MICROFILMED
JUL 09 1979
REPRODUCTION

MICROFILMED
JUL 10 1979
REPRODUCTION

MICROFILMED
JUNE 14, 1979
REPRODUCTION
ON

FED. RD.	STATE	PROJECT
2	OHIO	I-680-5(14) I-680-5(20)

I
656

MAHONING COUNTY
MAH-680-6.98

I-680-5(14) 240
I-680-5(20) 240 (SAFETY FUNDS

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≠ 425A-C, 426A-L, 427A-I, 429A&B, 431A&B, 433A-F

* CONT'D. 300A, 391A, 392A, 410A, 411A, 413A-413C, 414A 415A-415C, 417A, 417B, 419A, 420A-420D, 421A, 422A-422D

★ CONT'D. 459A, 466A, 550A, 550B, 551A-551H, 545A

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
MAH-680-6.98
BOARDMAN TOWNSHIP & CITY OF YOUNGSTOWN MAHONING COUNTY
RECONSTRUCTION OF EXISTING SEPARATED CROSSING WITH YOUNGSTOWN AND SOUTHERN RAILWAY COMPANY

Sheet No. 476 & 477 revised 11-26-71 EBL
Sheet No. 551-B, 551-C, 551-E, 551-F revised 2-2-72 EBL
Sheets 518 & 519 revised 5-19-72 EBL

LIMITED ACCESS 1971 SPECIFICATIONS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SEC. 5511.02 OF THE REVISED CODE OF OHIO.

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT.

THE RIGHT OF WAY FOR THIS PROJECT WILL BE PROVIDED BY THE STATE OF OHIO.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED Lebbeus W. Hunkins
DATE 6-24-69 DIVISION DEPUTY DIRECTOR

APPROVED Thomas M. Major
DATE 9-24-69 DEPUTY DIRECTOR OF PLANNING & PROGRAMMING

APPROVED C. V. Altwater
DATE 9-24-69 ENGINEER OF BRIDGES

APPROVED R. E. Gallin
DATE 9-24-69 ENGINEER OF LOCATION & DESIGN

APPROVED
DATE ____ DEPUTY DIRECTOR OF RIGHT-OF-WAY

APPROVED George F. Thornton
DATE 9/24/69 DEPUTY DIRECTOR OF DESIGN & CONSTRUCTION

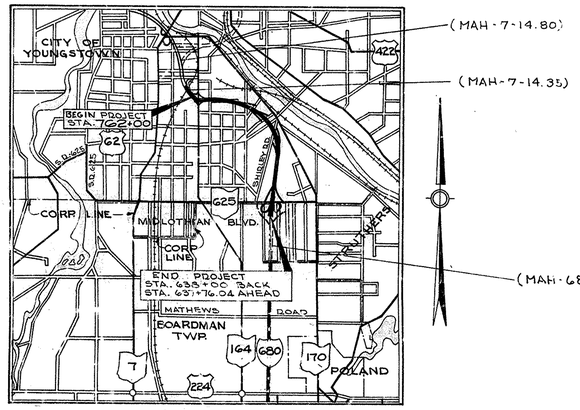
APPROVED
DATE ____ FIRST ASSISTANT DIRECTOR

APPROVED Warren R. McKenzie
DATE 6/27/72 FIRST ASSISTANT DIRECTOR

APPROVED
DATE ____ DIRECTOR OF HIGHWAYS

APPROVED R. H. Volk
DATE 6-27-72 DIRECTOR OF HIGHWAYS

APPROVED Edward Salata
DATE 25 June 69 DEPUTY DIRECTOR OF PUBLIC WORKS YOUNGSTOWN



LOCATION MAP

SCALE OF MILES 0 ½ ¾ 1 2 3 4

PORTION TO BE IMPROVED
STATE ROADS
OTHER ROADS

SCALE
PLAN
PROFILE: HORIZ. 0 25 50 100 150

CONVENTIONAL SIGNS

CORPORATION LINE
FENCE LINE
CENTER LINE
GUARD RAIL (EXISTING)
GUARD RAIL (PROPOSED)
POWER POLES (THE OHIO EDISON CO.)
TELEPHONE POLES (THE OHIO BELL TEL. CO.)
TREES OR STUMPS (EXISTING)
TREES OR STUMPS (TO BE REMOVED)
GAS LINE (THE EAST OHIO GAS CO.) G
WATER LINE (CITY OF YOUNGSTOWN WATER DEPT.) W
TELEPHONE DUCT (UNDERGROUND) (OHIO BELL TEL. CO.) T
SANITARY SEWER (CITY OF YOUNGSTOWN & MAH. CO.) S
STORM SEWER (CITY OF YOUNGSTOWN & MAH. CO.) ST
COMBINED STORM & SANITARY SEWER (CITY OF YOUNGSTOWN & MAH. CO.) CS

LINE DATA

I-680-5(14) 240

BEGIN PROJECT	STA. 762+00
END PROJECT	STA. 637+76.04(AH)=638+00(BK)
NET LENGTH OF PROJECT	12,423.96 FEET OR 2.353 MILES
BEGIN WORK	STA. 784+00 (AHD.)
END WORK	STA. 620+11 (BK.)
NET LENGTH OF WORK	15,812.96 FEET OR 2.938 MILES
ADD FOR INTERSECTING STREETS (SEE SHEET No. 24A)	8,726.62 FEET
TOTAL LENGTH OF WORK	24,230.58 L.F. OR 4.591 MI.

I-680-5(20) 240

NET LENGTH OF PROJECT	0.00 FEET OR 0.00 MILES
BEGIN WORK	STA. 0+00 (RAMP "P")
END WORK	STA. 0+50 (RAMP "P")
TOTAL LENGTH OF WORK	050.00 FEET OR 0.180 MILE

TOTAL LENGTH OF WORK (I-680-5(14) 240 & I-680-5(20) 240) 25,189.58 L.F. OR 4.771 MILES

PREPARED & RECOMMENDED BY
GLAUS, PYLE & SCHOMER
ARCHITECT AND CONSULTING ENGINEERS
AKRON, OHIO YOUNGSTOWN, OHIO

FILE No. MAHONING COUNTY MAH-680-6.98
DATE OF LETTING ____ 19 ____
CONTRACT No. ____

SUPPLEMENTAL PRINTS OF ST'D. CONSTRUCTION DRAWINGS

DWG. No.	O.D.H. APP. DATE	DWG. No.	O.D.H. APP. DATE	DWG. No.	O.D.H. APP. DATE	DWG. No.	O.D.H. APP. DATE
BP-1	6-1-65	BP-6	6-1-65			MH-1A	10-1-68
BP-2	12-1-68	F-3	3-10-60	HW-E	6-1-65	MH-2	10-1-68
BP-3	1-1-71	F-5	3-10-60	I-2A	6-6-69	HL-1	11-1-65
BP-4	1-1-71	F-6	10-1-66	L-1	6-1-65	HL-2	11-1-65
BP-5	1-1-71	FACI-1	9-15-67			HL-3	11-1-65
BP-7	1-1-66	FACI-2	6-1-65	MC-1	6-13-69	HL-4	1-1-66
BP-8	5-20-70			MH-2A	10-1-68		
CB2-2A&B	6-1-65			MC-3	6-20-69	AS-1-67	6-12-69
CB2-3&2-4	6-1-65	GR-2B	1-1-71	MC-4	6-13-69	BR-1-65	11-24-65
CB-5	9-1-69	GR-3	1-1-71	MC-5	6-1-65	BR2-2-67	1-1-71
CB-6	6-1-65	GR-4	1-1-71	MC-6	6-1-65	RB-1-55	2-2-59
CB-458A	6-6-68	GR-5	1-1-71	MC-7	10-1-68	SD-1-69	6-12-69
F-1	3-10-60	GR-6	1-1-71	MH-1	10-1-68	SP-53	6-30-61

SUPPLEMENTAL SPECIFICATIONS

801	1-1-69
814	1-1-69
815	1-1-69
816	1-1-69
830	11-25-70
808	1-1-71
812	1-1-67
1001	1-1-69
836	1-1-71
806	1-1-69
934	1-1-69
941	11-25-70

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ENGINEER ____ DATE ____

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

2/656

MAH-680-6.98

I-680-9(15) 242 | I-680-9(14)240

MICROFILMED
JUL 09 1979
REPRODUCTION

END

CITY OF YOUNGSTOWN

BOARDMAN TWP.

MIDLOTHIAN BLVD. SR-625

HORIZONTAL EQUATION
STA. 638+00 (BACK) = STA. 637+76.04 (AHEAD)

END WORK STA. 629+11

(FUTURE RAMP "M-M")

RAMP "L"

END PROJECT MAH-680-6.98 STA. 637+76.04 AHD

BEGIN WORK STA. 353+00

CORPORATION LINE

SHIRLEY RD. 60'

N 16° 35' 23" E

STA. 642+05.20 (℄ BD EXP)
STA. 372+54.77 (℄ MIDLOTHIAN BLVD)

RAMP "K"

RAMP "J"

RAMP "O"

RAMP "N-N"

MAH-680-0834

FACI

END WORK STA. 370+30

CORR LINE

N 0° 21' 04" W

LEMOYNE AVE. 50'

MEDFORD AVE.

WESTON AVE.

OLIVE AVE.

N 88° 32' 12" E

CITY OF YOUNGSTOWN

BOARDMAN EXPRESSWAY
TRAFFIC DESIGNATION
MIDLOTHIAN BLVD. (SR-625)
TO
SHIRLEY ROAD
CURRENT A.D.T. *
DESIGN YEAR A.D.T. *
D.H.V. 12% OF A.D.T.
D. 60%-40%
T. 10%
V. 60 MPH
* SEE LEGEND

℄ BOARDMAN EXP (I-680)

℄ CREEK STA. 660+72

℄ CREEK STA. 663+87

℄ CREEK STA. 665+75

℄ CREEK STA. 671+36

℄ CREEK STA. 675+36

PINE HOLLOW DRIVE

T.S. STA. 671+15.72

C.S. STA. 673+15.72

22° 15'

21° 30'

N 14° 00' 43" E

635 640 645 650 655 660 665 670 675 680

CURVE N°1 ℄ CURVE DATA

Δ = 71° 25' 13" LT.	Xc = 199.98'
Dc = 1° 50' 00"	Yc = 2.13'
R = 3,125.22'	L.T. = 133.34'
Tc = 2,098.22'	S.T. = 66.67'
Lc = 3,695.65'	L.C. = 199.99'
CHc = 3,484.05'	Ts = 2,346.92'
Ec = 635.03'	Es = 124.32'
Δc = 67° 45' 13"	Ls = 200'
Ds = 1° 50' 00"	P.I. STA. 694+62.64
P = 0.53'	
K = 100.00'	

BEGIN WORK STA. 10+11.50

BEGIN WORK STA. 41+38.50

HUMBOLT AVE. 50'

HUMBOLT-TAFT CONNECTOR

N 0° 43' 55" W

N 34° 28' 54" E TAFT AVE. 50'

N 30° 31' 36" E

END WORK STA. 13+62

N 24° 38' 32" W COOPER AVE.

N 85° 54' 01" E

MAH-680-0835

N 34° 38' 36" W TAYLOR AVE. 50'

MATCH LINE STA. 692+00

STA. 688+72.48 (℄ BD EXP)
STA. 50+00 (℄ SHIRLEY RD)

34° 47' 08" ℄ TO LOCAL TANG.

TEMPORARY RUNAROUND

FACI F

STA. 688+83.33 (℄ BD EXP)
STA. 10+00 (℄ TAYLOR AVE.)

CONSTANTINE AVE. 50'

RAMP "H"

N 73° 24' 43" W

RAMP "G"

HOMEWOOD AVE.

56° 53' 42" ℄ TO LOCAL TANG.

CRAIGEN AVE. 50'
N 16° 35' 23" E

21° 48' 08" ℄ TO LOCAL TANG.

TAYLOR AVE. 50'

SPALDING RD.

STA. 682+64.31 (℄ BD EXP)
STA. 115+38.46 (℄ CRAIGEN AVE.)

PINE HOLLOW CREEK

PINE HOLLOW DR.

POWERS WAY

23,100 / 17,678	9475 / 7248	2392 / 1830
32,583 / 24,926	24,767 / 18,946	26,100 / 19,966
8750 / 6694	1333 / 1020	34,850 / 26,660
34,975 / 26,756	2425 / 1855	32,550 / 24,901
32,083 / 24,543	2767 / 2117	

LEGEND

000 / 000 – 1985 AVERAGE DAILY TRAFFIC (A.D.T.) / CURRENT AVERAGE DAILY TRAFFIC (A.D.T.)

0 100 200 400

LOCATION MAP

MAY 25 1971

MICROFILMED
JUL 09 1979
REPRODUCTION

MICROFILMED
JUL 10 1979
REPRODUCTION

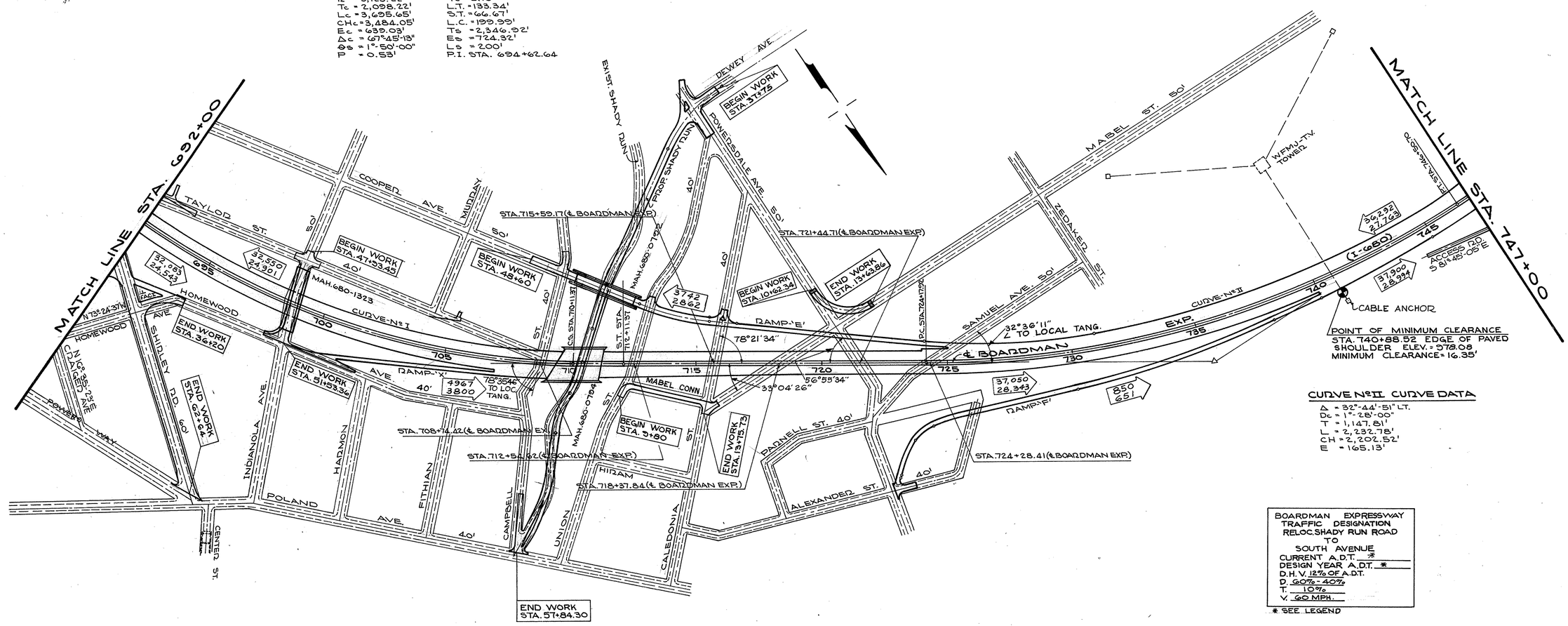
FED. RD.	STATE	PROJECT	
2	OHIO		

3
656

MAH-680-6.98

CURVE Nº I & CURVE DATA

Δ = 71°-25'-13" LT.	K = 100.00'
Dc = 1°-50'-00"	Xc = 199.98'
R = 3,125.22'	Yc = 2.13'
Tc = 2,098.22'	L.T. = 133.34'
Lc = 3,695.65'	S.T. = 66.67'
CHc = 3,484.05'	L.C. = 199.99'
Ec = 639.03'	Ts = 2,346.52'
Δc = 67°-45'-13"	Es = 724.32'
Θs = 1°-50'-00"	Ls = 2.00'
P = 0.58'	P.I. STA. 694+62.64



CURVE Nº II CURVE DATA

Δ = 32°-44'-51" LT.	
Dc = 1°-28'-00"	
T = 1,147.81'	
L = 2,232.78'	
CH = 2,202.52'	
E = 165.13'	

BOARDMAN EXPRESSWAY
TRAFFIC DESIGNATION
RELOC. SHADY RUN ROAD
TO
SOUTH AVENUE

CURRENT A.D.T. *
DESIGN YEAR A.D.T. *
D.H.V. 12% OF A.D.T.
D. 60% - 40%
T. 10%
V. 60 MPH.

* SEE LEGEND

BOARDMAN EXPRESSWAY
TRAFFIC DESIGNATION
SHIRLEY ROAD
TO
RELOC. SHADY RUN ROAD

CURRENT A.D.T. *
DESIGN YEAR A.D.T. *
D.H.V. 12% OF A.D.T.
D. 60% - 40%
T. 10%
V. 60 MPH.

* SEE LEGEND

LEGEND

000 / 000 - 1985 AVERAGE DAILY TRAFFIC (A.D.T.) / CURRENT A.D.T.

0' 100' 200' 400'

LOCATION MAP

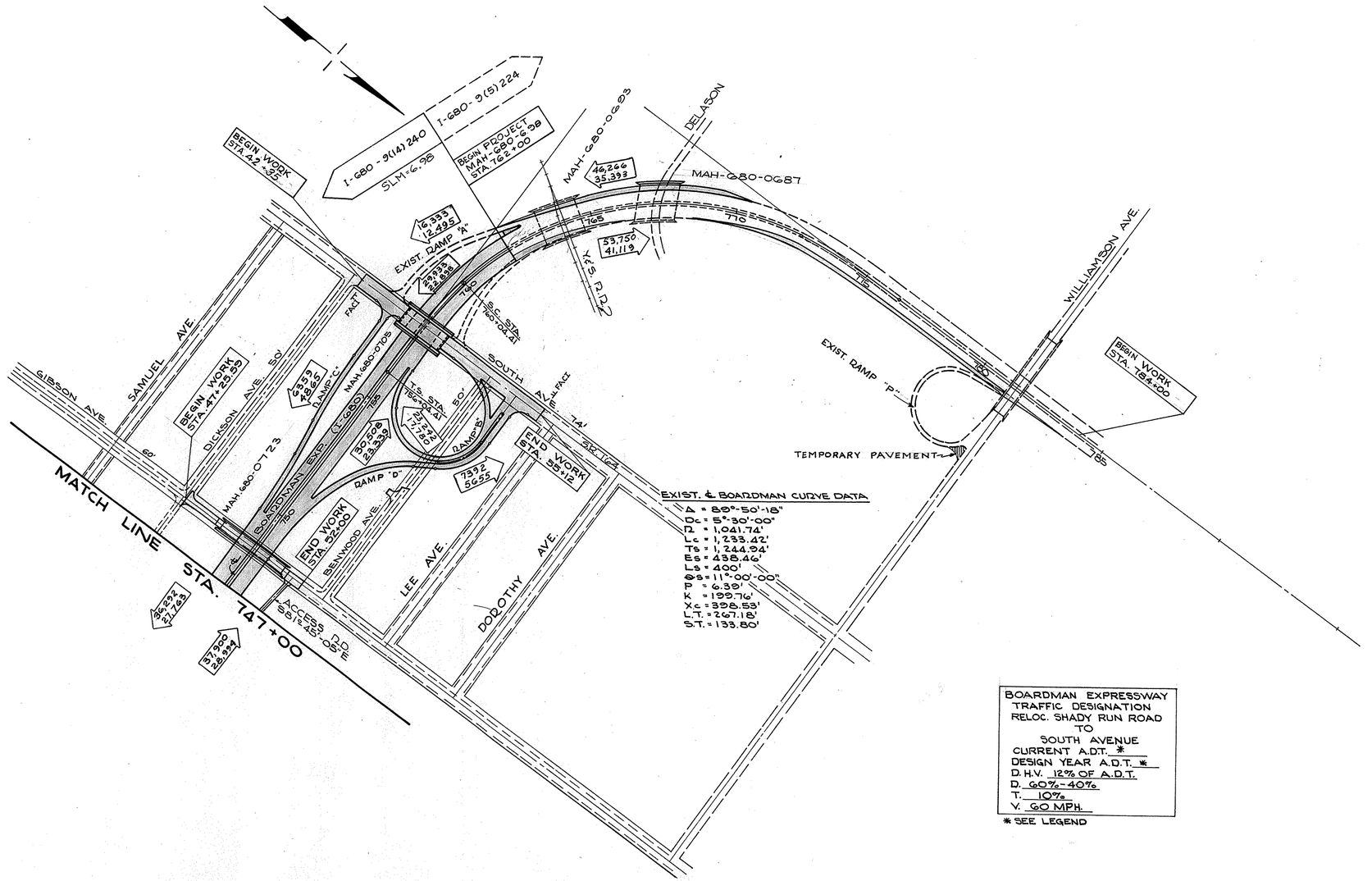
MAY 25 1971

MICROFILMED
JUL 19 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

4
656



BOARDMAN EXPRESSWAY
TRAFFIC DESIGNATION
RELOC. SHADY RUN ROAD
TO
SOUTH AVENUE
CURRENT A.D.T. *
DESIGN YEAR A.D.T. *
D.H.V. 12% OF A.D.T.
D. 60%-40%
T. 10%
V. 60 MPH.

* SEE LEGEND

LEGEND

000 / 000 - 1985 AVERAGE DAILY TRAFFIC (A.D.T.)
- CURRENT A.D.T.

0' 100' 200' 400'

LOCATION MAP

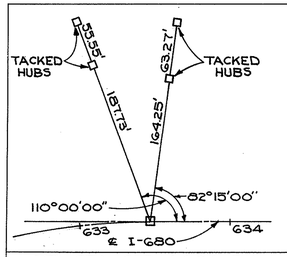
MAY 25 1971

CENTERLINE REFERENCE TIES

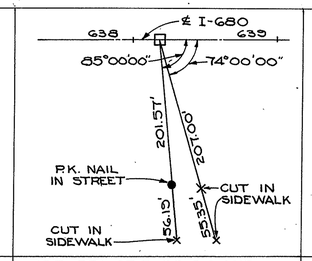
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

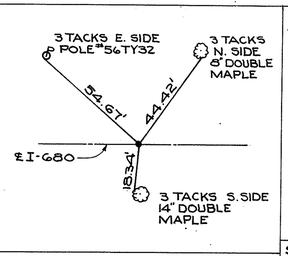
5
656



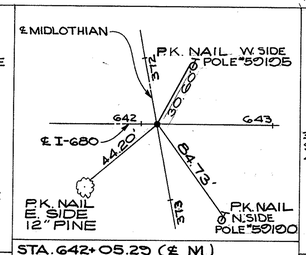
P.T. STA. 633+44.04 BK.



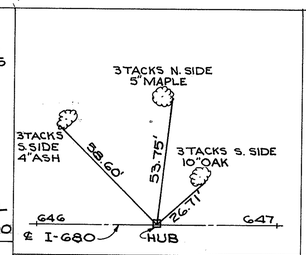
P.O.T. STA. 638+08.04 AHD.



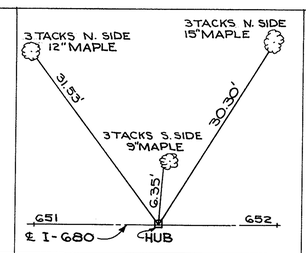
P.O.T. STA. 640+00.0



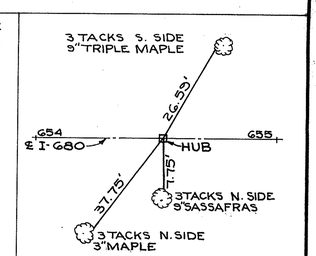
STA. 642+05.29 (℄ M)
STA. 372+54.77 (℄ MIDLOTHIAN)



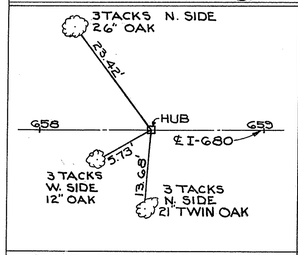
P.O.T. STA. 646+45.95



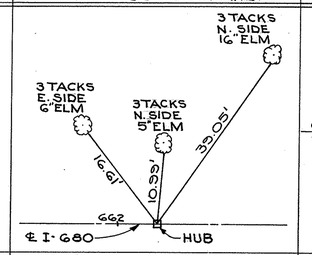
P.O.T. STA. 651+43.74



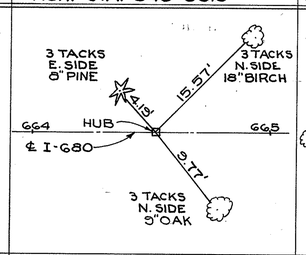
P.O.T. STA. 654+64.17



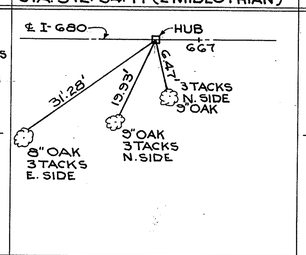
P.O.T. STA. 658+44.52



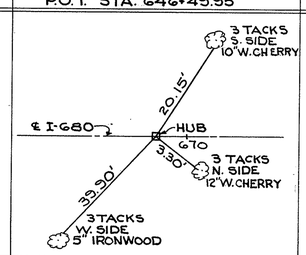
P.O.T. STA. 662+19.40



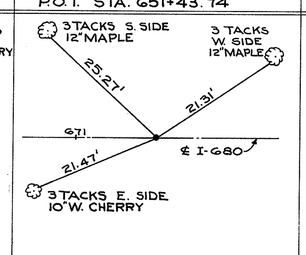
P.O.T. STA. 664+51.59



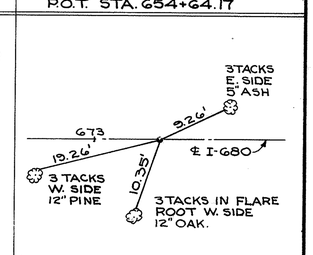
P.O.T. STA. 666+93.19



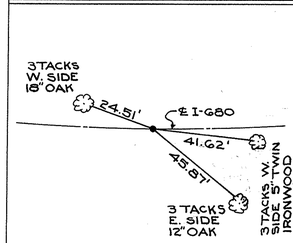
P.O.T. STA. 669+96.34



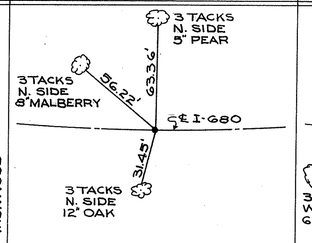
T.S. STA. 671+15.72



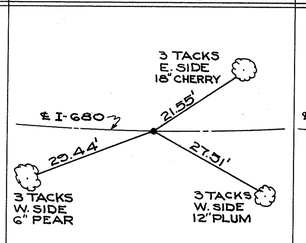
S.C. STA. 673+15.72



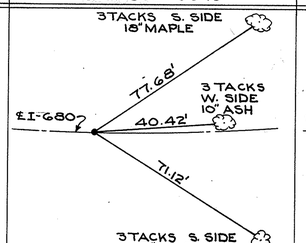
P.O.C. STA. 678+00



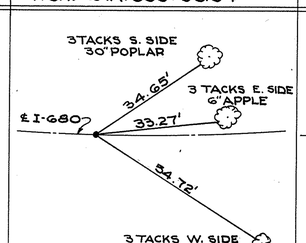
P.O.C. STA. 685+00



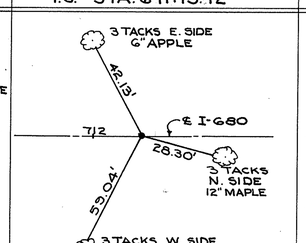
P.O.C. STA. 692+00



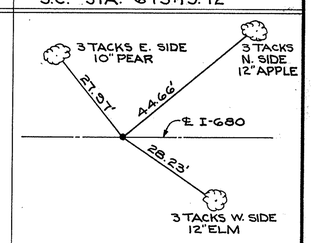
P.O.C. STA. 700+00



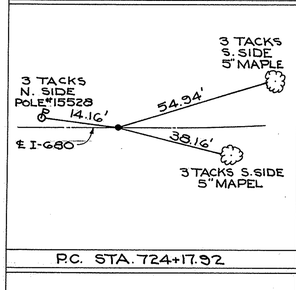
P.O.C. STA. 707+00



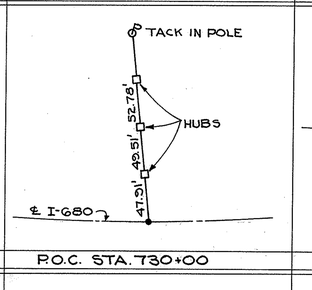
S.T. STA. 712+11.37



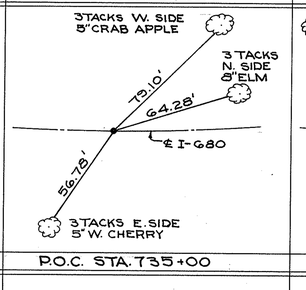
P.O.T. STA. 720+00



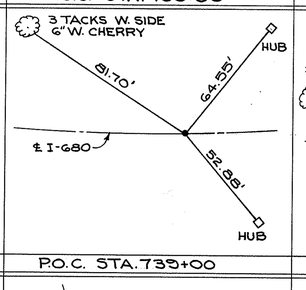
P.C. STA. 724+17.92



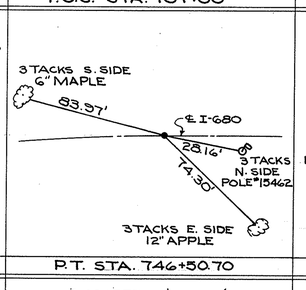
P.O.C. STA. 730+00



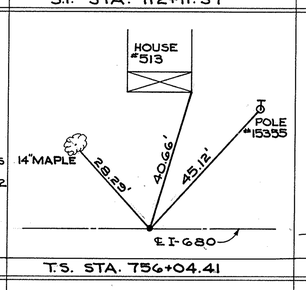
P.O.C. STA. 735+00



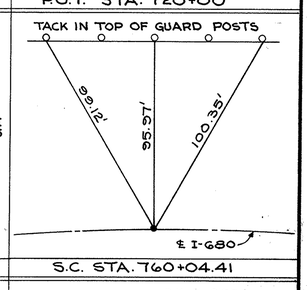
P.O.C. STA. 739+00



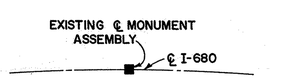
P.T. STA. 746+50.70



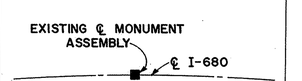
T.S. STA. 756+04.41



S.C. STA. 760+04.41

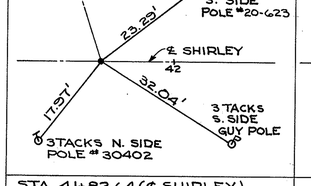


P.O.C. STA. 766+00

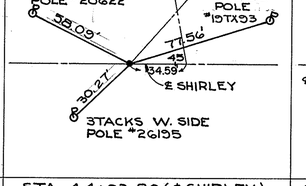


C.S. STA. 772+37.83

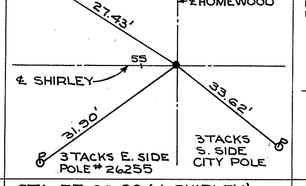
FOR EXISTING ℄ MONUMENTS ON MIDLOTHIAN BLVD. SEE SHEET Nº 6



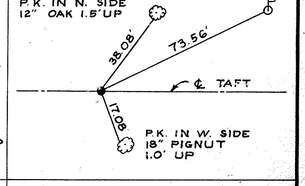
STA. 41+82.64 (℄ SHIRLEY)
STA. 50+00 (℄ HUMBOLT)



STA. 44+92.80 (℄ SHIRLEY)
STA. 10+00 (℄ COOPER)



STA. 55+08.80 (℄ SHIRLEY)
STA. 33+62.65 (℄ HOMEWOOD)



STA. 47+50 (℄ TAFT)

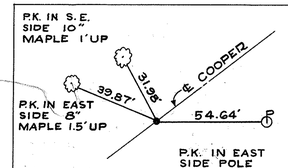
MAY 25 1971

CENTERLINE REFERENCE TIES

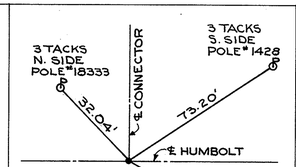
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

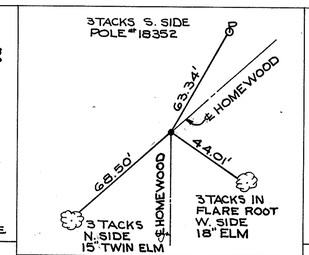
6/656



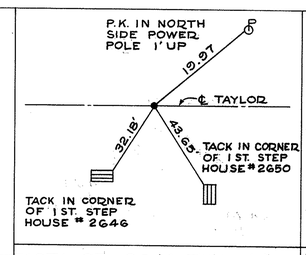
STA. 11+50 (℄ COOPER)



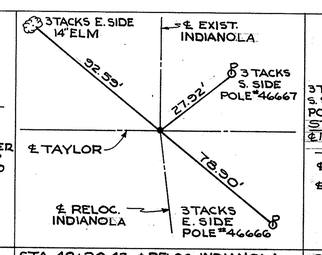
STA. 45+51.42 (℄ HUMBOLT)
STA. 10+00 (℄ CONNECTOR)



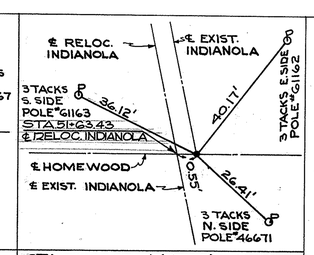
STA. 35+33.24 (℄ HOMEWOOD)



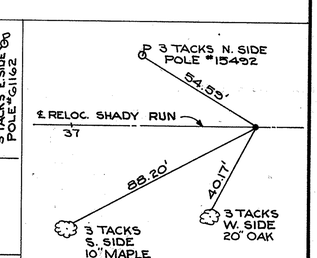
STA. 35 +00 (℄ TAYLOR)



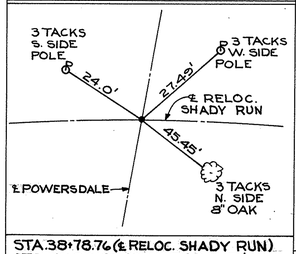
STA. 48+20.43 ℄ RELOC. INDIANOLA
STA. 39+96.22 ℄ TAYLOR



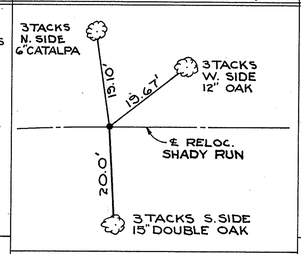
STA. 51+65.27 ℄ (EXIST.) INDIANOLA
STA. 39+90.14 ℄ HOMEWOOD



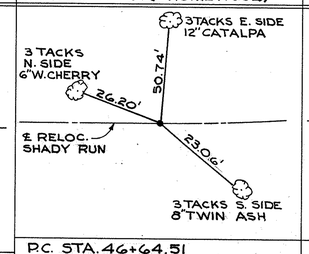
P.C. STA. 37+75.17 (℄ RELOC. SHADY RUN)



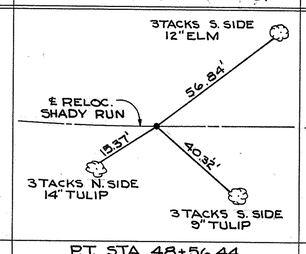
STA. 38+78.76 (℄ RELOC. SHADY RUN)
STA. 10+00 (℄ POWERSDALE)



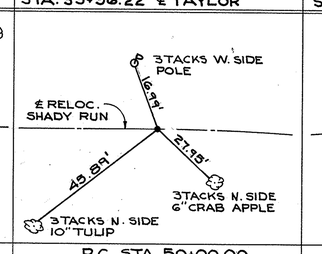
P.T. STA. 41+07.67 (RELOC. SHADY RUN)



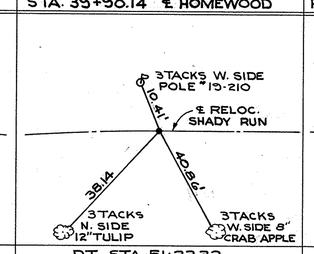
P.C. STA. 46+64.51
(℄ RELOC. SHADY RUN)



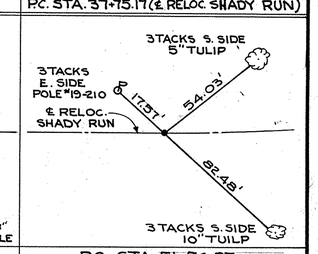
P.T. STA. 48+56.44
(℄ RELOC. SHADY RUN)



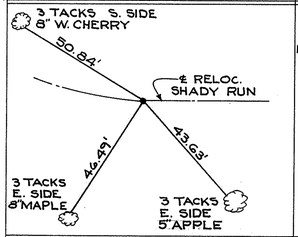
P.C. STA. 50+00.00
(℄ RELOC. SHADY RUN)



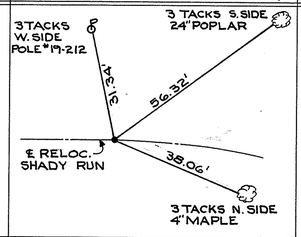
P.T. STA. 51+33.33
(℄ RELOC. SHADY RUN)



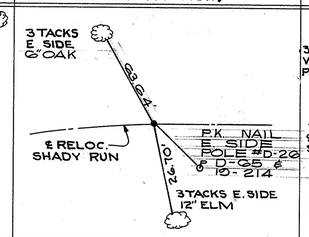
P.C. STA. 51+56.37
(℄ RELOC. SHADY RUN)



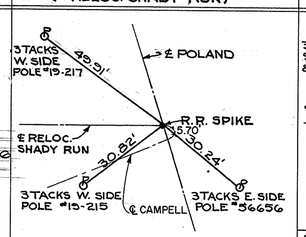
P.T. STA. 53+31.72
(℄ RELOC. SHADY RUN)



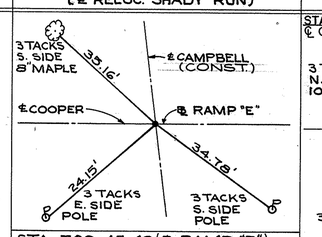
P.C. STA. 54+43.14
(℄ RELOC. SHADY RUN)



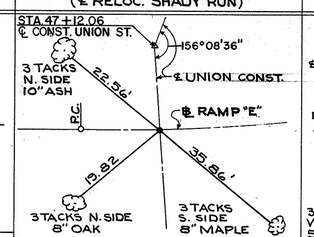
P.T. STA. 56+84.81
(℄ RELOC. SHADY RUN)



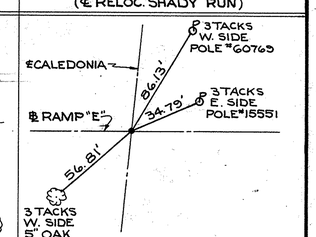
STA. 58+02.50 (℄ RELOC. SHADY RUN)
STA. 50+00 (℄ POLAND)



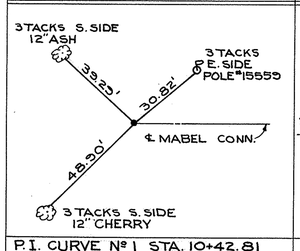
STA. 709+45.42 (℄ RAMP "E")
STA. 50+00 (℄ COOPER)
STA. 38+39.6 (℄ CAMPBELL)



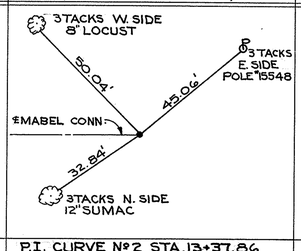
STA. 713+19.05 (℄ RAMP "E")
STA. 47+71.34 (℄ UNION)



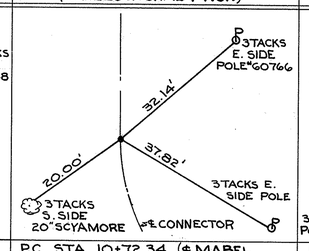
STA. 715+99.93 (℄ RAMP "E")
STA. 48+31.55 (℄ CALEDONIA)



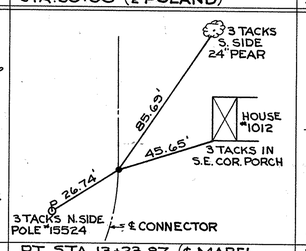
P.I. CURVE Nº 1 STA. 10+42.81
(℄ MABEL CONNECTOR)



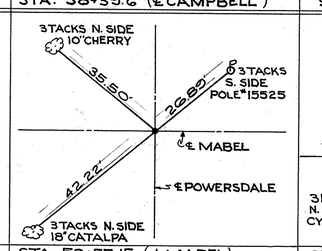
P.I. CURVE Nº 2 STA. 13+37.86
(℄ MABEL CONNECTOR)



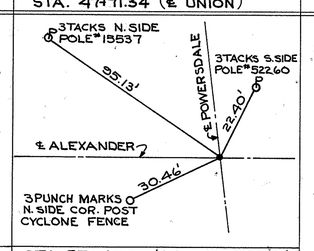
P.C. STA. 10+72.34 (℄ MABEL
POWERSDALE CONNECTOR)



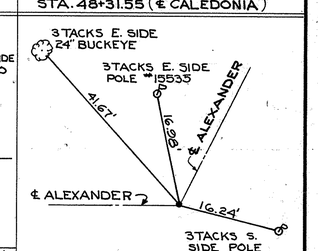
P.T. STA. 13+23.87 (℄ MABEL
POWERSDALE CONNECTOR)



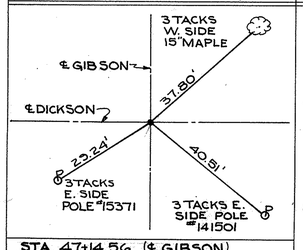
STA. 52+57.15 (℄ MABEL)
STA. 48+32.54 (℄ POWERSDALE)



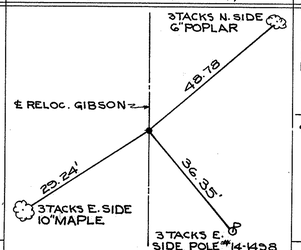
STA. 55+40.32 (℄ POWERSDALE)
STA. 10+00 (℄ ALEXANDER)



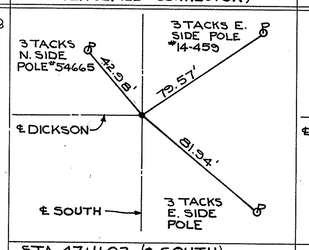
STA. 12+74.01 (℄ ALEXANDER)



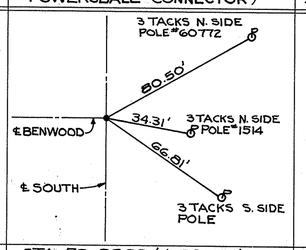
STA. 47+14.56 (℄ GIBSON)
STA. 40+70.70 (℄ DICKSON)



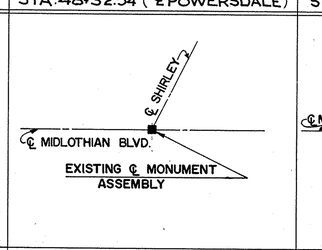
STA. 51+50.03 (℄ RELOC. GIBSON)



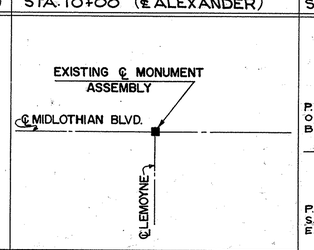
STA. 47+11.02 (℄ SOUTH)
STA. 50+00 (℄ DICKSON)



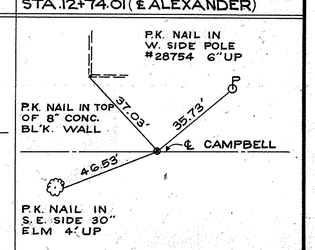
STA. 52+82.93 (℄ SOUTH)
STA. 50+00 (℄ BENWOOD)



STA. 365+35.69 (℄ MIDLOTHIAN BLVD.)



STA. 378+61.91 (℄ MIDLOTHIAN BLVD.)



STA. 48+00 (℄ CAMPBELL)

MAY 25 '71

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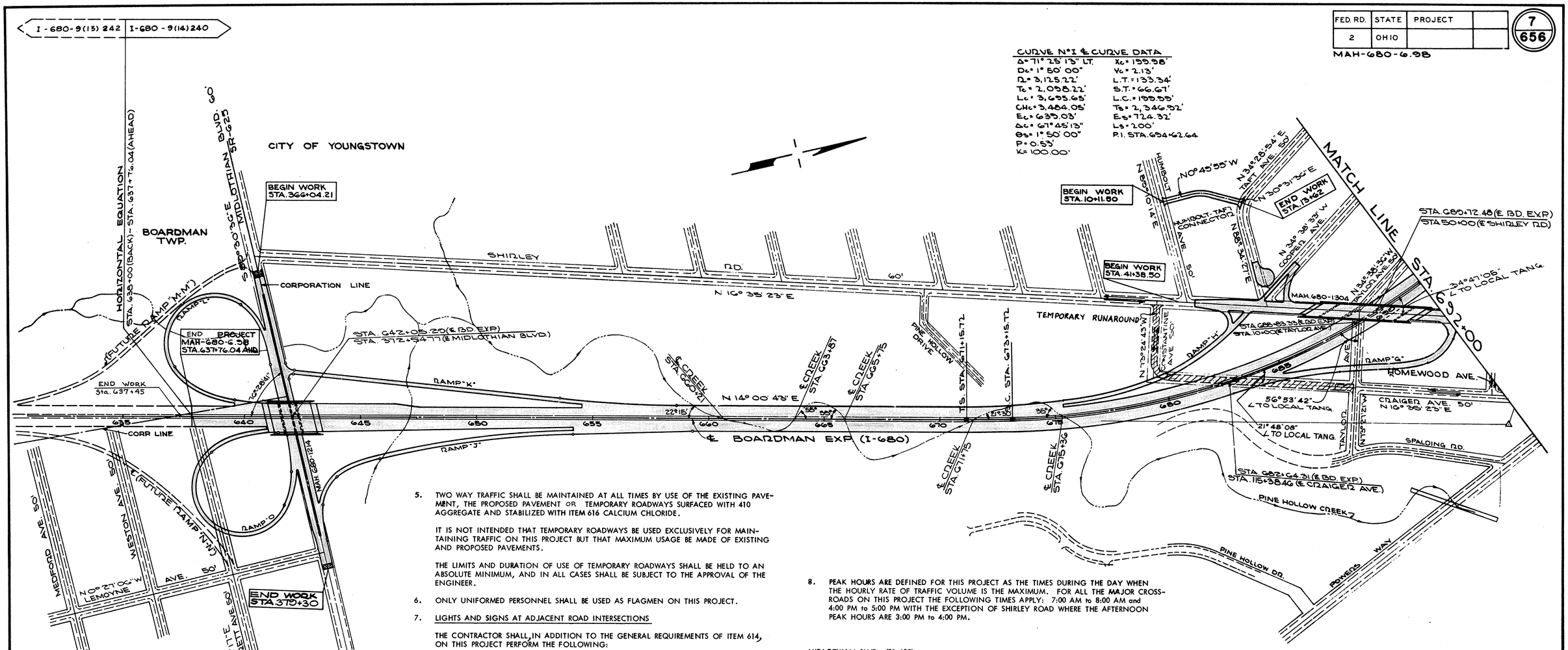
I-680-9(15) 242 | I-680-9(14)240



MAINTENANCE OF TRAFFIC

GENERAL

1. THE CONTRACTOR SHALL ERECT AND MAINTAIN LIGHTS, SIGNS AND BARRICADES AT SUCH LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.

2. IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE FOLLOWING PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DIRECTOR.

3. WHERE ANY OF THE WORK SPECIFIED UNDER THIS CONTRACT INVOLVES CLOSING EXISTING STREETS AND/OR THE RE-ROUTING OF TRAFFIC, THE CONTRACTOR SHALL PROSECUTE TO THE FULLEST EXTENT THE WORK INVOLVED SO AS TO REDUCE TO A MINIMUM THE LENGTH OF TIME THAT THE STREETS CONCERNED SHALL BE CLOSED TO TRAFFIC.

4. PRIOR TO THE CLOSING OF ANY STREET, THE CONTRACTOR WILL SUBMIT TO THE ENGINEER A SCHEDULE OF CONSTRUCTION OPERATIONS. UPON RECEIPT OF APPROVAL OF THE CONSTRUCTION OPERATIONS SCHEDULE FROM THE ENGINEER, THE STREET MAY BE CLOSED, WITH 48 HOUR NOTICE OF CLOSING REQUIRED.

5. TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT OR TEMPORARY ROADWAYS SURFACED WITH 410 AGGREGATE AND STABILIZED WITH ITEM 616 CALCIUM CHLORIDE.

   IT IS NOT INTENDED THAT TEMPORARY ROADWAYS BE USED EXCLUSIVELY FOR MAINTAINING TRAFFIC ON THIS PROJECT BUT THAT MAXIMUM USAGE BE MADE OF EXISTING AND PROPOSED PAVEMENTS.

   THE LIMITS AND DURATION OF USE OF TEMPORARY ROADWAYS SHALL BE HELD TO AN ABSOLUTE MINIMUM, AND IN ALL CASES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

6. ONLY UNIFORMED PERSONNEL SHALL BE USED AS FLAGMEN ON THIS PROJECT.

7. LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS

   THE CONTRACTOR SHALL, IN ADDITION TO THE GENERAL REQUIREMENTS OF ITEM 614, ON THIS PROJECT PERFORM THE FOLLOWING:

   PROVIDE, ERECT, AND MAINTAIN STANDARD 48" x 30" SIZE "ROAD CLOSED" SIGNS, SIGN SUPPORTS, AND LIGHTS AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

   1) EVERETT AVENUE JUST WEST OF LEMOYNE AVENUE.
   2) SHIRLEY ROAD JUST NORTH OF HUMBOLT AVENUE.
   3) TAYLOR AVENUE JUST WEST OF CRAIGER AVENUE.
   4) TAFT AVENUE JUST EAST OF THE PROPOSED HUMBOLT-TAFT CONNECTOR.
   5) SHIRLEY ROAD JUST SOUTH OF HOMEWOOD AVENUE.
   6) TAYLOR STREET JUST EAST OF INDIANOLA AVENUE.
   7) COOPER AVENUE JUST EAST OF INDIANOLA AVENUE.
   8) HOMEWOOD AVENUE JUST EAST OF INDIANOLA AVENUE.
   9) CAMPBELL STREET JUST NORTH OF TAFT AVENUE.
   10) CAMPBELL STREET JUST SOUTH OF HOMEWOOD AVENUE.
   11) SHADY RUN ROAD JUST NORTH OF POWERSDALE AVENUE.
   12) SHADY RUN ROAD JUST SOUTH OF CAMPBELL STREET.
   13) POWERSDALE AVENUE JUST NORTH OF THE PROPOSED SHADY RUN ROAD.
   14) UNION STREET JUST EAST OF POWERSDALE AVENUE.
   15) UNION STREET JUST SOUTH OF POLAND AVENUE.
   16) CALEDONIA STREET JUST EAST OF POWERSDALE AVENUE.
   17) CALEDONIA STREET JUST SOUTH OF POLAND AVENUE.
   18) MABEL STREET JUST EAST OF ZEDAKER STREET
   19) ZEDAKER STREET JUST NORTH OF MABEL STREET.
   20) GIBSON AVENUE JUST NORTH OF DICKSON AVENUE.
   21) GIBSON AVENUE JUST SOUTH OF LEE AVENUE.
   22) SOUTH AVENUE JUST NORTH OF DICKSON AVENUE.
   23) SOUTH AVENUE JUST SOUTH OF LEE AVENUE.
   24) RAMP "P" AT WILLIAMSON AVENUE ENTRANCE.

   SIGN SUPPORTS AND LIGHTS FOR "ROAD CLOSED" SIGNS SHALL BE AS DETAILED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

   PAYMENT FOR PROVIDING, ERECTING, MAINTAINING, AND REMOVING LIGHTS, SIGNS, AND SIGN SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR "ITEM 614 MAINTAINING TRAFFIC."

8. PEAK HOURS ARE DEFINED FOR THIS PROJECT AS THE TIMES DURING THE DAY WHEN THE HOURLY RATE OF TRAFFIC VOLUME IS THE MAXIMUM. FOR ALL THE MAJOR CROSS-ROADS ON THIS PROJECT THE FOLLOWING TIMES APPLY: 7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM WITH THE EXCEPTION OF SHIRLEY ROAD WHERE THE AFTERNOON PEAK HOURS ARE 3:00 PM to 4:00 PM.

MIDLOTHIAN BLVD. (SR-625)

EXISTING MIDLOTHIAN SHALL REMAIN OPEN TO THRU TRAFFIC AT ALL TIMES, EXCEPT DURING THE PLACING OF STRUCTURAL STEEL. THE CONTRACTOR SHALL ERECT STRUCTURAL STEEL DURING OFF PEAK HOURS. TRAFFIC MAY BE STOPPED, AS DIRECTED BY THE ENGINEER, FOR A PERIOD OF TIME TO PLACE ONE BEAM IN ITS INITIAL POSITION AFTER WHICH TRAFFIC SHALL BE ALLOWED TO CLEAR BEFORE SETTING THE NEXT BEAM. AT NO TIME DURING THE CONSTRUCTION OF THE RAMPS ADJACENT TO MIDLOTHIAN BLVD. SHALL THE PAVEMENT WIDTH BE NARROWED TO LESS THAN 40 FEET.

SHIRLEY ROAD

SHIRLEY ROAD MAY BE CLOSED TO THROUGH TRAFFIC DURING THE CONSTRUCTION OF THE SHIRLEY ROAD BRIDGE AND THE SHIRLEY ROAD APPROACHES BETWEEN HUMBOLT AVENUE AND HOMEWOOD AVENUE. TRAFFIC SHALL BE DETOURED OVER CONSTANTINE AVENUE, TEMPORARY RUNAROUND, CRAIGER AVENUE AND HOMEWOOD AVENUE SHOWN ON THE DETOUR MAP.

ONE WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON SHIRLEY ROAD BETWEEN HOMEWOOD AVENUE AND POLAND AVE. PART WIDTH CONSTRUCTION SHALL BE EMPLOYED AS NECESSARY.

TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON HOMEWOOD AVENUE BETWEEN SHIRLEY ROAD AND CAMPBELL STREET.

TRAFFIC ON SHIRLEY ROAD SHALL BE MAINTAINED BY A TEMPORARY ROADWAY (CONSTANTINE AVENUE) THE TEMPORARY PAVEMENT SHALL BE CLASS "A" 24 FEET WIDE. ITEM 615 CLASS "A" TEMPORARY PAVEMENT = 3327 S.Y. ALL THE ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE PRICE BID FOR 614 MAINTAINING TRAFFIC EXCEPT ITEMS 410, 615 and 616. AS NOTED ON THE PLAN OF THE RUNAROUND, PORTIONS OF THE TEMPORARY PAVEMENT WILL BE LEFT IN PLACE AFTER COMPLETION OF THE PROJECT.

HUMBOLT-TAFT CONNECTOR

THE HUMBOLT-TAFT CONNECTOR SHALL BE BUILT PRIOR TO CLOSING TAFT AVENUE AT SHIRLEY ROAD.

PLACEMENT OF ASPHALT CONCRETE

TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

LOCAL TRAFFIC

LOCAL TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. THE FOLLOWING QUANTITIES ARE INCLUDED FOR MAINTAINING LOCAL TRAFFIC:

ITEM 616 WATER	80 M GALLONS
ITEM 616 CALCIUM CHLORIDE	12 TONS
ITEM 410 TRAFFIC COMPACTED SURFACE - TYPE A OR B	600 C.Y.
ITEM 410 TRAFFIC COMPACTED SURFACE - TYPE C	300 C.Y.

RRC 6/18/68
CEW 6/24/68

MAINTENANCE OF TRAFFIC

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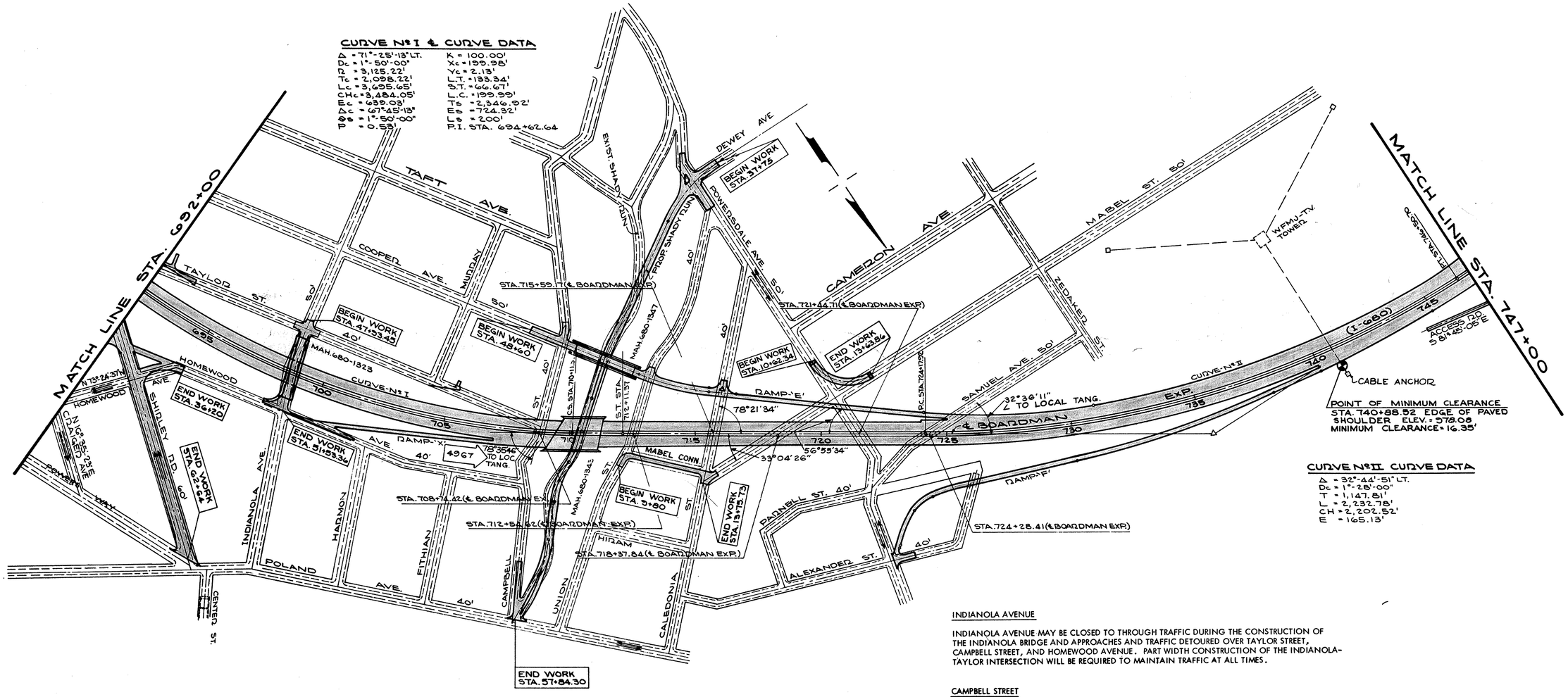

INDIANOLA AVENUE

INDIANOLA AVENUE MAY BE CLOSED TO THROUGH TRAFFIC DURING THE CONSTRUCTION OF THE INDIANOLA BRIDGE AND APPROACHES AND TRAFFIC DETOURED OVER TAYLOR STREET, CAMPBELL STREET, AND HOMEWOOD AVENUE. PART WIDTH CONSTRUCTION OF THE INDIANOLA-TAYLOR INTERSECTION WILL BE REQUIRED TO MAINTAIN TRAFFIC AT ALL TIMES.

CAMPBELL STREET

CAMPBELL STREET SHALL NOT BE CLOSED DURING THE PERIOD OF TIME THAT INDIANOLA IS CLOSED FOR CONSTRUCTION.

SHADY RUN, UNION STREET, CALEDONIA STREET

SHADY RUN, UNION STREET AND CALEDONIA STREET MAY BE CLOSED DURING CONSTRUCTION WITH TRAFFIC DETOURED OVER POWERSDALE AVENUE AS SHOWN ON THE DETOUR MAP.

POWERSDALE AVENUE

POWERSDALE AVENUE SHALL NOT BE CLOSED TO TRAFFIC UNTIL CONSTRUCTION OF PROPOSED SHADY RUN ROAD HAS BEEN COMPLETED.

MABEL STREET AND SAMUEL AVENUE

MABEL STREET AND SAMUEL AVENUE MAY BE CLOSED TO TRAFFIC AFTER CONSTRUCTION OF PROPOSED SHADY RUN ROAD HAS BEEN COMPLETED.

MAINTENANCE OF TRAFFIC

MAY 25 1971

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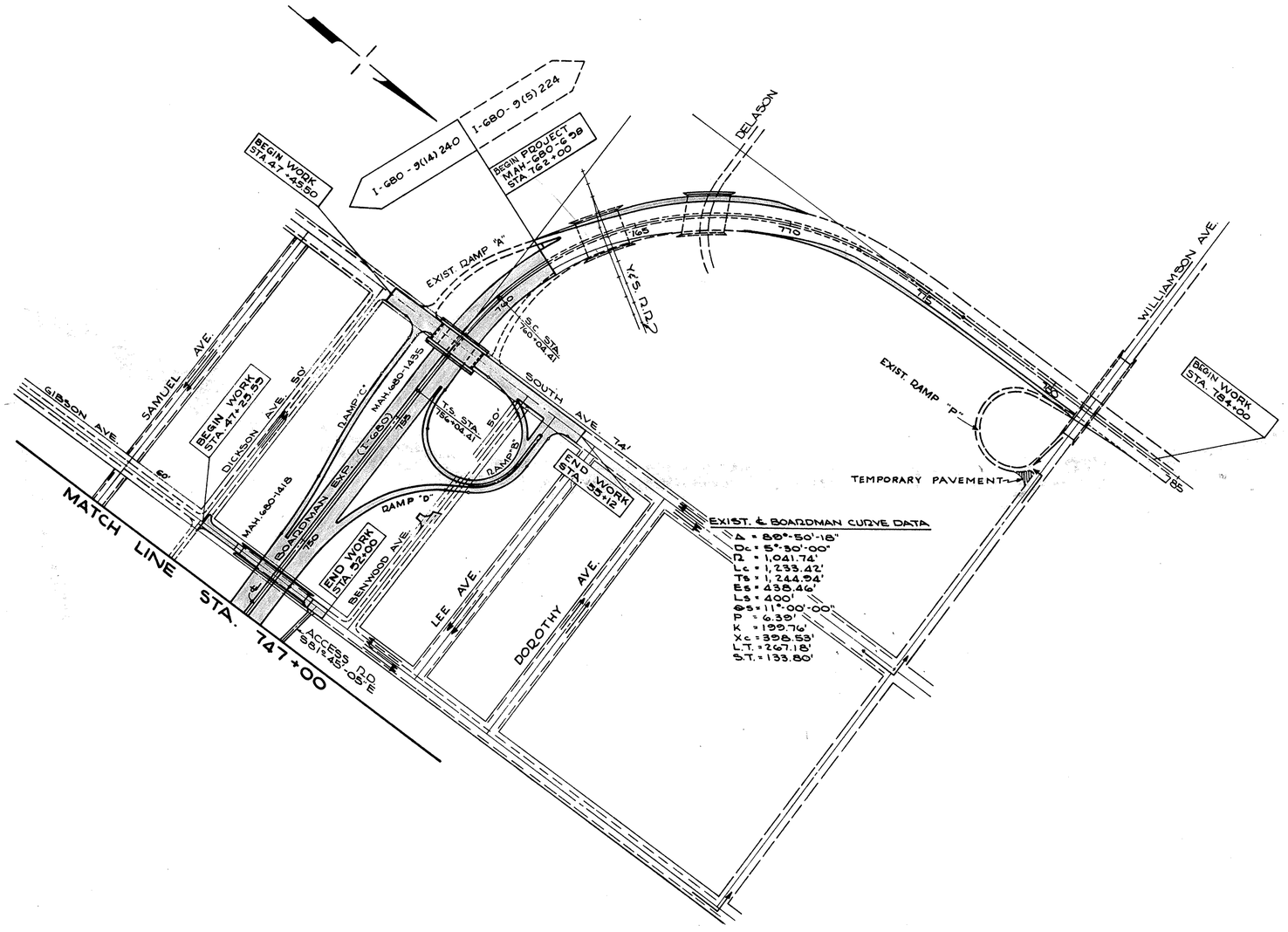

GIBSON AVENUE AND SOUTH AVENUE

SOUTH AVENUE AND GIBSON AVENUE MAY NOT BE CLOSED DURING THE SAME PERIOD. THE CONTRACTOR SHALL SO ARRANGE HIS CONSTRUCTION OPERATIONS THAT THE CONSTRUCTION OF GIBSON AVENUE SHALL BE COMPLETED AND OPEN TO 4 LANE - TWO WAY TRAFFIC PRIOR TO THE CLOSING OF SOUTH AVENUE.

AFTER COMPLETION OF GIBSON AVENUE, SOUTH AVENUE MAY BE CLOSED WITH ONE WAY TRAFFIC DETOURED OVER SAMUEL AVENUE, DICKSON AVENUE, LEE AVENUE AND DOROTHY AVENUE AND 4 LANE - TWO WAY TRAFFIC MAINTAINED ON PROPOSED GIBSON AVENUE. DURING CONSTRUCTION OF SOUTH AVENUE, EXISTING RAMP "Y" MAY BE CLOSED TO TRAFFIC WITH ACCESS TO THE EXPRESSWAY VIA GIBSON AVENUE, WILLIAMSON AVENUE AND EXISTING RAMP "P". SPECIAL CARE SHALL BE TAKEN TO MAINTAIN TRAFFIC ON EXISTING RAMP "A" AT ALL TIMES.

GIBSON AVENUE MAY BE CLOSED DURING CONSTRUCTION WITH ONE WAY TRAFFIC DETOURED OVER SAMUEL AVENUE, DICKSON AVENUE, LEE AVENUE AND DOROTHY AVENUE AND TWO WAY TRAFFIC MAINTAINED ON EXISTING SOUTH AVENUE. SEE DETOUR MAP.

EXISTING RAMP "P"

EXISTING RAMP "P" SHALL NOT BE CLOSED TO TRAFFIC UNTIL RAMP "B" AT SOUTH AVENUE HAS BEEN CONSTRUCTED AND OPEN TO TRAFFIC. TO FACILITATE LEFT TURN MOVEMENTS FROM WILLIAMSON AVENUE, TEMPORARY PAVEMENT WILL BE REQUIRED AT THE RAMP NOSE AS SHOWN ON THE PLANS.

ITEM 615, CLASS "A" TEMPORARY PAVEMENT = 136 S.Y. (Planimeter)

THE ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE PRICE BID FOR 614 MAINTAINING TRAFFIC EXCEPT ITEMS 410, 615 AND 616.

YOUNGSTOWN AND SOUTHERN R.R.

MODIFICATIONS TO THE EXISTING STRUCTURE SHALL BE ACCOMPLISHED WITHOUT DISRUPTING ROAD OR RAIL TRAFFIC AT ANY TIME.

DELASON AVENUE

MODIFICATIONS TO THE EXISTING STRUCTURE SHALL BE ACCOMPLISHED WITHOUT DISRUPTION TO MAINLINE OR CROSS ROAD TRAFFIC.

0' 100' 200' 400'

RRC 6/13/67
CEW 6/24/68

MAINTENANCE OF TRAFFIC

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TYPICAL SECTIONS
TYPE-451
CODE TYPE-7223

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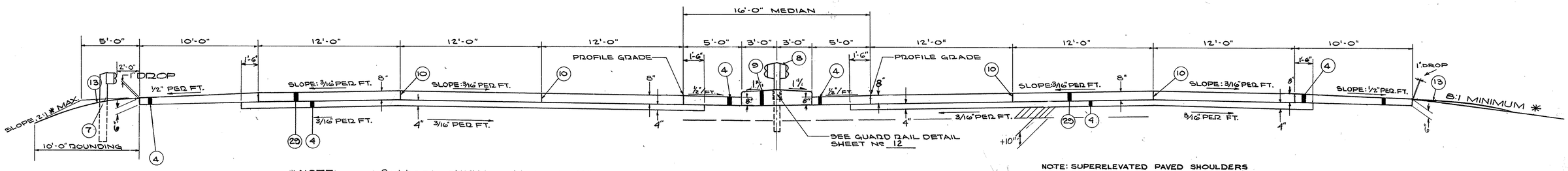


* NOTE: Subbase shall be added with 10" thickness of 310 subbase, Grading A from Sta. 654+50 to Sta. 656+50. See cross sections and General Notes.

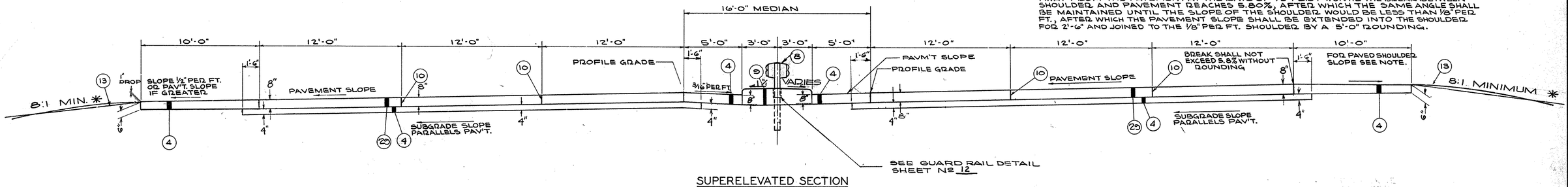
NORMAL SECTION

LIMITING STATIONS
631+76.04 TO 641+10.90
642+96.02 TO 668+90.72
714+36.37 TO 721+61.76
749+06.86 TO 753+30.87

NOTE: SUPERELEVATED PAVED SHOULDERS

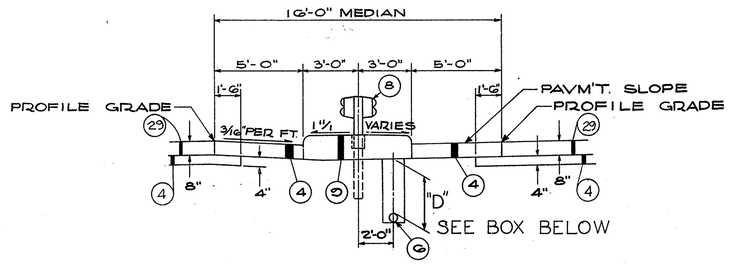
PAVED MEDIAN SHOULDERS - ENTERING THE CURVE THE INSIDE MEDIAN SHOULDER SHALL SLOPE AWAY FROM THE PAVEMENT AT THE RATE OF 1/2" PER FT. UNTIL THE STATION 100' FROM THE POINT WHERE FULL SUPERELEVATION IS REACHED. THE SHOULDER SLOPE SHALL THEN TRANSITION FROM A SLOPE OF 1/2" PER FT TO 3/16" PER FT. AWAY FROM THE PAVEMENT IN THE 100' DISTANCE TO THE POINT WHERE FULL SUPERELEVATION IS REACHED. THE OUTSIDE MEDIAN SHOULDER SHALL SLOPE AWAY FROM THE PAVEMENT AT THE RATE OF 1/2" PER FT. UNTIL THE PAVEMENT SLOPE REACHES A SLOPE OF 1/8" PER FT. TOWARD THE MEDIAN. THE SHOULDER SHALL THEN MAINTAIN THE SAME SLOPE AS THE PAVEMENT. THE REVERSE SEQUENCE SHALL APPLY WHEN LEAVING THE CURVE. THE PRECEDING INSTRUCTIONS DO NOT APPLY TO CURVE Nº 3. SEE SHEET Nº 58 FOR DETAILS

TEN FOOT PAVED SHOULDERS — THE OUTSIDE SHOULDER SHALL SLOPE AWAY FROM THE PAVEMENT AT THE RATE OF 1/2" PER FT. UNTIL THE BREAK BETWEEN SHOULDER AND PAVEMENT REACHES 5.80%, AFTER WHICH THE SAME ANGLE SHALL BE MAINTAINED UNTIL THE SLOPE OF THE SHOULDER WOULD BE LESS THAN 1/8" PER FT., AFTER WHICH THE PAVEMENT SLOPE SHALL BE EXTENDED INTO THE SHOULDER FOR 2'-6" AND JOINED TO THE 1/8" PER FT. SHOULDER BY A 5'-0" ROUNDING.



SUPERELEVATED SECTION

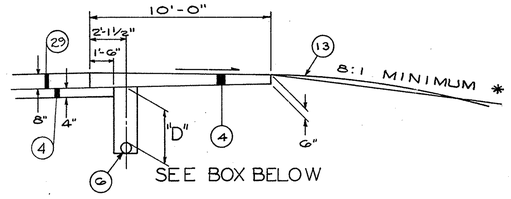
LIMITING STATIONS
668+90.72 TO 709+42.40
711+26.28 TO 714+36.37
721+61.76 TO 749+06.86



UNDERDRAIN DETAIL AT MEDIAN

Sta. 653+00 to Sta. 659+00
Sta. 730+00 ~ Sta. 749+00

UNDERDRAIN TYPES	
"D" DEPTH OF COVER	TYPE
36"	SHALLOW
TRANSITION	UNCLASSIFIED
56"	DEEP
18"	ROCK CUT



UNDERDRAIN DETAIL AT SHOULDER

Sta. 653+00 ~ Sta. 659+00
Sta. 730+00 ~ Sta. 749+00

LEGEND

(29)—451 CONTINUOUSLY REINFORCED CONCRETE PAVEMENT AS PER PLAN

(4)—301 BITUMINOUS AGGREGATE BASE AS PER PLAN. 702.01(85-100) OR 702.09, RT-11 or RT-12 SEE NOTE IN PROPOSAL.
(5)—304 AGGREGATE BASE
(6)—6056" PIPE, UNDERDRAIN
(7)—606 GUARD RAIL TYPE 5
(8)—606 GUARD RAIL BARRIER TYPE 5
(9)—612 CONCRETE MEDIAN STANDARD TYPE AS PER PLAN
(10)—STANDARD LONGITUDINAL JOINT
(12)—310 SUBBASE, REGULAR GRADING
(13)—659 SEEDING & MULCHING SEE GENERAL NOTES.

* - ALL EARTH SLOPES TYPICAL UNLESS OTHERWISE SHOWN ON THE CROSS SECTIONS. SEE SHEET Nº 11 FOR VARIOUS SIDE TREATMENT.

0' 2' 4' 8'

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TYPICAL SECTIONS

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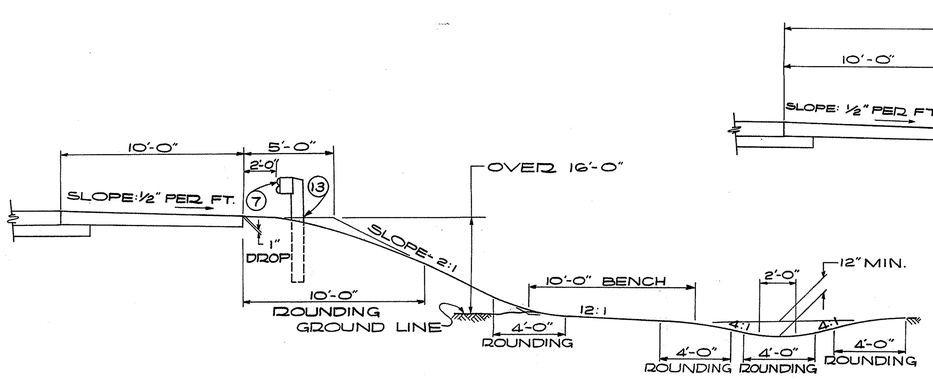
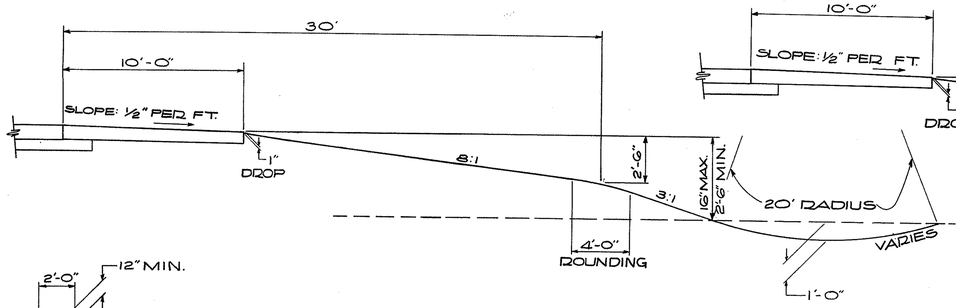
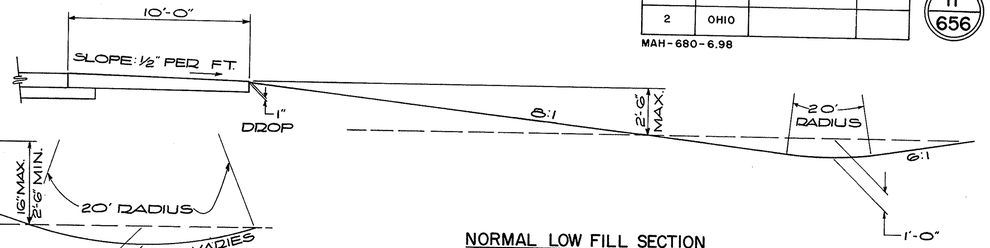


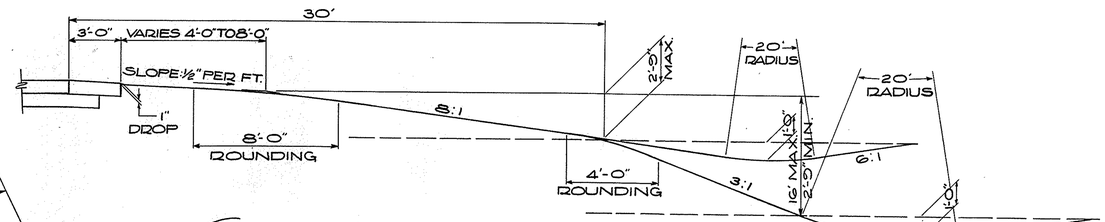
NORMAL DEEP FILL SECTION



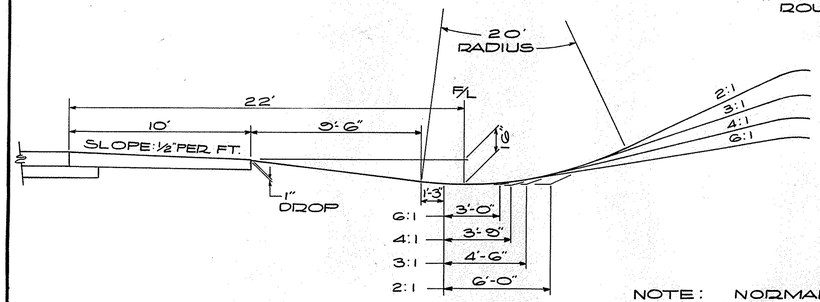
NORMAL MEDIUM FILL SECTION



NORMAL LOW FILL SECTION

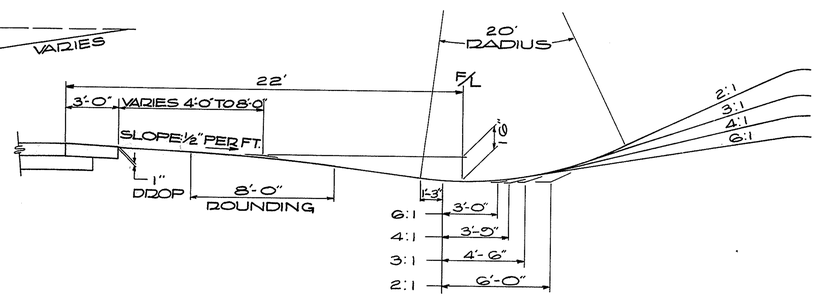


NORMAL MEDIUM & LOW FILL SECTION - RAMP ONLY

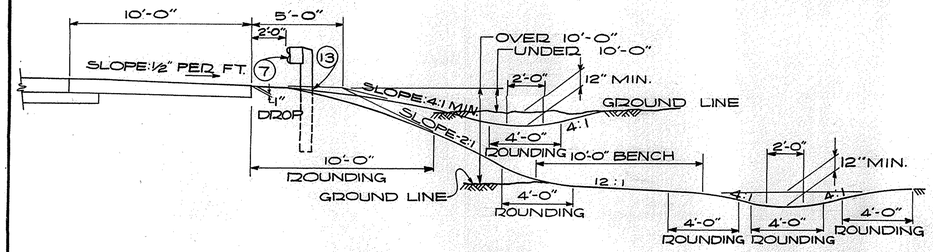


NORMAL CUT SECTION

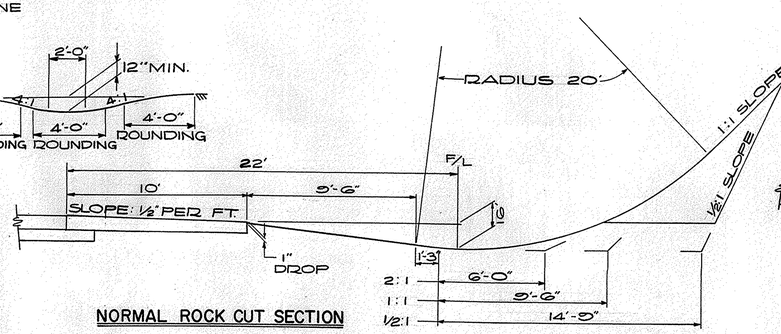
NOTE: NORMAL CUT AND FILL SECTIONS SHALL BE USED WHEREVER POSSIBLE. ALTERNATE CUT AND FILL SECTIONS SHALL BE USED ONLY AT STRUCTURES, DRAINAGE APPURTENANCES AND AT SUCH LOCATIONS WHERE THE USE OF THE NORMAL SECTIONS WOULD EXTEND WORK LIMITS BEYOND THE PROPOSED LIMITED ACCESS OR RIGHT-OF-WAY LINE.



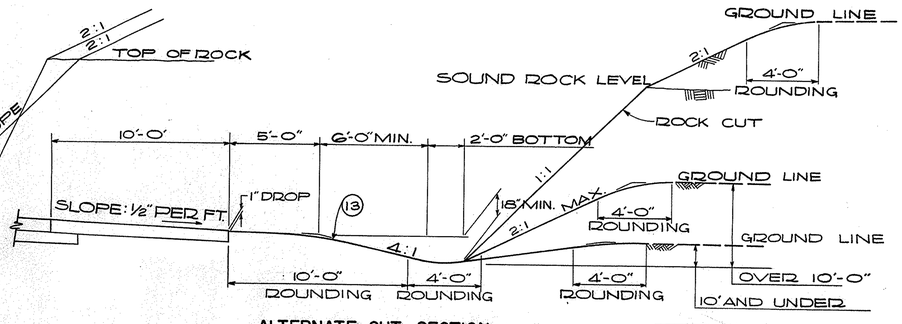
NORMAL CUT SECTION - RAMP ONLY



ALTERNATE-FILL SECTION



NORMAL ROCK CUT SECTION



ALTERNATE-CUT SECTION

0 2' 4' 8'

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TYPICAL SECTIONS

TYPICAL SECTIONS

TYPE 451

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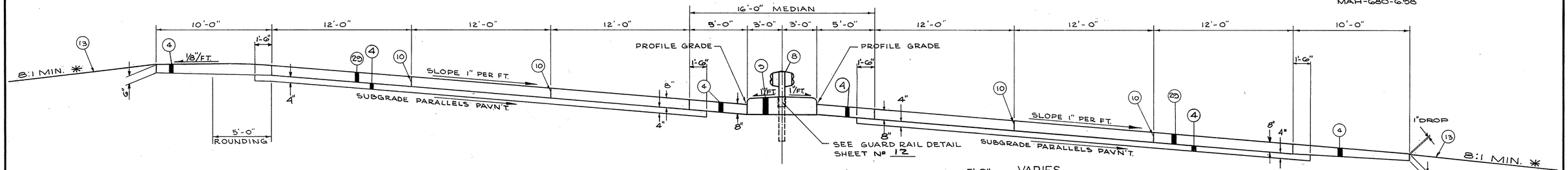
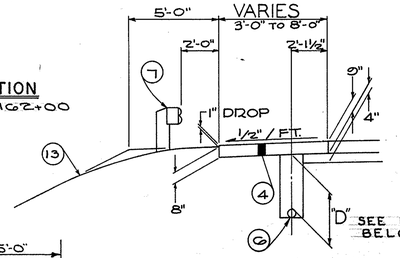
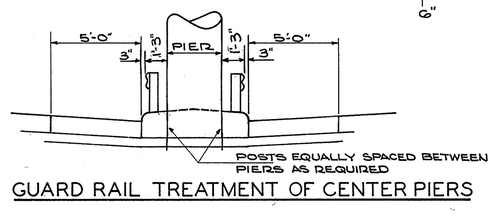




SUPERELEVATED SECTION

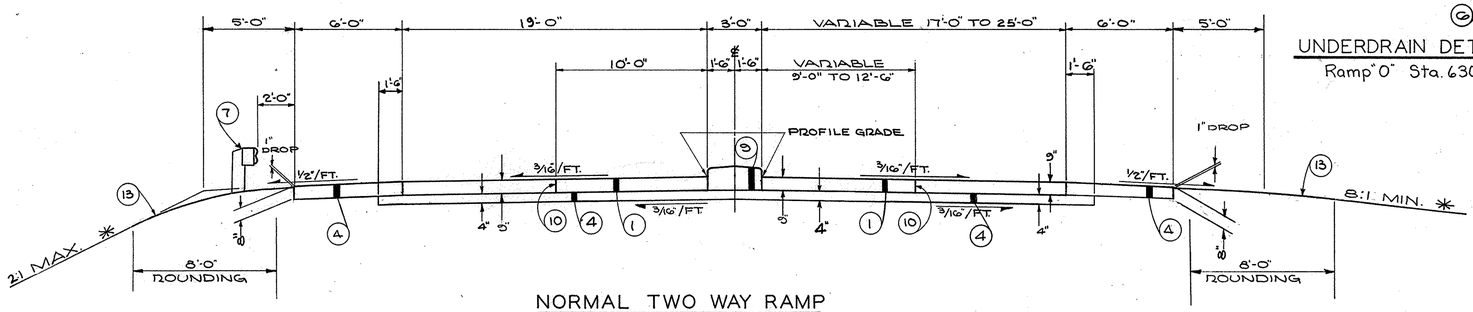
LIMITING STATIONS 753+30.87 TO 762+00



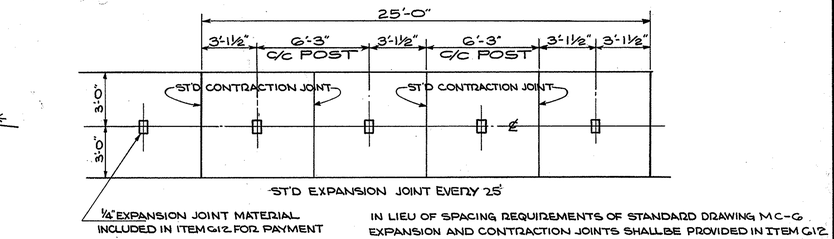
GUARD RAIL TREATMENT OF CENTER PIERS

UNDERDRAIN DETAIL ON RAMP "O"

Ramp "O" Sta. 630+00 -Sta. 638+00

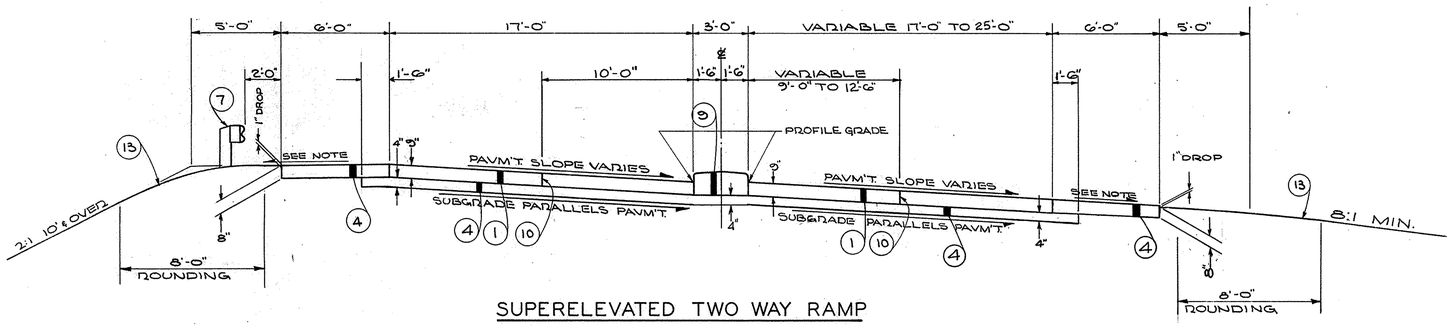


NORMAL TWO WAY RAMP



IN LIEU OF SPACING REQUIREMENTS OF STANDARD DRAWING MC-6 EXPANSION AND CONTRACTION JOINTS SHALL BE PROVIDED IN ITEM 612 CONCRETE MEDIAN AS DETAILED HEREON, WHENEVER GUARD RAIL IS CALLED FOR.

JOINT DETAILS AT GUARD RAIL POSTS



SUPERELEVATED TWO WAY RAMP

* SEE NOTE ON SHEET 13

LEGEND

(1) 451 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

(29) 451 CONTINUOUSLY REINFORCED CONCRETE PAVEMENT (AS PER PLAN)

(4) 301 BITUMINOUS AGGREGATE BASE: 702.01 (85-100) OR 702.09 RT-11 or RT-12

(5) 304 AGGREGATE BASE

(6) 605 6" PIPE, UNDERDRAINS

(8) 606 GUARD RAIL BARRIER TYPE 5

(9) 612 CONCRETE MEDIAN STANDARD AS PER PLAN

(10) STANDARD LONGITUDINAL JOINT

(12) 310 SUBBASE, REGULAR GRADING

(13) 659 SEEDING & MULCHING SEE GENERAL NOTES

UNDERDRAIN TYPES	
"D" = DEPTH OF COVER	TYPE
36"	SHALLOW
TRANSITION	UNCLASSIFIED
56"	DEEP
18"	ROCK CUT

SHOULDER TREATMENT FOR THE TWO WAY RAMP SECTION IN SUPERELEVATION SHALL BE AS SHOWN FOR THE ONE LANE SUPERELEVATED RAMP SECTION.

NOTE SUPERELEVATED PAVED SHOULDERS.
THE OUTSIDE SHOULDER SHALL SLOPE AWAY FROM THE PAVEMENT AT THE RATE OF ½" PER FT. UNTIL THE BREAK BETWEEN SHOULDER AND PAVEMENT REACHES 5.80%, AFTER WHICH THE SAME ANGLE SHALL BE MAINTAINED UNTIL THE SLOPE OF THE SHOULDER WOULD BE LESS THAN ⅛" PER FT., AFTER WHICH THE PAVEMENT SLOPE SHALL BE EXTENDED INTO THE SHOULDER FOR 2'-0" AND JOINED TO THE ⅛" PER FT. SHOULDER BY A 5'-0" ROUNDING.

0 2' 4' 8'

TYPICAL SECTIONS

MAY 25 1971

TYPICAL SECTIONS

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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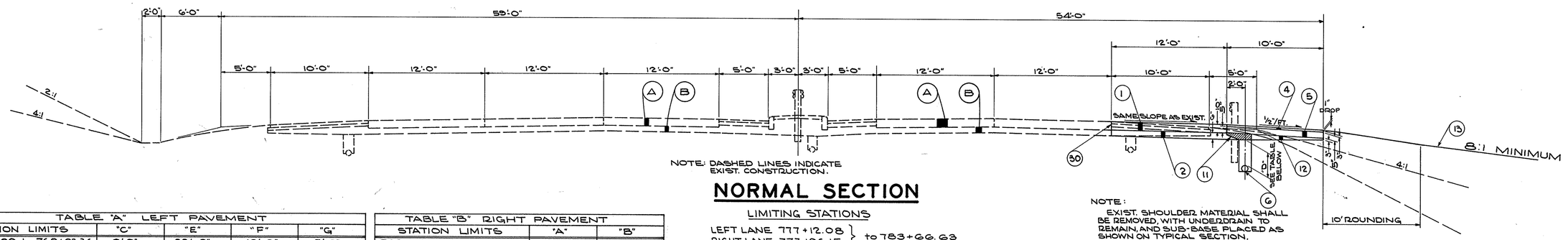


NOTE: DASHED LINES INDICATE EXIST. CONSTRUCTION.

NORMAL SECTION

LIMITING STATIONS

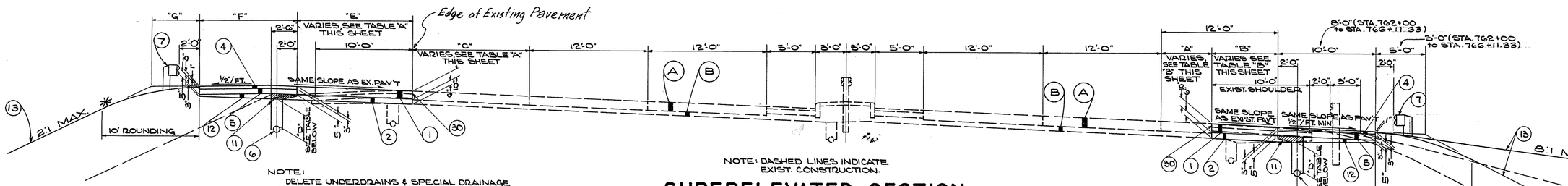
LEFT LANE 777+12.08 } to 783+66.63
RIGHT LANE 777+96.15 }

NOTE:
EXIST. SHOULDER MATERIAL SHALL BE REMOVED, WITH UNDERDRAIN TO REMAIN, AND SUB-BASE PLACED AS SHOWN ON TYPICAL SECTION.

TABLE "A" LEFT PAVEMENT				
STATION LIMITS	"C"	"E"	"F"	"G"
762+00.00 to 762+23.36	0'-0"	22'-0"	10'-0"	5'-0"
762+23.36 to 763+23.36	10'-0"	SEE SH. Nº 318	SEE SH. Nº 318	SEE SH. Nº 318
763+23.36 to 766+50.00	SEE NOTE A	See NOTE A	8'-0"	3'-0"
766+50.00 to 769+26.07	12'-0"	12'-0"	8'-0"	3'-0"
769+26.07 to 770+26.07	12'-0"	12'-0" to 0'-0"	8'-0" to 10'-0"	3'-0" to 5'-0"
770+26.07 to 777+12.08	12'-0"	0'-0"	10'-0"	5'-0"

TABLE "B" RIGHT PAVEMENT		
STATION LIMITS	"A"	"B"
762+00.00 to 762+11.38	0'-00"	SEE SH. Nº 318
762+11.38 to 763+50.00	SEE SH. Nº 72	SEE SH. Nº 72
763+50.00 to 766+11.33	12'-00"	5'-6" TO 0'-0"
766+11.33 to 768+50.00	12'-00"	0'-0"
768+50.00 to 772+00.00	12'-0" to 0'-0"	0'-0" to 12'-0"
772+00.00 to 777+96.15	0'-00"	12'-0"

Note A: Dimension "C" varies, verify exact dimensions in field. Dimension "E" varies and is the distance between the existing edge of pavement and the new edge of pavement as defined by the baseline of Ramp A. See sheet No. 72 for plan.



NOTE:
DELETE UNDERDRAINS & SPECIAL DRAINAGE CONNECTIONS ON HIGH SIDE OF SUPERELEVATED SECTION FOR FILL AREA. SEE NOTE AT RIGHT CONCERNING EXISTING SHOULDER MATERIAL.

NOTE: DASHED LINES INDICATE EXIST. CONSTRUCTION.

SUPERELEVATED SECTION

LIMITING STATIONS

762+00 to 763+30.74
764+71.55 to 766+57.32
767+93.47 to { 777+12.08 LEFT LANE / 777+96.15 RIGHT LANE }

NOTE:
EXIST. SHOULDER MATERIAL SHALL BE REMOVED, WITH UNDERDRAIN TO REMAIN, AND SUB-BASE PLACED AS SHOWN ON TYPICAL SECTION. TO BE PERFORMED ON BOTH SIDES. PAYMENT SHALL BE MADE AS 203

NOTE: SUPERELEVATED PAVED SHOULDERS
THE OUTSIDE SHOULDER SHALL SLOPE AWAY FROM THE PAVEMENT AT THE RATE OF ½" PER FT. UNTIL THE BREAK BETWEEN SHOULDER AND PAVEMENT REACHES 5.80%, AFTER WHICH THE SAME ANGLE SHALL BE MAINTAINED UNTIL THE SLOPE OF THE SHOULDER WOULD BE LESS THAN ⅛" PER FT., AFTER WHICH THE PAVEMENT SLOPE SHALL BE EXTENDED INTO THE SHOULDER FOR 2'-6" AND JOINED TO THE ⅛" PER FT. SHOULDER BY A 5'-0" ROUNDING.

UNDERDRAIN TYPES	
"D" DEPTH OF COVER	TYPE
30"	SHALLOW
TRANSITION	UNCLASSIFIED
50"	DEEP
12"	ROCK CUT

*-ALL EARTH SLOPES TYPICAL UNLESS OTHERWISE SHOWN ON THE CROSS SECTIONS SEE SHEET Nº 11 FOR VARIOUS SIDE SLOPE TREATMENTS.

(1) 451 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
(2) 310 SUBBASE GRADING A AS PER PLAN. (SEE GENERAL NOTES)
(4) 301 BITUMINOUS AGGREGATE BASE AS PER PLAN. 702.01 (85-100) OR 702.09 RT-11 or RT-12 SEE NOTE IN PROPOSAL
(5) 304 AGGREGATE BASE
(6) 605 6" PIPE UNDERDRAINS
(7) 606 GUARD RAIL TYPE 5
(11) SPECIAL DRAINAGE CONNECTION, USING Nº 8 AGGREGATE (SEE NOTE IN PROPOSAL)
(12) 310 SUBBASE, REGULAR GRADING
(13) 659 SEEDING AND MULCHING (SEE GENERAL NOTES)
(30) STANDARD EXPANSION BOLT JOINT AS PER PLAN
(A) 10" REINFORCED CONCRETE PAVEMENT (EXISTING)
(B) 6" SUBBASE (EXISTING)

0' 5' 10'

TYPICAL SECTIONS

MAY 25 '82

FED. RD.	STATE	PROJECT	
2	OHIO		

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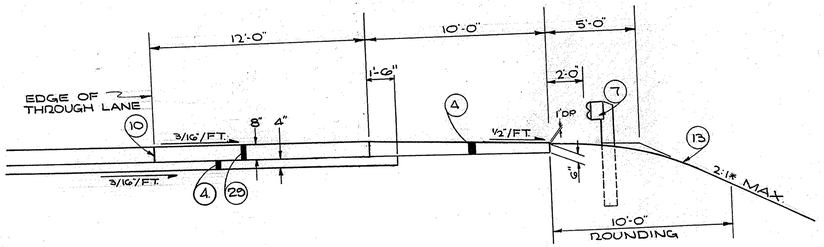
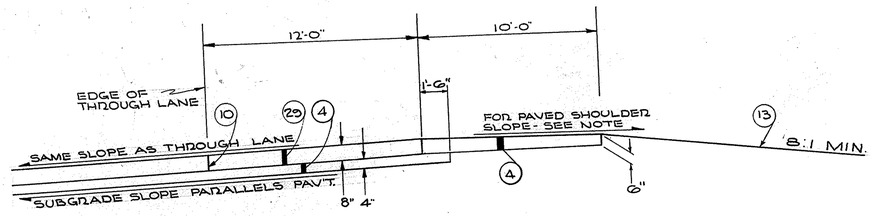
TYPICAL SECTIONS
TYPE 451
CODE TYPE-7223
SCALE: 1/4" = 1'-0"

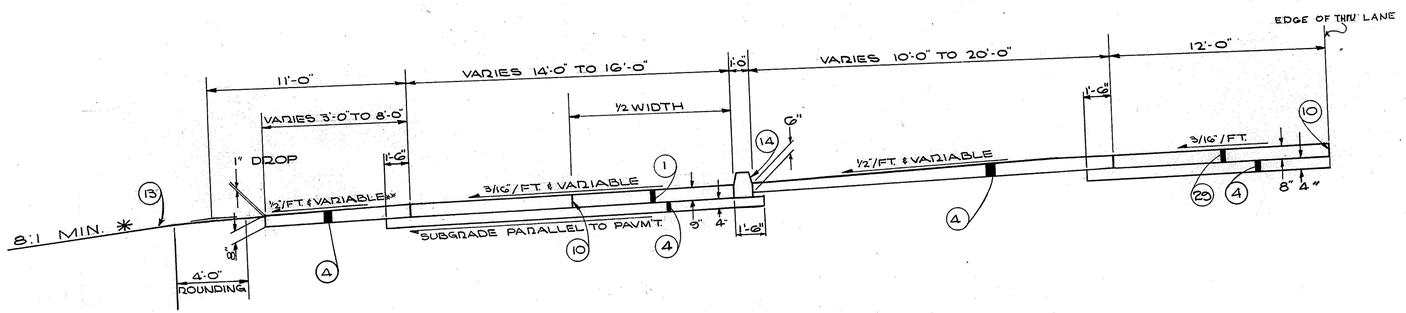


NORMAL COMBINED
ACCELERATION-DECELERATION LANE

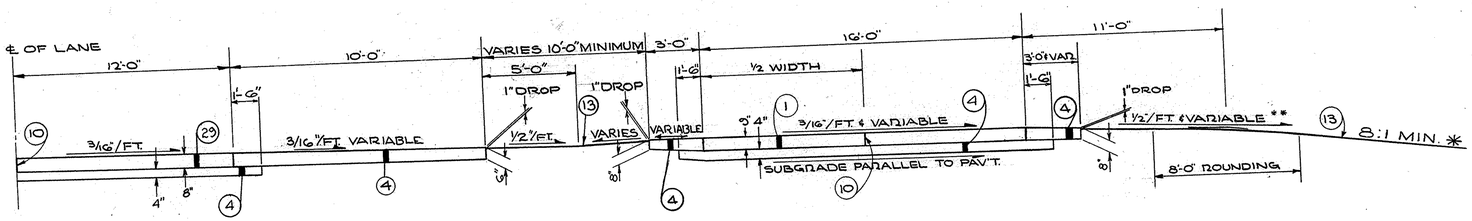


SUPERELEVATED COMBINED
ACCELERATION-DECELERATION LANE

NOTE: SUPERELEVATED PAVED SHOULDERS.
THE OUTSIDE SHOULDER SHALL SLOPE AWAY FROM THE PAVEMENT AT THE RATE OF ½" PER FT UNTIL THE BREAK BETWEEN SHOULDER AND PAVEMENT REACHES 5.80%, AFTER WHICH THE SAME ANGLE SHALL BE MAINTAINED UNTIL THE SLOPE OF THE SHOULDER WOULD BE LESS THAN ⅛" PER FT, AFTER WHICH THE PAVEMENT SLOPE SHALL BE EXTENDED INTO THE SHOULDER FOR 2'-6" AND JOINED TO THE ⅛" PER FT. SHOULDER BY A 5'-0" ROUNDING.



NORMAL SECTION ENTRANCE RAMP TERMINAL



NORMAL SECTION EXIT RAMP TERMINAL

LEGEND

(1) 451 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
(2) 310 SUBBASE GRADING A AS PER PLAN (SEE GENERAL NOTES)
(4) 301 BITUMINOUS AGGREGATE BASE AS PER PLAN. 702.01 (85-100) OR 702.05 RT-11 OR RT-12 SEE NOTE IN PROPOSAL.
(5) 304 AGGREGATE BASE
(6) 605 6" PIPE, UNDERDRAINS
(7) 606 GUARD RAIL TYPE 5
(9) 612 CONCRETE MEDIAN AS PER PLAN
(10) STANDARD LONGITUDINAL JOINT
(12) 310 SUBBASE, REGULAR GRADING
(13) 659 SEEDING & MULCHING SEE GENERAL NOTES
(14) 609 CONCRETE CURB STANDARD TYPE 8
(29) 451 CONTINUOUSLY REINFORCED CONCRETE PAVEMENT (AS PER PLAN)

0' 2' 4' 8'

* ALL EARTH SLOPES TYPICAL UNLESS OTHERWISE SHOWN ON THE CROSS SECTIONS. SEE SHEET Nº 11 FOR VARIOUS SIDE SLOPE TREATMENTS.

** IN SUPERELEVATION, SHOULDERS SHALL BE TREATED THE SAME AS MAINLINE OUTSIDE SHOULDERS

TYPICAL SECTIONS

MAY 23 1998

TYPICAL SECTIONS
TYPE 451
CODE TYPE-7223
SCALE: 1/4" = 1'-0"

FED. RD.	STATE	PROJECT	
2	OHIO		

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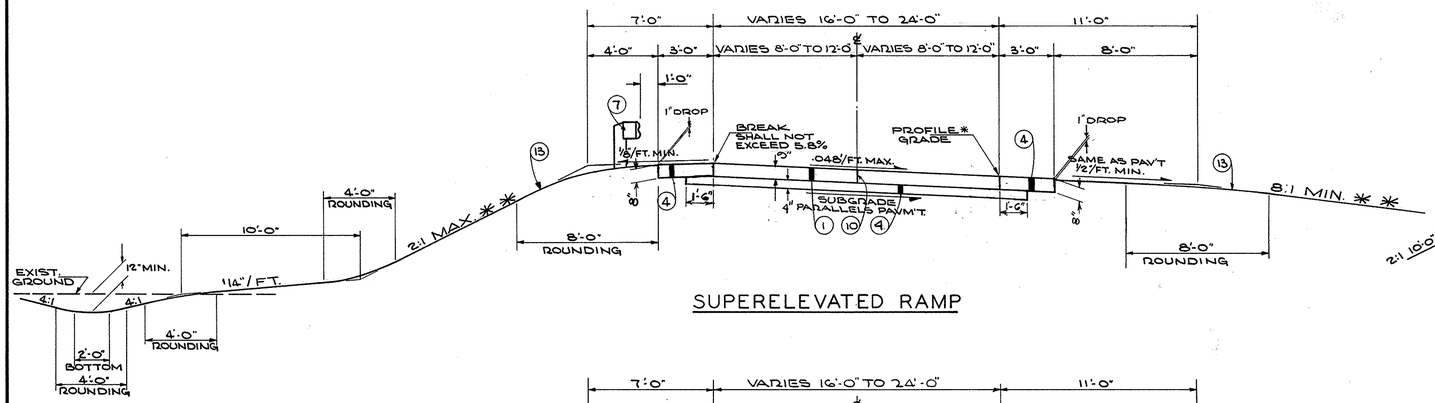
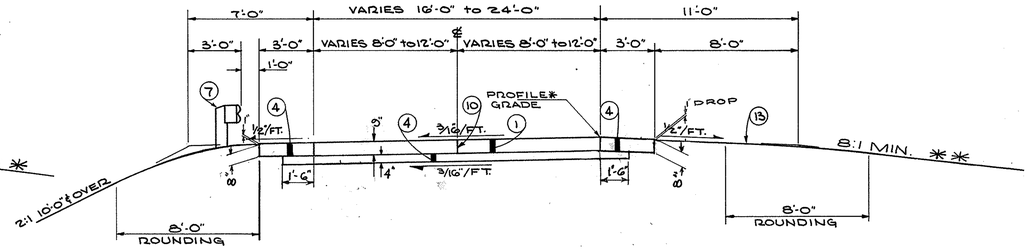
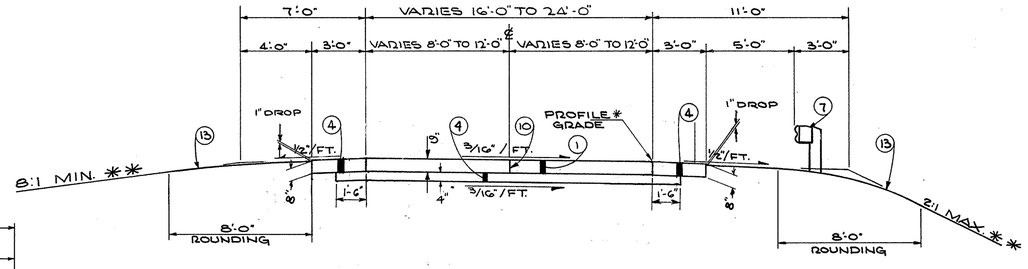


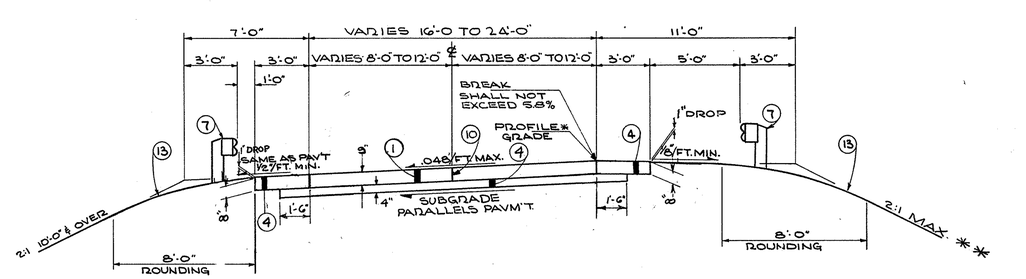
SUPERELEVATED RAMP



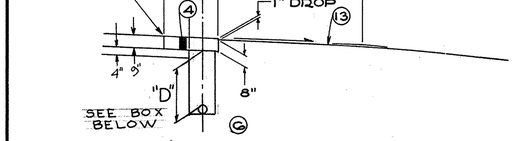
SUPERELEVATED RAMP

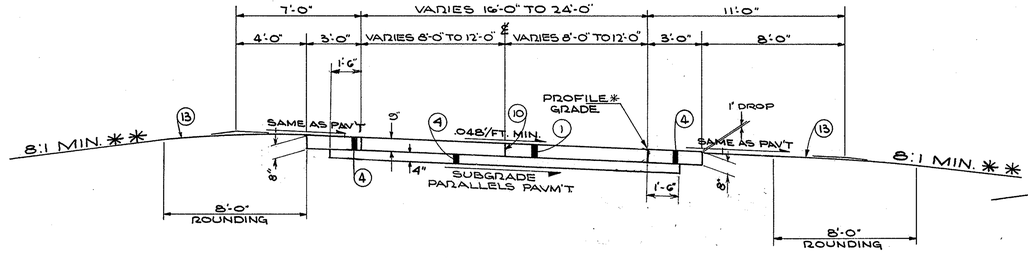


NORMAL RAMP



SUPERELEVATED RAMP





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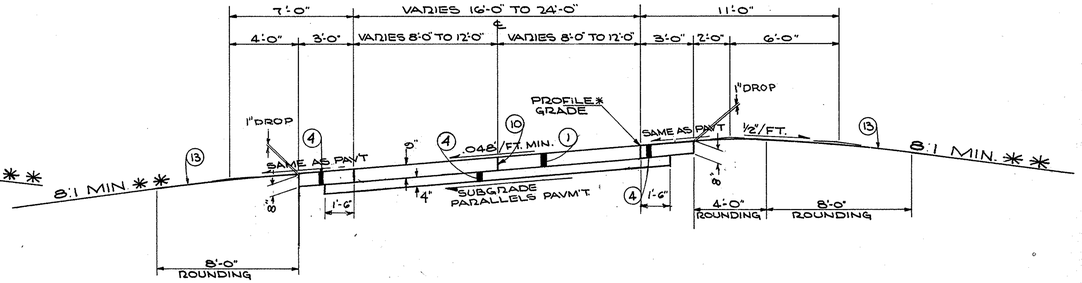

SUPERELEVATED RAMP

(1) 451 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
(2) 310 SUBBASE GRADING "A" , AS PER PLAN (SEE GENERAL NOTE'S)

(4) 301 BITUMINOUS AGGREGATE BASE AS PER PLAN. 702.01 (85-100) OR 702.05, RT-11 or RT-12 SEE NOTE IN PROPOSAL
(5) 304 AGGREGATE BASE
(6) 605 6" PIPE, UNDERDRAINS

SEQUENCE OF OPERATIONS: (1) INSTALL PIPE UNDERDRAIN ON OUTSIDE SHOULDER. INSTALLATION OF SHALLOW UNDERDRAIN IN MEDIAN MAY BE DEFERRED UNTIL 451 IS PLACED, (2) PLACE SUBBASE OUT TO OUTSIDE EDGE OF UNDERDRAIN OR TO 18" BEYOND EDGE OF PAVEMENT WHERE NO UNDERDRAIN IS PRESENT, PAYMENT SHALL BE MADE FOR ALL SUBBASE PLACED IN THIS OPERATION, (3) CONSTRUCT 451, (4) REMOVE SUBBASE AND ANY CONTAMINATED BACKFILL OVER DRAIN AND REPLACE WITH № 8 AGGREGATE AS SHOWN BY (11), (5) COMPLETE SHOULDER CONSTRUCTION.

(7) 606 GUARD RAIL TYPE 5
(10) STANDARD LONGITUDINAL JOINT
(11) SPECIAL DRAINAGE CONNECTION, USING № 8 AGGREGATE (SEE NOTE IN PROPOSAL)
(12) 310 SUBBASE, REGULAR GRADING
(13) 659 SEEDING & MULCHING SEE GENERAL NOTES.

* NOTE: RIGHT AND LEFT CONFIGURATIONS SHALL BE REFERENCED TO THE DIRECTION OF TRAVEL NOT NECESSARILY IN THE DIRECTION OF STATIONING.
FOR LIMITING STATION SEE PAVEMENT DETAIL

UNDERDRAIN TYPES	
"D" = DEPTH OF COVER	TYPE
36"	SHALLOW
TRANSITION	UNCLASSIFIED
56"	DEEP
18"	ROCK CUT

** ALL EARTH SLOPES TYPICAL UNLESS OTHERWISE SHOWN ON THE CROSS SECTIONS. SEE SHEET № 11 FOR VARIOUS SLOPE TREATMENTS.

0' 2' 4' 8'

TYPICAL SECTIONS

MAY 26 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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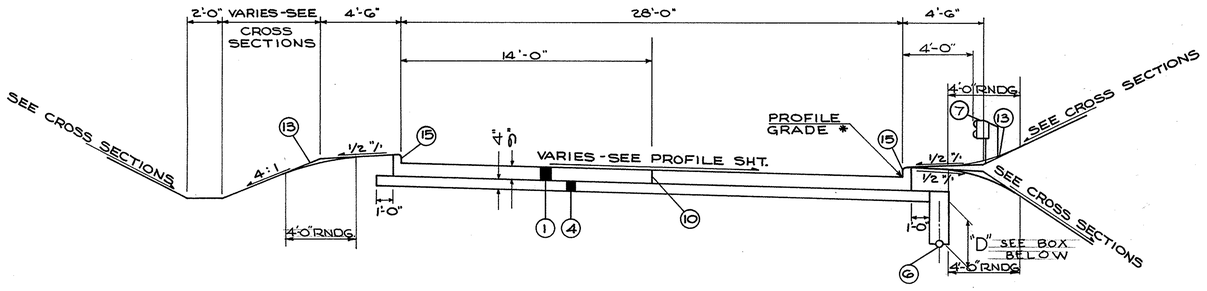
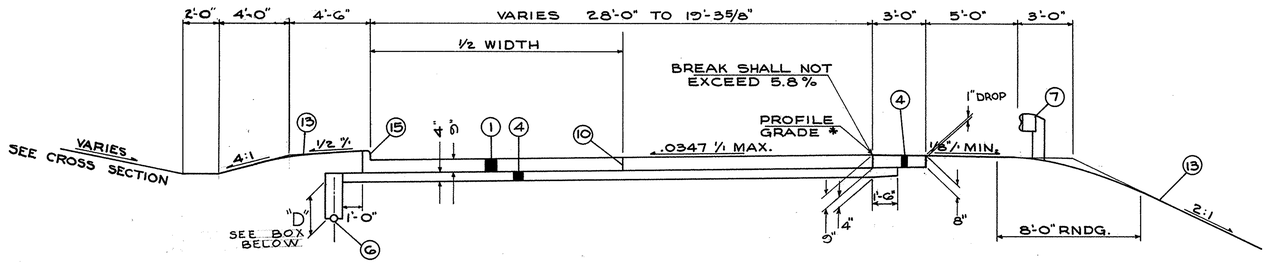
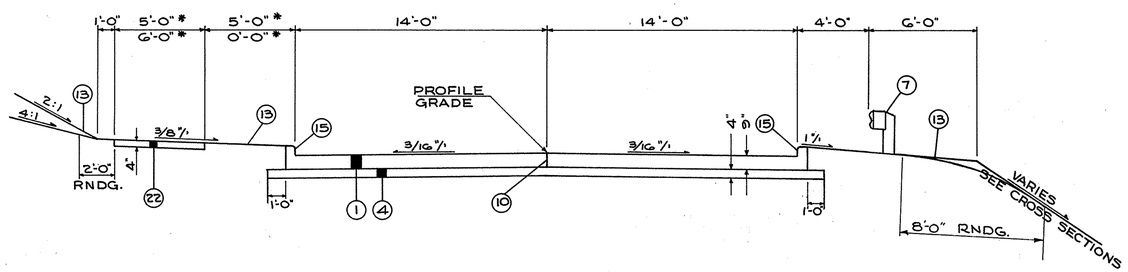
TYPE 451



TWO-CURB SECTION
RAMP "F"
LIMITING STATIONS
STA. 720+80.92 TO STA. 733+14.04



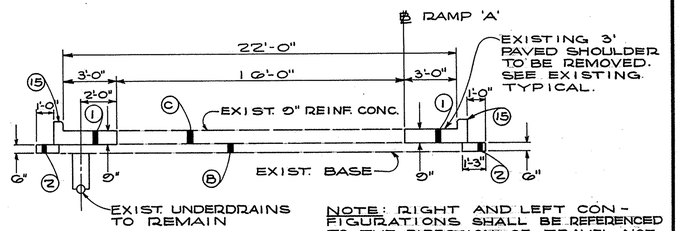
ONE-CURB SECTION
RAMP "F"
LIMITING STATIONS
STA. 733+14.04 TO STA. 734+25



*SEE PAVEMENT DETAILS FOR DIMENSIONS

TYPICAL SECTION RAMP "E"
LIMITING STATIONS
STA. 709+78.96 TO STA. 709+85.75
STA. 712+78.25 TO STA. 715+43.19

SHOULDER REMOVAL ON RAMP 'A' - ALL WATERPROOF AGGREGATE BASE COURSE AND STABILIZED CRUSHED AGGREGATE TO BE REMOVED WITHOUT DAMAGE TO EXISTING SUBBASE OR SUBBASE MUST BE REPLACED AT CONTRACTOR'S EXPENSE.



NOTE: RIGHT AND LEFT CONFIGURATIONS SHALL BE REFERENCED TO THE DIRECTION OF TRAVEL NOT NECESSARILY IN THE DIRECTION OF STATIONING.

WIDENED SECTION RAMP "A"

LIMITING STATIONS
LEFT STA. 757+30.45 } TO STA. 759+50
RIGHT STA. 757+35.45 }

LEGEND

(1) 451 - REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
(2) 310 - SUBBASE GRADING "A" AS PER PLAN (SEE GENERAL NOTES)
(4) 301 - BITUMINOUS AGGREGATE BASE AS PER PLAN. 702.01 (85-100) OR 702.09, RT-1 or RT-2 SEE NOTE IN PROPOSAL
(5) 304 - AGGREGATE BASE
(6) 605 - 6" PIPE UNDERDRAINS
(7) 606 - GUARD RAIL TYPE 5
(10) STANDARD LONGITUDINAL JOINT
(12) 310 - SUBBASE, REGULAR GRADING
(13) 659 - SEEDING AND MULCHING SEE GENERAL NOTES
(15) 609 - CONCRETE CURB, STANDARD TYPE 2-A
(22) 608 - CONCRETE WALKS
(B) 6" SUBBASE (EXISTING)
(C) 9" REINFORCED CONCRETE (EXISTING)

UNDERDRAIN TYPES	
"D" DEPTH OF COVER	TYPE
32"	SHALLOW
TRANSITION	UNCLASSIFIED
52"	DEEP
14"	ROCK CUT

0' 2' 4' 8'

TYPICAL SECTIONS RAMPS 'A','E' & 'F'

MAY 4, 81

TYPICAL SECTIONS
404

FED. RD.	STATE	PROJECT	
2	OHIO		

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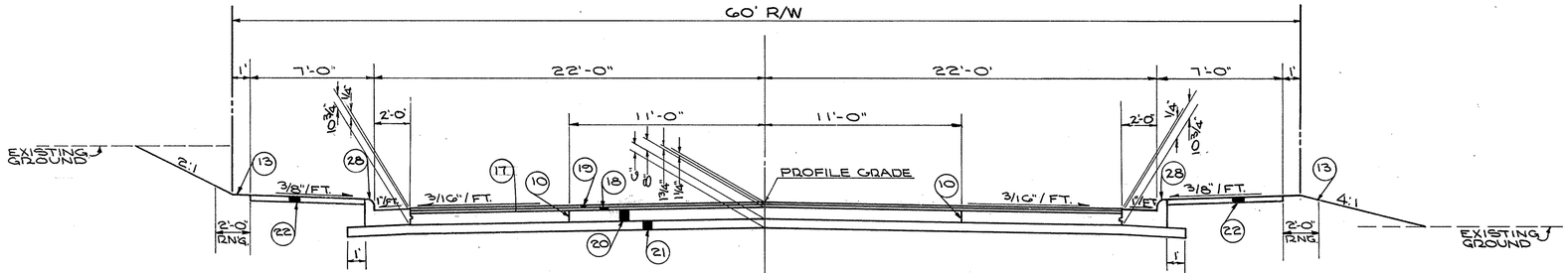
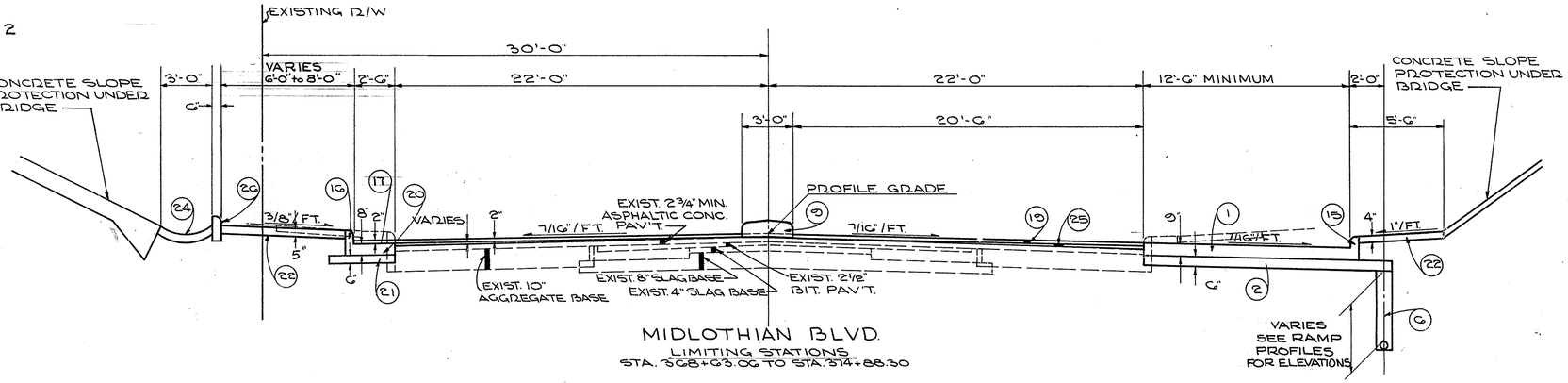
LEGEND

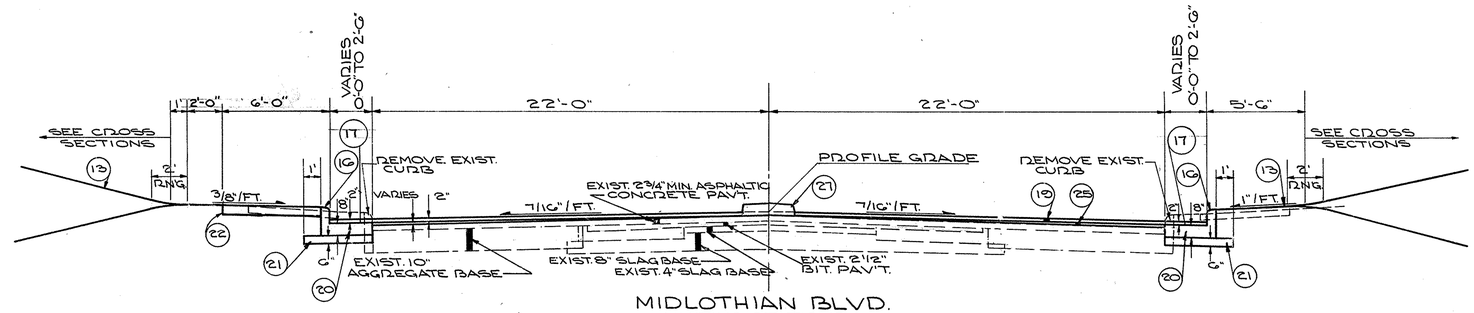
(1) 451 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT.
(2) 310 SUBBASE GRADING 'A' (AS PER PLAN). SEE GENERAL NOTES
(6) 605 6" PIPE UNDERDRAINS
(9) 612 CONCRETE MEDIAN.
(10) STANDARD LONGITUDINAL JOINT.
(13) 659 SEEDING AND MULCHING SEE GENERAL NOTES
(15) 608 CONCRETE CURB, STANDARD TYPE 2-A.
(16) 608 CONCRETE CURB, STANDARD TYPE 2-B.
(17) 407 TACK COAT. 702.04, MS-2 OR RS-1 OR 702.02, RC-70 OR RC-250, APPLIED AT THE RATE OF 0.10 GAL./SQ.YD.
(18) 402 1¾" ASPHALT CONCRETE (70-85)
(19) 404 1¼" MIN. ASPHALT CONCRETE (70-85)
(20) 305 PORTLAND CEMENT CONCRETE BASE.
(21) 310 SUBBASE, GRADING 'B'
(22) 608 CONCRETE WALK.
(24) 601 PAVED GUTTER, TYPE 2.
(25) 403 0" MINIMUM ASPHALT CONCRETE USING 404 MATERIAL (70-85)
(26) 609 CONCRETE CURB, STANDARD TYPE 6.
(27) 613 TRAFFIC DIVIDERS
(28) 609 COMBINATION CURB AND GUTTER, STANDARD TYPE 2



SHIRLEY ROAD
LIMITING STATIONS
STA. 42+10 TO STA. 62+50



MIDLOTHIAN BLVD.
LIMITING STATIONS
STA. 368+03.06 TO STA. 374+88.30



MIDLOTHIAN BLVD.
LIMITING STATIONS
STA. 366+29.21 TO STA. 368+03.06
STA. 374+88.30 TO STA. 379+10

MAY 25 1971
Rev. Aug. 9, 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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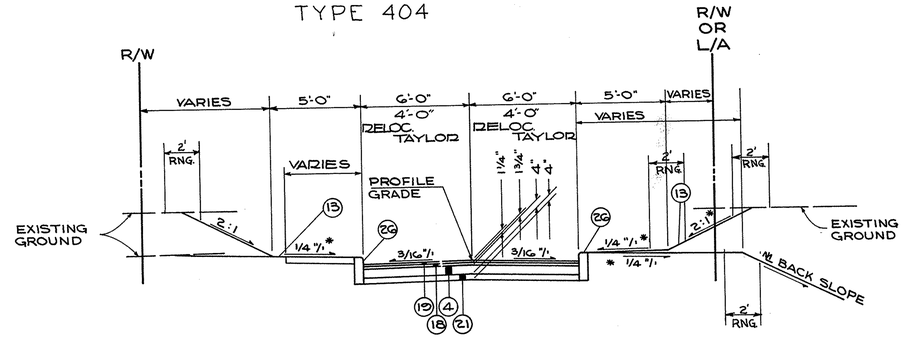
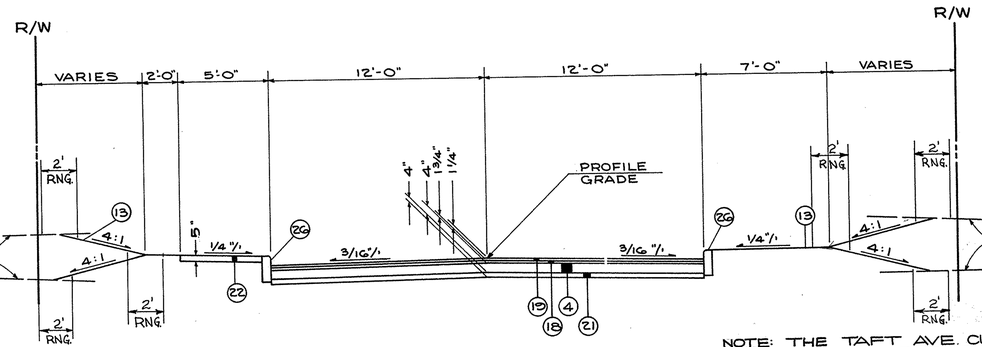
TYPE 404



RELOCATED TAYLOR AVE. AND RELOCATED TAYLOR AVE.-SOUTH TURNAROUND

LIMITING STATIONS
RELOC. TAYLOR STA. 45+00 TO STA. 46+55
RELOC. TAYLOR-SOUTH TURNAROUND STA. 33+47.06 TO STA. 35+20

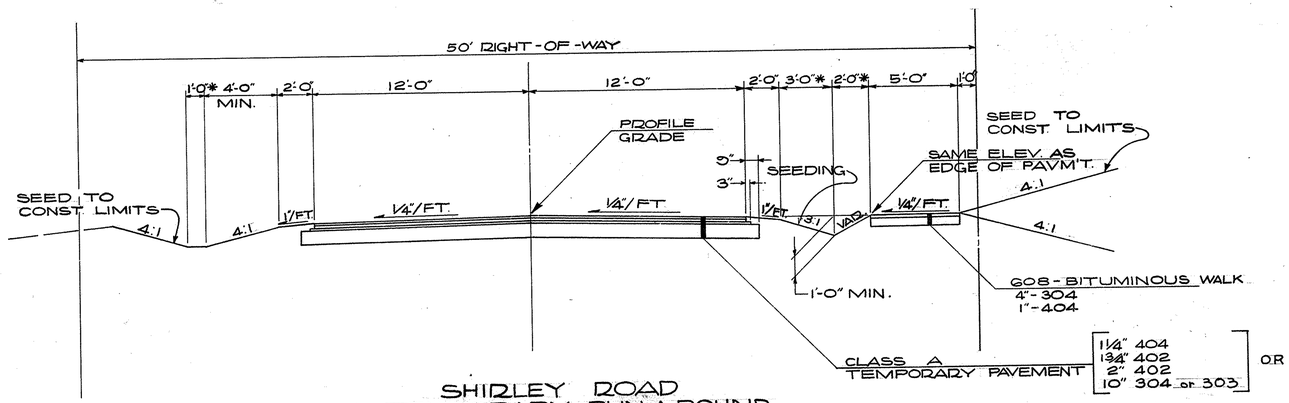
* NOTE: EXTEND SLOPE TO MEET EXISTING GROUND OR ¢ BACK SLOPE, SEE CROSS SECTIONS. SLOPE AWAY FROM CURB FOR RELOCATED PORTION AND TOWARD CURB FOR TURNAROUND PORTION.



HUMBOLT-TAFT CONNECTOR

LIMITING STATIONS
STA. 10+13.70 TO STA. 13+62

NOTE: THE TAFT AVE CUL-DE-SAC SHALL HAVE THE SAME PAVEMENT TYPE AND THICKNESS AS SHOWN FOR THE CONNECTOR.



SHIRLEY ROAD
TEMPORARY RUN-A-ROUND

LIMITING STATIONS
STA. 50+22 TO STA. 53+77.75
STA. 117+85.61 TO STA. 109+99

* DELETE FULL DEPTH SIDE DITCHES
STA. 50+72.2 TO STA. 52+50
STA. 109+00 TO STA. 111+50

LEGEND

(4) 301 - BITUMINOUS AGGREGATE BASE 702.01 (85-100) OR 702.09, RT-11 OR RT-12
(13) 659 - SEEDING AND MULCHING SEE GENERAL NOTES.
(16) 609 - CONCRETE CURB, STANDARD TYPE 2-B
(18) 402 - 1¾" MIN. ASPHALT CONCRETE (70-85)
(19) 404 - 1¼" MIN. ASPHALT CONCRETE (70-85)
(21) 310 - SUBBASE GRADING "B"
(22) 608 - CONCRETE WALKS
(26) 609 - CONCRETE CURB, STANDARD TYPE 6
(28) 609 - COMBINATION CURB & GUTTER, STANDARD TYPE 2

0 2' 4' 8'

TYPICAL SECTIONS

MAY 25 1971

TYPE 404 & 451

FED. RD.	STATE	PROJECT	
2	OHIO		

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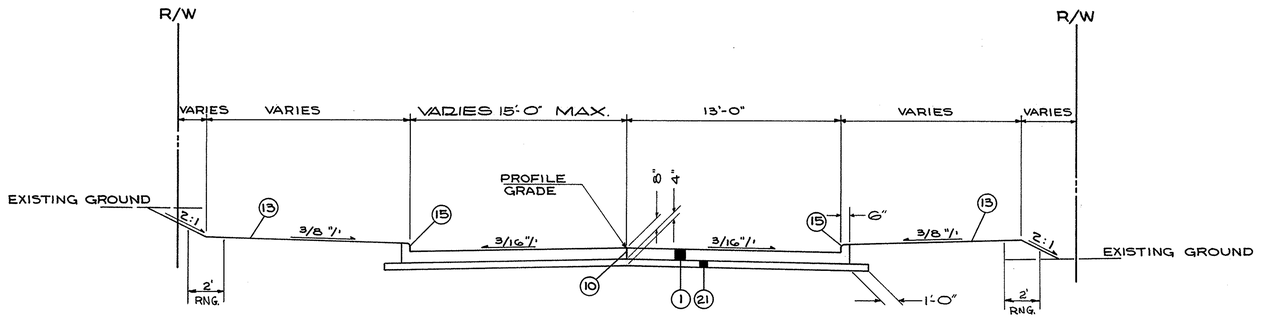
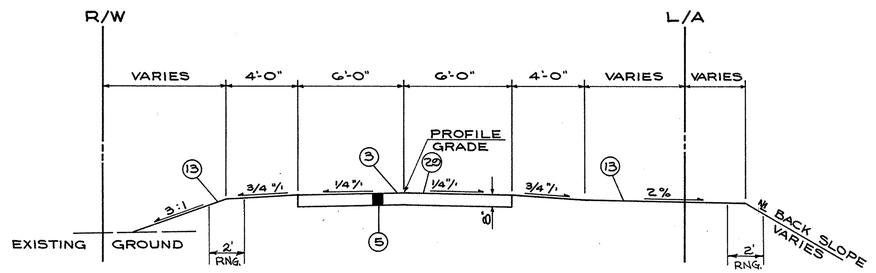
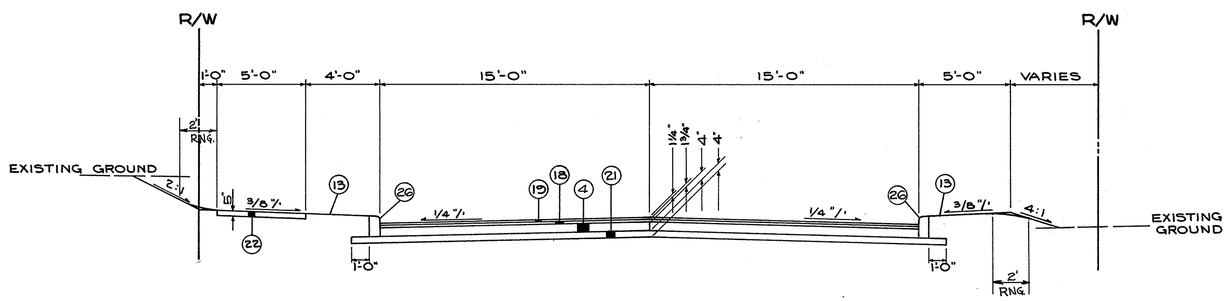


POWERSDALE AVENUE
LIMITING STATIONS
STA. 8+50.88 TO STA. 11+23.50



ACCESS ROAD AT GIBSON AVENUE
LIMITING STATIONS
STA. 0+20.20 TO STA. 4+25



POWERSDALE - MABEL CONNECTOR
LIMITING STATIONS
STA. 10+72.34 TO STA. 13+53.86

LEGEND

(1) 451 - REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

(3) 409- SEAL COAT USING 0.008 CU.YD. Nº 8 AGGREGATE PER SQ.YD. AND 0.30 GALS. BITUMINOUS MATERIAL PER SQ.YD. 702.09 RT-9 or RT-10 or 702.02, MC-800 or MC-3000.

(5) 304- AGGREGATE BASE

(10) STANDARD LONGITUDINAL JOINT "

(13) 659- SEEDING AND MULCHING SEE GENERAL NOTES

(15) 609- CONCRETE CURB, STANDARD TYPE 2-A

(18) 402- 1¾" ASPHALT CONCRETE (70-85)

(19) 404- 1¼" ASPHALT CONCRETE (70-85)

(22) 408- BITUMINOUS PRIME COAT 702.09 RT-2 OR RT-3 APPLIED AT THE RATE OF 0.40 GALS. PER S.Y.

(21) 310- SUBBASE GRADING "B"

(22) 608- CONCRETE WALKS

(26) 609- CONCRETE CURB, STANDARD TYPE 6

(4) 301 - BITUMINOUS AGGREGATE BASE 702.01 (85-100) OR 702.09, RT-11 OR RT-12

0' 2' 4' 8'

MAY 25 1971

TYPICAL SECTIONS

TYPE 404 & 451

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

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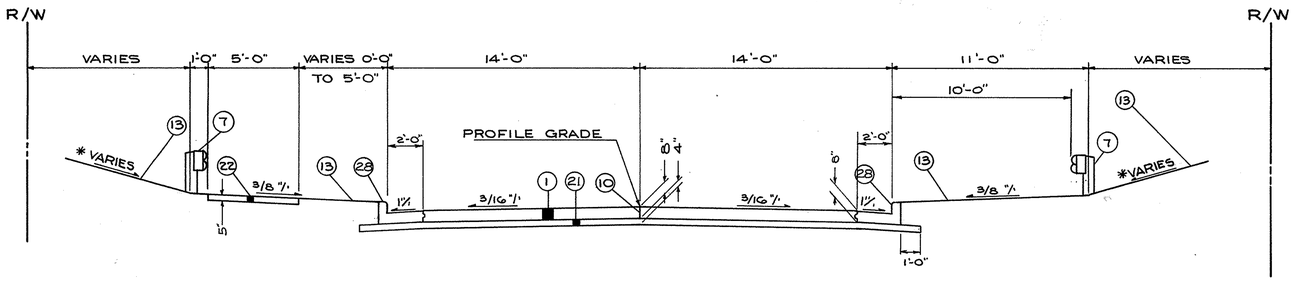
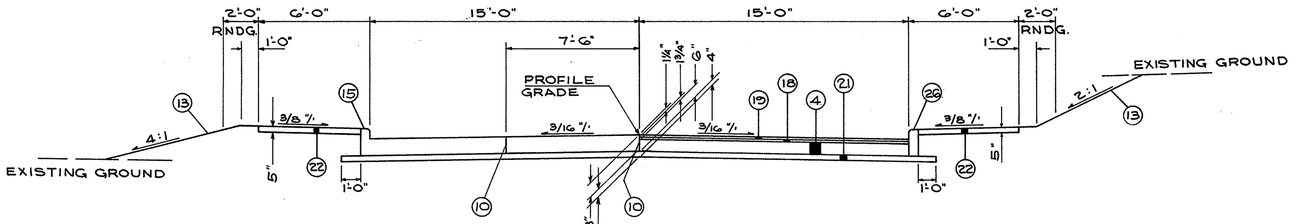
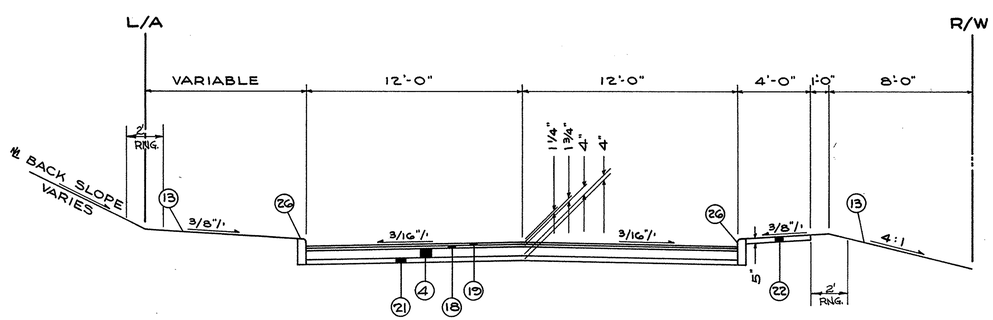


SHADY RUN ROAD
LIMITING STATIONS
STA. 37+75 TO STA. 57+84.30
*NOTE: FOR ACTUAL SLOPE USED SEE CROSS-SECTIONS



INDIANOLA AVENUE
LIMITING STATIONS
STA. 50+97.78 TO STA. 51+53.36 (SEE LEFT HALF)
STA. 47+93.45 TO STA. 48+68.24 (SEE RIGHT HALF)



MABEL CONNECTOR
LIMITING STATIONS
STA. 10+00 TO STA. 13+75.73

LEGEND

(1) 451- REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

(10) STANDARD LONGITUDINAL JOINT

(13) 659- SEEDING AND MULCHING SEE GENERAL NOTES

(15) 609- CONCRETE CURB, STANDARD TYPE-2-A

(17) 407- TACK COAT, SEC. 702.04, MS-2 OR RS-1 OR SEC. 702.02, RC-70 OR RC-250, APPLIED AT THE RATE OF 0.10 GAL./SQ. YD.

(18) 402- 1¾" ASPHALT CONCRETE (70-85)

(19) 404- 1¼" MIN. ASPHALT CONCRETE (70-85)

(22) 608- CONCRETE WALKS

(26) 609- CONCRETE CURB, STANDARD TYPE 6

(28) 609- COMBINATION CURB & GUTTER, STANDARD TYPE 2

(21) 310- SUBBASE GRADING "B".

(7) 606- GUARD RAIL TYPE 5

(4) 301 - BITUMINOUS AGGREGATE BASE 702.01 (85-100) OR 702.09 RT-11 OR RT-12

0' 2' 4' 8'

MAY 23 1971

TYPICAL SECTIONS

TYPE 404 & 451

FED. RD.	STATE	PROJECT	
2	OHIO		

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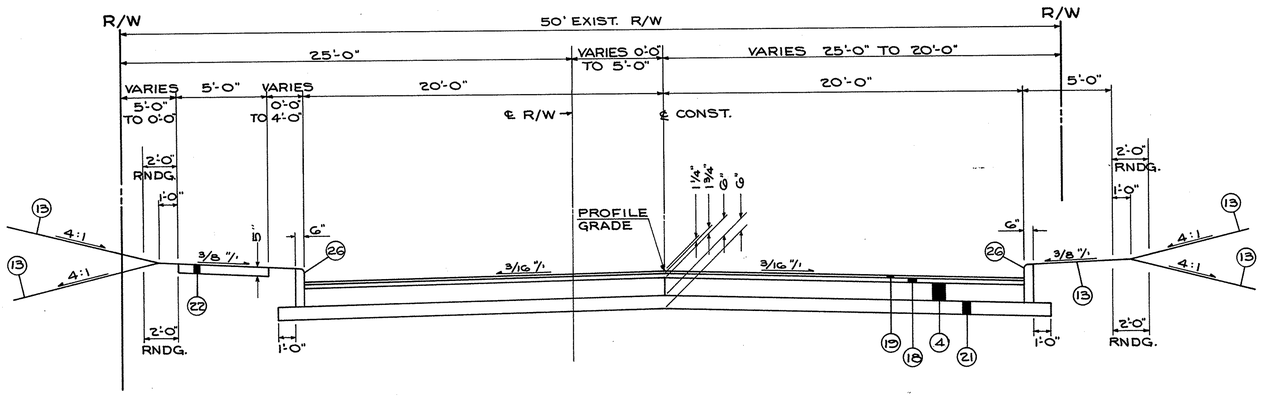


GIBSON AVENUE
LIMITING STATIONS
STA. 47+27.59 TO STA. 51+80

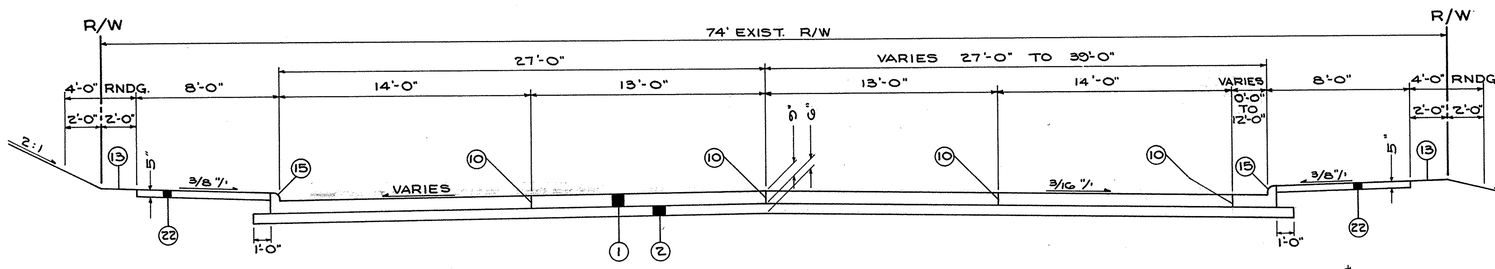
LEGEND

(1) 451 - REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
(2) 310 - SUBBASE GRADING "A" AS PER PLAN (SEE GENERAL NOTES)
(4) 301 - BITUMINOUS AGGREGATE BASE 702.01(85-100) OR 702.09 RT-11 OR RT-12

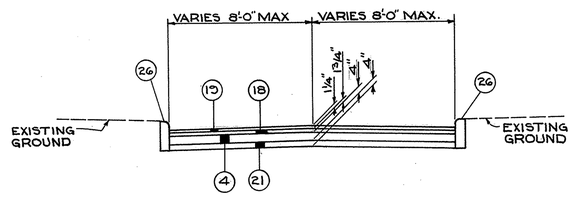
(10) STANDARD LONGITUDINAL JOINT
(13) 659-SEEDING AND MULCHING SEE GENERAL NOTES
(15) 609-CONCRETE CURB STANDARD TYPE 2A
(16) 609-CONCRETE CURB STANDARD TYPE 2-B
(18) 402- 1¾" ASPHALT CONCRETE (70-85)

(19) 404-1¼" MIN. ASPHALT CONCRETE (70-85)
(20) 305-PORTLAND CEMENT CONCRETE BASE

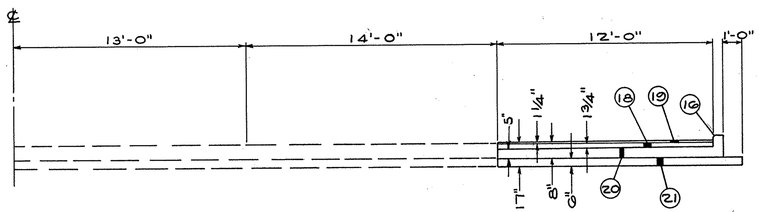
(21) 310-SUBBASE GRADING "B"
(22) 608-CONCRETE WALKS
(26) 609-CONCRETE CURB, STANDARD TYPE 6



SOUTH AVENUE
LIMITING STATIONS
STA. 47+60 TO STA. 49+10.67
STA. 51+03.25 TO STA. 54+90



BENWOOD AVENUE TURNAROUND
LIMITING STATION
STA. 0+13.5 TO STA. 0+43.8



SOUTH AVENUE
LIMITING STATIONS
STA. 47+44.50 TO STA. 47+60

0' 2' 4' 8'

MAY 25 1971

TYPICAL SECTIONS

FED. RD.	STATE	PROJECT	
2	OHIO		

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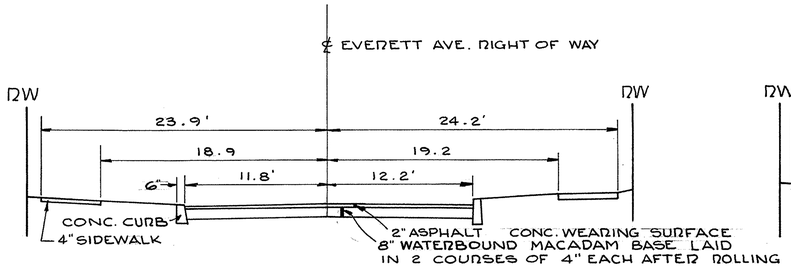
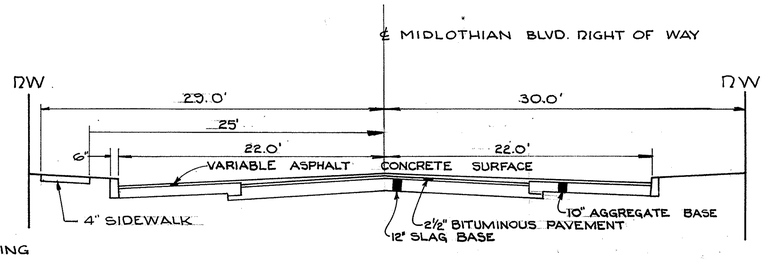
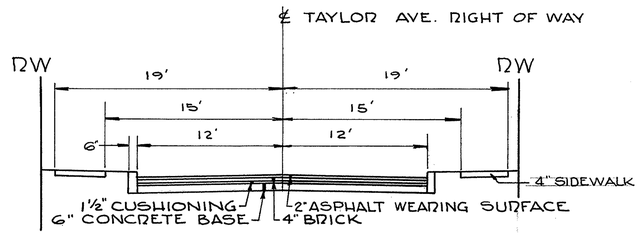


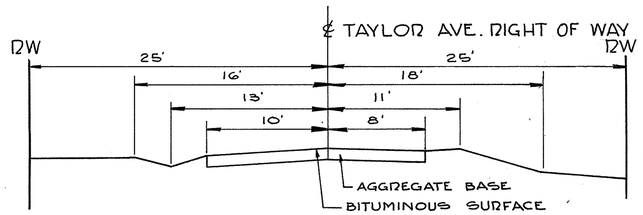
EVERETT AVENUE



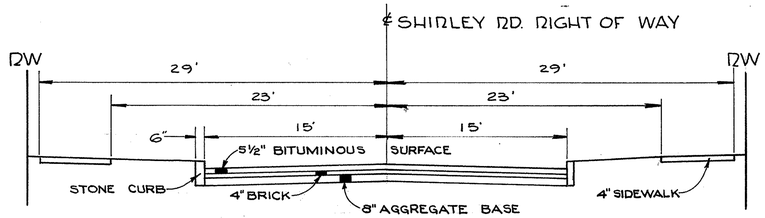
MIDLOTHIAN BOULEVARD



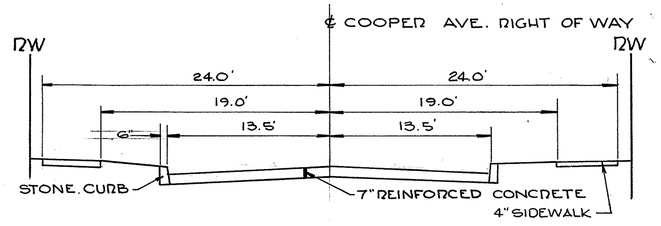
TAYLOR AVENUE
BETWEEN SHIRLEY RD. AND CAMPBELL ST.



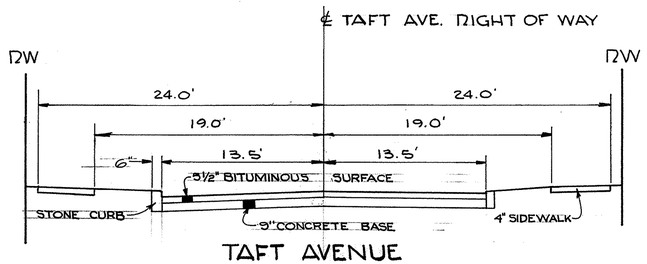
TAYLOR AVENUE
BETWEEN SHIRLEY RD. AND CRAIGER AVE



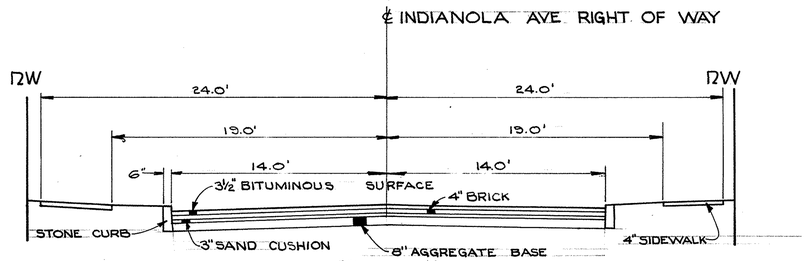
SHIRLEY ROAD



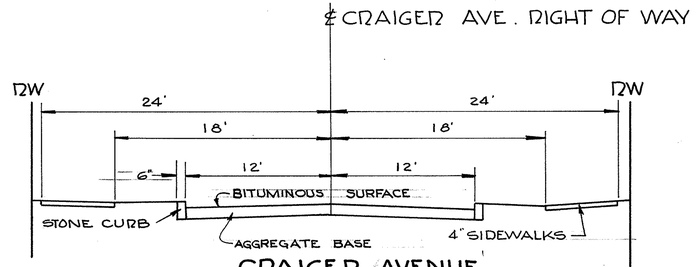
COOPER AVENUE



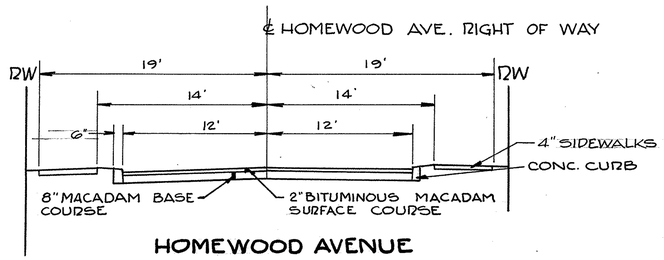
TAFT AVENUE



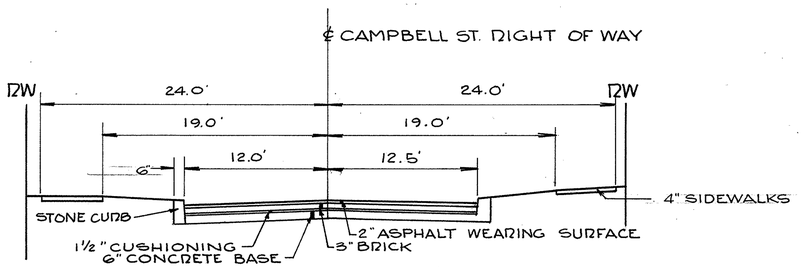
INDIANOLA AVENUE



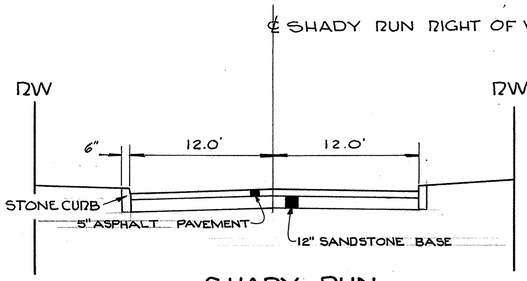
CRAIGER AVENUE



HOMEWOOD AVENUE



CAMPBELL STREET



SHADY RUN

EXISTING
TYPICAL SECTIONS

MAY 25, 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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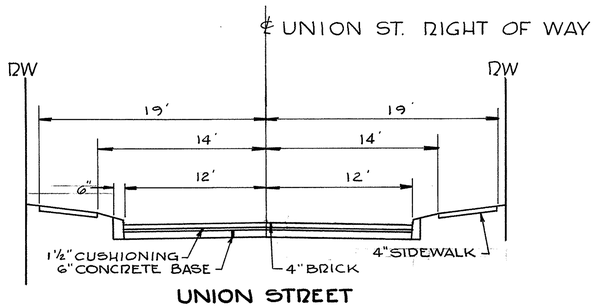
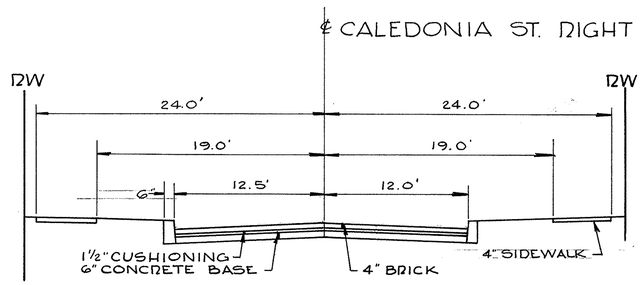
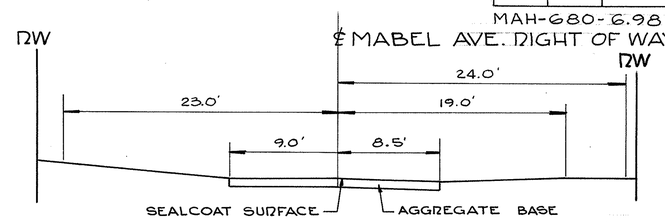


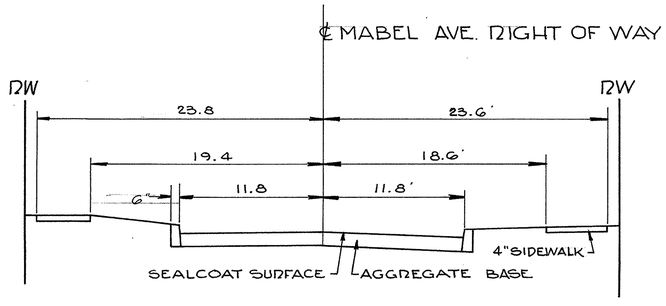
UNION STREET



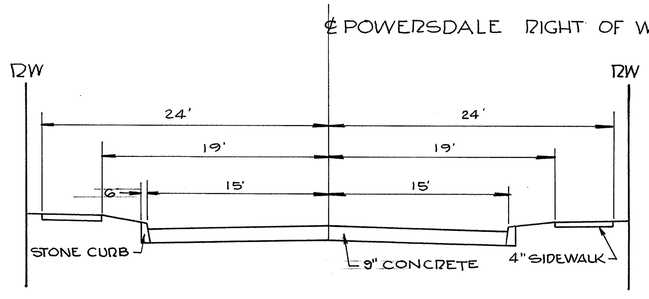
CALEDONIA STREET



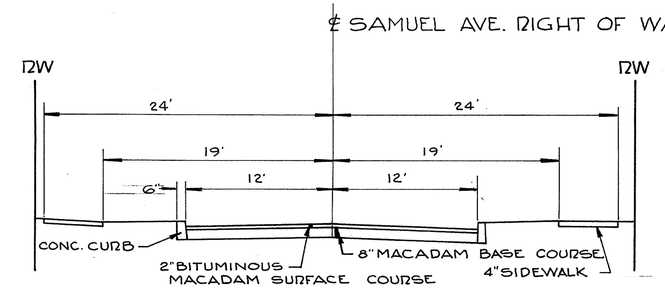
MABEL AVENUE
UNION STREET TO CALEDONIA STREET



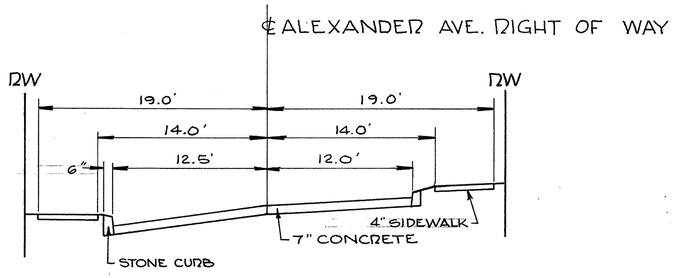
MABEL AVENUE
WEST OF POWERDALE AVENUE



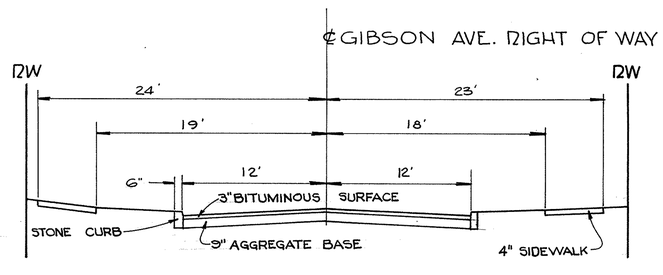
POWERSDALE AVENUE



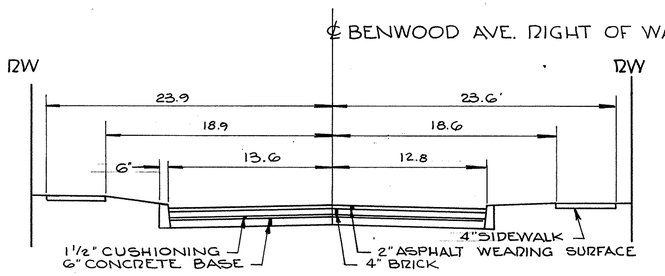
SAMUEL AVENUE



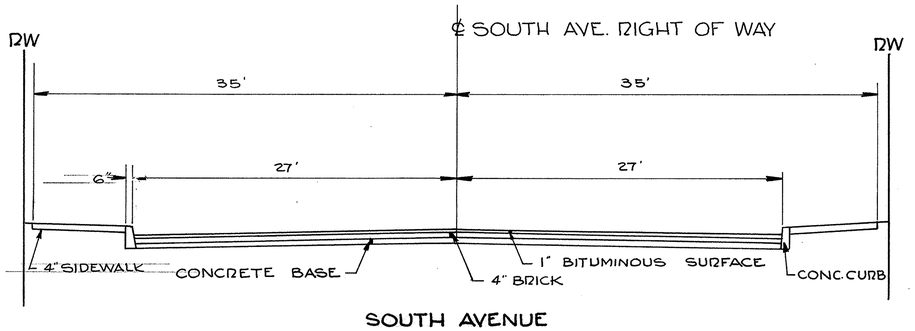
ALEXANDER AVENUE



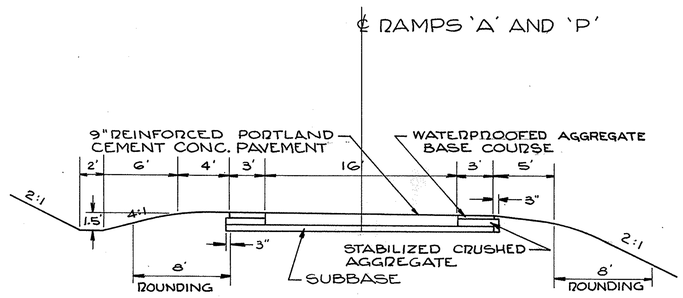
GIBSON AVENUE



BENWOOD AVENUE



SOUTH AVENUE



RAMPS 'A' AND 'P'

EXISTING TYPICAL SECTIONS

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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GENERAL NOTES

DRAINAGE NOTES

RESILIENT & FLEXIBLE GASKET JOINTS

SEWER LINES DESIGNATED ON THE PLANS AS SANITARY OR COMBINATION SEWERS SHALL HAVE FLEXIBLE AND RESILIENT GASKET JOINTS AS SPECIFIED IN 603.06, 706.11 OR 706.12 OF THE SPECIFICATIONS. ALL SEWERS 30" IN DIAMETER AND SMALLER HAVING FLEXIBLE AND RESILIENT GASKET JOINTS SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF 603.06 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

BITUMINOUS COATED CONCRETE COMBINATION AND SANITARY SEWERS

ALL CONCRETE PIPES USED IN COMBINATION OR SANITARY SEWERS SHALL BE COATED INSIDE WITH TWO COATS OF COAL TAR PITCH PAINT AT THE RATE OF NOT MORE THAN 180 SQUARE FEET PER GALLON PER COAT. WATERPROOFING MATERIALS SHALL CONSIST OF "INTERTOL STANDARD THICK", "KOPPERS SUPER SERVICE", "PITTSBURGH CHEMICAL 103", OR approved equal. Cost of labor and materials for coating the pipe shall be included in the unit price bid per lin. ft. for the 603 conduit.

STANDARD NO. 6 CATCH BASIN MODIFIED AS PER PLAN

THIS MODIFICATION SHALL CONSIST OF PROVIDING A 2" DEPRESSION OF THE GRATE WITHIN THE BLOCK-OUT AREA IN LIEU OF THE 1" SHOWN.

ITEM 604, FLAP GATE (WALL MOUNTED)

THE FLAP GATE IS TO BE WALL MOUNTED ARMCO MODEL 10C (SIZES 4" TO 90"), NEENAH Type R-5050 SF (SIZES 6" TO 48"), BROWN & BROWN TYPE M-4 (SIZES 8"TO 36"), or approved equal. THE GATE SHALL BE FITTED WITH BRASS HINGE BOLTS, NUTS AND BUSHINGS.

Payment for Item 604 flap gate shall include furnishing and installing galvanized steel anchor bolts & nuts; brass bushings, hinge bolts & nuts; and flap gate complete in place on the proposed wall.

MAINTENANCE OF SEWER FLOWS

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES SEWER FLOWS THROUGH EXISTING FACILITIES TO REMAIN IN PLACE AND THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PLACED INTO USE.

PAYMENT FOR ANY ADDITIONAL COSTS INVOLVED IN MAINTAINING THESE FLOWS BY PUMPING OR BY ANY OTHER MEANS APPROVED BY THE ENGINEER SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE RESPECTIVE ITEMS OF 603 CONDUIT.

ITEMS 601 ROCK CH. PROT., 667 JUTE MATTING, AND 659 SOD ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

SEALING OF PIPE JOINTS

WHERE CONNECTIONS ARE MADE BETWEEN RIGID AND FLEXIBLE PIPE SECTIONS OR BETWEEN PIPE SECTIONS OF DIFFERENT KINDS OR TYPES OF END FABRICATIONS, WHETHER REQUIRED BY THE PLANS, ARISING FROM PERMISSIBLE USE OF OPTIONAL MATERIALS OR ENCOUNTERED IN CONNECTION TO EXISTING FACILITIES, THE JOINTS SHALL BE SEALED BY THE USE OF A STANDARD CONCRETE COLLAR AS SHOWN ON STANDARD DRAWING MC-4. PAYMENT FOR SEALING AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT PIPE ITEM.

APPURTENANCE STATIONING

ALL MANHOLES, INLETS AND CATCH BASINS CALLED FOR ON THESE PLANS ARE LOCATED BY THE STATION AND OFFSET DESCRIBED BELOW:

STANDARD MANHOLE: STATION AND OFFSET TO THE CENTERLINE OF COVER.

NO. 2-2A, 2-4, 5, 5A, & 6 CATCH BASIN: STATION AND OFFSET TO THE CENTERLINE OF GRATE.

NO. 2A-6, 2A-6 MOD. TYPE I & 2A-6 MOD. TYPE II INLETS: STATIONED TO CENTERLINE OF COVER AND OFFSET TO FACE OF CURB.

NO. 2A-6 MODIFIED: STATIONED TO CENTERLINE OF COVER AND OFFSET TO CENTERLINE SURVEY.

CITY OF YOUNGSTOWN NO. I & II INLET: STATIONED TO CENTERLINE COVER AND OFFSET TO FACE OF CURB.

PIPE NOMENCLATURE

ALL PIPE LINES ARE DESIGNATED AS TO "TYPE OF PIPE" AND "CLASS OF BEDDING". IN ORDER TO SIMPLIFY THIS NOMENCLATURE ON THESE PLANS, TYPE AND CLASS OF PIPE HAVE BEEN COMBINED. EXAMPLE: TYPE C-B; THE LETTER "C" REFERS TO THE TYPE OF PIPE AND THE LETTER "B" REFERS TO THE CLASS OF BEDDING AS DESIGNATED IN THE SPECIFICATIONS, 603.04

MODIFICATION OF STANDARD INLETS

STANDARD NO. 2A-6 PAVED SHOULDER INLET MODIFIED - SEE DETAIL SHEET NO. 369

STANDARD NO. 2A-6 PAVED SHOULDER INLET MODIFIED TYPE I - THIS INLET SHALL BE CONSTRUCTED AS SHOWN ON STANDARD DRAWING I-2A EXCEPT, THAT THE DEPRESSED APRON AND APPROACH SHALL BE MODIFIED SO AS TO CONFORM TO THE APRON SHOWN ON STANDARD DRAWING I-2.

STANDARD NO. 2A-6 PAVED SHOULDER INLET MODIFIED TYPE II - SEE DETAIL SHEET NO. 371

Item 202 Existing Buildings Removed
Parcel No. 243-WL, WD, S, T - John Calvin U.P. Church
The Contractor shall carefully salvage the cornerstone and its contents and make the cornerstone and contents available to the Church

CONNECTIONS TO EXISTING PIPE

AT PLACES WHERE THE PLANS PROVIDE FOR PROPOSED PIPE TO BE CONNECTED TO EXISTING PIPE, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED PIPE. THE COST OF THIS OPERATION SHALL BE INCLUDFD IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEM.

PAVEMENT NOTES

CONTRACTION AND EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN EXPANSION AND CONTRACTION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL IN ALL CASES BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS AND THE SPECIFICATIONS.

ITEM 310 SUBBASE, GRADING A AS PER PLAN

MATERIAL FOR THIS ITEM SHALL MEET THE REQUIREMENTS OF GRADING A OF 310.02 EXCEPT THAT NO MORE THAN 10% OF THE MATERIAL SHALL PASS A NO. 200 SIEVE AFTER ALL OPERATIONS OF PLACING AND COMPACTING HAVE BEEN COMPLETED.

THICKENED SUBBASE

AS DETAILED ON THE CROSS SECTIONS THE SUBBASE SHALL BE THICKENED FROM STATION 654 + 50 TO 656 + 50. THE THICKENED SUBBASE SHALL EXTEND THE FULL WIDTH OF THE PAVEMENT AND SHOULDERS AND SHALL BE 18" THICK. ADDITIONAL SUBBASE, AND EXCAVATION HAVE BEEN INCLUDED IN THE PLANS FOR THIS WORK.

UNSUITABLE MATERIAL

UNSUITABLE MATERIAL EXCAVATION AND SUBSEQUENT BACKFILL SHALL BE AS SHOWN ON THE CROSS SECTIONS BETWEEN STATION 740 + 00 TO STATION 745 + 00. EXCAVATION SHALL BE PAID FOR UNDER ITEM 203, EXCAVATION NOT INCLUDING EMBANKMENT, AND THE BACKFILL WITH SUITABLE EMBANKMENT MATERIAL SHALL BE PAID FOR UNDER ITEM 203, EMBANKMENT.

MEDIAN PAVEMENT ON APPROACH SLABS

THE CROSS SECTION AND SLOPE OF MEDIAN PAVEMENT ON APPROACH SLABS SHALL BE TRANSITIONED FROM THE STANDARD SECTION USED ON THE APPROACH PAVEMENT TO THE SECTION USED ON THE BRIDGE WITHIN THE LIMITS OF THE APPROACH SLAB.

TRANSITION OF CURB, SIDEWALKS AND DRIVES

WHERE CALLED FOR ON THE PLANS, PROPOSED CURBS, SIDEWALKS AND DRIVE APPROACHS SHALL BE TRANSITIONED TO MEET EXISTING AS FOLLOWS:

1) CURBS SHALL BE TRANSITIONED HORIZONTALLY AND VERTICALLY WITHIN TEN (10) FEET TO MEET EXISTING CURBS.

2) SIDEWALKS SHALL BE TRANSITIONED HORIZONTALLY, VERTICALLY AND TO WIDTH WITHIN TEN (10) FEET TO MEET EXISTING SIDEWALKS.

3) EXISTING DRIVES SHALL BE ACCURATELY LOCATED AS TO ALIGNMENT AND GRADE PRIOR TO CONSTRUCTION, AND NEW DRIVES SHALL BE CONSTRUCTED SO AS TO MEET THE EXISTING DRIVE AT THE LOCATION SHOWN ON THE PLANS.

FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS

THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS AT EACH OF THE FOLLOWING APPROXIMATE LOCATIONS:

1.	MIDLOTHIAN BLVD.	STATION 366 + 25	35' RIGHT OF CENTERLINE
2.	MIDLOTHIAN BLVD.	STATION 378 + 50	35' LEFT OF CENTERLINE
3.	SHIRLEY ROAD	STATION 43 + 00	40' RIGHT OF CENTERLINE
4.	SHIRLEY ROAD	STATION 54 + 65	45' LEFT OF CENTERLINE
5.	SOUTH AVENUE	STATION 47 + 60	50' RIGHT OF CENTERLINE
6.	SOUTH AVENUE	STATION 55 + 30	45' LEFT OF CENTERLINE

SIGN DETAILS SHALL BE AS SPECIFIED ON STANDARD DRAWING FACI-1, "CODE N-55(1)-132(3)"

THE SIGNS SHALL BE ERECTED IN ACCORDANCE WITH STANDARD DRAWING FACI-2. ADDITIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH NOTES IN THE PROPOSAL.

EXPANSION BOLT JOINT

WHERE THE STANDARD EXPANSION BOLT JOINT IS CALLED FOR IT SHALL HAVE BOLTS SPACED AT 60" CENTER TO CENTER AND THE COST OF THE JOINT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 451 - 8" CONTINUOUSLY REINFORCED CONCRETE PAVEMENT, AND ITEM 451 - 10" REINFORCED CONCRETE PAVEMENT. SEE TYPICAL SECTIONS AND PAVEMENT DETAILS FOR LOCATIONS OF JOINT.

CONNECTION TO EXISTING DRAIN PIPE

WHERE EXISTING PIPE DRAINS ARE DAMAGED IN EXCAVATION FOR SIDEWALKS AND FOR NEW CURBS, THE CONTRACTOR SHALL REPLACE THE DAMAGED SECTIONS AS SHOWN IN THE DETAILS ON SHEET NO. 371 FOR AN ESTIMATED QUANTITY FOR THIS WORK SEE SHEET NO. 42. THE CONTRACTOR SHALL NOT ORDER ANY OF THE REQUIRED PIPE UNTIL SO DIRECTED BY THE ENGINEER

ROADWAY NOTES

REMOVAL OF EXISTING PIPE

THE REMOVAL OF ALL EXISTING PIPE DRAINS WHICH WOULD NORMALLY BE REMOVED IN VARIOUS EXCAVATION ITEMS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICES BID FOR THE RESPECTIVE EXCAVATION ITEMS, UNLESS OTHERWISE ITEMIZED IN THE PLANS.

REMOVAL OF TREES AND STUMPS

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR ITEM 201 CLEARING AND GRUBBING, EXCEPT THAT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSWHERE IN THESE PLANS SHALL NOT BE REMOVED.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED:

I-680-9(14)240 Urban

SIZES	No. TREES	No. STUMPS
18"	297	0
30"	23	0
48"	2	0
60"	0	0

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE OF THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT-OF-WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201 CLEARING AND GRUBBING.

GUARD RAIL ADJUSTMENT

THE LOCATIONS OF GUARDRAIL RUNS AS SHOWN IN THESE PLANS ARE SUBJECT TO ADJUSTMENT TO ASSURE THAT THE PLANNED INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

PAVEMENT REMOVAL OUTSIDE NORMAL CONSTRUCTION LIMITS

AFTER THE EXISTING PAVEMENT AS INDICATED ON THE PLANS HAS BEEN REMOVED, THE OLD ROADWAY SHALL BE GRADED TO THE LEVEL OF THE SURROUNDING GROUND, THE OLD DITCHES FILLED AND THE DISTURBED AREAS SLOPED TO DRAIN AND LEFT IN A NEAT CONDITION READY FOR SEEDING. SEEDING SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 659 SEEDING AND MULCHING. PAYMENT FOR ALL OTHER WORK REQUIRED SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION, AS PER PLAN.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN THE RIGHT-OF-WAY FENCE LINES, BETWEEN THE RIGHT-OF-WAY LINES IN UNFENCED AREAS, AND WITHIN THE WORK LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT.

SPECIAL SEEDING PREPARATION AREAS

THE REFERENCE IN THE FIRST PARAGRAPH OF 659.09 TO PREPARATION OF THE SEED BED IN FRONT OF RESIDENCES, ETC., SHALL ON THIS PROJECT BE CONSIDERED TO BE PARTICULARLY APPLICABLE TO ALL AREAS LISTED IN 659.09 IN ADDITION TO TEMPORARY WORK AREAS, WORK AGREEMENT AREAS AND SEWER EASEMENTS.

ITEM SPECIAL, DRILLED WELL ABANDONED

THE EXISTING CONCRETE OR STONE SLAB WELL COVER AND PUMPING EQUIPMENT SHALL BE REMOVED AND DISPOSED OF. THE CASING SHALL BE CUT OFF AT LEAST TWO (2) FEET BELOW THE PROPOSED FINISHED GRADE OUTSIDE PROPOSED PAVEMENT AREAS OR AT LEAST TWO (2) FEET BELOW THE PROPOSED SUBGRADE ELEVATION INSIDE PROPOSED PAVEMENT AREAS AND CAPPED WITH CLASS C CONCRETE OR A STANDARD THREADED PIPE CAP.

THE UNIT PRICE BID FOR EACH "DRILLED WELL ABANDONED" SHALL INCLUDE PAYMENT FOR ALL LABOR, TOOLS, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM. AN ESTIMATED QUANTITY OF 2 EACH, HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM SPECIAL, DRILLED WELL ABANDONED.

ITEM 203 PROOF ROLLING

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE IN PROOF ROLLING OF SUBGRADE FOR THE MAINLINE AND RAMP PAVEMENTS, AND FOR PAVED SHOULDERS, IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 801.

ITEM 606 - GUARD RAIL TYPE 5 BARRIER MODIFIED AS PER PLAN

WHERE CALLED FOR IN THE PLANS, THIS ITEM SHALL CONSIST OF THE FOLLOWING: THE EXISTING MEDIAN GUARD RAIL SHALL BE CAREFULLY REMOVED LEAVING THE EXISTING POSTS IN PLACE. NEW POSTS OF THE SAME MATERIAL AS THE EXISTING SHALL BE PLACED TO PROVIDE 6'-3" POST SPACING. THE EXISTING POSTS SHALL BE MODIFIED TO ACCEPT THE BLOCKS AS DETAILED ON STANDARD DRAWING GR-2B. NEW RAIL SHALL BE INSTALLED ON THE NEW AND MODIFIED POSTS. AT STATION 783 + 00 THE GUARD RAIL SHALL BE TIED BACK INTO THE EXISTING RAIL. THE COST OF REMOVING THE EXISTING RAIL, THE INSTALLATION OF THE NEW POSTS AND NEW RAIL AND THE TIE BACK INTO THE EXISTING RAIL SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM.

ITEM 607 - FENCE, TYPE CL, REBUILT AS PER PLAN

WHERE CALLED FOR IN THE PLANS, THIS ITEM SHALL CONSIST OF THE FOLLOWING: THE FENCE FABRIC REMOVED UNDER ITEM 202 SHALL BE USED TO CONSTRUCT THE NEW FENCE. NEW POSTS SHALL BE INSTALLED AS REQUIRED BY THE PLANS AND SPECIFICATIONS. THE COMPLETED INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF ITEM 607 FENCE, TYPE CL. THE COST OF ALL MATERIALS REQUIRED FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM.

ITEM 202 - REMOVAL OF EXISTING SIGN FOR STORAGE

SEE GENERAL NOTE IN SIGNING SECTION, PAGE 389

ITEM 202 - REMOVAL OF EXISTING TERMINAL TREATMENT, AS PER PLAN

THE REQUIREMENTS OF THIS ITEM SHALL INCLUDE THE REMOVAL OF ALL INTERIM BARRELS, INTERIM GUARD RAIL, AND INTERIM STRIPING. THE PAVEMENT SHALL BE LEFT IN A CLEAN AND USEABLE CONDITION. THE PRICE BID FOR THIS LUMP SUM ITEM SHALL INCLUDE ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED FOR COMPLETION, SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL GENERAL NOTES.

ALL REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE Contractor AND SHALL BE disposed of by him.

GENERAL NOTES

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE PERFORMED ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH TEMPORARY GUIDE MARKERS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 800 SQ. FT. OF FLOOR SPACE FOR THE FIELD OFFICE AND, IN ADDITION TO THE REQUIREMENTS OF ITEM 619, SHALL PROVIDE AND MAINTAIN SANITARY PROVISIONS AS PER 107.06. ALL THE ABOVE IS INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS, EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

SLOPES AT STRUCTURES AND DRAINAGE APPURTENANCES

IT IS INTENDED THAT THE SLOPES SHOWN ON THE CROSS SECTIONS SHALL BE USED WHEREEVER POSSIBLE. THESE SLOPES SHALL NOT BE USED AT DITCH INLETS OR THROUGH STRUCTURES. MINIMUM SIDE SLOPES AT DITCH INLETS SHALL BE SUCH THAT THE HORIZONTAL AND VERTICAL LOCATION OF THE INLET AS SHOWN ON THE PLANS SHALL NOT BE ALTERED. SLOPES AT STRUCTURES SHALL BE AS SHOWN ON THE STRUCTURE DETAILS.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE STATE OF OHIO DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS.

ESTIMATED QUANTITIES

SPECIFIC LOCATIONS AND USAGE OF ESTIMATED QUANTITIES SET UP ON THIS PLAN TO BE USED "AS DIRECTED BY THE ENGINEER" SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT. THESE QUANTITIES SHALL NOT BE ORDERED BY THE CONTRACTOR UNTIL REQUESTED BY THE ENGINEER.

CONSTRUCTION LAYOUT STAKES

SEE NOTE IN PROPOSAL DESCRIBING THE WORK INCLUDED IN THIS LUMP SUM PAY ITEM.

MAY 25 '71

RRC 6/18/68
OEW 6/24/68

GENERAL NOTES

FED.RD.	STATE	PROJECT	
2	OHIO		

24A 656

MAH-680-6.98

GENERAL NOTES(CONT'D.)

THE FOLLOWING IS A LIST OF COMPANIES WHICH HAVE UTILITIES LOCATED WITHIN THE LIMITS OF THIS PROJECT:

THE OHIO EDISON COMPANY
47 NORTH MAIN STREET
AKRON, OHIO 44308

THE OHIO BELL COMPANY
2405 MARKET STREET
YOUNGSTOWN, OHIO 44507

EAST OHIO GAS COMPANY
1717 EAST NINTH STREET
CLEVELAND, OHIO 44114

CITY OF YOUNGSTOWN WATER DEPT.
BOARDMAN AND PHELPS STREET
YOUNGSTOWN, OHIO 44503

COORDINATION OF PROJECTS

THE PROJECT TO THE SOUTH (MAH-680-9.32) SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF MAINLINE EARTHWORK TO STATION 638 + 00, THIS PROJECT, THE COMPLETE CONSTRUCTION OF RAMPS M-M AND N-N AND THE CULVERT AT RAMP M-M STATION 637 + 50.

THIS PROJECT (MAH-680-6.98) SHALL BE RESPONSIBLE FOR THE REMAINING EARTHWORK, THE JERSEY LANE SEWER RELOCATION, AND THE CULVERT AT MAINLINE STATION 638 + 50.

SUCCESSFUL COMPLETION OF THE WORK AT THE BEGINNING OF THE PROJECT REQUIRES EARLY COMPLETION OF THE SPECIFIC ITEMS MENTIONED AND CO-OPERATION WITH THE CONTRACTOR ON THE OTHER PROJECT IN ALL ITEMS RELATING TO BOTH PROJECTS.

LINE DATA
LOCAL ROADS & APPROACHES

	LIN.FT.
MIDLOTHIAN BLVD.	
STA. 358+00 to STA. 379+30	2,130.00
HUMBOLT-TAFT CONNECTOR 10+11.50 to 13+62	350.50
SHIRLEY ROAD	
STA. 41+38.50 to STA. 62 + 64	2,125.50
INDIANOLA AVE. 47+93.45 to 51+53.36	359.91
SHADY RUN ROAD	
STA. 374+75 to STA. 57+84.30	2,009.30
GIBSON AVE. 47+25.59 to 52+00	474.41
SOUTH AVENUE	
STA. 42+35 to STA. 55+12.00	1,277.00
TOTAL LOCAL ROADS & APPROACHES	8,726.62

(CARRIED to line data, SHEET 1)

WATER LINE RELOCATION

CITY OF YOUNGSTOWN WATER MAIN RELOCATION

ALL DUCTILE IRON PIPE AND APPURTENANCES USED IN WATER MAIN CONSTRUCTION WILL CONFORM TO OHIO SUPPLEMENTAL SPECIFICATION 814 WATER MAINS & SERVICE BRANCHES DATED JANUARY 1, 1968, SHALL BE OF SLIP JOINT TYPE, AND SHALL BE CEMENT LINED.

VALVES ARRANGED TO OPEN BY TURNING TO RIGHT, CLOCKWISE: AND AN ARROW ON WRENCH NUT WILL SHOW DIRECTION OF TURN TO OPEN: WITH VALVE STEMS OF HIGH GRADE MANGANESE BRONZE. ALL VALVES SHALL HAVE 150# WORKING PRESSURE. VALVES TO BE DARLING, KENNEDY, EDDY, OR APPROVED EQUAL.

VALVE BOXES WILL BE SIZE "B" WITH NO. 6 ROUND BASE, ADJUSTABLE SCREW TYPE, SHAFT NOT LESS THAN 5-1/4 INCH DIAMETER. DROP COVER TO HAVE "WATER" CAST THEREON AND RECESSED FOR EASE OF REMOVAL. SEE DETAIL ON WATER LINE DETAIL SHEET 387.

RESTORING SERVICE CONNECTIONS

IT SHALL BE THE RESPONSIBILITY OF THE CITY OF YOUNGSTOWN WATER DEPARTMENT TO RESTORE ALL WATER SERVICE CONNECTIONS TO EXISTING HOUSE SERVICE LINES, DISRUPTED IN THE CONSTRUCTION OF THE EXPRESSWAY.

WATER MAIN SPECIFICATIONS

ALL CONSTRUCTION ON WATER MAINS SHALL CONFORM TO STATE OF OHIO DEPARTMENT OF HIGHWAYS SUPPLEMENTAL SPECIFICATION 814 AS AMENDED HEREIN.

NO SEPARATE PAYMENT WILL BE MADE FOR CONCRETE ANCHORAGES OR CONCRETE THRUST BLOCKS REQUIRED IN LAYING WATER LINES. THE COST FOR SUCH CONCRETE SHALL BE INCLUDED IN UNIT PRICE BID FOR ITEM 814 NEW WATER MAINS. SEE DETAILS ON SHEET 387. USE CONCRETE ENCASEMENT OF TIMBER STRUTS OR CONCRETE BLOCKING.

THE DRAWINGS SHOW THE LOCATION AND PROFILE OF THE LINE TO BE LAID, AND TYPICAL DETAILS OF THE PIPING AND STRUCTURES DEPENDING UPON THE TYPE OF PIPE TO BE USED. THE LINE AND GRADE OF THE WATER PIPE MAY BE MODIFIED SLIGHTLY SO THAT CURVATURE MAY BE MADE INSOFAR AS PROPER AT THE JOINTS WITHOUT USE OF SPECIAL FITTINGS.

THE CONSTRUCTION OF RELOCATED WATER MAINS OWNED BY THE CITY OF YOUNGSTOWN WILL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE CITY OF YOUNGSTOWN. THE CONTRACTOR SHALL NOTIFY CITY OF YOUNGSTOWN WATER DEPARTMENT 48 HOURS IN ADVANCE OF BREAKING GROUND ON EACH WATER MAIN RELOCATION. HE WILL OBTAIN PERMISSION BEFORE TAKING ANY WATER MAIN OUT OF SERVICE. HE WILL ARRANGE WORK AND MATERIALS IN ADVANCE SO THAT ANY WATER MAIN WILL BE OUT OF SERVICE A MINIMUM PERIOD OF TIME.
ALL INSTRUCTIONS SHALL BE COORDINATED THROUGH THE PROJECT ENGINEER.

ITEM 814 CUT AND PLUG EXISTING WATER MAIN

THIS ITEM SHALL CONSIST OF PLUGGING OR CAPPING EXISTING WATER MAINS AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER INCLUDING THE FURNISHING OF ALL MATERIALS INCLUDING THE CAP OR PLUG, EXCAVATING AND BACKFILLING, CAREFULLY CUTTING AND REMOVING A SECTION OF EXISTING PIPE, CONSTRUCTING ALL NECESSARY JOINTS AND CONNECTIONS, HYDROSTATIC TESTING, DISINFECTION, AND DISPOSAL OF ALL SURPLUS EXCAVATION AND DISCARDED MATERIAL WHICH MAY BE REQUIRED TO COMPLETE THIS ITEM. THIS ITEM SHALL ALSO PROVIDE FOR REACTION BACKING AS OUTLINED UNDER SECTION 814 - NEW WATER MAIN AND AS AMENDED ABOVE.

A) EXCAVATION: NO EXCAVATION SHALL BE MADE UNTIL THE VALVE ON THE BRANCH HAS BEEN CLOSED TO RELIEVE PRESSURE ON THE BRANCH TO BE CUT AND PLUGGED. EXCAVATION SHALL BE PERFORMED AS REQUIRED UNDER SECTION 814 - NEW WATER MAIN.

B) INSTALLATION: THE PLUG OR CAP SHALL BE INSTALLED AND REACTION BACKING PROVIDING AS OUTLINED UNDER SECTION 814, NEW WATER MAIN, AS AMENDED BELOW.

C) TESTING: PRIOR TO BACKFILLING, TESTING SHALL BE PERFORMED BY SUBJECTING ALL JOINTS TO THE WORKING PRESSURE OF THE MAIN FOR A SUFFICIENT LENGTH OF TIME TO ALLOW FOR A THOROUGH EXAMINATION OF THE JOINTS WHICH HAVE BEEN EXPOSED AS WELL AS ALL NEW JOINTS. ANY JOINTS FOUND TO BE LEAKING SHALL BE MADE GOOD BY THE CONTRACTOR AT NO ADDITIONAL COST.

D) BACKFILLING: BACKFILLING SHALL BE PERFORMED AS REQUIRED UNDER SECTION 814, NEW WATER MAIN.

E) DISINFECTION: DISINFECTION SHALL BE PERFORMED AS REQUIRED UNDER SECTION 814, NEW WATER MAIN.

METHOD OF MEASUREMENT - THE QUANTITIES TO BE PAID FOR SHALL BE THE ACTUAL QUANTITY, MEASURED IN PLACE, COMPLETE AND ACCEPTED. THE QUANTITY SHALL BE MEASURED PER EACH FOR THE NUMBER OF EXISTING WATER MAINS CUT AND PLUGGED.

BASIS OF PAYMENT - THE QUANTITY MEASURED ABOVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER EACH FOR ITEM 814 CUT AND PLUG EXISTING WATER MAIN. THIS PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR NECESSARY EXCAVATION AND BACKFILL, THE DISPOSAL OF ALL SURPLUS EXCAVATION AND DISCARDED MATERIAL, THE FURNISHING, PREPARING AND PLACING OF ALL MATERIAL INCLUDING SEALING JOINTS AND REACTION BACKING, HYDROSTATIC TESTING, AND DISINFECTING, AND FOR ALL LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

REACTION BACKING: REACTION BACKING AS PROVIDED UNDER SECTION 814 SHALL BE AMENDED AS FOLLOWS:

REACTION BACKING SHALL BE PROVIDED FOR ALL TEES AND BENDS DEFLECTING 22-1/2 DEGREES OR MORE ON MAINS 8 INCHES IN DIAMETER AND LARGER AND FOR ALL PLUGS AND CAPS AND FOR THE BOWL OF EACH FIRE HYDRANT. AS DETAILED ON SHEET NO. 387, HARDWOOD TIMBER IS DEFINED AS: OAK, SYCAMORE, ELM, CHERRY, HICKORY, LOCUST, MAPLE, POPLAR OR EQUAL TIMBER.

814 FIRE HYDRANT REMOVED AND RESET

THIS ITEM SHALL CONSIST OF CAREFULLY REMOVING THE EXISTING HYDRANT AND RESETTING IT IN THE NEW LOCATION AS SHOWN ON THE PLANS. THE COST OF ALL MATERIALS AND LABOR INVOLVED IN THE RELOCATION OF THE HYDRANT SHALL BE INCLUDED UNDER ITEM 814 - FIRE HYDRANTS REMOVED AND RESET WITH THE EXCEPTION OF THE NEW WATER MAINS AND NEW VALVES WHICH WILL BE PAID FOR UNDER THE UNIT BID PRICE FOR THESE ITEMS.

THE CITY OF YOUNGSTOWN RESERVES THE RIGHT TO SUBSTITUTE A HYDRANT FROM THEIR SUPPLY FOR ANY DEFECTIVE HYDRANT AT NO ADDITIONAL COST TO THE CONTRACTOR.

SEQUENCE OF CONSTRUCTION

IN THE UNION STREET AND CALADONIA STREET AREA, ONE OF THESE LINES MUST BE LEFT OPEN AT ALL TIMES TO ASSURE THE ACTIVITY OF THE 12" LINE ON POLAND AVENUE.

IN THE GIBSON AVENUE AND SOUTH AVENUE AREA, EITHER GIBSON AVENUE OR SOUTH AVENUE WATER LINE MUST BE COMPLETED AND IN OPERATION BEFORE CONSTRUCTION MAY BEGIN ON THE REMAINING STREET. THE WATER LINE ON BENWOOD MUST BE IN SERVICE DURING THE CONSTRUCTION PERIOD FOR THE SOUTH AVENUE WATER LINE.

814 VALVE BOX: ADJUSTED TO GRADE

WHERE CALLED FOR ON THE PLANS THE CONTRACTOR SHALL PERFORM THE NECESSARY WORK OF EXCAVATING AROUND THE VALVE BOX AND RESETTING THE TOP SECTION BY SCREWING UP OR DOWN ON THE CENTER SECTION IN ORDER TO ADJUST TO THE NEW GRADE. IF AN EXTENSION IS NECESSARY TO REACH THE NEW GRADE, IT SHALL BE FURNISHED OR A NEW VALVE BOX TOP SECTION FURNISHED BY THE CONTRACTOR. THIS WORK WHEN COMPLETED WILL GIVE AN UNDAMAGED VALVE BOX WITH THE TOP FLUSH WITH THE PAVEMENT OR NEW GROUND SURFACE AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR EACH "ITEM 814 - VALVE BOX ADJUSTED TO GRADE".

814 - CUTTING-IN SLEEVE AND TEE

THIS ITEM OF WORK SHALL CONSIST OF THE FURNISHING AND INSTALLING OF THE CUTTING-IN SLEEVE AND TEE IN THE EXISTING WATER MAIN AND IN ADDITION PERFORMING THE EXCAVATION, CUTTING AND REMOVING A SECTION OF WATER MAIN PIPE, BACKFILLING, DISPOSING OF UNSUITABLE AND SURPLUS MATERIALS, TESTING, STERILIZING AND SURFACE RESTORATION.
PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH "ITEM 814 - CUTTING-IN SLEEVE AND TEE" WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR THE FURNISHING OF ALL LABOR, MATERIALS, SMALL TOOLS AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 814 - STEEL WATER MAIN ON STRUCTURES, INCLUDING COMPONENTS

DESCRIPTION:

THIS ITEM CONSISTS OF FURNISHING AND PLACING 8" AND 6" STEEL WATER MAIN ON THE BRIDGES AS SHOWN ON THE DRAWINGS.

MATERIAL:

MECHANICAL JOINT ADAPTER REDUCER COUPLINGS AT BRIDGE ABUTMENTS SHALL BE DRESSER STYLE 62 OR SMITH-BLAIR TYPE 433 OR APPROVED EQUAL. SECTIONS OF STEEL PIPE SHALL BE JOINED BY MECHANICAL JOINT COUPLINGS DRESSER STYLE 38 OR SMITH-BLAIR TYPE 411 OR APPROVED EQUAL.
STEEL PIPE, GRADE B, SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C 202-64 OR LATEST REVISION. PIPE LENGTHS SHALL BE AS SHOWN ON THE PLANS. ENDS SHALL BE PLAIN ENDS FOR USE WITH COUPLINGS. 6" DIAM. STEEL PIPE THICKNESS SHALL BE 0.280", AND 8" DIAM. STEEL PIPE THICKNESS SHALL BE 0.322".
COAL TAR ENAMEL PROTECTIVE COATING SHALL BE IN ACCORDANCE WITH A.W.W.A. SPEC'S. C-203.
2" FIBERGLASS INSULATION SHALL BE IN ACCORDANCE WITH A.S.T.M. SPECIFICATION

CONSTRUCTION:

THE TRANSPORTATION AND HANDLING OF ENAMELED STEEL PIPE SHALL BE AS PROVIDED FOR IN AWWA SPECIFICATION C-203 FOR COAL TAR ENAMEL PROTECTIVE COATING. PRIOR TO MANUFACTURE OF PIPE AND FITTINGS, THE CONTRACTOR SHALL SUBMIT, FOR APPROVAL, ASSEMBLY AND DETAILED SHOP DRAWINGS OF PIPE AND FITTINGS AND SUPPORTS. THE PIPE SHALL BE SUPPORTED ON THE BRIDGE CROSS-FRAMING. FOR DETAILS OF SUPPORT, SEE THE BRIDGE FRAMING PLANS. COUPLINGS, FITTINGS, PIPE COVERING PROTECTION SADDLES AND PIPE SUPPORTS AND APPURTENANCES SHALL BE SUPPLIED AND INSTALLED AND THE COST INCLUDED IN THE PRICE BID FOR ITEM 814 - STEEL WATER MAIN. AFTER THE PIPE HAS BEEN SATISFACTORILY TESTED, THE CONTRACTOR SHALL COMPLETELY COVER ALL COUPLINGS AND PORTIONS OF PIPE WHICH ARE UNCOATED AND UNWRAPPED BY ENCLOSING THE ENDS OF THE PIPE AND THE COUPLINGS WITH 2" FIBER GLASS INSULATION COVERED BY GALVANIZED #26 GAUGE STEEL OR ALUMINUM SHEETS HELD IN PLACE WITH STAINLESS STEEL BANDS. THE COST OF INSULATION SHALL BE INCLUDED IN CONTRACT UNIT PRICE BID PER LIN. FT. FOR ITEM 814 - 6" OR 8" STEEL WATER MAIN. SEE BELOW FOR SPECIFICATIONS ON INSULATION ITEMS.

NOTE:

STERILIZATION AND TESTING:

DURING THE INSTALLATION OF THE WATER LINE, THE CONTRACTOR SHALL PLACE A STERILIZING POWDER SUCH AS H.T.H., PERCHLORON, MAROCHLOR OR EQUAL INTO THE LINE AT INTERVALS, THE QUANTITY OF 32 OZ. PER HUNDRED FEET. WHEN THE PIPE LAYING IS COMPLETED, THE CITY OF YOUNGSTOWN WILL FILL THE LINE FOR STERILIZATION. IF ADDITIONAL STERILIZATION IS THEN REQUIRED, THE CONTRACTOR SHALL FURNISH ALL NECESSARY ASSISTANCE FOR SUCH ADDITIONAL WORK, BUT THE STERILIZING EQUIPMENT AND MATERIAL WILL BE FURNISHED BY THE CITY OF YOUNGSTOWN.

MEASUREMENT:

6" OR 8" STEEL WATER MAIN ON STRUCTURES
THE QUANTITY TO BE PAID FOR SHALL BE THE NUMBER OF LINEAL FEET OF STEEL WATER MAIN PIPE INSTALLED IN PLACE, COMPLETED AND ACCEPTED. IT SHALL INCLUDE PIPE SUPPORTS AND APPURTENANCES, PIPE SLEEVES, PIPE COUPLINGS, INSULATION COVERING, STERILIZATION AND TESTING.

COUPLINGS -
THE COST OF ALL COUPLINGS AND APPURTENANCES AND PAINTING SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 814 - 6" OR 8" STEEL WATER MAIN.

ALL MEASUREMENTS WILL BE DETERMINED BY THE ENGINEER.

PAYMENT:

THE QUANTITIES AS MEASURED ABOVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR ITEM 814-6" OR 8" STEEL WATER MAIN ON STRUCTURES, INCLUD. COMPONENTS WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM AS SPECIFIED.

8" STEEL WATER MAIN	STRUCTURE MAH-680-0835	SHEET 481
" " " "	" MAH-680-0705	SHEET 541
6" STEEL WATER MAIN	STRUCTURE MAH-680-0817	SHEET 520
" " " "	" MAH-680-0723	SHEET 529

STATIONING:

ALTHOUGH THIS PROJECT AND STRUCTURE NUMBERS PROGRESS FROM NORTH TO SOUTH, THE SURVEY AND MAINLINE STATIONS PROGRESS FROM SOUTH TO NORTH. ALL REFERENCES TO "RIGHT" TO "LEFT" SHALL BE BASED ON THE NORMAL METHOD OF INCREASING STATIONS BEING "AHEAD."

NOTE: THE STEEL BRACKET SUPPORTS FOR THE STEEL WATER MAIN PIPE ON BRIDGES SHALL BE FURNISHED, FABRICATED AND INSTALLED IN PLACE IN ACCORDANCE WITH THE APPICABLE REQUIREMENTS OF ITEM 513 - STRUCTURAL STEEL.

INSULATION ITEMS:
1. PIPE INSULATION PROTECTION SADDLES - GRINNELL FIG. 162 FEE & MASON FIG. 172, OR APPROVED EQUAL.
2. ALUMINUM PIPE INSULATION COVERING - 26 GA.
3. GALVINIZED STEEL PIPE INSULATION COVERING - 26 GA., 1.25 OZ/S.F. OF GALVINIZING
4. STAINLESS STEEL BANDS - ASTM A-167-G3, 0.020 GA., 57"X½" DIMENSION AT 12" SPACING
5. 2" FIBER GLASS INSULATION - ASTM C547-64T

MAY 25 1971

GENERAL NOTES RRC 6/19/68 CEW 6/28/68

FED. RD.	STATE	PROJECT	
2	OHIO		

25
656

MAH -680-6.98

GENERAL NOTES

BRIDGE NUMBERS

BRIDGE STRUCTURE NUMBERS SHALL BE CONSIDERED TO READ AS FOLLOWS WHERE USED THROUGHOUT THE PLAN:

STRUCTURE NUMBERS

BRIDGE NO.	MAH-7-1452	BECOMES	MAH-680-0687
BRIDGE NO.	MAH-7-1445	BECOMES	MAH-680-0693
BRIDGE NO.	MAH-680-1435	BECOMES	MAH-680-0705
BRIDGE NO.	MAH-680-1418	BECOMES	MAH-680-0723
BRIDGE NO.	MAH-680-1347	BECOMES	MAH-680-0792
BRIDGE NO.	MAH-680-1343	BECOMES	MAH-680-0794
BRIDGE NO.	MAH-680-1323	BECOMES	MAH-680-0817
BRIDGE NO.	MAH-680-1304	BECOMES	MAH-680-0835
BRIDGE NO.	MAH-680-1214	BECOMES	MAH-680-0924

GROUTED RIP-RAP AS PER PLAN

THE CONTRACTOR SHALL REPLACE ANY DISPLACED RIP-RAP IN THE EXISTING INLET CHANNEL TO THE 12' x 6' CULVERT LEFT OF STATION 764 + 50, USING THE EXISTING STONE IN THE CHANNEL AND FURNISHING ANY NEEDED ADDITIONAL STONE.

THE CONTRACTOR SHALL THEN GROUT THE ENTIRE ROCK CHANNEL PROTECTION, AS DIRECTED, BY THE ENGINEER, AND LEAVE THE CHANNEL IN A NEAT CONDITION.

PAYMENT FOR THE WORK OUTLINED ABOVE SHALL BE PAID FOR UNDER ITEM 601, RIP-RAP, GROUTED, AS PER PLAN.

THIS BID PRICE SHALL BE FULL COMPENSATION FOR FURNISHING AND PLACING ALL MATERIALS, EXCAVATION AND DISPOSAL OF ALL SURPLUS MATERIAL AND INCIDENTALS NECESSARY FOR COMPLETION OF THIS ITEM.

QUANTITIES TO PERFORM THIS OPERATION ARE ON SHEET NO. 364.

WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL

The following estimated quantities are to be used as directed by the Engineer for temporary control measures. For details see the note in the proposal.

Special, Repair Seeding and Mulching	30,079 Sq. Yds.
Special, Temporary Seeding and Mulching	60,158 Sq. Yds.
Special, Commercial Fertilizer (12-12-12)	2.71 Tons
Special, Water	15 M. Gals.
Special, Temporary Slope Drains	1780 Lin. Ft.
Special, Temporary Benches, Dikes, Dams & Sediment Basins	987 Cu. Yds.
Special, Refertilizing (12-12-12)	12.18 Tons

WATER LINE RELOCATION (CONT'D)

WHERE PREVIOUSLY ABANDONED WATER MAINS ARE ENCOUNTERED DURING CONSTRUCTION THE MAINS SHALL BE CUT AND PLUGGED IN ACCORDANCE WITH ITEM 814. AS AMENDED HEREIN. THE COST OF REMOVAL AND CUTTING AND PLUGGING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION.

ABANDONED WATER MAINS

WHERE WATER LINES PRESENTLY IN SERVICE ARE TO BE ABANDONED UNDER THIS CONTRACT THEY SHALL BE CUT & PLUGGED IN ACCORDANCE WITH ITEM 814, AS AMENDED HEREIN. THE COST OF CUTTING AND PLUGGING SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 814, CUT & PLUG EXISTING WATER MAIN. THE COST OF PIPE REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203, EXCAVATION.

814 FIRE HYDRANT REMOVED

WHERE FIRE HYDRANTS ARE REMOVED ON AN ACTIVE WATER MAIN THE LEAD TO THE FIRE HYDRANT SHALL BE CUT & PLUGGED. THE PAYMENT FOR THIS CUTTING AND PLUGGING SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 814, CUT & PLUG EXISTING WATER MAIN.

SPECIFICATIONS FOR THE SEEDING OF BIRDSFOOT TREE FOIL - EMPIRE ON SLOPES GREATER THAN 4:1, AS PER PLAN

WORK:

A. THE WORK TO BE DONE UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL CONSIST OF FURNISHING ALL LABOR, MATERIALS, AND SERVICE FOR AND REASONABLY INCIDENTAL TO ALL WORK IN CONNECTION WITH THE FINISHED GRADING AND PREPARATION OF SLOPE COVER AS HEREIN SPECIFIED AND AS INDICATED ON THE DRAWINGS. THIS SHALL BE DONE AFTER THE COMPLETION OF ROUGH GRADING AND ALL OTHER OPERATIONS AND, IN GENERAL SHALL INCLUDE THE FOLLOWING:

B. WHERE THE WORDS STATE SPECIFICATION ARE USED HEREINAFTER, THEY SHALL BE UNDERSTOOD TO REFER TO THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS CONSTRUCTION AND MATERIALS SPECIFICATIONS.

C. THE AREAS TO BE SEEDED UNDER THIS SPECIFICATION SHALL INCLUDE ALL SLOPES STEEPER THAN 4:1 ON I-680, INTERCHANGE RAMPS AND CROSS-ROADS WHICH HAVE QUANTITIES TABULATED IN THE COMPUTATIONS, PAGE 42. NO SEEDING SHALL BE DONE ON AREAS WHICH ABUT RESIDENTIAL PROPERTY, EXCEPT ON SHADY RUN ROAD AND POWERSDALE AVENUE WHERE THE RESIDENTIAL PROPERTY IS UNDEVELOPED.

MATERIALS:

A. AGRICULTURAL LIMING MATERIALS SHALL MEET STATE SPECIFICATIONS 659.02.

B. COMMERCIAL FERTILIZER SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
18% OF NITROGEN
46% OF PHOSPHORIC ACID
0% OF POTASH

SEEDS SHALL MEET STATE SPECIFICATIONS 659.04 AND THE FOLLOWING:

SEED	PROPORTION BY WEIGHT
BIRDSFOOT TREE FOIL-EMPIRE	45%
PENNLAWN FESCUE	30%
PERENNIAL RYE GRASS	25%

SEEDING SHALL BE AT A RATE OF 3 LBS. PER 1,000 SQUARE FEET.

INNOCULATING BACTERIA: STATE SPECIFICATIONS 659.05.

MULCHING MATERIAL: STATE SPECIFICATIONS 659.06, CLEAN STRAW OR HAY HELD DOWN WITH ASPHALT EMULSION, MULCH NETS OR ANY OTHER PROCEDURE WHICH WILL HOLD IT IN PLACE.

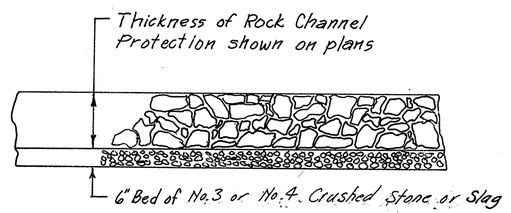
FERTILIZING: APPLY FERTILIZER AT A RATE OF 15 LBS. PER 1,000 SQ. FEET AND LIME AT A RATE OF 100 LBS. PER 1,000 SQ. FEET, AS PER STATE SPECIFICATIONS 659.08.

SEEDING AND MULCHING: SEED FOR BIRDSFOOT TREE FOIL-EMPIRE SHOULD BE TREATED WITH FRESH INNOCULANT AS DIRECTED IMMEDIATELY BEFORE SEEDING AND (UNLESS NOTED OTHERWISE WITHIN THESE SPECIFICATIONS) ALL SEEDS SHALL BE SOWN IN CONFORMANCE WITH STATE SPECIFICATIONS 659 AND 659.09. THE TOPSOIL SEED BED SHOULD NOT BE OVERWORKED BUT SHOULD BE LEFT ROUGH WHILE CONFORMING TO THE FINISHED GRADES INDICATED ON THE DRAWINGS. IMMEDIATELY AFTER THE SEED HAS BEEN RAKED INTO THE SEED BED MULCH SHOULD BE SPREAD OVER THE ENTIRE SEEDED AREA. BETWEEN MARCH 15 AND OCTOBER 15 MULCH SHOULD BE SPREAD AT A RATE OF TWO TONS PER ACRE OR TWO BALES PER 1,000 SQ. FEET. WHEN SEEDING BETWEEN OCTOBER 15 AND MARCH 15 OF THE SUCCEEDING YEAR, SPREAD MULCH AT A RATE OF THREE TONS PER ACRE OR 3 BALES PER 1,000 SQ. FEET. MULCHING MATERIALS SHALL BE HELD IN PLACE WITH ASPHALT EMULSION APPLIED AT A MINIMUM RATE OF 80 GALLONS PER TON OF MULCH SPECIFIED PER ACRE OR BY MULCH NETS OR AS MAY OTHERWISE BE REQUIRED TO PREVENT DISPLACEMENT OF SOILS, SEEDS AND MULCHING MATERIALS.

All soil areas not indicated above shall be seeded, mulched and fertilized in accordance with 659. Items Seeding & Mulching, as per plan and Commercial Fertilizer (12-12-12), as per plan have been carried to Sheet No. 52 as Alternate Bid Items.

WORK IN VICINITY OF THE WFMJ-TV TOWER - (GUY WIRES)

The Contractor is hereby alerted to the special, unusual and critical problem involved with the guy wires from the WFMJ-TV tower in the vicinity of Station 741. It is essential that this broadcasting facility remain in operation at all times. The Contractor must notify the owners of the tower, the Youngstown Vindicator Company prior to entering their property. The Contractor shall also, in addition to and in conjunction with provisions of the specifications, exercise all due caution, including but not limited to the erection of temporary protective fencing, and shall be responsible for all damage, injury to or interference with the transmission facility of Station WFMJ of any character, during the prosecution of the work. Said responsibility shall not be released until the project has been completed and accepted.



Thickness used for computing quantity of item 601 Rock Channel Protection

DETAIL OF ROCK CHANNEL PROTECTION

FED. RD.	STATE	PROJECT	
2	OHIO		

26
656

MAH-680-6.98

I-680-9(15) 242 | I-680-9(14) 240

HORIZONTAL EQUATION
STA. 638+00 (BACK) = STA. 637+76.04 (AHEAD)

Begin WORK 629+11

BOARDMAN TWP.

S 8° 30' 00" E

MIDLOTHIAN BLVD. 3226

CITY OF YOUNGSTOWN

BEGIN WORK STA. 358+00

CORPORATION LINE

SHIRLEY RD. 60'

N 16° 35' 23" E

(FUTURE RAMP "M-M")

RAMP "L"

END PROJECT MAH-680-6.58 STA. 637+76.04 AHD.

STA. 642+05.29 (℄ BD EXP)
STA. 372+54.77 (℄ MIDLOTHIAN BLVD)

MAH. 680-1214

RAMP "K"

℄ CREEK STA. 600+74

℄ CREEK STA. 643+87

℄ CREEK STA. 665+75

PINE HOLLOW DRIVE

T.S. STA. 671+15.72

C. STA. 673+15.72

℄ CREEK STA. 671+75

℄ CREEK STA. 675+36

N 14° 00' 43" E

12°15'

65°

35°

635 640 645 650 655 660 665 670 675 680

CORR LINE

℄ BOARDMAN EXP. (I-680)

RAMP "J"

RAMP "O"

MEDFORD AVE. 50'

WESTON AVE. 50'

N 0° 21' 00" W LEMOYNE AVE. 50'

N 89° 32' 11" E BYRON AVE. 50'

END WORK STA. 375+30

CITY OF YOUNGSTOWN

CURVE N°1 ℄ CURVE DATA

Δ = 71° 25' 13" LT.	Xc = 199.98'
Dc = 1° 50' 00"	Yc = 2.13'
R = 3,125.22'	L.T. = 133.34'
Tc = 2,098.22'	S.T. = 66.67'
Lc = 3,695.65'	L.C. = 199.99'
CHc = 3,484.05'	Ts = 2,346.92'
Ec = 639.03'	Es = 724.32'
Δc = 67° 45' 13"	Ls = 200'
Θs = 1° 50' 00"	P.I. STA. 694+62.64
P = 0.53'	
K = 100.00'	

BEGIN WORK STA. 10+11.50

N 89° 10' 14" E

HUMBOLT AVE. 50'

N 0° 49' 55" W

HUMBOLT-TAFT CONNECTOR

N 34° 28' 54" E TAFT AVE. 50'

N 30° 31' 36" E

END WORK STA. 13+62

N 89° 54' 21" E

BEGIN WORK STA. 41+38.50

N 34° 38' 33" W COOPER AVE.

MATCH LINE STA. 692+00

STA. 680+72.48 (℄ BD. EXP.)
STA. 50+00 (℄ SHIRLEY RD.)

34° 47' 05" ∠ TO LOCAL TANG.

MAH. 680-1304

N 34° 38' 33" W TAYLOR AVE. 50'

STA. 688+83.33 (℄ BD. EXP.)
STA. 10+10.0 (℄ TAYLOR AVE.)

N 73° 24' 43" W

CONSTANTINE AVE. 50'

RAMP "H"

50° 53' 42" ∠ TO LOCAL TANG.

RAMP "G"

HOMEWOOD AVE.

21° 48' 08" ∠ TO LOCAL TANG.

CRAIGED AVE. 50'
N 10° 35' 23" E

TAYLOR AVE. 50'

N 73° 24' 21" W

SPALDING RD.

STA. 682+64.31 (℄ BD. EXP.)
STA. 115+38.46 (℄ CRAIGED AVE.)

PINE HOLLOW CREEK

PINE HOLLOW DR.

POWERS WAY

LEGEND

INTERSTATE PARTICIPATING FUNDS MUNICIPAL

INTERSTATE PARTICIPATING FUNDS - QUIAL

FUNDING MAP

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

27
656

CURVE Nº I & CURVE DATA

Δ = 71°-25'-13" LT.
Dc = 1°-50'-00"
R = 3,125.22'
Tc = 2,098.22'
Lc = 3,695.65'
CHc = 3,484.05'
Ec = 639.03'
Δc = 67°45'-13"
Ds = 1°-50'-00"
P = 0.53'

K = 100.00'
Xc = 199.98'
Yc = 2.13'
L.T. = 133.34'
S.T. = 66.67'
L.C. = 199.99'
Ts = 2,346.92'
Es = 724.32'
Ls = 200'
P.I. STA. 694+62.64

MATCH LINE STA. 692+00

MATCH LINE STA. 747+00

TAYLOR ST.
COOPER AVE.
MURRAY
HOMEWOOD AVE.
SHIDLEY RD.
POWER WAY
INDIANOLA AVE.
HARMON
FITHIAN
POLAND AVE
CENTER ST.
CAMPBELL
UNION
HIRAM
CALEDONIA
ALEXANDER ST.
PARNELL ST. 40'
DEWEY AVE.
EXIST. SHADY RUN
PROP. SHADY RUN
TONEDALE AVE 50'
MABEL ST. 50'
ZEDAKER ST.
SAMUEL AVE. 50'
MABEL CONN.
& BOARDMAN EXP.
CURVE Nº I
CURVE Nº II
RAMP 'X'
RAMP 'E'
RAMP 'F'
MAH-680-1323
MAH-680-1345
MAH-680-1347
WFMJ-TV TOWER
CABLE ANCHOR
ACCESS RD.
S 81°-45'-08" E
(L=680')
CHARGED 38.5'-12.5" E
CHARGED 38.5'-12.5" E

BEGIN WORK STA. 41+93.45
BEGIN WORK STA. 48+60
BEGIN WORK STA. 37+50
BEGIN WORK STA. 10+62.34
BEGIN WORK STA. 9+80
END WORK STA. 36+20
END WORK STA. 51+93.34
END WORK STA. 62+64
END WORK STA. 13+75.73
END WORK STA. 57+84.30
END WORK STA. 13+62.86

STA. 715+59.17 (℄ BOARDMAN EXP)
STA. 721+44.71 (℄ BOARDMAN EXP)
STA. 708+74.42 (℄ BOARDMAN EXP)
STA. 712+52.62 (℄ BOARDMAN EXP)
STA. 718+37.84 (℄ BOARDMAN EXP)
STA. 724+28.41 (℄ BOARDMAN EXP)

C℄ STA. 710+11.37
S.T. STA. 712+11.37
P.C. STA. 726+17.90

700 705 710 715 720 725 730 735 740 745

POINT OF MINIMUM CLEARANCE
STA. 740+88.52 EDGE OF PAVED SHOULDER ELEV. = 378.08
MINIMUM CLEARANCE = 16.35'

CURVE Nº II CURVE DATA

Δ = 32°-44'-51" LT.
Dc = 1°-28'-00"
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

LEGEND

INTERSTATE PARTICIPATING FUNDS MUNICIPAL

100% CITY FUNDS

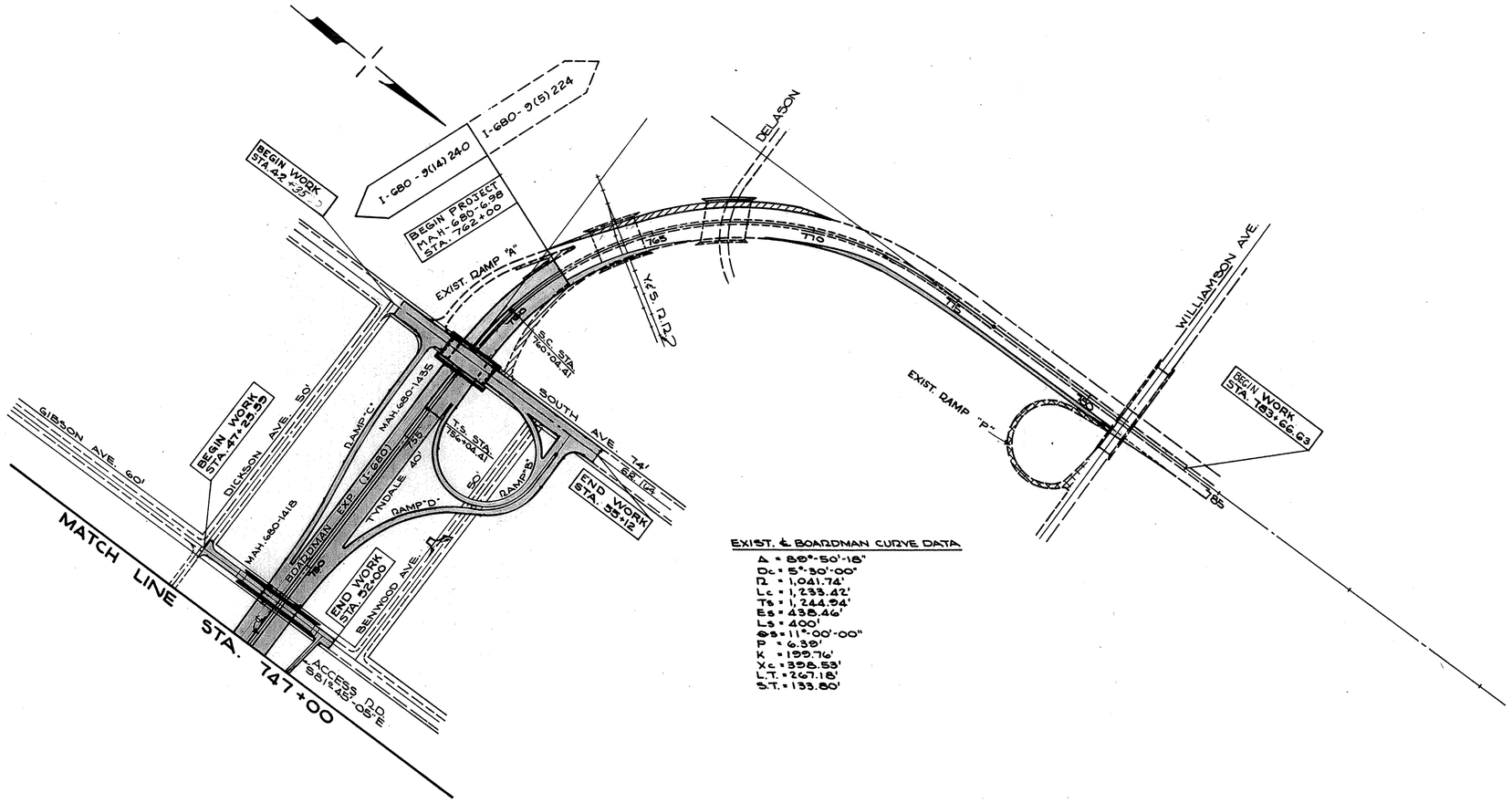
FUNDING MAP

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

28
656



EXIST. & BOARDMAN CURVE DATA

- Δ = 88°-50'-18"
- Dc = 5°-30'-00"
- R = 1,041.74'
- Lc = 1,233.42'
- Ts = 1,244.94'
- Es = 438.46'
- Ls = 400'
- θs = 11°-00'-00"
- P = 6.38'
- K = 199.74'
- Xc = 398.53'
- L.T. = 267.18'
- S.T. = 133.80'

LEGEND

- INTERSTATE PARTICIPATING FUNDS MUNICIPAL
- 25%-75% CITY-STATE PARTICIPATING FUNDS
- I-SAFETY FUNDS I-680-9(20) 240

FUNDING MAP

MAY 25 1971

202 - EXISTING CURB, RIGID PAVEMENT AND SIDEWALK REMOVED AND DISPOSED

LOCATION STREET	STATION FROM	STATION TO	SIDE	EXISTING PAVEMENT LEN. FT.	WIDTH FT.	AREA S.Y.	EXISTING SIDEWALK LEN. FT.	WID. FT.	AREA S.F.	EXIST. CURB LENGTH	REMARKS
MIDLOTHIAN	366+29.21	378+08.17	LT.							1178.96	
	366+04.21	378+08.17	LT.				1203.96	5.0	6019.80		
	366+29.21	378+30.31	RT.							1201.10	
	372+88	378+37	RT.				549.0	5.0	2745.0		
	366+60.5		LT.	25.0	1.0	2.8					DRIVE APPROACH
	367+79		LT.	21.0	2.5	5.8					" "
	368+57		LT.	36.0	2.5	10.0					" "
	371+27		RT.	22.0	2.5	6.1					" "
	372+94		RT.	18.0	2.5	5.0					" "
	373+48		RT.	22.0	2.5	6.1					" "
	373+93		RT.	18.0	2.5	5.0					" "
	375+00		RT.	20.0	2.5	5.6					" "
	375+45		RT.	20.0	2.5	5.6					" "
	375+93		RT.	20.0	2.5	5.6					" "
	376+45		RT.	20.0	2.5	5.6					" "
	377+32		RT.	20.0	2.5	5.6					" "
	377+80		RT.	20.0	2.5	5.6					" "
	373+80		LT.	24.0	2.5	6.7					" "
	375+39		LT.	40.0	2.5	11.1					" "
SHIRLEY	42+10	45+02	LT.							292.0	
	42+02	45+03	LT.				301.0	6.0	1806.0		
	42+10	46+00	RT.							390.0	
	41+39	46+00	RT.				461.0	6.0	2766.0		
	42+72.5		LT.	11.0	7.5	9.2					DRIVE APPROACH
	43+50		LT.	11.0	7.5	9.2					" "
	44+45		LT.	12.0	7.5	10.0					" "
	42+39		RT.	10.0	7.5	8.3					" "
	42+97.5		RT.	12.0	7.5	10.0					" "
	43+35		RT.	10.0	7.5	8.3					" "
	43+95		RT.	11.0	7.5	9.2					" "
	44+34		RT.	10.0	7.5	8.3					" "
	44+77		RT.	10.0	7.5	8.3					" "
	45+23		RT.	9.0	7.5	7.5					" "
	45+66		RT.	10.0	7.5	8.3					" "
	45+50	48+57	LT.							307.0	
	45+50	48+62	LT.				312.0	6.0	1872.0		
	46+00	47+87	RT.				187.0	6.0	1122.0		
	46+00	48+02	RT.							202.0	
	46+00		LT.	17.0	7.5	14.2					DRIVE APPROACH
	47+03		LT.	10.0	7.5	8.3					" "
	47+46		LT.	9.0	7.5	7.5					" "
	47+87		LT.	11.0	7.5	9.2					" "
	48+29		LT.	10.0	7.5	8.3					" "
	46+10		RT.	9.0	7.5	7.5					" "
	46+54		RT.	10.0	7.5	8.3					" "
	46+89		RT.	11.0	7.5	9.2					" "
	47+31		RT.	9.0	7.5	7.5					" "
	47+74		RT.	10.0	7.5	8.3					" "
	51+89	54+96	LT.							307.0	
	52+03	54+96	LT.				293.0	6.0	1758.0		
	55+25	56+00	LT.				75.0	6.0	450.0	75.0	
	51+43	54+97	RT.				354.0	6.0	2124.0		
	51+49	54+97	RT.							348.0	
	55+23	56+00	RT.				77.0	6.0	462.0	77.0	
	53+25		LT.	20.0	7.5	16.7					DRIVE APPROACH
	54+00		LT.	10.0	7.5	8.3					" "
	54+40		LT.	9.0	7.5	7.5					" "
	51+67		RT.	10.0	7.5	8.3					" "
	52+09		RT.	10.0	7.5	8.3					" "
	52+49		RT.	10.0	7.5	8.3					" "
	52+89		RT.	11.0	7.5	9.2					" "
	53+27		RT.	10.0	7.5	8.3					" "
	53+67		RT.	10.0	7.5	8.3					" "
	54+07		RT.	9.0	7.5	7.5					" "
	55+77		RT.	9.0	7.5	7.5					" "
	56+00*	62+86	LT.				686.0	6.0	4116.0		
	56+00	62+86	LT.							686.0	
	56+00	62+21	RT.				621.0	6.0	3726.0		
	56+00	62+21	RT.							621.0	
	56+19		LT.	11.0	7.5	9.2					DRIVE APPROACH
	56+95		LT.	11.0	7.5	9.2					" "
	57+77		LT.	9.0	7.5	7.5					" "
	60+19		LT.	13.0	7.5	10.8					" "
*	56+26		RT.	9.0	7.5	7.5					" "
	56+73.5		RT.	10.0	7.5	8.3					" "
	57+16		RT.	10.0	7.5	8.3					" "
	57+60		RT.	10.0	7.5	8.3					" "
	58+05		RT.	11.0	7.5	9.2					" "
	58+50		RT.	10.0	7.5	8.3					" "
	60+85		RT.	13.0	7.5	10.8					" "
	61+44		LT.	18.0	7.5	15.0					DRIVE APPROACH
	61+96		LT.	18.0	7.5	15.0					" "

* ALL REMOVAL ITEMS FOR SHIRLEY BEYOND STATION 56+00 SHALL BE 100% CITY FUNDS.

* POWERS WAY (Sh. 191)	53+93.89	54+17.00	LT.				23.11	6.0	138.66	23.11	

202 - EXISTING CURB, RIGID PAVEMENT AND SIDEWALK REMOVED AND DISPOSED

LOCATION STREET	STATION FROM	STATION TO	SIDE	EXISTING PAVEMENT LEN. FT.	WIDTH FT.	AREA S. Y.	EXISTING SIDEWALK LEN. FT.	WID. FT.	AREA S.F.	EXIST. CURB LENGTH	REMARKS
TAFT	47+89.69	49+29	LT.							139.31	
	47+95	48+29	LT.				34.0	5.0	170.0		
	47+89.69	49+73	RT.							183.31	
	47+62.50	49+73	RT.				210.50	5.0	1052.5		
	48+00		LT.	10.0	4.5	5.0					DRIVE APPROACH
COOPER	10+54	11+04.53	RT.							50.53	
	10+60	11+04.53	RT.				44.53	5.0	222.7		
	10+80	11+04.53	LT.							24.53	
	10+80	12+01	LT.				121.0	5.0	605.0		
HUMBOLT	45+19.42	45+83.42	LT.				64.0	5.0	320.0	64.0	
	45+33		LT.	11.0	88.0	107.6					DR. & DR. APPROACH
TAFT	45+07	45+59	RT.				60.0	5.0	300.0	57.0	
CRAIGER	106+79		RT.							8.0	
	107+20		RT.	47.0	14.0	73.1				14.0	DR. & DR. APPROACH
	107+58		RT.							10.0	@ DRIVE APPROACH
	107+98		RT.							15.0	@ DRIVE APPROACH
	109+16		RT.	29.0	8.0	25.8				8.0	DR. & DR. APPROACH
	104+11.45	104+21.45	LT.				10.0	6.0	60.0	10.0	
EXISTING RAMP Y △	0+27.31	4+04.58	B/L	377.27	16.0	671.0					
	SOUTH RETURN		LT.	(25) [29.23 - 43.16/2]/9 = 21.3						43.16	AREA = R(T - L/2)/9
	NORTH RETURN		RT.	(50) [42.77 - 70.76/2]/9 = 41.1						70.76	" " "
	2+04.58	4+04.58	LT.							200.0	
	762+11.39(ML)	BRIDGE	B/L							58.0	
*** WILLIAMSON	52+75	53+33	RT.	(SEE REMARKS)	172.44						PLANIMETER
EXISTING RAMP P ***	0+00	7+98.07	B/L	(SEE REMARKS)	1480.0						FROM MAH.7-14.80 PLANS
	0+00	2+0	RT.							200.0	
	1+45.55	2+35.10	LT.							120.0	
	5+79.66	7+98.07	LT.							218.41	
	781+16.30(ML)	783+66.63		(SEE REMARKS)	266.22						PLANIMETER
EXISTING RAMP A	762+09.09	763+09.09	RT.	EL RAMP A						200.00	
CHALMERS (Sh. 73)	50+90	51+25	C/L	35.0	33.0	128.33					
	50+90	51+25	LT.				35.0	5.0	175.0	35.0	
	50+90	51+25	RT.							35.0	
DELASON △	3+40	3+54					14.0	5.0	70.0		

*** ALL REMOVAL QUANTITIES FOR EXISTING RAMP P & WILLIAMSON SHALL BE I-SAFETY FUNDS.
△ ALL REMOVAL QUANTITIES FOR DELASON AND RAMP "Y" SHALL BE CITY-STATE FUNDS.

CALCULATED BY CEW DATE 8/28/68
CHECKED BY PWD DATE 8/30/68

MAY 26 1971

COMPUTATIONS - 202

LOCATION STREET	STATION FROM	STATION TO	SIDE	EXISTING PAVEMENT LEN. FT.	WIDTH FT.	AREA S.Y.	EXISTING SIDEWALK LEN. FT.	WID. FT.	AREA S.F.	EXIST. CURB LENGTH	REMARKS
TAYLOR	35+20	39+60.44	RT.				440.44	4	1761.76	440.44	
	35+17		RT.	2.5	11	3.1					DRIVE APPROACH
	35+55		RT.	2.5	11	3.1					"
	35+90		RT.	2.5	11	3.1					"
	36+32		RT.	2.5	11	3.1					"
	36+74		RT.	2.5	11	3.1					"
	37+12		RT.	2.5	10	2.8					"
	37+54		RT.	2.5	10	2.8					"
	37+87		RT	2.5	16	4.4					"
	38+22		RT.	2.5	12	3.3					"
	38+73		RT.	2.5	11	3.1					"
	39+39		RT.	2.5	11	3.1					"
	40+41.04	41+35	RT.				93.96	4	375.84	93.96	
	40+86		RT.	2.5	12	3.3					"
	34+00	35+20	LT.							120.00	
	33+85	35+23.5	LT.				138.50	4	554.0		
	34+89		LT.	2.5	9	2.5					DRIVE APPROACH
	40+41	45+64	RT.				429.0	4	2091.84 1716.00	522.96	
	40+93		RT.	2.5	10	2.8					DRIVE APPROACH
	41+71		RT.	2.5	10	2.8					" "
	42+27		RT.	2.5	10	2.8					
	43+61		RT.	2.5	10	2.8					
	43+75		RT.	2.5	10	2.8					
	44+26		RT.	2.5	9	2.5					
	44+74		RT.	2.5	9	2.5					
	45+99	46+63	LT.				64	4	256.0	64.00	
	46+23.82		LT.	2.5	10	2.8					DRIVE APPROACH
	39+60.44	39+72.94	LT.				12.5	4	50.00	6.00	
	40+20	40+41.04	LT.				21.04	4	84.16	17.00	
	39+60.44	39+73.44	RT.				13.00	4	52.0	13.00	
	40+20	40+41.04	RT.				21.04	4	84.16	21.00	
INDIANOLA	48+32	48+90	LT.				55.0	4	220.0	68.00	
	48+32	48+90	RT.				56.0	4	224.0	65.00	
	50+76	51+51	LT.				77.0	4	308.0	87.00	
	50+70	51+49	RT.				77.0	4	308.0	84.00	
	47+93.45	48+08.45	RT.				15	4	60.0	23.55	
	47+93.45	48+08.45	LT.				15	4	60.0	23.55	
HOMEWOOD	36+00	39+44.80	LT.							344.80	
	36+45		LT.	2.5	8	2.2					"
	36+90		LT.	2.5	9	2.5					"
	37+37		LT.	2.5	13	3.6					"
	37+66		LT.	2.5	43	11.9					"
	38+47		LT.	22.0	9	22.0					DR. & DR. APPROACH
	39+44	39+61	LT.				17.0	4	68.0	18.00	
	40+10	40+49.48	LT.				39.48	4	157.92	39.48	
	40+49.48	42+98.80	LT.				249.32	4	997.28	249.32	
	40+56		LT.	2.5	10	2.8					DRIVE APPROACH
	41+62		LT.	2.5	9	2.5					" "
	42+16		LT.	2.5	10	2.8					" "
	42+26		LT.	2.5	11	3.1					" "
	43+04		LT.	2.5	8	2.2					" "
	43+46		LT.	2.5	11	3.1					" "
	43+55		LT.	2.5	9	2.5					" "
	44+00		LT.	2.5	10	2.8					" "
	44+41		LT.	2.5	10	2.8					" "
	42+98.80	44+47	LT.							148.20	
	33+89	36+00	LT.				211.0	5.0	1055.0	211.0	
	33+89	36+00	RT.				211.0	5.0	1055.0	211.0	
	35+71		RT.	10.5	2.5	2.9					DRIVE APPROACH
UNION	50+90	51+61.27	RT.							71.27	
	51+00	51+41.27	RT.				41.27	5	206.35		
	51+05	51+61.27	LT.				57.0	5	385.0 285.0	63.00	
	50+80	51+61.27	C/L.	81.27	24.0	216.7			2455.0		
	47+36.96	47+90	LT.				53.04	5	257.00	53.04	
	47+36.96	47+90	RT.				53.04	5	265.20	53.04	
	47+36.96	47+90	C/L	53.04	24.0	141.4					
CALEDONIA	47+71.53	48+55	LT.				83.47	5	417.35	83.47	
	47+71.53	48+55	RT.				83.47	5	417.35	83.47	
	48+10		RT.	7.0	10.0	7.8					DRIVE APPROACH
	48+12		LT.	6.0	10.0	6.7					" "
	51+70	52+13.90	RT.				39.0	5	195.0	46.32	
	51+98	52+13.90	LT.							18.00	
COOPER	48+70	49+63.60	LT.							93.60	
	49+58	49+78	LT.				20.0	5	100.0		
	48+70	49+90	RT.							120.0	
	49+13	49+78	RT.				65.0	5	325.0		
	48+70	49+78	C/L	108.0	17.5	210.0					
CAMPBELL	37+63.60	38+15	RT.				51.4	5	257.0	51.4	
	37+63.60	38+85	LT.				121.4	5	607.0	121.4	
	38+53	38+85	RT.				32.0	5	160.0	40.0	
	37+63.60	38+85	C/L	121.4	24.5	330.5					
	47+50	49+17	LT.							167.0	
	47+50	49+80	RT.							230.0	
	48+00	49+16	LT.				116.0	5.0	580.0		
	48+42	49+79	RT.				137.0	5.0	685.0		
	47+50	49+80	C/L.	230.0	25.0	638.9					

202 - EXISTING CURB, RIGID PAVEMENT AND SIDEWALK REMOVED AND DISPOSED

LOCATION STREET	STATION FROM	STATION TO	SIDE	EXISTING PAVEMENT LEN. FT.	WIDTH FT.	AREA S.Y.	EXISTING SIDEWALK LEN. FT.	WID. FT.	AREA S.F.	EXIST. CURB LENGTH	REMARKS
EXIST. MABEL	52+90	54+37.35	LT.				147.35	5	736.75		
	53+45	54+46	RT.				101.0	5	505.0		
EXIST. POWERSDALE	8+60	9+75	LT.							115.0	
	10+04	11+35.11	LT.							131.11	
	8+60	11+35.11	RT.							286.0	
	8+74.39	11+20	C/L.	248.0	24.0	661.3					
	46+62.33	47+85	RT.							122.67	
	47+35	47+85	RT.				50.0	5	250.0		
	46+62.33	48+20	LT.							157.67	
	46+72.33	48+20	LT.				147.67	5	738.35		
	46+92		RT.	4.5	10.0	5.0					DRIVE APPROACH
	47+35		RT.	4.5	10.0	5.0					" "
	47+52		LT.	4.5	9.0	4.5					" "
	47+74		RT.	4.5	9.0	4.5					" "
	46+72.34	48+02	C/L	129.66	28.5	369.5	410.6				
	55+09.24	55+93.17	C/L	83.93	2.0	18.7					
	54+96	55+33	LT.				37.0	5	185.0		
	55+09.24	55+33	LT.							23.76	
	55+62	55+93.17	LT				31.17	5	155.85	31.17	
	53+87		LT.	4.50	8.50	4.2				9.00	DRIVE APPROACH
	54+47		LT.	4.5	10.0	5.0				10.00	" "
	54+85		LT.	4.5	10.0	5.0				10.00	" "
EXIST. ALEXANDER	10+17	11+00	LT.				83.0	5	415.0	83.00	
	10+21	11+00	RT.				79.0	5	395.0	79.00	
EXIST. GIBSON	47+28	48+65	RT.				137.0	5	685.0	137.0	
	47+28	48+65	LT.				137.0	5	685.0	137.0	
	47+26	48+65	C/L.	139.0	24.0	370.7					
	51+22	52+00	RT.							78.0	
	51+22	52+00	LT.				37.0	5	185.0	78.0	
	51+22	52+00	C/L.	78.0	40.0	346.7					
	51+35		LT.	3.5	10.0	3.9					DRIVE APPROACH
EXIST. DICKSON	40+25.43	40+53	RT.				27.57	5	137.85	27.57	
	40+91	49+68	RT.				877.0	5	4385.0		
	40+91	41+15.44	RT.							24.44	
	41+08		RT.	4.8	8.0	4.3					DRIVE APPROACH
	41+50.5		RT.	4.8	8.0	4.3					" "
	41+88		RT.	4.8	9.0	4.8					" "
	42+28		RT.	4.8	8.0	4.3					" "
	42+66		RT.	4.8	10.0	5.3					" "
	43+10		RT.	4.8	8.0	4.3					" "
	43+49		RT.	4.8	8.0	4.3					" "
	43+90.5		RT.	4.8	8.0	4.3					" "
	44+32.5		RT.	4.8	8.0	4.3					" "
	44+70		RT.	4.8	9.0	4.8					" "
	45+11.5		RT.	4.8	9.0	4.8					" "
	45+51.5		RT.	4.8	8.0	4.3					" "
	45+90		RT.	4.8	9.0	4.8					" "
	46+29		RT.	4.8	7.0	3.7					" "
	46+68		RT.	4.8	9.0	4.8					" "
	47+08.5		RT.	4.8	8.0	4.3					" "
	47+48.5		RT.	4.8	8.0	4.3					" "
	48+25.5		RT.	4.8	20.0	10.7					" "
	48+95.5		RT.	4.8	9.0	4.9	9.6				
EXIST. BENWOOD	44+44	45+22	LT.				78.0	5.0	390.0		
	44+42	45+22	LT.							80.0	
	44+49		LT.	6.1	10.0	6.8					DRIVE APPROACH
	44+78		LT.	6.1	10.5	7.1					" "
EXIST. SOUTH	47+60	48+26	LT.							66.0	
	47+45.5	48+29	LT.				83.5	7.5	626.25		
	48+96	49+42	LT.				46.0	7.5	345.0		
	49+00	49+42	LT.							42.0	
	51+85	54+90	LT.							305.0	
	50+70	51+00	LT.				30.0	7.5	225.0		
	51+62	55+12	LT.				350.0	7.5	2625.0		
	47+26	49+42	RT.				215.0	7.5	1612.5		
	47+26	49+42	RT.							246.0	
	50+67	52+57	RT.				190.0	7.5	1425.0	190.0	
	53+11	54+90	RT.							179.0	
	53+11	55+00	RT.				189.0	7.5	1417.5		
	47+60	49+42	C/L.	182	54.0	1092.0					
	50+68	54+90	C/L.	422	54.0	2532.0					
PROP. SHADY RUN	37+50	38+60	LT.							110.0	
	37+50	38+60	RT.							110.0	
	37+75.17	38+65	C/L.	89.83	26.0	259.5					
	38+20	38+64	LT.				44.0	5.0	220.0		
	55+30	57+73	LT.							251.0	
	55+30	57+21	RT.							188.0	
POLAND	49+45.86	49+80	RT.				34.14	5.0	170.70	34.14	
	50+24	50+37.12	RT.				13.12	5.0	65.60	13.12	
(SH. 191)	100+22	100+40.84	LT				21.0	6.0	126.00	21.00	

TOTALS				
	PARTICIPATING FUNDS	8,122.4	57,417.56	12,773.66
	I - SAFETY FUNDS	1,918.7	0	538.41
	CITY - STATE FUNDS	733.4	70.0	371.92
	100% CITY FUNDS	127.4	7,980.66	1,330.1

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

30
656

CALCULATED BY R.R.C. DATE 11/17/69
CHECKED BY WDB DATE 11/18/69

MAY 25 '71

ITEM 203 - EARTHWORK RECAPITULATION

MAINLINE

STATION FROM	STATION TO	EXCAVATION C.Y.	EMBANKMENT C.Y.	ITEM 659 SEEDING S.Y.
630 + 00	640 + 00	169	16,686	1,938
640 + 00	650 + 00	1,125	121,797	11,511
650 + 00	660 + 00	12,514	60,534	12,237
660 + 00	670 + 00	2,612	310,428	20,445
670 + 00	680 + 00	17,624	254,271	18,449
680 + 00	690 + 00	150,254	0	7,300
690 + 00	700 + 00	203,734	0	13,189
700 + 00	710 + 00	121,961	403	7,854
710 + 00	720 + 00	59,530	487	5,420
720 + 00	730 + 00	50,542	9,856	12,311
730 + 00	740 + 00	27,099	34,279	15,797
740 + 00	750 + 00	91,804	5,302	8,772
750 + 00	760 + 00	183,386	181	9,156
760 + 00	766 + 95	3,941	1,454	6,203
772 + 00	784 + 00	2,302	358	2,911
768 + 00	772 + 00	551	1,267	2,601
TOTAL MAINLINE (Part.)		929,148	817,303	156,094

RAMPS

STATION	EXCAVATION C.Y.	EMBANKMENT C.Y.	ITEM 659 SEEDING S.Y.
RAMP "B"	80,353	1,249	8,402
RAMP "C"	53,925	0	6,281
RAMP "D"	37,912	111	5,392
RAMP "E"	53,557	1,043	14,858
RAMP "F"	18,985	646	8,277
RAMP "G"	28,983	6	6,799
RAMP "H"	25,757	0	6,533
RAMP "J"	2,591	19,328	7,614
RAMP "K"	745	25,497	6,828
RAMP "O"	7,496	6,140	29,996
RAMP "X"	10,471	0	3,263
TOTAL RAMPS (Part.)	320,775	54,020	104,243
RAMP "L" (Rural)	2 049	45,406	9,443
TOTAL RAMPS (Rural)	2,049	45,406	9,443

CROSS ROADS

STATION	EXCAVATION C.Y.	EMBANKMENT C.Y.	ITEM 659 SEEDING S.Y.
MIDLOTHIAN BOULEVARD (Rural)	951 *	826 *	3,227 *
MIDLOTHIAN BOULEVARD (Part.)	759	37	611
SHIRLEY ROAD (part.)	2,298	749	2,134
SHIRLEY ROAD (100% City)	1,868 "	11 "	191 "
COOPER AVENUE	166	28	352
HOMEWOOD AVENUE	2,275	103	1,155
HUMBOLT-TAFT CONNECTOR	1,128	38	466
INDIANOLA	440	1	
RELOC. TAYLOR-SOUTH TURN AROUND	571	83	586
RELOC. TAYLOR	53	19	151
POWERSDALE MABEL CONN.	1,559	65	944
MABEL CONN.	673	42	745
SHADY RUN ROAD	4,843	67,496	16,538
POWERSDALE	570	33	447
ACCESS ROAD @ GIBSON	649	218	1,880
GIBSON AVENUE	485	13	134
BENWOOD AVENUE TURN AROUND	26	0	91
SOUTH AVENUE	1,901	55	525
TAYLOR	120	1	25
TAFT CUL-DE-SAC	366	0	360
WILLIAMSON AVENUE (I-SAFETY)	18 ϕ	166 ϕ	450 ϕ

ROADWAY OBLITERATION

MABEL AVENUE	32
TAYLOR @ CRAIGER	27
TOTAL ROADWAY OBLITERATION	59

TOTAL CROSS ROADS (Part.)	18,882	68,981	27,144
TOTAL CROSS ROADS (Rural) *	951	826	3,227
TOTAL CROSS ROADS (I-SAFETY) ϕ	18	166	450
TOTAL CROSS ROADS (100% City) "	1,868	11	191
GRAND TOTAL (Part.)	1,268,805	940,304	287,481
GRAND TOTAL (I-Safety)	18	166	450
GRAND TOTAL (100% City)	1,868	11	191
GRAND TOTAL (Rural)	3,000	46,232	12,670

ITEM 203 - SUBGRADE COMPACTION

MAINLINE (PARTICIPATING)

PREPARATION LIMITS:
637 + 76.04 to 680 + 00
718 + 00 to 746 + 00 (Rt. Side)
728 + 00 to 746 + 00 (Lt. Side)
758 + 50 to End

AREA OF PAVED SHOULDER (SEE 301)

637 + 76.04 to 680 + 00:

$$A = 258.19 + 150.00 + 171.49 + 641.29 + 22.22 + 410.73 + (2507.52 - \frac{169.08(3186.22)}{3125.22}) + 1284.56 + 516.77 + \frac{155(3076.22)}{3125.22} = 5,942.96 \text{ S.Y.}$$

718 + 00 to 746 + 00 (Rt. and Lt.):

$$A = (2303.09 - \frac{100(10)}{9}) + 406.67 + 1483.69 + \frac{80(10)}{9} = 4,171.23 \text{ S.Y.}$$

758 + 50 to 762 + 23.36:

$$A = 200(\frac{49}{2(1041.74)} + 1)(10)(1/4) = 227.45 \text{ S.Y.}$$

MEDIAN (ALL):

$$A = 344.29 + \frac{3678.98 \times 10}{9} + \frac{2800 \times 5}{9} + \frac{1800 \times 5}{9} + \frac{350 \times 10}{9} = 7,376.50 \text{ S.Y.}$$

768+50 to 782+16.63 = 1,487.77 + 50.00 = 1,537.77

TOTAL AREA = 10,255.01 S.Y.

AREA OF 8" - 451 (SEE 451 COMPUTATIONS)

637 + 76.04 to 680 + 00:

$$A = 1791.68 + 6119.04 + 8273.57 + 10,666.67 + 9,360.00 = 36,210.96 \text{ S.Y.}$$

718 + 00 to 746 + 00:

$$A = \frac{700(72)}{9} + 9,186.47 + \frac{455.10(3856.53)(12)}{3906.53(9)} + \frac{600(72)}{9} + \frac{80(12)}{9} = 16,792.18 \text{ S.Y.}$$

758 + 50 to 762 + 00:

$$A = \frac{150(72)}{9} + 1600.00 = 2,050.00 \text{ S.Y.}$$

RAMP ACCELERATION & DECELERATION LANES (RAMPS B, C, E, F, J, K, L, &O):

$$A = \frac{150(8.66+15.32)}{2} + \frac{144.90(25+15.63)}{2} + \frac{(298.60)(17.76+12.0)}{2} + \frac{1068.89 + 1069.22 + 1297.81 + 448.44 + 428.51 + 66.67 + 910.22}{9} = 6,310.35 \text{ S.Y.}$$

TOTAL 451 AREA = 61,363.49 S.Y.

AREA OF 10" - 451 (SEE 451 COMPUTATIONS)

RAMP B:
A = 256.95 S.Y.

RAMPS (PARTICIPATING)

PREPARATION LIMITS:

RAMP B; Spurs to South
RAMP C: 756 + 00 to End
RAMP D: 756 + 50 to End
RAMP E: Begin to 718 + 50
728 + 00 to End
RAMP F: Begin to 722 + 00 and
733 + 00 to End
RAMP G: 691 + 50 to End
RAMP H: 683 + 50 to End
RAMPS J,,K,O, : ALL

203 - SUBGRADE COMPACTION

RAMPS PARTICIPATING

AREA OF PAVED SHOULDER (SEE 301)

RAMP B:
A = 0 S.Y.

RAMP C:
$A = \frac{107.41(3)}{9} + \frac{120.41(3)}{9} = 75.94$ S.Y.

RAMP D:
$A = \left[\frac{116.73(210.67)}{207.67} + 103.03\right](6)(1/4) = 147.63$ S.Y.

RAMP E:
$A = 2.73 + 3/9(240.43 + 131.51) + 8/9(198.60) + 100.0 = 403.24$ S.Y.

RAMP F:
A = 2.34 + 161.99 + 122.22 + 391.11 + 80.00 = 757.66 S.Y.

RAMP G:
$A = \frac{167.81(3)}{9} + \left[\frac{116.05(179.13)}{204.63}\right](3/9) = 89.80$ S.Y.

RAMP H:
$A = \frac{101.56(1449.89)(3)}{1432.39(9)} = 34.27$ S.Y.

RAMP J:
A = 284.84 + 122.22 + 391.30 + 80.00 + 74.80 + 214.08 + 27.91 = 1,195.15 S.Y.

RAMP K:
A = 371.02 + 335.63 + 61.11 + 405.05 + 100.00 = 1,272.81 S.Y.

RAMP L:
A = 148.39 + 307.89 + 100.00 = 556.28 S.Y.

RAMP O:
A = 281.48 + 112.34 + 670.65 + 80.00 + 269.86+ 34.79 + 27.78 = 1,476.90 S.Y.

TOTAL AREA = 6,009.68 S.Y.

AREA OF 9"-451 (SEE 451 COMPUTATIONS)

RAMP B:
A = 334.27 + 188.61 + 236.58 = 759.46 S.Y.

RAMP C:
$A = \frac{38.06(1917.86)(16)(1/9) + 123.29 + 212.94}{1909.86} = 539.06$ S.Y.

RAMP D:
$A = \frac{(22.20 + 26.50)}{2}(116.73)(1/9) + 527.84 = 843.66$ S.Y.

RAMP E:
$A = 783.17 + 853.70 + 83.33 + 548.64 + \frac{181.51(16)}{9} = 2,591.51$ S.Y.

RAMP F:
$A = 1281.46 + 355.56 + 472.74 + \frac{59.45(29)}{9} = 1,857.58$ S.Y.

RAMP G:
$A = \frac{126.10(192.63)}{204.63}(\frac{24}{9}) = 316.55$ S.Y.

RAMP H:
$A = 527.90 - \frac{23.21(16)}{9} = 569.16$ S.Y.

RAMPS J, K, & O:
A = 2,289.80 + 2,062.06 + 2,442.24 = 6,794.10 S.Y.

GRAND TOTAL RAMPS = 14,271.08 S.Y.

AREA CURB (PARTICIPATING)

TYPE 7 (SEE QUANTITY BOXES)

RAMPS B, C, D, E, G, H, K:		0 L.F.
RAMP F:	L = 323.40	323.40 L.F.
RAMP J:	L = 161.81	161.81 L.F.
RAMP O:	L = 70.0	70.00 L.F.
TOTAL TYPE 7 CURB =		555.21 L.F.

AREA = $\frac{555.28(0.67)}{9}$ = 41.33 S.Y.

ITEM 203 - SUBGRADE COMPACTION

TYPE 8 (SEE QUANTITY BOXES)

RAMPS B, C, D, E, G, H, K:		0 L.F.
RAMP F:	L = 249.81	249.81 L.F.
RAMP J:	L = 275.98	275.98 L.F.
RAMP O:	L = 117.00	117.00 L.F.
TOTAL TYPE 8 CURB =		642.79 L.F.

AREA = $\frac{642.79(1.0)}{9}$ = 71.42 S.Y.

AREA MEDIAN-PARTICIPATING

RAMP D:
$A = \frac{185(3)}{9} = 61.67$ S.Y.

PARTICIPATING

AREA (SHD.- BOARDMAN EXP.) =	10,255.01 S.Y.
AREA (SHD.- RAMPS) =	6,009.68 S.Y.
AREA (9" 451 - RAMPS) =	14,271.08 S.Y.
AREA (10" 451 - BOARDMAN EXP.) =	1,910.48 S.Y.
AREA (8" 451 - BOARDMAN EXP. AND RAMPS) =	61,363.49 S.Y.
AREA (TYPE 7 CURB) =	41.33 S.Y.
AREA (TYPE 8 CURB) =	71.42 S.Y.
AREA (MEDIAN) =	61.67 S.Y.
TOTAL AREA =	102,985.07 S.Y.

RURAL

AREA (SHD.- RAMP L) =	451.93 S.Y.
AREA (9" 451 - RAMP L) =	2,113.78 S.Y.
TOTAL AREA =	2,565.71 S.Y.

CITY-STATE

AREA PAV'T - RAMP A =	158.83 S.Y.
AREA (SHD.- RAMPS A) =	419.72 S.Y.
AREA (10" 451 - BOARDMAN EXP. AND RAMPS) =	450.08 S.Y.
TOTAL AREA =	1,127.13 S.Y.

ITEM 203 - PROOF ROLLING

PARTICIPATING
$(102,985.07 \text{ S.Y.}) \frac{1}{(3000 \text{ S.Y./Hr.})} = 34.33$ HRS.

RURAL
$(2,565.71 \text{ S.Y.}) \frac{1}{(3000 \text{ S.Y./Hr.})} = 0.86$ HRS.

CITY-STATE
$(1,127.13 \text{ S.Y.}) \frac{1}{(3000 \text{ S.Y./Hr.})} = 0.38$ HRS.

MAY 25 1971

CALCULATED BY RRC DATE 11/27/69
CHECKED BY WDB DATE 11/30/69

FED. RD.	STATE	PROJECT	
2	OHIO		

32
656

MAH-680-6.98

ITEM 659 - SEEDING AND MULCHING

PARTICIPATING

MAINLINE = 156,084 S.Y.

RAMPS = 104,243 S.Y.

CROSS ROADS = 27,144 S.Y.

TOTAL = 287,481 S.Y.

RURAL

RAMP "L" = 9,443 S.Y.
CROSS ROADS = 3,227 S.Y.
TOTAL = 12,670 S.Y.

I - SAFETY

CROSS ROADS = 450 S.Y.

100% CITY

CROSS ROADS = 191 S.Y.

COMMERCIAL FERTILIZER

PARTICIPATING = 287,481 S.Y. (9) (20/1000) (1/2000) = 25.88 Tons

RURAL = 12,670 S.Y. (9) (20/1000) (1/2000) = 1.14 Tons

I-SAFETY = 450 S.Y. (9) (20/1000) (1/2000) = 0.04 Tons

100% CITY = 191 S.Y. (9) (20/1000) (1/2000) = 0.02 Tons

AGRICULTURAL LIMING

PARTICIPATING = 287,481 S.Y. (9) (100/1000) (1/2000) = 129.37 Tons

RURAL = 12,670 S.Y. (9) (100/1000) (1/2000) = 5.70 Tons

I - SAFETY = 450 S.Y. (9) (100/1000) (1/2000) = 0.20 Tons

100% CITY = 191 S.Y. (9) (100/1000) (1/2000) = 0.09 Tons

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

CROSS ROADS

SHIRLEY ROAD (PARTICIPATING)

STA. 42 + 10 TO STA. 43 + 00

$90\ \frac{(26.0 + 40.0)}{2}\ (0.5)\ (1/27) =$ 55.0 C.Y.

STA. 43 + 00 TO STA. 46 + 00

$[300\ (40.0) + 100.39\ (2.0)](0.5)\ (1/27) =$ 225.94 C.Y.

STA. 46 + 00 TO STA. 47 + 90.31

$190.31\ (40.0)\ (0.5)\ (1/27) =$ 140.97 C.Y.

STA. 52 + 00.44 TO STA. 55 + 62.46

$[362.02\ (40.) + (41.01 + 55.10)\ (2.0)]\ (0.5)\ (1/27) =$ 271.72 C.Y.

SHIRLEY ROAD (100% CITY FUNDS)

STA. 55 + 62.46 TO STA 56 + 00

$37.54\ (40.0)\ (0.5)\ (1/27) =$ 27.81 C.Y.

STA. 56 + 00 TO STA. 62 + 50

$(650.0\ (40.0) + 135\ S.F. + 261\ S.F.)\ (0.5)\ (1/27) =$ 488.81 C.Y.

COOPER AVENUE

2596 S.F. (BY PLANIMETER) (0.5) (1/27) = 48.07 C.Y.

HOMEWOOD

RETURN SEC. - EXT. PORTION

369 S.F. (PLANIMETER) (0.5) (1/27) = 6.83 C.Y.

STA. 33 + 55.91 TO STA. 35 + 16.96 (EXT)

$\left[\frac{161.05\ (16 + 12)}{2}\right]\ (0.5)\ (1/27) =$ 41.75 C.Y.

STA. 35 + 16.96 TO STA. 36 + 00 (LT. SIDE)

$[10.0\ (83.04)]\ (0.5)\ (1/27) =$ 15.38 C.Y.

STA. 35 + 16.96 TO STA. 36 + 00 (RT. SIDE)

$[10.0\ (81.54) + 9]\ (0.5)\ (1/27) =$ 16.79 C.Y.

CURVED SECTION

$\left[\frac{69.30\ \frac{(12 + 14)}{2}\ (184)}{(175)} + \frac{47\ \frac{(14 + 16)}{2}\ (80)}{60} + 45\right](0.5)(1/27) =$ 43.30 C.Y.

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

BENWOOD TURNAROUND

$\left[30.4\ (16) + 2(30^2 - \frac{30^2(3.14)}{4})\right]\ (0.33)\ (1/27)$ 10.67 C.Y.

INDIANOLA

STA. 47 + 93.45 TO STA. 58 + 68.24
(SEE 310 CALC.)
3770 (S.F) (0.5) (1/27)= 69.81 C.Y.

GIBSON AVENUE

STA. 47 + 27.59 TO STA. 48 + 39.75

40 (112.16) (0.50) (1/27) = 83.08 C.Y.

CURB RETURNS

$\left[25\ (25.17 - \frac{39.44}{2}) + 25\ (24.83 - \frac{39.10}{2})\right]\ (0.50)\ (1/27) =$ 4.99 C.Y.

STA. 51 + 42.16 TO STA. 51 + 90

47.84 (40) (0.50) (1/27) = 35.43 C.Y.

TAFT CUL-DE-SAC

6579 S.F. (PLANIMETER) (0.33) (1/27) = 80.41 C.Y.

HUMBOLT-TAFT

STA. 10 + 13.50 TO STA. 13 + 60

$\left[(2\ (20)(20) - \frac{\pi(20)^2}{2}) + 446.50\ (24) + 40 + 72\right](0.33)(1/27) =$ 134.44 C.Y.

POWERSDALE-MABEL

STA. 10 + 72.34 TO STA. 13 + 23.87

251.53 (30) (0.33) (1/27) = 92.23 C.Y.

STA. 13 + 23.87 TO STA. 13 + 50

$26.13\ \frac{(30 + 18.9)}{2}\ (0.33)\ (1/27) =$ 7.81 C.Y.

MABEL CONNECTOR

STA. 10 + 00 TO STA. 13 + 75.73

$\frac{24(375.73)\ (0.33)}{27} =$ 110.21 C.Y.

MABEL SECTION

STA. 46 + 15.99 TO STA. 46 + 76.93

$\frac{1156\ (0.33)}{27} =$ 14.13 C.Y.

TAYLOR-SOUTH TURNAROUND

STA. 33 + 47.96 TO STA. 34 + 66.17

12 (118.21) (0.33) (1/27) = 17.34 C.Y.

TURNAROUND

1184 (PLANIMETER) (0.33) (1/27) = 14.47 C.Y.

STA. 34 + 66.17 TO STA. 35 + 20

$\left[53.83\ (12) + 53.83\ (\frac{12}{2})\right]\ (0.33)\ (1/27) =$ 11.84 C.Y.

RELOC. TAYLOR

$\left[56.0\ (8) + (18.5)\ (\frac{3.8}{2})\right]\ (0.33)\ (1/27) =$ 5.91 C.Y.

CROSS ROADS TOTAL (PARTICIPATING) = 1,558.52 C.Y.

CROSS ROADS TOTAL (100% CITY) = 516.62 C.Y.

CALCULATED BY WDB DATE 11/15/69
CHECKED BY C.E.W. DATE 11/16/69

COMPUTATIONS - 659, 301

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.88

33
656

ITEM 301 - BITUMINOUS AGGREGATE BASE (SHOULDERS & MEDIAN)

BOARDMAN EXPRESSWAY (MAINLINE)

STATION LIMITS	SQUARE YARDS	AGGREGATE BASE CU.YDS.
NORTHBOUND		
637+76.04 - 640+08.41	(232.37)(10)(1/9) = 258.19	(258.19)(0.5833)/3 = 50.19
640+08.41 - 640+98.41	(90)(15AV.)(1/9) = 150.00	(150.00)(0.5833)/3 = 29.16
SOUTHBOUND		
637+76.04 - 639+30.38	(154.34)(10)(1/9) = 171.49	(171.49)(0.5833)/3 = 33.34
647+30.38 - 653+07.54	(577.16)(10)(1/9) = 641.29	(641.29)(0.5833)/3 = 124.69
NORTHBOUND		
651+44.48 - 651+64.48	(20)(10)(1/9) = 22.22	(22.22)(0.5833)/3 = 4.32
651+64.48 - 654+10.92	(246.44)(15AV.)(1/9) = 410.73	(410.73)(0.5833)/3 = 79.86
659+30.92 - 681+69.08	[1184.80+200 ($\frac{61}{2(3125.22)}$ + 1) + $\frac{853.36}{3125.22}$ (3186.22)] (10)(1/9) = 2507.52	(2507.52)(0.5833)/3 = 487.54
681+69.08 - 682+69.08	($\frac{100(3185.22)}{3125.22}$) (9AV.)(1/9) = 101.92	(101.92)(0.5833)/3 = 19.82
SOUTHBOUND		
658+63.90 - 670+20.00	(1156.10)(10)(1/9) = 1284.56	(1284.56)(0.5833)/3 = 249.76
675+40.00 - 678+55 ±	$\frac{315}{3125.22}$ (3076.22)(15AV.)(1/9)=516.77	(516.77)(0.5833)/3 = 100.47
678+55 - 709+68.45	$\frac{3113.45}{3125.22}$ (3076.22)(10)(1/9) = 3405.15	(3405.15)(0.5833)/3 = 662.06
NORTHBOUND		
685+18.27 - 704+68	$\frac{1949.73}{3125.22}$ (3174.22)(10)(1/9) = 2200.33	(220.33)(0.5833)/3 = 427.81
704+68 - 707+00	(232)(15AV.)(1/9) = 386.67	(386.67)(0.5833)/3 = 75.18
SOUTHBOUND		
711+36.81 - 724+50.14	(1313.33)(10)(1/9) = 1459.26	(1459.26)(0.5833)/3 = 283.72
NORTHBOUND		
717+00 - 737+56 ±	[717.92 + $\frac{1338.08}{3906.53}$ (3955.53)] (10)(1/9) = 2303.09	(2303.09)(0.5833)/3 = 447.79
737+56 ± - 740+00	(244 ±)(15AV.)(1/9) = 406.67	(406.67)(0.5833)/3 = 79.07
SOUTHBOUND		
730+98.60 - 744+55.10	$\frac{1356.50}{3906.53}$ (3845.53)(10)(1/9) = 1483.69	(1483.69)(0.5833)/3 = 288.47
NORTHBOUND		
745+20.00 - 748+52.88	130.70 + $\frac{202.18}{3906.53}$ (3967.53)(10)(1/9)= 373.38	(373.38)(0.5833)/3 = 72.59
751+10.60 - 755+39 ±	(428.40)(10)(1/9) = 476.00	(476.00)(0.5833)/3 = 92.55
755+39 ± - 756+61.33	(122.33)(10AV.)(1/9) = 135.89	(135.89)(0.5833)/3 = 26.42
768+50 - 782+16.63	[$\frac{387.83}{1041.74}$ (992.74) + 400 ($\frac{-49}{2(1041.74)}$ ± 1) + 578.80](10)(1/9) = 1487.77	(1487.77)(.250)/3 = 123.98
782+16.63 - 782+66.63	(50)(9AVG.)(1/9) = 50.00	(50.00)(.250)/3 = 4.17
SOUTHBOUND		
749+75.00 - 751+96+	(221)(15AV.)(1/9) = 368.33	(368.33)(0.5833)/3 = 71.62
751+96+ - 762+00.00	408.41 + 400 (+ $\frac{49}{2(1041.74)}$ + 1) + $\frac{195.59}{3819.72}$ (3868.72)(10)(1/9) = 1128.78	(1128.78)(0.5833)/3 = 219.29
762+00 - 762+23.36	(23.36) $\frac{1090.74}{1041.74}$ (10)(1/9) = 27.18	(27.18)(.250)/3 = 2.26
MEDIAN SHOULDERS		
637+76.04 - 640+85.90	(309.86)(10)(1/9) = 344.29	(344.29)(0.6667)/3 = 76.55
643+21.02 - 709+22.40	(6601.38)(10)(1/9) = 7334.87	(7334.87)(0.6667)/3 = 1630.80
711+46.28 - 762+00.00	(5053.72)(10)(1/9) = 5615.24	(5615.24)(0.6667)/3 = 1247.82

TOTAL MAINLINE = TOTAL = 7,011.30 C.Y.

ITEM 301 - BITUMINOUS AGGREGATE BASE (SHOULDERS & MEDIAN)

RAMPS

STATION LIMITS	SQUARE YARDS	AGGREGATE BASE CU. YDS.
RAMP "L" (LEFT SIDE)		
630+60.83 - 638+31.06*	(770.23)(3)(1/9) = 256.74	(256.74)(.7083)/3 = 60.62*
638+31.06 - 639+31.06*	(100)(5.5AV.)(1/9) = 61.11	(61.11)(.7083)/3 = 14.43*
639+31.06 - 640+98	(166.94)(8)(1/9) = 148.39	(148.39)(.7083)/3 = 35.03
642+84 - 646+30.38	(346.38)(8)(1/9) = 307.89	(307.89)(.7083)/3 = 72.69
646+30.38 - 647+30.38	(100)(9AV.)(1/9) = 100.0	(100.0)(.7083)/3 = 23.61
RAMP "L" (RIGHT SIDE)		
635+50 - 636+52.90*	$\frac{102.90}{200}$ (217.5)(3)(1/9) = 37.30	(37.30)(.7083)/3 = 8.81*
636+52.90 - 639+31.06*	278.16 ($\frac{17.5}{2(200)}$ + 1) (3) = 96.78	(96.78)(.7083)/3 = 22.85*
* INDICATES RURAL FUNDS		
RAMP "O" (RIGHT SIDE)		
630+99.72 - 639+44.17	(844.45)(3)(1/9) = 281.48	(281.48)(.7083)/3 = 66.46
639+44.17 - 641+28	(183.83)(5.5AV.)(1/9) = 112.34	(112.34)(.7083)/3 = 26.52
643+10 - 650+64.48	(754.48)(8)(1/9) = 670.65	(670.65)(.7083)/3 = 158.34
650+64.48 - 651+44.48	(80)(9AV.)(1/9) = 80.0	(80.0)(.7083)/3 = 18.89
RAMP "O" (LEFT SIDE)		
630+99.72 - 638+44.17	$\frac{744.45}{200}$ (217.5)(3)(1/9) = 269.86	(269.86)(.7083)/3 = 63.71
638+44.17 - 639+44.17	100 ($\frac{17.5}{2(200)}$ + 1) (3) (1/9) = 34.79	(34.79)(.7083)/3 = 8.21
639+44.17 - 640+44.17	(100)(2.5AV.)(1/9) = 27.78	(27.78)(.7083)/3 = 6.56
RAMP "K" (RIGHT SIDE)		
641+95.17 - 653+08.22	(1113.05)(3)(1/9) = 371.02	(371.02)(.7083)/3 = 87.60
RAMP "K" (LEFT SIDE)		
642+01.32 - 652+08.22	(1006.90)(3)(1/9) = 335.63	(335.63)(.7083)/3 = 79.24
652+08.22 - 653+08.22	(100)(5.5AV.)(1/9) = 61.11	(61.11)(.7083)/3 = 14.43
653+08.22 - 657+63.90	(455.68)(8)(1/9) = 405.05	(405.05)(.7083)/3 = 95.63
657+63.90 - 658+63.90	(100)(9AV.)(1/9) = 100.00	(100.00)(.7083)/3 = 23.61
RAMP "J" (RIGHT SIDE)		
643+56.24 - 652+10.76	(854.52)(3)(1/9) = 284.84	(284.84)(.7083)/3 = 67.25
652+10.76 - 654+10.76	(200)(5.5AV.)(1/9) = 122.22	(122.22)(.7083)/3 = 28.86
654+10.76 - 658+50.97	(440.21)(8)(1/9) = 391.30	(391.30)(.7083)/3 = 92.39
658+50.97 - 659+30.97	(80)(9AV.)(1/9) = 80.00	(80.00)(.7083)/3 = 18.89
RAMP "J" (LEFT SIDE)		
643+56.24 - 645+71.44	(215.20) ($\frac{17.5}{2(204.63)}$ +1)(3)(1/9)=74.80	(74.80)(.7083)/3 = 17.66
645+71.44 - 652+10.76	$\frac{639.32}{3819.72}$ (3837.22)(3)(1/9) = 214.08	(214.08)(.7083)/3 = 50.54
652+10.76 - 653+10.76	$\frac{100}{3819.72}$ (3837.22)(2.5AV.)(1/9) = 27.91	(27.91)(.7083)/3 = 6.59
RAMP "H" (LEFT SIDE)		
670+20 - 671+00	(80)(9AV.)(1/9) = 80.00	(80.00)(.7083)/3 = 18.89
671+00 - 675+40	(440)(8)(1/9) = 391.11	(391.11)(.7083)/3 = 92.34
675+40 - 677+40	(200)(5.5AV.)(1/9) = 122.22	(122.22)(.7083)/3 = 28.86
677+40 - 683+26.79	(586.76)(3)(1/9) = 195.59	(195.59)(.7083)/3 = 46.18
RAMP "H" (RIGHT SIDE)		
676+40 - 677+40	$\frac{100}{1432.39}$ (1449.89)(2.5AV.)(1/9)=28.12	(28.12)(.7083)/3 = 6.64
677+40 - 684+51.56	$\frac{711.56}{1432.39}$ (1449.89)(3)(1/9) = 240.08	(240.08)(.7083)/3 = 56.68
RAMP "G" (RIGHT SIDE)		
682+69.08 - 685+21.97	(252.89)(3)(1/9) = 224.79	(224.79)(.7083)/3 = 53.07
685+21.97 - 686+21.97	(100)(5.5AV.)(1/9) = 61.11	(61.11)(.7083)/3 = 14.43
686+21.97 - 693+17.81	(695.84)(3)(1/9) = 231.95	(231.95)(.7083)/3 = 54.76
RAMP "G" (LEFT SIDE)		
685+21.97 - 692+88.03	[$\frac{243.42}{1909.86}$ (1927.36) + 200 + 150 ($\frac{-25.5}{2(204.63)}$ +1) + $\frac{160.71}{204.63}$ (179.13) + 11.98 (3)](1/9) = 246.32	(246.32)(.7083)/3 = 58.16

ITEM 301 - BITUMINOUS AGGREGATE BASE (SHOULDERS & MEDIAN)

STATION LIMITS	SQUARE YARDS	AGGREGATE BASE CU.YDS.
RAMP "X" (RIGHT SIDE)		
701+65.43 - 705+00	(334.57)(3)(1/9) = 111.52	(111.52)(.7083)/3 = 26.33
705+00 - 707+00	(200)(5.5AV.)(1/9) = 122.22	(122.22)(.7083)/3 = 28.86
707+00 - 716+20	(920 - 183.88)(3)(1/9) = 245.37	(245.37)(.7083)/3 = 57.93
716+20 - 717+00	(80)(9AV.)(1/9) = 80.00	(80.00) (.7083)/3 = 18.89
RAMP "X" (LEFT SIDE)		
701+65.43 - 705+00	(334.57)(3)(1/9) = 111.52	(111.52)(.7083)/3 = 26.33
705+00 - 706+00	(100)(2.5) (1/9) = 27.78	(27.78)(.7083)/3 = 6.56
RAMP "E" (LEFT SIDE)		
716+68.49 - 723+61.52	(693.03)(3)(1/9) = 231.01	(231.01)(.7083)/3 = 54.54
723+61.52 - 724+61.52	(100) (5.5AV.)(1/9) = 61.11	(61.11)(.7083)/3 = 14.43
724+61.52 - 729+98.60	(537.08)(8)(1/9) = 477.40	(477.40)(.7083)/3 = 112.71
729+98.60 - 730+98.60	(100) (9AV.)(1/9) = 100.00	(100)(.7083)/3 = 23.61
RAMP "E" (RIGHT SIDE)		
715+43.19 - 715+59.57	(16.38)(1.5AV.)(1/9) = 2.73	(2.73)(.7083)/3 = 0.64
715+59.57 - 724+61.52	(901.95)(3)(1/9) = 300.65	(300.65)(.7083)/3 = 70.98
RAMP "F" (RIGHT SIDE)		
733+00 - 733+14.04	(14.04)(1.5AV.) (1/9) = 2.34	(2.34)(.7083)/3 = 0.55
733+14.04 - 738+00	(485.96)(3)(1/9) = 161.99	(161.99)(.7083)/3 = 38.25
738+00 - 740+00	(200)(5.5AV.)(1/9) = 122.22	(122.22)(.7083)/3 = 28.86
740+00 - 744+40	(440)(8)(1/9) = 391.11	(391.11)(.7083)/3 = 92.34
744+40 - 745+20	(80) (9AV.)(1/9) = 80.00	(80.00)(.7083)/3 = 18.89
RAMP "C" (LEFT SIDE)		
744+55.10 - 745+35.10	(80)(9AV.)(1/9) = 80.00	(80.00)(.7083)/3 = 18.89
745+35.10 - 749+75.10	(440)(8)(1/9) = 391.11	(391.11)(.7083)/3 = 92.34
749+75.10 - 751+75.10	(200)(5.5AV.)(1/9) = 122.22	(122.22)(.7083)/3 = 28.86
751+75.10 - 757+07.41	(532.31)(3)(1/9) = 177.44	(177.44)(.7083)/3 = 41.89
RAMP "C" (RIGHT SIDE)		
750+75.10 - 751+75.10	(100)(2.5AV.)(1/9) = 27.78	(27.78)(.7083)/3 = 6.56
751+75.10 - 757+20.41	[202.23 + $\frac{260.73}{1909.86}$ (1892.36) + 82.35 (3)](1/9) = 180.97	(180.97)(.7083)/3 = 42.73
RAMP "D" (RIGHT SIDE)		
748+52.88 - 749+52.88	(100)(9AV.)(1/9) = 100.00	(100.00)(.7083)/3 = 23.61
749+52.88 - 751+29.67	(176.79)(8)(1/9) = 157.15	(157.15)(.7083)/3 = 37.10
751+29.67 - 752+29.67	(100)(5.5AV.)(1/9) = 61.11	(61.11)(.7083)/3 = 14.43
752+29.67 - 754+75	(245.33)(3)(1/9) = 81.78	(81.78)(.7083)/3 = 19.31
754+75 - 755+25	(50)(4.5AV.)(1/9) = 25.0	(25.0)(.7083)/3 = 5.90
755+25 - 758+19.76	[$\frac{191.73}{207.67}$ (210.67)=103.03](6)(1/9)=198.35	(198.35)(.7083)/3 = 46.83
RAMP "D" (LEFT SIDE)		
751+29.67 - 754+25	[178.20 ($\frac{17.5}{2(1432.39)}$ + 1) + 117.13 ($\frac{17.5}{2(1432.34)}$ +1) (3)](1/9) = 99.04	(99.04)(.7083)/3 = 23.38
RAMP "B" (RIGHT SIDE)		
750+27.52 - 753+00.00	$\frac{272.48\ (149.28)}{150.78}$ (6)(1/9) = 179.85	(179.85)(.7083)/3 = 42.46
753+00.00 - 753+75.00	$\frac{75.0\ (149.28)}{150.78}$ (4.5AV.)(1/9) = 37.13	(37.13)(.7083)/3 = 8.77
753+75.00 - 754+61.33	$\frac{86.33\ (149.28)}{150.78}$ (3) (1/9) = 28.49	(28.49)(.7083)/3 = 6.73
754+61.33 - 756+61.33	($\frac{50(149.28)}{150.78}$ +150 ($\frac{-1.5}{2(150.78)}$ +1) (5.5AV.)(1/9) = 121.46	(121.46)(.7083)/3 = 28.68
756+61.33 - 762+00	[343.08 ($\frac{(68.00+60.78)/2}{2(1041.74)}$ + 1) + $\frac{195.59(980.96+987.82/2}{1041.74}$](8) (1/9) = 459.82	(459.82)(.7083)/3 = 108.56
762+00 - 764+71.45	271.45 $\frac{993.74}{1041.74}$ (8)(1/9) = 230.17	(230.17)(.25)(1/3) = 19.18
764+ 1.45 - 766+11.33	139.88 ($\frac{990.79-993.74}{1041.74\ (2)}$)(8)(1/9)=118.44	(118.44)(.250)/3 = 9.87
RAMP "B" (LEFT SIDE)		
753+50.00 - 754+61.33	$\frac{111.33(168.28)}{150.78}$ (3)(1/9) = 41.42	(41.42)(.7083)/3 = 9.78
754+61.33 - 755+61.33	100 ($\frac{17.25}{2(150.78)}$ + 1) (2.5AV.)(1/9)=29.37	(29.37)(.7083)/3 = 6.93

ITEM 301 - BITUMINOUS AGGREGATE BASE (SHOULDERS & MEDIAN)

STATION LIMITS	SQUARE YARDS	AGGREGATE BASE CU.YDS.
RAMP "A" (LEFT SIDE) □		
764+62.95 - 766+75.32	$\frac{212.37(1101.74)}{1041.74}$ (8)(1/9) = 199.65	(199.65)(.250)/3 = 16.64 C.Y. □
768+04.47 - 769+26.07	$\frac{121.60(1101.74)}{1041.74}$ (8)(1/9) = 114.31	(114.31)(.250)/3 = 9.53 C.Y. □
769+26.07 - 770+26.07	$\frac{100(1101.74)}{1041.74}$ (9.5AV.)(1/9) = 105.76	(105.76)(.250)/3 = 8.81 C.Y. □

□ = INDICATES CITY-STATE FUNDS (RAMPS)

* INDICATES RURAL FUNDS (RAMPS)

RAMP TOTAL (PART.)= 2756.21 C.Y.

RAMP TOTAL (RURAL)= 106.71 C.Y.

RAMP TOTAL (CITY-STATE)=34.98 C.Y.

GRAND TOTAL 301 SHOULDER (PARTICIPATING)= 9,761.51 C.Y.

GRAND TOTAL 301 SHOULDER (RURAL)= 106.71 C.Y.

GRAND TOTAL 301 SHOULDER (CITY-STATE) = 34.98 C.Y.

CALC. BY WDB DATE 11-17-69
CHECK BY CEW DATE 11-19-69

FED.RD.	STATE	PROJECT	
2	OHIO		

34
656

MAH-680-6.98

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

BOARDMAN EXPRESSWAY

FOR STANDARD 6 LANE FACILITY

$A = (72 + 6)(0.333) =$ 26 SQ. FT.

FOR 8 LANE FACILITY

$A = (96 + 6)(0.333) =$ 34 SQ. FT.

STA. 637 + 76.04 TO 640 + 00

$\frac{223.96\ (26)}{27} =$ 215.67 C.Y.

STA. 640 + 00 to 650 + 00

$\frac{(1000 - 185.12)(26)}{27} =$ 784.70 C.Y.

STA. 650 + 00 to 660 + 00

$\frac{1000(26) + 136.10(12)(0.333) + 69.08(12)(0.333)}{27} =$ 993.36 C.Y.

STA. 660 + 00 to 670 + 00

$\frac{(1000)(34)}{27} =$ 1,259.26 C.Y.

STA. 670 + 00 to 680 + 00

$\frac{1000(36 + 6 + 48)\ (0.333) + 20\ (12)\ (0.333)}{27}$ 1,114.07 C.Y.

STA. 680 + 00 to 690 + 00

$\frac{1000\ (26) + 269.08\ (12)\ (3165.22/3125.22)\ (0.333)}{27} =$ 1,003.34 C.Y.

STA. 690 + 00 to 700 + 00

$\frac{1000\ (26)}{27} =$ 962.96 C.Y.

STA. 700 + 00 to 710 + 00

$\frac{942.40\ (26)}{27} =$ 907.50 C.Y.

STA. 710 + 00 to 720 + 00

$\frac{873.72\ (26)}{27} =$ 841.36 C.Y.

STA. 720 + 00 to 730 + 00

$\frac{1000\ (26)}{27} =$ 962.96 C.Y.

STA. 730 + 00 to 740 + 00

$\frac{1000\ (26) + 901.40\ (12)\ (0.333)}{27} =$ 1,096.50 C.Y.

STA. 740 + 00 to 750 + 00

$\frac{1000\ (26) + 455.10\ (12)\ (0.333)}{27} =$ 1,030.39 C.Y.

STA. 750 + 00 to 760 + 00

$\frac{1000\ (26)}{27} =$ 962.96 C.Y.

STA. 760 + 00 to 762 + 00

$\frac{200\ (26)}{27} =$ 192.59 C.Y.

MAINLINE TOTAL - 301 BASE (PART.)=12,327.62 C.Y.

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

RAMP "B"

STA. 749 + 27.52 to 753 + 50

$\frac{(0.333)(23.72)(159.78/150.78)20}{27} + \frac{723.69*(0.333)}{3} + \frac{322.48(1.5)(0.333)+50(1.5)(0.333)}{27} + \frac{(188.61)(0.333)}{3} + \frac{398.65(1.5)(0.333)}{27} =$ 134.09 C.Y.

STA. 753 + 50 to 754 + 61.33

$\frac{235.95*(0.333)}{3} + \frac{111.33(1.5)(0.333) + 111.33\ (\frac{168.78}{150.78})\ (1.5)(0.333)}{27} =$ 30.37 C.Y.

STA. 754 + 61.33 to 755 + 61.33

$\frac{188.39*(0.333)}{3} + \frac{100(1.5)(0.333) + 111.0(0.333)(1.5)}{27} =$ 24.84 C.Y.

STA. 755 + 61.33 to 756 + 61.33

$\frac{170.81*(0.333)}{3} + \frac{100(3.0)(0.333)}{27} =$ 22.68 C.Y.

RAMP "B" ACCELERATION LANE

STA. 756 + 61.33 to 762 + 00

$\frac{538.67\ (\frac{20 + 8.66}{2})\ (0.333)}{27} =$ 95.20 C.Y.

FOR CONTINUATION OF RAMP "B" QUANTITIES, SEE MAILINE

RAMP "C" ACCELERATION LANE

STA. 744 + 55.10 to 749 + 75.10

$520\ (\frac{12 + 25}{2})\ (0.333)\ (1/27) =$ 118.77 C.Y.

RAMP "C" * SEE 451-9" CONC. CALC.

STA. 749 + 75.10 to 751 + 75.10

$\frac{334.64*(0.333)}{3} + \frac{200\ (1.5)(0.333)}{27} =$ 40.88 C.Y.

STA. 751 + 75.10 to 756 + 95.41

$\frac{520.31(19)(0.333)}{27} =$ 122.05 C.Y.

SOUTH AVE. INTERSECTION

$\frac{178.28*(0.333) + 117.81(0.333)\ (1.5)}{3} =$ 21.98 C.Y.

RAMP "D" ACCELERATION LANE ** SEE 451-8" CONC.CALC. * SEE 451-9" CONC.CALC.

STA. 748 + 52.88 to 751 + 29.67

$\frac{667.28**(0.333)}{3} =$ 74.14 C.Y.

RAMP "D"

STA. 751 + 29.67 to 752 + 07.87

$\frac{139.41*(0.333)}{3} + \frac{\left[78.20(\frac{16.5}{2(1432.39)}) + 1\right](1.5)(0.333)}{27} + \frac{78.20\ (1.5)\ (0.333)}{27} =$ 18.40 C.Y.

STA. 752 + 07.87 to STA. 753 + 07.87

$\frac{178.27*(0.333)}{3} + \frac{\left[100\ (\frac{16.75}{2(1432.39)}) + 1\right](1.5)\ (0.333)}{27} + \frac{100(1.5)(0.333)}{27} =$ 23.52 C.Y.

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

RAMP "D" (CONT.)

STA. 753 + 07.87 to 754 + 57.87

$\frac{273.92*(0.333)}{3} + \frac{151(3)(0.333)}{27} =$ 36.03 C.Y.

STA. 754 + 57.87 to 755 + 33.21

$\frac{144.07*\ (0.333)}{3} + \frac{75.34\ (3)\ (0.333)}{27} =$ 18.80 C.Y.

STA. 755 + 33.21 to 757 + 16.73

$\frac{435.11*\ (0.333)}{3} + \frac{183.52\ (3)\ (0.333)}{27} =$ 55.15 C.Y.

STA. 757 + 16.73 to SOUTH AVE.

$\frac{527.84*\ (0.333)}{3} + \frac{103.03\ (1.5)\ (0.333) + 78.54\ (1.5)\ (0.333)}{27} + \frac{118.27\ (0.333)\ (1.5)}{27} =$ 64.15 C.Y.

RAMP "E" **SEE 451 - 8" CONC.CALC.

STA. 716 + 68.49 to 724 + 61.52

$\frac{793.03(19)\ (0.333)}{27} =$ 186.02 C.Y.

RAMP "E" DECELERATION LANE

STA. 724 + 61.52 to 730 + 98.60

$\frac{1492.55**(0.333)}{3} =$ 165.84 C.Y.

RAMP "F" * SEE 451 - 9" CONC.CALC. □ SEE CURBING QUANTITIES

POWERSDALE INTERSECTION

$\frac{472.74*(0.333)}{3} + \frac{223.75\square(1.5)(0.333)}{27} =$ 56.67 C.Y.

STA. 721 + 40.55 to 722 + 90.22

$\frac{150\ (\frac{14}{2(318.31)} + 1)\ (31)\ (0.333)}{27} =$ 58.67 C.Y.

STA. 722 + 90.22 to 724 + 07.22

$\frac{332.31\ (21)\ (\pi)\ (31)\ (0.333)}{27\ (180)} =$ 46.61 C.Y.

STA. 724 + 07.22 to 725 + 57.22

$\frac{150\ (\frac{14}{2(318.31)} + 1)\ (31)\ (0.333)}{27} =$ 58.67 C.Y.

STA. 725 + 57.22 to 729 + 63.20

$\frac{405.98\ (31)\ (0.333)}{27} =$ 155.38 C.Y.

STA. 729 + 63.20 to 733 + 00

$\frac{4569.66\ (4.21)\ (\pi)\ (31)\ (0.333)}{27\ (180)} =$ 128.55 C.Y.

STA. 733 + 00 to 738 + 00

$\frac{1281.46*(0.333)}{3} + \frac{497.63(0.333)(1.5) + 500(1.5)(0.333)}{27} =$ 160.86 C.Y.

STA. 738 + 00 to 740 + 00

$\frac{355.56*(0.333)}{3} + \frac{198(1.5)(0.333) + 200(1.5)(0.333)}{27} =$ 46.88 C.Y.

RAMP "F" ACCELERATION LANE

STA. 740 + 00 to 745 + 20

$\frac{520\ (\frac{26 + 13}{2})\ (0.333)}{27} =$ 125.19 C.Y.

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

RAMP "G" DECELERATION LANE * SEE 451 - 9" CONC.CALC.

STA. 682 + 69.08 to 685 + 21.97

$\frac{\text{PLANIMETER } 5360*(0.333)}{3} =$ 595.56 C.Y.

RAMP "G"

STA. 685 + 21.97 to 687 + 50

$\frac{\frac{228.03}{1909.86}\ (1917.86)(19)(0.333)}{27} =$ 53.71 C.Y.

STA. 687 + 50 to 689 + 50

$\frac{200\ (\frac{19 + 27}{2})\ (0.333)}{27} =$ 56.79 C.Y.

STA. 689 + 50 to 689 + 65.39

$\frac{15.39\ (27)\ (0.333)}{27} =$ 5.13 C.Y.

STA. 689 + 65.39 to 691 + 15.39

$\frac{150\ (\frac{-12}{2(204.63)} + 1)\ (27)\ (0.333)}{27} =$ 48.53 C.Y.

STA. 691 + 15.39 to 692 + 76.10

$\frac{\frac{160.71}{204.63}\ (192.63)\ (27)\ (0.333)}{27} =$ 50.43 C.Y.

INTERSECTION ω SHIRLEY RD.

$\frac{3212*(.333)(\text{PLANIMETER}) + (62.10 + 41.71 + 73.30)(1.5)(.333)}{27} =$ 42.93 C.Y.

RAMP "H" ACCELERATION LANE * SEE 451 - 9" CONC.CALC.

STA. 670 + 20 to 675 + 40

$\frac{1068.89*(0.333)}{3} =$ 118.77 C.Y.

RAMP "H"

STA. 675 + 40 to 6k7 + 40

$\frac{355*(0.333)}{3} + \frac{200(3)\ (0.333)}{27} =$ 46.85 C.Y.

STA. 677 + 40 to 683 + 33.68

$\frac{882.55*(0.333)}{3} + \frac{493.68\ (1.5)(0.333) + 499(1.5)(0.333)}{27} =$ 116.44 C.Y.

STA. 682 + 33.68 to 683 + 26.79

$\frac{166.92*(0.333)}{3} + \frac{\frac{93.11}{954.93}\ (962.93)(3)\ (0.333)}{27} =$ 22.03 C.Y.

SHIRLEY INTERSECTION

$\frac{527.90*(0.333)}{3} + \frac{350.88(1.5)(0.333) + 124.77(1.5)(0.333)}{27} =$ 67.47 C.Y.

CALC. BY WDB DATE 11-17-69
CHK'D BY CEW DATE 11-19-69

MAH 20 821

COMPUTATIONS - 301

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

RAMP "J"

STA. 640 + 82.15 to 643 + 56.24

$\frac{426.81*(0.333)}{3} + \frac{474.09(1.5)(0.333)}{27}$ = 56.20 C.Y.

STA. 643 + 56.24 to 645 + 71.44

$\frac{390.05*(0.333)}{3}$

$+215.20(1.5)(0.333)+215.20\left(\frac{16}{2(204.63)}+1\right)(1.5)(0.333)=$ 51.47 C.Y.

27

STA. 645 + 71.44 to 652 + 10.76

$\frac{639.32}{3819.72}$ (3826.72(19)(0.333)(1/27) = 150.24 C.Y.

STA. 652 + 10.76 to 654 + 10.76

$\frac{200}{3819.72}$ (3827.22)(18AVG)(1/27)(0.333) = 44.54 C.Y.

RAMP "J" ACCELERATION LANE

STA. 654 + 10.76 to 659 + 30.92

$\frac{520.16\left(\frac{25+12}{2}\right)(0.333)}{27}$ = 118.80 C.Y.

RAMP "K" * SEE 451-9" CONC.CALC.

MIDLOTHIAN INTERSECTION

$\frac{94.24*(0.333)}{3} + \frac{68.26(0.333)(1.5)}{27}$ = 11.73 C.Y.

STA. 642 + 01.32 to 653 + 08.22

1106.90(19) (0.333) (1/27) = 259.64 C.Y.

RAMP "K" DECELERATION LANE

STA. 653 + 08.22 to 658 + 63.90

$\frac{1297.81*(0.333)}{3}$ = 144.20 C.Y.

RAMP "L" * SEE 451-9" CONC.CALC.

STA. 628 + 14.17 to 630 + 60.83

$\frac{18(100)(0.333)100\left(\frac{8.5}{2(200)}+1\right)(20)(0.333)}{27}$ = 47.44 C.Y.$^{\Delta}$

STA. 630 + 60.83 to 631 + 14.17

$53.34\left(\frac{8.5}{2(200)}+1\right)(20)(0.333)(1/27)$ = 13.45 C.Y.$^{\Delta}$

STA. 631 + 14.17 to 635 + 50

$\frac{435.83}{200}$ (208.5) (20) (0.333) (1/27) = 112.19 C.Y.$^{\Delta}$

STA. 635 + 50 to 636 + 52.90

$\frac{102.90}{200}$ (208.5) (20) (0.333) (1/27) = 26.49 C.Y.$^{\Delta}$

STA. 636 + 52.90 to 639 + 31.06

$278.16\left(\frac{8}{2(1432.39)}+1\right)(19)(0.333)(1/27)$ = 65.43 C.Y.$^{\Delta}$

$^{\Delta}$-Indicates Rural Funds

RAMP "L" DECELERATION LANE

STA. 639 + 31.06 to 646 + 30.38

(17 AVG) $\frac{(699.32 - 185.12)(0.333)}{27}$ = 107.92 C.Y.

STA. 646 + 30.38 to 647 + 30.38

$100\left(\frac{12}{2}\right)(0.333)(1/27)$ = 7.41 C.Y.

ITEM 301 - BITUMINOUS AGGREGATE BASE COURSE

RAMP "O" * SEE 451-9" CONC.CALC.

STA. 628 + 41.13 to 629 + 99.72

381.33* $\frac{(0.333)}{3}$ + $\frac{158.31(1.5)(0.333)}{27}$ = 45.30 C.Y.

STA. 629 + 99.72 to 630 + 99.72

$100\left(\frac{10}{2(200)}+1\right)\left(\frac{21.5+19}{2}\right)(0.333)(1/27)$ = 25.62 C.Y.

STA. 630 + 99.72 to 635 + 90

$\frac{490.28}{200}$ (208.75) (20.5) (0.333) (1/27) = 129.51 C.Y.

STA. 635 + 90 to 638 + 44.17

$\frac{254.17}{200}$ (208) (19) (0.333) (1/27) = 62.01 C.Y.

STA. 638 + 44.17 to 639 + 44.17

$100\left(\frac{8}{2(200)}+1\right)(19)(0.333)(1/27)$ = 23.93 C.Y.

STA. 639 + 44.17 to 641 + 03

$100\left(\frac{8}{2(200)}+1\right)\left(\frac{19+17}{2}\right)(0.333)(1/27)$ = 22.67 C.Y.

RAMP "O" ACCELERATION LANE

STA. 643 + 35 to 651 + 44.48

(1/27)(809.48 - 185.12) $\left(\frac{20.24}{2}\right)$ (0.333) = 78.01 C.Y.

RAMP "X"

HOMEWOOD INTERSECTION

$\frac{243.56(0.333)}{3} + \frac{411.25*(1.5)(0.333)}{27}$ = 34.68 C.Y.

STA. 700 + 65.43 to 701 + 65.43

$100\left(\frac{22+20}{2}\right)(0.333)(1/27)$ = 25.93 C.Y.

STA. 701 + 65.43 to 705 + 00

334.57 (18) (0.333) (1/27) = 74.35 C.Y.

STA. 705 + 00 to 707 + 00

200 (17 AVG)(0.333) (1/27) = 41.98 C.Y.

RAMP "X" ACCELERATION LANE

$\frac{1077.94*(0.333)}{3}$ = 119.77 C.Y.

TOTAL BOARDMAN RAMPS (RURAL)	265.00 C.Y.
TOTAL BOARDMAN RAMPS (PART.)	4950.94 C.Y.

GRAND TOTAL 301 (part.) =	28,604.58 C.Y.
GRAND TOTAL 301 (City-State) =	34.98 C.Y.
GRAND TOTAL 301 (100% City) =	516.62 C.Y.
GRAND TOTAL 301 (Rural) =	371.71 C.Y.

ITEM 304 - AGGREGATE BASE

SIDE ROADS

ACCESS ROAD @ GIBSON AVE. (PARTICIPATING)

0 + 30.20 - 4 + 25 $\frac{394.80(12)}{9}$ = 526.40 S.Y. .526.40)(0.6667)/3 = 116.98

MAINLINE

NORTHBOUND

STA. 768 + 50 to 782 + 16.63

1487.77 S.Y.# (.4167)(1/3) = 206.65 C.Y.

STA. 782 + 16.63 to 782 + 66.63

50 S.Y.# (.4167)(1/3) = 6.94 C.Y.

SOUTHBOUND

STA. 762 + 00 to 762 + 23.36

27.18# S.Y. (.4167)(1/3) = 3.78□ C.Y.

RAMP "B" (RT.)

STA. 762 + 00 to 764 + 71.45

230.17# S.Y. (.4167)(1/3) = 31.97 C.Y.

RAMP "A"

(109.65+114.31+105.76)#(0.4167)(1/3)= 5830 □ C.Y.

TOTAL AGGREGATE BASE (PART.) = 362.54C.Y.

TOTAL AGGREGATE BASE (CITY-STATE)= 62.08C.Y.

□ INDICATES CITY-STATE FUNDS
SEE 301 FOR S.Y. CALC.

ITEM 305 - 8" CONCRETE BASE

MIDLOTHIAN BLVD.

STA. 366 + 29.21 TO STA. 367 + 00 (LT.)

$\frac{70.79\left(\frac{3+0.5}{2}\right)}{9}$ = 13.76 S.Y.

STA. 367 + 00 TO STA. 370 + 19.83 (LT.)

$\frac{319.83(3.0)}{9}$ = 106.61 S.Y.

STA. 370 + 85.57 TO STA. 375 + 28.46 (LT.)

$\frac{3.0(442.89)}{9}$ = 147.63 S.Y.

STA. 377 + 30 TO STA. 378 + 08.71 (LT.)

$\frac{78.71(3.0)}{9}$ = 26.24 S.Y.

STA. 366 + 29.21 TO STA. 367 + 00 (RT.)

$\frac{70.79\left(\frac{3+0.5}{2}\right)}{9}$ = 13.76 S.Y. *

STA. 367 + 00 TO STA. 368 + 63.06 (RT)

$\frac{128(3.0)}{9} + \frac{35.06(2.5)}{9}$ = 52.41 S.Y. *

STA. 375 + 88.30 TO STA. 377 + 50 (RT.)

$\frac{161.70(3.0)}{9}$ = 53.90 S.Y.

STA. 377 + 50 TO STA. 378 + 08.71 (RT.)

$\frac{58.71\left(\frac{3.0+0.5}{2}\right)}{9}$ = 11.42 S.Y.

SOUTH AVE.

STA. 47 + 24.5 TO STA. 47 + 60

$\left[15.5(12.5)+\frac{\pi}{4}(20)^2+20(12)-\frac{\pi}{4}(19.5)^2\right]1/9$ = 49.92 S.Y.

TOTAL (PARTICIPATING) =	409.48 S.Y.
TOTAL PARTICIPATING (RURAL) =	66.17 S.Y.*

*INDICATES PARTICIPATING (RURAL) FUNDS

ITEM 305 - PAVEMENT REPLACEMENT QUANTITIES FOR SEWERS

	AREA S.F.	8" - 305 S.Y.
SHEET 143		
P-10 - 12"	55 (5.17) = 284.34	284.34 (1/9) = 31.59#
P-11 - 12"	15 (5.17) = 77.55	77.55 (1/9) = 8.62#
SHEET 145		
P-9 - 12"	7 (5.17) = 36.19	36.19 (1/9) = 4.02
P-22 - 12"	4 (5.17) = 20.68	20.68 (1/9) = 2.30
SHEET 189		
P-77 - 12"	7 (5.17) = 36.19	36.19 (1/9) =4.02
SHEET 225		
P-351 - 15"	14 (5.44) = 76.16	76.16 (1/9) = 8.46
SHEET 300		
P-185 - 12"	37 (5.17) = 191.29	191.29 (1/9) = 21.25
SHEET 301		
P-240 - 12"	11 (5.17) = 56.9	56.9 (1/9) = 6.32
SHEET 344 (BASE ONLY)		
P-55 - 8"	8 (5.17) = 41.35	41.35 (1/9) = 4.59
SHEET 345		
P-82	40 (5.17) = 206.80	206.80 (1/9) = 22.98
P-74 @ CRAIGER	310 (9.66) = 2994.60	2994.60 (1/9) = 332.73
P-374 @SPAULDING 18	(9.66) = 173.88	173.88 (1/9) = 19.32
SHEET 348		
P - 94	15 (5.17) = 77.55	77.55 (1/9) = 8.62
P -103	20 (9.66) = 193.20	193.20 (1/9) = 21.47
P -104	147(9.66) = 1420.02	1420.02 (1/9) =157.78
SHEET 350		
P - 116 & 111	10 $\left(\frac{5+7}{2}\right)$ = 60.00	60.00 (1/9) = 6.67
P - 125	20.5 (5.17 = 105.99	105.99 (1/9) = 11.78
SHEET 353		
Y - 1 P - 137	20 (5.17) = 103.40	103.40 (1/9) = 11.49
Y - 2 P - 131 & 150	14.5 $\left(\frac{10+5}{2}\right)$ = 108.75	108.75 (1/9) = 12.08
Y - 3 P - 155 & 156	42 (5.17) = 217.14	217.14 (1/9) = 24.13
Y - 4 P - 330	40 (5.17) = 206.80	206.80 (1/9) = 22.98
SHEET 360		
Y-1-24"	(35) (6.83) = 239.05	239.05 (1/9) = 26.56
Y-2-18"	79 (5.71) = 451.09	451.09 (1/9) = 50.12
Y-3-48"	60 (10.84) = 650.40	650.40 (1/9) = 72.27

* Indicates Rural Funds

TOTAL PAVEMENT REPLACEMENT	851.94 S.Y.
TOTAL PAVEMENT REPLACEMENT (Rural)	40.21 S.Y.

GRAND TOTAL 305 (PARTICIPATING) =	1,261.42 S.Y.
GRAND TOTAL 305 (RURAL) =	106.38 S.Y.

CALC. BY WDB DATE 11-17-69
CHK'D. BY CEW DATE 11-19-69

MAY 30, 1969

COMPUTATIONS-301, 304, 305

ITEM 310 - SUBBASE GRADING A

MAINLINE

STA. 654 + 50 to 656 + 50

$\frac{200(72+6)(1.0)}{27}$ = 577.78 C.Y.

STA. 762 + 00 to 763 + 36.36

$\frac{23.36(0.5)(12)}{27} + \frac{1536^{\square}(\text{PLANIMETER})(0.5)}{27} + \frac{13.89\ \text{S.Y.}(0.5)}{3} + \frac{105(19\text{AVE})(0.5)}{27}$ = 72.90 C.Y.*

□ SEE 451-10" CONC.CALC.

STA. 764 + 71.95 to 766 + 57.32

$\frac{185.37\left(\frac{12+7.2}{2}\right)(0.5) + 185.37(1.0)(0.5)}{27}$ = 36.39 C.Y.*

STA. 767 + 93.97 to 770 + 26.07 (LT)

$\frac{132.60(12)(0.5) + 100\left(\frac{12}{2}\right)(0.5) + 232.60(1.0)(0.5)}{27}$ = 44.89 C.Y.*

STA. 768 + 50 to 772 + 00 ($L_C = \frac{L}{R}(R')$)

$\frac{\frac{350}{1041.74}(997.74)\left(\frac{12.0}{2}\right)(0.5) + \frac{350}{1041.74}(997.74)(1.175\ \text{S.Y.})}{27}$ = 51.83 C.Y.

STA. 772 + 00 to 782 + 66.63

$\frac{(12+1.175)(0.5)\left[\frac{37.83(1003.74)}{1041.74} + 400\left(\frac{-38}{2(1041.74)}+1\right)\right]}{27} + \frac{628.80(12+1.175)(0.5)}{27}$ = 258.12 C.Y.

* INDICATES CITY-STATE FUNDS

MAINLINE TOTAL 310A (PART.)= 887.73 C.Y.
MAINLINE TOTAL 310A (City-State)= 154.18 C.Y.

RAMP "E"

CAMPBELL INTERSECTION (INCLUDING CAMPBELL)

$\frac{783.17^{*}(0.5) + 326.29(1.0)(0.5) + 20(29)(0.5)}{27}$ = 147.31. C.Y.

STA. 712 + 58.25 to 715 + 43.19

$\frac{853.70^{*}(0.5)}{3} + \frac{264.94(2)(1.0)(0.5)}{27}$ = 152.10 C.Y.

UNION INTERSECTION

$\frac{83.33^{*}(0.5)}{3} + \frac{64.22(1.0)(0.5)}{27}$ = 15.08 C.Y.

CALEDONIA INTERSECTION

$\frac{548.64^{*}(0.5)}{3} + \frac{261.90(1.0)(0.5) + 125.30(1.5)(0.5)}{27}$ = 99.77 C.Y.

* SEE 451-9" CONC. CALC.

TOTAL RAMP "E" = 414.26 C.Y.

RAMP "B"

BRIDGE TO STA. 748 + 01.24

$\frac{70.44(12)(0.5) + 70.44(1.5)(0.5)}{27}$ = 17.61 C.Y.

STA. 748 + 01.24 to 749 + 27.52

$\left[334.27 - 23.72\left(\frac{159.78}{150.78}\right)\frac{20}{9}\right](0.5)(1/3) + \frac{89.20(1.5)(0.5)}{27}$ = 48.88 C.Y.

TOTAL RAMP "B" = 66.49 C.Y.

ITEM 310 - SUBBASE GRADING A

RAMP "A"

STA. 757 + 30.45 to STA. 759 + 50 (RT. SIDE)

$\left[23.53 + 169.35\left(\frac{457.71}{477.46}\right) + 26.67\right](1.25)(0.5)(1/27)$ = 4.92 C.Y.*

STA. 757 + 55.45 to STA. 759 + 50 (LT. SIDE)

$\left[(169.46 - 1.47)\left(\frac{481.21}{477.46}\right) + 26.67\right](1.25)(0.5)(1/27)$ = 4.52 C.Y.*

TOTAL RAMP "A" = 9.44C.Y.*

* INDICATES CITY-STATE FUNDS

TOTAL RAMPS (PART.) = 480.75 C.Y.

TOTAL RAMPS (CITY-STATE) = 9.44 C.Y.

SIDE ROADS

MIDLOTHIAN BOULEVARD

STA. 370 + 12.11 to 371 + 39.24 (RT.)

$\frac{15.0(127.13)(0.5)}{27}$ = 35.31 C.Y. *

STA. 371 + 39.24 to 373 + 26.39

$\frac{15.0(187.15)(0.5)}{27}$ = 51.99 C.Y.

SOUTH AVE.

STA. 47 + 60 to 49 + 40.67

$\frac{180.67(66)}{9}\left(\frac{0.50}{3}\right) + \frac{(55+64+32.67+42)(1.5)(0.5)}{27}$ = 226.20 C.Y.

STA. 50 + 73.25 to 54 + 68.86

$\frac{395.61(55.5)(0.5)}{27}$ = 406.60 C.Y.

STA. 54 + 68.86 to 54 + 90

$\frac{21.14(57)(0.5)}{27}$ = 22.31 C.Y.

STA. 50 + 97.78 to 51 + 53

$\left[\frac{2080}{9} + \frac{149.39(1.5)}{9}\right]\frac{0.33}{3}$ = 28.16 C.Y.

* INDICATES RURAL FUNDS

TOTAL SIDE ROADS (PART) = 735.26 C.Y.

TOTAL SIDE ROADS (RURAL) = 35.31 C.Y.

GRAND TOTAL 310A (PARTICIPATING) = 2,103.74C.Y.

GRAND TOTAL 310 A (CITY-STATE) = 163.62C.Y.

GRAND TOTAL 310A (RURAL) = 35.31 C.Y.

ITEM 310 - SUBBASE GRADING B
SIDE ROADS

MIDLOTHIAN BLVD.

STA 366 + 29.21 TO 367 + 00

$\frac{70.79\left(\frac{8.0+3.0}{2}\right)(0.5)}{27}$ = 7.21 C.Y.

STA. 367 + 00 TO 370 + 19.83 (LT.)

$\frac{319.83(4.0)(0.5)}{27}$ = 23.69 C.Y.

STA. 370 + 85.57 TO 375 + 28.46 (LT.)

$\frac{442.89(4.0)(0.5)}{27}$ = 32.81 C.Y.

STA. 377 + 30 TO 378 + 08.17 (LT.)

$\frac{78.17(4.0)(0.5)}{27}$ = 5.79 C.Y.

STA. 367 + 00 TO 368 + 63.06 (RT.)

$\frac{128(4.0)(0.5) + 35.06(2.5)(0.5)}{27}$ = 11.10 C.Y.*

STA. 375 + 88.30 TO 377 + 50 (RT.)

$\frac{161.70(4.0)(0.5)}{27}$ = 11.98 C. Y.

STA. 377 + 50 TO 378 + 08.71 (RT.)

$\frac{58.71\left(\frac{4.0+1.5}{2}\right)(0.5)}{27}$ = 2.99 C.Y.

TOTAL = 84.47 C.Y

* INDICATES RURAL FUNDS

* TOTAL RURAL FUNDS = 11.10 C.Y.

SHIRLEY RD. (PARTICIPATING)

STA. 42 + 10 TO 43 + 00

$\frac{\left(\frac{33.0+46.0}{2}\right)(0.5)(90)}{27}$ = 65.83 C.Y.

STA. 43 + 00 TO 46 + 00

$\frac{0.50\left[300(47.00) - 160.84(3.5) - 100.39(1.5)\right]}{27}$ = 247.90 C.Y.

STA. 46 + 00 TO 47 + 90.31

$\frac{190.31(47.0)(0.5)}{27}$ = 165.64 C.Y.

STA. 52 + 00.44 TO 55 + 62.46

$\frac{0.5\left[(362.02)(47.0) - 100.93(3.5) - 197.78(1.5)\right]}{27}$ = 302.94 C.Y.

TOTAL = 782.31 C.Y.

SHIRLEY RD. (100% CITY FUNDS)

STA. 55 + 62.46 TO 56 + 00

$\frac{37.54(47.0)(0.5)}{27}$ = 32.67 C.Y.

STA. 56 + 00 TO 62 + 50

$\frac{0.5\left[650(47.0)\right]}{27} + \frac{\left[(199\ \text{S.F.} + 315\ \text{S.F.})(0.5)\right]}{27}$ = 575.26 C.Y.

△ INDICATES 100% CITY FUNDS

TOTAL = 607.93△C.Y.

COOPER AVENUE

$\frac{2596\ \text{S.F.}(0.5) + 587.89(1.5)(0.5)}{27}$ = TOTAL = 64.40 C.Y.

TAFT TURNAROUND

$\frac{6579\ \text{S.F.}(0.33)}{27}$ = TOTAL = 80.41 C.Y.

HOMEWOOD AVE.
RETURN SECTION - EXTENSION PORTION

$\frac{369\ \text{S.F.}(0.5) + 35(1.5)(0.5)}{27}$ = 7.81 C.Y.

STA. 33 + 55.91 TO 35 + 16.96 (EXT.)

$\frac{161.05\left(\frac{21+17}{2}\right)(0.50)}{27}$ = 56.67 C.Y.

STA. 35 + 16.96 TO 36 + 00 (LT. SIDE)

$\frac{13.5(0.50)83.04}{27}$ = 20.76 C.Y.

ITEM 310 - SUBBASE GRADING B

STA. 35 + 16.96 to 36 + 00 (RT. SIDE.)

$\frac{13.5(0.50)(81.54)}{27} + \frac{140(0.50)}{27}$ = 22.98 C.Y.

CURVED SECTION

$\frac{(0.50)69.30\left(\frac{17+19}{2}\right)(184)}{175(27)} + \frac{47.0\left(\frac{19+21}{2}\right)(80)(0.50)}{60(27)} + \frac{496(0.50)}{27}$ = 56.69 C.Y.

TOTAL = 164.91 C.Y.

HUMBOLT-TAFT

STA. 10 + 13.50 TO 13 + 60.00

$\left[2\left(20(20) - \frac{\pi(20)^2}{4}\right) + 446.5(24) + 40 + 72\right](0.33)(1/27)$ = 130.24 C.Y.

INDIANOLA

STA. 47 + 93.45 TO 48 + 68.24

$\left[\frac{3720}{9} + \frac{167.26(1.5)}{9}\right] \times \frac{0.33}{3}$ = 49.02 C.Y.

TAYLOR-SOUTH TURNAROUND

STA. 33 + 47.96 TO 34 + 66.17

$\frac{12(118.21)}{9} \times \frac{0.33}{3}$ = 17.34 C.Y.

TURNAROUND

$\frac{1184}{9}\left(\frac{0.33}{3}\right)$ = 14.47 C.Y.

STA. 34 + 66.17 TO 35 + 20

$\frac{53.83(12) + 53.83\left(\frac{12}{2}\right)}{9} \times \frac{(0.33)}{3}$ = 11.84 C.Y.

TOTAL = 222.91 C.Y.

RELOC. TAYLOR

$\frac{56(8) + (18.5)\left(\frac{28}{2}\right)}{9} \times \frac{0.33}{3}$ = TOTAL = 5.84 C.Y.

MABEL CONNECTOR

STA. 10 + 00 TO 13 + 75.73

$\frac{24(375.73)(0.33)}{27}$ = 110.21 C.Y.

MABEL SECTION

STA. 46 + 15.99 TO 46 + 76.93

$\frac{1156(0.33)}{27}$ = 14.13 C.Y.

TOTAL = 124.34 C.Y.

SOUTH AVE.

STA. 47 + 24.50 to 47 + 60

$\left[(13.5)(15.5) + \frac{\pi}{4}(20)^2 + 20(12) - \frac{\pi}{4}(18.5)^2\right](.5)(1/27)$ = 9.16 C.Y.

TOTAL = 9.16 C.Y.

CALCULATED BY WDB DATE 12-17-69
CHECKED BY DEW DATE 12-19-69

ITEM 310 - SUBBASE GRADING B

SHADY RUN

STA. 37 + 75 TO 54 + 43.14

$$\frac{31\ (1668.14)\ (0.33) - (85.29)(1.5)(0.33)}{27} - \frac{(139.24)\ (0.33)\ (1.5)}{27} = 627.92\ \text{C.Y.}$$

STA. 54 + 43.14 TO 56 + 84.81 (LT. LANE) - SEE 451 CALC.

$$\frac{325.26\ \text{SY}\ (0.33)}{3} + \frac{241.67\ (4.5)\ (0.33)}{27} = 49.07\ \text{C.Y.}$$

STA. 56 + 84.81 TO 57 + 45.03 (LT. LANE) - SEE 451 CALC.

$$\frac{80.29\ \text{SY}\ (0.33)}{3} + \frac{(4.5)\ (0.33)\ (60.22)}{27} = 12.14\ \text{C.Y.}$$

STA. 57 + 45.03 TO POLAND (LT. LANE) - SEE 451 CALC.

$$\frac{96.44\ \text{SY X}\ 0.33}{3} + \frac{46.71\ (1.5)\ (0.33)}{27} + \frac{1.5\ (0.33)\ (28.71)}{27} = 12.00\ \text{C.Y.}$$

TRIANGLE BETWEEN RT. & LT. LANES - SEE 451 CALC.

$$\frac{13.22\ (0.33)}{3} = 1.45\ \text{C.Y.}$$

STA. 54 + 43.14 TO 54 + 98.11 (RT. LANE) - SEE 451 CALC.

$$\frac{73.29\ \text{SY X}\ 0.33}{3} + \frac{3.5\ (0.33)\ (54.97)}{27} = 10.41\ \text{C.Y.}$$

STA. 54 + 98.11 TO 56 + 23.69 (RT. LANE) - SEE 451 CALC.

$$\frac{163.68\ \text{SY}\ (0.33)}{3} + \frac{4.5\ (0.33)\ (66.30)}{27} + \frac{59.28\ (3.5)(0.33)}{27} = 24.19\ \text{C.Y.}$$

STA. 56 + 23.69 TO 56 + 79.04 (RT. LANE) - SEE 451 CALC.

$$\frac{75.50\ \text{SY X}\ 0.33}{3} + \frac{4.5(0.33)\ (55.35)}{27} = 11.34\ \text{C.Y.}$$

STA. 56 + 79.04 TO POLAND (RT. LANE) - SEE 451 CALC.

$$\frac{252.54\ \text{SY}\ (0.33)}{3} + \frac{1.5(0.33)(94.50+6.0+79.58+41.49+18.84)}{27} = 32.19\ \text{C.Y.}$$

CAMPBELL SECTION - SEE 451 CALC.

$$\frac{229.17\ (0.33)}{3} + \frac{1.5(0.33)\ (121.88 + 125.0)}{27} = 29.74\ \text{C.Y.}$$

TOTAL = 810.45 C.Y.

POWERSDALE - SEE 451 CALC.

$$\left[1068.19\ \text{SY} + \frac{708.11\ (1.0)}{9}\right]\ \frac{0.33}{3} = \text{TOTAL} = 126.16\ \text{C.Y.}$$

POWERSDALE - MABEL

STA. 10 + 72.33 TO 13 + 23.86

$$\frac{251.53\ (33)\ (0.33)}{27} = 101.45\ \text{C.Y.}$$

STA. 13 + 23.86 TO 13 + 50

$$\frac{26.14\ (.33)\ (\frac{30 + 18.75}{2})}{27} = 29.25\ \text{C.Y}$$

TOTAL = 130.70 C.Y.

GIBSON AVE.

STA. 47 + 27.59 TO 48 + 39.75

$$43\ (112.16)\ (0.50)\ (1/27) = 89.31\ \text{C.Y.}$$

CURB RETURNS AREA = $R\ (T - \frac{1}{2})$

$$\left(\left[25\ (25.17 - \frac{32.44}{2})\right] + 39.44\ (1.5)\right] +$$

$$\left[25\ (24.83 - \frac{32.10}{2}) + 39.10\ (1.5)\right](0.5)\ (1/27) = 7.15\ \text{C.Y.}$$

STA. 51 + 42.16 TO 51 + 90

$$47.84\ (43)\ (0.50)\ (1/27) = 38.09\ \text{C.Y.}$$

TOTAL = 134.55 C.Y.

BENWOOD TURNAROUND

$$\frac{30.4\ (16) + 2\ (30^2 - \frac{30^2\ (3.14)}{4})}{9}\ \text{X}\ \frac{0.33}{3} = 10.67\ \text{C.Y.}$$

TOTAL = 10.67 C.Y.

TOTAL (PARTICIPATING) = 2751.28 C.Y.

TOTAL (100% CITY FUNDS) = 607.93 C.Y.

TOTAL (RURAL FUNDS) = 11.10 C.Y.

ITEM 310 - REGULAR GRADING

AREA UNDER 10' SHOULDER W/UNDERDRAIN

$$A = \frac{0.44 + 0.25}{2}\ (7.5) = 2.588\ \text{SQ. FT.}$$

AREA UNDER 8' SHOULDER W/UNDERDRAIN

$$A = \frac{0.43 + 0.25}{2}\ (5.5) = 1.870\ \text{SQ. FT.}$$

MAINLINE

STA. 762 + 00 to 772 + 00

$$\left[\frac{23.36}{1041.74}\ (1090.74)\ (2.588)\right]\ (1/27) = 2.34\ \text{C.Y.}$$

$$\left[\frac{36.36 + 145.0}{1041.74}\ (992.74) + \frac{(185.37 + 132.60}{1041.74}\ (1102.74\right](1.870)\ (1/27) = 41.88\ \text{C.Y.}^*$$

$$\frac{350}{1041.74}\ (992.74)\ (2.588)\ (1/27) = 31.97\ \text{C.Y.}$$

$$100\ (\frac{2.588 + 1.87}{2})\ (1/27) = 8.26\ \text{C.Y.}^*$$

STA. 772 + 00 TO END CONSTRUCTION

$$\frac{37.83 + 991.74}{1041.74} + \left[400\ (\frac{-50}{2(1041.74)} + 1)\right] + 628.80\ (2.588)\ (1/27) = 101.34\ \text{C.Y.}^*$$

* Indicates City - State Funds

MAINLINE TOTAL = 34.31 C.Y.

MAINLINE TOTAL (City-State) = 151.48 C.Y.

ITEM 402 - ASPHALT CONCRETE

SHIRLEY RD.
STA. 42 + 10 to STA. 43 + 00

$$\frac{90(26.0 + 40.0)}{2}\ (0.1458)\ (1/27) = 16.04\ \text{C.Y.}$$

STA. 43 + 00 to STA. 46 + 00

$$[300\ (40) + 100.39\ (2)]\ (0.1458)\ (1/27) = 65.88\ \text{C.Y.}$$

STA. 46 + 00 to STA. 47 + 90.31

$$[190.31\ (40)]\ (0.1458)\ (1/27) = 41.11\ \text{C.Y.}$$

STA. 52 + 00.44 to STA. 55 + 62.46

$$362.02\ (40) + (41.01 + 55.10)\ (2)]\ (0.1458)\ (1/27) = 79.24\ \text{C.Y.}$$

TOTAL (PARTICIPATING) = 202.27 C.Y.

SHIRLEY RD. (100% CITY FUNDS)[Δ]
STA. 55 + 62.46 to 56 + 00

$$[37.54\ (40)]\ (0.1458)\ (1/27) = 8.11^{\Delta}\ \text{C.Y.}$$

STA. 56 + 00 to 62 + 50

$$[650\ (40) + (135\text{sf} + 261\text{sf})]\ (0.1458)\ (1/27) = 142.54^{\Delta}\ \text{C.Y.}$$

TOTAL (100% CITY FUNDS) 150.65[Δ] C.Y.

COOPER AVE.

2596 s.f. (By PLANIMETER) (0.1458) (1/27) = TOTAL = 14.02 C.Y.

TAFT CUL-DE-SAC

6579 s.f. (PLANIMETER) (0.1458) (1/27) TOTAL 35.53 C.Y.

HOMEWOOD AVE.
RETURN SECTION 369 s.f. (PLANIMETER) (0.1458) (1/27) = 1.99 C.Y.

STA. 33 + 55.91 to STA. 35 + 16.96

$$161.05\ \frac{(16 + 12)}{2}\ (0.1458)\ (1/27) = 12.18\ \text{C.Y.}$$

STA. 35 + 16.96 to STA. 36 + 00

$$10.0\ (83.04)\ (0.1458)\ (1/27) = 4.48\ \text{C.Y.}$$

STA. 35 + 16.96 to STA. 36 + 00 (RT. SIDE)

$$[10\ (81.54) + 91]\ (0.1458)\ (1/27) = 4.89\ \text{C.Y.}$$

CURVED SECTION

$$\left[\frac{69.30\ (12 + 14)\ (184)}{2} + \frac{47\ (14 + 16)\ (80)}{2} + 451\right]\ (0.1458)\ (1/27) = 12.63\ \text{C.Y.}$$

TOTAL = 36.17 C.Y.

HUMBOLT - TAFT
STA. 10 + 13.50 to STA. 14 + 60.00

$$[2\ (20)\ (20) - \frac{\pi\ (20)^2}{2} + 446.50\ (24) + 40 + 72]\ (0.1458)\ (1/27) =$$

TOTAL = 59.40 C.Y.

INDIANOLA
STA. 47 + 93.45 to STA. 48 + 68.24

3770 s.f. (0.1458) (1/27) = TOTAL = 20.36 C.Y.

POWERSDALE - MABEL CONNECTOR
STA. 10 + 72.34 to STA. 13 + 23.87

$$251.53\ (30)\ (0.1458)\ (1/27) = 40.75\ \text{C.Y.}$$

STA. 13 + 23.87 to STA. 13.50

$$26.14\ \frac{(30 + 18.9)}{2}\ (0.1458)\ (1/27) = 3.45\ \text{C.Y.}$$

TOTAL = 44.20 C.Y.

MABEL CONNECTOR
STA. 10 + 00 to STA. 13 + 75.73

$$\frac{24\ (375.73)\ (0.1458)}{27} = 48.69\ \text{C.Y.}$$

MABEL SECTION
STA. 46 + 15.99 to 46 + 76.93

$$\frac{1156\ (\text{Planimeter})\ (0.1458)}{27} = 6.24\ \text{C.Y.}$$

TOTAL = 54.93 C.Y.

GIBSON AVE.
STA. 47 + 27.59 to STA. 48 + 39.75

$$40\ (112.16)\ (0.1458)\ (1/27) = 24.23\ \text{C.Y.}$$

$$\left[25\ (25.17 - \frac{39.44}{2})\right] + \left[25\ (24.83 - \frac{39.10}{2})\right]\ (0.1458)\ (1/27) = 1.46\ \text{C.Y.}$$

STA. 51 + 42.16 to STA. 51 + 90

$$47.84\ (40)\ (0.1458)\ (1/27) = 10.33\ \text{C.Y.}$$

TOTAL = 36.02 C.Y.

ITEM 402 ASPHALT CONCRETE

SOUTH AVE.
STA. 47 + 24.5 to STA. 47 + 60

$$15.5\ (12)\ (\frac{1.75}{12}) + (12)(20)\ (1/27) \cdot \text{TOTAL} = 2.30\ \text{C.Y.}$$

BENWOOD TURN-AROUND

$$30.4\ (16) + 2\ (30^2 - \frac{30^2\ (3.14)}{4})\ (0.1458)\ (1/27) = \text{TOTAL} = 4.71\ \text{C.Y.}$$

TAYLOR - SOUTH TURNAROUND
33 + 47.96 to 34 + 66.17

$$12\ (118.21)\ (0.1458)\ (1/27) = 7.66\ \text{C.Y.}$$

TURNAROUND

$$1184\ (\text{Planimeter})\ (0.1458)\ (1/27) = 6.39\ \text{C.Y.}$$

TAYLOR - SOUTH TURNAROUND
STA. 34 + 66.17 to 35 + 20

$$[53.83\ (12) + 53.83\ (\frac{12}{2})]\ (0.1458)\ (1/27) = 5.23\ \text{C.Y.}$$

TOTAL 19.28 C.Y.

RELOCATED TAYLOR

$$[56.0(8) + (18.5)\ (\frac{3.6}{2})]\ (0.1458)\ (1/27) = \text{TOTAL} = 2.61\ \text{C.Y.}$$

TOTAL (Part.) = 531.80 C.Y.
TOTAL (100% City) = 150.65 C.Y.

CALCULATED BY WLB DATE 11/8/69
CHECKED BY CEW DATE 11/18/69

COMPUTATIONS-310, 402

FED.RD.	STATE	PROJECT	
2	OHIO		

38
656

MAH-680-6.98

ITEM 403 ASPHALT CONCRETE O' MIN. THICKNESS

MIDLOTHIAN BLVD.

STA. 366 + 29.21 to STA. 366 + 50 (LT)

$\frac{20.79\ (11.0)\ (0.05)}{27}$ = 0.43 C.Y.

STA. 366 + 29.21 to STA. 366 + 50 (RT)

$\frac{20.79\ (11.0)\ (0.05)}{27}$ = 0.43 C.Y.

STA. 366 + 50 to STA. 367 + 00 (LT)

$\frac{50(11.0)(0.02)}{27}$ = 0.40 C.Y.

STA. 366 + 50 to STA. 367 + 00 (RT)

$\frac{50(11.0)(0.02)}{27}$ = 0.40 C.Y.

STA. 367 + 00 to STA. 368 + 00 (LT)

$\frac{100(11.00)(.01)1}{27}$ = 0.40 C.Y.

STA. 367 + 00 to STA. 368 + 00 (RT)

$\frac{100(11.00)(.01)1}{27}$ = 0.40 C.Y.

STA. 368 + 00 to STA 369 + 00 (LT)

$\frac{100(10.0)(.11)}{27}$ = 4.07 C.Y.

STA. 368 + 00 to STA. 369 + 00 (RT)

$\frac{100(11.0)(0.04)}{27}$ = 1.63 C.Y.

STA. 369 + 00 to STA. 370 + 00 (LT)

$\frac{100(10.0)(0.03)}{27}$ = 1.11 C.Y.

STA. 369 + 00 to STA. 370 + 00 (RT)

$\frac{100(10.0)(0.03)}{27}$ = 1.11 C.Y.

STA. 370 + 00 to STA. 371 + 00 (LT)

$\frac{100(10.0)(0.08)}{27}$ = 2.96 C.Y.

STA. 371 + 00 to STA. 372 + 00 (LT)

$\frac{100(11.0)(.02)}{27}$ = 0.81 C.Y.

STA. 373 + 00 to STA. 374 + 00

$\frac{100(10.0)(0.08) + 100(10.0)(.04)}{27}$ = 4.44 C.Y.

STA. 374 + 00 to STA. 375 + 00

$\frac{100(10.0)(0.23) + 100(10.0)(0.03)}{27}$ = 9.63 C.Y.

STA. 375 + 00 to STA 376 +00

$\frac{100(10.0)(0.13) + 100(10.0)(0.13)}{27}$ = 9.63 C.Y.

STA. 376 + 00 to STA. 379 + 10

$\frac{100(11.0)(0.08) + 100(11.0)(0.18)}{27}$ = 10.59 C.Y.

* Indicates Rural Quantities

TOTAL (PART) = 44.47 C.Y.

TOTAL (RURAL) = 3.97 C.Y.

ITEM 404 - ASPHALT CONCRETE

MIDLOTHIAN BLVD.

25' FEATHER (RT.)

$\frac{22.0\ (25.0)\ (\frac{0.1667}{2})}{27}$ = 1.70 C.Y.*

25' FEATHER (LT.)

$\frac{22.0\ (25.0)\ (\frac{0.1667}{2})}{27}$ = 1.70 C.Y.

STA. 366 + 29.21 TO STA. 367 + 00 (RT).

$\frac{70.79\ (\frac{22.0 + 24.5}{2})\ (0.1667)}{27}$ = 10.16 C.Y. *

STA. 366 + 29.21 TO STA. 367 + 00 (LT.)

$\frac{70.79\ (\frac{22.0 + 24.5}{2})\ (0.1667)}{27}$ = 10.16 C.Y.

ITEM 404 ASPHALT CONCRETE

MIDLOTHIAN BLVD. (Cont'd)

STA. 367 + 00 TO STA. 370 + 19.83 (LT.)

$\frac{[319.83\ (23.0)]\ (0.1667)}{27}$ = 45.42 C.Y.

STA. 370 + 19.83 TO STA. 370 + 85.57 (LT.)

$\frac{65.74\ (20.5)\ (0.1667)}{27}$ = 8.32 C.Y.

STA. 370 + 85.57 TO STA. 375 + 28.46 (LT.)

$\frac{442.89\ (23.0)\ (0.1667)}{27}$ = 62.89 C.Y.

STA. 375 + 28.46 TO STA. 377 + 30 (LT.)

$\frac{[201.54\ (20.5)]\ (0.1667)}{27}$ = 25.51 C.Y.

STA. 377 + 30 TO STA 379 + 10 (LT.)

$\frac{70.0\ (\frac{23.0+20.5}{2}) + 22.0\ (110.00) + 50.0(1.5)\ (0.1667)}{27}$ = 24.80 C.Y.

STA. 367 + 00 TO STA. 368 + 63.03 (RT.)

$\frac{163.06\ (24.5)\ (0.1667)}{27}$ = 24.67 C.Y. *

STA. 368 + 63.06 TO STA. 371 + 39.24 (RT.)

$\frac{[276.18\ (20.5)\ (0.1667) + 11.94\ (1.5)](0.1667)}{27}$ = 35.07 C.Y. *

STA. 371 + 39.24 TO STA. 375 + 88.30

$\frac{449.06\ (20.5)\ (0.1667)}{27}$ = 56.84 C.Y.

STA. 375 + 88.30 TO STA. 377 + 50 (RT.)

$\frac{161.70\ (23.0)\ (0.1667)}{27}$ = 22.96 C.Y.

STA. 377 + 50 TO STA. 379 + 10 (RT)

$\frac{[37.04\ (24.50) + 122.96\ (22.00)]\ \times\ (0.1667)}{27}$ = 22.30 C.Y.

20.00' FEATHER AREA

$\frac{20.00\ (44.0)\ (0.1667)}{27}$ = 5.43 C.Y.

* INDICATES RURAL QUANTITIES

TOTAL (PART.) 286.33 C.Y.

TOTAL (RURAL) 71.60 C.Y.

SHIRLEY RD.

STA. 42 + 00 TO STA. 42 + 10

$30\ (10)\ (\frac{0.1042}{2})\ (1/27)$ = 0.58 C.Y.

STA. 42 + 10 TO STA. 43 + 00

$90\ (\frac{26+40}{2})\ (0.1042)\ (1/27)$ = 11.46 C.Y.

STA. 43 + 00 TO STA. 46 + 00

$[300\ (40) + 100.39\ (2)]$ (7200.78) $(0.1042)\ (1/27)$ = 47.09 C.Y.

STA. 46 + 00 TO STA. 47 + 90.31

$[90.31\ (40)]\ (0.1042)\ (1/27)$ = 29.38 C.Y.

STA. 52 + 00.44 TO STA. 55 + 62.46

$[362.02\ (40) + (41.01 + 55.10)\ (2)]\ (0.1042)\ (1/27)$ = 56.63 C.Y.

TOTAL (PART.) 145.14 C.Y.

SHIRLEY ROAD (100% CITY FUNDS)

STA. 55 + 62.46 TO STA. 56 + 00

$[37.54\ (40)]\ (0.1042)\ (1/27)$ = 5.80 C.Y.

STA. 56 + 00 TO STA. 62 + 50

$[650\ (40) + (135 + 261)]\ (0.1042)\ (1/27)$ = 101.86 C.Y.

FEATHER AREA 62 + 50 TO 62 + 64

$14\ (65)\ (\frac{0.1042}{2})\ (1/27)$ = 1.76 C.Y.

TOTAL (100% CITY FUNDS) 109.42 C.Y.

ITEM 404 - ASPHALT CONCRETE

COOPER AVE.

2596 (BY PLANIMETER) (0.1042) (1/27) = 10.02 C.Y.

FEATHER AREA

$[27\ (20.47)]\ (\frac{0.1042}{2})\ (1/27)$ = 1.07 C.Y.

TOTAL = 11.09 C.Y.

TAFT CUL - DE - SAC

6579 S.F.(PLANIMETER) (0.1042) (1/27) = 25.39 C.Y.

FEATHER AREA = $\frac{1}{2}$0 (27) $(\frac{0.1042}{2})\ (1/27)$ = 0.52 C.Y.

TOTAL = 25.91 C.Y.

HOMEWOOD AVE.
RETURN SECTION

369 S.F. (PLANIMETER) (0.1042) (1/27) = 1.42 C.Y.

STA. 33 + 55.91 TO STA. 35 + 16.96

$161.05\ (\frac{16+12}{2})\ (0.1042)\ (1/27)$ = 8.70 C.Y.

STA. 35 + 16.96 TO STA. 36 + 00

$10.0\ (83.04)\ (0.1042)\ (1)(27)$ = 3.20 C.Y.

STA. 35 + 16.96 TO STA. 36 + 00 (RT. SIDE)

$[10\ (81.54) + 9]\ (0.1042)\ (1/27)$ = 3.50 C.Y.

CURVED SECTION

$\left[\frac{69.30\ (\frac{12+14}{2})\ (184)}{175} + \frac{47\ (\frac{14+16}{2})\ (80) + 451}{60}\right]\ (0.1042)\ (1/27)$ = 9.02 C.Y.

FEATHER AREA

STA. 36 + 00 TO STA. 36 + 20

$20\ (24)\ (\frac{0.1042}{2})\ (1/27)$ = 0.93 C.Y.

TOTAL = 26.77 C.Y.

HUMBOLT-TAFT

STA. 10 + 13.50 TO STA. 14 + 60.00

$[2\ (20)\ (20) - \frac{\pi(20)^2}{2} + 446.50\ (24) + 40 + 72]\ (0.1042)\ (1/27)$ = 42.45 C.Y.

TOTAL = 42.45 C.Y.

INDIANOLA

STA. 47 + 93.45 TO STA. 48 + 68.24

3770 S.F. (0.1042) (1/27) = 14.55 C.Y.

TOTAL = 14.55 C.Y.

CAMPBELL ST.

STA. 47 + 40 TO STA. 47 + 50 FEATHER AREA

$10\ (25)\ (\frac{0.1042}{2})\ (1/27)$ = 0.48 C.Y.

TOTAL = 0.48 C.Y.

MABEL CONNECTOR

STA. 10 + 00 TO STA. 13 + 93.50

$\frac{24\ (375.73)\ (0.1042)}{27}$ = 34.80 C.Y.

MABEL SECTION

STA. 46 + 15.99 TO STA. 46 + 76.93

$\frac{1156\ (\text{PLANIMETER})\ (0.1042)}{27}$ = 4.46 C.Y.

FEATHER AREA

STA. 9 + 80 TO STA. 10 + 00

$20\ (24)\ (\frac{0.1042}{2})\ (1/27)$ = 0.93 C.Y.

STA. 46 + 76.93 TO STA. 46 + 86.93

$10\ (16)\ (\frac{0.1042}{2})\ (1/27)$ = 0.31 C.Y.

TOTAL = 40.50 C.Y.

POWERSDALE-MABEL CONNECTOR

STA. 10 + 62.34 TO STA. 10 + 72.34

$10\ (30)\ (\frac{0.1042}{2})\ (1/27)$ = 0.58 C.Y.

STA. 10 + 72.34 TO STA. 13 + 23.87

251.53 (30) (0.1042) (1/27) = 29.12 C.Y.

ITEM 404 - ASPHALT CONCRETE

POWERSDALE-MABEL CONNECTOR (Con't'd)

STA. 13 + 23.87 TO STA. 13 + 50

$26.14\ (\frac{30+18.9}{2})\ (0.1042)\ (1/27)$ = 2.46 C.Y.

STA. 13 + 50 TO STA. 13 + 63.86

$13.86\ (18.9)\ (\frac{0.1042}{2})\ (1/27)$ = 0.51 C.Y.

TOTAL = 32.67 C.Y.

GIBSON AVE.

STA. 47 + 27.59 TO STA. 48 + 39.75

40 (112.16) (0.1042) (1/27) = 17.31 C.Y.

$[25\ (25.17 - \frac{39.44}{2}) + 25\ (24.83 - \frac{39.10}{2})]\ (0.1042)(1/27)$ = 1.04 C.Y.

STA. 51 + 42.16 TO STA. 51 + 90

47.84 (40) (0.1042) (1/27) = 7.39 C.Y.

STA. 51 + 90 TO STA. 52 + 00

$10\ (40)\ (\frac{0.1042}{2})\ (1/27)$ = 0.77 C.Y.

TOTAL = 26.51 C.Y.

BENWOOD TURNAROUND

$(30.4\ (16) + 2\ (30^2 - \frac{30^2\ (3.14)}{4})\ (0.1042)\ (1/27)$ = 3.37 C.Y.

$[\frac{38\ (13.5)\ (0.5)}{2\ (6)} + (\frac{38+45}{2})\ (\frac{13.5+13.9}{2})\ (\frac{0.50+0.33}{2})\ (1/2)](1/27)$ = 5.17 C.Y.

TOTAL = 8.54 C.Y.

SOUTH AVE.

STA. 47 + 24.5 to STA. 47 + 60

$\frac{14.5\ (54)\ (\frac{0.11}{2})}{27}$ = 1.60 C.Y.

$[15.5(12)\ (1.25/12) + 20(12)]\ (1/27)$ = 1.65 C.Y.

STA. 54 + 90 TO STA. 55 + 00

$\frac{10\ (54)\ (\frac{0.07}{2})}{27}$ = 0.70 C.Y.

TOTAL = 3.95 C.Y.

RELOC. TAYLOR

$(56.0\ (8) + (18.5)\ (\frac{3.8}{2}))\ (0.1042)\ (1/27)$ = 1.86 C.Y.

FEATHER AREA

$11.5\ (5)\ (\frac{0.1042}{2})\ (1/27)$ = 0.11 C.Y.

TOTAL 1.97 C.Y.

TAYLOR-SOUTH TURNAROUND

STA. 33 + 47.96 TO STA. 34 + 66.17

12 (118.21) (0.1042) (1/27) = 5.47 C.Y.

TURNAROUND

1184 (0.1042) (1/27) = 4.57 C.Y.

STA. 34 + 66.17 TO STA. 35 + 20

$[53.83\ (12) + 53.83\ (\frac{12}{2})]\ (0.1042)\ (1/27)$ = 3.74 C.Y.

FEATHER AREA = $24\ (\frac{11+6}{2})\ (\frac{0.1042}{2})\ (1/27)$ = 0.39 C.Y.

TOTAL = 14.17 C.Y.

MAY 25 1971

CALCULATED BY WDB DATE 11/18/69

CHECKED BY CEW DATE 11/19/69

COMPUTATIONS-403,404

FED. R.D.	STATE	PROJECT	
2	OHIO		

39
656

MAH-580-6.98

ITEM 404 ASPHALT CONCRETE

COOPER AVE. AT RAMP "E"

STA. 48 + 60 TO STA. 48 + 70

$10\ (27)\ (\frac{0.1042}{2})\ (1/27) =$ TOTAL = 0.52 C.Y.

CALEDONIA ST.

STA. 47 + 61.53 TO STA. 47 + 71.53

$24.5\ (10)\ (\frac{0.1042}{2})\ (1/27) =$ TOTAL = 0.47 C.Y.

UNION ST.

STA. 47 + 26.91 (CONST) TO STA. 47 + 36.91

$24\ (10)\ (\frac{0.1042}{2})\ (1/27) =$ TOTAL = 0.46 C.Y.

ALEXANDER ST.

STA. 11 + 00 TO STA. 11 + 10

$24.5\ (10)\ (\frac{0.1042}{2})\ (1/27) =$ TOTAL = 0.47 C.Y.

CAMPBELL ST.

STA. 37 + 60 TO STA. 37 + 63.60

$(24.5)\ (3.60)\ (\frac{0.1042}{2})\ (1/27) =$ TOTAL = 0.17 C.Y.

CAMPBELL ST. @ RAMP "E"

STA. 38 + 70 TO 38 + 80

$(24.5)\ 10\ (\frac{0.1042}{2})\ (1/27) =$ TOTAL = 0.47 C.Y.

PAVEMENT REPLACEMENT QUANTITIES FOR SEWERS

SHEET 143	AREA S.F.	X	1-1/4" - 404 C.Y.
P-10 - 12"	55 (5.17) = 284.35	X	(0.1042) (1/27) = 1.10*
P-11 - 12"	15 (5.17) = 77.55	X	(0.1042) (1/27) = 0.30*

* INDICATES RURAL QUANTITIES

SHEET 145			
P- 9 - 12"	7 (5.17) = 36.19	X	(0.1042) (1/27) = 0.14
P-22 - 12"	4 (5.17) = 20.68	X	(0.1042) (1/27) = 0.09
SHEET 189			
P-77 - 12"	7 (5.17) = 36.19	X	(0.1042) (1/27) = 0.14
SHEET 225			
P-351 - 15"	14 (5.44) = 76.16	X	(0.1042) (1/27) = 0.29
SHEET 300			
P-185 - 12"	37 (5.17) = 191.29	X	(0.1042) (1/27) = 0.73
SHEET 301			
P-240 - 12"	11 (5.17) = 56.9	X	(0.1042) (1/27) = 0.22
SHEET 344 (BASE ONLY)			
P-55 - 8"	8 (5.17) = 41.35	X	----
SHEET 345			
P-82	40 (5.17) = 206.80	X	(0.1042) (1/27) = 0.80
P-74 @ CRAIGER	310 (9.66) = 2994.60	X	(0.1042) (1/27) =11 56
P-374 @ SPAULDING	18 (9.66) = 173.88	X	(0.1042) (1/27) = 0.67
SHEET 348			
P-94	15 (5.17) = 77.55	X	(0.1042) (1/27) = 0.30
P-103	20 (9.66) = 193.20	X	(0.1042) (1/27) = 0.75
P-104	147 (9.66) = 1420.02	X	(0.1042) (1/27) = 5.48

ITEM 404 - ASPHALT CONCRETE

SHEET 350			
P-116 & 111	$(10)\ (\frac{5+7}{2}) = 60.0$	X	(0.1042) (1/27) = 0.23
P-125	20.5 (5.17) = 105.99	X	None
SHEET 353			
Y-1 P-137	20 (5.17) = 103.40	X	None
Y-1 P-131 & 150	$14.5\ (\frac{10+5}{2}) = 108.75$	X	(0.1042) (1/27) = 0.42
Y-3 P-155 & 156	42 (5.17) = 217.14	X	(0.1042) (1/27) = 0.84
Y-4 P-330	40 (5.17) = 206.80	X	(0.1042) (1/27) = 0.80
SHEET 360			
Y-1 - 27"	404=(21)(6.83)=143.43	X	(0.1042) (1/27) = 0.55
Y-2 - 18"	404=(68)(5.71)=388.28	X	(0.1042) (1/27) = 1.50
Y-3 - 48"	404=(50(10.84)=542.0	X	(0.1042) (1/27) = 2.09

TOTAL (PARTICIPATING) = 27.60 C.Y.

TOTAL (RURAL) = 1.40 C.Y.

TOTAL SIDE ROADS (PARTICIPATING) = 711.19 C.Y.

TOTAL SIDE ROADS (100% CITY FUNDS)= 109.42 C.Y.

TOTAL SIDE ROADS (RURAL)= 73.00 C.Y.

ITEM 407 TACK COAT

MIDLOTHIAN BLVD.

366 + 29.21 to 367 + 00 (LT)

$\frac{70.79\ (\frac{.215}{2})\ 0.10}{9}$ = 0.98 GALS

366 + 29.21 to 367 + 00 (RT)

$\frac{70.79\ (\frac{.215}{2})\ 0.10}{11}$ = 0.98 GALS*

367 + 00 to 378 + 08.71 (LT)

$\frac{(319.83 + 442.89 + 78.71)(2.5)(0.10)}{9}$ = 23.37 GALS

367 + 00 to 371 + 39.24 (RT)

$\frac{(0.10)[(163.06)(2.5)]}{9}$ = 4.53 GALS*

371 + 39.24 to 378 + 08.71 (RT)

$\frac{\left[161.70(2.5) + 58.71\ (\frac{.215}{2})\right]0.10}{9}$ = 5.31 GALS

TOTAL (PART) 29.66 GALS

TOTAL (RURAL)* 5.51 GALS

ITEM 408 - PRIME COAT

ACCESS ROAD AT GIBSON AVE.
(SEE 304 COMPUTATIONS)

526.40 S.Y.(0.40 Gals/S.Y.) = 210.56 GALS

TOTAL (PARTICIPATING) = 210.56 GALS

ITEM 409 - SEAL COAT

SIDE ROADS

ACCESS ROAD @ GIBSON AVE.	NO. 8 AGGREGATE (0.008 C.Y./S.Y.)	BITUMINOUS MATERIAL (0.30 GAL/S.Y.)
0+30.20 - 4 + 25 $\frac{394.80\ (12)}{9}$ = 526.40 S.Y.	(526.40) (.008) = 4.21 C.Y.	(526.40)(.30) = 157.92 GAL.

TOTAL AGGREGATE = 4.21 C.Y.

TOTAL BITUMINOUS = 157.92 GAL.

ITEM 451 8" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT SIDE ROADS

SHADY RUN RD

37 + 75.00 to 54 + 43.14

$\frac{24(1668.14) + 115.76(2.0)(559.96/572.96) + 139.24\ (585.96/572.96)+}{9}$

$\frac{65.75(558.96/572.96) + 60.47(586.96/572.96)}{9}$ = 4503.23 S.Y.

54 + 43.14 to 56 + 84.81 (LEFT LANE)

$\frac{12(11)(21.75)(642.62)}{9(180)}$ = 325.26 S.Y.

56 + 84.81 to 57 + 45.03 (LEFT LANE)

$\frac{12(60.22)}{9}$ = 80.29 S.Y.

57 + 45.86 to POLAND AVENUE (LEFT LANE)

$\frac{868\ (Planimeter)}{9}$ = 96.44 S.Y.

TRIANGLE BETWEEN RT & LT LANES

$\frac{\frac{4}{2}\ (59.49)}{9}$ = 13.22 S.Y.

54 + 43.14 to 54 + 98.11 (Rt. LANE)

$\frac{54.97(12)}{9}$ = 73.29 S.Y.

54 + 98.11 to 56 + 23.69 (RIGHT LANE)

$\frac{12(11)(27.6269444)(254.44)}{9(180)}$ = 163.58 S.Y.

56 + 23.69 to 56 + 79.04 (RIGHT LANE)

$\frac{12(11)(266.44)(22)(55.35)}{9(180)(100)}$ = 75.50 S.Y.

CAMPBELL SECTION

$\frac{125\ (\frac{21+12}{2})}{9}$ = 229.17 S.Y.

56 + 79.04 to POLAND AVENUE (RIGHT LANE)

$\frac{2432\ (Planimeter) - 20(79.58)}{9}$ = 252.54 S.Y.

CURBING ADDITIONAL
(SEE 2A CURB QUANTITY)

$\frac{0.5(669.34)}{9}$ = 37.19 S.Y.

POWERSDALE

10 + 48.33 to 11 + 23.50

$\frac{28(75.17)}{9}$ = 233.86 S.Y.

NORTH INTERSECTION W/SHADY RUN

$\frac{1304\ (Planimeter)}{9}$ = 144.89 S.Y.

SOUTH INTERSECTION W/SHADY RUN

$\frac{1240\ (Planimeter)}{9}$ = 137.78 S.Y.

8 + 50.88 to ISLAND

$\frac{4611\ (Planimeter)}{9}$ = 512.33 S.Y.

CURB AREA

$\frac{0.5(708.11)}{9}$ = 39.33 S.Y.

INDIANOLA AVENUE

50 + 97.78 to 51 + 53

$\frac{2080\ (Planimeter) + 149.39(0.5)}{7}$ = 239.41 S.Y.

TOTAL = 7,157.31 S.Y.

MAY 25 '71

CALCULATED BY WDB DATE 11/7/69
CHECKED BY CEW DATE 11/20/69

COMPUTATIONS-404,407,408,409,451

FED. RD.	STATE	PROJECT	
2	OHIO		

40
656

MAH-680-6.98

ITEM 451 - 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

RAMP A

NORTH SIDE

$\left[23.53 + 169.35\left(\frac{459.71}{477.46}\right) + 26.67\right](3.5)(\frac{1}{9})$ = 82.93□ S.Y.

SOUTH SIDE

$\left[(169.35 - 1.47)\left(\frac{479.21}{477.46}\right) + 26.67\right](3.5)(\frac{1}{9})$ = 75.90□ S.Y.

TOTAL (CITY-STATE) 158.83□ S.Y.

□ INDICATES CITY-STATE FUNDS

RAMP "B"

STA. 748 + 01.24 to 749 + 51.24

Planimeter

$\frac{2731}{9} + \frac{50\left(\frac{4+2}{2}\right)}{9} + \frac{63.70\ (2)}{9}$ = 334.27 S.Y.

STA. 749 + 51.24 to 750 + 27.52

$\frac{76.28\ (159.78)(21)(1/9)}{150.78}$ = 188.61 S.Y.

STA. 750 + 27.52 to 753 + 50

$\frac{322.48\ (160.18)(19)(1/9)}{150.78}$ = 723.69 S.Y.

STA. 753 + 50 to 754 + 61.33

$\frac{111.33\ (159.78)(18)(1/9)}{150.78}$ = 235.95 S.Y.

ITEM 451 - 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

RAMP B (continued)

STA. 754 + 61.33 to 755 + 61.33

$\frac{\frac{100}{150.78}\ (159.78)\left(\frac{18+14}{2}\right)}{9}$ = 188.39 S.Y.

STA. 755 + 61.53 to 756 + 61.33

$100\left[\frac{7.5}{2(150.78)} + 1\right]\left(\frac{16+14}{2}\right)\ (1/9)$ = 170.81 S.Y.

BRIDGE APPROACH SLAB TO STA. 748 + 01.24

$\frac{42(12)}{9}$ = 56.00 S.Y.

SPUR TO SOUTH AVENUE

$\frac{34.76\ (19.5)}{9} + \frac{49.08(18.0)}{9} + \frac{568}{9}$ = 236.58 S.Y.

TOTAL = 2,134.30 S.Y.

RAMP "C"

STA. 749 + 75.10 to 751 + 75.10

$\frac{\frac{200}{1909.86}\ (1917.36)\left(\frac{16+14}{2}\right)}{9}$ = 334.64 S.Y.

STA. 751 + 75.10 to 753 + 77.33

$\frac{202.23(16)}{9}$ = 359.52 S.Y.

STA. 753 + 77.33 to 756 + 38.06

$\frac{260.73\ (1917.86)(16)(1/9)}{1909.86}$ = 465.46 S.Y.

STA. 756 + 38.06 to 756 + 95.41

$\frac{57.35\ (16)}{9}$ = 101.96 S.Y.

STA. INTERSECTION W/SOUTH

$\frac{50(17)}{9} + \frac{25(1)}{9} + \left[\frac{(50 \times 50) - \frac{\pi(50)^2}{4}}{9}\right]$

$\left[\frac{25^2 - \frac{\pi(25)^2}{4}}{9}\right] + \frac{0.5(117.81)}{9}$ = 178.28 S.Y.

TOTAL 1,429.86 S.Y.

RAMP "D"

STA. 751 + 29.67 to 752 + 07.87

$\frac{\left[78.20\left(\frac{8}{2(1432.39)} + 1\right)\right]16}{9}$ = 139.41 S.Y.

STA 752 + 07.87 to 753 + 07.87

$\frac{\left[100\left(\frac{8}{2(1432.39)} + 1\right)\right](16)}{9}$ = 178.27 S.Y.

STA. 753 + 07.87 to 754 + 57.87

$\frac{151(16) + 32.87(1.5)}{9}$ = 273.92 S.Y.

STA 754 + 57.87 to 755 + 33.21

$\frac{17(75.34) + (0.5)(31.63)}{9}$ = 144.07 S.Y.

STA 755 + 33.21 to 757 + 16.73

Planimeter

$\frac{1324 + 2592}{9}$ = 435.11 S.Y.

STA 757 + 16.73 to 758 + 69.76

$\frac{25(153.03)}{9} + \frac{(50)(6)}{9} + \frac{\left[(50)^2 - \frac{\pi(50)^2}{4}\right]}{9} + \frac{1.5(32.76)}{9} + \frac{0.5(78.54)}{9}$ = 527.84 S.Y.

TOTAL = 1,698.62 S.Y.

RAMP "E"

INTERSECTION WITH CAMPBELL (INCLUDING CAMPBELL)

$\frac{(49 + 63.60 - 48 + 70)(28.5) + \frac{64.94\left(\frac{28.5 + 29.0}{2}\right)}{9}}{9}$

$\frac{11.79(29) + 1712\ (\text{Planimeter}) + 460(\text{Planimeter})}{9}$ = 783.17 S.Y.

STA. 712 + 78.25 to 715 + 43.19

$\frac{264.94(29)}{9}$ = 853.70 S.Y.

INTERSECTION WITH UNION STREET

$\frac{750\ (\text{Planimeter})}{9}$ = 83.33 S.Y.

INTERSECTION WITH CALEDONIA

$\frac{39.11(14)}{9} + \frac{36.39(15)}{9} + \frac{46.49(16)}{9} + \frac{1089}{9} + \frac{990}{9} + \frac{888}{9} + \frac{0.5(266.90)}{9}$ = 548.64 S.Y.

ITEM 451 - 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

RAMP E (continued)

STA 716 + 68.49 to 724 + 61.52

$\frac{793.03(16)}{9}$ = 1409.83 S.Y.

TOTAL 3678.67 S.Y.

RAMP "F"

INTERSECTION WITH POWERSDALE & ALEXANDER ALEXANDER

$\frac{88(24.5)}{9} + \frac{(37.7 + 49.65)(0.5)}{9} + \frac{2055}{9}$ = 472.74 S.Y.

STA. 721 + 40.55 to 722 + 90.55

$\frac{150\left(\frac{14}{2(318.31)} + 1\right)(29)}{9}$ = 493.96 S.Y.

STA. 722 + 90.55 to 724 + 07.22

$\frac{332.31(21)(\pi)(29)}{9(180)}$ = 392.46 S.Y.

STA. 724 + 07.22 to 725 + 57.22

$\frac{150\left(\frac{14}{2(318.31)}\right) + 1)(29)}{9}$ = 493.96 S.Y.

STA. 725 + 57.22 to 729 + 63.20

$\frac{405.98(29)}{9}$ = 1308.16 S.Y.

STA. 729 + 63.20 to 733 + 00

$\frac{4,569.66(4.21)\pi\ (29)}{9(180)}$ = 1081.93 S.Y.

STA. 733 + 00 to 738 + 00

$\frac{500}{6(4583.66)}\left[\frac{(3 \times 4583.66 - 28)\ 46 - 324}{9}\right] + \frac{125(0.5)}{9}$ = 1281.46 S.Y.

STA. 738 + 00 TO STA. 740 + 00

$\frac{200\ (\frac{18+14}{2})}{9}$ = 355.56 S.Y.

TOTAL = 5,880.23 S.Y.

RAMP "G"

STA. 685 + 21.97 TO 687 + 50

$\frac{\left[\frac{228.03}{1909.86}\ (1917.86)\right]16}{9}$ = 407.06 S.Y.

STA. 687 + 50 TO 689 + 50

$\frac{200\ (\frac{16+24}{2})}{9}$ = 444.44 S.Y.

STA. 689 + 50 TO 689 + 65.39

$\frac{15.39\ (24)}{9}$ = 41.04 S.Y.

STA. 689 + 65.39 TO 691 + 15.39

$\frac{150\ (\frac{12}{2\ (204.63)} + 1)\ (24)}{9}$ = 388.03 S.Y.

STA. 691 + 15.39 TO 692 + 76.10

$\frac{\frac{160.71}{204.63}\ (192.63)\ (24)}{9}$ = 403.43 S. Y.

INTERSECTION @ SHIRLEY RD.

$\frac{3212\ (\text{PLANIMETER})}{9}$ = 356.89 S.Y.

TOTAL = 2,040.89 S.Y.

RAMP "H"

STA. 675 + 40 TO 677 + 40

$\frac{100.5\ (\frac{14+16}{2}) + 100.5\ (\frac{14+16}{2})}{9}$ = 335.00 S. Y.

STA. 677 + 40 TO 682 + 33.68

$\frac{16\ (19.747222)\ \pi\ (1440.39)}{108\ (9)}$ = 882.55 S. Y.

STA. 682 + 33.68 TO 683 + 26.79

$\frac{16\ \pi\ (962.93)\ (.9311 \times 6)}{180\ (9)}$ = 166.92 S.Y.

ITEM 451 - 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

RAMP H (Continued)

INTERSECTION W/SHIRLEY

$\frac{4456 + 61.70\ (2)}{9} + \frac{0.5\ (343.38)}{9}$ = 527.90 S.Y.

TOTAL 1,912.37 S.Y.

RAMP "J"

STA. 640 + 82.15 TO 643 + 56.24

$\frac{1744\ (\text{PLANIMETER})}{9} + \frac{\frac{100}{204.63}\ (214.63)\ (20.0)}{9}$ = 426.81 S.Y.

STA. 643 + 56.24 TO 645 + 71.44

$215.20\ (\frac{8}{2(204.63)} + 1)\ (16)\ (1/9)$ = 390.05 S.Y.

STA. 645 + 71.44 TO 652 + 10.76

$\frac{\frac{639.32}{3819.72}\ (3827.72)\ (16)}{9}$ = 1,138.95 S.Y.

STA. 652 + 10.76 TO 654 + 10.76

$\frac{\frac{200}{3819.72}\ (3827.22)\ (15\ \text{AVG.})}{9}$ = 333.99 S.Y.

TOTAL 2,289.80 S.Y.

RAMP "K"

INTERSECTION W/MIDLOTHIAN PLANIMETER

$\frac{814}{9} + \frac{68.26\ (0.5)}{9}$ = 94.24 S.Y.

STA. 642 + 01.32 TO STA. 653 + 08.22

$\frac{1106.90\ (16)}{9}$ = 1,967.82 S.Y.

TOTAL 2,062.06 S.Y.

RAMP "L"

ACCELERATION LANE (STA. 628 + 14.17 TO STA. 629 + 60.83)

$\frac{2270\ (\text{PLANIMETER})}{9}$ = 252.22 S.Y.*

STA. 629 + 60.83 TO STA. 630 + 60.83

$\frac{100\ (\frac{8.5}{2\ (200)} + 1)\ (\frac{16+18}{2})}{9} - \frac{38\ (0.5)}{9}$ = 190.79 S.Y.*

STA. 630 + 60.83 TO STA. 631 + 14.17

$53.34\ (\frac{8.75}{2(200)} + 1)\ (17.5)\ (1/9)$ = 105.98 S.Y.*

STA. 631 + 14.17 TO STA. 635 + 50

$\frac{\frac{435.83}{200}\ (208.75)\ (17.5)}{9} - \frac{\frac{98}{200}\ (217.23)\ (0.5)}{9}$ = 878.65 S.Y.*

STA. 635 + 50 TO 636 + 52.90

$\frac{\frac{102.90}{200}\ (208)\ (16)}{9}$ = 190.25 S.Y.*

STA. 636 + 52.90 TO 639 + 31.06

$\frac{278.16\ (\frac{8}{2(1432.39)} + 1)\ (16)}{9}$ = 495.89 S.Y.*

TOTAL (Rural) 2,113.78 S.Y.*

CALCULATED BY W.D.B. DATE 11/25/69

CHECKED BY C.E.W. DATE 11/30/69

COMPUTATIONS - 451

MAY 86 RM

ITEM 451 - 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

RAMP "O"

DECELERATION LANE: STA. 628 + 41.13 TO STA. 629 + 99.72
PLANIMETER

$\frac{3432}{9}$ = 381.33 S.Y.

100' TRANSITION: STA. 629 + 99.72 TO STA. 630 + 99.72

$\frac{100\left(\frac{10}{2(200)}+1\right)\left(\frac{20\ AVG.}{2}\right)}{9} - \frac{23\ (0.5)}{9}$ = 226.50 S.Y.

STA. 630 + 99.72 TO STA. 685 + 90

$\frac{490.28}{200.00}$ (208.00) (16.0) (1/9) = 906.47 S.Y.

STA. 635 + 90 TO STA. 638 + 44.17

$\frac{254.17}{200}$ (208) (16) (1/9) = 469.93 S.Y.

STA. 638 + 44.17 TO STA. 639 + 44.17

$100\left(\frac{8}{2(200)}+1\right)(16)\ (1/9)$ = 181.33 S.Y.

STA. 639 + 44.17 TO STA. 641 + 03 (APPROACH SLAB)

$\frac{100\left(\frac{8}{2(200)}+1\right)\left(\frac{16+14}{2}\right)}{9} + \frac{58.83\left(\frac{8}{2(200)}+1\right)(16)}{9}$ = 276.68 S.Y.

TOTAL = 2,442.24 S.Y.

RAMP "X"

HOMEWOOD INTERSECTION

$\frac{2192\ (PLANIMETER)}{9}$ = 243.56 S.Y.

STA. 700 + 65.43 TO 701 + 65.43

$\frac{100\left(\frac{21+19}{2}\right)}{9}$ = 222.22 S.Y.

STA. 701 + 65.43 TO 705 + 00

$\frac{334.57\ (16)}{9}$ = 594.79 S.Y.

STA. 705 + 00 TO 707 + 00

$\frac{100\left(\frac{16+14}{2}\right)+100\left(\frac{16+14}{2}\right)}{9}$ = 333.33 S.Y.

TOTAL 1,393.90 S.Y.

TOTAL RAMPS (PART.)=26,962.94 S.Y.
TOTAL RAMPS (RURAL)= 2,113.78 S.Y.
TOTAL RAMPS City-State)=158.83 S.Y.

ITEM 451 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT SIDE ROADS

SOUTH AVENUE
47 + 60 to 49 + 10.67

$\frac{66(150.67)}{9}$ = 1,104.91 S.Y.

51 + 03.25 to 54 + 90

$\frac{54(386.75)}{9}$ = 2,320.50 S.Y.

CURBING ADDITIONAL

$\frac{0.5(586.34)}{9}$ = 32.57 S.Y.

MIDLOTHIAN BLVD. TOTAL = 3,457.98 S.Y.

STA 370 + 12.11 TO 371 + 39.24 *

$\frac{13.0\ (127.13)}{9}$ = 183.63 S.Y. *

STA. 371 + 39.24 TO 373 + 26.39

$\frac{13.0\ (187.15)}{9}$ = 270.33 S.Y.

* INDICATES RURAL FUNDS

TOTAL SIDE ROADS (PART.) = 3,728.31 S.Y.
TOTAL SIDE ROADS (RURAL) = 183.63 S.Y.

GRAND TOTAL (PART.) = 30,691.25 S.Y.
GRAND TOTAL (RURAL) = 2,297.41 S.Y.
GRAND TOTAL (CITY-STATE) = 158.83 S.Y.

ITEM 451 - 10" REINFORCED CONCRETE

RAMP "A"

STA. 762 + 00 TO BRIDGE

$\frac{23.36\ (12)}{9} + \frac{1536\ (PLANIMETER)}{9}$ = 201.81 S.Y.□

STA. 764 + 96.95 TO 766 + 32.32 (APPR. SLAB)

$\frac{135.37\left(\frac{12+72}{2}\right)}{9}$ = 144.39 S.Y.□

STA. 768 + 18.47 TO 769 + 20.63

$\frac{102.16\ (12)}{9}$ = 136.21 S.Y.□

STA. 769 + 26.07 TO 770 + 26.07 (ML STA.)

$\frac{100\ (12/2)}{9}$ = 66.67 S.Y.□

□-INDICATES CITY-STATE FUNDS

RAMP "B"

STA. 762 + 00 TO 763 + 11.36 (PLUS ADJACENT MAINLINE PAVEMENT)

$\frac{20.66+18.46}{2}\ (111.36)$ = 242.02 S.Y.

STA. 764 + 96.95 TO 766 + 11.33

$\left(\frac{2.35}{2}\right)(114.38)\ (1/9)$ = 14.93 S.Y.

MAINLINE WIDENING

STA. 768 + 50 TO 772 + 00

$\frac{350}{1041.74}\ (997.74)\left(\frac{12}{2}\right)(1/9)$ = 223.48 S.Y.

STA. 772 + 00 TO 782 + 66.63

$\frac{12\left(\frac{37.83 \times 1003.74}{1041.74}\right) + 12\left(400\left[\frac{-38}{2(1041.74)}+1\right]\right)+628.80\ (12)}{9}$ = 1,430.05 S.Y.

TOTAL (PART.) 1,2104S.Y.
TOTAL (CITY-STATE) = 540.085.Y.

ITEM 451 - 8" CONTINUOUSLY REINFORCED CONCRETE

STA. 637 + 76.04 TO 640 + 00

$\frac{223.96\ (72)}{9}$ = 1,791.68 S.Y.

STA. 640 + 00 TO 650 + 00

$\frac{(1000-235.12)\ (36+36)}{9}$ = 6,119.04 S.Y.

STA. 650 + 00 TO 660 + 00

$\frac{1000\ (72)}{9} + \frac{136.10\ (12)}{9} + \frac{69.08\ (12)}{9}$ = 8,273.57 S.Y.

STA. 660 + 00 TO 670 + 00

$\frac{1000\ (96)}{9}$ = 10,666.67 S.Y.

STA. 670 + 00 TO 680 + 00

$\frac{1000\ (84)}{9} + \frac{20(12)}{9}$ = 9,360.00 S.Y.

STA. 680 + 00 TO 690 + 00

$\frac{1000\ (72)}{9} + \frac{269.08\ (12)(3175.22)}{9\ (3125.22)}$ = 8,364.51 S.Y.

STA. 690 + 00 TO 700 + 00

$\frac{1000\ (72)}{9}$ = 8,000.00 S.Y.

ITEM 451 - 8" CONTINUOUSLY REINFORCED CONCRETE

STA. 700 + 00 TO 710 + 00

$\frac{(1000-77.60)\ (72)}{9}$ = 7,379.20 S.Y.

STA. 710 + 00 TO 720 + 00

$\frac{(1000-146.28)\ (72)}{9}$ = 6,829.76 S.Y.

STA. 720 + 00 TO 730 + 00

$\frac{1000\ (72)}{9}$ = 8,000.00 S.Y.

STA. 730 + 00 TO 740 + 00

$\frac{1000\ (72)}{9} + \frac{901.40}{3906.53}\ (3856.53)\ (12)\ (1/9)$ = 9,186.47 S.Y.

STA. 740 + 00 TO 750 + 00

$\frac{1000\ (72)}{9} + \frac{455.10}{3906.53}\ (3856.53)\ (12) + 332.88\ (12)}{9}$ = 9,042.84 S.Y.

STA. 750 + 00 TO 760 + 00

$\frac{1000\ (72)}{9}$ = 8,000.00 S.Y.

STA. 760 + 00 TO 762 + 00

$\frac{200\ (72)}{9}$ = 1,600.00 S.Y.

BOARDMAN EXPRESSWAY TOTAL = 102,613.74 S.Y.

RAMP "B" ACCELERATION LANE

STA 756 + 61.33 TO 762 + 00

$\frac{\left(\frac{20+8.66}{2}\right)(538.67)}{9}$ = 857.68 S.Y.

RAMP "C" ACCELERATION LANE

STA. 744 + 55.10 TO 749 + 75.10

$\frac{\left(\frac{12+25}{2}\right)(520.00)}{9}$ = 1,068.89 S.Y.

RAMP "D" DECELERATION LANE

STA. 748 + 52.88 TO 751 + 29.67 (NOSE)

(PLANIMETER) $\frac{5068}{9} + \frac{72.12\left(\frac{14+12}{2}\right)}{9}$ = 667.28 S.Y.

RAMP "E" DECELERATION LANE

(COMPUTER) 1,492.55 S.Y.

RAMP "F" ACCELERATION LANE

STA. 740 + 00 TO 745 + 20

$\frac{520\left(\frac{25+12}{2}\right)}{9}$ = 1,068.89 S.Y.

RAMP "G" DECELERATION LANE

STA. 682 + 69.08 TO 685 + 21.97

(PLANIMETER) $\frac{5360}{9}$ = 595.56 S.Y.

RAMP "H" ACCELERATION LANE

STA. 670 + 20 TO 675 + 40 (NOSE)

$\frac{520\left(\frac{25+12}{2}\right)}{9}$ = 1,068.89 S.Y.

ITEM 451 -8" CONTINUOUSLY REINFORCED CONCRETE

RAMP "J" ACCELERATION LANE
STA. 654 + 10.76 to 659 + 30.92

$\frac{520.16\left(\frac{25+12}{2}\right)}{9}$ = 1069.22 S.Y.

RAMP "K" DECELERATION LANE
653 + 08.22 to 658 + 63.90

$\frac{11,680.32}{(Computer)\ 9}$ = 1297.81 S.Y.

RAMP "L" DECELERATION LANE
639 + 31.06 to 640 + 73

$\frac{4036}{(Planimeter)\ 9}$ 448.44 S.Y.

643 + 09 to 646 + 30.38

$\frac{321.38\ (12)}{9}$ = 428.51 S.Y.

646 + 30.38 to 647 + 30.38

$\frac{100\ (12/2)}{9}$ = 66.67 S.Y.

RAMP "O" ACCELERATION LANE
643 + 35 to 651 + 44.48

$\frac{809.48\left(\frac{20.24}{2}\right)(1/9)}{}$ = 910.22 S.Y.

RAMP "X" ACCELERATION LANE
707 + 00 to 717 + 00

$\frac{\left(\frac{25+0}{2}\right)(1000-223.88)}{9}$ 1077.94 S.Y.

RAMP TOTALS = 12,118.55 S.Y.

GRAND TOTAL = 114,732.29 S.Y.

CALCULATED BY WLL DATE 11/17/60
CHECKED BY CEW DATE 11/18/60

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

42
656

ITEM - SPECIAL DRAINAGE CONNECTION

AREA MAINLINE DRAINAGE CONNECTION = 1.127 Sq. Ft.

BOARDMAN EXPRESSWAY

762 + 00 to 772 + 00

$\frac{100(1.127)}{27}$ = 4.17 C.Y.

$\frac{230(1.127)}{27}$ = 9.60 C.Y.

772 + 00 to END CONSTRUCTION *

$\frac{(859)(1.127)}{27}$ = 35.86 C.Y.

BOARDMAN EXPRESSWAY TOTAL = 49.63 C.Y.

ITEM 659 - SEEDING WITH BIRDSFOOT TREE FOIL - EMPIRE RECAPITULATION

MAINLINE

STATION FROM	TO	AREA S.Y.
630 + 00	640 + 00	365
640 + 00	650 + 00	2,755
650 + 00	660 + 00	3,623
660 + 00	670 + 00	7, 385
670 + 00	680 + 00	10,083
680 + 00	690 + 00	2,714
690+ 00	700 + 00	4,105
700 + 00	710 + 00	3,208
710 + 00	720 + 00	495
720 + 00	730 + 00	6,460
730 + 00	740 + 00	10,500
740 + 00	750 + 00	4,405
750 + 00	760 + 00	3,231
760 + 00	766 + 95	3,600
768 + 00	772 + 00	3,165
772 + 00	784 + 00	0'
TOTAL MAINLINE (PART.)		65,914

RAMPS

STATION	AREA S.Y.
RAMP "B"	0
RAMP "C"	5,215
RAMP "D"	2,760
RAMP "E"	9,891
RAMP "F"	3,534
RAMP "G"	2,554
RAMP "H"	2,701
RAMP "J"	2,114
RAMP "K"	3,226
RAMP "O"	404
RAMP "X"	0
TOTAL RAMPS (PART.)	32,399
RAMP "L" (RURAL)	3,126 □
TOTAL RAMPS (RURAL)	3,126 □

CROSS ROADS

STATION	AREA S.Y.
MIDLOTHIAN BLVD. (RURAL)	914 □
MIDLOTHIAN BLVD. (PART.)	193
SHIRLEY ROAD (PART.)	0
SHIRLEY ROAD (100% CITY)	0*
COOPER AVENUE	0
HOMEWOOD AVENUE	745
HUMBOLT-TAFT, CONNECTOR	0
INDIANOLA AVENUE	125
RELOC. TAYLOR - SOUTH TURNAROUND	60
RELOC. TAYLOR	0
POWERSDALE - MABEL CONNECTOR	0
MABEL CONNECTOR	0
SHADY RUN ROAD	6,288
POWERSDALE AVENUE	165
ACCESS ROAD @ GIBSON	198
GIBSON AVENUE	0
BENWOOD AVENUE TURNAROUND	0
SOUTH AVENUE	0
TAYLOR AVENUE	0
TAFT CUL-DE-SAC	0
WILLIAMSON AVENUE (I-SAFETY)	0 △
TOTAL CROSS ROADS (PART.)	7,774
TOTAL CROSS ROADS (RURAL) □	914
TOTAL CROSS ROADS (I-SAFETY) △	0
TOTAL CROSS ROADS (100% CITY) *	0
GRAND TOTAL (PART.)	106,087
GRAND TOTAL (I-SAFETY)	0
GRAND TOTAL (100% CITY)	0
GRAND TOTAL (RURAL)	4,040

ITEM 659 - SEEDING AND MULCHING, WITH BIRDSFOOT TREE FOIL - EMPIRE ALTERNATE BID

PARTICIPATING = 106,087 S.Y.

RURAL = 4,040 S.Y.

I-SAFETY = 0 S.Y.

100% CITY = 0 S.Y.

ITEM 659 - SEEDING AND MULCHING AS PER PLAN - ALTERNATE BID

SEE PAGE 32 FOR PRIME BID QUANTITIES

PARTICIPATING = 287,481 - 106,087 = 181,394 S.Y.

RURAL = 12,670 - 4,040 = 8,630 S.Y.

I-SAFETY = 450 - 0 = 450 S.Y.

100% CITY = 191 - 0 = 191 S.Y.

COMMERCIAL FERTILIZER (18-46-0)

SEE PAGE 32 FOR PRIME BID QUANTITIES

PARTICIPATING = 106,087(9)(5/1000)(1/2000) = 7.16 tons

RURAL = 4,040(9)(5/1000)(1/2000) = 0.27 tons

Commercial Fertilizer (12-12-12)
See Page 32 For Prime Bid Quantities

Participating = 181,394(9)(20÷1000)(1÷2000) = 16.33 Tons
Rural = 8,630(9)(20÷1000)(1÷2000) = 0.78 Tons
I-Safety = 450(9)(20÷1000)(1÷2000) = 0.04 Tons
100% City = 191(9)(20÷1000)(1÷2000) = 0.02 Tons

SUB-SUMMARY OF UNDERDRAIN QUANTITIES

605 UNDERDRAINS					603 CONDUIT
SHEET NO.	SHALLOW PIPE 6"	DEEP PIPE 6"	UNCLASSIFIED PIPE 6"	PIPE UNDERDRAIN 707.01, 707.12 6"	TYPE F 6"
61	785	968	192		30
62	562				20
68	90			157	30
69	985			990	20
70	245			2510	10
71				436	25
72			100	958 458	60
73	173	726			20
153		936			10
154		111			
262	100			90	10
263	785				10
309				588	20
TOTAL (PART.)	3,725	2,741	292	5,099	265

ITEM	DESCRIPTION	UNIT	MUNICIPAL PARTICIPATING QUANTITIES	I-SAFETY QUANTITIES	100% CITY QUANTITIES	CITY-STATE QUANTITIES	PARTICIPATING RURAL QUANTITIES	TOTAL QUANTITIES
202	EXISTING PAVEMENT REMOVED & DISPOSED OF	S.Y.	8,192	1,919	127	733	0	10,971
202	EXISTING SIDEWALK REMOVED & DISPOSED OF	S.F.	57,418	0	7,981	70	0	65,469
202	EXISTING CURB REMOVED & DISPOSED OF	L.F.	12,774	538	1,330	372	0	15,014
203	EXCAVATION NOT INCLUDING EMBANKMENT	C.Y.	1,268,805	18	1,868	0	3,000	1,273,691
203	EMBANKMENT	C.Y.	940,304	166	11	0	46,232	986,713
203	SUBGRADE COMPACTION	S.Y.	102,085	0	0	1,127	2,566	106,678
203	PROOF ROLLING	HRS.	34	0	0	0	1	35
301	BITUMINOUS AGGREGATE BASE	C.Y.	28,605	0	517	35	372	29,520
304	AGGREGATE BASE	C.Y.	363	0	0	62	0	425
305	8" PLAIN CEMENT CONCRETE BASE	S.Y.	1,262	0	0	0	106	1,368
310	SUBBASE GRADING A	C.Y.	2,104	0	0	164	35	2,303
310	SUBBASE GRADING B	C.Y.	2,751	0	608	0	11	3,370
310	SUBBASE REGULAR GRADING	C.Y.	34	0	0	151	0	185
402	ASPHALT CONCRETE	C.Y.	532	0	151	0	0	683
403	ASPHALT CONCRETE	C.Y.	44	0	0	4	0	48
404	ASPHALT CONCRETE	C.Y.	711	0	109	0	73	893
407	TACK COAT	GAL.	30	0	0	0	6	36
408	PRIME COAT	GAL.	211	0	0	0	0	211
409	SEAL COAT BITUMINOUS MATERIAL	GAL.	158	0	0	0	0	158
409	SEAL COAT AGGREGATE	C.Y.	4	0	0	0	0	4
451	8" REINFORCED CONCRETE PAVEMENT	S.Y.	7,157	0	0	0	0	7,157
451	9" REINFORCED CONCRETE PAVEMENT	S.Y.	30,691	0	0	159	2,297	33,147
451	10" REINFORCED CONCRETE PAVEMENT	S.Y.	1,910	0	0	540	0	2,450
451	8" CONTINUOUSLY REINFORCED CONCRETE PAVEMENT	S.Y.	114,732	0	0	0	0	114,732
603	CONDUIT, TYPE F-6"	L.F.	265	0	0	0	0	265
603	CONDUIT, TYPE C-B-4"	L.F.	350	0	150	0	0	500
605	UNDERDRAINS, SHALLOW PIPE 6"	L.F.	3,725	0	0	0	0	3,725
605	UNDERDRAINS, DEEP PIPE 6"	L.F.	2,741	0	0	0	0	2,741
605	UNDERDRAINS, UNCLASSIFIED PIPE 6"	L.F.	292	0	0	0	0	292
605	UNDERDRAINS, 707.01 OR 707.12 - 6"	L.F.	5,099	0	0	0	0	5,099
659	SEEDING AND MULCHING	S.Y.	287,481	450	191	0	12,670	300,792
659	COMMERCIAL FERTILIZER	TON	26.58	0.04	0.02	0	1.17	27.81
659	AGRICULTURAL LIMING	TON	132.84	0.20	0.09	0	5.86	138.99
SPECIAL	SPECIAL DRAINAGE CONNECTION	C.Y.	50'	0	0	0	0	50

CALCULATED BY WDB DATE 11/24/69
CHECKED BY C.E.W. DATE 11/25/69

MAY BE MH

COMPUTATIONS

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121* = 100% CITY FUNDS
121** = CITY-STATE FUNDS (25% CITY, 75% STATE)
121□ = PARTI.(RURAL) FUNDS (90% FED., 10% STATE)
121 = PARTICIPATING FUNDS (90% FED., 5% STATE, 5% CITY) TYPE CODE 7223 (UNLESS OTHERWISE INDICATED)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

43
656

SHEET NUMBER

ITEM	7	9	42	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	143	144	145	153	154	187	188	189	190	191	198	199	I-SAFETY FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	TYPE CODE	SUB TOTAL THIS SHT.	ITEM	QUANTITY	UNIT	DESCRIPTION
																																										ROADWAY
201																LUMP																		LUMP		LUMP	201		LUMP	CLEARING & GRUBBING
202																LUMP		LUMP																LUMP		LUMP	202		LUMP	REMOVAL OF EXISTING SIGN INSTALLATIONS, AS PER PLAN
202			1919△ 127* 733** 8192																												1919	127	733		8192		10,971	202		SQ.YD.	PAVEMENT REMOVED
202																																						202		LUMP	PORTIONS OF STRUCTURES REMOVED
202			7981* 70** 57,418																													7981	70		57,418		65,469	202		SQ. FT.	SIDEWALK REMOVED
202																	1	1																	2		2	202		EACH	REMOVAL OF EXISTING MAJOR SIGN INSTALLATIONS, AS PER PLAN
202			538△ 1,330* 372** 12,774																												538	1,330	372		12,774		15,014	202		LIN. FT.	CURB REMOVED
202																77.5*	1,017.0	362.5	1200□	425□													820.5	1625	1517		2,500.0	202		LIN. FT.	GUARD RAIL REMOVED
202																	743.0*		96.0	42.5																	202		LUMP	REMOVAL OF EXISTING TERMINAL TREATMENT, AS PER PLAN
202															20		LUMP 140	154△ 680					154												840		994	202		LIN. FT.	FENCE REMOVED FOR RE-USE
203			18△ 1868* 3,000□ 1268,805																				18	1,868									3,000	1,268,805		1,273,691	203		CU. YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION, AS PER PLAN
203			166△ 11* 46,232□ 940,304																				166	11									46,232	940,304		986,713	203		CU. YD.	EMBANKMENT
203			1,127** 2,566□ 102,085																														1,127	2,566	102,085		106,678	203		SQ. YD.	SUBGRADE COMPACTION
203			1□ 34																															1	34		35	203		HOURS	PROOF ROLLING
410	600																																		600		600	410		CU. YD.	TRAFFIC COMPACTED SURFACE TYPE A OR B
410	300																																		300		300	410		CU. YD.	TRAFFIC COMPACTED SURFACE TYPE C
604				1	1	1	1	3	1	2	1	1	2	1	2	1					1			1	1	1*		1*					2		21		23	604		EACH	STANDARD MONUMENT ASSEMBLY
606																5																			5		5	606		EACH	BRIDGE TERMINAL ASSEMBLY, TYPE A
606					2						1	1					1.1** 4		2.2□			5□ 1125□	2										1		5		6	606		Each	Bridge Terminal Assembly, Type E
606				1	2		3	1	2	3	2	2			7	3	1214.5	6	100□	25□		8	30822		100	125.00			4	4				7	51		58	606		EACH	ANCHOR ASSEMBLY
606				118.58	924	691.78	1150	1265	307.	368	187.5	337.5	162.5	425.00	550	69.67	395.5* 4.2**	850	75	37.5									350	200			305.5	1250	12,446.75		14,092.25	606		LIN. FT.	GUARD RAIL TYPE 5
606					2																											2		6		8	606		Each	Bridge Terminal Assembly, Type F
606				223.96	814.88	1000.0	1000.0	1000.0	1000.0	1000.0	942.40	873.72	1000.0	1000.0	1000.0	837.5	200.0																			11,892.46		11,892.46	606		LIN. FT.	GUARD RAIL TYPE 5 BARRIER DESIGN
606																	722.64	1100.0																	1822.64		1,822.64	606		LIN. FT.	GUARD RAIL TYPE 5 BARRIER DESIGN MODIFIED AS PER PLAN
607																	5	8△													8				5		13	607		LIN. FT.	FENCE TYPE CL, ALUMINUM
606																									1	1									2		2	606		Each	Bridge Terminal Assembly, As Per Plan
607																	140	221△ 613													221				753		974	607		LIN. FT.	FENCE TYPE CL, REBUILT AS PER PLAN
607																																						607		EACH	GATE TYPE CL, ALUMINUM
608																	60**		423* 1774	1130* 2260	762* 1524			769* 2806	1898	226* 2548	3526*	2433*					9,269	60		12,810	22,139	608		SQ. YD.	5" CONCRETE WALK
615	3327	136																																	3,463		3,463	615		SQ. YD.	CLASS A TEMPORARY PAVEMENT
615	LUMP																																		LUMP		LUMP	615		LUMP	TEMPORARY ROAD
616	80																																		80		80	616		M. GAL.	WATER
616	12																																		12		12	616		TON	CALCIUM CHLORIDE
656																						135													135		135	656		M. S. F.	ROADSIDE CLEANUP
SPECIAL																																						SPECIAL		EACH	DRILLED WELL ABANDONED

SEE SHEET No 44 FOR GRAND TOTAL OF QUANTITIES

QLC 12/16/69
WDB 12/11/69

SUB-SUMMARY

MAH 25 1971

QUANTITY SUMMARY

#Y104

121△ = I-SAFETY FUNDS
121✱ = 100% CITY FUNDS
121✱✱ = CITY-STATE FUNDS (25% CITY, 75% STATE)
121□ = PARTI. (RURAL) FUNDS (90% FED, 10% STATE)
121 = PARTICIPATING FUNDS (90% FED, 5% STATE, 5% CITY)

TYPE CODE 7223 (UNLESS OTHERWISE INDICATED)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

44
656

FROM SHEET 43

SHEET NUMBER: 24 | 213 | 217 | 220 | 224 | 225 | 228 | 231 | 233 | 241 | 242 | 257 | 261 | 262 | 263 | 288 | 291 | 294 | 300 | 301 | 303 | 304 | 309 | 330 | 331

ITEM	I-SAFETY△ FUNDS	100% CITY✱ FUNDS	CITY-STATE✱✱ FUNDS	PARTI. (RURAL)□ FUNDS	PARTICIPATING 121 FUNDS	24	213	217	220	224	225	228	231	233	241	242	257	261	262	263	288	291	294	300	301	303	304	309	330	331
201					LUMP																				LUMP					
202					LUMP																				LUMP					
202	1919	127	733		8192																		LUMP							
202		7981	70		57418																									
202					2																									
202	538	1330	372		12774												158.0													
202			820.5	162.5	1517																									
202					LUMP																									
202	194				840																									
203	18	1,868		3000	1,268,805																									
203	166	11		46,232	940,304																									
203			1,127	2,566	102,085																									
203				1	34																									
410					600																									
410					300																									
604		2			21						2			2	3	6			1			2				1	1	1		
606					5																									
606			1		5							2	2		1	2		1	4	1								2		
606				7	51						125	125	87.5		#105.65	72.85	107.50	939.5	673	775					37.5			420.33		
606			395.5	1250	12,446.75		25																							
606			2		6																								13,030	12,411
606					11,892.46																									
606					1822.64																									
607	8		-		5													2												
606					2																								2	1
607	221		-		753																				221					
607											863*																			
608		9,269	60		12,810						1459	2926	60	1792	254	90	1788	4905	5375	2684	901	1083	1376	800	1188	4081	4002			
615					3,463																									
615					LUMP																									
616					80																									
616					12																									
656					135																									
SPECIAL								2				2																		

TOTAL, SHEETS 43 & 44

I-SAFETY△ FUNDS	100% CITY✱ FUNDS	CITY-STATE✱✱ FUNDS	PARTI. (RURAL)□ FUNDS	PARTICIPATING 121 FUNDS	TYPE CODE
				LUMP	
				LUMP	
1919	127	733		8192	
	7981	70		LUMP	
				57418	
				2	
538	1330	372		12774	
		820.5	162.5	1675	
				LUMP	
154				840	
18	1,868		3,000	1,268,805	
166	11		46,232	940,304	
		1127	2566	102,085	
			1	34	
				600	
				300	
	2			39	
			1	5	
			7	66	
		305.5	1250	17,339.58	
	2			6	
				11,892.46	
				822.64	
8				25,446	
				4	
221				753	
				3	
	10,132	60		47574	
				3,463	
				LUMP	
				80	
				12	
				135	
				4	

ITEM	GRAND TOTAL QUANTITY	UNIT	DESCRIPTION
			ROADWAY
201	LUMP ✓	LUMP	CLEARING & GRUBBING
202	LUMP ✓	LUMP	REMOVAL OF EXISTING SIGN INSTALLATIONS AS PER PLAN
202	10,971 ✓	SQ. YD.	PAVEMENT REMOVED
202	LUMP ✓	LUMP	PORTION OF STRUCTURE REMOVED
202	65,469 ✓	SQ. FT.	SIDEWALK REMOVED
202	2 ✓	EACH	REMOVAL OF EXISTING MAJOR SIGN INSTALLATION, AS PER PLAN
202	15,014 ✓	LIN. FT.	CURB REMOVED
202	2658 ✓	LIN. FT.	GUARD RAIL REMOVED
202	LUMP ✓	LUMP	REMOVAL OF EXISTING TERMINAL TREATMENT AS PER PLAN
202	994 ✓	LIN. FT.	FENCE REMOVED FOR RE-USE
203	1,273,691 ✓	CU. YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION, AS PER PLAN
203	986,713 ✓	CU. YD.	EMBANKMENT
203	106,678 ✓	SQ. YD.	SUBGRADE COMPACTION
203	35 ✓	HOURS	PROOF ROLLING
410	600 ✓	CU. YD.	TRAFFIC COMPACTED SURFACE, TYPE A OR B
410	300 ✓	CU. YD.	TRAFFIC COMPACTED SURFACE, TYPE C
604	41 ✓	EACH	STANDARD MONUMENT ASSEMBLY
606	6 ✓	EACH	Bridge Terminal Assembly, Type A
606	6 ✓	EACH	Bridge Terminal Assembly, Type E
606	73 ✓	EACH	ANCHOR ASSEMBLY
606	19,605.08 ✓	LIN. FT.	GUARD RAIL, TYPE 5
606	8 ✓	EACH	Bridge Terminal Assembly, Type F
606	11,892.46 ✓	LIN. FT.	GUARD RAIL, TYPE 5, BARRIER DESIGN
606	1,822.64 ✓	LIN. FT.	GUARD RAIL, TYPE 5, BARRIER DESIGN MODIFIED AS PER PLAN
607	25,454 ✓	LIN. FT.	FENCE, TYPE CL, ALUMINUM
606	4 ✓	EACH	Bridge Terminal Assembly, As Per Plan
607	974 ✓	LIN. FT.	FENCE, TYPE CL, REBUILT AS PER PLAN
607	3 ✓	EACH	GATE, TYPE CL, ALUMINUM
608	57,766 ✓	SQ. FT.	5" CONCRETE WALK
615	3463 ✓	SQ. YD.	CLASS A TEMPORARY PAVEMENT
615	LUMP ✓	LUMP	TEMPORARY ROAD
616	80 ✓	M. GAL.	WATER
616	12 ✓	TON	CALCIUM CHLORIDE
656	135 ✓	M.S.F.	ROADSIDE CLEANUP
SPECIAL	4 ✓	EACH	DRILLED WELL ABANDONED

RAC 12/10/69
WDB 12/11/69

MAY 25 197

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121* = 100% CITY FUNDS
121** = CITY-STATE FUNDS (25% CITY, 75% STATE)
121□ = PARTI. (RURAL) FUNDS (90% FED.,10% STATE)
121 = PARTICIPATING FUNDS (90% FED., 5% STATE, 5% CITY)

TYPE CODE 7223 (UNLESS OTHERWISE INDICATED)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

45
656

SHEET NUMBER

ITEM	24	42	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	143	144	145	153	154	187	188	189	190	191	198	199	217	220	224	I-SAFETY FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PART. (RURAL) FUNDS	PARTICIPATING FUNDS	TYPE CODE
301		517* 35 **372□ 28,605																																517	35	372	28,605	
304		62** 393																8					1	1		4*	7*			2	5			11	62		380	
305		106□ 1,262																																		106	1,262	
310		164 ** 35 □ 2,104																																	164	35	2,104	
310		608* 11□ 2751																																608		11	2,751	
310		151 ** 34																																	151		34	
402		151* 532																																151			532	
403		4□ 44																																		4	44	
404		109* 73□ 711																2						1		1*				1	13			110		73	728	
407		6□ 30																																		6	30	
408		211																																			211	
409		158																																			158	
409		4																																			4	
451		7,157																																			7,157	
451		2,257 159** 30,691																																	159	2,297	30,691	
451		540** 1010																																	540		1010	
451		114,732																																			114,732	
452																		22					64	30	46*	184*	100*			13	10			330			139	
609																	125△ 58						519	367	75* 419	800*	469*			198	620		125	1,344			2,181	
609															355**	53**			127□ 187		732□ 500	453						486								408	859	1,626	
609																		197□ 371	434	227		67															197	1,099	
609										53		133					36								24		79*			390	295	65		79			996	
609																					213	162						101									476	
609																					117	276						263									656	
611				698						273	232					85** 19								147	147										85		1,516	
612																					100□ 15	18								6						39	
612																		50□ 50	50□ 117	83																100	250	
612			149	510	667	667	667	667	667	615	569	667	667	667	667	133																					7,979	
SPECIAL		50																																			50	

ITEM	QUANTITY	UNIT	DESCRIPTION
			PAVEMENT
301		CU. YD.	BITUMINOUS AGGREGATE BASE: 702.01(85-100); or 702.02, RT-11 or RT-12
304		CU. YD.	AGGREGATE BASE
305		SQ. YD.	8" PORTLAND CEMENT CONCRETE BASE
310		CU. YD.	SUBBASE, GRADING A, as per plan
310		CU. YD.	SUBBASE, GRADING B
310		CU. YD	SUBBASE
402		CU. YD.	ASPHALT CONCRETE (85-100)
403		CU. YD.	ASPHALT CONCRETE (85-100)
404		CU. YD.	ASPHALT CONCRETE (85-100)
407		GAL.	TACK COAT: 702.04, MS-2 OR RS-1; OR 702.02, RC-70 OR RC-250
408		GAL.	Bituminous Prime Coat: 702.09, RT-2 or RT-3
409		GAL.	SEAL COAT BITUMINOUS MATERIAL: 702.09, RT-9 OR RT-10, OR 702.02, MC-800 OR MC-3000
409		CU. YD.	SEAL COAT COVER AGGREGATE Nº 8
451		SQ. YD.	8" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
451		SQ. YD.	9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
451		SQ. YD.	10" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
451		SQ. YD.	8" CONTINOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN
452		SQ. YD.	7" PLAIN PORTLAND CEMENT CONCRETE PAVEMENT
609		LIN. FT.	STANDARD TYPE 2 COMBINATION CURB AND GUTTER
609		LIN. FT.	STANDARD TYPE 2-A CONCRETE CURB
609		LIN. FT.	STANDARD TYPE 2B CONCRETE CURB
609		LIN. FT.	STANDARD TYPE 6 CONCRETE CURB
609		LIN. FT.	STANDARD TYPE 7 CONCRETE CURB
609		LIN. FT.	STANDARD TYPE 8 CONCRETE CURB
611		SQ. YD.	REINFORCED CONCRETE APPROACH SLAB (T = 13")
612		SQ. YD.	9" CONCRETE TRAFFIC ISLAND, AS PER PLAN
612		SQ. YD.	9" CONCRETE MEDIAN, STANDARD
612		SQ. YD.	9" CONCRETE MEDIAN, AS PER PLAN
SPECIAL		CU. YD.	DRAINAGE CONNECTION, USING Nº 8 AGGREGATE

SEE SHEET Nº 46 FOR QUANTITIES OF TOTAL GRAND

RRC 12/10/69
WDB 12/11/69

SUB-SUMMARY

MAH-68 1971

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121✱ = 100% CITY FUNDS
121✱✱= CITY-STATE FUNDS(25%CITY,75%STATE)
121□ = PARTI. (RURAL) FUNDS(90%FED.,10%STATE)
121 = PARTICIPATING FUNDS(90%FED.,5%STATE,5%CITY) TYPE CODE 7223(UNLESS OTHERWISE INDICATED)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

46
656

4104

FROM SHEET 45

SHEET NUMBER

ITEM	I-SAFETY FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	225	228	231	233	236	241	242	257	261	262	263	288	291	294	298	300	301	303	304	309
301		517	35	372	28,605																				
304		11	62		380			7				5													
305				106	1262																				
310			164	35	2104																				
310		608		11	2751																				
310			151		34																				
402		151			532																				
403				4	44																				
404		110		73	728			3				2													
407				6	30																				
408					211																				
409					158																				
409					4																				
451					7,157																				
451			159	2,297	30,691																				
451			549		1,910																				
451					14,732																				
452		330			139	34	8				60	47		24	11		26	34	64	25	73				
609	125	1,344			2,181						1,696	2,024													
609			408	859	1,626				149	411	128	669	708	1,222	2,366	324						275	308	762
609				197	1,099														357			47			
609		79			996	737	453	189	167					17		14	758	503				141			
609					476					138						323									
609					656					237						250									
611		85			1,516				133					124					222			440			
612				100	39					13															
612				100	250																				
612					7,979																				
SPECIAL					50																				

TOTALS SHEETS 45 & 46

I-SAFETY FUNDS #	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	TYPE CODE
	517	35	372	28605	
	11	62		302	
			106	1262	
		164	35	2,104	
	608		11	2751	
		151		34	
	151			532	
			4	44	
	110		73	733	
			6	30	
				211	
				158	
				4	
				7157	
		159	2,297	30,691	
		549		1,910	
				114,731	
	330			545	
125	1,344			5001	
		408	859	8948	
			197	1503	
	79			3975	
				1,111	
				1247	
		85		2435	
			100	122	
			100	250	
				8,080	
				50	

ITEM	GRAND TOTAL QUANTITY	UNIT	DESCRIPTION
			PAVEMENT
301	29,520 ✓	CU. YD.	BITUMINOUS AGGREGATE BASE: 702.01(85-100) or 702.09, RT-11 or RT-12
304	465 ✓	CU. YD.	AGGREGATE BASE
305	1368 ✓	SQ. YD.	8" PORTLAND CEMENT CONCRETE BASE
310	2303 ✓	CU. YD.	SUBBASE GRADING A, AS PER PLAN
310	3370 ✓	CU. YD.	SUBBASE GRADING B
310	185 ✓	CU. YD.	SUBBASE
402	683 ✓	CU. YD.	ASPHALT CONCRETE (85-100)
403	48 ✓	CU. YD.	ASPHALT CONCRETE (85-100)
404	916 ✓	CU. YD.	ASPHALT CONCRETE (85-100)
407	36 ✓	GAL.	TACK COAT: 702.04, MS-2 OR RS-1; OR 702.02, RC-70 OR RC-250
408	211 ✓	GAL.	Bituminous Prime Coat: 702.09, RT-2 or RT-3
409	158 ✓	GAL.	SEAL COAT BITUMINOUS MATERIAL: 702.09, RT-9 OR RT-10 OR 702.02, MC-800 OR MC-3000
409	4 ✓	CU. YD.	SEAL COAT COVER AGGREGATE Nº 8
451	7157 ✓	SQ. YD.	8" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
451	33,147 ✓	SQ. YD.	9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
451	2,455 ✓	SQ. YD.	10" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
451	114,732 ✓	SQ. YD.	8" CONTINOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN
452	875 ✓	SQ. YD.	7" PLAIN PORTLAND CEMENT CONCRETE PAVEMENT
609	7,370 ✓	LIN. FT.	STANDARD TYPE 2 COMBINATION CURB AND GUTTER
609	10,215 ✓	LIN. FT.	STANDARD TYPE 2-A CONCRETE CURB
609	1700 ✓	LIN. FT.	STANDARD TYPE 2B CONCRETE CURB
609	4,054 ✓	LIN. FT.	STANDARD TYPE 6 CONCRETE CURB
609	1,111 ✓	LIN. FT.	STANDARD TYPE 7 CONCRETE CURB
609	1247 ✓	LIN. FT.	STANDARD TYPE 8 CONCRETE CURB
611	2,520 ✓	SQ. YD.	REINFORCED CONCRETE APPROACH SLAB (T=13")
612	222 ✓	SQ. YD.	9" CONCRETE TRAFFIC ISLAND, AS PER PLAN
612	350 ✓	SQ. YD.	9" CONCRETE MEDIAN, STANDARD
612	8,080 ✓	SQ. YD.	9" CONCRETE MEDIAN, AS PER PLAN
SPECIAL	50 ✓	CU. YD.	DRAINAGE CONNECTION, USING Nº 8 AGGREGATE

RRS 12/10/69
WDB 12/11/69

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121✱ = 100% CITY FUNDS
121✱✱= CITY-STATE FUNDS (25% CITY, 75% STATE)
121□ = PARTI. (RURAL) FUNDS (90% FED., 10% STATE)
121 = PARTICIPATING FUNDS (90% FED., 5% STATE, 5% CITY)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

47
656

TYPE CODE 7223 (UNLESS OTHERWISE INDICATED)

ITEM	42	143	144	145	188	189	190	191	217	220	225	233	241	242	294	300	301	303	335	336	337	339	340	341	344	345	348	350	353	357	359	360	364	I-SAFETY FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	TYPE CODE	SUB. TOTAL THIS SHT.	ITEM	QUANTITY	UNIT	DESCRIPTION
																																													DRAINAGE
202		1			3							1	3	2	6					5			4	4	1	—	2	2	3		1	6							44		44	202		EACH	MANHOLES REMOVED
202		10 1				3		5✱				4	5	3	2												4	6	2			11	1		5			1	42		48	202		EACH	CATCH BASINS OR INLETS REMOVED
202																																67							67		67	202		LIN. FT.	PIPE REMOVED, 15" AND UNDER
202													703	1007										107								20							1927		1027	202		LIN. FT.	PIPE REMOVED, OVER 15"
602		0.8□																		0.8	0.30/.22	0.3	0.3	0.3		0.8		0.3		0.5			0.6					1.1	6.1		7.2	602		CU. YD.	CONCRETE MASONRY
603													108																									108		108	603		LIN. FT.	6" CONDUIT TYPE C
603	150✱ 350																																		150			350		500	603		LIN. FT.	4" CONDUIT TYPE C
603																		127																				127		127	603		LIN. FT.	8" CONDUIT TYPE B
603																								190														190	Y-060	190	603		LIN. FT.	6" CONDUIT TYPE B 706.08 (SANITARY)
603	265																																					265		265	603		LIN. FT.	6" CONDUIT TYPE F
603																			132																			132	Y-060	132	603		LIN. FT.	10" CONDUIT TYPE C 706.08 (SANITARY)
603																			586		344																	930	Y-060	930	603		LIN. FT.	10" CONDUIT TYPE C 706.08 E.S. (SANITARY)
603													91																									91		91	603		LIN. FT.	8" CONDUIT TYPE C
603													60	148														91	446	28								773		773	603		LIN. FT.	12" CONDUIT TYPE C
603																					186																	186	Y-060	186	603		LIN. FT.	10" CONDUIT TYPE B 706.08 E.S. (SANITARY)
603																													147			348						495	Y-060	495	603		LIN. FT.	12" CONDUIT TYPE C 706.08 (SANITARY)
603																													255									255	Y-060	255	603		LIN. FT.	12" CONDUIT TYPE C 706.02 CLASS III or 707.13
603		101□ 4		42	89	98	82✱	27✱	100	95	26		424	140	111	40	15									256	349	145	384	10	100	333			109		101	2,761		2,971	603		LIN. FT.	12" CONDUIT TYPE B
603																					79																	79		79	603		LIN. FT.	12" CONDUIT TYPE B 706.01 E.S. 706.02 CL. III OR 706.08 E.S.
603																													39			216						255	Y-060	255	603		LIN. FT.	12" CONDUIT TYPE C 706.08 E.S. (SANITARY)
603																					39									85								124		124	603		LIN. FT.	15" CONDUIT TYPE F
603																													267									267	Y-060	267	603		LIN. FT.	15" CONDUIT TYPE C 706.02 CLASS IV WITH BITUMINOUS COATING (SANITARY) ✱
603																												56									56		56	603		LIN. FT.	15" CONDUIT TYPE C ✱ As Per Plan
603						114					139			93							57/89	163	95	104		130		202		101		279					57	1,509		1,566	603		LIN. FT.	15" CONDUIT TYPE B
603																												300	303								603	Y-060	603	603		LIN. FT.	15" CONDUIT TYPE B 706.02 CLASS I WITH BITUMINOUS COATING (SANITARY) As Per Plan
603																					66																	66		66	603		LIN. FT.	15" CONDUIT TYPE C 706.02 E.S. 706.02, 707.13 OR 706.08 E.S.
603																												369									369	Y-060	369	603		LIN. FT.	15" CONDUIT TYPE B 706.08 E.S. (SANITARY)
603																													204									204	Y-060	204	603		LIN. FT.	15" CONDUIT TYPE C 706.08 E.S. (SANITARY)
603																																									603		LIN. FT.	18" CONDUIT TYPE A 706.02 CLASS III
603		11□																														203					11	203		214	603		LIN. FT.	18" CONDUIT TYPE C
603																										275			111			510						896		896	603		LIN. FT.	18" CONDUIT TYPE B
603																								55														55		55	603		LIN. FT.	18" CONDUIT TYPE C 706.08, 706.01 OR 706.02 (SANITARY)
603																					317																	317		317	603		LIN. FT.	21" CONDUIT TYPE C 706.02 CLASS III or 707.13
603																													157									157		157	603		LIN. FT.	21" CONDUIT TYPE C
603																								290														290	Y-060	290	603		LIN. FT.	21" CONDUIT TYPE C 706.02 CLASS III OR 706.08 EXTRA STRENGTH WITH BITUMINOUS COATING (Sanitary) As Per Plan
603																													125									125		125	603		LIN. FT.	21" CONDUIT TYPE B 706.02 CLASS V
603																													639									639		639	603		LIN. FT.	21" CONDUIT TYPE B 706.02 CLASS IV
603																									48														48		48	603		LIN. FT.	21" CONDUIT TYPE C 706.02 CLASS III, 706.08 E.S. or 707.13
603																													102	78								180		180	603		LIN. FT.	21" CONDUIT TYPE B
603																													100	360		584						1,044		1,044	603		LIN. FT.	24" CONDUIT TYPE B
603																																						75		75	603		LIN. FT.	24" CONDUIT TYPE B 706.02 CLASS V UNDER RAILROAD, AS PER PLAN
603																															165	285						450		450	603		LIN. FT.	24" CONDUIT TYPE B 706.02 CLASS IV
603																								134														134		134	603		LIN. FT.	24" CONDUIT TYPE C 706.02, 706.08 E.S. or 707.13
603																																478						478		478	603		LIN. FT.	24" CONDUIT TYPE C 706.02 CLASS IV or 707.13
603																										50												50		50	603		LIN. FT.	24" CONDUIT TYPE C
603																																225						225		225	603		LIN. FT.	27" CONDUIT TYPE B
603																																150	218					368		368	603		LIN. FT.	27" CONDUIT TYPE B 706.02 CLASS IV
603																						200		70														270	Y-060	270	603		LIN. FT.	27" CONDUIT TYPE C 706.02 CLASS V (SANITARY)
603																																	245					245		245	603		LIN. FT.	27" CONDUIT TYPE C 706.02, 706.08 E.S. or 707.13
603																						20		35														55	Y-060	55	603		LIN. FT.	27" CONDUIT TYPE C 706.02 CLASS V WITH CLASS A BEDDING (SANITARY)
603																										317												317	Y-060	317	603		LIN. FT.	30" CONDUIT TYPE B 706.08 E.S. (SANITARY)
603		8□																																			8			8	603		LIN. FT.	30" CONDUIT TYPE C 706.08
603																								129														129		129	603		LIN. FT.	30" CONDUIT TYPE C 706.08 E.S. (Sanitary)
603																										132												132		132	603		LIN. FT.	30" CONDUIT TYPE B

PLC 12/10/60
WDB 12/11/60

SUB— SUMMARY

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121✱ = 100% CITY FUNDS
121✱✱ = CITY-STATE FUNDS (25% CITY, 75% STATE)
121□ = PARTI. (RURAL) FUNDS (90% FED., 10% STATE)
121 = PARTICIPATING FUNDS (90% FED., 5% STATE, 5% CITY)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

TYPE CODE T223 (UNLESS OTHERWISE INDICATED)

48
656

#Y104

FROM SHEET 47

SHEET NUMBER 366 367 368

TOTALS SHEETS 47 & 48

ITEM	I-SAFETY FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	366	367	368	I-SAFETY FUNDS*	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	TYPE CODE	GRAND TOTAL ITEM	GRAND TOTAL QUANTITY	GRAND TOTAL UNIT	DESCRIPTION
																		DRAINAGE
202					44								44		202	44	EACH	MANHOLE, REMOVED
202		5		1	42	1△ 2			1	5	-	1	44		202	51	EACH	CATCH BASIN OR INLET, REMOVED
202					67	85△ 20			85				87		202	172	LIN. FT.	PIPE REMOVED, 15" AND UNDER
202					1027								1027		202	1027	LIN. FT.	PIPE REMOVED, OVER 15"
602				1.1	6.1		1.1 06 4.1					1.7	11.3		602	13	CU. YD.	CONCRETE MASONRY
603					108								108		603	108	LIN. FT.	6" CONDUIT TYPE C ✓
603		150			350					150			350		603	500	LIN. FT.	4" CONDUIT TYPE C
603					127								127		603	127	LIN. FT.	8" CONDUIT TYPE B ✓
603					190								190	Y-060	603	190	LIN. FT.	6" CONDUIT TYPE B 706.08 (SANITARY)
603					265								265		603	265	LIN. FT.	6" CONDUIT TYPE F ✓
603					132								132	Y-060	603	132	LIN. FT.	10" CONDUIT TYPE C 706.08 (SANITARY)
603					930								930	Y-060	603	930	LIN. FT.	10" CONDUIT TYPE C 706.08 E.S. (SANITARY)
603					91								91		603	91	LIN. FT.	8" CONDUIT TYPE C
603					773	8✱✱					8		773		603	781	LIN. FT.	12" CONDUIT TYPE C
603					186								186	Y-060	603	186	LIN. FT.	10" CONDUIT TYPE B 706.08 (SANITARY)
603					495								495	Y-060	603	495	LIN. FT.	12" CONDUIT TYPE C 706.08 (SANITARY)
603					255								255	Y-060	603	255	LIN. FT.	12" CONDUIT TYPE C 706.02 CLASS III or 707.13
603		109		101	2,761					109		101	2,761		603	2,971	LIN. FT.	12" CONDUIT TYPE B
603					79								79		603	79	LIN. FT.	12" CONDUIT TYPE B 706.01 706.02 CL III OR 706.08
603					255								255	Y-060	603	255	LIN. FT.	12" CONDUIT TYPE B 706.08 (SANITARY)
603					124								124		603	124	LIN. FT.	15" CONDUIT TYPE F
603					267								267	Y-060	603	267	LIN. FT.	15" CONDUIT TYPE C 706.02 CLASS IV WITH BITUMINOUS COATING (SANITARY) ✱
603					56								56		603	56	LIN. FT.	15" CONDUIT TYPE C ✱ As Per Plan
603				57	1,509							57	1,509		603	1,566	LIN. FT.	15" CONDUIT TYPE B
603					603								603	Y-060	603	603	LIN. FT.	15" CONDUIT TYPE B 706.02 CLASS V WITH BITUMINOUS COATING (SANITARY) As Per Plan
603					66								66		603	66	LIN. FT.	15" CONDUIT TYPE C 706.01 E.S. 706.02, 707.13 OR 706.08 E.S.
603					369								369	Y-060	603	369	LIN. FT.	15" CONDUIT TYPE B 706.08 (SANITARY)
603					204								204	Y-060	603	204	LIN. FT.	15" CONDUIT TYPE C 706.08 E.S. (SANITARY)
603					117		117°						117		603	117	LIN. FT.	18" CONDUIT TYPE A 706.02 CLASS III
603				11	203							11	203		603	214	LIN. FT.	18" CONDUIT TYPE C
603					896								896		603	896	LIN. FT.	18" CONDUIT TYPE B
603					55								55	Y-060	603	55	LIN. FT.	18" CONDUIT TYPE C 706.08, 706.01 OR 706.02 (SANITARY)
603					317								317		603	317	LIN. FT.	21" CONDUIT TYPE C 706.02 CLASS III or 707.13
603					157								157		603	157	LIN. FT.	21" CONDUIT TYPE C
603					290								290	Y-060	603	290	LIN. FT.	21" CONDUIT TYPE C 706.02 CLASS III OR 706.08 E.S. WITH BITUMINOUS COATING (SANITARY) As Per Plan
603					125								125		603	125	LIN. FT.	21" CONDUIT TYPE B 706.02 CLASS V
603					639								639		603	639	LIN. FT.	21" CONDUIT TYPE B 706.02 CLASS IV
603					48								48		603	48	LIN. FT.	21" CONDUIT TYPE C 706.02 CLASS III, 706.08 E.S. or 707.13
603					180								180		603	180	LIN. FT.	21" CONDUIT TYPE B
603					1,044								1,044		603	1,044	LIN. FT.	24" CONDUIT TYPE B
603					75								75		603	75	LIN. FT.	24" CONDUIT Type B 706.02 CLASS V UNDER RAILROAD, AS PER PLAN.
603					450								450		603	450	LIN. FT.	24" CONDUIT TYPE B 706.02 CLASS IV
603					134								134		603	134	LIN. FT.	24" CONDUIT TYPE C 706.02, 706.08 E.S. or 707.13
603					478								478		603	478	LIN. FT.	24" CONDUIT TYPE C 706.02 CLASS IV or 707.13
603					50								50		603	50	LIN. FT.	24" CONDUIT TYPE C
603					225								225		603	225	LIN. FT.	27" CONDUIT TYPE B
603					368								368		603	368	LIN. FT.	27" CONDUIT TYPE B 706.02 CLASS IV
603					270								270	Y-060	603	270	LIN. FT.	27" CONDUIT TYPE B 706.02 CLASS V (SANITARY)
603					245								245		603	245	LIN. FT.	27" CONDUIT TYPE C 706.02, 706.08 E.S. or 707.13
603					55								55	Y-060	603	55	LIN. FT.	27" CONDUIT TYPE C 706.02 CLASS V WITH CLASS A BEDDING (SANITARY)
603					317								317	Y-060	603	317	LIN. FT.	30" CONDUIT TYPE B 706.08 (SANITARY)
603				8								8			603	8	LIN. FT.	30" CONDUIT TYPE C 706.08
603					129								129	Y-060	603	129	LIN. FT.	30" CONDUIT TYPE C 706.08 E.S. (Sanitary)
603					132								132		603	132	LIN. FT.	30" CONDUIT TYPE B

DRC 12/10/60
WOB 2/11/60

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121✱ = 100% CITY FUNDS
121✱✱ = CITY-STATE FUNDS (25% CITY, 75% STATE)
121□ = PARTI. (RURAL) FUNDS (90% FED., 10% STATE)
121 = PARTICIPATING FUNDS (90% FED., 5% STATE, 5% CITY)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

TYPE CODE 7223 (UNLESS OTHERWISE INDICATED)

49
656

ITEM	SHEET NUMBER	I-SAFETY FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	TYPE CODE	DESCRIPTION
								DRAINAGE
603	345: 274					274		30" CONDUIT TYPE B 706.02 CLASS V
603	341: 231					231	Y-060	30" CONDUIT TYPE B 706.08 (SANITARY)
603	367: 28					28		30" CONDUIT TYPE A 706.02
603	367: 286					286		30" CONDUIT TYPE A 706.02 CLASS V
603	364: 45					45		33" CONDUIT TYPE B 706.02 CLASS V UNDER RAILROAD, AS PER PLAN.
603	337: 126					126		33" CONDUIT TYPE A 706.02. CLASS IV
603	337: 60					60		33" CONDUIT TYPE A 706.02 CLASS V
603	360: 260; 364: 190					450		33" CONDUIT TYPE C 706.02 *or 707.13*
603	364: 245					245		33" CONDUIT TYPE C
603	345: 296					296	Y-060	33" CONDUIT TYPE B 706.02 CLASS IV WITH BITUMINOUS COATING. (SANITARY) *As Per Plan*
603	337: 323					323		33" CONDUIT TYPE A 706.02 CLASS IV WITH CLASS A BEDDING
603	345: 202					202	Y-060	33" CONDUIT TYPE B 706.08 ... (SANITARY)
603	345: 54					54		36" CONDUIT TYPE B 706.02 OR 706.08
603	345: 143; 348: 314; 360: 254; 364: 170					881	Y-060	36" CONDUIT TYPE B 706.02 CLASS IV WITH BITUMINOUS COATING (SANITARY) *As Per Plan*
603	348: 157					157	Y-060	36" CONDUIT TYPE C 706.02 CLASS IV WITH BITUMINOUS COATING (SANITARY) *As Per Plan*
603	345: 668					668	Y-060	36" CONDUIT TYPE B 706.02 CLASS III
603	350: 72					72	Y-060	36" CONDUIT TYPE C 706.02 CLASS III (SANITARY).
603	348: 482					482	Y-060	36" CONDUIT TYPE C 706.02 CLASS V WITH BITUMINOUS COATING (SANITARY) *As Per Plan*
603	341: 35					35		42" CONDUIT TYPE C 706.02 CLASS IV WITH CLASS A BEDDING
603	341: 25					25		42" CONDUIT TYPE C
603	341: 54					54		42" CONDUIT TYPE C 706.02 CLASS IV
603	242: 284; 360: 23					307	Y-060	48" CONDUIT TYPE B 706.02 WITH BITUMINOUS COATING (SANITARY) *As Per Plan*
603	242: 248; 364: 226					474	Y-060	48" CONDUIT TYPE B 706.02 CLASS III WITH BITUMINOUS COATING (SANITARY) *As Per Plan*
603	241: 452; 242: 357; 360: 598; 364: 142					1549	Y-060	48" CONDUIT TYPE B 706.02 CLASS IV WITH BITUMINOUS COATING (SANITARY) *As Per Plan*
603	241: 382					382	Y-060	48" CONDUIT TYPE B 706.02 CLASS V WITH BITUMINOUS COATING (SANITARY) *As Per Plan*
603	348: 16					16		7'-3"x5'-3" CONDUIT TYPE A 707.03 (10-10 GA)
604	220: 1; 294: 1; 335: 1					2		MANHOLE AJUSTED TO GRADE
604	143: 2; 144: 1; 145: 3; 187: 2; 189: 3; 190: 1; 220: 1; 225: 2; 241: 1; 294: 2; 337: 1; 348: 1; 350: 1; 353: 1; 360: 7; 364: 4; 366: 2; 367: 1					22	Y-060	MANHOLE ADJUSTED TO GRADE (SANITARY)
604	143: 1; 335: 1					2		MANHOLE RECONSTRUCTED TO GRADE
604	189: 2; 220: 1; 225: 1; 241: 1; 294: 1; 348: 3; 350: 1; 353: 3; 357: 2; 359: 1; 360: 7; 364: 4					26		STANDARD Nº1 MANHOLE
604	189: 1; 190: 2✱; 220: 1; 294: 1; 337: 4; 339: 2; 340: 1; 341: 1; 344: 2; 345: 4; 348: 2; 350: 3; 353: 4; 360: 7; 366: 2					34	Y-060	Nº1 SANITARY MANHOLE AS PER PLAN
604	341: 1; 348: 2; 353: 1					4	Y-060	Nº1 SANITARY MANHOLE WITH DROP PIPE AS PER PLAN
604	350: 1					1	Y-060	Nº1 SANITARY MANHOLE WITH 2 DROP PIPES AS PER PLAN
604	353: 1					1	Y-060	Nº1 SANITARY MANHOLE WITH 3 DROP PIPES AS PER PLAN
604	242: 1					1	Y-060	Nº2 SANITARY MANHOLE AS PER PLAN
604	241: 2; 242: 3; 364: 2					7	Y-060	Nº2 SANITARY MANHOLE W/O DROP PIPE AS PER PLAN
604	337: 1; 345: 2; 353: 2; 360: 1; 364: 1; 367: 1					8		STANDARD Nº2 MANHOLE W/O DROP PIPE
604	241: 2; 242: 1; 350: 1; 353: 2					6		STANDARD Nº 2-2A CATCH BASIN
604	220: 1					1		INLETS ADJUSTED TO GRADE
604	341: 1					1		STANDARD Nº. 2-4 CATCH BASIN
604	143: 1; 189: 1; 340: 1; 345: 4; 348: 1; 350: 2; 353: 6; 357: 3; 360: 7; 364: 1					26		STANDARD Nº.5 CATCH BASIN
604	345: 1					1		STANDARD Nº.5A CATCH BASIN
604	337: 10; 339: 3; 340: 1; 360: 2; 366: 1; 367: 2					6		STANDARD Nº.6 CATCH BASIN
604	357: 1; 360: 2					3		STANDARD Nº. 2A-6 INLET, *Paved Shoulder*
604	345: 1					1		STANDARD Nº. 2A-6 INLET MODIFIED AS PER PLAN, *Paved Shoulder*
604	242: 3					3		STANDARD Nº. 2A-6 INLET TYPE I MODIFIED AS PER PLAN, *Paved Shoulder*
604	143: 10; 366: 1					1		STANDARD Nº. 2A-6 INLET TYPE II MODIFIED AS PER PLAN, *Paved Shoulder*
604	360: 1					1		STANDARD Nº. 2A-8 INLET MODIFIED WITH ONE WINDOW, *Paved Shoulder* DOC 12/10/60 WDB 12/11/60

QUANTITY SUMMARY

Y104

12I△ = I-SAFETY FUNDS
12I* = 100% CITY FUNDS
12I** = CITY-STATE FUNDS(25%CITY, 75% STATE)
12I□ = PARTI. (RURAL) FUNDS(90%FED,10%STATE)
12I = PARTICIPATING FUNDS(90%FED,5%STATE,5%CITY)

FED.RD.	STATE	PROJECT	
2	OHIO		

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TYPE CODE 7223 (UNLESS OTHERWISE INDICATED)

ITEM	42	143	145	188	189	190	191	217	220	225	241	242	291	300	301	335	336	337	339	340	341	344	345	348	350	353	357	359	360	366	I-SAFETY FUNDS△	100% CITY FUNDS*	CITY-STATE FUNDS**	PARTI. (RURAL) FUNDS□	PARTICIPATING FUNDS	DESCRIPTION
604																		1																	4	DRAINAGE
604											1	2																							3	
604		1		2																				1											4	
604																									1				1						2	
604											1	1																							2	
604		1[10]	1			3*	2*					1																				5		1	2	
604																									1			1							2	
604																								2											2	
604																				1			1												2	
604												1														2									3	
604																								2											2	
604																			1				1												2	
604																					1														2	
604																									3										3	
604																									1										1	
604					3				2																	1			2						8	
604					2		1*	2		2	3			1	1								2	3	2	5				1△	1	1				23	
604											2	4												1	5	2									14	
604												1													1										2	
605	3725																																		3725	
605	5099																																		5099	
605	2741																																		2,741	
605	292																																		292	

ITEM	QUANTITY	UNIT	DESCRIPTION
604	4	EACH	STANDARD No. 2A-8 INLET MODIFIED AS PER PLAN, Paved Shoulder
604	3	EACH	STANDARD No. 2A-8 INLET TYPE I MODIFIED AS PER PLAN, Paved Shoulder
604	4	EACH	STANDARD No. 2A-8 INLET TYPE II MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-10 INLET MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-10 INLET TYPE I MODIFIED AS PER PLAN, Paved Shoulder
604	8	EACH	STANDARD No. 2A-10 INLET TYPE II MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-12 INLET MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-12 INLET TYPE II MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-14 INLET MODIFIED AS PER PLAN, Paved Shoulder
604	3	EACH	STANDARD No. 2A-14 INLET TYPE I MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-14 INLET TYPE II MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-16 INLET MODIFIED AS PER PLAN, Paved Shoulder
604	2	EACH	STANDARD No. 2A-16 INLET TYPE I MODIFIED AS PER PLAN, Paved Shoulder
604	1	EACH	STANDARD No. 2A-18 INLET MODIFIED AS PER PLAN, Paved Shoulder
604	3	EACH	STANDARD No. 2A-18 INLET TYPE I MODIFIED AS PER PLAN, Paved Shoulder
604	1	EACH	STANDARD No. 2A-20 INLET MODIFIED TYPE I AS PER PLAN, Paved Shoulder
604	8	EACH	CITY OF YOUNGSTOWN No. I INLET
604	25	EACH	CITY OF YOUNGSTOWN No. II INLET
604	14	EACH	12" FLAPGATE, as per plan
604	2	EACH	15" FLAPGATE, as per plan
605	3725	LIN.FT.	6" SHALLOW PIPE UNDERDRAIN
605	5,099	LIN.FT.	6"(707.01 TYPE III or 707.12) PIPE UNDERDRAIN
605	2,741	LIN.FT.	6" DEEP PIPE UNDERDRAIN
605	292	LIN.FT.	6" UNCLASSIFIED PIPE UNDERDRAIN

For estimated quantities for Pine Hollow Box Culvert, see Sht. No. 45B

RBC 12/11
WDB 12/11

MAH

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121 ✱ = 100% CITY FUNDS
121 ✱✱ = CITY-STATE FUNDS(25% CITY, 75% STATE)
121 □ = PARTI.(RURAL) FUNDS (90% FED., 10% STATE)
121 = PARTICIPATING FUNDS (90% FED., 5% STATE, 5% CITY)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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Y104

ITEM	SHEET NUMBER	I-SAFETY # FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICI-PATING FUNDS	TYPE CODE	BID ITEM	BID QUANTITY	BID UNIT	DESCRIPTION
											EROSION CONTROL
601	368					65	Y-005	601	65	CU. YD.	ROCK CHANNEL PROTECTION, TYPE A
601	25, 42, 144, 241, 242, 291, 335, 336, 337 2□ 18, 339, 340, 341, 348, 350, 353, 357, 359, 360, 364, 366, 367				2	457	Y-005	601	459	CU. YD.	ROCK CHANNEL PROTECTION, TYPE B
601	241					56	Y-005	601	56	SQ. YD.	RIPRAP, USING 6" REINFORCED CONCRETE SLAB
601	144, 242					346	Y-005	601	346	LIN. FT.	PAVED GUTTER STANDARD TYPE 2
601	364					50	Y-005	601	50	SQ. YD.	RIP-RAP, GROUTED, AS PER PLAN
659	450□ 191✱ 12,670□ 287.48△	450	191		12,670	287.48△	Y-005	659	300,792	SQ. YD.	SEEDING AND MULCHING
659	0.04□ 0.02✱ 1.17□ 26.58	0.04	0.02		1.17	26.58	Y-005	659	27.81	TON	COMMERCIAL FERTILIZER (12-12-12)
659	0.20□ 0.09✱ 5.86□ 132.84	0.20	0.09		5.86	132.84	Y-005	659	138.99	TON	AGRICULTURAL LIMING
660	291, 336, 337 67□ 87, 348, 364				67	285	Y-005	660	352	SQ. YD.	SODDING FOR SPECIAL BERM AND SLOPE PROTECTION, As Per Plan.
667	241, 335, 336, 337 292□ 1204, 339, 340, 341, 344, 345, 348, 350, 353, 357, 359, 360, 364, 366				292	7,523	Y-005	667	7,815	SQ. YD.	SEEDING AND JUTE MATTING
Special	60,158					60158	Y-005	Special	60,158	SQ. YD.	Temporary Seeding and Mulching
Special	2.71					2.71	Y-005	Special	2.71	TON	Commercial Fertilizer (12-12-12)
Special	15					15	Y-005	Special	15	M. Gal.	Water
Special	1780					1780	Y-005	Special	1780	Lin. Ft.	Temporary Slope Drains
Special	987					987	Y-005	Special	987	Cu. Yd.	Temporary Branches, Dikes, Dams & Sediment Basins
Special	30079					30079	Y-005	Special	30,079	Sq. Yd.	Repair Seeding and Mulching
Special	12.18					12.18	Y-005	Special	12.18	Tons	Refertilizing (12-12-12)

RRC 12/10/69
WDB 12/11/69

MAY 25 1971

QUANTITY SUMMARY

121△ = I-SAFETY FUNDS
121✱ = 100% CITY FUNDS
121✱✱ = CITY-STATE FUNDS (25% CITY, 75% STATE)
121□ = PARTI. (RURAL) FUNDS (90% FED, 10% STATE)
121 = PARTICIPATING FUNDS (90% FED, 5% STATE, 5% CITY)

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

TYPE CODE Y-060 (UNLESS OTHERWISE INDICATED)

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Y104

ITEM	SHEET NUMBER	I-SAFETY FUNDS	100% CITY FUNDS	CITY-STATE FUNDS	PARTI. (RURAL) FUNDS	PARTICIPATING FUNDS	TYPE CODE	BID ITEM	BID QUANTITY	BID UNIT	DESCRIPTION
											WATER
814	73: 1 / 187: 1 / 233: 1 / 291: 1 / 294: 1 / 303: 1 / 304: 1 / 373: 1 / 378: 2 / 379: 1 / 380: 2 / 381: 4					12		814	12	EACH	CUT AND PLUG EXISTING 6"-8" WATER MAIN
814	187: 1					2		814	2	EACH	CUT AND PLUG EXISTING 12" WATER MAIN
814	73: 13✱✱ / 143: 2 / 144: 7 / 145: 3 / 189: 5 / 190: 10✱ / 233: 124 / 291: 163 / 294: 129 / 304: 8 / 378: 1 / 379: 14 / 380: 417 / 381: 20 / 383: 701 / 386: 558		10	13		2,151		814	2,174	LIN. FT.	6" DUCTILE IRON WATER MAIN - ASA CLASS 3 PUSH-ON TYPE JOINT CEMENT LINED
814	233: 182 / 294: 245					427		814	427	LIN. FT.	6" STEEL WATER MAIN ON STRUCTURES, INCLUDING COMPONENTS
814	188: 86 / 189: 77 / 303: 106 / 381: 1,051					1,320		814	1,320	LIN. FT.	8" DUCTILE IRON WATER MAIN - ASA CLASS 3 PUSH-ON TYPE JOINT CEMENT LINED
814	188: 265 / 189: 60 / 303: 124					449		814	449	LIN. FT.	8" X 0.322" THICKNESS STEEL WATER MAIN ON STRUCTURES, INCLUDING COMPONENTS
814	294: 2 / 380: 1					3		814	3	EACH	6"-11¼° C.I. BEND FITTING MECH JOINT, CEMENT LINED
814	233: 2 / 291: 2 / 294: 2 / 386: 2					8		814	8	EACH	6"-45° C.I. BEND FITTING, MECH JOINT, CEMENT LINED
814	380: 1 / 383: 1					2		814	2	EACH	6"-90° C.I. BEND FITTING, MECH JOINT, CEMENT LINED
814	380: 1 / 381: 1 / 386: 1					3		814	3	EACH	8"X6" C.I. TEE FITTING, MECH JOINT, CEMENT LINED
814	291: 1 / 380: 1					2		814	2	EACH	8"TO 6" C.I. REDUCER FITTING, MECH JOINT, CEMENT LINED
814	73: 1 / 379: 1					2		814	2	EACH	6" C.I. TEE FITTING, MECH JOINT, CEMENT LINED
814	381: 2					2		814	2	EACH	8" C.I TEE FITTING, MECH JOINT, CEMENT LINED
814	381: 1					1		814	1	EACH	8"X8"-45° C.I. Y-BRANCH - MECH JOINT, CEMENT LINED
814	188: 2 / 189: 2 / 303: 4 / 381: 3					11		814	11	EACH	8"-45° C.I. BEND FITTING, MECH JOINT, CEMENT LINED
814	381: 2					2		814	2	EACH	8"-90° C.I. BEND FITTING, MECH JOINT, CEMENT LINED
814	73: 1 / 291: 2 / 294: 2 / 379: 1 / 380: 3 / 381: 1 / 386: 2					12		814	12	EACH	6" VALVE AND VALVE BOX
814	188: 1 / 189: 1 / 303: 2 / 381: 5					9		814	9	EACH	8" VALVE AND VALVE BOX
814	143: 1 / 144: 3 / 145: 2 / 187: 2 / 189: 3 / 190: 1✱ / 233: 5 / 294: 1 / 304: 1 / 373: 2 / 380: 5 / 381: 2 / 383: 1		1			28		814	29	EACH	VALVE BOX ADJUSTED TO GRADE
814	190: 10△ / 191: 1✱ / 304: 9		11			9		814	20	EACH	SERVICE BOX ADJUSTED TO GRADE
814	73: 1 / 144: 1 / 145: 1 / 187: 1 / 189: 1 / 190: 2△ / 304: 1 / 379: 1 / 380: 1 / 381: 1		2			9		814	11	EACH	FIRE HYDRANT REMOVED AND RESET
814	373: 2 / 378: 2 / 380: 1 / 381: 1 / 383: 1 / 386: 4					11		814	11	EACH	FIRE HYDRANT REMOVED AND DISPOSED OF
	73: 1 / 379: 1					2		814	2	EACH	6" C.I. CUTTING-IN SLEEVE-MECH JOINT, CEMENT LINED
	380: 1					1		814	1	EACH	8" C.I. CUTTING-IN SLEEVE-MECH JOINT, CEMENT LINED
	233: 2 / 291: 1 / 294: 2 / 380: 1 / 386: 1					7		814	7	EACH	6" C.I. SOLID SLEEVE FITTING, MECH JOINT, CEMENT LINED
	188: 1 / 189: 1 / 303: 2 / 381: 1					5		814	5	EACH	8" C.I. SOLID SLEEVE FITTING, MECH JOINT, CEMENT LINED
	233: 2 / 291: 1 / 294: 2 / 380: 1 / 386: 1					7		814	7	EACH	6" C.I. CONNECTOR FITTING-MECH JOINT AND PLAIN END, CEMENT LINED
	188: 1 / 189: 1 / 303: 2 / 381: 1					5		814	5	EACH	8" C.I. CONNECTOR FITTING-MECH JOINT AND PLAIN END, CEMENT LINED
614	LUMP	Lump	Lump	Lump	Lump	LUMP	7223	614	LUMP	LUMP	MAINTAINING TRAFFIC
619	LUMP	Lump	Lump	Lump	Lump	LUMP	7223	619	LUMP	LUMP	FIELD OFFICE
	LUMP	Lump	Lump	Lump	Lump	LUMP	7223		LUMP	LUMP	CONSTRUCTION LAYOUT STAKES
											ALTERNATE BID ITEMS
607	42: 5✱✱ 8△ 25,481	8				25,446	7223	607	25,454	LIN. FT.	FENCE TYPE CL, Steel
						3	7223	607	3	Ea.	Gate Type CL, Steel
659	42: 450△ 191✱ 8,630□ 181,304	450	191		8,630	181,304	Y-005	659	190,665	SQ. YD.	SEEDING AND MULCHING AS PER PLAN
659	42: 0△ 0✱ 4,040□ 106,087	0	0		4,040	106,087	Y-005	659	110,127	SQ. YD.	SEEDING AND MULCHING WITH BIRDSFOOT TREE-FOIL EMPIRE AS PER PLAN
659	42: 0.04△ 0.02✱ 0.78□ 16.33	0.04	0.02		0.78	16.33	Y-005	659	17.17	TON	COMMERCIAL FERTILIZER (12-12-12), as per plan
659	42: 0.27□ 7.16				0.27	7.16	Y-005	659	7.43	TON	COMMERCIAL FERTILIZER (18-46-0), as per plan
											STRUCTURES OVER 20 FOOT SPAN

FOR ESTIMATED QUANTITIES MAH-680-0924, SEE SHEET № 459A
FOR ESTIMATED QUANTITIES MAH-680-0835, SEE SHEET № 475
FOR ESTIMATED QUANTITIES MAH-680-0817, SEE SHEET № 515
FOR ESTIMATED QUANTITIES MAH-680-0794, SEE SHEET № 487
FOR ESTIMATED QUANTITIES MAH-680-0792, SEE SHEET № 505
FOR ESTIMATED QUANTITIES MAH-680-0723, SEE SHEET № 524
FOR ESTIMATED QUANTITIES MAH-680-0705, SEE SHEET № 533
FOR ESTIMATED QUANTITIES MAH-680-0693, SEE SHEET № 545A
FOR ESTIMATED QUANTITIES MAH-680-0687, SEE SHEET № 552

FOR ESTIMATED LIGHTING QUANTITIES, SEE SHEET № 425B & 425C
FOR ESTIMATED TRAFFIC CONTROL QUANTITIES SEE SHEET № 390A. RRC 12/11/69
For Estimated Traffic Signal Quantities See Sheet No. 418 WDB 12/12/69

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.98

53/656

121 = Participating Funds (90% fed., 5% State, 5% City)

TYPE CODE 7223

ITEM (SHEET NUMBER)	PARTICIPATING FUNDS	ITEM	QUANT.	UNIT	DESCRIPTION
					BUILDING REMOVAL
	Lump	202	Lump	Lump	Parcel Nº 144-AWL - Removal of one stone block office building with attached rest rooms (2).
	Lump	202	Lump	Lump	Parcel Nº 166 AWL - Removal of one 1½-story frame residence.
	Lump	202	Lump	Lump	Parcel Nº 179 WL - Removal of one 2½-story frame residence concrete block garage, frame shed.
	Lump	202	Lump	Lump	Parcel Nº 243 WL - Removal of one church building, one 2½-story brick residence.
	Lump	202	Lump	Lump	Parcel Nº 362 WD - Removal of one frame shed.
	Lump	202	Lump	Lump	Parcel Nº 459 WL - Removal of one concrete block garage, frame garage, frame shed.
	Lump	202	Lump	Lump	Parcel Nº 498 WL - Removal of one 2-car block garage
	Lump	202	Lump	Lump	Parcel Nº 605 WL - Removal of one 2½-story frame residence, one 1-car garage, frame shed.
	Lump	202	Lump	Lump	Parcel Nº 614 WL - Removal of one 2½-story frame residence.
	Lump	202	Lump	Lump	Parcel Nº 636 WL - Removal of one concrete block service station building, one 1-story brick garage.
	Lump	202	Lump	Lump	Parcel Nº 631 WL - Removal of one brick patio.
	Lump	202	Lump	Lump	Parcel Nº 637 WL - Removal of one 2½-story frame residence, 3 frame sheds.
	Lump	202	Lump	Lump	Parcel Nº 638 WL - Removal of one 2½-story brick residence, brick garage.
	Lump	202	Lump	Lump	Parcel Nº 639 WL - Removal of one 2-story brick residence, 4-car block garage.
	Lump	202	Lump	Lump	Parcel Nº 640 WL - Removal of one 2½-story brick tavern.

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FED. RD.	STATE	PROJECT	
2	OHIO		

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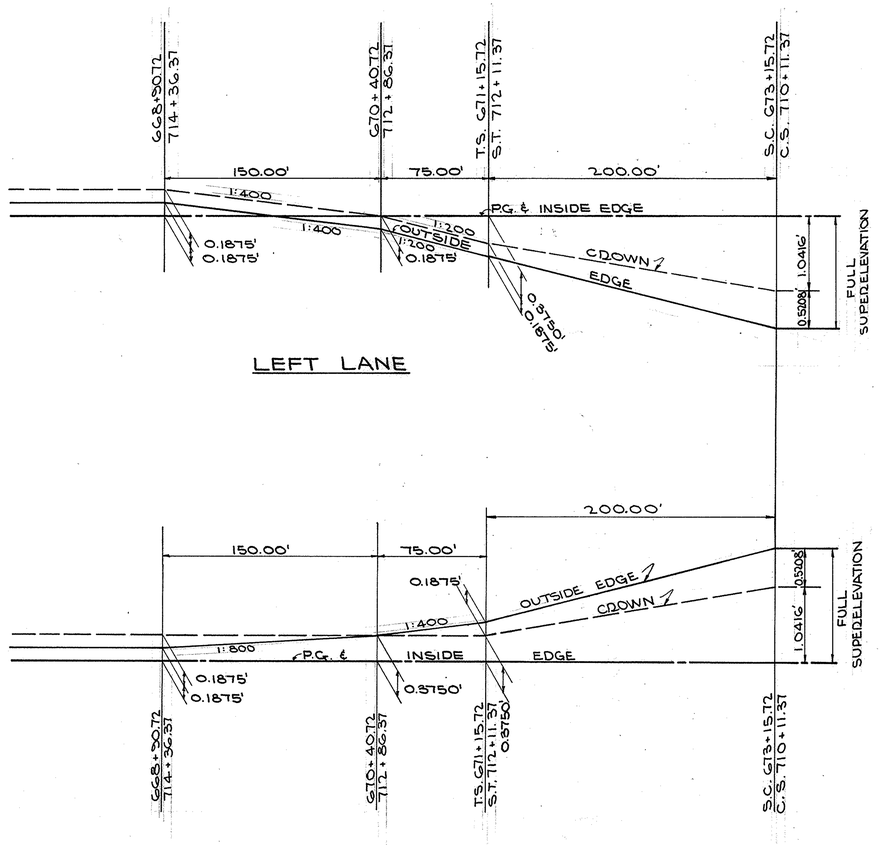
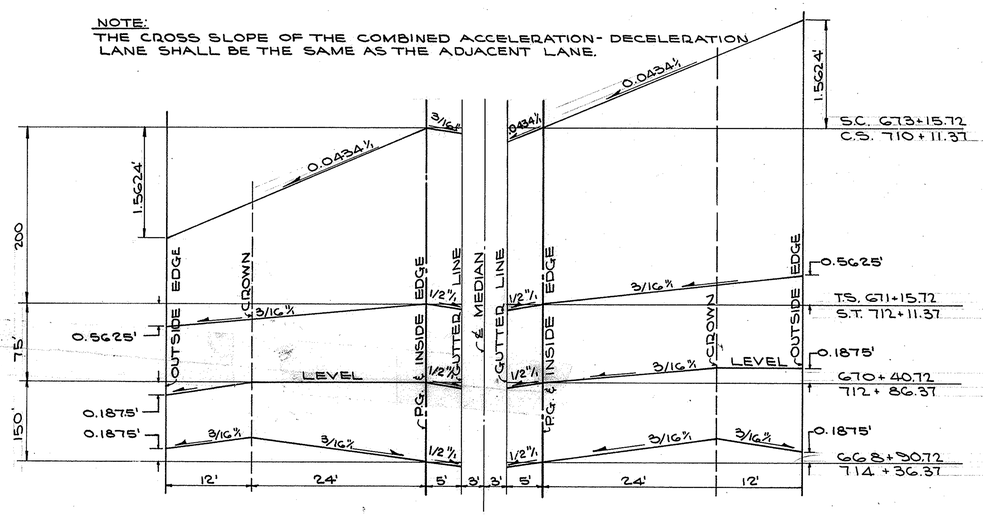


LEFT LANE

RIGHT LANE

NOTE:
THE CROSS SLOPE OF THE COMBINED ACCELERATION- DECELERATION LANE SHALL BE THE SAME AS THE ADJACENT LANE.



LEFT LANE RIGHT LANE

SUPERELEVATION TABLE
CURVE Nº 1

STATION	LEFT LANE		PROFILE GRADE	RIGHT LANE	
	LEFT EDGE	CROWN		CROWN	RIGHT LANE
G68+30.72	988.31	988.50	988.12	988.50	988.31
G69+00	988.06	988.25	987.90	988.28	988.10
G69+25	987.40	987.55	987.30	987.68	987.53
G69+50	986.74	986.93	986.70	987.08	986.96
G69+75	986.08	986.26	986.10	986.48	986.38
G70+00	985.41	985.60	985.50	985.88	985.82
G70+25	984.75	984.94	984.90	985.28	985.26
G70+40.72	984.31	984.52	984.52	984.90	984.90
G70+50	984.07	984.25	984.30	984.68	984.70
G70+75	983.34	983.53	983.70	984.08	984.16
G71+00	982.62	982.80	983.10	983.48	983.62
G71+15.72	982.16	982.35	982.72	983.10	983.30
G71+25	981.88	982.09	982.50	982.91	983.11
G71+50	981.17	981.41	981.90	982.30	982.63
G71+75	980.44	980.73	981.30	981.87	982.16
G72+00	979.72	980.04	980.70	981.36	981.68
G72+25	978.99	979.36	980.10	980.84	981.21
G72+50	978.27	978.68	979.50	980.32	980.73
G72+75	977.54	977.99	978.90	979.81	980.26
G73+00	976.82	977.31	978.30	979.25	979.78
G73+15.72	976.40	976.88	977.92	978.96	979.43
G73+25	976.14	976.66	977.70	978.74	979.24
G73+50	975.54	976.06	977.10	978.14	978.66
G73+75	974.94	975.46	976.50	977.54	978.06
G74+00	974.34	974.86	975.90	976.94	977.46
G74+25	973.74	974.26	975.30	976.34	976.86
G74+50	973.14	973.66	974.70	975.74	976.26
G74+75	972.54	973.06	974.10	975.14	975.66
G75+00	971.94	972.46	973.50	974.54	975.06
G75+25	971.34	971.86	972.90	973.94	974.46
G75+50	970.74	971.26	972.30	973.34	973.86
G75+75	970.14	970.66	971.70	972.74	973.26
G76+00	969.54	970.06	971.10	972.14	972.66
G76+25	968.94	969.46	970.50	971.54	972.06
G76+50	968.34	968.86	969.90	970.94	971.46
G76+75	967.74	968.26	969.80	970.34	970.86
G77+00	967.14	967.66	968.70	969.74	970.26
G77+25	966.54	967.06	968.10	969.14	969.66
G77+50	965.94	966.46	967.50	968.54	969.06
G77+75	965.84	965.86	966.90	967.94	968.46
G78+00	964.74	965.26	966.30	967.34	967.86
G78+25	964.14	964.66	965.70	966.74	967.26
G78+50	963.54	964.06	965.10	966.14	966.66
G78+75	962.94	963.46	964.50	965.54	966.06
G79+00	962.34	962.86	963.90	964.94	965.46
G79+25	961.74	962.26	963.30	964.34	964.86
G79+50	961.14	961.66	962.70	963.74	964.26
G79+75	960.54	961.06	962.10	963.14	963.66
G80+00	959.94	960.46	961.50	962.54	963.06
G80+25	959.34	959.86	960.90	961.94	962.46
G80+50	958.74	959.26	960.30	961.34	961.86
G80+75	958.14	958.66	959.70	960.74	961.26
G81+00	957.54	958.06	959.10	960.14	960.66
G81+25	956.94	957.46	958.50	959.54	960.06
G81+50	956.34	956.86	957.90	958.94	959.46
G81+75	955.74	956.26	957.30	958.34	958.86
G82+00	955.14	955.66	956.70	957.74	958.26
G82+25	954.54	955.06	956.10	957.14	957.66
G82+50	953.94	954.46	955.50	956.54	957.06
G82+75	953.34	953.86	954.90	955.94	956.46
G83+00	952.74	953.26	954.30	955.34	955.86
G83+25	952.14	952.66	953.70	954.74	955.26
G83+50	951.54	952.06	953.10	954.14	954.66
G83+75	950.94	951.46	952.50	953.54	954.06

SUPERELEVATION TABLE
CURVE Nº 1

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DD EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

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SUPERELEVATION TABLE
CURVE Nº 1 (CONTINUED)

STATION	LEFT LANE		PROFILE GRADE	RIGHT LANE	
	LEFT EDGE	CROWN		CROWN	RIGHT EDGE
684+00	950.34	950.86	951.30	952.54	953.46
684+25	949.74	950.26	951.30	952.34	952.86
684+50	949.14	949.66	950.70	951.74	952.26
684+75	948.54	949.06	950.10	951.14	951.66
685+00	947.94	948.46	949.50	950.54	951.06
685+25	947.34	947.86	948.90	949.94	950.46
685+50	946.74	947.26	948.30	949.34	949.86
685+75	946.14	946.66	947.70	948.74	949.26
686+00	945.54	946.06	947.10	948.14	948.66
686+25	944.94	945.46	946.50	947.54	948.06
686+50	944.34	944.86	945.90	946.94	947.46
686+75	943.74	944.26	945.30	946.34	946.86
687+00	943.14	943.66	944.70	945.74	946.26
687+25	942.54	943.06	944.10	945.14	945.66
687+50	941.94	942.46	943.50	944.54	945.06
687+75	941.34	941.86	942.90	943.94	944.46
688+00	940.74	941.26	942.30	943.34	943.86
688+25	940.14	940.66	941.70	942.74	943.26
688+50	939.54	940.06	941.10	942.14	942.66
688+75	938.94	939.46	940.50	941.54	942.06
689+00	938.34	938.86	939.90	940.94	941.46
689+25	937.74	938.26	939.30	940.34	940.86
689+50	937.14	937.66	938.70	939.74	940.26
689+75	936.54	937.06	938.10	939.14	939.66
690+00	935.94	936.46	937.50	938.54	939.06
690+25	935.35	935.87	936.91	937.95	938.47
690+50	934.80	935.32	936.36	937.40	937.92
690+75	934.27	934.73	935.83	936.87	937.39
691+00	933.77	934.29	935.33	936.37	936.89
691+25	933.30	933.82	934.86	935.90	936.42
691+50	932.85	933.37	934.41	935.45	935.97
691+75	932.44	932.96	934.00	935.04	935.56
692+00	932.05	932.57	933.61	934.65	935.17
692+25	931.69	932.21	933.25	934.29	934.81
692+50	931.36	931.88	932.92	933.96	934.48
692+75	931.06	931.58	932.62	933.66	934.18
693+00	930.79	931.31	932.35	933.39	933.91
693+25	930.54	931.06	932.10	933.14	933.66
693+50	930.33	930.85	931.89	932.93	933.45
693+75	930.14	930.66	931.70	932.74	933.26
694+00	929.98	930.50	931.54	932.58	933.10
694+25	929.85	930.37	931.41	932.45	932.97
694+50	929.75	930.27	931.31	932.35	932.87
694+75	929.67	930.19	931.23	932.27	932.79
695+00	929.63	930.15	931.19	932.23	932.75
695+25	929.61	930.13	931.17	932.21	932.78
695+50	929.62	930.14	931.18	932.22	932.74
695+75	929.66	930.18	931.22	932.26	932.78
696+00	929.73	930.25	931.29	932.33	932.85
696+25	929.83	930.35	931.39	932.43	932.95
696+50	929.95	930.47	931.51	932.55	933.07
696+75	930.11	930.63	931.67	932.71	933.23
697+00	930.25	930.81	931.85	932.89	933.41
697+25	930.50	931.02	932.06	933.10	933.62
697+50	930.74	931.26	932.30	933.34	933.86
697+75	931.00	931.52	932.56	933.60	934.12
698+00	931.30	931.82	932.86	933.90	934.42
698+25	931.61	932.13	933.17	934.21	934.73
698+50	931.92	932.44	933.48	934.52	935.04
698+75	932.23	932.75	933.79	934.83	935.35
699+00	932.54	933.06	934.10	935.14	935.66
699+25	932.85	933.37	934.41	935.45	935.97
699+50	933.16	933.68	934.72	935.76	936.28

SUPERELEVATION TABLE
CURVE Nº 1 (CONTINUED)

STATION	LEFT LANE		PROFILE GRADE	RIGHT LANE	
	LEFT EDGE	CROWN		CROWN	RIGHT EDGE
699+75	933.47	933.99	935.03	936.07	936.59
700+00	933.78	934.30	935.34	936.38	936.90
700+25	934.09	934.61	935.65	936.69	937.21
700+50	934.40	934.92	935.96	937.00	937.52
700+75	934.71	935.23	936.27	937.31	937.83
701+00	935.02	935.54	936.58	937.62	938.14
701+25	935.33	935.85	936.89	937.93	938.45
701+50	935.64	936.16	937.20	938.24	938.76
701+75	935.95	936.47	937.51	938.55	939.07
702+00	936.26	936.78	937.82	938.86	939.38
702+25	936.57	937.09	938.13	939.17	939.69
702+50	936.88	937.40	938.44	939.48	940.00
702+75	937.19	937.71	938.75	939.79	940.31
703+00	937.50	938.02	939.06	940.10	940.62
703+25	937.81	938.33	939.37	940.41	940.93
703+50	938.12	938.64	939.68	940.72	941.24
703+75	938.43	938.95	939.99	941.03	941.55
704+00	938.74	939.26	940.30	941.34	941.86
704+25	939.05	939.57	940.61	941.65	942.17
704+50	939.36	939.88	940.92	941.96	942.48
704+75	939.67	940.19	941.23	942.27	942.79
705+00	939.98	940.50	941.54	942.58	943.10
705+25	940.29	940.81	941.85	942.89	943.41
705+50	940.60	941.12	942.16	943.20	943.72
705+75	940.91	941.43	942.47	943.51	944.03
706+00	941.22	941.74	942.78	943.82	944.34
706+25	941.53	942.05	943.09	944.13	944.65
706+50	941.84	942.36	943.40	944.44	944.96
706+75	942.15	942.67	943.71	944.75	945.27
707+00	942.46	942.98	944.02	945.06	945.58
707+25	942.77	943.29	944.33	945.37	945.89
707+50	943.08	943.60	944.64	945.68	946.20
707+75	943.39	943.91	944.95	945.99	946.51
708+00	943.70	944.22	945.26	946.30	946.82
708+25	944.01	944.53	945.57	946.61	947.13
708+50	944.32	944.84	945.88	946.92	947.44
708+75	944.63	945.15	946.19	947.23	947.75
709+00	944.94	945.46	946.50	947.54	948.06
709+25	945.25	945.77	946.81	947.85	948.37
709+50	945.56	946.08	947.12	948.16	948.68
709+75	945.87	946.39	947.43	948.47	948.99
710+00	946.15	946.70	947.74	948.78	949.28
710+11.37	946.35	946.84	947.88	948.92	949.40
710+25	946.57	947.05	948.05	949.05	949.53
710+50	946.99	947.45	948.36	949.27	949.73
710+75	947.43	947.84	948.67	949.50	949.91
711+00	947.86	948.23	948.98	949.73	950.10
711+25	948.30	948.63	949.29	949.95	950.28
711+50	948.73	949.02	949.60	950.18	950.47
711+75	949.17	949.41	949.91	950.41	950.65
712+00	949.60	949.81	950.22	950.63	950.84
712+11.37	949.80	949.99	950.36	950.74	950.92
712+25	950.04	950.22	950.53	950.81	951.06
712+50	950.47	950.66	950.84	951.22	951.31
712+75	950.91	951.09	951.15	951.58	951.55
712+86.37	951.10	951.25	951.25	951.67	951.67
713+00	951.31	951.49	951.46	951.84	951.82
713+25	951.68	951.87	951.77	952.15	952.10
713+50	952.05	952.24	952.08	952.46	952.38
713+75	952.42	952.61	952.39	952.77	952.65
714+00	952.80	952.98	952.70	953.08	952.93
714+25	953.17	953.36	953.01	953.39	953.21
714+36.37	953.34	953.53	953.15	953.53	953.34

SUPERELEVATION TABLE
CURVE Nº. 1

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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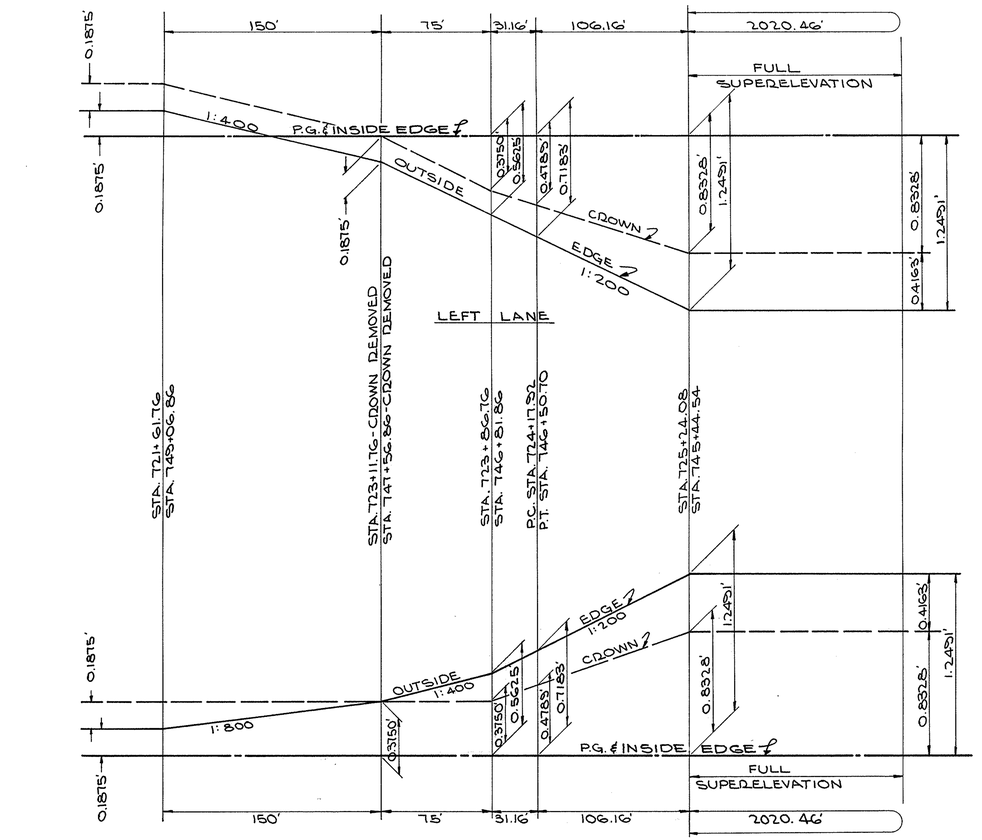
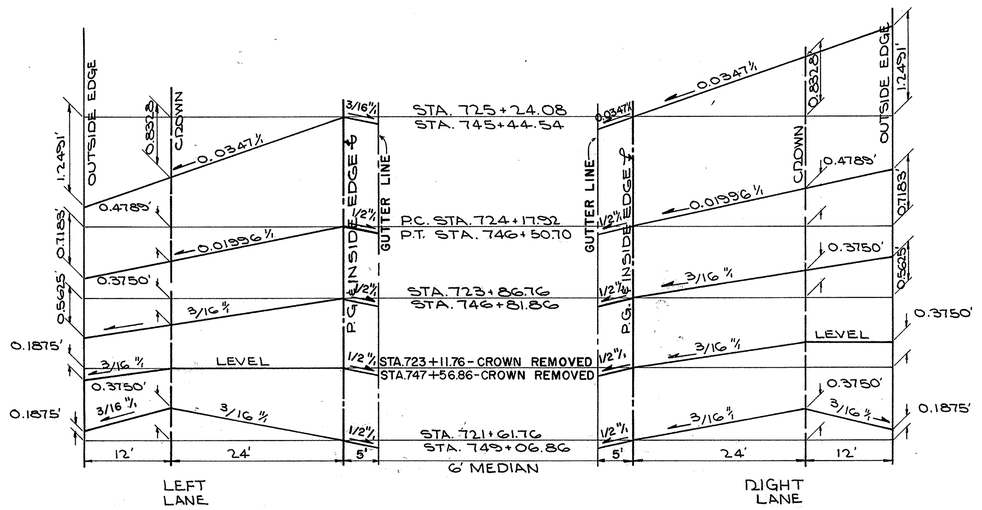




STATION	LEFT LANE		PROFILE GRADE	RIGHT LANE	
	CROWN	LEFT LANE		CROWN	RIGHT LANE
721+61.76	962.53	962.34	962.15	962.53	962.34
721+75	962.65	962.46	962.31	962.68	962.51
722+00	962.90	962.71	962.62	963.00	962.86
722+25	963.15	962.96	962.93	963.31	963.20
722+50	963.39	963.21	963.24	963.62	963.54
722+75	963.64	963.45	963.55	963.93	963.88
723+00	963.89	963.70	963.86	964.24	964.22
723+11.76	964.01	963.82	964.01	964.39	964.39
723+25	964.10	963.92	964.17	964.55	964.58
723+50	964.29	964.10	964.48	964.86	964.95
723+75	964.47	964.28	964.79	965.17	965.32
723+86.76	964.56	964.38	964.94	965.32	965.50
724+00	964.68	964.47	965.10	965.52	965.73
724+17.92	964.84	964.60	965.32	965.80	966.04
724+25	964.91	964.66	965.41	965.91	966.16
724+50	965.13	964.84	965.72	966.31	966.60
724+75	965.36	965.03	966.03	966.70	967.03
725+00	965.55	965.21	966.34	967.05	967.47
725+24.08	965.81	965.39	966.64	967.47	967.89
725+25	965.82	965.40	966.65	967.48	967.90
725+50	966.13	965.71	966.96	967.79	968.21
725+75	966.44	966.02	967.27	968.10	968.52
726+00	966.75	966.33	967.58	968.41	968.83
726+25	967.06	966.64	967.89	968.72	969.14
726+50	967.37	966.95	968.20	969.03	969.45
726+75	967.68	967.26	968.51	969.34	969.76
727+00	967.99	967.57	968.82	969.65	970.07
727+25	968.30	967.88	969.13	969.96	970.38
727+50	968.61	968.19	969.44	970.27	970.69
727+75	968.92	968.50	969.75	970.58	971.00
728+00	969.23	968.81	970.06	970.89	971.31
728+25	969.54	969.12	970.37	971.20	971.62
728+50	969.85	969.43	970.68	971.51	971.93
728+75	970.16	969.74	970.99	971.82	972.24
729+00	970.47	970.05	971.30	972.13	972.55
729+25	970.78	970.36	971.61	972.44	972.86
729+50	971.09	970.67	971.92	972.75	973.17
729+75	971.40	970.98	972.23	973.06	973.48
730+00	971.71	971.29	972.54	973.37	973.79
730+25	972.02	971.60	972.85	973.68	974.10
730+50	972.33	971.91	973.16	973.99	974.41
730+75	972.64	972.22	973.47	974.30	974.72
731+00	972.95	972.53	973.78	974.61	975.03
731+25	973.26	972.84	974.09	974.92	975.34
731+50	973.57	973.15	974.40	975.23	975.65
731+75	973.88	973.46	974.71	975.54	975.96
732+00	974.19	973.77	975.02	975.85	976.27
732+25	974.50	974.08	975.33	976.16	976.58
732+50	974.81	974.39	975.64	976.47	976.89
732+75	975.12	974.70	975.95	976.78	977.20
733+00	975.43	975.01	976.26	977.09	977.51
733+25	975.74	975.32	976.57	977.40	977.82
733+50	976.05	975.63	976.88	977.71	978.13
733+75	976.36	975.94	977.19	978.02	978.44
734+00	976.67	976.25	977.50	978.33	978.75
734+25	976.98	976.56	977.81	978.64	979.06
734+50	977.29	976.87	978.12	978.95	979.37
734+75	977.60	977.18	978.43	979.26	979.68
735+00	977.91	977.49	978.74	979.57	979.99
735+25	978.22	977.80	979.05	979.88	980.30

STATION	LEFT LANE		PROFILE GRADE	RIGHT LANE	
	CROWN	LEFT LANE		CROWN	RIGHT LANE
735+50	978.53	978.11	979.36	980.19	980.61
735+75	978.84	978.42	979.67	980.50	980.92
736+00	979.15	978.73	979.98	980.81	981.23
736+25	979.46	979.04	980.29	981.12	981.54
736+50	979.77	979.35	980.60	981.43	981.85
736+75	980.08	979.66	980.91	981.74	982.16
737+00	980.39	979.97	981.22	982.05	982.47
737+25	980.70	980.28	981.53	982.36	982.78
737+50	981.01	980.59	981.84	982.67	983.09
737+75	981.32	980.90	982.15	982.98	983.40
738+00	981.63	981.21	982.46	983.29	983.71
738+25	981.94	981.52	982.77	983.60	984.02
738+50	982.25	981.83	983.08	983.91	984.33
738+75	982.56	982.14	983.39	984.22	984.64
739+00	982.85	982.43	983.68	984.51	984.93
739+25	983.12	982.70	983.95	984.78	985.20
739+50	983.37	982.95	984.20	985.03	985.45
739+75	983.60	983.18	984.43	985.26	985.68
740+00	983.81	983.39	984.64	985.47	985.89
740+25	984.00	983.58	984.83	985.66	986.08
740+50	984.17	983.75	985.00	985.83	986.25
740+75	984.32	983.90	985.15	985.98	986.40
741+00	984.45	984.03	985.28	986.11	986.53
741+25	984.56	984.14	985.39	986.22	986.64
741+50	984.65	984.23	985.48	986.31	986.73
741+75	984.72	984.30	985.55	986.38	986.80
742+00	984.77	984.35	985.60	986.43	986.85
742+25	984.80	984.38	985.63	986.46	986.88
742+50	984.81	984.38	985.64	986.47	986.89
742+75	984.79	984.37	985.62	986.45	986.87
743+00	984.76	984.34	985.59	986.42	986.84
743+25	984.71	984.29	985.54	986.37	986.79
743+50	984.63	984.21	985.46	986.29	986.71
743+75	984.55	984.13	985.38	986.21	986.63
744+00	984.43	984.01	985.26	986.09	986.51
744+25	984.30	983.85	985.13	985.96	986.38
744+50	984.15	983.73	984.98	985.81	986.23
744+75	983.97	983.55	984.80	985.63	986.05
745+00	983.77	983.35	984.60	985.43	985.85
745+25	983.55	983.13	984.38	985.21	985.63
745+44.54	983.37	982.95	984.20	985.03	985.45
745+50	983.34	982.93	984.15	984.96	985.37
745+75	983.17	982.80	983.90	984.63	985.00
746+00	982.97	982.65	983.62	984.27	984.55
746+25	982.77	982.48	983.33	983.89	984.18
746+50	982.53	982.23	983.01	983.49	983.73
746+50.70	982.52	982.28	983.00	983.48	983.72
746+75	982.27	982.07	982.67	983.07	983.27
746+81.86	982.20	982.02	982.58	982.96	983.14
747+00	982.04	981.85	982.32	982.70	982.84
747+25	981.78	981.63	981.94	982.32	982.38
747+50	981.51	981.32	981.54	981.92	981.93
747+56.86	981.43	981.24	981.43	981.81	981.81
747+75	981.17	980.98	981.12	981.50	981.47
748+00	980.79	980.60	980.68	981.06	981.00
748+25	980.39	980.20	980.22	980.60	980.51
748+50	979.98	979.80	979.75	980.13	980.01
748+75	979.55	979.36	979.25	979.63	979.48
749+00	979.11	978.92	978.75	979.13	978.95
749+06.86	978.99	978.80	978.61	978.99	978.80

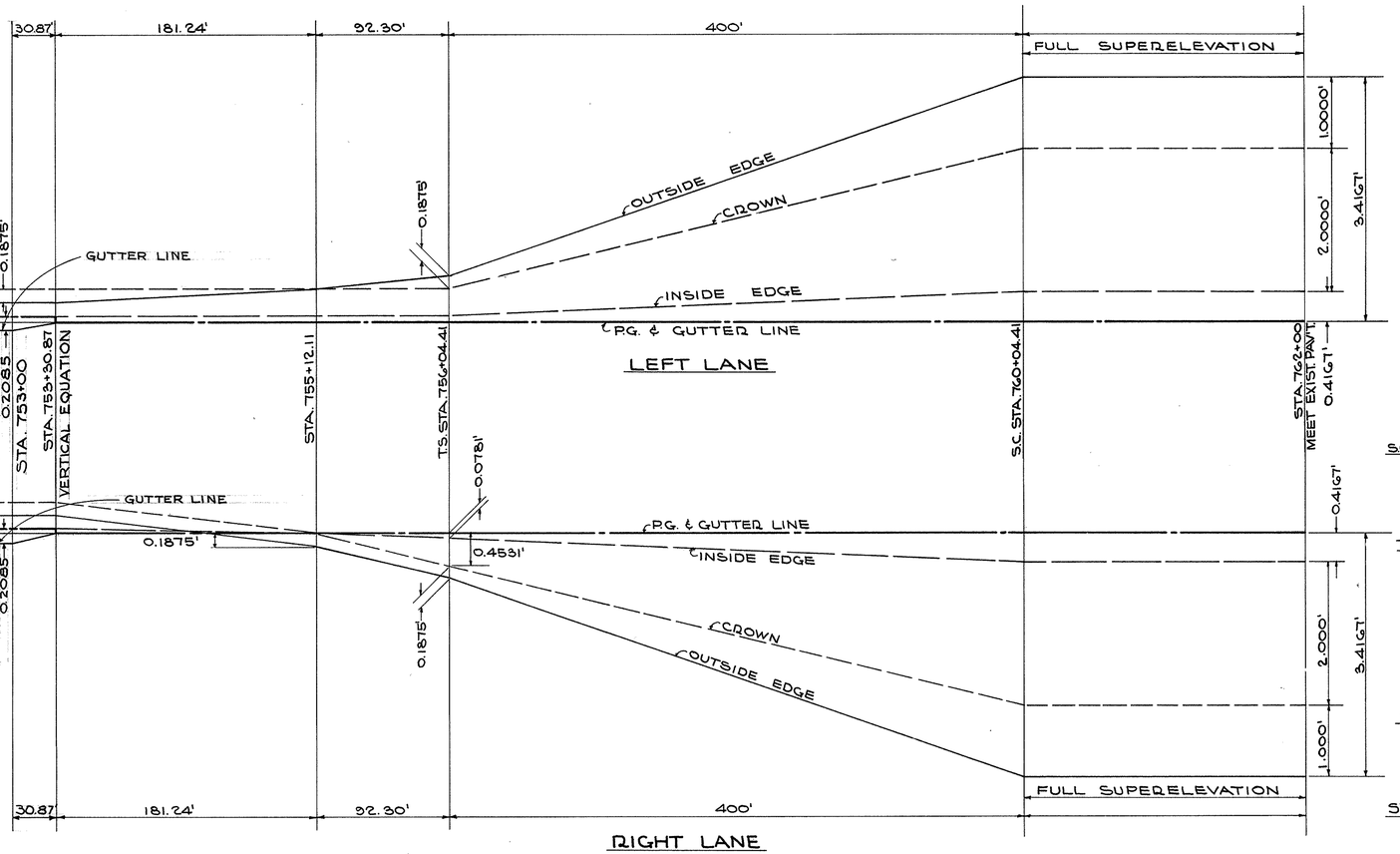
SUPERELEVATION TABLE
CURVE Nº 2

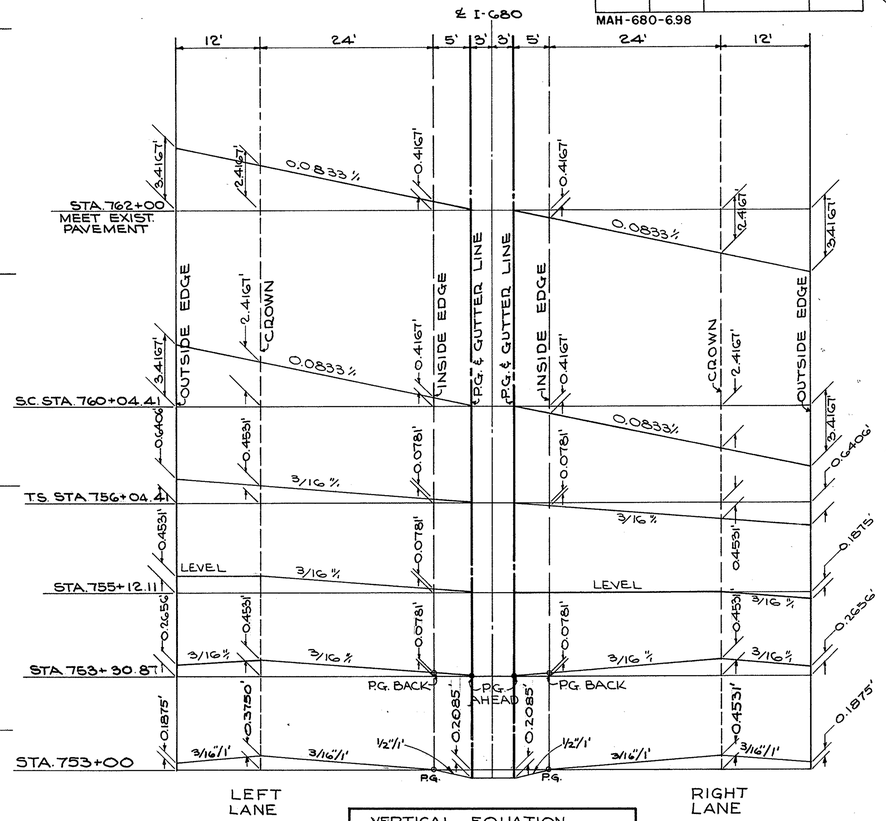
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

58
656





VERTICAL EQUATION
TRANSFER P.G. FROM 8' LT. & RT. OF ℄ (BACK) TO 3' LT. & RT. OF ℄ (AHEAD) AT STA. 753+30.87

SUPERELEVATION TABLE
CURVE Nº. 3

STATION	LEFT LANE			PROFILE GRADE	RIGHT LANE		
	OUTSIDE EDGE	CROWN	INSIDE EDGE		INSIDE EDGE	CROWN	OUTSIDE EDGE
				570.11 - BK. 570.03 AHD.			
753+30.87	970.30	970.48	970.11		970.11	970.48	970.30
753+50	969.94	970.10	969.73		969.72	970.06	969.87
753+75	969.46	969.60	969.23		969.21	969.45	969.31
754+00	968.99	969.10	968.73		968.70	968.93	968.74
754+25	968.51	968.60	968.23		968.19	968.37	968.18
754+50	968.04	968.10	967.73		967.68	967.81	967.62
754+75	967.56	967.60	967.23		967.17	967.24	967.06
755+00	967.08	967.09	966.72		966.65	966.67	966.48
755+12.11	966.85	966.85	966.48		966.40	966.40	966.21
755+25	966.62	966.59	966.22		966.14	966.08	965.89
755+50	966.20	966.12	965.75		965.67	965.48	965.30
755+75	965.84	965.71	965.34		965.26	965.21	964.95
756+00	965.54	965.36	964.99		964.91	964.84	964.48
756+04.41	965.45	965.30	964.93		964.85	964.77	964.40
756+25	965.40	965.17	964.72		964.62	964.52	964.01
756+50	965.34	965.06	964.50		964.38	964.26	963.70
756+75	965.34	965.01	964.35		964.21	964.07	963.41
757+00	965.40	965.02	964.26		964.10	963.94	963.18
757+25	965.52	965.09	964.22		964.04	963.86	962.99
757+50	965.69	965.21	964.24		964.04	963.84	962.87

STATION	LEFT LANE			PROFILE GRADE	RIGHT LANE		
	OUTSIDE EDGE	CROWN	INSIDE EDGE		INSIDE EDGE	CROWN	OUTSIDE EDGE
757+75	965.93	965.40	964.33	964.11	963.89	962.82	962.25
758+00	966.23	965.64	964.47	964.23	963.99	962.82	962.23
758+25	966.59	965.96	964.68	964.42	964.16	962.88	962.25
758+50	967.00	966.31	964.94	964.65	964.36	962.99	962.30
758+75	967.47	966.73	965.26	964.95	964.64	963.17	962.43
759+00	968.01	967.22	965.65	965.32	964.99	963.42	962.63
759+25	968.61	967.77	966.09	965.74	965.39	963.71	962.87
759+50	969.25	968.36	966.58	966.21	965.84	964.06	963.17
759+75	969.97	969.03	967.15	966.76	966.37	964.49	963.55
760+00	970.75	969.76	967.77	967.36	966.95	964.96	963.97
760+04.41	970.89	969.89	967.89	967.47	967.05	965.05	964.05
760+25	971.44	970.44	968.44	968.02	967.60	965.60	964.60
760+50	972.15	971.15	969.15	968.73	968.31	966.31	965.31
760+75	972.93	971.93	969.93	969.51	969.09	967.09	966.09
761+00	973.74	972.74	970.74	970.32	969.90	967.90	966.90
761+25	974.54	973.54	971.54	971.12	970.70	968.70	967.70
761+50	975.35	974.35	972.35	971.93	971.51	969.51	968.51
761+75	976.16	975.16	973.16	972.74	972.32	970.32	969.32
762+00	976.97	975.97	973.97	973.55	973.13	971.13	970.13

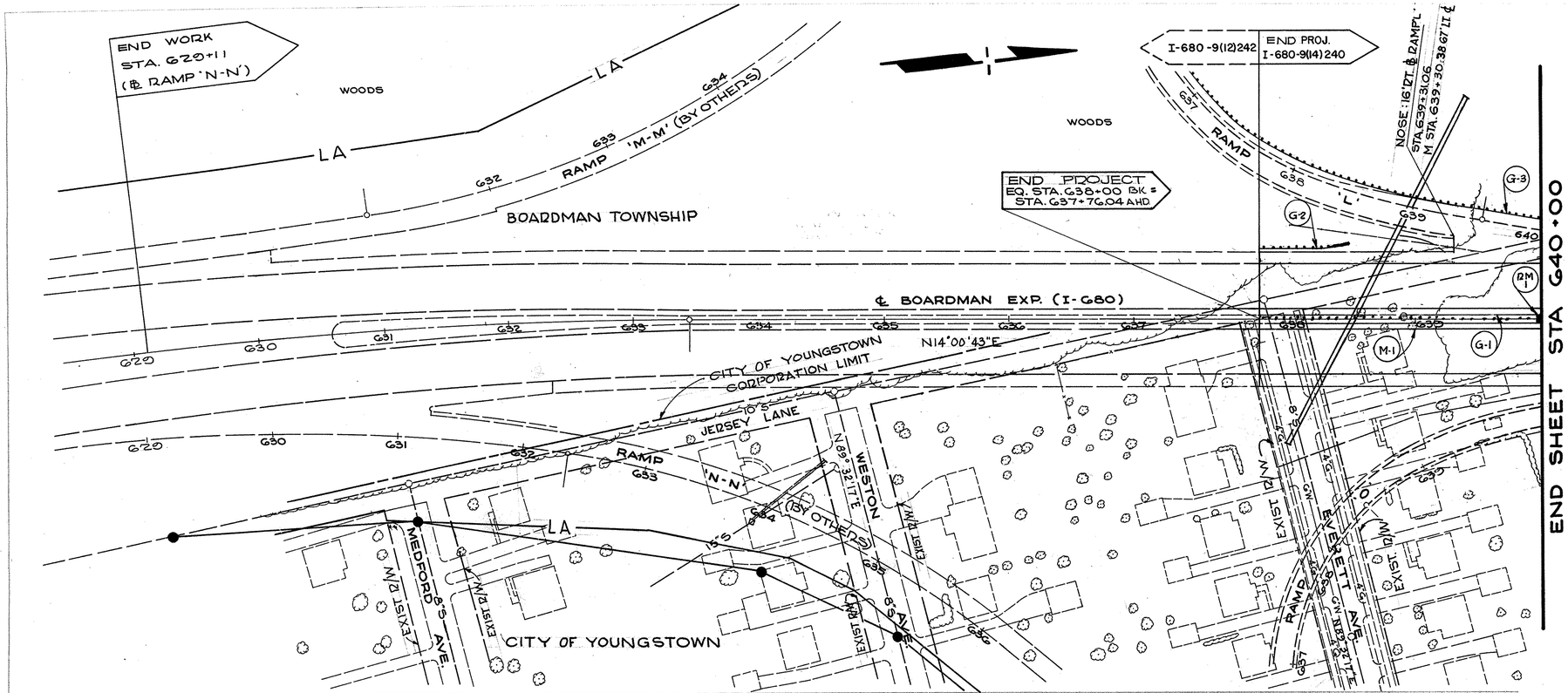
SUPERELEVATION TABLE
CURVE Nº. 3

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

59
656

MAH-680-6.98



ITEM 604 ~ MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	640+00	℄	1
		TOTAL	1

ITEM 606 ~ GUARD RAIL LINEAR FEET					
CODE	LOCATION FROM	LOCATION TO	TYPE 5	TYPE 5 BARRIER DESIGN	Anchor Assembly
G-1	637+76.04	640+00		223.96	
G-2	637+76.04	638+50	48.96		1
G-3	639+30.38	640+00	69.62		
		TOTAL	118.58	223.96	1

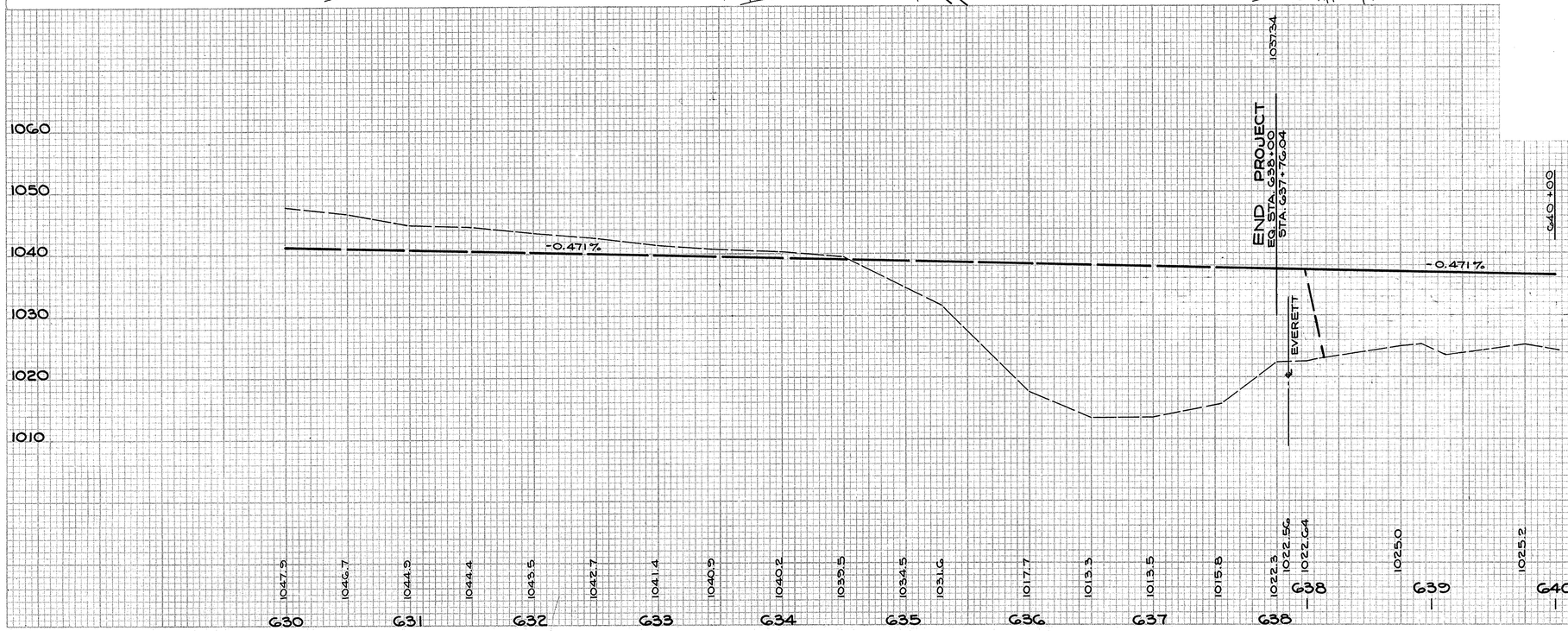
203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
169	16,686	1938

BM # 43
TOP WEST BOLT ON FIRE HYDRANT ON SOUTHEAST CORNER OF LEMOYNE AND WESTON
ELEV. = 1050.170

BM # 47
TOP 'S' MARK - FIRE HYDRANT IN FRONT OF 1501 MEDFORD AVE. (SOUTH SIDE OF STREET AT CORPERATION LINE)
ELEV. = 1051.86

FOR RAMP 'L' & 'O' DETAILS, SEE SHT. № 153
FOR INTERCHANGE GRADING, SEE SHT. № 157
FOR DRAINAGE DETAILS, SEE SHT. № 335 TO 337

ITEM 612 CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQ. YDS
M-1	637+76.04	640+00	149.30
	SHEET TOTAL		149.30



RRC 8/27/68
PWD 8/30/68

PLAN & PROFILE SHEET
STA. 630+00 TO STA. 640+00

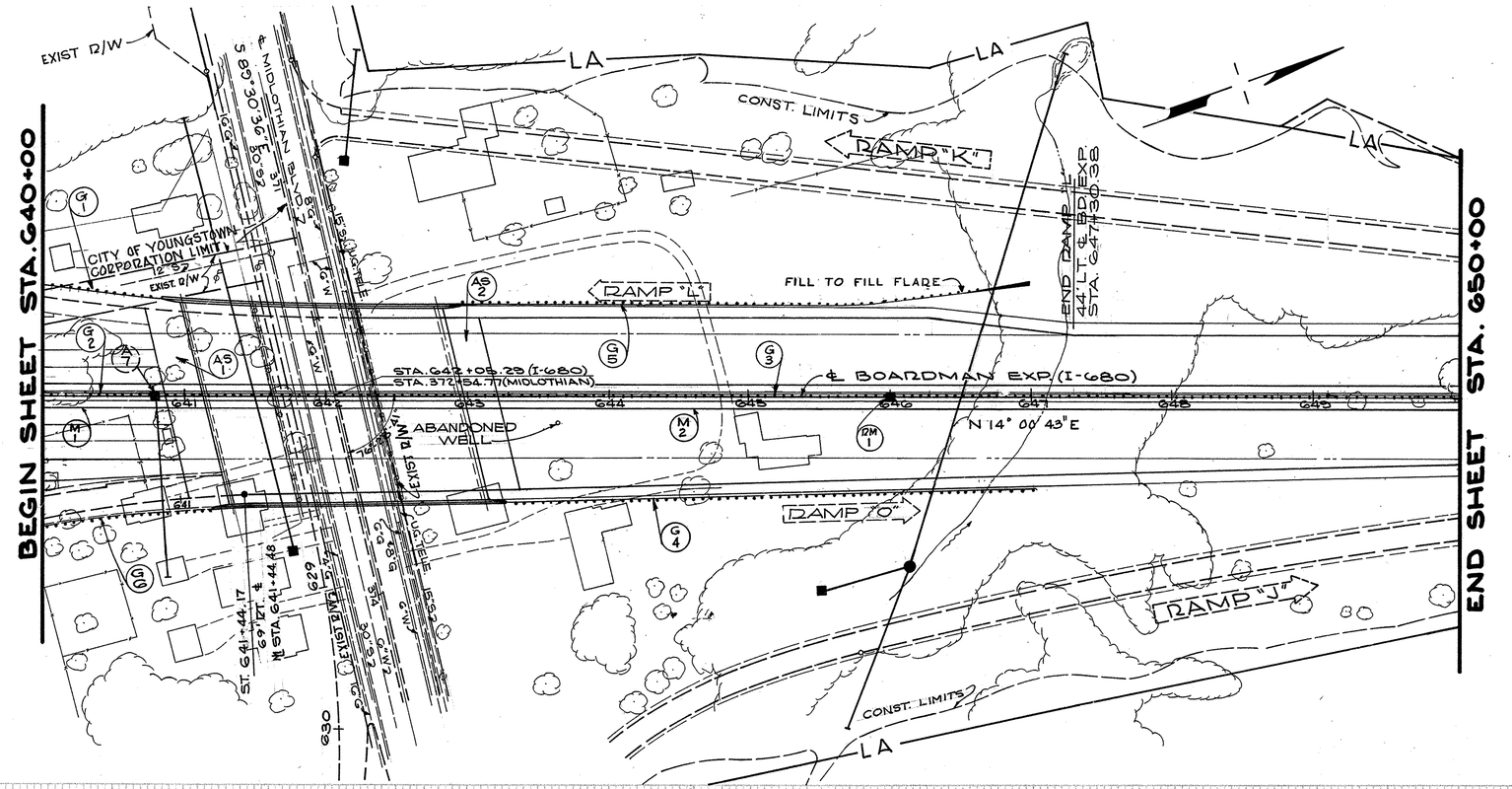
MAY 25 1971

PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

60
656



ITEM 611 APPROACH SLABS (T=13")				
CODE	STATION FROM	STATION TO	S.Y.	WIDTH
AS-1	640+85.90	641+10.90	362.19	VARIES
AS-2	642+96.02	643+21.02	336.29	VARIES
TOTAL			698.48	

604 — MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	646+00	℄	1
TOTAL			1

606 — GUARD RAIL LINEAR FEET							
CODE	LOCATION FROM	LOCATION TO	TYPE 5	TYPE E BARRIER DESIGN	Bridge Term. Assembly: Each Type E	Type F	ANCHOR ASSEMBLY EACH
G-1	640+00	BRIDGE	81				
G-2	640+00	641+10.90		110.90			
G-3	642+96.02	650+00		703.98			
G-4	BRIDGE	647+03	350			1	1
G-5	BRIDGE	646+95.5	375		1		1
G-6	640+00	BRIDGE	118.0		1		
TOTAL			924	814.88	2	2	2

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
1125	121,797	11,511

BM#39
TOP OF RR SPIKE IN EAST ROOT OF 42" MAPLE 150' LT. OF ℄ AT STA. 649+00 ON THE SOUTH BANK OF A GULLY APPROXIMATELY 700' NORTH MIDLOTHIAN BLVD.
ELEV. = 1009.215

BM-USGS Nº -154-1950
STA. 378+94 - 32.5' RT ℄ MIDLOTHIAN BLVD.
ELEV. = 1035.602

ITEM 612 CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQ. YRDS.
M-1	640+00	640+85.90	57.55
M-2	643+21.02	650+00	452.62
TOTAL			510.17

BRIDGE MAH-680-0324

TYPE: CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 49'-3" x 82'-0" x 49'-3" ℄ OF BEARINGS
ROADWAY WIDTH: AVERAGE ROADWAY WIDTH 137.3' ℄ OF PARAPETS INCLUDING MEDIAN AND 1' SAFETY CURBS.
LOAD FREQUENCY: HS 20-44 AND FOR AASHO ALTERNATE LOADING
SKEW: 13°31'19" RF.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 25' LONG AS-1-67
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE

FOR MIDLOTHIAN PLAN & PROFILES, SEE SHT. Nºs 143-145
FOR L & O DETAILS, SEE SHT. Nº 153
FOR RAMP K & J DETAILS, SEE SHT. Nº 154
FOR INTERCHANGE GRADING, SEE SHT. Nº 157 & 158
FOR DRAINAGE DETAILS, SEE SHT. Nº 136 & 137

RRC 8/20/68
PWD 8/30/68

PLAN & PROFILE SHEET
STA. 640+00 TO STA. 650+00

MAY 25 1971

K&E PLATE 4, CROSS SECTION
KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

61
656

MAH-680-6.98

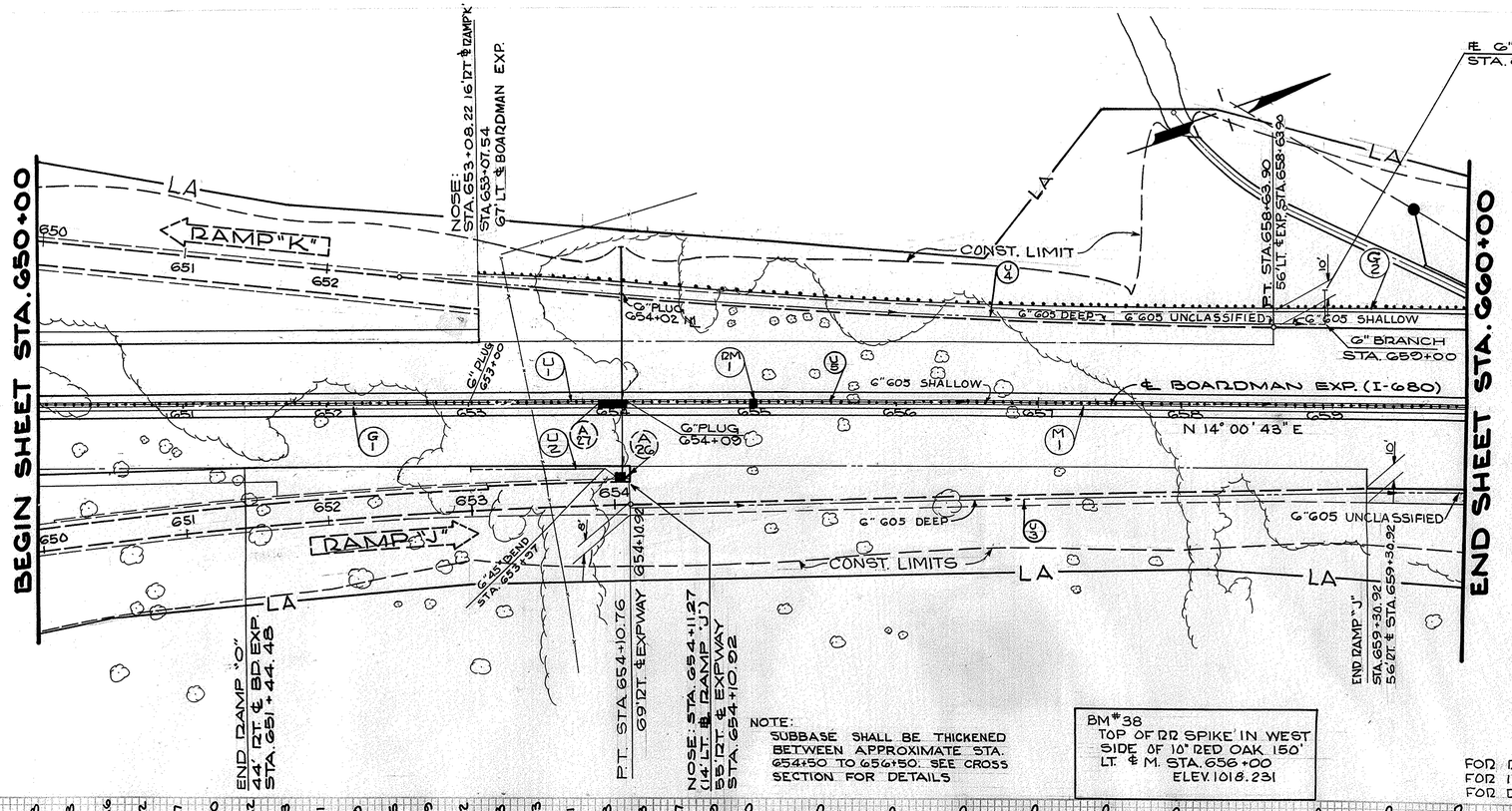
ITEM 605 - UNDERDRAINS			LINEAR FEET					603-CONDUITS LINEAR FEET	
CODE	LOCATION FROM	LOCATION TO	BENDS & BRANCHES 6"	SHALLOW PIPE 6"	SHALLOW PIPE 707.06, 707.12 6"	DEEP PIPE 6"	UNCLASS PIPE 6"	TYPE F 6"	TYPE B-B 6"
U-1	653+00	654+05		95				5	
U-2	653+00	654+09		90				10	
U-3	654+1092	660+00						10	
U-4	654+02	650+00	1			505	65		
U-5	654+09	660+00				373	127	10	
				501					
	TOTAL			785		968	192	30	

604 ~ MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	655+00	℄	1
		TOTAL	1

606 ~ GUARD RAIL LINEAR FEET					
CODE	LOCATION FROM	LOCATION TO	TYPE 5		TYPE 5 BARRIER DESIGN
G-1	650+00	660+00			1000
G-2	653+0822(K)	660+00	691.78		
	TOTAL		691.78		1000

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
12,514	60,534	12,237

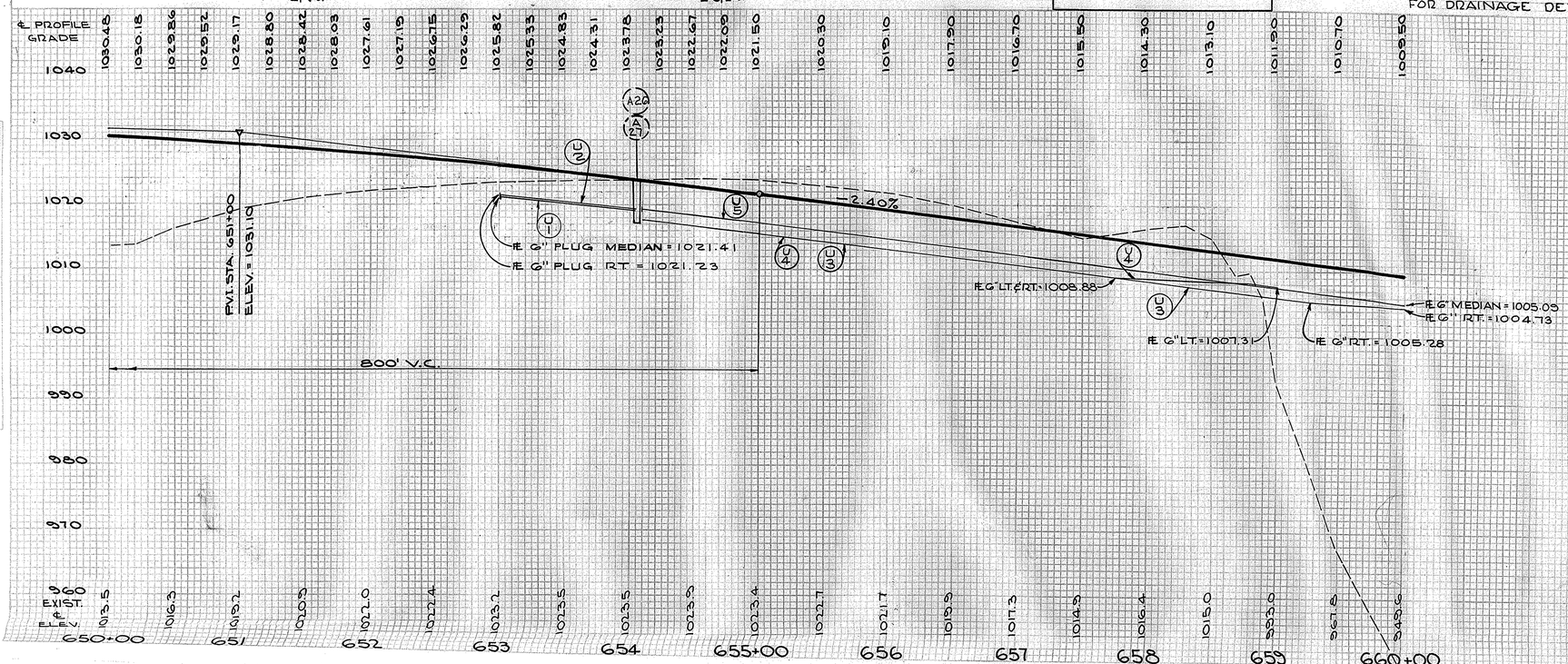
ITEM 612 CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQ. YARDS
M-1	650+00	660+00	667.0
	TOTAL		667.0



NOTE:
SUBBASE SHALL BE THICKENED BETWEEN APPROXIMATE STA. 654+50 TO 656+50. SEE CROSS SECTION FOR DETAILS

BM #38
TOP OF RR SPIKE IN WEST SIDE OF 10" RED OAK 150' LT. ℄ M. STA. 656+00
ELEV. 1018.231

FOR RAMP K & J DETAILS SEE SHT. № 154
FOR INTERCHANGE GRADING SEE SHT. № 188
FOR DRAINAGE DETAILS, SEE SHT. № 330



RRC 8/27/68
PWD 8/30/68

PLAN & PROFILE SHEET STA. 650+00 TO STA. 660+00

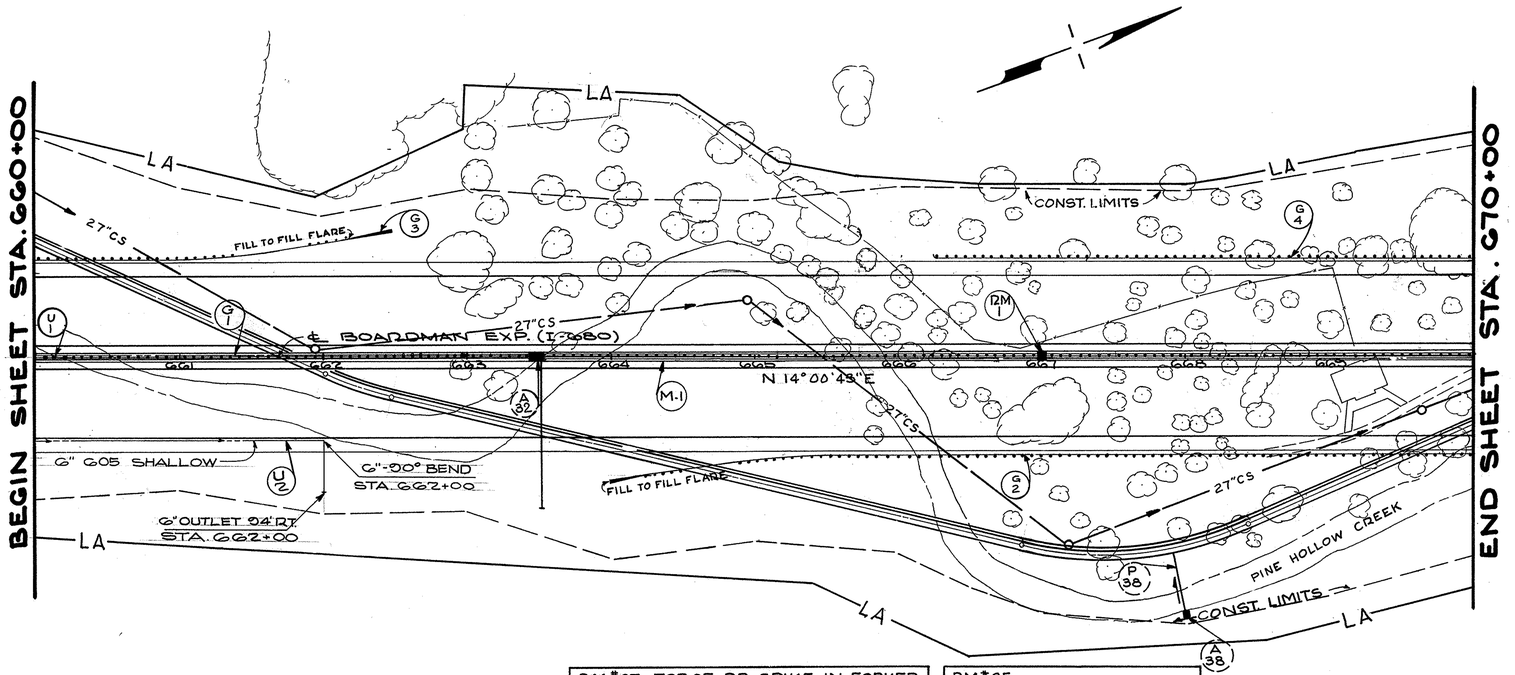
K&E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

62
656

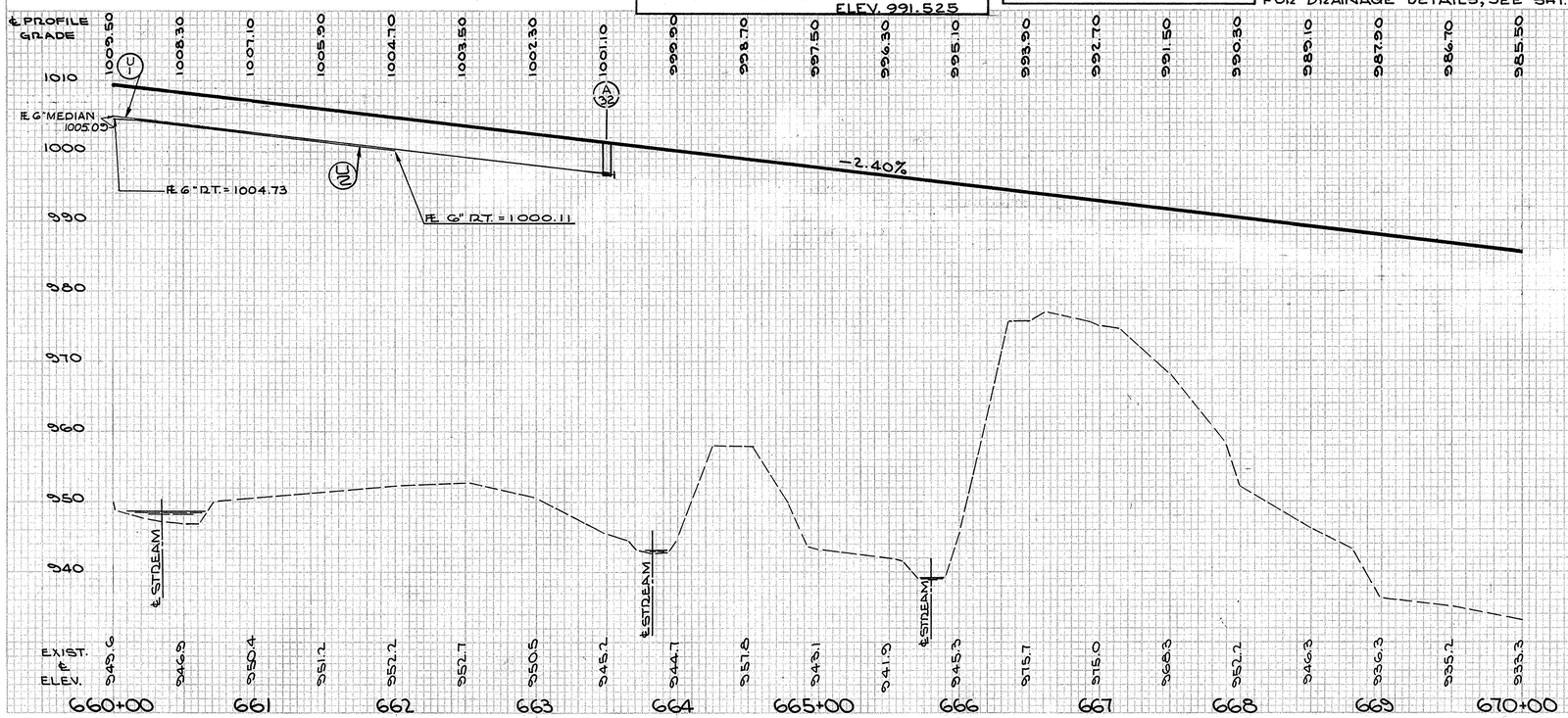
MAH-680-6.98



BM #37 - TOP OF RR SPIKE IN FORKED BEECH TREE ON EAST HILL OF PARK, AT FIRST BEND IN VALLEY SOUTH OF PARK OFFICE 2' ABOVE GROUND, 65' RT. OF ℄ AT STA. 664+50
ELEV. 991.525

BM #35
TOP OF P.K. NAIL IN TOP OF 8" STUMP 18' NORTH OF PARK OFFICE
ELEV. = 937.276

FOR DRAINAGE DETAILS, SEE SHT. No 340



ITEM 605-UNDERDRAINS LINEAR FEET				603-CONDUITS
CODE	LOCATION FROM	LOCATION TO	SHALLOW PIPE 6"	LINEAR FEET TYPE F 6"
U-1	660+00	663+50	340	10
U-2	660+00	662+00	222	10
	TOTAL		562	20

604 ~ MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	667+00	℄	1
		TOTAL	1

606 ~ GUARD RAIL LINEAR FEET						ANCHOR ASSEMBLY EACH
CODE	LOCATION FROM	LOCATION TO	TYPE 5	TYPE 5 BARRIER DESIGN		
G-1	660+00	670+00		1000		
G-2	664+00	670+00	575			1
G-3	660+00	662+50	225			1
G-4	665+25	670+00	350			1
		TOTAL	1450	1000		3

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
2612	310,428	20,445

ITEM ~ 612 CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQ YARDS
M-1	660+00	670+00	667.00
		TOTAL	667.00

RRC 8/29/68
PWD 8/30/68

PLAN & PROFILE SHEET
STA. 660+00 TO STA. 670+00

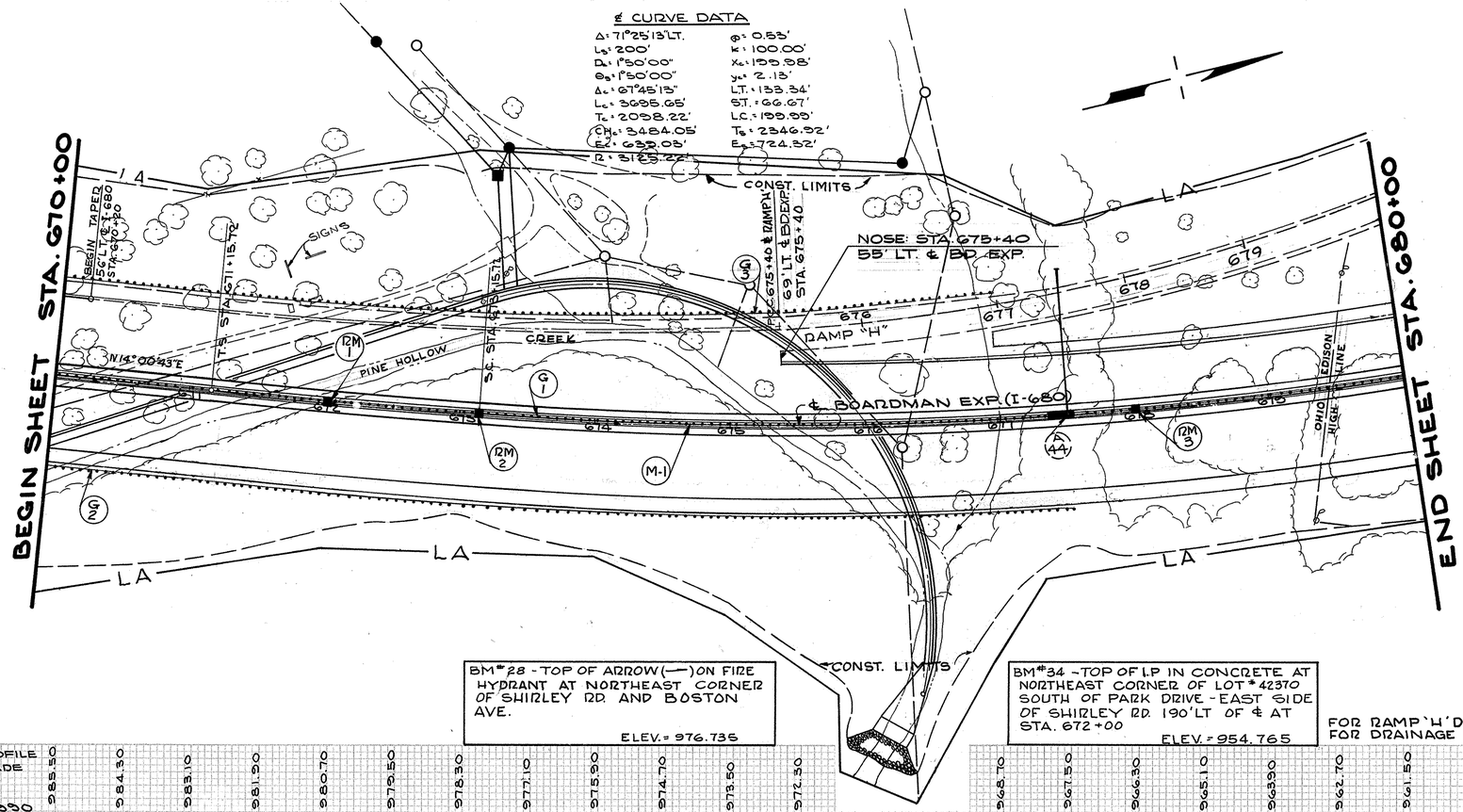
MAY 25 1971

K+E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

63
656

MAH-680-6.98



BM#28 - TOP OF ARROW (—) ON FIRE HYDRANT AT NORTHEAST CORNER OF SHIRLEY RD. AND BOSTON AVE.
ELEV. = 976.735

BM#34 - TOP OF I.P. IN CONCRETE AT NORTHEAST CORNER OF LOT #42370 SOUTH OF PARK DRIVE - EAST SIDE OF SHIRLEY RD. 190' LT OF ℄ AT STA. 672+00
ELEV. = 954.765

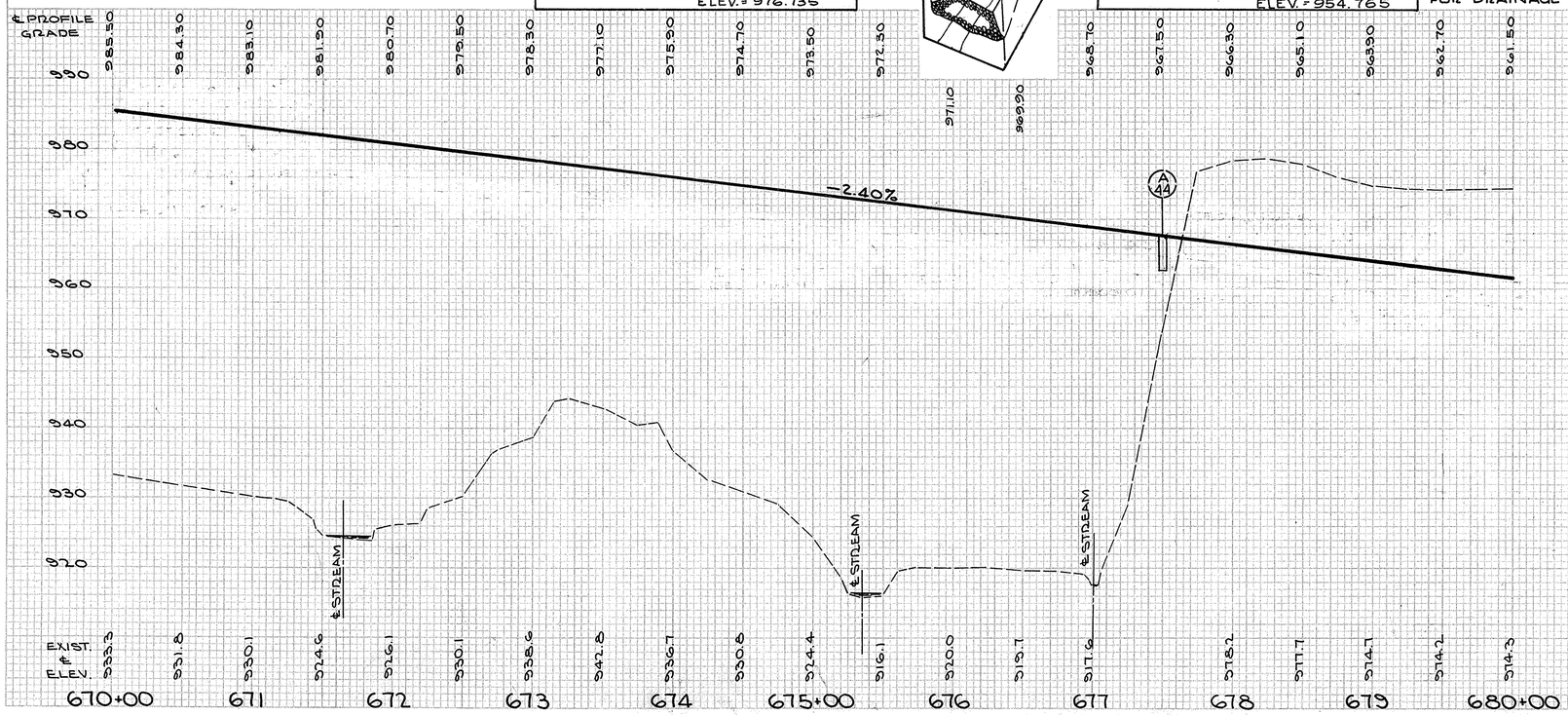
FOR RAMP 'H' DETAILS, SEE SHT. No 108 & 109
FOR DRAINAGE DETAILS, SEE SHT. No 341

604 ~ MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	671+82.39	℄ R/W	1
RM-2	673+15.72	℄ CONST.	1
RM-4	678+00	℄ CONST.	1
		TOTAL	3

606 ~ GUARD RAIL LINEAR FEET					
CODE	LOCATION FROM	LOCATION TO	TYPE 5	ANCHOR ASSEMBLY EACH	TYPE 5 BARRIER DESIGN
G-1	670+00	680+00			1000
G-2	670+00	677+50	725	1	
G-3	670+00	675+40			
		TOTAL	1265	1	1000

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
17,624	254,271	18,449

ITEM 612 CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQ. YARDS
M-1	670+00	680+00	667.00
		TOTAL	667.00



RRC 8/29/68
PWD 8/30/68

PLAN & PROFILE SHEET
STA. 670+00 TO STA. 680+00

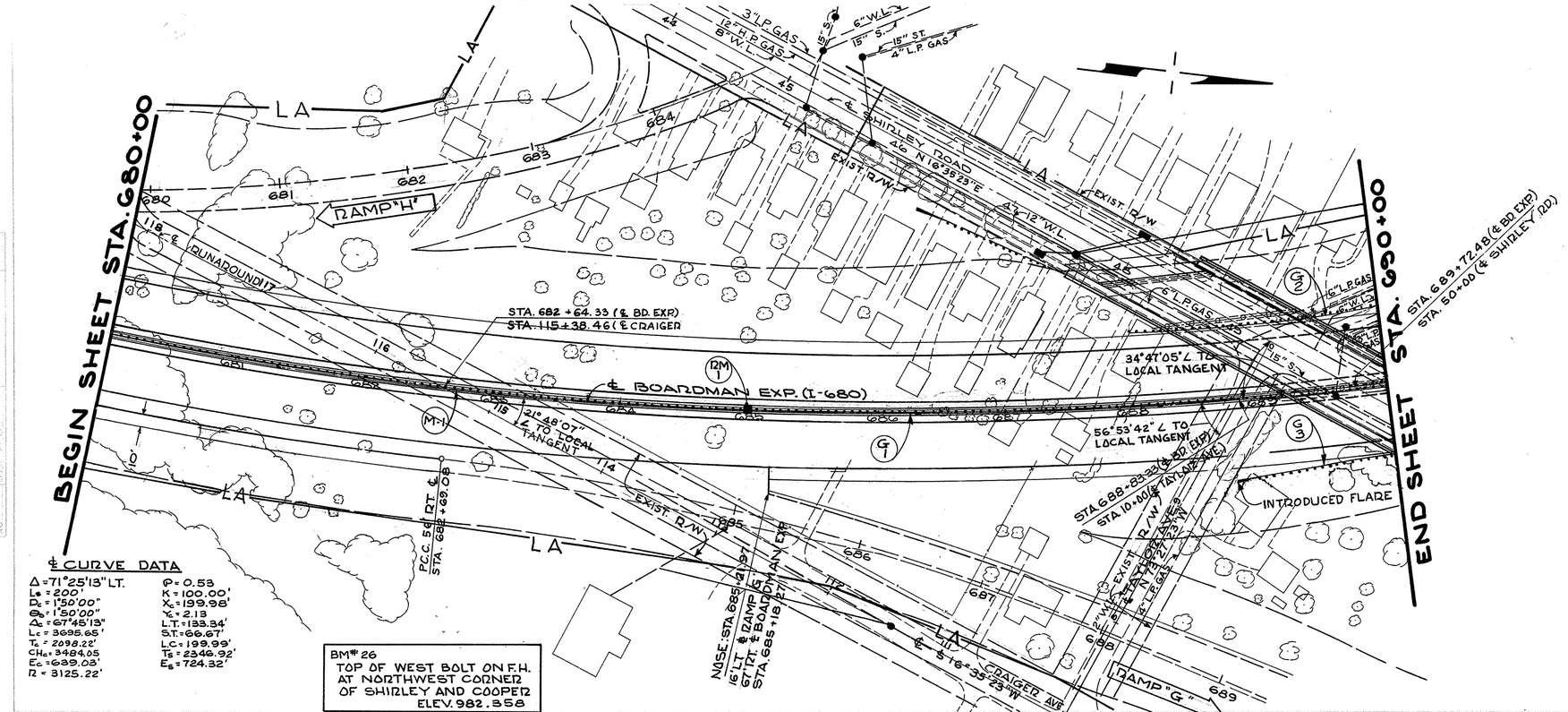
MAY 25 1971

K+E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

64
656

MAH-680-6.58



℄ CURVE DATA

Δ = 71°25'13" LT.	P = 0.53
L_s = 200'	K = 100.00'
D_c = 1°50'00"	X_c = 199.98'
e_s = 1'50'00"	Y_c = 2.13
Δ_c = 67°45'13"	L.T. = 133.34'
L_c = 3695.65'	S.T. = 66.67'
T_s = 2098.22'	L.C. = 199.99'
CH_s = 3484.05	T_s = 2346.92'
E_c = 639.03'	E_s = 724.32'
R = 3125.22'	

BM # 26
TOP OF WEST BOLT ON F.H. AT NORTHWEST CORNER OF SHIRLEY AND COOPER
ELEV. 982.358

604 — MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
12M-1	685+00	℄	1
		TOTAL	1

606 — GUARD RAIL LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	TYPE 5	TYPE 5 BARRIER DESIGN		ANCHOR ASSEMBLY EACH
G-1	680+00	690+00		1000		
G-2	688+07	690+00	193			1
G-3	688+86	690+00	114			1
	TOTAL		307	1000		2

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
150,254	0	7300

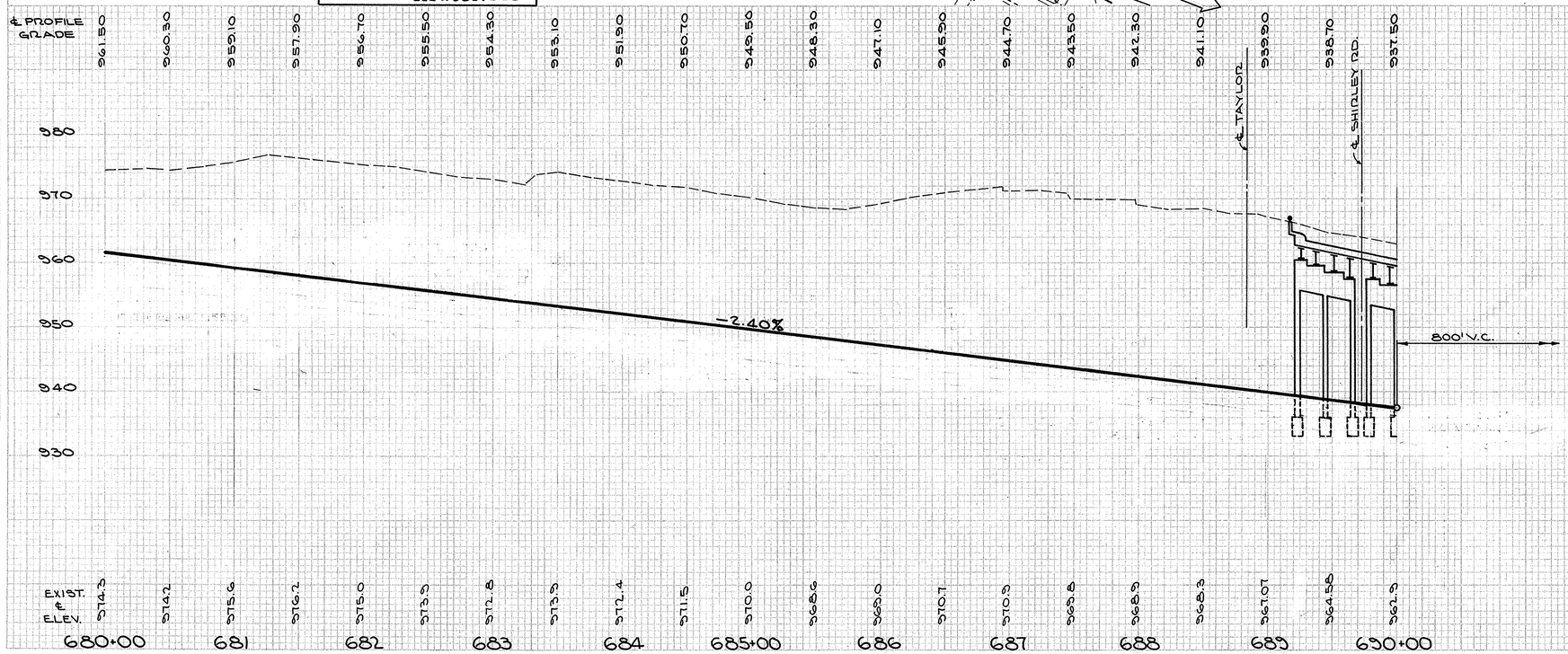
BRIDGE MAH-680-0835

TYPE: CONTINUOUS STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 65'-11" x 109'-10" x 104'-1" x 62'-5" ℄ BEARINGS
ROADWAY WIDTH: 44'-0" ℄ OF 6'-0" SIDEWALKS ON BOTH SIDES
LOAD FREQUENCY: HS 20-44
SKEW: 55°-12'-55" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 30'-0" LONG AS-1-67
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE

ITEM 612 CONCRETE MEDIAN

CODE	STATION FROM	STATION TO	SQ. YARDS
M-1	680+00	690+00	667.00
	TOTAL		667.00

FOR MEDIAN GUARD RAIL TREATMENT AT BRIDGE PIER SEE SHT. № 333
FOR DRAINAGE DETAILS, SEE SHT. № 344
FOR RAMP "G" & "H" DETAILS, SEE SHT. № 108 & 100
FOR SHIRLEY RD. DETAILS, SEE SHT. № 187 TO 191
FOR WATER LINE DETAILS, SEE SHT. № 378
FOR DETAILS OF SHIRLEY RD. RUNAROUND, SEE SHT. № 213



RRC 8/25/68
PWD 8/30/68

PLAN & PROFILE SHEET STA. 680+00 TO STA. 690+00

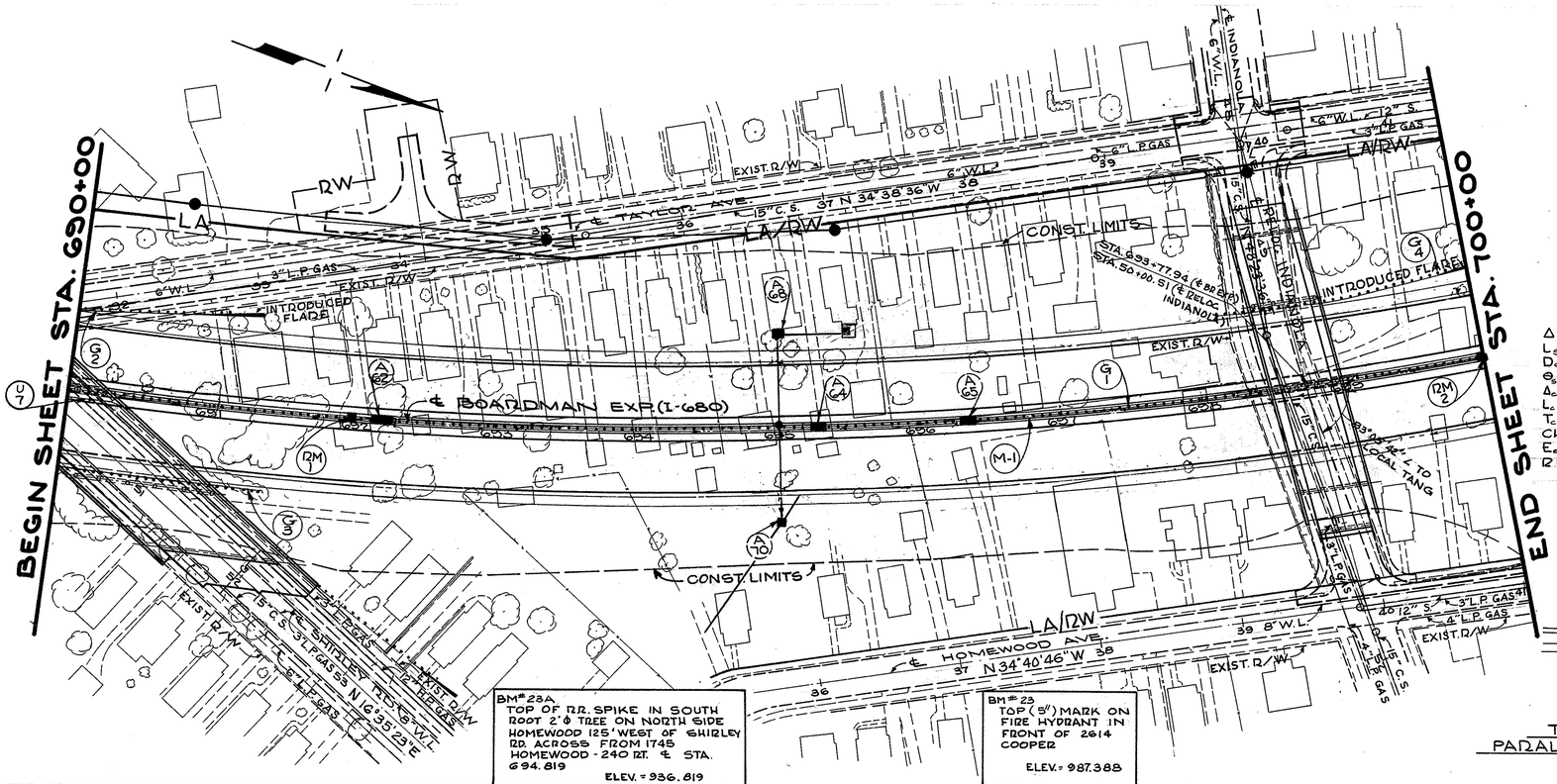
MAY 25 1971

FINAL SURVEY
ORIGINAL SURVEY
K-E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

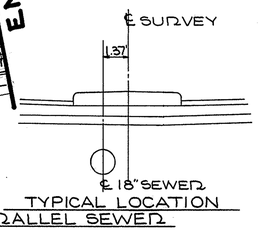
MAH-680-6.98

65
656



℄ CURVE DATA

Δ = 71°25'13" LT.	P = 0.53'
L_S = 200'	K = 100.00'
D_C = 1°50'00"	X_C = 199.98
Θ_S = 1°50'00"	Y_C = 2.13'
Δ_C = 67°45'13"	L.T. = 133.34
L_C = 3695.65'	S.T. = 66.67
T_C = 2098.22	L.C. = 199.99
CH_C = 3484.05	T.S. = 2346.92
E_C = 639.03'	E_S = 724.32
R = 3125.22'	



TYPICAL LOCATION
PARALLEL SEWER

604 ~ MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	692+00	℄	1
RM-2	700+00	℄	1
	SHEET TOTAL		2

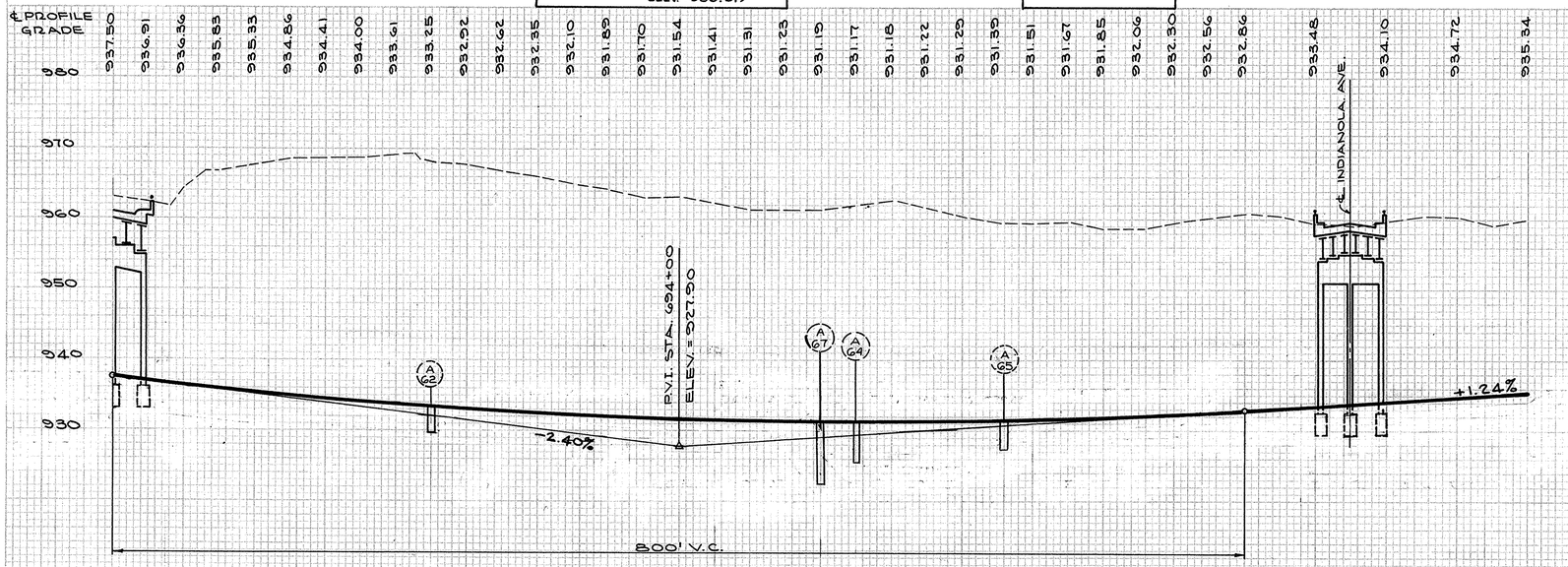
606 ~ GUARD RAIL LINEAR FT.

CODE	LOCATION FROM	LOCATION TO	TYPE 5	TYPE & BARRIER DESIGN		ANCHOR ASSEMBLY EACH.
G-1	690+00	700+00		1000		
G-2	690+00	671+32	107'			1
G-3	690+00	691+36	111'			1
G-4	698+10	700+00	150'			1
	TOTAL		368'	1000		3

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
203,734	0	13,189

ITEM 612 CONCRETE MEDIAN

CODE	STATION FROM	STATION TO	SQ. YARDS
M-1	690+00	700+00	667.00
	TOTAL		667.00



BRIDGE MAH-680-0817

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 49'-9" x 60'-3" x 75'-0" ℄ BEARINGS
ROADWAY WIDTH: 30'-0" ℄ OF 6'-0" WALKS ON BOTH SIDES
LOAD FREQUENCY: HS 20-44
SKEW: 6°-54'-18" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 20'-0" LONG SPECIAL
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE

FOR TAYLOR AVE. TURNAROUND DETAILS, SEE SHT. Nº 228
FOR INDIANOLA AVE. DETAILS, SEE SHT. Nº 233
FOR SHIRLEY RD. DETAILS, SEE SHT. Nº 187 TO 191
FOR DRAINAGE DETAILS, SEE SHT. Nº 345
FOR MEDIAN GUARD RAIL TREATMENT AT BRIDGE PIER, SEE SHT. Nº 333
FOR WATER LINE DETAILS, SEE SHT. Nº 370

RRC 8/29/68
PUD 8/30/68

PLAN & PROFILE SHEET STA. 690+00 TO STA. 700+00

PLATE 4, CROSS SECTION
KEUFFEL & ESSER CO.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

66
656

BEGIN SHEET STA. 700+00

END SHEET STA. 710+00

EXIST. R/W

12" S

15" S

3" L.P. GAS

LA/12W

TAYLOR AVE

N 34°38'36" W

CONST. LIMITS

EXIST. R/W

℄ BOARDMAN EXP. (I-680)

NOSE STA. 707+00
54' RT. ℄ BD. EXP.

RAMP 'X'

CONST. LIMITS

UNPRODUCED FLARE

HOMEWOOD AVE

N 34°40'46" W

EXIST. R/W

2" L.P. GAS

℄ HARMON AVE

15" S

EXIST. R/W

3" L.P. GAS

6" L.P. GAS

℄ CAMPBELL ST

N 48°14'46" E

EXIST. R/W

LA/12W

15" S

6" L.P. GAS

70+48.80 P.T.
To LOCAL TANG. ℄

STA. 709+79.20
54.0' RT. ℄ BD. EXP.

50 EXP.

℄ CAMPBELL

SHADY RUN

EXIST. R/W

EXIST. R/W

EXIST. 8" L.P. GAS

EXIST. 8" L.P. GAS

℄ CURVE DATA

Δ = 71°25'13" LT.	P = 0.53'		
L_s = 200.00'	K = 100.00'		
D_c = 1°50'00"	X_c = 199.98'		
Θ = 1°50'00"	Y_c = 2.13'		
L_c = 6745'13"	L.T. = 133.34		
L_c = 3695.65'	S.T. = 66.67'		
T_c = 2098.22	L.C. = 199.99'		
CH_c = 3484.05	T_s = 2346.92'		
E_c = 639.09	E_s = 724.32'		
R = 3125.22'			

BM# 22A
TOP OF R.R. SPIKE IN WEST ROOT OF 3 RD MAPLE ON NORTHWEST CORNER OF HARMON AND HOMEWOOD
215'RT. STA. 702+60
ELEV. 943.436

FOR BRIDGE DETAILS, SEE SHT. Nº 408
FOR RAMP 'X' DETAILS, SEE SHT. Nº 230
FOR TAYLOR AVE DETAILS, SEE SHT. Nº 231
FOR DRAINAGE DETAILS, SEE SHT. Nº 348
FOR WATER LINE DETAILS, SEE SHT. Nº 380

℄ PROFILE GRADE

	935.34	935.96	936.58	937.20	937.82	938.44	939.06	939.68	940.30	940.92	941.54	942.16	942.78	943.40	944.02	944.64	945.26	945.88	946.50	947.12	947.74

970
960
950
940
930
920
910

+1.24%

STONE WALL

℄ CAMPBELL

183.88
℄ BRIDGE LIMITS

EXIST. ℄ ELEV.	960.1	961.0	960.0	958.3	956.8	956.7	955.8	960.1	953.6	961.5	961.5	960.6	963.9	962.5	961.8	959.7	960.6	957.3	957.8	957.6	914.1

700+00 701 702 703 704 705+00 706 707 708 709 710+00

604 ~ MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	700+00	℄	1
TOTAL			1

606 ~ GUARD RAIL LIN. FT.

CODE	LOCATION FROM	LOCATION TO		TYPE 5	TYPE 5 BARRIER	ANCHOR ASSEMBLY EACH		Type E BRIDGE TERMINAL ASSEMBLY EACH
G-1	700+00	703+42.40			942.40			
G-2	707+42	BRIDGE		125		1		1
G-3	700+00	700+10				1		
G-4	41+01 (℄ CAMPBELL)			25				
G-5	43+60 (℄ CAMPBELL)			37.5				
TOTAL				187.5	942.40	2		1

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
121,961	403	7854

ITEM 612 CONCRETE MEDIAN

CODE	STATION FROM	STATION TO	SQ. YDS.
M-1	700+00	702+22.40	615.24
TOTAL			615.24

ITEM 611 – APPROACH SLABS (T-12")

CODE	STATION FROM	STATION TO	WIDTH	SQ YDS
AS-1	703+22.40	703+42.40	VARIES	273.33
TOTAL				273.33

BRIDGE MAH-680-0794

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 56'-0" x 71'-0" x 52'-0" ℄ BEARINGS.
ROADWAY WIDTH: VARIES (SEE PLAN).
LOAD FREQUENCY: HS 20-44 & INTERSTATE ALTERNATE LOADING.
SKEW: VARIES AS SHOWN ON PLAN.
ALIGNMENT: 1°50'00" LT. & 200' SPIRAL.
SUPERELEVATION: VARIES (.0434'/' TO C.S., .0156'/' TO S.T.)
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: SPECIAL 20' LONG

ITEM 609 CONCRETE CURBS: TYPE G

CODE	LOCATION	STA.	SKEW	LIN. FT.
C-1	CAMPBELL	40+87	90° RT.	24.5
C-2	CAMPBELL	43+64	122° RT.	28.0
SHEET TOTAL				52.5

RRC 8/24/68
PUD 8/30/68

PLAN & PROFILE SHEET STA. 700+00 TO STA. 710+00

MAY 25 1971

PLATE 4, CROSS SECTION
KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

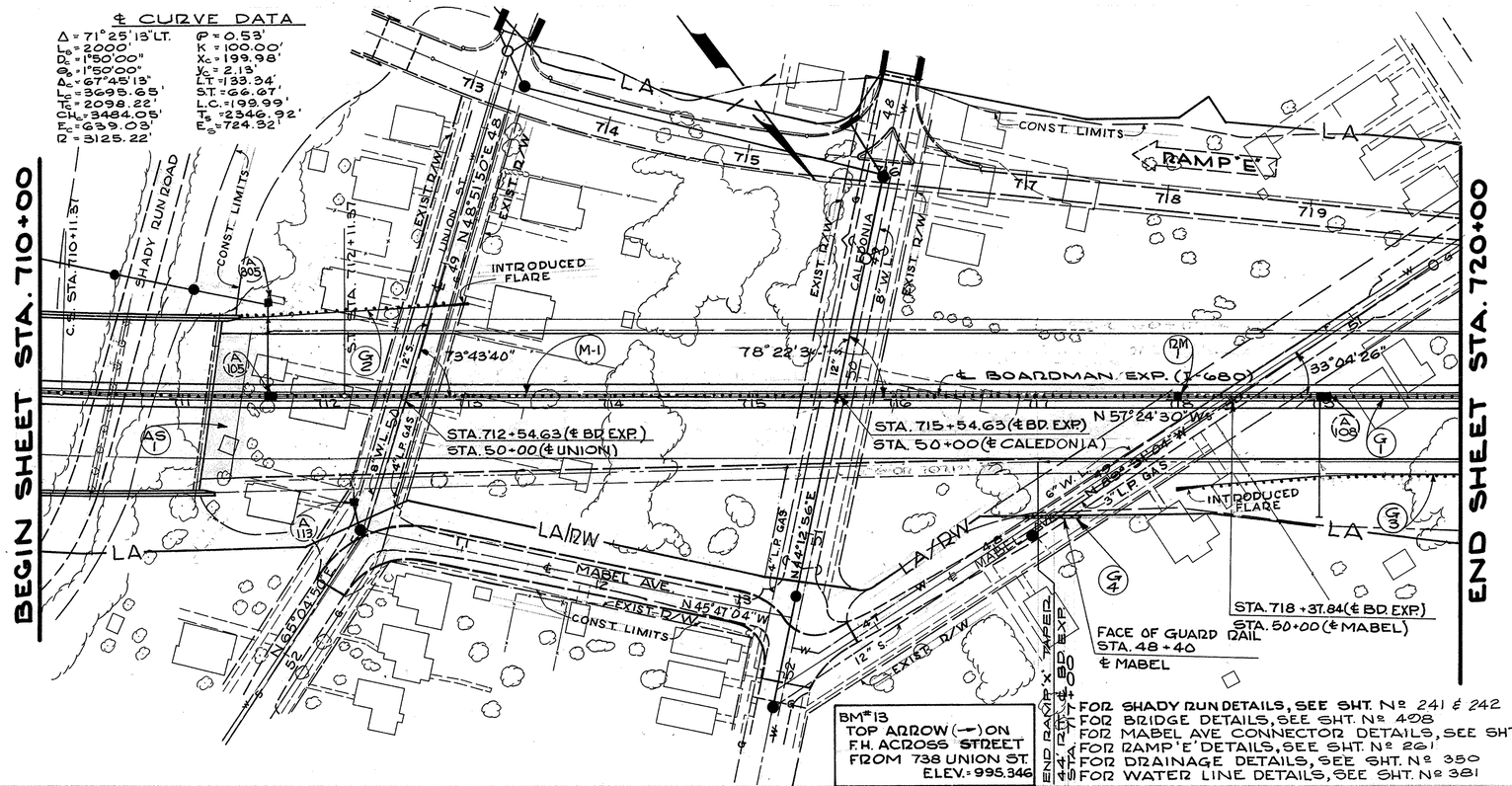
MAH-680-6.98

67
656

℄ CURVE DATA

Δ = 71°25'13" LT.
L_c = 2000'
D_c = 1°50'00"
R_c = 1°50'00"
P_c = 67°45'13"
L_T = 3695.65'
T_c = 2098.22'
CH$_c$ = 3484.05'
E_c = 639.03'
R = 3125.22'

P = 0.53'
K = 100.00'
X_c = 199.98'
Y_c = 2.13'
L.T. = 133.34'
S.T. = 66.67'
L.C. = 199.99'
T_s = 2346.92'
E_s = 724.52'



FOR SHADY RUN DETAILS, SEE SHT. Nº 241 & 242
FOR BRIDGE DETAILS, SEE SHT. Nº 408
FOR MABEL AVE CONNECTOR DETAILS, SEE SHT. Nº 288
FOR RAMP 'E' DETAILS, SEE SHT. Nº 261
FOR DRAINAGE DETAILS, SEE SHT. Nº 350
FOR WATER LINE DETAILS, SEE SHT. Nº 381

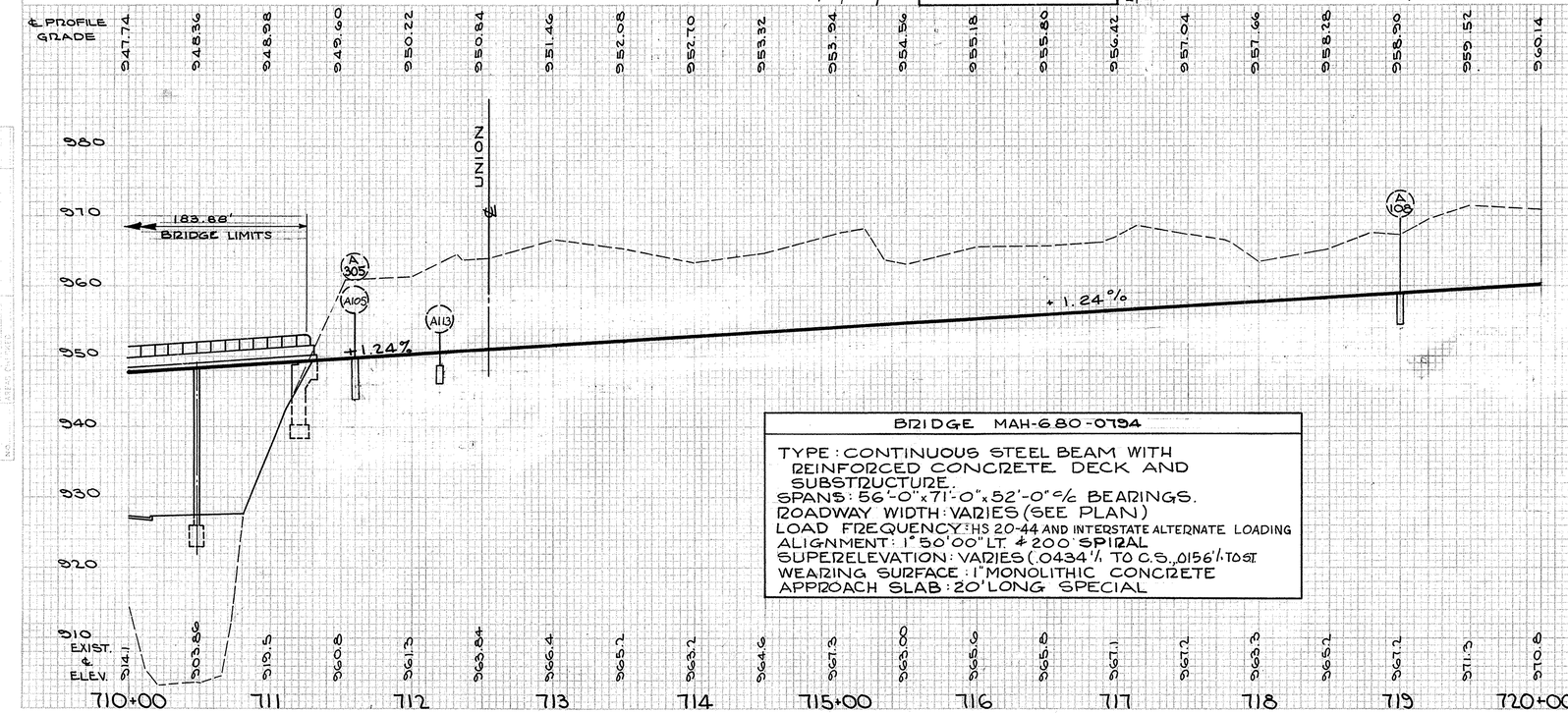
604 — MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	718+00	℄	1
TOTAL			1

606 — GUARD RAIL LIN. FT.					ANCHOR ASSEMBLY	BRIDGE TERMINAL ASSEMBLY
CODE	LOCATION FROM	LOCATION TO	TYPE 5	TYPE 5 BARRIER	EACH	EACH
G-1	711+26.28	720+00	-	873.72		
G-2	BRIDGE	718+00	125	-	/	1
G-3	718+00	720+00	175	-	/	
G-4	48+40 (MABEL)	SKEWED	37.5	-		
TOTAL			337.5	873.72	2	1

203	659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
59,530	487	5420

ITEM 611 - APPROACH SLABS (T-12)				
CODE	STATION FROM	STATION TO	WIDTH	SQ. YDS.
AS-1	711+26.28	711+46.28	VARIES	232.22
TOTAL				232.22

ITEM 612 CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQ. YARDS
M-1	711+46.28	720+00	560.43
TOTAL			560.43



BRIDGE MAH-680-0794

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 56'-0" x 71'-0" x 52'-0" ℄ BEARINGS.
ROADWAY WIDTH: VARIES (SEE PLAN)
LOAD FREQUENCY: HS 20-44 AND INTERSTATE ALTERNATE LOADING
ALIGNMENT: 1°50'00" LT. & 200' SPIRAL
SUPERELEVATION: VARIES (.0434 ft/ft TO C.S., .0156 ft/ft TOST
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 20' LONG SPECIAL

RRC 8/24/68
PWD 8/30/68

MAY 25 1971

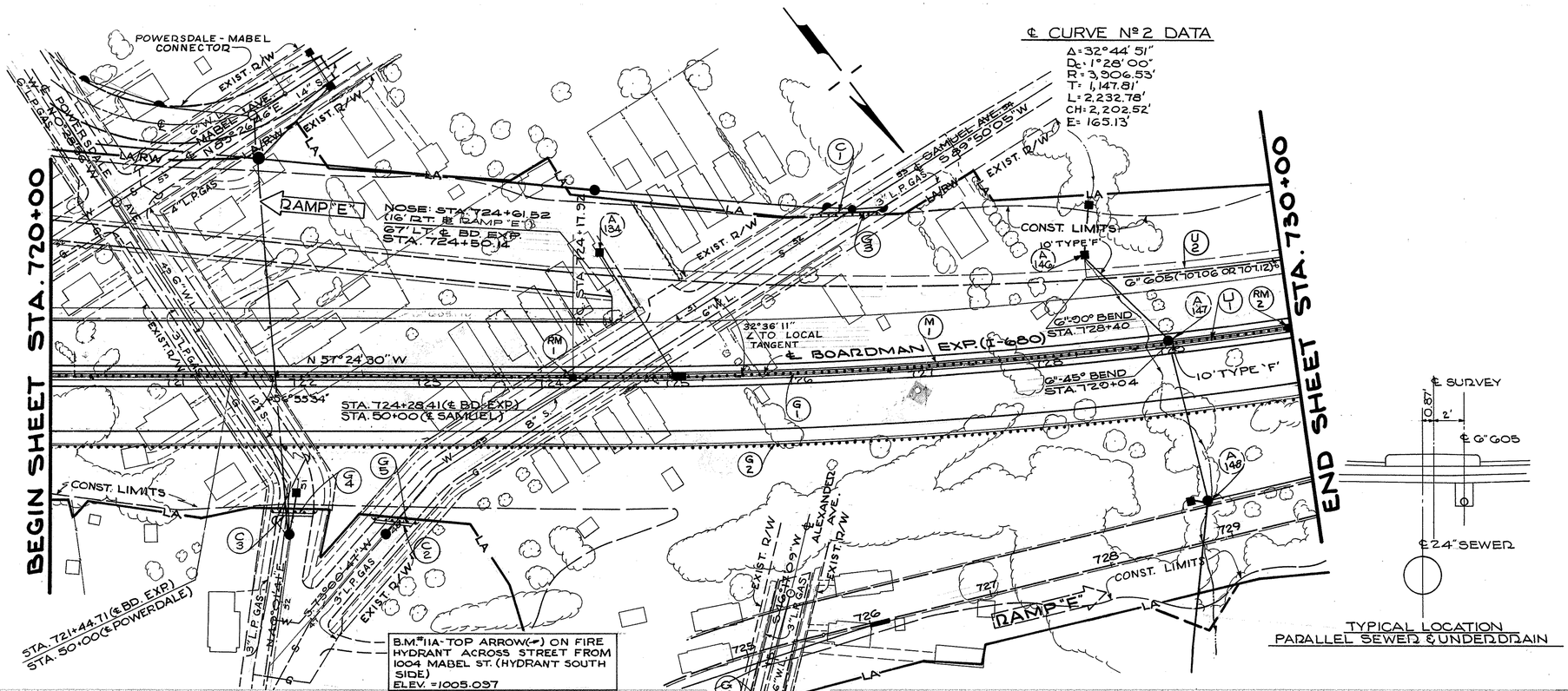
PLAN & PROFILE SHEET STA. 710+00 TO STA. 720+00

PLATE 4, CROSS SECTION
KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

68
656



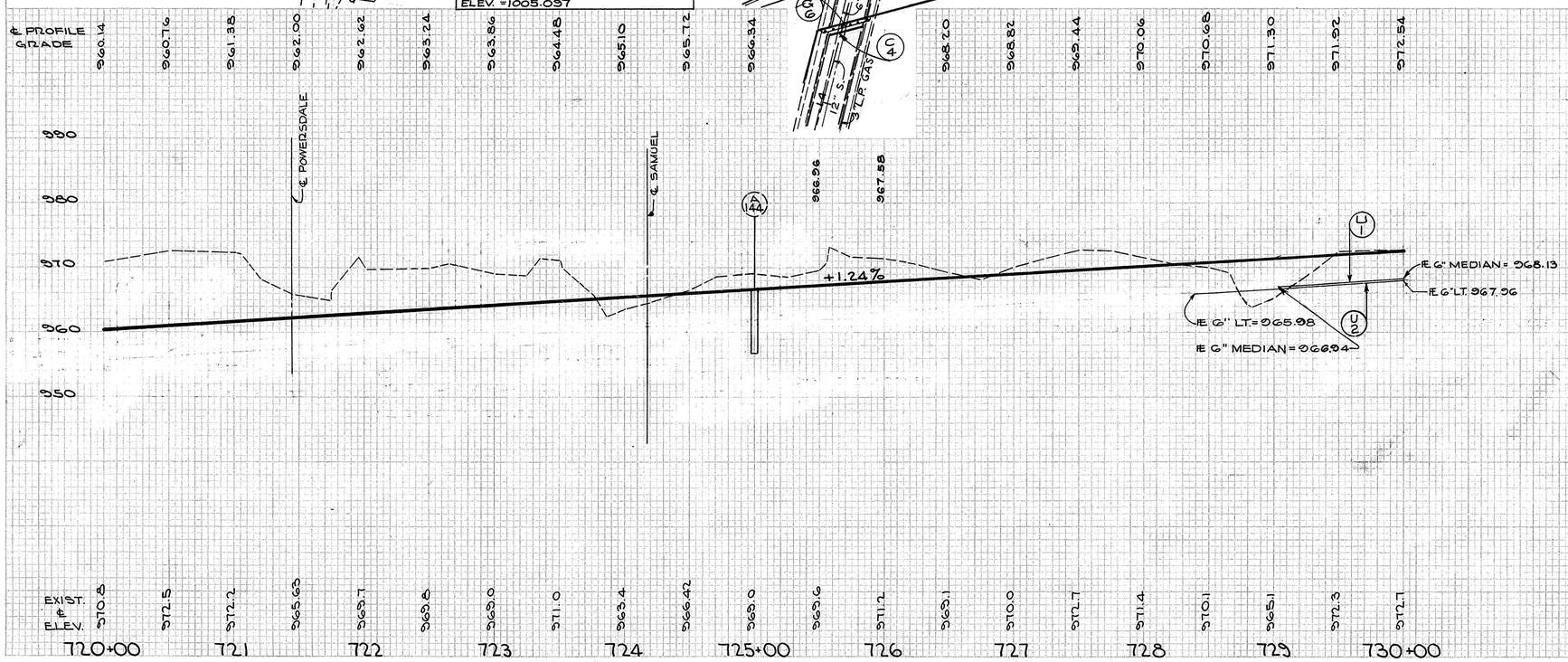
ITEM 605 - UNDERDRAINS LINEAR FEET					603 - CONDUITS
CODE	LOCATION FROM	LOCATION TO	SHALLOW PIPE 6"	PIPE UNDERDRAIN 707.06, 707.12 6"	LINEAR FEET TYPE 'F' 6"
U-1	720+00	730+00	00		10
U-2	728+40	730+00		157	20
TOTAL			00	157	30

ITEM 606 - GUARD RAIL - LIN. FEET				
CODE	STATION FROM	STATION TO	TYPE 5	TYPE 5 BARRIER
G-1	720+00	730+00		1000
G-2	720+00	730+00	1000	
G-3	52+40 (℄ SAMUEL AVE)		50	
G-4	48+00 (℄ SAMUEL AVE.)		37.5	
G-5	51+36 (℄ POWERSDALE)		37.5	
G-6	14+61 (℄ ALEXANDER)		37.5	
TOTAL			1162.5	1000

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
50,542	9856	12,311

FOR POWERSDALE-MABEL CONNECTOR DETAILS, SEE SHEET Nº 201.
FOR RAMP "E" AND "F" DETAILS, SEE SHEET Nº 201. TO 203

FOR DRAINAGE DETAILS, SEE SHEET Nº 353
FOR WATER LINE DETAILS, SEE SHEET Nº 383



ITEM 612 - CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQUARE YARDS
M-1	720+00	730+00	667.00
SHEET TOTAL			667.00

ITEM 604 - MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	724+14.92	℄	1
RM-2	730+00	℄	1
TOTAL			2

ITEM 609 CONCRETE CURBS - TYPE 6				
CODE	LOCATION	STA.	SKEW	LIN. FT.
C-1	SAMUEL	52+47	31° RT.	40.0
C-2	SAMUEL	48+04	54° RT.	30.0
C-3	POWERSDALE	51+25	87° RT.	28.0
C-4	ALEXANDER	14+61	62° RT.	27.0
SHEET TOTAL				133.0

RRC 8/24/68
PWD 8/30/68

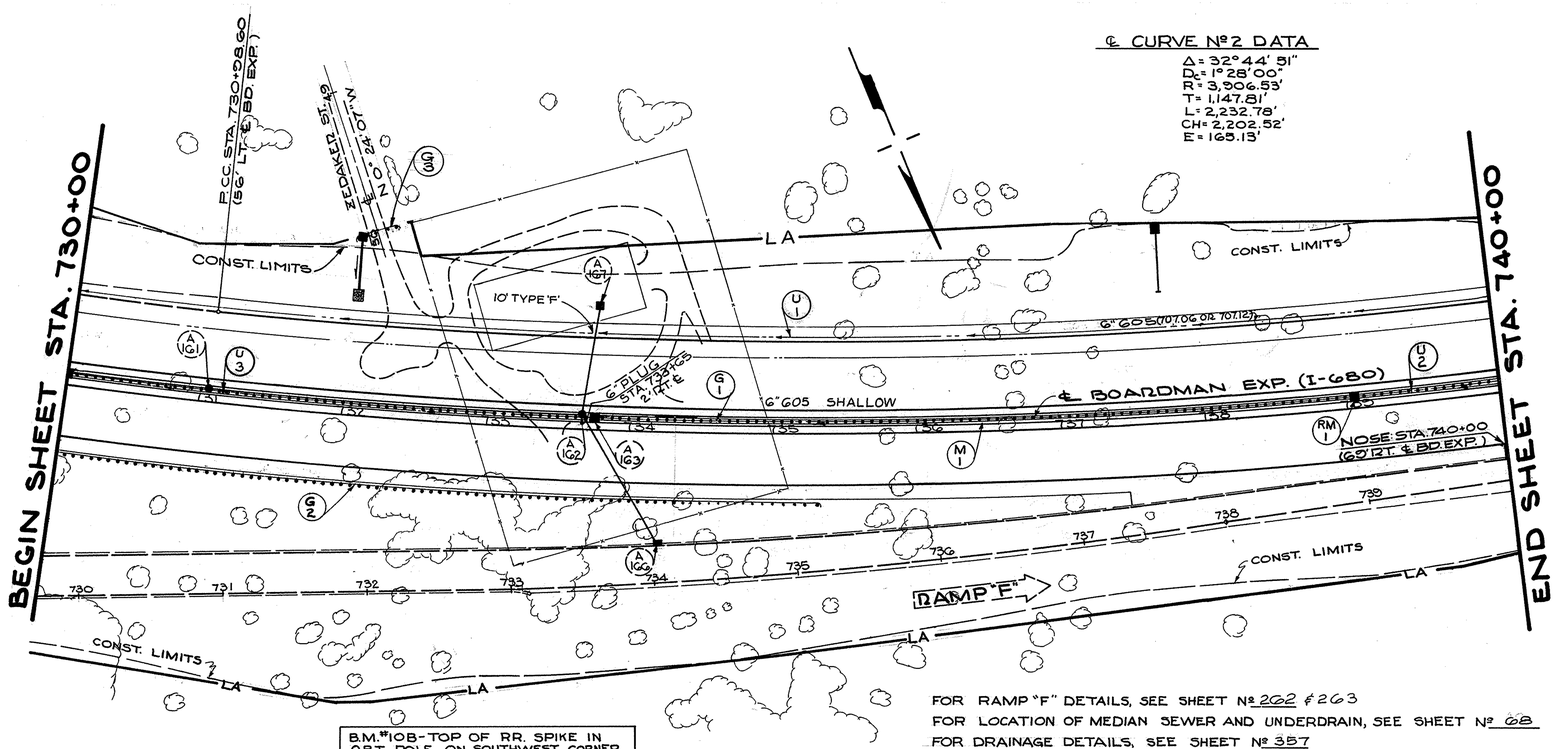
MAY 25 1971

PLAN & PROFILE SHEET
STA. 720+00 TO STA. 730+00

PLATE 4, CROSS SECTION
KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT		69
2	OHIO			656

MAH-680-6.38



B.M. #108 - TOP OF RR. SPIKE IN O.B.T. POLE ON SOUTHWEST CORNER ZEDAKER AND SAMUEL. 360' LT. ℄ STA. 731+30
ELEV. = 1005.339

FOR RAMP "F" DETAILS, SEE SHEET Nº 262 & 263
FOR LOCATION OF MEDIAN SEWER AND UNDERDRAIN, SEE SHEET Nº 68
FOR DRAINAGE DETAILS, SEE SHEET Nº 357
FOR WATER LINE DETAILS, SEE SHEET Nº 384

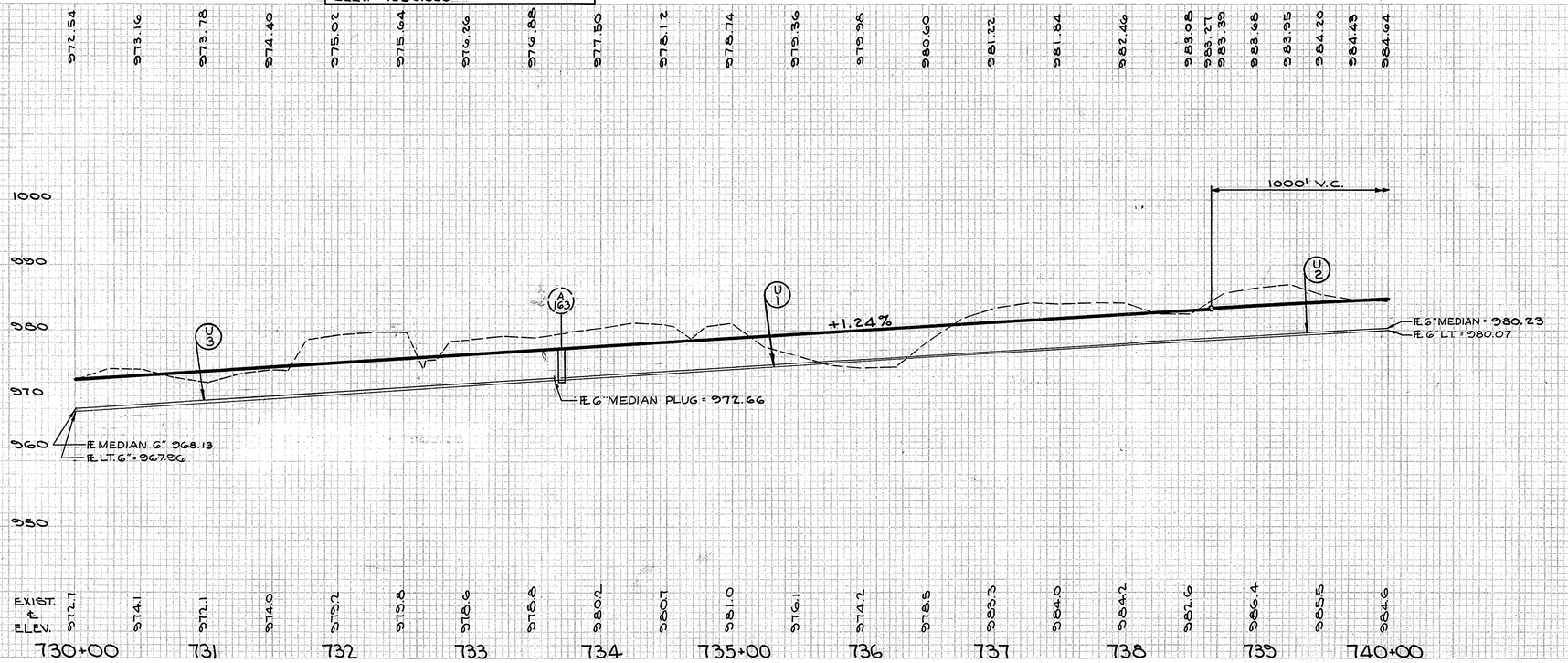
ITEM 605 - UNDERDRAIN LINEAR FEET					603 CONDUITS
CODE	LOCATION FROM	LOCATION TO	SHALLOW PIPE 6"	PIPE UNDERDRAIN 707.06, 707.12 6"	LINEAR FEET TYPE F 6"
U-1	730+00	740+00		990	10
U-2	733+70	740+00	620		10
U-3	730+00	733+65	365		
TOTAL			985	990	20

ITEM 606 - GUARD RAIL - LINEAR FEET					
CODE	STATION FROM	STATION TO		TYPE B	TYPE B BARRIER
G-1	730+00	740+00		400	1000
G-2	730+00	735+25			
G-3	49+99	ZEDAKER		65	
TOTAL				425	1000

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
27,099	34,279	15,797

ITEM 612 - CONCRETE MEDIAN			
CODE	STATION FROM	STATION TO	SQUARE YARDS
M-1	730+00	740+00	667.00
TOTAL			667.00

ITEM 604 - MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	739+00	℄	1
TOTAL			1



RRC 8/25/68
PUD 8/30/68

MAY 25 1971

PLAN & PROFILE SHEET STA. 730+00 TO STA. 740+00

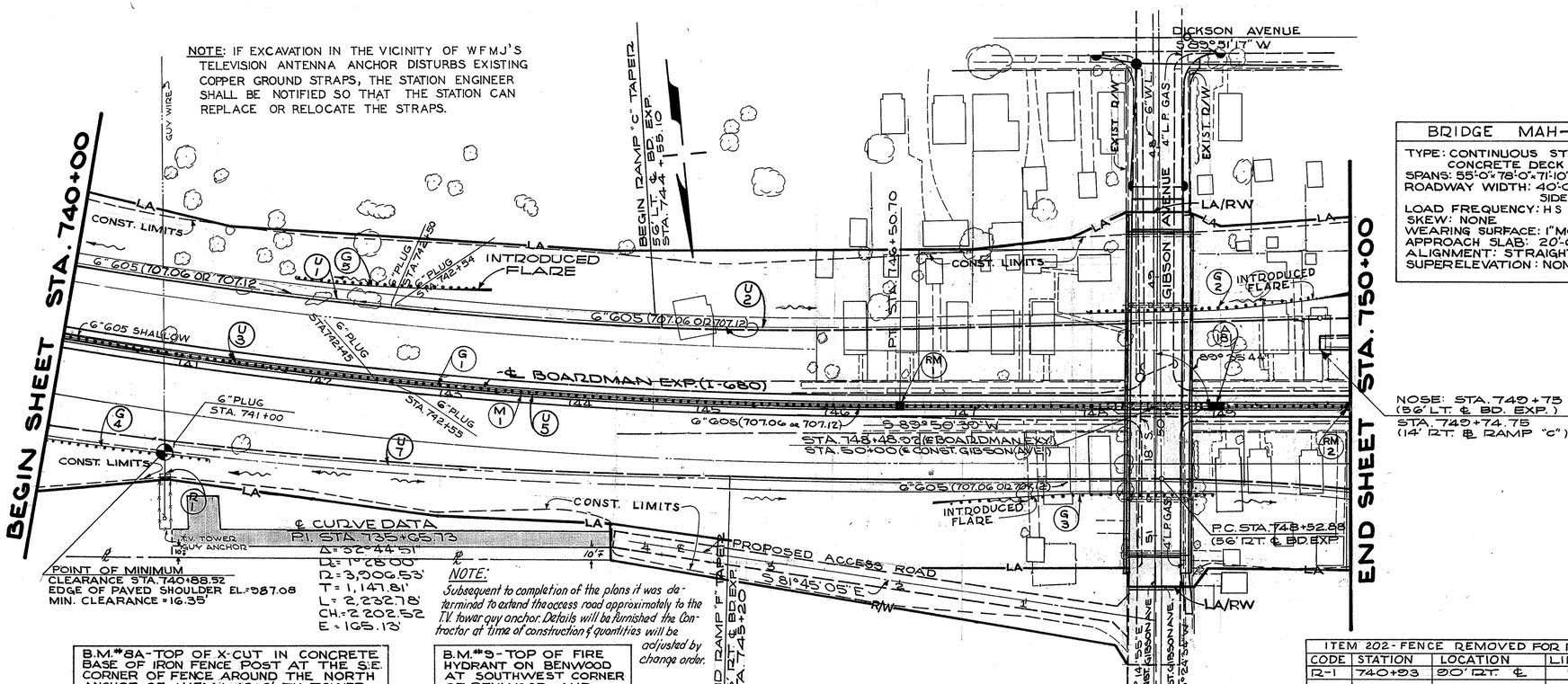
K-E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

70
656

NOTE: IF EXCAVATION IN THE VICINITY OF WFMJ'S TELEVISION ANTENNA ANCHOR DISTURBS EXISTING COPPER GROUND STRAPS, THE STATION ENGINEER SHALL BE NOTIFIED SO THAT THE STATION CAN REPLACE OR RELOCATE THE STRAPS.



BRIDGE MAH-680-0723

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 55'-0"+78'-0"+71'-10"+43'-1" ℄ BEARINGS.
ROADWAY WIDTH: 40'-0" ℄ SAFETY CURBS WITH 6'-0" SIDEWALK (LT.) AND 2'-0" CURB (RT.)
LOAD FREQUENCY: H S 20-44
SKEW: NONE
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 20'-0" LONG AS-1-67
ALIGNMENT: STRAIGHT.
SUPERELEVATION: NONE.

FOR GIBSON AVE. DETAILS, SEE SHEET Nº 204
FOR MEDIAN GUARD RAIL TREATMENT AT BRIDGE PIER, SEE SH'T. Nº 333
FOR ACCESS RD. DETAILS, SEE SHEET Nº 208
FOR RAMP "F" DETAILS, SEE SHEE Nº 203
FOR RAMP "C" AND "D" DETAILS, SEE SHEET Nº 302
FOR DRAINAGE DETAILS, SEE SHEET Nº 350
FOR WATER LINE DETAILS, SEE SHEET Nº 388

ITEM 605 - UNDERDRAINS LINEAR FEET | 603-CONDUITS

CODE	LOCATION FROM	LOCATION TO	SHALLOW PIPE 6"	PIPE UNDERDRAIN 707.06, 707.12 6"	603-CONDUITS LINEAR FEET TYPE 'F' 6"
U-1	740+00	742+50		250	
U-2	742+54	749+75		721	
U-3	740+00	742+45	245		
U-5	742+55	749+00		630	10
U-7	741+00	750+00		900	
TOTAL			245	2510	10

ITEM 606 - GUARD RAIL - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 5	TYPE 5 BARRIER	ANCHOR ASSEMBLY EACH
G-1	740+00	750+00		1000	
G-2	748+00	750+00	150		2
G-3	746+75	749+00	75		2
G-4	740+00	741+25	200		1
G-5	741+75	743+25	125		2
TOTAL			550	1000	7

ITEM 202 - FENCE REMOVED FOR RE USE

CODE	STATION	LOCATION	LIN. FT.
R-1	740+93	90' RT. ℄	20
TOTAL			20

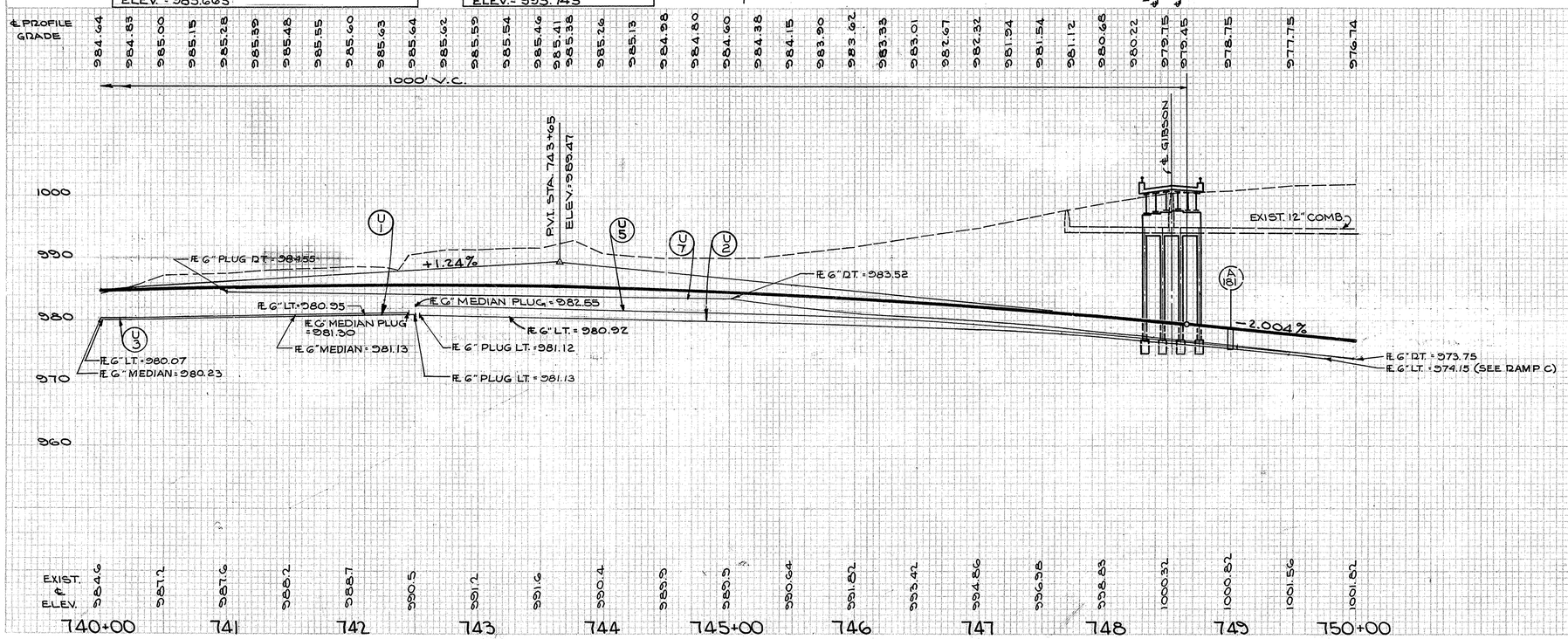
203 EXCAVATION (C.Y.)	203 EMBANKMENT (C.Y.)	G59 SEEDING (S.Y.)
21,804	5,302	8,772

ITEM 612 - CONCRETE MEDIAN

CODE	STATION FROM	STATION TO	SQUARE YARDS
M-1	740+00	750+00	667.00
TOTAL			667.00

ITEM 604 - MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	746+50.70	℄	1
RM-2	750+00	℄	1
TOTAL			2



RRC 8/29/68
PWD 8/30/68
MAY 25 1971

PLAN & PROFILE SHEET STA. 740+00 TO STA. 750+00

PLATE 4, CROSS SECTION
KOPPERS & ASSOC. CO.

FED. RD.	STATE	PROJECT		71
2	OHIO			656

MAH-680-6.98

BRIDGE MAH-680-0705

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 57'-1"x 71'-0" & BRGS.
ROADWAY WIDTH: 66'-0" & OF 8'-0" WALKS ON BOTH SIDES
LOAD FREQUENCY: HS 20-44
SKEW: 2°21' 14" L.F.
WEARING SURFACE: 1" MONOLITHIC
APPROACH SLAB: 30'-0" LONG SPECIAL
SUPERELEVATION: NONE
ALIGNMENT: STRAIGHT

ITEM 604-MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	756+37.79 (R/W)	℄ R/W	1
TOTAL			1

ITEM 605-UNDERDRAINS-LINEAR FEET

CODE	STATION FROM	STATION TO	BENDS & BRANCHES 6"	SHALLOW PIPE TO 7.06, TO 7.12 6"	603-CONDUITS LINEAR FEET TYPE F 6"
U-1	750+00	751+31.08		131	
U-2	758+25	760+00		165	16
U-3	758+60	760+00	1	140	15
TOTAL				436	25

CURVE A-4 (EXIST.)
L = 200'
Δ1+Δ2 = 15°0'0"
T = 120.61'
R = 800.54'
P = 2.62'

CURVE A-5 (EXIST.)
Δ = 15°21'38"
Dc = 12°0'0"
R = 477.46'
L = 128.00'
T = 64.39'

ITEM 606- GUARD RAIL - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 5	TYPE 5 BARRIER	Br. Term. As Type A Each	ANCHOR ASSEMBLY EACH
G-1	750+00	760+00	925	837.5		
G-2	757+06	ABUTMENT	75		1	1
G-3	ABUTMENT	759+41	100		1	1
G-4	756+61.33	ABUTMENT	74.67		1	
G-5	ABUTMENT	758+46	75		1	1
G-6	PARAPET	759+25 "A"	192		1	
TOTAL			691.67	837.5	5	3

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
183,386	181	9156

ITEM 612- CONCRETE MEDIAN

CODE	STATION FROM	STATION TO	SQUARE YARDS
M-1	750+00	760+00	667.00
TOTAL			667.00

ITEM 202- GUARD RAIL REMOVED

CODE	STATION FROM	STATION TO	LINEAR FEET
R-1	1+22.5 ℄ RAMP "Y"	2+00 ℄ RAMP "Y"	77.5 **
TOTAL			77.5 **

** DENOTES CITY-STATE FUNDS

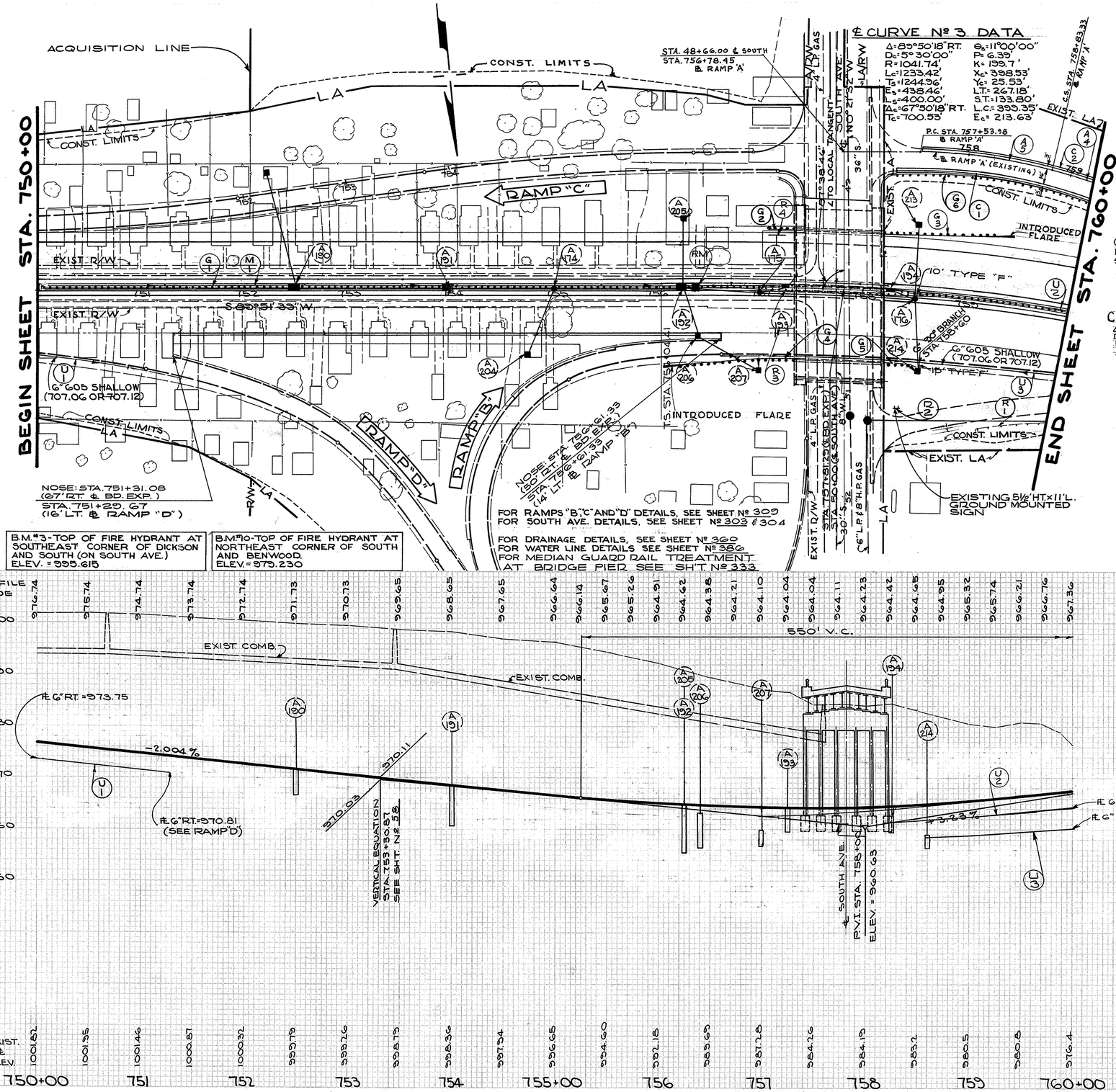
ITEM 202-REMOVAL OF EXIST. SIGN AS PER PLAN

CODE	STATION	LOCATION	LUMP SUM REMOVAL
R-2	51+15	50' LT & SOUTH	1
R-3	50+43	60' RT. & SOUTH	1
R-4	49+50	60' RT. & SOUTH	1
TOTAL			Lump

ITEM 609 CONCRETE CURB LIN. FT.

CODE	STATION (℄ RAMP 'A') FROM	TO	TYPE 2A
C-1	757+30.45	759+23.33	186.14
C-2	757+55.45	759+23.33	169.11
TOTAL			355.25**

** DENOTES CITY-STATE FUNDS



RRC 8/26/68
PWD 8/30/68
MAY 25 1974

PLAN & PROFILE SHEET STA. 750+00 TO STA. 760+00

PLATE 4, CROSS SECTION
KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT		72
2	OHIO			656

MAH-680-6.98

CURVE A-1 DATA
Δ = 3°31'18"
Dc = 1°30'
R = 3819.72'
T = 117.43'
L = 234.78'
CH = 234.75'

CURVE A-3 DATA
Δ = 4°20'39"
Dc = 3°0'0"
R = 1909.86'
T = 72.44'
L = 144.81'
CH = 144.77'

CURVE A-4 DATA
L = 200'
$\Delta_A + \Delta_B$ = 15°0'0"
T = 120.61'
Ts = 80.54'
P = 2.62'

CURVE A-2 DATA
Δ = 23°22'04"
R = 1097.74'
T = 227.01'
L = 447.71'
CH = 444.61'

BEGIN PROJECT MAH-680-6.98 STA. 762+00 SLM 6.98

EXIST. NOSE: STA. 3+40.91 23'LT. & EXIST. RAMP "A" 44'LT. & BOARDMAN EXP. STA. 763+23.36

P.C.C. STA. 762+38.14 PROP. ℄ RAMP "A"

STA. 3+90.19 ℄ EXIST. RAMP "A" 73.74'LT. ℄ BOARDMAN EXP. STA. 762+80.42

EXISTING № 2.14 SIGN

P.C.C. STA. 764+32.92 PROP. ℄ RAMP "A" 56'LT. ℄ BOARDMAN EXP. STA. 765+01.20

P.C.C. STA. 0+00 ℄ EXIST. RAMP "A" 44'LT. ℄ BOARDMAN EXP. STA. 766+50

PROP. NOSE: 44'LT. ℄ BOARDMAN STA. 762+23.36

S.C. STA. 760+83.33 ℄ RAMP "A"

BEGIN SHEET STA. 760+00

END SHEET STA. 772+00

EXIST. LA

℄ RAMP "A" (EXISTING)

INTRODUCED FLARE

10' TYPE 'F'

EXIST. 6" UNDERDRAIN TO REMAIN

EXIST. 6" UNDERDRAIN TO BE REMOVED

EXIST. 6" CONC. (SHALLOW)

6" PLUG STA. 763+00

6" PLUG STA. 764+00

EXIST. 6" CONC. (UNCLASSIFIED)

CONST. LIMITS

EXIST. REFERENCE MONUMENT STA. 766+00 (EXIST. C.B.)

BOARDMAN

℄ CURVE

EXIST. 6" CONC. (SHALLOW)

EXIST. C.B. 765

SEE DETAIL SHEET №339

EXIST. 6" UNDERDRAIN (TO REMAIN)

EXIST. 6" CONC. (SHALLOW)

EXIST. 6" CONC. (UNCLASSIFIED)

EXIST. LA FENCE

CITY ROW

PROP. LA FENCE

EXIST. 42" CONC. SEWER

EXIST. 72" CONC. SEWER

EXIST. BOX CULVERT

EXIST. 24" CONC. SEWER

EXIST. 15" CONC. SEWER

EXIST. 18" CONC. SEWER

EXIST. 12" CONC. SEWER

EXIST. 8" CONC. SEWER

EXIST. 6" CONC. SEWER

EXIST. 4" CONC. SEWER

EXIST. 2" CONC. SEWER

EXIST. 1" CONC. SEWER

EXIST. 0" CONC. SEWER

EXIST. -1" CONC. SEWER

EXIST. -2" CONC. SEWER

EXIST. -3" CONC. SEWER

EXIST. -4" CONC. SEWER

EXIST. -5" CONC. SEWER

EXIST. -6" CONC. SEWER

EXIST. -7" CONC. SEWER

EXIST. -8" CONC. SEWER

EXIST. -9" CONC. SEWER

EXIST. -10" CONC. SEWER

EXIST.

FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

73
656

BEGIN SHEET STA. 772+00

EXISTING Nº 8.4
DESIGN 1-55' SPAN SIGN

EXIST. LA

INTRODUCED FLARE

EXISTING REFERENCE MONUMENT
STA. 776+37.83

BOARDMAN EXP

EXIST. C.B.

EXIST. STORM SEWER TO REMAIN

EXIST. UNDERDRAIN TO REMAIN

N 10° 37' 45" E

6" 45° BEND
STA. 778+89

6" PLUG
STA. 780+75

6"-605 SHALLOW

6"-605 DEEP

CONST. LIMITS

INTRODUCED FLARE

EXIST. LA FENCE

CITY ℄

PROP. LA FENCE

EXIST. R/W

℄ CHALMERS

℄ MARION

4" L.P. GAS

8" W.L.

12" S.

4" L.P. GAS

CITY ℄

R/W

℄ CURVE DATA
EXISTING BOARDMAN EXP.

Δ = 89° 50' 18"	Θs = 11° 00' 00"
Dc = 5° 30'	P = 6.39'
R = 1041.74'	K = 199.76'
Lc = 1233.42'	X = 398.53'
Ts = 1244.96'	Y = 25.53'
Es = 438.46'	L.T. = 267.18'
Ls = 400.00'	S.T. = 133.80'
C.S. STA. 772 +37.83	
S.T. STA. 776 +37.83	

NOTE: WHERE THE PROPOSED REINFORCED CONCRETE PAVEMENT IS TO BE PLACED ADJACENT TO EXISTING REINFORCED CONCRETE PAVEMENT THE JOINT BETWEEN THEM SHALL BE AN EXPANSION BOLT JOINT. SEE PAVEMENT DETAIL SHEETS AND STANDARD DRAWINGS FOR FURTHER INFORMATION. THE EXISTING TRANSVERSE JOINTS SHALL BE EXTENDED THROUGH THE PROPOSED PAVEMENT IN KIND.

FOR PAVEMENT DETAILS, SEE SHEET Nº 328
FOR DRAINAGE DETAILS, SEE SHEET Nº 366
FOR RAMP "P" DETAILS, SEE SHEET Nº 328

BEGIN WORK
STA. 784+00

INTRODUCED FLARE

SOUTH BOUND SR-7

NOTE: CONTRACTOR SHALL EXERCISE CARE TO PREVENT DAMAGE TO THE EXISTING DIRECT BURIAL LIGHTING CABLE.

EXISTING 6" UNDERDRAIN TO REMAIN

EXISTING GUARD RAIL TO REMAIN

6" 45° BEND
STA. 779+29

RE-USE EXISTING END POST

EXISTING RAMP "P" TO BE REMOVED

EXIST. POST TO BE REMOVED FOR TEMPORARY PAV'T.

RAMP "P"

EXISTING 4'HT.×8'L. GROUND MOUNTED SIGN

TEMP. PAV'T.

2" GAS

℄ WILLIAMSON AVE

S 79° 47' 37" E

B.M. #400 - TOP OF ▫ CUT ON FIRST STEP OF HOUSE #313 MYRTLE AVE. ELEV. = 979.44

ITEM 609 - CONCRETE CURB - LIN. FT. - TYPE 6			
CODE	STATION	LOCATION	PART I. FUNDS
C-3	51+29	℄ CHALMERS	36.0
	TOTAL		36.0

ITEM 609 - CONCRETE CURB - LIN. FT. - TYPE 2				
CODE	STATION FROM	STATION TO	PART I. FUNDS	I-SAFETY FUNDS
C-1	51+50 (WILLIAMSON)	52+75 (WILLIAMSON)		125.0
C-2	52+75 (WILLIAMSON)	53+33 (WILLIAMSON)	58.0	
	TOTAL		58.0	125.0*

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
2,302	358	2,911

ITEM 605 - UNDERDRAINS LINEAR FEET						603 - CONDUITS
CODE	LOCATION FROM	LOCATION TO	BENDS & BRANCHES 6"	SHALLOW PIPE 6"	DEEP PIPE 6"	LINEAR FEET TYPE "F" 6"
U-1	772+00	779+01	1		726	10
U-2	779+11	780+75	1	173		10
	TOTAL			173	726	20

ITEM 606 - GUARD RAIL L.F.							ANCHOR ASSEMBLY
CODE	STATION FROM	STATION TO	TYPE 5A	TYPE 5 BARRIER ADD.			EACH
G-1	780+81.5	784+00	262.5				2
G-2	777+25	782+00	925				2
G-3	772+00	783+00		1100.0			
G-4	51+25 ℄	CHALMERS	37.5				
G-5	775+75	777+25	125				2
TOTAL			850	1100.0			6

ITEM 202 - REMOVAL OF EXIST. SIGN FOR STORAGE		
CODE	STATION LOCATION	REMOVAL
R-7	53+00 WM 40' RT. ℄	1
R-8	773+00 LT. OF ℄	1 (MAJOR)
TOTAL		LUMP 1 (MAJOR)

ITEM 202 - FENCE REMOVED FOR RE-USE				
CODE	STATION FROM	STATION TO	LOCATION	LIN. FT.
R-4	772+00	778+20	RT. ℄	630.0
R-5	52+85	53+35	RT. ℄ (W)	50.0
R-6	51+06	52+60	RT. ℄ (W)	154.0*
TOTAL				834.0

ITEM 202 - GUARD RAIL REMOVE			
CODE	STATION FROM	STATION TO	LIN. FT.
R-1	781+12.5	782+50	137.5
R-2	780+24	781+14	150
R-3	773+89.5	774+14.5	25
R-9	772+07	773+47	50
TOTAL			362.5

ITEM 607 - FENCE, NEW & REBUILT					
CODE	STATION FROM	STATION TO	LOCATION	LIN. FT. R.B.	LIN. FT. NEW
FE-1	772+00	778+20	RT. ℄	630	—
FE-2	51+06 (W)	52+85 (W)	RT. ℄	220*	80*
TOTAL				834	80*

* I-SAFETY FUNDS

ITEM 814 - WATER MAINS									
CODE	EXISTING LOCATION	PROPOSED LOCATION	6" D.I. PIPE LIN. FT.	6" VALVE & VAL. BOX EACH	6" 90° BEND EACH	FI. HYD. REM. & RESET	CUT & PLUG EXIST. WM EACH	6" CUTTING IN SLEEVE EACH	6" TEE EACH
W-100	50+90 21' RT. ℄ CHALMERS	51+30 21' RT. ℄ CHALMERS				1	2		
WM-100	50+90 21' RT. ℄ CHALMERS	51+30 21' RT. ℄ CHALMERS	13					1	1
W-101	50+90 21' RT. ℄ CHALMERS	51+30 17' RT. ℄ CHALMERS		1					
TOTAL			13	1		1	2	1	1

RRC 8/30/68
PWD 8/30/68

R.T. SIDE OFF SET FROM ℄

R.T. EDGE ELEVATION

983.83 44.00 | 982.40 | 981.20 | 980.11 | 978.87 | 977.94 | 976.81 | 975.75 | 974.65 | 973.36 | 972.11 | 970.75 | 969.52 | 968.40 | 967.27 | 966.45 | 965.60 | 965.03 | 964.27 44.00

EXIST. ℄ ELEV. 967.22 | 965.73 | 964.24 | 962.76 | 961.27 | 959.78 | 958.30 | 956.81 | 955.32 | 953.84 | 952.35 | 950.93 | 949.04 | 948.49 | 947.41 | 946.58 | 945.82 | 945.13 | 944.44 | 943.75 | 943.06 | 942.37 | 941.68 | 940.99 | 940.30

772+00 | 773+00 | 774+00 | 775+00 | 776+00 | 777+00 | 778+00 | 779+00 | 780+00 | 781+00 | 782+00 | 783+00 | 784+00

990 | 985 | 980 | 975 | 970 | 965 | 960

℄ G" RT. = 976.04

℄ G" PLUG RT. = 963.11

℄ G" RT. = 962.61

℄ G" PLUG = 962.71

℄ G" RT. = 962.21

℄ G" RT. = 962.11

℄ G" PLUG RT. 962.58

℄ WILLIAMSON AVE

STA. 781+16.30 EXIST.

PLATE 4 CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

PLAN & PROFILE SHEET
STA. 772+00 TO BEGIN CONSTRUCTION

MAY 25 1971

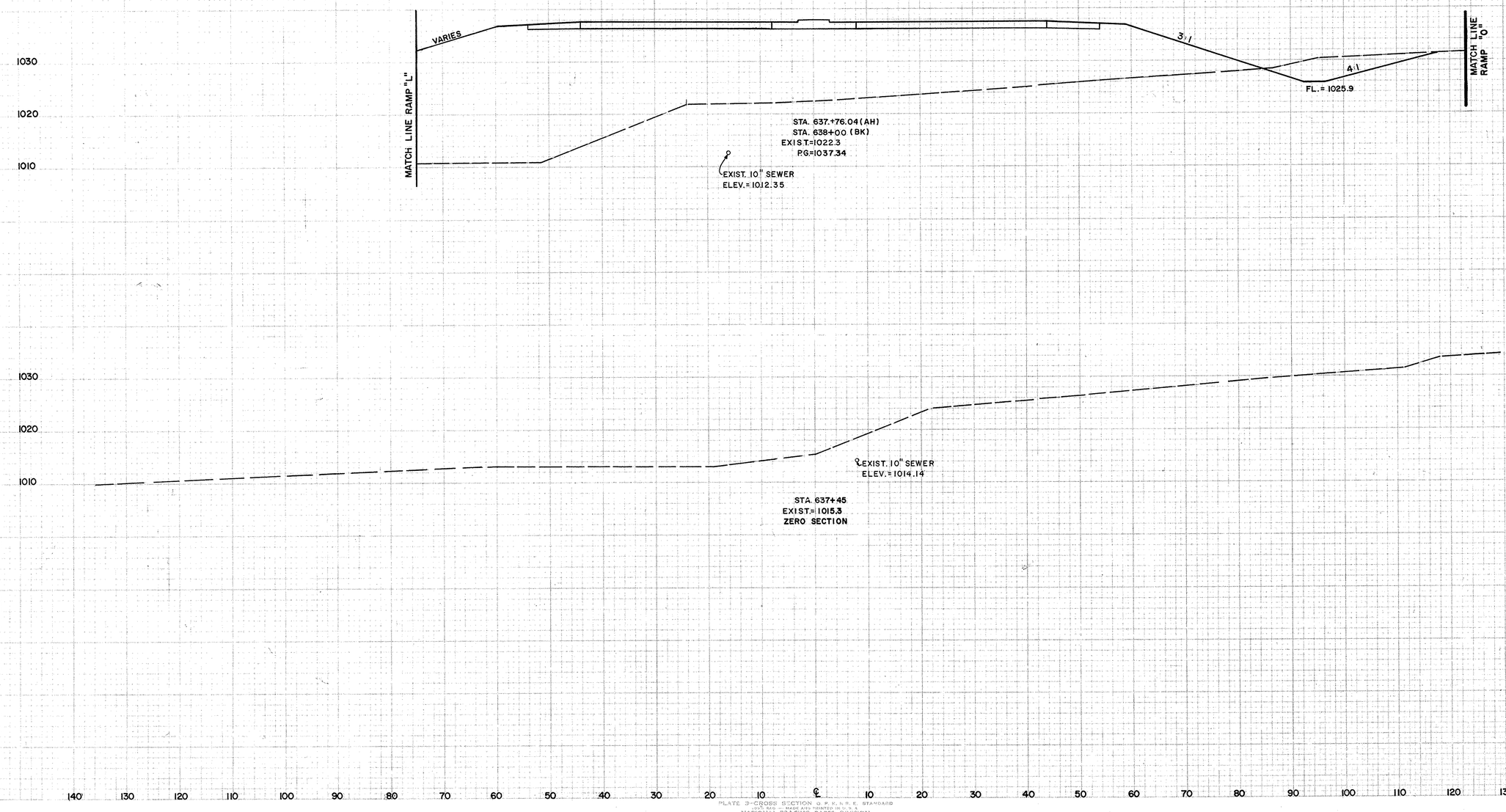
ORIGINAL SURVEY | FINAL SURVEY | COMPUTED | PLOTTED | TIES/LATE | NOTE BOOK | AREAS | CHECKED | NO. | BY | DATE

FED. RD.	STATE	PROJECT	
2	OHIO		

74
656

MAH—680—6.98

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
223		84	2464		
				86	2510
	681				
0		0	0		



RRC 6/27/68

STA. 637+00 TO STA. 638+00

PWD 8/30/68

MAY 25 1971

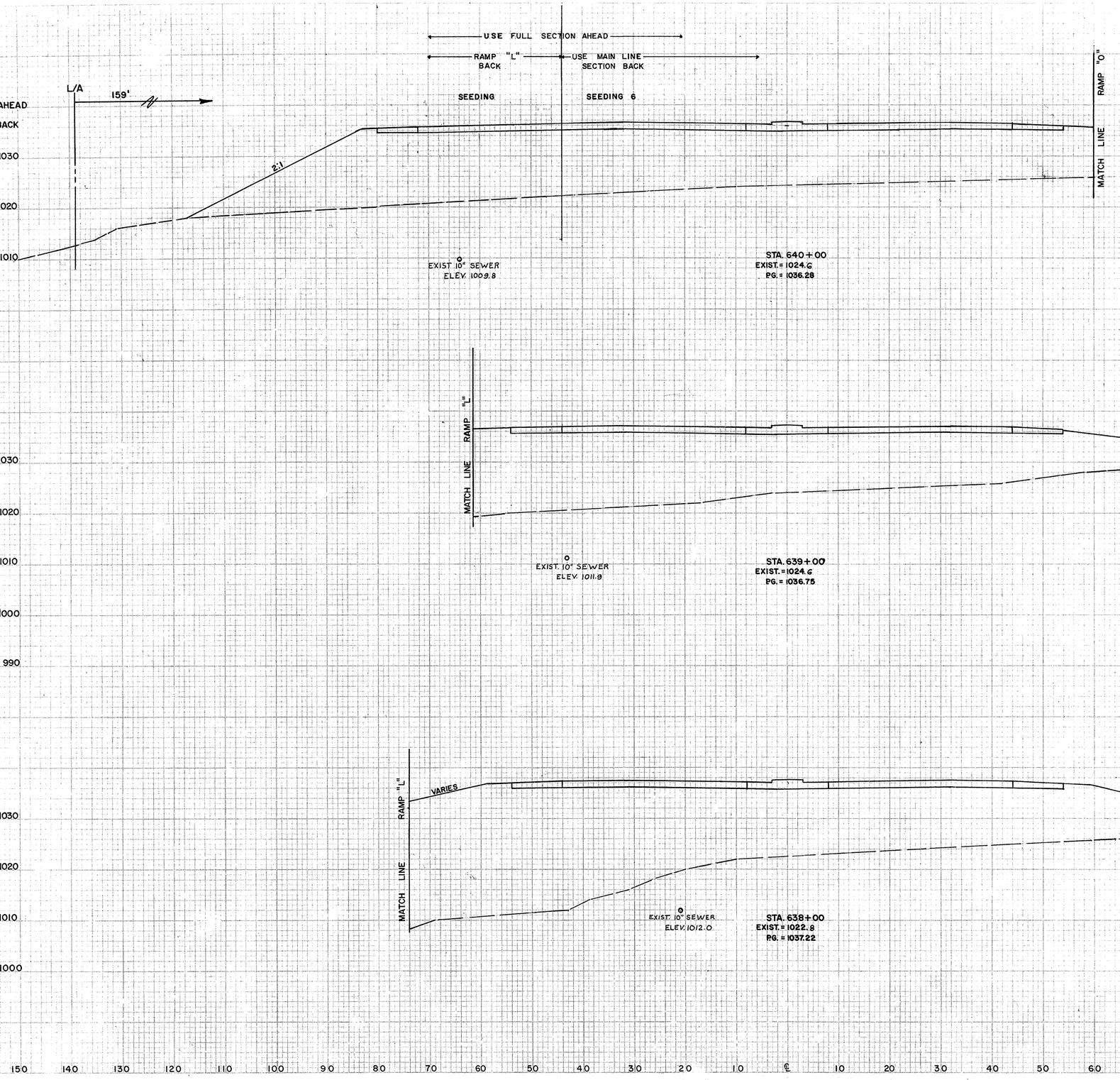
PLATE 3—CROSS SECTION O. P. R. R. R. E. STANDARD
NATIONAL TRACING PAPER DIVISION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

75
656

SEEDING END WIDTH	SEEDING SQ. YDS.
	990
	211
	32
	639
	83
	407



END AREA	CUT	FILL	CU. YDS. CUT	FILL
AHEAD	0	1935		
BACK	0	1114		
			0	4778
	0	1466		
			37	7224
			20	2435
			46	2174

RRC 6/27/68
PWD 8/30/68

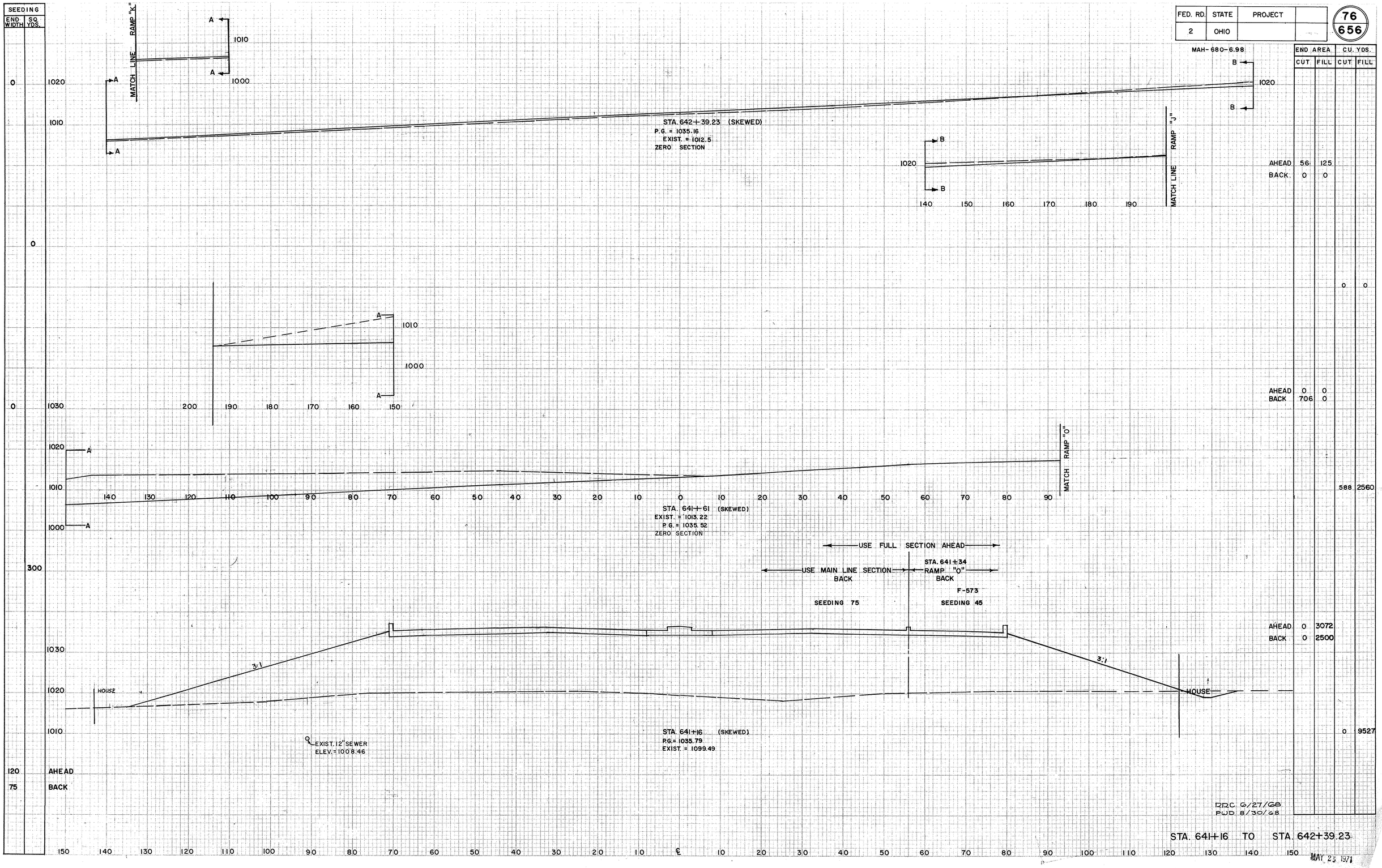
BOARDMAN EXWAY. MAY 25 1971

STA. 638+00 TO STA. 640

FED. RD.	STATE	PROJECT	
2	OHIO		

76
656

MAH-680-6.98



	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
AHEAD	56	125		
BACK	0	0		
			0	0
AHEAD	0	0		
BACK	706	0		
			588	2560
AHEAD	0	3072		
BACK	0	2500		
			0	9527

RRC 6/27/68
PWD 8/30/68

STA. 641+16 TO STA. 642+39.23

MAY 25 1971

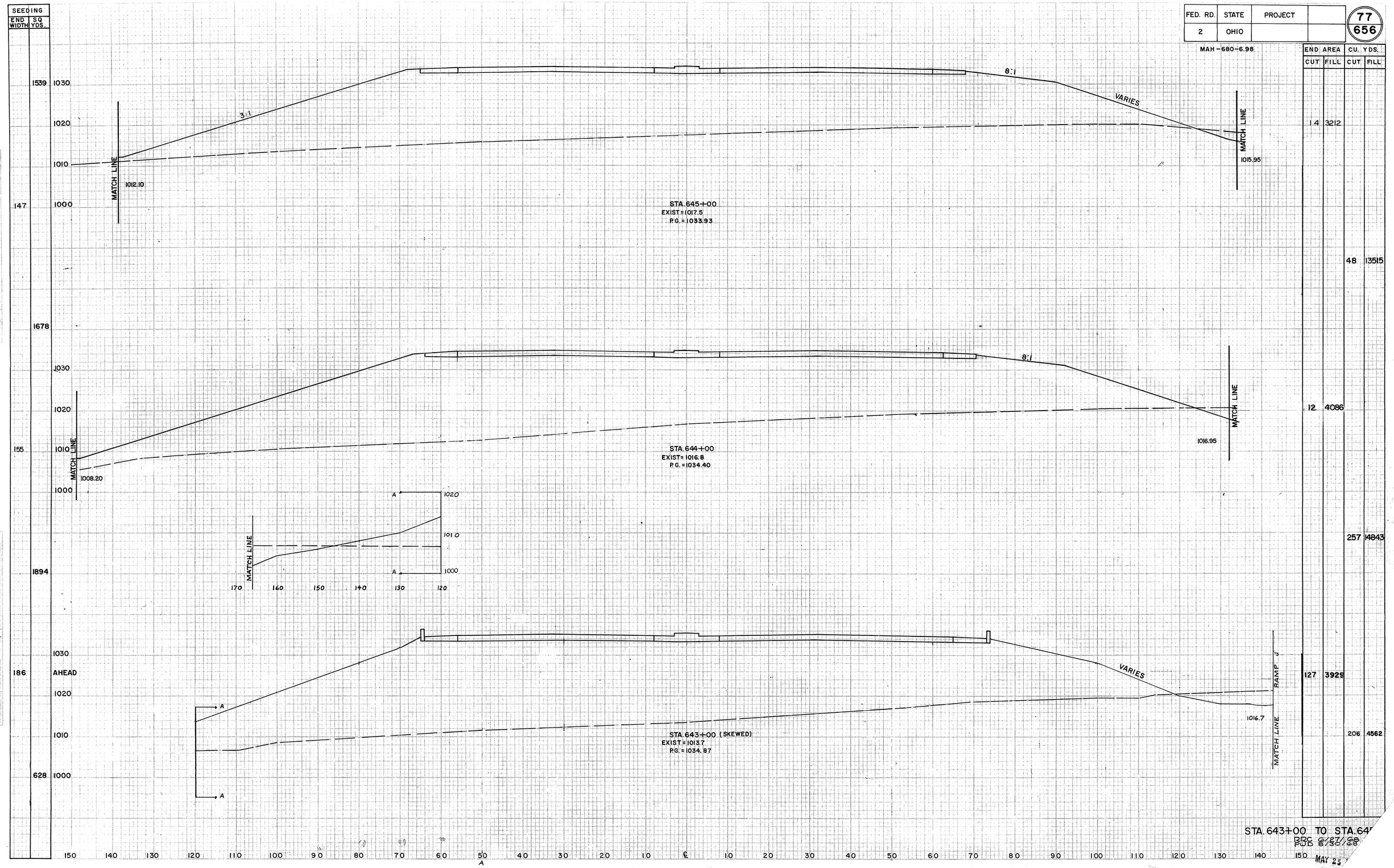
FED. RD.	STATE	PROJECT	
2	OHIO		

77
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ YDS.
1539	
147	
1678	
155	
1894	
186 AHEAD	
628	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	14	3212	
		48	13515
	12	4086	
		257	14843
	127	3929	
		206	4562



STA. 643+00 TO STA. 64
RRC 6/27/68
PUB 8/30/68

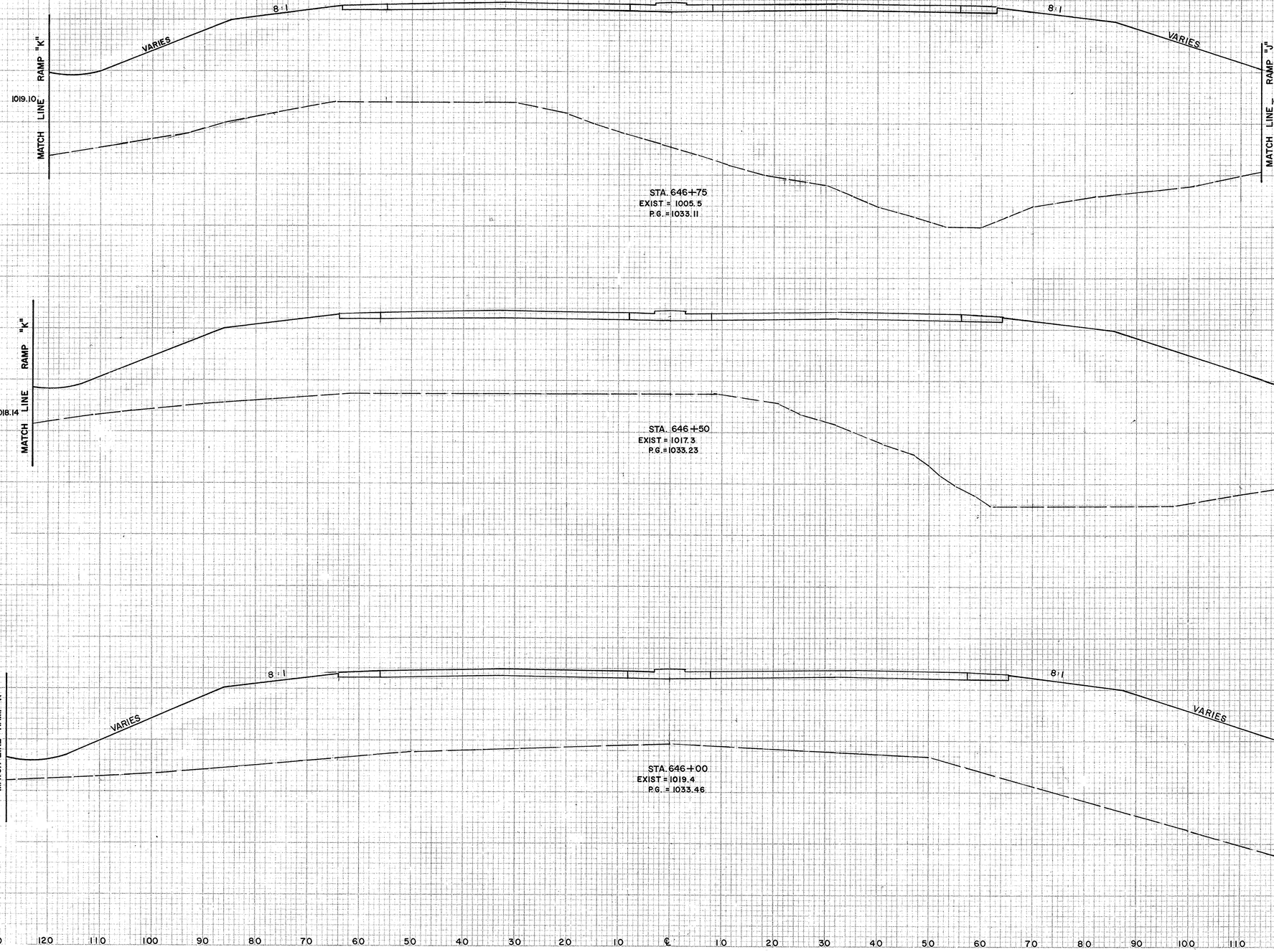
MAY 25

FED. RD.	STATE	PROJECT	
2	OHIO		

78
656

MAH - 680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	306
111	
	317
117	
	686
130	



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	6110		
		0	5013
0	4718		
		0	8037
0	3962		
		26	13285

RRC 6/27/68

STA. 646+00 TO STA. 646+75

PWD 8/30/68

MAY 25

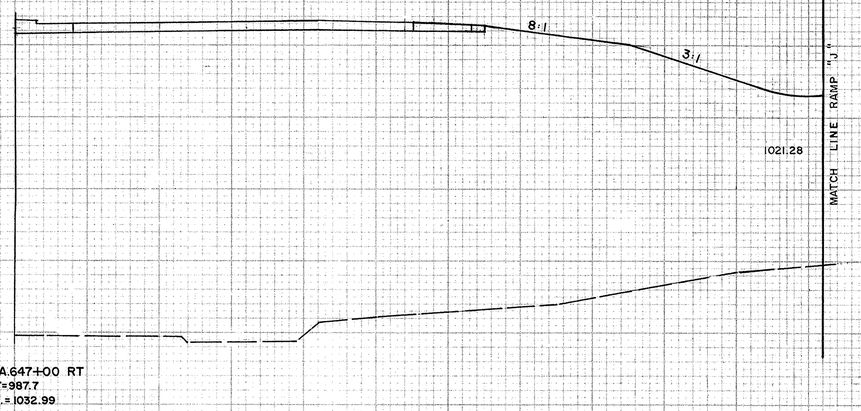
FED. RD.	STATE	PROJECT	
2	OHIO		

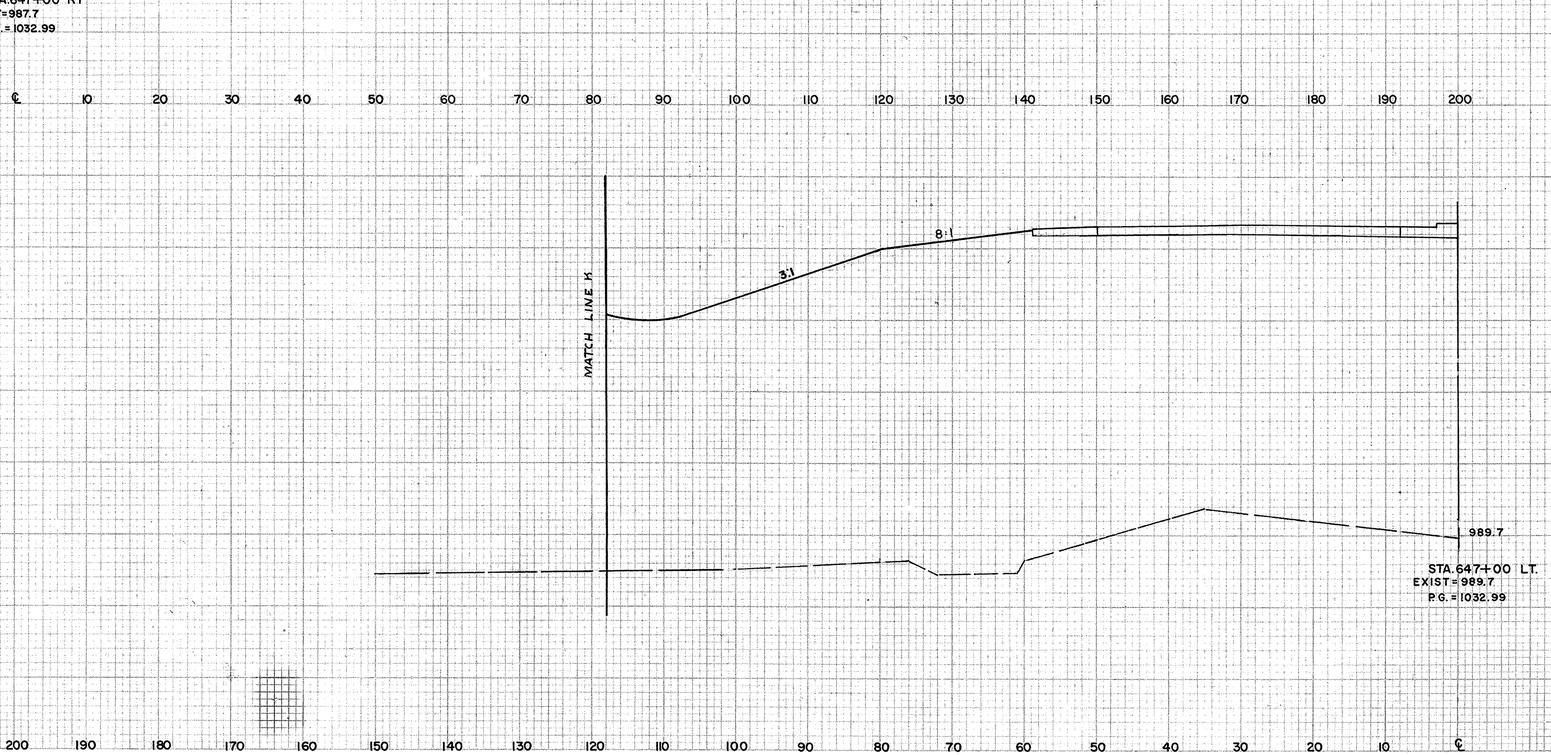
79
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	587
109	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
		0	8090
		0	6574





STA. 647+00

PUD 8/30/68
RRC 6/27/68

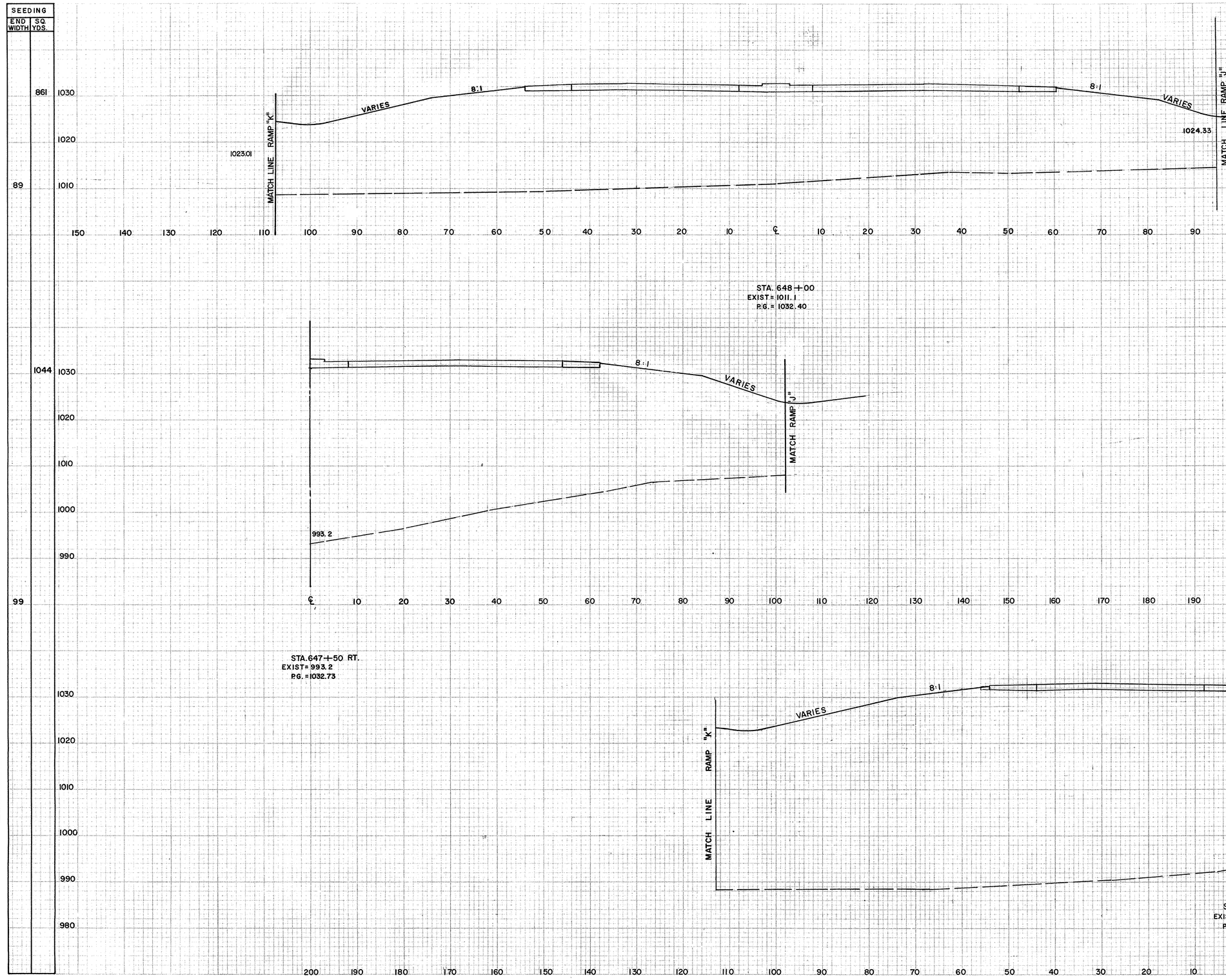
MAY 25 19

FED. RD.	STATE	PROJECT	
2	OHIO		

80
656

MAH-680-6.98

SEEDING		END AREA		CU. YDS.	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
89	861	0	3766		
				0	9544
99	1044	0	6542		
				0	13548



PUD 8/30/68
RRC 9/27/68

STA. 647+50 TO STA. 648+00

MAY 25 1971

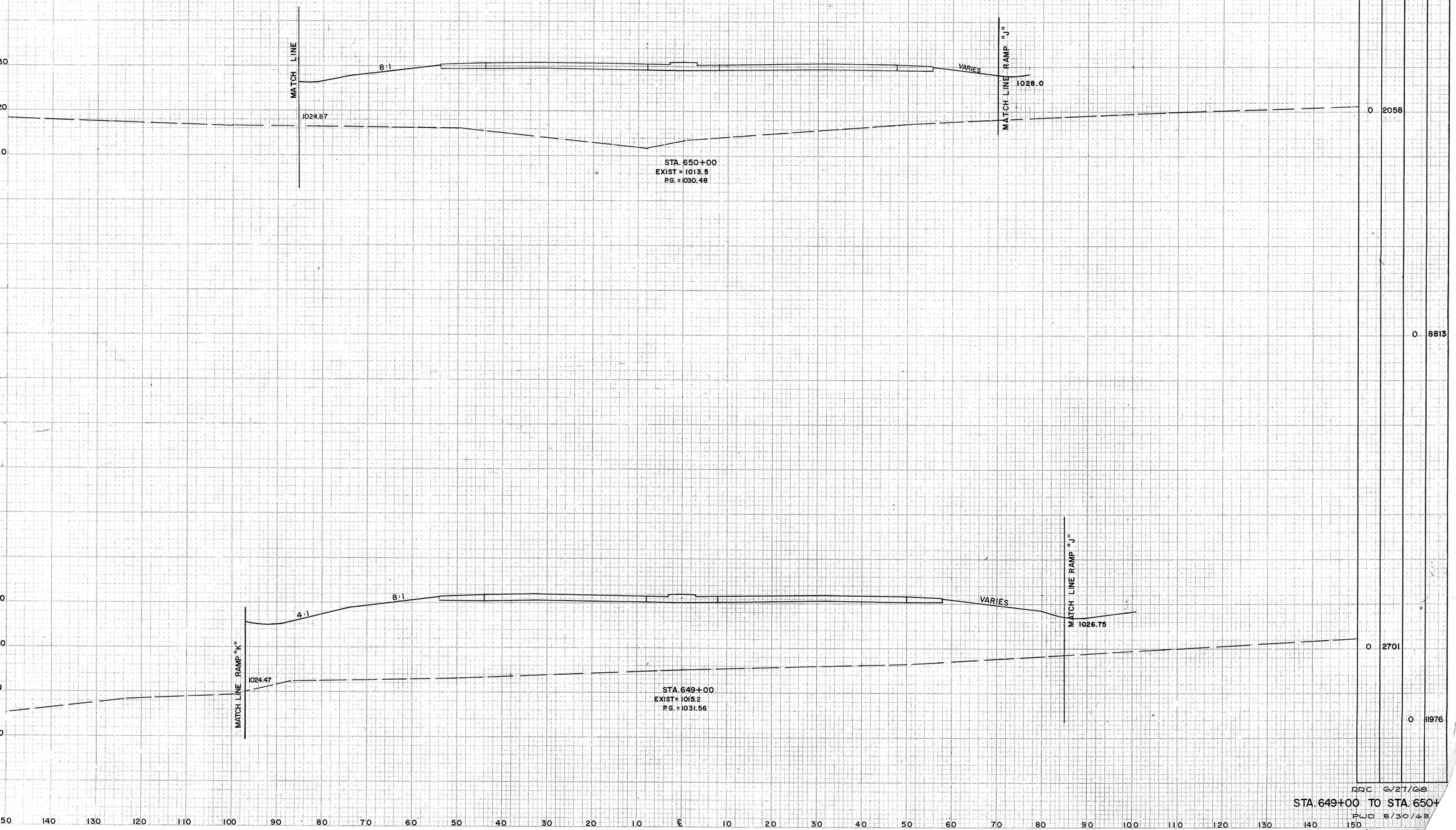
FED. RD.	STATE	PROJECT	
2	OHIO		

81
656

MAH- 680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	400
45	
	617
66	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	2058		
		0	8813
0	2701		
		0	11976



RRC 6/27/68

STA. 649+00 TO STA. 650+

PUD 6/30/68

MAY 25 1971

FINAL SURVEY	SURVEYED BY	DATE
NO.	AREAS REVISED	

ORIGINAL SURVEY	SURVEYED BY	DATE
NO.	AREAS REVISED	

FED. RD.	STATE	PROJECT	
2	OHIO		

82
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	944
83	1030
	1020
	1010
	1022
101	AHEAD
50	BACK
	1030
	1020
	606 1010
59	1030
	1020
	822 1010
	1030
	1020
89	AHEAD
27	BACK
	1010

L/A

30'CHANNEL RELOCATION

H-28
HW-E HEADWALL
STA. 654+00
34' LT. ℄ RAMP "K"
℄ 15" = 1016.80

2.00 %
ELEV. = 1016.20

4:1

RAMP "K"
℄

RAMP "K"
STA. 654+00
EXIST. = 1021.8
P.G. = 1023.49

P-27
109'15" TYPE B-B @ 2.04 %

A-27
604 Nº 2A-16 (MOD) INLET
STA. 654+05 ℄
TOP OF CURB EL. = 1022.62
WINDOW EL. = 1023.29
℄ 6" = 1020.40
℄ 15" = 1019.02

STA. 654+00
EXIST. = 1023.7
P.G. = 1023.78

P-26
54'15" TYPE B-B @ 0.60 %

A-26
604 Nº 6 C.B. (MODIFIED)
STA. 654+05
54.01' RT. ℄
GRATE EL. = 1023.45
℄ 6" = 1019.34
℄ 15" = 1019.34

STA. 653+98
EXIST. = 1025.60
P.G. = 1623.57
RAMP "J"

℄ RAMP "J"

8:1

4:1

1021.63

L/A

RAMP "K" ← USE FULL SECTION AHEAD →

RAMP "K" SECTION → BACK ← MAIN LINE SECTION → BACK

SEEDING 48

SEEDING 50

END AREA SEPARATION

RAMP "K"
STA. 653+00
EXIST. = 1019
P.G. = 1025.37

2:1

STA. 653+00
EXIST. = 1023.3
P.G. = 1025.82

℄ RAMP "J"

RAMP "J"
STA. 653+00
EXIST. = 1026.50
P.G. = 1025.26

1023.30

MAINLINE C=130 F=200
RAMP "K" C=0 F=249

L/A

MATCH LINE

1025.98

STA. 652+00
EXIST. = 1022.2
P.G. = 1027.61

℄ RAMP "J"

RAMP "J"
STA. 652+00
EXIST. = 1022.10
P.G. = 1026.89

1021.00

L/A

USE FULL SECTION AHEAD

MAIN LINE SECTION → BACK ← RAMP "J" SECTION → BACK

SEEDING 27 VARIES

SEEDING 62 VARIES

MATCH LINE RAMP "K"

1025.70

STA. 651+00
EXIST. = 1019.4
P.G. = 1029.17

END AREA SEPARATION

℄ RAMP "J"

RAMP "J"
STA. 651+00
EXIST. = 1020.50
P.G. = 1027.92

8:1

MAINLINE C=0 F=1138
RAMP "J" C=9 F=353

1020.50

L/A

	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	311	21		
			833	870

FED. RD.	STATE	PROJECT	
2	OHIO		

83
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	1275
209	
	872
105	
	1039
82	
	940
87	

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
221	29		
		807	28
650	0		
		2554	0
		1118	
729	0		
		2604	0
677	0		
		1830	39

L/A

219'

8:1

1013.04

STA. 657+50
EXIST.=1014.9
P.G.=1015.50

8:1

4:1

1013.47

L/A

L/A

1014.73

STA. 657+00
EXIST.=1017.4
P.G.=1016.70

1014.65

L/A

ADDITIONAL EXCAVATION FOR THICKENED SUBBASE $\frac{1.0\ (150.99\ AVG)(200)}{27} = 1118$ C.Y.

L/A

1016.97

STA. 656+00
EXIST.=1021.7
P.G.=1019.10

THICKENED SUBBASE

1017.02

L/A

L/A

4:1

8:1

1019.37

STA. 655+00
EXIST.=1023.5
P.G.=1021.50

THICKENED SUBBASE
STA. 654+50 TO 656+50

8:1

4:1

1019.38

L/A

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RRC 6/27/68

STA. 655+00 TO STA. 657+50

PCD 8/30/68

MAY 25 1971

FINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / AREAS / AREAS CHECKED / BY / DATE / NO.

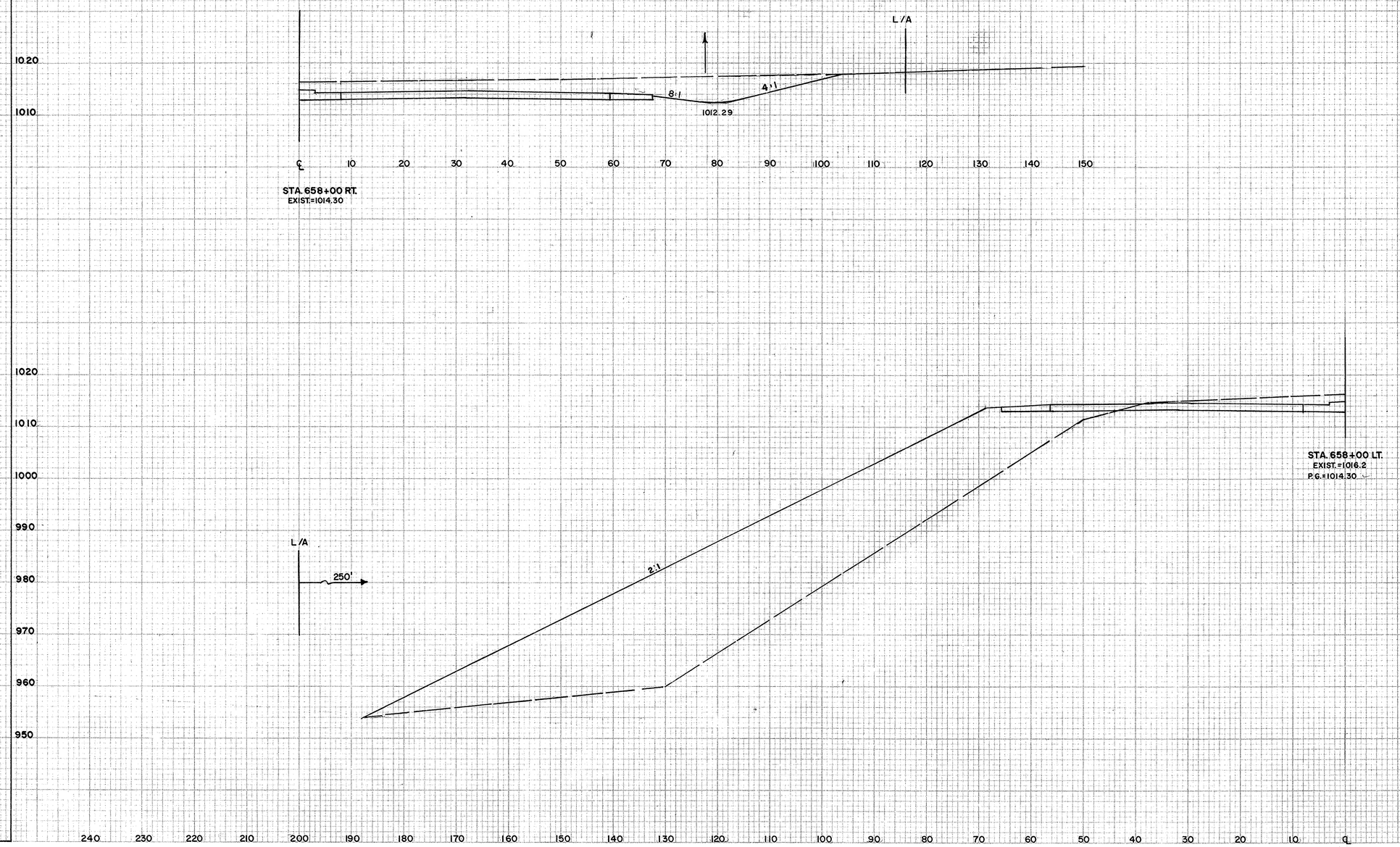
FED. RD.	STATE	PROJECT	
2	OHIO		

84
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	2428
250	

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
519	2857		
		685	2672



STA. 658+00

RRC 6/27/68
PWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

85
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
1889	
187	

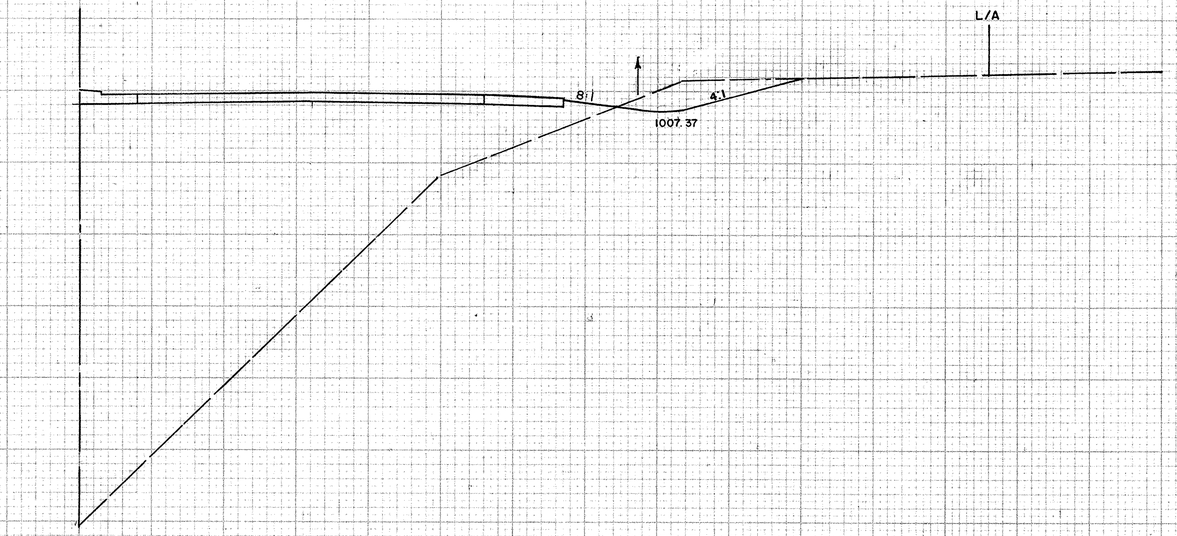
FED. RD.	STATE	PROJECT	
2	OHIO		

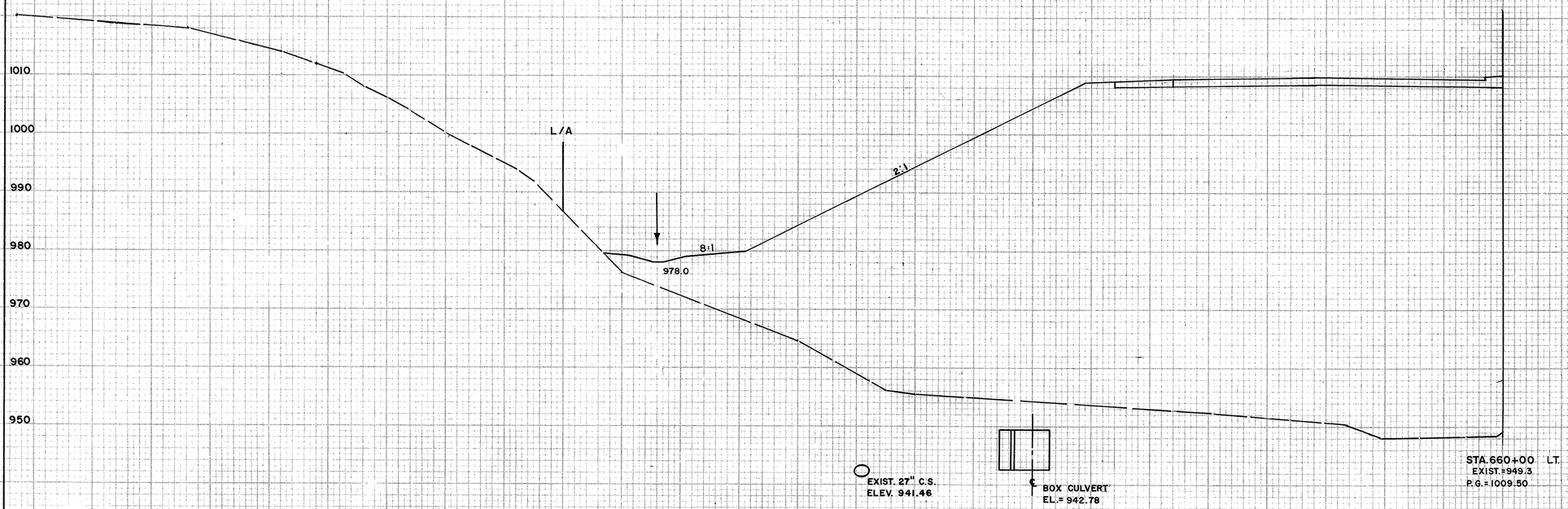
86
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
153	
1528	

END AREA		CU. YDS	
CUT	FILL	CUT	FILL
74	8177		
		470	27476





STA. 660+00

RDC 6/27/68
FWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

87
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	1272
122	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
		0	9483

FED. RD.	STATE	PROJECT	
2	OHIO		

88
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	1728

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

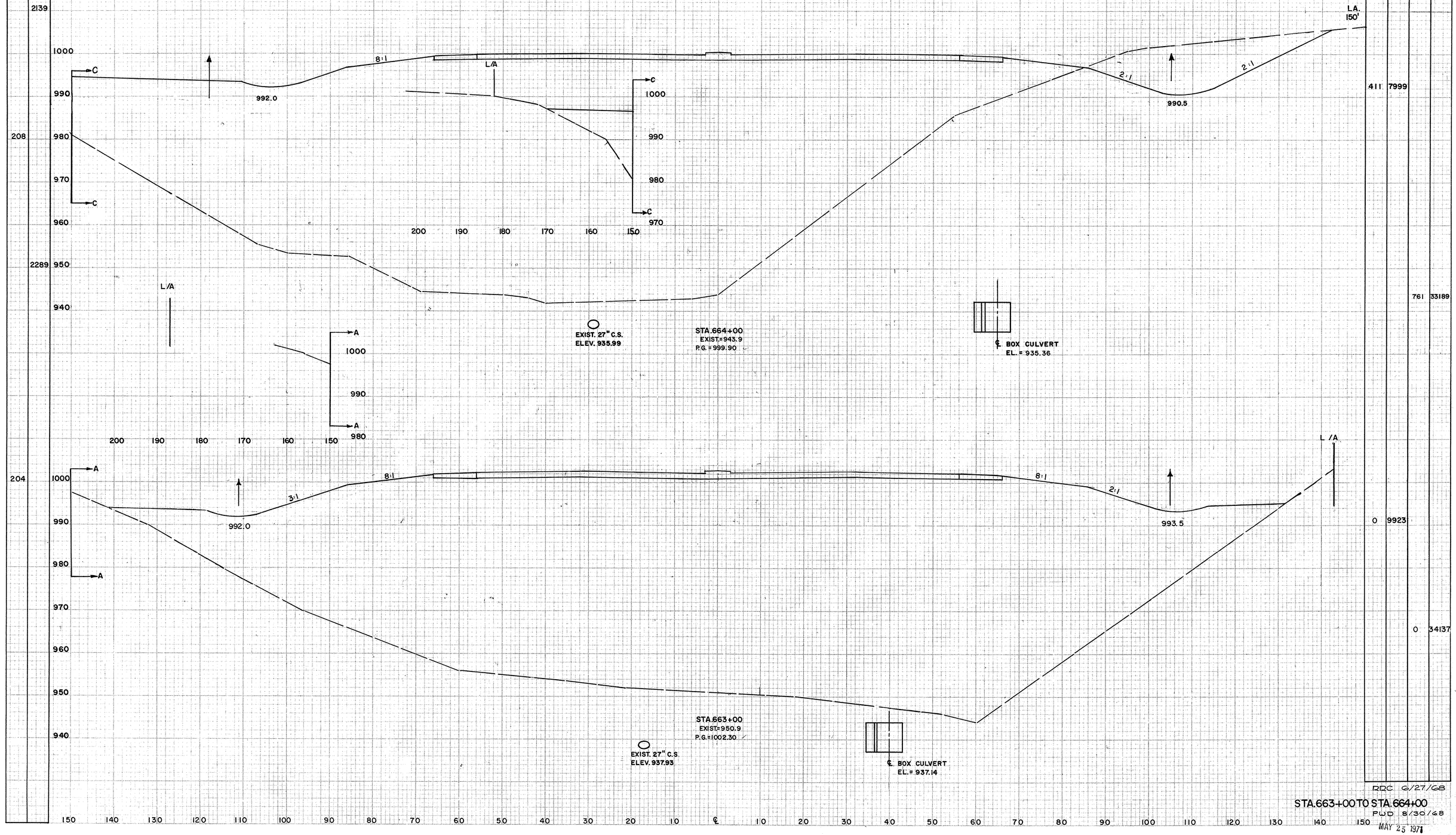
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

89
656

SEEDING	
END WIDTH	SQ. YDS.
	2139
208	2289

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	411	7999	
		761	33189
0		9923	
		0	34137



RRC 6/27/68

STA.663+00 TO STA.664+00

PWD 8/30/68

MAY 25 1971

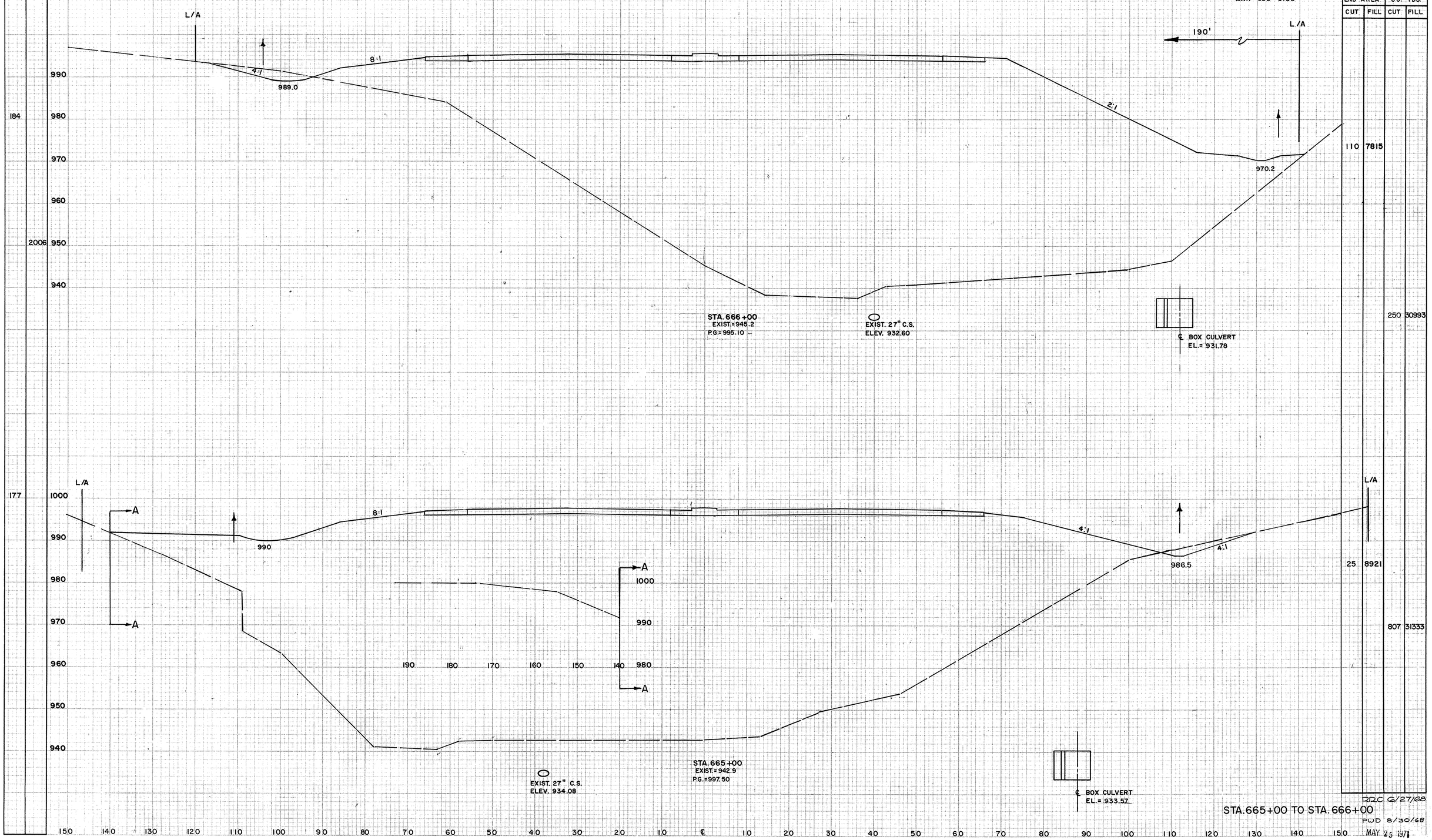
FED. RD.	STATE	PROJECT	
2	OHIO		

90
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	1128
184	
	2006
177	

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
110	7815		
		250	30993
25	8921		
		807	31333



RRC 6/27/68

STA. 665+00 TO STA. 666+00

PWD 8/30/68

MAY 25 1971

QUANTITY SUMMARY

121* = 100% CITY FUNDS
121** = CITY-STATE FUNDS
121□ = PART I. (RURAL) FUNDS
121 = PARTICIPATING FUNDS

TYPE CODE 7223

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.-680-6.98

390A / 656

SHEET NUMBER

ITEM	SIGN No.	395 G1a	G1b	G2a	G2b	G3	G4a	G4b	G5	G6	G8	G9a	G9b	397 10Ga	10Gb	399 112	391A
G20																	
G20																	
G21																	
G21																	
G21																	
G21																	
G21																	
G21																	
G21																	
G21																	
G21																	
G21																	
G25														1	1		
G25						1	1	1	1	1	2						
G25																	
G25		2	1		2							1	2				
G25			1	2								1					
G25						1	1	1	1	1				1	1		
G25											1						
G25		1	1	1	1							1	1				
G25						1			1	1	1			1			
G25							1										
G25		1		1								1					
G25																	
G25						1	1		1	1	1			1			
G25		1		1								1					
G25		1		1		1	1		1	1	1	1					
G25		1	1	1	1	1	1	1	1	1	1	1	1	1	1		
G25		1		1		1	1		1	1	1	1		1			
G25		1		1		1	1		1	1	1	1		1			
G25																	
815		152.5	228.5	180.0	100.0	42.0	42.0	42.0	54.0	49.0	98.0	212.5	163.0				439.0
815														22.0	22.0	20.0	1408.2
816												1					
816																	
816			1														
816		1															
816						1											
816																	
816									1								
816																	
816																	
816																	
816																	
816																1	
816														1			885 / 461 / 72 / 506 / 115
816		9.1		8.6		3.5			3.0		3.1	8.6		2.7			134 / 39.8
816																	94.5
620																	
621																	
816																	219.3
606																	1420

ITEM	FROM SHT. 380 *	**	□	PART. FUNDS	TOTAL SHT 390 & 390A CITY FUNDS	CITY-STATE FUNDS	PART. (RURAL) FUNDS	PART. FUNDS	BID ITEM	QUANTITY	UNIT	DESCRIPTION
G20		6	32	274		6	32	274	G20	312	EACH	DELINEATORS, TYPE C-2 POST MOUNTED
G20		5		9		5		9	G20	14	EACH	DELINEATORS, TYPE C-2 BRACKET MOUNTED
G21		0.42	0.24	13.48		0.42	0.24	13.48	G21	14.14	MILES	EDGE LINES
G21	0.10	0.03	0.05	0.81	0.10	0.03	0.05	0.87	G21	1.05	MILES	4" LANE AND CENTER LINES
G21		0.10		4.13		0.10		4.13	G21	4.23	MILES	6" LANE LINES
G21	0.26		0.08	1.23	0.26		0.08	1.23	G21	1.52	MILES	BARRIER LINES
G21		500	82	4317		500	82	4317	G21	4909	L.F.	8" CHANNELIZING LINES
G21	41	38	22	530	41	38	22	580	G21	681	L.F.	24" STOP LINES
G21	165	126		2630	165	126		2630	G21	2921	L.F.	CROSSWALK LINES
G21		348		2901		348		2901	G21	2349	L.F.	24" BROAD TRAVERSE Stripes
G21				2164				2164	G21	2164	L.F.	CURB MARKING
G21				1177				1177	G21	1177	SQ.FT.	ISLAND MARKING
G21				6				6	G21	6	EACH	LANE ARROWS
G25								2	G25	2	EACH	48" LIGHT FIXTURE WITH HO LAMP
G25			1	14			1	21	G25	22	EACH	72" LIGHT FIXTURE WITH HO LAMP
G25				1				1	G25	1	EACH	96" LIGHT FIXTURE WITH HO LAMP
G25				32				40	G25	40	EACH	72" LIGHT FIXTURE WITH SHO LAMP
G25				6				10	G25	10	EACH	96" LIGHT FIXTURE WITH SHO LAMP
G25			1	12			1	13	G25	20	EACH	SIGN BALLAST TYPE "A"
G25				3				4	G25	4	EACH	SIGN BALLAST TYPE "B"
G25				7				7	G25	7	EACH	SIGN BALLAST TYPE "C"
G25				14				20	G25	20	EACH	SIGN BALLAST TYPE "D"
G25			1	4			1	9	G25	10	EACH	TRANSFORMER, TYPE I,
G25				8				9	G25	9	EACH	TRANSFORMER, TYPE II,
G25				3				3	G25	3	EACH	TRANSFORMER, TYPE III,
G25				4				4	G25	4	EACH	TRANSFORMER, TYPE IV,
G25								3	G25	3	EACH	TRANSFORMER, TYPE V,
G25				1				1	G25	1	EACH	TRANSFORMER, TYPE VI,
G25			1	15			1	21	G25	22	EACH	30 AMP FUSIBLE DISCONNECT SWITCH WITH TYPE "Y" ENCLOSURE
G25				5				8	G25	8	EACH	30 AMP FUSIBLE DISCONNECT SWITCH WITH TYPE "Z" ENCLOSURE
G25				6				6	G25	6	EACH	DISCONNECT SWITCH ENCLOSURE MOUNTING BRACKET
G25			1	19			1	28	G25	29	EACH	GROUND ROD
G25			1	25			1	39	G25	40	EACH	SIGNS WIRED, COMPLETE,
G25				3				3	G25	3	EACH	STRUCTURE MOUNTED SIGN WIRED, COMPLETE
G25			1	19			1	28	G25	29	EACH	SIGN SERVICE
G25				3				3	G25	3	EACH	SIGN SERVICE FOR STRUCTURE MOUNTED SIGNS
815	56.0	387.5			56.0	568.0			815	5738.0	SQ.FT.	SIGN ERECTION - EXTRU SHEET TYPE
815					21.6	138.6			815	1408.2	SQ.FT.	SIGN ERECTION - FLAT SHEET TYPE
816								1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 7.5 DESIGN 1 (MOD.) SPAN = 59'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 7.5 DESIGN 2 (MOD.) SPAN = 77'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 7.6 DESIGN 1 (MOD.) SPAN = 69'-0"
816				1				2	816	2	EACH	OVERHEAD SIGN SUPPORT NO. 7.6 DESIGN 2 (MOD.) SPAN = 71'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 1, ARM = 16'-0"
816								1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 1 (MOD.) ARM = 11'-0"
816				2				2	816	2	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 1 (MOD.) ARM = 13'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 1 (MOD.) ARM = 13'-6"
816				1				1	816	1	EACH	COMBINATION SIGN SUPPORT NO. 12.24, DESIGN 1 (MOD.) ARM = 14'-0"
816			1				1		816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 1 (MOD.) ARM = 14'-6"
816								1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 1 (MOD.) ARM = 15'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 1 (MOD.) ARM = 16'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 2 (MOD.) ARM = 19'-0"
816								1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 4 ARM = 20'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 8 (MOD.) ARM = 25'-0"
816				2				2	816	2	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 8 (MOD.) ARM = 27'-0"
816				2				2	816	2	EACH	OVERHEAD SIGN SUPPORT NO. 12.24, DESIGN 8 (MOD.) ARM = 30'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 15.8, DESIGN 3 (MOD.) SPAN = 77'-0"
816				1				1	816	1	EACH	OVERHEAD SIGN SUPPORT NO. 15.8, DESIGN 3 (MOD.) SPAN = 79'-0"
816				3				4	816	4	EACH	OVERPASS STRUCTURE MOUNTED SIGN SUPPORT
816								1	816	1	EACH	MONOLEVER OVERHEAD SIGN SUPPORT, POLE = 20'-6" ARM = 28'-0"
816							16	830	816	906	L.F.	STRUCTURAL SUPPORT, 4" DRIVE POST
816							15	451	816	466	L.F.	STRUCTURAL SUPPORT, 6" BEAM
816								72	816	72	L.F.	STRUCTURAL SUPPORT, 6" BEAM, AS PER PLAN
816								506	816	506	L.F.	STRUCTURAL SUPPORT, 8" BEAM
816								115	816	115	L.F.	STRUCTURAL SUPPORT 8" BEAM, AS PER PLAN
816	3.0	79.0			3.0	117.6			816	120.6	C.Y.	CONCRETE FOR OVERHEAD SIGN SUPPORT FOUNDATIONS
816					0.2	13.6			816	13.8	C.Y.	CONCRETE FOR GROUND MOUNTED SIGN SUPPORT FOUNDATIONS
816								94.5	816	94.5	L.F.	INTERIM STEEL DRIVE POSTS, 4" PER FOOT, AS PER PLAN
620				8				8	G20	8	EACH	INTERIM DELINEATORS, AS PER PLAN
621				0.42				0.42	G21	0.42	MILES	INTERIM PAVEMENT MARKING, EDGE LINE
816				40.5				259.8	815	259.8	SQ.FT.	INTERIM COVERING FOR SIGNS
606								1420	606	1420	L.F.	Guard Rail, Type 6

CALC. BY RRC DATE 12/2/97
CHK'D. BY WDB DATE 12-4-97

TRAFFIC CONTROL AND SIGN QUANTITIES

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

91
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	1222
222	

SEEDING	
END WIDTH	SQ. YDS.
	2444
	218

FED. RD.	STATE	PROJECT	
2	OHIO		

92
656

MAH-680-6.98

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

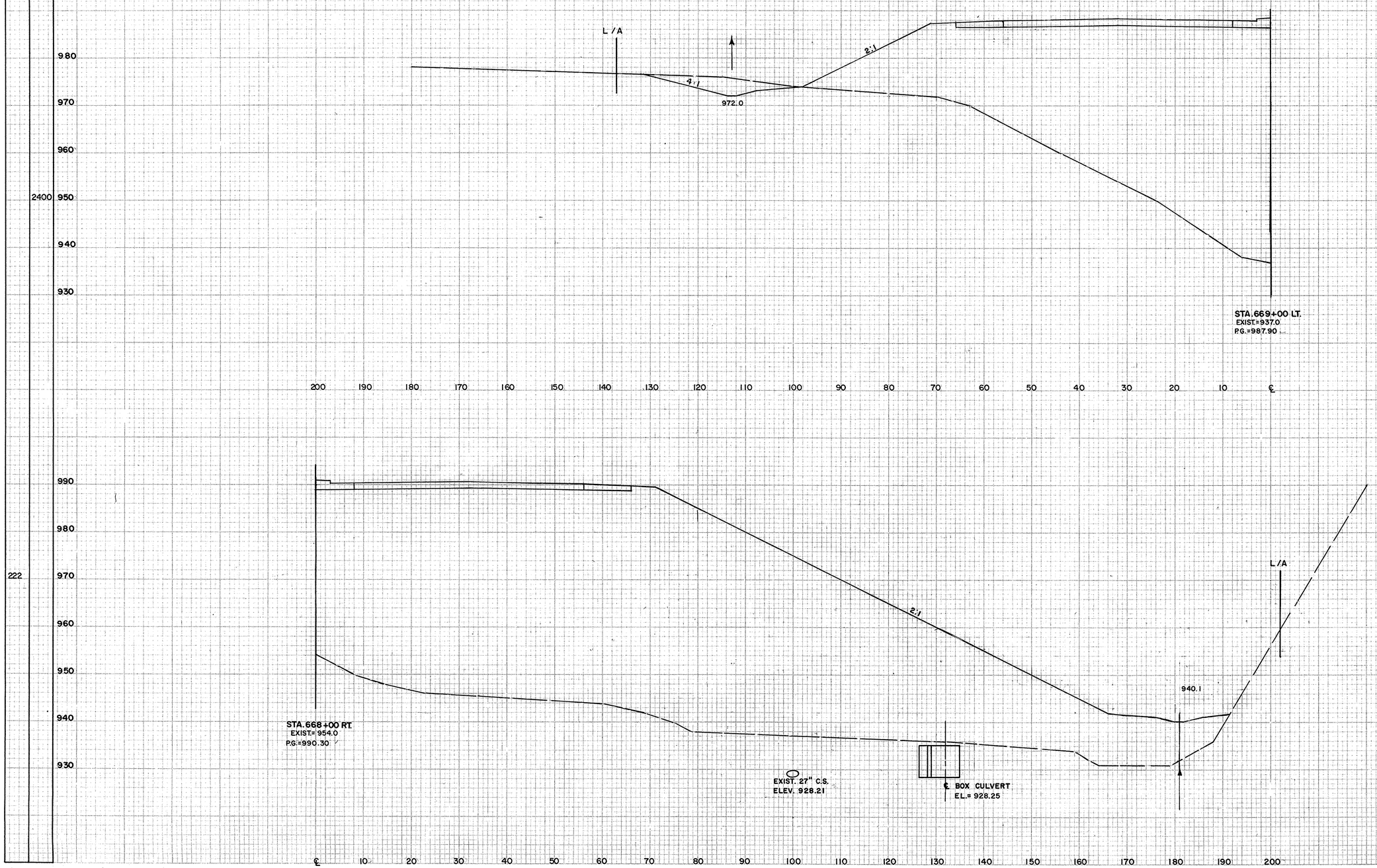
FED. RD.	STATE	PROJECT	
2	OHIO		

93
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	2400
222	

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
STA. 668+00	23	7693	
		72	25445



STA. 668+00 RT. TO STA. 669+00 LT.

PWD 8/30/68
RRC 6/27/68
MAY 25 1971

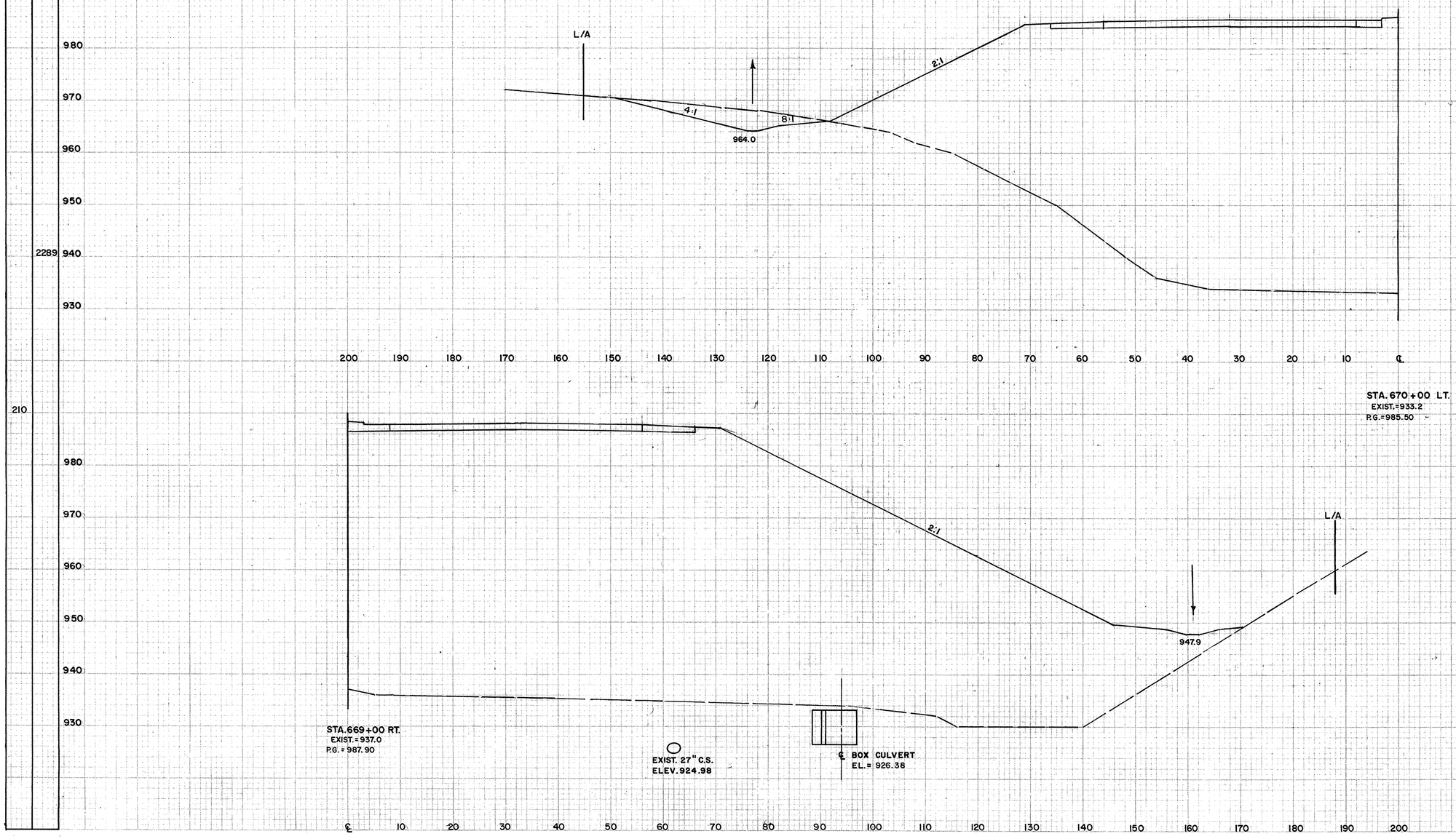
FED. RD.	STATE	PROJECT	
2	OHIO		

94
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	2289

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
STA. 669+00	66	8954	
		165	30828
STA. 668+00	23	7693	



STA. 669+00 TO STA. 670+00

RRC 6/27/68
PWD 8/30/68

MAY 25 1971

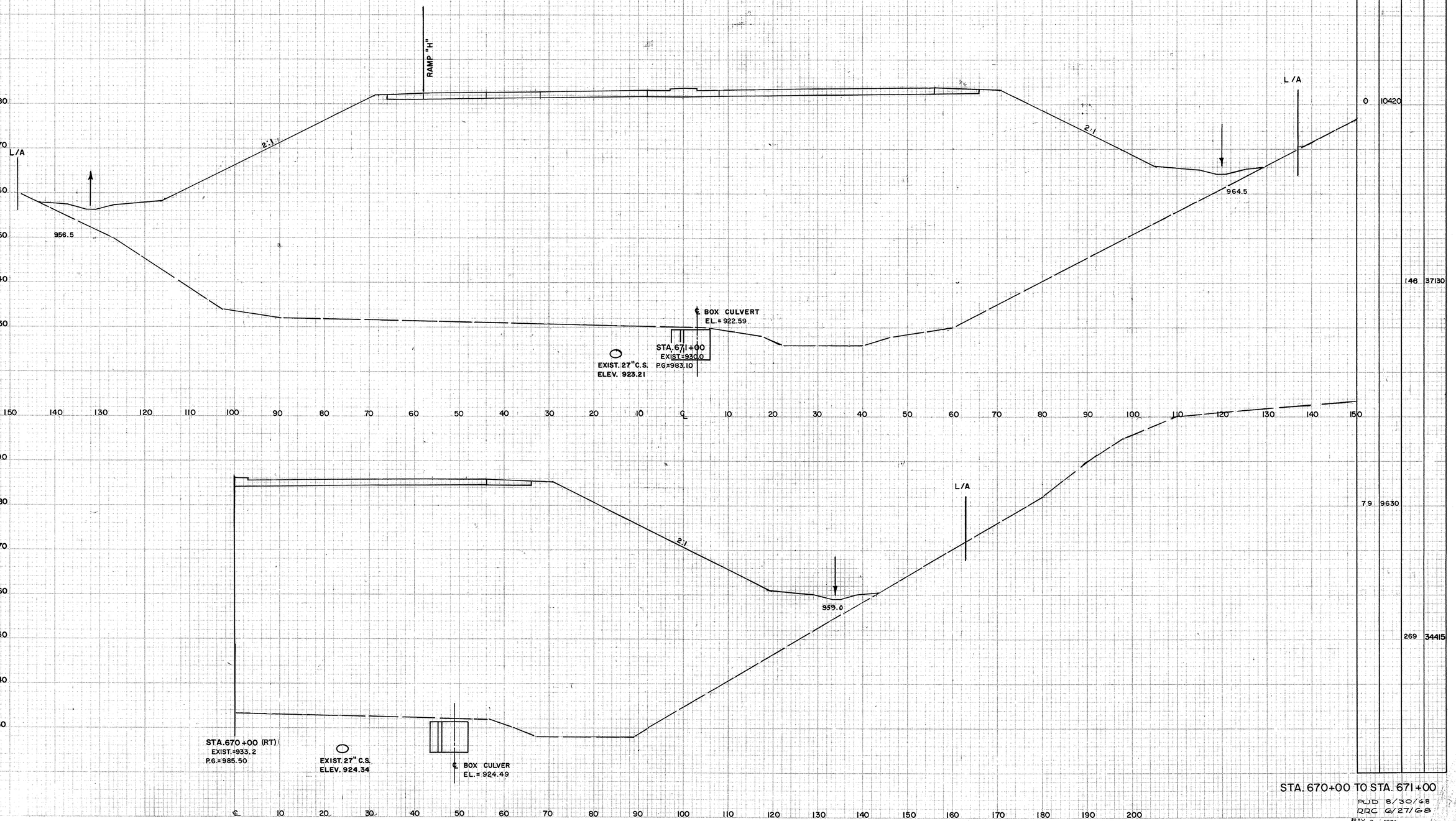
FED. RD.	STATE	PROJECT	
2	OHIO		

95
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	1794
163	
	2028
202	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	10420		
		146	37130
7.9	9630		
		269	34415



STA. 670+00 TO STA. 671+00

PUD 8/30/68
RRC 9/27/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

96
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	908
160	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	8785		

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

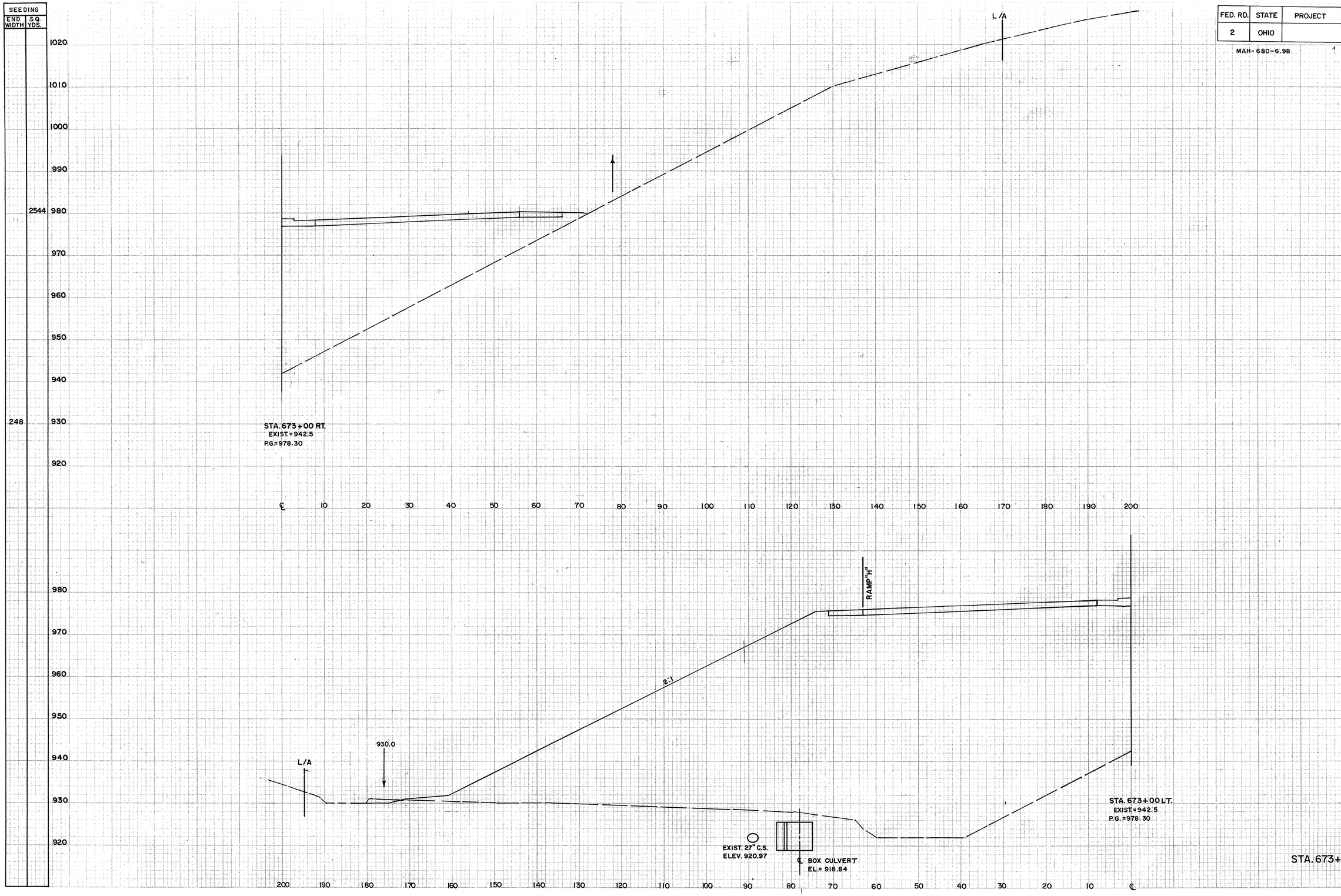
97
656

SEEDING	
END WIDTH	SQ. YDS.
	1153
	167

FED. RD.	STATE	PROJECT	
2	OHIO		

98
656

MAH-680-6.98



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
6	7110		
		13	14969

STA. 673+00

PWD 8/30/68
RRC 6/28/68
MAY 25 1971

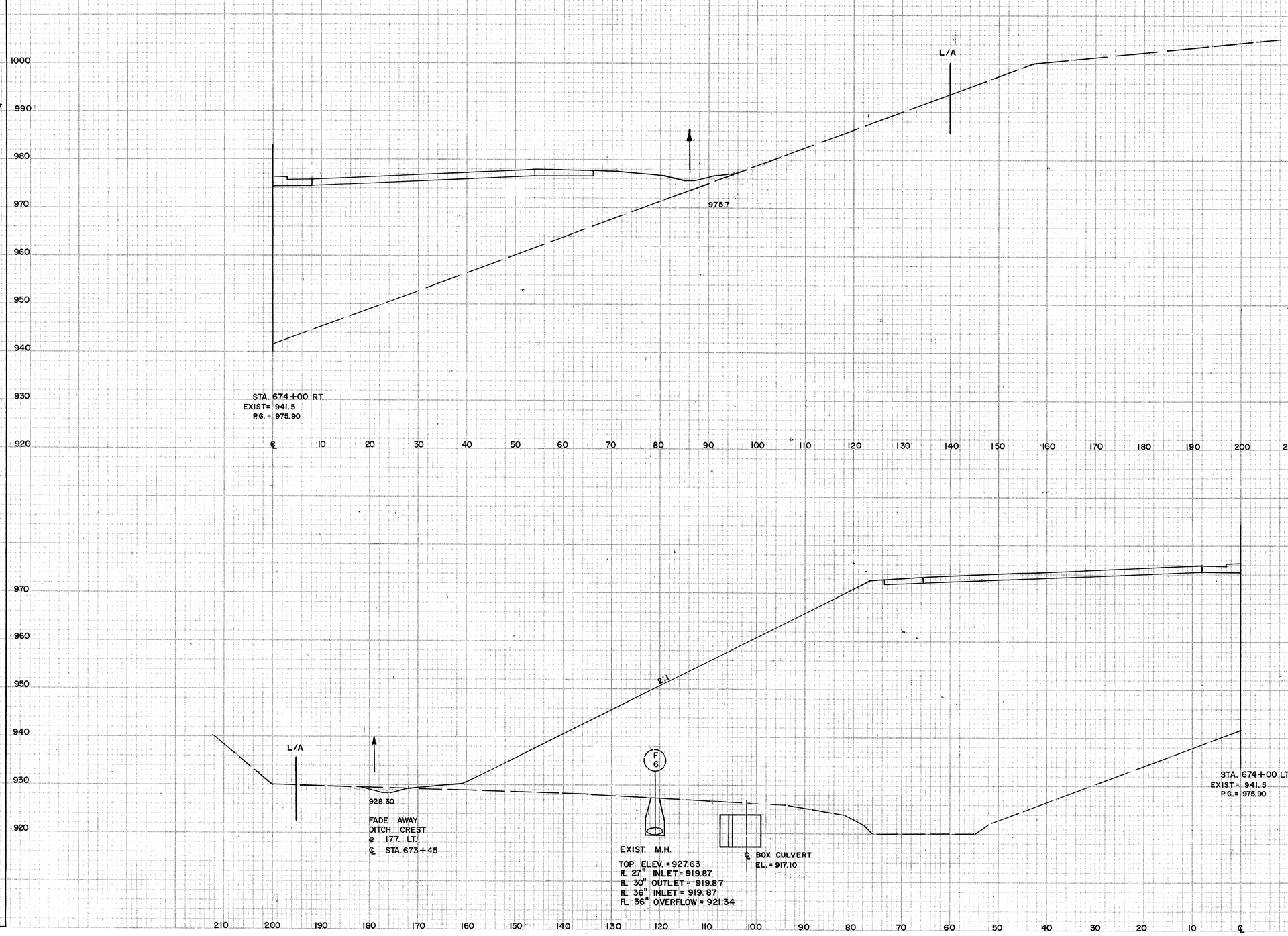
FED. RD.	STATE	PROJECT	
2	OHIO		

99
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	2167
210	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
10	7297		
		30	26682



RRC 6/28/68
PWD 8/30/68

STA. 674+00

MAY 25 1971

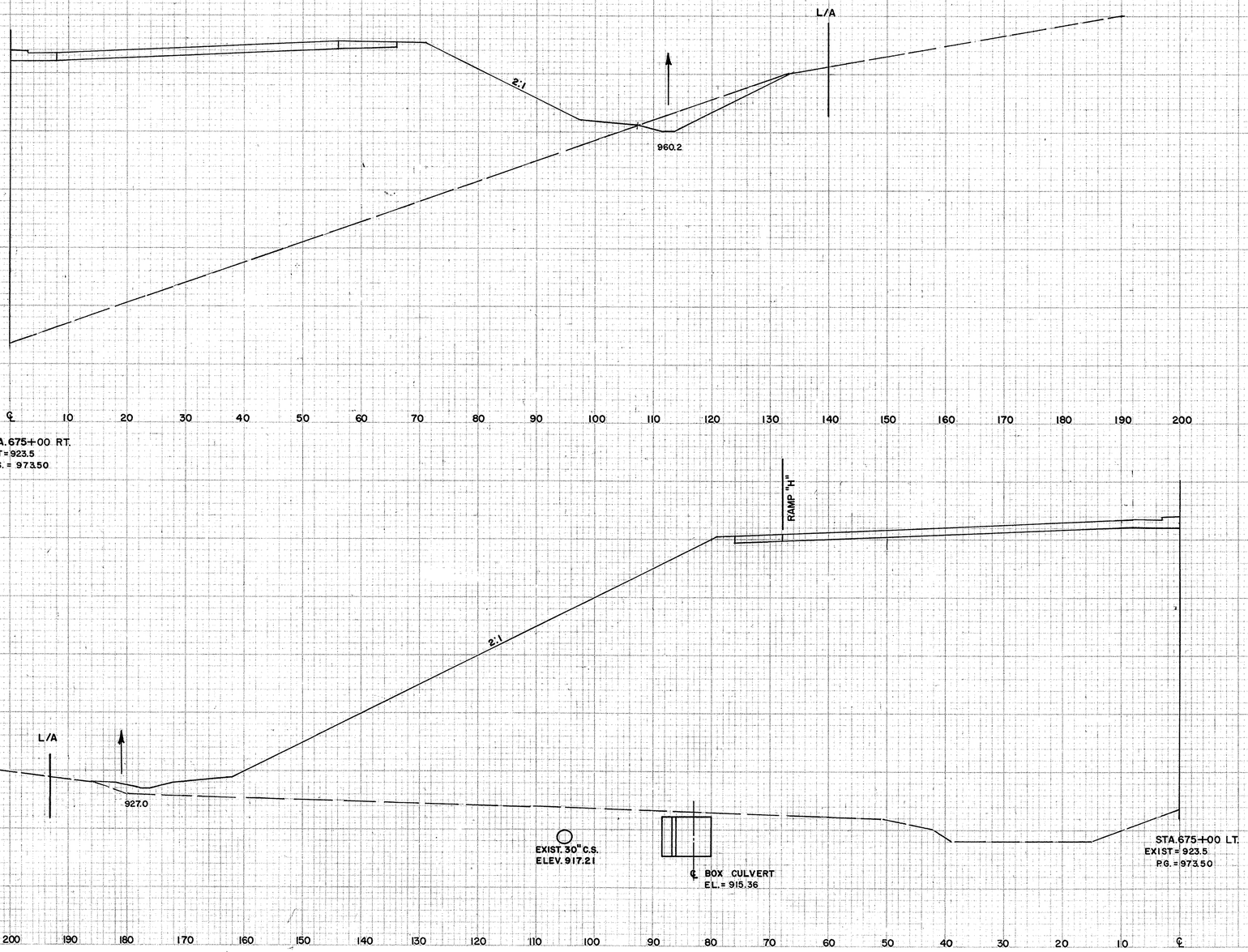
FED. RD.	STATE	PROJECT	
2	OHIO		

100
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
180	2589

END AREA		C.U. YDS.	
CUT	FILL	CUT	FILL
45	9410		
102	30939		



RRC 6/28/68

STA. 675+00

PWD 8/30/68

MAY 15 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

101
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.

FED. RD.	STATE	PROJECT	
2	OHIO		

102
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
1292	
279	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
28	12570		

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

103
656

SEEDING		END AREA CU. YDS.			
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL

FED. RD.	STATE	PROJECT	
2	OHIO		

104
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	539
47	
	578
57	
	158
322	
105	

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
1755	0		
		6751	0
1890	0		
1461	0		
AHEAD 1265	0		
BACK 2210	0		
RAMP "H" AHEAD 915	0		
1116	741		
230	1600		
243	10029		

MATCH LINE RAMP "H"

STA. 679+00
EXIST= 974.6
P.G. = 963.90

964.26

L/A

8:1

3:1

MATCH LINE RAMP "H"

STA. 678+00
EXIST= 978.0
P.G. = 966.30

966.66

L/A

4:1

USE FULL SECTION BACK

RAMP "H" AHEAD — USE MAIN LINE SECTION AHEAD

SEEDING 70 — SEEDING 57

℄ RAMP "H"

L/A

980

970

960

2:1

57 AHEAD
127 BACK

961.58

STA. 677+70
RAMP "H"
P.G. = 964.53

STA. 677+75
EXIST = 975.0
P.G. = 966.90

967.26

L/A

980

970

960

950

H44

℄ RAMP "H"

2:1

18" DRCP

960.4

STA. 677+45
RAMP "H"
P.G. = 964.89

104'-15" TYPE B-B @ 2.54%

℄ 6"605

P-44

A44

STA. 677+50
EXIST = 954.2
P.G. = 967.50

A-44

604 Nº 2A-18 (MOD) INLET
STA. 677+50 (℄)
RT. TOP ELEV. = 967.78
LT. TOP ELEV. = 967.92
RT. WINDOW ELEV. = 967.11
LT. WINDOW ELEV. = 967.25

RL 15" = 963.05

967.86

8:1

4:1

L/A

H-44

HW-E HEADWALL
STA. 677+45 (24' LT. ℄ RAMP "H")
RL 15" = 960.45

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RDC 6/28/68

STA. 677+50 TO STA. 679+00

PUD 8/30/68

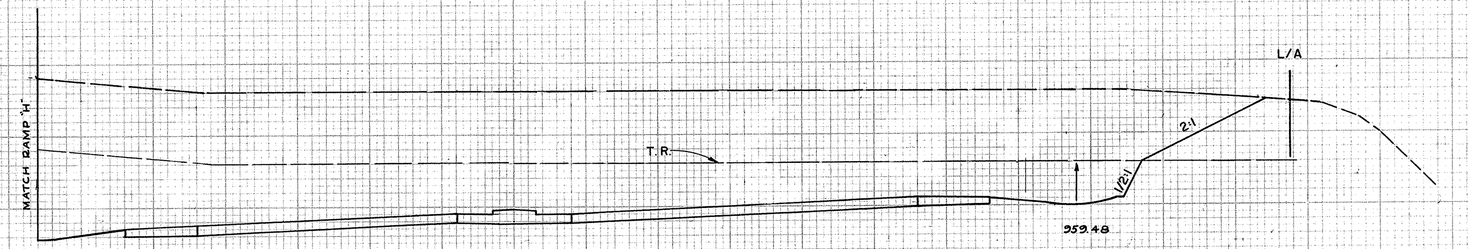
MAY 23 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

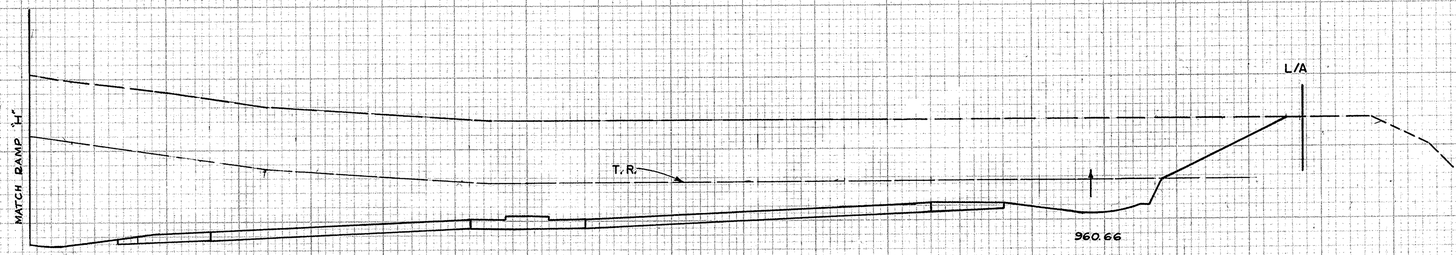
105
656

MAH-680-6.98

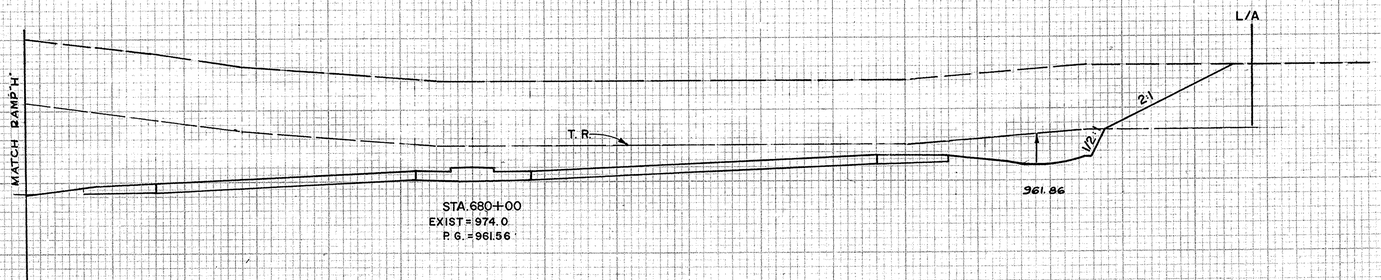
SEEDING	
END WIDTH	SQ. YDS.
	578
58	
	319
57	
	297
50	



STA. 681+00
EXIST = 976.0
P.G. = 959.10



STA. 680+50
EXIST = 974.0
P.G. = 960.30



STA. 680+00
EXIST = 974.0
P.G. = 961.56

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
2849	0		
		4977	0
2526	0		
		4450	0
2280	0		
		7473	0

RRC 6/28/68
PWD 8/30/68
MAY 23 1971

STA. 680+00 TO STA. 681+00

FINAL SURVEY	SURVEYED BY	DATE
	PLOTTED BY	
	TEMPLATE	
NOTE BOOK	AREAS	
	AREAS CHECKED	

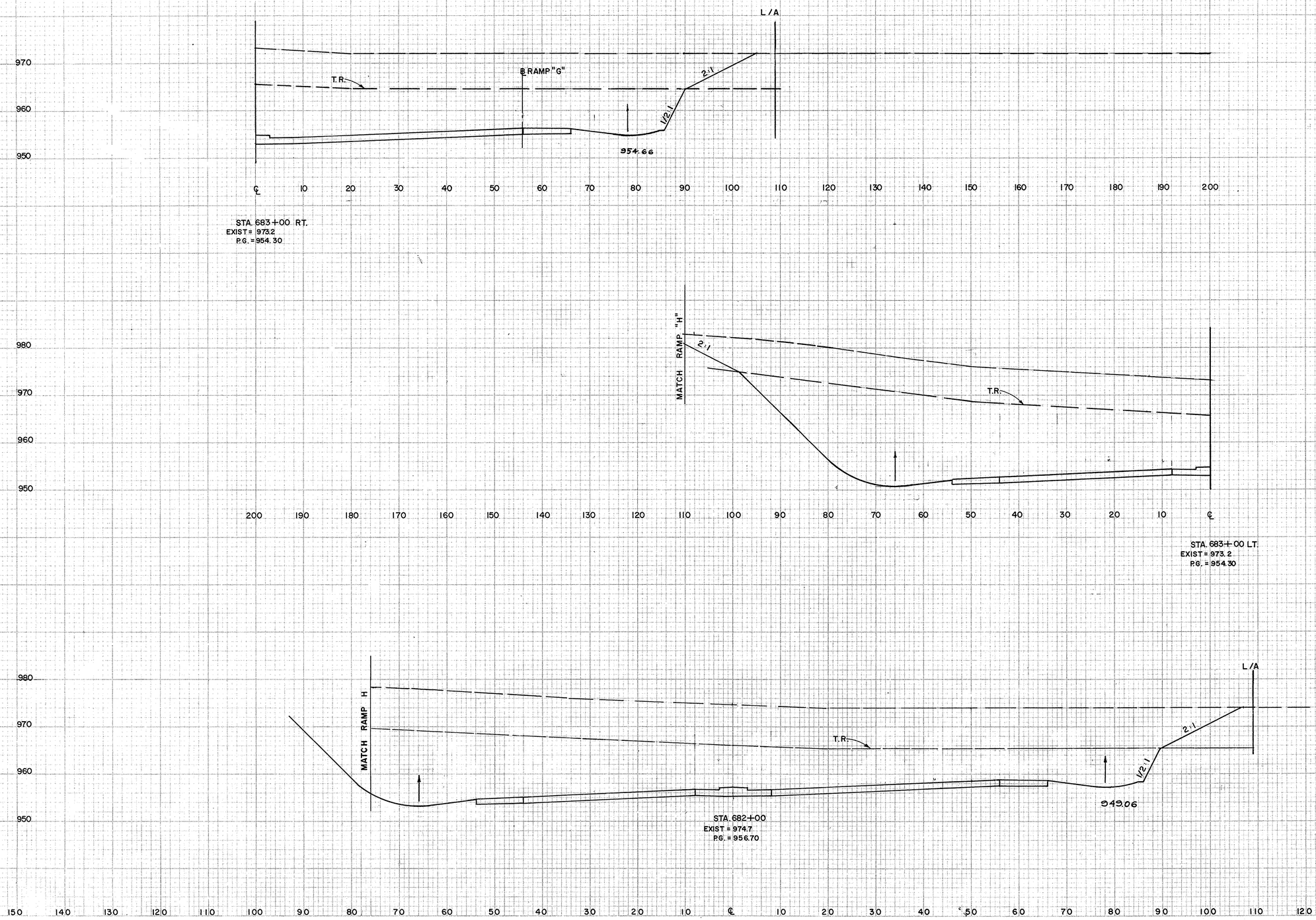
ORIGINAL SURVEY	SURVEYED BY	DATE
	PLOTTED BY	
	TEMPLATE	
NOTE BOOK	AREAS	
NO	AREAS CHECKED	

FED. RD.	STATE	PROJECT	
2	OHIO		

106
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	906
66	
	622
46	



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
3867	0		
		13535	0
3442	0		
		11650	0

RRC 6/28/68

STA. 682+00 TO STA. 683+00

PWD 8/30/68

MAY 25 1971

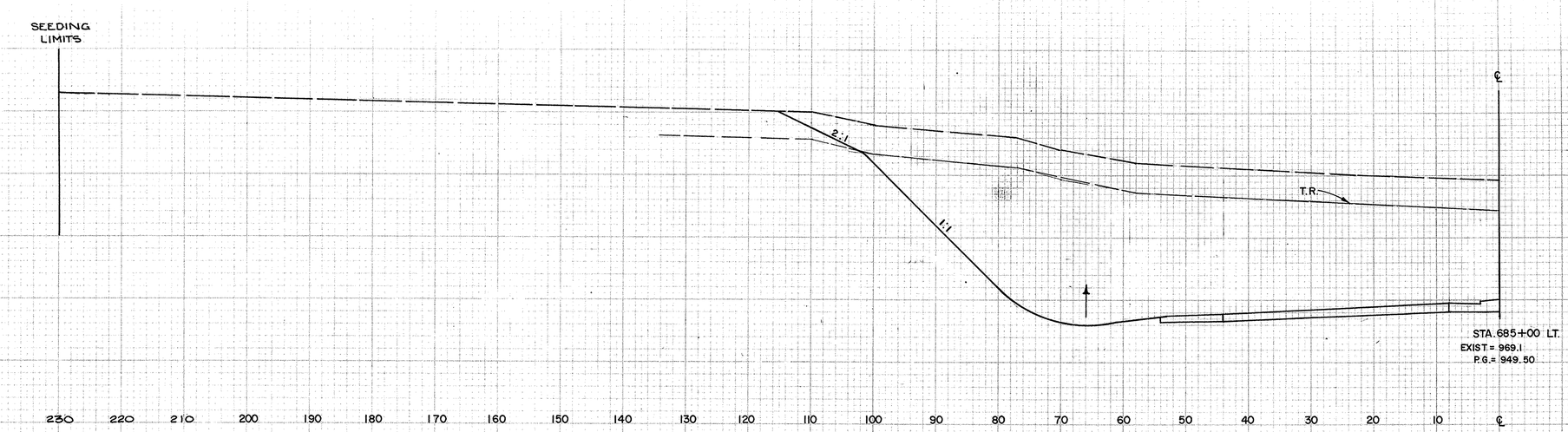
FED. RD.	STATE	PROJECT	
2	OHIO		

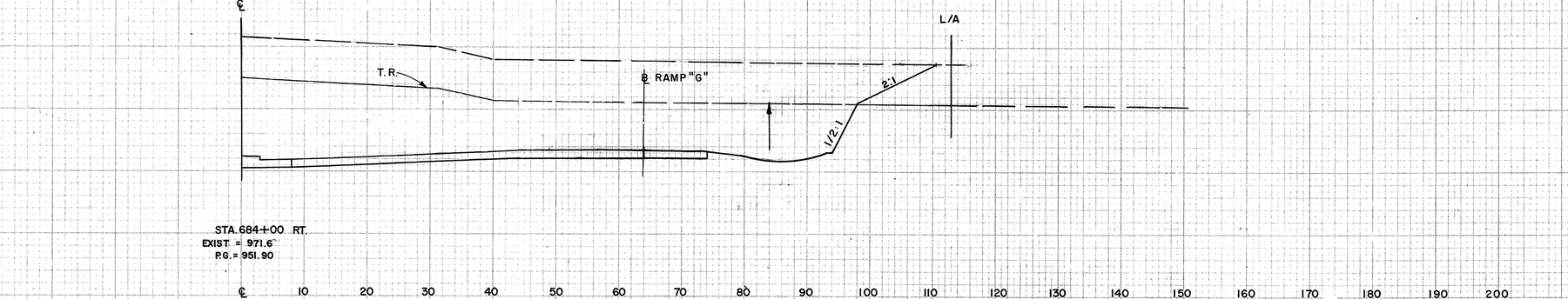
MAH-680-6.98

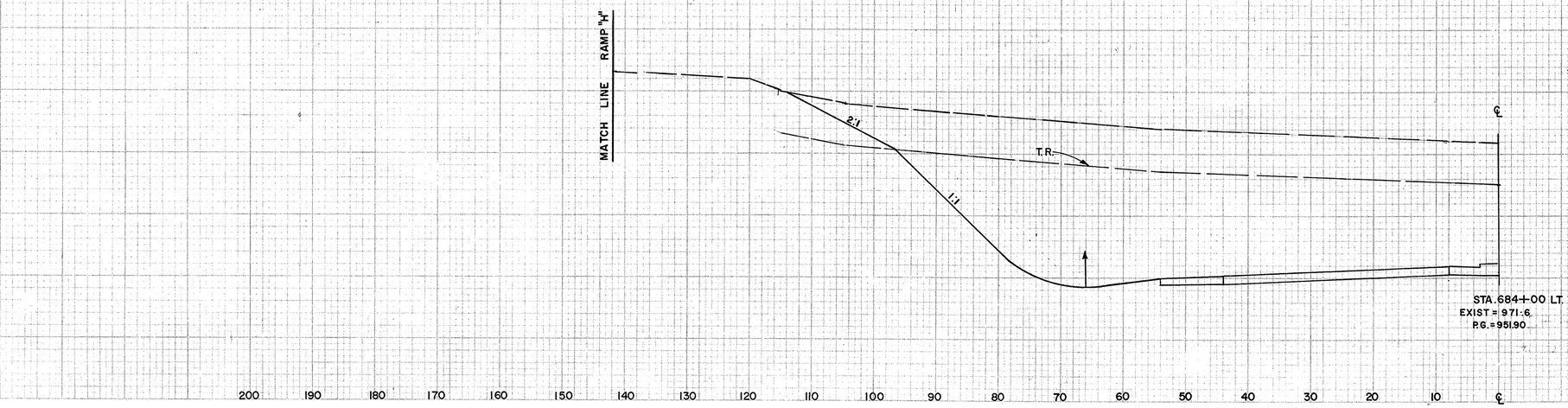
107
656

SEEDING	
END WIDTH	SQ. YDS.
	1494
	14344

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
		3879	0
		14344	0







PWD 8/30/68

STA. 684+00 TO STA. 685+00

DRC 6/28/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

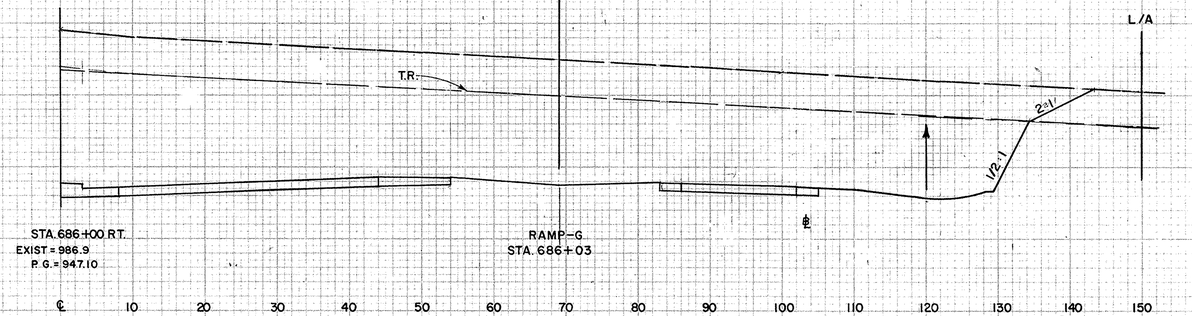
108
656

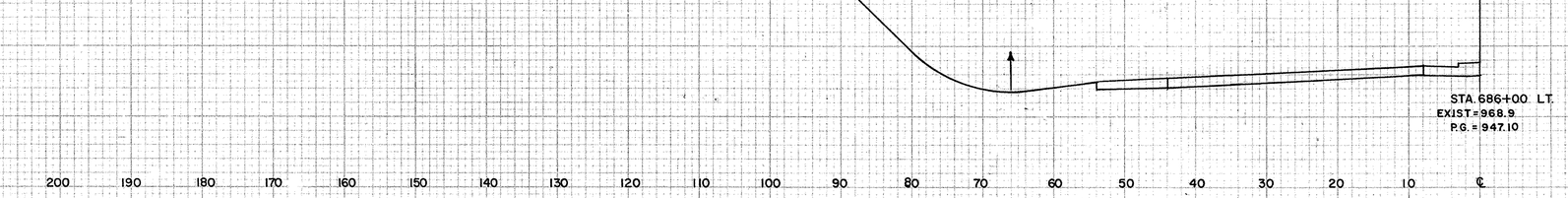
MAH-680-6.98

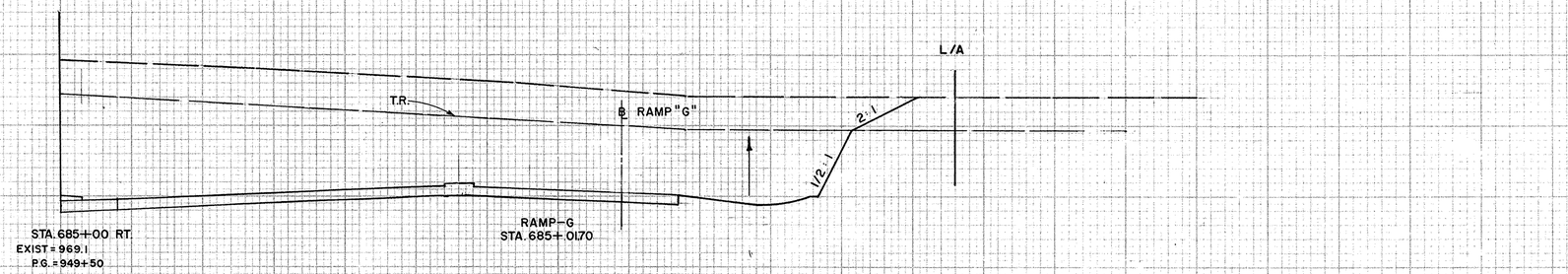
SEEDING END WIDTH	SEEDING SQ. YDS.	
	850	970
		960
		950
		940
68		AHEAD
117		BACK
	1606	970
		960
		950
		940
172		
		970
		960
		950
		940

USE FULL SECTION BACK

USE MAINLINE SECTION — RAMP "G" SECTION







END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
RAMP "G" AHEAD	860	0	
AHEAD	4173	0	
BACK	3049	0	

FED. RD.	STATE	PROJECT	
2.	OHIO		

109
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	156
0	
	0
472	
85	

L/A

℄ SHIRLEY RD.

EDGE PAV'T TAYLOR AVE.

2:1

1:1

℄ R. 15" 958.45

T.R.

4:1

936.19

8:1

STA. 689+00
EXIST. = 966.0
P.G. = 939.90

SHIRLEY RD.
MATCH LINE

T.R.

℄ R. 15" = 962.24

℄ TAYLOR AVE.

4:1

938.59

STA. 688+00
EXIST = 968.7
P.G. = 942.36

SEEDING LIMITS

R/W

T.R.

MATCH LINE RAMP 'G'

944.54

STA. 687+00
EXIST = 970.5
P.G. = 944.70

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
4853	0		
		17802	0
4760	0		
		17561	0
4723	0		
		16474	0

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RRC 6/28/68

STA. 687+00 TO STA. 689+00

PWD 8/30/68

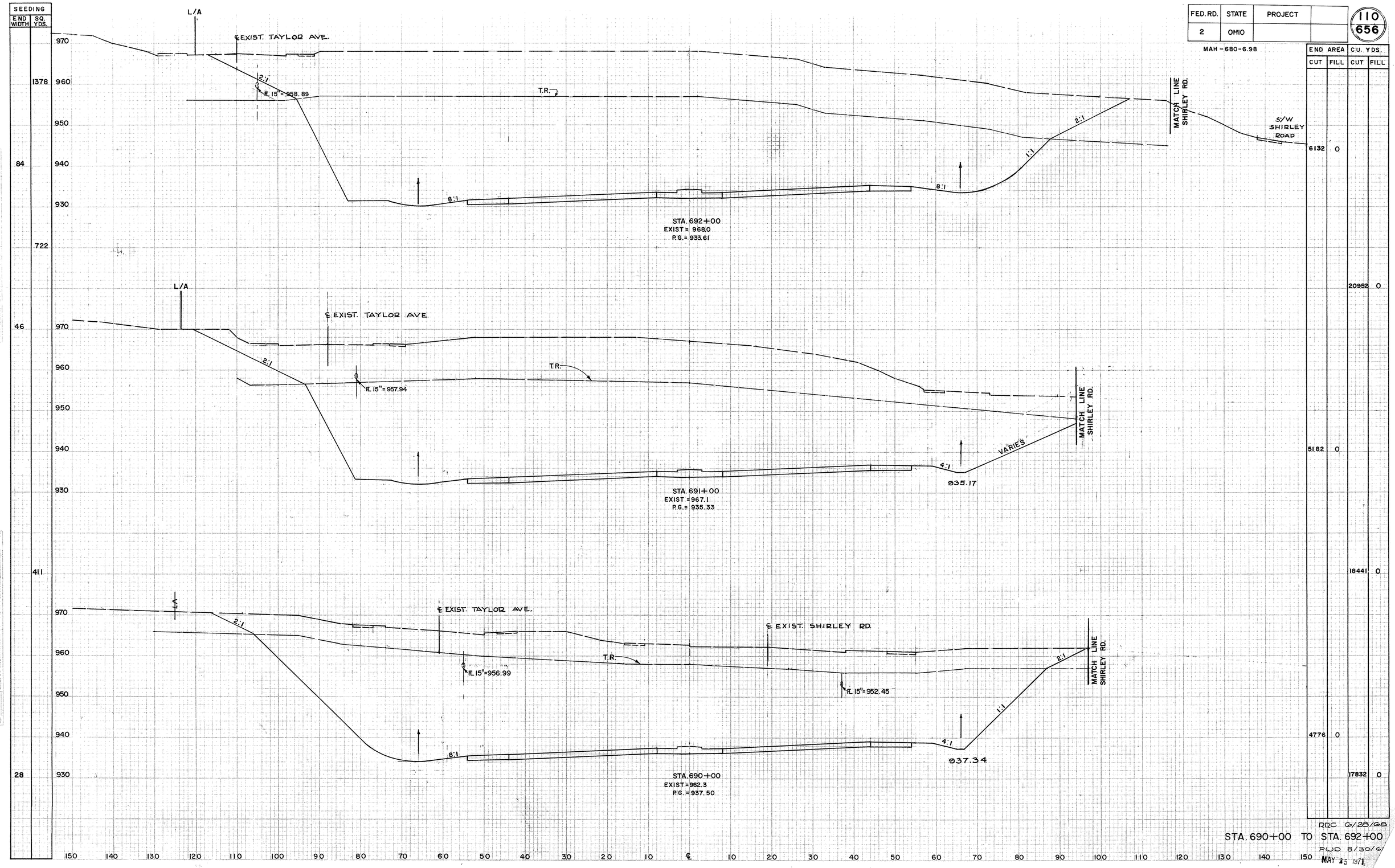
MAY 23 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

110
656

SEEDING END WIDTH	SEEDING SQ. YDS.
	1378
84	
	722
46	
	411
28	



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
6132	0		
		20952	0
5182	0		
		18441	0
4776	0		
		17832	0

RDC 6/28/68

STA. 690+00 TO STA. 692+00

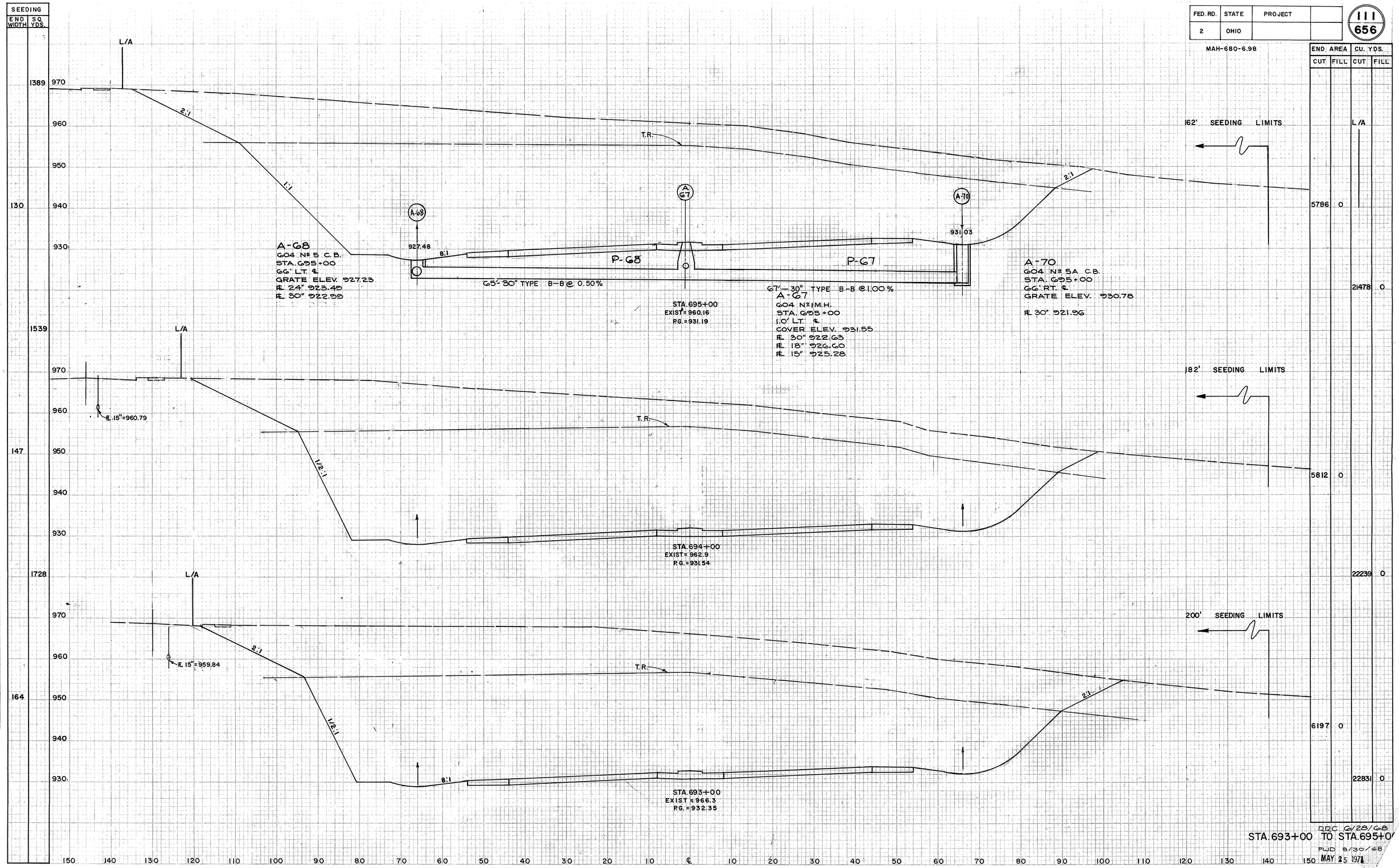
PUD 8/30/6

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

111
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
5786	0		
		21478	0
5812	0		
		22239	0
6197	0		
		22831	0

L/A

STA. 693+00 TO STA. 695+00

RRC 6/28/68
PWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

112
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	1750	L/A 157'				
153		STA. 698+00 EXIST=961.4 P.G.=932.86	5591	0		
	1561	L/A			20183	0
128		STA. 697+00 EXIST=959.4 P.G.=931.85	5308	0		
	1378	L/A EXIST. TAYLOR AVE.			19815	0
120		STA. 696+00 EXIST=959.6 P.G.=931.29	5392	0		
					20700	0

RJRC 6/28/68

STA. 696+00 TO STA. 698+00

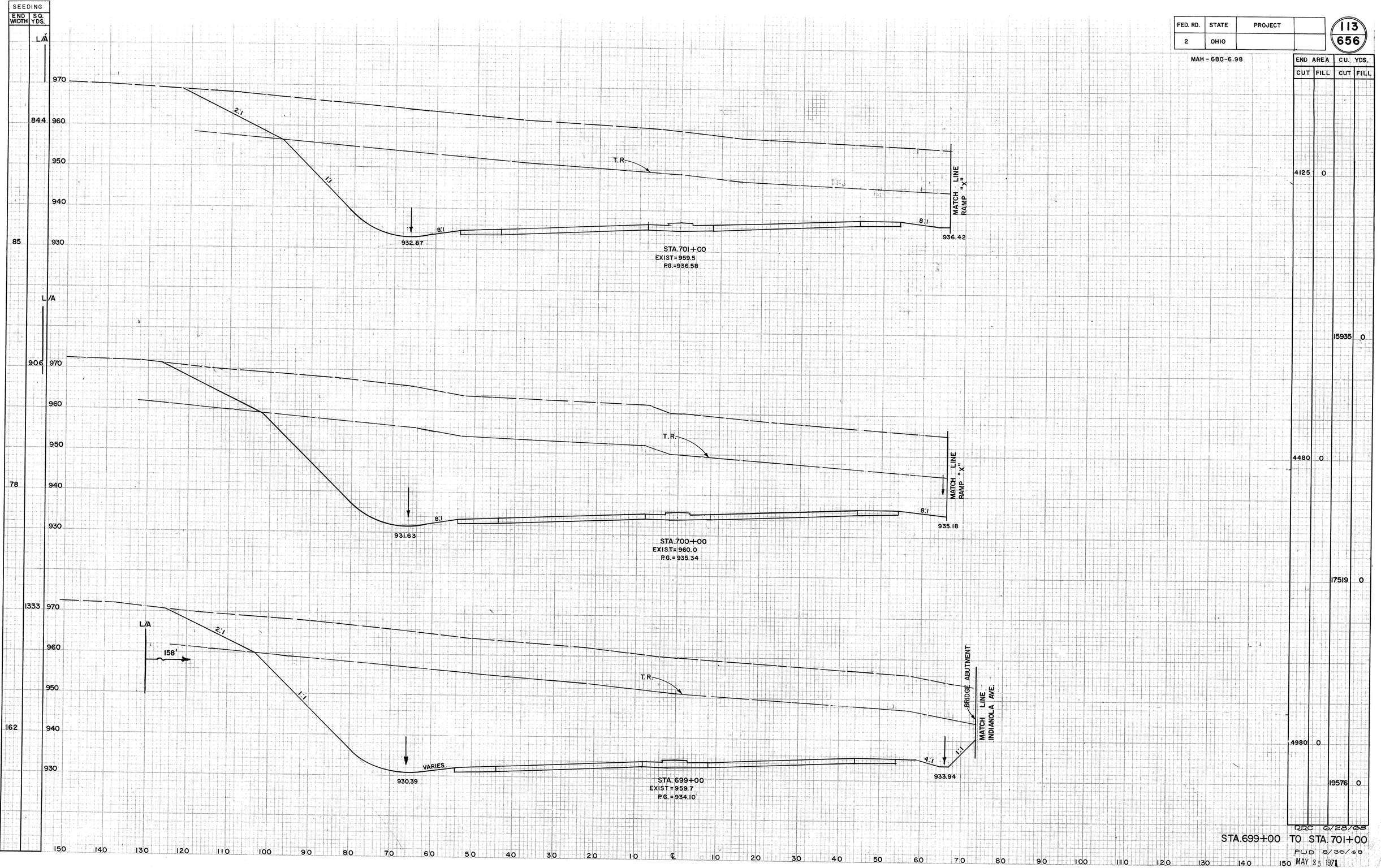
PJD 8/30/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

113
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
4125	0		
		15935	0
4480	0		
		17519	0
4980	0		
		19576	0

RRC 6/28/68

STA.699+00 TO STA.701+00

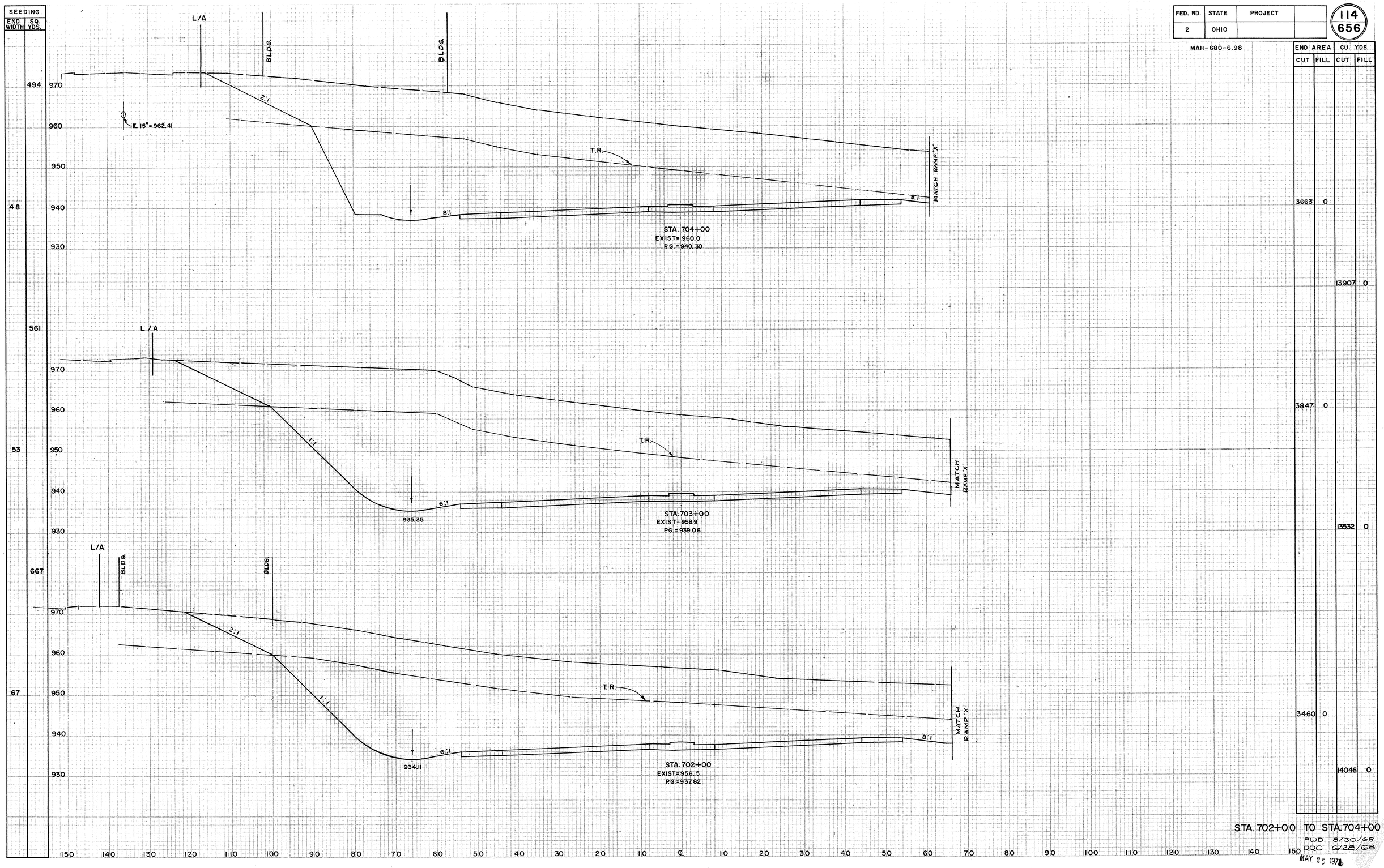
PWD 8/30/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

114
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
3663	0		
		13907	0
3847	0		
		13532	0
3460	0		
		14046	0

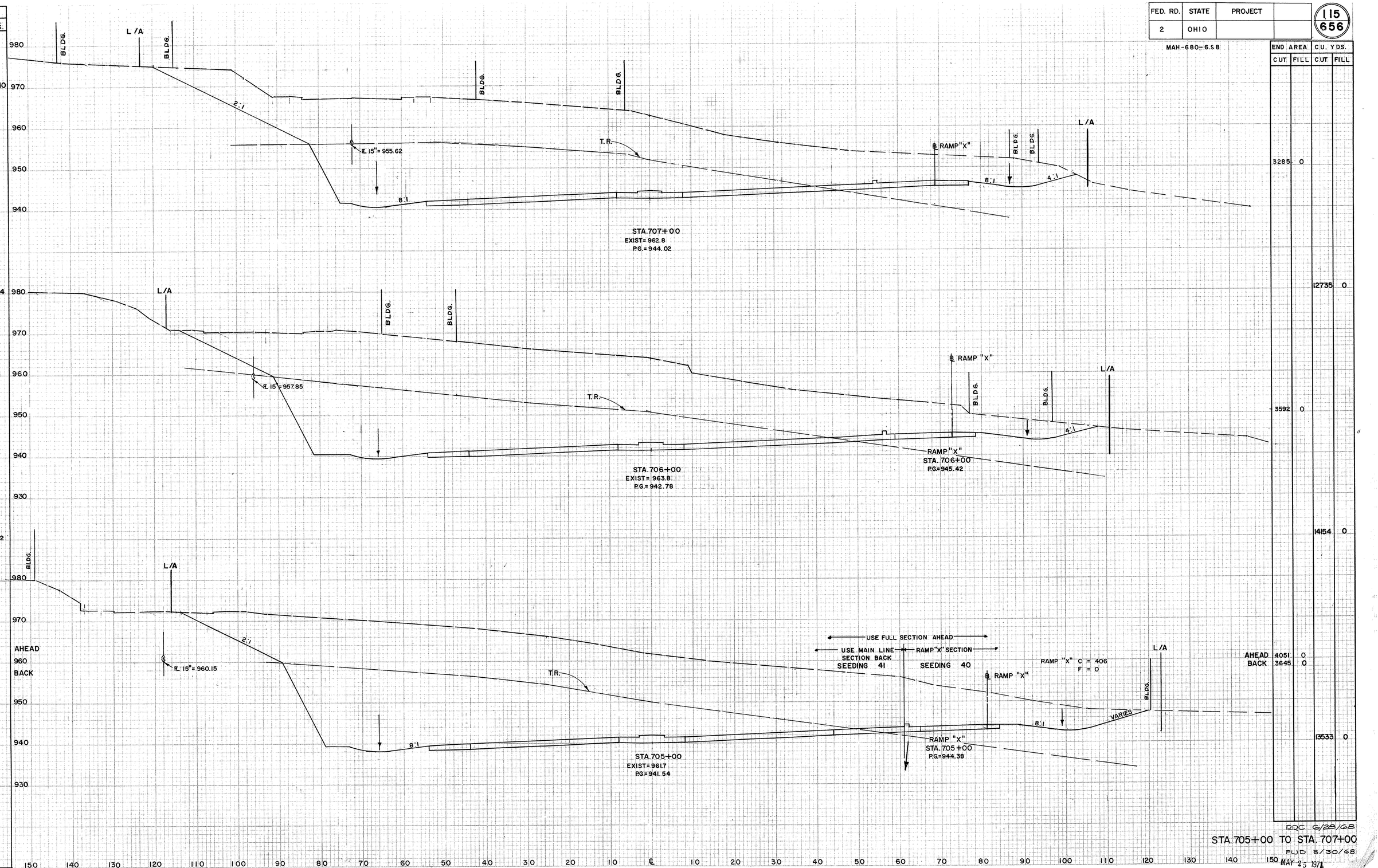
STA. 702+00 TO STA. 704+00

PWD 8/30/68
RRC 6/28/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

115
656

MAH-680-6.98



END AREA CUT	END AREA FILL	C.U. YDS. CUT	C.U. YDS. FILL
3285	0		
		12735	0
3592	0		
		14154	0
AHEAD 4051	0		
BACK 3645	0		
		13533	0

RRC 6/28/68

STA. 705+00 TO STA. 707+00

PWD 8/30/68

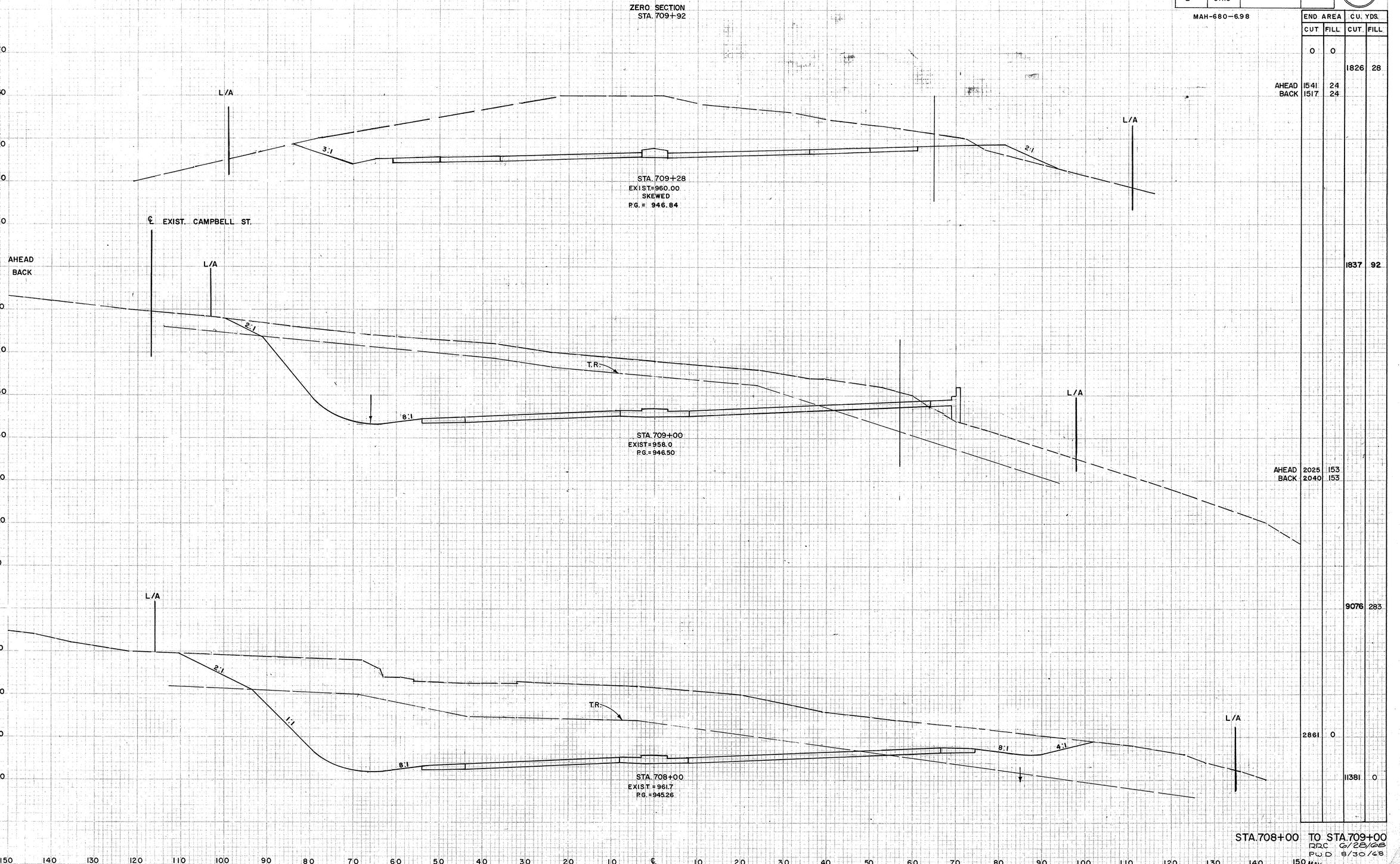
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

116
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	302
85	
91	381
55	
	883
104	



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0		
		1826	28
AHEAD 1541	24		
BACK 1517	24		
		1837	92
AHEAD 2025	153		
BACK 2040	153		
		9076	283
2861	0		
		11381	0

STA. 708+00 TO STA. 709+00

RRC 6/28/68

PWD 8/30/68

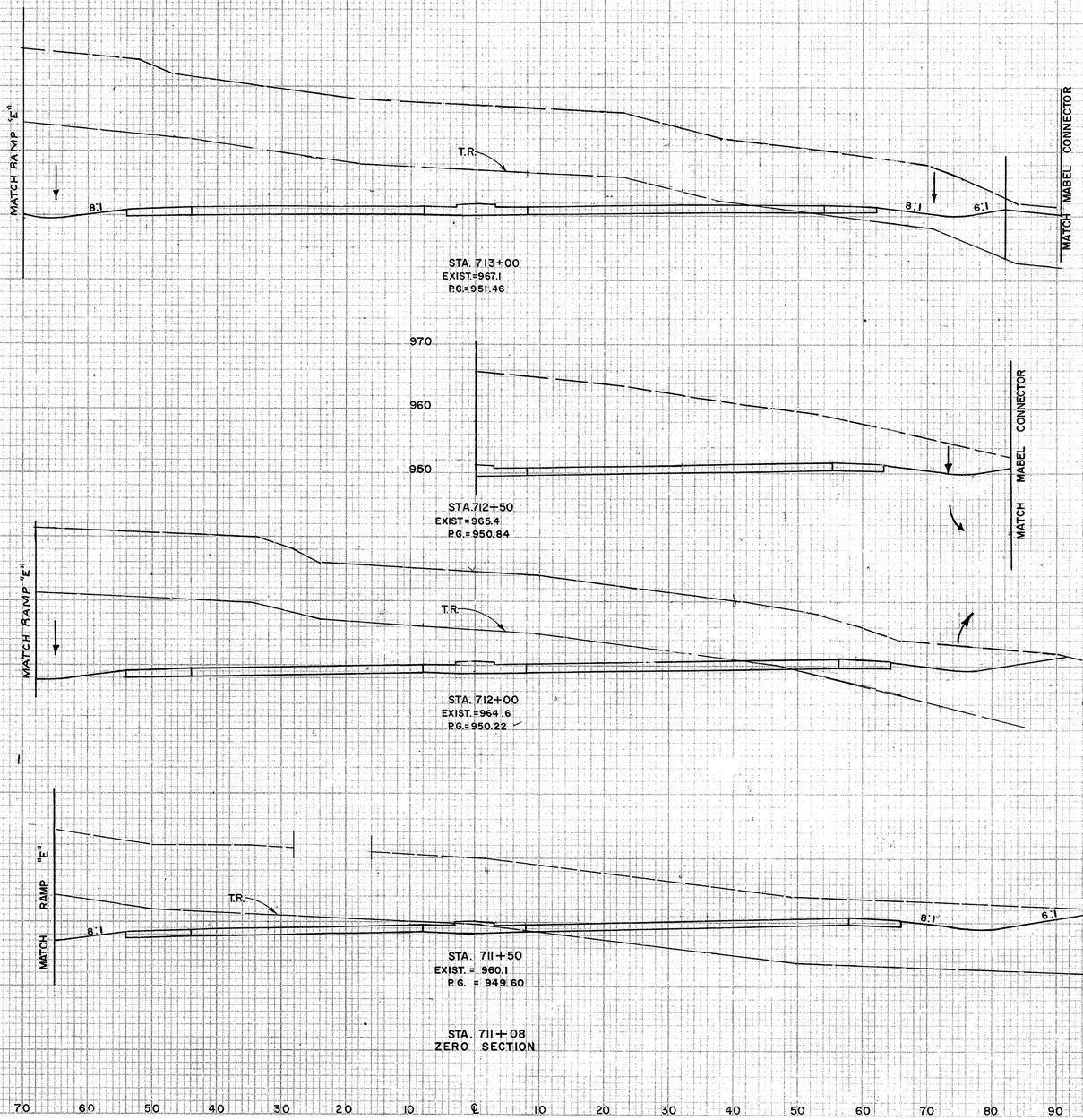
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

117
656

SEEDING	
END WIDTH	SQ. YDS.
	594
	980
44	970
	960
	950
	522 940
50	
	970
	960
	289 950
	940
	970
54	960
	126 950
0	940



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
2340	0		
		8280	0

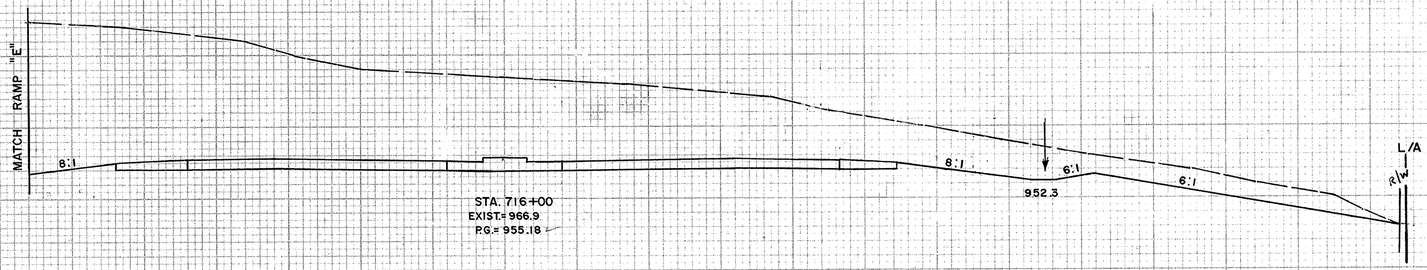
FED. RD.	STATE	PROJECT	
2	OHIO		

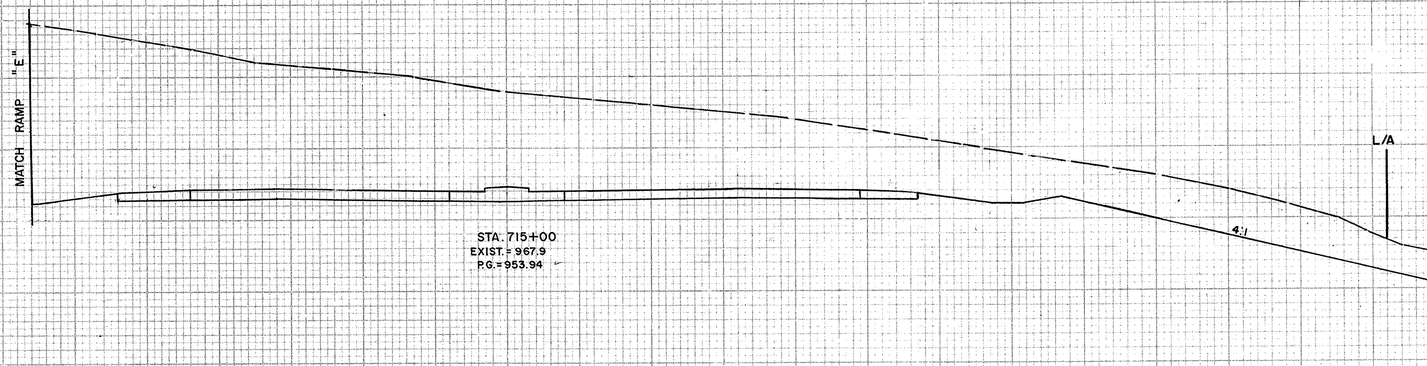
118
656

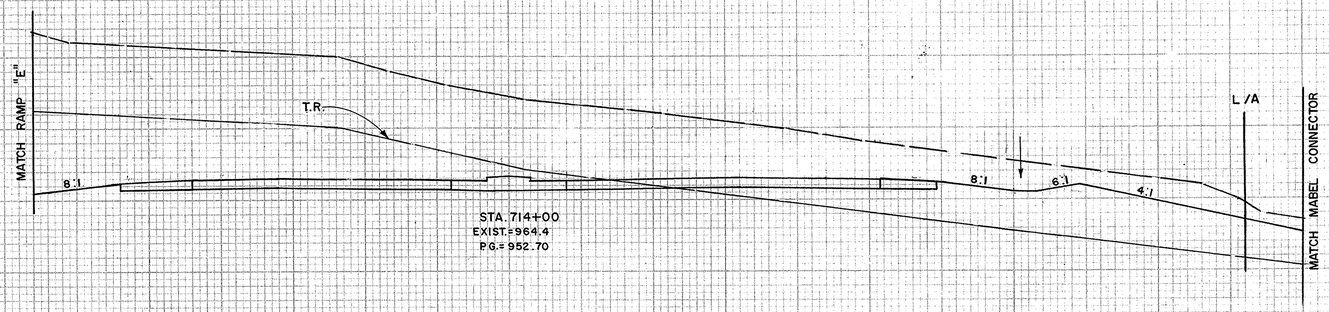
MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
81	600
83	911
63	811

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
1935	0		
		8180	0
2483	0		
		8210	0
1950	0		
		7945	0







RRC 6/28/68
PWD 6/30/68

STA. 714+00 TO STA. 716+00

MAY 8, 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

119
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	639
54	
	539
43	
	389
27	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
		1080	35
		4389	65
		1290	0
		5732	0
		1805	0
		6926	0

A-108
604 Nº 2A-10 (MOD) INLET
STA. 719+00 (℄)
TOP EL.= 959.19
WINDOW EL.= 958.52

RL 15"= 954.49

A 108

MATCH RAMP "E"

T.R.

EXIST. 15" SEWER
ELEV.= 954.87

STA. 719+00
EXIST.= 967.3
P.G.= 958.90

P-108

H-108
HW-E HEADWALL
STA. 719+00
(86' RT. ℄)
RL 15" = 949.07

H 108

L/A

86'-15" TYPE B-B @ 6.30%

949.0

6' X 3' X 18"
DUMP ROCK
CHANNEL PROTECTION

MATCH RAMP "E"

STA. 718+00
EXIST.=963.8
P.G.=957.66

T.R.

6:1

6:1

L/A

EXIST. 15" SEWER
ELEV. = 947.39

MATCH RAMP "E"

T.R.

STA. 717+00
EXIST.= 968.0
P.G.= 956.42

6:1

6:1

952.6

L/A

EXIST. 15" SEWER
ELEV.= 939.97

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

POD 8/30/68
RRC 6/28/68

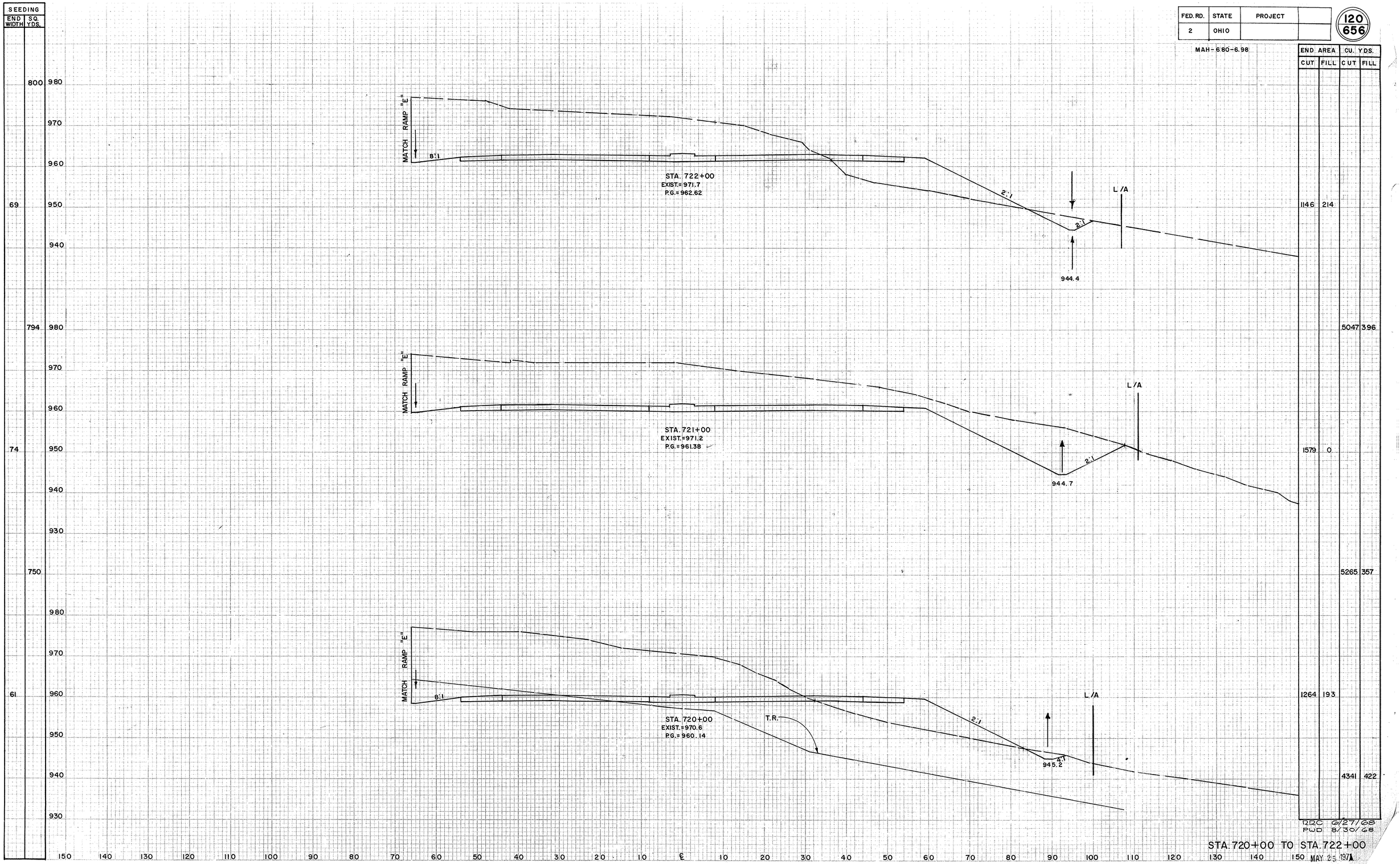
STA. 717+00 TO STA. 719+00

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

120
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
1146	214		
		5047	396
1579	0		
		5265	357
1264	193		
		4341	422

RRC 6/27/68
PWD 8/30/68

STA. 720+00 TO STA. 722+00

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

121
656

SEEDING END WIDTH	SEEDING SQ. YDS.
128	1511
62	597
	653
	761
	75

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
1563	130		
		2851	261
1516	152		
		2874	326
		2822	787
		859	225
		3713	813
AHD. 1588	200		
BK 665	200		

L/A

2:1

1/2:1

8:1

℄ RAMP "E"

RAMP "E"
STA. 725+10.95
℄ = 964.10

℄ EL. 10" = 967.81

STA. 725+00
EXIST. = 969.7
P.G. = 966.34

T.R.

SEEDING LIMITS

951.50

1:1

RAMP "E"
STA. 724+60.95
℄ = 963.90

STA. 724+50
EXIST. = 966.4
P.G. = 965.72

℄ EL. 10" = 956.13

951.35

USE FULL SECTION AHEAD

RAMP "E" SECTION
BACK
SEEDING 66

MAIN LINE SECTION
BACK
SEEDING 62

169'

VAR.
963.55

CUT. = 923

RAMP "E"
STA. 724+13
℄ = 963.91

STA. 724+00
EXIST. = 963.7
P.G. = 965.10

95120

℄ EL. 10" = 946.46

AHEAD
BACK

MATCH RAMP "E"

962.90

STA. 723+00
EXIST. = 969.6
P.G. = 963.86

948.0

℄ EL. 10" = 935.76

990 980 970 960 950 940

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

STA. 723+00 TO STA. 725+00

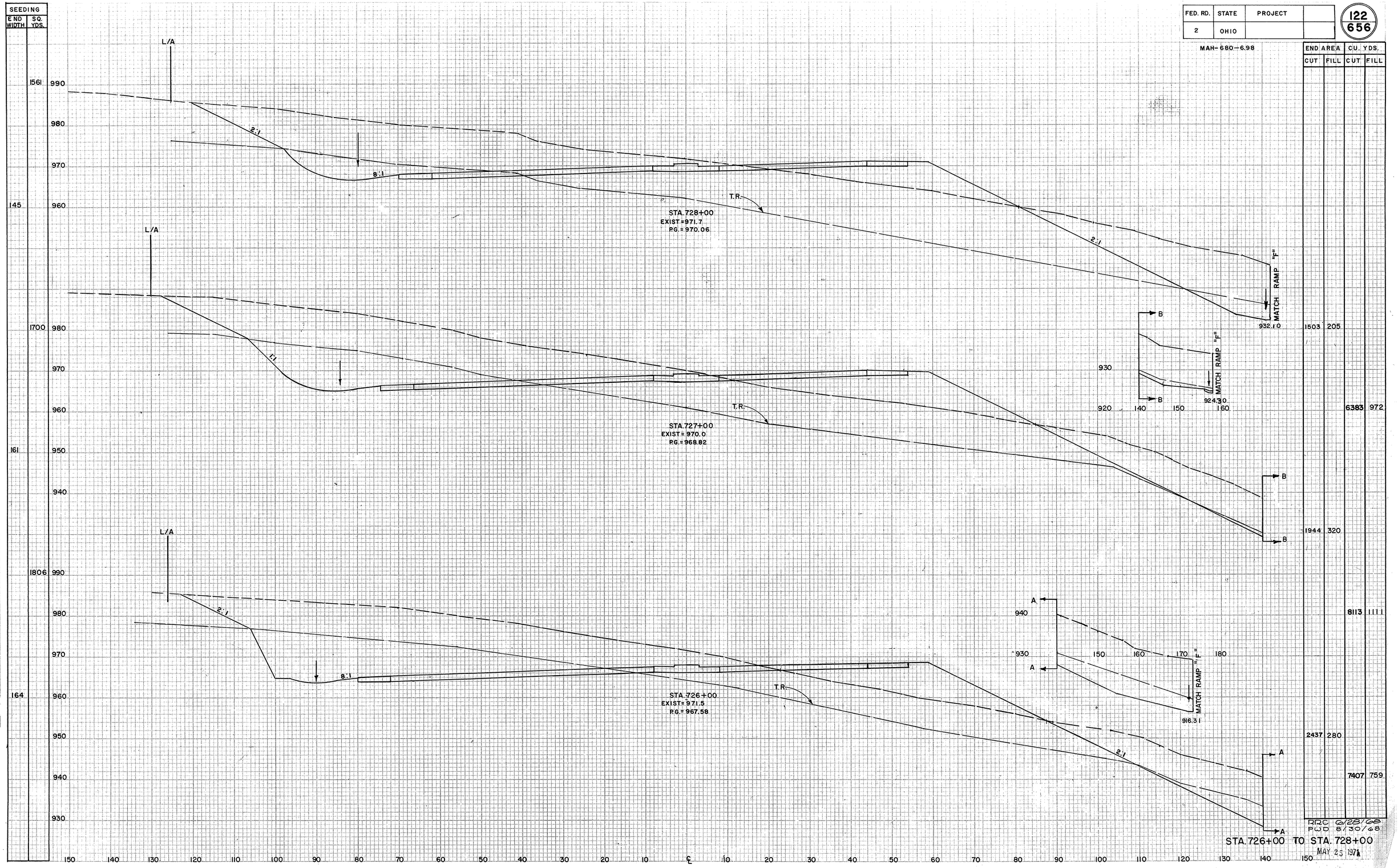
PUD 6/30/68
RRC 6/28/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

122
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
1503	205		
		6383	972
1944	320		
		8113	1111
2437	280		
		7407	759

RRC 6/28/68
PWD 8/30/68

STA. 726+00 TO STA. 728+00

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

123
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	2033
200	
	2100
178	
	1922
168	
112	
	1378
136	

END AREA CUT	END AREA FILL	C.U. YDS. CUT	C.U. YDS. FILL
798	1375		
		2335	4435
463	1020		
2689	2685		
2502	2111		
422	855		
3565	1963		

L/A

STA. 732+00
EXIST = 978.8
P.G. = 975.02

2:1
8:1
T.R.

C
950
940
150 160 170 180 190 200 L/A 940
930

960.81

RAMP "F"
STA. 731+81
B = 961.96

B
950
940
256.83

160 170 180 190

STA. 731+00
EXIST = 972.0
P.G. = 973.78

954.25

RAMP "F"
STA. 730+77
B = 955.5

A
A

140 150 160 170 180 190 200 L/A 940
930

STA. 730+00
EXIST = 973.0
P.G. = 972.54

USE FULL SECTION AHEAD

MAIN LINE SECTION BACK
CUT = 86.5
FILL = 285

RAMP "F" SECTION BACK
CUT = 60
FILL = 145
SEEDING = 52

947.27

RAMP "F"
STA. 729+73
B = 948.28

AHEAD
BACK

STA. 729+00
EXIST = 964.7
P.G. = 971.30

MATCH RAMP "F"

AHD. 989 430
BK. 929 285

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 139.35 140 150 160

PWD 8/30/68
RRC 6/28/68

STA. 729+00 TO STA. 732+00

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

124
656

SEEDING	
END WIDTH	SQ. YDS.
	1267
116	
	1444
144	
	1633
150	
	1756
166	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
483	1178		
		2024	4413
610	1205		
		2509	4787
745	1380		
		2494	4722
602	1170		
		2593	4713

STA. 736+00
EXIST = 975.4
P.G. = 979.98

RAMP "F"
STA. 735+95
℄ = 980.16

STA. 735+00
EXIST = 977.7
P.G. = 978.74

975.56

RAMP "F"
STA. 734+91
℄ = 976.75

STA. 734+00
EXIST = 980.5
P.G. = 977.50

971.29

RAMP "F"
STA. 733+81
℄ = 972.53

STA. 733+00
EXIST = 978.0
P.G. = 976.26

966.42

RAMP "F"
STA. 732+85
℄ = 967.67

RRC 6/28/68

STA. 733+00 TO STA. 736+00

PUD 8/30/68

MAY 2, 1971

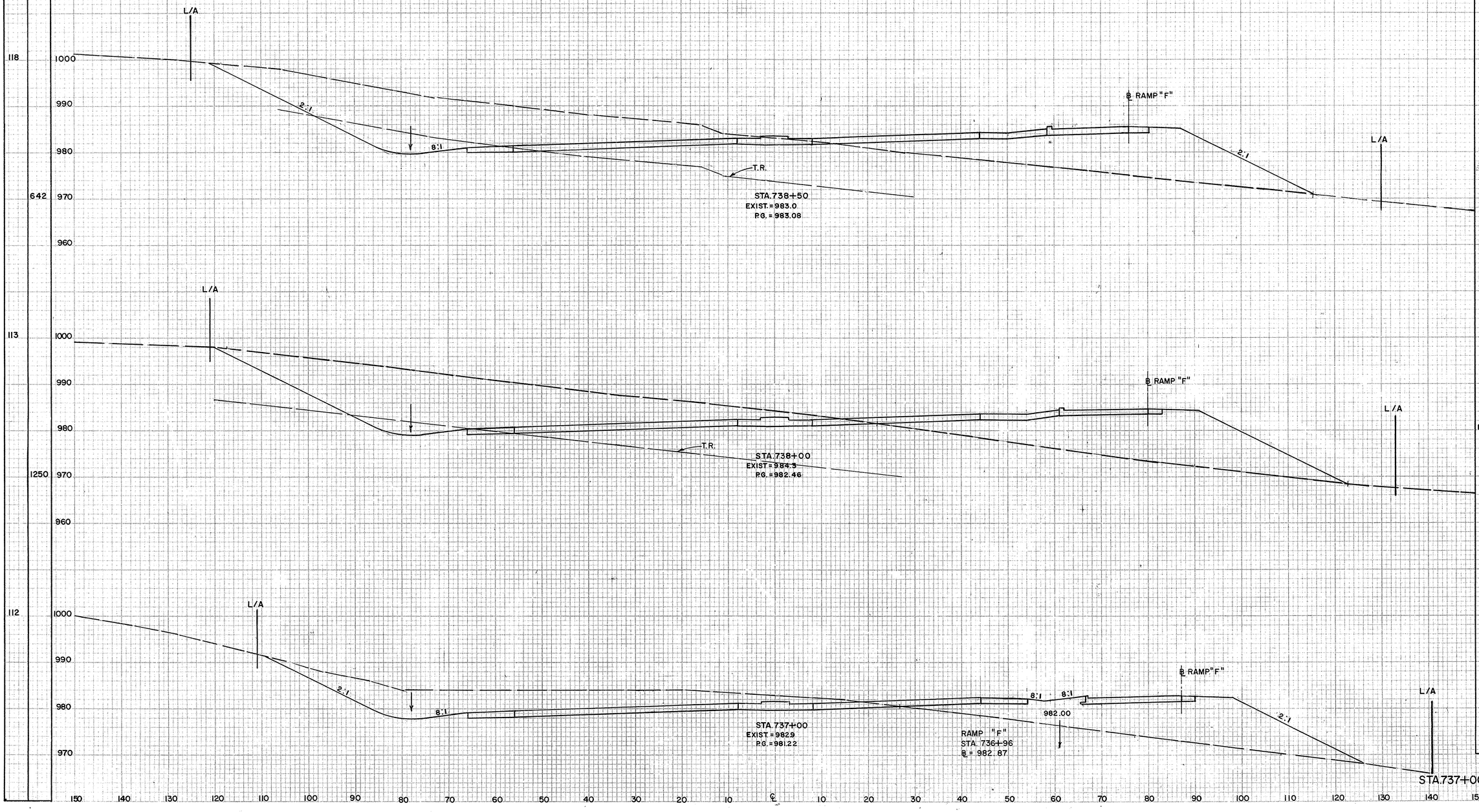
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

125
656

SEEDING	
END WIDTH	SQ. YDS.
	639
118	
	642
113	
1250	
112	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	875	570	
			1782 1139
1050	660		
			2943 2176
539	515		
			1893 3135



PWD 8/30/68

STA.737+00 TO STA.738+50

RRC 2/28/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

126
656

MAH-680-6.98

SEEDING		END AREA		CU. YDS.	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
750	59				
700	67	1458	315		
861	88	4669	1259		
1111	112	1063	365		
		3576	1194		
		868	280		
		3887	1204		
		1231	37.0		
		1950	870		

L/A

2:1

1/2:1

T.R.

8:1

STA.742+00
EXIST = 988.6
P.G. = 985.60

3' UNDERCUT FOR CINDER FILL

8:1

6:1

986.0

L/A

L/A

T.R.

STA.741+00
EXIST = 987.2
P.G. = 985.28

3' UNDERCUT FOR CINDER FILL

VARIES

L/A

CABLE ANCHOR LIMITS

L/A

2:1

1/2:1

T.R.

STA.740+00
EXIST = 984.1
P.G. = 984.64

℄ RAMP "F"

3:1

L/A

L/A

2:1

T.R.

8:1

STA.739+00
EXIST = 987.1
P.G. = 983.68

VARIES

℄ RAMP "F"

2:1

L/A

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

PUD 8/30/68

STA. 739+00 TO STA. 742+00

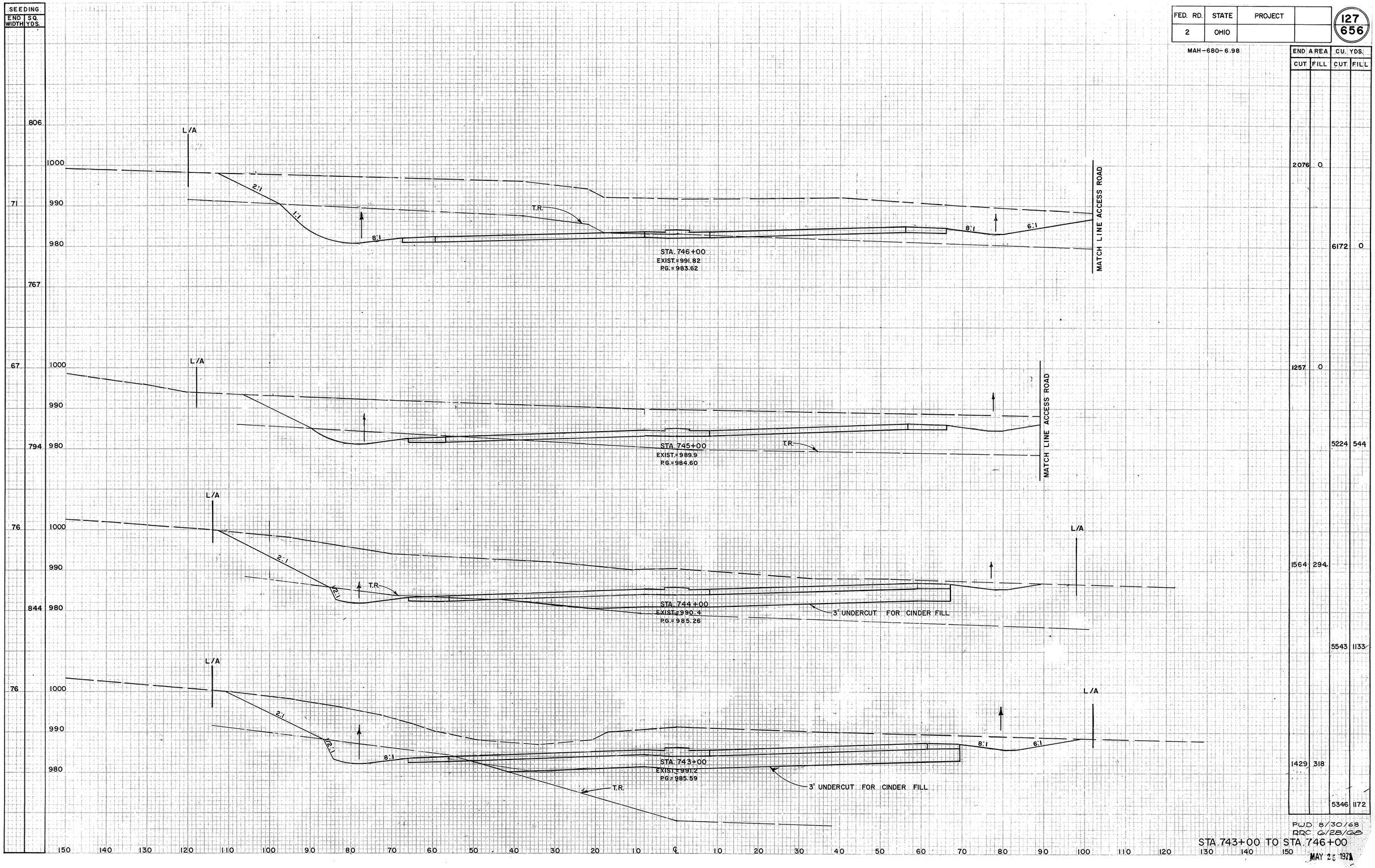
RRC 6/28/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

127
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
2076	0		
		6172	0
1257	0		
		5224	544
1564	294		
		5543	1133
1429	318		
		5346	1172

PWD 8/30/68
RRC 6/28/68

STA. 743+00 TO STA. 746+00

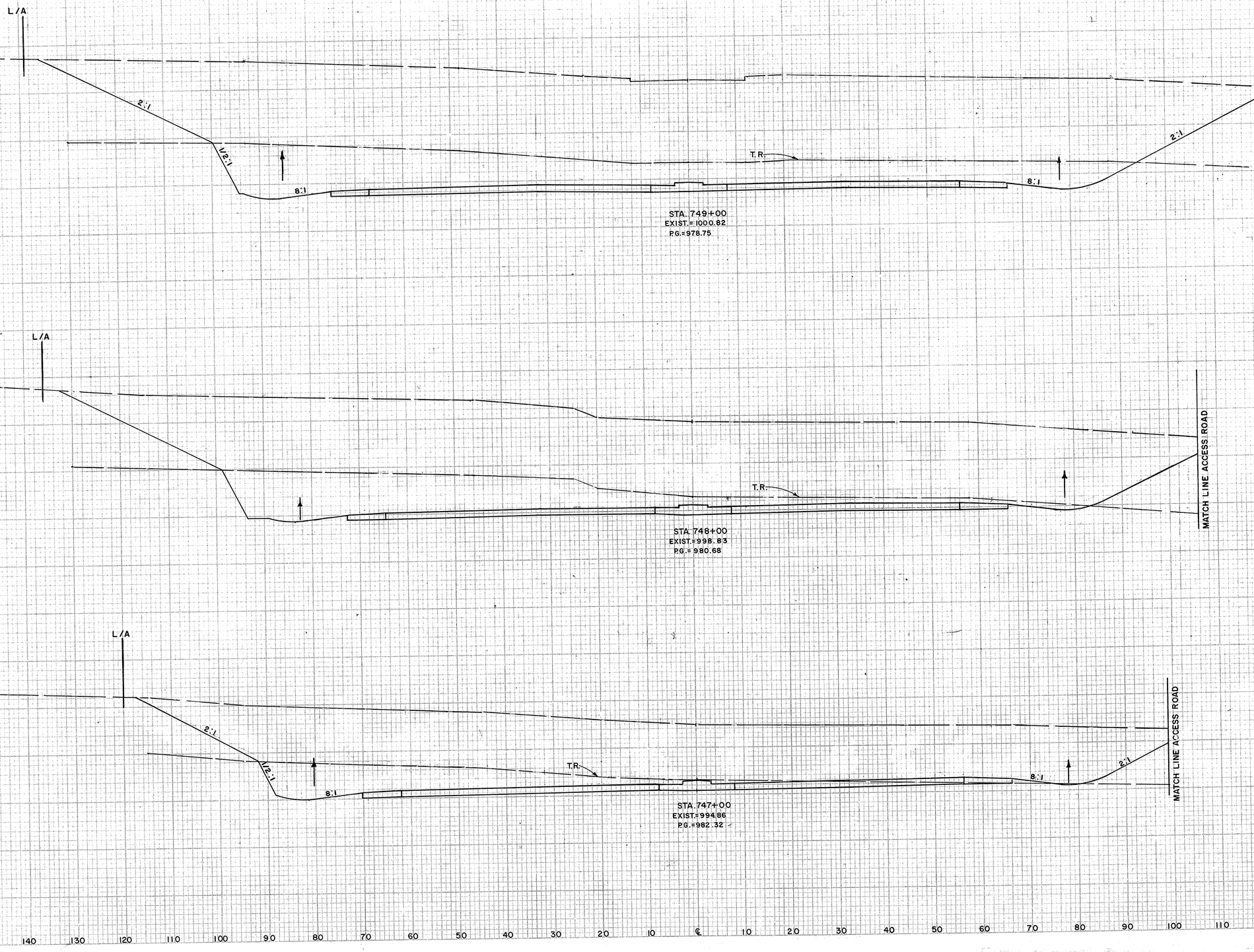
MAY 25 1971

FED. RD.	STATE	PROJECT	
2.	OHIO		

128
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
1211	1010
	1000
	990
111	980
	970
1122	1010
	1000
91	990
	980
	970
917	
	1000
74	990
	980



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
5308	0		
		17828	0
4319	0		
		13309	0
2868	0		
		9156	0

PWD 8/30/68
RRC 6/28/68

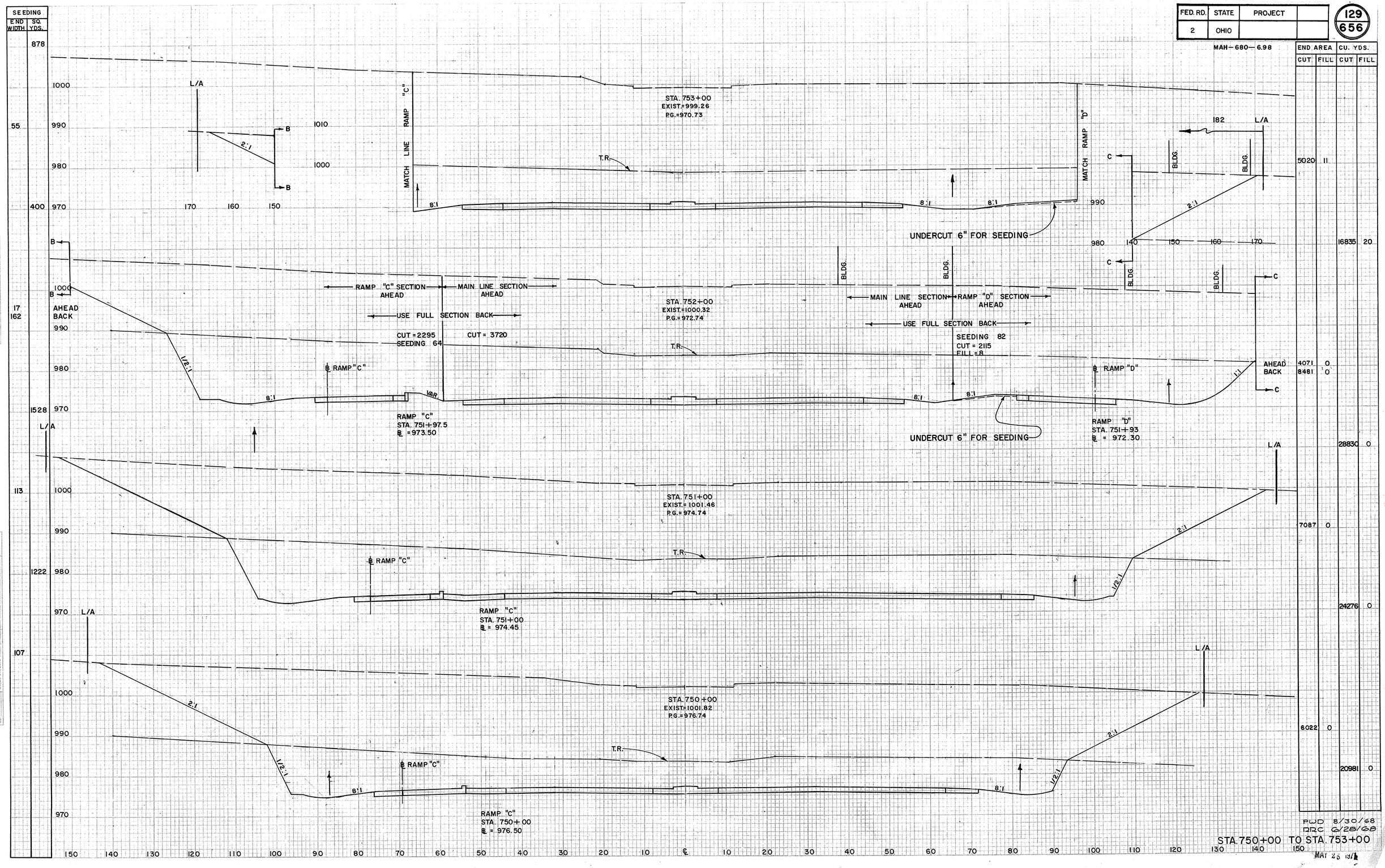
STA. 747+00 TO STA. 749+00

MAY 2 6 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

129
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
5020	11		
		16835	20
4071	0		
8481	0		
		28830	0
7087	0		
		24276	0
6022	0		
		20981	0

PWD 8/30/68
RRC 6/28/68

STA. 750+00 TO STA. 753+00

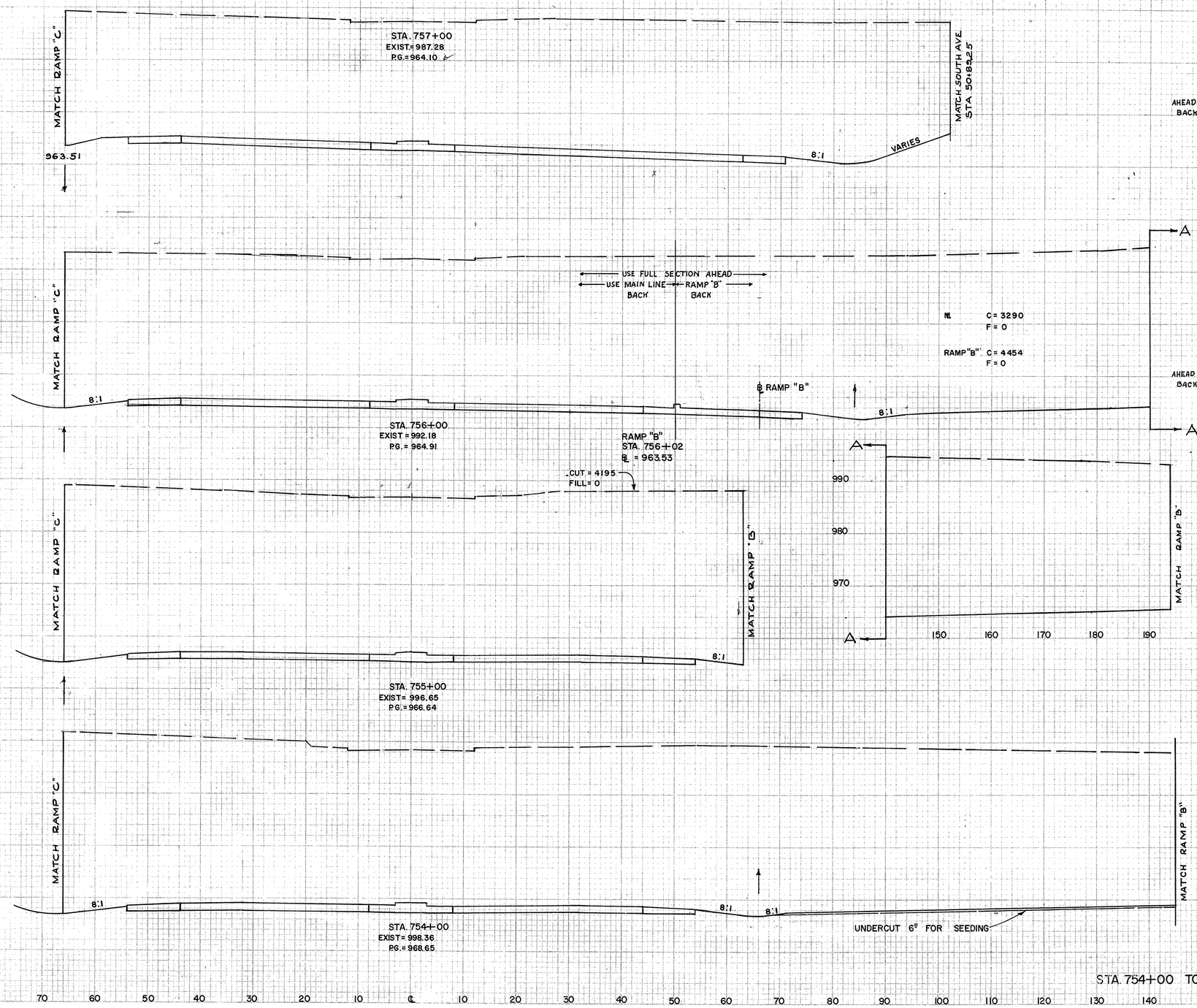
MAY 25 1971

FED. RD.	STATE	PROJECT	
2.	OHIO		

130
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.		
	0	990	
		980	
0		970	AHEAD
45			BACK
	322	1000	
		990	
13		980	AHEAD
81			BACK
		970	
	567		
		1000	
21		990	
		980	
	689	970	
		1000	
103		990	
		980	
		970	
		960	



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
AHEAD 3449	0		
BACK 4254	0		
		22220	0
℄	C = 3290 F = 0		
RAMP "B"	C = 4454 F = 0		
AHEAD 7744	0		
BACK 3290	0		
		13862	0
4195	0		
		20215	70
6721	38		
		21743	91

RRC 7/24/68
PWD 8/30/68

STA. 754+00 TO STA. 757+00

MAY 25 1971

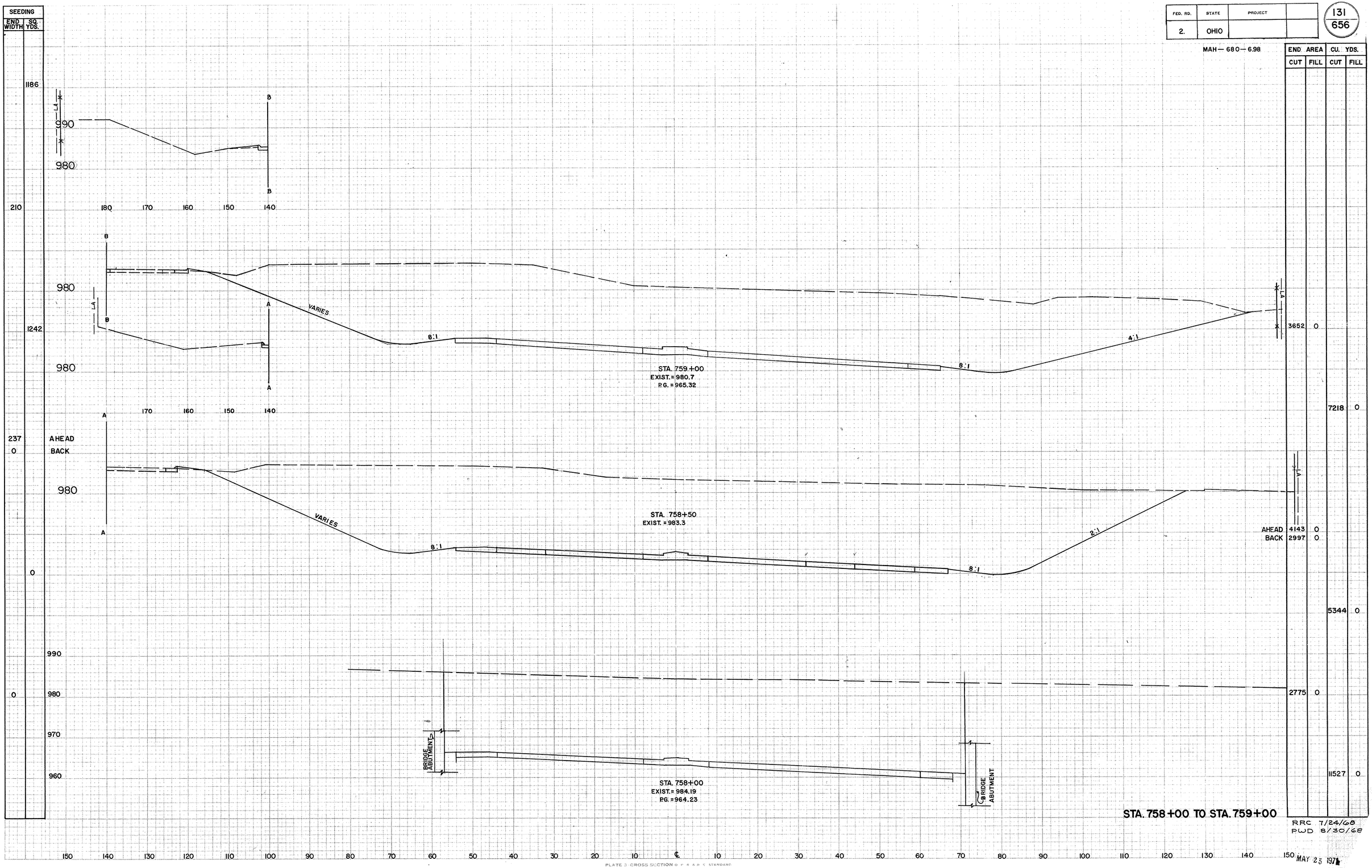
ORIGINAL SURVEY	DRAFTED ADDITIONS	DATE
NOTE BOOK	CHECKED	
RD.	AREAS CHECKED	

FINAL SURVEY	PLOTTED	DATE
NOTE BOOK	TEMPLATE	
SO.	AREAS CHECKED	

FED. RD.	STATE	PROJECT	
2.	OHIO		

131
656

MAH — 680 — 6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
3652	0		
		7218	0
AHEAD 4143	0		
BACK 2997	0		
		5344	0
2775	0		
		11527	0

STA. 758+00 TO STA. 759+00

RRC 7/24/68
PWD 8/30/68

MAY 25 1971

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK, NO. — DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK, NO. — DATE

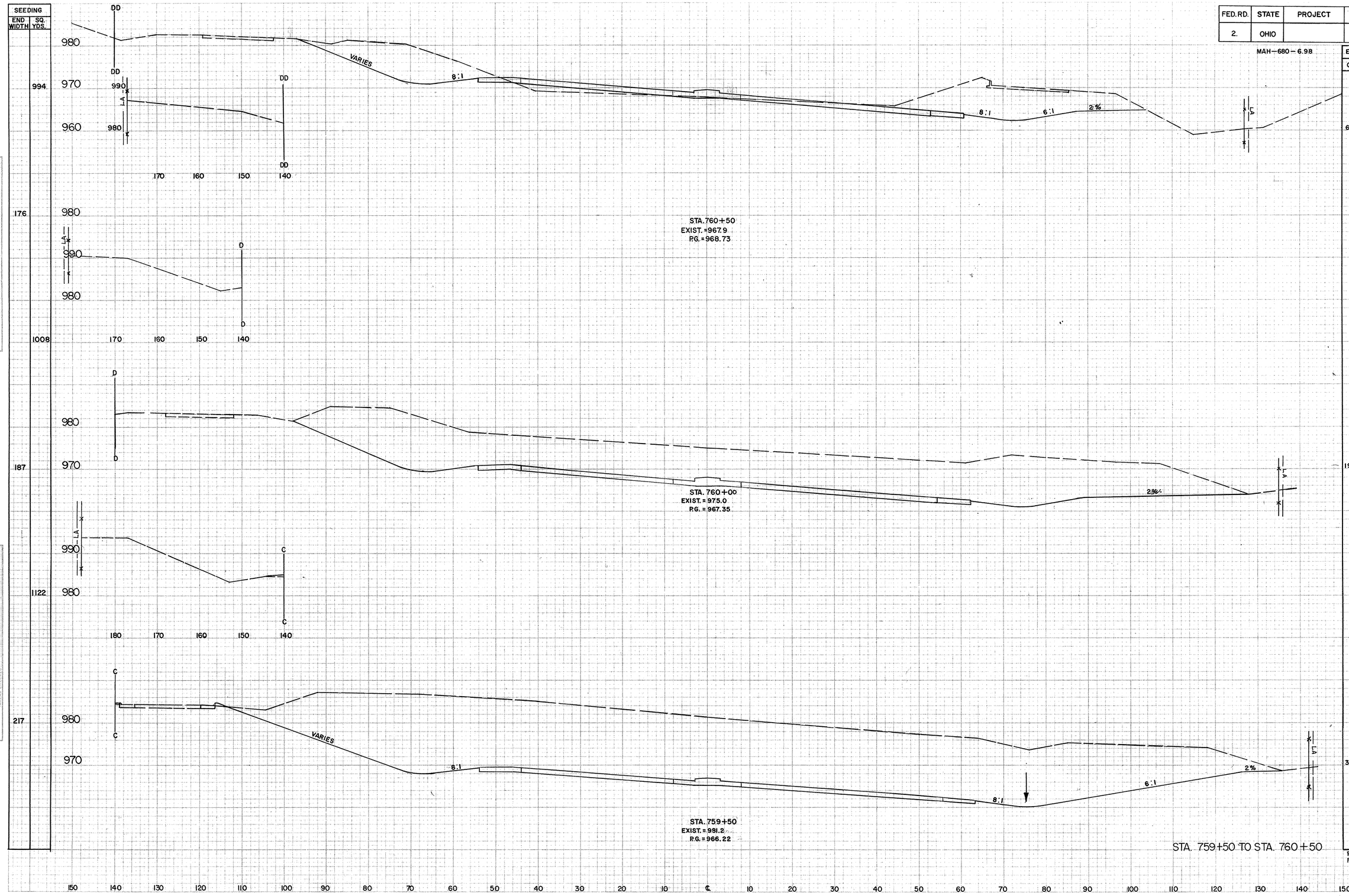
PLATE 3 CROSS SECTION O P & A R C STANDARD
NATIONAL TRACING PAPER DIVISION
L. E. P. & L. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2.	OHIO		

132
656

MAH—680—6.98

SEEDING	
END WIDTH	SQ. YDS.
994	
176	
1008	
187	
1122	
217	



END. AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	649	30	
		2401	28
1944	0		
		4869	0
3314	0		
		6450	0

STA. 759+50 TO STA. 760+50

RRC 7/24/68
PJD 8/30/68

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

PLATE 3 CROSS SECTION 6 × 8 & 8 × 10 STANDARD
NATIONAL TRACING PAPER DIVISION
I. B. E. N. L. CO. INC. INDIANAPOLIS, INDIANA

MAY 25 1971

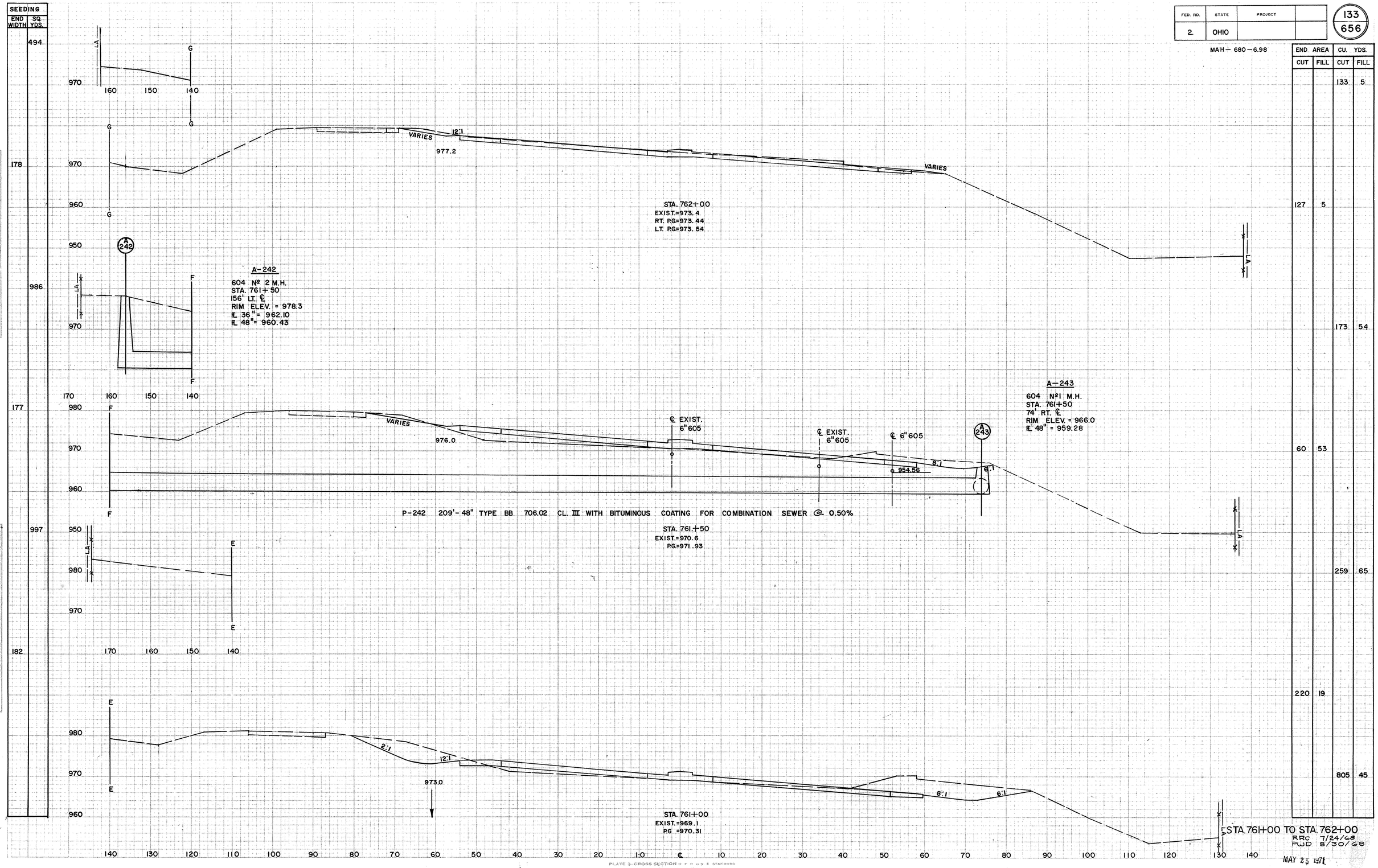
FINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS, NO., DATE, BY, AREAS CHECKED

ORIGINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS, NO., DATE, BY, AREAS CHECKED

FED. RD.	STATE	PROJECT	
2.	OHIO		

133
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		133	5
127	5		
		173	54
60	53		
		259	65
220	19		
		805	45

STA. 761+00 TO STA. 762+00
RRC 7/24/68
PWD 8/30/68

MAY 25 1971

FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

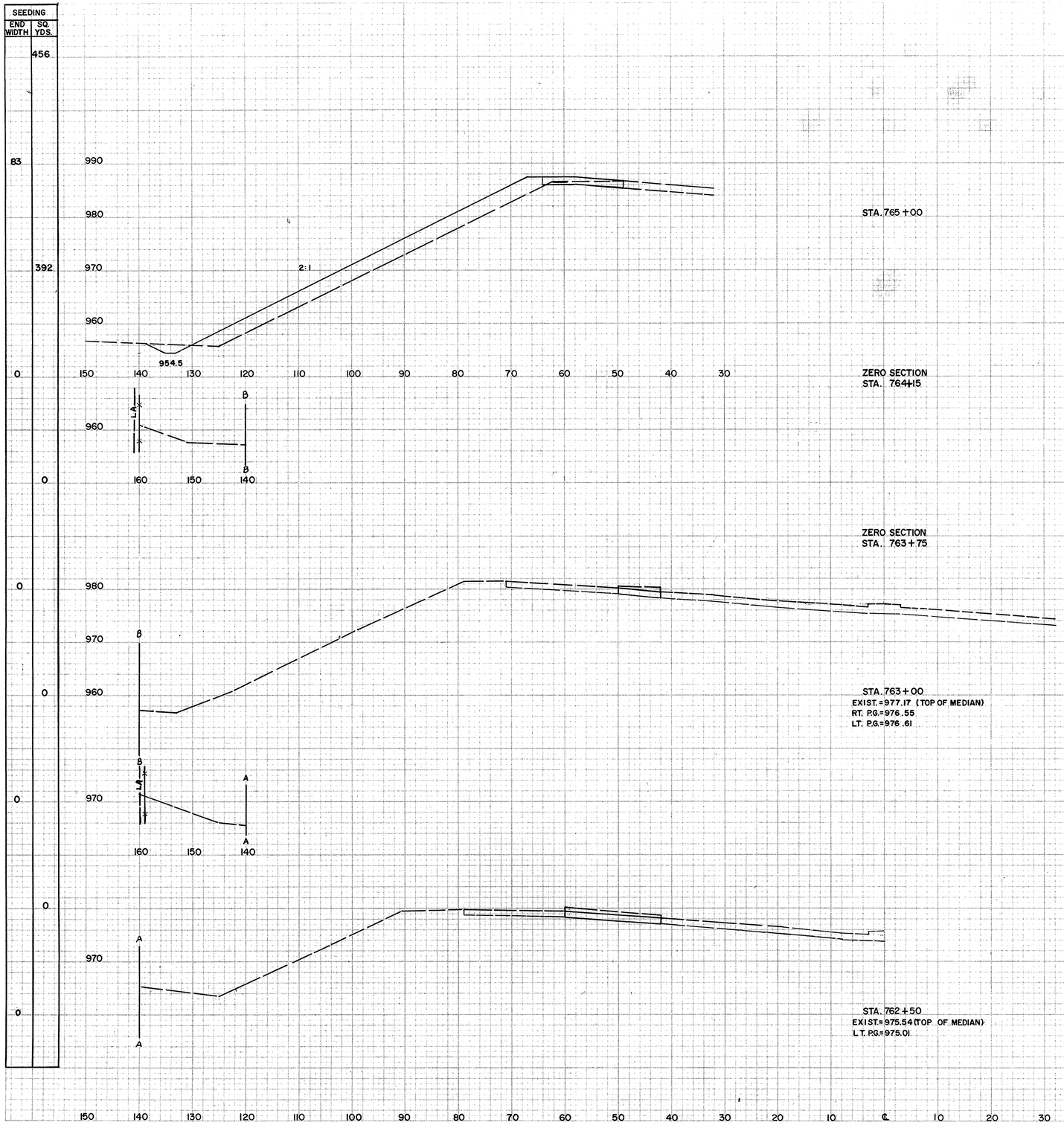
ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
NATIONAL TRACING PAPER DIVISION
I. B. P. & L. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

134
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		25	356
20	180		
		31	283
0	0		
		0	0
0	0		
		11	0
8	0		
		23	0
17	0		

STA. 762+50 TO STA. 765+00

RRC 7/24/68
PWD 8/30/68

MAY 25 1971

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO.

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO.

PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
NATIONAL TRACING PAPER DIVISION
U. S. P. & L. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

135
656

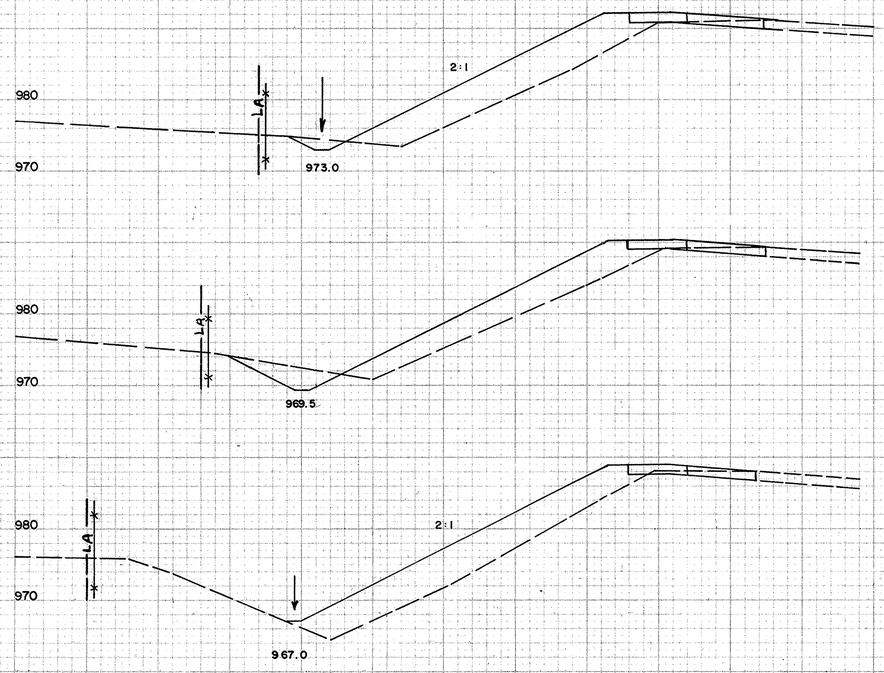
MAH-680-6.98

ZERO SECTION
STA. 766+95

STA. 766+50

STA. 766+00

STA. 765+50



SEEDING END WIDTH	SEEDING SQ. YDS.	END. AREA CUT	END. AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0		0	0		
	135			10	79
54					
	333			37	219
66					
	408			33	320
81					
		12	95		
		28	141		
		8	205		

STA. 765+50 TO STA. 766+50

RRC 7/24/68
PUD 8/30/68

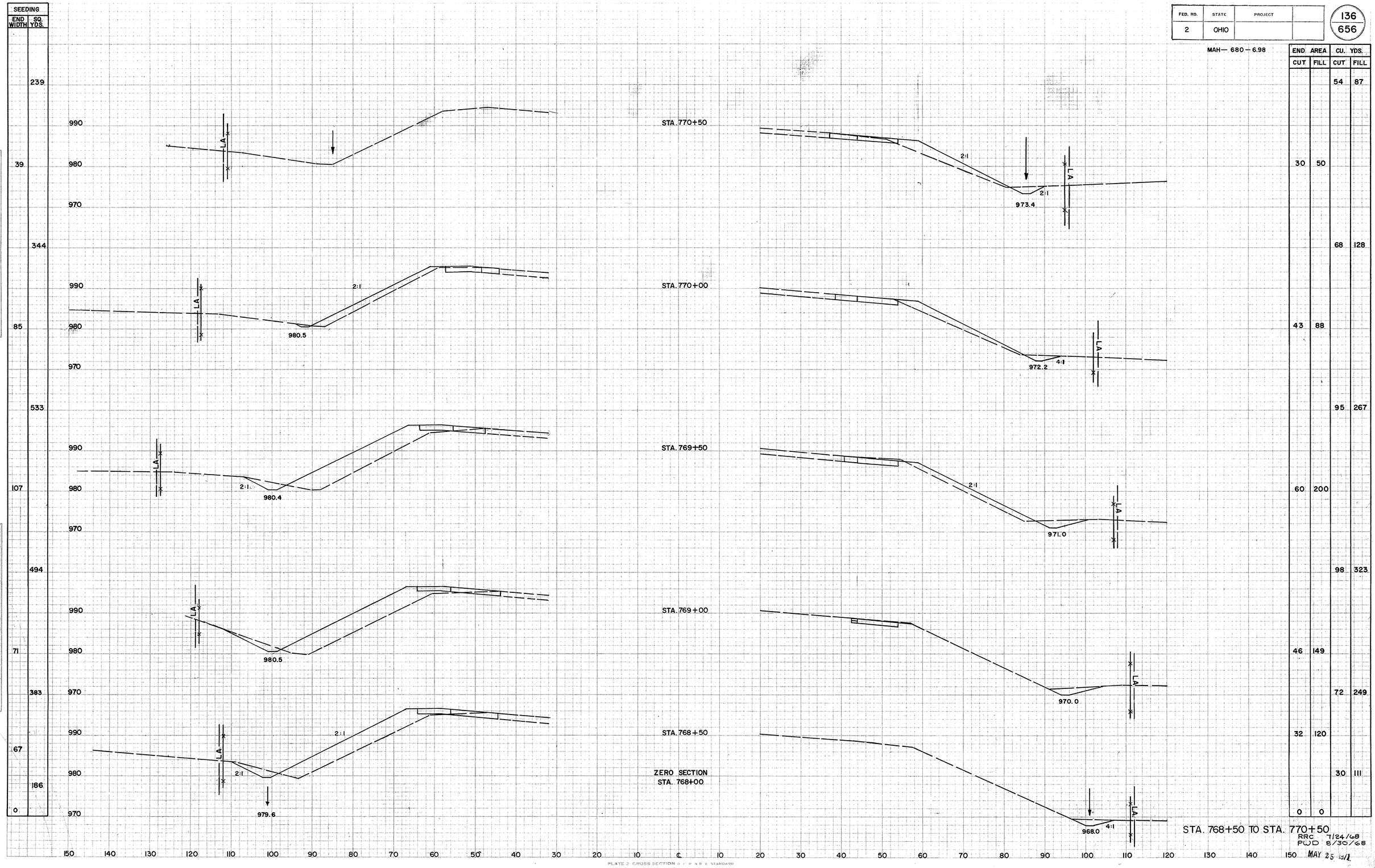
MAY 25 1971

PLATE 3 CROSS SECTION © U. P. & S. I. STANDARD
NATIONAL TRACING PAPER DIVISION
U. P. & S. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

136
656

MAH— 680 — 6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		54	87
30	50		
		68	128
43	88		
		95	267
60	200		
		98	323
46	149		
		72	249
32	120		
		30	111
0	0		

STA. 768+50 TO STA. 770+50

RRC 7/24/68
PWD 8/30/68
MAY 25 1971

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

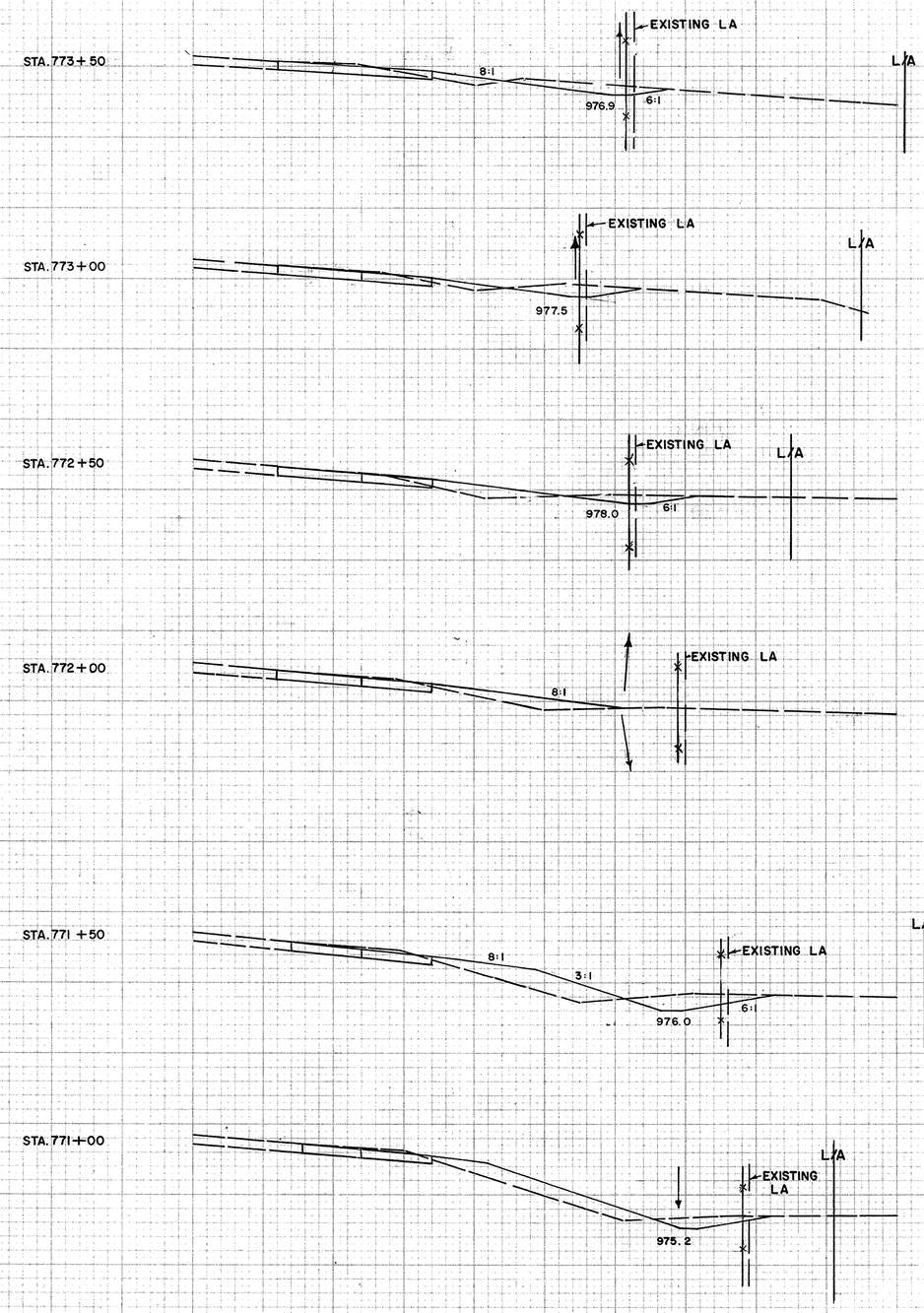
PLATE 2 CROSS SECTION O. P. & R. E. STANDARD
NATIONAL TRACING PAPER DIVISION
I. P. & L. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

137
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	164					
28		980			83	20
	139		41	13		
22					77	22
	139	980	42	11		
					73	28
28						
		980	37	19		
	131					
					62	29
19		980				
			30	12		
	172					
					68	36
43		980				
			43	27		
	250					
		980			66	66
47			28	44		



STA. 771+00 TO STA. 773+50

RRC 7/24/68
PWD 8/30/68

MAY 25 1971

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

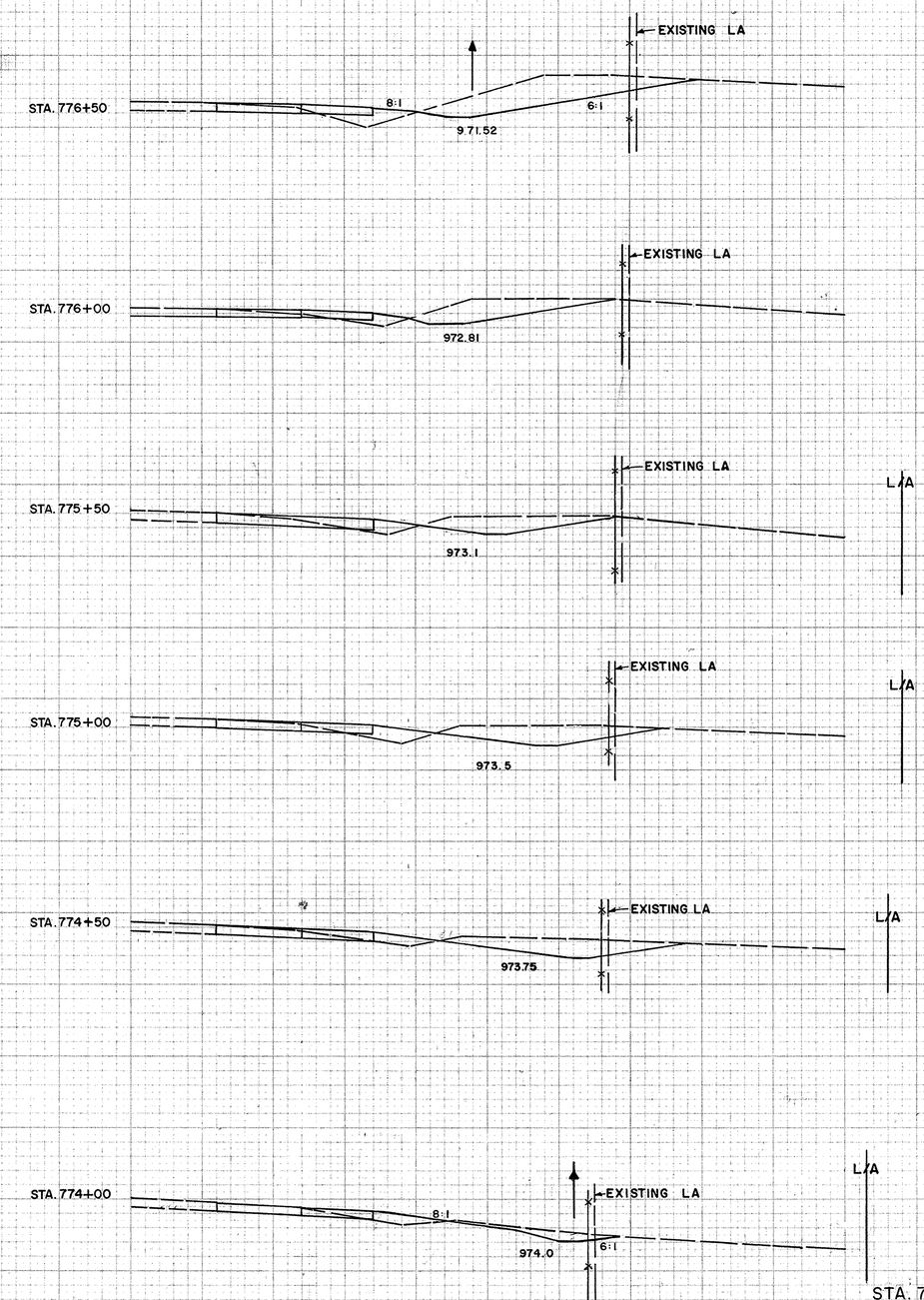
PLATE 3 CROSS SECTION G P R & R E STANDARD
NATIONAL TRACING PAPER DIVISION
I. B. P. & L. CO. INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

138
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	192				160	21
37						
	197		93	15		
34		970			128	22
	192		45	9		
					83	17
35		970				
			43	9		
	192					
		970			96	21
34						
			61	14		
	181	970				
					114	21
31		970				
			62	9		
	172					
					101	17
31		980				
			47	9		



STA. 774+00 TO STA. 776+50

RRC 7/25/68
PWD 8/30/68

MAY 25 1971

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

PLATE 3 CROSS SECTION O. P. & S. L. E. STANDARD
NATIONAL TRACING PAPER DIVISION
I. B. P. & L. CO., INC. INDIANAPOLIS INDIANA

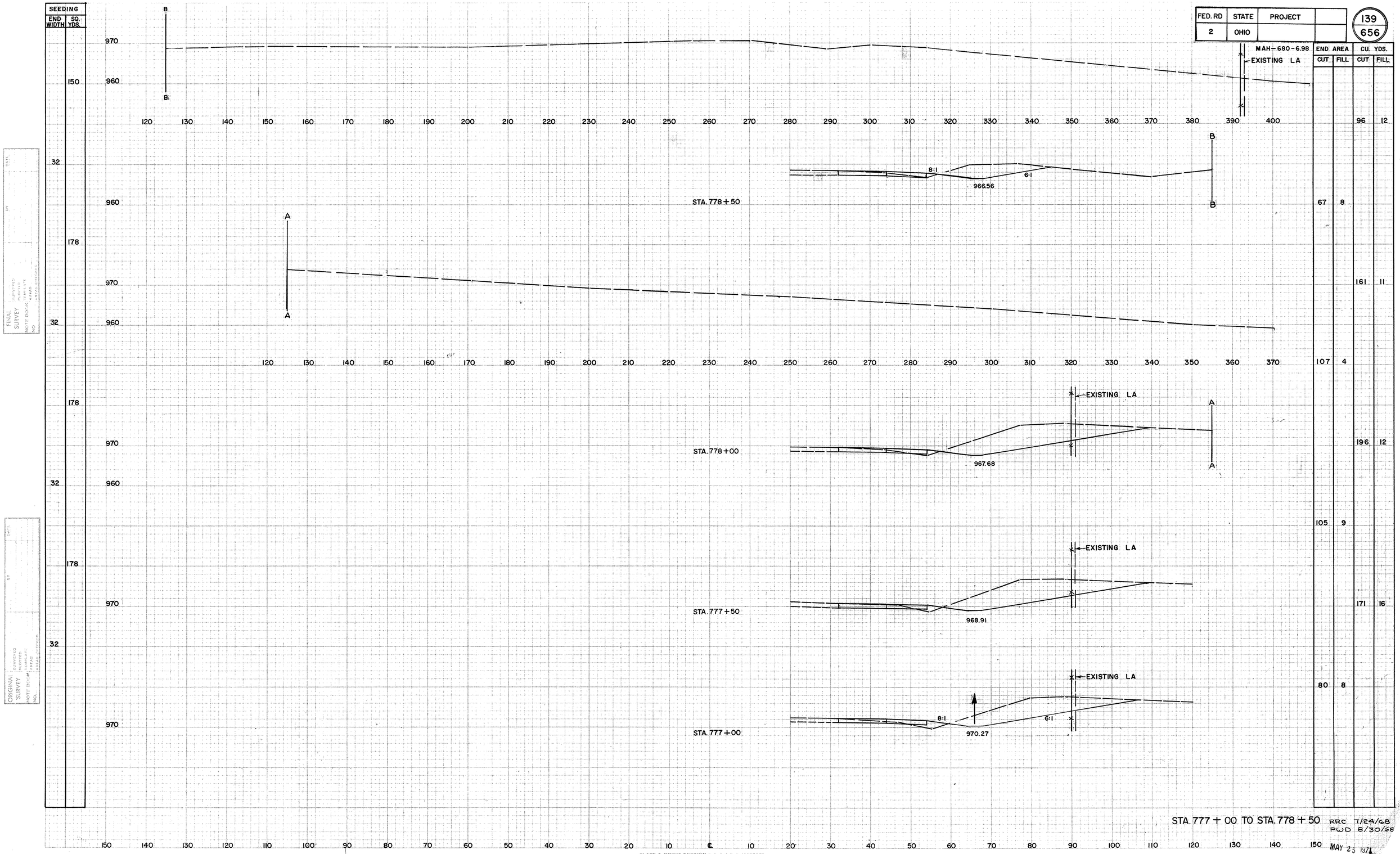


PLATE 3 CROSS SECTION
NATIONAL TRACING PAPER DIVISION

FED. RD.	STATE	PROJECT	
2	OHIO		

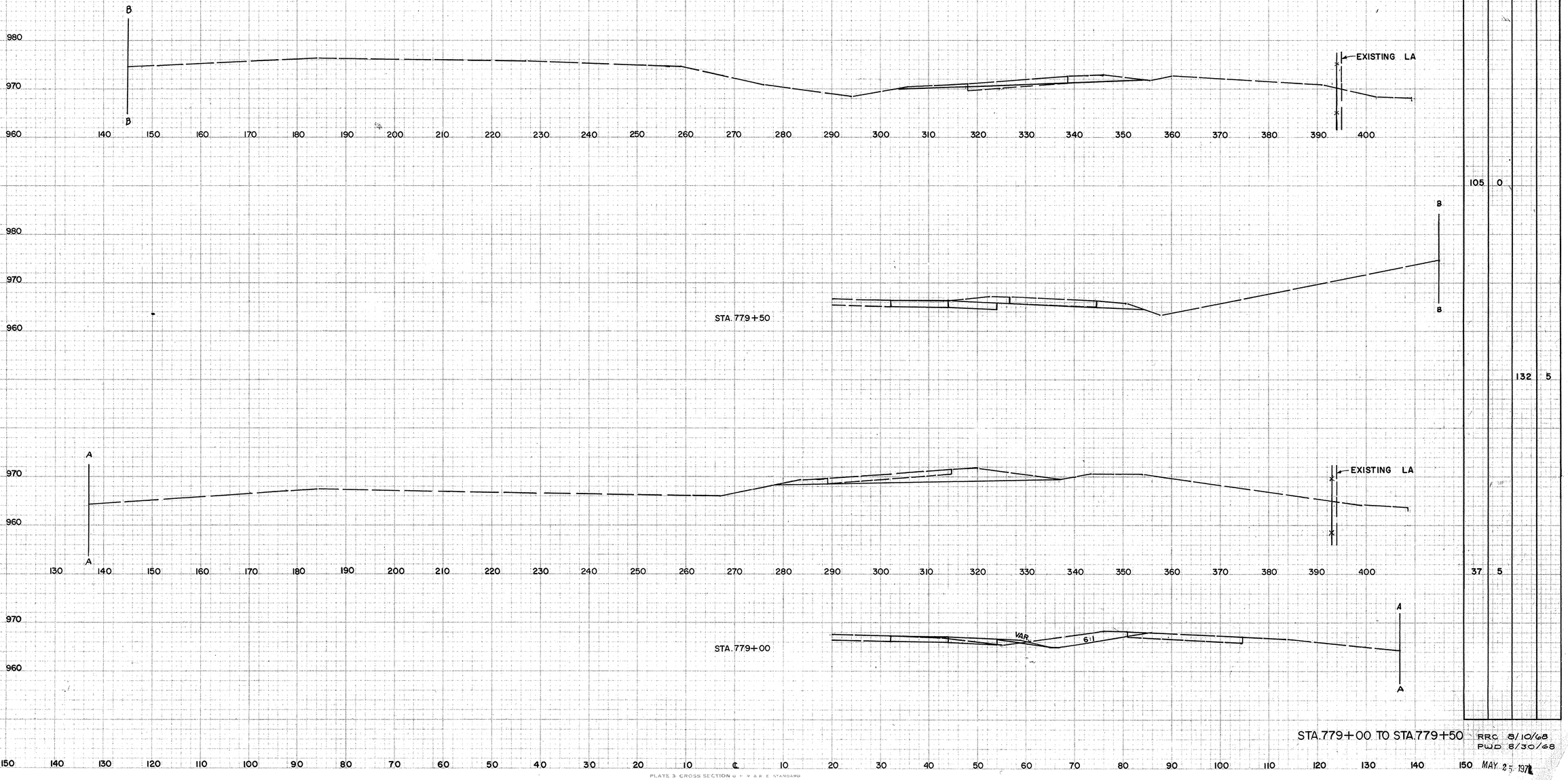
140 / 656

MAH– 680–6.98

SEEDING		END AREA		CU. YDS.	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
67				194	0
				105	0
94					
				132	5
22					
				37	5
12					

FINAL SURVEY — NOTE BOOK — NO. — DATE — BY — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — DATE — BY — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED



STA. 779+00 TO STA. 779+50

RRC 8/10/68
PWD 8/30/68

MAY 25 1971

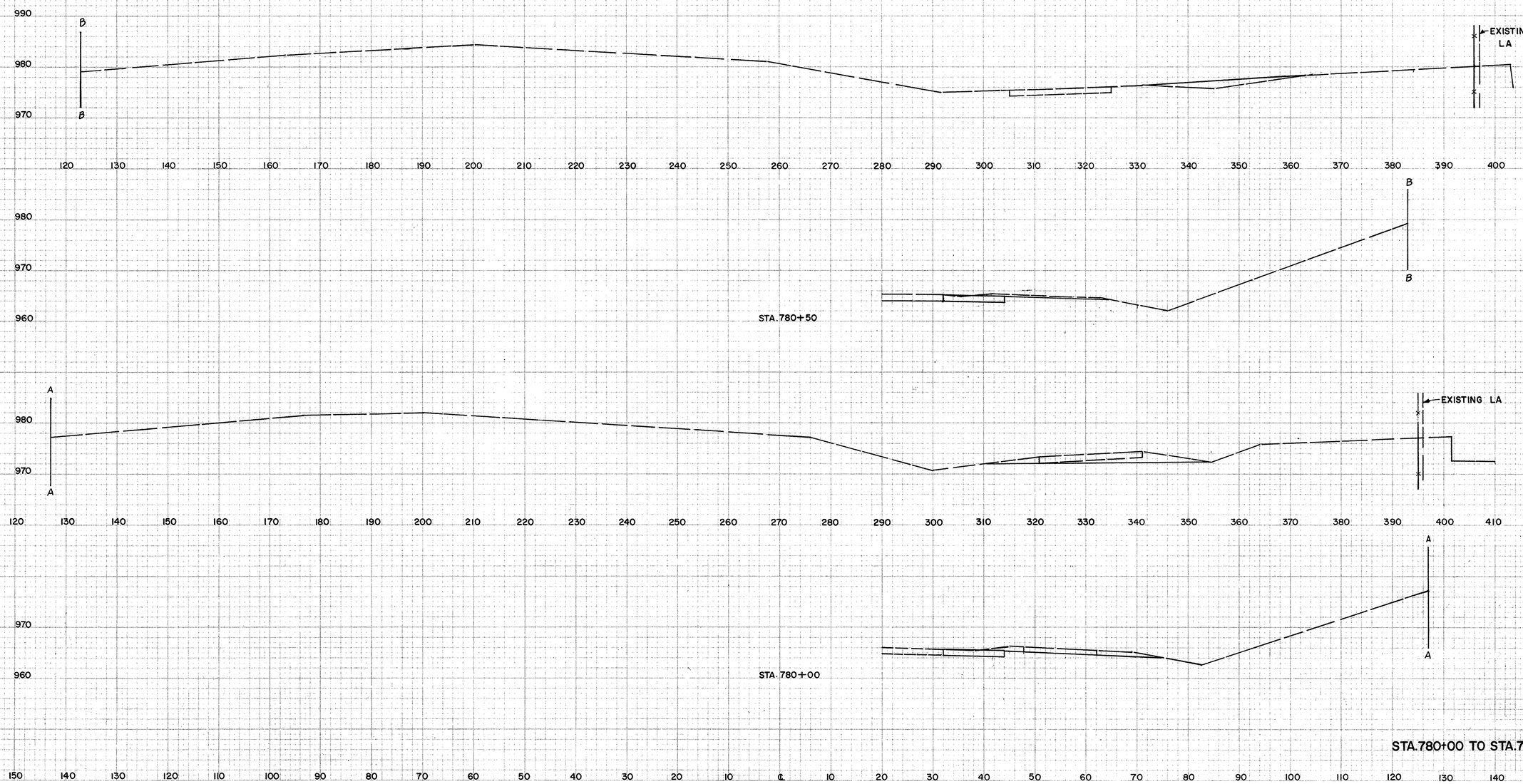
PLATE 3 CROSS SECTION 6 × 4 A & E STANDARD
NATIONAL TRACING PAPER DIVISION
L. B. P. & S. CO., INC. INDIANAPOLIS, INDIANA

FED RD.	STATE	PROJECT	
2	OHIO		

141
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	83			65	42
20		28	45		
	89			122	42
12		104	0		



STA.780+00 TO STA.780+50 RRC 8/28/68
PWD 8/30/68
MAI 23 1968

FINAL SURVEY NOTE BOOK NO. SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED BY DATE

ORIGINAL SURVEY NOTE BOOK NO. SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED BY DATE

PLATE 3 CROSS SECTION G P & A & E STANDARD
NATIONAL TRACING PAPER DIVISION
I. B. P. & L. CO. INC. IN MINNEAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

142
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
0	
	56
15	
	139
10	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	19	0	
		58	0
28			
		130	0
42		0	

STA. 782+66.63

STA. 782+00

STA. 781+00

EXISTING LA

STA. 781+00 TO STA. 782+66.63

PUD. 8/30/68
RRC. 8/28/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

143
656

MAH-680-6.08

BEGIN WORK STA. 358+00

SHIRLEY RD.

BEGIN FEATHER STA. 366+04.21

TAPER 70'

EXIST. R/W

EXIST. MONUMENT

℄ MIDLOTHIAN STA. 365+35.69

365+00 366+00 367+00 368+00 369+00

MEET EXISTING PAVEMENT

22'-0"

24'-6"

60'-0"

MIDLOTHIAN BLVD.

S 85°00'05"E 367.00

S D-625

CITY OF YOUNGSTOWN CORPORATION LINE

(ABANDONED)

MAC. APRON

HEDGE

25' FEATHER

EXIST. R/W

℄ RAMP "M" (BY OTHERS)

℄ RAMP "L"

CONST. LIMITS

EXIST. TANK

EXIST. E. WALK

70.50'

3'-0"

6'-0"

TAPER 60'

LA

END SHEET STA. 370+00

** INDICATES PART. (RURAL) FUNDS.

CONC. COLLAR

EXIST. R/W

11'-18" TYPE C-B 706.08 @ 3.00%

8'-30" TYPE C-B 706.08 @ 4.00%

18" THICK R.C.P. SEE CULVERT DETAILS FOR QUANTITY

H-410 369+26 57' RT. ℄ MIDLOTHIAN

H-411 369+70 70.5' RT. ℄ MIDLOTHIAN

0 10 20 40

FOR PAVT. DETAILS, SEE SHT. Nº 146 & 147
FOR RAMP "L" DETAILS, SEE SHT. Nº 153
FOR RAMP "M" DETAILS, SEE SHT. Nº 153
FOR DRAINAGE DETAILS, SEE SHT. Nº 337

ITEM 814 - WATER MAINS

CODE	STATION	EXISTING LOCATION	VALVE BOX ADJUSTED EACH
W-1	366+26	18.9' LT.	1
		TOTAL	1

ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	Nº 2A-6 MOD. TYPE II INLET	Nº 2A-8 MOD. TYPE II INLET	Nº 2A-10 MOD. TYPE II INLET
A-10	368+55	22' RT. ℄	1**		
A-11	628+75	1' LT. ℄ RAMP "L"			1**
A-12	369+50	24.5' LT. ℄		1	
		TOTAL	1**	1	1**

ITEM 603 - CONDUITS - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	TYPE B-B 12"	TYPE C-B 18"	TYPE C-B 706.08 30"
P-10	A-10	AJ-19	143	60**		
P-11	A-11	AJ-19	143	41**		
P-12	A-12	E.P.12	143	4		
P-410	EXIST. 18"	H-410			11**	
P-411	EXIST. 30"	H-411				8**
	TOTAL			105	11	8

ITEM 604 - MANHOLES RECONSTRUCTED TO GRADE - EACH

CODE	STATION	LOCATION	EACH
RB-21	369+93	24.1' LT. ℄	1
		TOTAL	1

ITEM 604 - MANHOLES, CATCH BASIN & INLETS ADJUSTED TO GRADE EACH

CODE	STATION	LOCATION	EACH M.H.
AJ-18	366+93	26.2' LT. ℄	1
AJ-19	369+14	14' RT. ℄	1**
AJ-20	369+77	23.8' RT. ℄	1**
		TOTAL	3

ITEM 202 - INLETS AND MANHOLES REMOVED

CODE	STATION	LOCATION	INLETS REMOVED EACH	MANHOLES REMOVE. EACH
F-14	369+50	22' LT. ℄	1	
F-15	369+50	22' RT. ℄	1**	
F-16	369+48	24.2 LT. ℄		1
TOTAL			2	1

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	"L"	"W"	PROFILE SHT. Nº	ITEM 452 7" SQ. YDS.	"L"	ITEM 404 2" CU. YDS.	ITEM 304 1" CU. YDS.
D-1	368+56	LT.	I	5'	35'	149	22.22	6'	0.13	3.24
D-2	367+78	TO	368+40.5						1.50	5.14
SHEET TOTAL							22.22		1.63	8.38

ITEM 612 - CONCRETE MEDIAN

CODE	STATION FROM	STATION TO	SQUARE YARDS	
M-1	367+00	370+00	50.0	50**
SHT. TOTAL			50.0	50**

ITEM 608 - SIDEWALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS	SQ. FT. 7" THICKNESS *
S-1	366+04.21	368+36	LT.	11585.5	150.39
S-2	368+77	370+00	LT.	615.0	272.5
SHEET TOTAL				1773.95	423.49

*INDICATES 100% CITY FUNDS

ITEM 609 - CONCRETE CURB

CODE	STATION FROM	STATION TO	TYPE 2B
C-1	366+29.21	370+00	370.79
C-2	366+29.21	368+26	**196.79
TOTAL			567.58

ITEM 606 - GUARD RAIL - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 5	MULCHAR ASSEMBLY EACH
G-1	369+00	370+00	75	2
G-2	368+78	370+00	100	2
SHEET TOTAL			175	4

ITEM 602 - MASONRY - CU. YDS.

CODE	STATION	LOCATION	CU. YDS.
H-410	369+26	56' RT. ℄	0.30
H-411	369+70	70.5' RT. ℄	0.51
		TOTAL	0.81**

ITEM - PAVEMENT REPLACEMENT

CODE	LOCATION	PROPOSED CONDUIT	1½"-404 C.Y.	8"-305 S.Y.
Y-1	MIDLOTHIAN	P-10	1.10	31.50
Y-2	MIDLOTHIAN	P-11	0.30	8.22
TOTAL			1.40**	40.21**

ITEM 202 - GUARD RAIL REMOVED

CODE	STATION FROM	STATION TO	LIN. FT.
R-1	369+05	370+00	95
R-2	368+80	370+00	120**
TOTAL			215

ITEM 203 - 659

EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
431**	706**	2505**

**INDICATES RURAL FUNDS

℄ PROFILE GRADE

1009.88 1009.64 1009.50 1009.16 1008.83 1007.61 1006.02 1004.44 1003.67 1002.85 1002.22 1001.54 1000.85 1000.40 1000.05 1001.21

1020 1015 1010 1005 1000 995

BEGIN WORK STA. 366+04.21 MEET EXISTING GRADE

BEGIN CONSTRUCTION STA. 366+36

P.V.I. STA. 366+36 ELEV. = 1009.62

-0.66%

50' V.C.

-3.16%

50' V.C.

-2.63%

50' V.C.

1.72%

P.V.I. STA. 368+50 ELEV. = 1002.85

P.V.I. STA. 369+50 ELEV. = 1000.22

P.V.I. STA. 370+00 ELEV. = 1001.05

EXIST. 15" STORM (RT.)

EXIST. 15" COMBINATION

EXIST. 15" COMB.

EXIST. 30" COMB.

1011.33 1010.45 1009.88 1008.99 1007.44 1005.85 1004.27 1002.71 1001.37 1001.04 1000.37

365+00 366+00 367+00 368+00 369+00 370+00

℄ EXIST. PAVT.

A-10

604 Nº 2A-6 (MOD. TYPE II)
STA. 368+55
22' RT. ℄ MIDLOTHIAN
TOP. ELEV. = 1002.40
WINDOW ELEV. = 1001.65
℄ 12" = 998.32

AJ-18

604 ADJUST M.H. TO GRADE
STA. 366+93
26.2 LT. ℄ MIDLOTHIAN
EXIST. RIM ELEV. = 1007.4
PROP. RIM ELEV. = 1007.50

AJ-19

604 ADJUST M.H. TO GRADE
STA. 369+14
14' RT. ℄ MIDLOTHIAN
EXIST. RIM ELEV. = 1000.27
PROP. RIM ELEV. = 1000.66
℄ PROP. 12" = 997.78
℄ PROP. 12" = 995.31

P-10
60'-12" TYPE B-B @ 0.50%
℄ 12" = 997.78

P-11
41'-12" TYPE B-B @ 0.70%
℄ 12" = 995.31

A-11

604 Nº 2A-10 (MOD. TYPE II)
STA. 628+75
1' LT. ℄ RAMP "L"
TOP. ELEV. = 999.68
WINDOW ELEV. = 998.93
℄ 12" = 995.60

RB-21

604 RECONSTRUCT M.H. TO GRADE
STA. 369+66.5
24.1' LT. ℄ MIDLOTHIAN
EXIST. RIM ELEV. = 999.77
PROP. RIM ELEV. = 999.72
EXIST. 12" @ 1.50%
STD. CONCRETE COLLAR
℄ 12" = 996.00
4'-12" TYPE B-B @ 1.50%

A-12

604 Nº 2A-8 (MOD. TYPE II)
STA. 369+50
24.5' LT. ℄ MIDLOTHIAN
TOP. ELEV. = 1000.10
WINDOW ELEV. = 999.48
℄ 12" = 996.06

AJ-20

604 ADJUST M.H. TO GRADE
STA. 369+77
28.8' RT. ℄ MIDLOTHIAN
EXIST. RIM ELEV. = 1000.5'
PROP. RIM ELEV. = 999.91

MIDLOTHIAN BLVD.
BEGIN CONSTRUCTION TO STA. 370+00

RRC 8/21/68
PWD 8/30/68

MAY 25 1971

K&E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

203		659	
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)	
520** 642	120**	722**	61

**INDICATES RURAL FUNDS

FED. RD.	STATE	PROJECT	
2	OHIO		

144
656

MAH-680-6.98

BEGIN SHEET STA. 370+00

END SHEET STA. 375+00

CONST. LIMITS

RAMP "K"

RAMP GUARD RAIL

EXIST. R/W

CITY OF YOUNGSTOWN

BOARDMAN TOWNSHIP

STA. 371+30.24

(ABANDONED) MIDLOTHIAN BLVD.

S.R.-625

STA. 642+05.23 (℄ BD. EXP)
STA. 372+54.77 (℄ SR.-625

CONC. WALK

EXIST. L.P.

RAMP "O"

BOARDMAN TOWNSHIP
CITY OF YOUNGSTOWN CORPORATION LINE

FOR PAVEMENT DETAILS, SEE SHEET Nº 146 & 147
FOR RAMP "K" DETAILS, SEE SHEET Nº 154
FOR RAMP "O" DETAILS, SEE SHEET Nº 153
FOR BRIDGE DETAILS, SEE SHEET Nº 463
FOR DRAINAGE DETAILS, SEE SHEET Nº 130 & 137

0 10 20 40

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS	
S-1	370+00	370+32	LT.	160.0	80.0*
S-2	370+80	375+00	LT.	2100.0	1050.0*
SHEET TOTAL				2260.0	1130.0*

*INDICATES 100% CITY FUNDS

ITEM 612-CONCRETE MEDIAN - SQ. YDS.

CODE	STATION FROM	STATION TO	9" THICKNESS	
M-1	370+00	375+00	116.92	40.75**
SHEET TOTAL			116.92	40.75**

ITEM 609-CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2A	TYPE 2B
C-1	370+00	370+19.83		19.83
C-2	370+85.57	375+00		414.43
C-3	370+12.11	371+39.24	127.13**	
C-4	371+39.24	373+26.39	187.15	
SHEET TOTAL			314.28	434.26

**INDICATES RURAL FUNDS

ITEM 604-MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	373+00	℄	1
SHEET TOTAL			1

@ APPROACH & FARSIDE ASSEMBLIES ON 145

ITEM 606-GUARD RAIL-LIN. FT.

CODE	STATION FROM	STATION TO	TYPE @ 5
G-1	370+00	642+00 (℄ R.)	37.5
G-2	370+00	370+50	25.
SHEET TOTAL			62.5

ITEM 604-MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE - EACH

CODE	STATION	LOCATION	EACH M.H.
AJ-49	371+47	20.4' RT. ℄	1
AJ-50	372+15	27' LT. ℄	1
AJ-60	374+65	26.3' LT. ℄	1
SHEET	TOTAL		3

ITEM 814 - WATER MAINS

CODE	STATION	EXISTING LOCATION	PROPOSED LOCATION	VALVE BOXES ADJUSTED EACH	HYDRANT REMOVED & RESET EACH	6" D.I. PIPE LIN. FT.
W-3	370+01.5	19.4' LT.		1		
W-4	371+59	16.4' RT.		1		
W-5	373+68	18.9' LT.		1		
W-6	373+68	24' LT.	26.5' LT.		1	2
SHEET TOTAL				3	1	2

ITEM 601 PAVED GUTTER-LIN. FT.

CODE	LOCATION FROM	LOCATION TO	TYPE 2
PG-1	371+91	373+56	165
SHEET TOTAL			165

ITEM 202- GUARD RAIL REMOVED

CODE	STATION FROM	STATION TO	LIN. FT.
R-1	370+00	370+42.5	42.5
R-2	370+00	370+42.5	42.5**
SHEET TOTAL			85.0

AJ-49
604 ADJUST M.H. TO GRADE
STA. 371+47
20.4' RT. ℄
EXIST. RIM ELEV. = 1006.5
PROP. RIM ELEV. = 1006.45

AJ-50
604 ADJUST M.H. TO GRADE
STA. 372+15
27' LT. ℄
EXIST. RIM ELEV. = 1004.5
PROP. RIM ELEV. = 1004.68

AJ-60
604 ADJUST M.H. TO GRADE
STA. 374+65
26.8' LT. ℄
EXIST. RIM ELEV. = 1022.0
PROP. RIM ELEV. = 1022.08

℄ PROFILE GRADE
℄ EXIST. PAV'T.

1001.21 1002.04 1003.00 1003.51 1004.99 1006.12 1007.30 1009.68 1012.05 1014.43 1015.14 1015.62 1016.30 1016.86 1017.64 1019.41 1022.09 1024.45 1024.70

1001.04 1002.83 1004.82 1007.13 1009.51 1011.88 1014.26 1016.65 1019.30 1021.92 1024.53

1025
1020
1015
1010
1005
1000

50' V.C.
P.V.I. STA. 370+00
ELEV. = 1001.06
+3.85%
P.V.I. STA. 371+00
ELEV. = 1004.93
50' V.C.
AJ 49
+4.75%
AJ 50
P.V.I. STA. 373+40
ELEV. = 1016.33
+5.24%
50' V.C.
AJ 60
EXIST. 15" COMBINATION
EXIST. 30" COMBINATION
EXIST. 15" COMBINATION
EXIST. 30" COMBINATION

370+00 371+00 372+00 373+00 374+00 375+00

RRC 8/21/68
PUD 8/30/68

MIDLOTHIAN BLVD. STA. 370+00 TO 375+00

PLATE 4—CROSS SECTION OF P.R.R.R.E. STANDARD
NEUFELD & ESSER CO., NEW YORK

MAY 25 1971

FINAL SURVEY — SURVEYED, PLOTTED, TRIPLATE, NOTE BOOK, NO., DATE, BY, AREAS CHECKED

ORIGINAL SURVEY — SURVEYED, PLOTTED, TRIPLATE, NOTE BOOK, NO., DATE, BY, AREAS CHECKED

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
117	37	550

FED. RD.	STATE	PROJECT	
2	OHIO		

145
656

MAH-680-6.98

ITEM 603-CONDUITS - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	TYPE B-B 12"
P-9	A-9	AJ-44	145	18
P-22	A-22	AJ-44	145	24
TOTAL				42

ITEM 604- MANHOLES, CATCH BASINS & INLETS-EACH

CODE	STATION	LOCATION	Nº 2A-10 MOD. TYPE II INLET	Nº 5 C. B.
A-9	375+13	27.14' RT. ℄	1	
A-22	630+50	30' LT. & "O"		1
TOTAL			1	1

ITEM 604- MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE -EACH

CODE	STATION	LOCATION	EACH M. H.
AJ-44	375+26	18.6' RT. ℄	1
AJ-23	378+60.5	19.4' RT ℄	1
TOTAL			2

ITEM 814 - WATER MAINS

CODE	STATION	EXISTING LOCATION	PROPOSED LOCATION	VALVE BOXES ADJUSTED EACH	HYDRANT MOVED & RESET EACH	6" D.I. PIPE LIN. FT.
W-7	375+25	13.5' RT.		1		
W-8	377+11.5	18.0' LT.		1		
W-9	377+11.5	24.0' LT.	31.0' LT.		1	7.0
TOTAL				2	1	7.0

FOR PAV'T DETAILS, SEE SHT. Nº 146 & 147
FOR RAMP "N" AND "O" DETAILS, SEE SHT. Nº 183
FOR RAMP "J" DETAILS, SEE SHT. Nº 184
FOR DRAINAGE DETAILS, SEE SHT. Nº 336

ITEM G12 - CONCRETE MEDIAN

CODE	STATION FROM	STATION TO	SQ. YDS 9" THICKNESS
M-1	375+00	377+50	83.33
SHEET TOTAL			83.33

ITEM-608 SIDEWALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	375+00	376+12	LT.	560.0 280.0*
S-2	376+25	378+08.71	LT. "J"	964.25 482.13*
SHEET TOTAL				1524.25 762.13*

* INDICATES 100% CITY FUNDS.

ITEM 609 CONCRETE CURB

CODE	STATION FROM	STATION TO	TYPE 2B
C-1	375+00	375+28.46	28.46
C-2	375+88.30	377+87.04	198.74
SHEET TOTAL			227.20

PAVEMENT REPLACEMENT

CODE	LOCATION	PROPOSED CONDUIT	1¼"-404 C.Y.	8"-305 S.Y.
Y-1	MIDLOTHIAN	P-9	0.14	4.02
Y-2	MIDLOTHIAN	P-22	0.09	2.30
TOTAL			0.23	6.32

BEGIN SHEET STA. 375+00

END WORK STA. 379+30

BM - USGS Nº N-154-1950
STA. 378+94, 32.5' RT. ℄
ELEV. = 1035.602

A-9
604 Nº 2A-10 (MOD. TYPE II)
STA. 375+13
27.14' RT. ℄ MIDLOTHIAN
TOP ELEV. = 1024.69
WINDOW ELEV. = 1023.94
12" = 1020.61

A-22
604 Nº 5 C.B.
STA. 630+50
30' LT. & RAMP "O"
GRATE ELEV. = 1024.25
12" = 1021.58

AJ-44
604 ADJUST M.H. TO GRADE
STA. 375+26
18.6' RT. ℄ MIDLOTHIAN
EXIST. RIM ELEV. = 1025.8
PROP. RIM ELEV. = 1025.25
12" = 1020.45
12" = 1021.22

AJ-23
604 ADJUST M.H. TO GRADE
STA. 378+60.5
19.4' RT. ℄ MIDLOTHIAN
EXIST. RIM ELEV. = 1033.75
PROP. RIM ELEV. = 1033.92
30" = 1022.34

18'-12" TYPE B-B @ 0.50%
12" = 1020.45
24'-12" TYPE B-B @ 1.50%
12" FLAP VALVE
12" = 1021.22

P.V.I. STA. 375+20
ELEV. = 1025.76
+2.65%
P.V.I. STA. 378+00
ELEV. = 1033.18
+2.39%
P.V.I. STA. 379+00
ELEV. 1033.57
+2.77%
50' V.C.
END CONSTRUCTION STA. 379+10
END WORK STA. 379+30 MEET EXISTING PAVEMENT

EXIST. 15" COMBINATION
EXIST. 30" COMBINATION
EXIST. 15" SAN.
EXIST. 12" SAN.

℄ PROFILE GRADE: 1024.70, 1025.60, 1025.79, 1026.42, 1026.56, 1027.88, 1029.21, 1030.53, 1031.86, 1032.52, 1033.16, 1033.78, 1034.38, 1034.98, 1035.59

℄ EXIST. PAV'T.: 1024.53, 1024.39, 1027.72, 1029.04, 1030.36, 1031.69, 1032.99, 1034.21, 1035.42, 1036.78, 1038.17

375+00 376+00 377+00 378+00 379+00 380+00

MIDLOTHIAN BLVD.
STA. 375+00 TO END CONSTRUCTION

R R C 8/21/68
P W D 8/30/68

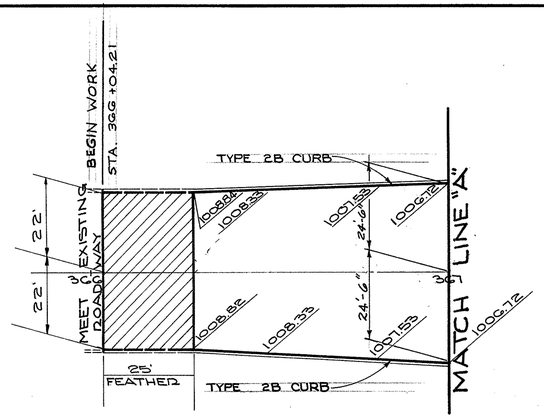
MAY 25 1971

K&E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

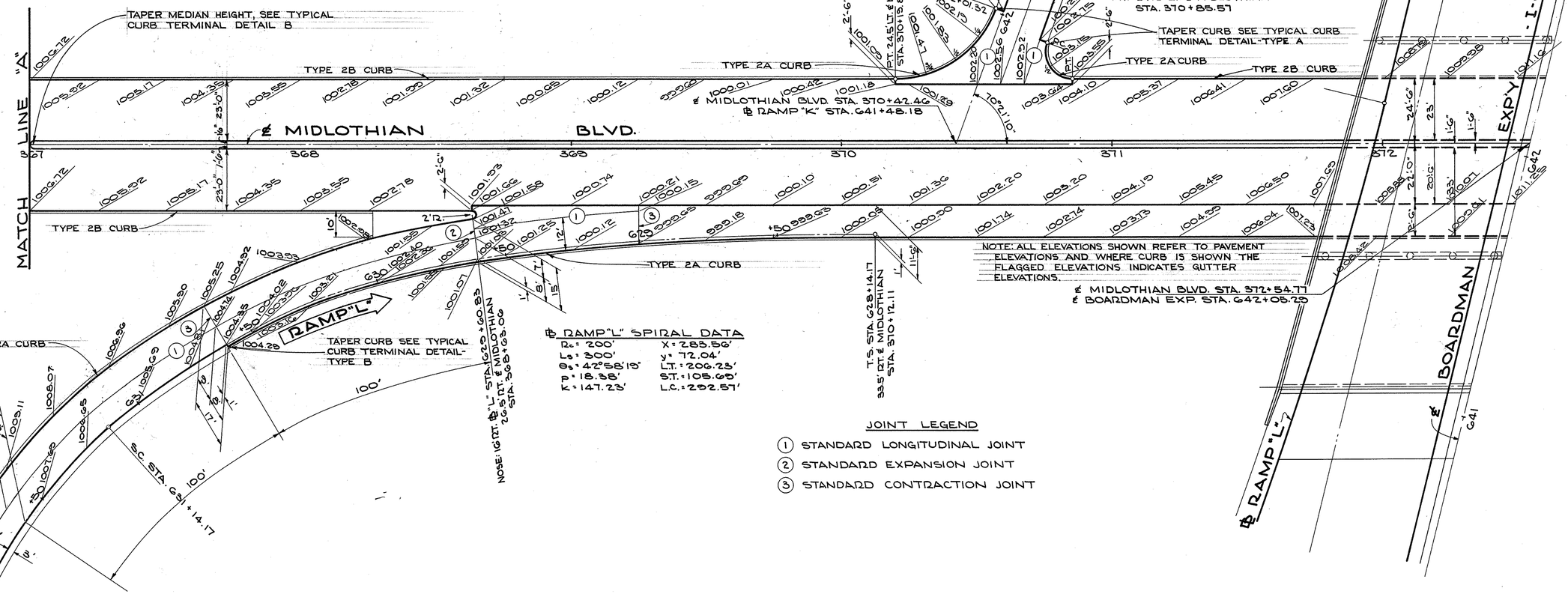
146
656



N.W. CURB RETURN DATA
Δ = 70°21'10"
R = 40'
T = 28.19'
L = 49.12'

N.E. CURB RETURN DATA
Δ = 109°38'50"
R = 10'
T = 14.19'
L = 19.14'

P.C. 19' RT. ℄ RAMP "K"
STA. 641+95.17
P.T. 24.5' LT. ℄ MIDLOTHIAN
STA. 370+85.57



℄ RAMP "L" SPIRAL DATA

R_c = 200'	X = 283.56'
L_s = 300'	y = 72.04'
θ_s = 42°58'19"	L.T. = 206.23'
p = 18.38'	S.T. = 105.60'
k = 147.23'	L.C. = 292.57'

JOINT LEGEND
(1) STANDARD LONGITUDINAL JOINT
(2) STANDARD EXPANSION JOINT
(3) STANDARD CONTRACTION JOINT

0 10 20 40

MIDLOTHIAN BLVD.
PAVEMENT DETAILS

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

147
656

MIDLOTHIAN BLVD. PAVEMENT DETAILS

℄ RAMP "J" CURVE DATA
Δ = 39°00'00"
D_c = 28°00'00"
R = 204.63'
T = 72.46'
L_c = 139.29'
E = 12.45'
CH = 136.61'

℄ RAMP "J" SPIRAL DATA
L_s = 150'
D_s = 28°00'00"
Θ_s = 21°00'00"
p = 4.56'
k = 74.67'
X_c = 148.00'
Y_c = 18.15'
LT. = 100.71'
ST. = 50.65'
LC. = 149.11'

℄ "O" CURVE DATA
Δ = 12°41'14"
D_c = 8°00'00"
R = 716.20'
T = 79.62'
L_c = 158.59'

℄ "O" SPIRAL DATA
L_s = 150'
Δ_1 = 6°00'00"
Δ_2 = 21°29'09"
Θ_s = 15°29'09"
p = 4.43'
T_1 = 88.38'
T_2 = 64.72'

JOINT LEGEND
① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT
③ STANDARD CONTRACTION JOINT

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

148
656

MAH-680-6.98

	CU. YDS.	
END AREA	CUT	FILL
	50	1
29	57	0
32	61	4
34	24	4
26	13	4
1	0	

MATCH LINE RAMP L

MATCH LINE RAMP L

MATCH LINE RAMP L

MATCH LINE RAMP M-M

B B B B A A A A

STA. 367+79
EXIST = 1004.93
P.G. = 1005.10

STA. 367+50
EXIST = 1005.85
P.G. = 1006.02

STA. 367+00
EXIST = 1007.44
P.G. = 1007.61

STA. 366+60
EXIST = 1008.69
P.G. = 1008.86

STA. 366+50
EXIST = 1008.99
P.G. = 1009.16

STA. 366+29.21
EXIST = 1009.45
P.G. = 1009.62
BEGIN CONSTRUCTION

STA. 366+04.21
EXIST = 1009.83
P.G. = 1009.83
BEGIN WORK

L A

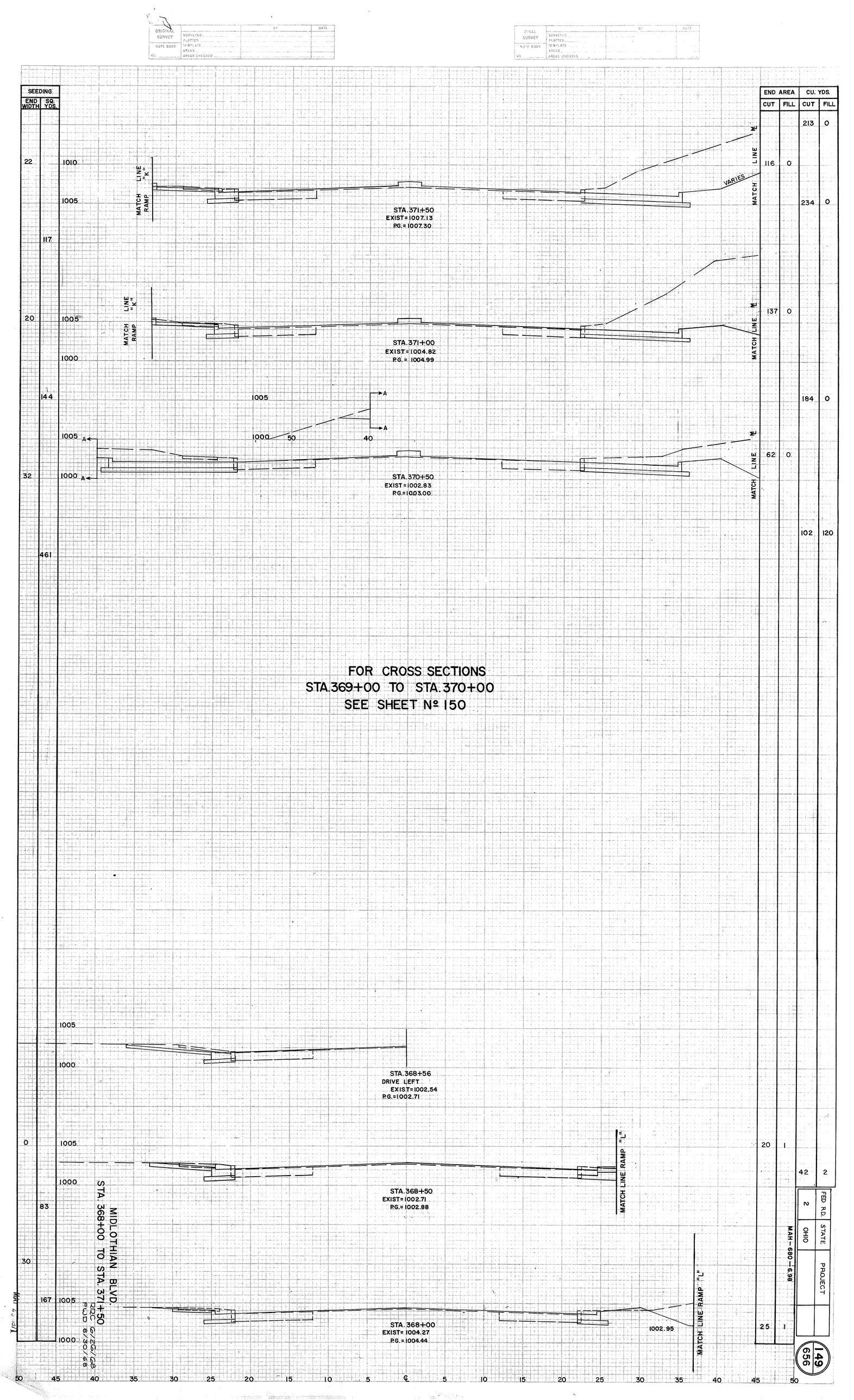
SEEDING	
END WIDTH	SQ. YDS.
30	194
40	317
74	172
75	104
0	

MIDLOTHIAN BLVD.
STA. 366+04.21 TO STA. 367+79
REC'D 8/30/68
REC'D 6/20/68

MAY 25 1971

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	REVISED		
NO.	AREAS DIVIDED		

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TRIM LINE		
NO.	AREAS CHECKED		



SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
CU. YDS.
CUT
FILL
22
117
20
144
32
461
0
83
30
167
1010
1005
1000
MATCH LINE "K" RAMP
STA. 371+50
EXIST = 1007.13
P.G. = 1007.30
VARIES
MATCH LINE
STA. 371+00
EXIST = 1004.82
P.G. = 1004.99
1005
1000
50
40
A
STA. 370+50
EXIST = 1002.83
P.G. = 1003.00
116
0
137
0
62
0
213
0
234
0
184
0
102
120
FOR CROSS SECTIONS
STA. 369+00 TO STA. 370+00
SEE SHEET Nº 150
STA. 368+56
DRIVE LEFT
EXIST = 1002.54
P.G. = 1002.71
STA. 368+50
EXIST = 1002.71
P.G. = 1002.88
MATCH LINE RAMP "L"
STA. 368+00
EXIST = 1004.27
P.G. = 1004.44
1002.95
20
1
25
1
42
2
MIDLOTHIAN BLVD.
STA. 368+00 TO STA. 371+50
RDC 6/26/68
PWD 8/30/68
MAH-680-6.98
FED. RD.
STATE
PROJECT
2
OHIO
149
656
50
45
40
35
30
25
20
15
10
5
℄

FED. RD.	STATE	PROJECT	
2	OHIO		

150
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
134	718
131	
17	647
102 AHD.	
31 BK	86

STA. 370+00
EXIST = 1001.14
P.G. = 1001.31

STA. 369+51.20
EXIST = 1000.34
P.G. = 1000.54

STA. 369+50
EXIST = 1000.32
P.G. = 1000.49

FULL SECTION AHEAD

MATCH MIDLOTHIAN BACK
CUT - 7
FILL - 20

MATCH RAMP "L" BACK
CUT - 23
FILL - 173

STA. 369+00
EXIST = 1001.37
P.G. = 1001.54

LINE "L"

MATCH RAMP

L A

985.0

	END AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
	49	130		
			93	265
	54	163		
			2	9
	39	237		
			64	398
AHEAD	30	193		
BACK	7	20		
			25	19

1000 995 990 985 980

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

MIDLOTHIAN
STA. 369+00 TO STA. 370+00

DRC 6/26/68
PWD 6/30/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

151
656

MAH-680-6.98

		STA. 375+50	STA. 375+00	STA. 374+50	STA. 374+00	STA. 373+50	STA. 373+00	STA. 372+50	STA. 372+00
END AREA	CUT	8	27	10	8	9	46	55	60	114
	FILL	3	0	0	0	0	0	0	0	0
CU. YDS.	CUT	26	32	17	16	0	101	107	161
	FILL	5	3	0	0	0	0	0	0

STA. 375+50
EXIST = 1026.39
P.G. = 1028.56

STA. 375+00
EXIST = 1024.53
P.G. = 1024.70

STA. 374+50
EXIST = 1021.92
P.G. = 1022.09

STA. 374+00
EXIST = 1019.30
P.G. = 1019.47

STA. 373+50
EXIST = 1016.69
P.G. = 1016.92

STA. 373+00
EXIST = 1014.26
P.G. = 1014.43

STA. 372+50
EXIST = 1011.88
P.G. = 1012.05

STA. 372+00
EXIST = 1009.51
P.G. = 1009.68

MIDLOTHIAN BLVD
FULL SECTION BACK
MATCH RAMP "O" STA. 628+63 AHEAD
C = 37
F = 0
C = 9
F = 0
MIDLOTHIAN BLVD. AHEAD
MIDLOTHIAN BLVD. BACK

RRC 6/26/68
PUD 8/30/68

MIDLOTHIAN BLVD.
STA. 372+00 TO STA. 375+50

SEEDING	SQ. YDS.
END WIDTH	13	36	0	0	0	0	0	0	0	61

MAY 25 1971

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	0	0	0
0	0	0	0
0	0	0	0
0	0	3	6
3	5	7	7
7	11	13	5
13	25	25	5

FED. RD.	STATE	PROJECT	
2	OHIO		

152
656

MAH-680-6.98

STA. 379+30
EXIST.=1036.23
P.G.=1036.23
END WORK

STA. 379+10
EXIST=1035.69
P.G=1035.86
END CONSTRUCTION

STA. 379+00
EXIST=1035.42
P.G=1035.59

STA. 378+50
EXIST=1034.21
P.G=1034.38

STA. 378+00
EXIST=1032.99
P.G.=1033.16

STA. 377+50
EXIST=1031.69
P.G=1031.86

STA. 377+00
EXIST=1030.36
P.G=1030.53

STA. 376+50
EXIST=1029.04
P.G=1029.21

STA. 376+00
EXIST=1027.71
P.G=1027.88

MEET PROPOSED PAVEMENT ON LEMOYNE AVE. (BY OTHERS)

MEET PROPOSED PAVEMENT ON LEMOYNE AVE. (BY OTHERS)

MEET PROPOSED PAVEMENT ON LEMOYNE AVE. (BY OTHERS)

MEET PROPOSED PAVEMENT ON LEMOYNE AVE. (BY OTHERS)

LA

MATCH

RAMP "J"

MATCH LINE

1035 1030 1025

| SEEDING | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

153
656

BM # 40
Top West Bolt F.H.
House N° 1561
Midlothian Blvd.
Elev. 1033.136

BM # 30
Top of West Bolt F.H.
At Northwest Corner
Midlothian and Shirley
Road
Elev. 1011.774

LOC.	203		659
	EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
RAMP 'L'	2049	45,406	9443
RAMP 'O'	7496	6140	29,996

RAMP "M-M" STA. 642+68.10
MIDLOTHIAN BLVD. STA. 365+35.57
P.T. STA. 642+65.71
SHIRLEY RD.
75°52'57"
CITY OF YOUNGSTOWN CORPORATION LINE
BOARDMAN—TWP.
9" TRAFFIC ISLAND DETAIL, SEE SHT. N° 140
RAMP "K"
P.T. STA. 647+07.89
STA. 642+08.67
EXPRESSWAY
NOTE: FOR CONTINUATION OF RAMPS "L" AND "O" GEOMETRICS SEE GEOMETRIC PLAN, SHEET N° 150
℄ MIDLOTHIAN BLV'D STA. 372+54.77
℄ BOARDMAN EXP. STA. 642+05.29
76°28'44"
6°00' BEND STA. 628+70
9" TRAFFIC ISLAND SEE DETAIL SHT. N° 147
RAMP "J"
MIDLOTHIAN BLVD.
℄ RAMP "L"
℄ RAMP "O"
CURVE
S 89°30'36" E
℄ MIDLOTHIAN
STA. 371+58.29
89°40'43"
P.T.
60' R.
P.C.
SPIRAL
NOSE: 16' RT. ℄ "L" STA. 629+60.83
629.5' RT. ℄ MIDLOTHIAN STA. 366+65.06
INTRODUCE FLARE
S.C. STA. 631+14.17
T.S. STA. 628+14.17
33.5' RT. ℄ MIDLOTHIAN STA. 370+12.11
CITY OF YOUNGSTOWN CORPORATION LINE
P.C. STA. 628+41.13
33.5' RT. ℄ MIDLOTHIAN STA. 373+26.35
S.T. STA. 641+44.48 BK. 641+44.48 AH. EXP.
C.S. STA. 629+99.72
NOSE: 2' LT. ℄ "O" STA. 629+50.72
30.5' RT. ℄ MIDLOTHIAN STA. 374+88.30
S.C. STA. 631+49.72
6" 605 DEEP
N 10°49'41" E
BOARDMAN TWP.
CITY OF YOUNGSTOWN
NOSE: 16' RT. ℄ "L" STA. 635+31.06 EXP. STA. 635+30.38
STANDARD FLARE
SPIRAL
C.S. STA. 638+44.17
C.S. STA. 636+52.90
6" PLUG STA. 638+00
℄ BOARDMAN EXP.
N 14°00'43" E
INTRODUCED FLARE
RAMP "L"
RAMP "O"
RAMP "N-N"
P.C. STA. 639+10.75
P.T. STA. 641+38.57
R.C. STA. 637+70.54
CULVERT BY OTHERS
CURVE

ITEM 609 CONCRETE CURB-LIN.FT.					
CODE	STATION FROM	STATION TO	TYPE 2-A	TYPE 7	TYPE 8
C-1	628+14.17	630+60.83	* 245.83		
C-2	630+00	633+17	* 339.41		
C-3	634+15	635+50	* 146.64		
C-4	375+08.30	375+88.30	80.00		
C-5	629+99.72	630+99.72	83.00		
C-6	628+41.13	630+99.72	337.31		
C-7	634+60	635+90		142.56	
C-8	639+44.17	640+13		70.00	
C-9	640+13	641+00			117.0
SHEET TOTAL			1232.25	212.56	117.0

ITEM 656 - ROADSIDE CLEAN UP		
CODE	LOCATION	M. S. F.
RC-1	INSIDE RAMP "O" LOOP	89
RC-2	BETWEEN RAMP "O" & LEMOYNE	46
	SHEET TOTAL	135

ITEM 612 CONCRETE TRAFFIC ISLAND			
CODE	STATION FROM	STATION TO	SQ. YDS. 9" THICK
I-1	RAMP "L" AT	MIDLOTHIAN	28.70 *
I-2	RAMP "O" AT	MIDLOTHIAN	14.70
I-3	633+17	634+15	71.11 *
	SHEET TOTAL		114.51

* PART. (RURAL) FUNDS

ITEM 605 UNDERDRAINS LINEAR FEET							603-CONDUIT
CODE	LOCATION FROM	LOCATION TO	BENDS & BRANCHES 6"	SHALLOW PIPE 6"	DEEP PIPE 6"	UNCLASS PIPE 6"	LINEAR FEET TYPE F 6"
U-1	628+70	638+00	1		936		10
TOTAL					936		10

(1) SPIRAL DATA
R_c = 200' X = 283.56'
L_s = 300' Y = 72.04'
Θ_s = 42°58'15" L.T. = 206.23'
p = 18.38' S.T. = 105.69'
K = 147.23' L.C. = 292.57'

(2) CURVE DATA
Δ = 154°20'04"
R = 200'
T = 877.98'
L_c = 538.73'

(3) SPIRAL DATA
L_s = 300'
Δ_s = 6°00'00"
Δ_s = 42°58'15"
Θ_s = 36°58'15"
p_s = 15.88'
T. = 198.62'
T_s = 120.98'

(4) CURVE DATA
Δ = 10°11'55"
D_c = 4°00'00"
R = 1432.39'
T = 127.85'
L_c = 254.98'

(5) CURVE DATA
Δ = 12°41'14"
D_c = 8°00'00"
R = 716.20'
T = 79.62'
L_c = 158.59'

(6) SPIRAL DATA
L_s = 150' p_s = 4.49'
Δ_s = 6°00'00" T. = 88.38'
Δ_s = 21°20'09" T_s = 64.72'
Θ_s = 15°20'09"

(7) CURVE DATA
Δ = 198°56'41"
R = 200'
L_c = 694.45'

(8) SPIRAL DATA
R_c = 200' X = 283.56'
L_s = 300' Y = 72.04'
Θ_s = 42°58'15" L.T. = 206.23'
P = 18.38' S.T. = 105.69'
K = 147.23' L.C. = 292.57'

(28) CURVE DATA
Δ = 19°26'49"
D_c = 4°00'00"
R = 1,432.39'
T = 245.45'
L = 486.17

(31) CURVE DATA
Δ = 27°22'36
D_c = 12°00'00"
R = 477.46'
T = 116.29'
L = 228.14'

ITEM 606 - GUARD RAIL - LIN.FT.						ANCHOR ASSEMBLY
CODE	LOCATION FROM	LOCATION TO	TYPE 5			EACH
G-1	632+98	639+52.90	612.5 *			1*
G-2	628+50	630+00	125 *			2*
G-3	634+50	638+50	387.5 *			2*
G-4	639+67	640+00	8			1
	TOTAL		1133			6

FOR PAV'T DETAILS, SEE SHT. N° 161 & 162
FOR MIDLOTHIAN BLVD. DETAILS, SEE SHT. N° 143 TO 145
FOR BRIDGE DETAILS, SEE SHT. N° 463
FOR GRADING PLAN, SEE SHT. N° 157
FOR DRAINAGE DETAILS, SEE SHT. N° 336 & 337
FOR RAMP "J" AND "K" DETAILS, SEE SHT. N° 154

GEOMETRIC PLAN RAMPS "L" & "O"

R RC 8/20/68
PWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

154
656

ITEM 605 UNDERDRAINS LINEAR FEET							603-CONDUITS
CODE	LOCATION FROM	LOCATION TO	BENDS & BRANCHES 6"	SHALLOW PIPE 6"	DEEP PIPE 6"	UNCLASS PIPE 6"	LINEAR FEET TYPE F 6"
U-1	653+00	654+10.76			111		
TOTAL					111		

LOC.	203 EXCAVATION (C.Y.)	203 EMBANKMENT (C.Y.)	659 SEEDING (S.Y.)
RAMP 'K'	745	25,497	6828
RAMP 'J'	2591	19,328	7614

MIDLOTHIAN BLVD. STA. 370+42.46
℄ RAMP "K" STA. 641+48.18

RAMP "K"

RAMP "L"

800' RAMP "L" DECELERATION LANE

MIDLOTHIAN BLVD. STA. 372+54.77
℄ BOARDMAN EXP. STA. 642+05.25

P.T. STA. 642+07.89 ℄ RAMP "L"
56' LT. ℄ 80' EXP.
STA. 642+05.61

70°21'10"

℄ BOARDMAN EXP. (I-680)

N 14°00' 43"E

16°18'41"

40:1 TAPER

RAMP "O"

1000' RAMP "O" ACCELERATION LANE

RAMP "J"

℄ "O" STA. 641+44.17
68' RT. ℄ EXP.
STA. 641+44.48

℄ MIDLOTHIAN BLVD.

S 89°30'36"E

5" CONC. TRAFFIC ISLAND, SEE 147

℄ RAMP "J" STA. 642+56.24
30.5' LT. ℄ MIDLOTHIAN STA. 376+28.46

S.C. STA. 642+32.15

CONC. TRAFFIC ISLAND SEE EXIT NOSE DETAIL ON STANDARD DETAIL SHEET.

T.S. STA. 640+82.15
21' LT. ℄ MIDLOTHIAN
STA. 378+08.17

S.C. STA. 643+71.44

S.C. STA. 645+71.44

FILL TO FILL FLARE

P.C. STA. 652+51.37

STA. 653+07.54 (37' LT. ℄ BOARDMAN EXP.)
STA. 653+08.22 (16' RT. ℄ RAMP "K")

100'

MATCH LINE ℄ STA. 656+00

6" PLUG STA. 653+00

6" 605 DEPTH

80' TRANSITION

40:1 TAPER

P.T. STA. 654+10.76
68' RT. ℄ EXP. STA. 654+10.92

END RAMP "O" STA. 651+44.48
44' RT. ℄ EXP STA. 651+44.48

(1) CURVE

(2) CURVE

(3) TRANSITION

(9) SPIRAL DATA
- L_s = 150'
- D_c = 28°00'00"
- θ_s = 21°00'00"
- p = 4.56'
- k = 74.67'
- X_c = 148.00'
- Y_c = 18.15'
- LT. = 100.71'
- ST. = 50.65'
- L.C. = 140.11'

(10) CURVE DATA
- Δ = 35°00'00"
- D_c = 28°00'00"
- R = 204.63'
- T = 72.46'
- L_c = 139.25'
- E = 12.45'
- CH = 136.61'

(11) SPIRAL DATA
- L_s = 200'
- Δ = 1°30'00"
- Δ_s = 28°00'00"
- θ_s = 26°30'00"
- p = 7.65'
- T = 132.59'
- T_s = 71.92'

(12) CURVE DATA
- Δ = 12°35'23"
- D_c = 1°30'00"
- R = 3819.72'
- T = 421.35'
- L_c = 839.32'
- E = 23.17'
- CH = 837.63'

(13) CURVE DATA
- Δ = 6°07'21"
- D_c = 1°00'00"
- R = 5729.58'
- T = 306.56'
- L = 612.55'
- E = 8.20'
- CH = 612.24'

FOR PAVEMENT DETAILS, SEE SHT. Nº 163, 164 & 165
FOR GRADING PLAN, SEE SHT. Nº 158
FOR DRAINAGE DETAILS, SEE SHT. Nº 336 & 337
FOR MIDLOTHIAN BLVD. DETAILS, SEE SHT. Nº 143, 144 & 145
FOR BRIDGE DETAILS, SEE SHT. Nº 463

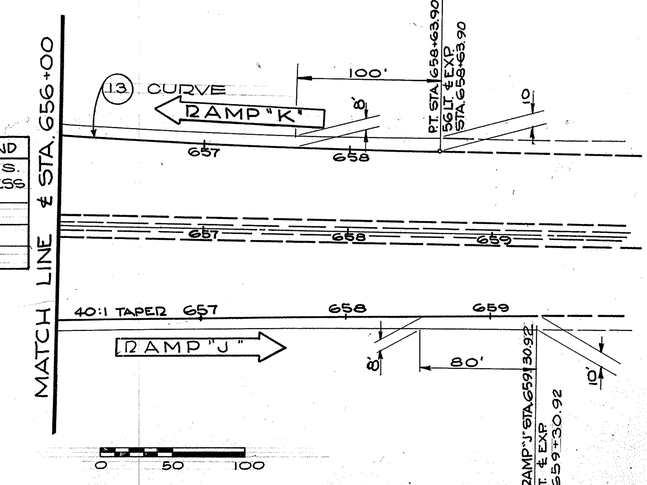
ITEM 606-GUARD RAIL-LIN. FT.					
CODE	LOCATION FROM	LOCATION TO	TYPE 5		ANCHOR ASSEMBLY EACH
G-1	642+00	653+08.22	1108.22		
G-2	644+00	646+50	200		2
TOTAL			1308.22		2

BM#30
TOP OF WEST BOLT F.H. AT NORTHWEST CORNER, MIDLOTHIAN AND SHIRLEY ROAD
ELEV. = 1011.774

BM#40
TOP WEST BOLT F.H. AT HOUSE Nº 1561 MIDLOTHIAN BLVD.
ELEV. = 1033.136

ITEM 609 CONCRETE CURB-LIN. FT.						
CODE	STATION FROM	STATION TO	TYPE 2-A	TYPE 7	TYPE 8	TYPE 2-B
C-1	651+36	654+10.76			27598	
C-2	642+76.24	643+56.24	87.33			
C-3	376+10.46	375+28.46	82.00			67.0
C-4	640+82.15	643+56.24	215.81			
C-5	642+01.32(K)	370+19.83(M)	40.12			
C-6	641+25.17(K)	370+85.57(M)	10.14			
C-7	640+75	651+36		161.81		
SHEET TOTAL			453.40	161.81	27598	67.0

ITEM 612 CONCRETE TRAFFIC ISLAND			
CODE	STATION FROM	STATION TO	SQ. YDS. 9" THICKNESS
I-1	RAMP 'J' AT MIDLOTHIAN		17.78
TOTAL			17.78



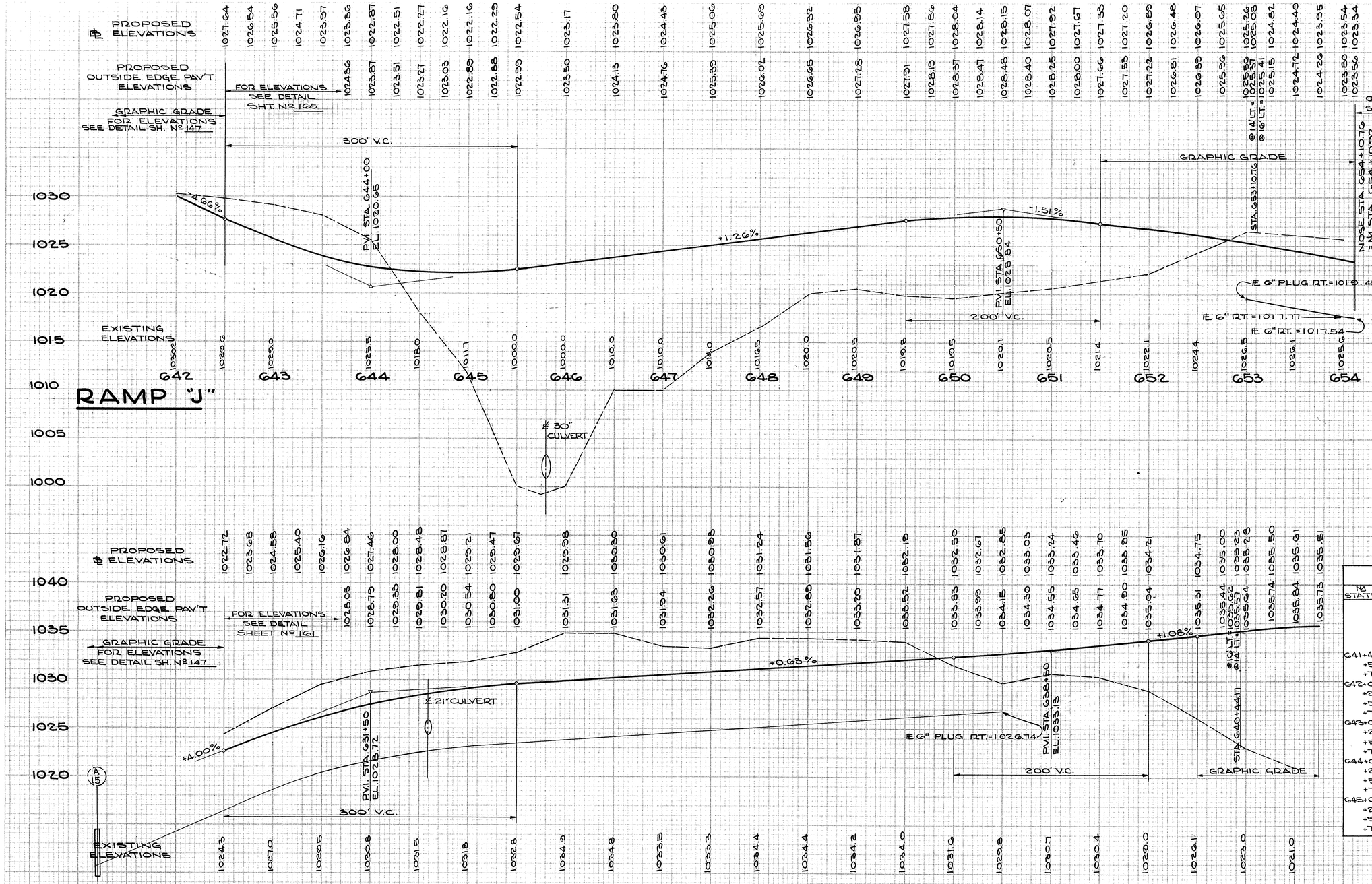
GEOMETRIC PLAN RAMPS "K" & "J"

RRC 4/10/68
CGW 4/12/68
MAY 28 1971

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

155
656



RAMP "J" GRAPHIC GRADE ELEV'S

℄ STATION	OFFSET FROM ℄	RAMP EDGE ELEV.
644+10.76	68'	1023.34
+25	68.65'	1023.03
+50	68.02'	1022.48
+75	67.40'	1021.92
645+00	66.77'	1021.33
+25	66.15'	1020.74
+50	65.52'	1020.08
+75	64.90'	1019.56
646+00	64.27'	1018.97
+25	63.65'	1018.38
+50	63.02'	1017.78
+75	62.40'	1017.20
647+00	61.77'	1016.61
+25	61.15'	1016.02
+50	60.52'	1015.43
+75	59.90'	1014.84
648+00	59.27'	1014.25
+25	58.65'	1013.67
+50	58.02'	1013.07
+75	57.40'	1012.48
649+00	56.77'	1011.88
+25	56.15'	1011.30
+30.92	56'	1011.16

RAMP "O" GRAPHIC GRADE ELEV'S

℄ STATION	OFFSET FROM ℄	RAMP EDGE ELEV.	℄ STATION	OFFSET FROM ℄	RAMP EDGE ELEV.
			640+00	51.61'	1033.44
			+25	50.99'	1033.34
			+50	50.36'	1033.23
			+75	55.74'	1033.12
			641+00	55.11'	1033.11
641+44.48	68'	1035.41	+25	54.49'	1032.90
+50	68.86'	1035.38	+50	53.86'	1032.77
+75	68.24'	1035.27	+75	53.24'	1032.62
642+00	67.61'	1035.16	648+00	52.61'	1032.46
+25	66.99'	1035.06	+25	51.99'	1032.28
+50	66.36'	1034.98	+50	51.36'	1032.08
+75	65.74'	1034.84	+75	50.74'	1031.87
643+00	65.11'	1034.73	649+00	50.11'	1031.65
+25	64.49'	1034.63	+25	49.49'	1031.41
+50	63.86'	1034.52	+50	48.86'	1031.17
+75	63.24'	1034.41	+75	48.24'	1030.80
644+00	62.61'	1034.30	650+00	47.61'	1030.61
+25	61.99'	1034.20	+25	46.99'	1030.32
+50	61.36'	1034.08	+50	46.36'	1030.01
+75	60.74'	1033.98	+75	45.74'	1029.68
645+00	60.11'	1033.87	651+00	45.11'	1029.34
+25	59.49'	1033.77	+25	44.49'	1028.98
+50	58.86'	1033.66	+44.48	44'	1028.51
+75	58.24'	1033.55			

MIDLOTHIAN BLVD INTERCHANGE
RAMP PROFILES - "J" & "O"

MAY 25 1971

FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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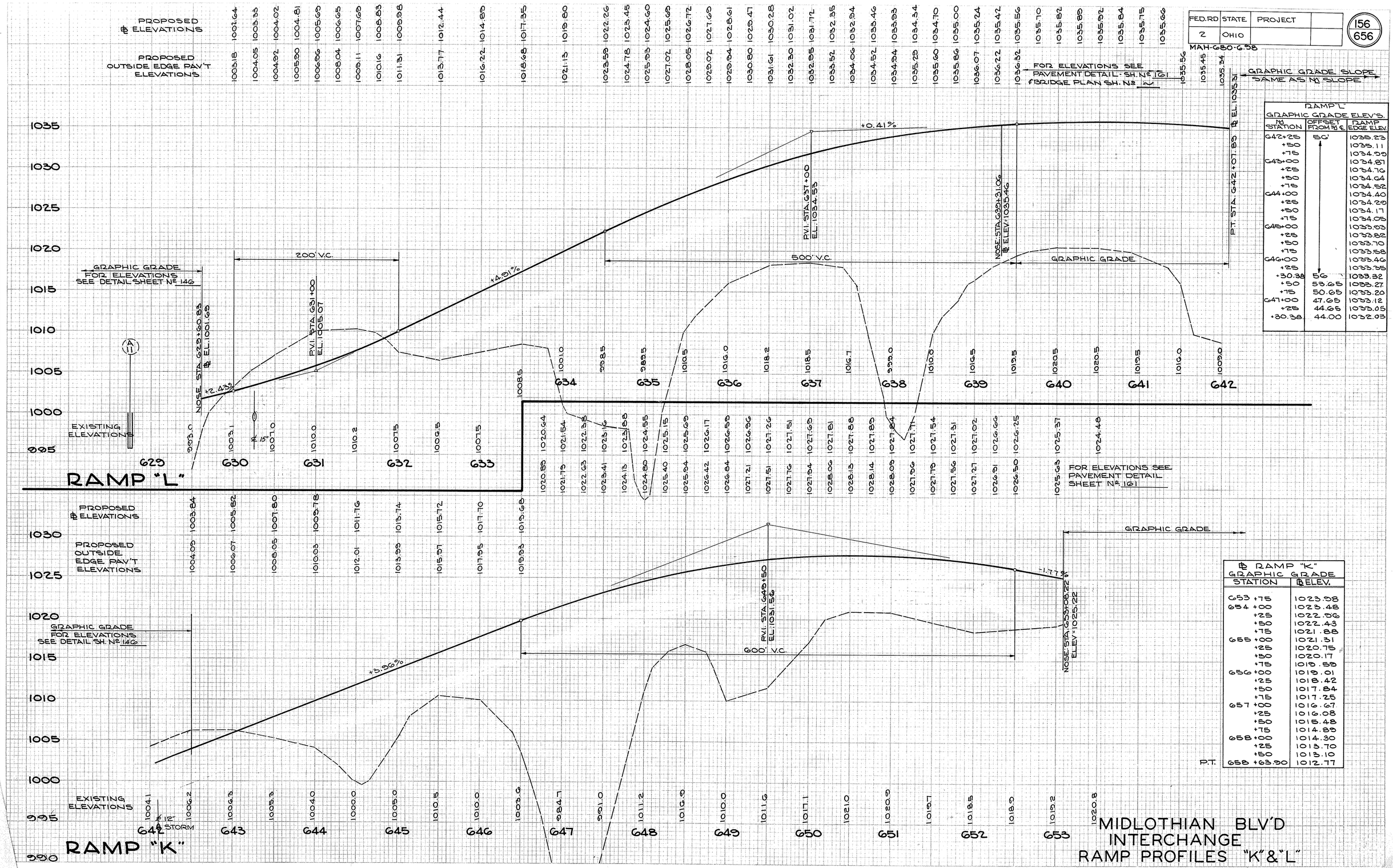

RAMP "L"
GRAPHIC GRADE ELEV'S.

M STATION	OFFSET FROM M ℄	RAMP EDGE ELEV.
642+25	56'	1035.23
+50		1035.11
+75		1034.99
643+00		1034.87
+25		1034.76
+50		1034.64
+75		1034.52
644+00		1034.40
+25		1034.29
+50		1034.17
+75		1034.05
645+00		1033.93
+25		1033.82
+50		1033.70
+75		1033.58
646+00		1033.46
+25		1033.35
+30.38	56	1033.32
+50	53.65	1033.27
+75	50.65	1033.20
647+00	47.65	1033.12
+25	44.65	1033.05
+30.38	44.00	1032.03

℄ RAMP "K"
GRAPHIC GRADE

STATION	℄ ELEV.
653 +75	1023.98
654 +00	1023.48
+25	1022.96
+50	1022.43
+75	1021.88
655 +00	1021.31
+25	1020.75
+50	1020.17
+75	1019.59
656 +00	1019.01
+25	1018.42
+50	1017.84
+75	1017.25
657 +00	1016.67
+25	1016.08
+50	1015.48
+75	1014.89
658 +00	1014.30
+25	1013.70
+50	1013.10
P.T. 658 +63.90	1012.77

MIDLOTHIAN BLV'D INTERCHANGE RAMP PROFILES "K" & "L"

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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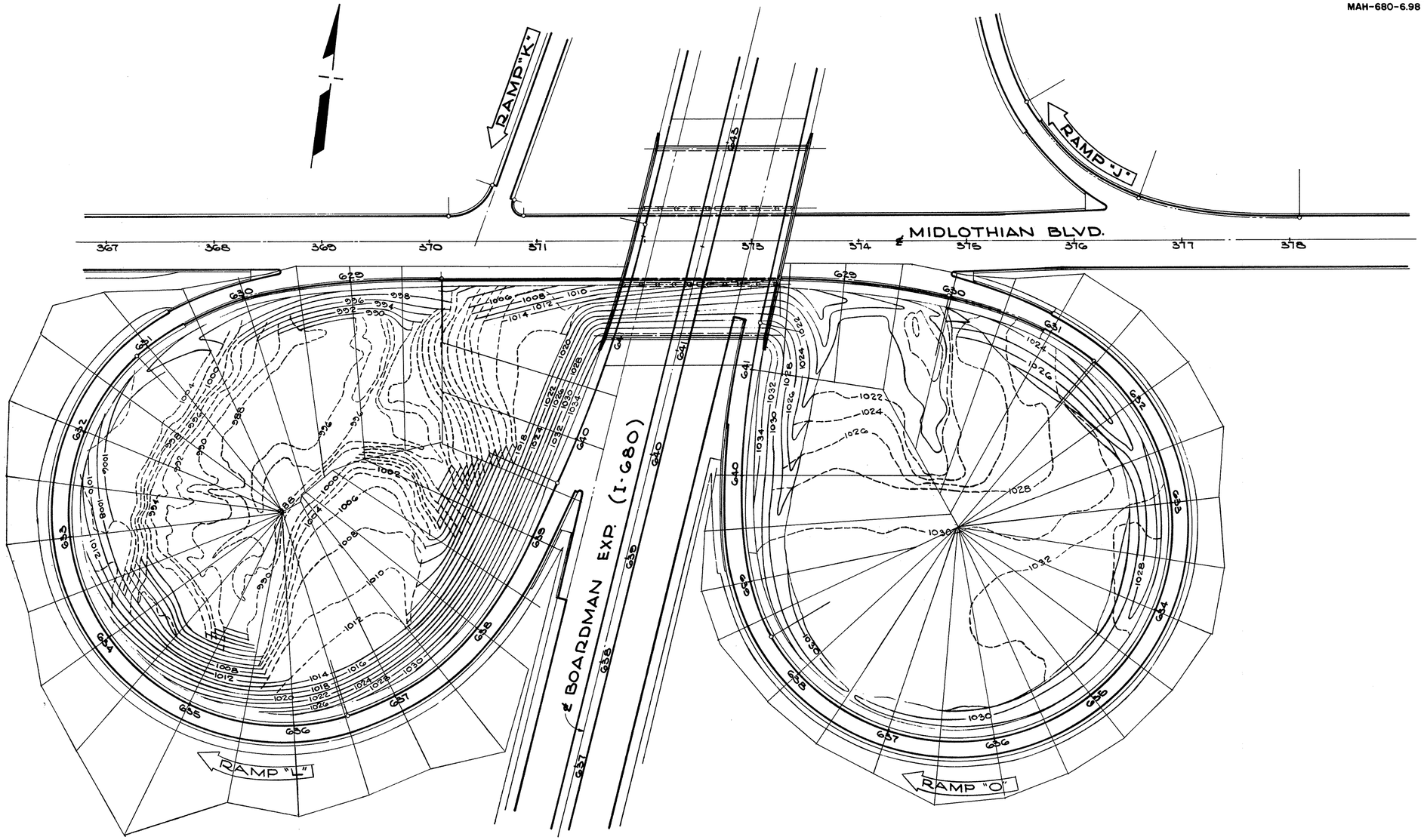

GRADING PLAN
MIDLOTHIAN BLVD. INTERCHANGE

MAY 25 1971

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

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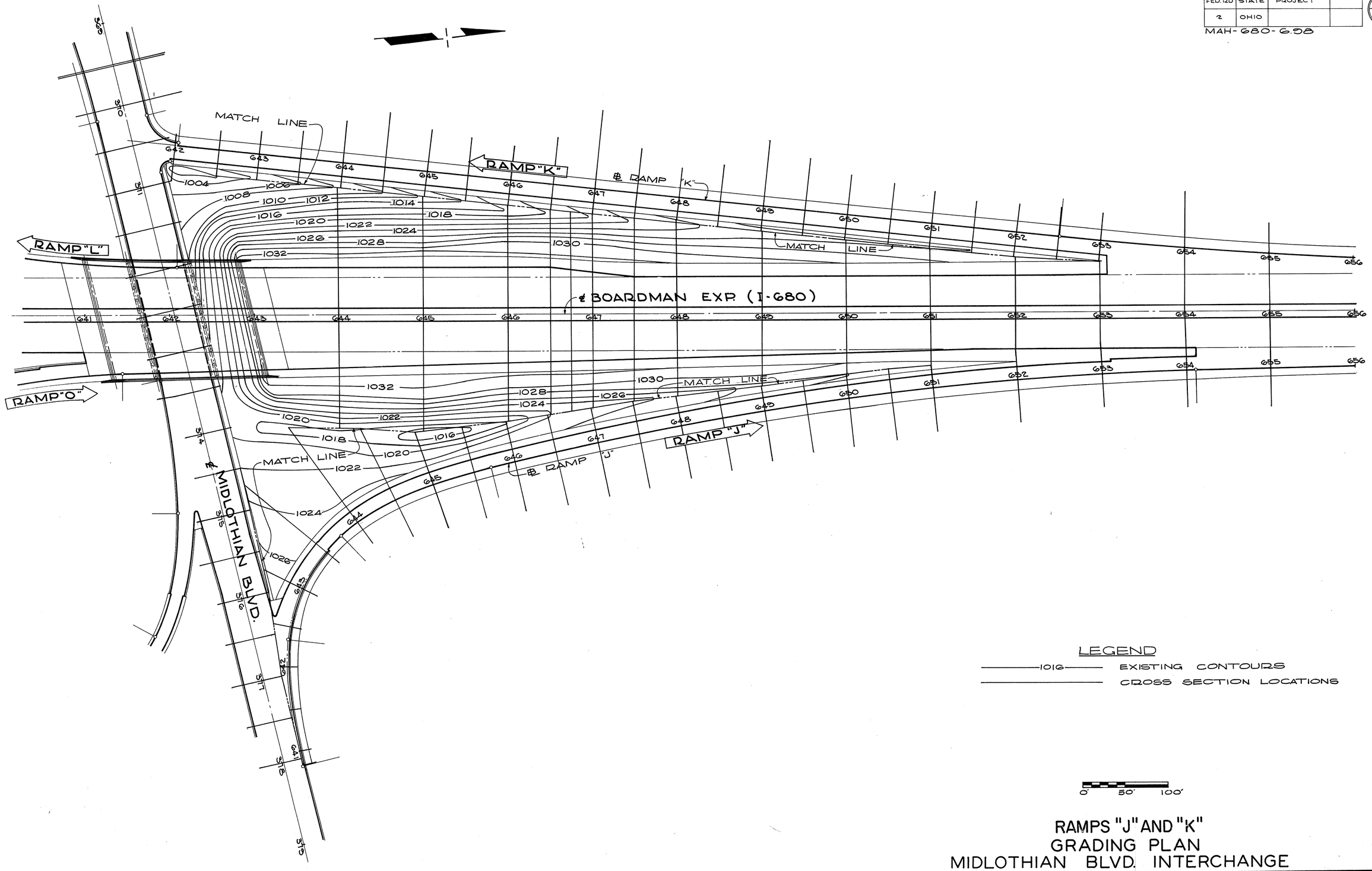
656



LEGEND

1016 EXISTING CONTOURS

CROSS SECTION LOCATIONS

0' 50' 100'

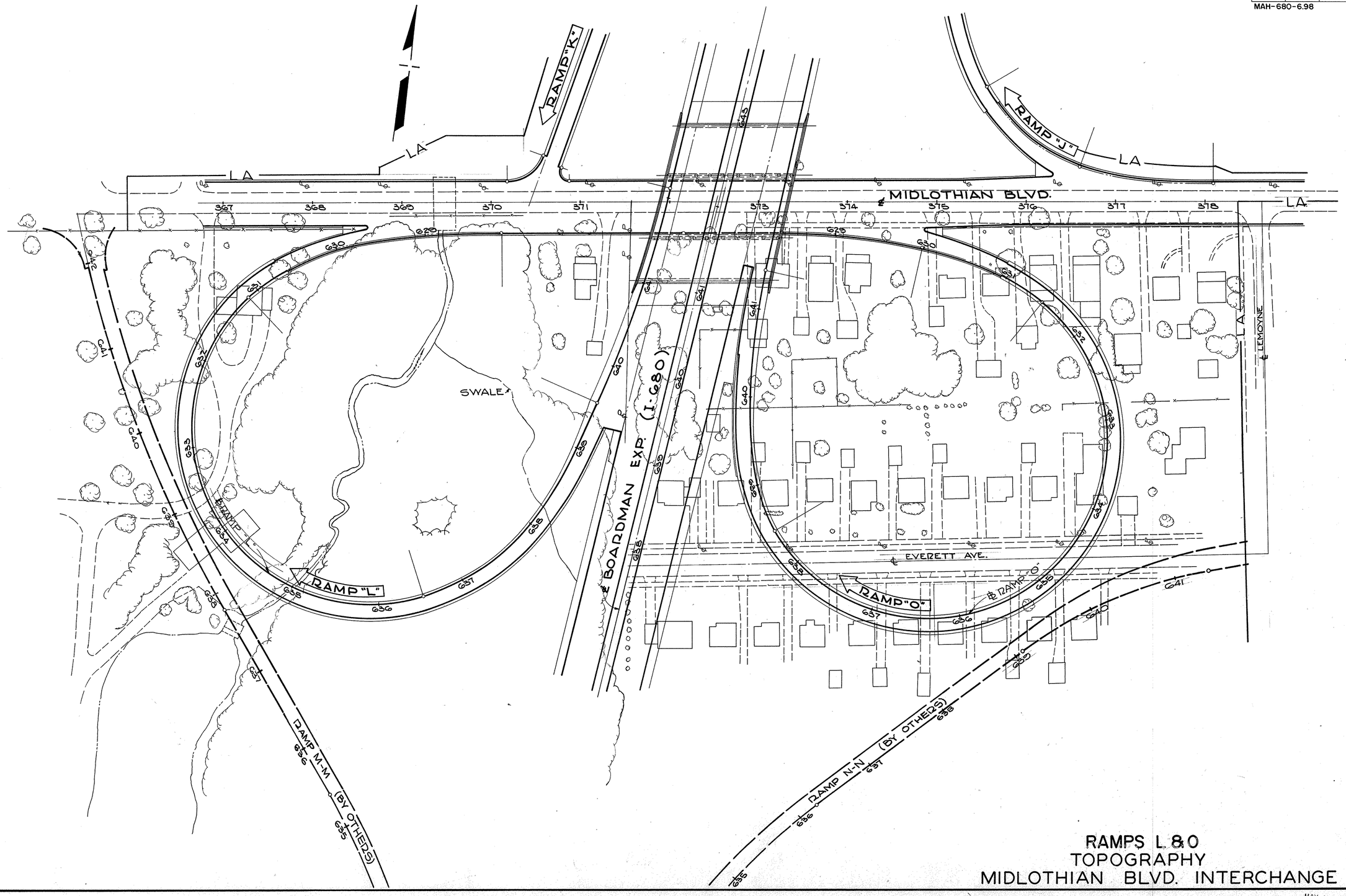
RAMPS "J" AND "K"
GRADING PLAN
MIDLOTHIAN BLVD. INTERCHANGE

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OH10		

159
656

MAH-680-6.98



RAMPS L & O
TOPOGRAPHY
MIDLOTHIAN BLVD. INTERCHANGE

MAY 25 1971

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-698

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RAMP "K"

℄ RAMP "K"

RAMP "L"

℄ BOARDMAN EXP. (I-680)

RAMP "O"

RAMP "J"

℄ RAMP "J"

℄ MIDLOTHIAN BLVD.

℄ LEMOYNE

BRUSH ℄ TREES

BASEBALL FIELD

TOPOGRAPHY
MIDLOTHIAN BLVD. INTERCHANGE

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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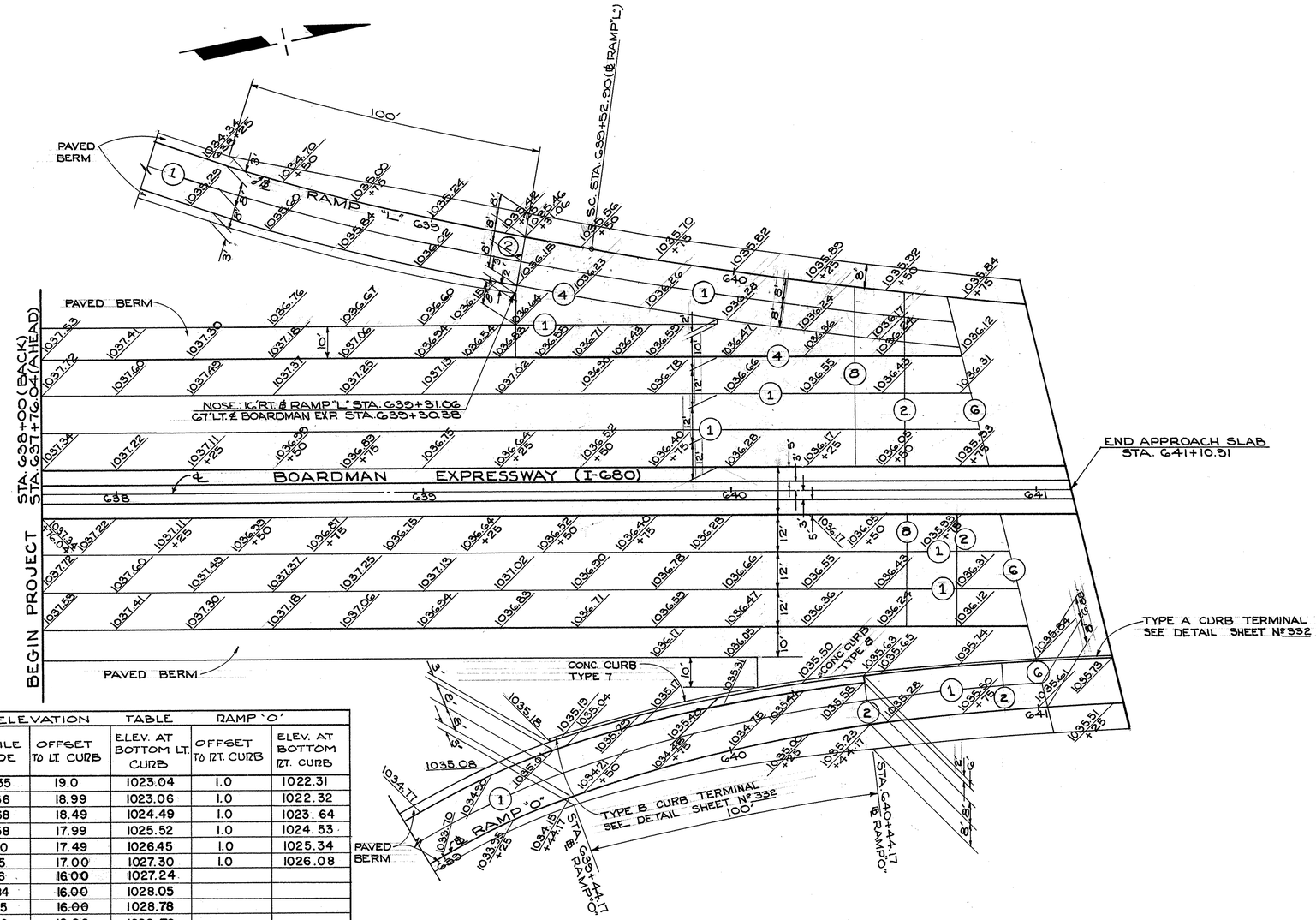


SUPERELEVATION TABLE RAMP 'L'					
STA.	PROFILE GRADE	OFFSET TO LT. CURB	ELEV. AT BOTTOM LT. CURB	OFFSET RT. CURB	ELEV. AT BOTTOM RT CURB
629+60.83	1001.07	1.0	1001.03	14.0	1001.58
75	1001.59	1.0	1001.55	14.42	1002.16
630+00	1002.40	1.0	1002.35	15.18	1003.14
25	1003.21	1.0	1003.15	15.93	1004.10
50	1004.02	1.0	1003.96	16.68	1005.08
60.83	1004.35	1.0	1004.28	17.0	1005.49
75	1004.81			17.0	1006.02
631+00	1005.69			17.0	1007.03
14.17	1006.22			17.0	1007.64
25	1006.65			17.0	1008.07
50	1007.69			17.0	1009.11
60.83	1008.16			17.0	1009.58
75	1008.83			17.0	1010.25
632+00	1009.98			17.0	1011.40
25	1011.21			17.0	1012.63
50	1012.44			17.0	1013.86
75	1013.66			17.0	1015.08
633+00	1014.89			17.0	1016.31
17	1015.72			17.0	1017.14
25	1016.12			17.0	1017.54
50	1017.35			17.0	1018.77
75	1018.57			17.0	1019.99
634+00	1019.80			17.0	1021.20
15	1020.54			17.0	1021.96
25	1021.03			17.0	1022.45
50	1022.26			17.0	1023.68
75	1023.45			17.0	1024.87
635+00	1024.60			17.0	1026.02
25	1025.69			17.0	1027.11
50	1026.72			17.0	1028.14
STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH		
635+50	1026.72	1028.05	16.0		
75	1027.69	1029.02	16.0		
636+00	1028.61	1029.94	16.0		
25	1029.47	1030.80	16.0		
50	1030.28	1031.61	16.0		
75	1031.02	1032.30	16.0		
637+00	1031.72	1032.95	16.0		
25	1032.35	1033.52	16.0		
50	1032.94	1034.06	16.0		
75	1033.46	1034.52	16.0		
638+00	1033.93	1034.94	16.0		
25	1034.34	1035.29	16.0		
50	1034.70	1035.60	16.0		
75	1035.00	1035.84	16.0		
639+00	1035.24	1036.02	16.0		
25	1035.42	1036.15	16.0		
31.06	1035.46	1036.18	16.0		

SUPERELEVATION TABLE RAMP 'O'					
STA.	PROFILE GRADE	OFFSET TO LT. CURB	ELEV. AT BOTTOM LT. CURB	OFFSET TO RT. CURB	ELEV. AT BOTTOM RT. CURB
629+99.72	1022.35	19.0	1023.04	1.0	1022.31
630+00	1022.36	18.99	1023.06	1.0	1022.32
25	1023.68	18.49	1024.49	1.0	1023.64
50	1024.58	17.99	1025.52	1.0	1024.53
75	102540	17.49	1026.45	1.0	1025.34
99.72	1026.15	17.00	1027.30	1.0	1026.08
631+00	1026.16	16.00	1027.24		
25	1026.84	16.00	1028.05		
49.72	1027.45	16.00	1028.78		
50	1027.46	16.00	1028.79		
75	1028.00	16.00	1029.33		
632+00	1028.48	16.00	1029.81		
25	1028.87	16.00	1030.20		
50	1029.21	16.00	1030.54		
75	1029.47	16.00	1030.80		
633+00	1029.67	16.00	1031.00		
25	1029.82	16.00	1031.15		
50	1029.98	16.00	1031.31		
75	1030.14	16.00	1031.47		
634+00	1030.30	16.00	1031.63		
25	1030.45	16.00	1031.78		
50	1030.61	16.00	1031.94		
75	1030.77	16.00	1032.10		
635+00	1030.93	16.00	1032.26		
25	1031.08	16.00	1032.41		
50	1031.24	16.00	1032.57		
75	1031.40	16.00	1032.73		
90	1031.49	16.00	1032.82		

SUPERELEVATION TABLE RAMP 'O'			
STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH
636+00	1031.56	1032.89	16.0
25	1031.71	1033.04	16.0
50	1031.87	1033.20	16.0
75	1032.03	1033.36	16.0
637+00	1032.19	1033.52	16.0
25	1032.34	1033.67	16.0
50	1032.50	1033.83	16.0
75	1032.67	1033.99	16.0
638+00	1032.85	1034.15	16.0
25	1033.03	1034.30	16.0
50	1033.24	1034.55	16.0
75	1033.46	1034.65	16.0

SUPERELEVATION TABLE RAMP 'O'			
STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH
639+00	1033.70	1034.77	16.0
25	1033.95	1034.90	16.0
44.17	1034.15	1035.01	16.0
50	1034.21	1035.04	15.88
75	1034.48	1035.17	15.38
640+00	1034.75	1033.31	14.88
25	1035.00	1035.44	14.38
44.17	1035.23	1035.58	14.00
50	1035.28	1035.65	15.88
75	1035.50	1035.74	15.38
641+00	1035.61	1035.84	14.88
25	1035.51	1035.73	14.38
44.17	1035.41	1035.63	14.00

JOINT LEGEND

① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT
③ STANDARD CONTRACTION JOINT
④ KEY JOINT WITHOUT TIE BARS
⑥ CONSTRUCTION JOINT
⑧ STANDARD FLANGE BEAM JOINT

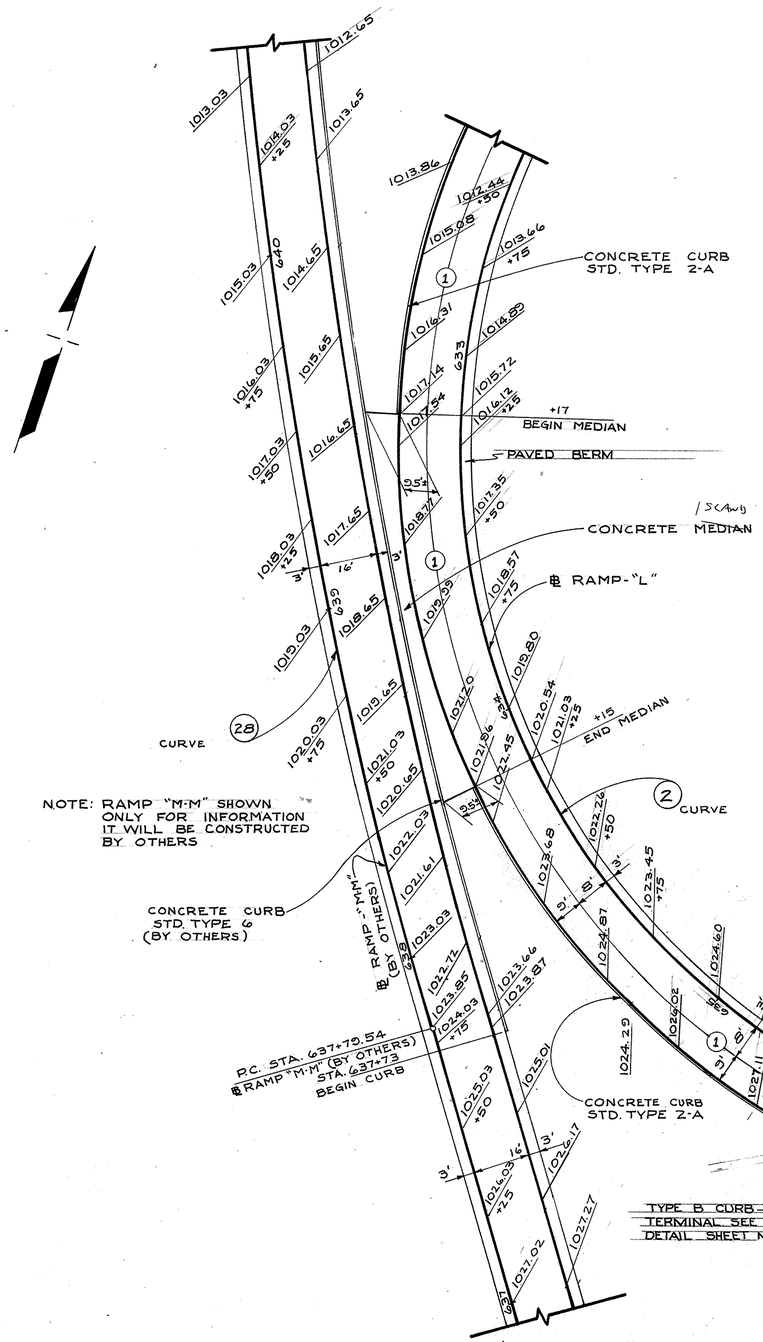
0 10 20 30 50

RAMPS "L & O" PAVEMENT DETAILS

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98



NOTE: RAMP "M-M" SHOWN ONLY FOR INFORMATION IT WILL BE CONSTRUCTED BY OTHERS

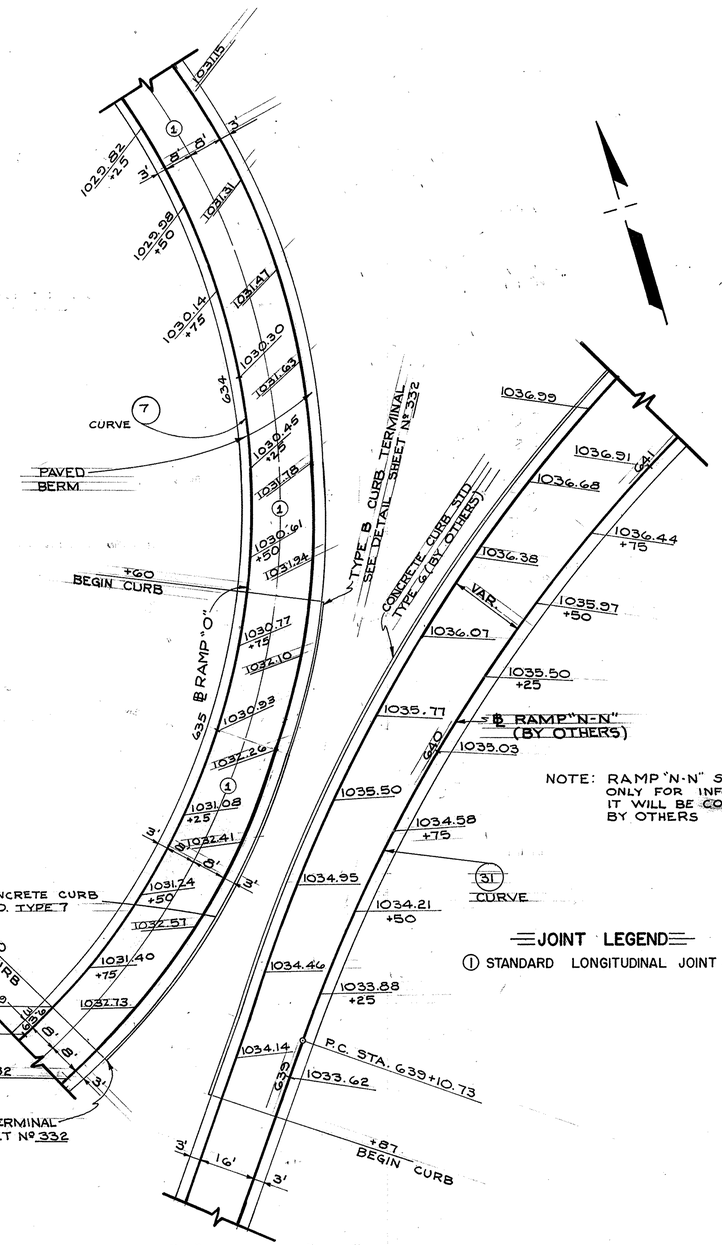
DETAIL OF RAMP "L" AT MEDIAN

(2) CURVE DATA
Δ = 154° 20' 04"
R = 200'
T = 877.98'
L_C = 538.73'

(28) CURVE DATA
Δ = 19° 24' 49"
D_C = 4° 00' 00"
R = 1,432.39'
T = 245.45'
L = 486.17'

(7) CURVE DATA
Δ = 198° 56' 41"
R = 200'
L_C = 694.45'

(31) CURVE DATA
Δ = 27° 22' 30"
D_C = 12° 00' 00"
R = 477.46'
T = 116.29'
L = 228.14'



NOTE: RAMP "N-N" SHOWN ONLY FOR INFORMATION IT WILL BE CONSTRUCTED BY OTHERS

JOINT LEGEND
(1) STANDARD LONGITUDINAL JOINT

DETAIL OF RAMP "O" AT RAMP "N-N"

0 10 20 40

PAVEMENT DETAILS
RAMPS "L & O"

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

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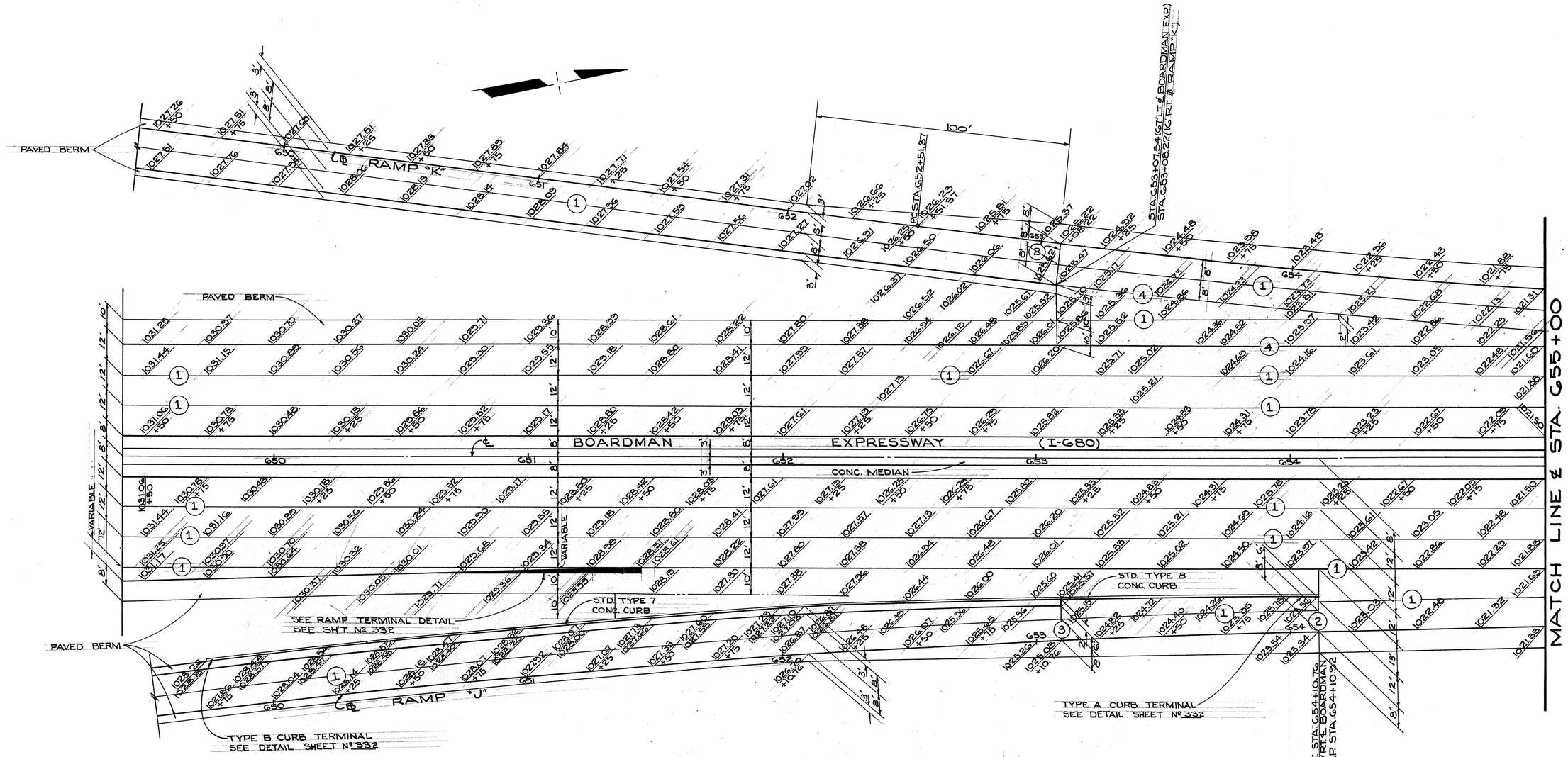

JOINT LEGEND

1. STANDARD LONGITUDINAL JOINT
2. STANDARD EXPANSION JOINT
3. STANDARD CONTRACTION JOINT
4. KEY JOINT WITHOUT TIE BARS

0 10 20 30 50

MAY 25 1971

RAMPS "J" & "K" PAVEMENT DETAILS

FED. RD.	STATE	PROJECT	
2	OH 10		

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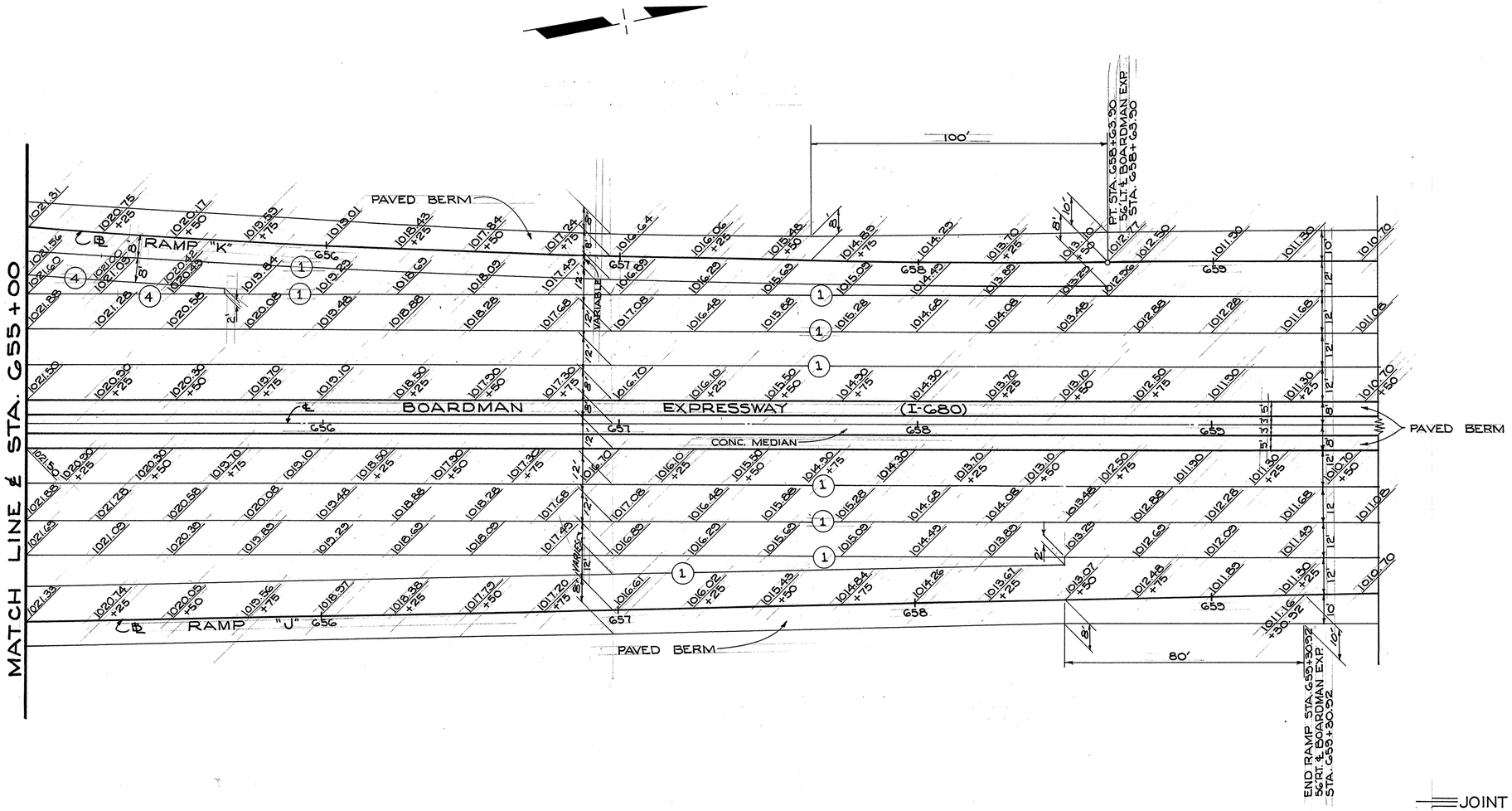
656



JOINT LEGEND

① STANDARD LONGITUDINAL JOINT

④ KEY JOINT WITHOUT TIE BARS

0 10 20 30 50

MAY 25 1971

RAMPS "J" & "K" PAVEMENT DETAILS

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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SUPERELEVATION TABLE RAMP 'J'

STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH	OFFSET TO CURB	ELEV. AT CURB	OFFSET TO RT. CURB	ELEV. RT. CURB
642+50	1027.42					1.0	1027.38
56.24	1027.20			20.0	1027.89	1.0	1027.16
75	1026.54			19.44	1027.39	1.0	1027.50
643+00	1025.56			18.69	1026.55	1.0	1025.51
25	1024.71			17.94	1025.83	1.0	1024.65
50	1023.97			17.19	1025.04	1.0	1023.91
56.24	1023.80	1024.80	16.0	17.0	1024.86	1.0	1023.74
75	1023.36	1024.36	16.0				
644+00	1022.87	1023.87	16.0				
25	1022.51	1023.57	16.0				
50	1022.27	1023.27	16.0				
75	1022.16	1022.03	16.0				
645+00	1022.16	1022.89	16.0				
25	1022.29	1022.88	16.0				
50	1022.54	1022.99	16.0				
75	1022.86	1023.19	16.0				
646+00	1023.17	1023.50	16.0				
25	1023.49	1023.82	16.0				
50	1023.80	1024.13	16.0				
75	1024.12	1024.45	16.0				
647+00	1024.43	1024.76	16.0				
25	1024.75	1025.08	16.0				
50	1025.06	1025.39	16.0				
75	1025.38	1025.71	16.0				
648+00	1025.69	1026.02	16.0				
25	1026.01	1026.34	16.0				
50	1026.32	1026.65	16.0				
75	1026.64	1026.97	16.0				
649+00	1026.95	1027.28	16.0				
25	1027.27	1027.60	16.0				
50	1027.58	1027.91	16.0				
75	1027.86	1028.19	16.0	19.0	1028.26		
650+00	1028.04	1028.37	16.0	19.0	1028.44		
25	1028.14	1028.47	16.0	19.0	1028.54		
50	1028.15	1028.48	16.0	19.0	1028.55		
75	1028.07	1028.40	16.0	19.0	1028.47		
651+00	1027.92	1028.25	16.0	19.0	1028.32		
25	1027.67	1028.00	16.0	19.0	1028.07		
50	1027.33	1027.66	16.0	19.0	1027.73		
75	1027.20	1027.53	16.0	19.0	1027.60		
652+00	1026.89	1027.22	16.0	19.0	1027.29		
10.76	1026.70	1027.03	16.0	19.0	1027.10		
25	1026.48	1026.81	15.72	18.57	1026.87		
50	1026.07	1026.39	15.22	17.82	1026.44		
75	1025.65	1025.96	14.72	17.03	1026.00		
653+00	1025.26	1025.56	14.22	16.32	1025.60		
10.76	1025.08	1025.37	14.0	16.0	1025.41		
25	1024.82			15.72	1025.15		
50	1024.40			15.22	1024.72		
75	1023.95			14.72	1024.26		
654+00	1023.54			14.22	1023.78		
10.76	1023.34			14.0	1023.56		
FOR ACCELERATION LANE SEE PROFILE SHEET							

SUPERELEVATION TABLE RAMP 'K'

STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH
642+25	1003.07	1003.32	16.0
50	1003.84	1004.09	16.0
75	1004.83	1005.08	16.0
643+00	1005.82	1006.07	16.0
25	1006.81	1007.06	16.0
50	1007.80	1008.05	16.0
75	1008.79	1009.04	16.0
644+00	1009.78	1010.03	16.0
25	1010.77	1011.02	16.0
50	1011.76	1012.01	16.0
75	1012.75	1013.00	16.0
645+00	1013.74	1013.99	16.0
25	1014.73	1014.98	16.0
50	1015.72	1015.97	16.0
75	1016.71	1016.96	16.0
646+00	1017.70	1017.95	16.0
25	1018.69	1018.94	16.0
50	1019.68	1019.93	16.0
75	1020.64	1020.89	16.0
647+00	1021.54	1021.79	16.0
25	1022.38	1022.63	16.0
50	1023.16	1023.41	16.0
75	1023.88	1024.13	16.0
648+00	1024.55	1024.80	16.0
25	1025.15	1025.40	16.0
50	1025.69	1025.94	16.0
75	1026.17	1026.42	16.0
649+00	1026.59	1026.84	16.0
25	1026.96	1027.21	16.0
50	1027.26	1027.51	16.0
75	1027.51	1027.76	16.0
650+00	1027.69	1027.94	16.0
25	1027.81	1028.06	16.0
50	1027.88	1028.13	16.0
75	1027.89	1028.14	16.0
651+00	1027.84	1028.09	16.0
25	1027.71	1027.96	16.0
50	1027.54	1027.79	16.0
75	1027.31	1027.56	16.0
652+00	1027.02	1027.27	16.0
25	1026.66	1026.91	16.0
50	1026.25	1026.50	16.0
75	1025.81	1026.06	16.0
653+00	1025.37	1025.62	16.0
08.22	1025.22	1025.47	16.0
FOR DECELERATION LANE SEE PROFILE SHEET			

RAMP 'J' AND 'K'
SUPERELEVATION TABLE MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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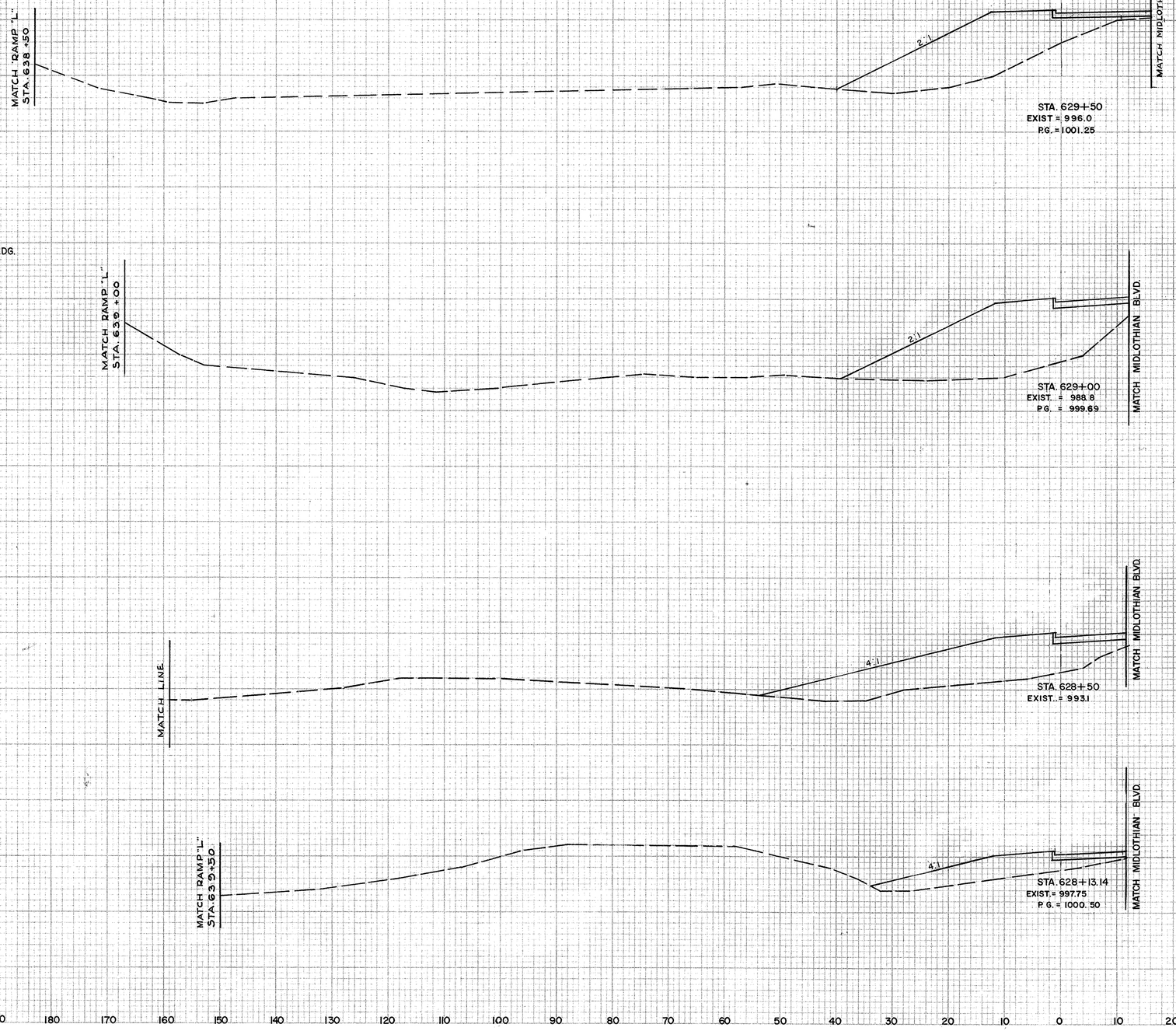
SEEDING END WIDTH	SEEDING SQ. YDS.
42	217

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	308		

EARTHWORK TABULATED WITH MIDLOTHIAN BLVD.

SEEDING TABULATED WITH MIDLOTHIAN BLDG.



RAMP "L"

STA. 628+13.14 TO STA. 629+50

PWD 8/30/68
RRC 6/26/68

MAY 23 1974

FED. RD.	STATE	PROJECT	
2	OHIO		

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SEEDING END WIDTH	SEEDING SQ. YDS.
76	433
80	480
77	342
46	228
36	

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
28	98		
		257	91
250	0		
		665	0
403	0		
		541	0
181	0		
		231	0
68	0		
		63	285

STA. 632+00
EXIST = 1008.0
P.G. = 1009.98

STA. 631+50
EXIST = 1010.0
P.G. = 1007.69

STA. 631+00
EXIST = 1010.0
P.G. = 1005.69

STA. 630+50
EXIST = 1006.6
P.G. = 1004.02

1001.94

STA. 630+00
EXIST = 1003.8
P.G. = 1002.46

MATCH LINE

MATCH LINE MIDLOTHIAN

MATCH RAMP "L" STA. 637+50

RAMP "L"

STA. 630+00 TO STA. 632+00

PUD 8/30/68
RRC 6/26/68

MAY 25 1971

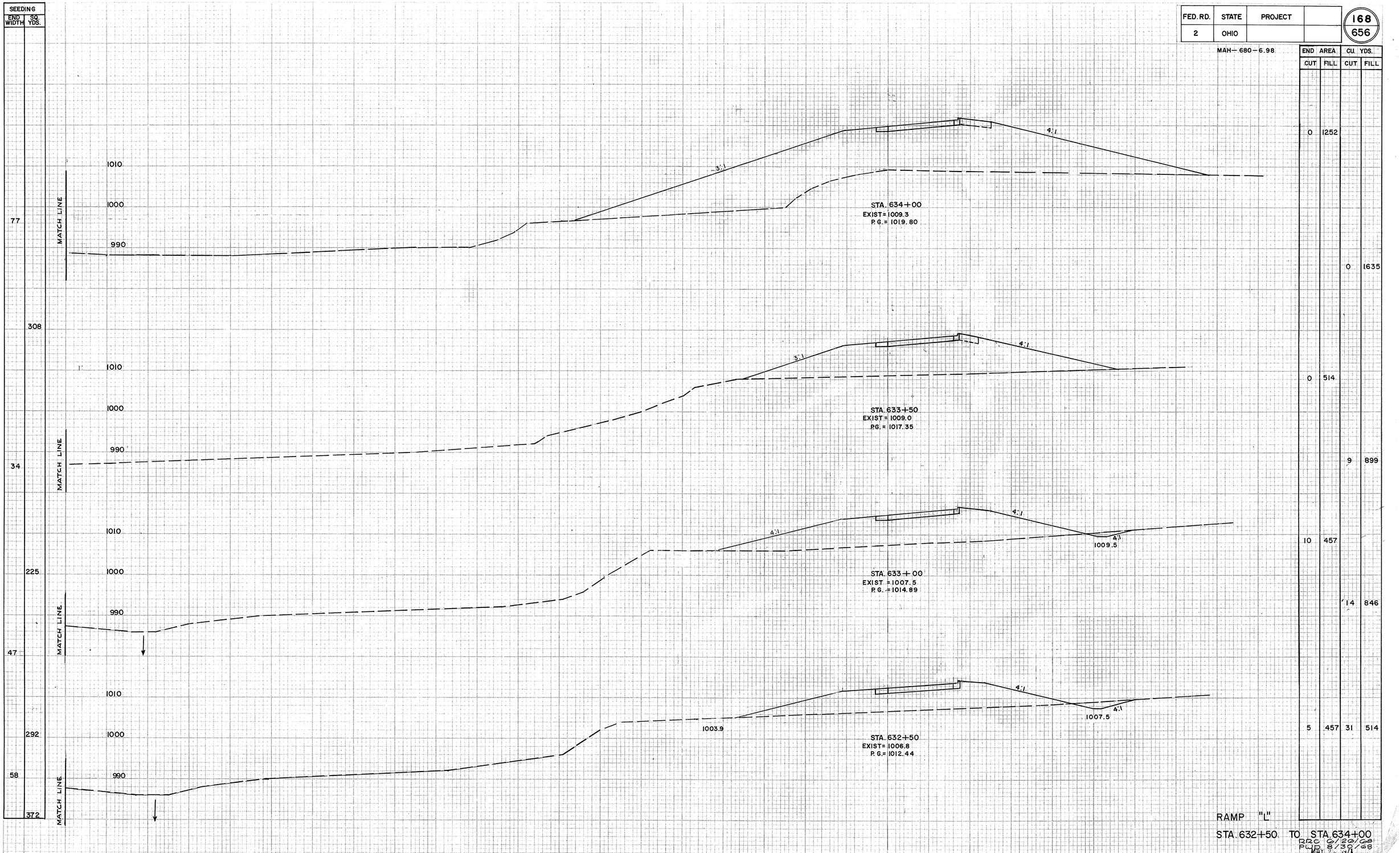
FINAL SURVEY — DATE — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — NOTE BOOK — NO.

ORIGINAL SURVEY — DATE — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — NOTE BOOK — NO.

FED. RD.	STATE	PROJECT	
2	OHIO		

168
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	1252		
		0	1635
0	514		
		9	899
10	457		
		14	846
5	457	31	514

RAMP "L"

STA. 632+50 TO STA. 634+00

RRC 6/20/68
PWD 8/30/68
MAY 2 3/68

FED. RD.	STATE	PROJECT	
2	OHIO		

169
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
116	642
115	528
75	422

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	0		1545
		0	5654
	0		4562
		0	6257
	0		2196
		0	3193

STA. 635+50
EXIST = 1010.0
P.G. = 1026.72

STA. 635+00
EXIST = 990.0
P.G. = 1024.60

STA. 634+50
EXIST = 999.0
P.G. = 1022.26

RAMP L
STA. 634+50 TO STA. 635+50

MAY 25 1971

PUD 8/30/68
RRC 6/26/68

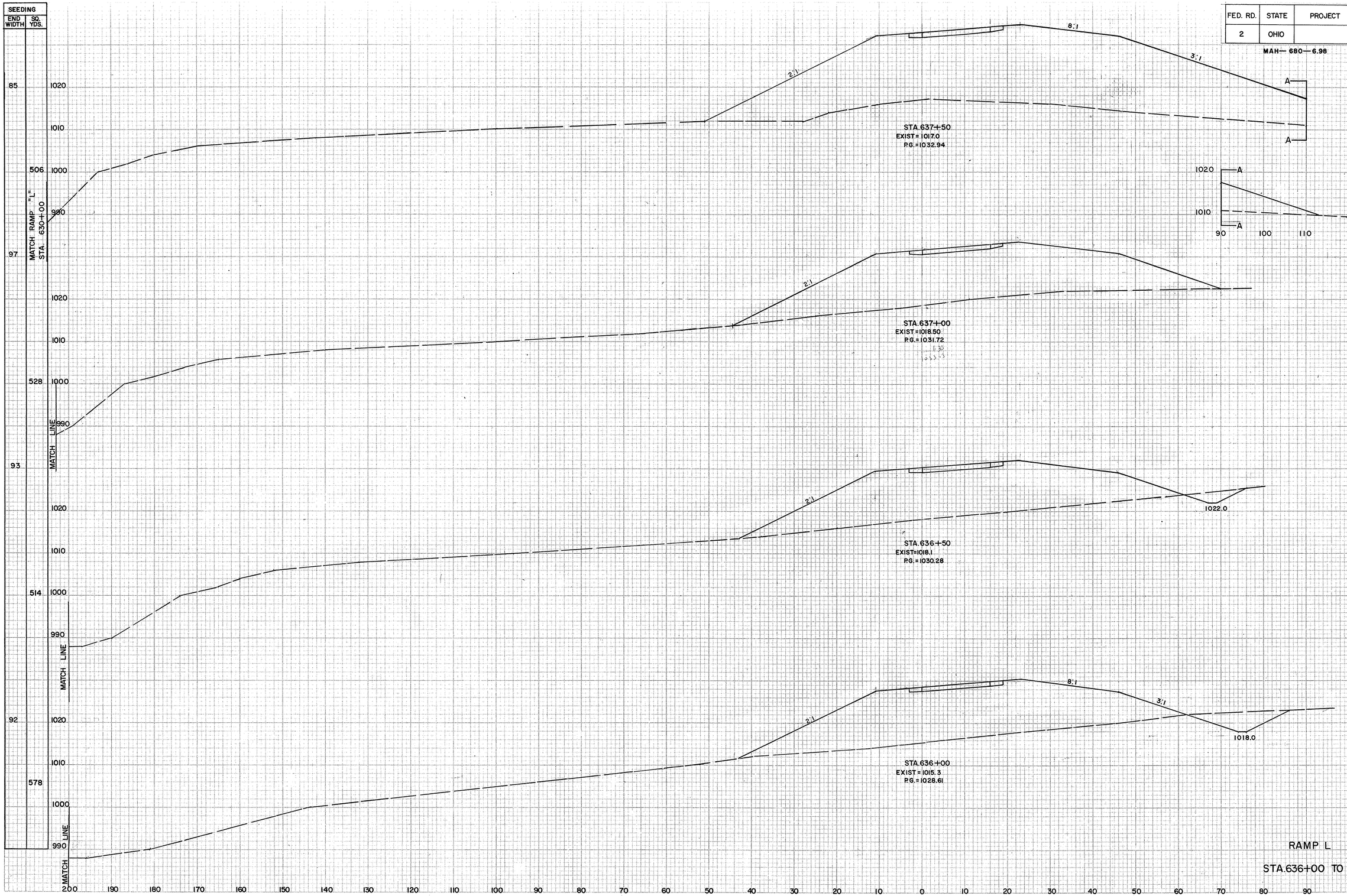
FINAL SURVEY	SURVEYED	DATE
	PLOTTED	BY
	TRACED	
	NOTE BOOK	AREAS CHECKED
NO.		

ORIGINAL SURVEY	SURVEYED	DATE
	PLOTTED	BY
	TRACED	
	NOTE BOOK	AREAS CHECKED
NO.		

FED. RD.	STATE	PROJECT	
2	OHIO		

170
656

MAH— 680—6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	1939		
		0	2696
0	973		
		42	1692
45	854		
		100	1658
63	937		
		58	2298

RAMP L

STA.636+00 TO STA.637+50

PWD 8/30/68
RRC 6/26/68

MAY 25 1971

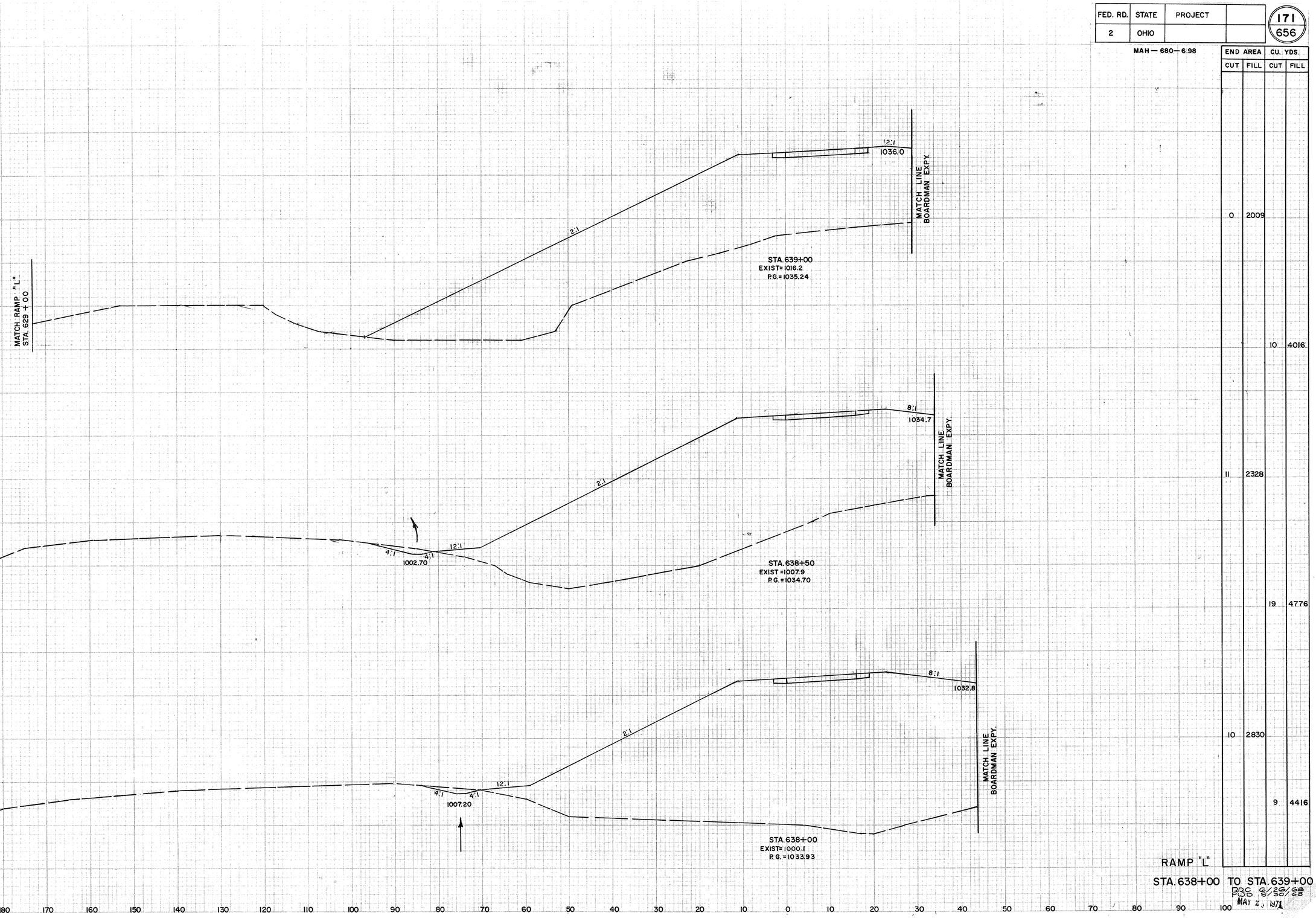
FED. RD.	STATE	PROJECT	
2	OHIO		

171
656

MAH — 680 — 6.98

SEEDING	
END WIDTH	SQ. YDS.
113	639
117	647
116	558

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	2009		
		10	4016
11	2328		
		19	4776
10	2830		
		9	4416



RAMP "L"

STA. 638+00 TO STA. 639+00

RDC 6/25/68

MAY 2 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

172
656

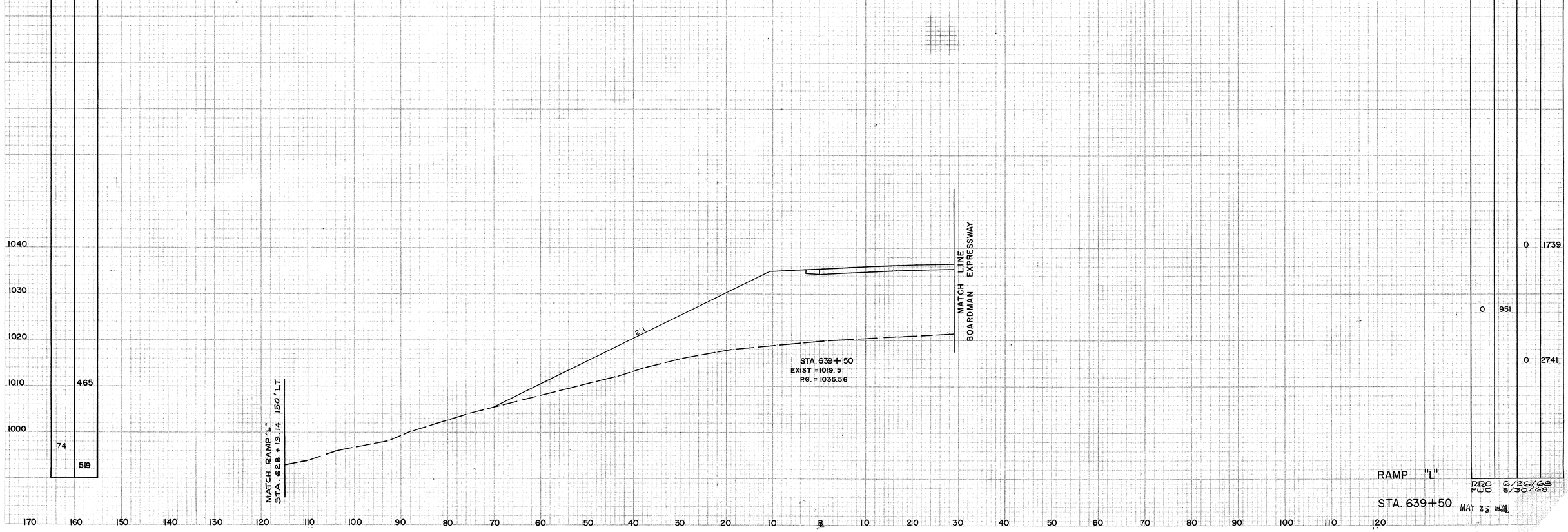
MAH—680—6.98

SEEDING	
END WIDTH	SQ. YDS.
74	519
	465

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
		0	1739
		0	951
		0	2741

FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE



RAMP "L"

STA. 639+50

MAY 23 1968

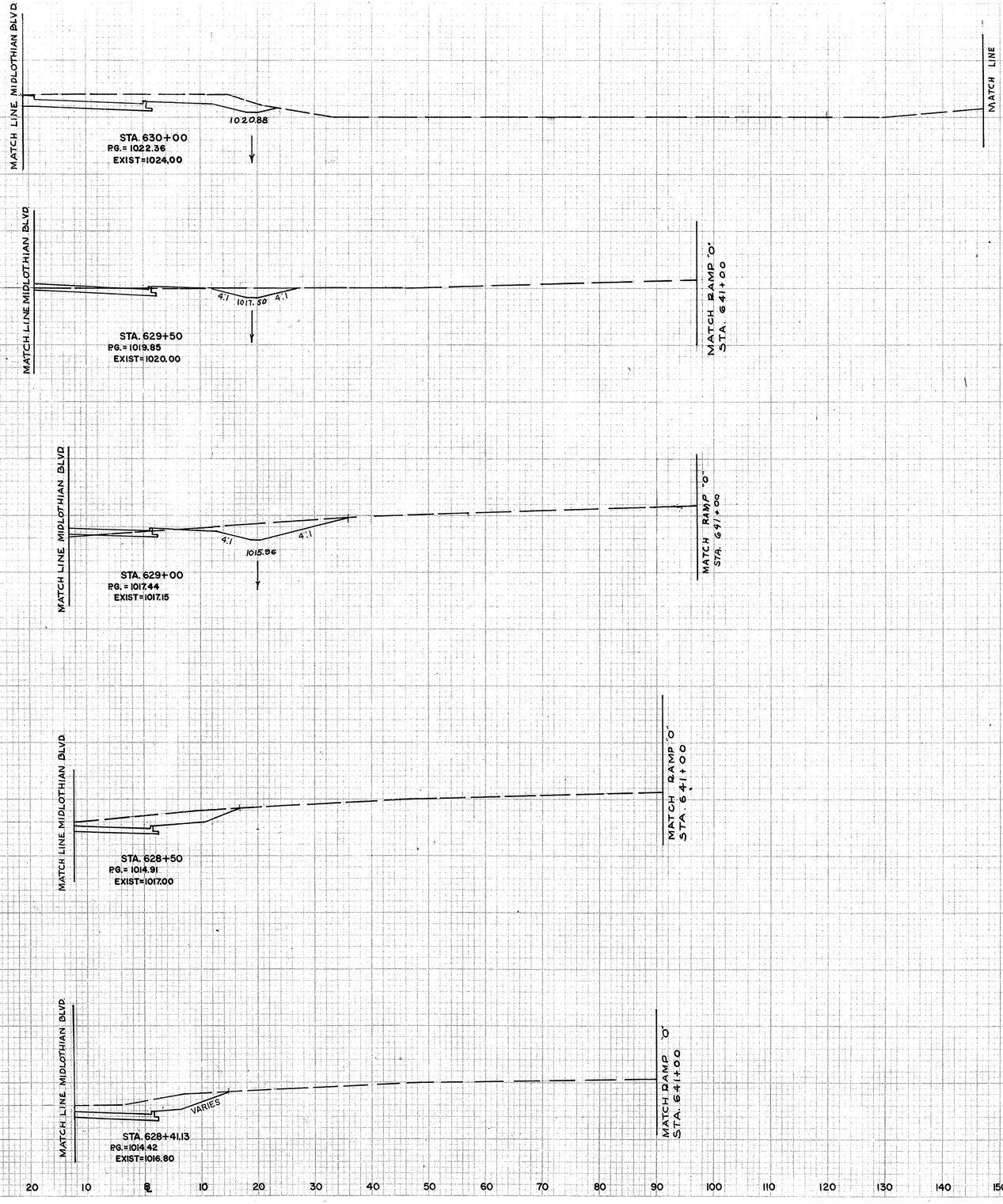
RDC 6/26/68
PWD 6/30/68

FED. RD.	STATE	PROJECT		173
2	OHIO			656

MAH- 680-6.98

SEEDING	
END WIDTH	SQ. YDS.
147	1020
	1010
	678
	1020
97	1010
	539
	1020
97	1010
	1020
	1010
	1020
	1010

SEEDING TABULATED ON MIDLOTHIAN BLVD.



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
89	0		
		96	1
15	1		
		57	3
47	2		
		58	1

EARTHWORK TABULATED ON MIDLOTHIAN BLVD.

RAMP "O"

STA. 628+41.13 TO STA. 630+00

RRC 6/26/68
PUD 8/30/68

MAY 25 1971

FINAL SURVEY	SURVEYED	DATE
	PLOTTED	BY
	TEMPLATE	
	NOTE BOOK	
	AREAS CHECKED	
NO		

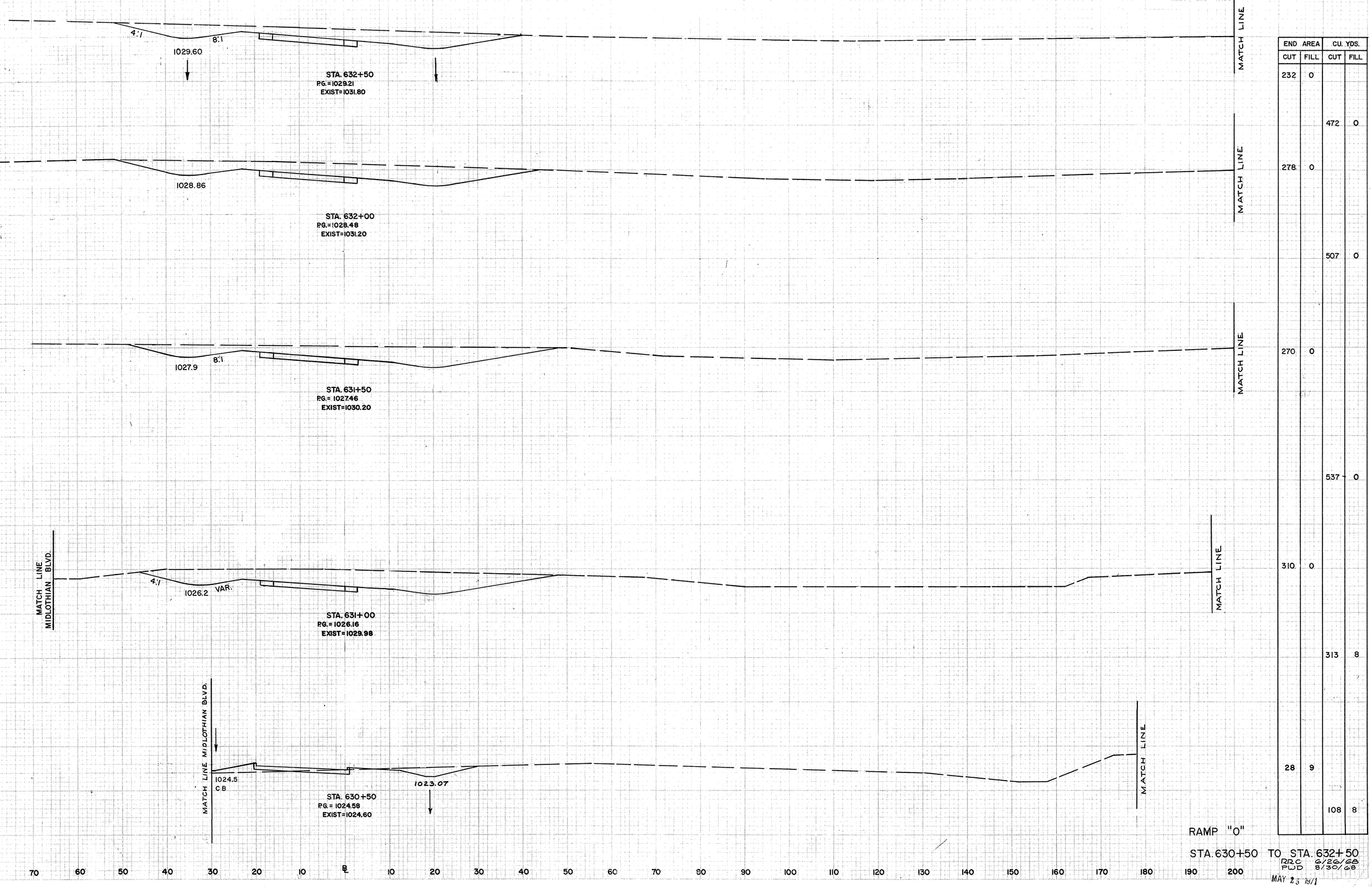
ORIGINAL SURVEY	SURVEYED	DATE
	PLOTTED	BY
	TEMPLATE	
	NOTE BOOK	
	AREAS CHECKED	
NO		

FED. RD.	STATE	PROJECT	
2	OHIO		

174
656

MAH—680—6.98

SEEDING	
END WIDTH	SQ. YDS.
244	1030
	1350
242	1030
	1358
	1030
247	1020
	1356
241	1030
	1020
	1183
185	
	922 1020
	1010



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
232	0		
		472	0
278	0		
		507	0
270	0		
		537	0
310	0		
		313	8
28	9		
		108	8

RAMP "O"

STA. 630+50 TO STA. 632+50

RRC 6/26/68
PUD 8/30/68

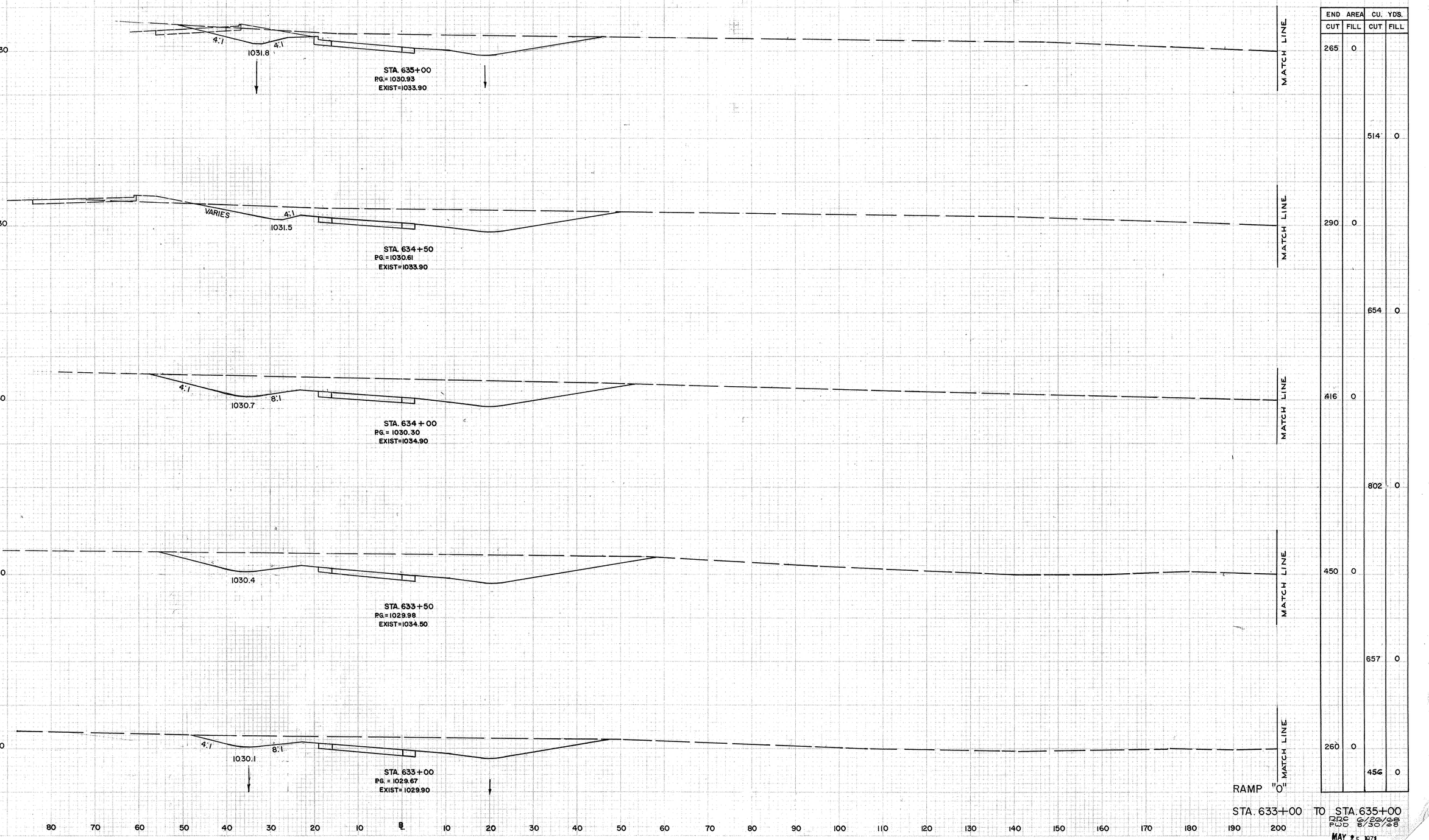
MAY 23 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH— 680—6.98

175
656

SEEDING	
END WIDTH	SQ. YDS.
232	
	1286
231	
	1297
236	
	1300
232	
	1264
223	
	1297



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
265	0		
		514	0
290	0		
		654	0
416	0		
		802	0
450	0		
		657	0
260	0		
		456	0

RAMP "O"

STA. 633+00 TO STA. 635+00

DISC 6/26/68
PUD 6/30/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

176
656

MAH—680—6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
290	
	1556
270	
	1408
237	
	1319
238	
	1303
231	
	1286

SEEDING LIMITS 183'

SEEDING LIMITS 135'

1030

1030.30

1030.08

STA. 637+50
P.G. = 1032.50
EXIST=1032.00

MATCH LINE

1030

1030.2

STA. 637+00
P.G.= 1032.19
EXIST=1033.80

MATCH LINE

1030

PROP RAMP N-N

1030.4

STA. 636+50
P.G. = 1031.87
EXIST = 1034.00

MATCH LINE

1030

PROP RAMP N-N

1030.6

STA. 636+00
P.G.= 1031.56
EXIST=1034.40

MATCH LINE

1030

PROP RAMP N-N

1032.0 VAR.

STA. 635+50
P.G.= 1031.24
EXIST=1034.50

MATCH LINE

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
105	6		
		254	6
169	0		
		369	0
230	0		
		443	0
248	0		
		461	0
250	0		
		477	0

RAMP "O"

STA. 635+50 TO STA. 637+50

RRC 6/26/68
PJD 8/30/68

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 189 190 200

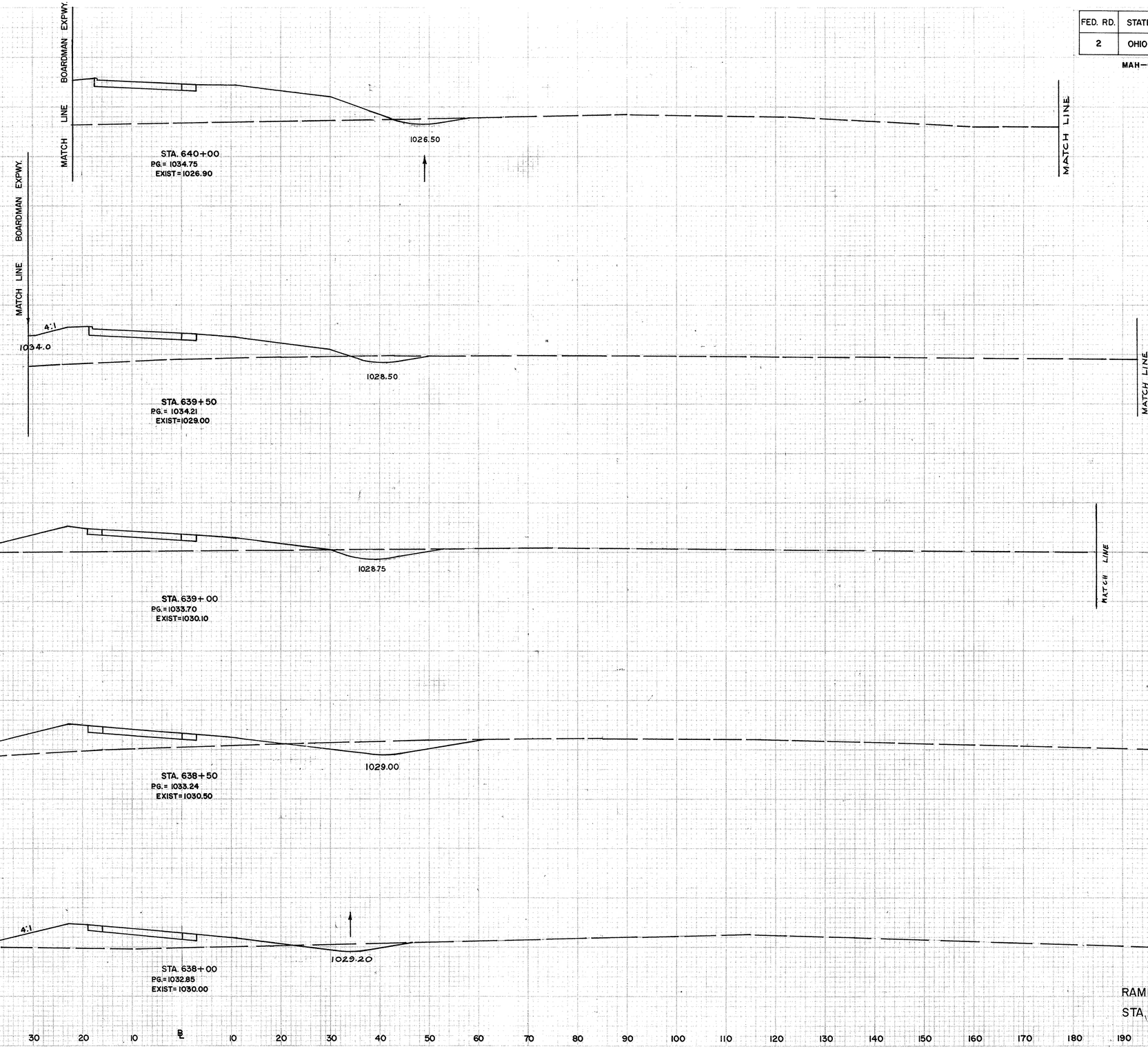
MAY 23 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

177
656

MAH-680-6.98

SEEDING		
	END WIDTH	SQ. YDS.
1030		
179		
1064		
204		1030
1147		
209		1030
1272		
249		1030
1020		
1631		
338		1030
1744		



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
8	328		
		14	513
7	226		
		22	372
17	175		
		44	322
30	173		
		40	285
13	135		
		109	112

90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

RAMP "O"
STA. 638+00 TO STA. 640+00
RDC 6/26/68
PCD 8/30/68

MAY 25 1971

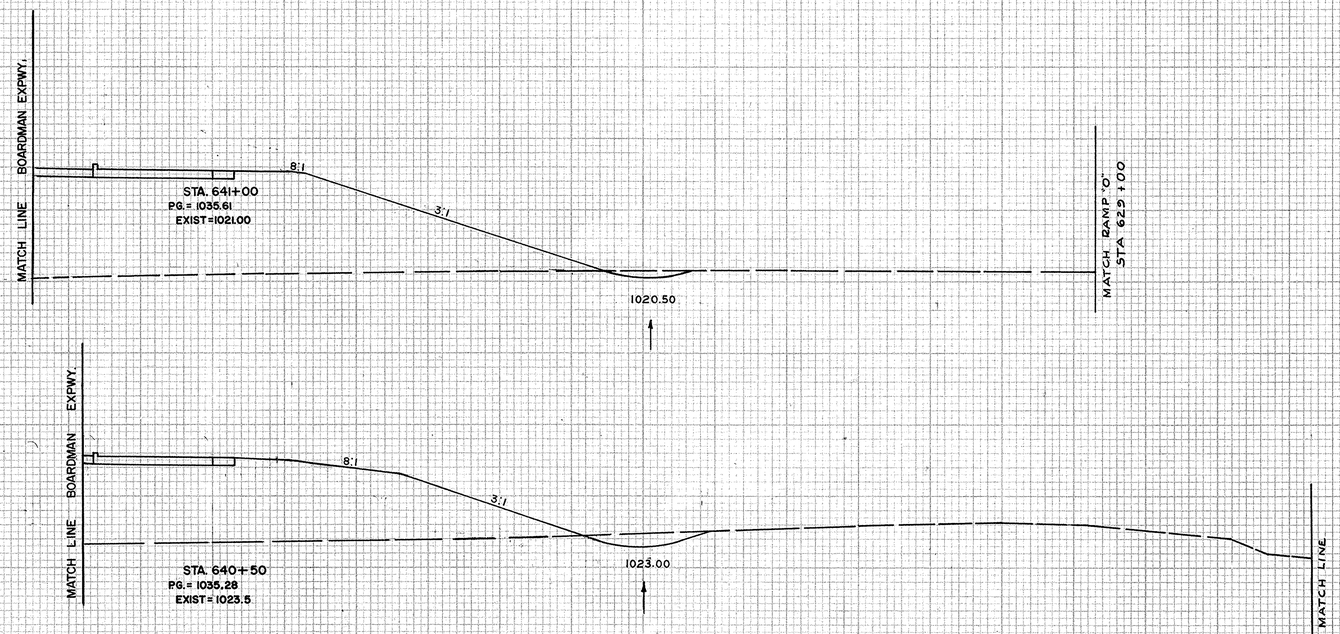
FED. RD.	STATE	PROJECT	
2	OHIO		

178
656

MAH — 680 — 6.98

SEEDING	
END WIDTH	SQ. YDS.
672	
122	
1030	
769	1020
155	
1030	
928	
1020	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	4		1154
	6	1260	
	13		2100
8	1008		
	15		1237



RAMP "O"

STA. 640+50 TO STA. 641+00

RDC 6/26/68
PUD 8/30/68

MAY 23 1971

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

| | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

180
656

MAH— 680—6.98

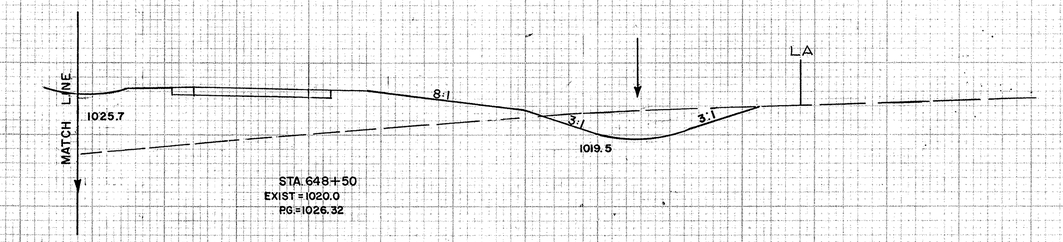
SEEDING			END AREA		CU. YDS.	
STA.	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
78						

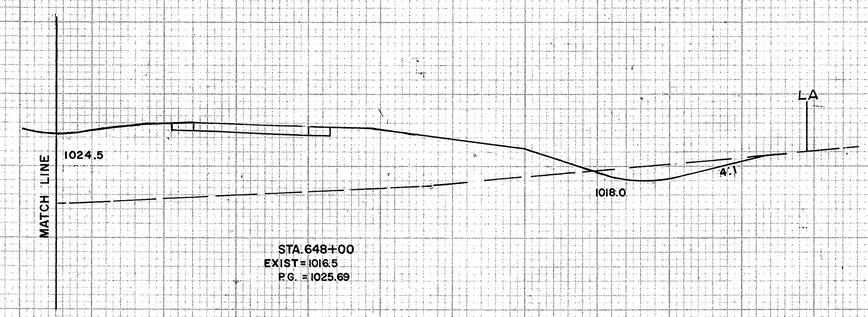
FED. RD.	STATE	PROJECT	
2	OHIO		

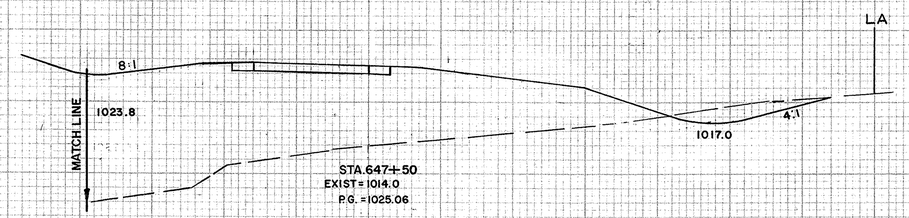
181
656

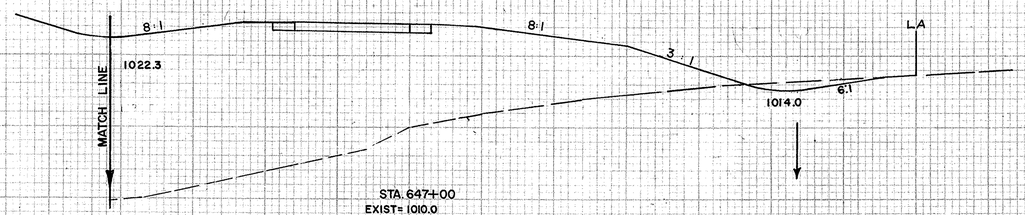
MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
69	375
66	403
79	408
68	406









END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
58	353		
		68	835
15	549		
		32	1255
20	806		
		28	1844
10	1186		
		40	2238

RAMP J

STA. 647+00 TO STA. 648+50

PLD 8/30/68
RRC 9/26/68

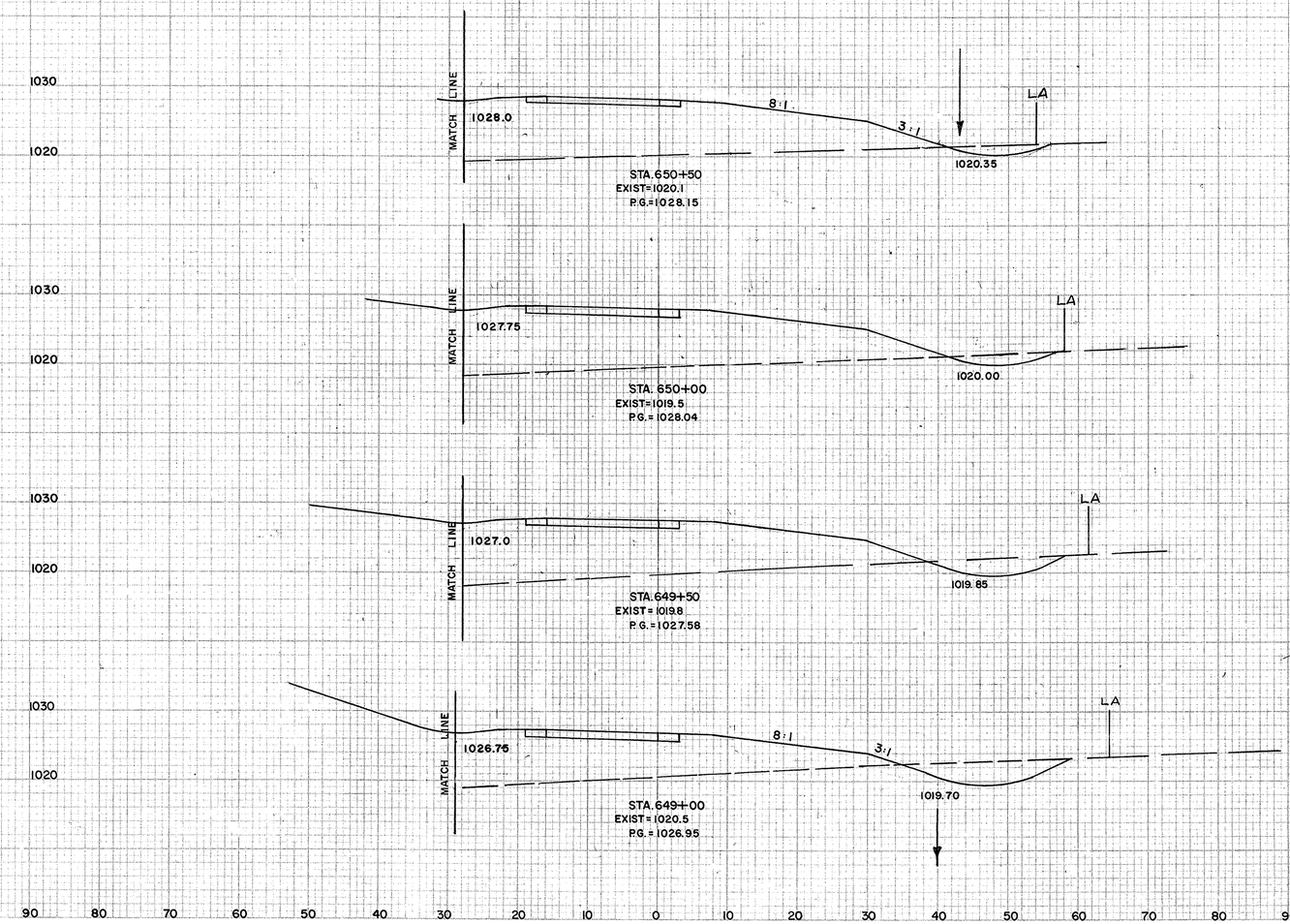
MAY 2, 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH—680—6.98

182
656

SEEDING		END AREA		CU. YDS.	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
				19	735
	306				
58		11	441		
				21	842
	325				
59		12	468		
				37	842
	336				
62		28	441		
				61	736
	350				
64		38	354		
				89	655
	369				



RAMP "J"

STA. 649+00 TO STA. 650+00

FJD 8/30/68
RRC 6/26/68

MAY 25 1971

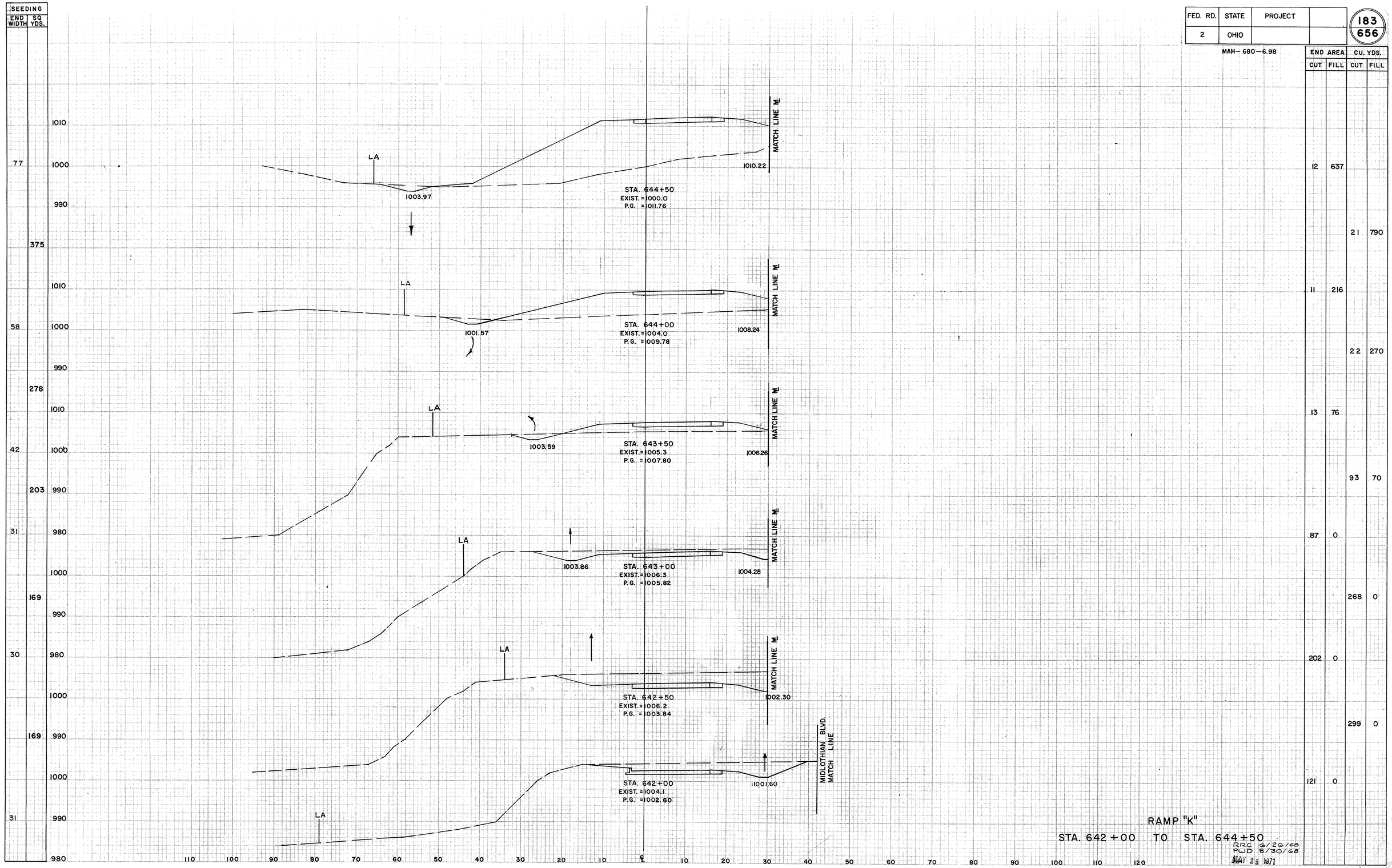
ORIGINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, NO., TEMPLATE, LEVELS, AREAS CHECKED, BY, DATE

FINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, NO., TEMPLATE, LEVELS, AREAS CHECKED, BY, DATE

FED. RD.	STATE	PROJECT	
2	OHIO		

183
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
12	637		
		21	790
11	216		
		22	270
13	76		
		93	70
87	0		
		268	0
202	0		
		299	0
121	0		

RAMP "K"

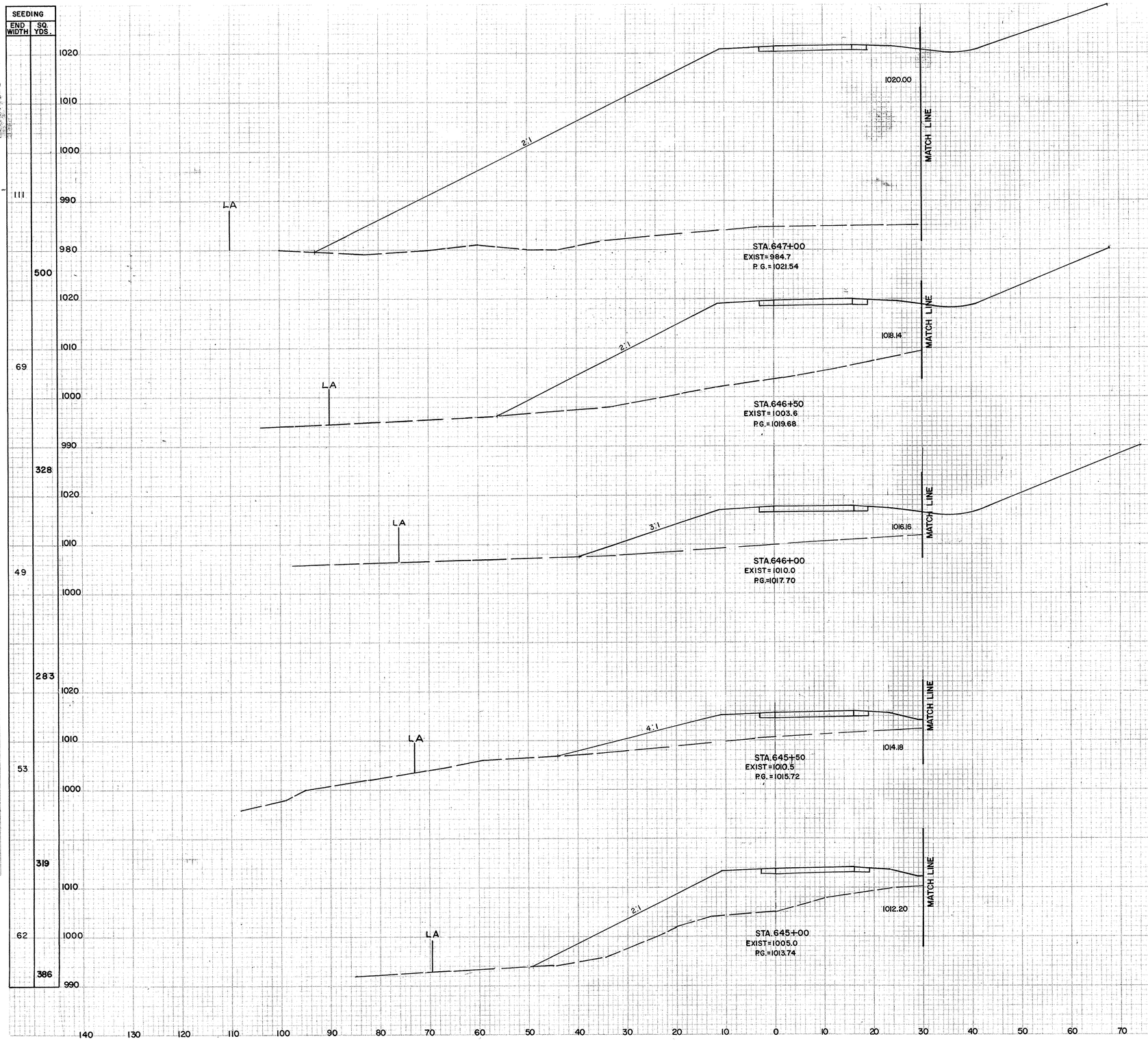
STA. 642+00 TO STA. 644+50

RRC 6/26/68
PWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

184
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		0	4622
0	3081		
		0	3756
0	975		
		0	1257
0	383		
		0	588
0	252		
		0	650
0	450		
		11	1006

RAMP-K

STA.645+00 TO STA.647+00

PWD 8/30/68
RRC 6/26/68

FED. RD.	STATE	PROJECT	
2	OHIO		

185
656

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	354	0	673
0	342	0	644
8	534	7	811
9	890	16	1319
0	1284	8	2013
0	492	0	1644
0	687	0	1092
0	1911	0	2406

MAH – 680 – 6.98

STA. 651+00
EXIST=1020.9
P.G.=1027.84

STA. 650+50
EXIST=1021.0
P.G.=1027.88

STA. 650+00
EXIST=1017.1
P.G.=1027.69

STA. 649+50
EXIST=1011.6
P.G.=1027.26

STA. 649+00
EXIST=1010.0
P.G.=1026.59

STA. 648+50
EXIST=1016.9
P.G.=1025.69

STA. 648+00
EXIST=1011.2
P.G.=1024.55

STA. 647+50
EXIST=991.0
P.G.=1023.16

MATCH LINE

4:1 3:1 1:2 2:1 3:1 1:2 2:1

LA

1017.56 1010.72

RAMP-K

STA. 647+50 TO STA. 651+00

RUD 8/30/68
RRC 6/27/68

SEEDING	
END WIDTH	SQ. YDS.
47	272
51	297
56	358
73	461
93	406
53	269
44	303
65	489

MAT'L

FINAL SURVEY: SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, DATE

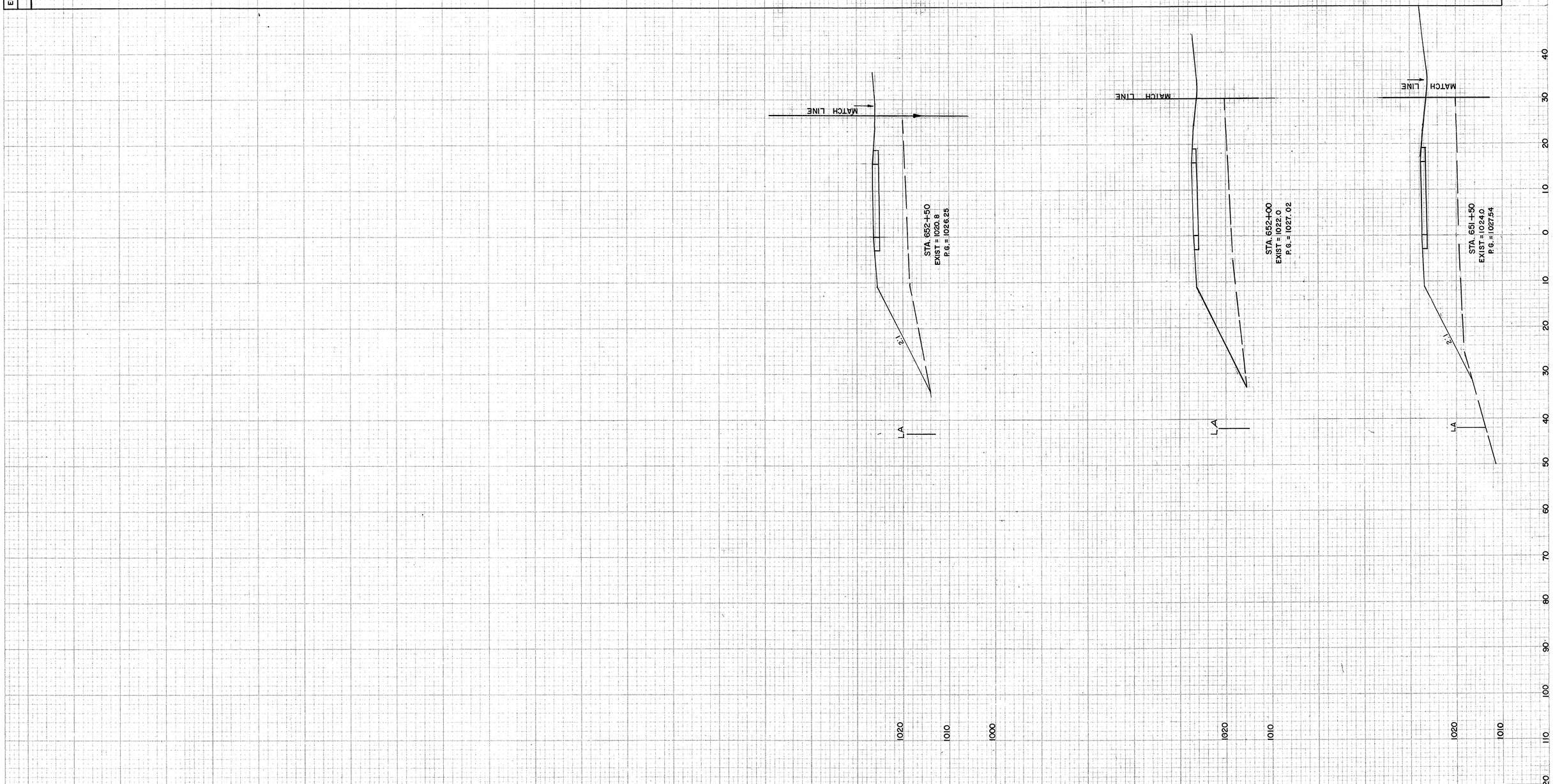
ORIGINAL SURVEY: SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, DATE

FED. RD.	STATE	PROJECT	
2	OHIO		

186
656

MAH-680-6.98

CU. YDS.	0	526	0	655	0	705
END AREA	0	319	0	388	0	373



SEEDING SQ. YDS.	247	233	236	247	
END WIDTH	41	43	42		

RAMP "K" RRC 6/27/68 PWD 8/30/68

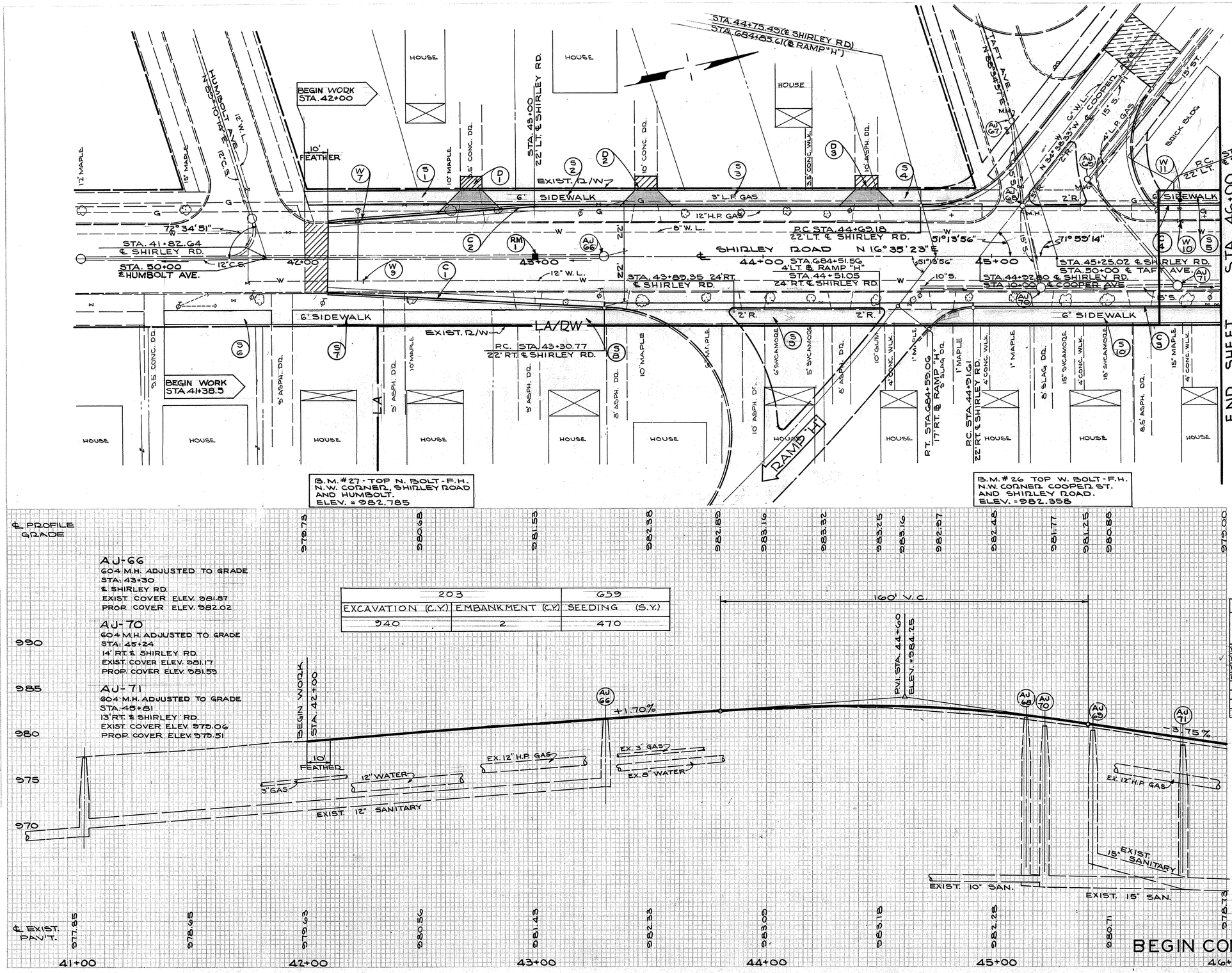
STA. 651+50 TO STA. 652+50

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

187
656



203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
940	2	470

ITEM 604-MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	43+00	℄	1
TOTAL			1

ITEM 609- CONCRETE CURB - LIN. FT.			
CODE	STATION FROM	STATION TO	TYPE 2
C-1	42+10	43+30.77	120.77
C-2	42+10	44+69.18	259.18
C-3	44+91.61	46+00	108.39
C-4	45+69.57	46+00	30.43
TOTAL			518.77

DRIVE APPROACHES										
CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 7 SQ. YDS.	L.	ITEM 404 CU. YDS.	ITEM 304 CU. YDS.
D-1	42+72.5	LT.	1	10'	9.5'	192	26.10	5		
D-2	43+50	LT.	1	8'	10'	192	21.56	5		
D-3	44+45	LT.	1	8'	10'	192	16.00	5	0.31	0.77
TOTAL							63.66		0.31	0.77

ITEM 608- WALKS				
CODE	STATION FROM	STATION TO	LOCA.	SQ. FT. 5" THICKNESS
S-1	42+02	42+66	LT.	384.0
S-2	42+82	43+43	LT.	344.5
S-3	43+58	44+37	LT.	434.5
S-4	44+55	44+70	LT.	82.5
S-5	45+74	46+00	LT.	143.0
S-6	41+39	41+85	RT.	*253.0
S-7	41+94	42+80	RT.	*516.0
S-8	42+80	43+50	RT.	410.0
S-9	43+89	44+51	RT.	341.0
S-10	44+79	46+00	RT.	665.5
TOTAL				2805.5
*TOTAL 100% CITY FUNDS				769.0

814 - WATER MAINS							
CODE	STATION	EXISTING LOCATION	PROPOSED LOCATION	VALVE BOX ADJ. TO GRADE EACH	HYDRANT MOVED & RESET EACH	6" D.I. PIPE L.F.	CUT & PLUG EXIST. 12" W.M. EA.
W-7	42+23.5	15.5' LT.		1			
W-9	42+25	10' RT.					1
W-10	45+82	15.5' LT.		1			
W-11	45+82	21.0' LT.	24.0' LT.		1	3	
TOTAL				2	1	3	1

ITEM 604- MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE - EACH			
CODE	STATION	LOCATION	EACH M.H.
AJ-66	43+30	℄	1
AJ-70	45+21	14' RT. ℄	1
AJ-71	45+81	13' RT. ℄	1
TOTAL			3

0 10 20 40

FOR DETAIL RAMP "H" SEE SHEET Nº 198 & 199

FOR DETAIL COOPER AVE. & TAFT AVE. SEE SHEET Nº 217

RRC 8/21/68
PWD 8/30/68

SHIRLEY ROAD
BEGIN CONSTRUCTION TO STA. 46+00

MAY 25 1971

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

PLATE 4—CROSS SECTION O.P.R.R. & R.R. STANDARD
KEUFFEL & ESSER CO., NEW YORK

FED. RD.	STATE	PROJECT	
2	OHIO		

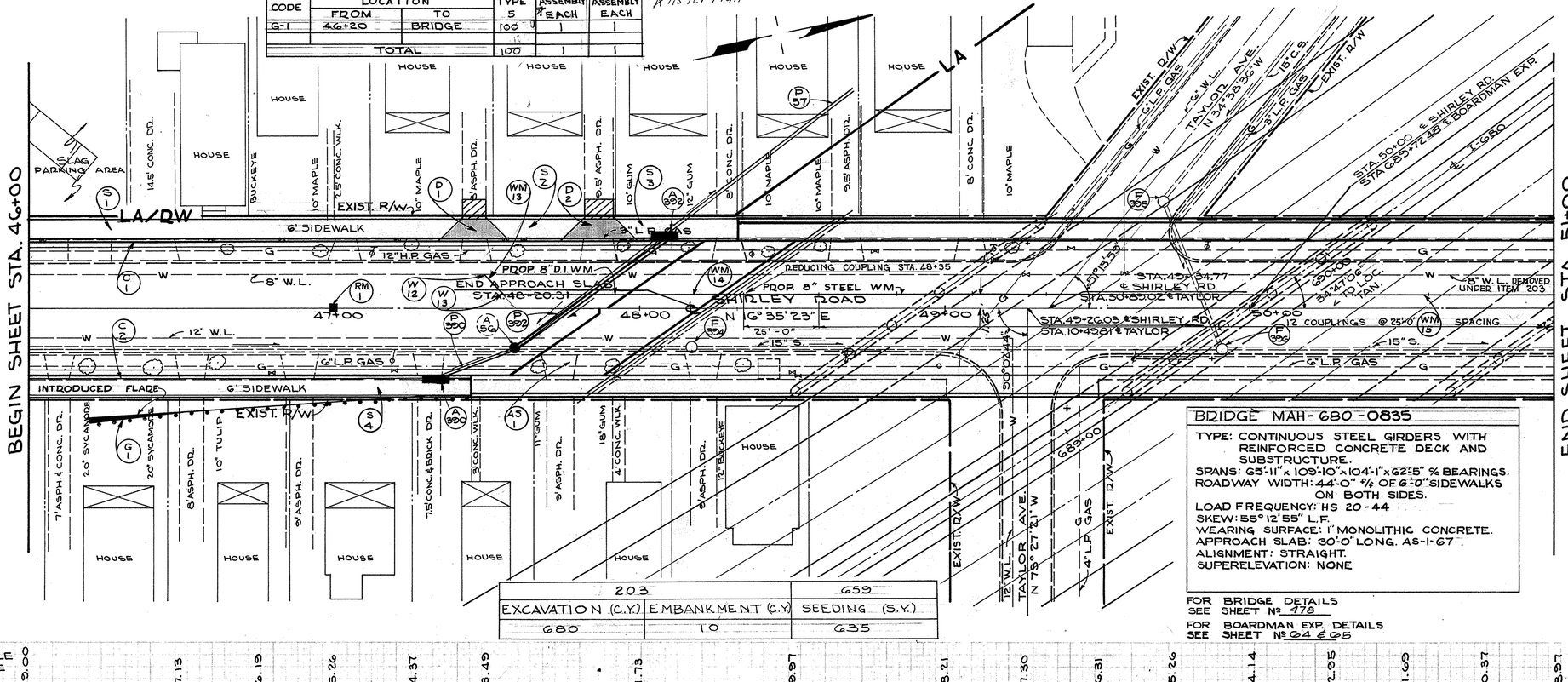
MAH-680-6.98

188
656

ITEM 606 - GUARD RAIL - LIN. FT.

CODE	LOCATION FROM	LOCATION TO	TYPE 5	BRIDGE TERMINAL ASSEMBLY EACH	ANCHOR ASSEMBLY EACH
G-1	46+20	BRIDGE	100	1	1
TOTAL			100	1	1

*As Per Plan



203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
680	TO	635

BRIDGE MAH-680-0835

TYPE: CONTINUOUS STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 65'-11" x 105'-10" x 104'-1" x 62'-5" ℅ BEARINGS.
ROADWAY WIDTH: 44'-0" ℅ OF 6'-0" SIDEWALKS ON BOTH SIDES.
LOAD FREQUENCY: HS 20-44
SKEW: 55° 12' 55" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 30'-0" LONG. AS-1-67
ALIGNMENT: STRAIGHT.
SUPERELEVATION: NONE

FOR BRIDGE DETAILS SEE SHEET Nº 478
FOR BOARDMAN EXP. DETAILS SEE SHEET Nº 64 & 65

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCA.	SQ. FT. 5" THICKNESS
S-1	46+00	47+38	LT.	759.0
S-2	47+53	47+78	LT.	137.5
S-3	47+85	48+32	LT.	203.5
S-4	46+00	47+45	RT.	797.5
TOTAL				1897.5

ITEM 604 - MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	47+00	℄	1
TOTAL			1

ITEM 609 - CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2	
C-1	46+00	48+21.5	221.5	
C-2	46+00	47+45	145.0	
TOTAL			366.5	

ITEM 611 - APPROACH SLABS (T=13")

CODE	STATION FROM	STATION TO	WIDTH	SQ. YDS.
AS-1	47+80.31	48+20.31	44.0'	146.67
TOTAL				146.67

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 "7" CONC. SQ. YDS.	L	ITEM 604 C.Y.	ITEM 304 C.Y.
D-1	47+30	LT.	1	8'	8'	193	14.22	5	0.25	0.62
D-2	47+86.5	LT.	1	8'	9.5	193	15.56	5	0.38	0.73
TOTAL							29.78		0.63	1.35

ITEM 814 - WATER MAINS

CODE	STATION	LOCATION	8" VALVE M.J. RES.	8"-45° BEND-FA	8" STEEL PIPE B.A.I.	8" SOLID SLEEVE EACH	8" CONN. EXTPL. EACH
W-12	47+50	11' LT.	1	-	-	-	1
W-13	47+56			1	/		
WM-13	W-12 - W-13				9		
WM-14	W-13 - 48+35	4.33' LT.			77		
WM-15	48+35 - 51+00	4.33' LT.				265	
TOTAL			1	2	86	265	1

ITEM 603 - CONDUITS - LINEAR FEET

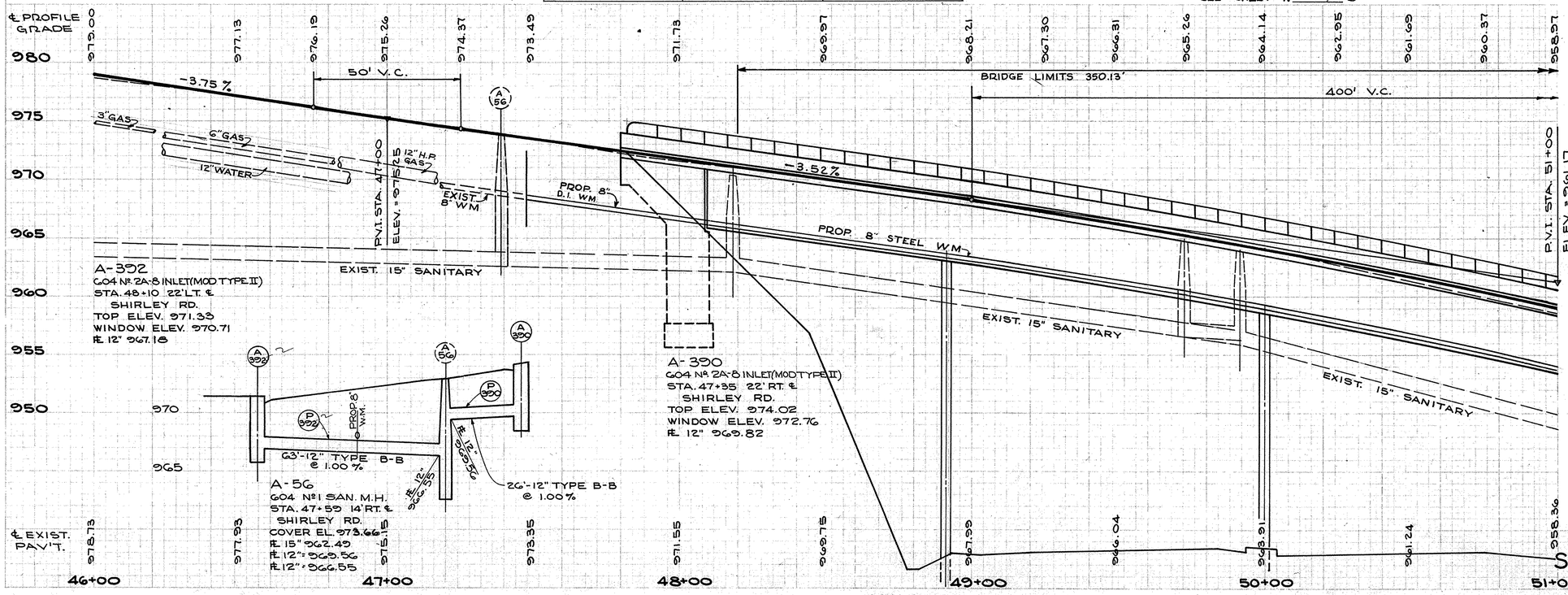
CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	B-B 12"
P-390	A-56	A-390	188	26
P-392	A-56	A-392	188	63
TOTAL				89

ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	Nº2A-8 INLET MOD. TYPE II
A-390	47+35	22' RT. ℄	1
A-392	48+10	22' LT. ℄	1
TOTAL			2

ITEM 202 - MANHOLES REMOVED

CODE	STATION	LOCATION	MANHOLES REMOVED EACH
F-394	48+17.5	14' RT. ℄	1
F-395	49+72	35' LT. ℄	1
F-396	49+91	14' RT. ℄	1
TOTAL			3



0 10 20 40

SHIRLEY ROAD
STA. 46+00 TO STA. 51+00

R.R.C. 8/1/68
PUD 8/30/68

MAY 28 1971

PLATE 4 - CROSS SECTIONS - P. R. & R. C. STANDARD
NATIONAL TRACING PAPER DIVISION

FED. RD.	STATE	PROJECT		189
2	OHIO			656

MAH-680-6.98

ITEM 604 - MANHOLE, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	No I M.H.	No I SAN. M.H.	C.O.Y. No II INLET	C.O.Y. No II INLET
A-71	53+00	12.8' RT. ℄		1		
A-74	54+90	18' LT. ℄	1			
A-77	33+20	12' RT. ℄ HOMEWOOD				1
A-361	53+02	22' RT. ℄				1
A-363	53+61	22' LT. ℄			1	
A-364	53+76	18' LT. ℄				
A-366	55+04	22' LT. ℄	1		1	
A-367	55+21	44' LT ℄			1	
TOTAL			2	1	3	2

ITEM 603 - CONDUITS - LIN. FT.

CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	TYPE B-B 12"	15"
P-77	A-77	AJ-61	189	32	
P-361	A-361	A-71	189	10	
P-363	A-363	A-364	347	16	
P-364	A-364	A-74	189		114
P-366	A-366	A-74	——	15	
P-367	A-367	A-366	——	25	
TOTAL				98	114

DRIVE APPROACHES (T=13")

CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 7" SQ. YDS.	L,
D-1	55+81	RT.	I	8'	8'	196	32.00	20
D-2	55+78.5	LT.	I	8'	8'	196	14.44	1
TOTAL							46.44*	

ITEM 611 - APPROACH SLABS (T=13")

CODE	STATION FROM	STATION TO	WIDTH	SQ. YDS.
AS-1	51+70.44	52+00.44	44.0	146.67
TOTAL				146.67

ITEM 609 - CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2	TYPE 6	TYPE 2*
C-1	52+39.64	53+64.64	125.0		
C-2	51+63.42	53+05.42	138.0		
C-3	54+06.35	55+62.46	156.11		
C-4	55+62.46	56+00			37.54
C-5	54+98	55+22		24.0	
C-6	55+62.35	56+00			37.54
TOTAL			419.11	24.0	75.08*

ITEM 604 - MONUMENTS ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	56+00	℄	1
TOTAL			1*

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOC	SQ. FT. 5" T.	SQ. FT. 5" T.
S-1	52+39.64	53+64.39	LT.	687.5	
S-2	51+54	53+08	RT.	847.0	
S-3	53+91	55+62.46	RT.	1,013.03	
S-4	55+62.46	55+70.46	LT.		44.0
S-5	55+86	56+00	LT.		77.0
S-6	55+62.46	55+71.46	RT.		49.5
S-7	55+90	56+00	RT.		55.0
				2547.53	225.5*

ITEM 606 - GUARD RAIL - LIN. FT.

CODE	STATION FROM	STATION TO		TYPE 5
G-1	54+97.5	55+22.5		25
G-2	BRIDGE	53+64		100
TOTAL				125

606	ANCHOR ASSEMBLY	BRIDGE TERMINAL ASSEMBLY REAR
CODE	EACH	EACH
G-1	1	1
G-2	1	1
TOTAL	1	1

* As Per Plan

ITEM 604 - MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE - EACH

CODE	STATION	LOCATION	EACH MH. AJ.
AJ-61	55+09	12' RT. ℄	1
TOTAL			1

FOR DRAINAGE DETAILS SEE SHEET Nº 345
FOR DETAIL RAMP "G" SEE SHEET Nº 190
FOR BRIDGE DETAILS SEE SHEET Nº 478
FOR DETAIL HOMEWOOD AVE. SEE SHEET Nº 220

PAVEMENT REPLACEMENT

CODE	LOCATION	CONDUIT Nº	11¼"-404 C.Y.	8"-305 S.Y.
Y-1	HOMEWOOD	P-77	0.14	4.02
TOTAL			0.14	4.02

B.M.# 23A - TOP N.R. SPIKE IN SOUTH ROOT OF 2' TREE ON N. SIDE HOMEWOOD 125' W. OF SHIRLEY RD. 240' RT. STA. 694+60 ELEV. = 936.819

* DENOTES 100% CITY FUNDS

0 10 20 40

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
678	737	1029

ITEM 202 - INLET REMOVED

CODE	STATION	LOCATION	INLET REMOVED EACH
F-397	54+74.5	15' LT. ℄	1
F-398	54+76.5	15' RT. ℄	1
F-399	16+07	15' LT. ℄ (H.)	1
TOTAL			3

ITEM 814 - WATER LINES

CODE	STATION FROM	STATION TO	EXISTING LOCATION	8" SOLID SLEEVE EACH	8" CONNECTOR EACH
WM-14	51+00	51+73	1.25' LT. ℄	1	1
SHEET TOTAL				1	1

ITEM 814 - WATER MAINS

CODE	STATION FROM	STATION TO	EXISTING LOCATION	8" STEEL PIPE L.F.	D.I. PIPE LIN. FT. 6"	D.I. PIPE LIN. FT. 8"	8"-45° BENDS EACH	8" VALVE AND BOX EACH	VALVE BOXES ADJ. TO GRADE EACH	HYDRANT MOVED & RESET EACH
WM-14	51+00	51+60*	1.25' LT. ℄	60						
WM-15	51+60	W-15	1.25' LT. ℄			68				
W-15	52+28		1.25' LT. ℄				1			
WM-16	W-15	W-16				9				
W-16	52+35		11' LT. ℄				1	1		
W-17	52+62		14' LT. ℄						1	
W-18	52+62		19' LT. ℄ +		5					1
W-19	55+03		16' RT. ℄						1	
W-20	55+04		16' LT. ℄						1	
TOTAL				60	5	77	2	1	3	1

\+ PROPOSED LOCATION - 24' LT. ℄ ** SEE ADDITIONAL QUANTITIES AT LEFT

A-71
604 Nº 1 M.H.
STA. 53+00
12.8' RT. ℄ SHIRLEY RD
COVER ELEV. 945.13
℄ EXIST. 15" 935.18
℄ 12" 940.75

A-361
604 C.O.Y. Nº II INLET
STA. 53+00
22' RT. ℄ SHIRLEY
TOP OF CURB ELEV. 945.35
WINDOW ELEV. 944.60
℄ 12" 940.85

P-361
10-12" TYPE B-B @ 1.00%

A-364
604 Nº 1 M.H.
STA. 53+76 18' LT. ℄ SHIRLEY RD.
COVER ELEV. 939.03
℄ 15" 929.00
℄ 12" 935.20
℄ 12" 931.40

A-74
604 Nº 1. SAN. M.H.
STA. 54+90 18' LT. ℄ SHIRLEY RD.
COVER ELEV. 930.03
℄ 30" 918.12
℄ 15" 923.78
℄ 12" 923.47
℄ 36" 917.62

AJ-61
604 M.H. ADJUSTED TO GRADE
STA. 55+09
12' RT. ℄ SHIRLEY RD
EXIST. COVER ELEV. 928.51
PROP. COVER ELEV. 928.66
℄ PROP 12" = 922.81

A-77
604 C.O.T. Nº II INLET
STA. 33+20 (12' RT. ℄ HOMEWOOD AVE.)
TOP ELEV. = 927.69
WINDOW ELEV. = 926.94
℄ 12" = 923.13

P-77
32-12" TYPE B-B @ 1.00%

BEGIN SHEET STA. 51+00

END SHEET STA. 56+00

PARTICIPAT. 100% CITY FUNDS

SHIRLEY ROAD
STA. 51+00 TO STA. 56+00

RRC 8/21/68
PWD 8/30/68

MAY 26 1971

K&E PLATE 4, CROSS SECTION

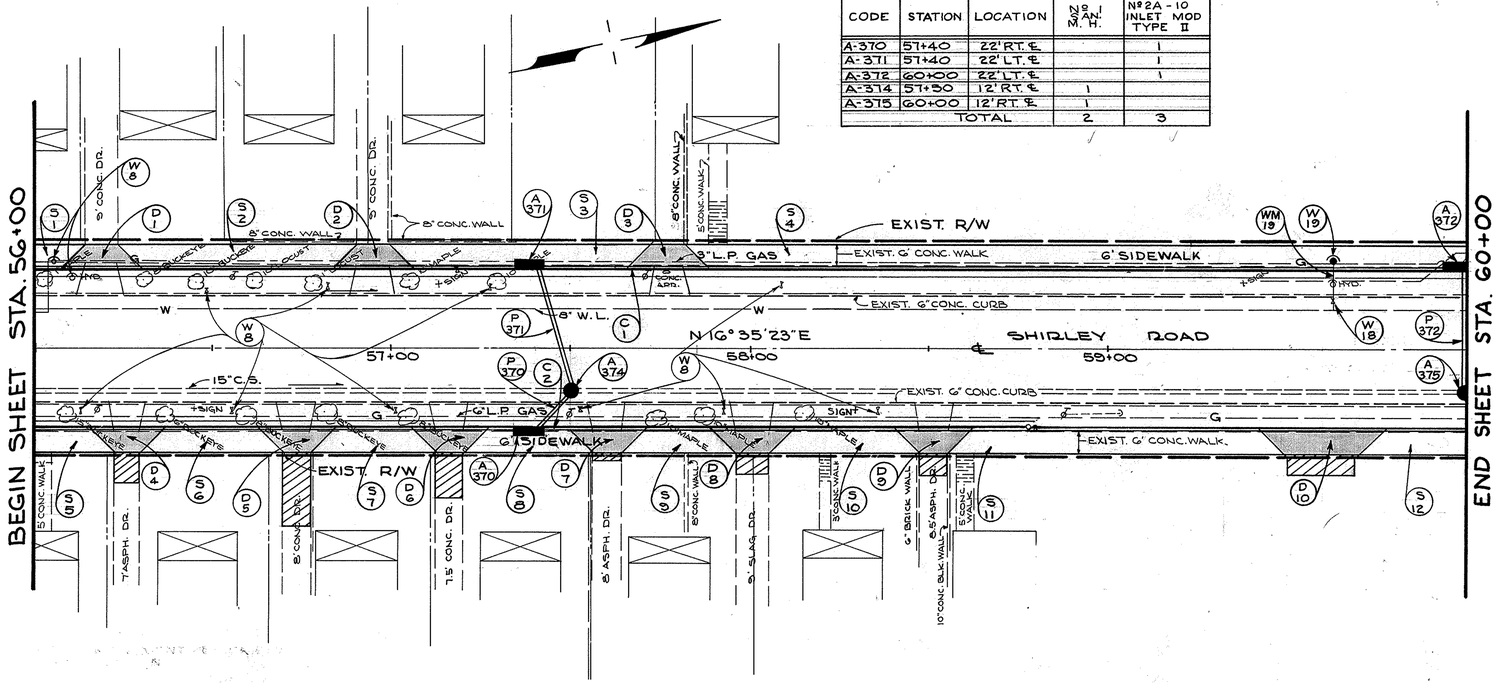
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-G.98

190
656

ITEM 604 - MANHOLES CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	No 1 SAN. M.H.	No 2A-10 INLET MOD TYPE II
A-370	57+40	22' RT. ℄		1
A-371	57+40	22' LT. ℄		1
A-372	60+00	22' LT. ℄		1
A-374	57+50	12' RT. ℄	1	
A-375	60+00	12' RT. ℄	1	
TOTAL			2	3



ITEM 608 - WALKS

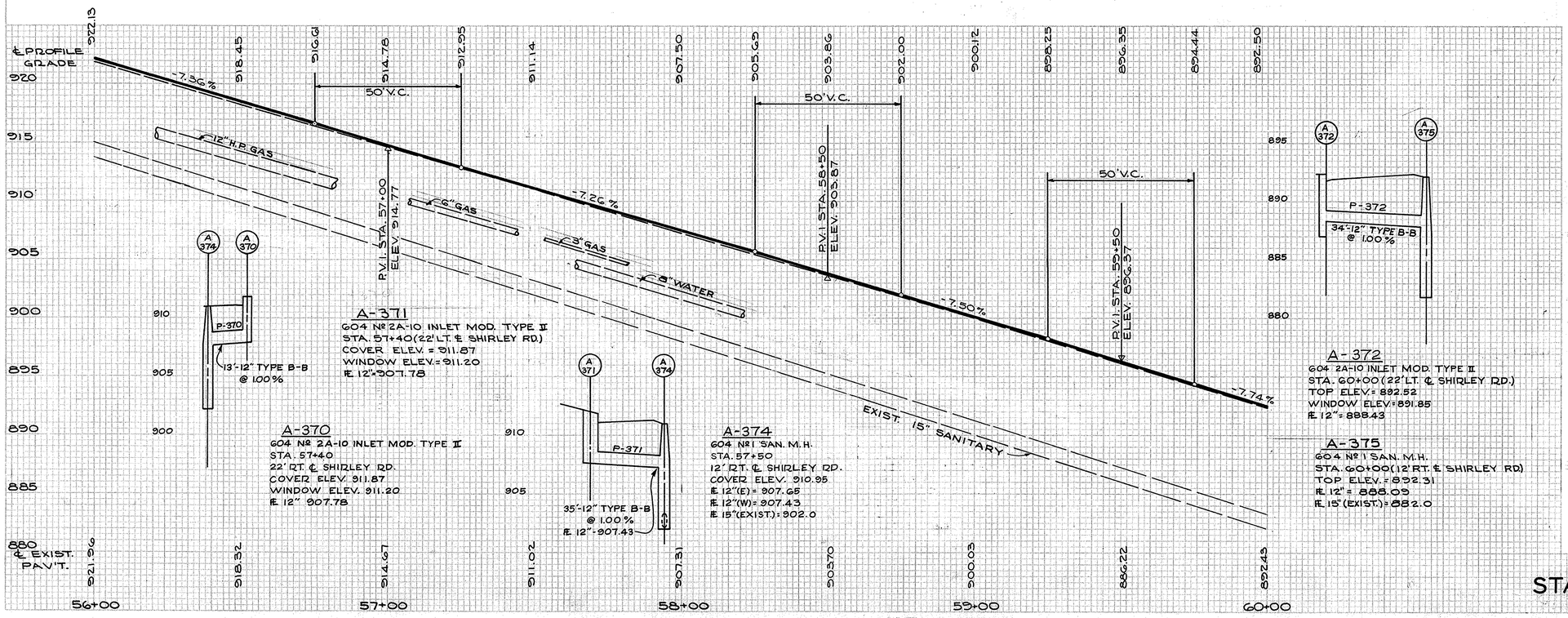
CODE	STATION FROM	STATION TO	LOCA.	SQ. FT. 5" THICKNESS
S-1	56+00	56+11	LT.	60.5
S-2	56+26	56+87	LT.	335.5
S-3	57+04	57+69	LT.	357.5
S-4	57+87	60+00	LT.	1171.5
S-5	56+00	56+20	RT.	110.0
S-6	56+34	56+66	RT.	176.0
S-7	56+81	57+09	RT.	154.0
S-8	57+24	57+52	RT.	154.0
S-9	57+67	57+92	RT.	137.5
S-10	58+10	58+44	RT.	187.0
S-11	58+59	59+46	RT.	478.5
S-12	59+63	60+00	RT.	203.5
TOTAL				3,525.5*

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
1085*	1*	113*

*INDICATES 100% CITY FUNDS

ITEM 609 - CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2	
C-1	56+00	60+00	400.0	
C-2	56+00	60+00	400.0	
TOTAL			800.0*	



A-370
604 No 2A-10 INLET MOD. TYPE II
STA. 57+40
22' RT. ℄ SHIRLEY RD.
COVER ELEV. 911.87
WINDOW ELEV. 911.20
E 12" 907.78

A-371
604 No 2A-10 INLET MOD. TYPE II
STA. 57+40 (22' LT. ℄ SHIRLEY RD.)
COVER ELEV. = 911.87
WINDOW ELEV. = 911.20
E 12"-907.78

A-372
604 No 2A-10 INLET MOD. TYPE II
STA. 60+00 (22' LT. ℄ SHIRLEY RD.)
TOP ELEV. = 892.52
WINDOW ELEV. = 891.85
E 12" = 888.43

A-374
604 No 1 SAN. M.H.
STA. 57+50
12' RT. ℄ SHIRLEY RD.
COVER ELEV. 910.95
E 12"(E) = 907.65
E 12"(W) = 907.43
E 15"(EXIST.) = 902.0

A-375
604 No 1 SAN. M.H.
STA. 60+00 (12' RT. ℄ SHIRLEY RD)
TOP ELEV. = 892.31
E 12" = 888.05
E 15" (EXIST.) = 882.0

0 10 20 40

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. No	ITEM 452 7" SQ. YDS.	L	ITEM 404 2" C. Y.	ITEM 304 6" C. Y.
D-1	56+19	LT.	I	8'	9'	195	15.11			
D-2	56+35	LT.	I	8'	9'	196	15.11			
D-3	57+77.5	LT.	I	8'	8'	196	14.22			
D-4	56+26	RT.	I	8'	7'	195	13.33	8	0.35	0.86
D-5	56+73.5	RT.	I	8'	8'	196	35.00	20		
D-6	57+16	RT.	I	8'	7.5'	196	23.78	12		
D-7	57+60	RT.	I	8'	8'	196	14.22	1	0.05	0.12
D-8	58+05	RT.	I	8'	9	196	15.11	5		0.83
D-9	58+50	RT.	I	8'	8.5	196	14.76	5	0.25	0.66
D-10	59+60	RT.	I	8'	18'	196	23.11	5	0.56	1.39
TOTAL							183.66*		1.21*	3.86*

ITEM 814 - WATER MAINS

CODE	STATION	EXISTING LOCATION	PROPOSED LOCATION	VALVE BOXES ADJ. TO GRADE EACH	HYDRANT REMOVED & RESET EACH	SERVICE BOXES ADJ. TO GRADE EACH	6" D.I. PIPE L.F.
W-18	59+63	13.5' LT.		1			
W-19	59+63	13.0' LT.	24' LT.		1		
WM-19	59+63						5
W-8	56+11	20' LT.	24' LT.		1	10°	5
			STA. 56+05				
TOTAL				1*	2*	10*	10*

°LOCATION OF SERVICE BOXES IS APPROXIMATE, DETERMINE EXACT LOCATION IN FIELD.

ITEM 603 - CONDUITS - LIN. FT.

CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET No	TYPE B-B 12"
P-370	A-370	A-374	190	13
P-371	A-371	A-374	190	35
P-372	A-372	A-375	190	34
TOTAL				82*

RRC 8/21/68
PWD 8/30/68

MAY 25 1971

SHIRLEY ROAD
STA. 56+00 TO STA. 60+00

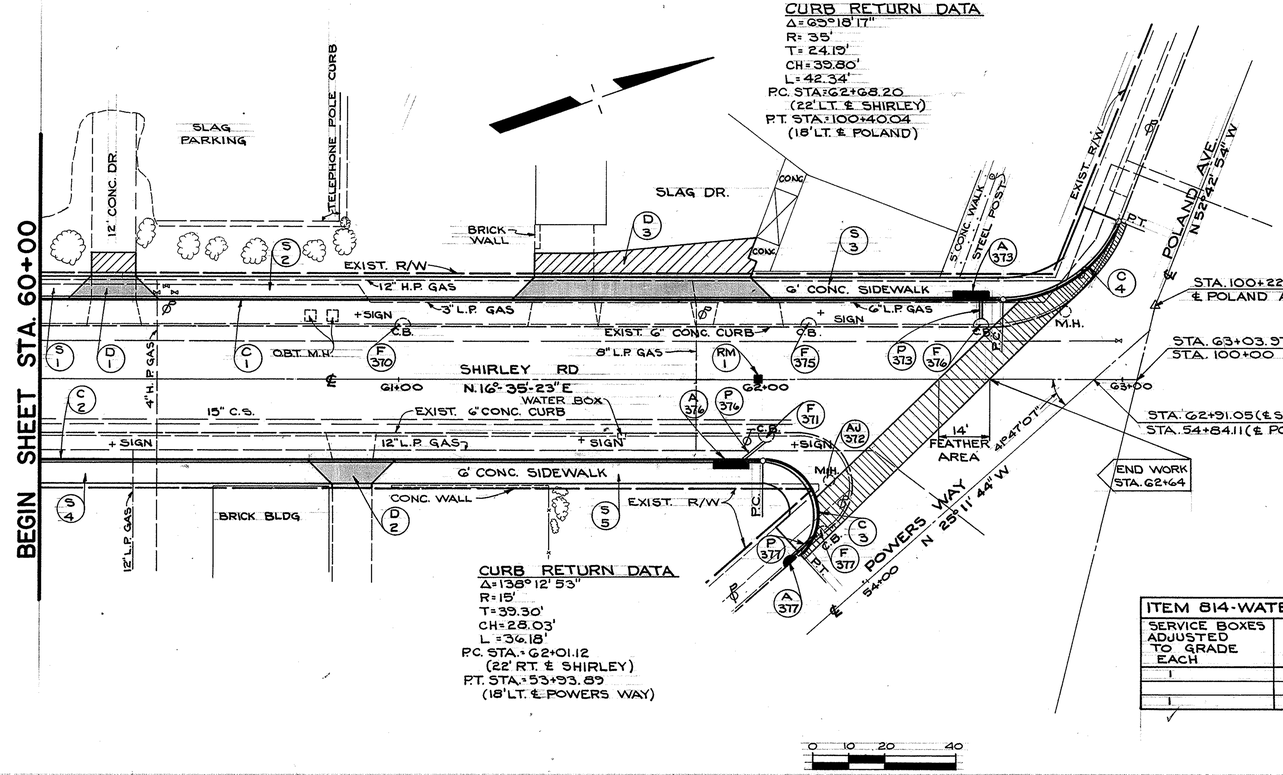
FINAL SURVEY SURVEYED FIGHTER PLOTTED CHECKED NOTE BOOK AREAS NO. AREAS CHECKED DATE BY
ORIGINAL SURVEY SURVEYED PLOTTED CHECKED NOTE BOOK AREAS NO. AREAS CHECKED

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

191
656

BEGIN SHEET STA. 60+00



CURB RETURN DATA

Δ=65°18'17"
R=35'
T=24.19'
CH=39.80'
L=42.34'
P.C. STA.=G2+68.20
(22' LT. ℄ SHIRLEY)
P.T. STA.=100+40.04
(18' LT. ℄ POLAND)

CURB RETURN DATA

Δ=138°12'53"
R=15'
T=39.30'
CH=28.03'
L=36.18'
P.C. STA.=G2+01.12
(22' RT. ℄ SHIRLEY)
P.T. STA.=53+93.89
(18' LT. ℄ POWERS WAY)

0 10 20 40

ITEM 603 - CONDUIT - LIN. FT.

CODE	STATION FROM	STATION TO	PROFILE SHEET Nº	TYPE B-B 12"
P-373	A-373	F-376	191	5
P-376	A-376	F-371	191	10
P-377	A-377	F-377	191	12
	TOTAL			27

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 7" SQ. YDS.	L_1	ITEM 304 CU. YDS.
D-1	60+19	LT.	1	8	12	197	24.45	5	
D-2	60+85	RT.	1	8	12	197	15.00		
D-3	61+69	LT.	1	8	65	197	60.42	7	7.31
	TOTAL						99.87		7.31

ITEM 604 - MANHOLES, CATCH BASIN AND INLETS - EACH

CODE	STATION	LOCATION	Nº 2A-10 INLET MOD TYPE II	COY. Nº II INLET
A-373	G2+61	22' LT. ℄	1	
A-376	61+95	22' RT. ℄	1	
A-377	53+89 (PWRS)	18' LT. ℄		1
	TOTAL		2	1

ITEM 604 - MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE - EACH

CODE	STATION	LOCATION	M.H. EACH
AU-372	G2+18	28' RT. ℄	1
	TOTAL		1

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	60+00	60+10	LT.	55.0
S-2	60+29	61+33	LT.	572.5
S-3	62+03	100+40.04 (P)	LT.	606.0
S-4	60+00	60+77	RT.	423.5
S-5	60+94	53+93.89 (P.W.)	RT.	775.5
	TOTAL			2,432.5

ITEM 202 - INLET REMOVED

CODE	STATION	LOCATION	INLET REMOVED EACH
F-370	60+99.5	16' LT. ℄	1
F-371	62+05	16' RT. ℄	1
F-375	62+13	16' LT. ℄	1
F-376	62+61	15' LT. ℄	1
F-377	54+02	18' LT. ℄ POWR. WY.	1
	TOTAL		5

ITEM 814 - WATER MAINS

SERVICE BOXES ADJUSTED TO GRADE EACH	
1	
1	TOTAL

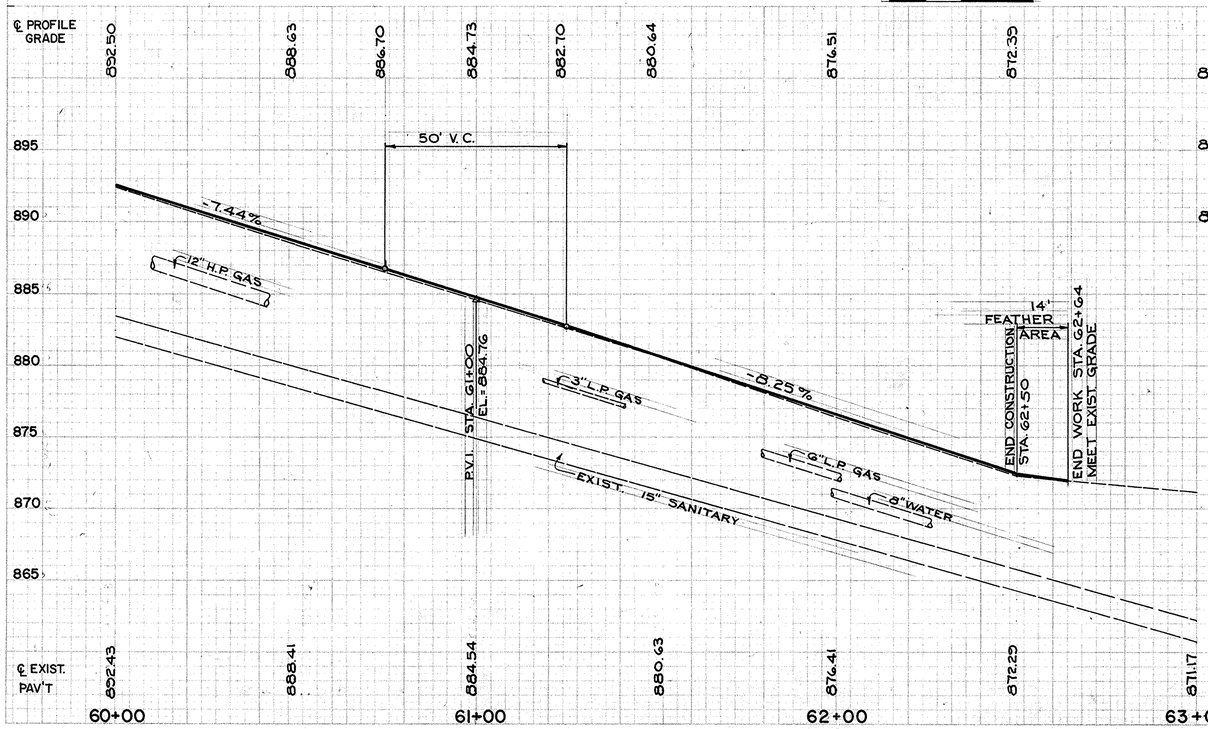
ITEM 604 - MONUMENT ASSEMBLIES

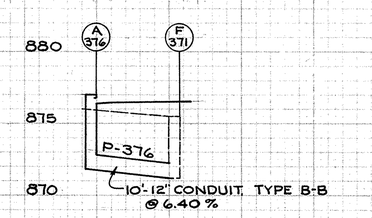
CODE	STATION	LOCATION	EACH
RM-1	G2+00	℄	1
	TOTAL		1

ITEM 609 - CONCRETE CURB - LIN. FT.

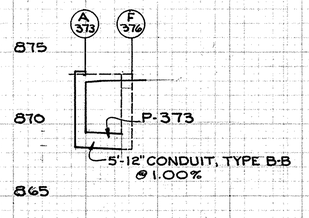
CODE	STATION FROM	STATION TO	TYPE 2	TYPE 6
C-1	60+00	G2+68.20	268.20	
C-2	60+00	G2+01.12	201.12	
C-3	G2+01.12	53+93.89 P.W.		36.18
C-4	G2+68.20	100+40.04 P.		42.34
	TOTAL		469.32	78.52

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
783	10	78

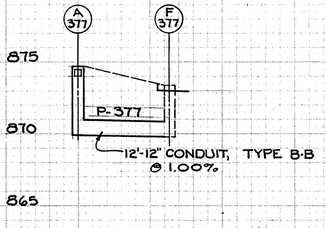




A-376
604 2A-10 INLET MOD. TYPE II
STA. 61+95 (22' RT. ℄ SHIRLEY RD.)
TOP ELEV. = 877.02
WINDOW ELEV. = 876.35
IL 12" = 871.79



A-373
604 2A-10 INLET MOD. TYPE II
STA. 62+61 (22' LT. ℄ SHIRLEY RD.)
TOP ELEV. = 873.64
WINDOW ELEV. = 872.97
IL 12" = 868.33



A-377
604 C.O.Y. Nº II INLET
STA. 53+89 (18' LT. ℄ POWERS WAY)
TOP ELEV. = 874.75
WINDOW ELEV. = 874.00
IL 12" = 869.92

RRC 1/12/69
CEW 1/14/69
MAY 25 N/1

SHIRLEY ROAD
STA. 60+00 TO END CONSTRUCTION

PLATE 4—CROSS SECTION O. P. R. & R. E. STANDARD
NATIONAL TRACING PAPER DIVISION

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

SEEDING	
END WIDTH	SQ. YDS.
	22
4	
	44
12	
	86
19	
	117
23	
	122
32	
	18
0	

END AREAS		CU. YDS.	
CUT	FILL	CUT	FILL
		133	0
75	0		
		132	0
68	0		
		129	0
71	0		
		119	0
58	0		
		84	1
55	1		
		10	1
0	0		

985
980
975

STA. 44+45
EXIST.=983.21
P.G.= 983.28
℄ DRIVE LT.

STA. 44+00
EXIST.=983.09
P.G.= 983.16
MATCH RAMP "H"

STA. 43+50
EXIST.=982.23
P.G.= 982.38
℄ DRIVE LT.
MATCH RAMP "H"

STA. 43+00
EXIST.=981.43
P.G.= 981.53

DRIVE | RT.
STA. 42+97.5
P.G.= 981.49
EXIST. = 981.35

STA. 42+72.5
EXIST.=980.98
P.G.= 981.06
℄ DRIVE LT.

STA. 42+50
EXIST.=980.56
P.G.= 980.68

STA. 42+10
EXIST=979.81
P.G=979.83
BEGIN PAVEMENT

SIDEWALK

STA. 42+00
EXIST.=979.73
P.G.= 979.73
ZERO SECTION

BEGIN WORK

45 40 35 30 25 20 15 10 5 ℄ 5 10 15 20 25 30 35 40 45

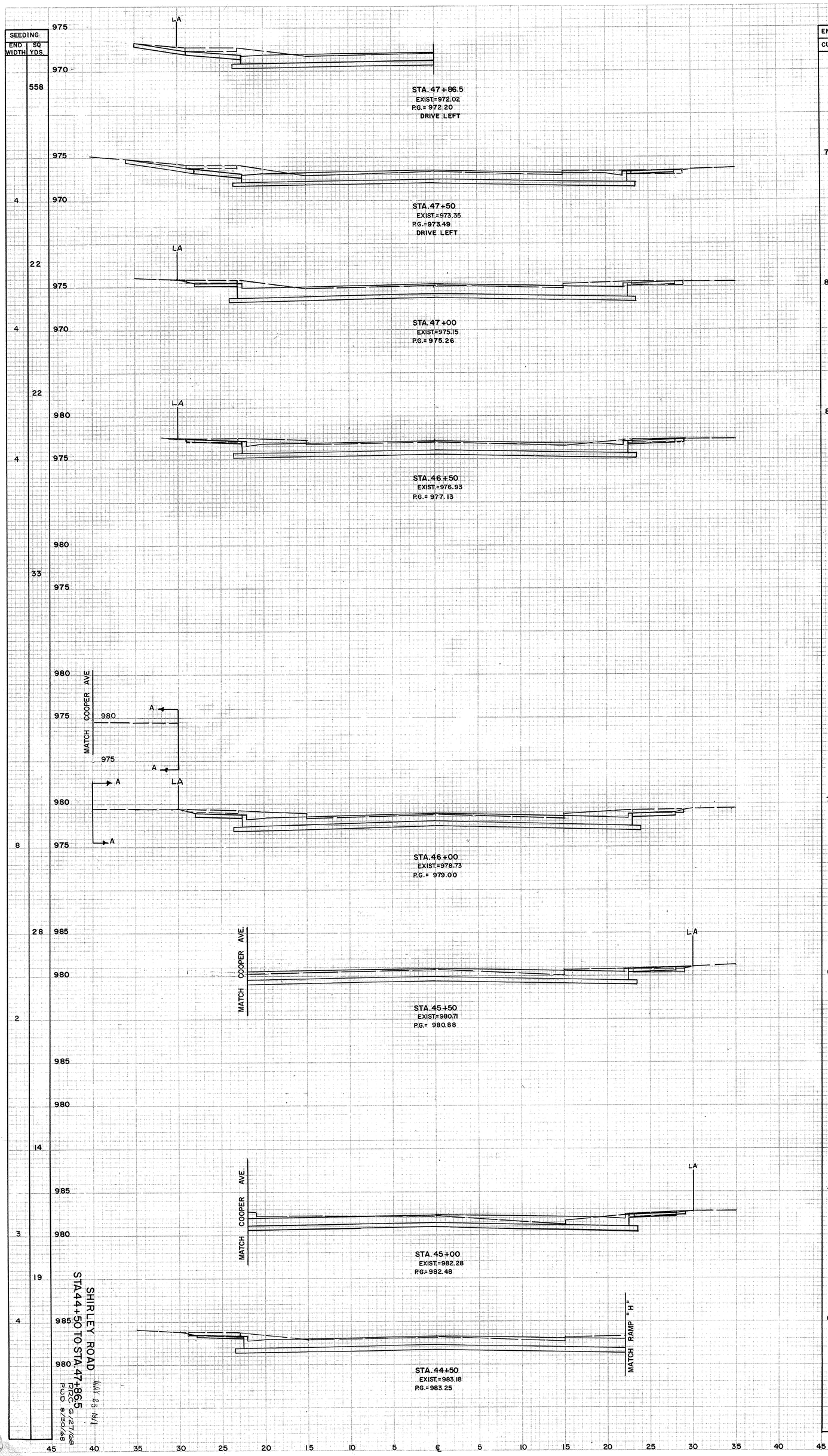
SHIRLEY ROAD
STA. 42+00 TO STA. 44+45
RRC 6/27/68
PUD 8/30/68
MAY 25, 1971

FED. RD.	STATE	PROJECT
2	OHIO	MAH-680-6.98

192
556

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



SHIRLEY ROAD
STA. 44+50 TO STA. 47+86.5
RDC 6/27/68
PWD 8/30/68
MAY 25 1971

END AREAS CUT	END AREAS FILL	CU. YDS. CUT	CU. YDS. FILL
		231	4
77	0		
		147	0
82	0		
		153	0
83	0		
		149	0
78	0		
		129	0
61	0		
		98	0
45	0		
		106	0
69	0		

MAH-680-6.98

FED. RD.	STATE	PROJECT
2	OHIO	

END AREAS CUT	END AREAS FILL	CU. YDS. CUT	CU. YDS. FILL
14	170	139	404
80	103		
106	8		

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

194
656

STA. 52+50
EXIST=947.48
P.G.= 949.15

MATCH MAIN LINE

STA. 51+70.44 (RT.)
EXIST=953.48
P.G=954.66
(SKEWED)

MATCH MAIN LINE

STA. 51+70.44(LT)
EXIST=953.48
P.G=954.66
(SKEWED)

MATCH MAIN LINE

STA. 48+20.31
EXIST=970.87
P.G=971.02
(SKEWED)

MATCH MAIN LINE

MAY 25 1971

SHIRLEY ROAD
STA.48+00 TO STA. 52+50

PDC 6/27/68
PDD 8/30/68

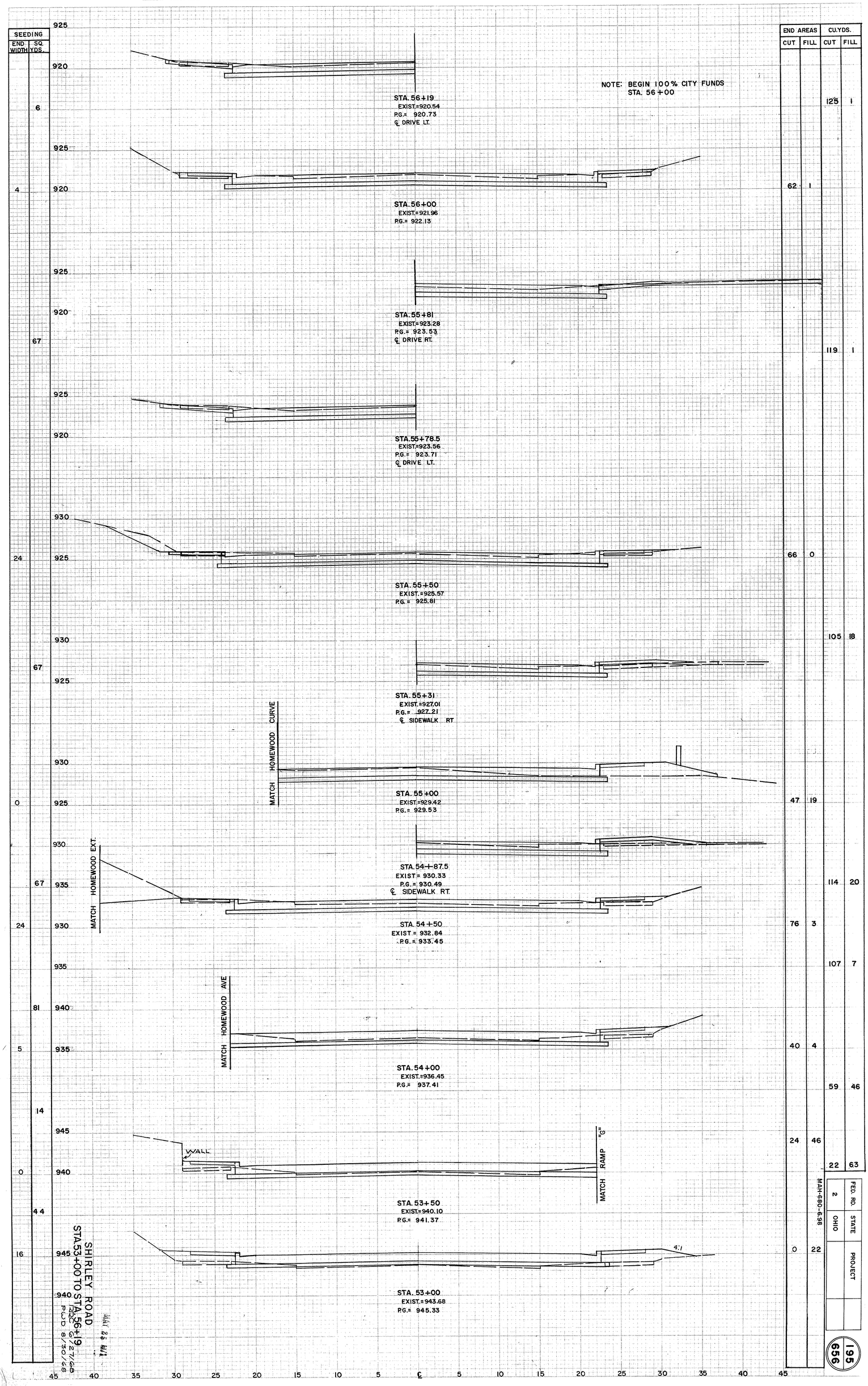
SEEDING END WIDTH	SQ. YDS.
16	89
197	600
	0
	200

ORIGINAL SURVEY
SURVEY: PLOTTED / TENTATIVE / FINAL
NOTE BOOK
NO.
AREAS CHECKED

FINAL SURVEY
SURVEY: PLOTTED / TENTATIVE / FINAL
NOTE BOOK
NO.
AREAS CHECKED

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



SHIRLEY ROAD
STA.53+00 TO STA.56+19
PRC 6/27/68
PWD 8/30/68

MAY 25 1971

MAH-680-6.98

FED. RD.	STATE	PROJECT
2	OHIO	

195
656

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

SEEDING	
END WIDTH	SQ. YDS.
2	0
	6
	22
6	
	25
3	
	14
2	
	17
4	
	17
2	

END AREAS		CU. YDS.	
CUT	FILL	CUT	FILL
		125	0
77	0		
		139	0
73	0		
		137	0
75	0		
		139	0
75	0		
		140	0
76	0		
		140	0
75	0		
		133	0
69	0		
		132	0
73	0		

STA. 60+00
EXIST.= 892.43
P.G.= 892.50

STA. 59+60
EXIST. = 895.42
P. G.= 895.59
DRIVE RT.

STA. 59+50
EXIST.=896.22
P.G.= 896.35

STA. 59+00
EXIST.=900.03
P.G.= 900.12

STA. 58+50
EXIST.=903.70
P.G.= 903.86
℄ DR. RT.

STA. 58+05
EXIST.=906.94
P.G.= 907.15
℄ DR. RT.

STA. 58+00
EXIST.= 907.31
P.G.= 907.50

STA. 57+77.5
EXIST. = 908.88
P. G. = 909.14
℄ DRIVE LT.

STA. 57+60
EXIST. = 910.27
P.G.= 910.41
℄ DR. RT.

STA. 57+50
EXIST.=911.02
P.G.= 911.14

STA. 57+16
EXIST. = 913.39
P. G. = 913.61
℄ DR. RT.

STA. 57+00
EXIST.=914.67
P.G.= 914.78

STA. 56+95
EXIST.=915.05
P.G.= 915.15
℄ DRIVE LT.

STA. 56+73.5
EXIST.=916.64
P.G.= 916.72
℄ DRIVE RT.

STA. 56+50
EXIST.=918.32
P.G.= 918.45

STA. 56+26
EXIST.=920.02
P.G.= 920.22
℄ DRIVE RT.

SHIRLEY ROAD
STA. 56+26 TO STA. 60+00

DRC 6/27/68
PUD 8/30/68

45 40 35 30 25 20 15 10 5 ℄ 5 10 15 20 25 30 35 40 45

FED. RD.	STATE	PROJECT
2	OHIO	MAH-680-6.98

196
656

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

SEEDING	
END WIDTH	SQ. YDS.
0	
0	
4	
2	
4	
3	

END WORK 58' LT

END WORK 69.5' RT.

END AREAS		CU. YDS.	
CUT	FILL	CUT	FILL
0	0		
121	0		
98	2		
94	3		
84	0		
48	0		

875 870

STA. 62+64
EXIST.= 871.98
P.G.= 871.98

ZERO SECTION
SKEWED SECTION

A A

875 870

30 40 50 60

A A

875 870

STA. 62+50
EXIST.= 872.29
P.G.= 872.39
END CONSTRUCTION
SKEWED SECTION

BLDG.

880 875

STA. 62+00
EXIST.= 876.41
P.G.= 876.51

880 875

STA. 61+96
EXIST.= 876.77
P.G.= 876.84
DRIVE LEFT

880

STA. 61+67
EXIST.= 879.24
P.G.= 879.60
DRIVE LEFT

885 880

STA. 61+50
EXIST.= 880.63
P.G.= 880.64
DRIVE LEFT

885

STA. 61+00
EXIST.= 884.54
P.G.= 884.76

880

890 885

STA. 60+85
EXIST.= 885.73
P.G.= 885.83
℄ DRIVE RT.

BLDG.

890 885

STA. 60+50
EXIST.= 888.41
P.G.= 888.63

895 890

STA. 60+19
EXIST.= 891.07
P.G.= 891.03
℄ DRIVE LT.

45 40 35 30 25 20 15 10 5 ℄

SHIRLEY ROAD
STA. 60+19 TO STA. 63+00
RDC 6/27/68
PUD 8/30/68

MAY 23 1969

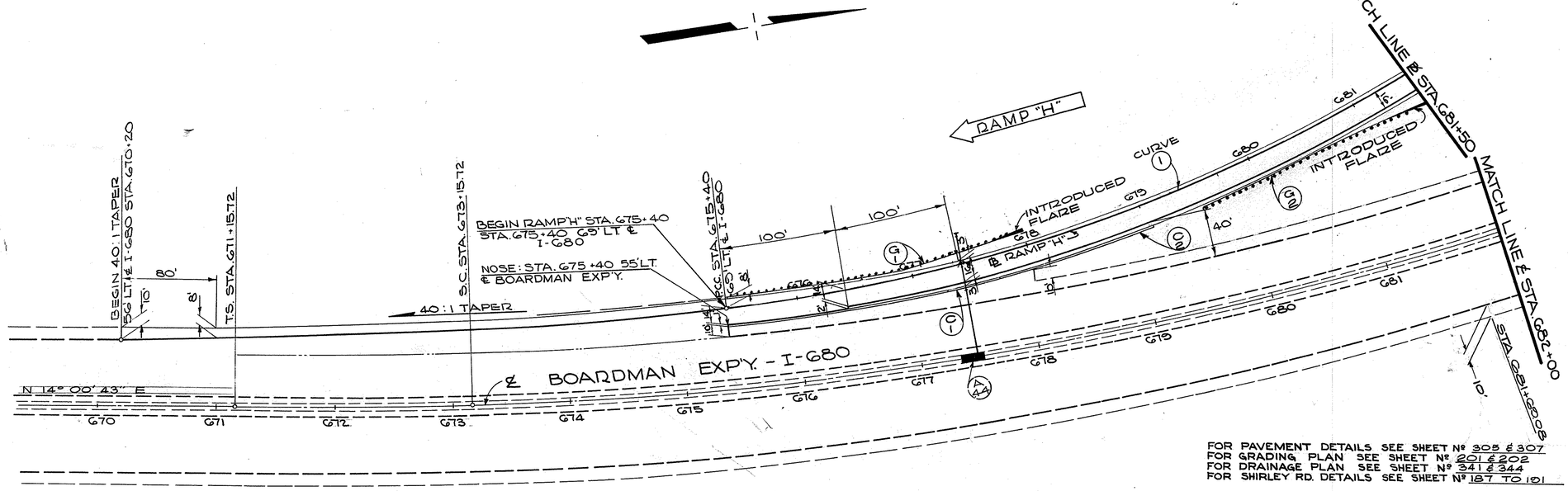
FED. RD.	STATE	PROJECT
2	OHIO	

MAH-680-6.98

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

198
656



FOR PAVEMENT DETAILS SEE SHEET Nº 305 & 307
FOR GRADING PLAN SEE SHEET Nº 201 & 202
FOR DRAINAGE PLAN SEE SHEET Nº 341 & 344
FOR SHIRLEY RD. DETAILS SEE SHEET Nº 187 TO 191

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
18,990	0	3689

℄ EXP'Y CURVE DATA

Δ = 71° 25' 13" LT.	P = 0.53'
L_s = 200.00'	K = 100.00'
D_c = 1° 50' 00"	X_c = 199.98
R = 3,125.22'	Y_c = 2.13'
Θ_s = 1° 50' 00"	L.T. = 133.34'
Δ_c = 67° 45' 13"	S.T. = 66.67'
L_c = 3,655.65'	L.C. = 199.99'
T_c = 2,098.22'	T_s = 2,346.92'
CH_c = 3,484.05'	E_s = 724.32'
E_c = 639.03'	P.I. STA. 694+62.64

(1) CURVE DATA

P.I. STA. 678+93.78
Δ = 27° 44' 50"
D_c = 4° 00' 00"
R = 1,432.39'
T = 353.78'
L_c = 693.68'
E = 43.04'
CH = 686.92'

	ITEM 606- GUARD RAIL LIN. FEET				ANCHOR ASSEMBLY
	CODE	STATION FROM	STATION TO	TYPE 5	EACH
	G-1	G75+40	G78+00	200	2
	G-2	G79+50	G81+50	150	2
		TOTAL		350	4

ITEM 609- CONCRETE CURB LINEAR FEET				
CODE	STATION FROM	STATION TO	TYPE 7	TYPE 8
C-1	G76+40	G78+00		263.00
C-2	G78+00	G79+00	101.35	
TOTAL			101.35	263.00

0 50 100

MAY 25 1971

RRC 1/6/69
CAP 1/8/69

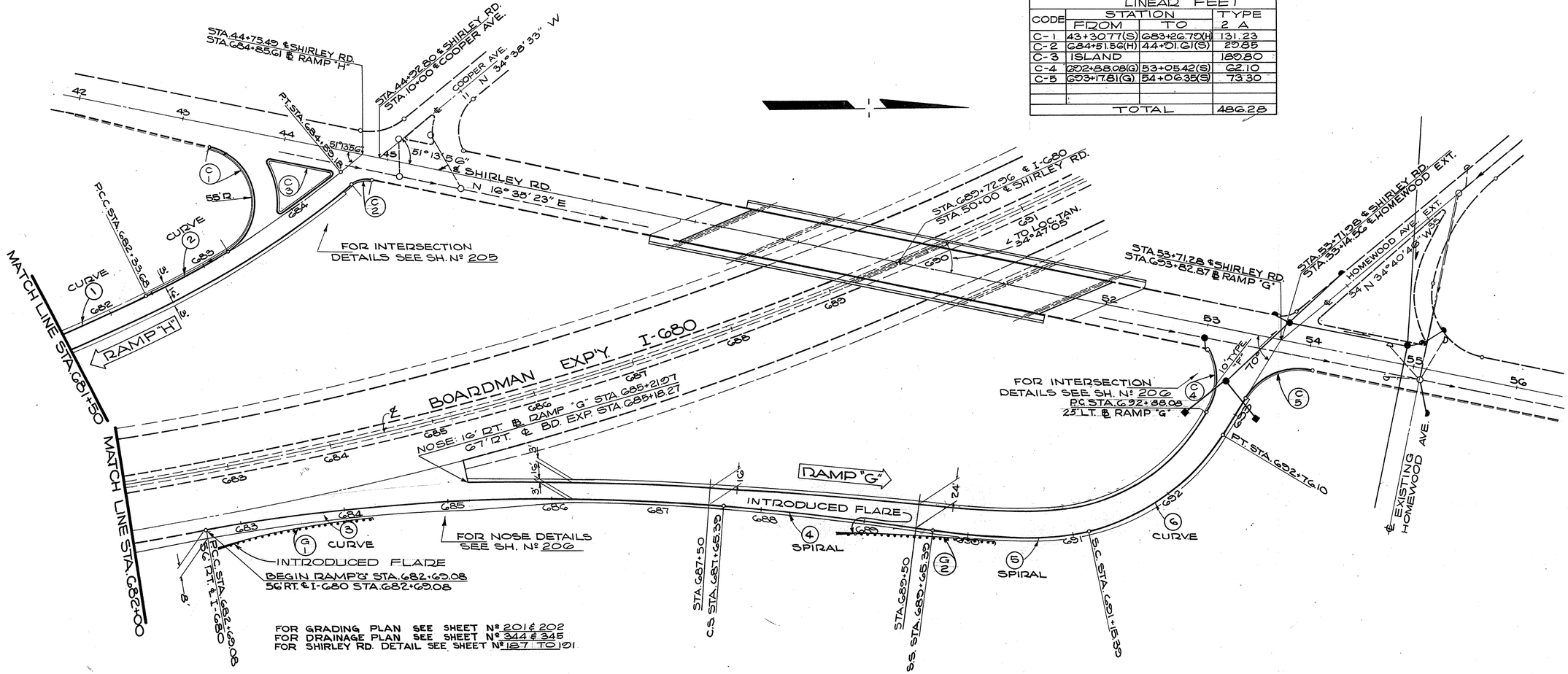
GEOMETRIC PLAN (SHEET 1)
SHIRLEY ROAD INTERCHANGE

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

195
656

ITEM 609 - CONCRETE CURB LINEAR FEET			
CODE	STATION FROM	STATION TO	TYPE 2 A
C-1	43+30.77(S)	683+26.70(H)	131.23
C-2	684+51.56(H)	44+01.61(S)	29.85
C-3	ISLAND		180.80
C-4	692+88.08(G)	53+05.42(S)	62.10
C-5	693+17.81(G)	54+06.35(S)	73.30
	TOTAL		486.28



FOR GRADING PLAN SEE SHEET Nº 201 & 202
FOR DRAINAGE PLAN SEE SHEET Nº 344 & 345
FOR SHIRLEY RD. DETAIL SEE SHEET Nº 187 TO 191

(1) CURVE DATA
P.I. STA. 671+93.78
Δ = 27° 44' 50"
D_c = 4° 00' 00"
R = 1,432.39'
T = 353.78'
L_c = 693.68'
E = 43.04'
CH = 686.92'

(2) CURVE DATA
P.I. STA. 683+46.96
Δ = 13° 31' 48"
D_c = 6° 00' 00"
R = 954.93'
T = 113.28'
L_c = 225.50'
E = 6.70'
CH = 224.98'

℄ EXP'Y CURVE DATA
Δ = 71° 25' 13" LT.
L_s = 200.00'
D_c = 1° 50' 00"
R = 3,125.22'
θ_s = 1° 50' 00"
Δ_c = 67° 45' 13"
L_c = 3,695.65'
T_s = 2,098.22'
CH_c = 3484.05'
E_c = 639.03'
P = 0.53'
K = 100.00'
X_c = 199.98'
Y_c = 2.13'
L.T. = 133.34'
S.T. = 66.67'
L.C. = 199.99'
T_s = 2,346.92'
E_s = 724.32'
P.I. STA. 684+62.64

(3) CURVE DATA
Δ = 14° 53' 22"
D_c = 3° 00' 00"
R = 1909.86'
T = 249.56'
L_c = 496.31'
E = 16.24'
CH = 494.92'

(4) SPIRAL DATA
L_s = 200.00'
D_c = 3° 00' 00"
θ_s = 3° 00' 00"
P = 0.87'
K = 99.99'
X = 199.95'
Y = 3.49'
L.T. = 133.35'
S.T. = 66.68'
L.C. = 199.98'

(6) CURVE DATA
Δ = 45° 00' 00"
D_c = 28° 00' 00"
R = 204.63'
T = 84.76'
L_c = 160.71'
E = 16.86'
CH = 156.62'

(5) SPIRAL DATA
L_s = 150.00'
D_c = 28° 00' 00"
θ_s = 21° 00' 00"
P = 4.56'
K = 74.67'
X = 148.00'
Y = 18.15'
L.T. = 100.71'
S.T. = 50.65'
L.C. = 149.11'

LOC.	203 EXCAVATION (C.Y.)	203 EMBANKMENT (C.Y.)	659 SEEDING (S.Y.)
RAMP 'G'	28,983	6	6799
RAMP 'H'	6767	0	2844

ITEM 606 - GUARD RAIL - LIN. FT.					ANCHOR ASSEMBLY
CODE	LOCATION FROM	LOCATION TO	TYPE 5		EACH
G-1	682+75(G)	684+25(G)	100.		2
G-2	688+75(G)	690+25(G)	100.		2
	SHEET TOTAL		200.		4

MAY 85 871

RRC 1/6/69
CAP 1/8/69

0 50 100

GEOMETRIC PLAN (SHEET 2)
SHIRLEY ROAD INTERCHANGE

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

200
656

RAMP "G"

℄ PROPOSED ELEVATIONS: 950.54 949.68 948.88 948.12 947.41

PROPOSED OPPOSITE EDGE PAVT ELEVATIONS: 950.19 949.33 948.63 947.92 947.25

℄ PROPOSED ELEVATIONS: 946.74 946.13 945.56 945.03 944.56 944.12 943.74 943.40 943.11 942.86 942.67 942.52 942.33 942.27 941.67 942.02 940.92 941.77 940.17 941.52 939.77 941.27 939.70 941.02 939.82 940.77 940.52 940.35 940.09 939.68

PROPOSED OPPOSITE EDGE PAVT ELEVATIONS: 946.64 946.07 945.54 945.07 944.63 944.23 943.85 943.52 943.21 942.96 942.74

GRAPHIC GRADE SEE INTERSECTION DETAILS SH. Nº 206

980 / 970 / 960 / 950 / 940

P.C.C. STA. 682+69.08

GRAPHIC GRADE SEE NOSE DETAIL SH. Nº 206

400' V.C.

-3.51%

NOSE STA. 685+21.97 ℄ ELEV. 945.97

P.V.I. STA. 687+00 EL. 943.52

-0.50%

(A 64)

P.V.I. STA. 693+25 EL. 940.40

+1.24%

50' V.C.

℄ SHIRLEY RD. STA. 693+82.87

EXISTING ELEVATIONS: 971.4 969.5 968.0 966.0 964.0 963.0 962.0 960.5 959.3 957.0 955.0 953.8 950.9 948.1 946.0 942.3 941.2 940.5 940.0

683 684 685 686 687 688 689 690 691 692 693 694

RAMP "H"

℄ PROPOSED ELEVATIONS: 969.89 969.64 968.37 967.11 965.84 965.27 964.81 964.47 964.25 964.14 964.16 964.28 964.53 964.85 965.37 965.97 966.68 967.52 968.46 970.48 972.49 974.51 976.52 978.54 980.55 981.45 982.12 982.58 982.80 982.96

PROPOSED OPPOSITE EDGE PAVT ELEVATIONS: 970.50 970.26 969.03 967.88 966.50 965.95 965.50 965.16 964.94 964.83 964.85 964.57 965.22 965.58 966.08 966.66 967.37 968.21 969.15 971.17 973.18 974.19 977.13 978.30

GRAPHIC GRADE SEE PAVEMENT DETAILS SH. N° 207

980 / 970 / 960

NOSE STA. 676+40

-2.53%

350' V.C.

P.V.I. STA. 678+75 EL. 961.41

+4.03%

P.V.I. STA. 684+00 EL. 982.57

+0.41%

100' V.C.

℄ SHIRLEY RD. STA. 684+85.61

EXISTING ELEVATIONS: 973.0 973.2 975.0 975.0 980.5 981.0 981.0 982.0 984.2 987.2 981.4 979.0 982.0 986.0 986.4 986.7 986.0 983.0

675 676 677 678 679 680 681 682 683 684 685

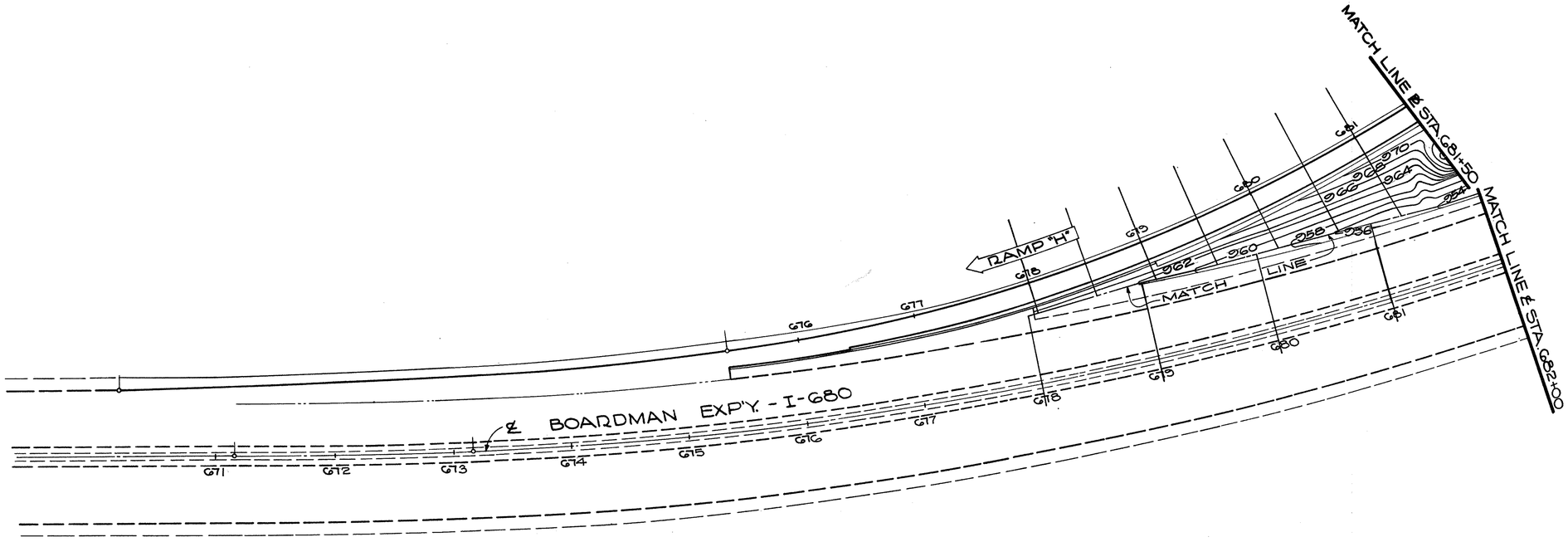
MAY 25 '71

RAMP "G" & RAMP "H" PROFILES

FED.RD.	STATE	PROJECT	
2	OHIO		

201
656

MAH-680-6.98



LEGEND

——— 900 ——— PROPOSED CONTORS

——————— CROSS SECTION LOCATIONS

0' 50' 100'

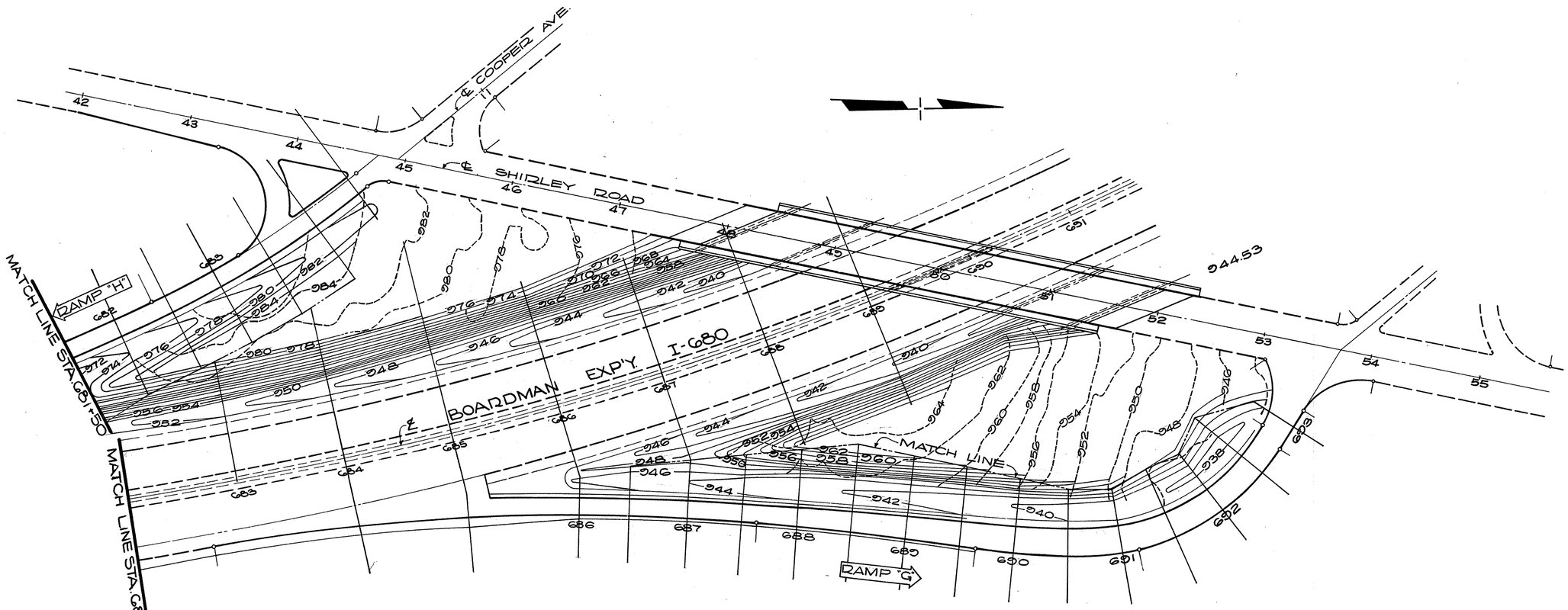
MAY 25 1978

GRADING PLAN (SHEET 1)
SHIRLEY ROAD INTERCHANGE

FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

202
656



LEGEND

---------900--------- EXISTING CONTORS

———900——— PROPOSED CONTORS

——————————— CROSS SECTION LOCATIONS

0' 50' 100'

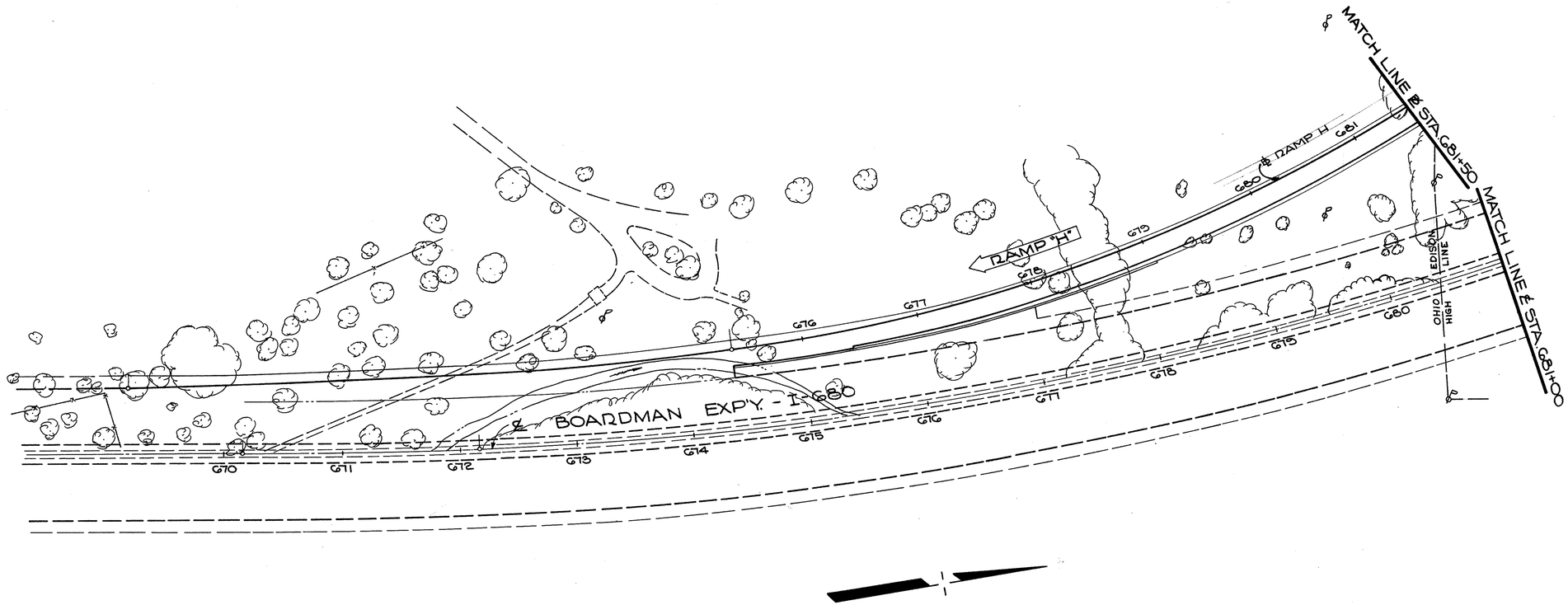
SHEET 2 of 17

GRADING PLAN (SHEET 2)
SHIRLEY ROAD INTERCHANGE

FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

203
656

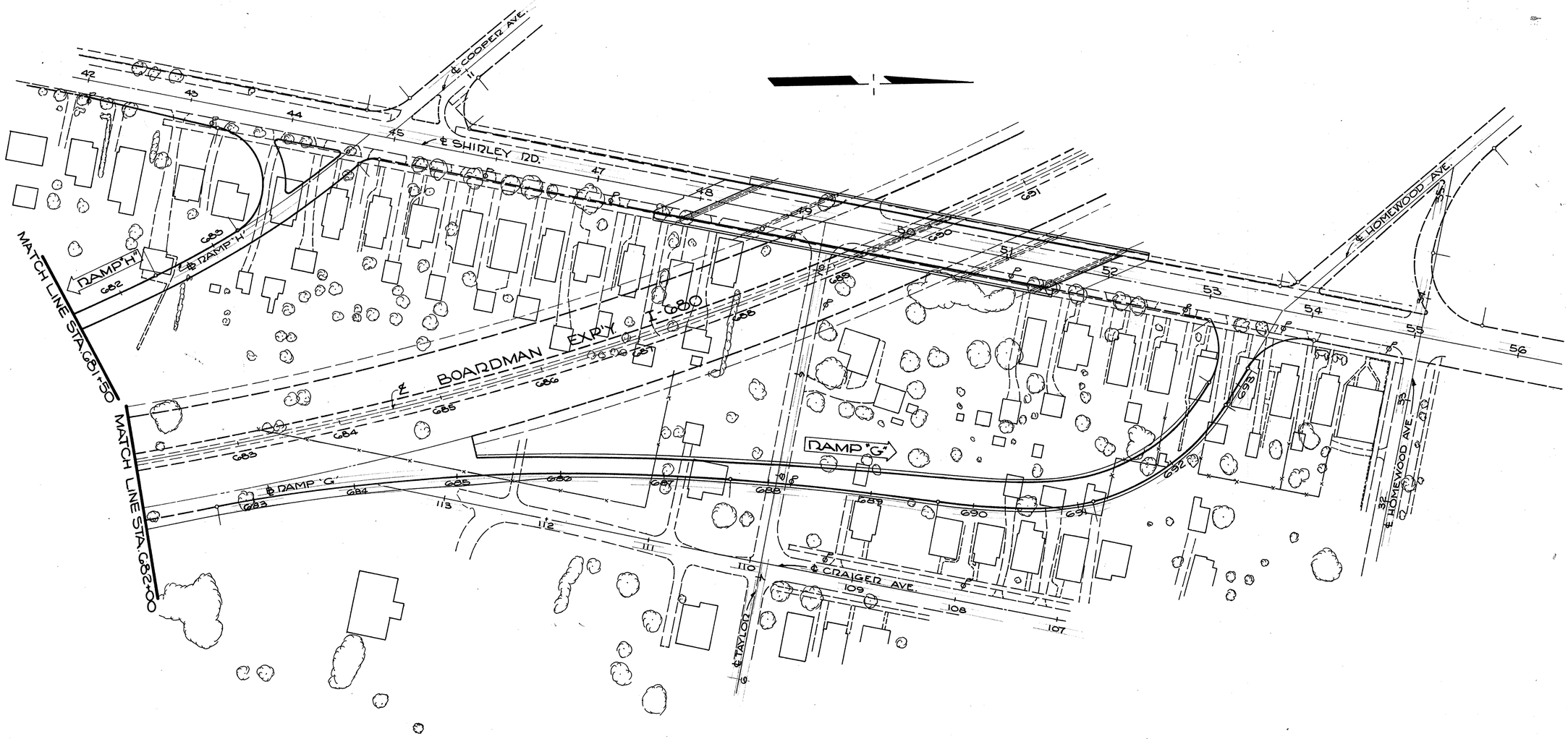


TOPOGRAPHY (SHEET 1) MAY 25 1971
SHIRLEY ROAD INTERCHANGE

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

204
656



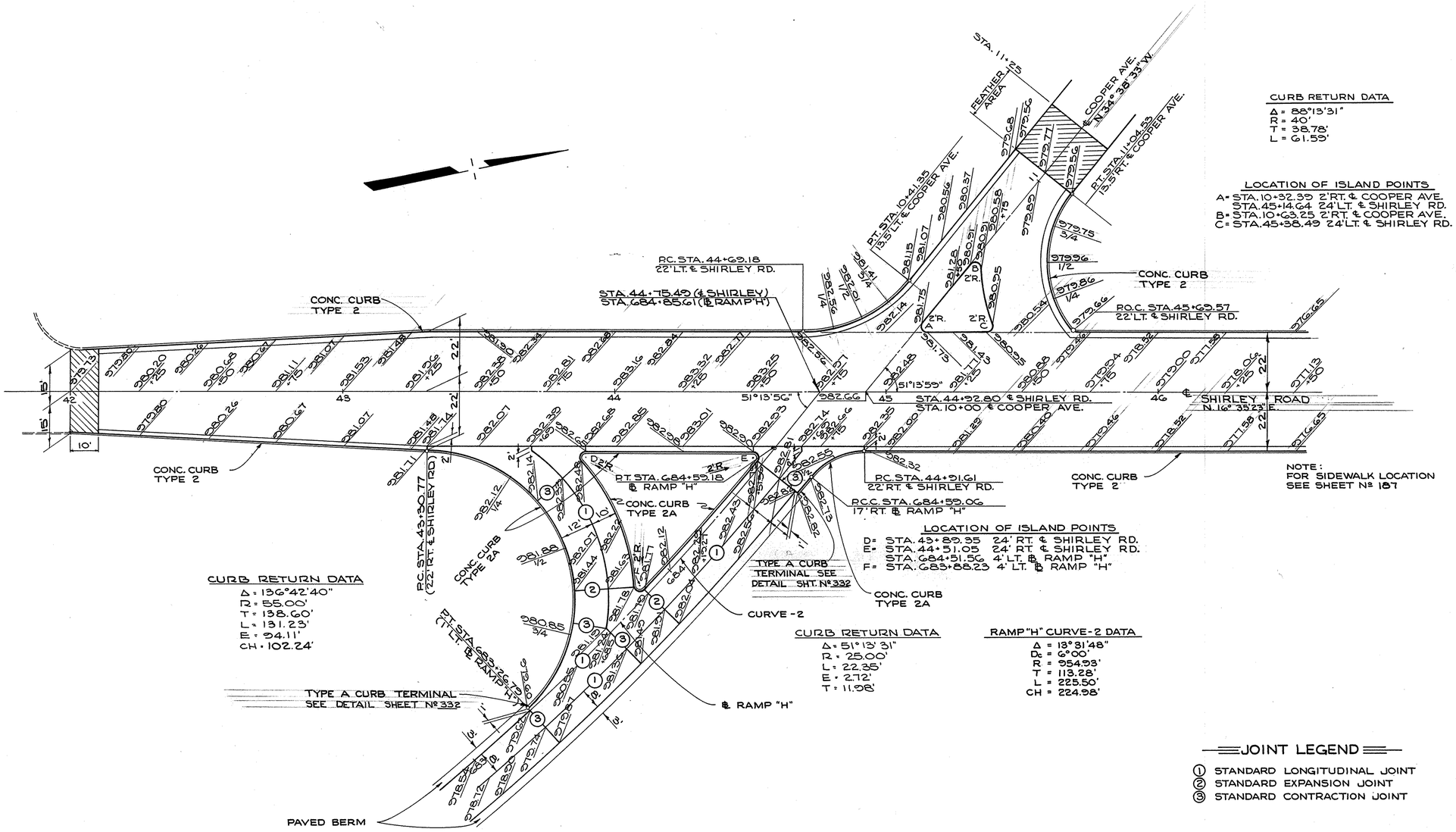
TOPOGRAPHY (SHEET 2)
SHIRLEY ROAD INTERCHANGE

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

205
656



CURB RETURN DATA
Δ = 88°13'31"
R = 40'
T = 38.78'
L = 61.59'

LOCATION OF ISLAND POINTS
A = STA. 10+32.35 2' RT. ℄ COOPER AVE.
STA. 45+14.64 24' LT. ℄ SHIRLEY RD.
B = STA. 10+63.25 2' RT. ℄ COOPER AVE.
C = STA. 45+38.49 24' LT. ℄ SHIRLEY RD.

CURB RETURN DATA
Δ = 136°42'40"
R = 55.00'
T = 138.60'
L = 131.23'
E = 94.11'
CH = 102.24'

LOCATION OF ISLAND POINTS
D = STA. 43+89.35 24' RT. ℄ SHIRLEY RD.
E = STA. 44+51.05 24' RT. ℄ SHIRLEY RD.
STA. 684+51.56 4' LT. ℄ RAMP "H"
F = STA. 685+88.23 4' LT. ℄ RAMP "H"

CURB RETURN DATA
Δ = 51°13'31"
R = 25.00'
L = 22.35'
E = 2.72'
T = 11.98'

RAMP "H" CURVE-2 DATA
Δ = 13°31'48"
D_c = 6°00'
R = 954.93'
T = 113.28'
L = 225.50'
CH = 224.98'

JOINT LEGEND
① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT
③ STANDARD CONTRACTION JOINT

0 10 20 40

MAY 25 97

PAVEMENT DETAILS RAMP "H"

FED.RD	STATE	PROJECT	
2	OH10		

MAH-680-6.98

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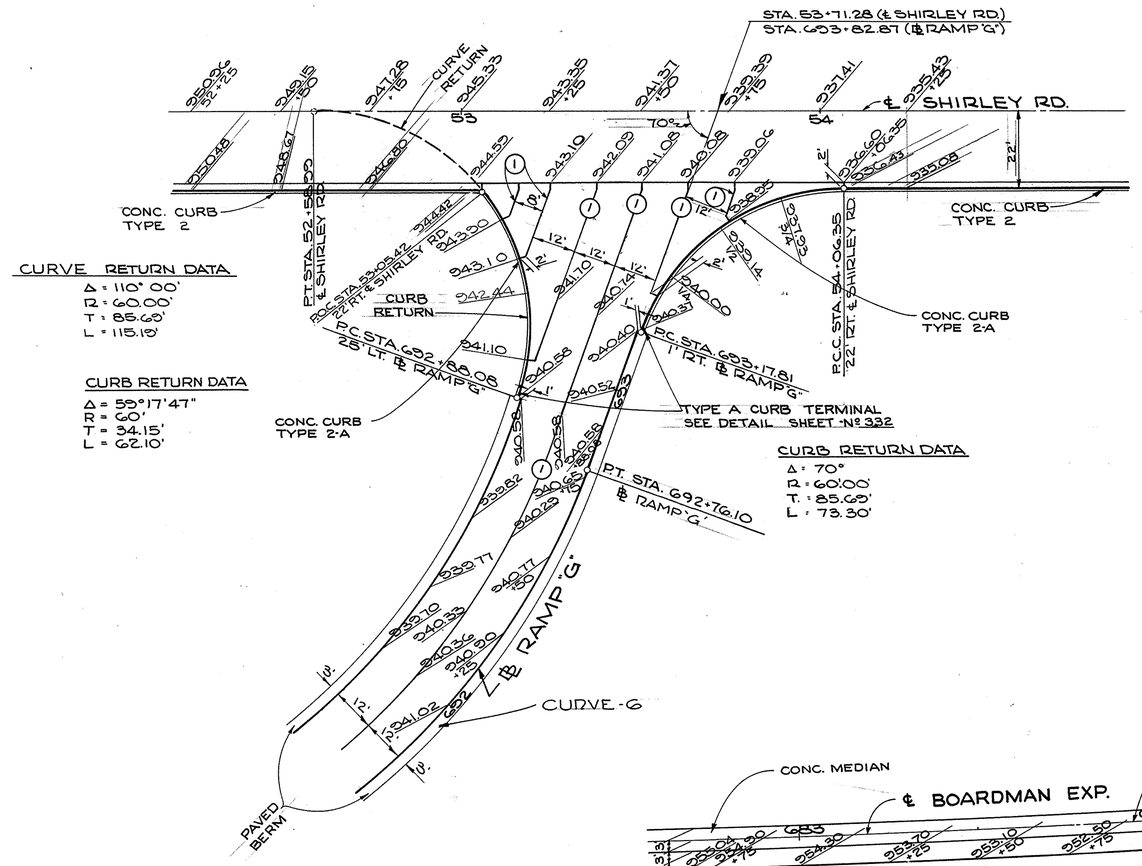
656



CURVE RETURN DATA

Δ = 110° 00'
R = 60.00'
T = 85.69'
L = 115.18'

CURB RETURN DATA

Δ = 59°17'47"
R = 60'
T = 34.15'
L = 62.10'

CURB RETURN DATA

Δ = 70°
R = 60.00'
T = 85.69'
L = 73.30'

SUPERELEVATION TABLE RAMP "G"

STA.	PROFILE GRADE	EDGE	WIDTH
685+21.97	949.79	950.30	16.0
25	949.68	950.19	16.0
50	948.88	949.39	16.0
75	948.12	948.63	16.0
686+00	947.41	947.92	16.0
25	946.74	947.25	16.0
50	946.13	946.64	16.0
75	945.56	946.07	16.0
687+00	945.03	945.54	16.0
25	944.56	945.07	16.0
50	944.12	944.63	16.0
75	943.74	944.23	16.38
688+00	943.40	943.85	17.38
25	943.11	943.52	18.38
50	942.86	943.21	19.38
75	942.67	942.96	20.38
689+00	942.52	942.74	21.38
25	942.40	942.54	22.38
50	942.27	942.33	23.38
75	942.15	942.05	24.0
690+00	942.02	941.67	24.0
25	941.90	941.30	24.0
50	941.77	940.92	24.0
75	941.65	940.55	24.0
691+00	941.52	940.17	24.0
25	941.40	939.90	24.0
50	941.27	939.77	24.0
75	941.15	939.65	24.0
692+00	941.02	939.70	24.0
25	940.90	939.77	24.0

CURVE-1 ℄ CURVE DATA

Δc = 67°45'13"
Dc = 1°50'
R = 3,125.22'
Lc = 3,695.65'
Tc = 2,098.23'
CHc = 3,484.06'
Ec = 639.03'

RAMP "G" CURVE-1 DATA

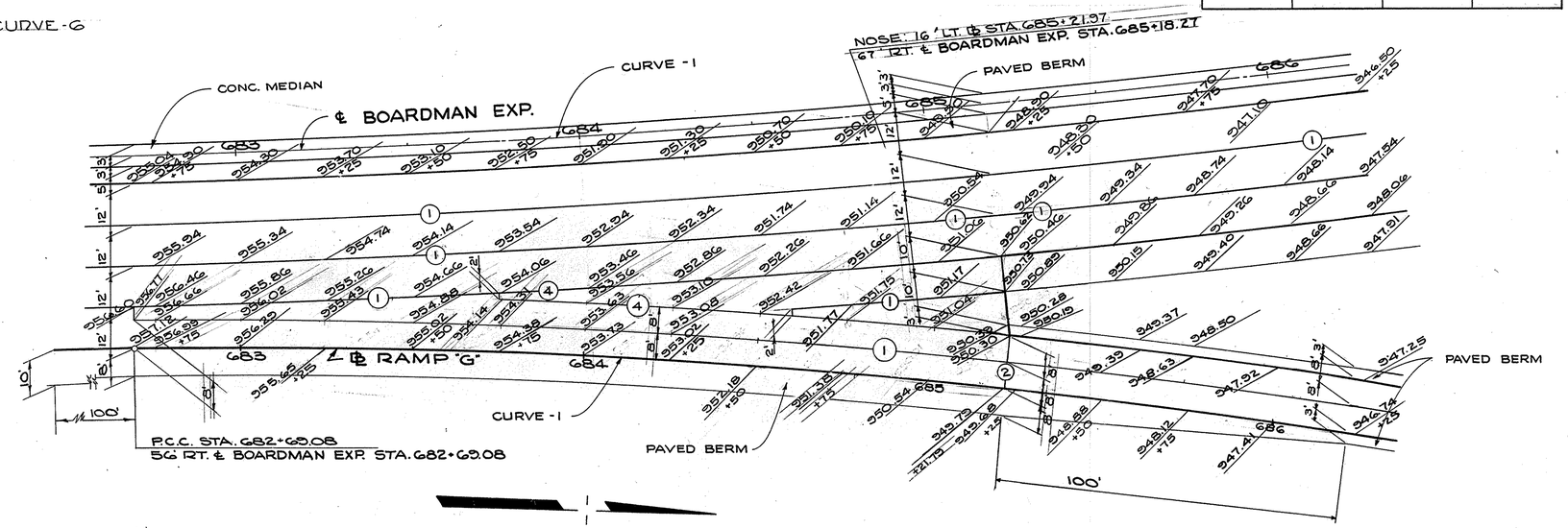
Δ = 14°53'22"
Dc = 3°00'
R = 1,902.86'
L = 496.31'
T = 249.56'
CH = 494.92'

RAMP "G" CURVE-6 DATA

Δ = 45°00'00"
Dc = 28°00'00"
R = 204.63'
T = 84.76'
Lc = 160.71'
E = 16.86'
CH = 156.62'

JOINT LEGEND

(1) STANDARD LONGITUDINAL JOINT
(2) STANDARD EXPANSION JOINT
(4) KEY JOINT WITHOUT TIE BARS



0 10 20 40

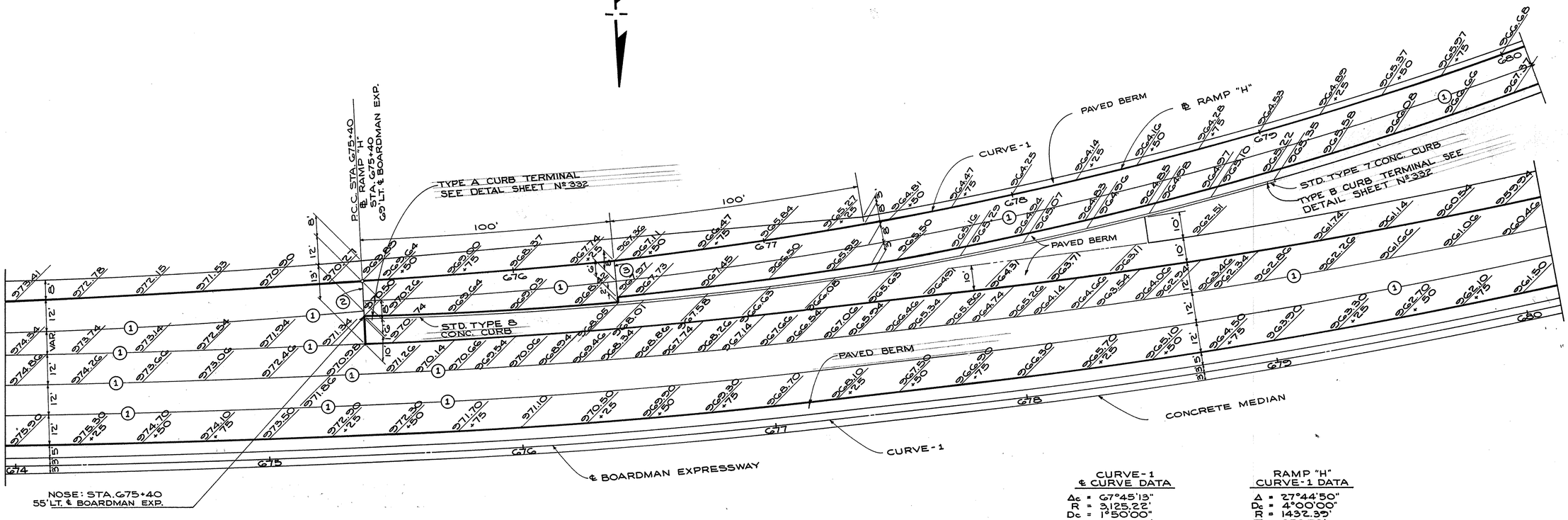
PAVEMENT DETAILS RAMP "G"

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

207
656



SUPERELEVATION TABLE RAMP "H"					
STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH	OFFSET TO FACE OF CURB	ELEVATION AT BOTT. OF CURB.
675+40	969.89		14.0	14.0	970.50
50	969.64		14.20	14.20	970.26
75	969.00		14.70	14.70	969.64
676+00	968.37		15.20	15.20	969.03
25	967.74		15.70	15.70	968.42
40	967.36		14.0	16.0	968.05
50	967.11	967.73	14.20	16.30	967.82
75	966.47	967.45	14.70	17.05	967.21
677+00	965.84	966.50	15.20	17.80	966.61
25	965.27	965.95	15.70	18.55	966.08
40	964.98	965.67	16.0	19.0	965.80
50	964.81	965.50	16.0	19.0	965.63
75	964.47	965.16	16.0	19.0	965.29
678+00	964.25	964.94	16.0	19.0	965.07
25	964.14	964.83	16.0	19.0	964.96
50	964.16	964.85	16.0	19.0	964.98
75	964.28	964.97	16.0	19.0	965.10
679+00	964.53	965.22	16.0	19.0	965.35
25	964.89	965.58	16.0		
50	965.37	966.08	16.0		
75	965.97	966.66	16.0		
680+00	966.68	967.37	16.0		
25	967.52	968.21	16.0		
50	968.46	969.15	16.0		
75	969.47	970.16	16.0		
681+00	970.48	971.17	16.0		
25	971.49	972.18	16.0		
50	972.49	973.18	16.0		
75	973.50	974.19	16.0		

SUPERELEVATION TABLE RAMP "H"			
STA	PROFILE GRADE	EDGE	PAVEMENT WIDTH
682+00	974.51	975.20	16.0
25	975.52	976.21	16.0
50	976.52	977.13	16.0
75	977.53	978.02	16.0
683+00	978.54	978.90	16.0
25	979.55	979.80	16.0
50	980.55		
75	981.45		VARIES SEE INTERSECTION DETAIL
684+00	982.12		
25	982.58		
50	982.80		
75	982.92		
68.61	982.96		

CURVE-1 ℄ CURVE DATA

- Δ_c = 67°45'13"
- R = 3,125.22'
- D_c = 1°50'00"
- L_c = 3,695.65'
- T_c = 2,098.23'
- CH_c = 3,484.06'
- E_c = 639.03'

RAMP "H" CURVE-1 DATA

- Δ = 27°44'50"
- D_R = 4°00'00"
- R = 1432.39'
- T = 353.78'
- L_c = 693.68'
- CH = 686.92'
- E = 43.04'

JOINT LEGEND

1. STANDARD LONGITUDINAL JOINT
2. STANDARD EXPANSION JOINT
3. STANDARD CONTRACTION JOINT

MAR 25 1971

0 10 20 40

PAVEMENT DETAILS RAMP "H"

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO	AREAS CHECKED		

SEEDING	
END WIDTH	SQ. YDS.
93	517
	525
96	531
95	508
88	475
83	411
65	350
61	287

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
1474	0	2558	0
		2838	0
1591	0		
		2939	0
1583	0		
		2757	0
1394	0		
		2823	0
1655	0		
		2920	0
1498	0		
		2642	0
1355	0		
		1928	0

STA. 689+50
EXIST=956.0
P.G.=942.27

STA. 689+00
EXIST=957.0
P.G.=942.52

STA. 688+50
EXIST=958.0
P.G.=942.86

STA. 688+00
EXIST=957.6
P.G.=943.40

STA. 687+50
EXIST=961.0
P.G.=944.12

STA. 687+00
EXIST=961.4
P.G.=945.03

STA. 686+50
EXIST=962.0
P.G.=946.13

RAMP-G
STA. 686+50 TO STA. 689+50

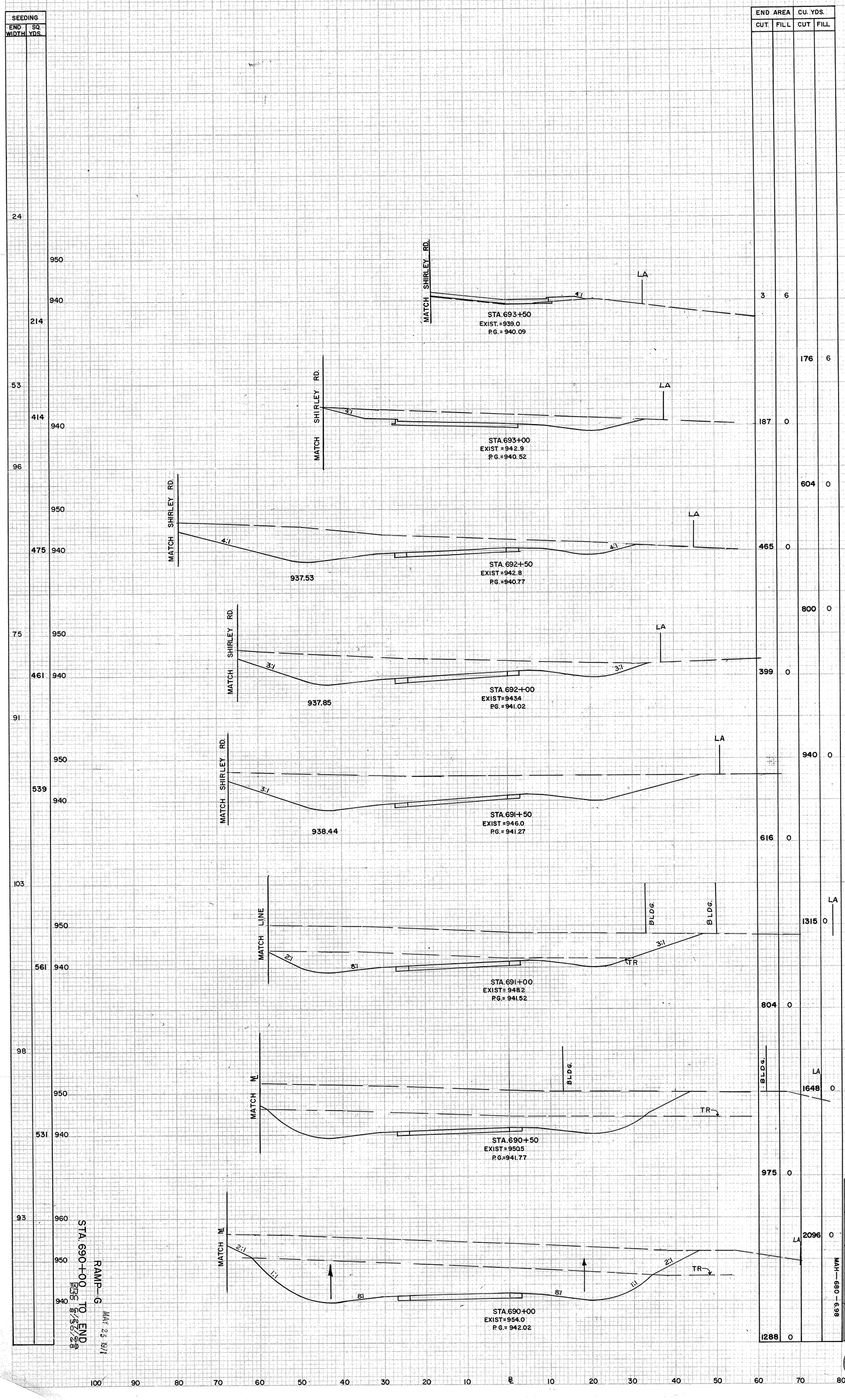
P.U.D. 8/30/68
T.R.C. 9/27/68

FED. RD.	STATE	PROJECT
2	OHIO	MAH-680-6.98

208
656

ORIGINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



RAMP-G
STA. 690+00 TO END
RBC 6/27/68
RBC 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT
2	OHIO	

MAH-680-6.98

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656

CU.YDS.		0	0	0	0	0
CUT	FILL	2925	2539	2383	2232	1147
END AREA						
CUT	FILL	1429	1313	1261	1150	915

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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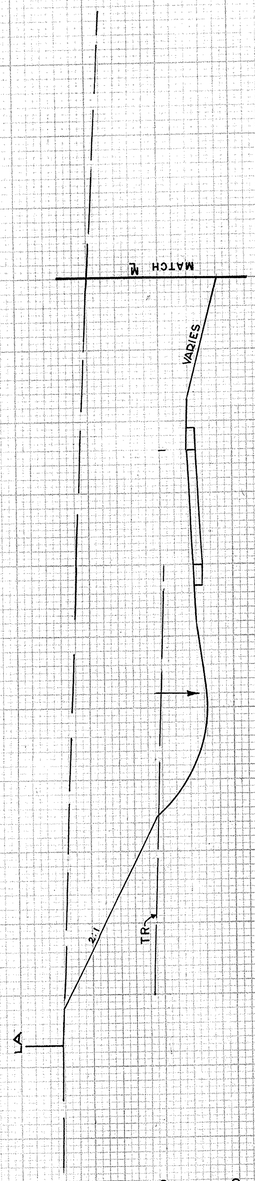
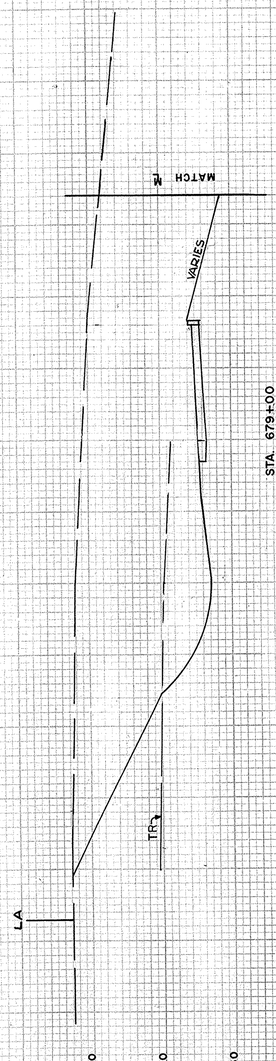
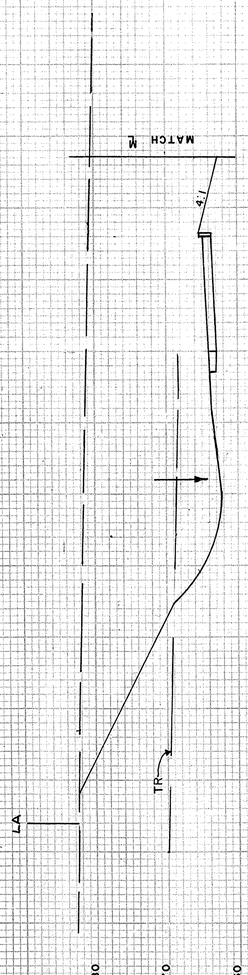
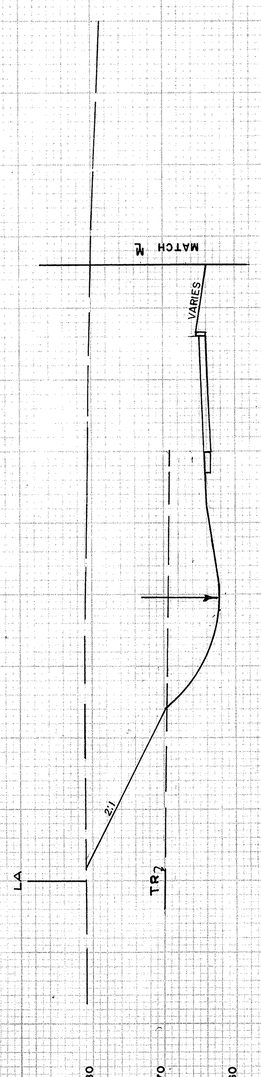
656









SEEDING						
END AREA	SQ. YDS.	478	442	414	378	225
WIDTH		81	78	71	65	

RAMP "H"

STA. 678+00 TO STA. 679+50

MAY 25 '71

RRC 6/27/68

PWD 8/30/68

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
690	0	1385	0
806	0	1427	0
735	0	1415	0
937	0	1602	0
793	0	2647	0
2066	0	3515	0
1730	0		

FED. RD.	STATE	PROJECT	
2	OHIO		

211
656

MAH-680-698

SEEDING SQ. YDS.	586	428	467	550	619	600	533
END WIDTH	76	78	90	108	115	101	91

RAMP H

STA. 680+00 TO STA. 683+00

MAY 25 1971

PCD 8/30/68
RRC 6/27/68

FED. RD.	STATE	PROJECT	
2	OHIO		

212
656

END AREA CUT	END AREA FILL	CU.YDS. CUT	CU.YDS. FILL
0	0		
174	0	0	0
458	0	585	0
482	0	870	0
		1085	0

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MATCH LINE BOARDMAN EXP'Y

RAMP "H" MAY 25 1971

STA. 683 +50 TO STA. 684+50

PWD 6/30/68
RDC 6/27/68

SEEDING	SQ. YDS.
END WIDTH	YDS.
	18
	244
	70
	569
	135

ORIGINAL SURVEY
FINAL SURVEY
NOTE BOOK
PD
DATE
SURVEYED BY
PLOTTED BY
TEMPLATE BY
AREAS
AREAS CHECKED

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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656

STA. 40+55.63 (℄ SHIRLEY)
STA. 50+00 (℄ RUNAROUND)

℄ SHIRLEY

EXIST. R/W

BEGIN WORK STA. 50+14.75

TEMPORARY PAVEMENT TO REMAIN

℄ CONSTANTINE AVE. AND ℄ RUNAROUND

CURVE C-1 DATA
Δ = 890.59' 54"
R = 75.00'
T = 75.00'
L = 117.81'
CH = 106.06'

P.C. STA. 52+59.04 ℄ RUNAROUND

TEMPORARY SIDEWALK

WOODED AREA

FRUIT TREES

EXIST. R/W

LA

MEET EXIST. PAVEMENT STA. 109+97.75

TEMPORARY PAVEMENT TO REMAIN

STA. 111+50

EXIST. R/W

℄ TAYLOR

END WORK STA. 109+65

STA. 109+89.95 (℄ CRAIGER)
STA. 7+14.87 (℄ TAYLOR)

LA/RW

℄ PROP. BOARDMAN EXP.

℄ RELOC. CRAIGER

℄ CRAIGER AVE. AND ℄ RUNAROUND

OHIO EDISON HIGH LINE

P.T. STA. 53+77.75 (℄ RUNAROUND)
HORZ. EQ. STA. 117+85.61 (℄ RUNAROUND)

ITEM 606 - GUARD RAIL LINEAR FEET			
CODE	LOCATION	TYPE 5	
G-1	STA. 52+55 ℄ CONSTANTINE	25	
	SHEET TOTAL	25	

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	LINES CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	LINES CHECKED		

976.77 976.93 977.15 977.36 977.78 978.40 979.21 980.11 980.90 981.48 981.83 981.97 981.90 981.60 981.55 981.55 980.72 980.36 979.07 977.39 975.72 974.04 972.37 970.69 969.85 968.95 968.11 967.22 965.42 963.62 961.82 960.94 960.10 959.31 958.55 957.09 955.63 955.56

BEGIN CONST. STA. 50+14.75 ℄ SHIRLEY

+0.44 %

50' VC

+2.10%

50' VC

END OF PAV'T.

P.C. STA. 52+59.04

+3.60%

PVI STA. 53+25
ELEV. = 983.71

-3.38%

P.T.

HORZ. EQUATION

P.T.

PVC. STA. 52+25

PVI STA. 51+25
ELEV. = 977.26

PVI STA. 51+75
ELEV. = 978.31

200' VC

STA. 53+77.75
STA. 117+85.61

STA. 53+77.75
STA. 117+85.61

PVT STA. 117+38.36

-3.38%

PVI STA. 114+00
ELEV. = 960.02

100' VC

BEGIN EXIST. PAV'T.

-3.60%

PVI STA. 111+50
ELEV. = 960.02

℄ POINT

100' VC

-2.73%

END CONST. STA. 109+57.55

℄ TAYLOR

50 51 52 53 117 116 115 114 113 112 111 110

980 970 960

MAY 25 1971

RRC 1/9/69
CEW 1/11/69

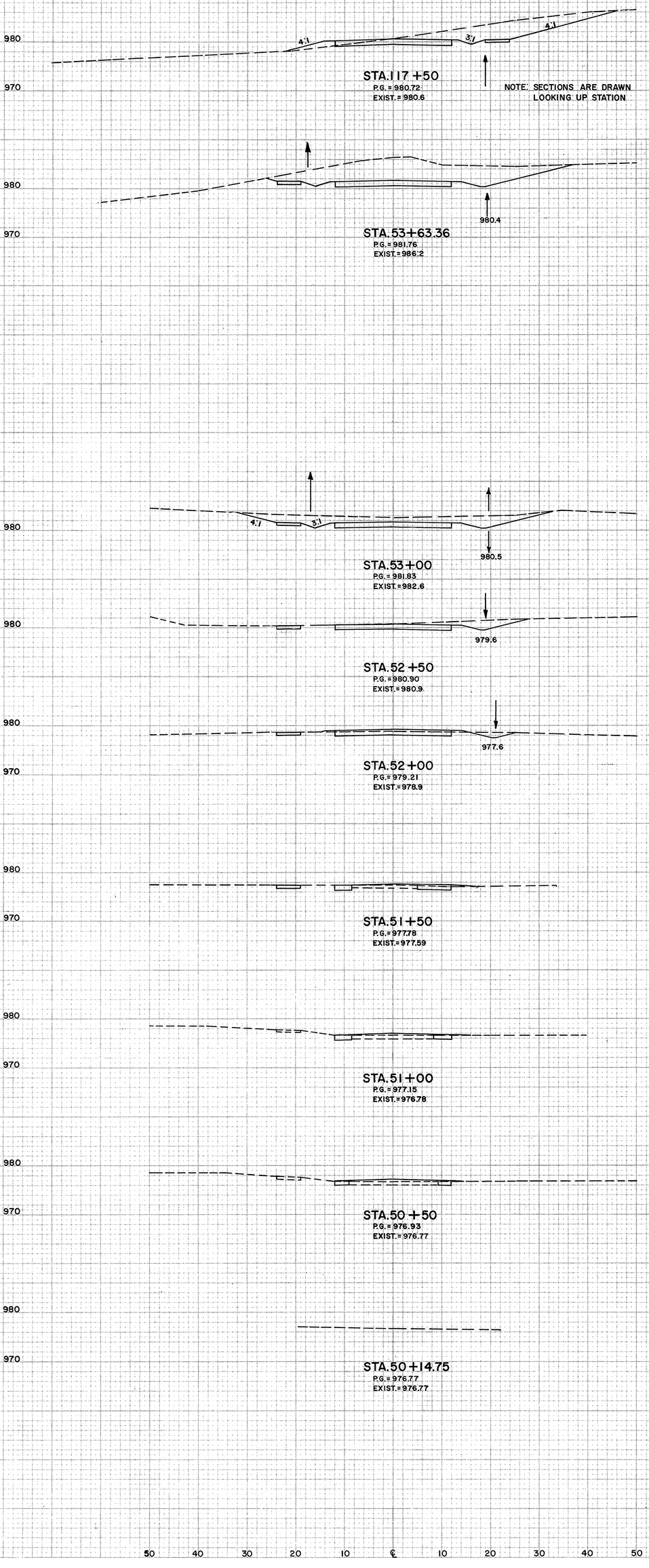
0 25 50 100

SHIRLEY ROAD RUNAROUND

PLATE 4—CROSS SECTION O. P. R. & R. V. STANDARD
100% RAG — MADE AND PRINTED IN U. S. A.
NATIONAL TRACING PAPER DIVISION
I. U. P. & L. CO., INC. INDIANAPOLIS, INDIANA

ORIGINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STA. 50 + 14.75 TO STA. 53 + 63.36
STA. 117 + 50

SHIRLEY ROAD
RUNAROUND
RRC 6/27/68

FED. RD.	STATE	PROJECT
2	OHIO	

MAH-680-6.98

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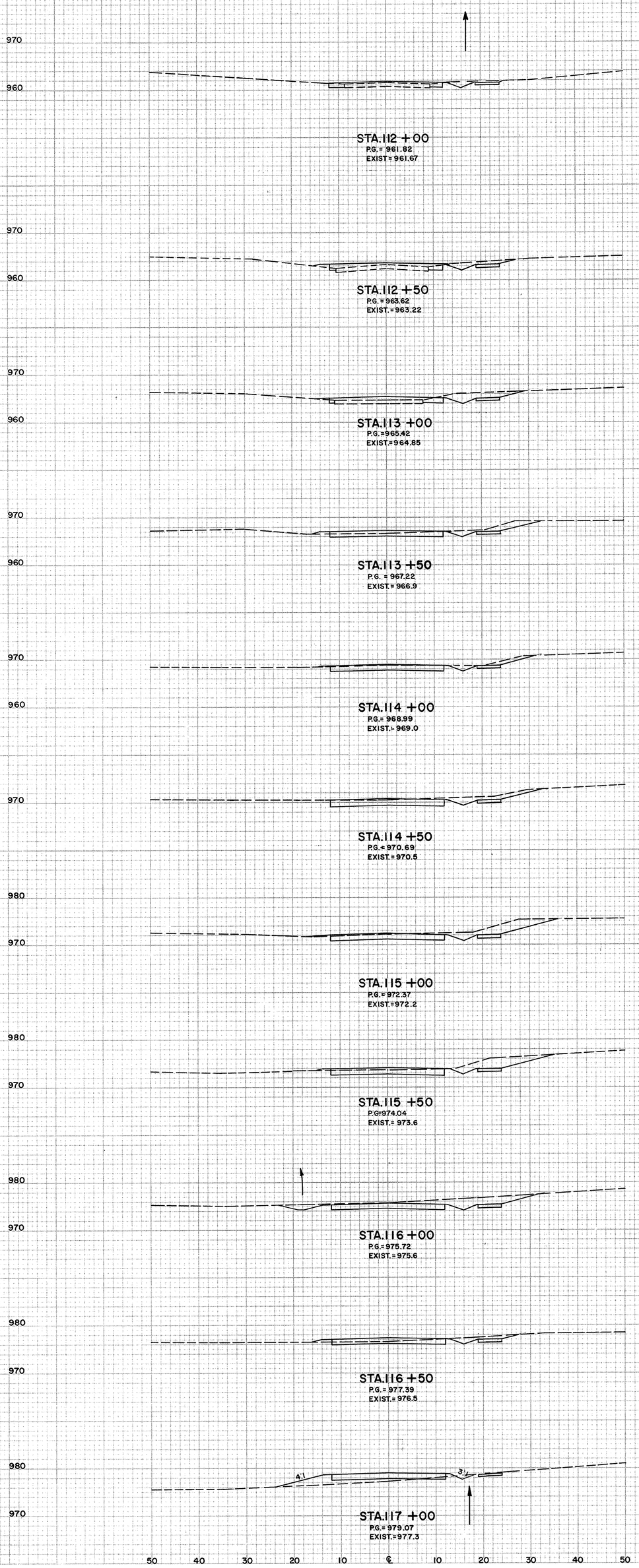
ORIGINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STA.112+00 TO STA.117+00
SHIRLEY ROAD
RUNAROUND
RRC 6/27/68

FED. RD	STATE	PROJECT
2	OHIO	

MAH-680-6.98

215
656

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

216
656

FINAL SURVEY
DATE
BY
SURVEYED
PLOTTED
NOTE BOOK, TEMPLATE
PAGES
NO.
AREAS CHECKED

ORIGINAL SURVEY
DATE
BY
SURVEYED
PLOTTED
NOTE BOOK, TEMPLATE
PAGES
NO.
AREAS CHECKED

MAY 25 1971

STA. 109 +97.75 TO STA. 111 + 50

SHIRLEY ROAD
RUNAROUND

RRC 6/27/68

PLATE 3-CROSS SECTION © P. S. & P. E. STANDARD
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NATIONAL TRACING PAPER DIVISION
I.B.P.U., CO. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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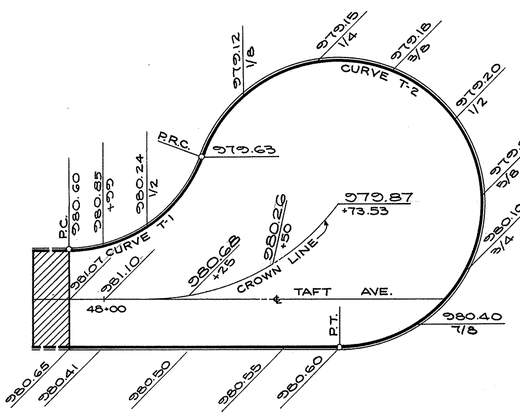
656

B.M. #26 - TOP OF WEST BOLT F.H. AT NORTHWEST CORNER OF COOPER AND SHIRLEY. ELEV. = 982.350

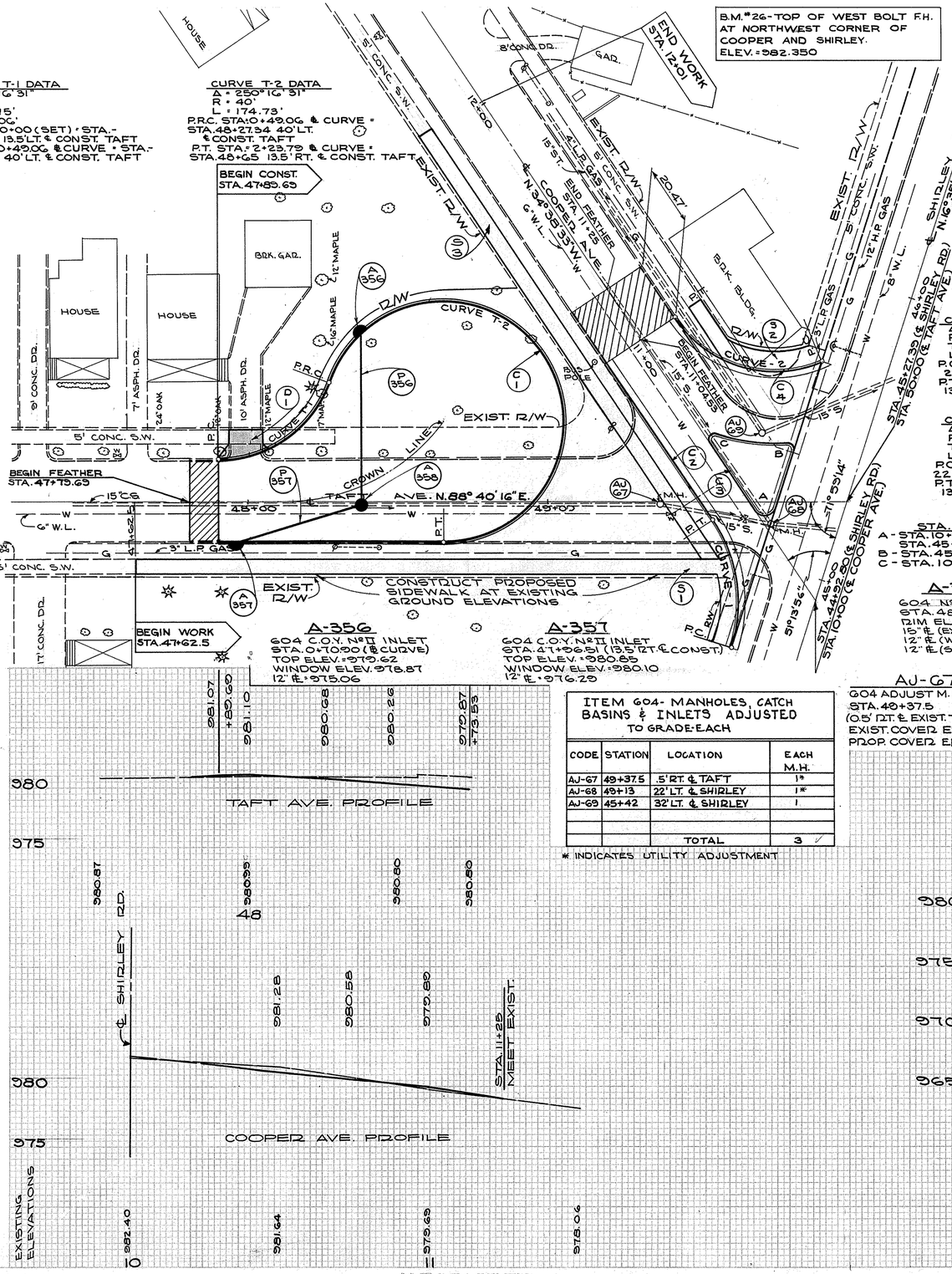
CROWN LINE DATA
Δ = 53° 40' 45"
R = 65'
T = 34.33'
L = 60.30'
P.C. STA. 48+12.63 & CONST. EXIST. TAFT
P.T. STA. 48+73.53 CROWN LINE OF TAFT
STA. 48+65 26.5' LT. & CONST. EXIST. TAFT

CURVE T-1 DATA
Δ = 70° 16' 31"
R = 40'
T = 28.15'
L = 49.06'
P.C. STA. 0+00 (SET) • STA. 47+89.69 13.5' LT. & CONST. TAFT
P.R.C. STA. 0+49.06 & CURVE • STA. 48+27.34 40' LT. & CONST. TAFT

CURVE T-2 DATA
Δ = 250° 16' 31"
R = 40'
L = 174.73'
P.R.C. STA. 0+49.06 & CURVE • STA. 48+27.34 40' LT. & CONST. TAFT
P.T. STA. • 2+23.79 & CURVE • STA. 48+65 13.5' RT. & CONST. TAFT



NOTE: THE PAVEMENT TYPE AND THICKNESS FOR THE CUL-DE-SAC SHALL BE THE SAME AS SHOWN FOR THE HUMBOLT-TAFT CONNECTOR.



A-356
604 C.O.V. Nº II INLET
STA. 0+70.90 (℄ CURVE)
TOP ELEV. = 979.62
WINDOW ELEV. 978.87
12" ℄ = 975.06

A-357
604 C.O.V. Nº II INLET
STA. 47+96.51 (13.5' RT. ℄ CONST.)
TOP ELEV. = 980.65
WINDOW ELEV. = 980.10
12" ℄ = 976.29

A-358
604 Nº 2 SANITARY M.H.
STA. 48+38 (℄ CONST.)
RIM ELEV. = 981.06
15" ℄ (EXIST.) = 968.43
12" ℄ (W) = 974.32
12" ℄ (SW) = 975.43

ITEM 604 - MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE - EACH			
CODE	STATION	LOCATION	EACH M.H.
AJ-67	49+37.5	.5' RT. ℄ TAFT	1*
AJ-68	49+13	22' LT. ℄ SHIRLEY	1*
AJ-69	45+42	32' LT. ℄ SHIRLEY	1
		TOTAL	3

* INDICATES UTILITY ADJUSTMENT

AJ-67
604 ADJUST M.H. TO GRADE
STA. 49+37.5
(0.5' RT. & EXIST. TAFT)
EXIST. COVER EL. = 981.04
PROP. COVER EL. = 981.80

AJ-68
604 ADJUST M.H. TO GRADE
STA. 49+13
(22' LT. ℄ SHIRLEY)
EXIST. COVER EL. = 982.06
PROP. COVER EL. = 981.80

AJ-69
604 ADJUST M.H. TO GRADE
STA. 45+42
(32' LT. ℄ SHIRLEY)
EXIST. COVER EL. = 980.72
PROP. COVER EL. = 980.54

DRIVE APPROACHES							
CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 7" SQ. YDS.
D-1	48+00 (T)	LT.	III	10.0'	10.0'	218	13.2
					TOTAL		13.2

ITEM 604 - MANHOLES CATCH BASINS & INLETS - EACH				
CODE	STATION	LOCATION	Nº I SANITARY M.H.	C.O.V. Nº II INLET
A-356	0+70.90	℄ CURVE		1
A-357	47+96.51	13.5' RT. ℄		1
A-358	48+38	℄ CONSTR.	1	
	TOTAL		1	2

CURVE - 1 CURB DATA
Δ = 51° 13' 55"
R = 50'
T = 23.79'
L = 44.71'
P.C. STA. 44+69.18
22' LT. ℄ SHIRLEY RD.
P.T. STA. 10+41.35
13.5' LT ℄ COOPER AVE.

CURVE - 2 CURB DATA
Δ = 128° 46' 01"
R = 40'
T = 83.42'
L = 89.90'
P.C. STA. 45+69.57
22' LT. ℄ SHIRLEY RD.
P.T. STA. 11+04.53
13.5' RT. ℄ COOPER AVE.

ITEM 609 - CONCRETE CURB - LIN. FT.				
CODE	STATION FROM	STATION TO	TYPE 6	TYPE 2
C-1	47+89.69 (T)	47+89.69 (T)	299.10	
C-2	44+69.18 (S)	11+04.53 (C)		107.89
C-3	ISLAND		91.00	
C-4	45+69.57 (S)	11+04.53 (C)		89.90
	TOTAL		390.10	197.79

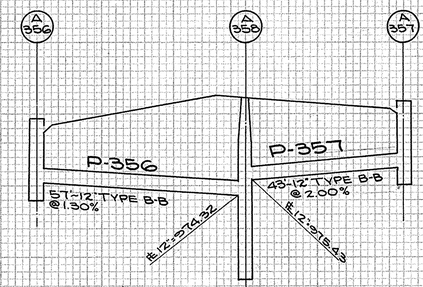
STA. OF TRAFFIC ISLAND
A - STA. 10+36.56 4' RT. ℄ COOPER AVE.
STA. 45+18.81 20' LT. ℄ SHIRLEY RD.
B - STA. 45+38.49 24' LT. ℄ SHIRLEY RD.
C - STA. 10+63.25 2' RT. ℄ COOPER AVE.

ITEM 608 - WALKS					
CODE	STATION FROM	STATION TO	LOCA.	SQ. FT. 5" THICKNESS
S-1	47+62.5 (T)	SHIRLEY	RT. & LT.	1,156.5
S-2	11+04.53 (C)	45+69.57 (S)	LT.	302.0
S-3	10+29.5 (C)	12+01 (C)	LT.	862.5 *
	TOTAL			2321.0

* INDICATES 100% CITY FUNDS

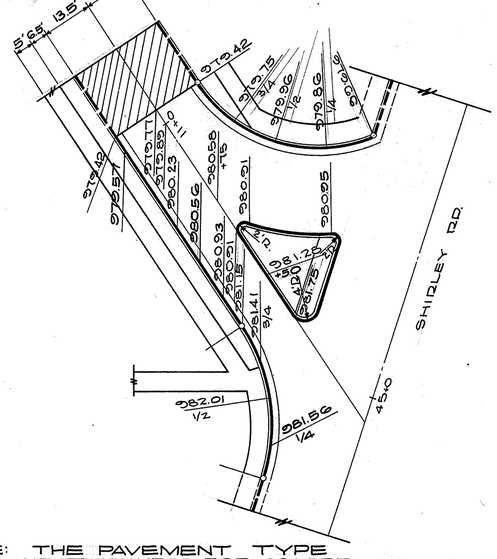
FOR DETAIL SHIRLEY RD. SEE SHEET Nº 187

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
532	28	712



ITEM 603 - CONDUITS - LINEAR FEET				
CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	TYPE B-B 12"
P-356	A-356	A-358	217	57
P-357	A-357	A-358	217	43
	TOTAL			100

R.R.C. 8/24/68
P.W.D. 8/30/68



NOTE: THE PAVEMENT TYPE AND THICKNESS FOR COOPER AVE. SHALL BE THE SAME AS SHOWN FOR SHIRLEY RD.

COOPER & TAFT AVENUE
STA. 47+00 TO STA. 50+00

ORIGINAL SURVEY: SURVEYED, PLOTTED, NOTE BOOK, AREAS CHECKED, NO.
FINAL SURVEY: SURVEYED, PLOTTED, NOTE BOOK, AREAS CHECKED, NO.
BY DATE
PLATE 4, CROSS SECTION
KELLER & GEER CO.

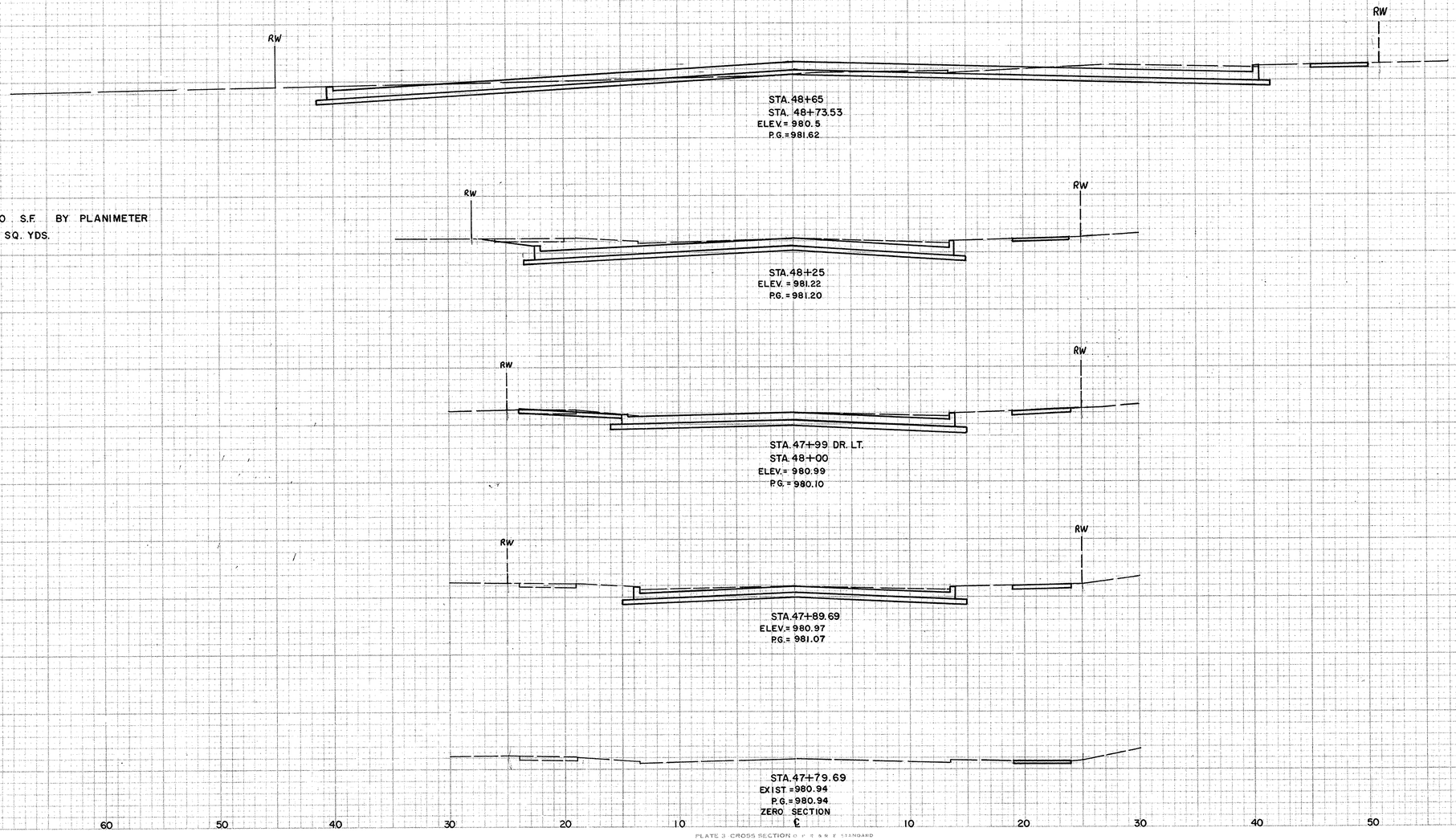
FED. RD.	STATE	PROJECT	
2	OHIO		

218
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
361	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
73	0		
56	0		
44	0		
34	0		
0	2		



AREA = 3250 S.F. BY PLANIMETER
$\frac{3250}{9}$ = 360 SQ. YDS.

AREA = 6580 S.F.
$\frac{6580 \times 1.5}{27}$ = 366 C.Y.

TOTAL CUT = 366 C.Y.

MAY 25 1971
RRC 6/27/68
PWD 8/30/68

TAFT CUL-DE SAC
STA. 47+75 TO STA. 48+73.53

FINAL SURVEY — SURVEYED BY, PLOTTED, TEMPLATE, NOTE BOOK, AREAS, AREAS CHECKED, NO., DATE

ORIGINAL SURVEY — SURVEYED BY, PLOTTED, TEMPLATE, NOTE BOOK, AREAS, AREAS CHECKED, NO., DATE

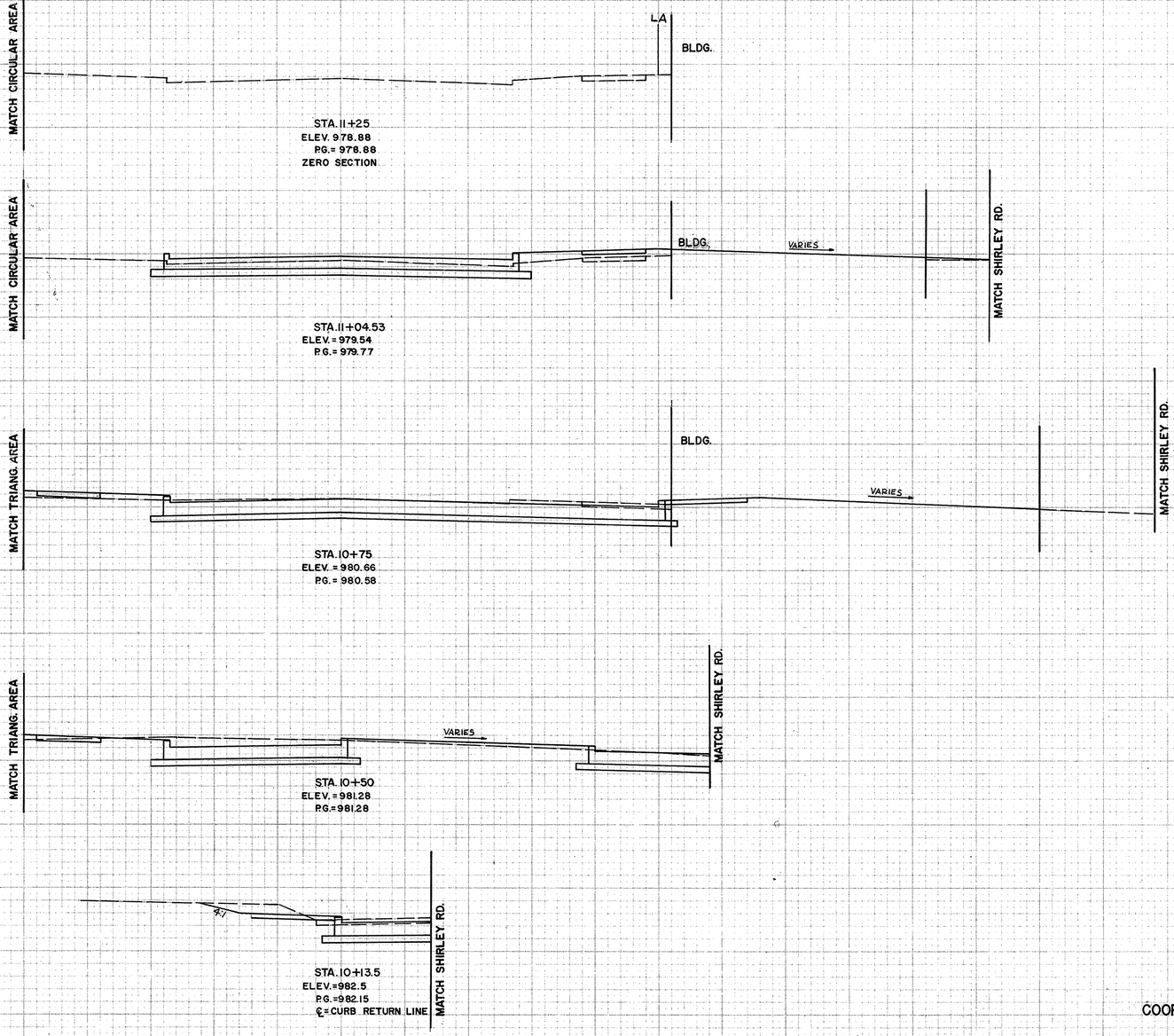
PLATE 3 CROSS SECTION O P R & R E STANDARD
NATIONAL TRACING PAPER DIVISION
L. P. F. & L. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

219
656

MAH-680-6.98

SEEDING			END. AREA		CU. YDS.	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
0		980	0	0		
	51	975			12	6
45						
		980	32	16		
	121					
		975			55	12
29						
		985				
	75	980	68	6		
		975			53	6
25						
		985				
	105	980	47	6		
					46	4
27		985				
		980	21	0		



80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

COOPER AVE.

STA. 10+13.5 TO STA. 11+25

PWD 8/30/68

RRC 6/27/68

MAY 25 1971

PLATE 3. CROSS SECTION

NATIONAL TRACING PAPER DIVISION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

220
656

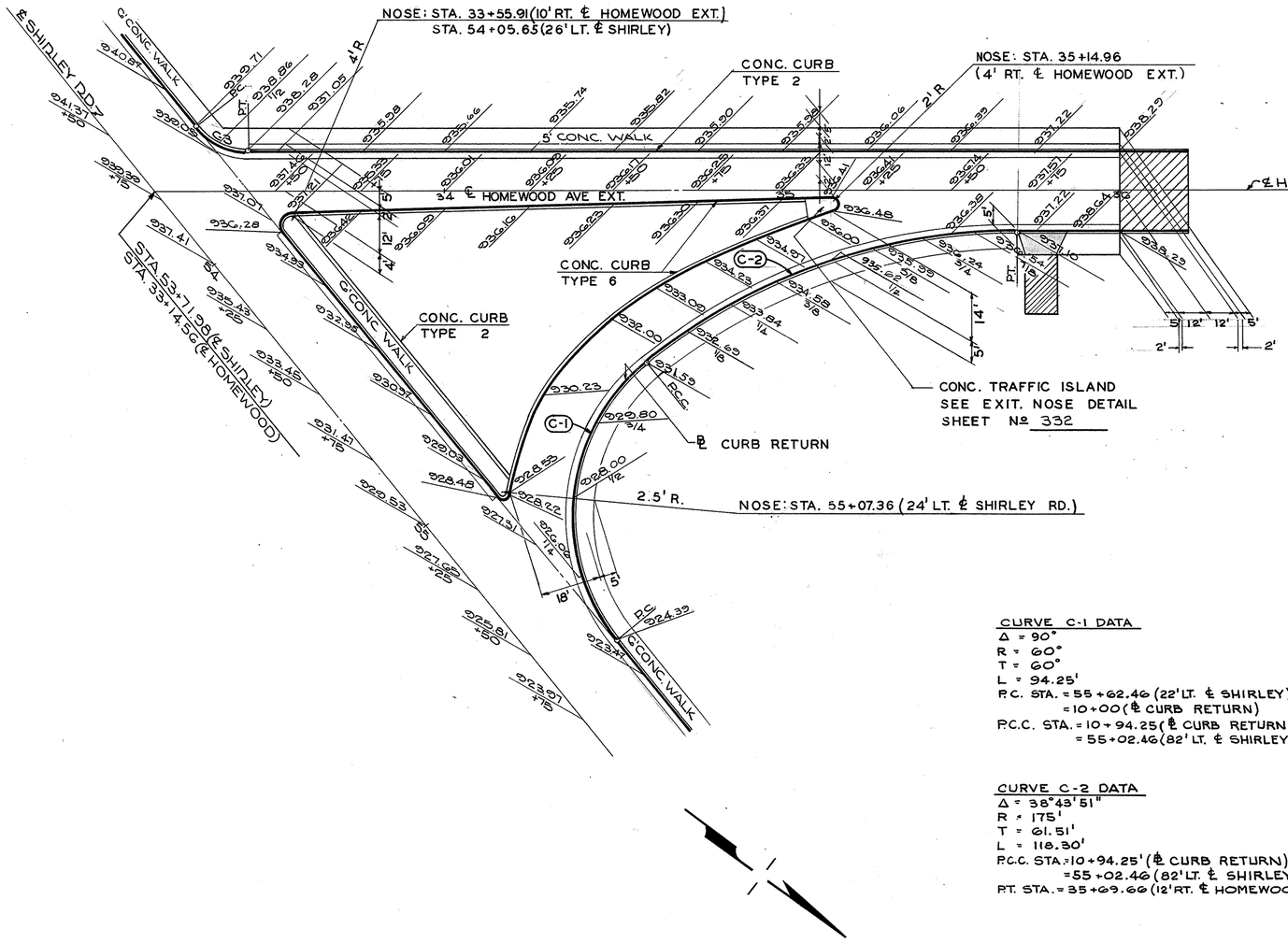
& SHIRLEY RD
STA 53+11.98 & SHIRLEY
STA 33+14.56 & HOMEWOOD

EXIST. CONC. WALK
12" T.P. GAS
6" WATER
6" CONC. CURB
2½ STY. FR. #2512
CONC.
DIRT
BRICK
BRICK GAR.
5-12" ASH
10" ASPH. DR.
#1745
STONE WALL
STONE WALL
STONE WALL

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

221
656



CURVE C-1 DATA
Δ = 90°
R = 60°
T = 60°
L = 94.25'
P.C. STA. = 55+62.46 (22' LT. ℄ SHIRLEY)
= 10+00 (℄ CURB RETURN)
P.C.C. STA. = 10+94.25 (℄ CURB RETURN)
= 55+02.46 (82' LT. ℄ SHIRLEY)

CURVE C-2 DATA
Δ = 38°43'51"
R = 175'
T = 61.51'
L = 118.30'
P.C.C. STA. = 10+94.25' (℄ CURB RETURN)
= 55+02.46 (82' LT. ℄ SHIRLEY)
P.T. STA. = 35+69.66 (12' RT. ℄ HOMEWOOD)

CURB RETURN C-3 DATA
Δ = 51°16'19"
R = 20'
T = 9.60'
L = 18.05'
P.C. STA. = 53+64.64 (22' LT. ℄ SHIRLEY)
P.T. STA. = 33+42.73 (12' LT. ℄ HOMEWOOD EXT.)

SCALE
0 20 40 60 80 100

HOMEWOOD AVE. PAVEMENT DETAILS

MAY 28 1971

CU. YDS.		3	17	46	37	0	0
	CUT	11	49	132	393	741	620
END AREA	FILL	0	8	10	39	0	0
	CUT	0	31	22	120	304	497	172

FED. RD.	STATE	PROJECT	
2	OHIO		

222
656

MAH-680-6.98

FINAL SURVEY
NOTE BOOK
NO.
BY
DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY
NOTE BOOK
NO.
BY
DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

R W
L A / RW
STA. 36+20
EL EV.= 939.51
P.G.= 939.51
ZERO SECTION

R W
L A/RW
STA. 36+00
ELEV. = 938.65
P.G.= 938.75

STA. 35+71 (DR. RT)
ELEV. = 937.22
P.G.= 937.80

R W
L A/RW
STA. 35+50
ELEV.= 936.77
P.G.= 936.74

BEND LINE
R W
50'
4:1
L A
2:1
STA. 35+00
ELEV.= 936.0
P.G.= 936.33

MATCH-STA. 11+09.04
(HOMEWOOD AVE. CURVE)
2:1
GARAGE
STA. 34+50
ELEV= 943.0
P.G.= 936.17

HOUSE
2:1
STA. 34+00
ELEV= 943.0
P.G.= 936.01

MATCH-STA. 10+70.69 (HOMEWOOD AVE. CURVE)
2:1

MATCH-STA. 54+00
(SHIRLEY ROAD)
STA. 33+50
ELEV. = 937.60
P.G.= 937.46
2:1

MAY 25 1971
RRC 6/27/68
PUD 8/30/68

HOMEWOOD AVE.
STA. 33+50 TO STA. 36+20

SEEDING	SQ. YDS.	2	22	136	200	236	228	26
END AREA	WIDTH	0	2	6	43	29	56	

945 940 935 950 945 940 935 950 945 940 935 950 945 940 935 950 945 940 935

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45

PLATE 3-CROSS SECTION O F R & R E STANDARD
NATIONAL TRACING PAPER DIVISION
T. R. P. C., CO., INC. INDIANAPOLIS, INDIANA

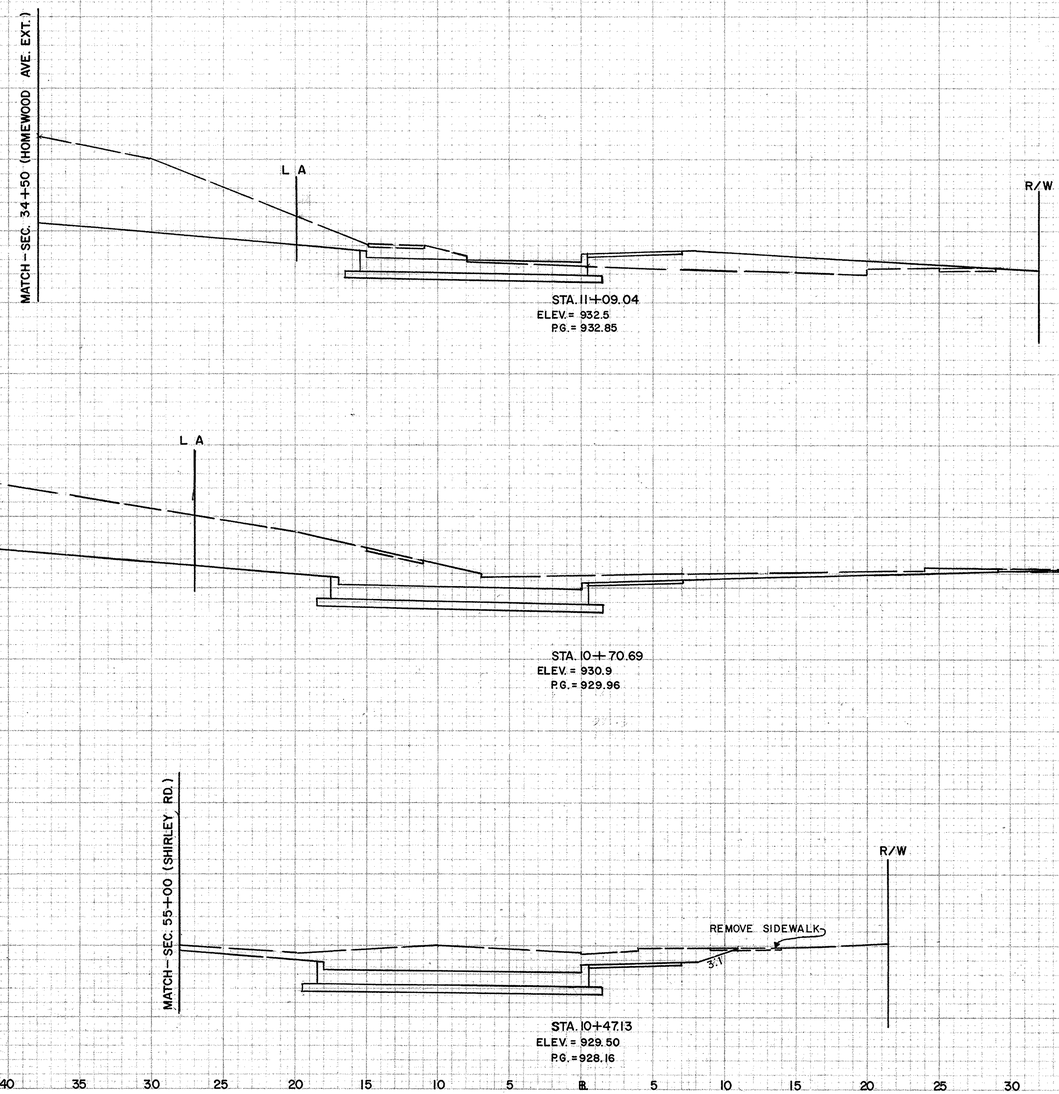
FED. RD.	STATE	PROJECT	
2	OHIO		

223
656

MAH – 680 – 6.98

SEEDING	
END WIDTH	SQ. YDS.
47	224
58	107
24	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	111	0	
	214	0	
	191	0	
	115	0	
	72	0	



FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

RRC 6/27/68
PSD 8/30/68

HOMEWOOD AVE.
STA. 10+47.13 TO STA. 11+09.04

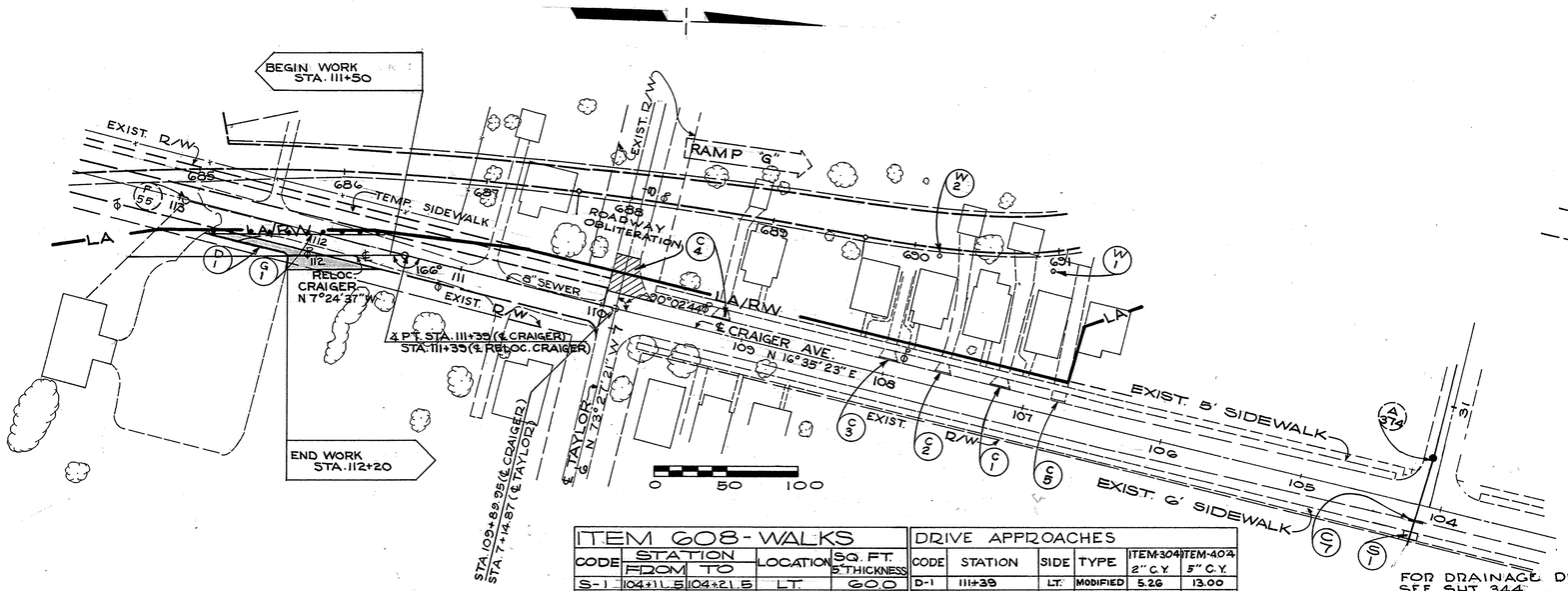
MAY 25 1971

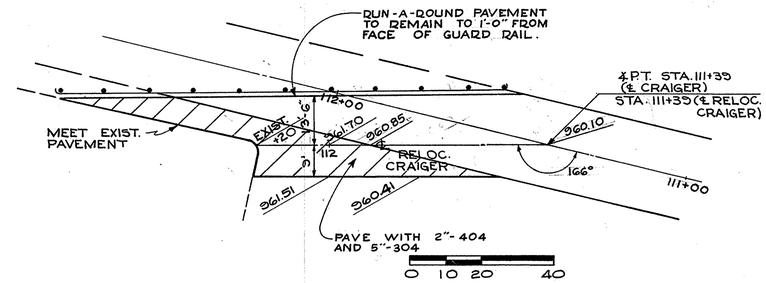
PLATE 2 CROSS SECTION U P N A R L STANDARD
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

224
656





ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	104+11.5	104+21.5	LT.	60.0
TOTAL				60.0

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	ITEM-304 2" C.Y.	ITEM-404 5" C.Y.
D-1	111+39	LT.	MODIFIED	5.26	13.00
SHEET TOTAL				5.26	13.00

FOR DRAINAGE DETAILS SEE SHT. 344

FOR WATER DETAILS SEE SHT. 378

ITEM 609 CONCRETE CURB - L.F.

CODE	STATION FROM	STATION TO	TYPE 6
C-1	107+13	107+27	14.0
C-2	107+53	107+63	10.0
C-3	107+90.5	108+05.5	15.0
C-4	109+12	109+20	8.0
C-5	106+75	106+83	8.0
C-7	104+11.5	104+21.5	10.0
TOTAL			65.0

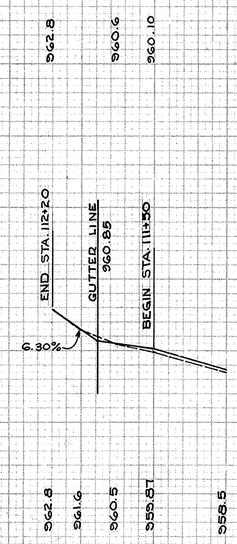
SPECIAL ITEM - DRILLED WELL ABAN'D.

CODE	STATION	LOC.	DRILLED WELL-EA.
W-1	107+01	97' RT. ℄	1
W-2	107+82	88' RT. ℄	1
SHEET TOTAL			2

ITEM 606 - GUARD RAIL LINEAR FT.

CODE	LOCATION	TYPE 5
G-1	112+00 (EXIST. ℄) SKEWED	125
TOTAL		125

B.M.# 26 A - TOP NORTH BOLT FIRE HYDRANT IN FRONT OF 2514 CRAIGER 190' SOUTH OF HOMEWOOD - 450' RT. ℄ STA. 690+40 ELEV. = 944.526



MAY 25 9/1

R.R.C. 4/14/69
C.A.P. 4/17/69

RELOC. CRAIGER AVE.

PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG — MADE AND PRINTED IN U.S.A.
NATIONAL TRACING PAPER DIVISION

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

225
656

CURB-1 RETURN
Δ = 90°00'09"
R = 20'
T = 20'
L = 31.42'
P.C. STA. 45+19.42
13.5' LT. & HUMBOLT
P.T. STA. 10+33.50
12' LT. & CONNECTOR

CURB-2 RETURN
Δ = 89°59'51"
R = 20'
T = 20'
L = 31.42'
P.C. STA. 45+83.42
13.7' LT. & HUMBOLT
P.T. STA. 10+33.70
12' RT. & CONNECTOR

CURB-3 RETURN
Δ = 65°00'30"
R = 20'
T = 12.74'
L = 22.69'
P.C. STA. 13+44.15
12' LT. & CONNECTOR
P.T. NO STA. MEET
EXIST. CURB LINE

CURB-4 RETURN
Δ = 90°48'51"
R = 20'
T = 20.28'
L = 31.70'
P.C. STA. 13+42.67
12' RT. & CONNECTOR
P.T. NO STA. MEET
EXIST. CURB LINE

BEGIN WORK STA. 10+13.70

STA. 10+00 ℄ CONNECTOR ℄ HUMBOLT

STA. 13+73.00 ℄ CONN. STA 45+41.44 ℄ TAFT

END WORK STA. 13+60

FOR PAVEMENT DETAILS SEE SHEET Nº 226

0 10 20 40

BM #27 TOP N. BOLT FIRE HYD. N.W. CORNER SHIRLEY RD. AND HUMBOLT AVE.
ELEV. = 982.785

℄ TAFT-HUMBOLT CONNECTOR
CURVE DATA
Δ = 31°21'31" RT.
R = 175'
T = 49.12'
L = 95.78'
CH = 94.59'
E = 6.76'
P.C. STA. 11+38.66 ℄ CONNECTOR
P.T. STA. 12+34.44 ℄ CONNECTOR

℄ CURVE DATA TAFT AVE.
Δ = 56°50'50" LT.
R = 135.38'
T = 73.27'
L = 134.32'
CH = 128.87'
P.C. STA. 44+87.32
P.T. STA. 46+21.64

DRIVE APPROACHES							
CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 SQ. YDS. 7" THICKNESS
D-1	11+10±	RT.	IV	13'	10'	227	17.22
D-2	12+75	RT.	IV	13'	10'	227	17.22
TOTAL							34.44

ITEM 604-MANHOLES, CATCH BASINS & INLETS - EACH					
CODE	STATION	LOCATION	Nº 1 M.H.	Nº 1 SANT. M.H.	C.O.Y. Nº II INLET
A-58	12+37	12' RT. ℄			1
A-59	12+37	12' LT. ℄			1
A-351	12+37	℄	1		
A-352	45+41.44	4'± LT. ℄ TAFT.		1	
TOTAL			1	1	2

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
1128	38	466

ITEM-608- WALKS				
CODE	STATION FROM	STATION TO	LOCA.	SQ. FT. 5" THICK
S-1	45+19.42(H)	45+08(T)	LT.	1,629.15
S-2	45+68.42	45+83.42	LT.	75.00
S-3	45+55	45+71	RT.	87.50
TOTAL				1,791.65

ITEM-609-CONCRETE CURB LIN. FT.				
CODE	STATION FROM	STATION TO	TYPE ℄	
C-1	10+13.5	TAFT AVE.	371.46	
C-2	10+13.5	TAFT AVE.	365.58	
			737.04	

ITEM 604-MONUMENTS ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	10+00	℄	1
RM-2	11+38.44	℄	1
TOTAL			2

PAVEMENT REPLACEMENT				
CODE	LOCATION	PROPOSED CONDUIT	1¼"-404 C.Y.	8"-305 S.Y.
Y-1	TAFT AVE.	P-351	0.29	8.46
TOTAL			0.29	8.46

A-58
604 C.O.Y. Nº 2 INLET
STA. 12+37 12' RT. ℄
TOP ELEV. = 980.02
WINDOW ELEV. = 979.27
℄ 12" = 975.96

A-59
604 C.O.Y. Nº 2 INLET
STA. 12+37
12' LT. ℄
TOP ELEV. = 980.02
WINDOW ELEV. = 979.27
℄ 12" = 975.96

ITEM 603 CONDUITS - LINEAR FEET					
CODE	STATION FROM	STATION TO	PROFILE SHEET Nº	TYPE B-B 12"	TYPE B-B 15"
P-58	A-58	A-351	225	13	
P-59	A-59	A-351	225	13	
P-351	A-351	A-352	225		139
TOTAL				26	139

A-351
604 STD. Nº 1 M.H.
STA. 12+37 ℄
COVER ELEV. = 979.71
℄ 12" = 975.83
℄ 15" = 973.46
℄ 12" = 975.83

A-352
604 Nº 1 SANT. M.H.
STA. 45+41.17
4'± LT. ℄ TAFT
COVER ELEV. = 982.0
℄ EXIST. 15" = 970.17
℄ PROP. 15" = 971.79

MAY 25 1971
R.R.C. 7/24/68
PWD 8/30/68

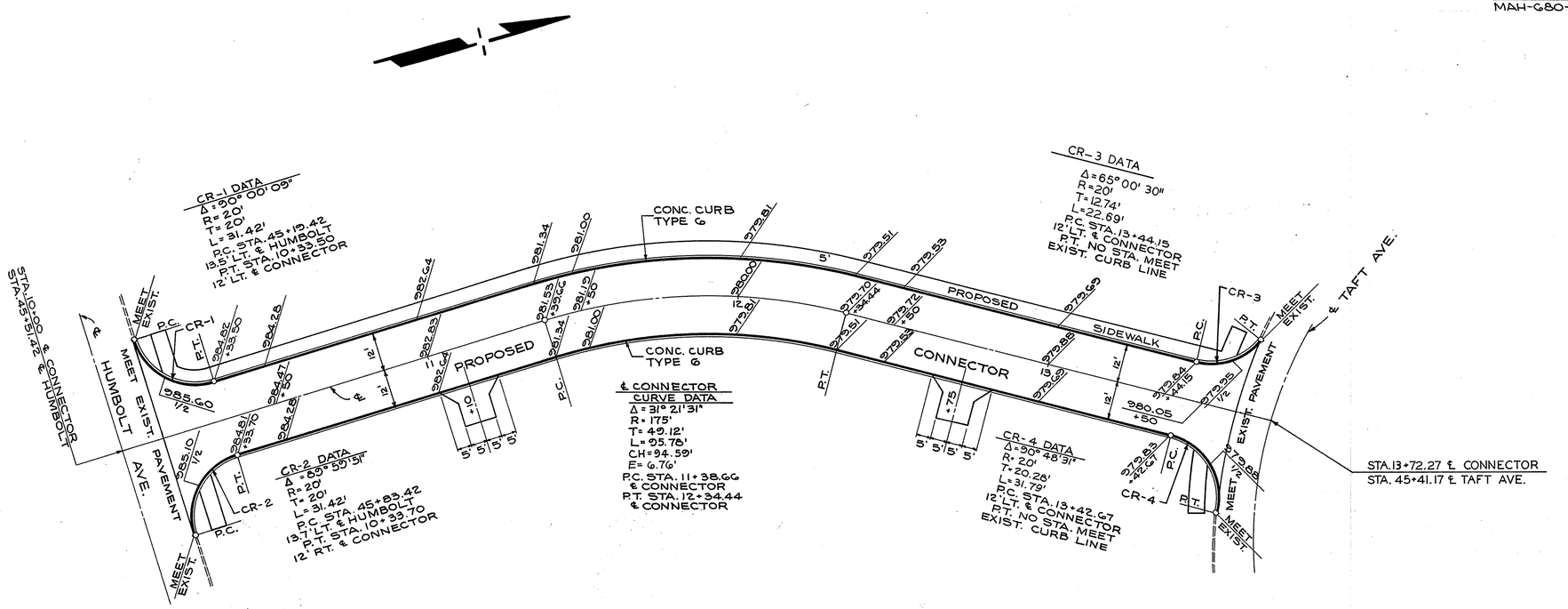
HUMBOLT - TAFT CONNECTOR
STA. 10+00 TO STA. 13+72.27

PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

226
656



SCALE
0 20 40 60 80 100

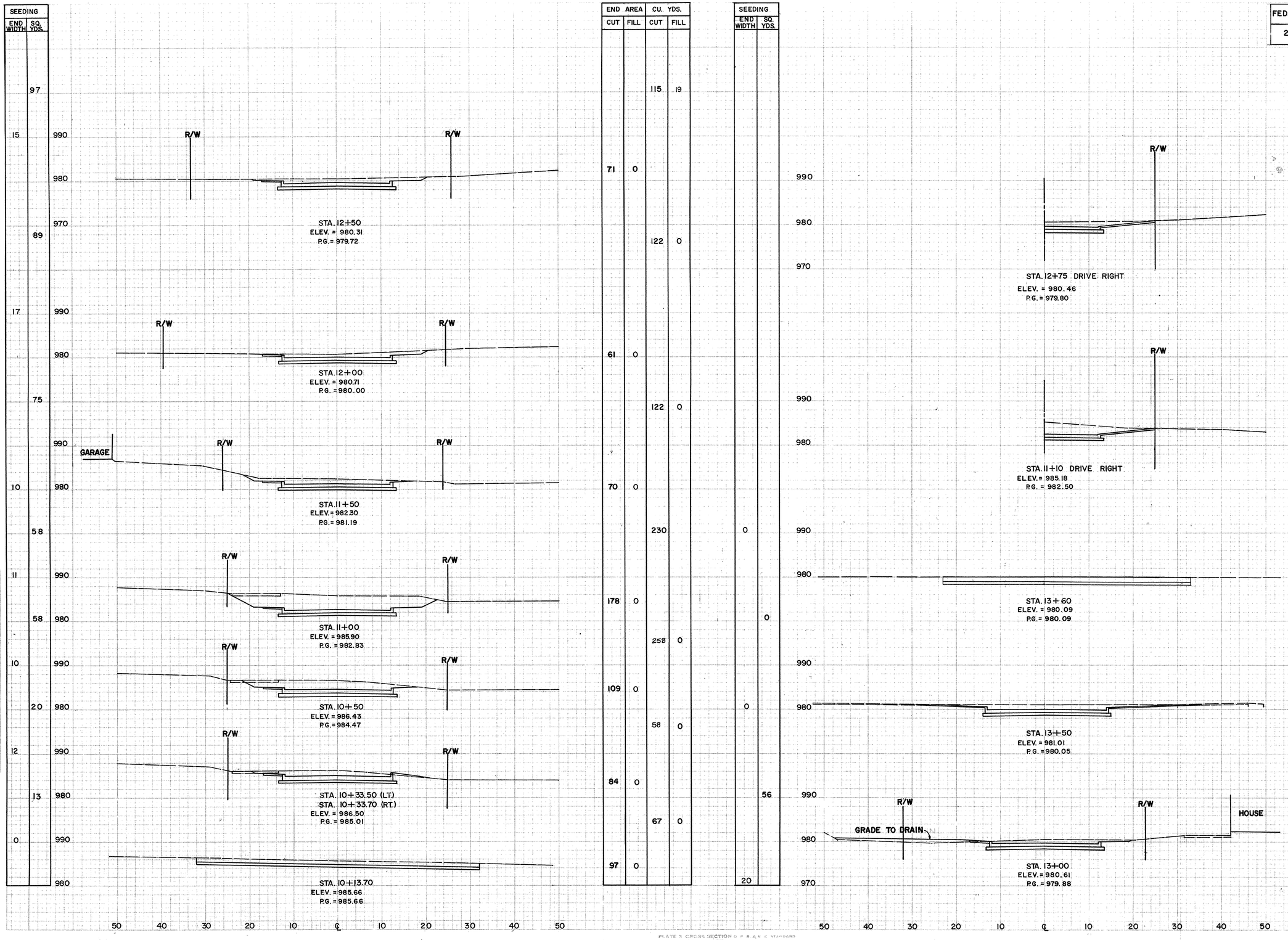
MAY 25 1971

PAVEMENT DETAIL
HUMBOLT – TAFT CONNECTOR

FED. RD.	STATE	PROJECT	
2	OHIO		

227
656

MAH — 680 — 6.98



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	97			115	19
15		71	0		
	89			122	0
17		61	0		
	75			122	0
10		70	0		
	58			230	
11		178	0		
	58			258	0
10		109	0		
	20			58	0
12		84	0		
	13			67	0
0		97	0		

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		104	0		
	0			34	0
		78	0		
	56			122	19
		53	21		
	20				

RRC 6/24/68
PWD 8/30/68
MAY 25 1971

HUMBOLT - TAFT CONNECTOR
X - SECTIONS

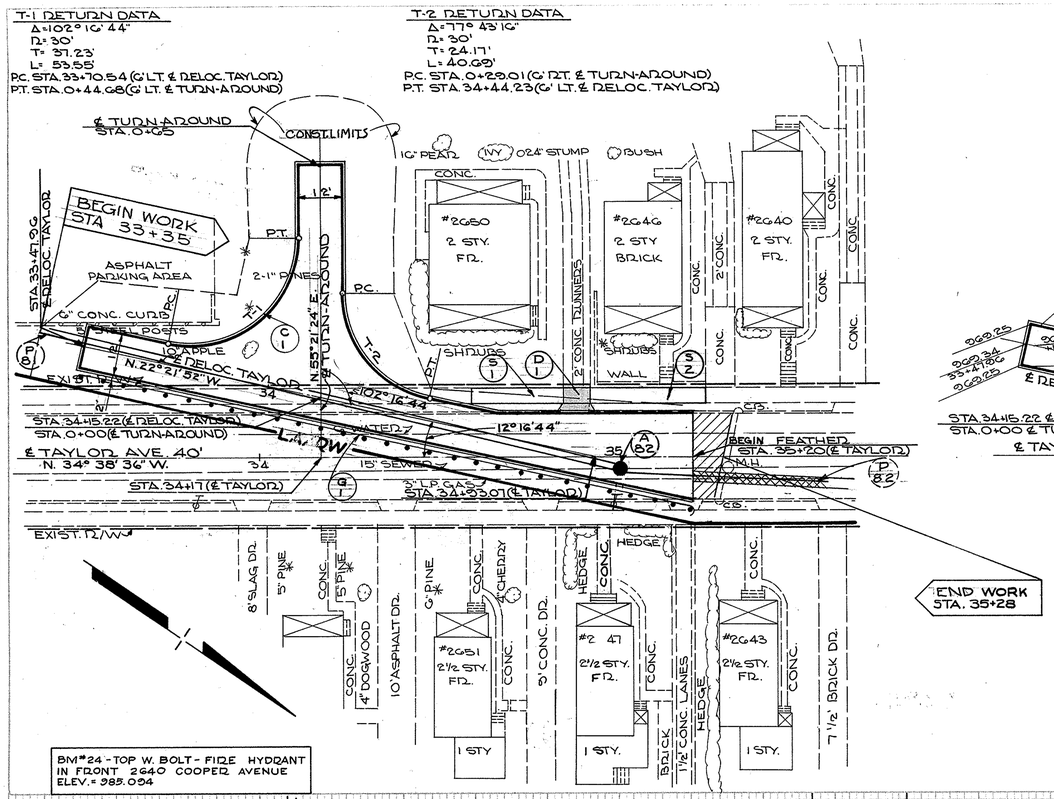
FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK — NO. — DATE

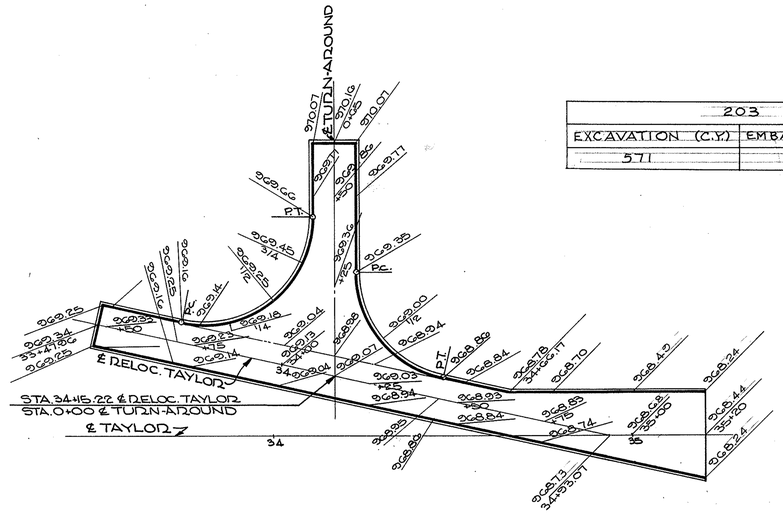
ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK — NO. — DATE

PLATE 3 CROSS SECTION O. P. R. & R. C. STANDARD
NATIONAL TRACING PAPER DIVISION

T-1 RETURN DATA
Δ=102° 16' 44"
R= 30'
T= 37.23'
L= 53.55'
P.C. STA. 33+70.54 (℄ LT. & RELOC. TAYLOR)
P.T. STA. 0+44.68 (℄ LT. & ℄ TURN-AROUND)

T-2 RETURN DATA
Δ=77° 43' 16"
R= 30'
T= 24.17'
L= 40.69'
P.C. STA. 0+29.01 (℄ RT. & ℄ TURN-AROUND)
P.T. STA. 34+44.23 (℄ LT. & ℄ RELOC. TAYLOR)





203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
571	83	586

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

228
656

ITEM 609 - CONCRETE CURB

CODE	STATION FROM	STATION TO	TYPE 6	
C-1	35+20 (LT.)	35+20 (RT.)	452.51	
	TOTAL		452.51	

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCA	SQ. FT. 5" THICKNESS
S-1	34+58	34+83.5	LT.	110.25
S-2	34+91.5	35+23.5	LT.	144.00
	TOTAL			254.25

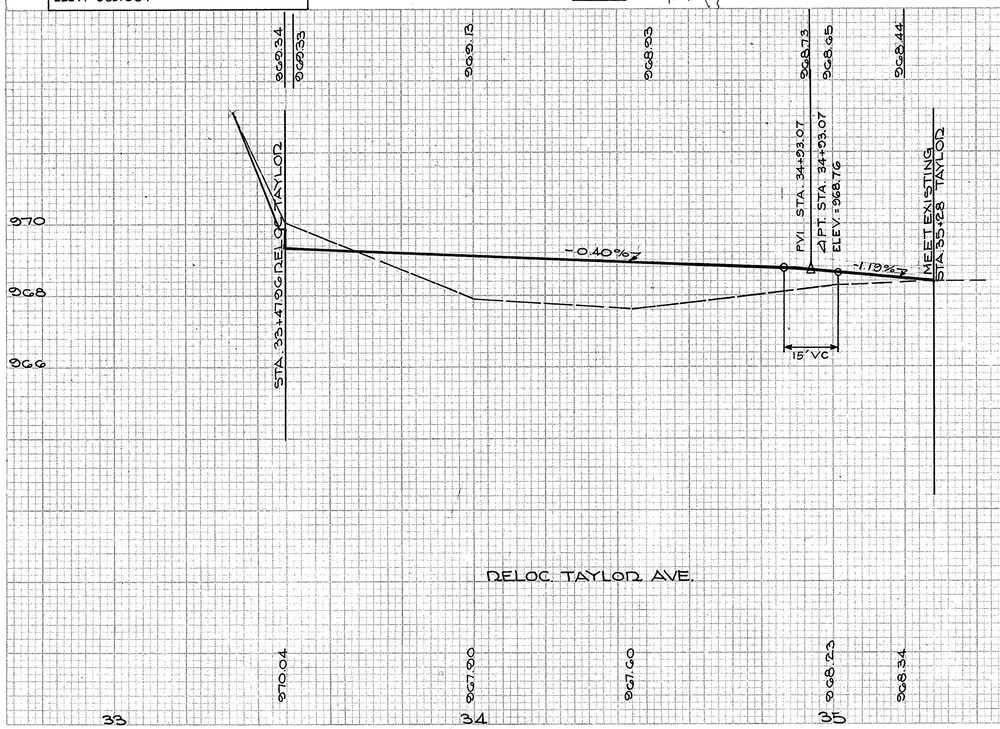
DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	'L'	'W'	PROFILE SHT. NO.	ITEM 452 SQ. YDS. 7" THICKNESS
D-1	34+87.5	LT.	II	7'	8'	229	7.78
	TOTAL						7.78

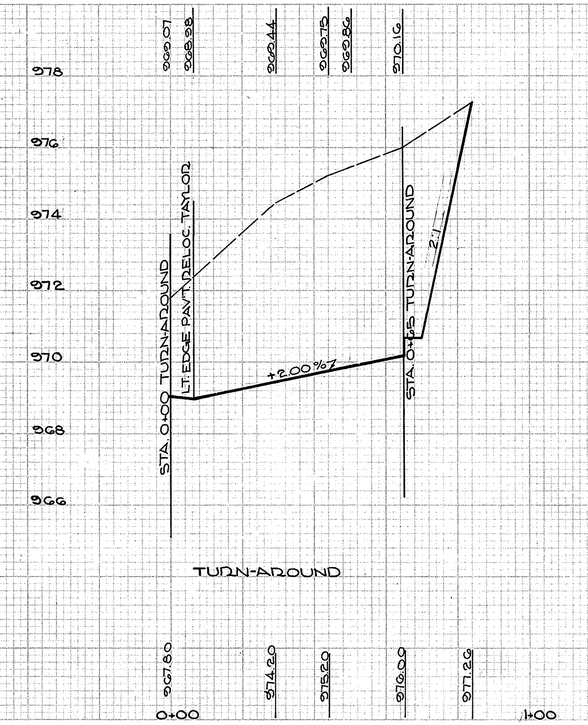
ITEM 606 - GUARD RAIL - LIN. FT.

CODE	LOCATION FROM	LOCATION TO	TYPE 5	ANCHOR ASSEMBLY EACH
G-1	33+35	35+20	185	2
	TOTAL		185	2

FOR DRAINAGE DETAILS
SEE SHEET Nº 345
FOR WATER LINE DETAILS
SEE SHEET Nº 379



RELOC. TAYLOR AVE.



TURN-AROUND

R.R.C. 5/24/68
P.W.D. 8/30/68
MAY 25 1971

RELOC. TAYLOR AVE. SOUTH TURN-AROUND STA. 33+47.96 TO 35+2

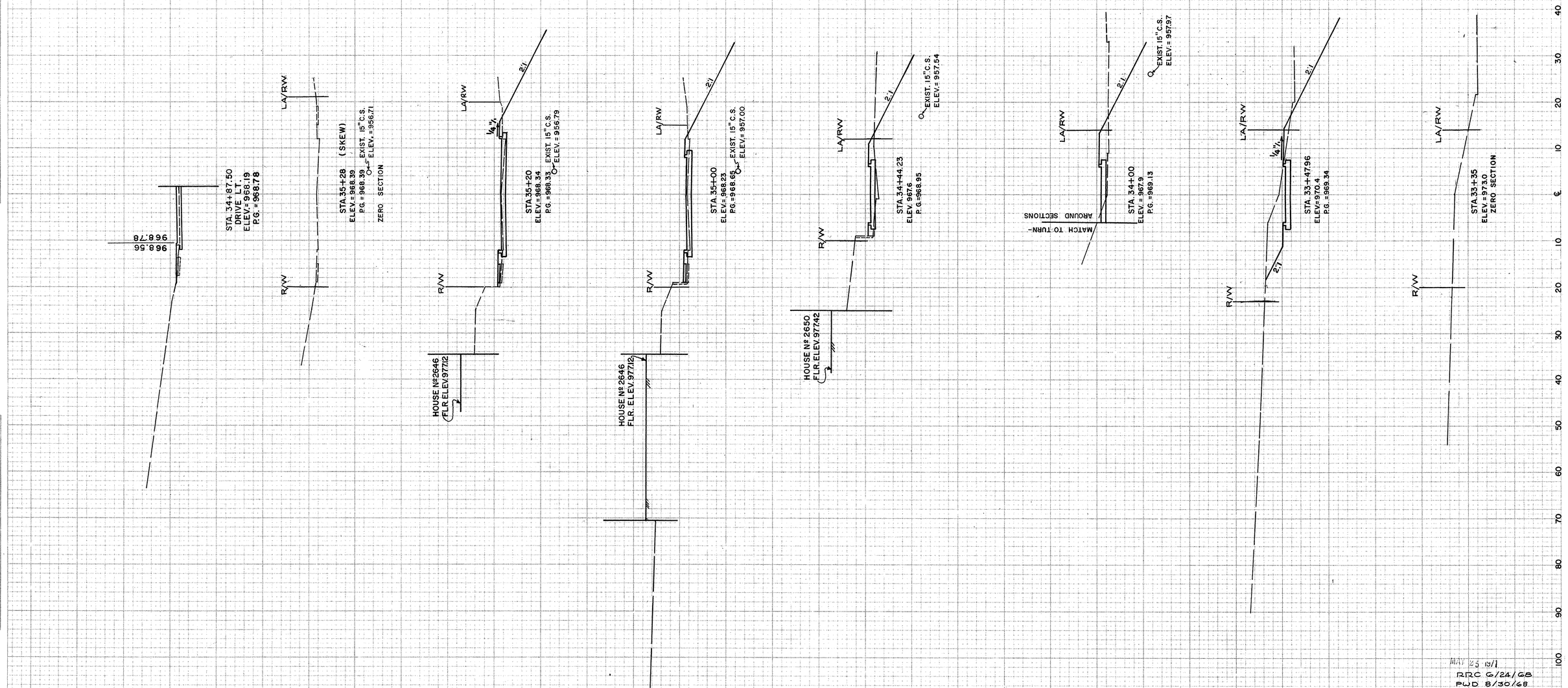
PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

FED. RD.	STATE	PROJECT	
2	OHIO		

229
656

MAH—680—6.98

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0		
		3	1
21	6		
		14	5
18	7		
		21	20
2	12		
		6	28
5	22		
		67	25
65	4		
		16	
0	0		



MAY 25 1971
RRC 6/24/68
PWD 8/30/68

RELOCATED TAYLOR AVE. SOUTH TURNAROUND

STA. 33+35 TO STA. 35+28

SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	5
12	
	26
11	
	62
9	
	42
8	
	93
24	
	42
35	

FINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

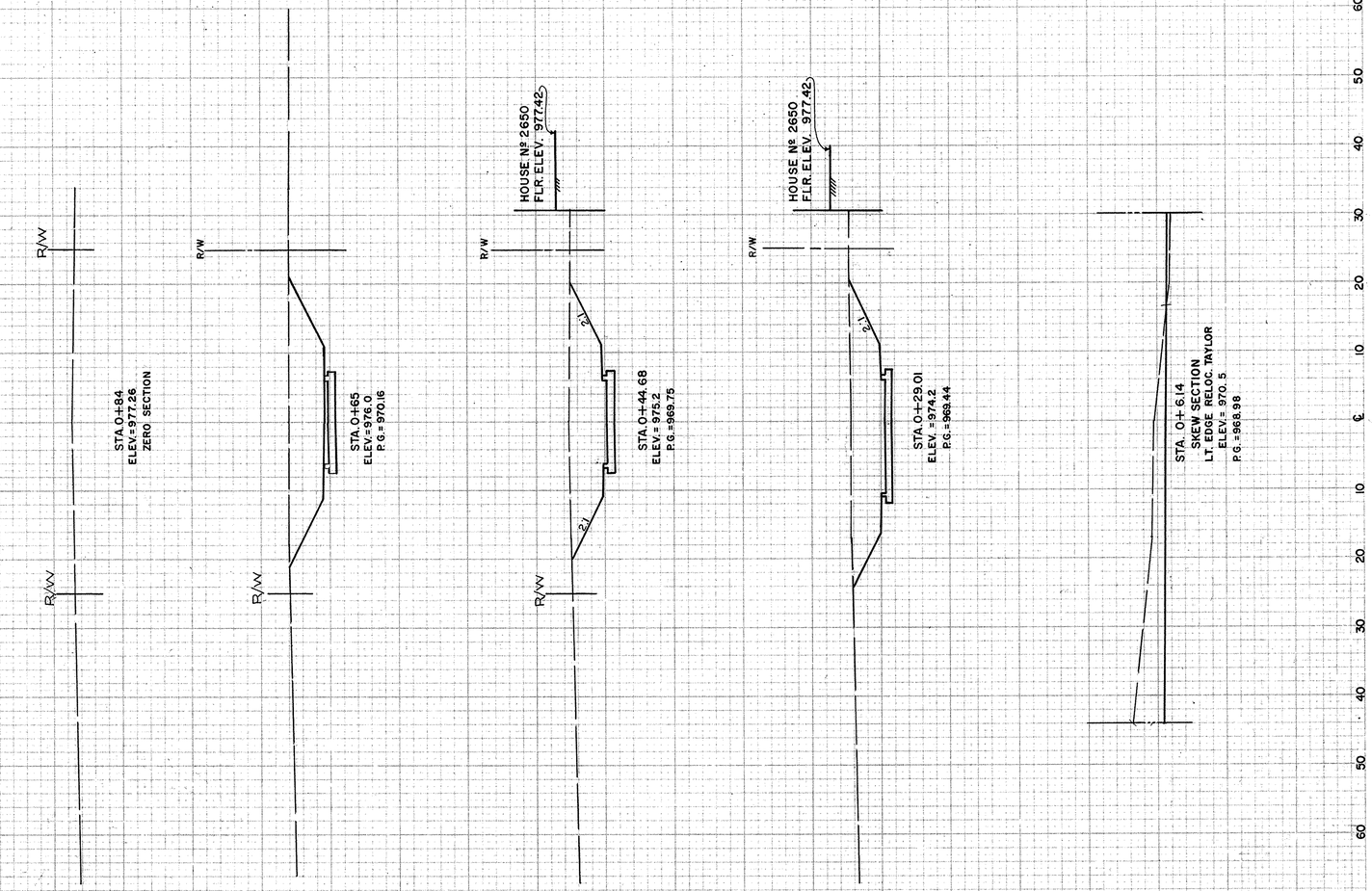
PLATE 3 CROSS SECTION O.P.R.A.R.E. STANDARD
NATIONAL TRACING PAPER DIVISION
I.B.P.A.L. CO. INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

230
656

MAH-680-6.98

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0		
		67	0
191	0		
		137	0
173	0		
		105	0
189	0		
		135	3
129	6		



SEEDING SQ. YDS.	END WIDTH
	50
108	
	52
102	
	38
63	
	34
43	
	0

980 970 980 970 960 980 970 960 980 970 960 980 970 960

MAH-680-6.98

RELOCATED TAYLOR AVE. SOUTH TURNAROUND

STA. 0+29.01 TO STA. 0+84

RRC. 6/24/68
PUD 8/30/68

FINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS, CROSS CHECKED, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS, CROSS CHECKED, NO., BY, DATE

PLATE 3-CROSS SECTION C P P O W E R STANDARD
NATIONAL TRACING PAPER DIVISION
I. B. M. A. S. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

231
656

MAH. 680-6.98

ITEM-609 CONCRETE CURB LIN. FEET

CODE	STATION FROM	STATION TO	TYPE G	
C-1	45+30.10 RT.	45+99 LT.	189	
TOTAL			189	

ITEM 608- WALKS

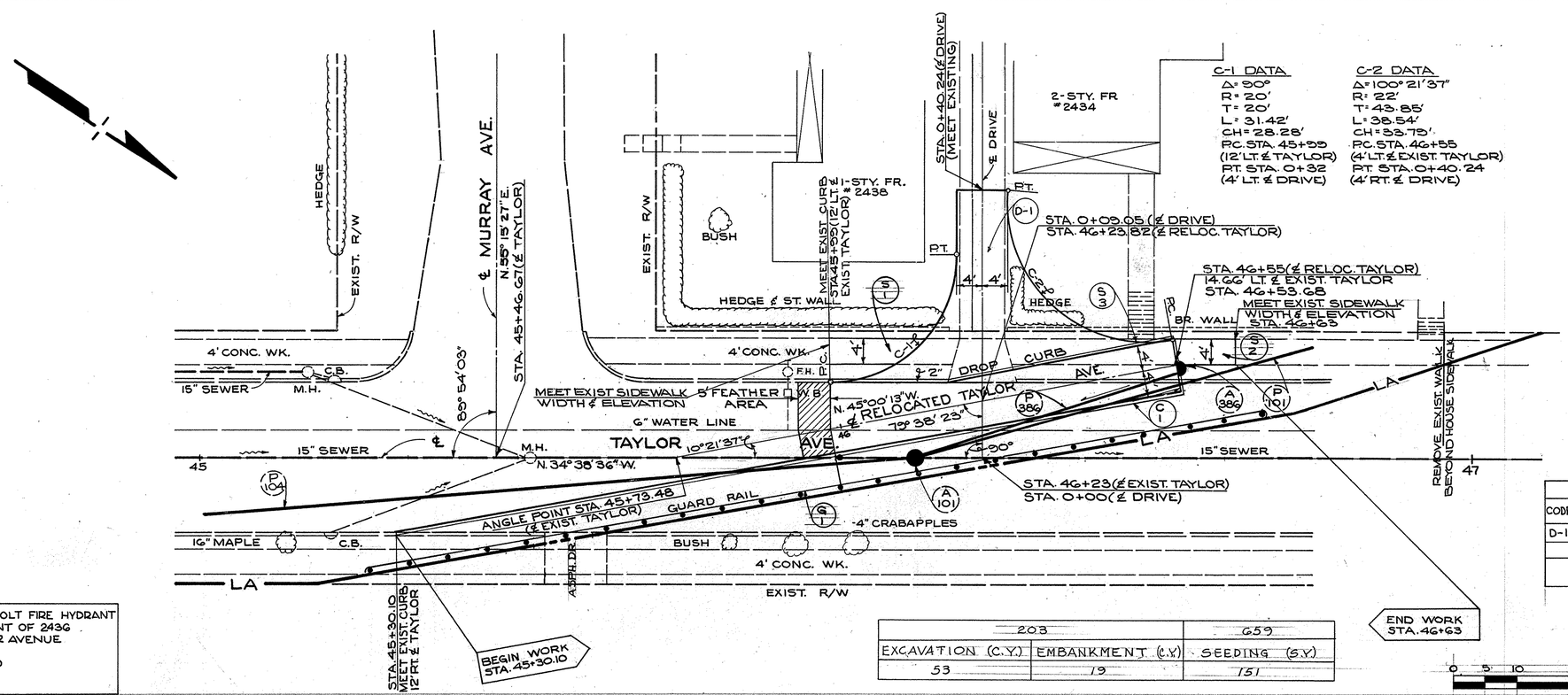
CODE	STATION FROM	STATION TO	LOCA.	SQ. FT. 5" THICKNESS
S-1	45+99	46+11.5	LT	50.0
S-2	46+53.5	46+63	LT	38.0
S-3	46+48	46+52.5	LT	2.0
TOTAL				90.0

ITEM 606-GUARD RAIL-LIN. FT.

CODE	STATION FROM	STATION TO	TYPE	ANCHOR ASSEMBLY EACH
G-1	45+33	46+61	87.5	2
TOTAL			87.5	2

DRIVE APPROACH

CODE	STATION	SIDE	L	W	PROFILE SHT. Nº	404-2" CU. YDS.	304-5" CU. YDS.
D-1	46+23.82	LT.	—	8'-0"	232	2.80	6.91
TOTAL						2.80	6.91



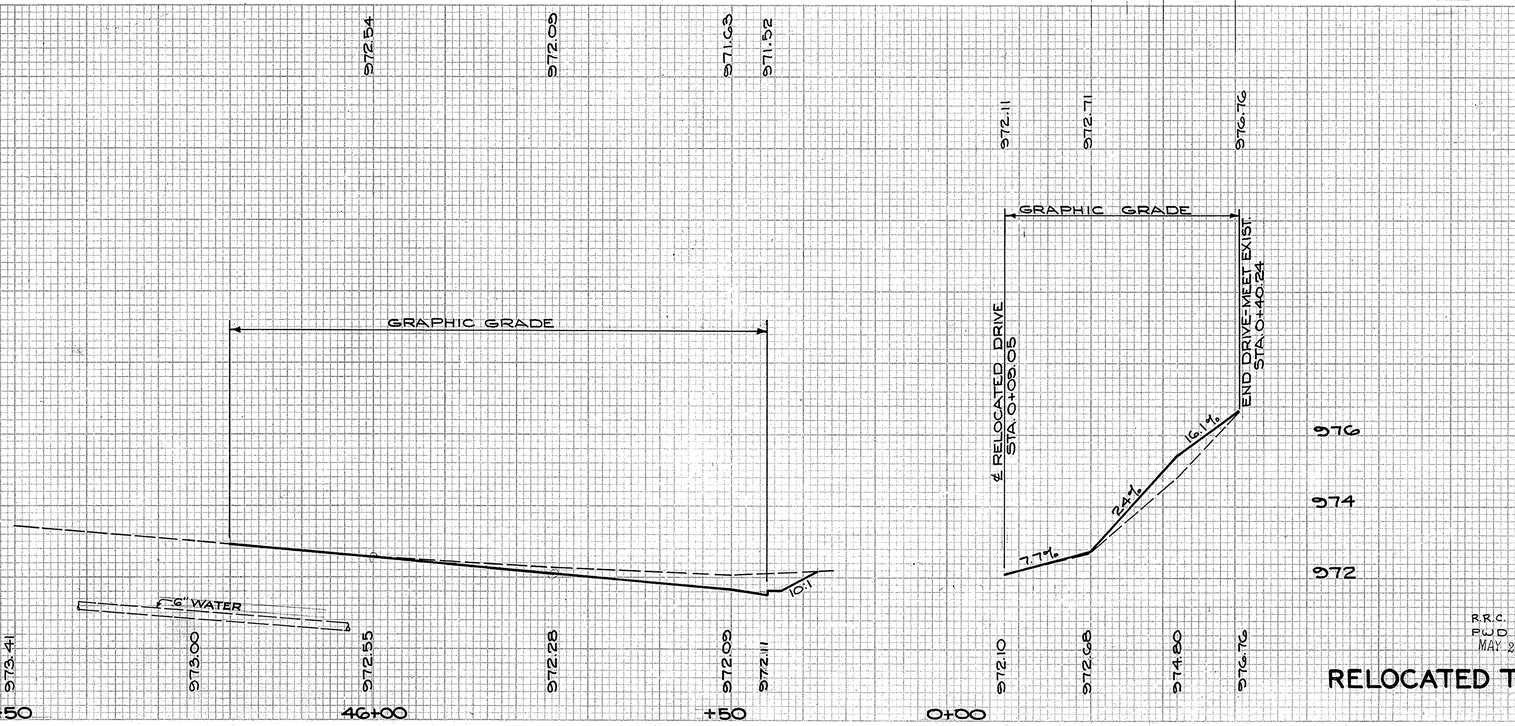
203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
53	19	151

BM#21 - TOP S. BOLT FIRE HYDRANT IN FRONT OF 2436 COOPER AVENUE.

ELEV. - 996.700

FOR DRAINAGE DETAILS SEE SHEET Nº 348

FOR WATER LINE DETAILS SEE SHEET Nº 370



R.R.C. 8/24/68
P.E.D. 8/30/68
MAY 26 1971

RELOCATED TAYLOR AVE

PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

END AREA		CU YDS.	
CUT	FILL	CUT	FILL
49	0		
		13	1
12	1		
		2	1
0	0		
		0	1
0	0		
		2	1
13	2		
		13	2
13	3		
		13	2
15	2		
		6	5
12	3		
		1	5
1	8		
		1	1
0	3		
		0	1
0	0		

MAH-680-6.98

FED. RD.	STATE	PROJECT	
2	OHIO		

232
656

FINAL SURVEY — SURVEYED — PLOTTED — LOCS. RIG. TEMPLATE — AREAS — CHECKED — NO.

ORIGINAL SURVEY — SURVEYED — PLOTTED — NOTE BOOK TEMPLATE — AREAS — CHECKED — NO.

BRICK WALL

℄ DRIVE

STA. 00+20 (℄ DRIVE) EXIST.=972.68 P.G.=972.71

STA. 00+32 (℄ DRIVE) EXIST.=974.80 P.G.=975.43

HOUSE 2438

STA. 00+40.24 (℄ DRIVE)

ZERO SECTION STA. 46+62

MATCH LINE - ℄

LA/RW

97.1.60
972.10
97.1.43
97.1.33
RW

STA. 46+55 EXIST = 972.11 P.G. = 971.52

EXIST. 15" C.S. ELEV.= 959.15

MATCH LINE - ℄

LA/RW

97.1.71
972.21
97.2.02
RW

STA. 46+50 EXIST = 972.09 P.G. = 971.63

MATCH LINE - ℄

LA/RW

STA. 46+25 DRIVE LT. EXIST = 972.28 P.G. = 972.09

MATCH LINE DRIVE
972.71 0+20

7.7%

24%

975.11 0+30

16.1%

END DRIVE
976.76 0+40.24

MATCH LINE - ℄

LA/RW

97.2.62
973.12
97.2.89
97.2.39
RW

STA. 46+00 EXIST = 972.85 P.G. = 972.54

2' BRICK WALL

MATCH LINE - ℄

LA/RW

EXIST. 15" C.S. ELEV. = 961.87

97.3.34
97.2.84

STA. 45+75 EXIST = 973.00

MATCH LINE - ℄

973.61
973.01

STA. 45+50 DRIVE LT. EXIST = 973.41

MATCH LINE - ℄

STA. 45+30.10 EXIST = 973.46

RR 6/24/68
PUD 8/30/68

MAY 25 1971

RELOCATED TAYLOR AVE.
STA. 45+30.10 TO STA. 46+55

SEEDING END WIDTH	SQ. YDS.
6	
	11
10	
	13
18	
	0
13	
	4
37	
	12
25	
	6
25	
	12
32	
	11
26	
	8
8	
	0

975 970 980 975 975 970 975 970 975 970 975 970 975 975

40 30 20 10 ℄ 10 20 30 40

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

233
656

BEGIN WORK STA. 47+53.45

CURB RETURN T-1 DATA
Δ = 89°57'15"
R = 15'
T = 14.99'
L = 23.55'

CURB RETURN T-2 DATA
Δ = 90°57'54"
R = 25'
T = 28.24'
L = 42.31'

AU-78
604 ADJUST TO GRADE
STA. 40+29.22
EXIST. COVER EL. = 973.67
PROP. COVER EL. = 973.51
E. EXIST. 12" = 965.12

℄ INDIANOLA AVE. STA. 48+20.43
℄ TAYLOR AVE. STA. 39+96.22

P.T. STA. 47+23.45
14' LT. ℄ INDIANOLA

P.T. STA. 40+23.20
12' LT. ℄ TAYLOR AVE.

6" L.P. GAS

12" ℄ WATER

3" L.P. GAS

EXIST. R/W

P.C. STA. 40+40.04
12' RT. ℄ TAYLOR AVE.

TAYLOR AVE.
N-34° 30' 00"-W

P.T. STA. 48+52.82
15' RT. ℄ REL. INDIANOLA

P.C. STA. 48+02.59
15' LT. ℄ RELOC. INDIANOLA AVE.

BRICK BLDG.

5' BRICK STEPS W/ WALLS

5' SIDEWALK 25'-0"

END APPROACH SLAB STA. 48+68.24

48+00

49+00

℄ INDIANOLA AVE. N-48° 23' 30"-E

7 COUPLINGS @ 5'-0"

RELOCATED

15" C.S.

SIGN

5' SIDEWALK

STA. 48+92
REDUCER COUPLING

EX. WM REMOVED
F.H. UNDER ITEM 208

CONC. APPR.

10" MAPLE

10' ASPH. DR.

FR. HOUSE

DET. WALL @ 28.50

10' SLAG DRIVE

CURB RETURN DATA
Δ = 89°04'16"
R = 25'
T = 22.15'
L = 38.25'

BRICK DWG.

BRICK APPR.

TO LOC. TAN. 83°05'42"

EXIST. R/W

STA. 628+72.91 I-680
STA. 50+00.51 ℄ RELOCATED INDIANOLA AVE.

M.H.

3" L.P. GAS

BEGIN APPROACH SLAB STA. 50+77.78

EXIST. R/W

10" BUCKEYE

SIGN

BRICK GARAGE

BRICK BLDG. STA. 50+74

REDUCER COUPLING

BRICK WALL

CURB RETURN DATA
Δ = 96°55'44"
R = 25'
T = 28.22'
L = 42.29'

P.C. STA. 51+12.30
15' RT. ℄ REL. INDIANOLA AVE.

P.T. STA. 39+44.80
12' LT. ℄ HOMEWOOD AVE.

EXIST. 5' SIDEWALK

LAYDOWN

CURB RETURN T-3 DATA
Δ = 90°02'45"
R = 15'
T = 15.01'
L = 23.57'

P.T. STA. 39+67.30
12' LT. ℄ TAYLOR AVE.

15" C.S.

39.50

P.C. STA. 48+52.82
15' RT. ℄ REL. INDIANOLA

CURB RETURN T-4 DATA
Δ = 89°02'06"
R = 25'
T = 22.13'
L = 38.23'

ST. MATTHIAS CHURCH

CONC. WALK

EXIST. R/W

+ SIGN

INDIANOLA AVE. N-43° 28' 24"-E

15" C.S.

6" WATER
STA. 51+63.43 ℄ REL. INDIANOLA AVE.
STA. 39+80.55 ℄ HOMEWOOD AVE.

4" L.P. GAS

CONC. APPR.

SIGN

PLUG EXISTING SEWER AT STA. 51+80

END WORK STA. 51+53.36

1' CONC. RUNNERS

8' ASPH. DR.

HOUSE

* SEE ADDITIONAL QUANTITIES BELOW

P.C. STA. 51+31.02
15' LT. ℄ REL. INDIANOLA AVE.

P.T. STA. 40+23.59
12' LT. ℄ HOMEWOOD AVE.

SIDEWALK TO BE REMOVED

HOMEWOOD AVE.
N-34° 40' 46"-W

3" L.P. GAS

6" WATER

12" S.

78° 09' 10"

40'

B.M. #22A - TOP R.R. SPIKE IN WEST ROOT OF 3' MAPLE AT N.W. CORNER HARMON AND HOMEWOOD, 215' RT. STA. 702+60
ELEV. = 943.436

ITEM 609 - CONCRETE CURB - LINEAR FEET

CODE	STATION FROM	STATION TO	TYPE 2A	TYPE 6
C-1	47+33.45	40+41.04 (T.)		39.39
C-2	47+33.41	39+60.44 (T.)		30.33
C-3	40+41.04 (T.)	48+68.55		48.31
C-4	39+60.44 (T.)	48+65.82		49.23
C-5	50+33.96	40+45.48 (H.)	67.63	
C-6	51+01.80	39+44.80 (H.)	81.76	
	SHEET TOTAL		149.39	167.26

ITEM 611 - APPROACH SLABS (T=12")

CODE	STATION FROM	STATION TO	WIDTH	SQ. YDS.
AS-1	48+68.24	48+88.24	30.0	66.67
AS-2	50+77.78	50+97.78	30.0	66.67
	SHEET TOTAL			133.34

ITEM 604 - MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	48+20.43	℄ RELOC. INDIANOLA	1
RM-2	51+25	℄ RELOC. INDIANOLA	1
	SHEET TOTAL		2

ITEM 814 - WATER MAINS

CODE	STATION	LOCATION	6"-45° BEND EACH	6" D.I. PIPE L.F.	6" STEEL PIPE L.F.	VALVE BOXES ADJUST TO GRADE
W-30	48+51	3.5' RT	1			
WM-32		W-30 - W-30		14		
W-31	48+60	3.17 RT	1			
WM-33		W-31 - 48+92		33		
WM-34		48+92.50 - 74			182	
WM-35		50+74 - W-35		62		
W-36		W-35 - W-36		5		
WM-36	51+45	3.17' RT.				
W-80	48+14.5	27' LT.				1
W-81	48+33	3' RT.				1
W-82	48+03.5	3' RT.				1
W-83	48+14.5	15' RT.				1
W-84	48+18.5	2' RT.				1
WM-37		W-30 - W-31		10		
	SHEET TOTAL		2	124	182	5

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCA.	SQ. FT. 5" THICKNESS
S-1	47+33.25	40+41.04 (T)	LT.	185.00
S-2	47+23.41	39+60.44 (T.)	RT.	151.00
S-3	40+41.04 (T.)	48+78	LT.	315.21
S-4	39+60.44 (T.)	48+74	RT.	323.02
S-5	50+93	40+25.35 (H.)	LT.	405.63
S-6	50+85	39+44.80 (H.)	RT.	408.60
	SHEET TOTAL			1,788.46

ITEM 202 - INLETS & MANHOLES REMOVED

CODE	STATION	LOCATION	INLETS REMOVED EACH	MANHOLES REMOVED EACH
F-216	47+97	14' RT. ℄	1	
F-217	47+97	14' LT. ℄	1	
F-218	49+60	℄		1
F-219	51+46	14' LT. ℄	1	
F-220	51+39	14' RT. ℄	1	
	SHEET TOTAL		4	1

ITEM 814 - WATER LINES

CODE	STATION		LOCATION	6" SOLID SLEEVE EACH	6" CONNECTOR EACH
W-30	48+35		3.5' RT	1	1
W-36	W-35	W-36	3.17' RT.	1	1
SHEET TOTAL				2	2

ITEM 604 - MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE - EACH

CODE	STATION	LOCATION	EACH M.H.
AU-TT	48+24	℄ INDIANOLA	1
AU-78	40+29.22	℄ TAYLOR	1
		TOTAL	2

203 EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)
440	1

BRIDGE MAH-680-0817

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 43'-9" × 60'-3" × 75'-0" ℄ BEARINGS.
ROADWAY WIDTH: 30'-0" ⁴/₆ OF 6'-0" WALKS ON BOTH SIDES.
LOAD FREQUENCY: H S 20-44
SKEW: 6° 54' 18" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 20'-0" LONG SPECIAL
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE

FOR DRAINAGE DETAILS SEE SHEET № 345

0 5 10 15 20 40

R.R.C. 8/24/68
PWD 8/30/68

MAY 28 1971

INDIANOLA AVE.
STA. 48+00 TO STA. 53+00

MEET EXIST. GRADE STA. 47+93.43 ℄ PROFILE GRADE

973.99 973.88 973.20 973.12 972.04 972.41 970.15 968.10 967.88 963.79 963.35 955.95 958.82 955.14 954.23 950.65 949.76 947.11 947.94 946.71 947.01 945.90 944.43 938.63 933.01

-3.15%

BRIDGE LIMITS - 189.54'

MEET EXIST WM STA. 48+35

P.V.I. STA. 48+50 ELEV. = 972.41

PROP 6" D.I. WM

50' V.C.

EXIST. 15" C.S.

PROPOSED 36" COMBINATION SEWER

-3.00%

PROP 6" STEEL WM

3" GAS

EXIST. 15" C.S.

PROP 6" D.I. WM

-3.32%

P.V.I. STA. 51+25 ELEV. = 947.49

50' V.C.

MEET EXIST. GRADE STA. 51+53.36

℄ HOMEWOOD AVE. STA. 51+63.43

EXIST. 15" C.S.

℄ EXIST. PAV'T.

975 970 965 960 955 950 945 940

48+00 49+00 50+00 51+00 52+00 53+00

PLATE 4 CROSS SECTION 8½" × 11" STANDARD
NATIONAL TRACING PAPER DIVISION

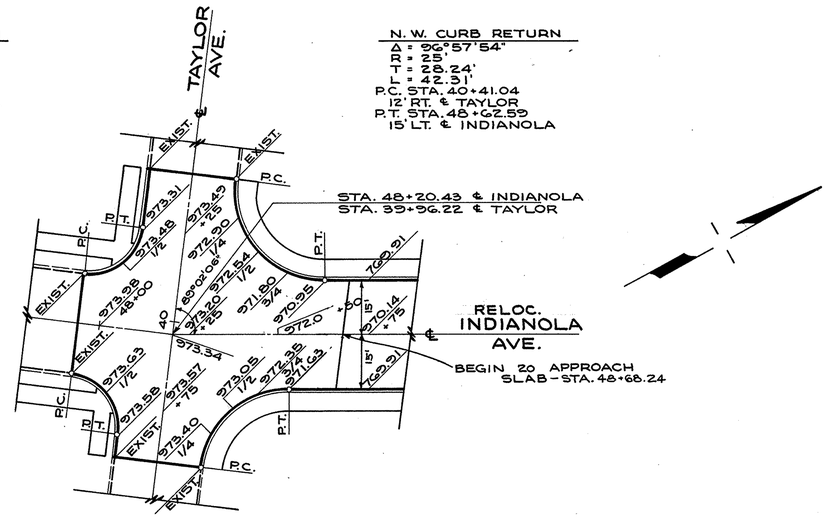
FED. RD.	STATE	PROJECT	
2	OHIO		

234
656

MAH-680-6.98

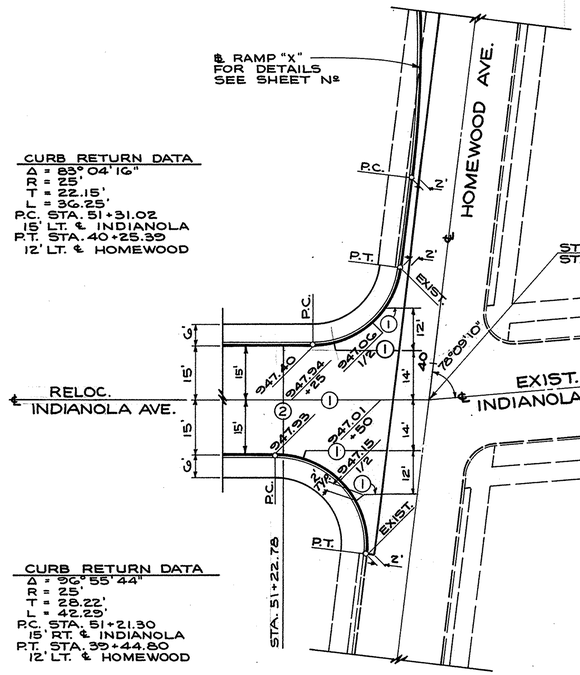
S.W. CURB RETURN
Δ = 89°57'15"
R = 15'
T = 14.99'
L = 23.55'
P.C. STA. 47+93.45
14' LT. ℄ INDIANOLA
P.T. STA. 40+25.20
12' LT. ℄ TAYLOR

N.W. CURB RETURN
Δ = 96°57'54"
R = 25'
T = 28.24'
L = 42.31'
P.C. STA. 40+41.04
12' RT. ℄ TAYLOR
P.T. STA. 48+62.59
15' LT. ℄ INDIANOLA



S.E. CURB RETURN
Δ = 90°02'45"
R = 15'
T = 15.01'
L = 23.57'
P.C. STA. 47+93.41
14' RT. ℄ INDIANOLA
P.T. STA. 39+67.20
12' LT. ℄ TAYLOR

N.E. CURB RETURN
Δ = 83°02'06"
R = 25'
T = 22.13'
L = 36.23'
P.C. STA. 39+60.44
12' RT. ℄ TAYLOR
P.T. STA. 48+52.82
15' RT. ℄ INDIANOLA



CURB RETURN DATA
Δ = 96°55'44"
R = 25'
T = 28.22'
L = 42.25'
P.C. STA. 51+21.30
15' RT. ℄ INDIANOLA
P.T. STA. 39+44.80
12' LT. ℄ HOMEWOOD

CURB RETURN DATA
Δ = 89°04'16"
R = 25'
T = 22.15'
L = 36.25'
P.C. STA. 51+31.02
15' LT. ℄ INDIANOLA
P.T. STA. 40+25.39
12' LT. ℄ HOMEWOOD

JOINT LEGEND
① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT

SCALE
0 20 40 60 80 100

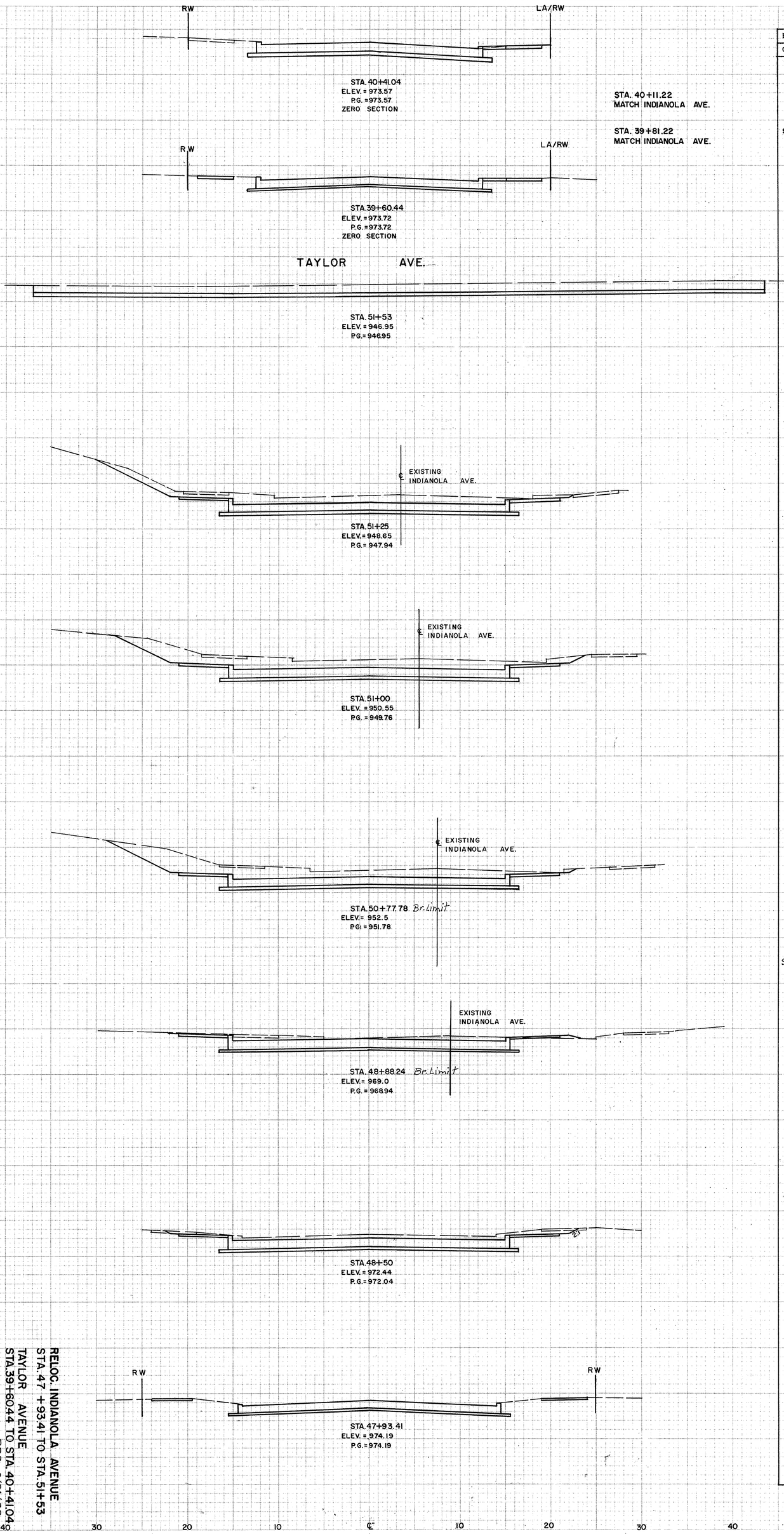
MAY 25 1971

PAVEMENT DETAILS INDIANOLA AVE.

ORIGINAL SURVEY — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE — NOTE BOOK — NO.

FINAL SURVEY — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE — NOTE BOOK — NO.

SEEDING END WIDTH	SEEDING SQ. YDS.
4	13
4	
5	12
5	
0	
0	
0	
0	
0	
0	
0	



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
33	1		
		70	1
96	0		
96	0		
		50	0
34	0		
107	0		
		97	0
80	0		
		82	0
98	0		
		79	0
94	0		
Structure			
52	1		
		80	1
61	0		
		102	0
36	0		

RELOC. INDIANOLA AVENUE
STA. 47 +93.41 TO STA. 51+53
TAYLOR AVENUE
STA.39+60.44 TO STA. 40+41.04
RRC 6/24/68
PUD 8/30/68
Mar 7-0 1971

2	FED. RD.
OHIO	STATE
	PROJECT
MAH-680-6.98	

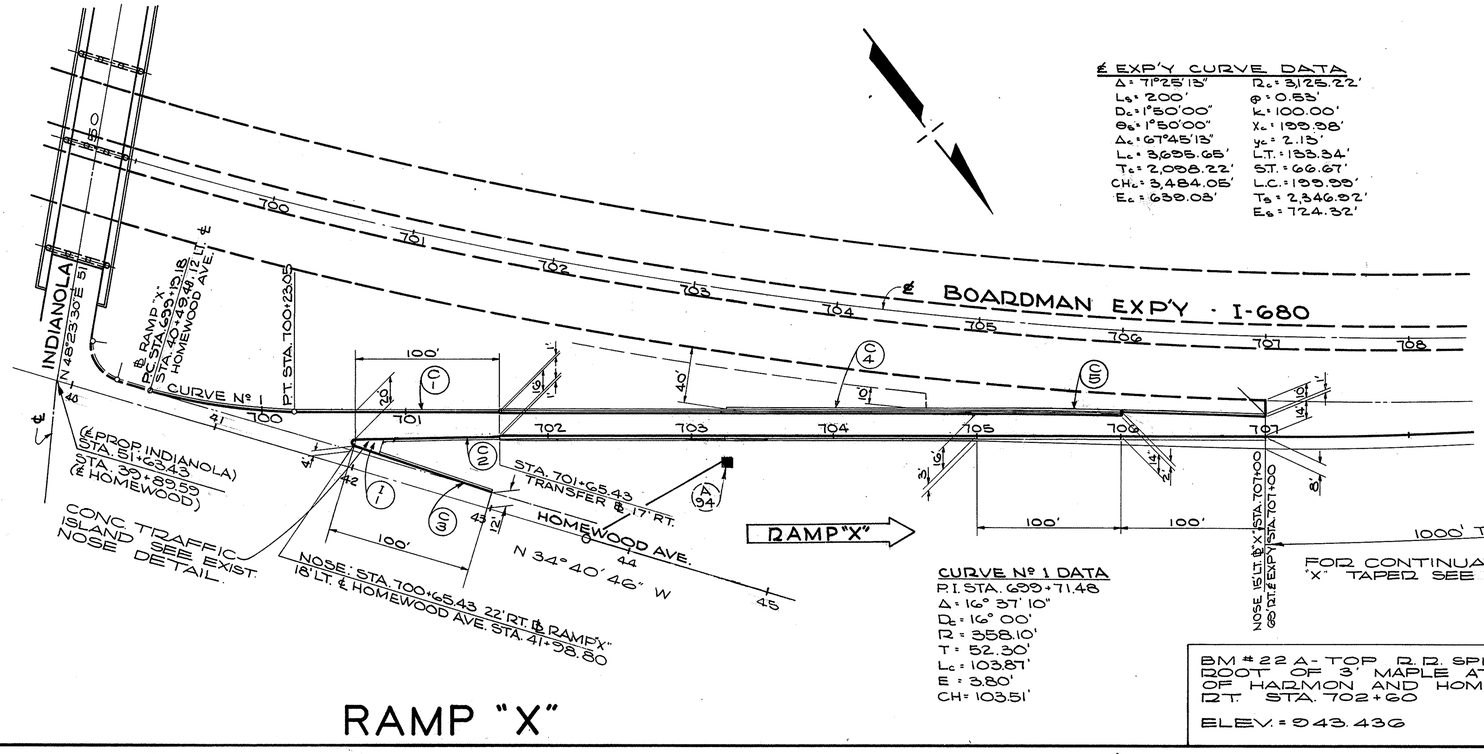
235
656

PLATE 3 CROSS SECTION PAPER STANDARD NATIONAL RULING PAPER DIVISION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

236
656



RAMP "X"

℄ EXP'Y CURVE DATA

Δ = 7°25'15"	R_c = 3,125.22'
L_s = 200'	Φ = 0.53'
D_c = 1°50'00"	K_c = 100.00'
θ_s = 1°50'00"	X_c = 199.88'
Δ_c = 67°48'13"	y_c = 2.15'
L_c = 3,695.65'	L.T. = 1,553.34'
T_c = 2,088.22'	S.T. = 66.67'
CH_c = 3,484.05'	L.C. = 199.98'
E_c = 639.08'	T_s = 2,346.82'
	E_s = 724.32'

CURVE Nº 1 DATA

P.I. STA. 699+71.48
Δ = 16° 37' 10"
D_c = 16° 00'
R = 358.10'
T = 52.30'
L_c = 103.87'
E = 3.80'
CH = 103.51'

ITEM 609 - CONCRETE CURB LINEAR FEET

CODE	STATION FROM	STATION TO	TYPE 2 A	TYPE 7	TYPE 8
C-1	699+19.18	701+65.43	246.25		
C-2	700+83.43	701+65.43	82.00		
C-3	41+15.80	41+98.80	83.00		
C-4	703+25	704+63		138.00	
C-5	704+63	707+00			237.00
	TOTAL		411.25	138.00	237.00

ITEM 612 - TRAFFIC ISLAND 9" THICKNESS

CODE	STATION FROM	STATION TO	SQUARE YARDS
I-1	700+63.43	700+83.43	13.33
	TOTAL		13.33

203		G59
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING, (S.Y.)
10,471	0	3263

BM # 22 A - TOP R.R. SPIKE IN WEST ROOT OF 3' MAPLE AT N.W. CORNER OF HARMON AND HOMEWOOD, 215' R.T. STA. 702+60

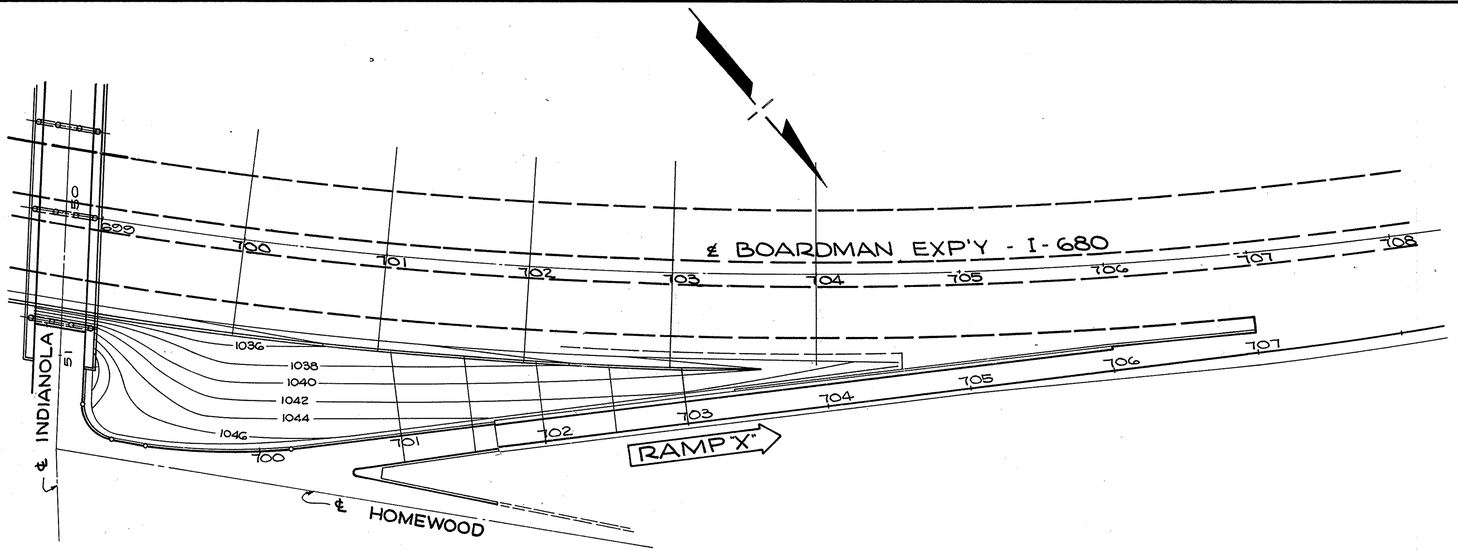
ELEV. = 943.436

FOR STRUCTURE DETAILS SEE SHEET 489

FOR DRAINAGE DETAILS SEE SHEET 348

FOR PAVEMENT DETAILS SEE SHEET 328 & 329

FOR CONTINUATION OF RAMP "X" TAPER SEE SHEET Nº 201



0 50' 100'

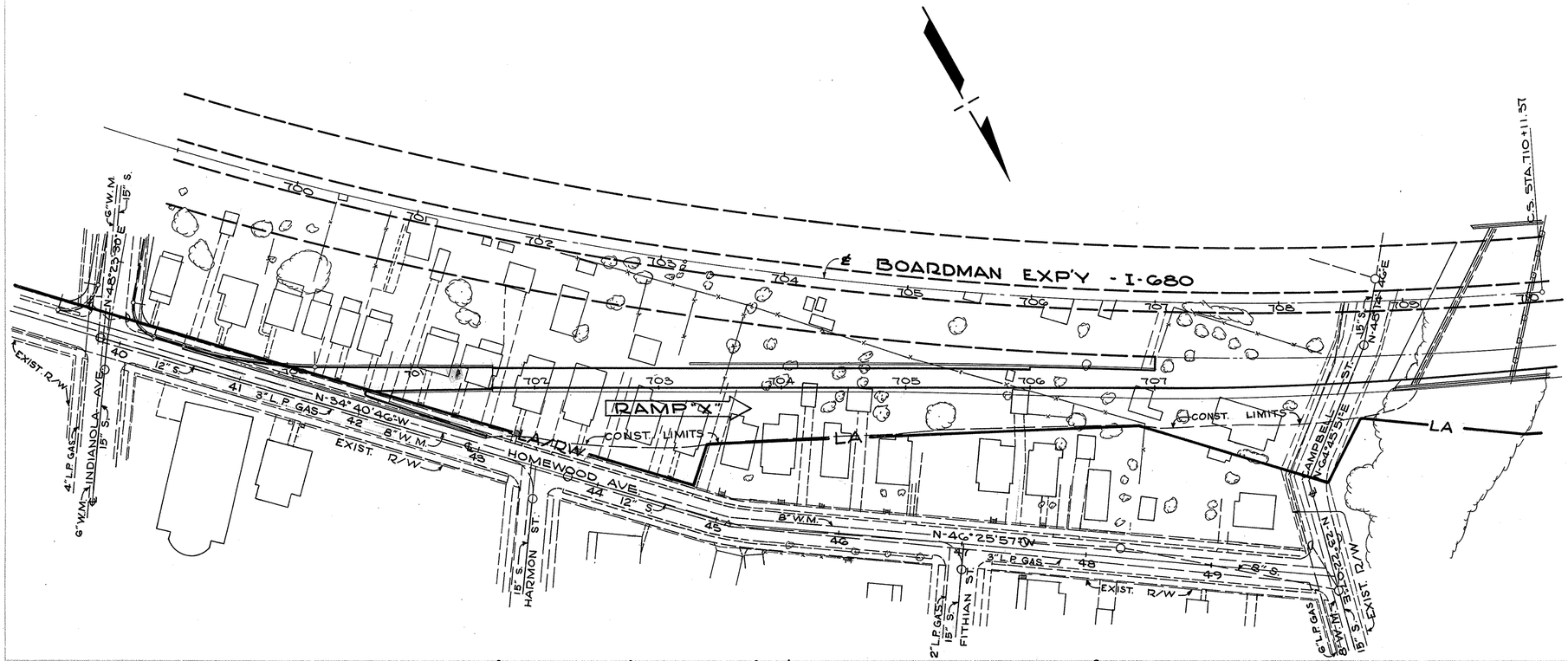
R.R.C. 4/15/69
C.A.P. 4/17.69
MAY 25 1971

RAMP "X"
GEOMETRIC & GRADING PLAN

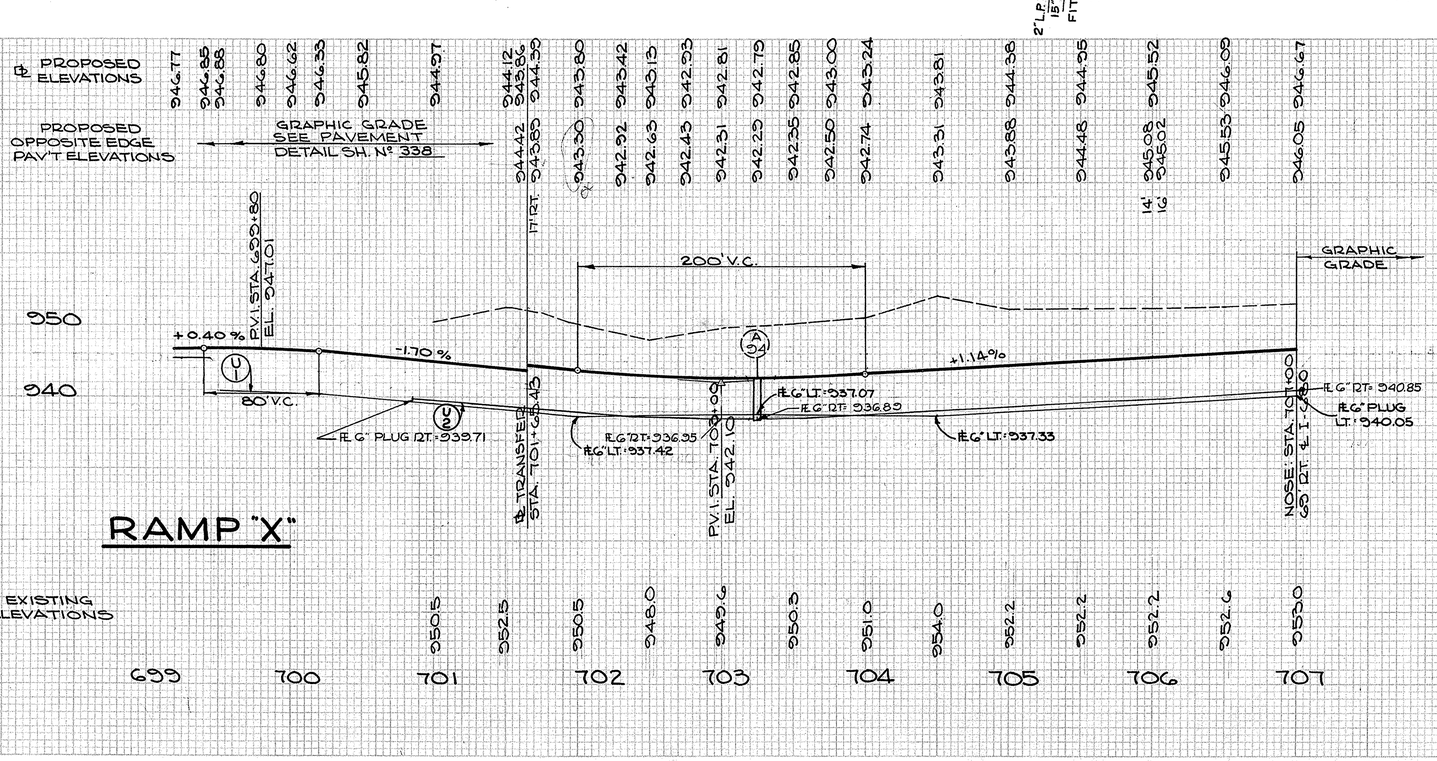
FED.RD	STATE	PROJECT	
2	OHIO		

237
656

MAH-680-6.98



FOR GEOMETRIC AND GRADING PLANS, SEE SHEET Nº 336
FOR PAVEMENT DETAILS, SEE SHEET Nº 338 & 339



℄ RAMP "X" GRAPHIC GRADE

Nº STATION	℄ ELEV.	℄ OFFSET
707+00	946.67	69.00'
+25	946.85	68.38'
+50	947.23	67.75'
+75	947.51	67.13'
708+00	947.80	66.50'
+25	948.08	65.88'
+50	948.36	65.25'
+75	948.65	64.63'
709+00	948.93	64.00'
+25	949.21	63.38'
+50	949.49	62.75'
+75	949.78	62.13'
710+00	950.04	61.50'
+25	950.23	60.88'
+50	950.35	60.25'
+75	950.45	59.63'
711+00	950.57	59.00'
+25	950.68	58.38'
+50	950.80	57.75'
+75	950.92	57.13'
712+00	951.05	56.50'
+25	951.21	55.88'
+50	951.40	55.25'
+75	951.58	54.63'
713+00	951.81	54.00'
+25	952.06	53.38'
+50	952.33	52.75'
+75	952.57	52.13'
714+00	952.84	51.50'
+25	953.11	50.88'
+50	953.41	50.25'
+75	953.73	49.63'
715+00	954.05	49.00'
+25	954.37	48.38'
+50	954.69	47.75'
+75	955.01	47.13'
716+00	955.33	46.50'
+25	955.65	45.88'
+50	955.97	45.25'
+75	956.29	44.63'
717+00	956.61	44.00'

0' 50' 100'

PWD 8/30/68

MAY 25 1971

RAMP "X" TOPOGRAPHY & PROFILE

K+E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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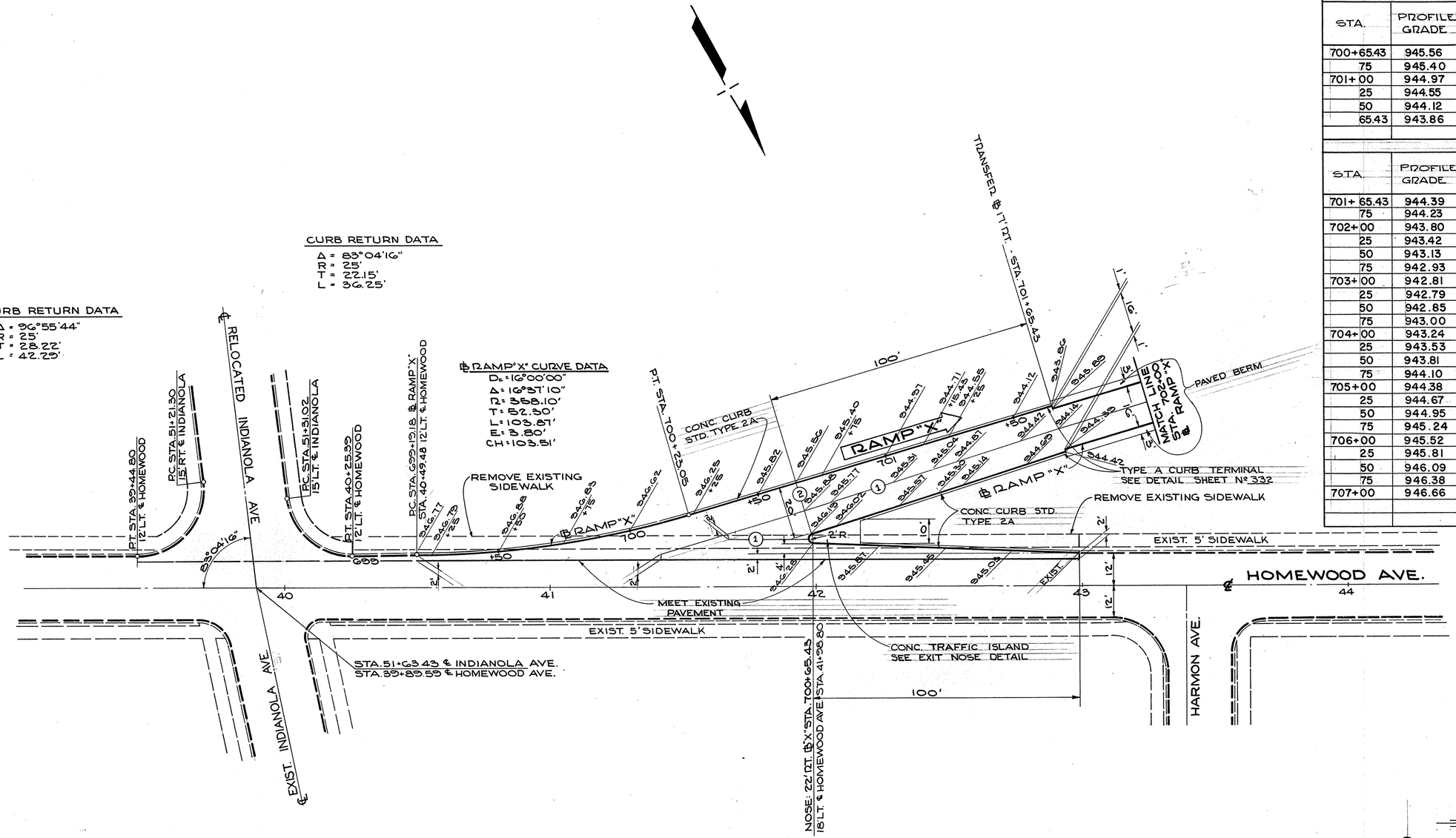
SUPERELEVATION TABLE RAMP 'X'					
STA.	PROFILE GRADE	OFFSET TO RT. CURB	ELEV. AT BOTTOM RT. CURB		
700+65.43	945.56	20.0	946.19		
75	945.40	19.81	946.02		
701+00	944.97	19.31	945.57		
25	944.55	18.81	945.14		
50	944.12	18.31	944.69		
65.43	943.86	18.0	944.42		
SHIFT ℄ 17' RT.					
STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH	OFFSET TO CURB	ELEV. AT BOTTOM OF CURB
701+65.43	944.39	943.89	16.0	17.0	943.86
75	944.23	943.73	16.0		
702+00	943.80	943.30	16.0		
25	943.42	942.92	16.0		
50	943.13	942.63	16.0		
75	942.93	942.43	16.0		
703+00	942.81	942.31	16.0		
25	942.79	942.29	16.0	19.0	942.20
50	942.85	942.35	16.0	19.0	942.26
75	943.00	942.50	16.0	19.0	942.41
704+00	943.24	942.74	16.0	19.0	942.65
25	943.53	943.03	16.0	19.0	942.94
50	943.81	943.31	16.0	19.0	943.22
75	944.10	943.60	16.0	19.0	943.51
705+00	944.38	943.88	16.0	19.0	943.79
25	944.67	944.18	15.5	18.25	944.10
50	944.95	944.48	15.0	17.50	944.40
75	945.24	944.79	14.5	16.75	944.72
706+00	945.52	945.08	14.0	16.0	945.02
25	945.81			15.5	945.28
50	946.09			15.0	945.53
75	946.38			14.5	945.79
707+00	946.66			14.0	946.05

CURB RETURN DATA
Δ = 96°55'44"
R = 25'
T = 28.22'
L = 42.29'

CURB RETURN DATA
Δ = 83°04'16"
R = 25'
T = 22.15'
L = 36.25'

℄ RAMP "X" CURVE DATA
D = 16°00'00"
Δ = 16°37'10"
R = 358.10'
T = 52.30'
L = 103.87'
E = 3.80'
CH = 103.51'



JOINT LEGEND
① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT

0 10 20 40

PAVEMENT DETAILS RAMP "X"

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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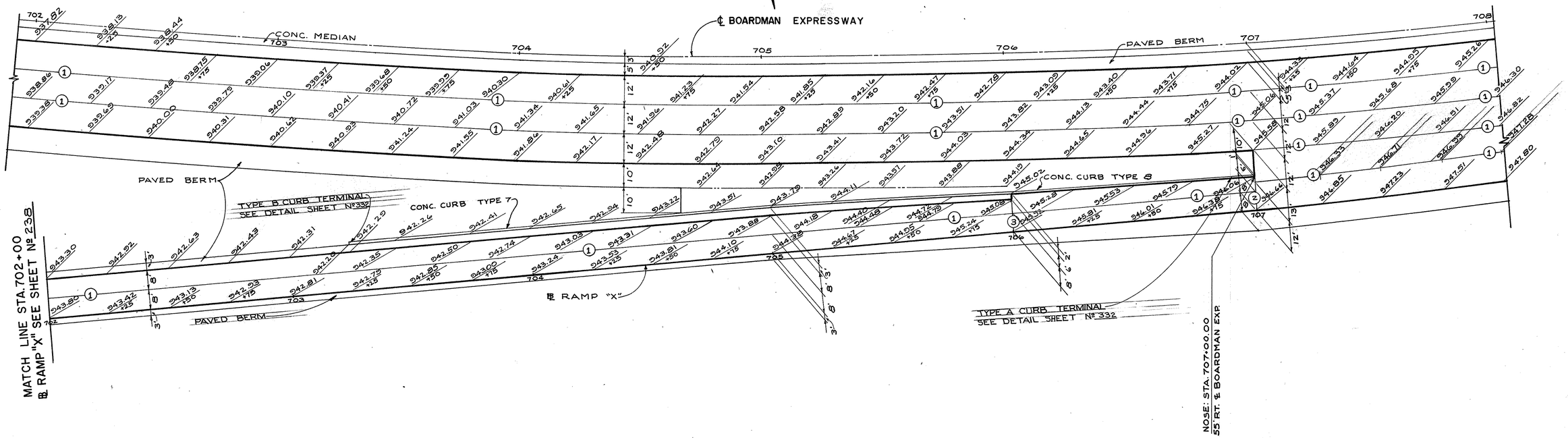
656

CURVE Nº 1
℄ CURVE DATA

Δ = 71° 25' 13" LT.	K = 100.00'
D_c = 1° 50' 00"	X_c = 199.98'
R = 3,125.22'	Y_c = 2.13'
T_c = 2,098.22'	L.T. = 139.34'
L_c = 3,655.65'	S.T. = 66.67'
CH_c = 3,484.05'	L.C. = 199.99'
E_c = 639.03'	T_s = 2,346.92'
Δ_c = 67° 45' 13"	E_s = 724.32'
θ_s = 1° 50' 00"	L_s = 200'
P = 0.53'	



JOINT LEGEND

① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT
③ STANDARD CONTRACTION JOINT

0 10 20 40

PAVEMENT DETAILS
RAMP - "X"

MAY 25 1971

CU. YDS.										
CUT	866	1016	1064	1104	958	1100	1033	502	1674	1152
FILL	0	0	0	0	0	0	0	0	0	0
END AREA										
CUT	531	566	564	628	407	781	832	926	882	918
FILL	0	0	0	0	0	0	0	0	0	0

FED. RD.	STATE	PROJECT	
2.	OHIO		

MAH-680-6.98

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656

STA. 704+50
EXIST = 954.0
P.G. = 943.81

STA. 704+00
EXIST = 950.9
P.G. = 943.24

STA. 703+50
EXIST = 950.2
P.G. = 942.85

STA. 703+00
EXIST = 949.7
P.G. = 942.81

STA. 702+50
EXIST = 949.0
P.G. = 943.13

STA. 702+00
EXIST = 950.1
P.G. = 943.80

STA. 701+65.43
EXIST = 950.9
P.G. = 944.39

STA. 701+50
EXIST = 952.2
P.G. = 944.12

STA. 701+00
EXIST = 950.5
P.G. = 944.97

STA. 700+65.43
EXIST = 952.0
P.G. = 945.56

MAY 25 1971
RRC 6/24/68
PWD 8/30/68

RAMP X
STA. 700+65.43 TO STA. 704+50

SEEDING										
END AREA SQ. YDS.	247	283	314	406	475	444	294	131	411	263
WIDTH YDS.	47	55	58	88	83	77	76	77	71	66

FED. RD.	STATE	PROJECT	
2	OHIO		

241
656

MAH-680-6.98

202 MANHOLES & INLETS REMOVED-EACH				
CODE	STATION	LOCATION	MH	INLETS
F-403	41+03±	90' RT. ℄		1
F-404	41+31±	104' RT. ℄	1	
F-405	38+54.5	55' LT. ℄		1
F-406	38+49.5	21' RT. ℄		1
F-408	47+15	30' LT. ℄		
F-410	46+95	5' LT. ℄		1
F-407	42+93	16'± RT ℄	1	
F-411	43+00	98'±LT ℄	1	1
TOTAL			3	5

ITEM 606-GUARD RAIL-LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 5	EACH
G-1	9+82.92 (PDALE)	48+00 (S.R)	895.65	
G-2	42+50	48+00	585.00	1
SHEET TOTAL			1445.65	1

BRIDGE MAH-680-0792

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPAN: 76'-96'-76' ℄ BRG'S.
ROADWAY: 28'-0" ℄ OF 6'-0" SIDEWALK LT AND 2'-0" SAFETY CURB RT.
LOAD FREQUENCY: HS 20-44
SKEW: NONE.
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 20'-0" LONG AS-1-67
SUPERELEVATION: NONE.
ALIGNMENT: STRAIGHT.

ITEM 604-MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	37+75.17	℄	1
RM-2	41+07.67	℄	1
RM-3	46+67.51	℄	1
SHEET TOTAL			3

FOR RAMP 'E' DETAILS, SEE SHEET Nº 261
FOR POWERSDALE DETAILS, SEE SHEET Nº 257
FOR BRIDGE DETAILS, SEE SHEET Nº 513

604 - MANHOLES ADJUSTED TO GRADE - EACH

CODE	STATION	LOCATION	EA.
AJ405	38+77	20'RT. ℄	1
TOTAL			1

EROSION CONTROL

CODE	STATION FROM	STATION TO	667 S.Y. SEEDING JUTE MAT.	601 S.Y. REIN. CONC. RIP RAP
E-1	40+53	41+00	48	
E-2	41+53	43+57	171	
E-3	41+00	41+47		56
E-4	44+76	46+20	121	
E-5	43+63	44+70	88	
TOTAL			428	56

BOX "A" 603-CONDUITS-LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T Nº	6" BENDS & BRANCHES	8"	6" CB	8" CB	12" CB
P-310	A-310	AJ-405	244					52
P-311	A-311	AJ-405	↑					60
P-312	A-312	AJ-405						62
P-317	A-317	A-409	↓					25
P-318	A-318	A-409						25
P-403	A-403	EX. M.H.						35
P-404	A-404	A-408	244					25
P-405	ABUTMENT	A-317	251	2	3	88	91	
P-408	PIER	A-318	251	2		20		
FOR TOTALS, SEE BOX "B"								

ITEM 608-WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FEET 5" THICKNESS
S-1	38+20 (S.R.)	10+53 (PDALE)	LT.	416.35
S-2	10+53.33 (P.D)	48+00 (S.R.)	LT.	4,488.71
TOTAL				4,905.06

ITEM 609-CONCRETE CURB-LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2	TYPE 2A
C-1	37+75	38+42.75		66.09
C-2	37+75	38+35.47		61.93
C-3	39+28.01	48+00	864.29	
C-4	39+74.71	48+00	831.85	
TOTAL			1696.14	128.02

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT Nº	ITEM 452 (T-7") SQ. YDS.
D-1	38+30	RT.	II	7.5	10.0	246	17.92
D-2	39+75 (℄ EX.)	RT.	II	38.0	10.0	248	42.22
							60.14

ITEM 604-MANHOLES CATCH BASINS & INLETS-EACH

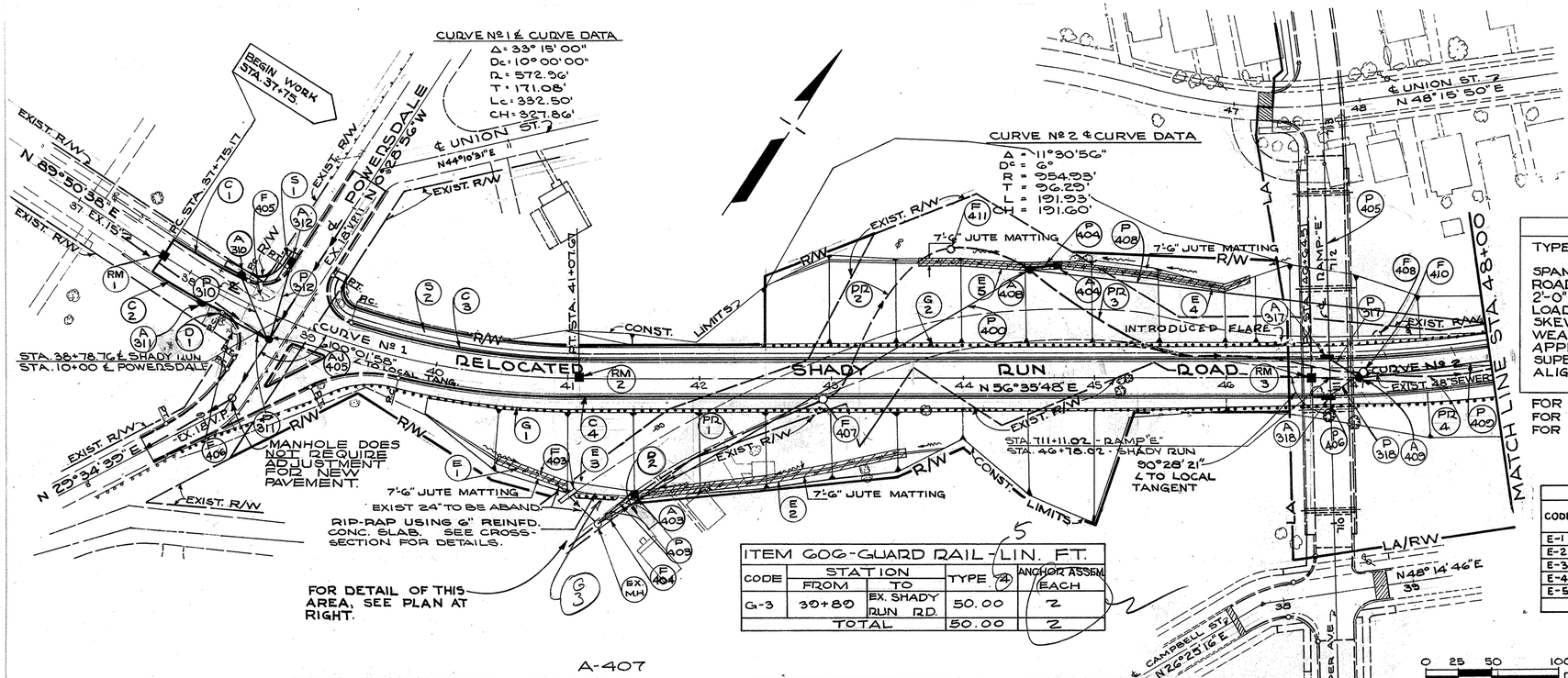
CODE	STATION	LOCATION	FLAP GATE 12"	Nº2 SANT. M.H. W/O DROP	Nº22A C.B.	C.O.Y Nº11 INLET	Nº2A-B MOD. TP I INLET	Nº2A-10 MOD. TP I INLET
A-310	38+35.92	14' LT. ℄				1		
A-311	38+18	14' RT. ℄				1		
A-312	10+40.43	15' LT. ℄ P DALE				1		
A-317	46+78	14' LT. ℄					1	
A-318	46+78	14' RT. ℄						1
A-403	41+50	89' RT. ℄			1			
A-404	44+75	86' LT. ℄			1			
A-408	44+50	82' LT. ℄	1	1				
A-409	47+00	℄		1				
EX.M.H	41+22	109.50' RT. ℄	1					
TOTAL			2	2	2	3	1	1

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
2777	45,995	10,439

0 50 100

R.R.C. 8/24/68
P.U.D 8/30/68
MAY 25 1971

SHADY RUN ROAD
BEGIN CONSTRUCTION TO STA. 48+00



ITEM 606-GUARD RAIL-LIN. FT.				
CODE	STATION FROM	STATION TO	TYPE 24	ANCHOR ASSEM. EACH
G-3	39+89	EX. SHADY RUN RD.	50.00	2
TOTAL			50.00	2

A-407
604 Nº 2 M.H.
STA. 42+93 (16'± RT. ℄)
RIM ELEV. = 973.22
12" = 946.06
48" (EXIST) = 932.9

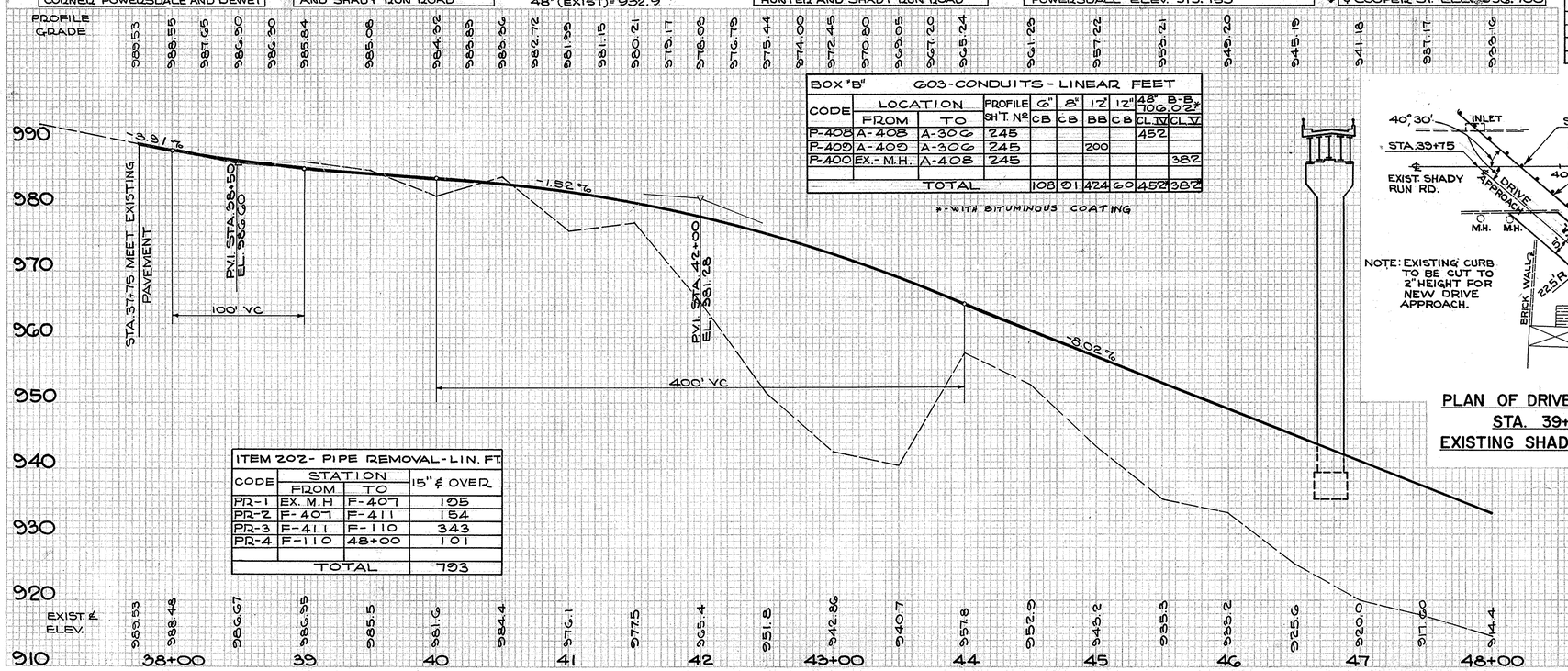
B.M.* 15 ELEV. 989.985
TOP 5" MARK F.H. AT SOUTHWEST CORNER POWERSDALE AND DEWEY

B.M.* 16 ELEV. 970.053
TOP ARROW(→) ON F.H. AT INTERSECTION POWERSDALE AND SHADY RUN ROAD

B.M.* 18 ELEV. 958.680
TOP ARROW(→) ON F.H. AT NORTHEAST CORNER INTERSECTION HUNTER AND SHADY RUN ROAD

B.M.* 19 X-CUT IN SOUTH CORNER OF CONC. CATCH BASIN COVER WEST SIDE SHADY RUN ROAD APPROX. 800' NORTH OF POWERSDALE ELEV. 919.753

B.M.* 20 TOP W. BOLT F.H. S.W. CORNER CAMPBELL & COOPER ST. ELEV. 956.700



BOX "B" 603-CONDUITS-LINEAR FEET									
CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T. Nº	6" CB	8" CB	12" BB	12" CB	48" B-B 106.02* CL IV	48" B-B 106.02* CL V
P-408	A-408	A-306	245					452	
P-409	A-409	A-306	245			200			
P-400	EX.-M.H.	A-408	245						382
TOTAL				108	01	424	60	452	382

*-WITH BITUMINOUS COATING

NOTE: EXISTING CURB TO BE CUT TO 2" HEIGHT FOR NEW DRIVE APPROACH.

PLAN OF DRIVE APPROACH
STA. 39+75
EXISTING SHADY RUN RD.

ITEM 202-PIPE REMOVAL-LIN. FT.			
CODE	STATION FROM	STATION TO	15" & OVER
PR-1	EX. M.H	F-407	105
PR-2	F-407	F-411	154
PR-3	F-411	F-110	343
PR-4	F-110	48+00	101
TOTAL			703

PLATE 4, CROSS SECTION
KUMPEL & ESSER CO.

FED. R.D.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

242
656

ITEM 202 - MANHOLES & INLETS REMOVED

CODE	STATION	LOCATION	MANHOLES REMOVED EACH	INLETS REMOVED EACH
F-413	57+43.3	12' LT. ℄		1
F-414	56+88.3	11.5 RT. ℄		1
F-415	57+69.3	32.5 RT. ℄		1
F-416	49+02	10' RT. ℄	1	
F-417	52+51	10' RT. ℄	1	
	TOTAL		2	3

203		G55
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
2066	21501	6099

DRIVE APPROACH

CODE	STATION	SIDE	TYPE	L	W	LI	PROFILE SHT. N⁰	ITEM 452-7" SQ.YDS.	ITEM 404-2" ASPH.CONC-CY.	ITEM 304-5" AGG. BASE C.Y.
D-1	48+35.5 CMPB	RT	II	9	13.5	3	255	29.00		
D-2	57+00 (S.R.)	LT	II	4	14.0	24	256	9.33	2.12	5.23
D-3	56+40 (S.R.)	LT	II	4	10.0		255	8.22		
TOTAL								46.55	2.12	5.23

ITEM 609 - CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2A	TYPE 2
C-1	48+00	57+43.03		947.73
C-2	48+00	56+79.04 (℄)		871.77
C-3	47+50 (CAMPBELL)	49+54.58 (CMP)		204.58
C-4	49+45.86 (POL)	57+45.03 (SR)	46.71	
C-5	49+54.86 (CMB)	50+37.12 (POL)	41.49	
C-6	IS	LAND	452.98	
C-7	47+50 (CAMPBELL)	48+71.88 (CMP)	128.16	
			669.34	2024.08

ITEM 604 - MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	48+56.44	℄	1
RM-2	50+00.00	℄	1
RM-3	51+33.33	℄	1
RM-4	51+56.37	℄	1
RM-5	53+31.72	℄	1
RM-6	54+43.14	℄	1
SHEET TOTAL			6

BRIDGE MAH-680-0794

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 56'-0" + 71'-0" + 52'-0" ± BEARINGS.
ROADWAY WIDTH: VARIES (SEE PLAN).
LOAD FREQUENCY: HS 20-44 & INTERSTATE ALT. LOADING
SKEW: VARIES AS SHOWN ON PLAN.
ALIGNMENT: 1° 50' 00" LT. & 200' SPIRAL.
SUPERELEVATION: VARIES (0.034½ TO C.S., 0.156½ TO S.T.)
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 20' LONG SPECIAL

ITEM 606 - GUARD RAIL - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 5		ANCHOR ASSEMBLY EACH
G-1	48+00	51+96.85	371.85		1
G-2	48+00	51+75	350		1
			721.85		2

ITEM 601 PAVED GUTTER - LIN. FT

CODE	LOCATION FROM	LOCATION TO	TYPE 2
E-1	49+37	51+18 RT.	181
SHEET TOTAL			181

ITEM 202 - PIPE REMOVAL - LIN. FT.

CODE	STATION FROM	STATION TO	15" & OVER
PR-5	48+00.	F-416	102
PR-6	F-416	F-417	360
PR-7	F-417	EX. M.H.	545
SHEET TOTAL			1007

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	48+00 (S.R.)	56+35	LT.	4,191.59
S-2	48+00 (CMP)	48+71.88 (CMP)	LT.	306.00
S-3	48+42 (CMP)	50+37.12 (POL)	RT.	624.00
S-4	ISLAND		RT.	50.00
S-5	56+45	56+93 (SR)	LT.	242.63
S-6	57+07 (S.R.)	49+45.86 (POL)	LT.	360.32
				5,374.54

ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	N⁰ 2 SANT.	NEW JERSEY 3'-0" DROP	2-2A CB	2A-8 MOD INLET	2A-14 MOD INLET	2A-10 MOD TP I	2A-10 MOD TP II	FLAP GATE 12"	FLAP GATE 15"
A-321	51+19	50' RT. ℄			1						
A-325	53+25	14.2' LT. ℄						1			
A-326	53+25	14' RT. ℄							1		
A-329	56+70	14' RT. ℄				1					
A-306	49+00	℄	1								
A-401	57+38.20	14' RT. ℄				1					
A-402	49+47.75	25' RT. ℄ (℄)					1				
A-412	52+55	℄		1						1	1
A-417	57+50	7' RT. ℄		1							3
A-407	55+00	℄		1							
			1	3	1	2	1	1	1	1	4

ITEM 603 - CONDUITS - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SHT. N⁰	TYPE C-B 12"	B-B 12"	B-B 15"	B-B 706.02 48"* CL II	B-B 706.02 48"* CL III	B-B 706.02 48"* CL IV
P-321	A-321	A-412	244	148					
P-325	A-325	A-326	244			31			
P-326	A-326	A-416	244			62			
P-329	A-329	A-417	244		20				
P-401	A-401	A-417	244		25				
P-402	A-402	A-417	244		25				
P-417	A-417	EX. M.H	245			43			
P-306	A-306	A-412	245						357
P-412	A-412	A-407	245				248		
P-407	A-407	A-417	245			241			
TOTAL				148	140	93	284	248	357

* = WITH BITUMINOUS COATING

CURVE Nº 2 & CURVE DATA
Δ = 11° 31' 56"
Dc = 6° 00' 00"
R = 954.93'
T = 96.29'
Lc = 191.93'
CH = 191.60'

CURVE Nº 3 & CURVE DATA
Δ = 16° 00' 00"
Dc = 12° 00' 00"
R = 477.46'
T = 67.10'
Lc = 133.33'
CH =

CURVE Nº 4 & CURVE DATA
Δ = 21° 02' 32"
Dc = 12° 00' 00"
R = 477.46'
T = 88.67'
Lc = 175.35'
CH =

CURVE Nº 5 & CURVE DATA
Δ = 21° 45' 00"
Dc = 9° 00' 00"
R = 636.62'
T = 122.31'
Lc = 241.67'
CH = 240.22'

FOR PAVEMENT DETAILS, SEE SHEET Nº 243
FOR BOARDMAN EXPWY. DETAILS, SEE SHEET Nº 66 & 67

BM.# 19-A ELEV. 858.017
TOP W. BOLT (BROKEN OFF) OF CONC. BASE. NEAD. JET-A-WAY SIGN ON POLAND AVE. ACROSS FROM CAMPBELL AVE.

0 25 50 100

MAY '25 W/I
R.R.C. 8/24/68
P.W.D. 8/30/68

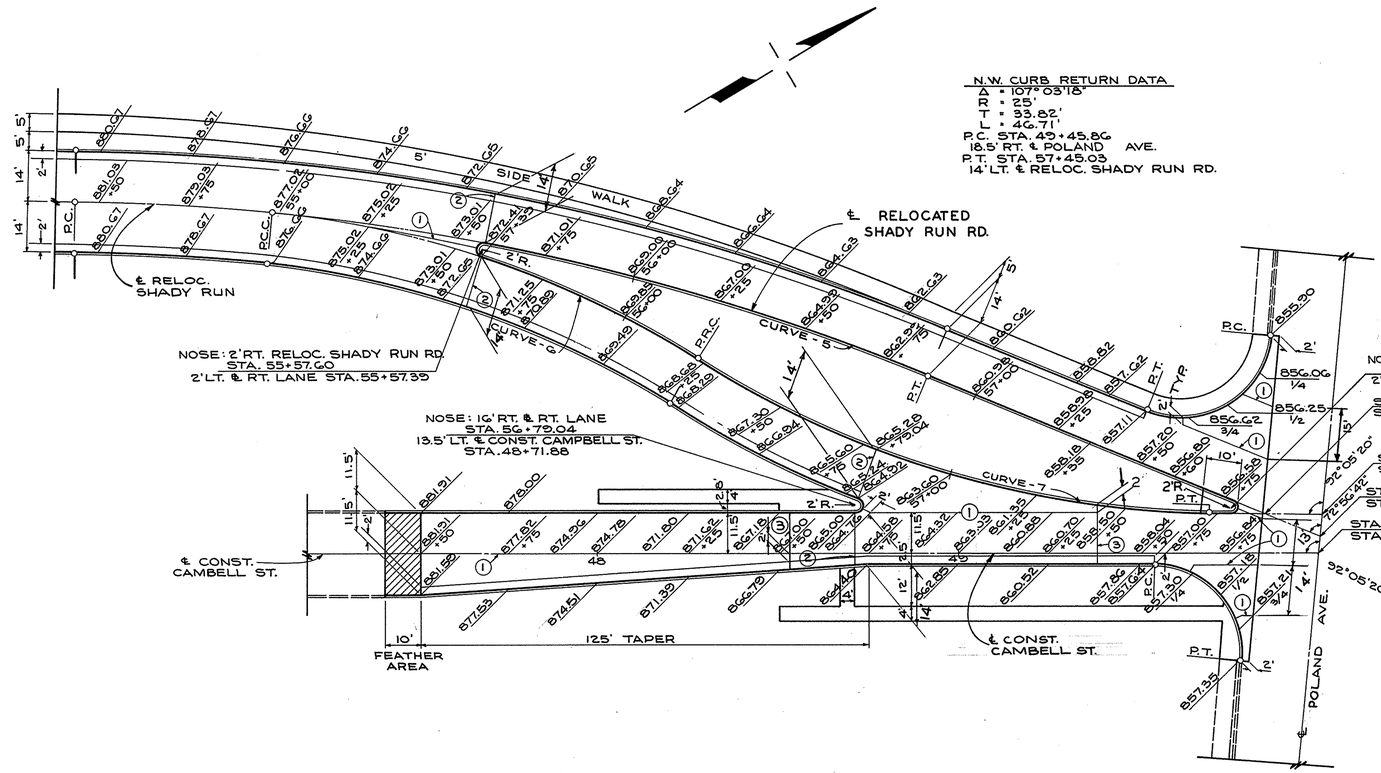
SHADY RUN ROAD
STA. 48+00 TO END CONSTRUCTION

K&E PLATE 4, CROSS SECTION KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

243
656

MAH-680-6.98



N.W. CURB RETURN DATA
Δ = 107° 03'18"
R = 25'
T = 33.82'
L = 46.71'
P.C. STA. 49+45.86
18.5' RT. ℄ POLAND AVE.
P.T. STA. 57+45.03
14' LT. ℄ RELOC. SHADY RUN RD.

CURVE-5 ℄ CURVE DATA
Δ = 21°45'00"
R = 636.62'
D_c = 9°00'00"
T = 122.31'
L = 241.67'
CH = 240.22'
P.C. STA. 54+43.14
℄ RELOC. SHADY RUN RD.
P.T. STA. 56+84.81
℄ RELOC. SHADY RUN RD.

CURVE-6 DATA
Δ = 27°37.37'
R = 260.44'
D_c = 22°00'00"
T = 64.04'
L = 125.58'
CH = 124.37'
P.C.C. STA. 54+98.11
℄ RELOC. SHADY RUN RD.
P.R.C. STA. 56+23.69
℄ RIGHT LANE

CURVE-7 DATA
Δ = 32°58.05"
R = 260.44'
D_c = 22°00'00"
T = 77.07'
L = 149.85'
CH = 147.80'
P.R.C. STA. 56+23.69
℄ RIGHT LANE
P.T. STA. 57+73.54
℄ RIGHT LANE

S.W. CURB RETURN DATA
Δ = 95°05'20"
R = 25'
T = 27.33'
L = 41.49'
P.C. STA. 49+54.58
2.5' RT. ℄ CAMPBELL ST.
P.T. STA. 50+37.12
17.6'RT. ℄ POLAND AVE.

JOINT LEGEND
(1) STANDARD LONGITUDINAL JOINT
(2) STANDARD EXPANSION JOINT
(3) STANDARD CONTRACTION JOINT

SCALE
0 20 40 60 80 100

PAVEMENT DETAILS SHADY RUN, CAMPBELL & POLAND INTERSECTIONS

MAY 25 1971

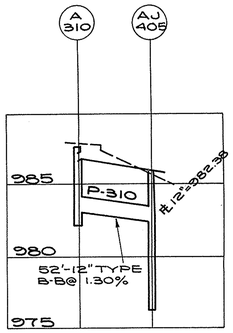
FED. RD.	STATE	PROJECT	
2	OHIO		

244
656

MAH-680-6.98

A-310

604 C.O.Y. Nº II INLET
STA. 38+35.92 (14' LT ℄)
TOP ELEV. = 987.82
WINDOW ELEV. = 986.87
℄ 12" = 983.06

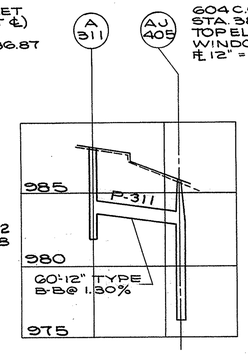


AJ-405

604 Nº 1 M. H.
STA. 38+77 (20' RT. ℄)
EXIST. RIM ELEV.=986.12
PROP. RIM ELEV.=985.98
℄ 12" (N.W.)=982.38
℄ 12" (N.-N.W.)=981.07
℄ 12" (W.)=982.83

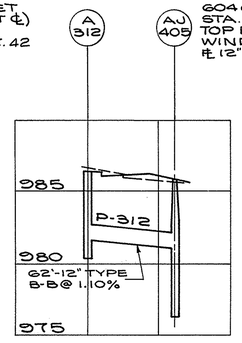
A-311

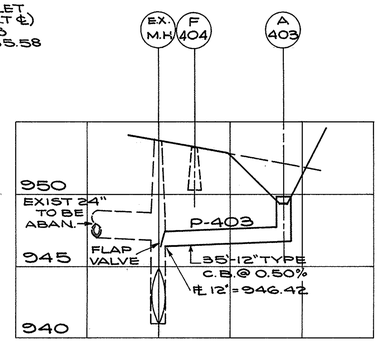
604 C.O.Y. Nº. II INLET
STA. 38+18 (14' RT ℄)
TOP ELEV. = 988.17
WINDOW ELEV. = 987.42
℄ 12" = 985.61



A-312

604 C.O.Y. Nº II INLET
STA. 10+40.43 (15' LT ℄)
TOP ELEV. = 986.33
WINDOW ELEV. = 985.58
℄ 12" = 981.77



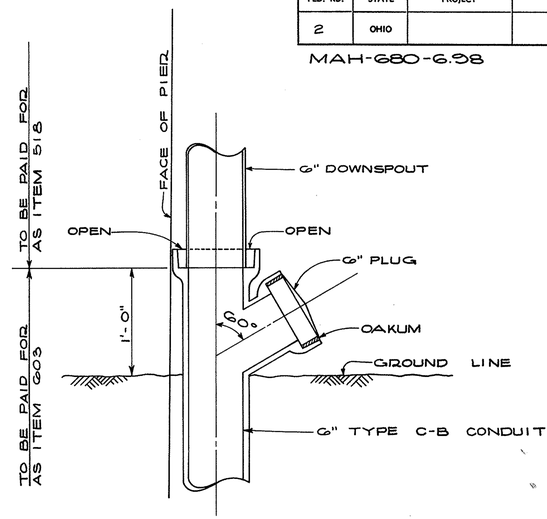


EX. M.H.

STA. 41+22
(109.50' RT ℄ RELOC. SHADY RUN)
EXIST MANHOLE
COVER EL. = 953.61
℄ EXIST. 10" = 950.04
℄ PROP. 12" = 946.42
℄ EXIST. 24" = 942.76
℄ EXIST. 15" = 940.46
℄ EXIST. 48" = 941.83
℄ PROP. 48" = 941.83

A-403

604 Nº. 2-2-A.C.B.
STA. 41+50 (85' RT ℄ RELOC SHADY RUN
GRATE ELEV. = 949.80
WINDOW EL. = 948.30
℄ 12" = 946.60

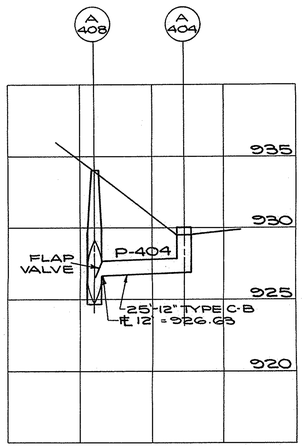


SCUPPER CLEANOUT DETAIL

0 1 2

A-408

604 Nº 2 SANT. M.H. W/o DROP
STA. 44+50 (82' LT. ℄
SHADY RUN RD.)
COVER ELEV. = 934.00
℄ PROP 12" = 926.63
℄ PROP. 48" = 924.64

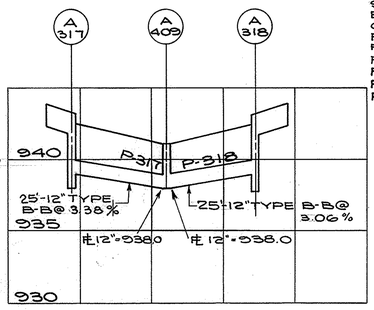


A-404

604 Nº 2-2-A.C.B.
STA. 44+75 (86' LT. ℄)
GRATE ELEV. = 930.00
℄ 12 = 926.83
WINDOW ELEV. = 929.50

A-405

604 Nº 2 SANT. M.H. W/o DROP
STA. 47+00 (℄)
RIM ELEV. = 941.18
℄ 12" (N.) = 938.00
℄ 12" (N.W.) = 938.00
℄ 12" (S.W.) = 938.00



A-317

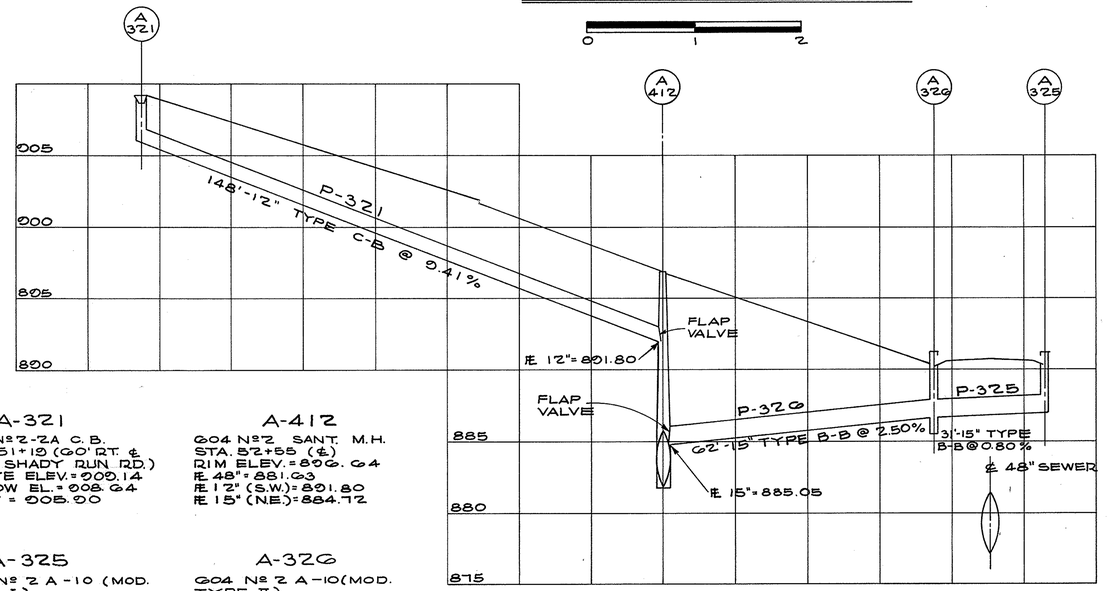
604 Nº 2A-8 (MOD. TP. I)
STA. 46+78 (14' LT ℄)
TOP ELEV. = 943.06
WINDOW ELEV. = 942.39
℄ 12" = 938.98

A-318

604 Nº 2A-10 (MOD TP. I)
STA. 46+78 (14' RT ℄)
TOP ELEV. = 943.06
WINDOW EL. = 942.39
℄ 12" = 938.98

A-320

604 Nº 2A-B MOD. TP. I
STA. 56+70 (14' RT ℄ RT. LANE)
TOP ELEV. = 866.05
WINDOW EL. = 865.38
℄ 12" = 861.66



A-401

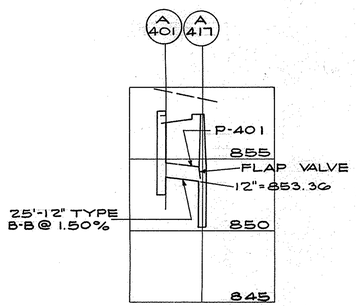
604 Nº 2A-8 MOD. TP. I
STA. 57+38.20 (14' LT. ℄)
TOP ELEV. = 858.13
WINDOW EL. = 857.46
℄ 12" = 853.74

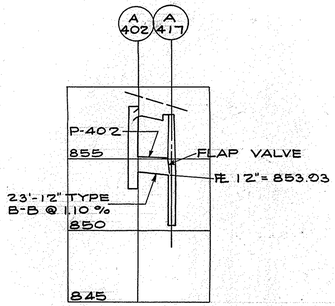
A-417

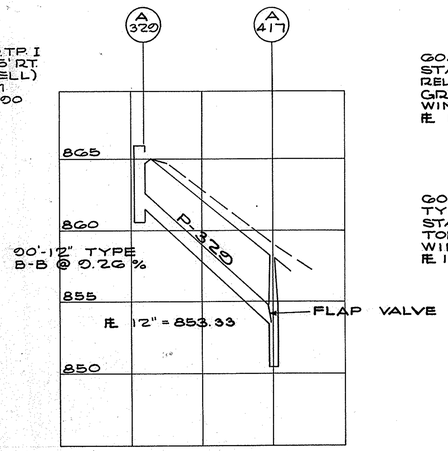
604 Nº 1 M.H.
STA. 57+50 (7' RT. ℄)
RIM ELEV. = 858.72
℄ 12" (N.W) = 853.36
℄ 12" (S.E.) = 853.03
℄ 12" (S.W.) = 853.33
℄ 48" = 850.22

A-402

604 Nº 2A-14 MOD. TP. I
STA. 40+47.75 (2.5' RT. ℄ CONST. CAMPBELL)
TOP ELEV. = 858.51
WINDOW EL. = 857.00
℄ 12" = 854.18







A-321

604 Nº 2-2A C.B.
STA. 51+18 (60' RT. ℄ RELOC. SHADY RUN RD.)
GRATE ELEV. = 809.14
WINDOW EL. = 808.64
℄ 12" = 805.00

A-412

604 Nº 2 SANT. M.H.
STA. 52+55 (℄)
RIM ELEV. = 890.64
℄ 48" = 881.63
℄ 12" (S.W.) = 881.80
℄ 15" (N.E.) = 884.72

A-325

604 Nº 2 A-10 (MOD. TYPE I)
STA. 53+25 (14' LT. ℄)
TOP ELEV. = 891.18
WINDOW EL. = 890.43
℄ 15" = 886.85

A-326

604 Nº 2 A-10 (MOD. TYPE II)
STA. 53+25 (14' RT. ℄)
TOP ELEV. = 891.18
WINDOW EL. = 890.43
℄ 15" = 886.60

PIPE PROFILE THIS SHEET
P-310
P-311
P-312
P-317
P-318
P-321
P-325
P-326
P-329
P-401
P-402
P-403
P-404

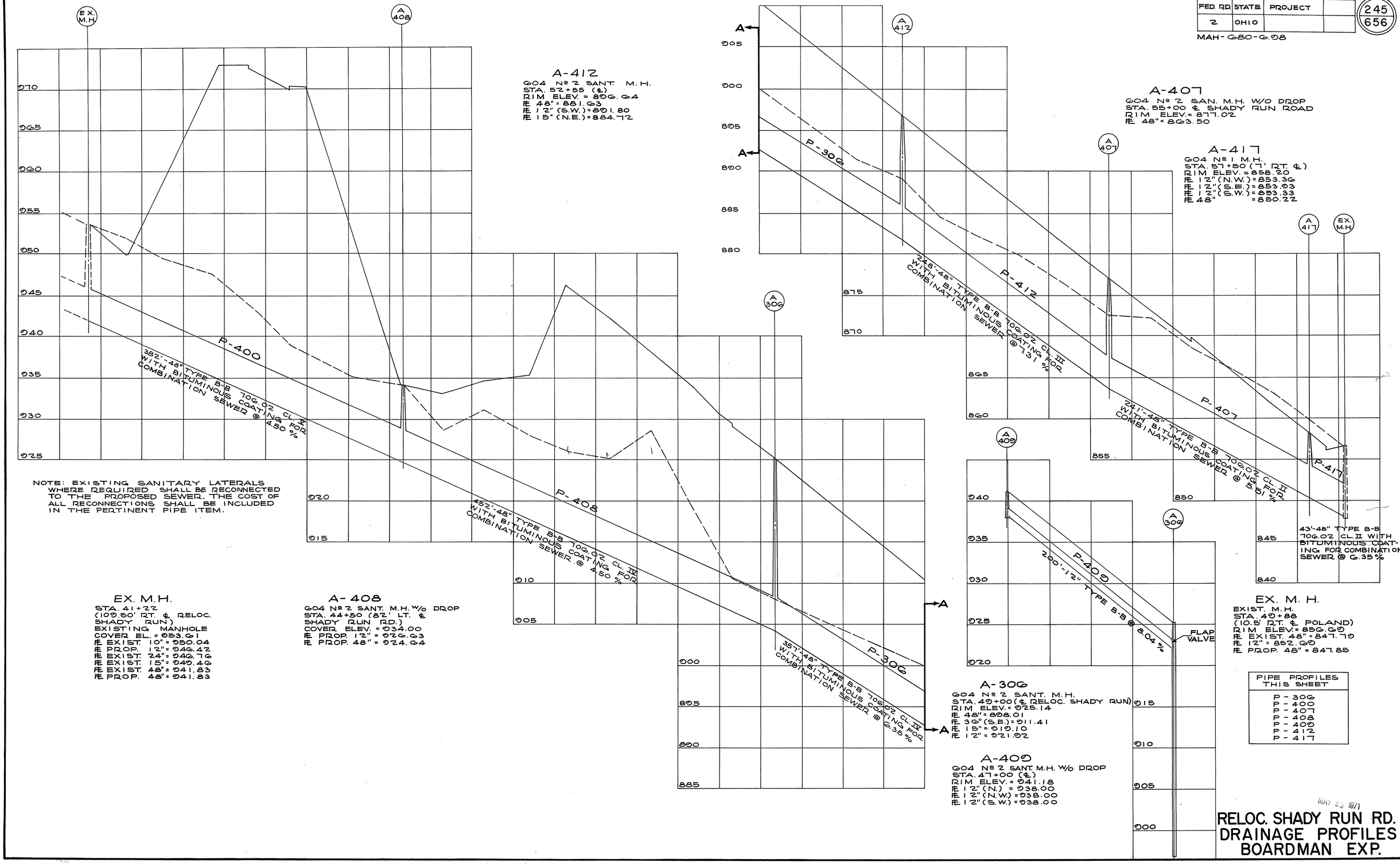
RELOC. SHADY RUN ROAD DRAINAGE PROFILES BOARDMAN EXP.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

245
656

MAH-680-6.08



A-412
604 Nº 2 SANT. M.H.
STA. 52+55 (℄)
RIM ELEV. = 896.64
℄ 48" = 881.63
℄ 12" (S.W.) = 891.80
℄ 15" (N.E.) = 884.72

A-407
604 Nº 2 SAN. M.H. W/O DROP
STA. 55+00 ℄ SHADY RUN ROAD
RIM ELEV. = 877.02
℄ 48" = 863.50

A-417
604 Nº 1 M.H.
STA. 57+50 (7' RT. ℄)
RIM ELEV. = 858.20
℄ 12" (N.W.) = 853.36
℄ 12" (S.E.) = 853.93
℄ 12" (S.W.) = 853.33
℄ 48" = 850.22

NOTE: EXISTING SANITARY LATERALS WHERE REQUIRED SHALL BE RECONNECTED TO THE PROPOSED SEWER. THE COST OF ALL RECONNECTIONS SHALL BE INCLUDED IN THE PERTINENT PIPE ITEM.

EX. M.H.
STA. 41+22
(109.50' RT. ℄ RELOC. SHADY RUN)
EXISTING MANHOLE
COVER EL. = 953.61
℄ EXIST. 10" = 950.04
℄ PROP. 12" = 949.42
℄ EXIST. 24" = 949.76
℄ EXIST. 15" = 949.46
℄ EXIST. 48" = 941.83
℄ PROP. 48" = 941.83

A-408
604 Nº 2 SANT. M.H. W/O DROP
STA. 44+50 (82' LT. ℄ SHADY RUN RD.)
COVER ELEV. = 934.00
℄ PROP. 12" = 926.63
℄ PROP. 48" = 924.64

A-306
604 Nº 2 SANT. M.H.
STA. 49+00 (℄ RELOC. SHADY RUN)
RIM ELEV. = 925.14
℄ 48" = 898.01
℄ 36" (S.E.) = 911.41
℄ 15" = 910.10
℄ 12" = 921.92

A-409
604 Nº 2 SANT. M.H. W/O DROP
STA. 47+00 (℄)
RIM ELEV. = 941.18
℄ 12" (N.) = 938.00
℄ 12" (N.W.) = 938.00
℄ 12" (S.W.) = 938.00

EX. M.H.
EXIST. M.H.
STA. 49+88
(10.5' RT. ℄ POLAND)
RIM ELEV. = 856.09
℄ EXIST. 48" = 847.79
℄ 12" = 852.60
℄ PROP. 48" = 847.85

PIPE PROFILES THIS SHEET
P - 306
P - 400
P - 407
P - 408
P - 409
P - 412
P - 417

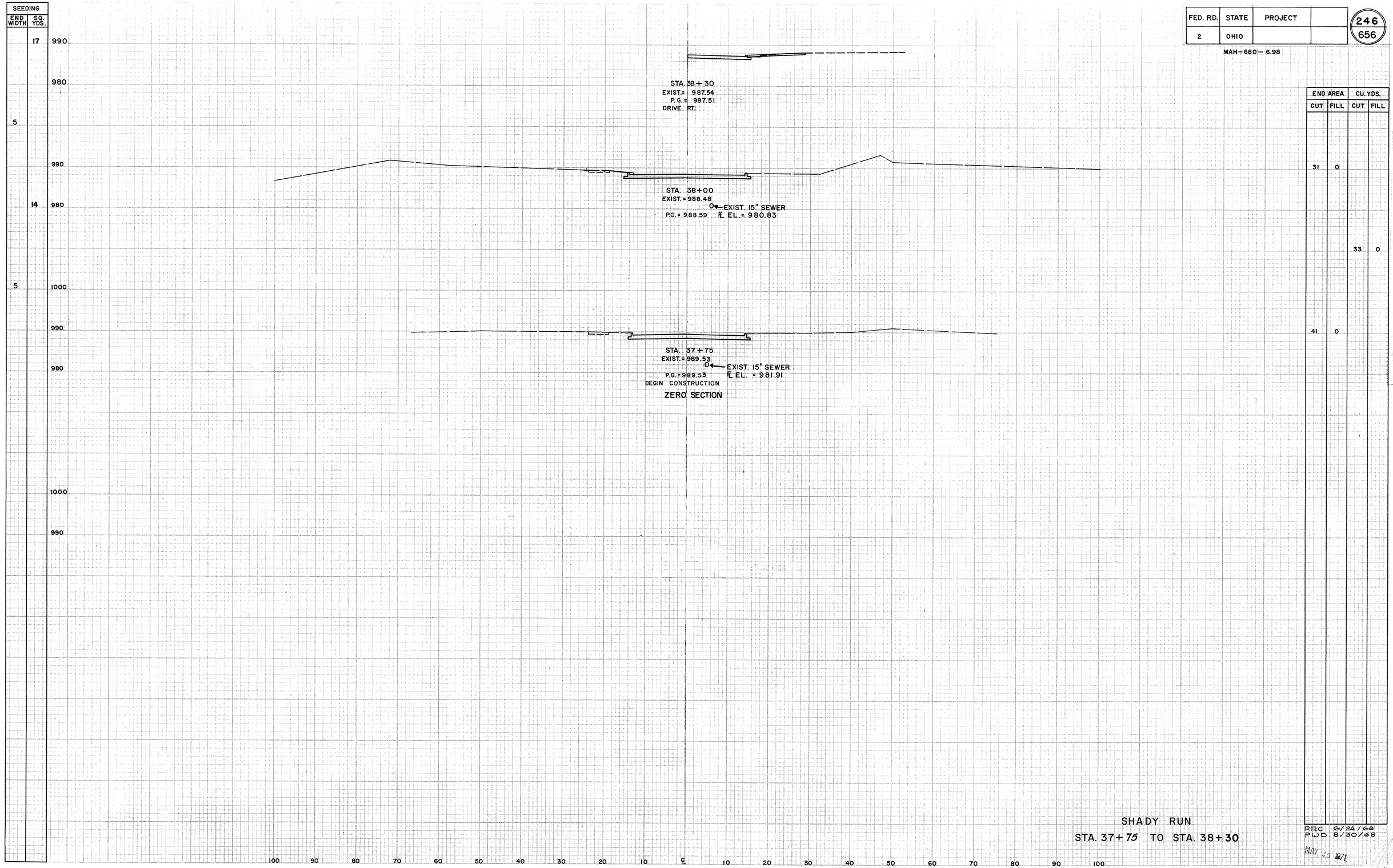
MAY 25 1971

RELOC. SHADY RUN RD. DRAINAGE PROFILES BOARDMAN EXP.

FED. RD.	STATE	PROJECT		246
2	OHIO			656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	17
5	
	14
5	



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
31	0		
		33	0
41	0		

SHADY RUN

STA. 37+75 TO STA. 38+30

RRC 6/24/68
PWD 8/30/68

MAY 23 1971

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
PROFILE
AREAS
AREAS CHECKED
BY
DATE

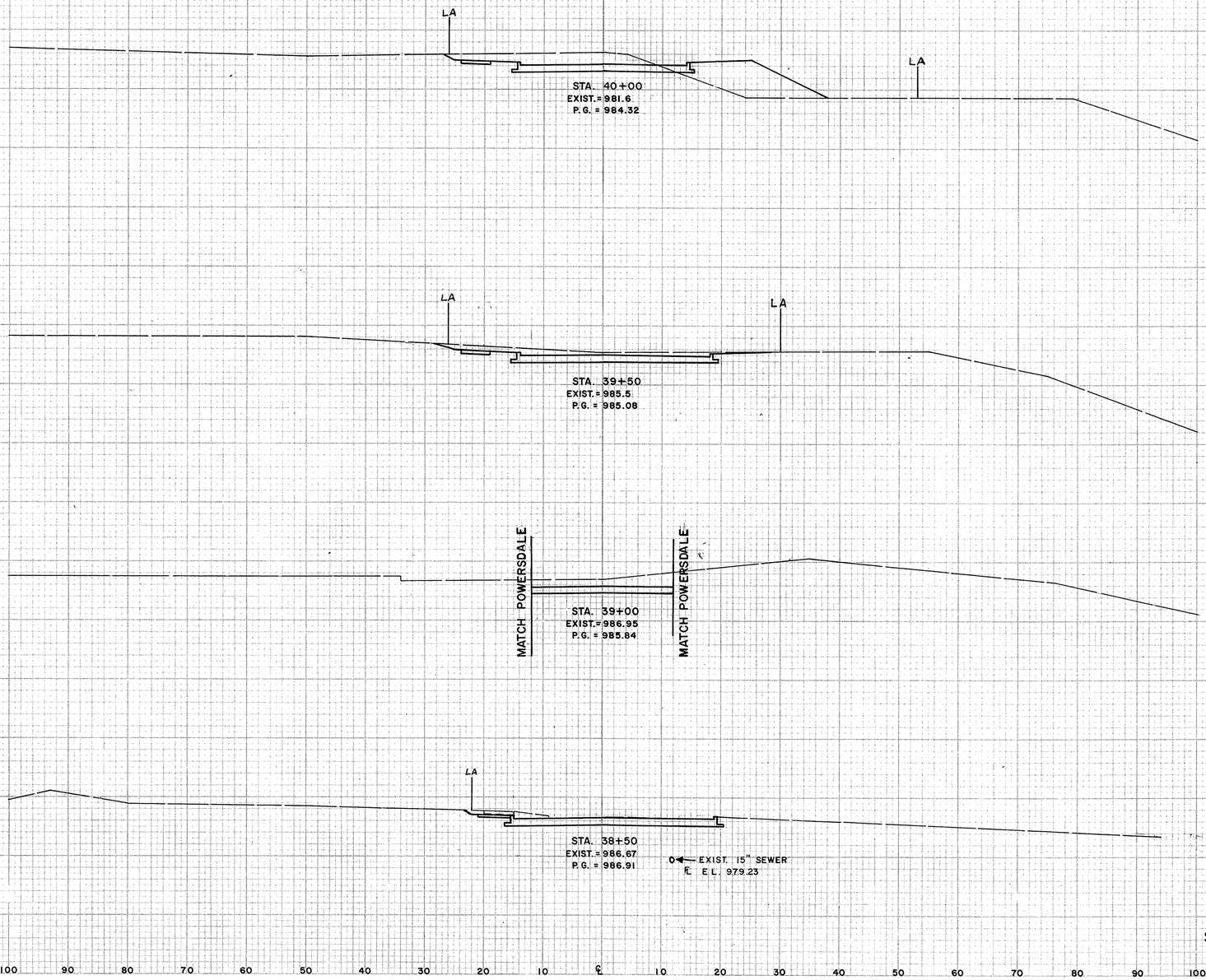
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
PROFILE
AREAS
AREAS CHECKED
BY
DATE

FED. RD	STATE	PROJECT	
2	OHIO		

247
656

MAH – 680 – 6.98

SEEDING	
END WIDTH	SQ. YDS
	339
	990
47	980
	970
	181
18	990
	980
	50
0	990
	980
	3
1	990
	980



END. AREA		CU. YDS.	
CUT	FILL	CUT	FILL
91	101		
		155	94
76	0		
		132	0
66	0		
		121	0
65	0		
		89	0

SHADY RUN

STA. 38+50 TO STA. 40+00

RRC 6/24/68
PUD 8/30/68

MAY 25 1971

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — DATE — BY — NO.

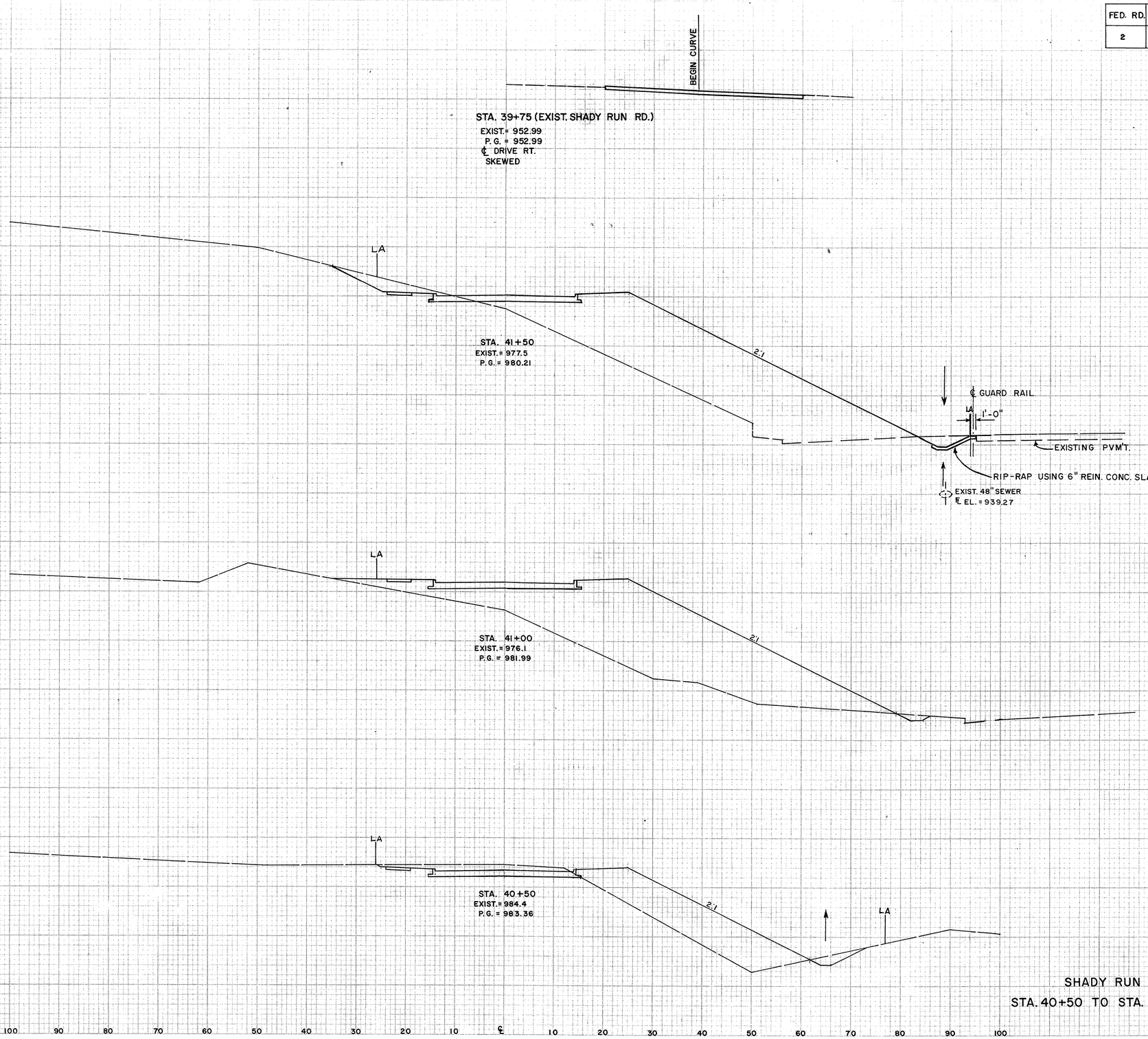
ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — DATE — BY — NO.

FED. RD.	STATE	PROJECT	
2	OHIO		

248
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
95	
	522
95	
75	
	528
	472



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
46	831		
		47	1613
5	911		
		90	1114
92	292		
		169	364

SHADY RUN
STA. 40+50 TO STA. 41+50

RRC 6/24/68
PWD 6/30/68
MAY 25 1971

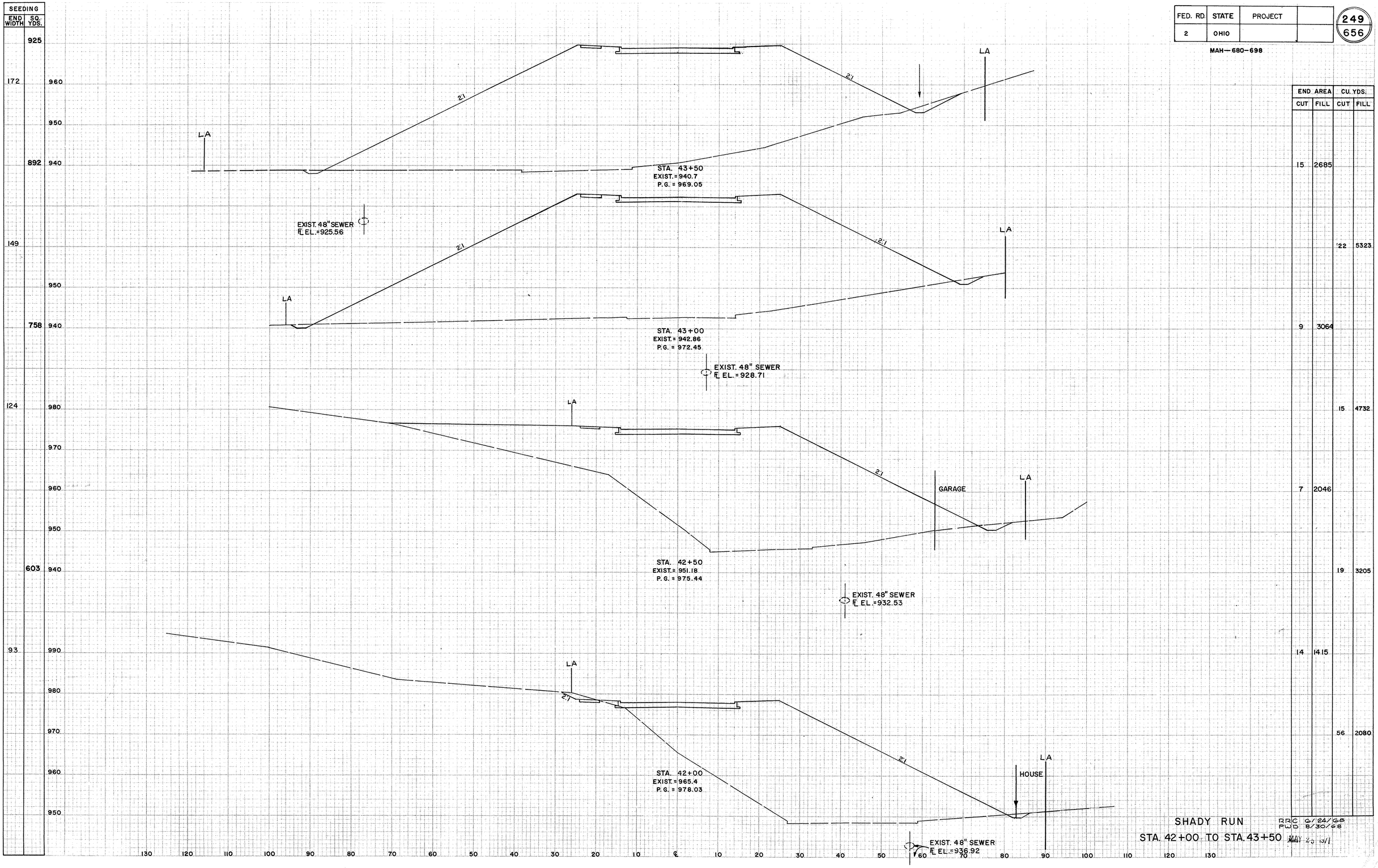
FINAL SURVEY — DATE — BY — SURVEYED — PLOTTED — TENTATIVE AREAS — AREAS CHECKED — NOTE BOOK — NO.

ORIGINAL SURVEY — DATE — BY — SURVEYED — PLOTTED — FINAL AREAS — AREAS CHECKED — NOTE BOOK — NO.

FED. RD.	STATE	PROJECT	
2	OHIO		

249
656

MAH—680-698



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
15	2685		
		22	5323
9	3064		
		15	4732
7	2046		
		19	3205
14	1415		
		56	2080

SHADY RUN

STA. 42+00 TO STA. 43+50

RRC 6/24/68
PWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

250
656

SEEDING	
END WIDTH	SQ. YDS.
85	
	492
92	
	789
192	
	1078
196	
	992
161	

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	1489		
		7	2847
7	1586		
		408	2875
434	1519		
		897	2599
535	1288		
		499	2592
4	1511		
18	3885		

RW
2:1
934.5
STA. 46+00
EXIST. = 933.2
P.G. = 949.20
EXIST. 48" SEWER
℄ EL. = 912.74
934.25
STA. 45+50
EXIST. = 935.3
P.G. = 953.21
EXIST. 48" SEWER
℄ EL. = 915.11
931.00
STA. 45+00
EXIST. = 943.2
P.G. = 957.22
EXIST. 48" SEWER
℄ EL. = 916.56
STA. 44+50
EXIST. = 952.9
P.G. = 961.23
932.5
EXIST. 48" SEWER
℄ EL. = 920.10
STA. 44+00
EXIST. = 957.8
P.G. = 965.24
945.0
EXIST. 48" SEWER
℄ EL. = 922.53

930 940 920 930 940 930 920 940 930 940 920 940 930 940 960 950 940

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100

SHADY RUN
STA. 44+00 TO STA. 46+00

RRC 6/24/68
PWD 8/30/68
MAY 25 1971

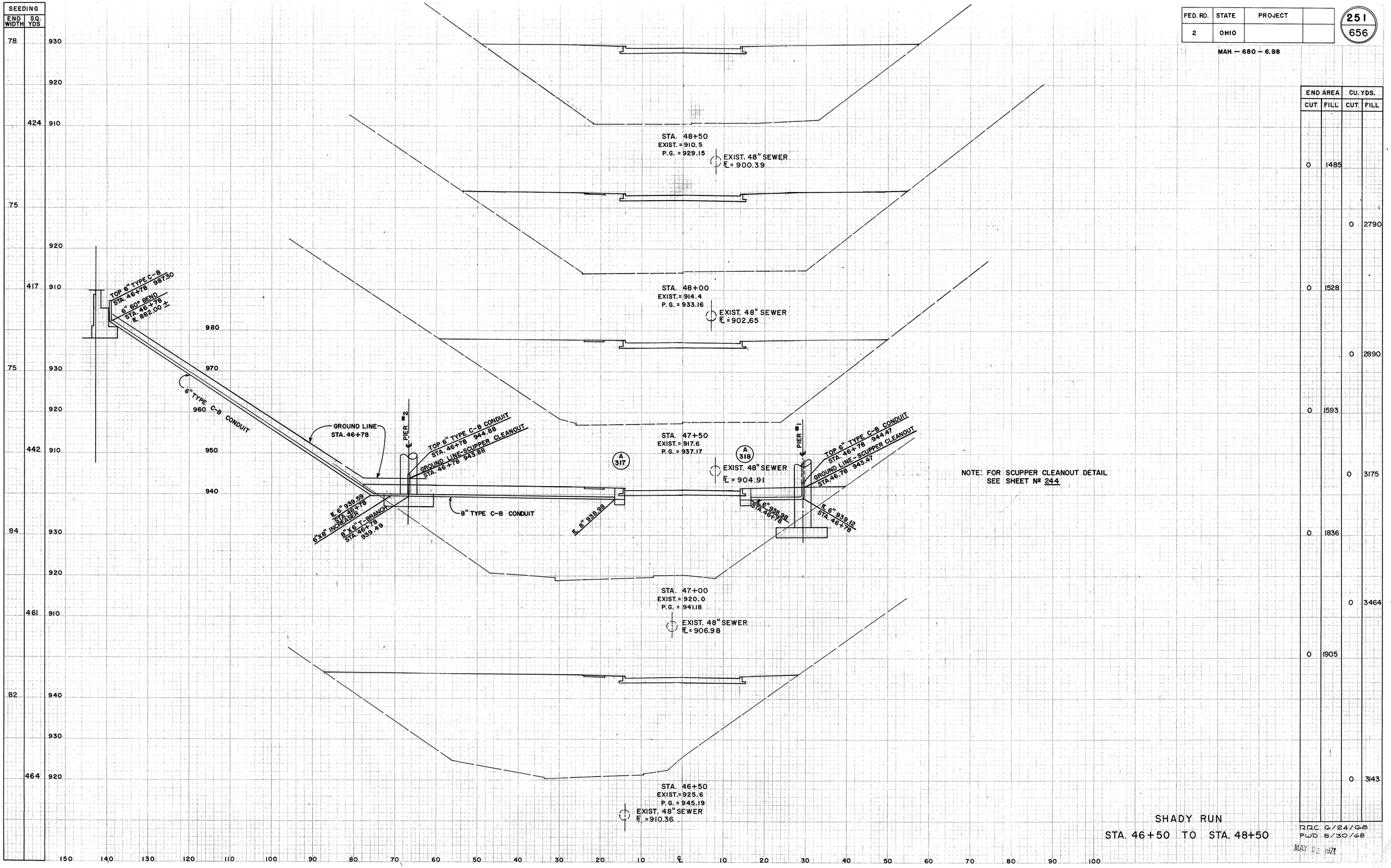
FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

FED. RD.	STATE	PROJECT	
2	OHIO		

251
656

MAH — 680 — 6.98



NOTE: FOR SCUPPER CLEANOUT DETAIL SEE SHEET Nº 244

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	1485		
		0	2790
0	1528		
		0	2890
0	1593		
		0	3175
0	1836		
		0	3464
0	1905		
		0	3143

SHADY RUN

STA. 46+50 TO STA. 48+50

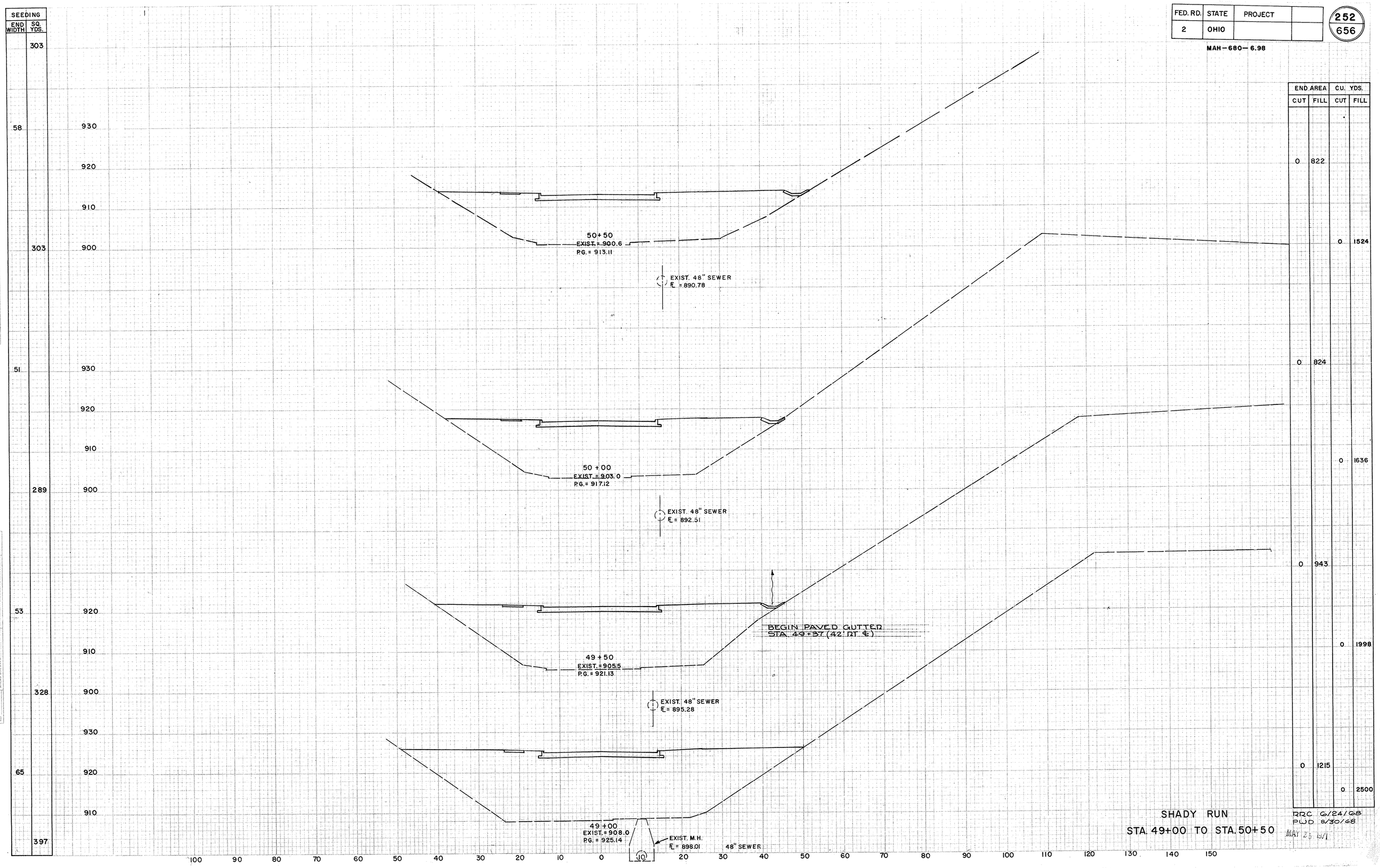
RRC 6/24/68
PWD 8/30/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

252
656

MAH-680-6.98



SHADY RUN

STA. 49+00 TO STA. 50+50

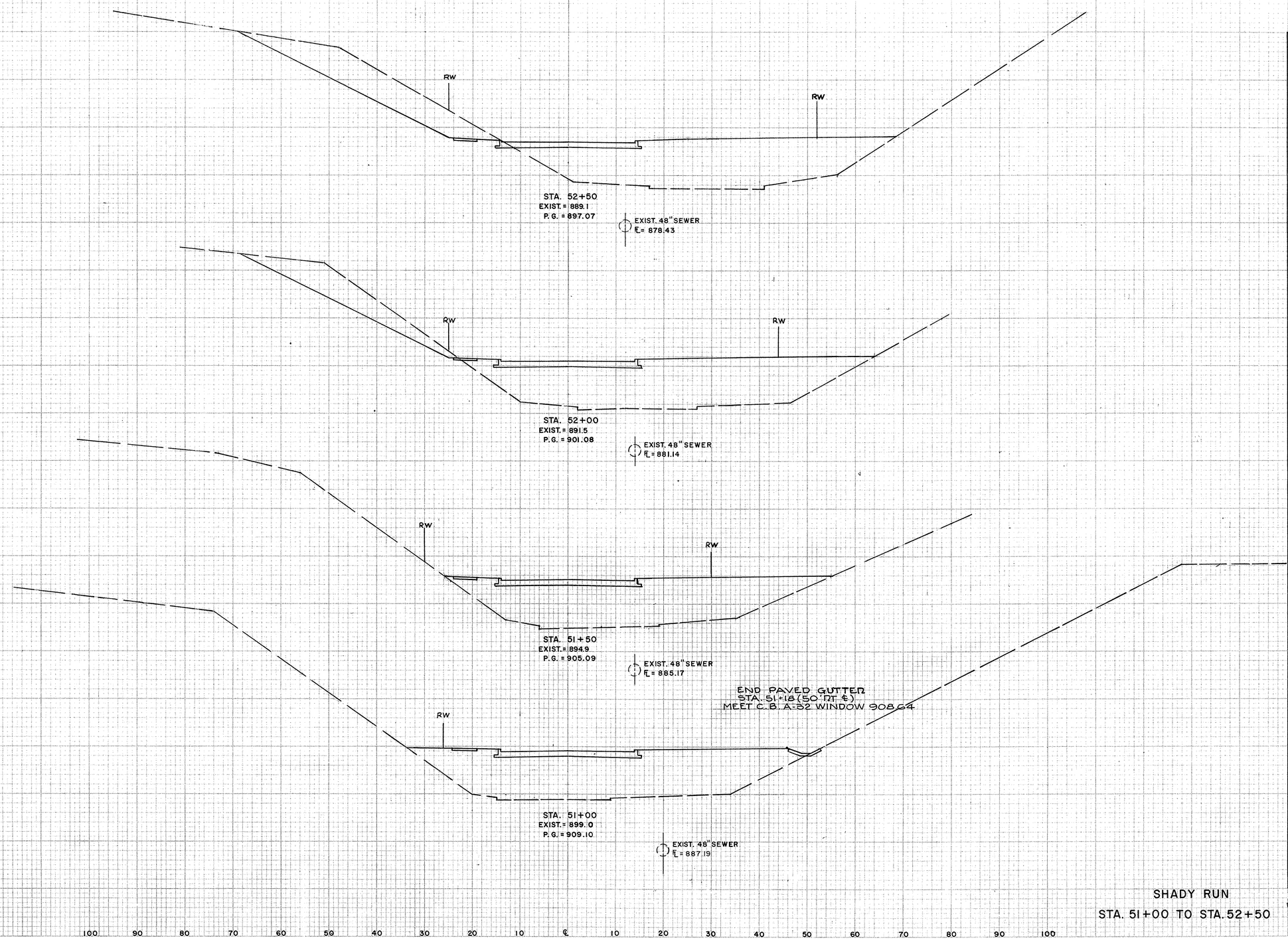
RRC 6/24/68
PWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

253
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	450
110	
	594
104	
	436
53	
	289
51	



END AREA CUT	END AREA FILL	CU. YDS CUT	CU. YDS FILL
258	600		
		404	1174
178	668		
		165	1144
0	567		
		0	1127
0	650		
		0	1363

SHADY RUN

STA. 51+00 TO STA. 52+50

RRC 6/24/68
PWD 8/30/68
MAY 25 1971

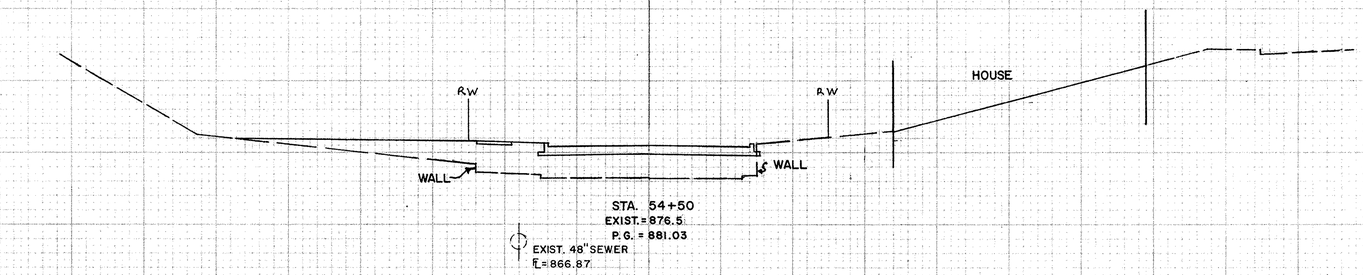
FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

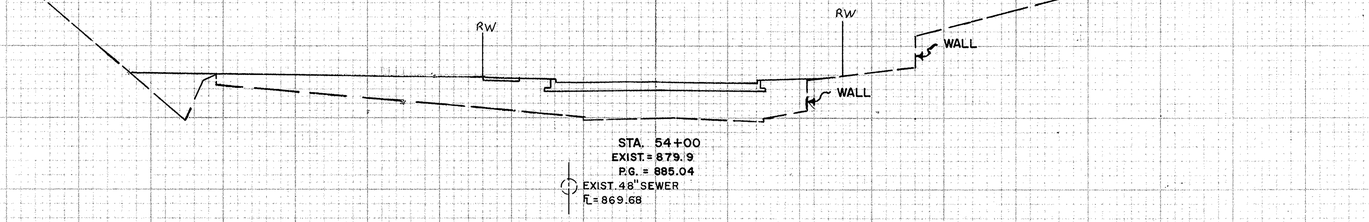
254
656

SEEDING END WIDTH	SEEDING SQ. YDS.
49	214
65	317
53	328
52	292

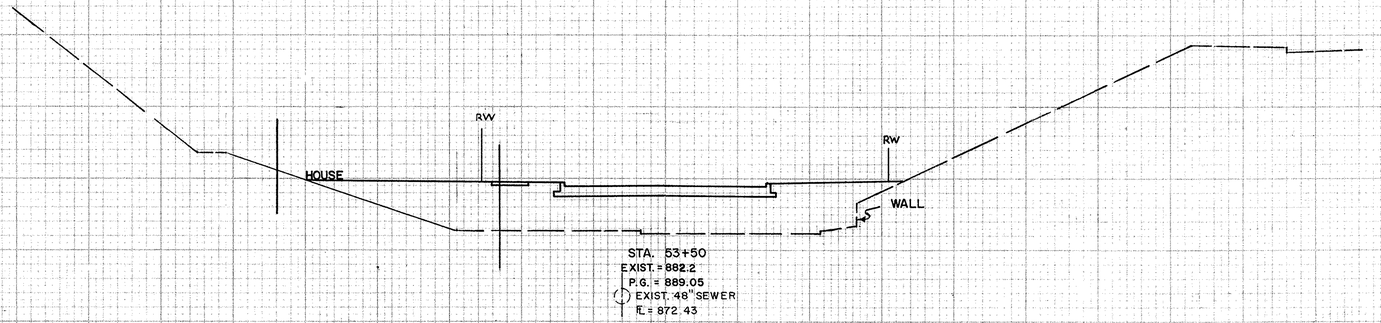
END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	190		
		0	494
0	344		
		0	1823
0	1625		
		0	2060
0	600		
		239	1111



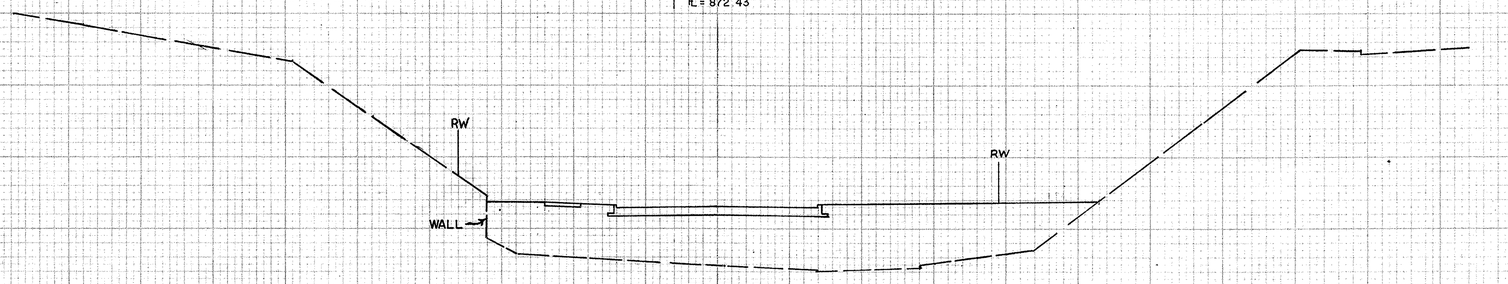
STA. 54+50
EXIST.=876.5
P.G. = 881.03
EXIST. 48" SEWER
℄=866.87



STA. 54+00
EXIST.=879.9
P.G. = 885.04
EXIST. 48" SEWER
℄=869.68



STA. 53+50
EXIST.=882.2
P.G. = 889.05
EXIST. 48" SEWER
℄=872.43



STA. 53+00
EXIST.=884.9
P.G. = 893.06
EXIST. 48" SEWER
℄= 875.35

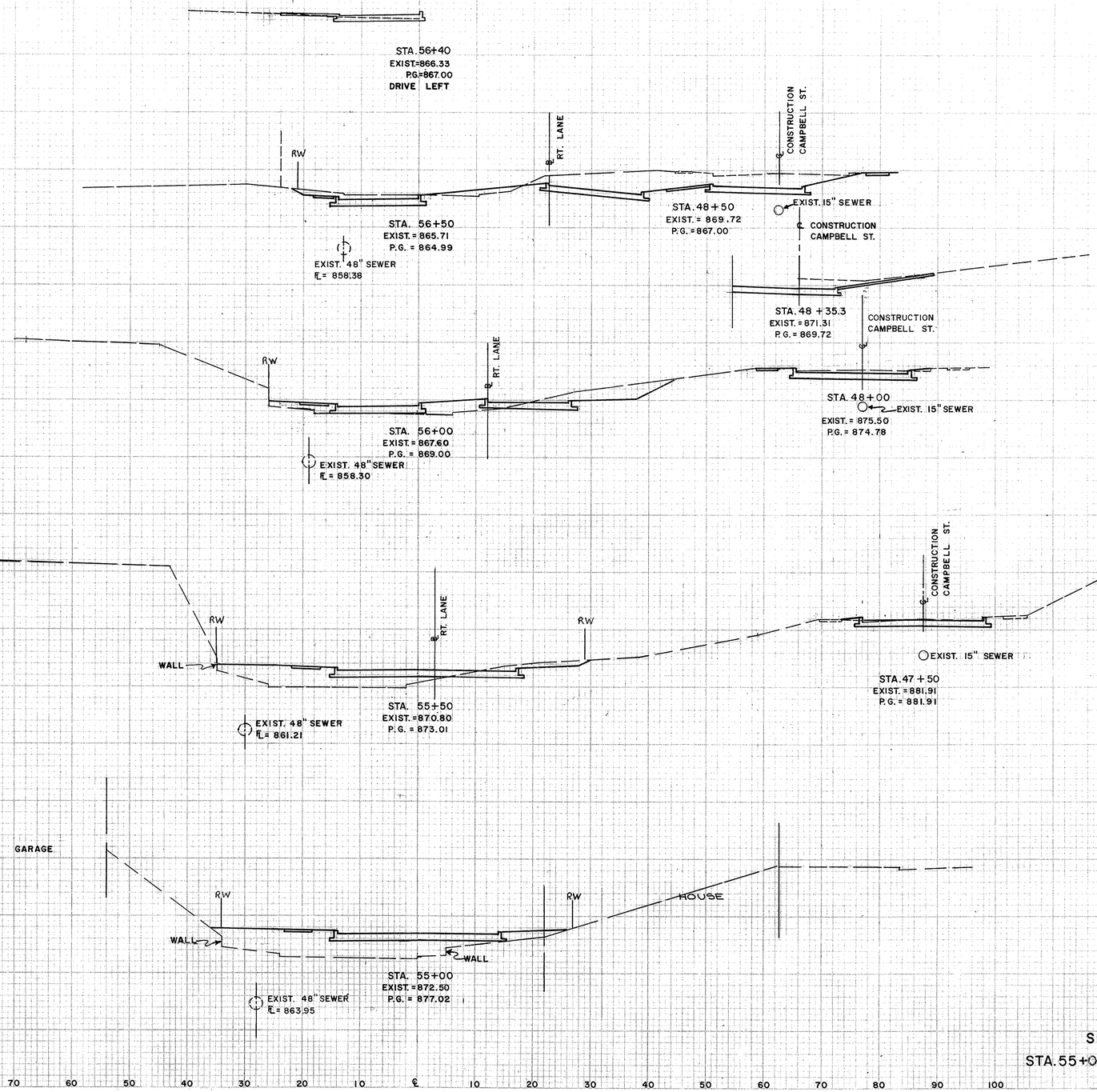
SHADY RUN
STA. 53+00 TO STA. 54+50

RRC 6/24/68
PWD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT		255
2	OHIO			656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
	283
41	
	217
37	
	178
27	
	153
28	



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
216	10		
		277	51
83	45		
		124	127
51	92		
		47	240
0	166		
		0	330

SHADY RUN

STA. 55+00 TO STA. 56+50

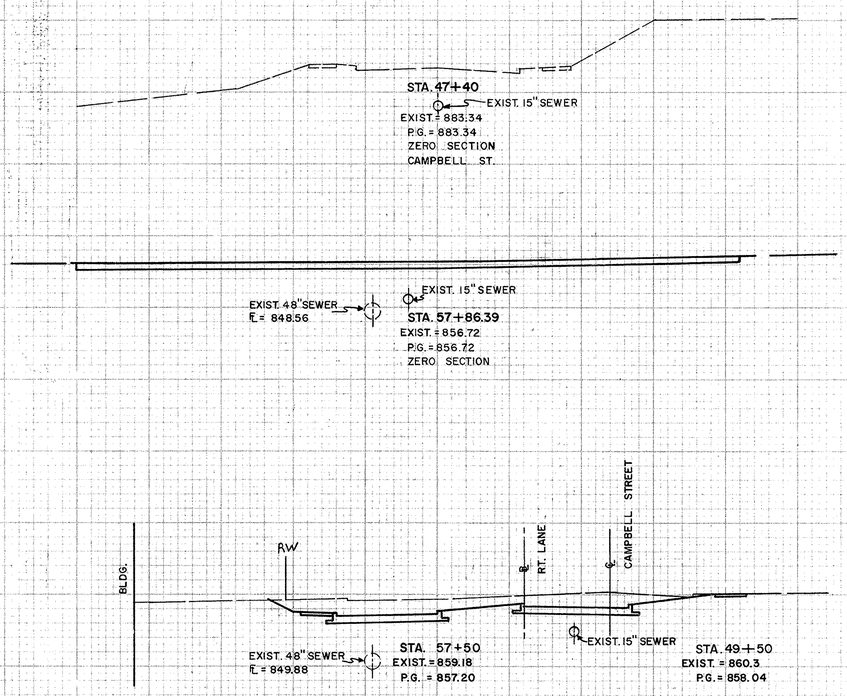
DRC 6/24/68
PUD 8/30/68

MAY 23 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH — 680 — 6.98

SEEDING	
END WIDTH	SQ. YDS.
0	57
28	247
61	



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	0		
82	0		
		147	0
136	0		
		294	0
182	0		
		369	9

SHADY RUN

STA. 57+00 TO STA. 57+86.39

RRC 6/24/68
PUD 8/30/68

MAY 1971

MICROFILMED
JUNE 15, 1979
Reproduction
DL

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

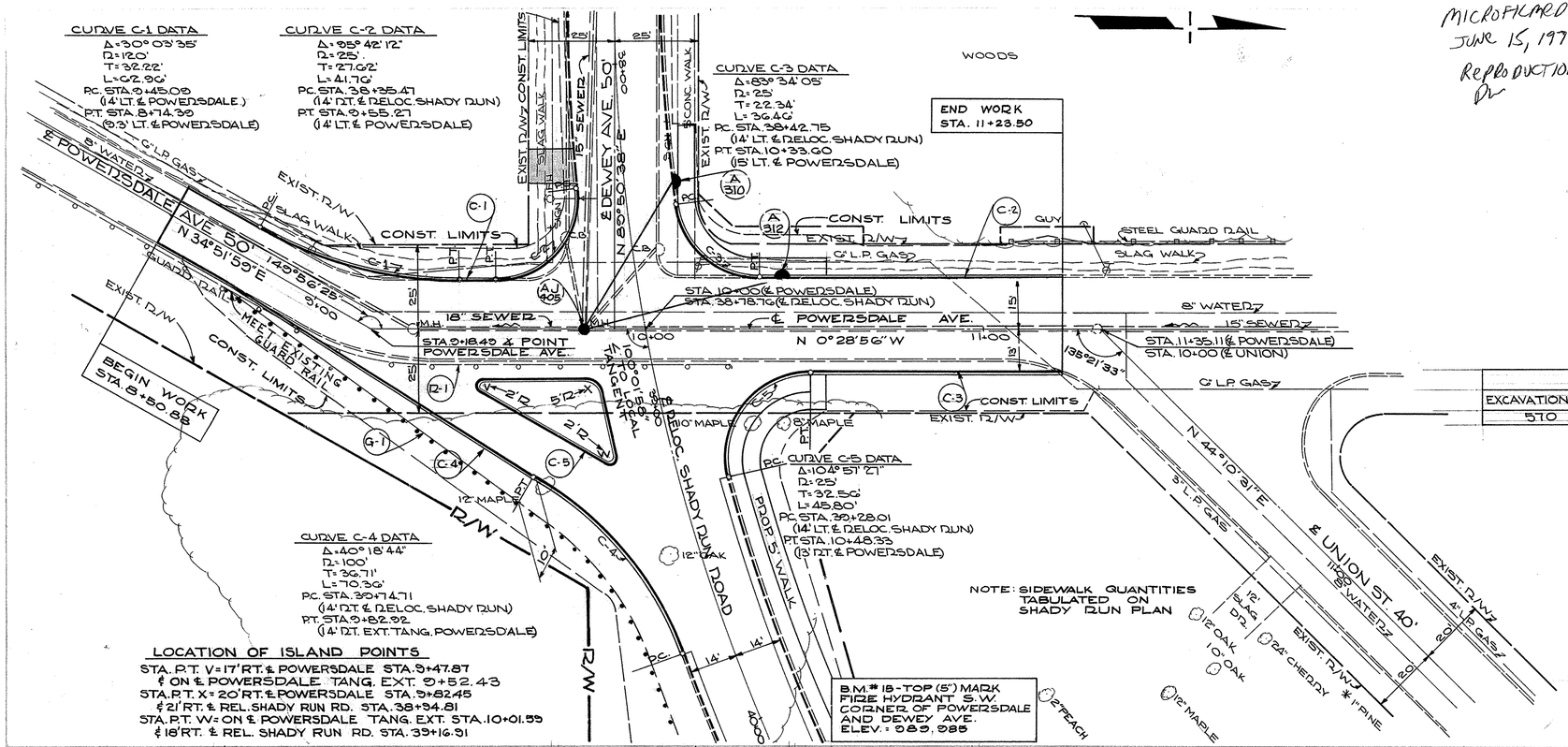
257
656

CURVE C-1 DATA
Δ=90° 05' 35"
D=12.0'
T=32.22'
L=62.96'
PC. STA. 9+45.08 (14' LT. & POWERSDALE)
PT. STA. 8+74.39 (9.3' LT. & POWERSDALE)

CURVE C-2 DATA
Δ=85° 42' 12"
D=25'
T=27.62'
L=41.76'
PC. STA. 38+35.47 (14' RT. & RELOC. SHADY RUN)
PT. STA. 9+55.27 (14' LT. & POWERSDALE)

CURVE C-3 DATA
Δ=83° 34' 05"
D=25'
T=22.34'
L=36.46'
PC. STA. 38+42.75 (14' LT. & RELOC. SHADY RUN)
PT. STA. 10+33.60 (15' LT. & POWERSDALE)

END WORK
STA. 11+23.50



203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
570	33	447

ITEM 202 - GUARD RAIL REMOVED

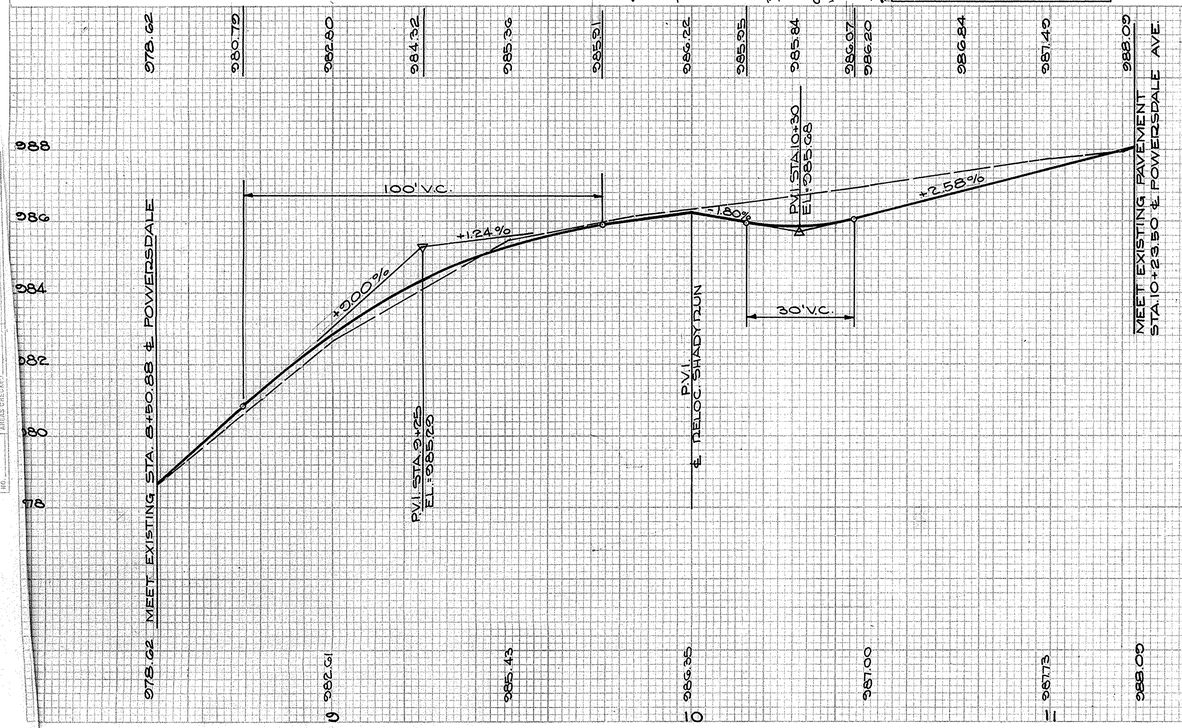
CODE	STATION FROM	STATION TO	LINEAR FEET
R-1	9+75	10+25	158.0
		SHEET TOTAL	158.0

ITEM 606-GUARD RAIL-LIN FT.

CODE	LOCATION FROM	LOCATION TO	TYPE B
G-1	8+75	9+82.92	107.5
		SHEET TOTAL	107.5

ITEM 609 - CONC. CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2A
C-1	8+50.88 (P)	38+35.47 (SR)	138.41
C-2	38+42.75 (SR)	23+50 (P)	126.36
C-3	39+28.01 (SR)	10+23.50 (P)	120.97
C-4	8+50.88 (P)	39+14.71 (SR)	202.40
C-5	ISLAND		110.97
		SHEET TOTAL	708.11



R.R.C. 4/15/69
C.A.P. 4/18/69
0 10 20 40

MAY 20 1971

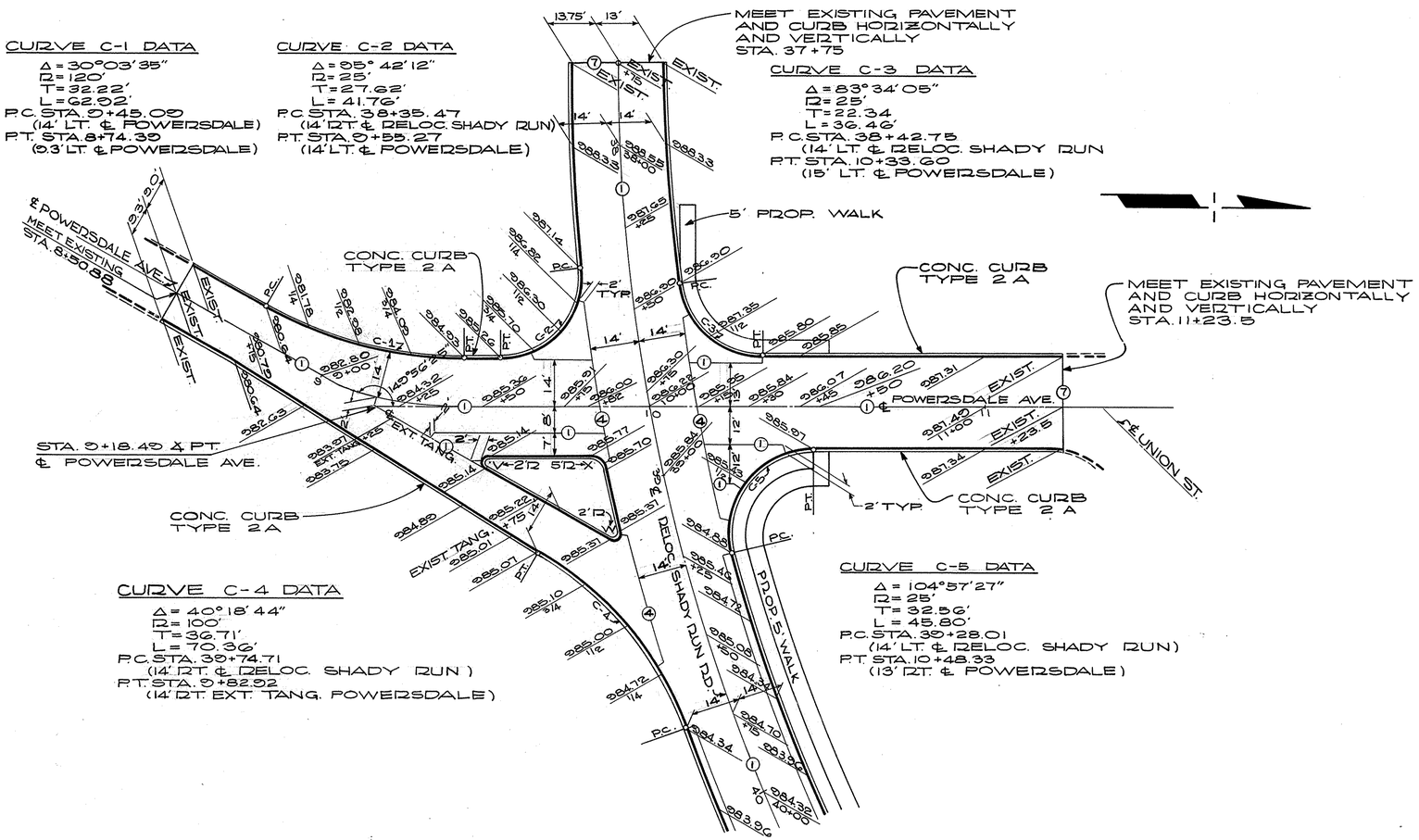
POWERSDALE AVE. STA. 8+60 TO 11+35

PLATE 4-CROSS SECTION O. P. R- & R. E. STANDARD

FED. RD.	STATE	PROJECT	
2	OHIO		

258
656

MAH-680-6.98



JOINT LEGEND

① STANDARD LONGITUDINAL JOINT

④ KEY JOINT WITHOUT TIE BARS

⑦ STANDARD EXPANSION BOLT JOINT

LOCATION OF ISLAND POINTS

STA. P.T. V = 17' RT. ℄ POWERSDALE STA. 9+47.87
℄ ON ℄ POWERSDALE TANG. EXT. 9+52.43
STA. P.T. X = 20' RT. ℄ POWERSDALE STA. 9+82.45
℄ 21' RT. ℄ REL. SHADY RUN RD. STA. 38+94.81
STA. P.T. W = ON ℄ POWERSDALE TANG. EXT. STA. 10+01.59
℄ 18' RT. ℄ REL. SHADY RUN RD. STA. 38+16.91

0' 10' 20' 40'

MAY 25 1971

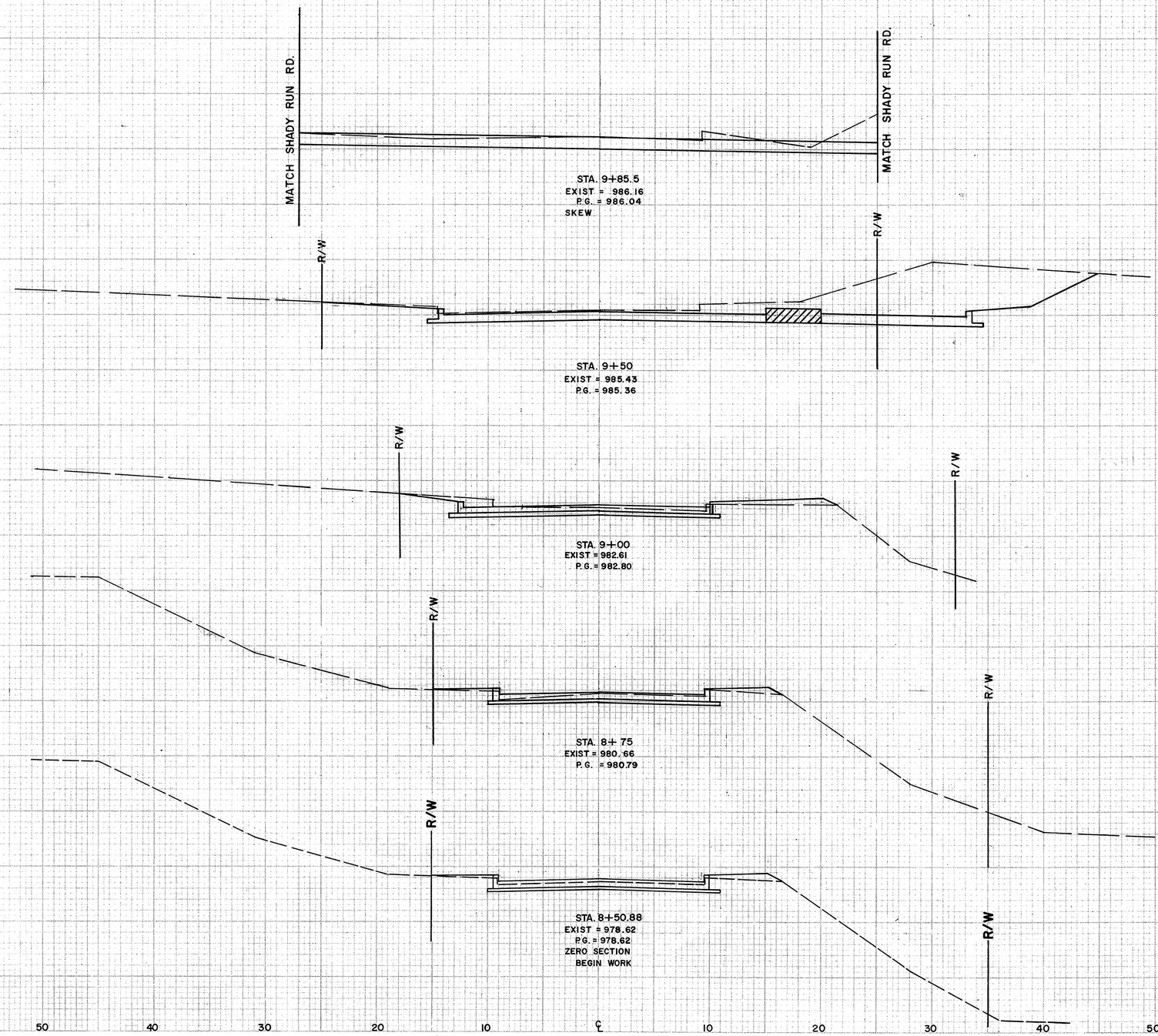
POWERSDALE AVE. PAVEMENT DETAILS

FED. RD.	STATE	PROJECT	
2	OHIO		

259
656

MAH – 680 – 6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	43
22	
	144
30	
	90
33	
	26
0	



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
70	11		
		139	7
141	0		
		152	9
23	10		
		19	9
18	10		
		14	4
13	0		

POWERSDALE AVENUE
STA. 8+50.88 TO STA. 9+85.5

PUD 8/30/68
DRC 6/24/68

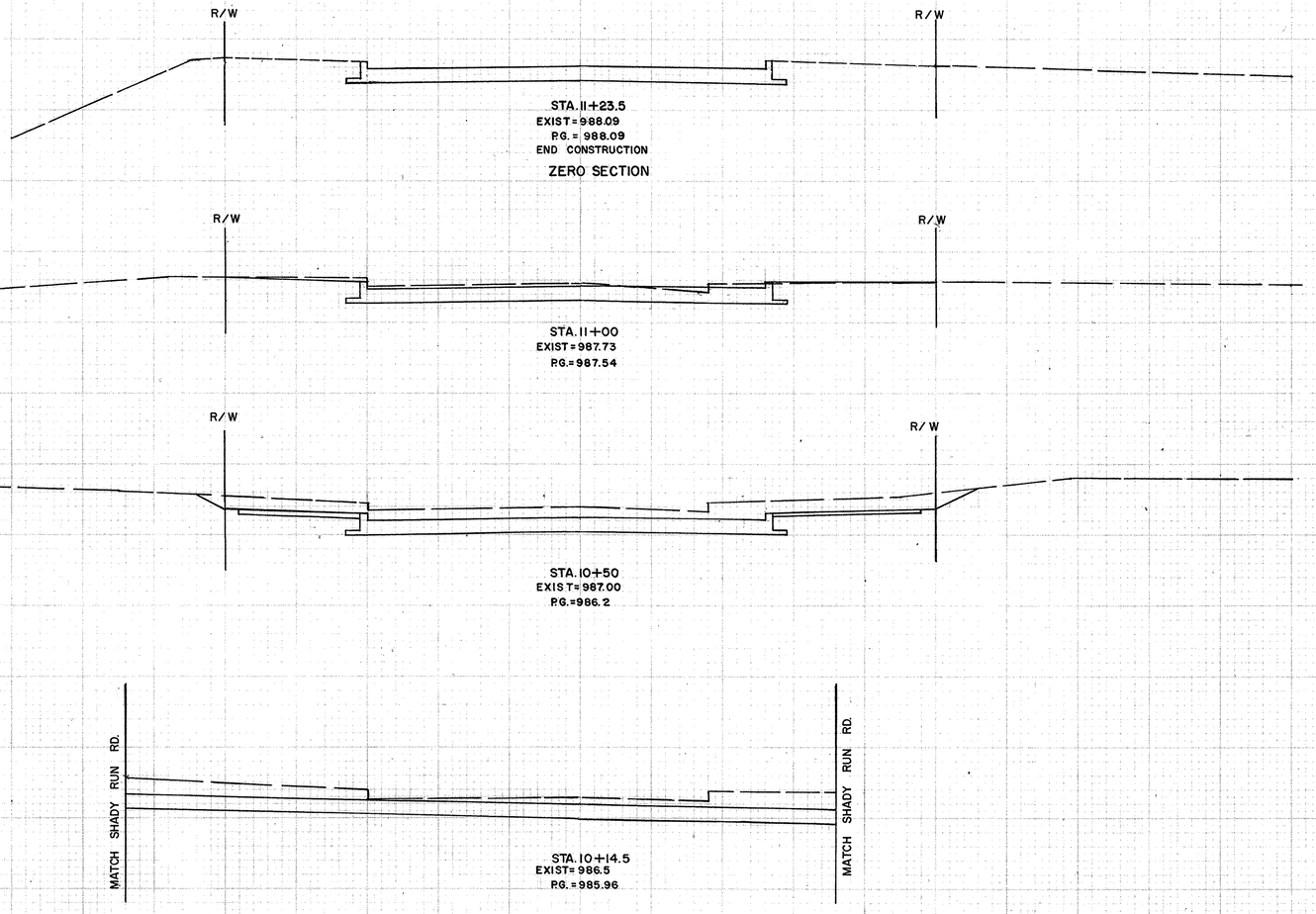
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

260
656

MAH – 680 – 6.98

SEEDING		END AREA		CU. YDS.	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
0	24	36	0	32	1
22	83	38	3	107	3
8	16	78	0	107	0
0		85	0		



990 985 980 990 985 980 990 985 980 990 985 980

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

POWERSDALE AVENUE

STA. 10+14.5 TO STA. 11+35

RDC 6/24/68 PWD 8/30/68

MAY 2 1974

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.38

261
656

BRIDGE MAH-680-0702
TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE SPAN: 76'x96'x76' c/c BRGS. ROADWAY: 28'-0" c/f OF 6'-0" SIDEWALK LT. AND 2'-0" SAFETY CURB RT. LOAD FREQUENCY: HS 20-44 SKEW: NONE WEARING SURFACE: 1" MONOLITHIC CONC. APPROACH SLAB: 20'-0" LONG A.S.-1 GT SUPERELEVATION: NONE ALIGNMENT: STRAIGHT

BRIDGE MAH-680-0704
TYPE: CONTINUOUS STEEL BEAM WITH CONCRETE DECK AND SUBSTRUCTURE SPANS: 56'-0"x71'-0"x52'-0" c/c BRGS. ROADWAY WIDTH: VARIES (SEE PLAN) LOAD FREQUENCY: HS 20-44 SKEW: VARIES AS SHOWN ON PLAN ALIGNMENT: 1°50'00" LT. & 200' SPIRAL SUPERELEVATION: VARIES (.0434'/') TO C.S., .0156'/' TO STA., WEARING SURFACE: 1" MONOLITHIC CONC. APPROACH SLAB: 20' LONG SPECIAL FOR DETAIL SEE SHEET Nº 498

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	L	W	PROF. SH'T. Nº	ITEM 452 2 SQ. YDS.
*D-1	48+60 COOPER	RT.	II	6	8	2.71	7.67
*D-2	49+00 COOPER	LT.	II	5.5	8	2.71	7.03
D-3	37+71.00 CAMPBELL	LT.	II	7	8	2.76	8.04
						TOTAL	23.64

* TO MEET EXIST. SIDEWALK
EXIST. WALK TO BE MAINTAINED

RAMP "E" CURVE ① DATA
Δ = 17°13'49"
Dc = 6°00'00"
R = 954.93
T = 144.68'
L = 287.17'
CH = 286.08'
E = 10.90'

ITEM 606 - GUARD RAIL - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	TYPE 5		BRIDGE TERMINAL ASSEMBLY * EACH	ANCHOR ASSEMBLY EACH
G-1	712+73	722+00	927.0		1	
G-2	712+73	PT. CURB RET.	L.C.&		1	1
		TOTAL	939.5		2	1

* As Per Plan

ITEM 609 CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 2A	TYPE 6
C-1	48+70 COOPER	37+63.60 CAMPBELL	155.83	
C-2	37+63.60 CAMPBELL	709+85.75 RAMP "E"	86.24	
C-3	48+70 COOPER	38+70 CAMPBELL	132.62	
C-4	712+78.25	47+38.46 UNION	42.80	
C-5	47+36.91 UNION	47+70.73 CAL.	203.76	
C-6	712+78.25	715+50.57	284.72	16.00
C-7	ISLAND	—	55.31	
C-8	47+71.53 CAL.	716+68.45 RAMP "E"	83.80	
C-9	38+70 CAMPBELL	709+85.75 RAMP "E"	42.64	
	TOTAL		1221.88	16.00

ITEM 611 - APPROACH SLABS (T=12")

CODE	STATION FROM	STATION TO	WIDTH	SQ. YDS.
AS-1	709+85.75	710+05.75	28.0	62.2
AS-2	712+58.25	712+78.25	28.0	62.2
		TOTAL		124.4

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	49+57 COOPER	37+60 CAMPBELL	LT.	308.0
S-2	37+76 CAMPBELL	BRIDGE	LT.	852.0
S-3	49+14 COOPER	38+60 CAMPBELL	RT.	420.0
S-4	BRIDGE	34+16 UNION	LT.	304.0
S-5	34+15 UNION	47+70.73 CAL.	LT.	742.0
S-6	47+71.53	RT. & CAL.	RT.	57.5
		SHEET TOTAL		2683.5

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
43,562	1043	13,170

BM* 20 - TOP OF WEST BOLT ON FIRE HYDRANT IN SOUTH WEST CORNER OF INTERSECTION OF CAMPBELL AND COOPER STREETS
ELEV. = 996.700

FOR PAVEMENT DETAILS, SEE SHT. Nº 272 TO 275
FOR TOPOGRAPHY, SEE SHT. Nº 269
FOR DRAINAGE DETAILS, SEE SHT. Nº 348 350 383
FOR RAMP "X" DETAILS, SEE SHT. Nº 230
FOR BRIDGE DETAILS, SEE SHT. Nº 513
FOR WATER LINE DETAILS, SEE SHT Nº 380 381 383

R.R.C. 8/25/68
PWD 8/30/68

0 50 100

MAY 25 1971

GEOMETRIC PLAN (SHEET 1)
RAMPS "E" & "F"

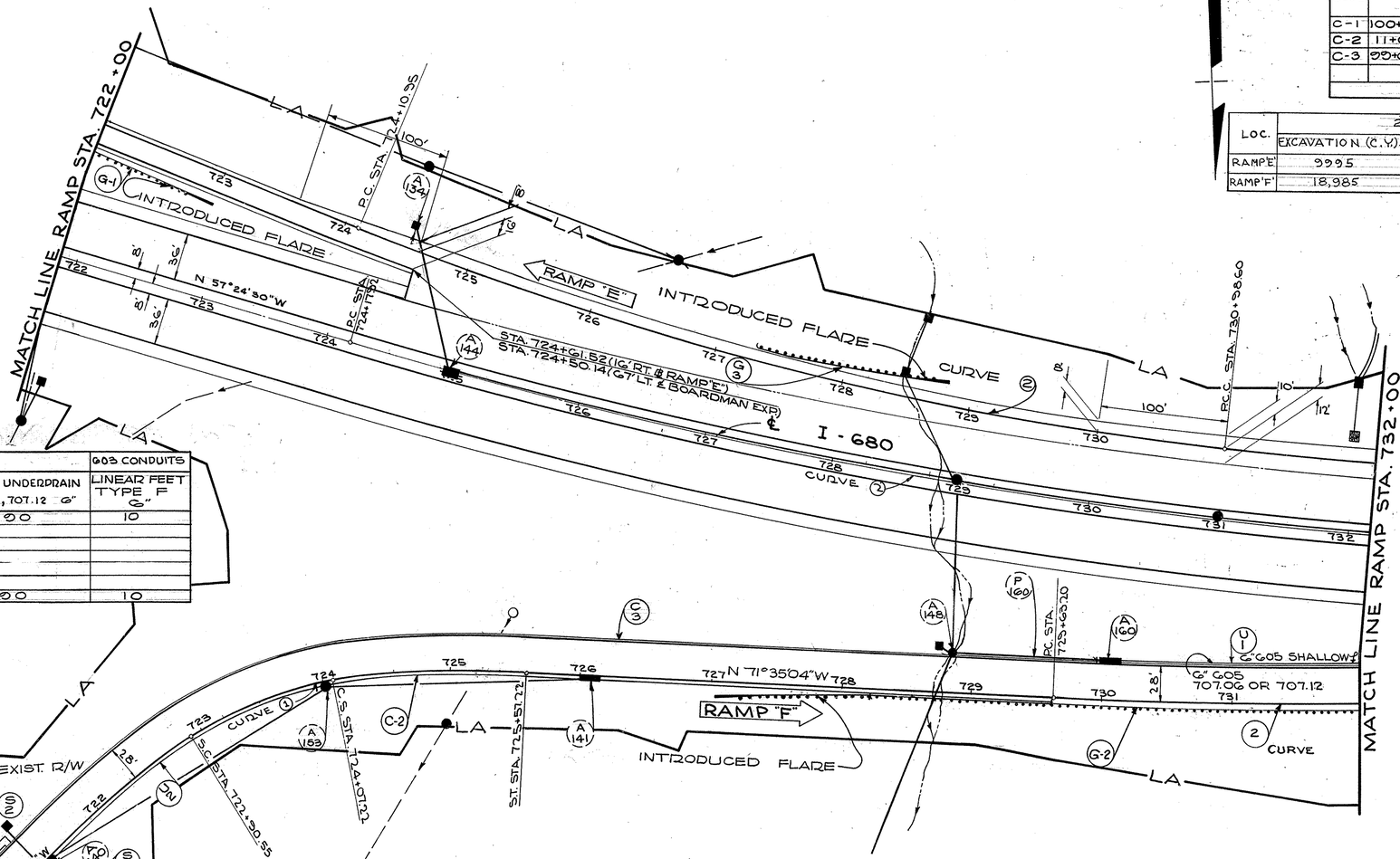
FED. RD.	STATE	PROJECT	
2	OHIO		

262
656

MAH-680-6.98

ITEM 609 CONCRETE CURB-LIN.FT.			
CODE	STATION FROM	STATION TO	TYPE 2A
C-1	100+48.15(PWRSDL)	11+00(ALEX DR.)	100.66
C-2	11+00 (ALEX DR.)	732+00(℄ RAMP F)	1142.04
C-3	99+64.22(PWRSDL)	732+00(℄ RAMP F)	1123.62
	SHEET TOTAL		2366.32

LOC.	203 EXCAVATION (C.Y.)	203 EMBANKMENT (C.Y.)	659 SEEDING (S.Y.)
RAMP'E'	9995	0	1688
RAMP'F'	18,985	646	8277



ITEM 605 UNDERDRAINS LINEAR FEET						603 CONDUITS
CODE	LOCATION FROM	LOCATION TO	BENDS & BRANCHES 6"	SHALLOW PIPE 6"	PIPE UNDERDRAIN 707.06, 707.12 6"	LINEAR FEET TYPE F 6"
U-1	730+00	732+00		100	00	10
TOTAL				100	00	10

ITEM 608 - WALKS				
CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	54+08	POWERSDALE	RT.	22.5
S-2	54+08 PWRSDL	721+32.5 F	—	147.5
S-3	721+32.5 F	11+00 ALXNDR	—	313.75
S-4	55+03.17 PWRSDL	10+68.5 ALXNDR	—	324.75
S-5	10+81.5	11+00 ALXNDR	RT.	92.5
	TOTAL			901.0

DRIVE APPROACHES							
CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452-SQ.YDS.
D-1	10+75	RT.	II	15'	13.0'	285	11.42
SHEET TOTAL							11.42

ITEM 606 - GUARD RAIL - LIN. FT.			
CODE	LOCATION FROM	LOCATION TO	TYPE 5
G-1	722+00 "E"	722+08 "E"	8
G-2	727+00 "F"	732+00 "F"	475
G-3	727+25 (NL)	728+75 (NL)	125
		TOTAL	613

ITEM 604 - MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
RM-1	720+80.92	℄ RAMP "F"	1
		TOTAL	1

⊗ ANCHOR ASSEMBLY - 9 ea.

℄ RAMP "E"
CURVE 2 DATA
Δ = 15° 28' 20"
Dc = 2° 15' 00"
R = 2,546.48'
T = 345.93'
L = 687.65'
CH = 685.51'
E = 23.38'

℄ I-680
CURVE 2 DATA
Δ = 32° 44' 51" LT
Dc = 1° 28' 00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.53'
E = 165.13'

℄ RAMP "F"
CURVE 1 DATA
Δ = 48° 00' 00"
Ls = 150'
Dc = 18° 00' 00"
R = 318.31'
θs = 13° 30' 00"
Δc = 21° 00' 00"
Lc = 116.67'
Tc = 59.00'
CHc = 116.01'
Ec = 5.42'
P = 2.94'
K = 74.86'
Xc = 149.17'
Yc = 11.73'
L.T. = 100.25'
S.T. = 50.25'
L.C. = 149.63'
Ts = 217.85'
Es = 33.34'

℄ RAMP "F"
CURVE 2 DATA
Δ = 10° 27' 36"
Dc = 1° 15' 00"
R = 4,583.66'
T = 419.51'
Lc = 836.80'
CH = 835.64'
E = 19.16'

FOR PAVEMENT DETAILS, SEE SHT. Nº 272-275
FOR TOPOGRAPHY, SEE SHT. Nº 270
FOR DRAINAGE DETAILS, SEE SHT Nº 253
FOR RAMP "F" DETAILS, SEE SHT Nº 275
FOR WATER LINE DETAILS, SEE SHT Nº 283

0 50 100

R.R.C. 8/25/68
PWD 8/30/68
MAY 23 1971

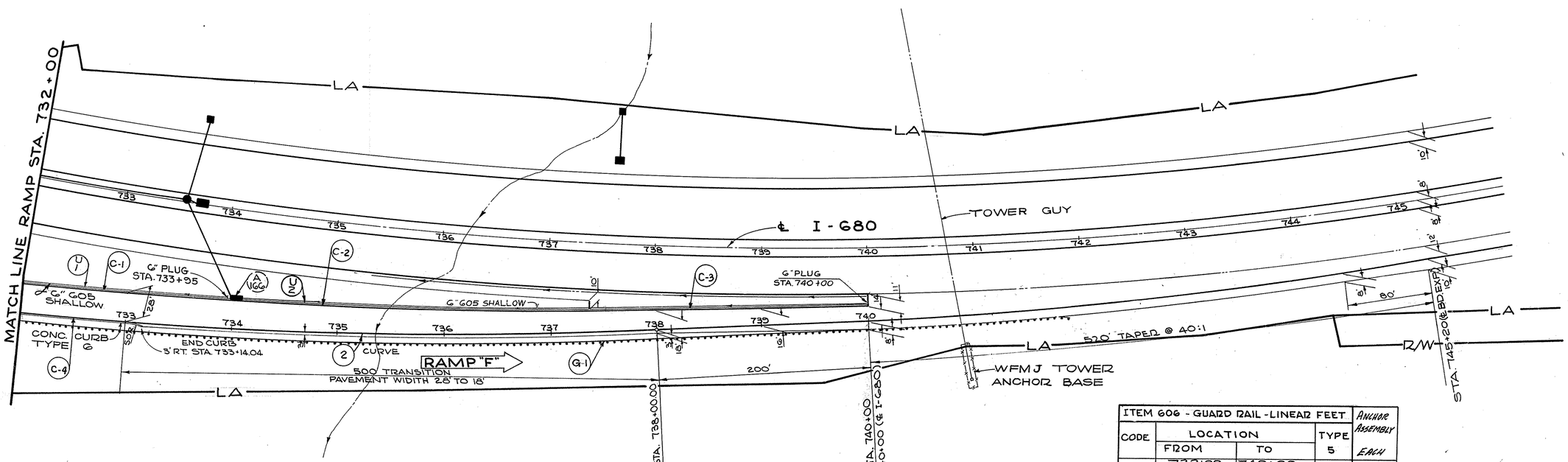
GEOMETRIC PLAN (SHEET 2)
RAMPS "E" & "F"

FED. RD.	STATE	PROJECT	
2	OHIO		

263
656

MAH-680-6.38

ITEM 609 - CONCRETE CURB - LIN. FT.						
CODE	STATION FROM	STATION TO	TYPE 2A	TYPE 6	TYPE 7	TYPE 8
C-1	732+00 (LT.)	734+25 (LT.)	223.63			
C-2	734+25 (LT.)	737+50 (LT.)			323.40	
C-3	737+50 (LT.)	740+00 (LT.)				249.81
C-4	732+00 (RT.)	733+14.04	100.00	14.25		
TOTAL			323.63	14.25	323.40	249.81



ITEM 606 - GUARD RAIL - LINEAR FEET				ANCHOR ASSEMBLY
CODE	LOCATION FROM	LOCATION TO	TYPE 5	EACH
G-1	732+00 RAMP "F"	740+00 RAMP "F"	775	1
TOTAL			775	1

ITEM 605 - UNDERDRAINS - LINEAR FEET				603 - CONDUITS
CODE	LOCATION FROM	LOCATION TO	SHALLOW PIPE 6"	LINEAR FEET TYPE F 6"
U-1	732+00	733+05	105	
U-2	734+00	740+00	500	10
TOTAL			785	10

℄ I-680
CURVE ② DATA
Δ = 32° 44' 51"
D_c = 1° 28' 00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
C.H. = 2,202.52'
E = 165.13'

℄ RAMP "F"
CURVE ② DATA
Δ = 10° 27' 36"
D_c = 1° -15'
R = 4,583.66'
T = 419.57'
L_c = 836.80'
C.H. = 835.64'
E = 19.16'

B.M. #8A - CROSS CUT IN CONC. BASE OF IRON FENCE POST AT THE S.E. CORNER OF FENCE AROUND THE NORTH ANCHOR OF 1000' WFMJ TOWER.
ELEV. = 583.663

FOR PAVEMENT DETAILS, SEE SHT. Nº 272 TO 275
FOR TOPOGRAPHY, SEE SHT. Nº 271
FOR DRAINAGE DETAILS, SEE SHT. Nº 357 ℄ 359

FOR WATER LINE DETAILS, SEE SHT. Nº 384 ℄ 385

R.R.C. 4/15/69
C.A.P. 4/18/69

MAY 23 1969

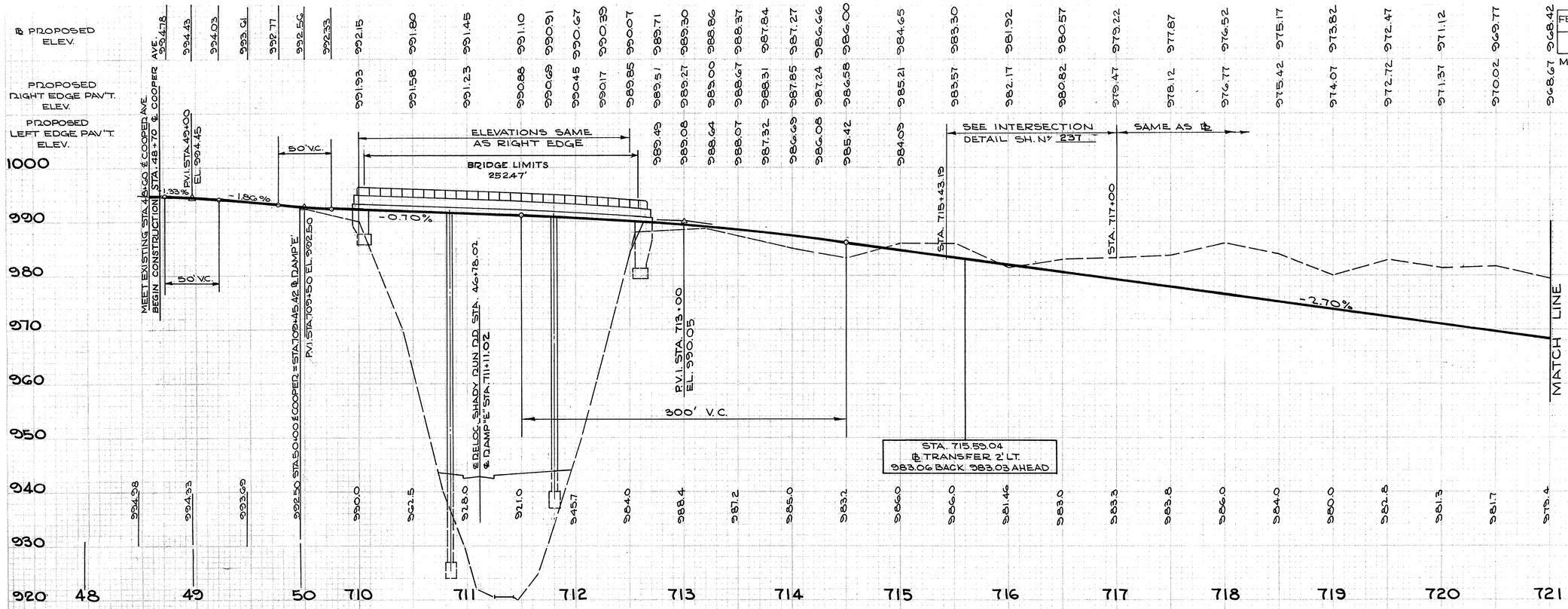
0 50 100

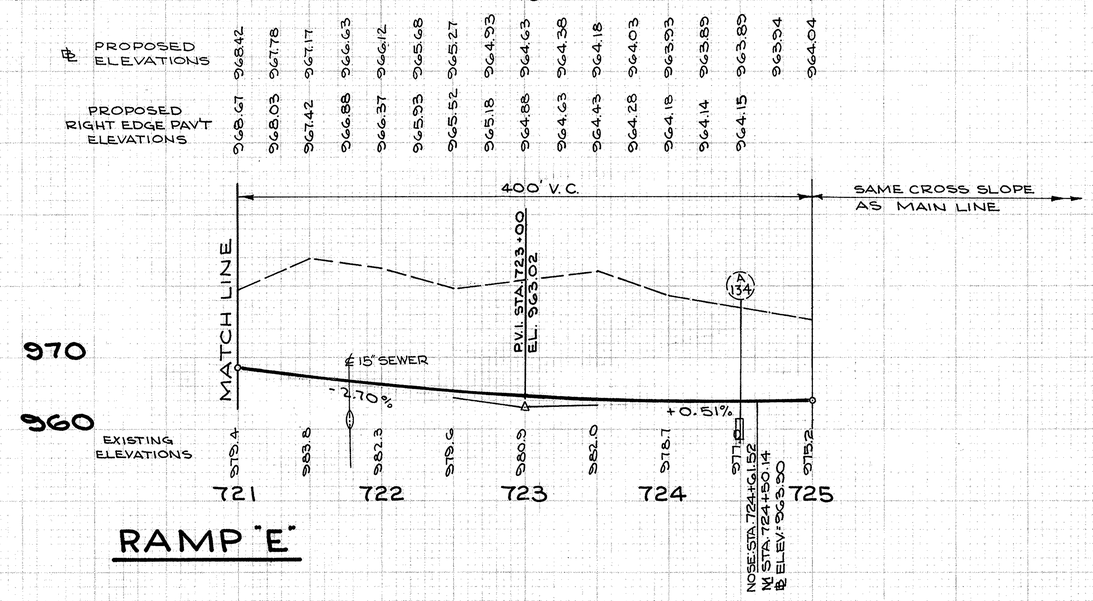
GEOMETRIC PLAN (SHEET 3)
RAMPS "E" & "F"

FED RD.	STATE	PROJECT	
2	OHIO		

264
656

MAH-680-6.98





RAMP "E"

℄ RAMP "E" GRAPHIC GRADE		
℄ STATION	OFFSET	EDGE ELEV.
725+25.	77.19'	964.25
+50	75.39'	964.62
+75	73.67'	964.99
726+00	72.02'	965.36
+25	70.46'	965.72
+50	68.98'	966.08
+75	67.57'	966.44
727+00	66.25'	966.80
+25	65.01'	967.15
+50	63.84'	967.50
+75	62.76'	967.85
728+00	61.76	968.19
+25	60.83'	968.54
+50	59.99	968.88
+75	59.23'	969.21
729+00	58.55'	969.55
+25	57.95'	969.88
+50	57.43'	970.20
+75	56.99'	970.53
730+00	56.63'	970.85
+25	56.35'	971.17
+50	56.15'	971.49
+75	56.04'	971.80
730+98.60	56.00'	972.09

COOPER AVE. &
RAMP "E" PROFILE

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

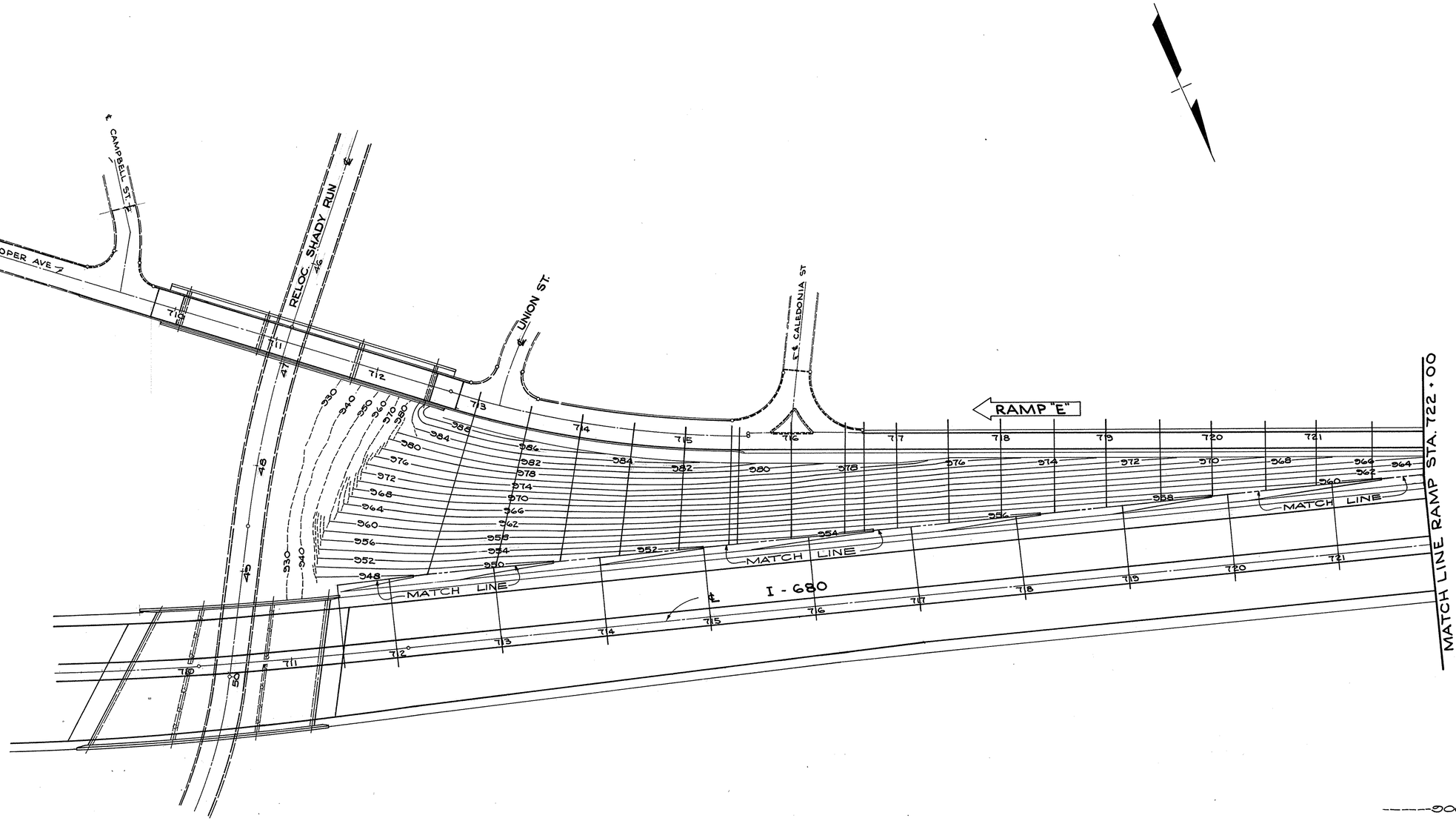
265
656

| | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

266
656



LEGEND

-----900----- EXISTING CONTOURS

———900——— PROPOSED CONTOURS

——————— CROSS SECTION LOCATIONS

0' 50' 100'

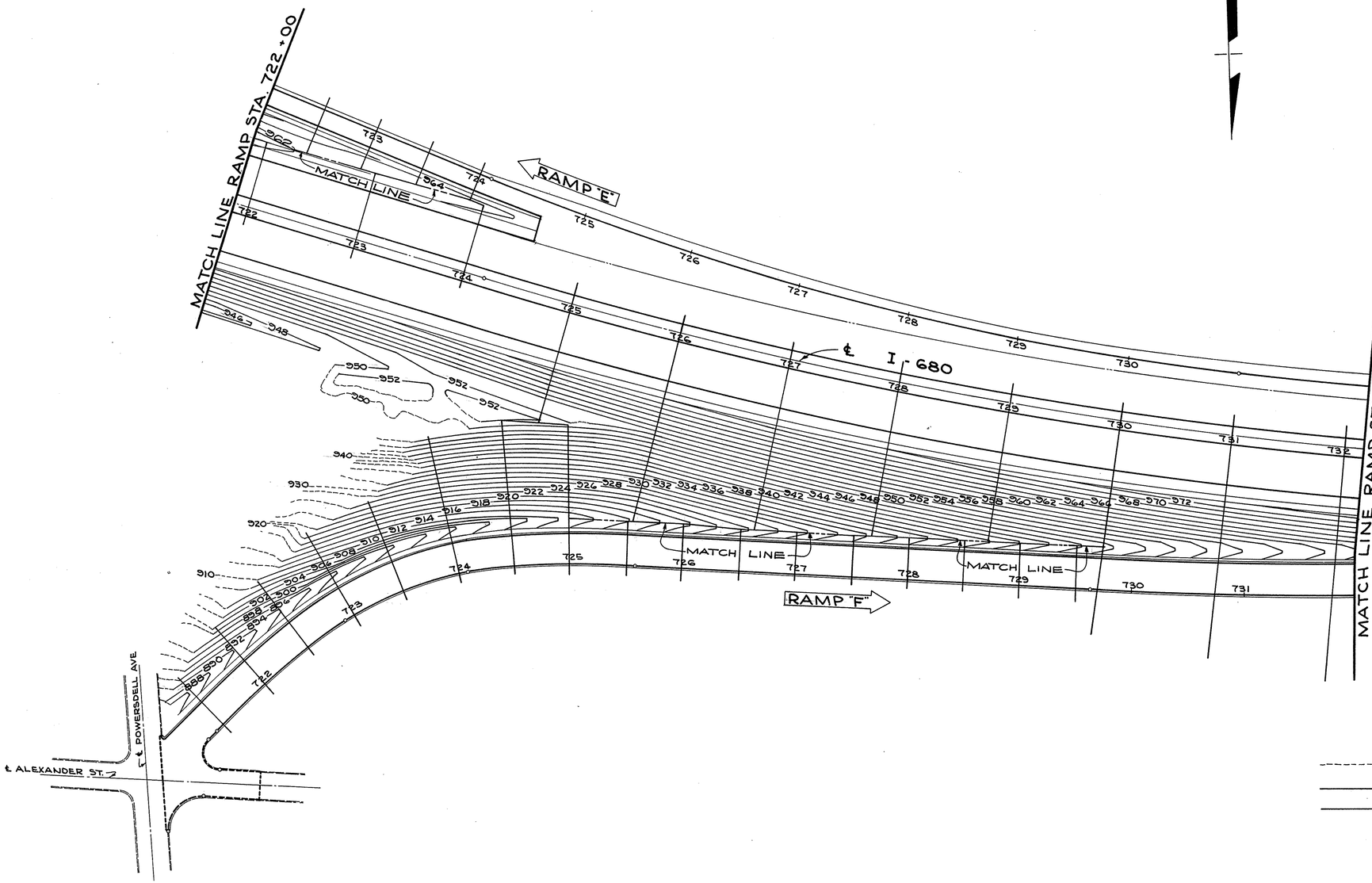
GRADING PLAN (SHEET 1)
RAMPS "E" & "F"

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

267
656

MAH-680-6.08



LEGEND

- 900 EXISTING CONTOURS
- 900 PROPOSED CONTOURS
- CROSS SECTION LOCATIONS

0' 50' 100'

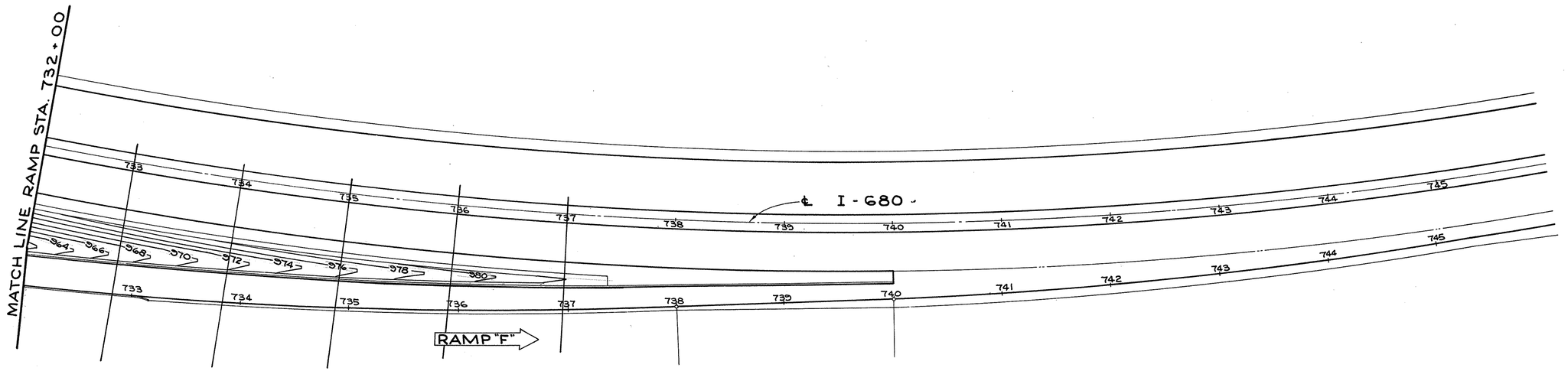
MAY 25 1971

GRADING PLAN (SHEET 2)
RAMPS "E" & "F"

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

268
656



LEGEND

——900—— PROPOSED CONTOURS

——————— CROSS SECTION LOCATIONS

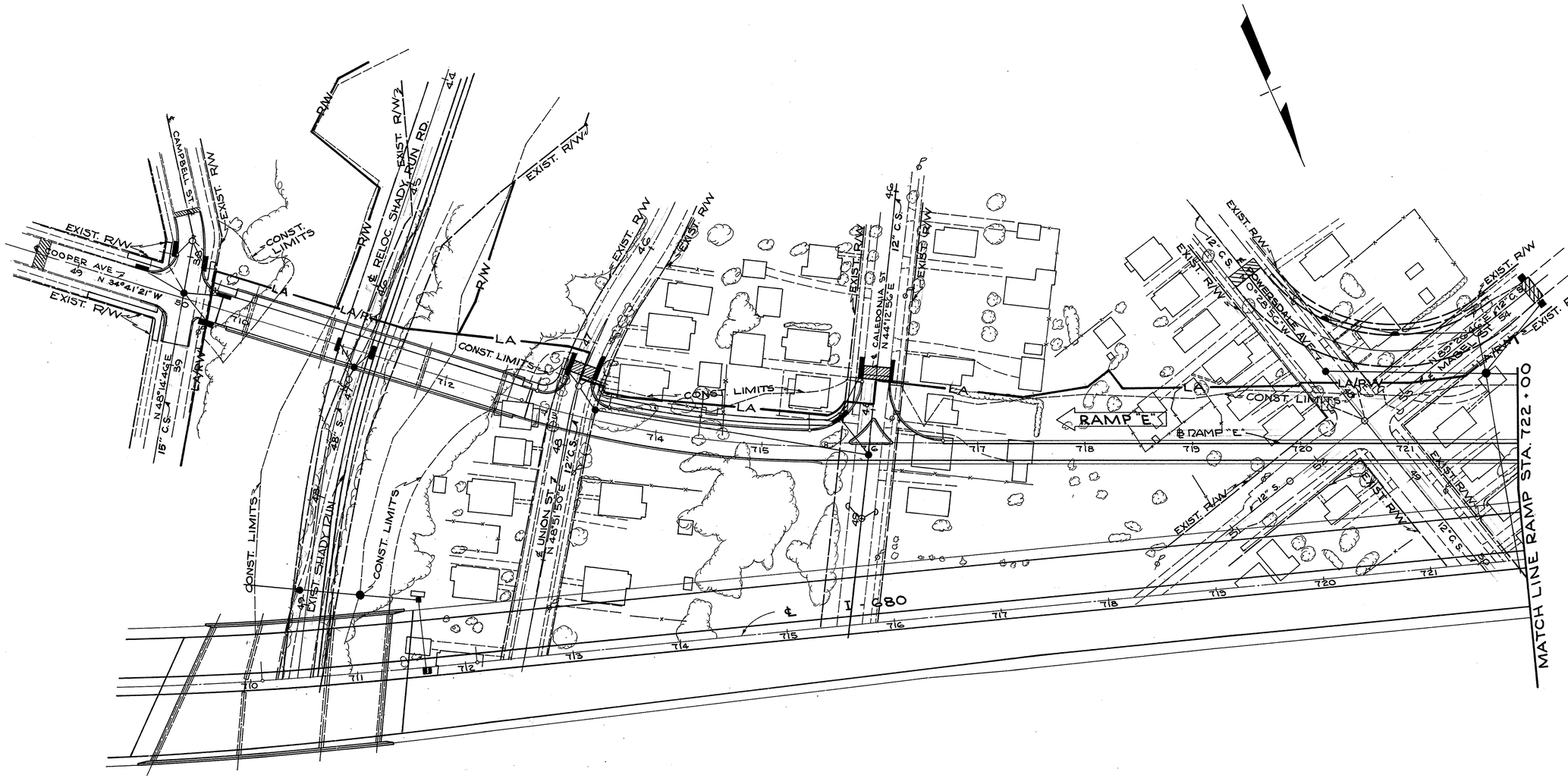
0' 50' 100' MAY 25 1971

GRADING PLAN (SHEET 3)
RAMPS "E" & "F"

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

269
656



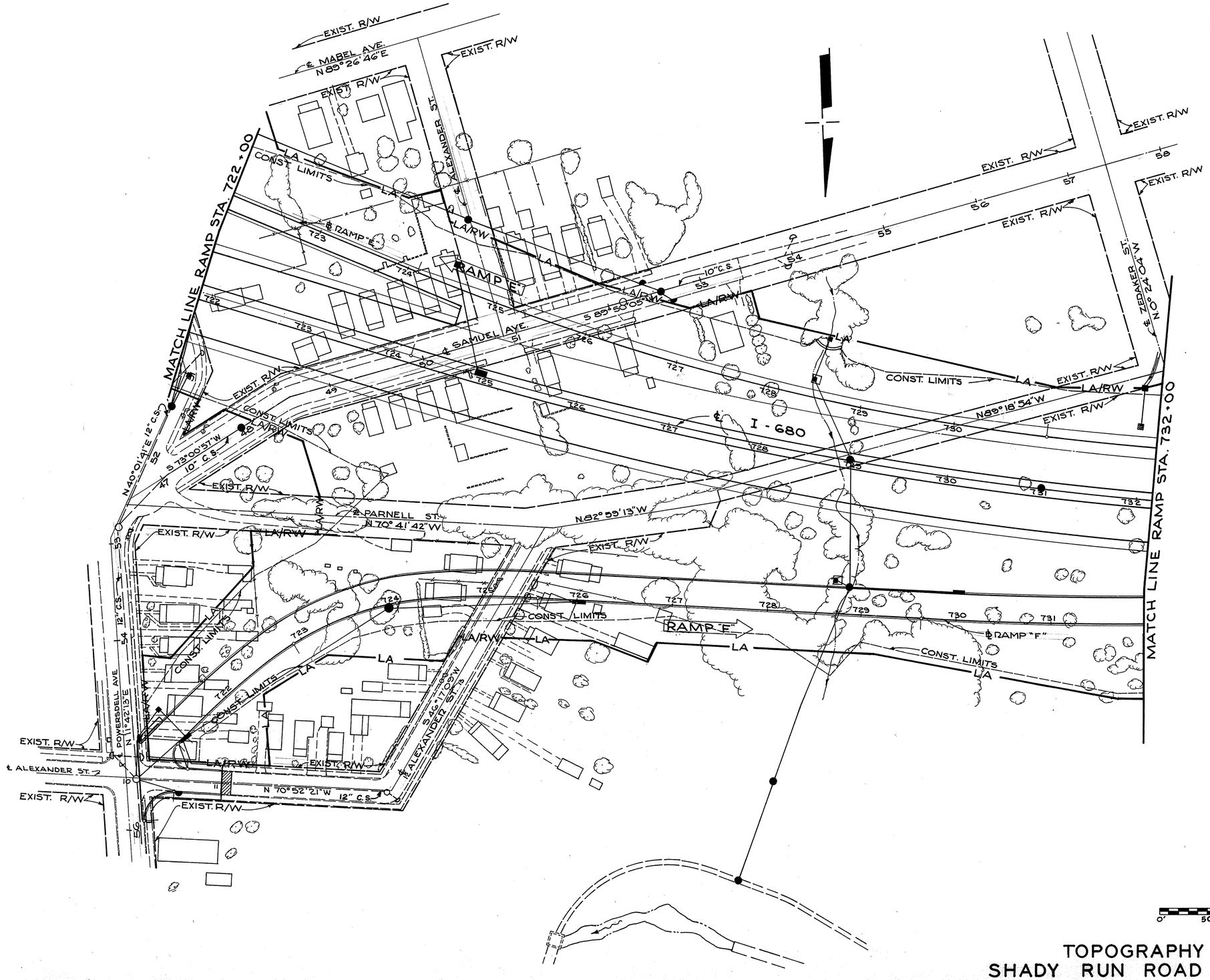
MAY 25 1971

TOPOGRAPHY (SHEET 1)
SHADY RUN ROAD INTERCHANGE

FED. RD.	STATE	PROJECT	
2	OHIO		

270
656

MAH-680-6.98



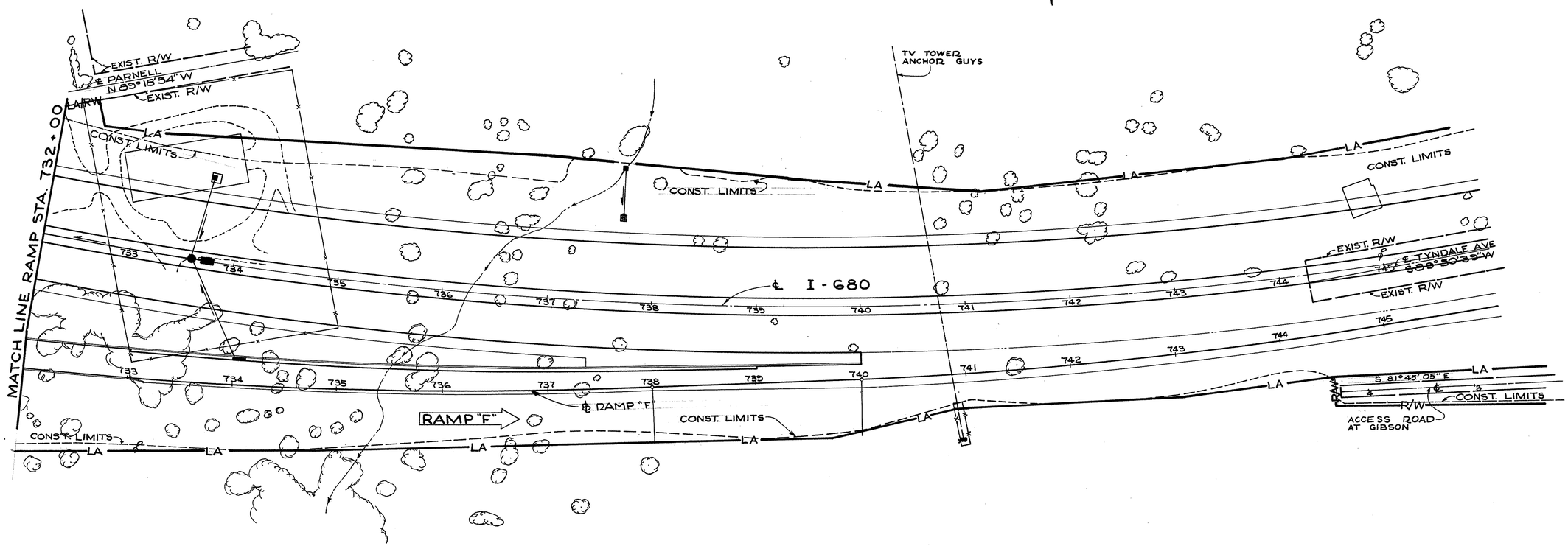
MAY 25 1971

TOPOGRAPHY (SHEET 2)
SHADY RUN ROAD INTERCHANGE

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.98

271
656



0' 50' 100'

MAY 25 1971

TOPOGRAPHY (SHEET 3)
SHADY RUN ROAD INTERCHANGE

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

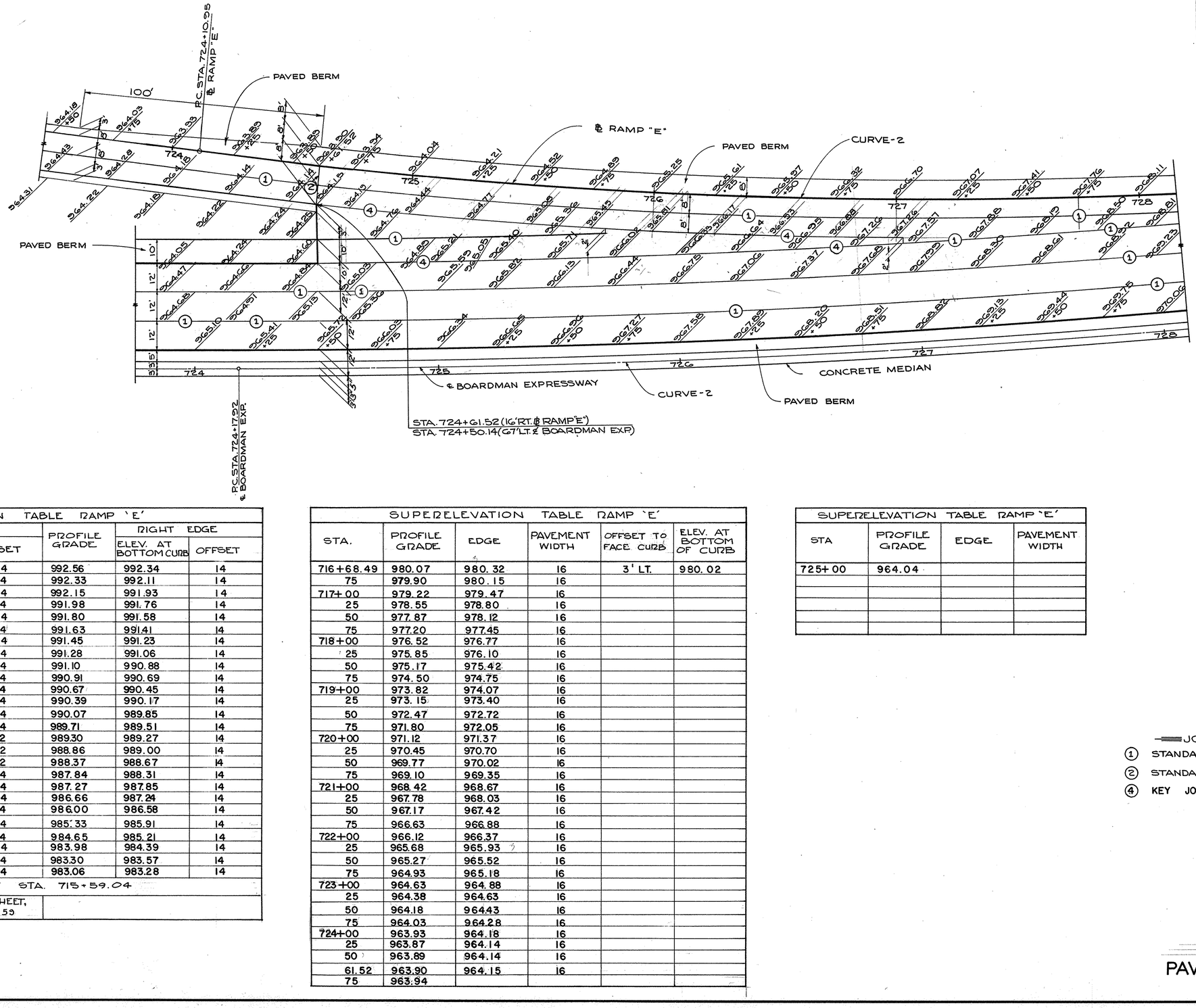
272
656

RAMP "E"
CURVE-2 DATA

Δ = 15°28'20"
Dc = 2°15'
R = 2,546.48'
T = 345.93'
L = 687.65'
CH = 685.57'
E = 23.39'

CURVE-2
℄ CURVE DATA

Δ = 32°44'51"
R = 3,900.53'
Dc = 1°28'00"
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'



SUPERELEVATION TABLE RAMP 'E'					
STA.	LEFT EDGE ELEV. AT BOTTOM CURB	LEFT EDGE OFFSET	PROFILE GRADE	RIGHT EDGE ELEV. AT BOTTOM CURB	RIGHT EDGE OFFSET
709+50	992.34	14	992.56	992.34	14
75	992.11	14	992.33	992.11	14
710+00	991.93	14	992.15	991.93	14
25	991.76	14	991.98	991.76	14
50	991.58	14	991.80	991.58	14
75	991.41	14	991.63	991.41	14
711+00	991.23	14	991.45	991.23	14
25	991.06	14	991.28	991.06	14
50	990.88	14	991.10	990.88	14
75	990.69	14	990.91	990.69	14
712+00	990.45	14	990.67	990.45	14
25	990.17	14	990.39	990.17	14
50	990.85	14	990.07	989.85	14
75	989.49	14	989.71	989.51	14
713+00	989.08	12	989.30	989.27	14
25	988.64	12	988.86	989.00	14
50	988.07	12	988.37	988.67	14
75	987.32	14	987.84	988.31	14
714+00	986.69	14	987.27	987.85	14
25	986.08	14	986.66	987.24	14
50	985.42	14	986.00	986.58	14
75	984.75	14	985.33	985.91	14
715+00	984.09	14	984.65	985.21	14
25	983.57	14	983.98	984.39	14
50	983.03	14	983.30	983.57	14
59.04	982.84	14	983.06	983.28	14
SHIFT ℄ 2' LEFT STA. 715+59.04					
715+59.04	SEE DETAIL SHEET, SHEET No. 259				
716+50					

SUPERELEVATION TABLE RAMP 'E'						
STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH	OFFSET TO FACE CURB	ELEV. AT BOTTOM OF CURB
716+68.49	980.07	980.32	16	3' LT.	980.02
75	979.90	980.15	16		
717+00	979.22	979.47	16		
25	978.55	978.80	16		
50	977.87	978.12	16		
75	977.20	977.45	16		
718+00	976.52	976.77	16		
25	975.85	976.10	16		
50	975.17	975.42	16		
75	974.50	974.75	16		
719+00	973.82	974.07	16		
25	973.15	973.40	16		
50	972.47	972.72	16		
75	971.80	972.05	16		
720+00	971.12	971.37	16		
25	970.45	970.70	16		
50	969.77	970.02	16		
75	969.10	969.35	16		
721+00	968.42	968.67	16		
25	967.78	968.03	16		
50	967.17	967.42	16		
75	966.63	966.88	16		
722+00	966.12	966.37	16		
25	965.68	965.93	16		
50	965.27	965.52	16		
75	964.93	965.18	16		
723+00	964.63	964.88	16		
25	964.38	964.63	16		
50	964.18	964.43	16		
75	964.03	964.28	16		
724+00	963.93	964.18	16		
25	963.87	964.14	16		
50	963.89	964.14	16		
61.52	963.90	964.15	16		
75	963.94				

SUPERELEVATION TABLE RAMP 'E'			
STA	PROFILE GRADE	EDGE	PAVEMENT WIDTH
725+00	964.04		

JOINT LEGEND

(1) STANDARD LONGITUDINAL JOINT
(2) STANDARD EXPANSION JOINT
(4) KEY JOINT WITHOUT TIE BARS

MAY 25 1971

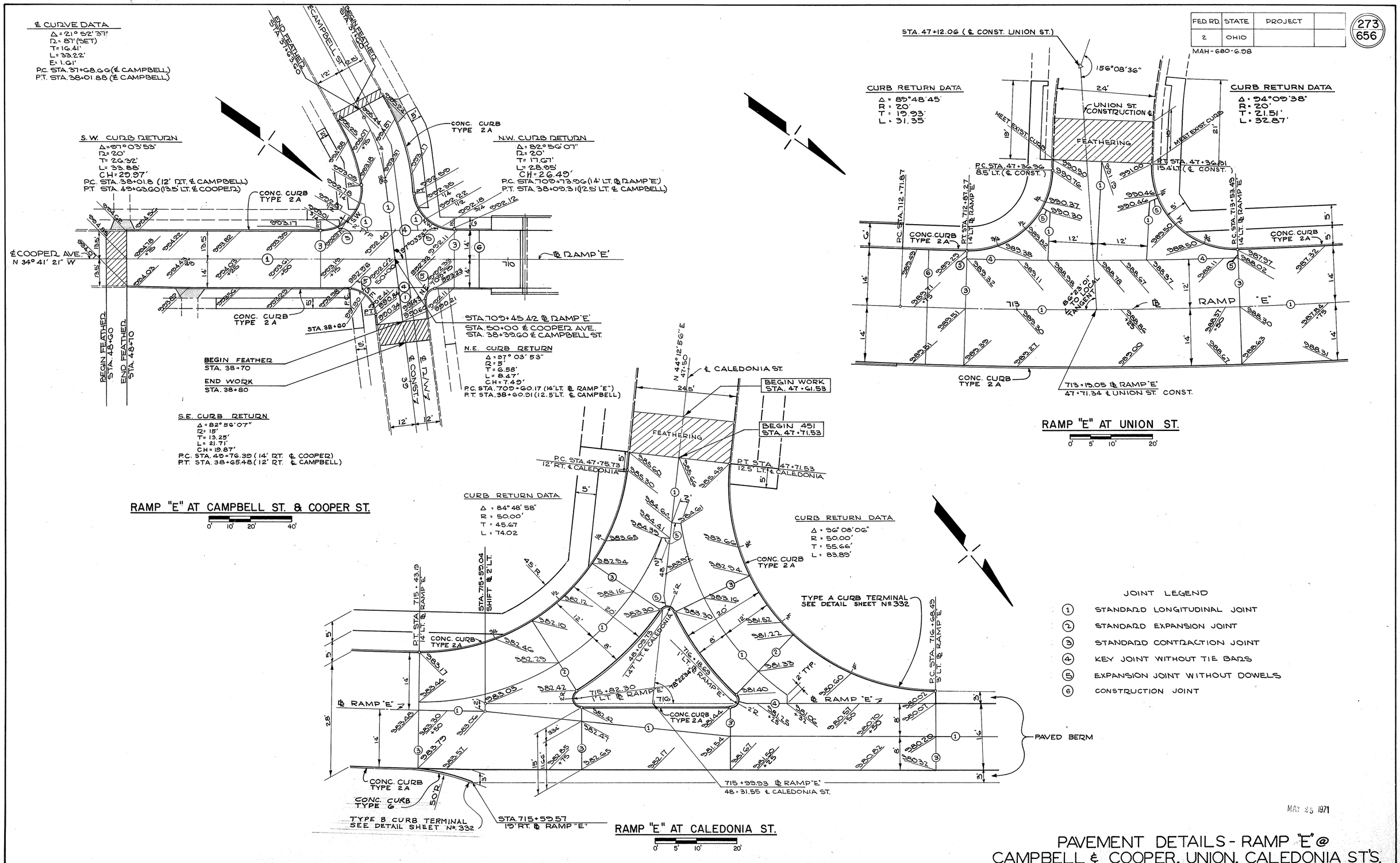
0 10 20 40

PAVEMENT DETAILS RAMP "E"

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

273
656



JOINT LEGEND

1. STANDARD LONGITUDINAL JOINT
2. STANDARD EXPANSION JOINT
3. STANDARD CONTRACTION JOINT
4. KEY JOINT WITHOUT TIE BARS
5. EXPANSION JOINT WITHOUT DOWELS
6. CONSTRUCTION JOINT

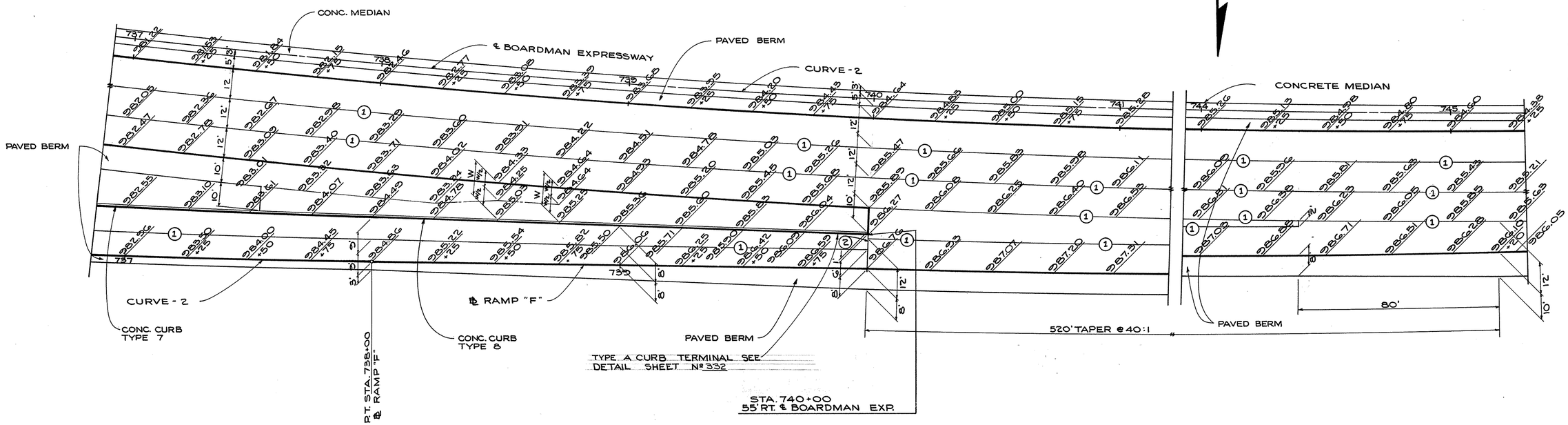
MAY 25 1971

PAVEMENT DETAILS - RAMP "E" @ CAMPBELL & COOPER, UNION, CALEDONIA ST'S.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

274
656



SUPERELEVATION TABLE RAMP 'F'			
STA.	PROFILE GRADE	OFFSET TO CURB	ELEV. AT BOTT. CURB
721+50	885.57	28	887.32
75	887.48	28	889.23
722+00	889.39	28	891.14
25	891.29	28	893.04
50	893.20	28	894.95
75	895.11	28	896.86
723+00	897.02	28	898.77
25	898.92	28	900.67
50	900.83	28	902.58
75	902.74	28	904.49
724+00	904.65	28	906.40
25	906.55	28	908.21
50	908.46	28	910.00
75	910.37	28	911.78
725+00	912.28	28	913.57
25	914.18	28	915.34
50	916.09	28	917.13
75	918.00	28	918.91
726+00	919.91	28	920.70
25	921.81	28	922.47
50	923.72	28	924.26
75	925.63	28	926.07
727+00	927.54	28	927.98
25	929.44	28	929.88
50	931.35	28	931.74
75	933.26	28	933.58
728+00	935.17	28	935.43
25	937.07	28	937.27
50	938.98	28	939.12
75	940.89	28	940.96

SUPERELEVATION TABLE RAMP 'F'			
STA.	PROFILE GRADE	OFFSET TO CURB	ELEV. AT BOTT. CURB
729+00	942.80	28	942.81
25	944.70	28	944.60
50	946.59	28	946.36
75	948.43	28	948.08
730+00	950.23	28	949.75
25	951.98	28	951.40
50	953.70	28	953.12
75	955.37	28	954.79
731+00	957.00	28	956.42
25	958.57	28	957.99
50	960.11	28	959.53
75	961.61	28	961.03
732+00	963.06	28	962.48
25	964.46	28	963.88
50	965.83	28	965.25
75	967.15	28	966.57
733+00	968.43	28	967.85
25	969.66	27.50	969.09
50	970.85	27.00	970.29
75	972.00	26.50	971.45
734+00	973.11	26.00	972.57
25	974.16	25.50	973.63
50	975.18	25.00	974.66
75	976.15	24.50	975.64
735+00	977.08	24.00	976.58
25	977.97	23.50	977.48
50	978.81	23.00	978.33
75	979.61	22.50	979.14
736+00	980.37	22.00	979.91
25	981.08	21.50	980.63

SUPERELEVATION TABLE RAMP 'F'			
STA.	PROFILE GRADE	OFFSET TO CURB	ELEV. AT BOTT. CURB
736+50	981.75	21.00	981.31
75	982.38	20.50	981.95
737+00	982.96	20.00	982.55
25	983.50	19.50	983.10
50	984.00	19.00	983.61
75	984.45	18.50	984.07
738+00	984.86	18.00	984.49
25	985.22	17.50	984.78
50	985.54	17.00	985.03
75	985.82	16.50	985.25
739+00	986.06	16.00	985.50
25	986.25	15.50	985.71
50	986.42	15.00	985.90
75	986.59	14.50	986.08
740+00	986.76	14.00	986.27

RAMP "F"
CURVE-2 DATA

Δ = 10°27'36"
Dc = 1°15'
R = 4,583.66'
T = 419.57'
Lc = 836.80'
CH = 835.64'
E = 19.16'

CURVE - 2
℄ CURVE DATA

Δ = 32°44'51"
Dc = 1°28'00"
R = 3,906.53'
T = 1,147.81'
Lc = 2,232.78'
CH = 2,202.52'
E = 165.15'

JOINT LEGEND

① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT

0 10 20 40

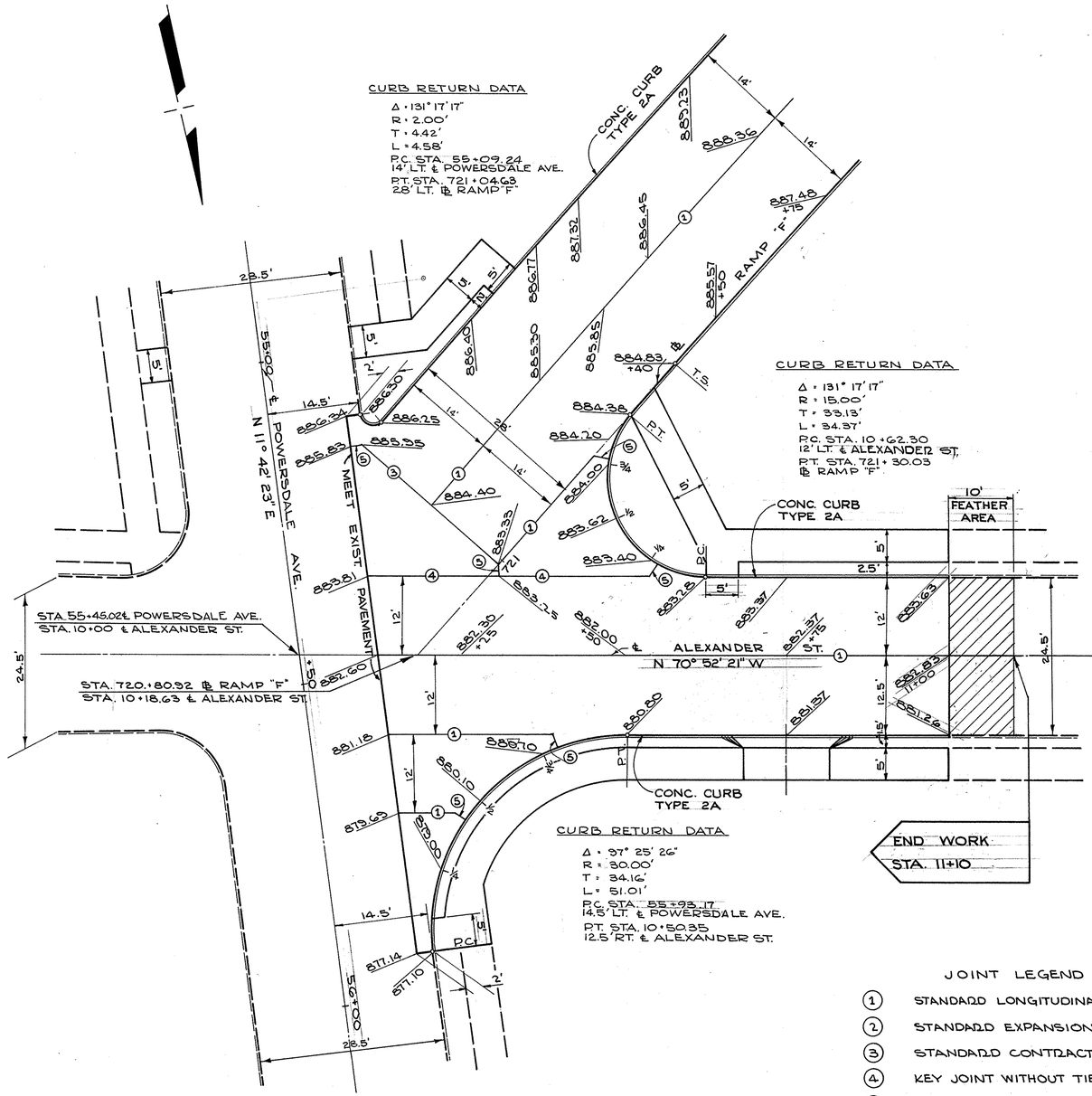
MAY 25 1971

PAVEMENT DETAILS RAMP "F"

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

275
656



MAY 25 1971

PAVEMENT DETAILS
RAMP "F" @ ALEXANDER & POWERSDALE

| | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

277
656

MAH — 680 — 698

		0	8	13	39	6	8	0	10	0	7	0	0
END AREA	CUT												
	FILL												
CU. YDS.	CUT												
	FILL												

SEE RAMP "E"

MATCH CAMPBELL ST

STA. 50+00
EXIST = 992.50
P.G. = 992.58

4:1

STA. 49+80 WALK RT.
EXIST = 993.12
P.G. = 992.75

STA. 49+73 WALK LT.
EXIST = 993.34
P.G. = 993.22

RW

VAR.

STA. 49+50
EXIST = 993.69
P.G. = 993.61

STA. 49+00 DRIVE RT.
EXIST = 994.33
P.G. = 994.43

STA. 48+69 DRIVE LT.
EXIST = 994.73
P.G. = 994.85

STA. 48+60
EXIST = 994.86

SEEDING		0	42	15	78	13	29	0
END WIDTH	SQ. YDS.							

995 990 995 995 995 990 995 995

10 20 30 40 50

COOPER AVENUE (@ RAMP "E")
STA. 48+60 TO STA. 50+00
RRC 6/24/68
PUD 8/30/68

MAY 23 1971

PLATE 3-CROSS SECTION 6" B.A.R.S. STANDARD
NATIONAL TRACING PAPER DIVISION

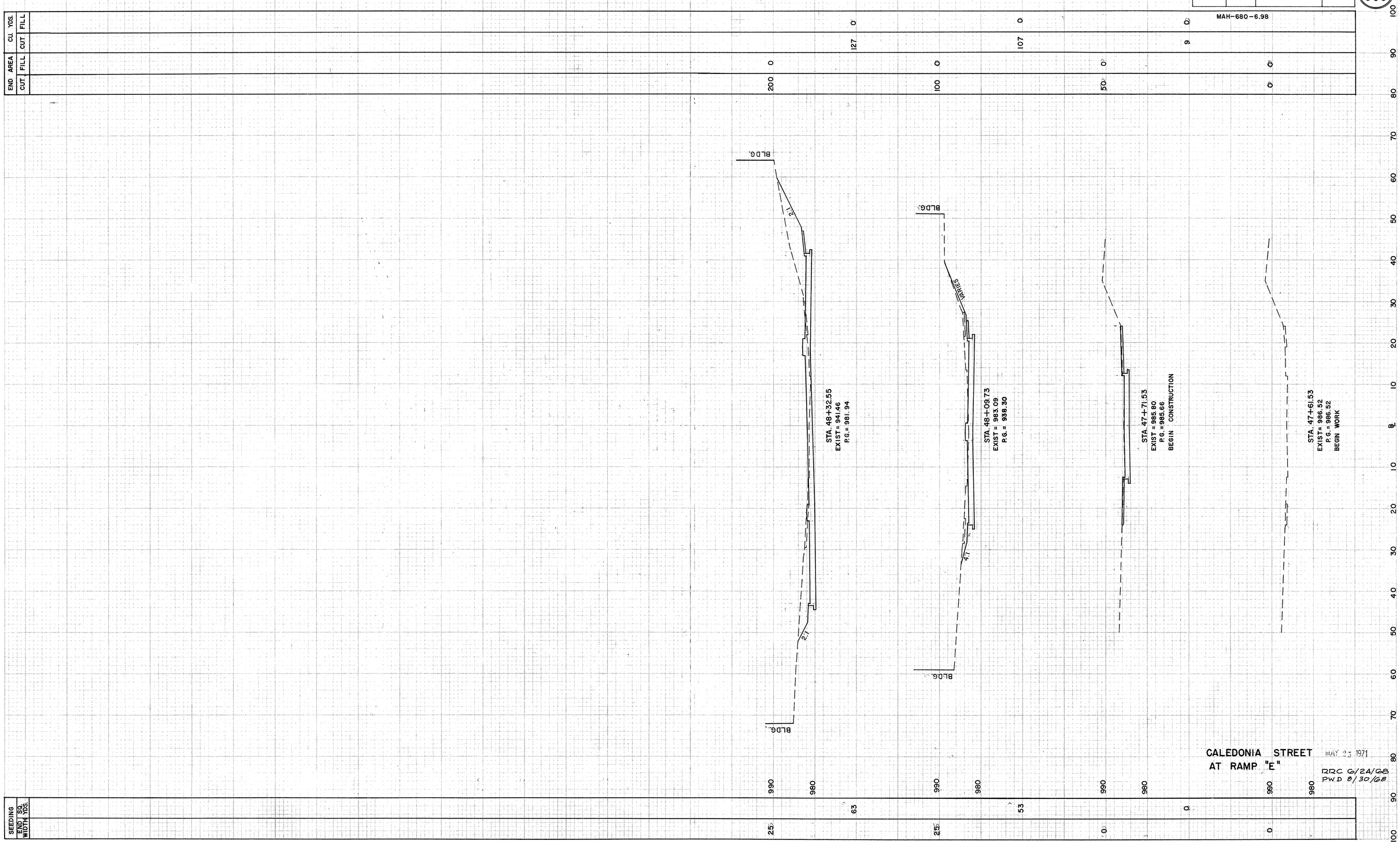
FINAL SURVEY
ORIGINAL SURVEY

FED. RD.	STATE	PROJECT	
2	OHIO		

278
656

MAH-680-6.98

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
200	0	127	0
100	0	107	0
50	0	9	0
0	0		



CALEDONIA STREET
AT RAMP "E"

MAY 25 1971

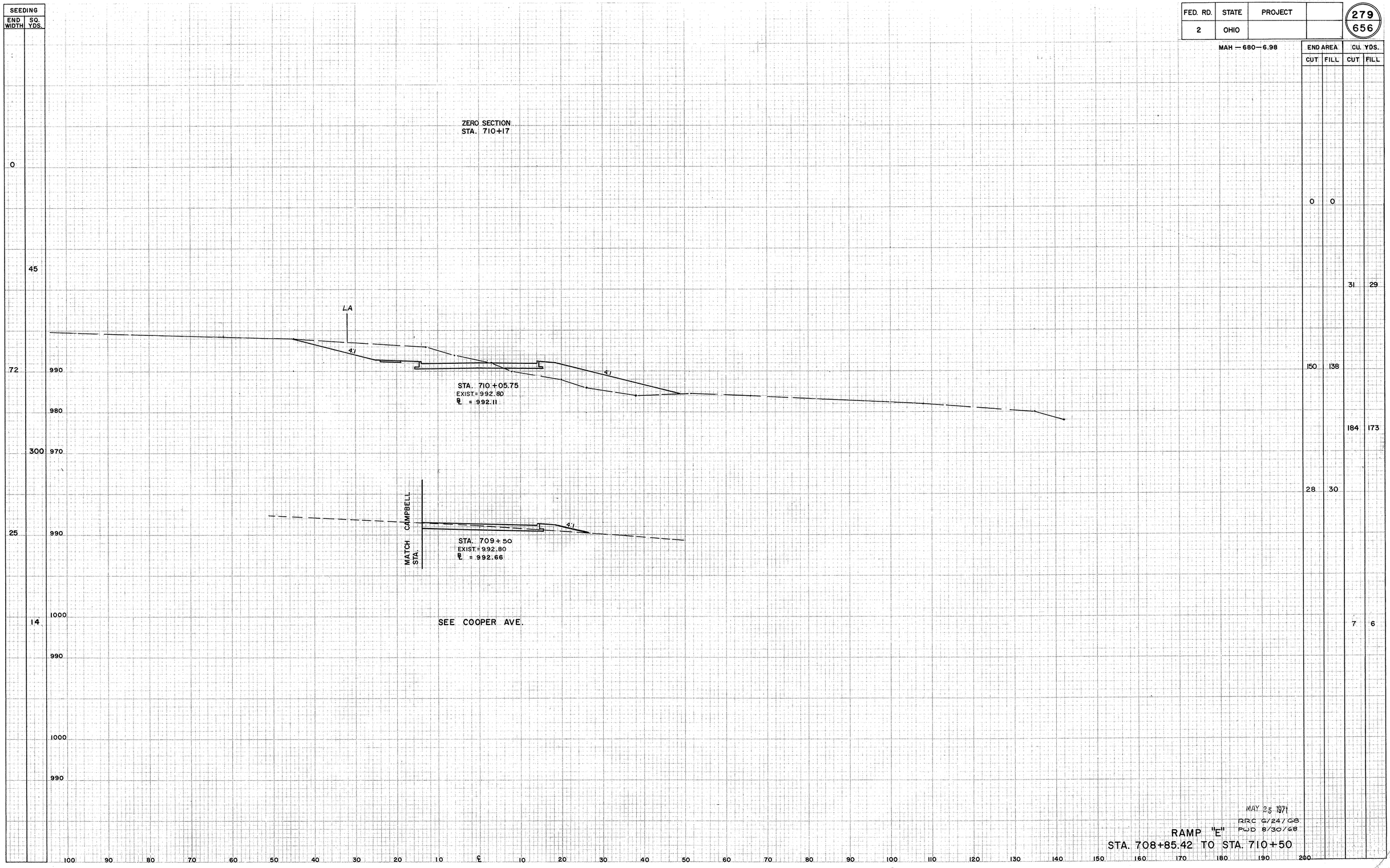
RRC 6/24/68
PWD 8/30/68

SEEDING END WIDTH	SEEDING SQ. YDS.
25	63
25	53
0	0
0	0

FED. RD.	STATE	PROJECT	
2	OHIO		

279
656

MAH — 680 — 6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0		
		31	29
150	138		
		184	173
28	30		
		7	6

MAY 25 1971
RRC 6/24/68
PWD 8/30/68

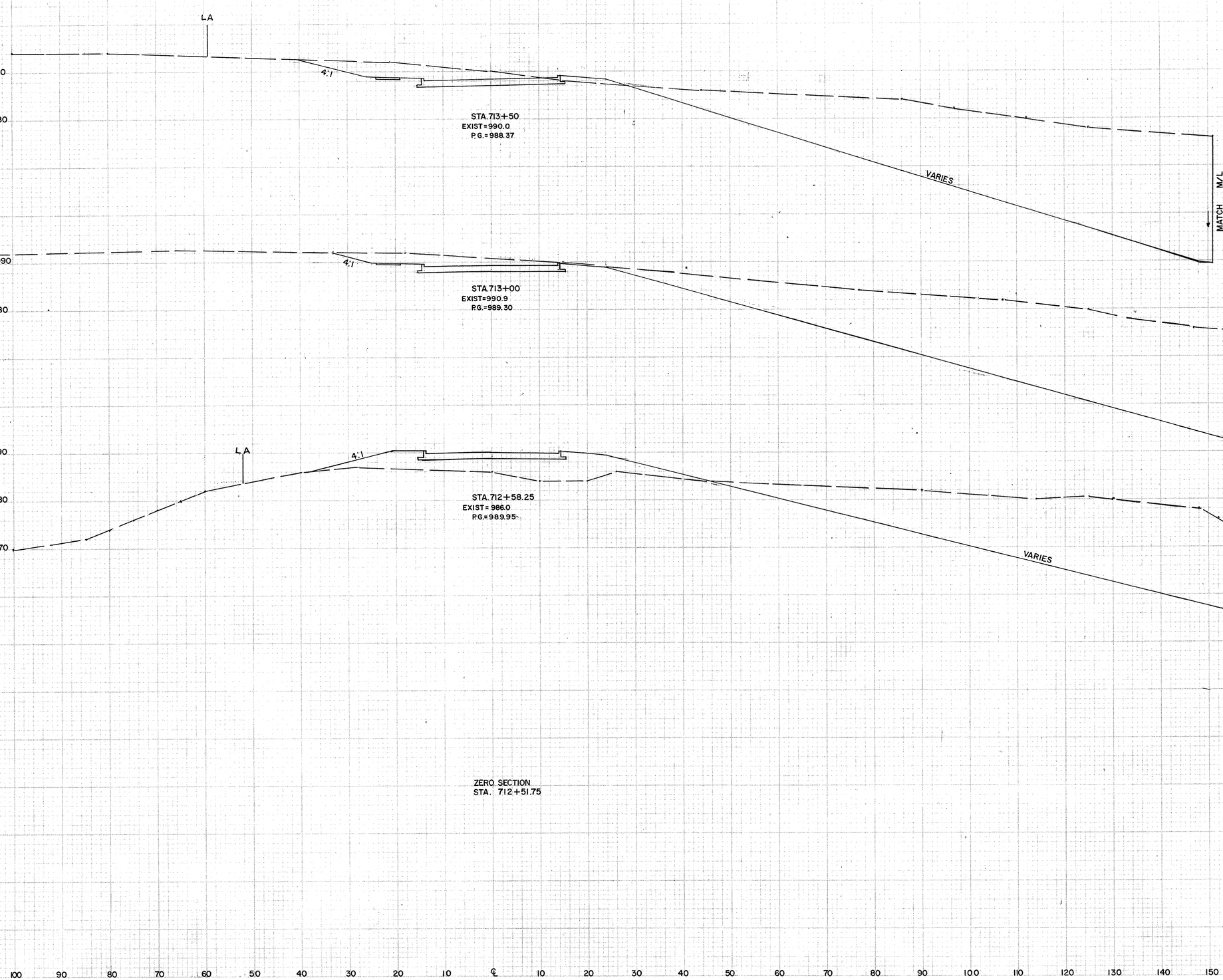
RAMP "E"
STA. 708+85.42 TO STA. 710+50

FED. RD.	STATE	PROJECT	
2	OHIO		

280
656

MAH — 680 — 6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
183	1061
199	983
225	
81	



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		2938	109
1867	12		
		3669	11
2095	0		
		3102	172
1917	222		
		231	27
0	0		

RAMP—"E"

STA. 712+00 TO STA. 713+50

RRC 6/24/68 PUD 8/30/68

MAY 23 1971

FED. RD.	STATE	PROJECT		281
2	OHIO			656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
87	589
125	95
126	612
129	703
124	736
141	900

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		1493	30
662	32		
		1800	30
1282	0		
		328	0
1322	0		
		1986	8
1161	10		
		1827	162
812	165		
		1961	251
1306	106		

MATCH CALEDONIA STA. 48+32.35

STA.716+00
EXIST=981.4
P.G.=981.92

TRANSFER ℄ 2' LT.
STA. 715+59.04

STA.715+50
EXIST=983.75
P.G.=983.30

STA. 715+43.19
EXIST=986.5
P.G.=983.48

STA.715+00
EXIST=985.9
P.G.=984.65

STA.714+50
EXIST=983.2
P.G.=986.00

STA.714+00
EXIST=985.0
P.G.=986.00

BLDG. BLDG. LA 4:1 MATCH M/L VARIES

990 980 990 980 990 980 990 980 970 990 980 970

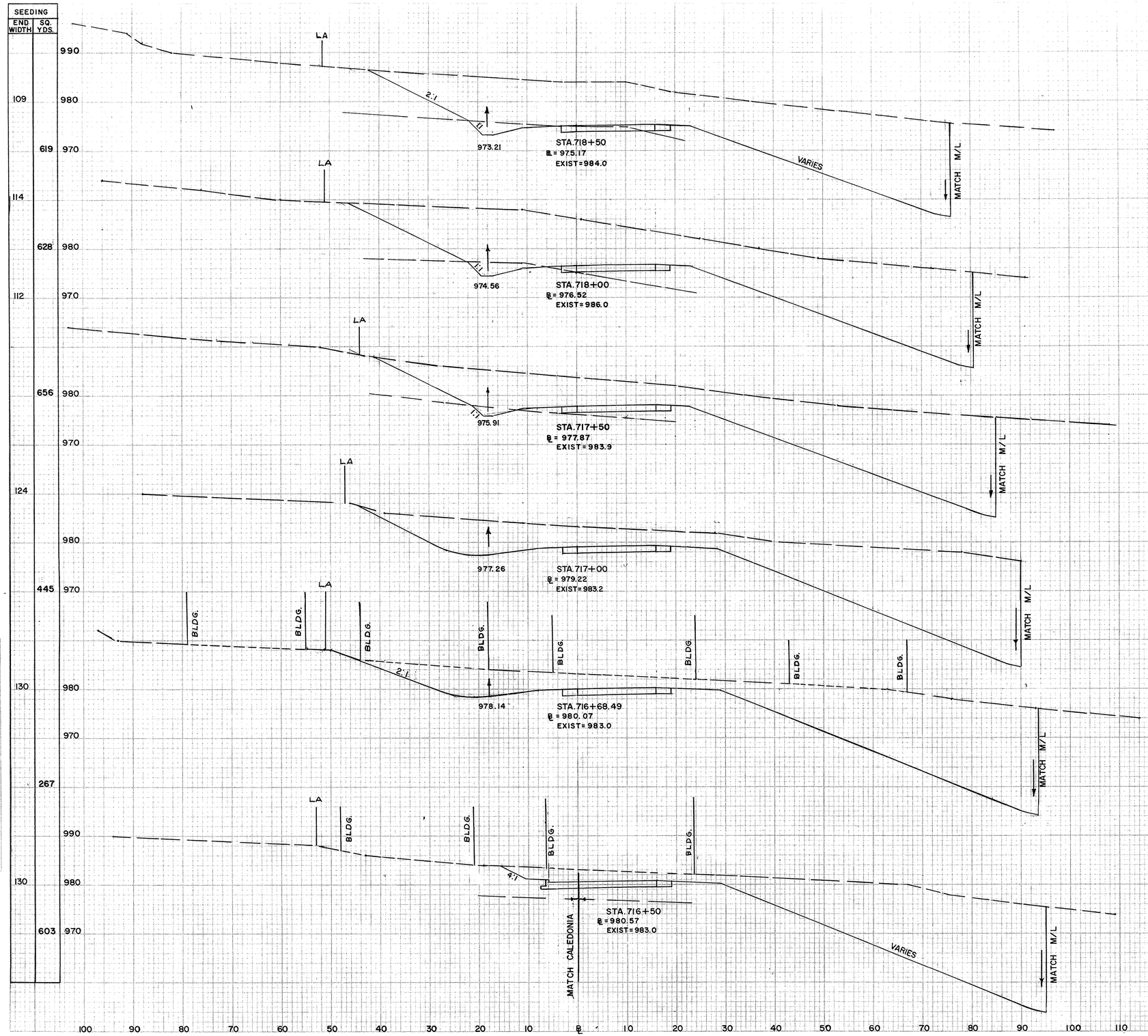
100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

RAMP "E"
STA.714+00 TO STA.716+00
RDC 6/24/68
POD 6/30/68

FED. RD.	STATE	PROJECT	
2	OHIO		

282
656

MAH-680-6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		2093	0
1208	0		
		2336	0
1315	0		
		1296	0
1085	0		
		2008	0
1084	0		
		1266	0
1086	0		
		697	0
950	0		

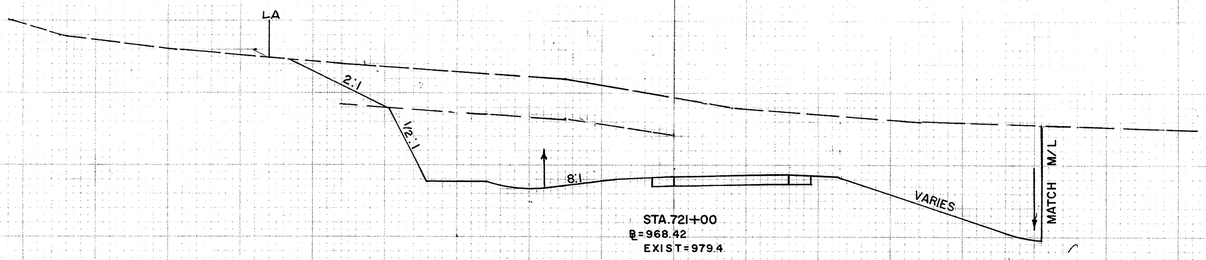
RAMP-E
MAY 25 1971
PWD 8/30/68
STA.716+50 TO STA.718+50
RRC 6/24/68

FED. RD.	STATE	PROJECT	
2	OHIO		

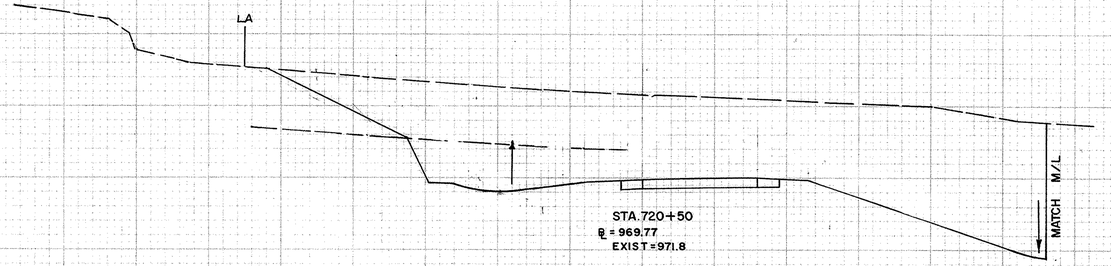
283
656

MAH-680-6.98

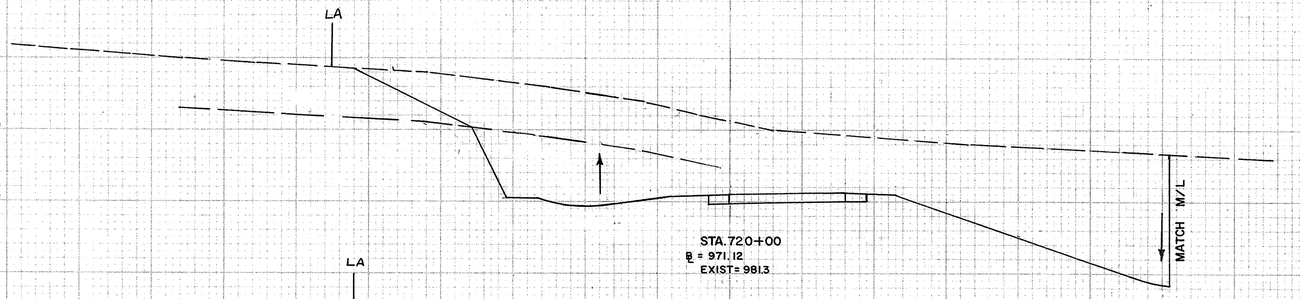
SEEDING		
	END WIDTH	SQ. YDS.
990		
980	78	
970		
960		456
990	86	
980		
970		486
990	89	
980		
970		503
990	92	
980		
970		519
980	95	
970		567
960		



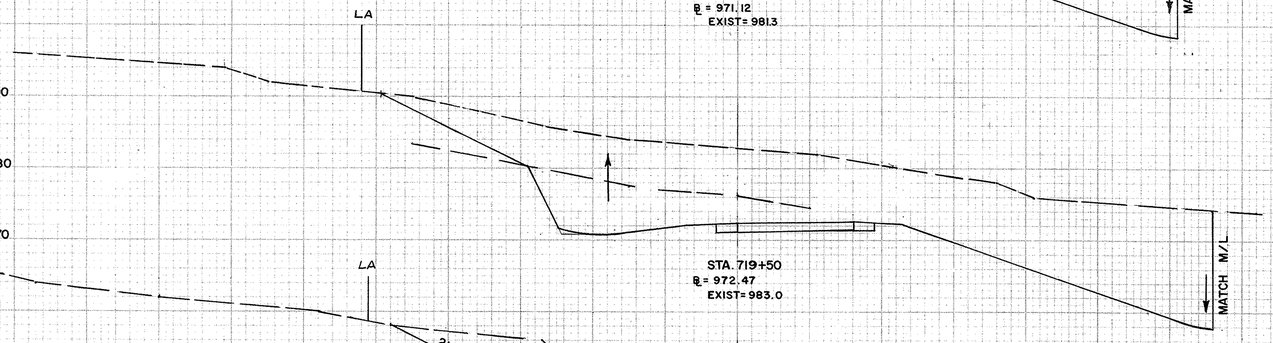
STA. 721+00
℄ = 968.42
EXIST = 979.4



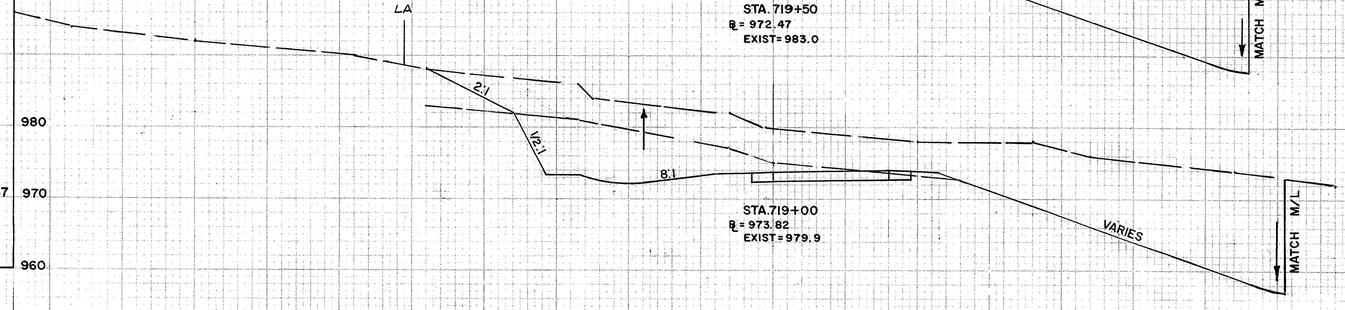
STA. 720+50
℄ = 969.77
EXIST = 971.8



STA. 720+00
℄ = 971.12
EXIST = 981.3



STA. 719+50
℄ = 972.47
EXIST = 983.0



STA. 719+00
℄ = 973.82
EXIST = 979.9

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
		2342	0
1061	0		
		2198	0
1313	0		
		2414	0
1294	0		
		2243	0
1182	0		
		2293	0
1052	0		

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

RAMP-"E"

PWD 8/30/68

STA. 719+00 TO STA. 721+00

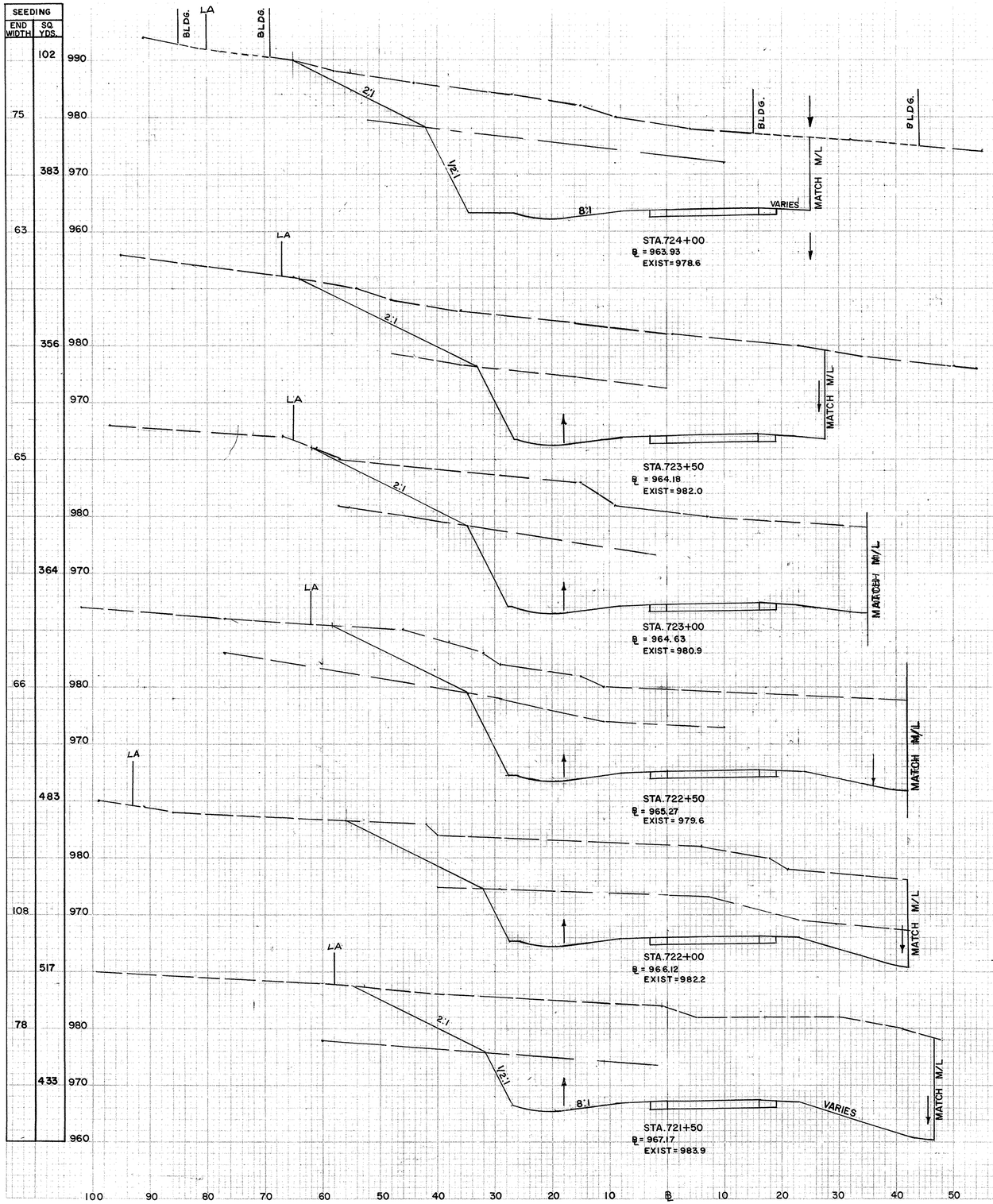
RRC 6/24/68

DATE
BY
ORIGINAL SURVEY — SCRIBED / PLOTTED / TRACED / TEMPLATE — NOTE BOOK — AREAS — VOLS CHECKED — NO
FINAL SURVEY — SCRIBED / PLOTTED / TRACED / TEMPLATE — NOTE BOOK — AREAS — VOLS CHECKED — NO

FED. RD.	STATE	PROJECT	
2	OHIO		

284
656

MAH-680-6.98



	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
STA. 724+13	1069	0		
			553	0
	1227	0		
			2331	0
	1290	0		
			2418	0
	1321	0		
			2361	0
	1229	0		
			2332	0
	1290	0		
			2554	0
	1468	0		

RAMP—E

STA. 721+50 TO 724+00

PWD 8/30/68

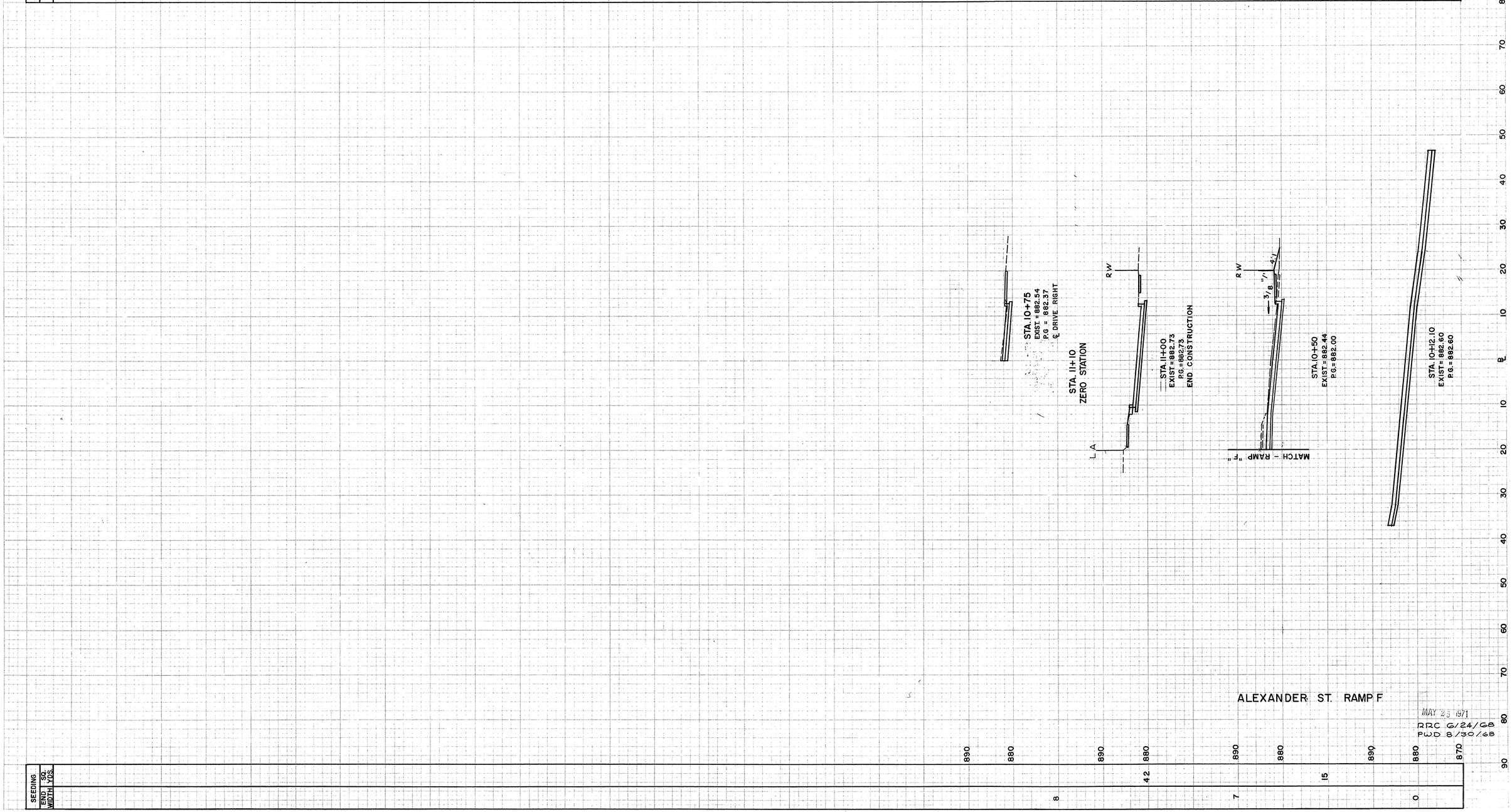
RRC 6/24/68

FED. RD.	STATE	PROJECT	
2	OHIO		

285
656

MAH—680—6.98

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0	0	0
49	0	10	6
64	6	105	4
98	0	114	



ALEXANDER ST. RAMP F

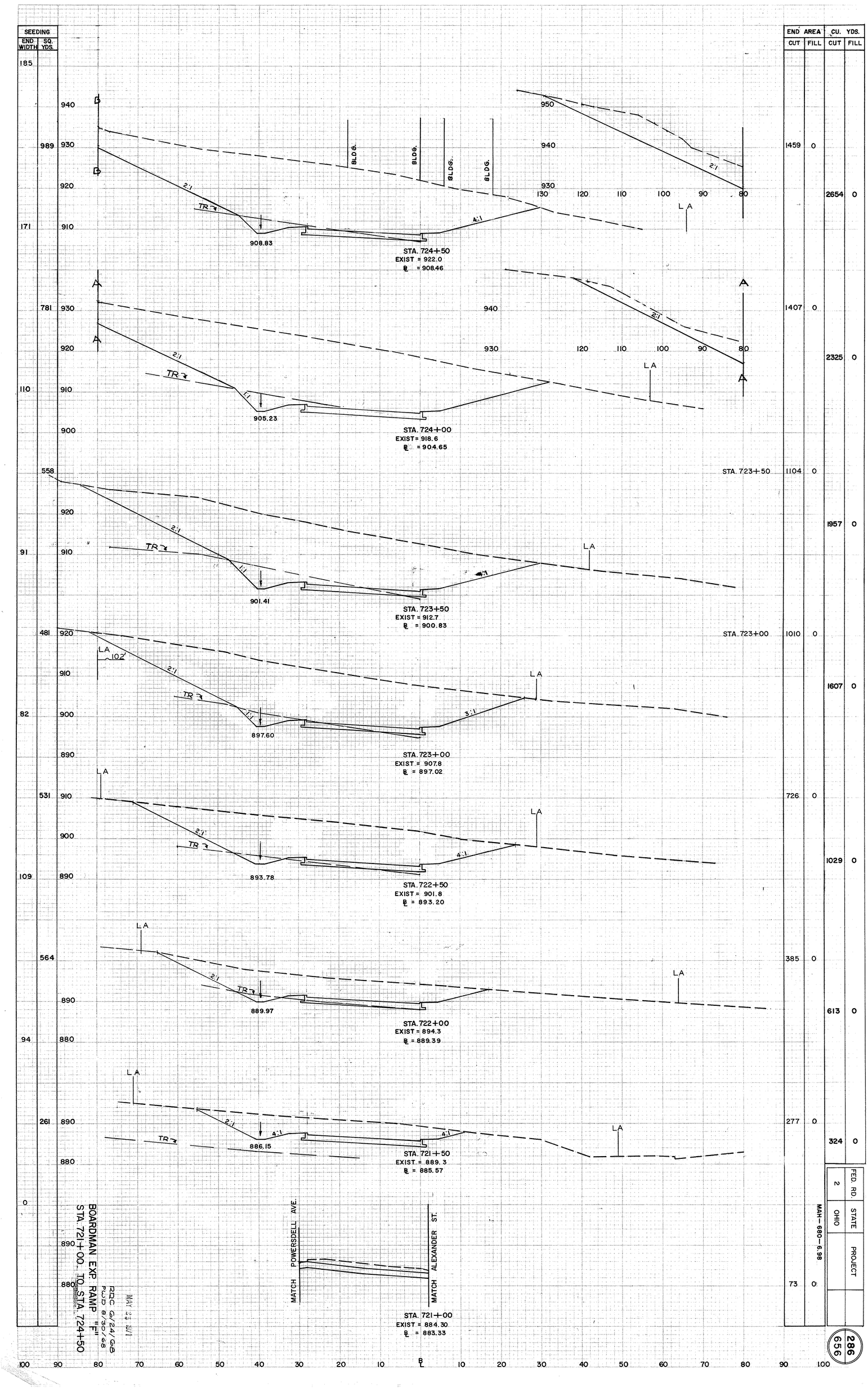
MAY 25 1971
RRC 6/24/68
PWD 8/30/68

SEEDING END WIDTH	SEEDING SQ. YDS.
8	42
7	15
0	

FINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

ORIGINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

PLATE 3 CROSS SECTION U. P. R. & R. E. STANDARD
NATIONAL TRACING PAPER DIVISION


SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
CU. YDS.
CUT
FILL
185
989
171
781
110
558
91
481
82
531
109
564
94
261
0
940
930
920
910
900
890
880
950
130
120
110
100
90
80
BLDG.
2:1
TR
4:1
1:1
3:1
LA
908.83
STA. 724+50
EXIST = 922.0
℄ = 908.46
905.23
STA. 724+00
EXIST = 918.6
℄ = 904.65
STA. 723+50
901.41
STA. 723+50
EXIST = 912.7
℄ = 900.83
STA. 723+00
102'
897.60
STA. 723+00
EXIST = 907.8
℄ = 897.02
893.78
STA. 722+50
EXIST = 901.8
℄ = 893.20
889.97
STA. 722+00
EXIST = 894.3
℄ = 889.39
886.15
STA. 721+50
EXIST = 889.3
℄ = 885.57
MATCH POWERSDELL AVE.
MATCH ALEXANDER ST.
STA. 721+00
EXIST = 884.30
℄ = 883.33
1459
1407
1104
1010
726
385
277
73
0
2654
2325
1957
1607
1029
613
324
100
90
80
70
60
50
40
30
20
10
℄
10
20
30
40
50
60
70
80
90
100
BOARDMAN EXP. RAMP "F"
STA. 721+00 TO STA. 724+50
MAY 25 1971
RDC 6/24/68
PWD 8/30/68
FED. RD.
2
STATE
OHIO
PROJECT
MAH-680-6.98
286
656

FED. RD.	STATE	PROJECT	
2	OHIO		

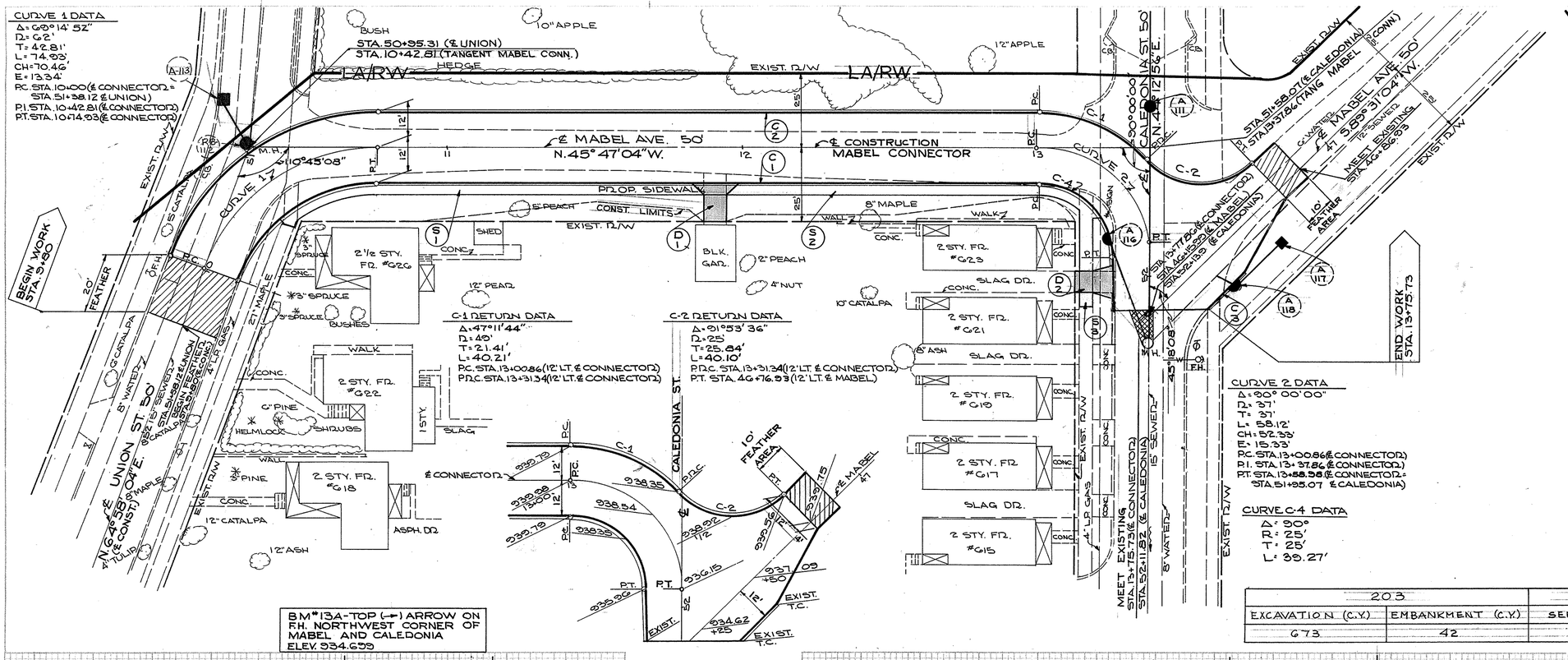
287
656

| | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

288
656



DRIVE APPROACHES							
CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 SQ. YDS. 7" THICKNESS
D-1	11+92	RT.	IV	13	8	290	14.33
D-2	13+67	RT.	IV	12	7	290	11.66
TOTAL							25.99

ITEM 609-CONCRETE CURB - LIN. FT.				
CODE	STATION FROM	STATION TO	TYPE 6	
C-1	10+00 (RT.)	13+57 (RT.	343.81	
C-2	10+00 (LT.)	46+76.93 (M)	395.97	
C-3	46+31.15 (M)	46+49.15 (M)	18.00	
TOTAL			757.78	

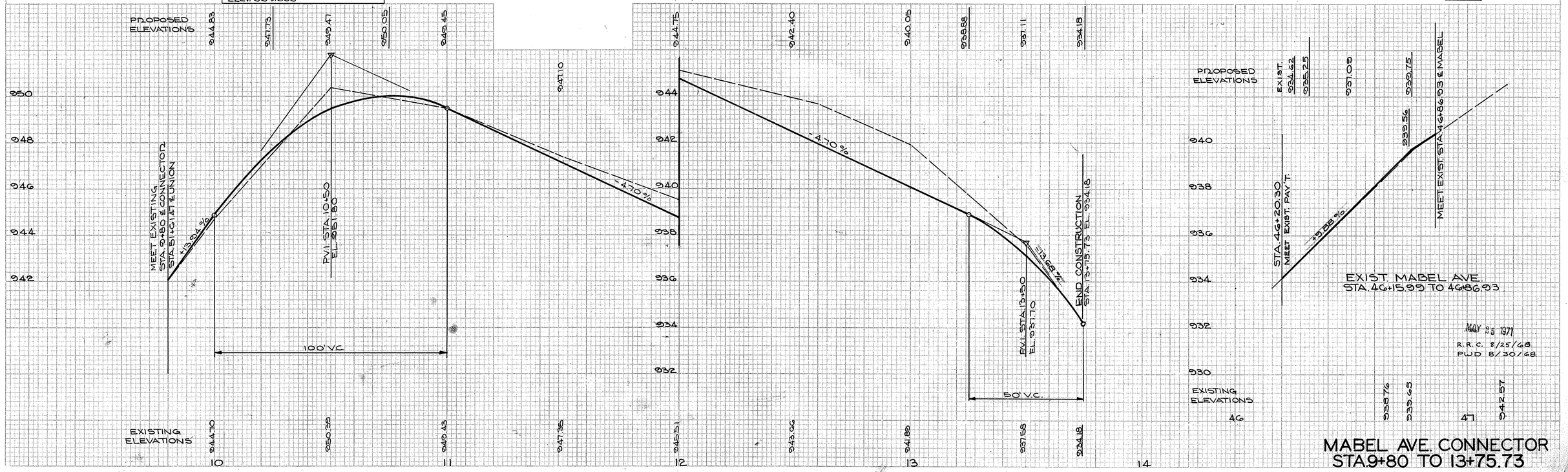
ITEM 608- WALKS-5" THICKNESS				
CODE	STATION FROM	STATION TO	LOC.	SQ. FT.
S-1	10+32.5	11+88	RT.	510.12
S-2	11+96	13+63.5	RT.	550.81
S-3	13+70.5	13+75.5	RT.	22.50
TOTAL				1083.43

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
673	42	745

0 10 20 40

FOR DRAINAGE DETAILS SEE SHEET Nº 350

FOR WATER LINE DETAILS SEE SHEET Nº 381



MAY 25 1977
R.R.C. 8/25/68
PWD 8/30/68

MABEL AVE. CONNECTOR STA. 9+80 TO 13+75.73

PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

FED. RD.	STATE	PROJECT	
2.	OHIO		

289
656

MAH —680—6.98

		1	2	3	4	5	6	7	8
END AREA	CUT	58	90	3	9	0	63	76	46
	FILL	0	0	4	2	5	2	5	4
CU. YDS.	CUT		90	3	61	46	76	63	61
	FILL		2	4	5	8	7	6	5

| SEEDING | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

290
656

MAH—680—6.98

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
22	0	29	1
39	3	144	7
116	4	161	5

FINAL SURVEY
NOTE BOOK
NO.
BY
DATE
SURVEYED
PLOTTED
COMPUTED
AREAS
AREAS CHECKED

ORIGINAL SURVEY
NOTE BOOK
NO.
BY
DATE
SURVEYED
PLOTTED
COMPUTED
AREAS
AREAS CHECKED

2" DROP CURB

STA. 13+67
DRIVE RIGHT
ELEV.=935.05
P.G.=935.23

940 935 930

SAR. F.L.R.

2" DROP CURB

STA. 11+92
DRIVE RIGHT
ELEV.=945.67
P.G.=945.13

950 945 940

RW

63'

STA. 13+75.73
ELEV = 934.18
P.G.=934.18
END CONSTRUCTION
ZERO SECTION

940 935 930

RW

72'

STA. 13+50
ELEV.=937.58
P.G.=937.11

940 935 930

RW

HOUSE # 623

4:1

STA. 13+00
ELEV.=941.89
P.G.=940.05

MATCH

950 945 940

SEEDING END WIDTH	SEEDING SQ. YDS.
50	123
36	139
14	

MAY 25 1971
RRC 6/25/68
PUD 8/30/68

MABEL CONN.

PLATE 3 - CROSS SECTION OF PARE STANDARD
NATIONAL TRACING PAPER DIVISION
INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

291
656

CONNECTOR & CURVE DATA
Δ = 90° 04' 18"
D = 160'
T = 160.20'
L = 251.53'
CH = 226.42'
E = 66.42'

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
1559	65	944

814 - WATER MAINS

CODE	STATION	LOCATION	8" x 6" REDUCER EACH	6"-45° BEND EACH	6" VALVE & BOX EACH	6" D.I. PIPE L.F.
W-20	11+12	10.5' RT.	1	1	1	
WH-21		W-20 TO W-21				163
W-21*	13+75	3.5' RT.		1	1	
TOTAL			1	2	2	163

* SEE ADDITIONAL QUANTITIES BELOW

BM #11-A
TOP ARROW (→) ON FIRE HYDRANT ACROSS STREET FROM 1004 MABEL ST. (FIRE HYDRANT ON SOUTH SIDE OF ST.)
ELEV. = 1005.097

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FEET. 5" THICKNESS
S-1	10+62.34	10+69.34	LT.	35.00
S-2	10+75.34	13+43.87	LT.	1198.17
S-3	13+42	13+52	RT.	50.00
S-4	13+18.37	13+23.37	RT.	25.00
S-5	11+27	——	RT.	67.50
				1375.67

FOR PAVEMENT DETAILS SEE SHT. Nº 292
FOR DRAINAGE DETAILS SEE SHT. Nº 353

ITEM 604 - MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
RM-1	10+72.34	℄ CONNECTOR	1
RM-2	13+23.87	℄ CONNECTOR	1
SHEET TOTAL			2

DRIVE APPROACHES

CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº.	ITEM 452 SQ. YDS.
D-1	10+72.34	LT.	II	5	6	293	8.75
D-2	10+91	RT.	II	5.5	9	293	13.64
D-3	13+38.52	RT.	II	7	10	293	11.28
SHEET TOTAL							33.67

ITEM 609 - CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 6	
C-1	10+72.34 (LT.)	13+23.87 (LT.)	227.56	
C-2	10+72.34 (RT.)	13+23.87 (RT.)	225.50	
SHEET TOTAL			503.06	

ITEM 814 - WATER MAINS

CODE	STATION FROM	STATION TO	LOC.	6" SOLID SLEEVE-EACH	6" CONNECTOR EACH
W-21	13+75	—	3.5' RT.	1	1
SHEET TOTAL				1	1

ITEM 660 - SODDING

CODE	STATION FROM	STATION TO	SQ. YDS.
E-1	11+75	LT.	7.3
TOTAL			7.3

0 10 20 40

POWERSDALE - MABEL CONNECTOR
STA. 10+62.34 TO STA. 13+63.86

MAY 25 1971
R.R.C. 8/25/68
PUD 8/30/68

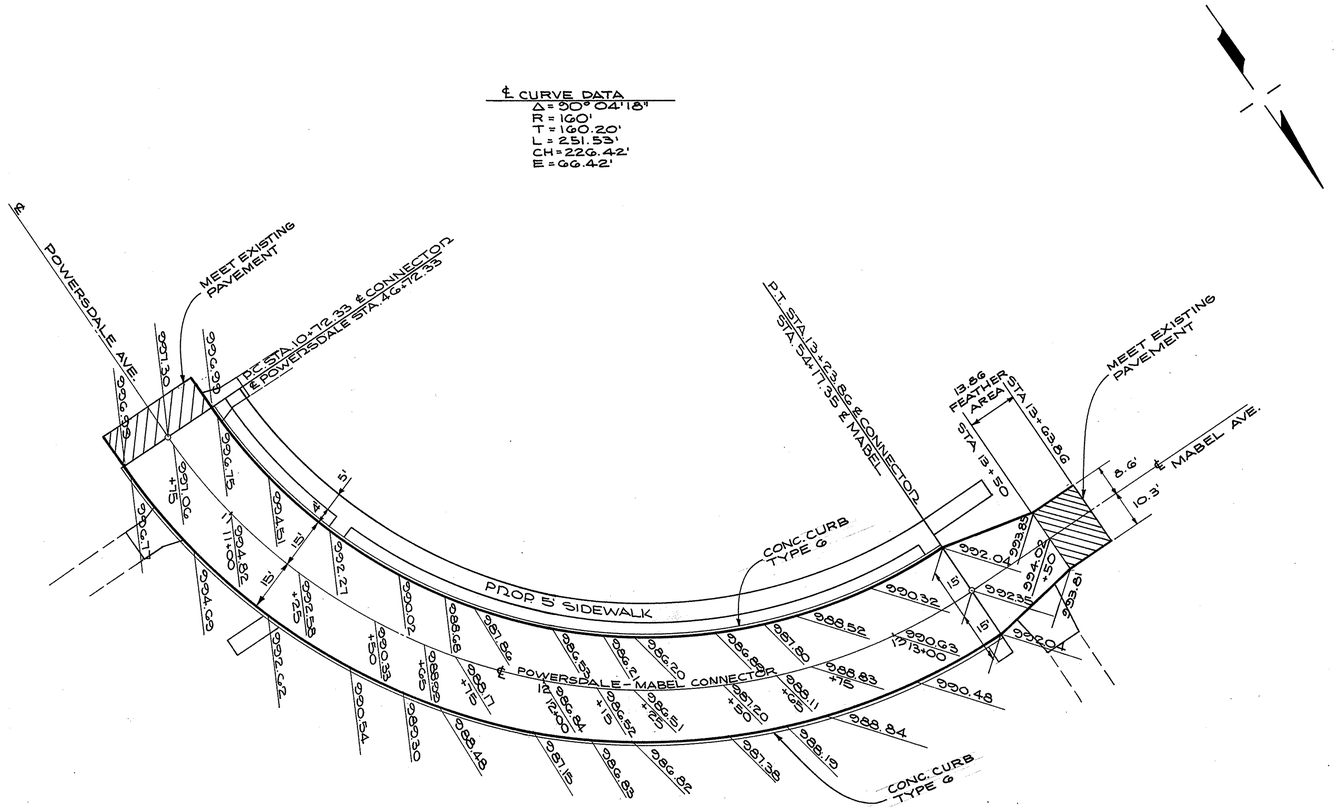
PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

FED. R.D.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

292
656

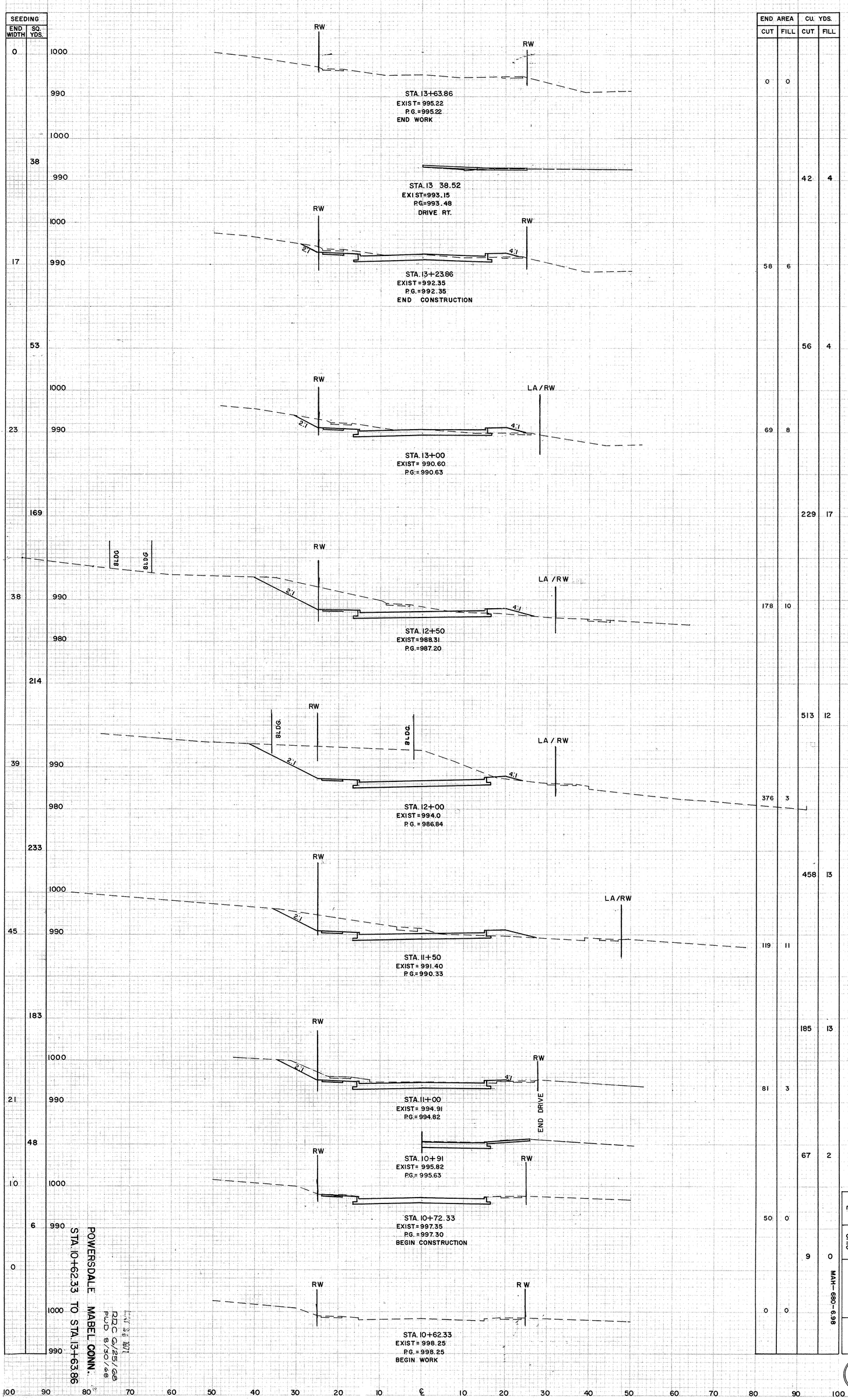
℄ CURVE DATA
Δ = 50° 04' 18"
R = 160'
T = 160.20'
L = 251.53'
CH = 226.42'
E = 66.42'



SCALE
0 20 40 60 80 100

MAY 25 1971

PAVEMENT DETAIL
POWERSDALE-MABEL CONNECTOR


SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
CU. YDS.
CUT
FILL
RW
LA/RW
2:1
4:1
BLDG.
END DRIVE
STA. 13+63.86
EXIST = 995.22
P.G. = 995.22
END WORK
STA. 13 38.52
EXIST=993.15
P.G=993.48
DRIVE RT.
STA. 13+23.86
EXIST = 992.35
P.G. = 992.35
END CONSTRUCTION
STA. 13+00
EXIST = 990.60
P.G. = 990.63
STA. 12+50
EXIST = 988.31
P.G. = 987.20
STA. 12+00
EXIST = 994.0
P.G. = 986.84
STA. 11+50
EXIST = 991.40
P.G. = 990.33
STA. 11+00
EXIST = 994.91
P.G. = 994.82
STA. 10+91
EXIST = 995.82
P.G. = 995.63
STA. 10+72.33
EXIST = 997.35
P.G. = 997.30
BEGIN CONSTRUCTION
STA. 10+62.33
EXIST = 998.25
P.G. = 998.25
BEGIN WORK
POWERSDALE MABEL CONN.
STA. 10+62.33 TO STA. 13+63.86
RDC 6/25/68
PUD 8/30/68
FED. RD. 2
STATE OHIO
PROJECT MAH-680-6.98
293
656

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680 - 0.58

294
656

BEGIN WORK
STA. 47+27.59

END WORK
STA. 52+00

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
485	13	134

A-186

604 C.O.Y. Nº II INLET
STA. 48+30 (20 LT. ℄)
TOP ELEV. = 1006.98
WINDOW ELEV. = 1006.23
℄ 12" = 1002.80

CURB RETURN DATA
Δ = 89° 36' 22"
D = 25'
T = 24.83'
L = 39.10'
P.C. STA. 41+15.44
13.7' RT. ℄ DICKSON AVE.
P.T. STA. 47+52.98
20 LT. ℄ CONST. GIBSON AVE

DRIVE APPROACHES						
CODE	STATION	SIDE	TYPE	'L'	'W'	PROFILE ITEM 452 7" SHT. Nº SQ YARDS
DI	51+75	LT	II	4'	10'	297 64.08
SHEET TOTAL						64.08

END APPROACH SLAB
STA. 48+64.75

REDUCED COUPLING
STA. 48+70
N. 0° 24' 34" W

MEET EXIST. PAV'T.
STA. 47+27.59

WALL TO REMAIN
SEE DETAIL SHT Nº 295

WALL TO BE REMOVED
SEE DETAIL SHT Nº 295

ITEM 202 - PORTIONS OF EXIST. STRUCTURES REMOVED				
CODE	LOCATION	DESCRIPTION	QUAN	COMMENT
R-1	48+33-48+81	8" CONC. WALL 2.6' HIGH X 267.5 LONG	LS	END OF WALL & FENCE TO BE FINISHED IN WORK-MANLIKE CONDITION.
SHEET TOTAL			LS	

CURB RETURN DATA
Δ = 90° 23' 38"
D = 25
T = 25.17'
L = 39.44'
P.C. STA. 40+25.43
13.7' RT. ℄ DICKSON
P.T. STA. 47+53.60
20' RT. ℄ & CONST. DICKSON

A-184

604 2A-G INLET MOD. TYPE I
STA. 40+21.10 (13.7' RT. ℄ DICKSON)
TOP ELEV. = 1010.18
WINDOW ELEV. = 1009.43
℄ 12" = 1006.10

A-187

604 2A-G INLET MOD. TYPE I
STA. 48+30 (20' RT. ℄)
TOP ELEV. = 1006.98
WINDOW ELEV. = 1006.23
℄ 12" = 1002.10

ITEM 608 - WALKS				
CODE	STATION FROM	STATION TO	LOC.	SQ. FT. 5" T
S-1	47+25.59	48+43.75	LT	544.5
S-2	51+27.5	51+59	LT	170.0
S-3	40+25.43(0)	40+42.33(0)	RT	85.0
SHEET TOTAL				799.5

BRIDGE MAH. 680-0723
TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 55'-0" x 78'-0" x 71'-10" x 43'-1" c/c BRGS.
ROADWAY WIDTH: 40'-0" F/F, SAFETY CURBS W/6'-0" SIDEWALK (LEFT) AND 2'-0" CURB (RIGHT)
LOAD FREQUENCY: HS 20-44
SKEW: NONE
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 25'-0 LONG AS 1-67
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE

BEGIN APPROACH SLAB STA. 51+17.16

ACCESS RD. S 81° 45' 05" E

DEDUCER COUPLING STA. 51+15

ITEM 603 - CONDUITS - LINEAR FEET				
CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	TYPE B-B 12"
P-184	A-184	A-170	294	35
P-186	A-186	A-172	294	47
P-187	A-172	A-187	294	29
SHEET TOTAL				111

DW-1 & CURVE DATA

Δ = 90°
D = 25
T = 25'
L = 39.27'
P.C. = STA. 51+75/37' LT & RELOC. GIBSON)
P.T. = STA. 51+50 (62' LT & RELOC. GIBSON)

STA. 51+50.03 (& CONST GIBSON AVE)
STA. 0+00 (& ACCESS RD)

STA. 52+00.03 (& CONST)
MEET EXIST. PAVEMENT +5
RT. STA. 52+00 (& 12' W)
SHIFT & 5' LT.

BEGIN FEATHER AREA
STA. 51+90

814 WATER MAINS											
CODE	STATION	LOCATION	6" VALVE AND BOX EACH	6"-45° BEND EACH	6"-11¼° BEND EACH	6" P.I. PIPE L.F.	6" STEEL CASE L.F.	VALVE BOX ADJ. TO GRADE EACH	6" SOLID SLEEVE EACH	6" CONN. TO EXIST. EACH
W-22	48+00	4.5' RT ℄ (EX)	1	1					1	1
WM-22		W-22 TO W-23				7				
W-23	48+04	1.0' LT. ℄ (PROP)		1						
WM-23		W-23 TO 48+70				64				
WM-24		48+70 TO 51+15					245			
WM-25		51+15 TO W-24								
W-25	51+40	6.25 LT ℄ (EX)			1					
W-26	51+60	4.5' LT ℄ (EX)			1					
W-24	51+74	4.5' RT ℄ (EX).	1			58			1	1
W-85	47+40	2.5' RT ℄						1		
TOTAL			2	2	2	129	245	1	2	2

B.M.# 12 - TOP OF EAST CAP BOLT ON F.H. AT HOUSE Nº 623 DICKSON. ELEV. = 1014.924

B.M.# 8 - TOP F.H. AT SOUTHWEST CORNER BENWOOD AND GIBSON AVE. ELEV. = 993.743

ITEM 609 CONCRETE CURB			
CODE	STATION FROM	STATION TO	TYPE 2B
C-1	41+25.44 DICKSON	48+39.75 GIBSON	135.61
C-2	40+25.43 DICKSON	48+39.75 GIBSON	125.59
C-3	51+42.16	51+90	47.84
C-4	51+42.16	51+90	47.84
SHEET TOTAL			357.14

ITEM 604 - MANHOLES, CATCH BASINS, & INLETS - EACH			
CODE	STATION	LOCATION	2A-6 MOD. TYPE I INLET
A-184	40+21.10	13.7 RT ℄ DICKSON AVE	1
A-186	48+30	20 LT ℄	1
A-187	48+30	20 RT ℄	1
SHEET TOTAL			3

ITEM 202 - INLETS & MANHOLES REMOVED				
CODE	STATION	LOCATION	INLETS REMOVED EACH	MANHOLES REMOVED EACH
F-184	47+28	27' RT ℄		1
F-185	47+29	29 LT ℄		1
F-186	49+665	12' LT ℄		1
F-187	49+88	30.5' LT ℄		1
F-188	50+12	38' LT ℄		1
F-189	49+695	12' RT ℄		1
F-190	49+76	17' RT ℄	1	
F-191	50+00	℄	1	
SHEET TOTAL			2	6

ITEM 611 - APPROACH SLABS (T=13")				
CODE	STATION FROM	STATION TO	WIDTH	SQ. YARDS
AS-1	48+39.75	48+64.75	40.0	111.11
AS-2	51+17.16	51+42.16	40.0	111.11
SHEET TOTAL				222.22

FOR PAVEMENT DETAILS, SEE SHT. Nº 295
FOR DRAINAGE DETAILS, SEE SHT. Nº 350
FOR WATER LINE DETAILS, SEE SHT. Nº 385
FOR MAINLINE DETAILS, SEE SHT. Nº 70
FOR DICKSON AVE. DETAILS, SEE SHT. Nº 300
FOR BRIDGE DETAILS, SEE SHT. Nº 527
FOR ACCESS DRIVE SEE SHT. Nº 298

SCALE
0 10 20 40 60 80 100

MAY 26 1971
R.R.D. 5/10/68
PWD 8/30/68

GIBSON AVE.
STA. 46+80 TO STA. 52+00

PLATE 4 - CROSS SECTION - O. P. M. & R. E. STANDARD
NEWHALL & FISHER CO., NEW YORK

FINAL SURVEY: SURVEYED, PLOTTED, TRACED, NOTE BOOK, NO., AREAS, AREAS CHECKED, DATE, BY
ORIGINAL SURVEY: SURVEYED, PLOTTED, TRACED, NOTE BOOK, NO., AREAS, AREAS CHECKED, DATE, BY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH — 680 - 6.08

295
656

STA. 47+14.56 (℄ CONST. GIBSON AVE.)
STA. 47+14.56 (℄ EXIST. GIBSON AVE.)
STA. 401+70.70 (℄ DICKSON AVE.)

DICKSON AVE.

MEET EXIST. PAV'T. STA. 47+25.55

4:1

2'

P.C.

P.T.

CURB RETURN DATA
Δ = 89° 36' 22"
R = 25'
T = 24.83
L = 39.10'

CONC. CURB TYPE G

1005.52 | 1007.60 | 1006.67

1005.20 | 1005.55 +50 | 1006.03 +75 | 1007.31 | 1006.38 +25

47 | 48

STA. 48+39.75
BEGIN APPROACH SLAB

℄ GIBSON AVE. (EXIST.)

49 | 50

℄ GIBSON AVE. (PROPOSED)

STA. 51+42.16
END APPROACH SLAB

51

FOR BRIDGE DETAILS SEE SHEET Nº 527

1005.18 | 1005.52 | 1007.60 | 1006.67

P.T.

EXIST.

P.C.

2'

CONC. CURB TYPE G

CURB RETURN DATA
Δ = 90° 23' 38"
R = 25'
T = 25.17'
L = 39.44'

CONC. CURB TYPE G

STA. 51+65 (℄ CONST. GIBSON AVE.)
STA. 0+00 (℄ ACCESS RD.)

EXIST.

334.08 | 332.73 | 332.06

15'

℄ CROWN LINE

334.35 +50 | 333.04 +75 | 332.06 +92

EXIST.

STA. 52+00.03 (℄ CONST.)
MEET EXIST. PAVEMENT 5' RT STA. 52+00 (℄ R/W)
SHIFT ℄ 5' LT.

334.08 | 333.04 | 332.73

20'

5'

25'

EXIST.

10'
FEATHER

CONC. CURB TYPE G

26.75'
TO BE REMOVED

FINISH WALL AND FENCE IN WORKMANLIKE CONDITION

WOVEN WIRE FENCE TO BE REMOVED

BRICK WALL TO BE REMOVED

2.5'

STA. 48+50.75

2.6'

1.5'

PROP. PARAPET WALL

8" CONC. BLOCK WALL TO BE REMOVED

STA. 48+51

DETAIL OF WALL REMOVAL

SCALE
0 | 2 | 4 | 6 | 8 | 10

SCALE
0 | 20 | 40 | 60 | 80 | 100

MAY 25 1971

GIBSON AVE. PAVEMENT DETAILS

FED. RD.	STATE	PROJECT	
2	OHIO		

296
656

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
30	0		
38	2	19	1
47	1	79	3
59	2	98	3
137	0	89	

MAH-680-6.98

SEEDING END AREA	SEEDING SQ. YDS.
0	
6	5
4	28
9	36
0	12
	0

FED. RD.	STATE	PROJECT	
2	OHIO		

297
656

| | | |

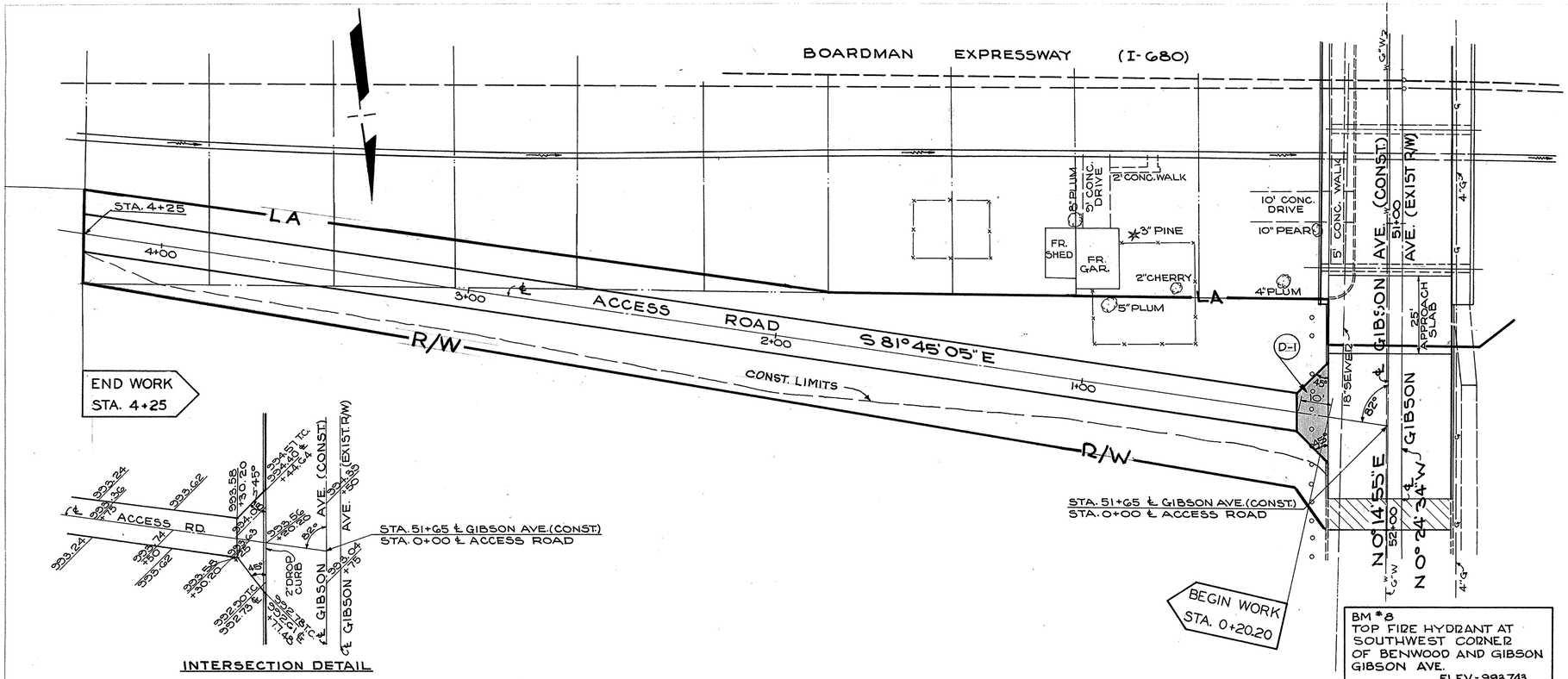
FED. RD.	STATE	PROJECT	
2	OHIO		

298
656

MAH-680-6.98

DRIVE APPROACHES							
CODE	STATION	SIDE	TYPE	L	W	PROFILE SHT. Nº	ITEM 452 7" SQ. YDS.
D-1	0+20.20	℄	III	10.0'	12.0'	298	24.81
SHEET TOTAL							24.81

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
649	218	1880

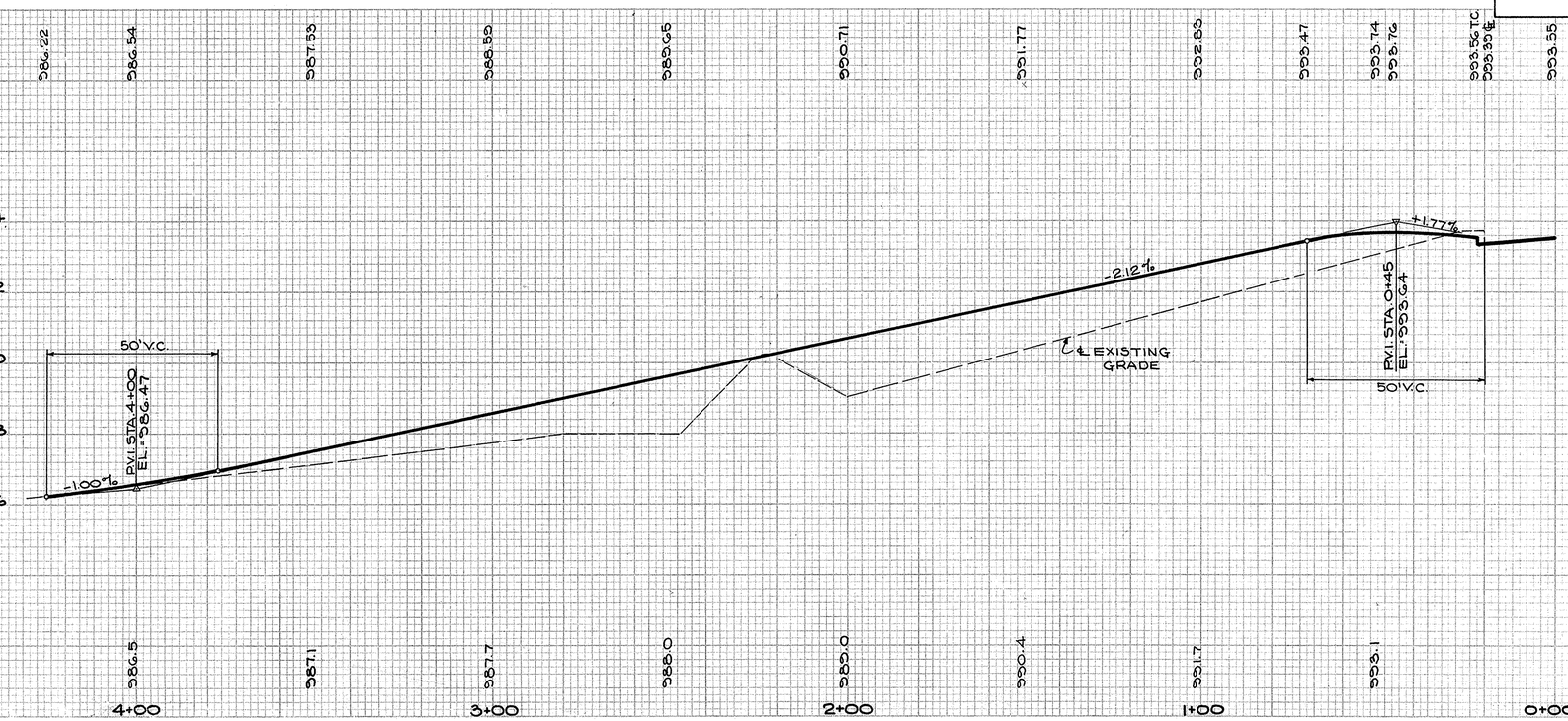


BM #8
TOP FIRE HYDRANT AT SOUTHWEST CORNER OF BENWOOD AND GIBSON
GIBSON AVE.
ELEV.= 993.743

INTERSECTION DETAIL

0 10 20 40

FOR DRAINAGE DETAILS, SEE SHT Nº 359
FOR GIBSON AVE DETAILS, SEE SHT. Nº 294
FOR WATER LINE DETAILS, SEE SHT Nº 294



MAY 25 1971
R.R.C. 8/24/68
PWD 8/30/68

ACCESS RD. AT GIBSON AVE
STA. 0+00 TO STA 4+25

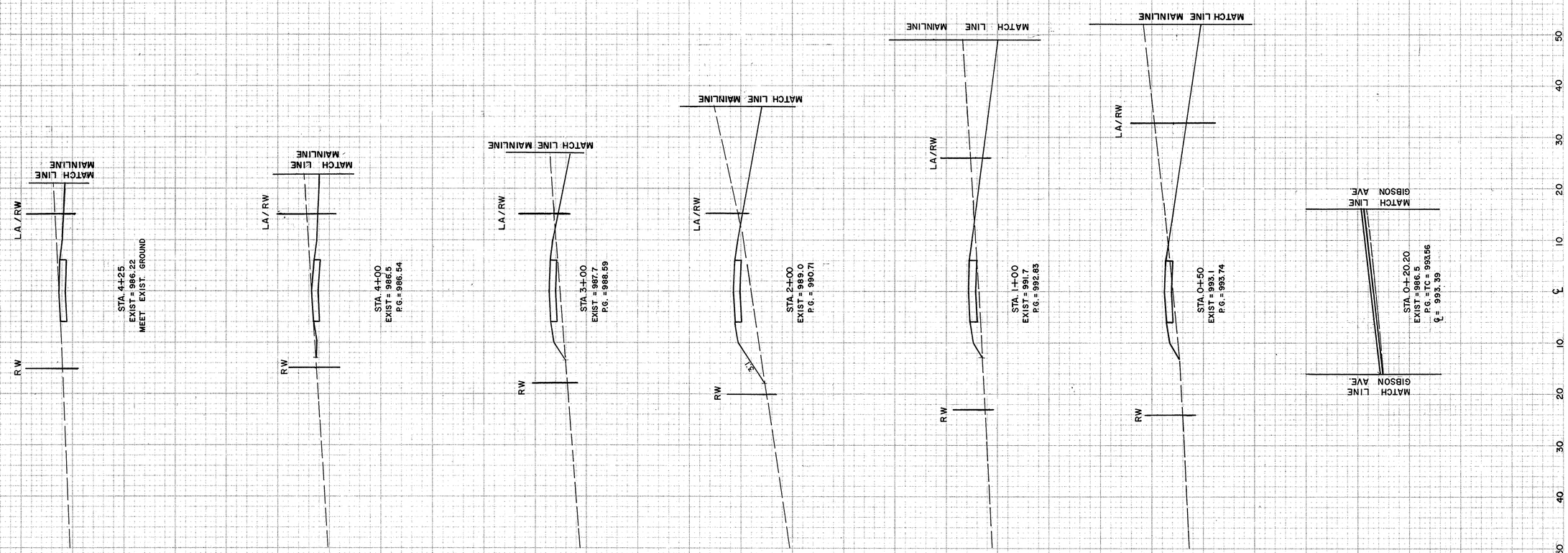
PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

FED. RD.	STATE	PROJECT	
2	OHIO		

299
656

MAH-680-6.98

END AREA CUT	13		21		15		54		59		118		0				
END AREA FILL		0		0		15		32		10		8		7			
CU. YDS. CUT		16		67		128		209		164		65					
CU. YDS. FILL		0		28		87		78		17		8					



ACCESS RD. @ GIBSON AVE.
STA 0+20.20 TO STA. 4+25

MAY 25 1971
RRC 6/25/68
PWD 8/30/68

SEEDING END WIDTH	24		26		33		46		60		65		0				
SEEDING SQ. YDS.		69		328		439		589		347		108					

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK NO. — BY — DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK NO. — BY — DATE

PLATE 3-CROSS SECTION © P R & R E STANDARD
NATIONAL TRACING PAPER DIVISION
I. P. P. & L. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

300
656

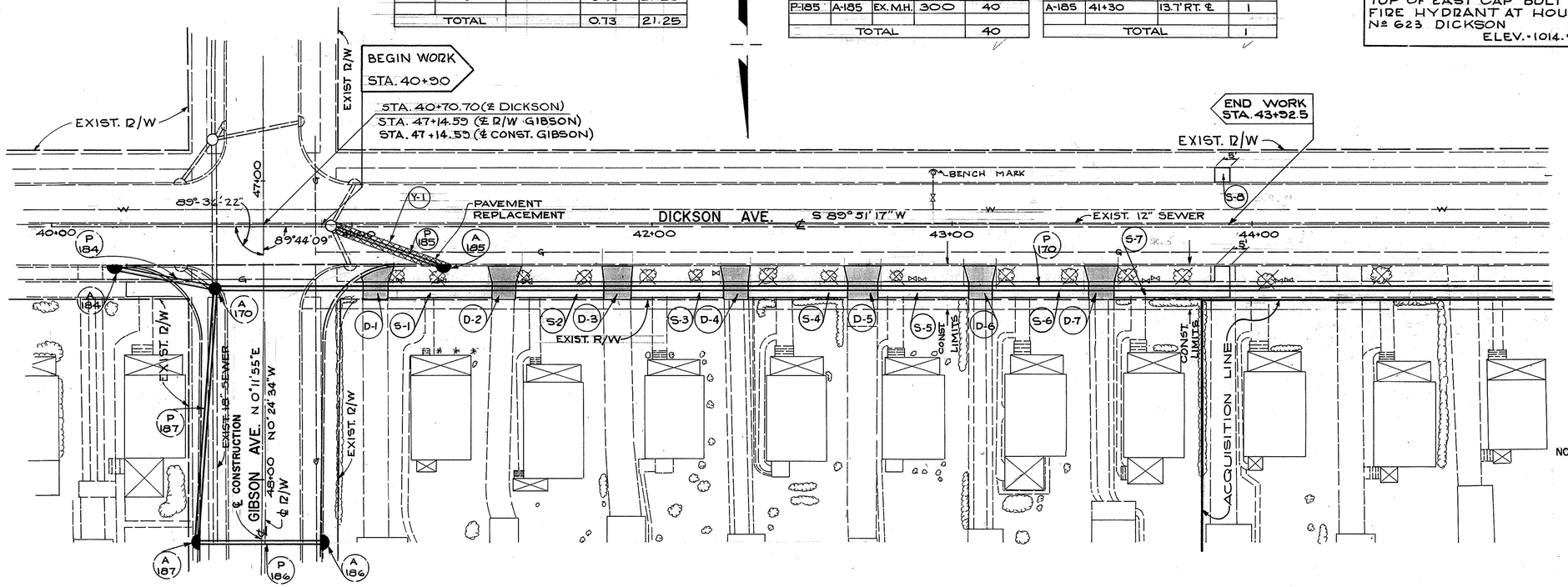
MAH-680-6.98

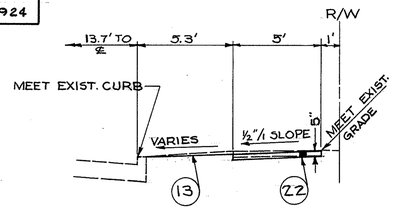
ITEM - PAVEMENT REPLACEMENT				
CODE	LOCATION	PROPOSED CONDUIT	1¼" L 404 CU.YDS.	8" 305 SQ.YDS.
Y-1	DICKSON	P-185	0.73	21.25
	TOTAL		0.73	21.25

ITEM 603 - CONDUITS - LIN. FT.				
CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	12" TYPE B-B
P-185	A-185	EX. M.H.	300	40
	TOTAL			40

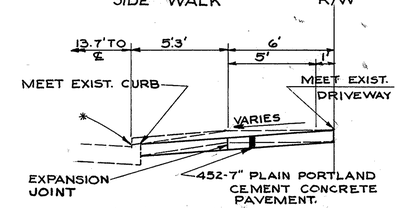
ITEM 604 - INLETS - EACH			
CODE	STATION	LOCATION	C.O.Y. Nº II INLET
A-185	41+30	13.7' RT. ℄	1
	TOTAL		1

BM # 12
TOP OF EAST CAP BOLT ON FIRE HYDRANT AT HOUSE Nº 623 DICKSON
ELEV. - 1014.924





TYPICAL SECTION FOR NORMAL SIDE WALK



TYPICAL SECTION FOR DRIVEWAY

NOTE: EXISTING CURB OPENING TO BE UTILIZED FOR THE PROPOSED DRIVE APPROACH. AT STREET SIDE OF SIDEWALK THE DRIVE APPROACH SHALL BE THE SAME WIDTH AS THE EXISTING DRIVE.

(13) 659 - SEEDING AND MULCHING (AS PER. PLAN)

(2.2) 608 - 4" CONCRETE WALKS

ITEM 608 - WALKS				
CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	41+12	41+46.5	RT.	172.5
S-2	41+54.5	41+83.5	RT.	145.0
S-3	41+93	42+24	RT.	155.0
S-4	42+32.5	42+65	RT.	165.0
S-5	42+76	43+06	RT.	150.0
S-6	43+13	43+45	RT.	160.0
S-7	43+54	43+92.5	RT.	216.5
S-8	43+90		LT.	24.0
SHEET TOTAL				1188.0

DRIVE APPROACHES						
CODE	STATION	SIDE	TYPE	L	W	ITEM 452 T' SQ. YDS.
D-1	41+08	RT.	SEE TYPICAL SECTION NOTE	4.8	8.0	7.33
D-2	41+50.5	RT.		4.8	8.0	10.61
D-3	41+88	RT.		4.8	8.0	10.80
D-4	42+28	RT.		4.8	8.0	10.27
D-5	42+66	RT.		4.8	10.0	12.59
D-6	43+10	RT.		4.8	8.0	10.37
D-7	43+49	RT.		4.8	8.0	10.53
SHEET TOTAL						72.50

FOR DRAINAGE DETAILS, SEE SHT. Nº 359 & 360
FOR GIBSON AVE. DETAILS, SEE SHT. Nº 294
FOR WATER MAIN DETAILS, SEE SHT. Nº 385 & 386

0 10 20 40

MAY 25 1971
R.R.C. 8/27/68
PUD 8/30/68

DICKSON AVENUE
STA. 40+90 TO STA. 43+92.5

FINAL SURVEY — SURVEYED, DRAWN, TRACED, NOTE BOOK, TEMPLATE, AREAS, CHECKED, NO., DATE, BY

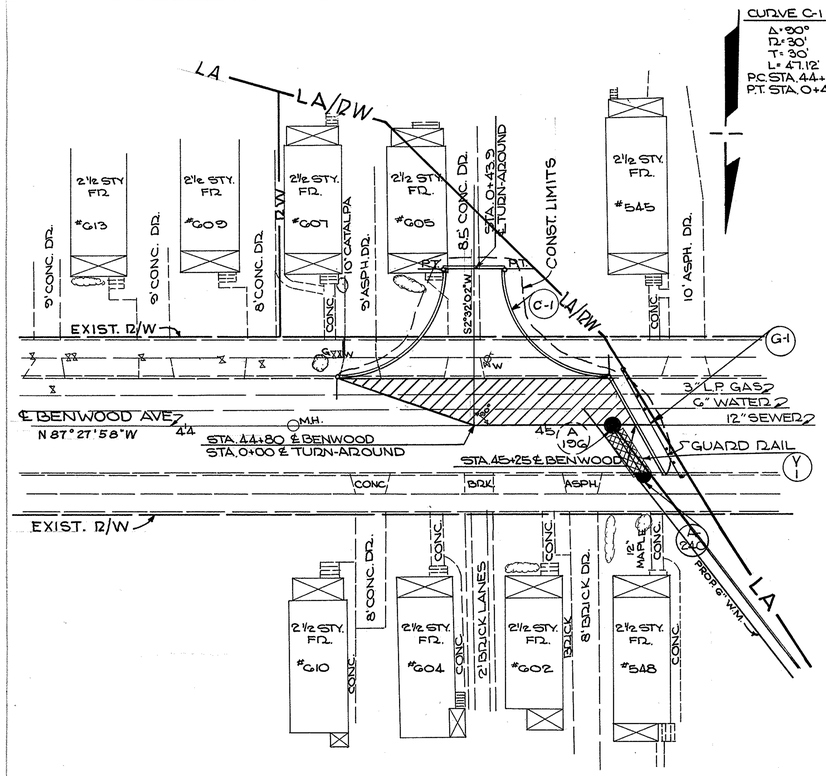
ORIGINAL SURVEY — SURVEYED, DRAWN, TRACED, NOTE BOOK, TEMPLATE, AREAS, CHECKED, NO., DATE, BY

PLATE 4—CROSS SECTION O. P. R. & B. E. STANDARD
100% RAG — MADE AND PRINTED IN U. S. A.
NATIONAL TRACING PAPER DIVISION
U.S.P.&C. CO., INC. INDIANAPOLIS, INDIANA

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

301
656

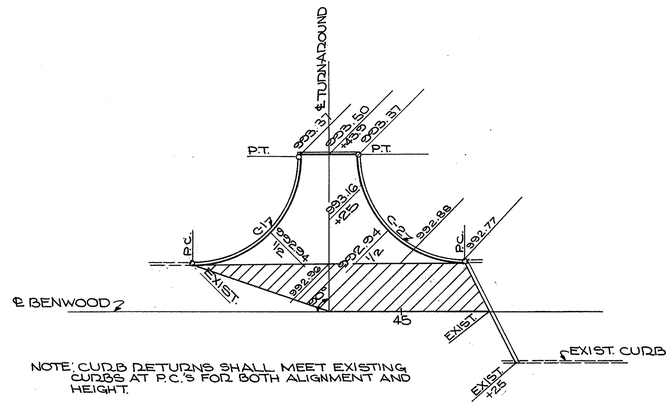


CURVE C-1 DATA

Δ = 90°
D = 30'
T = 30'
L = 47.12'
P.C. STA. 44+42 (13.1' LT ℄ BENWOOD)
P.T. STA. 0+43.1 (8' LT. & TURN-AROUND)

CURVE C-2 DATA

Δ = 90°
D = 30'
T = 30'
L = 47.12'
P.C. STA. 45+18 (13.8' LT. ℄ BENWOOD)
P.T. STA. 0+43.9 (8' RT. & TURN-AROUND)



NOTE: CURB RETURNS SHALL MEET EXISTING CURBS AT P.C.'S FOR BOTH ALIGNMENT AND HEIGHT.

A-239
G04 Nº II C.O.Y. INLET
STA. 45+19.2 (11.5' LT. ℄ BENWOOD)
TOP EL. = 992.94
WINDOW EL. = 992.19
℄ 12" = 988.38

A-240
G04 Nº II C.O.Y. INLET
STA. 45+26 (13.3' RT. ℄ BENWOOD)
TOP EL. = 993.06
WINDOW EL. = 992.31
℄ 12" = 988.50

0 10 20 40

FOR WATER LINE DETAILS, SEE SHT. Nº 386
FOR DRAINAGE DETAILS, SEE SHT. Nº 360

BM # 8
TOP FIRE HYDRANT ON BENWOOD AT SOUTHWEST CORNER OF BENWOOD AND GIBSON AVE.
ELEV. = 993.743

BM # 10
TOP FIRE HYDRANT NORTHEAST CORNER OF SOUTH AND AND BENWOOD AVE.
ELEV. = 979.230

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
26	0	91

ITEM 609 - CONCRETE CURB - LIN. FT.

CODE	STATION FROM	STATION TO	TYPE 6	
C-1	44+42	45+27	141.24	
SHEET TOTAL			141.24	

ITEM 604 - MANHOLES, CATCH BASIN & INLETS - EACH

CODE	STATION	LOCATION	C.O.Y. Nº II INLET	
A-240	45+26	13.3' RT ℄ BEN.	1	
TOTAL			1	

PAVEMENT REPLACEMENT

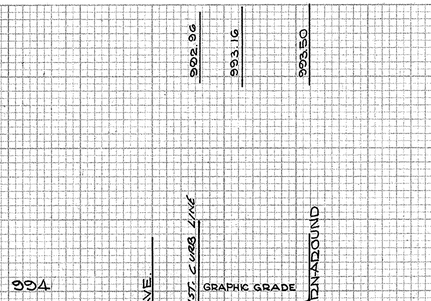
CODE	LOCATION	PROPOSED CONDUIT	1½"-404 C.Y.	8"-305 S.Y.
Y-1	BENWOOD	P-240	0.22	6.32
TOTAL			0.22	6.32

ITEM 603 - CONDUITS - LINEAR FEET

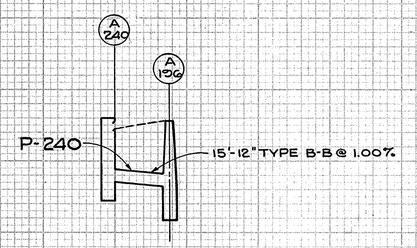
CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	TYPE B-B 12"	
P-240	A-240	A-196	301	15	
TOTAL				15	

ITEM 606 - GUARD RAIL - LIN. FT.

CODE	LOCATION FROM	LOCATION TO	TYPE 5	
G-1	45+22 (LT)	45+38 (RT)	37.5	
SHEET TOTAL			37.5	



PROFILE TURN-AROUND



A-196
G04 Nº I M.H.
STA. 45+19.06
℄ BENWOOD
TOP ELEV. = 992.66
℄ EXIST. 12" = 989.20
℄ 12" = 989.91
℄ 12" = 988.25
℄ 12" = 988.35

A-240
G04 Nº II C.O.Y. INLET
STA. 45+26
13.3' RT. ℄ BENWOOD
TOP ELEV. = 993.06
WINDOW ELEV. = 992.31
℄ 12" = 988.50

MAY 25 1971

R.R.C. 8/13/68
PWD 8/30/68

BENWOOD AVE. TURN-AROUND

PLATE 4-CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO. - CHICAGO

FED. RD.	STATE	PROJECT	
2	OHIO		

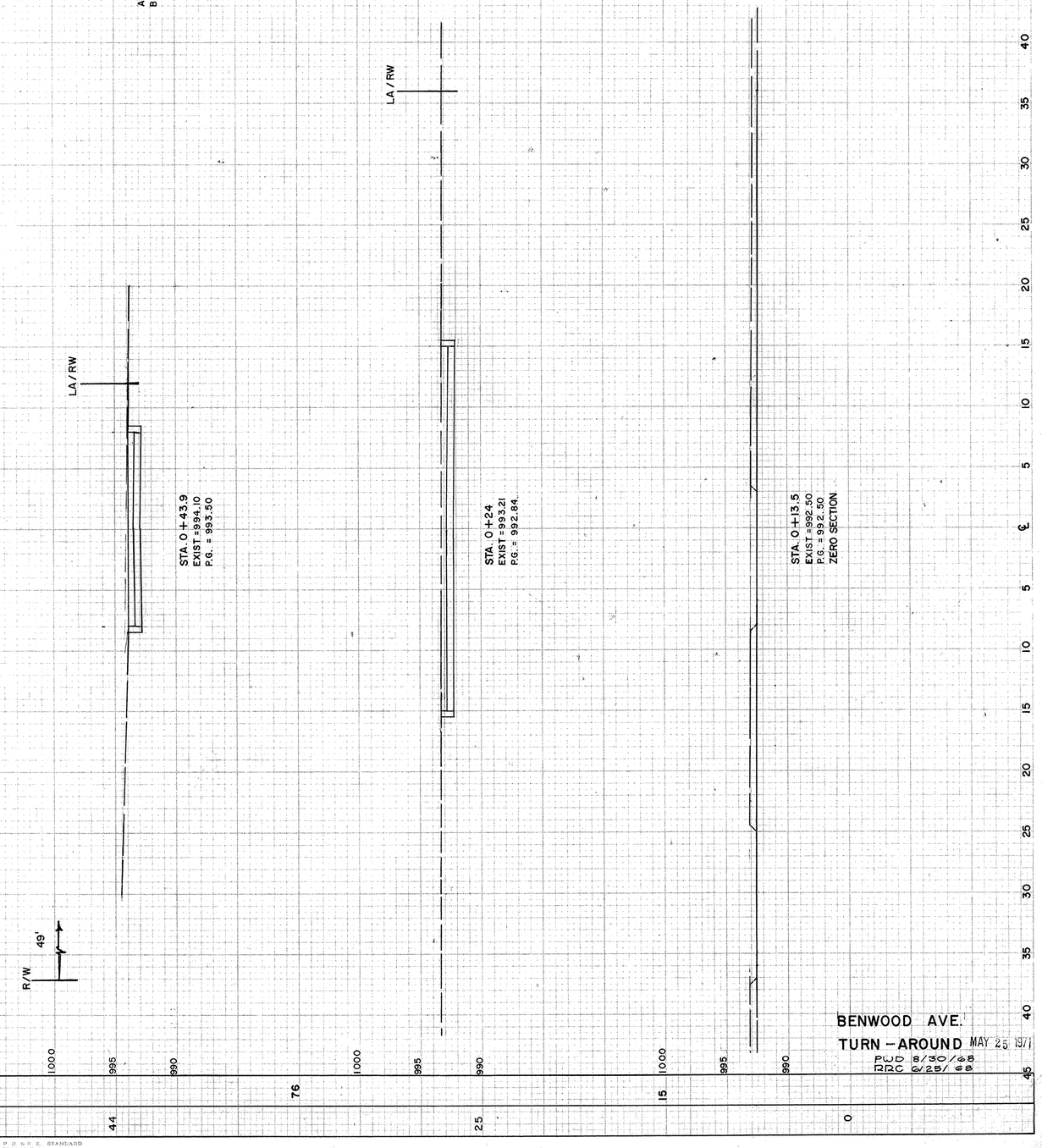
302
656

MAH—680—6.98

		CU. YDS.	
END AREA	CUT	CUT	FILL
	FILL		

	0	19	0	7	0
CUT	0	34	0	0	
FILL	0	18	0	0	

AH.
BK.



BENWOOD AVE.
TURN—AROUND MAY 25 1971
PUD 8/30/68
RRC 6/25/68

| SEEDING | SQ. YDS. | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

303
656

MAH-680-6.98

814 WATER MAINS

CODE	STATION	LOCATION	8" VALVE & BOX EACH	8"-45° BEND EACH	8" D.I. PIPE L.F.	8" STEEL PIPE L.F.	8" SOLID SLEEVE EACH	8" CONNECTOR EACH
W-26	48+90	9.0' RT	1	1			1	1
WM-27		W-26 TO W-27			4			
W-27	48+94	5.5' RT		1				
WM-28		W-27 TO 49+45			51			
WM-29		49+45 TO 50+69				124		
WM-30		50+69 TO W-28			47			
W-28	51+16	5.5' RT		1				
WM-31		W-28 TO W-29			4		1	1
W-31	51+20		1	1				
			2	4	106	124	2	2

ITEM 611 APPROACH SLABS (T-13)				
CODE	STATION FROM	STATION TO	WIDTH	SQ YDS
AS-1	49+10.67	49+40.67	66.0	220.0
AS-2	50+73.25	51+03.25	66.0	220.0
SHEET TOTAL				440.0

ITEM 604 - MONUMENT ASSEMBLIES			
CODE	STATION	LOCATION	EACH
I2M-1	48+00	℄	1
SHEET TOTAL			1

ITEM 609 CONC. CURB				
CODE	STATION FROM	STATION TO	TYPE 2A	TYPE 2B
C-1	DICKSON	48+15	55.0	47
C-2	47+60	48+26	66.0	
C-3	49+00	49+14	14.0	
C-4	49+08	49+10	2.0	
C-5	51+04	52+00	96.0	
C-6	51+01.5	51+43.69	42.2	
SHEET TOTAL			275.2	47

ITEM 604 - MANHOLES, CATCH BASIN & INLETS EACH				
CODE	STATION	LOCATION	Nº 1 SAN. M.H.	Nº 1 M.H.
A-218	51+25	8.93' RT. ℄		1
A-219	51+25	3' LT. ℄	1	
TOTAL			1	1

CR-1 DATA
Δ = 90° 12' 49"
R = 20'
L = 31.50'
T = 20.07'
CH = 28.34'

BEGIN WORK STA. 42+35

BM #3 - TOP FIRE HYDRANT ON SOUTHEAST CORNER OF DICKSON AND SOUTH AVE. ELEV. = 995.615

B.M. #2 - TOP F.H. SOUTHEAST CORNER OF SOUTH AVE. AND TYNDALE. ELEV. = 990.872

FOR PAY'T DETAILS, SEE SHT. Nº 305
FOR BRIDGE DETAILS, SEE SHT. Nº 536
FOR DRAINAGE DETAILS, SEE SHT. Nº 360
FOR RAMP "C" DETAILS, SEE SHT. Nº 309

ITEM 603 - CONDUIT - LIN. FT.				
CODE	STATION FROM	STATION TO	SIDE	TYPE B-B 8"
P-601	ABUT.	A-218	RT.	61
P-602	ABUT.	A-218	LT.	66
SHEET TOTAL				127

BRIDGE MAH-680-0705

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 57'-1" x 71'-0 c/c BEARINGS
ROADWAY WIDTH: 66'-0" F/F OF 8'-0" WALKS ON BOTH SIDES
LOAD FREQUENCY: HS 20-44
SKEW: 2°21'14" LT.
WEARING SURFACE: 1" MONOLITIC CONCRETE
APPROACH SLAB: 30'-0" LONG SPECIAL
SUPERELEVATION: NONE
ALIGNMENT: STRAIGHT

ITEM 608 - WALKS				
CODE	STATION FROM	STATION TO	LOCATION	SQ. FT. 5" THICKNESS
S-1	DICKSON	RAMP RET.	RT.	963.08
S-2	RAMP RET.	49+35	RT.	327.53
S-3	47+45.5	48+31	LT.	648.75
S-4	48+95.5	49+37.5	LT.	315.00
S-5	50+79.5	52+00	LT.	903.75
S-6	50+77	52+00	RT.	922.50
SHEET TOTAL				4080.61

ITEM 202 - REMOVAL OF EXIST. SIGNS AS PER PLAN			
CODE	STATION	LOCATION	LUMP SUM REMOVAL
R-1	43+20	45' RT. ℄ SOUTH	1
TOTAL			1

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
846	31	239

A-218
604 Nº 1 M.H.
STA. 51+25 (8.93' RT. ℄)
TOP ELEV. 981.71
IE EXIST. 30" 972.93
IE PROP. 8" E = 978.07
IE PROP. 8" W = 978.07

A-219
604 Nº 1 SANT. M.H.
STA. 51+25 (3' LT. ℄)
TOP ELEV. 981.80
IE EXIST. 36" 969.43

R.R.C. 8/20/68
PWD 8/30/68
MAY 25 1971

SOUTH AVE.
BEGIN CONSTRUCTION TO STA. 52+00

PLATE 1—CROSS SECTION O.P.P.&R.R. STANDARD
KEUFFEL & ESSER CO. NEW YORK

FED. RD.	STATE	PROJECT	
2	OHIO		

304
656

MAH-680-6.98

ITEM 814 - WATER MAINS

CODE	STATION	EXISTING LOCATION	PROPOSED LOCATION	FIRE HYDRANT REMOVED & RELOCATED EACH	SERVICE BOXES ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE	CUT & PLUG EXIST. PIPE EACH 6"	6" D.I. PIPE L.F.
W-1	52+79	5' RT. ℄					1	
W-2	53+48.5	29' RT. ℄	38' RT. ℄	1				
WM-2	53+48.5							8
W-3	53+48.5	5' RT. ℄				1		
					2			
	SHEET	TOTAL		1	2	1	1	8

ITEM 604 - MANHOLES ADJUSTED TO GRADE - EACH

CODE	STATION	LOCATION	M.H.
AJ-215	52+61.5	8' RT. ℄ SOUTH	1
AJ-216	52+96	3' LT. ℄ SOUTH	1
AJ-217	53+54	4' LT. ℄ SOUTH	1
	SHEET	TOTAL	3

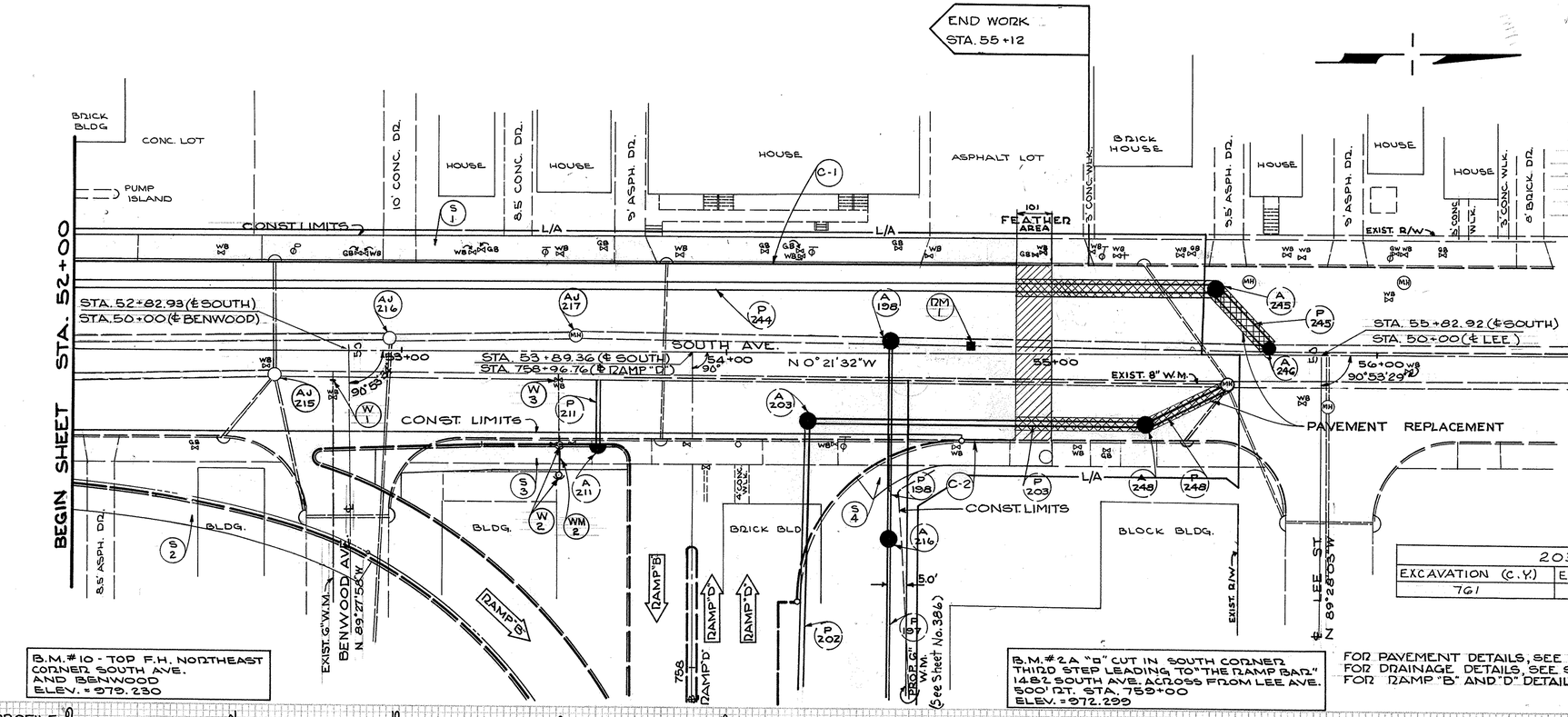
ITEM 609 CONC. CURB

CODE	STATION FROM	STATION TO	TYPE 2A
C-1	52+00	54+90	290.00
C-2	54+71.86	54+90	18.14
	SHEET TOTAL		308.14

203		659
EXCAVATION (C.Y.)	EMBANKMENT (C.Y.)	SEEDING (S.Y.)
761	26	147

ITEM 604 - MONUMENT ASSEMBLIES

CODE	STATION	LOCATION	EACH
DM-1	54+75	℄	1
	SHEET TOTAL		1

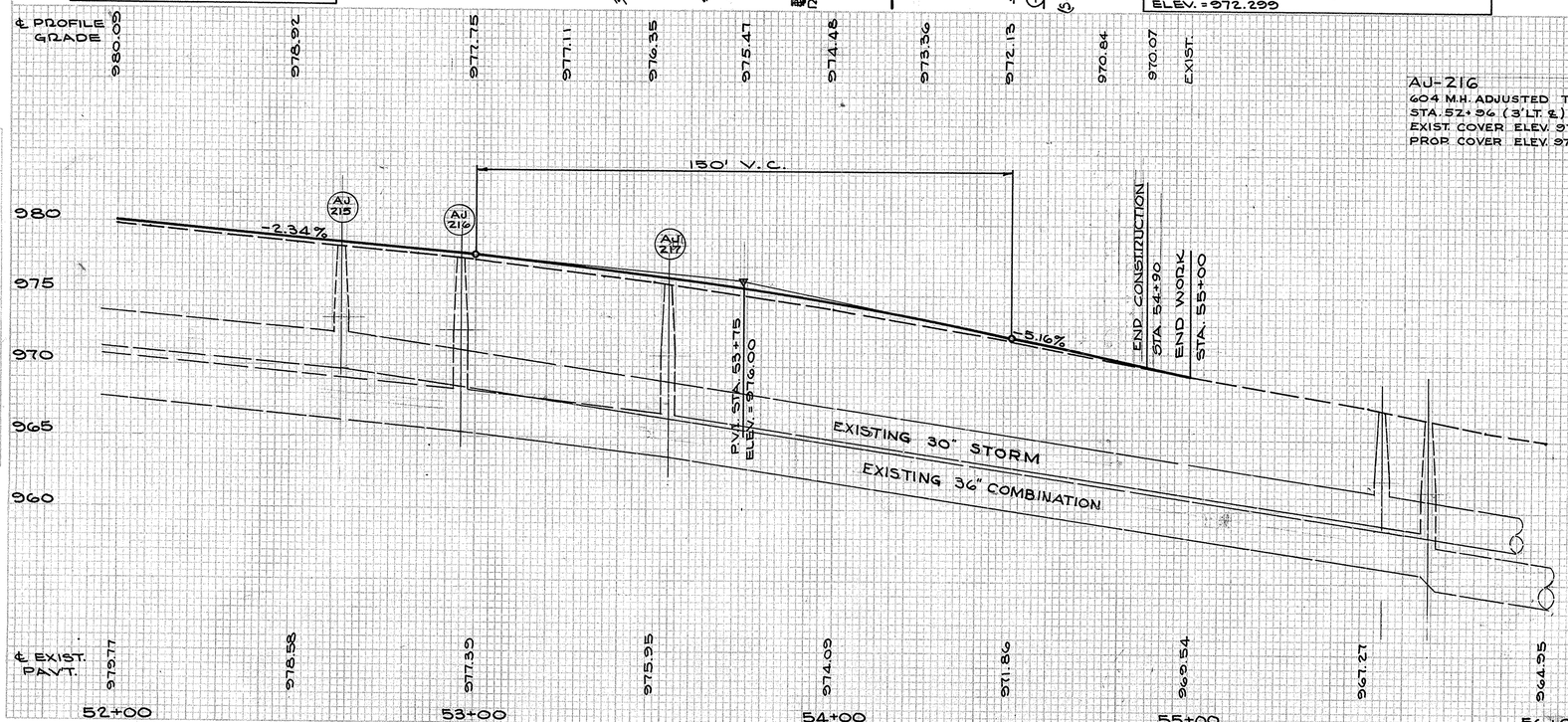


B.M. # 10 - TOP F.H. NORTHEAST CORNER SOUTH AVE. AND BENWOOD ELEV. = 979.230

B.M. # 2A "D" CUT IN SOUTH CORNER THIRD STEP LEADING TO "THE RAMP BAR" 1482 SOUTH AVE. ACROSS FROM LEE AVE. 500' RT. STA. 758+00 ELEV. = 972.299

FOR PAVEMENT DETAILS, SEE SHT. No. 305
FOR DRAINAGE DETAILS, SEE SHT. No. 360
FOR RAMP "B" AND "D" DETAILS, SEE SHT. No. 309

0 10 20 40



AJ-216
604 M.H. ADJUSTED TO GRADE
STA. 52+96 (3' LT. ℄)
EXIST. COVER ELEV. 977.50
PROP. COVER ELEV. 977.76

AJ-217
604 M.H. ADJUSTED TO GRADE
STA. 53+54 (4' LT. ℄)
EXIST. COVER ELEV. 975.75
PROP. COVER ELEV. 976.10

AJ-215
604 M.H. ADJUSTED TO GRADE
STA. 52+61.5 (8' RT. ℄)
EXIST. COVER ELEV. = 978.26
PROP. COVER ELEV. = 978.52

ITEM 608 - WALKS

CODE	STATION FROM	STATION TO	LOCATION	SQ. FEET 5" THICKNESS
S-1	52+00	55+00	LT.	2,250.00
S-2	52+00 (6)	749+53 (8)	RT.	690.00
S-3	52+92	53+68	RT.	612.00
S-4	54+42	55+00	RT.	450.00
	SHEET	TOTAL		4,002.00

R.R.C. 5/20/68
PCD 8/30/68
MAY 23 '71

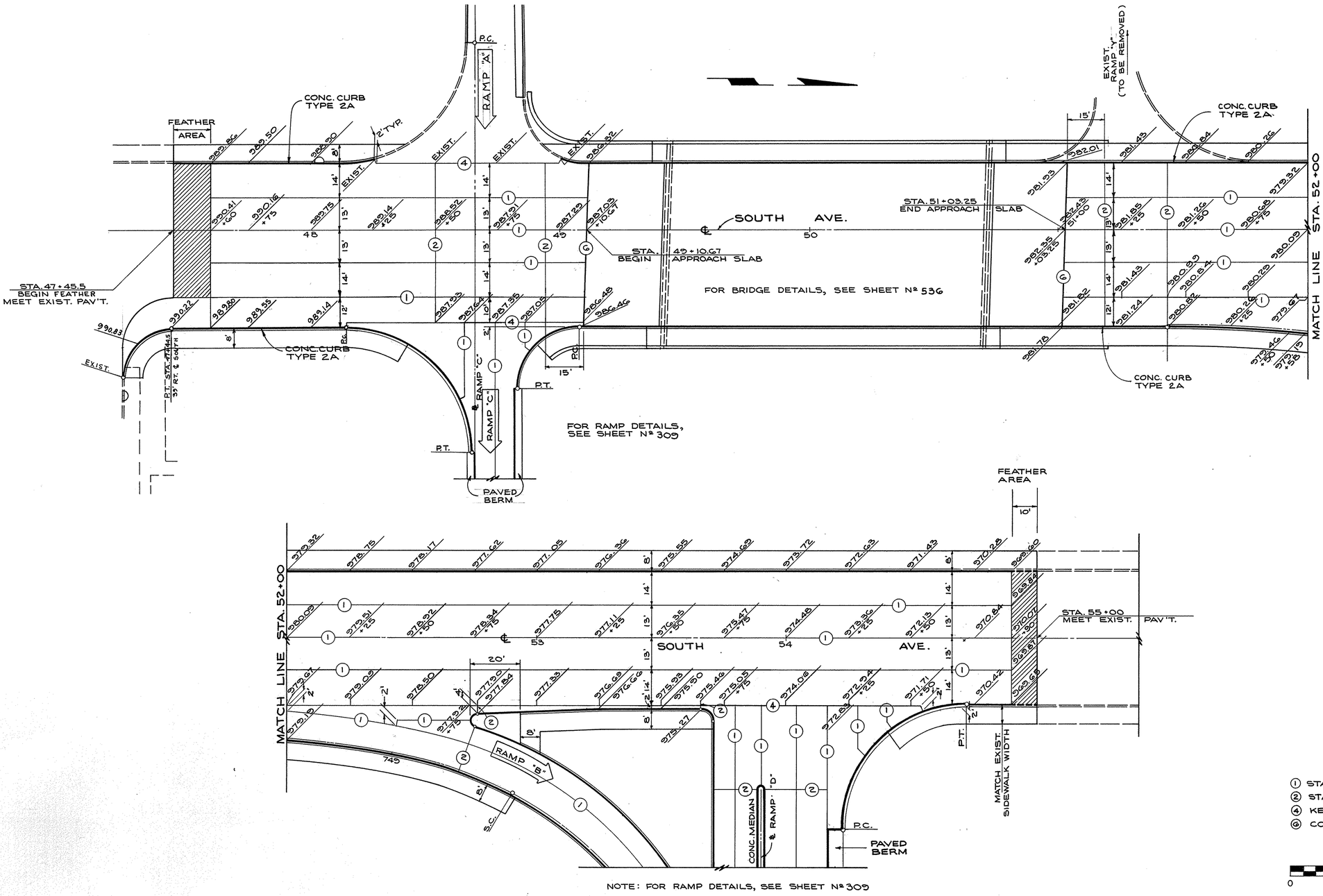
SOUTH AVE. STA. 52+00 TO END CONSTRUCTION

K&E PLATE 4, CROSS SECTION
KEUFFEL & ESSER CO.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

305
656



JOINT LEGEND

① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT
④ KEY JOINT WITHOUT TIE BARS
⑥ CONSTRUCTION JOINT

SCALE

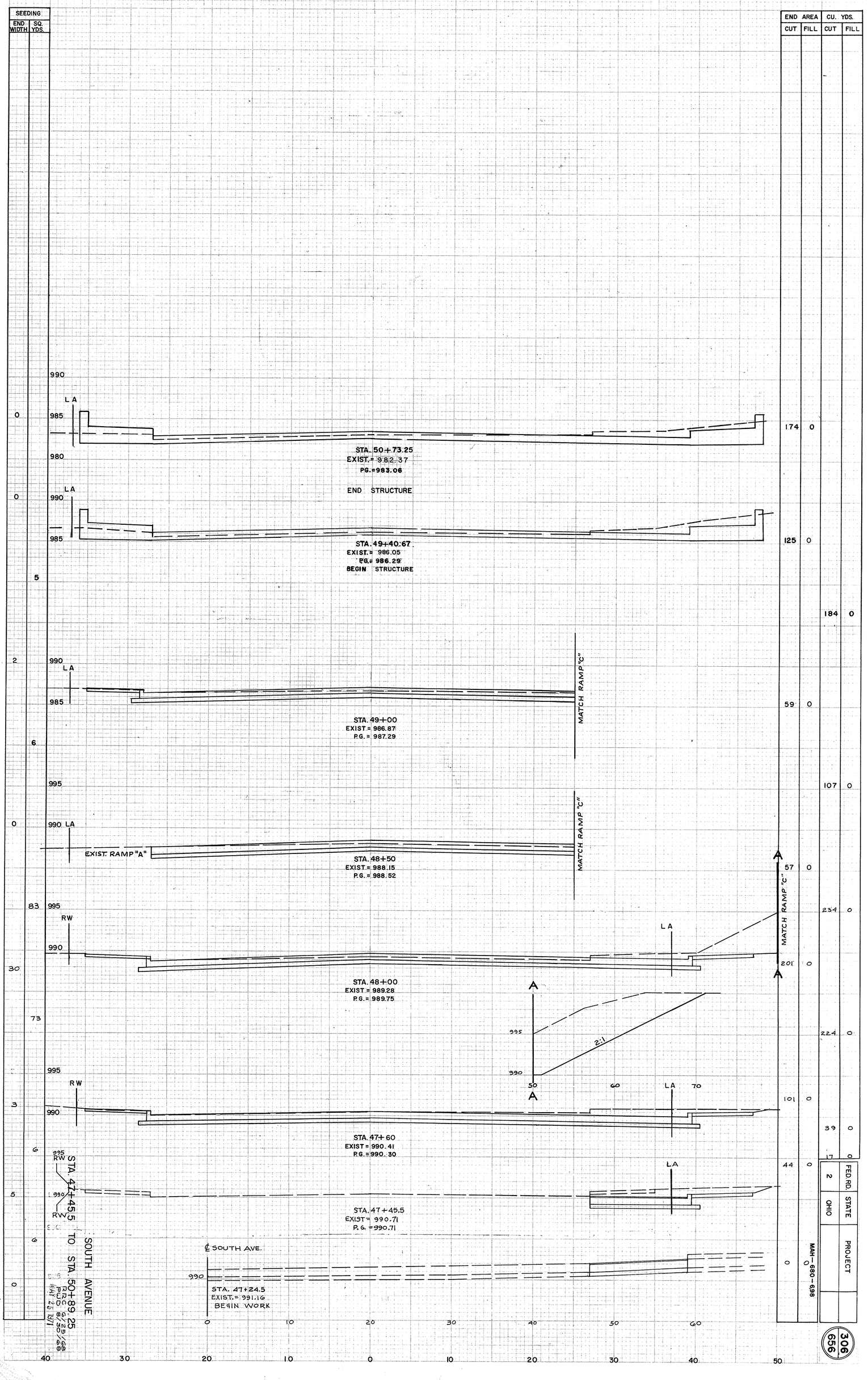
0 20 40 60 80 100

PAVEMENT DETAILS SOUTH AVE.

MAY 25 1971

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



FED. RD.	STATE	PROJECT	
2	OHIO		

307
656

MAH-680-698

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
2						
	14	975	104	0		
3					148	0
		980				
	14	975	56	0		
					104	0
2		980				
	11	975	56	0		
2					106	0
		980				
	11	975	58	0		
					109	0
2		980				
	19		60	0		
5		985			101	8
		980	49	9		
	122				138	17
39		985	100	9		
	58				136	4
		980				

RW — LA / RW — MATCH RAMP "D"

STA. 54+00
EXIST = 974.09
P.G. = 974.48

RW — MATCH RAMP "B"

STA. 53+50
EXIST = 975.95
P.G. = 976.35

RW — MATCH RAMP "B"

STA. 53+00
EXIST = 977.39
P.G. = 977.75
℄ DRIVE LT.

RW — MATCH RAMP "B"

STA. 52+50
EXIST = 978.58
P.G. = 978.92

R W — LA/RW — MATCH RAMP "B"

STA. 52+00
EXIST = 979.77
P.G. = 980.09

L A — MATCH RAMP "B"

STA. 51+50
EXIST = 980.98
P.G. = 981.26

L A — MATCH AHEAD SOUTH AVE. — MATCH AHEAD RAMP "B"

STA. 51+00
EXIST = 982.18
P.G. = 982.43

A — 990 — 985 — A — 75 — MATCH LINE — 80 — A — A

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

SOUTH AVENUE
STA. 51+00 TO STA. 54+00
POD 8/30/68
RRC 6/25/68
MAY 25 1971

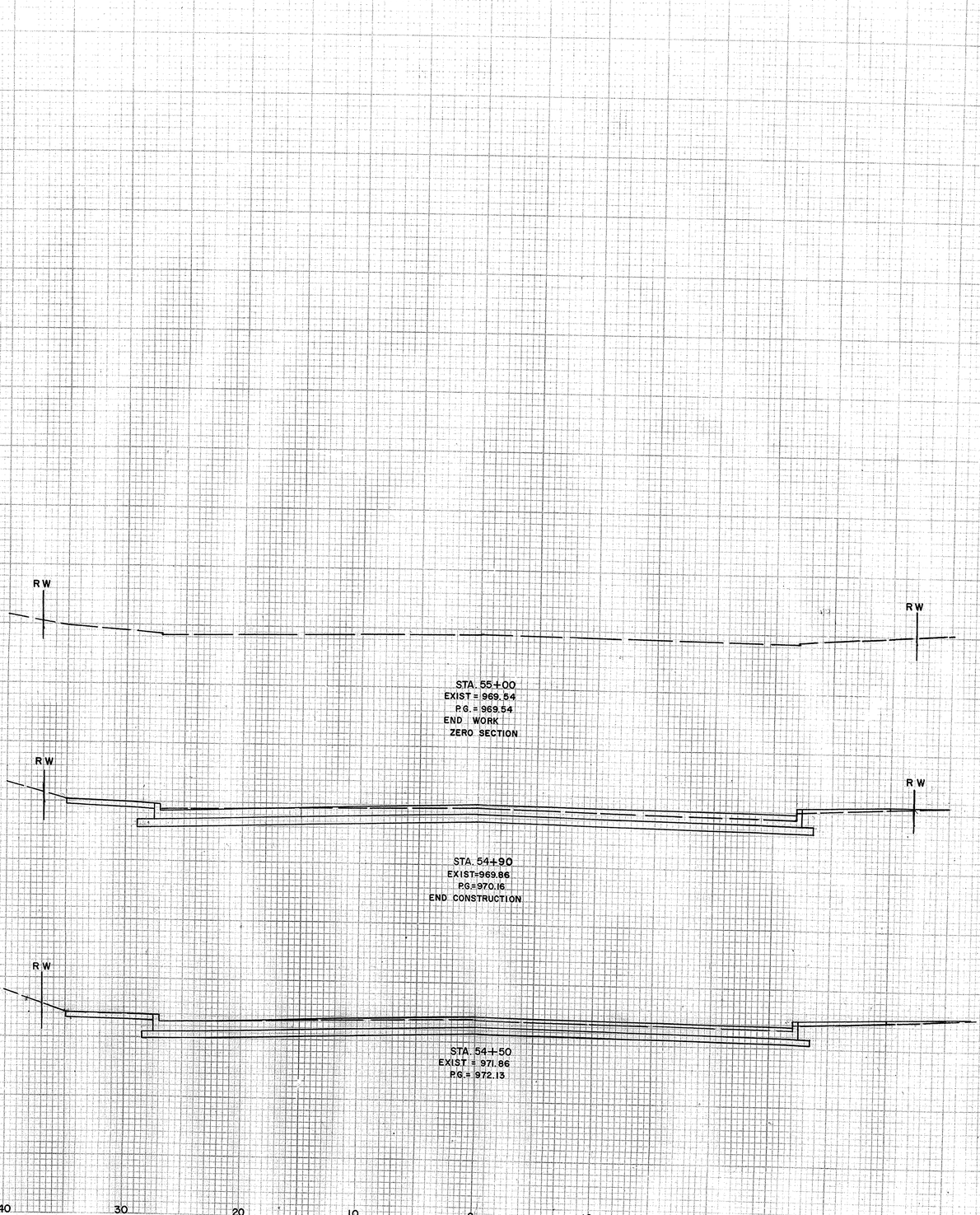
ORIGINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / AREAS CHECKED — DATE — 8" — FISCAL SHEET NO.

DATE — 8" — SURVEYED / PLOTTED / NOTE BOOK / AREAS CHECKED — FISCAL SHEET NO.

FED. RD.	STATE	PROJECT		308 / 656
2	OHIO			

MAH— 680—6.98

SEEDING	
END WIDTH	SQ. YDS.
0	
8	
15	
56	
10	
33	



END. AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	0		
		14	3
77	17		
		113	17
76	6		
		167	6

MAY 25 1971
R.P.C. 6/25/68
P.U.D. 8/30/68

TO END SOUTH AVENUE
STA. 54+50 TO STA. 55+00

70 80

FED.RD	STATE	PROJECT	
2	OHIO		

309
656

MAH-680-6.98

ITEM 605 - UNDERDRAINS LINEAR FEET							603-CONDUITS
CODE	LOCATION FROM	LOCATION TO	BENDS & BRANCHES 6"	PIPE UNDERDRAIN 707.06, 707.12 6"	DEEP PIPE 6"	UNCLASS PIPE 6"	LINEAR FEET TYPE 'F' 6"	LINEAR FEET B-B 6"
U-1	749+79.10	752+25	1	263			10	
U-2	751+29.67	754+50	1	325			10	
TOTAL				588			20	

℄ EXP'Y CURVE DATA
Δ = 32°44'51"
D_c = 1°28'00"
R = 3906.53'
T = 1147.81'
L = 2232.78'
CH = 2202.52
E = 165.13'

CURB CR-1 RETURN DATA
Δ = 90°
R = 50'
T = 50'
L = 78.54'

CURB CR-2 RETURN DATA
Δ = 90°
R = 25'
T = 25'
L = 39.27'

CURB CR-3 RETURN DATA
Δ = 90°
R = 50'
T = 50'
L = 78.54'

B.M.#3 - TOP FIRE HYDRANT S.E. CORNER OF DICKSON AND SOUTH AVE. ON SOUTH AVE.
ELEV. = 595.615

B.M.#10 - TOP FIRE HYDRANT N.E. CORNER OF SOUTH AVE. AND BENWOOD AVE.
ELEV. = 579.230

LOC.	203 EXCAVATION (C.Y.)	203 EMBANKMENT (C.Y.)	659 SEEDING (S.Y.)
RAMP 'B'	80,353	1249	8402
RAMP 'C'	53,696	0	6295
RAMP 'D'	37,912	111	5392

ITEM 609 - CONCRETE CURB - LIN. FT.					
CODE	STATION FROM	STATION TO	TYPE 2A	TYPE 7	TYPE 8
C-1	749+75.10	751+04.86			229.54
C-2	751+04.86	753+25		130.14	
C-3	757+07.41(C)	48+15(SOUTH)	78.54		
C-4	757+20.41(C)	45+08(SOUTH)	39.27		
C-5	754+25 (D)	754+89.50(D)	64.50		
C-6	757+19.76 (D)	54+71.86(SOUTH)	78.54		
C-7	753+00 (B)	753+50 (B)	50.38		
C-8	755+00 (B)	755+30 (B)		44.0	
C-9	755+30 (B)	756+61.33(B)			104.0
C-10	748+01.24(B)	750+27.52(B)	225.03		
C-11	749+46.50(B)	750+10 (B)	81.76		
C-12	52+02.66(SOUTH)	758+03.02(D)	137.80		
TOTAL			761.01	174.14	104.0

ITEM 606 - GUARD RAIL - LIN. FT.						
CODE	STATION FROM	STATION TO	TYPE 5	TYPE A BRIDGE TERMINAL ASSEMBLY EACH	ANCHOR ASSEMBLY EACH	
G-1	753+20.41	BRIDGE	375	1	1	
G-2	756+11	756+61.33	25.33		1	
TOTAL			400.33	1	2	

ITEM 612 - STANDARD CONCRETE MEDIAN AS PER PLAN			
CODE	STATION FROM	STATION TO	SQUARE YARDS
M-1	755+33.21	758+35	100.60
TOTAL			100.60

ITEM 612 - TRAFFIC ISLAND-5" THICKNESS			
CODE	STATION FROM	STATION TO	SQUARE YARDS
I-1	749+25.52(B)	749+45.52(B)	17.78
I-2	757+83.02(D)	758+03.02(D)	22.22
I-3	752+61.51(B)	753+00 (B)	30.22
TOTAL			70.22

① SPIRAL DATA
θ_s = 28°30'00"
L_s = 150'
φ = 9.16'
k = 74.35'
X = 146.33'
y = 24.44'
L.T. = 101.33'
S.T. = 51.21'
L.C. = 148.36'

② CURVE DATA
R = 150.78'
Δ = 212°50'01"
D_c = 38°00'00"
L_c = 560.09'

③ SPIRAL DATA
L_s = 150'
Δ_1 = 0°35'32"
Δ_2 = 28°30'00"
θ_s = 27°54'29"
p_s = 6.04'
T_1 = 100.98'
T_2 = 52.32'

④ CURVE DATA
Δ = 6°55'34"
R = 1909.86'
T = 110.00'
D_c = 3°00'00"
L_c = 219.76'
E = 3.17'

⑤ CURVE DATA
Δ = 7°48'19"
R = 1909.86'
T = 130.57'
D_c = 3°00'00"
L_c = 260.73'
E = 4.46'

⑥ CURVE DATA
Δ = 10°11'53"
D_c = 4°00'00"
R = 1432.39'
T = 127.85'
L_c = 254.98'

⑦ SPIRAL DATA
L_s = 200'
Δ_1 = 4°00'00"
Δ_2 = 24°00'00"
θ_s = 20°00'00"
p_s = 5.78'
T_1 = 126.05'
T_2 = 78.02'

⑧ SPIRAL DATA
L_s = 150'
D_c = 24°00'00"
θ_s = 18°00'00"
φ = 3.81'
k = 74.75'
X_s = 148.53'
Y_s = 15.60'
L.T. = 100.52'
S.T. = 50.47'
L.C. = 149.34'

⑨ CURVE DATA
Δ = 56°24'10"
R = 171.28'
T = 91.84'
L_c = 168.61'
CH = 161.88'

⑩ CURVE DATA
Δ = 56°24'10"
R = 207.67'
T = 111.36'
L_c = 204.43'

LOCATION OF ISLAND POINTS
NOSE "E" STA. 750+35.94 21'LT. ℄ RAMP "B"
STA. 757+85.92 21.5'LT. ℄ RAMP "D"
NOSE "F" STA. 758+02.76 24.5'LT. ℄ RAMP "D"
STA. 53+64.86 34'RT. ℄ SOUTH AVE.
NOSE "G" STA. 749+27.52 21'LT. ℄ RAMP "B"
STA. 52+75.66 35'RT. ℄ SOUTH AVE.

BRIDGE MAH-680-0705
TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 57'-1" x 71'-0" ℅ BRGS.
ROADWAY WIDTH: 66'-0" & 8'-0" WALKS ON BOTH SIDES.
LOAD FREQUENCY: HS 20-44
SKEW: 2°21'14" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 30'-0" LONG SPECIAL
SUPERELEVATION: NONE.
ALIGNMENT: STRAIGHT.

FOR PAVEMENT DETAILS, SEE SHEET № 318 TO 318
FOR DRAINAGE DETAILS, SEE SHEET № 320
FOR SOUTH AVE. DETAILS, SEE SHEET № 303 & 304
FOR BOARDMAN EXP DETAILS, SEE SHEET № 71
FOR BRIDGE DETAILS, SEE SHEET № 536

0 50 100

SOUTH AVENUE INTERCHANGE
GEOMETRIC PLAN - RAMPS "B" "C" & "D"

R.R.C. 8/24/68
PWD 8/30/68
MAY 29 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

310
656

MAH-680-6.98

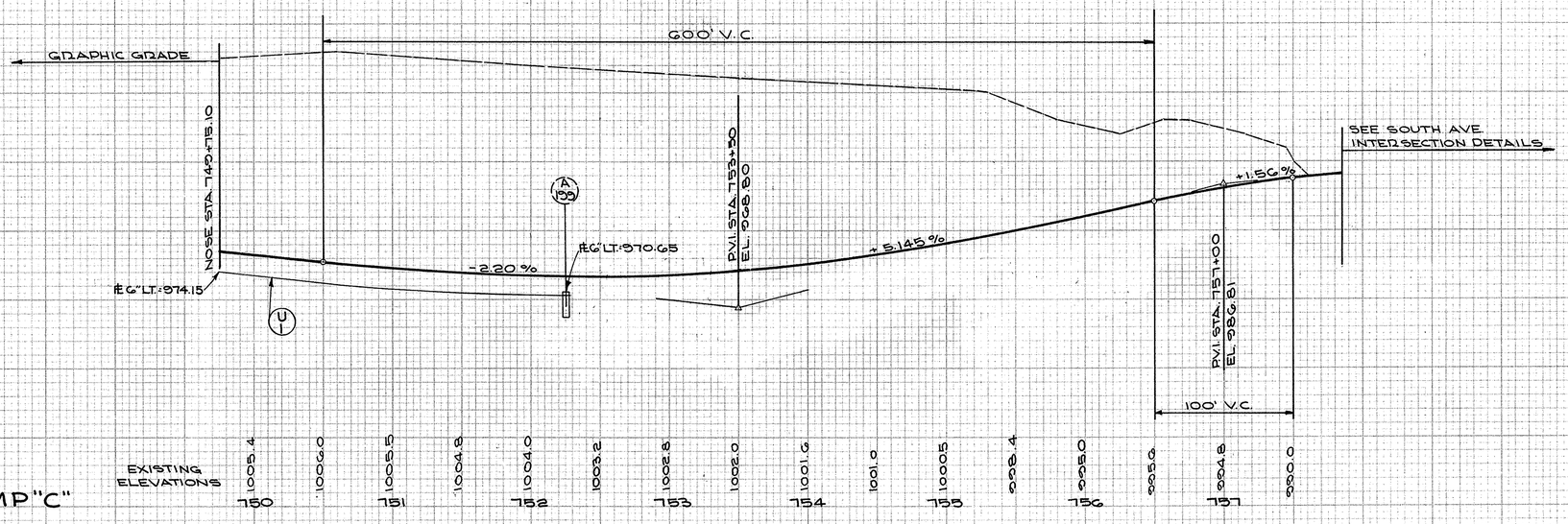
℄ RAMP "C" GRAPHIC GRADE			
	№ STATION	℄ ELEV.	℄ OFFSET
BEGIN TAPER	744+55.10	983.89	56.00'
	+75	983.12	56.50'
	745+00	982.89	57.12'
	+25	982.65	57.75'
	+50	982.44	58.38'
	+75	982.34	59.00'
	746+00	982.23	59.62'
	+25	982.10	60.25'
	+50	981.95	60.88'
	+75	981.78	61.50'
	747+00	981.51	62.13'
	+25	981.30	62.75'
	+50	981.02	63.38'
	+75	980.67	64.00'
	748+00	980.28	64.62'
	+25	979.87	65.25'
	+50	979.46	65.88'
	+75	979.01	66.50'
	749+00	978.56	67.13'
	+25	978.07	67.75'
	+50	977.56	68.38'
NOSE	+75	977.05	69.00'

℄ PROPOSED ELEVATIONS

PROPOSED OPPOSITE EDGE PAV'T. ELEVATIONS

977.21 977.05 976.86 976.50 975.80 975.40 975.30 974.89 974.85 974.45 974.45 974.09 974.14 973.81 973.90 973.61 973.72 973.48 973.61 973.42 973.59 973.45 973.63 973.55 973.77 973.73 973.96 973.98 974.24 974.31 974.60 974.72 975.03 975.20 975.54 975.76 976.15 976.40 976.88 977.10 977.65 977.90 978.51 978.76 979.45 979.70 980.47 980.72 981.56 981.81 982.74 982.99 983.99 984.24 985.16 985.41 986.11 986.36 987.05 987.30 987.98 987.98

SEE INTERSECTION DETAIL FOR PAV'T. ELEVATIONS



RAMP "C"

RAMP "B"

℄ RAMP "B" GRAPHIC GRADE			
	№ STATION	℄ ELEV.	℄ OFFSET
NOSE	756+61.33	962.75	64.00
	+75	962.54	63.54
	757+00	962.20	62.71
	+25	961.92	61.88
	+50	961.70	61.04
	+75	961.55	60.55
	758+00	961.45	60.05
	+25	961.43	59.86
	+50	961.44	59.06
	+75	961.54	58.57
	759+00	961.71	58.07
	+25	961.92	57.58
	+50	962.20	57.09
	+75	962.56	56.59
	760+00	962.97	56.10
	+25	963.82	55.60
	+50	964.38	55.11
	+75	965.21	54.61
	761+00	966.05	54.12
	+25	966.90	53.62
	+50	967.75	53.13
	+75	968.60	52.63
	762+00	969.38	52.14
	+25	970.19	51.65
	+50	971.03	51.15
	+75	971.87	50.66
	763+00	972.71	50.16
	+25	973.68	49.67
	+50	974.53	49.17
	+75	975.38	48.68
	764+00	976.23	48.18
	+25	977.07	47.69
	+50	977.93	47.19
	+75	978.78	46.70
	765+00	979.62	46.20
	+25	980.47	45.71
	+50	981.32	45.22
	+75	982.17	44.72
	766+00	983.01	44.23
END TAPER	766+11.33	984.40	44.00

℄ PROPOSED ELEVATIONS

PROPOSED OPPOSITE EDGE PAV'T. ELEVATIONS

+01.24 980.82 980.53 980.26 979.82 979.46 979.04 978.60 978.07 977.69 976.34 975.58 975.32 974.56 974.33 973.57 973.45 972.69 972.81 971.87 972.21 971.16 971.68 970.52 971.27 970.08 970.93 969.51 970.73 969.15 970.40 968.82 969.74 968.16 969.08 967.50 968.34 966.84 967.69 966.10 967.03 965.52 964.87 964.21 962.90 962.75

SEE INTERSECTION DETAIL FOR PAV'T. ELEVATIONS

MAY 25 1971

RAMPS "B"&"C" PROFILES

FINAL SURVEY — ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FED. RD.	STATE	PROJECT	
2	OHIO		

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ORIGINAL SURVEY
FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMP. GR.
AREAS
AREAS CHECKED

PROPOSED ELEVATIONS

973.29 972.24 971.72 971.23 970.76 970.42 970.10 969.82 969.61 969.46 969.37 969.33 969.35 969.43 969.57 969.82 970.16 970.00 970.21 970.67 971.06 971.84 972.62 973.40 973.76 974.18 974.57 974.91

SEE PAVEMENT DETAILS-RAMPS B,C, AND D AT SOUTH AVENUE

1010
1000
990
980
970
960

400' V.C.

℄ SOUTH AVENUE
STA. 758+06.76

GRAPHIC GRADE
SEE PAVEMENT DETAILS
FOR ELEVATIONS

NOSE STA. 751+29.67, P.G. = 973.71

P.I. STA. 754+25
EL. 967.55

A 200

D 400

E.G. RT. = 966.48

+1.56 %

-2.087 %

E.G. RT. = 970.81

E.G. RT. = 966.61

C 400

TRANSFER STA. 755+33.12

RAMP "D"

EXISTING ELEVATIONS

1000.7 998.5 997.2 996.5 996.0 994.5 993.0 992.5 992.1 992.0 988.5 986.7 984.5 978.5 976.0

748 749 750 751 752 753 754 755 756 757 758

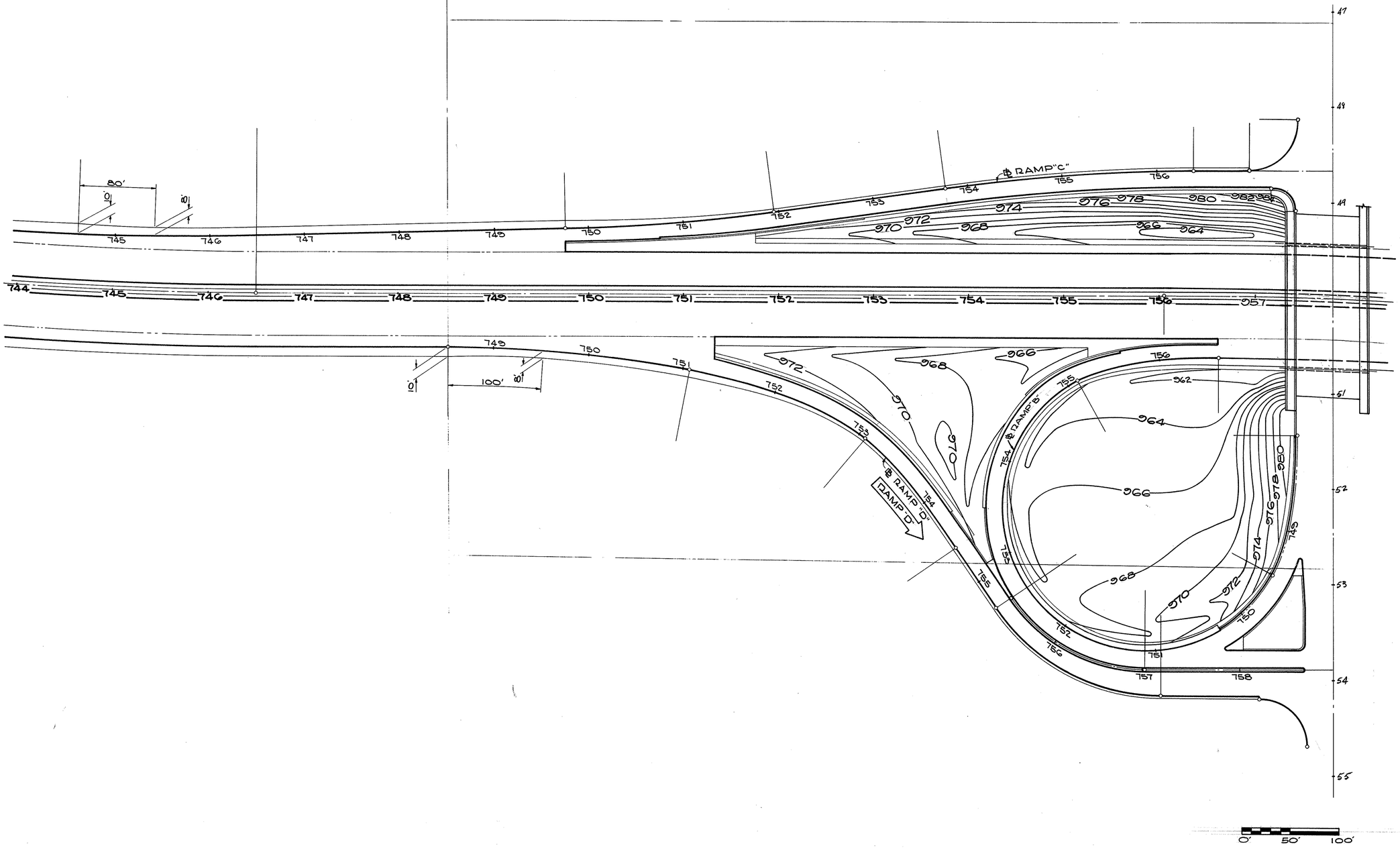
RAMP "D" PROFILE

MAY 25 1971

FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

312
656



SOUTH AVENUE INTERCHANGE
GRADING PLAN - RAMPS "B" "C" & "D"

MAY 29 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

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TOPOGRAPHY SHEET
SOUTH AVE. INTERCHANGE

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

SUPERELEVATION TABLE RAMP "C"

STATION	PROFILE GRADE	EDGE	PAVEMENT WIDTH	OFFSET TO FACE CURB	ELEVATION AT BOTTOM OF CURB
749 +75.10	977.05	977.27	14		977.27
750 +00	976.50	976.86	14.50		976.86
+25	975.95	976.42	15		976.42
+50	975.40	975.89	15.50		976.42
+75	974.89	975.33	14	16	974.89
+75.10	975.89	975.33	14	16	974.39
751 +00	974.45	974.85	14.50	16.75	974.92
+25	974.09	974.46	15	17.50	974.52
+50	973.81	974.14	15.50	18.25	974.20
+75	973.61	973.90	16	19	973.96
752 +00	973.48	973.72	16	19	973.77
+25	973.42	973.61	16	19	973.64
+50	973.45	973.59	16	19	973.61
+75	973.55	973.63	16	19	973.65
753 +00	973.73	973.76	16	19	973.77
+25	973.98	973.96	16	19	973.96
+50	974.31	974.24	16		
+75	974.72	974.60	16		
754 +00	975.20	975.03	16		
+25	975.76	975.54	16		
+50	976.40	976.15	16		
+75	977.10	976.85	16		
755 +00	977.90	977.65	16		
+25	978.76	978.51	16		
+50	979.70	979.45	16		
+75	980.72	980.47	16		
756 +00	981.81	981.56	16		
+25	982.99	982.74	16		
+50	984.24	983.99	16		
+75	985.41	985.16	16		
757 +00	986.36	986.11	16		
SEE PAVEMENT DETAILS FOR ELEVATIONS					

SUPERELEVATION TABLE RAMP "D"

STATION	PROFILE GRADE	EDGE	PAVEMENT WIDTH	OFFSET TO FACE OF CURB	ELEVATION AT BOTTOM OF CURB
751 + 29.67	937.71	973.96	16		
+ 50	937.29	973.68	16		
+ 75	972.77	973.32	16		
752 + 00	972.24	972.96	16		
+ 25	971.72	972.60	16		
+ 29.67	971.63	972.55	16		
+ 50	971.23	972.28	16		
+ 75	970.79	972.01	16		
753 + 00	970.42	971.75	16		
+ 25	970.10	971.75	16		
+ 50	969.82	970.87	16		
+ 75	969.61	970.51	16		
754 + 00	969.46	970.22	16		
+ 25	969.37	969.99	16	17	970.03
+ 50	969.33			17	969.83
+ 75	969.35			17	969.70
755 + 00	969.43			17	969.63
+ 25	969.57			17	969.62
+ 33.21	969.62			17	969.62

SHIFT PROFILE GRADE TO MEDIAN EDGE AT STA. 755 +33.21

STATION	PROFILE GRADE	MEDIAN EDGE	OFFSET TO MEDIAN EDGE	OFFSET TO EDGE	EDGE ELEVATION
755 + 50	969.76	969.77	1.5	18.85	969.87
+ 75	970.00	970.02	1.5	18.99	970.28
756 + 00	970.31	970.33	1.5	19.73	970.62
+ 25	970.67	970.69	1.5	20.81	971.00
+ 50	971.06	971.08	1.5	22.20	971.41
+ 75	971.45	971.47	1.5	23.88	971.82
757 + 00	971.84	971.86	1.5	25.81	972.24
+ 01.82	971.87	971.89	1.5	25.96	972.28
+ 16.73	972.10	972.12	1.5	26.50	972.51
+ 25	972.23	972.25	1.5	26.50	972.64
+ 50	972.62	972.63	1.5	26.50	972.76
+ 62.50	972.82	972.82	1.5	26.50	972.82
SEE PAVEMENT DETAILS FOR ELEVATIONS					

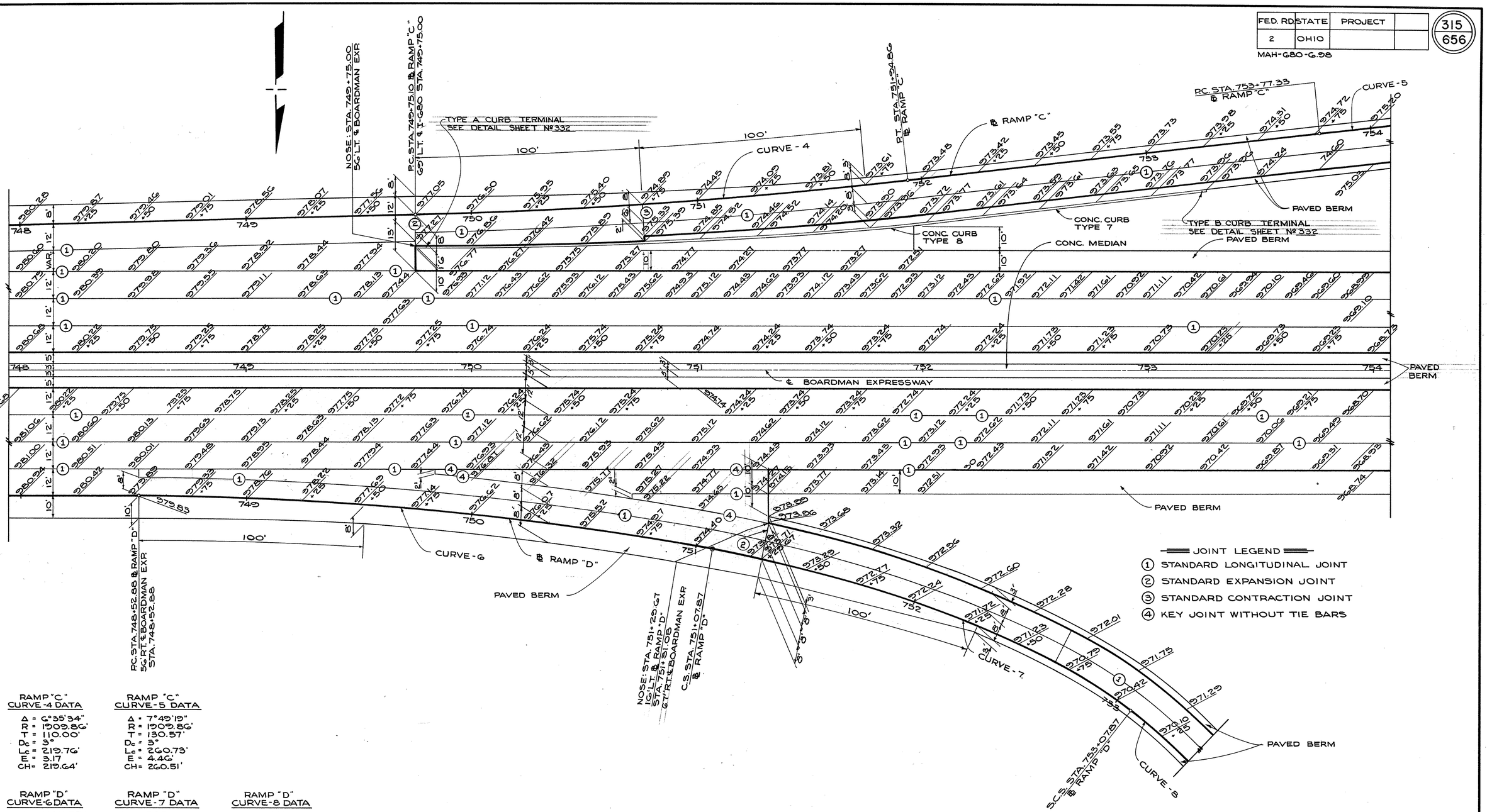
RAMP 'C' AND 'D' SUPERELEVATION TABLES

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OH10		

MAH-680-6.98

315
656



JOINT LEGEND

1. STANDARD LONGITUDINAL JOINT
2. STANDARD EXPANSION JOINT
3. STANDARD CONTRACTION JOINT
4. KEY JOINT WITHOUT TIE BARS

RAMP "C"
CURVE -4 DATA

Δ = 6°35'34"
R = 1909.86'
T = 110.00'
Dc = 3°
Lc = 219.76'
E = 3.17
CH = 219.64'

RAMP "C"
CURVE - 5 DATA

Δ = 7°49'19"
R = 1909.86'
T = 130.57'
Dc = 3°
Lc = 260.73'
E = 4.46'
CH = 260.51'

RAMP "D"
CURVE-6 DATA

Δ = 10°11'59"
R = 1432.39'
T = 127.83'
Dc = 4°
Lc = 254.99'

RAMP "D"
CURVE - 7 DATA

Ls = 200'
Dc1 = 4°
Δ1 = 4°
R1 = 1432.39'
Dc2 = 24°
Δ2 = 24°
R2 = 238.73'
θs = 20°
Ps = 5.79'
T1 = 126.05'
T2 = 78.02'

RAMP "D"
CURVE-8 DATA

Ls = 150'
Dc = 24°
θs = 18°
P = 3.91'
K = 74.75'
Xc = 148.53'
Yc = 15.60'
L.T. = 100.52'
S.T. = 50.47'
L.C. = 149.34'

0 10 20 40

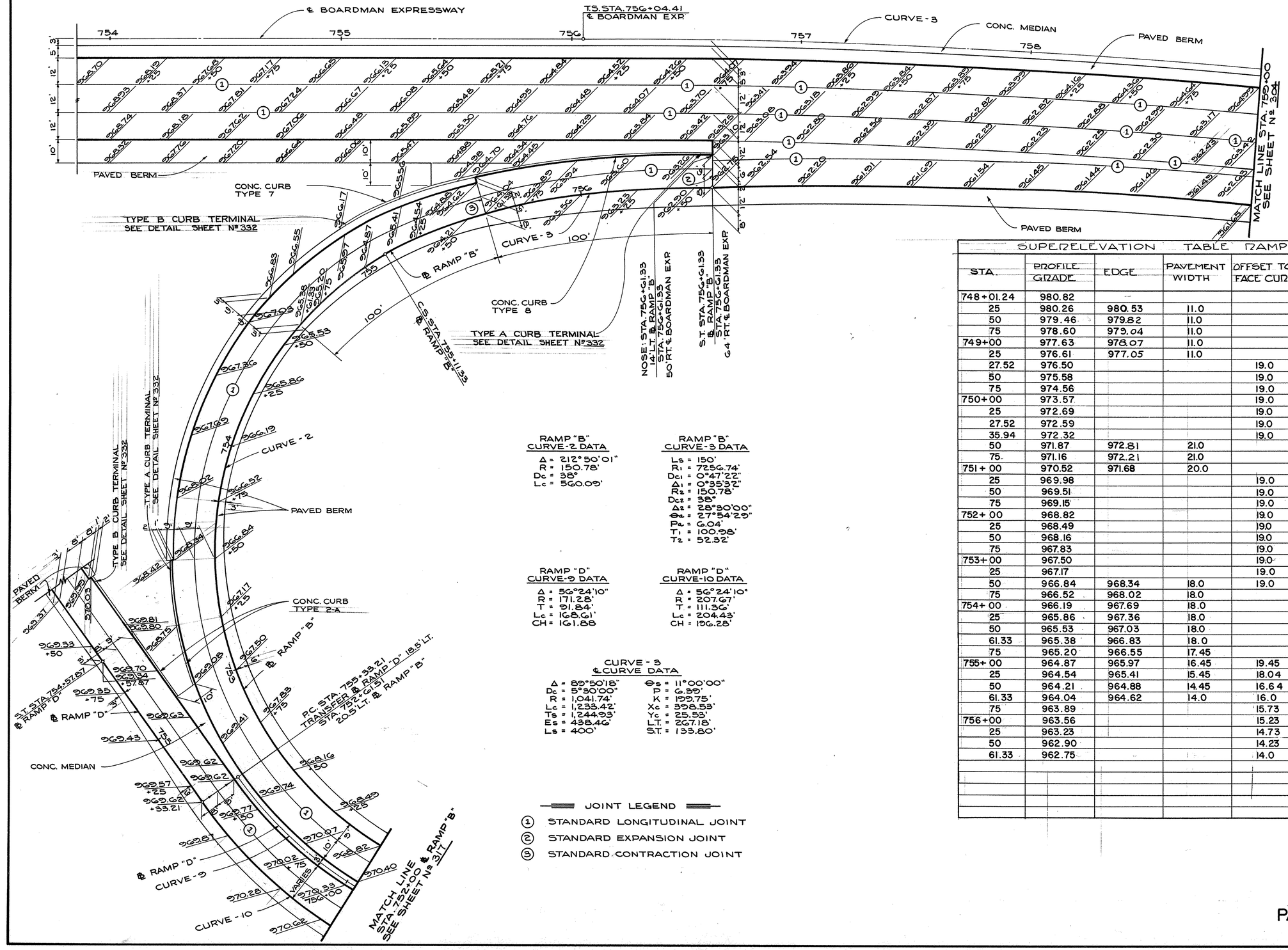
PAVEMENT DETAILS RAMPS "C" & "D"

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

316
656



RAMP "B" CURVE-2 DATA

Δ = 212°50'01"
R = 150.78'
Dc = 38°
Lc = 560.09'

RAMP "B" CURVE-3 DATA

Ls = 150'
R1 = 7256.74'
Dc1 = 0°47'22"
Δ1 = 0°35'37"
R2 = 150.78'
Dc2 = 38°
Δ2 = 28°30'00"
θs = 2°54'29"
Pr = 6.04'
T1 = 100.98'
T2 = 52.32'

RAMP "D" CURVE-9 DATA

Δ = 56°24'10"
R = 171.28'
T = 91.84'
Lc = 168.61'
CH = 161.88

RAMP "D" CURVE-10 DATA

Δ = 56°24'10"
R = 207.67'
T = 111.36'
Lc = 204.43'
CH = 196.28'

CURVE - 3 ℄ CURVE DATA

Δ = 89°50'18"
Dc = 5°30'00"
R = 1,041.74'
Lc = 1,233.42'
Ts = 1,244.93'
Es = 438.46'
Ls = 400'
θs = 11°00'00"
P = 6.39'
K = 199.75'
Xc = 398.53'
Yc = 25.53'
L.T. = 267.18'
S.T. = 133.80'

JOINT LEGEND

① STANDARD LONGITUDINAL JOINT
② STANDARD EXPANSION JOINT
③ STANDARD CONTRACTION JOINT

SUPERELEVATION TABLE RAMP 'B'

STA.	PROFILE GRADE	EDGE	PAVEMENT WIDTH	OFFSET TO FACE CURB	ELEV. AT BOTTOM CURB	OFFSET RT CURB	ELEVATION BOTTOM RT. CURB
748+01.24	980.82					1.0	980.80
25	980.26	980.53	11.0			1.0	980.24
50	979.46	979.82	11.0			1.0	979.43
75	978.60	979.04	11.0			1.0	978.56
749+00	977.63	978.07	11.0			1.0	977.59
25	976.61	977.05	11.0			1.0	976.57
27.52	976.50			19.0	977.26	1.0	976.46
50	975.58			19.0	976.34	1.0	975.53
75	974.56			19.0	975.32	1.0	974.52
750+00	973.57			19.0	974.33	1.0	973.53
25	972.69			19.0	973.45	1.0	972.65
27.52	972.59			19.0	973.35	1.0	972.55
35.94	972.32			19.0	973.08		
50	971.87	972.81	21.0				
75	971.16	972.21	21.0				
751+00	970.52	971.68	20.0				
25	969.98			19.0	971.23		
50	969.51			19.0	970.93		
75	969.15			19.0	970.73		
752+00	968.82			19.0	970.40		
25	968.49			19.0	970.07		
50	968.16			19.0	969.74		
75	967.83			19.0	969.41		
753+00	967.50			19.0	969.08		
25	967.17			19.0	968.75		
50	966.84	968.34	18.0	19.0	968.42		
75	966.52	968.02	18.0				
754+00	966.19	967.69	18.0				
25	965.86	967.36	18.0				
50	965.53	967.03	18.0				
61.33	965.38	966.83	18.0				
75	965.20	966.55	17.45				
755+00	964.87	965.97	16.45	19.45	966.17		
25	964.54	965.41	15.45	18.04	965.56		
50	964.21	964.88	14.45	16.64	964.98		
61.33	964.04	964.62	14.0	16.0	964.70		
75	963.89			15.73	964.45		
756+00	963.56			15.23	963.94		
25	963.23			14.73	963.60		
50	962.90			14.23	963.26		
61.33	962.75			14.0	963.10		

0 10 20 40

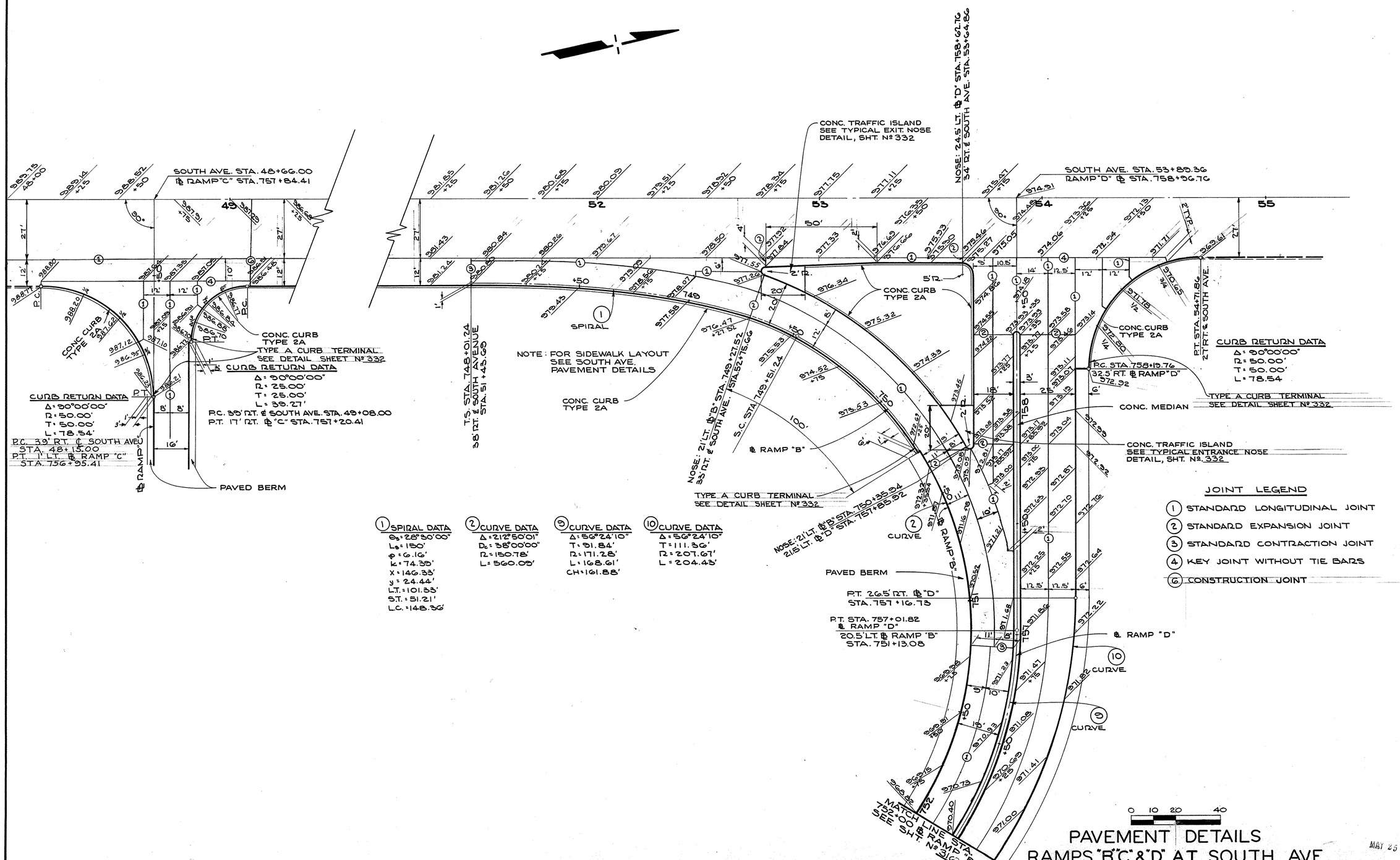
PAVEMENT DETAILS RAMPS "B" & "D"

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

317
656

MAH-680-6.98



(1) SPIRAL DATA
θ_s = 28°30'00"
L_s = 150'
ϕ = 6.16'
k = 74.39'
X = 146.33'
y = 24.44'
L.T. = 101.33'
S.T. = 51.21'
L.C. = 148.36'

(2) CURVE DATA
Δ = 212°50'01"
D_c = 38°00'00"
R = 150.78'
L = 560.09'

(9) CURVE DATA
Δ = 56°24'10"
T = 91.84'
R = 171.28'
L = 168.61'
CH = 161.88'

(10) CURVE DATA
Δ = 56°24'10"
T = 111.36'
R = 207.67'
L = 204.43'

JOINT LEGEND

1. STANDARD LONGITUDINAL JOINT
2. STANDARD EXPANSION JOINT
3. STANDARD CONTRACTION JOINT
4. KEY JOINT WITHOUT TIE BARS
6. CONSTRUCTION JOINT

PAVEMENT DETAILS
RAMPS "B" "C" & "D" AT SOUTH AVE.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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656

EXIST. PAVED BERM

C.S. STA. 760+83.33
℄ EXIST. RAMP "A"

CONC. MEDIAN

PAVED BERM

℄ EXIST. RAMP "A"

NOSE: STA. 762+23.36
24' LT. ℄ BOARDMAN EXP.

P.C.C. STA. 762+38.14
℄ PROP. RAMP "A"
STA. 3+38.18
℄ EXIST. RAMP "A"

℄ PROP. RAMP "A"

SC STA. 760+04.41
℄ BOARDMAN EXP.

MATCH LINE STA. 759+00
SEE SHEET Nº 302

℄ BOARDMAN EXPRESSWAY

EDGE RAMP "B"

PAVED BERM

CURVE Nº 3

RAMP "Y" TO BE REMOVED

NOSE: STA.:
STA. 3+40.91 23' LT. ℄ EXIST. RAMP "A"
STA. 763+23.36 44' LT. ℄ BOARDMAN EXP.

NOSE STA. EXISTING RAMP "Y"
STA. 762+11.39 39' RT. ℄ BOARDMAN EXP.

8" CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

10" REINFORCED CONCRETE PAVEMENT

EXIST. PAVED BERM

STA. 762+00 ℄ BOARDMAN EXP.
MEET EXISTING CONSTRUCTION

CURVE-3
℄ CURVE DATA

Δ = 85°50'18"
Dc = 5°30'
R = 1,041.74'
Lc = 1,233.42'

NOTE: IN NEW PAVEMENT BUILT ADJACENT TO EXISTING, EXTEND THE EXISTING LONGITUDINAL JOINT THROUGH THE NEW PAVEMENT IN KIND.

JOINT LEGEND

(1) STANDARD LONGITUDINAL JOINT
(3) STANDARD CONTRACTION JOINT
(7) STANDARD EXPANSION BOLT JOINT
(6) CONSTRUCTION JOINT

0 10 20 40

PAVEMENT DETAILS RAMPS "A" & "B"

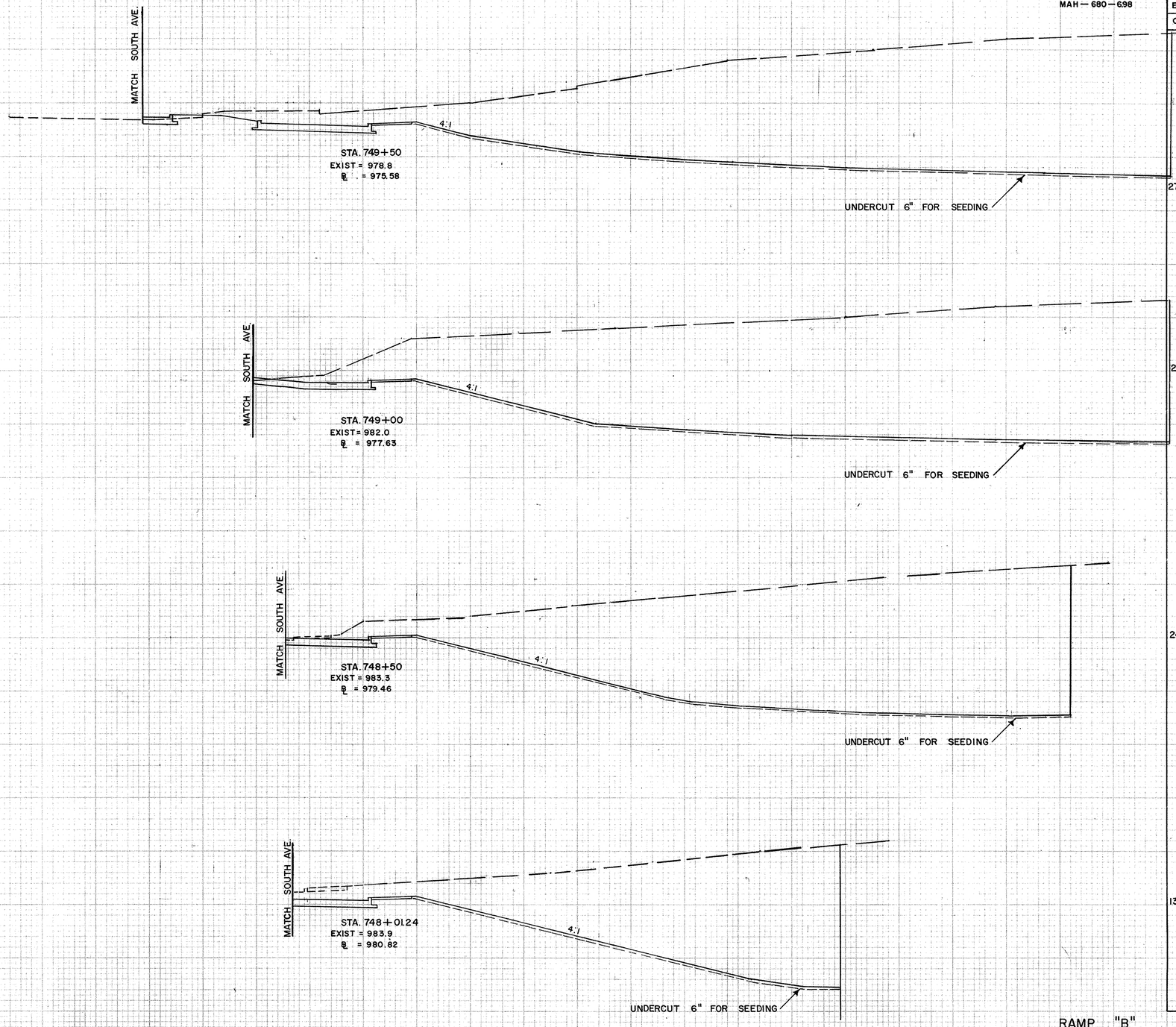
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

319
656

MAH — 680 — 698

SEEDING END WIDTH	SEEDING SQ. YDS.
159	980
	970
	503 960
143	990
	980
	970
	742 960
125	990
	980
	970
	561 960
82	990
	980
	970
	960



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
2755	72		
		3146	77
2908	67		
		4948	119
2436	61		
		3387	91
1315	40		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RAMP "B"
STA. 748+01.24 TO STA. 749+50

RRC 6/25/68
PUC 8/30/68

MAY 25 1971

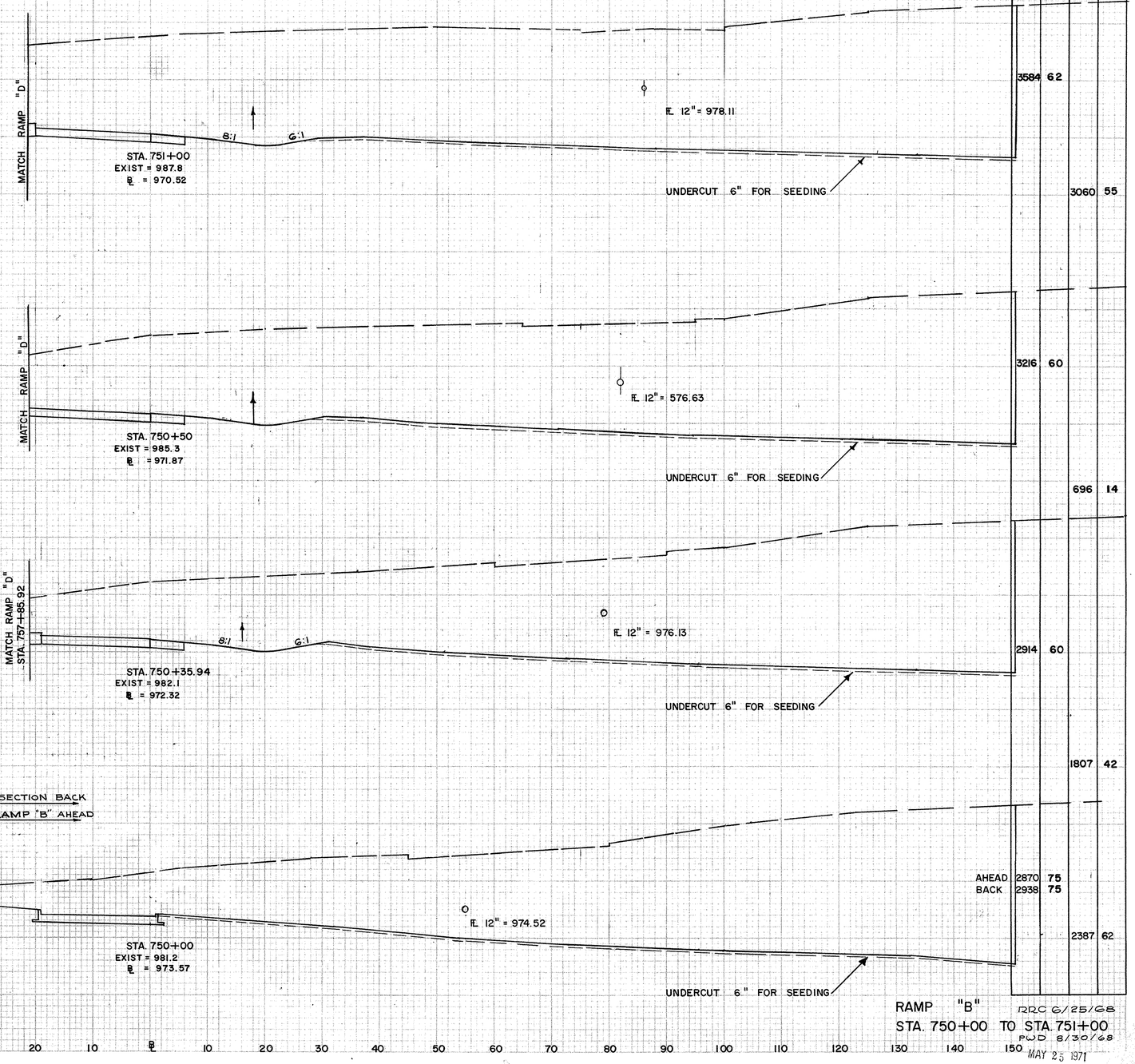
FED. RD.	STATE	PROJECT	
2	OHIO		

320
656

MAH – 680 – 6.98

SEEDING	
END WIDTH	SQ. YDS.
144	390
145	99
145	286
160 AHEAD 128 BACK	361 BACK

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
	3584	62	
		3060	55
	3216	60	
		696	14
	2914	60	
		1807	42
AHEAD 2870 BACK 2938		75 75	
		2387	62



RAMP "B"
STA. 750+00 TO STA. 751+00

RRC 6/25/68
POD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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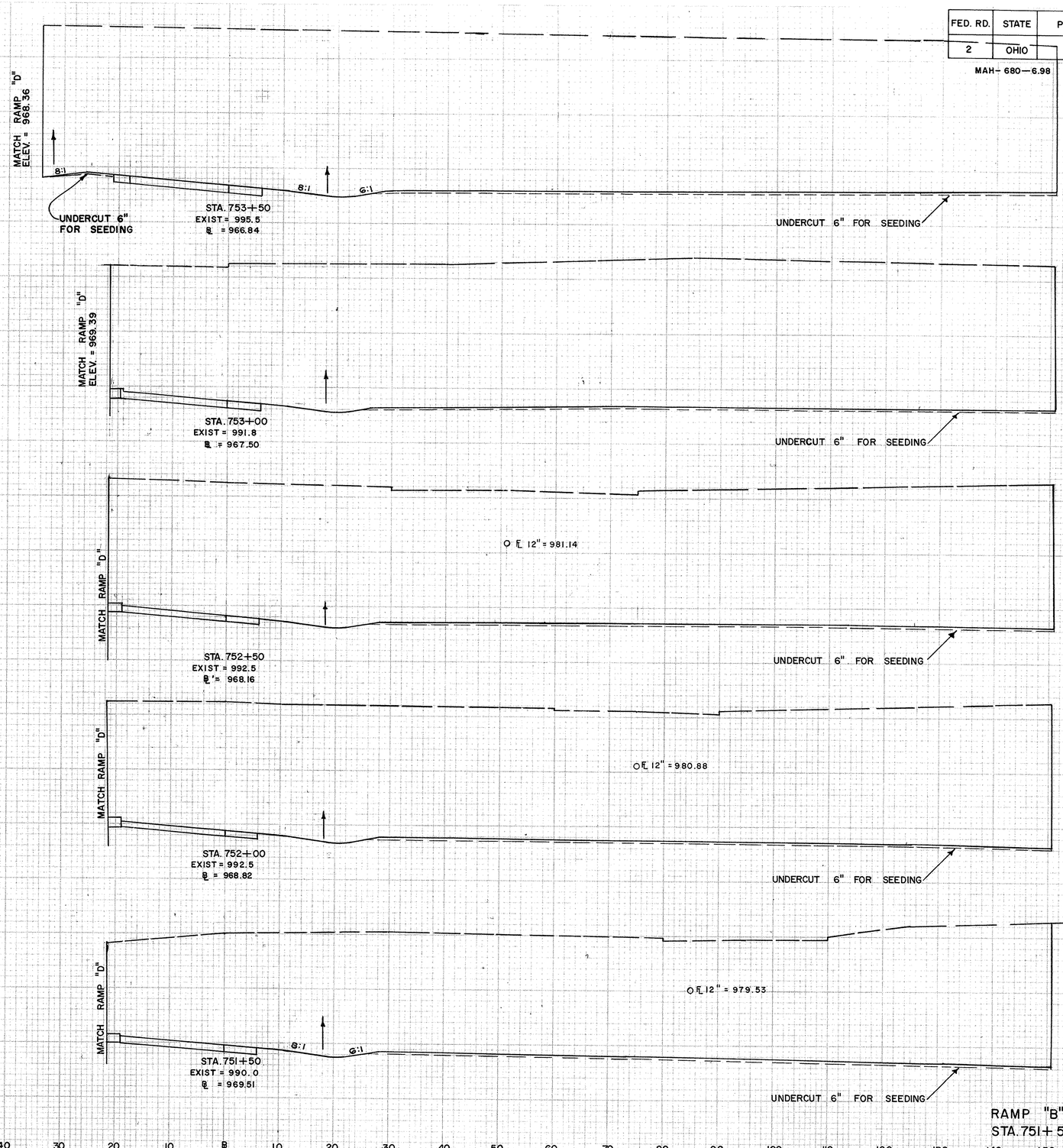
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
145	980
	970
472	960
145	980
	970
458	960
145	980
	970
460	960
146	980
	970
462	960
146	980
	970
445	960



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
5263	67		
		5341	70
4587	62		
		4804	67
4273	62		
		4596	67
4204	62		
		4372	67
3859	62		
		3807	63

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RAMP "B"
STA. 751+50 TO STA. 753+50

RRC 6/25/68
PUD 8/30/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

322
656

MAH-680-6.98

SEEDING END WIDTH	SEEDING SQ. YDS.
	763
141	990
	980
	970
	523
	960
	990
152	980
	970
	960
	541
	990
	980
156	970
	960
	685
	990
	980
192	970
	960
	651

MATCH M/L
ELEV. = 965.50

STA. 755+50
EXIST = 995.7
℄ = 964.21

UNDERCUT 6" FOR SEEDING

MATCH M/L

UNDERCUT 6" FOR SEEDING

STA. 755+00
EXIST = 998.0
℄ = 964.87

UNDERCUT 6" FOR SEEDING

MATCH M/L

UNDERCUT 6" FOR SEEDING

STA. 754+50
EXIST = 998.2
℄ = 965.53

UNDERCUT 6" FOR SEEDING

BLDG.

BLDG.

MATCH RAMP "D"

UNDERCUT 6" FOR SEEDING

STA. 754+00
EXIST = 997.3
P.G. = 966.19

UNDERCUT 6" FOR SEEDING

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
		9255	109
5157	61		
		6415	76
5627	66		
		6595	78
5643	67		
		8066	97
6658	81		
	123		
		7671	95

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 18

RAMP "B"
STA. 754+00 TO STA. 755+50

RRC 6/25/68
PUD 8/30/68
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

323
656

MAH—680—6.98

END AREA CUT	3232	3462	3384	3356	3243	0
END AREA FILL	0	0	0	0	0	0
CU. YDS. CUT	6198	6339	6241	6110	5384	
CU. YDS. FILL	0	0	0	0	0	

SEEDING						
END WIDTH	108	107	106	99	84	
SQ. YDS.	608	597	592	569	508	438

STA. 754+50
EXIST = 1002.4
℄ = 976.40

STA. 754+00
EXIST = 1003.9
℄ = 975.20

STA. 753+50
EXIST = 1004.1
℄ = 974.31

STA. 753+00
EXIST = 1005.2
℄ = 973.73

STA. 752+50
EXIST = 1004.8
℄ = 973.45

974.44 | 973.24 | 972.35 | 971.77 | 971.49

967.77 | 968.73 | 970.44

BLDG. MATCH M/L 3:1 1/2 2:1

A A | B B | C C

RAMP "C"
STA. 752+50 TO STA. 754+50

MAY 25 1971
RRC 4/2/69
PJD 4/3/69

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE WORK, AREAS, AREAS CHECKED, NO., DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE BOOKS, AREAS, AREAS CHECKED, NO., ST., DATE

| | | |

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

325
656

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	522	1000				
101		990				
		980				
		970				
	642	960	2432	8		
					5248	27
		1000				
130		990				
		980	3236	21		
		970				
	692					
		1000				
		990				
119		980	2749	12		
		970				
	606					
		1000				
99		990				
		980	2405	4		
	538				4771	13

MATCH RAMP "B"
8:1
8:1
8:1
2:1
VARIES
UNDERCUT 6" FOR SEEDING
LA
STA. 754+00
EXIST= 994.5
℄ = 969.46

MATCH RAMP "B"
UNDERCUT 6" FOR SEEDING
LA
STA. 753+50
EXIST= 999.0
℄ = 969.82

MATCH M/L
UNDERCUT 6" FOR SEEDING
LA
STA. 753+00
EXIST= 996.5
℄ = 970.42

MATCH M/L
8:1
8:1
8:1
2:1
UNDERCUT 6" FOR SEEDING
LA
STA. 752+50
EXIST= 997.2
P.G. = 971.23

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

BOARDMAN EXP.
RAMP "D"
STA. 752+50 TO STA. 754+00

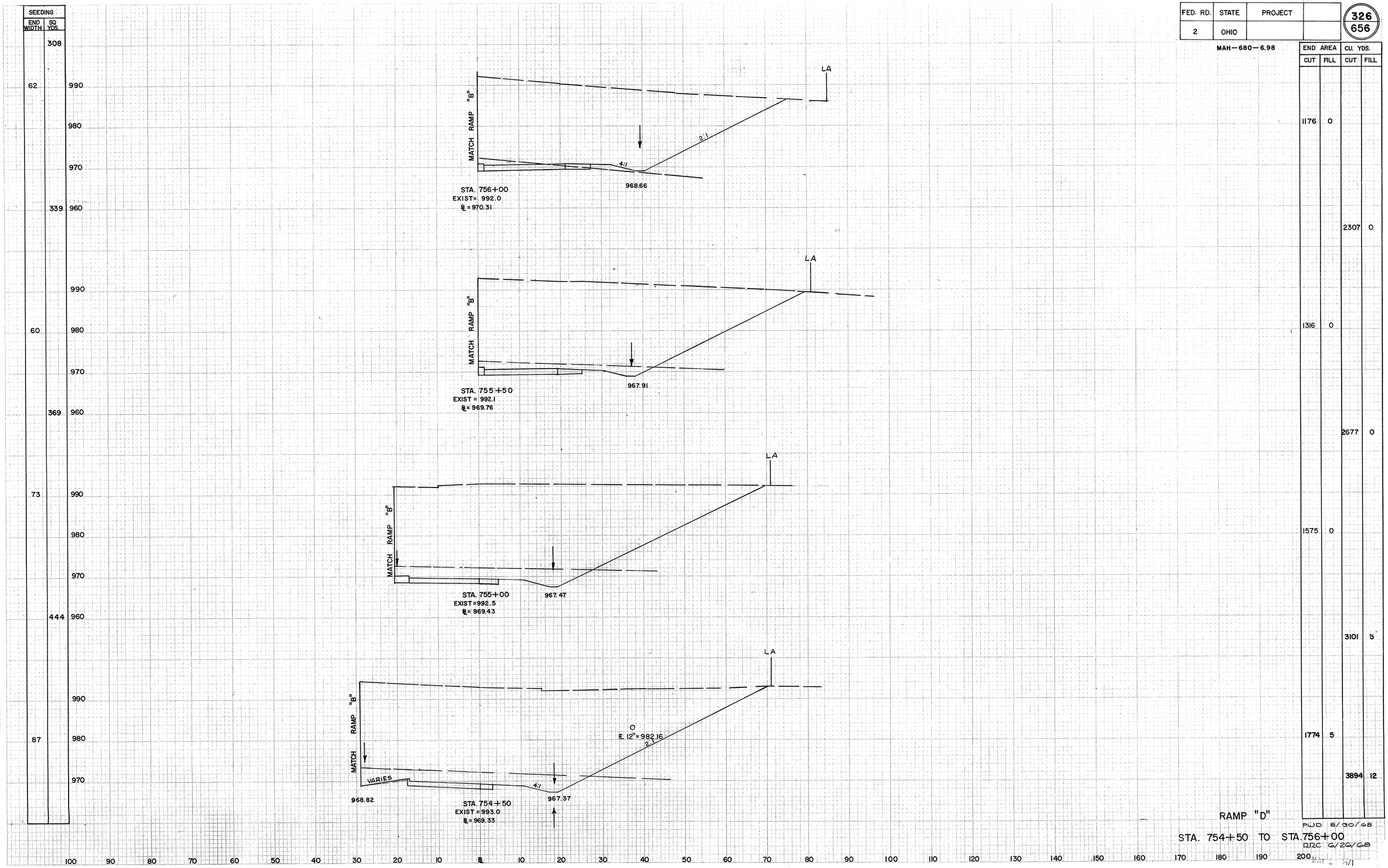
RRC 6/25/68
PUD 8/30/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

326
656

MAH—680—6.98



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
1176	0		
		2307	0
1316	0		
		2677	0
1575	0		
		3101	5
1774	5		
		3894	12

RAMP "D"

STA. 754+50 TO STA. 756+00

PWD 8/30/68

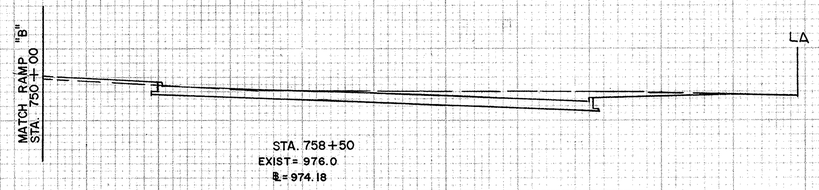
RRC 6/26/68

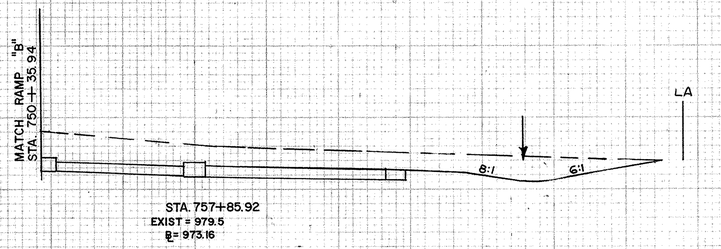
FED. RD.	STATE	PROJECT	
2	OHIO		

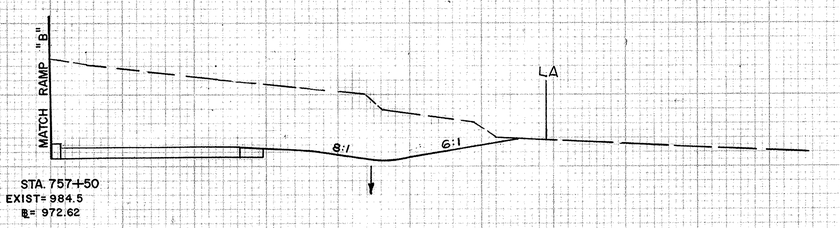
327
656

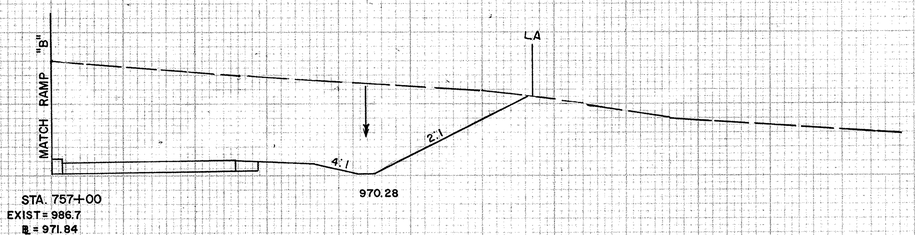
MAH — 680 — 6.98

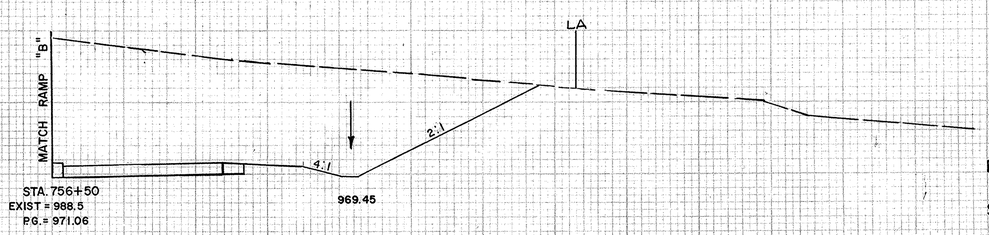
SEEDING END WIDTH	SEEDING SQ. YDS.
	980
	970
45	
	970
	299
	990
39	980
	970
	158
	990
40	980
	970
	225
	990
41	980
	970
	250
	990
49	980











END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
112	7		
		434	0
254	0		
		549	0
572	0		
		1211	0
736	0		
		1499	0
883	0		
		1907	0

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RAMP "D"

STA. 756+50 TO STA. 758+50

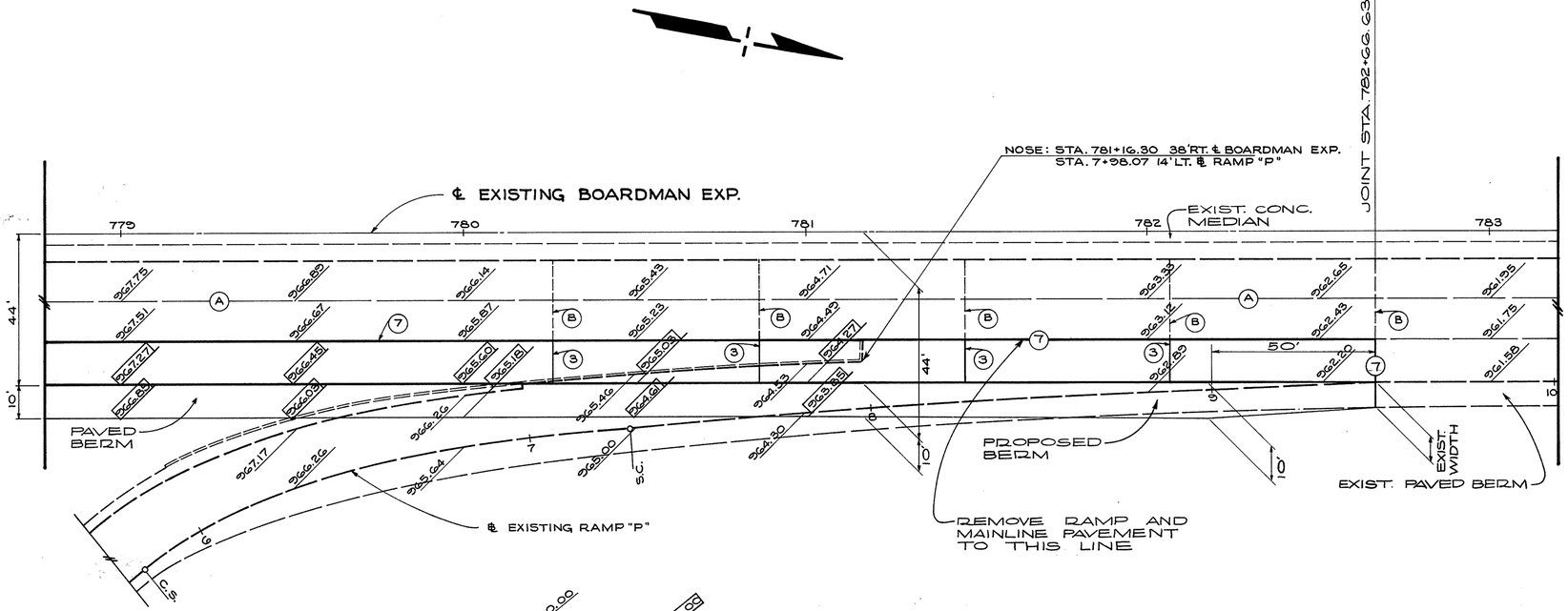
PWD 8/30/68
RRC 6/26/68

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

328
656

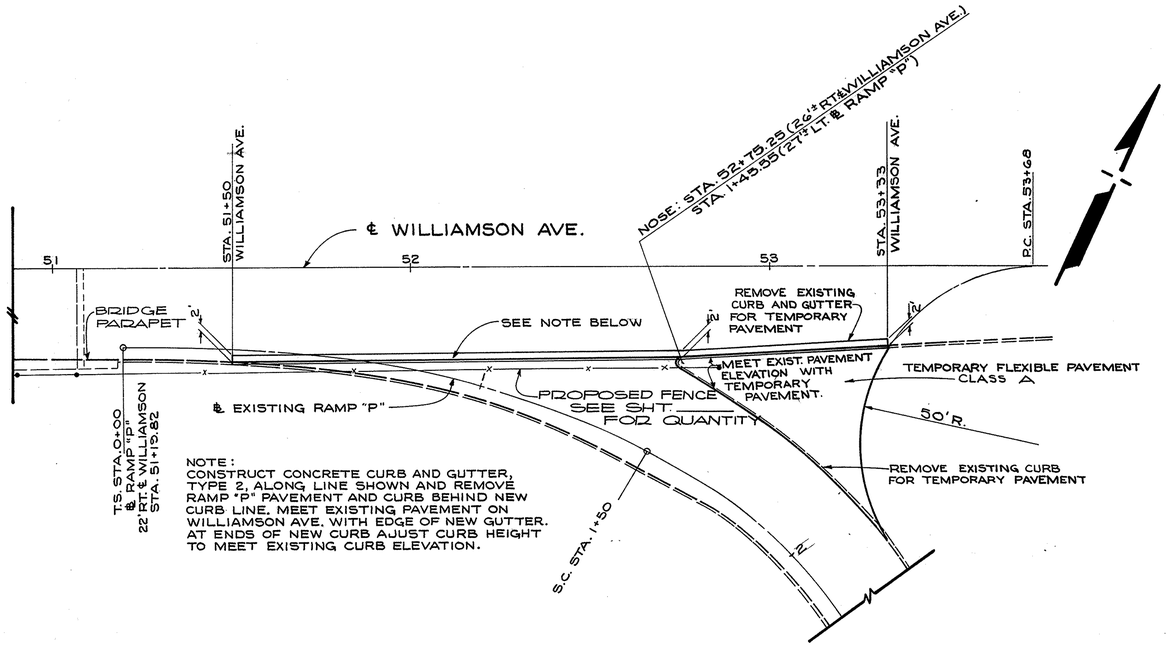
MAH-680-6.98



NOTE :
ELEVATIONS SHOWN THUS 900.00 ARE EXISTING ELEVATIONS. ELEVATIONS SHOWN THUS 900.00 ARE PROPOSED ELEVATIONS.

JOINT LEGEND

- (A) EXISTING STANDARD LONGITUDINAL JOINT.
- (B) EXISTING STANDARD CONTRACTION JOINT.
- (3) STANDARD CONTRACTION JOINT (PLACED AS AN EXTENSION OF EXISTING CONTRACTION JOINT.)
- (7) STANDARD EXPANSION BOLT JOINT.



NOTE :
CONSTRUCT CONCRETE CURB AND GUTTER, TYPE 2, ALONG LINE SHOWN AND REMOVE RAMP "P" PAVEMENT AND CURB BEHIND NEW CURB LINE. MEET EXISTING PAVEMENT ON WILLIAMSON AVE. WITH EDGE OF NEW GUTTER. AT ENDS OF NEW CURB AJUST CURB HEIGHT TO MEET EXISTING CURB ELEVATION.

0 10 20 40 60

MAY 25 1971

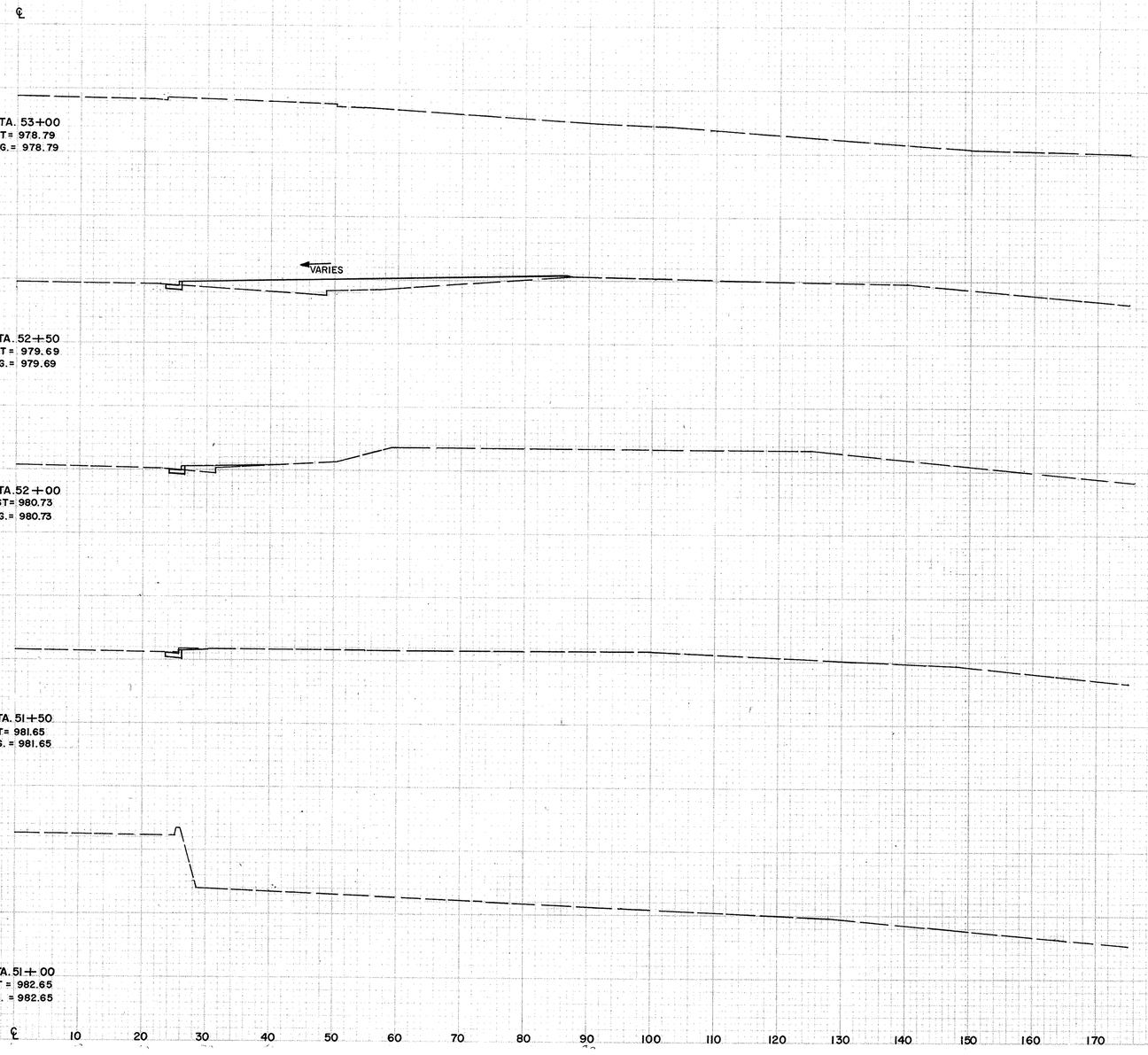
PAVEMENT DETAILS
WIDENING AT EXISTING RAMP "P"

FED. RD.	STATE	PROJECT	
2	OHIO		

329
656

MAH-680-6.98

SEEDING	
END WIDTH	SQ. YDS.
0	
	169
61	
	211
15	
	56
5	
	14
0	



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	0		
		3	75
3	81		
		6	82
3	8		
		6	8
3	1		
		3	1
0	0		

RRC 6/20/68
PUD 8/30/68
MAY 25 1971

WILLIAMSON AVE.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH 680-6.98

330
656

FENCE PLAN

ITEM 607-TYPE CL FENCE

CODE	BEGIN FENCE	END FENCE	LT. OR RT. I-680	LIN. FT.
1	26'LT. LEMOYNE STA.46+28.4	31'RT. MID. BLVD. STA.378+36.4	RT.	527
2	32'LT. MID. BLVD. STA.379+34	WING WALL CONN. STA.675+95±	RT.	3,680
3	WING WALL CONN. STA.676+20±	55' RT. SHIRLEY RD. STA.53+92	RT.	1,920
4	BRIDGE CONNECTION SHIRLEY RD.	55'RT. SHIRLEY RD. STA.53+00	RT.	275
5	BRIDGE CONNECTION SHIRLEY RD.	BRIDGE CONNECTION INDIANOLA AVE.	RT.	820
6	BRIDGE CONNECTION INDIANOLA AVE	140' RT. I-680 STA.700+00	RT.	145

CODE	BEGIN FENCE	END FENCE	LT. OR RT. I-680	LIN. FT.
7	32'LT. MID. BLVD. STA.368+77	WING WALL CONN. STA.657+75 ±	LT.	1,850
8	WING WALL CONN. STA.658+15±	31'RT. SHIRLEY RD. STA.42+32	LT.	2,541
9	31'RT. SHIRLEY RD. STA.45+00	BRIDGE CONNECTION SHIRLEY RD.	LT.	282
10	BRIDGE CONNECTION SHIRLEY RD.	BRIDGE CONNECTION INDIANOLA AVE.	LT.	990
11	BRIDGE CONNECTION INDIANOLA AVE.	COUNTINUED ON FENCE SHT. Nº2	LT.	SEE FENCE SHT. Nº2

SUB TOTAL (THIS SHEET) 13,030 LIN. FT.

ITEM 607-TYPE CL GATE

CODE	STATION	LT. OR RT. I-680	EACH
A	141' LT. I-680 STA. 695+40	LT.	1
B	153' RT. I-680 STA. 696+00	RT.	1

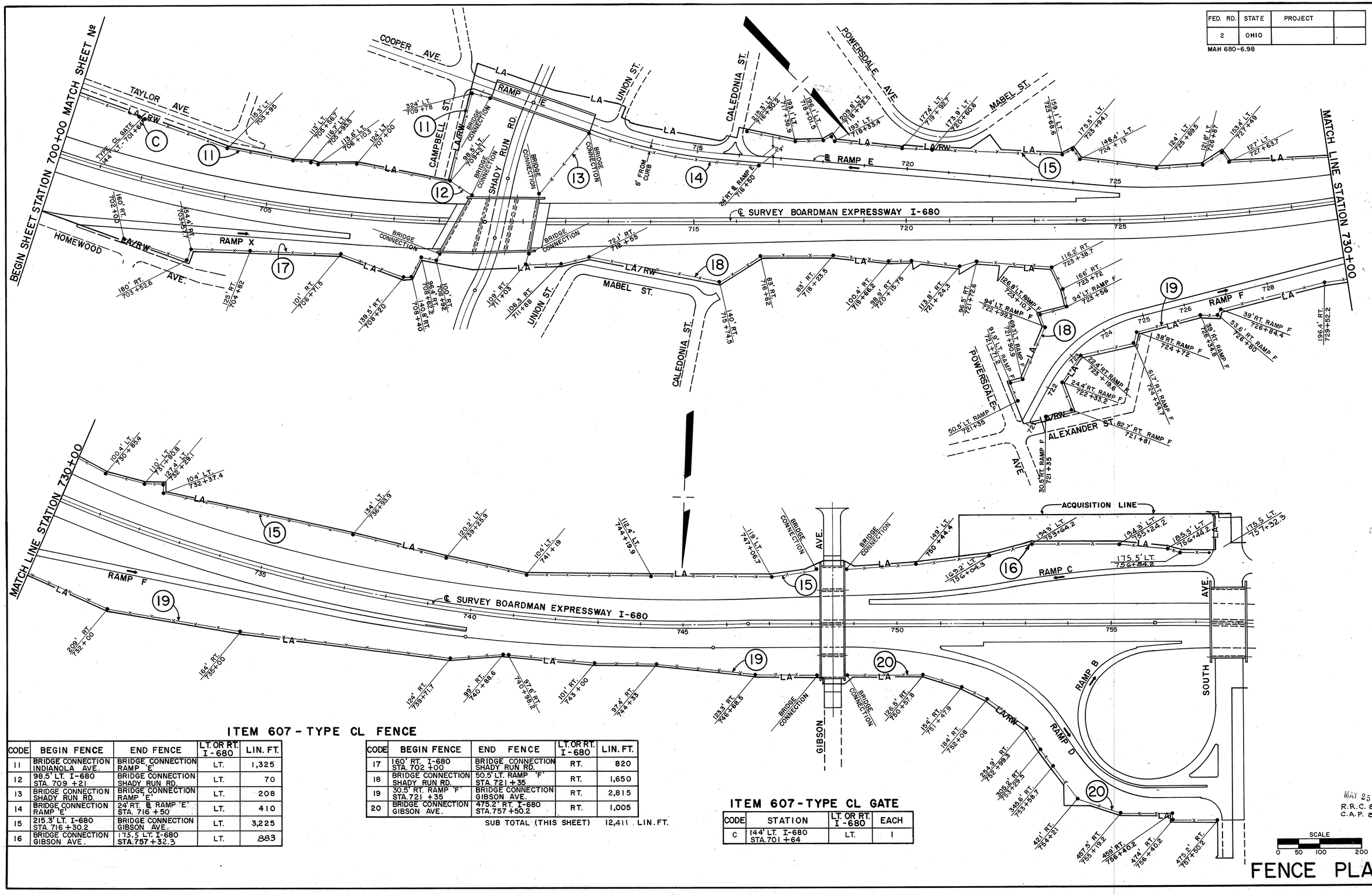
MAY 25 1971
R.R.C. 4/15/69
C.A.P. 4/18/69

SCALE
0 50 100 200

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH 680-6.98

331
656



ITEM 607 - TYPE CL FENCE

CODE	BEGIN FENCE	END FENCE	LT. OR RT. I-680	LIN. FT.
11	BRIDGE CONNECTION INDIANOLA AVE.	BRIDGE CONNECTION RAMP 'E'	LT.	1,325
12	98.5' LT. I-680 STA. 709 +21	BRIDGE CONNECTION SHADY RUN RD.	LT.	70
13	BRIDGE CONNECTION SHADY RUN RD.	BRIDGE CONNECTION RAMP 'E'	LT.	208
14	BRIDGE CONNECTION RAMP 'E'	24' RT. ℄ RAMP 'E' STA. 716 +50	LT.	410
15	215.3' LT. I-680 STA. 716 +30.2	BRIDGE CONNECTION GIBSON AVE.	LT.	3,225
16	BRIDGE CONNECTION GIBSON AVE.	175.5 LT. I-680 STA. 757 +32.3	LT.	883

CODE	BEGIN FENCE	END FENCE	LT. OR RT. I-680	LIN. FT.
17	160' RT. I-680 STA. 702 +00	BRIDGE CONNECTION SHADY RUN RD.	RT.	820
18	BRIDGE CONNECTION SHADY RUN RD.	50.5' LT. RAMP 'F' STA. 721 +35	RT.	1,650
19	30.5' RT. RAMP 'F' STA. 721 +35	BRIDGE CONNECTION GIBSON AVE.	RT.	2,815
20	BRIDGE CONNECTION GIBSON AVE.	475.2' RT. I-680 STA. 757 +50.2	RT.	1,005

SUB TOTAL (THIS SHEET) 12,411 LIN. FT.

ITEM 607 - TYPE CL GATE

CODE	STATION	LT. OR RT. I-680	EACH
C	144' LT. I-680 STA. 701 +64	LT.	1

MAY 25 1971
R.R.C. 8/14/68
C.A.P. 8/28/68

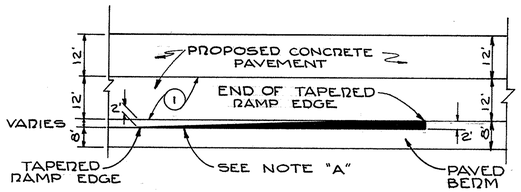
SCALE
0 50 100 200

FENCE PLAN

FED.RD.	STATE	PROJECT	
2	OHIO		

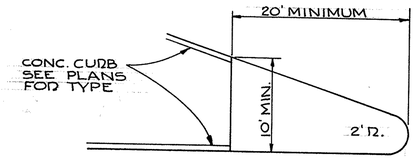
MAH-680-6.98

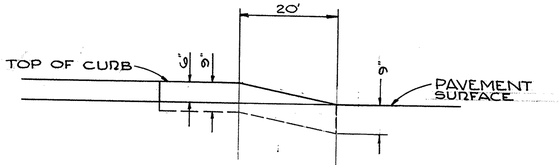
332
656



DETAIL OF ENTRANCE RAMP TERMINAL AT MAINLINE

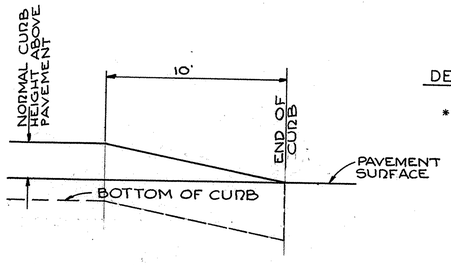
NOTE "A"
THE SHADED AREA SHALL BE CONSTRUCTED OF CONCRETE PAVEMENT (451) TO AN ELEVATION ONE HALF INCH (1/2") LOWER THAN THE ADJACENT PAVEMENT AND SURFACED WITH 409 USING N8 & AGGREGATE AS THE MAXIMUM SIZE. THE SHADED AREA SHALL BE PAID FOR AS FULL DEPTH 451 AND THE SURFACE TREATMENT SHALL BE PAID FOR AS 409



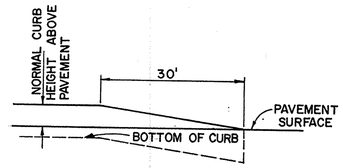


DETAIL OF TYPICAL EXIT AND ENTRANCE NOSE

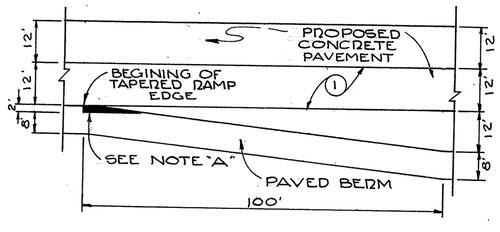
* NOTE: THE ENTRANCE NOSE HAS NO TAPER ON THE ISLAND HEIGHT.



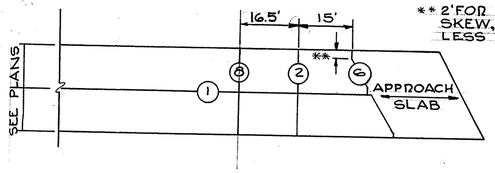
TYPICAL CURB TERMINAL DETAIL - TYPE A



TYPICAL CURB TERMINAL DETAIL - TYPE B

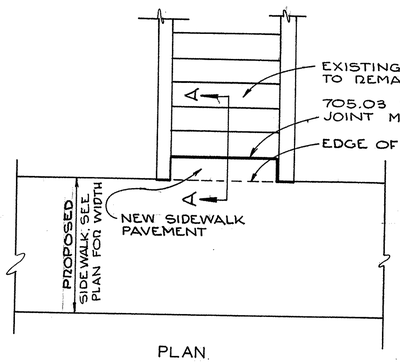


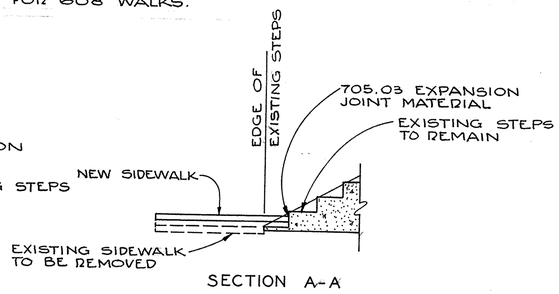
DETAIL OF EXIT RAMP TERMINAL AT MAINLINE



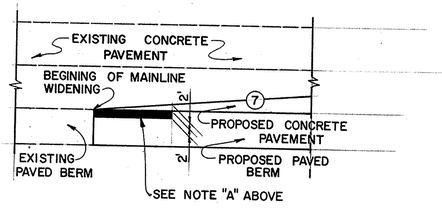
DETAIL OF JOINT LOCATION AT BRIDGE APPROACH SLABS

NOTE: EXPANSION JOINT MATERIAL TO BE PLACED BETWEEN NEW CONCRETE AND EXISTING STEPS. COST OF MATERIAL TO BE INCLUDED IN PRICE BID FOR 608 WALKS.





DETAIL OF NEW SIDEWALK AT EXISTING STEPS



DETAIL OF MAINLINE WIDENING TERMINAL

JOINT LEGEND

1. STANDARD LONGITUDINAL JOINT
2. STANDARD EXPANSION JOINT
3. STANDARD CONTRACTION JOINT
4. KEY JOINT WITHOUT TIE BARS
5. EXPANSION JOINT WITHOUT DOWELS
6. CONSTRUCTION JOINT
7. STANDARD EXPANSION BOLT JOINT
8. STANDARD FLANGE BEAM JOINT

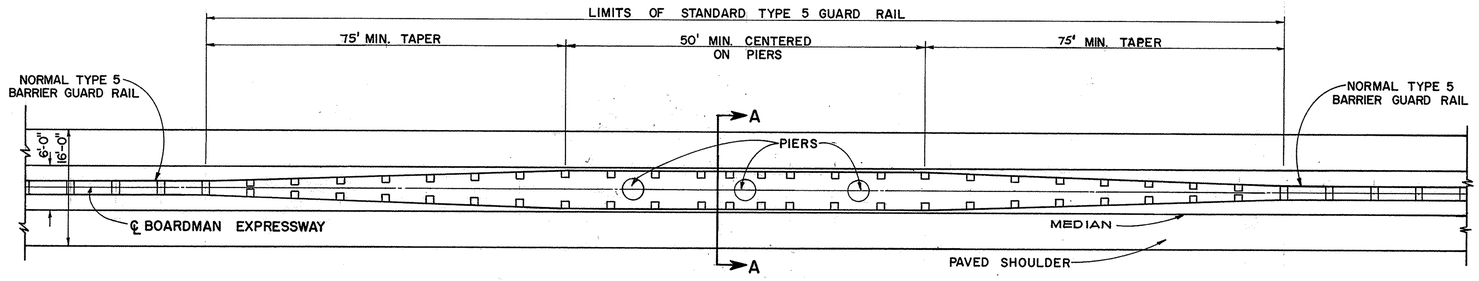
MAY 25 1971

STANDARD DETAIL SHEET

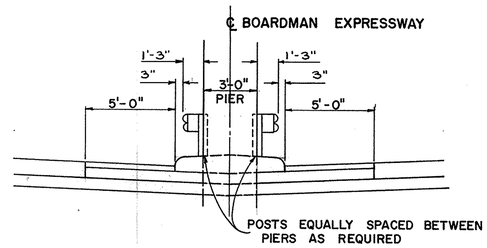
FED. RD.	STATE	PROJECT	
2	OHIO		

333
656

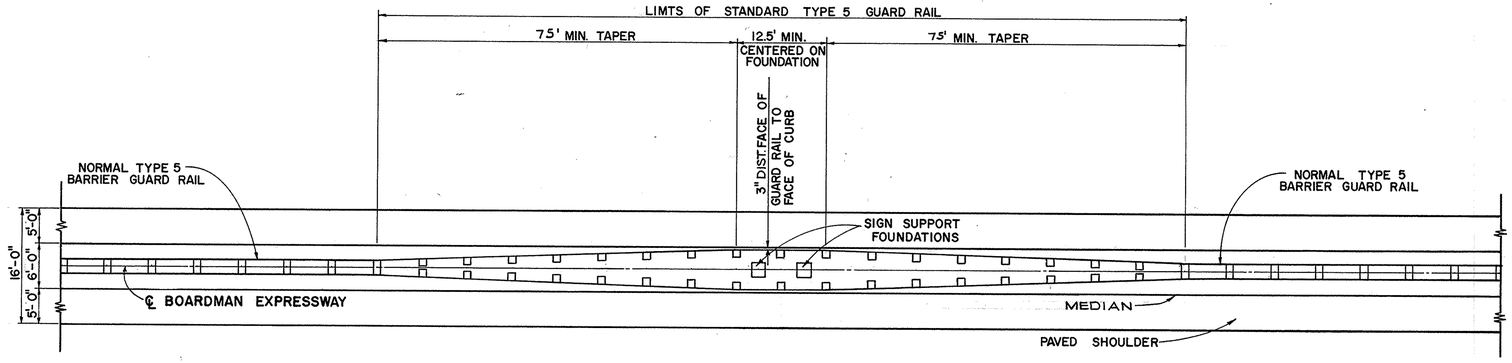
MAH-680-6.98



MEDIAN GUARD RAIL AT PIERS



SECTION A-A



MEDIAN GUARD RAIL AT SIGN SUPPORTS

MAY 25 1971

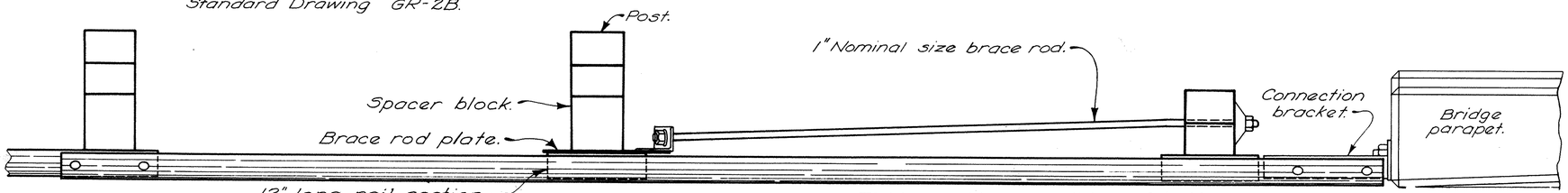
STANDARD DETAIL SHEET

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

333A
656

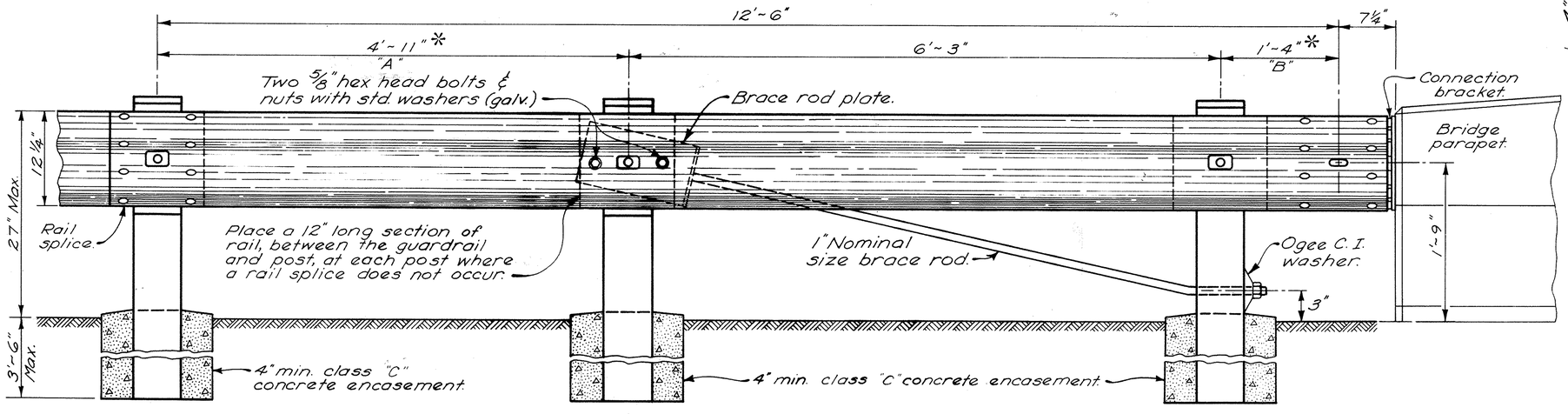
MAH-680-6.98

Posts may be round or square-sawed wood, or W6x8.5 steel. See Standard Drawing GR-2B.



PLAN VIEW

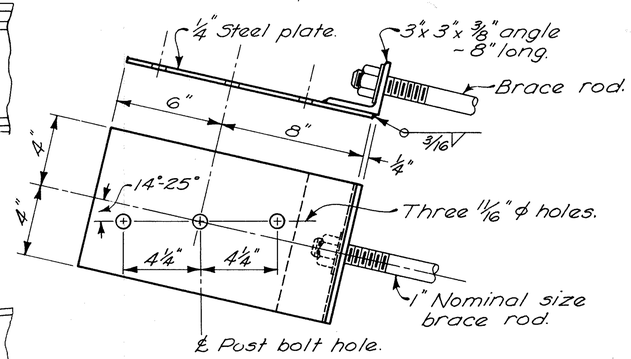
Field punching or drilling of bolt holes for the brace rod assembly shall be accomplished as provided for in 606.05.



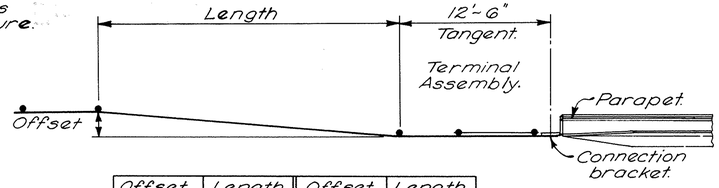
ELEVATION

GUARDRAIL TERMINAL AT BRIDGE

* Dimension "A" shall decrease as dimension "B" increases to accommodate interference by the bridge substructure.



BRACE ROD PLATE



Offset	Length	Offset	Length
1'-0"	25.00'	5'-0"	100.00'
2'-0"	50.00'	6'-0"	100.00'
4'-0"	100.00'	7'-0"	100.00'

GUARDRAIL OFFSET DETAIL

NOTES

BRIDGE TERMINAL ASSEMBLY, AS PER PLAN

The price bid for bridge terminal assembly, as per plan shall include the additional cost, in excess of normal guardrail cost, for concrete encasement, brace rod, brace rod plate and all component parts as detailed.

The connection bracket and anchor bolts are included with the bridge railing for payment. See Std. Dwg. BR-2-67 for connection bracket details.

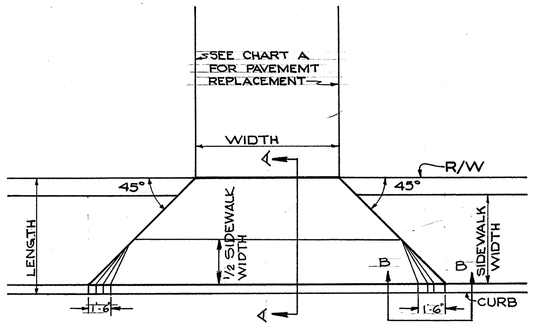
Rev. 1-1-71

BRIDGE TERMINAL ASSEMBLY, AS PER PLAN

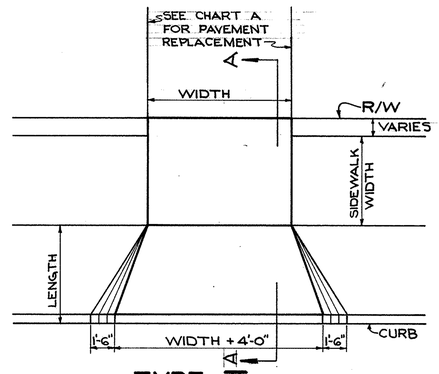
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

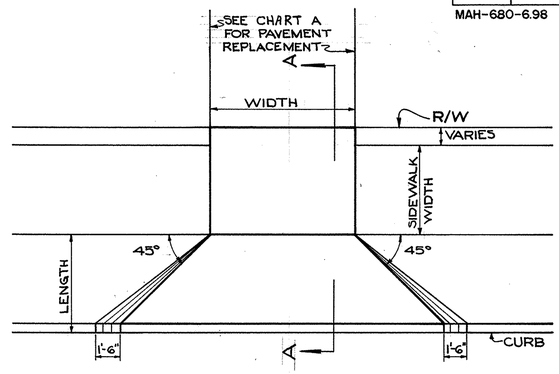
334
656



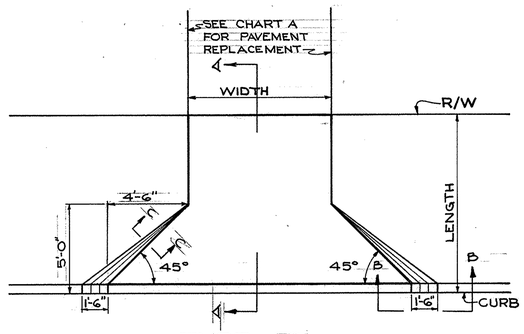
TYPE I
DRIVEWAY APPROACH



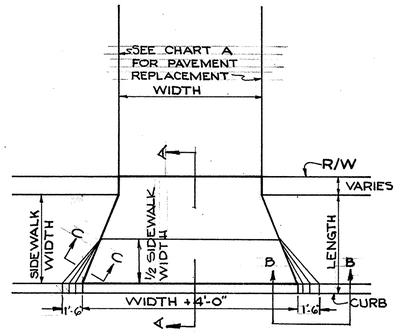
TYPE II
DRIVEWAY APPROACH



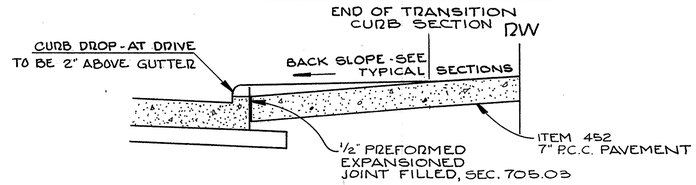
TYPE III
DRIVEWAY APPROACH



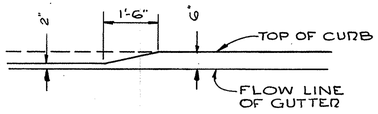
TYPE IV
DRIVEWAY APPROACH



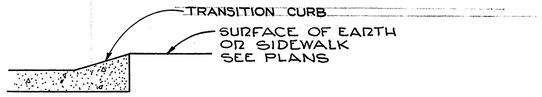
TYPE V
DRIVEWAY APPROACH



SECTION A-A

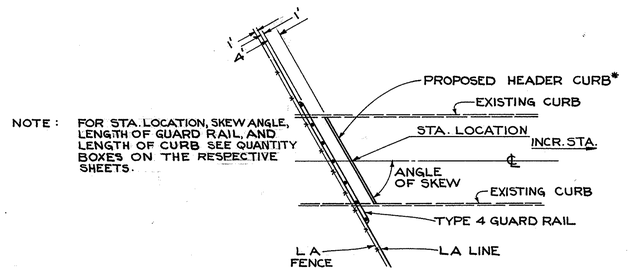


SECTION B-B
SHOWING METHOD OF DROPPING CURBING AT DRIVEWAYS



SECTION C-C

NOTE: PAVEMENT FOR TRANSITION CURB SECTION ON 452 DRIVE PAVEMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 452 ; 7" PORTLAND CEMENT CONCRETE PAVEMENT



NOTE: FOR STA. LOCATION, SKEW ANGLE, LENGTH OF GUARD RAIL, AND LENGTH OF CURB SEE QUANTITY BOXES ON THE RESPECTIVE SHEETS.

DETAIL OF HEADER CURB AND GUARD RAIL

*NOTE: HEADER CURB TO BE CONCRETE CURB, STD. TYPE No 6. EXISTING PAVEMENT TO BE NEATLY CUT FOR NEW CURB. CONSTRUCT NEW CURB TO FIT EXISTING PAVEMENT ELEVATION AND MATCH CURB HEIGHT AT END OF PROPOSED CURB. GUARD RAIL TO BE PLACED PARALLEL TO CURB.

CHART A

EXIST. DRIVE TYPE	REPLACEMENT MATERIAL
ASPHALT	2" ITEM 404 (2-1" COURSES) ASPHALT CONCRETE SURFACE COURSE ON 5" ITEM 304 AGGREGATE BASE
CONCRETE	7" ITEM 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT
SLAG	6" ITEM 304 AGGREGATE BASE
BRICK	7" ITEM 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT

MAY 25, 1971

ROADWAY DETAILS

FED.RD.	STATE	PROJECT	
2	OHIO		

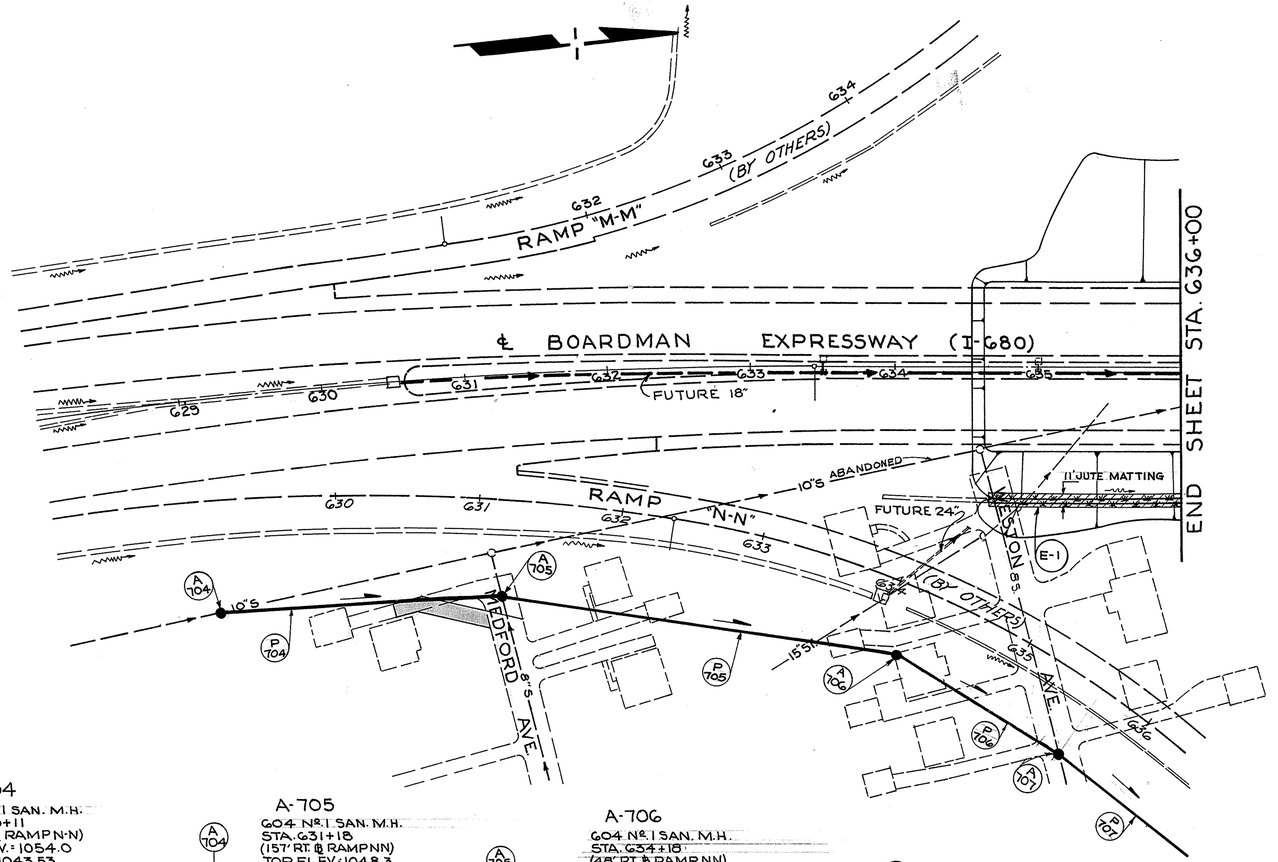
335
656

MAH-680-6.38

ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH			
CODE	STATION	LOCATION	Nº 1 SAN. M.H.
A-704	629+11	150' RT. ℄ RAMP "N-N"	1
A-705	631+18	157' RT. ℄ RAMP "N-N"	1
A-706	634+18	48' RT. ℄ RAMP "N-N"	1
A-707	635+60	55' RT. ℄ RAMP "N-N"	1
TOTAL			4

ITEM 603 - CONDUITS - LINEAR FEET				
CODE	LOCATION		TYPE C-B 706.08 E.S. W-COMP. JNTS. 10"	TYPE C-B 706.08 W-COMP. JNTS. 10"
	FROM	TO		
P-704	A- 704	A-705	202	
P-705	A-705	A-706	278	
P-706	A-706	A-707		132
P-707	A-707	636+00	106	
TOTAL			586	132

EROSION CONTROL			
CODE	LOCATION		667 S.Y. JUTE MATTING
	FROM	TO	
E-1	634+65	636+00	165



0 25 50 100 150

MAY 25 1971

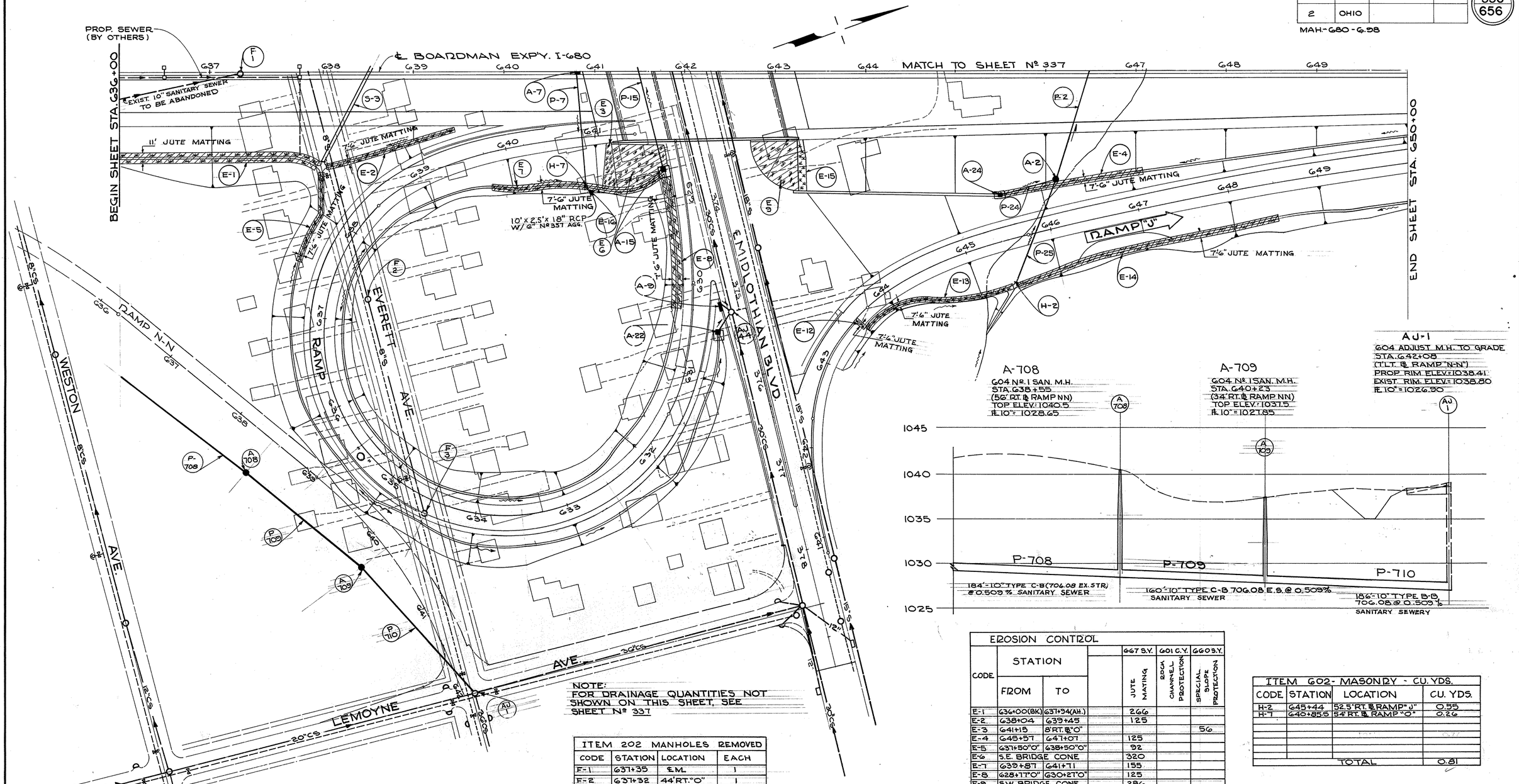
R.R.C. 4/14/68
C.A.P. 4/15/68

END WORK TO STA. 636+00 DRAINAGE PLAN BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

336
656



NOTE:
FOR DRAINAGE QUANTITIES NOT SHOWN ON THIS SHEET, SEE SHEET Nº 337

ITEM 202 MANHOLES REMOVED			
CODE	STATION	LOCATION	EACH
F-1	637+35	℄ M.	1
F-2	637+32	44' RT. "O"	1
F-3	634+52	16' LT. "O"	1
F-4	638+10	17' LT. M.	1
F-5	641+00	8' LT. M.	1
SHEET TOTAL			5

STRUCTURES					
CODE	STATION	SIZE	TYPE	DETAIL SHT. Nº	STRUCTURE Nº
S-3	638+51	30"	AB 706.02 CL. II 706.02 CL. V	367	

EROSION CONTROL						
CODE	STATION FROM	STATION TO		667 S.Y. JUTE MATING	601 C.Y. ROCK CHANNEL PROTECTION	6609 S.Y. SPECIAL SLOPE PROTECTION
E-1	636+00(BK)	637+94(AH.)		266		
E-2	638+04	639+45		125		
E-3	641+15	8' RT. ℄ "O"				56
E-4	645+57	647+07		125		
E-5	637+50"O"	638+50"O"		92		
E-6	S.E. BRIDGE CONE			320		
E-7	639+87	641+71		155		
E-8	628+77"O"	630+27"O"		125		
E-9	S.W. BRIDGE CONE			286		
E-12	643+57"J"	12' RT. ℄ "J"		10		
E-13	643+57"J"	645+40"J"		146		
E-14	645+44"J"	648+50"J"		255		
E-15	643+28	15' RT. ℄				66
E-16	640+85.5	54' RT. ℄ "O"			2	
	SHEET	TOTAL		1305	2	122

ITEM 602- MASONRY - CU. YDS.			
CODE	STATION	LOCATION	CU. YDS.
H-2	645+44	52.5' RT. ℄ RAMP "J"	0.55
H-7	640+85.5	54' RT. ℄ RAMP "O"	0.26
	TOTAL		0.81

0 25 50 100 150

MAY 25 1971
R.R.C. 8/20/68
PWO 8/30/68

DRAINAGE PLAN
STA. 636+00 TO STA. 650+00
EAST OF ℄

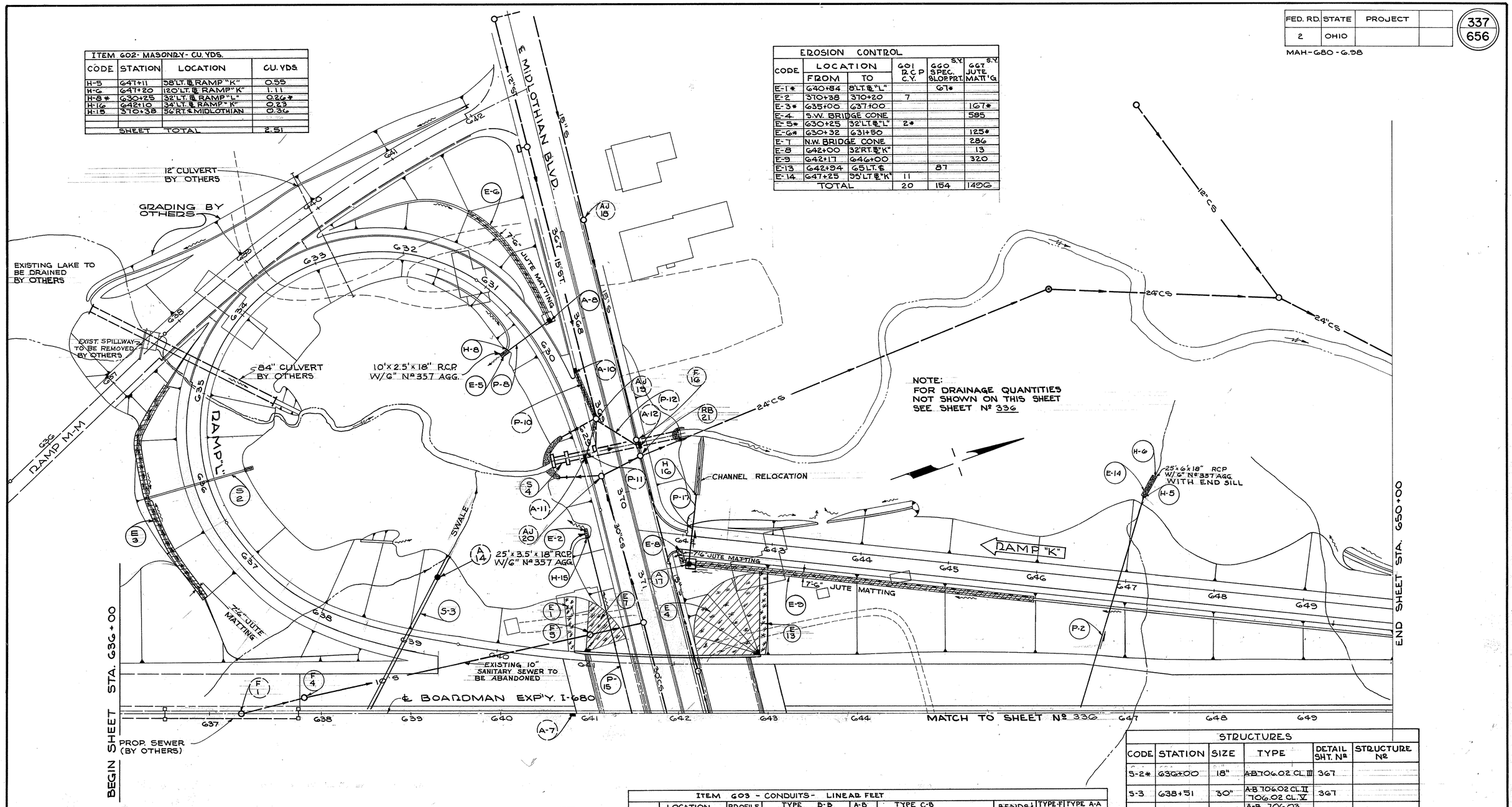
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

337
656

ITEM 602- MASONRY- CU. YDS.			
CODE	STATION	LOCATION	CU. YDS.
H-5	647+11	38'LT. ℄ RAMP "K"	0.55
H-6	647+20	120'LT. ℄ RAMP "K"	1.11
H-8*	630+25	32'LT. ℄ RAMP "L"	0.26*
H-16	642+10	34'LT. ℄ RAMP "K"	0.23
H-15	370+38	56'RT. ℄ MIDLOTHIAN	0.36
	SHEET TOTAL		2.51

EROSION CONTROL						
CODE	LOCATION FROM	LOCATION TO	601 R.C.P C.Y.	660 S.Y. SPEC. SLOP. PRT.	667 S.Y. JUTE MATT'G	
E-1*	640+84	8'LT. ℄ "L"		67*		
E-2	370+38	370+20	7			
E-3*	635+00	637+00			167*	
E-4	S.W. BRIDGE CONE				585	
E-5*	630+25	32'LT. ℄ "L"	2*			
E-6*	630+32	631+50			125*	
E-7	N.W. BRIDGE CONE				286	
E-8	642+00	32'RT. ℄ "K"			13	
E-9	642+17	646+00			320	
E-13	642+94	65LT. ℄		87		
E-14	647+25	55'LT. ℄ "K"	11			
TOTAL			20	154	1496	



NOTE:
FOR DRAINAGE QUANTITIES NOT SHOWN ON THIS SHEET SEE SHEET Nº 336

ITEM 604- MANHOLES ADJUSTED TO GRADE			
CODE	STATION	LOCATION	M.H. EACH
AJ-1	642+08	7'LT. ℄ RAMP "NN"	1
		TOTAL	1

ITEM 604- MANHOLES, CATCH BASINS & INLETS - EACH						
CODE	STATION	LOCATION	Nº1 SAN. M.H.	Nº6 C.B.	Nº2A-8 MOD INLET	Nº2 MH W/o DROP
A-2	646+10	121' RT. ℄				1
A-7	640+80	℄			1	
A-8*	630+25	25'RT. ℄ RAMP "L"		1*		
A-15	628+70	25'RT. ℄ RAMP "O"		1		
A-17	642+10	32'RT. ℄ RAMP "K"		1		
A-24	645+50	134' RT. ℄		1		
A-708	638+95	56'RT. ℄ RAMP "NN"	1			
A-709	640+23	34'RT. ℄ RAMP "NN"	1			
		TOTAL	2	4	1	1
			√	√	√	√

ITEM 603 - CONDUITS - LINEAR FEET																	
CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T. Nº	TYPE 10" 706.08 E.S.	TYPE B-B 706.01 ES 706.02 CL III 706.08 E.S. 15"	TYPE B-B 706.02 CL III 706.08 E.S. 18"	TYPE A-B 33" 706.02 CL III 706.08 E.S. 15"	TYPE A-B 706.02 CL III 706.08 E.S. 18"	TYPE C-B 10" 706.08 E.S.	TYPE C-B 706.02 X 5 706.02 CL III 706.08 E.S. 18"	TYPE C-B 706.02 C.L. III 21"	BENDS & BRANCHES	TYPE-F 15"	TYPE A-A 706.02 CL III 33"
P-2	A-2	H-5	338					60						323
P-7	A-7	H-7					89					2	39	
P-8*	A-8	H-8					57*							
P-15	A-15	H-15									317			
P-17	A-17	H-16			79									
P-24	A-24	A-2								66				
P-25	A-2	H-2	338				126							
P-708	636+00	A-708	336						184					
P-709	A-708	A-709	336						160					
P-710	A-709	AJ-1	336	186										
		TOTAL		186	79	146	126	60	344	66	317		39	323
				√	√	√	√	√	√	√	√		√	√

STRUCTURES					
CODE	STATION	SIZE	TYPE	DETAIL SHT. Nº	STRUCTURE Nº
S-2*	636+00	18"	A-B 706.02 CL. III	367	
S-3	638+51	30"	A-B 706.02 CL. II 706.02 CL. V	367	
S-4	369+51.20	87"X63"	A-B 706.03 10-10 GA.	368	

*INDICATES RURAL QUANTITIES

0 25 50 100 150

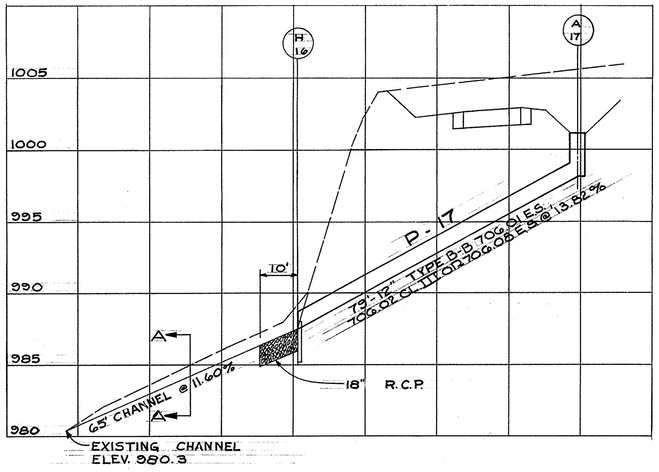
MAY 25 1971
R.R.C. 8/20/68
PWD 8/30/68

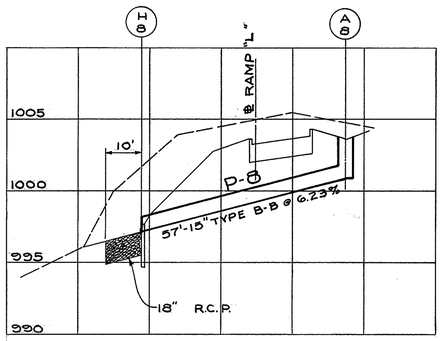
DRAINAGE PLAN
STA. 636+00 TO STA. 650+00
WEST OF ℄

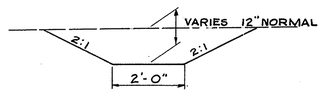
FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

338
656







SECTION A-A

A-8

604 № 5 C.B.
STA. 630+25
25' RT. ℄ RAMP "L"
GRATE ELEV. = 1003.35
℄ 15" = 1000.65

H-8

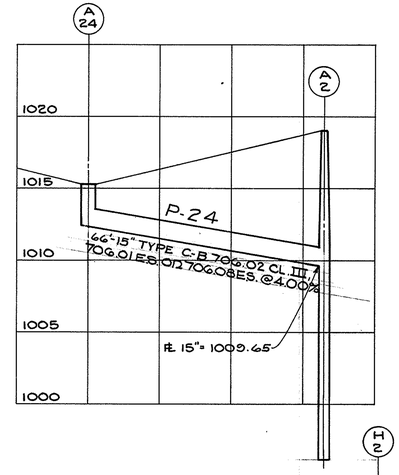
HW-E HEADWALL
STA. 630+25
32' LT. ℄ RAMP "L"
℄ 15" = 997.10

A-17

604 № 5 C.B
STA. 642+10
32' RT. ℄ RAMP "K"
GRATE ELEV. = 1001.05
℄ 12" = 998.41

H-16

HW-E HEADWALL
STA. 642+10
46' LT. ℄ RAMP "K"
℄ 12" = 987.3



A-24

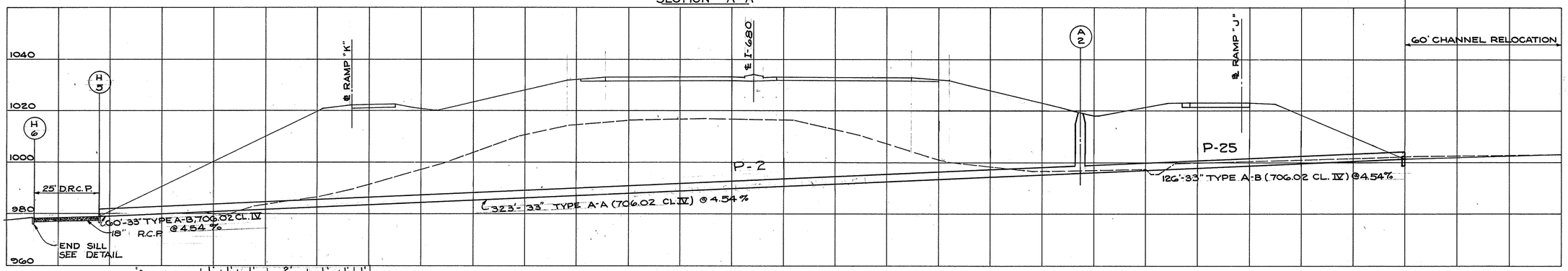
604 № 5 C.B.
STA. 645+50
134' RT. ℄
GRATE ELEV. = 1015.25
℄ 15" = 1012.29

A-2

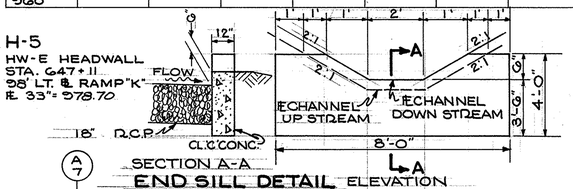
604 № 2 MH W/o DROP
STA. 646+10
121.50' RT. ℄
COVER ELEV. = 1019.00
℄ 15" = 1009.65
℄ 33" = 996.08

H-2

HW-E HEADWALL
STA. 645+44
52.5' RT. ℄ RAMP "J"
℄ 33" = 1001.80



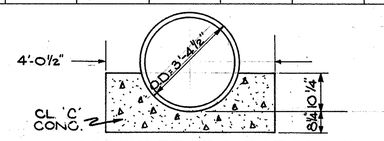
PIPE PROFILES THIS SHEET	
P -	2
P -	7
P -	8
P P -	15
P P -	17
P P P -	24
P -	25



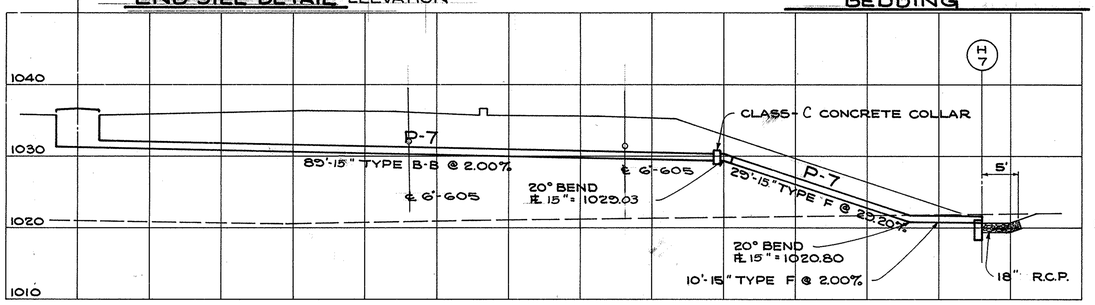
H-5

HW-E HEADWALL
STA. 647+11
98' LT. ℄ RAMP "K"
℄ 33" = 978.70

SECTION A-A
END SILL DETAIL ELEVATION



CONCRETE CRADLE DETAIL FOR 33" PIPE, P-2, CLASS 'A' BEDDING



A-7

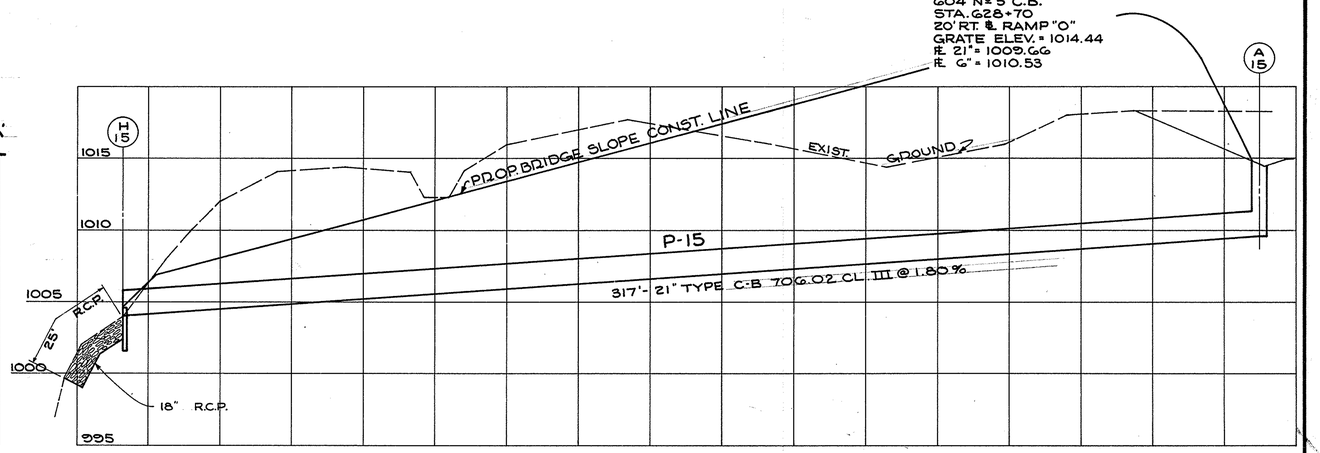
604 № 2A-8 (MOD.) INLET
STA. 640+80 ℄
TOP ELEV. = 1036.21
WINDOW ELEV. = 1035.54
℄ 15" = 1030.83

H-7

HW-E HEADWALL
STA. 640+85.50
54' RT. ℄ RAMP "O"
℄ 15" = 1020.60

A-15

604 № 5 C.B.
STA. 628+70
20' RT. ℄ RAMP "O"
GRATE ELEV. = 1014.44
℄ 21" = 1009.66
℄ 6" = 1010.53



H-15

HW-E HEADWALL
STA. 370+38
56' RT. ℄ MIDLOTHIAN BLVD.
℄ 21" = 1003.96

MAY 25 1971

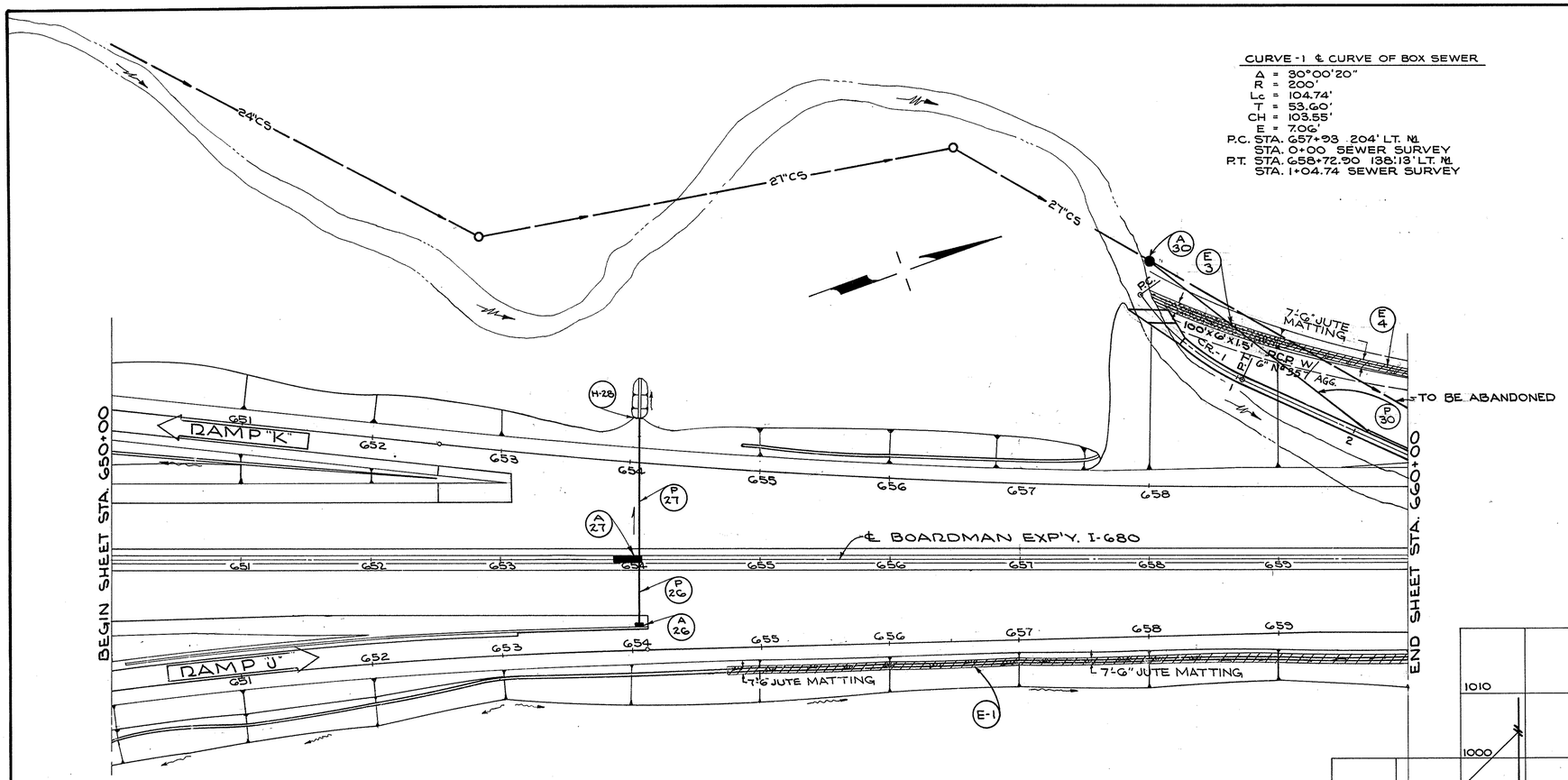
STA. 636+00 TO STA. 650+00
DRAINAGE PROFILES
BOARDMAN EXP.

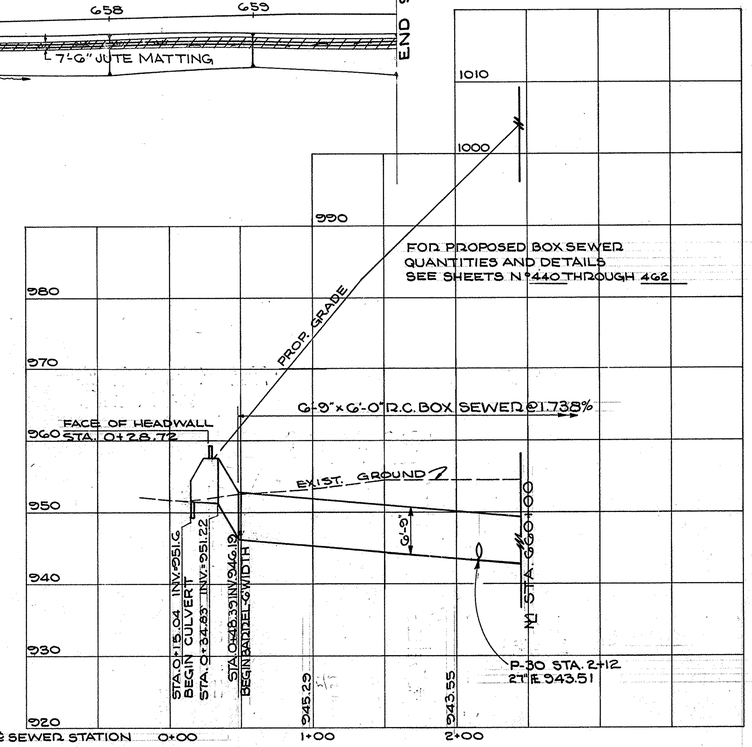
FED. RD.	STATE	PROJECT	
2	OHIO		

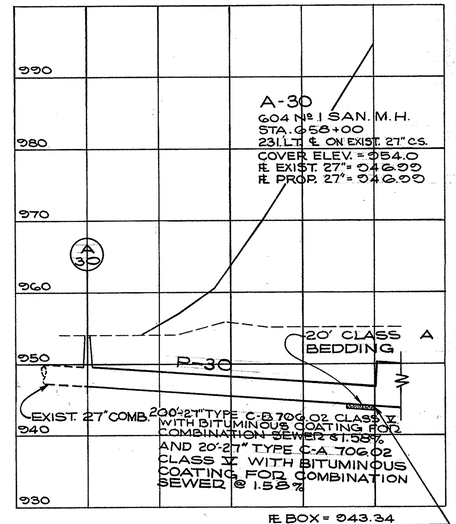
339
656

MAH-680-6.98

CURVE-1 ℄ CURVE OF BOX SEWER
Δ = 30°00'20"
R = 200'
Lc = 104.74'
T = 53.60'
CH = 103.55'
E = 7.06'
P.C. STA. 657+93 204' LT. N1
STA. 0+00 SEWER SURVEY
P.T. STA. 658+72.90 138.13' LT. N1
STA. 1+04.74 SEWER SURVEY







ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	N°1 SAN. M.H.	N°6 C.B.	N°2A-16 MOD.
A-26	654+05	54.01' RT. ℄		1	
A-27	654+05	℄			1
A-30	658+62.5	141' LT ℄	1		
TOTAL			1	1	1

ITEM 603 - CONDUITS - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T. N°	TYPE B-9 15"	TYPE C-A 27" 706.02 CL. IV W/ BITUM. COATING	TYPE C-B 706.02 CL. IV W/ BITUM. COATING
P-26	A-26	P-27	82	54		
P-27	A-27	H-28	82	109		
P-30	A-30	BOX SEWER	339		20	200
TOTAL				163	20	200

ITEM 602 - MASONRY

CODE	STATION	LOCATION	C.Y.
H-28	654+00	34' LT. ℄ "K"	0.26

EROSION CONTROL

CODE	LOCATION FROM	LOCATION TO	667 JUTE MAT.	601 C.Y. R.C.P.
E-1	654+75	660+00	438	
E-3	658+00	659+00		44
E-4	659+00	660+00	83	
TOTAL			521	44

MAY 25 1971

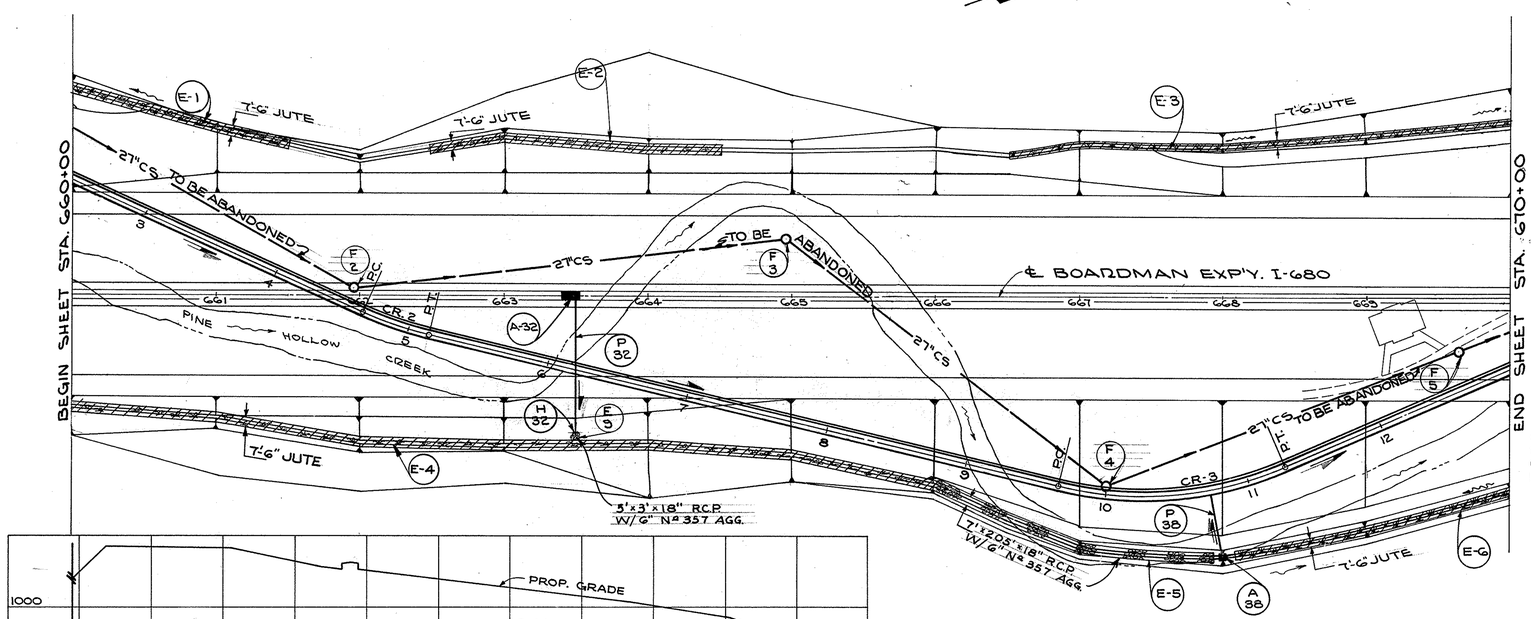
0 25 50 100 150

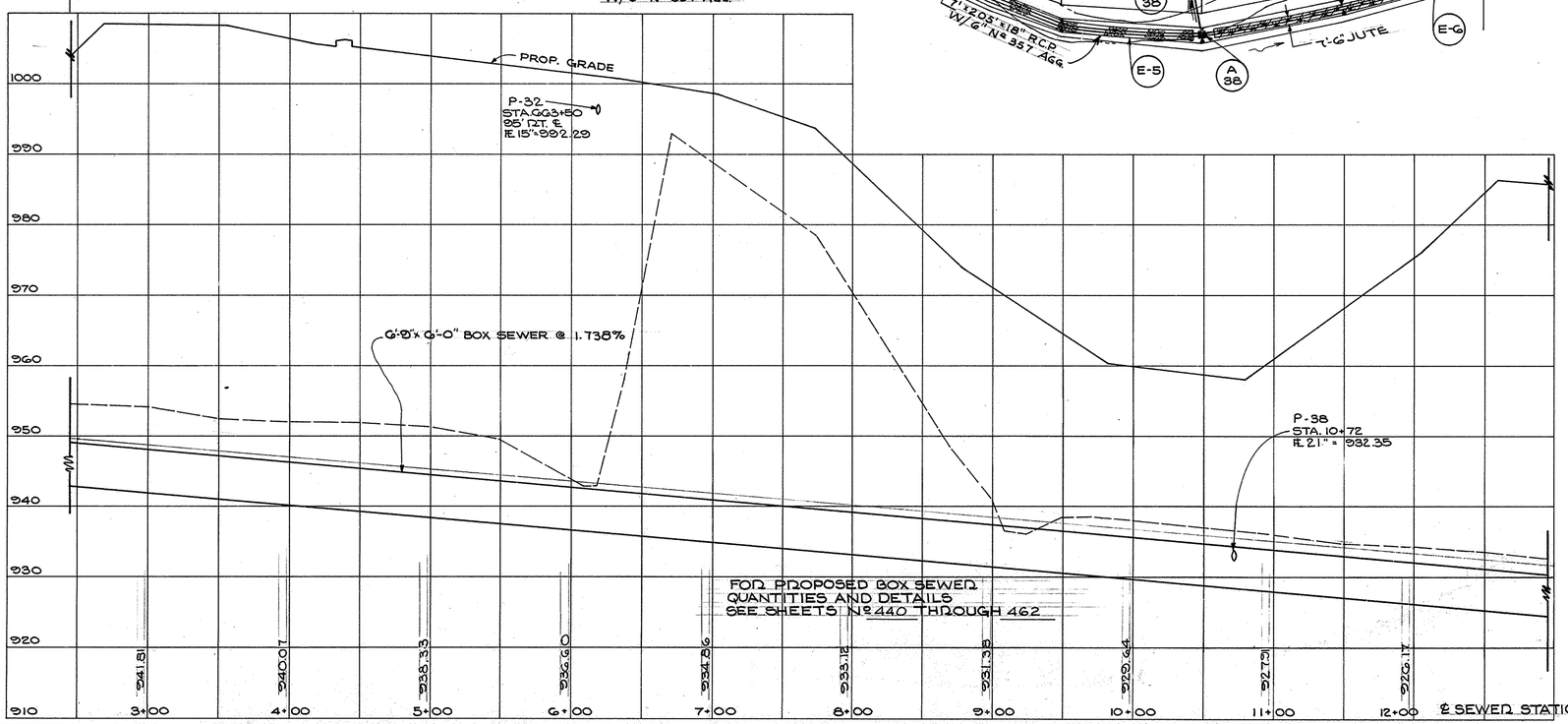
R.R.C. 8/20/68
PWD 8/30/68

DRAINAGE PLAN
STA. 650+00 TO STA. 660+00

CURVE-2 ℄ CURVE OF BOX SEWER
Δ = 11°10'24"
R = 250'
Lc = 48.75'
T = 24.45'
CH = 48.68'
E = 1.19'
P.C. STA. 662+02.25 11.96' RT. ℄
STA. 4+66.69 SEWER SURVEY
P.T. STA. 662+48.30 27.74' RT. ℄
STA. 5+15.44 SEWER SURVEY

CURVE-3 ℄ CURVE OF BOX SEWER
Δ = 36°54'36"
R = 250'
Lc = 161.05'
T = 83.43'
CH = 158.28'
E = 13.55
P.C. STA. 666+86.78 131.61' RT. ℄
STA. 9+66.05 SEWER SURVEY
P.T. STA. 668+44.43 117.46' RT. ℄
STA. 11+27.10 SEWER SURVEY





ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	N° 5 C.B.	N° 2A-14 MOD INLET
A-32	663+50	℄		1
A-38	668+00	181' RT. ℄	1	
TOTAL			1	1

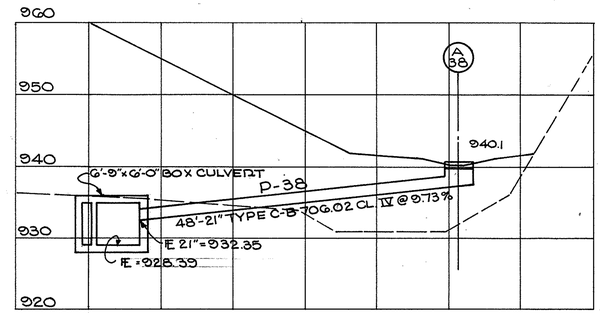
ITEM 603 - CONDUITS - LINEAR FEET

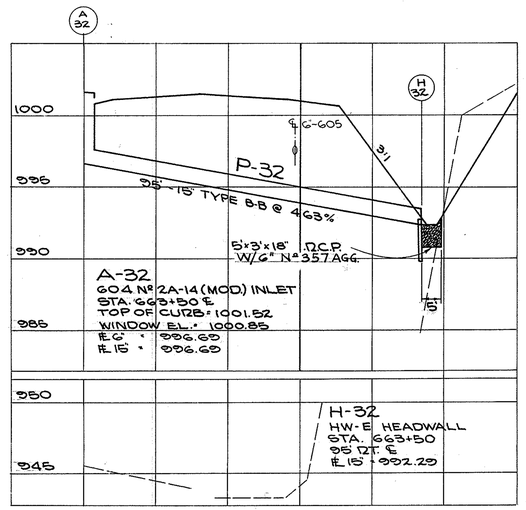
CODE	LOCATION		PROFILE	TYPE B-B	TYPE C-B
	FROM	TO	SH'T. N°	15"	21" 706.02 CL. IV
P-32	A-32	H-32	340	95	
P-38	A-38	BX. SEWER	340		48
TOTAL				95	48

ITEM 602 - MASONRY

CODE	STATION	LOCATION	C.Y.
H-32	663+50	95' RT. ℄	0.26

A-38
604 N° 5 C.B.
STA. 668+00 (81' RT. ℄)
GRATE EL. = 939.85
℄ 21" = 937.02





FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

340
656

EROSION CONTROL

CODE	STATION FROM	STATION TO	667 - JUTE MATTING SY.	601 - RK. CHAN. PRT. C.Y.
E-1	660+00	661+50	129	
E-2	662+50	664+50	167	
E-3	666+50	670+00	292	
E-4	660+00	666+00	500	
E-5	666+00	667+95		106
E-6	668+09	670+00	167	
E-9	663+50	RT.		1
TOTAL			1255	107

ITEM 202 - MANHOLES REMOVED

CODE	STATION	LOCATION	EACH
F-2	661+95.69	4.84' LT. ℄	1
F-3	664+96.04	40.33' LT. ℄	1
F-4	667+18.97	131.29' RT. ℄	1
F-5	669+65.12	37.12' RT. ℄	1
TOTAL			4

0 25 50 100 150

MAY 25 1971
R.R.C. 8/30/68
PUD 8/30/68

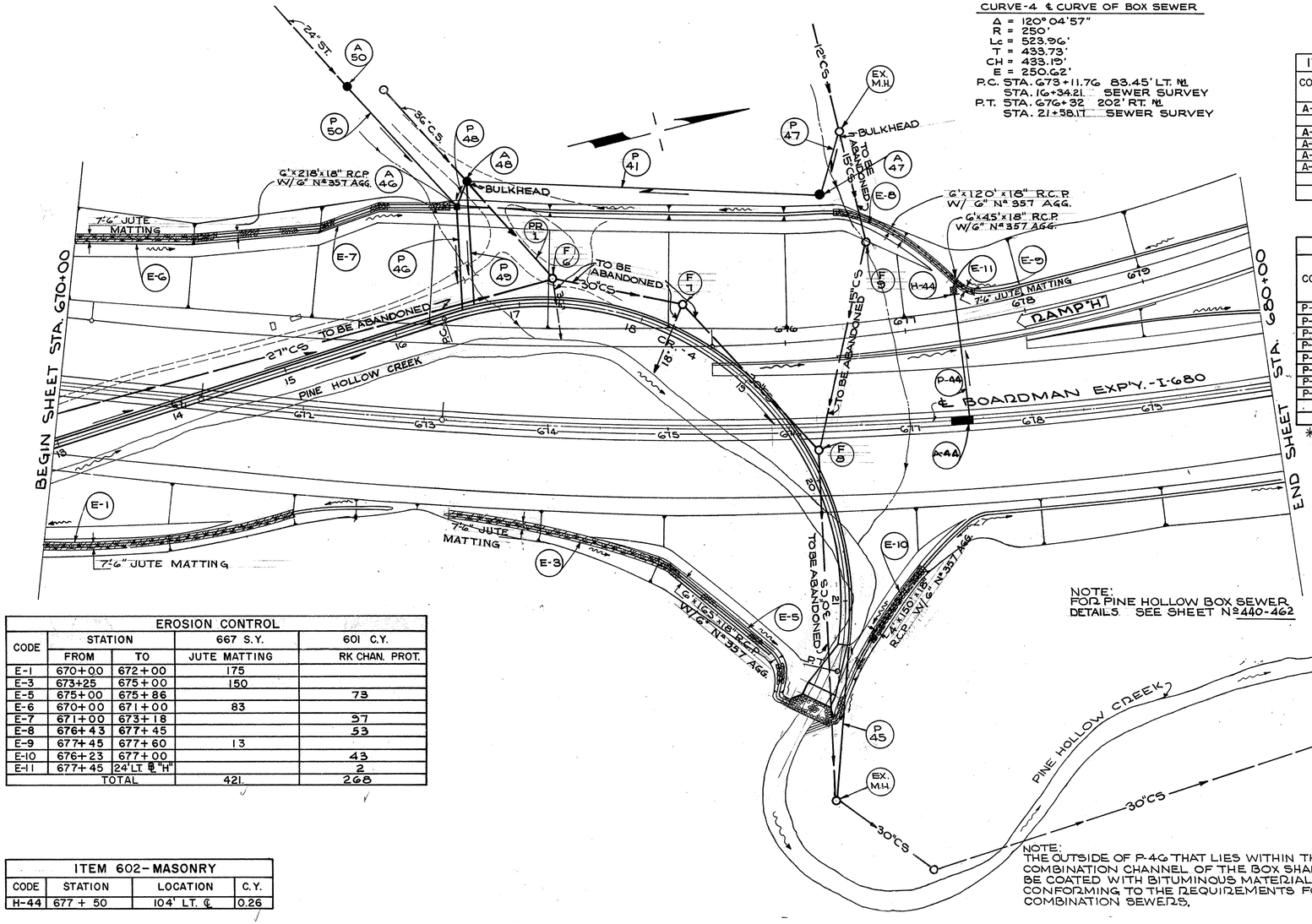
DRAINAGE PLAN
STA. 660+00 TO STA. 670+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.-680-6.98

341
656

CURVE-4 ℄ CURVE OF BOX SEWER
Δ = 120°04'57"
R = 250'
Lc = 523.96'
T = 433.73'
CH = 433.15'
E = 250.62'
P.C. STA. 673+11.76 83.45' LT. ℄
STA. 16+34.21 SEWER SURVEY
P.T. STA. 676+32 202' RT. ℄
STA. 21+58.17 SEWER SURVEY



NOTE:
FOR PINE HOLLOW BOX SEWER DETAILS SEE SHEET Nº 440-462

NOTE:
THE OUTSIDE OF P-46 THAT LIES WITHIN THE COMBINATION CHANNEL OF THE BOX SHALL BE COATED WITH BITUMINOUS MATERIAL CONFORMING TO THE REQUIREMENTS FOR COMBINATION SEWERS.

ITEM 604 – MANHOLES, CATCH BASINS & INLETS – EACH

CODE	STATION	LOCATION	Nº1 M.H.	Nº1 SAN M.H.	Nº1 SAN. M.H. W/DROP	Nº 2-4 C.B.	Nº 2A-18 MOD. INLET
A-44	677+50	℄					1
A-46	673+15	176' LT. ℄				1	
A-47	676+30	190' LT. ℄		1			
A-48	673+23	200' LT. ℄			1		
A-50	672+13	268' LT. ℄	1				
TOTAL			1	1	1	1	1

ITEM 603 – CONDUITS – LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET Nº	TYPE C-B 30"	TYPE C-B 42"	TYPE C-B 706.02 II 24"	TYPE C-B 706.02 IV 42"	TYPE C-B 706.02 V 27"	TYPE B-B 15"			TYPE C-B 706.08 E.S. 706.02 CL. III * 21"	TYPE C-A 706.02 IV 27"	TYPE C-A 706.02 IV 42"	TYPE C-B 706.08 706.01 * 706.02 * 18"	TYPE C-B 706.08 E.S. 30"
P-41	A-47	A-48	341						104			290				
P-44	A-44	H-44	104													
P-45	BX. SEWER	EX. M.H.	343													129
P-46	A-46	BX. SEWER	341			54							35			
P-47	EX. M.H.	A-47	341												55	
P-48	A-48	A-46	341	25												
P-49	A-49	A-48	342				70						35			
P-50	A-50	A-46	342			134										
TOTAL				25	134	54	70		104			290	35	35	55	129

* WITH BITUMINOUS COATING FOR COMBINATION SEWER

ITEM 202 – MANHOLES REMOVED

CODE	STATION	LOCATION	EACH
F-6	674+00.85	121.41' LT. ℄	1
F-7	675+15	103' LT. ℄	1
F-8	676+24.14	19.57' RT. ℄	1
F-9	676+70	150' LT. ℄	1
TOTAL			4

ITEM 202 – PIPE REMOVED

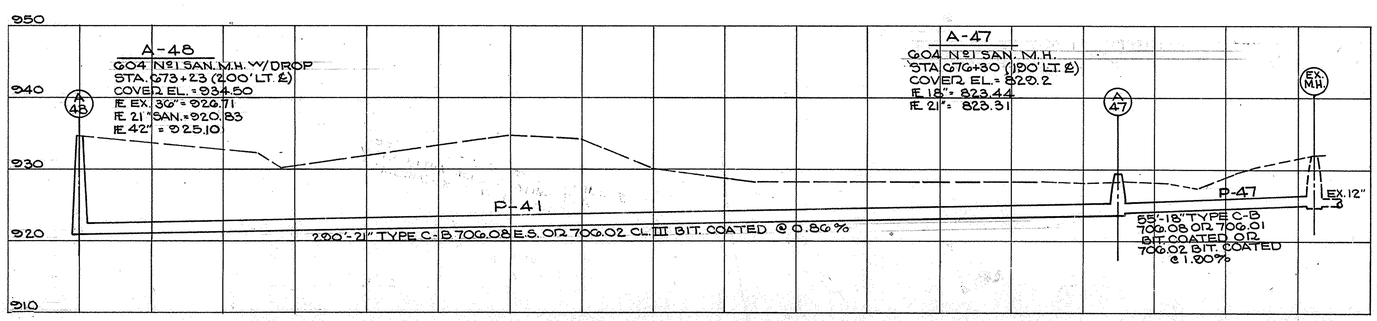
CODE	LOCATION FROM	LOCATION TO	OVER 15" LIN. FT.
PR-1	F-6	A-48	107
TOTAL			107

EROSION CONTROL

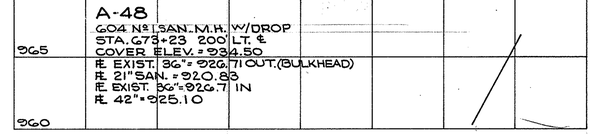
CODE	STATION FROM	STATION TO	667 S.Y. JUTE MATTING	601 C.Y. RK CHAN. PROT.
E-1	670+00	672+00	175	
E-3	673+25	675+00	150	
E-5	675+00	675+86		73
E-6	670+00	671+00	83	
E-7	671+00	673+18		37
E-8	676+43	677+45		53
E-9	677+45	677+60	13	
E-10	676+23	677+00		43
E-11	677+45	24' LT. ℄ "H"		2
TOTAL			421	268

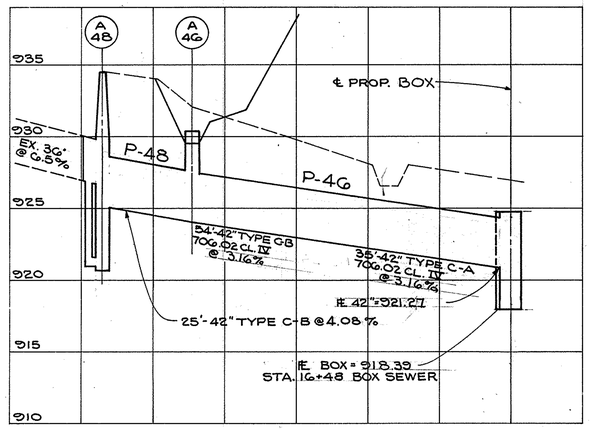
ITEM 602 – MASONRY

CODE	STATION	LOCATION	C.Y.
H-44	677+50	104' LT. ℄	0.26



EX. MANHOLE
STA. 676+43 (243' LT. ℄)
COVER EL. = 931.66
EX. 12" IN = 924.55
EX. 15" OUT = 924.48
PROP. 18" OUT = 924.48





A-46
604 Nº2-4 C.B.
STA. 673+15 176' LT. ℄
GRATE ELEV. = 930.42
WINDOW ELEV. = 929.50
IE 42" = 924.08
IE 24" = 924.58

0 25 50 100 150

MAY 28 B/1

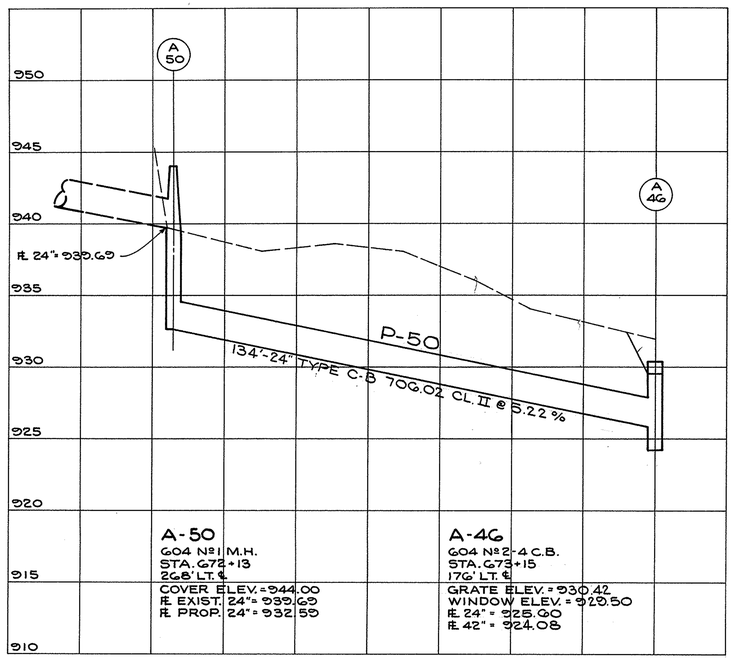
R.R.C. 8/20/68
PWD 8/30/68

DRAINAGE PLAN
STA. 670+00 TO STA. 680+00

FED. RD.	STATE	PROJECT	
2	OHIO		

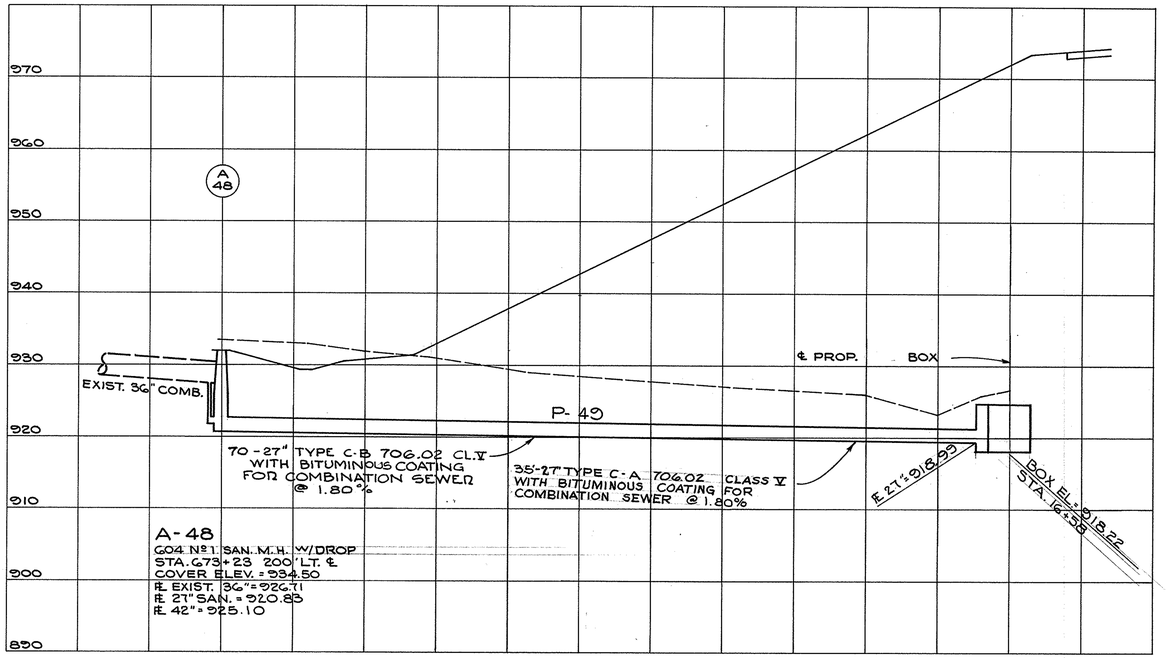
342
656

MAH-680-6.98



A-50
604 №1 M.H.
STA. 672+13
268' LT. ℄
COVER ELEV. = 944.00
℄ EXIST. 24"= 935.69
℄ PROP. 24"= 932.55

A-46
604 №2-4 C.B.
STA. 673+15
176' LT. ℄
GRATE ELEV. = 930.42
WINDOW ELEV. = 929.50
℄ 24" = 925.90
℄ 42" = 924.08



A-48
604 №1 SAN. M.H. W/DROP
STA. 673+23 200' LT. ℄
COVER ELEV. = 934.50
℄ EXIST. 36"= 926.71
℄ 21" SAN. = 920.83
℄ 42" = 925.10

PIPE PROFILES THIS SHEET
P - 49
P - 50

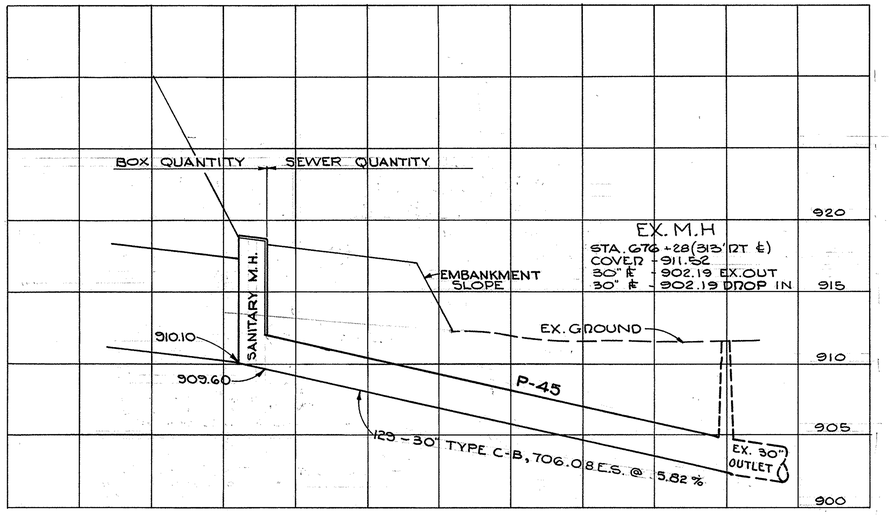
MAY 25 1971

STA. 670+00 TO STA. 680+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

343
656

MAH-680-6.98



PIPE PROFILES THIS SHEET
P - 45

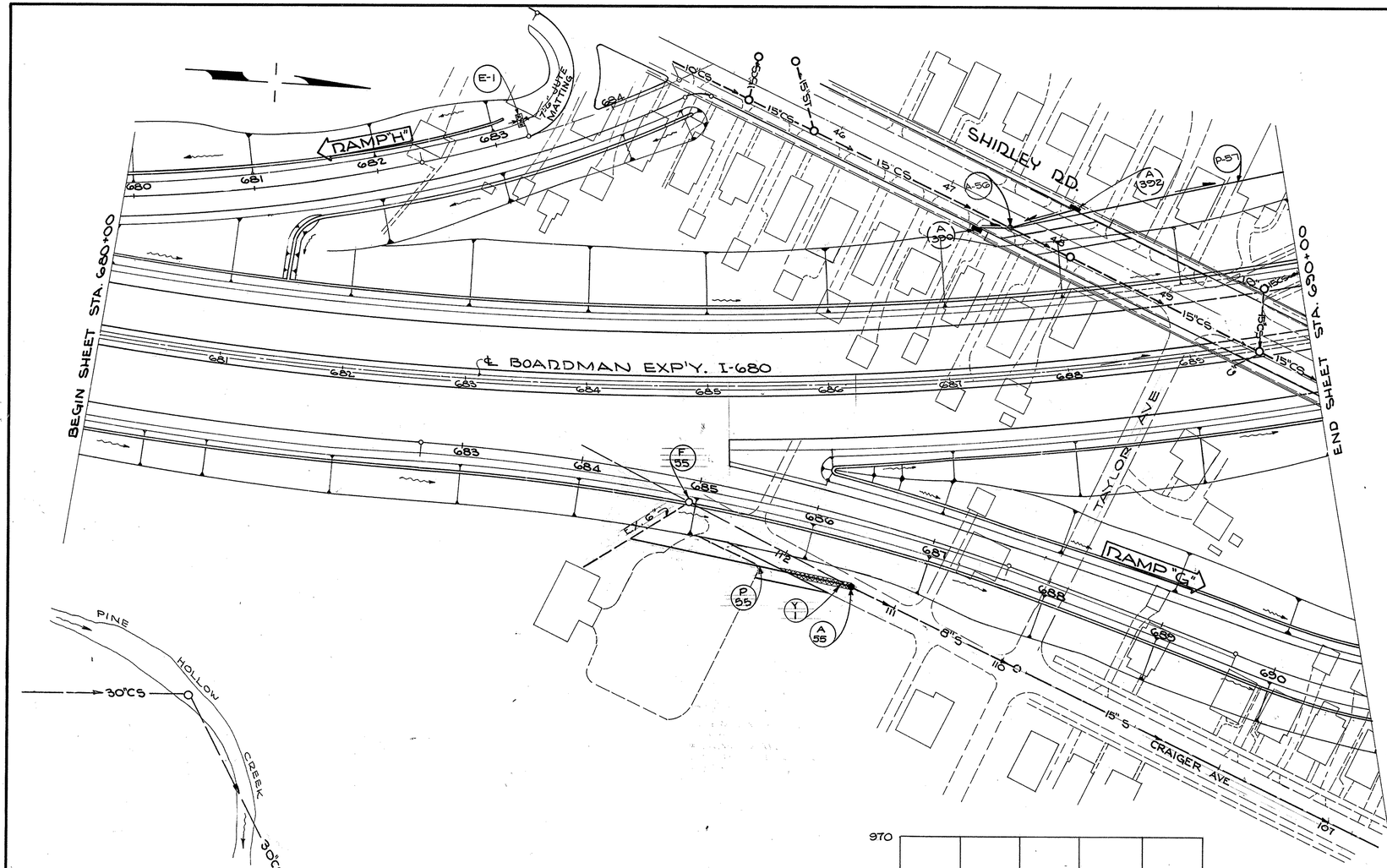
MAY 25 1971

STA. 670+00 TO STA. 680+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

344
656



PAVEMENT REPLACEMENT				
CODE	LOCATION	PROPOSED CONDUIT	1¼" 404-C.Y.	8" 305-S.Y.
Y-1	CRAIGER AVE	P-55	——	4.59
SHEET TOTAL				4.59

ITEM 604 – MANHOLES, CATCH BASINS & INLETS - EACH			
CODE	STATION	LOCATION	№1 SAN. M.H.
A-56	47 + 59	14'RT.℄ SHIRLEY	1
A-55	111 + 39	℄ CRAIGER ST.	1
SHEET TOTAL			2 ✓

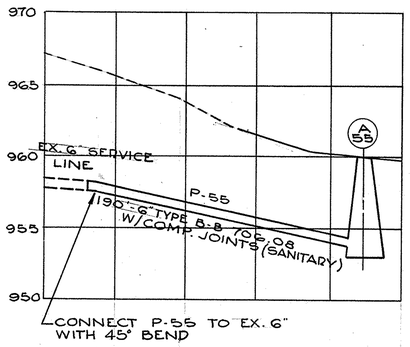
ITEM 603 – CONDUITS – LINEAR FEET						
CODE	LOCATION		PROFILE SHT. №2	B-B 30" 706.08*	B-B 6" 706.08*	BEND & BRANCH
	FROM	TO				
P-57	A-56	690 + 00	344	231		2
P-55	A-55	EX. 6" LAT	344		190	1
SHEET TOTAL				231 ✓	190 ✓	

* WITH COMPRESSION JOINTS

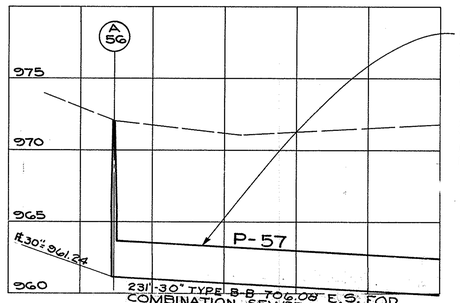
EROSION CONTROL			
CODE	STATION		667 S.Y. JUTE MATTING
	FROM	TO	
E-1	683 + 25	10' LT ℄ H	8
TOTAL			8

ITEM 202– MANHOLES & INLETS REMOVED – EACH				
CODE	STATION	LOCATION	M.H.	INLET
F-55	112+96	1'LT ℄ CRAIGER	1	
SHEET TOTAL			1	

PIPE PROFILES THIS SHEET
P - 57
P - 55



A-55
604 №1 SAN. M.H.
STA. 111+39
℄ CRAIGER AVE.
COVER ELEV. = 960.0
Ø 6" = 953.56



A-56
604 №1 SAN. M.H.
STA. 47+59
14' RT. ℄ SHIRLEY RD.
COVER ELEV. 973.66
Ø 30" = 961.24
Ø 12" = 969.56
Ø 12" = 966.55
Ø 15" = 962.49 (EX.)

NOTE:
THE CONTRACTOR SHALL SUPPLY TWO (2) 30" x 6" WYE BRANCHES WITH LINE P-57 TO PROVIDE, AS DIRECTED BY THE ENGINEER, FOR SERVICE LATERAL CONNECTION FROM PARCELS 239 LA AND 240 LA. THE COST FOR THESE WYE BRANCHES SHALL BE INCLUDED IN THE PRICE BID FOR LINE P-57.

R.R.C. 4/13/69
C.A.P. 4/17/69

0 25 50 100 150

MAY 25 1971

DRAINAGE PLAN
STA. 680+00 TO STA. 690+00

FED. RD.	STATE	PROJECT	
2	OHIO		

345
656

MAH-680-6.98

ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	Nº1 MH	Nº1 SAN. MH	Nº2 STM. MH	Nº5 C.B.	Nº2A C.B.	Nº2A-6 MOD INLET	Nº2A-14 MOD INLET	Nº2A-16 MOD INLET	C.O.Y. Nº2 INLET
A-62	692+25	1.67' RT. ℄								1	
A-64	695+25	℄						1			
A-65	690+30	℄							1		
A-67	695+00	1' LT. ℄	1								
A-68	695+00	66' LT. ℄				1					
A-69	695+50	66' LT. ℄				1					
A-70	695+00	66' RT. ℄					1				
A-76	39+96	25' RT. ℄ TAYLOR		1							
A-81	32+59.37	56.66' LT. ℄ EX. TAYLOR		1							
A-82	35+00	2.5' RT. ℄ EX. TAYLOR		1							
A-83	37+00	25' RT. ℄ EX. TAYLOR		1							
A-84	692+72	42.68' LT. ℄ RAMP "G"				1					
A-85	693+07	16' RT. ℄ RAMP "G"				1					
A-362	693+23	25' LT. ℄ RAMP "G"	1								
A-368	27+11	1' RT. ℄ SEWER SURVEY	1								
A-314	30+60.65	6' LT. ℄ HOMEWOOD			1						
A-483	33+30	6' LT. ℄ HOMEWOOD			1						
A-484	47+89	14' RT. ℄ INDIANOLA									1
A-485	47+89	14' LT. ℄ INDIANOLA									1
TOTAL			3	4	2	4	1	1	1	1	2

ITEM 603 - CONDUITS - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SHT Nº	TYPE C-B 24"	42"	TYPE B-B 12"	15"	18"	30"	706.02 CL II 36"	706.02 CL III 36"	706.02 C.S.P. 36"	706.02 CL IV 30"	706.08 E.S. 30"	706.08 E.S. 33"	706.02 IV 36" *	C-B 706.02 CL. II OR 706.08 36"
P-57A	690+00	A-81	347											69			
P-62	A-62	A-63	346					275									
P-64	A-67	A-64	346				25										
P-65	A-64	A-65	346				105										
P-67	A-67	A-68	111						67								
P-68	A-67	A-70	111						65								
P-69	A-68	A-69	346		50												
P-70	A-74	A-70	346										214				
P-76	A-76	700+00	347													143	
P-81	A-81	A-82	347											248			
P-82	A-82	A-83	347												202		
P-83	A-83	A-76	347										236				
P-84	A-84	A-362	346				55										
P-85	A-85	A-362	346				49										
P-368	A-368	H-368	346														54
P-314	A-314	A-368	346							344							
P-74	A-74	A-314	346							55							
P-484	A-484	AJ-77	347				40										
P-485	A-485	AJ-77	347				40										
P-362	A-362	A-364	346				72										
P-483	A-483	A-314	346							269							
TOTAL				50		256	130	215	132	668	236	214	317	202	143		54

\# W-COMPRESSION JOINTS

* W-BITUMINOUS COATING FOR COMINATION SEWERS

ITEM 602 - MASONRY - CUBIC YARDS

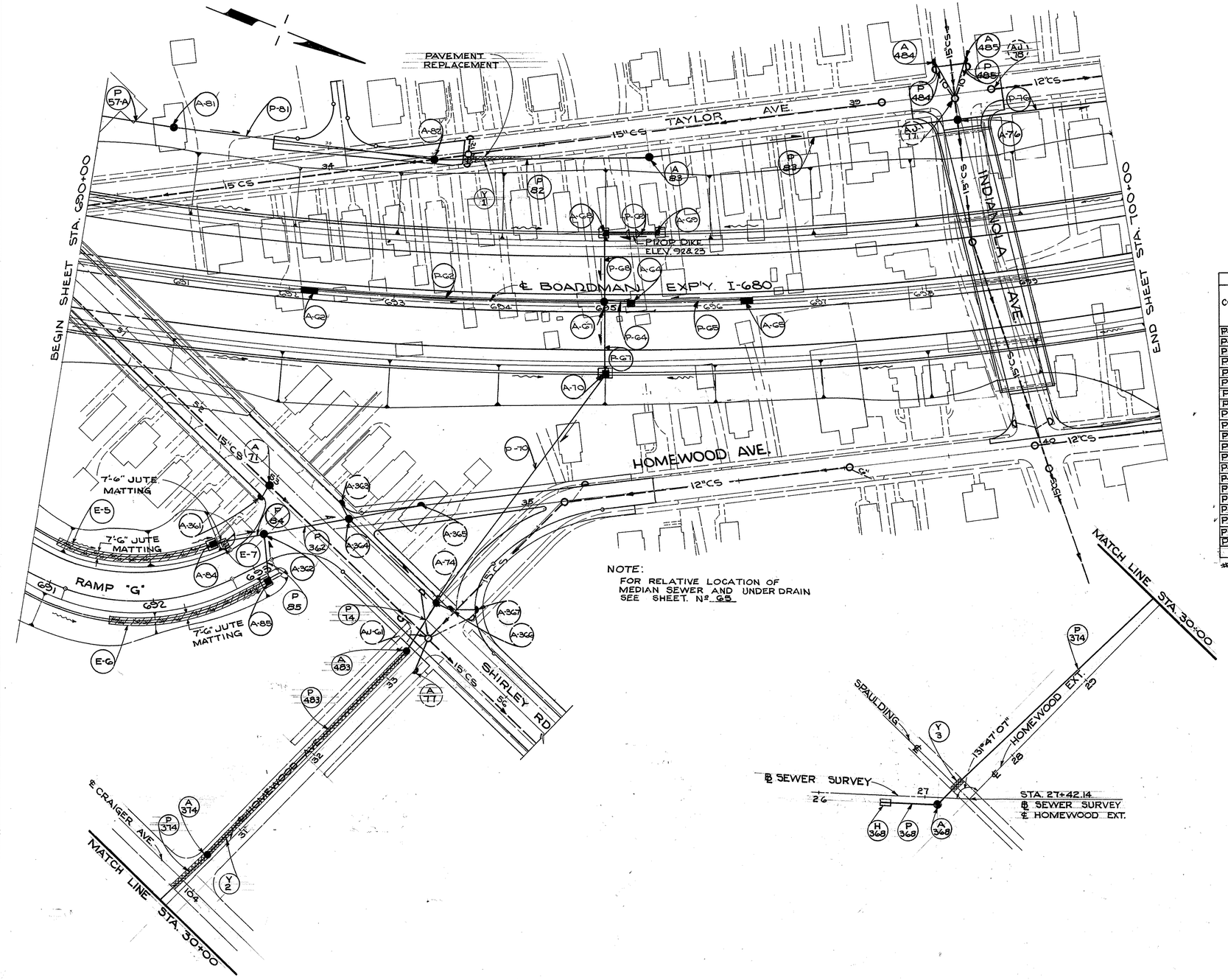
CODE	STATION	LOCATION	HW-E CRADLE
H-368	26+57	1' RT. ℄ SEWER SURVEY	0.76

EROSION CONTROL

CODE	STATION FROM	STATION TO	667 - S.Y. JUTE MATTING
E-5	690+90 (G)	692+71 (G)	125
E-6	691+60 ("G")	693+00 ("G")	125
E-7	692+85	28' LT. RAMP "G"	8
TOTAL			258

PAVEMENT REPLACEMENT

CODE	LOCATION	PROPOSED CONDUIT	1¼" 404 C.Y.	8" 305 S.Y.
Y-1	TAYLOR AVE.	P-82	0.80	22.98
Y-2	HOMEWOOD AVE	P-374, P-483	11.56	332.73
Y-3	SPAULDING AVE.	P-374	0.67	19.32
TOTAL			13.03	375.03



0 25 50 100 150

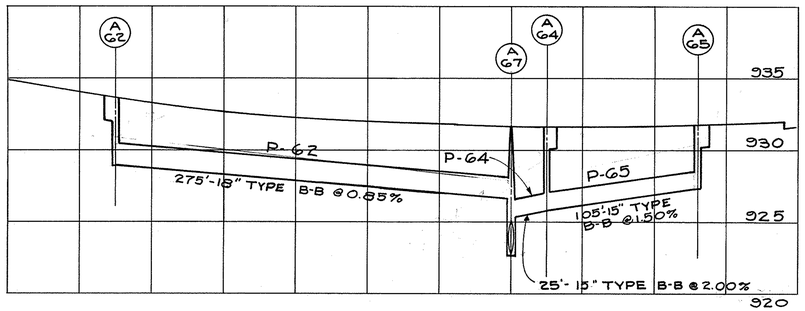
MAY 25 1971
R.R.C. 8/20/68
PJD 8/30/68

DRAINAGE PLAN
STA. 690+00 TO STA. 700+00

FED. RD.	STATE	PROJECT	
2	OHIO		

346
656

MAH-680.-6.98



A-483
604 Nº2 M.H. W/o DROP
STA. 30+30
6' LT. ℄ HOMEWOOD AVE.
COVER ELEV.= 930.00
℄ 36" 917.23

A-374
604 Nº 2 M.H. W/o DROP
STA. 30+60.65
6' LT. ℄ HOMEWOOD AVE.
COVER ELEV. 930.01
℄ 36" 915.25

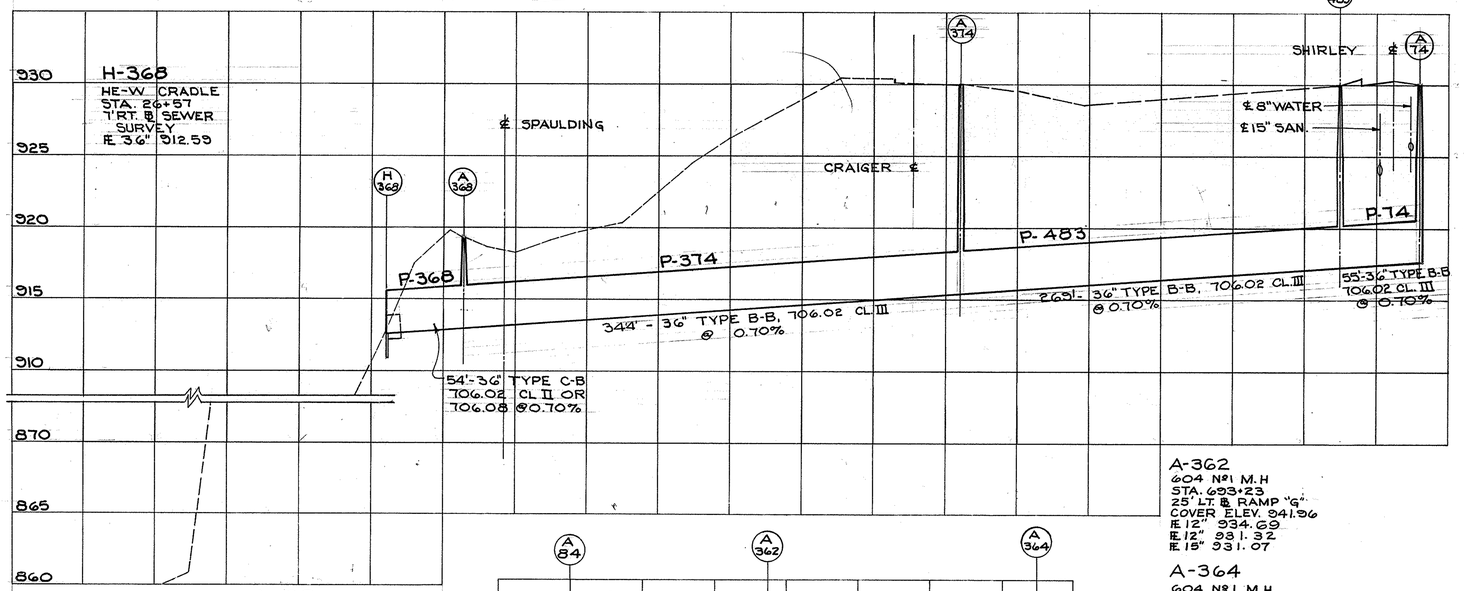
A-62
604 Nº 2A-16 (MOD.) INLET
STA. 692+25
1.67' RT. ℄
RT. TOP ELEV.= 933.53
LT. TOP ELEV.= 933.67
RT. WINDOW ELEV.= 932.86
LT. WINDOW ELEV. 933.00
℄ 18"= 928.95

A-368
604 Nº 1 M.H.
STA. 27+11
7' RT. ℄ SEWER SURVEY
COVER ELEV. 919.30
℄ 36" 912.94

A-67
604 Nº 1 M.H.
STA. 695+00
7'-0" LT. ℄
COVER ELEV. 931.55
℄ 15" 925.28
℄ 18" 926.60
℄ 30" 922.63

A-64
604 Nº 2A-6 (MOD.) INLET
STA. 695+25 ℄
RT. TOP ELEV.= 931.45
LT. TOP ELEV.= 931.55
RT. WINDOW ELEV.= 930.78
LT. WINDOW ELEV.= 930.92
℄ 15"= 925.78

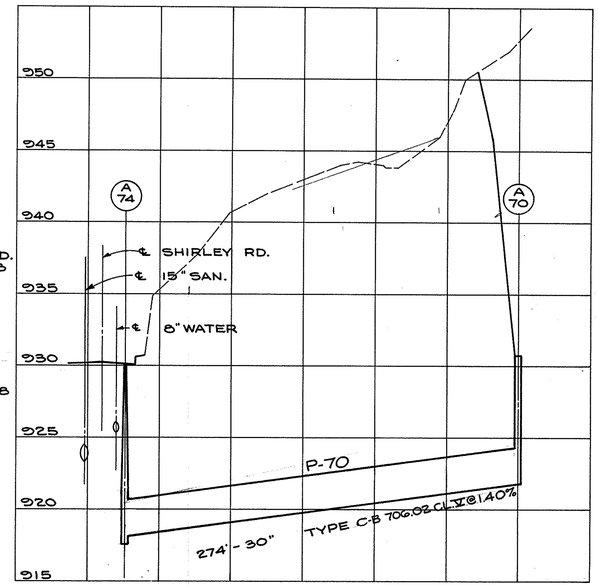
A-65
604 Nº 2A-14 (MOD.) INLET
STA. 696+30 ℄
RT. TOP ELEV.= 931.69
LT. TOP ELEV.= 931.83
RT. WINDOW ELEV.= 931.02
LT. WINDOW ELEV.= 931.16
℄ 15"= 927.36

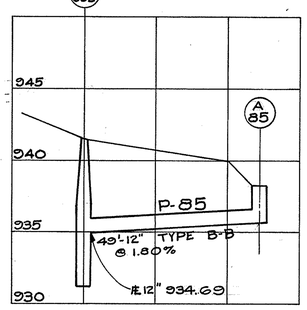


A-74
604 Nº 1 M.H.
STA. 54+30
18' LT. ℄ SHIRLEY RD.
COVER ELEV. 930.03
℄ 12" 923.47
℄ 15" 923.78
℄ 30" 918.12
℄ 36" 917.62

A-70
604 Nº 5A. C.B.
STA. 695+00
66' RT. ℄
GRATE ELEV. 930.78
℄ 30" 921.96

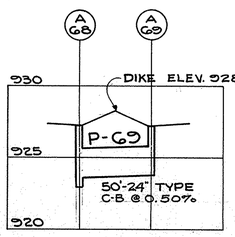
A-85
604 Nº 5 C.B.
STA. 693+07
18' RT. ℄ RAMP "G"
GRATE ELEV. 938.24
℄ 12" 935.57





A-362
604 Nº1 M.H
STA. 693+23
25' LT. ℄ RAMP "G"
COVER ELEV. 941.96
℄ 12" 934.69
℄ 12" 931.32
℄ 15" 931.07

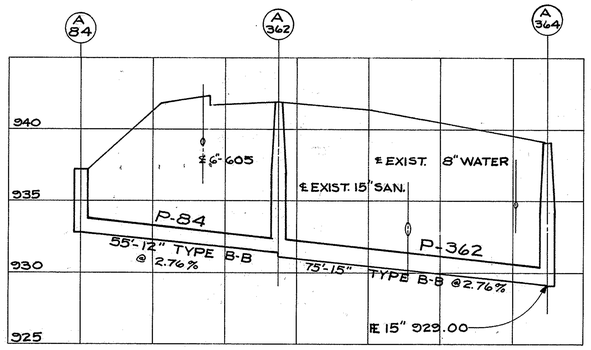
A-364
604 Nº 1 M.H.
STA. 53+76
18' LT. ℄ SHIRLEY RD.
COVER ELEV. 935.03
℄ 12" 931.24
℄ 12" 935.04
℄ 15" 929.00



A-68
604 Nº 5 C.B.
STA. 695+00
66' LT. ℄
GRATE ELEV. 927.23
℄ 24" 923.49
℄ 30" 922.99

A-69
604 Nº 5 C.B.
STA 695+50
66' LT. ℄
GRATE ELEV. 927.24
℄ 24" 923.74

A-84
604 Nº 5 C.B.
STA. 692+78
42.68' LT. ℄ RAMP "G"
GRATE ELEV. 937.17
℄ 12" 932.84



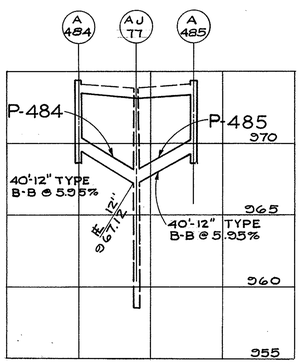
PIPE PROFILES THIS SHEET	
P -	62
P -	64
P -	65
P -	69
P -	70
P -	74
P -	84
P -	85
P -	362
P -	368
P -	374
P -	483

STA. 690+00 TO STA. 700+00
DRAINAGE PROFILES
BOARDMAN EXP.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

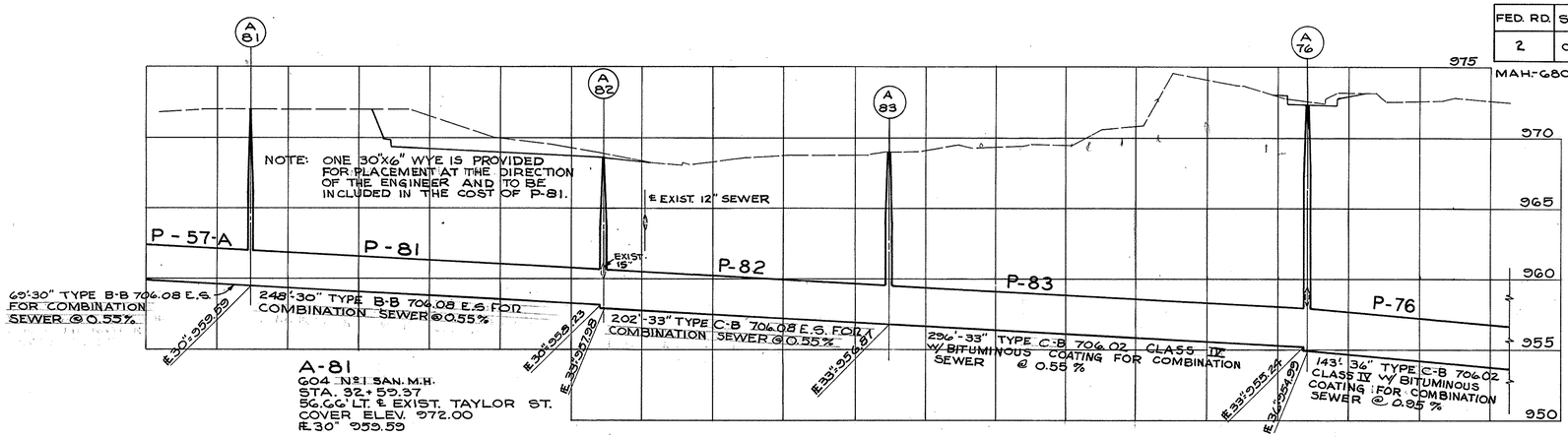
347
656



AJ-TT
EXIST. MANHOLE
STA. 48+24
℄ INDIANOLA AVE.
M.H. ADJUST TO GRADE
EXIST. COVER 973.92
PROP. COVER
℄ EXIST. 15" 958.52
℄ PROP 15" 958.52
℄ 12" 967.12
℄ 12" 967.12

A-484
604 C.O.Y. Nº 2 INLET
STA. 47+89
14' RT. ℄ INDIANOLA AVE.
TOP ELEV. 974.31
WINDOW ELEV. 973.56
℄ 12" 969.50

A-485
604 C.O.Y. Nº 2 M.H.
STA. 47+89
14' LT. ℄ INDIANOLA AVE.
TOP ELEV. 974.30
WINDOW ELEV. 973.55
℄ 12" 969.49



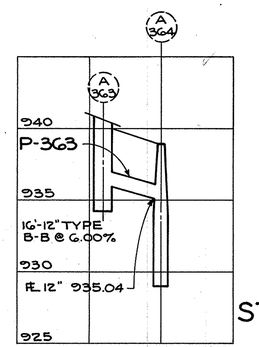
A-81
604 Nº1 SAN. M.H.
STA. 32+59.37
56.66' LT. ℄ EXIST. TAYLOR ST.
COVER ELEV. 972.00
℄ 30" 959.59

A-82
604 Nº1 SAN. M.H.
STA. 35+00
25' RT. ℄ EXIST. TAYLOR ST.
COVER ELEV. 968.61
℄ 30" 958.23
℄ EXIST. 15" 960.04
℄ 33" 957.98

A-83
604 Nº 1 SAN. M.H.
STA. 37+00
25' RT. ℄ EXIST. TAYLOR ST.
COVER ELEV. 969.2
℄ 33" 956.87

A-76
604 Nº 1 SAN. M.H.
STA. 39+36
25' RT. ℄ EXIST. TAYLOR ST.
COVER ELEV. 972.26
℄ 33" 955.24
℄ 36" 954.99
℄ 15" EXIST. 958.19

PIPE PROFILES THIS SHEET
P - 76
P - 81
P - 82
P - 83
P - 57-A
P - 363
- 76
71
364
P - 484
P - 485



A-363
C.O.Y. Nº1 STORM INLET
STA. 53+61
22' LT. ℄ SHIRLEY RD.
COVER ELEV. 940.50
WINDOW ELEV. 939.75
℄ 12" 936.00

A-364
604 Nº1 M.H.
STA. 53+76
18' LT. ℄ SHIRLEY RD.
COVER ELEV. 939.03
℄ 15" 929.00
℄ 12" 935.04
℄ 12" 931.24

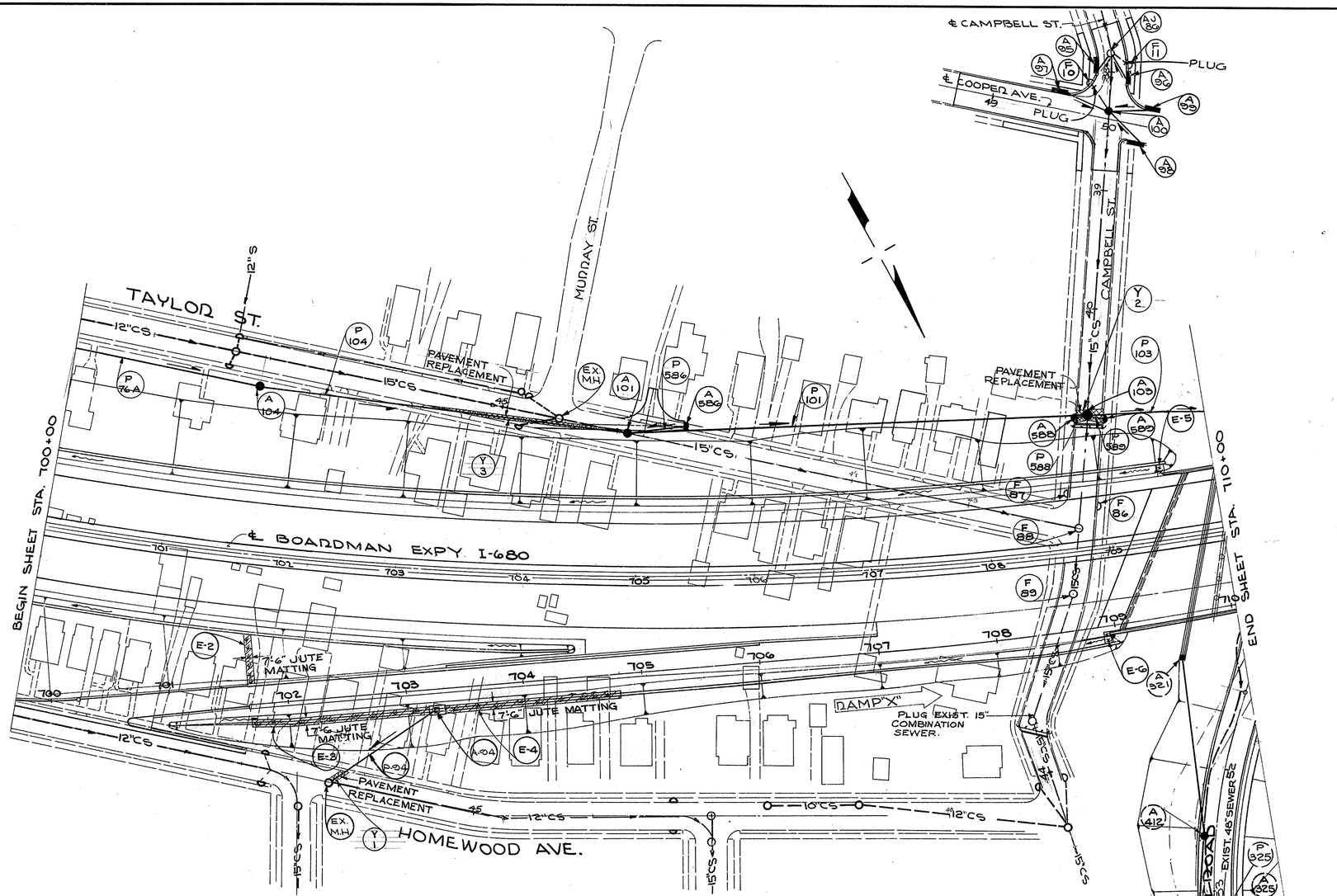
MAY 25 1971

STA. 690+00 TO STA. 700+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.98

348
656



ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH									
CODE	STATION	LOCATION	№1 SAN. M.H.	№1 SAN. M.H. W/DROP	№3 C.B.		2A-8 MOD II	2A-12 MOD II	2A-14 MOD II	C.&Y. №11
A-94	703+25	18'RT. ℄ RAMP "X"			1					
A-95	37+98.88	12'RT. ℄ CAMPBELL						1		
A-96	38+06.37	12.5'LT. ℄ CAMPBELL						1		
A-97	40+60.60	13.5'LT. ℄ COOPER							1	
A-98	709+81	14'RT. ℄ RAMP "E"							1	
A-99	709+81	14'LT. ℄ RAMP "E"					1			
A-100	40+99.14	7'LT. ℄ COOPER	1							
A-101	46+09	℄ EXIST. TAYLOR		1						
A-103	40+90	℄ EXIST. CAMPBELL		1						
A-104	42+96	25'RT. ℄ EX. TAYLOR	1							
A-586	46+56	℄ PROP TAYLOR								1
A-588	40+92	12'RT. ℄ EX. CAMPBELL								1
A-589	40+92	12'LT. ℄ EX. CAMPBELL								1
SHEET TOTAL			2	2	1		1	2	2	3

ITEM 603 - CONDUITS - LINEAR FEET						
CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T №2	TYPE C-B 36" 706.02 CL. IV *	TYPE C-B 36" 706.02 CL. V *	TYPE B-B 12"	TYPE B-B 36" IV* 706.02
P-76A	700+00	A-104	345	157			
P-94	A-94	EX. M.H.				111	
P-95	AJ-86	A-95				21	
P-96	A-96	AJ-86				27	
P-97	A-97	A-100				39	
P-98	A-98	A-100				43	
P-99	A-99	A-100				38	
P-101	A-101	A-103			392		
P-103	A-103	710+00			90		
P-104	A-104	A-101					314
P-586	A-101	A-586				43	
P-588	A-103	A-588				6	
P-589	A-103	A-589	345			21	
SHEET TOTAL				157	482	349	314

* W-BITUMINOUS COATING FOR COMBINATION SEWER

EROSION CONTROL				
CODE	STATION FROM	STATION TO	667 S.Y. JUTE MATTING	660 S.Y. SPEC. SLOPE PROTECT.
E-2	701+70	18'LT. ℄ RP "X"	38	
E-3	701+68	703+18 ("X")	125	
E-4	703+32	704+82 ("X")	125	
E-5	709+53	54'LT. ℄		7
E-6	708+93	61'RT. ℄		7
SHEET TOTAL			288	14

ITEM 604 - MANHOLES ADJUSTED TO GRADE			
CODE	STATION	LOCATION	EACH
AJ-86	37+83	1'LT. ℄ CAMPBELL	1

ITEM 604 - FLAP GATE - EACH		
STATION	LOCATION	12"
43+73.89	℄ HOMEWOOD	1

ITEM 202 - MANHOLES & INLETS REMOVED EA.				
CODE	STATION	LOCATION	M.H.	INLET
F-10	38+10	15'RT. ℄ CAMPBELL		1
F-11	37+94	13'LT. ℄ CAMPBELL		1
F-86	41+66	13'LT. ℄ CAMPBELL		1
F-87	41+57	13'RT. ℄ CAMPBELL		1
F-88	42+86.80	℄ CAMPBELL	1	
F-89	43+42.60	℄ CAMPBELL	1	
SHEET TOTAL			2	4

PAVEMENT REPLACEMENT				
CODE	LOCATION	PROPOSED CONDUIT	1¼"-404 C.Y.	8"-305 S.Y.
Y-1	HOMEWOOD	P-94	0.30	8.62
Y-2	CAMPBELL	P-102, P-103, P-588, P-589	0.75	21.47
Y-3	TAYLOR	P-104	5.48	157.78
		SHEET TOTAL	6.53	187.87

0 25 50 100 150

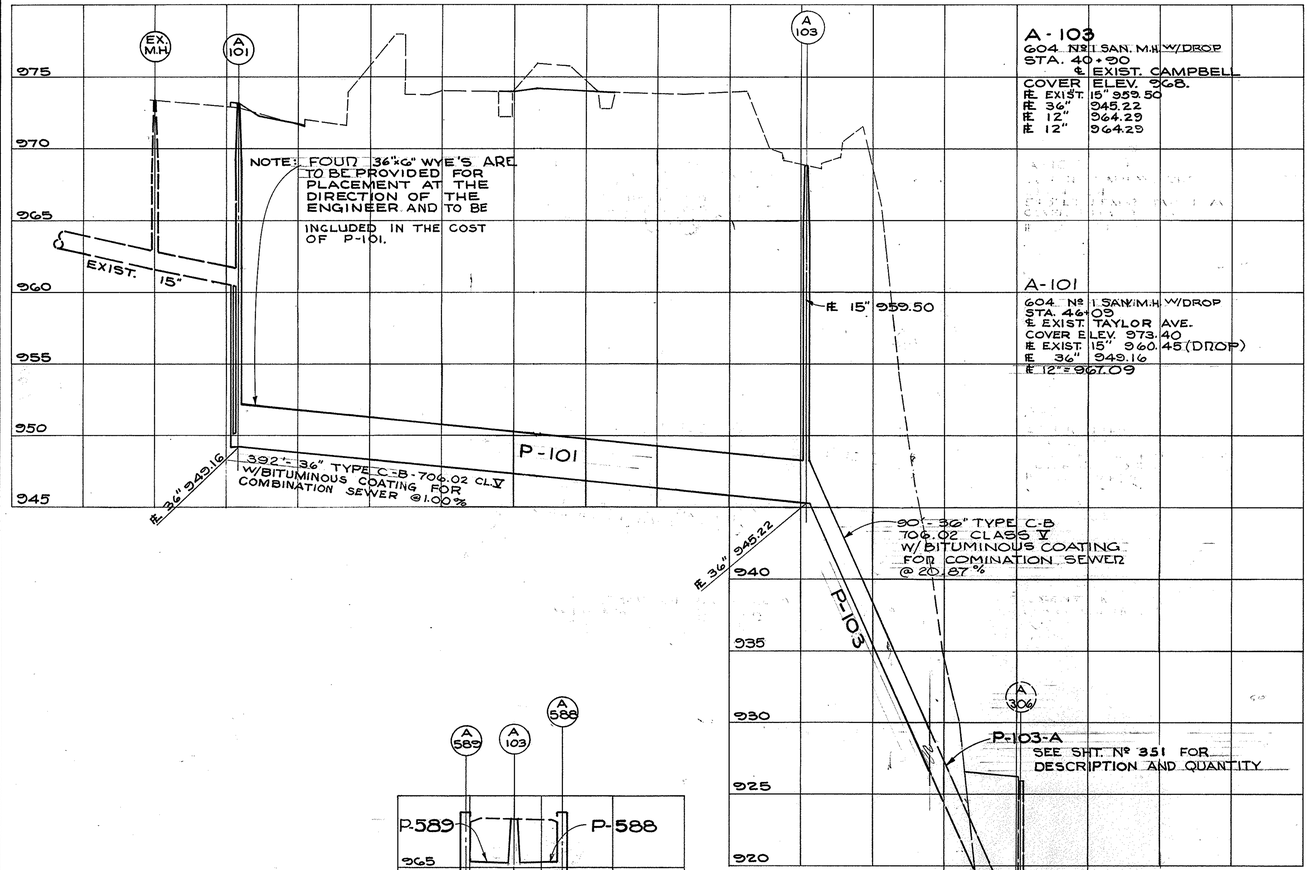
MAY 25 1971
R.R.C. 8/21/68
PWD 8/30/68

DRAINAGE PLAN
STA. 700+00 TO STA. 710+00

FED. RD	STATE	PROJECT	
2	OHIO		

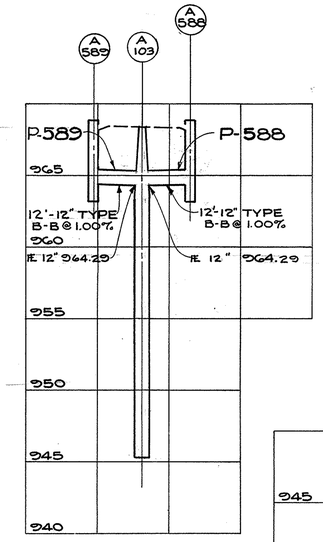
MAH-680-6.98

349
656



A-103
604 Nº 1 SAN. M.H. W/DROP
STA. 40+90
℄ EXIST. CAMPBELL
COVER ELEV. 968.
℄ EXIST. 15" 959.50
℄ 36" 945.22
℄ 12" 964.29
℄ 12" 964.29

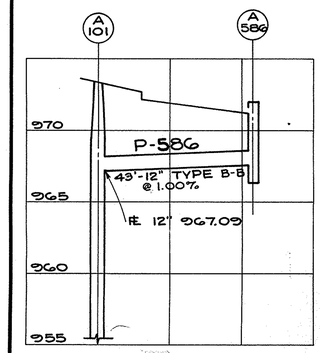
A-101
604 Nº 1 SAN. M.H. W/DROP
STA. 46+09
℄ EXIST. TAYLOR AVE.
COVER ELEV. 973.40
℄ EXIST. 15" 960.45 (DROP)
℄ 36" 945.16
℄ 12" = 967.09



A-588
C.O.Y. Nº 2 ST. INLET
STA. 40+92
12' RT. ℄ CONST. EXIST. CAMPBELL
TOP ELEV. 968.91
WINDOW ELEV. 968.16
℄ 12" 964.41

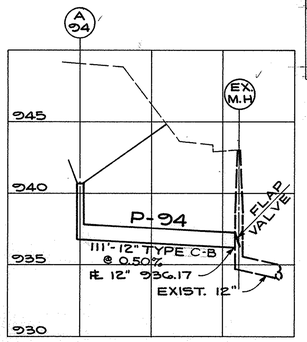
A-589
C.O.Y. Nº 2 ST. INLET
STA. 40+92
12' LT. ℄ CONST. EXIST. CAMPBELL
TOP ELEV. 968.91
WINDOW ELEV. 968.16
℄ 12" 964.41

A-104
604 Nº 1 SAN. M.H.
STA. 42+96
25' RT. ℄ EXIST. TAYLOR AVE.
COVER ELEV. 971.3
℄ 36" 952.14



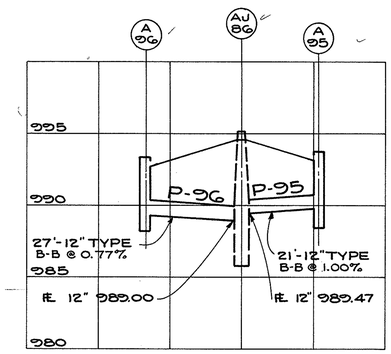
A-586
C.O.Y. Nº 2 ST. INLET
STA. 46+56
℄ PROP. TAYLOR AVE.
TOP ELEV. 972.02
WINDOW ELEV. 971.35
℄ 12" 967.52

EX. M.H.
EXIST. MANHOLE
STA. 43+13.89
℄ HOMEWOOD
TOP ELEV. 943.08
℄ EXIST. 12" 934.73
℄ PROP. 12" 936.17



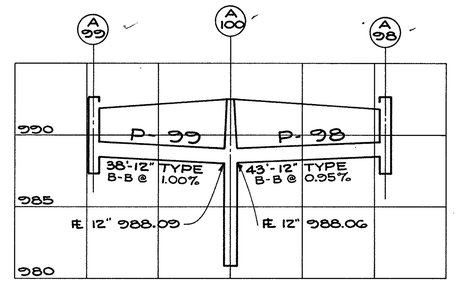
A-94
604 Nº 5 C.B.
STA. 703+25
18' RT. ℄ RAMP 'X'
GRATE ELEV. 940.75

℄ 12" 936.73



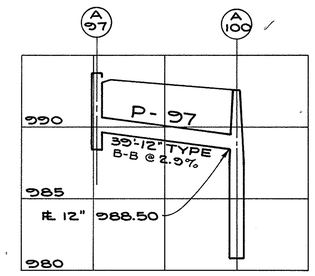
AU-86
MANHOLE ADJUSTED TO GRADE
STA. 37+83
1' LT. ℄ CAMPBELL
EXIST. TOP ELEV. 995.12
PROP. TOP ELEV. 994.59
℄ EXIST. 15" 985.72
℄ 12" 989.47
℄ 12" 989.00

A-95
Nº 2A-12 MOD. TYPE II
PAVED SHLDR. INLET
STA. 37+98.88
12' RT. ℄ CAMPBELL
TOP ELEV. 993.77
WINDOW ELEV. 993.10
℄ 12" 989.68



A-96
Nº 2A-12 MOD. TYPE II
PAVED SHLDR. INLET
STA. 38+06.37
12.5' LT. ℄ CAMPBELL
TOP ELEV. 993.30
WINDOW ELEV. 992.63
℄ 12" 989.21

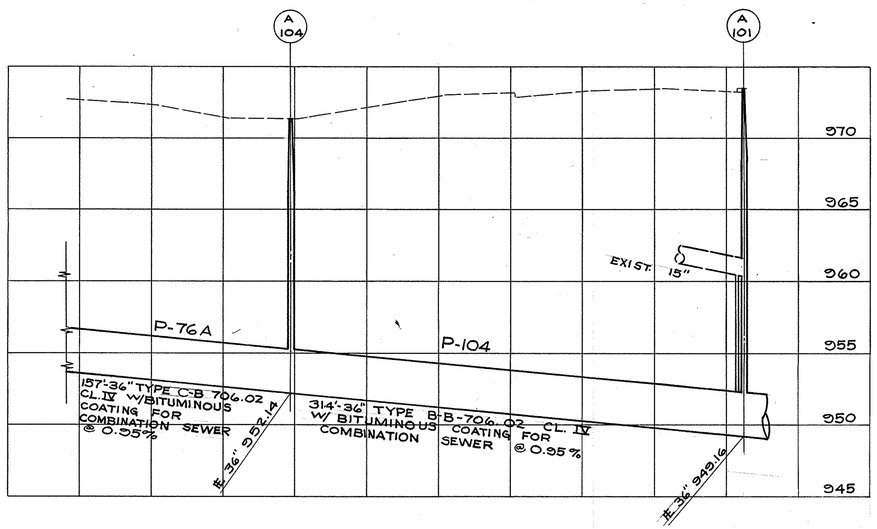
A-98
Nº 2A-14 MOD. TYPE II
PAVED SHLDR. INLET
STA. 709+81
14' RT. ℄ RAMP "E"
TOP ELEV. 992.56
WINDOW ELEV. 991.89
℄ 12" 988.47



A-97
Nº 2A-14 MOD. TYPE II
PAVED SHLDR. INLET
STA. 49+60.60
13.5' LT. ℄ COOPER
TOP ELEV. 993.73
WINDOW ELEV. 993.06
℄ 12" 989.64

A-99
Nº 2A-8 MOD. TYPE II
PAVED SHLDR. INLET
STA. 709+81
14' LT. ℄ RAMP "E"
TOP ELEV. 992.56
WINDOW ELEV. 991.89
℄ 12" 988.47

A-100
STD. Nº 1 SAN. M.H.
STA. 49+99.14
7' LT. ℄ COOPER
COVER ELEV. 992.51
℄ EXIST. 15" 981.48
℄ 12" 988.09
℄ 12" 988.06
℄ 12" 988.50



PIPE PROFILES THIS SHEET	
P -	76A
P -	94
P -	95
P -	96
P -	97
P -	98
P -	99
P -	101
P -	103
P -	104
P -	586
P -	588
P -	589

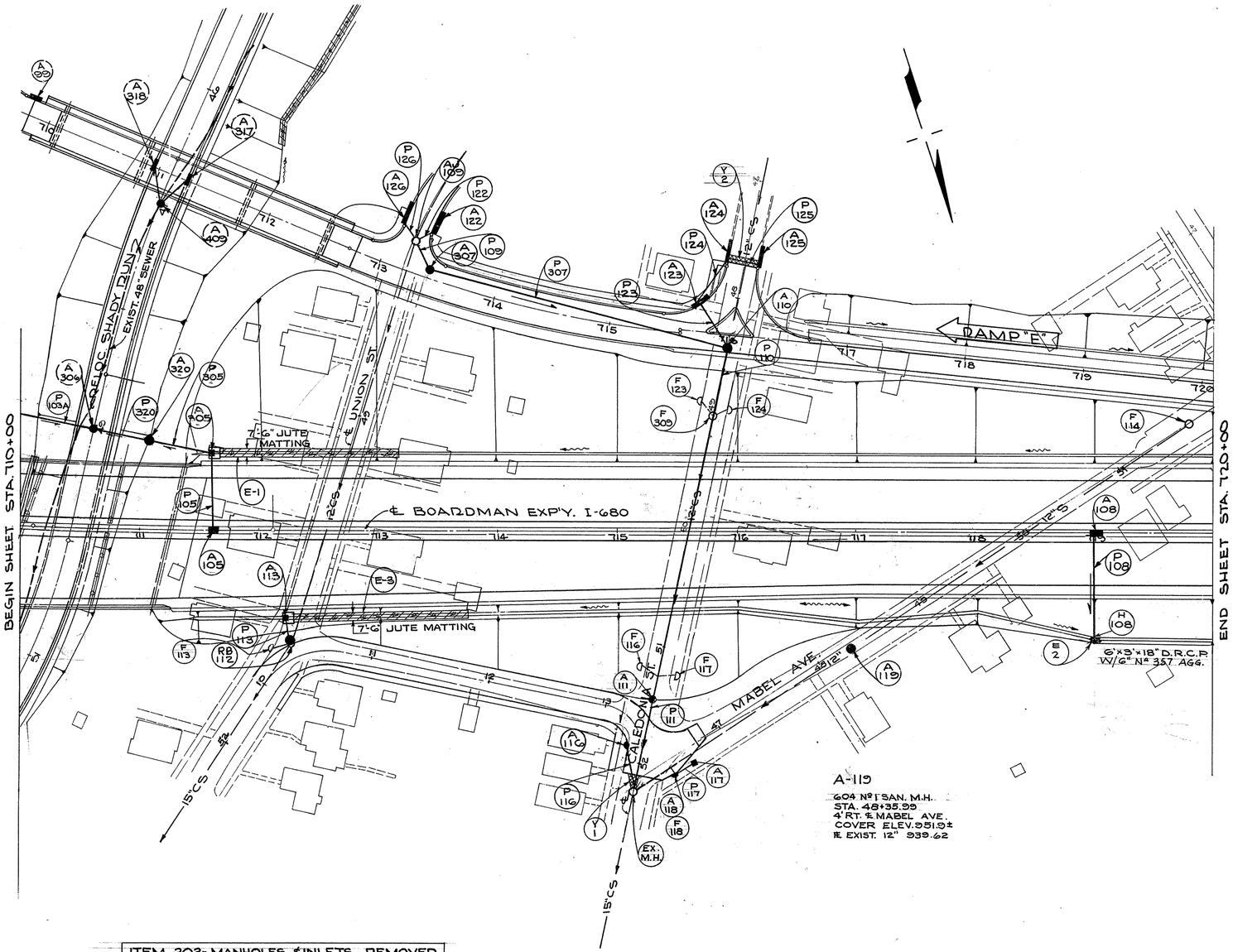
STA. 700+00 TO STA. 710+00
DRAINAGE PROFILES
BOARDMAN EXP.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

350
656

MAH-680-6.98



ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	Nº 1 M.H.	Nº 1 SAN. M.H.	Nº 5 C.B.	Nº 2-2A C.B.	Nº 2A-12 MOD. C.B.	Nº 2A-10 MOD. C.B.	Nº 2A-16 MOD.	Nº 2A-18 MOD.	Nº 2A-20 MOD.	Nº 1 SANM.H. W/2 DROPS
A-105	711+60	℄					1					
A-108	719+00	℄						1				
A-110	716+02	11' RT. ℄ RAMP "E"										1
A-111	51+42	℄ CALEDONIA		1								
A-113	712+20	74' RT. ℄			1							
A-116	13+50	12' RT. ℄ MABEL CONN.				1						
A-117	46+66	14' RT. ℄ MABEL AVE.				1						
A-118	52+03	30' LT. ℄ CALEDONIA				1						
A-119	48+35.99	4' RT. ℄ MABEL AVE.		1								
A-122	47+34	16' LT. ℄ UNION ST.								1		
A-123	715+61	15.5' LT. ℄ RAMP "E"										1
A-124	47+69	12' RT. ℄ CALEDONIA								1		
A-125	47+69	12.5' LT. ℄ CALEDONIA								1		
A-126	47+34	8' RT. ℄ UNION ST.								1		
A-305	711+60	66' LT. ℄			1							
A-307	713+42	7' LT. ℄ RAMP "E"		1								
A-320	48+95	48' LT. ℄ REL. SHADY RUN	1									
SHEET TOTAL			1	3	2	1	2	1	1	3	1	1

ITEM 603 - CONDUITS - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SHEET NO.	TYPE B-B 12"	15"	15" * 706.08	15" * 706.02 CL. V	TYPE C-B 12"	15"	36" 706.02 CL. II *
P-103A	710+00	A-306	351							72
P-105	A-105	A-305	351		66					
P-108	A-108	H-108	119		86					
P-109	AJ-109	A-307	352			29				
P-110	A-110	A-111	352				300			
P-111	A-111	EX. M.H.	352			82				
P-113	A-113	RB-112	351					21		
P-116	A-116	EX. M.H.	351	40						
P-117	A-117	A-118	352					20		
P-122	A-122	AJ-109	352	16						
P-123	A-123	A-110	351	45						
P-124	A-124	A-123	351					50		
P-125	A-125	A-124	351	26						
P-126	A-126	AJ-109	352	18						
P-305	A-305	A-320	351						56	
P-307	A-307	A-110	352			258				
P-320	A-306	A-320	351		50					
SHEET TOTAL				145	202	369	300	91	56	72

*W/ BITUMINOUS COATING
#W/ COMPRESSION JOINTS

ITEM 604 - MANHOLES RECONSTRUCTED TO GRADE -

CODE	STATION	LOCATION	EACH
RB-112	50+38.46	℄ UNION	1

ITEM 604 - MANHOLES, CATCH BASINS & INLETS ADJUSTED TO GRADE - EACH

CODE	STATION	LOCATION	M. H.
AJ-109	47+45	℄ UNION	1
SHEET TOTAL			1

ITEM 602 - MASONRY - CU. YDS.

CODE	STATION	LOCATION	HW-E
H-108	719+00	86' RT. ℄	0.26

ITEM 202 - MANHOLES & INLETS REMOVED

CODE	STATION	LOCATION	M.H. EACH	INLET EACH
F-113	10+24	16' LT. ℄ MABEL CON.		1
F-114	51+71	℄ MABEL AVE	1	
F-116	51+20	12' RT. ℄ CALEDONIA		1
F-117	51+20	12' LT. ℄ CALEDONIA		1
F-118	52+03	30' LT. ℄ CALEDONIA		1
F-123	48+90	12' RT. ℄ CALEDONIA		1
F-124	48+93	12' LT. ℄ CALEDONIA		1
F-309	49+00	℄ CALEDONIA	1	
SHEET TOTAL			2	6

ITEM 604 - FLAP GATE - EACH

STATION	LOCATION	M.H. Nº	12"	15"
52+22.5	℄ CALEDONIA	EX. M.H.	1	
47+43.52	1.0' LT. ℄ UNION	AJ-109	2	
716+02	10' RT. ℄ RAMP "E"	A-110	1	
50+38.46	℄ UNION	RB-112	1	
48+90	10 RT. ℄ REL. SHADY RUN	A-306		1
SHEET TOTAL			5	1

ITEM - PAVEMENT REPLACEMENT

CODE	LOCATION	PROPOSED CONDUIT	1¼"-404 C.Y.	8"-305 S.Y.
Y-1	CALEDONIA	P-116 & P-111	0.23	6.67
Y-2	CALEDONIA	P-125	——	11.78
TOTAL			0.23	18.45

EROSION CONTROL

CODE	STATION FROM	STATION TO	667 S.Y. JUTE MAT'G	601 C.Y. R.C.P.
E-1	711+67	713+17	125	
E-2	719+00	86' RT. ℄		1
E-3	712+26	713+76	125	
SHEET TOTAL			250	1

0 25 50 100 150

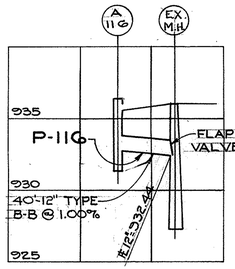
MAY 25 1971
R.R.C. 8/20/68
PWD 8/30/68

DRAINAGE PLAN
STA. 710+00 TO STA. 720+00

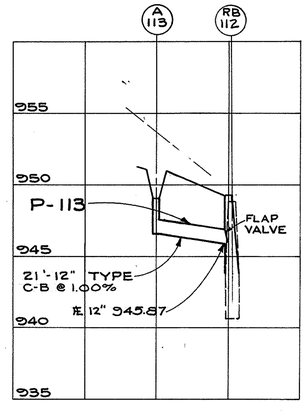
FED. RD	STATE	PROJECT	
2	OHIO		

351
656

MAH-680-6.98

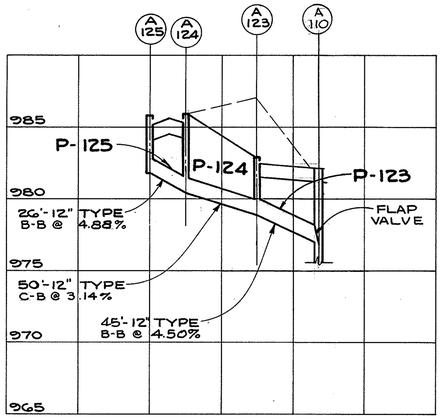


A-116
604 C.O.Y. TYPE II C.B.
STA. 13+50
12' RT. ℄ MABEL CONN.
TOP ELEV. 937.42
WINDOW ELEV. 930.65
℄ 12" 932.84



A-113
604 Nº 5 C.B.
STA. 712+20
74' RT. ℄
GRATE ELEV. 948.75
℄ 12" 946.08

RB-112
REBUILD M.H.
STA. 50+38.46 ℄ UNION
COVER ELEV. PROP. 949.29
COVER ELEV. EXIST. 948.78
℄ 12" 940.59
℄ 15" 940.59
℄ 12" 945.87

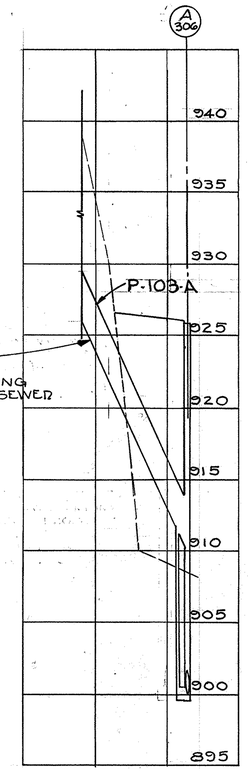


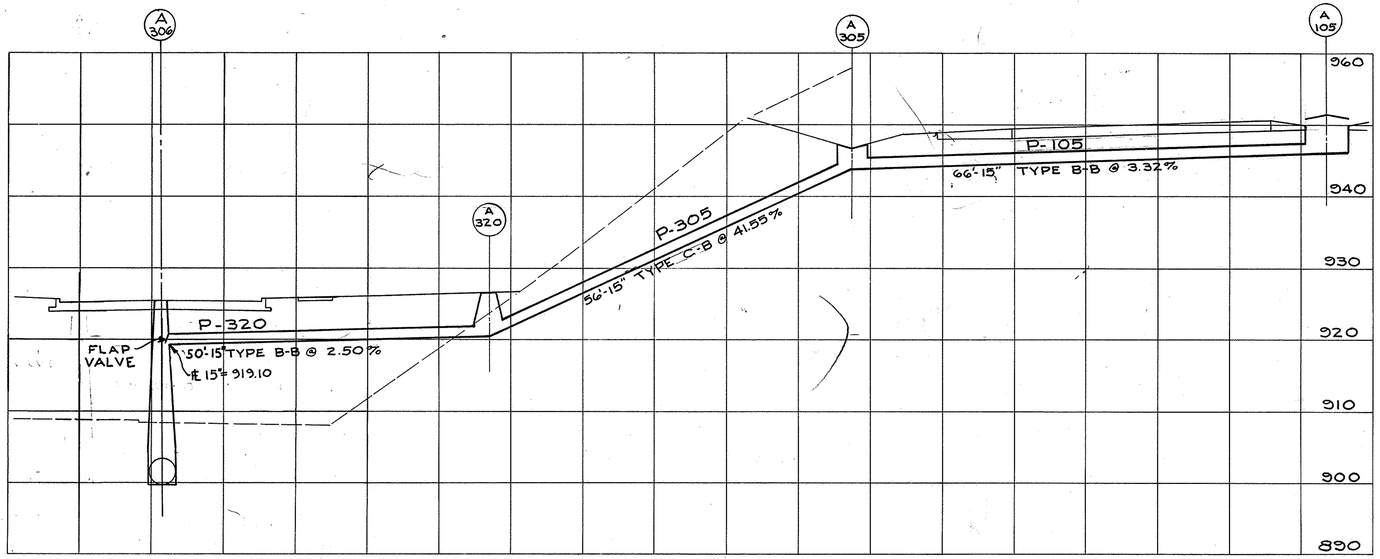
A-110
604 Nº 1 SAN. M.H. W/2 DROPS
STA. 716+02
11' RT. ℄ RAMP "E"
COVER ELEV. 982.06
℄ 12" 976.85
℄ 15" 957.42
℄ 15" 978.20

A-123
604 Nº 2A-20 MOD. TYPE I
STA. 715+61
15.5' LT. ℄ RAMP "E"
TOP ELEV. 982.96
WINDOW ELEV. 982.29
℄ 12" 978.88

A-124
604 Nº 2A-18 MOD. TYPE I
STA. 47+69
12' RT. ℄ CALEDONIA
TOP ELEV. 985.95
WINDOW ELEV. 985.28
℄ 12" 980.45

A-125
604 Nº 2A-18 MOD. TYPE I
STA. 47+69
12.5' LT. ℄ CALEDONIA
TOP ELEV. 985.80
WINDOW ELEV. 985.13
℄ 12" 981.72





A-306
604 Nº 2 SAN. M.H.
STA. 49+00 (℄ RELOC. SHADY RUN)
RIM ELEV.= 925.14
℄ 48" = 898.01
℄ 36" S.E.= 911.41
℄ 15" = 919.10
℄ 12" = 921.92

A-320
604 Nº 1 M.H.
STA. 48+95
48' LT. ℄ RELOC. SHADY RUN
COVER ELEV. 926.60
℄ 15" 920.35

A-305
604 Nº 5 C.B.
STA. 711+60
66' LT. ℄
GRATE ELEV. 946.54
℄ 15" 943.62

A-105
604 Nº 2A-12 MOD.
STA. 711+60 ℄
TOP ELEV 951.38
WINDOW ELEV. 949.47

℄ 15" 945.81

PIPE PROFILES THIS SHEET
P - 103A
P - 105
P - 113
P - 116
P - 123
P - 124
P - 125
P - 305
P - 320

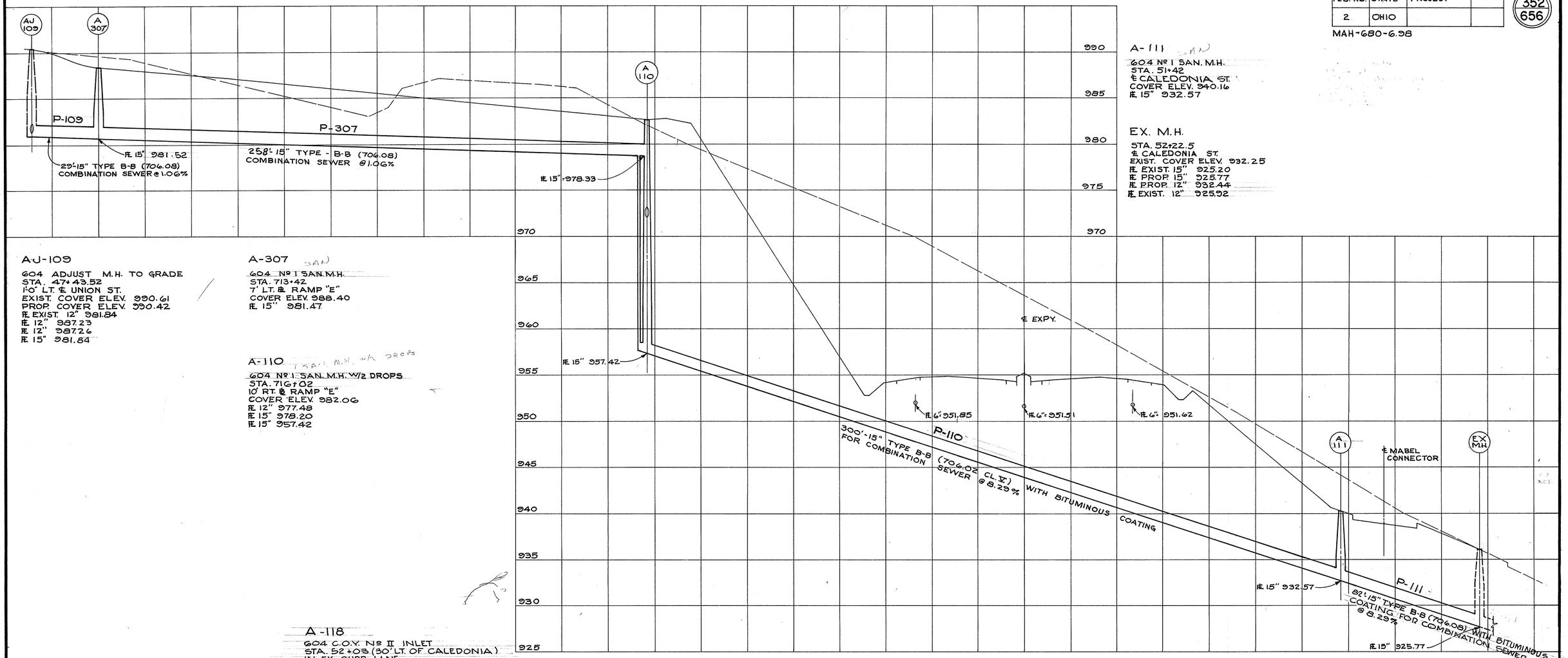
MAY 25 1971

STA. 710+00 TO STA. 720+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

352
656

MAH-680-6.98



A-111

604 Nº 1 SAN. M.H.
STA. 51+42
℄ CALEDONIA ST.
COVER ELEV. 940.16
FE 15" 932.57

EX. M.H.

STA. 52+22.5
℄ CALEDONIA ST.
EXIST. COVER ELEV. 932.25
FE EXIST. 15" 925.20
FE PROP. 15" 925.77
FE PROP. 12" 932.44
FE EXIST. 12" 925.92

A-109

604 ADJUST M.H. TO GRADE
STA. 47+43.52
1'-0" LT. ℄ UNION ST.
EXIST. COVER ELEV. 990.61
PROP. COVER ELEV. 990.42
FE EXIST. 12" 981.84
FE 12" 987.23
FE 12" 987.26
FE 15" 981.84

A-307

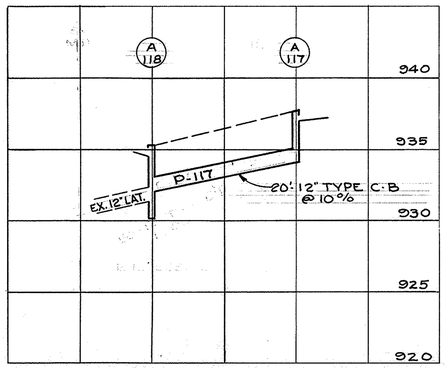
604 Nº 1 SAN. M.H.
STA. 713+42
7' LT. ℄ RAMP "E"
COVER ELEV. 988.40
FE 15" 981.47

A-110

604 Nº 1 SAN. M.H. W/2 DROPS
STA. 716+02
10' RT. ℄ RAMP "E"
COVER ELEV. 982.06
FE 12" 977.48
FE 15" 978.20
FE 15" 957.42

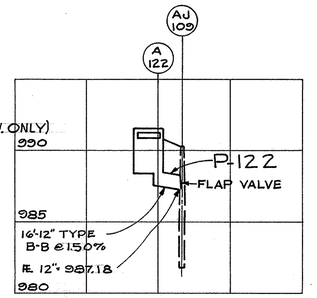
A-118

604 C.O.Y. Nº II INLET
STA. 52+03 (30' LT. OF CALEDONIA)
IN EX. CURB LINE
TOP - 935.29
WINDOW - 934.46
FE 12"(W) = 932.00 (PROP.)
FE 12"(S) = 931.39 (EX. LAT.)



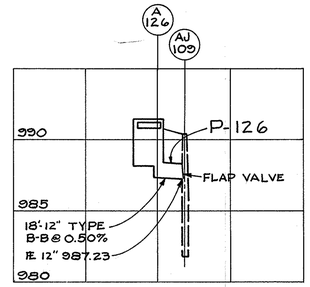
A-117

604 Nº 2-2A C.B.
STA. 46+66
14' RT. ℄ MABEL AVE.
WINDOW ELEV. = 936.90 (W. ONLY)
FE 12" = 934.00



A-122

604 Nº 2A-18 MOD. TYPE I
STA. 47+34
16' LT. ℄ UNION ST.
TOP ELEV. 991.50
WINDOW ELEV. 990.83
FE 12" 987.42



A-126

604 Nº 2A-16 MOD. TYPE I
STA. 47+34
8' RT. ℄ UNION ST.
TOP ELEV. 991.40
WINDOW ELEV. 990.73
FE 12" 987.32

PIPE PROFILES THIS SHEET
P - 109
P - 110
P - 111
P - 117
P - 122
P - 126
P - 307

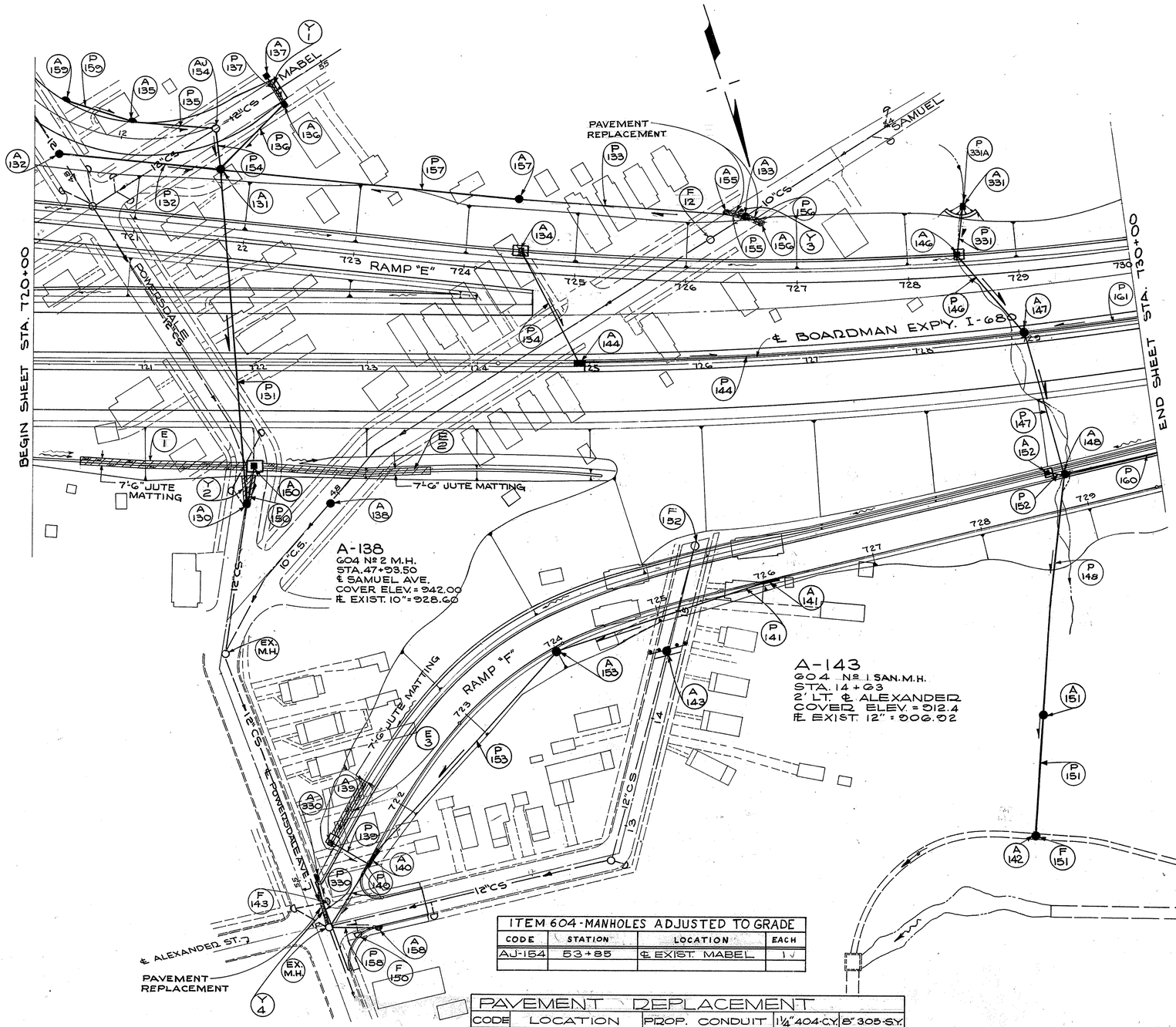
MAY 25 1971

STA. 710+00 TO STA. 720+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

353
656

MAH-680-6.98



ITEM 603-CONDUITS-LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SHT.	TYPE B-B 12"	18"	21"	24"	706.02 CL III 21"	706.02 CL. V 15"	706.02 CL. V 21"	TYPE C-B 706.08 12" E.S.	12" S	15" E.S.	706.02 12"	CL IV 15"	21"
P-131	A-131	A-130	355						303							
P-132	A-132	A-131	355									147				
P-133	A-133	A-157	355										204			
P-134	A-134	A-144	356		111											
P-135	A-135	AJ-154	355	72												
P-136	A-136	A-131	355											83		
P-137	A-137	A-136	355	28												
P-138	A-138	A-140	355	40												
P-140	A-140	EX. M.H.	355	70												
P-141	A-141	A-153	354											198		
P-144	A-144	A-147	356					410								
P-150	A-150	A-130	354	35												
P-146	A-146	A-147	356			102										
P-147	A-147	A-148	356							125						
P-148	A-148	A-151	355					220								
P-153	A-153	A-140	354													255
P-181	A-142	A-151	355											110		
P-152	A-152	A-148	354											14		
P-154	AJ-154	A-131	355								39					
P-155	A-155	A-133	354	21												
P-156	A-156	A-133	354	25												
P-157	A-157	A-131	355													267
P-158	A-158	EX. M.H.	354	47												
P-159	A-159	A-135	354											63		
P-160	A-148	730+00	354											88		
P-161	A-147	730+00	356				100									
P-330	A-330	EX. M.H	354	45												
P-331	A-331	A-146	356												43	
P331A	PLUG	A-331	356												4	
TOTAL				384	111	102	100	630	303	125	39	147	204	446	157	255	267

✳ W-BITUMINOUS COATING FOR COMBINATION SEWERS

BOX "A" ITEM 604-MANHOLES, CATCH BASINS & INLETS-EACH

CODE	STATION	LOCATION	Nº1 M.H.	Nº1 SAN. M.H.	Nº 5 C.B.	Nº2-2A C.B.	Nº 2A-8 MOD. INLET	Nº2A-14 MOD. TYPE I INLET	C.O.Y. Nº I	C.O.Y. Nº II	Nº 2 W/O DROP
A-132	47+76	℄ EXIST. POWERSDALE		1							
A-133	52+50	℄ SAMUEL		1							
A-134	724+50	18.5' LT. ℄ RAMP "E"			1						
A-135	12+25	15' LT. ℄ MABEL CONN.								1	
A-136	54+50	15' RT. ℄ MABEL				1					
A-137	54+50	14' LT. ℄ MABEL				1					
A-138	721+40	40' LT. ℄ RAMP "F"			1						
A-140	721+40	℄ RAMP "F"						1			
A-141	726+00	℄ RAMP "F"						1			
A-144	724+00	℄				1					
A-153	724+00	3' RT. ℄ RAMP "F"	1								
A-146	728+40	77' LT. ℄			1						
A-147	720+00	1.5' RT. ℄									1
A-148	728+84	31' LT. ℄ RAMP "F"	1								
A-150	722+00	55' RT. ℄			1						
A-151	728+15	177' RT. ℄ RAMP "F"	1								
A-152	720+70	34.5' LT. ℄ RAMP "F"			1						
A-155	52+33	12' LT. ℄ SAMUEL								1	
A-156	52+72	12' RT. ℄ SAMUEL								1	
A-157	724+50	66' LT. ℄ RAMP "E"		1							
A-158	10+53.18	12.5' RT. ℄ ALEXADER								1	
A-159	11+50	15' LT. ℄ PWRS.-MAB. CONN								1	
A-330	99+61.35	14.5' LT. ℄ POWERSDALE								1	
A-331	728+53	62' LT. ℄ RAMP "E"		1							
A-142	727+81	279.5' RT. RAMP "F"									1
A-143	14+63	℄ ALEXANDER	1								
TOTAL			3	4	6	2	1	2	1	5	2

EROSION CONTROL

CODE	STATION FROM	STATION TO	66T S.Y. JUTE MATTING
E-1	720+43	721+93	125
E-2	722+07	723+57	125
E-3	721+47	722+00"F"	44
TOTAL			294

ITEM 604-FLAP GATES - EACH

STATIONS	LOCATION	M. H.	12"
12+87	43' RT. ℄ (P-140)	A-131 EXIST.	1 1
TOTAL			2

ITEM 604-MANHOLES ADJUSTED TO GRADE

CODE	STATION	LOCATION	EACH
AJ-154	53+85	℄ EXIST. MABEL	1

ITEM 604-MANHOLES- EACH BOX "B"

CODE	STATION	LOCATION	Nº1 SAN.M.H. W/3 DROPS	Nº1 SAN.M.H. W/ DROP
A-130	51+43.5	℄ POWERSDALE		1
A-131	12+76	43' RT. ℄ MABEL CONN	1	
TOTAL			1	1

PAVEMENT REPLACEMENT

CODE	LOCATION	PROP. CONDUIT	1¼" 404-C.Y.	8" 305-S.Y.
Y-1	MABEL	P-137	—	11.49
Y-2	POWERSDALE	P-131 & P-150	0.42	12.08
Y-3	SAMUEL	P-155 & P-156	0.84	24.13
Y-4	POWERSDALE	P-330	0.80	22.98
TOTAL			2.06	70.68

ITEM 202-MANHOLES & INLETS REMOVED

CODE	STATION	LOCATION	M.H.	INLETS
F-12	52+11	1.5' RT. ℄ SAMUEL	1	
F-143	720+93	14' LT. ℄ RAMP "F"		1
F-150	720+80	21' RT. ℄ RAMP "F"		1
F-151	727+85	280' RT. ℄ RAMP "F"	1	
F-152	15+62	℄ ALEXANDER	1	
TOTAL			3	2

0 25 50 100 150

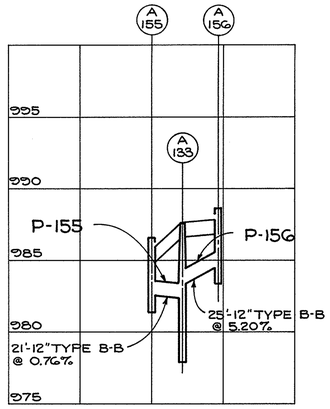
MAY 25 1971
R.R.C. 8/26/68
PWD 8/30/68

DRAINAGE PLAN
STA. 720+00 TO STA. 730+00

FED. RD.	STATE	PROJECT	
2	OHIO		

354
656

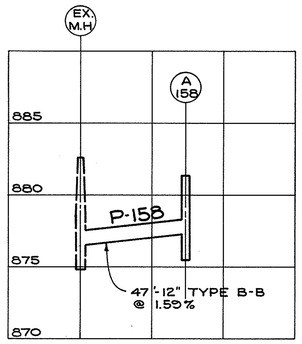
MAH-680-6.98



A-155
C.O.Y. Nº 2 C.B.
STA. 52+33
12' LT. ℄ SAMUEL
COVER EL. = 986.59
WINDOW EL. = 985.84
℄ 12" = 982.51

A-133
G04 Nº 1 SAN. M.H.
STA. 52+50
℄ SAMUEL
COVER EL. = 987.61
℄ EXIST. 10" = 978.31
℄ 12" = 982.35
℄ 12" = 983.22

A-156
C.O.Y. Nº 2 C.B.
STA. 52+72
12' RT. ℄ SAMUEL
COVER EL. = 988.60
WINDOW EL. = 987.85
℄ 12" = 984.52



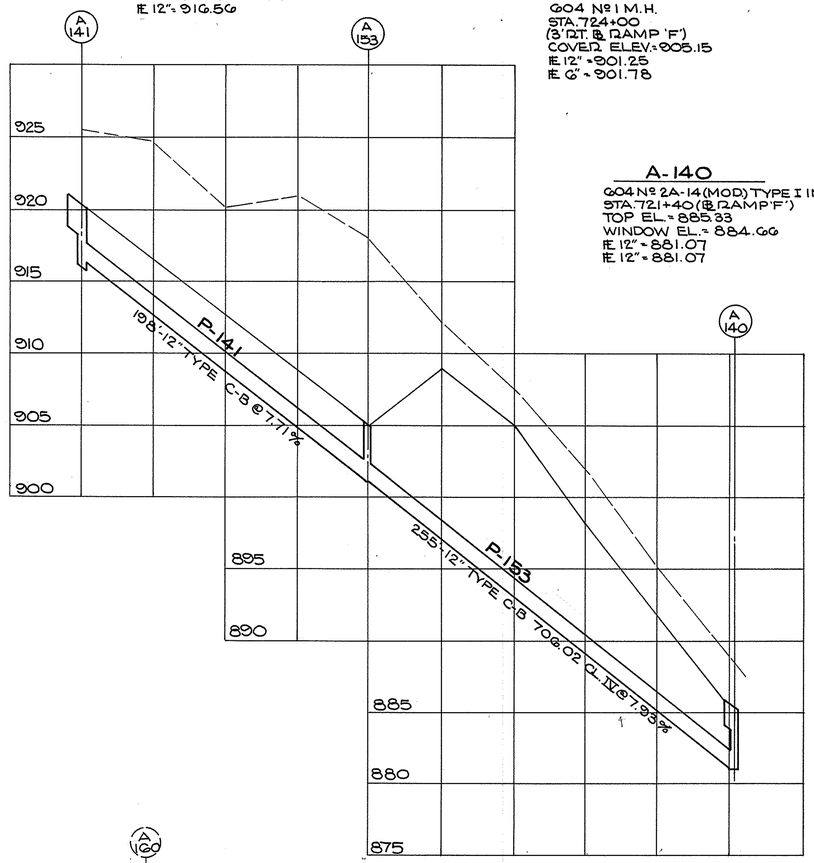
A-158
C.O.Y. Nº 2 INLET
STA. 10+53.18
12.5' RT. ℄ ALEXANDER
COVER EL. = 881.35
WINDOW EL. = 880.60
℄ 12" = 877.27

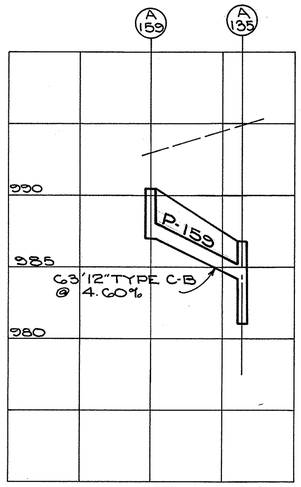
EX. M.H.
EXIST. M.H.
STA. 10+07.5
1.5' RT. ℄ ALEXANDER
RIM EL. = 882.55
℄ EXIST. 12" = 874.82
℄ EXIST. 12" = 874.95
℄ EXIST. 12" = 875.46
℄ 12" = 876.87
℄ 12" = 876.52
℄ 12" = 880.38

A-141
G04 Nº 2A-14 (MOD) TYPE I INLET
STA. 726+00 (℄ RAMP 'F')
TOP EL. = 920.41
WINDOW EL. = 919.74
℄ 12" = 916.56

A-153
G04 Nº 1 M.H.
STA. 724+00
(3' RT. ℄ RAMP 'F')
COVER ELEV. = 905.15
℄ 12" = 901.25
℄ 6" = 901.78

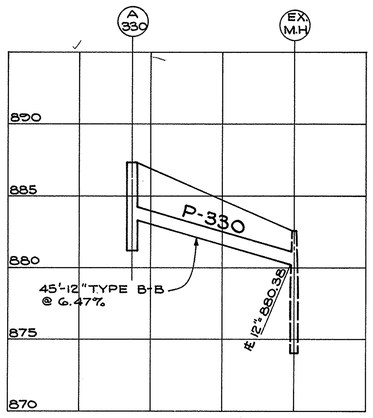
A-140
G04 Nº 2A-14 (MOD) TYPE I INLET
STA. 721+40 (℄ RAMP 'F')
TOP EL. = 885.33
WINDOW EL. = 884.66
℄ 12" = 881.07
℄ 12" = 881.07





A-159
C.O.Y. Nº 1 INLET
STA. 11+50
15' LT. ℄ POWERSDALE-MABEL CONN.
TOP EL. = 990.52
WINDOW EL. = 989.77
℄ 12" = 987.02

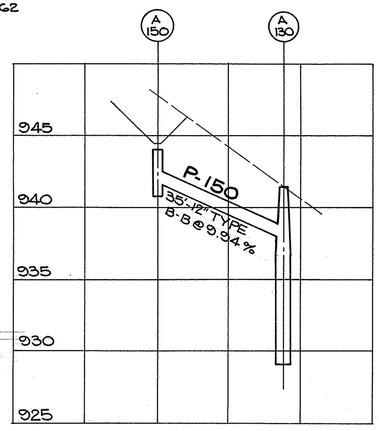
A-135
C.O.Y. Nº 2 INLET
STA. 12+25
15' LT. ℄ MABEL
TOP EL. = 987.00
WINDOW EL. = 981.12
℄ 12" = 984.12
℄ 12" = 982.14

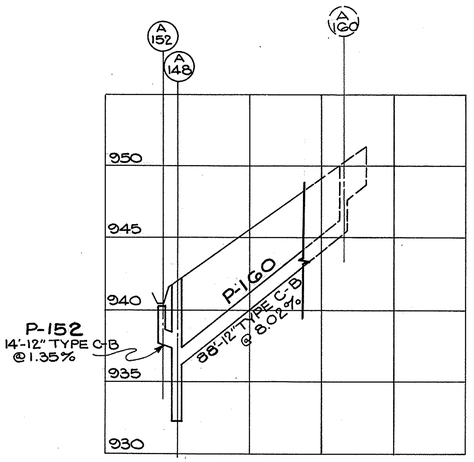


A-330
C.O.Y. Nº 2 INLET
STA. 99+61.39
14.5' LT. ℄ POWERSDALE
COVER EL. = 887.37
WINDOW EL. = 886.62
℄ 12" = 883.29

A-150
G04 Nº 5 C.B.
STA. 722+00
(25' RT. ℄)
GRATE EL. 944.15
℄ 12" = 941.48

A-130
G04 Nº 1 SAN. M.H. W/DROP
STA. 51+43.5 (℄ POWERSDALE)
COVER EL. = 940.00
℄ EXIST. 12" = 929.82
℄ 12" = 938.00
℄ 12" = 929.82





A-148
G04 Nº 1 M.H.
STA. 72.8+84
(31' LT. ℄ RAMP 'F')
COVER EL. = 942.00
℄ 12" = 936.00
℄ 12" = 937.32
℄ 2" = 933.00
℄ 6" = 938.88

A-152
G04 Nº 5 C.B.
STA. 72.8+70
(34.5' LT. ℄ RAMP 'F')
GRATE EL. = 940.18
℄ 12" = 937.51

PIPE PROFILES THIS SHEET		
P	-	155
P	-	156
P	-	158
P	-	159
P	-	330
P	-	141
P	-	160
P	-	152
P	-	153
P	-	160

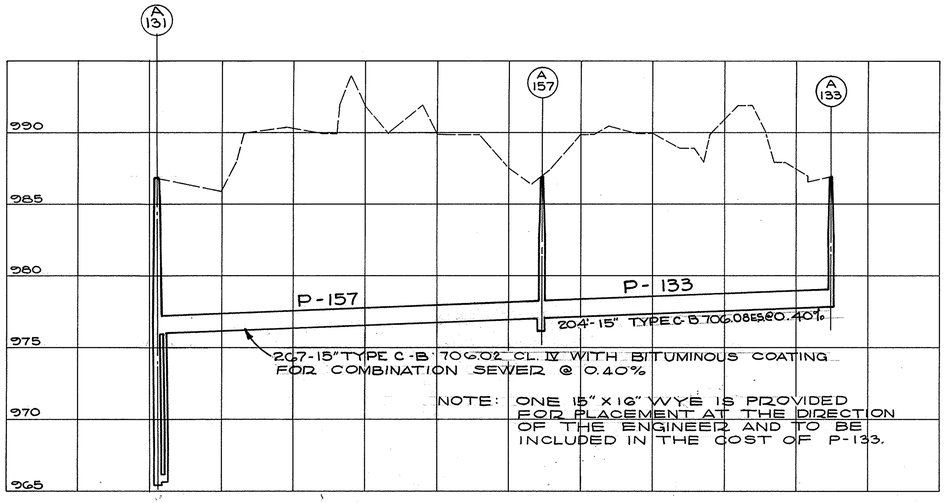
MAY 25 1971

STA. 720+00 TO STA. 730+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OH10		

355
656

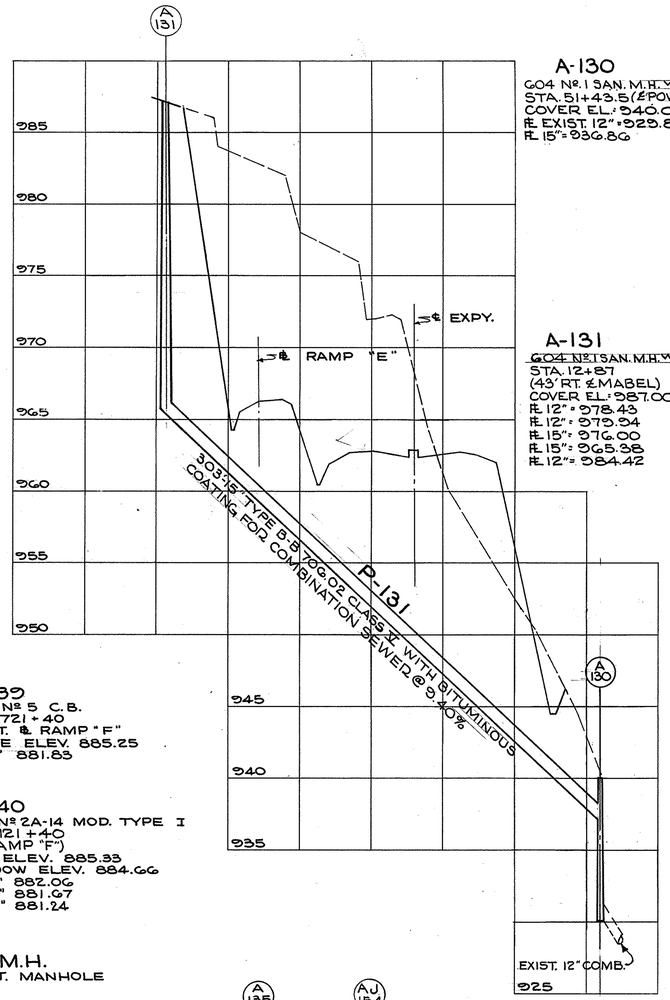
MAH-680 - 6.98



A-131
604 Nº 1 SAN. M.H. W/3 DROPS
STA. 12+87
(43' RT. ℄)
COVER ELEV. 987.00
℄ 12" 978.43
℄ 12" 979.34
℄ 15" 976.00
℄ 15" 965.38
℄ 12" 984.42

A-157
604 Nº 1 SAN. M.H.
STA. 724+50
(66' LT. ℄ RAMP "E")
COVER ELEV. 986.5
℄ 15" 977.07

A-133
604 Nº 1 SAN. M.H.
STA. 52+50
℄ SAMUEL AVE.
COVER ELEV. 987.61
℄ 10" 978.31
℄ 15" 977.85
℄ 12" 982.35
℄ 12" 983.22

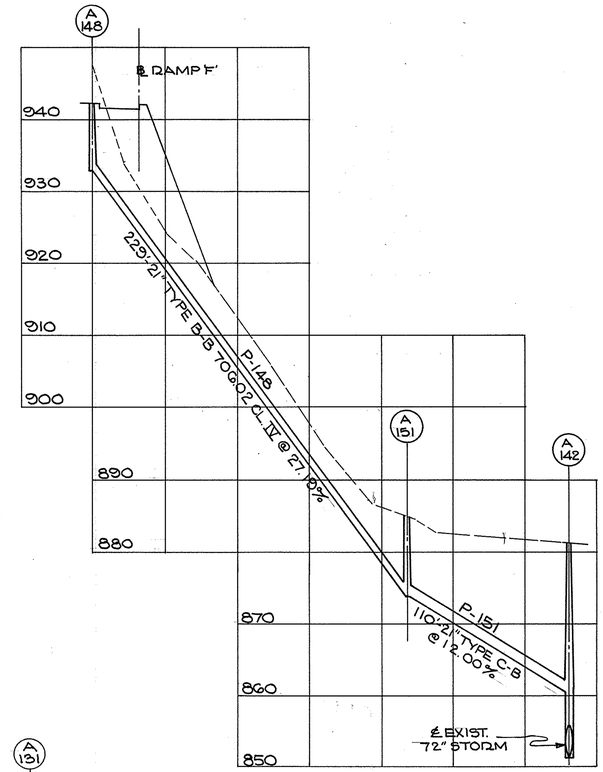


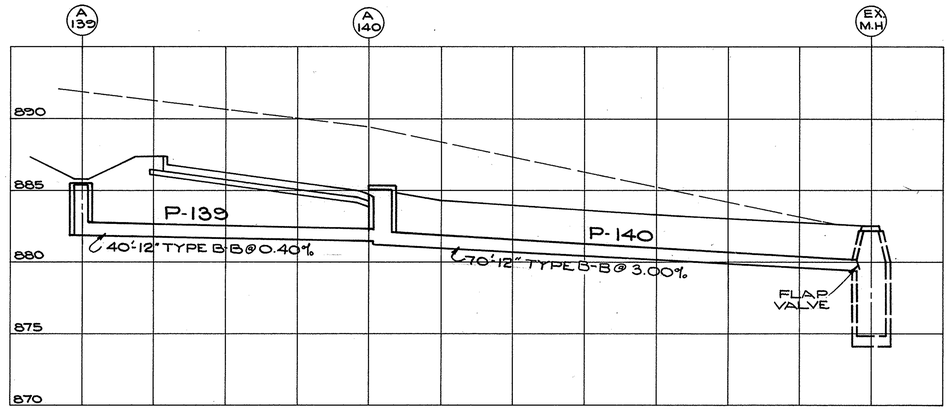
A-130
604 Nº 1 SAN. M.H. W/DROP
STA. 51+43.5 (℄ POWERSDALE)
COVER EL.: 940.00
℄ EXIST. 12" = 929.82
℄ 15" = 936.86

A-148
604 Nº 1 M.H.
STA. 728+84
(31' LT. ℄ RAMP 'F')
COVER EL. = 942.00
℄ = 12" = 936.00
℄ = 12" = 937.32
℄ = 21" = 933.00

A-151
604 Nº 1 M.H
STA. 728+15
(177' RT. ℄ RAMP 'F')
COVER EL. = 884.80
℄ 21" = 872.90

A-142
604 Nº 2 M.H. W/ DROP
STA. 727+81
(279.5' RT. ℄ RAMP F')
COVER EL. = 881.55
℄ 21" = 860.32
℄ 72" = 851.25



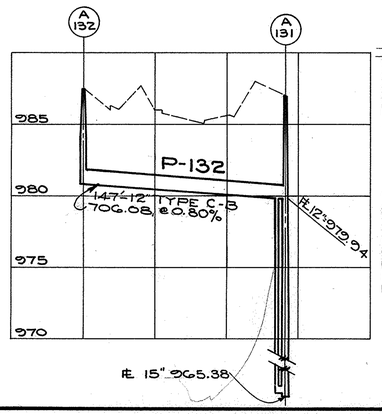


A-139
604 Nº 5 C.B.
STA. 721+40
40' LT. ℄ RAMP "F"
GRATE ELEV. 885.25
℄ 12" 881.83

A-140
604 Nº 2A-14 MOD. TYPE I
STA. 721+40
(℄ RAMP "F")
TOP ELEV. 885.33
WINDOW ELEV. 884.66
℄ 6" 882.06
℄ 12" 881.67
℄ 12" 881.24

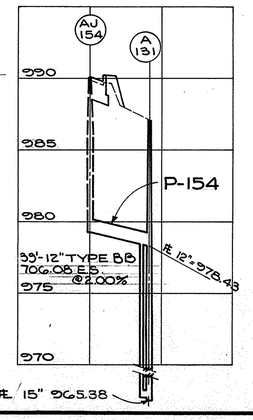
EX. M.H.
EXIST. MANHOLE
STA.

COVER ELEV. 882.55
℄ EXIST. 12" 874.82
℄ EXIST. 12" 874.95
℄ EXIST. 12" 875.46
℄ PROP. 12" 8
℄ PROP. 12" 876.52
℄ PROP. 12" 880.38



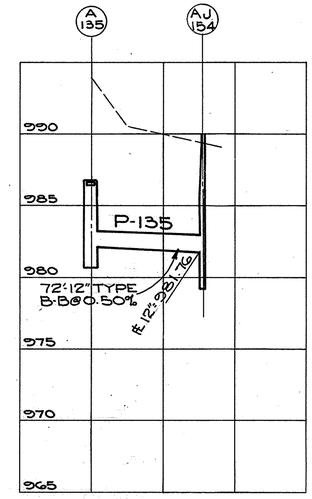
A-132
604 Nº 1 SAN. M.H.
STA. 47+76
(EXIST. ℄ POWERSDALE)
COVER ELEV. 987.00
℄ EXIST. 12" 981.12
℄ 12" 981.12

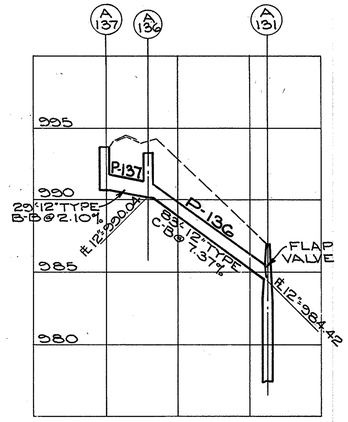
AJ-154
ADJUST M.H. TO GRADE
STA. 53+85
℄ EXIST. MABEL
COVER ELEV. 989.91 EXIST.
COVER ELEV. 990.10 PROP.
℄ EXIST. 12" 979.21
℄ PROP. 12" 979.21
℄ 12" 981.76



A-135
C.O.Y. Nº 2 C.B.
STA. 12+25
15' LT. ℄ MABEL
TOP ELEV. 986.70
WINDOW ELEV. 98
℄ 12" 982.14

PIPE PROFILES THIS SHEET	
P-	131
P-	132
P-	133
P-	135
P-	136
P-	137
P-	139
P-	140
P-	148
P-	151
P-	154
P-	157





A-136
604 Nº. 2-2A C.B.
STA. 54+50
(15' RT. ℄ MABEL)
GRATE EL.: 993.25
WINDOW EL.: 992.75
℄ 12" = 990.04

A-137
604 Nº. 2-2A C.B.
STA. 54+50
(14' LT. ℄ MABEL)
GRATE EL.: 993.75
WINDOW EL.: 993.25
℄ 12" = 990.65

MAY 25 1971

STA. 720+00 TO STA. 730+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

356
656

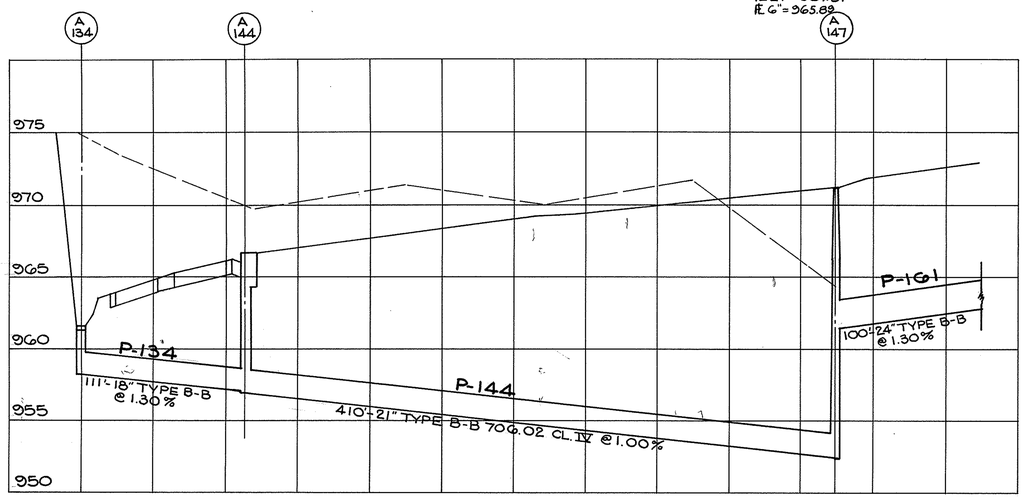
MAH-680-6.98

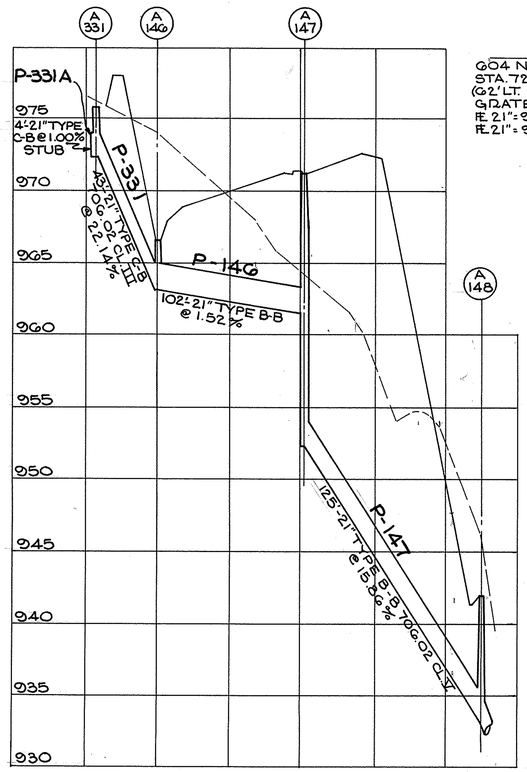
A-134
604 N°5 C.B.
STA. 724+50
(18.5' LT. ℄ RAMP 'E')
GRATE EL. = 962.00

FE 18" = 958.39

A-144
604 N°2A-8(MOD.) INLET
STA. 724+90(℄)
TOP EL. = 966.64
WINDOW EL. = 965.97
FE 21" = 956.61
FE 18" = 956.95

A-147
604 N°2 M.H. W/o DROP
STA. 729+00(1.5' RT. ℄)
COVER EL. = 971.26
FE 21" = 961.51
FE 21" = 952.51
FE 21" = 952.51
FE 24" = 961.51
FE 6" = 965.88





A-331
604 N°5 C.B.
STA. 728+53
(62' LT. ℄ RAMP 'E')
GRATE EL. = 975.75
FE 21" = 972.36
FE 21" = 972.36 (STUB - PLUGGED)

A-146
604 N°5 C.B.
STA. 728+40 (77' LT. ℄)
GRATE EL. = 966.48
FE 21" = 963.06
FE 6" = 964.98

A-148
604 N°1 M.H.
STA. 728+84
(31' LT. ℄ RAMP 'F')
COVER EL. = 942.00
FE 12" = 936.00
FE 12" = 937.32
FE 21" = 933.00

PIPE PROFILES THIS SHEET	
P -	134
P -	144
P -	146
P -	147
P -	161
P -	331
P -	331A

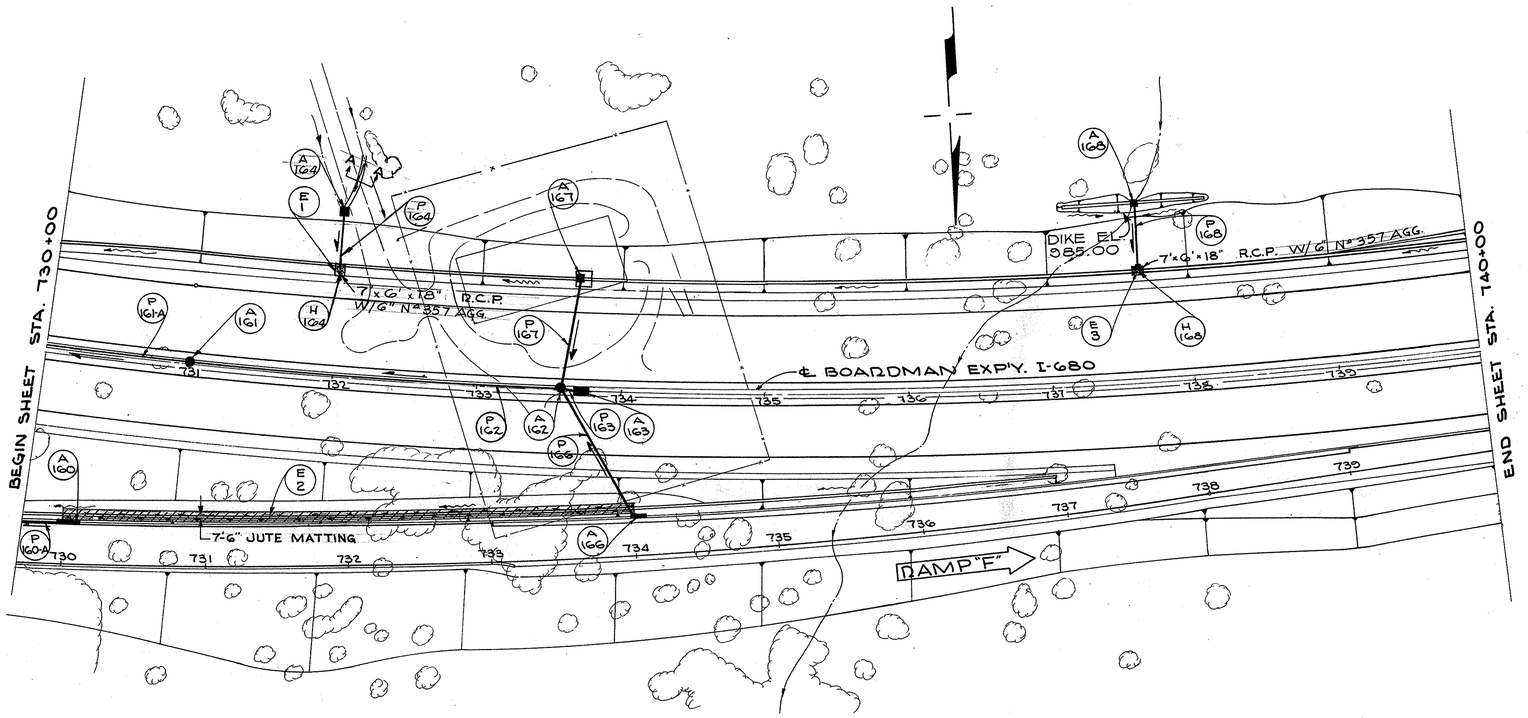
STA. 720+00 TO STA. 730+00
DRAINAGE PROFILES
BOARDMAN EXP.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

357
656



ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH							
CODE	STATION	LOCATION	N°1 M.H.	N° 5 C.B.	N°2A-G INLET	N°2A-B MOD INLET	N°2A-IG MODTYPE I INLET
A-160	730+00	28'LT. ℄ RAMP 'F'					1
A-161	731+00	1.5'LT. ℄	1				
A-162	733+60	1.5'LT. ℄	1				
A-163	733+70	℄				1	
A-166	734+00	26'LT. ℄ RAMP 'F'			1		
A-167	733+70	78'LT. ℄		1			
A-168	737+66	125'LT. ℄		1			
A-164	732+00	114'LT. ℄		1			
TOTAL			2	3	1	1	1

ITEM 603 - CONDUITS - LINEAR FEET									
CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T N°	TYPE B-B 12"	15"	21"	24"	C.B. TYPE 'F' 12"	15"
P-160A	730+00	A-160	358					28	
P-161A	730+00	A-161					100		
P-162	A-161	A-162					260		
P-163	A-163	A-162		10					
P-166	A-166	A-162			101				
P-167	A-167	A-162				78			
P-168	A-168	H-168							49
P-164	A-164	H-164	358						36
TOTAL				10	101	78	360	28	85

EROSION CONTROL				
CODE	STATION FROM	STATION TO	667 S.Y. JUTE MATTING	601 C.Y. ROCK CHANNEL PROT.
E-1	732+00	70'LT. ℄		3
E-2	730+00	734+00	333	
E-3	737+66	75'LT ℄		3
TOTAL			333	6

ITEM 602 - MASONRY			
CODE	STATION	LOCATION	CU.YDS.
H-168	737+66	75'LT. ℄	0.26
H-164	732+00	80'LT. ℄	0.26
TOTAL			0.52

MAY 25 1971

R.R.C. 8/24/68
P.U.D. 8/30/68

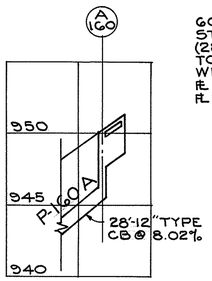
730+00 TO STA. 740+00
DRAINAGE PLAN
BOARDMAN EXP.

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

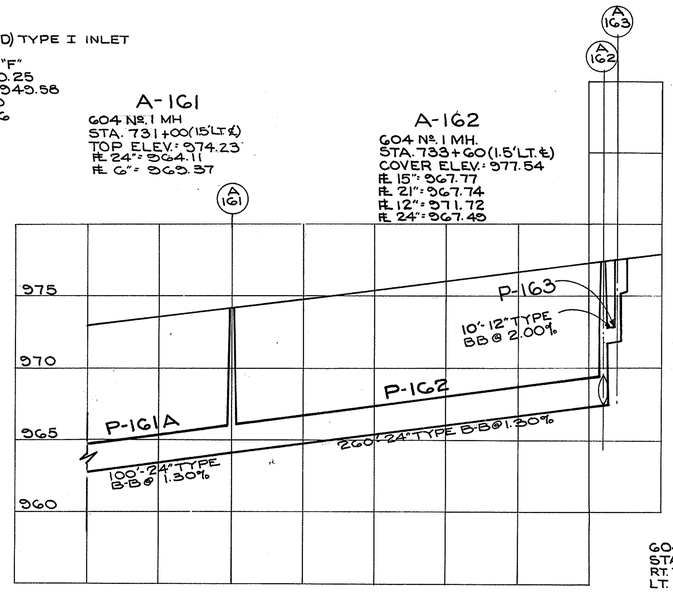
358
656

A-160
604 Nº 2A-16(MOD) TYPE I INLET
STA. 730+00
(28' LT. ℄ RAMP "F")
TOP ELEV.= 950.25
WINDOW ELEV.= 943.58
℄ 12" = 945.30
℄ 6" = 946.96



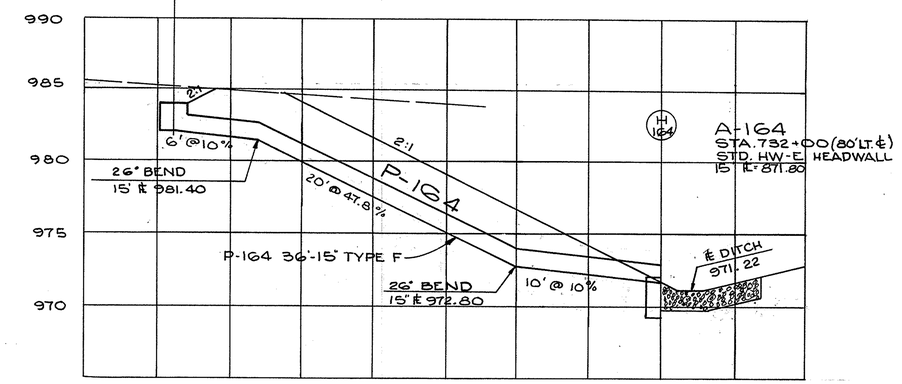
A-161
604 Nº 1 MH
STA. 731+00 (15' LT ℄)
TOP ELEV.= 974.23
℄ 24" = 964.11
℄ 6" = 969.37

A-162
604 Nº 1 MH.
STA. 733+60 (1.5' LT. ℄)
COVER ELEV.= 977.54
℄ 15" = 967.77
℄ 21" = 967.74
℄ 12" = 971.72
℄ 24" = 967.49



A-163
604 Nº 2A-8(MOD.) INLET
STA. 733+70 (℄)
RT. TOP ELEV.= 977.42
LT. TOP ELEV.= 977.55
RT. WINDOW ELEV.= 976.75
LT. WINDOW ELEV.= 976.88
℄ 6" = 972.66
℄ 12" = 971.92

A-164
STA. 732+00 (114 LT. ℄)
STD Nº 5 CATCH BASIN
GRATE - 984.00
15" ℄ - 982.00

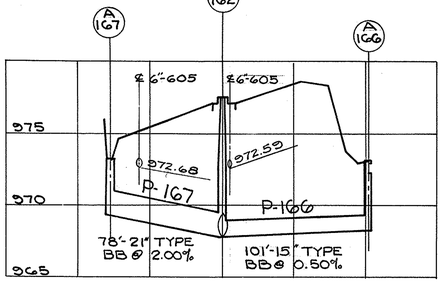


A-164
STA. 732+00 (80' LT ℄)
STD. HW-E HEADWALL
15" ℄ - 971.80

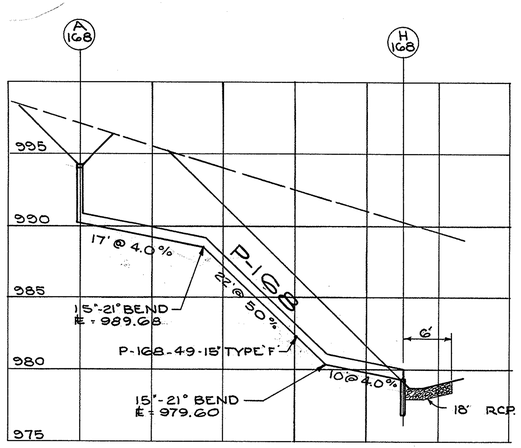
A-166
604 Nº 2A-6 INLET
STA. 734+00 (26' LT.
℄ RAMP "F")
TOP ELEV.= 973.07
WINDOW ELEV.= 972.40
℄ 15" = 968.28
℄ 6" = 968.28

A-167
604 Nº 5 C.B.
STA. 733+70
(78' LT. ℄)
GRATE ELEV.= 973.08
℄ 21" = 969.30

A-168
604 Nº 5 C.B.
STA. 737+66
(125' LT. ℄)
GRATE EL.= 994.00
℄ 15" = 990.00



H-168
604 HW-E HEADWALL
STA. 737+66
79' LT. ℄
℄ 15" = 979.20



PIPE PROFILES THIS SHEET
P-160A
P-161A
P-162
P-163
P-164
P-166
P-167
P-168

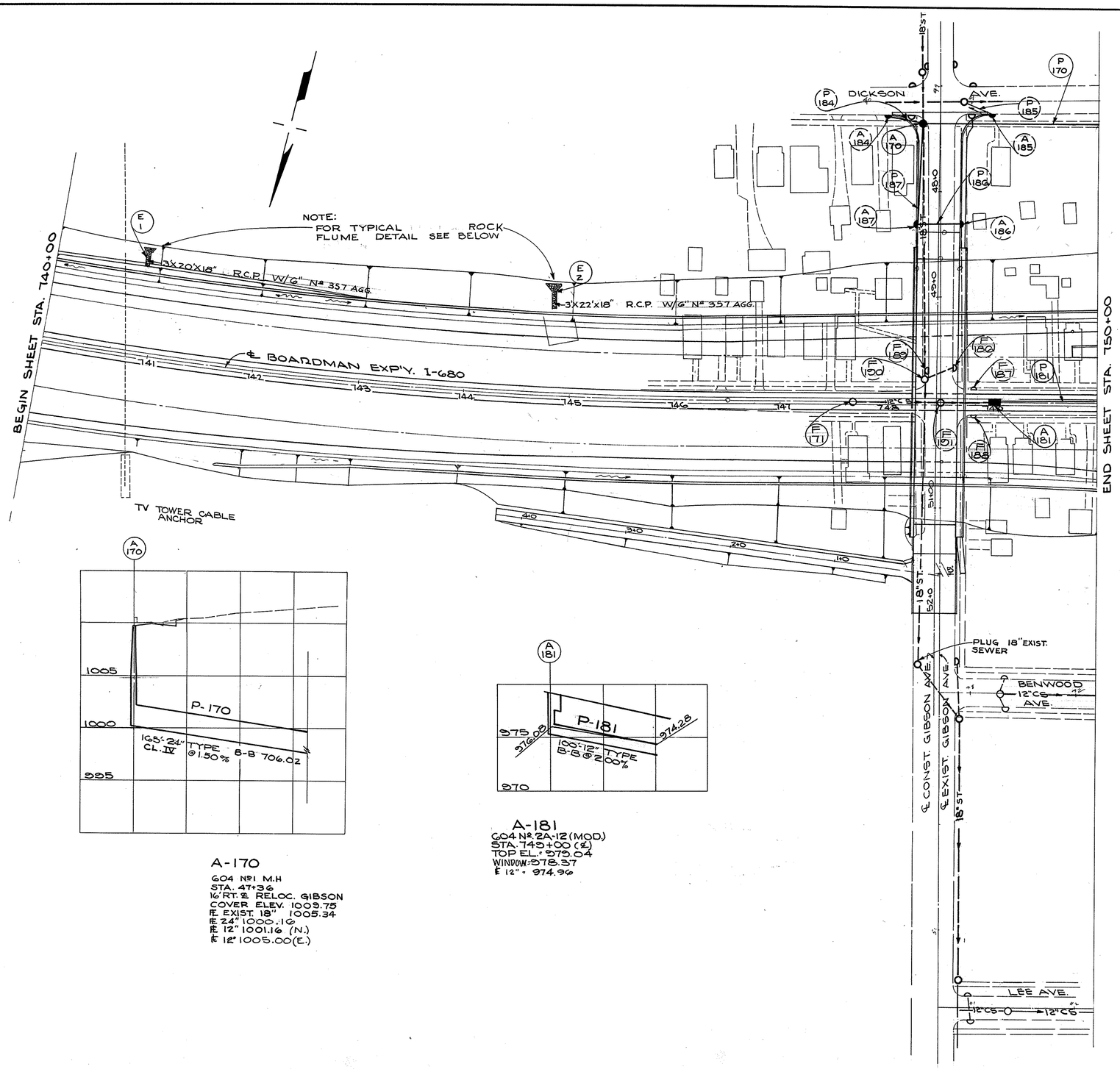
MAY 25 1971

STA. 730+00 TO STA. 740+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD.	STATE	PROJECT	
2	OHIO		

359
656

MAH-680-6.98



A-170
604 Nº1 M.H
STA. 47+36
16'RT. ℄ RELOC. GIBSON
COVER ELEV. 1009.75
℄ EXIST. 18" 1005.34
℄ 24" 1000.16
℄ 12" 1001.16 (N.)
℄ 12" 1005.00(E.)

A-181
604 Nº 2A-12 (MOD.)
STA. 745+00 (℄)
TOP EL.= 979.04
WINDOW=978.37
℄ 12" = 974.96

ITEM 604-MANHOLES, CATCH BASINS & INLETS-EACH

CODE	STATION	LOCATION	Nº 1 M. H.		Nº 2A-12 MOD. INLET
A-170	47 + 36	16'RT. ℄ REL. GIBSON	1		
A-181	749 + 00	℄			1
		TOTAL	1		1

ITEM 603-CONDUITS-LINEAR FEET

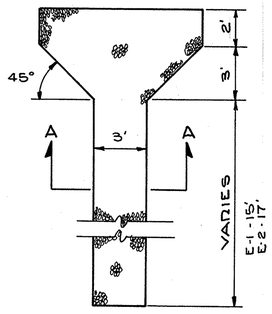
CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T. Nº	TYPE B-B 12"	TYPE B-B 24" 706.02 CLASS IV
P-170	A-170	750 + 00	359		165
P-181	A-181	750 + 00	359	100	
		TOTAL		100	165

EROSION CONTROL

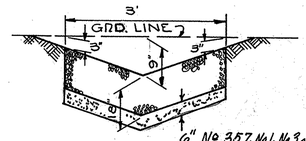
CODE	STATION	LOCATION	601-TYPE B ROCK CHANNEL PROTECTION C.Y.
E-1	740 + 88	85' LT. ℄	4
E-2	744 + 85	83' LT. ℄	5
		TOTAL	9

ITEM 202-MANHOLES REMOVED

CODE	STATION	LOCATION	MANHOLES REMOVED EACH
F-171	747+68	℄ I-680	1
		TOTAL	1



TYPICAL ROCK FLUME



SECTION A-A

MAY 25 1971
R.R.C. 4/15/69
C.A.P. 4/18/69

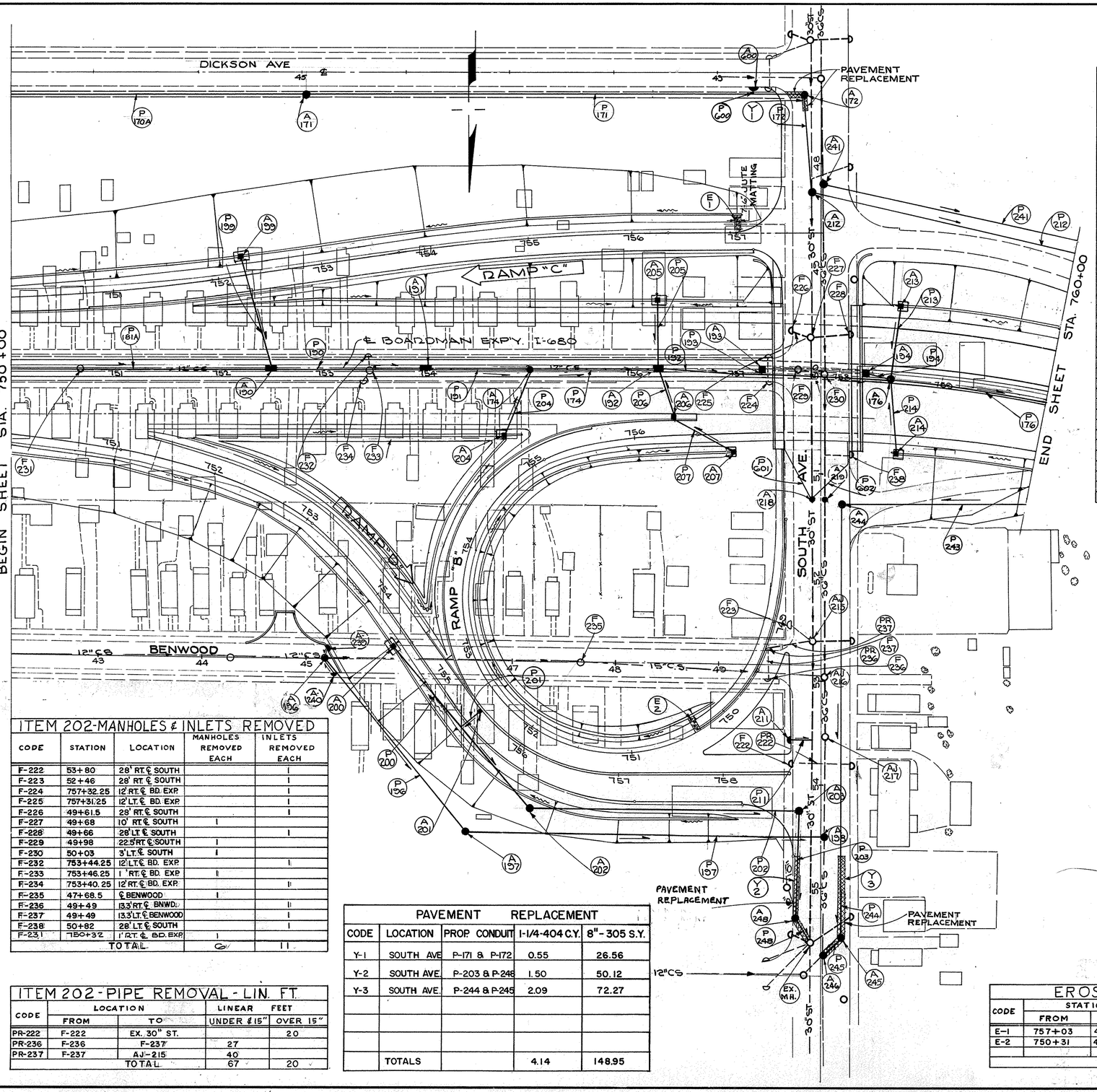
0 25 50 100 150

STA. 740+00 TO STA. 750+00
DRAINAGE PLAN
BOARDMAN EXP.

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

360
656



ITEM 604 - MANHOLES - CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	Nº 1 M. H.	Nº 1 SAN. M.H.	Nº 2 M. H. W/DROP	Nº 5 C. B.	Nº 6 C. B.	Nº 2A-6 INLET	Nº 2A-8 MOD. INLET	Nº 2A-8 MOD. INLET W-ONE (1) WINDOW	Nº 2A-10 MOD. INLET	C.O.Y Nº 1 INLET
A-171	45+04.70	21' RT. ℄ DICKSON			1							
A-172	47+34	17' RT. ℄ SOUTH	1									
A-174	755+00	1.5' RT. ℄	1									
A-176	758+50	5.5' RT. ℄	1									
A-190	752+50	℄							1			
A-191	754+00	℄									1	
A-192	756+25	℄								1		
A-193	757+25	℄				1						
A-194	758+25	℄				1						
A-196	45+19.06	℄ BENWOOD		1								
A-197	46+57.55	165.49' RT. ℄ BENWOOD		1								
A-198	54+50	2.5' LT. ℄ SOUTH		1								
A-199	752+25	20' LT. ℄ RAMP "C"				1						
A-200	754+50	17' RT. ℄ RAMP "D"				1						
A-201	755+50	2.38' RT. ℄ RAMP "D"					1					
A-202	56+30	50' RT. ℄ RAMP "D"	1									
A-203	54+25	21' RT. ℄ SOUTH	1									
A-204	754+75	65' RT. ℄				1						
A-205	756+25	66' LT. ℄				1						
A-206	756+40	48.7' RT. ℄					1					
A-207	757+00	80.90' RT. ℄				1						
A-211	53+60	29' RT. ℄ SOUTH										1
A-212	48+30	10' RT. ℄ SOUTH	1									
A-213	758+50	66' LT. ℄				1						
A-214	758+60	75.5' RT. ℄				1						
A-241	48+20	1.1' LT. ℄ SOUTH		1								
A-244	51+30	20' LT. ℄ SOUTH		1								
A-245	55+50	20' LT. ℄ SOUTH	1									
A-246	55+67	1.5 LT. ℄ SOUTH		1								
A-248	55+29	2.2' RT. ℄ SOUTH		1								
A-600	49+34.30	13.7' RT. ℄ DICKSON										1
		TOTAL	7	7	1	7	2	2	1	1	1	2

ITEM 603 - CONDUITS - LINEAR FEET

CODE	LOCATION FROM	LOCATION TO	PROFILE SH'T. Nº	TYPE B-B 12"	15"	18"	24"	27"	48" *	TYPE B-B 706.02 CLASS IV 24"	27"	36" *	48" *	TYPE C-B: 706.02 CL II 33"	706.02 CL IV 24"	12" #	706.08 18"
P-170A	750+00	A-171	363							285							
P-171	A-171	A-172	363												478		
P-172	A-172	A-212	363				97										
P-174	A-174	A-192	361				125										
P-176	A-176	760+00	361							150							
P-181A	750+00	A-190	361	250													
P-190	A-190	A-191	361				150										
P-191	A-191	A-174	361				100										
P-192	A-192	A-176	361					225									
P-193	A-193	P-192	361	6													
P-194	A-194	A-176	361	25													
P-196	A-196	A-197	362													216	
P-197	A-197	A-198	362													348	
P-199	A-199	A-190	361				112										
P-200	A-200	A-202	362														203
P-201	A-201	P-200	363	23													
P-202	A-202	A-203	362			260											
P-203	A-203	A-248	363			104											
P-204	A-204	A-174	361		69												
P-205	A-205	A-192	361		66												
P-206	A-206	A-192	361			50											
P-207	A-207	A-206	361			68											
P-211	A-211	EX. S.	362	20													
P-212	A-212	760+00	361											260			
P-213	A-213	A-176	361		72												
P-214	A-214	A-176	361		72												
P-241	A-241	760+00	362										254				
P-243	760+00	A-244	362											178			
P-244	A-244	A-245	362											420			
P-245	A-245	A-246	362						23								
P-248	A-248	EX. M. H.	363			28											
P-600	A-600	P-171	363	9													
		TOTAL		333	279	510	584	225	23	285	150	254	598	260	478	564'	203

* W-BITUMINOUS COATING FOR COMBINATION SEWERS

W-COMPRESSION JOINTS

ITEM 202 - MANHOLES & INLETS REMOVED

CODE	STATION	LOCATION	MANHOLES REMOVED EACH	INLETS REMOVED EACH
F-222	53+80	28' RT. ℄ SOUTH		1
F-223	52+46	28' RT. ℄ SOUTH		1
F-224	757+32.25	12' RT. ℄ BD. EXP.		1
F-225	757+31.25	12' LT. ℄ BD. EXP.		1
F-226	49+61.5	28' RT. ℄ SOUTH		1
F-227	49+68	10' RT. ℄ SOUTH	1	
F-228	49+66	28' LT. ℄ SOUTH		1
F-229	49+98	22.5 RT. ℄ SOUTH	1	
F-230	50+03	3' LT. ℄ SOUTH	1	
F-232	753+44.25	12' LT. ℄ BD. EXP.		1
F-233	753+46.25	1' RT. ℄ BD. EXP.	1	
F-234	753+40.25	12' RT. ℄ BD. EXP.		1
F-235	47+68.5	℄ BENWOOD	1	
F-236	49+49	13.3' RT. ℄ BNWD.		1
F-237	49+49	13.3' LT. ℄ BENWOOD		1
F-238	50+82	28' LT. ℄ SOUTH		1
F-231	750+32	1' RT. ℄ BD. EXP.	1	
		TOTAL	5	11

ITEM 202 - PIPE REMOVAL - LIN. FT.

CODE	LOCATION FROM	LOCATION TO	LINEAR FEET UNDER & 15"	LINEAR FEET OVER 15"
PR-222	F-222	EX. 30" ST.		20
PR-236	F-236	F-237	27	
PR-237	F-237	AJ-215	40	
		TOTAL	67	20

PAVEMENT REPLACEMENT

CODE	LOCATION	PROP. CONDUIT	1-1/4-404 C.Y.	8"-305 S.Y.
Y-1	SOUTH AVE.	P-171 & P-172	0.55	26.56
Y-2	SOUTH AVE.	P-203 & P-248	1.50	50.12
Y-3	SOUTH AVE.	P-244 & P-245	2.09	72.27
	TOTALS		4.14	148.95

EROSION CONTROL

CODE	STATION FROM	STATION TO	667 - S.Y. JUTE MATTING
E-1	757+03	4' LT. ℄ RAMP "C"	9
E-2	750+31	4' RT. ℄ RAMP "B"	9
		TOTAL	18

0 50 100

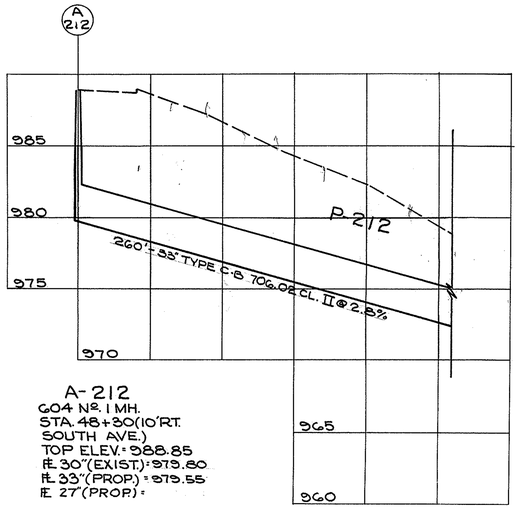
R.R.C. 8/20/68
PWD 8/30/68
MAY 25 1971

DRAINAGE PLAN
STA. 750+00 TO 760+00

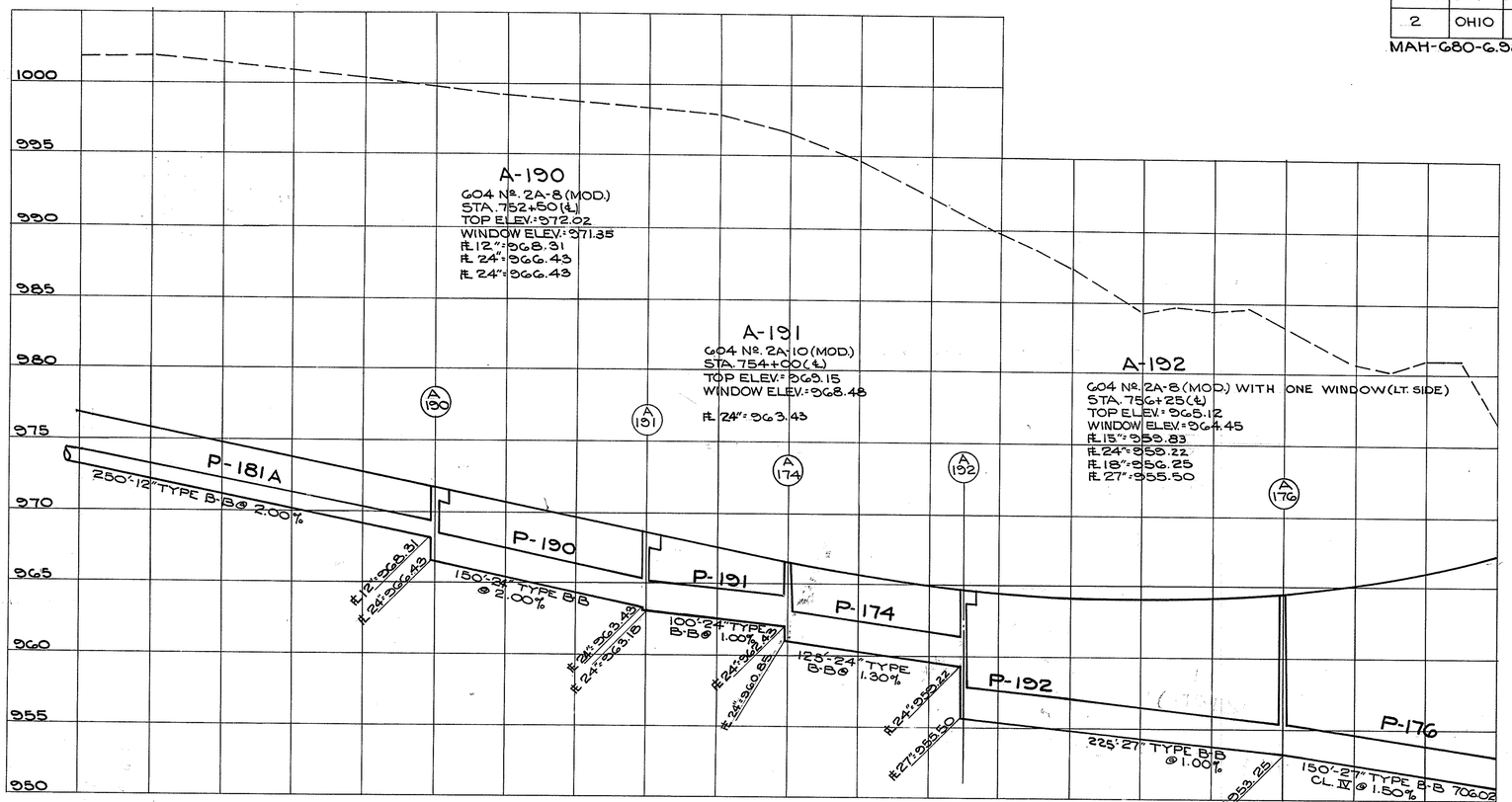
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

361
656



A-212
604 Nº. 1 MH.
STA. 48+30 (10' RT. SOUTH AVE.)
TOP ELEV.= 988.85
Ø 30" (EXIST.)= 979.80
Ø 33" (PROP.) = 979.55
Ø 27" (PROP.) =



A-190
604 Nº. 2A-8 (MOD.)
STA. 752+50 (℄)
TOP ELEV.= 972.02
WINDOW ELEV.= 971.35
Ø 12" = 968.31
Ø 24" = 966.43
Ø 24" = 966.43

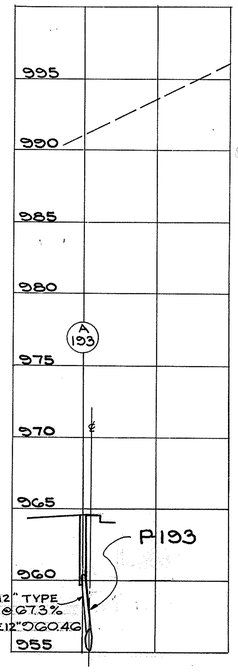
A-191
604 Nº. 2A-10 (MOD.)
STA. 754+00 (℄)
TOP ELEV.= 969.15
WINDOW ELEV.= 968.48
Ø 24" = 963.43

A-192
604 Nº. 2A-8 (MOD.) WITH ONE WINDOW (LT. SIDE)
STA. 756+25 (℄)
TOP ELEV.= 965.12
WINDOW ELEV.= 964.45
Ø 15" = 959.83
Ø 24" = 959.22
Ø 18" = 956.25
Ø 27" = 955.50

PIPE PROFILES THIS SHEET
P-181A
P-190
P-191
P-192
P-193
P-194
P-199
P-204
P-205
P-206
P-207
P-212
P-213
P-214
P-174
P-176

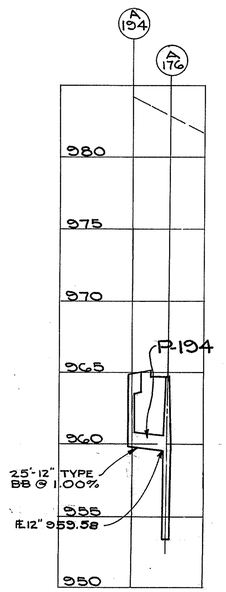
A-176
604 Nº. 1 MH.
STA. 758+50 (5.5' RT. ℄)
TOP EL.= 964.50
Ø 15" = 960.84
Ø 15" = 955.84
Ø 12" = 959.58
Ø 27" = 953.25

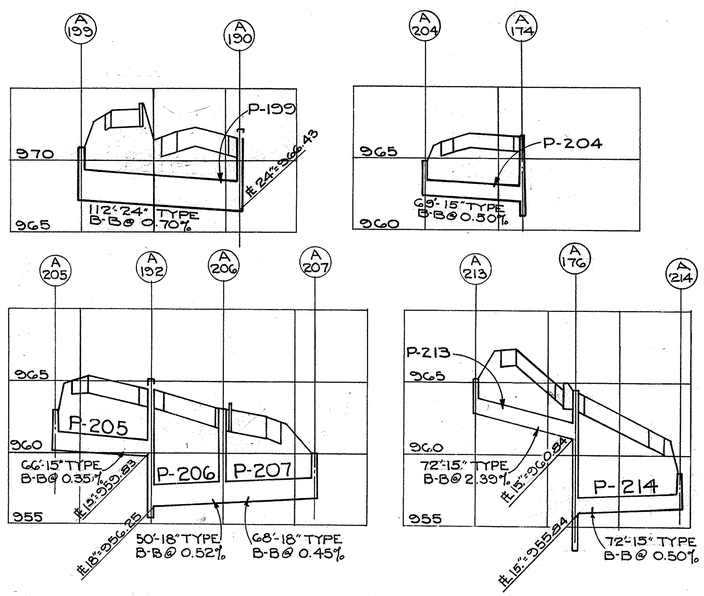
A-174
604 Nº. 1 MH.
STA. 755+00 (1.5' RT. ℄)
TOP EL.= 967.24
Ø 15" = 961.60
Ø 24" = 962.
Ø 24" = 960.85



A-193
604 Nº. 2A-6
STA. 757+25 (℄)
TOP ELEV.= 964.54
WINDOW ELEV.= 963.87
Ø 12" = 96.4.6

A-194
604 Nº. 2A-6
STA. 758+25 (℄)
TOP ELEV.= 964.92
WINDOW ELEV.= 964.25
Ø 6" = 961.50
Ø 12" = 959.83





A-199
604 Nº. 5 C.B.
STA. 752+25 (20' LT. ℄ RAMP "C")
GRATE ELEV.= 970.91
Ø 24" = 967.21

A-204
604 Nº. 5 C.B.
STA. 754+75 (65' RT. ℄)
GRATE ELEV.= 964.86
Ø 15" = 961.54

A-205
604 Nº. 5 C.B.
STA. 756+25 (66' LT. ℄)
GRATE ELEV.= 963.01
Ø 15" = 960.09

A-206
604 Nº. 6 C.B. (MOD)
STA. 756+40 (48.7' RT. ℄)
GRATE ELEV.= 963.11
Ø 18" = 956.51

A-207
604 Nº. 5 C.B.
STA. 757+00 (80.30' RT. ℄)
GRATE ELEV.= 959.99
Ø 18" = 956.82

A-213
604 Nº. 5 C.B.
STA. 758+50 (66' LT. ℄)
GRATE ELEV.= 965.26
Ø 15" = 962.56

A-214
604 Nº. 5 C.B.
STA. 758+60 (75.5' RT. ℄)
GRATE ELEV.= 958.70
Ø 12" = 956.25
Ø 6" = 957.73

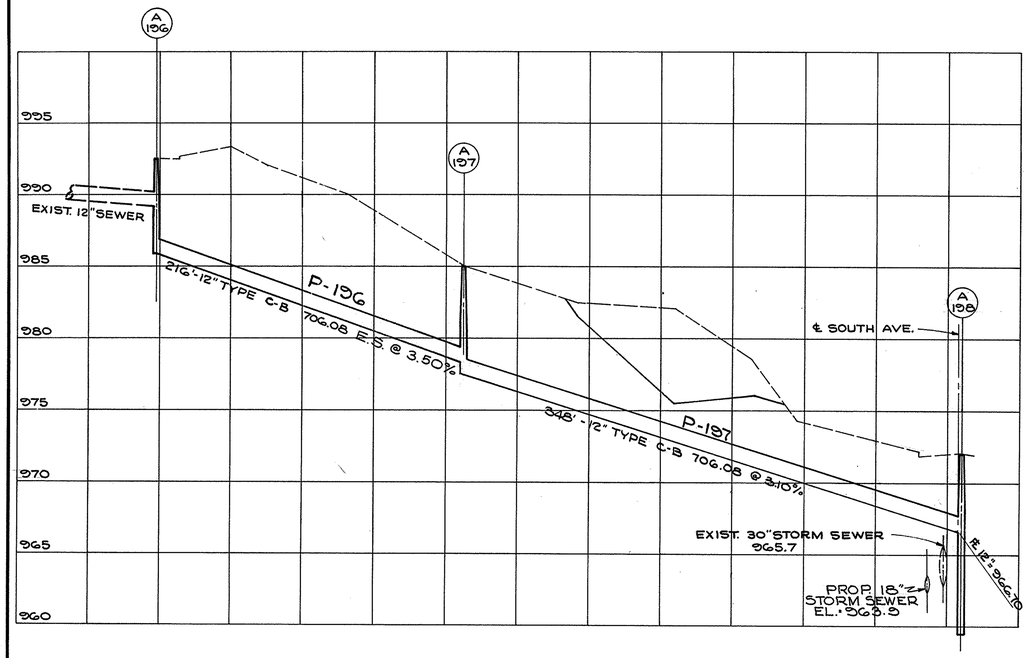
MAY 25 1971

DRAINAGE PROFILES
STA. 750+00 TO STA. 760+00

FED. RD.	STATE	PROJECT	
2	OH10		

MAH-680-6.98

362
656

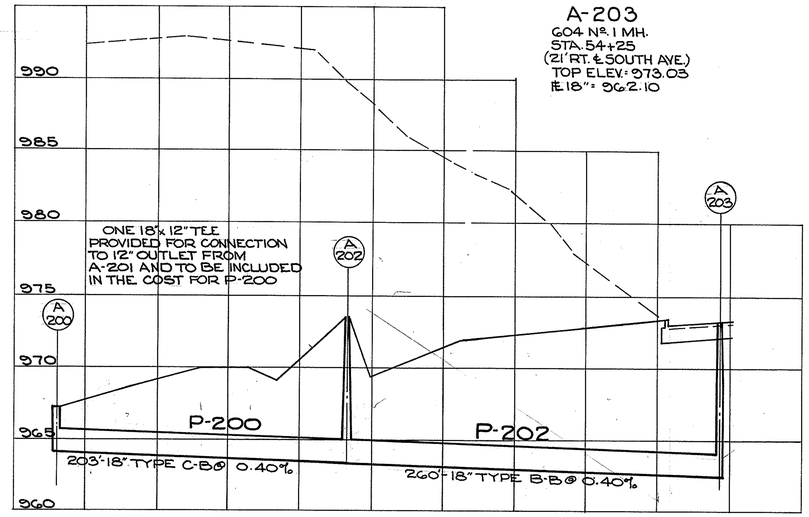


A-196
604 Nº 1 SAN. M.H.
STA. 45+19.06
℄ BENWOOD
TOP EL. 992.66
℄ EXIST. 12" = 989.20
℄ PROP. 12" = 985.91

A-197
604 Nº 1 SAN. M.H.
STA. 46+57.55
165.49' RT. ℄ BENWOOD
TOP EL. 985.10
℄ 12" = 978.35
℄ 12" = 975.50

A-198
604 Nº 1 SAN. M.H.
STA. 54+50
2.5' LT. ℄ SOUTH AVE.
TOP EL. 972.09
℄ 12" = 966.
℄ 36" = 959.48

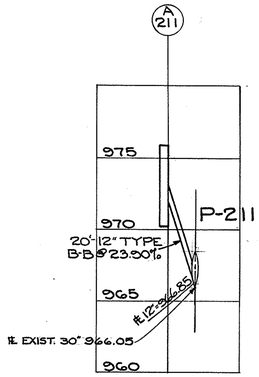
A-200
604 Nº 5 C.B.
STA. 754+50
(17' RT. ℄ RAMP "D")
GRATE ELEV. = 967.12
℄ 18" = 963.95



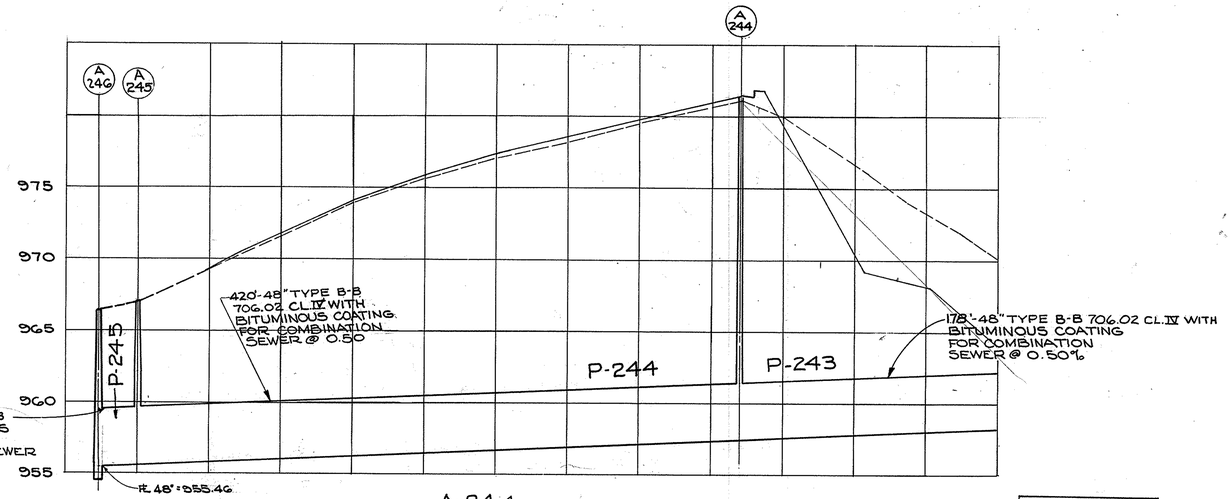
A-203
604 Nº. 1 MH.
STA. 54+25
(21' RT. ℄ SOUTH AVE.)
TOP ELEV.: 973.03
℄ 18": 962.10

A-202
604 Nº. 1 MH.
STA. 756+30
(50' RT. ℄ RAMP "D")
TOP ELEV.: 973.7
℄ 18" = 963.14

A-211
604 C.O.Y. Nº. 1 STORM INLET
STA. 53+60 (23' RT. ℄ SOUTH AVE.)
TOP ELEV.: 975.88
WINDOW ELEV.: 975.13
℄ 12": 971.63



A-241
604 Nº. 1 SAN. M.H.
STA. 48+20
(1.1' LT. ℄ SOUTH AVE.)
RIM ELEV.: 989.23
℄ EXIST. 36": 976.52
℄ PROP. 36": 976.52



A-245
604 Nº. 1 SAN. M.H.
STA. 55+50
(20' LT. ℄ SOUTH AVE.)
RIM ELEV.: 966.97
℄ 48": 955.58

A-246
604 Nº. 1 SAN. M.H.
STA. 55+97
(1.5' LT. ℄ SOUTH AVE.)
RIM ELEV. = 966.46
℄ 15" (EXIST.) = 954.55
℄ 36" (EXIST.) = 954.61
℄ 36" (EXIST.) = 955.65
℄ 48" = 955.46

A-244
604 Nº. 1 SAN. M.H.
STA. 51+30
(20' LT. ℄ SOUTH AVE.)
RIM ELEV.: 981.42
℄ 48": 957.48

PIPE PROFILES THIS SHEET
P-196
P-197
P-200
P-202
P-211
P-241
P-243
P-244
P-245

MAY 25 1971

DRAINAGE PROFILES
STA. 750+00 TO STA. 760+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

363
656

A-171

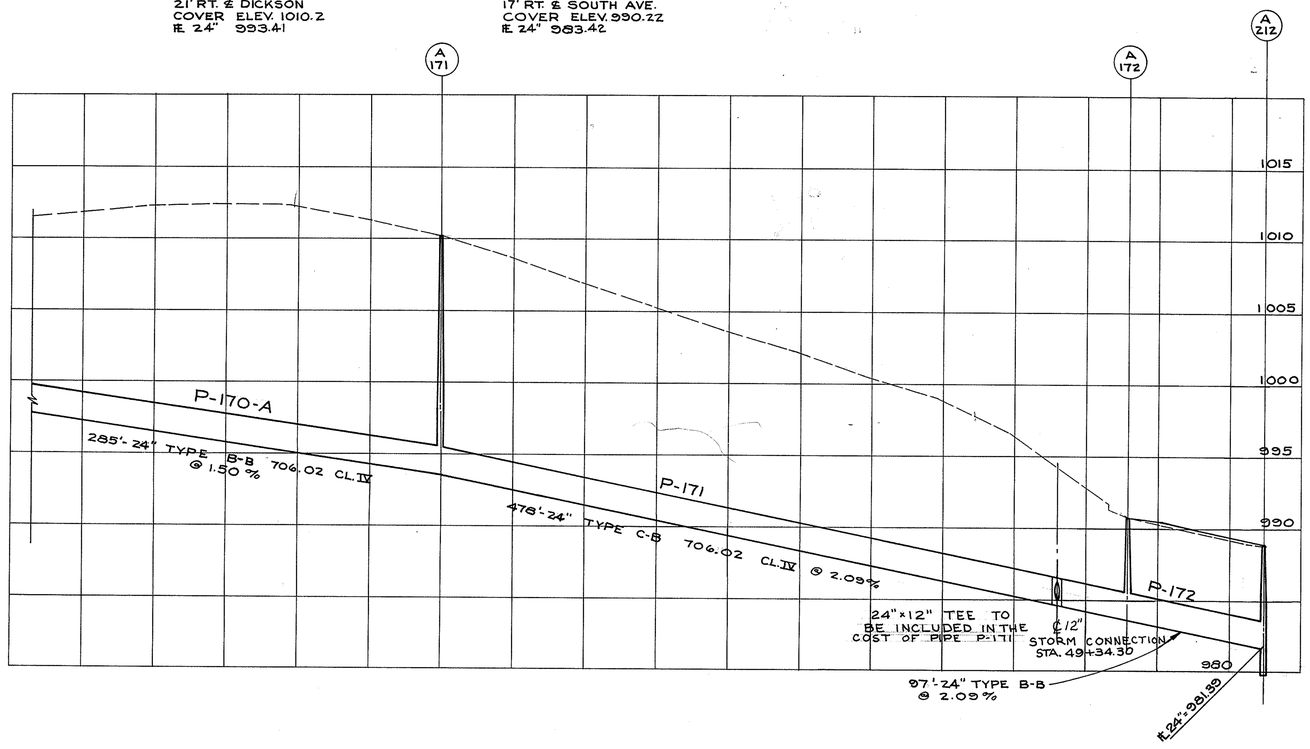
604 Nº 2 M.H. W/o DROP
STA. 45+04.07
21' RT. ℄ DICKSON
COVER ELEV. 1010.2
℄ 24" 993.41

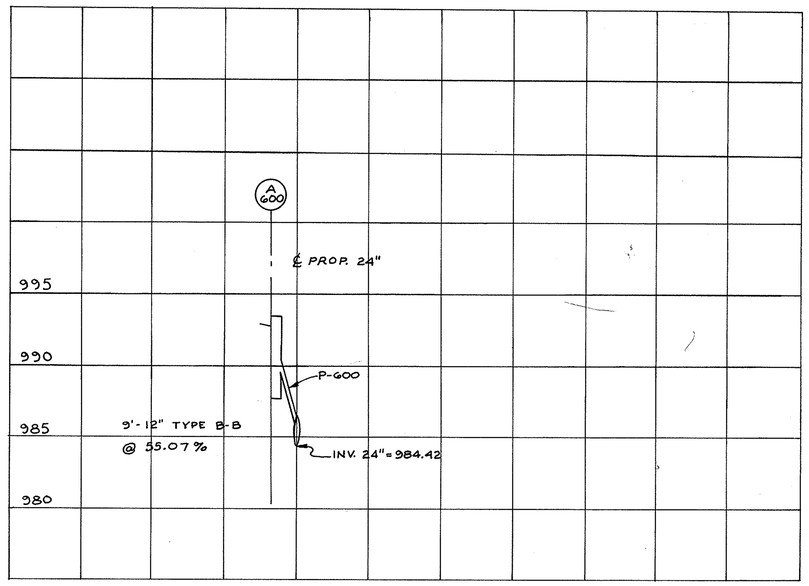
A-172

604 Nº 1 M.H.
STA. 47+34
17' RT. ℄ SOUTH AVE.
COVER ELEV. 990.22
℄ 24" 983.42

A-212

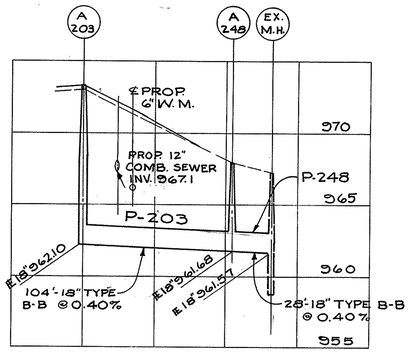
604 Nº 1 M.H.
STA. 48+30
10' RT. ℄ SOUTH AVE.
COVER ELEV. 988.85
℄ EXIST. 30" 979.80
℄ 33" 979.55
℄ 24" 981.39





A-600

604 C.O.Y. Nº 1 STORM INLET
STA. 49+34.30 (13.7' RT. ℄)
TOP EL. = 993.44
WINDOW EL. = 992.69
℄ 12" = 988.94

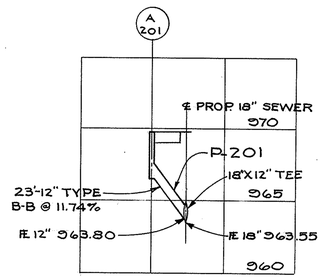


A-203

604 Nº 1 M.H.
STA. 54+25
21' RT. ℄ SOUTH AVE.
COVER ELEV. 973.03
℄ 18" 962.10

A-248

604 Nº 1 M.H.
STA. 55+29
22' RT. ℄ SOUTH AVE.
COVER ELEV. 967.89
℄ 18" 961.68



A-201

604 Nº 6 C.B.
STA. 755+50
2.38' RT. ℄ RAMP "D"
GRATE ELEV. 969.76
℄ 12" 966.50

PIPE	PROFILES THIS SHEET
P -	170-A
P -	171
P -	172
P -	600
P -	201
P -	203
P -	248

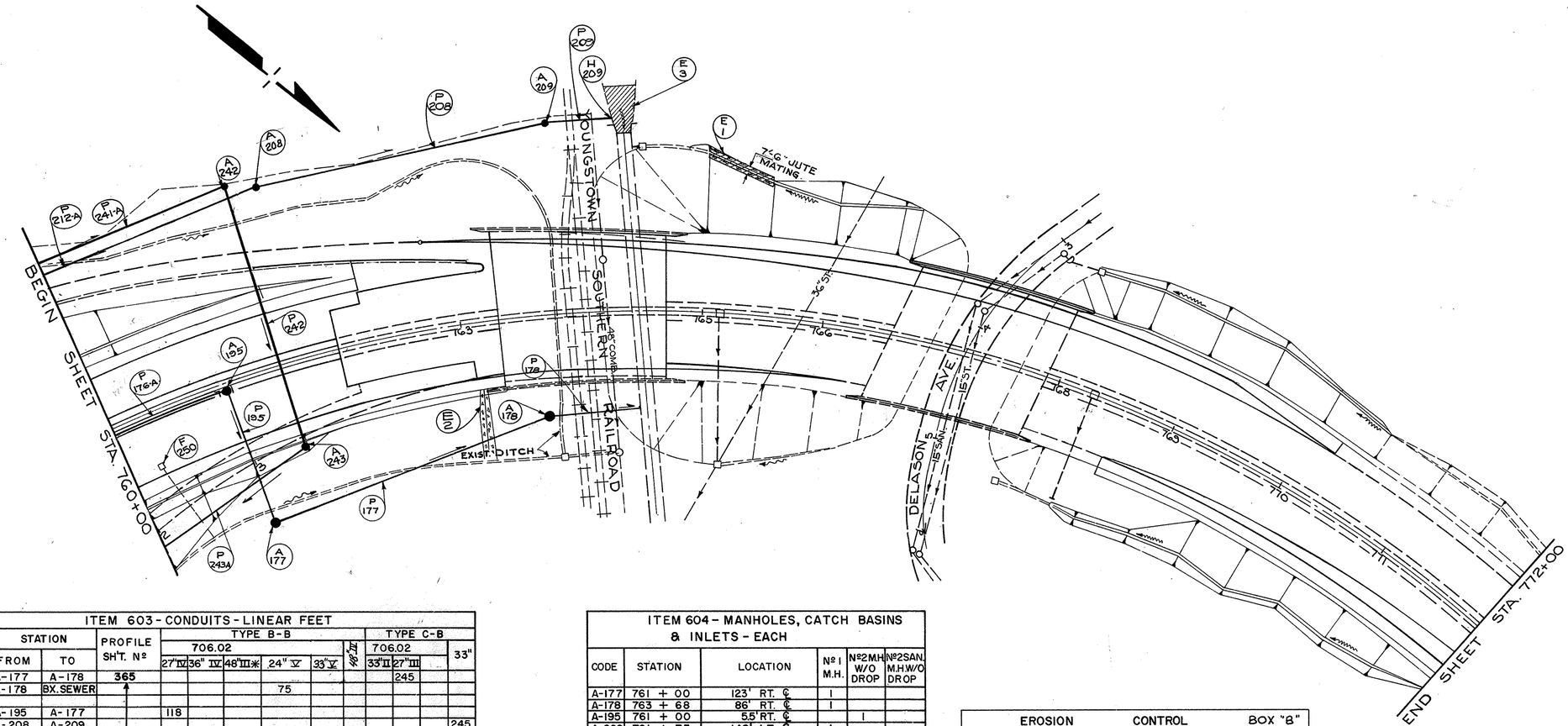
MAY 25 1971

DRAINAGE PROFILES
STA. 750+00 TO STA. 760+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-G.98

364
656



ITEM 603 - CONDUITS - LINEAR FEET														
CODE	STATION		PROFILE SH'T. Nº	TYPE B-B						TYPE C-B				
	FROM	TO		706.02						706.02				33"
				27" IV	36" IV	48" III*	24" V	33" V	42"	33" II	27" III			
P-177	A-177	A-178	365								245			
P-178	A-178	BX. SEWER					75							
P-195	A-195	A-177		118										
P-208	A-208	A-209												245
P-209	A-209	H-209						45						
P-212A	760+00	A-208								190				
P-241A	700+00	A-242			170*									
P-242	A-242	A-243				226								
P-243A	A-243	760+00							142					
P-176A	760+00	A-195	365	100			75			190	245			245
TOTAL				218	170*	226*	75	45	142	190	245			245

*WITH BITUMINOUS COATING FOR SANITARY SEWER

ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH					
CODE	STATION	LOCATION	Nº 1 M.H.	Nº 2 M.H. W/O DROP	Nº 2 SAN. M.H. W/O DROP
A-177	761 + 00	123' RT. ℄	1		
A-178	763 + 68	86' RT. ℄	1		
A-195	761 + 00	5.5' RT. ℄		1	
A-208	761 + 73	148' LT. ℄	1		
A-209	763 + 83	158' LT. ℄	1		
A-242	761 + 50	156' LT. ℄			1
A-243	761 + 50	74' RT. ℄			1
TOTAL			4 ✓	1 ✓	2 ✓

EROSION CONTROL BOX "B"			
CODE	STATION	LOCATION	601 - RIP - RAP AS PER PLAN S.Y.
E-3	764+50	LT. ℄	50.0
	TOTAL		50.0

EROSION CONTROL BOX "A"				
CODE	STATION		667-S.Y. JUTE MATTING	660-S.Y. SPECIAL SLOPE PROTECTION
	FROM	TO		
E-1	765+00	765+50	50 **	
E-2	763+07	——		55
TOTAL			50**	55

**CITY-STATE FUNDS

202-INLET REMOVED			
CODE	STATION	LOCATION	EACH
F-250	2+35	40' LT. ℄ RAMP "Y"	1

ITEM 602 - MASONRY - CU. YD.			
CODE	STATION	LOCATION	C.Y.
H-209	764 + 30	159' LT. ℄	0.6
TOTAL			0.6

R.R.C. 4/2/69
C.A.P. 4/17/69

0 50 100

MAY 25 '71

STA. 760+00 TO STA. 772+00 DRAINAGE PLAN BOARDMAN EXP.

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

365
656

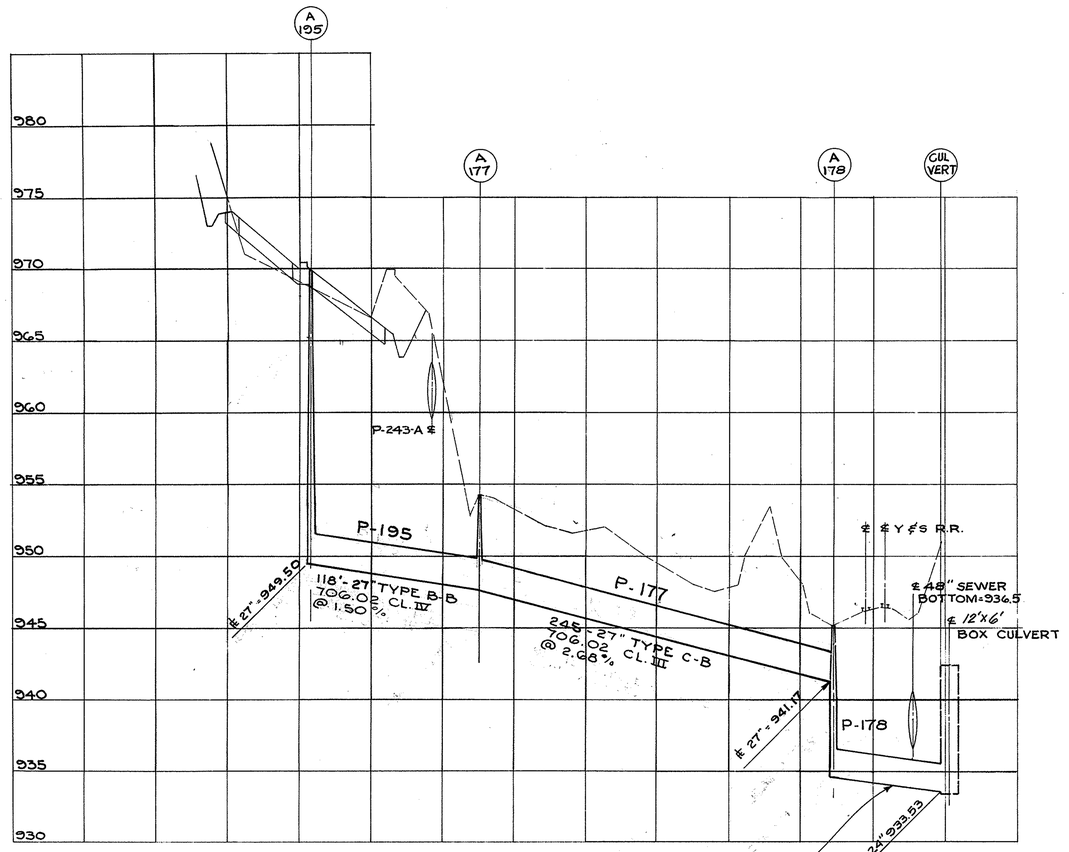
A-195
604 Nº 2 M.H. W/DROP
STA. 761+00
5.5' RT ℄
COVER ELEV. 970.10
℄ 27" = 949.50

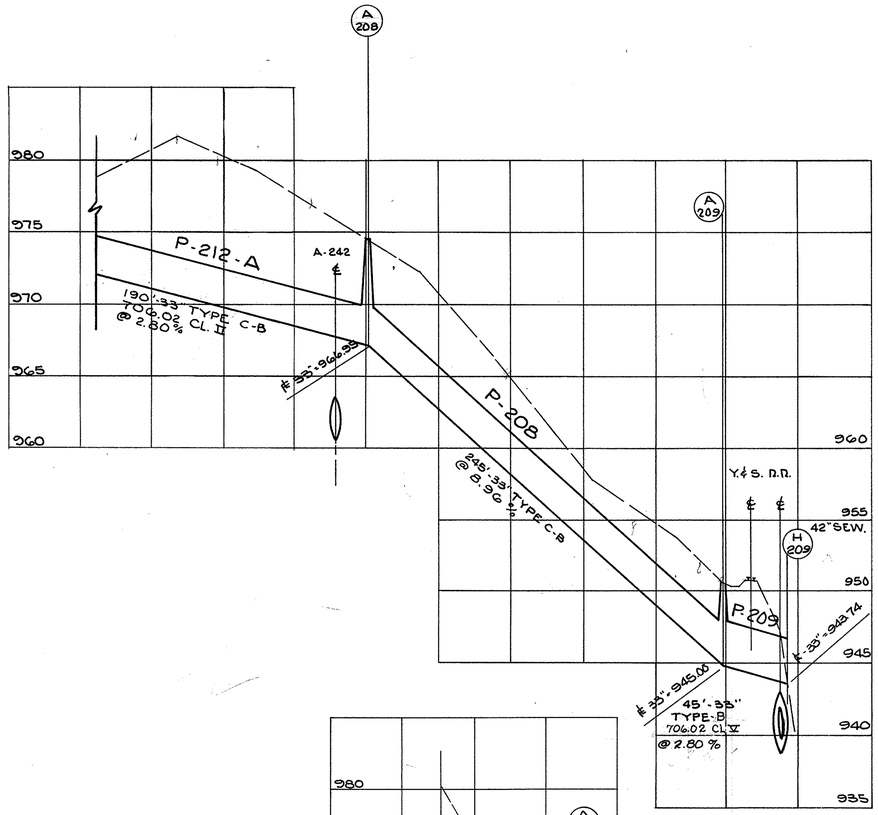
A-177
604 Nº1 M.H.
STA. 761+00
123' RT. ℄
COVER ELEV. 954.3
℄ 27" 944.71

A-178
604 Nº 1 M.H
STA 763+68
86' RT. ℄
COVER ELEV. 945.1
℄ 27" 937.36
℄ 24" 934.51

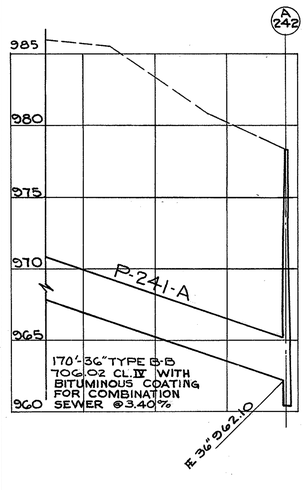
A-208
604 Nº 1 MANHOLE
STA. 761+73
(148' LT. ℄)
COVER ELEV. = 974.5
℄ 33" = 966.95

A-209
604 Nº 1 MANHOLE
STA. 763+83
(158' LT ℄)
COVER ELEV. = 950.5
℄ 33" = 945.00

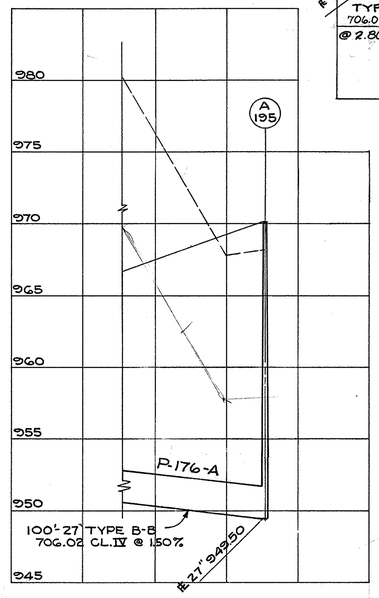




A-242
604 Nº. 2 SAN. M.H. W/o DROP
STA. 761+50
(156' LT. ℄)
COVER ELEV. 978.30
℄ 36" = 962.10
℄ 48" = 960.48

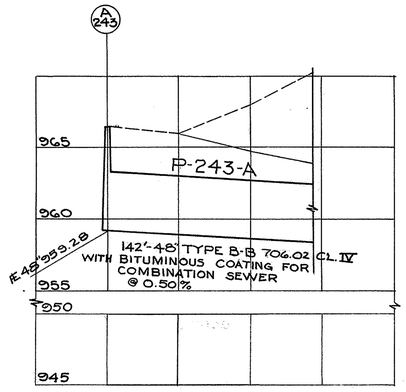


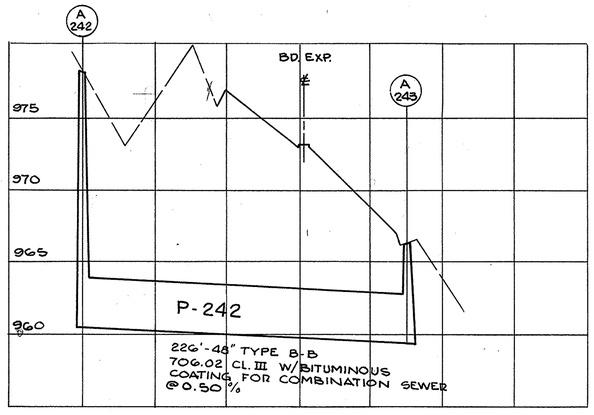
H-209
602 HW-E
STA. 764+30
(159' LT ℄)
℄ 33" = 943.74



A-195
604 Nº 2 M.H. W/DROP
STA. 761+00
5.5' RT. ℄
COVER ELEV. 970.10
℄ 27" = 949.50

A-243
604 Nº 2 SAN. M.H W/o DROP
STA. 761+50
(74' RT. ℄)
COVER ELEV. 966.5
℄ 48" = 959.28





A-242
604 Nº 2 MANHOLE
STA. 761+50
156' RT ℄
COVER ELEV. 978.3
℄ 36" = 962.10
℄ 48" = 960.48

A-243
604 Nº 1 MANHOLE
STA. 761+50
74' RT. ℄
COVER ELEV. = 966.5
℄ 48" = 959.28

PIPE PROFILES THIS SHEET		
P	-	176-A
P	-	177
P	-	178
P	-	178-A
P	-	195
P	-	208
P	-	209
P	-	212-A
P	-	241-A
P	-	242
P	-	243-A

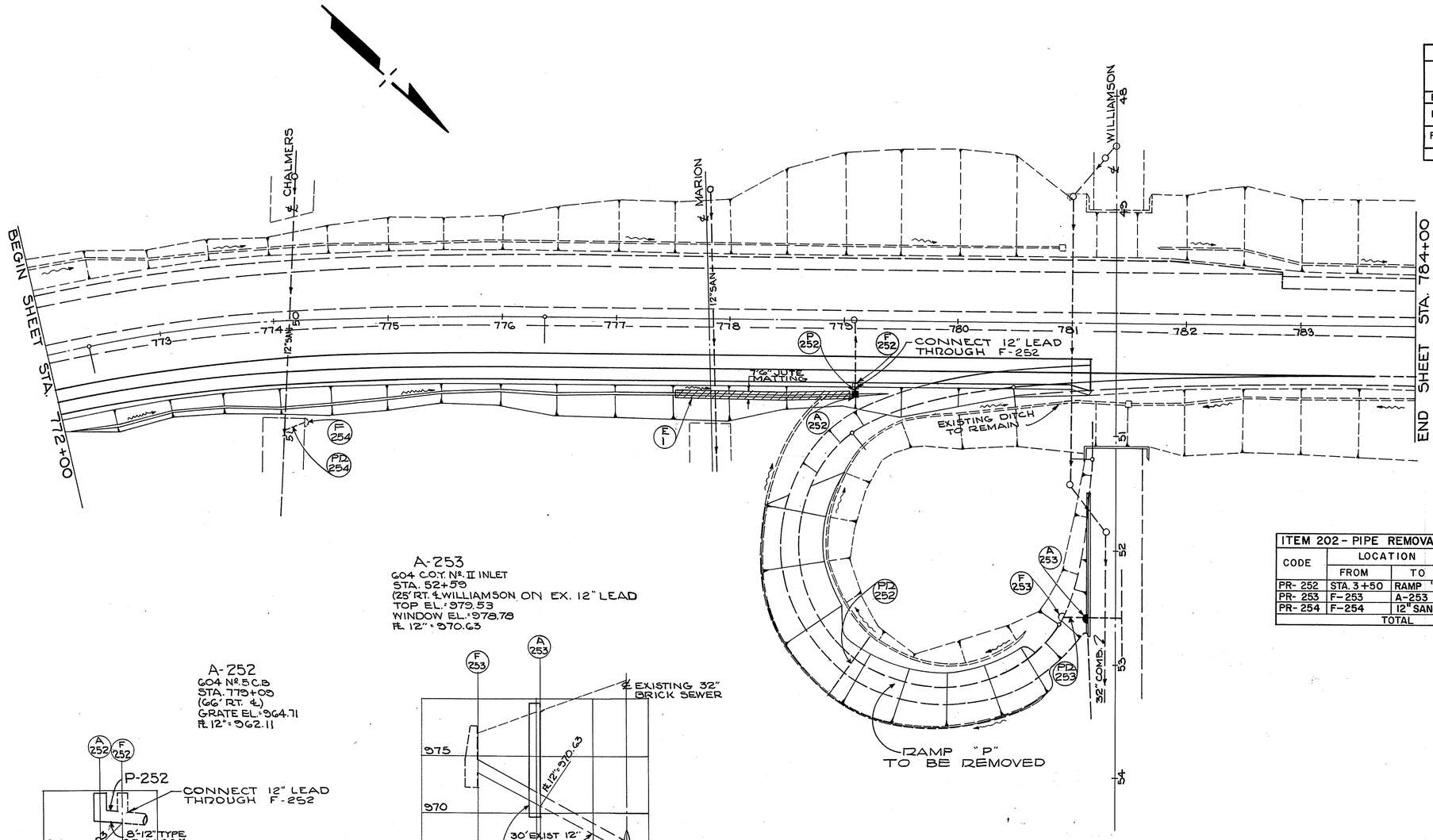
MAY 25 [illegible]

STA.760+00 TO STA.772+00
DRAINAGE PROFILES
BOARDMAN EXP.

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

366
656



A-253
604 C.O.Y. Nº. II INLET
STA. 52+59
(25' RT. ℄ WILLIAMSON ON EX. 12" LEAD
TOP EL.=979.53
WINDOW EL.=978.78
Ft. 12" = 970.63

NOTE: PROPOSED INLET TO BE PLACED ON EXISTING 12" LATERAL.

A-252
604 Nº. 5 C.B.
STA. 779+09
(66' RT. ℄)
GRATE EL.=964.71
Ft. 12" = 962.11

F-252
EXIST. C.B.
STA. 779+09
(58' RT. ℄)
EXIST. 12" PIPE
TO BE CONNECTED
TO P-252

ITEM 202 - INLETS & CATCH BASINS REMOVED

CODE	STATION	LOCATION	INLETS REMOVED EACH	CATCH BASINS REMOVED EA.
F-252	779 +09	58' RT. ℄		1
F-253	52 +59	45' RT. ℄ WILLIAMSON	1△	
F-254	50 +90	16.5' LT. ℄ CHALMERS	1	
TOTAL			2	1

ITEM 603 - CONDUITS - LINEAR FEET

CODE	LOCATION		PROFILE SH'T. Nº	TYPE C-B 12"
	FROM	TO		
P-252	A-252	F-252	366	8
TOTAL				8

ITEM 604 - MANHOLES, CATCH BASINS & INLETS - EACH

CODE	STATION	LOCATION	Nº 5 C-B	C.O.Y. Nº II INLET
A-252	779 +09	66' RT. ℄	1	
A-253	52 +59	25' RT. ℄ WILLIAMSON		1△
TOTAL			1	1

△ INDICATES 100% I-SAFETY FUNDS

ITEM 202 - PIPE REMOVAL

CODE	LOCATION		LINEAR FEET
	FROM	TO	15" & UNDER
PR- 252	STA. 3+50	RAMP "P"	65.0△
PR- 253	F-253	A-253	20.0△
PR- 254	F-254	12" SAN.	20.0
TOTAL			105.0

EROSION CONTROL

CODE	STATION		667 S.Y. JUTE MATTING
	FROM	TO	
E-1	777 +52	779 +02	125
TOTAL			125

0 50 100

R.R.C. 4/2/69
C.A.P. 4/4/69
MAY 25 1971

STA. 772+00 TO STA. 784+00
DRAINAGE PLAN
BOARDMAN EXP.

FED.RD.	STATE	PROJECT	
2	OHIO		

367
656

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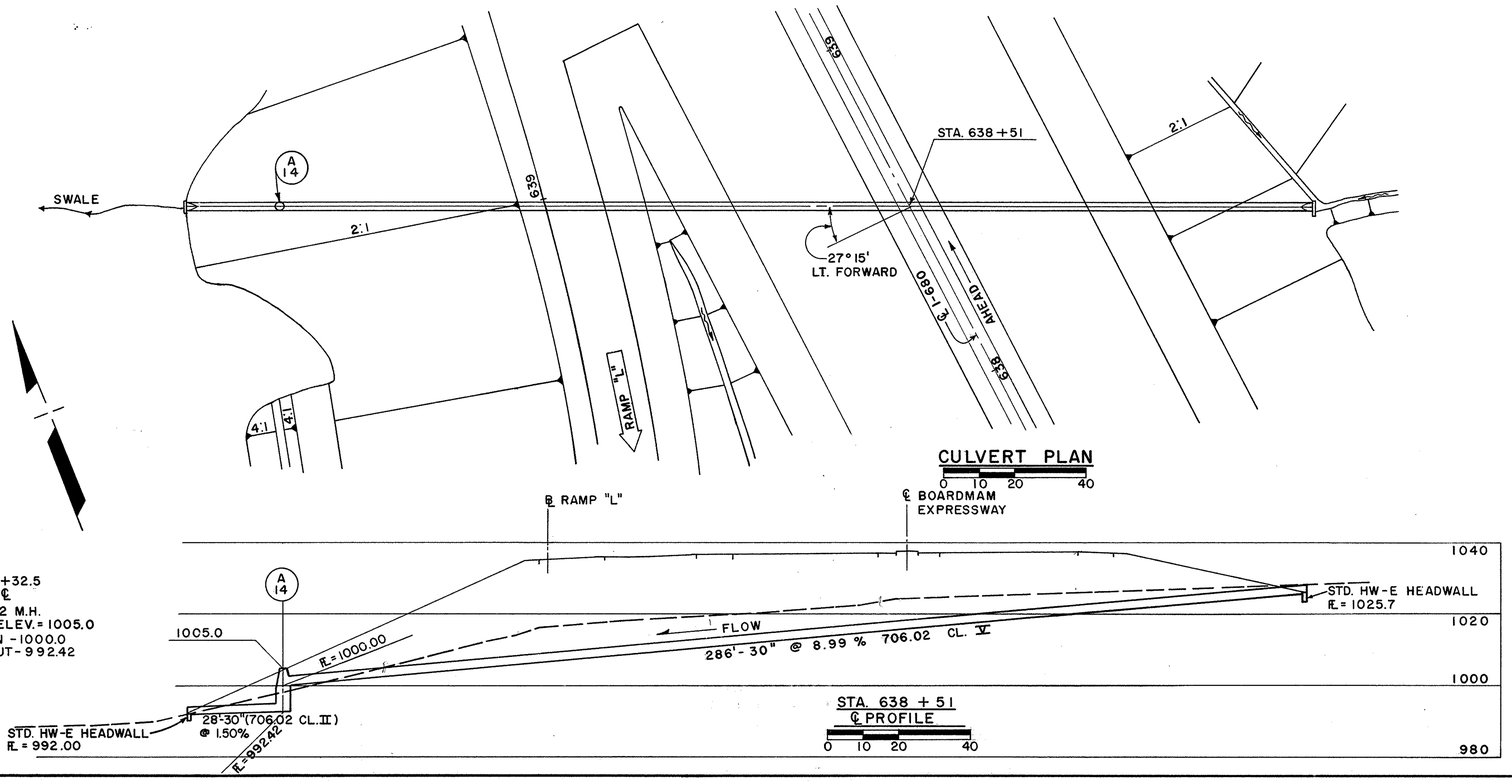
STA.638+51
S-3



A-14

STA. 639+32.5
136' LT. ℄
604 Nº 2 M.H.
COVER ELEV.= 1005.0
R 30" IN - 1000.0
R 30" OUT - 992.42

AREA = 16 ACRES
Q 50 = 40 C.F.S.

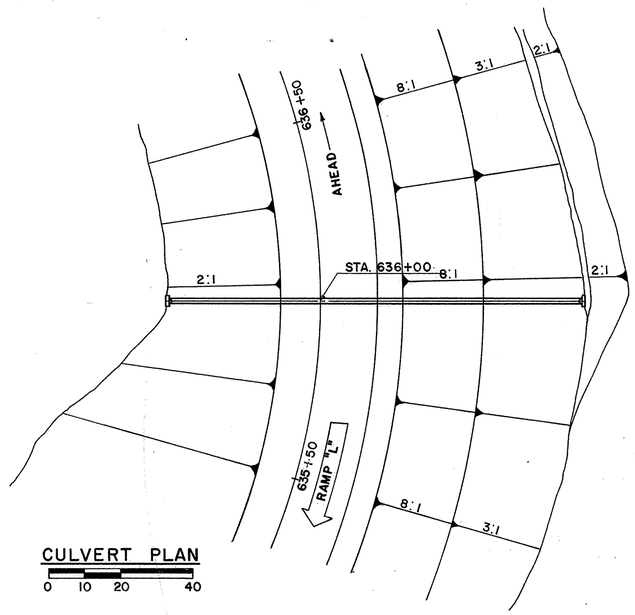
PARTIC. ESTIMATED QUANTITES

603	30" PIPE CULVERT TYPE A-B (706.02-CLASS V)	286 L.F.
603	30" PIPE CULVERT TYPE A-B (706.02-CLASS III)	28 L.F.
602	CONCRETE MASONRY	1.1 C.Y.
604	Nº 2 MANHOLE W/o DROP	1 EA.

CULVERT DATA

TYPE: STD. PIPE CULVERT
SIZE: 30"X 314'
SKEW: 27°15' LT. FOREWARD
WORK REQUIRED: BUILD NEW 30" PIPE CULVERT FOR ROADWAY AS SHOWN.

STA. 636+00 RAMP "L"
S-2



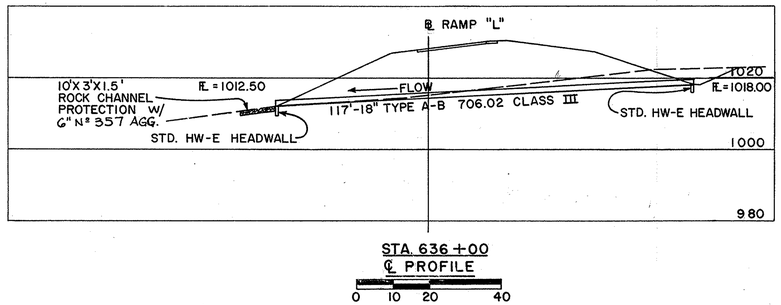
AREA = 3.2 ACRES
Q 50 = 13 C.F.S.

RURAL ESTIMATED QUANTITIES

603	18" PIPE CULVERT TYPE A-B(706.02 CLASS III)	117 L.F.
602	CONCRETE MASONRY	0.6 C.Y.
601	ROCK CHANNEL PROTECTION TYPE B	2.2 C.Y.

CULVERT DATA

TYPE: STD PIPE CULVERT
SIZE: 18"X 117'
SKEW: NONE
WORK REQUIRED: BUILD NEW 18" PIPE CULVERT FOR ROADWAY AS SHOWN.



CULVERT DETAILS

STA. 638 +51 BOARDMAN EXP.
STA. 636 +50 RAMP "L"

R.R.C. 4/4/69
C.A.P. 4/14/69

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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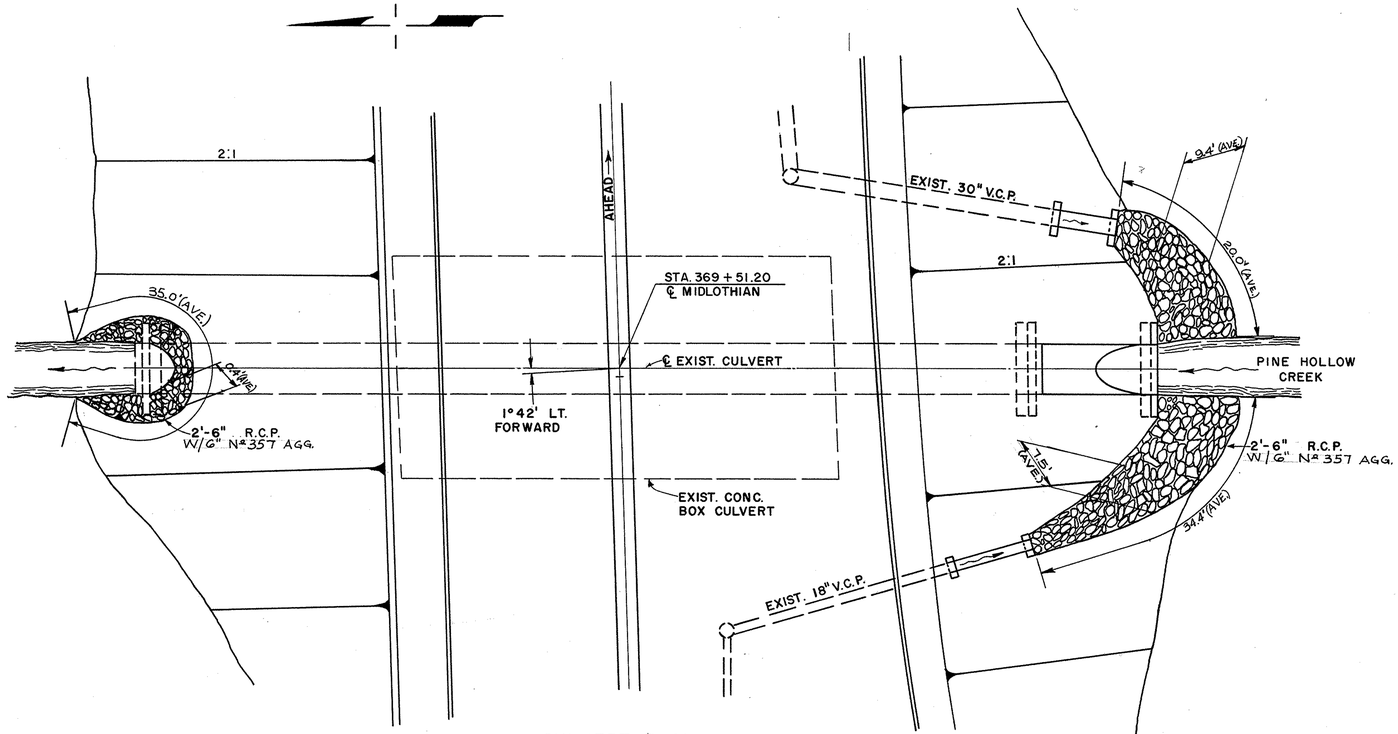
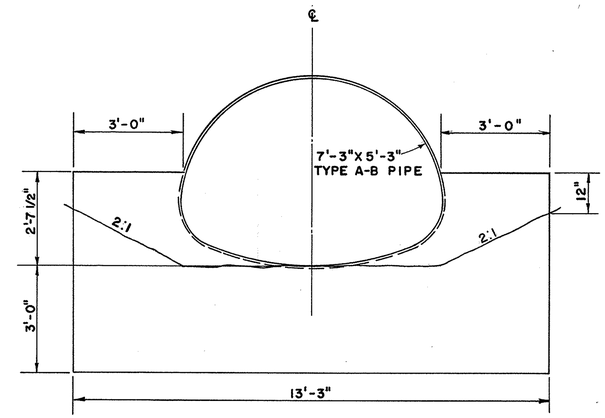
656

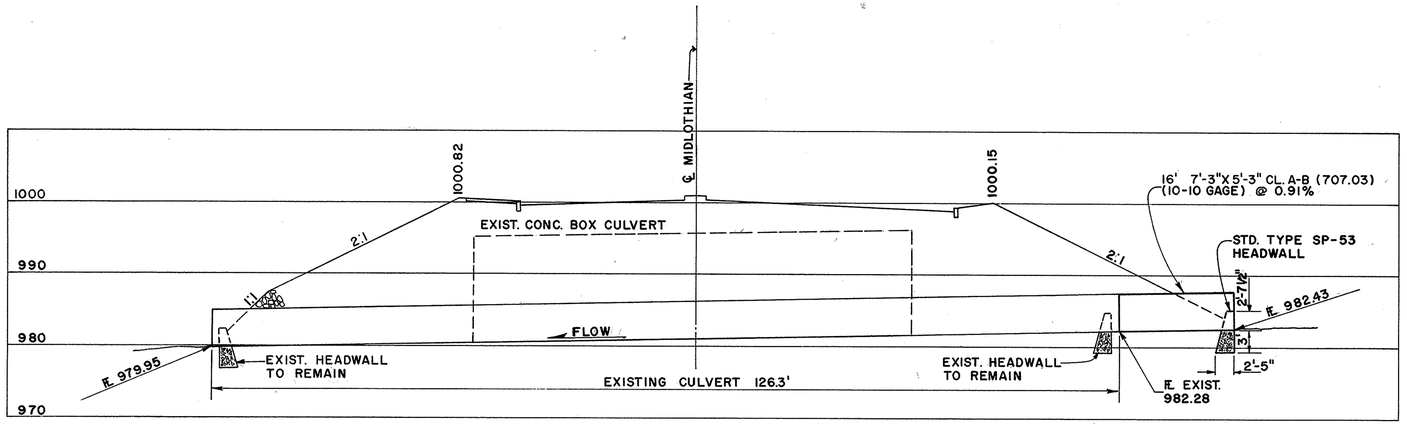
STA. 369 + 51.20
S-4



CULVERT PLAN
0 5 10 15 30



HEADWALL DETAIL
0 1 2 3 6



STA. 369 + 51.20
℄ PROFILE
0 5 10 15 30

CULVERT DATA

TYPE : 7'-3"X 5'-3" CLASS A-B (707.03) (10 10 GAGE)
SIZE : 7'-3"X 5'-3" X 16'-0"
SKEW : 1°42' LEFT FORWARD
WORK REQUIRED : EXTEND EXIST. 7'-3"X 5'-3" CULVERT FOR ROADWAY AS SHOWN.

ESTIMATED QUANTITIES

603	7'-3"X 5'-3" TYPE A (707.03)(10-10 GAGE) WITH CLASS B BEDDING	16 L.F.
602	CONCRETE MASONRY	4.1 C.Y.
601	TYPE A ROCK CHANNEL PROTECTION	65.1 C.Y.

AREA : 557 ACRES
Q 50 : 410 C.F.S.

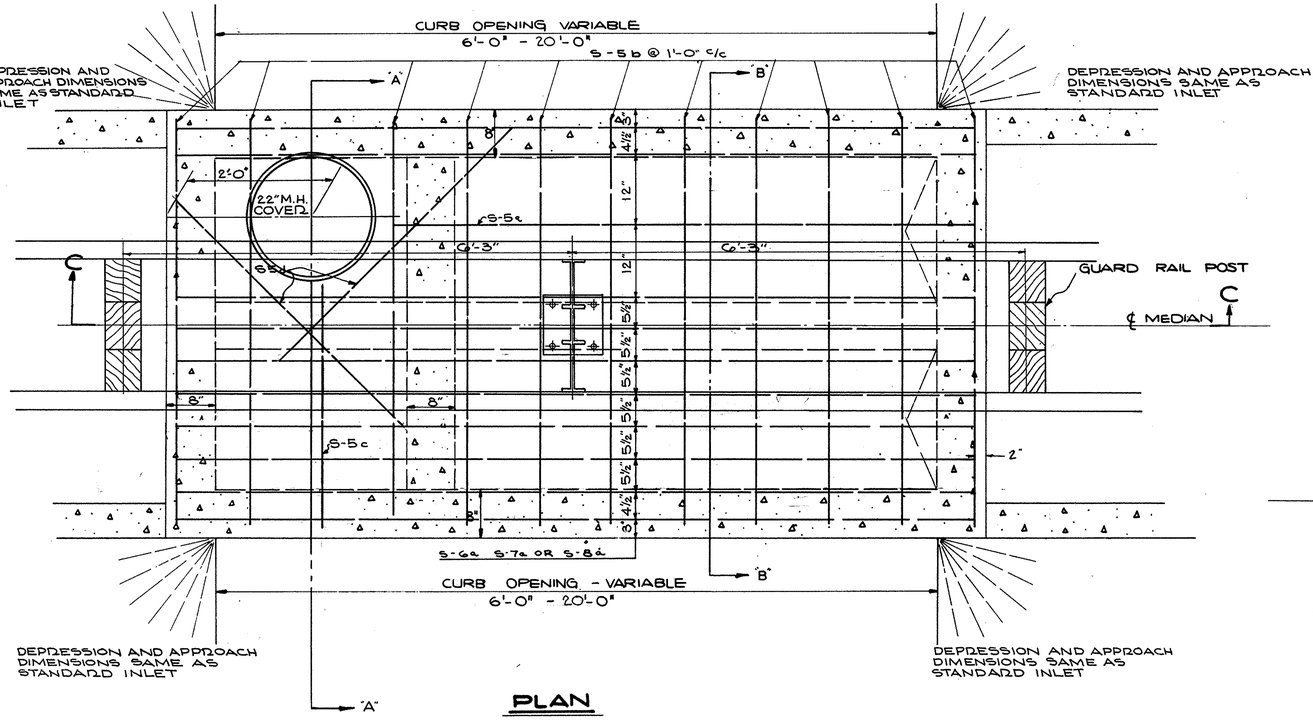
MAY 25 19[illegible]
R.R.C. 4/4/69
C.A.P. 4/14/69

CULVERT DETAIL STA. 369 + 51.20 MIDLOTHIAN BLVD.

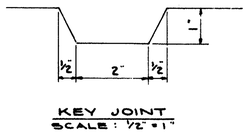
FED. RD.	STATE	PROJECT	
2	OHIO		

369
656

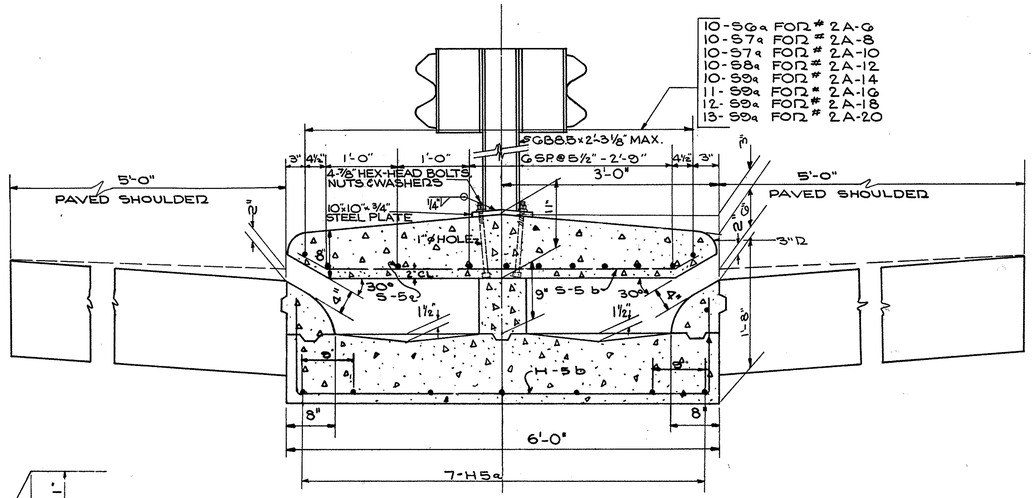
MAH -680-6.98



PLAN

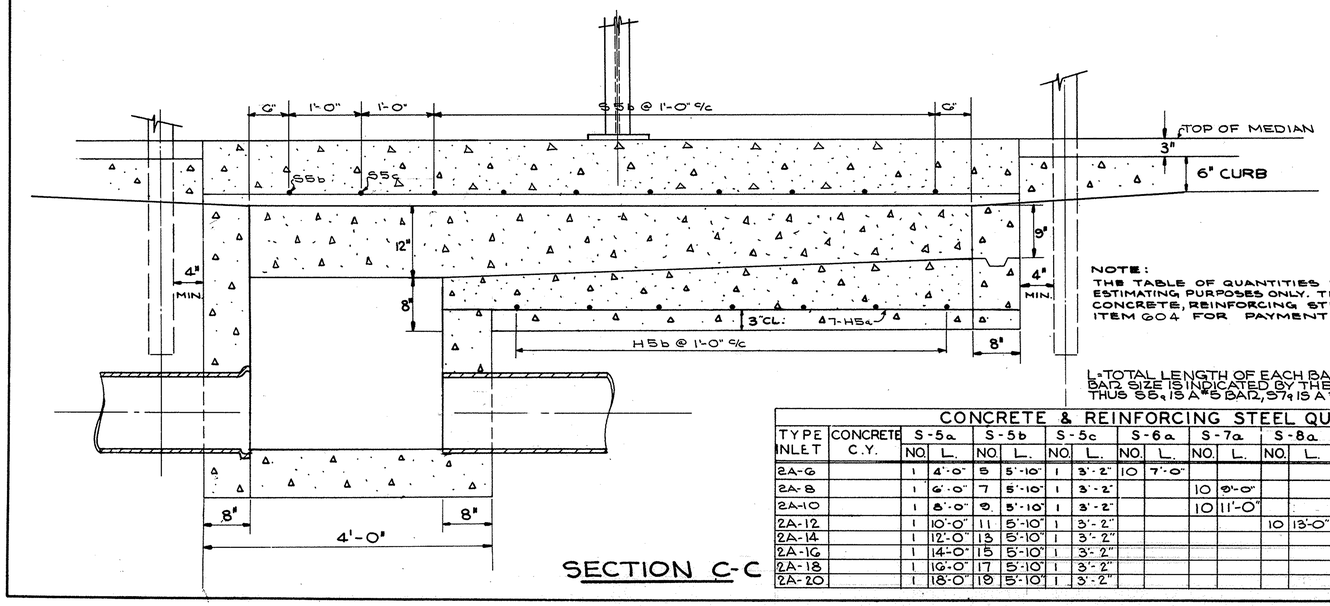


KEY JOINT
SCALE: ½" = 1"



SECTION B-B

QUANTITIES OF CURB WITHIN THE LIMITS OF THE INLET SHALL BE DEDUCTED FROM THE PROJECT QUANTITIES



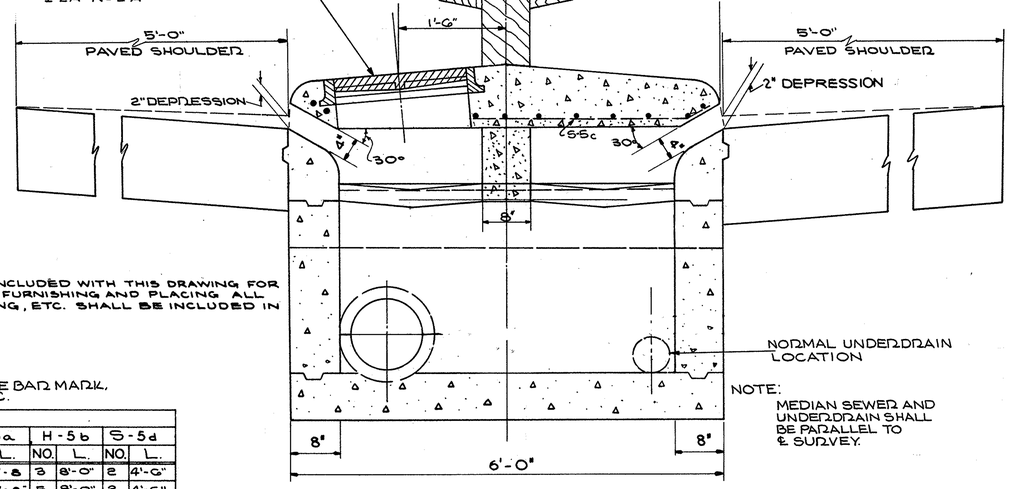
SECTION C-C

NOTE:
THE TABLE OF QUANTITIES BELOW IS INCLUDED WITH THIS DRAWING FOR ESTIMATING PURPOSES ONLY. THE COST OF FURNISHING AND PLACING ALL CONCRETE, REINFORCING STEEL, CASTING, ETC. SHALL BE INCLUDED IN ITEM 604 FOR PAYMENT.

L = TOTAL LENGTH OF EACH BAR.
BAR SIZE IS INDICATED BY THE DIGIT IN THE BAR MARK.
THUS S5a IS A #5 BAR, S7a IS A #7 BAR, ETC.

CONCRETE & REINFORCING STEEL QUANTITIES

TYPE INLET	CONCRETE C.Y.	S-5a NO.	S-5a L.	S-5b NO.	S-5b L.	S-5c NO.	S-5c L.	S-6a NO.	S-6a L.	S-7a NO.	S-7a L.	S-8a NO.	S-8a L.	S-9a NO.	S-9a L.	H-5a NO.	H-5a L.	H-5b NO.	H-5b L.	S-5d NO.	S-5d L.
2A-6		1	4'-0"	5	5'-10"	1	3'-2"	10	7'-0"							7	3'-8"	3	8'-0"	2	4'-6"
2A-8		1	6'-0"	7	5'-10"	1	3'-2"			10	9'-0"					7	5'-8"	5	8'-0"	2	4'-6"
2A-10		1	8'-0"	9	5'-10"	1	3'-2"			10	11'-0"					7	7'-8"	7	8'-0"	2	4'-6"
2A-12		1	10'-0"	11	5'-10"	1	3'-2"					10	13'-0"			7	9'-8"	9	8'-0"	2	4'-6"
2A-14		1	12'-0"	13	5'-10"	1	3'-2"							10	15'-0"	7	11'-8"	11	8'-0"	2	4'-6"
2A-16		1	14'-0"	15	5'-10"	1	3'-2"							11	17'-0"	7	13'-8"	13	8'-0"	2	4'-6"
2A-18		1	16'-0"	17	5'-10"	1	3'-2"							12	19'-0"	7	15'-8"	15	8'-0"	2	4'-6"
2A-20		1	18'-0"	19	5'-10"	1	3'-2"							13	21'-0"	7	17'-8"	17	8'-0"	2	4'-6"



SECTION A-A

NOTE:
MEDIAN SEWER AND UNDERDRAIN SHALL BE PARALLEL TO ℄ SURVEY.

MAY 25 1971

STANDARD № 2A-6, TO 2A-20 INLETS MODIFIED

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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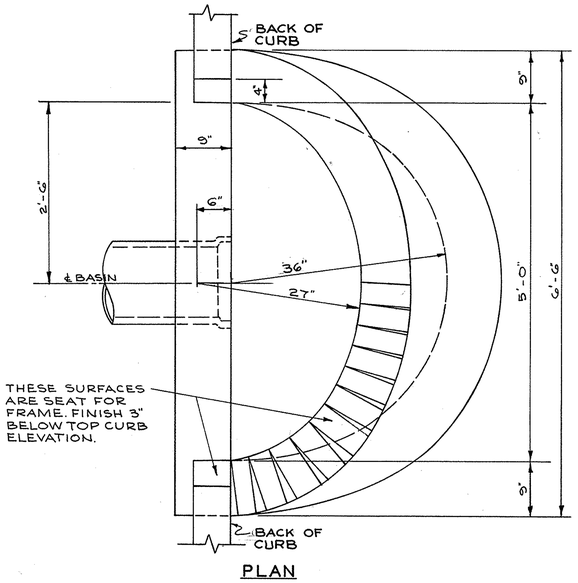
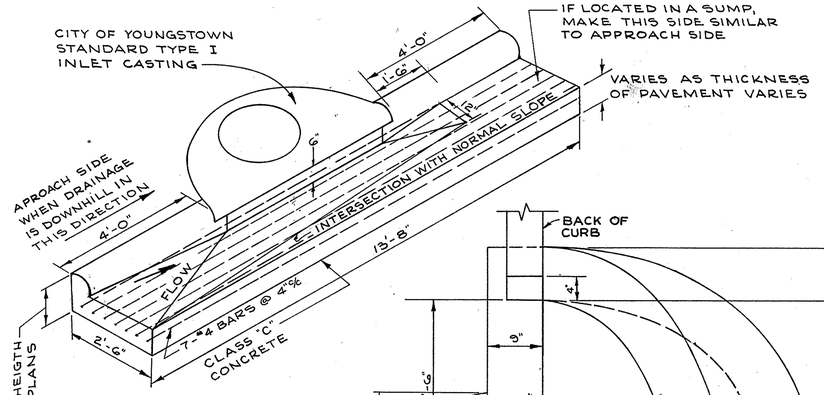
656



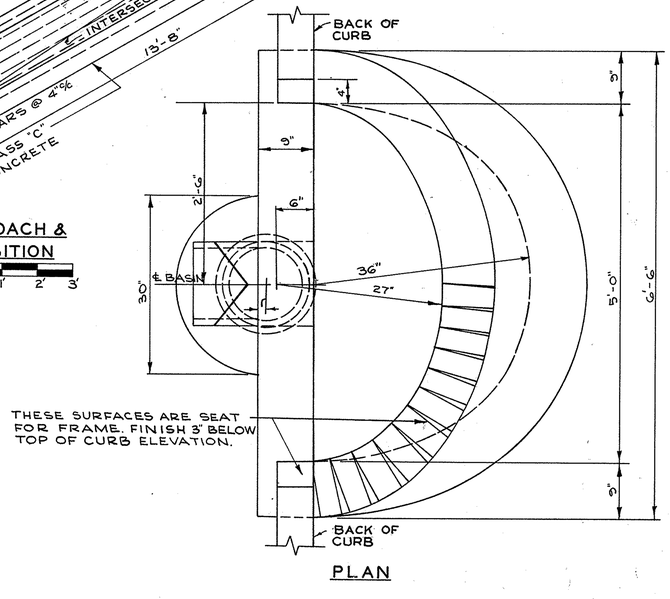
THESE SURFACES ARE SEAT FOR FRAME. FINISH 3" BELOW TOP CURB ELEVATION.

PLAN



INLET APPROACH & CURB TRANSITION

SCALE 0 1' 2' 3'



THESE SURFACES ARE SEAT FOR FRAME. FINISH 3" BELOW TOP OF CURB ELEVATION.

PLAN

NOTES

FRAME & COVER SHALL BE OF NEW CAST IRON IN ACCORDANCE WITH MATERAL DETAILS FOR STANDARD TYPE I 320# MIN. INLET CASTING & 50# MIN. COVER, AND SHALL CONFORM TO THE REQUIREMENTS OF ITEM 604

BRICK SHALL BE EIGHT INCHES IN SIZE LAID IN MORTAR AND INTERIOR SURFACE SHALL BE PLASTERED WITH A SMOOTH COAT OF PORTLAND CEMENT MORTAR AT LEAST ONE HALF INCH THICK TO THE HEIGHT SHOWN. THE BRICK SHALL BE LAID IN A FULL BED OF MORTAR WITH NO JOINTS APPEARING ON EITHER SURFACE OF MORE THAN THREE EIGHTS INCHES IN THICKNESS. JOINTS SHALL BE NEATLY POINTED AND STRUCK ON THE INSIDE OF THE INLET. THE MORTAR SHALL BE COMPOSED OF ONE PART OF PORTLAND CEMENT TO TWO PARTS OF SAND BY VOLUME.

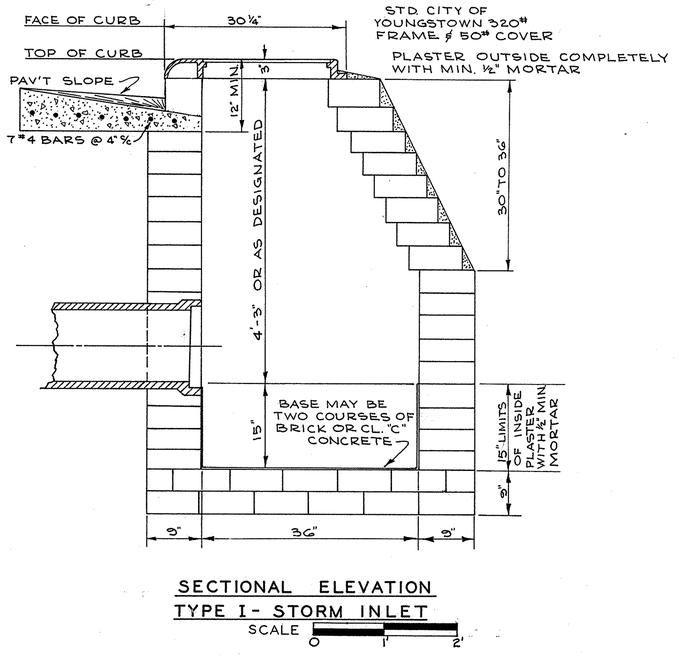
THE TOP OF THE WALLS OF THE STANDARD INLETS SHALL BE PROPERLY LEVELED OFF SO AS TO FORM A FLAT SURFACE UPON WHICH THE INLET CASTING IS TO REST. THE INLET CASTING IS TO BE SET IN A MORTAR BED.

THE TOP OF THE CASTING SHALL BE FILLED WITH MORTAR AND TROWELED TO A SMOOTH EVEN FINISH.

THE BOTTOM OF THE STORM INLET SHALL BE CONSTRUCTED OF TWO COURSES OF BRICK LAID IN MORTAR. A CONCRETE BOTTOM MAY BE USED IN PLACE OF BRICK. THE PAD SHALL BE NINE INCHES IN THICKNESS, CLASS "C" CONCRETE AND LEVELED OFF TO A FLAT SURFACE.

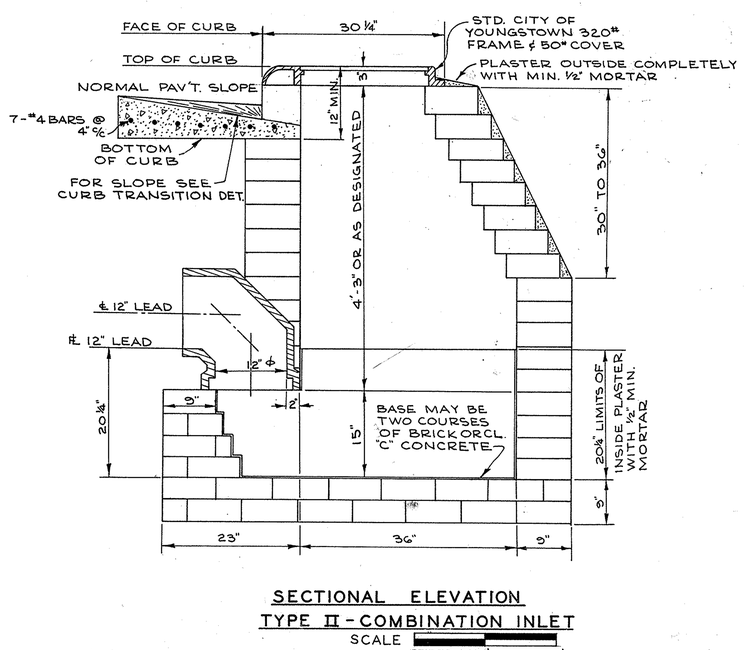
INTEGRAL CURB AND GUTTER SHOWN WILL BE CONSTRUCTED AND PAID FOR AS ITEM 604 "CATCH BASIN." REINFORCE SLAB WITH #4 BARS @ FOUR INCHES CENTER TO CENTER, EIGHT FEET LONG CENTERED ON OPENING.

QUANTITIES OF CURB AND DEPRESSED APRON WITHIN THE LIMITS OF THE INLET SHALL BE DEDUCTED FROM THE PROJECT QUANTITIES.



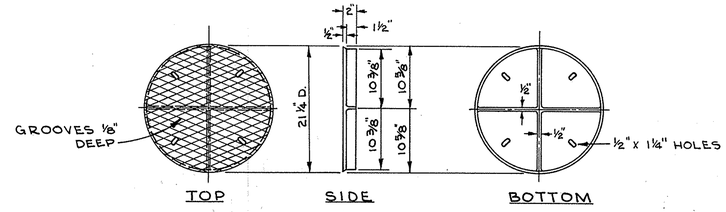
SECTIONAL ELEVATION
TYPE I - STORM INLET

SCALE 0 1' 2'

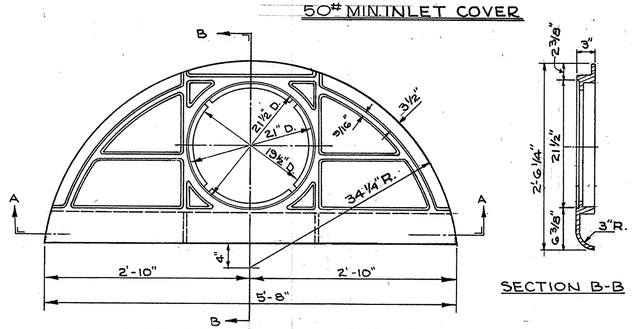


SECTIONAL ELEVATION
TYPE II - COMBINATION INLET

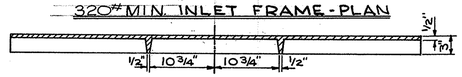
SCALE 0 1' 2'



50# MIN. INLET COVER



320# MIN. INLET FRAME - PLAN



SECTION A-A

DETAILS OF INLET FRAME & COVER

SCALE 0 1' 2' 3'

DRAINAGE DETAILS
YOUNGSTOWN CITY STD. C.B.

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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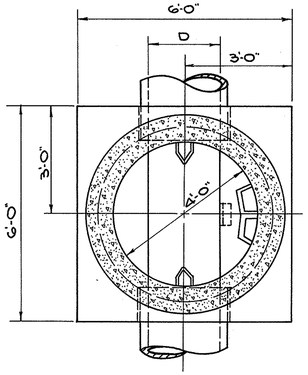
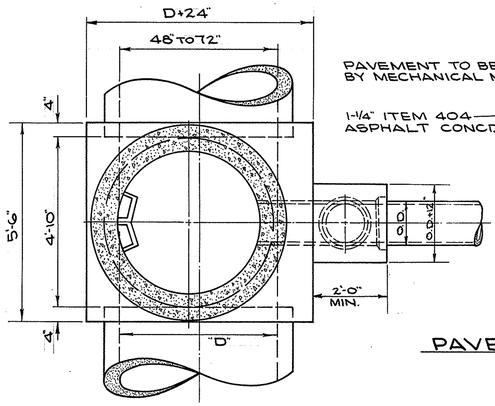
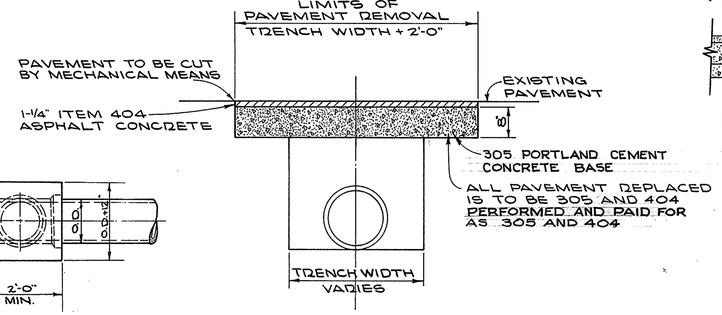


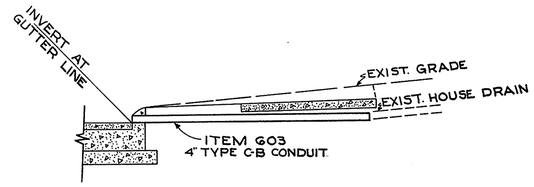
PLAN



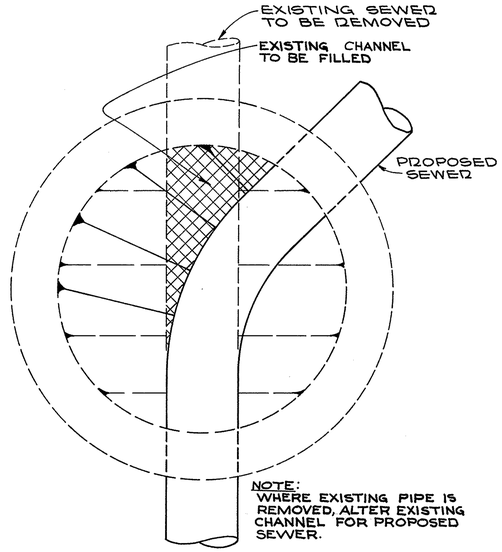
PLAN



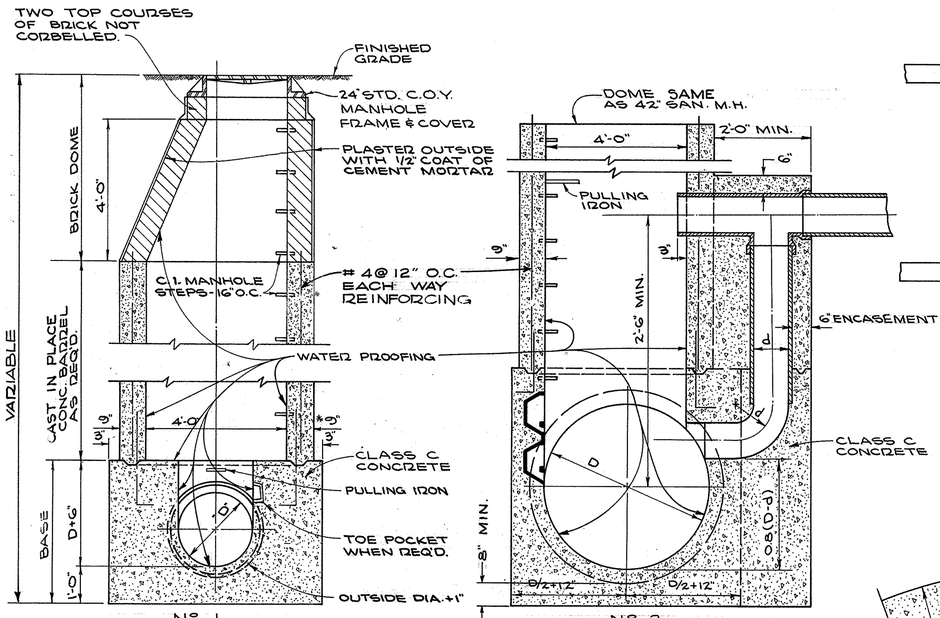
PAVEMENT REPLACEMENT DETAIL



DETAIL OF CONNECTION
TO EXIST. DRAIN PIPE



NOTE:
WHERE EXISTING PIPE IS REMOVED, ALTER EXISTING CHANNEL FOR PROPOSED SEWER.



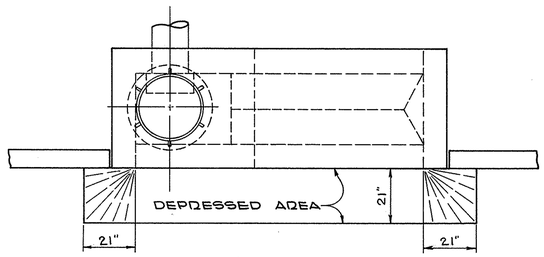
FOR SEWERS UP TO 42"

FOR SEWERS 48" & OVER

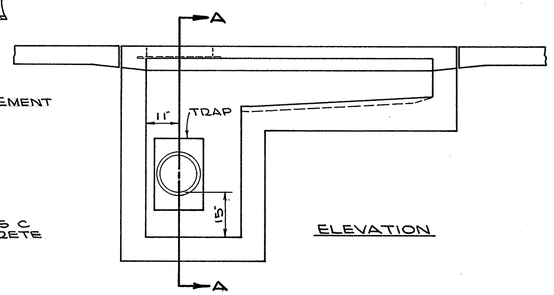
CITY OF YOUNGSTOWN
STANDARD SANITARY MANHOLE DETAILS

0 1 2 3 4 5

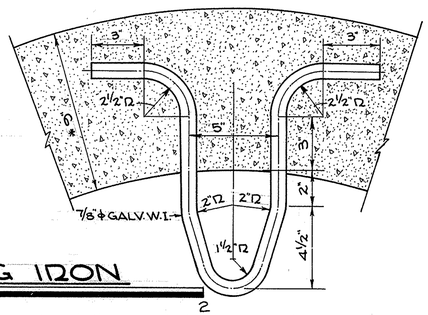
NOTES:
1. DIMENSION "d" TO BE 12" MIN.
2. THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, DATED JANUARY 1, 1971, SHALL BE ADHERED TO.
3. WATERPROOF AREAS INSIDE MANHOLES SHALL INCLUDE ALL INTERIOR SURFACES INCLUDING CONCRETE PIPE EXCEPT CASTINGS. WATERPROOFING MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF FOR "BITUMINOUS COATED CONCRETE COMBINATION AND SANITARY SEWERS" AS CALLED FOR IN THE GENERAL NOTES, PAGE 24.



PLAN



ELEVATION



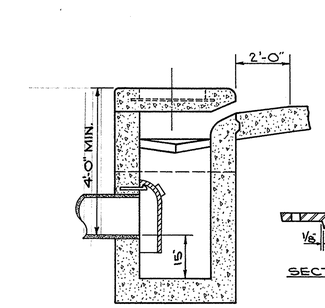
PULLING IRON

0 1 2

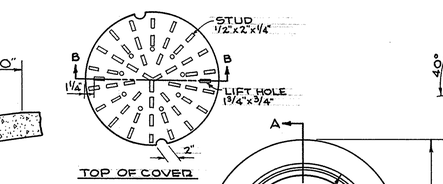
TRAP CATALOGUE NUMBERS
NEENAH D-3701-12 OR D-3706
NEENAH FOUNDRY CO.
NEENAH, WISCONSIN
OR
CAMPBELL 2560 SERIES WITH
2590 HANGER
CAMPBELL FOUNDRY CO.
HARRISON, NEW JERSEY

NOTE:
1. THIS TRAP DETAIL, AS MANUFACTURED BY NEENAH FOUNDRY CO., CAMPBELL FOUNDRY CO., OR APPROVED EQUAL, WILL BE UTILIZED ONLY WHERE NOTED ELSEWHERE IN THESE PLANS OR WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR THE TRAP, SUMP, AND ALL INCIDENTALS INVOLVED WILL BE INCLUDED IN THE UNIT PRICE BID FOR "ITEM 604, STANDARD Nº 2A-G TO-20 INLET, MODIFIED" AS PER PLAN.
2. FOR ALL DIMENSIONS AND OTHER DETAILS NOT SHOWN SEE STANDARD CONSTRUCTION DRAWING I-2A PAVED SHOULDER INLETS.

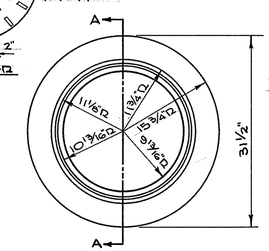
2A-G TO-20 INLET MODIFIED TYPE II



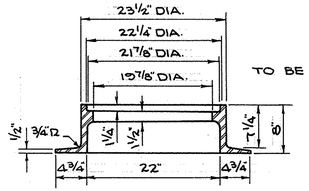
SECTION A-A



SECTION B-B



PLAN OF FRAME



SECTION A-A

0 1 2 3

CITY OF YOUNGSTOWN
STANDARD FRAME & COVER DETAIL

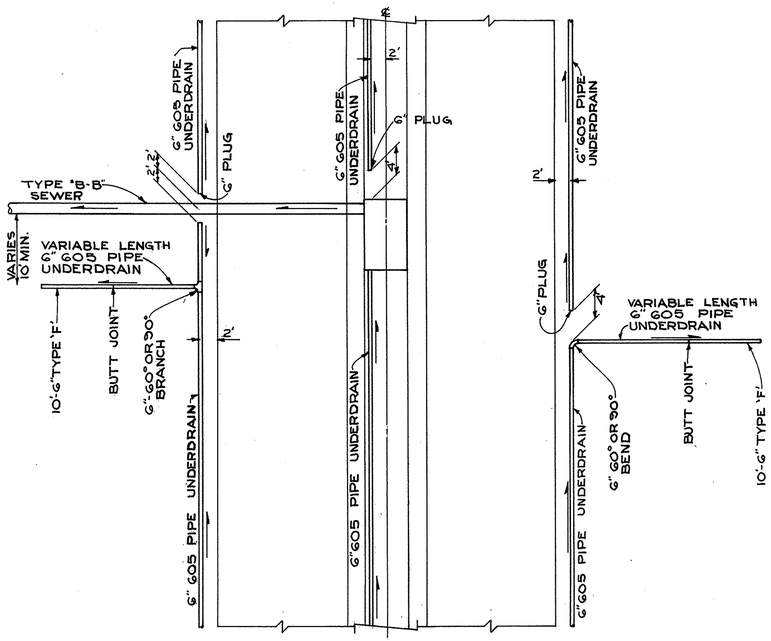
MAY 25 1971
Rev. 8-9-71

DRAINAGE DETAILS

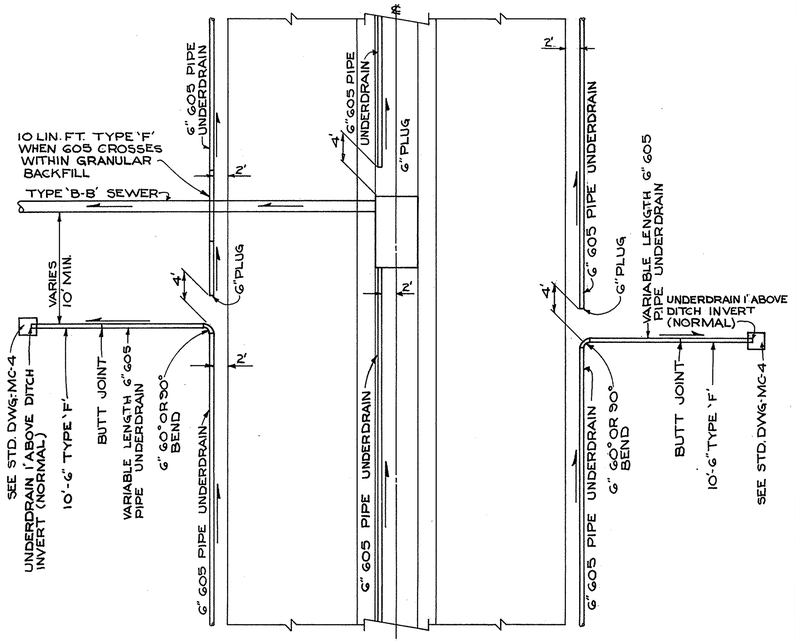
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

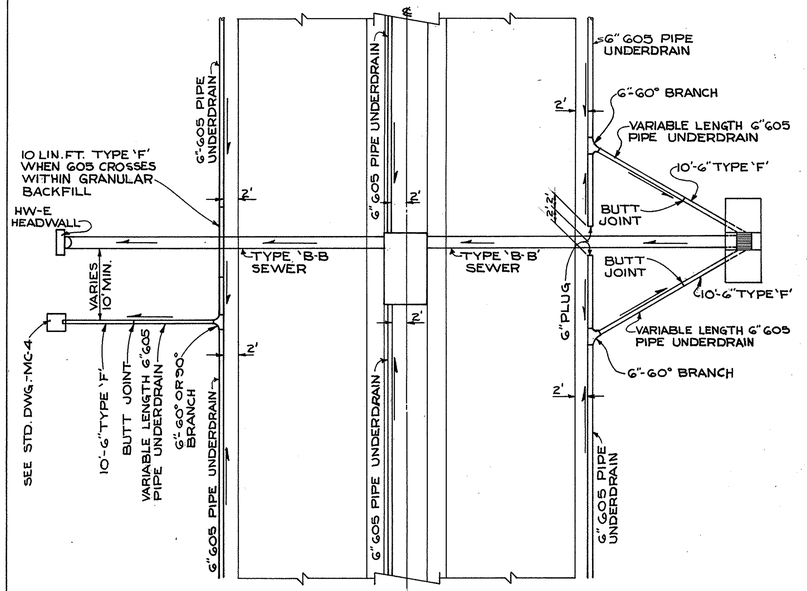
372
656



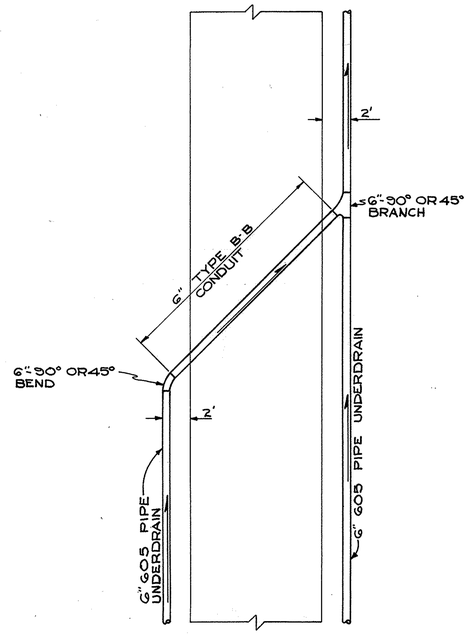
DETAIL "A"



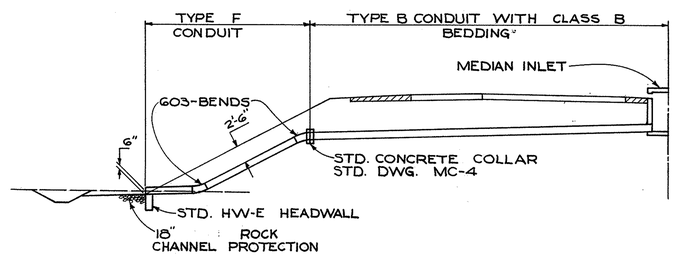
DETAIL "B"



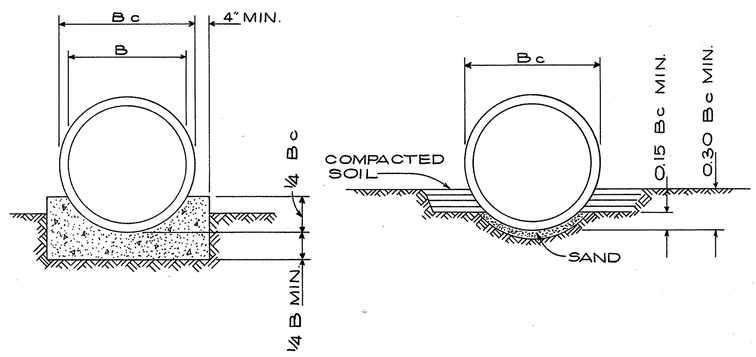
DETAIL "C"



DETAIL 'D'



TYPICAL MEDIAN OUTLET IN HIGH FILL



CONDUIT BEDDING AND UNDERDRAIN DETAILS

mod 25 [illegible]

FED. RD.	STATE	PROJECT	
2	OHIO		

373
656

MAH-680-6.98

℄ BOARDMAN EXPY. I-680

MATCH TO SHEET Nº 374

END SHEET STA. 650+00

℄ MIDLOTHIAN BLVD.

RAMP "J"

RAMP N-N

RAMP "O"

EVERETT AVE.

WESTON AVE.

LEMOYNE AVE.

FOR MIDLOTHIAN BLVD. WATER LINE. SEE SHEET Nº 143, 144 & 145

814 - WATER MAINS				
CODE	STATION	LOCATION	HYDRANTS REMOVED & DISPOSED OF EACH	CUT & PLUG 6" EXIST. W.M. EACH
W-73	G34+90	2' RT. ℄ RAMP "O"	1	
W-74	G38+25	67' LT. ℄ R.P. "O"	1	
W-75	G33+83	175' LT. ℄ R.P. "O"		1
	TOTAL		2	1

0 25 50 100 150

WATER LINE PLAN

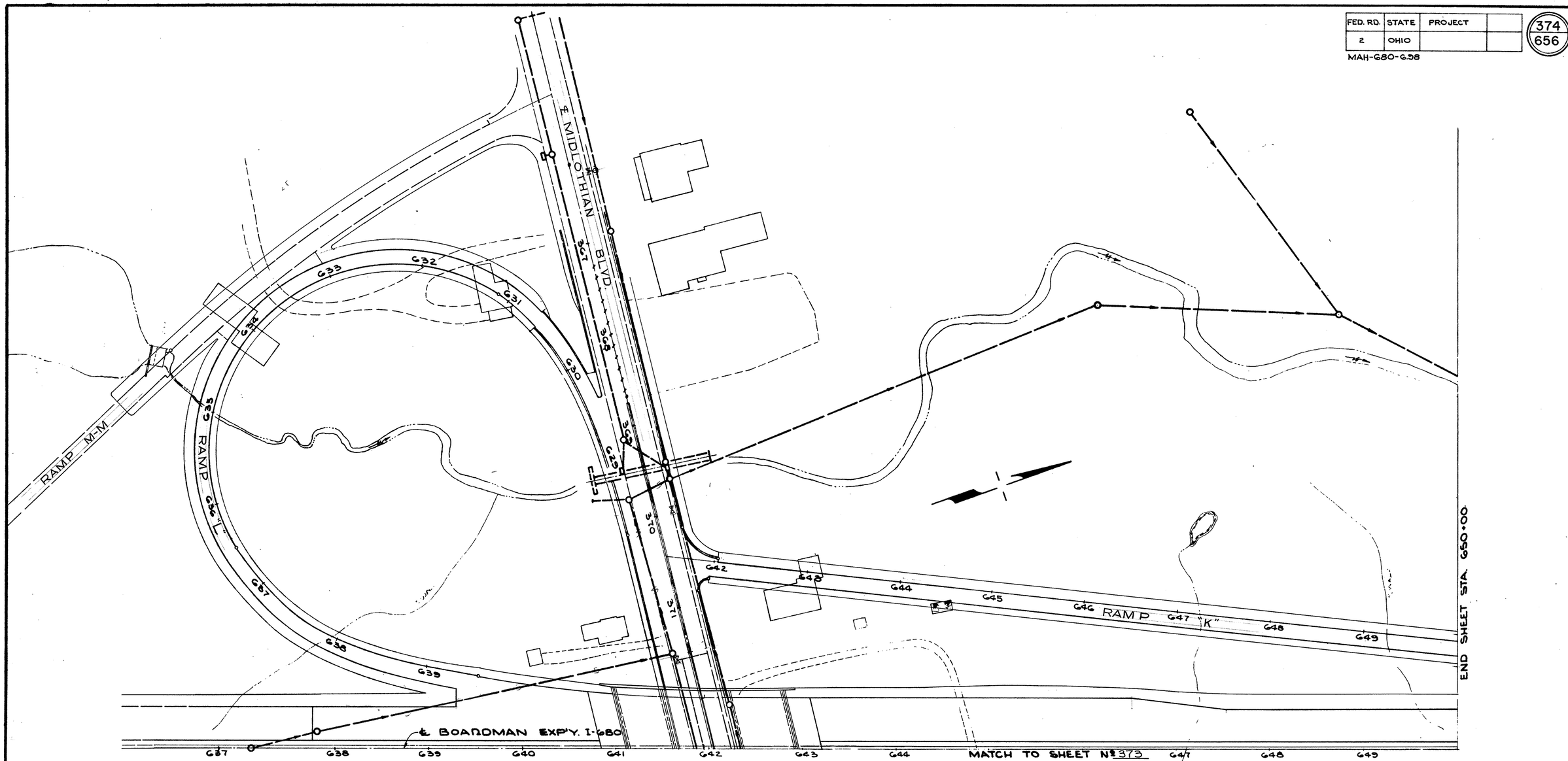
END PROJECT To STA. 650+00
EAST OF ℄

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

374
656



FOR MIDLOTHIAN BLVD.
WATER LINES SEE
SHEET Nº 143, 144 & 145

0 25 50 100 150

WATER LINE PLAN

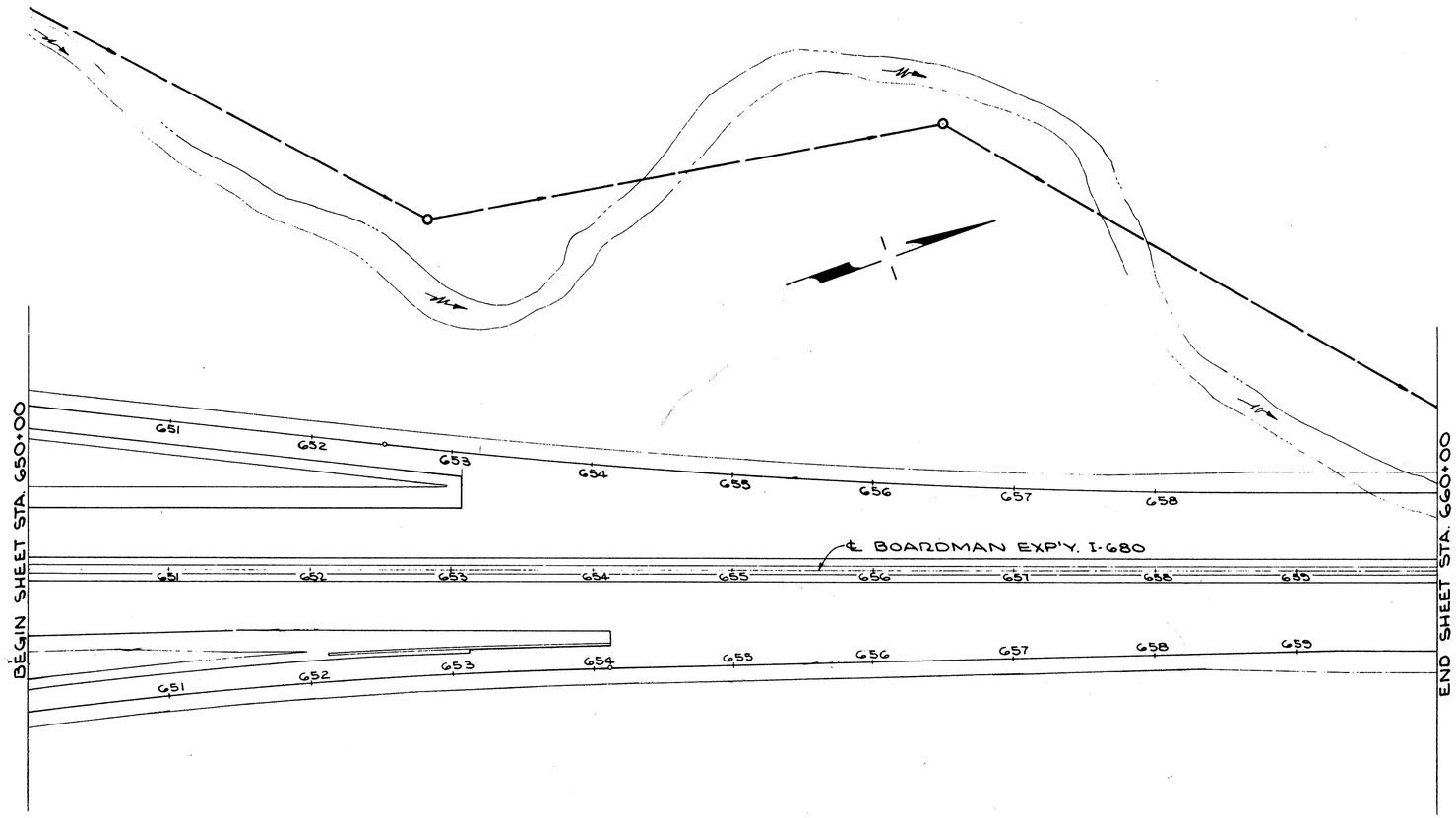
MAY 25 1971

END PROJECT To STA. 650+00
WEST OF ℄

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

375
656



0 25 50 100 150

WATER LINE PLAN

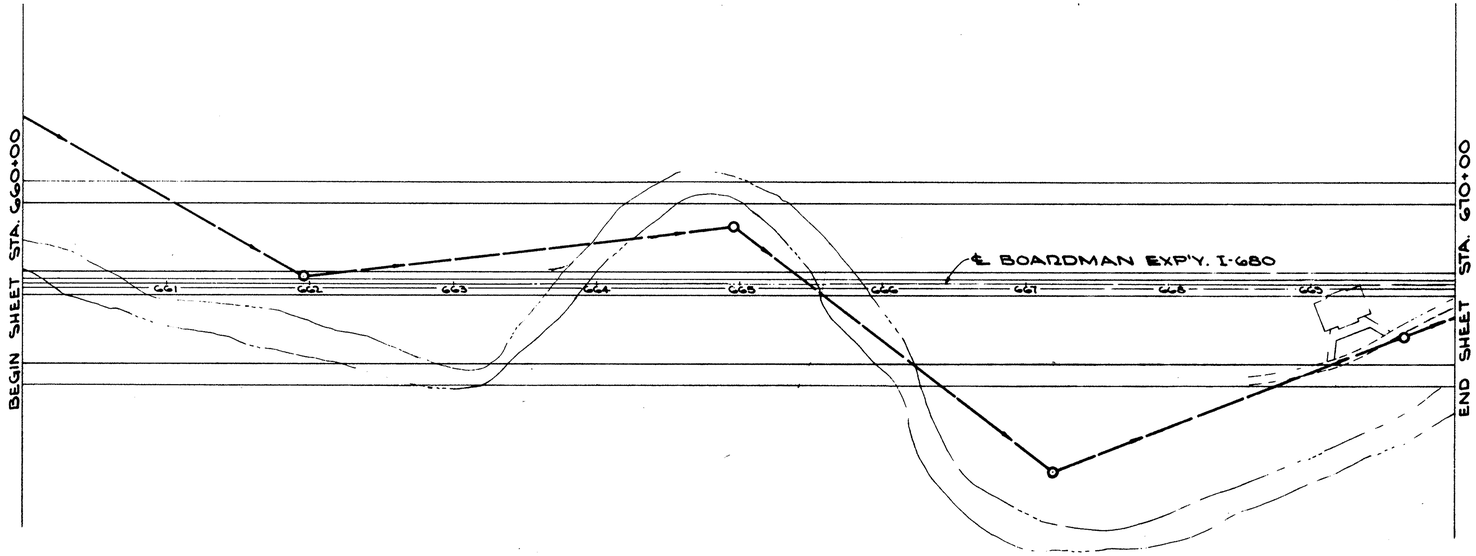
MAY 25 1971

STA. 650+00 To STA. 660+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.38

376
656



0 25 50 100 150

MAY 25 1971

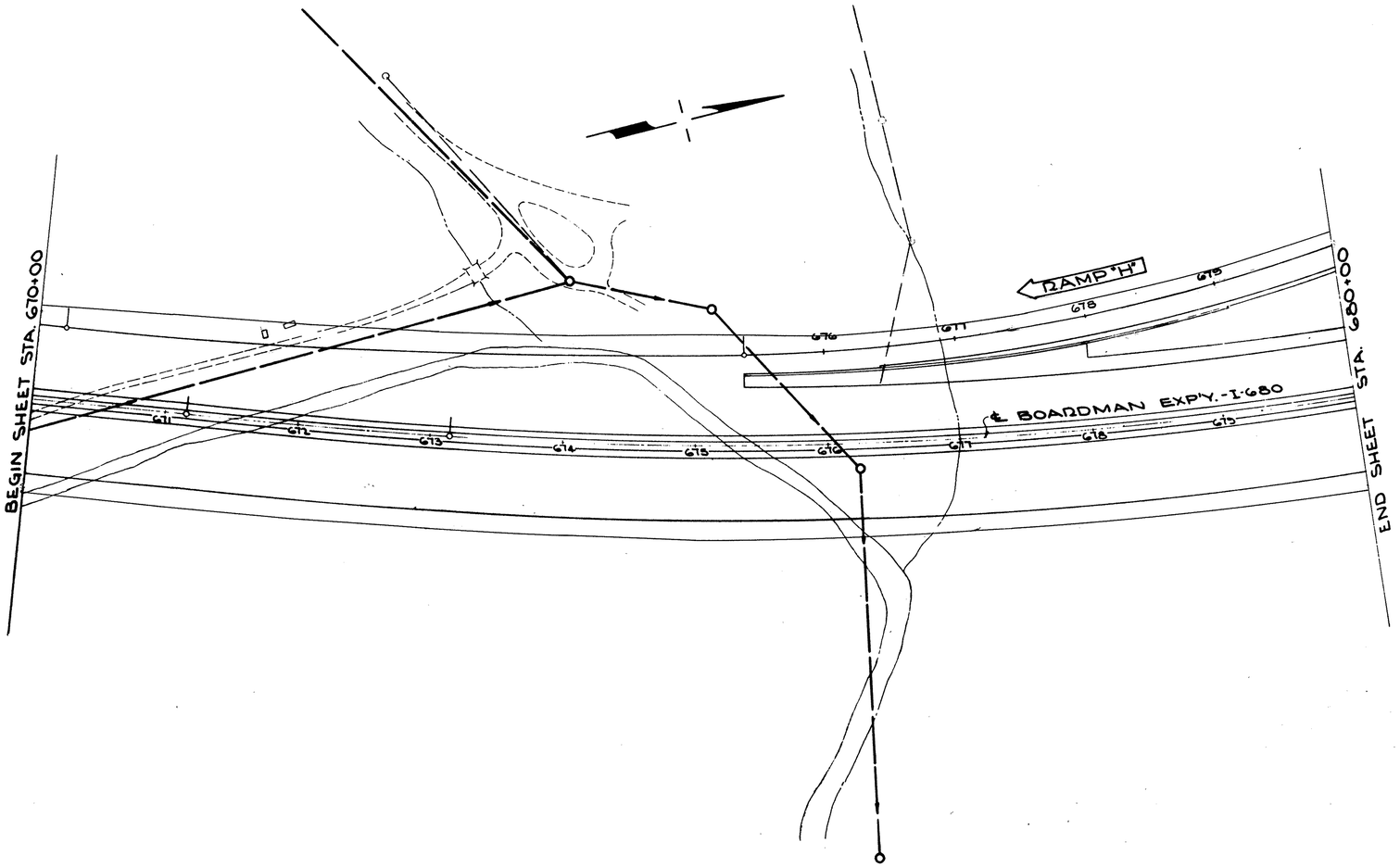
WATER LINE PLAN

STA. 660+00 To STA. 670+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

377
656



0 25 50 100 150

MAY 25 1971

WATER LINE PLAN

STA. 670+00 To STA. 680+00

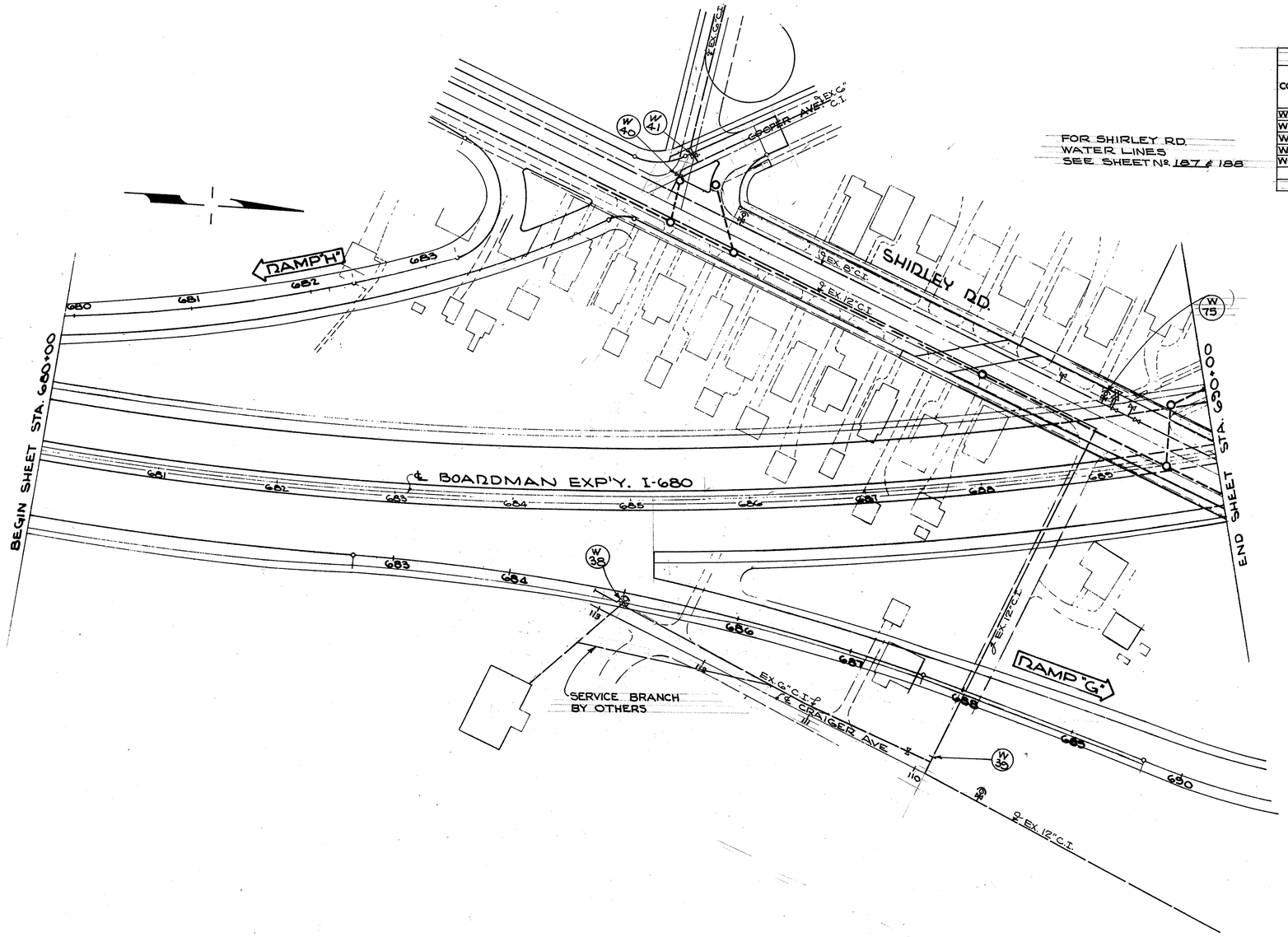
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

378
656

ITEM 814 - WATER MAINS					
CODE	STATION	LOCATION	CUT & PLUG EXIST. 12" EACH	VALVE ADJUSTED TO GRADE EACH	HYDRANT REMOVED & DISPOSED OF EACH
W-38	113+13	20'RT. & CRAIGER			1
W-39	109+90	15'RT. & CRAIGER	1		
W-40	10+30	2'RT. & COOPER		1	
W-41	10+50	12'RT. & COOPER		1	
W-75	49+16	19'LT. & SHIRLEY			1
SHEET TOTAL			1	2	2

FOR SHIRLEY RD.
WATER LINES
SEE SHEET No. 187 & 188



0 25 50 100 150

MAY 25 1971

WATER LINE PLAN

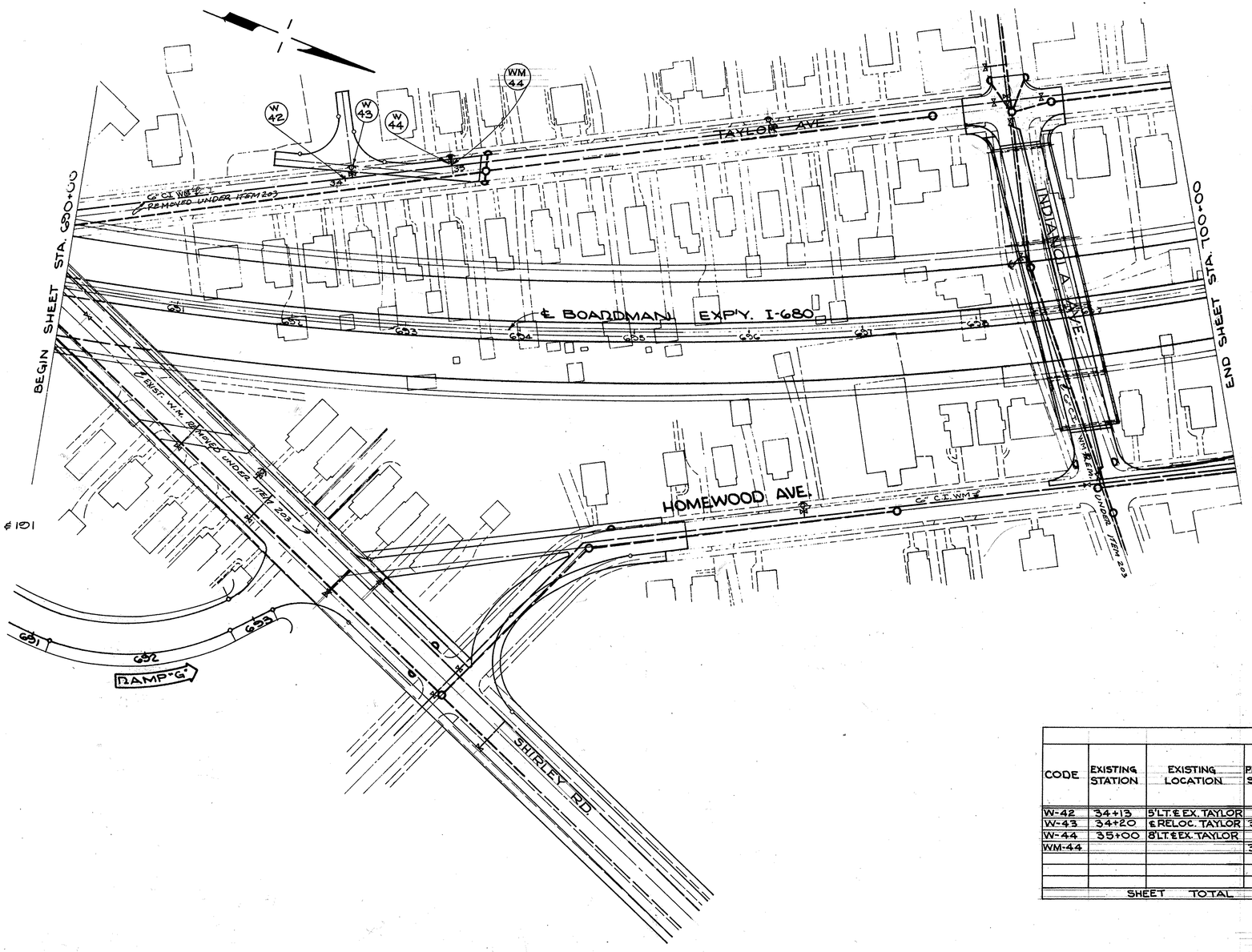
SCALE: 1" = 50'

STA. 680+00 To STA. 690+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

379
656



FOR SHIRLEY RD.
WATER LINE SEE
SHEET Nº 189, 190 & 191

FOR INDIANOLA AVE
WATER LINE SEE
SHEET Nº 233

814-WATER MAINS

CODE	EXISTING STATION	EXISTING LOCATION	PROPOSED STATION	PROPOSED LOCATION	CUT & PLUG EX. 6" W.M. EACH	HYD. MOVED & RESET EACH	6" VALVE & BOX EACH	6" D.I. PIPE L.F.	6" CUTTING IN SLEEVE EACH	6" TEE EACH
W-42	34+13	5' LT. & EX. TAYLOR			1					
W-43	34+20	& RELOC. TAYLOR	35+00	14' LT. & EX. TAYLOR	1	1	1			
W-44	35+00	8' LT. & EX. TAYLOR						14	1	1
WM-44			35+00	& EX. TAYLOR						
	SHEET	TOTAL			2	1	1	14	1	1

0 25 50 100 150

MAY 25 1971

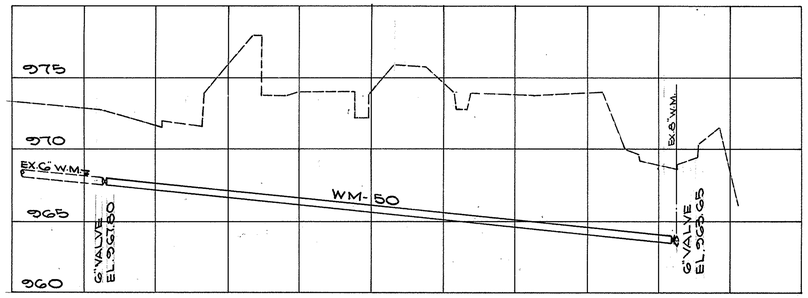
WATER LINE PLANS

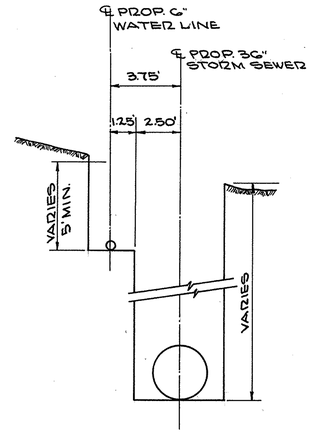
STA. 690+00 To STA. 700+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

380
656





SECTION A-A

814- WATER MAINS

CODE	STATION	EXISTING LOCATION	PROPOSED LOCATION	HYDRANT MOVED & RESET EACH	VALVE BOX ADJUSTED TO GRADE EACH	CUT & PLUG 6" EXIST. WM EACH	6" VALVE & BOX EACH	6"-11½° BEND EACH	6"-90° BEND EACH	8"x6" REDUCER EACH	6" D.I. PIPE L.F.	FIRE HYD. REMOVED & DISPOSED OF	8" CUTTING-IN SLEEVE EACH	8"X6" TEE EACH	6" SOLID SLEEVE EACH	6" CONNECTION EACH
W-45	41+88	14' LT. ℄ HOMEWOOD	14' RT. ℄ HOMEWOOD	1												
W-46	41+88						1						1	1		
WM-46	41+88										20					
W-47	43+62	5' RT. ℄ CAMPBELL				1										
W-48	45+38	6' LT. ℄ TAYLOR			1											
W-49	46+10	5' RT. ℄ TAYLOR					1	1							1	1
WM-50			W-49 TO W-50								397					
W-50	40+82	10' LT. ℄ CAMPBELL					1		1	1						
W-51	49+59	10' LT. ℄ COOPER			1											
W-52	49+79	5' LT. ℄ COOPER			1											
W-53	38+15	10' LT. ℄ CAMPBELL			1											
W-54	38+66	10' LT. ℄ CAMPBELL			1											
W-70	49+31	12.5' LT. ℄ TAYLOR										1				
SHEET TOTAL				1	5	1	3	1	1	1	417	1	1	1	1	1

0 25 50 100 150

MAY 25 1971

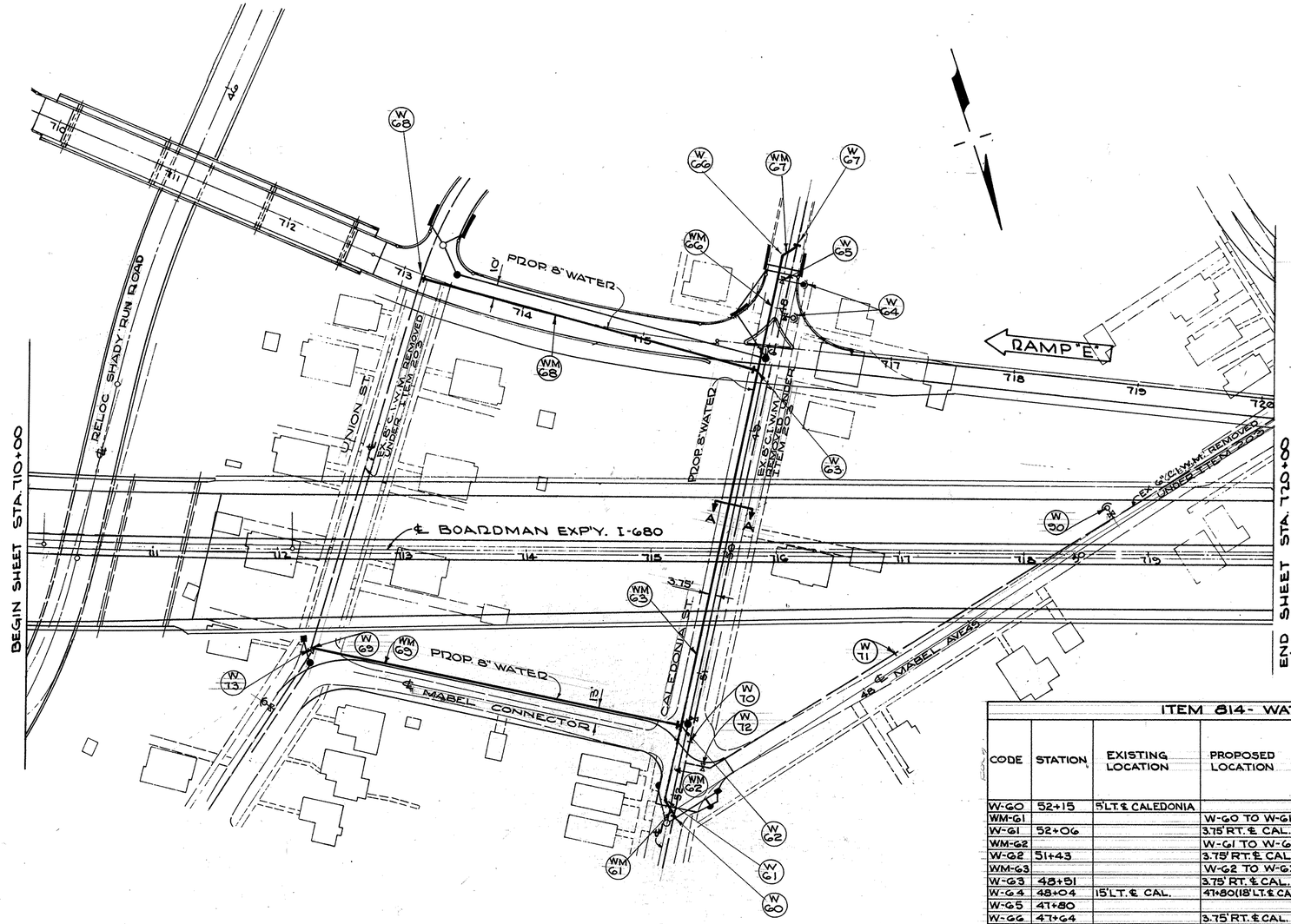
WATER LINE PLAN
STA. 700+00 To STA. 710+00

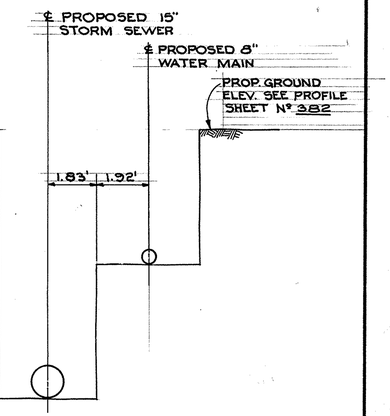
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

381
656

FOR WATER LINE PROFILES SEE SHEET Nº 382





SECTION A-A

ITEM 814 - WATER LINES

CODE	STATION FROM	STATION TO	LOCATION	8" SOLID SLEEVE EACH	8" CONNECTOR EACH
W-G7	47+54		5'LT ℄ CALEDONIA	1	1
SHEET TOTAL				1	1

ITEM 814 - WATER MAINS

CODE	STATION	EXISTING LOCATION	PROPOSED LOCATION	HYDRANT REMOVED & RESET EACH	HYDRANT REMOVED OF EACH	VALVE BOX ADJUSTED TO GRADE EACH	CUT & PLUG 6" C.I.W.M. EACH	6" VALVE AND BOX EACH	6" VALVE AND BOX EACH	8"-45° BEND EACH	8"-90° BEND EACH	8"x8"-45° Y BRANCH EACH	8"x8" TEE EACH	6"x8"x6" TEE EACH	8" D.I. PIPE LIN. FT.	6" D.I. PIPE LIN. FT.
W-G0	52+15	5'LT.℄ CALEDONIA						1								
WM-G1			W-G0 TO W-G1												15	
W-G1	52+06		3.75' RT. ℄ CAL.							1						
WM-G2			W-G1 TO W-G2												63	
W-G2	51+43		3.75' RT. ℄ CAL.					1					1			
WM-G3			W-G2 TO W-G3												292	
W-G3	48+51		3.75' RT. ℄ CAL.					1					1			
W-G4	48+04	15'LT. ℄ CAL.	47+80(18'LT.℄ CAL.)	1												
W-G5	47+80								1					1		20
W-G6	47+64		3.75' RT. ℄ CAL.							1						
WM-G6			W-G3 TO W-G6												87	
W-G7*	47+54	5'LT.℄ CALEDONIA						1		1						
WM-G7			W-G6 TO W-G7												15	
W-G8	713+16		2'RT. ℄ RAMP "E"					1			1					
WM-G8			W-G3 TO W-G8												275	
W-G9	50+82	5'RT. ℄ UNION									1					
WM-G9			W-G2 TO W-G9												304	
W-70	51+85	5'LT.℄ CALEDONIA					1									
W-71	48+37	10'LT.℄ MABEL					1									
W-72	51+73	18'LT.℄ CALEDONIA				1										
W-73	50+86	5'RT.℄ UNION				1										
W-30	50+42	11'LT.℄ MABEL			1											
SHEET TOTAL				1	1	2	2	5	1	3	2	1	2	1	1051	20

* SEE ADDITIONAL QUANTITIES AT LEFT

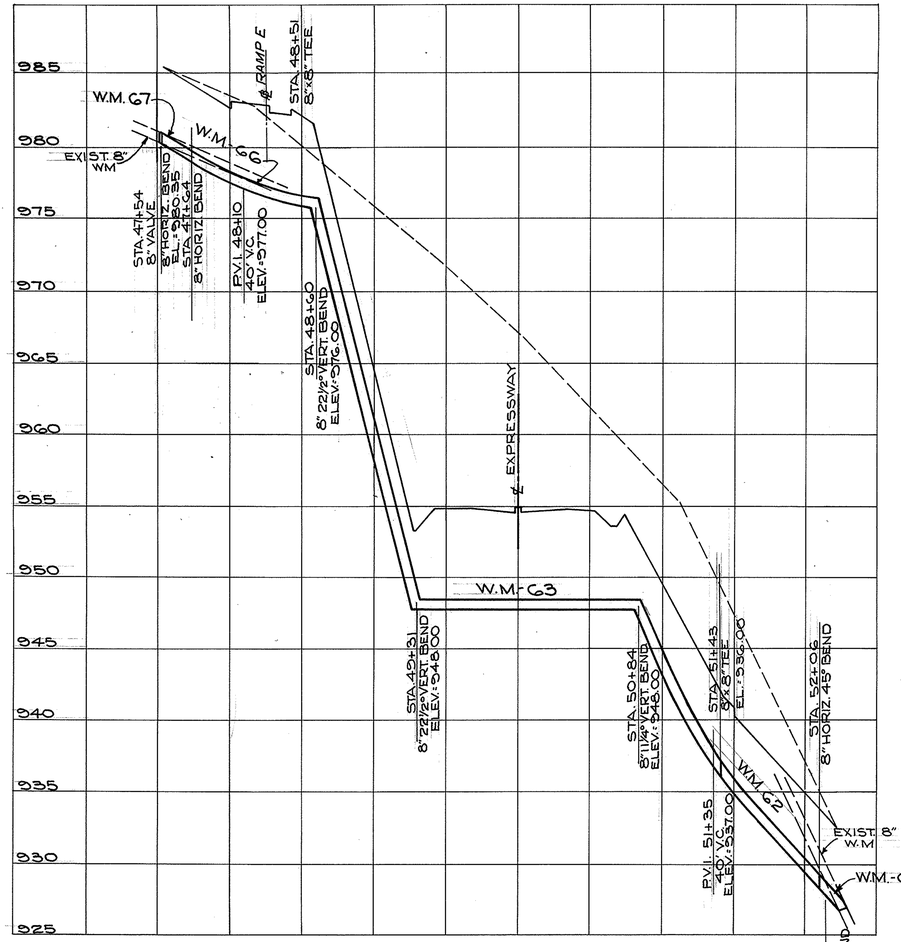
WATER LINE PLAN
STA. 710+00 TO STA. 720+00

MAY 25 1971

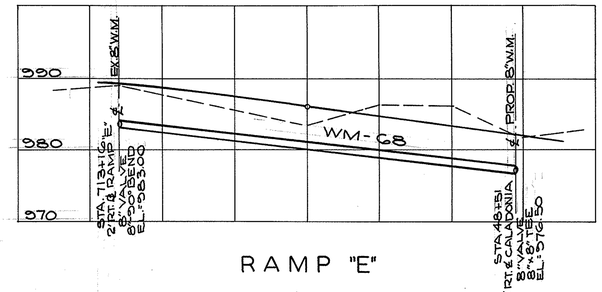
FED. NO.	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.98

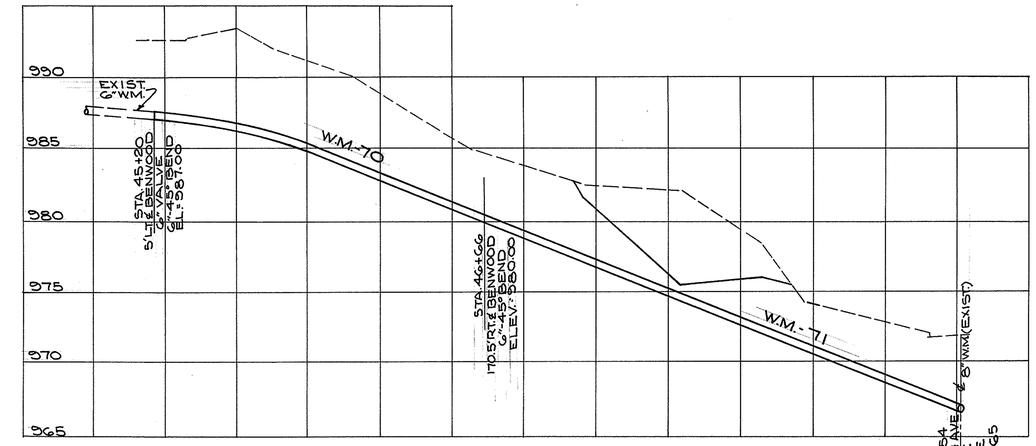
382
656



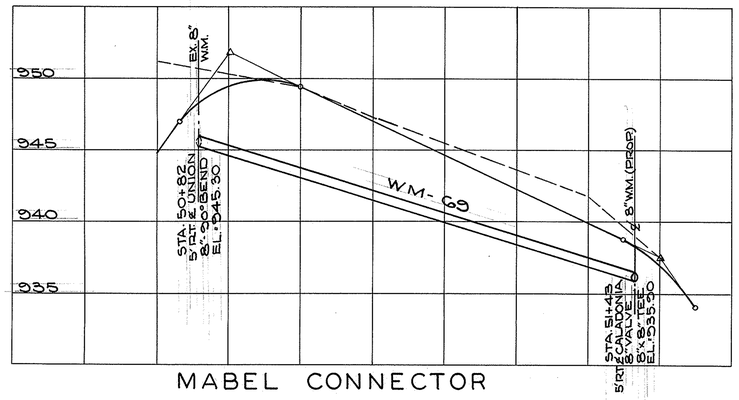
CALADONIA AVE.



RAMP "E"



BENWOOD AVE.



MABEL CONNECTOR

MAY 25 1971

WATER MAIN PROFILES

FOR MABEL AVE. WATER LINE SEE SHEET Nº 201

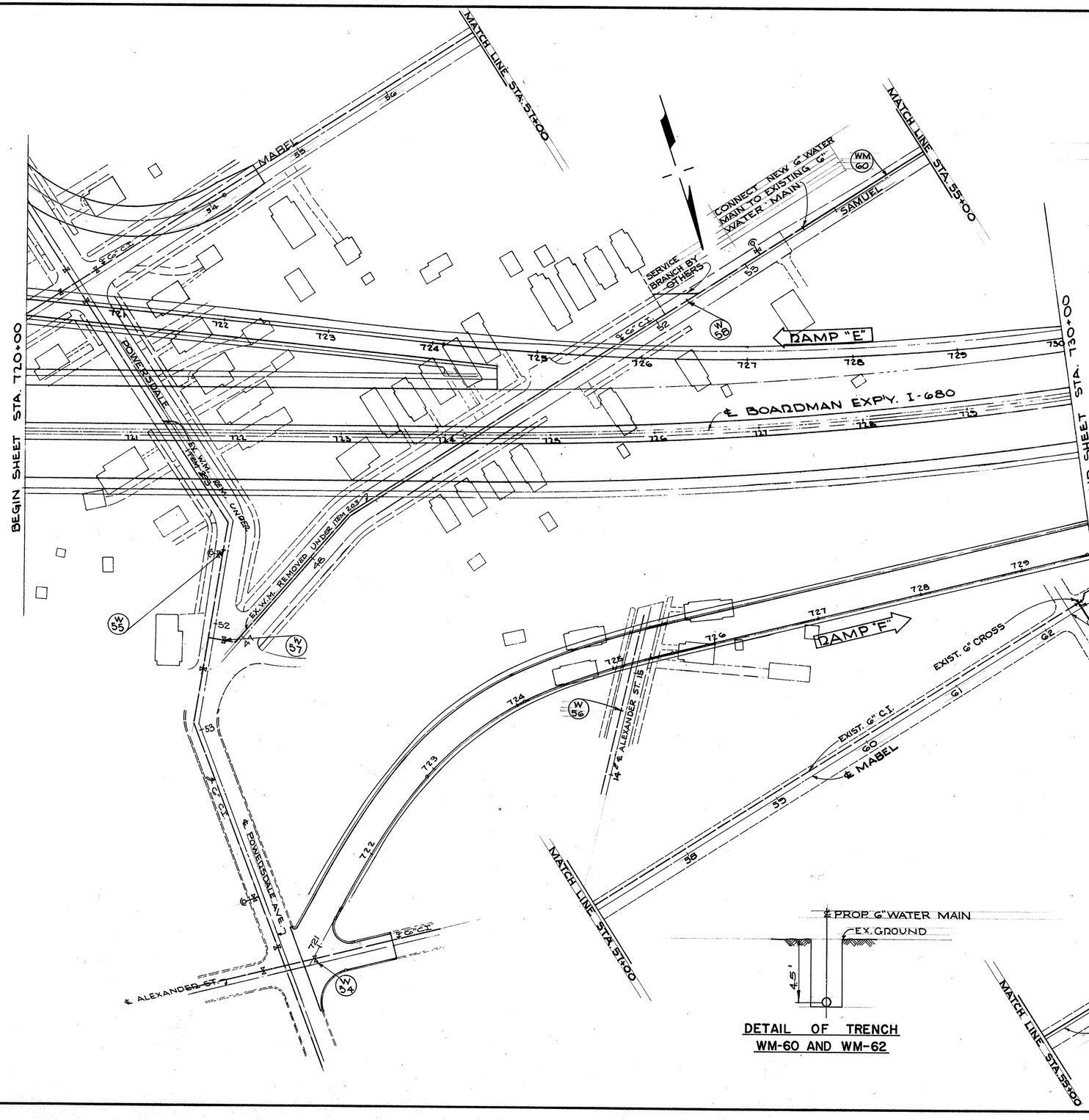
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

383
656

814 - WATER MAINS

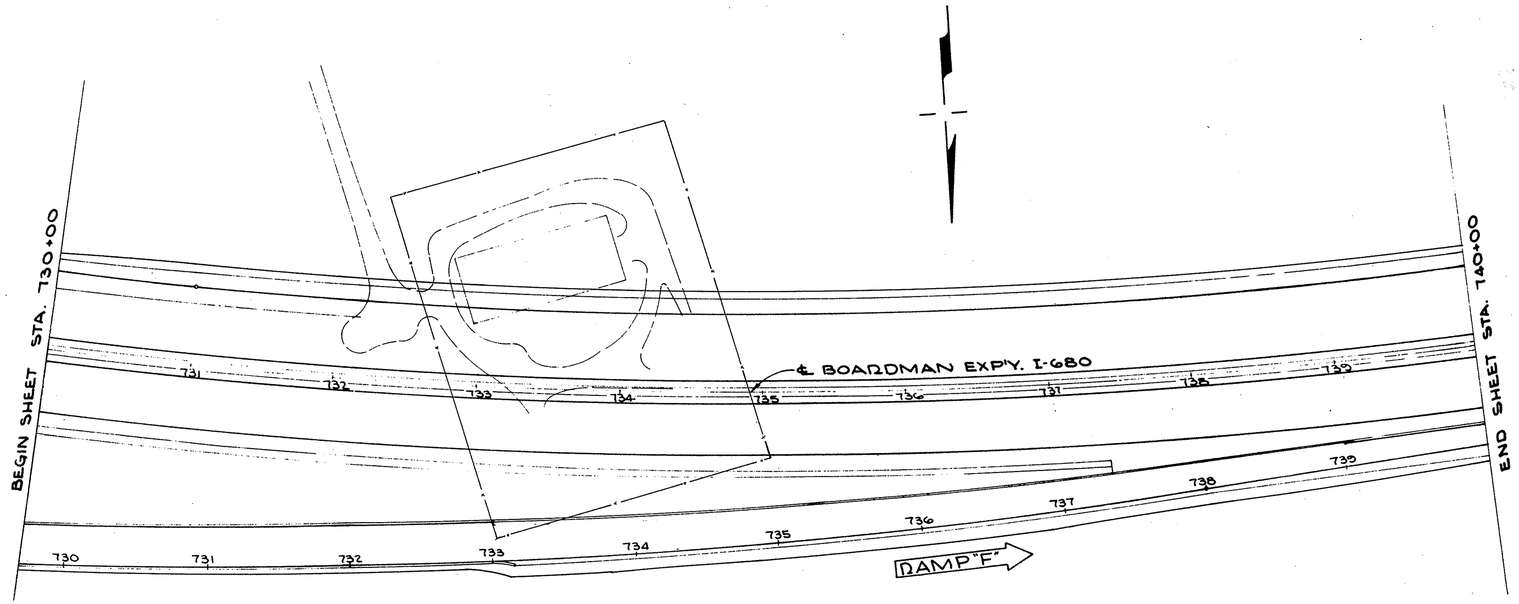
CODE	STATION FROM	STATION TO	LOCATION	VALVE BOX ADJUSTED TO GRADE EACH	CUT & PLUG 6" EXIST. W.M. EACH	6" 90° BEND EACH	6" D.I. PIPE L.F.
W-54	720+86		2' RT. & RAMP "E"	1			
W-55	51+30		5' RT. & PWR'DALE		1		
W-56	14+62		5' LT. & ALEXANDER		1		
W-57	52+14		10' LT. & PWR'DALE		1		
W-58	52+36		3' LT. & SAMUEL		1		
WM-60	53+65	57+44	3' LT. & SAMUEL				379
W-61	57+44		3' LT. & SAMUEL			1	
WM-62	13+27	9+95	11' LT. & ZEDAKER				322
	SHEET TOTAL			1	4	1	701



FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

384
656



0 25 50 100 150

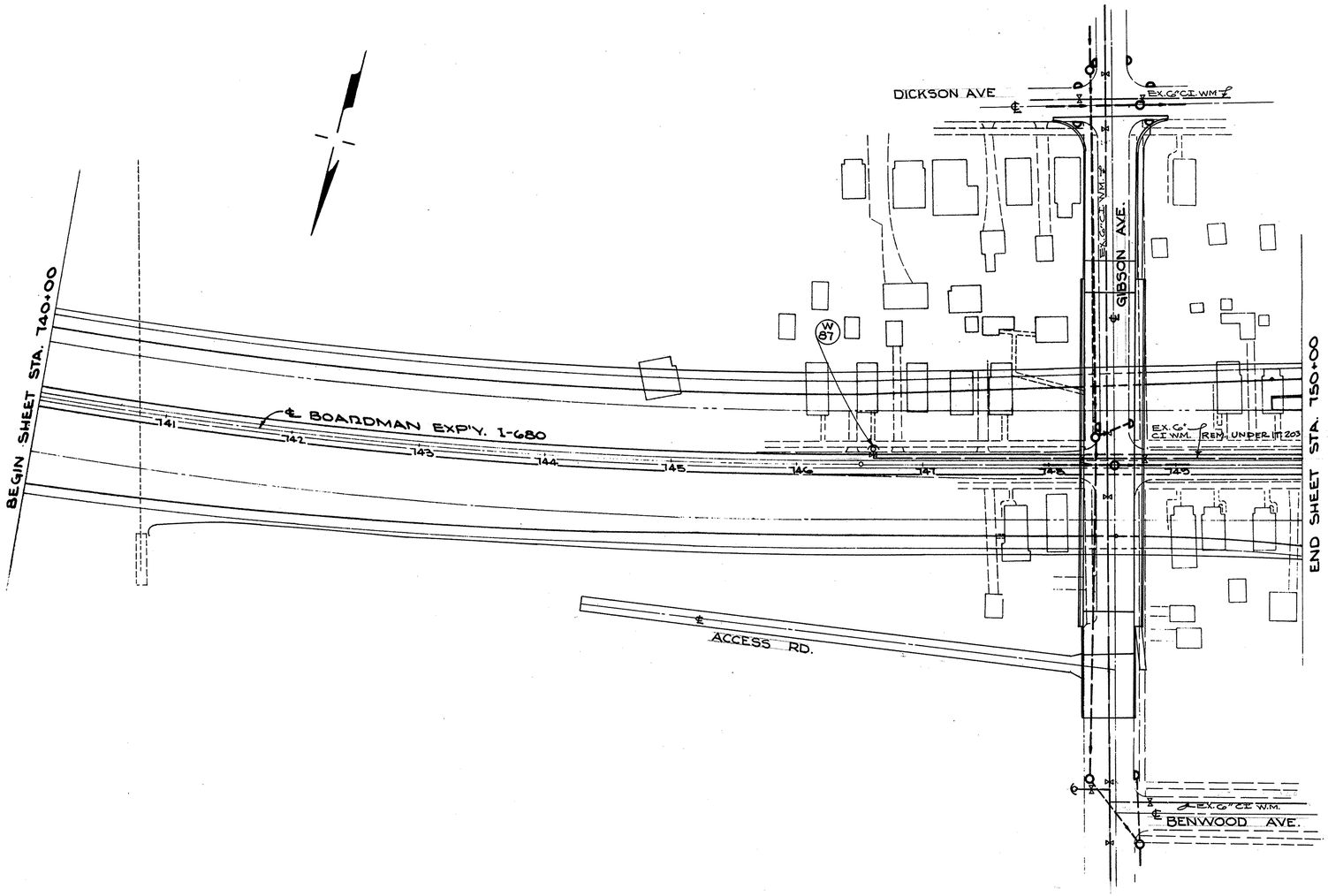
MAY 25 1971

WATER LINE PLAN
STA. 730+00 TO STA. 740+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.58

385
656



FOR GIBSON AVE. WATER LINE SEE SHEET No. 204

814 - WATER MAINS			
CODE	STATION	LOCATION	FIRE HYDRANT REMOVED AND DISPOSED OF
W-87	746+61	12.5' LT ML ℄	1

0 25 50 100 150

MAY 25 1971

WATER LINE PLAN
STA. 740+00 TO STA. 750+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

386
656

814- WATER MAINS

CODE	STATION	LOCATION	FIRE HYDRANT REMOVED & DISPOSED OF	6" VALVE BOX EACH	6"-45° BEND EACH	8"x8"x6" TEE EACH	6" D.I. PIPE L.F.	6" SOLID SLEEVE EACH	6" CONN. EACH
W-70	45+20	5'LT. & BENWOOD		1	1			1	1
WM-70		W-70 TO W-71					230		
W-71	46+66	170.5' RT. & BENWOOD			1				
WM-71		W-71 TO W-72					328		
W-72	54+54	5' RT. & SOUTH		1		1			
W-88	750+06	12.5' LT. ℄	1						
W-89	753+75	12.5' LT. ℄	1						
W-90	757+02	12.5' LT. ℄	1						
W-91	47+09	18' LT. & BENWOOD	1						
SHEET TOTAL			4	2	2	1	558	1	1

FOR SOUTHAVE WATER LINE SEE SHEET No. 303 & 304

BEGIN SHEET STA. 750+00

END SHEET STA. 760+00

RAMP "C"

RAMP "B"

RAMP "D"

℄ BOARDMAN EXPY. I-680

EX. 6" C.I. WM. ℄ REMOVED UNDER ITEM 203

EX. 6" C.I. WM. ℄

SOUTH AVE

BENWOOD

EX. 6" C.I. WM. ℄ REMOVED UNDER ITEM 203

PROP. 6" W.M. FOR PROFILE SEE SHT. NO. 382

3.5'

5.0'

0 25 50 100 150

MAY 25 1971

WATER LINE PLAN
STA. 750+00 TO STA. 760+00

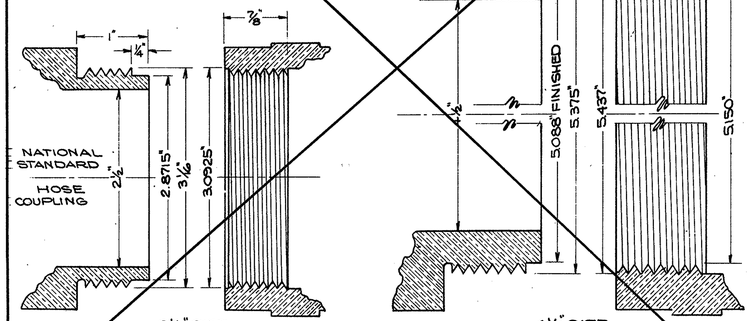
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

387
656

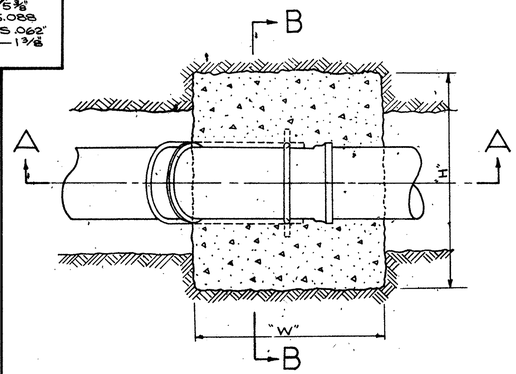
INSIDE DIAMETER OF HOSE COUPLING — 4½"
NUMBER OF THREADS PER INCH — 6"
BLANK END ON MALE PART — 1"
OUTSIDE DIAMETER OF THREAD FINISHED — 5⅜"
DIAMETER OF ROOT OF THREAD FINISHED — 5.088"
CLEARANCE BETWEEN MALE AND FEMALE THREADS .062"
TOTAL LENGTH OF THREADED MALE ENDS — 1⅜"
60° V THREAD PATTERN
FEMALE END TO BE CUT ⅛" SHORTER FOR ENDWISE CLEARANCE.

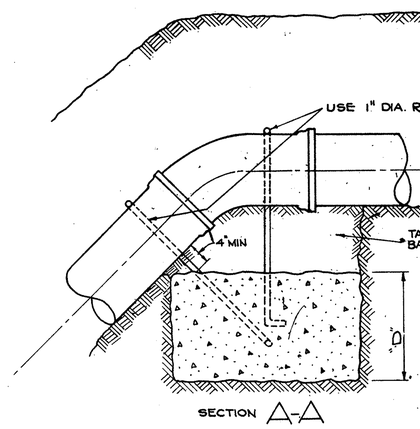
INSIDE DIAMETER OF HOSE COUPLING — 2½"
NUMBER OF THREADS PER INCH — 7½"
BLANK END OF MALE PART — ¼"
OUTSIDE DIAMETER OF THREAD FINISHED — 3 1/16"
DIAMETER OF ROOT OF THREAD — 2.8715"
CLEARANCE BETWEEN MALE & FEMALE THREADS-.03"
TOTAL LENGTH OF THREADED MALE END — 1.00"
60° V THREAD PATTERN 1/100 INCH CUT OFF TOP OF THREAD AND 1/100 INCH LEFT IN BOTTOM OF VALLEY FEMALE END TO BE CUT ⅛ SHORTED FOR ENDWISE CLEARANCE.



2½" SIZE — 4½" SIZE

YOUNGSTOWN STANDARD FIRE HYDRANT COUPLINGS FOR 2½" & 4½" HOSE

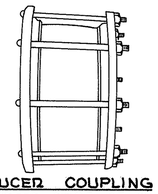




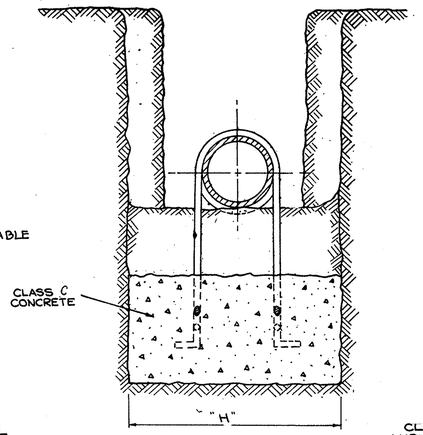
SECTION A-A

REACTION ANCHORAGE							
SIZE	22½° BEND			45° BENDS			
	W	H	D	W	H	D	
8"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	4'-0"	

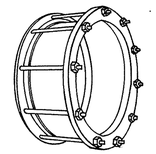
DETAIL
REACTION ANCHORAGE
TO BE USED WHERE REACTION BACKING IS REQUIRED FOR VERTICAL BENDS.



REDUCER COUPLING
DRESSER STYLE 62 OR SMITH-BLAIR TYPE 433 OR APPROVED EQUAL

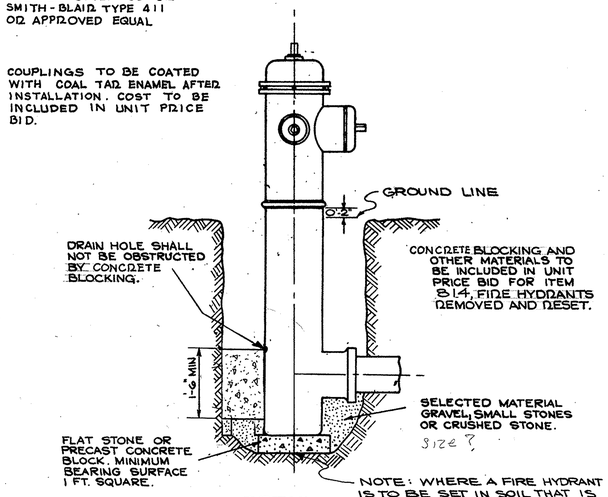


SECTION B-B



MECHANIAL JOINT COUPLING
DRESSER STYLE 38 OR SMITH-BLAIR TYPE 411 OR APPROVED EQUAL

NOTE: COUPLINGS TO BE COATED WITH COAL TAR ENAMEL AFTER INSTALLATION. COST TO BE INCLUDED IN UNIT PRICE BID.

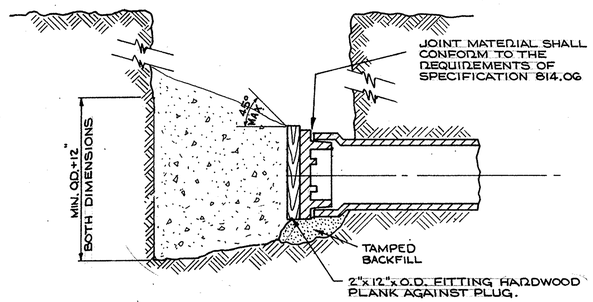


DETAIL
FIRE HYDRANT SETTING

NOTE: WHERE A FIRE HYDRANT IS TO BE SET IN SOIL THAT IS NOT FREE DRAINING, A DRAINAGE PIT 2 FEET IN DIAMETER AND 3 FEET DEEP SHALL BE EXCAVATED BELOW THE HYDRANT AND BACKFILLED TO GRADE WITH GRAVEL, STONE OR SLAG, MEETING THE GRADING REQUIREMENTS OF No 67, 7, 8 SIZE COARSE AGGREGATE.

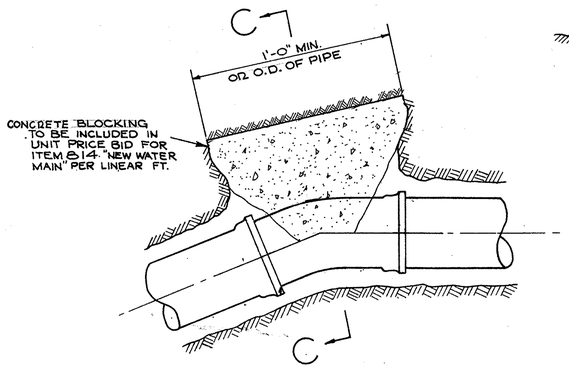
WHERE A FIRE HYDRANT IS LOCATED IN WALK AREAS, EXPANSION MATERIAL SHALL BE PLACED AROUND THE HYDRANT WHERE IT PASSES THROUGH THE WALK. THE COST OF THIS MATERIAL IS TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 814, FIRE HYDRANTS, REMOVED AND RESET.

CLASS C CONCRETE 1" DIA. RODS, AND OTHER MATERIALS TO BE INCLUDED IN UNIT PRICE BID FOR ITEM 814. "NEW WATER MAIN" PER LINEAR FT.

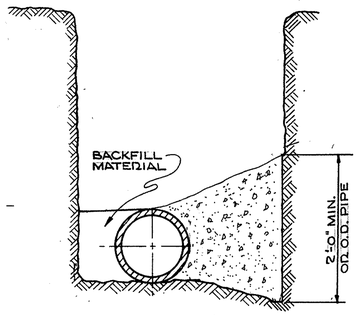


DETAIL
REACTION BACKING AT PLUG OR CAP

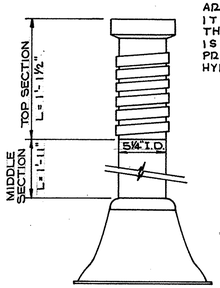
CONCRETE BLOCKING TO BE INCLUDED IN UNIT PRICE BID FOR ITEM 814 "NEW WATER MAIN, CUT & PLUG" PER EACH.



DETAIL
CONCRETE THRUST BLOCKING
TO BE USED WHERE REACTION BACKING IS REQUIRED FOR HORIZONTAL BENDS.



SECTION C-C



VALVE BOX DETAIL

DETAILS
UTILITIES AND WATER MAIN RELOCATION

MAY 25 1971

GENERAL NOTES

FED. RD.	STATE	PROJECT	
2	OHIO		

388 656

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ELECTRICAL - GENERAL

THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY MATERIAL, LABOR AND FACILITIES REQUIRED TO COMPLETE THE ELECTRICAL INSTALLATION IN ACCORDANCE WITH THE DESIGNS, DIMENSIONS AND DETAILS SHOWN IN THE PLANS AND DESCRIBED IN THE SPECIFICATIONS.

ALL MATERIAL, WORKMANSHIP AND CONSTRUCTION METHODS, EXCEPT AS MODIFIED HEREIN, SHALL CONFORM TO THE GENERAL REQUIREMENTS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, CONSTRUCTION AND MATERIALS SPECIFICATIONS, JANUARY 1, 1971.

625 SIGN SERVICE

THIS ITEM SHALL CONSIST OF THE COMPLETION OF THE ELECTRICAL SYSTEM AND COMPONENTS CONNECTING THE CONNECTORS IN THE PULL BOX (INCLUDED WITHIN THE ROADWAY LIGHTING QUANTITIES) WITH THE PRIMARY SIDE OF THE DISCONNECTING SWITCH.

WORK WILL INCLUDE THE FURNISHING AND INSTALLING (INCLUDING TRENCHING AND BACKFILLING) OF THE 2 INCH GALVANIZED STEEL CONDUIT AND COUPLINGS FROM THE PULL BOX TO THE CONDUIT ELL IN THE SIGN SUPPORT FOUNDATION.

THIS ITEM WILL ALSO INCLUDE THE FURNISHING AND INSTALLING OF THE 1/C 600 VOLT SERVICE WIRE FROM THE CONNECTORS TO THE DISCONNECT SWITCH.

BASIS OF PAYMENT FOR THIS ITEM SHALL BE AT CONTRACT UNIT PRICE PER EACH, WHICH SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK

625 SIGN SERVICE FOR STRUCTURE MOUNTED SIGNS

THIS ITEM OF WORK SHALL CONSIST OF THE COMPLETION OF THE ELECTRICAL SYSTEM AND COMPONENTS CORRECTING THE CONNECTORS IN THE PULL BOX (INCLUDED WITHIN THE ROADWAY LIGHTING QUANTITIES) WITH THE PRIMARY SIDE OF THE DISCONNECT SWITCH.

WORK WILL INCLUDE THE FURNISHING AND INSTALLING (INCLUDING TRENCHING AND BACKFILLING) OF THE 1-1/4" TYPE II OR III METAL CONDUIT AND #12AWG, 600 VOLT DIRECT BURIAL CABLE FROM THE PULL BOX TO THE SWITCH ENCLOSURE AND SHALL ALSO INCLUDE ALL FITTING AND FASTENERS NEEDED TO COMPLETE THIS ITEM OF WORK.

BASIS OF PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT UNIT PRICE PER EACH, WHICH SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

625 DISCONNECT SWITCH WITH TYPE "Y" OR "Z" ENCLOSURE

THIS ITEM SHALL INCLUDE FURNISHING OF A 30 AMP. 600 VOLT FUSED DISCONNECT SWITCH OF TYPE AND MAKE AS INDICATED ON SHEET 418 AND SHALL BE MOUNTED IN A NEMA 4 STAINLESS STEEL ENCLOSURE TYPE "Y" OR "Z" AND ATTACHED TO EACH SIGN SUPPORT BY MEANS OF A MOUNTING BRACKET AS DESCRIBED IN DETAIL ON THE ABOVE SHEET.

EACH SWITCH ENCLOSURE SHALL BE FURNISHED WITH ONE PADLOCK. PADLOCKS SHALL HAVE A BRASS BODY AND WROUGHT IRON SHACKLE EQUAL TO RUSSWIN NO. 2882 KA OR MASTER NO. 4 KA OR APPROVED EQUAL.

BASIS FOR PAYMENT FOR THIS ITEM SHALL BE PER EACH AT CONTRACT UNIT PRICE, WHICH SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT TO COMPLETE THIS ITEM AT WORK.

625 TRANSFORMER, BY TYPE

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING TRANSFORMERS AS DETAILED AND SPECIFIED ON SHEET 418 .

BASIS OF PAYMENT FOR THIS ITEM SHALL BE AT CONTRACT UNIT PRICE PER EACH, WHICH SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THIS COMPLETE ITEM OF WORK.

625 BALLAST, BY TYPE

BALLAST FOR FIXTURES SHALL BE WEATHER-PROOF OUTDOOR TYPE FOR A 120 VOLT 60 CYCLE SYSTEM AND SHALL PROVIDE LAMP STARTING AT AN AMBIENT TEMPERATURE OF -20 DEGREES F.

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING ALL BALLAST TYPES A THROUGH D AS DETAILED AND SPECIFIED ON SHEET 417.

BASIS OF PAYMENT FOR THIS ITEM SHALL BE AT CONTRACT UNIT PRICE PER EACH, FURNISHED TO THE JOB FOR INSTALLATION UNDER ITEM 625 "SIGNS WIRED, COMPLETE".

625 GROUND ROD

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING GROUND ROD AND CABLE AS DETAILED AND SPECIFIED ON SHEET 418.

BASIS OF PAYMENT FOR THIS ITEM SHALL BE AT CONTRACT UNIT PRICE PER EACH, WHICH SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

625 SIGNS WIRED, COMPLETE

THIS ITEM SHALL CONSIST OF THE COMPLETION OF THE ELECTRICAL SIGN LIGHTING SYSTEM FOR EACH ILLUMINATED SIGN.

WORK SHALL INCLUDE INSTALLATION OF LIGHT FIXTURES AND BALLASTS, AND FURNISHING AND INSTALLATION OF ALL RIGID AND FLEXIBLE CONDUIT, CONDULETS, JUNCTION BOXES, CABLE, FASTENERS, HARDWARE, AND ALL OTHER ITEMS REQUIRED TO ENERGIZE THE SIGN LIGHTING SYSTEM. SEE DETAILS ON SHEETS 416, 417 and 418.

THE COST OF FURNISHING AND INSTALLING CABLE, CABLE GRIPS, CABLE SPLICE UNITS, AND NECESSARY FASTENERS FROM THE DISCONNECT SWITCH TO THE SIGNS (OR BETWEEN SIGNS) WITHIN SIGN SUPPORT MEMBERS SHALL BE INCLUDED IN THIS ITEM OF WORK.

BASIS OF PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER EACH SIGN WIRED WHICH PRICE SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND OTHER INCIDENTALS TO PROVIDE A COMPLETE AND ACCEPTED ITEM OF WORK.

ILLUMINATED SIGNS REQUIRING TWO (2) BALLASTS SHALL BE CONSIDERED AS AN EQUIVALENT OF TWO (2) SEPARATE SIGNS FOR DETERMINATION OF PAYMENT QUANTITIES

625 STRUCTURE MOUNTED SIGNS WIRED, COMPLETE

THIS ITEM SHALL CONSIST OF THE FURNISHING AND/OR INSTALLING THE ELECTRICAL SIGN LIGHTING SYSTEM COMPONENTS FROM THE DISCONNECT SWITCH TO THE LIGHT FIXTURES.

WORK SHALL INCLUDE INSTALLATION OF LIGHT FIXTURES, BALLAST AND THE FURNISHING AND INSTALLATION OF RIGID AND FLEXIBLE CONDUIT, CONDULETS, JUNCTION BOXES, CABLE, FASTENERS, HARDWARE, GROUNDING SYSTEM AND ALL OTHER ITEMS REQUIRED TO ENERGIZE THE SIGN LIGHTING SYSTEM. SEE DETAILS ON SHEETS 415B, 415C, and 405-407.

BASIS OF PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER EACH SIGN WIRED WHICH PRICE SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS TO PROVIDE A COMPLETE AND ACCEPTED ITEM OF WORK.

ILLUMINATED SIGNS REQUIRING TWO (2) BALLASTS SHALL BE CONSIDERED AS AN EQUIVALENT OF TWO (2) SEPARATE SIGNS FOR DETERMINATION OF PAYMENT QUANTITIES.

625 INSPECTION AND TESTING OF SIGN LIGHTING

THE CONTRACTOR SHALL FURNISH ALL LABOR, ELECTRICAL POWER, AND EQUIPMENT NECESSARY TO DEMONSTRATE TO THE ENGINEER THAT NO SHORT CIRCUITS AND UNSPECIFIED GROUNDS EXIST AND THAT THE SIGN CIRCUITS ARE PROPERLY CONNECTED AND OPERABLE PRIOR TO ACCEPTANCE.

THIS DEMONSTRATION SHALL INCLUDE A MEGGARING TEST TO SHOW THAT THE POWER CONDUCTORS ARE NOT GROUNDED AND THAT THE RESISTANCE TO GROUND FOR THE GROUND CONDUCTOR IS NOT MORE THAN 25 OHMS. WHERE RESISTANCE EXCEEDS 25 OHMS, ADDITIONAL LENGTH AND/OR NUMBERS OF RODS SHALL BE INSTALLED PER REQUIREMENTS OF 625.10.

A VOLTAGE AND AMPERAGE MEASUREMENT SHALL BE MADE AT THE SIGN SUPPORT SWITCH.

WHERE A LOW VOLTAGE TAP TRANSFORMER IS USED THE VOLTAGE MEASUREMENT SHALL BE USED TO DETERMINE THE APPLICABLE TAP.

AFTER THE SIGN LIGHTING SYSTEM IS COMPLETED, THE ENTIRE SYSTEM SHALL BE OPERATED CONTINUOUSLY EACH NIGHT UNTIL TEN (10) CONSECUTIVE DAYS ELAPSE WITHOUT FAILURE OR DEFECT. THE CONTRACTOR SHALL RECORD AND SUBSEQUENTLY CORRECT ANY DEFECTS WHICH MAY DEVELOP AT NO EXTRA COST TO THE STATE.

DURING THE TEST PERIOD, ADJUSTMENTS TO FIXTURE AIMING ANGLES SHALL BE MADE TO OBTAIN MAXIMUM UNIFORMITY AS DIRECTED BY THE ENGINEER.

THE ABOVE MEASUREMENTS, VOLTAGE TAP SELECTION NOTATIONS, AND METHODS OF DEFECT CORRECTION SHALL BE RECORDED AND DELIVERED TO THE ENGINEER FOR INCLUSION IN THE PROJECT RECORDS.

INSPECTION AND TESTING OF THE SIGN LIGHTING SYSTEM SHALL BE CONSIDERED A SUBSIDIARY WORK ITEM AND PAYMENT THEREFORE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE RESPECTIVE ITEMS TESTED.

625 LIGHT FIXTURE WITH LAMP, BY TYPE AND SIZE

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING ALL LIGHT FIXTURES AND LAMPS, TYPES AND SIZES AS SPECIFIED ON SHEET 417.

BASIS OF PAYMENT FOR THIS ITEM SHALL BE AT CONTRACT UNIT PRICE PER EACH, FURNISHED TO THE JOB FOR INSTALLATION UNDER ITEM 625 SIGNS WIRED, COMPLETE.

815 SIGN ERECTION, BY TYPE

THE CONTRACTOR SHALL ERECT SIGN PANELS AS INDICATED ON THE SCHEMATIC SIGNING LAYOUT SHEET NUMBERS 393-399. THE PANELS WILL BE FURNISHED BY OTHERS AND SHALL BE MOUNTED ON THE BRACKETS OR BEAM SUPPORTS PROVIDED IN THE PLANS.

ALL SIGN MATERIAL AND ACCESSORIES WILL BE FURNISHED AND TRANSPORTED BY OTHERS TO A DELIVERY POINT DESIGNATED BY THE CONTRACTOR ON OR NEAR THE SUBJECT PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HANDLING, PROTECTION, AND STORAGE OF THE SIGN PANELS AND ACCESSORIES FROM THE TIME OF UNLOADING BY OTHERS AT THE DELIVERY POINT.
LARGE GUIDE SIGNS (OVER 8 FEET IN HEIGHT) MAY BE DELIVERED IN TWO PARTS. WORK SHALL ALSO CONSIST OF ASSEMBLY OF THESE PANELS INCLUDING ATTACHMENT OF DEMOUNTABLE SIGN LEGEND, WHERE NECESSARY, AND ERECTION OF SIGNS IN CONFORMANCE WITH THE SCHEMATIC SIGN PLAN.
THE CONTRACTOR SHALL SUBMIT, IN THREE COPIES, A SCHEDULE FOR SIGN ERECTION TO THE ENGINEER AT LEAST 120 CALENDAR DAYS PRIOR TO THE START OF ANY SCHEDULED ERECTION WORK. THE SCHEDULE SHALL INCLUDE PROPOSED DATES, SIGN NUMBERS, AND DELIVERY POINT. THE ENGINEER WILL FURNISH COPIES OF THE SCHEDULE TO THE DIVISION TRAFFIC ENGINEER AND TO THE ENGINEER OF DESIGN SERVICES, 25 SOUTH FRONT STREET, COLUMBUS, OHIO, 43215.

THE PRICE PER SQUARE FOOT FOR "ITEM 815, SIGN ERECTION, BY TYPE", SHALL INCLUDE PAYMENT FOR ALL NECESSARY EQUIPMENT LABOR, AND TOOLS TO STORE ASSEMBLE AND ERECT THE SIGNS AS SPECIFIED.

815 ERECTION OF INTERIM SIGN OVERLAYS

THIS ITEM OF WORK SHALL CONSIST OF THE ASSEMBLY AND ERECTION OF INTERIM ALUMINUM SHEET OVERLAY SIGNS FURNISHED BY OTHERS TO BE PLACED OVER EXISTING SIGN PANELS AT LOCATIONS SHOWN IN THE PLANS.

METHOD OF ATTACHMENT SHALL BE BY RIVETS ON PERIPHERY AND ENTIRE SURFACE AREA SHEETING AT A MAXIMUM SPACING OF 2'-6".

CONTRACTOR'S RESPONSIBILITY FOR OVERLAYS FURNISHED BY OTHERS SHALL BE SIMILAR TO THOSE SPECIFIED IN THE "SIGN ERECTION BY TYPE" ITEM CONTAINED IN THESE PLANS.

BASIS OF PAYMENT SHALL BE AT THE CONTRACT BID PRICE PER SQUARE FOOT FOR ERECTION OF INTERIM SIGN OVERLAYS INCLUDING ALL EQUIPMENT, LABOR, MATERIALS INCIDENTAL TO THIS ITEM OF WORK

815 INTERIM COVERING FOR SIGNS

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING AN INTERIM COVER AND ATTACHMENT MATERIALS FOR SIGNS REFERRED TO IN THE PLANS AS "BAGGED" OR AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL ALSO INCLUDE THE SUBSEQUENT REMOVAL OF COVERS WHEN DIRECTED BY THE ENGINEER.

MATERIAL FOR COVERING SHALL BE PLASTIC COATED BURLAP BLANKETS IN CONFORMANCE WITH 705.09.

THE ENGINEER SHALL APPROVE THE METHOD PROPOSED FOR ATTACHING INTERIM COVERS TO SIGNS PRIOR TO INSTALLATION OF COVERS.

WORK SHALL INCLUDE ALL NECESSARY MATERIAL, HARDWARE, LABOR, AND EQUIPMENT REQUIRED TO PERFORM THE REQUIRED ITEM OF WORK.

BASIS OF PAYMENT SHALL BE INTERIM COVERING FOR SIGNS, PER SQUARE FOOT.

IN ADDITION TO THE 0 SQ. FT. REFERRED TO IN THE PLANS, AN ADDITIONAL QUANTITY OF 200 SQ. FT. FOR ITEM 815, INTERIM COVERING FOR SIGNS, HAVE BEEN INCLUDED TO COVER SIGNS AS DIRECTED BY THE ENGINEER.

816 OVERHEAD SIGN AND TRAFFIC SIGNAL SUPPORT FABRICATION

IN LIEU OF PLAN DETAILS THE FOLLOWING ARE FABRICATION REQUIREMENTS FOR SUPPORTS IN THIS PROJECT:

ALL HANDHOLES FABRICATED FOR SUPPORTS SHALL BE 4" x 8" IN SIZE WITH FACE FLUSH WITH POLE EXTERIOR AT THE REQUIRED LOCATIONS DESCRIBED IN PLANS.

THE ELECTRICAL SERVICE ENTRY THROUGH EACH VERTICAL SIGN SUPPORT POLE SHALL BE PROVIDED BY MEANS OF A TWO INCH (2") HALF-COUPLING CENTERED AT A HEIGHT OF 5'-0" ABOVE THE BOTTOM OF THE BASE PLATE.

THE TYPE "Y" OR "Z" DISCONNECT SWITCH ENCLOSURE SHALL BE MOUNTED IN SUCH A MANNER THAT THE BOTTOM OF THE ENCLOSURE WILL BE 4'-9½" (± ½") ABOVE BOTTOM OF BASE PLATE.

PAYMENT FOR THE FABRICATION REQUIREMENT SPECIFIED ABOVE SHALL BE INCIDENTAL TO THE COST OF EACH SUPPORT STRUCTURE.

CERTIFICATION AND APPROVAL OF SIGN SUPPORT & SIGN LIGHTING ITEMS

THE CONTRACTOR SHALL SUBMIT THROUGH PROPER CHANNELS THE DRAWINGS, INFORMATION, & SAMPLES AS REQUIRED BELOW:

A. 8 COPIES OF SHOP DRAWINGS & MATERIAL LISTS FOR APPROVAL:
   1. OVERHEAD SIGN SUPPORTS
   2. SIGN LIGHTING LAYOUT PLAN & DETAILS FOR WIRING, CONDUIT SIZE AND PLACEMENT FROM SIGN DISCONNECT SWITCH TO FIXTURE.

B. 8 COPIES OF CATALOG CUTS DESCRIPTIONS OF SAMPLES OF FABRICATORS STANDARD ITEMS AS SHOWN IN THE PLANS OR THEIR EQUALS FOR APPROVAL OF THEIR USE.

C. CERTIFICATIONS AND/OR SAMPLES FOR ALL MATERIAL WHICH HAVE BEEN APPROVED ABOVE UNDER "A" AND "B".

D. APPROVAL OF ITEMS UNDER "A" AND "B" SHALL BE IN THE HAND OF THE CONTRACTOR PRIOR TO ANY PURCHASE OR INSTALLATION.

E. CERTIFICATIONS OF SAMPLES UNDER "C" MUST BE IN HAND AND APPROVED PRIOR TO CONTRACT COMPLETION.

816 OVERHEAD SIGN SUPPORT, BY TYPE

ALL COMPONENT PARTS OF THE OVERHEAD SIGN SUPPORTS SHALL BE STEEL, EXCEPT FOR THE TRUSS AND COMPONENTS FOR THE NUMBER 7 SERIES WHICH SHALL BE ALUMINUM. FOR SPECIFIC DETAILS AND MATERIALS, SEE SHEET NUMBERS 412 THROUGH 413C.

COST OF FURNISHING AND INSTALLING THE SIGN BRACKETS AND THE FIXTURE SUPPORT ARM, LENGTH "G", WITH MOUNTING HOLES AND HARDWARE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR OVERHEAD SIGN SUPPORTS.

MODIFYING SUPPLEMENTAL SPECIFICATION 816 SWITCH ENCLOSURE MOUNTING BRACKETS INCLUDING MOUNTING BOLTS AND DRILLED HOLES SHALL BE FURNISHED AND INSTALLED UNDER PAYMENT FOR 816 OVERHEAD SIGN SUPPORT STRUCTURES AT THE CONTRACT PRICE PER OVERHEAD SIGN SUPPORT, BY TYPE.

PAYMENT FOR THIS ITEM SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR EACH OVERHEAD SIGN SUPPORT, BY TYPE, INSTALLED IN PLACE AND ACCEPTED, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL ANCHOR BOLTS AND 2" AND 3/4" EHT CONDUIT ELLS (FOR INSTALLATION UNDER 816 CONCRETE FOR OVERHEAD SIGN SUPPORT FOUNDATIONS), AND FOR FURNISHING AND INSTALLING EACH OVERHEAD SIGN SUPPORT STRUCTURE SHOWN ON SHEETS 393 THROUGH 395 INCLUDING FIXTURE SUPPORT ARMS, SWITCH ENCLOSURE MOUNTING BRACKET, SIGN BRACKETS AND ALL COMPONENT PARTS NECESSARY TO MAKE A COMPLETE WORKABLE INSTALLATION READY FOR SIGN ERECTION, INSTALLATION OF DISCONNECT SWITCH AND ENCLOSURE, GROUND ROD AND WIRE CONNECTIONS AND SIGN WIRING.

ERECTION OF THESE SUPPORTS SHALL BE ACCOMPLISHED IN A MANNER MEETING THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 816.

ERECTION OF OVERHEAD SPAN TYPE SIGN SUPPORTS (7 SERIES)

IN ALL CASES, SPAN TYPE OVERHEAD SIGN SUPPORTS AND SIGNS SHALL BE ERECTED CONCURRENTLY. AT NO TIME SHALL THE BOX TRUSSES BE ERECTED WITHOUT THE SIGN BEING IN PLACE WITHIN EIGHT (8) HOURS.

816 ALTERNATE DESIGNS FOR OVERHEAD SIGN SUPPORTS

IF THE CONTRACTOR DESIRES TO FURNISH AN ALTERNATE DESIGN FOR OVERHEAD SIGN SUPPORTS, THE ALTERNATE DESIGNS MUST BE SUBMITTED TO THE STATE AT LEAST 21 DAYS PRIOR TO OPENING OF BIDS. THE BIDDER WILL BE NOTIFIED AS TO ACCEPTANCE OR REJECTION OF ALTERNATE DESIGN AT LEAST 7 DAYS BEFORE BIDS ARE TO BE OPENED. ALTERNATE DESIGNS MUST UTILIZE TUBULAR STRUCTURAL MEMBERS. SUBMISSIONS SHALL BE MADE TO OHIO DEPARTMENT OF HIGHWAYS, Office of Design Services, 25 S. Front St. Columbus, Ohio. 43215

GENERAL NOTES

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816 OVERPASS STRUCTURE MOUNTED SIGN SUPPORT BY TYPE

THIS ITEM OF WORK SHALL CONSIST OF THE FURNISHING, FABRICATION, AND ERECTION OF THE MATERIALS FOR THE OVERPASS STRUCTURE MOUNTED SIGN SUPPORTS IN ACCORDANCE WITH MATERIALS AND REQUIREMENTS SPECIFIED IN THESE PLANS AND DETAILED ON SHEETS 405-407.

WORK SHALL INCLUDE ALL NECESSARY FRAMING, SIGN BRACKETS, LIGHT FIXTURE SUPPORT ARMS, WELDING, BOLTS, COMPLETE AND READY FOR INSTALLATION OF ELECTRICAL SIGN LIGHTING COMPONENTS.

BASIS OF PAYMENT SHALL BE AT THE BID PRICE PER EACH OVERPASS STRUCTURE MOUNTED SIGN SUPPORT, BY TYPE INCLUDING ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS REQUIRED TO PERFORM THE ITEM OF WORK.

816 CONCRETE FOUNDATIONS, FOR SIGN SUPPORTS

PAYMENT FOR THIS ITEM SHALL BE BASED ON PLAN DIMENSIONS (OR DIMENSIONS AS MODIFIED BY THE ENGINEER IN LIEU OF PLAN QUANTITIES) AS REQUIRED IN SUPPLEMENTAL SPECIFICATION 816.

PAYMENT FOR REINFORCING STEEL AND INSTALLATION ONLY OF 2" AND 3/4" CONDUIT ELLS SHALL BE INCLUDED IN THE COST OF CONCRETE FOUNDATIONS FOR OVERHEAD SIGN SUPPORTS. CONCRETE SHALL BE CLASS "C".

BASIS OF PAYMENT SHALL BE AS FOLLOWS:

1. CONCRETE FOUNDATIONS FOR OVERHEAD SIGN SUPPORTS, PER CUBIC YARD.
2. CONCRETE FOUNDATIONS FOR GROUND MOUNTED SIGN SUPPORTS, PER CUBIC YARD.

816 STRUCTURAL SUPPORTS, STEEL BEAM (TYPE)

THE STRUCTURAL STEEL BEAM SUPPORTS INCLUDING 8 AND 6 POUND BEAMS, 4 POUND DRIVE POST AND HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-123 AND A-153 RESPECTIVELY.

QUANTITIES FOR ITEM 816 "STRUCTURAL SUPPORTS, STEEL BEAM (TYPE)", APPEARING IN THE QUANTITY TABLES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT SUPPORT LENGTHS PRIOR TO FABRICATION AND GALVANIZING OF SUPPORTS. PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE BID PER LIN. FT. WHICH PRICE AND PAYMENT SHALL INCLUDE ALL COSTS IN CONNECTION WITH THE EMBEDMENT OF THE SUPPORTS.

THE COST OF THE CONCRETE USED FOR EMBEDMENT WILL BE A SEPARATE PAY ITEM.

816 INTERIM STEEL DRIVE POSTS, 4 LBS. PER FOOT, AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING 4 POUND PER LINEAR FOOT STEEL DRIVE POSTS AS SPECIFIED FOR INTERIM LANE WIDTH TRANSITIONS.

THIS ITEM SHALL INCLUDE 4 POUNDS PER FOOT STEEL DRIVE POSTS 11'-0" LONG BOLTED TO THE INSIDE OF INTERIM BARRELS FURNISHED UNDER 606 USING A MINIMUM OF THREE 5/16" STEEL BOLTS SPACED ON 12" CENTERS.

POST FLANGES SHALL BE 90 DEGREES TO INTERIM EDGE LINES FACING APPROACHING TRAFFIC. STEEL BEARING PLATES 3" x 2" SHALL BE USED AT EACH BOLT OUTSIDE THE BARREL TO PREVENT PULL THROUGH. MOUNTING OF SIGNS ON THE DRIVE POSTS WITH THE BOTTOM OF THE SIGNS 7' ABOVE THE PAVEMENT SHALL BE INCLUDED IN ITEM 815.

THE QUANTITY FURNISHED AND INSTALLED WILL BE PAID FOR AT THE PRICE BID PER LINEAR FOOT WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING AND INSTALLING DRIVE POSTS INCLUDING NECESSARY HARDWARE, LABOR AND EQUIPMENT.

816 STRUCTURAL SUPPORTS, 6 LB. BEAM, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE FURNISHING, ASSEMBLY, AND INSTALLATION OF TWO (2) 3 LB. PER FOOT DRIVE POSTS (6 LB. BEAM) IN COMBINATION WITH A SQUARE SEAMLESS TUBULAR POST EXTENSION SPLICED TO THE TOP OF THE 6 LB. BEAM. DETAILS ARE SHOWN ON SHEET SOW.

SQUARE SEAMLESS TUBULAR POST MATERIAL SHALL BE MILD STEEL CONFORMING TO ASA 1020 STEEL, MINIMUM YIELD STRENGTH 35,000 PSI, ULTIMATE YIELD 55,000 PSI.

WORK SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND HARDWARE NECESSARY TO PERFORM THE REQUIRED ITEM OF WORK.

BASIS OF PAYMENT SHALL BE FOR STRUCTURAL SUPPORTS, 6 LB. BEAM, AS PER PLAN PER LINEAR FOOT MEASURED BY TOTAL LENGTH OF COMBINATION BEAM FROM END TO END.

816 STRUCTURAL SUPPORTS, 8 LB. BEAM, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE FURNISHING, ASSEMBLY, AND INSTALLATION OF TWO (2) 4 LB. PER FOOT DRIVE POSTS (8 LB. BEAM) IN COMBINATION WITH A SQUARE SEAMLESS TUBULAR POST EXTENSION SPLICED TO THE TOP OF THE 8 LB. BEAM. DETAILS SHOWN ON SHEET SOW.

SQUARE SEAMLESS TUBULAR POST MATERIAL SHALL BE MILD STEEL CONFORMING TO USASI 1020 STEEL, MINIMUM YIELD STRENGTH 35,000 PSI, ULTIMATE YIELD 55,000 PSI.

WORK SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND HARDWARE NECESSARY TO PERFORM THE REQUIRED ITEM OF WORK.

BASIS OF PAYMENT SHALL BE FOR STRUCTURAL SUPPORTS, 8 LB. BEAM, AS PER PLAN PER LINEAR FOOT MEASURED BY TOTAL LENGTH OF COMBINATION BEAM FROM END TO END.

GALVANIZED SUPPORTS

THE STRUCTURAL STEEL BEAM SUPPORTS INCLUDING THE 8 AND 6 POUND BEAMS AND THE 4 POUND DRIVE POST SHALL BE GALVANIZED, AFTER PUNCHING, IN ACCORDANCE WITH ASTM A-153 EXCEPT WHERE ALUMINUM OR STAINLESS STEEL IS SPECIFIED.

816 CONSTRUCTION LAYOUT STAKES FOR SIGNS AND TRAFFIC SIGNALS

THE CONTRACTOR SHALL STAKE OUT ALL SIGN AND TRAFFIC SIGNAL SUPPORTS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 816 PRIOR TO INSTALLATION OF ANY FOUNDATIONS OR SUPPORTS.

AFTER STAKEOUT THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF SEVEN (7) DAYS IN ADVANCE OF SCHEDULED WORK. SUPPORT LOCATIONS FOR EACH SUPPORT WILL BE FIELD CHECKED AND APPROVED BY THE ENGINEER AND DIVISION TRAFFIC ENGINEER AND/OR CITY TRAFFIC ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION WORK REQUIRED.

IF BOTH MAJOR AND MINOR TYPE SUPPORTS ARE INCLUDED WITHIN THE PROJECT IT WILL BE PERMISSIBLE TO PERFORM THE CONSTRUCTION STAKEOUT AND FIELD INSPECTION IN TWO (2) STAGES, ONE FOR MAJOR SUPPORTS AND ONE FOR MINOR SUPPORTS.

COST FOR THIS ITEM OF WORK WILL BE INCIDENTAL TO THE VARIOUS 816 ITEMS OF WORK CONTAINED IN THE PROJECT.

606 Guardrail, Type 6 AS PER PLAN

MODIFYING 606 ALL DRUMS FOR TEMPORARY BEAM RAIL WILL, IN ADDITION TO PAINTING REQUIREMENTS, HAVE AN 8" BAND OF YELLOW REFLECTORIZED SHEETING TYPE E PROVIDED AROUND THE CIRCUMFERENCE OF EACH BARREL AT THE TOP. REFLECTORIZATION AND APPLICATION OF THE SHEETING SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 815.

FOR DRAINAGE OF STEEL DRUMS, 4 EACH ONE-HALF INCH (1/2") DIAMETER HOLES SHALL BE PROVIDED ON THE CIRCULAR SURFACE NEAR THE BOTTOM OF EACH DRUM.

620 INTERIM DELINEATORS, AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING INTERIM DELINEATORS AS SPECIFIED ON PLAN SHEETS.

THIS ITEM SHALL INCLUDE 2 POUNDS PER FOOT STEEL DRIVE POSTS 4'-0" LONG BOLTED TO INSIDE OF INTERIM BARRELS FURNISHED UNDER 606 USING A MINIMUM OF THREE 5/16" STEEL BOLTS SPACED ON 12" CENTERS. POST FLANGES SHALL BE 90 DEGREES TO INTERIM EDGE LINES FACING APPROACHING TRAFFIC. TYPE C2 DELINEATORS SHALL BE MOUNTED ON THE DRIVE POST FLANGES WITH THE TOP OF THE DELINEATOR 4' ABOVE PAVEMENT.

THE QUANTITY FURNISHED AND INSTALLED WILL BE PAID FOR AT THE PRICE BID PER EACH WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING AND INSTALLING DRIVE POSTS AND DELINEATORS INCLUDING NECESSARY HARDWARE, LABOR AND EQUIPMENT.

621 INTERIM PAVEMENT MARKING, BY TYPE

THIS WORK SHALL CONSIST OF THE FURNISHING AND INSTALLATION OF INTERIM REMOVABLE MARKINGS AS SPECIFIED HEREIN AND SHOWN ON THE PLANS.

1. MATERIAL

MATERIAL SHALL CONSIST OF A BACKING COATED WITH A PRESSURE-SENSITIVE ADHESIVE AND A WEATHER AND TRAFFIC RESISTANT REFLECTIVE WHITE OR YELLOW COLORED SURFACE AND ADDITIONAL REQUIREMENTS AS FOLLOWS:

A. REFLECTION - THE WHITE AND YELLOW STRIPING MATERIAL SHALL BE REFLEX-REFLECTIVE, REFLECTING WHITE OR YELLOW RESPECTIVELY AND SHALL BE READILY VISIBLE WHEN VIEWED WITH AUTOMOBILE HEADLIGHTS AT NIGHT.

B. ADHESIVE - THE STRIPING MATERIAL SHALL HAVE A PRECOATED PRESSURE-SENSITIVE ADHESIVE WHICH SHALL NOT REQUIRE A LINER FOR PROTECTION FROM CONTAMINATION, PREADHESION, OR BLOCKING WITHIN THE ROLL AS DELIVERED.

C. CONFORMABILITY - THE STRIPING MATERIAL SHALL BE THIN, FLEXIBLE, FORMABLE, AND FOLLOWING APPLICATION, SHALL REMAIN CONFORMED TO THE TEXTURE OF THE PAVEMENT SURFACE.

D. REMOVABILITY - THE STRIPING MATERIAL BACKING SHALL PERMIT REMOVAL WITHOUT REQUIRING SANDBLAST, SOLVENT, OR GRINDING METHODS.

E. DURABILITY - THE STRIPING MATERIAL APPLIED IN ACCORDANCE WITH RECOMMENDED PROCEDURES SHALL BE WEATHER RESISTANT AND SHOW NO APPRECIABLE FADING, LIFTING, OR SHRINKAGE, PRIOR TO COMPLETION OF THIS PROJECT.

F. GENERAL - THE STRIPING MATERIAL AS SUPPLIED SHALL BE OF GOOD APPEARANCE, FREE FROM CRACKS, AND EDGES SHALL BE TRUE, STRAIGHT, AND UNBROKEN. THE STRIPING MATERIAL SHALL BE SUPPLIED IN ROLLS AND THERE SHALL BE NO MORE THAN 3 SPLICES PER 60 YARDS OF LENGTH.

THE STRIPING MATERIAL SHALL BE PREPARED FOR DELIVERY IN STANDARD COMMERCIAL CONTAINERS SO CONSTRUCTED AS TO INSURE ACCEPTANCE BY THE CARRIER AND PREVENT DAMAGE DURING PROPER SHIPMENT AND STORAGE.

THE CONTRACTOR SHALL STORE THE MATERIAL IN A COOL, DRY LOCATION WHERE TEMPERATURE WILL NOT EXCEED 100°F. PRIOR TO APPLICATION OF MARKING ON ROADWAY SURFACES.

2. ROAD SURFACE PREPARATION

THE ROAD SURFACE MUST BE CLEAN AND DRY, FREE OF OILS AND GREASE, DUST OR DIRT. ALL SURFACES MUST BE PRIMED.

CONCRETE PAVEMENT SHALL BE SURFACE TREATED IN ACCORDANCE WITH SECTION 621.04. SURFACE SHALL THEN BE GENEROUSLY FLUSHED WITH CLEAN WATER AND ALLOWED TO DRY THOROUGHLY PRIOR TO APPLICATION OF PRIMER AND INTERIM MARKINGS.

3. PRIMING

METHOD OF PRIMING SHALL BE AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL SUBMIT A PROPOSAL FOR TYPE OF PRIMING TO BE USED. COST FOR PRIMING SURFACES SHALL BE INCIDENTAL TO THE COST OF VARIOUS ITEMS INCLUDED IN ITEM 615, TEMPORARY ROADS, AS PER PLAN.

4. APPLICATION

INTERIM LINES SHALL BE APPLIED TO THE ROAD SURFACE WITH A ROLLER TYPE APPLICATOR AND ROLLED IMMEDIATELY AFTERWARDS BY RUBBER-TIRED ROLLER WITH APPROXIMATE SINGLE WHEEL LOAD BETWEEN ONE THOUSAND (1000) AND TWO THOUSAND (2000) POUNDS.

5. SPECIAL PLAN DETAILS

DETAILS FOR LOCATION OF INTERIM MARKINGS ARE SHOWN ON SIGN LOCATION PLAN SHEETS.

6. BASIS OF PAYMENT

COST OF FURNISHING AND INSTALLATION OF INTERIM PAVEMENT MARKING SHALL BE INCLUDED AT THE CONTRACT UNIT PRICE PER LINEAR FOOT.

202 REMOVAL OF EXISTING SIGN INSTALLATION, AS PER PLAN

THIS WORK SHALL CONSIST OF THE REMOVAL OF ALL EXISTING SIGN INSTALLATIONS ON MAIN ROADWAY, RAMPS AND APPROACH ROADWAYS WITHIN WORK LIMITS OF THIS PROJECT.

WORK SHALL ALSO INCLUDE REMOVAL OF SIGN SUPPORTS AND FOUNDATIONS AS REQUIRED IN SECTION 202.

For Item I below:
ALL SIGNS, SUPPORTS, AND ACCESSORIES REMOVED SHALL BE STORED NEATLY WITHIN THE LIMITS OF THE PROJECT AT LOCATIONS APPROVED BY THE ENGINEER FOR REMOVAL BY STATE FORCES. THIS WORK SHALL INCLUDE DISPOSAL OF ALL WASTE MATERIAL.

TO ASSURE MAINTENANCE OF ADEQUATE TRAFFIC CONTROL AT ALL TIMES, NO SIGNS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

PAYMENT FOR REMOVAL OF EXISTING SIGNS SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE REQUIRED WORK AS INDICATED ABOVE.

1. BASIS OF PAYMENT SHALL BE AS FOLLOWS FOR SIGNS SIXTY(60) SQUARE FEET OR GREATER:

   REMOVAL OF EXISTING MAJOR SIGN INSTALLATIONS AS PER PLAN AT THE CONTRACT PRICE PER EACH.

2. BASIS OF PAYMENT SHALL BE AS FOLLOWS FOR ALL OTHER SIGNS:

Removal and disposal OF EXISTING SIGN INSTALLATIONS AS PER PLAN AT THE CONTRACT LUMP SUM PRICE. This item shall include disposal of all signs and supports.

QUANTITY SUMMARY

121* = 100% CITY FUNDS
121** = CITY-STATE FUNDS
121□ = PARTI.(RURAL) FUNDS
121 = PARTICIPATING FUNDS

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SHEET NUMBER

| ITEM | | 392A | SIGN Nº | 393 | | | | | | | | | | | | | | | 394 | | | | | | | | | | | | | | |

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121□ = PARTI.(RURAL) FUNDS
121 = PARTICIPATING FUNDS

| SHEET Nº | LOCATION | STATION | EACH: R-1-48 48"x48" | R-10-36 36"x48" | R-10-48 48"x60" | R-15-30 30"x30" | R-16-48 48"x48" | R-25-30 30"x30" | R-33-30 30"x30" | R-37-24 24"x30" | R-38-36 36"x36" | R-41-36 36"x36" | R-43R-36 36"x12" | R-43L-36 36"x12" | W-49-36 36"x36" | W-49-48 48"x48" | W-97-48 48"x60" | W-98-48 48"x60" | W-138-30 30"x30" | M-2-24 24"x24" | M-5-24-3 30"x25" | M-5-36-3 42"x36" | M-24-20 20"x15" | M-39-24 24"x12" | M-40-24 24"x12" | M-45-42 35'x5' | M-45-42 35'-5.5" | 1M-17-24 24"x12" | 1M-26-20 20"x15" | 1M-37-24 24"x12" | 1M-37-36 36"x18" | 1M-36-24 24"x12" | | D-4-1 2'x7' | D-4-2 6'x4' | D-4-2 10'x4' | D-4B 5'x3' | D-12-96 8'x1.5' | N-12A-72 6'x5' | N-12A-96 8'x5' | L.F.: INTERIM 4" DRIVE POST AS PER PLAN | SQUARE FEET: SIGN ERECTION EXTRU. SHT. | SIGN ERECTION FLAT SHT. | INTERIM OVERLAY | INTERIM COVERING | LINEAR FEET: CONC. TEMP. BEAM RAIL AS PER PLAN | 4# POST | G# BEAM | G# BEAM AS PER PLAN | B# BEAM | B# BEAM AS PER PLAN | CU. YDS. CONC. FOR GM SIGNS |
|---|---|---|---

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121□ = PARTI.(RURAL) FUNDS
121 = PARTICIPATING FUNDS

SHEET Nº	LOCATION	STATION	EACH: R-1-30 30"x30"	R-1-36 36"x36"	R-1-48 48"x48"	R-2-36 36"x36"x36"	R-2-48 48"x48"x48"	R-15-30 30"x30"	R-20-24 24"x30"	R-21-24 24"x30"	R-25-24 24"x30"	R-37A-24 24"x30"	R-37A-36 36"x42"	R-41-24 24"x24"	R-41-30 30"x30"	R-43R-36 36"x12"	R-43L-36 36"x12"	W-13-30 30"x30"	W-14-30 30"x30"	W-28-24 24"x24"	W-32-48 48"x24"	W-45-48 48"x48"	W-47-48 48"x48"	W-48-30 30"x30"	W-49-48 48"x48"	W-60-36 36"x36"	W-27-48 48"x60"	W-38-48 48"x60"	W-143-18 18"x18"	M-2-24 24"x24"	M-24-20 20"x15"			D-4-1 5'x2'	D-4-1 10'x2'	D-4-2 8'x4'	D-4-2 11'x4'				L.F. INTERIM 4# DRIVE POST AS PER PLAN	SQUARE FEET: SIGN ERECTION EXTRU SHT	SIGN ERECTION FLAT SHT	INTERIM OVERLAY	INTERIM COVERING	LINEAR FEET: GOG-G.E. TYPE AS PER PLAN	4# POST	G# BEAM	G# BEAM AS PER PLAN	8# BEAM	8# BEAM AS PER PLAN	CU. YDS. CONC. FOR G.M. SIGNS
397	I-680	678+60 LT																							1																								0.1
	RAMP 'G'	686+00 RT																				1																												0.1
	"	693+40 RT			1										1																																			0.1
	RAMP 'H'	682+75 LT						1																																									0.1
	"	684+25 LT				1																				1																								0.1
	SHIRLEY	43+80 LT														1	1																																0.1
	"	44+40 RT																																															0.1
	"	52+90 RT			1										1																																			0.2
	"	53+50 LT														1	1																																0.1
	"	54+12 LT																																															0.1
	HUMBOLT-TAFT	10+30 LT	1																																														0.1
	"	13+50 RT	1																																														0.1
	TAFT	45+75 RT																							1																									0.1
	COOPER	10+42 RT		1										1		1	1																																0.1
	"	10+50 LT		1										1																																				0.1
	"	10+50 RT		1										1																																				0.1
	TAYLOR	39+68 RT	1																						1																									0.1
	"	39+68 LT																																															0.1
	"	40+25 LT	1																																														0.1
	HOMEWOOD	40+20 LT																																															0.2
	INDIANOLA	44+50 RT	1							1						1	1																																0.1
	"	45+00 LT	1						1							1	1																																0.1
	"	51+40 RT	1						1							1	1																																0.1
397	"	51+90 LT	1													1	1																																0.1
TOTAL	SIGNS	(BY TYPE)	8	3	2	1	—	1	2	2	—	—	—	3	2	7	7	—	—	—	—	1	—	2	1	1	—	—	—	—	—	—	—	1	1	—	—	—	—												
TOTAL	SQ. FT.	(BY TYPE)	50.0	27.0	32.0	3.9		6.3	10.0	10.0				12.0	12.5	21.0	21.0					16.0		12.5	16.0	9.0								18.0	20.0																
	TOTAL	SHEET 397																																					—	38.0	259.2	—	—	—	214.8	15.2	58.0	63.4	15.0	2.6
398	I-680	704+62 RT																							1																								0.1
	RAMP 'E'	713+20 RT														1																																0.1
	"	716+00 LT																																															0.2
	HOMEWOOD	43+60 LT														1																																0.1
	"	43+70 RT	1								1					1																																0.1
	"	47+05 LT														1																																0.1
	"	47+15 RT	1								1					1																																0.1
	CAMPBELL	38+11 RT	1							1						1	1																																0.1
	"	38+60 RT																						1																									0.1
	"	38+60 LT	1													1	1																																0.1
	"	48+50 RT				1																																											0.1
	SHADY RUN	55+65 RT										1																																					0.1
	"	57+65 RT										1																																					0.1
	ALEXANDER	10+55 RT																							1																									0.1
	"	10+58 LT	1																																														0.1
	TAYLOR	45+68 RT										1													1																									0.1
	"	45+68 LT	1																																														0.1
	COOPER	45+60 LT	1							1						1	1																																0.1
	"	46+10 RT	1						1							1	1																																0.1
	POWERSDALE	9+55 RT																																																0.1
	"	9+75 RT	1																																														0.1
	"	9+85 LT&RT												1																																			0.1
	"	10+00 RT. &LT		1																																													0.1
	"	10+58 LT	1																																														0.1
	"	44+00 RT																			1																													0.1
	POWERSDALE-	11+60 RT																				1																												0.2
	MABEL CONN	12+30 RT																				1																												0.2
	MABEL	57+00 LT																1																																0.1
	UNION	47+43 RT	1								1																																						0.1
	CALEDONIA	47+85 RT				1					1																																					0.1
	"	48+25 E										1																																					0.1
	RAMP 'F'	721+75 RT						1																																									0.1
398	RAMP 'X'	701+25 LT						1																																									0.1
TOTAL	SIGNS	(BY TYPE)	11	1	—	2	—	2	1	2	4	3	—	1	—	9	4	1	1	1	2	—	—	3	1	—	—	—	2	—	—	—	—	—	—	—	1	—	—												
TOTAL	SQ. FT.	(BY TYPE)	68.8	9.0		7.8		12.5	5.0	10.0	20.0	15.0		4.0		27.0	12.0	6.3	6.3	4.0	16.0			16.8	16.0				4.5								44.0															
	TOTAL	SHEET 398																																					—	44.0	263.0	—	—	—	308.6	56.1	14.5	44.7	85.0	3.6
399	I-680	737+50 RT																							1																								0.1
	"	752+00 LT																							1																								0.1
	"	755+35 RT																							1																								0.1
	RAMP 'B'	740+50 RT																					1																										0.1
	"	750+36 RT					1																																										0.1
	"	751+50 RT						1																																									0.1
	RAMP 'C'	757+45 LT						1																																									0.1
	RAMP 'D'	751+50 RT																						1																								0.1
	"	755+00 RT																									1	1																				0.2
	"	758+30 E										1																																					0.1
	RAMP 'A'	762+20 LT																					1																										0.1
399	BENWOOD	41+10 RT																						1																										0.1
TOTAL	SIGNS	(BY TYPE)	—	—	—	—	1	2	—	—	—	1	—	—	—	—	—	—	—	—	—	2	1	3	—	—	1	—	1	1	—	—	—	—	1	—	—	—												
TOTAL	SQ. FT.	(BY TYPE)					6.9	12.5				5.0										32.0	6.3	48.0			20.0		4.0	2.0					32.0																
	TOTAL	SHEET 399																																					—	32.0	136.7	—	—	—	60.5	45.6	—	102.7	—	1.3
	GRAND TOTAL	(RURAL)																																					—	—	21.6[b]	—	—	—	15.5[b]	15.3[b]	—	—	—	0.2[b]
	GRAND TOTAL	(PART.)																																					94.5	439.0	1322.6	—	219.3	1420	885.1	450.6	72.5	505.6	115.1	13.6

CHKD BY RRC DATE 12-2-69
CHKD WDB DATE 12-9-69

SIGN QUANTITIES MAY 25 1971

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LOCATION	STATION From	STATION To	SIDE	NO. LINES	EDGE LINES LIN. FT.	4" LANE LINES LIN. FT.	6" LANE LINES LIN. FT.	8" CHANNELIZING LINES LIN.FT.	BROAD TRAVERSE STRIPES LIN.FT.	CURB MARKING LIN. FT.	ISLAND MARKING SQ. FT.	CROSS WALK LINES LIN.FT.	24" STOP LINES LIN.FT.	LANE ARROWS EACH	BARRIER LINES LIN.FT.
Mainline	637 + 76.04	762 + 00	median L&R	2	24,847.92										
Mainline	637 + 76.04	768 + 50	20'&32'RT	2			26,147.92								
Mainline	637 + 76.04	768 + 50	20'&32'LT	2			26,147.92								
Mainline	637 + 76.04	645 + 84.48	RT	1	808.44										
Mainline	641 + 44.48	659 + 30.92	RT	1	1,786.44										
Mainline	654 + 10.92	685 + 18.27	RT	1	3,107.35										
Mainline	659 + 30.92	683 + 50	44' RT	1			2,419.08								
Mainline	641 + 44.48	643 + 44.48	RT	1				200.00							
Mainline	643 + 44.48	645 + 84.48	44' RT	1		240.00									
Mainline	654 + 10.92	656 + 10.92	RT	1				200.00							
Mainline	656 + 10.92	659 + 30.92	44' RT	1		320.00									
Mainline	683 + 50	685 + 18.27	RT	2				326.00							
Mainline	683 + 50	685 + 18.27	RT	20					271.00						
Mainline	685 + 18.27	711 + 40	RT	1	2,621.73										
Mainline	707 + 00	744 + 40	RT	1	3,740.00										
Mainline	707 + 00	709 + 00	RT	1				200.00							
Mainline	709 + 00	711 + 40	RT	1		240.00									
Mainline	740 + 00	751 + 31.08	RT	1	1,131.08										
Mainline	740 + 00	742 + 00	RT	1				200.00							
Mainline	742 + 00	744 + 40	RT	1		240.00									
Mainline	744 + 40	749 + 50	44' RT	1			510.00								
Mainline	749 + 50	751 + 31.08	RT	2				363.00							
Mainline	749 + 50	751 + 31.08	RT	20					286.00						
Mainline	751 + 31.08	760 + 00	RT	1	868.92										
Mainline	756 + 61.33	760 + 00	RT	1		338.67									
Mainline	756 + 61.33	766 + 11.33	RT	1	950.00										
Mainline	768 + 50	782 + 66.63	RT	1	1,416.63**										
Mainline	768 + 50	782 + 66.63	32' RT	1			1,416.63**								
Mainline	637 + 76.04	639 + 30.38	LT	1	154.34										
Mainline	639 + 30.38	641 + 05	LT	2				351.00							
Mainline	639 + 30.38	641 + 05	LT	22					310.00						
Mainline	639 + 30.38	653 + 07.54	LT	1	1,376.48										
Mainline	653 + 07.54	656 + 50	LT	2				685.00							
Mainline	653 + 07.54	656 + 50	LT	40					493.00						
Mainline	656 + 50	670 + 20	44' LT.	1			1,370.00								
Mainline	653 + 07.54	675 + 40	LT	1	2,232.46										
Mainline	670 + 20	724 + 50.14	LT	1	5,430.14										
Mainline	673 + 40	675 + 40	LT	1				200.00							
Mainline	670 + 20	673 + 40	LT	1		320.00									
Mainline	724 + 50.14	728 + 50	LT	43					641.00						
Mainline	724 + 50.14	728 + 50	LT	2				800.00							
Mainline	724 + 50.14	749 + 75	LT	1	2,524.86										
Mainline	728 + 50	744 + 55.10	44' LT	1			1,605.10								
Mainline	744 + 55.10	747 + 75	LT	1		319.90									
Mainline	747 + 75	749 + 75	LT	1				200.00							
Mainline	744 + 55.10	762 + 23.36	LT	1	1,768.26										
Mainline	762 + 23.36	764 + 25	LT	2				400.00**							
Mainline	762 + 23.36	764 + 25	LT	25					348.00**						
Mainline	764 + 25	766 + 75	44' LT	1		250.00**									
Mainline	762 + 80.42	770 + 26.07	LT	1	787.93**										
Ramp A	757 + 10	—	LT & RT	2						126.00**					
Ramp A	757 + 20	—	LT & RT	1							38.00**				
Ramp A	757 + 22	758 + 22	RT	1					100.00**						
Ramp A	758 + 22	759 + 42	RT	1		120.00**									
Ramp B	750 + 27.52	756 + 61.33	RT	1	633.81										
Ramp B	753 + 00	755 + 61.33	LT	1	261.33										
Ramp B	753 + 00	753 + 50	LT	--						56.38					
Ramp B	755 + 00	756 + 61.33	LT	--						148.00					
Ramp B	753 + 50	755 + 61.33	LT	1	211.33										
Ramp B	749 + 50	- -	LT	2						40					
Ramp C	749 + 75.10	757 + 04.41	LT	1	729.31										
Ramp C	750 + 75.10	757 + 20.41	RT	1	645.31										
Ramp C	749 + 75.10	753 + 25	RT	--						351.68					
Ramp C	757 + 41	- -	LT & RT	2						120					
Ramp D	751 + 29.67	758 + 19.76	RT	1	711.00										
Ramp D	751 + 29.67	754 + 25	LT	1	295.33										
Ramp D	754 + 25	754 + 89.5	LT	--						64.50					
Ramp D	754 + 89.5	755 + 33.21	LT	--							271.98				
Ramp D	755 + 33.21	758 + 35	LT	--							905.40				
Ramp D	758 + 63	- -	LT & RT	2						144					
Ramp D	758 + 54	- -	RT	1							40				
Ramp D	758 + 37	758 + 54	RT	2											34.00
Ramp D	756 + 72	757 + 52	RT	1		80.00									
Ramp E	48 + 70 (Cooper)	715 + 80.30	℄	1		764.88									
Ramp E	715 + 43.19	724 + 61.52	RT	1	918.33										
Ramp E	716 + 68.49	724 + 61.52	LT	1	793.03										
Cooper	49 + 77	-	LT & RT	2						63					
Campbell	38 + 17	-	LT & RT	2						66					
Ramp E	709 + 67	-	LT & RT	2						61					
Union	47 + 50	-	LT & RT	2						66					
Caledonia	47 + 74	-	LT & RT	2						49					
Campbell	38 + 60	-	LT & RT	1							24				
Campbell	38 + 11	-	LT & RT	1							26				
Union	47 + 43	-	LT & RT	1							26				

LOCATION	STATION From	STATION To	SIDE	NO. LINES	EDGE LINES LIN. FT.	4" LANE LINES LIN. FT.	6" LANE LINES LIN. FT.	8" CHANNELIZING LINES LIN.FT.	BROAD TRAVERSE STRIPES LIN FT.	CURB MARKING LIN FT.	ISLAND MARKING SQ. FT.	CROSS-WALK LINES LIN. FT	24" STOP LINES LIN.FT.	LANE ARROWS EACH	BARRIER LINES LIN.FT.
Ramp F	721 + 40	733 + 00	14' LT	1		1,160.00									
Ramp F	733 + 00	740 + 00	RT	1	700.00										
Ramp F	734 + 25	737 + 50	LT	--						323.40					
Ramp F	737 + 50	740 + 00	LT	--						249.81					
Ramp F	721 + 33	-	LT	2								56			
Powersdale	54 + 98	-	LT & RT	2								57			
Powersdale	55 + 90	-	LT & RT	2								57			
Alexander	10 + 66	-	LT & RT	2								49			
Alexander	10 + 72	-	LT & RT	1									25		
Ramp G	685 + 21.97	692 + 88.08	LT	1	766.11										
Ramp G	685 + 21.97	693 + 17.81	RT	1	795.84										
Ramp G	689 + 82	693 + 42	RT	1		360.00									
Ramp G	691 + 50	-	LT	--										2	
Ramp G	693 + 44	-	LT	1									59		
Ramp G	693 + 51	-	LT	2								171			
Ramp G	693 + 00	-	LT	--										2	
Ramp H	675 + 40	683 + 26.79	LT	1	786.79										
Ramp H	676 + 40	684 + 51.56	RT	1	811.56										
Ramp H	675 + 40	679 + 00	RT	--						364.44					
Ramp H	684 + 55	-	RT	2								66			
Ramp H	684 + 00	-	LT	2								87			
Ramp K	641 + 95.17	653 + 08.22	LT & RT	2	2,219 95										
Ramp K	641 + 78	-	LT & RT	2								100			
Ramp K	641 + 86	-	LT & RT	1									29		
Ramp J	643 + 56.24	654 + 10.76	LT & RT	2	1,809.04										
Ramp J	649 + 75	654 + 10.76	LT	-											
Ramp J	643 + 73	-	LT	2											
Ramp L	630 + 60.83	639 + 31.06	LT	1	870.23□										
Ramp L	635 + 50	639 + 31.06	RT	1	381.06□										
Ramp O	630 + 99.72	641 + 44.17	LT & RT	2	1,788.90										
Ramp O	639 + 44.17	641 + 44.17	LT	-						231.17					
Ramp X	701 + 65.43	707 + 00	LT & RT	2	769.14										
Ramp X	703 + 25	707 + 00	LT	--						375.00					
Midlothian	366 + 00	367 + 00	℄	1											100.00□
Midlothian	366 + 00	367 + 00	℄	1											100.00
Midlothian	364 + 50	364 + 85	℄	1											35.00□
Midlothian	364 + 50	364 + 85	℄	1											35.00
Midlothian	364 + 87	-	RT	1									22□		
Midlothian	365 + 98	-	LT	1									23		
Midlothian	364 + 45	364 + 85	LT	1						40.00					
Midlothian	364 + 45	364 + 85	RT	1						40.00□					
Midlothian	367 + 60	370 + 40	LT	1						280.00					
Midlothian	370 + 80	378 + 00	LT	1						720.00					
Midlothian	366 + 22	371 + 42	RT	1						520.00□					
Midlothian	371 + 42	377 + 97	RT	1						655.00					
Midlothian	368 + 65	369 + 57	RT	1							92.00□				
Midlothian	369 + 82	371 + 42	RT	1						160.00□					
Midlothian	371 + 42	373 + 42	RT	1						200.00					
Midlothian	373 + 42	375 + 88	RT	1							246.00				98.00
Midlothian	377 + 50	377 + 99	℄	2									26		
Midlothian	377 + 99	-	RT	1								90			
Midlothian	379 + 02	-	LT & RT	2									22		
Midlothian	379 + 10	-	LT	1											36.00
Midlothian	379 + 12	379 + 30	℄	2											
Midlothian	379 + 12	379 + 27	LT & RT	2						30.00					
Midlothian	366 + 00	367 + 35	LT	1							135.00				
Shirley Rd.	10 + 28	-	LT & RT	2								145			
Shirley Rd.	10 + 37	-	LT	1									18		
Shirley Rd.	42 + 10	44 + 75	℄	2											530.00
Shirley Rd.	45 + 20	45 + 50	℄	2											60.00
Shirley Rd.	45 + 80	52 + 60	℄	2											1,360.00
Shirley Rd.	54 + 00	55 + 62	℄	2											324.00
Shirley Rd.	55 + 62	62 + 50	℄	2											1,376.00*
Shirley Rd.	43 + 00	44 + 00	11' LT	1						100.00					
Shirley Rd.	43 + 31	44 + 00	11' RT	1						69.00					
Shirley Rd.	44 + 00	44 + 75	11'LT, 11'RT	2						150.00					
Shirley Rd.	45 + 20	45 + 50	11'LT, 11'RT	2						60.00					
Shirley Rd.	45 + 80	52 + 60	11'LT, 11'RT	2						1,360.00					
Shirley Rd.	54 + 00	55 + 62	11'LT, 11'RT	2						324.00					
Shirley Rd.	55 + 62	62 + 50	11'LT, 11'RT	2						1,376.00^					
Shirley Rd.	62 + 44	-	RT	1									41*		
Shirley Rd.	62 + 52	-	LT & RT	2								165*			

CALC. BY REC DATE 11/18/69
CHECK BY WDB DATE 11/19/69

MAY 25 1971

SUMMARY OF QUANTITES

FED. RD.	STATE	PROJECT	
2	OHIO		

392A 656

MAH-680-6.98

LOCATION	STATION From	To	SIDE	NO. LINES	EDGE LINES LIN. FT.	4" LANE LINES LIN. FT.	6" LANE LINES LIN. FT.	8" CHANNEL-IZING LINES LIN. FT.	BROAD TRAVERSE STRIPES LIN. FT.	CURB MARKING LIN. FT.	ISLAND MARKING SQ. FT.	CROSS-WALK LINES LIN. FT.	24" STOP LINES LIN. FT.	LANE ARROWS EACH	BARRIER LINES LIN. FT.
Shirley Rd.	51 + 75	110 + 00	℄	1											988.36
Runaround	51 + 75	110 + 00	LT & RT	2	1,976.72										
Craiger	110 + 00	104 + 30													570.00
Cooper	10 + 65	12 + 30	℄	1											165.00
Cooper	Island at Shirley Road		LT & RT	4								110			
Cooper	11 + 50	-	LT & RT	--										2	
Homewood	35 + 16	36 + 00	℄	1				84.00							
Homewood	10 + 45 (Curb Return)	-	RT	2								36			
Homewood	33 + 47	-	LT & RT	2								57			
Indianola	48 + 03	-	LT & RT	2								68			
Indianola	48 + 53	-	LT & RT	2								62			
Indianola	51 + 47	-	LT & RT	2								105			
Indianola	51 + 40	-	RT	1									21		
Taylor	39 + 75	-	LT & RT	2								59			
Taylor	40 + 18	-	LT & RT	2								77			
Taylor	39 + 66	-	LT & RT	1									12		
Taylor	40 + 29	-	LT & RT	1									12		
Shady Run Rd.	37 + 75	38 + 45	℄	1		70.00									
Shady Run Rd	39 + 25	54 + 55	℄	1		1,530.00									
Shady Run Rd.	54 + 55	55 + 55	℄	2											100.00
Shady Run Rd.	57 + 78	-	LT & RT	2								127			
Campbell	48 + 70	-	LT & RT	2								29			
Powersdale	10 + 51		LT & RT	2								56			
Powesdale	9 + 75	-	RT	1									15		
Powersdale	10 + 00 Ext. Tang	-	RT	1									15		
Powersdale	10 + 58	-	LT	1									15		
		-													
Gibson Ave.	47 + 27.59	52 + 00	℄	2											944.82
Gibson Ave	47 + 37	-	LT & RT	2								109			
Gibson Ave	47 + 27.59	52 + 00	LT & RT	2		944.82									
South Ave	47 + 39	48 + 11	℄	2											144 00
South Ave	49 + 10	53 + 65	℄	2											910.00
South Ave	54 + 62	55 + 00	℄	2											76.00
South Ave	47 + 54	48 + 09	LT & RT	3		165.00									
South Ave	49 + 08	53 + 63	13' RT	1		455.00									
South Ave	49 + 08	51 + 48	27' RT	1		240.00									
South Ave	51 + 48	52 + 75	27' RT	1				127.00							
South Ave	49 + 12	53 + 52	13' LT	1		440.00									
South Ave	48 + 11	-	RT	1									39		
South Ave	48 + 21	-	LT & RT	2								135			
South Ave	49 + 10	-	LT	1									27		
South Ave	53 + 65	-	RT	1									29		
South Ave	54 + 52	-	LT & RT	2								113			
South Ave	54 + 62	-	LT	1									27		
South Ave	54 + 62	55 + 02	LT & RT	2		80 00									
TOTALS		100% CITY FUNDS*				1,376.00 X 15/40=0.10Mi.						165	41		1,376.00 = 0.26 MI.
		CITY-STATE FUNDS**			2,204.56 = 0.42 Mi.	370.00 X 15/40=0.03Mi.	1,416.63 X 15/40=0.10Mi.	500.00	348.00			126	38		
		RURAL FUNDS			1,251.29 = 0.24 Mi.	720.00 X 15/40=0.05Mi.		92.00					22		135.00 = 0.03 MI.
		PARTICIPATING FUNDS			71,190.58 = 13.48 Mi.	12,296.27 X 15/40=0.87Mi.	58,200.02 X 15/40=4.13Mi.	4,317.00	2,001.00	2,164.38	1,177.38	2,630	530	6	6,475.18 = 1.23 MI.

INTERIM QUANTITIES

Mainline	640 + 50	652 + 91	1241.00	

TOTALS PARTICIPATING FUNDS 1241.00

= 0.42 MI.

LOCATION	STATION From	To	SIDE	SPACING LIN. FT.	BRACKET MOUNTED C-2	POST MOUNTED C-2	INTERIM C-2
Ramp A	763 + 25	764 + 65	LT.	70	3 **		
	764 + 65	766 + 05	LT.	70		2 **	
	766 + 05	767 + 45	LT.	70	2**		
	767 + 45	770 + 25	LT.	70		4 **	
Ramp B	750 + 00	755 + 10	LT.	30		17	
	755 + 10	756 + 00	RT.	30		4	
	756 + 00	756 + 60	RT.	60		1	
	756 + 60	757 + 30	RT.	70		1	
	757 + 30	762 + 90	RT.	70		8	
	762 + 90	765 + 00	RT.	70	3		
	765 + 00	765 + 70	RT.	70		1	
	765 + 70	766 + 11	RT.	41		1	
Ramp C	744 + 50	756 + 50	LT.	100		13	
Ramp D	748 + 50	751 + 50	RT.	100		4	
	751 + 50	752 + 10	LT.	60		2	
	752 + 10	753 + 90	LT.	30		6	
	753 + 90	754 + 50	LT.	60		1	
	754 + 50	755 + 10	RT.	60		2	
	755 + 10	757 + 20	RT.	30		7	
Ramp E	717 + 00	731 + 00	LT.	100		15	
Ramp F	721 + 50	724 + 80	LT.	30		12	
	724 + 80	726 + 00	LT.	60		2	
	726 + 00	745 + 00	RT.	100		20	
Ramp G	682 + 00	689 + 00	RT.	100		8	
	689 + 00	689 + 60	RT.	60		1	
	689 + 60	692 + 90	RT.	30		11	
Ramp H	670 + 00	678 + 00	LT.	100		9	
	678 + 00	682 + 00	RT.	80		6	
	682 + 00	684 + 40	RT.	60		4	
Ramp J	640 + 90	643 + 00	RT.	30		8	
	643 + 00	643 + 90	LT.	30		4	
	643 + 90	644 + 50	LT.	60		1	
	644 + 50	645 + 50	LT.	100		1	
	645 + 50	659 + 50	RT.	100		15	
Ramp K	642 + 00	659 + 00	LT.	100		18	
Ramp L	628 + 00	630 + 00	LT.	100		3 □	
	630 + 00	630 + 60	RT.	60		2 □	
	630 + 60	637 + 50	RT.	30		23 □	
	637 + 50	638 + 10	RT.	60		1 □	
	638 + 10	639 + 10	RT.	100		1 □	
	639 + 10	640 + 10	LT.	100		2 □	
	640 + 10	642 + 10	LT.	100	2		
	642 + 10	647 + 10	LT.	100		5	
Ramp O	628 + 40	629 + 40	RT.	100		2	
	629 + 40	630 + 60	RT.	60		2	
	630 + 60	639 + 00	LT.	30		29	
	639 + 00	639 + 60	LT.	60		1	
	639 + 60	640 + 60	RT.	100		2	
	640 + 60	642 + 60	RT.	100	2		
	642 + 60	650 + 60	RT.	100		8	
Midlothian	370 + 26.28	373 + 26.39	RT.	100		2	
Ramp X	699 + 30	700 + 20	LT.	30		4	
	700 + 20	700 + 80	LT.	60		1	
	700 + 80	701 + 80	LT.	100		1	
	701 + 80	708 + 80	RT.	100		8	
	708 + 80	710 + 80	RT.	100	2		
	710 + 80	716 + 80	RT.	100		6	
TOTALS		PARTICIPATING FUNDS			9	274	
		RURAL FUNDS □				32	
		CITY-STATE FUNDS**			5	6	

INTERIM QUANTITIES

Mainline	643 + 00	656 + 00	LT	Variable	8

TOTALS PARTICIPATING FUNDS 8

CALC. BY ERC DATE 11/18/69

CHK'D BY WDB DATE 11/19/69

MAY 25 1971

SUMMARY OF QUANTITES

FED.RD.	STATE	PROJECT	
2	OHIO		

393
656

MAH-680-6.58

DESIGN YEAR: 1985
DESIGN SPEED: 60 M.P.H.
COMPLETE ROADWAY LIGHTING

SIGNING PLAN
END PROJECT TO STA. 692+00

MAY 25 1971

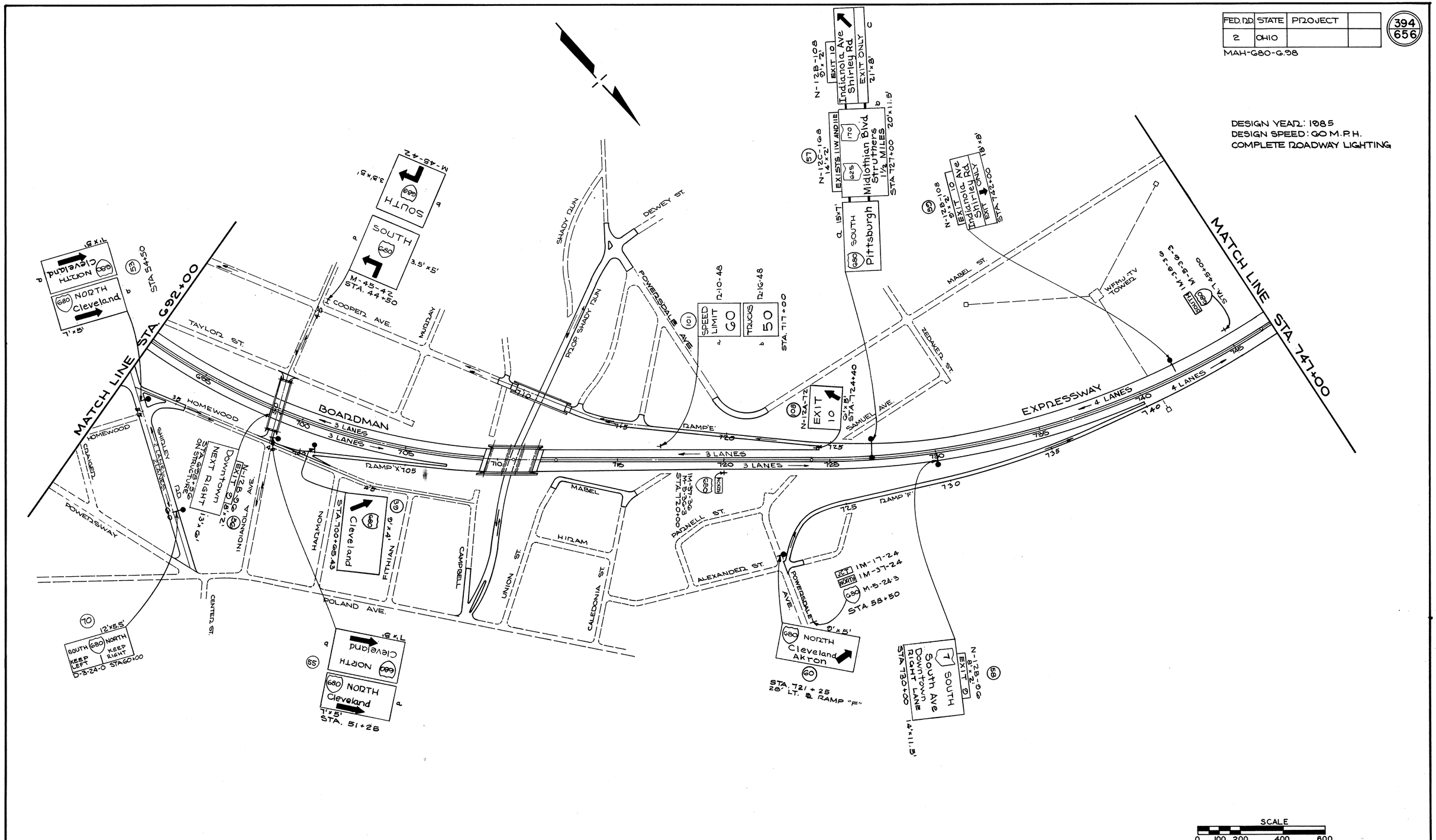
SCALE
0 100 200 400 600

FED. RD.	STATE	PROJECT	
2	OHIO		

394
656

MAH-680-6.98

DESIGN YEAR: 1985
DESIGN SPEED: 60 M.P.H.
COMPLETE ROADWAY LIGHTING



SIGNING PLAN
STA. 692+00 TO STA. 747+00

MAY 25 1971

FED. R.D.	STATE	PROJECT	
2	OHIO		

395
656

MAH-680-6.98

DESIGN YEAR: 1985
DESIGN SPEED: 60 M.P.H.
COMPLETE ROADWAY LIGHTING

SCALE
0 100 200 400 600

MAY 25 1971

SIGNING PLAN
STA. 747+00 TO BEGIN PROJECT

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

396
656

DESIGN YEAR: 1985
DESIGN SPEED: 60 M.P.H.
COMPLETE ROADWAY LIGHTING

MIDLOTHIAN BLVD.
1044
1178
345
EXISTING TRAFFIC SIGNAL
225
163
SHIRLEY RD.
FUTURE RAMP 'MM'
415
W-49-36
MERGING TRAFFIC
STA. 3680+00
RAMP 'L'
628
315
STA. 3671+05
R-37A-24
RIGHT
STOP
R-41-36
R-1-48
R-25-30
LEAVE LOW CEILING
STOP
RIGHT TURN ONLY
ONE WAY
R-43-36
STA. 642+00
3,188
3,356
635
630
BOARDMAN
W-97-48
EXIT 35 MPH
STA 639+38
STA 639+25
1,137
STA 641+25
1,365
STA. 643+44.25
STA. 643+25
SIDE PARK
R-48-1234
STA. 510+50
YOUNGSTOWN CORPORATION LINE
2,972
2,773
640
645
287
RAMP 'K'
EXPRESSWAY
3,910
3,132
650
655
TEMPORARY
R-33-30
DO NOT PASS
STA. 651+50
STA 653+12.34
STA. 656+50
4,197
4,182
STA 656+10.02
STA. 652+30.02
STA. 654+10.32
KEEP RIGHT
TEMPORARY
R-38-36
STRAP
4½ POST
NOTE: STRAP 4½ POST TO.
FUTURE SIGN (BY OTHERS)
MERGING TRAFFIC
END PROJECT
MAH-680-9.32
STA. 638+00
END PROJECT
MAH-680-6.98
STA. 637+76.04
160
FUTURE RAMP 'NN'
384
W-38-48
RAMP 'O'
635
STA 630+00
35 MPH
RAMP 'O'
1050
1,028
315
STA. 643+44.25
STA. 643+25
CR-150 YIELD
W-49-36
MERGING TRAFFIC
STA. 646+34.48
PEDESTRIANS AND BICYCLES PROHIBITED
R-15-30
STA. 643+10
PEDESTRIANS AND BICYCLES PROHIBITED
R-15-30
STA. 630+15
KEEP RIGHT
R-STA-24
STA. 517+45
1,805
2,018
WESTON AVE.
LEMOYNE AVE.
EVERETT AVE.
TEMPORARY BARRELS WITH GUARD RAIL ATTACHED SPACED 12'-6" ON CENTERS.
TEMPORARY W-138-30 SIGN TO BE ERECTED ON FIRST BARREL, THEN EVERY 100' FOR 300', THEN EVERY 200' THEREAFTER.
ERECT C-2 DELINEATORS APPROX. MIDWAY BETWEEN SIGNS ON BARRELS.
STA. 640+50 to STA. 658+50
NOTE:
TEMPORARY GUARD RAIL AND SIGNS TO BE NON-PERFORMED IF BOTH SECTIONS MAH-680-9.32 & MAH-680-6.98 ARE OPENED TO TRAFFIC AT THE SAME TIME.
0000 = 1985 DDHV
SCALE
0 50 100 200 300 400

SIGNING PLAN
MIDLOTHIAN BLVD. INTERCHANGE

MAY 25 1971

FED. R.D.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

397
656

DESIGN YEAR: 1985
DESIGN SPEED: 60 M.P.H.
COMPLETE ROADWAY LIGHTING

MATCH LINE STA. 700+00

HUMBOLT AVE.
HUMBOLT - TAFT CONNECTOR
TAFT AVE.
COOPER AVE.
TAYLOR AVE.
EXPRESSWAY
SHIRLEY
HOMEWOOD AVE.
INDIANOLA AVE.
BOARDMAN
RAMP 'H'
RAMP 'G'
CRAIGEN AVE.
POLAND AVE.
ROAD
CENTER ST.
SPALDING ROAD
POWERS WAY
TAYLOR AVE

EXISTING STOP SIGN TO REMAIN

STA 671+00
STA 673+40
STA 675+40
STA 683+50
STA 685+18.27

EXISTING TRAFFIC SIGNAL
EXISTING TRAFFIC SIGNAL

100% CITY FUNDS

= 1985 DDHV

SCALE
0 50 100 200 300 400

SIGNING PLAN
SHIRLEY ROAD INTERCHANGE
MAY 25 1971

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-9.08

398
656

DESIGN YEAR: 1985
DESIGN SPEED: 60 M.P.H.
COMPLETE ROADWAY LIGHTING

TAFT AVE.
HUNTER ST.
SHADY RUN RD
STOP R-1-30 STA. 10+00
DO NOT ENTER R-41-24 STA. 10+00
W-28-24 STA. 9+55
STOP R-1-30 STA. 9+75
DO NOT ENTER R-41-24 STA. 9+95
STOP R-1-30 STA. 10+58
POWERSDALE AVE.
ZEDAKER ST.
CAMPBELL ST.
RELOC. SHADY RUN ROAD
UNION ST.
CALEDONIA ST.
COOPER AVE.
359
R-21-24
NO LEFT TURN
R-1-30 STA. 43+60
R-43R-36
ONE WAY
R-43L-36
R-1-30 STA. 38+11
R-25-24 STA. 41+49
STOP R-1-30
LIGHT TURN ONLY
R-25-24 STA. 41+85
W-48-30 STA. 58+60
OUTLET
R-2-36 YIELD
W-14-30 STA. 46+25
KEEP RIGHT
R-25A-24 STA. 46+25
W-14-18 STA. 44+00
20 MPH
Indianola Ave
Shirley Rd
R-4-2 STA. 716+00
107
W-13-30
W-14-18 STA. 37+00
20 MPH
MABEL ST.
SAMUEL ST.
MATCH LINE STA. 700+00
MURRAY AVE.
TAYLOR AVE.
STOP R-1-30 (BY OTHERS)
W-48-30 STA. 43+68
TO OUTLET
3,906
3,850
BOARDMAN
STOP R-1-30 STA. 42+10
NO RIGHT TURN R-20-24
R-43R-36
R-43L-36
STOP R-1-30 STA. 38+68
STOP R-1-30 STA. 35+60
R-43R-36
R-43L-36
W-48-30 STA. 58+60
OUTLET
R-43R-36
R-43L-36
STA. 713+20
157
120
445
720
RAMP 'E'
W-27-48 STA. 11+00
KEEP RIGHT
R-25A-24 STA. 46+25
STA. 724+50.14
STA. 782+80
MATCH LINE STA. 732+00
EXPRESSWAY
4,355
4,446
596
705
715
720
725
730
RAMP 'X'
MERGING TRAFFIC
W-48-48 STA. 703+48
R-15-30 PEDESTRIANS AND BICYCLES PROHIBITED STA. 701+25
ONE WAY R-43R-36 STA. 703+25
ONE WAY R-43R-36 STA. 705+05
STA 707+00
STA 709+00
STA 711+40
HOMEWOOD AVE.
HARMON AVE.
FITHIAN AVE.
CAMPBELL ST.
UNION ST.
HIRAM ST.
MABEL ST.
CALEDONIA ST.
ALEXANDER ST.
POLAND AVE.
ONE WAY R-43R-36
STOP R-1-30 STA. 43+70
RIGHT TURN ONLY R-25-24
ONE WAY R-43R-36
STOP R-1-30 STA. 47+15
RIGHT TURN ONLY R-25-24
R-2-36 YIELD STA. 48+50
KEEP RIGHT R-27A-24 STA. 53+62
EXIST STOP SIGN TO REMAIN
R-27A-24 KEEP RIGHT STA. 57+65
RAMP 'F'
PARNELL ST.
R-15-30 STA. 721+75 PEDESTRIANS AND BICYCLES PROHIBITED
108
STOP R-1-30 STA. 10+58
W-48-30 STA. 10+55 NO OUTLET
EXIST STOP SIGN TO REMAIN
POWERSDALE AVE.
POLAND AVE.

00000 = 1985 DDHV

SCALE
0 50 100 200 300 400

SIGNING PLAN
SHIRLEY ROAD INTERCHANGE

MAY 23 1977

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.38

399
656

DESIGN YEAR: 1985
DESIGN SPEED: 60 M.P.H.
COMPLETE ROADWAY LIGHTING

MATCH LINE STA. 732+00

BOARDMAN EXPRESSWAY

RAMP 'E'

4,355
4,446
102
135
145
4,548
750
3,592
763
3,661
755
765
1,960
6,450
5,552

STA. 737+50
W-4-48
STA. 740+00
STA. 742+00
STA. 744+40
STA. 745+34.22
STA. 747+78
STA. 749+75
STA. 752+00
W-49-48
MERGING TRAFFIC
EXISTING TRAFFIC SIGNAL TO BE REMOVED
EXIST. STOP SIGN TO REMAIN
EXIST. STOP SIGN TO REMAIN
EXIST. STOP SIGN TO REMAIN
EXIST. STOP SIGN TO REMAIN
EXIST. T-41-24 SIGNS TO REMAIN
DO NOT ENTER
DO NOT ENTER

SAMUEL AVE.

DICKSON AVE.

KNOX AVE.

R-10-48
STA. 751+32
50
SPEED LIMIT
ON STRUCTURE
R-15-30
PEDESTRIANS AND BICYCLES PROHIBITED
STA. 751+45
3,617
3,095
49

RAMP 'C'

RAMP 'A'

W-47-48
SIGNAL AHEAD
STA. 762+20

Y. & S. R.R.

STA. 749+50
SIGNAL AHEAD
STA. 751+30
W-47-48
STA. 751+50
W-49-48
STA. 753+45
W-49-48
STA. 756+46.33
W-49-48
STA. 758+30
W-49-48
STA. 761+10
W-48-41.30
STA. 753+00
W-49-48
STA. 755+00
W-49-48
STA. 758+30
R-2-37A-24
KEEP RIGHT
STA. 759+46.33
R-15-30
PEDESTRIANS AND BICYCLES PROHIBITED
STA. 751+50
RAMP 'D'
857
RAMP 'B'
2,785
3-08-48
25 MPH
STA. 749+50
RAMP
OUTLET
SIGNAL AHEAD
VIEW
3,687
1,769
1,496
1,468
1,496

BENWOOD AVE.

EXIST. STOP SIGN TO REMAIN

SOUTH AVE
DOWNTOWN
M-24-20
D-4-2
LEE AVE.
M-22-2

GIBSON AVE.

SOUTH AVE.

PROPOSED TRAFFIC SIGNAL

EXIST. STOP SIGN TO REMAIN

DOROTHY AVE.

0000 = 1985 DDHV

SCALE
0 50 100 200 300 400

SIGNING PLAN
SOUTH AVE. INTERCHANGE

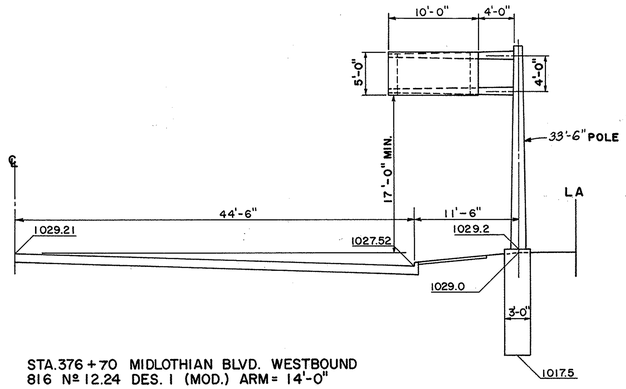
MAY 25 1971

FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

400
656

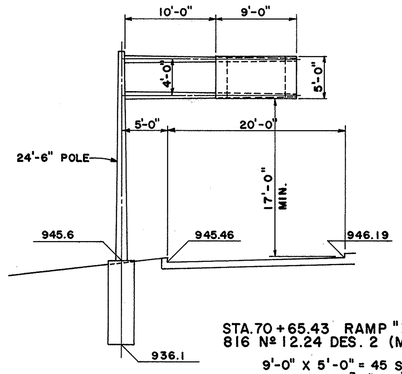
SIGN Nº 38



STA.376+70 MIDLOTHIAN BLVD. WESTBOUND
816 Nº 12.24 DES. 1 (MOD.) ARM = 14'-0"

10'-0" X 5'-0" = 50 SQ. FT.
SPACING = $10\frac{3}{8}$", $99\frac{3}{8}$", $10\frac{3}{4}$"
Nº BRACKETS 2, HEIGHT 5'-0", TYPE X_S
FIXTURES 1 @ $99\frac{3}{8}$"

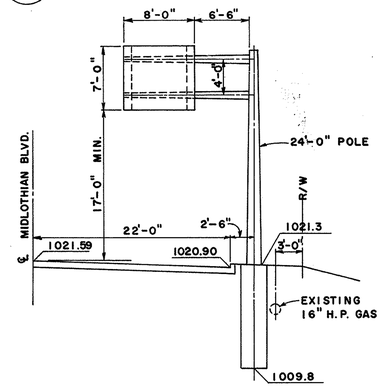
SIGN Nº 39



STA.70+65.43 RAMP "X" WESTBOUND
816 Nº 12.24 DES. 2 (MOD.) ARM = 19'-0"

9'-0" X 5'-0" = 45 SQ. FT.
SPACING = $16\frac{3}{8}$", $75\frac{3}{8}$", $16\frac{1}{4}$"
Nº BRACKETS 2, HEIGHT 5'-0", TYPE X_S
FIXTURES 1 @ $75\frac{3}{8}$"

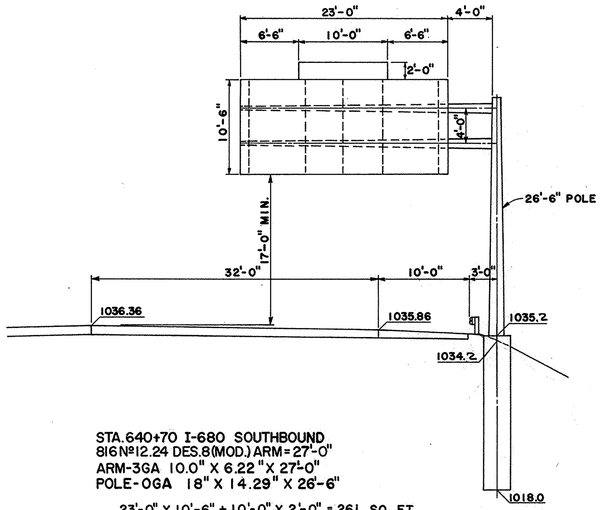
SIGN Nº 43



STA.358+00 MIDLOTHIAN BLVD. EASTBOUND
816 Nº 12.24 DES. 1 (MOD.) ARM = 14'-6"

8'-0" X 7'-0" = 56.0 SQ. FT.
SPACING = $10\frac{3}{8}$", $75\frac{3}{8}$", $10\frac{1}{4}$"
Nº BRACKETS 2, HEIGHT 7'-0", TYPE X_S
FIXTURES 1 @ $75\frac{3}{8}$"

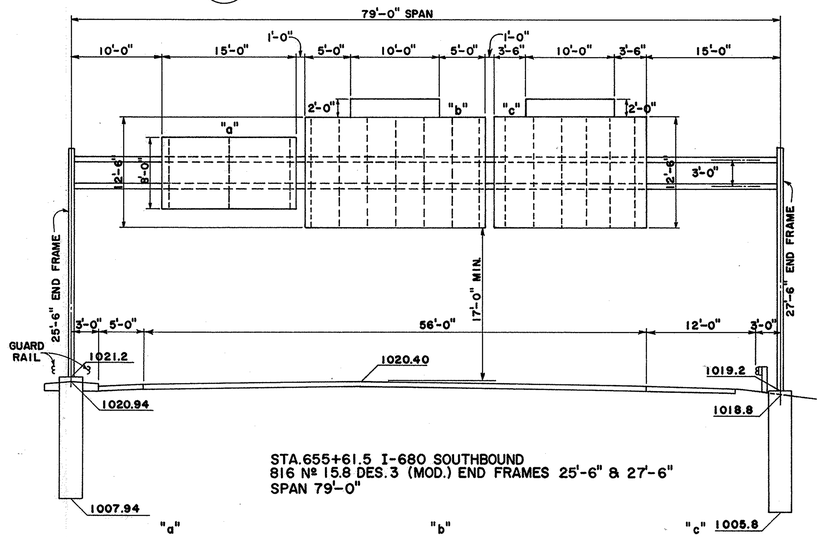
SIGN Nº 45



STA.640+70 I-680 SOUTHBOUND
816 Nº 12.24 DES. 8 (MOD.) ARM = 27'-0"
ARM-3GA 10.0" X 6.22" X 27'-0"
POLE-OGA 18" X 14.29" X 26'-6"

23'-0" X 10'-6" + 10'-0" X 2'-0" = 261 SQ. FT.
SPACING = 13", $75\frac{3}{8}$", $49\frac{5}{8}$", $49\frac{3}{4}$", $75\frac{3}{8}$", $12\frac{7}{8}$"
Nº BRACKETS 5, HEIGHT 10'-6", TYPE Y_S
FIXTURES 2 @ $75\frac{3}{8}$", 1 @ $99\frac{3}{8}$"

SIGN Nº 47



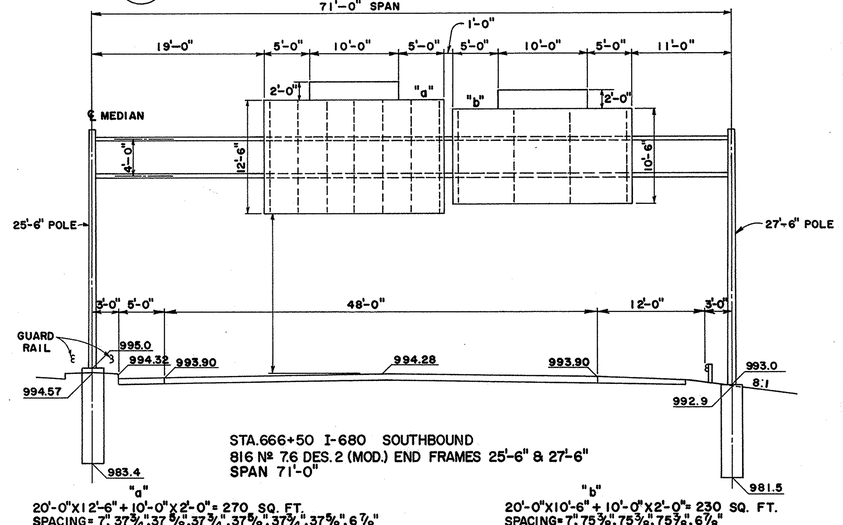
STA.655+61.5 I-680 SOUTHBOUND
816 Nº 15.8 DES. 3 (MOD.) END FRAMES 25'-6" & 27'-6"
SPAN 79'-0"

"a"
15'-0" X 8'-0" = 120 SQ. FT.
SPACING = $8\frac{5}{8}$", $75\frac{3}{8}$", $75\frac{3}{8}$", $8\frac{5}{8}$"
Nº BRACKETS 3, HEIGHT 8'-0"
TYPE Xa
FIXTURES 2 @ $75\frac{3}{8}$"
INTERIM OVERLAY 15'-0" X 8'-0" = 120 SQ. FT.

"b"
20'-0" X 12'-6" + 10'-0" X 2'-0" = 270 SQ. FT.
SPACING = 7", 38", $37\frac{3}{8}$", 38", $37\frac{3}{8}$", 38", $37\frac{3}{8}$", $6\frac{7}{8}$"
Nº BRACKETS 7, HEIGHT 12'-6", TYPE Ya
FIXTURES 3 @ $75\frac{3}{8}$"

"c"
17'-0" X 12'-6" + 10'-0" X 2'-0" = 232.5 SQ. FT.
SPACING = $14\frac{5}{8}$", 38", $37\frac{3}{8}$", $33\frac{3}{8}$", 33", 33", $14\frac{5}{8}$"
Nº BRACKETS 6, HEIGHT 12'-6", TYPE Ya
FIXTURES 1 @ $7\frac{3}{8}$" & 1 @ $99\frac{3}{8}$"

SIGN Nº 48



STA.666+50 I-680 SOUTHBOUND
816 Nº 7.6 DES. 2 (MOD.) END FRAMES 25'-6" & 27'-6"
SPAN 71'-0"

"a"
20'-0" X 12'-6" + 10'-0" X 2'-0" = 270 SQ. FT.
SPACING = 7", $37\frac{3}{4}$", $37\frac{5}{8}$", $37\frac{3}{4}$", $37\frac{5}{8}$", $37\frac{3}{4}$", $37\frac{5}{8}$", $6\frac{7}{8}$"
Nº BRACKETS 7, HEIGHT 12'-6", TYPE Ya
FIXTURES 3 @ $75\frac{3}{8}$"

"b"
20'-0" X 10'-6" + 10'-0" X 2'-0" = 230 SQ. FT.
SPACING = 7", $75\frac{3}{8}$", $75\frac{3}{8}$", $75\frac{3}{8}$", $6\frac{7}{8}$"
Nº BRACKETS 4, HEIGHT 10'-6", TYPE Ya
FIXTURES 3 @ $75\frac{3}{8}$"

CALC. BY R.R.C. DATE 11/20/69
CHK'D BY W.D.B. DATE 11/27/69

SIGN DETAILS

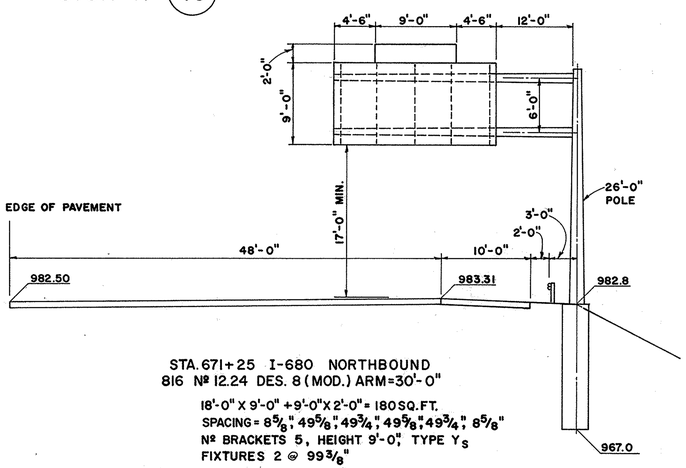
MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

401
656

MAH-680-6.98

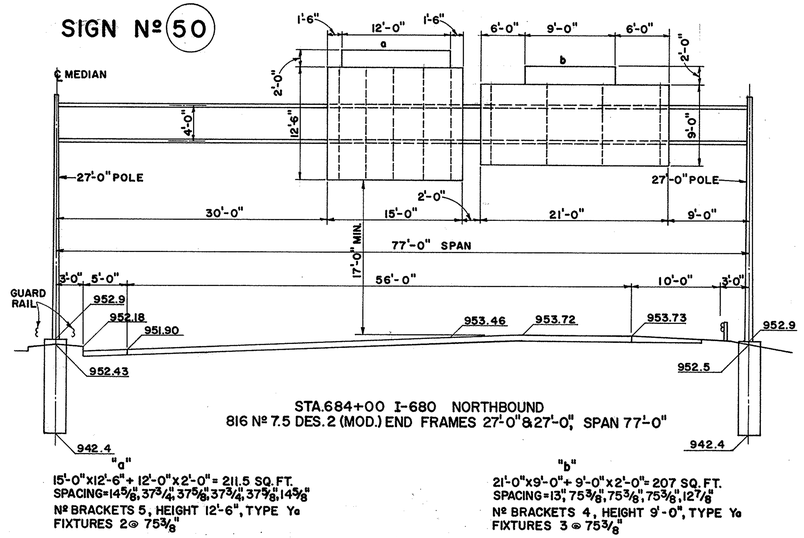
SIGN Nº 49



STA. 671+25 I-680 NORTHBOUND
816 Nº 12.24 DES. 8 (MOD.) ARM=30'-0"

18'-0" X 9'-0" + 9'-0" X 2'-0" = 180 SQ.FT.
SPACING = 8 5/8", 49 5/8", 49 3/4", 49 5/8", 49 3/4", 8 5/8"
Nº BRACKETS 5, HEIGHT 9'-0", TYPE Y_S
FIXTURES 2 @ 99 3/8"

SIGN Nº 50

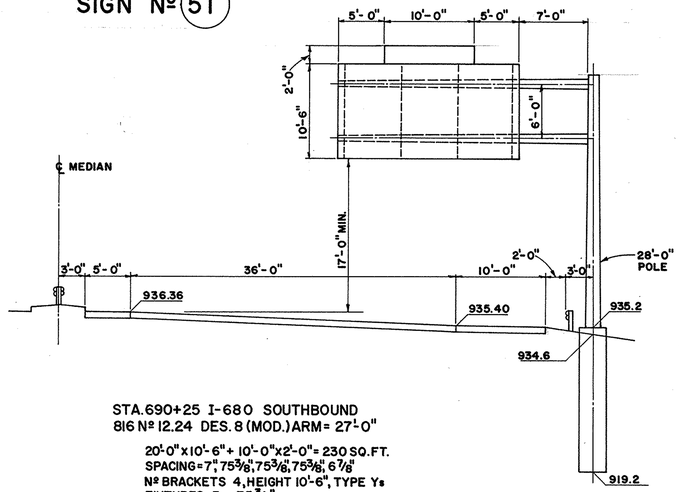


STA. 684+00 I-680 NORTHBOUND
816 Nº 7.5 DES. 2 (MOD.) END FRAMES 27'-0" & 27'-0", SPAN 77'-0"

"a"
15'-0" X 12'-6" + 12'-0" X 2'-0" = 211.5 SQ.FT.
SPACING = 14 5/8", 37 3/4", 37 5/8", 37 3/4", 37 5/8", 14 5/8"
Nº BRACKETS 5, HEIGHT 12'-6", TYPE Ys
FIXTURES 2 @ 75 3/8"

"b"
21'-0" X 9'-0" + 9'-0" X 2'-0" = 207 SQ.FT.
SPACING = 13", 75 3/8", 75 3/8", 75 3/8", 127/8"
Nº BRACKETS 4, HEIGHT 9'-0", TYPE Ys
FIXTURES 3 @ 75 3/8"

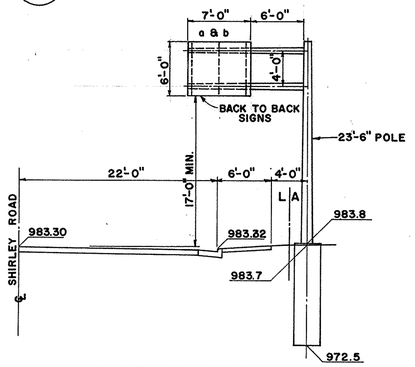
SIGN Nº 51



STA. 690+25 I-680 SOUTHBOUND
816 Nº 12.24 DES. 8 (MOD.) ARM= 27'-0"

20'-0" X 10'-6" + 10'-0" X 2'-0" = 230 SQ.FT.
SPACING = 7", 75 3/8", 75 3/8", 75 3/8", 6 7/8"
Nº BRACKETS 4, HEIGHT 10'-6", TYPE Ys
FIXTURES 3 75 3/8"
INTERIM OVERLAY
20'-0" X 10'-6" = 210 SQ. FT.

SIGN Nº 52

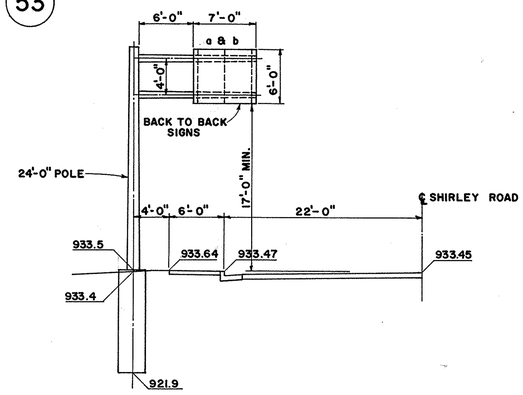


STA. 44+20 SHIRLEY RD. NORTHBOUND
816 Nº 12.24 DES. 1 (MOD.) ARM = 13'-0"

"a"
7'-0" X 6'-0" = 42 SQ.FT.
SPACING = 6", 36", 36", 6"
Nº BRACKETS 3, HEIGHT 6'-0", TYPE Xs (DOUBLE BRACKETS)
FIXTURES 1 @ 75 3/8"

"b"
7'-0" X 6'-0" = 42 SQ.FT.
FIXTURES 1 @ 75 3/8"

SIGN Nº 53

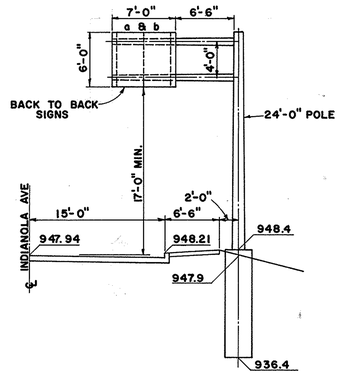


STA. 54+50 SHIRLEY RD. SOUTHBOUND
816 Nº 12.24 DES. 1 (MOD.) ARM = 13'-0"

"a"
7'-0" X 6'-0" = 42 SQ.FT.
SPACING = 6", 36", 36", 6"
Nº BRACKETS 3, HEIGHT 6'-0", TYPE Xs (DOUBLE BRACKETS)
FIXTURES 1 @ 75 3/8"

"b"
7'-0" X 6'-0" = 42 SQ.FT.
FIXTURES 1 @ 75 3/8"

SIGN Nº 55



STA. 51+25 INDIANOLA AVE. WESTBOUND
816 Nº 12.24 DES. 1 (MOD.) ARM= 13'-6"

"a"
7'-0" X 6'-0" = 42 SQ.FT.
SPACING = 6", 36", 36", 6"
Nº BRACKETS 3, HEIGHT 6'-0" TYPE Xs (DOUBLE BRACKETS)
FIXTURES 1 @ 75 3/8"

"b"
7'-0" X 6'-0" = 42 SQ.FT.
FIXTURES 1 @ 75 3/8"

CALC. BY RRC DATE 11/26/69
CHECK BY WOB DATE 11/27/69

SIGN DETAILS

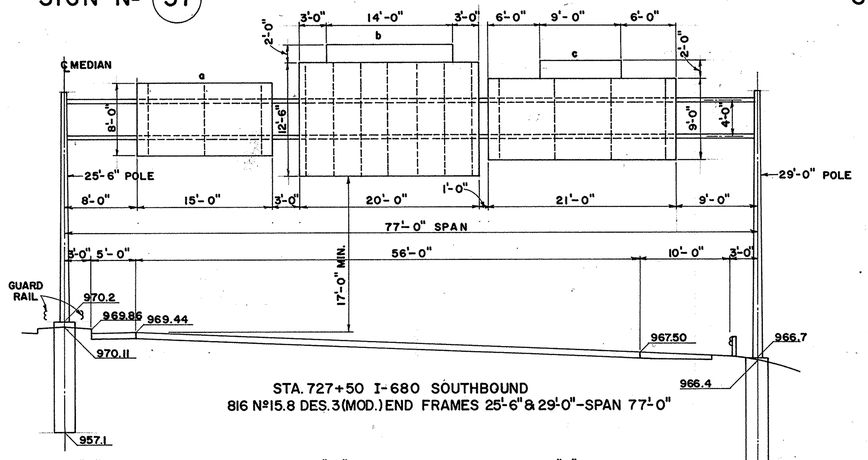
MAY 25 1971

FED RD.	STATE	PROJECT	
2	OHIO		

402
656

MAH-680-6.98

SIGN Nº 57



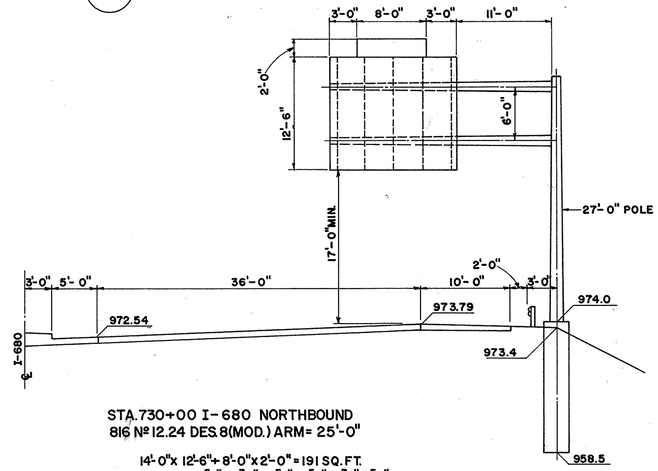
STA. 727+50 I-680 SOUTHBOUND
816 Nº15.8 DES. 3(MOD.) END FRAMES 25'-6" & 29'-0"-SPAN 77'-0"

"a"
15'-0"x8'-0"= 120 SQ.FT.
SPACING=14⅝",75⅜",75⅜",14⅝"
Nº BRACKETS 3, HEIGHT 8'-0" TYPE Xa
FIXTURES 2 @ 75⅜"

"b"
20'-0"x12'-6"+14'-0"x2'-0"= 298 SQ.FT.
SPACING=7",37¾",37⅝",37¾",37⅝",
37¾",37⅝",6 7/8"
Nº BRACKETS 7, HEIGHT 12'-6", TYPE Ya
FIXTURES 3 @ 75⅜"

"c"
21'-0"x9'-0"+9'-0"x2'-0"=207 SQ.FT.
SPACING=13",75⅜",75⅜",75⅜",12 7/8"
Nº BRACKETS 4, HEIGHT 9'-0", TYPE Ya
FIXTURES 3 @ 75⅜"

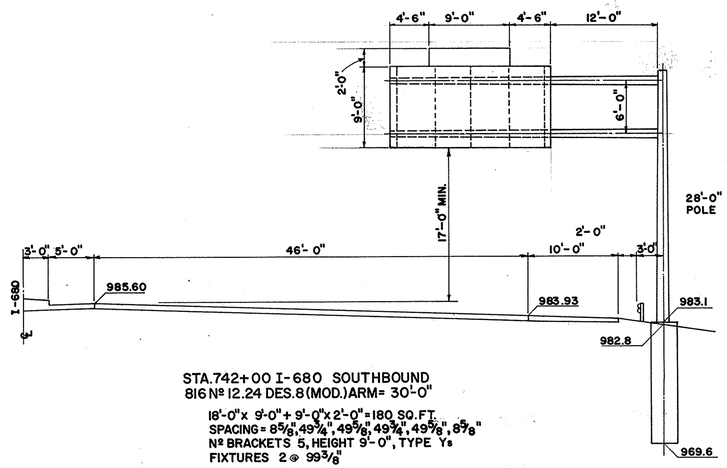
SIGN Nº 58



STA. 730+00 I-680 NORTHBOUND
816 Nº 12.24 DES. 8(MOD.) ARM= 25'-0"

14'-0"x 12'-6"+ 8'-0"x 2'-0" = 191 SQ. FT.
SPACING= 8⅝",37¾",37⅝",37⅝",37¾",8⅝"
Nº BRACKETS 5, HEIGHT 12'-6", TYPE Ys
FIXTURES 2 75⅜"

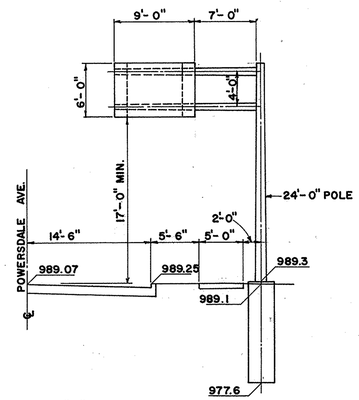
SIGN Nº 59



STA. 742+00 I-680 SOUTHBOUND
816 Nº 12.24 DES. 8 (MOD.) ARM= 30'-0"

18'-0"x 9'-0"+ 9'-0"x 2'-0" = 180 SQ. FT.
SPACING= 8⅝",49¾",49⅝",49¾",49⅝",8⅝"
Nº BRACKETS 5, HEIGHT 9'-0", TYPE Ys
FIXTURES 2 @ 99⅜"

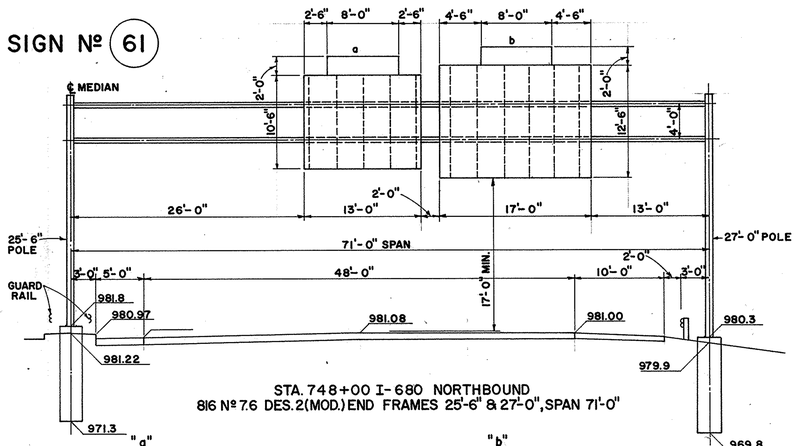
SIGN Nº 60



STA. 721+23 38' LT. Ⓑ RAMP "F" SOUTHBOUND
816 Nº 12.24 DES. 1(MOD.) ARM= 16'-0"

9'-0"x 6'-0" = 54 SQ. FT.
SPACING= 16⅜",75⅜",16 ¼"
Nº BRACKETS 2, HEIGHT 6'-0", TYPE Xs
FIXTURES 1 @ 75⅜"

SIGN Nº 61

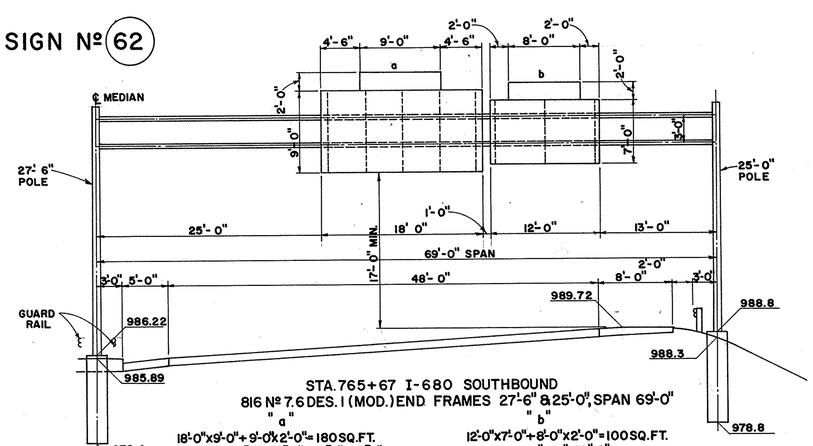


STA. 748+00 I-680 NORTHBOUND
816 Nº 7.6 DES. 2(MOD.) END FRAMES 25'-6" & 27'-0", SPAN 71'-0"

"a"
13'-0"x10'-6"+8'-0"x2'-0" = 152.5 SQ. FT.
SPACING= 6",36",36",36",36",6"
Nº BRACKETS 5, HEIGHT 10'-6", TYPE Ya
FIXTURES 2 @ 75⅜"

"b"
17'-0"x 12'-6"+8'-0"x 2'-0"= 228.5 SQ.FT
SPACING=14⅝",37¾",37⅜",33",33⅜",33",14⅝"
Nº BRACKETS 6, HEIGHT 12'-6", TYPE Ya
FIXTURES 1 @ 75⅜" & 1 @ 99⅜"

SIGN Nº 62



STA. 765+67 I-680 SOUTHBOUND
816 Nº 7.6 DES. 1 (MOD.) END FRAMES 27'-6" & 25'-0", SPAN 69'-0"

"a"
18'-0"x9'-0"+ 9'-0"x 2'-0"= 180 SQ. FT.
SPACING= 8⅝",49¾",49⅝",49¾",
49⅝",8⅝"
Nº BRACKETS 5, HEIGHT 9'-0", TYPE Ya
FIXTURES 2 @ 99⅜"

"b"
12'-0"x7'-0"+8'-0"x2'-0"=100 SQ. FT.
SPACING= 6", 66", 66", 6"
Nº BRACKETS 3, HEIGHT 7'-0", TYPE Ya
FIXTURES 2 @ 75⅜"

CALC. BY RRC DATE 11/26/69
CHECK BY WDB DATE 11/27/69

SIGN DETAILS

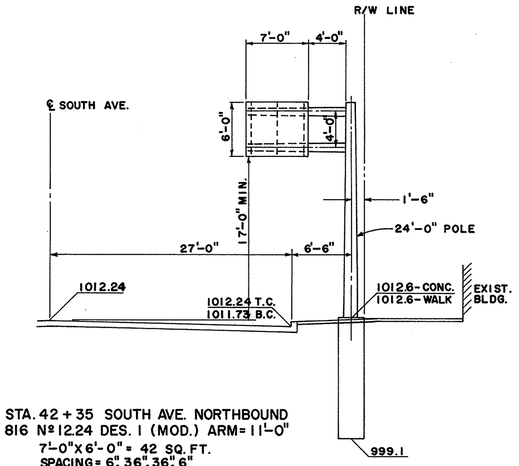
MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

403
656

MAH-680-6.98

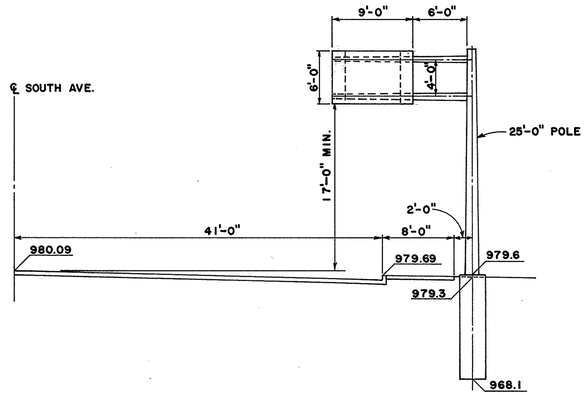
SIGN Nº 63



STA. 42+35 SOUTH AVE. NORTHBOUND
816 Nº 12.24 DES. 1 (MOD.) ARM= 11'-0"

7'-0" X 6'-0" = 42 SQ. FT.
SPACING= 6", 36", 36", 6"
Nº BRACKETS 3, HEIGHT 6'-0", TYPE X_S
FIXTURES 1 @ 75 3/8"

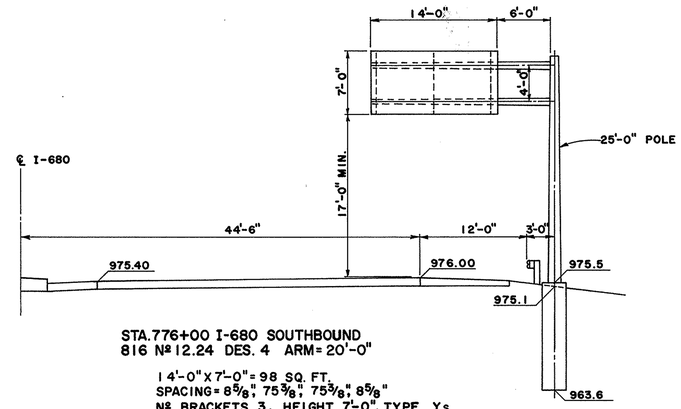
SIGN Nº 65



STA. 52+00 SOUTH AVE. NORTHBOUND
816 Nº 12.24 DES. 1 (MOD.) ARM= 15'-0"

9'-0" X 6'-0" = 54 SQ. FT.
SPACING = 16 3/8", 75 3/8", 16 1/4"
Nº BRACKETS 2, HEIGHT 6'-0", TYPE Xs
FIXTURES 1 @ 75 3/8"

SIGN Nº 68



STA. 776+00 I-680 SOUTHBOUND
816 Nº 12.24 DES. 4 ARM= 20'-0"

14'-0" X 7'-0" = 98 SQ. FT.
SPACING= 8 5/8", 75 3/8", 75 3/8", 8 5/8"
Nº BRACKETS 3, HEIGHT 7'-0", TYPE Ys
FIXTURES 2 @ 75 3/8"

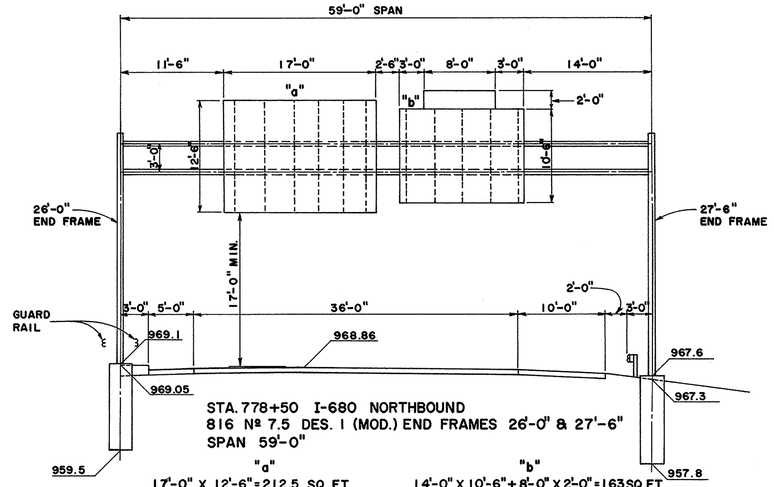
SIGN Nº 64

SEE SIGNAL DETAILS
SHEET Nº 422-A

SIGN Nº 66

SEE SIGNAL DETAILS
SHEET Nº 422-B

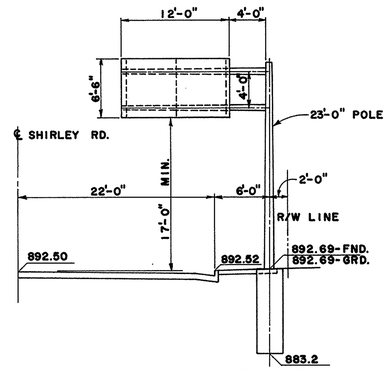
SIGN Nº 69



STA. 778+50 I-680 NORTHBOUND
816 Nº 7.5 DES. 1 (MOD.) END FRAMES 26'-0" & 27'-6"
SPAN 59'-0"

"a"	"b"
17'-0" X 12'-6" = 212.5 SQ. FT.	14'-0" X 10'-6" + 8'-0" X 2'-0" = 163 SQ. FT.
SPACING= 14 5/8", 37 5/8", 37 3/4", 33 1/8", 33 1/8", 33 1/8", 33 1/8", 14 5/8"	SPACING= 8 5/8", 37 5/8", 37 3/4", 37 3/4", 37 5/8", 8 5/8"
Nº BRACKETS 6, HEIGHT 12'-6"	Nº BRACKETS 5, HEIGHT 10'-6"
TYPE Ya	TYPE Ya
FIXTURES 1 @ 75 3/8" & 1 @ 99 3/8"	FIXTURES 2 @ 75 3/8"

SIGN Nº 70



STA. 60+00 SHIRLEY RD. SOUTHBOUND
816 Nº 12.24 DES. 1 ARM= 16'-0"

12'-0" X 6'-6" = 78 SQ. FT.
SPACING= 6", 66", 66", 6"
Nº BRACKETS 3, HEIGHT 6'-6", TYPE Ys
FIXTURES 2 @ 75 3/8"

CALC. BY RRC DATE 11/20/69
CHECK BY WDB DATE 11/27/69

SIGN DETAILS

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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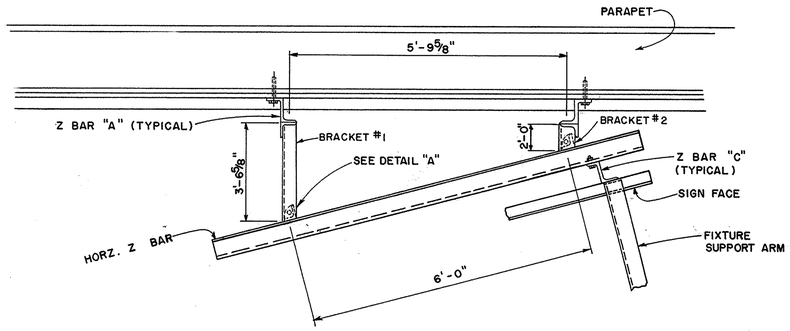
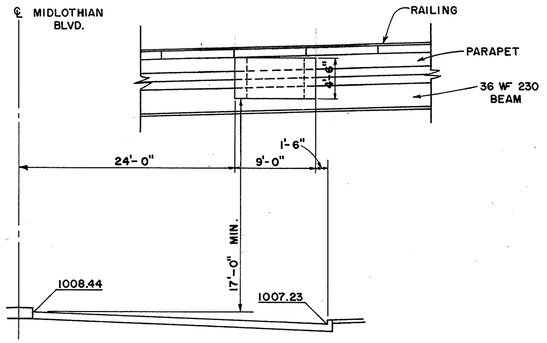


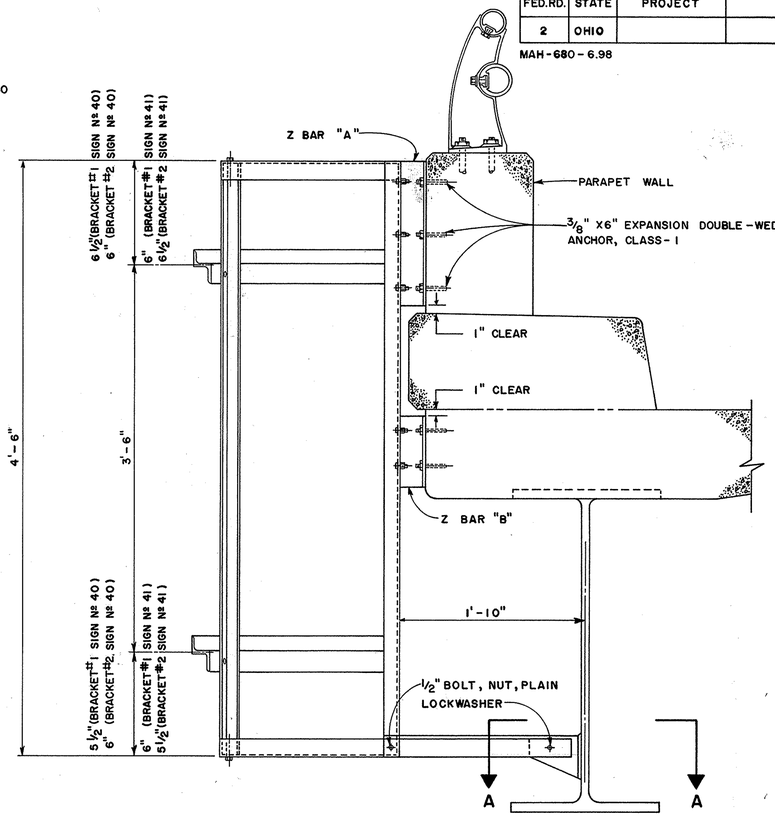
PLAN VIEW



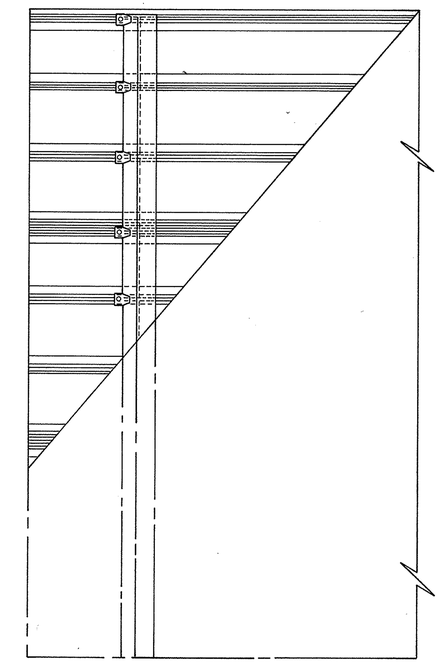
STA. 371 + 78.5 MIDLOTHIAN BLVD. EASTBOUND
816 OVERPASS MOUNTED SIGN

9'-0" X4'-6" =40.5 SQ. FT.
SPACING=16 3/8", 75 3/8", 16 1/4"
Nº BRACKETS 2, HEIGHT 4'-6", TYPE Z BAR
FIXTURES 1 @ 75 3/8"

ELEVATION
SIGN Nº (41)

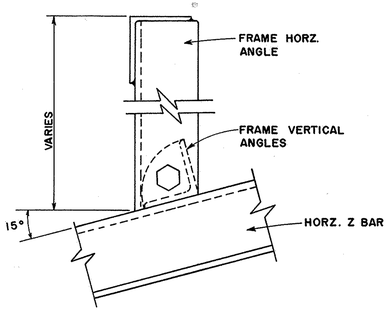


SIDE VIEW BRIDGE MOUNT

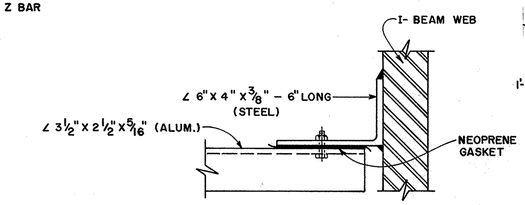


SECTION B-B

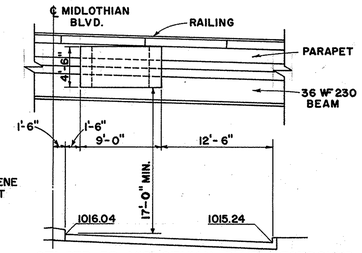
DETAIL SIGN SUPPORT



DETAIL "A"



SECTION A-A



STA. 373+35 MIDLOTHIAN BLVD. WESTBOUND
816 OVERPASS MOUNTED SIGN

9'-0" x 4'-6" = 40.5 SQ. FT.
SPACING = 16 3/8", 75 3/8", 16 1/4"
Nº BRACKETS 2, HEIGHT 4'-6", TYPE Z BAR
FIXTURES 1 @ 75 3/8"
INTERIM COVERING 9'-0" x 4'-6" = 40.5 SQ. FT.

ELEVATION
SIGN Nº (40)

NOTES

ALL STRUCTURAL SHAPES TO BE ALUMINUM, EXCEPT AS NOTED.

EXPANSION BOLTS TO BE GALVANIZED STEEL.

(1) FOR ELECTRICAL DETAIL SEE DRAWINGS,
EI-1 PAGE 415 B .
EI-2 PAGE 415 C .

(2) ALL MATERIALS SHALL CONFORM TO THE STATE OF OHIO, CONSTRUCTION & MATERIALS SPECIFICATIONS, AND THE SUPPLEMENTAL SPECIFICATIONS 816, OR AS OTHER-WISE SPECIFIED.

(3) FOR DETAILS OF CLAMP ASSEMBLY AND Z BARS A, B AND C SEE SHEET 405 .

CALC. BY RRC DATE 11/20/69
CHECK BY WDB DATE 11/27/69

DETAILS SIGNS Nº 40 & 41

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

405
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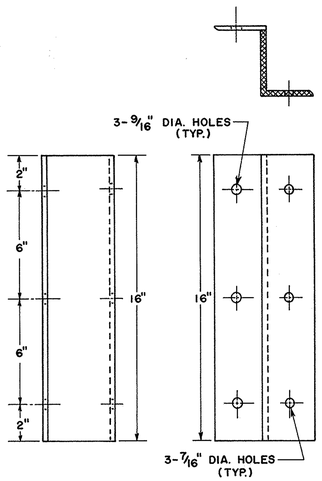
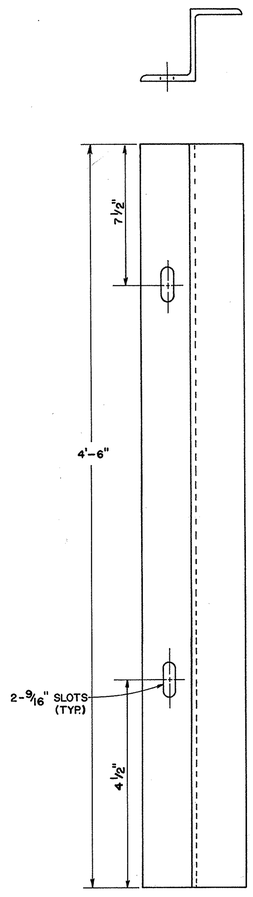


"Z" BAR-A

(4"x3 1/16" x 1/4" @ 2.85 LB.)

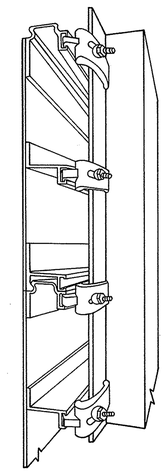
SIGNS Nº 40, 41 AND 112



"Z" BAR-C

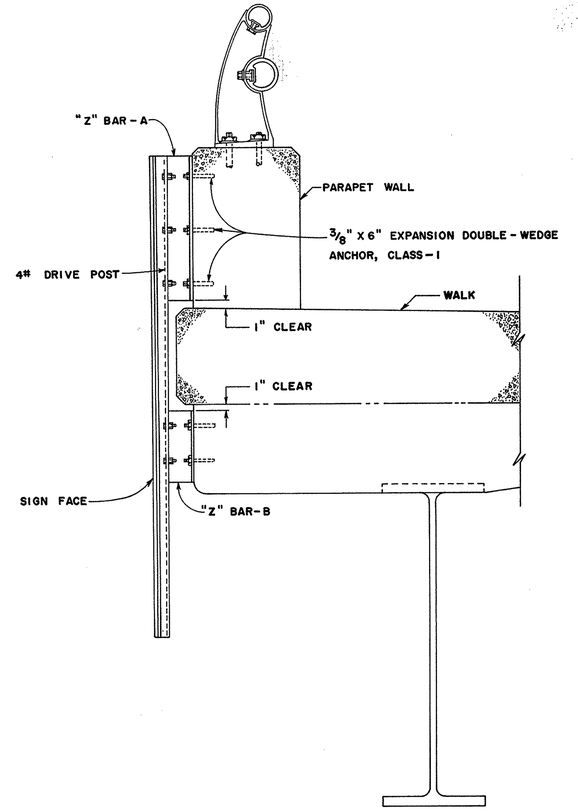
(4"x3 1/16"x1/4" @ 2.85 LB.)

SIGNS Nº 40 AND 41



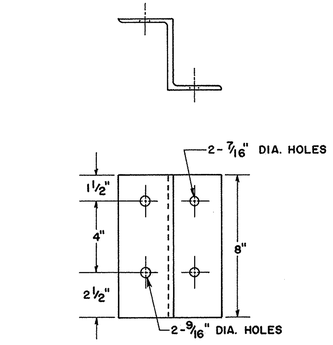
CLAMP ASSEMBLY

SIGNS Nº 40 AND 41



SIDE VIEW BRIDGE MOUNT

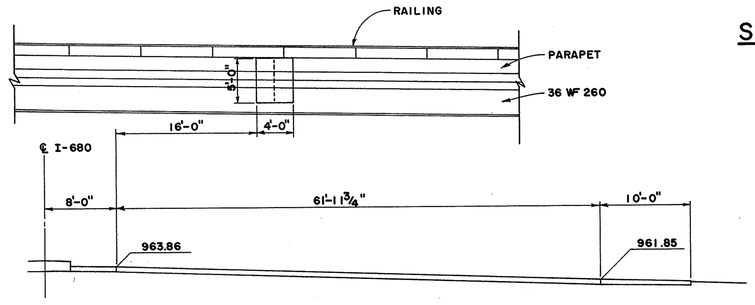
SIGN Nº 112



"Z" BAR-B

(4"x3 1/16"x1/4" @ 2.85 LB.)

SIGNS Nº 40,41 AND 112



STA. 757+32 I-680 NORTHBOUND
816 OVERPASS MOUNTED SIGN

4'-0" X 5'-0" = 20 SQ. FT.
SPACING = 24", 24"
Nº BRACKETS 1, LENGTH 5'-0", TYPE 4# POST

SIGN Nº 112

CALC. BY RPC DATE 11/26/69
CHK'D BY WPB DATE 11/27/69

DETAILS
SIGNS Nº 40, 41 AND 112

MAY 25 1971

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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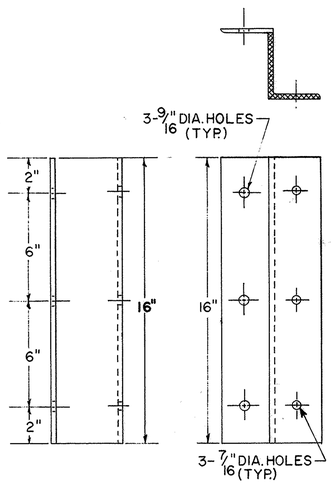
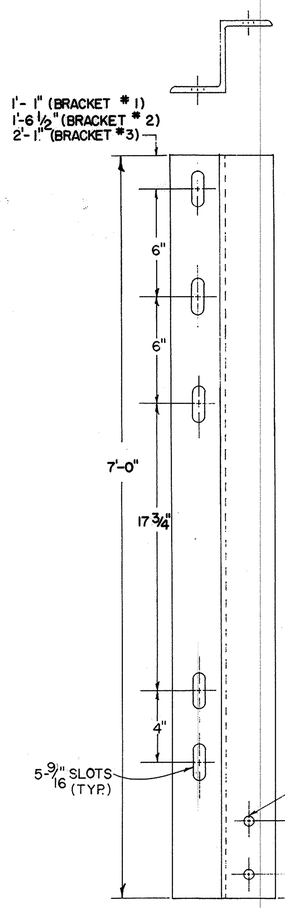
656

MAH-680-6.98



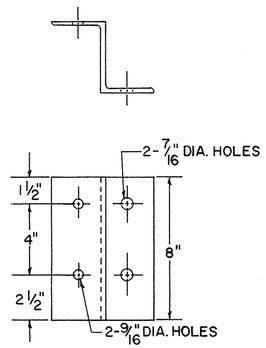
"Z" BAR-A

(4" x 3 1/16" x 1/4" @ 2.85 LB.)



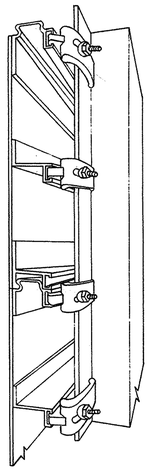
"Z" BAR-C

(4" x 3 1/16" x 1/4" @ 2.85 LB.)

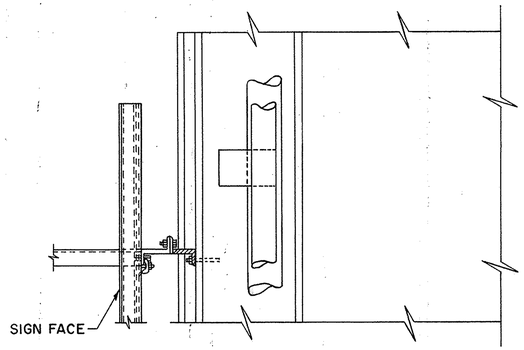


"Z" BAR-B

(4" x 3 1/16" x 1/4" @ 2.85 LB.)



CLAMP ASSEMBLY



TOP VIEW

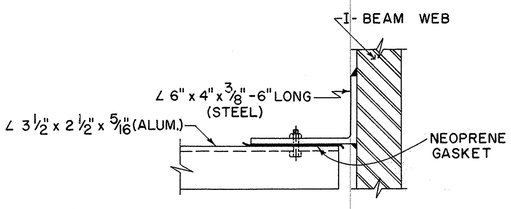
NOTES

ALL STRUCTURAL SHAPES TO BE ALUMINUM, EXCEPT AS NOTED.

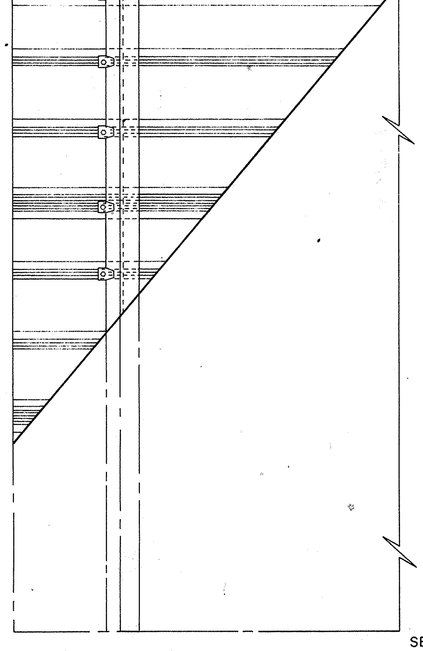
EXPANSION BOLTS TO BE GALVANIZED STEEL.

(1) FOR ELECTRICAL DETAIL SEE DRAWINGS, EI-1 PAGE 415B, SIGN DETAILS PAGE 409, AND EI-2 PAGE 415C.

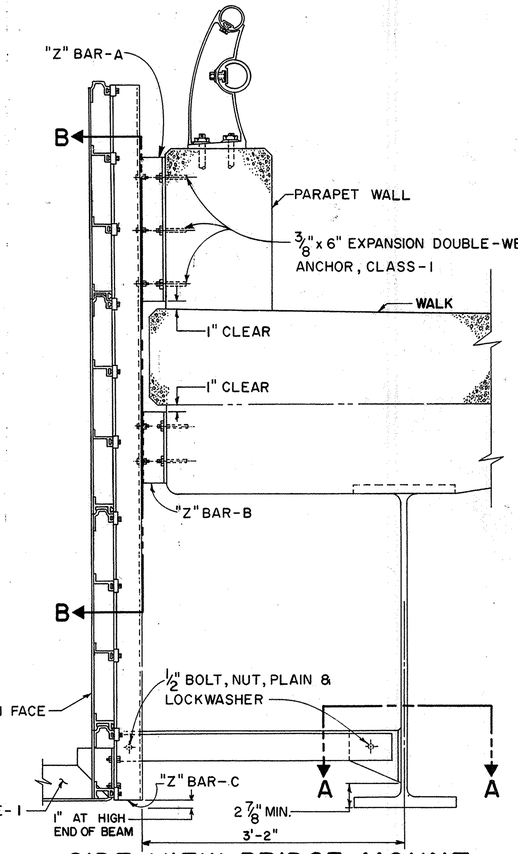
(2) ALL MATERIALS SHALL CONFORM TO THE STATE OF OHIO, CONSTRUCTION & MATERIALS SPECIFICATIONS, AND THE SUPPLEMENTAL SPECIFICATIONS 816, OR AS OTHER-WISE SPECIFIED.



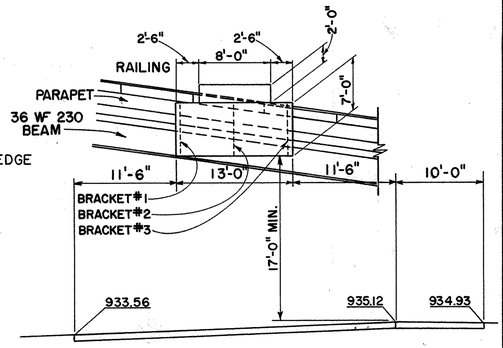
SECTION A-A



SECTION B-B



SIDE VIEW BRIDGE MOUNT



STA. 698 + 56 I-680 NORTH BOUND
816 OVERPASS MOUNTED SIGN
13'-0" X 7'-0" + 8'-0" X 2'-0" = 107 SQ. FT.
SPACING = 6", 72", 72", 6"
Nº BRACKETS 3, HEIGHT 7'-0", TYPE Z BAR
FIXTURES 2 @ 75 3/8"

CALC. BY RRC DATE 11/26/69
CHECK BY WDB DATE 11/27/69

DETAILS SIGN Nº 56

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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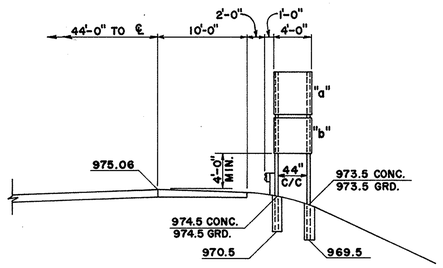
656

SIGN Nº 100

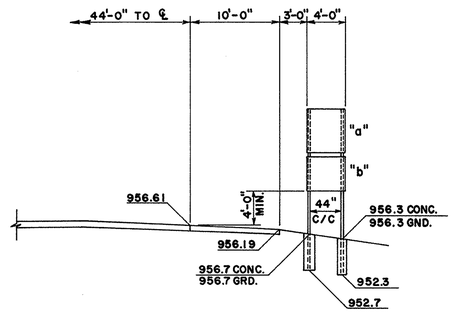


STA. 675+00 I-680 NORTHBOUND
GROUND MOUNTED

"a"	"b"
4'-0" X 5'-0" = 20 SQ. FT.	4'-0" X 4'-0" = 16 SQ. FT.

2-8# BEAMS, LENGTH 1@17'-6", 1@18'-6"
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 C.Y.

SIGN Nº 101

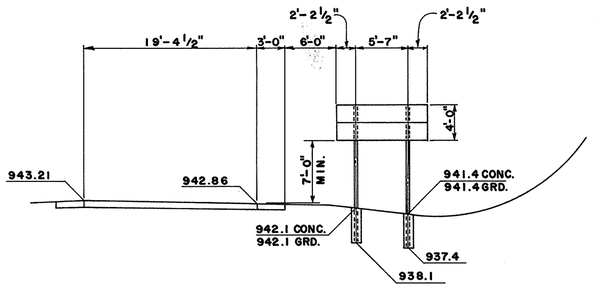


STA. 717+00 I-680 SOUTHBOUND
GROUND MOUNTED

"a"	"b"
4'-0" X 5'-0" = 20 SQ. FT.	4'-0" X 4'-0" = 16 SQ. FT.

2-8# BEAMS, LENGTH 1@16.9', 1@17.2'
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 C.Y.

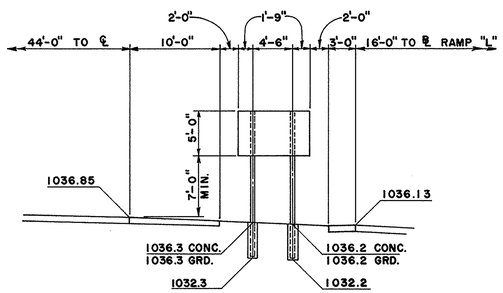
SIGN Nº 102



STA. 688+50 RAMP "G"
GROUND MOUNTED

10'-0" X 4'-0" = 40 SQ. FT.
2-6# BEAMS, LENGTH 1@15.5', 1@16.2'
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 C.Y.

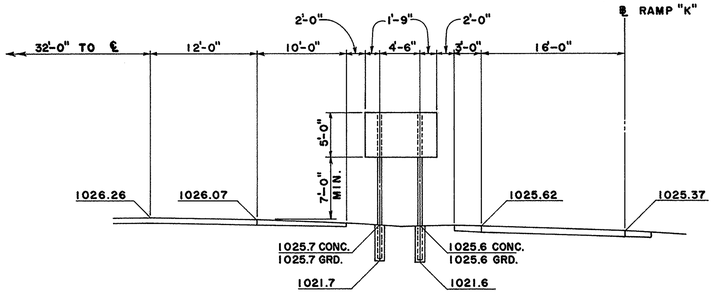
SIGN Nº 103



STA. 639+20 I-680 SOUTHBOUND
GROUND MOUNTED

8'-0" X 5'-0" = 40 SQ. FT.
2-6# BEAMS, LENGTH 1@16.3', 1@16.4'
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 C.Y.

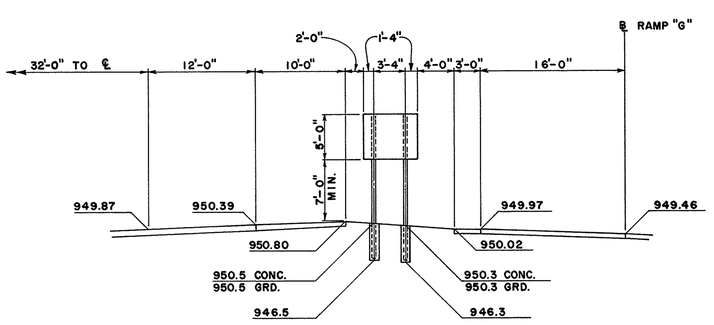
SIGN Nº 104



STA. 652+97 I-680 SOUTHBOUND
GROUND MOUNTED

8'-0" X 5'-0" = 40 SQ. FT.
2-6# BEAMS, LENGTH 1@16.1', 1@16.2'
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 C.Y.

SIGN Nº 105



STA. 685+28 I-680 NORTHBOUND
GROUND MOUNTED

6'-0" X 5'-0" = 30 SQ. FT.
2-6# BEAMS, LENGTH 1@16.1', 1@16.3'
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 C.Y.

CALC. BY RRC DATE 11/26/69
CHECK BY WDB DATE 11/27/69

SIGN DETAILS

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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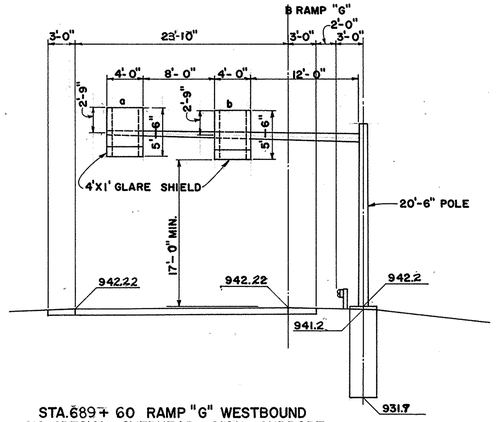
MAH-680-6.98

SIGN Nº 106

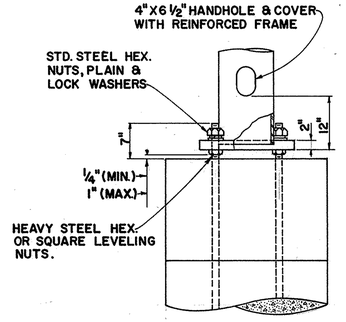


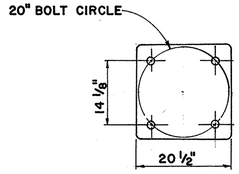
STA. 689+60 RAMP "G" WESTBOUND
816 SPECIAL OVERHEAD SIGN SUPPORT

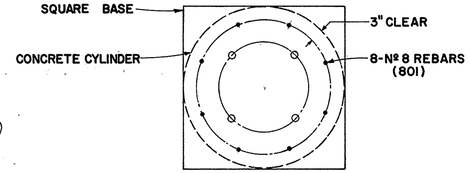
POLE = 3 GA. 14" X 20'-6" "a"
ARM = 3 GA. 11" X 28'-0" "b"

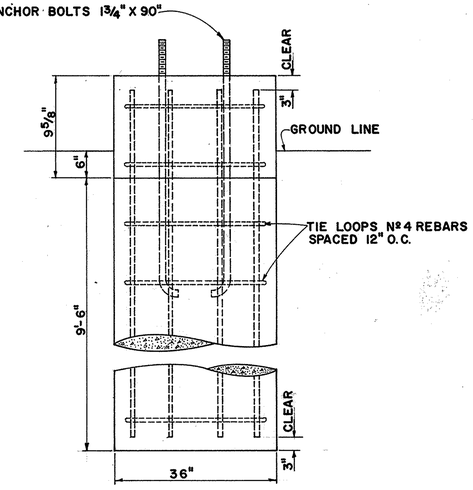
R-26A-48 A = 18.0+4.0 = 22.0 SQ.FT.
SPACING = 6", 36", 6"
Nº BRACKETS 2, HEIGHT 5'-6", TYPE Xs
FIXTURES 1 @ 48"
CONCRETE FOUNDATION = 3.0' X 10.3'
TOTAL CONCRETE = 2.7 CU. YDS.

R-29A-48 A = 18.0+4.0 = 22.0 SQ.FT.
SPACING = 6", 36", 6"
Nº BRACKETS 2, HEIGHT 5'-6", TYPE Xs
FIXTURES 1 @ 48"



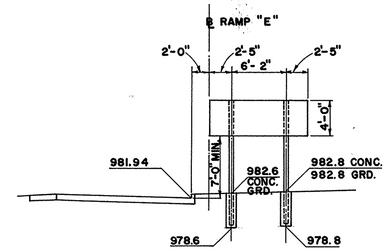






FOUNDATION DETAIL

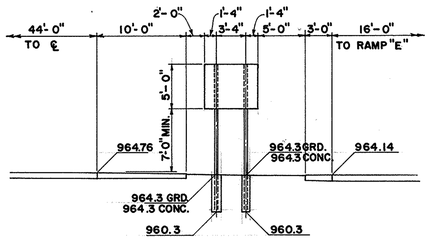
SIGN Nº 107



STA. 716+00 (℄ RAMP "E") SOUTHBOUND
GROUND MOUNTED

11'-0" X 4'-0" = 44 SQ. FT.
2-8# BEAMS, LENGTH = 2 @ 14'-0"
FOUNDATION = 12" X 4'-0"
TOTAL CONCRETE = 0.2 CU.YDS.

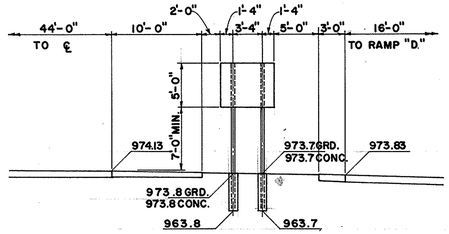
SIGN Nº 108



STA. 724+40 I-680 SOUTHBOUND
GROUND MOUNTED

6'-0" X 5'-0" = 30 SQ. FT.
2-6# BEAMS LENGTH = 2 @ 16.2'
FOUNDATION 12" X 4'-0"
TOTAL CONCRETE = 0.2 CU. YDS.

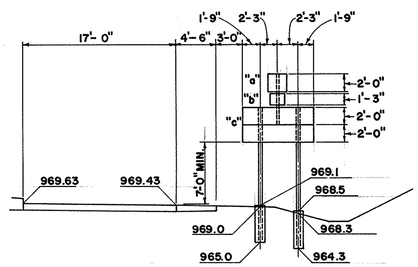
SIGN Nº 109



STA. 751+41 I-680 NORTHBOUND
GROUND MOUNTED

6'-0" X 5'-0" = 30 SQ. FT.
2-6# BEAMS LENGTH = 1 @ 16.1', 1 @ 16.2'
FOUNDATION 12" X 4'-0"
TOTAL CONCRETE = 0.2 CU. YDS.

SIGN Nº 110



STA. 755+00 RAMP "D" WESTBOUND
GROUND MOUNTED

"a"
2'-0" X 2'-0" = 4.0 SQ. FT.
M-2-24

"b"
1'-3" X 1'-8" = 2.1 SQ. FT.
M-24-20

"c"
8'-0" X 4'-0" = 32.0 SQ. FT.
2-6# BEAMS LENGTH = 1 15.2', 1 15.9'
1-4# POST LENGTH = 1 5.5'
FOUNDATIONS 12" X 4'-0"
TOTAL CONCRETE = 0.2 CU.YDS.

CALC. BY RRC DATE 11/26/69
CHECK BY WDB DATE 11/27/69

SIGN DETAILS

MAY 25 1971

FED. R.D.	STATE	PROJECT	
2	OHIO		

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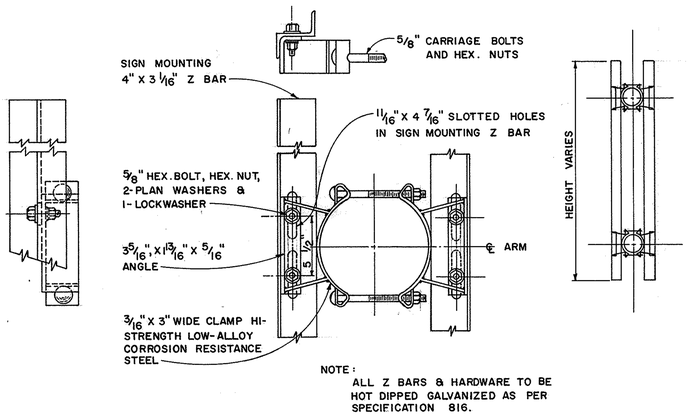
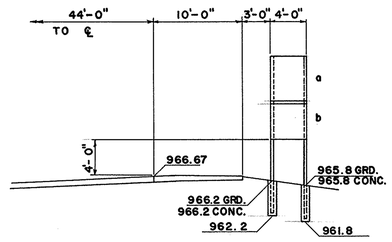


NOTE:
ALL Z BARS & HARDWARE TO BE HOT DIPPED GALVANIZED AS PER SPECIFICATION 816.

DOUBLE BRACKET DETAIL

SIGN Nº 111

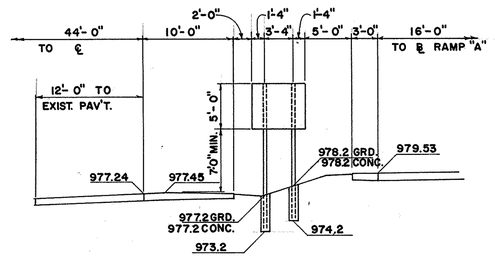


STA. 758+30 I-680 SOUTHBOUND
GROUND MOUNTED

"a"
4'-0" X 5'-0" = 20 SQ. FT.
2-8# BEAMS, LENGTH l=17.5', l=17.9'
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 CU. YDS.

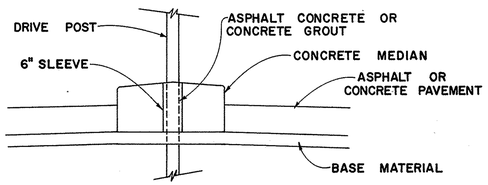
"b"
4'-0" X 4'-0" = 16 SQ. FT.

SIGN Nº 113



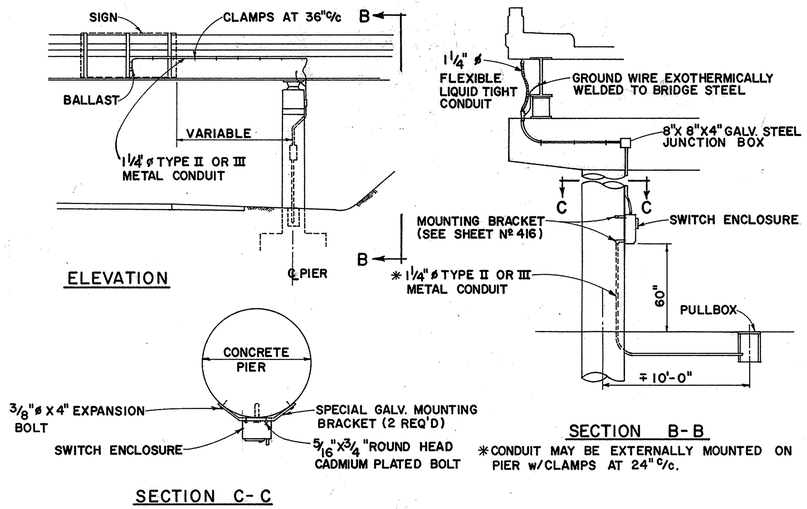
STA. 762+13 I-680 SOUTHBOUND
GROUND MOUNTED

6'-0" X 5'-0" = 30 SQ. FT.
2-6# BEAMS, LENGTH l=15.9', l=14.9'
FOUNDATIONS = 12" X 4'-0"
TOTAL CONCRETE = 0.2 CU. YDS.



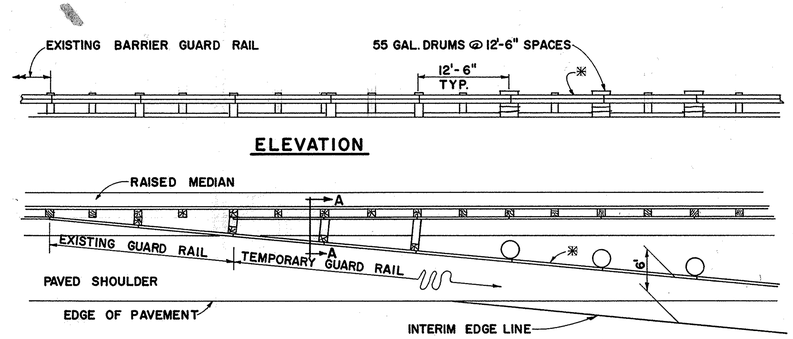
NOTE:
POSTS PLACED IN CONCRETE MEDIAN SHALL BE INSTALLED BY DRIVING THROUGH A 6" SLEEVE OR CORE DRILLED HOLE. THE HOLE SHALL BE FILLED WITH ASPHALT OR CONCRETE AFTER THE POST IS IN PROPER POSITION.

DETAIL OF DRIVE POSTS IN CONCRETE MEDIAN



*CONDUIT MAY BE EXTERNALLY MOUNTED ON PIER w/CLAMPS AT 24" c/c.

STRUCTURE MOUNTED SIGN ELECTRICAL DETAILS



DETAIL OF TEMPORARY GUARD RAIL CONNECTION TO BARRIER GUARD RAIL

CALC. BY R.R.C. DATE 11/26/69
CHK'D BY W.D.B. DATE 11/27/69

MAY 25 1971

SIGN DETAILS

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2	OHIO		

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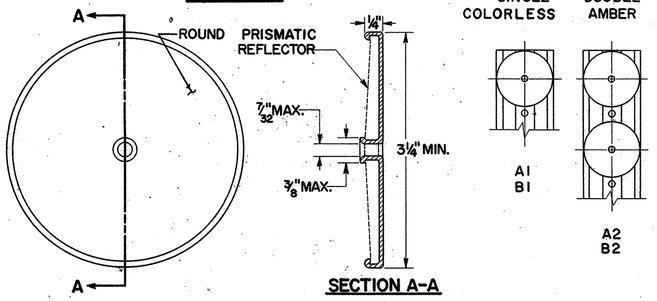
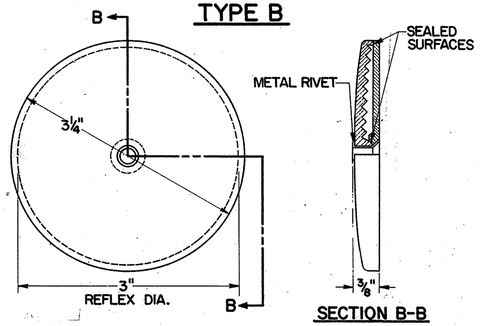
TYPE A



SECTION A-A

TYPE B

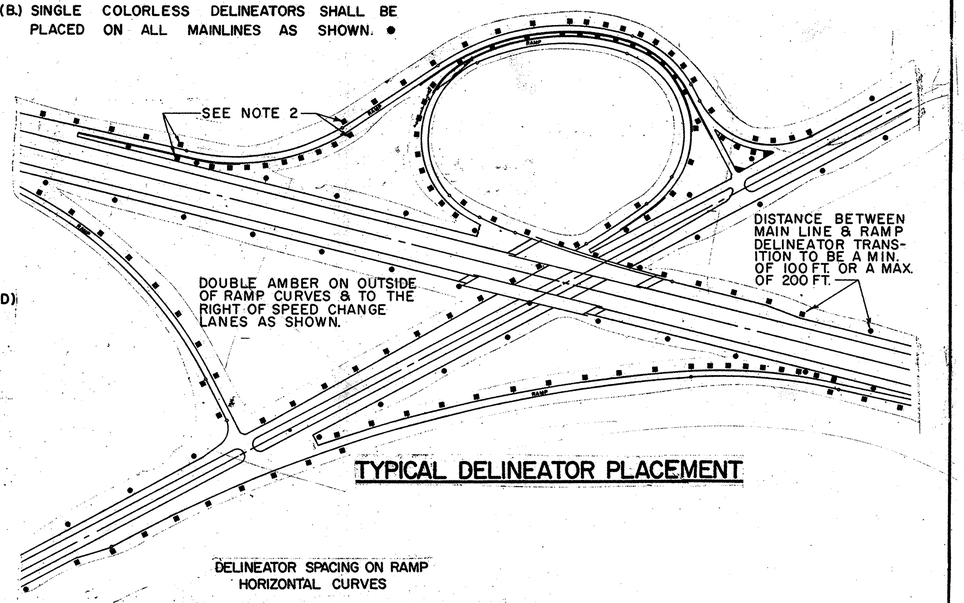


SECTION B-B

NOTE:

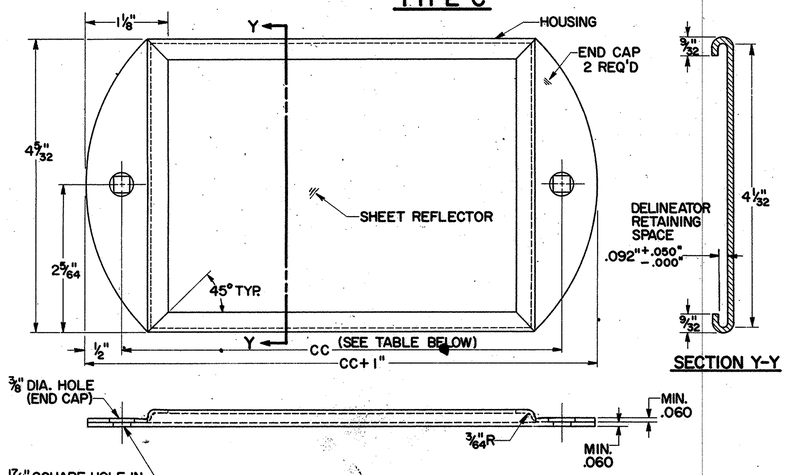
(A.) DOUBLE AMBER DELINEATORS SHALL BE PLACED ON ALL RAMPS AS SHOWN. ■

(B.) SINGLE COLORLESS DELINEATORS SHALL BE PLACED ON ALL MAINLINES AS SHOWN. ●



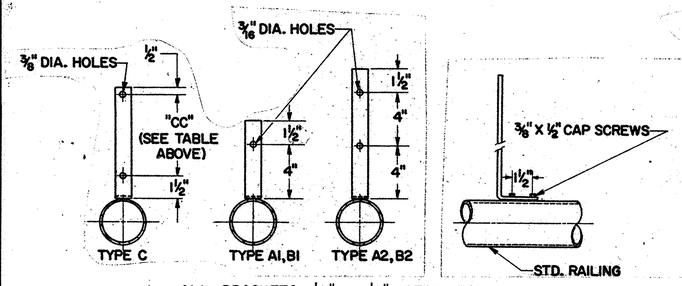
TYPICAL DELINEATOR PLACEMENT

TYPE C



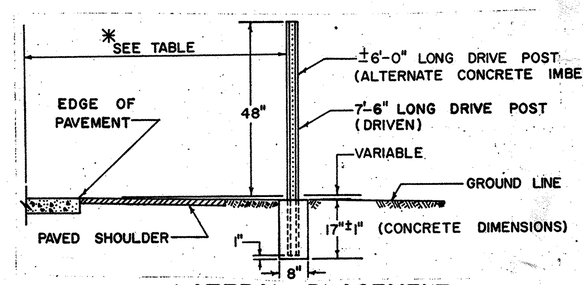
SECTION Y-Y

TYPE	DIM. CC
C1 – SINGLE COLORLESS	6"
C2 – DOUBLE AMBER	11"



ALL BRACKETS 1/4" x 1 1/4" STAINLESS STEEL

BRIDGE RAIL BRACKET



LATERAL PLACEMENT OF DELINEATORS

✱ TABLE

TYPE DELINEATOR	NO GUARDRAIL	GUARDRAIL
SINGLE COLORLESS	12'-6"	6" OUTSIDE
DOUBLE AMBER RIGHT SIDE	✱✱ 8'-6"	6" OUTSIDE
DOUBLE AMBER LEFT SIDE	4'-6"	6" OUTSIDE

✱✱ THIS DIMENSION SHALL VARY ON SPEED CHANGE LANES TO MAINTAIN MINIMUM DISTANCE OF 2'-6" FROM EDGE OF PAVED SHOULDER.

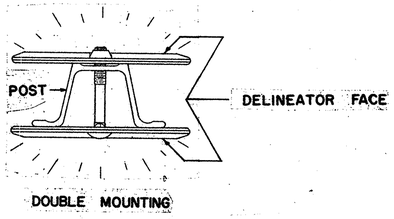
DELINEATOR SPACING ON RAMP HORIZONTAL CURVES

RADII, FT. FROM	RADII, FT. TO	SPACING ON CURVE	✱ TRANSITION SPACING	
TANGENT	1,801	100'	100'	100'
1,800	1,401	80'	100'	100'
1,400	1,001	70'	100'	100'
1,000	751	60'	100'	100'
750	551	50'	80'	100'
550	326	40'	70'	100'
325	——	30'	60'	100'

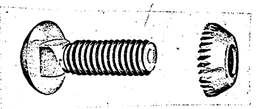
✱ SUCH AS 40' TO 70' TO 100' OR 100' TO 80' TO 50' OR ANY OTHER COMBINATION SHOWN ABOVE.

NOTES

1. TYPE A1 OR B1 DELINEATORS ON THE RIGHT OF THE THROUGH ROADWAY ARE TO BE SPACED AT 200 FT. INTERVALS THROUGHOUT, REGARDLESS OF CURVES.
2. WHEN CROSSING FROM LEFT TO RIGHT OR FROM RIGHT TO LEFT ON THE RAMPS, THE DELINEATORS AT THE POINT OF CROSSOVER ARE TO BE AT THE SAME STATION ON EACH SIDE.
3. NO DELINEATORS ARE TO BE PLACED IN PAVED BERM
4. WHEN RADII OF CURVE ON RAMPS REQUIRE 100' SPACING THE DELINEATORS SHALL BE PLACED ON THE RIGHT IN RELATION TO THE FLOW OF TRAFFIC.

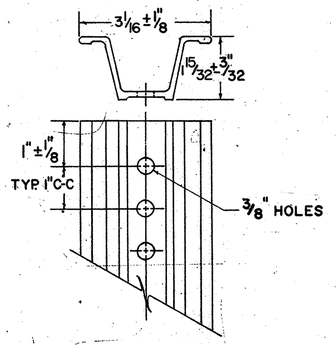


DELINEATOR MOUNTING



TAMPER RESISTANT FASTENERS SHALL BE USED TO FASTEN DELINEATORS TO POST AS/OR SIMILAR TO ONE SHOWN ABOVE.

TAMPER RESISTANT FASTENERS



2 LB./FT.

DELINEATOR DRIVE POST

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

DELINEATOR DETAILS

620

DATE
9-25-62
5-24-65
9-12-67

APPROVED Robert L. Comer
ENGINEER OF TRAFFIC

MAY 25 1971

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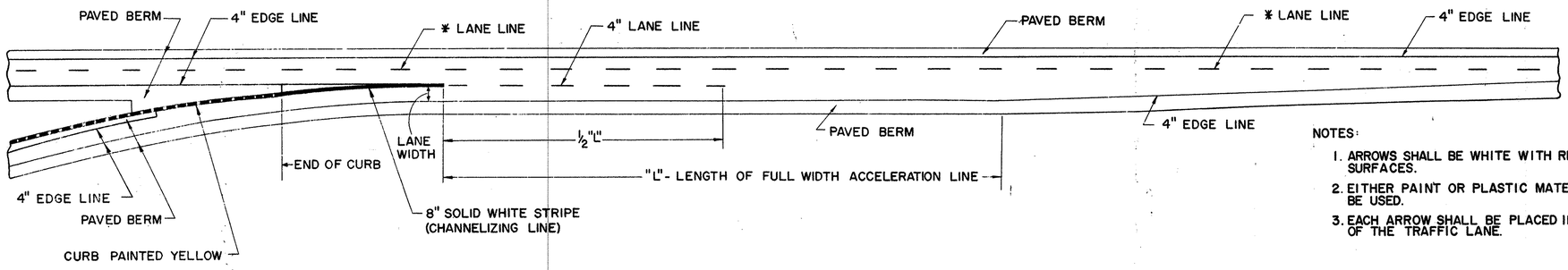
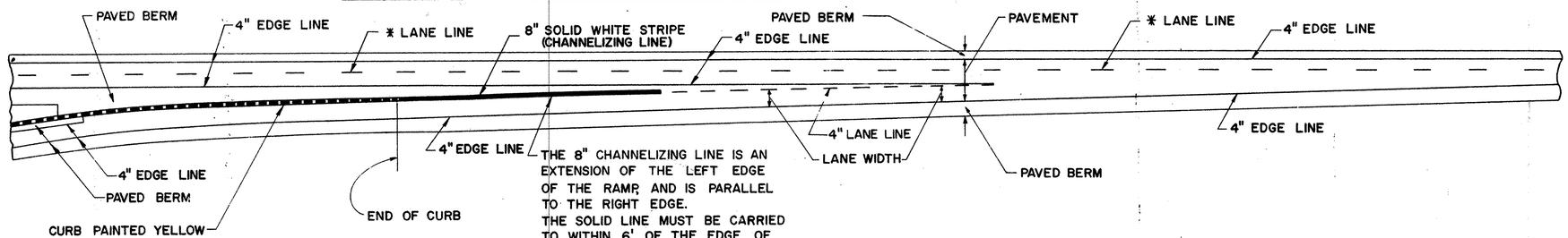
ENTRANCE TERMINAL - PARALLEL ACCELERATION LANE



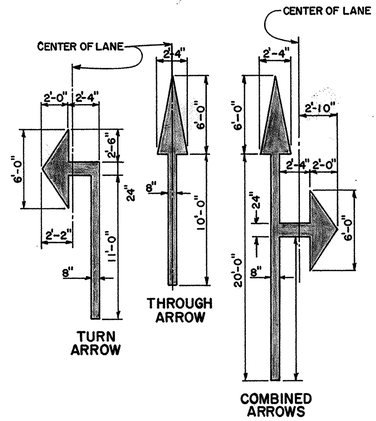
NOTES:

1. ARROWS SHALL BE WHITE WITH REFLECTIVE SURFACES.
2. EITHER PAINT OR PLASTIC MATERIALS MAY BE USED.
3. EACH ARROW SHALL BE PLACED IN THE CENTER OF THE TRAFFIC LANE.

ENTRANCE TERMINAL - TAPERED ACCELERATION LANE



THE 8" CHANNELIZING LINE IS AN EXTENSION OF THE LEFT EDGE OF THE RAMP, AND IS PARALLEL TO THE RIGHT EDGE. THE SOLID LINE MUST BE CARRIED TO WITHIN 6' OF THE EDGE OF THE THROUGH LANE, OR TO THE END OF THE RAMP CURVE IF CLOSER. THE 4" DASHED LINE SHOULD CONTINUE TO THE EDGE OF THE THROUGH LANE.



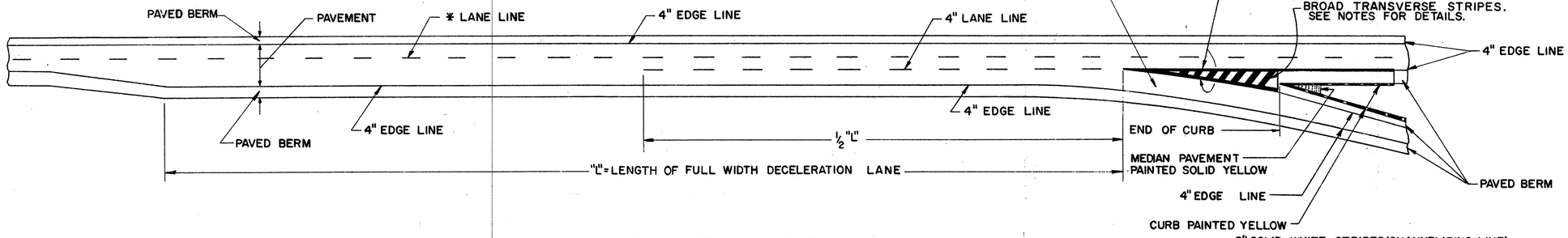
PAVEMENT ARROWS

NOTES

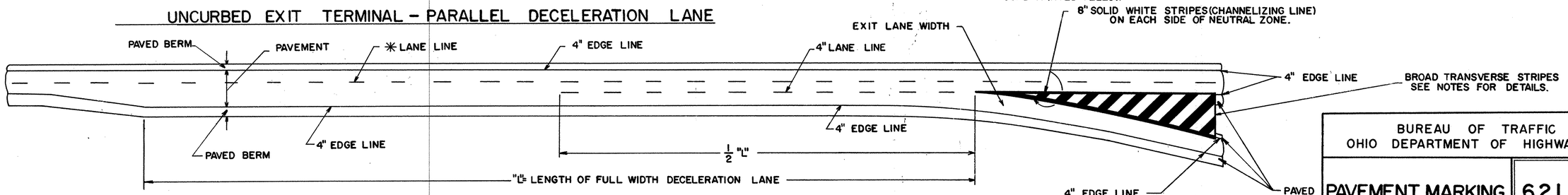
DIAGONAL STRIPES AT EXIT RAMPS SHALL BE 24" BROAD TRANSVERSE STRIPES, 621.11, WITH A 6' SPACE BETWEEN STRIPES.

* 6" LANE LINE ON INTERSTATE HIGHWAYS ONLY.
4" LANE LINE ON ALL OTHER HIGHWAYS.

CURBED EXIT TERMINAL - PARALLEL DECELERATION LANE



UNCURBED EXIT TERMINAL - PARALLEL DECELERATION LANE



BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

PAVEMENT MARKING	621	DATE 7-17-61 4-6-62 5-24-65 9-29-67 4-17-68

APPROVED Robert E. Lower
ENGINEER OF TRAFFIC

MAY 25 1971

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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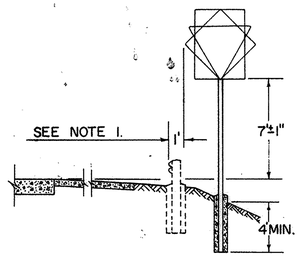
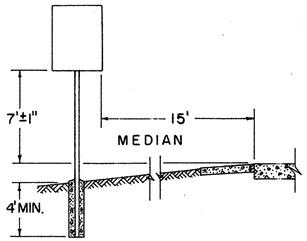
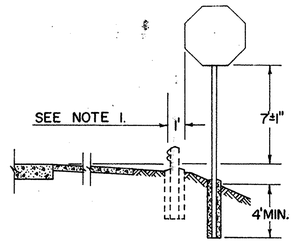
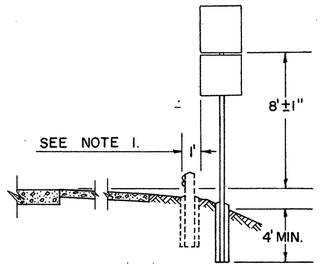
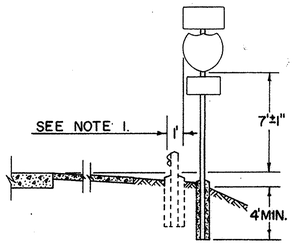
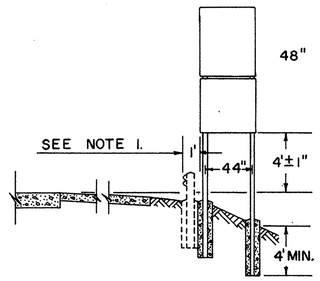


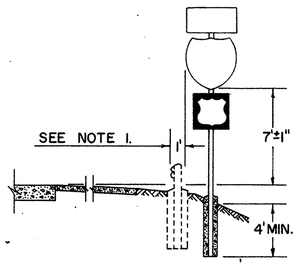


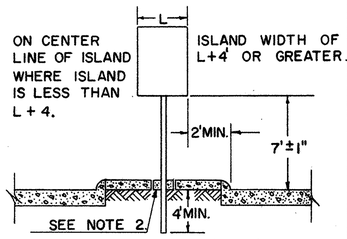


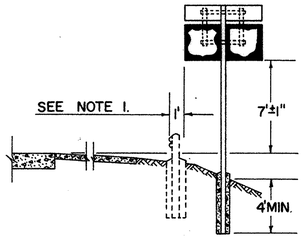


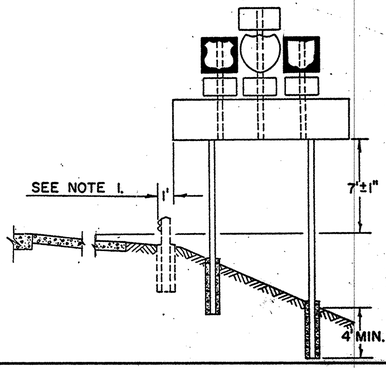


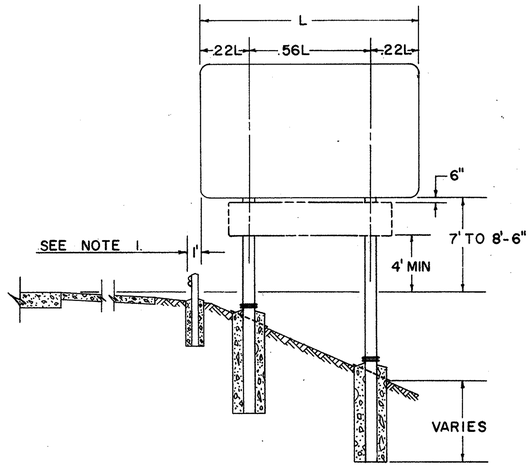


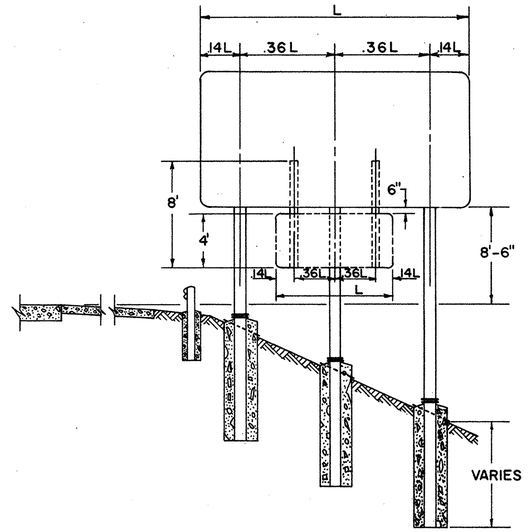


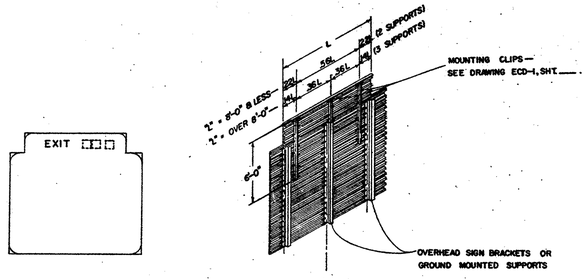




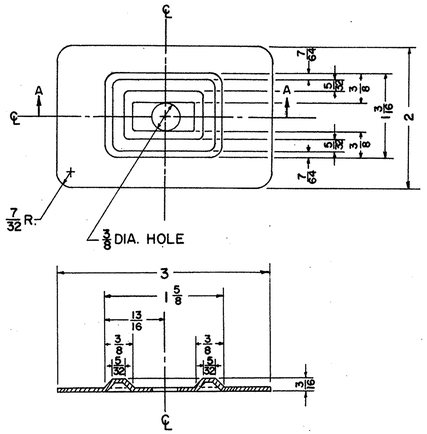








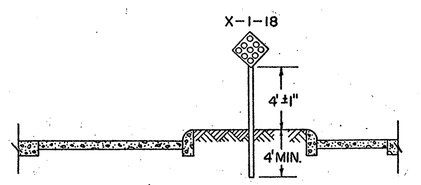
"EXIT" SIGN ATTACHMENT DETAIL



SECTION AA

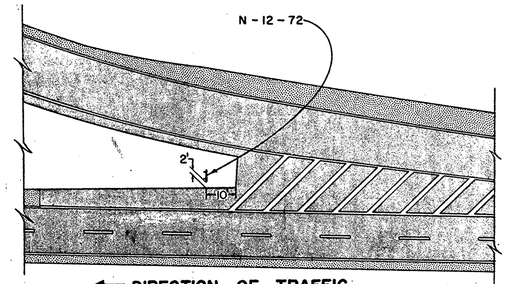
NOTE:
THE PLATE IS SYMMETRICAL ABOUT EITHER CENTERLINE.
METAL SHALL BE 16 GAUGE STEEL.
ALL DIMENSIONS ARE IN INCHES.

BEARING PLATE DETAIL



SIGN SUPPORT SPACING

L=FT	2 SUPPORTS .22	2 SUPPORTS .56	3 SUPPORTS .14	3 SUPPORTS .36	L=FT	2 SUPPORTS .22	2 SUPPORTS .56	3 SUPPORTS .14	3 SUPPORTS .36
5.0	1.10	2.80	0.70	1.80	17.0	3.74	9.52	2.38	6.12
6.0	1.32	3.36	0.84	2.16	18.0	3.96	10.08	2.52	6.48
7.0	1.54	3.92	0.98	2.52	19.0	4.18	10.64	2.66	6.84
8.0	1.76	4.48	1.12	2.88	20.0			2.80	7.20
9.0	1.98	5.04	1.26	3.24	21.0			2.94	7.56
10.0	2.20	5.60	1.40	3.60	22.0			3.08	7.92
11.0	2.42	6.16	1.54	3.96	23.0			3.22	8.28
12.0	2.64	6.72	1.68	4.32	24.0			3.36	8.64
13.0	2.86	7.28	1.82	4.68	25.0			3.50	9.00
14.0	3.08	7.84	1.96	5.04	26.0			3.64	9.36
15.0	3.30	8.40	2.10	5.40	27.0			3.78	9.72
16.0	3.52	8.96	2.24	5.76	28.0			3.92	10.08



NOTES

1. THE NEAR EDGE OF ALL MAIN LINE SIGNS, EXCEPT GORE INSTALLATIONS, SHALL BE LOCATED ONE FOOT (1') BACK OF GUARD RAIL FACE. THIS DIMENSION SHALL BE DETERMINED BY ROADWAY TYPICAL SECTION & USED WHETHER OR NOT GUARD RAIL IS PRESENT.
   ON RAMPS THE NEAR EDGE OF SIGNS SHALL BE LOCATED ONE FOOT (1') BACK OF GUARD RAIL FACE. THIS DIMENSION WILL BE DETERMINED AND USED AS FOR MAIN LINE ABOVE.
   ON APPROACHES THE NEAR EDGE OF SIGNS SHALL BE
   (A) ONE FOOT (1') BEHIND EXISTING GUARD RAIL
   (B) TWO FEET (2') FROM THE EDGE OF PAVED OR TRAVELED SHOULDER WITH A MINIMUM OF 6' FROM EDGE OF ROADWAY PAVEMENT.

2. POSTS PLACED IN CONCRETE MEDIANS SHALL BE INSTALLED BY DRIVING THROUGH A 6" SLEEVE OR CORE DRILLED HOLE. THE HOLE SHALL BE FILLED WITH ASPHALT OR PORTLAND CONCRETE AFTER THE POST IS IN THE PROPER POSITION.

3. HORIZONTAL BACK BRACING SHALL ALWAYS BE MOUNTED ON THE FRONT FLANGE OF THE SUPPORT EXCEPT WHERE SIGNS ARE MOUNTED BACK TO BACK. BACK BRACING SHALL NEVER EXTEND ABOVE TOP EDGE OF UPPERMOST SIGN PLATE AND SHALL BE ATTACHED TO SUPPORTS USING 5/16" GALVANIZED STEEL BOLTS.

4. SCREWS, NUTS, AND WASHERS FOR SIGN ERECTION SHALL BE ALUMINUM EXCEPT AS NOTED ABOVE. 5/16" TRUSS HEAD SLOTTED MACHINE SCREWS WITH HEX. NUTS PLAIN AND LOCKWASHERS SHALL BE USED. PLAIN WASHERS SHALL BE 5/16" WIDE", USED ON SIGN FACE ONLY.

5. SIGN INSTALLATIONS SHALL BE PLACED SO THAT SUPPORTS ARE NOT PLACED IN DRAINAGE DITCHES.

6. HORIZONTAL CLEARANCES SHOWN PERTAIN TO NON-CURBED SECTIONS. SECTIONS WITH UNMOUNTABLE CURB SHALL HAVE A HORIZONTAL CLEARANCE OF 2'-0" MINIMUM FROM THE CURB FACE TO THE SIGN EDGE.

7. VERTICAL AND HORIZONTAL CLEARANCE BETWEEN SIGNS ON ONE ASSEMBLY SHALL BE A MAXIMUM OF 2" AND A MINIMUM OF 1".

8. GALVANIZED STEEL BEARING PLATES SHALL BE INCLUDED BETWEEN ALL SHEET ALUMINUM SIGNS ATTACHED TO VERTICAL SUPPORTS AT EACH SIGN BOLT LOCATION.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

TYPICAL PLACEMENT OF SIGNS

TPS-1

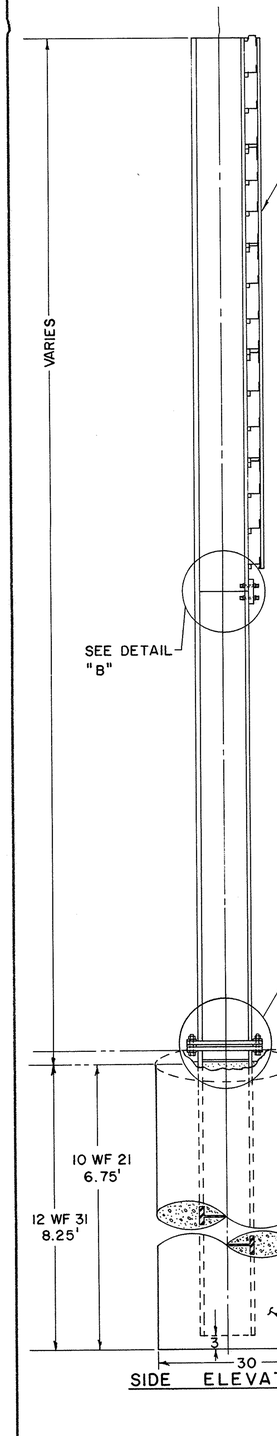
DATE
9-27-67
7-12-68
5-13-69

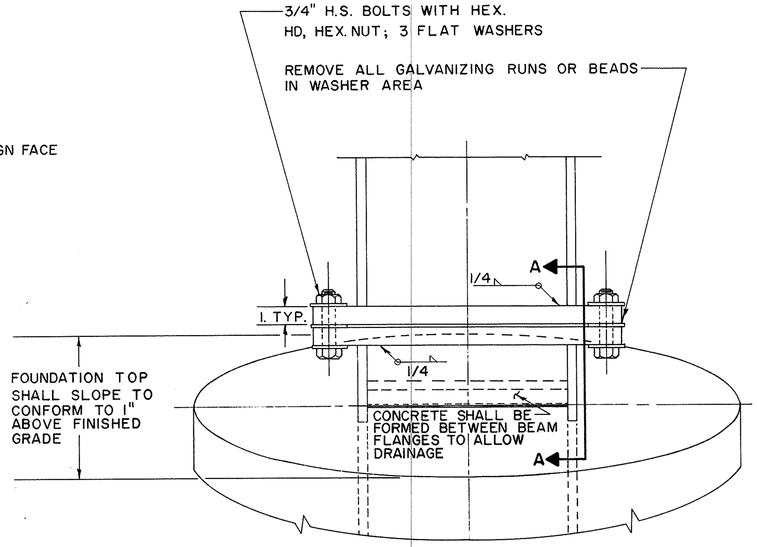
APPROVED _____
ENGINEER OF TRAFFIC

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

411A
656

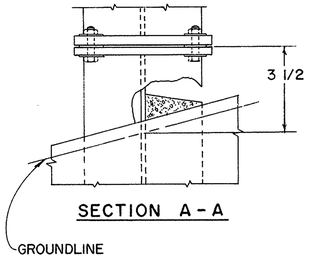




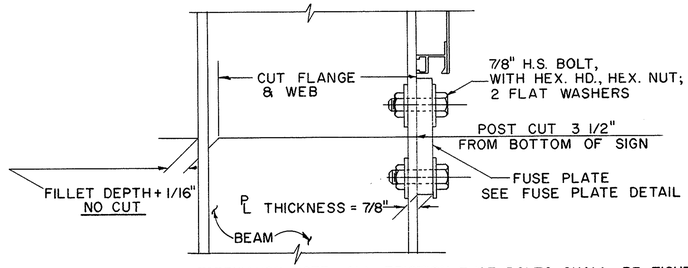
BOLTING PROCEDURE

1. ASSEMBLE POST TO STUB W/BOLTS & ONE FLAT WASHER ON EACH BOLT BETWEEN PLATES.
2. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE W/12" TO 15" WRENCH TO BED & TO CLEAN BOLT THREADS. LOOSEN EACH BOLT IN TURN & RETIGHTEN BOLTS IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE OF 750 IN. LBS.
3. BURR THREADS AT JUNCTION W/NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE: TIGHTEN THE H.S. BOLTS IN THE BASE CONNECTION ONLY TO GIVEN TORQUE DO NOT OVER TIGHTEN



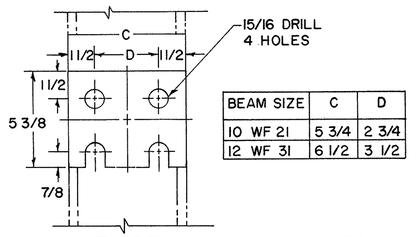
SECTION A-A



FABRICATOR NOTE: ALL FRICTION FUSE BOLTS SHALL BE TIGHTENED IN THE SHOP FOLLOWING A METHOD APPROVED BY THE ENGINEER. TIGHTENING SHALL BE TO SUCH A DEGREE AS TO OBTAIN MINIMUM RESIDUAL TENSION IN EACH BOLT OF 36,050 LBS.

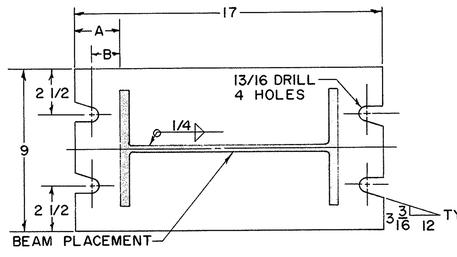
NOTE: INSTALL FUSE PLATE WITH NOTCHES TOWARD BASE

DETAIL "B"



BEAM SIZE	C	D
10 WF 21	5 3/4	2 3/4
12 WF 31	6 1/2	3 1/2

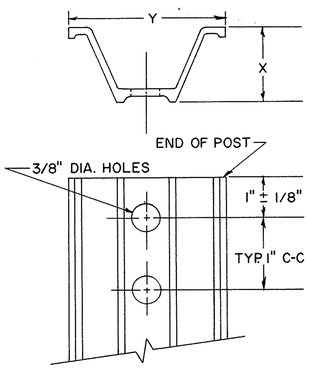
FUSE PLATE DETAIL



BEAM SIZE	A	B
10 WF 21	3 1/2	2 5/8
12 WF 31	2 1/2	1 5/8

BASE PLATE DETAIL

(TOP VIEW)



WEIGHT PER FOOT	X ± 3/32"	Y ± 1/8"
2.00 #	1 15/32"	3 1/16"
3.00 #	1 7/8"	3 1/2"
4.00 #	2"	3 5/8"

DRIVE POST DETAIL

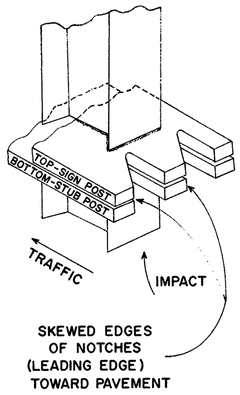
NOTE: THE FOUNDATION FOR 4# DRIVE POST IS SIMILAR TO THE FOUNDATION SHOWN FOR 6# & 8# BEAM

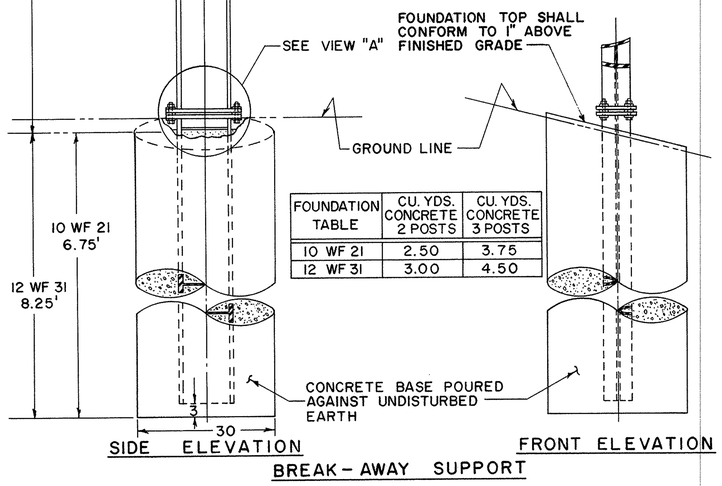
NOTES: ALL MATERIALS SHALL CONFORM TO THE STATE OF OHIO, CONSTRUCTION & MATERIALS SPECIFICATIONS OR AS OTHERWISE SPECIFIED

1) 511 FOUNDATIONS
2) 711.01 STRUCTURAL STEEL SHAPES & PLATES
3) 711.09 H.S. STEEL BOLTS, NUTS & WASHERS

ALL DIMENSIONS IN INCHES UNLESS OTERWISE SHOWN

BREAKAWAY SIGN SUPPORT BASE PLATE ORIENTATION



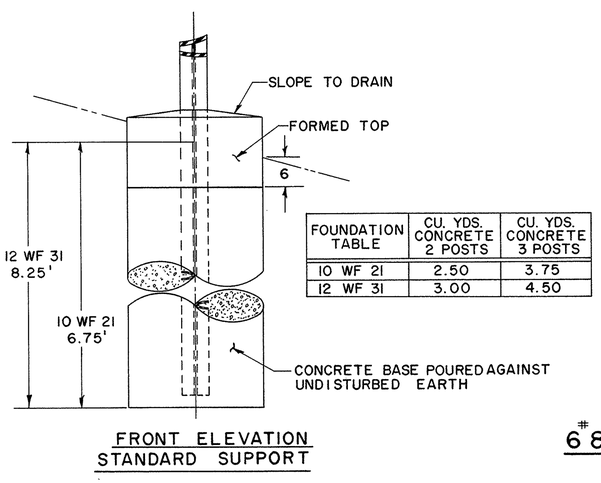


FOUNDATION TABLE	CU. YDS. CONCRETE 2 POSTS	CU. YDS. CONCRETE 3 POSTS
10 WF 21	2.50	3.75
12 WF 31	3.00	4.50

SIDE ELEVATION

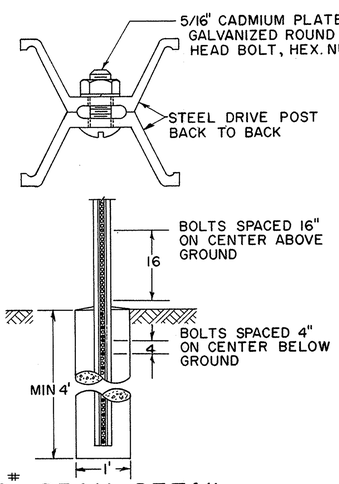
FRONT ELEVATION

BREAK-AWAY SUPPORT



FOUNDATION TABLE	CU. YDS. CONCRETE 2 POSTS	CU. YDS. CONCRETE 3 POSTS
10 WF 21	2.50	3.75
12 WF 31	3.00	4.50

FRONT ELEVATION STANDARD SUPPORT



6# & 8# BEAM DETAIL

STRUCTURAL SUPPORTS

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

GROUND MOUNTED SIGN SUPPORTS

GMSS

DATE
5-10-68
7-12-68
5-23-69
MAY 25, 1971

APPROVED _____
ENGINEER OF TRAFFIC

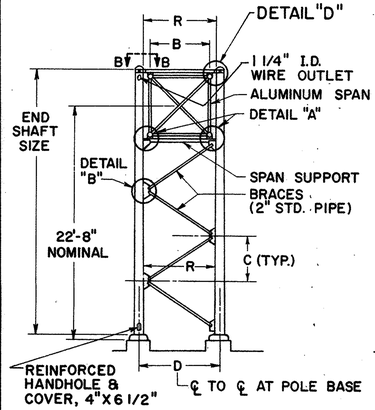
Boardman

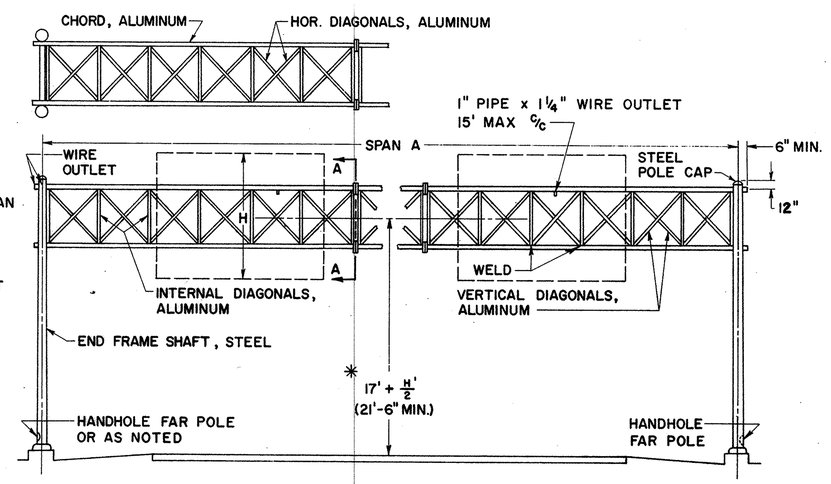
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

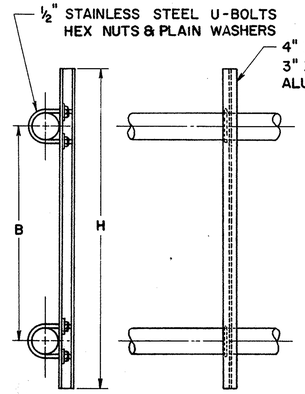
412
656

MAH-680-6.98

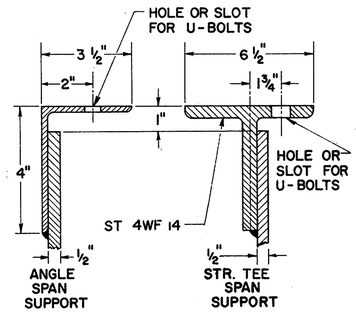
DIRECTION OF TRAFFIC







SIGN BRACKET



SECTION D-D

NOTES

MATERIALS

THE OVERHEAD SPAN TRUSS SHALL BE ALUMINUM AND THE END FRAMES SHALL BE STEEL.

SPAN TRUSS AND END FRAMES, INCLUDING HARDWARE, SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 816 UNLESS OTHERWISE NOTED.

STEEL POLE BASES AND GUSSETS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A-373.

AFTER FABRICATION THE TAPERED POLES SHALL HAVE A MINIMUM YIELD STRENGTH OF 48,000 PSI.

FABRICATION

THE ENTIRE STEEL END FRAME SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH SEC. 711.02

MAXIMUM LENGTH OF SPAN SECTIONS IS 30 FT.

ERECTION

USE A MINIMUM OF 1" CAMBER IN SPAN TRUSS MEMBER FOR A 50' SPAN; ADD 1/4" OF CAMBER FOR EACH 5' OF INCREASE IN SPAN OVER 50'.

PAYMENT

PAYMENT FOR THE GALVANIZED CONDUIT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OVERHEAD SIGN SUPPORTS.

SOILS

THE FOUNDATION DETAILS SHOWN ARE FOR AVERAGE SOIL CONDITIONS (MEDIUM CLAY, CEMENTED SAND AND GRAVEL, SANDY CLAY, OR STIFF CLAY).

FOR POOR SOIL CONDITIONS, INCREASE "D" MIN. BY: 50% IN DRY OR WET SAND, 60% IN SILTY CLAY, 100% IN SOFT CLAY, AND FROM 75% TO 150% IN WET SILT, DEPENDING ON QUICKSAND ACTION.

REINFORCING STEEL

COST OF REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS.

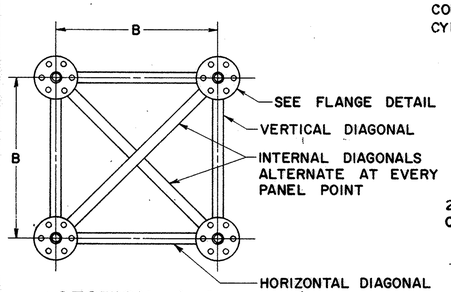
BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER.

*FOUNDATION ELEVATION

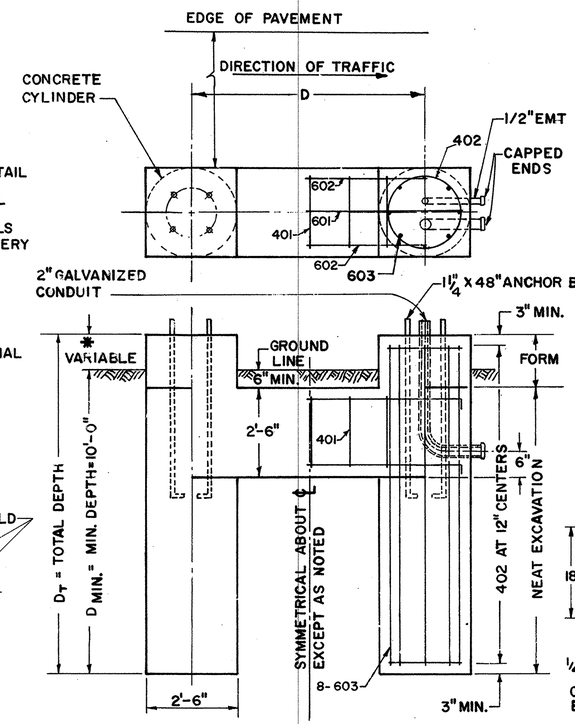
ELEVATION OF TOPS OF FOUNDATIONS SHALL BE BUILT UP SO THAT 17' CLEARANCE IS MAINTAINED OVER THE ENTIRE WIDTH OF PAVEMENT AND SHOULDERS.

DESIGN

THE DESIGN OF OVERHEAD SUPPORTS IS IN ACCORDANCE WITH A.A.S.H.O. SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, ADOPTED JUNE 12, 1961.

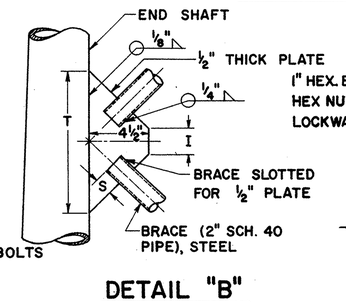


SECTION A-A

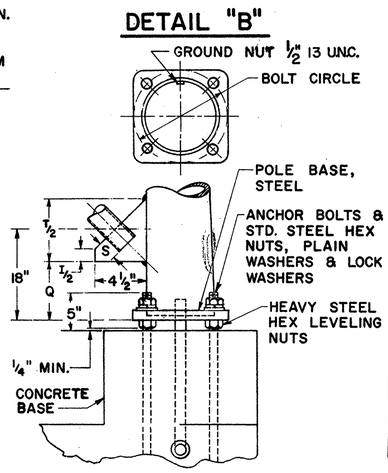


FOUNDATION DETAIL

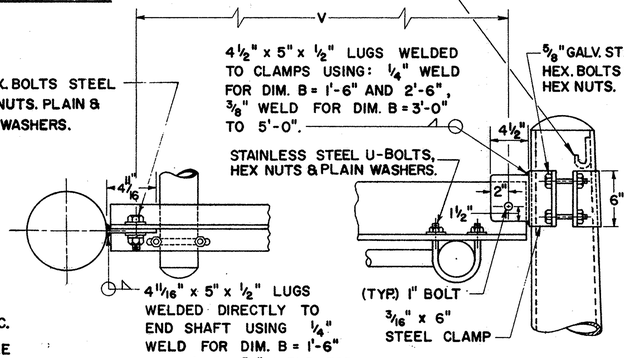
(RIGHT HAND SHOWN — LEFT HAND OPPOSITE)



DETAIL "B"



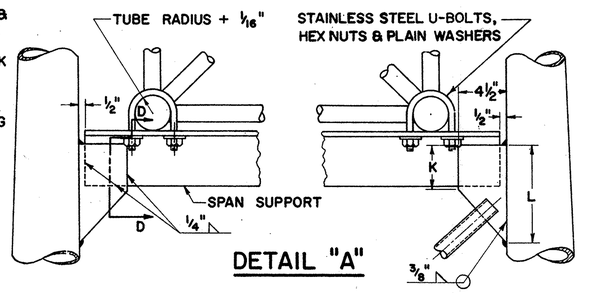
POLE BASE DETAIL



VIEW B-B

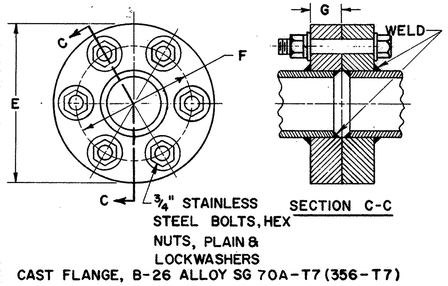
DETAIL "D"

UPPER SPAN SUPPORT (ALTERNATE METHODS)



DETAIL "A"

LOWER SPAN SUPPORT

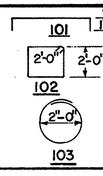


CAST FLANGE, B-26 ALLOY SG 70A-T7 (356-T7)

FLANGE DETAIL

DESIGN NO.	SPAN A	B	C	D	E	END SHAFT	BRACE LENGTH	F	G	I	K	L	P	Q	R	S	T	U BOLTS	V	BOLT CIRCLE	SPAN SUPPORT SECTION D-D	CHORDS	HORIZONTAL AND INTERNAL DIAGONAL	VERTICAL DIAGONAL
1	50' THRU 70'	3'-0"	4'-1 3/4"	4'-5"	9 1/4"	8"X4.5"X 25'-0", 3GA	5'-10 3/16"	7 7/16"	1 3/8"	3 1/2"	4 3/4"	8"	12"	6 5/8"	3'-9"	1 1/2"	10"	5/8"	3'-3 5/8"	11"	SPLIT TEE 3'-8"	4 3/4"X.188"	1.900"X.145"	1.660"X.140"
2	71' THRU 80'	4'-0"	4'-10 1/4"	5'-7"	9 1/4"	8"X6.22'X25'-6", 3GA	6'-7 1/8"	7 7/16"	1 3/8"	5/8"	4 3/8"	7 3/4"	12"	6 1/4"	4'-11"	1 1/2"	9 1/2"	5/8"	4'-5 5/8"	11"	SPLIT TEE 4'-10"	4 3/4"X.188"	2" X.188"	1.900"X.145"
3	81' THRU 86'	4'-0"	4'-10 1/4"	5'-7"	11"	8"X6.22'X25'-6", 3GA	6'-7 1/8"	8 1/2"	1 1/2"	5/8	4 3/8"	7 3/4"	12"	6 1/4"	4'-11"	1 1/2"	9 1/2"	5/8"	4'-5 5/8"	11"	SPLIT TEE 4'-10"	5 1/2"X.250"	2" X.188"	1.900"X.145"
4	86' THRU 110'	5'-0"	4'-8 1/2"	6'-7"	11"	8"X6.18"X26'-0", 3GA	7'-3 1/4"	8 1/2"	1 1/2"	—	3 1/2"	7 3/4"	12"	7 1/2"	5'-11"	1 3/4"	11 1/2"	3/4"	5'-5 5/8"	11"	SPLIT TEE 5'-10"	5 1/2"X.250"	2 1/2"X.188"	2 1/2"X.188"

REINFORCEMENT SCHEDULE			
MARK	NO.	LENGTH	TYPE
401	12"C/C	8'-6"	102
402	12"C/C	7'-6"	103
601	4	D+4'-0"	101
602	8	D+2'-0"	101
603	32	D_T − 6"	STR.



BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

OVERHEAD SIGN SUPPORTS | 816 No. 7.5

DATE
5-2-62
7-25-62
4-29-64
6-20-66

MAY 25 1971

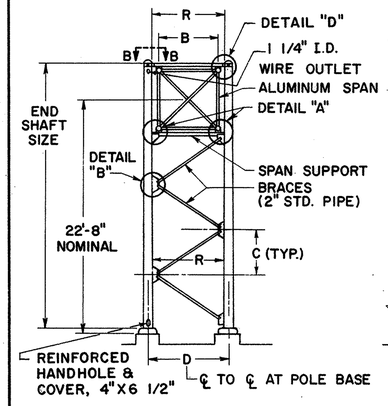
APPROVED Robert E. Comer
ENGINEER OF TRAFFIC

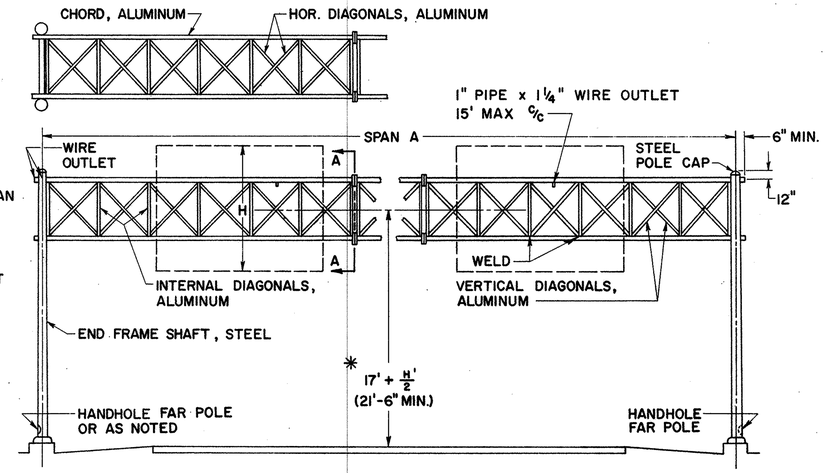
500 SQ. FT. SIGN AREA — OVERHEAD SIGN SUPPORT, 816 NO. 7.5

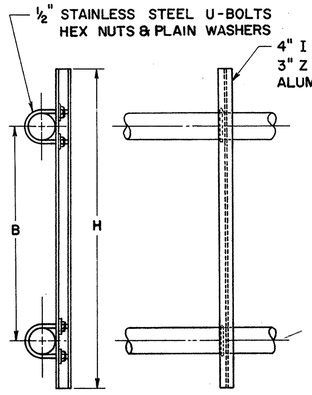
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

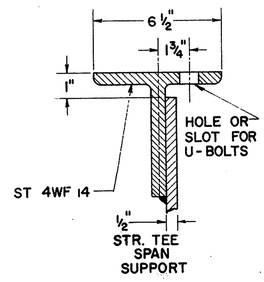
413
656







SIGN BRACKET



SECTION D-D

NOTES

MATERIALS

THE OVERHEAD SPAN TRUSS SHALL BE ALUMINUM AND THE END FRAMES SHALL BE STEEL.

SPAN TRUSS AND END FRAMES, INCLUDING HARDWARE, SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 816 UNLESS OTHERWISE NOTED.

STEEL POLE BASES AND GUSSETS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A-373.

AFTER FABRICATION THE TAPERED POLES SHALL HAVE A MINIMUM YIELD STRENGTH OF 48,000 PSI.

FABRICATION

THE ENTIRE STEEL END FRAME SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH SEC. 711.02.

MAXIMUM LENGTH OF SPAN SECTIONS IS 30 FT.

ERECTION

USE A MINIMUM OF 1" CAMBER IN SPAN TRUSS MEMBER FOR A 50' SPAN; ADD ¼" OF CAMBER FOR EACH 5' OF INCREASE IN SPAN OVER 50'.

PAYMENT

PAYMENT FOR THE GALVANIZED CONDUIT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OVERHEAD SIGN SUPPORTS.

SOILS

THE FOUNDATION DETAILS SHOWN ARE FOR AVERAGE SOIL CONDITIONS (MEDIUM CLAY, CEMENTED SAND AND GRAVEL, SANDY CLAY, OR STIFF CLAY).

FOR POOR SOIL CONDITIONS, INCREASE "D" MIN. BY: 50% IN DRY OR WET SAND, 60% IN SILTY CLAY, 100% IN SOFT CLAY, AND FROM 75% TO 150% IN WET SILT, DEPENDING ON QUICKSAND ACTION.

REINFORCING STEEL

COST OF REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS.

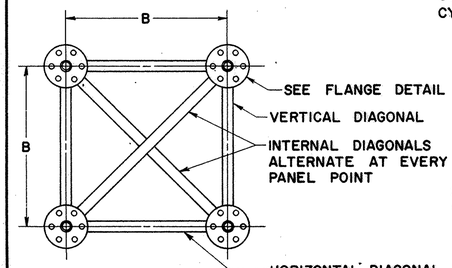
BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATE THE BAR SIZE NUMBER.

*FOUNDATION ELEVATION

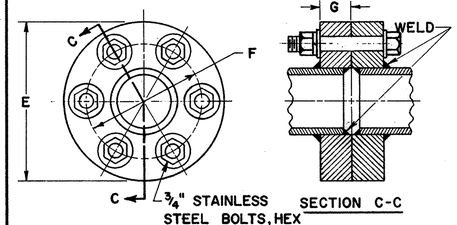
ELEVATION OF TOPS OF FOUNDATIONS SHALL BE BUILT UP SO THAT 17' CLEARANCE IS MAINTAINED OVER THE ENTIRE WIDTH OF THE PAVEMENT AND SHOULDERS.

DESIGN

THE DESIGN OF OVERHEAD SUPPORTS IS IN ACCORDANCE WITH A.A.S.H.O. SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, ADOPTED JUNE 12, 1961.

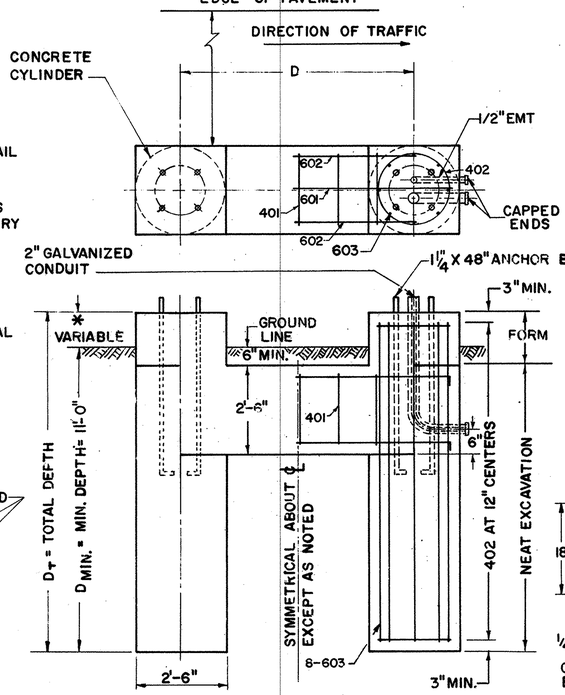


SECTION A-A



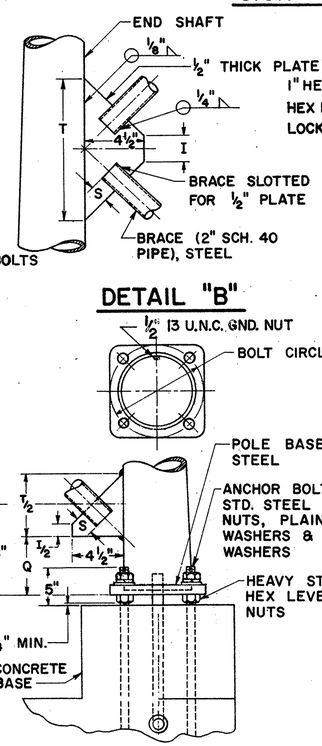
CAST FLANGE, B-26 ALLOY SG 70A-T7 (356-T7)

FLANGE DETAIL



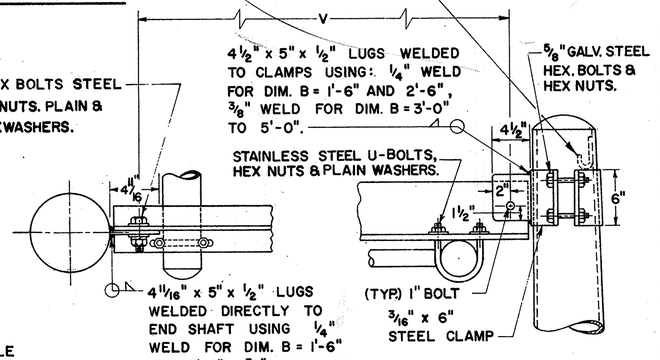
FOUNDATION DETAIL

(RIGHT HAND SHOWN — LEFT HAND OPPOSITE)



DETAIL "B"

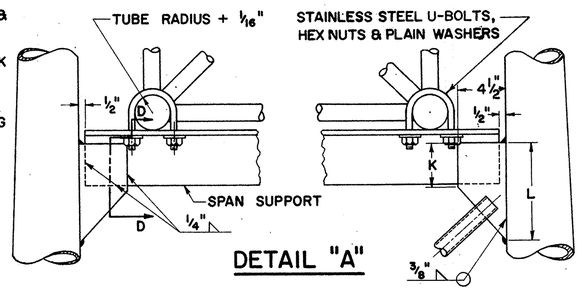
POLE BASE DETAIL



VIEW B-B

DETAIL "D"

UPPER SPAN SUPPORT (ALTERNATE METHODS)

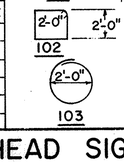


DETAIL "A"

LOWER SPAN SUPPORT

DESIGN NO.	SPAN A	B	C	D	E	END SHAFT	BRACE LENGTH	F	G	I	K	L	P	Q	R	S	T	U BOLTS	V	BOLT CIRCLE	SPAN SUPPORT SECTION D-D	CHORDS	HORIZONTAL AND INTERNAL DIAGONAL	VERTICAL DIAGONAL
1.	50' thru 65'	3'-0"	4'-11¾"	4'-5"	9¼"	8"X4.5 X25'-0",3GA	5'-10 13/16"	7 7/16"	1⅜"	3½"	4¾"	8"	12"	6 5/8"	3'-9"	1½"	10"	⅝"	3'-3 5/8"	11"	Split Tee 3'-8"	4¾" X .188"	2" X .188"	1.660"X .140"
2.	70' thru 75'	4'-0"	4'-10¼"	5'-7"	9¼"	8"X6.22X25'-6",3GA	6'-7⅛"	7 7/16"	1⅜"	⅝"	4¾"	7¾"	12"	6¼"	4'-11"	1½"	9½"	⅝"	4'-5 5/8"	11"	Split Tee 4'-10"	4¾" X .188"	2' X .188"	1.900"X .145"
3.	76' thru 80'	4'-0"	4'-10¼"	5'-7"	11"	8"X6.22X25'-6",3GA	6'-7⅛"	8½"	1½"	⅝"	4⅜"	7¾"	12"	6¼"	4'-11"	1½"	9½"	⅝"	4'-5 5/8"	1'-1"	Split Tee 4'-10"	5½" X .250	2½" X .188"	1.900"X .145"
4.	81' thru 110'	5'-0"	4'-8½"	6'-7"	11"	8"X6.18 X26'-0",3GA	7'-3¼"	8½"	1½"	—	3½"	7¾"	12"	7¼"	5'-11"	1 3/4"	11¼"	¾"	5'-5 5/8"	11"	Split Tee 5'-10"	5½" X .250	2½" X .188	2½" X .188

REINFORCEMENT SCHEDULE			
MARK	NO.	LENGTH	TYPE
401	12" C/C	8'-6"	102
402	12" C/C	7'-6"	103
601	4	D+4'-0"	101
602	8	D+2'-0"	101
603	32	D+ — 6"	STR.



BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

OVERHEAD SIGN SUPPORTS

816 No.7.6

DATE 5-6-64 5-5-64 6-20-60 MAY 25 1971

APPROVED _____ ENGINEER OF TRAFFIC

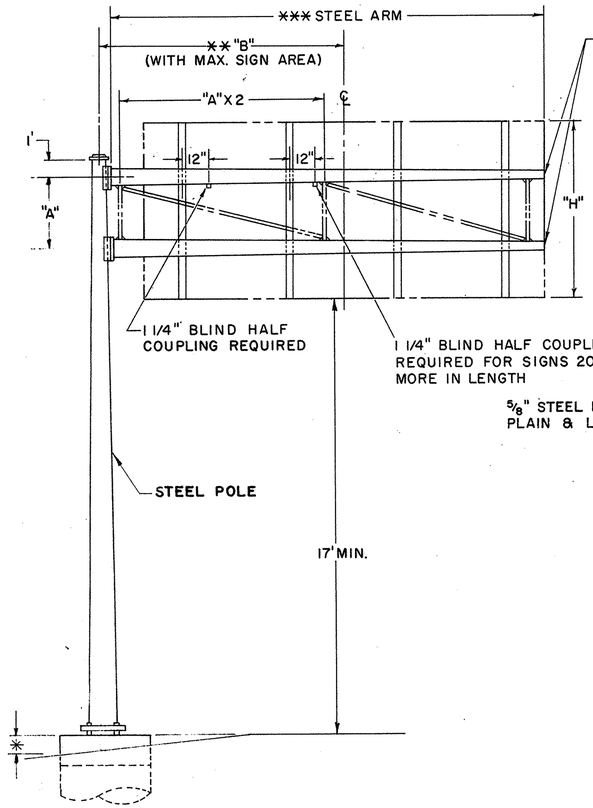
600 SQ. FT. SIGN AREA

OVERHEAD SIGN SUPPORT, 816 NO.7.6

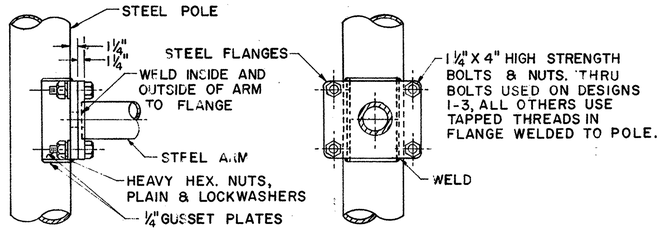
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

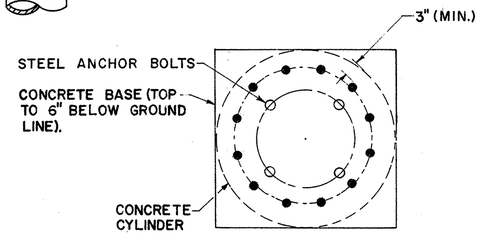
413 A
656

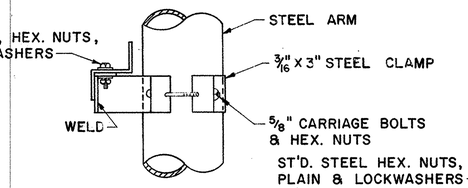


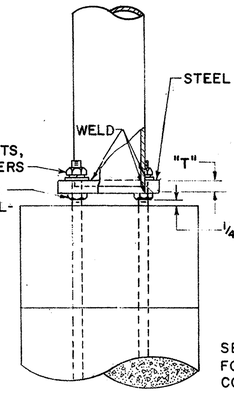
NOTE:
THE 12" DIMENSION SHOWN FOR BLIND HALF COUPLINGS MAY BE INCREASED OR DECREASED WHEN NECESSARY TO TO PREVENT INTERFERENCE WITH OTHER MEMBERS.



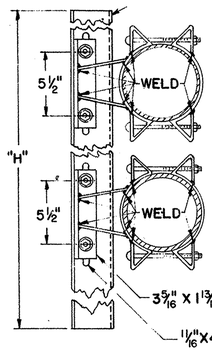
ARM ATTACHMENT

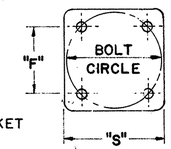




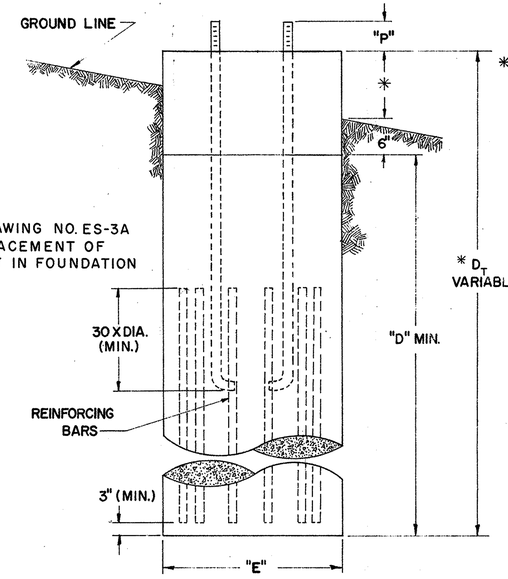


SEE DRAWING NO. ES-3A FOR PLACEMENT OF CONDUIT IN FOUNDATION





POLE BASE DETAIL



FOUNDATION DETAIL

SIGN ATTACHMENT DETAIL

DESIGN NO.	POLE SIZE	*** ARM SIZE	DIM A	DIM ** B	DIM "D" MIN.	DIM E	DIM F	DIM P	DIM S	DIM T	BOLT CIRCLE	ANCHOR BOLT SIZE	MAX SIGN AREA	REINF. BARS SIZE	REINF. BARS # REQ'D
1	3 Ga, 12" X 8.78" X 23'-0"	7Ga, 6.9" X 4.66" X 16'-0"	4'	12'	9'	3'-0"	11 5/16"	7 3/4"	17"	2"	16"	1 3/4" X 90"	80	3/4"	12
2	3 Ga, 12" X 8.78" X 23'-0"	7 Ga, 8" X 5.2" X 20'-0"	4'	16'	9'	3'-0"	11 5/16"	7 3/4"	17"	2"	16"	1 3/4" X 90"	80	3/4"	12
3	3 Ga, 15" X 11.5" X 25'-0"	7 Ga, 8.3" X 6.06" X 16'-0"	4'	12'	11'	3'-0"	15½"	8 3/8"	23"	2"	22"	2" X 96"	120	1"	12
4	3 Ga, 16" X 12.5" X 25'-0"	3 Ga, 9.2" X 6.40" X 20'-0"	4'	16'	11'	3'-0"	16 5/16"	8 3/8"	24½"	2"	23½"	2" X 96"	120	1"	12
5	0 Ga, 18" X 14.36" X 26'-0"	7 Ga, 11" X 7.92" X 22'-0"	6'	14'	13'	3'-0"	18"	9 3/8"	26½"	2½"	25½"	2¼" X 120"	180	1⅛"	12
6	0 Ga, 18" X 14.36" X 26'-0"	7 Ga, 12.5" X 8.86" X 26'-0"	6'	18'	13'	3'-0"	18"	9 3/8"	26½"	2½"	25½"	2¼" X 120"	180	1⅛"	12
7	2 PLY 7 Ga, 18" X 14.36" X 26'-0"	7 Ga, 12.5" X 9.14" X 24'-0"	6'	14'	15'	3'-0"	18"	9 3/4"	26½"	2½"	25½"	2½" X 144"	240	1¼"	12
8	2 PLY ¼", 18" X 14.36" X 26'-0"	3 Ga, 12.5" X 8.58" X 26'-0"	6'	18'	15'	3'-0"	18"	11¼"	26½"	3"	25½"	3" X 144"	240	1¼"	12
1	3 Ga, 8" X 5.74" X 16'-0"	3" SCHD. 40 GRADE A	4'	8'	6'	2'-0"	7 3/4"	5"	11½"	1 3/16"*	11"	1¼" X 48"	60	½"	8

* SUGGEST USE OF CAST BASE, PLATE T = 1½"

NOTES

FABRICATION - ALL PORTIONS OF THE SIGN SUPPORT, INCLUDING SIGN ATTACHMENTS, SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF A.S.T.M. DESIGNATIONS A-123 AND A-153. THE CONDUIT SHALL BE GALVANIZED IN ACCORDANCE WITH SEC. 625.13 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OVERHEAD SIGN SUPPORTS FOR PAYMENT.

* FOUNDATION- THE TOP ELEVATION OF FOUNDATIONS SHALL BE VARIED SO AS TO MAINTAIN A MINIMUM CLEARANCE OF 17' BETWEEN THE BOTTOM OF THE SIGN AND THE HIGHWAY CROWN.

** ERECTION- VALUES OF "B" MAY BE EXCEEDED PROVIDED THE PRODUCT OF ACTUAL SIGN AREA TIMES THE DISTANCE FROM ℄ OF POLE TO ℄ OF SIGN DOES NOT EXCEED THE MAX. SIGN AREA TIMES "B".

*** ARMS 20' LONG OR LONGER ARE TO BE TRUSS TYPE WITH 3" X 3" X 3/8" ANGLES WELDED TO GUSSET PLATES.

MATERIAL- STEEL POLE BASES, FLANGES, AND END CAPS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 30 GRADE B. HIGH STRENGTH STEEL BOLTS SHALL CONFORM TO ASTM SPECIFICATION A 193 GRADE B7 AFTER FABRICATION TAPERED POLES AND ARMS SHALL HAVE A MINIMUM YIELD STRENGTH OF 48,000 PSI.

SOILS- THE FOUNDATION DETAILS SHOWN ARE FOR AVERAGE SOIL CONDITIONS (MEDIUM CLAY, CEMENTED SAND AND GRAVEL, SANDY CLAY, OR STIFF CLAY). FOR POOR SOIL CONDITIONS, INCREASE "D" MIN. BY: 50% IN DRY OR WET SAND, 60% IN SILTY CLAY, 100% IN SOFT CLAY, AND FROM 75% TO 150% IN WET SILT, DEPENDING ON QUICKSAND ACTION.

REINFORCING STEEL- REINFORCING STEEL AS SHOWN IN TABLE SHALL BE INSTALLED WHEN "D" EXCEEDS THE ANCHOR BOLT LENGTH BY MORE THAN 3 FT. THE COST AND PLACEMENT OF REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS.

DESIGN

THE DESIGN OF OVERHEAD SUPPORTS IS IN ACCORDANCE WITH A.A.S.H.O. SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, ADOPTED JUNE 12, 1961.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

OVERHEAD SIGN SUPPORT

816 No. 12.24

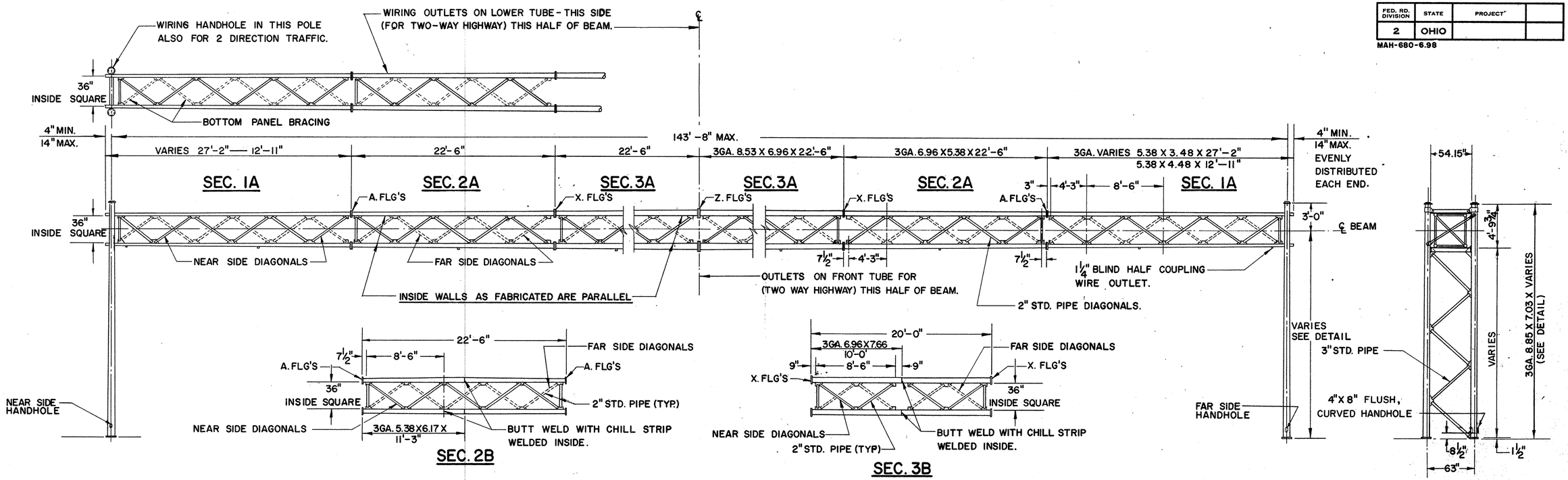
DATE
8-18-61
4-17-62
4-18-67
5-29-68
MAY 25 1971

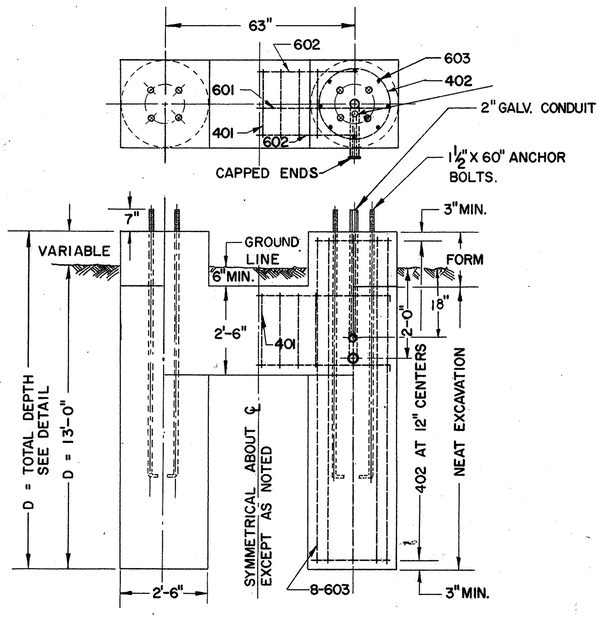
APPROVED Robert E. Conner
ENGINEER OF TRAFFIC

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

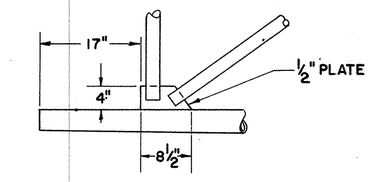
MAH-680-6.98

413B
656

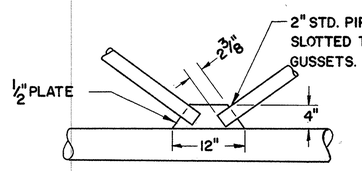




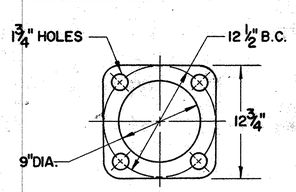
FOUNDATION DETAIL



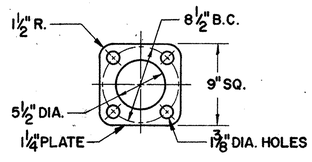
END JOINT DETAIL



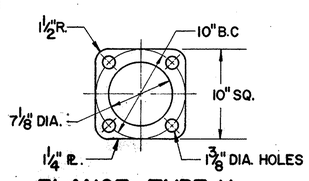
TYPICAL JOINT
DIAGONAL TRUSS MEMBER



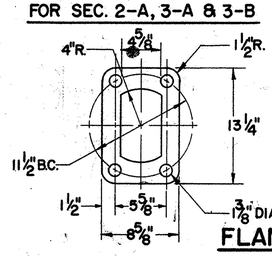
POLE BASE DETAIL

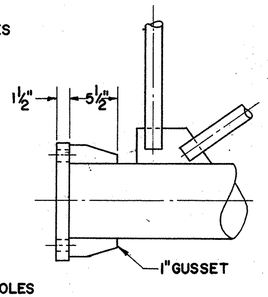


FLANGE TYPE A.
FOR SEC. 1-A, 2-A, & 2-B

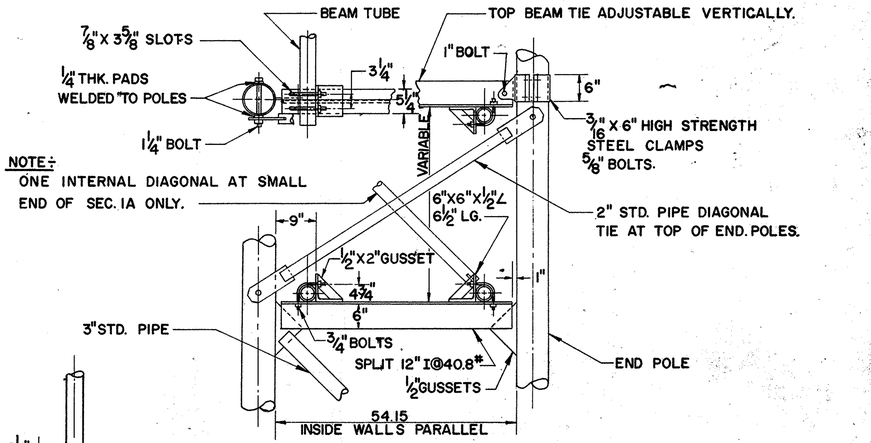


FLANGE TYPE X.
FOR SEC. 2-A, 3-A & 3-B





FLANGE TYPE Z.
FOR SEC. 3-A



BOTTOM BEAM SUPPORT & END POLE FRAME TIE.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

OVERHEAD SIGN SUPPORT	816 15.8	DATE 6-24-64 7-1-66 MAY 25 1971

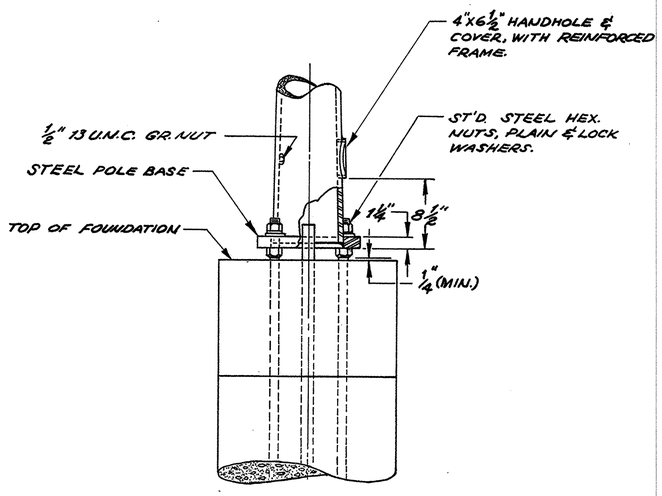
APPROVED _____ ENGINEER OF TRAFFIC

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

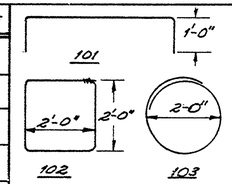
413C
656

SUPPORT						ACTUAL SIGN AREA	SIGN AREA SPREAD	ALLOWABLE DESIGN SIGN AREA	ACTUAL MAX. SIGN HEIGHT	END SECTION				INTERNAL SECTION				CENTER SECTION				END OVER-HANG	LEFT END FRAME				RIGHT END FRAME			
NO.	STATION	LOCATION	TYPE	DESIGN	SPAN					NO.	GA.	SIZE	LENGTH	NO.	GA.	SIZE	LENGTH	NO.	GA.	SIZE	LENGTH		NO.	GA.	SIZE	LENGTH	NO.	GA.	SIZE	LENGTH
47	655+61.5	I-680 SOUTHBOUND	OVERHEAD	3	70'-0"	622.5 S.F.	54'	670 S.F.	14'-6"	1	A	3 GA	9.38"x4.48"x 18'-0"	18'-0"	2	A	3GA	6.06"x5.38"x22'-6"	22'-6"	—	—	———	———	1'-0"		3 GA	8.85"x7.06"x25'-6"	25'-6"		3GA	8.85"x6.82"x27'-6"	27'-6"
57	727+50	I-680 SOUTHBOUND	OVERHEAD	3	77'-0"	605 S.F.	60'	723 S.F.	14'-6"	1	A	3 GA	5.38"x4.48"x17'-0"	17'-0"	2	A	3GA	6.06"x5.38"x22'-6"	22'-6"	—	—	———	———	1'-0"		3 GA	8.85"x7.06"x25'-6"	25'-6"		3GA	8.85"x6.82"x20'-0"	20'-0"



REINFORCEMENT SCHEDULE

MARK	NO.	LENGTH	TYPE
401	12"c/c	8'-6"	102
402	12"c/c	7'-6"	103
601	4	D+4'-0"	101
602	8	D+2'-0"	101
603	32	D+-6"	STR.



NOTES

DESIGN

THE DESIGN OF OVERHEAD SUPPORTS SHALL BE IN ACCORDANCE WITH A.A.S.H.O. SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, ADOPTED JUNE 13, 1961.

FOUNDATION

THE TOP ELEVATION OF FOUNDATIONS SHALL BE VARIED SO AS TO MAINTAIN A MINIMUM CLEARANCE OF 17' BETWEEN THE BOTTOM OF THE SIGN AND THE HIGHWAY CROWN.

SOILS

THE FOUNDATION DETAILS SHOWN ARE FOR AVERAGE SOIL CONDITIONS (MEDIUM CLAY, CEMENTED SAND AND GRAVEL, SANDY CLAY OR STIFF CLAY).

FINISH

ALL STRUCTURAL PORTIONS OF THE SIGN SUPPORTS, SIGN BRACKETS, HARDWARE AND CONDUIT SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH S.S. 816.02 (EXCEPT AS OTHERWISE SHOWN).

MATERIALS

ALL MATERIALS TO BE FURNISHED SHALL BE IN ACCORDANCE WITH S.S. 816.02 WITH THE FOLLOWING ADDITIONS:
TAPERED TUBES SHALL BE STEEL, SAE 1015 AND COLD ROLLED TO OBTAIN A MINIMUM YIELD STRENGTH OF 48,000 PSI.
STEEL PIPE: 4" DIAMETER AND UNDER SHALL BE STEEL-ASTM-A120. OVER 4" DIAMETER SHALL BE ASTM-A53, GRADE B.
ANCHOR BOLTS SHALL BE HIGH STRENGTH STEEL-ASTM-A107, GRADE C-1035.
HIGH STRENGTH CLAMPS SHALL BE STEEL ASTM-A242.

REINFORCING STEEL

COST OF REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS.
BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER.

PAYMENT FOR CONDUIT

PAYMENT FOR THE GALVANIZED CONDUIT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OVERHEAD SIGN SUPPORTS.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

OVERHEAD SIGN SUPPORT	816 15.8	DATE 7-1-66 MAY 25 1971

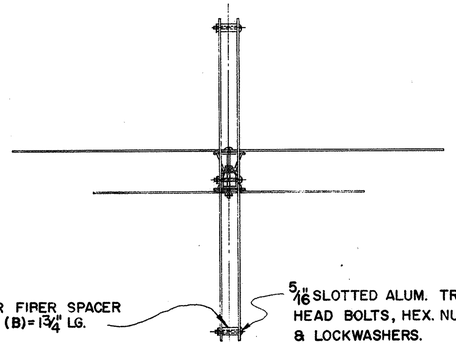
APPROVED _____ ENGINEER OF TRAFFIC

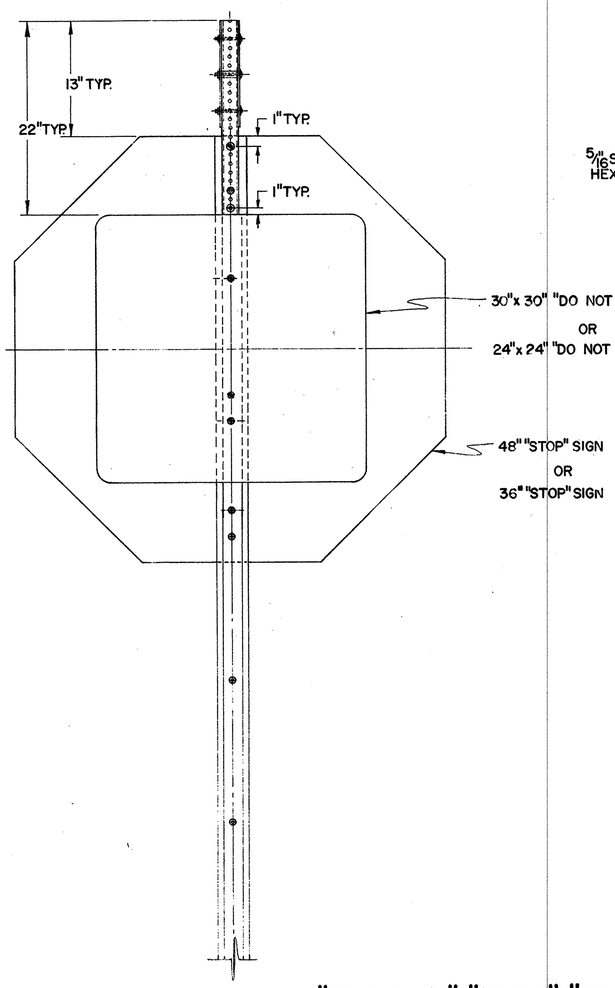
OVERHEAD SIGN SUPPORT, 816 Nº 15.8

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

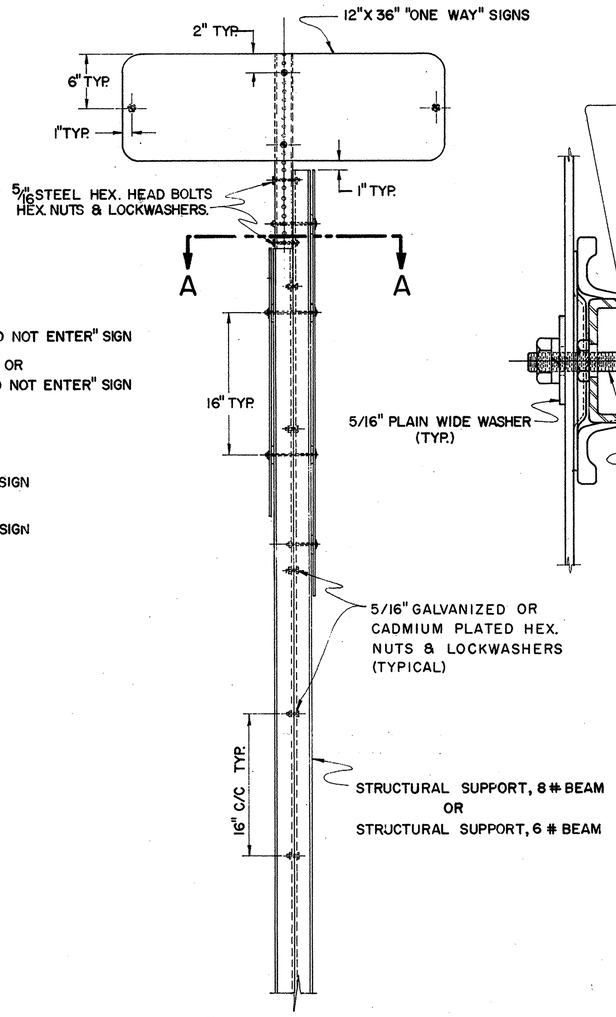
MAH-680-6.98

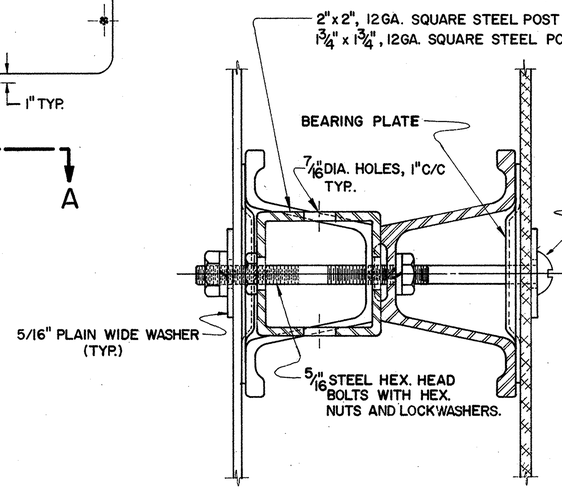
414
656



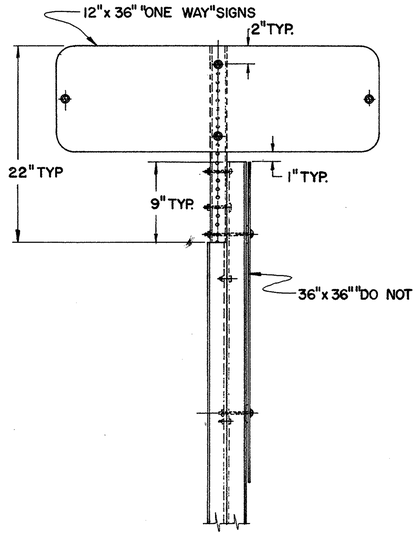


"ONE WAY", "STOP", "DO NOT ENTER", SIGN INSTALLATION.





SECTION A-A



"ONE WAY", "DO NOT ENTER" SIGN INSTALLATION

NOTES

MATERIALS

ALL SIGN MATERIALS SHALL BE IN ACCORDANCE WITH SUPPLEMENT SPECIFICATION 815.

ALL STRUCTURAL MATERIALS SHALL BE IN ACCORDANCE WITH SUPPLEMENT SPECIFICATION 816.

FOR SPECIFICATIONS FOR THE 2" & 1 3/4" SQUARE STEEL POST SEE GENERAL NOTES, SHEET NO. 395.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

SPECIAL "ONE WAY" SIGN SUPPORT DETAILS	SOW	DATE 2-7-66 4-18-67 MAY 23 1967

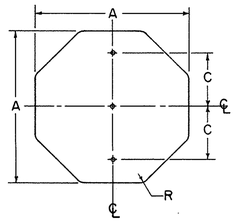
APPROVED _____ ENGINEER OF TRAFFIC

SPECIAL "ONE WAY" SIGN SUPPORT DETAILS

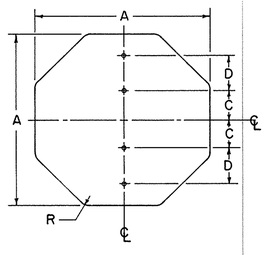
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

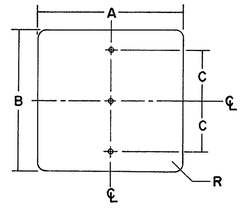
414A
656



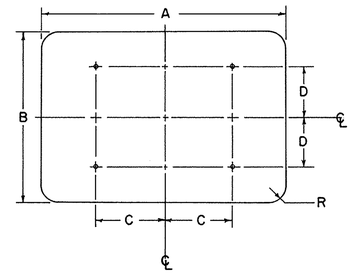
A	C	R	GAUGE
30	8	1 1/2	.080
36	8	1 1/2	.080



A	C	D	R	GAUGE
48	8	10	1 1/2	.100

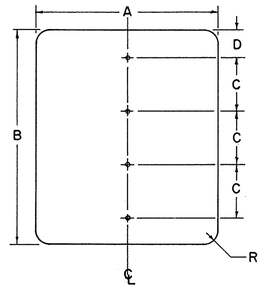


A	B	C	R	GAUGE
24	30	8	1 1/2	.063
24	48	15	1 1/2	.100
30	36	11	1 1/2	.080
30	42	12	1 1/2	.080
36	36	11	1 1/2	.080
36	42	15	1 1/2	.080
36	48	15	1 1/2	.080
48	24	10	3	.100
48	36	13	3	.100

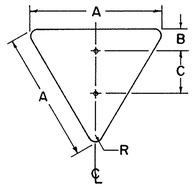


A	B	C	D	R	GAUGE
48	48	22	16	3	.100
48	60	22	22	3	.100

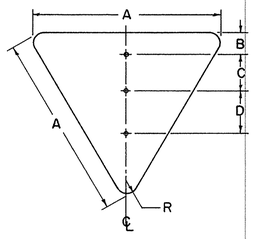
SPEED LIMIT SIGNS ON TWO SUPPORTS



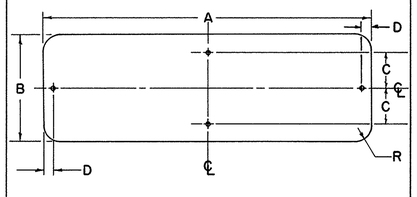
A	B	C	D	R	GAUGE
48	48	12	6	3	.100
48	60	15	7 1/2	3	.100



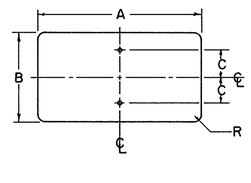
A	B	C	R	GAUGE
36	3	16	2 1/2	.080



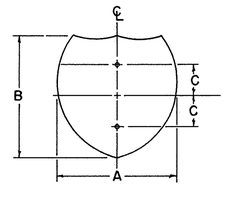
A	B	C	D	R	GAUGE
48	4	10	15	3	.100
60	5	10	15	4	.100



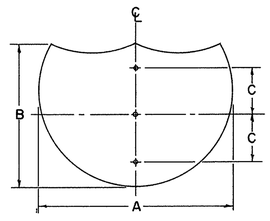
A	B	C	D	R	GAUGE
36	12	4	1	1 1/2	.080
72	12	—	16	1 1/2	.100
60	**12**	**—**	**13**	**1 1/2**	**.100**



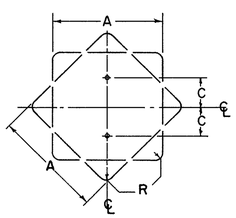
A	B	C	R	GAUGE
12	6	1 1/2	1 1/2	.063
20	15	6	1 1/2	.063
24	12	4 1/2	1 1/2	.063
24	18	7 1/2	1 1/2	.063
8	26	8	1	.063
36	18	7 1/2	1 1/2	.080



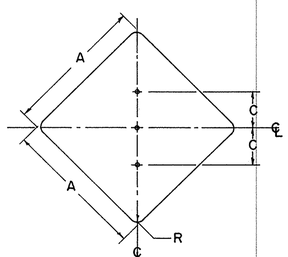
A	B	C	GAUGE
24	24	8	.063
30	24	8	.080



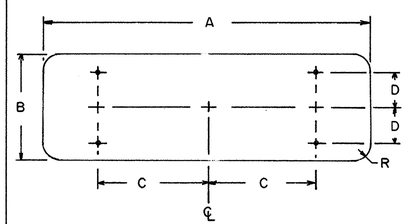
A	B	C	GAUGE
36	36	11	.080
48	36	11	.100



A	C	R	GAUGE
18	7 1/2	1 1/2	.063
24	8	1 1/2	.063
30	8	1 1/2	.080

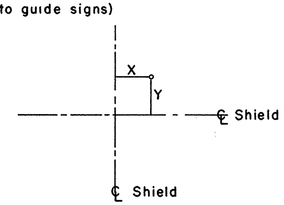


A	C	R	GAUGE
36	12	1 1/2	.080
48	14	3	.100



A	B	C	D	R	GAUGE
72	18	20	6	1 1/2	.100
72	24	20	8	1 1/2	.100
60	30	17	10	1 1/2	.100
96	18	27	6	1 1/2	.100

Location of holes on "Demountable Shields" (attached to guide signs)



SIZE	NO. HOLES	X	Y
(26) 24X24	4	7	7
30X24	4	8	8
(39) 36X36	4	10	10
		0	10
48X36	6	15	10

For notes on fastening see drawing for miscellaneous "Signing Items" sheet.

NOTES:

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.

MATERIAL

FLAT SIGN BLANKS SHALL BE FURNISHED IN ALUMINUM ALLOY 6061-T6, (ASTM-B209, GS11A-T6) WITH MILL FINISH.

BOLT HOLES

THE BOLT HOLES SHALL BE 3/8" IN DIAMETER, AND MAY BE DRILLED, BLANKED OR PUNCHED TO FINISHED SIZE.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

SIGN BLANK DETAILS

SBD

DATE
4-14-67
5-10-68
10-1-68
5-27-69
6-18-69
MAY 25 1971

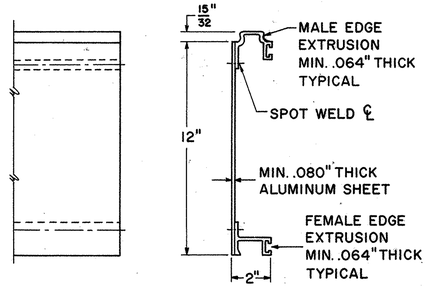
APPROVED_____
ENGINEER OF TRAFFIC

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

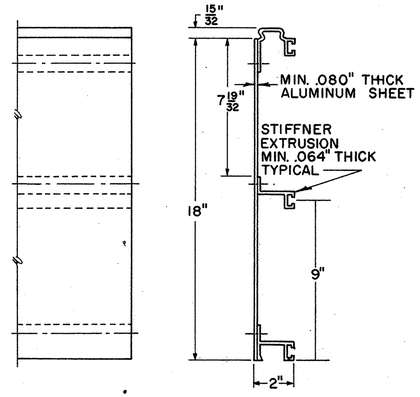
415/656

12" EXTRUSHEET PANEL



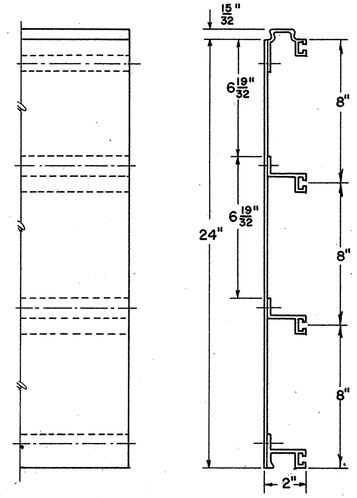
FRONT VIEW SIDE VIEW

18" EXTRUSHEET PANEL



FRONT VIEW SIDE VIEW

24" EXTRUSHEET PANEL



FRONT VIEW SIDE VIEW

NOTES:

EXTRUSHEET PANELS SHALL BE ALUMINUM; SPOT WELDING AND ALL MATERIALS SHALL CONFORM WITH SUPPLEMENTAL SPECIFICATION

COMBINATIONS OF 12", 18", AND 24" PANELS ARE USED TO ATTAIN REQUIRED SIGN HEIGHT.

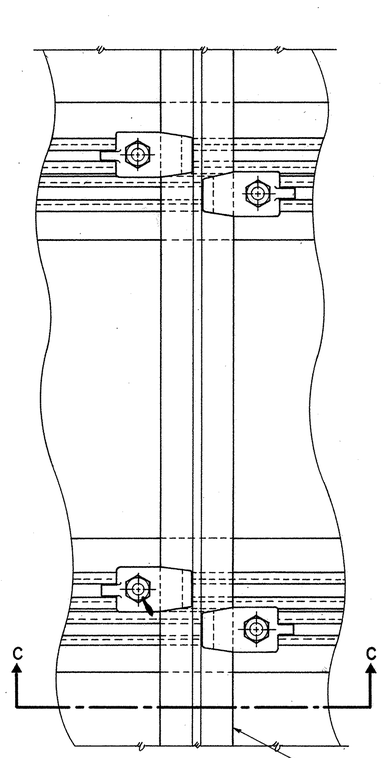
INDIVIDUAL PANELS SHALL BE THE SAME LENGTH AS THE HORIZONTAL LENGTH OF SIGN WITH NO SPLICES.

PANELS SHALL BE INTERLOCKED AND ERECTED WITH THE MALE EXTRUSION LOCATED AT THE TOP EDGE OF THE SIGN.

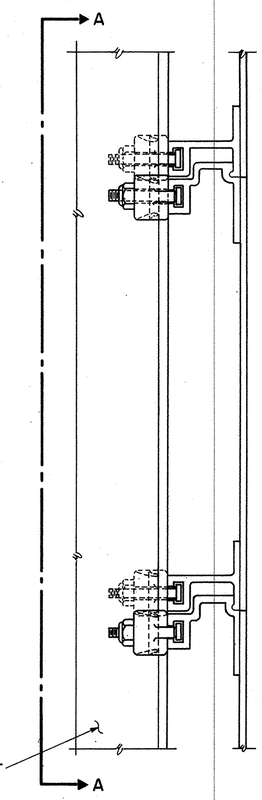
EXTRUSHEET PANELS SHALL BE FASTENED TO EACH VERTICAL SUPPORT MEMBER WITH MOUNTING CLIPS; ALTERNATELY AT EACH HORIZONTAL EXTRUSION; BOTH SIDES AT EACH JOINT, AND ON BOTH SIDES AT TOP AND BOTTOM EDGE OF SIGN.

THE PANELS SHALL BE DESIGNED TO WITHSTAND A WIND LOAD OF 35 POUNDS PER SQUARE FOOT, IN ACCORDANCE WITH THE A.A.S.H.O. SPECIFICATION FOR DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS.

THE MAXIMUM SIGN LENGTH FOR TWO SUPPORTS IS 19'-0".
THE MAXIMUM SIGN LENGTH FOR THREE SUPPORTS IS 29'-0".

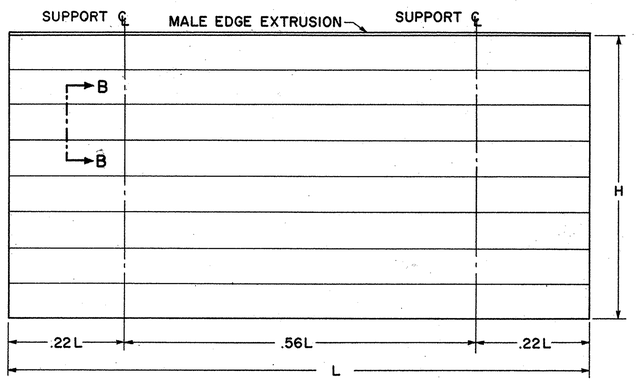


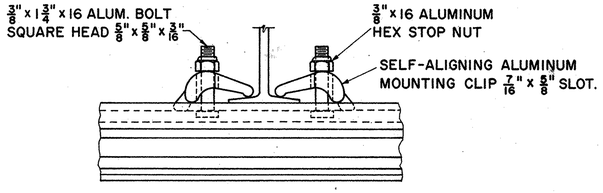
SECTION A-A



SECTION B-B

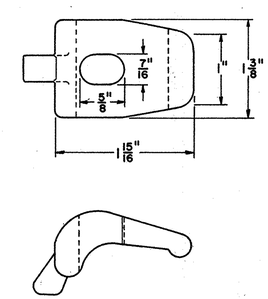
GENERAL ARRANGEMENT





SECTION C-C

CLIP DETAIL



SPOT WELDS

PANEL SIZE	MAXIMUM SPOT WELD SPACING	
	CENTER TO CENTER	BETWN ROWS
12 INCH	4 INCH	10 INCH
18 & 24 INCH	4 INCH	8 INCH

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

ALUMINUM EXTRUSHEET PANEL SIGN

ECD 1

DATE 9-25-63 5-19-64 10-21-65 MAY 25 1971

APPROVED Fred C. Tarbox
ENGINEER OF TRAFFIC

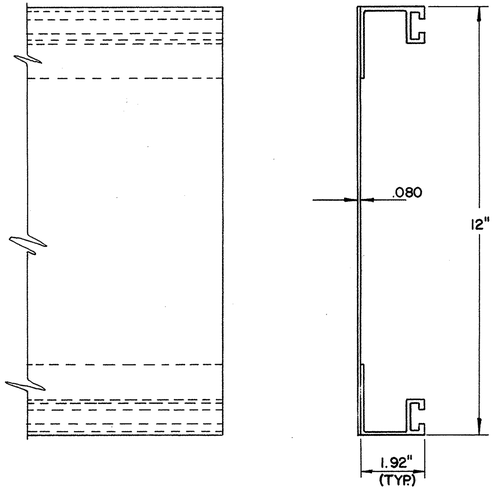
ALUMINUM EXTRUSHEET PANEL SIGN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

415A
656

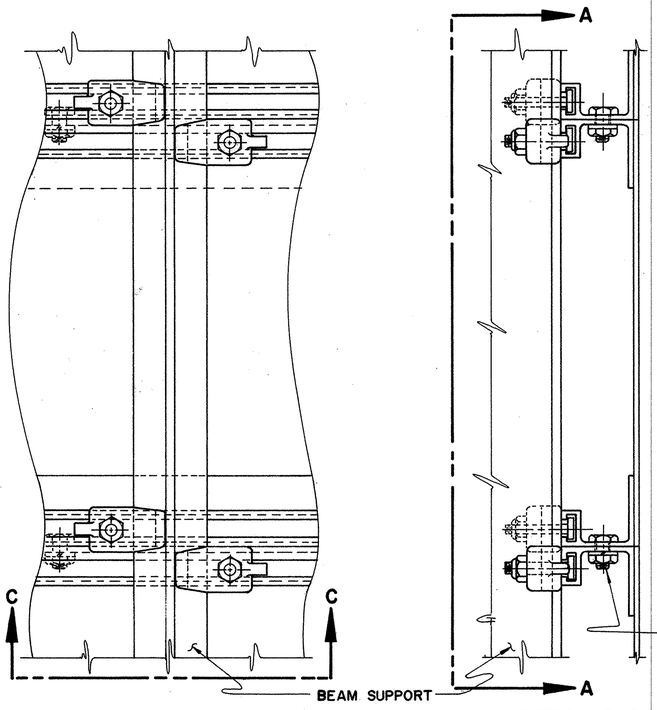
MAH-680-8.98

12" BOLTED-EXTRUSHEET PANEL



FRONT VIEW

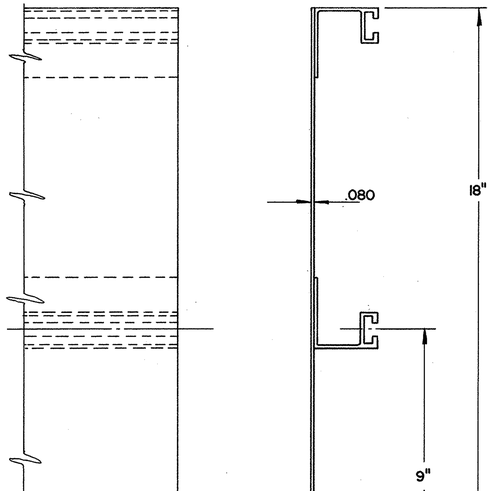
SIDE VIEW



SECTION A-A

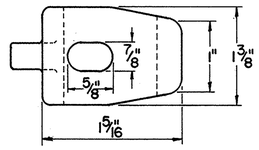
SECTION B-B

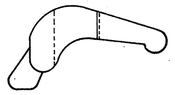
18" BOLTED-EXTRUSHEET PANEL



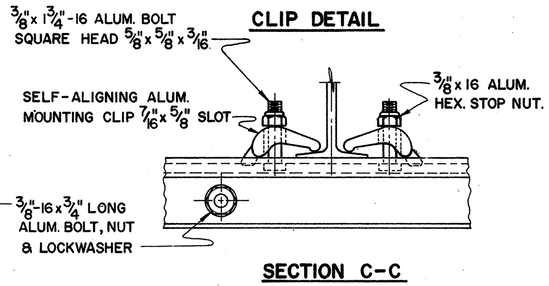
FRONT VIEW

SIDE VIEW



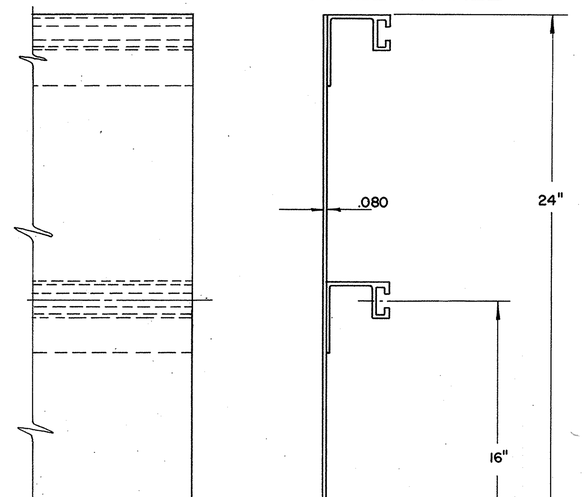


CLIP DETAIL



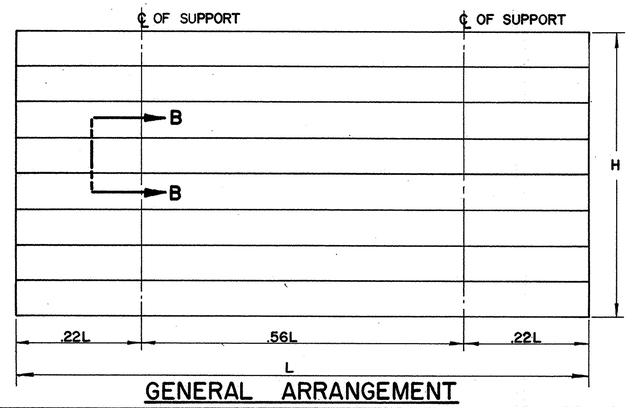
SECTION C-C

24" BOLTED-EXTRUSHEET PANEL



FRONT VIEW

SIDE VIEW



GENERAL ARRANGEMENT

NOTES

EXTRU-SHEET PANELS SHALL BE ALUMINUM; SPOT WELDING, MATERIALS AND HARDWARE SHALL CONFORM WITH SPECIFICATION NO. 815

COMBINATIONS OF 12", 18" AND 24" PANELS ARE TO BE USED TO ATTAIN REQUIRED SIGN HEIGHT.

INDIVIDUAL PANELS SHALL BE THE SAME LENGTH AS THE HORIZONTAL LENGTH OF SIGN, WITH NO SPLICES.

THE PANELS SHALL BE ERECTED HORIZONTALLY AND BOLTED ON 24" CENTERS.

THE PANELS SHALL BE FASTENED TO EACH VERTICAL SUPPORT MEMBER WITH MOUNTING CLIPS; ALTERNATELY AT EACH HORIZONTAL EXTRUSION; BOTH SIDES AT EACH JOINT, AND BOTH SIDES AT TOP AND BOTTOM EDGES OF SIGN.

THE PANELS SHALL BE DESIGNED IN ACCORDANCE WITH THE A.A.S.H.O SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, BASE ON A WIND LOAD OF 35#/SQ.FT.

THE MAXIMUM SIGN LENGTH FOR TWO SUPPORTS IS 19'-0". THE MAXIMUM SIGN LENGTH FOR THREE SUPPORTS IS 29'-0".

SPOT WELDS

PANEL SIZE	MAXIMUM SPOT WELD SPACING	
	CENTER TO CENTER	BETWN ROWS
12 INCH	4 INCH	10 INCH
18 & 24 INCH	4 INCH	8 INCH

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OHIO DEPARTMENT OF HIGHWAYS

ALUMINUM BOLTED EXTRUSHEET PANEL SIGN	ECD 2	DATE 10-14-65 MAY 25 1971

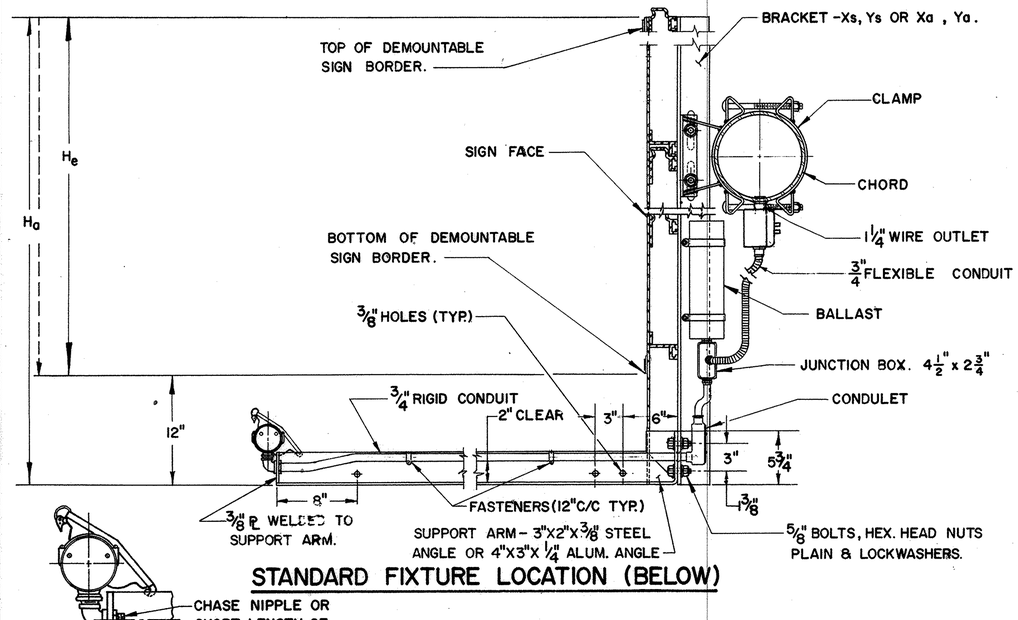
APPROVED Fred C. Talbot
ENGINEER OF TRAFFIC

ALUMINUM BOLTED-EXTRUSHEET PANEL SIGN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

415B
656



STANDARD FIXTURE LOCATION (BELOW)

FIXTURE CONNECTION WHERE WIRING CONDUIT IS NOT NEEDED.

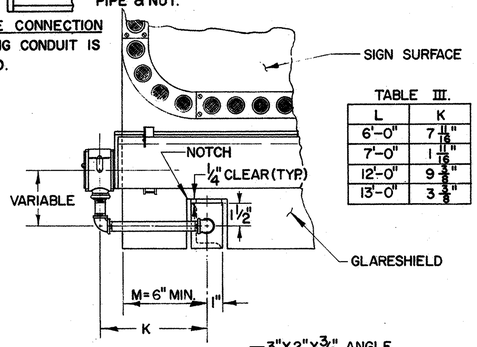
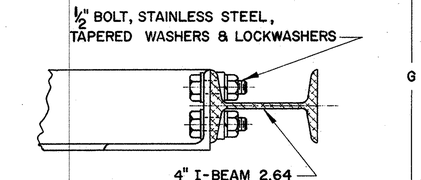
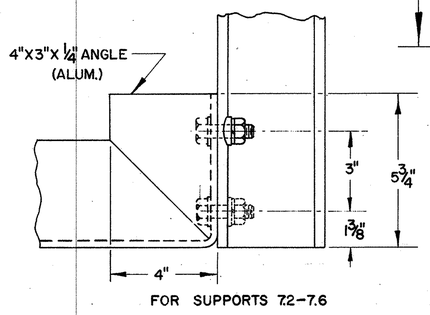


TABLE III.	
L	K
6'-0"	7 11/16"
7'-0"	1 11/16"
12'-0"	9 3/8"
13'-0"	3 3/8"

ALTERNATE FIXTURE CONNECTIONS FOR SIGN 6', 7', 12' & 13' IN LENGTH.

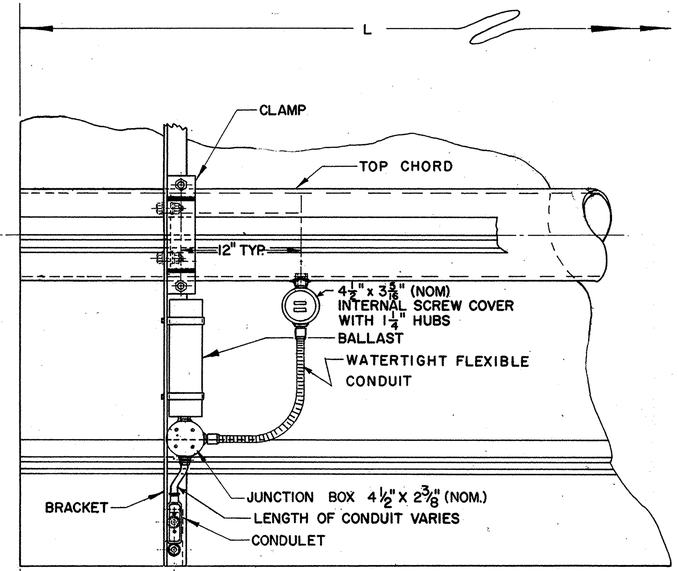
DETAIL A.



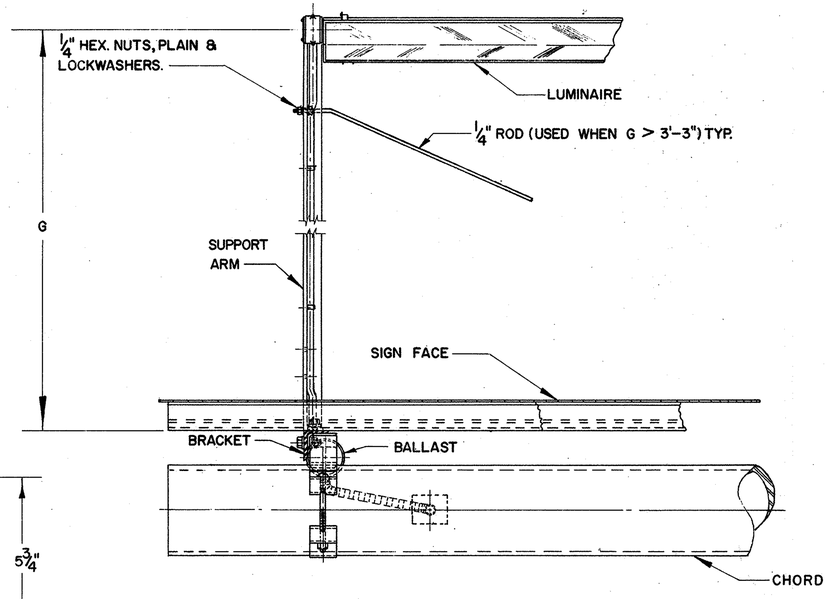


FOR SUPPORTS 7.2-7.6

DETAIL B.



REAR VIEW



TOP VIEW

FABRICATION — ALL STRUCTURAL COMPONENTS SHOWN ON THIS SHEET SHALL CONFORM TO SUPPLEMENT SPECIFICATIONS 816.

MATERIALS — THE MATERIALS USED IN THE COMPONENTS SHOWN ON THIS SHEET SHALL BE IN CONFORMANCE WITH THE MATERIALS USED IN THE SIGN SUPPORT

TABLE I.

"L" SIGN LENGTH		NUMBER OF FIXTURES		"M" EDGE DISTANCE				NO. BALLAST
				A		B		
A	B	75⅜"	99⅜"	LT.	RT.	LT.	RT.	
6'-0"	7'-0"	1		6"	6"	6"	6"	1
8'-0"	9'-0"	1		10 3/16"	10¼"	16 3/16"	16¼"	1
10'-0"	11'-0"		1	10 3/16"	10¼"	16 3/16"	16¼"	1
12'-0"	13'-0"	2		6"	6	6	6	1
14'-0"	15'-0"	2		8 5/16"	8 5/16"	14 5/16"	14 5/16"	1
16'-0"	17'-0"	1	1	8 5/16"	8 5/16"	14 5/16"	14 5/16"	1
18'-0"	19'-0"		2	8 5/16"	8 5/16"	14 5/16"	14 5/16"	1
20'-0"	21'-0"	3		7"	6⅞"	13	12⅞"	2
22'-0"	23'-0"	2	1	7"	6⅞"	13	12⅞"	2
24'-0"	25'-0"	1	2	7"	6⅞"	13	12⅞"	2
26'-0"	27'-0"		3	7"	6⅞"	13	12⅞"	2

Sn= Nominal Fixture Length, 72" & 96" respectively.
Sa= Actual Fixture Length, for mounting purposes, 75⅜" and 99⅜" respectively. (Slight variation for different manufacturers.)
M= Distance from edge of sign to ℄ of notch, min. 6". When the length of the sign minus 1'-0" is less than the sum of the actual fixture lengths, an offset "K" is used. For additional details see detail A and table III.

TABLE II

MAX. BRACKET SPACING FOR EXTERNALLY ILLUMINATED SIGNS

ACTUAL SIGN HEIGHT "Ha"	SUPPORT TYPES			
	9.12, 11.08, 13.2, 7.2	9.24, 10.48, 12.24, 14.5, 15.8, 7.2 to 7.6		
	SINGLE TUBE DOUBLE TUBE LESS 36" C/C	DOUBLE TUBE		
		C/C 36"-42"	C/C 48"-54"	C/C 60"-72"
	MAXIMUM BRACKET SPACING			
to 5'-0"	6'-4" with X 8'-4" with Y	8'-4" with X	8'-4" with X	8'-4" with X
5'-6" to 8'-0"	6'-4" with Y	4'-2" with X 6'-4" with Y	6'-4" with X 8'-4" with Y	8'-4" with X
8'-6" to 10'-0"	3'-2" with X 4'-2" with Y	6'-4" with Y	6'-4" with Y	8'-4" with Y
10'-6" to 12'-0"	———	4'-2" with Y	6'-4" with Y	6'-4" with Y
12'-6" to 14'-0"	———	3'-2" with Y	3'-2" with Y	4'-2" with Y

Ha= ACTUAL SIGN HEIGHT
He= EFFECTIVE SIGN HEIGHT
BRACKET SIZE: Xs = 3½" X 2½" X 5/16" — L @ 6.1 LB. STEEL; Ys = 4" X 3 1/16" X ¼" — Z @ 8.2 LB. STEEL } 9.12, 10.48, 11.08, 12.24, 14.5 & 15.8
Xa = 3" X 2 1/16" X ¼" — Z @ 2.33 LB. ALUM.; Ya = 4" X 2 3/32" X 3/16" — I @ 2.64 LB. ALUM. } 7.2 Thru 7.6

WHEN MAX. ALLOWABLE SPACING IS LESS THAN ACTUAL FIXTURE LENGTHS, Sa, ADDITIONAL STANDARD BRACKETS MUST BE FURNISHED, EQUAL IN HEIGHT TO "Ha".

SUPPORTS 7.2 THROUGH 7.6 SHALL HAVE AN ALUMINUM FIXTURE ARM, 4"X3"X¼" ANGLE. SEE DETAIL B. BOLTS AND ACCESSORIES SHALL BE STAINLESS STEEL.

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OHIO DEPARTMENT OF HIGHWAYS

STRUCTURAL DETAILS FOR EXTERNALLY ILLUMINATED SIGNS

EI-1

DATE
10-16-63
5-6-64
10-29-64
6-21-66
3-29-67
MAY 25, 1971

APPROVED Richard C. Talbot
ENGINEER OF TRAFFIC

STRUCTURAL DETAILS FOR EXTERNALLY ILLUMINATED SIGNS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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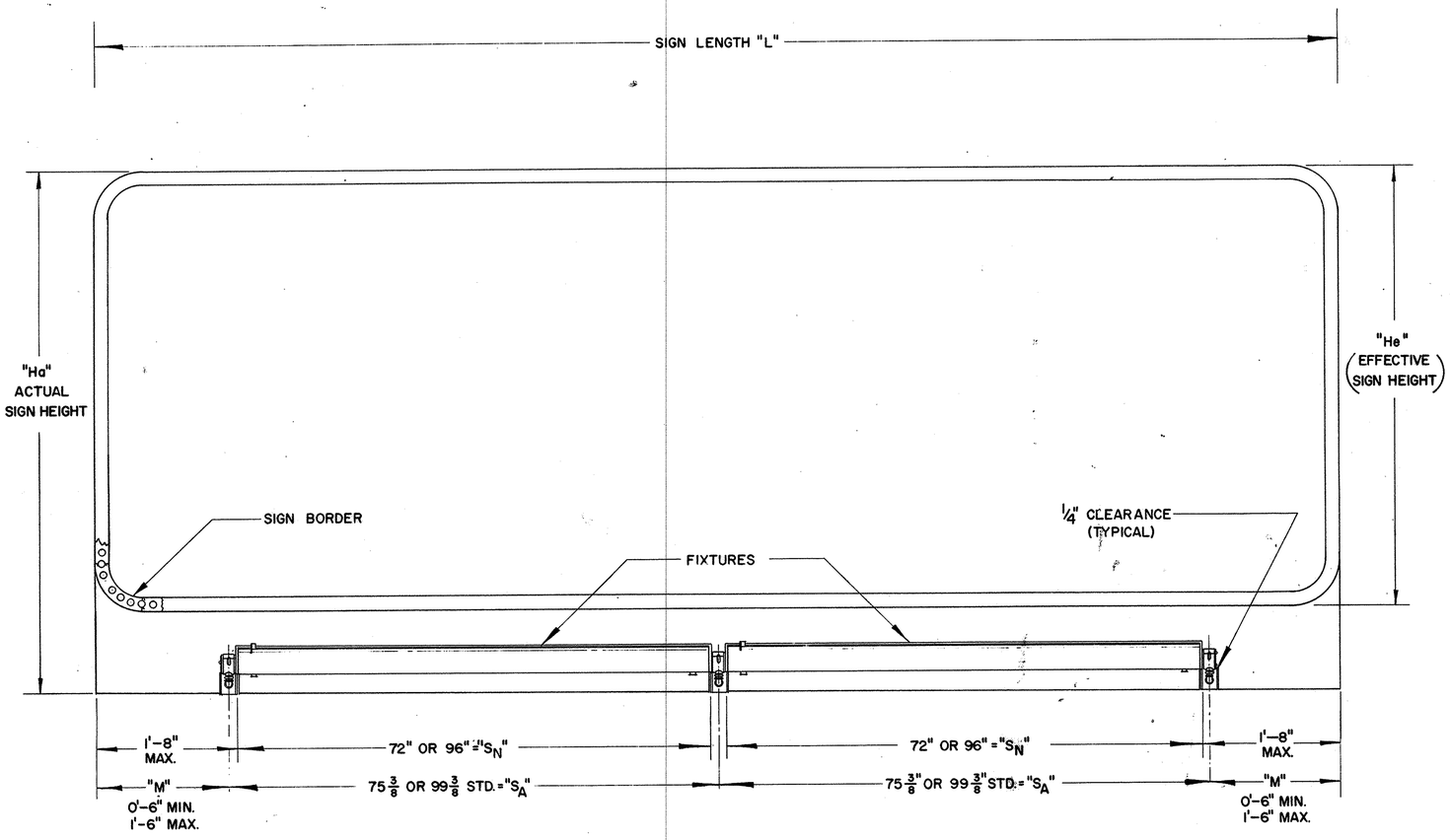
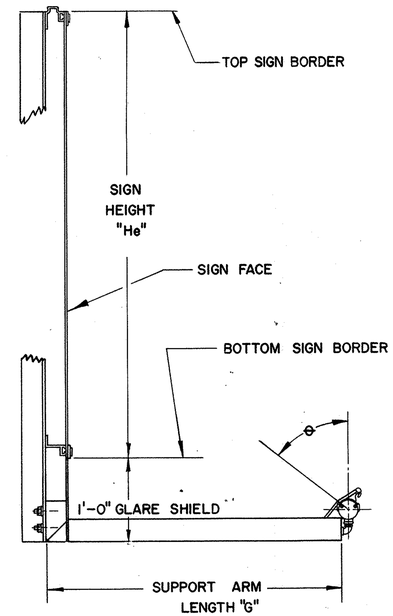
MAH-680-6.98





SIGN LIGHTING NOTES

SIGN ILLUMINATION

SIGN ILLUMINATION SHALL BE BY ATTACHED FLUORESCENT FIXTURES AS SHOWN ON ILLUMINATED SIGN DETAIL SHEETS.

LAMPS

LAMPS SHALL BE TYPE F72 OR F96-T12/CW/HO AS MANUFACTURED BY WESTINGHOUSE, GENERAL ELECTRIC OR APPROVED EQUAL FOR SIGNS TO A MAXIMUM HEIGHT OF 6'-6". LAMP TYPE SHALL BE F72 OR F96-T12/CW/SHO AS MANUFACTURED BY WESTINGHOUSE, F72 OR F96-PG17/CW AS MANUFACTURED BY GENERAL ELECTRIC, OR APPROVED EQUAL FOR SIGNS THAT ARE 7'-0" OR GREATER IN HEIGHT.

LAMP FIXTURES

LIGHTING FIXTURES SHALL BE CONSTRUCTED OF CORROSION RESISTANT MATERIALS OR WITH HIGH QUALITY CORROSION RESISTANT FINISH. ALL FIXTURES SHALL BE SPECIFICALLY DESIGNED FOR OUTDOOR SIGN LIGHTING SERVICE. MAJOR COMPONENTS SHALL INCLUDE WEATHERPROOF CAST ALUMINUM MOUNTING HUBS DESIGNED TO SECURELY LOCK THE FIXTURES AT ANY ANGLE THROUGH 360 DEGREES. INDICATORS IN 10 DEGREE INCREMENTS SHALL BE STAMPED OR CAST INTO THE HUB TO FACILITATE PROPER AIMING OF THE FIXTURE. FINAL ADJUSTMENT OF FIXTURE SHALL BE DONE AT NIGHT UNDER THE PROJECT ENGINEER'S DIRECTION.

THE BODY DESIGN OF THE FIXTURE SHALL PROVIDE AN ASYMMETRIC SPECULAR ALZAK REFLECTOR TO GIVE A HIGH LEVEL OF UNIFORM ILLUMINATION AND SHALL PROVIDE A WIREWAY FROM END TO END. WHEN ADJACENT FIXTURES ARE WIRED TOGETHER THROUGH THE WIREWAY, WIRE BETWEEN FIXTURES SHALL BE ENTIRELY ENCLOSED.

EXTERIOR FINISH OF THE FIXTURE BODY SHALL BE INTERSTATE GREEN COLOR, HEAT RESISTANT BAKED ENAMEL AS # 8950 UNIVERSAL PAINT AND VARNISH INC., OR MIDWESTERN COLOR WORKS, OR APPROVED EQUAL, EXCEPT THAT THE 48" FIXTURE SHALL BE WHITE, BUT MEET ALL OTHER SPECIFICATIONS FOR THE INTERSTATE GREEN ENAMEL. REFLECTOR, LAMP AND SOCKETS SHALL BE PROTECTED BY A HINGED DOOR OF CLEAR ACRYLIC PLASTIC WITH ALUMINUM OR STAINLES STEEL FRAME AND NEOPRENE GASKETING.

BALLASTS

BALLASTS FOR FIXTURES SHALL BE WEATHER-PROOF OUTDOOR TYPE FOR A 120 VOLT 60 CYCLE SYSTEM AND SHALL PROVIDE LAMP STARTING AT AN AMBIENT TEMPERATURE OF -20°F. BALLASTS SHALL BE MOUNTED ON SIGN BRACKET ONLY. WIRING SHALL BE ACCOMPLISHED IN SUCH A MANNER THAT THE SIGN MAY BE REMOVED WITHOUT DISTURBING THE ELECTRICAL WIRING.

EFFECTIVE SIGN HEIGHT "H"	SUPPORT ARM LENGTH "G"	APPROX. AIMING ANGLE ⊖
3'-0" to 5'-0"	2'-9"	25°
5'-0" to 6'-6"	3'-3"	25°
7'-0" to 10'-0"	4'-3"	17°
10'-6" to 13'-0"	5'-9"	23°

"L" SIGN LENGTH	NO. OF FIXTURES			He=3'-0" to 6'-6" LAMP=T12/cw/ho			He=7'-0" to 13'-0" LAMP=T12/cw/sho		
	48	72	96	BALLAST NO.	BALLAST TYPE	WATTAGE PER SIGN	BALLAST NO.	BALLAST TYPE	WATTAGE PER SIGN
6'-0" to 7'-0"		1		1	A	190	1	C	250
8'-0" to 9'-0"		1		1	A	190	1	C	250
10'-0" to 11'-0"			1	1	A	190	1	C	250
12'-0" to 13'-0"		2		1	B	250	1	D	425
14'-0" to 15'-0"		2		1	B	250	1	D	425
16'-0" to 17'-0"		1	1	1	B	250	1	D	425
18'-0" to 19'-0"			2	1	B	250	1	D	425
20'-0" to 21'-0"		3		2	A&B	440	2	C&D	675
22'-0" to 23'-0"		2	1	2	A&B	440	2	C&D	675
24'-0" to 25'-0"		1	2	2	A&B	440	2	C&D	675
26'-0" to 27'-0"			3	2	A&B	440	2	C&D	675
4'-0"	1			1	A	190			

BALLASTS

TYPE	MANUFACTURERS G.E.	MANUFACTURERS JEFFERSON	WATTAGE
A	GG 3583	257-321	190
B	GG 3535	257-331	250
C	GG 3585	257-361	250
D	GG 3588	257-371	425

BALLASTS SHALL BE GENERAL ELECTRIC, JEFFERSON AS SPECIFIED ABOVE OR EQUAL.

TRANSFORMERS

TYPE	MANUFACTURERS G.E.	MANUFACTURERS JEFFERSON	OUTPUT K.V.A.	SWITCH TRANSFORMER ENCLOSURE
I	9T51Y7	220-241	.25	Y
II	9T51Y8	220-251	.50	Y
III	9T51Y9	220-261	.75	Y
IV	9T51Y10	220-071-100	1.00	Z
V	9T51Y11	220-081-100	1.50	Z
VI	9T51Y12	220-091-100	2.00	Z
VII	9T51Y13	221-102	3.00	Z

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OHIO DEPARTMENT OF HIGHWAYS

ELECTRICAL DETAILS FOR EXTERNALLY ILLUMINATED SIGNS

EI-2

DATE
10-31-63
5-6-64
10-29-64
23-29-67
1-3-68
MAY. 25 197

APPROVED Fred C Yarbo
ENGINEER OF TRAFFIC

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

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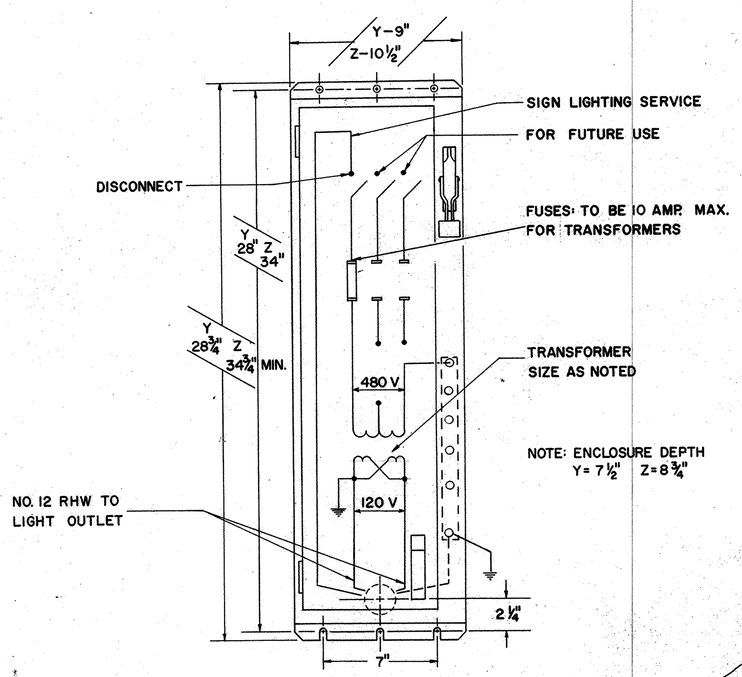
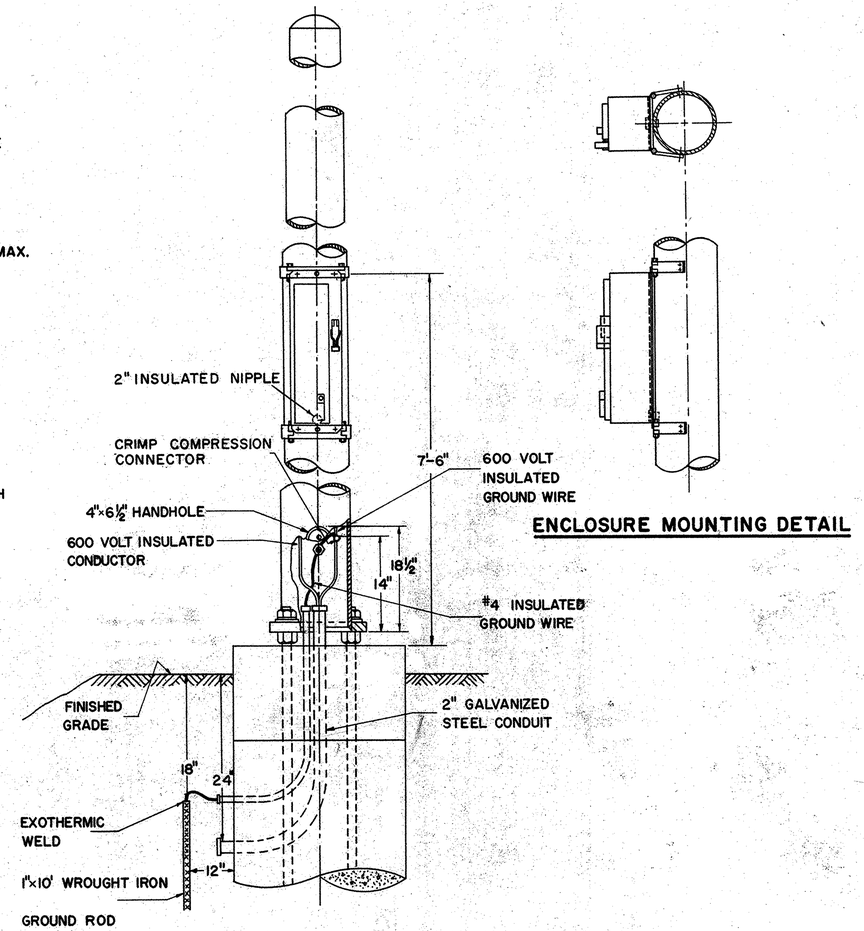


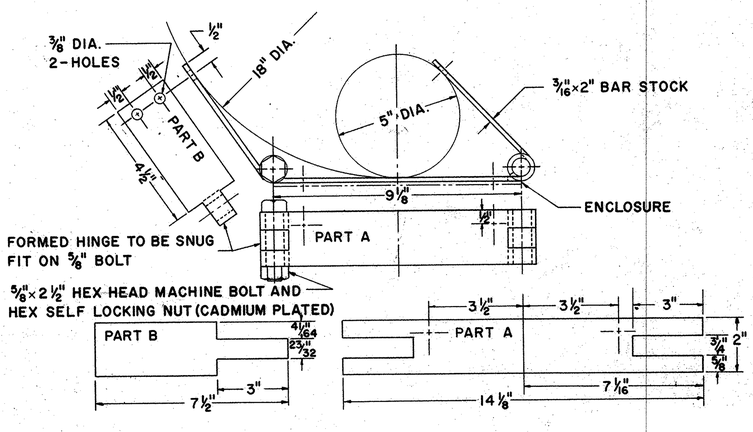
TYPICAL ENCLOSURE DETAIL

480 VOLT SIGN LIGHTING SERVICE

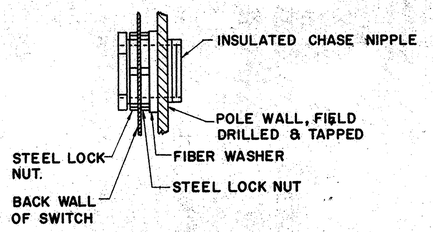


SIGN SUPPORT DETAIL FOR ILLUMINATED SIGNS

ENCLOSURE MOUNTING DETAIL



ENCLOSURE MOUNTING BRACKET



INSULATED CHASE NIPPLE ASSEMBLY

AS MANUFACTURED BY THOMAS BETTS, APPELTON, STEEL CITY OR EQUAL

NOTES

GENERAL

DETAILS OF THIS SHEET SHALL APPLY TO EACH OVERHEAD SIGN STRUCTURE TO SUPPORT EXTERNALLY ILLUMINATED SIGNS.

SERVICE

ELECTRIC SERVICE SHALL ENTER THROUGH A 2" GALVANIZED RIGID STEEL CONDUIT INSTALLED IN STRUCTURE FOUNDATION AS PER DETAIL. SIGN SERVICE OR CIRCUITRY SHALL BE CONTROLLED AS REQUIRED BY THE SYSTEM DESIGN AT THE PRIMARY SOURCE.

SERVICE CONDUCTORS SHALL BE THE SIZE AND TYPE AS SPECIFIED.

COMBINATION SWITCH AND TRANSFORMER

(TYPE Y OR Z ENCLOSURE REQUIRED AS PER SCHEDULE ON THIS SHEET)

THIS COMBINATION SHALL BE A 30 OR 60 AMPERE 600 VOLT SWITCH WITH A .25 TO 3.0 KVA TRANSFORMER. THE COMBINATION AND ENCLOSURE SHALL BE AS SQUARE D CLASS 9421, COLUMBUS ELECTRIC WORKS CLASS 101, PANALS INCORPORATED–CLASS 9400, OR APPROVED EQUAL.

TRANSFORMER

THE TRANSFORMER SHALL BE DRY TYPE SINGLE PHASE 240/480 VOLT PRIMARY 120/240 VOLT SECONDARY, THE TYPE AND CAPACITY AS SPECIFIED IN DETAILED SCHEDULE ON THIS SHEET.

ENCLOSURE

THE ENCLOSURE SHALL BE NEMA #4 WATER TIGHT .063 GAGE STAINLESS STEEL ASTA 302–303. A DISCONNECT HANDLE SHALL BE FLANGE MOUNTED AND CAPABLE OF BEING LOCKED IN EITHER POSITION. THE ENCLOSURE SHALL BE EQUIPPED WITH A DOOR LOCKING MECHANISM WITH A DEFEATER THAT NECESSITATES TWO HANDS TO OPERATE MECHANISM WITH THE SWITCH IN OFF POSITION. SPACE FOR A 2" INSULATED CHASE NIPPLE SHALL BE PROVIDED APPROXIMATELY 2 ¼" ABOVE THE CENTER LINE OF THE LOWER MOUNTING SLOT. THIS ENCLOSURE AND STRUCTURE SHALL BE FIELD DRILLED AND TAPPED FOR THE REQUIRED NIPPLE AS SHOWN ON THE DETAIL ON THIS SHEET.

THIS ENCLOSURE SHALL BE FLANGE MOUNTED ON BRACKETS WITH 5/16–18×¾" HEX HEAD CADMIUM PLATED MACHINE BOLTS. ENCLOSURES SHALL BE TYPE Y OR Z AS SPECIFIED AND DIMENSIONED ON THIS SHEET.

ENCLOSURE MOUNTING BRACKET

THE ENCLOSURE MOUNTING BRACKET SHALL BE FABRICATED THEN GALVANIZED BEFORE ASSEMBLY. THE BRACKET SHALL BE FIELD MOUNTED WITH 5/16" HEX HEAD SELF TAPPING CADMIUM PLATED SCREWS. THE SIGN SUPPORT SHALL BE FIELD DRILLED, AS PER DETAIL.

WIRE AND CABLE

ALL WIRE AND CABLE UP TO AND INCLUDING #4 SHALL COMPLY WITH FAA TYPE A SPECIFICATIONS, #2 OR LARGER WIRE OR CABLE SHALL BE G.E. 58006 OR ANACONDA AP–10711, OR EQUAL. ALL WIRE AND CABLE SHALL BE 600 VOLT.

GROUNDING

EACH SIGN SUPPORT OR STRUCTURE SHALL BE GROUNDED WITH A #4 RUBBER INSULATION AND NEOPRENE JACKETED CONDUCTOR. THE GROUNDING CONDUCTOR SHALL BE CONNECTED TO THE SWITCH THEN TO THE COMPRESSION CONNECTOR IN THE SIGN SUPPORT THEN TO A 1"×10' SOLID WROUGHT IRON GROUND ROD. GROUND CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO GROUND ROD AND THEN TAPED WITH PLASTIC ELECTRICAL TAPE AT EACH EXPOSED PORTION OF CONDUCTOR. THE WELDED CONNECTION AND TAPED PORTION SHALL BE PAINTED 2 COATS OF INSULATING ENAMEL.

TRANSFORMERS

TYPE	MANUFACTURERS G.E.	MANUFACTURERS JEFFERSON	OUTPUT K.V.A.	SWITCH TRANSFORMER ENCLOSURE
I	9T51Y7	220–241	.25	Y
II	9T51Y8	220–251	.50	Y
III	9T51Y9	220–261	.75	Y
IV	9T51Y10	220–071–100	1.00	Z
V	9T51Y11	220–081–100	1.50	Z
VI	9T51Y12	220–091–100	2.00	Z
VII	9T51Y13	221–102	3.00	Z

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

ELECTRICAL SIGN SERVICE DETAILS 480 VOLT SYSTEM

ES-3A

DATE 6-18-64 9-15-66 MAY 25 1971

APPROVED

ENGINEER OF TRAFFIC

TRAFFIC SIGNAL SPECIFICATIONS

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

MAH. 680 – 6.98

417
656

SPECIFICATIONS

THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 713 OF THE STATE OF OHIO DEPARTMENT OF HIGHWAYS CONSTRUCTION AND MATERIAL SPECIFICATIONS DATED JANUARY 1, 1971, AND SUPPLEMENTAL SPECIFICATION 816. REFERENCE SHALL BE MADE TO STANDARD CONSTRUCTION DRAWINGS HE-1, and HE-3.

IN LIEU OF PERTINENT DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS, THE TOPS OF SIGNAL SUPPORT AND CONTROLLER SUPPORT FOUNDATIONS AND OF PULL BOXES SHALL NOT EXCEED 3 INCHES ABOVE THE SURROUNDING GROUND ELEVATION AT THE HIGH POINT OF THE SURROUNDING GROUND. WHERE SIGNAL SUPPORT AND CONTROLLER SUPPORT FOUNDATIONS AND PULL BOXES ARE INSTALLED IN SIDEWALK AREAS THE TOPS OF THE FOUNDATIONS AND PULL BOXES SHALL BE INSTALLED FLUSH WITH THE SURFACE OF THE SIDEWALK.

SCOPE OF WORK

THE CONTRACTOR SHALL INSTALL PRETIMED TRAFFIC SIGNALS AT THE FOLLOWING INTERSECTIONS:

MIDLOTHIAN BLVD. AND SHIRLEY RD.
MIDLOTHIAN BLVD. AND LEMOYNE AVE.
SOUTH AVE. AND RAMP A
SOUTH AVE. AND RAMP D

THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY SO THAT THE TRAFFIC SIGNALS WILL BE COMPLETE, ACCEPTED AND READY FOR SERVICE.

GENERAL

ANY ITEMS OF LABOR, MATERIALS, AND EQUIPMENT REQUIRED, BUT NOT SHOWN AS A SEPARATE PAY ITEM IN THE PROPOSAL SHALL BE FURNISHED AND INSTALLED AS INCIDENTAL TO THE CONTRACT.

THE REFERENCE TO ANY NAME, MAKE AND MODEL NUMBER IS INTENDED TO BE DESCRIPTIVE AND NOT RESTRICTIVE AND IS TO INDICATE TO BIDDERS THE DESIGN THAT WILL BE ACCEPTABLE. BIDS ON OTHER NAMES, MAKES AND NUMBERS WILL BE CONSIDERED. BEFORE ANY EQUIPMENT IS ORDERED OR INSTALLATION OF A TRAFFIC SIGNAL SYSTEM IF BEGUN, A COMPLETE SCHEDULE OF MATERIALS AND EQUIPMENT SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER. THE SCHEDULE SHALL INCLUDE EIGHT (8) SETS OF CATALOG CUTS, DIAGRAMS, DRAWINGS, BROCHURES, DATA SHEETS, MANUFACTURER'S CERTIFICATES OF COMPLIANCE OR OTHER DESCRIPTIVE DATA AS MAY BE REQUIRED AND SHALL INCLUDE COMPLETE DESCRIPTIVE DATA ON THE SIGNALS, WIRING DIAGRAMS, COMPLETE CABLE DESCRIPTIONS, TEST DATA, MAKE AND CAPACITY OF ALL APPARATUS. THE CONTRACTOR SHALL IDENTIFY THE ITEM ON EACH SHEET AND SHALL MARK ALL PRINTS "RECORD DRAWINGS." ONE COPY WILL BE RETURNED MARKED "APPROVED," IF FOUND SATISFACTORY. IN THE EVENT ANY ITEMS OF MATERIAL OR EQUIPMENT CONTAINED IN THE SCHEDULE FAIL TO COMPLY WITH THE SPECIFICATIONS REQUIREMENTS, SUCH ITEMS WILL BE REJECTED.

ALL MATERIALS AND EQUIPMENT FURNISHED UNDER THESE SPECIFICATIONS SHALL BE NEW, FIRST QUALITY, OF THE LATEST DESIGN, AND FREE FROM DEFECTS AND POOR WORKMANSHIP.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

OHIO EDISON COMPANY
25 EAST BOARDMAN ST.
YOUNGSTOWN, OHIO 44503

INSTALLATION - GENERAL

A. THE CONTRACTOR SHALL CONFORM TO THE NATIONAL ELECTRIC CODE AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS IN PERFORMING CONTRACT WORK. HE SHALL OBSERVE THE REGULATIONS OF UTILITIES IN THE AREA OF THEIR EQUIPMENT AND EXERCISE DUE CAUTION IN CONSTRUCTION WORK NEAR THEIR FACILITIES.

B. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL UTILITIES HAVING INSTALLATIONS IN THE AREA TO SECURE AND AFFIRM DATA ON UTILITY LOCATIONS. THESE AGENCIES AND UTILITIES SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO ANY EXCAVATION IN AREAS CONTAINING THEIR INSTALLATIONS.

C. THE CONTRACTOR SHALL INSTALL THE POWER TO THE CONTROLLER CABINET AND PROVIDE 120 VOLT SERVICE AS REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING AND PROVIDING THE POWER THROUGH THE OHIO EDISON COMPANY. THE COST OF OBTAINING THE POWER SHALL BE INCLUDED IN THE BID PRICE FOR "POWER CABLE WITH ACCESSORIES".

D. TRAFFIC SIGNAL CABLE SHALL ENTER THE CONTROLLER CABINETS AND RUN CONTINUOUSLY FROM SIGNAL HEAD TO SIGNAL HEAD WITHOUT SPLICES. NO SPLICES SHALL BE PERMITTED AT ANY LOCATION IN THE CABLE. PRESSURE TYPE CONNECTORS WILL BE USED TO MAKE CONNECTIONS INSIDE THE CONTROLLER CABINET. CABLE ENTRANCES SHALL BE PROTECTED BY A SUITABLE WEATHER HEAD AND DRIP LOOP WHEN ENTERING TRAFFIC FIXTURES.

E. ALL WIRES IN THE CONTROLLER CABINETS SHALL BE LABELED, NEATLY LASHED AND FASTENED TO THE CABINET WITH CLAMPS. THIS SHALL INCLUDE WIRES TO THE SIGNAL HEADS, INTERCONNECT EQUIPMENT AND ALL MISCELLANEOUS EQUIPMENT.

F. ALL SPLICES SHALL BE OF THE WEATHER-PROOF POURED TYPE.

EQUIPMENT TESTING

THE CONTRACTOR SHALL FURNISH ALL PERSONNEL, EQUIPMENT AND APPLIANCES REQUIRED TO SUCCESSFULLY FIELD TEST THE COMPLETED INSTALLATIONS. THE CONTRACTOR SHALL TEST AND DEMONSTRATE TO THE SATISFACTION OF THE ENGINEER, OR HIS AUTHORIZED REPRESENTATIVE THAT THE CIRCUITS ARE PROPERLY CONNECTED, CONTINUOUS AND FREE FROM SHORT CIRCUITS, CROSSES AND UNSPECIFIED GROUNDS AND THAT THEY ARE CONNECTED IN ACCORDANCE WITH THE WIRING INSTRUCTIONS AND THAT EACH CIRCUIT IS OPERABLE CORRECTLY AND INDEPENDENTLY FROM ANY OTHER CIRCUIT. THE CONTRACTOR SHALL TEST EACH UNDERGROUND CIRCUIT AND SPARE WIRES TERMINATING AT THE TRAFFIC CONTROLLER CABINET FOR RESISTANCE TO GROUND. THIS RESISTANCE TO GROUND SHALL BE NOT LESS THAN TEN (10) MEGOHMS. THE CONTRACTOR SHALL FURNISH A COMPLETE REPORT OF ALL MEGOHM RATINGS OF EACH CIRCUIT AND SPARE CONDUCTORS AND CABLES APPEARING AT THE CONTROLLER BASE. THE GROUND ROD AT THE TRAFFIC CONTROLLER SHALL HAVE A RESISTANCE OF NOT MORE THAN 15 OHMS TO GROUND. THE CONTRACTOR SHALL RECORD EACH FAULT AND THE METHOD AND DATE OF CORRECTION.

AFTER ALL CIRCUITS AND SPARE CONDUCTORS HAVE BEEN TESTED, THE CONTRACTOR WILL INSTALL THE TRAFFIC CONTROLLER AND CONNECT THE FIELD WIRING TO THE TERMINAL CONTACTS OF THE TRAFFIC CONTROLLER. THE COMPLETED INSTALLATION SHALL OPERATE CONTINUOUSLY FOR A PERIOD OF ONE WEEK WITHOUT INTERRUPTION OR FAILURE ATTRIBUTED TO POOR WORKMANSHIP OR DEFECTIVE MATERIAL PRIOR TO ACCEPTANCE AND AFTER ANY DEFECTIVE PARTS HAVE BEEN REPLACED AND ALL FAULTS CORRECTED, DURING THE TESTING, THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR MAINTAINING ALL TRAFFIC CONTROL EQUIPMENT.

THE COST OF CONDUCTING TESTS BY THE CONTRACTOR SHALL BE INCLUDED IN THE BID PRICE FOR THE ITEM TESTED. THE COST OF ALL ELECTRICAL ENERGY REQUIRED TO PERFORM THE TESTS SHALL BE BORN BY THE CONTRACTOR, AND SHALL BE INCLUDED IN THE BID PRICE FOR THE ITEM TESTED.

TRAFFIC SIGNAL HEADS

TRAFFIC SIGNAL HEADS SHALL BE OF CAST ALUMINUM OF THE SIZE SPECIFIED ON THE PLAN AND EQUIPPED WITH STANDARD VISORS UNLESS OTHERWISE SPECIFIED. THE OPTICAL UNIT LENSES AND REFLECTORS SHALL CONFORM TO THE STANDARDS OF THE AMERICAN STANDARD ASSOCIATION AND THE INSTITUTE OF TRAFFIC ENGINEERS. ALL SIGNAL HEADS SHALL BE THREE OR FOUR SECTION AS PER PLAN, ONE WAY UNITS WITH TURN ARROWS AS REQUIRED. TRAFFIC SIGNAL HEADS SHALL BE MOUNTED NOT LESS THAN 15 FEET AND NOT MORE THAN 17 FEET FROM THE BOTTOM OF THE HEAD TO THE PAVEMENT SURFACE.

THE EXTERNAL FINISH OF THE SIGNAL HEADS AND THE OUTSIDE OF THE HOODS SHALL BE PAINTED WITH A STANDARD FEDERAL YELLOW LACQUER OR ENAMEL. THE UNDERSIDE OF THE VISOR SHALL BE PAINTED FLAT BLACK.

PAYMENT FOR ITEM 625 "TRAFFIC SIGNAL HEADS" WILL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH SIGNAL HEAD BY TYPE COMPLETELY ASSEMBLED, MOUNTED IN PLACE BY USE OF FITTINGS SHOWN ON THE TYPICAL SIGNAL INSTALLATION DETAIL, WIRED IN ACCORDANCE WITH TYPICAL SIGNAL HEAD WIRING DIAGRAM, TESTED AND ACCEPTED.

SIGNAL CABLE

SIGNAL CABLE SHALL BE WEATHERPROOF AND SHALL CONSIST OF THE NUMBER OF CONDUCTORS AS SPECIFIED ON THE PLANS. ALL CONDUCTORS SHALL BE AWG #14. CABLES SHALL BE INSULATED, JACKETED, RATED 600 VOLTS FOR USE IN UNDERGROUND CONDUIT OR AS AERIAL CABLE SUPPORTED BY A MESSENGER. IT SHALL BE COLOR CODED AND IN EVERY RESPECT FOLLOW THE INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION SPECIFICATION NUMBER 19-1-1967.

PAYMENT FOR ITEM 625 "SIGNAL CABLE" WILL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAL FOOT BY SIZE, IN PLACE, COMPLETED AND ACCEPTED, INCLUDING WIRING, TERMINALS, CONNECTIONS, SPLICING, TESTING, AND ALL INCIDENTALS NECESSARY.

INNERCONNECT CABLE

INNERCONNECT CABLE SHALL BE WEATHERPROOF AND SHALL CONSIST OF THE NUMBER OF CONDUCTORS AS SPECIFIED ON THE PLANS. ALL CONDUCTORS SHALL BE AWG #14. CABLES SHALL BE INSULATED, JACKETED, RATED 600 VOLTS FOR USE IN UNDERGROUND CONDUIT OR AS AERIAL CABLE SUPPORTED BY A MESSENGER. IT SHALL BE COLOR CODED AND IN EVERY RESPECT FOLLOW THE INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION SPECIFICATION NUMBER 19-1-1967.

PAYMENT FOR ITEM 625 "INNERCONNECT CABLE" WILL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAL FOOT BY SIZE, IN PLACE, COMPLETED AND ACCEPTED, INCLUDING WIRING, TERMINALS, CONNECTIONS, SPLICING, TESTING, AND ALL INCIDENTALS NECESSARY.

POWER CABLE

POWER CABLE SHALL BE WEATHERPROOF AND SHALL BE 1 CONDUCTOR AWG #6 RHW STRANDED COPPER. POWER CABLE SHALL BE INSTALLED FROM THE CONTROLLER CABINET THROUGH THE APPROPRIATE CONDUIT, SIGNAL POLE, AND WEATHERHEAD AND SHALL BE ATTACHED TO THE SERVICE CABLE WITH PRESSURE CONNECTORS COVERED WITH MASTIC INSULATION. PAYMENT FOR ITEM 625 "POWER CABLE" WILL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAL FOOT, IN PLACE, COMPLETE AND ACCEPTED, INCLUDING WIRING, TERMINALS, CONNECTIONS, TESTING, AND ALL INCIDENTALS NECESSARY. THE CONNECTION OF THE POWER CABLE TO THE SERVICE CABLE SHALL BE MADE BY OR UNDER THE SUPERVISION OF OHIO EDISON COMPANY PERSONNEL.

SERVICE CABLE WITH ACCESSORIES

SERVICE CABLE WILL BE PROVIDED TO THE TOP OF THE SIGNAL SUPPORT POLES AS PER PLAN BY THE OHIO EDISON COMPANY. THE CONTRACTOR SHALL CONTACT THE ELECTRIC COMPANY TO ARRANGE THE DATE OF INSTALLATION OF SERVICE CABLE TO THESE POLES.

HOURS OF WORK

HOURS OF WORK ON THE SIGNALIZATION CONSTRUCTION SHALL BE LIMITED TO 8:30 A.M. to 4:00 P.M. AND 6:00 P.M. to 7:00 A.M. WEEKDAYS, OR AS APPROVED BY THE ENGINEER AFTER COORDINATION WITH THE DIVISION TRAFFIC ENGINEER.

PULL BOXES, 18" CIRCULAR, 713.08, AS PER PLAN

PULL BOXES SHALL BE AS SPECIFIED IN SECTION 625.11 AND 713.08 WITH THE EXCEPTION THAT THE WORD "TRAFFIC" SHALL BE ETCHED OR ENGRAVED, RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE COVER.

ANCHORING OF AIR BELLS SPECIFIED FOR THIS ITEM MAY BE ACCOMPLISHED BY THE USE OF 4 POLYPROPYLENE ROPES. THE ROPES, IF USED, SHALL BE KNOTTED AT ONE END. THE OTHER END SHALL ENTER THE BOX THROUGH EACH OF 4 EQUALLY-SPACED HOLES AROUND THE UPPER CIRCUMFERENCE OF THE BOX. THE ENTERING ENDS OF EACH TWO OPPOSING ROPES SHALL BE PULLED TIGHT AND TIED TOGETHER OVER THE AIR BELL TO HOLD IT SECURELY IN PLACE.

OPENINGS OR NOTCHES MAY BE FIELD CUT IN THE BELL TO MATCH THE LOWER OPENINGS IN THE PULL BOX IF NECESSARY TO SECURE A FIRM SEATING FOR THE BELL. THIS OPERATION, HOWEVER, MUST NOT MATERIALLY REDUCE THE SIZE OF THE AIR CHAMBER.

PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH PULL BOX.

TRENCH

EXCAVATION FOR TRENCHES SHALL NOT EXCEED TWELVE (12) INCHES IN WIDTH WITHOUT PRIOR APPROVAL OF THE ENGINEER.

PROTECTION OF COMPLETED WORK

CONDUIT SHALL BE SEALED, AS REQUIRED BY 625.13, IMMEDIATELY UPON COMPLETION OF INSTALLATION.

EMPTY CONDUITS SHALL BE CAPPED OR OTHERWISE CLOSED IMMEDIATELY UPON INSTALLATION UNTIL PULL WIRE OR CABLE IS INSTALLED AND FINAL SEALING COMPLETED.

SIGNAL SUPPORT POLE HAND HOLES SHALL HAVE COVERS INSTALLED IMMEDIATELY UPON ERECTION OF POLE.

ALL EXPOSED CABLE ENDS SHALL BE ADEQUATELY PROTECTED BY ENCLOSING IN PLASTIC BAGS, TAPING, OR OTHER APPROVED MEANS, UNTIL CABLE CONNECTIONS HAVE BEEN COMPLETED.

PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES BID FOR EACH OF THE RESPECTIVE ITEMS.

CONDUIT ON STRUCTURES

EXPANSION FITTINGS FOR CONDUIT ON STRUCTURES SHALL BE OZ TYPE AX, SPRING CITY TYPE AF, APPLETON TYPE XJ-4, OR EQUAL APPROVED BY THE ENGINEER FOR BRIDGE NO. MAH-680-0705.

Rev. 8-9-71
MAY 25 1971

TRAFFIC SIGNAL SPECIFICATIONS

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SIGNAL CONTROLLER CABINET

A DUSTPROOF, WEATHERPROOF CABINET, MADE OF HIGH GRADE ALUMINUM WITH RIBBED CAST TOP AND BOTTOM MEMBERS AND A HEAVY BODY, SHALL BE FURNISHED AS A HOUSING FOR THE TIMING MECHANISM AND TERMINAL FACILITIES.

THE CABINET SHALL BE ATTRACTIVELY AND DURABLY FINISHED WITH A HIGH GRADE SYNTHETIC ENAMEL. THE COLOR WILL BE FEDERAL YELLOW.

THE CABINET SHALL BE MOUNTED WITH A COLLAR FOR MOUNTING ON A 4-1/2 INCH OUTSIDE DIAMETER STEEL PEDESTAL.

MINIMUM DIMENSIONS OF THE CABINET SHALL BE: WIDTH 19 INCHES, HEIGHT 32 INCHES AND DEPTH 14 INCHES.

THE DOOR SHALL BE CAST ALUMINUM OF HIGH GRADE MATERIAL AND HINGED TO ALLOW FULL ACCESS TO THE INTERIOR OF THE CABINET. CABINET DOORS SHALL BE SUPPLIED WITH DOOR-IN-DOOR SWITCH COMPARTMENTS.

THE DOOR SHALL BE EQUIPPED WITH A SUBSTANTIAL LOCK WITH TWO KEYS. THE LOCK WILL BE OF THE TYPE HAVING ANTI-FRICTION BEARING SUPPORT LOCK BOLTS. THE LOCK SHALL BE KEYED TO THE CITY OF YOUNGSTOWN MASTER.

ON THE BACK WALL NEAR THE BOTTOM OF EACH CONTROLLER CABINET THERE SHALL BE TERMINAL FACILITIES FOR ALL FIELD CONNECTIONS. THESE SHALL INCLUDE TERMINALS FOR ALL SIGNAL LIGHTS, SIGNAL LIGHT COMMON, INCOMING POWER SUPPLY AND THE INTERCONNECTING CABLE FROM THE MASTER CONTROLLER.

ALL CONNECTIONS SHALL BE CLEARLY IDENTIFIED FOR EASE OF INSTALLATION AND MAINTENANCE.

THE UNGROUNDED SIDE OF THE POWER SUPPLY SHALL BE PROVIDED WITH PROPER OVER-CURRENT PROTECTION, AS SPECIFIED IN SECTION 2.8 OF TRAFFIC SIGNAL CONTROLLERS. NO CURRENT INTERRUPTING DEVICE SHALL BE ALLOWED ON THE GROUNDED SUPPLY WIRE. NO SWITCHING OF THE GROUNDED SIDE OF THESE COMPONENTS SHALL BE ALLOWED.

ONE SIDE OF ALL RELAYS, SOLENOIDS, MOTORS, ETC., SHALL BE CONNECTED TO THE GROUNDED POWER SUPPLY WIRE AT ALL TIMES. NO SWITCHING OF THE GROUNDED SIDE OF THESE COMPONENTS SHALL BE ALLOWED.

THE LOWEST FIELD CONNECTION SHALL BE AT LEAST THREE (3) INCHES FROM THE BOTTOM OF THE CABINET.

TERMINALS SHALL BE PROVIDED WHICH WILL ALLOW THE EASY ADDITION IN THE FIELD OF MANUFACTURER'S STANDARD FEATURES AVAILABLE BUT NOT PURCHASED INITIALLY.

PAYMENTS FOR ITEM 625 "SIGNAL CONTROLLER CABINET" WILL BE MADE AT THE CONTRACT PRICE FOR EACH CABINET COMPLETE AND IN PLACE INCLUDING ALL CONNECTIONS AND TESTING.

CONTROLLER CABINET SUPPORT

THE SUPPORT SHALL CONSIST OF A BASE WITH ANCHOR BOLTS AND NUTS AND PIPE SHAFT FOR MOUNTING A STANDARD CONTROLLER CABINET.

THE SHAFT SHALL BE STANDARD 4" (4-1/2" O.D.) AND SHALL BE WELDED TO THE CAST STEEL BASE.

THE BASE SHALL BE A ONE-PIECE CAST STEEL ANCHOR BASE, ASTM SPECIFICATION A27-58, GRADE 65-35, OF ADEQUATE STRENGTH, SHAPE, AND SIZE AND SECURED TO THE LOWER END OF THE PIPE SHAFT BY TWO CONTINUOUS ELECTRIC ARC WELDS. THE BASE SHALL TELESCOPE THE SHAFT AND THE ONE WELD SHALL BE ON THE INSIDE OF THE BASE AT THE END OF THE SHAFT, WHILE THE OTHER WELD SHALL BE ON THE OUTSIDE AT THE TOP OF THE BASE.

FOUR HIGH-STRENGTH STEEL ANCHOR BOLTS SHALL BE FURNISHED. EACH ANCHOR BOLT SHALL HAVE AN "L" BEND AT THE BOTTOM END AND SHALL BE THREADED AT THE TOP END. THE THREADED ENDS OF BOLTS AND ALL NUTS SHALL BE GALVANIZED.

ALL MATERIAL, EXCEPT ANCHOR BOLTS, SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.

PAYMENT FOR ITEM 816 "CONTROLLER CABINET SUPPORT" WILL BE MADE AT THE CONTRACT PRICE FOR EACH SUPPORT COMPLETE AND IN PLACE, AND SHALL INCLUDE POLE, ANCHOR BOLTS, AND ALL ACCESSORIES.

MAINTAINING EXISTING TRAFFIC SIGNALS

EXISTING TRAFFIC SIGNALS AT THE INTERSECTION OF SHIRLEY ROAD AND MIDLOTHIAN BOULEVARD SHALL BE MAINTAINED BY THE CONTRACTOR, AT ALL TIMES DURING CONSTRUCTION UNTIL THE NEW SIGNALS ARE COMPLETE AND ACCEPTED.

PAYMENT FOR ITEM 625 "MAINTAINING EXISTING TRAFFIC SIGNALS" WILL BE ON A LUMP SUM BID AND WILL INCLUDE ALL TEMPORARY POLES, SPAN WIRES AND ACCESSORIES, AND ALL LABOR NECESSARY TO RELOCATE AND MAINTAIN THE SIGNALS TO PROPERLY CONTROL INTERSECTION TRAFFIC.

REMOVAL OF EXISTING EQUIPMENT

WHEN THE NEW SIGNAL INSTALLATIONS ARE COMPLETE AND READY FOR THE TEST PERIOD, THE EXISTING SIGNAL HEADS SHALL BE REMOVED BY THE CONTRACTOR AND TAKEN TO STORAGE AREAS OR LOCATIONS WITHIN THE PROJECT LIMITS AS DESIGNATED BY THE ENGINEER. ALL THE REMAINING SIGNAL EQUIPMENT SHALL REMAIN IN PLACE DURING THE TEST PERIOD.

WHEN THE NEW SIGNAL INSTALLATIONS ARE ACCEPTED, THE CONTRACTOR SHALL REMOVE THE EXISTING SIGNAL EQUIPMENT. THE EXISTING SIGNAL EQUIPMENT, INCLUDING THE EXISTING SIGNAL HEADS, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT LIMITS AS DIRECTED BY THE PROJECT ENGINEER.

PAYMENTS FOR ITEM 202 "REMOVAL OF EXISTING SIGNAL EQUIPMENT" SHALL BE IN A LUMP SUM BASIS AND SHALL INCLUDE THE REMOVAL OF ALL TRAFFIC SIGNALS, POLES, CONTROLLERS, SPAN WIRES AND ACCESSORIES.

SIGNAL SUPPORTS

SIGNAL SUPPORTS SHALL CONFORM TO THE ABOVE MENTIONED SUPPLEMENTAL SPECIFICATION 816. THE FOLLOWING SPECIFICATIONS ARE SUPPLEMENTAL TO SECTION 816.

SIGNAL SUPPORTS SHALL CONSIST OF A CONTINUOUS ROUND TAPORED GALVANIZED STEEL SHAFT HAVING A CAST STEEL ANCHOR BASE, HANDHOLE WITH COVER, SINGLE OR DOUBLE MAST ARMS OF CONTINUOUS TAPERED STEEL AS PER PLAN, CAST STEEL POLE TOP, AND ANCHOR BOLTS AND NUTS.

THE ROUND TAPERED SHAFTS AND ARMS SHALL BE OF THE SIZE AND GAUGE SHOWN ON THE PLANS. SHAFTS AND ARMS SHALL BE 1 PLY AND OF THE BEST GRADE HOT ROLLED BASIC OPEN HEARTH STEEL. THEY SHALL BE FORMED, WELDED AND LONGITUDINALLY COLD ROLLED UNDER SUFFICIENT PRESSURE TO FLATTEN THE WELD, FORM A ROUND TAPERED TUBE AND IMPROVE THE PHYSICAL CHARACTERISTICS OF THE METAL TO INSURE A YIELD STRENGTH IN EXCESS OF 55,000 P.S.I. THE SHAFT AND ARM SHALL BE MADE FROM ONE LENGTH OF STEEL SHEET.

A 4" x 8" HAND HOLE SHALL BE WELDED INTO THE SHAFT AS SHOWN ON THE DETAIL DRAWING TO FACILITATE WIRING. THE HAND HOLE SHALL BE COMPLETE WITH A REINFORCING FRAME WITH 1/2" - 13" - NC TAPPED HOLE FOR GROUNDING SCREW. A CURVED 11 GAUGE COVER PLATE WITH 2 STAINLESS STEEL 1/4" - 20 PHILLIPS HEAD SCREWS AND A #35 STAINLESS SASH CHAIN CONNECTING THE COVER TO THE FRAME.

A GALVANIZED CAST IRON OR MALLEABLE STEEL POLE TOP COMPLETE WITH 3/4" CAP SCREW AND J-HOOK FOR SUPPORT OF INTERNAL WIRING SHALL BE FURNISHED. A GROUNDING NUT FOR ACCOMMODATING A 1/2" - 13 UNC THREADED BOLT OR STUD SHALL BE PROVIDED ON THE INSIDE OF THE SHAFT IMMEDIATELY ABOVE THE BOTTOM WELD JOINING THE SHAFT TO THE BASE.

THE BASE SHALL BE A ONE PIECE CAST STEEL ANCHOR BASE ASTM SPECIFICATION #A-27-58, GRADE 65-35 OF ADEQUATE STRENGTH, SHAPE AND SIZE AND HAVING A SCALLOPED TOP FLANGE SECURED TO THE LOWER END OF THE SHAFT BY TWO CONTINUOUS ELECTRIC ARC WELDS. THE BASE SHALL TELESCOPE THE SHAFT AND ONE WELD SHALL BE ON THE INSIDE AT THE TOP OF THE BASE. THE TWO WELDS SHALL BE NOT LESS THAN 2 INCHES APART AND THE DESIGN SHALL BE SUCH THAT THE WELDED CONNECTIONS SHALL DEVELOP THE FULL STRENGTH OF THE ADJACENT SHAFT SECTION TO RESIST BENDING ACTION.

THE MAST ARM SHALL BE MADE OF ONLY ONE (1) LENGTH OF BEST GRADE, HOT-ROLLED BASIC OPEN HEARTH STEEL SHEET, OF NOT LESS THAN #7 MANUFACTURERS STANDARD GAUGE. ONLY ONE LONGITUDINAL WELD, AND NO TRANSVERSE WELDS, SHALL BE PERMITTED IN THE FABRICATION OF THE MAST ARM. AFTER BEING FORMED AND WELDED, THE MAST ARM SHALL THAN BE LONGITUDINALLY COLD ROLLED UNDER SUFFICIENT PRESSURE TO FLATTEN THE WELD, FORM A ROUND, TAPERED TUBE, AND INCREASE ITS PHYSICAL CHARACTERISTICS SO THAT THE METAL WILL HAVE A GUARANTEED MINIMUM YIELD STRENGTH OF 55,000 PSI. A FLANGE PLATE OF 1-1/4" THICKNESS SHALL TELESCOPE THE LARGE END OF THE ARM AND BE WELDED BY TWO CONTINUOUS ELECTRIC ARC WELDS, ONE BEING ON THE OUTSIDE OF THE PLATE, ADJACENT TO THE SHAFT, AND THE OTHER ONE ON THE INSIDE AT THE END OF THE TUBULAR CROSS SECTION. THIS FLANGE PLATE SHALL HAVE FOUR HOLES FOR THE 1-1/4" HIGH-TENSILE BOLTS, WHICH SHALL MATCH THE FOUR TAPPED HOLES IN THE MOUNTING PLATE ON THE POLE. EACH MAST ARM SHALL BE FACTORY DRILLED ON THE BOTTOM SURFACE WITH WIRE OUTLET HOLES, WITH RUBBER GROMMET, LOCATED AT EACH SIGNAL POSITION. A PRESSED STEEL REMOVABLE CAP SHALL BE ATTACHED TO THE END OF THE ARM BY A SCREW. FOR EACH REQUIRED SIGNAL, A CLAMP AND CLEVIS WITH 11/16" DIAMETER HOLE SHALL BE FURNISHED.

GALVANIZED POLES AND ARMS, AND ACCESSORIES SHALL BE HOT DIPPED AFTER FABRICATION IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM #A-123. AFTER ERECTION, POLES SHALL BE INSPECTED FOR MINOR SCRATCHES IN THE GALVANIZED SURFACES. SUCH SCRATCHES SHALL BE GIVEN TWO COATS OF A ZINC RICH BASED PAINT. THE SECOND COAT SHALL BE APPLIED AFTER THE FIRST COAT HAS COMPLETELY DRIED. POLES HAVING MAJOR SCRATCHES OR DEFECTS IN THE GALVANIZED SURFACES WILL NOT BE ACCEPTED.

FOUR HIGH GRADE STEEL ANCHOR BOLTS EACH FITTED WITH TWO HEXAGON NUTS SHALL BE FURNISHED. EACH ANCHOR BOLT SHALL HAVE AN L-BEND AT THE BOTTOM AND SHALL BE THREADED AT THE TOP. THE THREADED END OF THE BOLTS AND THE NUTS SHALL BE GALVANIZED. THE ANCHOR BOLTS SHALL BE CAPABLE OF RESISTING, AT YIELD STRENGTH STRESS, THE BENDING MOMENT OF THE SHAFT AT ITS YIELD STRENGTH STRESS. EACH ANCHOR BOLT SHALL BE AS SHOWN ON SHEET No. 422-C.

PAYMENT OF ITEM 816 "SIGNAL SUPPORT" WILL BE MADE FOR EACH POLE ERECTED IN ACCORDANCE WITH THE TYPICAL SIGNAL INSTALLATION DETAIL AND SHALL INCLUDE THE POLES, ARMS, ANCHOR BOLTS, AND ALL ACCESSORIES.

CONCRETE FOR SIGNAL SUPPORT FOUNDATIONS AND CONTROLLER SUPPORT FOUNDATIONS

SIGNAL SUPPORT AND CONTROLLER FOUNDATIONS SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL STAKE THE LONGITUDINAL AND LATERAL LOCATION AND THE ELEVATION OF THE TOP OF EACH FOUNDATION SUBJECT TO THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER ELEVATION, OFFSET AND LEVEL OF EACH FOUNDATION. EXCAVATIONS SHALL BE MADE TO THE DIMENSIONS SHOWN ON THE PLANS AND SHALL BE PERFORMED BY MEANS OF AN EARTH AUGER OF THE SPECIFIED DIAMETER UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WHERE SUB-SURFACE OBSTRUCTIONS ARE ENCOUNTERED, THE ENGINEER MAY REQUIRE THE CONTRACTOR TO REMOVE THE OBSTRUCTION OR TO REPLACE THE EXCAVATED MATERIAL AND RELOCATE THE FOUNDATION. IF CAVING OF THE FOUNDATION OCCURS, THE CONTRACTOR SHALL EXCAVATE THE SPECIFIED DEPTH, MAINTAINING THE SIDEWALLS AS NEARLY VERTICAL AS POSSIBLE. NO PAYMENT SHALL BE MADE FOR ANY EXCAVATION, CONCRETE OR REINFORCING STEEL USED IN EXCESS OF THE PLANNED QUANTITIES.

PORTLAND CEMENT CONCRETE SHALL BE USED AND SHALL CONFORM WITH CLASS "C" OF THE CONSTRUCTION OF MATERIAL SPECIFICATIONS PREPARED BY THE DEPARTMENT OF HIGHWAYS OF THE STATE OF OHIO, DATED JANUARY 1, 1969. THE CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL OR COMPACTED EMBANKMENT. THE FOUNDATION SHALL HAVE ANCHOR BOLTS AND CONDUIT ACCURATELY HELD IN POSITION WITH A TEMPLET WHEN CONCRETE IS POURED. FORMS SHALL BE USED FOR THE UPPER PORTION OF ALL FOUNDATIONS AND NO BACKFILLING SHALL BE PERMITTED FROM THE BOTTOM WITHIN 6" BELOW GROUND LEVEL. NO GROUTING OF CONCRETE SHALL BE PERMITTED BETWEEN THE FOUNDATION AND THE STEEL POLE. THE POLES SHALL BE INSTALLED AND ADJUSTED TO THE PROPER RAKE SO THAT THE WEIGHT OF THE SIGNAL INSTALLATION WILL NOT CAUSE THE POLES TO BE OFF VERTICAL ALIGNMENT BY MORE THAN 1%. PAYMENT FOR ITEM 816 "CONCRETE FOR SIGNAL SUPPORT FOUNDATIONS" AND ITEM 816 "CONTROLLER SUPPORT FOUNDATIONS" SHALL BE MADE PER CUBIC YARD FOR EACH FOUNDATION CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL FOUNDATION DETAILS AND SHALL INCLUDE CONCRETE, REINFORCING STEEL, EXCAVATION AND BACKFILL.

TRAFFIC SIGNAL SPECIFICATIONS

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TRAFFIC SIGNAL CONTROLLER

1. GENERAL

1.1 THE CONTRACTOR SHALL FURNISH AND INSTALL AT THE LOCATIONS SHOWN ON THE PLANS A PRETIMED, 3 DIAL, EXPANSIBLE TRAFFIC SIGNAL CONTROLLER BY TYPE. THE CONTROLLER SHALL BE CAPABLE OF PROVIDING THE BASIC COLOR SEQUENCE IN ACCORDANCE WITH THE SIGNAL OPERATION DRAWINGS.

1.2 THE CONTROLLER AT THE INTERSECTION OF SHIRLEY ROAD AND MIDLOTHIAN BLVD. AND AT THE INTERSECTION OF RAMP A AND SOUTH AVENUE SHALL BE DESIGNATED AS THE MASTER-LOCAL CONTROLLER (TYPE A) AND THE CONTROLLER AT THE INTERSECTION OF LEMOYNE AVENUE AND MIDLOTHIAN BLVD. AND THE INTERSECTION OF RAMP D AND SOUTH AVENUE SHALL BE DESIGNATED AS LOCAL CONTROLLER (TYPE B).

1.3 INTERSECTION CONTROLLER SHALL BE OF THE TYPE WHICH MAY BE OPERATED AS AN ISOLATED UNIT, AS A UNIT IN A NON-INTERCONNECTED PROGRESSIVE SYSTEM, OR AS A UNIT IN AN INTERCONNECTED PROGRESSIVE SYSTEM, WITHOUT ANY PHYSICAL CHANGE TO THE CONTROLLER REQUIRED.

1.4 CONTROL OF ONE TO THREE CYCLE DIAL UNITS AND THREE POSSIBLE OFFSET RELATIONSHIPS PER CYCLE DIAL FROM THE MASTER CONTROLLER SHALL BE PROVIDED WITH A MAXIMUM OF SIX INTERCONNECTING WIRES, INCLUDING THE COMMON RETURN.

1.5 CONTROLLERS SHALL BE OF THE UNIT CONSTRUCTION DESIGN AND SHALL ALLOW FOR EASY AND COMPLETE REMOVAL OF THE TIMING UNIT FROM THE FRONT OF THE EQUIPMENT WITHOUT THE USE OF TOOLS..

2. ELECTRICAL REQUIREMENTS

2.1 EACH INTERSECTION CONTROLLER SHALL BE DESIGNED TO OPERATE ON 115 VOLTS, 60 CYCLE ALTERNATING CURRENT, SINGLE PHASE. THE VOLTAGE MAY VARY PLUS OR MINUS 15 PER CENT WITHOUT ANY VISIBLE EFFECT ON THE OPERATION, LIFE OR MAINTENANCE OF THE EQUIPMENT.

2.2 ALL INTERCONNECTING CIRCUITS BETWEEN THE MASTER CONTROLLER AND EACH INTERSECTION CONTROLLER SHALL USE 115 VOLTS, 60 CYCLE, SINGLE PHASE ALTERNATING CURRENT. THIS VOLTAGE MAY VARY PLUS OR MINUS 15% WITHOUT ANY VISIBLE EFFECT ON THE OPERATION, LIFE, OR MAINTENANCE OF THE CONTROLLER EQUIPMENT. IT SHALL ALSO BE POSSIBLE TO ISOLATE THE INTERCONNECTING POWER FROM THE LOCAL VOLTAGE SUPPLY SO THAT IT SHALL BE POSSIBLE TO USE UNRELATED SOURCES OF VOLTAGE FOR THE INTERCONNECTING CIRCUITS.

2.3 THE INDIVIDUAL SIGNAL CIRCUIT WIRING SHALL HAVE A CURRENT CARRYING CAPACITY OF NOT LESS THAN 15 AMPERES AND THE SIGNAL COMMON, THE SIGNAL CIRCUIT BUS, AND THE SIGNAL SHUTDOWN SWITCH SHALL HAVE A CURRENT CARRYING CAPACITY OF NOT LESS THAN 30 AMPERES.

2.4 ALL CONTACTS SHALL BE OF SUFFICIENT SIZE TO PERFORM THEIR NORMAL FUNCTIONS AND SHALL BE OF A SILVER CADMIUM-OXIDE ALLOY FOR HIGH CURRENT CARRYING CAPACITY AND LONG LIFE.

2.5 THE SIGNAL CIRCUIT CONTACTS SHALL BE DESIGNED FOR CARRYING 10 AMPERES FOR A MINIMUM OF 1,000,000 OPERATIONS.

2.6 ALL RELAYS, SOLENOIDS AND MOTOR WINDINGS SHALL BE SUFFICIENTLY LARGE AND RUGGED SO AS TO INSURE RELIABILITY AND MINIMUM MAINTENANCE. THEY SHALL BE CAPABLE OF WITHSTANDING AN INSULATION BREAKDOWN TEST OF 1,000 VOLTS, PLUS TWICE THE RATED VOLTAGE FOR ONE MINUTE.

2.7 OPENING THE BUSBAR CIRCUIT FOR FLASH OPERATION, REMOTE SIGNAL SHUTDOWN, OR ANY OTHER TYPE OF PREEMPTION IS PERFORMED BY A 30 AMPERES MERCURY CONTACT TYPE BUSBAR RELAY. THIS RELAY SHALL NOT BE JACK MOUNTED DUE TO THE CURRENT CAPACITY REQUIREMENTS.

2.8 THE POWER SUPPLY CONNECTIONS SHALL BE MADE TO A 30 AMPERE CIRCUIT BREAKER MOUNTED ON THE LEFT SIDE OF THE CABINET SEPARATE FROM THE SIGNAL TERMINAL PANEL. THE CIRCUIT BREAKER SHALL BE A MAGNETIC TRIP TYPE, HAING AN INTERRUPTING CAPACITY OF AT LEAST 2000 AMPERES AT 125 VOLTS A-C. THE CIRCUIT SHALL TRIP BETWEEN 101 AND 125 PERCENT OF RATED LOAD, WITH AN INVERSE TIME DELAY CHARACTERISTIC PROVIDED. INSTANTANEOUS TRIPPING SHALL OCCUR AT TEN TIMES THE NOMINAL RATING.

3. CONTROLLER MECHANISM

3.1 ALL TIMING UNITS AND THE CONTACT SWITCHING MECHANISM SHALL BE INCASED IN A METAL CONTROLLER HOUSING SO ARRANGED THAT IT SHALL BE POSSIBLE TO WITHDRAW THE MECHANISM FROM THE CABINET WITHOUT DISTURBING ITS OPERATION. THE MECHANISM SHALL REMAIN SUPPORTED BY SUITABLE MEMBERS IN THIS CONDITION TO PERMIT MAINTENANCE, INSPECTION OR LUBRICATION.

3.2 THE MECHANISM HOUSING SHALL BE DESIGNED SO THAT VISUAL INSPECTION OF THE TIMING UNITS IS POSSIBLE WITH THE MECHANISM DOOR CLOSED.

3.3 ELECTRICAL CONNECTION BETWEEN THE CONTROLLER MECHANISM AND THE TERMINAL PANEL SHALL BE MADE BY A 47 PIN "MS" TYPE POSITIVE CONNECTOR, ENABLING RAPID EXCHANGE OF THE CONTROLLER WITH A SIMILAR UNIT WITHOUT DISCONNECTING OR RECONNECTING ANY WIRES, AND WITHOUT USING ANY TOOLS.

3.4 A MINIMUM OF SEVEN (7) HEAVY DUTY PINS SHALL BE PROVIDED IN THE MULTIPLE PIN CONNECTOR, EACH HAVING A 30 AMPERE CAPACITY. THOSE SPECIFIED TO BE USED WILL HAVE NO. 12 GAUGE WIRE CONNECTION.

4. TIMING UNITS

4.1 THE CYCLE LENGTH OF ANY DIAL SHALL BE ADJUSTABLE FROM 30 SECONDS TO 130 SECONDS. THE TOTAL TIME OF THE CYCLE SHALL BE ADJUSTABLE BY THE CHANGING OF A SINGLE GEAR. THIS GEAR WILL HAVE THE NUMBER OF TEETH EQUAL TO THE CYCLE LENGTH IN SECONDS, AND THE NUMBER SHALL BE SO DESIGNATED ON THE GEAR.

4.2 AVAILABLE CYCLE GEARS SHALL RANGE FROM 30 TO 90 SECONDS IN FIVE SECOND STEPS AND FROM 90 TO 130 SECONDS IN TEN SECOND STEPS.

4.3 CHANGES IN THE TOTAL CYCLE LENGTH SHALL INCREASE OR DECREASE EACH OF THE INTERVALS IN THE CYCLE IN DIRECT PROPORTION TO THE CHANGE OF THE TOTAL CYCLE.

4.4 THERE SHALL BE A CALIBRATED SCALE ON THE FRONT OF THE CYCLE UNIT INDICATING WHICH CYCLE GEAR IS IN USE.

4.5 BY MEANS OF A SPECIAL DIAL MOTOR, IT SHALL BE POSSIBLE TO INCREASE THE RANGE OF TOTAL CYCLE LENGTHS FROM 60 TO 260 SECONDS, USING THE STANDARD CYCLE GEARS.

4.6 THE TIMING DIAL UNITS SHALL BE ELECTRICALLY AND MECHANICALLY JACK MOUNTED FOR EASE OF MAINTENANCE AND INSPECTION. IT SHALL BE POSSIBLE TO REPLACE THE CYCLE GEAR EASILY AND QUICKLY.

4.7 EACH INDIVIDUAL DIAL UNIT SHALL BE PROVIDED WITH A MOTOR SWITCH TO EFFECT SHUTDOWN OF THE DIAL UNIT.

4.8 THE TIME OF EACH SIGNAL INTERVAL SHALL BE ADJUSTABLE WITHOUT THE USE OF TOOLS, FROM A MINIMUM OF ONE PERCENT TO ANY DESIRED PERCENTAGE OF THE TOTAL CYCLE. DIAL KEYS SHALL BE EASILY REMOVABLE FOR THIS ADJUSTMENT. THERE SHALL BE AVAILABLE, FROM THE MANUFACTURER, A DIAL KEY WHICH WILL PERMIT A CALIBRATION OF ONE-HALF OF ONE PERCENT ON THE SIGNAL INTERVAL PROVIDING NO OTHER KEY IS WITHIN THREE PERCENT OF THE SLOT USED ON THE TRAILING SIDE OF THE DRUM.

4.9 NO INTERVAL OR PART THEREOF SHALL BE TIMED BY THERMAL OR DASH POT TYPE TIMERS. THE TIMING OF ALL INTERVALS MUST BE DEPENDENT UPON SYNCHRONOUS MOTORS.

4.10 IN ORDER TO PROVIDE A SMOOTHLY OPERATING DIAL UNIT, THE DIAL SHALL BE DRIVEN FROM GEAR TEETH NEAR ITS PERIPHERY AND SHALL FLOAT FREE ON ITS SHAFT. HIGH GRADE NEEDLE BEARINGS SHALL BE USED BETWEEN THE DIAL AND ITS SHAFT.

4.11 EACH DIAL UNIT SHALL BE FURNISHED WITH WIRING CONTACTS, AND OFFSET KEYS FOR THREE OFFSETS AND IT SHALL BE POSSIBLE TO ADJUST EACH OFFSET INDEPENDENTLY OF EACH OTHER TO ANY POINT IN THE CYCLE UNLESS IT BE CLOSER THAN 1% TO ANY OTHER DIAL KEY.

4.12 THE DIAL SHALL BE CALIBRATED IN STEPS OF ONE PERCENT FOR SETTING OF THE INTERVALS. A SECOND CALIBRATION OF THE DIAL SHALL SHOW, IN PERCENT, THE OFFSET RELATIONSHIP OF THE DIAL TO THE MASTER CONTROLLER TIME BASE.

4.13 ONLY ONE DIAL SHALL BE IN OPERATION AT ANY ONE TIME, THEREBY ELIMINATING WEAR ON THE BALANCE OF THE CYCLE UNITS AND TIMING MOTORS. THE IN-OPERATIVE DIALS SHALL STOP INSTANTLY AT THE INTERVAL OF TRANSFER.

4. TIMING UNIT (CONTINUED)

4.14 TRANSFER FROM ANY DIAL TO ANY OTHER DIAL SHALL OCCUR WITHOUT THE CONTACT SWITCHING UNIT GETTING OUT OF STEP WITH THE TIMING DIAL OR WITHOUT ANY ABNORMAL INTERVAL LENGTHS OF COLOR CIRCUIT TIMING.

4.15 DIAL TRANSFER SHALL BE ACCOMPLISHED BY SYNCHRONOUS TIME SWITCH. TWO SYNCHRONOUS TIME SWITCHES SHALL BE PROVIDED AND INSTALLED FOR EACH TYPE A CONTROLLER. THE TIME SWITCHES SHALL BE AS PROVIDED BY THE MANUFACTURER OF THE CONTROLLERS.

4.16 DIAL CONTACTS SHALL BE OF THE LEAF SPRING TYPE, MOUNTED ON A MOLDED BAKELITE BLOCK AND EQUIPPED WITH TERMINAL SCREWS. CONTACT SHALL BE AT LEAST 1/4 INCHES IN DIAMETER, 1/16 INCHES THICK AND CONTAIN AT LEAST 90% PURE SILVER.

4.17 TO FACILITATE INSPECTION AND MAINTENANCE, THE CONTACTS SHALL NOT BE ENCLOSED, BUT SHALL BE COVERED WITH A SHIELD FOR SAFETY.

4.18 THE CONTACTS SHALL BE ACTUATED BY A MOLDED NYLON LEVER. THE LEVER SHALL BE SO SHAPED THAT THE DIAL KEYS MAY BE SET AS CLOSE AS ONE PERCENT OF THE DIAL AND A SHARP DROP-OFF SHALL BE USED TO PROVIDE POSITIVE ACTION EXACTLY AT THE 12 O'CLOCK POSITION OF THE KEY.

4.19 EACH TIMING UNIT SHALL BE DRIVEN BY A SYNCHRONOUS MOTOR OF ADEQUATE TORQUE TO DRIVE THE CYCLE UNIT ON A 30 SECOND CYCLE WITHIN THE TEMPERATURE AND VOLTAGE RANGES AS SPECIFIED BELOW.

4.20 THE MOTOR SHALL RETAIN ITS SYNCHRONOUS CHARACTERISTICS AT TEMPERATURES WHICH RANGE OUTSIDE THE HOUSING FROM -30° F. TO 140°F. AND WITH VOLTAGE VARIATION OF PLUS OR MINUS 15% OF RATED VOLTAGE.

4.21 THE MOTOR SHALL BE ELECTRICALLY AND MECHANICALLY JACK MOUNTED TO THE CYCLE DIAL UNITS.

5. CONTACT SWITCHING MECHANISM

5.1 SIGNAL LIGHTS SHALL BE SWITCHED BY A CAMSHAFT DEVICE. THE SIGNAL SWITCHING MOTOR SHALL BE OF THE ROTARY SOLENOID TYPE. THE SOLENOID SHALL HAVE A DC COIL. THE DC SUPPLY SHALL BE OF THE FULL WAVE BRIDGE TYPE AND SHALL BE LOCATED INSIDE THE MECHANISM. SIGNAL SWITCHING SHALL NOT OCCUR UNTIL AFTER THE ACTUATION OF THE MOTOR COIL AND SHALL BE LESS THAN 1/10 SECONDS DURATION TO AVOID CONFUSING DARK SIGNALS OR OVERLAPPING OF SIGNAL INDICATIONS.

5.2 CONTACT FINGERS SHALL HAVE A HARDENED SURFACE AT THE POINT WHERE THEY BEAR ON THE CAMS TO PREVENT UNDUE WEAR.

5.3 THE SWITCHING DEVICE SHALL BE SO DESIGNATED THAT VARIOUS CAM ARRANGEMENTS WILL SERVE TO PROVIDE ANY SIGNAL LIGHT COLOR SEQUENCE NOT REQUIRING MORE THAN NINETEEN (19) SIGNAL CONTACT SETS.

5.4 THE CAMS AND CAMSHAFT SHALL PROVIDE TWELVE (12) INTERVALS PER CYCLE.

5.5 THE MECHANISM SHALL BE WIRED FOR NINETEEN (19) SIGNAL CIRCUITS.

5.6 THOSE CONTACTS THAT DIRECTLY HANDLE ANY SIGNAL LIGHT LOAD SHALL HAVE A MINIMUM DIAMETER OF 5/16 INCHES AND A MINIMUM THICKNESS OF 1/8 INCHES. THEY SHALL BE EASILY REMOVABLE FOR INSPECTION OR REPLACEMENT. THEY MUST HAVE CONVENIENT, INDEPENDENT, INDIVIDUAL ADJUSTMENT FOR CONTACT PRESSURE WHICH SHALL BE SET AT THE FACTORY BEFORE DELIVERY.

5.7 ALL SIGNAL CONTACTS SHALL CONTAIN AT LEAST 90% PURE SILVER AND 10% CADMIUM OXIDE, BY WEIGHT, AND BE OF SUFFICIENT SIZE TO BE ABLE TO SAFELY MAKE, CARRY AND BREAK A TUNGSTEN LAMP LOAD OF 10 AMPERES PER CIRCUIT ON 115 VOLTS, 60 CYCLE CURRENT, FOR 1,000,000 OPERATIONS.

6. OPERATION

6.1 TRANSFER FROM ANY DIAL TO ANY OTHER DIAL SHALL OCCUR ONLY AT THE BEGINNING OF THE FIRST INTERVAL IN THE SIGNAL SEQUENCE. INDISCRIMINATE TRANSFER ANYWHERE IN THIS FIRST INTERVAL WILL NOT BE ALLOWED.

6.2 TRANSFER FROM DIAL TO DIAL SHALL BE ACCOMPLISHED BY POSITIVE ACTING, TWO POLE, LATCH IN-LATCH OUT RELAYS.

6. OPERATION (CONTINUED)

6.3 AN ELECTRICAL INTERLOCK CIRCUIT BETWEEN THE CAMSHAFT AND THE TIMING UNITS SHALL BE PROVIDED, TO INSURE THAT THE CAMSHAFT AND TIMING UNITS REMAIN THEIR RELATIONSHIP.

6.4 A FLASH CONTROL CIRCUIT SHALL BE PROVIDED TO INSURE THAT REMOTE OR TIME SWITCH TRANSFER TO FLASHING, FROM NORMAL STOP AND GO OPERATION, SHALL ONLY OCCUR DURING THE NO.1 INTERVAL IN THE CYCLE, WHICH IS NORMALLY THE FIRST INTERVAL OF THE MAIN STREET GREEN. THE FLASH CONTROL CIRCUIT IS FURNISHED INDEPENDENT OF THE OTHER NINETEEN (19) SIGNAL CIRCUITS.

6.5 WHEN THE CONTROLLER IS IN A FLASHING CONDITION, THE SIGNAL SWITCHING MECHANISM SHALL BE INOPERATIVE, DWELLING IN THE MAIN STREET GREEN SIGNAL CONDITION, FROM WHERE NORMAL PRE-TIMED OPERATION SHALL RESUME.

7. MANUAL OPERATION

7.1 THE CONTROLLER SHALL BE SO DESIGNED AS TO PERMIT THE ADDITION OF MANUAL CONTROL EQUIPMENT WHICH MAY BE ADDED IN THE FIELD AT A LATER DATE. IT SHALL NOT BE NECESSARY TO CUT AND SPLICE WIRES BUT ONLY NECESSARY TO REMOVE JUMBERS OR LINKS TO WIRE IN THE NECESSARY EQUIPMENT.

7.2 WHEN ADDED, THE MANUAL EQUIPMENT IS TO BE RUGGED AND SIMPLE IN OPERATION. THE SAME SIGNAL SEQUENCE DISPLAYED DURING NORMAL OPERATION SHALL BE DISPLAYED DURING MANUAL OPERATION.

7.3 TRANSFER FROM NORMAL TO MANUAL OPERATION AND VICE VERSA SHALL BE ACCOMPLISHED BY THE ACTUATION OF ONE SWITCH. THE TIMING DIAL IN OPERATION AT THE TIME OF TRANSFER SHALL NOT BE AFFECTED BY THE MANUAL OPERATION.

8. REMOTE SEPARATE FLASHING (FLASHING NIGHT LIGHT)

8.1 A REMOTE SEPARATE FLASHING SHALL BE PROVIDED IN EACH LOCAL CONTROLLER. THIS FEATURE SHALL CONSIST OF A SEPARATE JACK-MOUNTED FLASHER UNIT WITH A BUILT-IN, EFFECTIVE RADIO INTERFERENCE FILTER AND THE NECESSARY JACK-MOUNTED RELAYS REQUIRED FOR THE TRANSFER OF SIGNAL LIGHT AND CONTROL CIRCUITS.

8.2 THE RATE OF FLASHING SHALL BE INDEPENDENT OF THE CONTROLLER AT ALL TIMES.

8.3 IT SHALL BE POSSIBLE TO COMPLETELY REMOVE THE TIMING MECHANISM FOR INSPECTION OR MAINTENANCE WHEN THE FLASHING FEATURE IS ENERGIZED WITHOUT DISTURBING THE FLASHING FEATURE. THIS IS SO THAT NO INTERSECTION NEED BE LEFT WITH DARK LIGHTS DUE TO MAINTENANCE OR INSPECTION PROCEDURES.

8.4 IF THE MECHANISM IS NOT REMOVED, THE TIMING DIAL IN OPERATION IS TO REMAIN IN STEP WITH THE SYSTEM AND THE CAMSHAFT SWITCHING UNIT IS TO STOP IN THE FIRST INTERVAL OF THE SEQUENCE.

8.5 IT SHALL BE POSSIBLE TO FLASH EITHER YELLOW OR RED TO ANY SIGNAL CIRCUIT BY MEANS OF JUMPERS ON THE TERMINAL PANEL.

8.6 FLASH RELAYS SHALL BE PROVIDED TO MAKE FLASHING SUSCEPTIBLE TO REMOTE OR TIME SWITCH CONTROL.

8.7 A HEAVY DUTY 30 AMPERE MERCURY CONTACT TYPE RELAY SHALL BE PROVIDED TO BREAK BUSBAR POWER DURING FLASHING OPERATION.

9. GUARANTEE

THE MANUFACTURER SHALL GUARANTEE THE EQUIPMENT FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF SHIPMENT FROM THE FACTORY. THE MANUFACTURER SHALL NOT BE REQUIRED TO ACCEPT RESPONSIBILITY FOR IMPROPER INSTALLATION OR IMPROPER MAINTENANCE OF ITS PRODUCT.

PAYMENT FOR ITEM 625 "TRAFFIC SIGNAL CONTROLLER BY TYPE" WILL BE MADE AT THE CONTRACT PRICE FOR EACH CONTROLLER BY INTERSECTION AND TYPE COMPLETE AND IN PLACE, INCLUDING ALL CONNECTIONS AND TESTING.

CALC. BY CSD DATE 12/10/69
CHK'D BY CAP DATE 12/16/69

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

418
650

GENERAL SUMMARY - TRAFFIC SIGNALIZATION QUANTITIES

TYPE CODE 7223

I-680-9 (14) (240)

| RURAL 80% FED. 10% STATE | | | | | PARTICIPATION 80% FED. 5% STATE 5% CITY | | | | |

SUB SUMMARY TRAFFIC SIGNALIZATION QUANTITIES

CALC. BY CSD DATE 12/3/69
CHK'D BY CAP DATE 12/16/69

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

419
656

REF. No.	SIDE	STATION	STATION	SIGNAL SUPPORT TGA 2.0"x21'-0" POLE W/19" ADM	SIGNAL SUPPORT TGA 11.0"x21'-0" POLE W/30" ADM	SIGNAL SUPPORT TGA 11.0"x21'-0" POLE W/23" ADMS	SIGNAL SUPPORT TGA 11.0"x21'-0" POLE W/19" & 30" ADMS	SIGNAL SUPPORT TGA 11.0"x21'-0" POLE W/23" & 36" ADMS	SIGNAL SUPPORT TGA 11.0"x21'-6" POLE W/23" & 32" ADMS	SIGNAL SUPPORT (COMB.) TGA 11.0"x21'-0" W/23" ADM				CONTROLLER CABINET 40"	CONCRETE FOR SIGNAL SUPPORT FOUNDATIONS	CONCRETE FOR CONTROLLER FOUNDATION	TRAFFIC SIGNAL HEAD 3 SECTION 12" LENS ONE WAY W/ADDW	TRAFFIC SIGNAL HEAD 3 SECTION 12" LENS ONE WAY W/ADDOWS	TRAFFIC SIGNAL HEAD 4 SECTION 12" LENS ONE WAY W/ADDOWS	GROUND ROD			SIGNAL CABLE SOLID 7/C No 14 AWG.	INTERCONNECT CABLE 12/C No 14 AWG.	POWER CABLE W/ACCESSORIES STRANDED 7/C No 6 AWG DRW	CONDUIT 3" 113.07 TYPE I	CONDUIT 2½" 113.04 TYPE II OR III	TRENCH 24" DEEP			PULL BOX 18" CIRCULAR 113.08	PRETIMED 3 DIAL SIGNAL CONTROLLED TYPE A	PRETIMED 3 DIAL SIGNAL CONTROLLED TYPE B		SIGNAL CONTROLLER CABINET 4.9 CU. FT.	REMOVAL OF EXISTING TRAFFIC SIGNAL SYSTEM	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
				EA.	EA.	EA.	EA.	EA.	EA.	EA.				EA.	C.Y.	C.Y.	EA.	EA.	EA.	EA.				L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.				EA.	EA.	EA.		EA.	L.S.	L.S.
STATIONING REFEDENCED TO ℄ OF MIDLOTHIAN BLVD. (PARTICIPATING RURAL)																																								
1	RT.	364+95			1										1.96		2				1			112																
2	RT.	364+95	365+04																					19				9		9										
3	RT.	365+04																													1								
4	RT.	365+04	365+88																					94				84		84										
5	RT.	365+83								1					1.96		2				1			97																
6	RT.	365+83	365+88																					15				5		5										
7	RT.	365+88														1		.26				1			45	15	34			3	3		1	1		1				
8	RT.	365+88	366+08																					30	30	60		20		20										
9	RT.	366+08																													1								
10	RT.	366+08	368+18																						220			210		210										
11	RT.	368+18																													1								
12	RT.	368+18	368+26																						41			31		31										
13	RT.	368+26																													1								
14	RT.	368+26	370+00																						179			174		174										
15	RT./LT.	366+08	366+08																					34		68		29		29										
TOTALS PARTI. RURAL FUNDS SHEET 420					1					1				1	3.92	.26	4				3			446	485	162		362	3	365		5	1			1			
16	LT.	365+00		1											1.36		2				1			80		41														
17	LT.	365+00	365+05																					15		30		5		5										
18	LT.	365+05																													1								
19	LT.	365+05	366+08																					113		226		103		103										
20	LT.	366+08																													1								
21	LT./RT.	366+08	366+08																					29		60		25		25										
TOTALS PARTICIPATING FUNDS SHEET 420				1											1.36		2				1			246		357		133		133		2				LUMP	LUMP		
																																				LUMP	LUMP		
25	RT.	370+00	371+39.24																						139			139		139										
TOTALS PARTI. RURAL FUNDS SHEET 420-A																									139			139		139										
26	RT.	371+39.24	371+48																						14			9		9										
27	RT.	371+48																													1								
28	RT.	371+48	373+36																						198			188		188										
29	RT.	373+36																													1								
30	RT.	373+36	375+00																						169			164		164										
TOTALS PARTICIPATING FUNDS SHEET 420-A																									381			361		361		2							

TRAFFIC SIGNALIZATION SUB SUMMARY

MAY 25 1971

12/8/69

SUB SUMMARY TRAFFIC SIGNALIZATION QUANTITIES

CALC. BY CSD DATE 12/10/69
CHK'D BY CAP DATE 12/16/69

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

419A
656

REF. No.	SIDE	STATION	STATION	SIGNAL SUPPORT 1 GA. 5.0"x21'-0" POLE W/19' ARM	SIGNAL SUPPORT 1 GA. 11.0"x21'-0" POLE W/30' ARM	SIGNAL SUPPORT 1 GA. 5"x21'-0" POLE W/23' ARM	SIGNAL SUPPORT 7 GA. 11.0"x21'-0" POLE W/19' & 30' ARMS	SIGNAL SUPPORT (COMB.) 5"x21'-0" POLE W/19' & 30' ARMS	SIGNAL SUPPORT (COMB.) 5"x21'-0" POLE W/23' & 30' ARMS	SIGNAL SUPPORT 1 GA. 11.0"x21'-0" POLE W/23' ARM				CONTROLLER CABINET TYPE 170	CONCRETE FOR SIGNAL SUPPORT FOUNDATIONS	CONCRETE FOR CONTROLLER FOUNDATION	TRAFFIC SIGNAL HEAD 3 SECTION 12" LENS ONE WAY	TRAFFIC SIGNAL HEAD 3 SECTION 12" LENS ONE WAY W/ADDOW	TRAFFIC SIGNAL HEAD 4 SECTION 12" LENS ONE WAY W/ADDOWS	GROUND ROD			SIGNAL CABLE SOLID 7/C No.14 AWG	INTERCONNECT CABLE 12/C No.14 AWG	POWER CABLE W/ACCESSORIES STRANDED 1/C No.6 AWG 12HW	CONDUIT 3" TYPE III 113.04	CONDUIT 3" TYPE I 113.07	CONDUIT 2 1/2" TYPE II OD III 113.04	TRENCH 24" DEEP			PULL BOX 18" CIRCULAR 713.08	PRETIMED 3 DIAL SIGNAL CONTROLLER TYPE A	PRETIMED 3 DIAL SIGNAL CONTROLLER TYPE B		SIGNAL CONTROLLER CABINET 4.5 CU.FT.		REMOVAL OF EXISTING TRAFFIC SIGNAL SYSTEM	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION											
				EA.	EA.	EA.	EA.	EA.	EA.	EA.				EA.	C.Y.	C.Y.	EA.	EA.	EA.	EA.				L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.				EA.	EA.	EA.		EA.		L.S.	L.S.												
STATIONING REFERENCED TO ℄ OF MIDLOTHIAN BLVD.																																																			
35	DT.	375+00	375+19																						24				19		19																				
36	DT.	375+19																																1																		
37	DT.	375+19	375+30																						47				37		37																				
38	DT.	375+30																																1																		
39	DT.	375+30	377+91																						271				261		261																				
40	DT.	377+91																																1																		
41	DT.	378+98				1									136			2				1			97		62																								
42	DT.	378+98	379+02																						15		30		5		5																				
43	DT.	379+02																																1																		
44	LT.	377+91																																1																		
45	LT.	377+91	378+37																						56				46		46																				
46	LT.	378+37													1		.26					1			45	15	34			3	3			1			1			1												
47	LT.	378+37	378+42																						40				5		5																				
48	LT.	378+42				1									136			2	2			1			202																								
49	LT.	378+37	379+02																						75		130		65		65																				
50	LT.	379+02																																1																		
51	DT./LT.	377+91	377+91																						64				54		54																				
52	DT./LT.	379+02	379+02																						65		130		55		55																				
TOTALS	SHEET	420-B				1	1							1	332	.26	4	2			3				539	477	386		547	3	550			7		1		1												
STATIONING REFERENCED TO ℄ OF SOUTH AVE.																																																			
55	DT.	48+08																							115		230		105		105			1																	
56	DT.	48+08	49+13																																																		
57	DT.	49+08						1							356			3	1	1	1				282																											
58	DT.	49+08	49+13																						30				5		5																				
59	DT.	49+13												1		.26					1				45	15	34			3	3			1		1			1												
60	DT.	49+13	51+27																							224		214				28																				
61	DT.	51+27																																1																		
62	DT.	51+27	51+85																							68				58		58																				
63	DT.	51+85																																1																		
64	DT./LT.	48+08																							82		164		72		72																				
65	LT.	48+08																																1																		
66	LT.	48+08	48+13																						15		30		5		5																				
67	LT.	48+13								1					196			2				1			95		62																								
68	LT.	51+85																																1																		
69	LT.	51+85	52+00																							20				15		15																				
70	DT./LT.	51+85																								80				80		80																				
TOTALS	SHEET	420-C						1		1				1	552	.26	5	1	1		3				664	417	520	214	340	3	371			6	1			1												
75	DT.	54+59				1									136			2				1			95		62																								
76	DT.	54+59	54+64																						15		30		5		5																				
77	DT.	54+64																																1																		
78	LT.	52+00	53+69																							179				169		169																				
79	LT.	53+69												1		.26					1				45	15	34			3	3			1		1			1												
80	LT.	53+69	53+74																						30				5		5																				
81	LT.	53+74							1						223			2	2			1			212																								
82	LT.	53+69	54+64																						105		210		95		95																				
83	LT.	54+64																																1																		
84	DT./LT.	54+64																							70		140		60		60																				
TOTALS	SHEET	420-D				1			1					1	359	.26	4	2			3				572	194	476		334	3	337			3	1			1												

TRAFFIC SIGNALIZATION SUB SUMMARY

MAY 25 1971

12/8/69

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

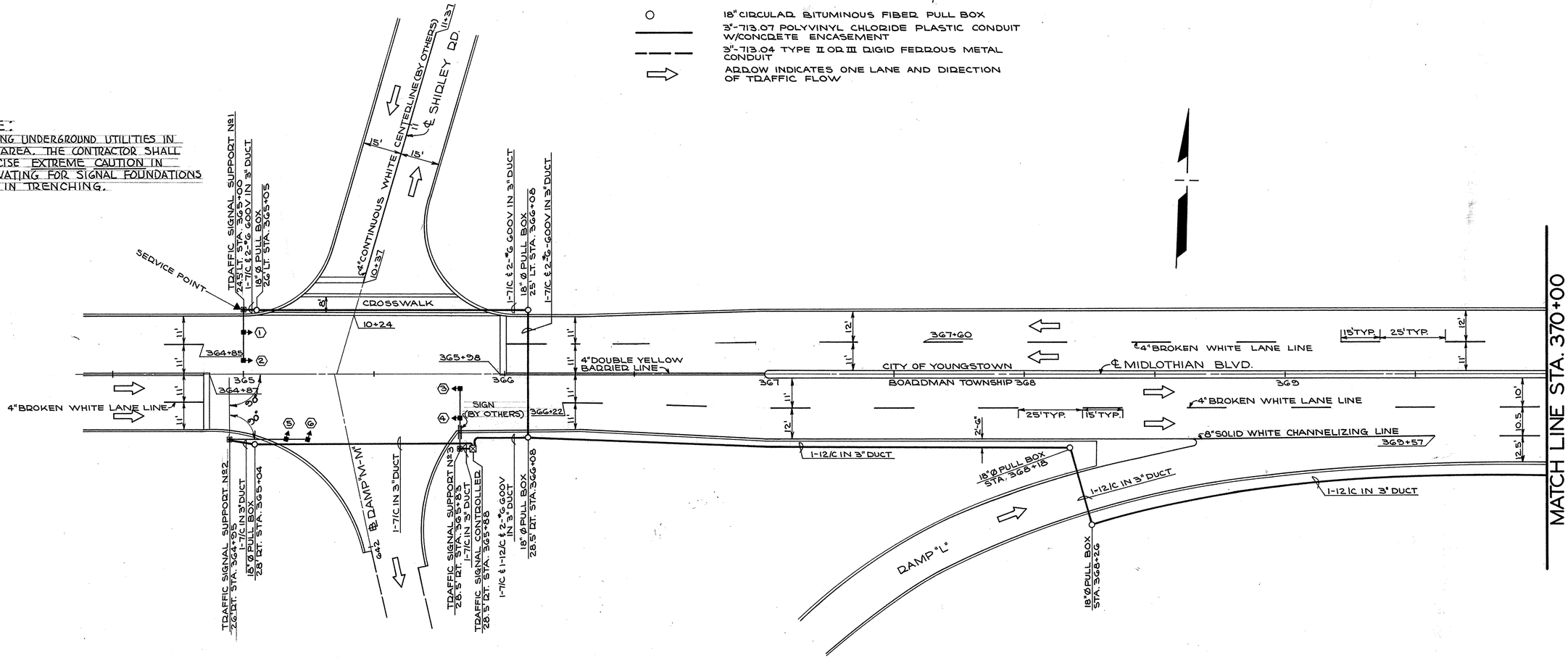
420
656

MAH. 680 - 6.98

LEGEND

- TRAFFIC SIGNAL SUPPORT POLE(▲ INDICATES SERVICE POINT)
- OVERHEAD SIGNS (BACK TO BACK)
- 12" ADJUSTABLE TRAFFIC SIGNAL HEAD - SECTIONS AS PER PLAN
- TRAFFIC SIGNAL CONTROLLER W/18" PULL BOX
- 18" CIRCULAR BITUMINOUS FIBER PULL BOX
- 3"-713.07 POLYVINYL CHLORIDE PLASTIC CONDUIT W/CONCRETE ENCASEMENT
- 3"-713.04 TYPE II OR III RIGID FERROUS METAL CONDUIT
- ARROW INDICATES ONE LANE AND DIRECTION OF TRAFFIC FLOW

NOTE:
EXISTING UNDERGROUND UTILITIES IN THIS AREA. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING FOR SIGNAL FOUNDATIONS AND IN TRENCHING.



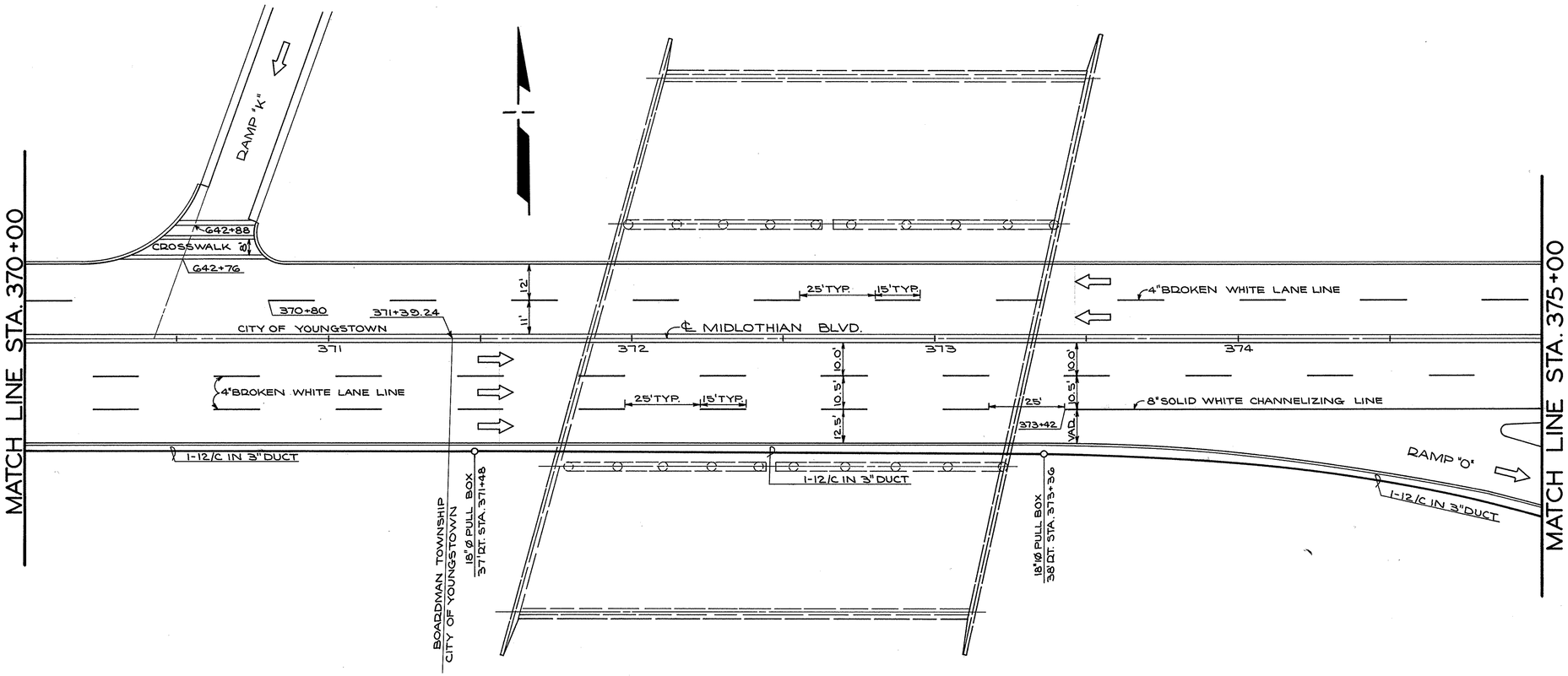
TRAFFIC SIGNAL PLAN
MIDLOTHIAN BLVD.

MAY 25 1971

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

420A
656

MAH. 680-6.98



TRAFFIC SIGNAL PLAN
MIDLOTHIAN BLVD.

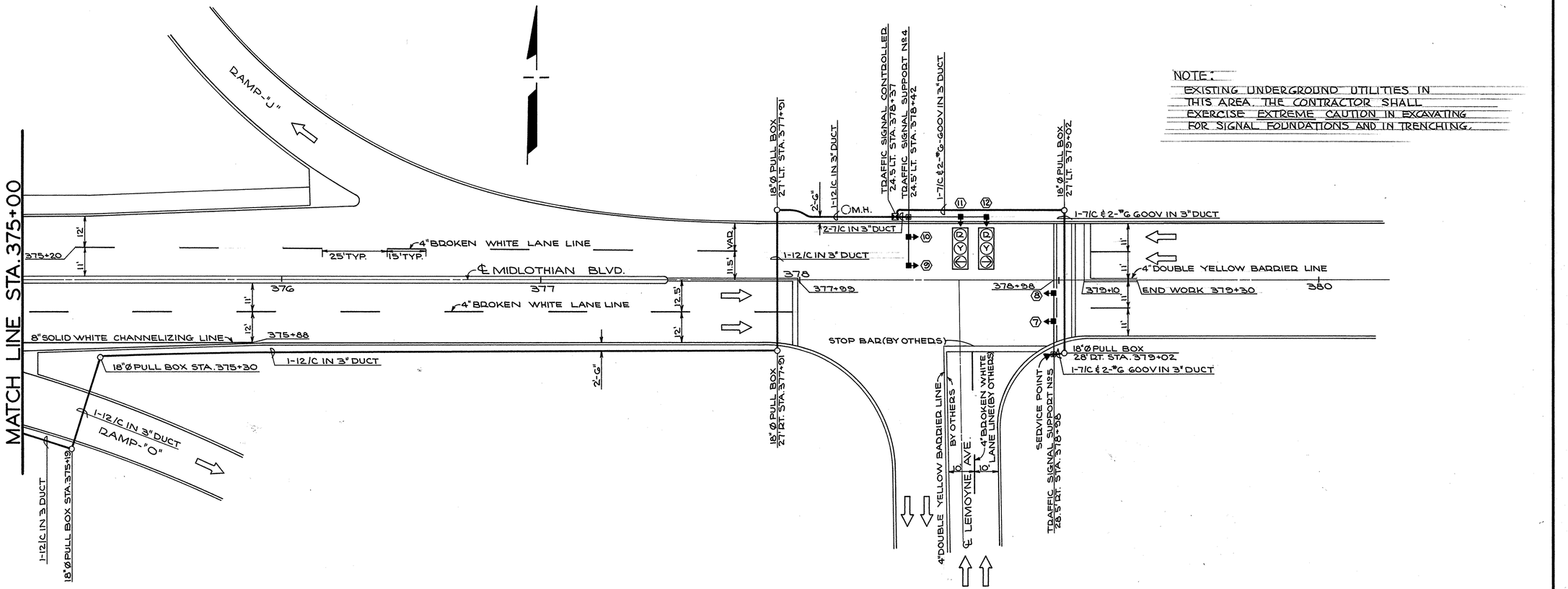
MAY 25 1971

FED. RD. DIV	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

420B
656

NOTE:
EXISTING UNDERGROUND UTILITIES IN THIS AREA. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING FOR SIGNAL FOUNDATIONS AND IN TRENCHING.



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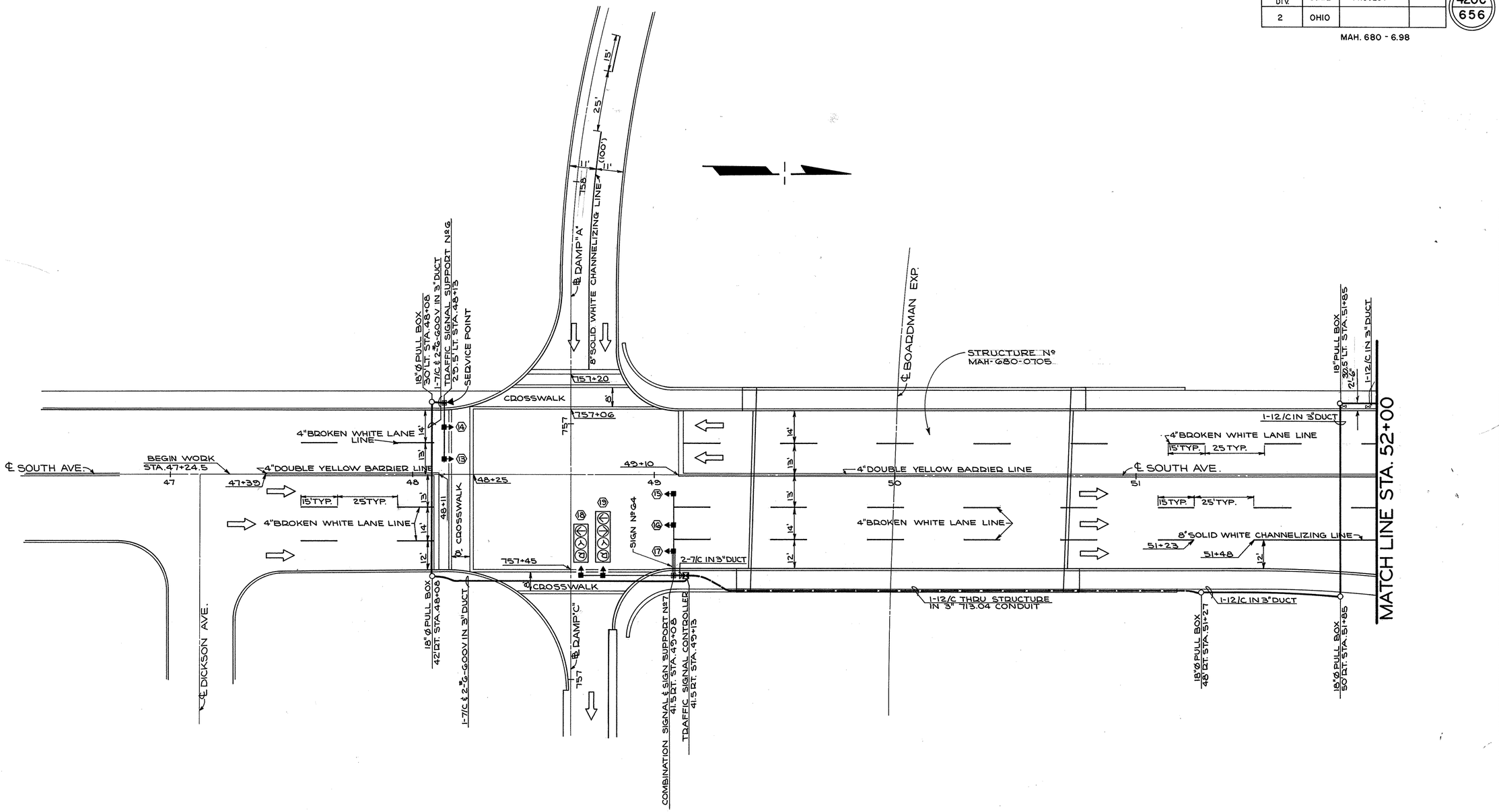
TRAFFIC SIGNAL PLAN
MIDLOTHIAN BLVD.

MAY 25 1971

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

420C / 656

MAH. 680 - 6.98



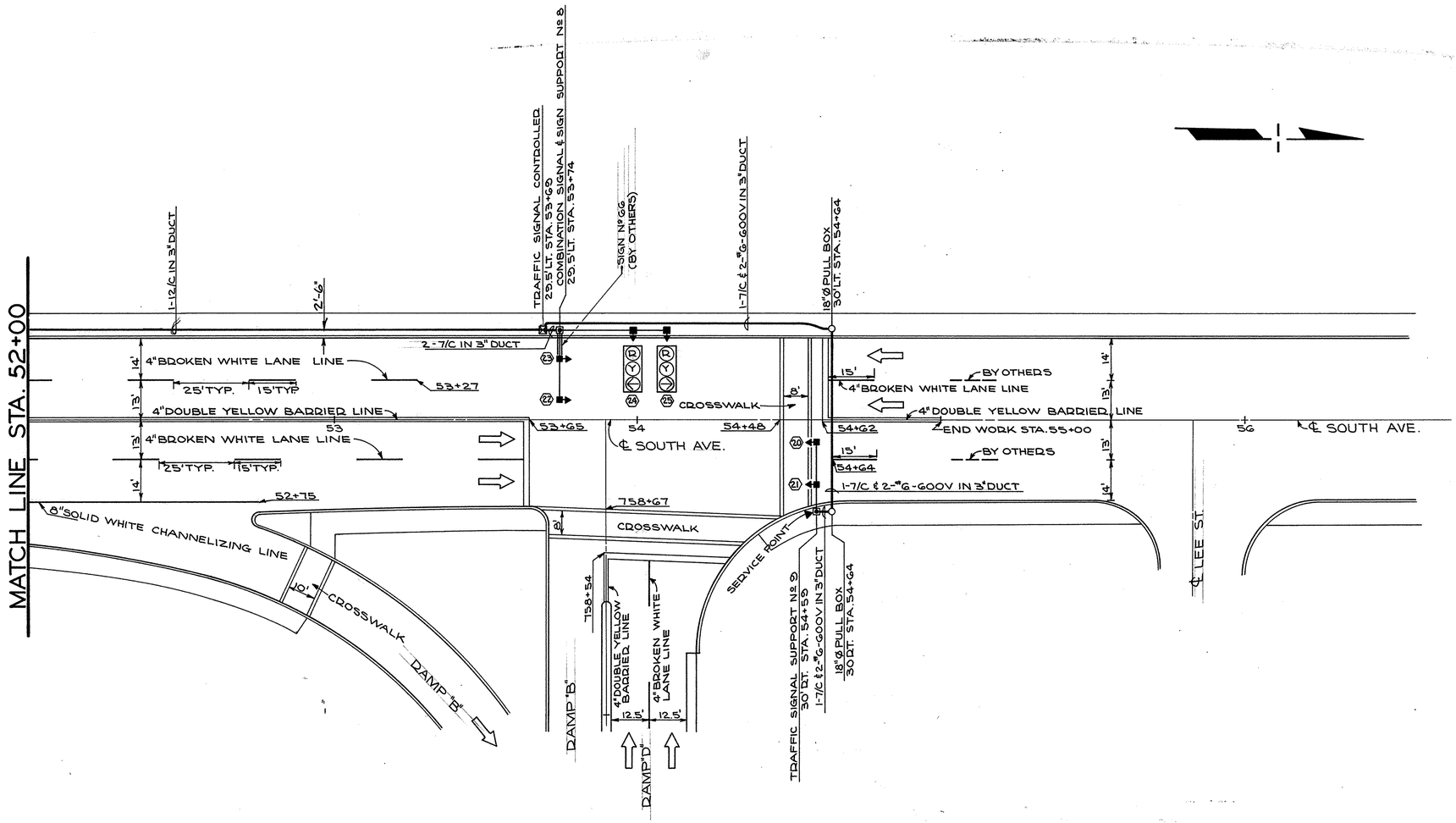
TRAFFIC SIGNAL PLAN
SOUTH AVE.

MAY 25 1971

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

420D
656

MAH. 680-6.98



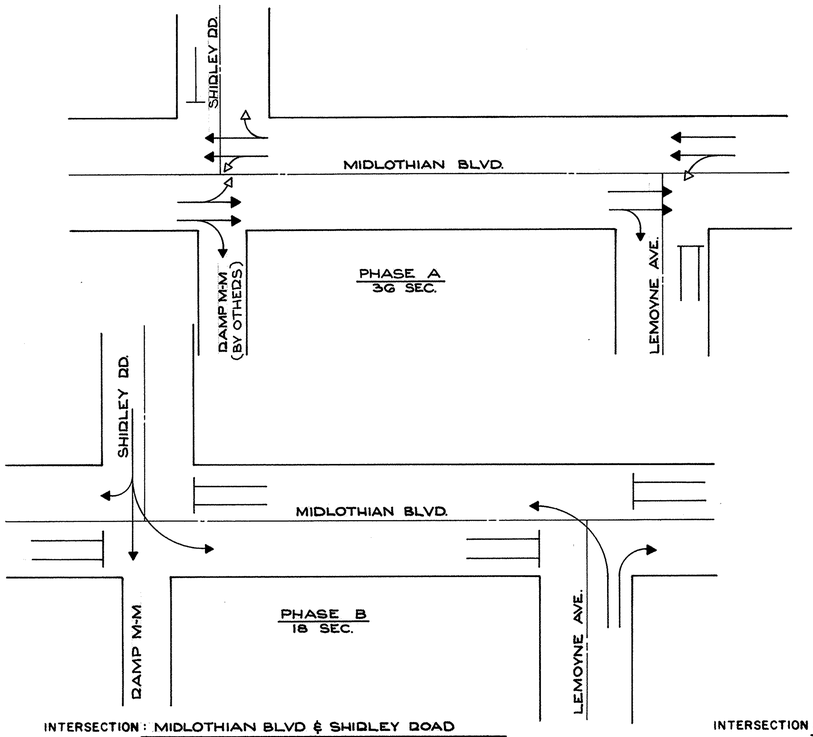
TRAFFIC SIGNAL PLAN
SOUTH AVE.

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

421
656

MAH. 680-6.98



INTERSECTION : MIDLOTHIAN BLVD & SHIDLEY ROAD

COLOR SEQUENCE CHART

DIAL SETTING – (PERCENT)

STREET	SIGNAL NUMBER	LENS	60	5	30	5	INTERVAL 1	2	3	4
SHIDLEY ROAD	6	R								
		Y								
		G								
	5	R								
		Y								
		G								
MIDLOTHIAN BLVD.	4	R								
		Y								
		G								
	3	R								
		Y								
		G								
	2	R								
		Y								
		G								
	1	R								
		Y								
		G								

INTERSECTION : MIDLOTHIAN BLVD. & LEMOYNE AVE.

COLOR SEQUENCE CHART

DIAL SETTING – (PERCENT)

STREET	SIGNAL NUMBER	LENS	60	5	30	5	INTERVAL 1	2	3	4
LEMOYNE AVE.	12	R								
		Y								
		G								
	13	R								
		Y								
		G								
MIDLOTHIAN BLVD.	10	R								
		Y								
		G								
	9	R								
		Y								
		G								
	8	R								
		Y								
		G								
	7	R								
		Y								
		G								

INTERSECTION MIDLOTHIAN BLVD. & SHIDLEY RD.

BREAK OUT CAM SEGMENTS AS INDICATED BELOW

CAM CHART

POSITION	CAM	1	2	3	4	5	6	7	8	9	10	11	12
	LT				4				8				12
	CSD		2	3	4		6	7	8		10	11	12
MIDLOTHIAN-GREEN	1G	1				5				9			
MIDLOTHIAN-YELLOW	1A		2				6				10		
MIDLOTHIAN-RED	1R			3	4			7	8			11	12
SHIDLEY-GREEN	2G			3				7				11	
SHIDLEY-YELLOW	2A				4				8				12
SHIDLEY-RED	2R	1	2			5	6			9	10		

INTERSECTION MIDLOTHIAN BLVD. & LEMOYNE AVE.

BREAK OUT CAM SEGMENTS AS INDICATED BELOW

CAM CHART

POSITION	CAM	1	2	3	4	5	6	7	8	9	10	11	12
	LT				4				8				12
	CSD		2	3	4		6	7	8		10	11	12
MIDLOTHIAN-GREEN	1G	1				5				9			
MIDLOTHIAN-YELLOW	1A		2				6				10		
MIDLOTHIAN-RED	1R			3	4			7	8			11	12
LEMOYNE-GREEN	2G			3				7				11	
LEMOYNE-YELLOW	2A				4				8				12
LEMOYNE-RED	2R	1	2			5	6			9	10		

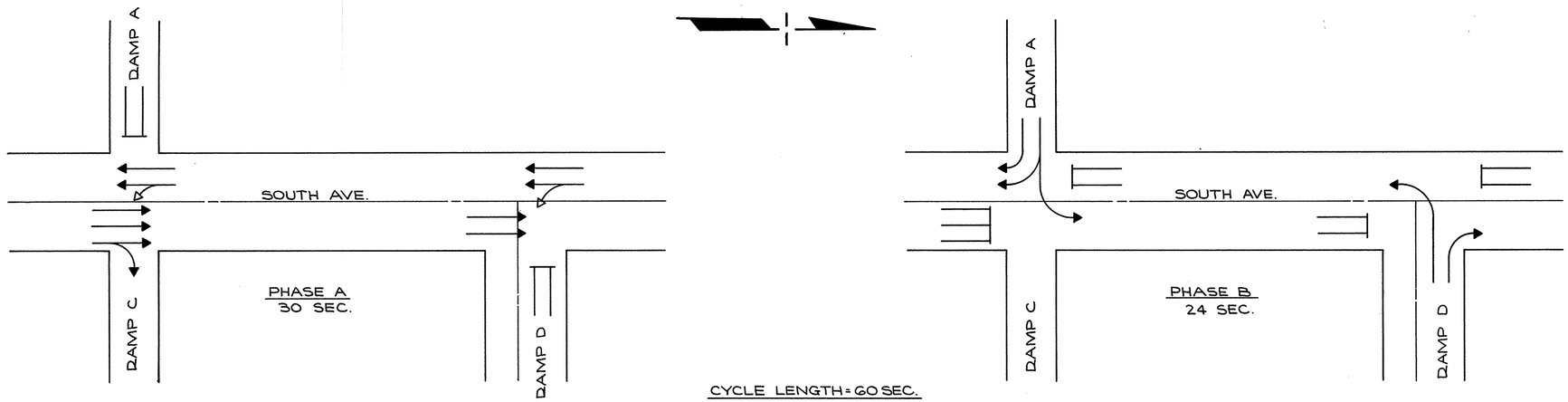
MAY 25 1971

TRAFFIC SIGNAL OPERATION DETAILS

FED. RD.	STATE	PROJECT	
2	OH10		

421-A
656

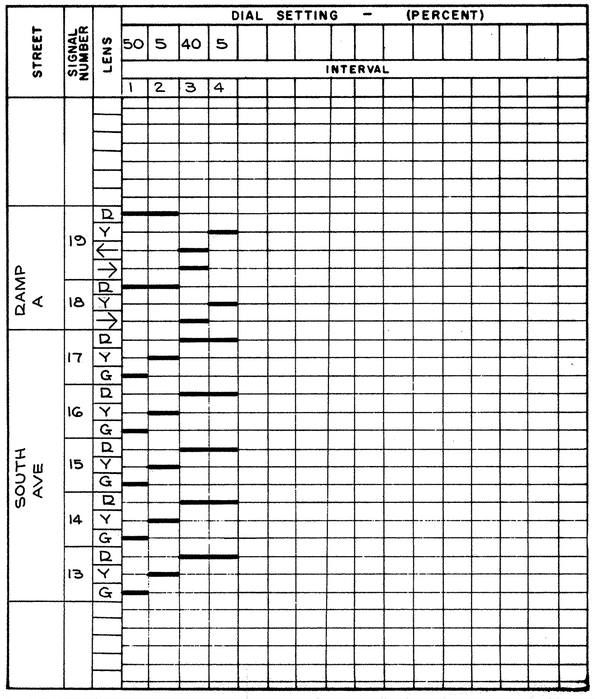
MAH. 680-6.98



CYCLE LENGTH = 60 SEC.

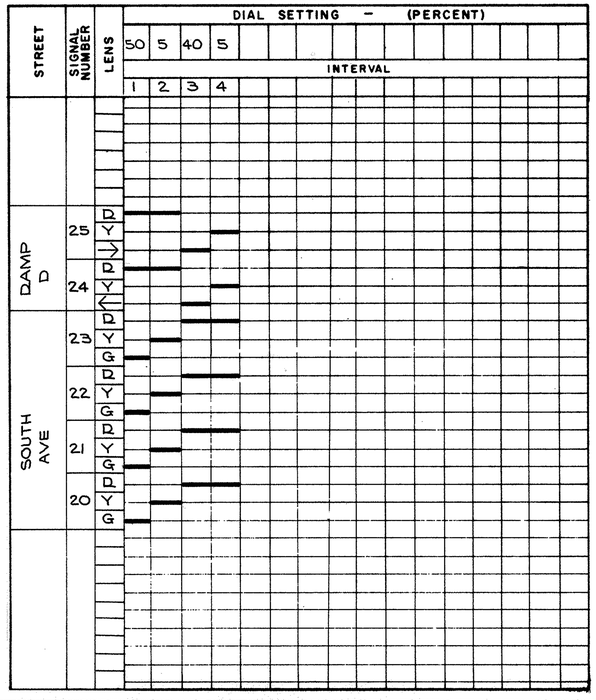
INTERSECTION SOUTH AVE. & RAMP A

COLOR SEQUENCE CHART



INTERSECTION SOUTH AVE. & RAMP D

COLOR SEQUENCE CHART



INTERSECTION SOUTH AVE & RAMP A

BREAK OUT CAM SEGMENTS AS INDICATED BELOW

CAM CHART

POSITION	CAM	1	2	3	4	5	6	7	8	9	10	11	12				
	LT				4				8				12				
	CSR		2	3	4		6	7	8		10	11	12				
SOUTH AVE-GREEN	1G	1				5				9							
SOUTH AVE-YELLOW	1A		2				6				10						
SOUTH AVE-RED	1R			3	4			7	8			11	12				
RAMP A-GREEN	2G			3				7				11					
RAMP A-YELLOW	2A				4				8				12				
RAMP A- RED	2R	1	2			5	6			9	10						

INTERSECTION SOUTH AVE & RAMP D

BREAK OUT CAM SEGMENTS AS INDICATED BELOW

CAM CHART

POSITION	CAM	1	2	3	4	5	6	7	8	9	10	11	12				
	LT				4				8				12				
	CSR		2	3	4		6	7	8		10	11	12				
SOUTH AVE-GREEN	1G	1				5				9							
SOUTH AVE-YELLOW	1A		2				6				10						
SOUTH AVE-RED	1R			3	4			7	8			11	12				
RAMP D-GREEN	2G			3				7				11					
RAMP D-YELLOW	2A				4				8				12				
RAMP D-RED	2R	1	2			5	6			9	10						

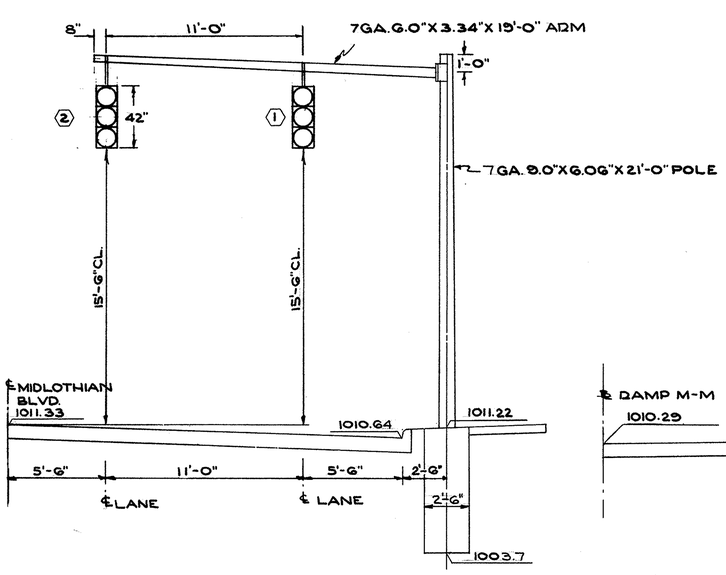
MAY 25 1971

TRAFFIC SIGNAL OPERATION DETAILS

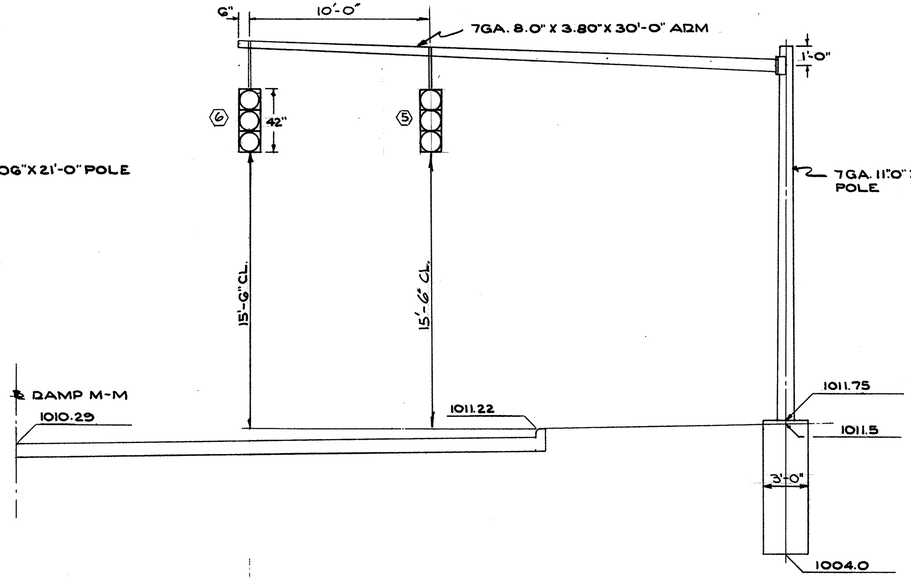
FED. RD.	STATE	PROJECT	
2	OHIO		

422
656

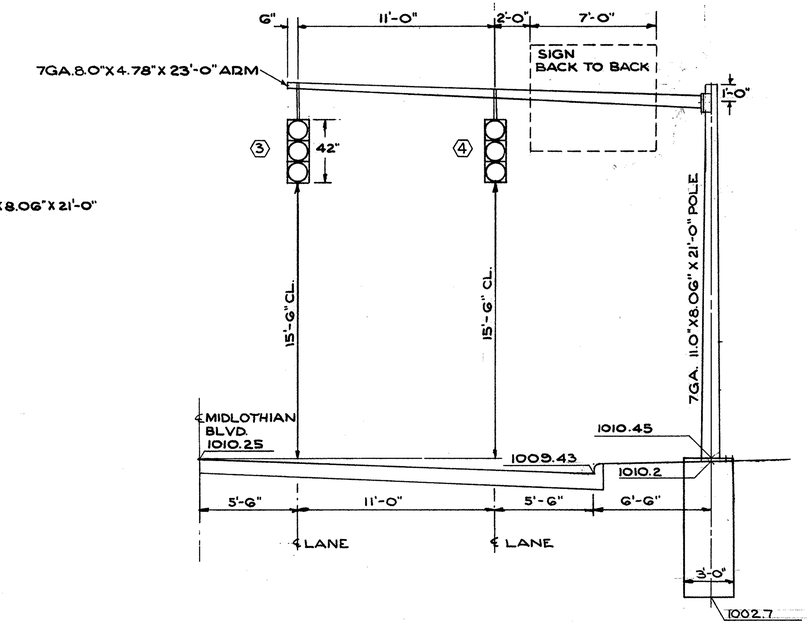
MAH.-680-698



TRAFFIC SIGNAL SUPPORT Nº 1
24.5' LT. STA. 365+00 MIDLOTHIAN BLVD.



TRAFFIC SIGNAL SUPPORT Nº 2
26' RT. STA. 364+95 MIDLOTHIAN BLVD.



TRAFFIC SIGNAL SUPPORT Nº 3
28.5' RT. STA. 365+83 MIDLOTHIAN BLVD.

NOTE:

ALL TRAFFIC SIGNAL ARMS SHALL BE NORMAL TO THE CENTERLINE OF THE APPROACH CONTROLLED BY THE SIGNALS SUPPORTED BY THAT ARM, UNLESS OTHERWISE INDICATED.

SIGNAL DETAILS MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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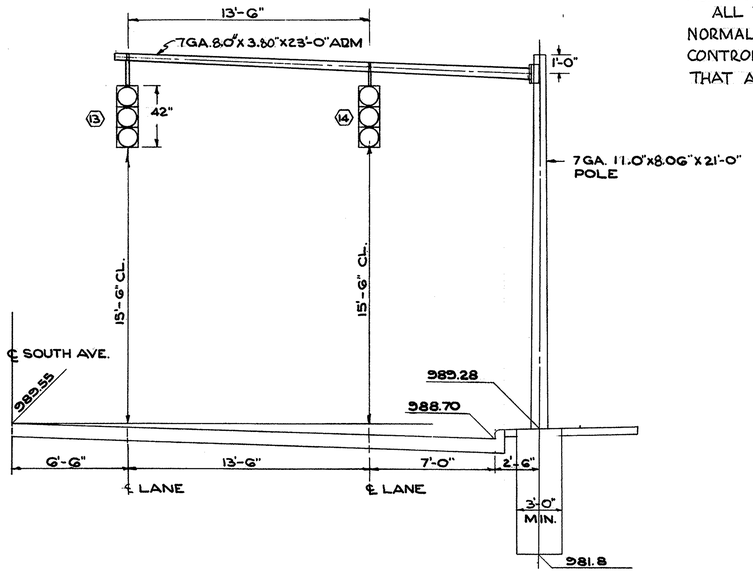
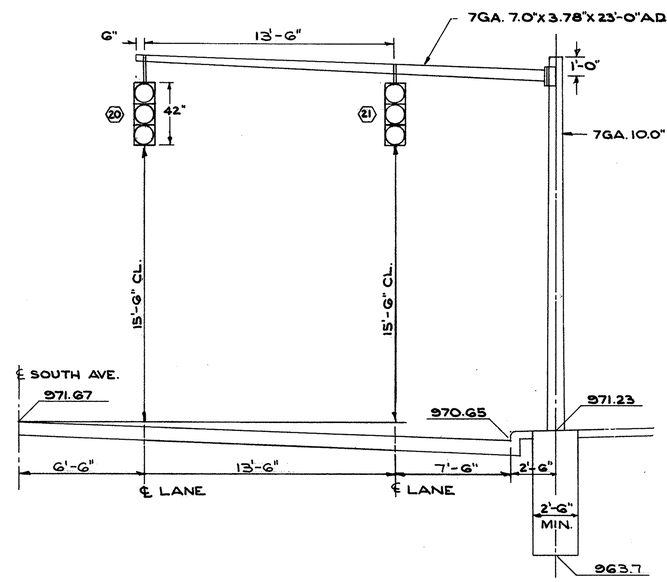
MAH.-680-698

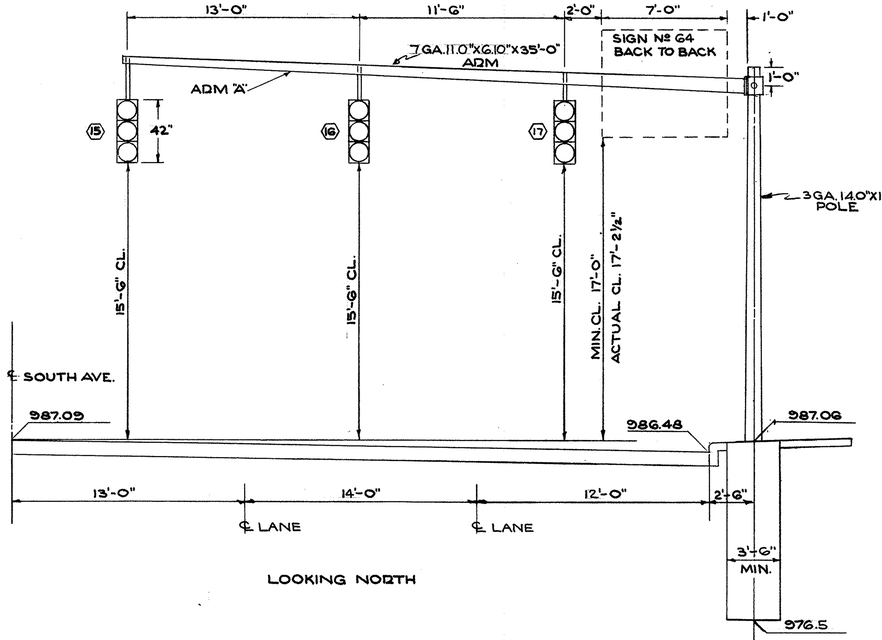
NOTE :
ALL TRAFFIC SIGNAL ARMS SHALL BE NORMAL TO THE CENTERLINE OF THE APPROACH CONTROLLED BY THE SIGNALS SUPPORTED BY THAT ARM UNLESS OTHERWISE INDICATED.



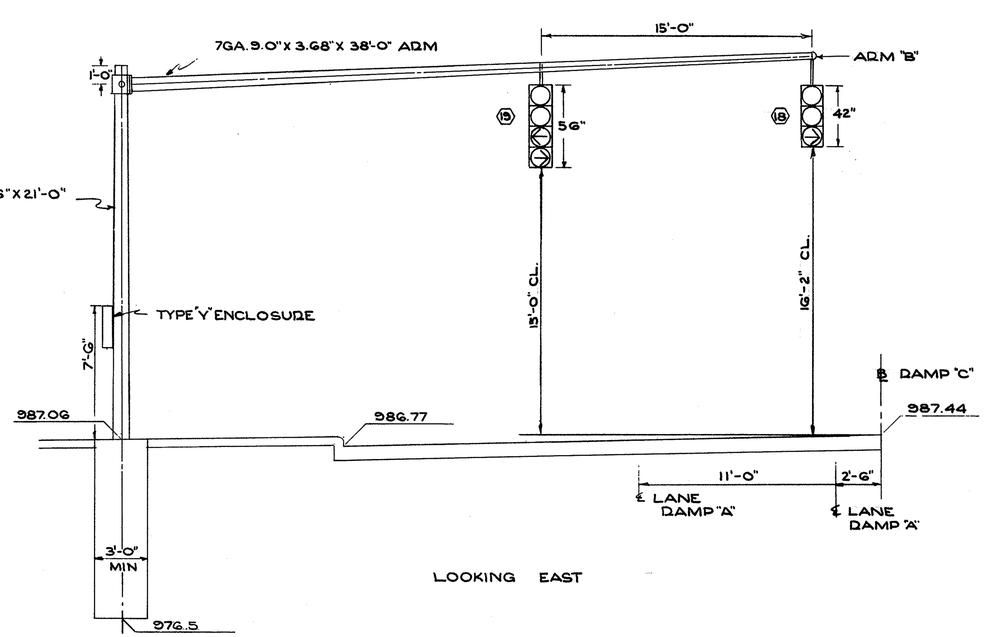
TRAFFIC SIGNAL SUPPORT Nº 6
29.5' LT. STA. 48+13 SOUTH AVE.



TRAFFIC SIGNAL SUPPORT Nº 9
30' RT. STA. 54+59 SOUTH AVE.



LOOKING NORTH



LOOKING EAST

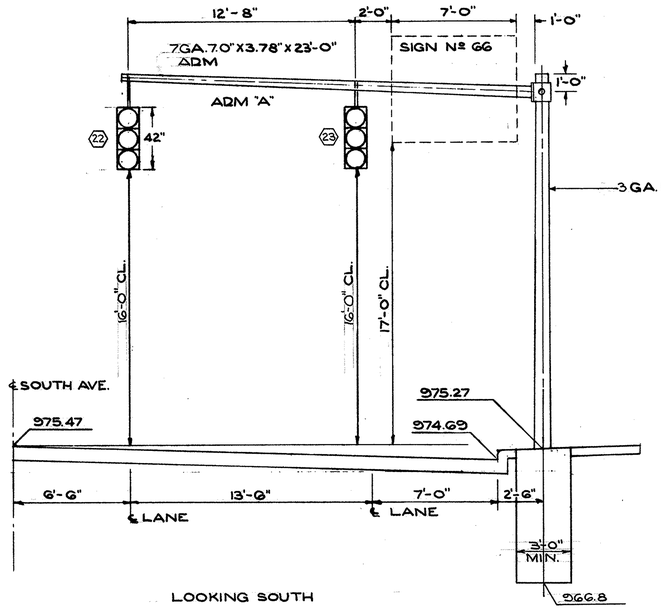
TRAFFIC SIGNAL SUPPORT Nº7
41.5' RT. STA. 49+08 SOUTH AVE.

SIGNAL DETAILS MAY 25 1971

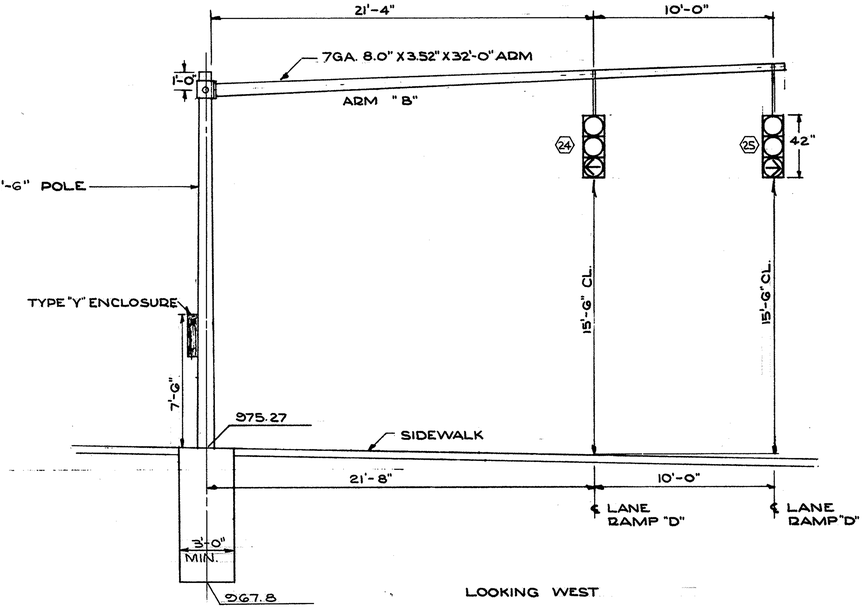
FED.RD.	STATE	PROJECT	
2	OHIO		

422-B
656

MAH.-680-698

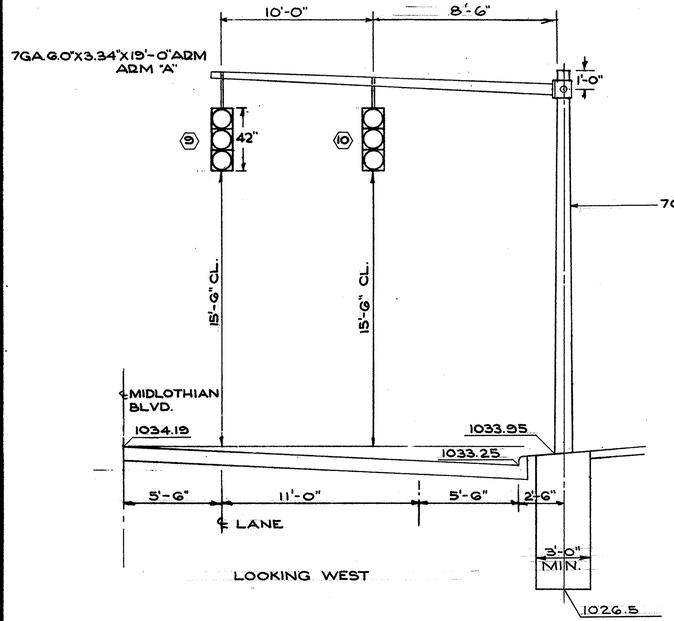


LOOKING SOUTH

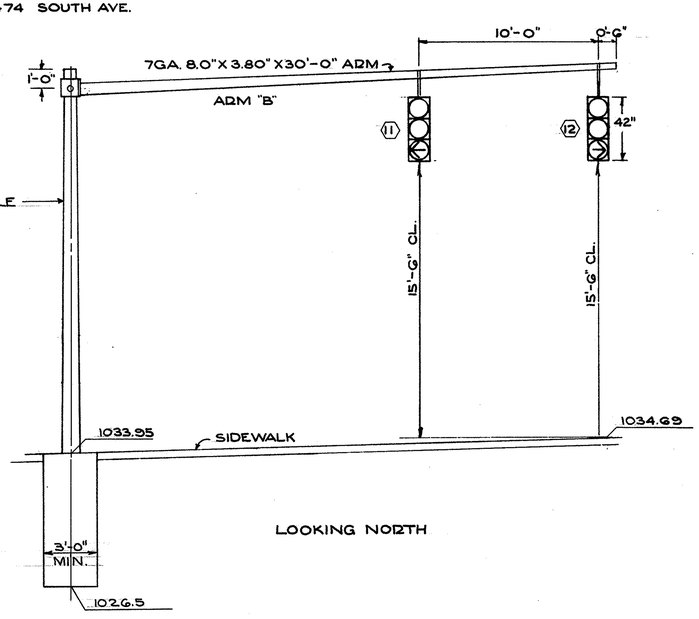


LOOKING WEST

TRAFFIC SIGNAL SUPPORT Nº 8
29.5' LT. STA. 53+74 SOUTH AVE.

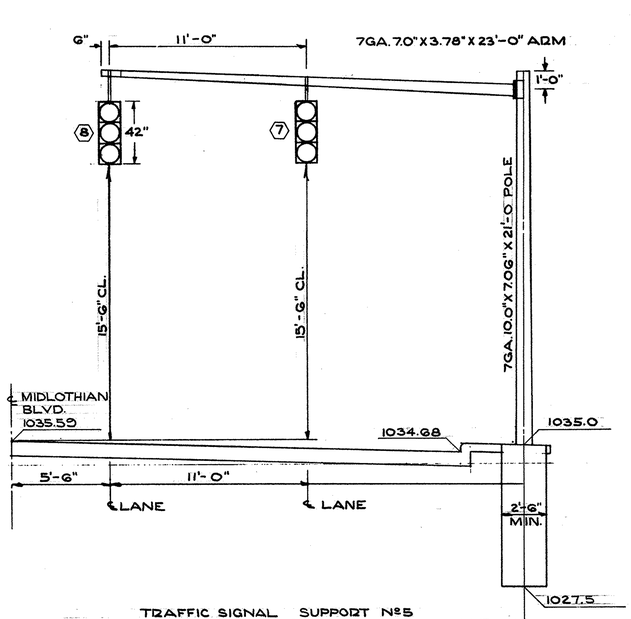


LOOKING WEST



LOOKING NORTH

TRAFFIC SIGNAL SUPPORT Nº 4
24.5' LT. STA. 378+42 MIDLOTHIAN BLVD.



TRAFFIC SIGNAL SUPPORT Nº 5
28.5' RT. STA. 378+98 MIDLOTHIAN BLVD.

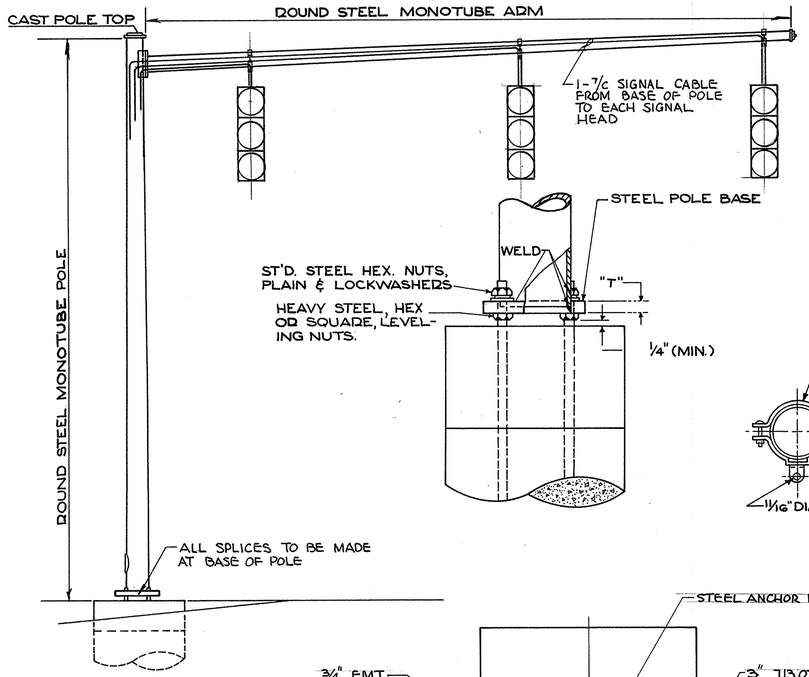
SIGNAL DETAILS

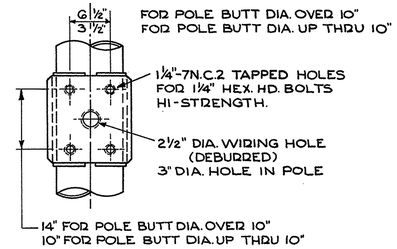
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

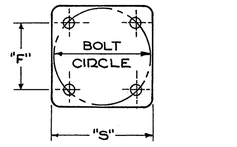
422C
656

MAH.-680-698

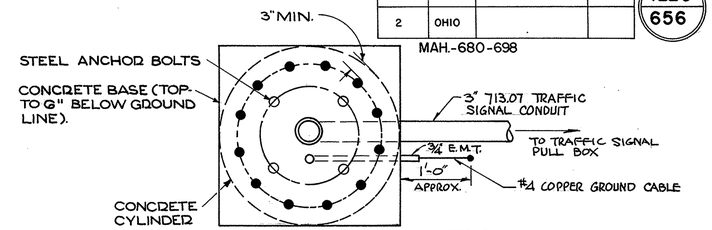




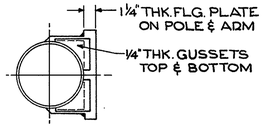
SINGLE ARM ATTACHMENT DETAIL

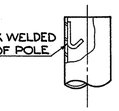


POLE BASE DETAIL

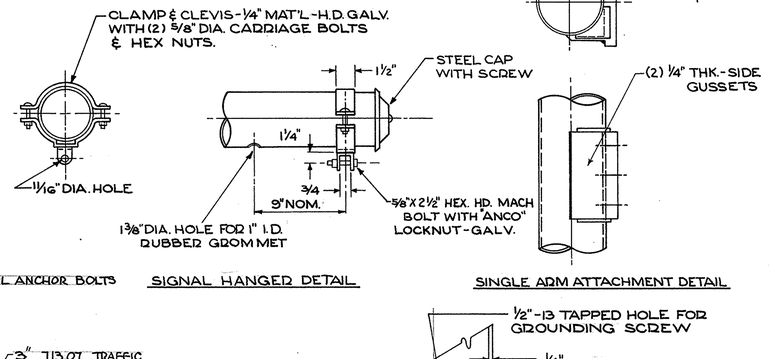


SEE DETAIL THIS SHEET FOR COMBINATION SIGNAL SUPPORT TYPICAL CONDUIT DETAILS



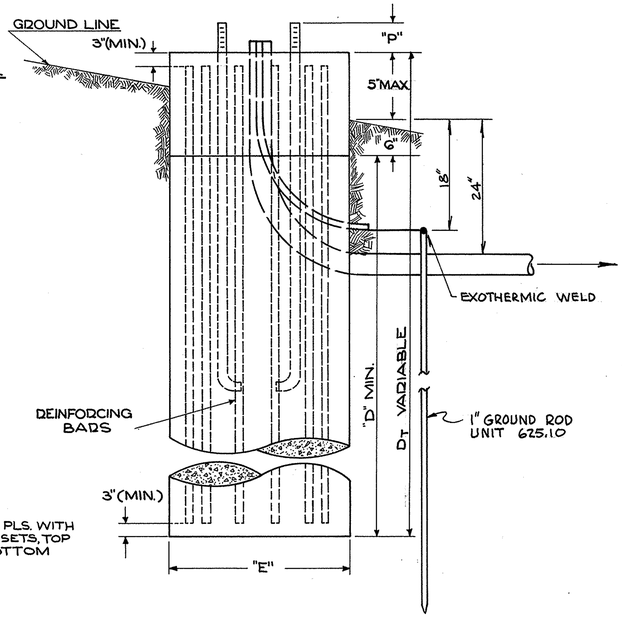


"J" HOOK DETAIL

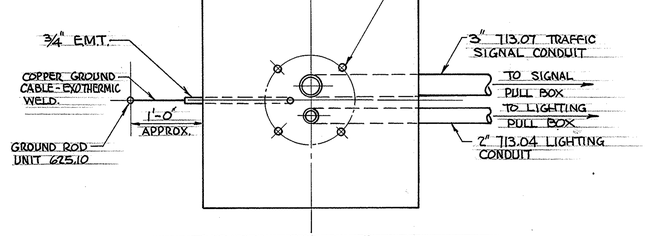


SIGNAL HANGER DETAIL

SINGLE ARM ATTACHMENT DETAIL

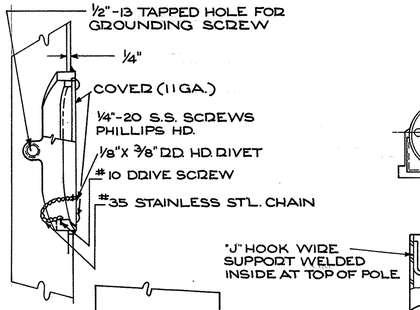


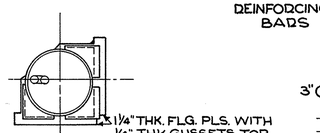
FOUNDATION DETAIL

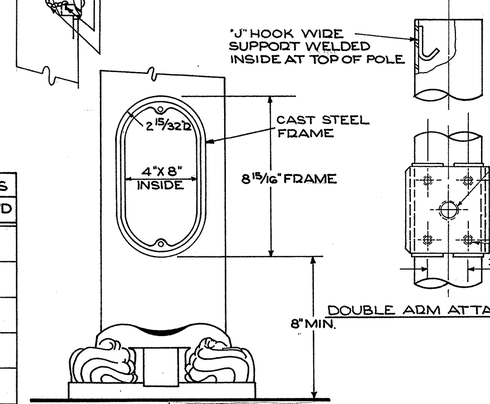


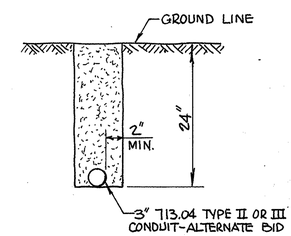
TYPICAL CONDUIT DETAIL OF COMBINATION SIGNAL SUPPORTS

NO SCALE









TRENCH DETAIL
3" 713.04 TYPE II OR III CONDUIT

SUPPORT NO.	POLE SIZE	ARM SIZE: ARM	ARM SIZE: SIZE	DIM "D" MIN.	DIM E	DIM F	DIM P	DIM S	DIM T	BOLT CIRCLE	ANCHOR BOLT SIZE	TOTAL* SIGN AREA	REINF. BARS: SIZE	REINF. BARS: #REQ'D
1	7 GA, 9.0"X6.06"X21'-0"		7GA, 6.0"X3.34"X19'-0"	7'	2'-6"	8⅞"	6"	12¾"	1 5/16"	12½"	1¼"X48"			8
2	7GA, 11.0"X 8.06"X21'-0"		7GA, 8.0"X3.80"X 30'-0"	7'	3'-0"	10⅝"	6½"	15⅝"	1⅝"	15"	1½"XGO"			12
3	7GA, 11.0"X8.06"X21'-0"		7GA, 8.0"X4.78"X 23'-0"	7'	3'-0"	10⅝"	6½"	15⅝"	1⅝"	15"	1½"XGO"	84 SQ. FT.		8
4	7GA, 11.0"X 8.06"X21'-0"	A	7GA, 6.0"X3.34"X19'-0"	7'	3'-0"	10⅝"	6½"	15⅝"	1⅝"	15"	1½"XGO"			12
		B	7GA, 8.0"X3.80"X30'-0"											
5	7GA, 10.0"X 7.06"X21'-0"		7GA, 7.0"X3.78"X23'-0"	7'	2'-6"	9 9/16"	6½"	14⅛"	1 7/16"	13½"	1½"XGO"			8
6	7GA, 11.0"X8.06"X21'-0"		7GA, 8.0"X3.80"X23'-0"	7'	3'-0"	10⅝"	6½"	15⅝"	1⅝"	15"	1½"XGO"			8
7	3GA, 140"X11.06"X21'-0"	A	7GA, 11.0"X6.10"X35'-0"	10'	3'-6"	14⅛"	7¾"	20½"	2"	20"	1¾"X90"	84 SQ. FT.		12
		B	7GA, 9.0"X3.68"X38'-0"											
8	3 GA, 11.0"X 7.93"X21'-6"	A	7GA, 7.0"X3.78"X23'-0"	8'	3'-0"	10⅝"	6½"	15⅝"	1⅝"	15"	1¾"X90"	49 SQ. FT.		12
		B	7GA, 8.0"X3.52"X32'-0"											
9	7GA, 10.0"X 7.06"X21'-0"		7GA, 7.0"X3.78"X23'-0"	7'	2'-6"	9 9/16"	6½"	14⅛"	1 7/16"	13½"	1½"XGO"			8

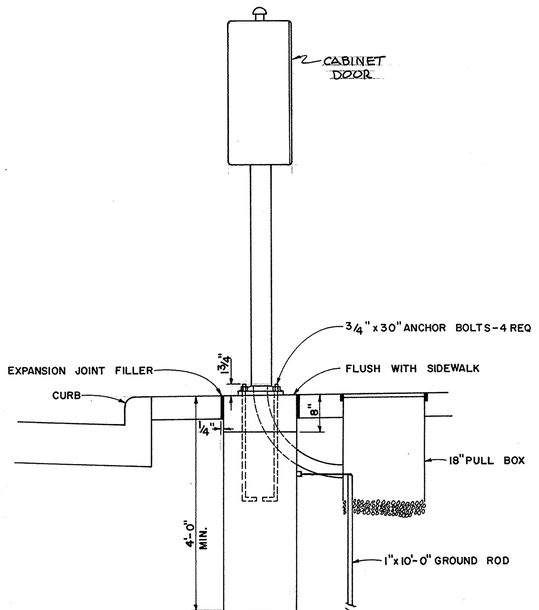
*INCLUDES GLARE SHIELD

TRAFFIC SIGNAL SUPPORT DETAILS MAY 25 1971

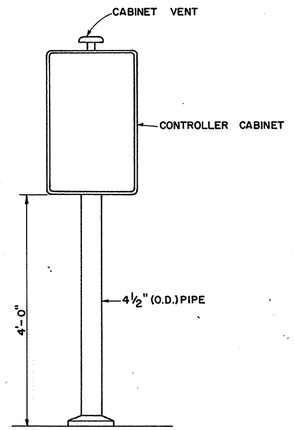
FED. RD.	STATE	PROJECT	
2	OHIO		

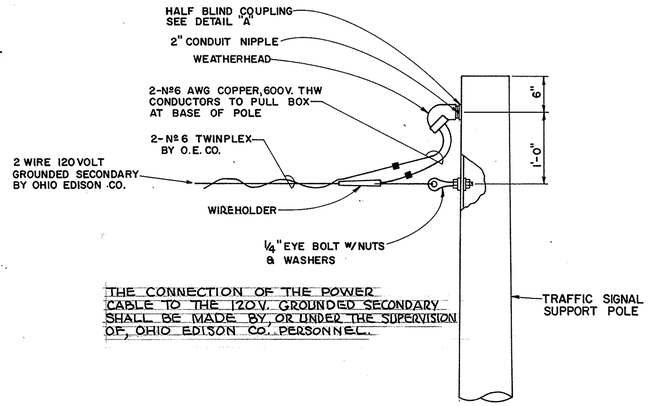
MAH-680-6.98

422-D
656



CONTROLLER CABINET & FOUNDATION DETAIL





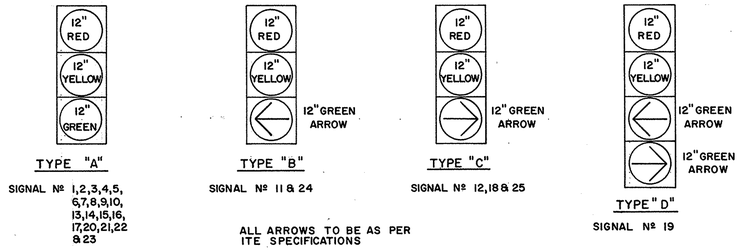
THE CONNECTION OF THE POWER CABLE TO THE 120V. GROUNDED SECONDARY SHALL BE MADE BY, OR UNDER THE SUPERVISION OF, OHIO EDISON CO. PERSONNEL.

SECONDARY SERVICE DETAIL

NOTE :

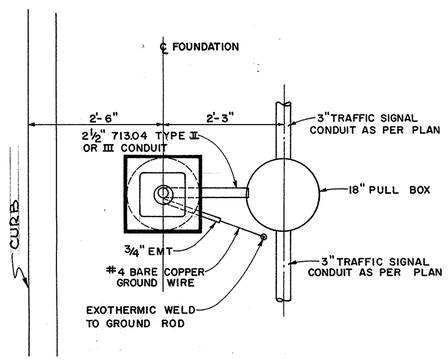
CONTRACTOR SHALL FIELD DETERMIN THE BEST ORIENTION FOR MOUNTING THE WEATHERHEAD ON THE POLE TO SUIT THE PARTICULAR LOCATION AND TO FACILITATE THE CONNECTION OF THE SUPPLY SERVICE BY THE OHIO EDISON CO.

THE CONTRACTOR SHALL MAKE ALL NECCESSARY ARRANGEMENTS FOR POWER WITH THE OHIO EDISON CO.

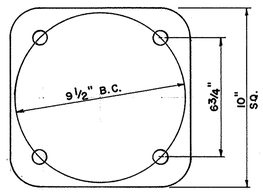


ALL ARROWS TO BE AS PER ITE SPECIFICATIONS

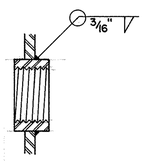
SIGNAL ARRANGEMENT DETAIL



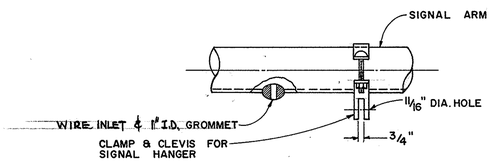
CONTROLLER FOUNDATION - PLAN VIEW

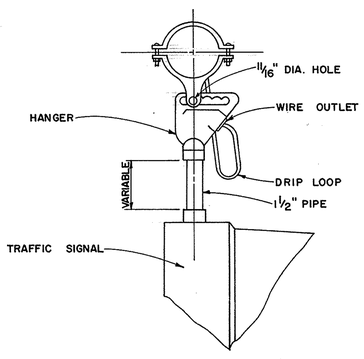


ANCHOR BOLT PLAN

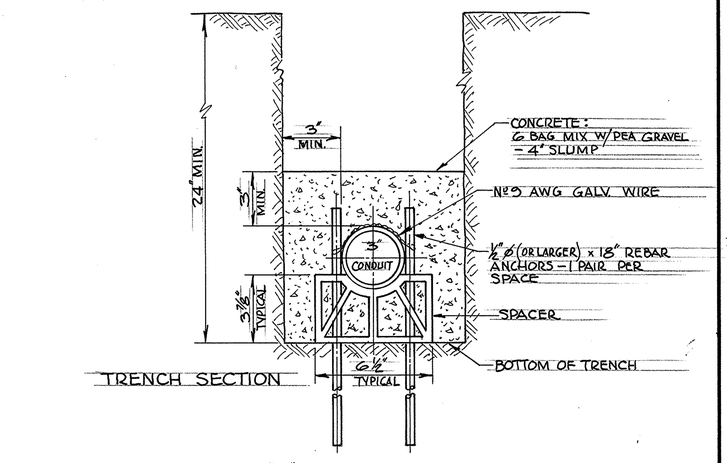


DETAIL "A"

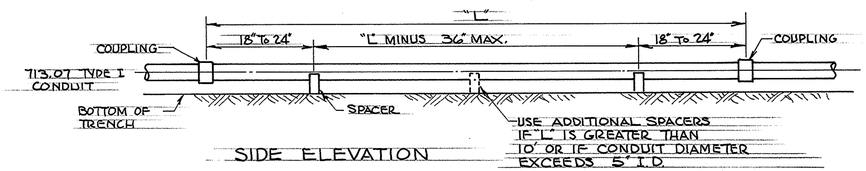




DETAIL A MAST ARM TRAFFIC SIGNAL ATTACHMENT



TRENCH SECTION



SIDE ELEVATION

TRAFFIC SIGNAL DETAILS

MAY 25 1971

FED.RD.	STATE	PROJECT	
2	OHIO		

MAH.-680-698

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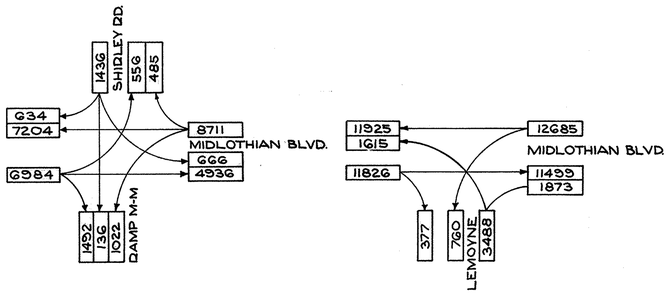
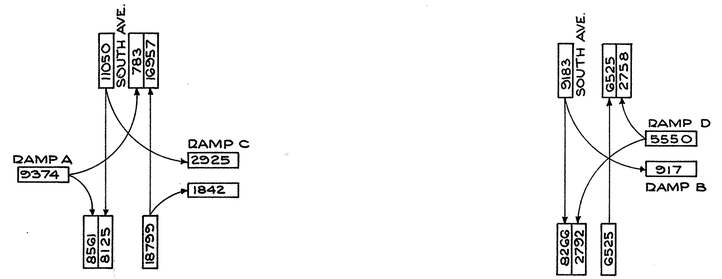
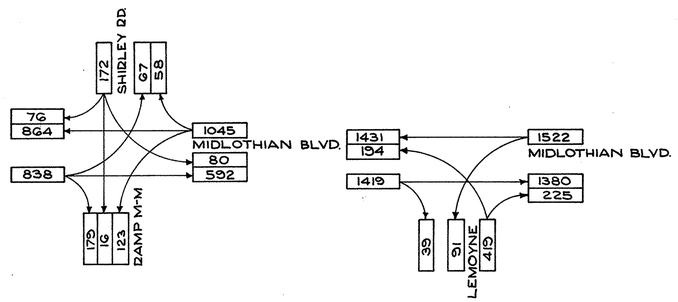


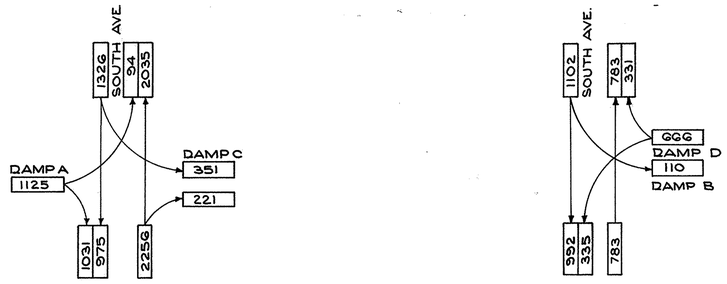
1972 AVERAGE DAILY TRAFFIC (ADT)



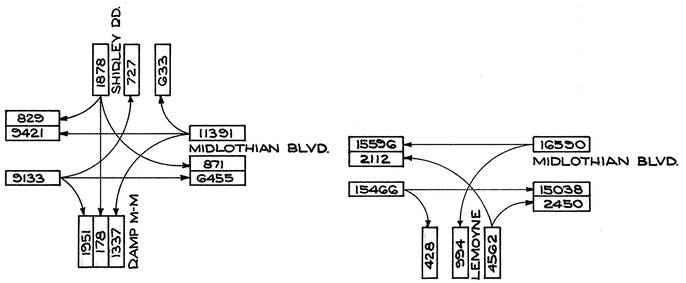
1972 AVERAGE DAILY TRAFFIC (ADT)



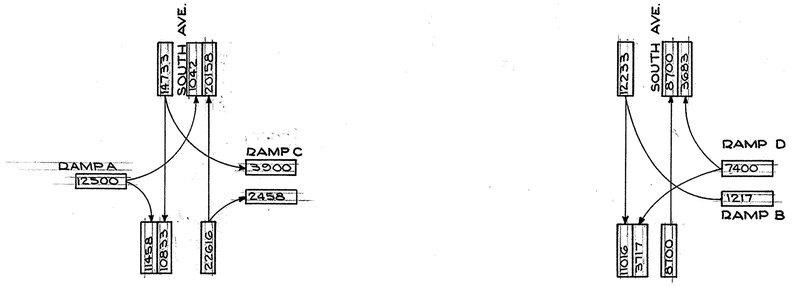
1972 DESIGN HOUR VOLUME (DDHV)



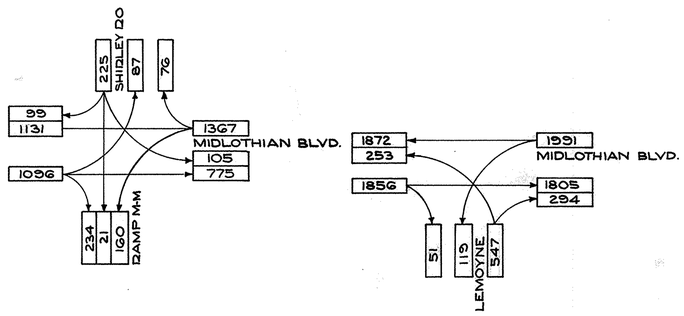
1972 DESIGN HOUR VOLUME (DDHV)



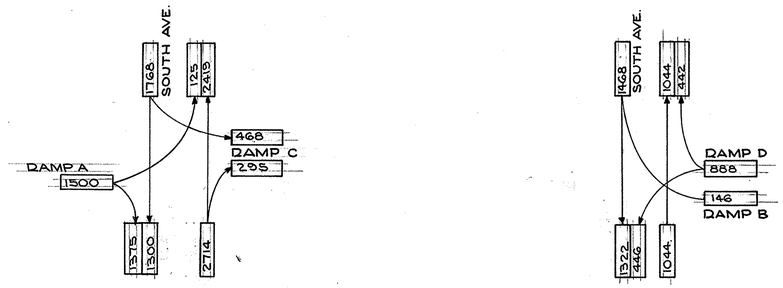
1985 AVERAGE DAILY TRAFFIC (ADT)



1985 AVERAGE DAILY TRAFFIC (ADT)



1985 DESIGN HOUR VOLUME (DDHV)



1985 DESIGN HOUR VOLUME (DDHV)

MAY 25 1971

TRAFFIC VOLUMES

GENERAL LIGHTING NOTES

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH – 680– 6.98

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625.03 - GENERAL

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

OHIO EDISON COMPANY
25 E. BOARDMAN STREET
YOUNGSTOWN, OHIO 44503

REVISION OF LIGHT POLE OFFSETS

IN LIEU OF THE RESPECTIVE DETAILS SHOWN ON STANDARD CONSTRUCTION DRAWINGS HL-1 AND HL-3 AND ELSEWHERE ON THIS PLAN, THE NORMAL TRENCH ALIGNMENT ON THIS PROJECT SHALL BE PARALLEL TO THE CONTROLLING PAVEMENT EDGE OR BASELINE AND DIRECT FROM POLE TO POLE, THE SPECIAL CONDUIT ELBOWS IN THE POLE FOUNDATIONS SHALL BE IN A VERTICAL PLANE ALONG THE POLE ALIGNMENT, AND THE NORMAL OFFSET DISTANCE OF THE POLES FROM FACE OF GUARD RAIL SHALL BE 36 INCHES.

TRANSFORMER BASE POLES

FOR POLE DESIGNS WITH A BASE TYPE LETTER DESIGNATION OF AT, THE TRANSFORMER BASE SHALL BE CAST ALUMINUM AS DETAILED ON THIS PLAN. WHERE THE BASE TYPE LETTER DESIGNATION IS T, THE TRANSFORMER BASES FURNISHED MAY, AT THE OPTION OF THE CONTRACTOR, BE EITHER OF CAST ALUMINUM OR OF STEEL MATERIALS MEETING THE REQUIREMENTS OF THIS PLAN AND THE GENERAL SPECIFICATIONS.

SPECIFICATIONS

THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 713 OF THE STATE OF OHIO DEPARTMENT OF HIGHWAYS CONSTRUCTION AND MATERIAL SPECIFICATIONS DATED JANUARY 1, 1971.

REFERENCE SHALL BE MADE TO STANDARD CONSTRUCTION DRAWINGS HL-1, HL-2, HL-3 and HL-4.

IN LIEU OF PERTINENT DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS, THE TOPS OF LIGHT POLE FOUNDATIONS AND OF PULL BOXES SHALL NOT EXCEED 1 INCH ABOVE THE SURROUNDING GROUND ELEVATION AT THE HIGH POINT OF THE SURROUNDING GROUND.

627.07 - 713.11 LUMINAIRES, EXCEPT UNDERPASS LUMINAIRES

(400-WATT LUMINAIRES SHALL HAVE DUAL RATED 240/480 VOLT INTEGRAL REGULATOR BALLASTS AND SHALL BE GENERAL ELECTRIC M400, WESTINGHOUSE OV-25, McGRAW-EDISON "UNISTYLE", OR EQUAL APPROVED BY THE ENGINEER.)

(700-WATT LUMINAIRES SHALL HAVE SINGLE RATED 480 VOLT 700 WATT INTEGRAL REGULATOR BALLASTS AND SHALL BE GENERAL ELECTRIC M-1000, WESTINGHOUSE OV-50, McGRAW-EDISON "UNISTYLE", OR EQUAL APPROVED BY THE ENGINEER.)

(1000-WATT LUMINAIRES SHALL HAVE SINGLE RATED 480 VOLT 1000 WATT INTEGRAL REGULATOR BALLASTS AND SHALL BE GENERAL ELECTRIC M-1000, WESTINGHOUSE OV-50, McGRAW-EDISON "UNISTYLE", OR EQUAL APPROVED BY THE ENGINEER.)

625.07 - 713.13 UNDERPASS LUMINAIRES

250-WATT UNDERPASS LUMINAIRES SHALL BE HOLOPHANE "UNDERPASS WALLPACK", WESTINGHOUSE, McGRAW-EDISON UNDER PASS UNIT OR EQUAL APPROVED BY THE ENGINEER, AND SHALL BE FURNISHED WITH AN INTEGRAL FUSE HOLDER AND FUSE. THE INTEGRAL BALLAST SHALL BE OF A REGULATOR TYPE RATED FOR 480 VOLTS.

625.08 - 713.14 LAMPS

MERCURY LAMPS SHALL BE GENERAL ELECTRIC "BONUS LINE", WESTINGHOUSE "LIFE-GUARD", SYLVANIA "ROUGH SERVICE", OR EQUAL APPROVED BY THE ENGINEER.

713.11 LUMINAIRES FOR MERCURY LAMPS

PARAGRAPH(F) IS HEREBY AMENDED TO PROVIDE THAT LUMINAIRES PROVIDING VARIOUS ANSI-IES TYPE DISTRIBUTIONS BY SOCKET ADJUSTMENT SHALL ALSO INCLUDE A MEANS OF IDENTIFICATION TO ASSOCIATE THE LAMP POSITIONS WITH THE DISTRIBUTION TYPES. THE SOCKET ADJUSTMENT SHALL PROVIDE POSITIVE POSITIONING BY MEANS OF INDEX HOLES, LUGS, OR NOTCHES. SLOTS WITH INFINITE SETTINGS WILL NOT BE ACCEPTABLE.

Grounding of Highway Right-of-Way Fences shall be as per details provided on sheet 431, and installation shall be made in accordance with applicable provisions of 625.10. Testing shall be in accordance with 625.22. Payment shall be made in accordance with 625.24 & 625.25.

LIGHT POLE ANCHOR BOLTS FOR BRIDGES AND RETAINING WALLS

ANCHOR BOLTS FOR MOUNTING LIGHT POLES ON BRIDGES AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF 713.01 AND DETAILS SHOWN ON THE PLANS AND STANDARD DRAWINGS FOR THE RESPECTIVE POLES TO BE PLACED THEREON. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH U OR L BOLT OF THE SIZE SPECIFIED AND THIS PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING AND PLACING THE BOLTS.

CONDUIT ON STRUCTURES

EXPANSION FITTINGS FOR CONDUIT ON STRUCTURES SHALL BE OZ TYPE AX, SPRING CITY TYPE AF, APPLETON TYPE XJ-4, OR EQUAL APPROVED BY THE ENGINEER.

ELECTRICAL SERVICE FOR ILLUMINATED SIGNS

THE PAY ITEMS IN THE LIGHTING GENERAL SUMMARY INCLUDE THE PULL BOX OR JUNCTION BOX ADJACENT TO EACH LIGHTED SIGN AND THE ELECTRICAL SERVICE CONNECTIONS LEADING INTO THE BOX, INCLUDING CONNECTOR KITS IN THE PULL BOX OR JUNCTION BOX. QUANTITIES FOR ELECTRICAL SERVICE FROM THE CONNECTOR KITS IN THE PULL BOX OR JUNCTION BOX TO THE SIGN ARE INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY.

ITEM 625 - SERVICE TO UNDERDECK LIGHTING, AS PER PLAN

THIS ITEM SHALL CONSIST OF PROVIDING COMPLETE ELECTRICAL SERVICE, EXCEPT FOR LUMINAIRES, LAMPS, AND GROUNDING SYSTEMS, FOR AN UNDERDECK LIGHTING SYSTEM OF BRIDGE NO. MAH-680-0924 OVER MIDLOTHIAN BOULEVARD, BRIDGE NO. MAH-680-0835 OVER THE MAINLINE, BRIDGE NO. MAH-680-0794 OVER SHADY RUN ROAD, BRIDGE NO. MAH-680-0705 OVER THE MAINLINE& BRIDGE NO. MAH-680-0687 OVER DELASON AVENUE. THE INSTALLATION WORK SHALL INCLUDE CONDUITS, MOUNTINGS, FITTINGS, JUNCTION BOXES, CABLES, AND ALL INCIDENTALS NECESSARY TO COMPLETE, READY FOR USE, THE SERVICE AS DETAILED ON SHEETS **429, 429-A, 429-B**

THE LUMP SUM PRICE BID FOR "ITEM 625 - SERVICE TO UNDERDECK LIGHTING, AS PER PLAN" SHALL INCLUDE PAYMENT FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. COMPONENT PARTS NOT SPECIFICALLY MENTIONED BUT REQUIRED FOR SATISFACTORY OPERATION OF THIS ITEM SHALL BE FURNISHED AND CONSIDERED PAID FOR AS PART OF THE ITEM.

REMOVAL OF EXISTING LIGHTING SYSTEM

THE EXISTING LIGHTING SYSTEM FROM SOUTH AVENUE TO WILLIAMSON AVENUE AS INDICATED ON THE PLANS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT LIMITS AS DIRECTED BY THE PROJECT ENGINEER.

ANCHOR BOLTS FOR OHIO EDISON POLES

ANCHOR BOLTS AND TEMPLATES FOR OHIO EDISON POLES, AS DETAILED ON SHEET 521, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

713.17 STRUCTURE GROUND CABLE

IN LIEU OF PARAGRAPH 2 UNDER THIS SECTION, "STRUCTURE GROUND CABLE SHALL BE ~~1/0~~ AWG, SEVEN STRAND, SOFT OR ANNEALED, BARE COPPER CONFORMING TO ASTM B-8, CLASS A."

625.21 - 713.10 STRUCTURE JUNCTION BOXES

PROVIDE OPENING IN SIDE OF BOX OF THE SAME CONFIGURATION BUT LARGER THAN, AND TO COINCIDE WITH, THE RACEWAY CAVITY IN TOP OF CONCRETE CURB.

ACCORDINGLY, THE DIMENSION FROM INSIDE FACE OF PARAPET WALL TO CENTER-LINE OF THE TYPE B RACEWAY CAVITY SHOULD BE 4" IN LIEU OF 6" AS SHOWN ON STANDARD DRAWING HL-4.

713.20, 8, (h) shall be changed to read: "Factory installed hubs located on side as per plan".

HIGH VOLTAGE DIRECT CURRENT TEST

A high voltage test, as described in Supplemental Specification 839, shall be performed on all (primary feeder cable), (secondary feeder cable), (distribution cable) and (duct cable) systems to be installed on this project, after all construction is completed, including guard rail, fence, delineator posts, signs, etc.

GENERAL LIGHTING NOTES

MAY 25 1971

FED. RD. DIV.	STATE	PROJECT	
2	OH10		

MAH-680-6.98

42.5
G5G

I-680-9 (14) (240)

RURAL 90% FEDERAL 10% STATE ROADWAY 426	RURAL TOTAL	CITY-STATE STRUCTURES 0693 426-K	CITY-STATE STRUCTURES 0687 426-K	CITY-STATE STRUCTURES 0687 426-L	75% STATE 25% CITY ROADWAY 426-J	75% STATE 25% CITY ROADWAY 426-K	75% STATE 25% CITY ROADWAY 426-L	CITY-STATE TOTAL	GRAND TOTAL	ITEM	UNIT	DESCRIPTION	GENERAL REF. LINE NOS.
										625	EACH	LIGHT POLE, DESIGN 11AT15B41.7	1
					1	1	6	8		625	EACH	LIGHT POLE, DESIGN 11AT12B41.7	2
3	3									625	EACH	LIGHT POLE, DESIGN 11AT 8B41.7	3
													4
										625	EACH	LIGHT POLE, DESIGN 11AT12B34.2	5
2	2				2			2		625	EACH	LIGHT POLE, DESIGN 11AT10B34.2	6
										625	EACH	LIGHT POLE, DESIGN 11AT 8B34.2	7
													8
						1	1	2		625	EACH	LIGHT POLE, DESIGN 11T15B41.7 AS PER PLAN	9
					1	5		6		625	EACH	LIGHT POLE, DESIGN 11T12B41.7 AS PER PLAN	10
													11
										625	EACH	LIGHT POLE, DESIGN 11T12B34.2 AS PER PLAN	12
4	4									625	EACH	LIGHT POLE, DESIGN 11T10B34.2 AS PER PLAN	13
										625	EACH	LIGHT POLE, DESIGN 11T 8B34.2 AS PER PLAN	14
													15
		2						2		625	EACH	LIGHT POLE, DESIGN 7A12B42.3	16
										625	EACH	LIGHT POLE, DESIGN 7A12B34.8	17
													18
													19
3	3				2	7	7	16		625	EACH	LIGHT POLE FOUNDATION 24" x 8'-0" DEEP	20
6	6				2			2		625	EACH	LIGHT POLE FOUNDATION 24" x 6'-0" DEEP	21
													22
										625	EACH	LUMINAIRE, TYPE III 700 WATT 713.11	23
3	3	2			2	7	7	18		625	EACH	LUMINAIRE, TYPE II 700 WATT 713.11	24
										625	EACH	LUMINAIRE, TYPE III 400 WATT 713.11	25
6	6				2			2		625	EACH	LUMINAIRE, TYPE II 400 WATT 713.11	26
			5					5		625	EACH	LUMINAIRE, UNDERPASS 250 WATT MERCURY 713.13	27
													28
			5					5		625	EACH	LAMP, 713.14, 250 WATT MERCURY-CLEAR	29
6	6				2			2		625	EACH	LAMP, 713.14, 400 WATT MERCURY-CLEAR	30
		2			2	7	7	18		625	EACH	LAMP, 713.14, 700 WATT MERCURY-CLEAR	31
										625	EACH	LAMP, 713.14, 400 WATT MERCURY-DELUX WHITE	32
3	3									625	EACH	LAMP, 713.14, 700 WATT MERCURY-DELUX WHITE	33
										625	EACH	GLARE SHIELD, 713.11, 700 WATT LUMINAIRE	34
													35
							LUMP	LUMP		625	LUMP	REMOVAL OF EXISTING LIGHTING SYSTEM	36
													37
													38
													39
													40
													41
													42
													43
													44
													45

FOR GRAND TOTAL SEE SHEET No 425-B

CALC. BY WDP DATE 5/19/70
CHK'D BY C.O.D. DATE 5/20/70

GENERAL SUMMARY LIGHTING QUANTITIES

MAY 25 1971

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

425-A
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I - 680 - 9 (14) (240)

SHT. No.	RURAL ROADWAY 80% FEDERAL 10% STATE 426	RURAL TOTAL	CITY - STATE STRUCTURES 75% STATE 25% CITY 0693 426-K	0687 426-K	426-L	CITY - STATE ROADWAY 426-J	426-K	426-L	CITY STATE TOTAL	GRAND TOTAL	ITEM	UNIT	DESCRIPTION	GENERAL REF. LINE NOS.
	9	9				4	7	7	18		625	EACH	GROUND ROD	1
	7	7				2	8	2	12		625	EACH	PULL BOX, 18" CIRCULAR, 713.09	2
	1	1					1	1	2		625	EACH	PULL BOX, 24" CIRCULAR, 713.09	3
														4
	2391	2391				641	1471	1689	3801		625	LIN.FT.	TRENCH, 24" DEEP	5
														6
			406	355					761		625	LIN.FT.	CONDUIT, 2", 713.04, TYPE III	7
	271	271				45	128		173		625	LIN.FT.	CONDUIT, 3", 713.04, TYPE III	8
	40	40					89	70	159		625	LIN.FT.	CONDUIT, 2", 713.04, TYPE III ENCASED	9
														10
	758	758	880	790		110	1344		3124		625	LIN.FT.	Nº 4 AWG, 600 VOLT DISTRIBUTION CABLE	11
								80	80		625	LIN.FT.	Nº 6 AWG, 5KV DISTRIBUTION CABLE	12
								155	155		625	LIN.FT.	Nº 2 AWG, 600 VOLT DISTRIBUTION CABLE	13
	825	825	216			396	761	791	2164		625	LIN.FT.	Nº 10 AWG POLE & BRACKET CABLE	14
	2518	2518				641	1379	1699	3719		625	LIN.FT.	1½" DUCT-CABLE WITH TWO Nº 4 AWG 600 VOLT CABLES	15
														16
	12	12				2	32		34		625	EACH	CONNECTOR KIT, TYPE VII-A	17
	9	9	2			4	7	7	20		625	EACH	CONNECTOR KIT, TYPE II	18
	9	9	2			4	7	7	20		625	EACH	CONNECTOR KIT, TYPE III	19
	8	8		4		2	2	4	12		625	EACH	CONNECTOR KIT, TYPE VII-B	20
											625	EACH	CONNECTOR KIT, TYPE V	21
											625	EACH	CONNECTOR KIT, TYPE VI	22
											625	EACH	CONNECTOR KIT, TYPE VII-C	23
														24
														25
														26
														27
														28
							LUMP		LUMP		625	LUMP	SERVICE POLE DA	29
														30
			1	1					2		625	EACH	STRUCTURE GROUNDING SYSTEM	31
			2						2		625	EACH	STRUCTURE JUNCTION BOX	32
			4						4		625	EACH	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE, 1¼" X 78", 713.01	33
											625			34
														35
														36
														37
														38
														39
														40
														41
														42
														43
														44
														45

FOR GRAND TOTAL SEE SHEET Nº 425-C

CALC. BY WDP DATE 5/19/70
CHK'D BY C.O.D. DATE 5/20/70

GENERAL SUMMARY LIGHTING QUANTITIES

MAY 25 1971

FED. RD. DIV.	STATE	PROJECT	
2	OH10		

MAH-680-6.98

425-B
656

TYPE CODE 7223

I-680-9 (14) (240)

PARTICIPATION — 90% FEDERAL 5% STATE 5% CITY

STRUCTURES											ROADWAY							95-5-5	90-10	75-25	GRAND TOTAL	ITEM	UNIT	DESCRIPTION	GENERAL REF LINE NOS.
0924		0835	0817	0794				0792	0723	0705								TOTAL PARTICIPATION	TOTAL RURAL	TOTAL CITY-STATE					
SHT. No→ 426-B	426-L	426-L	426-F	426-F	426-G	426-L	426-G	426-H	426-I	426-L	426-B	426-C	426-E	426-F	426-G	426-H	426-I								
											3	9	11	8	7	9	5	52		8	60	625	EACH	LIGHT POLE, DESIGN 11AT15B41.7	1
											4	5	2	2	3	7	4	27			27	625	EACH	LIGHT POLE, DESIGN 11AT12B41.7	2
											5						4	9	3		12	625	EACH	LIGHT POLE, DESIGN 11AT 8B41.7	3
																	9	9			9	625	EACH	LIGHT POLE, DESIGN 11AT 10B 41.7	4
																	1	1			1	625	EACH	LIGHT POLE, DESIGN 11AT 12B 34.2	5
											9	1	7	2	6		1	26	2	2	30	625	EACH	LIGHT POLE, DESIGN 11AT 10B 34.2	6
													2		3	1		6			6	625	EACH	LIGHT POLE, DESIGN 11AT 8B34.2	7
																									8
												8			2	4		14		2	16	625	EACH	LIGHT POLE, DESIGN 11T 15B 41.7 AS PER PLAN	9
											3	5				3		11		6	17	625	EACH	LIGHT POLE, DESIGN 11T 12B 41.7 AS PER PLAN	10
																									11
																						625	EACH	LIGHT POLE, DESIGN 11T 12B 34.2 AS PER PLAN	12
											6	1	2			1		10	4		14	625	EACH	LIGHT POLE, DESIGN 11T 10B 34.2 AS PER PLAN	13
																3		3			3	625	EACH	LIGHT POLE, DESIGN 11T 8B 34.2 AS PER PLAN	14
																									15
2				1	1					2								6		2	8	625	EACH	LIGHT POLE, DESIGN 7A 12B 42.3	16
							2											2			2	625	EACH	LIGHT POLE, DESIGN 7A 12B 34.8	17
											1							1			1	625	EACH	12' LIGHTING BRACKET ARM	18
																	1	1			1	625	EACH	8' LIGHTING BRACKET ARM	19
											15	27	13	10	12	23	22	122	3	16	141	625	EACH	LIGHT POLE FOUNDATION 24"x 8'-0" DEEP	20
											5	2	11	2	9	5	2	36	6	2	44	625	EACH	LIGHT POLE FOUNDATION 24"x 6'-0" DEEP	21
																									22
										1							5	6			6	625	EACH	LUMINAIRE, TYPE III 700 WATT 713.11	23
2				1	1						18	27	13	10	12	22	19	125	3	18	146	625	EACH	LUMINAIRE, TYPE II 700 WATT 713.11	24
																									25
							2				15	2	11	2	9	5	1	47	6	2	55	625	EACH	LUMINAIRE, TYPE II 400 WATT 713.11	26
	8	4				3				4								19		5	24	625	EACH	LUMINAIRE, UNDERPASS 250 WATT MERCURY 713.13	27
																									28
	8	4				3				4								19		5	24	625	EACH	LAMP, 713.14, 250 WATT MERCURY	29
							2				15	2	9	2	9	5	1	45	6	2	53	625	EACH	LAMP, 713.14, 400 WATT MERCURY - CLEAR	30
2				1	1						10	27	13	10	12	23	18	117		18	135	625	EACH	LAMP, 713.14, 700 WATT MERCURY - CLEAR	31
													2					2	3		5	625	EACH	LAMP, 713.14, 400 WATT MERCURY - DELUXE WHITE	32
										1	6						6	13			13	625	EACH	LAMP, 713.14, 700 WATT MERCURY - DELUXE WHITE	33
											1							1			1	625	EACH	GLARE SHIELD, 713.11, 700 WATT LUMINAIRE	34
																									35
																				LUMP	LUMP	625	LUMP	REMOVAL OF EXISTING LIGHTING SYSTEM	36
																									37
																									38
																									39
																									40
																									41
																									42
																									43
																									44
																									45

CALC. BY W.D.P. DATE 5/19/70
CHK'D BY C.O.D DATE 5/20/70

GENERAL SUMMARY LIGHTING QUANTITIES

MAY 25 1971

FED. RD. DIV.	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

425-C 656

TYPE CODE 7223

I-680-9 (14) (240)

PARTICIPATION — 90% FEDERAL 5% CITY 5% STATE

STRUCTURES: 0924, 0835, 0817, 0794, 0792, 0723, 0705

ROADWAY

SHT. No.	0924 426-B	0924 426-L	0835 426-L	0817 426-F	0794 426-F	0794 426-G	0794 426-L	0792 426-G	0723 426-H	0705 426-I	0705 426-L	ROADWAY 426-B	426-C	426-E	426-F	426-G	426-H	426-I	90-5-5 TOTAL PARTICIPATION	90-10 TOTAL RURAL	75-25 TOTAL CITY-STATE	GRAND TOTAL	ITEM	UNIT	DESCRIPTION	GENERAL REF LINE NOS.
												30	29	24	12	20	28	24	167	9	18	194	625	EACH	GROUND ROD	1
												15	5	12	9	8	5	16	70	7	12	89	625	EACH	PULL BOX, 18" CIRCULAR, 713.09	2
												2		2		4	2		10	1	2	13	625	EACH	PULL BOX, 24" CIRCULAR, 713.09	3
																										4
												5722	5854	5383	2834	4320	6079	4136	34328	2351	3801	40,520	625	LIN.FT.	TRENCH, 24" DEEP	5
																										6
470				187	276		296			213				300					1742		761	2503	625	LIN.FT.	CONDUIT, 2", 713.04, TYPE III	7
												303	40	415	85	339	142	464	1788	271	173	2232	625	LIN.FT	CONDUIT, 3", 713.04, TYPE III	8
												122		146		80	97		445	40	159	644	625	LIN.FT.	CONDUIT, 2", 713.04, TYPE III ENCASED	9
																										10
914				434	602		466			506		1288	100	1890	210	1878	1464	1048	10,800	758	3124	14,682	625	LIN.FT.	Nº 4 AWG, 600 VOLT DISTRIBUTION CABLE	11
																					80	80	625	LIN.FT.	Nº 6 AWG, 5KV DISTRIBUTION CABLE	12
																					155	155	625	LIN.FT.	Nº 2 AWG, 600 VOLT DISTRIBUTION CABLE	13
216				108	108		188			109		3007	3167	2501	1294	2118	2963	2502	18,371	825	2164	21,360	625	LIN.FT.	Nº 10 AWG POLE & BRACKET CABLE	14
												6152	6114	5117	2961	4236	6170	4025	34,775	2518	3719	41,012	625	LIN.FT.	1½" DUCT-CABLE WITH TWO Nº 4 AWG 600 VOLT CABLES	15
																										16
												36	4	24	12	34	20	16	146	12	34	192	625	EACH	CONNECTOR KIT, TYPE VII-A	17
2				1			2			1		31	29	24	12	21	28	25	176	9	20	205	625	EACH	CONNECTOR KIT, TYPE II	18
2				1			2			1		31	29	24	12	21	28	25	176	9	20	205	625	EACH	CONNECTOR KIT, TYPE III	19
										2		8	6	20	6	6	8	16	72	8	12	92	625	EACH	CONNECTOR KIT, TYPE VII-B	20
					1					2			6	20	6	6	8	16	3	12		3	625	EACH	CONNECTOR KIT, TYPE V	21
					1														1			1	625	EACH	CONNECTOR KIT, TYPE VI	22
2					2							2							6			6	625	EACH	CONNECTOR KIT, TYPE VII-C	23
																										24
												LUMP							LUMP			LUMP	625	LUMP	SERVICE POLE MB	25
														LUMP					LUMP			LUMP	625	LUMP	SERVICE POLE SR	26
																LUMP			LUMP			LUMP	625	LUMP	SERVICE POLE CS	27
																	LUMP		LUMP			LUMP	625	LUMP	SERVICE POLE GN	28
																				LUMP		LUMP	625	LUMP	SERVICE POLE "DA"	29
																										30
	1	1	1	1	1		1	1	1										8		2	10	625	EACH	STRUCTURE GROUNDING SYSTEM	31
2				1	1		2		2										8		2	10	625	EACH	STRUCTURE JUNCTION BOX	32
4				2	2		4		4										16		4	20	625	EACH	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE, 1¼" X 78", 713.01	33
	Lump																		Lump			LUMP	625	LUMP	SERVICE TO UNDERDECK LIGHTING - AS PER PLAN, BR. No. 0924	34
		4	2					2	6										14			14	625	EACH	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE, 1½" X 91", 713.01	35
		Lump																	Lump			LUMP	625	LUMP	SERVICE TO UNDERDECK LIGHTING - AS PER PLAN, BR. No. 0835	36
				Lump															Lump			LUMP	625	LUMP	SERVICE TO UNDERDECK LIGHTING - AS PER PLAN, BR. NO. 0794	37
									Lump										Lump			LUMP	625	LUMP	SERVICE TO UNDERDECK LIGHTING - AS PER PLAN, BR. NO. 0723	38
										Lump									Lump			LUMP	625	LUMP	SERVICE TO UNDERDECK LIGHTING - AS PER PLAN, BR. NO. 0705	39
																				LUMP		LUMP	625	LUMP	SERVICE TO UNDERDECK LIGHTING - AS PER PLAN, BR. NO. 0687	40
												Lump										Lump	839	Lump	High Voltage Test	41
																										42
																										43
																										44
																										45

CALC. BY W.D.R. DATE 5/19/70
CHK'D BY C.O.D. DATE 5-20-70

GENERAL SUMMARY LIGHTING QUANTITIES

MAY 25 871

CALC. BY W.D.P. DATE 5/12/70
CHK'D BY C.O.D. DATE 5/15/70

LIGHTING QUANTITIES SUB-SUMMARY

RURAL 90% FEDERAL 10% STATE

FED. RD.	STATE	PROJECT	
2	OHIO		

426 656

MAH-680-6.08

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN TA12B42.3	LIGHT POLE DESIGN TA12B34.6	LIGHT POLE FOUNDATION 24"x6'-0" DEEP	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LUMINAIRE, TYPE III 700 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR, KIT TYPE III-A	CONNECTOR, KIT TYPE II	CONNECTOR, KIT TYPE III	CONNECTOR, KIT TYPE III-B	CONNECTOR, KIT TYPE V	CONNECTOR, KIT TYPE II	CONNECTOR, KIT TYPE III-C	SERVICE POLE M.B.	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
		STA. REF. TO ℄ MIDLOTHIAN BLVD.		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT.	3G5+93																										1																					
2	RT.	3G5+93	3GG+80																											87								97										
3	RT.	3GG+80				1												1		1						1										99			1	1							
4	RT.	3GG+80	3G8+14																											134								144										
5	RT.	3G8+14																										1											2									
6	LT./RT.	3G8+14																										1		35			35			90										
7	RT.	3G8+14	3G8+95																											81								91										
8	RT.	3G8+95				1												\		\						1										99			1	1							
9	RT.	3G8+95	3G9+05																											10								20										
10	LT./RT.	3G9+05																											1	48			48			318			6								
11	RT.	3G9+05	371+33																											228								238										
12	RT.	3G9+05	371+15																																			220										
13	RT.	371+15																										1		40				40	90				2								
14	RT.	371+15	371+25																											10								20										
15	RT.	371+25				1												1		1						1										99			1	1							
		STA. REF. TO ℄ RAMP "L"																																																
19	LT.	3G8+14 MIDLTHBLVD.	G30+95 "L"																											70								80										
20	LT.	G30+95 "L"					1											1								1										88			1	1							
21	LT.	G30+95 "L"	G32+42 "L"																											147								157										
22	LT.	G32+42 "L"					1											/								1										88			1	1							
23	LT.	G32+42 "L"	G33+89 "L"															/								1										88			1	1							
24	LT.	G33+89 "L"																/								1										88			1	1							
25	LT.	G33+89 "L"	G35+36 "L"															/								1										88			1	1							
26	LT.	G35+36 "L"																/								1										88			1	1							
27	LT.	G35+36 "L"	G36+83 "L"															/								1										88			1	1							
28	LT.	G36+83 "L"																/								1										88			1	1							
29	LT.	G36+83 "L"	G38+30 "L"															/								1										88			1	1							
30	LT.	G38+30 "L"																/								1										88			1	1							
31	LT.	G38+30 "L"	G38+40 "L"																											10								20										
32	LT.	G38+40 "L"																										1											2									
33	RT./LT.	G38+40 "L"																												28			28			66										
34	LT.	G38+40 "L"	G39+32 "L"																											92								97										
STA	REF.	TO ℄ MIDLOTHIAN BLVD.																																														
40	RT	358+10																										1											2									
41	RT	358+10	361+92																											382								387										
42	RT	361+92	362+28																											36			36					36										
43	RT	362+28	363+21																											93								93										
44	RT	363+21	363+58																											37			37					37										
45	RT	363+58	365+06																											148								153										
46	RT	365+06																										1											2									
47	RT	365+06	365+93																											87			87			194										
TOTALS, SHEET Nº 427-A				3		2				4					6	3		3		6			6		3		9	7	1	2391			271	40	758	825	2518	12	5	3	8									

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

CALC. BY W.D.P. DATE 5/12/70
CHK'D BY C.O.D. DATE 5/15/70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.98

426A
656

REFERENCE №	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN TA12B42.3	LIGHT POLE DESIGN TA12B34.8	LIGHT POLE FOUNDATION 24"x6'-0" DEEP	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LUMINAIRE, TYPE II 1000 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	12' LIGHTING BRACKET ARM	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE 600 V № 4	POLE & BRACKET CABLE № 10	DUCT CABLE 600 V TWO № 4	CONNECTOR KIT TYPE VII-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE VII-B	CONNECTOR KIT TYPE V	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE VII-C	SERVICE POLE	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
STA. REF. TO ℄ MAIN LINE				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT.	638+90		1														1		1						1			1									113			1	1								
2	RT.	638+90	639+97																													107							117											
3	RT.	639+97																												1										2										
4	RT.	639+97	640+00 "O"																													35			35		90													
5	RT.	640+00 "O"																												1													2							
6	RT.	640+00	640+70 "O"																													70							80											
7	RT.	640+70			1													1		1						1			1									107			1	1								
8	RT.	640+70	641+11																													41							51											
9	RT.	641+11																												1										2										
10	RT.	641+11	642+93																															182			384													
11	RT.	642+93													1					1						1												108			1	1							1	2
12	RT.	642+93	643+36																															43																
13	RT.	643+36																												1										2										
14	RT.	643+36	644+90																													154							164											
15	RT.	644+90									1							1		1						1			1									107			1	1								
16	RT.	644+90	647+10																													220							230											
17	RT.	647+10			1													1		1						1			1									107			1	1								
18	RT.	647+10	649+30																													220							230											
19	RT.	649+30			1													1		1						1			1									107			1	1								
20	RT.	649+30	650+00																													70							75											
21	LT.	637+90		1														1		1						1			1									113			1	1								
22	LT.	637+90	638+28																													38							48											
23	LT.	638+28																												1		27			27		64			2										
24	LT.	639+32	639+70																													38							43											
25	LT.	639+70									1							1		1						1			1									107			1	1								
26	LT.	640+60																												1		50				50	110						2							
27	LT.	640+60	641+70																															110			240													
28	LT.	641+70													1					1						1												108			1	1				2			1	2
29	LT.	641+70	643+05																															135			290													
30	LT.	643+05																												1										2										
31	LT.	643+05	644+00																													95							105											
32	LT.	644+00									1							1		1						1			1									107			1	1								
33	LT.	644+00	646+45																													245							255											
34	LT.	646+45			1													1		1						1			1									107			1	1								
35	LT.	646+45	649+10																													265							275											
36	LT.	649+10		1														1		1						1			1									113			1	1								
37	LT.	649+10	650+00																													90							95											
STA. REF. TO BL RAMP "O"																																																		
38	RT.	374+60 MIDLTH. BLVD.				1												1		1							1		1									99			1	1								
39	RT.	374+60 M.B.	631+20 "O"																													140							150											
40	RT.	631+20 "O"						1									/					1			1				1									88			1	1								
41	RT.	631+20 "O"	632+70 "O"																													150							160											
42	RT.	632+70 "O"						1									/					1			1				1									88			1	1								
43	RT.	632+70 "O"	634+20 "O"																													150							160											
44	RT.	634+20 "O"						1									/					1			1				1									88			1	1								
45	RT.	634+20 "O"	635+70 "O"																													150							160											
46	RT.	635+70 "O"						1									/					1			1				1									88			1	1								
47	RT.	635+70 "O"	637+20 "O"																													150							160											
48	RT.	637+20 "O"						1									/					1			1				1									88			1	1								
49	RT.	637+20 "O"	638+70 "O"																													150							160											
50	RT.	638+70 "O"						1									/					1			1				1									88			1	1								
51	RT.	638+70 "O"	640+00 "O"																													130							140											
STA. REF. TO ℄ MIDLTH. BLVD.																																																		
52	LT.	376+60																												1																2				
53																																																		
54	LT.	376+70																		1			1				1											104			1	1								
55	RT.	376+60																												1										2										
56	RT.	376+60	377+90																													130							140											
57	RT.	377+90				1												1		1							1		1									99			1	1								
58	RT/LT.	376+60																														80			80		180													
STA. REF. TO BL RAMP "J"																																																		
59	RT.	376+40 MIDLTH. BLVD.	643+70 "J"																													122							132											
60	RT.	643+70 "J"						1									/					1			1				1									88			1	1								
61	RT.	643+70 "J"	645+20 "J"																													150							160											
62	RT.	645+20 "J"											1				/					1			1				1									88			1	1								
63	RT.	645+20 "J"	647+28 "J"																													208							218											
64	RT.	647+28 "J"						1									/					1			1				1									88			1	1								
65	RT.	647+28 "J"	649+38 "J"																													210							220											
66	RT.	649+38 "J"						1									/					1			1				1									88			1	1								
SUB-TOTALS, SHEET № 427-A				3	4	2		9			3		1		2		10	12		15		10	1		10	12	3		22	9		3685		470	142	50	1358	2486	3728	12	25	25	4			4			2	4

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

CALC. BY W.D.P. DATE 5/12/70
CHK'D BY C.O.D. DATE 5/15/70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680-6.08

4268
656

| REFERENCE Nº | SIDE | STATION | STATION | LIGHT POLE DESIGN 11AT15B41.7 | LIGHT POLE DESIGN 11AT12B41.7 | LIGHT POLE DESIGN 11AT8B41.7 | LIGHT POLE DESIGN 11AT12B34.2 | LIGHT POLE DESIGN 11AT10B34.2 | LIGHT POLE DESIGN 11AT8B34.2 | LIGHT POLE DESIGN 11T15B41.7 | LIGHT POLE DESIGN 11T12B41.7 | LIGHT POLE DESIGN 11T12B34.2 | LIGHT POLE DESIGN 11T10B34.2 | LIGHT POLE DESIGN 11T8B34.2 | LIGHT POLE DESIGN 7AT12B42.3 | LIGHT POLE DESIGN 7AT12B34.6 | 12' LIGHTING BRACKET ARM | LIGHT POLE FOUNDATION 24"x8'-0" DEEP | LUMINAIRE, TYPE II 1000 WATT | LUMINAIRE, TYPE II 700 WATT | LUMINAIRE, TYPE III 400 WATT | LUMINAIRE, TYPE II 400 WATT | LUMINAIRE UNDERPASS 250 WATT MERCURY | LAMP, 400 WATT DELUX WHITE | LAMP, 400 WATT CLEAR | LAMP, 700 WATT CLEAR | LAMP, 700 WATT DELUX WHITE | GLARE SHIELD 700 WATT MERCURY | GROUND ROD | PULL BOX 18" CIRCULAR | PULL BOX 24" CIRCULAR | TRENCH, 24" DEEP | CONDUIT, 1¼" TYPE III | CONDUIT, 2" TYPE III | CONDUIT, 3" TYPE III | CONDUIT 2" TYPE III ENCASED | DISTRIBUTION CABLE Nº 4 600 V | POLE & BRACKET Nº 10 | DUCT CABLE 600 V TWO Nº 4 | CONNECTOR KIT TYPE III-A | CONNECTOR KIT TYPE II | CONNECTOR KIT TYPE III | CONNECTOR KIT TYPE III-B | CONNECTOR KIT TYPE IV | CONNECTOR KIT TYPE VI | CONNECTOR KIT TYPE III-C | SERVICE POLE M.B. | STRUCTURE GROUNDING SYSTEM | STRUCTURE JUNCTION BOX | LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE |
|---|---|---|---

CALC. BY W.D.P. DATE 5/13/70
CHK'D BY C.O.D. DATE 5/15/70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680-6.08

426C
656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT1B841.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN TA12B42.3	LIGHT POLE DESIGN TA12B34.8	LIGHT POLE FOUNDATION 24"×8'-0" DEEP	LIGHT POLE FOUNDATION 24"×8'-0" DEEP	LUMINAIRE TYPE II 700 WATT	LUMINAIRE TYPE III 400 WATT	LUMINAIRE TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE 600 V Nº 4	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR KIT TYPE III - A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE III - B	CONNECTOR KIT TYPE IV	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE III - C	SERVICE POLE	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
STA. REF. TO ℄ MAIN LINE				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT.	650+00	651+20																								1		120							125												
2	RT.	651+20																											40								2											
3	LT./RT.	651+20																																														
4	RT.	651+20																										1		40				40		100		2										
5	RT.	651+20	651+30																										10							20											
6	RT.	651+30			1													1		1					1		1			107		1	1														
7	RT.	651+30	653+30																										200							210											
8	RT.	653+30			1													1		1					1		1			107		1	1														
9	RT.	653+30	655+30																										200							210											
10	RT.	655+30			1													1		1					1		1			107		1	1														
11	RT.	655+30	657+30																										200							210											
12	RT.	657+30			1													1		1					1		1			107		1	1														
13	RT.	657+30	659+60																										230							240											
14	RT.	659+60		1														1		1					1		1			113		1	1														
15	RT.	659+60	661+50																										230							240											
16	RT.	661+50		1														1		1					1		1			113		1	1														
17	RT.	661+50	664+22																										232							242											
18	RT.	664+22		1														1		1					1		1			113		1	1														
21	LT.	650+00	651+60																										160							165											
22	LT.	651+60		1														1		1					1		1			113		1	1														
25	LT.	650+00 "K"	651+63 "K"																										163							168											
26	LT.	651+63 "K"						1									/			1		1			1					88																	
27	LT.	651+63 "K"	653+47																										184							194											
28	LT.	653+47								1								1		1					1		1			107		1	1														
29	LT.	653+47	655+52																										205							215											
30	LT.	655+52																										1										2										
31	LT.	655+52	655+67																										15							25											
32	LT.	655+67								1								1		1					1		1			107		1	1														
33	LT.	655+67	657+25																										158							168											
34	LT.	657+25								1								1		1					1		1			107		1	1														
35	LT.	657+25	659+25																										200							210											
36	LT.	659+25									1							1		1					1		1			113		1	1														
37	LT.	659+25	661+50																										225							235											
38	LT.	661+50		1														1		1					1		1			113		1	1														
39	LT.	663+80		1														1		1					1		1			113		1	1														
40	LT.	663+80	665+00																										120							125											
41	LT.	665+00	665+90																										90							95											
42	LT.	665+90		1														1		1					1		1			113		1	1														
43	LT.	665+90	666+40																										50							60											
44	LT.	666+40																										1																			
45	LT.	666+40	668+35																										195							205							2				
46	LT.	668+35								1								1		1					1		1			113		1	1														
47	LT.	668+35	670+65																										230							240											
48	LT.	670+65								1								1		1					1		1			113		1	1														
49	LT.	670+65	672+85																										220							230											
50	LT.	672+85									1							1		1					1		1			107		1	1														
51	LT.	672+85	674+90																										205							215											
52	LT.	674+90									1							1		1					1		1			107		1	1														
53	LT.	674+90	676+80																										150							200											
54	LT.	676+80			1													1		1					1		1			107		1	1														
55	LT.	676+80	679+00"H"																										220							230											
56	LT.	679+00"H"				1											/			1		1			1					88																	
57	LT.	679+00"H"	680+00"H"																										100							105											
60	LT.	678+70		1														1		1					1		1			113			1	1														
61	LT.	678+70	680+00																										130							135											
64	RT.	666+68																																															
65	RT.	666+68	669+14															1		1					1		1			113			1	1														
66	RT.	669+14																1		1					1		1			113			1	1														
67	RT.	669+14	671+10																										246							256											
68	RT.	671+10																										1										2										
69	RT.	671+10	671+60																										196							206											
70	RT.	671+60																1		1					1		1			113			1	1														
71	RT.	671+60	673+60																										50							60											
72	RT.	673+60																1		1					1		1			113			1	1														
73	RT.	673+60	675+95																										200							210											
74	RT.	675+95																1		1					1		1			113			1	1														
75	RT.	675+95	678+25																										235							245											
76	RT.	678+25		1														1		1					1		1			113			1	1														
77	RT.	678+25	680+00																										230							240											
																													175							180											
TOTALS, SHEET Nº 427-B				9	5			1		8	5		1				2	27		27		2		2	27		23	5	5854		40		100	3167	6114	4	23	23	6								

LIGHTING QUANTITIES SUB-SUMMARY MAY, 25 1971

CALC. BY W.D.P. DATE 5/13/70
CHK'D BY C.O.D. DATE 5/18/70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680-6.08

426 D
656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN TA12B42.3	LIGHT POLE DESIGN TA12B34.8	LIGHT POLE FOUNDATION 24"x6'-0" DEEP	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III RIGID	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR KIT TYPE III-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE III-B	CONNECTOR KIT TYPE IV	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE III-C	SERVICE POLE	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
STATION REF. TO ℄ MAIN LINE				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.										LUMP	EACH	EACH	EACH
1	RT	680+00	680+60	1													1		1				1			1			60						65												
2	RT	680+60	682+85														1		1				1			1			225					113	235			1	1							
3	RT	680+60	682+85		1												1		1				1			1			107									1	1							
4	RT	682+85	684+10																										125						135											
5	RT	682+85	684+10																									1													2					
6	RT	684+10																																												
7	RT	684+10	684+76																										66						76											
8	RT	684+76			1												1		1				1			1			107									1	1							
9	RT	684+76	686+38 "G"																										162						172											
10	RT	686+38 "G"					1										1			1			1			1			88									1	1							
11	RT	686+38 "G"	686+55 "G"																										17						27											
12	RT	686+55 "G"																									1									4										
13	LT/RT	686+55 "G"																											70			70	160												
14	RT	686+55 "G"	688+19 "G"																										164						174											
15	RT	688+19 "G"					1										1			1			1			1			88									1	1							
16	RT	688+19 "G"	690+70 "G"																										151						161											
17	RT	690+70 "G"																									1													2					
18	RT	690+70 "G"	690+00 "G"																										30						40											
19	RT	690+00 "G"								1							1			1			1			1			88									1	1							
20	RT	690+00 "G"	691+50 "G"														1			1			1			1			150						160											
21	RT	691+50 "G"					1										1			1			1			1			88									1	1							
22	RT	691+50 "G"	693+00 "G"														1			1			1			1			150						160											
23	RT	693+00 "G"								1							1			1			1			1			88									1	1							
24	RT	693+00 "G"	54+40 SHIR. RD.														1			1			1			1			120						130											
25	RT	54+40 SHIR. RD.						1									1			1		1					1			84									1	1							
26	RT	686+47		1													1		1				1			1			113									1	1							
29	RT	686+47	686+64																										17						27											
30	RT	686+64																									1									2					2					
31	LT/RT	686+64																											122			122		528											
32	RT	686+64	689+21																										251						261											
33	RT	689+21		1													1		1				1			1			113									1	1							
34	RT	689+21	689+98																										77						87											
35	RT	689+98																									1									2										
37	RT	689+98	691+55																										197						207											
38	RT	691+55		1													1		1				1			1			113									1	1							
39	RT	691+55	694+60														1		1				1			1			274						284											
40	RT	694+60		1													1		1				1			1			113									1	1							
41	RT	694+60	695+00																										31						36											
44	LT	680+00	681+10																										110						115											
45	LT	681+10		1													1		1				1			1			113									1	1							
46	LT	681+10	683+40														1		1				1			1			230						240											
47	LT	683+40		1													1		1				1			1			113									1	1							
48	LT	683+40	685+70														1		1				1			1			230						240											
49	LT	685+70		1													1		1				1			1			113									1	1							
50	LT	685+70	686+64																										94						104											
51	LT	686+64																									1		76			76	516				4			2					
52	LT	686+64	688+00																										136						146											
53	LT	688+00		1													1		1				1			1			113									1	1							
54	LT	688+00	688+20																										20						30											
55	LT	688+20																									1									2										
56	LT	688+20	690+15																										195						205											
57	LT	690+15																									1									2										
58	LT	690+15	690+85																										70						80											
59	LT	690+85		1													1		1				1			1			113									1	1							
60	LT	690+85	693+60														1		1				1			1			275						285											
61	LT	693+60		1													1		1				1			1			113									1	1							
62	LT	693+60	695+00																										140						145											
STATION REF. TO ℄ RAMP "H"																																															
66	LT	680+00	681+10																										110						115											
67	LT	681+10					1										1			1			1			1			88									1	1							
68	LT	681+10	683+20														1			1			1			1			210						220											
69	LT	683+20					1										1			1			1			1			88									1	1							
70	LT	683+20	683+30																										10						20											
71	LT	683+30																									1									2										
72	LT	683+30	44+30 SHIR. RD.																										100			100		220											
SUB-TOTALS, SHEET Nº 427-C				11	2		5	1			2			8	13		13		8		1	7	13			21	9	1	4465			222	146	1424	2157	4382	12	21	21	14								

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

CALC. BY W.D.P. DATE 5/14/70
CHK'D BY C.O.D. DATE 5/18/70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% LOCAL

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

426E
656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT1B841.7	LIGHT POLE DESIGN 11AT12841.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B342	LIGHT POLE DESIGN 11AT10B342	LIGHT POLE DESIGN 11AT8B342.	LIGHT POLE DESIGN 11T1584I.7	LIGHT POLE DESIGN 11T12841.7	LIGHT POLE DESIGN 11T12B342	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8834.2	LIGHT POLE DESIGN 7A12B42.3	LIGHT POLE DESIGN 7A12B34.8	LIGHT POLE FOUNDATION 24"x6'-0" DEEP	LIGHT POLE FOUNDATION 24"x 8'-0" DEEP		LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR.	LAMP, 700 WATT CLEAR.	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR, KIT TYPE III-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR, KIT TYPE III-B	CONNECTOR KIT TYPE IV	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE III-C	SERVICE POLE S.R.	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
STA. REF. TO ℄ SHIRLEY RD.				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
1	RT.	44+30																										1		65					150						2							
2	RT.	44+30	44+95																									1																				
3	RT.	44+95																																							2							
4	RT.	44+95	45+05																											10									20							
5	RT	45+05						1									1				1		1														84				1	1						
6	RT.	45+05	46+75																									1		170									180							
7	RT.	46+75																											1											8						LUMP	
9	LT/RT.	54+40																												55			55		130						2							
10	LT.	54+40																											1																			
11	LT.	50+00																											1											2							
STA. REF. TO ℄ HOMEWOOD AVE.																																																
13	RT.	54+40 SHIR. RD.	34+11 H.A.																											38			38		96													
14	RT.	34+11						1									1				1		1													88				1	1						
15	RT.	34+11	34+36																											65			65		150						2							
16	RT.	34+36																											1																			
17	RT.	34+36	34+46																											10									20							
18	RT.	34+46						1									1				1		1													88				1	1						
20	RT.	34+36	50+00 SHIRLEY RD.																											505									515							
SUB-TOTALS FROM SHEET Nº 426-D				11	2		5	1			2			8	13		13		8		1	7	13			21	5	1	4465			222	146	1424	2101	4382	12	21	21	14							
TOTALS, SHEET Nº 427-C				11	2		7	2			2			11	13		13		11		2	5	13			24	12	2	5383			415	146	1890	2501	5117	24	24	24	20							LUMP

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

CALC. BY W.D.P. DATE 5/14/70
CHK'D BY C.O.D. DATE 5/18/70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

426F
656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN 7A12B42.3	LIGHT POLE DESIGN 7A12B34.8	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LUMINAIRE, TYPE III 700 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR KIT TYPE III-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE III-B	CONNECTOR KIT TYPE V	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE III-C	SERVICE POLE	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
STA. REF. TO ℄ MAIN LINE				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.

CALC. BY R.C.F. DATE 5-13-70
CHK'D BY C.O.D. DATE 5-15-70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD.	STATE	PROJECT		
2	OHIO			

MAH-680-6.98

426 G / 656

REFERENCE No.	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN 7A12B42.3	LIGHT POLE DESIGN 7A12B34.8	LIGHT POLE FOUNDATION 24"x6'-0" DEEP	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LUMINAIRE, TYPE III 700 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE 600 V No 4	POLE & BRACKET CABLE No 10	DUCT CABLE 600 V TWO No 4	CONNECTOR KIT TYPE VII-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE VII-B	CONNECTOR KIT TYPE V	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE VII-C	SERVICE POLE C.S.	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
STATIONING REFERENCE TO N1				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT.	710+00	711+30																															130			280													
2	RT.	711+30																												1									2										
3	RT.	711+30	711+50																													20							30											
4	RT.	711+50			1													1		1						1			1									107			1	1								
5	RT.	711+50	713+90																													240							250											
6	RT.	713+90			1													1		1						1			1									107			1	1								
7	RT.	713+90	716+20																													230							240											
8	RT.	716+20																													1									4										
9	RT.	716+20	716+40																													20							30											
10	RT.	716+40		1														1		1						1			1									113			1	1								
11	RT.	716+40	718+95																													255							265											
12	RT.	718+95		1														1		1						1			1									113			1	1								
13	RT.	718+95	721+70																													275							285											
14	RT.	721+70								1								1		1						1			1									113			1	1								
15	RT.	721+70	724+40																													270							280											
16	RT.	724+40								1								1		1						1			1									113			1	1								
17	RT.	724+40	725+00																													60							65											
18	LT.	710+00	710+12.33																															12			34													
19	LT.	710+12.33													1					1						1												108						1	1	2		1	1	2
20	LT.	710+12.33	711+46																															134			288													
21	LT.	711+46																												1									2										
22	LT.	711+46	712+50																													104							114											
23	LT.	712+50		1														1		1						1			1									113			1	1								
24	LT.	712+50	715+10																													260							270											
25	LT.	715+10		1														1		1						1			1									113			1	1								
26	LT.	715+10	716+21																													111							121											
27	LT.	716+21																													1									4			2							
28	LT.	716+21	717+75																													154							164											
29	LT.	717+75		1														1		1						1			1									113			1	1								
30	LT.	717+75	720+45																													270							280											
31	LT.	720+45		1														1		1						1			1									113			1	1								
32	LT.	720+45	723+05																													260							270											
33	LT.	723+05		1														1		1						1			1									113			1	1								
34	LT/RT.	716+21																														120			120		520													
STATIONING REFERENCE RAMP "E"																																																		
36	RT.	711+86 (E)																																														1		
37	RT.	716+28 (E)																													1									6										
38	LT/RT.	716+28 (E)																																		80	540													
40	LT.	709+81 (E)	710+63.75 (E)																															83																
41	LT.	710+63.75 (E)														1						1			1													94			1	1							1	2
42	LT.	710+63.75 (E)	712+26.25 (E)																															162			344													
43	LT.	712+26.25 (E)														1						1			1													94			1	1							1	2
44	LT.	712+26.25 (E)	712+77 (E)																															51			122													
45	LT.	712+77 (E)																												1									2										
46	LT.	712+77 (E)	713+47 (E)																													70			70		160													
47	LT.	713+47 (E)																												1									2										
48	LT.	713+47 (E)	713+70 (E)																													23							33											
49	LT.	713+70 (E)						1									1					1			1													88			1	1								
50	LT.	713+70 (E)	715+20 (E)																													150							160											
51	LT.	715+20 (E)						1									1					1			1				1									88			1	1								
52	LT.	715+20 (E)	715+88 (E & CAL.)																													84							94											
53	LT.	715+88 (E & CAL.)																												1									2										
54	LT.	715+88 (E & CAL.)	716+32 (E & CAL.)																													44			44		108													
55	LT.	716+32 (E & CAL.)																													1									6			2				LUMP			
57	LT.	716+32 (E & CAL.)	716+70 (E)																													50							60											
58	LT.	716+70 (E)						1									1					1			1				1									88			1	1								
59	LT.	716+70 (E)	718+75 (E)																													205							215											
60	LT.	718+75 (E)						1									1					1			1				1									88			1	1								
61	LT.	718+75 (E)	720+85 (E)																													210							220											
62	LT.	720+85 (E)						1									1					1			1				1									88			1	1								
63	LT.	720+85 (E)	722+95 (E)																													210							220											
64	LT.	722+95 (E)						1									1					1			1				1									88			1	1								
65	LT.	722+95 (E)	725+00																													205							215											
66	LT.	725+00			1													1		1						1			1									107			1	1								
67	LT/RT	716+32 (E & CAL.)																														65			65		450													
STATIONING REFERENCE RAMP "F"																																																		
69	RT.	721+50 (F)							1								1					1			1				1									84			1	1								
70	RT.	721+50 (F)	721+60 (F)																													10							20											
71	RT.	721+60 (F)																												1													2							
72	RT.	721+60 (F)	722+90 (F)																													130							140											
73	RT.	722+90 (F)							1								1					1			1				1									84			1	1								
74	RT.	722+90 (F)	724+40 (F)																													150							160											
75	RT.	724+40 (F)							1								1					1			1				1									84			1	1								
76	RT/LT.	721+60 (F)																														40			40		100													
77	LT.	721+60 (F)																												1									2										
78	LT.	721+60 (F)	721+35 (F)																													25							35											
79	LT.	721+35 (F)																												1									2										
TOTALS, SHEET No 427-E				7	3			6	3	2					1	2	9	12		13		11			11	13			20	8	4	4320		572	339	80	2946	2414	4236	34	23	23	6	1	1	2	LUMP	2	3	6

LIGHTING QUANTITIES SUB-SUMMARY

MAY 25 1971

CALC. BY R.C.F. DATE 5-14-70
CHK'D BY C.O.D. DATE 5-15-70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

426H 656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT1B41.7	LIGHT POLE DESIGN 11AT2B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T1B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN 7A12B42.3	LIGHT POLE DESIGN 7A12B34.8	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LIGHT POLE FOUNDATION 24"x 8'-0" DEEP	LUMINAIRE, TYPE III 700 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR KIT TYPE III-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE III-B	CONNECTOR KIT TYPE IV	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE III-C	SERVICE POLE G.N.	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR U-BOLT FOR STRUCTURE
				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT	725+00	726+75															1												175						180												
2	RT	726+75								1								1																	113			1	1								
3	RT	726+75	725+35															1												250						260										
4	RT	725+35								1								1																	113			1	1								
5	RT	725+35	730+10																											75						85										
6	RT	730+10																											1										2						
7	RT	730+10	732+05															1												195						205										
8	RT	732+05								1								1																	113			1	1								
9	RT	732+05	734+75															1												270						280										
10	RT	734+75								1								1																	113			1	1								
11	RT	736+30									1							1																	107			1	1								
12	RT	736+30	738+10															1												180						190										
13	RT	738+10									1							1																	107			1	1								
14	RT	738+10	740+00															1												190						200										
15	RT	740+00									1							1																	107			1	1								
16	RT	740+00	742+20															1												220						230										
17	RT	742+20			1													1																	107			1	1								
18	RT	742+20	744+55															1												235						245										
19	RT	744+55			1													1																	107			1	1								
20	RT	744+55	746+05															1												240						250										
21	RT	746+05		1														1																	113			1	1								
22	RT	746+05	747+82																											87						97										
23	RT	747+82																											1										4						
24	RT	747+82	748+10																											28						38										
25	RT	748+10																											1										2						
26	RT	748+10	750+35																											125						135										
27	RT	750+35			1													1																	107			1	1								
28	RT	750+35	750+00																											65						70										
29	LT	725+00	726+90																											190						195										
30	LT	726+90																											1										2						
31	LT	726+90	727+05																											15						25										
32	LT	727+05			1													1																	107			1	1								
34	LT	728+90			1													1																	107			1	1								
35	LT	728+90	731+00															1												210						220										
36	LT	731+00		1														1																	113			1	1								
37	LT	731+00	733+20															1												220						230										
38	LT	733+20		1														1																	113			1	1								
39	LT	733+20	735+40															1												220						230										
40	LT	735+40		1														1																	113			1	1								
41	LT	735+40	737+50															1												210						220										
42	LT	737+50		1														1																	113			1	1								
43	LT	737+50	739+55															1												205						215										
44	LT	739+55		1														1																	113			1	1								
45	LT	739+55	741+55															1												200						210										
46	LT	741+55		1														1																	113			1	1								
47	LT	741+55	741+90																											35						45										
48	LT	741+90																											1										2						
49	LT	741+90	743+55																											165						175										
50	LT	743+55		1														1																	113			1	1								
51	LT	743+55	745+55															1												200						210										
52	LT	745+55		1														1																	113			1	1								
53	LT	745+55	747+61															1												206						216										
54	LT	747+61			1													1																	107			1	1								
55	LT	747+61	747+71																											10						20										
56	LT	747+71																											1										8						
57	LT	747+71	749+87																											216						226										
58	LT	749+87			1													1																	107			1	1								
59	LT	749+87	750+00																											13						18										
60	LT/RT	747+71																												142		142		97	608											
61	RT	724+40 "F"	726+35 "F"																											195						205										
62	RT	726+35 "F"								1								/				1				1									84			1	1								
63	RT	726+35 "F"	728+30 "F"															/				1				1				195						205										
64	RT	728+30 "F"									1							/				1				1									84			1	1								
65	RT	728+30 "F"	730+25 "F"															/				1				1				195						205										
66	RT	730+25 "F"									1							/				1				1									84			1	1								
67	RT	730+25 "F"	732+20 "F"															/				1				1				195						205										
68	RT	732+20 "F"									1							/				1				1									84			1	1								
69	RT	732+20 "F"	734+15 "F"															/				1				1				195						205										
70	RT	734+15 "F"								1								/				1				1									88			1	1								
71	RT	734+15 "F"	736+30 "F"															/				1				1				215						225										
73	RT	48+54 GIBSON																											1	97			97	856			8							LUMP		
75	LT	50+00 GIBSON																																												1	
TOTALS, SHEET Nº 427-F				9	7					1	4	3		1	3			5	23		22		5		5	23		28	5	2	6079		142	97	1464	7963	6170	20	28	28	8				LUMP	1	

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

CALC. BY COD DATE 5-12-70
CHK'D BY W.D.P. DATE 5/15/70

LIGHTING QUANTITIES SUB-SUMMARY

PARTICIPATION: 90% FEDERAL
5% STATE
5% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

426I / 656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN TA12B42.3	LIGHT POLE DESIGN TA12B34.8	LIGHT POLE DESIGN 11AT10B41.7	LIGHT POLE FOUNDATION 24" x 8'-0" DEEP	LUMINAIRE, TYPE III 700 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	8' LIGHTING BRACKET ARM	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR KIT TYPE VII-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE VII-B	CONNECTOR KIT TYPE V	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE VII-C	SERVICE POLE	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
STA. REF. TO ℄ MAIN LINE				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT.	750+00	750+90																													90							95											
2	RT.	750+90				1													1		1						1			1									107			1	1								
3	RT.	750+90	751+31																													41							46											
4	RT.	751+57																															1											2										
5	RT.	751+57	752+75																													118							128											
6	RT.	752+75			1														1		1						1			1									113			1	1								
7	RT.	752+75	754+70																													195							205											
8	RT.	754+70			1														1		1						1			1									113			1	1								
9	RT.	756+60				1													1		1						1			1									107			1	1								
10	RT.	756+60	756+70																													10							20											
11	RT.	756+70																															1														2							
12	RT.	756+70	758+88																													218			218		456												
13	RT.	758+88																															1											2										
14	RT.	758+88	758+98																													10							20											
15	RT.	758+98				1													1		1						1			1									107			1	1								
16	RT.	758+98	760+80																													182							187											
18	LT.	750+00	751+65																													165							170											
19	LT.	751+65				1													1		1						1			1									107			1	1								
20	LT.	751+88																															1											2										
21	LT.	751+88	753+50																													162							172											
22	LT.	753+50			1														1		1						1			1									113			1	1								
23	LT.	753+50	756+00																													250							260											
24	LT.	756+00			1														1		1						1			1									113			1	1								
25	LT.	758+60			1														1		1						1			1									113			1	1								
26	LT.	758+60	760+80																													220							225											
27	LT.	751+65	751+85"C"																													20							30											
28	LT.	751+85"C"																															1														2							
29	LT.	751+85"C"	753+43"C"																													158							168											
30	LT.	753+43"C"															1	1		1						1			1									103			1	1								
31	LT.	753+43"C"	755+21"C"																													178							188											
32	LT.	755+21"C"															1	1		1						1			1									103			1	1								
33	LT.	755+21"C"	756+99"C"																													178							188											
34	LT.	756+99"C"															1	1		1						1			1									103			1	1								
35	LT.	756+99"C"	757+09"C"																													10							20											
36	LT.	757+09"C"																															1											2										
37	LT./RT.	757+09"C"																														35			35		90												
38	RT.	757+09"C"																															1											2										
39	RT.	757+09"C"	49+15"SOUTH"																													43							53											
40	RT.	49+15"SOUTH"																															1														2							
41	LT./RT.	751+85"C"																														35			35		90												
47	RT.	751+30"D"	751+53"D"																													23							28											
48	RT.	751+53"D"																															1														2							
49	RT.	751+53"D"	753+00"D"																													147							157											
50	RT.	753+00"D"							1										•1/–				1			1				1									88			1	1								
51	RT.	753+00"D"	755+00"D"																													200							210											
52	RT.	755+00"D"															1	1		1						1			1									103			1	1								
53	RT.	755+00"D"	756+40"D"																													140							150											
54	RT.	756+40"D"															1	1		1						1			1									103			1	1								
55	RT.	756+40"D"	758+20"D"																													180							190											
56	RT.	758+20"D"															1	1		1						1			1									103			1	1								
57	RT.	758+20"D"	758+30"D"																													10							20											
58	RT.	758+30"D"																															1														2							
59	RT./LT.	751+53"D"																														45			45		110												
60	RT.	52+10"SOUTH"																															1											2										
61	RT.	52+10"SOUTH"	52+40"SOUTH"																													30							40											
62	RT.	52+40"SOUTH"						1											•1/–	1								1		1									92			1	1								
63	RT.	52+40"SOUTH"	749+56"B"																													41							51											
64	RT.	750+50"B"															1	1		1						1			1									103			1	1								
65	RT.	750+50"B"	753+50"B"																													300							310											
66	RT.	753+50"B"															1	1		1						1			1									103			1	1								
67	RT.	753+50"B"	755+00"B"																													150							160											
68	RT.	755+00"B"															1	1		1						1			1									103			1	1								
69	RT.	755+00"B"	756+60																													160							170											
70	LT.	53+84"SOUTH"																															1														2							
71	LT.	53+84"SOUTH"	54+26"SOUTH"																													42							52											
72	LT.	54+26"SOUTH"																															1											2										
73	LT./RT.	54+26"SOUTH"																														93			93		206												
75	RT.	50+00"SOUTH"																																															1		
76	RT.	749+56"B"																															1														2							
77	RT.	749+56"B"	750+50"B"																													94							104											
78	RT./LT.	749+56"B"																																		38		96													
SUB-TOTAL	FROM SHEET Nº	426-J					4												4	4	1			1				5		4	2		163						492	208	2	5	5	2							
TOTALS, SHEET Nº 427-G				5	4	4	1	1									9	•2/22	5	19		1	1		1	18	6		24	16		4136			464		1048	2592	4025	16	25	25	16					1		

• 24" x 6'-0" FOUNDATION

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

CALC. BY C.O.D. DATE 5-12-70
CHK'D BY W.D.P. DATE 5/15/70

LIGHTING QUANTITIES SUB-SUMMARY

CITY-STATE : 75% STATE 25% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

426J 656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT1B5.41.7	LIGHT POLE DESIGN 11AT12B4.1.7	LIGHT POLE DESIGN 11AT8B4.1.7	LIGHT POLE DESIGN 11AT12B3.4.2	LIGHT POLE DESIGN 11AT10B3.4.2	LIGHT POLE DESIGN 11AT8B3.4.2	LIGHT POLE DESIGN 11T15B4.1.7	LIGHT POLE DESIGN 11T12B4.1.7	LIGHT POLE DESIGN 11T12B3.4.2	LIGHT POLE DESIGN 11T10B3.4.2	LIGHT POLE DESIGN 11T8B3.4.2	LIGHT POLE DESIGN TA12B4.2.3	LIGHT POLE DESIGN TA12B3.4.8	LIGHT POLE FOUNDATION 24"x6'-0" DEEP	LIGHT POLE FOUNDATION 24"x8'-0" DEEP	LUMINAIRE, TYPE III 700 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	8' LIGHTING BRACKET ARM	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR KIT TYPE III-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE III-B	CONNECTOR KIT TYPE V	CONNECTOR KIT TYPE VI	CONNECTOR KIT TYPE III-C	SERVICE POLE	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT.	760+80	761+45															1		1					1			1		65							70											
2	RT.	761+45								1								1		1					1			1							107			1	1								
3	RT.	761+45	762+00																											55							60											
4	LT.	760+80	760+90																											10							15											
5	LT.	760+90		1														1		1					1			1							113			1	1								
6	LT.	760+90	761+90																											100							110											
7	LT.	761+90																											1									2										
8	LT.	757+83 "A"					1										/				1					1			1							88			1	1								
9	LT.	757+83 "A"	750+83 "A"														/													200							210											
10	LT.	750+83 "A"					1										/				1					1			1							88			1	1								
11	LT.	750+83 "A"	761+40 "A"																											166							176											
12	LT.	761+40 "A"																											1									2										
13	LT./RT.	761+40 "A"																												45			45		110											
		TOTALS, SHEET Nº 427-G		1			2			1							2	2		2		2			2	2			4	2	641			45		110	306	641	2	4	4	2	ALL QUANTITIES THIS LINE ARE CITY-STATE			

CALC. BY C.O.D. DATE 5-12-70
CHK'D BY W.D.P. DATE 5/18/70

LIGHTING QUANTITIES SUB-SUMMARY

CITY – STATE : 75% STATE
25% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680-6.08

426K
656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN TA12B42.3	LIGHT POLE DESIGN TA12B34.8		LIGHT POLE FOUNDATION 24" x 8'-0" DEEP	LUMINAIRE, TYPE II 1000 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 400 WATT DELUX WHITE	LAMP, 400 WATT CLEAR	LAMP, 700 WATT CLEAR	LAMP, 700 WATT DELUX WHITE	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE III	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 600 V	POLE & BRACKET CABLE Nº 10	DUCT CABLE 600 V TWO Nº 4	CONNECTOR, KIT TYPE III - A	CONNECTOR, KIT TYPE II	CONNECTOR, KIT TYPE III	CONNECTOR, KIT TYPE III - B	CONNECTOR, KIT TYPE V	CONNECTOR, KIT TYPE VI	CONNECTOR, KIT TYPE III - C	SERVICE, POLE, DA	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR 1" BOLT FOR STRUCTURE
				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	EACH	EACH
1	RT	762+00	763+06																									1			106																							
2	RT	763+06																																																					
3	RT	763+06	763+67.03																														62				144																	
4	RT	763+67.03													1				1								1											108																1	1	2
5	RT	763+67.03	764+00																														131				282																	
6	RT	764+00																												1																									
7	RT	764+00	766+03																														104																						
8	RT	766+03									1								1		1						1				1							107																1	1	
9	RT	766+03	766+10																														16																						
10	RT	766+10																												1																									
11	RT	766+10	768+04																														185				300																	
12	RT	768+04																												1																									
13	RT	768+04	768+50																														46																						
14	RT	768+50								1									1		1						1				1							113																1	1	
15	RT	768+50	771+25																														275																						
16	RT	771+25		1															1		1						1				1							113																1	1	
17	RT	771+25	772+00																														75																						
18	LT	761+40 "A"	762+65																														74																						
19	LT	762+65									1								1		1						1				1							107																1	1	
20	LT	762+65	762+92																														27																						
21	LT	762+92																												1																									
22	LT	762+92	764+34																														148				304																	
23	LT	764+34														1			1		1						1											108																1	1	2
24	LT	764+34	764+00																														65				150																	
25	LT	764+00																												1																									
26	LT	764+00	765+57																														58																						
27	LT	765+57																												1																									
28	LT	765+57	766+35																														78																						
29	LT	766+35									1								1		1						1				1							107																1	1	
30	LT	766+35	766+54																														19																						
31	LT	766+54																													1																									
32	LT	766+54	767+13																														55				138																	
33	LT	767+13																																																						
34	LT	767+13	767+65																														52				124																	
35	LT	767+65																																																					
36	LT	767+65	768+24																														55				138																	
37	LT	768+24																												1																									
38	LT	768+24	768+53																														29																						
39	LT	768+53								1									1		1						1				1							107																1	1	
40	LT	768+53	769+80								1								1		1						1				1							107																1	1	
41	LT/RT	769+80									1								1		1						1				1							107																1	1	
42	LT	769+80	772+00																														220																						
44	LT/RT	766+54																																																						
45	RT	3+37 DELASON																														128		128		552																	
																																89		89	702																	
TOTALS, SHEET Nº 427-H				1						1	5				2			7		9						9			7	8	1	1471		761	128	89	3014	977	1370	32	0	0	6							LUMP	2	2	4

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

CALC. BY C.O.D. DATE 5-13-70
CHK'D BY W.D.P. DATE 5/18/70

LIGHTING QUANTITIES SUB-SUMMARY

CITY–STATE 75% STATE 25% CITY

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-G.08

426L 656

REFERENCE Nº	SIDE	STATION	STATION	LIGHT POLE DESIGN 11AT15B41.7	LIGHT POLE DESIGN 11AT12B41.7	LIGHT POLE DESIGN 11AT8B41.7	LIGHT POLE DESIGN 11AT12B34.2	LIGHT POLE DESIGN 11AT10B34.2	LIGHT POLE DESIGN 11AT8B34.2	LIGHT POLE DESIGN 11T15B41.7	LIGHT POLE DESIGN 11T12B41.7	LIGHT POLE DESIGN 11T12B34.2	LIGHT POLE DESIGN 11T10B 34.2	LIGHT POLE DESIGN 11T8B34.2	LIGHT POLE DESIGN TA12B42.3	LIGHT POLE DESIGN TA12B34.8	LIGHT POLE FOUNDATION 24"x 8'-0" DEEP	LUMINAIRE, TYPE III 700 WATT	LUMINAIRE, TYPE II 700 WATT	LUMINAIRE, TYPE III 400 WATT	LUMINAIRE, TYPE II 400 WATT	LUMINAIRE UNDERPASS 250 WATT MERCURY	LAMP, 250 WATT	LAMP, 700 WATT DELUX WHITE	LAMP, 700 WATT CLEAR	SERVICE TO UNDERDECK LIGHTING AS PER PLAN	GLARE SHIELD 700 WATT MERCURY	GROUND ROD	PULL BOX 18" CIRCULAR	PULL BOX 24" CIRCULAR	TRENCH, 24" DEEP	CONDUIT, 1¼" TYPE	CONDUIT, 2" TYPE III	CONDUIT, 3" TYPE III	CONDUIT 2" TYPE III ENCASED	DISTRIBUTION CABLE Nº 4 GOO V	POLE & BRACKET CABLE Nº 10	DUCT CABLE GOO V TWO Nº 4	CONNECTOR KIT TYPE III-A	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CONNECTOR KIT TYPE III-B	CONNECTOR KIT TYPE V	REMOVAL OF EXIST. LIGHTING SYSTEM	DISTRIBUTION CIRCUIT CABLE Nº6 SKV	DISTRIBUTION CIRCUIT CABLE Nº 2 GOO V	STRUCTURE GROUNDING SYSTEM	STRUCTURE JUNCTION BOX	LIGHT POLE ANCHOR "U" BOLT FOR STRUCTURE
				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	EACH	LUMP	EACH	LUMP	EACH	EACH	EACH
1	12T.	772+00	774+10														1	1						1			1			210							215											
2	12T.	774+10		1													1	1						1			1			270							280											
3	12T.	774+10	776+80														1	1						1			1			180							190											
4	12T.	776+80		1													1	1						1			1			90							100											
5	12T.	776+80	778+60														1	1						1			1			70				70													
6	12T.	778+60															1	1						1			1			130							135											
7	12T.	778+60	779+50							1							1	1						1			1			210							220											
8	12T.	779+50															1	1						1			1			50							60											
9	12T.	781+02																																														
10	LT./12T.	781+02																												70				70										80	80			
11	LT.	772+00	773+30														1	1						1			1			230							240											
12	LT.	773+30		1													1	1						1			1			249							259											
13	LT.	773+30	775+40														1	1						1			1																		75			
14	LT.	775+40		1													1	1						1			1																					
15	LT.	775+40	775+90																																													
16	LT.	775+90																																														
17	LT.	775+90	778+20														1	1						1			1			113							113											
18	LT.	778+20		1													1	1						1			1																					
19	LT.	778+20	780+69														1	1						1			1																					
20	LT.	780+69		1													1	1						1			1																					
21	12T.	51+35	53+00																																													
		TOTALS, SHEET Nº 427-I		6						1							7	7						7			7	2	1	1689				70		701	1692			7	7	4			80	155			
																	PARTICIPATION:		90% FEDERAL																																
																			5% STATE																																
																			5% CITY																																
27		BRIDGE MAH-680-0924																					8	8			1																			1			
28		BRIDGE MAH-680-0705																					4	4			1																					
29		49+15	49+63.25																														48		116												
30		49+63.25																																							2			1			
31		49+63.25	50+00																														37		94												
32		50+00													1			1							1										109			1	1						1		2	
33		50+00	50+51																														51		122												
34		50+51																																							2			1			
35		50+51	51+28																														77		174												
		TOTALS, SHEET Nº 429													1			1					12	12	1		2							213		506	109			1	1	2	2			1	3	2
																	PARTICIPATION:		90% FEDERAL																																
																			5% STATE																																
																			5% CITY																																
43		BRIDGE MAH. 680-0794																					3	3			1																					
		TOTALS, SHEET Nº 429-A																					3	3			1																					
																	PARTICIPATION:		90% FEDERAL																																
																			5% STATE																																
																			5% CITY																																
54		BRIDGE MAH. 680-0835																					4	4			1																					
		TOTALS, SHEET Nº 429-B																					4	4			1																					
																	CITY–STATE:		75% STATE																																
																			25% CITY																																
62		BRIDGE MAH. 680-0687																					5	5			1																					
		TOTALS, SHEET Nº 429-A																					5	5			1																					
																	CITY–STATE:		75% STATE																																
																			25% CITY																																
73		SOUTH AVE.	WILLIAMSON AVE.																																											LUMP			
		TOTALS, SHEET Nº 428																																												LUMP			

LIGHTING QUANTITIES SUB-SUMMARY MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

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MAH-680-6.98

LIGHTING KEY

400 WATT LUMINAIRE w/delux WHITE MERCURY LAMP AT 34'-2" MOUNTING HEIGHT-BY OHIO EDISON COMPANY.

700 WATT LUMINAIRE w/delux WHITE MERCURY LAMP AT 41'-8" MOUNTING HEIGHT-BY OHIO EDISON COMPANY.

GROUND MOUNTED LIGHT POLE WITH LUMINAIRE. TYPE AT OR T BASE (AS PER PLAN) 41'-8" MOUNTING HEIGHT.

STRUCTURE MOUNTED LIGHT POLE WITH LUMINAIRE. TYPE A BASE, 42'-4" MOUNTING HEIGHT.

GROUND MOUNTED LIGHT POLE WITH LUMINAIRE. TYPE AT OR T BASE (AS PER PLAN) 34'-2" MOUNTING HEIGHT.

STRUCTURE MOUNTED LIGHT POLE WITH LUMINAIRE. TYPE A BASE, 34'-10" MOUNTING HEIGHT.

EXISTING OF FUTURE LIGHT POLE WITH LUMINAIRE, AS NOTED.

UNDERPASS LUMINAIRE.

EXISTING LIGHT POLE, LUMINAIRE, AND FOUNDATION TO BE REMOVED.

EXISTING UNDERPASS LUMINAIRE TO BE REMOVED.

18" CIRCULAR PULL BOX, EXCEPT AS NOTED.

EXISTING 24" SQUARE CONCRETE PULL BOX.

DUCT CABLE, 600 VOLT - TWO INSULATED 1/c NO. 4 AWG IN 24" DEEP TRENCH.

CONDUIT, 2", 713.04, TYPE III, ENCASED. HATCH MARK INDICATES THE NUMBER OF 1/c NO. 4 AWG DISTRIBUTION CIRCUIT CABLES INSTALLED. (ONE HATCH MARK FOR EACH CABLE).

CONDUIT, 3", 713.04, TYPE III, HATCH MARK INDICATES THE NUMBER OF 1/c NO. 4 AWG DISTRIBUTION CIRCUIT CABLES INSTALLED (ONE HATCH MARK FOR EACH CABLE.)

CONDUIT, 2" 713.04, TYPE III, HATCH MARK INDICATES THE NUMBER OF 1/c NO. 4 AWG DISTRIBUTION CIRCUIT CABLES INSTALLED (ONE HATCH MARK FOR EACH CABLE.)

DRAINAGE STRUCTURES

LIGHTING KEY (CONTINUED)

CONDUIT, 1-1/4", 713.04, TYPE III, HATCH MARK INDICATES THE NUMBER OF 1/c NO. 4 AWG DISTRIBUTION CIRCUIT CABLES INSTALLED (ONE HATCH MARK FOR EACH CABLE).

PROPOSED SERVICE POLE.

EXISTING C.C. SERIES TRANSFORMER AND SERVICE POLE

STRUCTURE GROUND POINT

ILLUMINATED OVERHEAD SIGNS.

700W-III-DX

LUMINAIRE DESIGNATION. THE FIRST DESIGNATION (700 W) IS THE LAMP WATTAGE - THE SECOND DESIGNATION (III) IS THE USASI - IES DISTRIBUTION PATTERN. WHEN THE THIRD DESIGNATION (DX) IS USED IT INDICATES THE USE OF DELUX WHITE LAMPS.

12-15-AT-2 MB(G)

TYPICAL LIGHT POLE DESIGNATION - THE FIRST DESIGNATION (12) IS THE OFFSET FROM THE EDGE OF PAVEMENT. THE SECOND DESIGNATION (15) IS THE BRACKET ARM LENGTH. THE THIRD DESIGNATION (AT) IS THE BASE TYPE. THE FOURTH DESIGNATION (2MB(6)) IS THE CIRCUIT NUMBER, THE SERVICE POLE DESIGNATION AND THE NUMBER OF THE LIGHT POLE IN THAT CIRCUIT.

DESIGN CRITERIA

TYPE LIGHTING:	FULL INTERCHANGE AND CONTINUOUS FREEWAY
ILLUMINATION LEVEL:	1.2 f.c. TO 1.0 f.c. AVERAGE INITIAL MAINLINE AND RAMPS
	0.9 f.c. AVERAGE MAINTAINED ON MIDLOTHIAN BOULEVARD
	6.0 f.c. AVERAGE MAINTAINED ON SOUTH AVENUE
UNIFORMITY:	NOT TO EXCEED 6 TO 1
LAMPS:	700 WATT CLEAR MERCURY - MAINLINE AND RAMPS (AS PER PLAN) 400 WATT CLEAR MERCURY - RAMPS 700 WATT WHITE MERCURY - MIDLOTHIAN BLVD. 700 WATT WHITE MERCURY - SOUTH AVENUE 400 WATT WHITE MERCURY - SHIRLEY ROAD
SYSTEM POWER:	480 VOLT - SINGLE PHASE

LIGHTING KEY MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680- 6.98

427A
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OVERHEAD SIGN #43
STA. 358+00
CONNECT TO CKT 4MB

STA. 366+80
7-8-AT-4MB(2)

PULL BOX FOR SIGN #42
AT STA. 365+83

3" 713.04 TYPE II OR III CONDUIT

15' ASPHALT DRIVE

5' MIN. EACH SIDE OF DRIVE

MIDLOTHIAN BLVD.

FUTURE RAMP M-M

STA 367+86-29.3'LT
PROP. O.E. POLE

CONNECT TO CKT 4MB

STA. 368+80 29.5' LT.
PROP. O.E. POLE
SERVICE POLE "MB"
33 FT. STA. 369+10

STA. 366+23
EXIST. O.E. POLE

SHIRLEY RD.

STA. 368+05
7-8-AT-4MB(1)

24" PULL BOX

CKT 5MB
CKT 6MB

CKT 6MB UP SLOPE IN 2" 713.04 TYPE III ENCASED CONDUIT

STA. 370+00
7-8-AT-1MB(1)
STA. 370+20 29.5' LT
PROP. O.E. POLE

CITY OF YOUNGSTOWN CORPORATION LIMITS

OVERHEAD SIGN #45
STA. 640+70

CKT 1MB
CKT 2MB

STA. 642+30
11-10-T-3MB(1)

STA. 644+20
11-10-T-3MB(2)

STA. 646+02
11-10-T-3MB(3)

STA. 647+96
11-10-T-3MB(4)

STA. 649+85
11-10-T-3MB(5)

RAMP "K"

STA. G35+36
11-10-T-4MB(6)

STA. G36+83
11-10-T-4MB(7)

STA. G38+30
11-10-T-4MB(8)

RAMP "L"

STA. G37+80
15-15-AT-4MB(9)

ALIGN NORMAL TO MAINLINE

STA. G39+70
11-12-T-4MB(10)
LAST LIGHT CKT 4MB

STA. 371+10
ST-12-A-2MB(1)

CKT 6MB THRU STRUCTURE IN 2" 713.04 TYPE III CONDUIT

STA. G41+70
ST-12-A-6MB(2)
SIGN ON STRUCTURE
STA. 371+78

STA. G44+00
11-12-T-6MB(3)

STA. G46+45
11-12-AT-6MB(4)

STA. G49+10
15-15-AT-6MB(5)

TYPE "B" RACEWAY

STA. 371+85 29.5' LT.
PROP O.E. POLE
MAH-680-09.24

CONSTRUCTION

STA. 638+00
STA. 637+76.04

END

CONNECT TO CKT. 6MB

SEE SHEET No. 412.0 FOR STRUCTURE GROUND LOCATION & UNDERPASS LIGHTING PLAN

CKT 5MB THRU STRUCTURE IN 2" 713.04 TYPE III CONDUIT

SIGN ON STRUCTURE

STA. 642+93
ST-12-A-5MB(10)

STA. 644+90
11-12-T-2MB(1)

STA. 647+10
11-12-AT-2MB(2)

STA. 648+30
11-12-AT-2MB(3)

STA. 649+38
11-10-AT-1MB(8)

LAST LIGHT
CKT 1MB

STA. 373+60 29.5' LT
PROP O.E. POLE

STA. 373+80
7-8-AT-1MB(2)

INSTALL GLARE SHIELD

STA. 373+46 PULL BOX FOR SIGN #40

PROP. O.E. CO. 4 KV. DIST LINE

CKT 2MB UP SLOPE IN 2" 713.04 TYPE III ENCASED CONDUIT

STA. G38+20
15-15-AT-5MB(2)

STA. G38+70
11-10-AT-5MB(7)

STA. G40+70
11-12-AT-5MB(9)

TYPE B RACEWAY

ALIGN NORMAL TO MIDLOTHIAN

STA. 374+60
7-8-AT-5MB(1)

STA. 375+45 29.5' LT
PROP O.E. POLE

STA. 375+55
7-8-AT-1MB(3)

STA. G43+70
11-10-AT-1MB(5)

STA. G45+20
11-10-T-1MB(6)

STA. G47+28
11-10-AT-1MB(7)

RAMP "J"

RAMP "O"

STA. G37+20
11-10-AT-5MB(6)

STA. G31+20
11-10-AT-5MB(2)

STA. G35+70
11-10-AT-5MB(5)

STA. G32+70
11-10-AT-5MB(3)

STA. G34+20
11-10-AT-5MB(4)

STA. 376+70 COMBINATION OVERHEAD SIGN (#38) AND LIGHT SUPPORT
CONNECT SIGN AND LIGHT TO CKT 1MB (12' BRACKET ARM)

ALIGN NORMAL TO MIDLOTHIAN

STA. 377+30 - 29.5' LT.
PROP O.E. POLE

STA. 377+90
7-8-AT-1MB(4)

LEMOYNE AVE.

STA. 378+77
EXIST OBT POLE
(O.E. CONTACT)

MIDLOTHAN BLVD.

STA. 650+00

SCALE
0 50 100 150

MAY 25 1971

LIGHTING PLAN
STA. 637+76.04 TO STA. 650+00

FED. RD.	STATE	PROJECT	
2	OHIO		

427B / 656

MAH-680-6.98

STA. 650+00

RAMP "K"

STA. G51+63
11-10-T-3MB (6)

ALIGN NORMAL TO MAINLINE

STA. G53+47
11-12-T-3MB (7)

#47 OVERHEAD SIGN
STA. G55+61.5
CONNECT TO CKT 3MB

STA. G55+67
11-12-T-3MB (8)

STA. G57+25
11-12-T-3MB (9)

STA. G59+25
15-15-T-3MB (10)

STA. GG1+50
15-15-AT-3MB (11)

STA. GG3+80
15-15-AT-7SR (11)

400 W-II

STA. G51+60
15-15-AT-6MB (6)

700 W-II

LAST LIGHT CKT. 6MB

LAST LIGHT CKT 3MB

LAST LIGHT CKT 7SR

LAST LIGHT CKT. 2MB

651 652 653 654 655 656 657 658 659 660 661 662 663 664

ALIGN NORMAL TO MAINLINE

RAMP "J"

STA. G51+30
11-12-AT-2MB (4)

STA. G53+30
11-12-AT-2MB (5)

STA. G55+30
11-12-AT-2MB (6)

STA. G57+30
11-12-AT-2MB (7)

STA. G59+60
15-15-AT-2MB (8)

STA. GG1+00
15-15-AT-2MB (9)

STA. GG4+22
15-15-AT-2MB (10)

STA. 665+00

STA. 665+00

OVERHEAD SIGN #48
STA. GGG+50

STA. GG5+90
15-15-AT-7SR (10)

STA. GG8+35
15-15-T-7SR (5)

STA. G70+65
15-15-T-7SR (8)

STA. G72+85
11-12-T-7SR (7)

STA. G74+90
11-12-T-7SR (6)

STA. G76+80
11-12-AT-7SR (5)

STA. G78+00
11-10-AT-7SR (4)

CONNECT TO CKT. 7SR.

ALIGN NORMAL TO MAINLINE

RAMP "H"

400 W-II

STA. G78+70
15-15-AT-8SR (4)

666 667 668 669 670 671 672 673 674 675 676 677 678 679

LAST LIGHT CKT. 10SR

STA. GGG+68
15-15-T-10SR (10)

STA. GG3+14
15-15-T-10SR (9)

CONNECT TO CKT. 10SR

OVERHEAD SIGN (#49)
STA. G71+00

STA. G71+60
15-15-T-10SR (8)

STA. G73+60
15-15-T-10SR (7)

STA. G75+95
15-15-T-10SR (6)

STA. G78+25
15-15-AT-10SR (5)

STA. 680+00

O.E. CO. 460 KW TRANS. LINE

PROP.

STA. G79+12
115' RT.

STA. G79+05
186' LT.

SCALE
0 50 100 150

MAY 25 1971

LIGHTING PLAN
STA. 650+00 TO STA. 680+00

FED. RD.	STATE	PROJECT	
2	OHIO		

427C
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MAH-680-6.98

✳ - See Sheet 431 - Mechanical Properties

STA. 42+90 - 25' LT. PROP. O.E. TX POLE
STA. 44+01 - 25' LT. PROP. O.E. POLE
CONNECT TO CKT. 7SR
COOPER AVENUE
STA. 45+73 - 25' LT. PROP. O.E. TX POLE
PROP. O.E. Co. 23KV TRANSMISSION LINE & 4KV DISTRIBUTION LINE
24" PULL BOX
STA. 47+17 - 25' LT. PROP. O.E. POLE
STA. 48+24 - 25' LT. PROP. O.E. POLE
OVERHEAD SIGN # 52 STA. 44+20
STA. 683+20 11-10-AT-7SR(2)
400 W-II
STA. 681+10 11-10-AT-7SR(3)
STA. 45+05 2-8-AT-7SR(1)
400W-II-DX
SHIRLEY ROAD
RAMP "H"
SERVICE POLE 9SR 45' LT. STA. 46+75
CKTS 8SR, 9SR, & 10SR DOWN SLOPE IN 2" 713.04 TYPE III ENCASED CONDUIT
MAH-680-0535
SEE SHT. No 420-B FOR UNDERPASS LIGHTING PLAN
OVERHEAD SIGN #51 STA. 49+60
49+66 Pilaster & Anchor Bolts
STA. 680+00
STA. 681+10 15-15-AT-8SR(3)
700 W-II
STA. 683+40 15-15-AT-8SR(2)
STA. 685+70 15-15-AT-8SR(1)
24" PULL BOX
STA. 688+00 15-15-AT-8SR(5)
2" CONDUIT
CONNECT TO CKT. 8SR
STA. 680+85 15-15-AT-8SR(6)
STA. 693+60 15-15-AT-8SR(7)
700 W-II
Connect to CKt. 9 SR.
STA. 694+00
STA. 694+69
STA. 694+69 15-15-AT-9SR(4)
CKTS 9SR & 10SR UNDER MAINLINE IN 3" 713.04 TYPE III CONDUIT
CONNECT TO CKT. 8SR
STA-51+08 Pilaster & Anchor Bolts
STA. 691+95 15-15-AT-9SR(3)
STA. 680+60 15-15-AT-10SR(4)
CONNECT TO CKT. 10SR ALIGN NORMAL TO MAINLINE
STA. 682+85 11-12-AT-10SR(3)
STA. 684+76 11-12-AT-10SR(2)
STA. 686+47 15-15-AT-9SR(1)
CKTS. 9SR & 10SR UP SLOPE IN 3" 713.04 III CONDUIT Type
STA. 686+38 11-10-AT-10SR(1)
STA. 688+18 11-10-AT-9SR(6)
STA. 690+00 11-10-T-9SR(7)
STA. 691+50 11-10-AT-9SR(8)
STA. 693+00 11-10-T-9SR(9)
STA. 54+40 2-8-AT-9SR(10)
STA. 684+00
OVERHEAD SIGN #50 STA. 684+00
OVERHEAD SIGN #54 STA. 690+00 CONNECT TO CKT 9SR
SEE SHEET No 429-B FOR LOCATION OF STRUCTURE GROUND
STA. 52+50 - 25' LT. PROP. O.E. TX POLE
2" Conduit
STA. 691+50 15-15-AT-9SR(2)
STA. 53+70 - 25' LT. PROP. O.E. POLE
STA. 34+11 11-10-AT-9SR(11)
HOMEWOOD AVENUE
STA. 34+46 11-10-AT-9SR(12)
OVERHEAD SIGN #53 STA. 54+50
STA. 55+65 - 25' LT. PROP. O.E. TX POLE
LAST LIGHT CKT. 9SR
STA. 56+54 - 25' LT. PROP. O.E. POLE
400W-II-DX
CONNECT TO CKT. 9SR
STA. 57+60 - 25' LT. PROP. O.E. POLE
OVERHEAD SIGN #70 STA. 60+00, CONNECT TO CKT 9SR
STA. 50+02 - 25' LT. PROP. O.E. POLE
STA. 60+35 - 25' LT. PROP. O.E. POLE
SHIRLEY ROAD

SCALE
0 50 100 150

MAY 25 1971

LIGHTING PLAN
STA. 680+00 TO STA. 695+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

427D
656

INDIANOLA AVENUE

TAYLOR AVENUE

HOMEWOOD AVENUE

RELOCATED

MAH-680-08.17

MAH-680-07.94

STA. 695+00

STA. 710+00

STA. 699+35
15-15-AT-11CS(10)

STA. 695+45
15-15-AT-8SR(8)

STA. 697+43
15-15-AT-8SR(3)

STA. 702+10
15-15-AT-11CS(9)

STA. 704+80
15-15-AT-11CS(8)

STA. 707+60
15-15-AT-11CS(7)

STA. 700+14
15-15-AT-12CS(2)

STA. 702+05
15-15-AT-12CS(3)

STA. 702+05
11-10-AT-12CS(6)

STA. 700+00
11-10-AT-12CS(7)

STA. 708+00
11-12-AT-12CS(5)

STA. 709+14.18
STR. 12-A-12CS(3)

STA. 707+00
11-12-AT-12CS(4)

STA. 708+00
11-12-AT-12CS(5)

700 W-II

400W-II

LAST LIGHT CKT. 8SR

LAST LIGHT CKT. 11CS

LAST LIGHT CKT. 12CS

CONNECT TO CKT. 8 SR

CONNECT TO CKT. 12CS

CKT. 11CS THRU STRUCTURE IN 2" 113.04 TYPE III CONDUIT

CKT. 12CS THRU STRUCTURE IN 2" 113.04 TYPE III CONDUIT

TYPE "B" RACEWAY

PIER #1

PIER #2

ALIGN NORMAL TO MAINLINE

RAMP "X"

SIGN #56 ON STRUCTURE 6

SIGN #55 STA. 51+25 CONNECT TO CKT. 12CS

SIGN #30 STA. 700+65.43

PULL BOX FOR SIGN #56 SEE STATE STD. 1200 FOR DETAIL

* STA. 49+95
Plaster Anchor Bolts

* See Sheet 431
Mechanical Properties

SCALE
0 50 100 150

MAY 25 1971

LIGHTING PLAN
STA. 695 +00 TO STA. 710+00

FED. RD.	STATE	PROJECT	
2	OHIO		

427E
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MAH-680-6.98

STA. 710+12.33 STR-12-A-11CS(6)

PIER #1

CKT 11CS THRU STRUCTURE IN 2" 713.04 TYPE III CONDUIT

1½" FLEXIBLE CONDUIT DOWN TO PIER CAP

TYPE "B" RACEWAY

MAH-680-0794

STA. 711+50 11-12-AT-12CS(2)

CKT 12 CS THRU STRUCTURE IN 2" 713.04 TYPE III CONDUIT

TYPE "B" RACEWAY

SEE SHEET N°420-A FOR UNDERPASS LIGHTING DETAILS

STA. 711+75 15-15-AT-11CS(5)

STA. 713+00 11-12-AT-12CS(1)

STA. 715+10 15-15-AT-11CS(4)

CKTS 11CS, 12CS & 13CS DOWN N. 713.04 TYPE III CONDUIT ENCASED

CKTS 12CS & 13CS UNDER 3" 713.04 CONDUIT IN PAVEMENT TYPE III,

STA. 716+40 15-15-AT-13CS(1)

STA. 717+18 15-15-AT-11CS(1)

STA. 718+05 15-15-AT-13CS(2)

STA. 720+48 15-15-AT-11CS(2)

STA. 721+10 15-15-T-13CS(3)

STA. 722+05 11-10-AT-14CS(8)

STA. 723+05 15-15-AT-11CS(3)

STA. 724+40 15-15-T-13CS(4)

STA. 728+00 11-12-AT-14CS(9)

ALIGN NORMAL TO MAINLINE

STA. 710+00

STA. 725+00

700 W-II

400 W-II

RAMP "E"

RAMP "F"

STA. 724+40 T-8-AT-17GN(12)

STA. 722+90 T-8-AT-17GN(13)

STA. 721+30 T-8-AT-17GN(4)

LAST LIGHT CKT 17GN

CONNECT SIGN #60 STA. 721+20 TO CKT 17GN

STA. 7100 DEWEY AVENUE

POWERSDELL AVENUE

RELOCATED SHADY RUN ROAD

STA 45+00

CKT 14CS THRU STRUCTURE IN 2" 713.04 TYPE III CONDUIT

MAH-680-0792

STA. 712+26.25 STR-12-A-14CS(2)

TYPE "B" RACEWAY

CAP 1-2" 713.04 TYPE CONDUIT LIGHTING

EMPTY 1-1" 10'

STA. 710+63.75 STR-12-A-14CS(1)

STA. 48+00

UNION STREET

STA. 713+70 11-10-AT-14CS(3)

STA. 715+20 11-10-AT-14CS(4)

GALEDONIA STREET

SERVICE POLE "S" LT. STA. 716+32

STA. 716+70 11-10-AT-14CS(5)

STA. 718+15 11-10-AT-14CS(6)

STA. 720+85 11-10-AT-14CS(7)

ALEXANDER AVENUE

POWERSDALE AVENUE

CONNECT SIGN #60 TO CKT 17GN

SCALE

0 50 100 150

MAY 25 1971

LIGHTING PLAN
STA. 710+00 TO STA. 725+00

FED. RD	STATE	PROJECT	
2	OHIO		

427F
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MAH-680-6.98

STA. 725+00

LAST LIGHT CKT. 14CS

700W-II

CONNECT TO CKT. 14CS

STA. 727+35 11-12-AT-14CS(10)

OVERHEAD SIGN #57 STA. 727+00

STA. 728+00 11-12-AT-15GN(10)

STA. 731+00 15-15-AT-15GN(9)

LAST LIGHT CKT 15GN

SIGN #58 STA. 730+00

CONNECT TO CKT 13CS

STA. 729+35 15-15-T-13CS(6)

STA. 732+05 15-15-T-13CS(7)

STA. 733+20 15-15-AT-15GN(8)

STA. 735+40 15-15-AT-15GN(7)

STA. 737+80 15-15-AT-15GN(6)

STA. 739+25 MATCH LINE

LAST LIGHT CKT 13CS

STA. 734+75 15-15-T-13CS(8)

ALIGN NORMAL TO MAIN LINE

STA. 736+30 11-12-T-17GN(6)

STA. 738+10 11-12-T-17GN(5)

RAMP "F"

400W-II

STA. 734+18 11-10-T-17GN(7)

STA. 723+75 15-15-T-13CS(5)

STA. 732+20 7-8-T-17GN(8)

STA. 730+25 7-8-T-17GN(9)

STA. 739+55 15-15-AT-15GN(5)

STA. 728+30 7-8-T-17GN(10)

STA. 726+35 7-8-AT-17GN(11)

STA. 741+55 15-15-AT-15GN(4)

OVERHEAD SIGN #59 STA. 742+00 CONNECT TO CKT. 15 GN

STA. 743+55 15-15-AT-15GN(3)

STA. 745+55 15-15-AT-15GN(2)

CKT'S 15GN, 16 GN, 17GN, AND 18GN DOWN SLOPE IN 2" 713.04 TYPE III CONDUIT, ENCASED

STA. 747+61 11-12-AT-15GN(1)

STA. 749+87 11-12-AT-16GN(1)

ALIGN NORMAL TO MAINLINE

MATCH LINE STA. 739+25

STA. 740+00 11-12-T-17GN(4)

STA. 742+20 11-12-AT-17GN(3)

STA. 744+55 11-12-AT-17GN(2)

CKT'S 17GN AND 18GN UNDER PAVEMENT IN 3" 713.04 TYPE III CONDUIT

STA. 746+95 15-15-AT-17GN(1)

OVERHEAD SIGN #61 STA. 748+00 CONNECT TO CKT 18GN

STA. 749+35 11-12-AT-18GN(1)

STA. 750+00

GIBSON AVENUE

MAH-680-0723

50+05 ✱ Pilaster& 700W-II Anchor Bolts

PIER# 2

STA. 51+28-22' RT. PROP O.E. POLE

PROP O.E. Co. 4KV DIST. LINE

STA. 48+20-23' RT. PROP O.E. POLE

SERVICE POLE "GN" 27' RT. STA. 48+54

24"

✱ See Sheet 431 Mechanical Properties

SCALE

0 50 100 150

LIGHTING PLAN
STA. 725+00 TO STA. 750+00

MAY 23 1971

FED. RD.	STATE	PROJECT	
2	OH10		

4276
656

MAH-680-6.98

STA. 750+00

STA. 751+65 11-12-AT-16GN(2)

STA. 753+43 11-10-AT-16GN(5)

STA. 755+21 11-10-AT-16GN(6)

STA. 755+00 11-10-AT-16GN(7)

2" Conduit

RAMP "C"

700W-II

STA. 753+50 15-15-AT-16GN(3)

STA. 756+00 15-15-AT-16GN(4)

700W-III-DX

STA. 49+20 ✱ PROP O.E. POLE

757+80 RAMP A

75% STATE 25% CITY

STA. 47+88 - 30' LT. PROP O.E. POLE

STA. 757+83 "A" 11-10-AT-19DA(5)

400W-III

LAST LIGHT CKT 19 DA

STA. 758+60 15-15-AT-19DA(7)

STA. 760+00 15-15-AT-19DA(6)

RAMP "A"

STA. 760+83 "A" 11-10-AT-19DA(4)

ALIGN NORMAL TO MAINLINE

700W-II

STA. 50+00 STR-12-A-16GN(8)

COMBINATION LIGHT AND OVERHEAD SIGN #64 STA 42+08 CONNECT TO CKT 16GN

SEE SHEET NO 420 FOR UNDERPASS LIGHTING PLAN

700W-III-DX

PIER "I"

STA. 50+00 MAH-680-0705

STA. 754+70 15-15-AT-18GN(4)

STA. 752+75 15-15-AT-18GN(3)

STA. 750+60 11-12-AT-21DA(5)

STA. 50+85 2-8-AT-16GN(9)

STA. 50+85 ✱ PROP O.E. POLE

RAMP "F"

STA. 758+98 "A" 11-12-AT-21DA(4)

ALIGN NORMAL TO MAINLINE

STA. 750+00 11-12-AT-18GN(2)

400W-II

STA. 753+00 11-10-AT-18GN(5)

STA. 755+00 11-10-AT-21DA(6)

CKT 16GN THRU STRUCTURE IN 2" 713.04 TYPE II OR III CONDUIT. TYPE "B" RACEWAY STA. 51+50 2-8-AT-16GN(10)

LAST LIGHT CKT 16GN OVERHEAD SIGN #65 STA. 52+00 CONNECT TO CKT 21 DA

STA. 753+50 11-10-AT-21DA(7)

CKT 21 DA UNDER PAVED BERM IN 3" 713.04 TYPE II OR III CONDUIT STA. 52+10 - 30' LT. PROP OBT POLE (O.E. CONTACT)

ALIGN NORMAL TO SOUTH AVE.

STA. 52+40 11-12-AT-21DA(10)

STA. 52+68 - 30' LT EXIST. POLE

LAST LIGHT CKT 21 DA

STA. 53+20 2-8-AT-21DA(9)

STA. 750+50 11-10-AT-21DA(8)

PROP O.E. Co 4 KV. DISTRIBUTION LINE

STA. 53+46 - 30' LT. EXIST. O.E. POLE

OVERHEAD SIGN #66 STA. 53+74 CONNECT TO CKT 18GN

Sta. 54+10 30' Lt. Prop. O.E. Pole

STA. 54+30 - 30' LT. EXIST. O.E. POLE

RAMP "D"

RAMP "B"

STA. 755+00 11-10-AT-18GN(6)

STA. 756+40 11-10-AT-18GN(7)

STA. 758+20 11-10-AT-18GN(8)

ALIGN NORMAL TO RAMP "D"

700W-II

700W-III-DX

SOUTH AVENUE

LAST LIGHT CKT 18GN

STA. 55+30 - 30' LT. EXIST. O.E. POLE

STA. 54+30 2-8-AT-18GN(9)

STA. 760+80 MAINLINE

75% STATE 25% CITY

STA. 761+45 11-12-AT-21DA(3)

NOTE: RAMP Y TO BE REMOVED

✱ See Sheet 431 Mechanical Properties.

SCALE

0 50 100 150

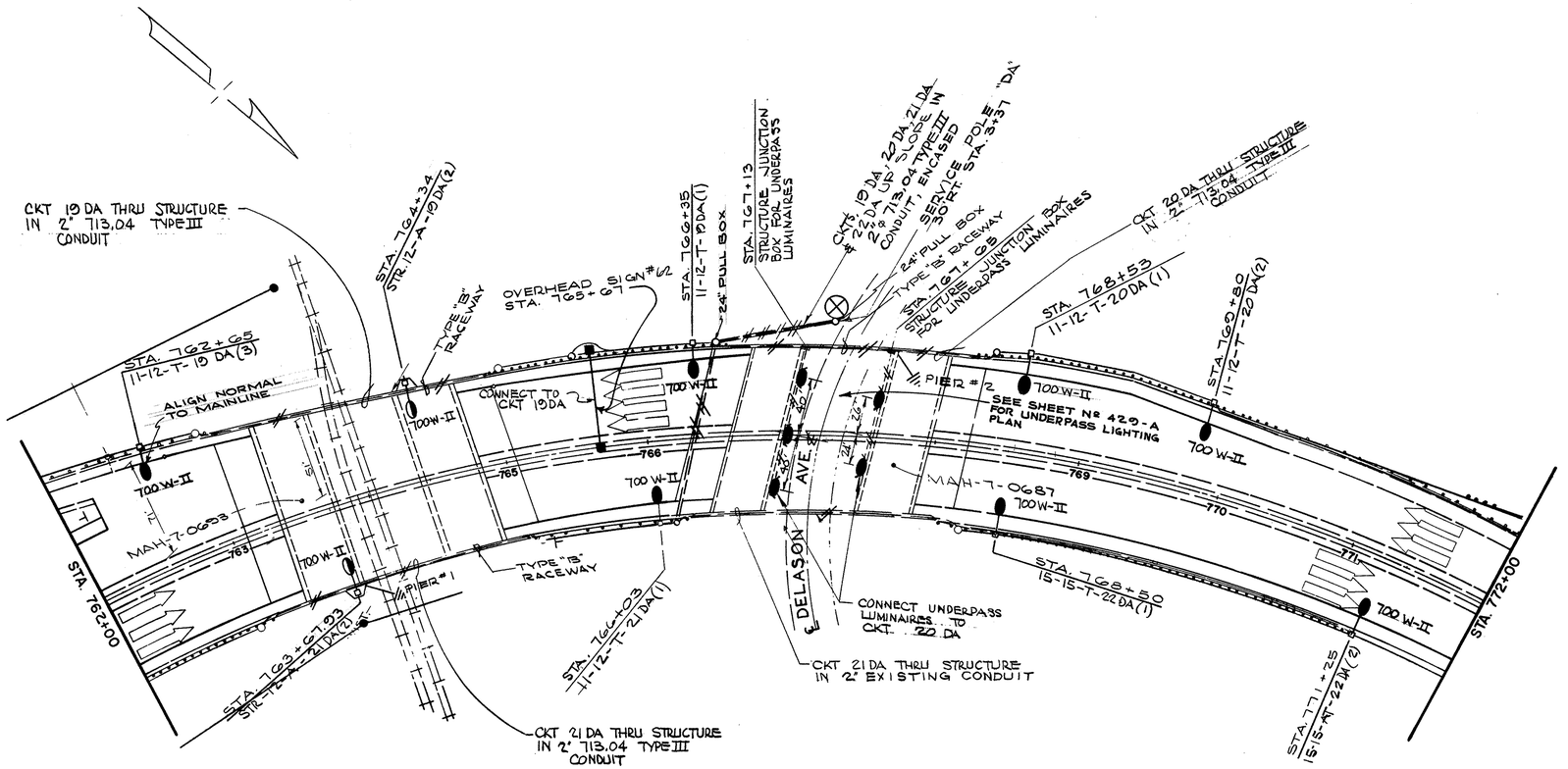
MAY 25 1971

LIGHTING PLAN
STA. 750+00 TO STA. 762+00

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

427H
656



SCALE

0 50 100 150

LIGHTING PLAN
STA. 762+00 TO STA. 772+00

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

427I
656

STA. 772+00

STA. 773+30
15-15-AT-20 DA (3)

700 W-II

STA. 774+10
15-15-AT-22 DA (3)

STA. 775+40
15-15-AT-20 DA (4)

SIGN #68 STA. 776+00
CONNECT TO CKT 22 DA

STA. 776+80
15-15-AT-22 DA (4)

STA. 778+20
15-15-AT-20 DA (5)

OVERHEAD SIGN #69
STA. 778+50
CONNECT TO CKT 22 DA

STA. 779+50
15-15-T-22 DA (5)

LAST LIGHT
CKT 20 DA
STA. 780+60
15-15-AT-20 DA (6)

EXIST. 24" SQ CONC.
PULL BOX Nº 2

EXIST. 24" SQ.
CONC. P.B. Nº 3

LAST LIGHT
CKT 22 DA

773 774 775 776 777 778 779 780 781 782 783

EXIST. SERIES CIR. Nº 5
DOWN SLOPE (DIRECT BURIED)

EXIST. SERIES
CIR Nº 5

STA 782+70 Nº
EXIST. UNIT

BEGIN WORK
STA. 784+00

EXIST. SERIES CIR Nº 5
THRU STR IN EXIST. 3"Φ COND.

STA 782+00 Nº
EXIST. UNIT

PROP 24" P.B.
Nº 5

EXIST. SERIES
CIR. Nº 6

EXIST 24" SQ
CONC. P.B. Nº 4

1-#6-AWG, 5 KV DIST. CKT. CABLE
1-#2-AWG, 600V DIST. CKT. CABLE
FOR USE AS GRND. WIRE
DOWN SLOPE IN 2" Φ
713.04 CONDUIT, ENCASED FROM
EXIST. P.B. AT TOP OF SLOPE
TO PROP. P.B. AT BOTTOM
OF SLOPE.

RAMP 'P'

WILLIAMSON AVE

51 52 53

2-EXIST #6-5000 V. CONDUCTORS &
1-EXIST #2-600 V. GRN'D WIRE IN
EXIST 2" Φ 713.04 CONDUIT. PULL IN
1 ADDITIONAL Nº 2 AWG, 600 VOLT
DISTRIBUTION CIRCUIT CABLE, FOR USE
AS A GRND. WIRE, FROM P.B. Nº 1 TO P.B Nº 4.

EXIST. 24" SQ. CONC.
P.B. Nº 1

2-EXIST. 3" Φ CONDUIT WITH
2-EXIST. #6-5000 V. CABLES AND
1-EXIST #2-600 V. GRN'D. CABLES
IN EACH CONDUIT.

EXISTING SERIES
20 AMP. C.C. TRANSF.

EXIST. P.B. Nº 2

EXISTING LIGHTS
TO BE REMOVED

EXISTING LIGHTS
TO REMAIN

#6-5000 V. CABLE
TO BE ABANDONED

EXIST P.B Nº 3

#2 CABLE-TO BE ABANDONED

#6-5000 V. CABLE

#2-CABLE

EXISTING LIGHTING
CIRCUIT Nº 5
NOT TO SCALE

EXISTING CABLE IN EXISTING 3" Φ
CONDUIT THRU MAH-7-1479
ABANDON #2

PROPOSED
P.B. Nº 5

RECONNECT
CIR Nº 6 HERE

EXISTING LIGHTS
TO BE REMOVED

EXISTING LIGHTS
TO REMAIN

RAMP P

#6-5000 V. CABLE
TO BE ABANDONED

#2-600 V. CABLE
TO BE ABANDONED

EXISTING P.B. Nº 4

#6-5000 V. CABLE

#2-600 V. CABLE

EXISTING LIGHTING
CIRCUIT Nº 6
NOT TO SCALE

1-PROP. #6 AWG 5KV DISTRIBUTION CIRCUIT CABLE
1-PROP. #2 AWG 600V DISTRIBUTION CIRCUIT CABLE

EXIST P.B. Nº 1

EXIST. CABLES FROM TRANSF.
POLE TO EXIST. P.B. Nº 1

SCALE
0 50 100 150

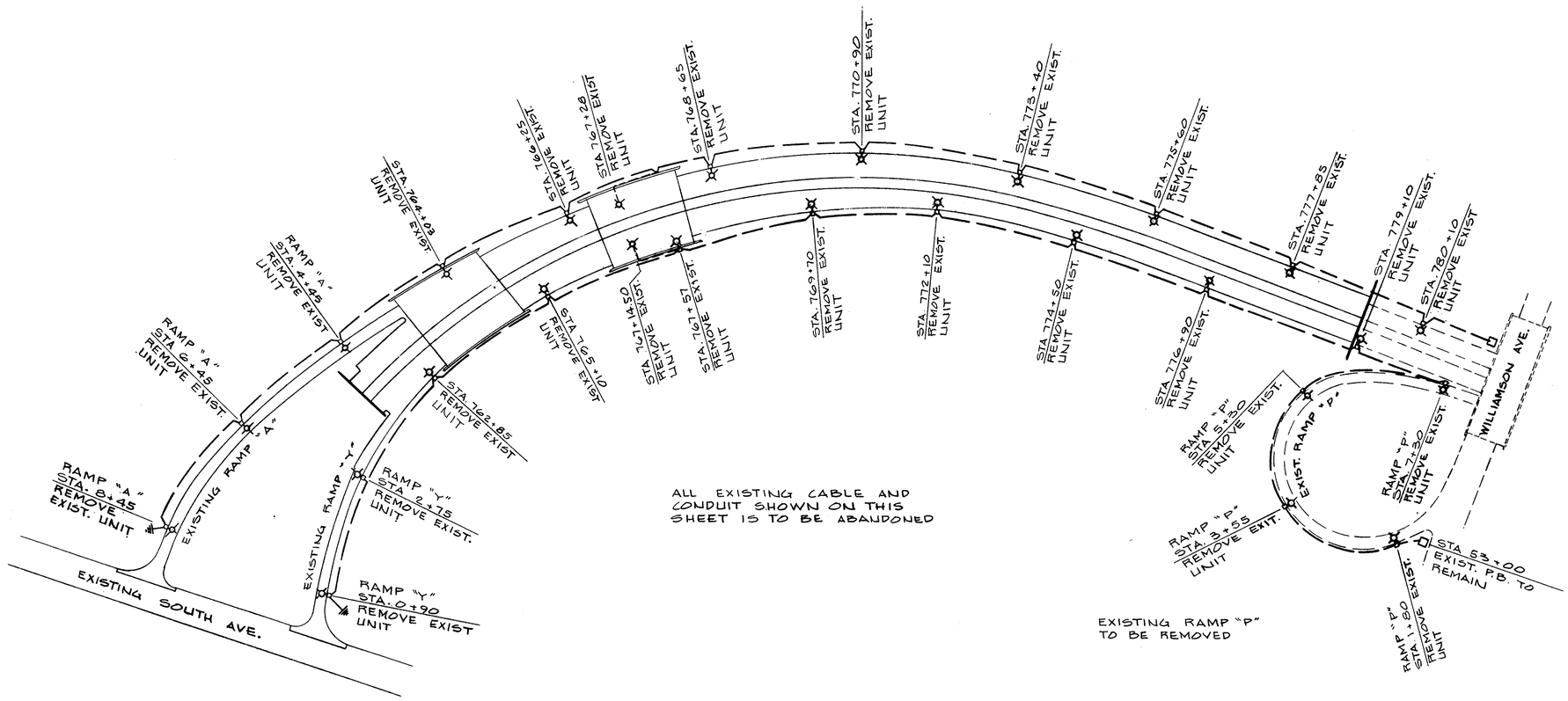
MAY 25 1971

LIGHTING PLAN
STA. 772+00 TO BEGIN CONSTRUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

428
656

MAH-680-6.98



ALL EXISTING CABLE AND CONDUIT SHOWN ON THIS SHEET IS TO BE ABANDONED

EXISTING RAMP Y TO BE REMOVED

EXISTING RAMP "P" TO BE REMOVED

EXISTING BOARDMAN EXPRESSWAY

REMOVAL OF EXISTING LIGHTING SYSTEM

SEE SHEET No. 427-I FOR RECONNECTION OF EXISTING SERIES LIGHTING SYSTEM

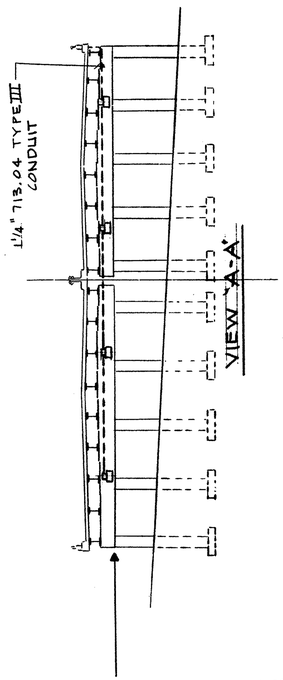
MAY 25 1971

REMOVAL OF EXISTING LIGHTING SYSTEM

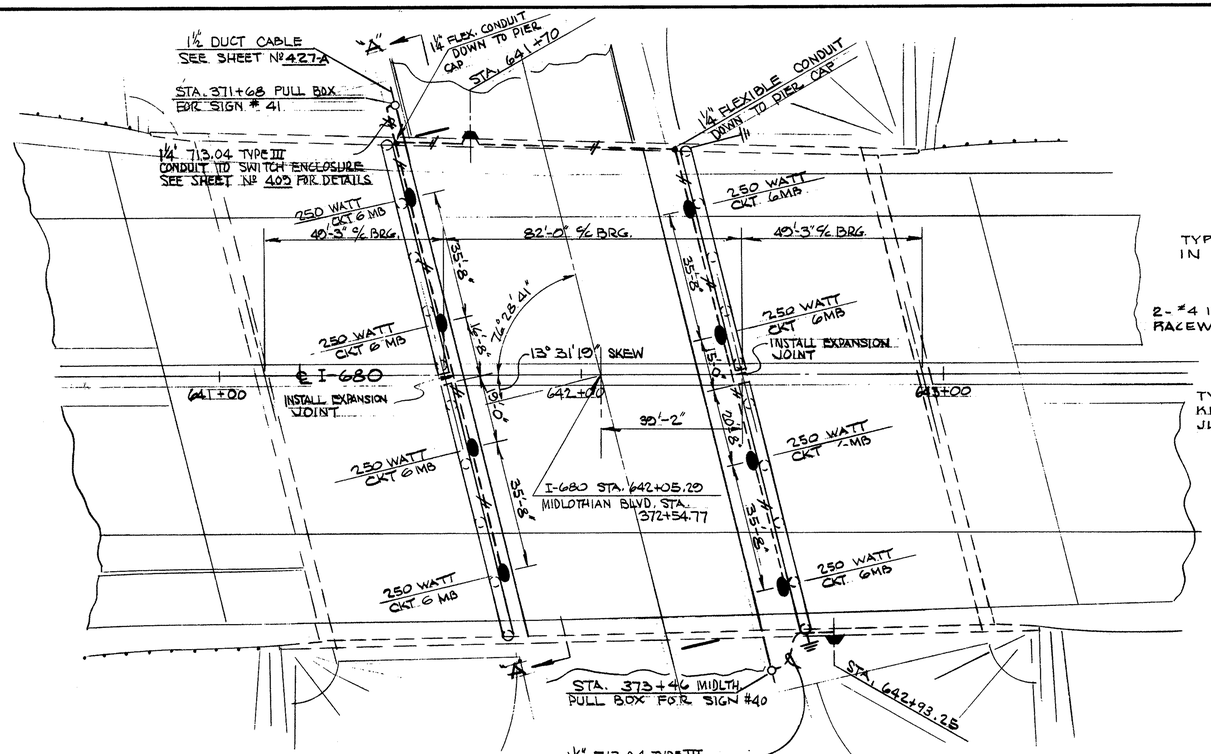
FED. RD.	STATE	PROJECT	
2	OHIO		

429
656

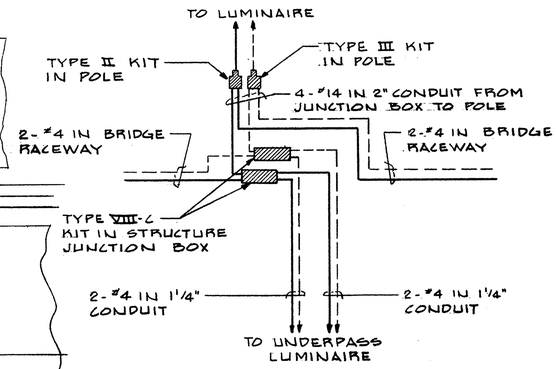
MAH-680-6.98



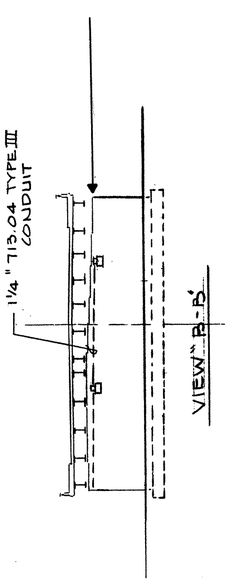
See Detail A Sheet 429B.

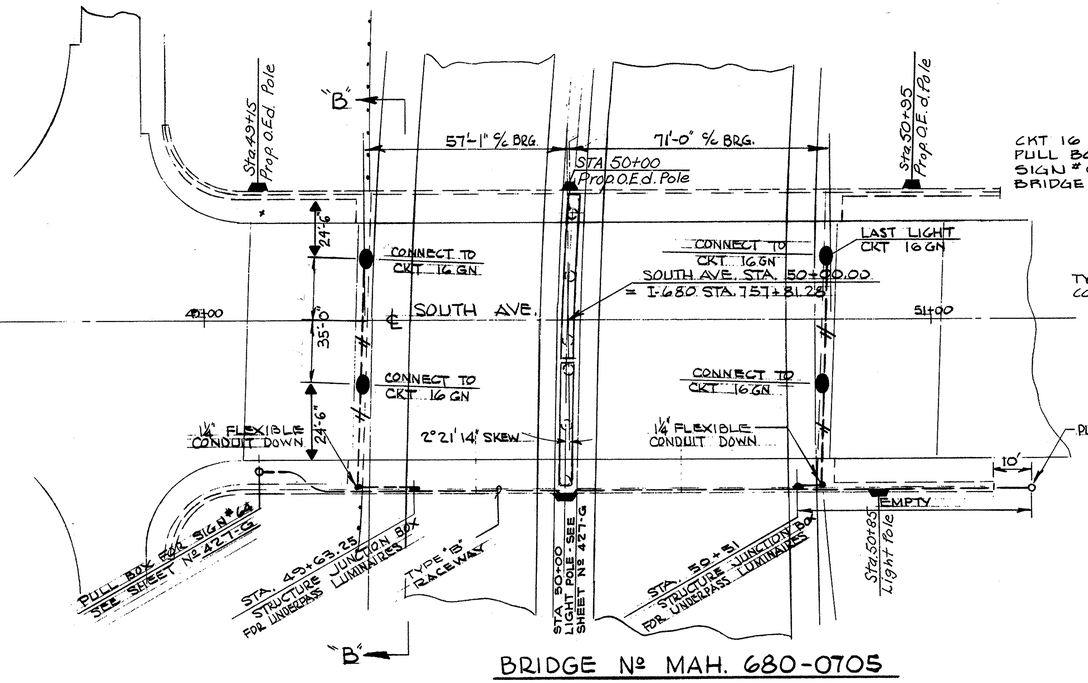


BRIDGE Nº MAH. 680-0924

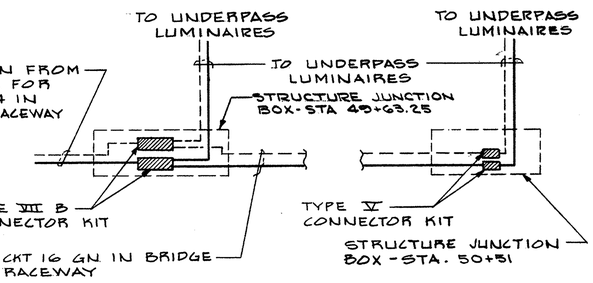


SCHEMATIC DIAGRAM FOR POLE AND JUNCTION BOX AT STA. 641+70





BRIDGE Nº MAH. 680-0705



SCHEMATIC DIAGRAM FOR JUNCTION BOXES STA. 49+63.25 & 50+51

UNDERPASS LIGHTING PLAN

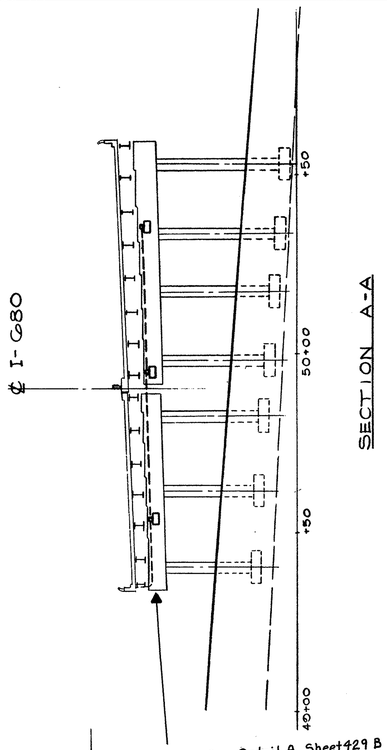
BRIDGE Nº MAH. 680-0924 &
BRIDGE Nº MAH. 680-0705

MAY 25 1971

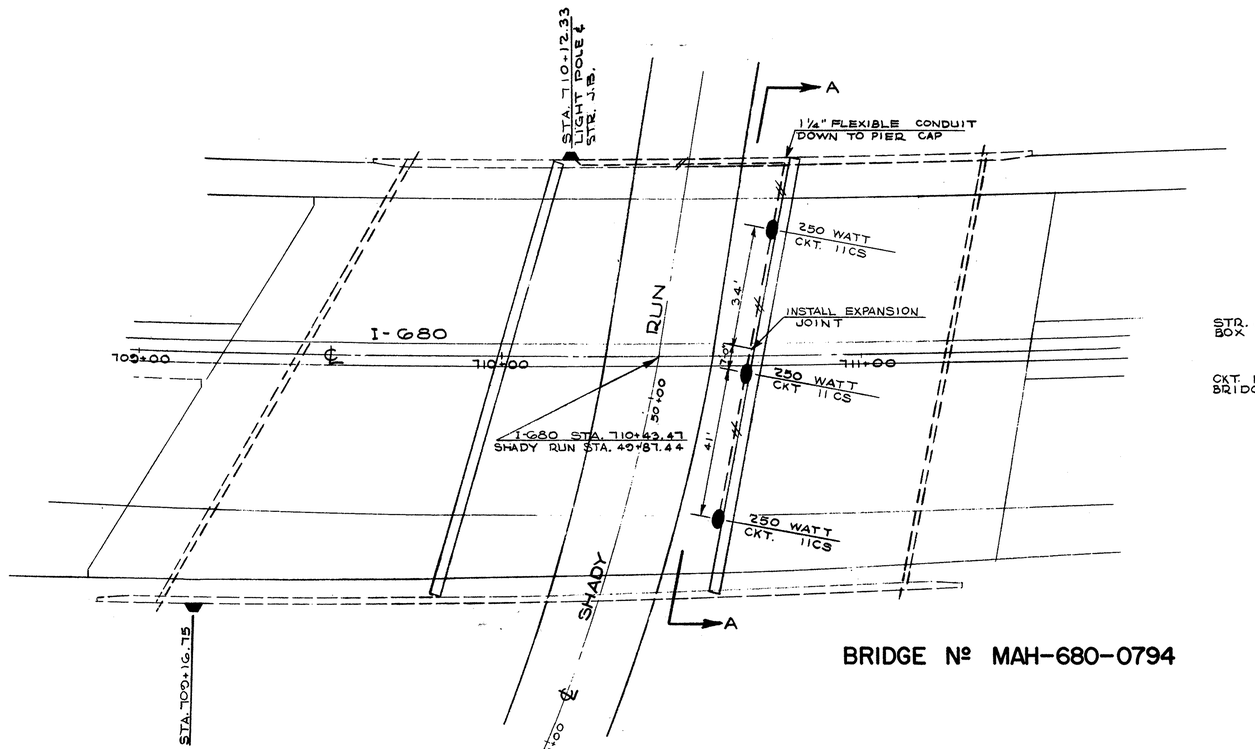
FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

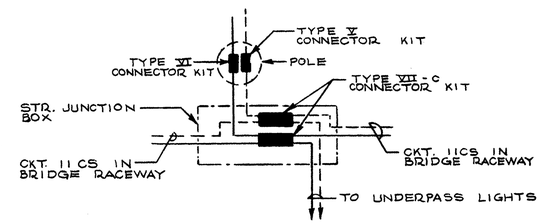
429A
656



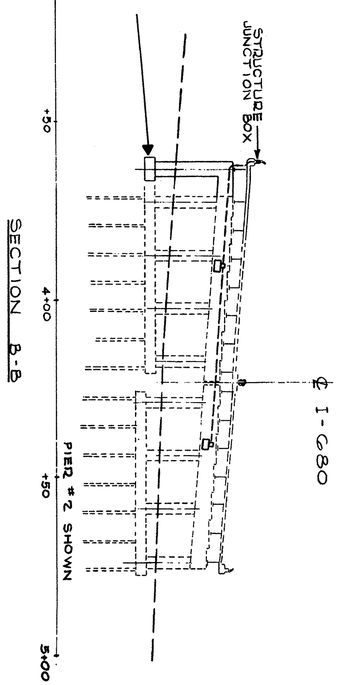
SECTION A-A

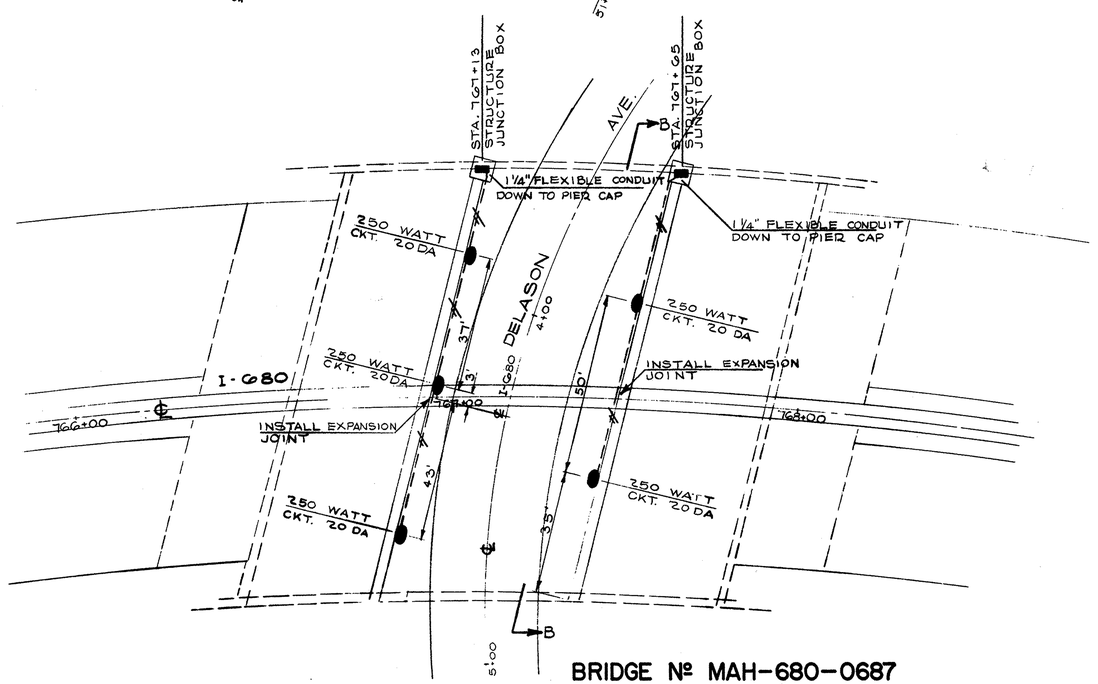


BRIDGE Nº MAH-680-0794

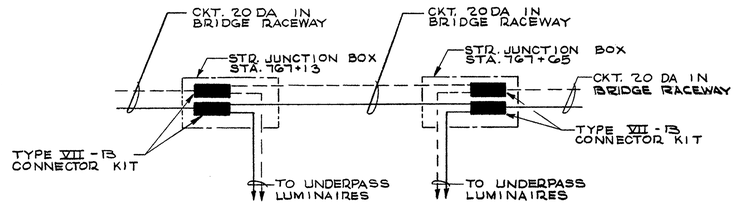


SCHEMATIC DIAGRAM FOR
POLE AND STRUCTURE JUNCTION
BOX AT STA. 710+12.33





BRIDGE Nº MAH-680-0687



SCHEMATIC DIAGRAM
STRUCTURE JUNCTION BOXES
STA. 767+13 AND STA. 767+65

UNDERPASS LIGHTING PLAN

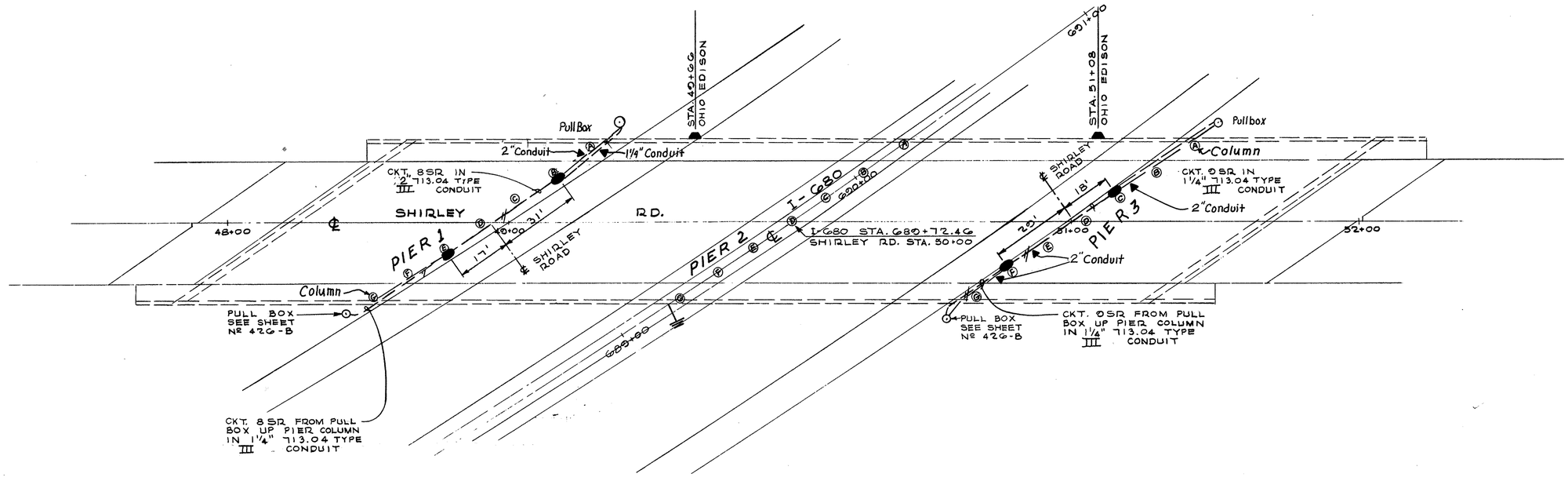
BRIDGE Nº MAH. 680-0794 &
BRIDGE Nº MAH. 680-0687

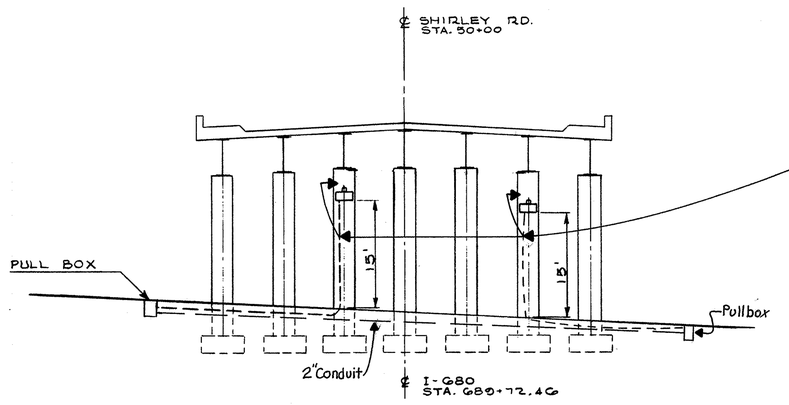
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

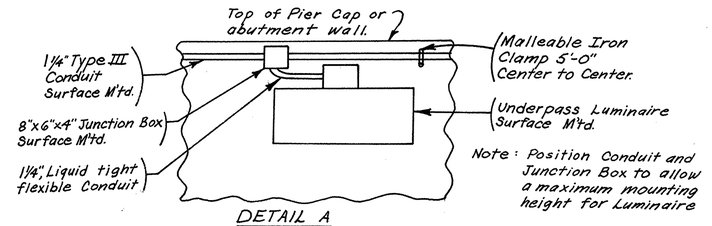
MAH-680-6.98

429-B
656





TYPICAL



DETAIL A
TYPICAL EXCEPT FOR BRIDGE NO. 0835

UNDERPASS LIGHTING PLAN

BRIDGE Nº MAH. 680-0835

MAY 25 1971

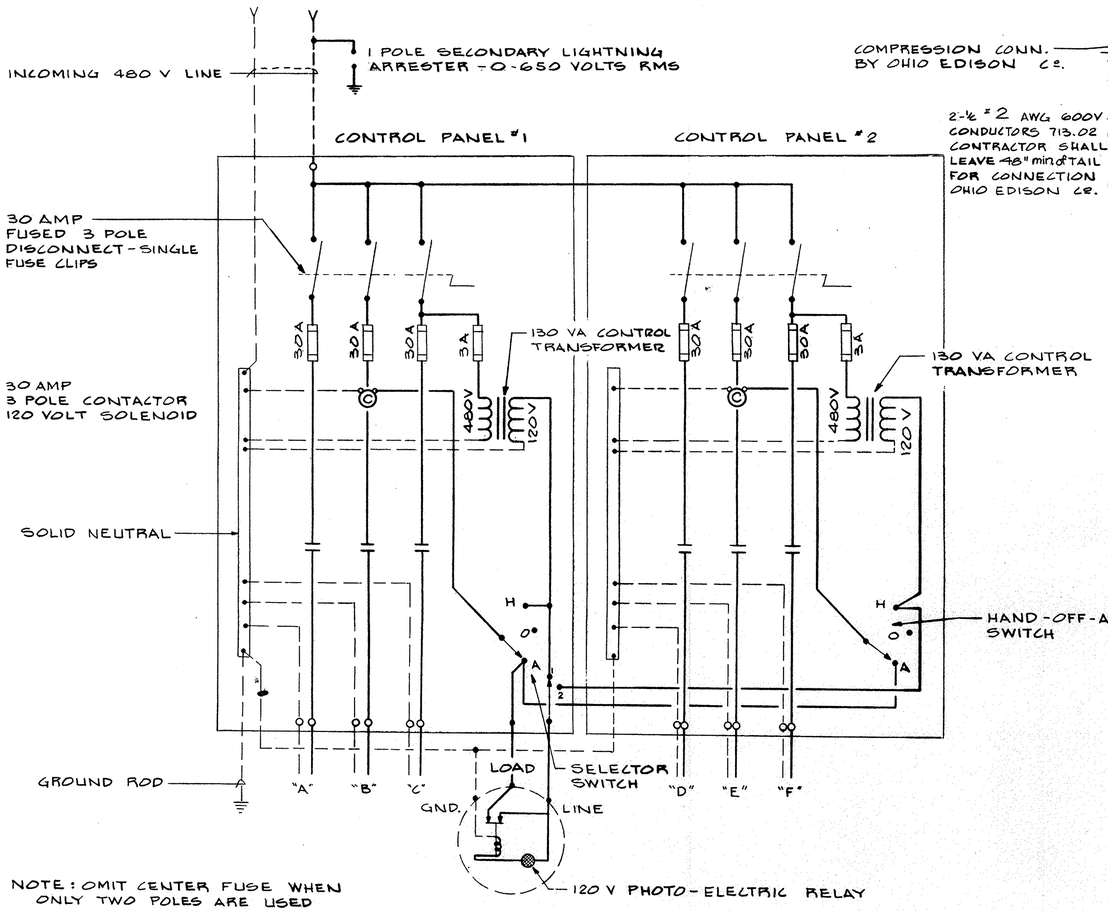
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

430
656

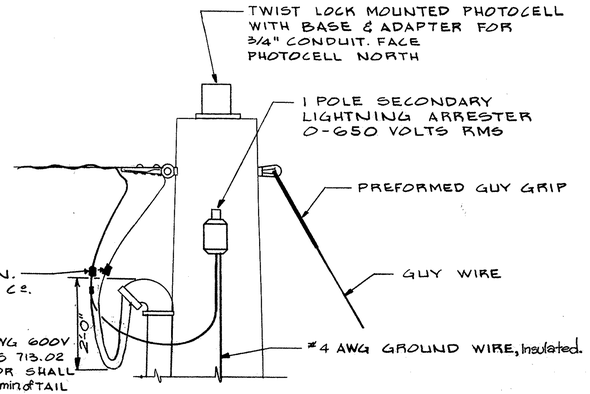
NOTES

1. CONTRACTOR SHALL FIELD DETERMINE THE BEST ORIENTATION FOR MOUNTING THE EQUIPMENT ON THE POLE TO SUIT THE PARTICULAR LOCATION AND TO FACILITATE THE CONNECTION OF SUPPLY SERVICE BY THE OHIO EDISON Co.
2. IF NECCESSARY AND/OR REQUESTED BY THE OHIO EDISON Co A 3/8" 7-STRAND GALVANIZED STEEL DOWN GUY, GUY GUARD, AND ANCHOR MUST BE FURNISHED AND INSTALLED BY THE CONTRACTOR



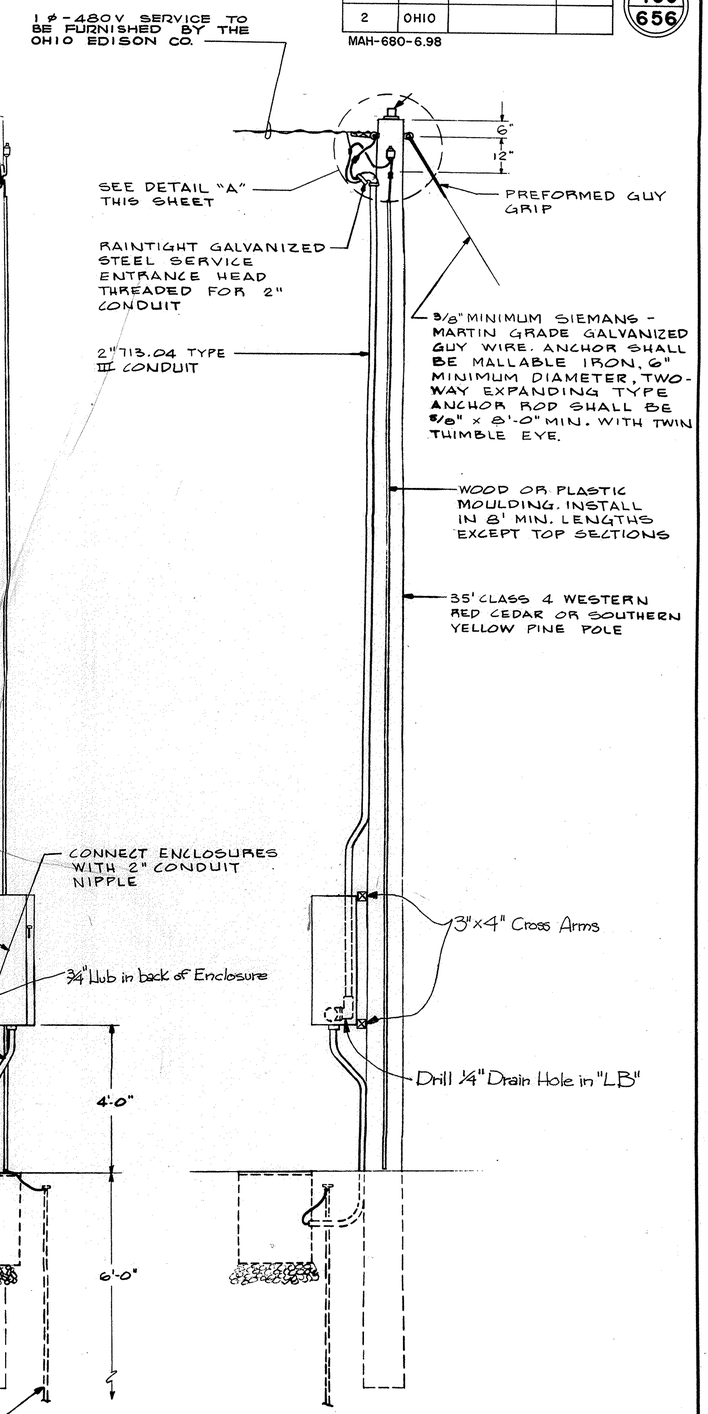
NOTE: OMIT CENTER FUSE WHEN ONLY TWO POLES ARE USED

SERVICE POLE	CONTROL PANEL #1			CONTROL PANEL #2		
	A	B	C	D	E	F
MB	1 MB	2 MB	3 MB	4 MB	5 MB	6 MB
SR	7 SR		8 SR	9 SR		10 SR
CS	11 CS		12 CS	13 CS		14 CS
GN	15 GN		16 GN	17 GN		18 GN
DA	19 DA		20 DA	21 DA		22 DA



DETAIL "A"

NOTE: COMBINATION SAFETY SWITCH AND LIGHTING CONTACTOR SHALL BE SQUARE D CAT. Nº W939FA609A, COLUMBUS ELECTRIC WORKS CAT. Nº CEW17554630, TWYCO ENGINEERING Co CAT. Nº T33030G5, CONTROL SYSTEMS AND EQUIPT. Co CAT. Nº 33030, OR EQUAL APPROVED BY THE ENGINEER.



MAY 25 1971

SERVICE POLE DETAIL

FED. RD.	STATE	PROJECT		431
2	OHIO			656

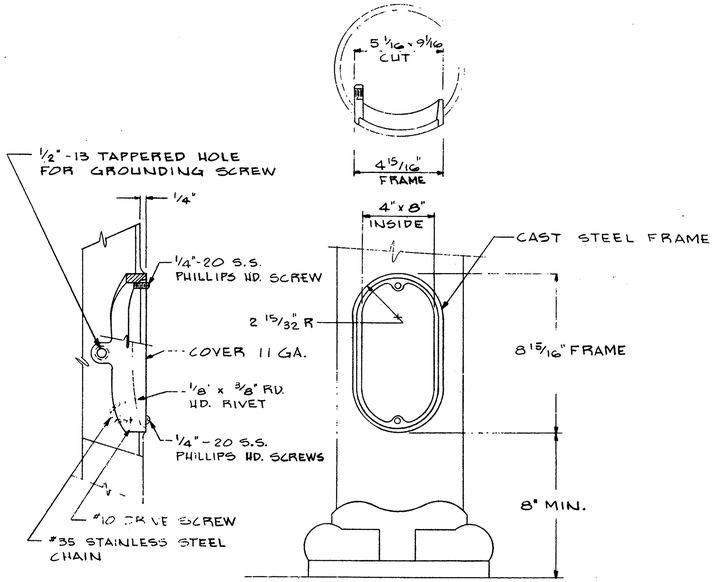
MAH-680-6.98

MECHANICAL PROPERTIES FOR LIGHT POLES

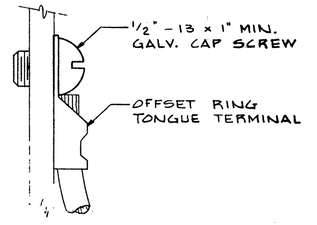
REFERENCE LETTER	POLE DESIGN NUMBER	SHAFT SIZE	TAPER INCHES/FT.	GAUGE	FOUNDATION ANCHOR BOLTS SIZE	FOUNDATION ANCHOR BOLTS DIAMETER BOLT CIRCLE	FOUNDATION ANCHOR BOLTS PROJECTION ABOVE FOUNDATION	ARM LENGTH	NOMINAL MOUNTING HEIGHT	ELASTIC DEFLECTION RATE INCHES PER 100 LB.	AT 2/3 OF YIELD STRESS LOAD 18" DOWN FROM TOP	AT 2/3 OF YIELD STRESS TOTAL DEFLECTION INCHES	AT 2/3 OF YIELD STRESS PERMANENT SET INCHES	AT YIELD STRESS LOAD 18" DOWN FROM TOP	AT YIELD STRESS TOTAL DEFLECTION INCHES	AT YIELD STRESS PERMANENT SET INCHES	TRANSFORMER BASE STYLE	FOUNDATION SIZE
A	11AT15B41.7	9.0"x5.65"x33'-6"	0.10	11	1" x 40"	17-1/4"	3-1/2"	15'-0"	41.7'	2.92	600#	18.0	0.50	900#	29.40	3.10	AT-C	24" x8'-0"
B	11AT12B41.7	9.0"x5.65"x33'-6"	0.10	11	1" x 40"	17-1/4"	3-1/2"	12'-0"	41.7'	2.92	600#	18.0	0.50	900#	29.40	3.10	AT-C	24" x8'-0"
C	11AT8B41.7	9.0"x5.65"x33'-6"	0.10	11	1" x 40"	17-1/4"	3-1/2"	8'-0"	41.7'	2.92	600#	18.0	0.50	900#	29.40	3.10	AT-C	24" x8'-0"
D	11AT12B34.2	9.0"x4.87"x29'-6"	0.14	11	1" x 40"	15"	3-1/2"	12'-0"	34.2'	2.16	659#	14.73	0.50	989#	24.00	2.64	AT-A	24" x6'-0"
E	11AT10B34.2	8.0"x3.87"x29'-6"	0.14	11	1" x 40"	15"	3-1/2"	10'-0"	34.2'	3.32	517#	17.66	0.50	776#	28.84	3.08	AT-A	24" x 6'-0"
F	11AT8B34.2	8.0"x3.87"x29'-6"	0.14	11	1" x 40"	15"	3-1/2"	8'-0"	34.2'	3.32	517#	17.66	0.50	776#	28.84	3.08	AT-A	24" x 6'-0"
G	11T15B41.7	9.0"x5.65"x33'-6"	0.10	11	1" x 40"	17-1/4"	3-1/2"	15'-0"	41.7'	2.92	600#	18.0	0.50	900#	29.40	3.10	AT-C	24" x8'-0"
H	11T12B41.7	9.0"x5.65"x33'-6"	0.10	11	1" x 40"	17-1/4"	3-1/2"	15'-0"	41.7'	2.92	600#	18.0	0.50	900#	29.40	3.10	AT-C	24"x 8'-0"
I	11T12B34.2	9.0"x4.87"x29'-6"	0.14	11	1" x 40"	15"	3-1/2"	12'-0"	34.2'	2.16	659#	14.73	0.50	989#	24.00	2.64	AT-A	24"x 6'-0"
J	11T10B34.2	8.0"x3.87"x29'-6"	0.14	11	1" x 40"	15"	3-1/2"	10'-0"	34.2'	3.32	517#	17.66	0.50	776#	28.84	3.08	AT-A	24"x 6'-0"
K	11T8B34.2	8.0"x3.87"x29'-6"	0.14	11	1" x 40"	15"	3-1/2"	8'-0"	34.2'	3.32	517#	17.66	0.50	776#	28.84	3.08	AT-A	24"x 6'-0"
L	7A12B40.0	9.0"x5.65"x33'-6"	0.10	7	1-1/4" x 78" U-Bolt	12.5"	3"	12'-0"	42.3'	1.96	895#	18.10	0.50	1340#	29.40	3.10	--	--
M	7A12B32.5	9.0"x4.87"x29'-6"	0.14	7	1-1/4" x 78" U-Bolt	12.5"	3"	12'-0"	34.8'	2.16	659#	14.73	0.50	989#	24.00	2.64	--	--
N	11AT10B41.7	9.0"x5.65"x33'-6"	0.10	11	1" x 40"	17-1/4"	3-1/2"	10'-0"	41.7'	2.92	600#	18.0	0.50	900#	29.40	3.10	AT-A	24"x 8'-0"
O																		
P	By Ohio Edison Company.				1½"x91" U Bolt	22½"	4"											See Sheet No. 521.

STRUCTURE GROUNDING TABLE

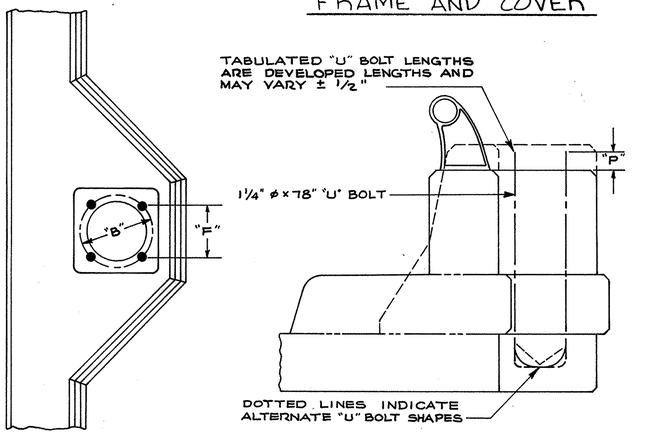
STRUCTURE NUMBER	FIXED PIER	METHOD OF GROUNDING	REMARKS
MAH-680-0705	PIER #1	SPIRAL COIL 25 FEET OF GROUND CABLE UNDER FOOTING OF FIXED PIER	TIE RIGHT AND LEFT SIDES OF MAH-680-0794 TOGETHER
MAH-680-0794	PIER #1		
MAH-680-0723	PIER #2		
MAH-680-0817	PIER #2		TIE RIGHT AND LEFT
MAH-680-0835	PIER #2		SIDE OF MAH-680-
MAH-680-0924	PIER #2		0924 TOGETHER
MAH-680-0687	PIER #2		
MAH-680-0693	PIER #1	EXOTHERMIC WELD GROUND CABLE TO STEEL PILE AT FIXED PIER	
MAH-680-0792	PIER #2		



4" x 8" CURVED HANDHOLE FRAME AND COVER

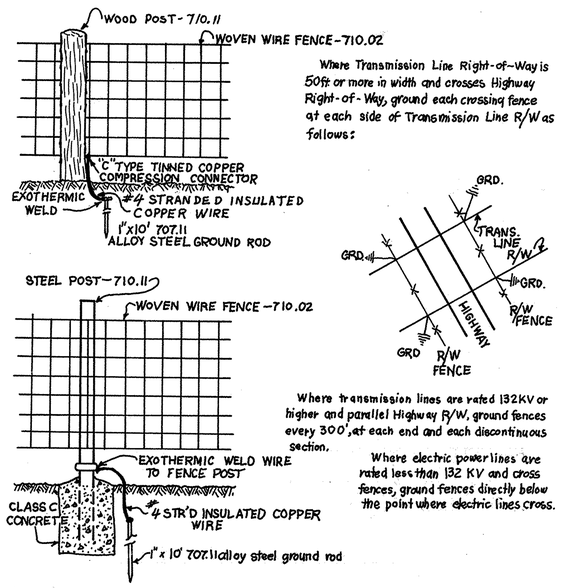


DETAIL OF TERMINATION FOR GROUND CABLE



ANCHOR BOLT DETAILS FOR BRIDGE MOUNTED POLES

NOT TO SCALE



Where Transmission Line Right-of-Way is 50ft or more in width and crosses Highway Right-of-Way, ground each crossing fence at each side of Transmission Line R/W as follows:

Where transmission lines are rated 132KV or higher and parallel Highway R/W, ground fences every 300', at each end and each discontinuous section.

Where electric power lines are rated less than 132 KV and cross fences, ground fences directly below the point where electric lines cross.

Grounding of Highway R/W Fences

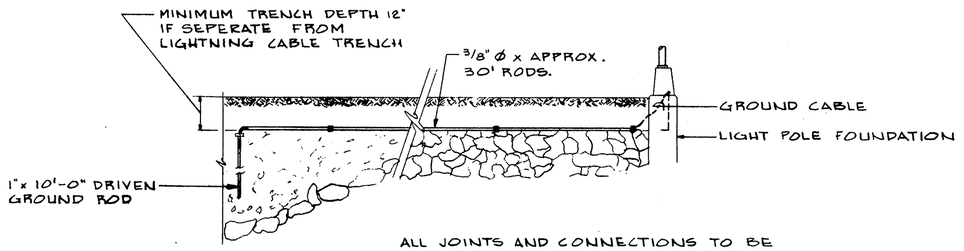
MAY 25 1971

LIGHTING DETAILS

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

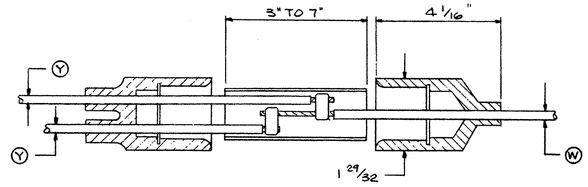
431A
656



ALL JOINTS AND CONNECTIONS TO BE EXOTHERMICALLY WELDED. PAINT WELDS AND EXPOSED CABLE WITH 2 COATS OF INSULATING VARNISH

NOTE: MATERIAL SHALL CONFORM TO 713.16

GROUND GRID



CABLE DIAMETER
O. 320" MIN.
O. 430" MAX.

SYMBOL FOR (Y) = D
SYMBOL FOR (W) = D

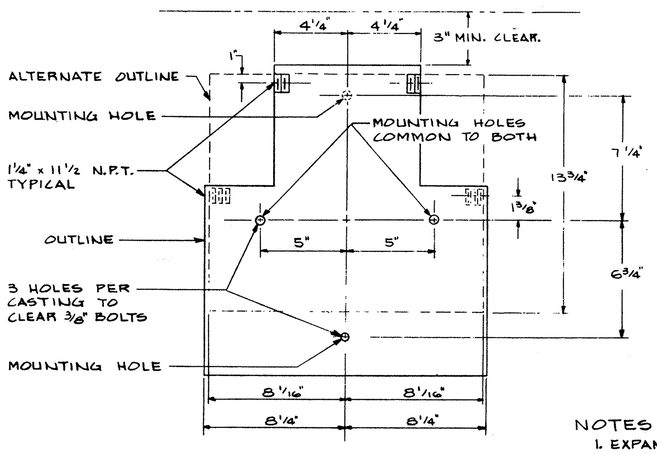
NOTE: BOTH WIRES WITH SYMBOL (Y) MUST BE OF EQUAL SIZE FOR A GIVEN CONNECTION

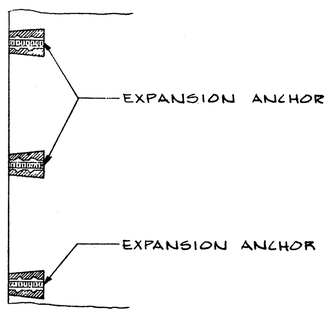
VII A CONNECTOR KIT = INLINE CABLE CONNECTION WITH BOTH END HOUSINGS SAME AS SHOWN ON RIGHT SIDE ABOVE

VII B CONNECTOR KIT = Y-TYPE CABLE CONNECTION SAME AS SHOWN ABOVE

VII C CONNECTOR KIT = 4 WAY CABLE CONNECTION WITH BOTH END HOUSING SAME AS SHOWN ON LEFT SIDE ABOVE

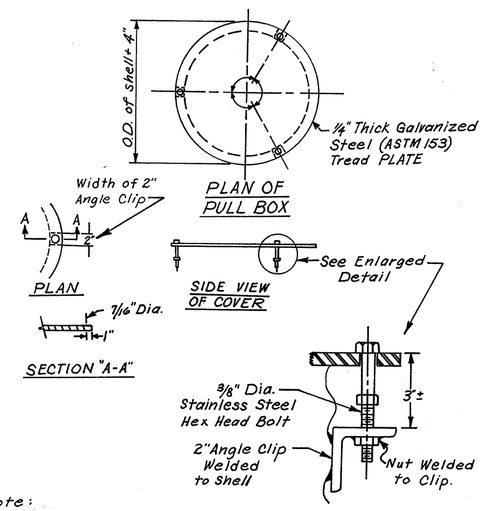
CABLE CONNECTOR KIT TYPE VII



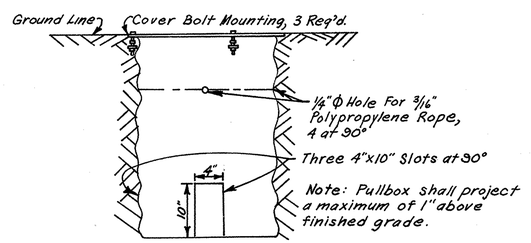


NOTES:
1. EXPANSION ANCHORS SHALL BE "DOUBLE" TYPE 1 3/8" LONG FOR 3/8" Ø MACH. BOLT. USE 11/16" Ø DRILL
2. HOLES FOR EXPANSION ANCHORS SHALL BE DRILLED AT THE TIME OF INSTALLATION OF LUMINAIRE OR CAST IN PLACE INITIALLY

WALL MOUNTED UNDERPASS LUMINAIRES



Note:
Air bells of the following app sizes shall be used in pullboxes:
18" = 16 3/4" dia. x 20 1/2" height
24" = 20 1/2" dia. x 28 1/2" height



ELEV. OF PULLBOX

CORRUGATED STEEL PULL BOX

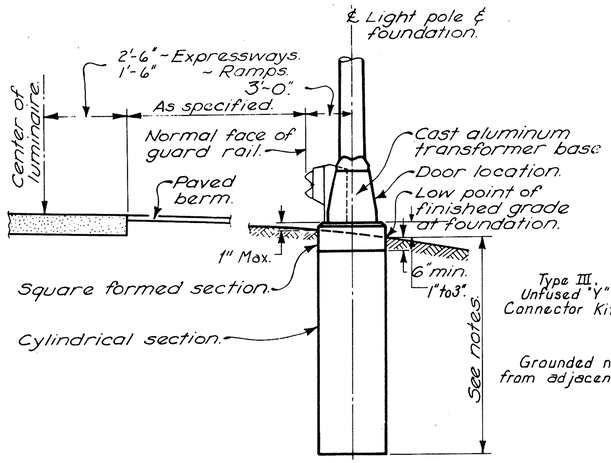
MAY 25 1976

LIGHTING DETAILS

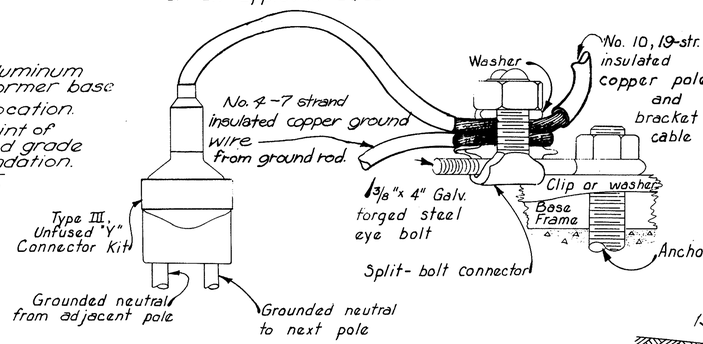
FED. RD DIVISION	STATE	PROJECT	
2	OHIO		

7318
656

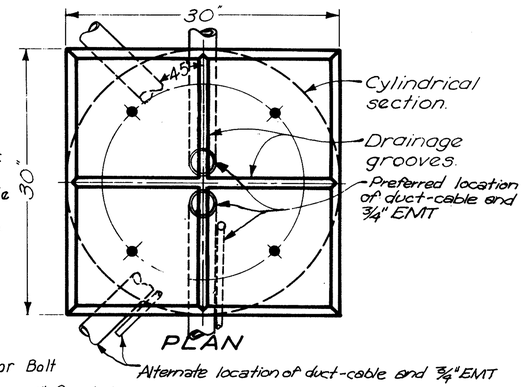
MAHONING COUNTY
MAH-680-6.98



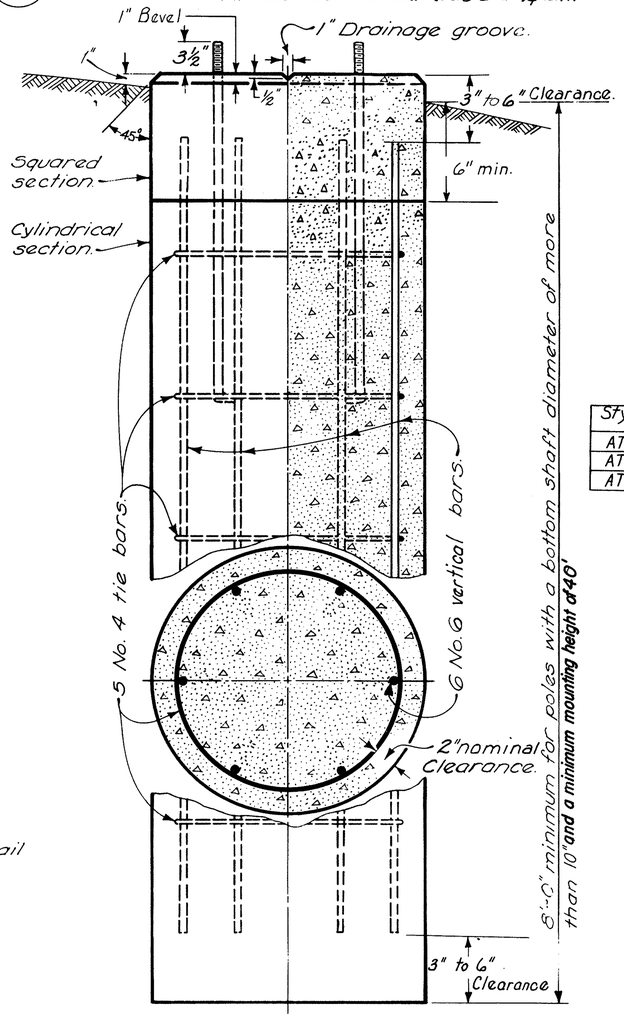
NOTE: Split-bolt Connector shall be made of tin plated copper alloy with tin plated spacer. Acceptable models are: Blackburn #10HPS, Burndy #KSU-25, Line Material #DK-5B-10, Kearney #118109-02, Penn Union # SW1 or an approved equal.



POLE GROUNDING DETAIL
(2-Wire Grounded Neutral System Only)

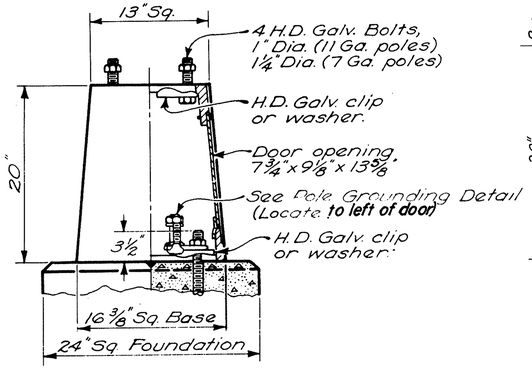


LOCATION OF POLE WITH OR WITHOUT ALUMINUM TRANSFORMER BASES
(Supersedes "Location of Light Pole Foundation" shown on Standard Drawing HL-1).

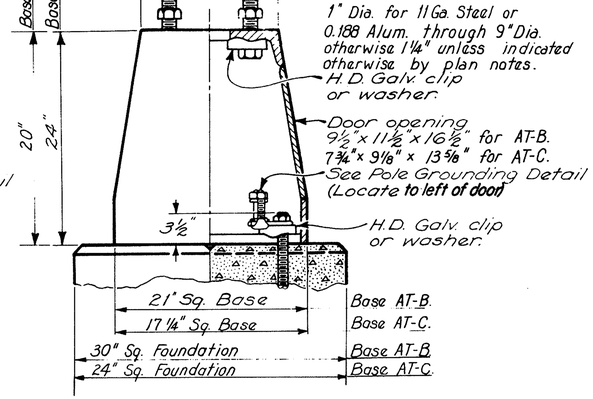


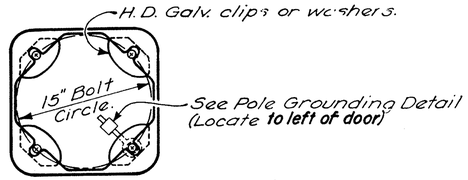
ELEVATION

30" FOUNDATION



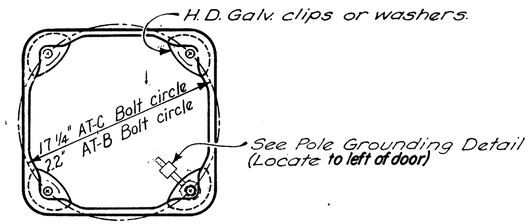
ELEVATION





BASE FRAME

BASE AT-A



BASE FRAME

BASES AT-B AND AT-C

CAST ALUMINUM TRANSFORMER BASES

NOTES

ANCHOR BOLTS: For anchor bolt sizes see drawing HL-3.

FOUNDATION: Foundations for light poles shall be poured-in-place concrete (vibrated and spaded 511.09). Each foundation must meet minimum depths as specified, but additional depth may be required by the Engineer because of existing soil conditions. The 30" foundation (detailed hereon) shall be used for light poles having a bottom shaft diameter of more than 10" through 12". The 24" foundation (detailed on Standard Drawing HL-1) shall be used for all light poles having a bottom shaft diameter of 6.0" through 10". See HL-1 for Foundation depth. Rotate reinforcing bars to clear conduit.

Drainage grooves on foundation top, as detailed hereon, shall be required on all foundations even though they do not appear on Standard Drawing HL-1.

ALUMINUM TRANSFORMER BASES: All bases shall be cast from ASTM B-26 or B-108 Alloy 5G 70A-T6.

Base AT-A shall be used with anchor base poles of 6" through 9.2" dia. inclusive, thru 34'-6" Mtg. Ht. Base AT-B shall be used for anchor base poles above 10" through 12" diameter. Base AT-C shall be used for anchor base poles with bottom diameter 9" through 10"*

The transformer bases shall be capable of resisting the following moments in foot pounds with load applied at a distance of 20' feet above the top of the base without collapsing or rupturing.

Style	Bolt Circle	Base Height	Moment-Foot Pounds	Arm Length
AT-A	15"	20"	37,000	15' Max.
AT-C	17 1/4"	20"	56,000	10' to 25'
AT-B	22"	24"	52,000	10' to 25'

Both the bottom of the cast steel pole base and the top of the aluminum transformer base shall be coated or painted with a heavy film of zinc rich paint (Federal Specification TT-P-641-Type II) to reduce galvanic action between the two dissimilar metals.

PAYMENT: 30" Light Pole Foundations shall be paid for at the unit price bid per each foundation.

Aluminum base complete with hardware, bolts, lugs, washers, etc, zinc rich paint, and installation shall be included with ground-mounted poles for payment.

* AT-C Base can be used with 8" or 8 1/2" dia. base poles, if desired, in order to reduce maintenance items.

Revised: 7-1-69 Revised: 11-10-69
Revised: 1-24-69 Revised: 2-10-70
Revised: 5-16-68 Revised: 5-19-70
Issued: 11-6-67 Revised: 6-1-70

Design Services Sketch No. RL-SK-186

MAY 25 1971

ALUMINUM TRANSFORMER BASE DETAILS

FED RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

432
656

CIRCUIT MAP KEY

GROUND MOUNTED LIGHTING UNIT - 700 WATT
TYPE II DISTRIBUTION (UNLESS OTHERWISE NOTED)

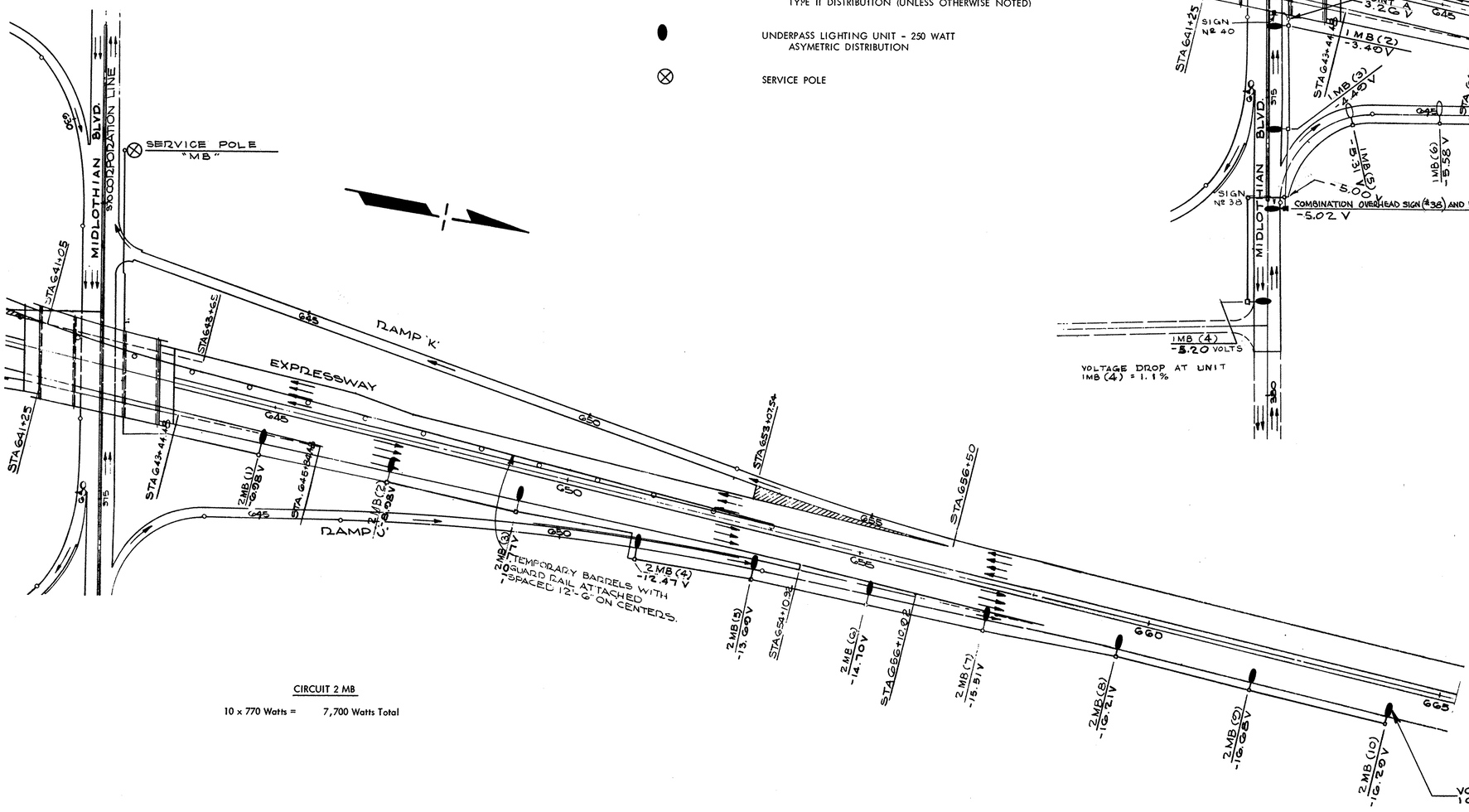
STRUCTURE MOUNTED LIGHTING UNIT - 700 WATT
TYPE II DISTRIBUTION (UNLESS OTHERWISE NOTED)

GROUND MOUNTED LIGHTING UNIT - 400 WATT
TYPE II DISTRIBUTION (UNLESS OTHERWISE NOTED)

STRUCTURE MOUNTED LIGHTING UNIT - 400 WATT
TYPE II DISTRIBUTION (UNLESS OTHERWISE NOTED)

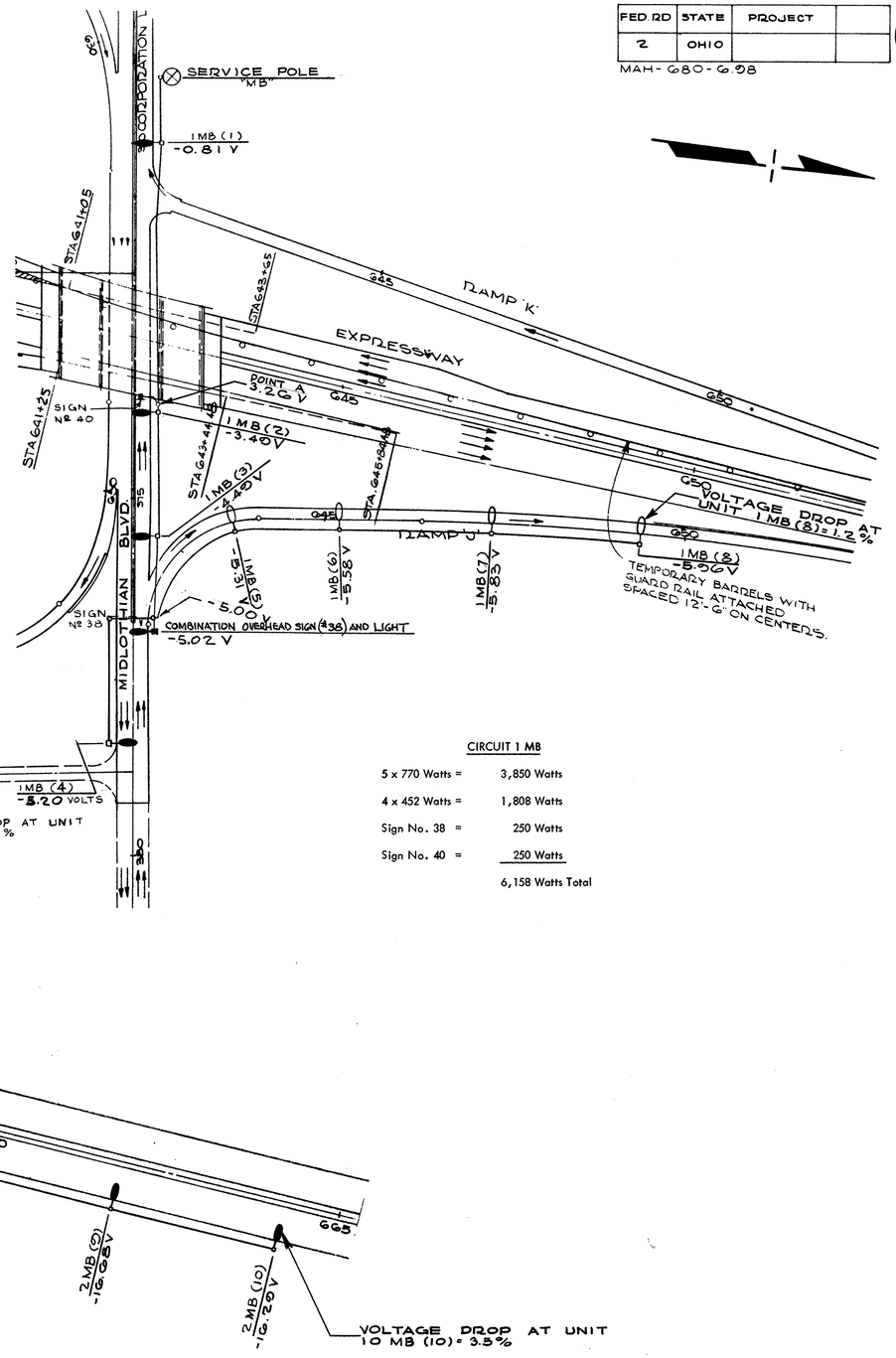
UNDERPASS LIGHTING UNIT - 250 WATT
ASYMETRIC DISTRIBUTION

SERVICE POLE



CIRCUIT 2 MB

10 x 770 Watts = 7,700 Watts Total



CIRCUIT 1 MB

5 x 770 Watts =	3,850 Watts
4 x 452 Watts =	1,808 Watts
Sign No. 38 =	250 Watts
Sign No. 40 =	250 Watts
	6,158 Watts Total

SCALE
0 50 100 200 300 400

CALC. BY C.O.D DATE 4-30-70
CHK'D BY JDT DATE 5-20-70

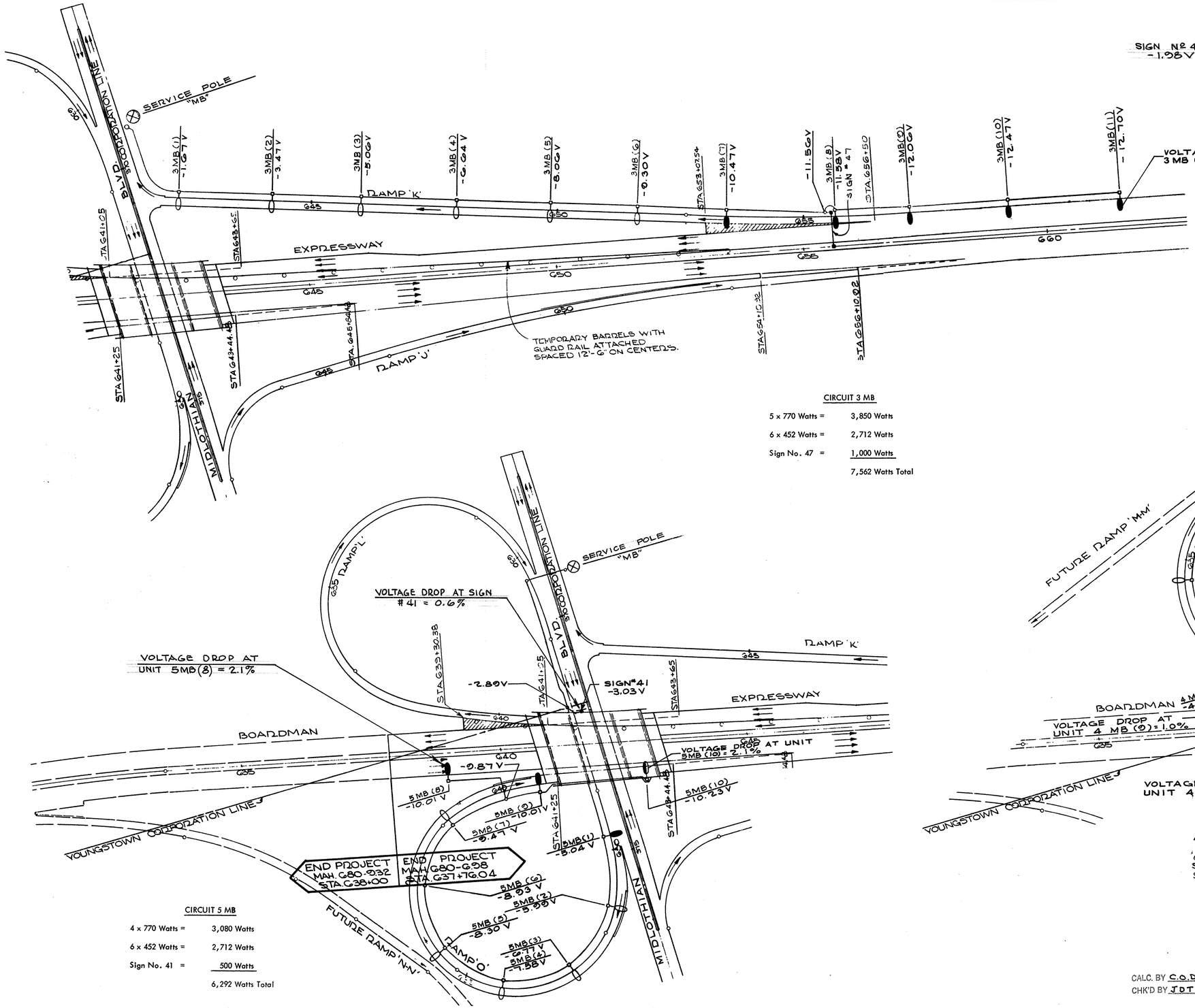
CIRCUIT MAPS

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

433
656

MAH-680-6.98



CIRCUIT 3 MB

5 x 770 Watts =	3,850 Watts
6 x 452 Watts =	2,712 Watts
Sign No. 47 =	1,000 Watts
	7,562 Watts Total

CIRCUIT 5 MB

4 x 770 Watts =	3,080 Watts
6 x 452 Watts =	2,712 Watts
Sign No. 41 =	500 Watts
	6,292 Watts Total

CIRCUIT 4 MB

4 x 770 Watts =	3,080 Watts
6 x 452 Watts =	2,712 Watts
SIGN No. 43 =	250 WATTS
Sign No. 42 =	250 Watts
	6,292 Watts Total

SCALE
0 50 100 200 300 400

CALC. BY C.O.D. DATE 5-1-70
CHK'D BY J.D.T. DATE 5-20-70

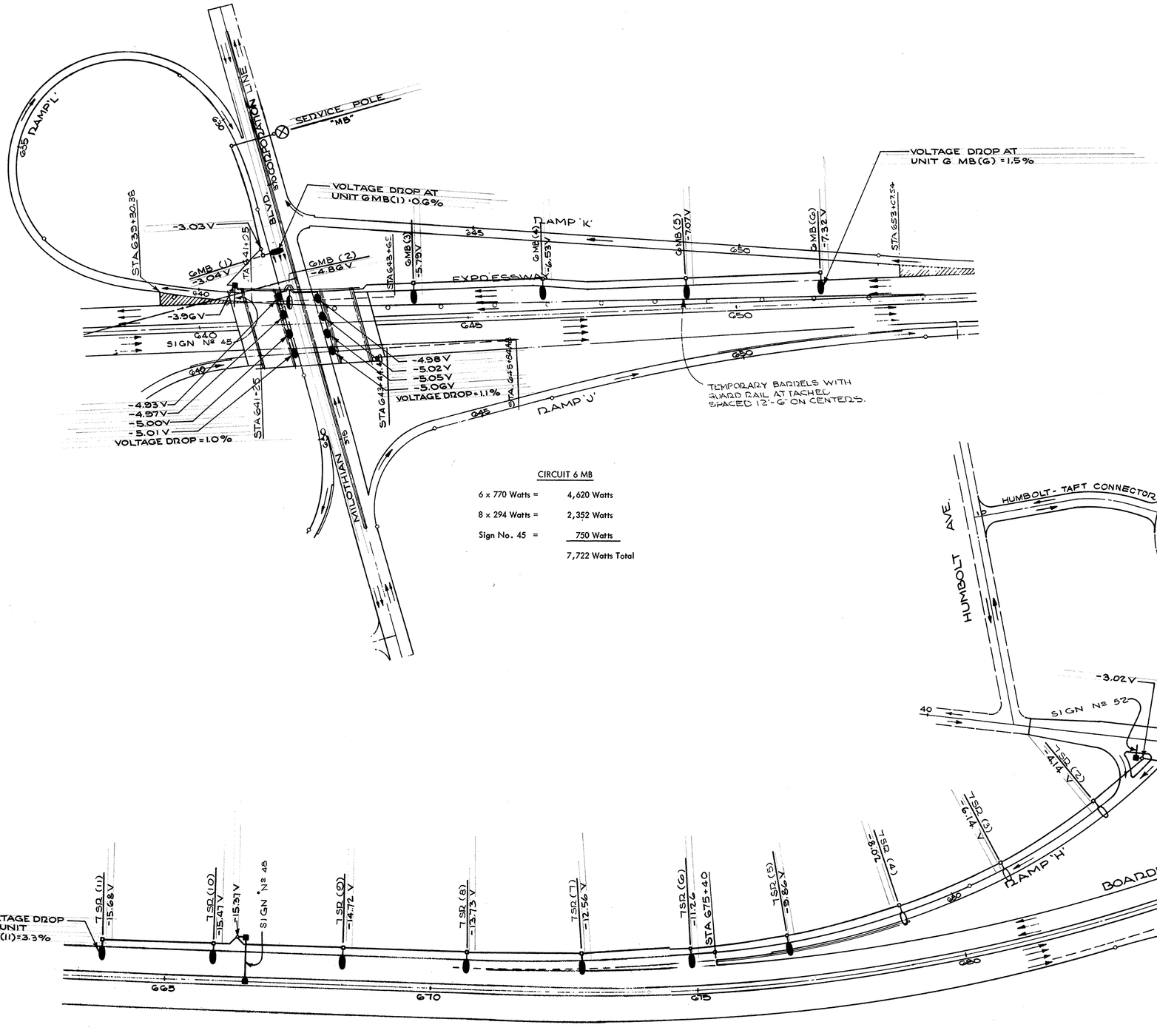
CIRCUIT MAPS

MAY 25 1971

FED RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

433A
656



CIRCUIT 6 MB

6 x 770 Watts =	4,620 Watts
8 x 294 Watts =	2,352 Watts
Sign No. 45 =	750 Watts
	7,722 Watts Total

CIRCUIT 7 SR

7 x 770 Watts =	5,390 Watts
4 x 452 Watts =	1,808 Watts
Sign No. 52 =	500 Watts
Sign No. 48 =	1,000 Watts
	8,698 Watts Total

SCALE
0 50 100 200 300 400

CALC. BY C.O.D. DATE 5-1-70
CHK'D BY J.D.T. DATE 5-20-70

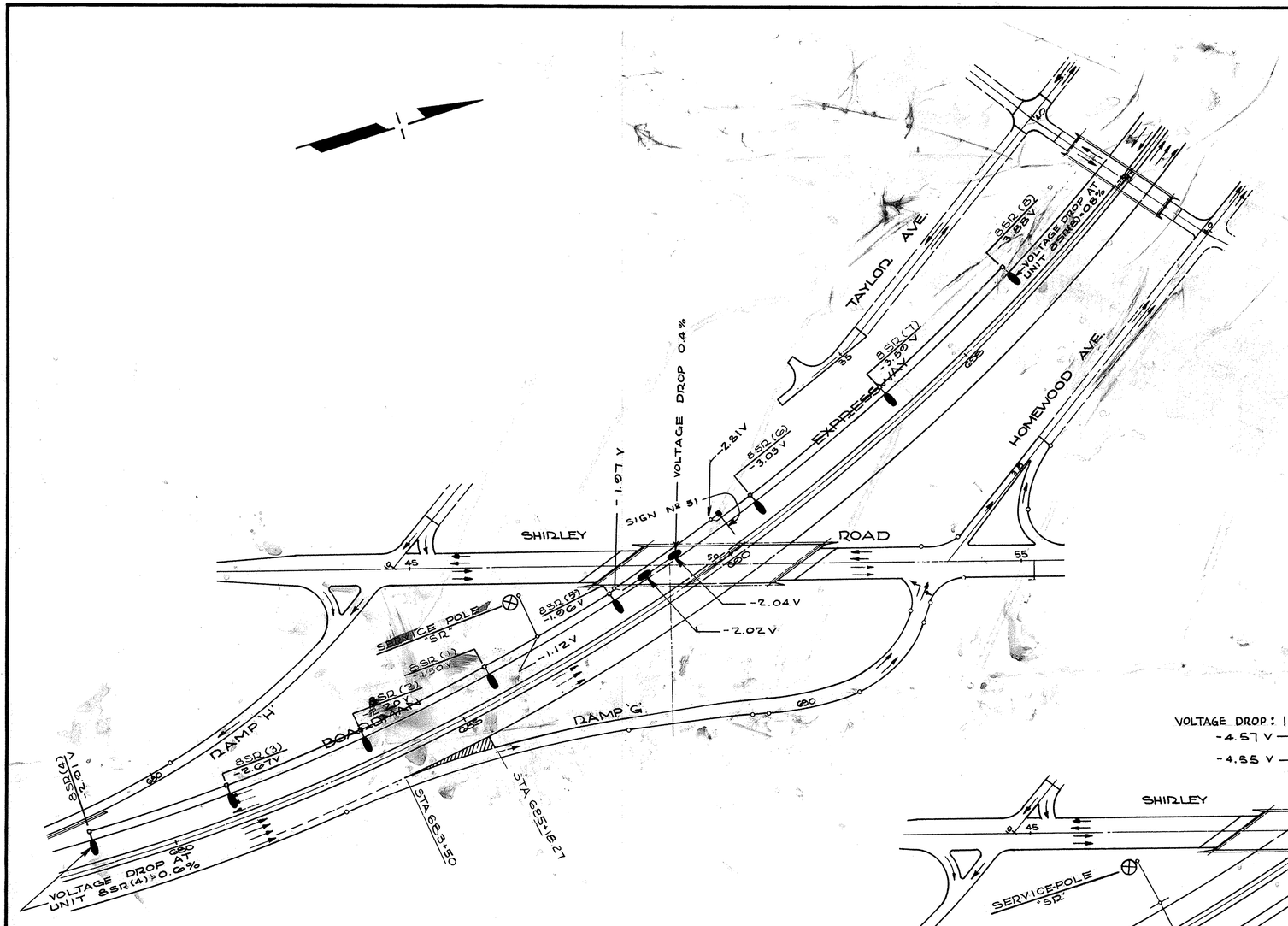
CIRCUIT MAPS

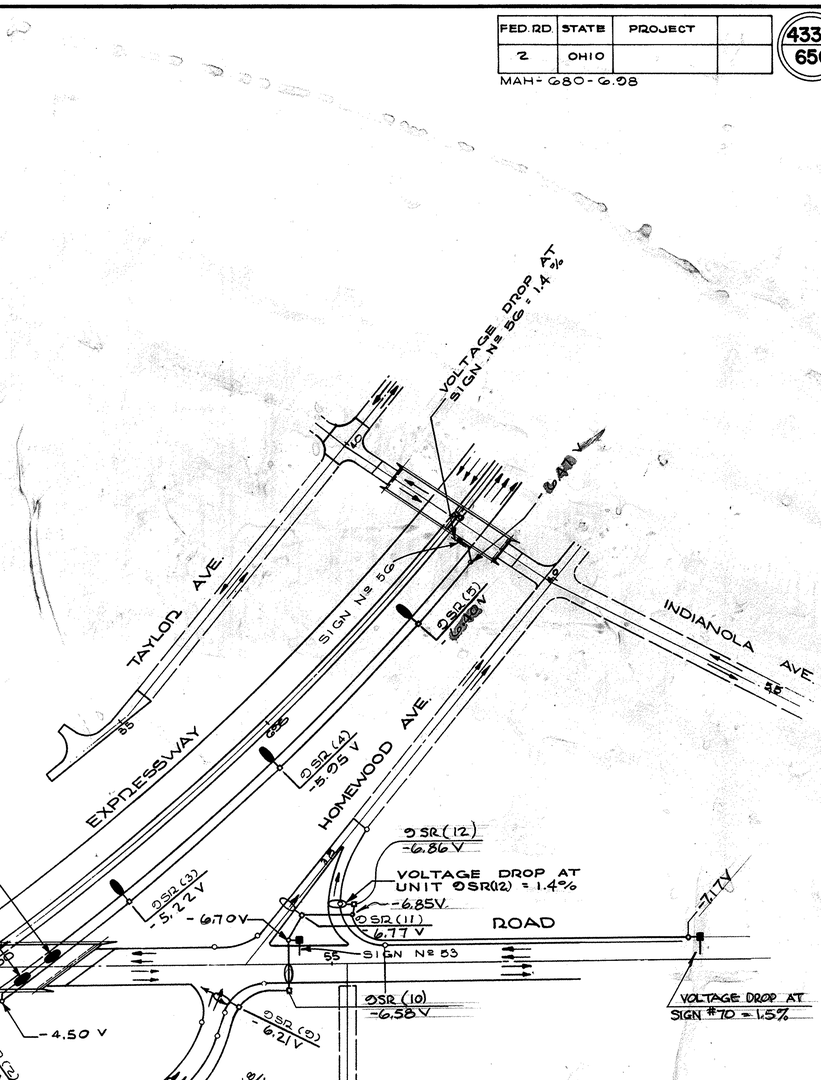
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

433B
656





CIRCUIT 8 SR

8 x 770 Watts =	6,160 Watts
2 x 294 Watts =	580 Watts
Sign No. 51 =	1,000 Watts
	7,740 Watts Total

CIRCUIT 9 SR

5 x 770 Watts =	3,850 Watts
7 x 452 Watts =	3,164 Watts
2 x 294 Watts =	588 Watts
Sign No. 56 =	500 Watts
Sign No. 53 =	500 Watts
Sign No. 106 =	250 Watts
SIGN No. 70 =	500 WATTS
	9352 Watts Total

SCALE
0 50 100 200 300 400

CALC. BY C.O.D. DATE 5-1-70
CHK'D BY JDT DATE 5-20-70

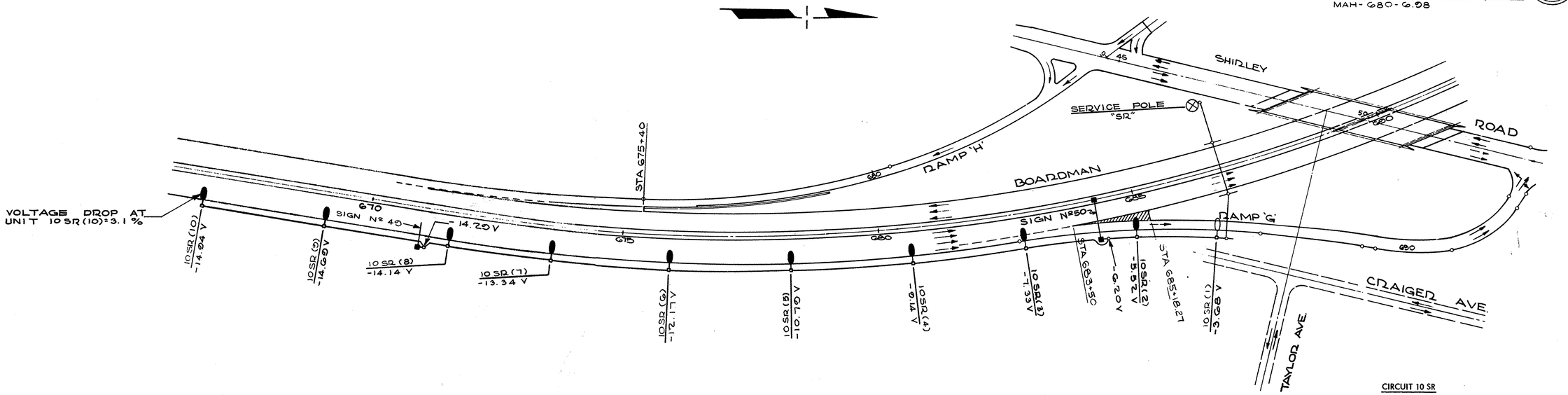
CIRCUIT MAPS

MAY 25 1971

FED RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

433C
656



CIRCUIT 10 SR

9 x 770 Watts =	6,930 Watts
1 x 452 Watts =	452 Watts
Sign No. 49 =	750 Watts
Sign No. 50 =	1,000 Watts
	9,132 Watts Total

CIRCUIT 11 CS

10 x 770 Watts =	7,700 Watts
3 x 294 Watts =	882 Watts
	8,582 Watts Total

CALC. BY C.O.D. DATE 5-4-70
CHK'D BY J.P.T DATE 5-20-70

SCALE
0 50 100 200 300 400

CIRCUIT MAPS

MAY 25 1971

FED RD	STATE	PROJECT	
2	OHIO		

433-D
656

MAH-680-6.98

CIRCUIT 13 CS

8 x 770 Watts = 6,160 Watts

Sign No. 58 = 500 Watts

6,660 Watts Total

CIRCUIT 14 CS

2 x 770 Watts = 1,540 Watts

8 x 452 Watts = 3,616 Watts

Sign No. 57 = 2,000 Watts

7,156 Watts Total

CIRCUIT 12 CS

7 x 770 Watts = 5,390 Watts

2 x 452 Watts = 904 Watts

Sign No. 39 = 250 Watts

Sign No. 55 = 500 Watts

7,044 Watts Total

CALEDONIA ST.

SERVICE POLE "CS"

RAMP 'E'

EXPRESSWAY

STA 724+50.4

STA 782+50

SIGN Nº 58

-10.31 V

13 CS (6) -10.11 V

VOLTAGE DROP AT UNIT 13 CS (8) = 2.3%

13 CS (8) -10.08 V

13 CS (7) -10.16 V

RAMP 'F'

13 CS (1) -2.68 V

13 CS (2) -4.65 V

13 CS (3) -8.80 V

13 CS (4) -8.04 V

13 CS (5) -9.15 V

CAMPBELL ST.

VOLTAGE DROP AT UNIT 14 CS (1) = 0.2%

14 CS (1) -0.02 V

14 CS (2) -0.13 V

14 CS (3) -0.55 V

14 CS (4) -0.28 V

14 CS (5) -0.41 V

14 CS (6) -1.70 V

14 CS (7) -3.00 V

14 CS (8) -4.00 V

14 CS (9) -5.03 V

14 CS (10) -5.73 V

-5.71 V

VOLTAGE DROP AT UNIT 14 CS (10) = 1.2%

-0.09 V

STA 709+00

STA 711+40

VOLTAGE DROP AT UNIT 12 CS (9) = 2.5%

-12.14 V

SIGN Nº 55

VOLTAGE DROP AT SIGN Nº 55 = 2.6%

SIGN Nº 39

VOLTAGE DROP AT UNIT 12 CS (7) = 2.5%

BOARDMAN

-12.01 V

12 CS (8) -11.77 V

12 CS (9) -12.05 V

12 CS (7) -11.95 V

-11.62 V

-11.64 V

-11.04 V

12 CS (6) -11.64 V

12 CS (5) -10.81 V

12 CS (4) -9.71 V

HOMEWOOD AVE.

RAMP 'A'

RELOC. SHADY RUN ROAD

POWERSDALE AVE.

UNION ST.

12 CS (1) -4.78 V

12 CS (2) -6.75 V

12 CS (3) -8.41 V

SCALE 0 50 100 200 300 400

CALC. BY C.O.D. DATE 5-4-70

CHK'D BY JDT DATE 5-20-70

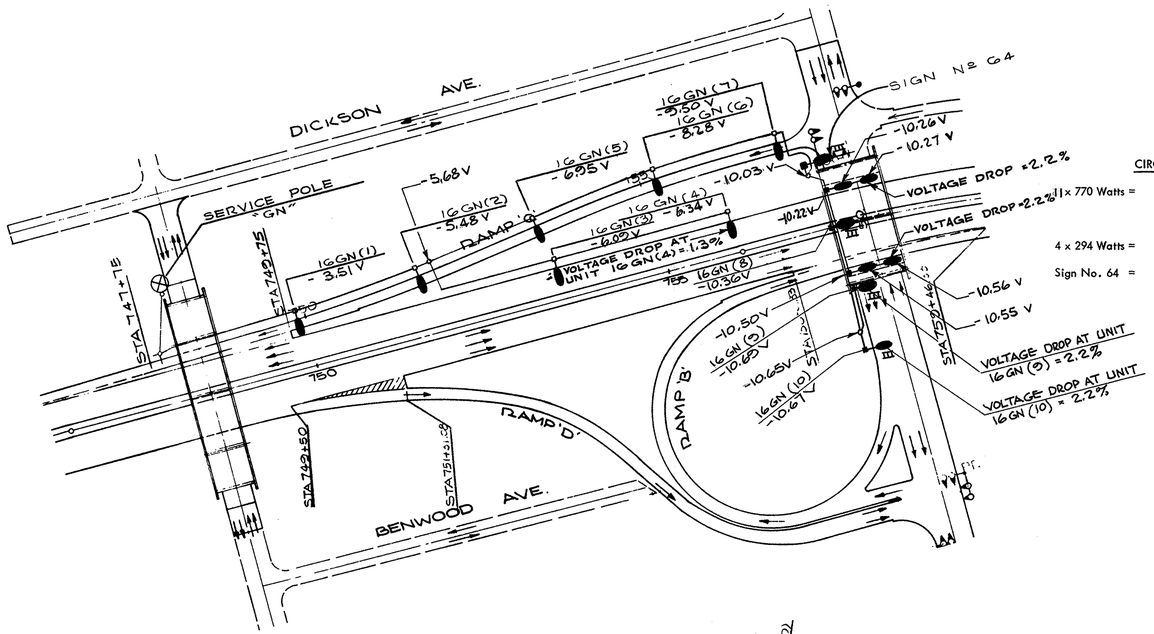
CIRCUIT MAPS

MAY 25 1971

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

433-E
656

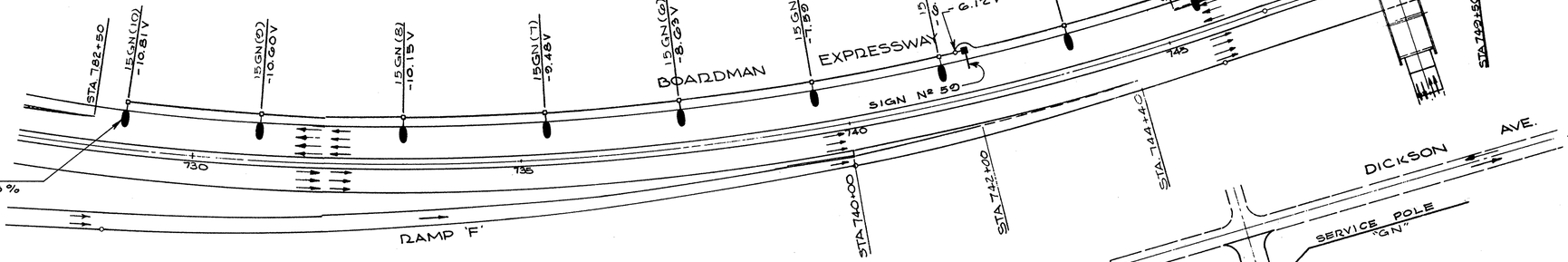


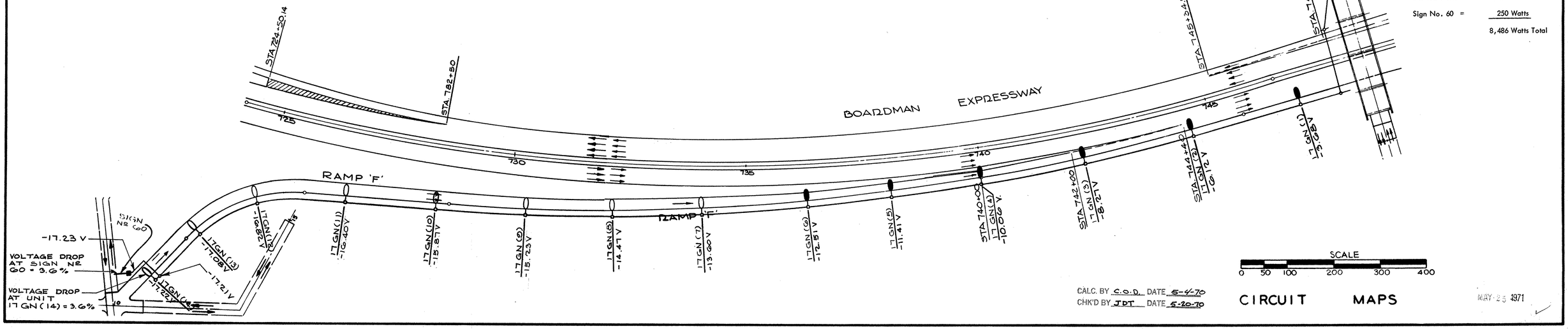
CIRCUIT 16 GN

1 x 770 Watts =	8,470 Watts
4 x 294 Watts =	1,176 Watts
Sign No. 64 =	500 Watts
	10,146 Watts Total

CIRCUIT 15 GN

10 x 770 Watts =	7,700 Watts
Sign No. 59 =	500 Watts
	8,200 Watts Total





CIRCUIT 17 GN

6 x 770 Watts =	4,620 Watts
8 x 452 Watts =	3,616 Watts
Sign No. 60 =	250 Watts
	8,486 Watts Total

SCALE
0 50 100 200 300 400

CALC. BY C.O.D. DATE 5-4-70
CHK'D BY JDT DATE 5-20-70

CIRCUIT MAPS

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

433-F
656

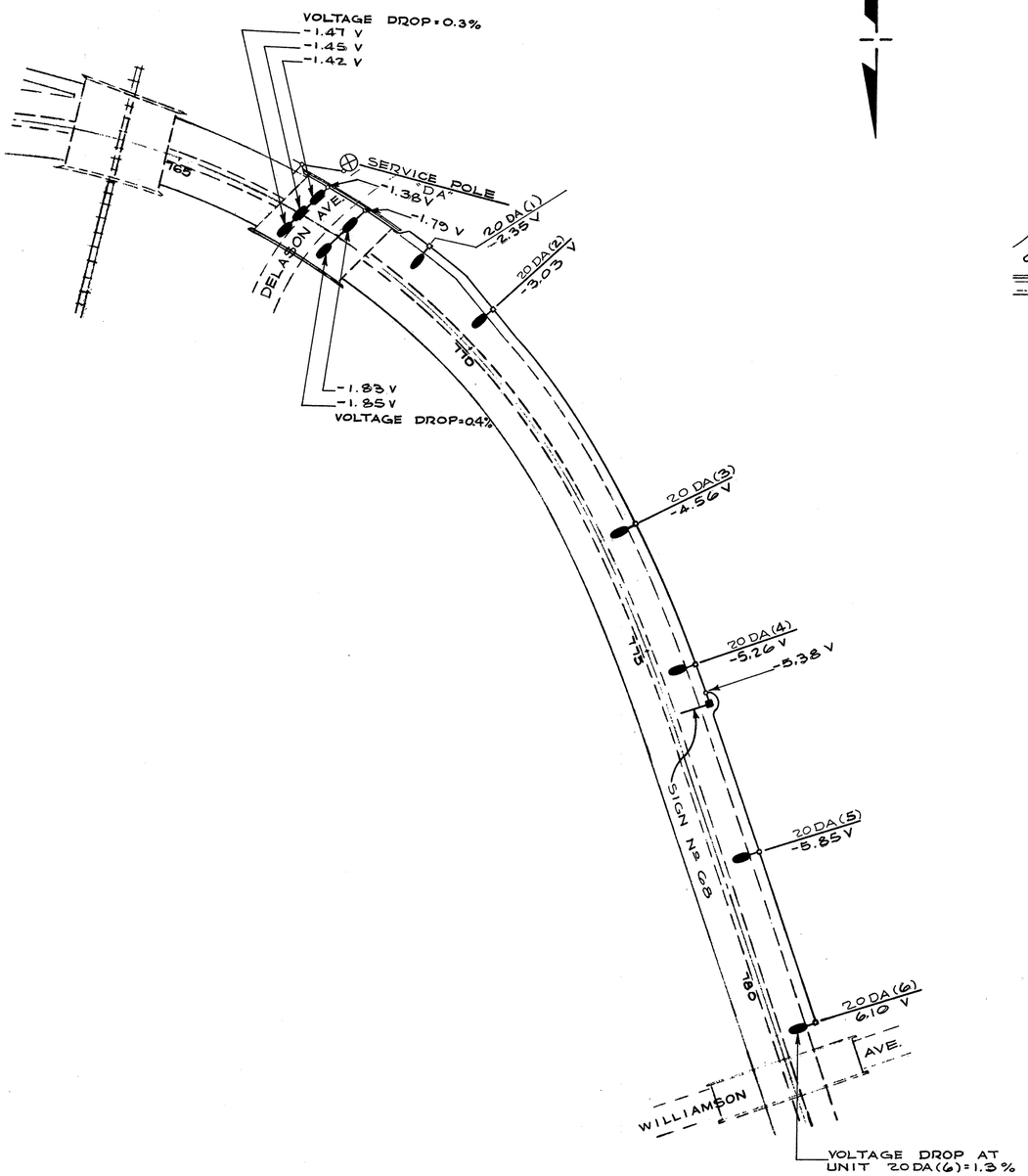
CIRCUIT 20 DA

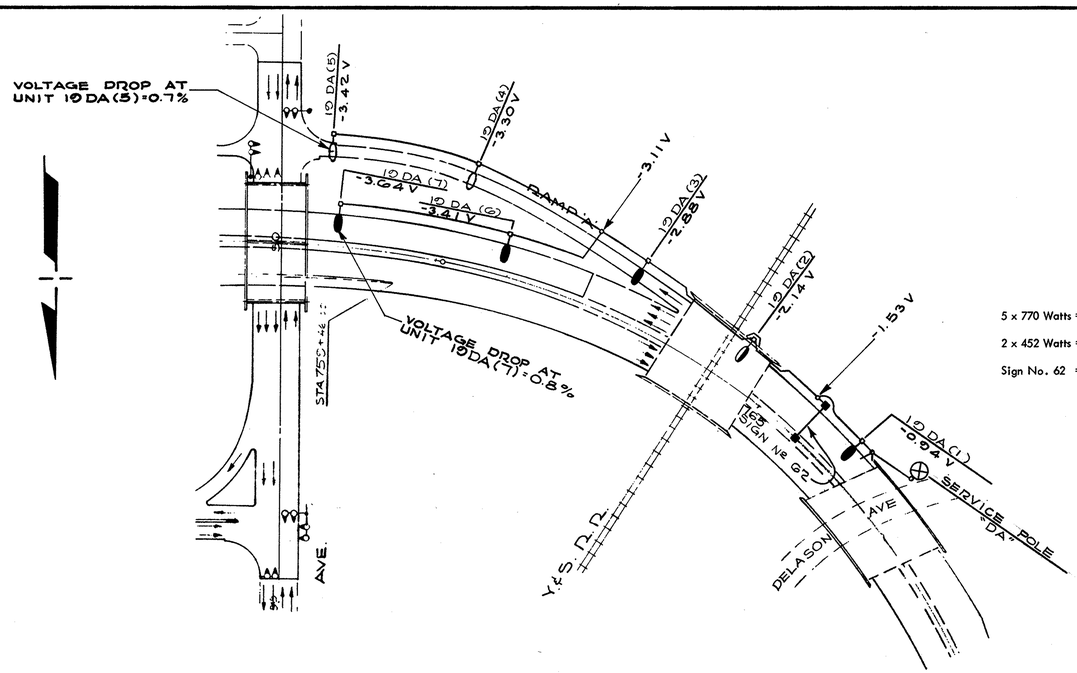
6 x 770 Watts = 4620 Watts

5 x 294 Watts = 1,470 Watts

Sign No. 68 = 250 Watts

6340 Watts Total





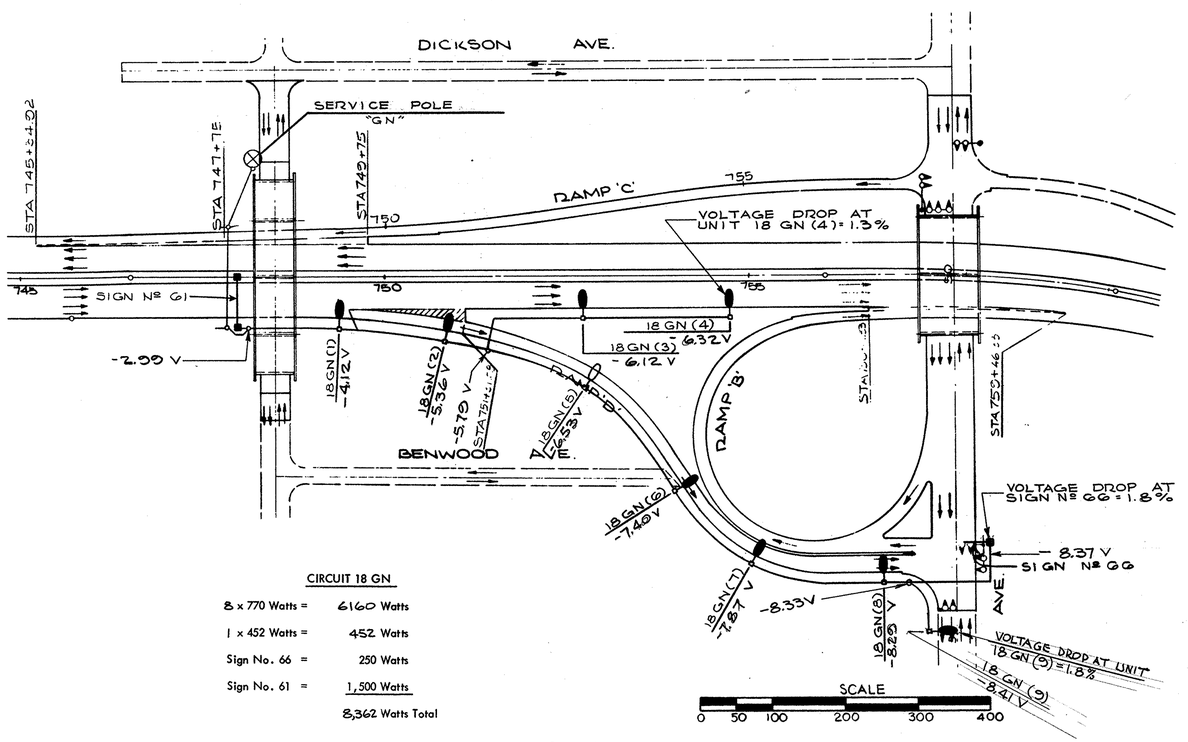
CIRCUIT 19 DA

5 x 770 Watts = 3,850 Watts

2 x 452 Watts = 904 Watts

Sign No. 62 = 1,500 Watts

6,254 Watts Total



CIRCUIT 18 GN

8 x 770 Watts = 6160 Watts

1 x 452 Watts = 452 Watts

Sign No. 66 = 250 Watts

Sign No. 61 = 1,500 Watts

8,362 Watts Total

CALC. BY C.O.D. DATE 5-6-70

CHK'D BY JDT DATE 5-20-70

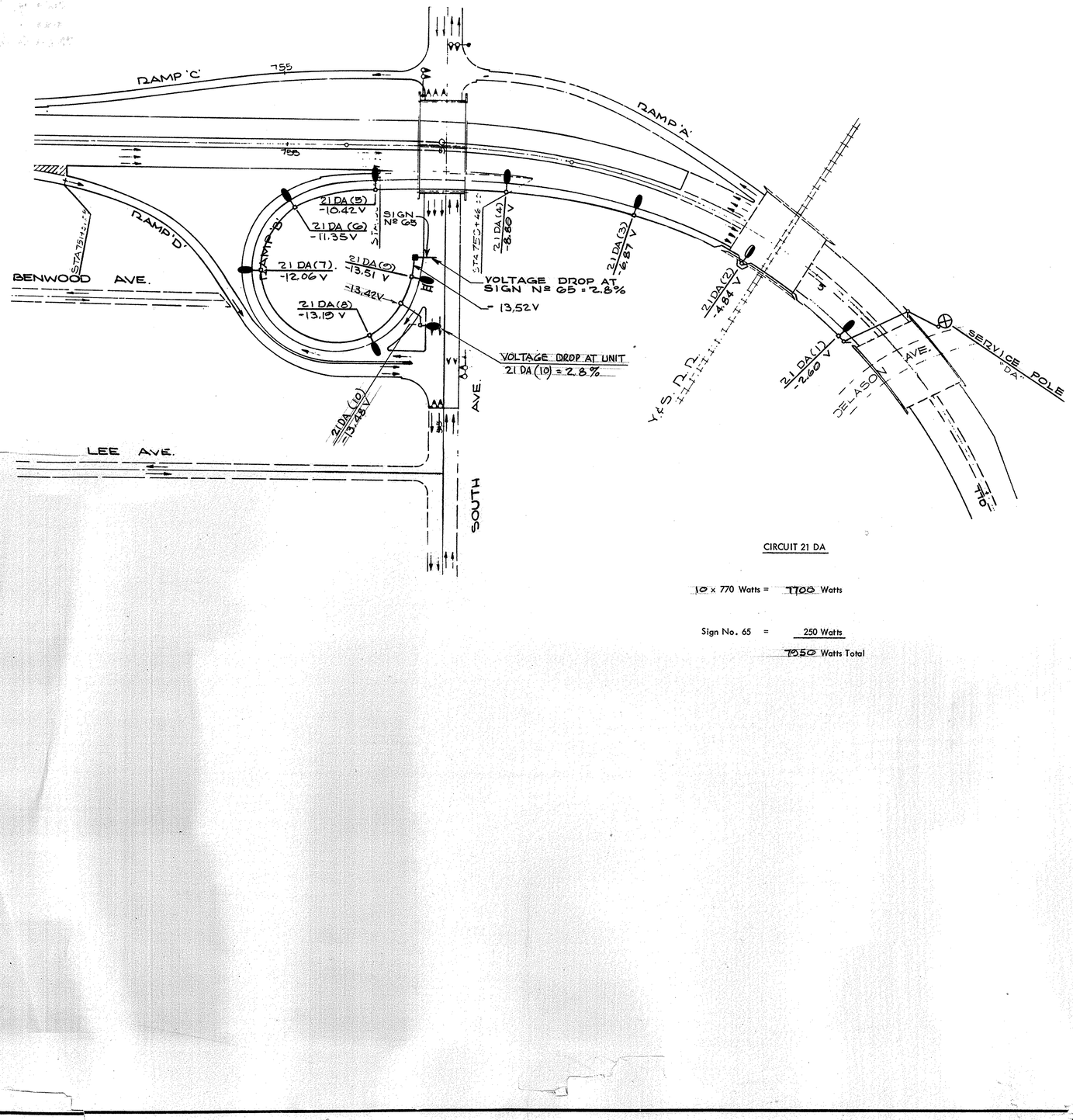
CIRCUIT MAPS

MAY 25 1971

FED. RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

434
656

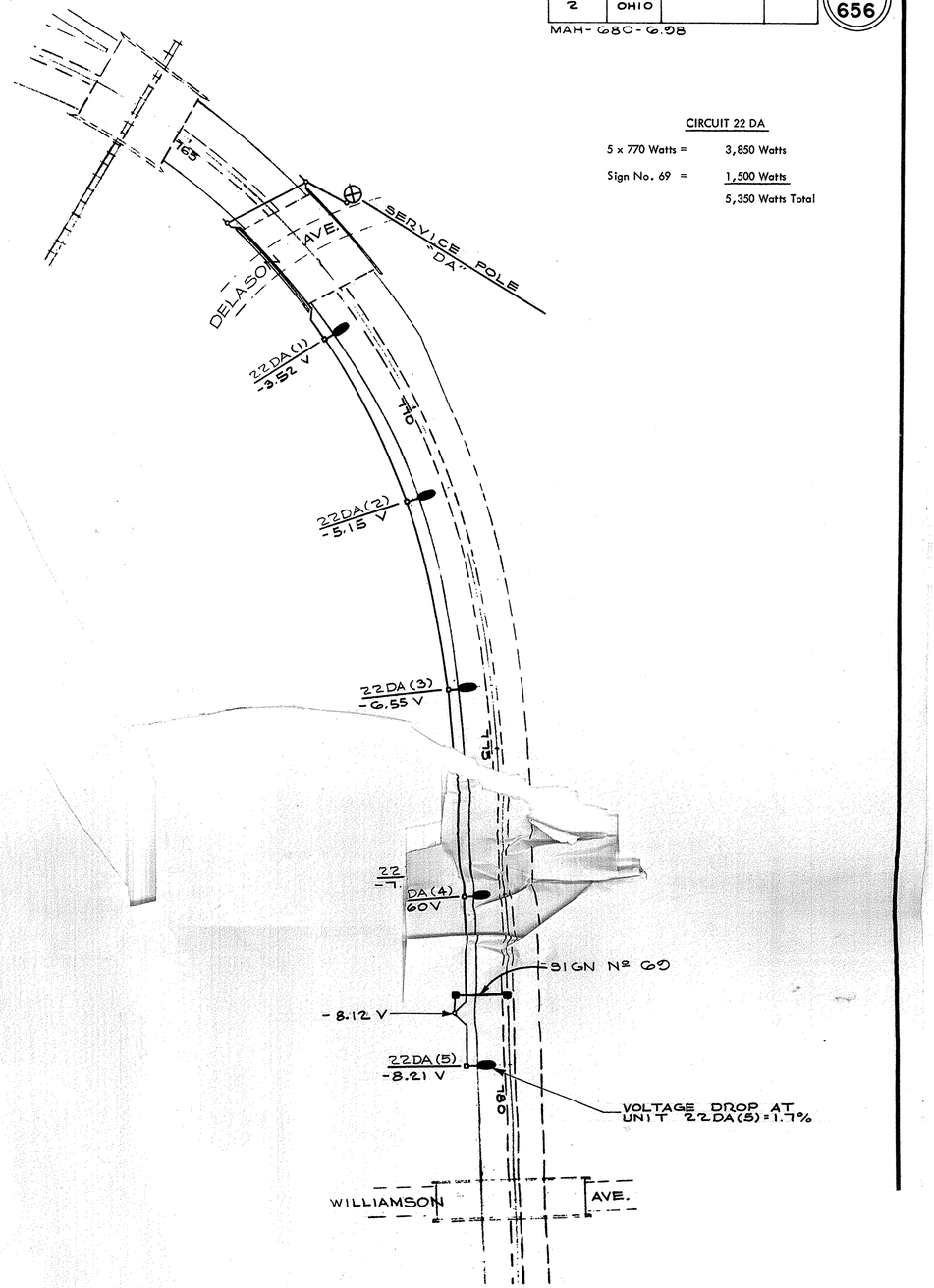


CIRCUIT 21 DA

10 x 770 Watts = 7700 Watts

Sign No. 65 = 250 Watts

7950 Watts Total



CIRCUIT 22 DA

5 x 770 Watts = 3,850 Watts

Sign No. 69 = 1,500 Watts

5,350 Watts Total

SCALE

0 50 100 200 300

CALC. BY C.O.D. DATE 5-5-70

CHK'D BY J.D.T. DATE 5-20-70

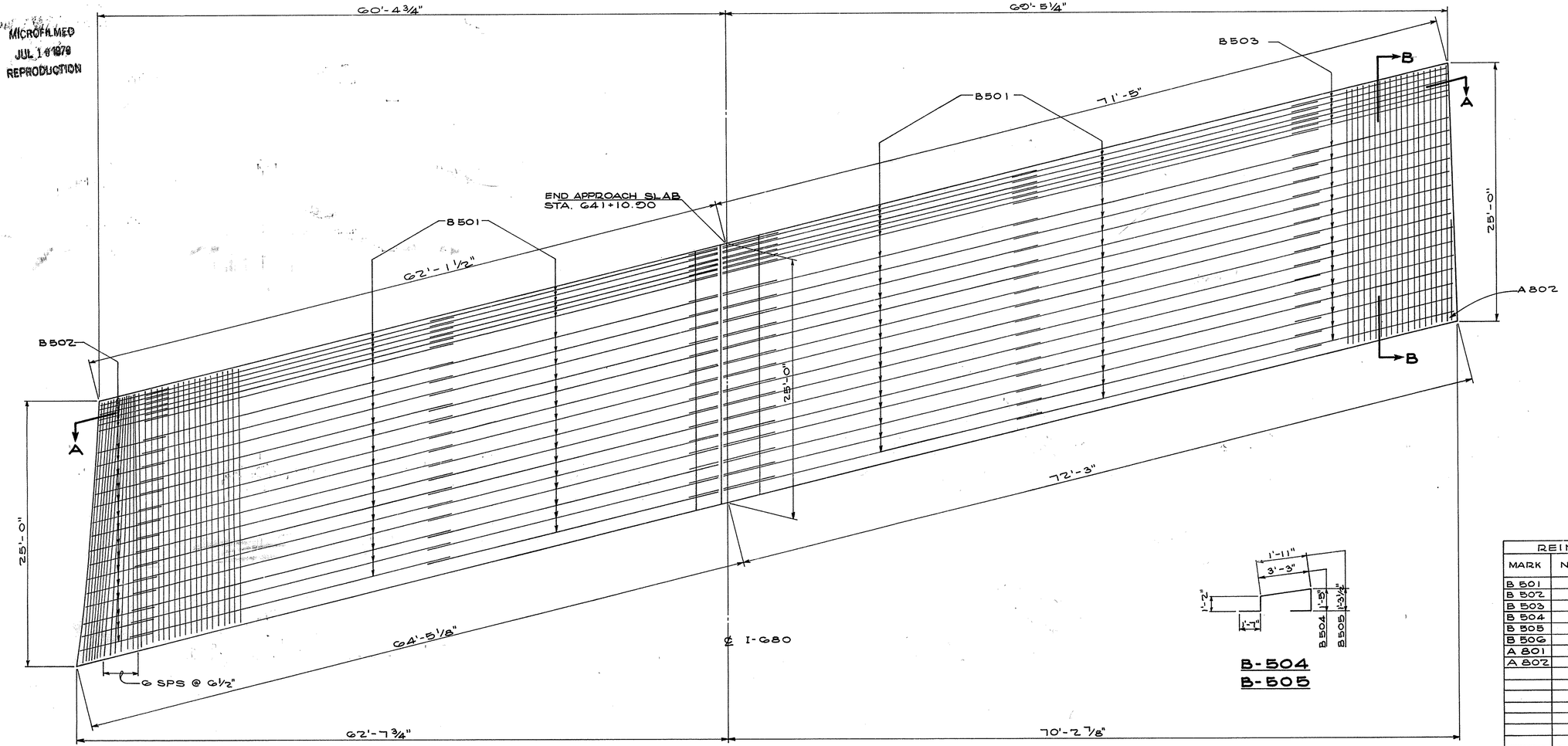
CIRCUIT MAPS

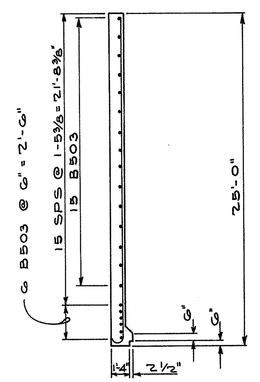
MICROFILMED
JUL 1 1 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

435/656

MAH-680-6.08

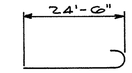




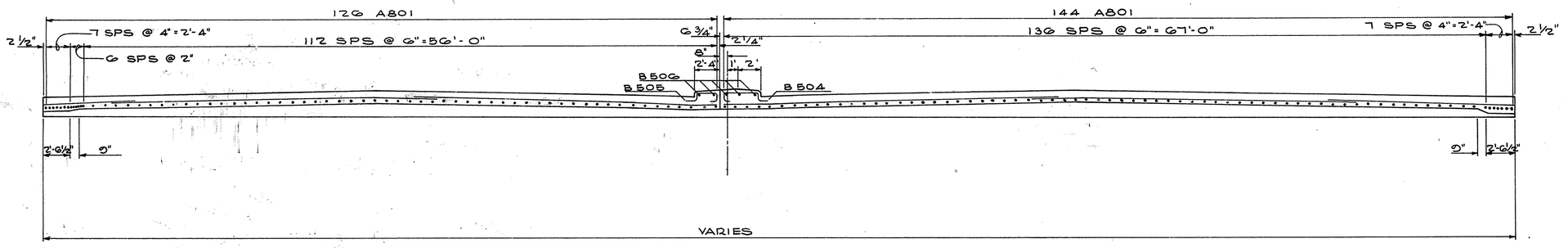
SECTION B-B

B-504
B-505

REINFORCING STEEL LIST				
MARK	Nº REQD.	SHAPE	LENGTH	WEIGHT
B 501	84	ST.	30'-0"	2628
B 502	21	ST.	7'-2"	157
B 503	21	ST.	15'-7"	341
B 504	21	BT.	8'-8"	180
B 505	21	BT.	7'-3"	159
B 506	21	ST.	24'-6"	234
A 801	270	BT.	25'-7"	18563
A 802	1	ST.	7'-10"	21
TOTAL				22292



A 801



SECTION A-A

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

APPROACH SLAB DETAILS @ MIDLOTHIAN BLVD.

BRIDGE Nº MAH 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680

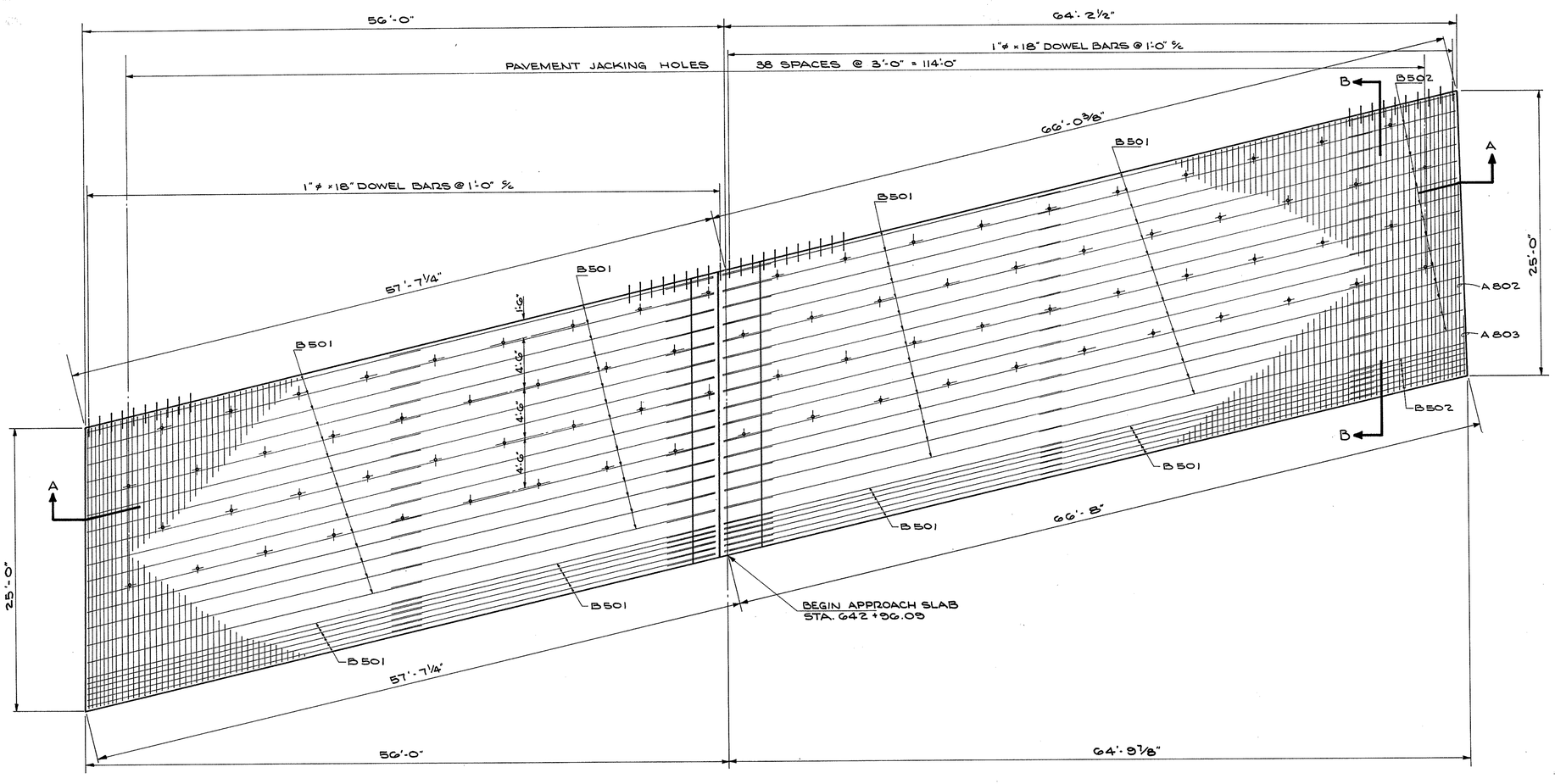
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

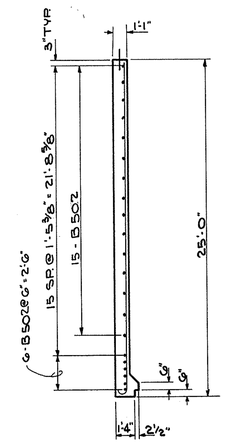
MICROFILMED
JUL 10 1979
REPRODUCTION

FED.RD	STATE	PROJECT	
2	OHIO		

MAH-680-6.08

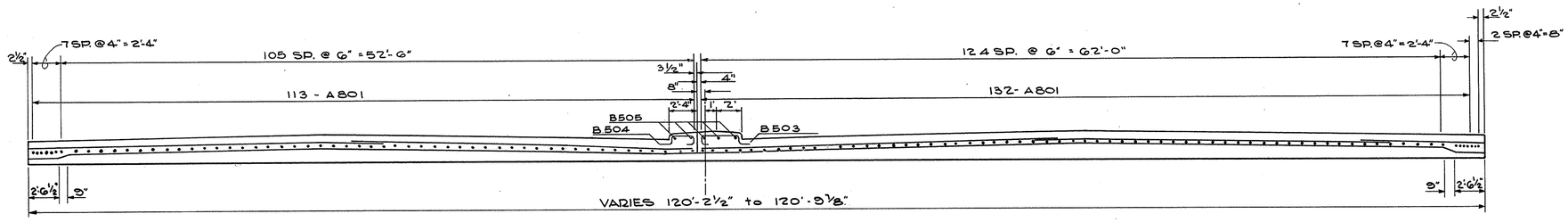
436
656



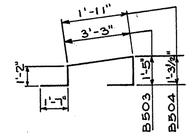


SECTION B-B

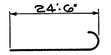
REINFORCING STEEL LIST				
MARK	Nº REQUIRED	SHAPE	LENGTH	WEIGHT
B501	84	ST.	30'-0"	2628
B502	21	ST.	10'-0"	210
B503	21	BT.	8'-8"	189
B504	21	BT.	7'-3"	159
B505	21	ST.	24'-6"	234
A801	245	BT.	25'-7"	16660
A802	1	BT.	17'-0"	45
A803	1	BT.	5'-0"	13



SECTION A-A



B-503
B-504



A801

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

APPROACH SLAB DETAILS @ MIDLOTHIAN BLVD.

BRIDGE Nº MAH. 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

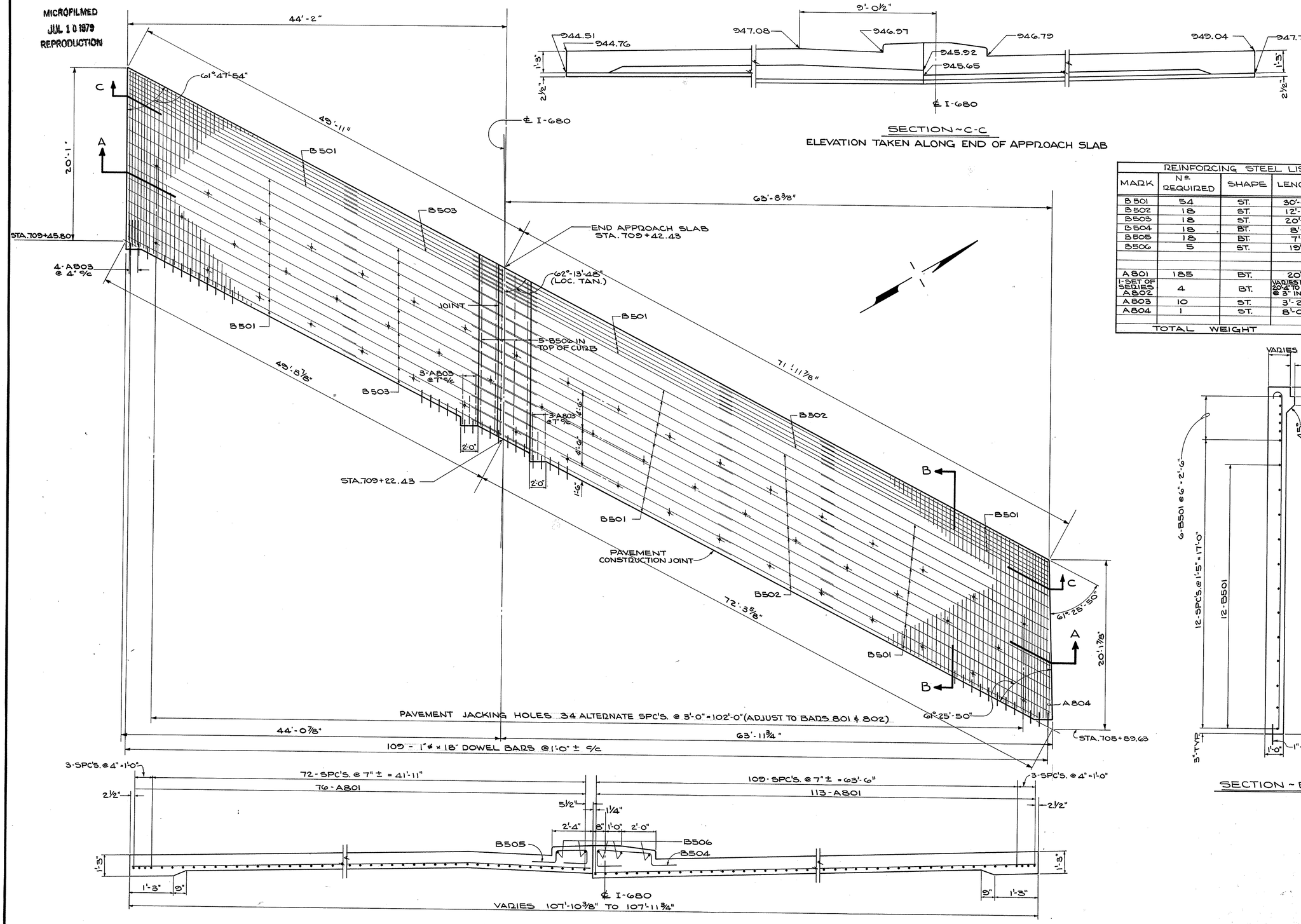
MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.680-6.98

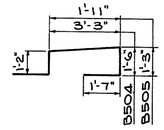
437
656

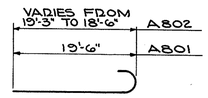


SECTION-A-A

SECTION-C-C
ELEVATION TAKEN ALONG END OF APPROACH SLAB

REINFORCING STEEL LIST				
MARK	Nº REQUIRED	SHAPE	LENGTH	WEIGHT
B501	54	ST.	30'-0"	1,690
B502	18	ST.	12'-6"	235
B503	18	ST.	20'-6"	385
B504	18	BT.	8'-9"	164
B505	18	BT.	7'-2"	135
B506	5	ST.	19'-8"	103
A801	185	BT.	20'-7"	10,151
1-SET OF SEDIES A802	4	BT.	VARIES FROM 20'-7" TO 19'-7" @ 3" INCR.	213
A803	10	ST.	3'-2"	84
A804	1	ST.	8'-0"	21
TOTAL WEIGHT				13,181





SECTION-B-B

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GLAUS, PYLE, & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

APPROACH SLAB DETAILS AT ABUT. Nº 1

BRIDGE Nº MAH. 680-0794
OVER SHADY RUN ROAD
MAHONING CO. I-680

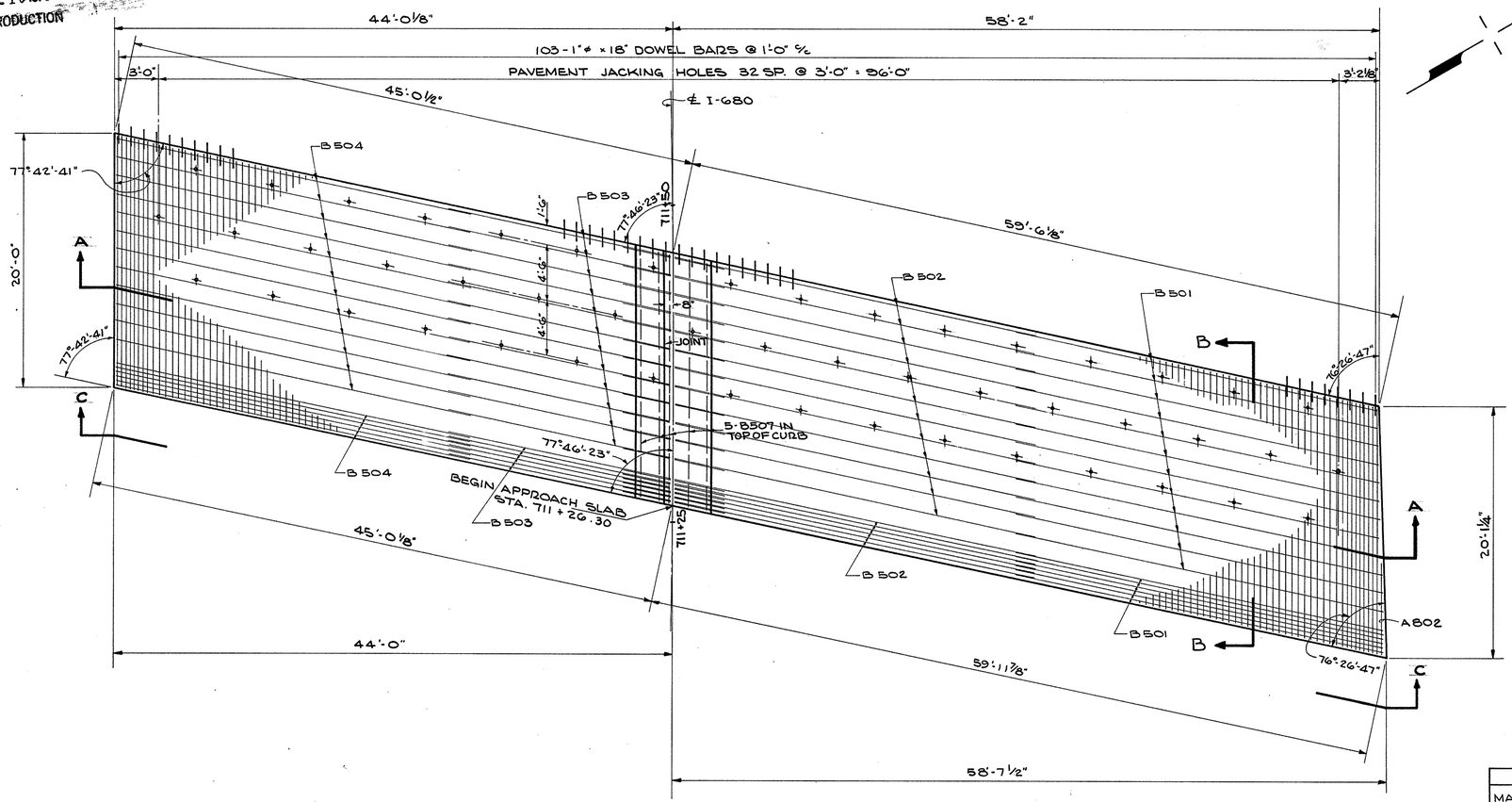
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.A.H.	J.D.P.		D.A.H.	W.K.D.	5-1-70	

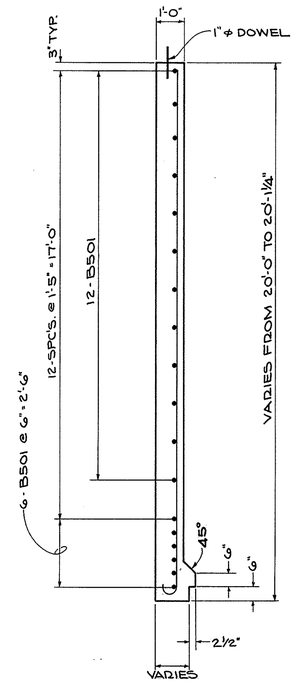
MICROFILMED
JUL 16 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

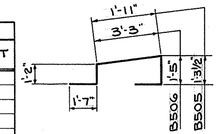
438
656

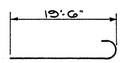




SECTION B-B

REINFORCING STEEL LIST				
MARK	Nº REQUIRED	SHAPE	LENGTH	WEIGHT
B501	18	ST.	30'-0"	563
B502	18	ST.	31'-6"	591
B503	18	ST.	17'-3"	324
B504	18	ST.	28'-6"	535
B505	18	BT.	7'-3"	136
B506	18	BT.	8'-8"	163
B507	5	ST.	19'-8"	102
A801	177	BT.	20'-7"	9,727
A802	1	ST.	7'-0"	19
TOTAL WEIGHT				12,160





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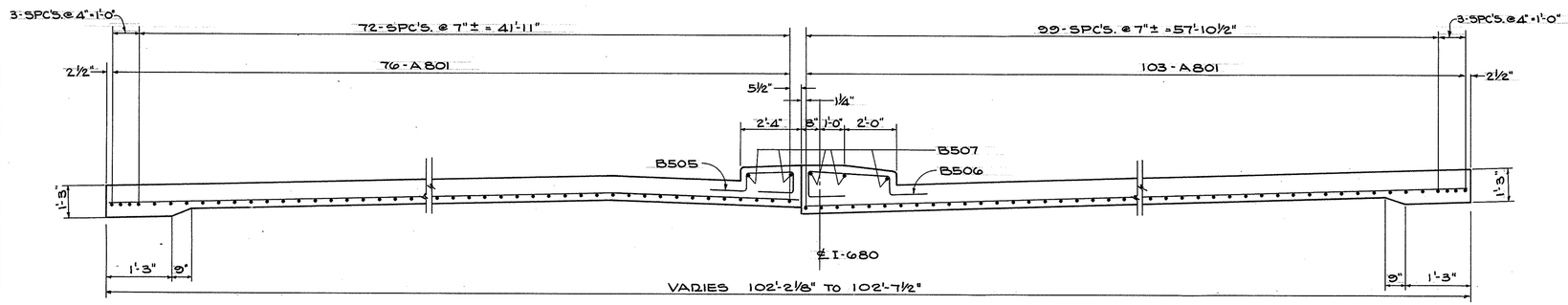
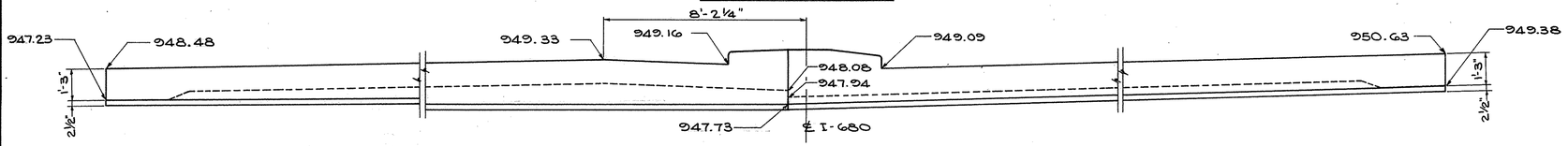


SECTION A-A



SECTION C-C

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
GLAUS, PYLE, & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

APPROACH SLAB DETAILS AT ABUT. Nº 2

BRIDGE Nº MAH. 680-0794
OVER SHADYRUN ROAD
MAHONING CO. I-680

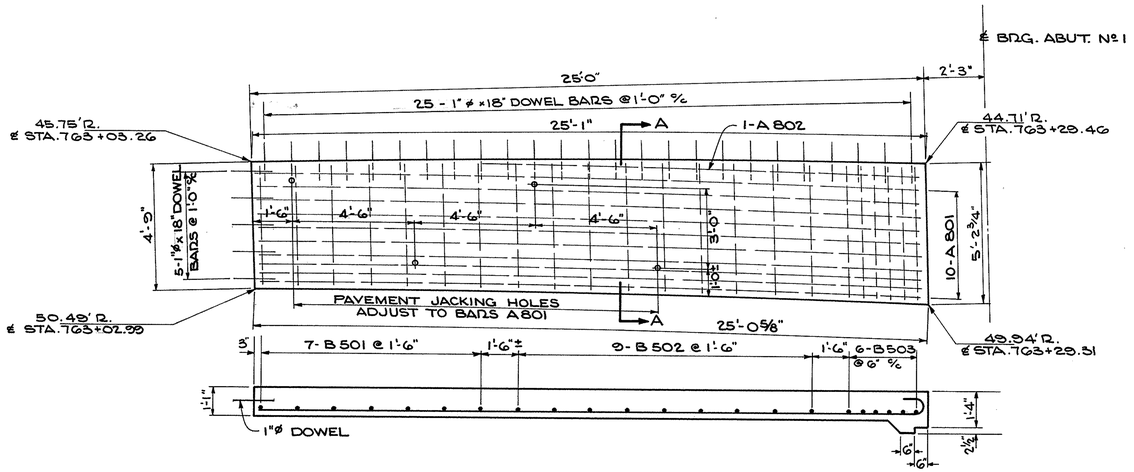
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

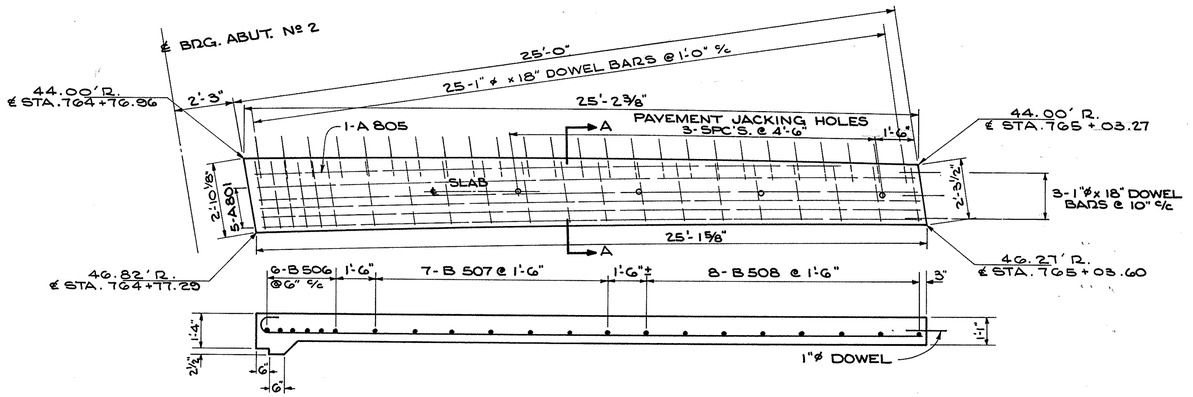
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.-680-6.98

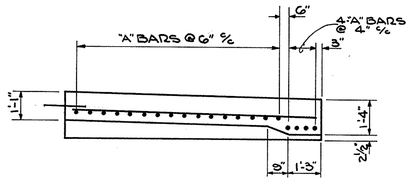
439/656



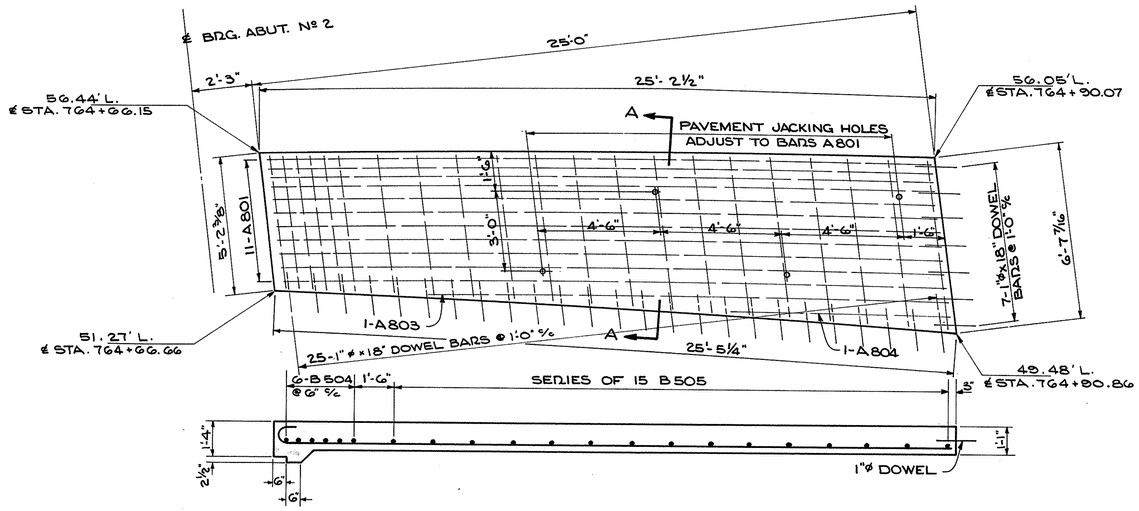
SLAB AT NORTHEAST CORNER



SLAB AT NORTHWEST CORNER



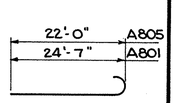
SECTION A-A
SCALE 3/8"=1'-0"



SLAB AT SOUTHWEST CORNER

REINFORCING STEEL LIST

MARK	NUMBER REQ'D.	SHAPE	LENGTH	WEIGHT
B 501	7	ST.	4'-5"	32
B 502	9	ST.	4'-8"	44
B 503	6	ST.	4'-10"	30
B 504	6	ST.	5'-0"	31
1-SET OF SERIES B 505	15	ST.	5'-1" TO 6'-5" @ 1" INCR.	89
A 801	26	BT.	25'-8"	1,782
A 802	1	ST.	16'-6"	44
A 803	1	ST.	19'-6"	52
A 804	1	ST.	8'-6"	23
A 805	1	BT.	23'-1"	62



MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

APPROACH SLAB DETAILS @ Y. & S. RR.

BRIDGE Nº MAH. 7-1445

MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	D.W		R.A.H.	W.K.D.	5-1-70	

FED. RD.	STATE	PROJECT	
2	OHIO		

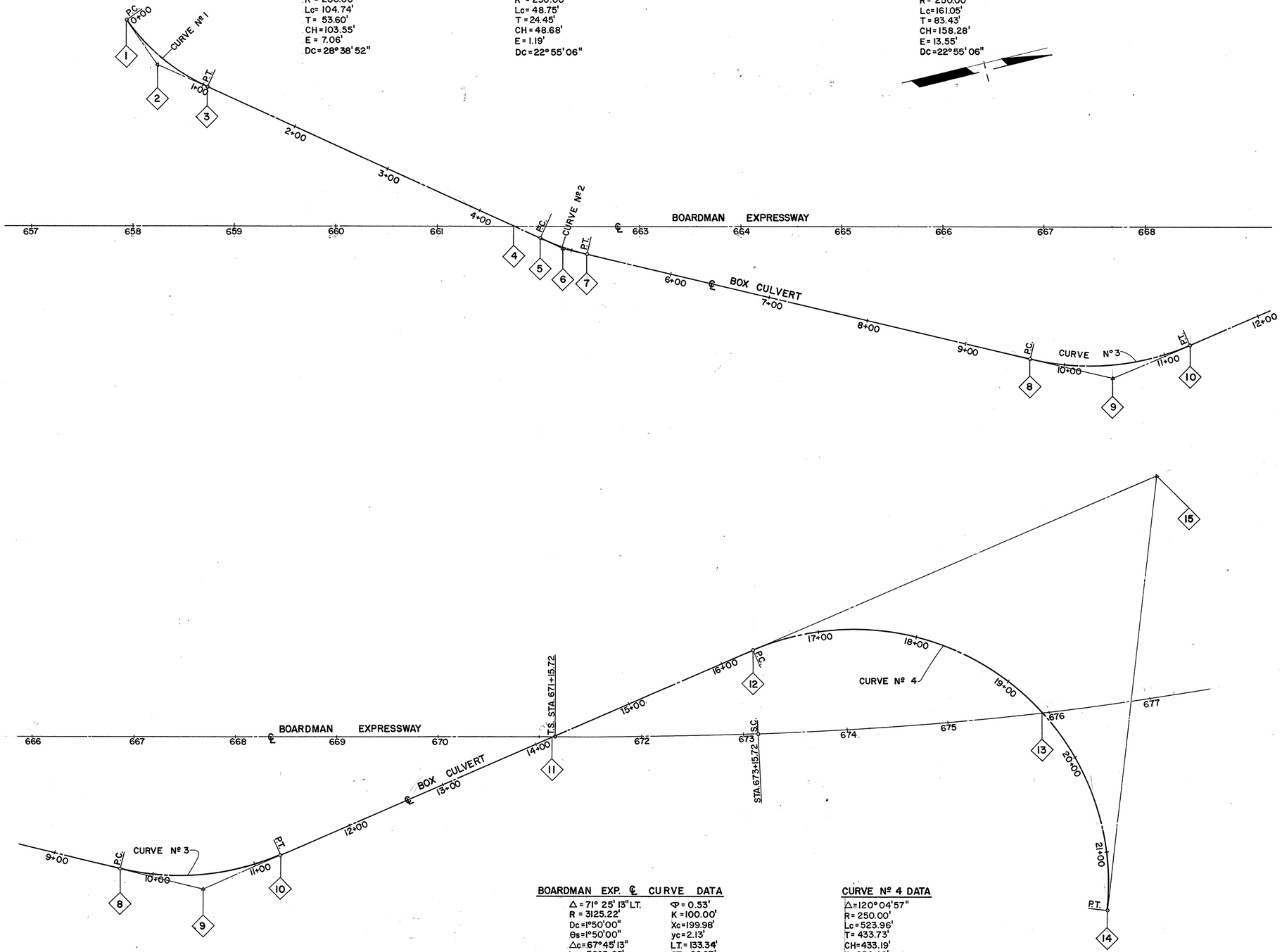
MAH-680-6.98

440/656

CURVE Nº 1 DATA
Δ = 30° 00' 20"
R = 200.00'
Lc = 104.74'
T = 53.60'
CH = 103.55'
E = 7.06'
Dc = 28° 38' 52"

CURVE Nº 2 DATA
Δ = 11° 10' 24"
R = 250.00'
Lc = 48.75'
T = 24.45'
CH = 48.68'
E = 1.19'
Dc = 22° 55' 06"

CURVE Nº 3 DATA
Δ = 36° 54' 36"
R = 250.00'
Lc = 161.05'
T = 83.43'
CH = 158.28'
E = 13.55'
Dc = 22° 55' 06"



BOARDMAN EXP. ℄ CURVE DATA

Δ = 71° 25' 13" LT.	Φ = 0.53'
R = 3125.22'	K = 100.00'
Dc = 1°50'00"	Xc = 199.98'
θs = 1°50'00"	yc = 2.13'
Δc = 67°45'13"	LT = 133.34'
Lc = 3695.65'	ST = 66.67'
Tc = 2098.22'	LC = 199.99'
CHc = 3484.05'	Ts = 2346.92'
Ec = 639.03'	Es = 724.32'
	Ls = 200'

CURVE Nº 4 DATA
Δ = 120° 04' 57"
R = 250.00'
Lc = 523.96'
T = 433.73'
CH = 433.19'
E = 250.62'
Dc = 22° 55' 06"

CODE	BOARDMAN EXPRESSWAY STATION	OFFSET ℄ BOARDMAN EXP TO ℄ BOX CULVERT	SIDE	BOX CULVERT STATION	INVERT ELEVATION
1	657+93	204'	LT.	0+00.00	947.02
	658+00	194.76'	LT.	0+11.59	946.82
2	658+24.12	160.36'	LT		
3	658+72.90	138.13'	LT.	1+04.74	945.20
	659+00	125.78'	LT.	1+34.53	944.69
	660+00	80.21'	LT.	2+44.42	942.78
	661+00	34.64'	LT	3+54.31	940.87
4	661+76.00	0.00'	℄	4+37.84	939.42
	662+00	10.94'	RT.	4+64.21	938.96
5	662+02.25	11.96'	RT.	4+66.69	938.91
6	662+24.50	22.10'	RT.		
7	662+48.30	27.74'	RT.	5+15.44	938.07
	663+00	39.99'	RT.	5+68.57	937.14
	664+00	63.68'	RT.	6+71.34	935.36
	665+00	87.36'	RT.	7+74.10	933.57
	666+00	111.05'	RT.	8+76.87	931.78
8	666+86.78	131.61'	RT.	9+66.05	930.23
	667+00	134.37'	RT.	9+79.56	930.00
9	667+67.97	150.84'	RT.		
	668+00	132.08'	RT.	10+80.26	928.25
10	668+44.43	117.46'	RT.	11+27.10	927.44
	669+00	93.20'	RT.	11+87.74	926.38
	670+00	49.55'	RT.	12+96.85	924.49
	671+00	5.89'	RT.	14+05.97	922.59
11	671+13.50	0.00'	℄	14+20.70	922.33
	672+00	37.51'	LT.	15+14.85	920.70
	673+00	78.84'	LT.	16+21.84	918.84
12	673+11.76	83.45'	LT.	16+34.21	918.62
	674+00	100.05'	LT.	17+21.90	917.10
	675+00	78.91'	LT.	18+21.97	915.36
13	675+95.89	0.00'	℄	19+46.49	913.19
	676+00	6.06'	RT.	19+53.82	913.07
14	676+32.00	202.00'	RT.	21+58.17	909.52
15	677+45.80	216.68'	LT.		
	676+36.43	178.80'	RT.	21+34.49	909.93

FOR INLET DETAILS
SEE SHEET Nº 441

FOR OUTLET DETAILS
SEE SHEET Nº 442

FOR STRUCTURE DETAILS
SEE SHEET Nº 443-457

FOR STRUCTURE QUANTITIES
SEE SHEET Nº 458

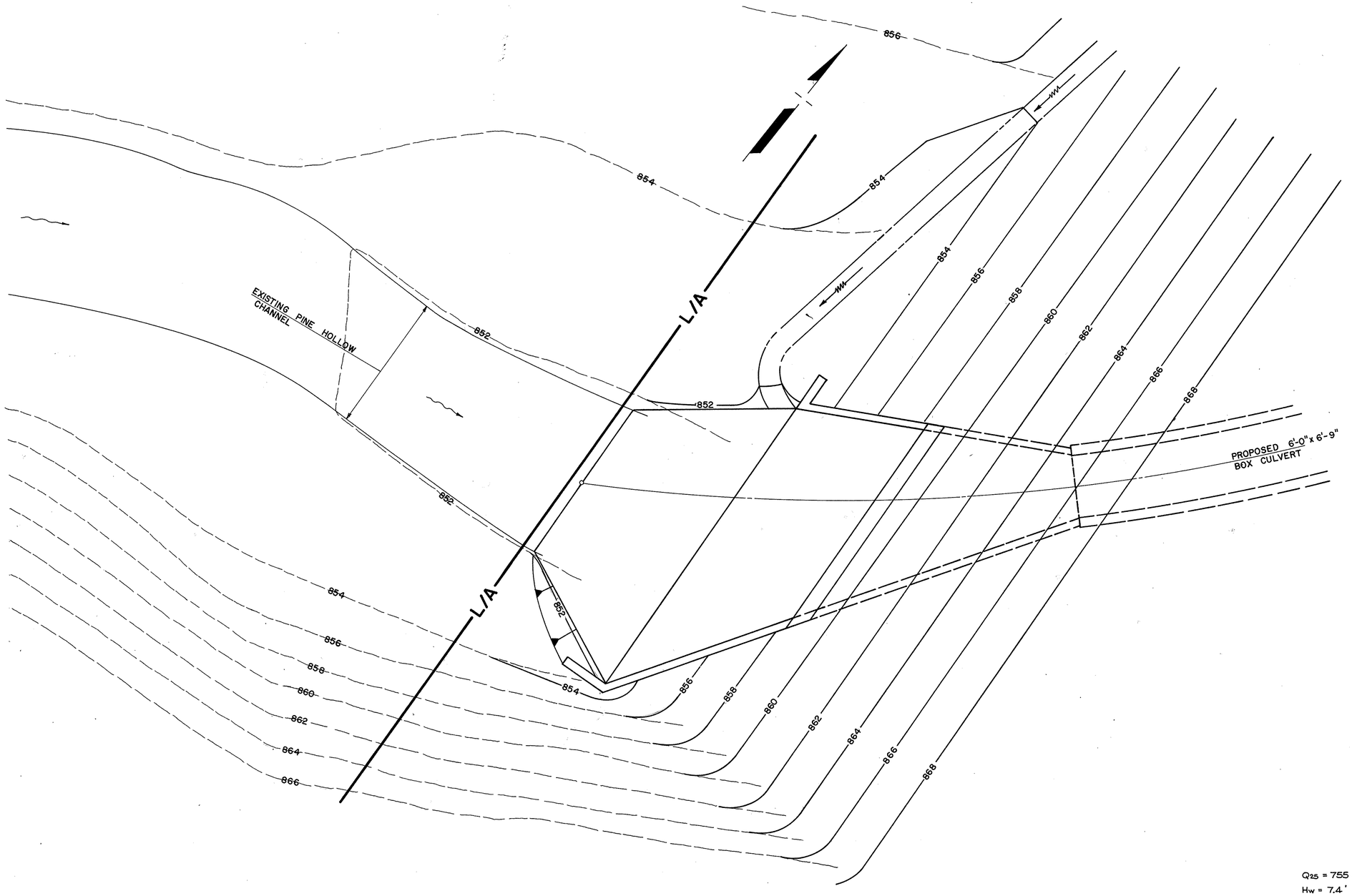
MAY 25 1971

PINE HOLLOW BOX CULVERT GEOMETRIC PLAN

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

441
656



Q_{25} = 755 c.f.s.

H_w = 7.4'

FOR CULVERT GEOMETRICS
SEE SHEET Nº 440

FOR STRUCTURE DETAILS
SEE SHEET Nº 443-457

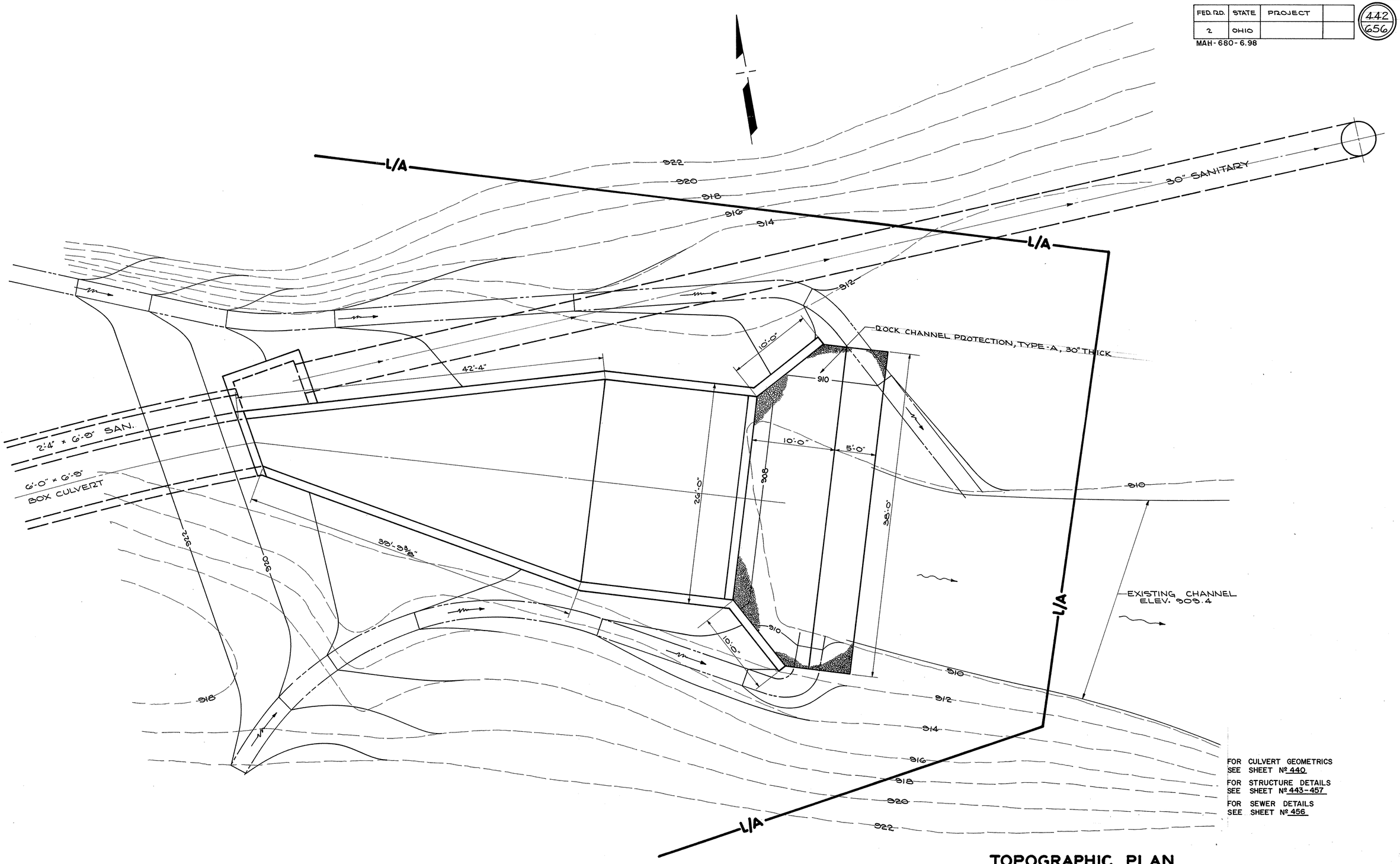
MAY 25 1971

TOPOGRAPHIC PLAN
PINE HOLLOW BOX CULVERT INLET

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

442
656



FOR CULVERT GEOMETRICS
SEE SHEET Nº 440

FOR STRUCTURE DETAILS
SEE SHEET Nº 443-457

FOR SEWER DETAILS
SEE SHEET Nº 456

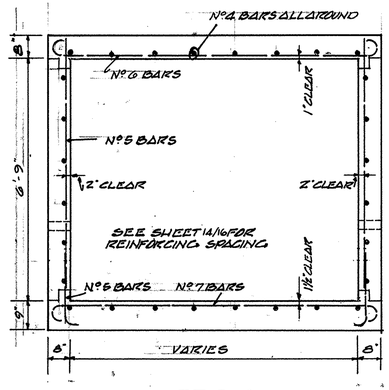
TOPOGRAPHIC PLAN
PINE HOLLOW BOX CULVERT OUTLET

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

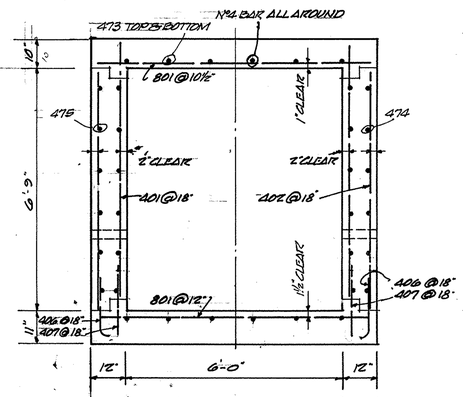
443
656

MAH-680-6.98



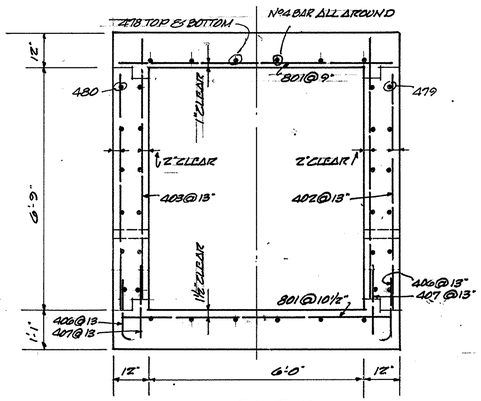
SEC. A

FROM STA. 0+28.72 TO STA. 0+48.39



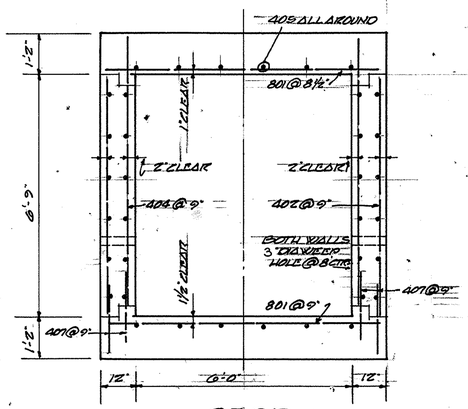
SEC. B

FROM STA. 0+48.39 TO STA. 0+75



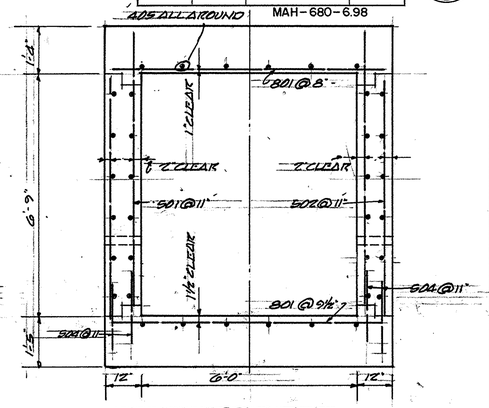
SEC. C

FROM STA. 0+75 TO STA. 1+05



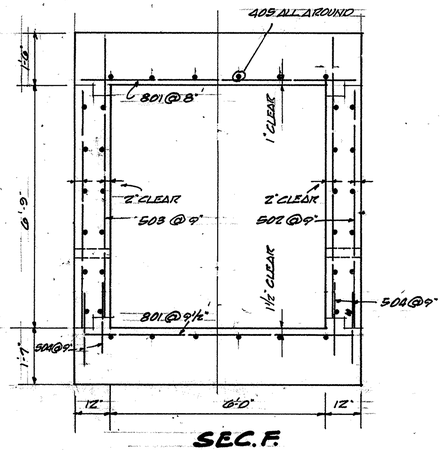
SEC. D

FROM STA. 1+05 TO STA. 1+35



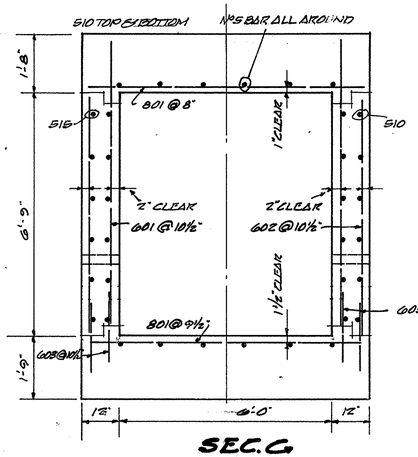
SEC. E

FROM STA. 1+35 TO STA. 1+65



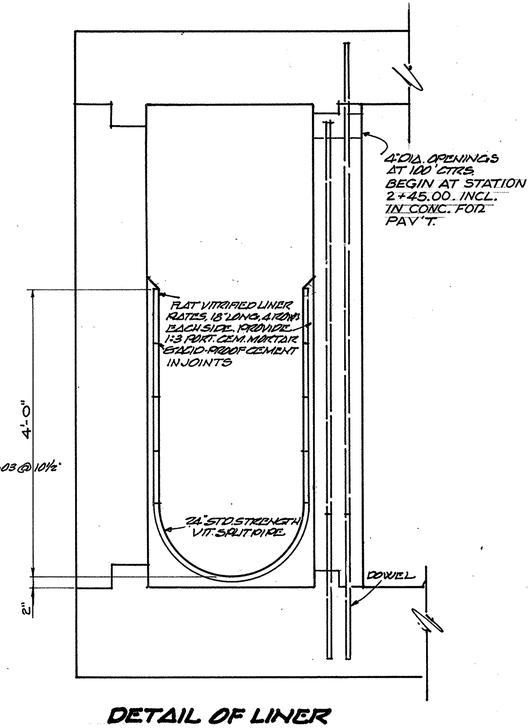
SEC. F

FROM STA. 1+65 TO STA. 1+95

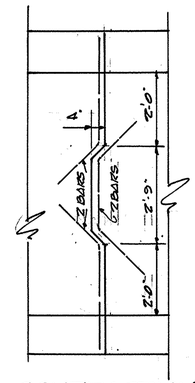


SEC. G

FROM STA. 1+95 TO STA. 2+11



DETAIL OF LINER FOR SANITARY SEWER



CONTRACTION JOINT DETAIL

GENERAL NOTES:

REFERENCE SHOULD BE MADE TO STANDARD DRAWING MH-1, DATED 10-1-68.

SUBSOIL OF APPROXIMATELY UNIFORM BEARING CAPACITY IS CONTEMPLATED. IF SPOTS OF SOFT MATERIAL EXIST THEY SHALL BE REPLACED WITH COMPACTED GRANULAR MATERIAL.

THE CONTRACTOR MAY POUR OUTSIDE WALLS OF THE BOX AGAINST NEATLY CUT ROCK EXCAVATION. HOWEVER HE MUST ADD 1" TO THE OUTSIDE WALL THICKNESS AT HIS EXPENSE.

PROVIDE 3" WEEP HOLES AT 8'-0" CENTERS FOR ALL SECTIONS OTHER THAN AREAS IN ROCK EXCAVATION WEEP HOLES SHALL BE PLACED 2'-0" ABOVE CULVERT INVERT. UNLESS OTHERWISE CALLED FOR ON THE PLANS.

EMBANKMENT SHALL BE PLACED SYMMETRICALLY ON BOTH SIDES OF CULVERT ALONG ENTIRE LENGTH AFTER TOP SLAB IS IN PLACE.

CONCRETE SHALL BE CLASS "C"

REINFORCING SCHEDULE ON SHEET 16/16

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1 / 16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT SECTIONS

STA. 0+00 TO STA. 2+11

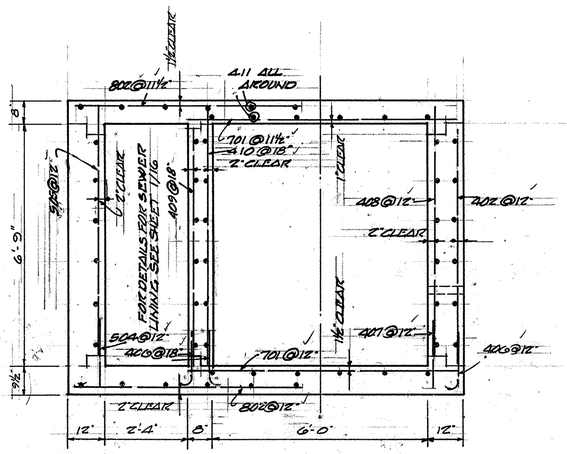
MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

FED. RD.	STATE	PROJECT	
2	OHIO		

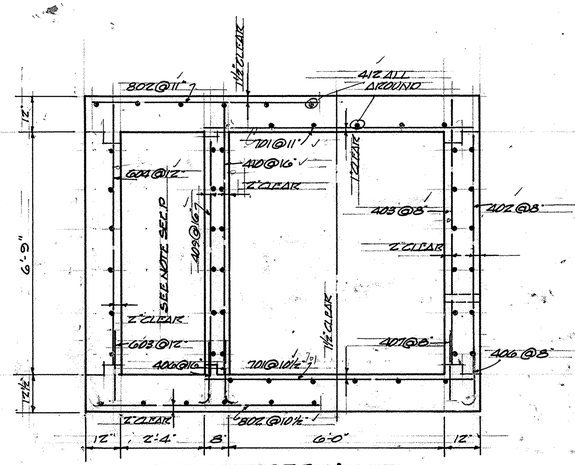
444
656

MAH.-680-6.98



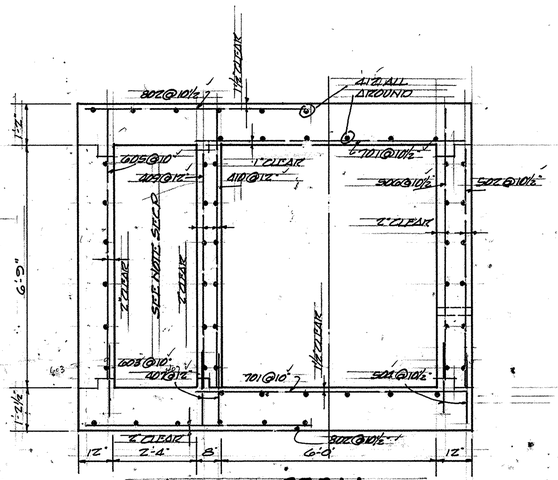
SEC. P

FROM STA. 2+11.5 TO STA. 2+34.49



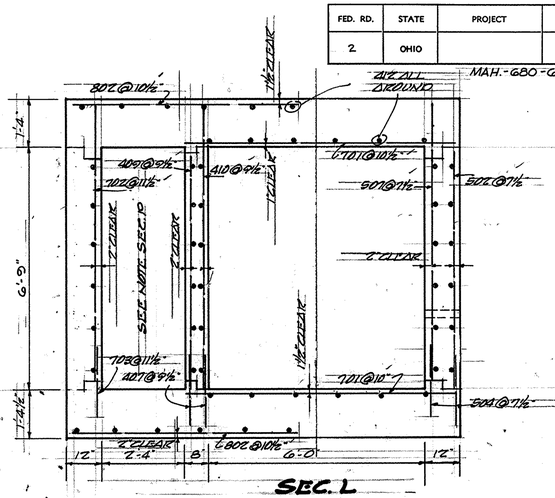
SEC. N

FROM STA. 9+45 TO STA. 11+25
20+85 TO 21+15



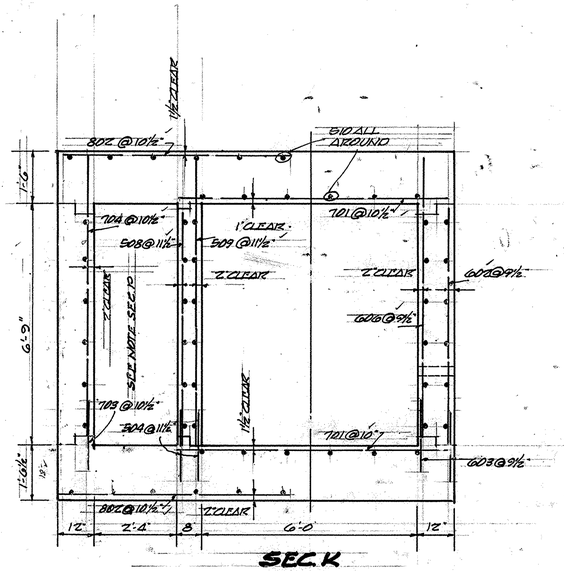
SEC. M

FROM STA. 9+45 TO STA. 9+75



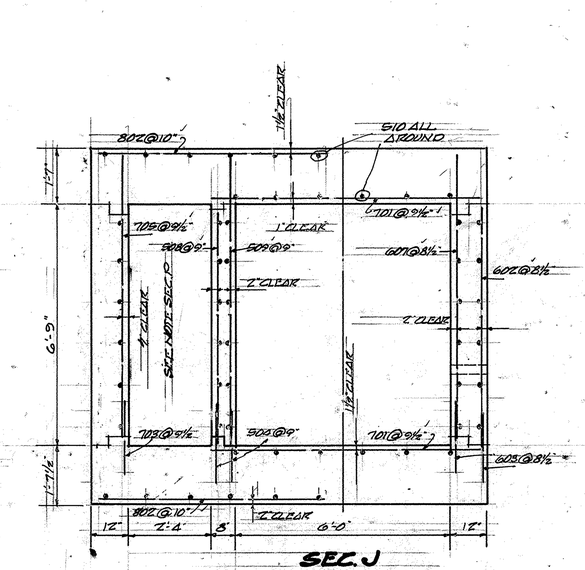
SEC. L

FROM STA. 8+55 TO STA. 8+85
11+25 TO 11+55
20+55 TO 20+85



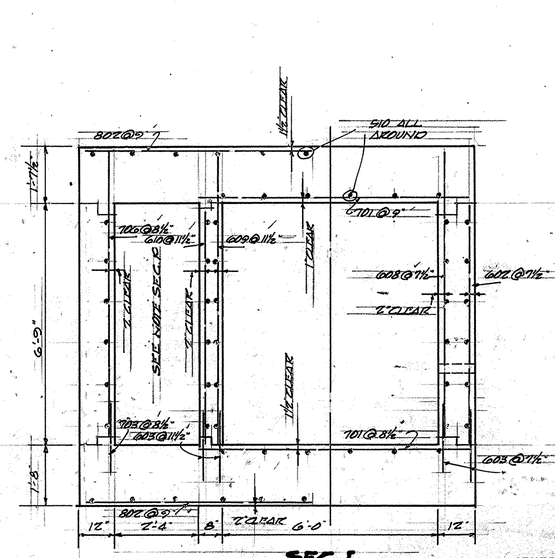
SEC. K

FROM STA. 8+25 TO STA. 9+15
11+55 TO 11+85
10+95 TO 11+55



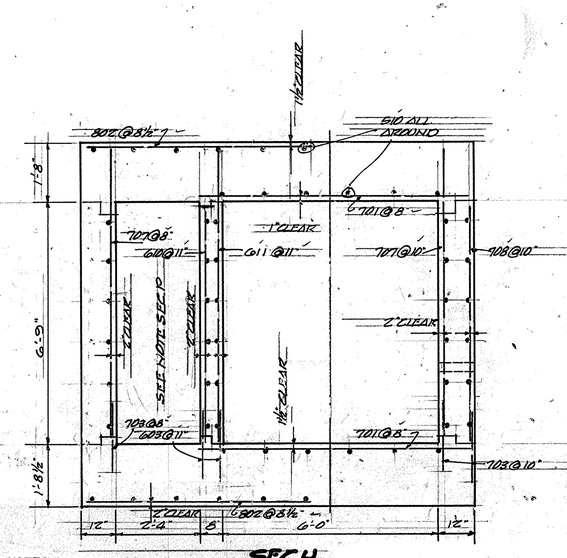
SEC. J

FROM STA. 7+05 TO STA. 8+25
11+85 TO 12+15
10+85 TO 10+95
11+55 TO 11+85



SEC. I

FROM STA. 7+35 TO STA. 7+65
12+15 TO 16+35
17+85 TO 20+55



SEC. H

FROM STA. 7+11 TO STA. 7+35

MAY 25 1971

GENERAL NOTES

THE CONTRACTOR MAY POUR OUTSIDE WALLS OF THE BOX AGAINST NEATLY CUT ROCK EXCAVATION. HOWEVER HE MUST ADD 1" TO THE OUTSIDE WALL THICKNESS AT HIS EXPENSE.

PROVIDE 3" WEEP HOLES AT 8'-0" CENTERS FOR THE OUTSIDE WALL OF THE STORM PORTION FOR ALL SECTIONS OTHER THAN AREAS IN ROCK EXCAVATION WEEP HOLES SHALL BE PLACED 2'-0" ABOVE CULVERT INVERT UNLESS OTHERWISE CALLED FOR ON THE PLANS.

REINFORCING SCHEDULE ON SHEET 16/16

PROVIDE 6" DIA. OPENING AT TOP OF PARTITION WALL. SEE DETAIL SHEET N° 1/16

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT SECTIONS

STA. 2+11 TO STA. 21+34.49
MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

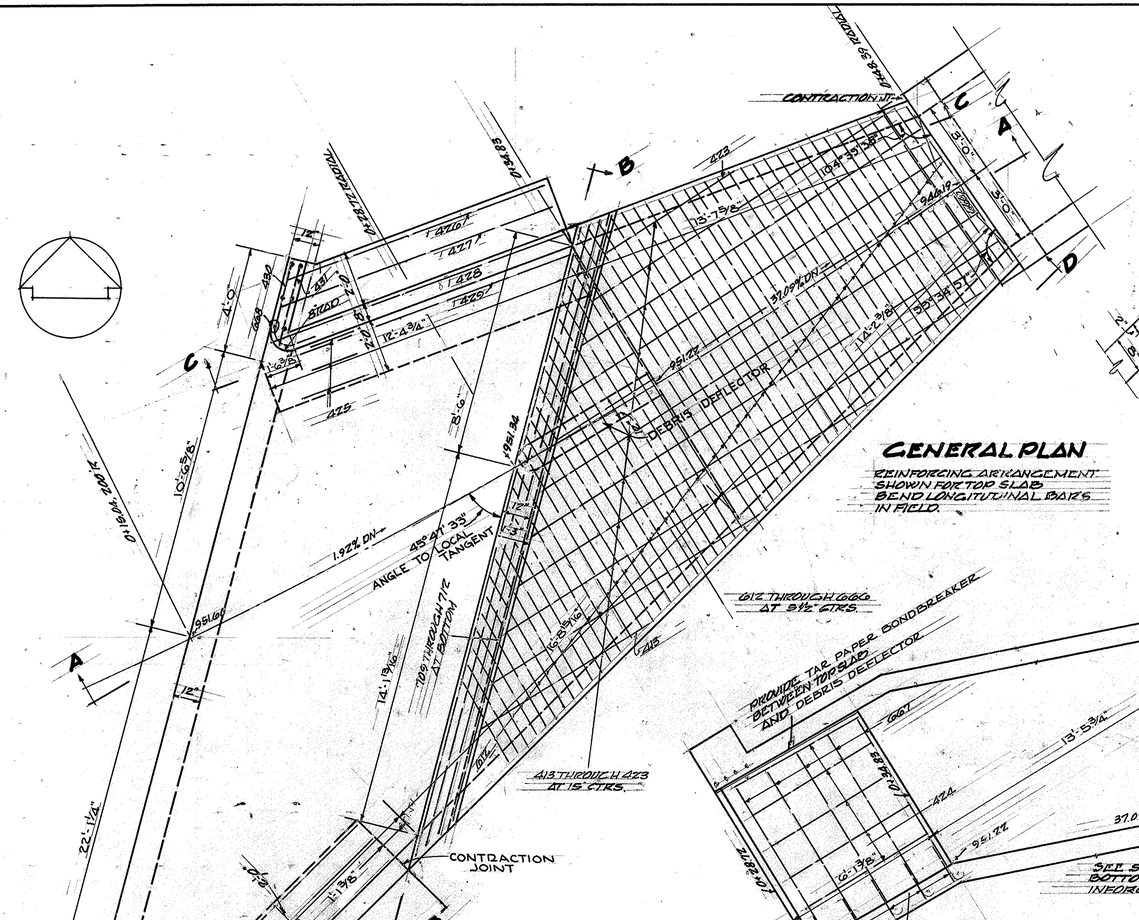
FED. RD.	STATE	PROJECT	
2.	OHIO		

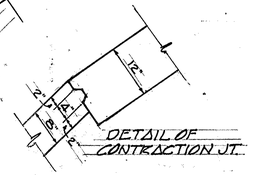
MAH - 680 - 6.98

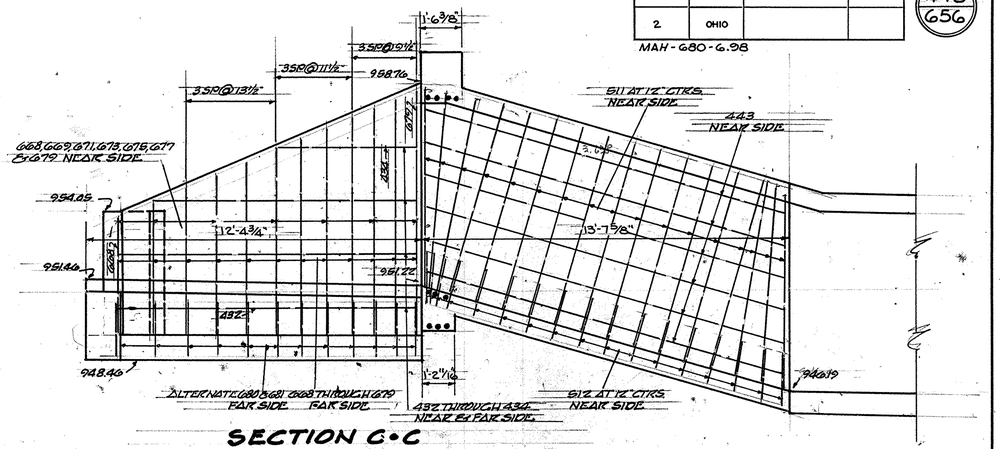
445
656

GENERAL PLAN

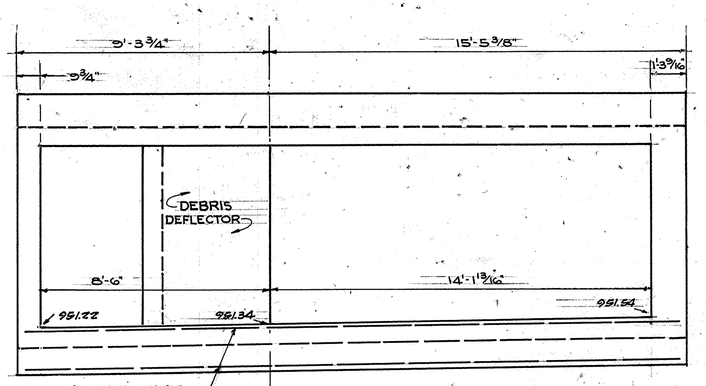
REINFORCING ARRANGEMENT SHOWN FOR TOP SLAB. BEND LONGITUDINAL BARS IN FIELD.







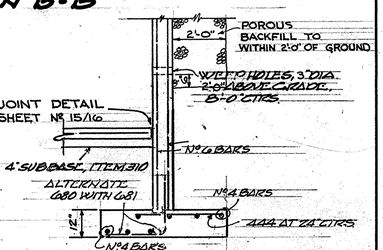
SECTION C-C



SECTION B-B

SECTION A-A

SECTION D-D



WING WALL FOOTING DETAIL

REINFORCING SCHEDULE ON SHEET 16/16

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT ENTRANCE DETAILS

MAHONING CO. I-689

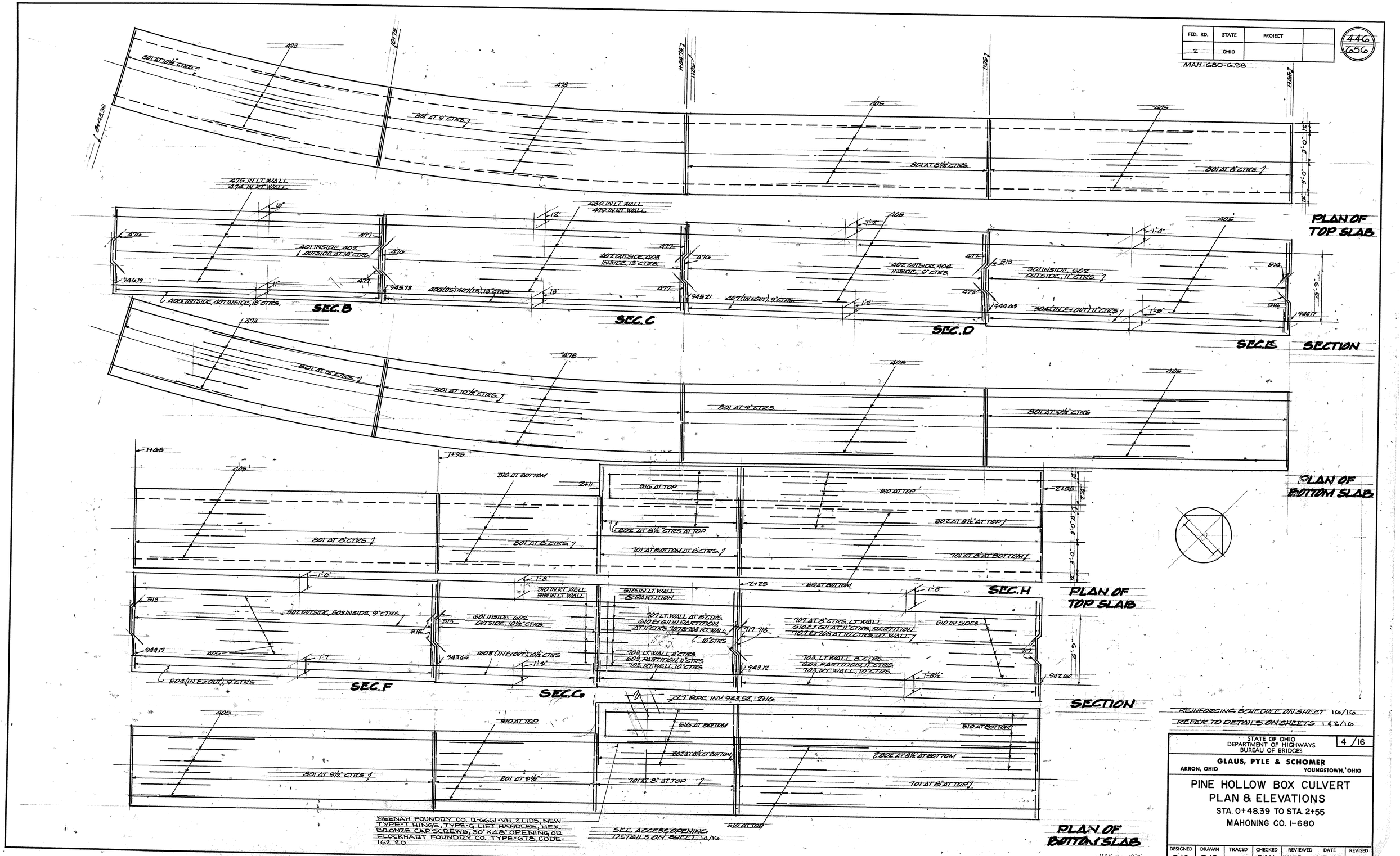
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

446/656



NEENAH FOUNDRY CO. R-6661-VH, 2 LIDS, NEW TYPE-T HINGE, TYPE-G LIFT HANDLES, HEX. BRONZE CAP SCREWS, 30"×48" OPENING OR FLOCKHART FOUNDRY CO. TYPE-678, CODE-162.20

SEE ACCESS OPENING DETAILS ON SHEET 14/16

REINFORCING SCHEDULE ON SHEET 16/16

REFER TO DETAILS ON SHEETS 1 & 2/16

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA. 0+48.39 TO STA. 2+55
MAHONING CO. I-680

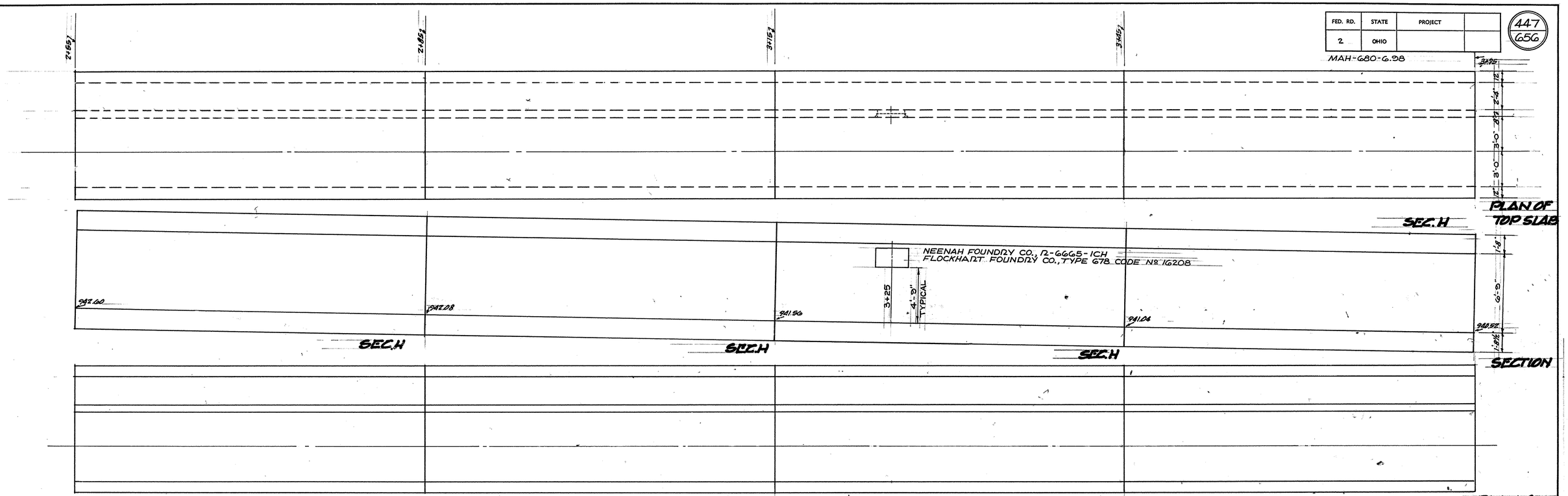
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

447
656



SEE REINFORCING PLAN ON SHEETS 2 & 3 OF 16
REINFORCING SCHEDULE ON SHEET 16 OF 16

REFER TO DETAILS ON SHEETS 1 & 2 OF 16

MAY 25 1971

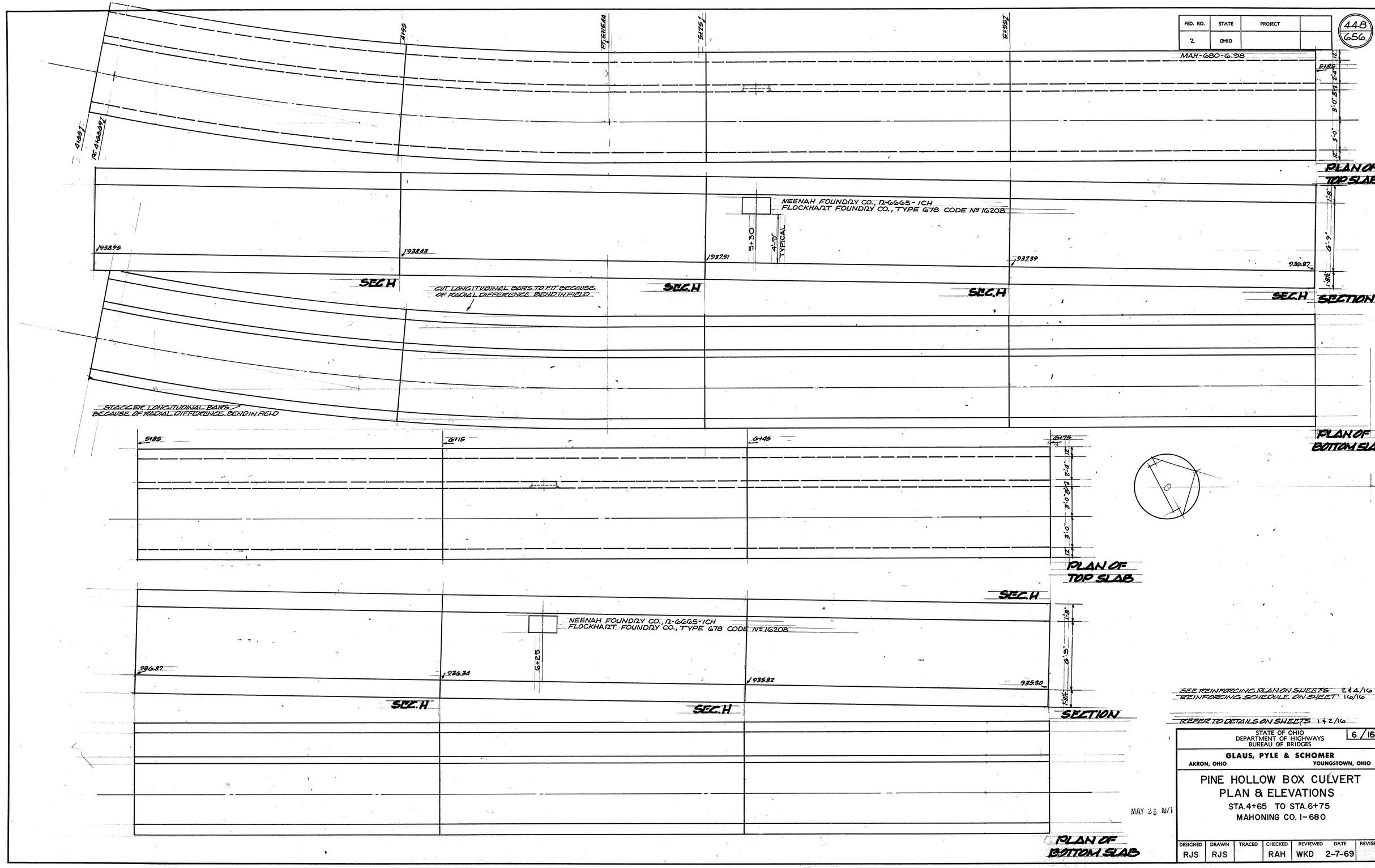
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5 / 16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA. 2+55 TO STA. 4+65
MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	



SEE REINFORCING PLAN ON SHEETS 2 & 4/16
REINFORCING SCHEDULE ON SHEET 16/16

REFER TO DETAILS ON SHEETS 1 & 2/16

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA.4+65 TO STA.6+75
MAHONING CO. I-680

MAY 25 1971

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

FED. RD.	STATE	PROJECT	
2	OHIO		

449
656

MAH-680-6.98

NEENAH FOUNDRY CO., R-6665-1CH
FLOCKHART FOUNDRY CO., TYPE G78
CODE Nº 16208

NEENAH FOUNDRY CO., R-6665-1CH
FLOCKHART FOUNDRY CO., TYPE G78
CODE Nº 16208

SEE REINFORCING PLAN ON SHEETS 2 & 2/16
REINFORCING SCHEDULE ON SHEET 16/16
REFER TO DETAILS ON SHEETS 1 & 2/16

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

7/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS

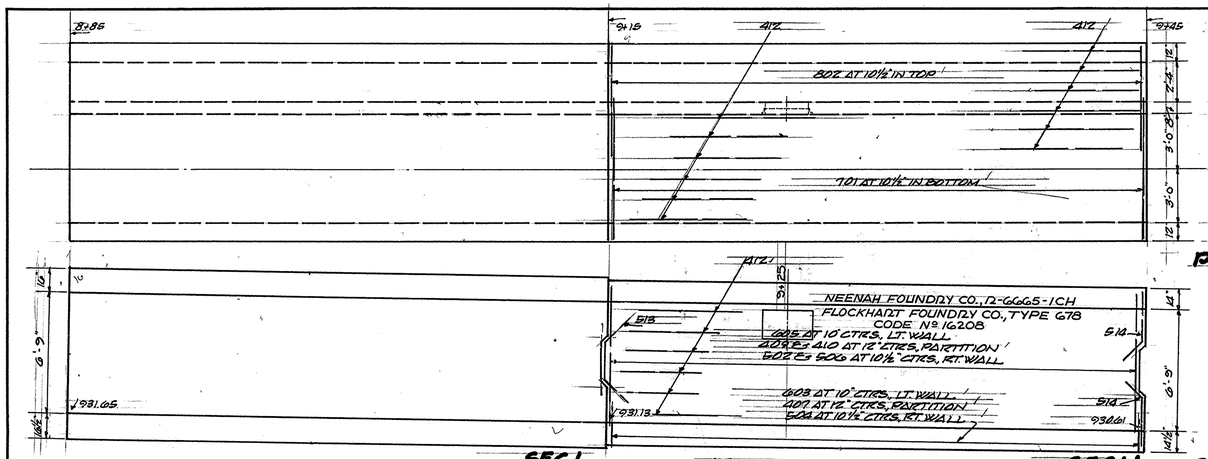
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

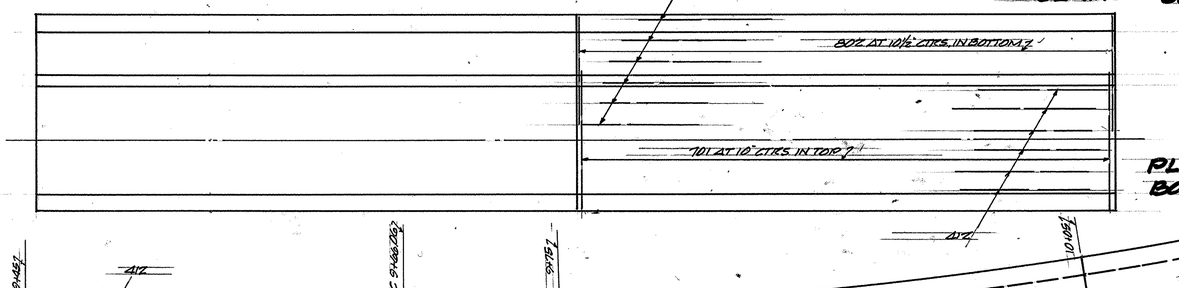
450
656



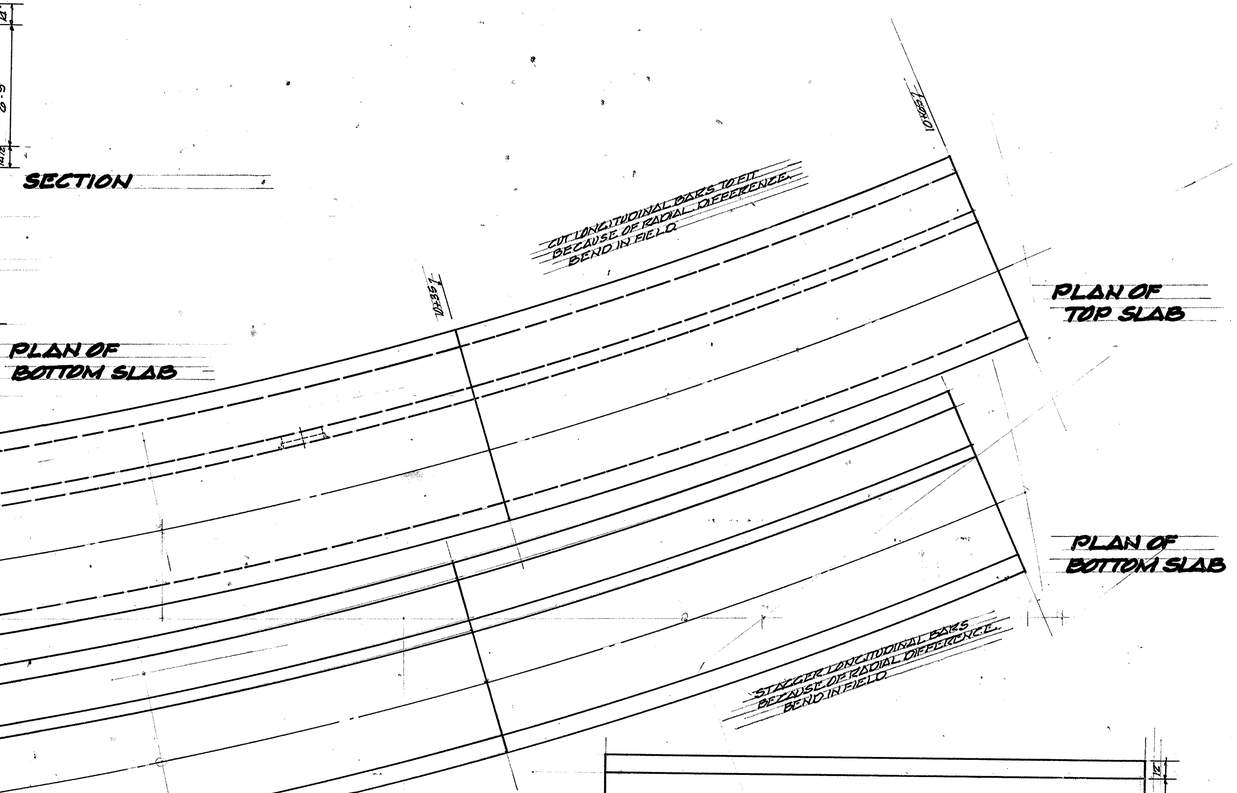
PLAN OF TOP SLAB

SEC.L SEC.M

SECTION

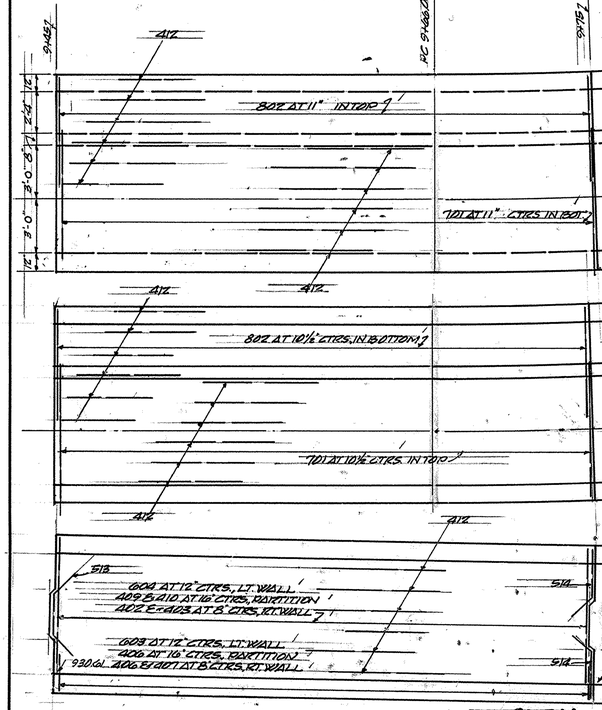


PLAN OF BOTTOM SLAB

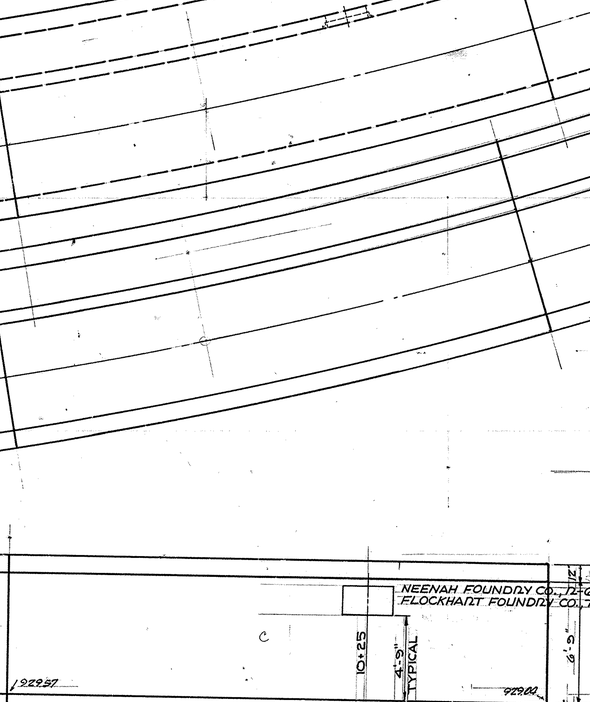


PLAN OF TOP SLAB

PLAN OF BOTTOM SLAB



SEC.N



SEC.N

SEC.N

SECTION

REFER TO DETAILS ON SHEETS 1 & 2/16

REINFORCING SCHEDULE ON SHEET 16/16

SEE REINFORCING PLAN ON SHEETS 2 & 7/16

MAY 25 1971

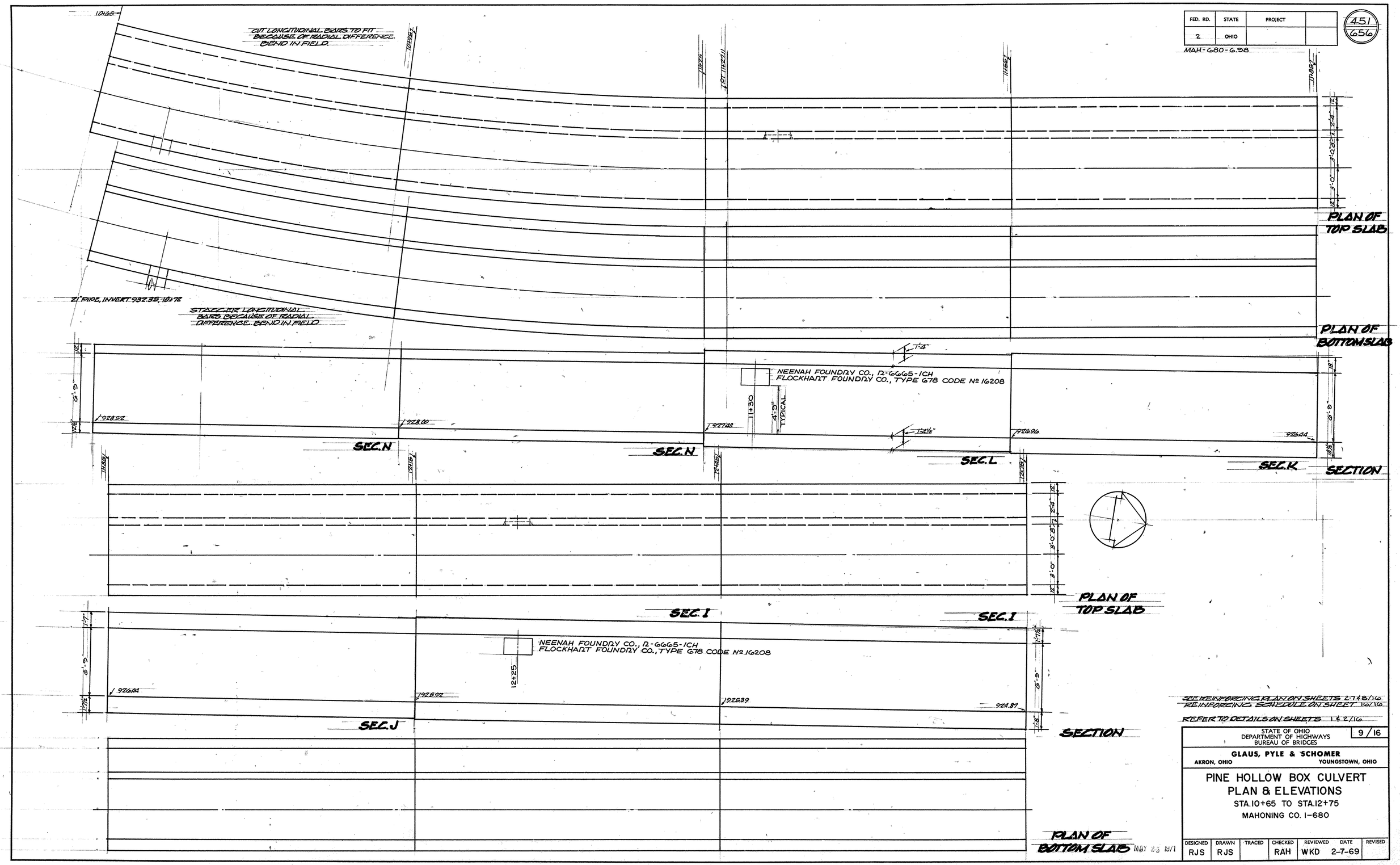
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

8/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA. 8+85, TO STA. 10+65
MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	



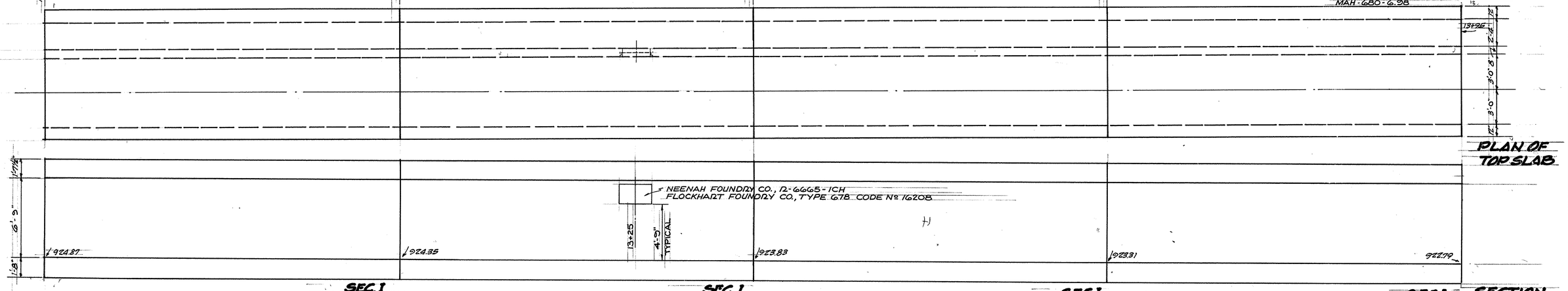
FED. RD. 2
STATE OHIO
PROJECT
451/656
MAH-680-6.98
CUT LONGITUDINAL BARS TO FIT BECAUSE OF RADIAL DIFFERENCE. BEND IN FIELD.
2" PIPE, INVERT 932.35, 10+72
STAGGER LONGITUDINAL BARS BECAUSE OF RADIAL DIFFERENCE. BEND IN FIELD.
PLAN OF TOP SLAB
PLAN OF BOTTOM SLAB
NEENAH FOUNDRY CO., R-6665-1CH
FLOCKHART FOUNDRY CO., TYPE 678 CODE Nº 16208
11+30
4'-9" TYPICAL
SEC. N
SEC. N
SEC. L
SEC. K
SECTION
PLAN OF TOP SLAB
SEC. I
SEC. I
NEENAH FOUNDRY CO., R-6665-1CH
FLOCKHART FOUNDRY CO., TYPE 678 CODE Nº 16208
12+25
SEC. J
SECTION
PLAN OF BOTTOM SLAB
MAY 25 1971
SEE REINFORCING PLAN ON SHEETS 2-7 & 8/16
REINFORCING SCHEDULE ON SHEET 16/16
REFER TO DETAILS ON SHEETS 1 & 2/16
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
9/16
GLAUS, PYLE & SCHOMER
AKRON, OHIO
YOUNGSTOWN, OHIO
PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA. 10+65 TO STA. 12+75
MAHONING CO. I-680
DESIGNED RJS
DRAWN RJS
TRACED
CHECKED RAH
REVIEWED WKD
DATE 2-7-69
REVISED

FED. RD.	STATE	PROJECT	
2	OHIO		

452
656

MAH-680-6.98

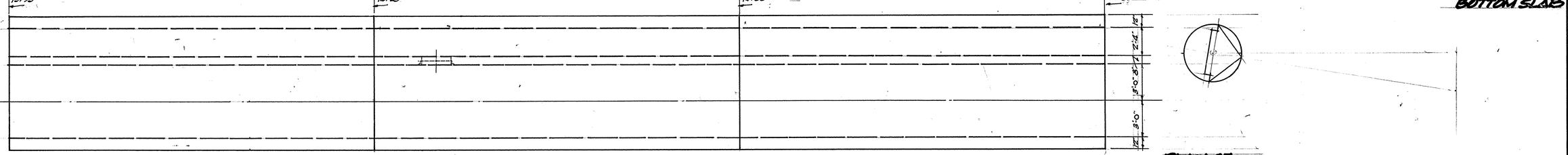
12+75 13+25 13+75 14+25



PLAN OF TOP SLAB

SECTION

13+95 14+25 14+55 14+85



PLAN OF BOTTOM SLAB

PLAN OF TOP SLAB

SECTION

PLAN OF BOTTOM SLAB

MAY 25 1971

SEE REINFORCING PLANS ON SHEETS 2 & 7/16
REINFORCING SCHEDULE ON SHEET 16/16

REFER TO DETAILS ON SHEETS 1 & 2/16

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

10/16

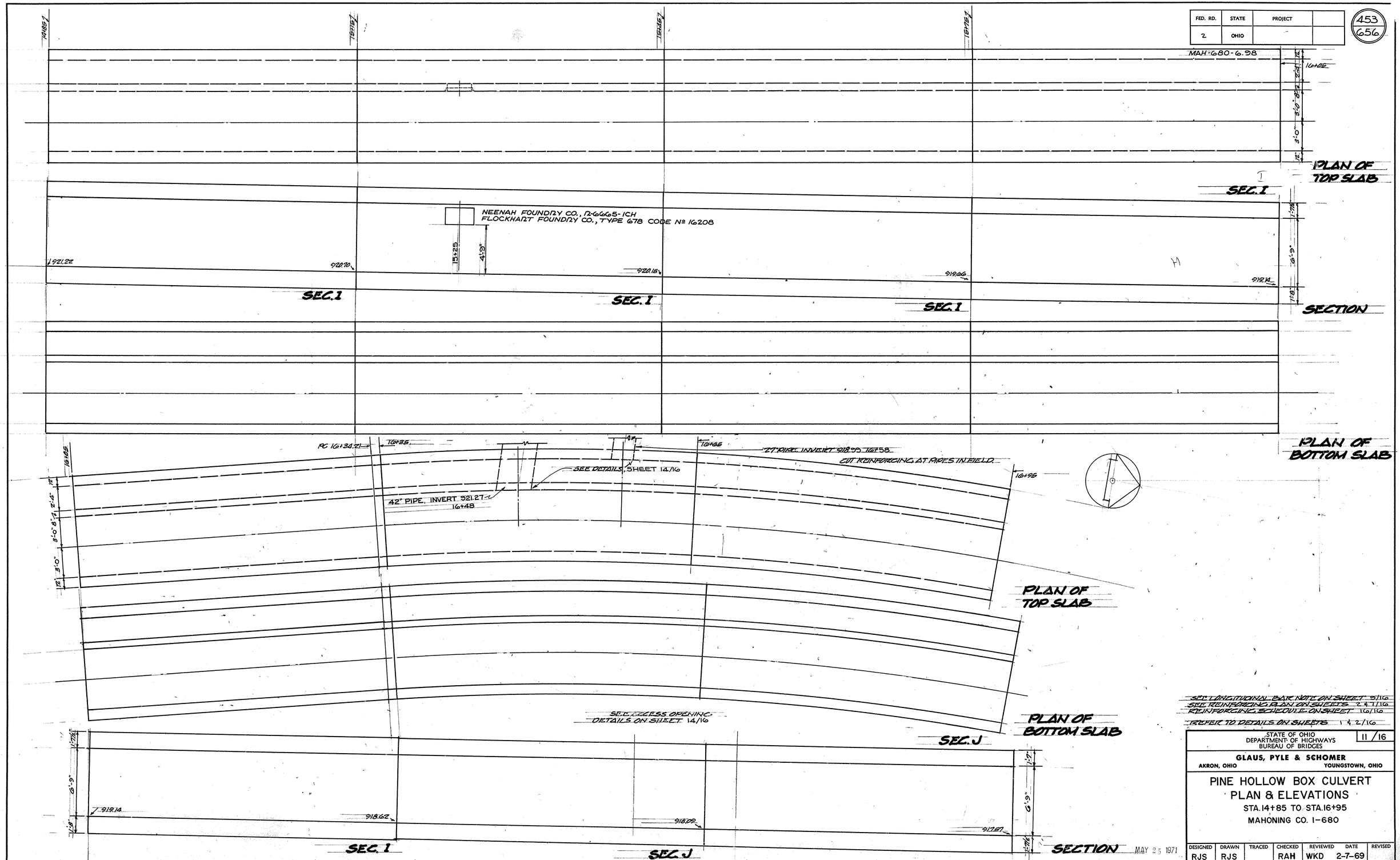
GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
PLAN & ELECTIONS
STA. 12+75 TO STA. 14+85
MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

FED. RD.	STATE	PROJECT	
2	OHIO		

453
656



SEE LONGITUDINAL BAR NOTE ON SHEET 9/16
SEE REINFORCING PLAN ON SHEETS 2 & 7/16
REINFORCING SCHEDULE ON SHEET 16/16
REFER TO DETAILS ON SHEETS 1 & 2/16

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

11/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA. 14+85 TO STA. 16+95
MAHONING CO. 1-680

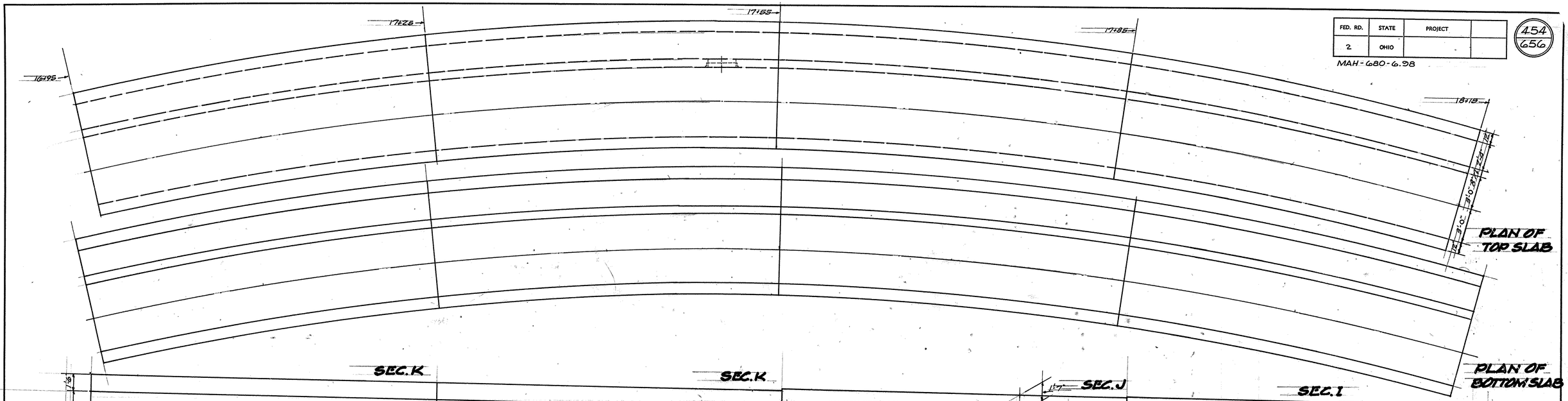
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

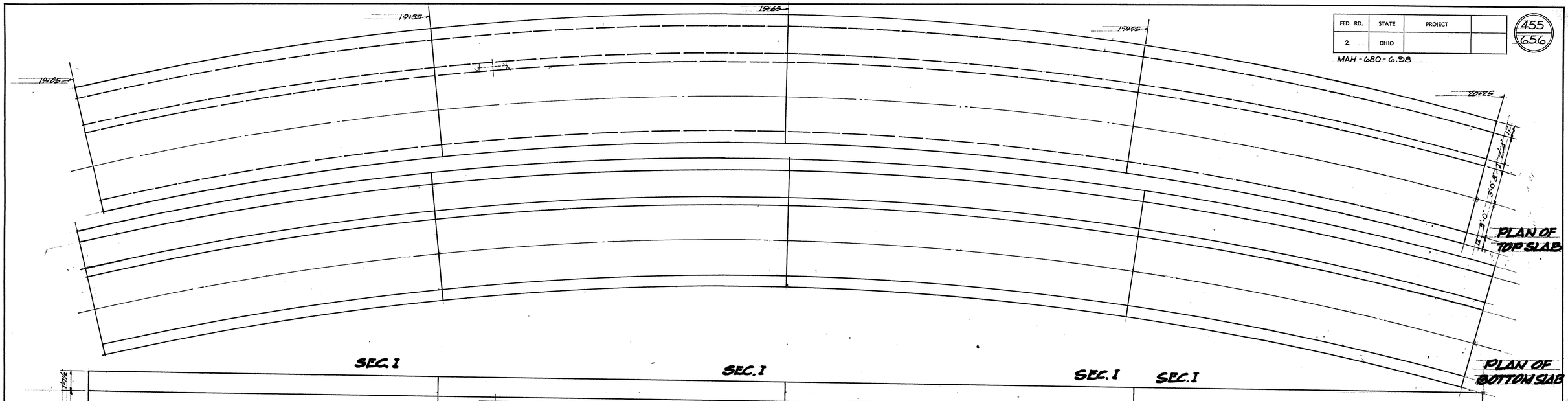
454
656

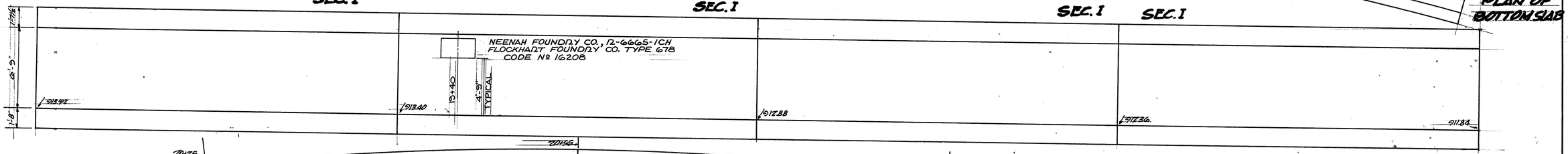

17+26
17+65
17+85
16+95
18+18
PLAN OF TOP SLAB
SEC.K
SEC.K
SEC.J
SEC.I
PLAN OF BOTTOM SLAB
NEENAH FOUNDRY CO., R-6665-1CH
FLOCKHART FOUNDRY CO., TYPE 678 CODE Nº 16208
17+50
4'-5" TYPICAL
9'-9"
1'-7½"
1'-3"
9'-3"
1'-7½"
1'-3"
9'-3"
1'-7½"
9'-3"
1'-3"
9'-3"
1'-7½"
9'-3"
1'-3"
9'-3"
1'-7½"
9'-3"
1'-3"
9'-3"
1'-7½"
9'-3"
1'-3"
9'-3"
1'-7½"
9'-3"
1'-3"
9'-3"
9'-3"
1'-3"
9'-3"
9'-3"
1'-3"
9'-3

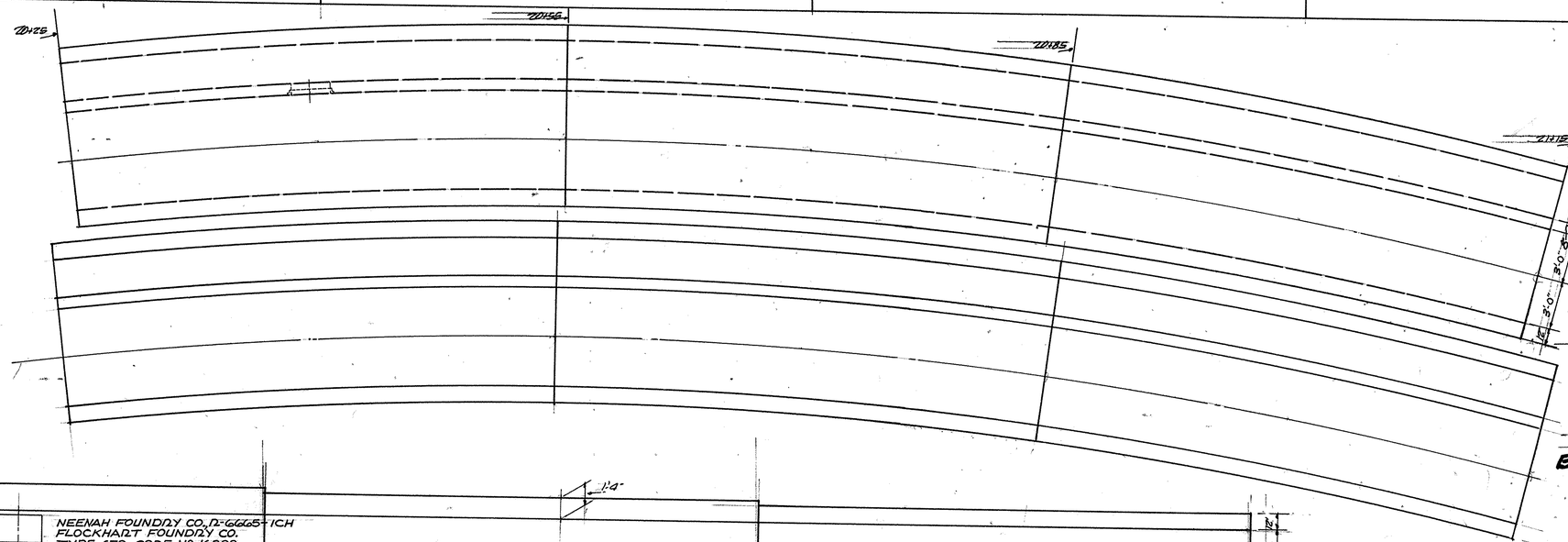
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.58

455
656

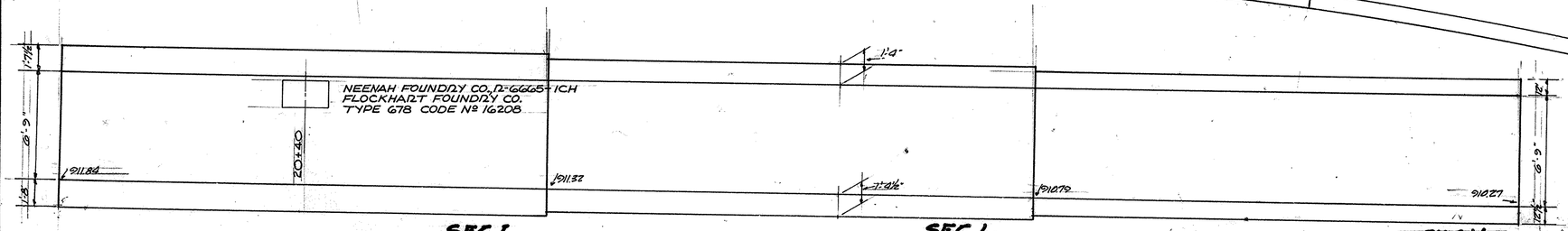






SEE LONGITUDINAL BAR NOTE ON SHEET 9/16
SEE REINFORCING PLAN ON SHEETS 2 & 7/16
FOR REINFORCING SYMBOLS ON SHEET 16/16

PLAN OF BOTTOM SLAB — REFER TO DETAILS ON SHEETS 1 & 2/16



MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

13 / 16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

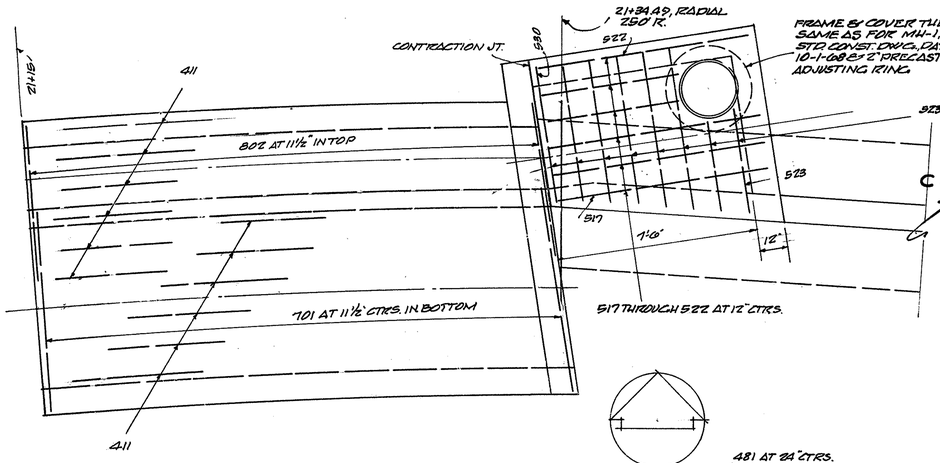
PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA. 19+05 TO STA. 21+15
MAHONING CO. I-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

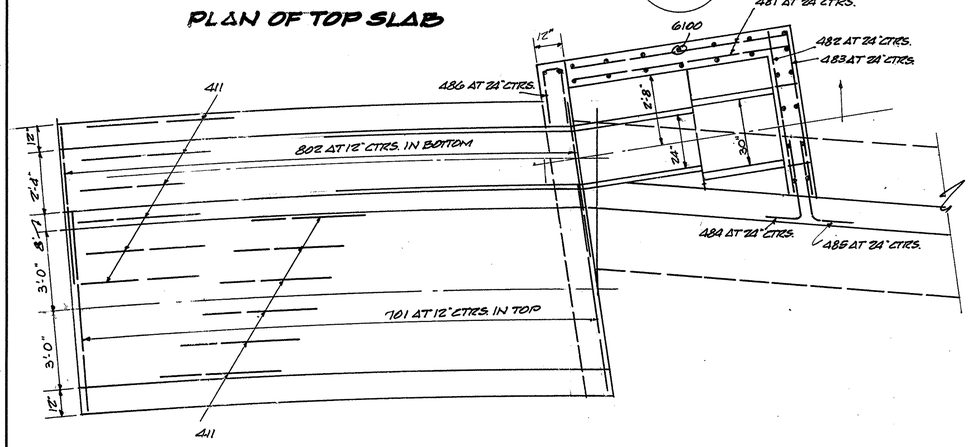
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.98

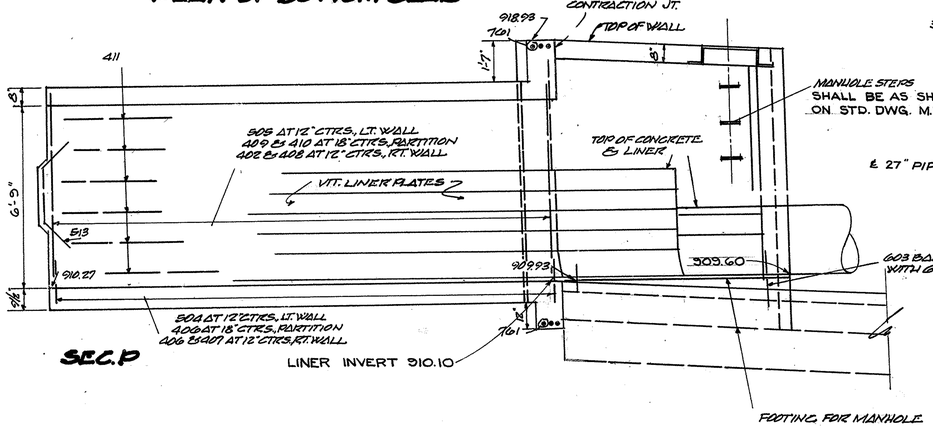
45G
65G



PLAN OF TOP SLAB

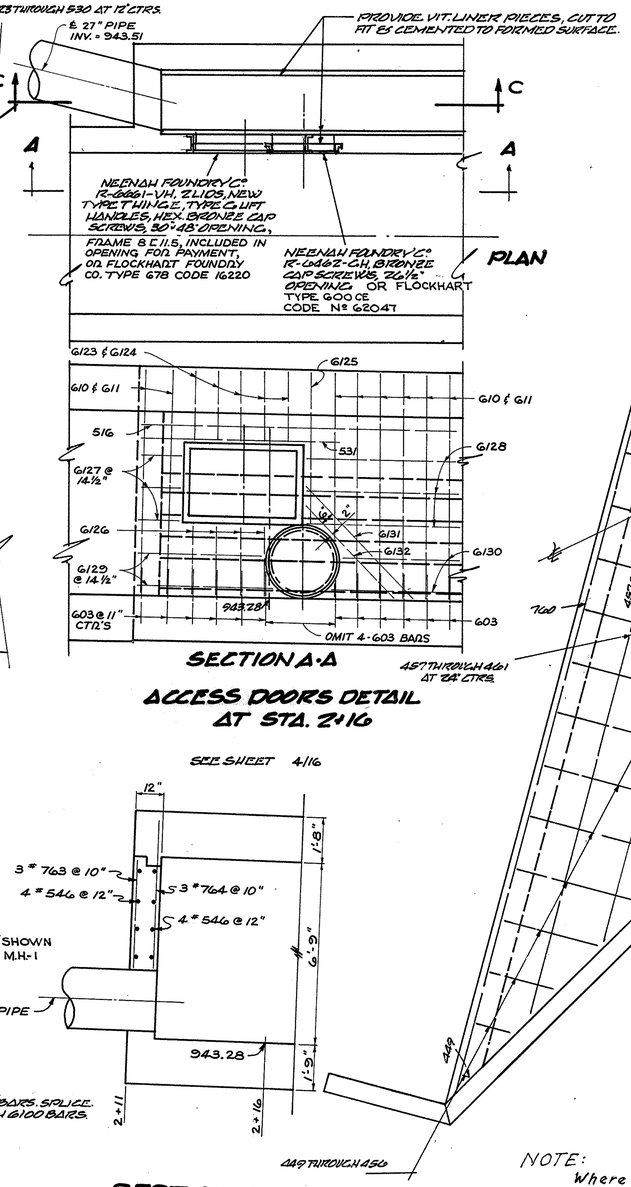


PLAN OF BOTTOM SLAB



SEC. P

SECTION

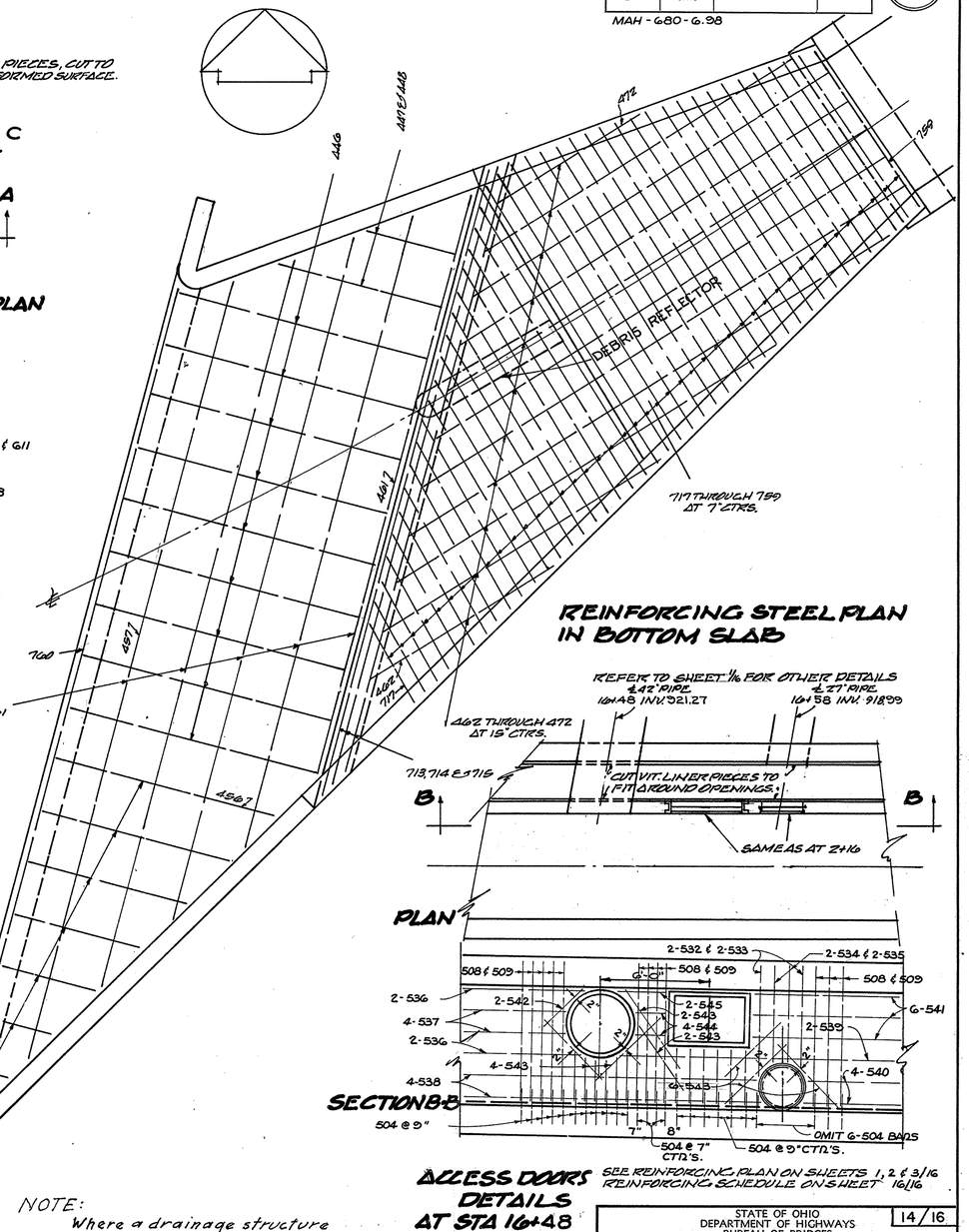


SECTION A-A

ACCESS DOORS DETAIL AT STA. 21+16

SEE SHEET 4/16

SECTION C-C



REINFORCING STEEL PLAN IN BOTTOM SLAB

REFER TO SHEET 11/16 FOR OTHER DETAILS
42" PIPE INV. 921.27
27" PIPE INV. 918.99

SEE REINFORCING PLAN ON SHEETS 1, 2 & 3/16
REINFORCING SCHEDULE ON SHEET 16/16

ACCESS DOORS DETAILS AT STA 16+48 & STA. 16+58

SEE SHEET 11/16

NOTE:
Where a drainage structure casting description includes two manufactures, it shall be considered to include the phrase "or approved equal."

Rev. 8-9-71
MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

14/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

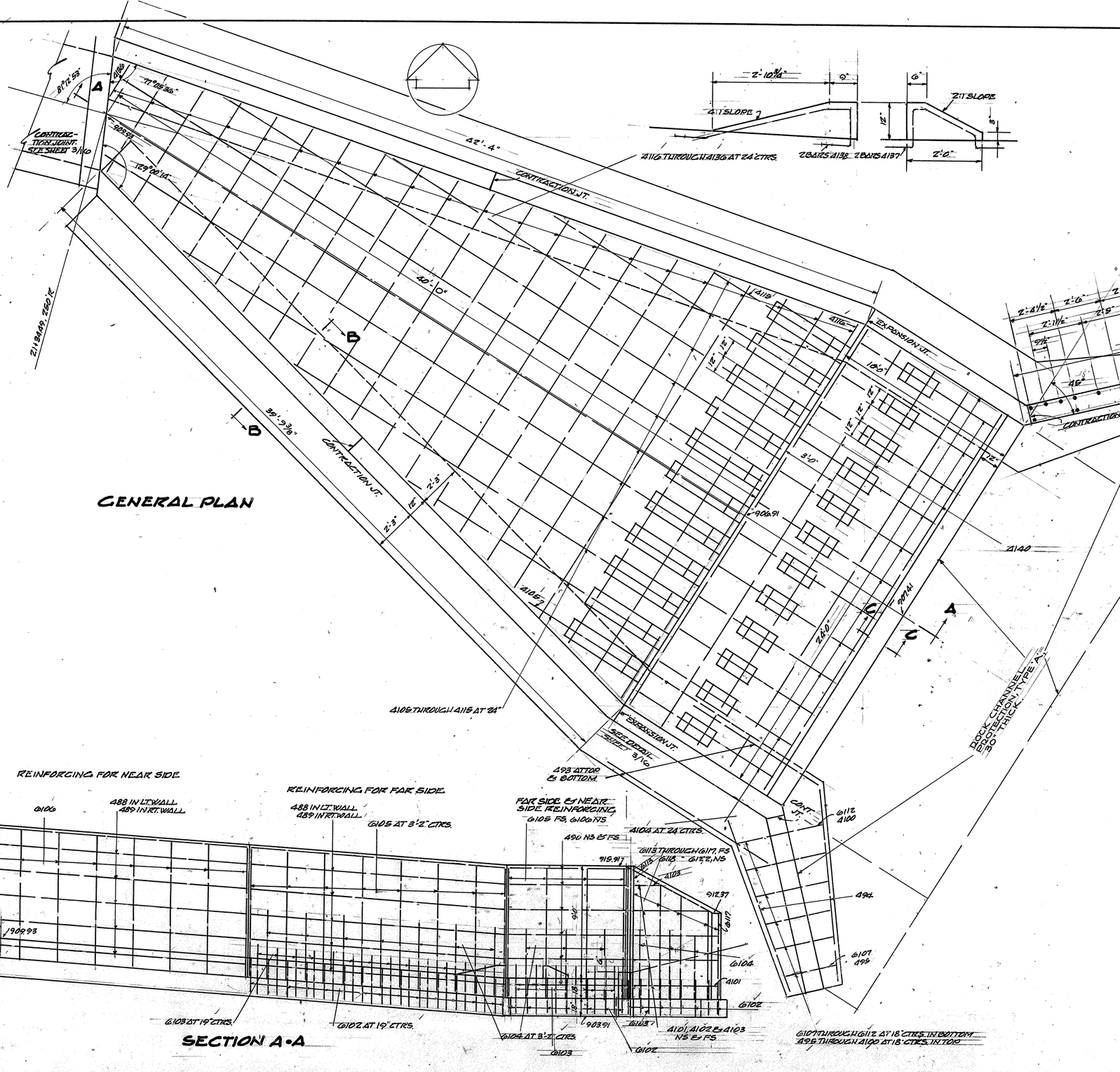
PINE HOLLOW BOX CULVERT
PLAN & ELEVATIONS
STA. 21+15 TO STA. 21+34.49
MAHONING CO. 1-680

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

457/656


B
B
A
C
C
A
89°12'59"
11°29'36"
129°00'14"
42'-4"
40'-10"
39'-3⅜"
905.38
CONTRACTION JT.
EXPANSION JT.
CONTRACTION JT.
CONTRACTION JT.
4116
4118
4116
4105 THROUGH 4115 AT 24"
EXPANSION JT. SEE DETAIL SHEET 9/16
493 AT TOP & BOTTOM
DOCK CHANNEL PROTECTION, TYPE A, 30" THICK
4140
4107 THROUGH 4112 AT 18" CTRS. IN BOTTOM
492 THROUGH 4100 AT 18" CTRS. IN TOP
492
6107
495
6112
4100
CONT. JT.
12'-72"
2'-3"
2'-3"
1'-6"
3'-0"
2'-10¾"
9"
6"
2:1 SLOPE
2:1 SLOPE
12"
8"
2:1 SLOPE
2'-0"
4116 THROUGH 4136 AT 24 CTRS.
2805 4138
2805 4137
2'-4½"
2'-1½"
2'-0"
2'-8"
1'-8"
1'-5"
9½"
100"
45°
12"
12"
12"

MICROFILMED 6-18-79 REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

458/656

MAH-680-6.98

REINFORCING DIAGRAMS

1.

Mark (1)	N	Length (3)	Weight (4)	Type (5)	Mark (1)	N°. Reqd. (2)	Length (3)	Weight (4)	Type (5)
Section A	1 Required	Inlet							
413	1	7'-6"	5	Stra.	618	1	6'-11"	10	Bent
414	1	11'-8"	8	"	619	1	7'-3"	11	"
415	1	16'-6"	11	"	620	1	7'-7"	11	"
416	1	21'-0"	14	"	621	1	8'-0"	12	"
417	1	21'-0"	14	"	622	1	8'-4"	13	"
418	1	19'-6"	13	"	623	1	8'-9"	13	"
419	1	18'-3"	12	"	624	1	9'-1"	14	"
420	1	16'-6"	11	"	625	1	9'-4"	14	"
421	1	15'-3"	10	"	626	1	9'-8"	15	"
422	1	13'-3"	9	"	627	1	10'-0"	15	"
423	1	6'-0"	4	Stra.	628	1	10'-4"	16	"
424	5	11'-4"	38	Bent	629	1	10'-8"	16	"
425	3	12'-0"	24	Stra.	630	1	11'-1"	17	"
426	1	10'-2"	7	"	631	1	11'-4"	17	"
427	1	10'-8"	7	"	632	1	11'-9"	18	"
428	1	11'-5"	8	"	633	1	12'-1"	18	"
429	1	12'-0"	8	Stra.	634	1	12'-5"	19	"
430	3	4'-11"	10	Bent	635	1	12'-9"	19	"
431	3	3'-0"	6	Stra.	636	1	13'-1"	20	"
432	4	11'-0"	29	"	637	1	13'-4"	20	"
433	2	9'-9"	13	"	638	1	13'-11"	21	"
434	2	5'-3"	7	"	639	1	13'-8"	21	"
435	4	18'-6"	49	"	640	1	13'-6"	20	"
436	2	14'-6"	19	"	641	1	13'-4"	20	"
437	2	7'-3"	10	"	642	1	13'-1"	20	"
438	8	5'-8"	30	BENT	643	1	12'-11"	19	"
439	2	4'-4"	6	STRA.	644	1	12'-9"	19	"
440	3	6'-7"	13	"	645	1	12'-6"	19	"
441	7	13'-8"	57	"	646	1	12'-3"	18	"
442	6	14'-6"	58	"	647	1	12'-1"	18	"
443	6	13'-9"	55	"	648	1	11'-10"	18	"
444	16	3'-2"	34	"	649	1	11'-8"	18	"
445	6	19'-9"	79	Stra.	650	1	11'-6"	17	"
					651	1	11'-3"	17	"
511	53	7'-0"	387	Stra.	652	1	11'-1"	17	"
512	53	2'-0"	111	Bent	653	1	10'-11"	16	"
					654	1	10'-9"	16	"
612	1	4'-10"	7	Bent	655	1	10'-6"	16	"
613	1	5'-2"	8	"	656	1	10'-3"	15	"
614	1	5'-6"	8	"	657	1	10'-1"	15	"
615	1	5'-10"	9	"	658	1	9'-11"	15	"
616	1	6'-3"	9	"	659	1	9'-8"	15	"
617	1	6'-6"	10	Bent	660	1	9'-6"	14	Bent

2.

Mark (1)	N°. Reqd. (2)	Length (3)	Weight (4)	Type (5)	Mark (1)	N°. Reqd. (2)	Length (3)	Weight (4)	Type (5)
661	1	9'-3"	14	Bent	714	2	23'-10"	97	Stra.
662	1	9'-1"	14	"	715	2	23'-6"	96	"
663	1	8'-11"	13	"					
664	1	8'-8"	13	"					
665	1	8'-6"	13	"	446	9	12'-2"	73	Bent
666	1	8'-3"	12	Bent	447	1	3'-4"	2	Stra.
667	10	6'-6"	98	Stra.	448	1	6'-3"	4	Stra.
668	8	4'-4"	52	"	449	1	2'-10"	2	Bent
669	2	4'-10"	15	"	450	1	4'-0"	3	"
670	1	5'-5"	8	"	451	1	5'-1"	3	"
671	2	5'-10"	18	"	452	1	6'-3"	4	"
672	1	6'-4"	10	"	453	1	7'-6"	5	"
673	2	6'-10"	21	"	454	1	8'-8"	6	"
674	1	7'-2"	11	"	455	1	9'-10"	7	"
675	2	7'-7"	23	"	456	1	11'-0"	7	Bent
676	1	8'-0"	12	"	457	1	30'-0"	20	Stra.
677	2	8'-4"	25	"	458	1	28'-0"	19	"
678	1	8'-8"	13	"	459	1	26'-0"	17	"
679	2	9'-0"	27	Stra.	460	1	24'-0"	16	"
680	18	4'-3"	121	Bent	461	1	22'-0"	15	"
681	18	2'-8"	72	Bent	462	1	8'-0"	5	"
682	10	2'-2"	33	Bent	463	1	12'-0"	8	"
683	10	3'-11"	59	Stra.	464	1	16'-6"	11	"
684	1	4'-6"	7	"	465	1	21'-0"	14	"
685	2	4'-10"	15	"	466	1	21'-3"	14	"
686	1	5'-3"	8	"	467	1	19'-9"	13	"
687	2	5'-7"	17	"	468	1	18'-6"	12	"
688	1	5'-11"	9	"	469	1	17'-0"	11	"
689	2	6'-3"	19	"	470	1	15'-6"	10	"
690	1	6'-7"	10	"	471	1	13'-6"	9	"
691	2	6'-10"	21	"	472	1	6'-3"	4	Stra.
692	1	7'-1"	11	"					
693	2	7'-5"	22	"	717	1	5'-1"	10	Bent
694	1	7'-8"	12	"	718	1	5'-7"	11	"
695	2	7'-10"	24	"	719	1	6'-0"	12	"
696	1	8'-1"	12	"	720	1	6'-6"	13	"
697	2	8'-4"	25	"	721	1	6'-11"	14	"
698	1	8'-6"	13	"	722	1	7'-5"	15	"
699	2	8'-8"	26	Stra.	723	1	7'-10"	16	"
					724	1	8'-4"	17	"
709	1	25'-11"	53	Bent	725	1	8'-9"	18	"
710	1	25'-8"	52	"	726	1	9'-2"	19	"
711	1	25'-3"	52	"	727	1	9'-7"	20	"
712	1	24'-11"	51	Bent	728	1	10'-1"	21	"
713	2	24'-2"	99	Stra.	729	1	10'-7"	22	Bent

3.

Mark (1)	N°. Reqd. (2)	Length (3)	Weight (4)	Type (5)	Mark (1)	N°. Reqd. (2)	Length (3)	Weight (4)	Type (5)
730	1	10'-11"	22	Bent	Section C	1 Required			
731	1	11'-5"	23	"	402	56	6'-7"	247	Stra.
732	1	11'-9"	24	"	403	56	7'-4"	274	Stra.
733	1	12'-4"	25	"	406	56	2'-2"	81	Bent
734	1	12'-8"	26	"	407	56	2'-0"	75	Stra.
735	1	13'-1"	27	"	476	2	5'-1"	7	Bent
736	1	13'-6"	28	"	477	4	4'-2"	11	Bent
737	1	13'-10"	28	"	478	12	29'-8"	238	Stra.
738	1	14'-0"	29	"	479	12	30'-2"	242	"
739	1	13'-10"	28	"	480	12	29'-0"	232	"
740	1	13'-6"	28	"					
741	1	13'-4"	27	"	801	76	7'-8"	1,556	Stra.
742	1	13'-0"	27	"		Total Weight		2,963#	
743	1	12'-9"	26	"	Section D	1 Required			
744	1	12'-6"	26	"	402	82	6'-7"	361	Stra.
745	1	12'-3"	25	"	404	82	7'-6"	411	"
746	1	12'-0"	25	"	405	36	29'-8"	714	"
747	1	11'-9"	24	"	407	164	2'-0"	219	Stra.
748	1	11'-6"	24	"	476	2	5'-1"	7	Bent
749	1	11'-2"	23	"	477	4	4'-2"	11	Bent
750	1	10'-11"	22	"					
751	1	10'-8"	22	"	801	84	7'-8"	1,720	Stra.
752	1	10'-5"	21	"		Total Weight		3,443#	
753	1	10'-2"	21	"	Section E	1 Required			
754	1	9'-11"	20	"	405	36	29'-8"	714	Stra.
755	1	9'-8"	20	"					
756	1	9'-5"	19	"	501	66	7'-8"	528	Stra.
757	1	9'-2"	19	"	502	66	6'-7"	454	"
758	1	8'-10"	18	"	504	132	2'-0"	275	Stra.
759	1	8'-7"	18	Bent	513	2	5'-1"	11	Bent
760	2	32'-9"	134	Stra.	514	4	4'-2"	17	Bent
	Total Weight		4,788						
Section B	1 Required				801	85	7'-8"	1,741	Stra.
401	38	7'-2"	162	Stra.		Total Weight		3,740#	
402	38	6'-7"	167	Stra.	Section F	1 Required			
406	38	2'-2"	55	Bent	405	36	29'-8"	714	Stra.
407	38	2'-0"	51	Stra.					
473	12	26'-2"	210	"	502	82	6'-7"	563	Stra.
474	12	26'-6"	212	"	503	82	7'-10"	670	"
475	12	25'-8"	206	Stra.	504	164	2'-0"	342	Stra.
476	2	5'-1"	7	Bent	513	2	5'-1"	11	Bent
477	4	4'-2"	11	Bent	514	4	4'-2"	17	Bent
801	58	7'-8"	1,188	Stra.	801	85	7'-8"	1,741	Stra.
	Total Weight		2,289#			Total Weight		4,058#	

4.

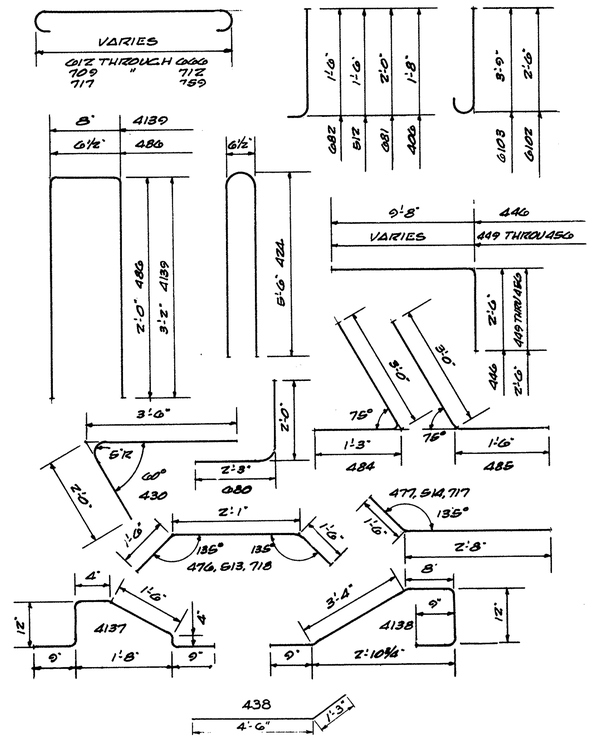
Mark (1)	No. Reqd (2)	Length (3)	Weight (4)	Type (5)	Mark (1)	No. Reqd (2)	Length (3)	Weight (4)	Type (5)
Section G and Section H (Part)	1 Required								
510	24	29'-8"	743	Stra.	701	84	7'-6"	1,288	Stra.
513	2	5'-1"	11	Bent	703	43	2'-0"	176	Stra.
515	12	16'-8"	209	Stra.	706	43	7'-11"	696	Stra.
516	26	13'-8"	307	Stra.	717	4	4'-2"	34	Bent
546	8	3'-8"	31	Stra.	718	2	5'-1"	21	Bent
601	38	8'-0"	457	Stra.	802	82	6'-4"	1,387	Stra.
602	38	6'-7"	376	Stra.		Total Weight		7,535	
603	108	2'-0"	324	Stra.	Section J	6 Required			
610	16	6'-6"	156	Stra.	504	76	2'-0"	158	Stra.
611	10	8'-3"	123	Stra.	508	28	6'-6"	189	Stra.
701	44	7'-6"	675	Stra.	509	28	8'-2"	238	Stra.
703	56	2'-0"	229	Stra.	510	42	29'-8"	1,299	Stra.
707	39	8'-0"	638	Stra.	532	2	5'-8"	12	Stra.
708	17	6'-7"	229	Stra.	533	2	4'-0"	8	Stra.
717	4	4'-2"	34	Bent	534	2	5'-6"	12	Stra.
763	3	3'-9"	23	Stra.	535	2	3'-10"	8	Stra.
764	3	5'-3"	32	Stra.	536	4	11'-9"	49	Stra.
801	46	7'-8"	942	Stra.	537	4	11'-2"	47	Stra.
802	40	6'-4"	676	Stra.	538	4	21'-6"	90	Stra.
	Total Weight		6,496		539	2	15'-3"	32	Stra.
Section H	17 Required				540	4	5'-6"	23	Stra.
510	54	29'-8"	1,671	Stra.	541	6	8'-7"	54	Stra.
531	2	7'-6"	16	Stra.	542	2	3'-0"	6	Stra.
603	62	2'-0"	185	Stra.	543	14	4'-8"	68	Stra.
610	27	6'-6"	263	Stra.	544	2	1'-9"	4	Stra.
611	27	8'-3"	334	Stra.	545	2	2'-1"	4	Stra.
6123	5	1'-0"	7	Stra.	602	43	6'-7"	426	Stra.
6124	5	2'-8"	20	Stra.	603	86	2'-0"	258	Stra.
6125	2	5'-10"	16	Stra.	607	43	7'-11"	512	Stra.
6126	8	2'-2"	26	Stra.	701	76	7'-6"	1,165	Stra.
6127	6	1'-6"	13	Stra.	703	38	2'-0"	155	Stra.
6128	6	7'-7"	68	Stra.	705	38	7'-11"	615	Stra.
6129	4	4'-7"	28	Stra.	717	4	4'-2"	34	Bent
6130	4	6'-6"	39	Stra.	718	2	5'-1"	21	Bent
6131	2	5'-7"	17	Stra.	802	74	6'-4"	1,251	Stra.
701	92	7'-6"	1,410	Stra.		Total Weight		6,748	
703	120	2'-0"	491	Stra.	Section K	4 Required			
707	83	8'-0"	1,357	Stra.	504	64	2'-0"	134	Stra.
708	37	6'-7"	498	Stra.	508	32	6'-6"	217	Stra.
717	4	4'-2"	34	Bent	509	32	8'-2"	273	Stra.
718	2	5'-1"	21	Bent	510	54	29'-8"	1,671	Stra.
802	86	6'-4"	1,454	Stra.	602	38	6'-7"	376	Stra.
	Total Weight		7,968		603	76	2'-0"	228	Stra.
Section I	24 Required				606	38	7'-10"	447	Stra.
510	54	29'-8"	1,671	Stra.	701	72	7'-6"	1,104	Stra.
602	49	6'-7"	484	Stra.	703	35	2'-0"	143	Stra.
603	162	2'-0"	487	Stra.	704	35	7'-10"	560	Stra.
608	49	7'-11"	583	Stra.	717	4	4'-2"	34	Bent
609	32	8'-3"	396	Stra.	718	2	5'-1"	21	Bent
610	32	6'-6"	312	Stra.	802	70	6'-4"	1,183	Stra.
						Total Weight		6,391	

5.

Mark (1)	No. Reqd (2)	Length (3)	Weight (4)	Type (5)	Mark (1)	No. Reqd (2)	Length (3)	Weight (4)	Type (5)
Section L	4 Required								
407	76	2'-0"	102	Stra.	410	14	7'-4"	69	Stra.
409	38	6'-6"	165	Stra.	411	54	19'-0"	685	Stra.
410	38	7'-4"	186	Stra.	481	10	8'-2"	55	Stra.
412	54	29'-8"	1,070	Stra.	482	5	6'-0"	20	Stra.
502	49	6'-7"	336	Stra.	483	5	6'-2"	21	Stra.
504	98	2'-0"	204	Stra.	484	5	4'-3"	14	Bent
507	49	7'-8"	392	Stra.	485	5	4'-6"	15	Bent
701	72	7'-6"	1,104	Stra.	486	5	4'-7"	15	Bent
702	32	7'-8"	502	Stra.	504	20	2'-0"	42	Stra.
703	32	2'-0"	131	Stra.	505	20	7'-0"	146	Stra.
717	4	4'-2"	34	Bent	513	2	5'-1"	11	Bent
718	2	5'-1"	21	Bent	517	1	8'-2"	9	Stra.
802	70	6'-4"	1,183	Stra.	518	1	8'-2"	9	Stra.
	Total Weight		5,430		519	1	8'-2"	9	Stra.
Section M	1 Required				520	1	5'-0"	5	Stra.
407	62	2'-0"	83	Stra.	521	1	5'-2"	5	Stra.
409	31	6'-6"	135	Stra.	522	1	8'-2"	9	Stra.
410	31	7'-4"	152	Stra.	523	1	3'-10"	4	Stra.
412	54	29'-8"	1,070	Stra.	524	1	3'-5"	4	Stra.
502	35	6'-7"	241	Stra.	525	1	6'-4"	7	Stra.
504	70	2'-0"	146	Stra.	526	1	6'-0"	6	Stra.
506	35	7'-6"	274	Stra.	527	1	5'-10"	6	Stra.
513	2	5'-1"	11	Bent	528	1	5'-7"	6	Stra.
514	4	4'-2"	17	Bent	529	1	5'-5"	6	Stra.
603	37	2'-0"	111	Stra.	530	1	5'-3"	5	Stra.
605	37	7'-6"	417	Stra.	603	24	2'-0"	72	Stra.
701	72	7'-6"	1,104	Stra.	6100	24	8'-5"	303	Stra.
802	70	6'-4"	1,183	Stra.	701	41	7'-6"	629	Stra.
	Total Weight		4,944		761	6	12'-0"	147	Stra.
Section N	7 Required				802	41	6'-4"	693	Stra.
402	46	6'-7"	202	Stra.		Total Weight		3,367	
403	46	7'-4"	225	Stra.	Outlet				
406	92	2'-2"	133	Bent	487	82	3'-6"	192	Stra.
407	46	2'-0"	61	Stra.	488	20	20'-10"	278	Stra.
409	23	6'-6"	100	Stra.	489	20	19'-7"	262	Stra.
410	23	7'-4"	113	Stra.	490	24	9'-8"	155	Stra.
412	54	29'-8"	1,070	Stra.	491	18	22'-0"	265	Stra.
513	2	5'-1"	11	Bent	492	18	20'-9"	249	Stra.
514	4	4'-2"	17	Bent	493	18	12'-0"	144	Stra.
603	31	2'-0"	93	Stra.	494	18	10'-6"	126	Stra.
604	31	7'-4"	341	Stra.	495	2	3'-0"	4	Stra.
701	68	7'-6"	1,042	Stra.	496	2	3'-4"	4	Stra.
802	68	6'-4"	1,149	Stra.	497	2	3'-8"	5	Stra.
	Total Weight		4,557		498	2	4'-1"	5	Stra.
Section P and Manhole	1 Required				499	2	4'-6"	6	Stra.
402	20	6'-7"	88	Stra.	4100	2	4'-11"	7	Stra.
406	48	2'-2"	70	Bent	4101	12	9'-8"	77	Stra.
407	20	2'-0"	27	Stra.	4102	4	7'-9"	21	Stra.
408	20	7'-0"	94	Stra.	4103	4	2'-6"	7	Stra.
409	14	6'-6"	61	Stra.					

6.

Mark (1)	No. Reqd (2)	Length (3)	Weight (4)	Type (5)	Mark (1)	No.Reqd (2)	Length (3)	Weight (4)	Type (5)
4104	12	9'-8"	78	Stra.	6114	2	9'-5"	28	Stra.
4105	1	7'-8"	5	Stra.	6115	2	8'-6"	26	Stra.
4106	1	16'-0"	11	Stra.	6116	2	7'-5"	22	Stra.
4107	1	24'-4"	16	Stra.	6117	2	6'-9"	20	Stra.
4108	1	32'-6"	22	Stra.	6118	2	10'-7"	32	Stra.
4109	2	20'-6"	27	Stra.	6119	2	9'-5"	28	Stra.
4110	2	21'-0"	28	Stra.	6120	2	8'-6"	26	Stra.
4111	2	21'-6"	29	Stra.	6121	2	7'-5"	22	Stra.
4112	1	35'-0"	23	Stra.	6122	2	6'-9"	20	Stra.
4113	1	26'-0"	17	Stra.	762	7	23'-8"	339	Stra.
4114	1	17'-0"	11	Stra.		Total Weight		6,245	
4115	1	8'-0"	5	Stra.					
4116	1	23'-5"	16	Stra.					
4117	1	22'-6"	15	Stra.					
4118	1	21'-7"	14	Stra.					
4119	1	20'-8"	14	Stra.					
4120	1	19'-9"	13	Stra.					
4121	1	18'-10"	13	Stra.					
4122	1	17'-11"	12	Stra.					
4123	1	17'-0"	11	Stra.					
4124	1	16'-0"	11	Stra.					
4125	1	15'-1"	10	Stra.					
4126	1	14'-1"	9	Stra.					
4127	1	13'-3"	9	Stra.					
4128	1	12'-4"	8	Stra.					
4129	1	11'-4"	8	Stra.					
4130	1	10'-6"	7	Stra.					
4131	1	9'-6"	6	Stra.					
4132	1	8'-7"	6	Stra.					
4133	1	7'-9"	5	Stra.					
4134	1	6'-9"	5	Stra.					
4135	1	5'-9"	4	Stra.					
4136	1	1'-9"	1	Stra.					
4137	24	4'-8"	75	Bent					
4138	22	6'-6"	96	Bent					
4139	13	7'-0"	61	Bent					
4140	5	23'-8"	79	Stra.					
6101	82	5'-2"	636	Stra.					
6102	82	3'-2"	390	Bent					
6103	60	4'-5"	398	Bent					
6104	36	5'-9"	311	Stra.					
6105	40	10'-7"	636	Stra.					
6106	40	10'-4"	621	Stra.					
6107	2	3'-0"	9	Stra.					
6108	2	3'-4"	10	Stra.					
6109	2	3'-8"	11	Stra.					
6110	2	4'-1"	12	Stra.					
6111	2	4'-6"	14	Stra.					
6112	2	4'-11"	15	Stra.					
6113	2	10'-7"	32	Stra.					



Participating Funds Code 7223

SUMMARY
TOTAL WEIGHT OF REINFORCING BARS

Section A	Inlet	4,788#
Section B	1 x 2,289#	2,289
Section C	1 x 2,963#	2,963
Section D	1 x 3,443#	3,443
Section E	1 x 3,740#	3,740
Section F	1 x 4,058#	4,058
Section G & Part H	1 x 6,496#	6,496
Section H	17 x 7,968#	135,456
Section I	24 x 7,535#	180,840
Section J	6 x 6,748#	40,488
Section K	4 x 6,391#	25,564
Section L	4 x 5,430#	21,720
Section M	1 x 4,944#	4,944
Section N	7 x 4,557#	31,899
Section P & Manhole	1 x 3,367	3,367
Section	Outlet	6,245
TOTAL WEIGHT		478,300

REPLACEMENT BARS:

MARK	NO. REQ.	LENGTH	SHAPE
RE401	1	6'-3"	ST.
RE501	1	6'-7"	ST.
RE601	1	6'-11"	ST.
RE701	1	7'-3"	ST.
RE801	1	7'-6"	ST.

NOTE:
BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT INDICATES THE BAR SIZE. THE TWO OR THREE FOLLOWING DIGITS INDICATE THE BAR DESIGNATION.

MAY 25 1971

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITIES
310	SUBBASE (703.08)	C.Y.	13
503	UNCLASSIFIED EXCAVATION	C.Y.	1,711
503	ROCK EXCAVATION	C.Y.	10,495
509	REINFORCING STEEL	LBS.	478,300
511	CONCRETE FOR STRUCTURES TOP SLAB CLASS "C"	C.Y.	1,283
511	CONCRETE FOR STRUCTURES BOTTOM SLAB CLASS "C"	C.Y.	1,323
511	CONCRETE FOR STRUCTURES WALLS, CLASS "C"	C.Y.	1,388
511	CONCRETE FOR STRUCTURES PAVEMENT SLAB, CLASS "C"	C.Y.	17
511	CONCRETE FOR STRUCTURES FOOTING, CLASS "C"	C.Y.	44
516	1/2" PREFORMED EXPANSION JOINT FILLER	S.F.	74
518	POROUS BACKFILL	C.Y.	56
601	ROCK CHANNEL PROTECTION, TYPE "A" (30" THICK)	C.Y.	58
603	24" 706.08 55 SPLIT PIPE	L.F.	1,927
603	30" 706.08 55 SPLIT PIPE	L.F.	3
SPECIAL	VITRIFIED LINER PLATES, Clay	S.F.	12,339
604	C.I. MANHOLE STEPS	EACH	3
604	MANHOLE FRAME AND COVER 15" X 29"	EACH	17
604	MANHOLE FRAME AND COVER 30" X 48"	EACH	2
604	MANHOLE FRAME AND COVER 26-1/2" DIA.	EACH	1

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

16/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

PINE HOLLOW BOX CULVERT
ESTIMATED QUANITIES
REINFORCING SCHEDULE
MAHONING CO. I-680

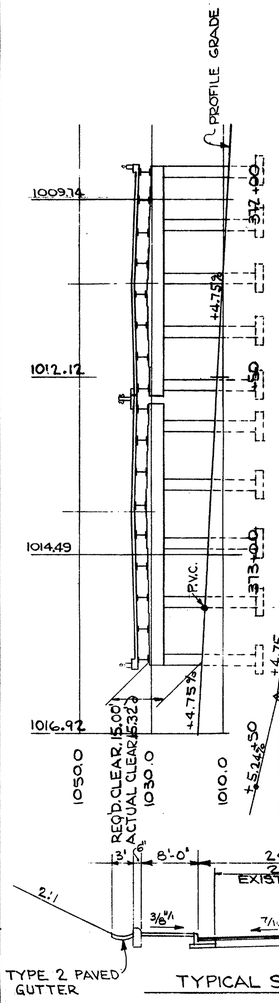
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	2-7-69	

MICROFILMED
JUL 10 1979
REPRODUCTION

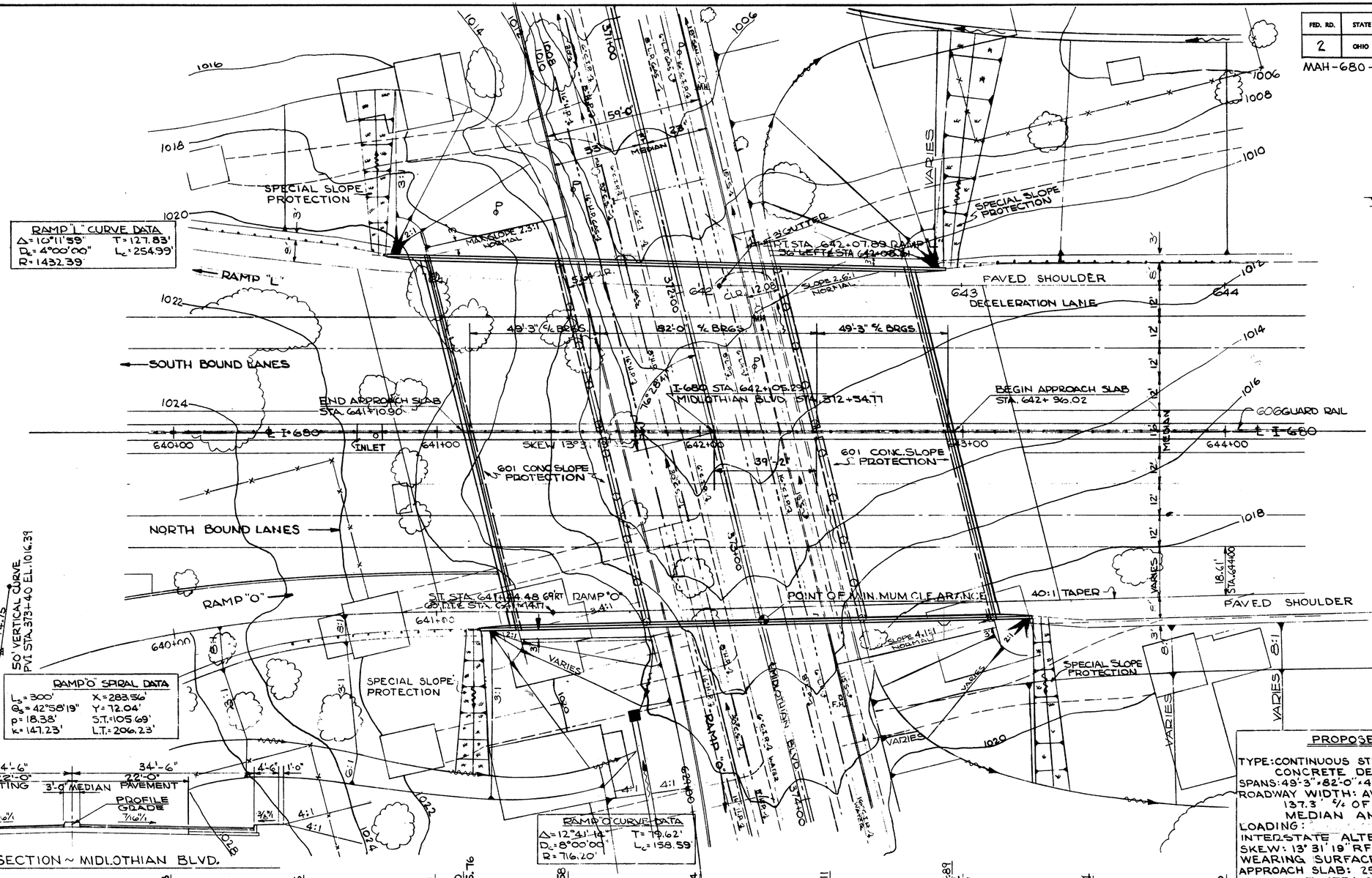
FED. RD.	STATE	PROJECT	
2	OHIO		

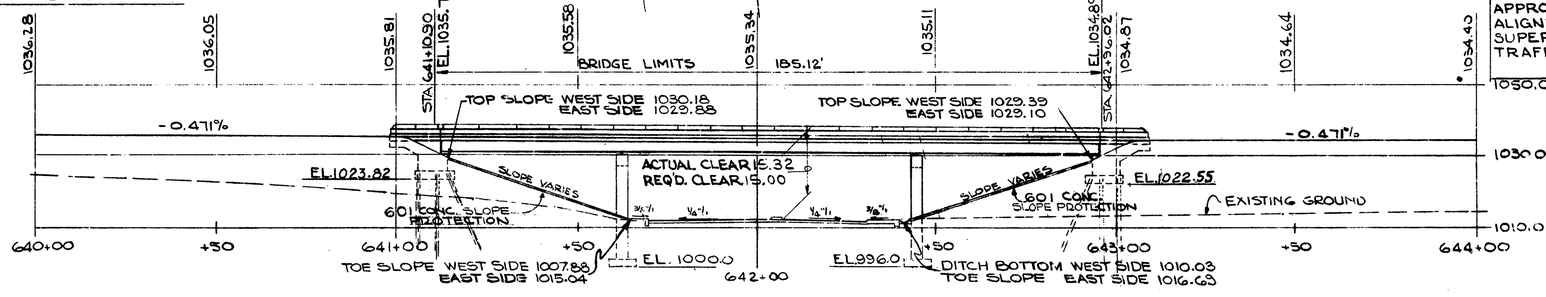
MAH-680-6.98

450
656



TYPICAL SECTION ~ MIDLOTHIAN BLVD.





PILES

ALL PILING 10BP42 STEEL
ESTIMATED PAY LENGTH:
ABUT. Nº1 - FORWARD 26.6' REAR 25.8'
ABUT. Nº2 - FORWARD 30.8' REAR 30.0'

SLOPE PROTECTION

601 CONCRETE SLOPE PROTECTION

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 49'-3" - 82'-0" - 49'-3" ℄ OF BEARINGS
ROADWAY WIDTH: AVERAGE ROADWAY WIDTH 137.3' ℄ OF PARAPETS INCLUDING MEDIAN AND 1' SAFETY CURBS.
LOADING: HS20-44 AND INTERSTATE ALTERNATE LOADING.
SKEW: 13° 31' 19" RF.
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 25' LONG SPECIAL
ALIGNMENT: STRAIGHT.
SUPERELEVATION: NONE.
TRAFFIC COUNT: MIDLOTHIAN BLVD. 1960 ADT 24200
: EXPRESSWAY 1975 ADT = 71,300

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SITE PLAN

BRIDGE Nº MAH. 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DS	DSH	DSH	D.A.H.	W.K.D.	5-8-70	

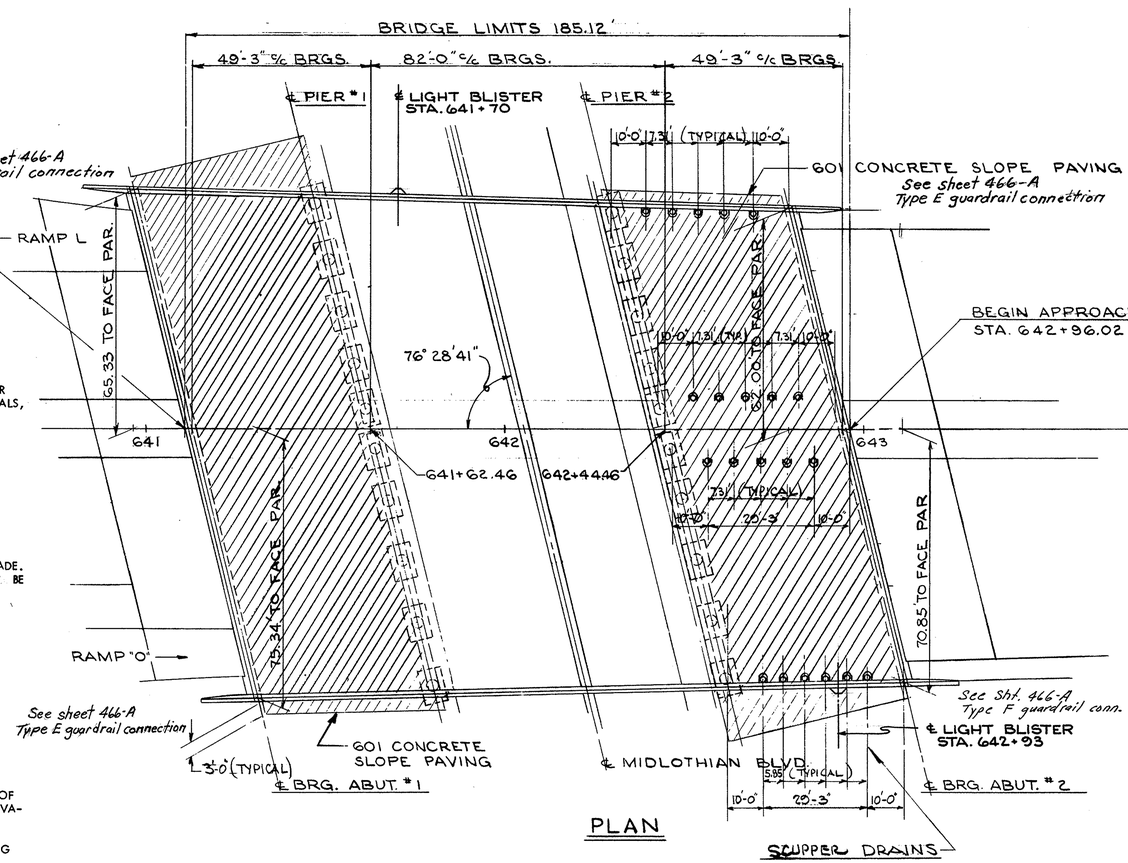
MAY 29 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

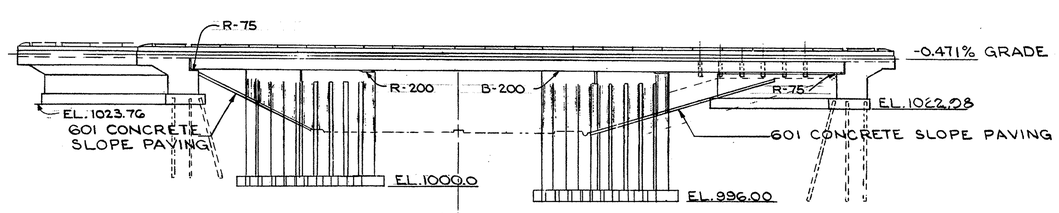
459-A
656

MAH-680-6.98



PLAN

NOTE:
FOR DETAIL OF LIGHT BLISTER
SEE SHT. Nº 15/18 MAH. 680-0794



ELEVATION

* HP10x42 piles formerly designated 10BP42

GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1965, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS 20-44

CONCRETE CLASS C - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE
UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE

STRUCTURAL STEEL - ASTM A36- UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616, OR A617, DEFORMED, INTERMEDIATE OR HARD GRADE. UNIT STRESS 20,000 P.S.I. EXCEPT THAT SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82, A806, A499 or A615

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-67	REVISED 6-12-69
BR-1-65	REVISED 11-24-65
RB-1-55	REVISED 2-2-59
SD-1-69	DATED 6-12-69

AND TO SUPPLEMENTAL SPECIFICATIONS:

808	REVISED 1-1-71
836	DATED 1-1-71

EMBANKMENT CONSTRUCTION: THE EMBANKMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL BE MADE FOR THE ABUTMENTS AND FOR PIERS #1 AND #2.

FOUNDATION BEARING PRESSURE: PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 12 TONS PER SQ. FT.

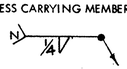
FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATION SHOWN WHICHEVER IS LOWER.

ABUTMENT PILES: PILE CAPACITY SHALL BE 45 TONS PER PILE USING A 7,000 FT./LB. HAMMER DRIVEN TO FIRM CONTACT WITH BEDROCK. IF THE LENGTH OF PENETRATION IS APPROXIMATELY EQUAL TO THE DEPTH TO BEDROCK ACCORDING TO THE BRIDGE FOUNDATION INVESTIGATION REPORT, THE FIRM CONTACT SHALL BE CONSIDERED AS ATTAINED WHEN THE CAPACITY ACCORDING TO THE FORMULA IN 507.05 IS NOT LESS THAN THE FOLLOWING VALUE FOR A PILE HAMMER OF FOLLOWING ENERGY RATING FOR ABUTMENT PILES:

35 TONS PER PILE USING AN 11,000 FT. LB. HAMMER
35 TONS PER PILE USING A 15,000 FT. LB. HAMMER

REAR AND FORWARD ABUTMENTS ARE DESIGNED FOR A MAXIMUM LOAD OF 35 TONS PER PILE.

WELDS ON NON-STRESS CARRYING MEMBERS ARE SHOWN THUS:



UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN.
503	1,185	CU. YD.	UNCLASSIFIED EXCAVATION		722	463	
503	9	CU. YD.	ROCK EXCAVATION			9	
503	L. SUM	L. SUM	COFFERDAMS, CRIBS AND SHEETING				L. SUM
505	L. SUM	L. SUM	TEST PILE				L. SUM
507	1,757	LIN. FT.	STEEL PILES - HP10x42 *		1,757		
509	312,562	LBS.	REINFORCING STEEL	201,669	31,416	79,477	
511	742	CU. YD.	CLASS "C" CONC. - SUPERSTRUCTURE	742			
511	262	CU. YD.	CLASS "C" CONC. PIERS ABOVE FTGS.			262	
511	270	CU. YD.	CLASS "C" CONC. - ABUTS. ABOVE FTGS.		270		
511	323	CU. YD.	CLASS "C" CONC. - FOOTINGS		217	106	
513	654,652	LBS.	STRUCTURAL STEEL	654,652			
514	654,652	LBS.	FIELD PAINTING OF STRUCT. STL.	654,652			
517	414	LIN. FT.	RAILING (concrete parapet & pipe rail)	365	49		
517	185	LIN. FT.	RAILING, (DBL. FACED DEEP BEAM RAIL WITH STL. POSTS & BOLTS)				
518	138	CU. YD.	POROUS BACKFILL		138		
518	270	LIN. FT.	6" HEL. PER. C.M.P., 707.01		270		
518	115	LIN. FT.	6" HEL. NON-PER. C.M.P. - INCLUDING SPECIALS, 707.01		115		
518	21	EACH	SCUPPERS - INCLD. SUPPORTS	21			
601	1,700	SQ. YDS.	CONC. SLOPE PROTECTION		1,700		
625			SEE SHT. 424 - GEN. LIGHTING SUMMARY				
808	742	UNITS	CHEMICAL ADMIXTURE FOR CONCRETE, TYPE A, B, OR D	742			
512	16	LIN. FT.	PRE-MOLDED SEALING STRIP		16		
516	145	SQ. FT.	½" PREFORMED EXP. JT. FILLER		145		
516	34	SQ. FT.	1" PREFORMED EXP. JT. FILLER		34		

ESTIMATED QUANTITIES: J.T.M. 9-17-69 CH'KD. R.A.H.-5-10-70

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION
BRIDGE Nº MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

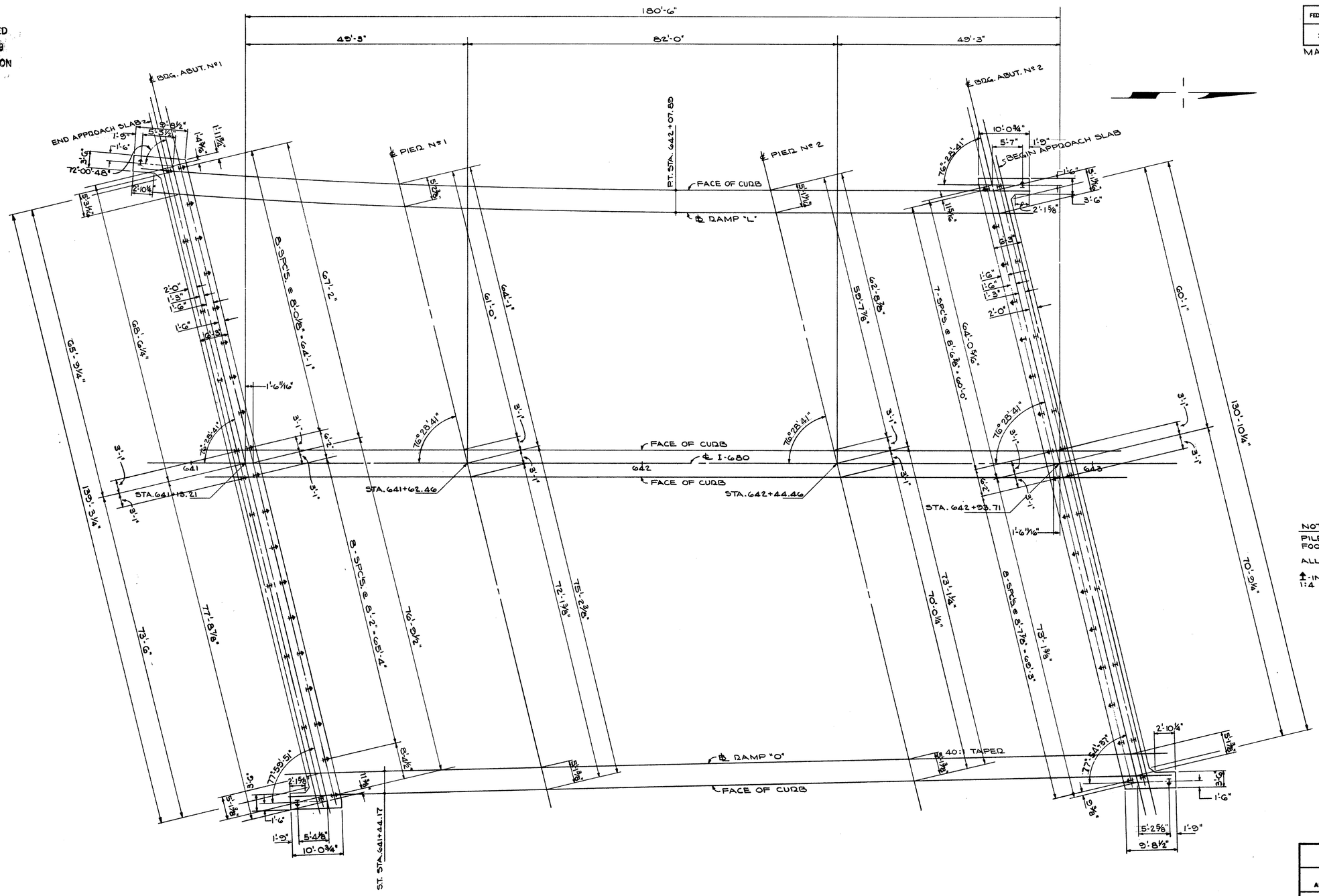
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	JWC		R.A.H.	W.K.D.	5-8-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

460
656

MAH. 680-6.58



NOTES:

PILES OCCUR ON ABUTMENT FOOTINGS ONLY.

ALL PILES 10BP42

↥ INDICATES DIRECTION OF 1:4 BATTER ON PILES.

GEOMETRIC & PILE PLAN

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

GEOMETRIC & PILE PLAN
BRIDGE N° MAH. 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

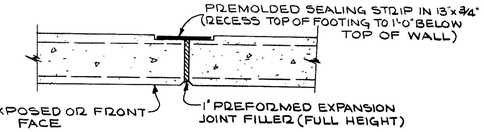
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	J.D.P.		R.A.H.	W.K.P.	5-8-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.-680-6.98

461
656



EXPANSION JOINT DETAIL (TYP.)

ELEVATION TABLE													
LOCATION	S	R	Q	P	N	M	L	K	J	W	V	X	Y
ABUT. Nº 1 RT. SIDE	1030.88	1031.04	1031.19	1031.35	1031.51	1031.54	1031.42	1031.23	1031.04	1035.38	1035.54	1023.82	1036.09

ELEVATION
ABUTMENT Nº 1
RIGHT SIDE

NOTE:
FOR SECTION M-M
SEE SHEET Nº 9/16

FOR SECTIONS A-A, B-B, C-C
SEE SHEET Nº 8/16

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
4/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº1 DETAILS (RT.)
BRIDGE Nº MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

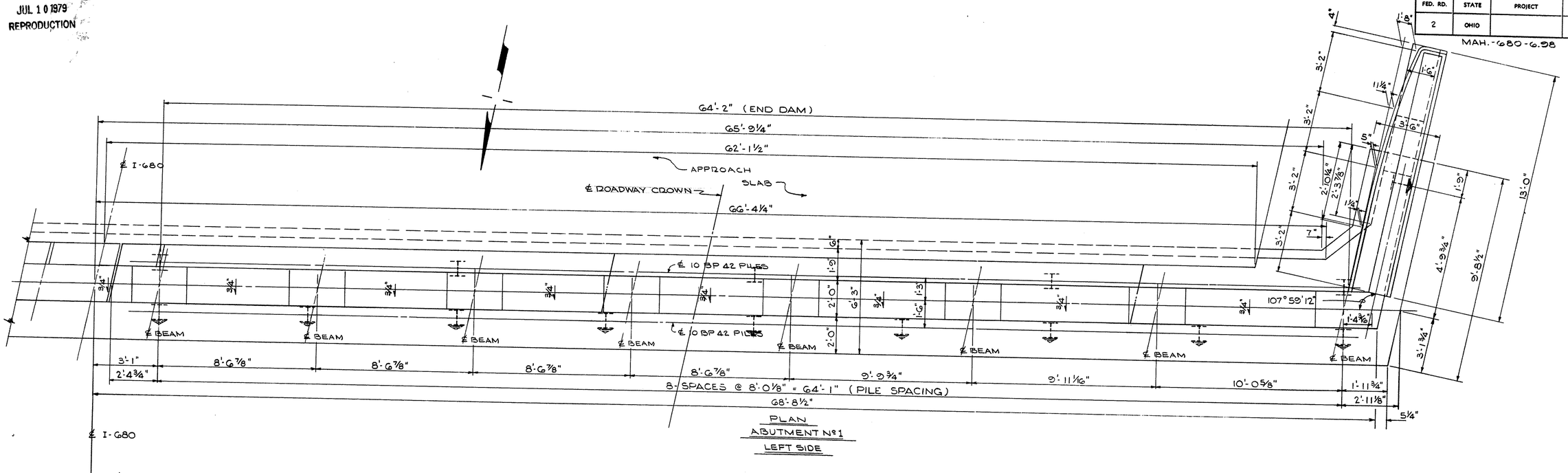
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
W.M.A.	J.D.P.		R.A.H.	W.K.D.	5-8-70	

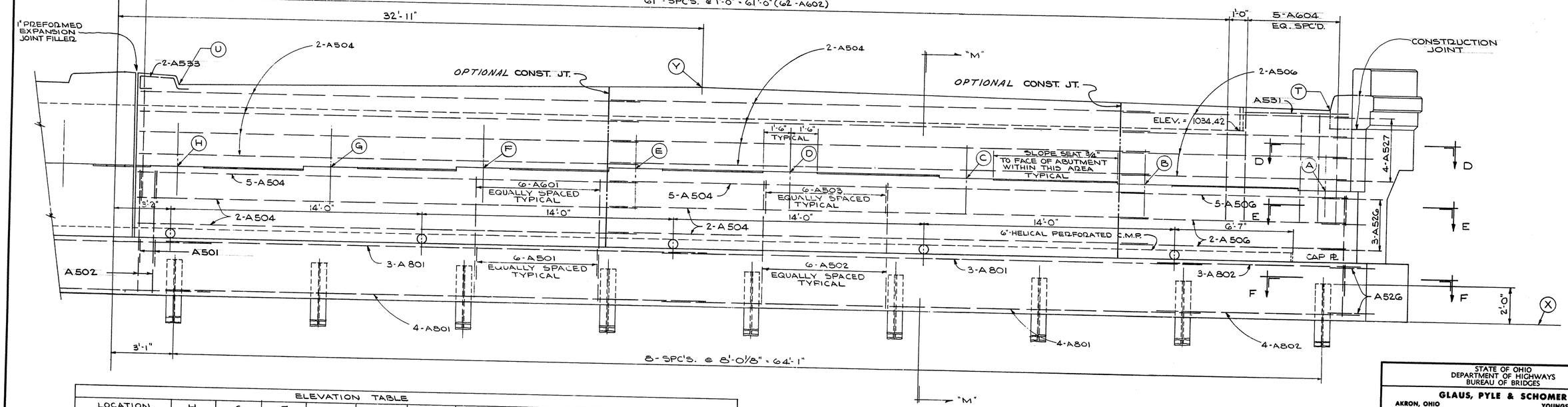
MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

462
656

MAH.-680-6.98





ELEVATION TABLE												
LOCATION	H	G	F	E	D	C	B	A	X	U	T	Y
ABUT. Nº1 LEFT SIDE	1031.05	1031.32	1031.46	1031.60	1031.61	1031.46	1031.32	1031.18	1023.82	1035.55	1035.68	1036.17

ELEVATION
ABUTMENT Nº1
LEFT SIDE

NOTE:
FOR SECTION M-M
SEE SHEET Nº 9/16

FOR SECTIONS D-D, E-E, F-F
SEE SHEET Nº 8/16

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº1 DETAILS (LT.)
BRIDGE Nº MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.V.A.	T.D.P.		R.A.H.	W.K.D.	5-8-70	

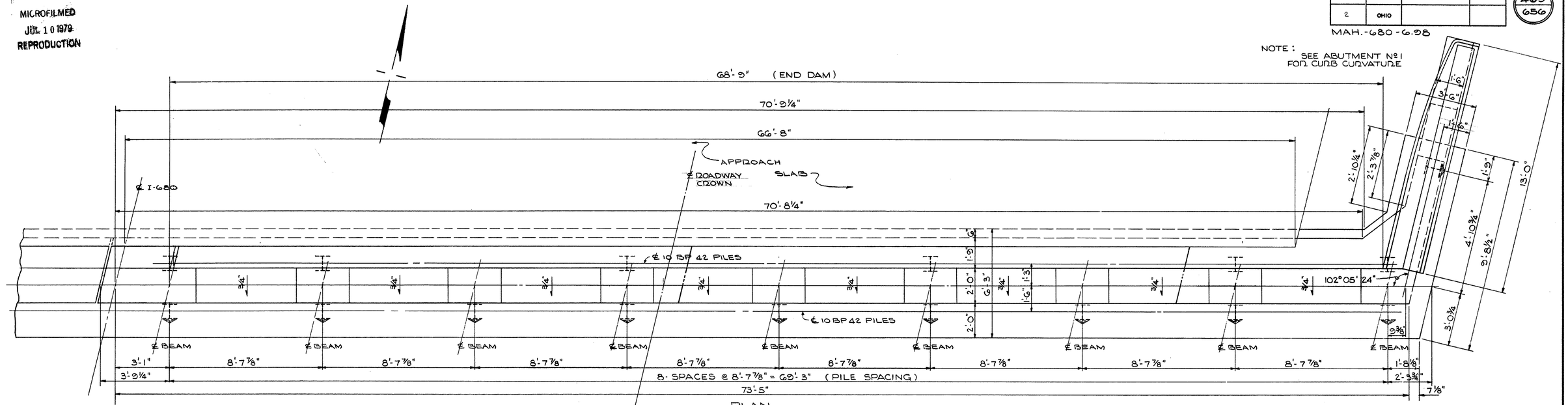
MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

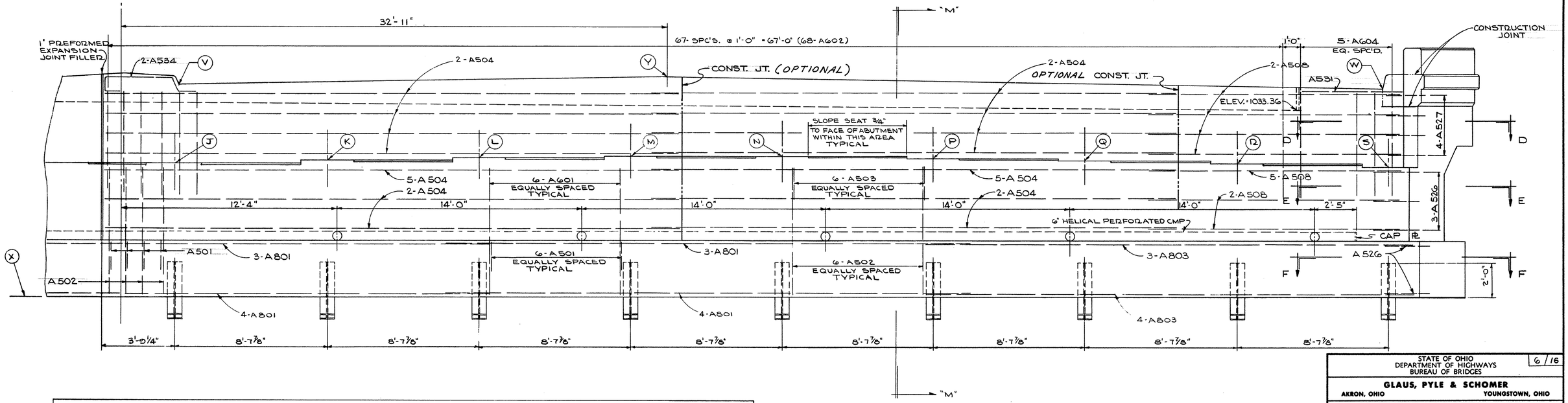
463
656

MAH.-680-6.98

NOTE : SEE ABUTMENT Nº 1 FOR CURB CURVATURE



PLAN
ABUTMENT Nº 2
RIGHT SIDE



ELEVATION TABLE													
LOCATION	J	K	L	M	N	P	Q	R	S	V	W	X	Y
ABUT. Nº 2 RT. SIDE	1030.19	1030.44	1030.57	1030.69	1030.66	1030.52	1030.38	1030.24	1030.10	1034.69	1034.61	1022.55	1035.24

ELEVATION
ABUTMENT Nº 2
RIGHT SIDE

NOTE:
FOR SECTION M-M
SEE SHEET Nº 9/16

FOR SECTIONS D-D, E-E, F-F
SEE SHEET Nº 8/16

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

ABUTMENT Nº 2 DETAILS (RT)
BRIDGE Nº MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+ 05.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	J.D.P.		R.A.H.	W.K.D.	5-8-70	

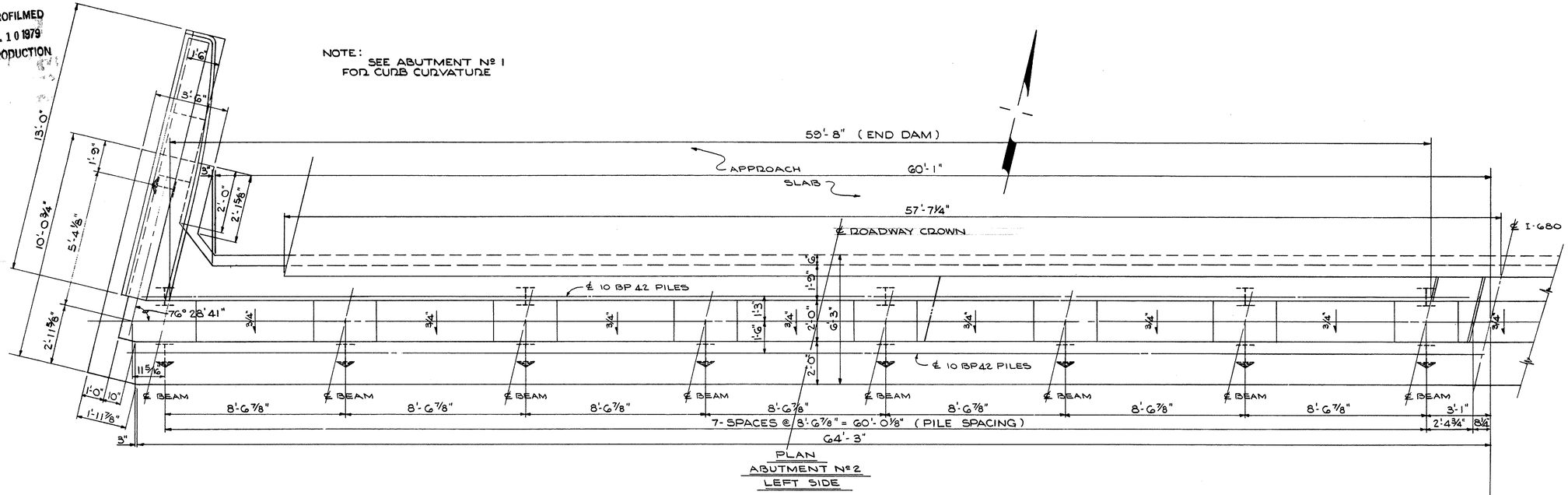
MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

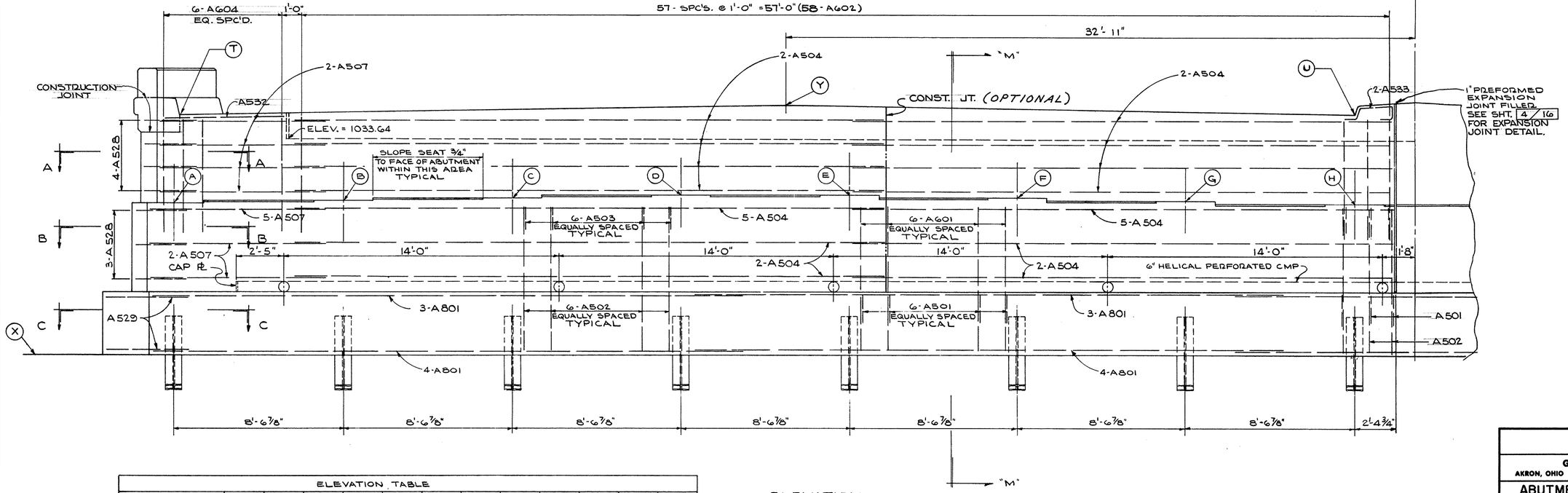
464
656

MAH.-680-6.98

NOTE: SEE ABUTMENT Nº 1 FOR CURB CURVATURE



PLAN
ABUTMENT Nº 2
LEFT SIDE



ELEVATION TABLE												
LOCATION	A	B	C	D	E	F	G	H	X	T	U	Y
ABUT. Nº2 LT. SIDE	1030.38	1030.51	1030.63	1030.75	1030.75	1030.61	1030.47	1030.20	1022.55	1034.85	1034.70	1035.31

ELEVATION
ABUTMENT Nº 2
LEFT SIDE

NOTE:
FOR SECTION M-M
SEE SHEET Nº 9/16

FOR SECTIONS A-A, B-B, C-C
SEE SHEET Nº 8/16

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

7/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

ABUTMENT Nº2 DETAILS LEFT

BRIDGE Nº MAH. 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.46

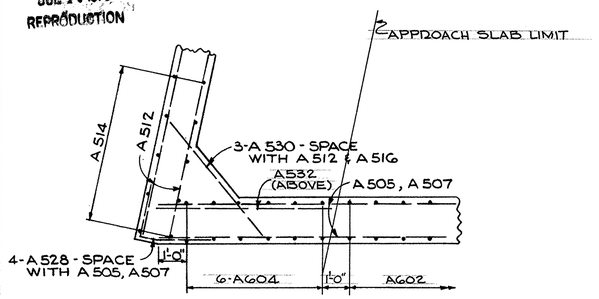
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	J.D.P.		D.A.H.	W.K.D.	5-8-70	

MICROFILMED
JUL. 1 0 1979
REPRODUCTION

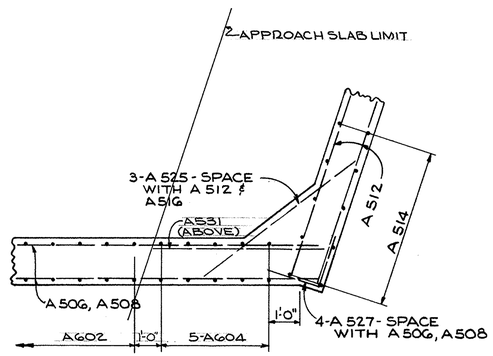
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. - 680 - 6.98

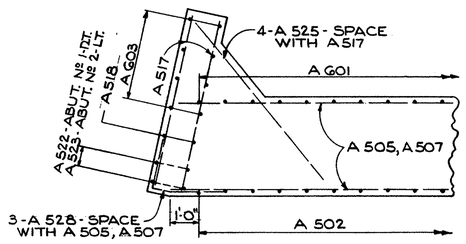
465
656



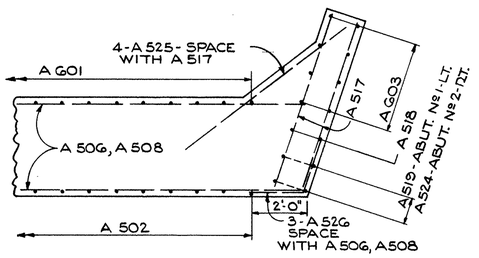
SECTION A-A



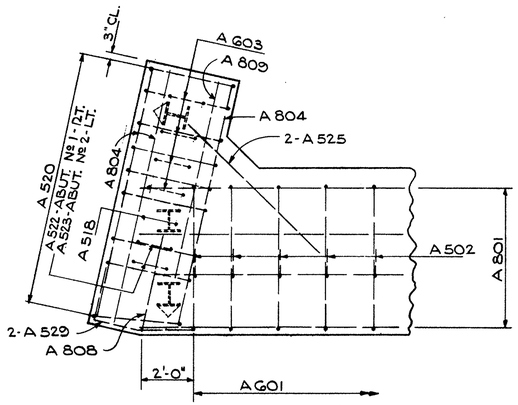
SECTION D-D



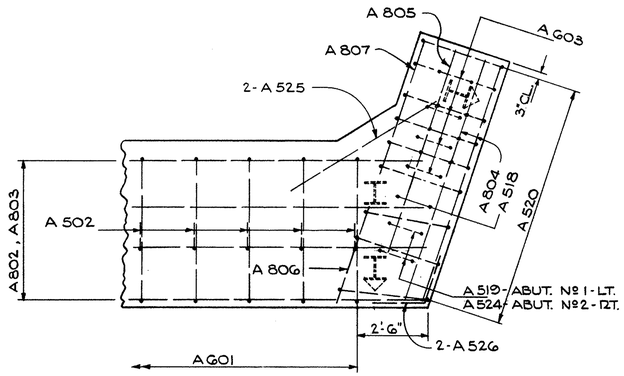
SECTION B-B



SECTION E-E



SECTION C-C



SECTION F-F

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

8 / 16

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT DETAILS

BRIDGE № MAH. 680-0924

OVER MIDLOTHIAN BLVD.

MAHONING CO. I-680

STA. 642 + 05.29

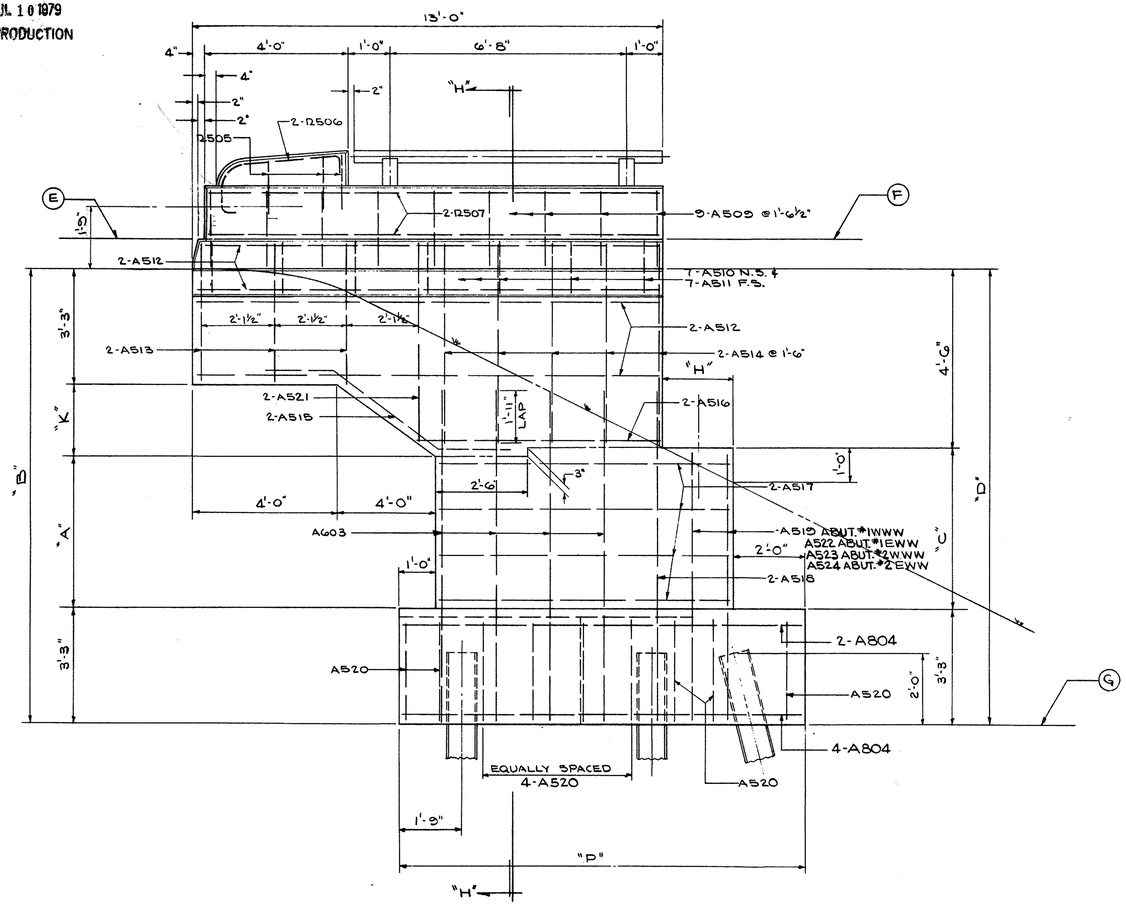
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	D.W.		R.A.H.	W.K.D.	5-8-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

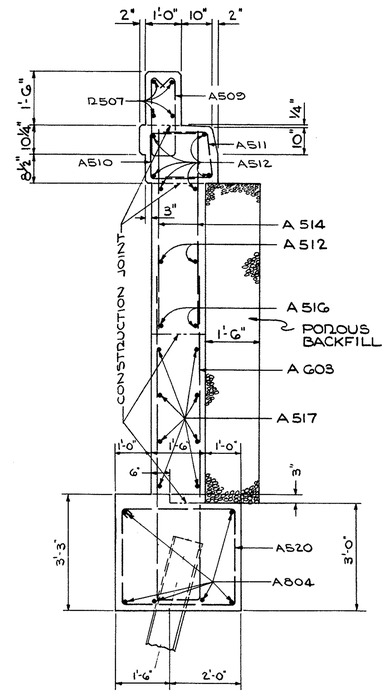
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. -680-6.98

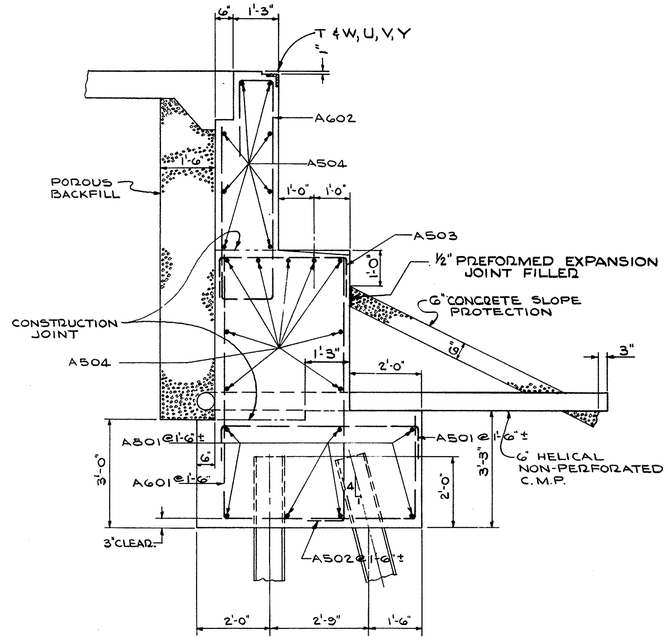
466
650



WINGWALLS FOR ABUTMENTS Nº 1 & 2



SECTION - H - H



SECTION ~ M - M

NOTE:
POROUS BACKFILL 1'-6" THICK FULL LENGTH OF ABUTMENT AND WINGWALLS, SHALL EXTEND UP TO THE SUBGRADE OR TO THE FINISHED GROUND SURFACE.

ABUTMENT Nº	A	B	C	D	E	F	G	H	K	P
1 - WEST	3'-8 7/8"	11'-11"	4'-1 3/8"	11'-10 3/8"	1036.58	1036.53	1023.82	1'-10 3/8"	1'-8 1/8"	9'-8 1/2"
1 - EAST	3'-6 3/4"	11'-7 3/8"	3'-9 3/4"	11'-6 3/4"	1036.18	1036.23	1023.82	2'-0 1/2"	1'-7"	10'-0 3/4"
2 - WEST	4'-4 1/8"	12'-4 3/4"	4'-7 1/8"	12'-4 1/8"	1035.79	1035.74	1022.55	2'-0 3/4"	1'-6 5/8"	10'-0 3/4"
2 - EAST	4'-0 3/8"	12'-1 3/8"	4'-3 3/4"	12'-0 3/4"	1035.40	1035.45	1022.55	1'-10 5/8"	1'-7"	9'-8 1/2"

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

9/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

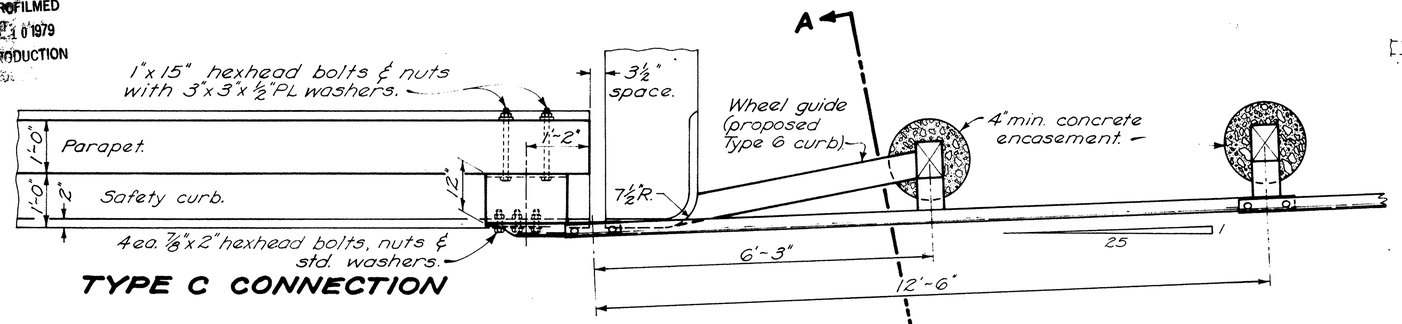
WINGWALL DETAILS
BRIDGE Nº MAH. 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.M.A.	J.D.P.		Q.A.H.	W.K.D.	5-8-70	

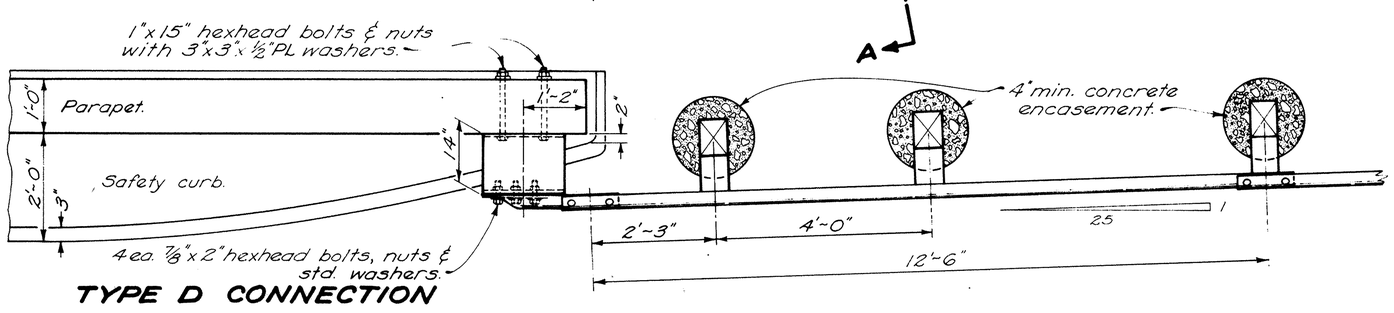
MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

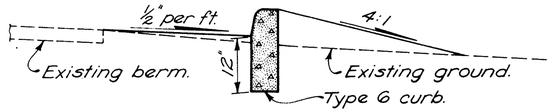
466A
656



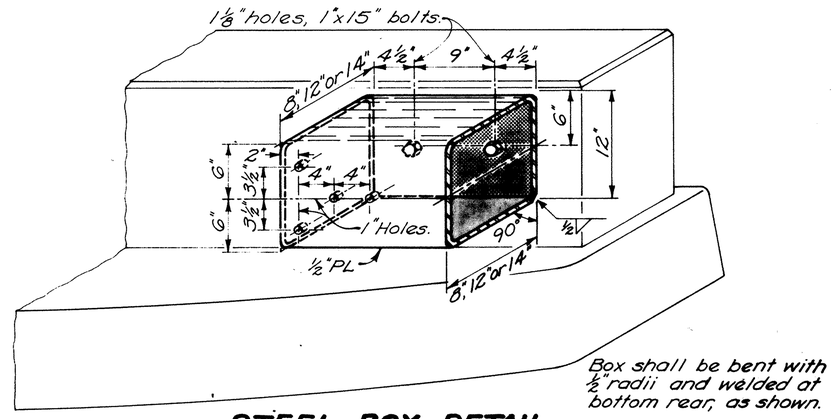
TYPE C CONNECTION



TYPE D CONNECTION



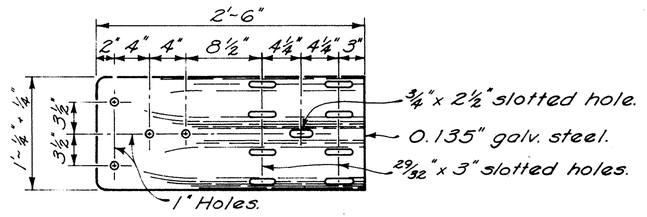
SECTION A-A



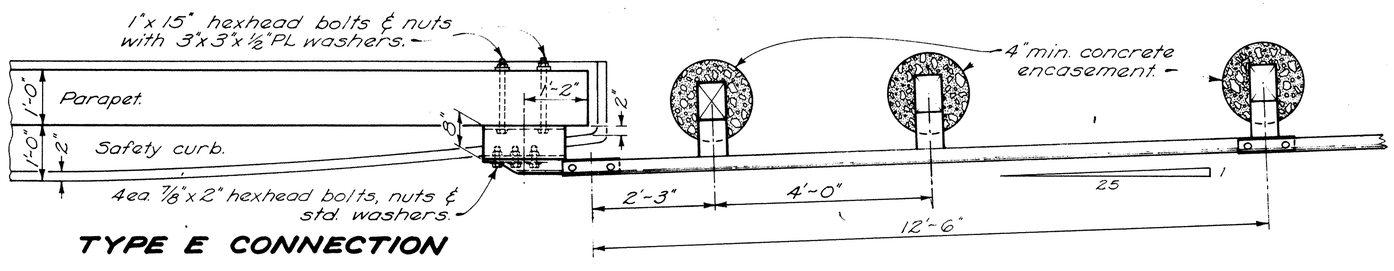
Box shall be bent with ½" radii and welded at bottom rear, as shown.

STEEL BOX DETAIL

A galv. steel box of the appropriate size (see connection type) shall be used on all approaches.

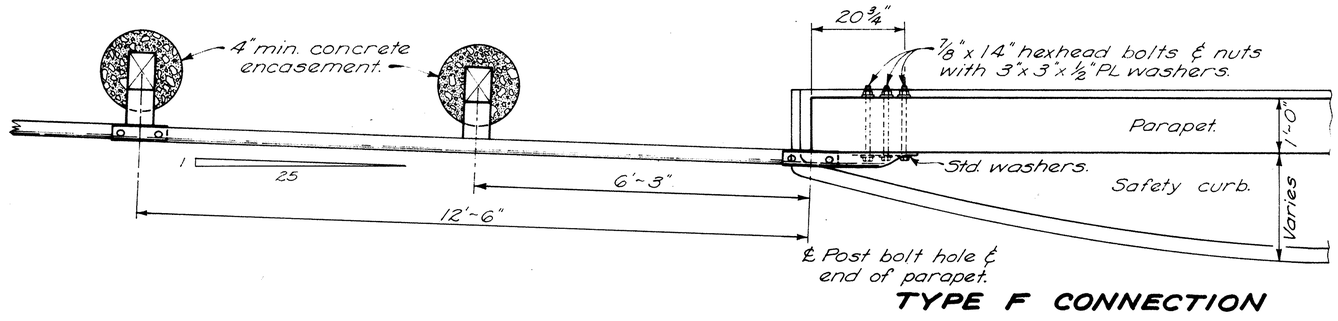


SPECIAL END SHOE



TYPE E CONNECTION

APPROACH ENDS



TYPE F CONNECTION

TRAILING END

NOTES

GENERAL: This drawing shall govern where a conflict arises. For details not shown, see Standard Drawings GR-2B & GR-7.

All steel parts shall be galvanized in accordance with 710.06 or 710.10, whichever may apply.

ANCHORS: Self-drilling anchors (of the appropriate size) may be substituted for the 1" and ⅞" hexhead bolts shown in the parapets. Anchors may be of the snap-off chuck-end type or of the flush-end type conforming to Federal Specification No. FF-S-325, Group III, Type 1(a) or (c), or Type 2.

Bolts for use with the self-drilling anchors shall be ⅞"x1½" or 1"x2", as required.

GUARDRAIL TERMINATION: Dimensions locating the horizontal position of the end shoes may be increased either by design or in the field if interference with existing steel in the parapet requires it.

PAYMENT: Price bid for bridge terminal assemblies shall include the additional cost, in excess of normal guardrail cost, for steel posts, concrete encasement, steel boxes, special end shoes, self-drilling anchors, curbing and embankment.

Connections shall be paid for as 606 Bridge terminal assembly, Type ——.

DATE
6-8-70
1-1-71

MAY 25 1971

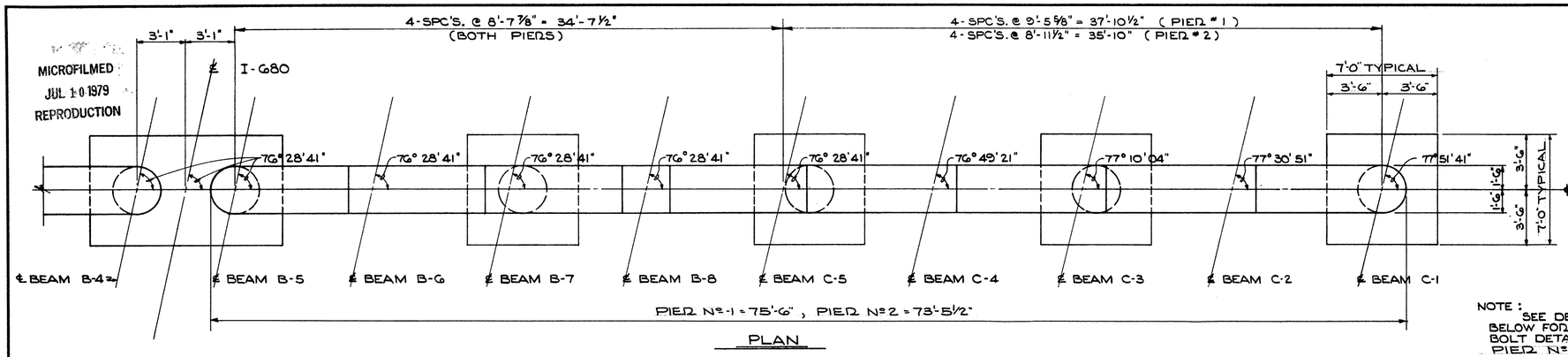
GUARDRAIL CONNECTIONS TO BRIDGES

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

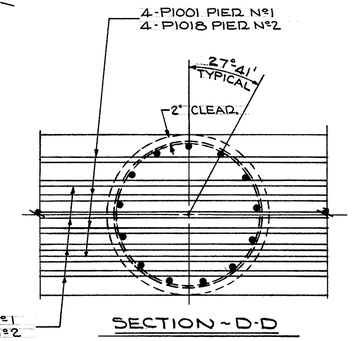
MAH 680-6.98

467
6560

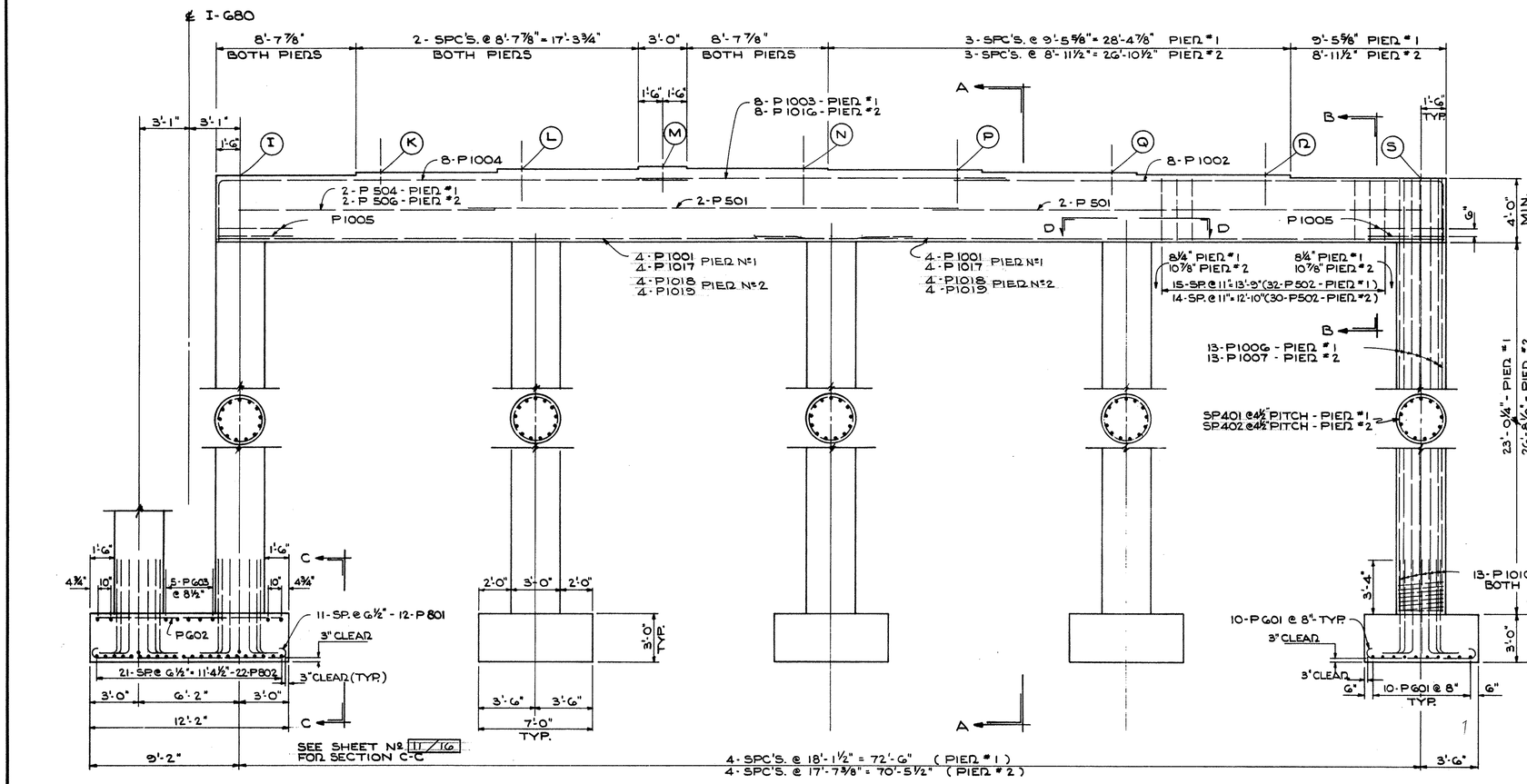


PLAN

NOTE : SEE DETAIL "A" BELOW FOR ANCHOR BOLT DETAILS. AT PIER N° 2.

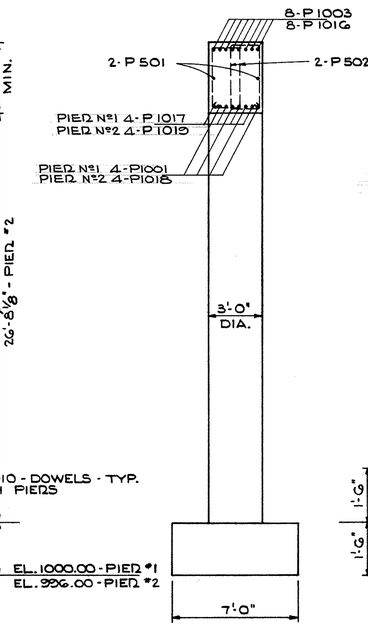


SECTION - D-D

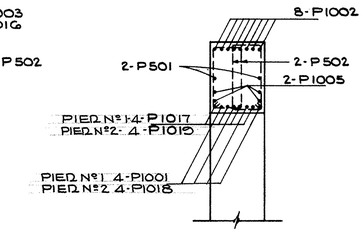


ELEVATION PIERS 1 & 2 (RIGHT STRUCTURE)

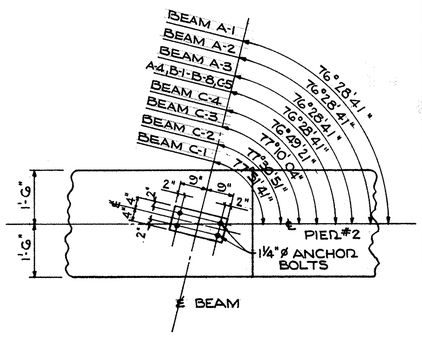
	I	K	L	M	N	P	Q	R	S
PIER #1-RT. STRUC.	1030.18	1030.43	1030.56	1030.68	1030.64	1030.48	1030.33	1030.17	1030.02
PIER #2-RT. STRUC.	1029.80	1030.05	1030.17	1030.29	1030.26	1030.11	1029.97	1029.82	1029.68



SECTION A-A



SECTION B-B



DETAIL "A"
ANCHOR BOLT DETAIL - PIER N° 2

NOTE : SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE PIER CAP SO THAT IT WILL NOT INTERFERE WITH THE BEARING PLATE ANCHOR BOLTS OR WITH THE COLUMN BARS EXTENDED INTO THE PIER CAP. SEE SECTIONS D-D & E-E AND DETAIL "A".

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

10/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

PIER 1 & 2 RIGHT STRUCTURE
BRIDGE N° MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642 + 05.29

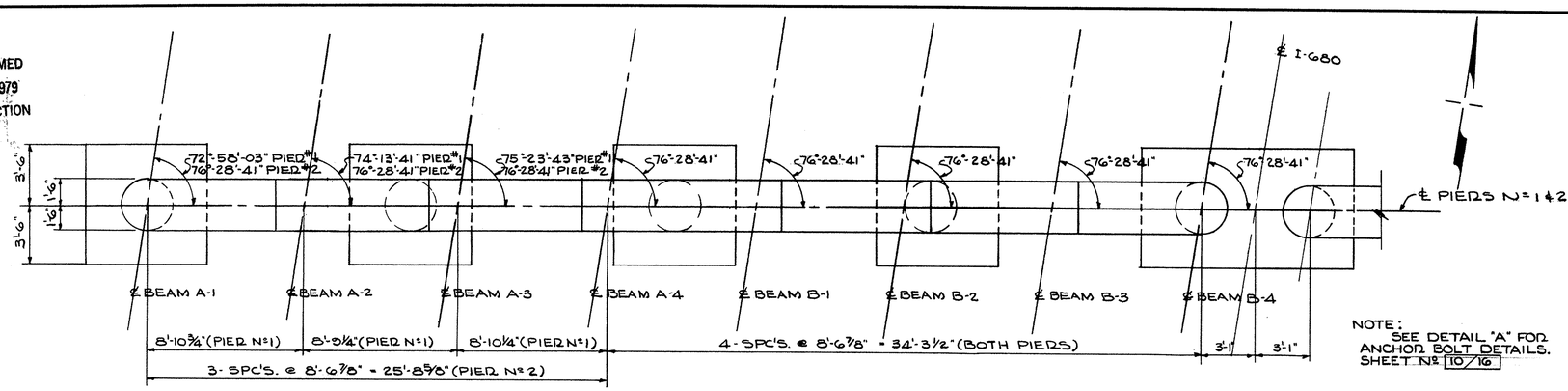
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	D.W.		R.A.H.	W.K.P.	5-8-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

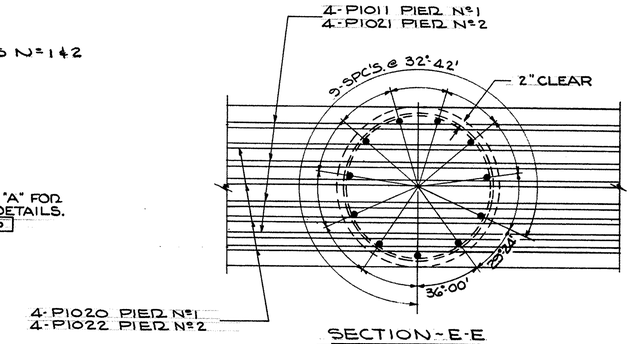
MAH.680-6.98

468
656

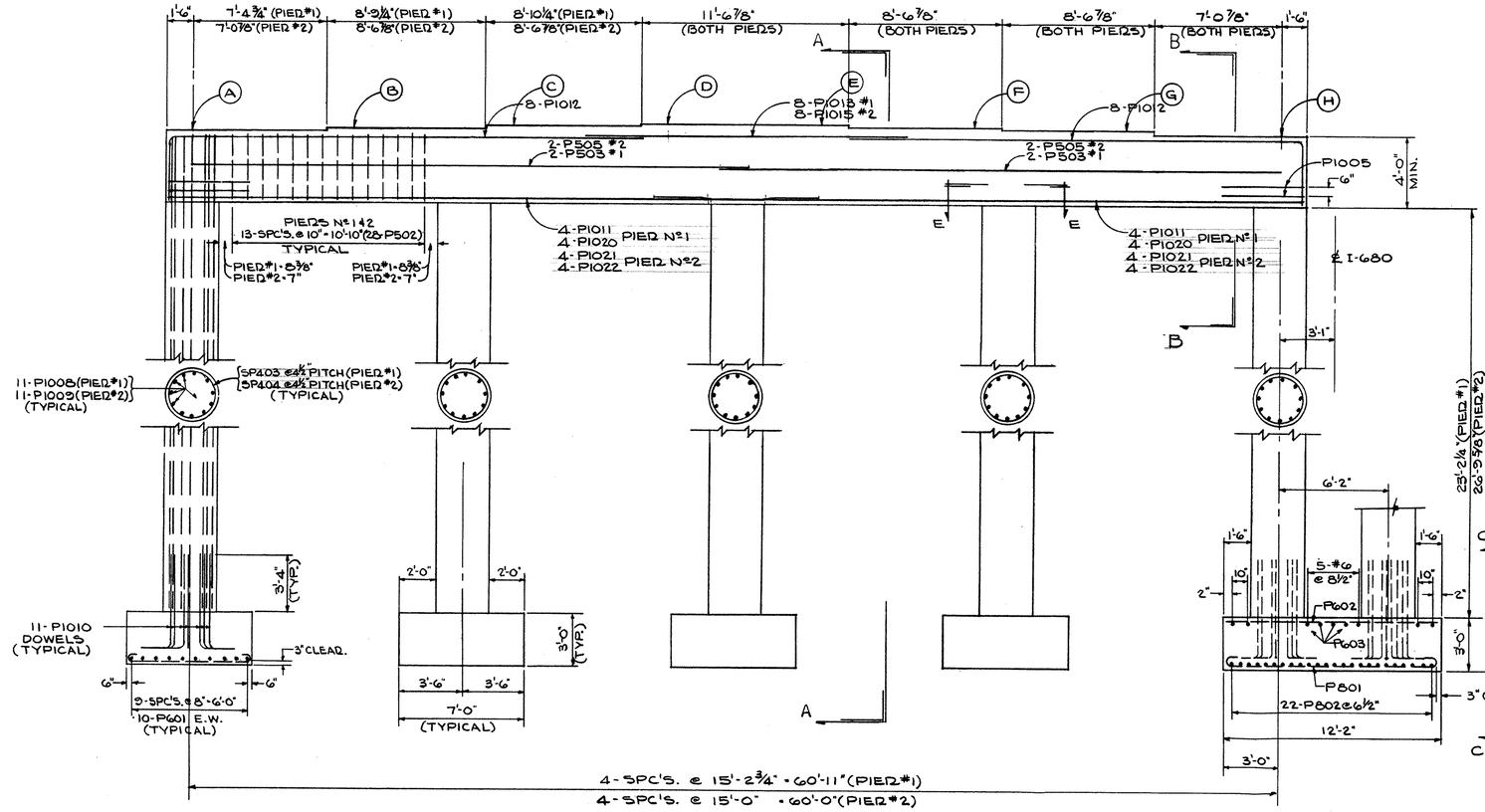


NOTE:
SEE DETAIL "A" FOR ANCHOR BOLT DETAILS. SHEET Nº 10/16

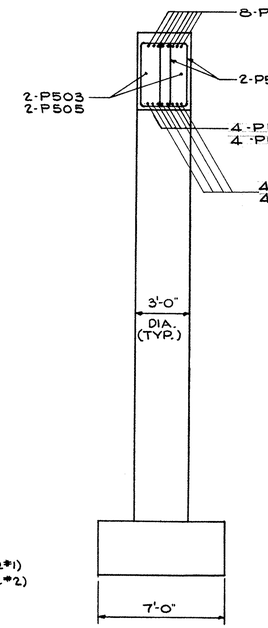
PLAN



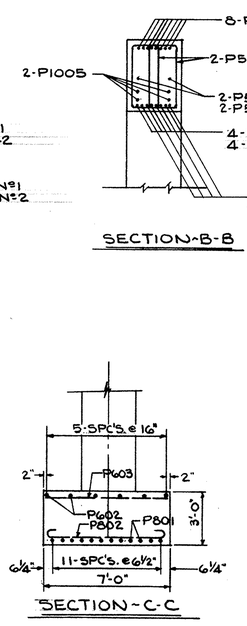
SECTION-E-E



ELEVATION PIERS Nº1 & 2 LEFT STRUCTURE



SECTION-A-A



SECTION-B-B

SECTION-C-C

	A	B	C	D	E	F	G	H
PIER #1 LT. STRUCT.	1030.37	1030.48	1030.61	1030.73	1030.73	1030.60	1030.46	1030.15
PIER #2 LT. STRUCT.	1030.00	1030.11	1030.23	1030.35	1030.35	1030.21	1030.07	1029.80

NOTE:
SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE PIER CAP SO THAT IT WILL NOT INTERFERE WITH THE BEARING PLATE ANCHOR BOLTS OR WITH THE COLUMN BARS EXTENDED INTO THE PIER CAP. SEE SECTIONS D-D & E-E AND DETAIL "A"

MAY 23 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

11/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

PIER 1&2 LEFT STRUCTURE
BRIDGE Nº MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

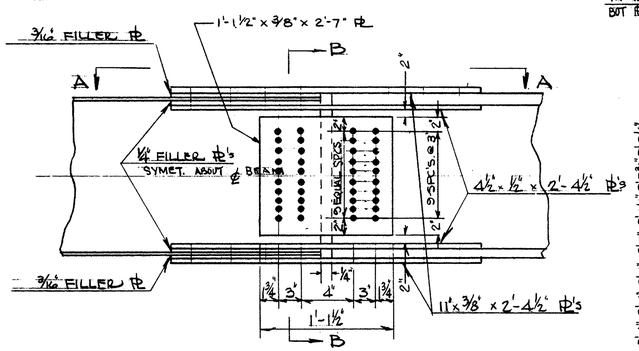
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	J.D.P.		R.A.H.	W.K.P.	5-8-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

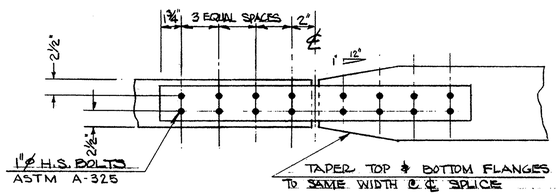
FED. RD.	STATE	PROJECT	
2	OHIO		

463
656

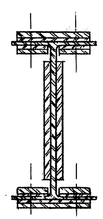
MAH 680-6.98



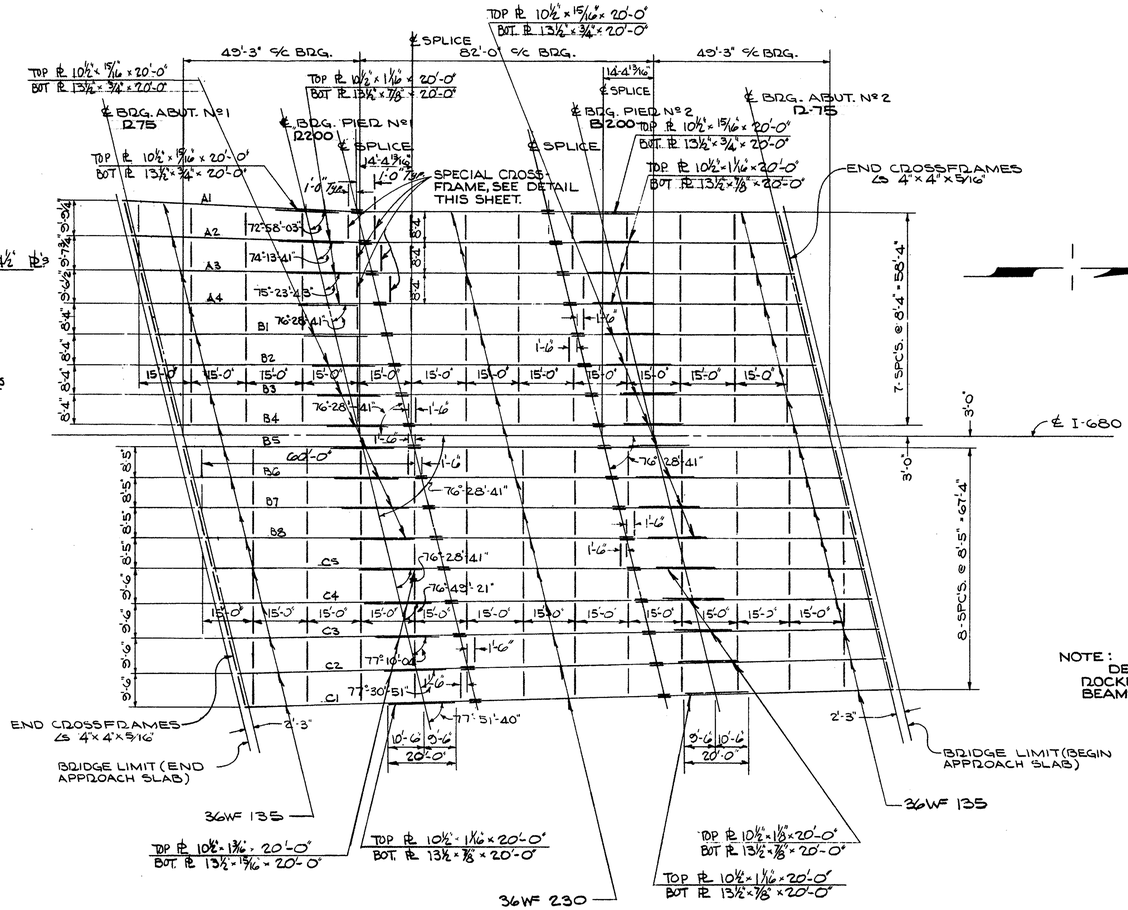
BEAM SPLICE DETAIL
(NOT TO SCALE)



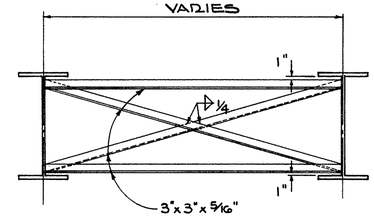
VIEW "A-A"
(NOT TO SCALE)



SECTION "B-B"
(NOT TO SCALE)



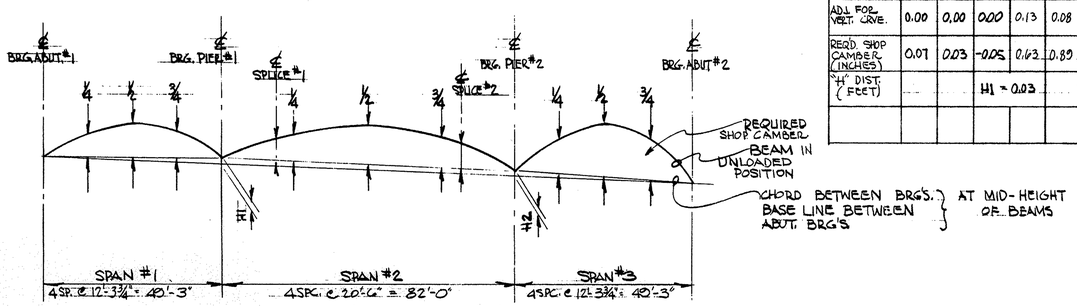
FRAMING PLAN



SPECIAL CROSSFRAME
6 - REQUIRED

NOTE:
CROSSFRAME ANGLES 3"x3"x5/16". WELD BOTH SIDES OF VERTICAL LEG AND TOP SIDE OF HORIZONTAL LEG TO BEAM WITH 1/4" CONTINUEOUS FILLET WELD.

NOTE:
DELETE SIDE PLATES FROM ROCKERS AND BOLSTERS FOR BEAMS A1, B4, B5, & C1.



CAMBER DIAGRAM
NOT TO SCALE

BEAM A1 & C1	DEFLECTION AND CAMBER											
	SPAN 1			SPAN 2					SPAN 3			
	1/4	1/2	3/4	1/4	1/2	3/4	SPL.#1	SPL.#2	1/4	1/2	3/4	
DEFL. DUE TO BEAM WT.	0.00	-0.02	-0.03	0.13	0.20	0.13	0.09	0.00	-0.03	-0.02	0.00	
DEFL. DUE TO DECK	0.01	0.05	-0.02	0.37	0.61	0.38	0.25	0.25	-0.03	0.04	0.06	
ADJ. FOR VERT. CRVE.	0.00	0.00	0.00	0.13	0.08	0.04	0.14	0.03	0.00	0.00	0.00	
REQ'D. SHOP CAMBER (INCHES)	0.01	0.03	-0.05	0.63	0.89	0.55	0.48	0.37	-0.06	0.02	0.07	
"H" DIST. (FEET)			H1 = 0.03					H2 = 0.02				

BEAM A2 TO A4 INCL. & B1 TO B8 INCL.	DEFLECTION AND CAMBER											
	SPAN 1			SPAN 2					SPAN 3			
	1/4	1/2	3/4	1/4	1/2	3/4	SPL.#1	SPL.#2	1/4	1/2	3/4	
DEFL. DUE TO BEAM WT.	-0.01	-0.01	-0.03	0.13	0.20	0.13	0.09	0.08	-0.03	-0.02	-0.01	
DEFL. DUE TO DECK	0.11	0.07	-0.04	0.57	0.92	0.57	0.38	0.38	-0.05	0.06	0.10	
ADJ. FOR VERT. CRVE.	0.00	0.00	0.00	0.08	0.05	0.03	0.09	0.02	0.00	0.00	0.00	
REQ'D. SHOP CAMBER (INCHES)	0.10	0.05	-0.07	0.78	1.17	0.73	0.56	0.48	-0.08	0.04	0.09	
"H" DIST. (FEET)			H1 = 0.02 FOR A2 & 0.00 FOR ALL OTHERS					H2 = 0.01 FOR A2 & 0.00 FOR ALL OTHERS				

BEAM C2 TO C5 INCL.	DEFLECTION AND CAMBER											
	SPAN 1			SPAN 2					SPAN 3			
	1/4	1/2	3/4	1/4	1/2	3/4	SPL.#1	SPL.#2	1/4	1/2	3/4	
DEFL. DUE TO BEAM WT.	-0.01	-0.02	-0.03	0.12	0.18	0.12	0.08	0.08	-0.03	-0.02	-0.01	
DEFL. DUE TO DECK	0.12	0.07	-0.06	0.67	1.08	0.67	0.44	0.44	-0.05	0.08	0.12	
ADJ. FOR VERT. CRVE.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
REQ'D. SHOP CAMBER (INCHES)	0.11	0.05	-0.09	0.79	1.27	0.79	0.52	0.52	-0.08	0.06	0.11	
"H" DIST. (FEET)			H1 = 0.00					H2 = 0.00				

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

12/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE Nº MAH. 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

MAY 25 1971

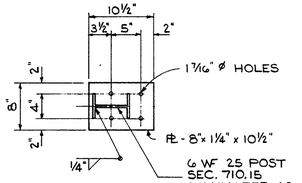
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	W.P.		R.A.H.	W.K.D.	5-8-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

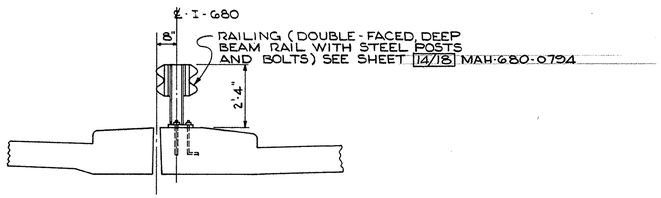
FED. RD.	STATE	PROJECT	
2	OHIO		

470
656

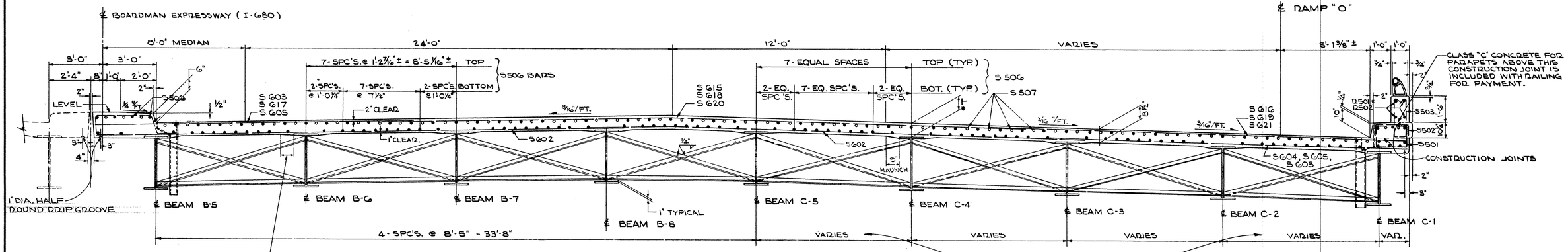
MAH. 680-6.38



PLAN



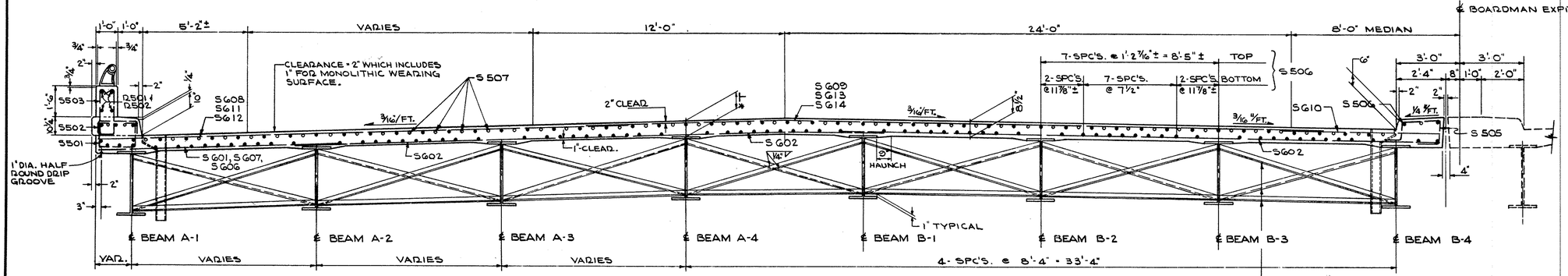
MEDIAN GUARD RAIL



A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

* T = 8 11/16" OVER 36 WF 135
* T = 8½" OVER 36 WF 230

SUPPERS shall be in accordance with SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".



INTERMEDIATE CROSSFRAME ANGLES 3"x3"x 5/16" WELD BOTH SIDES OF VERTICAL LEG AND TOP SIDE OF HORIZONTAL LEG TO BEAM WITH ½" CONTINUOUS FILLET WELD

TRANSVERSE SECTION

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

13/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

TRANSVERSE SECTION
BRIDGE Nº MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

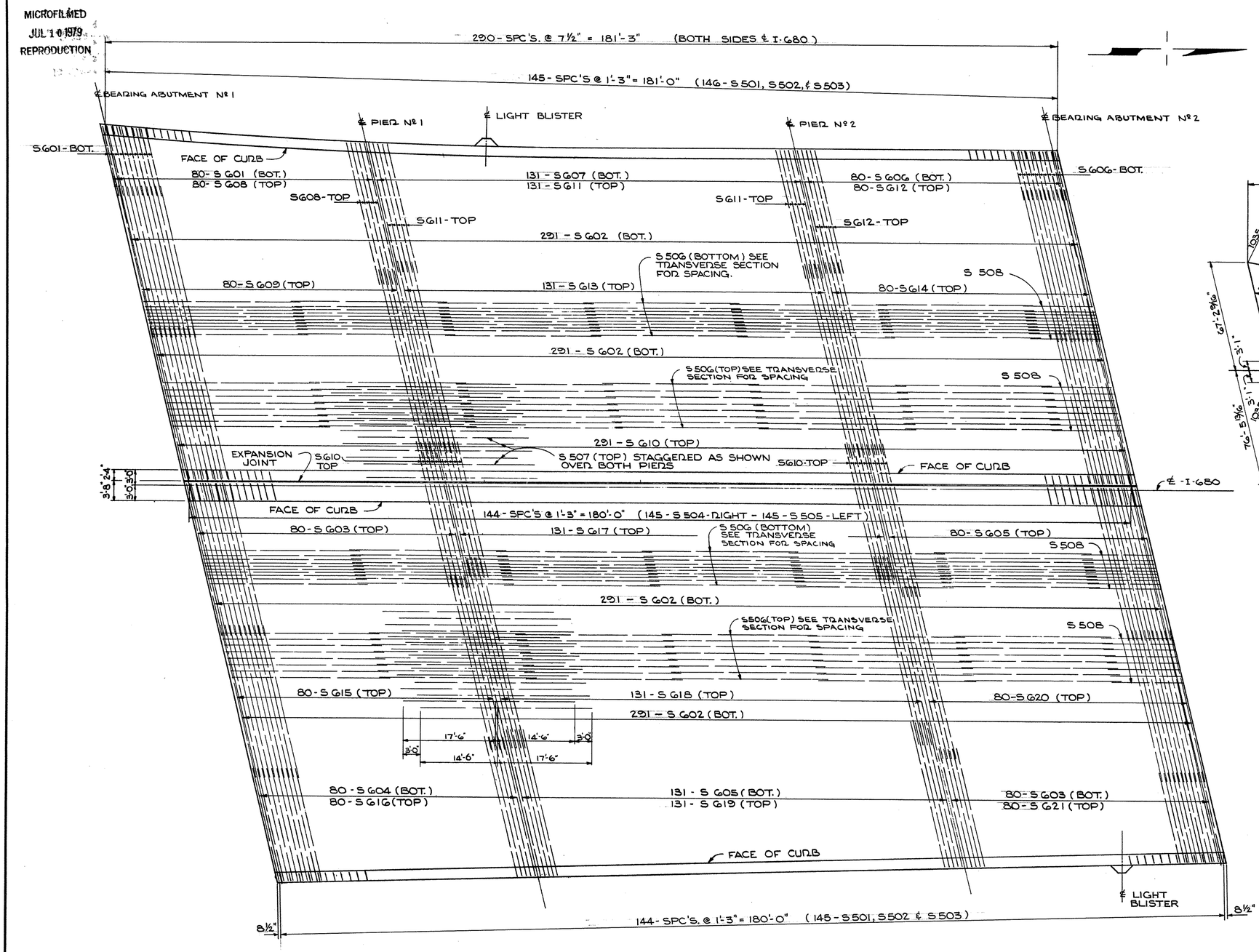
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	J.D.P.		R.A.H.	W.K.D.	5-8-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

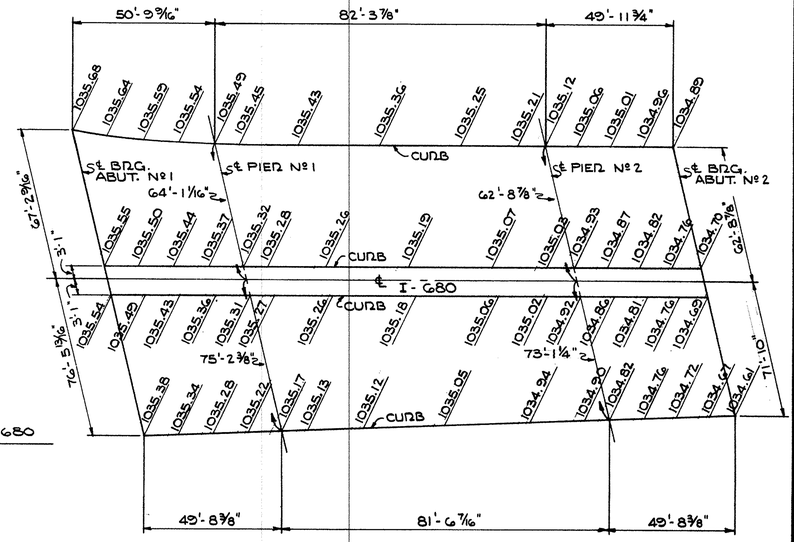
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.680-6.98

471
656



SLAB REINFORCING PLAN



FINISHED CURB SURFACE ELEVATIONS
AT ROADWAY LEVEL

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

14/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SLAB REINFORCING PLAN
BRIDGE Nº MAH. 680-0924

OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642+05.29

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.M.A.	J.D.P.		R.A.H.	W.K.D.	5-8-70	

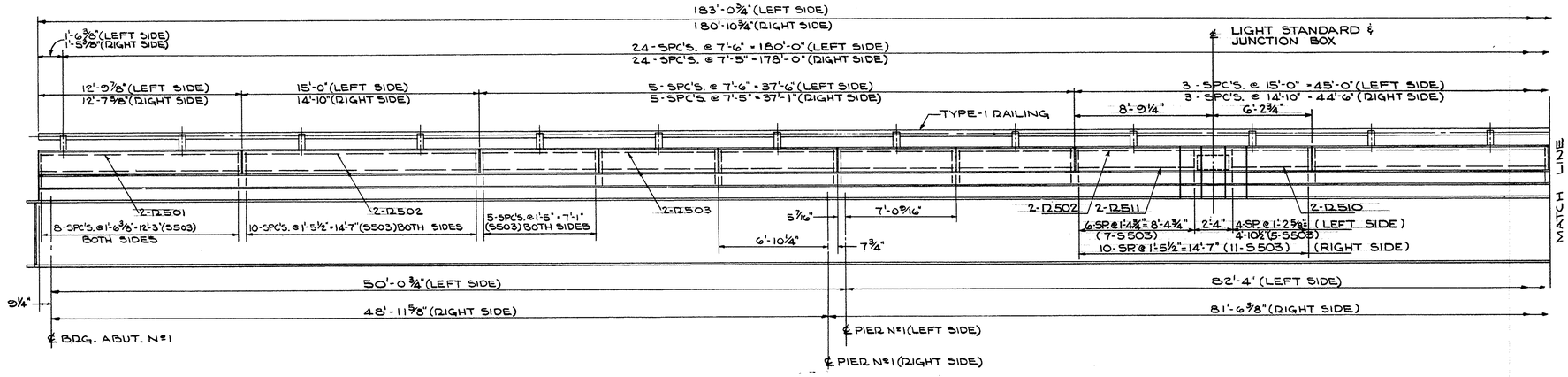
MAY 25 1971

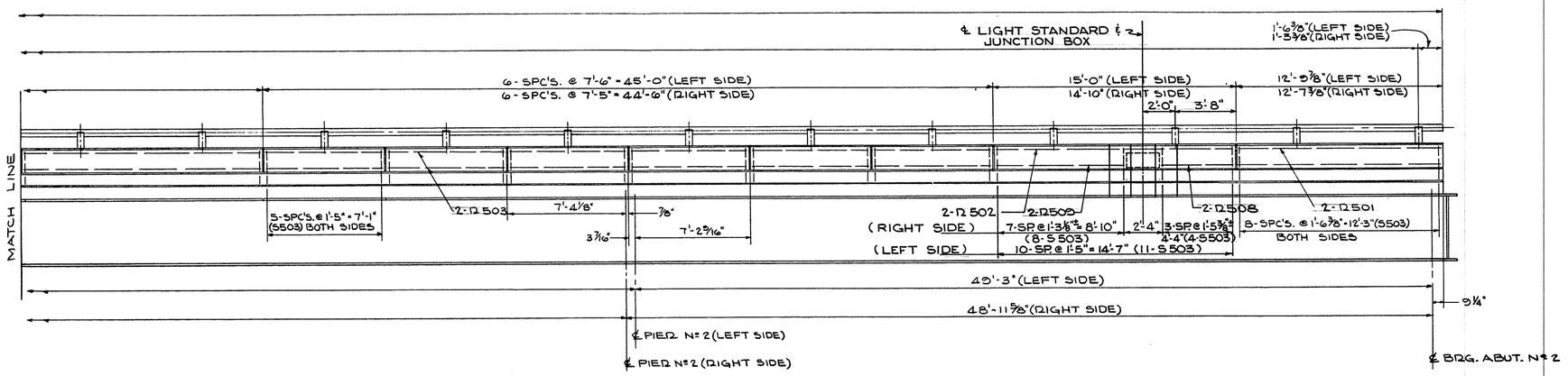
MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

472
656





RAILING DETAILS ~ MIDLOTHIAN BLVD.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

15/16

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS

BRIDGE N° MAH-680-0924
OVER MIDLOTHIAN BLVD.
MAHONING COUNTY I-680
STA. 642+05.29

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	J.D.P.		Q.A.H.	W.K.D.	5-8-70	

MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

473
656

ABUTMENTS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
A501	204	8'-5"	1,792	Bent
A502	204	7'-3"	1,543	Bent
A503	204	8'-0"	1,702	Bent
A504	136	30'-0"	4,255	Straight
A505	17	20'-4"	361	Straight
A506	17	10'-10"	192	Straight
A507	17	6'-8"	118	Straight
A508	17	16'-11"	300	Straight
A509	36	5'-7"	210	Bent
A510	28	3'-6"	102	Bent
A511	28	3'-4"	97	Bent
A512	32	12'-8"	423	Straight
A513	24	3'-9"	94	Straight
A514	40	5'-0"	209	Straight
A515	8	7'-8"	64	Bent
A516	8	6'-6"	54	Straight
A517	32	6'-5"	214	Straight
A518	8	9'-5"	79	Straight
A519	2	15'-2"	321	Bent
A520	36	12'-1"	454	Bent
A521	8	4'-9"	40	Straight
A522	2	14'-8"	311	Bent
A523	2	16'-2"	341	Bent
A524	2	15'-6"	321	Bent
A525	30	7'-6"	235	Straight
A526	10	4'-0"	42	Bent
A527	8	4'-0"	33	Bent
A528	14	5'-0"	73	Bent
A529	4	6'-0"	25	Bent
A530	6	6'-6"	41	Straight
A531	2	5'-9"	12	Straight
A532	2	7'-3"	15	Straight
A533	4	5'-8"	24	Bent
A534	4	6'-11"	29	Bent
A601	204	14'-2"	4,342	Bent
A602	260	14'-7"	5,694	Bent
A603	16	19'-10"	477	Bent
A604	22	13'-3"	446	Bent
A801	63	30'-0"	5,046	Straight
A802	7	9'-6"	178	Straight
A803	7	28'-0"	523	Straight
A804	24	9'-2"	584	Straight
ABUTMENTS TOTAL			31,416	

PIERS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
P501	8	30'-0"	250	Straight
P502	472	10'-10"	5,333	Bent
P503	4	31'-1"	130	Straight
P504	2	15'-8"	33	Straight
P505	4	30'-10"	129	Straight
P506	2	13'-8"	29	Straight
P601	320	7'-10"	3,758	Bent
P602	12	11'-8"	210	Straight
P603	18	6'-6"	175	Straight
P801	24	15'-10"	886	Bent
P802	44	8'-8"	1,019	Bent
P1001	8	36'-1"	1,241	Straight
P1002	16	32'-8"	2,249	Bent
P1003	8	23'-10"	820	Straight
P1004	16	32'-4"	2,226	Bent
P1005	16	13'-2"	907	Bent
P1006	65	26'-3"	7,337	Straight
P1007	65	30'-0"	8,390	Straight
P1008	55	26'-5"	6,248	Straight
P1009	55	30'-1"	7,114	Straight
P1010	240	6'-10"	7,057	Bent
P1011	8	30'-0"	1,033	Straight
P1012	32	29'-0"	3,993	Bent
P1013	8	19'-3"	663	Straight
P1015	8	18'-4"	631	Straight
P1016	8	21'-9"	749	Straight
P1017	8	42'-4"	1,457	Straight
P1018	8	35'-0"	1,205	Straight
P1019	8	41'-4"	1,423	Straight
P1020	8	36'-6"	1,256	Straight
P1021	8	29'-10"	1,027	Straight
P1022	8	36'-1"	1,242	Straight
PIER TOTALS			70,220	

SUPERSTRUCTURE

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
S501	291	4'-11"	1,492	Bent
S502	291	2'-6"	759	Bent
S503	291	5'-7"	1,695	Bent
S504	145	6'-11"	1,046	Bent
S505	145	5'-8"	857	Bent
S506	1,674	30'-0"	52,379	Straight
S507	226	32'-0"	7,543	Straight
S508	279	11'-1"	3,225	Straight
S601	80	12'-3"	1,472	Straight
S602	1,164	30'-0"	52,450	Straight
S603	140	20'-4"	4,886	Straight
S604	80	22'-10"	2,744	Straight
S605	211	21'-6"	6,814	Straight
S606	80	7'-9"	931	Straight
S607	131	9'-2"	1,804	Straight
S608	80	28'-0"	3,364	Straight
S609	80	37'-5"	4,496	Straight
S610	291	7'-7"	3,315	Straight
S611	131	25'-3"	4,968	Straight
S612	80	24'-3"	2,914	Straight
S613	13	36'-7"	7,198	Straight
S614	80	36'-1"	4,336	Straight
S615	80	34'-0"	4,085	Straight
S616	80	27'-9"	3,334	Straight
S617	131	18'-0"	3,542	Straight
S618	131	37'-9"	7,428	Straight
S619	131	28'-10"	5,673	Straight
S620	80	32'-6"	3,905	Straight
S621	80	23'-6"	2,824	Straight
SUPERSTRUCTURE TOTALS			201,479	
LIGHT BLISTER BARS			190	
			201,669	

SPIRAL REINFORCING LIST

MARK	No.	CORE DIA.	LENGTH	PITCH	NO. TURNS	WEIGHT INCLUDING SPACER
SP401	5	2'-8"	23'-0-1/4"	4-1/2"	62	2,144
SP402	5	2'-8"	26'-8-1/4"	4-1/2"	72	2,472
SP403	5	2'-8"	23'-2-1/4"	4-1/2"	62	2,159
SP404	5	2'-8"	26'-9-5/8"	4-1/2"	72	2,482
SPIRAL TOTALS						9,257

RAILING - TO BE INCLUDED IN ITEM 517 FOR PAYMENT

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
R501	16	12'-3"		ST
R502	36	14'-7"		ST
R503	88	7'-1"		ST
R504	44	13'-11"		ST
R505	12	4'-2"		BT
R506	8	5'-4"		BT
R507	16	12'-4"		ST
R508	2	4'-4"		ST
R509	2	8'-0"		ST
R510	2	4'-10"		ST
R511	2	7'-5"		ST

REPLACEMENT BARS

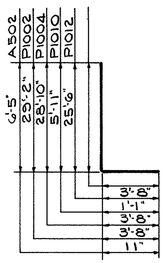
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
RE401	2	6'-3"		BT
RE501	5	6'-7"		ST
RE601	8	6'-11"		ST
RE801	1	7'-6"		ST
RE1001	3	8'-2"		ST

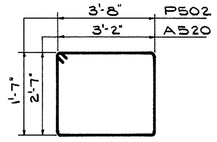
TOTALS

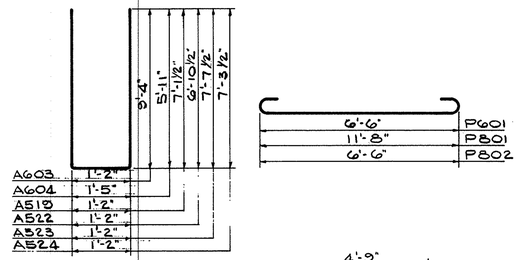
ABUTMENTS	31,416
PIERS	79,477
SUPERSTRUCTURE	201,669
GRAND TOTAL	312,562

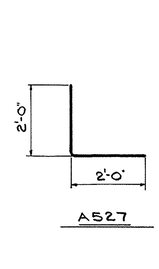


RE-401









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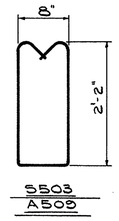

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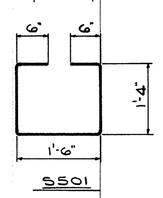

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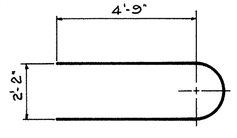

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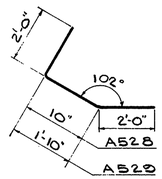

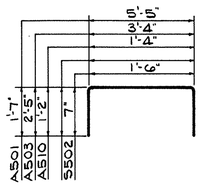

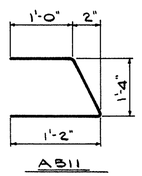

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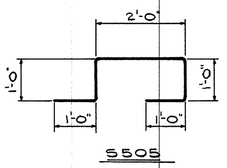

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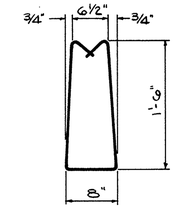

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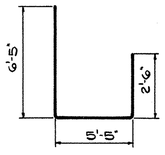

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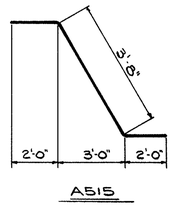

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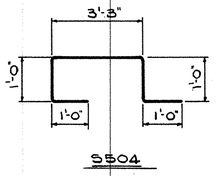

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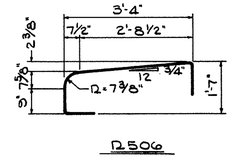

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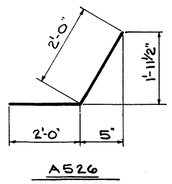


A526

A527

NOTES:

SPIRAL REINFORCING BARS: THE LENGTH SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE BOTTOM OF THE PIER CAP.

THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER.

1-1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. FOUR STEEL ANGLE SPACERS 1" x 1" x 1/8" WEIGHING APPROXIMATELY 0.8 LBS. PER LIN.FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF LBS. OF THESE SPACERS, BASED ON 0.8 LBS. PER LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A701 IS A NO.7 SIZE BAR AND A1000 IS A NO.10 SIZE.

ALL BAR DIMENSIONS ARE GIVEN OUT TO OUT.

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

16 / 16

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO — YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE
BRIDGE Nº MAH. 680-0924
OVER MIDLOTHIAN BLVD.
MAHONING CO. I-680
STA. 642 + 05.29

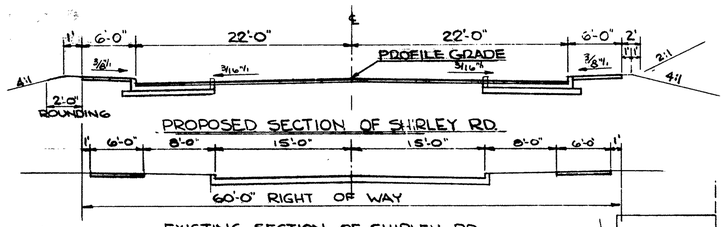
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
U.M.A.	J.D.P.		D.A.H.	W.K.D.	5-8-70	

FED. RD.	STATE	PROJECT	
2	OHIO		

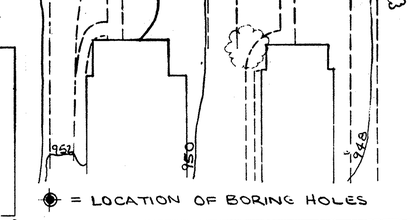
474
656

MAH-680-6.98

MICROFILMED
JUL 10 1979
REPRODUCTION

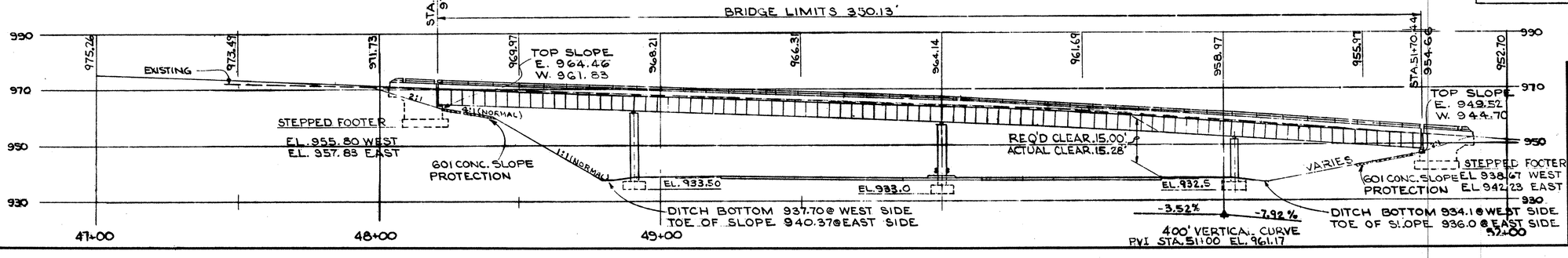


SLOPE PROTECTION
601 CONCRETE SLOPE PROTECTION ON SLOPES ABOVE ROCK CUT.



PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 65'-11" × 109'-10" × 104'-1" × 62'-5" ℄ BEARINGS
ROADWAY WIDTH: 44'-0" ℄ OF 6'-0" SIDEWALKS ON BOTH SIDES
LOADING HS20-44
SKEW: 55° 12'-54" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 30'-0" LONG. AS-1-67
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE
TRAFFIC COUNT: 1960 ADT = 11,250
1975 ADT = 21,400 MAX. STREET CAPACITY



CURVE DATA I-680

$\Delta = 71°-25'-13"$ $L_c = 3,695.65$
$D_c = 1°-50'-00"$ $T_c = 2,098.22'$
$R_c = 3,125.22'$ $L_s = 200'$

MAY 26 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1 / 12

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SITE PLAN

BRIDGE Nº MAH. 680-0835
UNDER SHIRLEY RD.
MAHONING CO. I-680
STA. 689+72.46

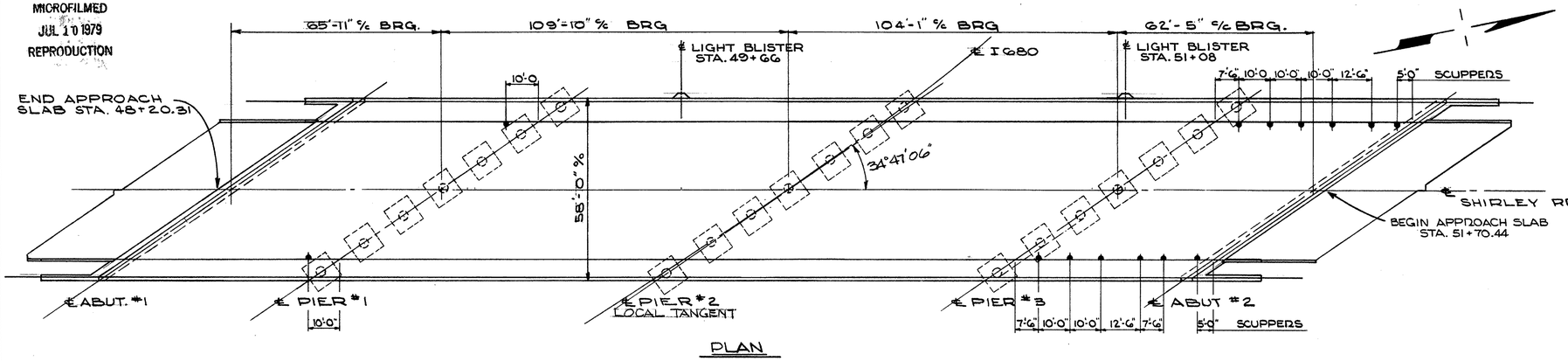
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DSIII	DSIII		D S	W.K.D.	5-11-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

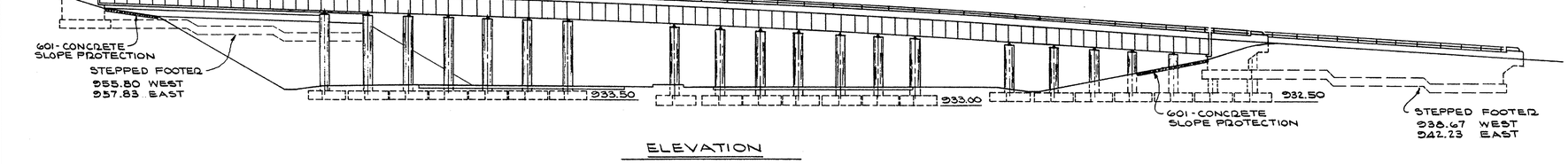
475
656

MAH.-680-698



PLAN

FOR DETAIL OF LIGHT BLISTER SEE SHT. 8/9 MAH 680-0817



ELEVATION

* 361 LBS. TO BE PAID FOR BY THE EAST OHIO GAS COMPANY.

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN		
	503	434	CU YDS	ROCK EXCAVATION		400	34			
	503	86	CU.YDS.	UNCLASSIFIED EXCAVATION		86				
	509	252,328	LBS	REINFORCING STEEL	158,920	26,817	66,591			
	511	749	CU.YDS	CLASS "C" CONCRETE, SUPER.	749					
	511	201	CU YDS	CLASS "C" CONCRETE, PIERS ABOVE FTGS.			201			
	511	335	CU YDS	CLASS "C" CONCRETE, ABUT'S ABOVE FTG.		335				
	511	313	CU YDS	CLASS "C" CONCRETE FTGS.		124	189			
*	513	631,019	LBS.	STRUCTURAL STEEL	631,019					
*	514	631,019	LBS.	FIELD PAINTING STRUCTURAL STEEL	631,019					
	516	100	SQ. FT.	PREFORMED EXPANSION JOINT ($\frac{1}{2}$")		100				
	517	809	LIN.FT.	RAILING (CONCRETE PARAPET WITH DOUBLE PIPE RAIL)	692	117				
	518	173	CU YDS	POROUS BACKFILL		173				

ESTIMATED QUANTITIES: J.W.B. 9-17-69 CHECKED: R.A.H. 9-23-69

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN		
518	222	LIN.FT.	6" PERF. HELICAL CMP INCLUDING SPECIALS 707.01		222				
518	279	LIN FT	6" NON-PERF HELICAL CMP 707.01		279				
518	16	EACH	SCUPPERS-INCLUDING SUPPORTS	16					
601	479	SQ YDS	CONCRETE SLOPE PROTECTION				479		
625			SEE SHT. Nº 424 GEN. LIGHTING SUMMARY						
808	749	UNITS	CHEMICAL ADMIXTURE FOR CONCRETE TYPE A, B OR D	749					

GENERAL NOTES

DESIGN SPECIFICATION: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1969, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS 20-44

CONCRETE CLASS "C" - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE.
UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE.

STRUCTURAL STEEL - ASTM A36 - UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A 615, A 616, A 617, DEFORMED, INTERMEDIATE OR HARD GRADE. UNIT STRESS 20,000 P.S.I. EXCEPT THAT SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A 306 OR A 499, A82 or A615

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-67	REVISED 6-12-69
BR-2-67	REVISED 1-1-71
RB-1-55	REVISED 2-02-59
SD-1-69	DATED 6-12-69

AND TO SUPPLEMENT SPECIFICATIONS:

808	DATED 1-1-71
836	DATED 1-1-71

ABUTMENT EXCAVATION QUANTITY: IN ADDITION TO 503.10, INCLUDE THE REMOVAL OF MATERIAL BOUNDED BY PROPOSED BENCH, BY THE FRONT VERTICAL PLANE DESCRIBED IN 503.10 AND BY THE FINISHED SLOPE OF THE CUT.

FOUNDATION BEARING PRESSURE: ALL FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 5 TONS PER SQUARE FOOT.

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATIONS SHOWN, WHICHEVER IS LOWER.

THE CONCRETE SLOPE PROTECTION SHALL EXTEND FROM THE FACE OF THE ABUTMENTS DOWN TO THE ROCK EXPOSURE AND EXTEND IN WIDTH TO 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE ON BOTH SIDES. THE OUTERSIDE EDGES OF THE SLOPE SHALL INTERSECT THE PROJECTED FACE OF THE ABUTMENT 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE AND SHALL EXTEND DOWN THE SLOPE, NORMAL TO THE FACE OF THE ABUTMENT TO THE ROCK EXPOSURE.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING AND INSTALLING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER. THE CONTRACTOR AND OWNER ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

WELD ON NON-STRESS CARRYING MEMBERS ARE SHOWN THUS:

THE EAST OHIO GAS CO. SHALL BE REFERRED TO BY THE INITIALS E. O. G.

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION
BRIDGE Nº MAH. 680-0835

UNDER SHIRLEY ROAD
MAHONING CO. 1-680
STA. 689 + 72.46

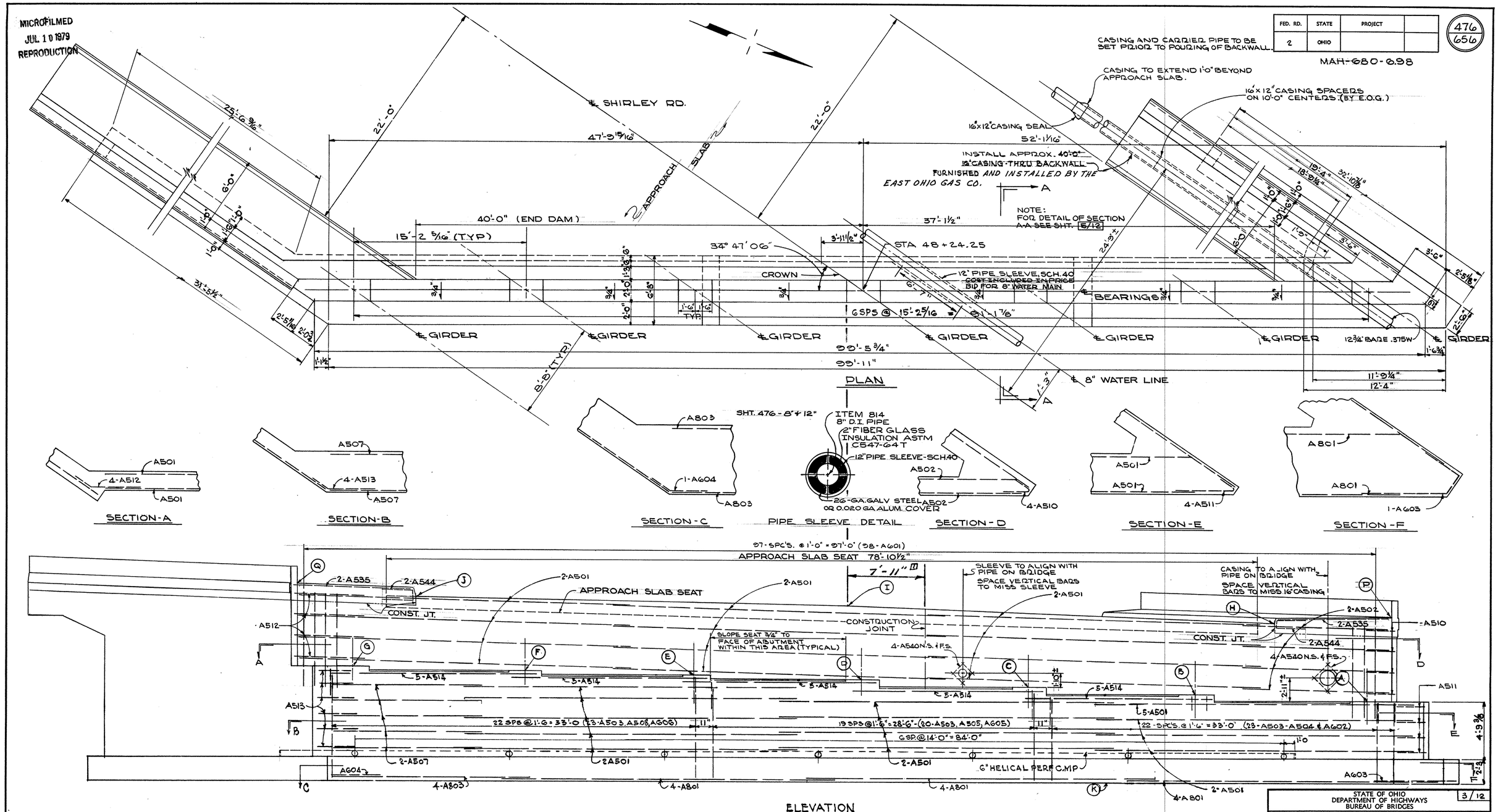
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JWC		JTM	WKD	5-11-70	

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

476/656

MAH-680-6.98



ELEVATIONS

	A	B	C	D	E	F	G	H	I	J	K	P	Q
ABUT 1	962.83	963.40	963.98	964.55	964.86	965.16	965.46	969.46	970.84	971.69	955.80	970.08	972.92

⊡ Revision of 11-26-71

MAY 25 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº 1 DETAILS
BRIDGE Nº MAH. 680-0835

UNDER SHIRLEY RD.
MAHONING CO. 1-680
STA. 689+72.46

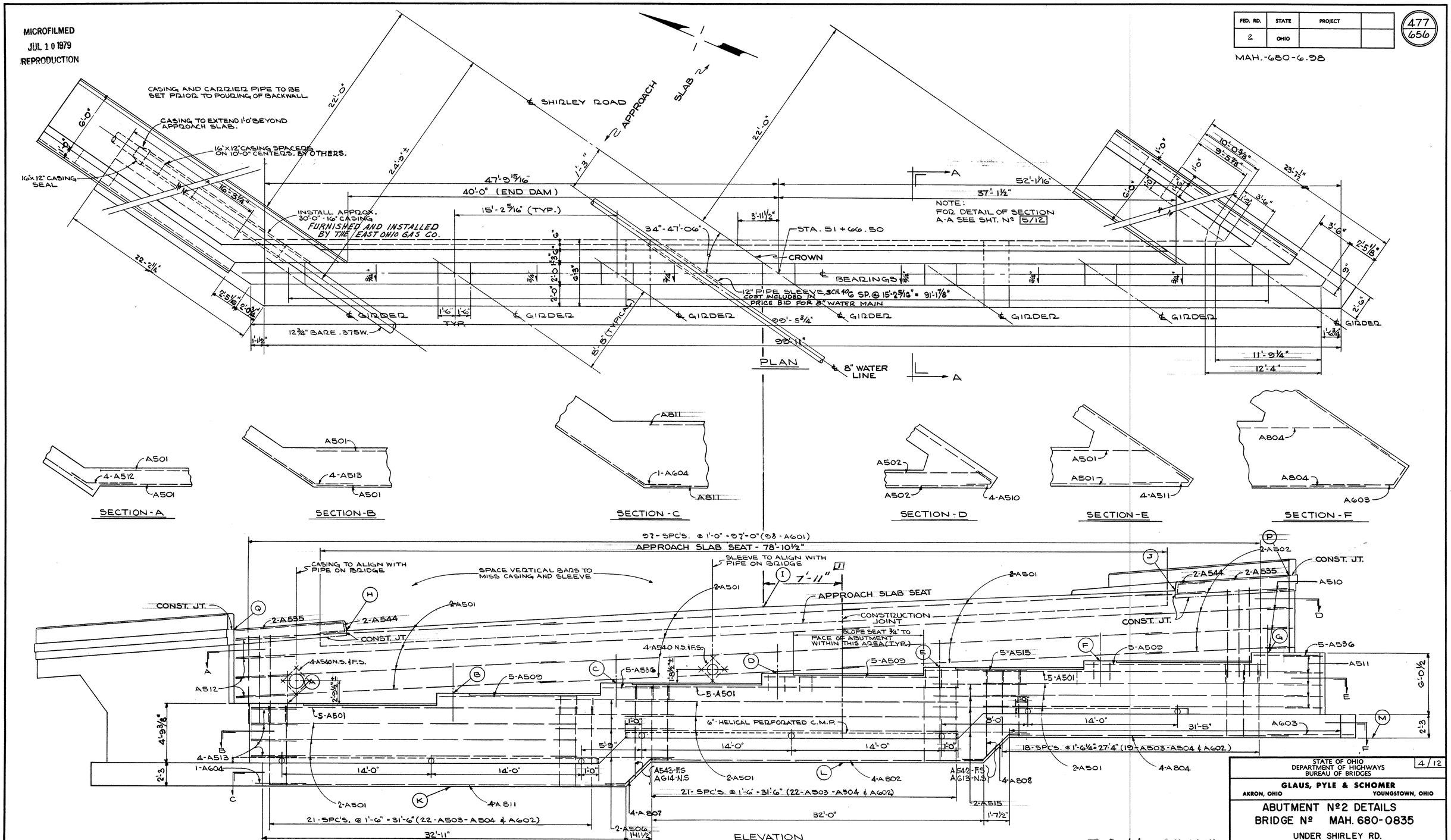
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JDP		JTM	WKD	5-11-70	11-26-71

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

477
656

MAH.-680-6.98



Revision of 11-26-71

ELEVATION TABLE															
LOCATION	A	B	C	D	E	F	G	H	I	J	K	L	M	P	Q
ABUT. Nº 2	945.70	946.68	947.65	948.60	949.26	949.90	950.52	952.42	954.86	956.51	938.67	940.62	942.23	952.25	951.95

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº2 DETAILS
BRIDGE Nº MAH. 680-0835

UNDER SHIRLEY RD.
MAHONING CO. I-680
STA. 689+72.46

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JDP		JTM	WKD	5-11-70	11-26-71

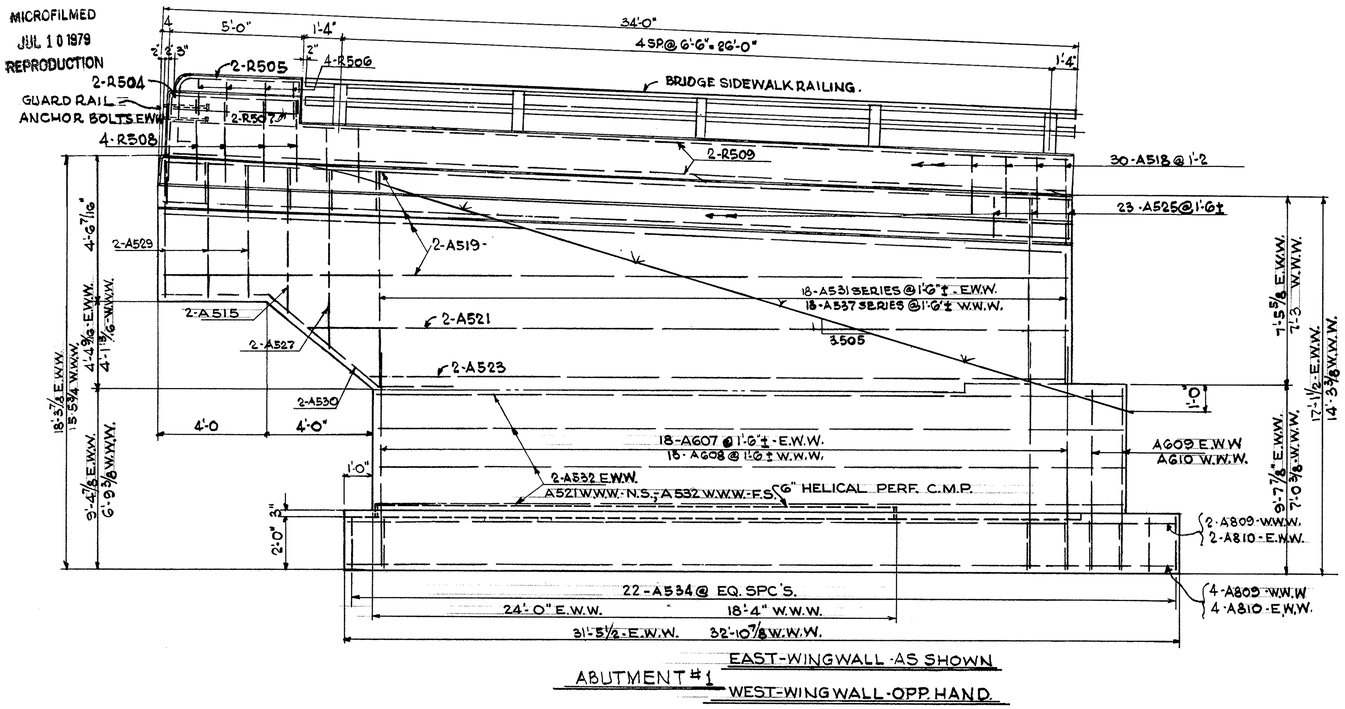
MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

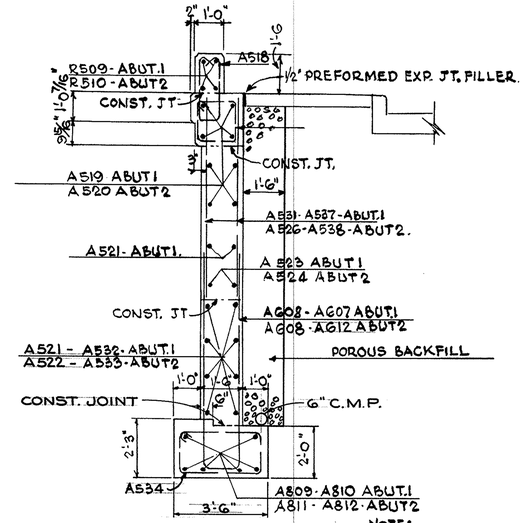
FED. RD.	STATE	PROJECT	
2	OHIO		

478
656

MAH-680-6.98



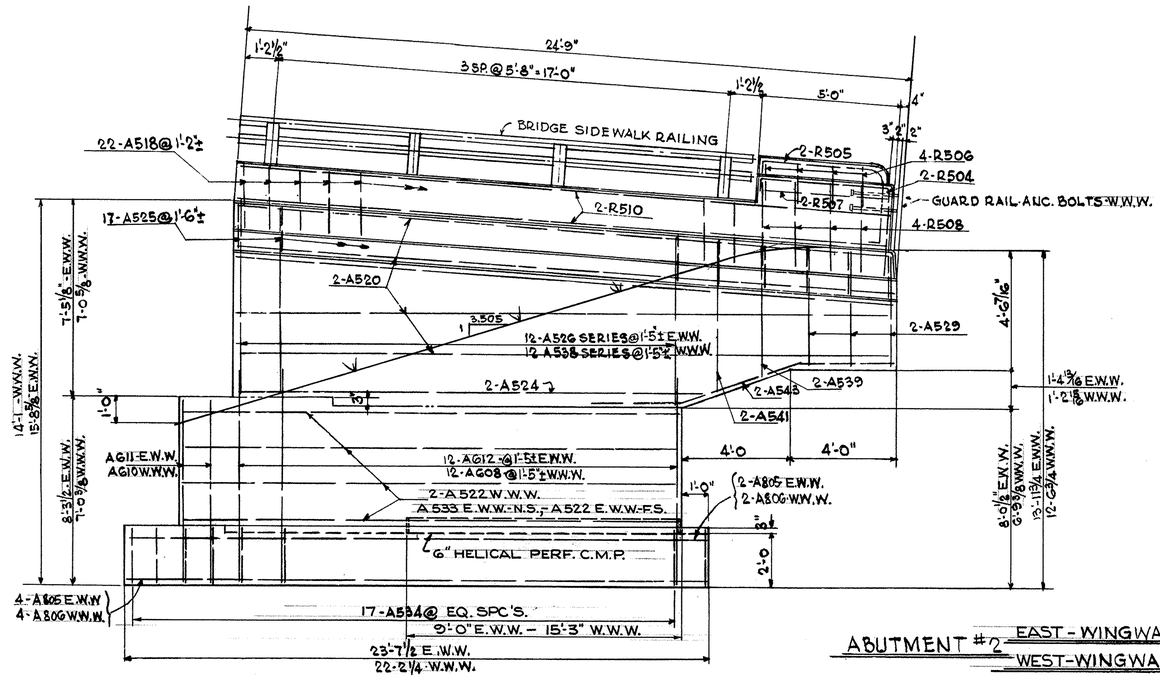
ABUTMENT #1 — EAST-WINGWALL-AS SHOWN; WEST-WINGWALL-OPP. HAND.



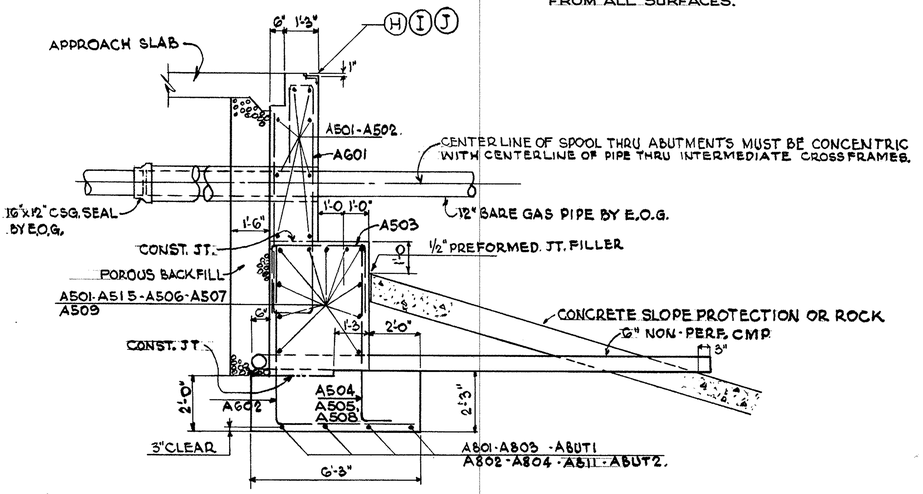
SECTION B-B

NOTE:
POROUS BACKFILL, 1'-6" THICK, FULL LENGTH OF ABUTMENT & WING WALLS SHALL EXTEND TO SUBGRADE ON TO THE FINISHED SURFACE.

IN ALL FOOTINGS THE MINIMUM COVER OF ALL REINFORCING BARS SHALL BE 3" FROM ALL SURFACES.



ABUTMENT #2 — EAST - WINGWALL AS SHOWN; WEST-WINGWALL OPP. HAND



SECTION A-A

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5/12

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO — YOUNGSTOWN, OHIO

WINGWALL DETAILS
BRIDGE Nº MAH.680-0835
UNDER SHIRLEY RD.
MAHONING CO. I-680
STA. 689+72.46

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.C.P.	B.		R.A.H.	W.K.D.	5-11-70	

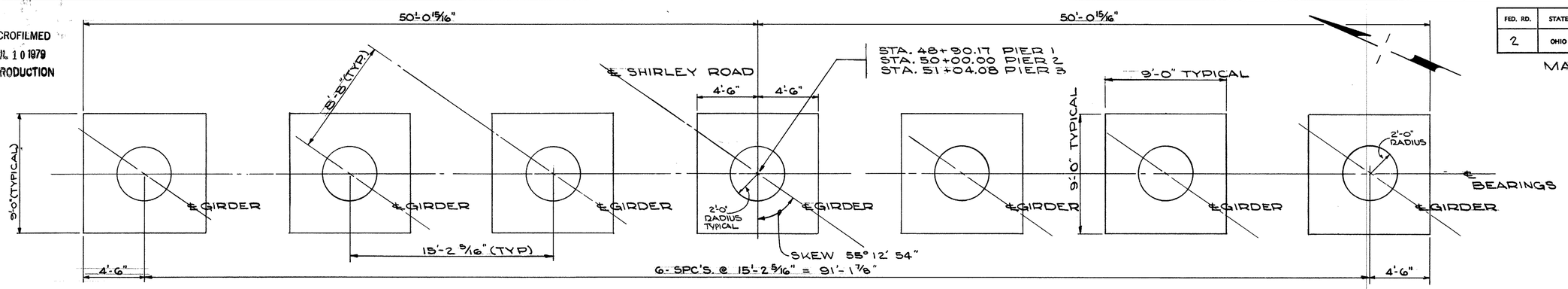
MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

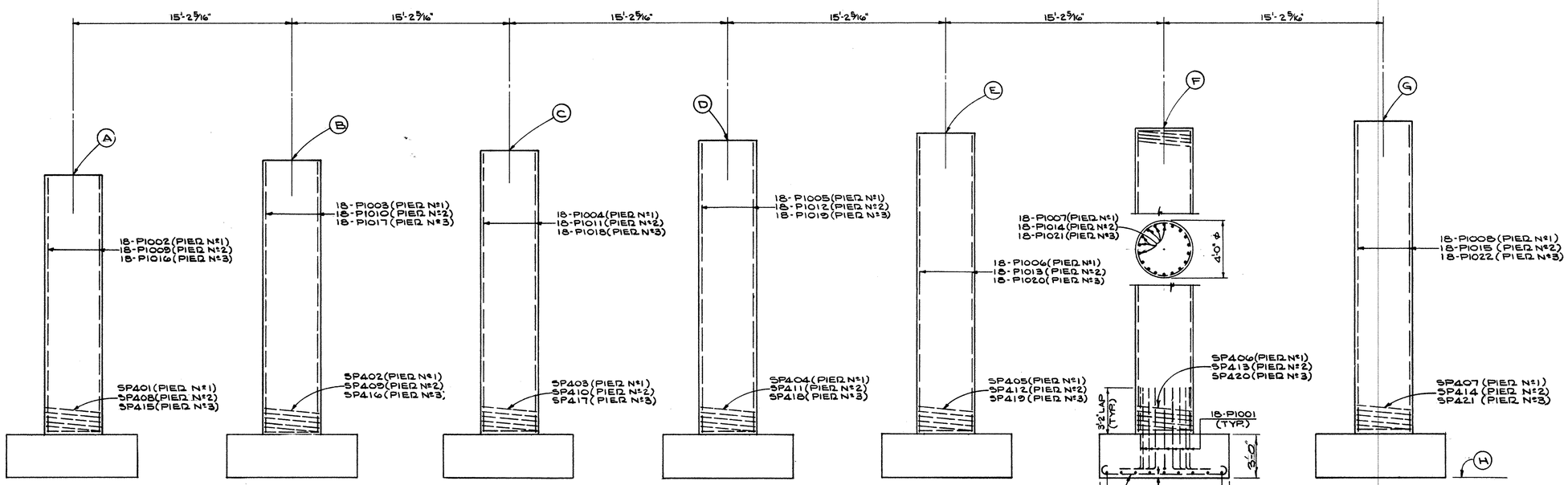
FED. RD.	STATE	PROJECT	
2	OHIO		

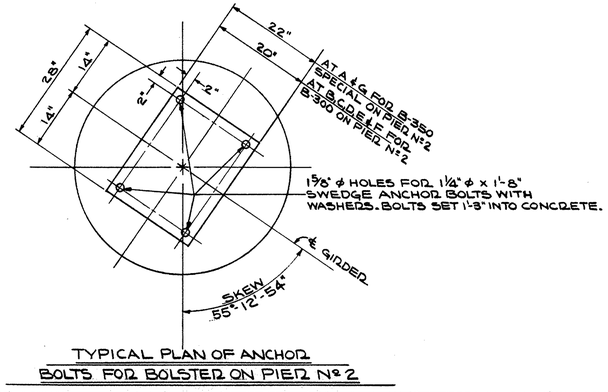
MAH-680-6.98

479/656



PLAN





TYPICAL PLAN OF ANCHOR BOLTS FOR BOLSTER ON PIER N° 2

	A	B	C	D	E	F	G	H
PIER 1	959.71	960.45	961.03	961.61	961.91	962.22	962.38	933.50
PIER 2	954.59	955.59	956.33	957.05	957.48	957.89	958.04	933.00
PIER 3	949.02	950.06	950.94	951.81	952.38	952.94	953.34	932.50

REINFORCING IN EACH COLUMN AND FOOTING IS IDENTICAL UNLESS OTHERWISE NOTED.

See sheet 429B for details of underdeck lighting.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PIERS N°1, 2 & 3 DETAILS
BRIDGE N° MAH. 680-0835
UNDER SHIRLEY RD.
MAHONING CO. I-680
STA. 689 +72.46

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JWC		JTM	WKD	5-11-70	

MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

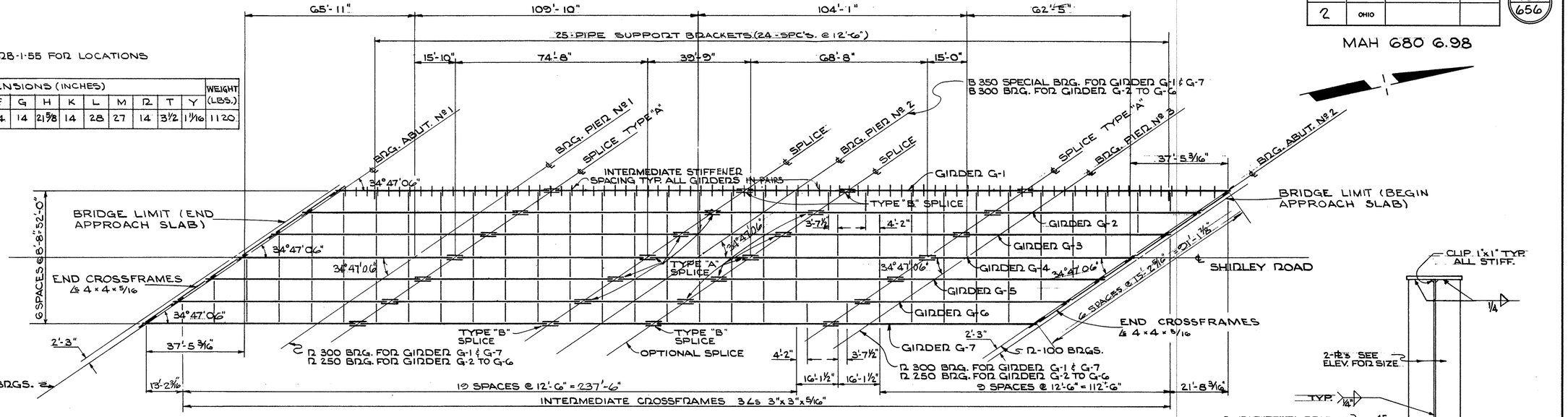
FED. RD.	STATE	PROJECT	
2	OHIO		

480/656

MAH 680 6.98

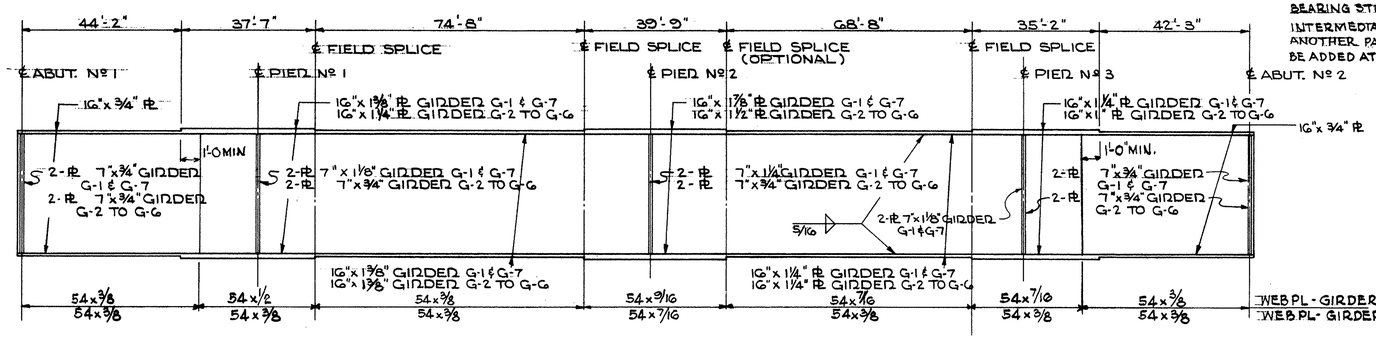
SEE STANDARD DWG. Nº 128-1-55 FOR LOCATIONS OF DIMENSIONS.

TYPE BOLSTER	DIMENSIONS (INCHES)												WEIGHT (LBS.)
	A	B	C	D	F	G	H	K	L	M	R	T	Y	
B-350 SPECIAL	3½	22	4	3½	¾	14	21⅝	14	28	27	14	3½	1 1/16	1120

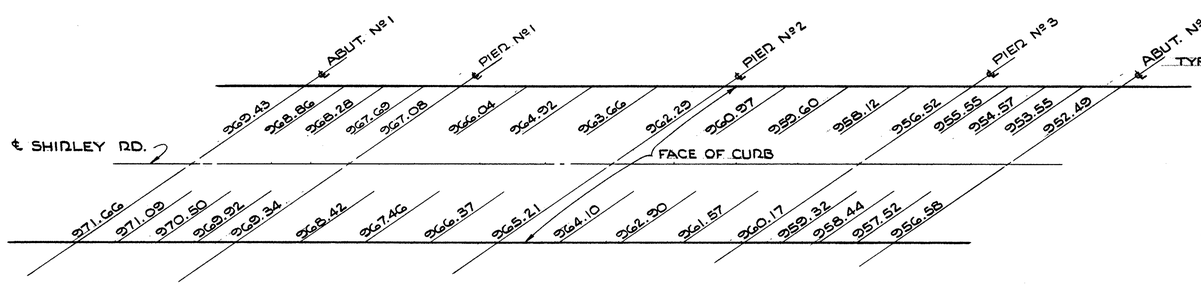


FRAMING PLAN

NOTE:
WHERE THE DISTANCE BETWEEN ABUT. BEARING STIFFENER AND ADJACENT INTERMEDIATE STIFFENER EXCEEDS 2'-1" ANOTHER PAIR OF STIFFENERS MUST BE ADDED AT ½ OF THE SPACE.

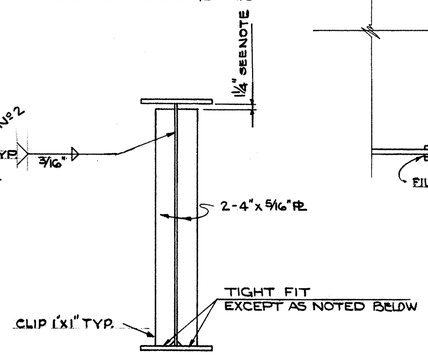


ELEVATION - GIRDER G-1 TO G-7



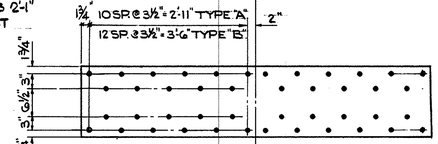
QUARTER POINT DECK ELEVATIONS

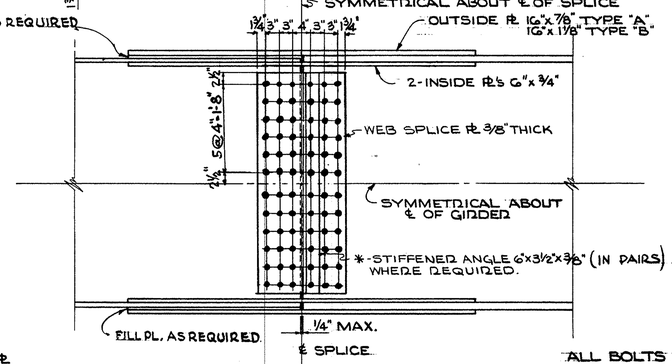
NOTE: THE ELEVATIONS SHOWN AT THE FACE OF THE CURB ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE DECK IS PLACED, PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTION CAUSED BY THE WEIGHT OF THE CONCRETE.



INTERMEDIATE STIFFENER

NOTE:
THE FIRST FOUR INTERMEDIATE STIFFENERS ON EACH SIDE OF THE ℄ OF THE PIERS SHALL BE AS SHOWN ALL OTHERS SHALL HAVE TIGHT FIT AT TOP AND DIMENSION 1¼" AT BOTTOM.





ALL BOLTS 1"ϕ H.S.

GIRDER SPLICE DETAIL

*-REVERSE OUTSTANDING LEG OR MOVE STIFFENER A DISTANCE EQUAL TO BOLT SPACING TO ADJUST TO INTERMEDIATE STIFFENER SPACING.

BEARING STIFFENER

ALL BEARING STIFFENERS SHALL BE MILLED TO PROVIDE FIRM BEARING CONTACT WITH TOP FLANGE. AND BE TRUE VERTICAL.
ALL BEARING STIFFENERS SHALL BE PLACED PERPENDICULAR TO WEB

NOTE:
FOR WELD DETAILS OF FLANGE SPLICES AND WEB SPLICES, SEE SHT. Nº 12/12

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

7/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE Nº MAH. 680-0835

UNDER SHIRLEY ROAD
MAHONING CO. I-680
STA. 689+72.46

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.W.C.	J.W.C.		Q.A.H.	W.K.D.	5-11-70	

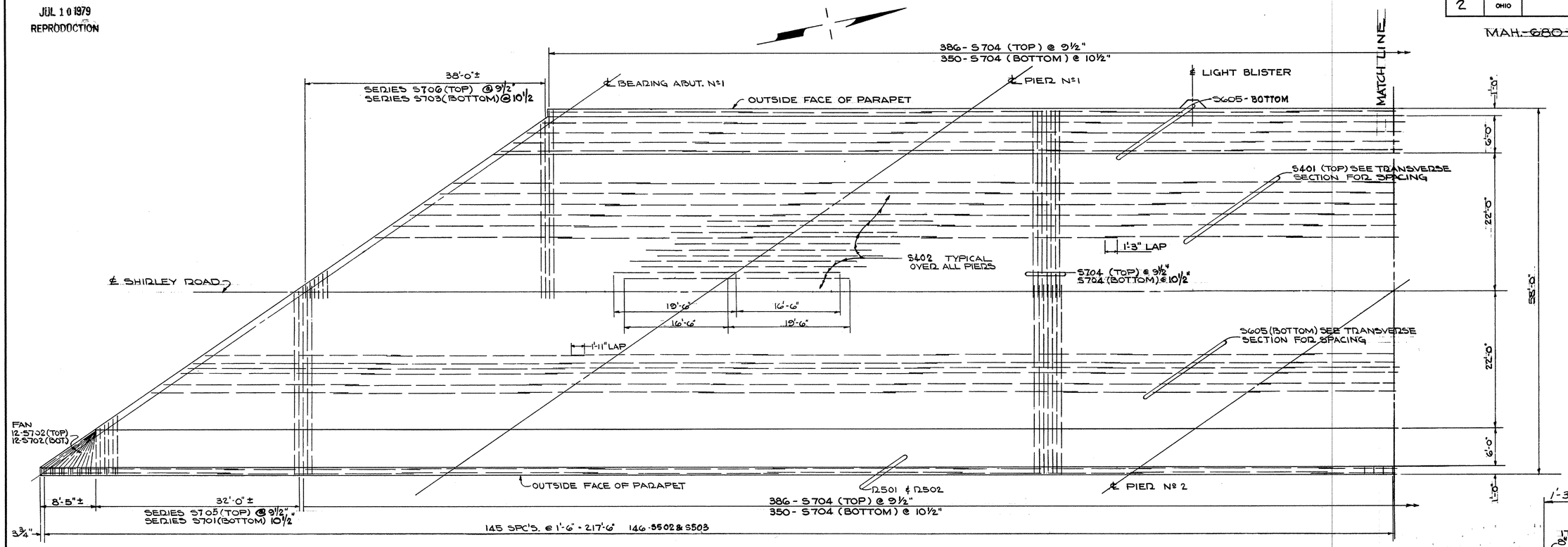
MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

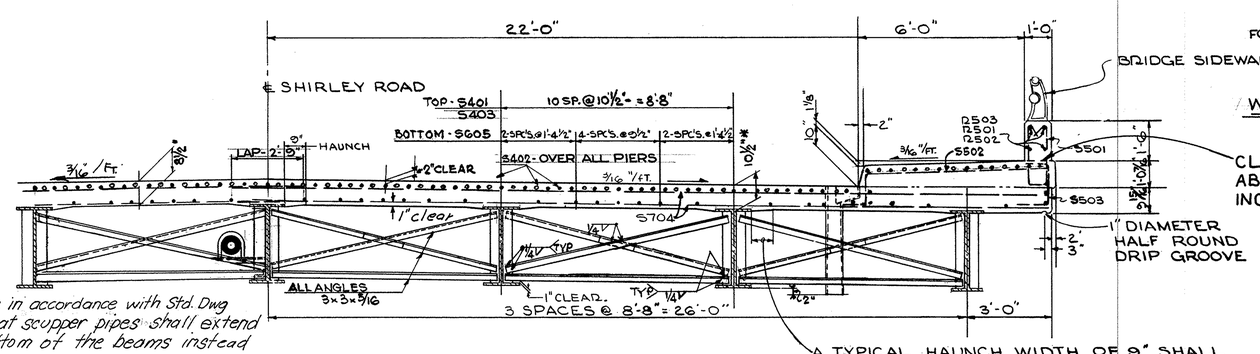
FED. RD.	STATE	PROJECT	
2	OHIO		

481/656

MAH.-680-6.98



SLAB REINFORCING PLAN



SCUPPERS shall be in accordance with Std. Dwg SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

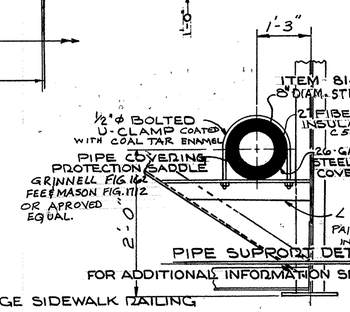
A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE, HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" & 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH

HALF TRANSVERSE SECTION

*DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF THE DECK SLAB TO TOP OF THE WEB PLATE IS THE NOMINAL DIMENSION.

THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCLOSED STEEL PLATES.

SLAB THICKNESS INCLUDES 1" FOR MONOLITHIC WEARING SURFACE.



PIPE SUPPORT DETAIL

FOR ADDITIONAL INFORMATION SEE SHEET 24-A

WATER PIPE SUPPORT DETAIL

CLASS C CONCRETE FOR PARAPETS ABOVE THIS CONSTRUCTION JOINT IS INCLUDED WITH RAILING FOR PAYMENT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

8/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

SLAB REINFORCING PLAN
BRIDGE N° MAH. 680-0835
UNDER SHIRLEY ROAD
MAHONING CO. I-680
STA. 689 + 72.46

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SWC	J.D.P.		STM	WKD	5-11-70	

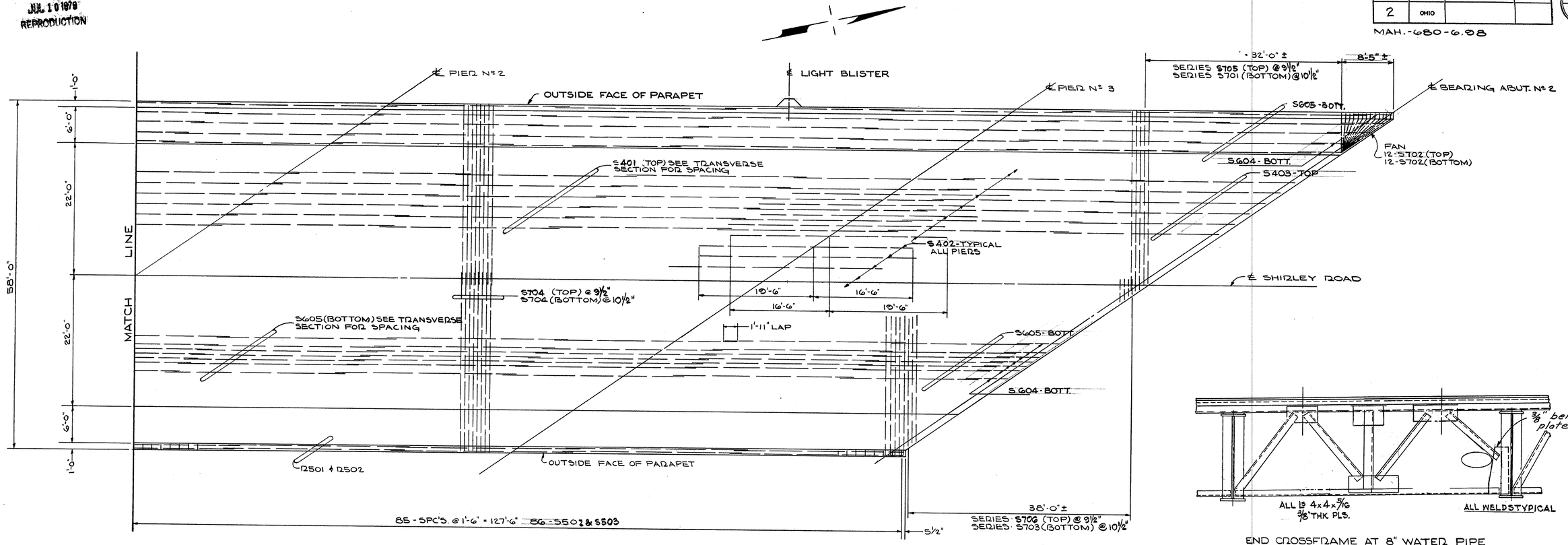
MAY 25 1971

MICROFILMED
JUL 10 1978
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

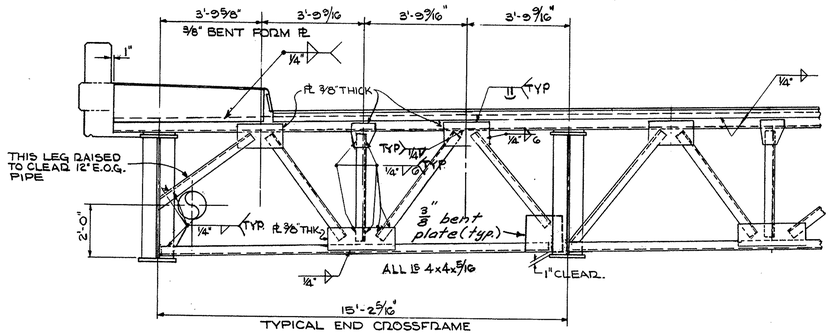
MAH.-680-6.88

482/656



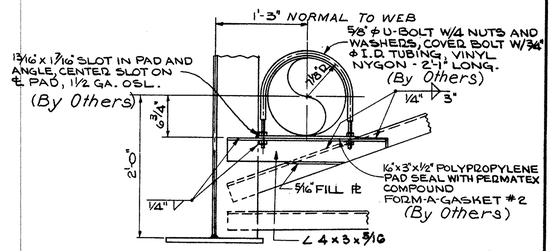
SLAB REINFORCING PLAN

END CROSSFRAME AT 8" WATER PIPE



END CROSSFRAME AT E.O.G. PIPE

ALL BAYS FOR END CROSSFRAME SIMILAR TO SD-1-69 UNLESS OTHERWISE SHOWN.



GAS PIPE SUPPORT BRACKET

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

9/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

SLAB REINFORCING PLAN
BRIDGE Nº MAH. 680-0835

UNDER SHIRLEY ROAD
MAHONING CO. I-680
STA. 689 + 72.46

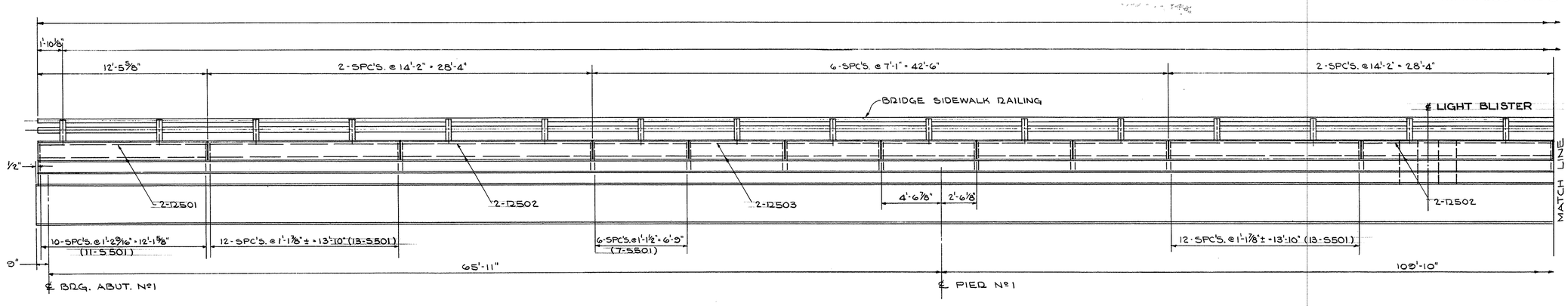
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JDP		JTM	WKD	5-11-70	

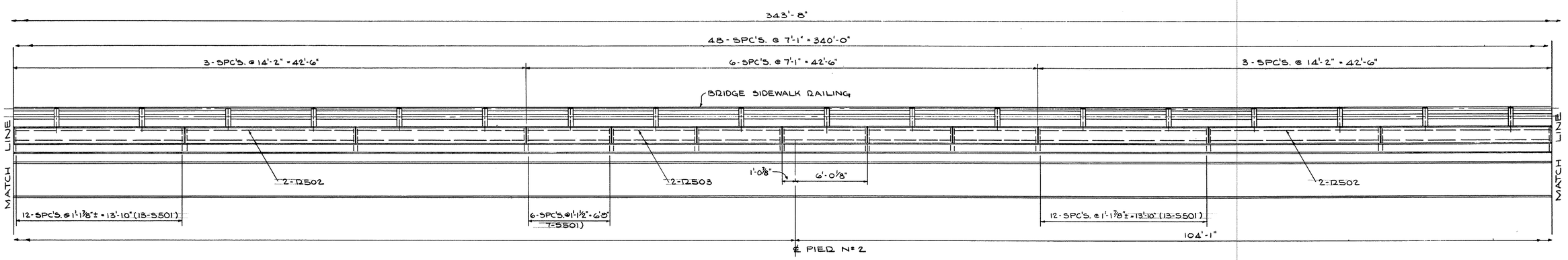
MICROFILMED
JUL 1 0 1979
REPRODUCTION

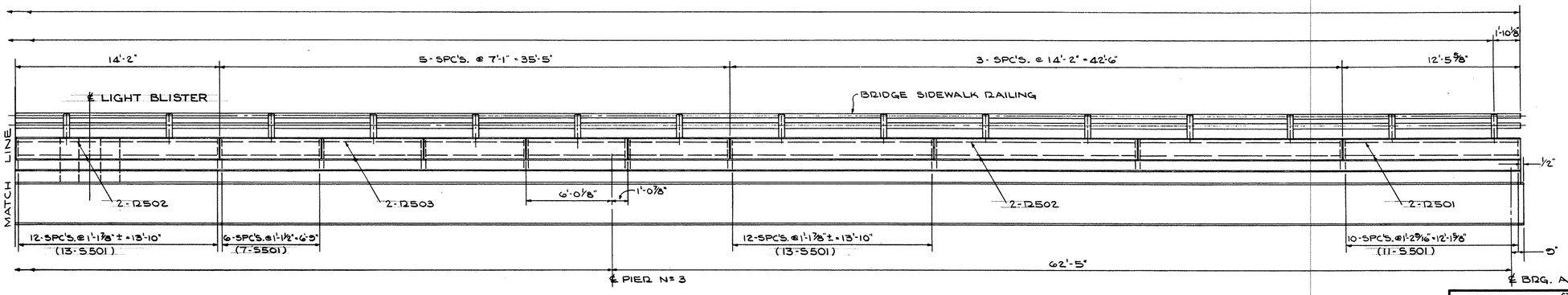
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

483
656







RAILING DETAIL ~ TYPICAL BOTH SIDES ~ SHIRLEY ROAD

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

10 / 12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS
BRIDGE Nº MAH. 680-0835

UNDER SHIRLEY ROAD
MAHONING CO. I-680
STA. 689+72.46

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.A.H.	J.D.P.		D.A.H.	W.K.D.	5-11-70	

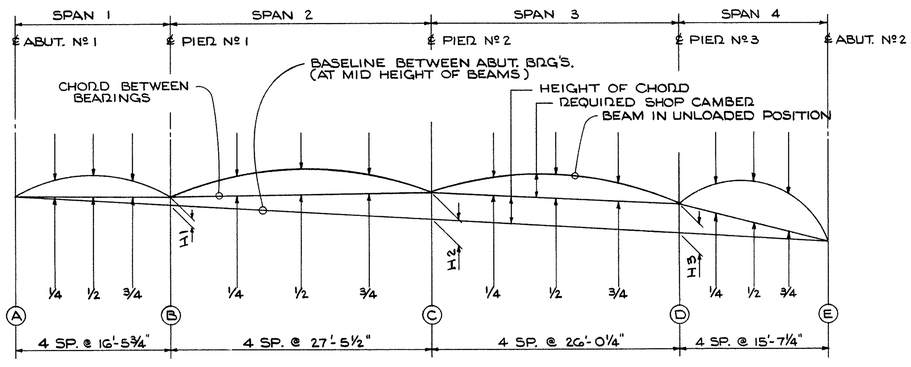
MAY 25 1971

DEFLECTIONS AND CAMBER

GIRDER	A	SPAN - 1 1/4	1/2	3/4	H1	SPAN - 2 1/4	1/2	3/4	H2	SPAN - 3 1/4	1/2	3/4	H3	SPAN - 4 1/4	1/2	3/4	E
GIRDER G 1																	
DEFLECTION DUE TO WEIGHT OF STEEL		0.00	0.00	-0.01		0.09	0.13	0.07		0.03	0.07	0.05		0.00	0.00	0.01	
DEFLECTION DUE TO RE-MAINING DEAD LOAD		0.13	0.11	0.00		0.51	0.78	0.41		0.30	0.65	0.44		0.01	0.11	0.12	
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0.13	0.25	0.29		1.49	1.99	1.49		1.34	1.79	1.34		0.48	0.64	0.48	
REQUIRED SHOP CAMBER INCHES		0.26	0.36	0.28		2.09	2.90	1.97		1.67	2.51	1.83		0.49	0.75	0.61	
H (FEET)	0.00				0.94				1.57				.95				0.00
GIRDER G 2																	
DEFLECTION DUE TO WEIGHT OF STEEL		0.00	-0.01	-0.02		0.10	0.15	0.08		0.04	0.08	0.06		0.00	0.00	0.01	
DEFLECTION DUE TO REMAINING DEAD LOAD		0.12	0.11	0.01		0.45	0.68	0.37		0.27	0.56	0.38		0.01	0.10	0.10	
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0.04	0.08	0.12		1.49	1.99	1.50		1.34	1.79	1.34		0.48	0.64	0.48	
REQUIRED SHOP CAMBER INCHES		0.16	0.18	0.11		2.04	2.82	1.95		1.65	2.43	1.78		0.49	0.74	0.59	
H (FEET)	0.00				0.89				1.54				0.94				0.00
GIRDER G 3																	
DEFLECTION DUE TO WEIGHT OF STEEL		0.00	-0.01	-0.02		0.10	0.15	0.08		0.04	0.08	0.06		0.00	0.00	0.01	
DEFLECTION DUE TO RE-MAINING DEAD LOAD		0.12	0.11	0.01		0.45	0.68	0.37		0.27	0.56	0.38		0.01	0.10	0.10	
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0.00	0.00	0.01		1.49	1.99	1.50		1.34	1.79	1.34		0.48	0.64	0.48	
REQUIRED SHOP CAMBER INCHES		0.12	0.10	0.00		2.04	2.82	1.95		1.65	2.43	1.78		0.49	0.74	0.59	
H (FEET)	0.00				0.82				1.50				0.92				0.00
GIRDER G 4																	
DEFLECTION DUE TO WEIGHT OF STEEL		0.00	-0.01	-0.02		0.10	0.15	0.08		0.04	0.08	0.06		0.00	0.00	0.01	
DEFLECTION DUE TO RE-MAINING DEAD LOAD		0.12	0.11	0.01		0.45	0.68	0.37		0.27	0.56	0.38		0.01	0.10	0.10	
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0.00	0.00	0.00		1.44	1.96	1.48		1.34	1.79	1.34		0.48	0.64	0.48	
REQUIRED SHOP CAMBER INCHES		0.12	0.10	-0.01		1.99	2.79	1.93		1.65	2.43	1.78		0.49	0.74	0.59	
H (FEET)	0.00				0.75				1.46				0.90				0.00

DEFLECTIONS AND CAMBER

GIRDER	A	SPAN - 1 1/4	1/2	3/4	H1	SPAN - 2 1/4	1/2	3/4	H2	SPAN - 3 1/4	1/2	3/4	H3	SPAN - 4 1/4	1/2	3/4	E
GIRDER G 5																	
DEFLECTION DUE TO WEIGHT OF STEEL		0.00	-0.01	-0.02		0.10	0.15	0.08		0.04	0.08	0.06		0.00	0.00	0.01	
DEFLECTION DUE TO RE-MAINING DEAD LOAD		0.12	0.11	0.01		0.45	0.68	0.37		0.27	0.56	0.38		0.01	0.10	0.10	
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0.00	0.00	0.00		1.25	1.83	1.41		1.34	1.79	1.34		0.48	0.64	0.48	
REQUIRED SHOP CAMBER INCHES		0.12	0.10	-0.01		1.80	2.66	1.86		1.65	2.43	1.78		0.49	0.74	0.59	
H (FEET)	0.00				0.68				1.40				0.88				0.00
GIRDER G 6																	
DEFLECTION DUE TO WEIGHT OF STEEL		0.00	-0.01	-0.02		0.10	0.15	0.08		0.04	0.08	0.06		0.00	0.00	0.01	
DEFLECTION DUE TO RE-MAINING DEAD LOAD		0.12	0.11	0.01		0.45	0.68	0.37		0.27	0.56	0.38		0.01	0.10	0.10	
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0.00	0.00	0.00		0.93	1.59	1.30		1.34	1.79	1.34		0.48	0.64	0.48	
REQUIRED SHOP CAMBER INCHES		0.12	0.10	0.01		1.48	2.42	1.75		1.65	2.43	1.78		0.49	0.74	0.59	
H (FEET)	0.00				0.62				1.34				0.86				0.00
GIRDER G 7																	
DEFLECTION DUE TO WEIGHT OF STEEL		0.00	0.00	-0.01		0.09	0.13	0.07		0.03	0.07	0.05		0.00	0.00	0.01	
DEFLECTION DUE TO RE-MAINING DEAD LOAD		0.13	0.11	0.00		0.51	0.78	0.41		0.30	0.65	0.44		0.01	0.11	0.12	
ADJUSTMENT REQUIRED FOR VERTICAL CURVE		0.00	0.00	0.00		0.64	1.26	1.13		1.34	1.79	1.34		0.48	0.65	0.48	
REQUIRED SHOP CAMBER INCHES		0.13	0.11	-0.01		1.24	2.17	1.61		1.67	2.51	1.83		0.49	0.76	0.61	
H (FEET)	0.00				0.56				1.27				0.83				0.00



CHAMBER DIAGRAM (TYPICAL)

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.-680-6.98

484
656

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

11 / 12

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO YOUNGSTOWN, OHIO

CAMBER DIAGRAM
BRIDGE Nº MAH. 680-0835

UNDER SHIRLEY ROAD
MAHONING CO. I-680
STA. 689 + 72.46

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.C.P.	D.L.W.		R.A.H.	W.K.D.	5-11-70	

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

485/656

MAH-680-6,98

MICROFILMED
JUL 10 1979
REPRODUCTION

ABUTMENTS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
A501	110	30'-0"	3,442	ST.
A502	16	12'-5"	207	ST.
A503	129	8'-4"	1,121	BT.
A504	86	7'-3"	650	BT.
A505	20	8'-6"	177	BT.
A506	8	8'-3"	69	ST.
A507	10	10'-0"	104	ST.
A508	23	9'-4"	224	BT.
A509	15	16'-8"	261	ST.
A510	8	4'-4"	36	BT.
A511	9	7'-6"	70	BT.
A512	8	9'-0"	75	BT.
A513	10	6'-0"	63	BT.
A514	25	16'-9"	437	ST.
A515	17	4'-11"	87	ST
A518	104	5'-7"	606	BT.
A519	16	33'-8"	562	ST.
A520	16	24'-5"	408	ST.
A521	8	28'-10"	240	ST.
A522	12	18'-9"	235	ST.
A523	4	26'-0"	108	ST.
A524	4	17'-4"	72	ST.
A525	80	6'-1"	508	BT.
A526	12	SERIES 5'-10" TO 6'-11½" @ 1/4" INC.	80	ST.
A527	4	6'-6"	27	ST.
A529	24	4'-3"	106	ST.
A530	4	11'-6"	48	BT.
A531	18	SERIES 7'-1" TO 7'-3½" @ 1/2" INC.	140	ST.
A532	12	28'-1"	351	ST.
A533	8	19'-10"	165	ST.
A534	78	10'-3"	834	BT.
A535	8	10'-0"	83	ST.
A536	10	4'-5"	46	ST
A537	18	SERIES 6'-11" TO 7'-1½" @ 1/2" INC.	124	ST.
A538	12	SERIES 5'-8" TO 6'-7" @ 1" INC.	84	ST.
A539	4	4'-10"	21	ST
A540	32	2'-3"	75	ST.
A541	4	5'-7"	23	ST
A542	2	9'-4"	19	BT.
A543	4	9'-9"	41	BT.
A544	8	5'-7"	47	BT.
AG01	196	21'-1"	6,207	BT.
AG02	86	11'-8"	1,507	BT.
AG03	2	13'-0"	39	BT.
AG04	2	5'-6"	17	BT.
AG05	20	12'-10"	386	BT.
AG06	23	13'-9"	475	BT.
AG07	18	23'-4"	631	BT.
AG08	30	18'-2"	819	BT.
AG09	4	19'-4"	116	BT.
AG10	8	14'-0"	168	BT.
AG11	4	16'-6"	99	BT.
AG12	12	20'-8"	373	BT.
A801	12	30'-0"	961	ST.
A802	4	32'-0"	342	ST
A803	4	12'-6"	134	ST
A804	4	26'-8"	285	ST
A805	6	21'-7"	346	ST
A806	6	21'-8"	347	ST
A807	4	7'-4"	78	BT.
A808	4	7'-9"	83	BT.
A809	6	29'-11"	479	ST.
A810	6	31'-0"	497	ST
A811	4	32'-11"	352	ST.
ABUTMENT TOTAL			26,817	

RAILING - TO BE INCLUDED IN ITEM 517 FOR PAYMENT

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
R501	16	12'-1"		ST.
R502	112	13'-10"		ST.
R503	136	6'-9"		ST.
R504	8	8'-3"		BT.
R505	8	6'-7"		BT.
R506	16	3'-3"		BT.
R507	8	4'-8"		ST.
R508	16	7'-7"		BT.
R509	8	33'-8"		ST.
R510	8	24'-5"		ST.

SUPERSTRUCTURE

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
S401	781	30'-0"	15,651	ST.
S402	192	36'-0"	4,617	ST.
S403	71	27'-9"	1,316	ST.
S501	602	5'-8"	3,558	BT.
S502	464	8'-10"	4,275	BT.
S503	464	2'-5"	1,170	BT.
S604	46	7'-0"	484	ST
S605	552	30'-0	24,873	ST.
S701 2-SETS OF 38 SERIES	76	SERIES 6'-11" TO 29'-3"@ 7/8" INC.	2,809	ST.
S702	48	6'-4"	621	ST.
S703 2-SETS OF 44-SERIES	88	SERIES 2'-9" TO 29'-3"@ 7/8" INC.	2,878	ST.
S704	1,472	30'-0"	90,263	ST.
S705 2-SETS OF 41-SERIES	82	SERIES 6'-11" TO 29'-0"@ 6'-9" INC.	3,010	ST.
S706 2-SETS OF 49 SERIES	98	SERIES 2'-9" TO 29'-3"@ 6'-9" INC.	3,205	ST.
SUPERSTRUCTURE TOTALS			158,730	

SPIRAL REINFORCING LIST

MARK	NUMBER	CORE DIA.	LENGTH	PITCH	No TURNS	WEIGHT
SP401	1	3'-7"	23'-01½"	4½"	64	574
SP402	1	3'-7"	23' 9¼"	4½"	66	591
SP403	1	3'-7"	24'-4"	4½"	68	605
SP404	1	3'-7"	24-11¼"	4½"	69	619
SP405	1	3'-7	25'-2¾"	4½"	70	626
SP406	1	3'-7"	25'-6½"	4½"	71	635
SP407	1	3'-7"	25'-8½"	4½"	72	638
SP408	1	3'-7"	18'- 5"	4½"	52	463
SP409	1	3'-7"	19'- 5"	4½"	55	487
SP410	1	3'-7"	20'- 2"	4½"	57	505
SP411	1	3'-7"	20'-10½"	4½"	59	522
SP412	1	3'-7"	21'- 3¾"	4½"	60	532
SP413	1	3'-7"	21'- 8½"	4½"	61	542
SP414	1	3'-7"	21-10½"	4½"	61	546
SP415	1	3'-7"	13'-4¼"	4½"	39	342
SP416	1	3'-7"	14'-3¾"	4½"	41	365
SP417	1	3'-7"	15'- 3¼"	4½"	44	388
SP418	1	3'-7"	16'- 1¾"	4½"	46	409
SP419	1	3'-7"	16'- 8½"	4½"	48	422
SP420	1	3'-7"	17'- 5¼"	4½"	49	436
SP421	1	3'-7"	17'- 8"	4½"	50	445
SPIRAL TOTALS						10,689

REPLACEMENT BARS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
RE401	1	6'-8"		ST.
RE501	2	6'-7"		ST.
RE601	6	6'-11"		ST.
RE701	4	7'-3"		ST.
RE801	1	7'-6"		ST.
RE1001	3	8'-2"		ST.
RESP401	1	6'-3"		BT.

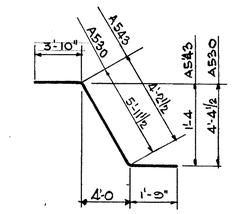
LIGHT BLISTER BARS TOTALS = 190 LBS.

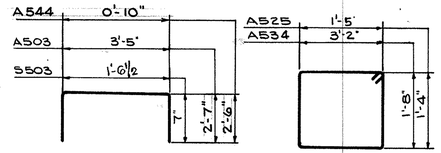
PIERS

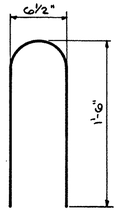
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
P801	378	10'-8"	10,765	BT.
P1001	378	7'-5"	12,064	BT.
P1002	18	23'-0½	1,785	ST.
P1003	18	23'-9"	1,840	ST.
P1004	18	24'-4"	1,885	ST.
P1005	18	24'-11"	1,930	ST.
P1006	18	25'-3'	1,956	ST.
P1007	18	25'-6½"	1,978	ST.
P1008	18	25'-8½"	1,991	ST.
P1009	18	18'-5"	1,427	ST.
P1010	18	19'-5"	1,504	ST.
P1011	18	20'-2"	1,562	ST.
P1012	18	20'-10½	1,617	ST.
P1013	18	21'-4"	1,652	ST.
P1014	18	21'-8"	1,678	ST.
P1015	18	21'-10½	1,694	ST.
P1016	18	13'-4"	1,033	ST.
P1017	18	14'-4"	1,110	ST.
P1018	18	15'-3"	1,181	ST.
P1019	18	16' 2	1,252	ST.
P1020	18	16'-8½"	1,294	ST.
P1021	18	17'-3'	1,336	ST.
P1022	18	17'-8"	1,368	ST.
PIER TOTALS			55,902	

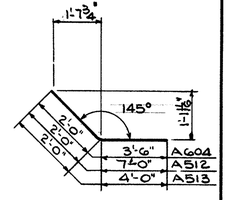
TOTALS

ABUTMENTS	26,817
PIERS	66,591
SUPERSTRUCTURE	158,920
GRAND TOTAL	252,328

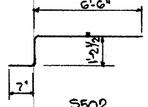


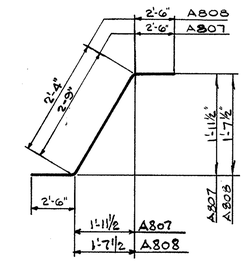


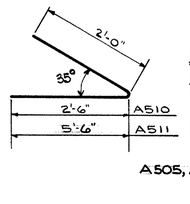


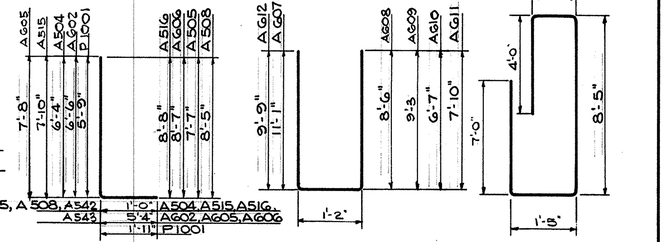


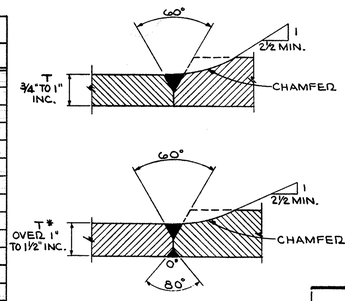




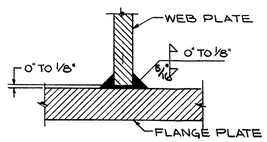




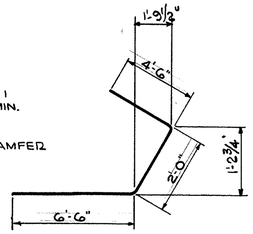




UNEQUAL FLANGES



FLANGE TO WEB WELD



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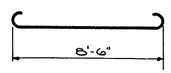

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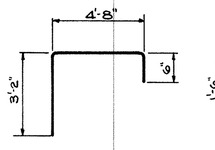

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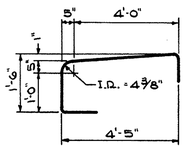

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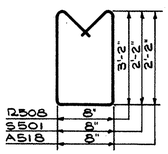
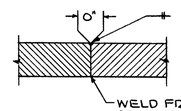




WEB SPLICE

ALL FULL PENETRATION WELDS SHALL BE BACK-GOUGED AND WELDED AFTER WELDING FAR SIDE. ALL GRINDING SHALL BE PARALLEL TO THE DIRECTION OF STRESS. ALL FLANGE TO FLANGE AND WEB TO WEB SPLICES ARE TO BE GROUND.

*-FOR PLATE THICKNESS OVER 1½", USE JOINT PREPARATION CONFORMING TO B-U3a-S OR B-U7-S, FIGURE-216 A.W.S. SPECIFICATIONS.

NOTE:

SPIRAL REINFORCING BARS: THE LENGTH SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE TOP OF THE PIER. MINUS 2".

THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. SPIRAL

1 - 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. FOUR STEEL 1"x1"x⅛" ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LB. PER LIN. FT. OF SPACER, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF LBS. OF THESE SPACERS, BASED ON 0.80 LB. PER LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE D IGITS ARE USED, AND FIRST TWO WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A 701 IS A NO. 7 SIZE BAR AND A 1000 IS A NO. 10 SIZE. ALL BAR DIMENSIONS ARE GIVEN OUT TO OUT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
12 / 12

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO — YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE

BRIDGE Nº MAH.680-0835

UNDER SHIRLEY RD.

MAHONING CO. I-680

STA. 689+72.45

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.C.P.	J.D.P.		R.A.H.	W.K.D.	5-11-70	

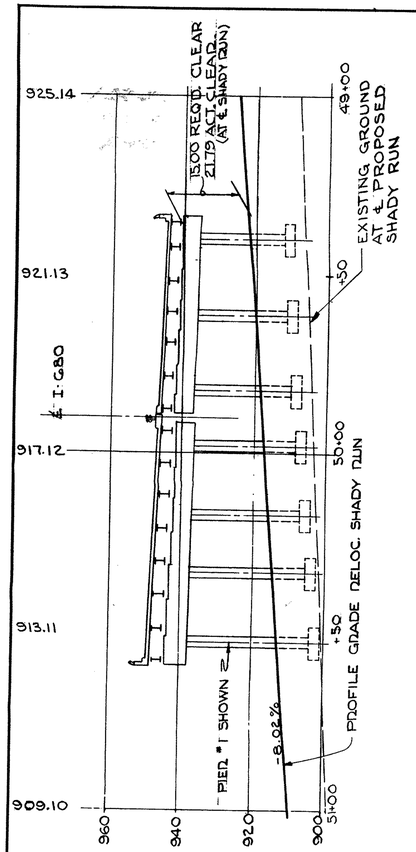
MAY 25 1971

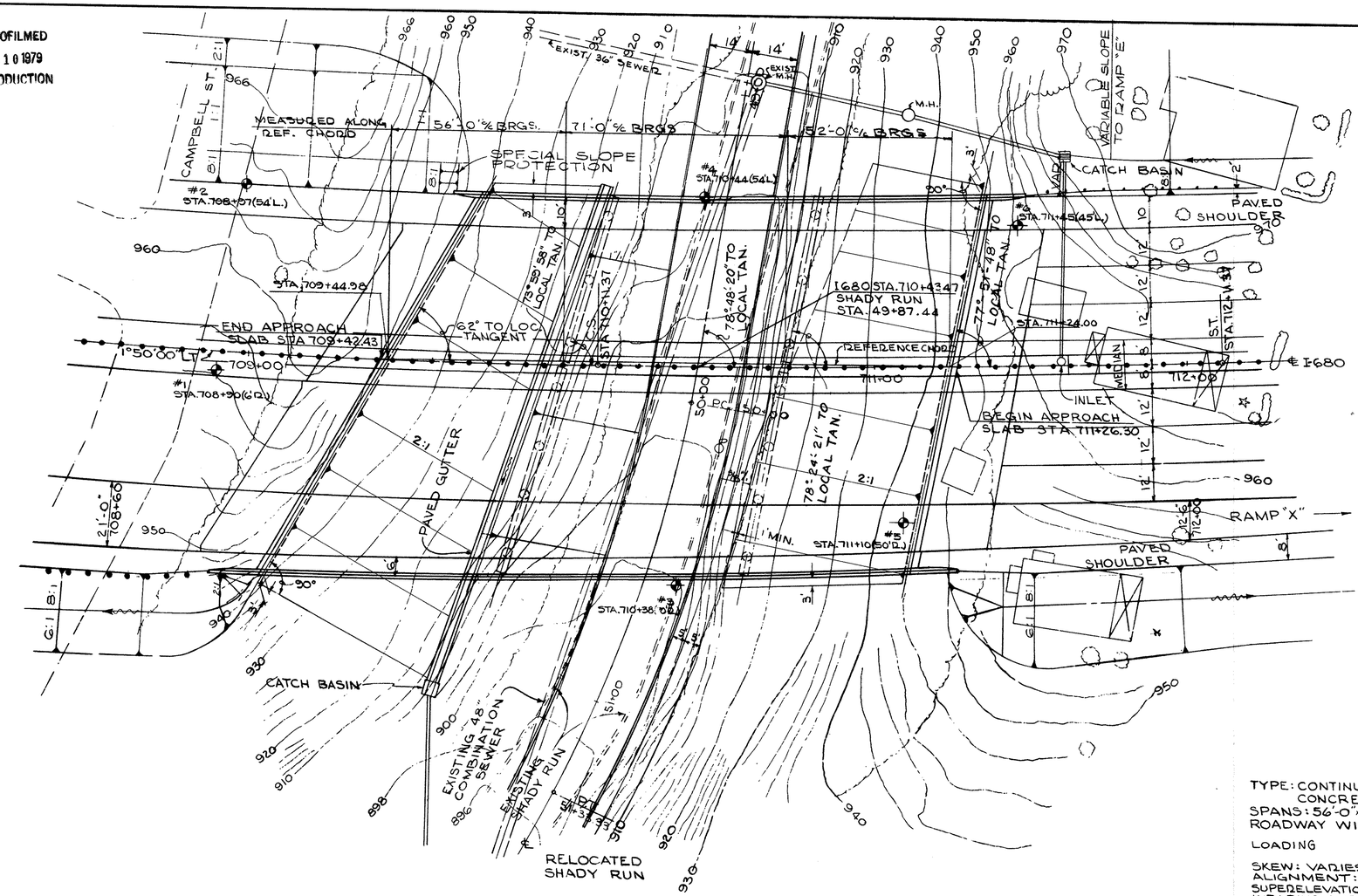
MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

486/656

MAH-680-6.98





CURVE DATA I-680

Δ = 71° 25' 13" LT L_c = 3,695.65
D = 1° 50' 00" T_c = 2,098.22
R = 3,125.22' L_s = 200'

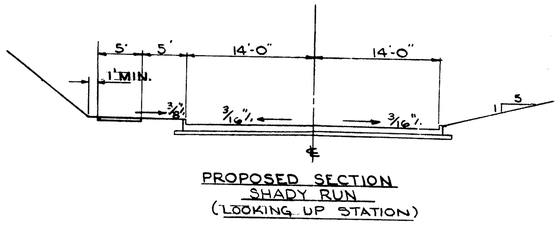
CURVE DATA SHADY RUN

Δ = 16° 00' 00" L = 133.33
D = 12° 00' 00" T = 67.10'
R = 477.46'

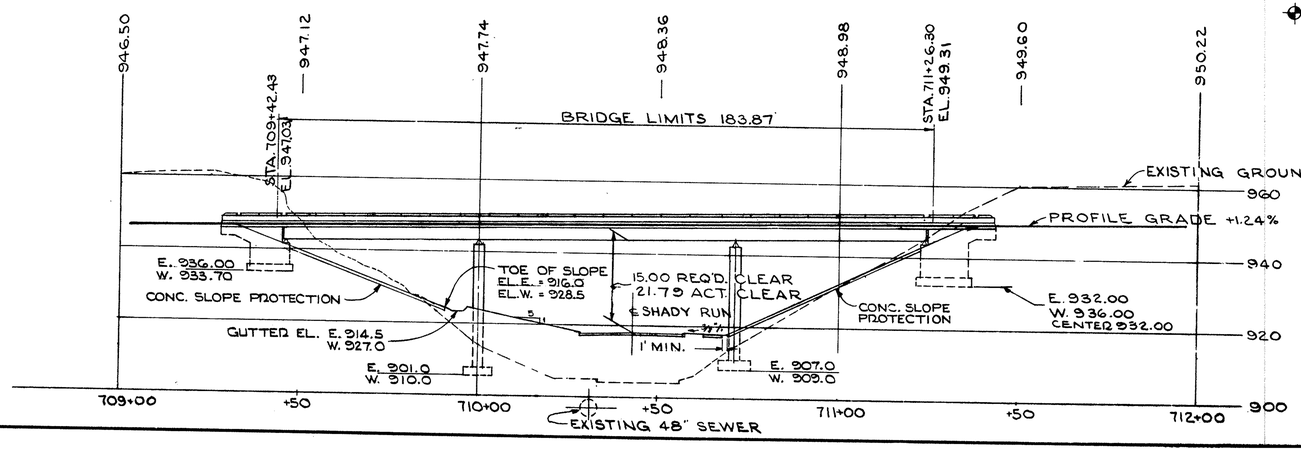
PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 56'-0" x 71'-0" x 52'-0" % BEARINGS.
ROADWAY WIDTH: AVERAGE ROADWAY WIDTH 119'-3" ± OF PARAPETS
LOADING: H S 20-44 & INTERSTATE ALTERNATE LOADING.
SKEW: VARIES AS SHOWN ON PLAN.
ALIGNMENT: 1°-50'-00" LT. & 200' SPIRAL.
SUPERELEVATION: VARIES (.0434 ft/ft TO C.S., .0186 ft/ft TO S.T.)
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
APPROACH SLAB: 20' LONG SPECIAL.
TRAFFIC COUNT: SHADY RUN - 8,064 ADT 1960
I680 - 104,000 ADT 1960

⊕ = SOIL TEST BORING

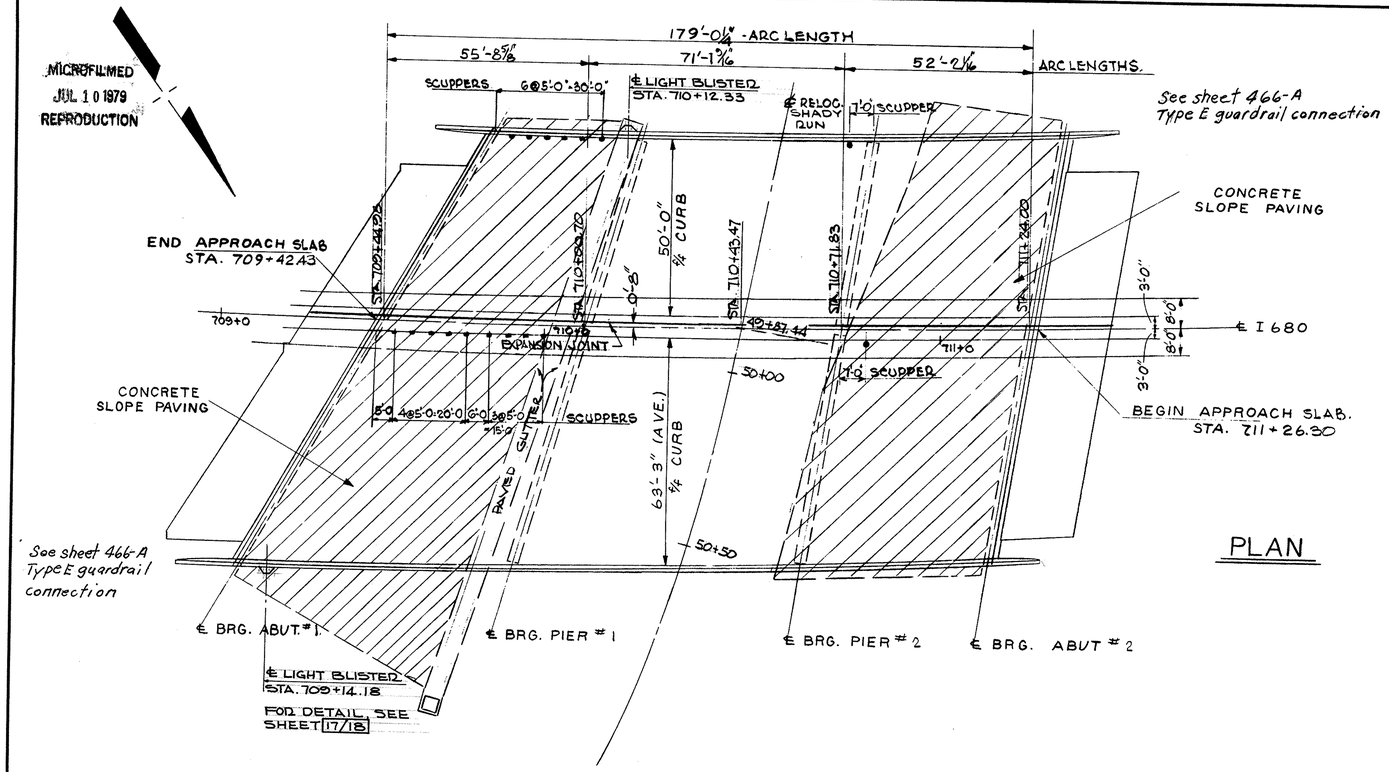


PROPOSED SECTION
SHADY RUN
(LOOKING UP STATION)

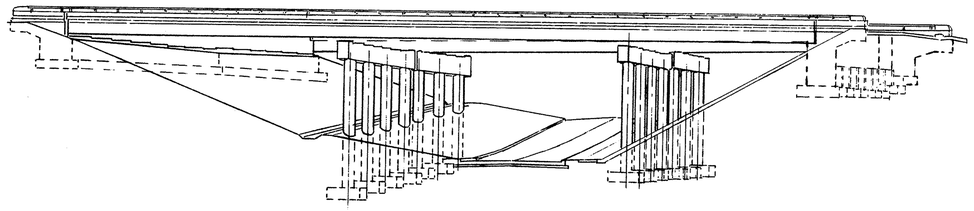


STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES						1/18
GLAUS, PYLE & SCHOMER AKRON, OHIO — YOUNGSTOWN, OHIO						
SITE PLAN BRIDGE Nº MAH. 680-0794 OVER SHADY RUN MAHONING CO. I-680 STA. 710+43.28						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JWC		RAH	W.K.D.	5-1-70	

MICROFILMED
JUL 10 1979
REPRODUCTION



PLAN



ELEVATION

GENERAL NOTES

DESIGN SPECIFICATION: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1969, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS 20-44 AND INTERSTATE ALTERNATE LOADING

CONCRETE CLASS "C" - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE.
UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE.

STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A 615, A 616, A 617, DEFORMED, INTERMEDIATE OR HARD GRADE UNIT STRESS 20,000 P.S.I. EXCEPT THAT SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A 306 OR A 499, A82 or A615.

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS 1-67	REVISED 6-12-69
BR 1-65	REVISED 11-24-65
RB 1-55	REVISED 2-02-59
SD 1-69	DATED 6-12-69

AND TO SUPPLEMENT SPECIFICATIONS:

808	DATED 1-1-71
836	DATED 1-1-71

FOUNDATION BEARING PRESSURE: ALL FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 6 TONS PER SQUARE FOOT.

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATIONS SHOWN, WHICHEVER IS LOWER.

THE CONCRETE SLOPE PROTECTION OF ABUTMENT Nº1 SHALL EXTEND FROM THE FACE OF THE ABUTMENT TO THE PAVED GUTTER AND ABUTMENT Nº 2 SHALL EXTEND FROM THE FACE OF ABUTMENT TO THE BACK EDGE OF THE SIDEWALK. IT SHALL EXTEND IN WIDTH TO 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE ON BOTH SIDES. THE OUTERSIDE EDGE OF THE SLOPE SHALL INTERSECT THE PROJECTED FACE OF THE ABUTMENT 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE AND SHALL EXTEND DOWN THE SLOPE, NORMAL TO THE FACE OF THE ABUTMENT AS HERE-IN-BEFORE STATED.

WELD ON NON-STRESS CARRYING MEMBERS ARE SHOWN THUS:

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN.		
503	269	CU. YD.	UNCLASSIFIED EXCAVATION		269				
503	557	CU. YD.	ROCK EXCAVATION		250	307			
503	LUMP	SUM	COFFERDAMS, CRIBS and SHEETING				LUMP		
509	306,596	LBS.	REINFORCING STEEL	200,490	34,301	71,805			
511	676	CU. YD.	CLASS "C" CONC. - SUPERSTRUCTURE	676					
511	241	CU. YD.	CLASS "C" CONC. - PIERS ABOVE FOOTINGS			241			
511	313	CU. YD.	CLASS "C" CONC. - ABUTS. ABOVE FOOTINGS		313				
511	247	CU. YD.	CLASS "C" CONC. - FOOTINGS		121	126			
512	22	LIN. FT.	PREMOLDED SEALING STRIP		22				
513	526,570	LBS.	STRUCTURAL STEEL	526,570					
514	526,570	LBS.	FIELD PAINTING OF STRUCTURAL STEEL	526,570					
516	55	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER		55				
517	426.00	LIN. FT.	RAILING (CONCRETE PARAPET WITH PIPE RAIL)	369.00	57.00				
517	184	LIN. FT.	RAILING (DOUBLE-FACED, DEEP BEAM RAIL WITH STEEL POSTS AND BOLTS)	184					

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN.		
518	130	CU. YD.	POROUS BACKFILL		130				
518	252	LIN. FT.	6" HEL. PER. C.M.P. - 707.01		252				
518	219	LIN. FT.	6" HEL. NON-PER. C.M.P. - 707.01 (INCLUDING SPECIALS)		219				
518	17	EACH	SCUPPERS INCLUDING SUPPORTS	17					
601	1,700	SQ. YDS.	CONCRETE SLOPE PROTECTION		1,700				
625			SEE SHT. Nº 424 - GENERAL LIGHTING SUMMARY						
808	676	UNITS	CHEMICAL ADMIXTURE FOR CONCRETE - TYPE A, B, OR D	676					

ESTIMATED QUANTITIES: C.E.S 4-29-70 CH'KD. R.A.H. 5-1-70

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

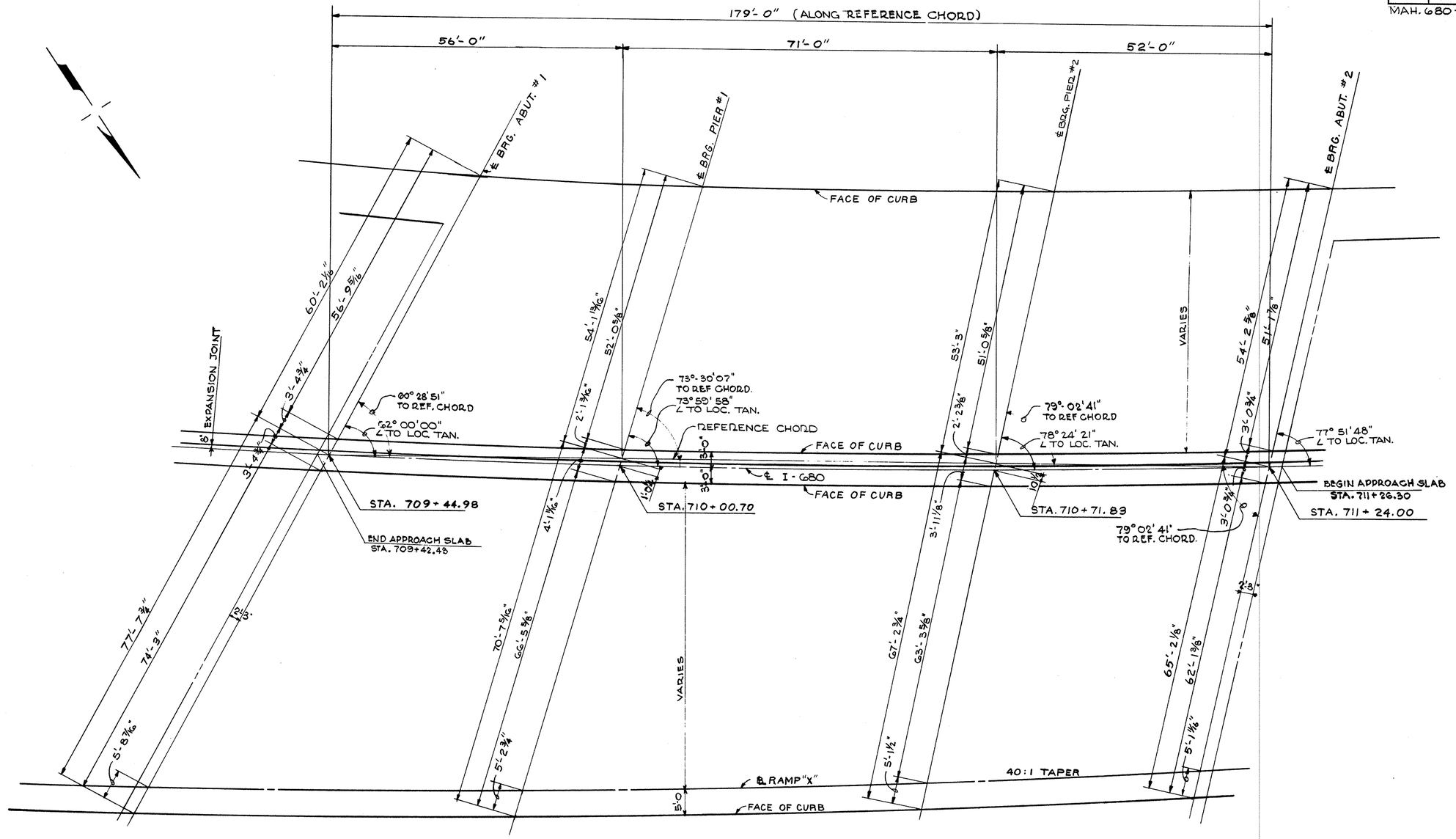
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.M.	D.M.		R.A.H.	W.K.D.	5-1-70	

MICROFILMED
JUL 10 1970
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

488/656

MAH. 680-6.98



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

GEOMETRIC PLAN

BRIDGE Nº MAH. 680-0794

OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	D.M.		R.A.H.	W.K.R.	5-1-70	

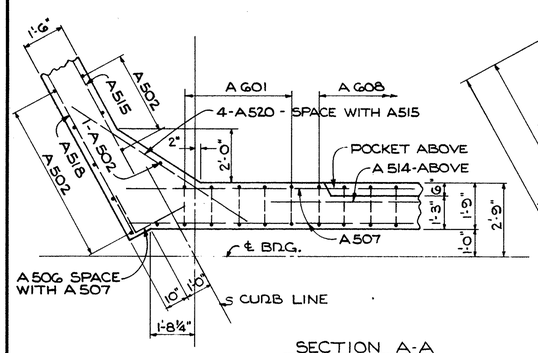
MAY 9 - 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

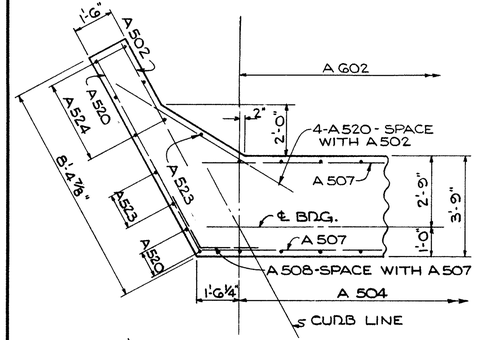
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

4/650



SECTION A-A



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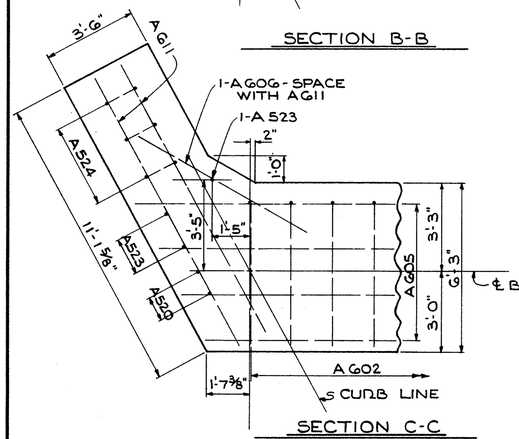

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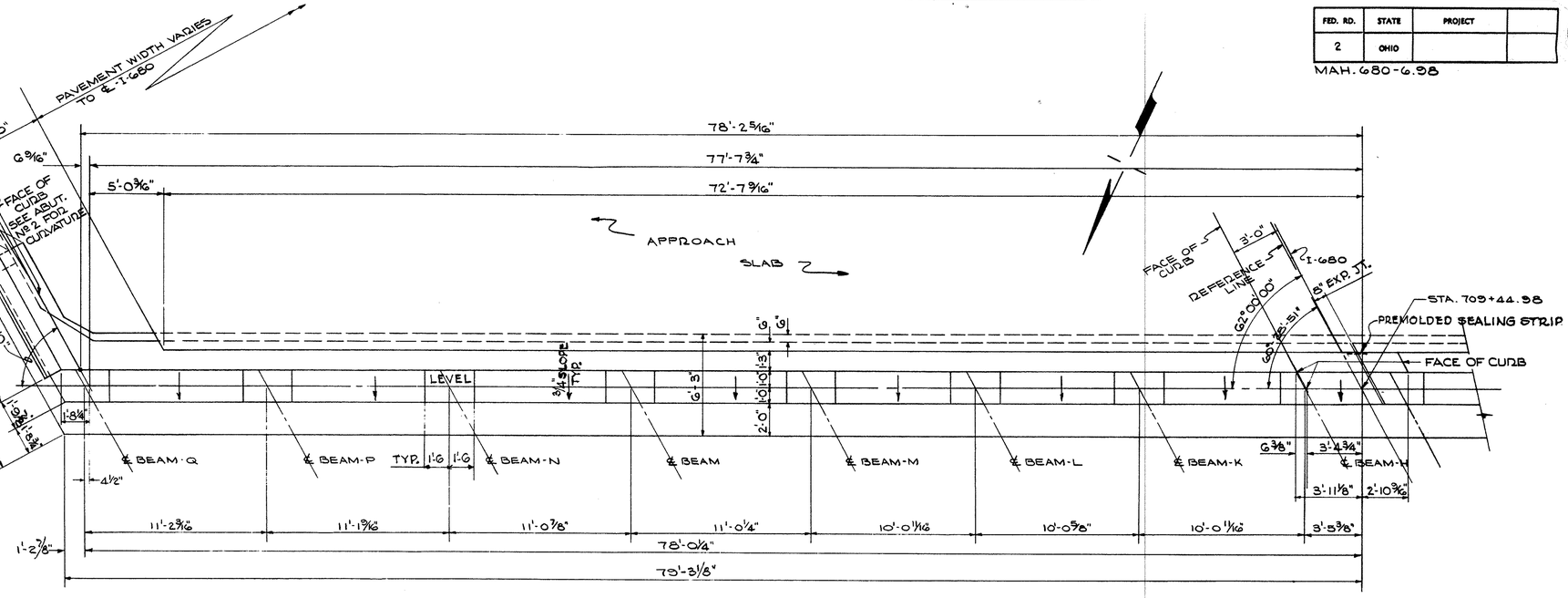
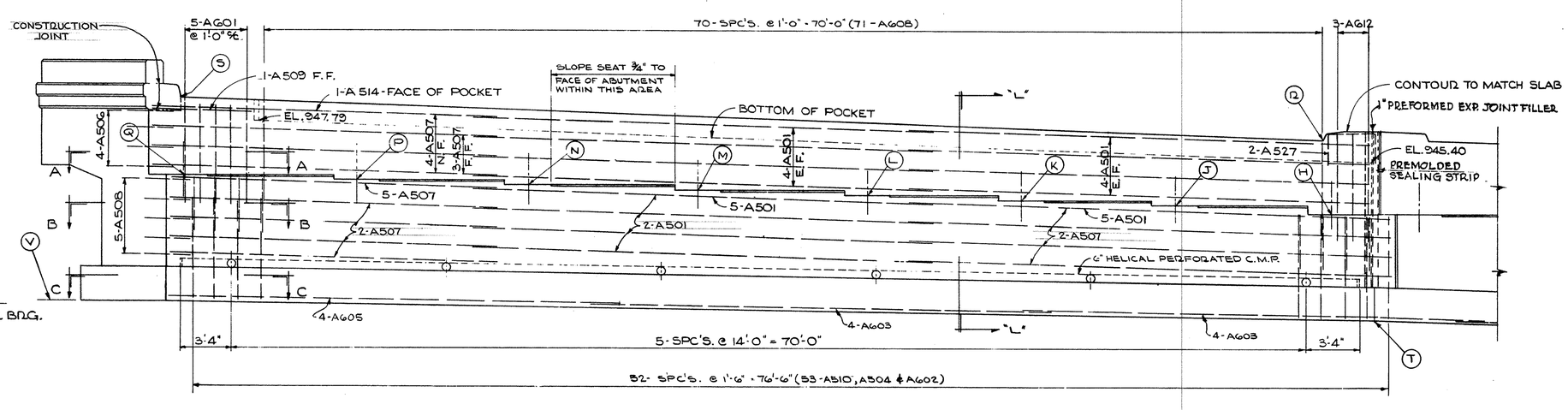


PLAN



ELEVATION

FOR SECTION L-L SEE WINGWALL DETAILS - SHEET Nº 7/18

ELEVATION TABLE												
LOCATION	H	J	K	L	M	N	P	Q	R	S	T	V
ABUT. Nº1 RT. SIDE	942.10	942.43	942.76	943.09	943.46	943.83	944.19	944.56	946.80	949.23	935.00	936.00

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº 1 DETAILS (RT.)
BRIDGE Nº MAH. 680-0794

OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.D.P.	J.D.P.		Q.A.H.	W.K.D.	5-1-70	

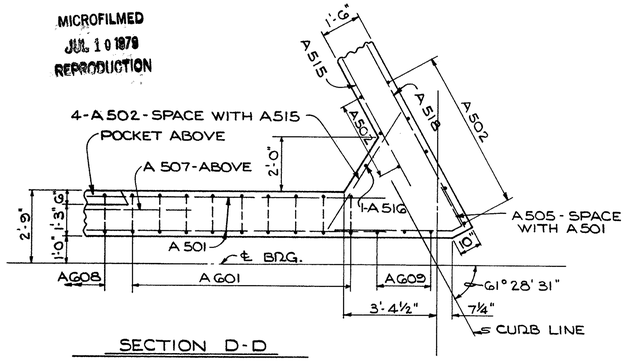
MAY 28 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

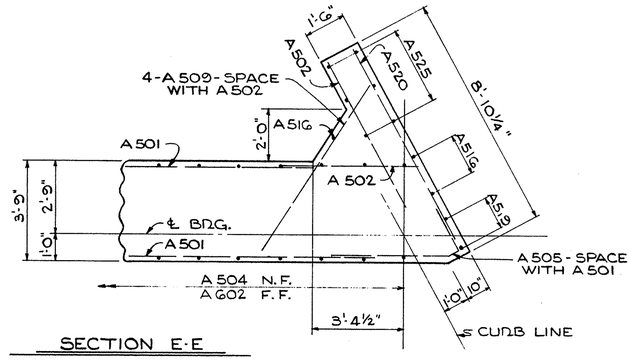
FED. RD.	STATE	PROJECT	
2	OHIO		

490
656

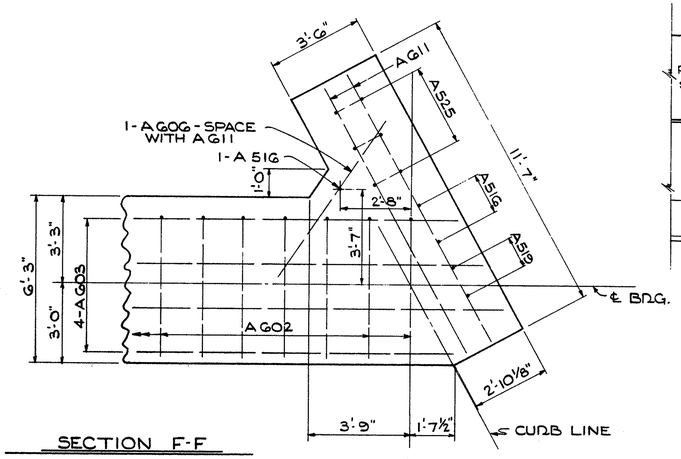
MAH. 680-6.98



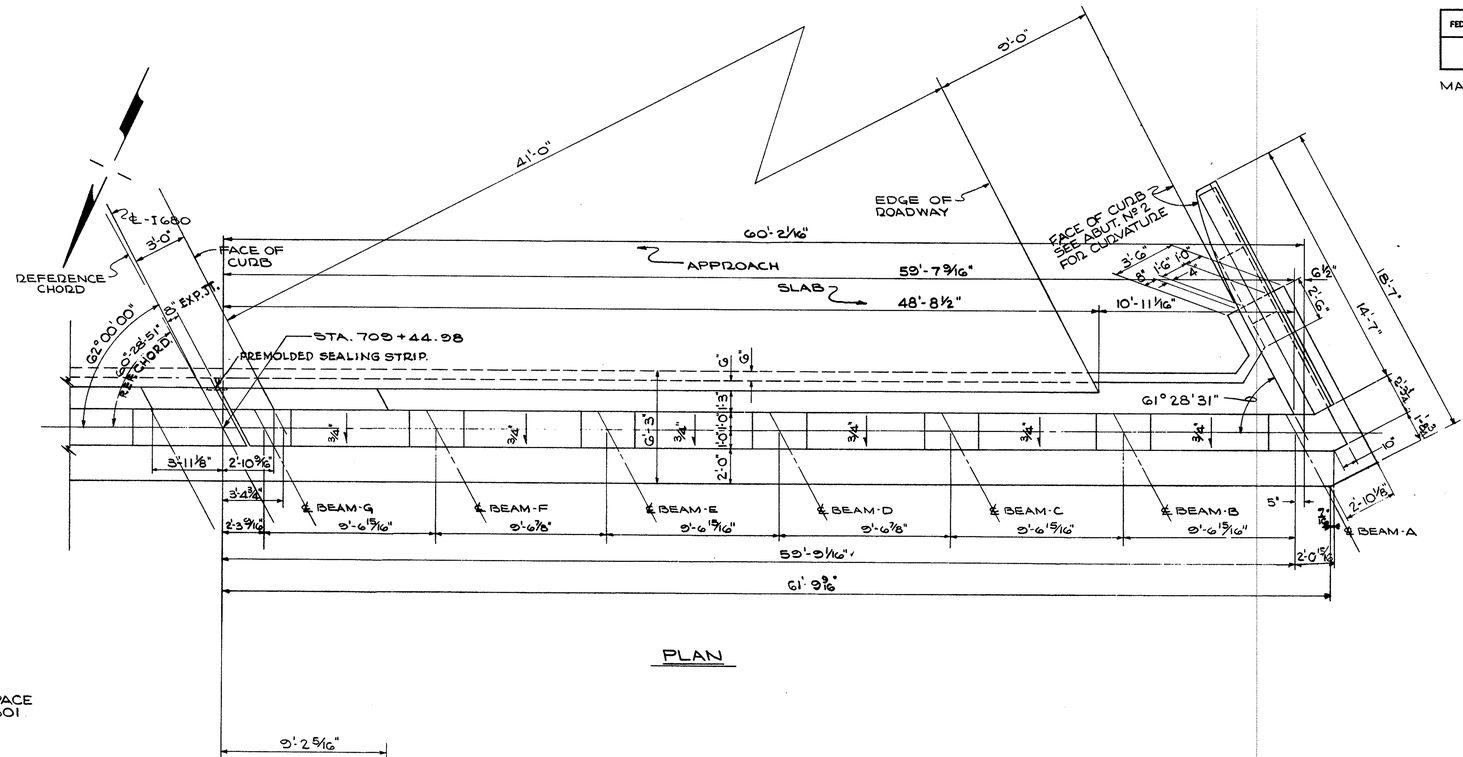
SECTION D-D



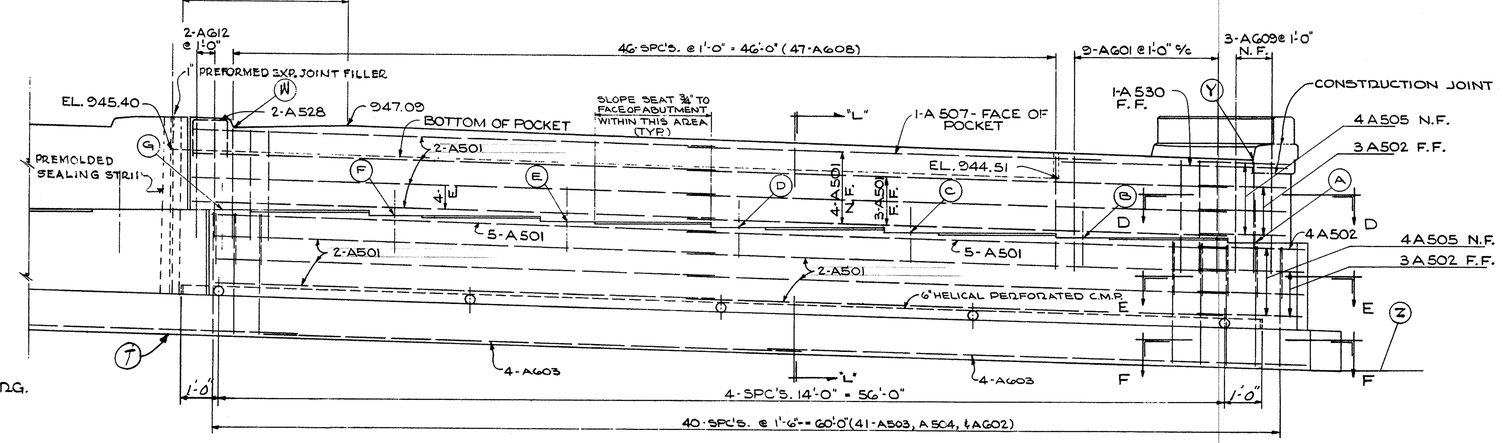
SECTION E-E



SECTION F-F



PLAN



ELEVATION

NOTE:
FOR SECTION L-L SEE WINGWALL DETAILS, SHT. Nº 7/18

ELEVATION TABLE											
LOCATION	A	B	C	D	E	F	G	W	Y	T	Z
ABUT. Nº1 LT. SIDE	940.89	941.20	941.51	941.81	942.12	942.43	942.38	946.98	945.44	935.00	933.70

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº 1 DETAILS (LT.)
BRIDGE Nº MAH. 680-0794

OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.D.P.	J.D.P.		Q.A.H.	W.K.D.	5-1-70	

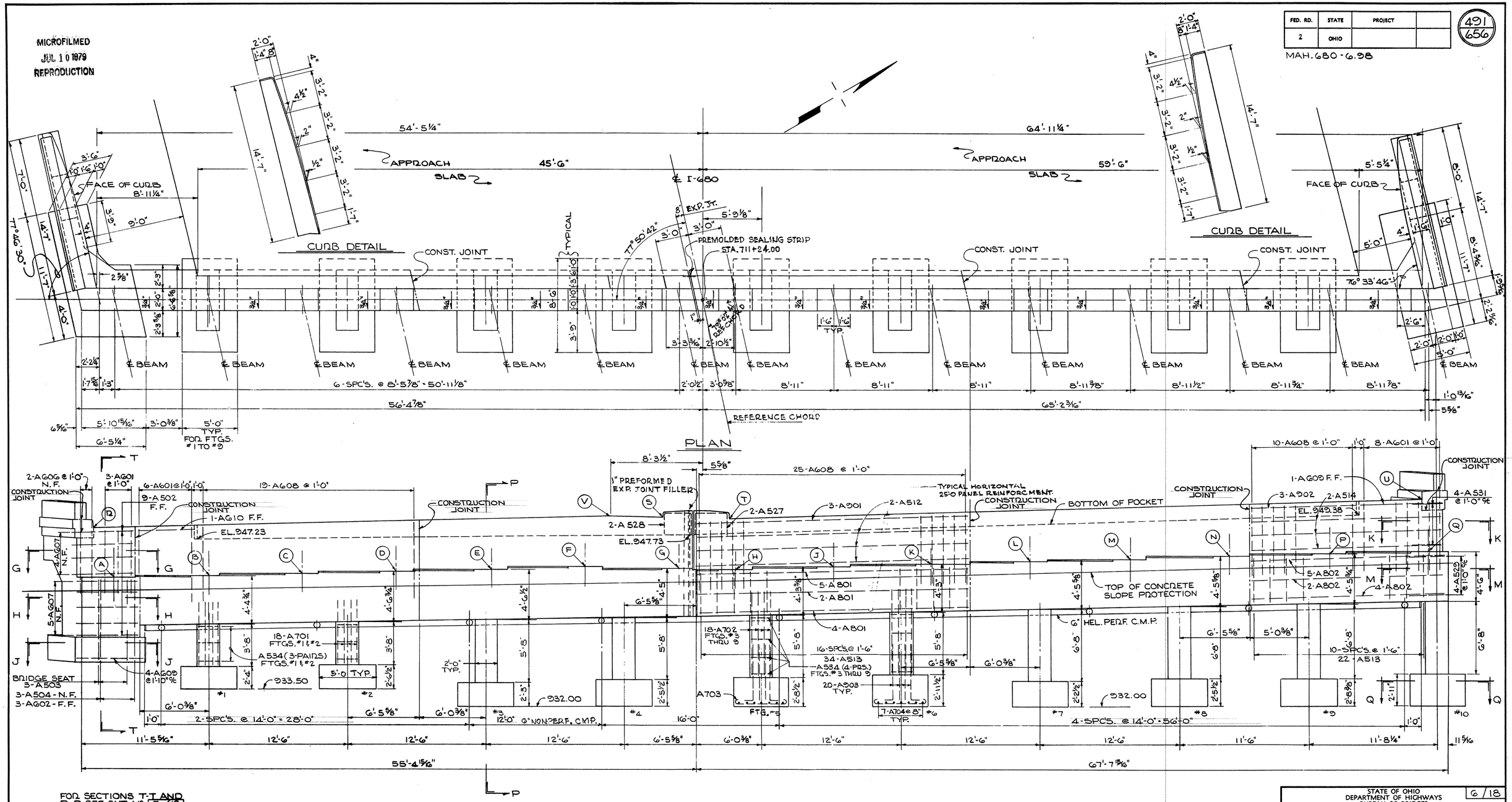
MAY 28 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

491/656

MAH.680-6.98



FOR SECTIONS T-T AND P-P SEE SHT. Nº 7/18

ELEVATION

ELEVATION TABLE																				
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	
943.69	943.89	944.07	944.27	944.46	944.67	944.54	944.36	944.65	944.88	945.10	945.34	945.59	945.84	946.08	948.24	949.15	949.07	950.77	949.32	

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº 2 DETAILS
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

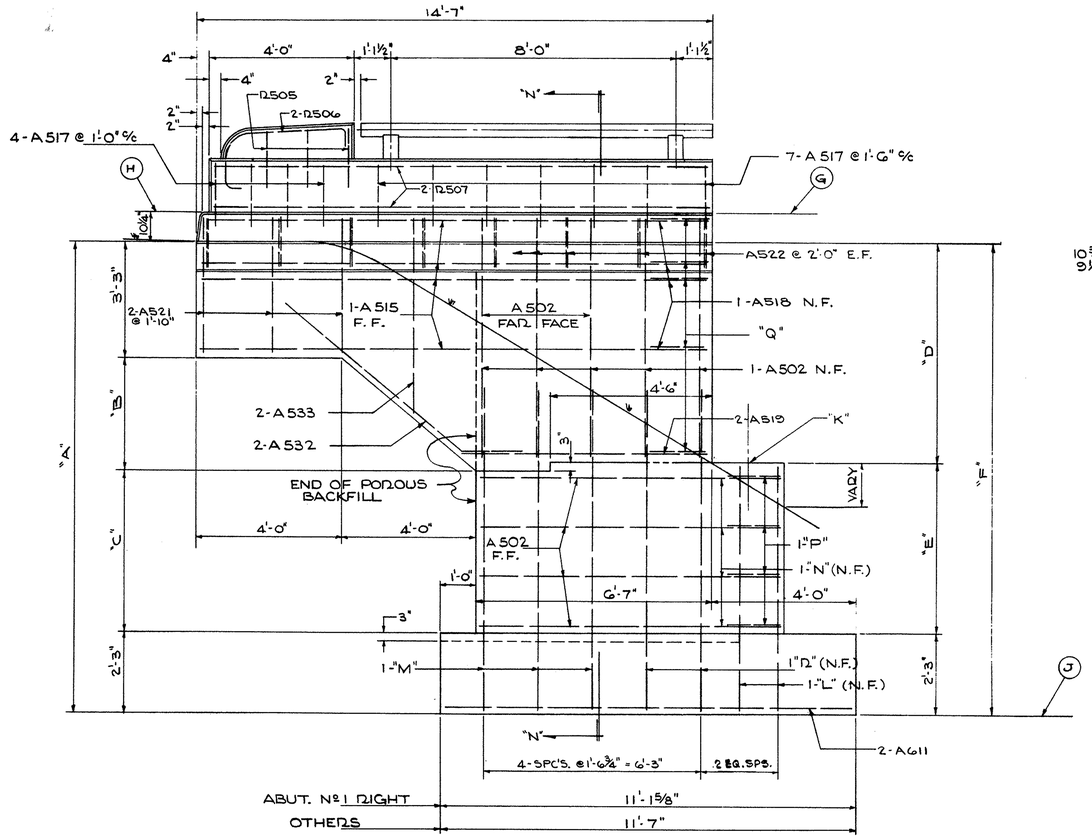
MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

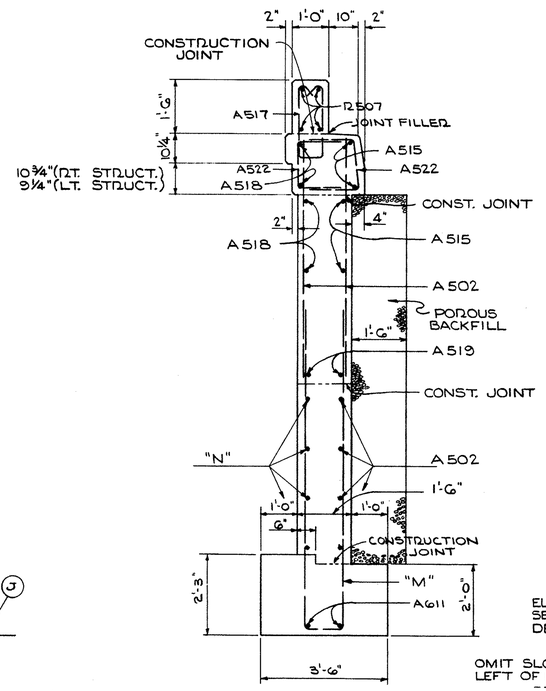
MAH.680-6.98

492
656

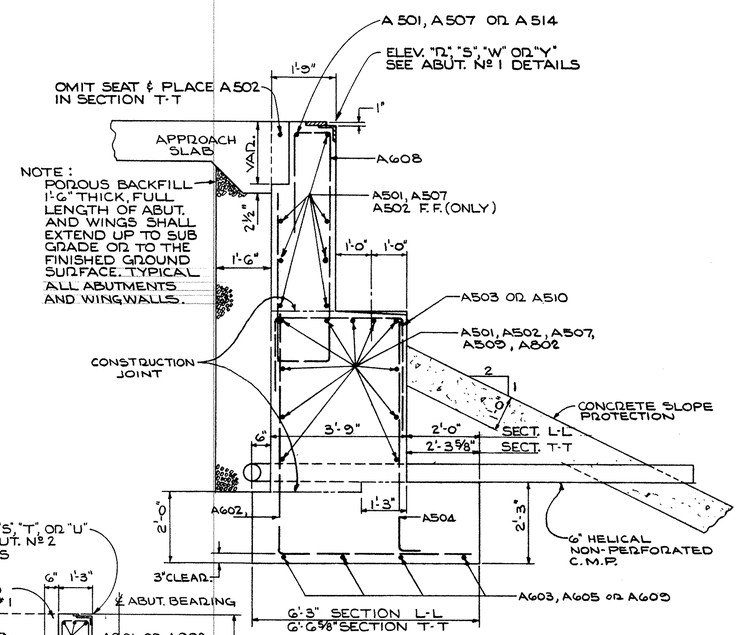


WINGWALL DETAILS

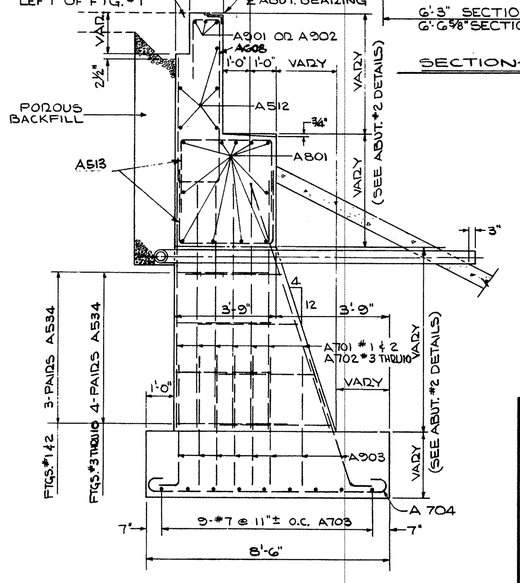
ABUT. Nº1-RIGHT, ABUT. Nº2-LEFT AS SHOWN
ABUT. Nº1-LEFT, OPPOSITE HAND
FOR ABUT. Nº2 RIGHT, SEE SHT. 8/18



SECTION "N"-"N"



SECTION-"L'-"L" & "T'-"T"



SECTION - P-P
TYPICAL FOR ABUTMENT Nº2
FOOTINGS Nº1 THRU 9

	DIMENSIONS						ELEVATIONS				REINFORCING BARS					
ABUTMENT Nº	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
1-RIGHT	13'-0½"	1'-5¾"	6'-0¾"	4'-8⅛"	6'-3¾"	13'-2⅞"	950.06	949.89	936.00	944.56	A520	A524	A520	A508	A506	A523
1-LEFT	11'-7"	1'-4¾"	4'-8¼"	4'-6⅝"	4'-1:¼"	11'-8⅞"	946.29	946.13	933.70	940.89	A519	A525	A520	A505	A505	A516
2-LEFT	12'-5½"	1'-9¼"	5'-2¼"	4'-6⅝"	5'-5¼"	12'-2⅞"	949.09	949.31	936.00	943.69	A509	A526	A520	A607	A607	A511

FOR ABUT. Nº 2 RT. WINGWALL
SEE SHEET Nº 8/18

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

7/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

WINGWALL DETAILS & ABUT. SECTIONS
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.D.P.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

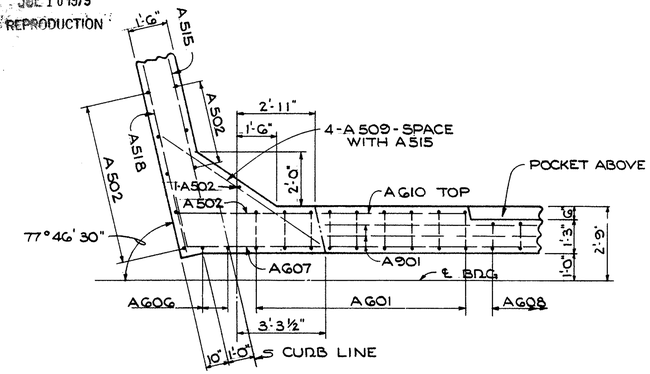
MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

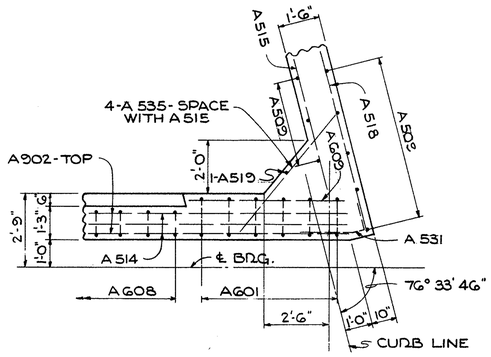
FED. RD.	STATE	PROJECT	
2	OHIO		

493
656

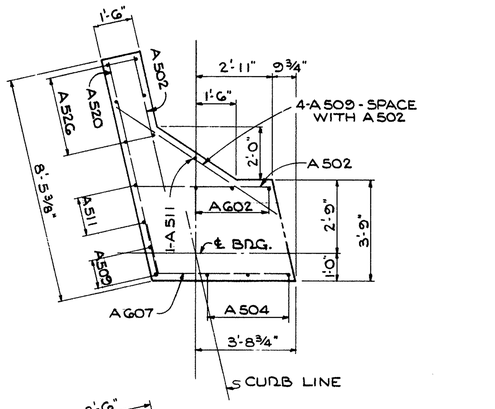
MAH. 680-6.98



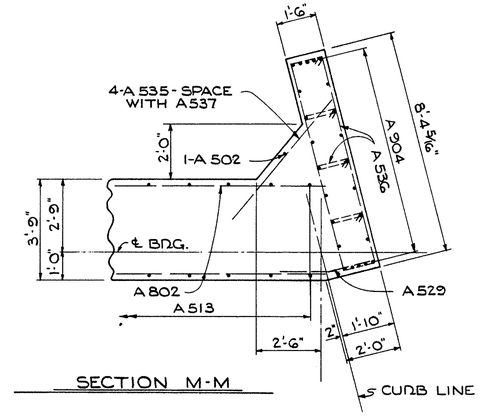
SECTION G-G



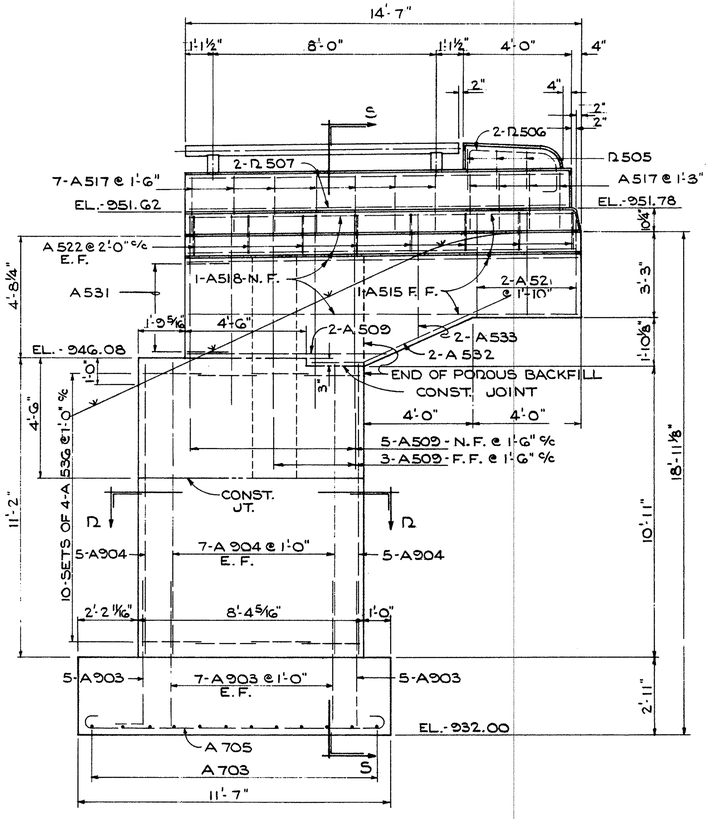
SECTION K-K



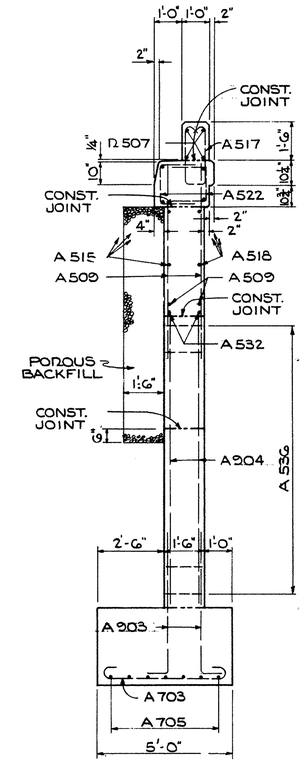
SECTION H-H



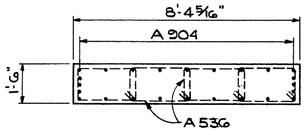
SECTION M-M



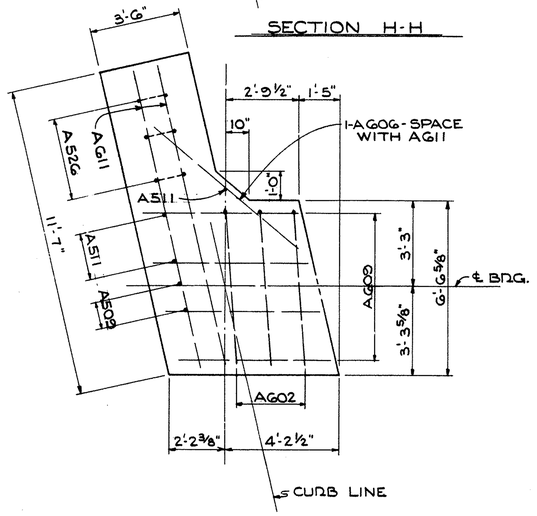
NORTH ELEVATION OF WINGWALL FOR ABUT. Nº 2 (RIGHT)
FOR ABUT. Nº2 LEFT SEE WINGWALL DETAILS - SHT. 7/18



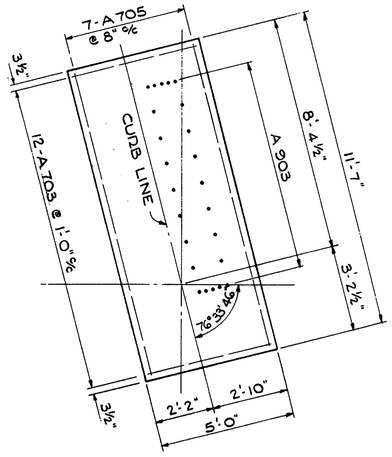
SECTION S-S



SECTION Ω-Ω



SECTION J-J



SECTION Q-Q

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

8/18

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº2 MISCEL. DETAILS
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		Ω.A.H.	W.K.D.	5-1-70	

MAY 25 1971

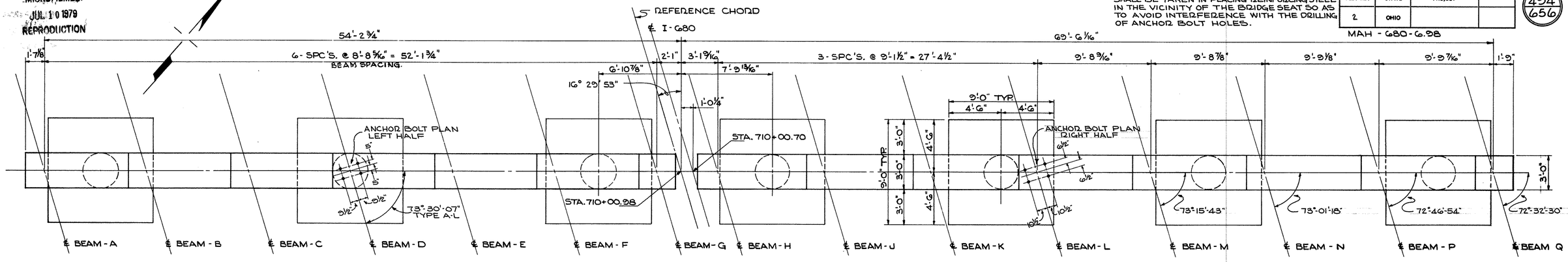
MICROFILMED
JUL 10 1979
REPRODUCTION

BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BOLT HOLES.

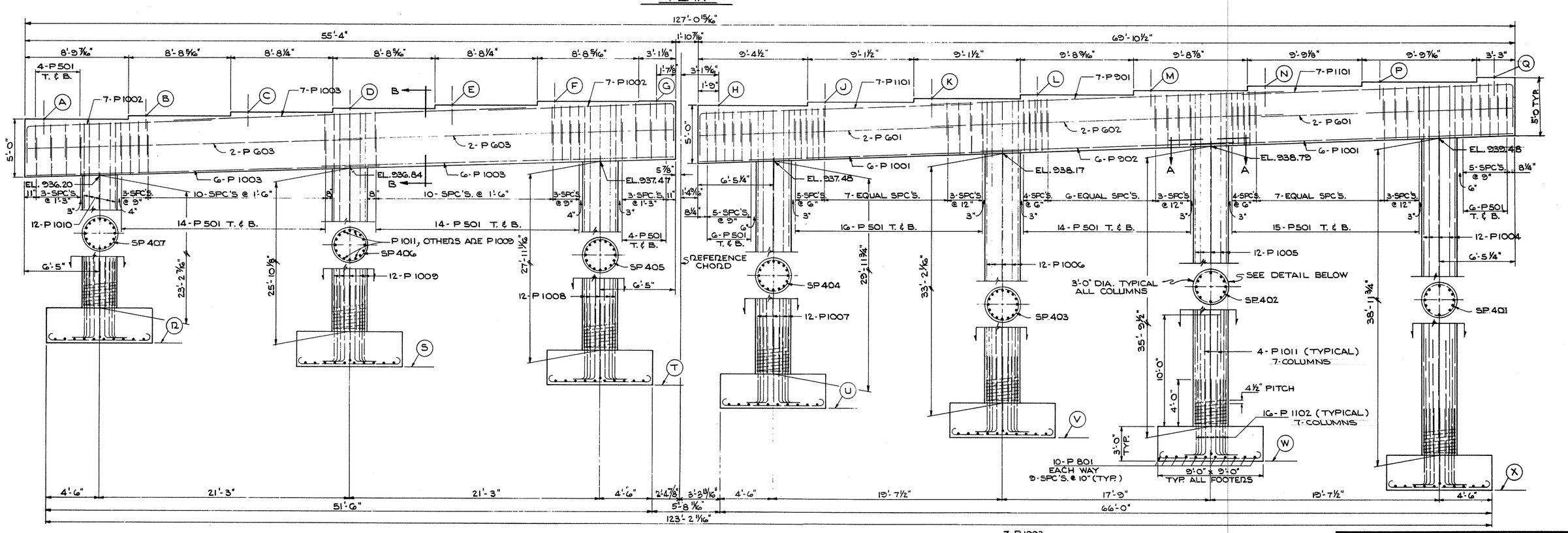
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH - 680 - 6.98

494
656

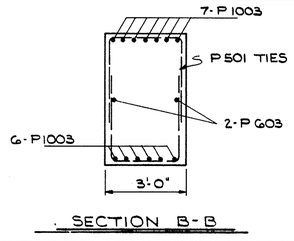


PLAN

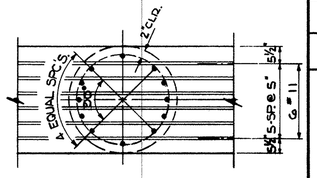


ELEVATION

PIER ELEVATION TABLE																						
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
941.01	941.32	941.64	941.98	942.29	942.63	942.66	942.25	942.54	942.89	943.24	943.58	943.96	944.33	944.71	910.00	908.00	906.50	904.50	902.00	900.00	897.50



SECTION B-B



SECTION A-A

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

9/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PIER Nº1 DETAILS
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		Q.A.H.	W.K.D.	5-1-70	

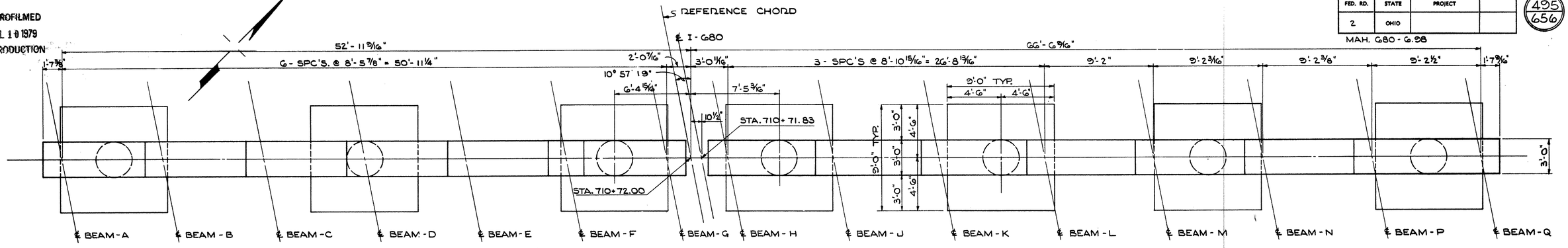
MAY 25 1971

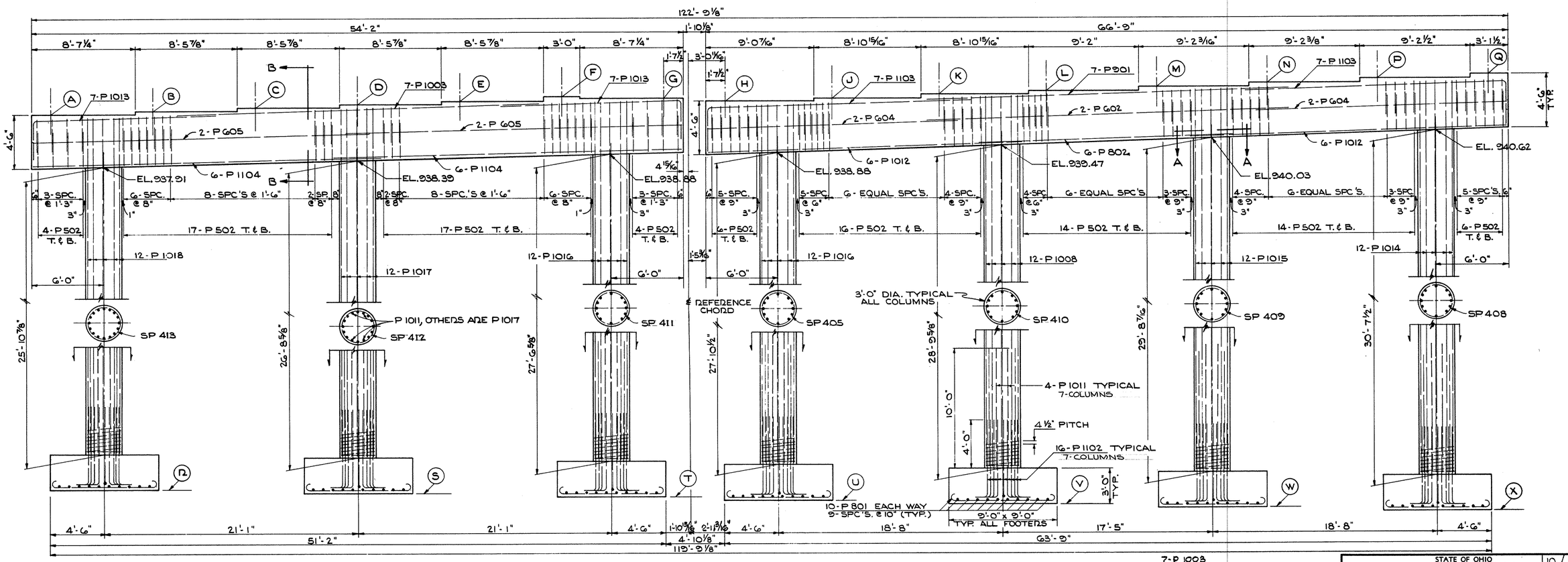
MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

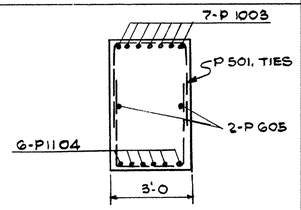
MAH. 680 - 6.98

495/656





NOTE : SEE SHEET Nº 9/18 FOR SECTIONS A-A



SECTION B-B

PIER ELEVATION TABLE

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
242.27	242.51	242.77	243.02	243.28	243.55	243.52	243.19	243.47	243.76	244.05	244.36	244.67	244.98	245.31	209.00	208.67	208.33	208.00	207.67	207.33	207.00

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

10/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PIER Nº 2 DETAILS
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		Q.A.H.	W.K.D.	5-1-70	

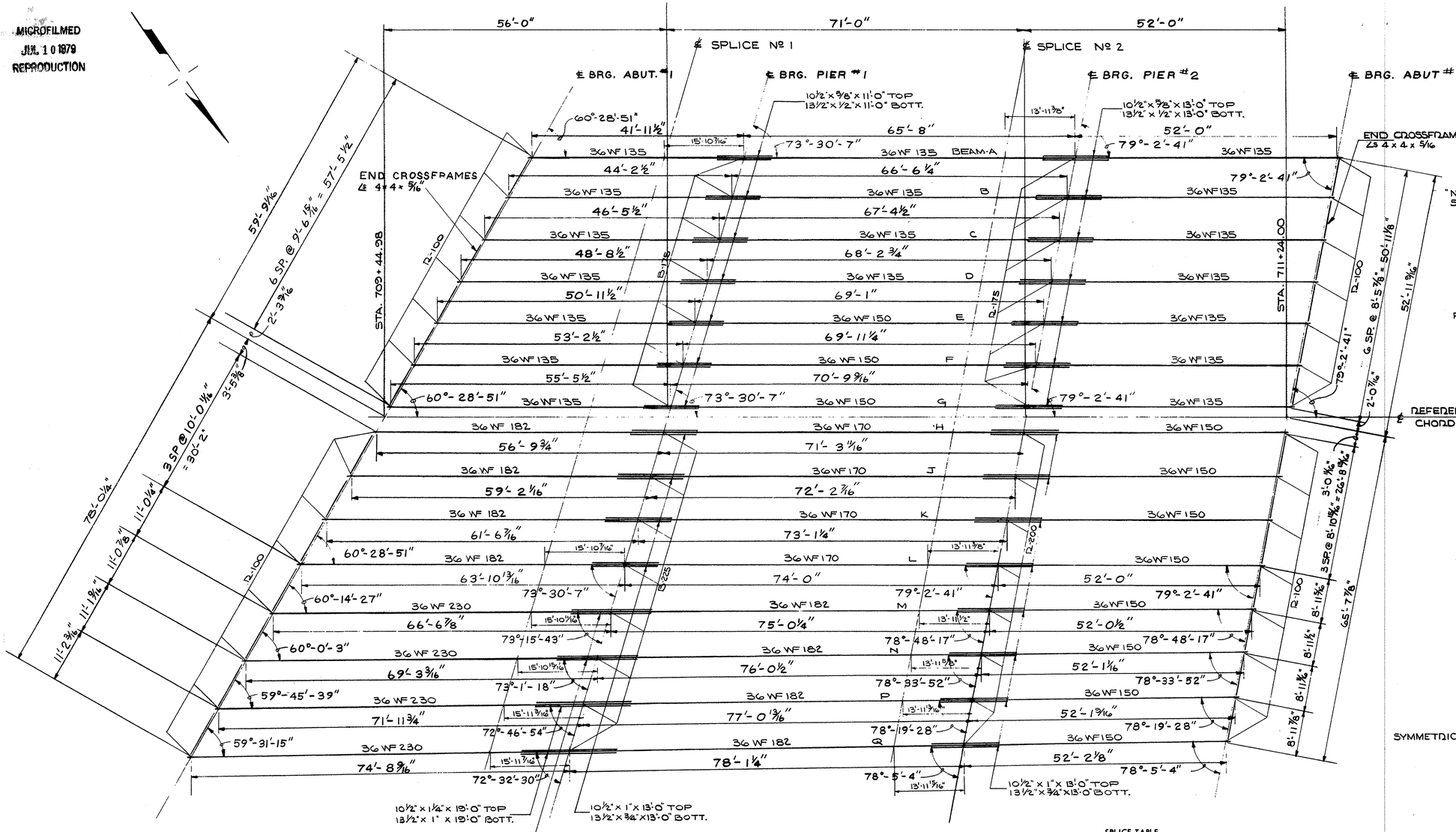
MAR 23 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

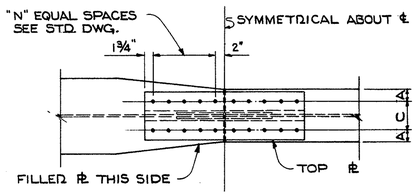
496
656

MAH. 680 6.98

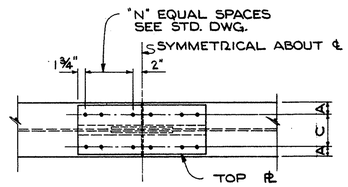


NOTE: ALL MOMENT PLATES EXTEND SAME DISTANCE EACH SIDE OF ℄ OF PIERS.

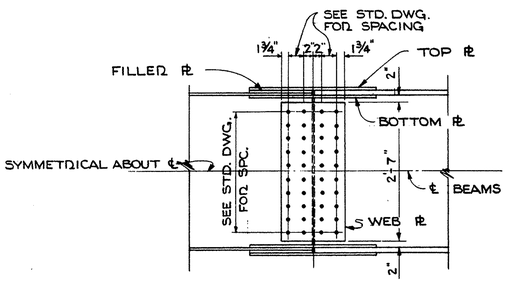
FRAMING PLAN



TYPE "A" FLANGE SPLICE



TYPE "A" FLANGE SPLICE



TYPE "A" WEB SPLICE (AS SHOWN)
TYPE "B" SIMILAR

NOTE: SEE STANDARD DRAWING SD-1-69 FOR DETAILS.

NOTE: ALL FLANGE SPLICES TYPE "A".

SPLICE TABLE

SPLICE No. 1	WEB SPLICE	FILLER PLATE
BEAM A - D	TYPE "A"	NONE
BEAM E - G	TYPE "A"	11" x 3/16" x 1'-2-1/4"
BEAM H - L	TYPE "B"	11" x 1/8" x 1'-5-3/4"
BEAM M - Q	TYPE "B"	11" x 1/4" x 1'-5-3/4" OUTSIDE 4-1/2" x 5/16" x 1'-5-3/4" INSIDE

SPLICE No. 2	WEB SPLICE	FILLER PLATE
BEAM A - D	TYPE "A"	NONE
BEAM E - G	TYPE "A"	11"x 3/16" x 1'-2-1/4"
BEAM H - L	TYPE "A"	11"x 1/8" x 1'-2-1/4"
BEAM M - Q	TYPE "A"	11"x 1/4" x 1'-2-1/8"

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

11/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE Nº MAH. 680-0794

OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	D.M		R.A.H.	W.K.P.	5-1-70	

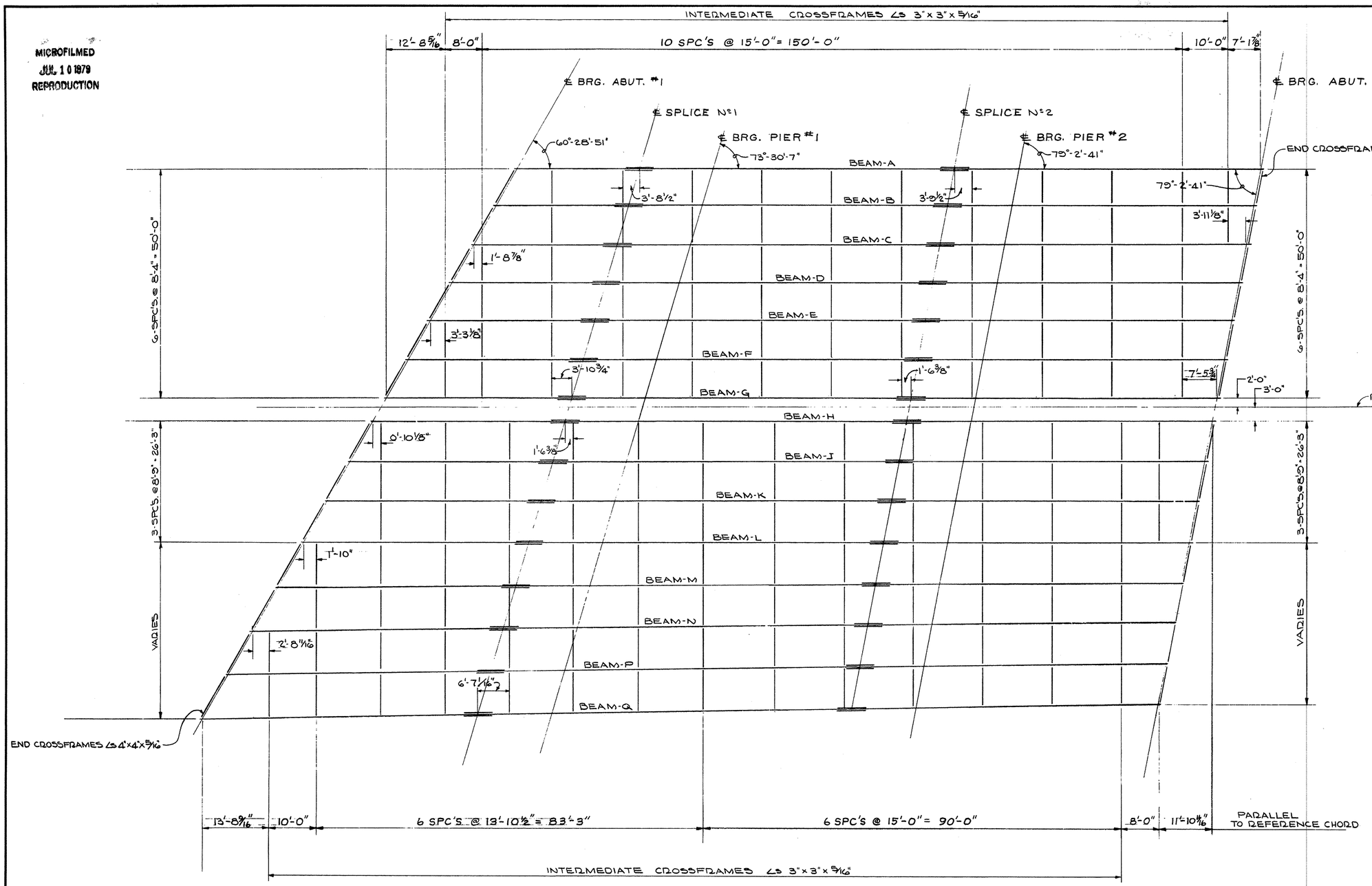
MAY 25 1971

MICROFILMED
JUL 10 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

497
656



NOTE:
BEAMS M, N, P & Q ARE NOT PARALLEL TO REFERENCE CHORD AND CROSS FRAMES IN THIS REGION ARE NOT PERPENDICULAR TO BEAMS. SEE FRAMING PLAN FOR SPACINGS ALONG ℄ BRG'S. AT ABUTMENTS.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

12/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

CROSSFRAME PLAN
BRIDGE N° MAH. 680-0794

OVER SHADY RUN
MAHONING CO. I-680
STA. 710 + 43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

MAY 25 1971

BEAM A	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.01	0.01	0.00		0.03	0.05	0.02		0.01	0.03	0.02
CAMBER DUE TO WEIGHT OF DECK	0.05	0.04	0.02		0.23	0.36	0.15		0.08	0.21	0.19
CAMBER DUE TO CONVEXITY	-0.12	-0.22	-0.26		-0.04	-0.04	-0.02		0.00	0.01	0.01
TOTAL CAMBER - INCHES -	-0.06	-0.17	-0.24		0.22	0.37	0.15		0.09	0.25	0.22
HEIGHT OF CHORD - FEET -	-0.049	-0.097	-0.121	-0.195	-0.168	-0.142	-0.135	-0.090	-0.068	-0.045	-0.023

BEAM B	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.01	0.01	0.01		0.03	0.06	0.02		0.01	0.03	0.02
CAMBER DUE TO WEIGHT OF DECK	0.07	0.06	0.03		0.24	0.38	0.16		0.08	0.21	0.19
CAMBER DUE TO CONVEXITY	-0.07	-0.11	-0.13		-0.04	-0.05	-0.02		0.00	0.01	0.01
TOTAL CAMBER - INCHES -	0.01	-0.04	-0.09		0.23	0.39	0.16		0.09	0.25	0.22
HEIGHT OF CHORD - FEET -	-0.045	-0.090	-0.116	-0.181	-0.157	-0.133	-0.126	-0.085	-0.063	-0.042	-0.021

BEAM C	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.01	0.01	0.01		0.04	0.06	0.02		0.01	0.03	0.03
CAMBER DUE TO WEIGHT OF DECK	0.10	0.10	0.04		0.24	0.40	0.17		0.07	0.21	0.19
CAMBER DUE TO CONVEXITY	-0.03	-0.05	-0.04		-0.05	-0.06	-0.03		0.00	0.00	0.00
TOTAL CAMBER - INCHES -	0.08	0.06	0.01		0.23	0.40	0.16		0.08	0.24	0.22
HEIGHT OF CHORD - FEET -	-0.040	-0.080	-0.105	-0.159	-0.138	-0.117	-0.093	-0.076	-0.057	-0.038	-0.019

BEAM D	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.02	0.02	0.01		0.04	0.06	0.03		0.01	0.03	0.03
CAMBER DUE TO WEIGHT OF DECK	0.13	0.13	0.06		0.24	0.41	0.17		0.07	0.20	0.18
CAMBER DUE TO CONVEXITY	-0.04	-0.05	-0.04		-0.11	-0.10	-0.05		0.00	0.00	0.00
TOTAL CAMBER - INCHES -	0.11	0.10	0.03		0.17	0.37	0.15		0.08	0.23	0.21
HEIGHT OF CHORD - FEET -	-0.031	-0.062	-0.084	-0.124	-0.109	-0.094	-0.076	-0.064	-0.048	-0.032	-0.016

BEAM E	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.02	0.02	0.01		0.04	0.07	0.03		0.01	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.17	0.18	0.09		0.22	0.38	0.16		0.07	0.21	0.19
CAMBER DUE TO CONVEXITY	-0.04	-0.06	-0.05		-0.13	-0.12	-0.05		0.00	0.00	0.00
TOTAL CAMBER - INCHES -	0.15	0.14	0.05		0.13	0.33	0.14		0.08	0.23	0.21
HEIGHT OF CHORD - FEET -	-0.022	-0.044	-0.060	-0.088	-0.078	-0.069	-0.057	-0.050	-0.037	-0.025	-0.012

BEAM F	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.03	0.03	0.02		0.04	0.07	0.03		0.01	0.03	0.02
CAMBER DUE TO WEIGHT OF DECK	0.21	0.23	0.11		0.22	0.39	0.17		0.07	0.20	0.19
CAMBER DUE TO CONVEXITY	-0.04	-0.06	-0.05		-0.09	-0.09	-0.05		0.00	0.00	0.00
TOTAL CAMBER - INCHES -	0.20	0.20	0.08		0.17	0.37	0.15		0.08	0.23	0.21
HEIGHT OF CHORD - FEET -	-0.013	-0.025	-0.036	-0.051	-0.046	-0.042	-0.036	-0.033	-0.025	-0.016	-0.008

BEAM G	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.04	0.05	0.02		0.04	0.07	0.03		0.01	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.20	0.23	0.11		0.17	0.32	0.14		0.05	0.16	0.15
CAMBER DUE TO CONVEXITY	0.03	0.03	0.03		0.09	0.07	0.03		0.00	0.00	0.00
TOTAL CAMBER - INCHES -	0.27	0.31	0.16		0.30	0.46	0.20		0.06	0.18	0.17
HEIGHT OF CHORD - FEET -	0.010	0.021	0.030	0.041	0.037	0.033	0.027	0.024	0.018	0.012	0.006

BEAM H	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.04	0.04	0.02		0.03	0.06	0.03		0.01	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.20	0.23	0.11		0.19	0.35	0.14		0.05	0.17	0.16
CAMBER DUE TO CONVEXITY	0.00	0.02	0.02		0.04	0.04	0.02		0.00	0.00	0.00
TOTAL CAMBER - INCHES -	0.24	0.29	0.15		0.26	0.45	0.19		0.06	0.19	0.18
HEIGHT OF CHORD - FEET -	0.005	0.010	0.014	0.020	0.018	0.016	0.014	0.012	0.009	0.006	0.003

BEAM J	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.05	0.05	0.03		0.03	0.06	0.03		0.01	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.25	0.29	0.14		0.18	0.36	0.15		0.05	0.17	0.16
CAMBER DUE TO CONVEXITY	-0.05	-0.07	-0.06		-0.02	-0.05	-0.04		-0.01	0.00	0.00
TOTAL CAMBER - INCHES -	0.25	0.27	0.11		0.19	0.37	0.14		0.05	0.19	0.18
HEIGHT OF CHORD - FEET -	-0.007	-0.014	-0.021	-0.028	-0.027	-0.025	-0.023	-0.022	-0.016	-0.011	-0.005

BEAM K	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.06	0.07	0.04		0.02	0.05	0.01		0.02	0.05	0.04
CAMBER DUE TO WEIGHT OF DECK	0.30	0.35	0.16		0.18	0.36	0.15		0.05	0.16	0.15
CAMBER DUE TO CONVEXITY	-0.06	-0.08	-0.06		0.16	0.06	0.01		0.00	0.00	0.00
TOTAL CAMBER - INCHES -	0.30	0.34	0.14		0.36	0.47	0.17		0.07	0.21	0.19
HEIGHT OF CHORD - FEET -	0.003	0.006	0.009	0.012	0.010	0.008	0.005	0.003	0.002	0.001	0.001

BEAM L	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.07	0.08	0.03		0.03	0.07	0.03		0.00	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.35	0.42	0.19		0.17	0.36	0.15		0.05	0.16	0.15
CAMBER DUE TO CONVEXITY	-0.06	-0.09	-0.06		0.38	0.22	0.07		-0.01	-0.01	0.00
TOTAL CAMBER - INCHES -	0.36	0.41	0.16		0.58	0.65	0.25		0.04	0.17	0.17
HEIGHT OF CHORD - FEET -	0.013	0.027	0.040	0.053	0.047	0.041	0.034	0.030	0.022	0.015	0.007

BEAM M	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.09	0.10	0.05		0.02	0.06	0.03		0.00	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.33	0.39	0.17		0.17	0.36	0.15		0.05	0.16	0.15
CAMBER DUE TO CONVEXITY	-0.07	-0.09	-0.06		0.56	0.41	0.13		-0.01	-0.01	-0.01
TOTAL CAMBER - INCHES -	0.35	0.40	0.16		0.75	0.83	0.31		0.04	0.17	0.16
HEIGHT OF CHORD - FEET -	0.024	0.047	0.072	0.094	0.085	0.076	0.064	0.057	0.043	0.029	0.014

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

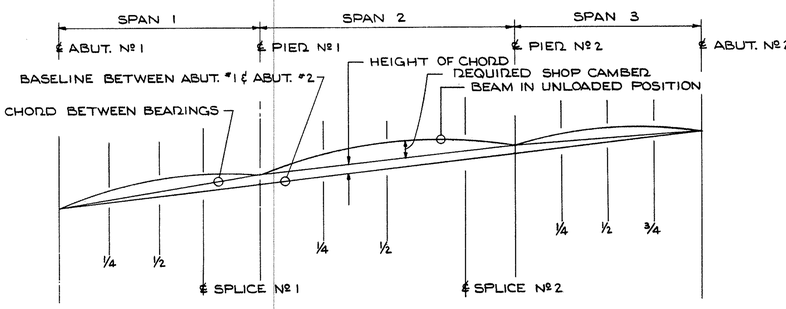
MAH.-680-6.98

498/656

BEAM N	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.10	0.13	0.06		0.02	0.06	0.03		0.00	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.40	0.47	0.21		0.16	0.37	0.16		0.05	0.16	0.15
CAMBER DUE TO CONVEXITY	-0.08	-0.10	-0.07		0.73	0.65	0.21		-0.02	-0.02	-0.01
TOTAL CAMBER - INCHES -	0.42	0.50	0.20		0.91	1.08	0.40		0.03	0.16	0.16
HEIGHT OF CHORD - FEET -	0.034	0.067	0.104	0.135	0.123	0.111	0.096	0.087	0.065	0.044	0.022

BEAM P	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.12	0.15	0.06		0.01	0.06	0.03		0.00	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.46	0.55	0.23		0.14	0.35	0.15		0.05	0.17	0.16
CAMBER DUE TO CONVEXITY	-0.08	-0.11	-0.07		0.88	0.92	0.31		-0.02	-0.03	-0.02
TOTAL CAMBER - INCHES -	0.50	0.59	0.22		1.03	1.33	0.49		0.03	0.16	0.16
HEIGHT OF CHORD - FEET -	0.044	0.088	0.137	0.176	0.162	0.147	0.130	0.119	0.089	0.060	0.030

BEAM Q	SPAN #1				SPAN #2				SPAN #3		
	1/4	1/2	SPLICE #1	PIER #1	1/4	1/2	SPLICE #2	PIER #2	1/4	1/2	3/4
CAMBER DUE TO WEIGHT OF BEAM	0.14	0.17	0.08		0.01	0.05	0.03		0.01	0.02	0.02
CAMBER DUE TO WEIGHT OF DECK	0.53	0.64	0.26		0.12	0.35	0.15		0.05	0.16	0.15
CAMBER DUE TO CONVEXITY	-0.08	-0.11	-0.08		1.02	1.24	0.41		-0.03	-0.03	-0.02
TOTAL CAMBER - INCHES -	0.59	0.70	0.28		1.15	1.64	0.59		0.03	0.15	0.15
HEIGHT OF CHORD - FEET -	0.054	0.108	0.170	0.216	0.201	0.185	0.165	0.154	0.115	0.077	0.038



LAYOUT DIAGRAM

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

13/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

CAMBER DIAGRAM & TABLES

BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		R.A.H.	W.K.D.	5-1-70	

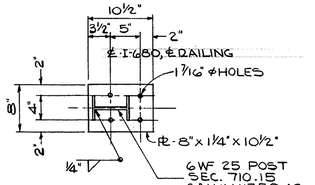
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

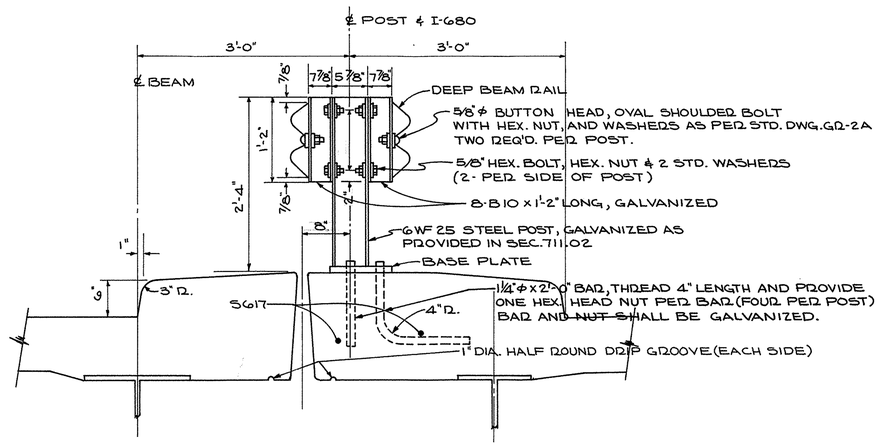
FED. RD.	STATE	PROJECT	
2	OHIO		

499/656

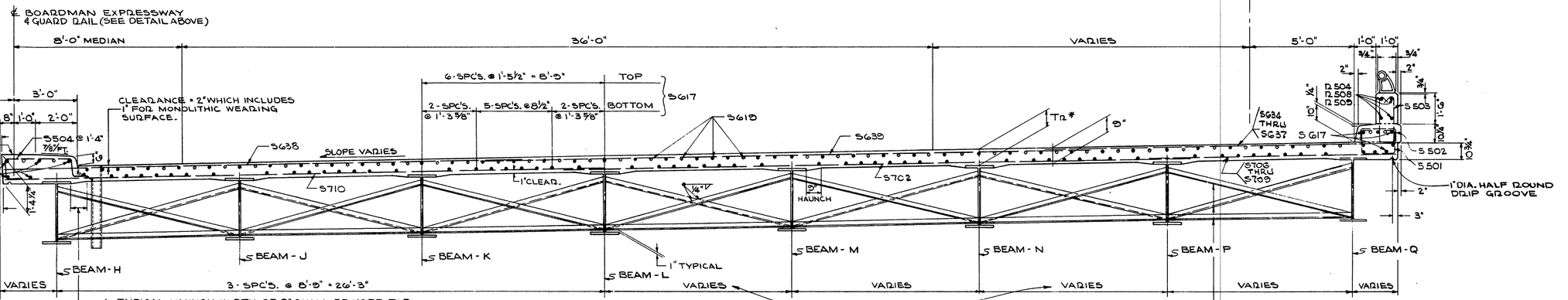
MAH. 680-6.98



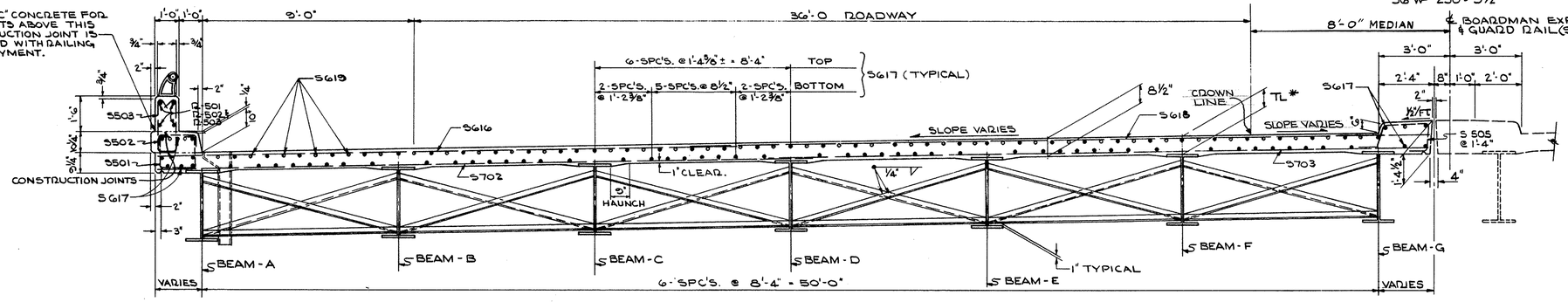
BASE PLATE PLAN



RAILING (DOUBLE-FACED DEEP BEAM RAIL WITH STEEL POSTS AND BOLTS)



TRANSVERSE SECTION
RIGHT STRUCTURE



TRANSVERSE SECTION
LEFT STRUCTURE

TL* OVER 36 WF 135 = 8½"
36 WF 150 = 8 5/16"

Td*, TL* DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

14/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

TRANVERSE SECTION
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.W.C.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

MAY 25 1971

MICROFILMED
JUL 11 1979
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FED. RD.	STATE	PROJECT	
2	OHIO		

500
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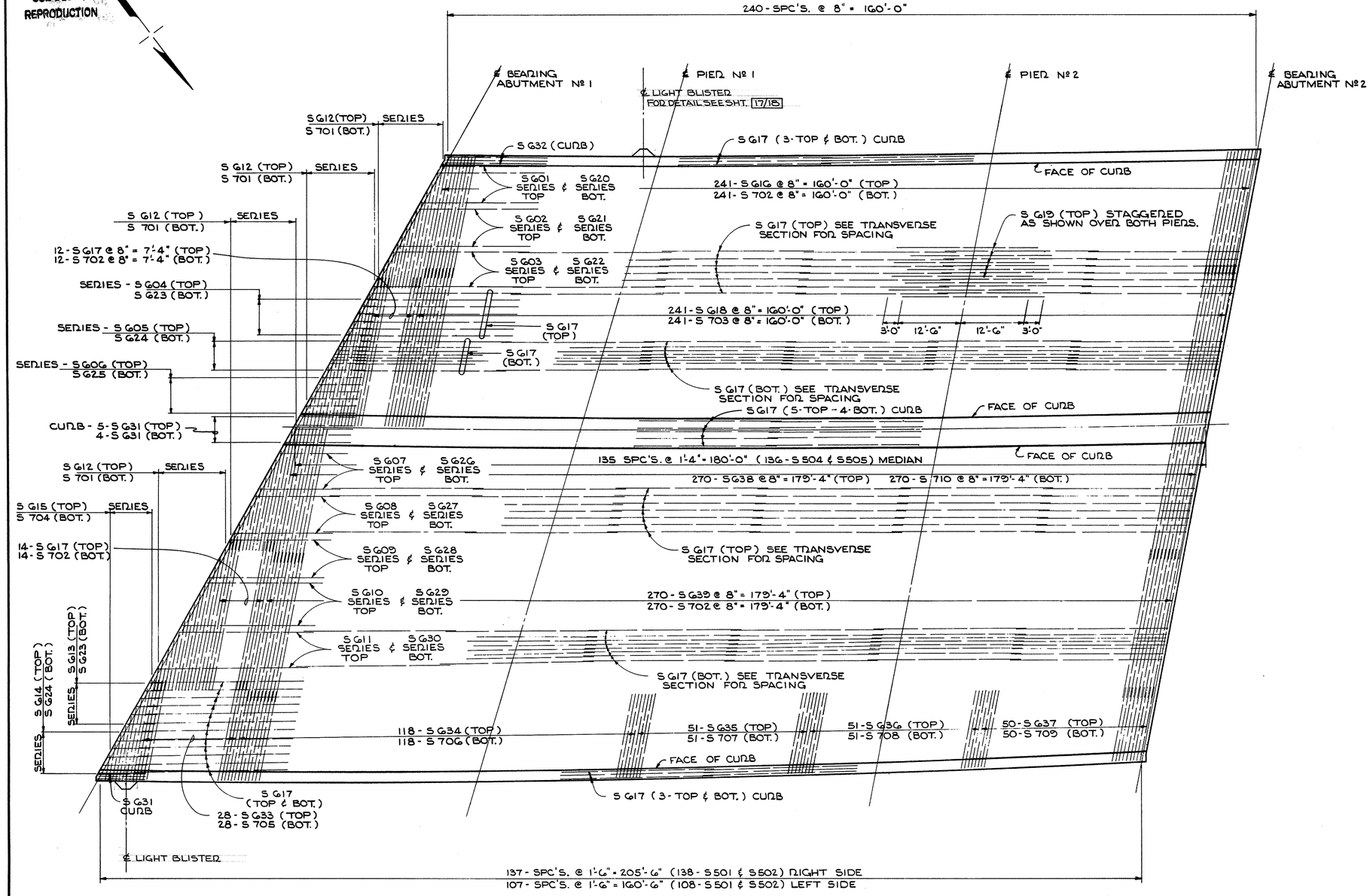
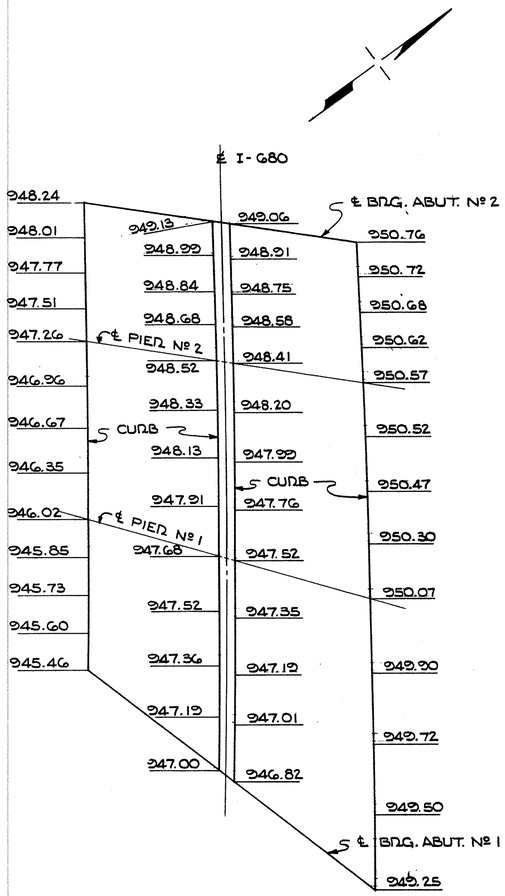
MAH. 680 - 6.98



SLAB REINFORCING PLAN



CONNECTED PAVEMENT ELEVATIONS AT QUARTER POINTS OF SPANS
BEFORE POURING OF SLAB CONCRETE

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

15 / 18

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SLAB REINFORCING PLAN
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		R.A.H.	W.K.D.	5-1-70	

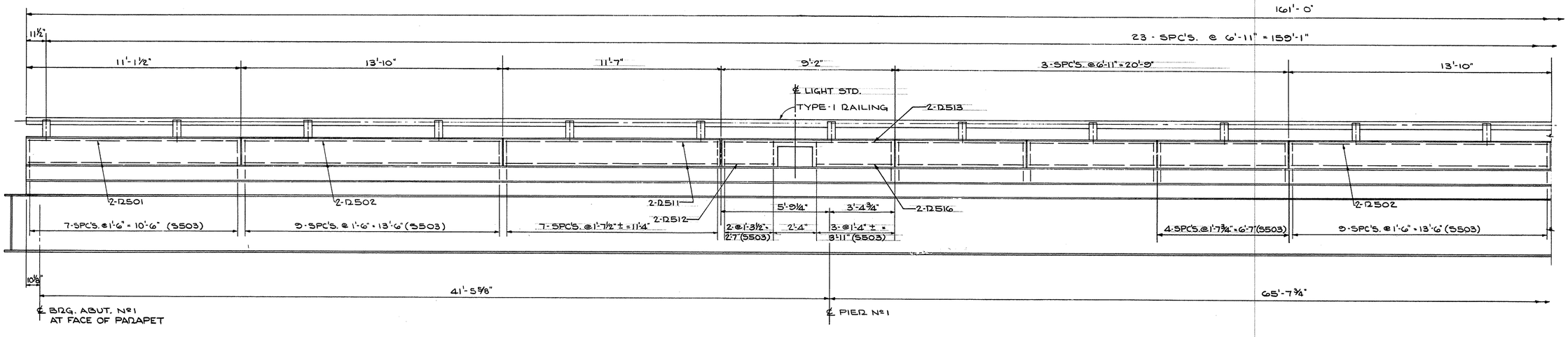
MAY 25 1971

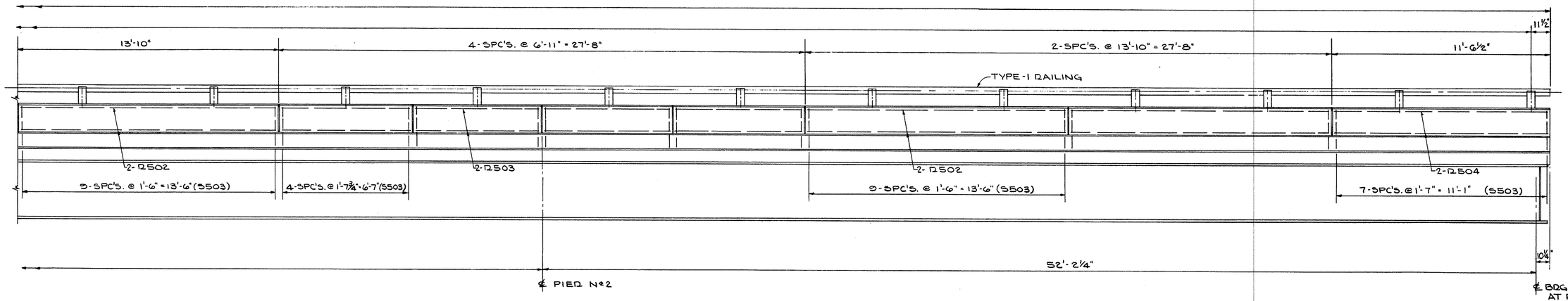
MICROFILMED
JUL 11 1978
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

501
656





SPAN LENGTHS TAKEN ALONG ROADSIDE FACE OF PARAPET

RAILING DETAILS - LEFT SIDE - I-680 OVER SHADY RUN

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

16 / 18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS
BRIDGE N° MAH-680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.D.P.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

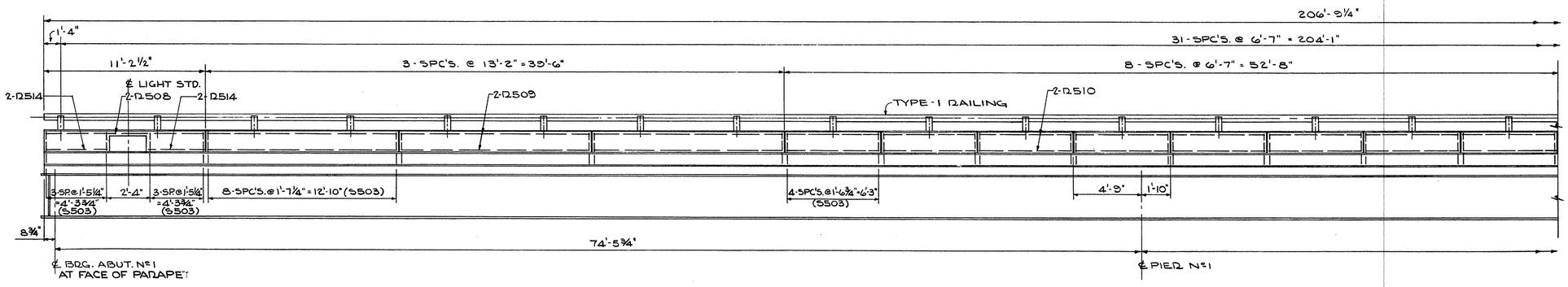
MAY 2 = 1971

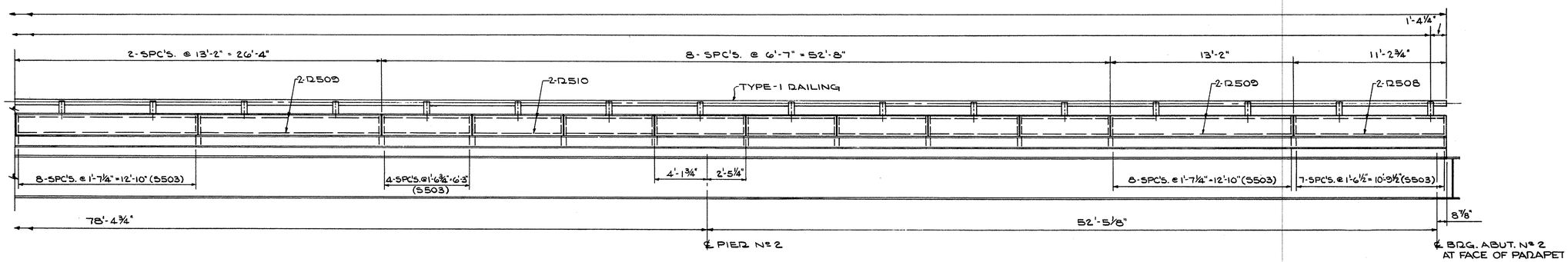
MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH.680-6.98

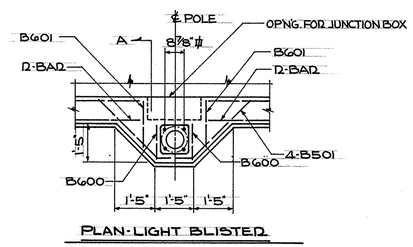
502
656





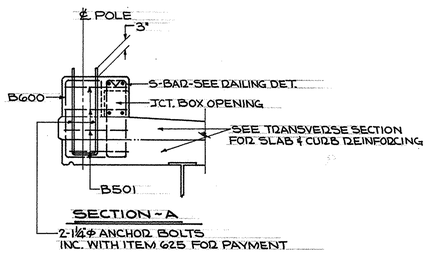
SPAN LENGTHS TAKEN ALONG ROADSIDE FACE OF PARAPET

RAILING DETAILS - RIGHT SIDE - I-680 OVER SHADY RUN

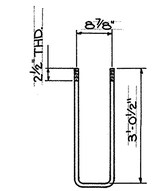


PLAN - LIGHT BLISTER

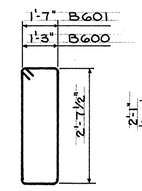
FOR 2-BARS - SEE RAILING DETS.



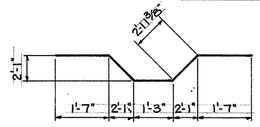
SECTION - A



ANCHOR BOLT DETAIL



B 600
B 601



B 501

LIGHT BLISTER BAR SCHEDULE

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
B501	8	10'-4"	86	BT.
B600	4	8'-3"	50	BT.
B601	4	8'-11"	54	BT.
TOTAL-TWO BLISTERS			190 LBS.	

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

17 / 18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS
BRIDGE N° MAH-680-0794

OVER SHADY RUN
MAHONING CO. I-680
STA. 710 + 43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.D.P.	J.D.P.		Q.A.H.	W.K.P.	5-1-70	

MAY 2 - 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

503/656

MAH. 680-6.98

ABUTMENTS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
A501	75	30'-0"	2,347	ST.
A502	62	5'-0"	323	ST.
A503	44	8'-0"	367	BT.
A504	97	6'-11"	700	BT.
A505	17	6'-10"	118	BT.
A506	4	3'-8"	15	BT.
A507	21	23'-0"	504	ST.
A508	5	3'-1"	16	BT.
A509	23	7'-2"	172	ST.
A510	53	8'-7"	475	BT.
A511	1	9'-7"	10	BT.
A512	24	24'-8"	617	ST.
A513	158	9'-0"	1,483	BT.
A514	7	17'-0"	125	ST.
A515	16	12'-3"	204	ST.
A516	2	9'-0"	19	BT.
A517	44	5'-7"	257	BT.
A518	16	14'-3"	237	ST.
A519	9	6'-9"	63	ST.
A520	26	8'-0"	217	ST.
A521	24	3'-9"	94	ST.
A522	64	3'-7"	240	BT.
A523	3	10'-5"	33	BT.
A524	3	21'-9"	68	BT.
A525	3	18'-5"	58	BT.
A526	3	19'-2"	60	BT.
A527	4	7'-3"	31	BT.
A528	4	5'-9"	24	BT.
A529	4	3'-2"	13	BT.
A530	1	11'-6"	12	ST.
A531	4	3'-7"	15	BT.
A532	8	8'-0"	67	BT.
A533	8	4'-4"	36	ST.
A534	68	8'-5"	597	BT.
A535	9	5'-9"	54	ST.
A536	40	7'-4"	306	BT.
A601	31	16'-7"	772	BT.
A602	97	13'-3"	1,930	BT.
A603	16	30'-0"	721	ST.
A604	1	3'-10"	6	BT.
A605	4	31'-8"	190	ST.
A606	4	7'-0"	42	ST.
A607	9	6'-9"	91	BT.
A608	222	15'-6"	5,168	BT.
A609	8	5'-9"	69	ST.
A610	2	5'-3"	16	ST.
A611	6	11'-1"	100	ST.
A612	5	16'-8"	125	BT.
A701	36	6'-3"	460	ST.
A702	126	9'-5"	2,425	ST.
A703	93	6'-2"	1,172	BT.
A704	63	9'-8"	1,245	BT.
A705	7	12'-9"	183	BT.
A801	44	24'-8"	2,898	ST.
A802	11	17'-0"	499	ST.
A901	12	24'-8"	1,006	ST.
A902	3	17'-0"	173	ST.
A903	204	6'-0"	4,162	BT.
A904	24	10'-9"	877	ST.
ABUTMENT TOTALS			34,301	

RAILING - TO BE INCLUDED IN ITEM 517 FOR PAYMENT

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
R501	4	10'-9"		ST.
R502	20	13'-6"		ST.
R503	28	6'-7"		ST.
R504	4	11'-2"		ST.
R505	12	4'-2"		BT.
R506	8	5'-4"		BT.
R507	16	13'-11"		ST.
R508	6	10'-10"		ST.
R509	24	12'-10"		ST.
R510	64	6'-3"		ST.
R511	4	11'-4"		ST.
R512	2	2'-7"		ST.
R513	2	8'-10"		ST.
R514	4	4'-4"		ST.
R516	2	3'-11"		ST.

SUPERSTRUCTURE

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
S501	246	4'-11"	1,261	BT.
S502	246	2'-6"	641	BT.
S503	266	5'-7"	1,548	BT.
S504	136	6'-10"	968	BT.
S505	136	5'-6"	780	BT.
S601 SERIES	1-SET OF 6-BARS	23'-0" TO 20'-6" IN 6" INC.	196	ST.
S602 SERIES	1-SET OF 6-BARS	25'-11" TO 23'-5" IN 6" INC.	222	ST.
S603 SERIES	1-SET OF 6-BARS	25'-1" TO 26'-7" IN 6" INC.	251	ST.
S604 SERIES	1-SET OF 6-BARS	5'-0" TO 2'-6" IN 6" INC.	34	ST.
S605 SERIES	1-SET OF 6-BARS	7'-8" TO 5'-2" IN 6" INC.	58	ST.
S606 SERIES	1-SET OF 6-BARS	10'-9" TO 8'-3" IN 6" INC.	86	ST.
S607 SERIES	1-SET OF 6-BARS	15'-11" TO 12'-9" IN 7" INC.	129	ST.
S608 SERIES	1-SET OF 6-BARS	19'-6" TO 16'-6" IN 7" INC.	162	ST.
S609 SERIES	1-SET OF 6-BARS	23'-0" TO 20'-1" IN 7" INC.	195	ST.
S610 SERIES	1-SET OF 6-BARS	27'-0" TO 23'-6" IN 7" INC.	228	ST.
S611 SERIES	1-SET OF 6-BARS	30'-1" TO 27'-2" IN 7" INC.	258	ST.
S612 SERIES	4-SETS OF 14-BARS	28'-0" TO 3'-1" IN 1'-11" INC.	1,311	ST.
S613 SERIES	1-SET OF 6-BARS	5'-5" TO 2'-6" IN 7" INC.	36	ST.
S614 SERIES	1-SET OF 6-BARS	8'-8" TO 5'-9" IN 7" INC.	65	ST.
S615 SERIES	1-SET OF 9-BARS	19'-0" TO 3'-8" IN 1'-11" INC.	153	ST.
S616	241	25'-0"	2,050	ST.
S617	1,248	30'-0"	56,235	ST.
S618	241	32'-0"	11,583	ST.
S619	168	28'-0"	7,065	ST.
S620 SERIES	1-SET OF 8-BARS	23'-2" TO 20'-10" IN 4" INC.	264	ST.
S621 SERIES	1-SET OF 8-BARS	26'-1" TO 23'-9" IN 4" INC.	299	ST.
S622 SERIES	1-SET OF 8-BARS	29'-3" TO 26'-11" IN 4" INC.	337	ST.
S623 SERIES	2-SETS OF 8-BARS	5'-2" TO 2'-10" IN 4" INC.	96	ST.
S624 SERIES	2-SETS OF 8-BARS	8'-5" TO 6'-1" IN 4" INC.	174	ST.
S625 SERIES	1-SET OF 8-BARS	10'-7" TO 8'-3" IN 4" INC.	113	ST.
S626 SERIES	1-SET OF 8-BARS	15'-10" TO 13'-2" IN 4½" INC.	174	ST.
S627 SERIES	1-SET OF 8-BARS	19'-1" TO 16'-5" IN 4½" INC.	213	ST.
S628 SERIES	1-SET OF 8-BARS	22'-4" TO 19'-8" IN 4½" INC.	252	ST.
S629 SERIES	1-SET OF 8-BARS	25'-8" TO 23'-1" IN 4½" INC.	293	ST.
S630 SERIES	1-SET OF 8-BARS	29'-0" TO 27'-1" IN 4½" INC.	341	ST.
S631	17	12'-0"	306	ST.
S632	8	21'-0"	252	ST.
S633	28	20'-0"	841	ST.
S634	118	19'-0"	3,367	ST.
S635	51	17'-6"	1,341	ST.
S636	51	16'-6"	1,264	ST.
S637	50	15'-6"	1,164	ST.
S638	270	27'-0"	10,950	ST.
S639	270	29'-0"	11,761	ST.
S701 SERIES	4-SETS OF 14-BARS	28'-0" TO 3'-1" IN 1'-11" INC.	1,784	ST.
S702	537	30'-0"	32,929	ST.
S703	241	27'-6"	13,547	ST.
S704 SERIES	1-SET OF 9-BARS	19'-0" TO 3'-8" IN 1'-11" INC.	208	ST.
S705	28	20'-0"	1,145	ST.
S706	118	14'-0"	3,377	ST.
S707	51	13'-6"	1,407	ST.
S708	51	12'-6"	1,303	ST.
S709	50	11'-6"	1,175	ST.
S710	270	31'-0"	17,108	ST.
SUPERSTRUCTURE TOTALS			200,300	

SPIRAL REINFORCING LIST

MARK	NUMBER	CORE DIA.	LENGTH	PITCH	No TURNS	WEIGHT
SP401	1	2'-8"	38'-11¾"	4½"	107	717
SP402	1	2'-8"	35'-9½"	4½"	99	660
SP403	1	2'-8"	33'-2 1/16"	4½"	92	612
SP404	1	2'-8"	29'-11¾"	4½"	83	555
SP405	2	2'-8"	27'-11 5/16"	4½"	78	1033
SP406	1	2'-8"	25'-10 1/8"	4½"	72	475
SP407	1	2'-8"	23'-2 7/16"	4½"	65	433
SP408	1	2'-8"	30'-7½"	4½"	85	571
SP409	1	2'-8"	29'-8 7/16"	4½"	82	549
SP410	1	2'-8"	28'-9 5/8"	4½"	80	533
SP411	1	2'-8"	27'-6 5/8"	4½"	77	511
SP412	1	2'-8"	26'-8 5/8"	4½"	74	495
SP413	1	2'-8"	25'-10 7/8"	4½"	72	477
TOTAL						7,621

PIERS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
P501	186	8'-8"	1,681	BT.
P502	186	8'-3"	1,687	BT.
P601	4	21'-8"	130	ST.
P602	4	30'-0"	180	ST.
P603	4	28'-6"	171	ST.
P604	4	21'-0"	126	ST.
P605	4	28'-0"	168	ST.
P801	280	10'-10"	8,099	BT.
P802	6	21'-0"	336	ST.
P901	14	30'-0"	1,428	ST.
P902	6	21'-6"	439	ST.
P1001	12	27'-6"	1,420	ST.
P1002	14	19'-3"	1,160	BT.
P1003	26	30'-0"	3,356	ST.
P1004	12	43'-6"	2,246	ST.
P1005	12	40'-3"	2,078	ST.
P1006	12	37'-6"	1,936	ST.
P1007	12	34'-5"	1,777	ST.
P1008	24	32'-9"	3,382	ST.
P1009	12	30'-7"	1,579	ST.
P1010	12	27'-8"	1,429	ST.
P1011	56	10'-0"	2,410	ST.
P1012	12	26'-0"	1,343	ST.
P1013	14	18'-8"	1,123	BT.
P1014	12	34'-8"	1,790	ST.
P1015	12	33'-6"	1,738	ST.
P1016	24	31'-10"	3,287	ST.
P1017	12	31'-0"	1,601	ST.
P1018	12	29'-11"	1,545	ST.
P1101	14	26'-9"	1,989	BT.
P1102	224	7'-5"	8,826	BT.
P1103	14	25'-2"	1,872	BT.
P1104	12	29'-0"	1,849	ST.
SPIRALS			7,621	
PIER TOTALS			71,805	

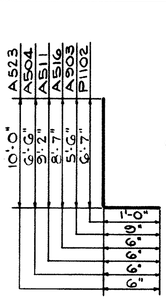
REPLACEMENT BARS

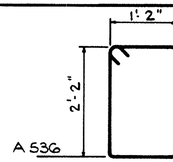
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
RE401	1	6'-3"		BT.
RE501	1	6'-7"		ST.
RE601	7	6'-11"		ST.
RE701	4	7'-3"		ST.
RE801	1	7'-6"		ST.
RE901	1	7'-10"		ST.
RE1001	2	8'-2"		ST.
RE1101	1	8'-7"		ST.

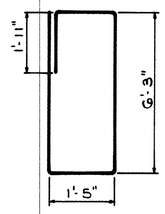
TOTALS

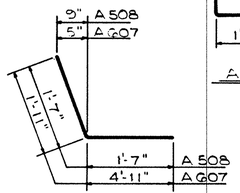
ABUTMENTS	34,301
PIERS	71,805
SUPERSTRUCTURE	200,490
GRAND TOTAL	306,596

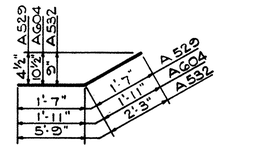
LIGHT BLISTER BARS - TOTAL WEIGHT = 190 LBS.

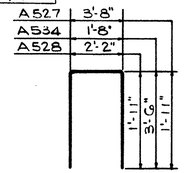


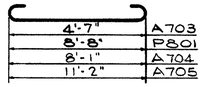


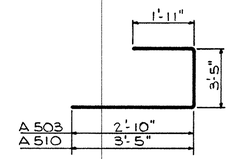


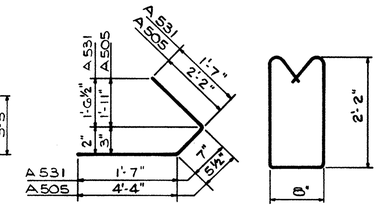




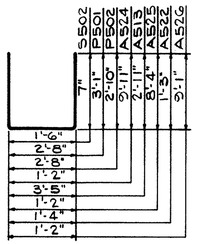


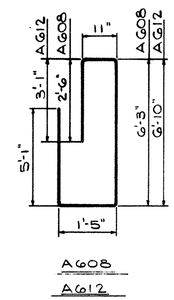


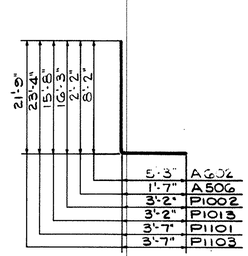


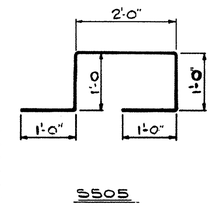


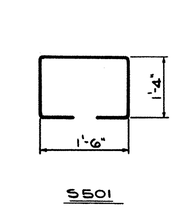
S503
A517

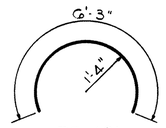


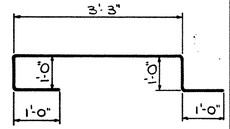


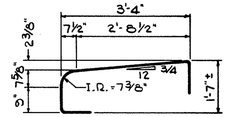


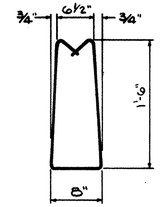












NOTES:

SPIRAL REINFORCING BARS: THE LENGTH SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE BOTTOM OF THE PIER CAP MINUS 4" CLEARANCE.

THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER.

1-1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. FOUR STEEL CHANNEL, TEE OR ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LB. PER LIN. FT. OF SPACER, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF LBS. OF THESE SPACERS, BASED ON 0.80 LB. PER LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A701 IS A NO. 7 SIZE BAR AND A1000 IS A NO. 10 SIZE.

ALL BAR DIMENSIONS ARE GIVEN OUT TO OUT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

18/18

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE
BRIDGE Nº MAH. 680-0794
OVER SHADY RUN
MAHONING CO. I-680
STA. 710+43.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	J.D.P.		Q.A.H.	W.K.D.	5-1-70	

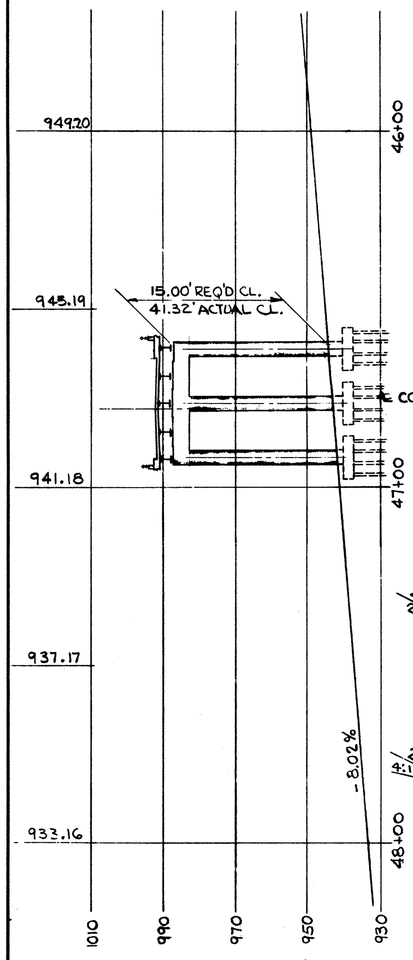
MAY 2 = 1971

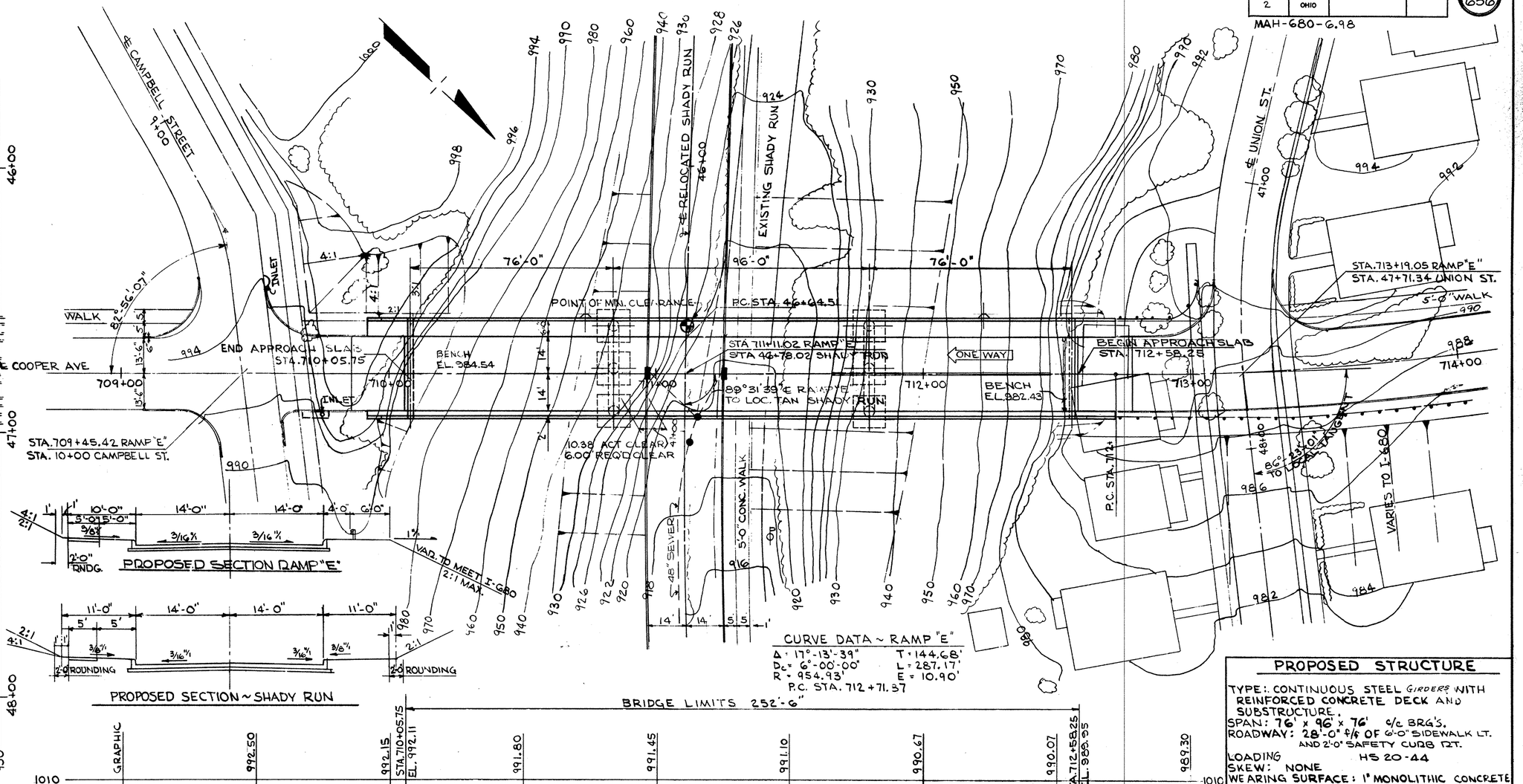
MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

504
656

MAH-680-6.98





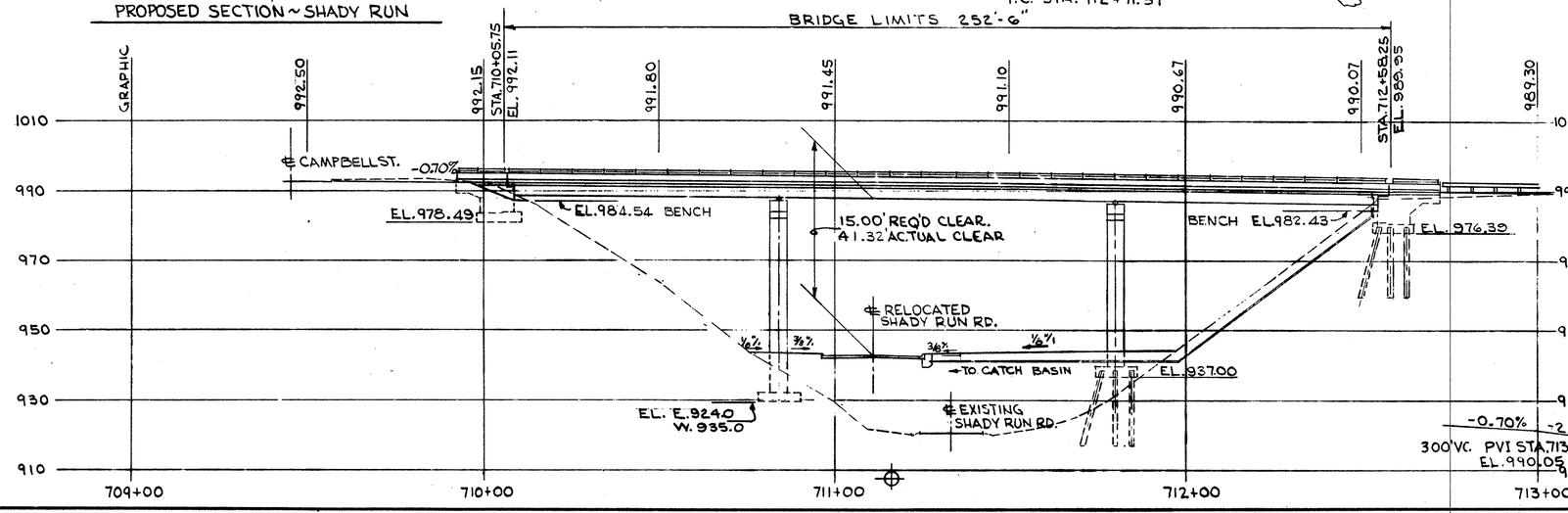
CURVE DATA ~ RAMP "E"
Δ: 17°-13'-39" T: 144.68'
D_c: 6°-00'-00" L: 287.17'
R: 954.93' E: 10.90'
P.C. STA. 712+71.37

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPAN: 76' x 96' x 76' c/c BRG's.
ROADWAY: 28'-0" f/f OF 6'-0" SIDEWALK LT. AND 2'-0" SAFETY CURB RT.
LOADING HS 20-44
SKEW: NONE
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 20'-0" LONG AS-1-67
SUPERELEVATION: NONE
ALIGNMENT: STRAIGHT
TRAFFIC COUNT: SHADY RUN RD. 1960 ADT = 8064
RAMP "E" 1975 ADT. = 9,580

PILES
FORWARD ABUTMENT: 10BP42 - AVERAGE EST. PAY LENGTH 20'
FORWARD PIER : 10BP42 - AVERAGE EST. PAY LENGTH 22'

SHADY RUN CURVE DATA
Δ = 11° 30' 56" L = 191.93
D = 6°00'00" T = 96.29
R = 954.93' C_h = 191.60



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
1 / 10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SITE PLAN

BRIDGE Nº MAH. 680-0792
RAMP "E" OVER RELOC. SHADY RUN
MAHONING CO. I-680
STA 711+10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DS	DS		J.M.	W.K.D.	5-1-70	

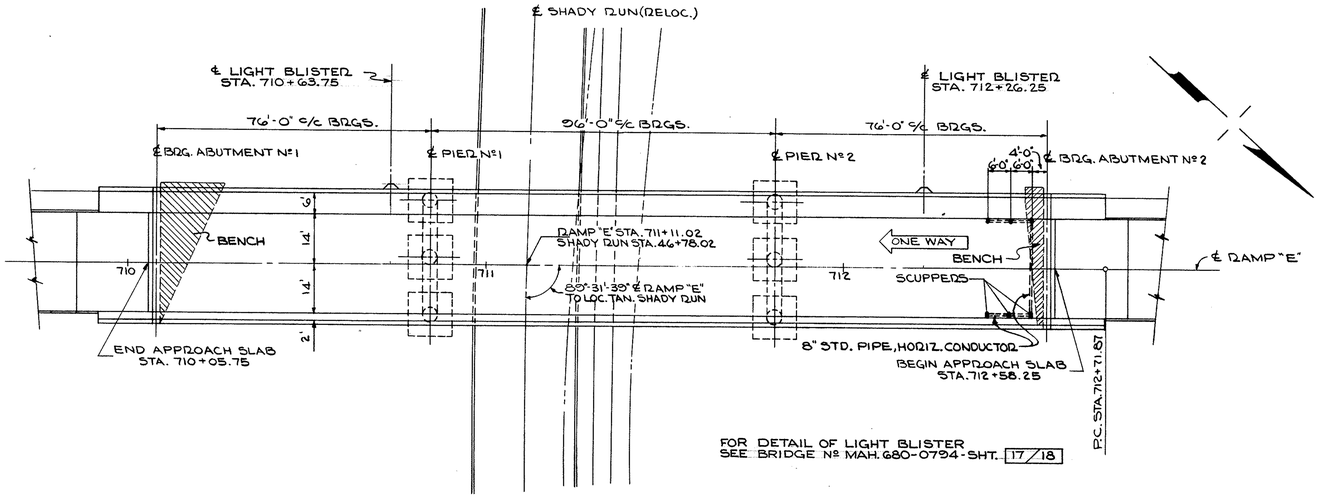
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

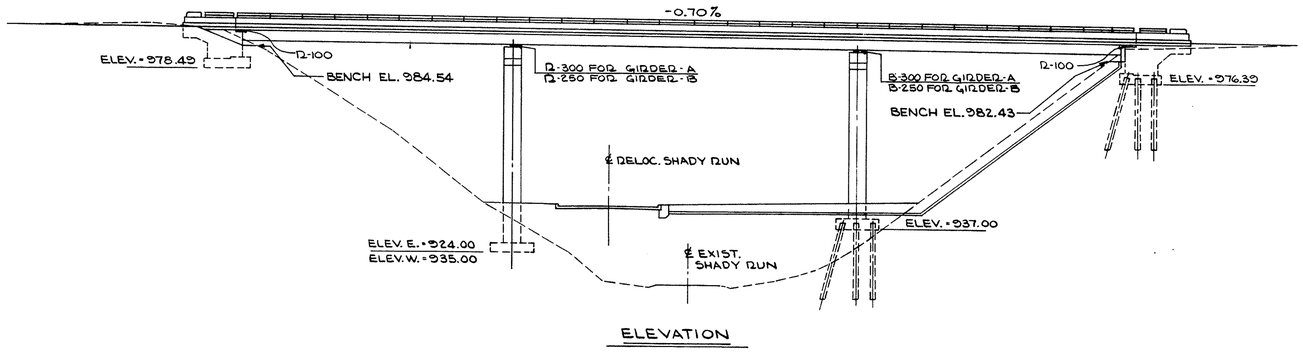
505/656

MAH.680-6.98



FOR DETAIL OF LIGHT BLISTER SEE BRIDGE Nº MAH. 680-0794 - SHT. 17/18

PLAN



ELEVATION

* HP10x42 piles formerly designated 10BP42

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT'S.	PIERS	GEN.		
503	744	CU. YD.	UNCLASSIFIED EXCAVATION		328	416			
503	78	CU. YD.	ROCK EXCAVATION		78				
505	LUMP	SUM	TEST PILE				LUMP		
507	992	LIN. FT.	STEEL PILES ~ HP10x42 *		200	792			
509	152,024	LBS.	REINFORCING STEEL	18,245	13,346	60,433			
511	368	CU. YDS.	CLASS "C" CONCRETE - SUPERSTRUCTURE	368					
511	166	CU. YDS.	CLASS "C" CONCRETE - PIERS ABOVE FOOTINGS			166			
511	124	CU. YDS.	CLASS "C" CONCRETE - ABUT'S. ABOVE FOOTINGS		124				
511	147	CU. YDS.	CLASS "C" CONCRETE - FOOTINGS		62	85			
513	280,633	LBS.	STRUCTURAL STEEL	280,633					
514	280,633	LBS.	FIELD PAINTING OF STRUCTURAL STEEL	280,633					

ESTIMATED QUANTITIES: G.C.P. 9-17-69 - CHECKED: D.A.H. 4-25-70

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT'S.	PIERS	GEN.		
517	555	LIN. FT.	RAILING (CONCRETE PARAPET WITH DOUBLE PIPE RAIL)	500	55				
518	57	CU. YD.	POROUS BACKFILL		57				
518	60	LIN. FT.	6" PERFORATED, HELICAL CMP, INC. SPECIALS (707.01)		60				
518	95	LIN. FT.	6" NON-PERFORATED, HELICAL CMP (707.01)		95				
518	56	LIN. FT.	8" STD. PIPE, HORIZ. COND. & DOWNSPOUT, 707.11	56					
518	6	EACH	SCUPPERS - INCLUDING SUPPORTS	6					
808	368	UNITS	CHEMICAL ADMIXTURE FOR CONC. (TYPE A, B-D)	368					
503	LUMP	SUM	COFFERDAMS, CRIBS AND SHEETING				LUMP		
G25			SEE SHT. Nº 424 GEN. LIGHTING SUMMARY						

GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1965, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS 20-44

CONCRETE CLASS C - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE
UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE

STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616, OR A617, DEFORMED, INTERMEDIATE OR HARD GRADE. UNIT STRESS 20,000 P.S.I. EXCEPT THAT SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A306 OR A499, A82 or A615.

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-67	REVISED 6-12-69
BR-2-67	REVISED 1-1-71
RB-1-55	REVISED 2-2-59
SD-1-69	DATED 6-12-69

AND TO SUPPLEMENTAL SPECIFICATIONS:

808	REVISED 1-1-71
836	DATED 1-1-71

ABUTMENT EXCAVATION QUANTITY: IN ADDITION TO 503.11, INCLUDE THE REMOVAL OF MATERIAL BOUNDED BY THE PROPOSED BENCH, BY THE FRONT VERTICAL PLANE DESCRIBED IN 503.11 AND BY THE FINISHED SLOPE OF THE CUT.

FOUNDATION BEARING PRESSURE: ABUTMENT NO.1 AND PIER NO.1 FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 5 TONS PER SQ. FT.

FOOTING SHALL BE PLACED IN BEDROCK AT THE ELEVATIONS SHOWN.

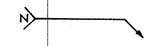
PILES SHALL BE DRIVEN WITH A HAMMER OF NOT LESS THAN 11,000 FT. LBS. PER BLOW TO FIRM CONTACT WITH BEDROCK. IF THE LENGTH OF PENETRATION IS APPROXIMATELY EQUAL TO THE DEPTH TO BEDROCK ACCORDING TO THE BRIDGE FOUNDATION INVESTIGATION REPORT, THE FIRM CONTACT SHALL BE CONSIDERED AS ATTAINED WHEN THE CAPACITY ACCORDING TO THE FORMULA IN 507.05 IS NOT LESS THAN THE FOLLOWING VALUE FOR A PILE HAMMER OF THE INDICATED ENERGY RATING:

FOR THE ABUTMENT PILES:
56 TONS PER PILE USING A 11,000 FT. LB. HAMMER
48 TONS PER PILE USING A 15,000 FT. LB. OR GREATER HAMMER

FOR THE PIER PILES:
56 TONS PER PILE USING A 11,000 FT. LB. HAMMER
48 TONS PER PILE USING A 15,000 FT. LB. OR GREATER HAMMER

IF THE ENERGY RATING OF THE HAMMER IS BETWEEN THE RATING AS SHOWN ABOVE, THE REQUIRED FORMULA CAPACITY SHALL BE DETERMINED BY INTERPOLATION. THE DESIGN LOAD IS 35 TONS PER PILE FOR THE ABUTMENT PILES AND 35 TONS PER PILE FOR THE PIER PILES.

WELD ON NON-STRESS CARRYING MEMBERS ARE SHOWN THUS:



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION
BRIDGE Nº MAH. 680-0792
RAMP "E" OVER RELOCATED SHADY RUN
MAHONING CO. I-680
STA. 711 + 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.A.H.	J.D.P.		D.A.H.	W.K.D.	5-1-70	

MAY 25 1971

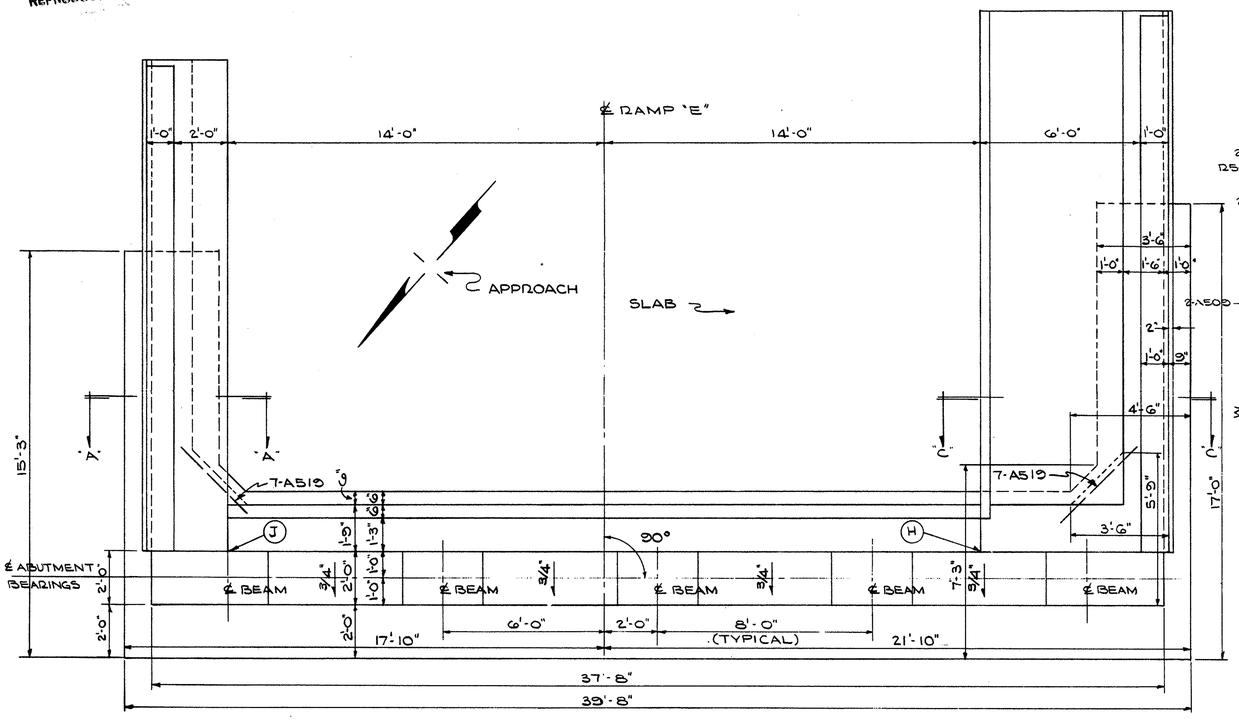
MICROFILMED
JUL 11 1979
REPRODUCTION

ABUTMENT Nº 1	ELEVATIONS											DIMENSIONS								
	A	B	C	D	E	F	H	J	K	L	M	P	Q	R	S	T	U	V	W	X
WINGWALL, CURB SIDE	985.54	985.67	985.79	985.73	985.60	978.49	991.88	991.88	992.74	992.87	992.09	5'-4½"	12'-11"	18'-3"	7'-1⅜"	13'-4⅛"	15'-3"	3'-4⅝"	13'-5⅛"	6'-10⅜"
WINGWALL, S.W. SIDE									992.90	993.04	992.09	6'-3"	14'-8"	20'-0"	7'-0⅝"	13'-3⅜"	17'-0"	3'-4⅞"	13'-8½"	6'-9⅝"

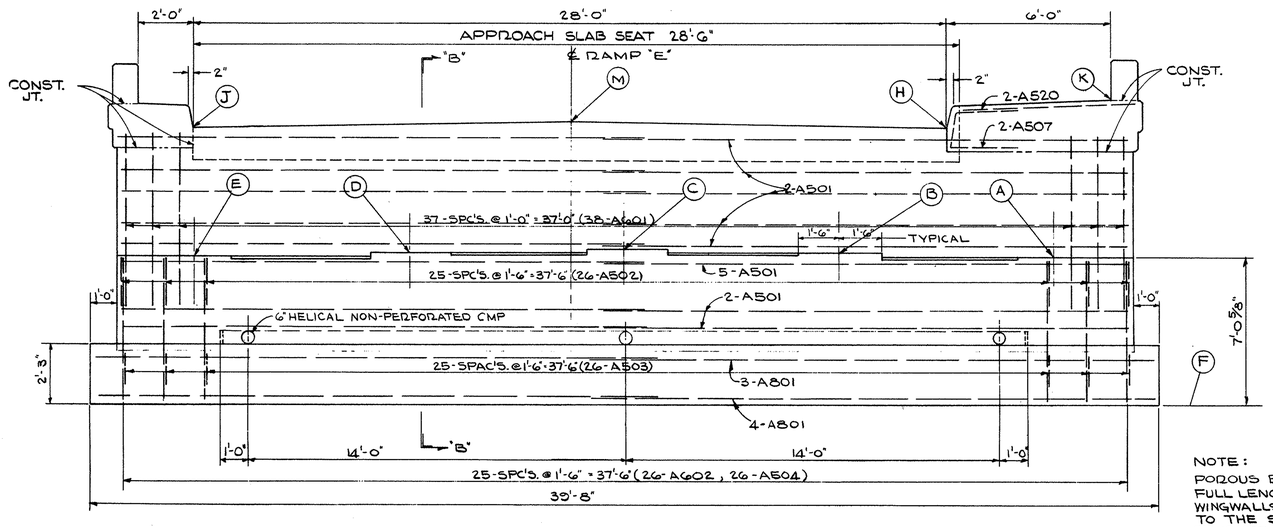
FED. RD.	STATE	PROJECT	
2	OHIO		

506/656

MAH. 680-6.98

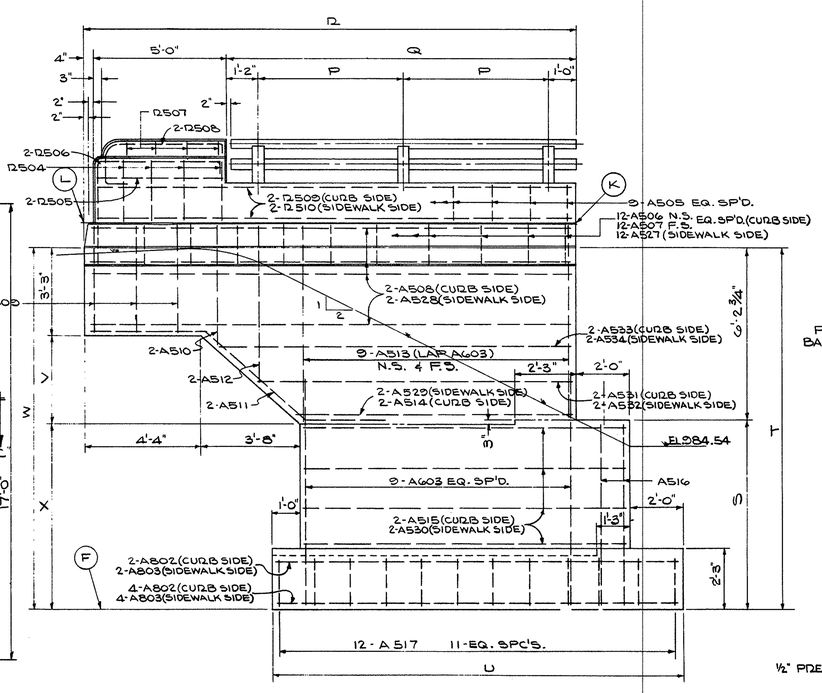


PLAN - ABUTMENT Nº 1

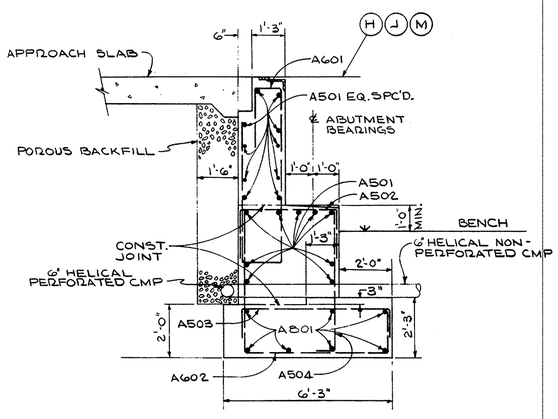


ELEVATION - ABUTMENT Nº 1

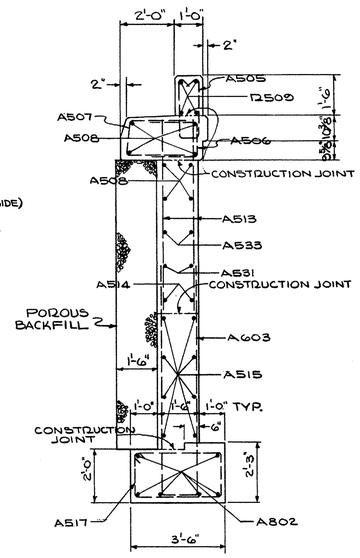
NOTE:
POROUS BACKFILL, 1'-6" THICK, FULL LENGTH OF ABUTMENT AND WINGWALLS, SHALL EXTEND UP TO THE SUBGRADE OR TO THE FINISHED GROUND SURFACE.



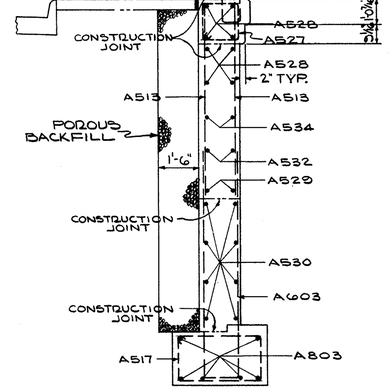
TYPICAL WINGWALL REINFORCING
ABUTMENT Nº 1



SECTION B-B



SECTION A-A



SECTION C-C

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

ABUTMENT Nº 1 DETAILS
BRIDGE Nº MAH. 680-0792

RAMP "E" OVER SHADY RUN
MAHONING CO. I-680
STA. 711 + 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.J.C.	J.B.P.		D.A.H.	W.K.D.	5-1-70	

MAR 25 1971

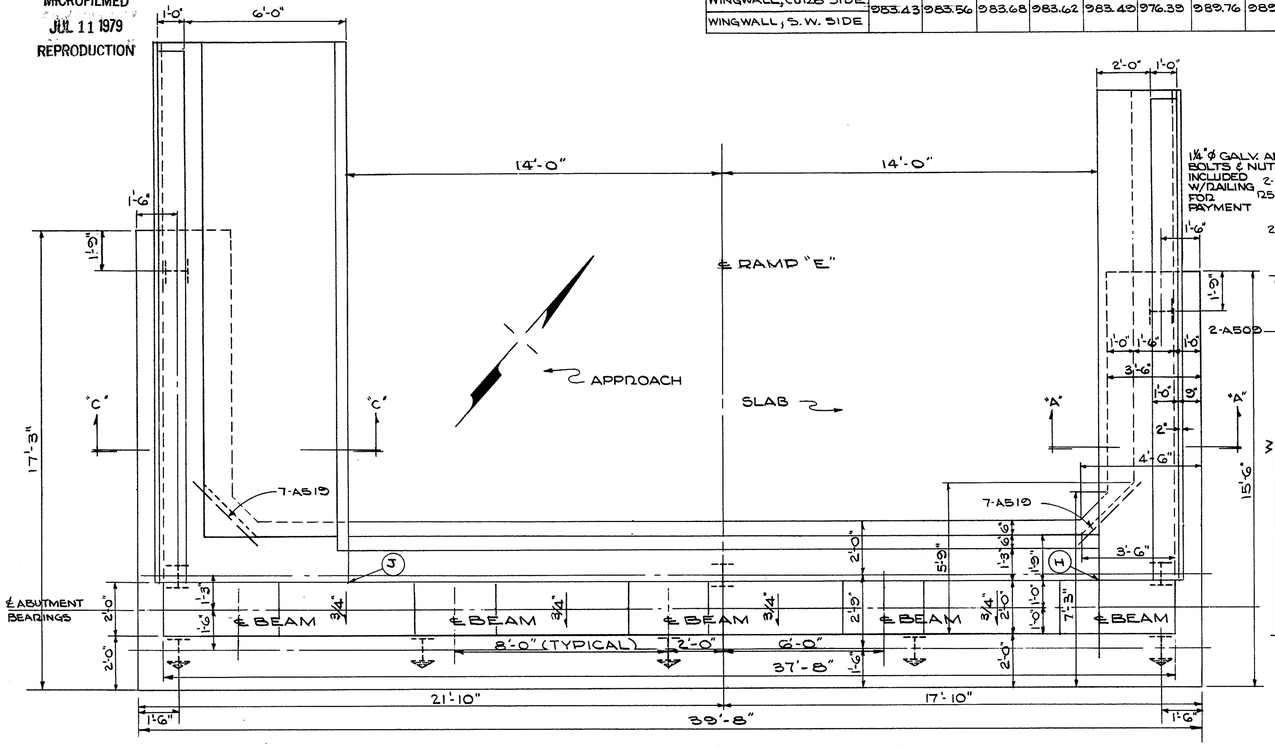
MICROFILMED
JUL 11 1979
REPRODUCTION

ABUTMENT Nº 2	ELEVATIONS											DIMENSIONS								
	A	B	C	D	E	F	H	J	K	L	M	P	Q	R	S	T	U	V	W	X
WINGWALL, CURB SIDE	983.43	983.56	983.68	983.62	983.49	976.39	989.76	989.76	990.63	990.50	989.98	5'-6"	13'-2"	18'-6"	7'-1 1/4"	13'-4"	15'-6"	3'-1 15/16"	13'-2 7/16"	6'-10 1/4"
WINGWALL, S.W. SIDE										990.78	990.65	989.98	6'-4 1/2"	14'-11"	20'-3"	7'-0 1/2"	13'-3 1/4"	17'-3"	3'-1 1/16"	13'-1 9/16"	6'-9 1/2"

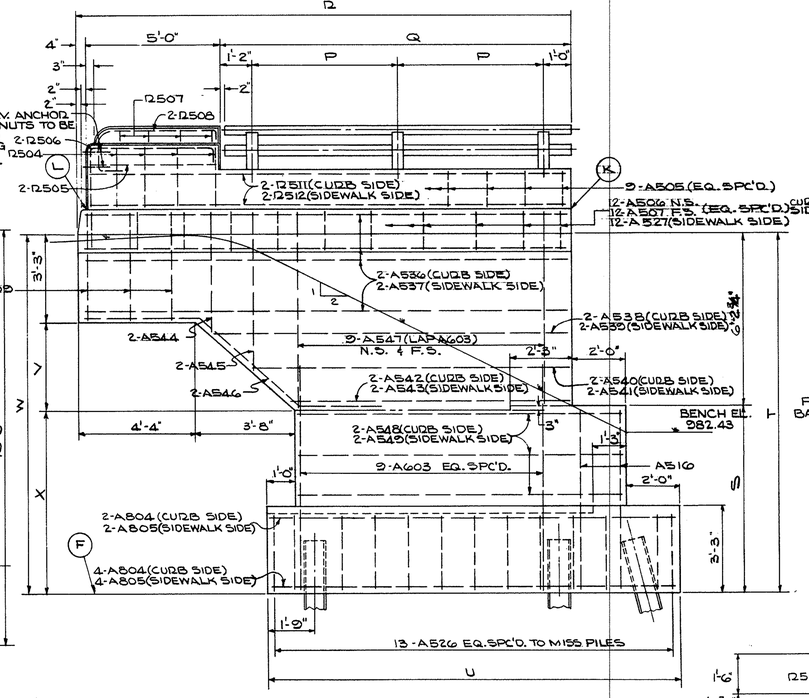
FED. RD.	STATE	PROJECT	
2	OHIO		

507
656

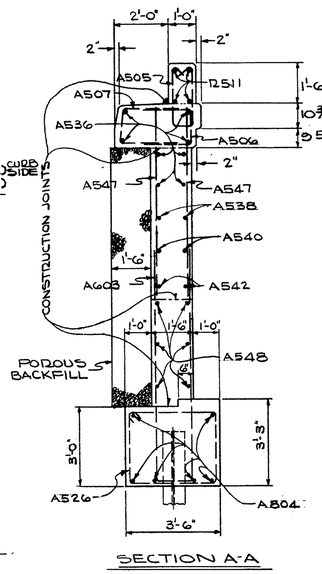
MAH-680-6.98



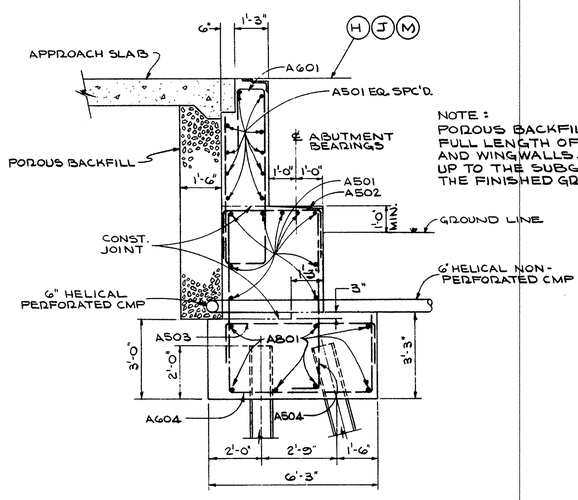
PLAN - ABUTMENT Nº 2



TYPICAL WINGWALL REINFORCING
ABUTMENT Nº 2

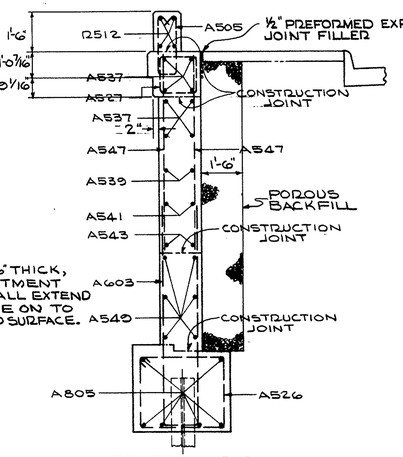


SECTION A-A

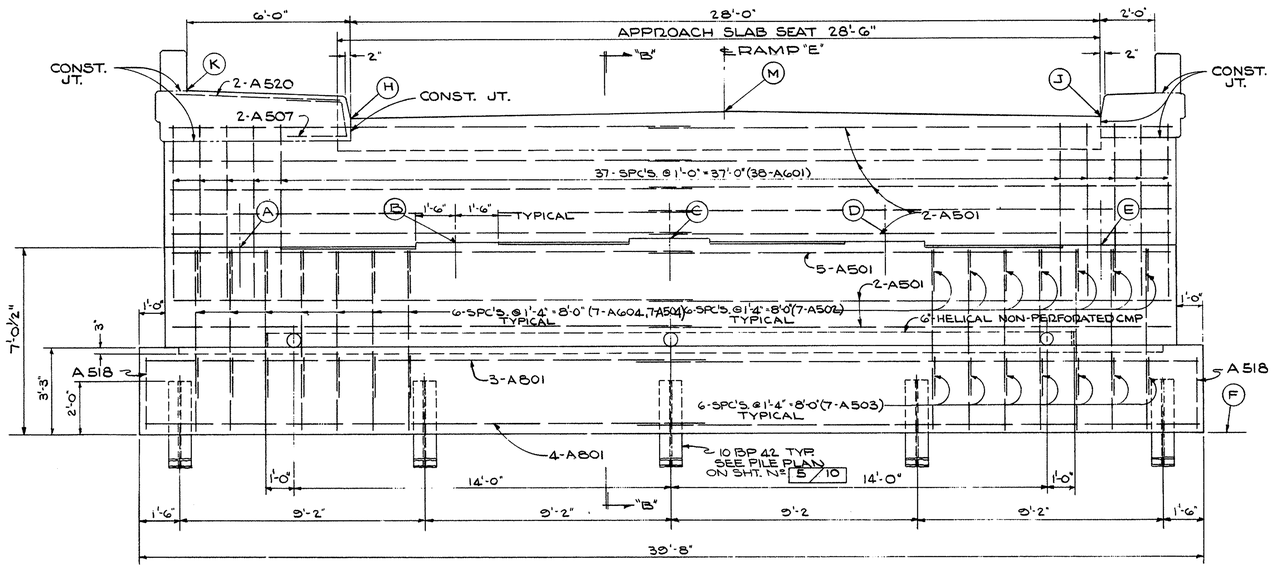


NOTE:
POROUS BACKFILL, 1'-6" THICK, FULL LENGTH OF ABUTMENT AND WINGWALLS. SHALL EXTEND UP TO THE SUBGRADE ON TO THE FINISHED GROUND SURFACE.

SECTION B-B



SECTION C-C



ELEVATION - ABUTMENT Nº 2

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº2 DETAILS
BRIDGE Nº MAH. 680-0792

RAMP "E" OVER RELOC. SHADY RUN
MAHONING CO. I-680
STA. 711 + 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	J.D.P.		JTM	WKD	5-1-70	

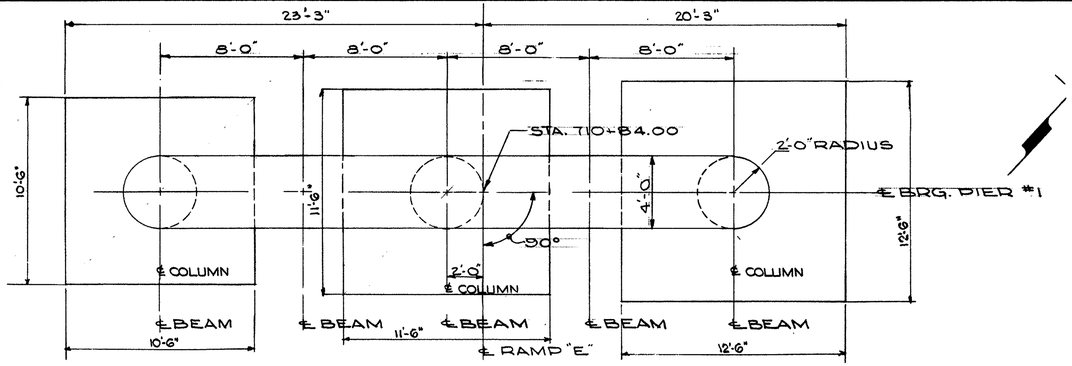
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

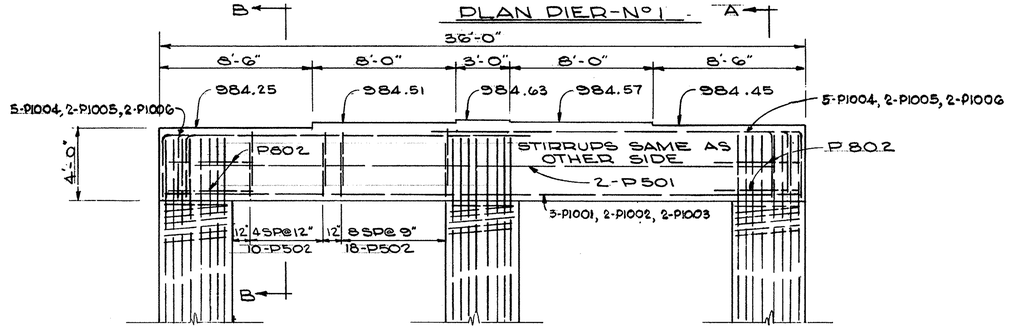
FED. RD.	STATE	PROJECT	
2	OHIO		

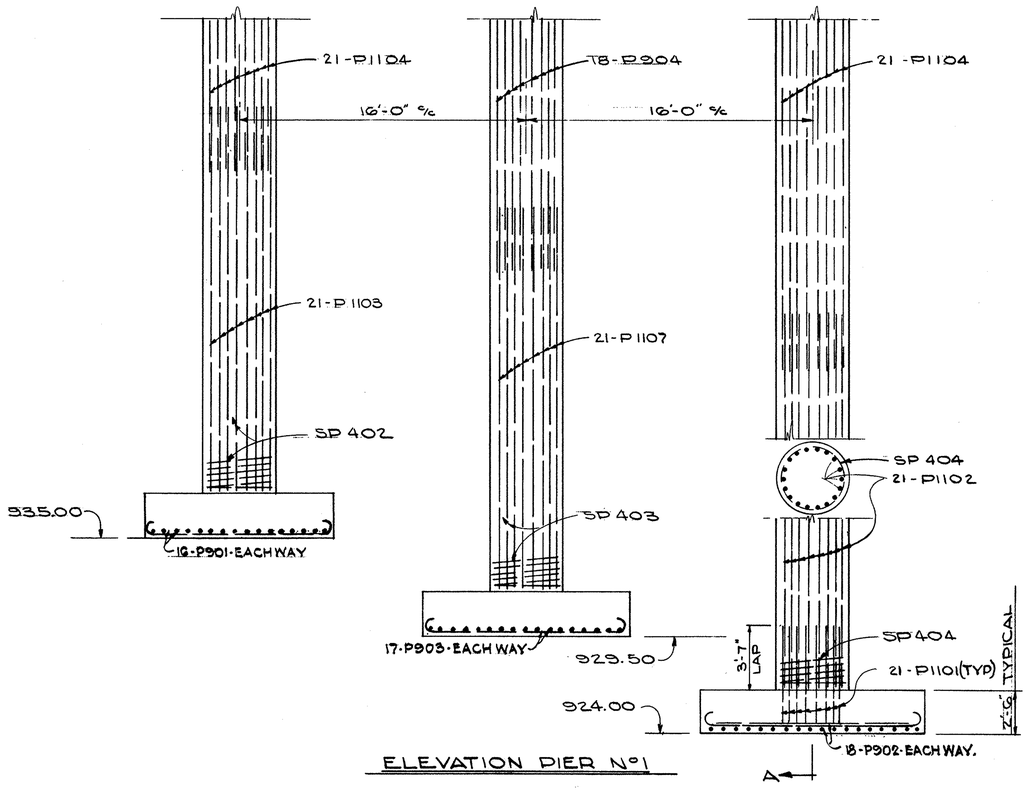
508/656

MAH - 680 - 6.98

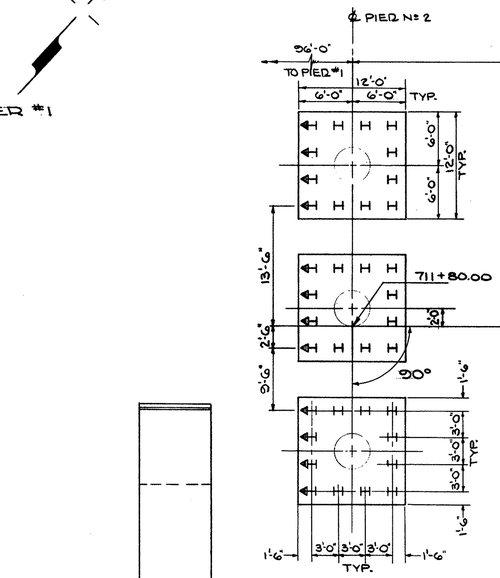


PLAN PIER-N°1



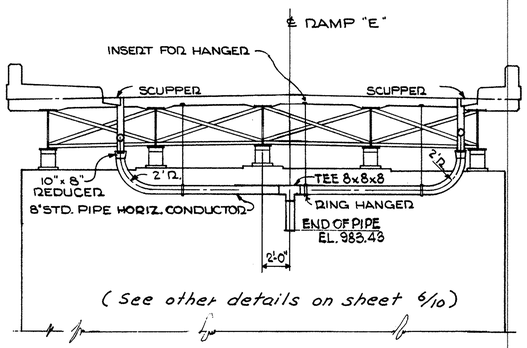


ELEVATION PIER N°1



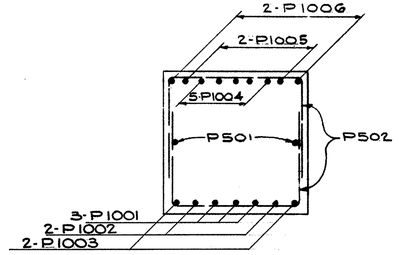
NOTE:
ALL PILES - 10BP42
PILES OCCUR ONLY ON PIER #2 AND ABUTMENT #2 FOOTING
←H-INDICATES 1:4 BATTERED PILE

PILE PLAN

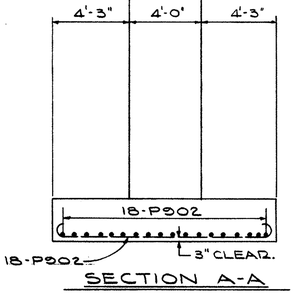


SCUPPER CONDUCTOR PIPE
ABUTMENT #2

NOTE: DOWNSPOUTS SHALL BE 8" STANDARD WROUGHT IRON PIPE, ALLOY STEEL PIPE 707.11, OR HOT-DIP GALVANIZED STEEL PIPE. JOINTS SHALL BE MADE BY WELDING OR BY THE USE OF A CLAMP-TYPE COUPLING WITH A RING GASKET. ALL WELDING SHALL BE DONE BEFORE GALVANIZING. STRAPS OR CLAMPS FOR ATTACHING DOWNSPOUTS SHALL BE WROUGHT IRON, ALLOY STEEL OR HOT-DIP GALVANIZED STEEL. ON BOLTS, GALVANIZING AS CALLED FOR IN ASTM A-153 IS ACCEPTABLE.



SECTION B-B



SECTION A-A

REINFORCING IN EACH COLUMN AND FOOTING IS IDENTICAL UNLESS OTHERWISE NOTED.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
5/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

PIER N° 1
BRIDGE N° MAH. 680-0792
RAMP "E" OVER RELOCATED SHADY RUN
MAHONING CO. I-680
STA. 711 + 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JWC		R.A.H.	W.K.D.	5-1-70	

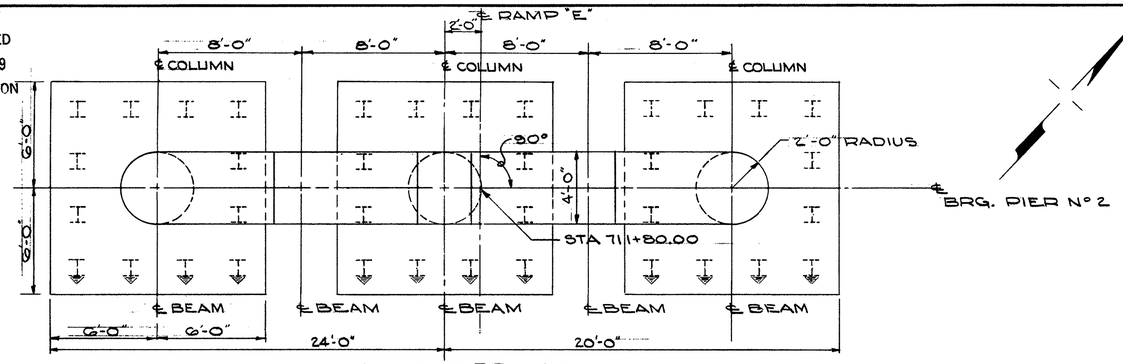
MAY 26 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

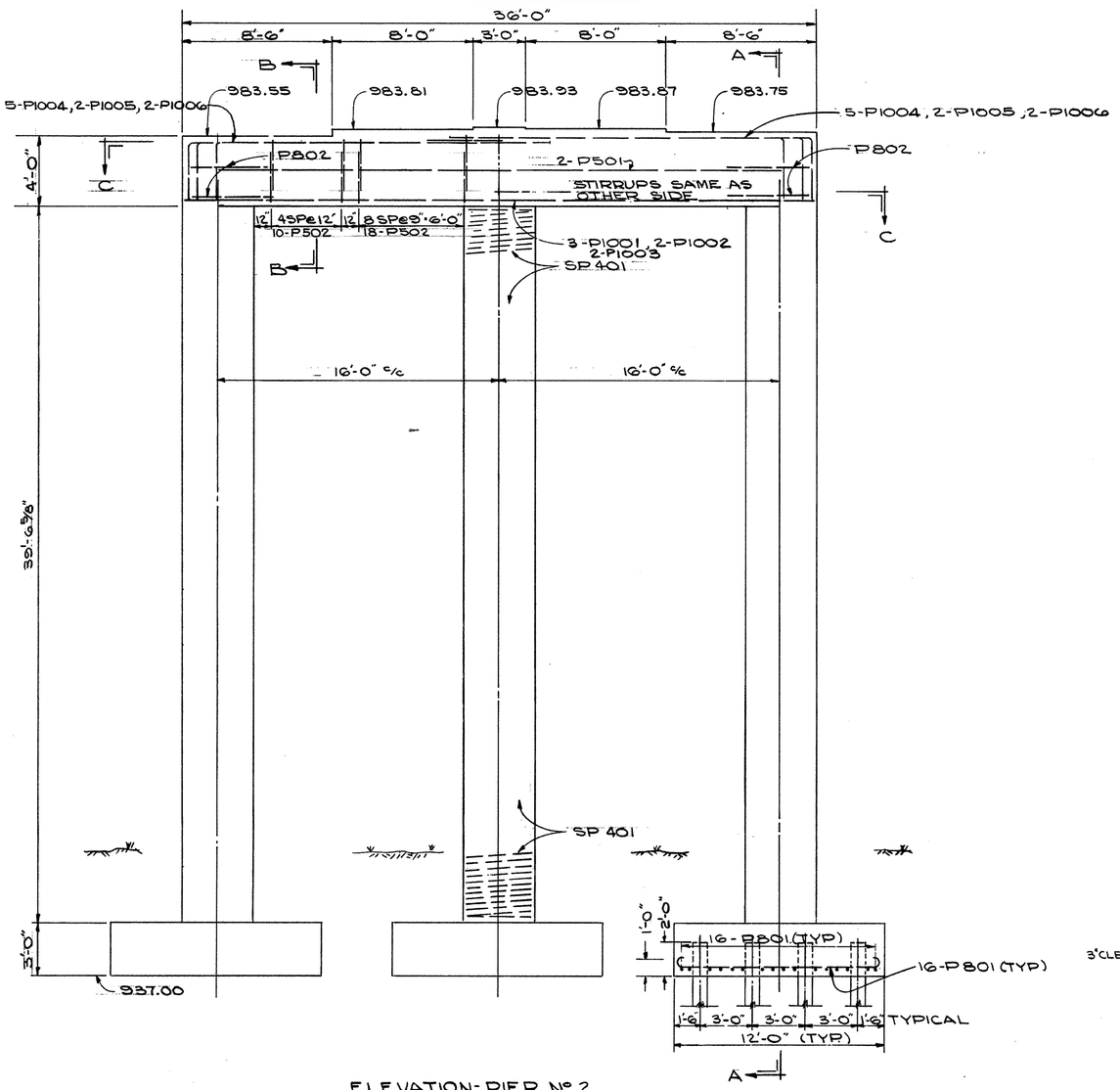
FED. RD.	STATE	PROJECT	
2	OHIO		

509/656

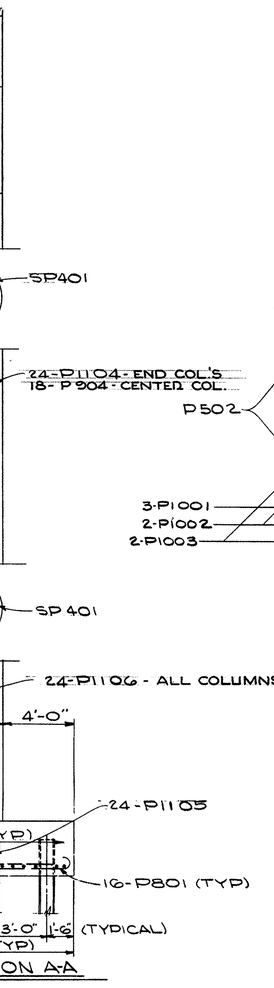
MAH-680-6.98



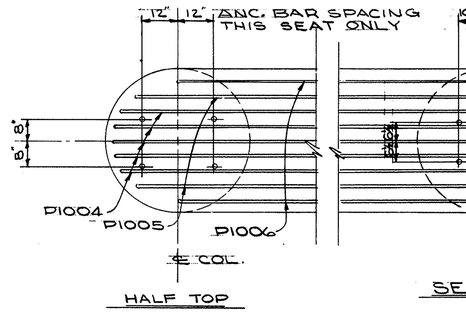
PLAN PIER N° 2



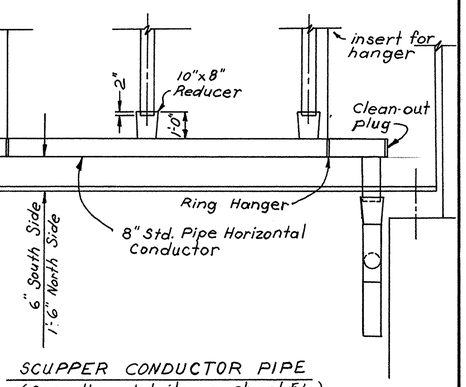
ELEVATION-PIER N° 2



SECTION A-A



HALF TOP — SECTION C-C — HALF BOTTOM



SCUPPER CONDUCTOR PIPE
(See other details on sheet 5/10)

NOTE:
ALL PILES 10BP42

↓ INDICATES DIRECTION OF 1¼ BATTER ON PILES.

SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.

DIMENSIONS & REINFORCING OF COLUMNS & FOOTING ARE IDENTICAL

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PIER N° 2
BRIDGE N° MAH. 680-0792
RAMP "E" OVER RELOCATED SHADY RUN
MAHONING CO. I-680
STA. 711 + 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JWC		R.A.H.	W.K.D.	5-1-70	

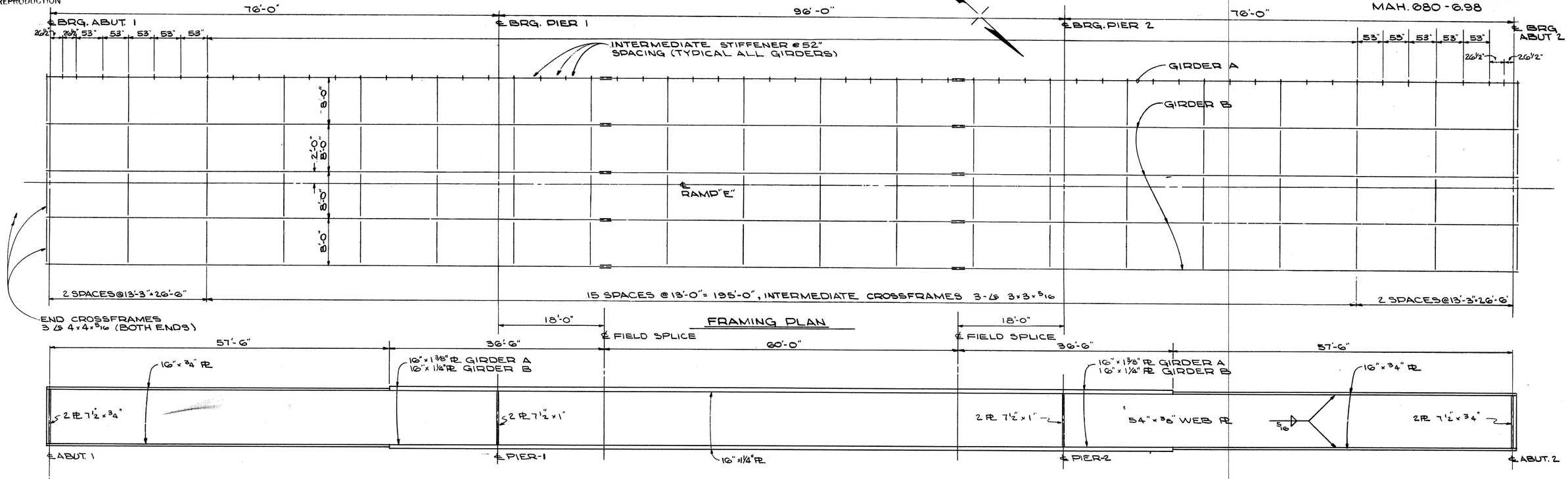
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

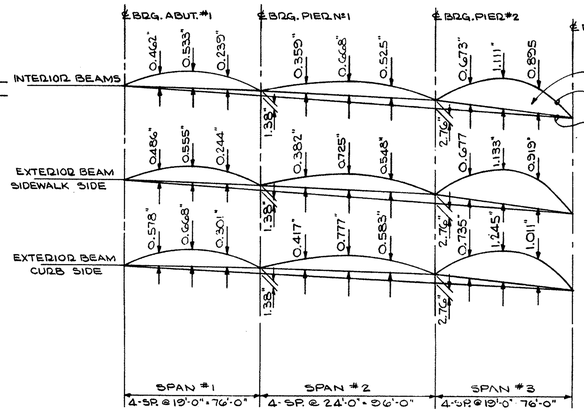
510/656

MAH. 680 - 6.98



FRAMING PLAN

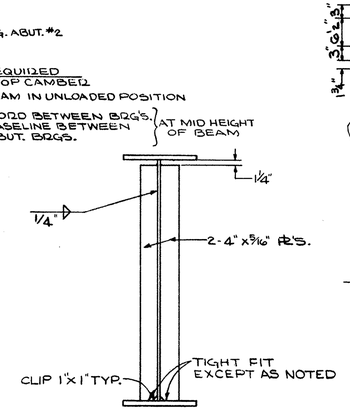
ELEVATION - GIRDER A & B



CAMBER DIAGRAM

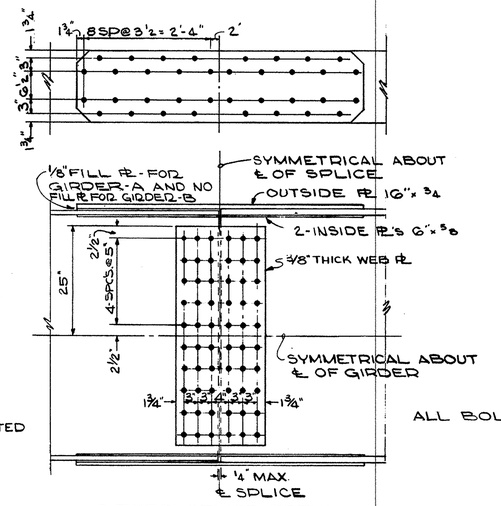
DEFLECTION AND CAMBER

INTERIOR BEAMS	SPAN 1			SPAN 2			SPAN 3		
	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4
DEFLECTION DUE TO WEIGHT OF STEEL	0.042	0.045	0.014	0.058	0.096	0.058	0.014	0.045	0.042
DEFLECTION DUE TO REMAINING DEAD LOAD	0.419	0.488	0.225	0.211	0.392	0.211	0.225	0.488	0.419
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	-	-	-	0.09	0.18	0.256	0.433	0.578	0.433
REQUIRED SHOP CAMBER INCHES	0.462	0.533	0.239	0.359	0.668	0.525	0.673	1.111	0.895
EXTERIOR BEAMS ON SIDEWALK SIDE									
DEFLECTION DUE TO WEIGHT OF STEEL	0.045	0.050	0.019	0.046	0.080	0.046	0.019	0.050	0.045
DEFLECTION DUE TO REMAINING DEAD LOAD	0.44	0.505	0.225	0.246	0.464	0.246	0.225	0.505	0.440
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	-	-	-	0.09	0.18	0.256	0.433	0.578	0.433
REQUIRED SHOP CAMBER INCHES	0.486	0.555	0.244	0.382	0.725	0.548	0.667	1.133	0.919
EXTERIOR BEAM CURB SIDE									
DEFLECTION DUE TO WEIGHT OF STEEL	0.042	0.045	0.014	0.058	0.096	0.058	0.014	0.045	0.042
DEFLECTION DUE TO REMAINING DEAD LOAD	0.535	0.623	0.287	0.27	0.501	0.27	0.287	0.623	0.535
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	-	-	-	0.09	0.18	0.256	0.433	0.578	0.433
REQUIRED SHOP CAMBER INCHES	0.578	0.668	0.301	0.417	0.777	0.583	0.735	1.245	1.011



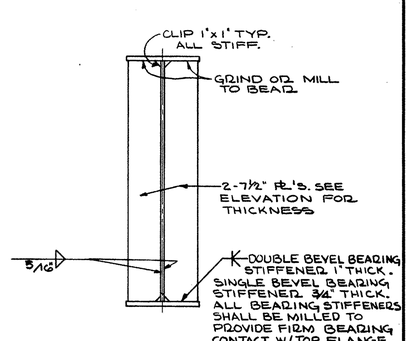
INTERMEDIATE STIFFENER

NOTE:
THE FIRST FOUR INTERMEDIATE STIFFENERS ON EACH SIDE OF THE ℄ OF THE PIERS SHALL BE AS SHOWN, ALL OTHERS SHALL HAVE TIGHT FIT TO TOP FLANGE.



GIRDER SPLICE DETAIL

FOR WELD DETAILS OF FLANGE SPLICE AND WEB SPLICES, SEE SHEET 12/12
MAH-680-0835



BEARING STIFFENER

ALL BOLTS 1" ϕ H.S.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
7/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE Nº MAH. 680-0792

RAMP "E" OVER RELOCATED SHADY RUN
MAHONING CO. I-680
STA. 711 + 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JWC		JTM	WKD	5-1-70	

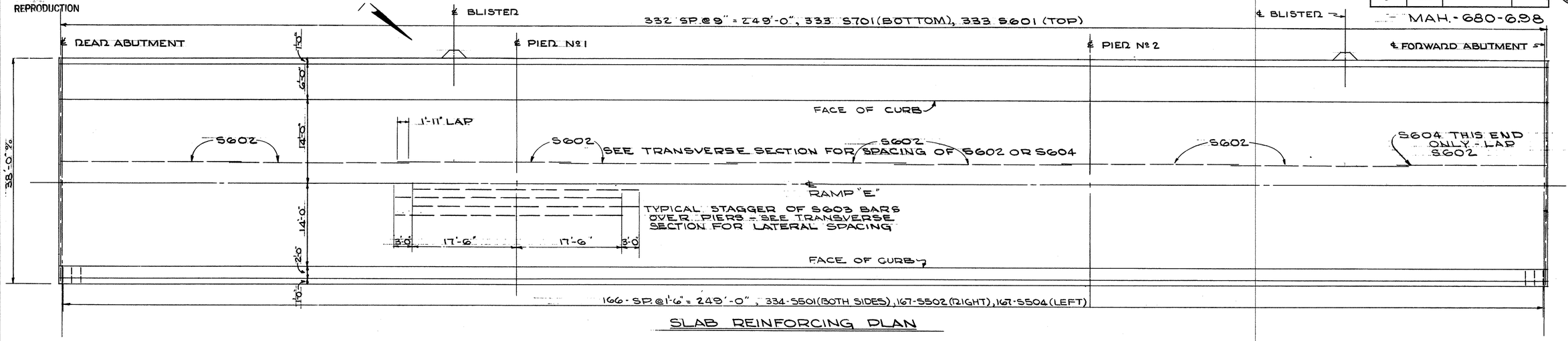
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

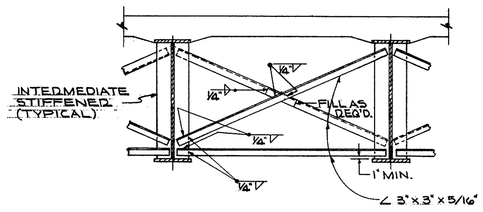
FED. RD.	STATE	PROJECT	
2	OHIO		

511/656

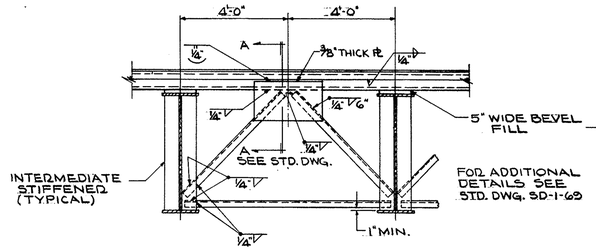
MAH.-680-6.98



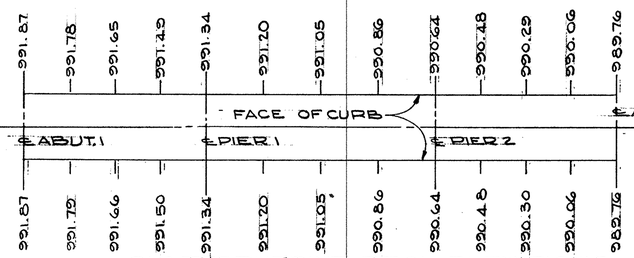
SLAB REINFORCING PLAN



TYPICAL INTERMEDIATE CROSSFRAME

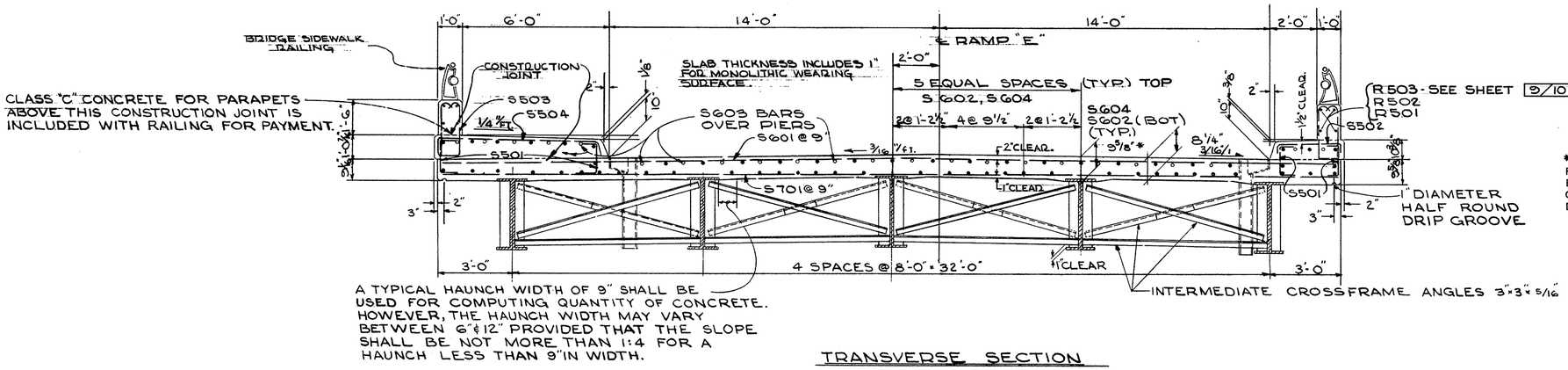


TYPICAL END CROSSFRAME



QUARTER POINT DECK ELEVATIONS

NOTE: THE ELEVATIONS SHOWN AT THE FACE OF CURB ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE DECK IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTION CAUSED BY THE WEIGHT OF THE CONCRETE.



A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" & 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

TRANSVERSE SECTION

*THIS IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

8/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

SLAB PLAN
BRIDGE Nº MAH.680-0792
RAMP "E" OVER RELOCATED SHADY RUN
MAHONING CO. I-680
STA. 711 + 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	JWC		JTM	WKD	5-1-70	

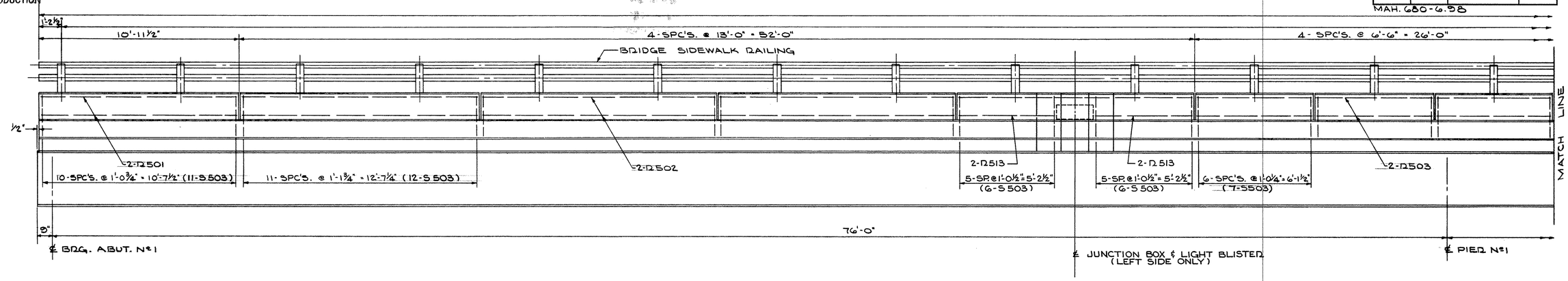
MAY 25 1971

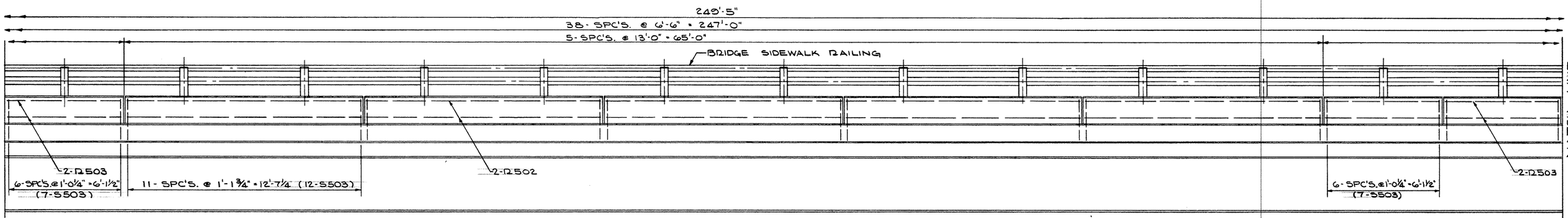
MICROFILMED
JUL 11 1979
REPRODUCTION

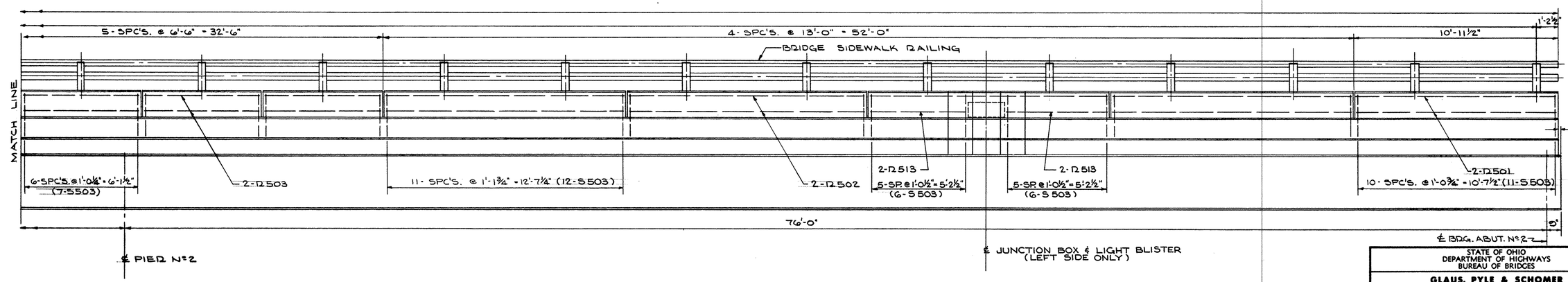
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

512
656







RAILING DETAIL, TYPICAL EACH SIDE ~ RAMP "E" OVER RELOCATED SHADY RUN

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

9/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS

BRIDGE N° MAH-680-0792

RAMP "E" OVER RELOCATED SHADY RUN
MAHONING COUNTY I-680

STA. 711+10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.D.P.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

513/656

MAH. 680-6.98

ABUTMENTS				
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
A501	76	19'-6"	1,546	ST.
A502	54	6'-2"	347	BT.
A503	54	7'-2"	404	BT.
A504	54	7'-3"	408	BT.
A505	36	5'-7"	210	BT.
A506	24	5'-1"	127	BT.
A507	28	5'-5"	158	BT.
A508	8	17'-11"	149	ST.
A509	24	3'-5"	94	ST.
A510	4	4'-4"	18	ST.
A511	4	11'-5"	49	BT.
A512	4	5'-5"	24	ST.
A513	36	7'-0"	263	ST.
A514	2	5'-11"	21	ST.
A515	8	11'-11"	90	ST.
A516	8	6'-8"	56	ST.
A517	24	9'-7"	240	BT.
A518	2	16'-4"	34	BT.
A519	28	4'-0"	117	ST.
A520	4	6'-10"	29	ST.
A526	26	11'-7"	314	BT.
A527	24	6'-5"	161	BT.
A528	8	19'-8"	164	ST.
A529	2	11'-8"	24	ST.
A530	8	13'-8"	114	ST.
A531	2	11'-6"	24	ST.
A532	2	13'-5"	28	ST.
A533	2	13'-0"	27	ST.
A534	2	14'-11"	31	ST.
A536	8	18'-2"	152	ST.
A537	8	19'-11"	166	ST.
A538	2	13'-6"	28	ST.
A539	2	15'-3"	32	ST.
A540	2	12'-2"	25	ST.
A541	2	14'-0"	29	ST.
A542	2	10'-5"	22	ST.
A543	2	12'-2"	25	ST.
A544	4	4'-3"	18	ST.
A545	4	5'-9"	24	ST.
A546	4	11'-8"	49	BT.
A547	36	6'-11"	260	ST.
A548	6	12'-2"	76	ST.
A549	6	13'-11"	87	ST.
A601	76	21'-0"	2,397	BT.
A602	26	13'-2"	514	BT.
A603	36	18'-4"	991	BT.
A604	28	14'-5"	606	BT.
A801	28	20'-10"	1,557	ST.
A802	6	14'-8"	236	ST.
A803	6	16'-6"	264	ST.
A804	6	15'-0"	240	ST.
A805	6	16'-9"	268	ST.
ABUTMENT TOTALS			13,346	

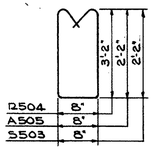
REPLACEMENT BARS				
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
RE401	1	6'-3"		BT.
RE501	1	6'-7"		ST.
RE601	3	6'-11"		ST.
RE701	2	7'-3"		ST.
RE801	1	7'-6"		ST.
RE901	1	7'-10"		ST.
RE1001	1	8'-2"		ST.
RE1101	1	8'-7"		ST.

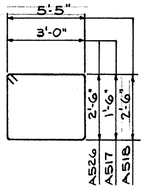
PIERS				
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
P501	4	32'-0"	134	ST.
P502	112	8'-11"	1,042	BT.
P801	96	13'-8"	3,503	BT.
P802	8	11'-9"	251	BT.
P901	32	12'-6"	1,360	BT.
P902	36	14'-6"	1,775	BT.
P903	34	13'-6"	1,561	BT.
P904	36	30'-0"	3,672	ST.
P1001	6	35'-0"	904	ST.
P1002	4	34'-6"	594	ST.
P1003	4	32'-0"	551	ST.
P1004	20	23'-9"	2,044	BT.
P1005	8	23'-0"	792	BT.
P1006	8	22'-3"	766	BT.
P1101	63	8'-1"	2,706	BT.
P1102	21	31'-2"	3,477	ST.
P1103	21	20'-2"	2,250	ST.
P1104	90	30'-0"	14,345	ST.
P1105	72	8'-3"	3,156	BT.
P1106	72	16'-11"	6,471	ST.
P1107	21	24'-8"	2,752	ST.
SPINAL TOTALS			4,815	
PIER TOTALS			58,921	

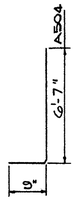
SUPERSTRUCTURE				
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
S501	668	2'-3"	1,568	BT.
S502	167	3'-7"	624	BT.
S503	482	5'-7"	2,807	BT.
S504	167	7'-7"	1,321	BT.
S601	333	37'-8"	18,840	ST.
S602	496	30'-0"	22,350	ST.
S603	46	38'-0"	2,625	ST.
S604	62	24'-6"	2,282	ST.
S701	333	37'-8"	25,638	ST.
SUPERSTRUCTURE TOTALS			78,055	

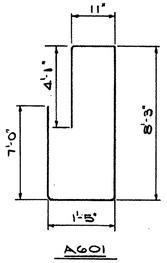
LIGHT BLISTED BARS - TOTAL 190
78,245

SPIRAL REINFORCING LIST						
MARK	NUMBER	CORE DIA.	LENGTH	PITCH	Nº TURNS	WEIGHT
SP401	3	3'-8"	39'-6 5/8"	4½"	108	2,857
SP402	1	3'-8"	42'-9"	4½"	117	1,027
SP403	1	3'-8"	48'-3"	4½"	132	1,157
SP404	1	3'-8"	53'-9"	4½"	146	1,286
SPIRAL TOTALS						6,327









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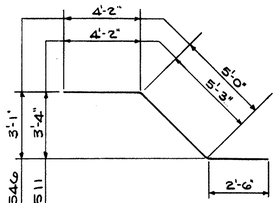
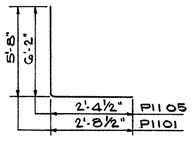
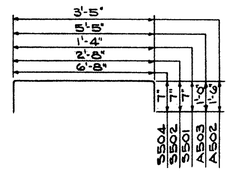
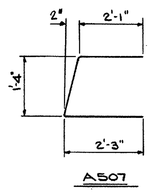




RE 401







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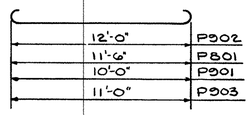

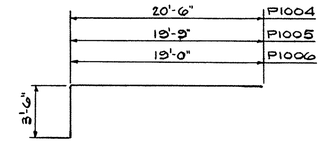

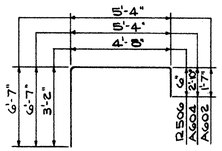

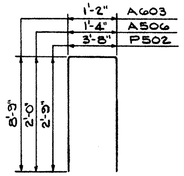

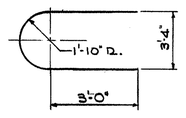

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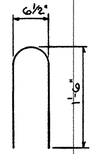

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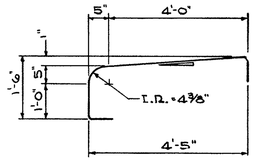
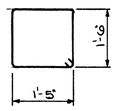


R508

RAILING - TO BE INCLUDED IN ITEM 517 FOR PAYMENT				
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
R501	16	10'-7"		ST.
R502	100	12'-8"		ST.
R503	72	6'-2"		ST.
R504	16	7'-7"		BT.
R505	8	4'-8"		ST.
R506	8	8'-1"		BT.
R507	16	3'-3"		BT.
R508	8	6'-7"		BT.
R509	4	17'-8"		ST.
R510	4	18'-5"		ST.
R511	4	17'-10"		ST.
R512	4	19'-7"		ST.
R513	8	5'-3"		ST.



A527

TOTALS	
ABUTMENTS	13,346
PIERS	60,433
SUPERSTRUCTURE	78,245
GRAND TOTAL	152,024

NOTE: THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER.

1-1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. FOUR 1" X 1" X 1/8" STEEL ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LB. PER LIN. FT. OF SPACER, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF LBS. OF THESE SPACERS, BASED ON 0.80 LB. PER LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A701 IS A NO.7 SIZE BAR AND A 1000 IS A NO. 10 SIZE.

ALL BAR DIMENSIONS ARE GIVEN OUT TO OUT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

10 / 10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE
BRIDGE Nº MAH-680-0792
RAMP "E" OVER RELOCATED SHADY RUN
MAHONING CO. I-680
STA. 711+ 10.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.D.P.		R.A.H.	W.K.D.	5-1-70	

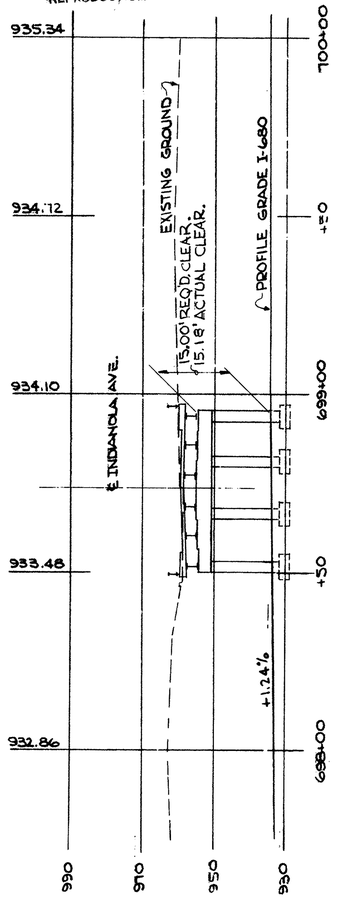
MAY 25 1971

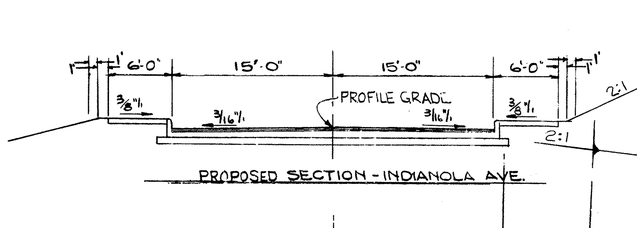
MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

514/656

MAH -680-6.98





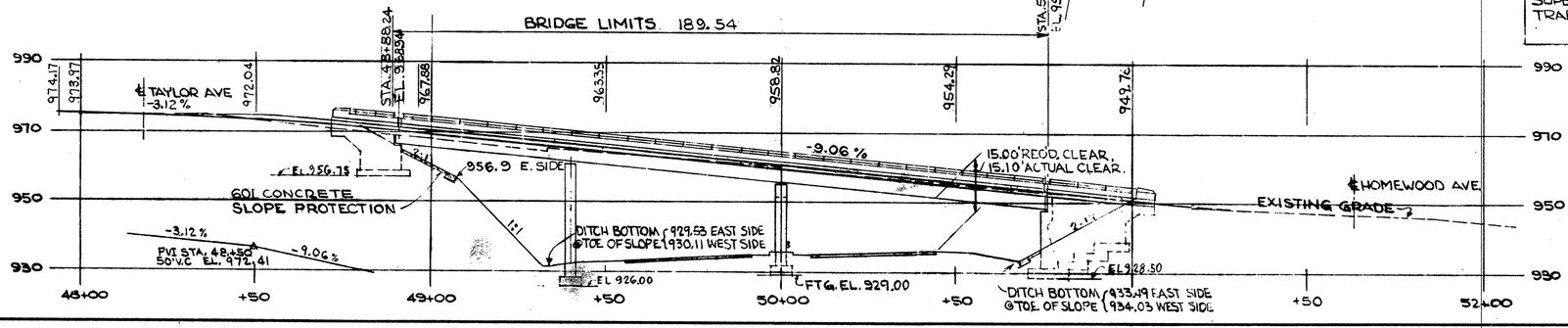
CURVE DATA ~ I-680

Δ 71°-25'-13" L_c = 3,695.65'
D_c = 1°-50'-00" T_c = 2,098.22'
R = 3,125.22' L_s = 200'
P.I. STA. 694+62.64

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 49'-9", 60'-3", 75'-0" ℄ BEARINGS
ROADWAY WIDTH: 30'-0" f/f OF 6'-0" WALKS
LOADING ON BOTH SIDES.
LOADING HS 20-44
SKEW 6°-54'-18" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 20'-0" LONG AS-1-67
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE.
TRAFFIC COUNT: 1960 ADT = 10,570
1975 ADT = 12,600 MAX. STREET CAPACITY

℄ = LOCATION OF BORING HOLES



SLOPE PROTECTION

601 CONCRETE SLOPE PROTECTION ABOVE ROCK CUT FOR BOTH ABUTMENTS

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1 / 2

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SITE PLAN

BRIDGE Nº MAH 680-0817
UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA. 698+72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	DSM		RAH	W.K.D.	5-1-70	

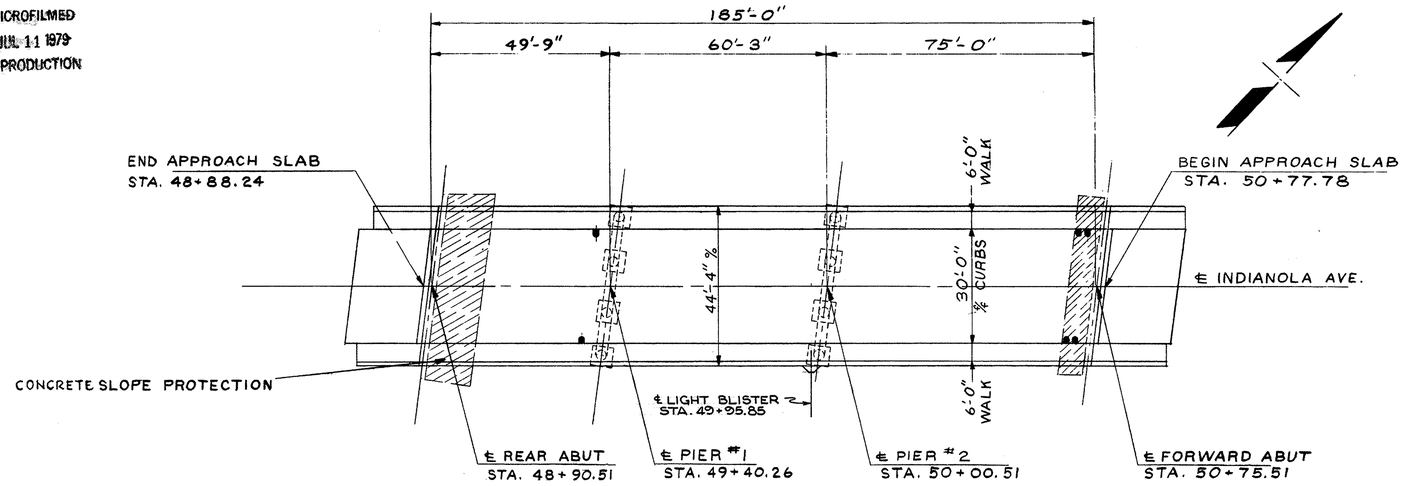
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

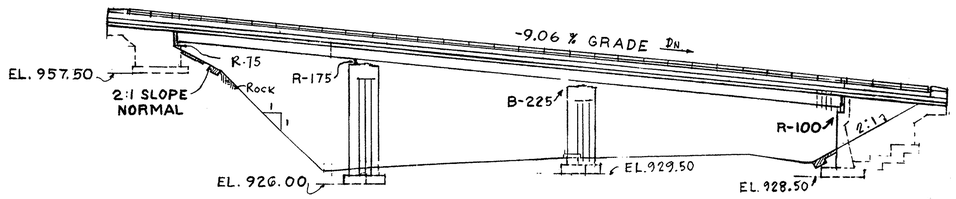
FED. RD.	STATE	PROJECT	
2	OHIO		

515/656

MAH-680-6.98



PLAN



ELEVATION

GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1965, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS 20-44

CONCRETE CLASS C - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE
UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE

STRUCTURAL STEEL - ASTM A36 - UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616, OR A617, DEFORMED, INTERMEDIATE OR HARD GRADE. UNIT STRESS 20,000 P.S.I. EXCEPT THAT SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A306 OR A499, A82 or A615

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-67	REVISED 6-12-69
BR-2-67	DATED 1-1-71
RB-1-55	REVISED 2-2-59
SD-1-69	DATED 6-12-69

AND TO SUPPLEMENTAL SPECIFICATIONS:

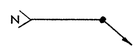
808	DATED 1-1-71
836	DATED 1-1-71

THE CONCRETE SLOPE PROTECTION SHALL EXTEND FROM THE FACE OF THE ABUTMENTS DOWN TO THE TOE OF THE SLOPE AND EXTEND IN WIDTH TO 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE ON ONE SIDE, AND AT THE ACUTE CORNERS OF THE OTHER SIDE, THE OUTSIDE EDGE OF THE SLOPE PROTECTION SHALL INTERSECT THE PROJECTED FACE OF THE ABUTMENT 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE AND SHALL EXTEND DOWN THE SLOPE, NORMAL TO THE FACE OF THE ABUTMENT, TO ELEVATION 956.9 FOR THE REAR ABUTMENT AND TO THE TOE OR SLOPE FOR THE FORWARD ABUTMENT.

FOUNDATION BEARING PRESSURE: REAR ABUTMENT FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 5 TONS PER SQ.FT. FORWARD ABUTMENT AND PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 12 TONS PER SQ.FT.

FOOTINGS SHALL BE PLACED IN BEDROCK AT THE ELEVATIONS SHOWN.

WELDS ON NON-STRESS CARRYING MEMBERS ARE SHOWN THUS:



UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER STRUCT.	ABUTS	PIERS	GEN
503	95	CU. YD.	UNCLASSIFIED EXCAVATION		95		
503	257	CU. YD.	ROCK EXCAVATION		222	35	
509	119757	LBS.	REINFORCING STEEL	77,468	16,147	26,142	
511	315	CU. YD.	CLASS "C" CONCRETE - SUPERSTRUCTURE	315			
511	83	CU. YD.	CLASS "C" CONCRETE - PIERS ABOVE FTNG.			83	
511	195	CU. YD.	CLASS "C" CONCRETE - ABUTS. ABOVE FTNG.		195		
511	137	CU. YD.	CLASS "C" CONCRETE - FOOTINGS		110	27	
513	238770	LBS.	STRUCTURAL STEEL	238770			
514	238770	LBS.	FIELD PAINTING OF STRUCTURAL STEEL	238770			
517	472.03	LIN. FT.	RAILING (CONCRETE PARAPET WITH DOUBLE PIPE RAIL)	375.53	96.50		
518	68	CU. YD.	POROUS BACKFILL		68		
518	70	LIN. FT.	6" PERFORATED HELICAL CMP 707.01	70			
518	72	LIN. FT.	6" NON-PERFORATED HELICAL C.M.P. INCLUDING SPECIALS 707.01		72		
518	6	EA.	SCUPPERS, INCLUDING SUPPORTS	6			

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER STRUCT	ABUTS	PIERS	GEN
601	142	SQ. YD.	CONCRETE SLOPE PROTECTION		142		
808	315	UNITS	CHEMICAL ADMIXTURE FOR CONCRETE TYPE, A, B, OR D	315			

QUANTITIES CALC. JLO DATE: 7-18-69 CHECKED: CES DATE: 4-20-70

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/5

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION
BRIDGE Nº MAH. 680-0817

UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA. 698 +72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.S.M.	D. M.		R.A.H	W.K.D.	5-1-70	

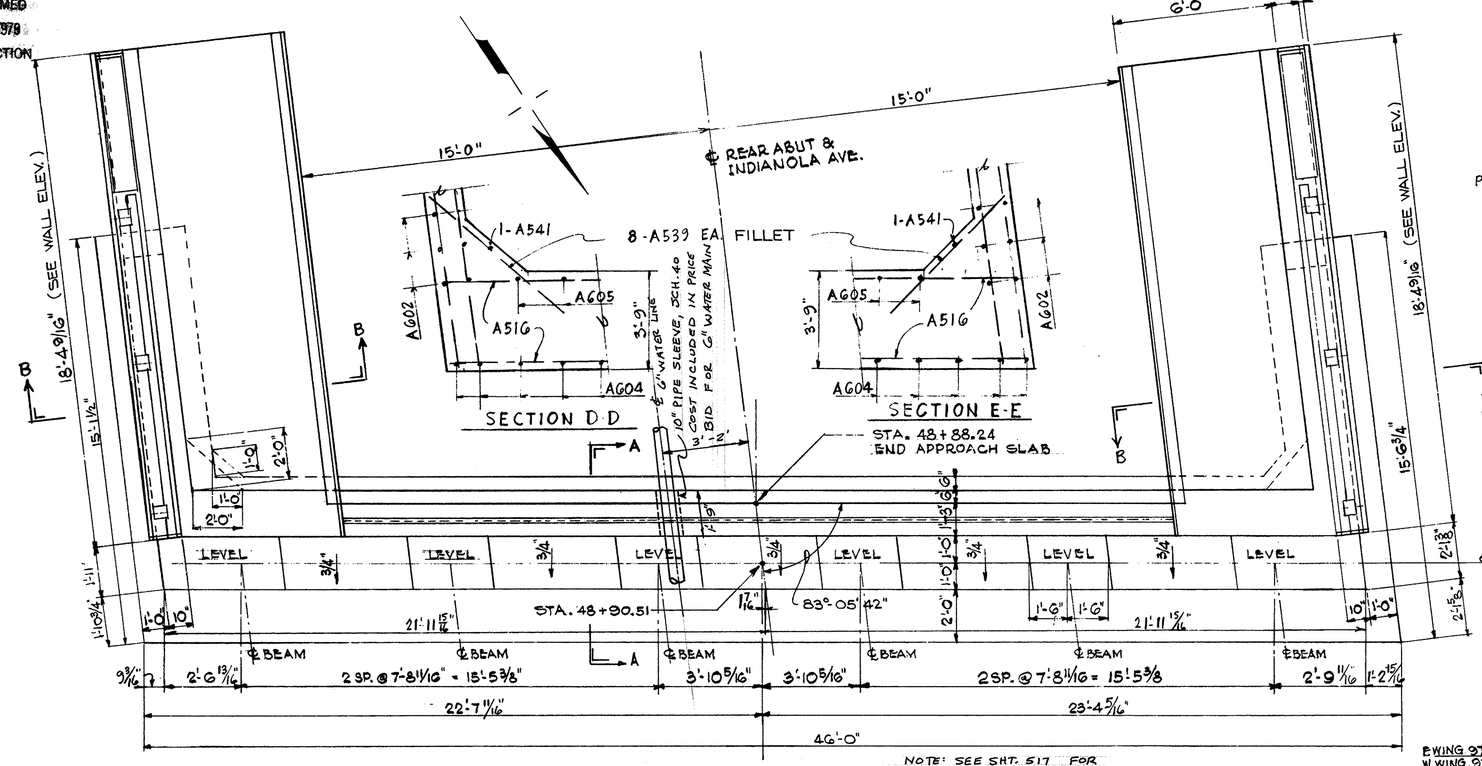
MAY 25 1971

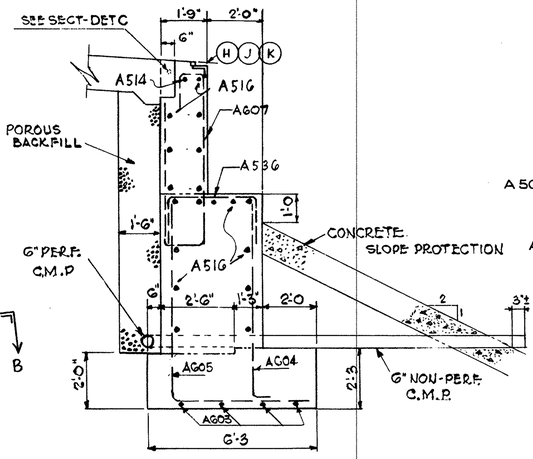
MICROFILMED
JUL 11 1979
REPRODUCTION

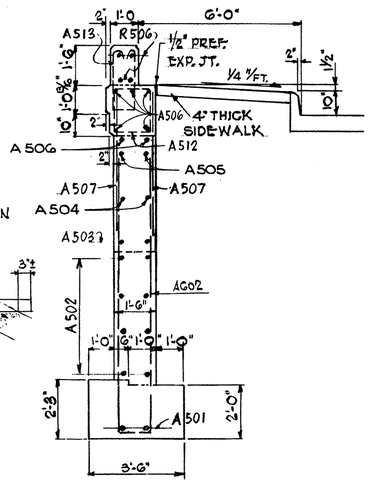
FED. RD.	STATE	PROJECT	
2	OHIO		

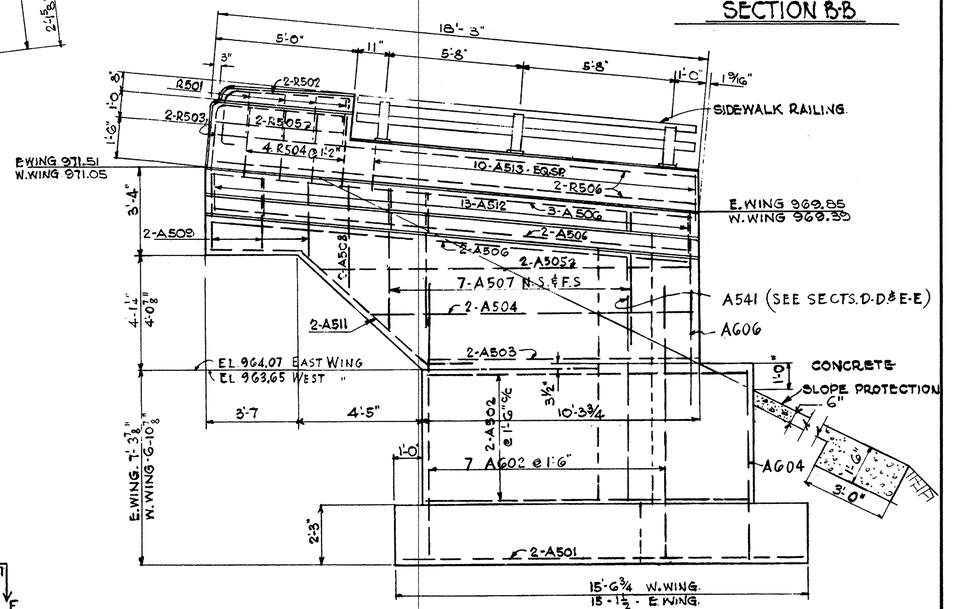
516
656

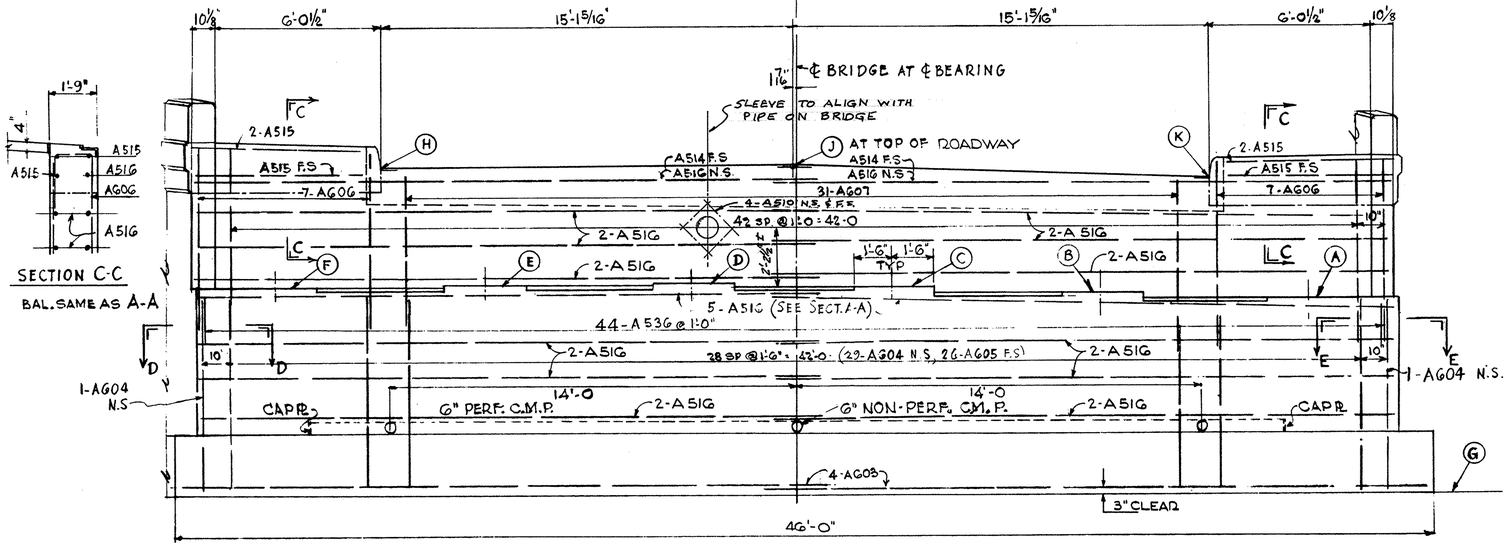
MAH - 680 - 6.98











ELEV. EAST WINGWALL

WEST WINGWALL OPPOSITE HAND

	A	B	C	D	E	F	G	H	K	J
REAR ABUT	363.34	364.14	364.34	364.43	364.39	364.36	356.75	368.76	368.43	368.83

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/5

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº 1 DETAILS
BRIDGE Nº MAH. 680-0817

UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA. 695+72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CES	J.B.		RAH	W.K.D.	5-1-70	

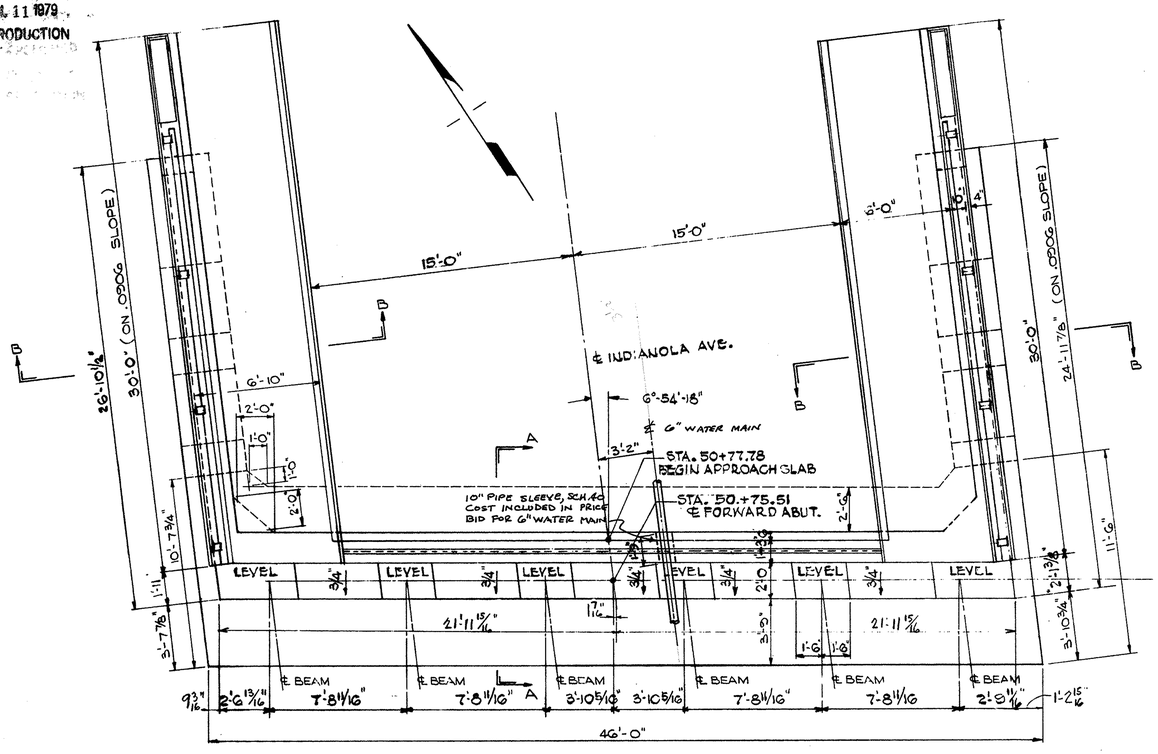
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

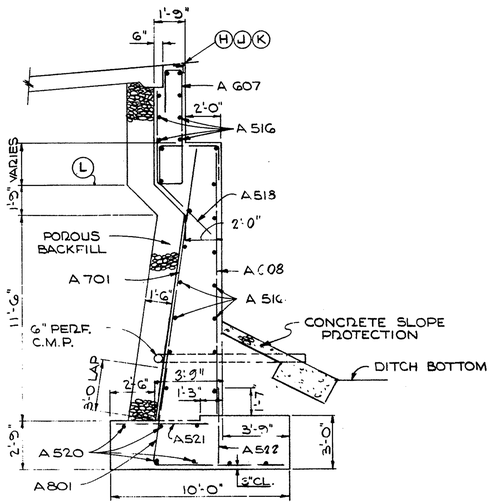
FED. RD.	STATE	PROJECT	
2	OHIO		

517
6556

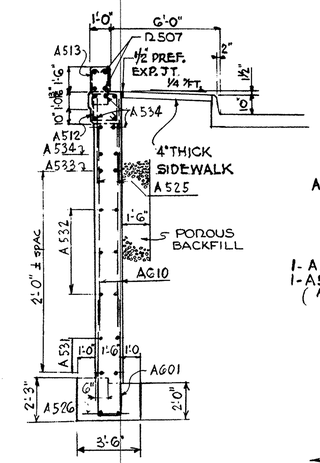
MAH.- 680-0.98



PLAN



SECTION A-A



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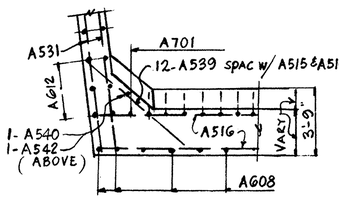

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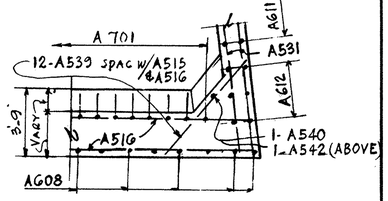

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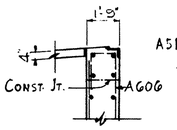

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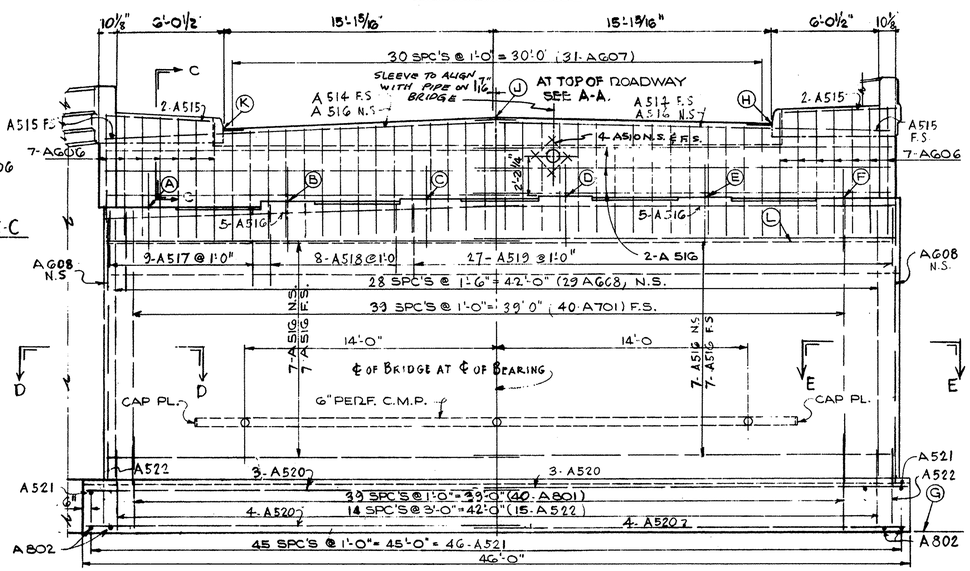
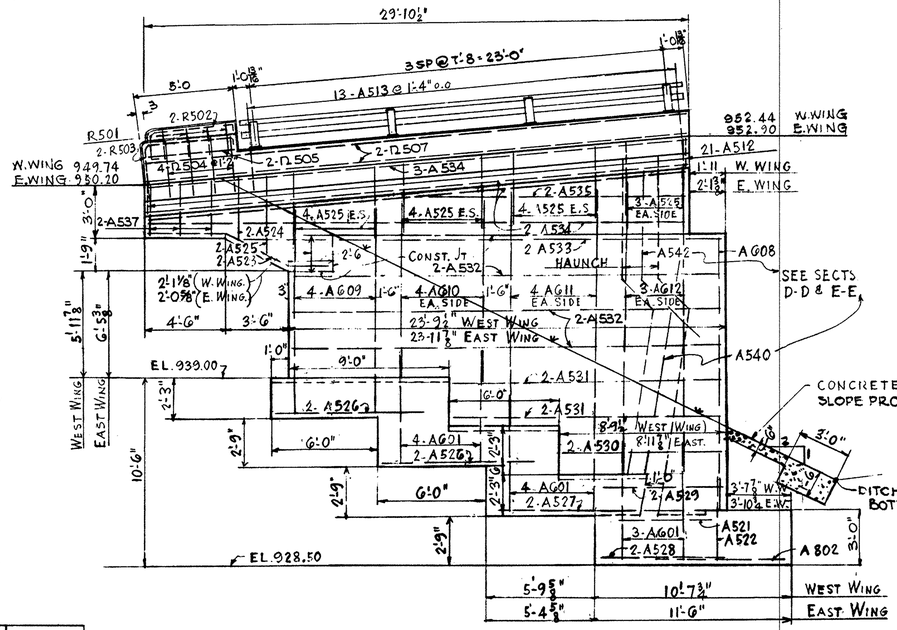
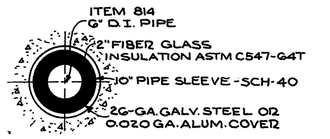


SOUTH ELEVATION

	A	B	C	D	E	F	G	H	K	J	L
	947.08	947.28	947.48	947.57	947.53	947.50	928.50	951.82	951.49	951.83	944.50



ELEVATION OF WEST WINGWALL
EAST WINGWALL OPPOSITE HAND



PIPE SLEEVE DETAIL

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº 2 DETAILS
BRIDGE Nº MAH. 680-0817
UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA. 698+72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CES	J.B.		RAH	W.K.D.	5-1-70	

MAY 25 1971

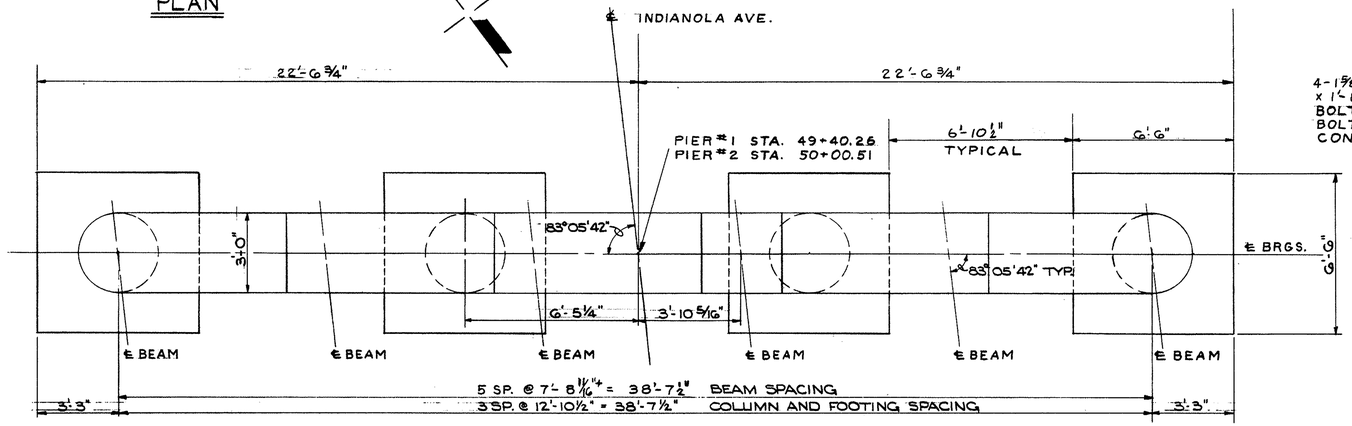
MICROFILMED
JUN 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

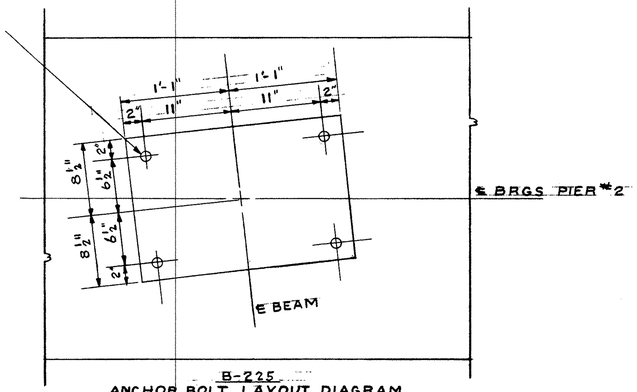
518
656

MAH.-680-6.98

PLAN



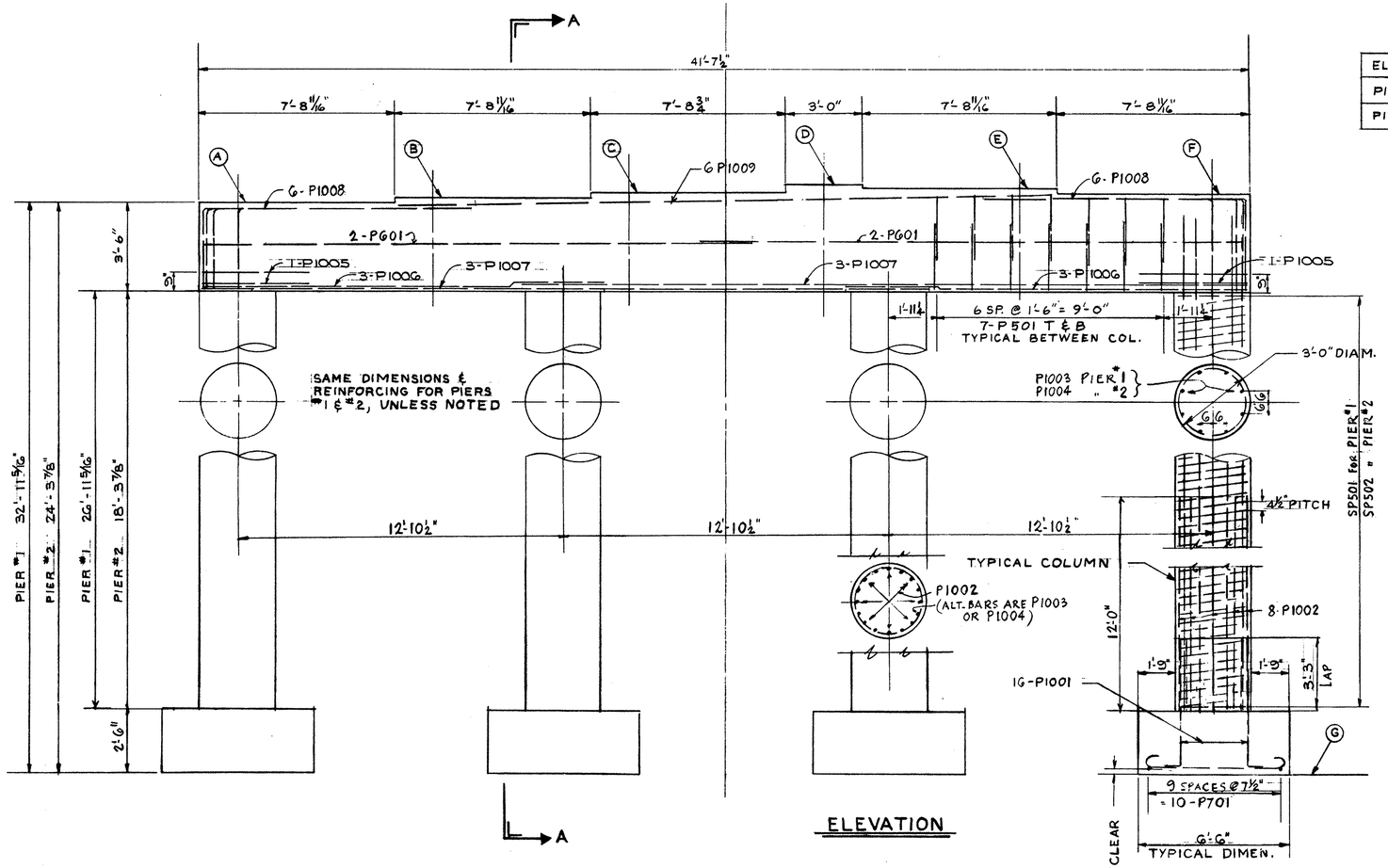
4-1 5/8" ϕ HOLES FOR 1 1/4" ϕ x 1'-8" SWEDGE ANCHOR BOLTS WITH WASHERS. BOLTS SET 1'-3" INTO CONCRETE

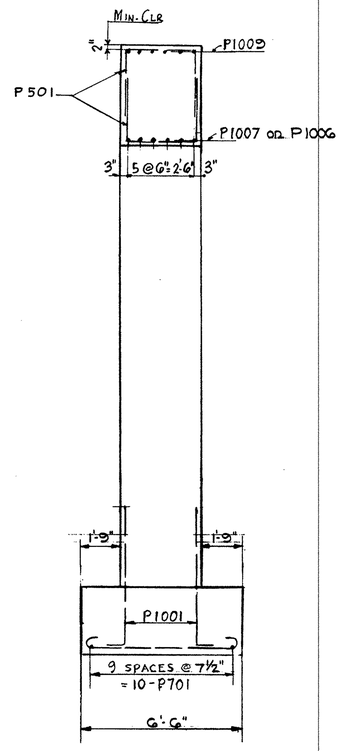


B-225
ANCHOR BOLT LAYOUT DIAGRAM FOR PIER #2
(TYPICAL FOR ALL BEAMS)

ELEVATION	A .93	B .13	C .34	D .42	E .38	F .35	G	
PIER #1	958.24	959.15	959.65	959.44	959.40	959.36	926.00	925.98
PIER #2	953.32	953.63	953.73	953.82	953.78	953.74	929.00	928.97
	.29	.50	.70	.79	.75	.71		

ELEVATION





SECTION A-A

NOTE:

SPECIAL CARE SHALL BE TAKEN IN THE PLACING OF REINFORCING IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES ON PIER #2

ALL REINFORCING BARS SHALL BE 2" CLEAR OF FACE OF CONCRETE UNLESS NOTED OTHERWISE

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5 / 8

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PIERS Nº 1 & 2 DETAILS
BRIDGE Nº MAH.680-0817

UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA.698+72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CES	DM		RAH	WKD	5-1-70	5-19-72

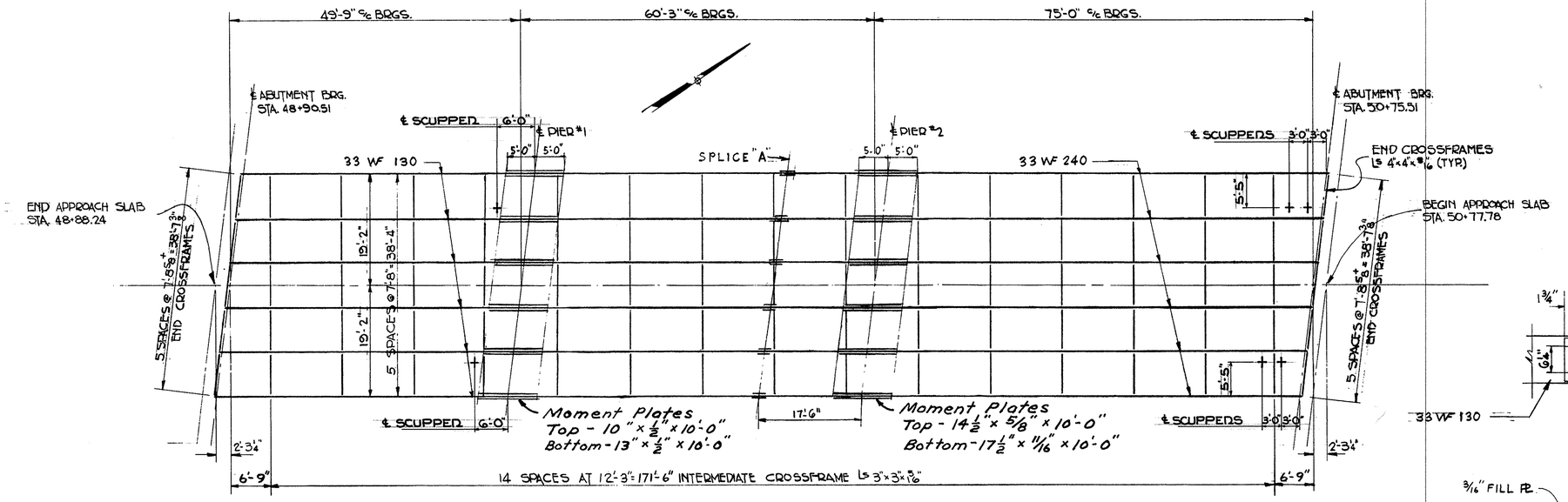
MAY 25 1971

MICROFILMED
JUN. 11 1979
REPRODUCTION

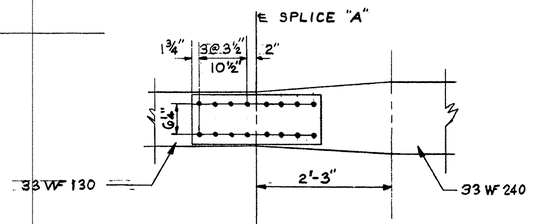
FED. RD.	STATE	PROJECT	
2	OHIO		

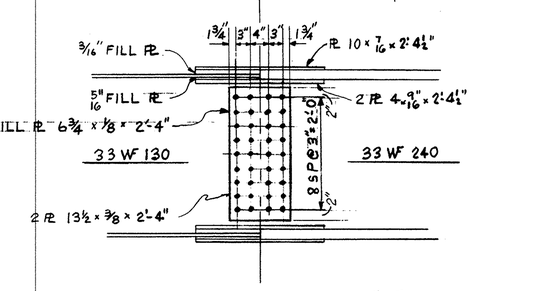
512
656

MAH.-680-6.98



FRAMING PLAN



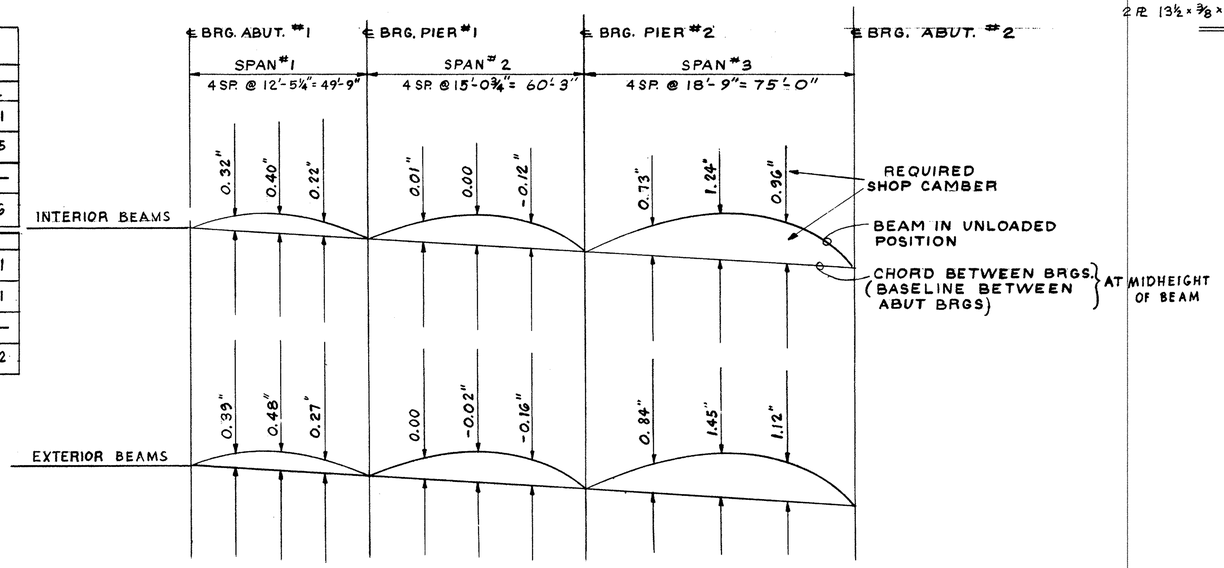


DETAIL SPLICE "A"

DEFLECTION AND CAMBER

INTERIOR BEAMS	SPAN 1			SPAN 2			SPAN 3		
	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4
DEFLECTION DUE TO WEIGHT OF STEEL	0.05	0.06	0.04	-0.02	-0.04	-0.05	0.17	0.27	0.21
DEFLECTION DUE TO REMAINING DEAD LOAD	0.27	0.34	0.18	0.03	0.04	-0.07	0.56	0.97	0.75
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	—	—	—	—	—	—	—	—	—
REQUIRED SHOP CAMBER INCHES	0.32	0.40	0.22	0.01	—	-0.12	0.73	1.24	0.96
EXTERIOR BEAMS									
DEFLECTION DUE TO WEIGHT OF STEEL	0.05	0.06	0.04	-0.02	-0.04	-0.05	0.16	0.27	0.21
DEFLECTION DUE TO REMAINING DEAD LOAD	0.34	0.42	0.23	0.02	0.02	-0.11	0.68	1.18	0.91
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	—	—	—	—	—	—	—	—	—
REQUIRED SHOP CAMBER INCHES	0.39	0.48	0.27	—	-0.02	-0.16	0.84	1.45	1.12

NOTE:
NEGATIVE VALUES INDICATE DIMENSION IS BELOW BASELINE OR CHORD



LAYOUT DIAGRAM

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/5

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE Nº MAH. 680-0817

UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA. 698 +72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
L.T.	D.M		RAH	W.K.D.	5-1-70	5-19-72

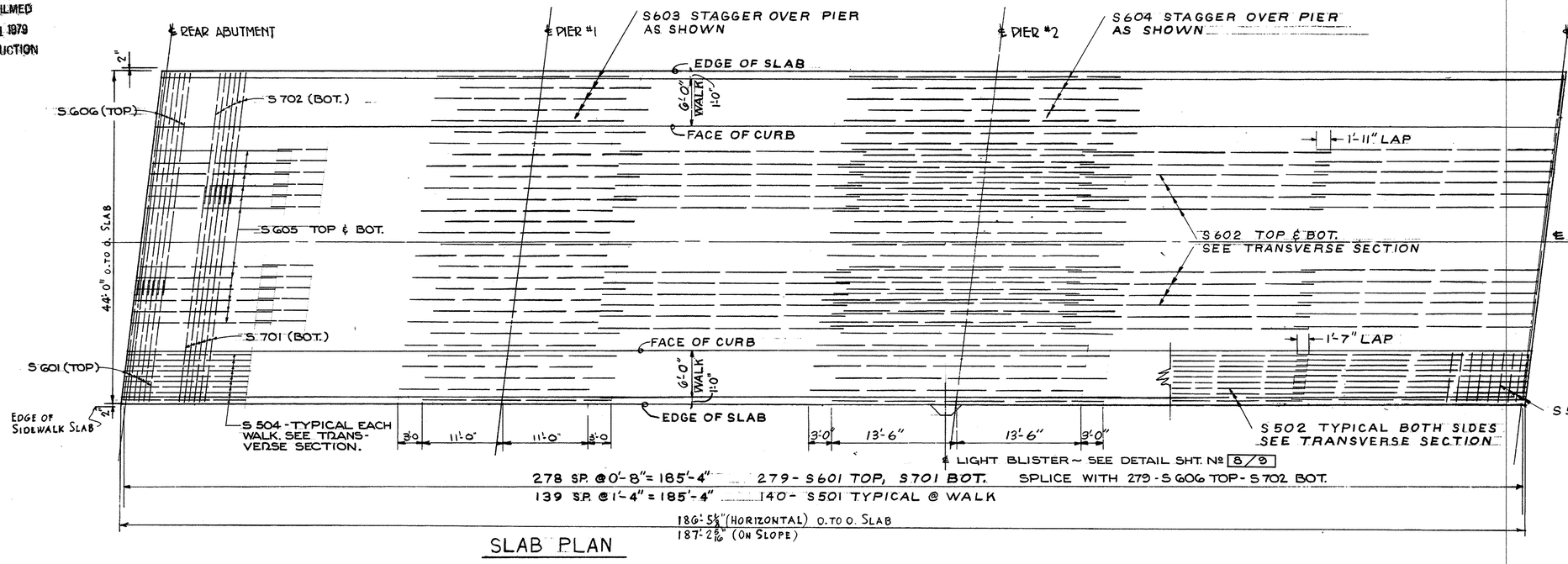
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

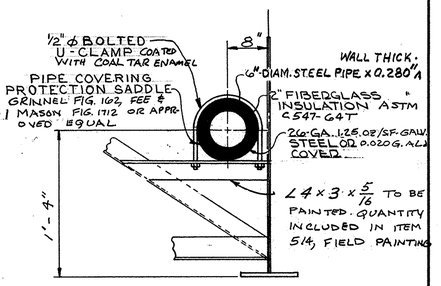
FED. RD.	STATE	PROJECT	
2	OHIO		

520
656

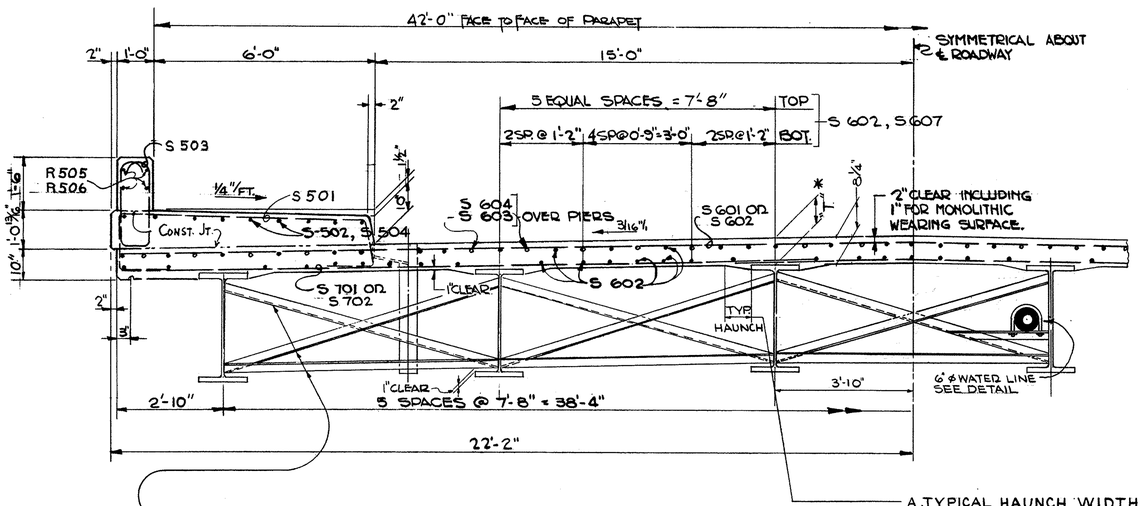
MAH.-680-6.98



SLAB PLAN



WATER PIPE SUPPORT DETAIL

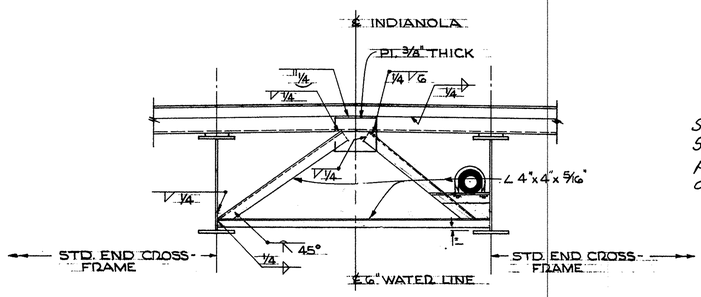


INTERMEDIATE CROSSFRAME ANGLES 3 x 3 x 5/16 WELD BOTH SIDES OF VERTICAL LEG AND TOP SIDE OF HORIZONTAL LEG TO BEAM WITH ¼" FILLET WELD.

"T" * =
OVER 33 WF 130 = 8 7/16"
OVER 33 WF 240 = 8¼"

A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

TRANSVERSE SECTION



SPECIAL END CROSSFRAME AT WATER LINE

SCUPPERS shall be in accordance with Std. Dwg. SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

7 / 9

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SLAB REINFORCING PLAN
BRIDGE Nº MAH. 680-0817

UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA. 698 + 72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CES	DM		RAH	WKD	5-1-70	

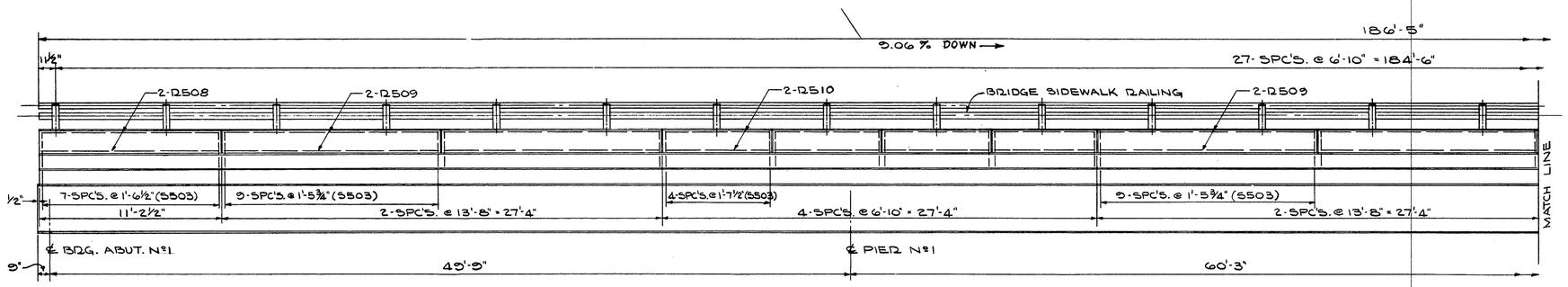
MAY 25 1971

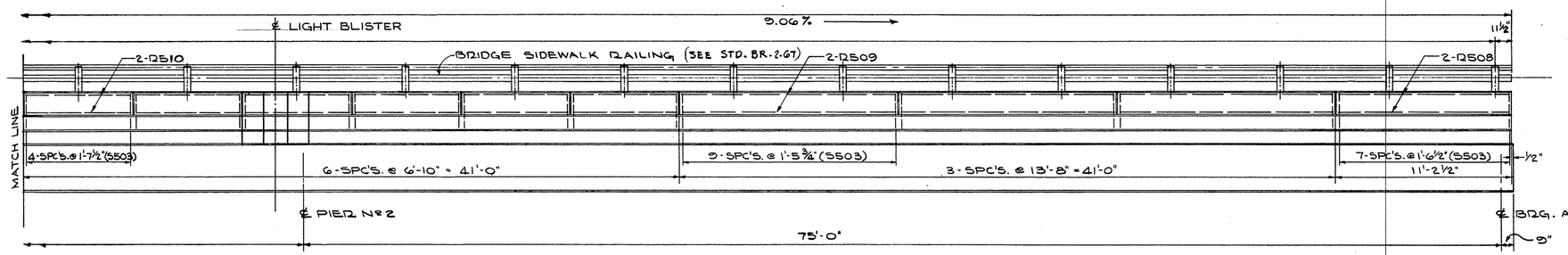
MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

521
656

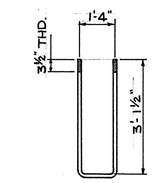




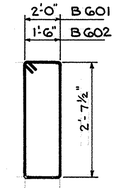
NOTE:
THE ELEVATIONS SHOWN AT THE FACE OF CURB ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE DECK IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF CONCRETE.

RAILING DETAIL (TYP.) BOTH SIDES

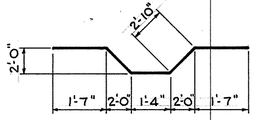
LENGTHS GIVEN ON THE HORIZONTAL
(NOTE GRADE ABOVE)



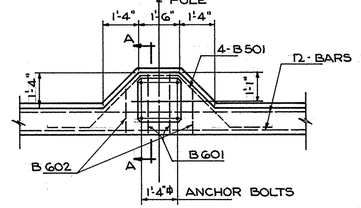
ANCHOR BOLT DETAIL



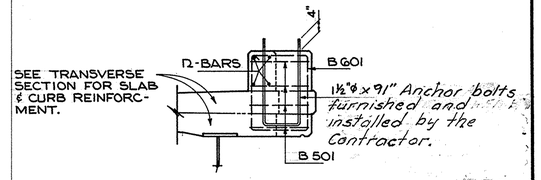
B 601
B 602



B 501

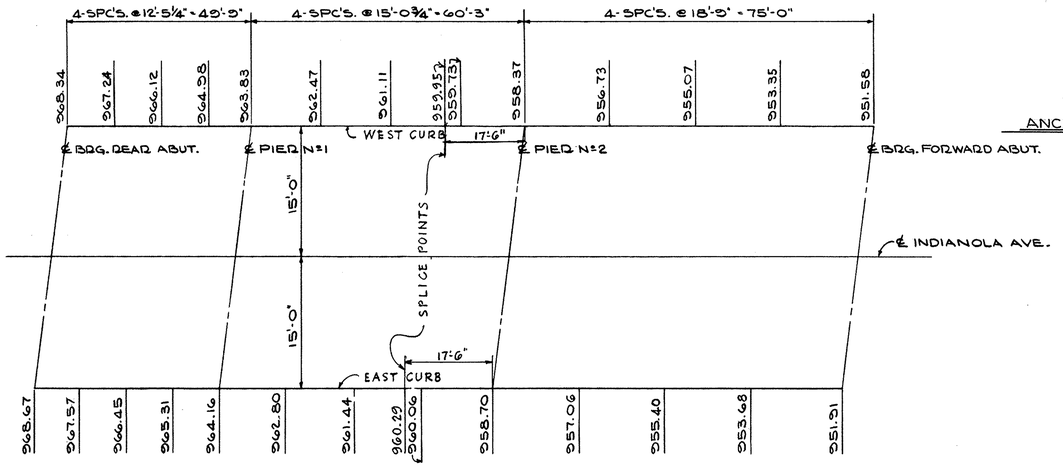


PLAN LIGHT BLISTER
FOR R&S BARS-SEE RAILING DETAILS



SEE TRANSVERSE SECTION FOR SLAB & CURB REINFORCEMENT.

SECTION A-A



ELEVATIONS OF ROADWAY

LIGHT BLISTER BAR SCHEDULE

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
B 501	4	10'-2"	42	BT.
B 601	2	10'-1"	28	BT.
B 602	2	9'-1"	25	BT.
TOTAL PER BLISTER			95 LBS.	

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

8/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS

BRIDGE N° MAH-680-0817
UNDER INDIANOLA AVE
MAHONING COUNTY I-680
STA. 698+72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.M.	J.D.P.		RAH	W.K.D.	5-1-70	

MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

522/656

MAH.-680-6.98

MARK	NUMBER	LENGTH	LBS.	SHP.
ABUTMENTS				
A501	4	14'-9"	62	ST.
A502	16	11'-10"	197	ST.
A503	4	9'-2"	38	ST.
A504	4	12'-3"	51	ST.
A505	4	13'-3"	57	ST.
A506	14	18'-0"	263	ST.
A507	28	5'-0"	146	ST.
A508	4	3'-8"	15	ST.
A509	12	2'-10"	36	ST.
A510	16	3'-0"	50	ST.
A511	4	11'-2"	47	BT.
A512	68	6'-4"	449	BT.
A513	46	5'-11"	284	BT.
A514	4	17'-6"	73	ST.
A515	12	6'-3"	78	ST.
A516	88	22'-9"	2088	ST.
A517	9	11'-10"	111	BT.
A518	8	12'-1"	101	BT.
A519	27	12'-4"	347	BT.
A520	14	23'-10"	348	ST.
A521	46	5'-0"	240	ST.
A522	17	4'-2"	74	ST.
A523	4	10'-1"	42	BT.
A524	4	3'-2"	14	ST.
A525	64	4'-0"	267	ST.
A526	8	8'-0"	67	ST.
A527	4	12'-0"	50	ST.
A528	4	7'-0"	29	ST.
A529	4	6'-6"	27	ST.
A530	4	8'-6"	36	ST.
A531	8	14'-6"	121	ST.
A532	12	23'-5"	293	ST.
A533	4	26'-6"	111	ST.
A534	14	29'-6"	431	ST.
A535	4	15'-6"	65	ST.
A536	44	7'-9"	356	BT.
A537	12	2'-8"	34	ST.
		NOT USED		
A539	40	6'-6"	271	ST.
A540	2	12'-6"	26	ST.
A541	2	10'-8"	22	ST.
A542	2	11'-6"	24	BT.
AG01	22	14'-6"	479	BT.
AG02	14	21'-4"	449	BT.
AG03	8	24'-0"	288	ST.
AG04	31	7'-0"	326	BT.
AG05	26	11'-9"	459	BT.
AG06	28	17'-6"	736	BT.
AG07	62	14'-10"	1381	BT.
AG08	31	15'-3"	710	ST.
AG09	8	24'-8"	296	BT.
AG10	16	10'-0"	240	ST.
AG11	16	13'-0"	312	ST.
AG12	12	16'-3"	293	ST.
A701	40	15'-9"	1288	ST.
A801	40	12'-10"	1371	BT.
A802	4	7'-3"	78	ST.
ABUTMENT TOTAL			16,147	

MARK	NUMBER	LENGTH	LBS.	SHP.
PIERS 1, 2				
P501	84	7'-8"	672	BT.
P601	8	21'-9"	261	ST.
P701	160	7'-10"	2,563	BT.
P1001	128	6'-3"	3,442	BT.
P1002	64	12'-0"	3,305	ST.
P1003	32	30'-0"	4,131	ST.
P1004	32	21'-6"	2,960	ST.
P1005	8	9'-10"	339	BT.
P1006	12	15'-10"	818	ST.
P1007	12	28'-8"	1480	ST.
P1008	24	13'-7"	1403	BT.
P1009	12	27'-0"	1394	ST.
PIERS SUB-TOTAL			22,768	
SPIRAL REINFORCING			3,374	
PIERS TOTAL			26,142	

MARK	NUMBER	LENGTH	LBS.	SHP.
SUPERSTRUCTURE				
S501	280	12'-0"	3,504	BT.
S502	108	30'-0"	3380	ST.
S503	272	5'-11"	1,678	BT.
S504	18	16'-4"	307	ST.
S601	279	15'-7"	6,530	ST.
S602	426	30'-0"	19,196	ST.
S603	25	25'-0"	939	ST.
S604	25	30'-0"	1,127	ST.
S605	71	18'-4"	1955	ST.
SG06	279	30'-0"	12,572	ST.
S701	279	26'-3"	15,255	ST.
S702	279	19'-2"	10,930	ST.
SUPERSTRUCTURE TOTAL			77,373	

MARK	NUMBER	CORE DIA OF SPIRAL	LENGTH OF SPIRAL	PITCH	NO. OF TURNS	LBS.
SPIRAL REINFORCING LIST						
SP 401	4	2'-8"	26'-11 5/16"	4½"	75	1,886
SP 402	4	2'-8"	18'-3 7/8"	4½"	52	1,378
SPIRAL REINFORCING TOTAL						3,374

MARK	NUMBER	LENGTH	LBS.	SHP.
RAILING - THESE REINFORCING BARS WILL BE INCLUDED AS PART OF ITEM 517 FOR PAYMENT				
R-501	16	3'-3"		BT.
R-502	8	6'-7"		BT.
R-503	8	8'-3"		BT.
R-504	8	7'-7"		BT.
R-505	8	4'-8"		ST.
R-506	8	18'-0"		ST.
R-507	8	29'-6"		ST.
R-508	16	10'-10"		ST.
R-509	56	13'-4"		ST.
R-510	80	6'-6"		ST.

MARK	NUMBER	LENGTH		SHP.
REPLACEMENT BARS				
RE 401	1	6'-3"		BT.
RE 501	1	6'-7"		ST.
RE 601	3	6'-11"		ST.
RE 701	2	7'-3"		ST.
RE 801	1	7'-6"		ST.
RE 1001	2	8'-2"		ST.

LIGHT BLISTER BARS TOTALS = 95 LBS.
(INCLUDED WITH SUPERSTRUCTURE TOTAL)

TOTALS	
ABUTMENTS	16,147
PIERS	26,142
SUPERSTRUCTURE	77,468
GRAND TOTAL	119,757

CALC. JLO 7-18-69
CHK'D CES 4-20-70

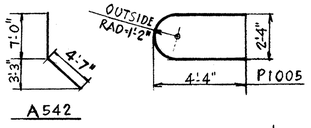
NOTES:

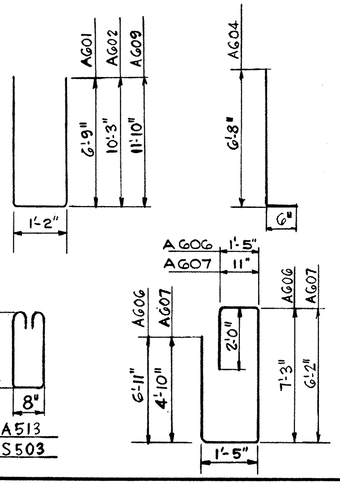
SPIRAL REINFORCING BARS: THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE BOTTOM OF THE PIER CAP.

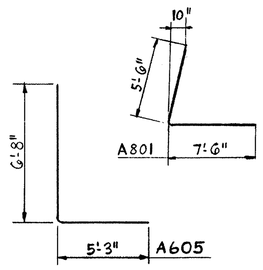
THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER.

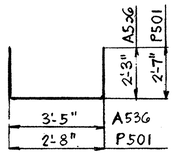
1-1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. FOUR STEEL ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LB. PER LIN. FT. OF SPACER, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF POUNDS OF THESE SPACERS, BASED ON 0.80 LB. PER LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

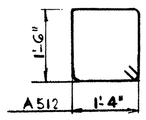
BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A-700 IS A NO. 7 SIZE BAR AND A-1014 IS A NO. 10 SIZE.

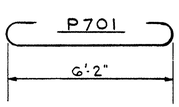


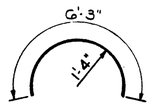


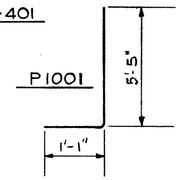


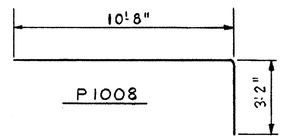


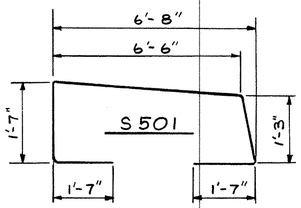


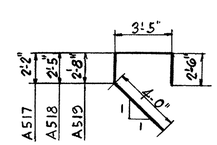


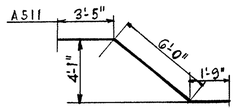


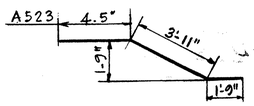












STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

9/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE
BRIDGE Nº MAH. 680-0817

UNDER INDIANOLA AVE.
MAHONING CO. I-680
STA. 698 +72.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CES	D.M.		RAH	W.K.D.	4-29-70	

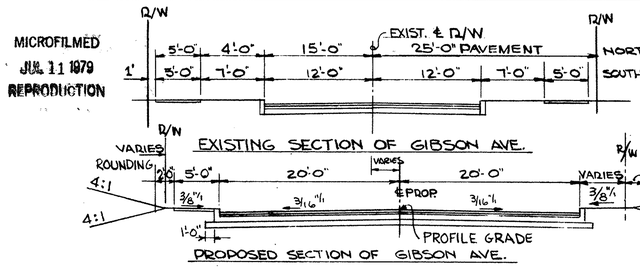
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

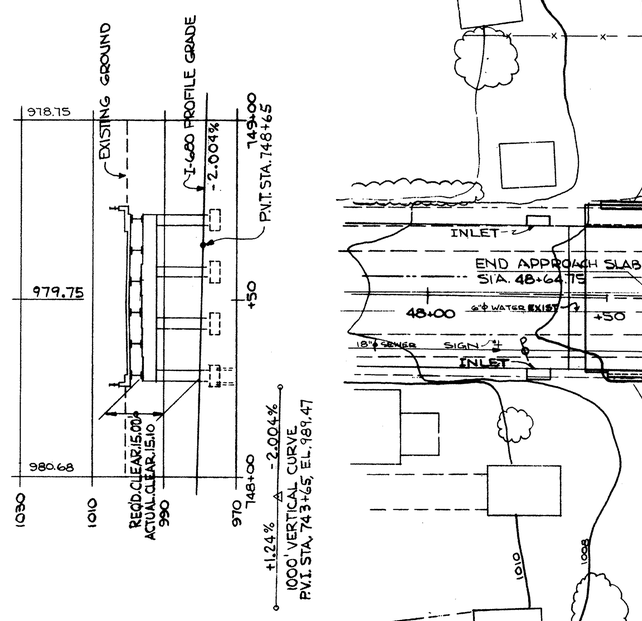
523/656

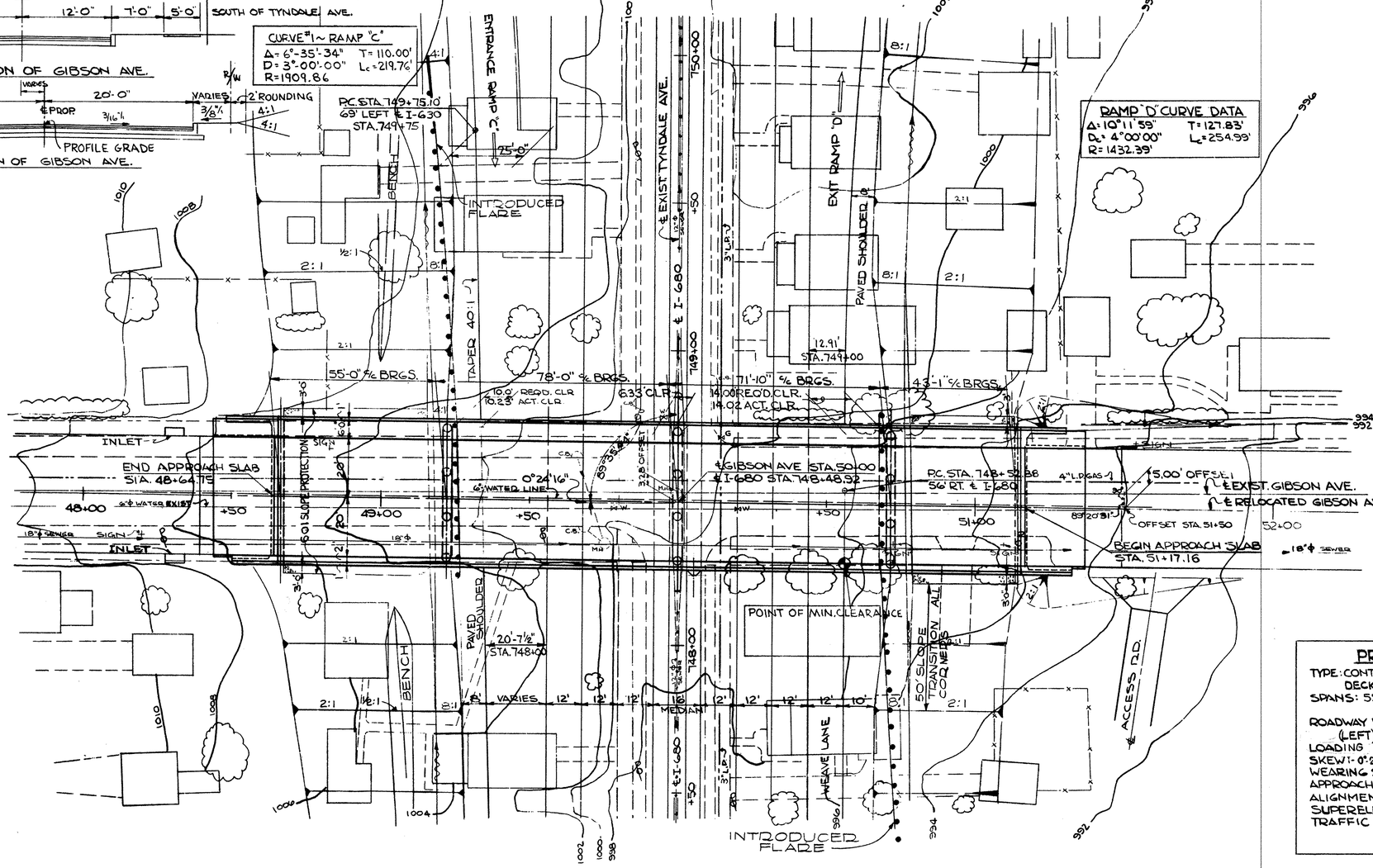
MAH - 680 - 6.98



CURVE #1 ~ RAMP "C"
Δ = 6°-35'-34" T = 110.00'
D = 3°-00'-00" L = 219.76'
R = 1909.86

RAMP "D" CURVE DATA
Δ = 10°11'59" T = 127.83'
D = 4°00'00" L = 254.99'
R = 1432.39'

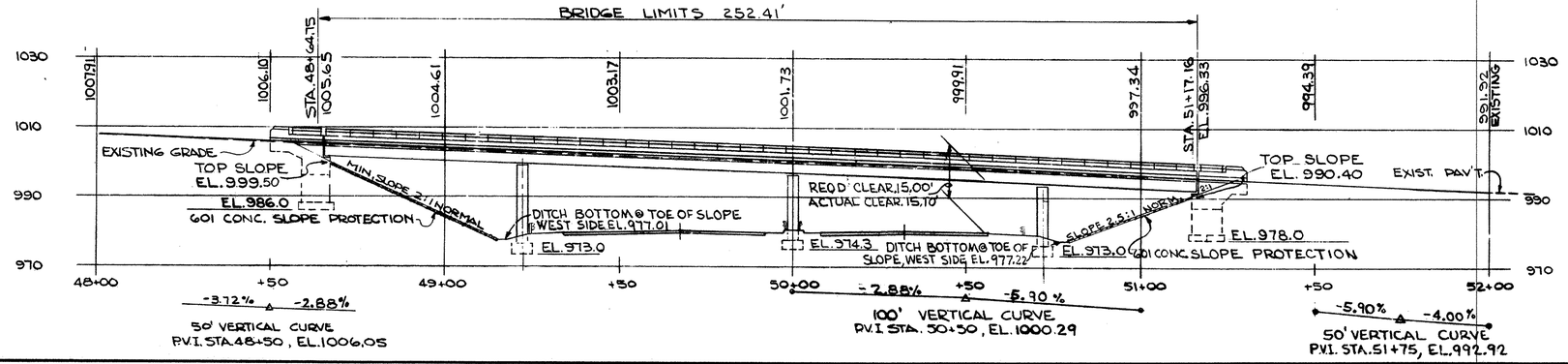




PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 55'-0" - 78'-0" - 71'-10" - 43'-1" ℄ BEARINGS

ROADWAY WIDTH: 40'-0" ℄ SAFETY CURBS WITH 2'-0" SIDEWALK (LEFT) AND 2'-0" CURB (RIGHT).
LOADING HS 20-44
SKEW: 0°24'16" RIGHT FORWARD
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 20'-0" LONG (SPECIAL)
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE
TRAFFIC COUNT: 1960 ADT = 14,400
1975 ADT = 19,000 MAX. STREET CAP.



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1 / 9

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SITE PLAN

BRIDGE Nº MAH. 680-0723
UNDER GIBSON AVE.
MAHONING CO. I-680
STA. 748+48.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	DSM		R.A.H.	W.K.D.	4-30-70	

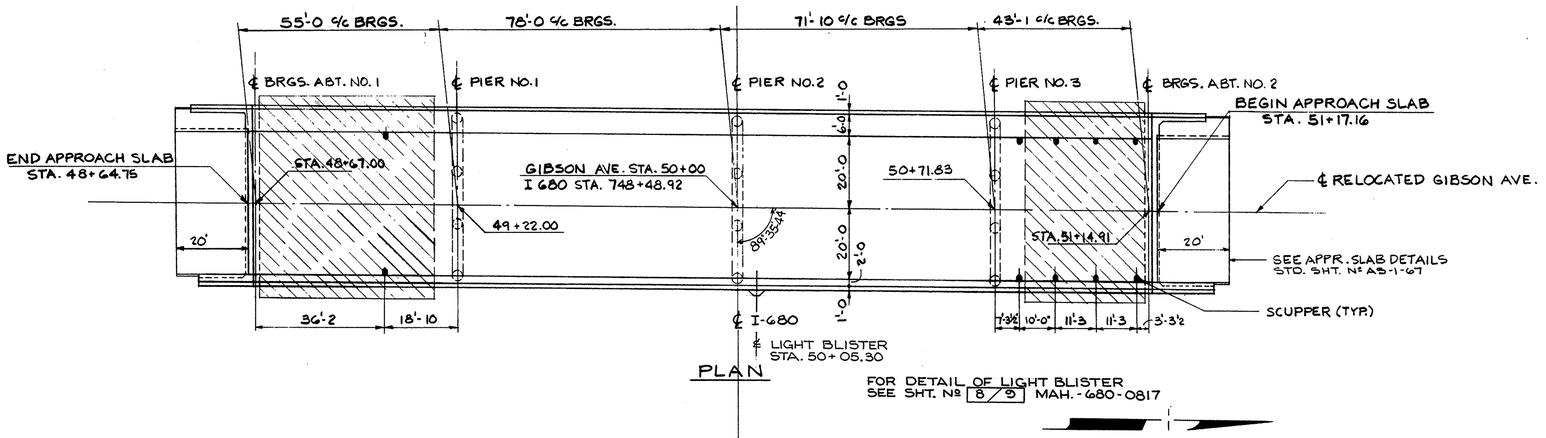
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

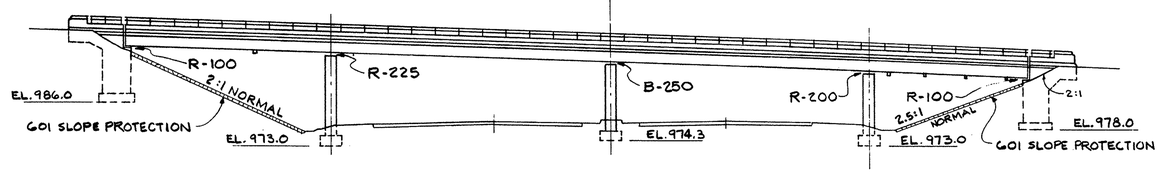
524
656

MAH. 680-6.98



PLAN

FOR DETAIL OF LIGHT BLISTER
SEE SHT. Nº 8/9 MAH.-680-0817



ELEVATION

GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1965, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS 20-44

CONCRETE CLASS C - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE
UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE

STRUCTURAL STEEL - ASTM A36 - UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616, OR A617, DEFORMED, INTERMEDIATE OR HARD GRADE. UNIT STRESS 20,000 P.S.I. EXCEPT THAT SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A306 OR A499, A82, A615

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

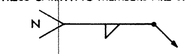
AS-1-67	REVISED 6-12-69
BR-2-67	DATED 1-1-71
RB-1-55	REVISED 2-2-59
SD-1-69	DATED 6-12-69

AND TO SUPPLEMENTAL SPECIFICATIONS:

808	REVISED 1-1-71
836	DATED 1-1-71

MACHINE FINISH: THE CONCRETE BRIDGE DECK SHALL BE FINISHED BY THE USE OF A FINISHING MACHINE.

WELDS ON NON-STRESS CARRYING MEMBERS ARE SHOWN THUS:



UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

FOUNDATION BEARING PRESSURE: ABUTMENT FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 5 TONS PER SQ. FT. PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 12 TONS PER SQ. FT.

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATIONS SHOWN, WHICHEVER IS LOWER.

ABUTMENT EXCAVATION QUANTITY, IN ADDITION TO 503.11 INCLUDES THE EXCAVATION FOR THE CROSS BEAMS.

EMBANKMENT CONSTRUCTION:
AFTER THE PEDESTALS HAVE BEEN BUILT THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT CROSS BEAMS.

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN.		
503	266	CU. YD.	UNCLASSIFIED EXCAVATION		266				
503	135	CU. YD.	ROCK EXCAVATION		46	89			
508	180,651	LBS.	REINFORCING STEEL	119,290	20,408	40,953			
511	445	CU. YD.	CLASS "C" CONC. - SUPERSTRUCTURE	445					
511	109	CU. YD.	CLASS "C" CONC. - PIERS ABOVE FOOTINGS			109			
511	140	CU. YD.	CLASS "C" CONC. ABUTS. ABOVE FOOTINGS		140				
511	85	CU. YD.	CLASS "C" CONC. - FOOTINGS		45	40			
513	303,004	LBS.	STRUCTURAL STEEL	303,004					
514	303,004	LBS.	FIELD PAINTING OF STRUCTURAL STEEL	303,004					
517	560.38	LIN. FT.	RAILING (CONCRETE PARAPET WITH DOUBLE PIPE RAIL)	500.30	60.08				

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN.		
518	82	LIN. FT.	6" HEL. PER. C.M. PIPE - 707.01		82				
518	96	LIN. FT.	6" HEL. NON-PER. C.M. PIPE - 707.01 & INC. SPECIALS		96				
518	10	EACH	SCUPPERS - INCLUDING SUPPORTS.	10					
518	45	CU. YDS.	POROUS BACKFILL		45				
503	L. SUM		COFFERDAMS, CRIBS AND SHEETING				LUMP		
601	550	SQ. YDS.	CONCRETE SLOPE PROTECTION				550		
625			SEE SHT. 424 GEN. LIGHTING SUMMARY						
808	445	UNITS	CHEMICAL ADMIXTURE FOR CONCRETE, TYPES A, B, & D	445					

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
2/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION
BRIDGE Nº MAH. 680-0723
UNDER GIBSON AVE.
MAHONING CO. I-680
STA. 748 +48.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	J.P.		D.A.H.	W.K.D.	4-30-70	

MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT
2	OHIO	

525
656

MAH. 680-6.98

℄ RELOCATED GIBSON AVE.

WEST WINGWALL ~ ABUT. #1 - 17'-0"
WEST WINGWALL ~ ABUT. #2 - 15'-0"

1'-8" | 6'-0" SIDEWALK | 20'-0" | 20'-0" | 2'-0" | 1'-8"

APPROACH SLAB

EAST WINGWALL ~ ABUT. #1 - 15'-0"
EAST WINGWALL ~ ABUT. #2 - 13'-0"

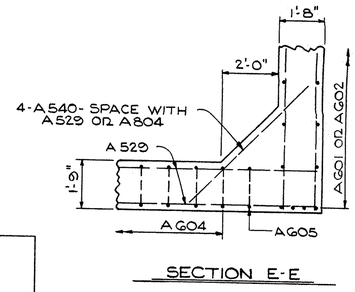
2'-0" | 2'-0" | 1'-9" | 2'-0" | 1'-0" | ¾" SLOPE TYP.

6" WATER LINE ℄ | 1'-0"
10" PIPE SLEEVE SCH-40 COST INCLUDE IN PRICE BID FOR 6" WATER MAIN
SEE GENERAL PLAN
1'-8"
CONST. JOINT
TYPICAL 1'-6" 1'-6"
℄ ABUTMENT BRG.

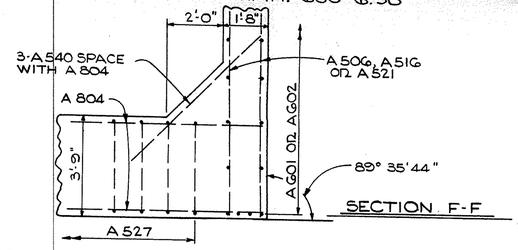
℄ BRG. | ℄ BRG. | ℄ BRG. | ℄ BRG. | ℄ BRG. | ℄ BRG.

2'-10¼" | 8'-9½" | 8'-9½" | 6'-4½" | 2'-5" | 8'-9½" | 8'-9½" | 2'-10¼"
49'-8"

PLAN ~ ABUTMENT Nº 2 - AS SHOWN
PLAN ~ ABUTMENT Nº 1 - OPPOSITE HAND



SECTION E-E



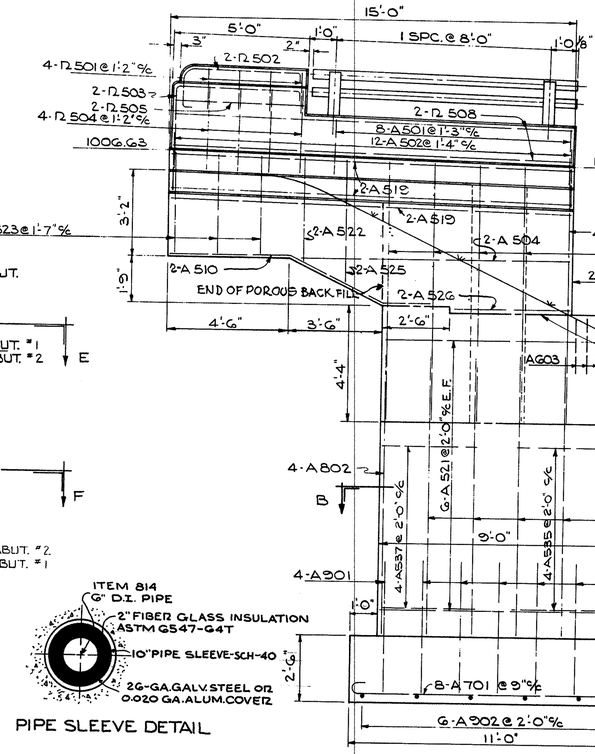
SECTION F-F

4-A537 (TIES) E.W.W. ABUT. #1
4-A538 (TIES) E.W.W. ABUT. #2
4-A537 (TIES) W.W.W. ABUT. #2

4-A535 (TIES) E.W.W. ABUT. #1
4-A536 (TIES) E.W.W. ABUT. #2
4-A535 (TIES) W.W.W. ABUT. #2

A516 OR A521

SECTION B-B



EAST WINGWALL
ABUTMENT Nº 1
SCALE 3/8" = 1'-0"

NOTE "A" FOR BOTH ABUTMENTS POINTS C, D, E, J, & K ARE ON WEST SIDE OF ROADWAY. POINTS F, G, H, M, & N ARE ON EAST SIDE OF ROADWAY.

ELEVATION ~ ABUTMENT Nº 2 - AS SHOWN & NOTED
ELEVATION ~ ABUTMENT Nº 1 - OPPOSITE HAND & NOTED } SEE NOTE "A"
SCALE 3/8" = 1'-0"

ELEVATION	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
ABUT. #1	986.00	986.50	1000.51	1000.64	1000.78	1000.84	1000.70	1000.55	1006.23	1005.29	1005.00	1005.28	1006.15	1002.36	1002.41
ABUT. #2	978.00	987.40	991.42	991.55	991.68	991.74	991.60	991.45	987.04	986.10	986.40	986.08	986.95	993.15	993.05

SEE NOTE "A"

PIPE SLEEVE DETAIL

NOTE: FOR SECTION CUT A-A SEE SHEET Nº 4/9

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENTS Nº 1 & 2 DETAILS
BRIDGE Nº MAH. 680-0723

UNDER GIBSON AVE.
MAHONING CO. I-680
STA. 748 + 48.92

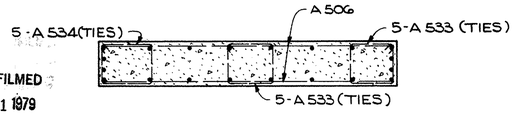
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		D.A.H.	W.K.D.	4-30-70	

MICROFILMED
JUL 11 1979
REPRODUCTION

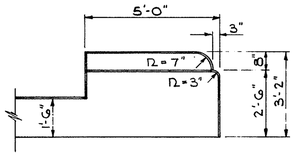
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

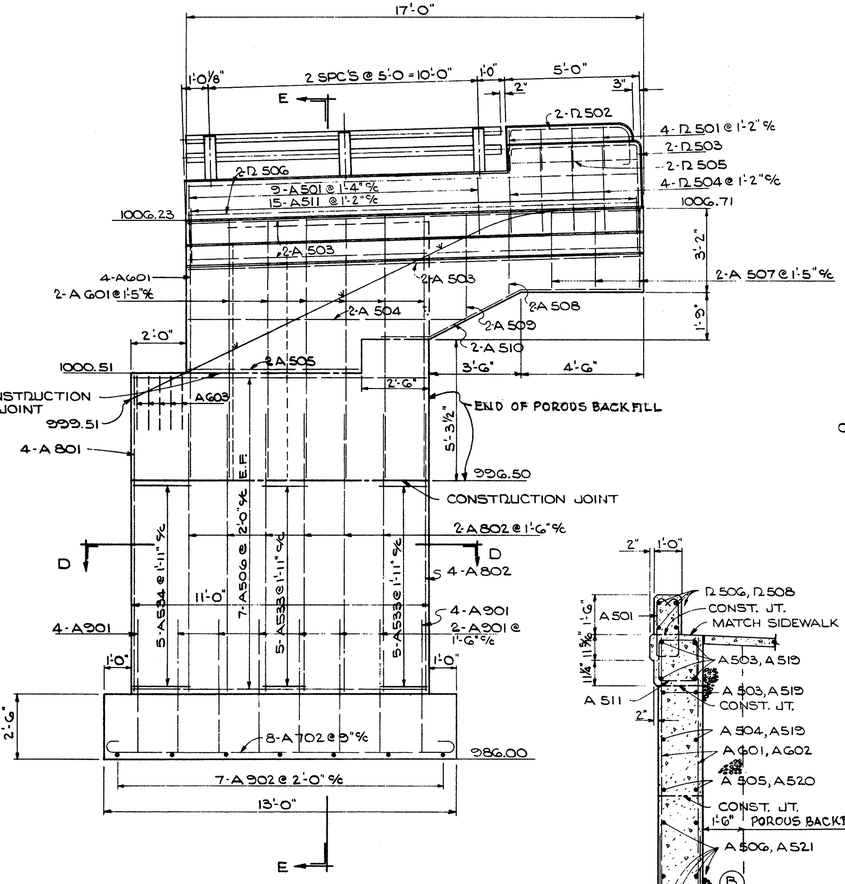
526
656



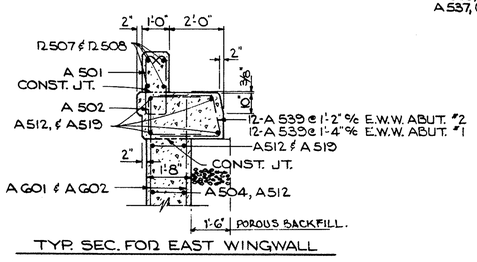
SECTION D-D



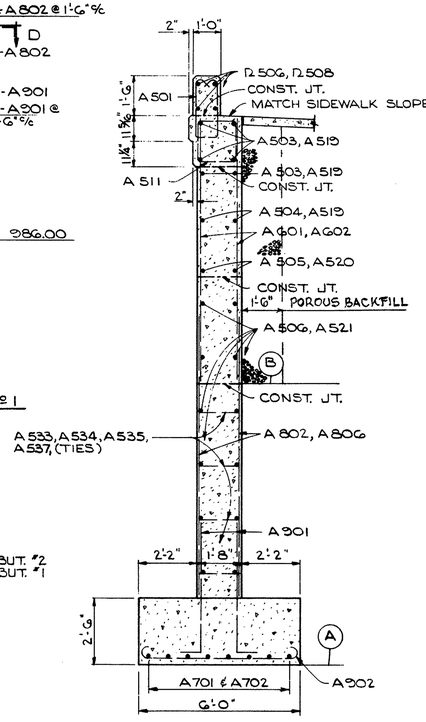
DETAIL OF TYPICAL END OF RAILING



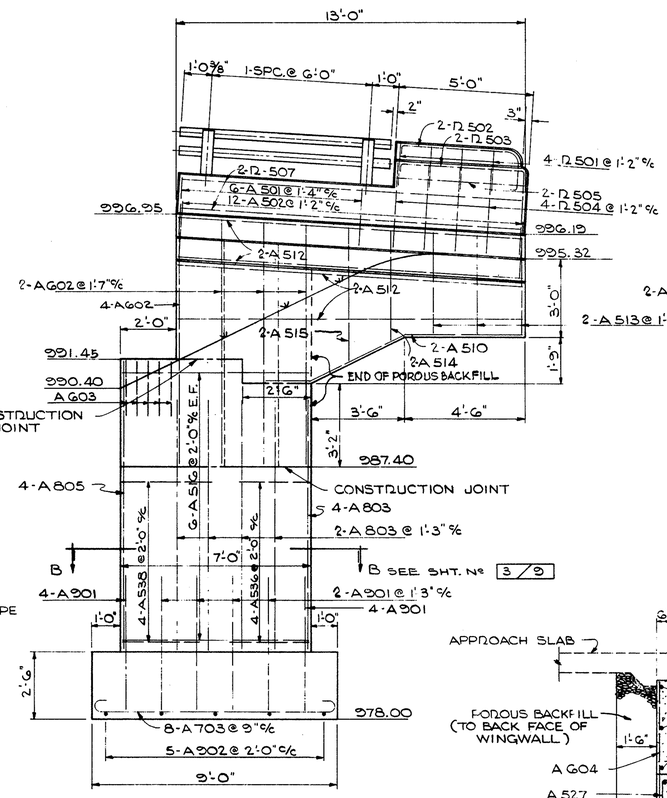
WEST WINGWALL ~ ABUTMENT Nº 1
SCALE 3/8" = 1'-0"



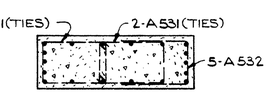
TYP. SEC. FOR EAST WINGWALL



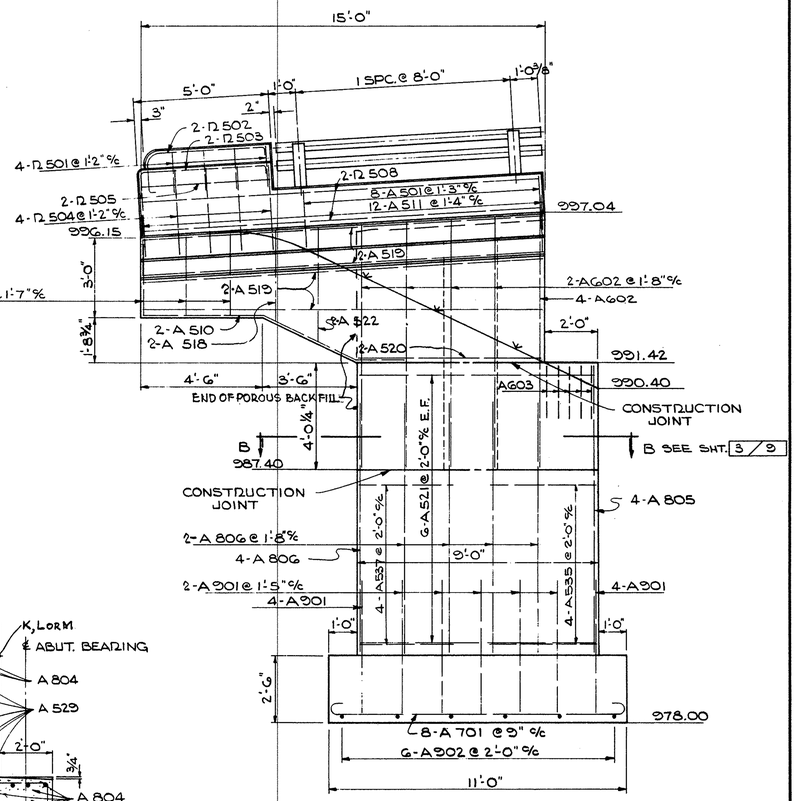
SECTION E-E
TYP. SEC. FOR WEST WINGWALL



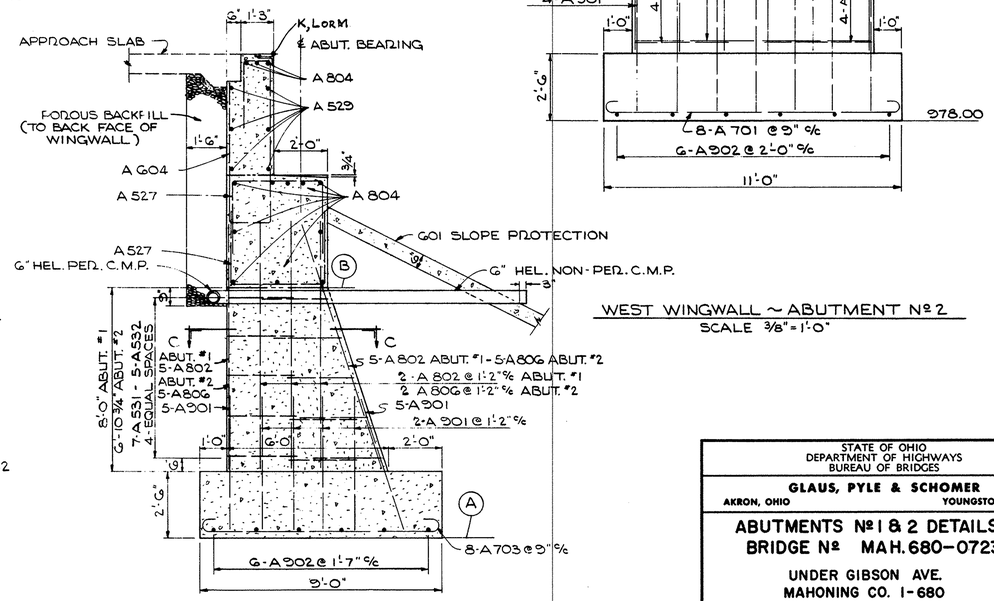
EAST WINGWALL ~ ABUTMENT Nº 2
SCALE 3/8" = 1'-0"



SECTION C-C



WEST WINGWALL ~ ABUTMENT Nº 2
SCALE 3/8" = 1'-0"



SECTION A-A
SCALE 3/8" = 1'-0"
SEE SHT. Nº 3/9 FOR LOCATION

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENTS Nº 1 & 2 DETAILS
BRIDGE Nº MAH. 680-0723

UNDER GIBSON AVE.
MAHONING CO. I-680
STA. 748 + 48.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		D.A.H.	W.K.D.	4-30-70	

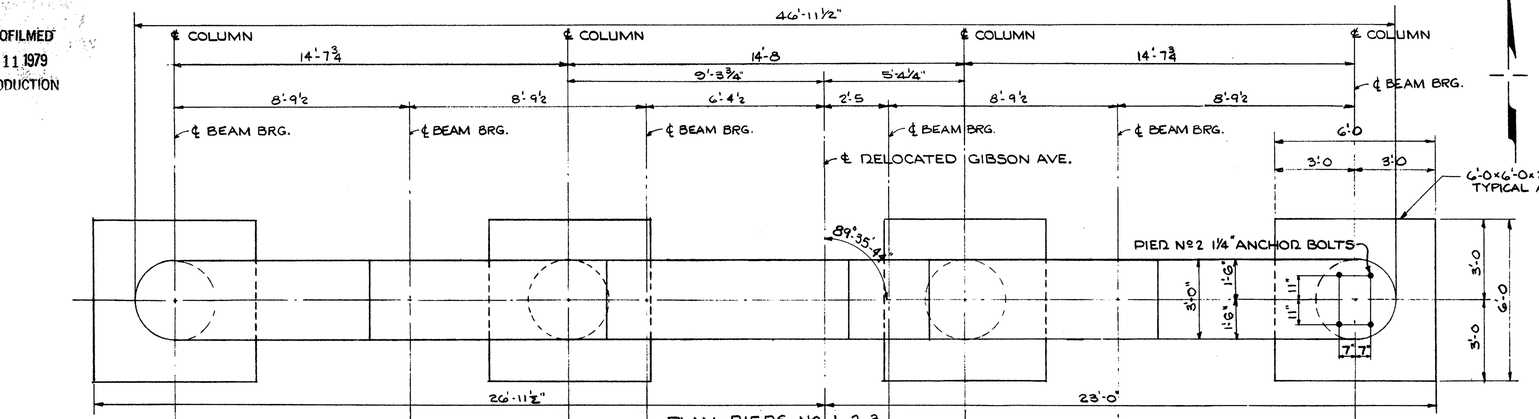
MAR 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

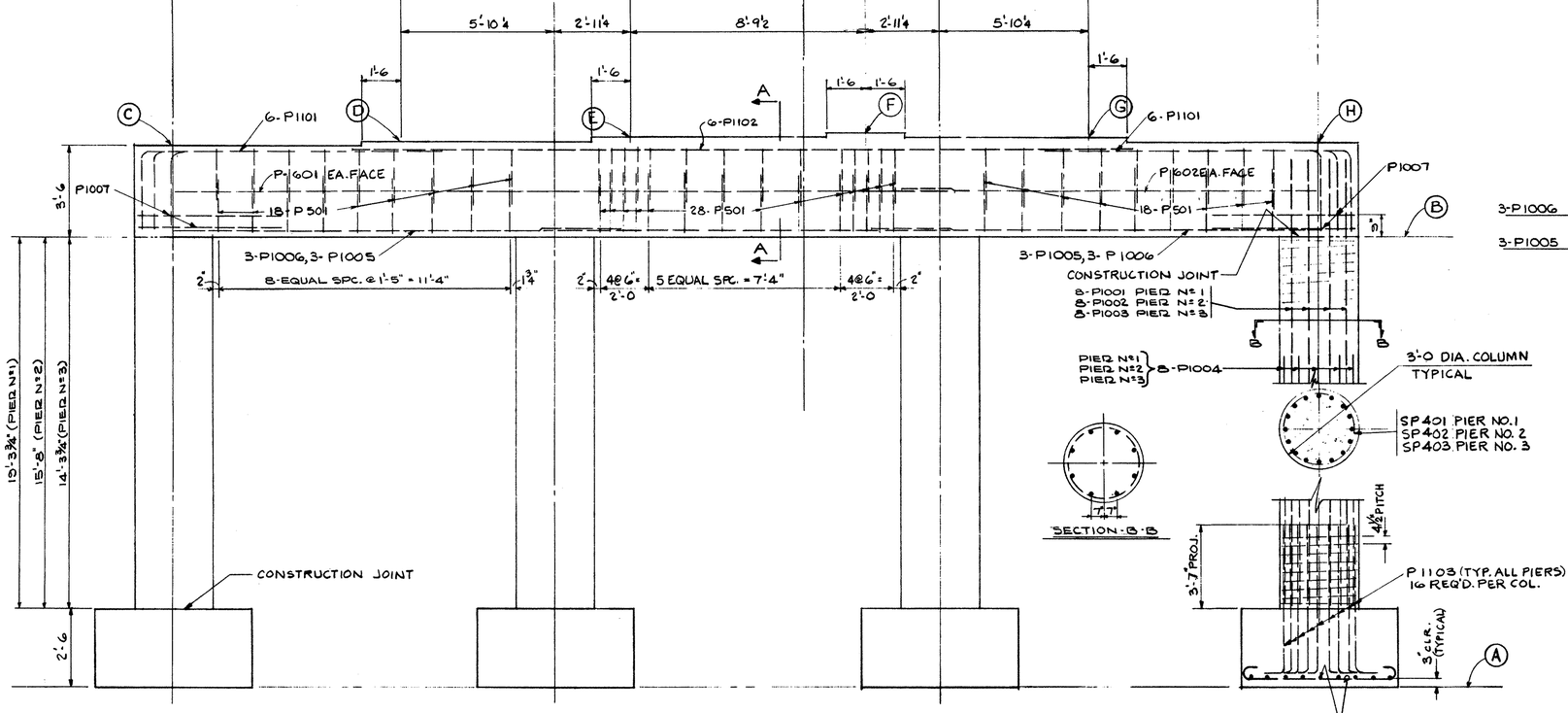
FED. RD.	STATE	PROJECT	
2	OHIO		

527/656

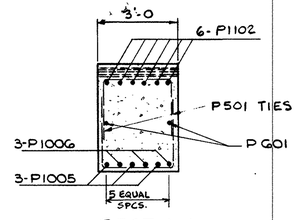
MAH. 680-6.98



PLAN - PIERS NO. 1, 2, 3



ELEVATION - PIERS NO. 1, 2, 3



SECT. A-A

BEAM SEAT ELEVATIONS								
LOCATION	A	B	C	D	E	F	G	H
PIER NO.1	973.00	994.81	998.31	998.47	998.61	998.67	998.53	998.39
PIER NO.2	974.30	992.47	995.97	996.14	996.28	996.34	996.20	996.05
PIER NO.3	973.00	989.81	993.31	993.45	993.59	993.65	993.49	993.37

NOTES

1. SPECIAL CARE SHALL SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BEARING DEVICES SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF THE ANCHOR BAR HOLES.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PIERS Nº 1, 2 & 3 DETAILS
BRIDGE Nº MAH. 680-0723

UNDER GIBSON AVE.
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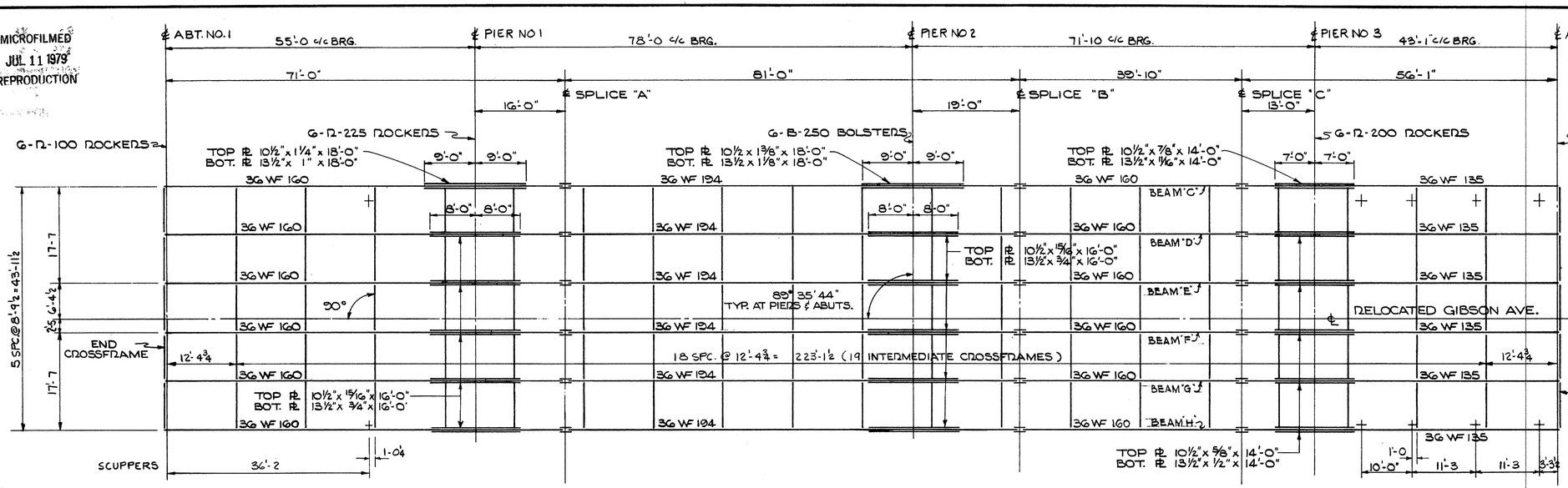
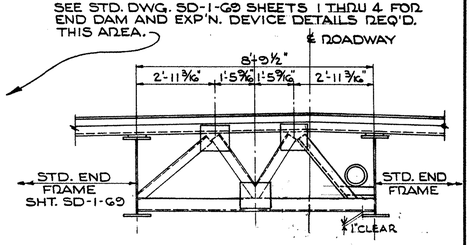
2	OHIO		

5/65

MAH. 680-6.98

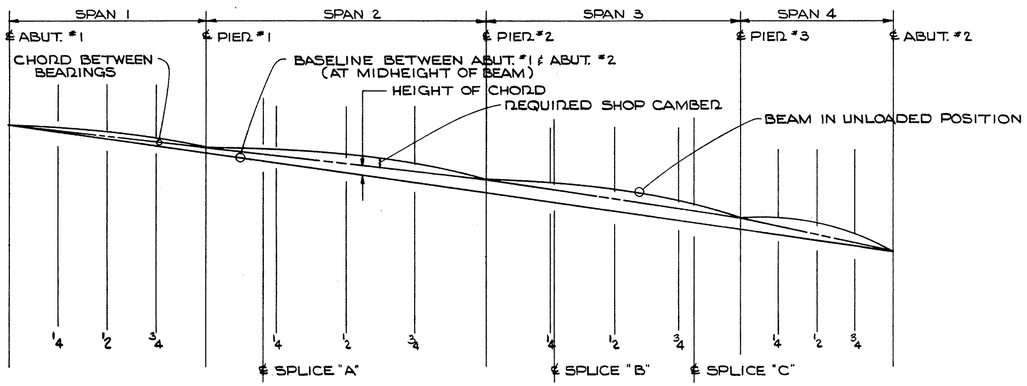


STEEL FRAMING PLAN



NOTE: FOR DETAILS NOT SHOWN SEE STD. DWG. SD-1-69

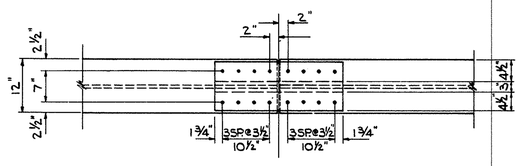
SPECIAL END CROSSFRAME
FOR CENTER PANEL (EACH ABUT.)
(LOOKING NORTH)

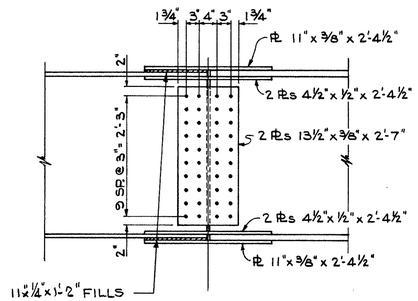


LAYOUT DIAGRAM

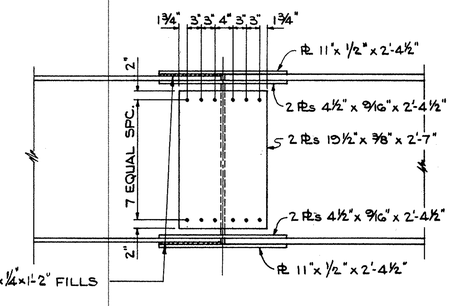
DEFLECTION AND CAMBER (INCHES)																
SPAN Nº	SPAN 1			SPAN 2				SPAN 3					SPAN 4			
CAMBER POINT	¼	½	¾	A	¼	½	¾	¼	B	½	¾	C	¼	½	¾	
CAMBER DUE TO WEIGHT OF BEAM	0.03	0.04	0.00	0.06	0.08	0.14	0.08	0.02	0.03	0.07	0.04	0.03	0.00	0.01	0.01	
CAMBER DUE TO REM. DEAD LOAD	-0.22	0.24	0.06	0.24	0.33	0.55	0.28	0.20	0.23	0.48	0.30	0.19	0.00	0.05	0.06	
ADJUST FOR VERTICAL CURVE	-.05	-.03	-.02	.00	.00	.00	.00	1.75	1.81	2.34	1.75	1.30	0.53	0.64	0.36	
SHOP CAMBER (INCHES)	0.20	0.24	0.04	0.30	0.41	0.59	0.36	1.97	2.07	2.89	2.09	1.42	0.53	0.70	0.43	
*HEIGHT OF CHORD	15/16"	2 5/8"	3 15/16"	6 3/4"	7 11/16"	8 7/8"	10 11/16"	11 7/8"	11 13/16"	11¼"	10 5/8"	10 7/16"	7½"	5"	2½"	

* AT ABUT. Nº 1 0"
* AT PIER Nº 1 5¼"
* AT PIER Nº 2 1'-0½"
* AT PIER Nº 3 10"
* AT ABUT. Nº 2 0"





SPLICE FOR 36 WF 135
JOINING 36 WF 135 TO 36 WF 160



SPLICE FOR 36 WF 160
JOINING 36 WF 160 TO 36 WF 194

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

G/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE Nº MAH. 680-0723

UNDER GIBSON AVE.
MAHONING CO. I-680
STA. 748+48.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		R.A.H.	W.K.D.	4-30-70	

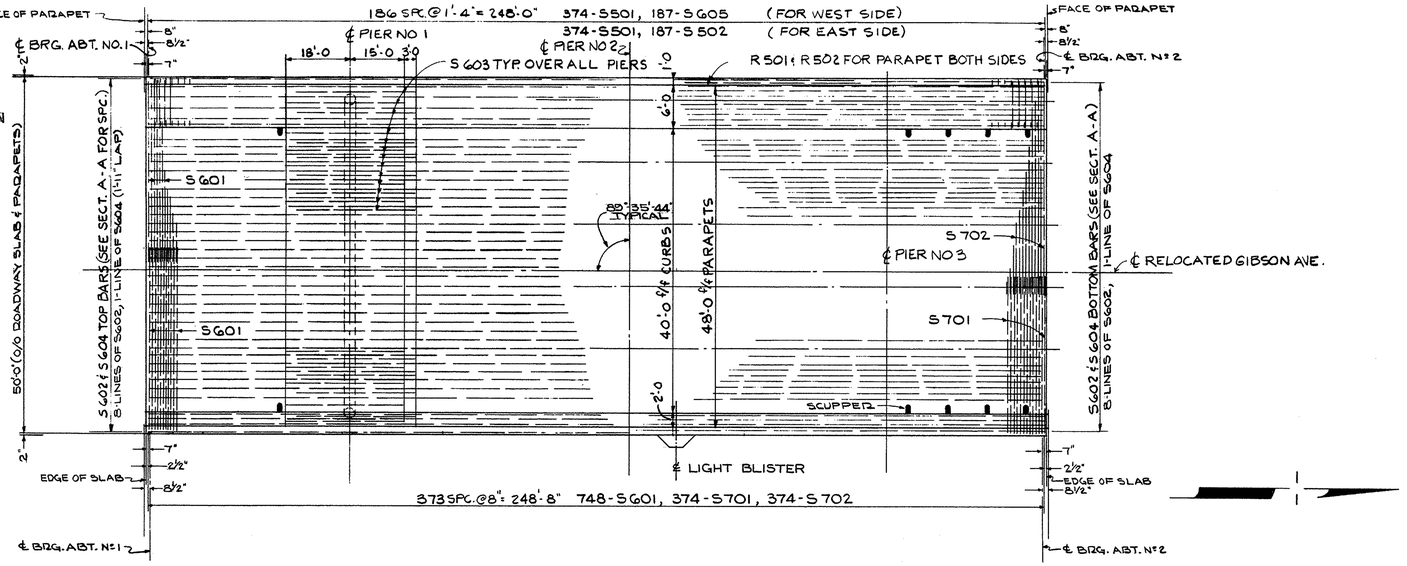
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

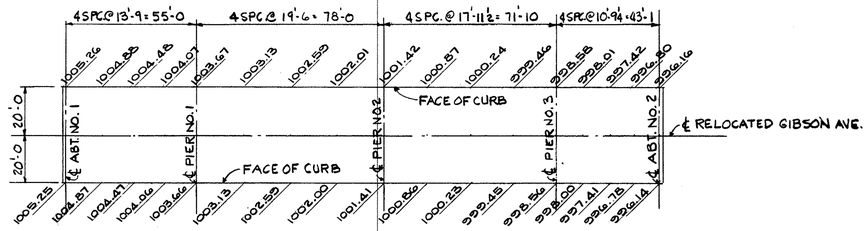
FED. RD.	STATE	PROJECT	
2	OHIO		

529/656

MAH. 680-6.98



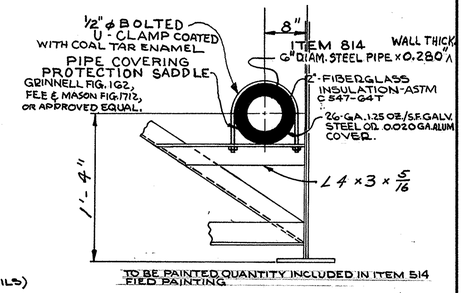
BAR PLACEMENT PLAN



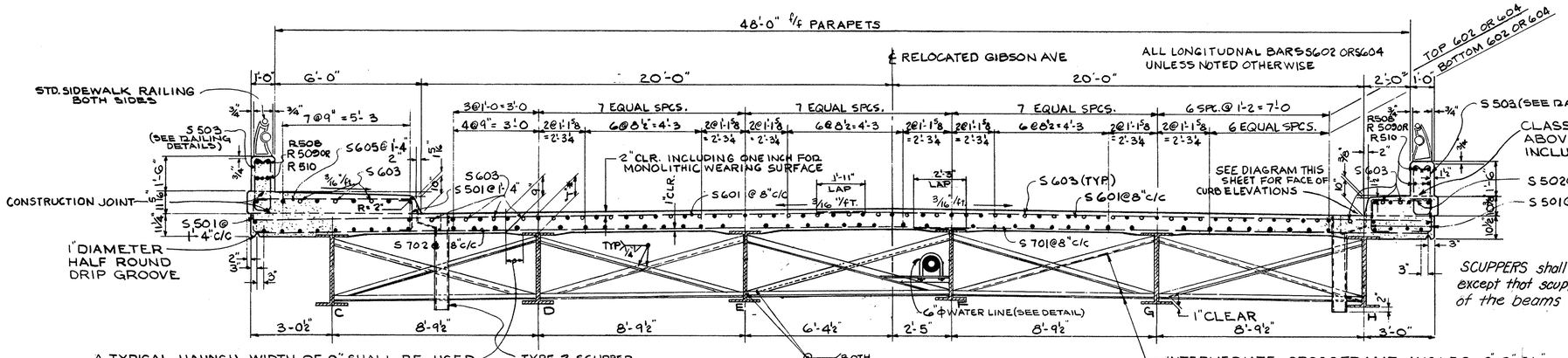
DECK ELEV. @ FACE OF CURB

NOTE:
REBAR LAP: S701, S702 2'-2"
S601, S602, S604, S606 1'-11"

PIPE SUPPORT DETAIL
For additional information
See sheet - 24A



TO BE PAINTED QUANTITY INCLUDED IN ITEM 514 FIELD PAINTING



A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" & 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

TYPE 2 SCUPPER 5 REQ'D EA. SIDE

INTERMEDIATE CROSSFRAME ANGLES 3"×3"×5/16". WELD BOTH SIDES OF VERTICAL LEG AND TOP SIDE OF HORIZONTAL LEG TO BEAM WITH ¼" CONTINUOUS FILLET WELD.

TRANSVERSE SECTION

"T"*
OVER 36WF135 = 5¾"
OVER 36WF160 = 5½"
OVER 36WF194 = 5¼"

SCUPPERS shall be in accordance with Std Dwg. SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SLAB REINFORCING PLAN
BRIDGE N° MAH. 680-0723

UNDER GIBSON AVE.
MAHONING CO. I-680
STA. 748 + 48.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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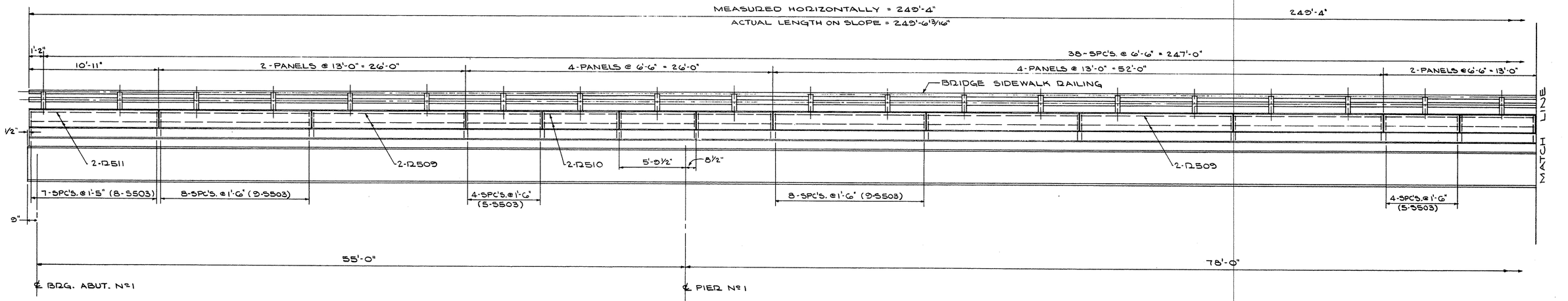
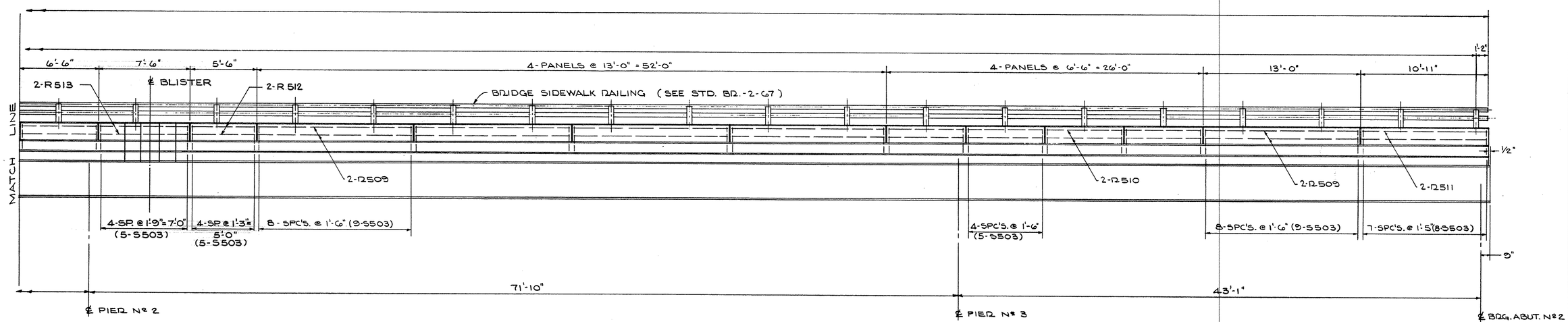
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680 - 6.98

530
656





RAILING DETAIL ~ TYPICAL BOTH SIDES ~ GIBSON AVE.

ALL DIMENSIONS HORIZONTAL UNLESS OTHERWISE NOTED

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS

BRIDGE Nº MAH – 680 – 0723
UNDER GIBSON AVE.
MAHONING COUNTY I – 680
STA. 748+48.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	J.D.P.		D.A.H.	W.K.D.	4-30-70	

MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

531
654

MAH. 680-6.98

ABUTMENTS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
A501	31	5'-11"	191	BT.
A502	24	5'-6"	138	BT.
A503	6	16'-8"	104	ST.
A504	4	10'-1"	42	ST.
A505	2	6'-2"	13	ST.
A506	14	10'-8"	156	ST.
A507	6	2'-10"	18	ST.
A508	2	2'-11"	6	ST.
A509	2	3'-8"	8	ST.
A510	8	10'-1"	84	BT.
A511	27	6'-8"	188	BT.
A512	8	12'-8"	106	ST.
A513	6	3'-6"	22	ST.
A514	2	4'-1"	9	ST.
A515	2	4'-11"	10	ST.
A516	12	6'-8"	83	ST.
A517	6	2'-8"	17	ST.
A518	2	3'-2"	7	ST.
A519	14	14'-8"	214	ST.
A520	2	6'-8"	14	ST.
A521	24	8'-8"	217	ST.
A522	4	4'-0"	17	ST.
A523	6	3'-8"	23	ST.
A524	16	3'-0"	50	ST.
A525	2	4'-6"	9	ST.
A526	2	4'-2"	9	ST.
A527	128	9'-2"	1,224	BT.
A528	4	6'-8"	28	ST.
A529	24	24'-6"	613	ST.
A530	4	2'-8"	11	ST.
A531	28	9'-0"	263	BT.
A532	20	6'-5"	134	BT.
A533	10	6'-6"	68	BT.
A534	5	7'-6"	39	BT.
A535	8	10'-10"	90	BT.
A536	4	10'-0"	42	BT.
A537	8	10'-2"	85	BT.
A538	4	8'-6"	35	BT.
A539	24	5'-4"	134	BT.
A540	14	6'-6"	95	BT.
A601	28	9'-4"	393	ST.
A602	22	8'-10"	292	ST.
A603	20	3'-11"	118	BT.
A604	80	15'-10"	1,903	BT.
A605	14	17'-1"	359	BT.
A701	16	12'-2"	398	BT.
A702	8	14'-2"	232	BT.
A703	48	10'-2"	997	BT.
A801	8	11'-8"	249	ST.
A802	60	10'-7"	1,585	ST.
A803	12	9'-6"	304	ST.
A804	52	24'-6"	3,402	ST.
A805	8	10'-7"	226	ST.
A806	44	9'-6"	1,116	ST.
A901	144	5'-8"	2,775	BT.
A902	48	8'-2"	1,333	BT.
ABUTMENT TOTAL			20,408	

PIERS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
P501	192	7'-8"	1,535	BT.
PG01	6	30'-0"	271	ST.
PG02	6	16'-0"	144	ST.
P901	216	8'-0"	5,875	BT.
P1001	32	22'-6"	3,038	ST.
P1002	32	18'-10"	2,593	ST.
P1003	32	17'-6"	2,410	ST.
P1004	96	10'-0"	4,131	ST.
P1005	18	30'-0"	2,323	ST.
P1006	18	19'-9"	1,529	ST.
P1007	12	12'-2"	628	BT.
P1101	36	15'-4"	2933	BT.
P1102	18	30'-0"	2869	ST.
P1103	192	6'-9"	6,886	BT.
SPIRAL REINFORCING			3,728	
PIER TOTAL			40,953	

SUPERSTRUCTURE

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
S501	748	2'-1"	1,625	BT.
S502	187	4'-0"	780	BT.
S503	360	5'-11"	2,222	BT.
SG01	748	25'-10"	29,024	ST.
SG02	776	30'-0"	34,967	ST.
SG03	111	33'-0"	5,502	ST.
SG04	97	24'-0"	3,497	ST.
SG05	187	6'-6"	1,826	ST.
S701	374	22'-0"	16,818	ST.
S702	374	30'-0"	22,934	ST.
SUPERSTRUCTURE TOTAL			119,135	

LIGHT BLISTER BARS TOTALS = 95 LBS.

RAILING - TO BE INCLUDED IN ITEM 517 FOR PAYMENT

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
R501	16	3'-3"		BT.
R502	8	6'-7"		BT.
R503	8	8'-3"		BT.
R504	16	7'-7"		BT.
R505	8	4'-8"		ST.
R506	4	16'-8"		ST.
R507	4	12'-8"		ST.
R508	8	14'-8"		ST.
R509	88	12'-8"		ST.
R510	96	6'-2"		ST.
R511	16	10'-7"		ST.
R512	4	5'-2"		ST.
R513	4	7'-2"		ST.

REPLACEMENT BARS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
RE501	1	6'-7"		ST.
RE601	4	6'-11"		ST.
RE701	3	7'-2"		ST.
RE801	1	7'-6"		ST.
RE901	1	7'-10"		ST.
RE1001	1	8'-3"		ST.
RE1101	1	8'-7"		ST.
RE401	1	6'-3		BT

SPIRAL REINFORCING LIST

MARK	NUMBER	CORE DIA	LENGTH	PITCH	Nº TURNS	WEIGHT
SP401	4	2'-8"	19'-3¾"	4½	55	1,449
SP402	4	2'-8"	15'-8"	4½	45	1,188
SP403	4	2'-8"	14'-3¾"	4½	42	1,091
					TOTAL	3,728

TOTALS

ABUTMENT	20,408
PIER (INCLUDING SPIRALS)	40,953
SUPERSTRUCTURE	119,290
GRAND TOTAL	180,651

NOTES:
SPIRAL REINFORCING BARS: THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE BOTTOM OF THE PIER CAP.

THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER.

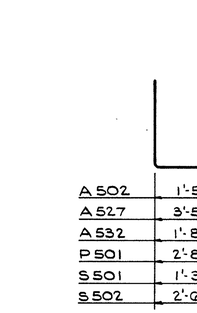
1-1/2 CLOSED ~~COILS SHALL BE PROVIDED AT THE ENDS OF EACH~~ SPIRAL UNIT. FOUR 1" X 1" X 1/8" STEEL ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LB. PER LIN. FT. OF SPACER, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF LBS. OF THESE SPACERS, BASED ON 0.80 LB. PER LIN. FT. WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

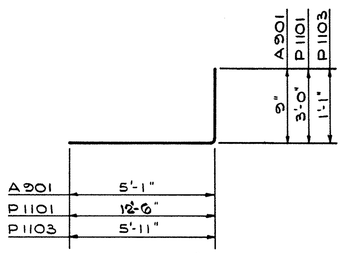
BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A 701 IS A NO. 7 SIZE BAR AND A 1000 IS A NO. 10 SIZE.

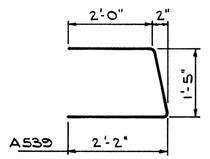
ALL BAR DIMENSIONS ARE GIVEN OUT TO OUT.

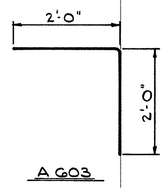
LIGHT BLISTER BAR SCHEDULE

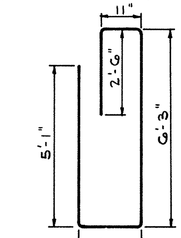
MARK	NUMBER	LENGTH	WEIGHT	SHAPE
B501	4	10'-2"	42	BT.
BG01	2	10'-1"	28	BT.
BG02	2	9'-1"	25	BT.
TOTAL PER BLISTER			95 LBS.	

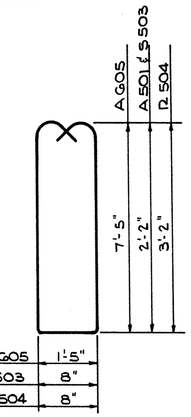


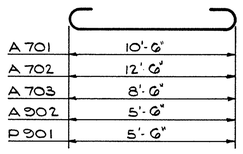


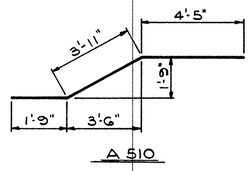


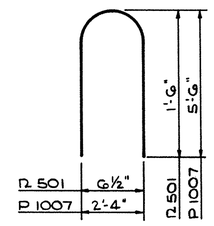


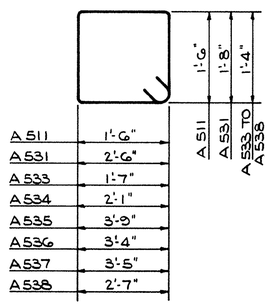


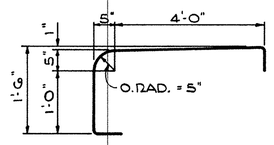


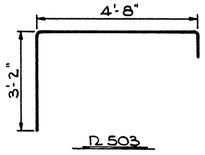














STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5/5

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE
BRIDGE Nº MAH. 680-0723

UNDER GIBSON AVE.
MAHONING CO. I-680
STA. 748 + 48.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.E.S.	D.W.		R.A.H.	W.K.D.	4-30-70	

MAY

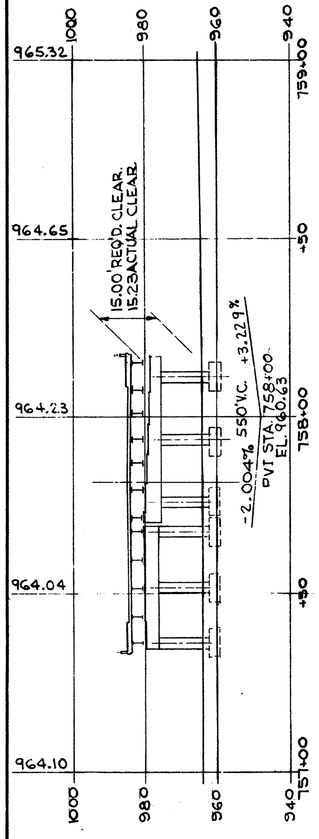
MICROFILMED
JUL. 11 1979
REPRODUCTION

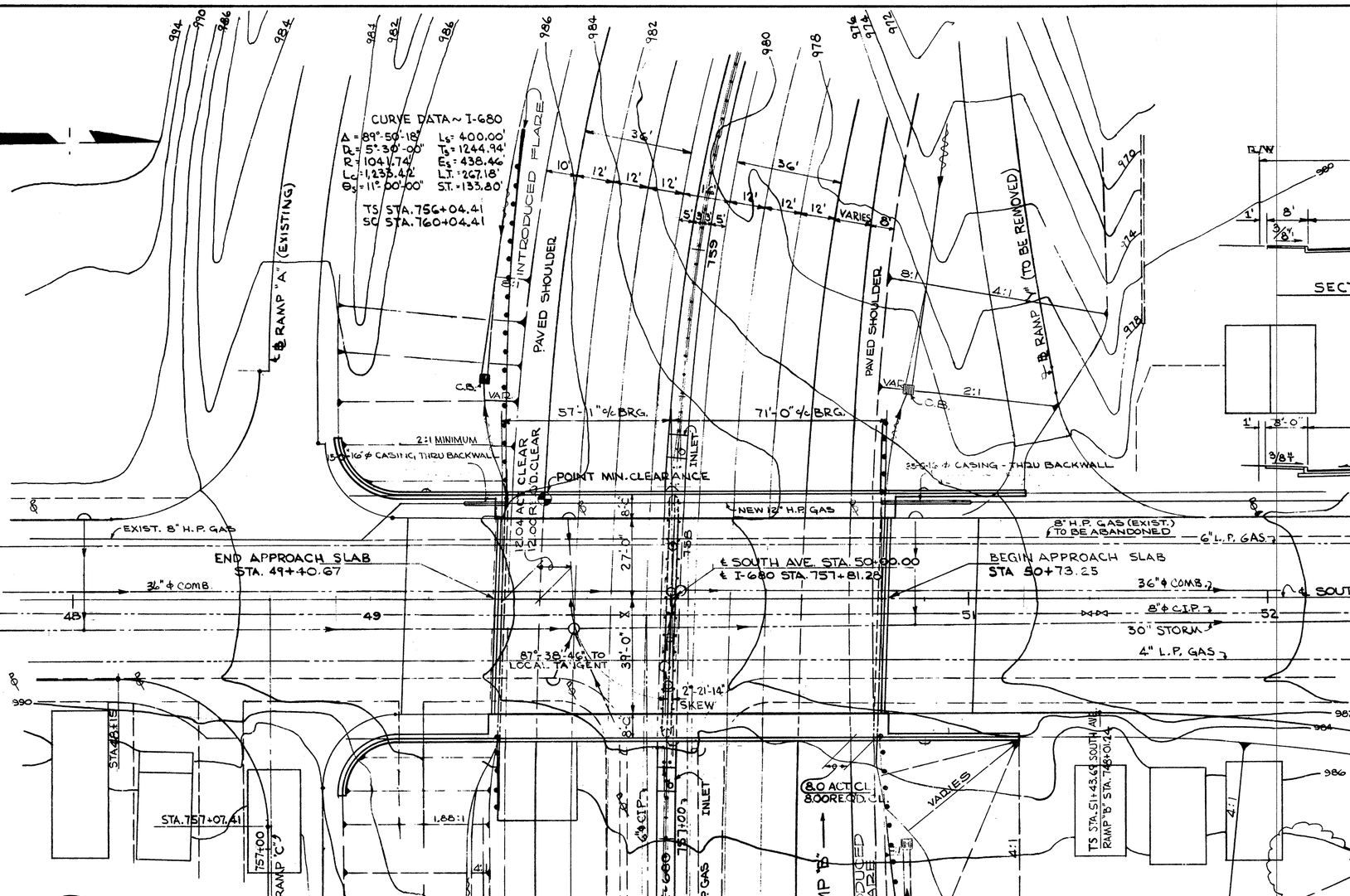
FED. RD.	STATE	PROJECT	
2	OHIO		

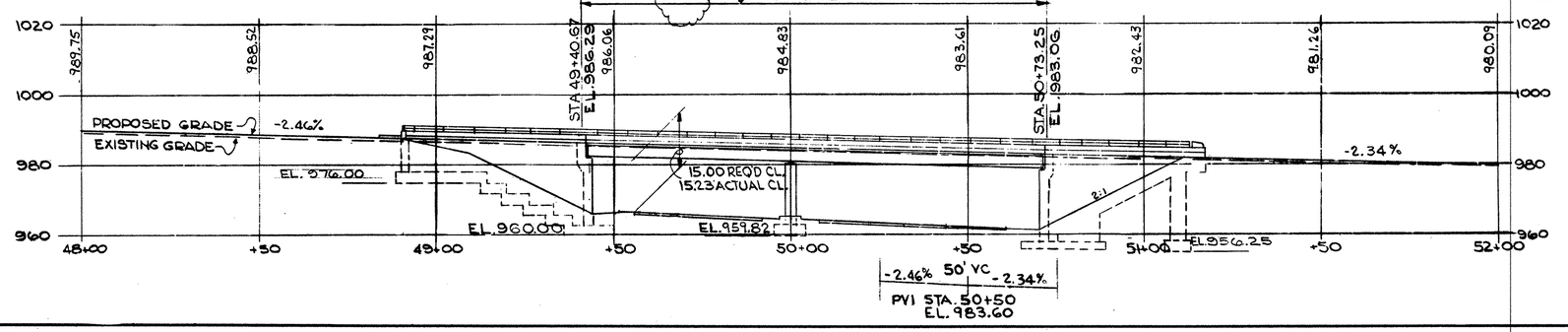
532/656

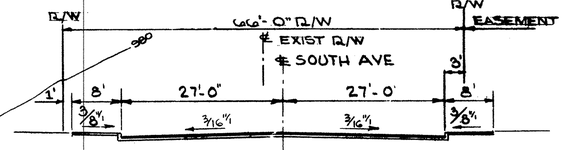
MAH-680-G.98

CURVE DATA ~ I-680
Δ = 89°-50'-18" L_S = 400.00'
D_c = 5°-30'-00" T_S = 1244.94'
R = 1041.74' E_S = 438.46'
L_C = 1,233.42' L.T. = 267.18'
θ_s = 11°-00'-00" S.T. = 133.80'
TS STA. 756+04.41
SC STA. 760+04.41

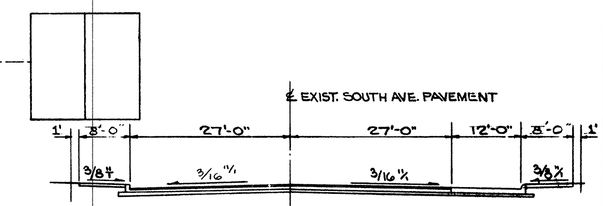








SECTION ~ EXISTING SOUTH AVE



SECTION - PROPOSED SOUTH AVE.

SPIRAL DATA ~ RAMP "B"

L_S = 150'	k = 74.39'
L.T. = 101.33	x = 146.33'
S.T. = 51.21	y = 24.44'
L.C. = 148.36	

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 57'-1" × 71'-0" ℄ BRGS.
ROADWAY WIDTH: 66'-0" F/F OF 8'-0" WALKS ON BOTH SIDES.
LOADING HS 20-44
SKEW: 2° 21' 14" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLAB: 30'-0" LONG AS-1-67
SUPERELEVATION: NONE
ALIGNMENT: STRAIGHT
TRAFFIC COUNT: 1960 ADT = 32,580 MAX. STREET CAPACITY

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
1/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

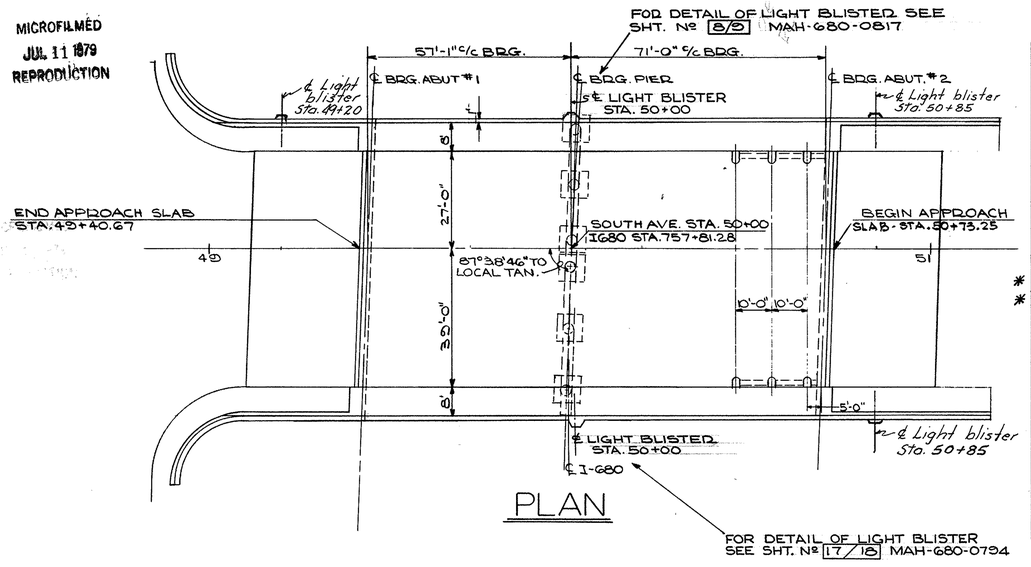
SITE PLAN

BRIDGE Nº MAH. 680-0705
UNDER SOUTH AVE.
MAHONING CO. I-680
STA. 757+81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DS	DS		J.M.	W.K.D.	5-4-70	

MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION



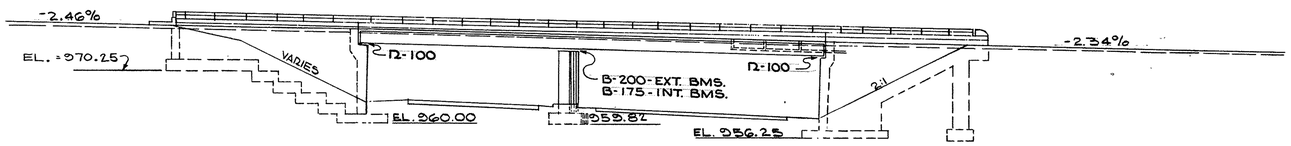
PLAN

ESTIMATED QUANTITIES

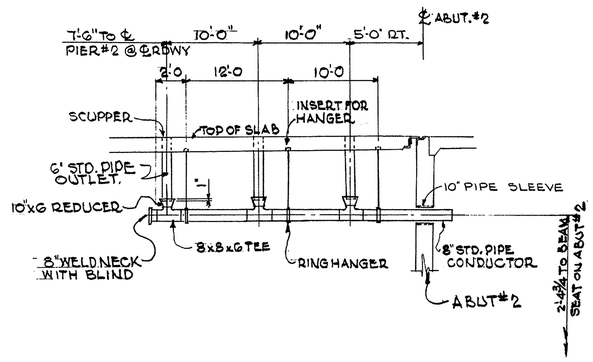
	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	GEN.	
	503	1,288	CU.YD	UNCLASSIFIED EXCAVATION		1,288			
	503	613	CU.YD.	ROCK EXCAVATION		561	52		
	509	205,506	LBS.	REINFORCING STEEL	94,934	81,118	29,454		
	511	384	CU.YD	CLASS 'C' CONC. - SUPERSTRUCTURE	384				
	511	514	CU.YD	CLASS 'C' CONC, *ABUTS. ABOVE FTGS.*		514			
	511	458	CU.YD	CLASS 'C' CONC. - FOOTINGS		420	38		
	511	*58*	*Cu.Yd.*	*CLASS "C" CONCRETE, PIER: ABOVE FOOTINGS*			*58*		
	512	291	LIN.FT.	PREMOLDED SEALING STRIP		291			
*	513	366,845	LBS.	STRUCTURAL STEEL	366,845				
*	514	366,845	LBS.	FIELD PAINTING - STRUCT. STL.	366,845				
	516	147	SQ.FT.	1" PREFORMED EXP. JT. FILLER		147			
	517	476.75	LIN. FT.	BRIDGE SIDEWALK RAILING	259	217.75			
	518	319	CU.YD.	POROUS BACKFILL		319			
	518	6	EACH	SCUPPERS - INCLUDING SUPPORTS	6				
	518	56	LIN.FT.	8" HORIZ. CONDUCTOR PIPE & SUPPS.	56				
	808	384	UNIT	CHEMICAL ADMIXTURE FOR					
				CONC. TYPE A, B, OR D	384				
	503	LUMP	SUM	*COFFERDAMS, CRIBS AND SHEETING*				LUMP	
	G25			SEE SHT. 424 GEN. LIGHTING					
				SUMMARY					

CALC. BY RAH 11-20-69
CHK'D BY GCP 5-4-70

* 190 LBS. TO BE PAID FOR BY THE EAST OHIO GAS COMPANY.



ELEVATION



SCUPPER CONDUCTOR PIPE.

FED. RD.	STATE	PROJECT	
2	OHIO		

533
656

MAH-680-6.98

GENERAL NOTES

DESIGN SPECIFICATION: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1969, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS 20-44

CONCRETE CLASS "C" - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE.
UNIT STRESS 1333 P.S.I. FOR SUPERSTRUCTURE.

STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A 615, A 616, A 617, DEFORMED, INTERMEDIATE OR HARD GRADE. UNIT STRESS 20,000 P.S.I. EXCEPT THAT SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A 306 or A 499, A82 or A615

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS - 1 - 67	REVISED 6-12-69
BR - 2 - 67	REVISED 1-1-71
RB - 1 - 55	REVISED 2-02-59
SD - 1 - 69	DATED 6-12-69

AND TO SUPPLEMENT SPECIFICATIONS:

808	REVISED 1-1-71
836	DATED 1-1-71

FOUNDATION BEARING PRESSURE: ABUTMENT FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 5 TONS PER SQUARE FOOT AND PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 12 TONS PER SQUARE FOOT.

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATIONS SHOWN, WHICHEVER IS LOWER.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING AND INSTALLING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER. THE CONTRACTOR AND OWNER ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

WELD ON NON-STRESS CARRYING MEMBERS ARE SHOWN THUS: N ¼

EMBANKMENT CONSTRUCTION: BEFORE THE BACKWALL IS CONSTRUCTED THE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE WITH A 1:1 SLOPE FROM THE BRIDGE SEAT TO THE SUBGRADE, FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION
BRIDGE Nº MAH. 680-0705

UNDER SOUTH AVE
MAHONING CO. I-680
STA. 757+81.28

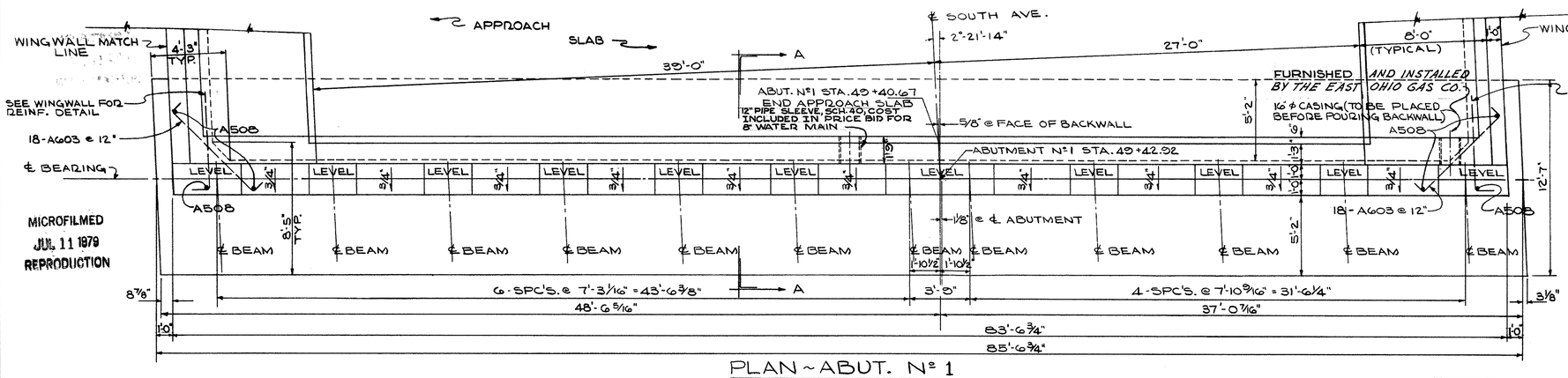
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GCP	J.D.P.		RAH	W.K.D.	5-4-70	

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

534/656

MAH. 680-6.98

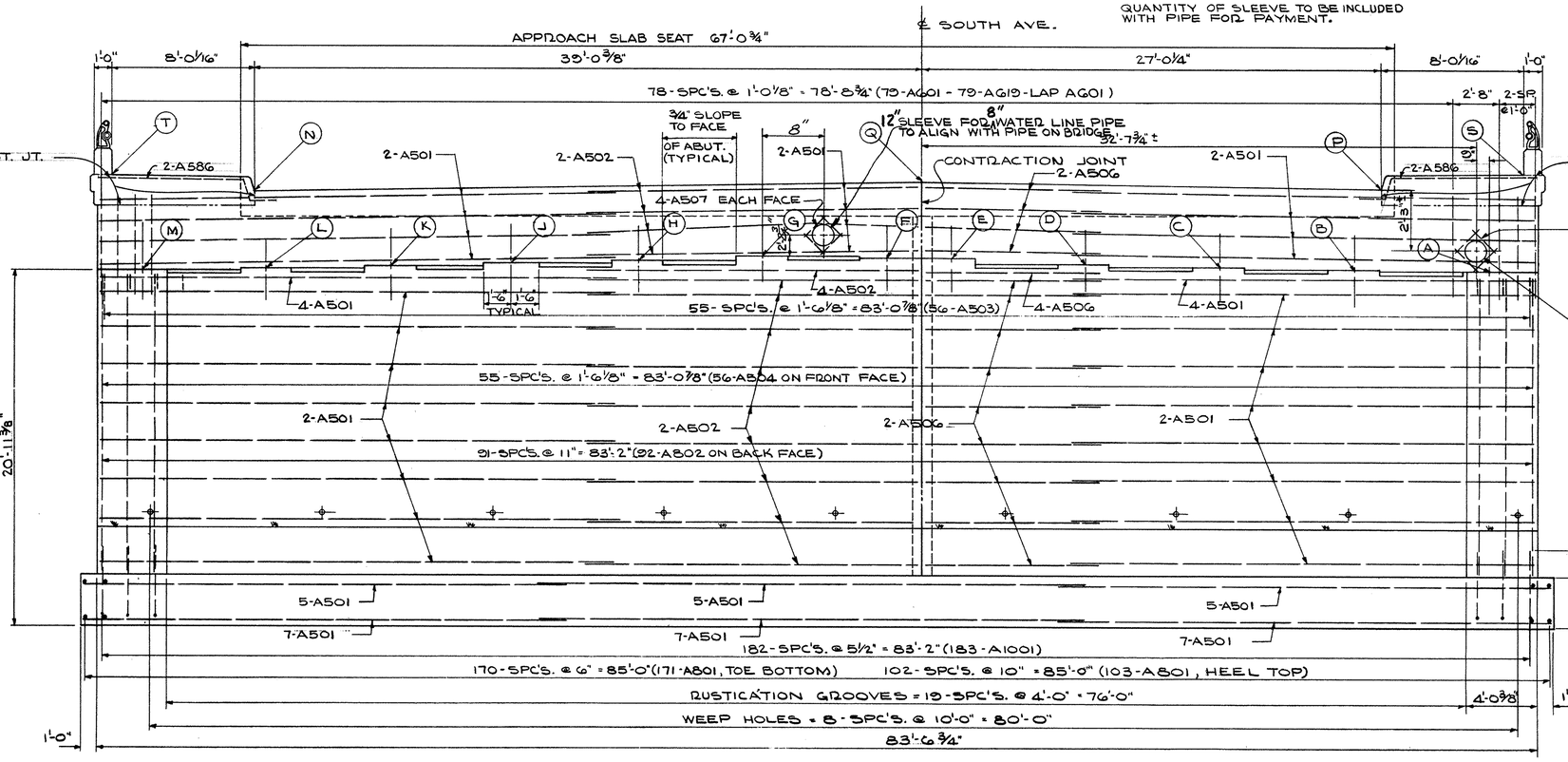


PLAN ~ ABUT. N° 1

534-8"+12"

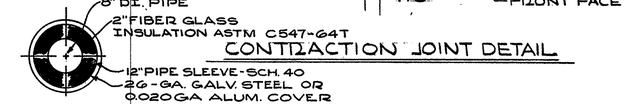
MICROFILMED
JUL 11 1979
REPRODUCTION

NOTE:
QUANTITY OF SLEEVE TO BE INCLUDED WITH PIPE FOR PAYMENT.

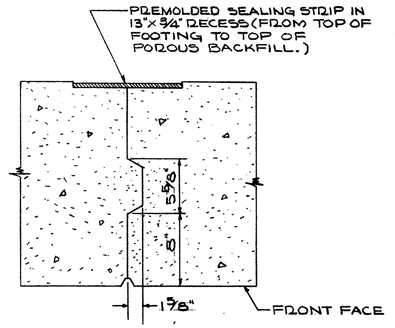


ELEVATION ~ ABUT. N° 1

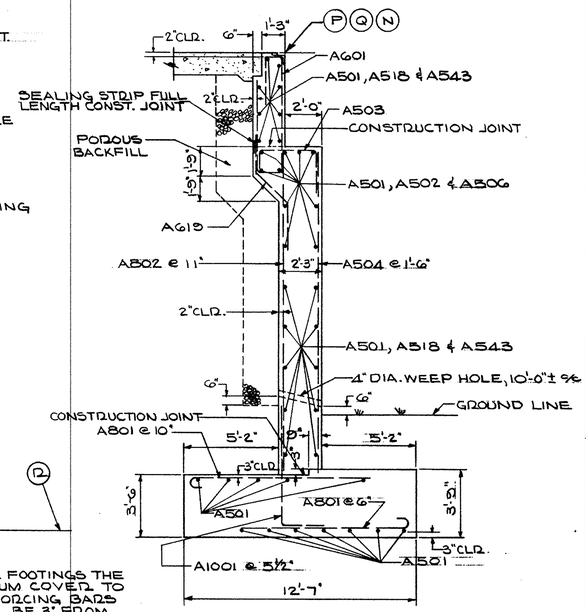
ELEVATION TABLE																	
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
981.06	981.19	981.32	981.45	981.58	981.58	981.48	981.37	981.27	981.16	981.05	980.95	985.69	985.81	986.26	960.00	986.76	986.66



PIPE SLEEVE DETAIL

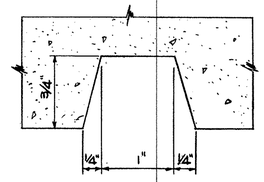


CONTRACTION JOINT DETAIL



SECTION ~ A-A

NOTE:
IN ALL FOOTINGS THE MINIMUM COVER TO REINFORCING BARS SHALL BE 3" FROM ALL SURFACES.



RUSTICATION GROOVE DETAIL

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3/12

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT N°1 DETAILS
BRIDGE N° MAH. 680-0705

UNDER SOUTH AVE.
MAHONING CO. I-680
STA. 757 + 81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.A.H.	J.D.P.		D.A.H.	W.K.D.	5-4-70	

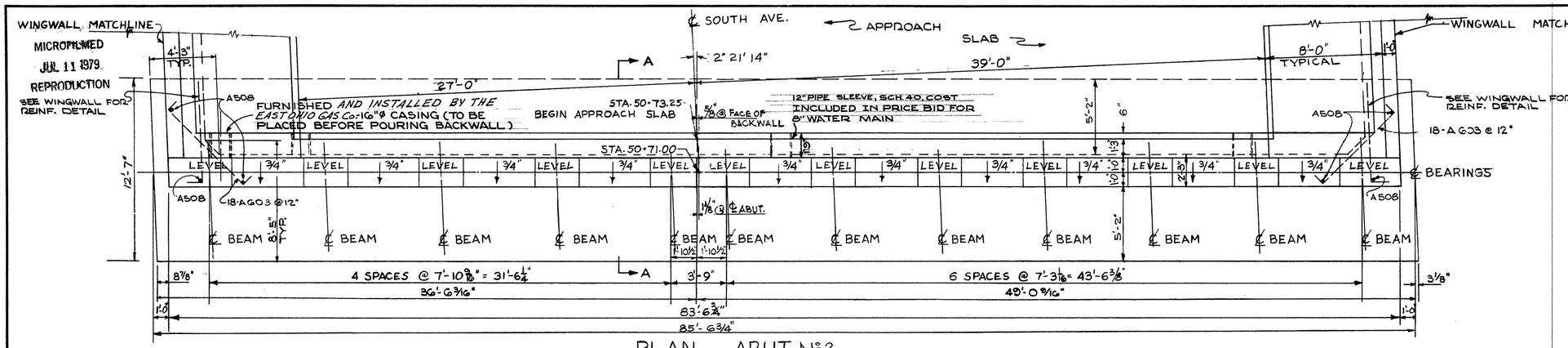
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

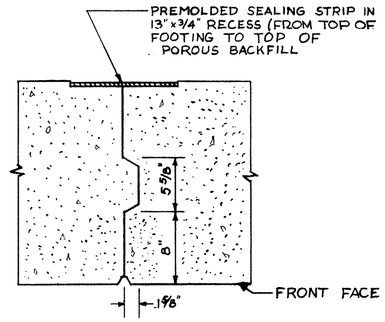
FED. RD.	STATE	PROJECT	
2	OHIO		

535/656

MAH-680-6.98

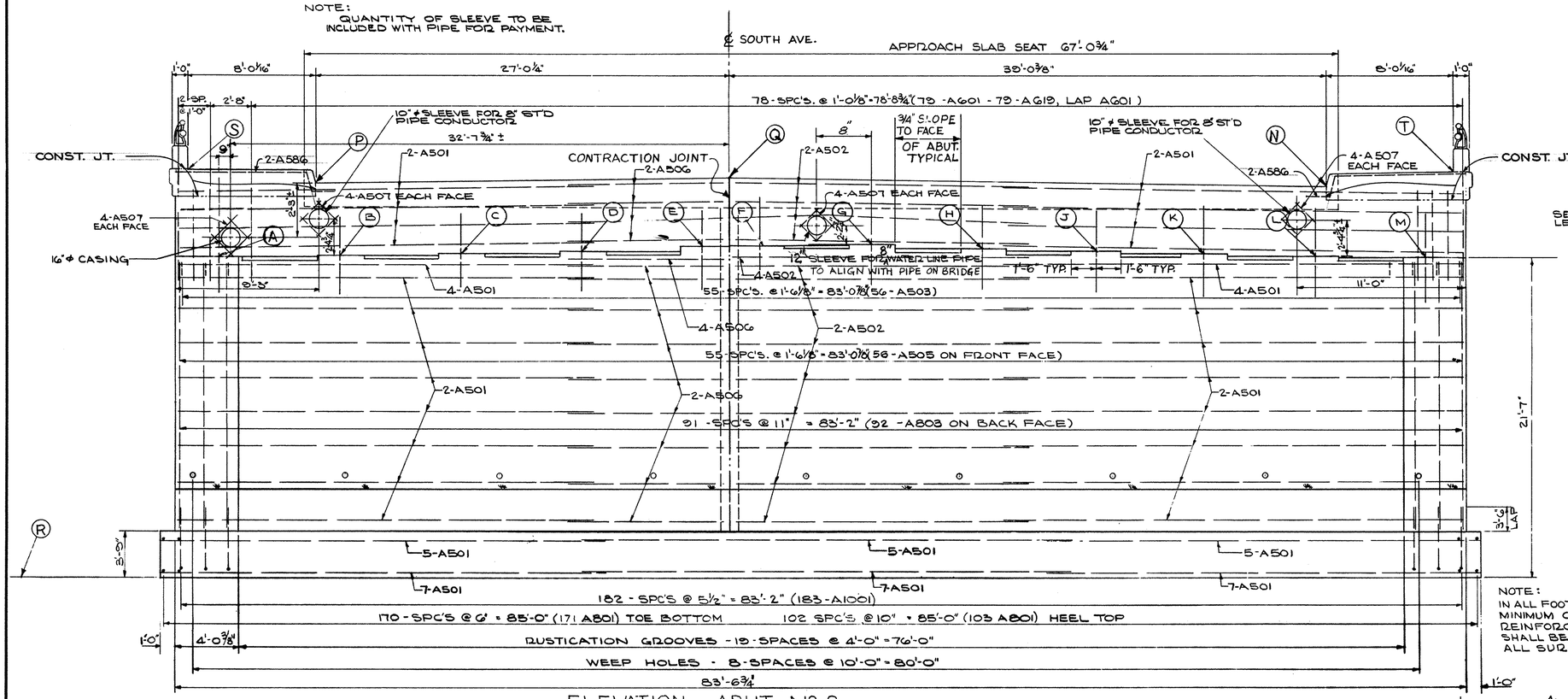


PLAN — ABUT. Nº 2



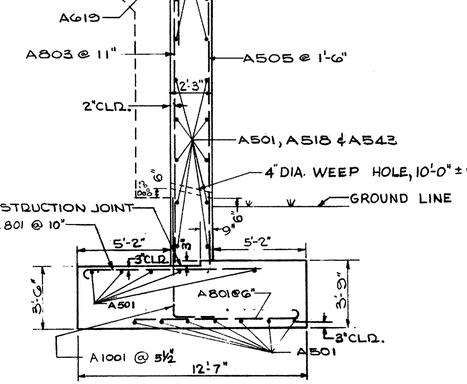
CONTRACTION JOINT DETAIL

NOTE:
QUANTITY OF SLEEVE TO BE INCLUDED WITH PIPE FOR PAYMENT.



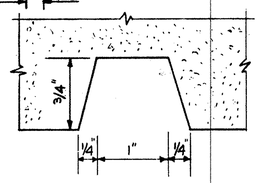
ELEVATION — ABUT. Nº 2

NOTE:
IN ALL FOOTINGS THE MINIMUM COVER TO REINFORCING BARS SHALL BE 3" FROM ALL SURFACES.



SECTION A-A

ELEVATION TABLE																	
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
877.93	878.06	878.13	878.32	878.45	878.46	878.35	878.24	878.14	878.03	877.93	877.82	982.51	982.64	983.08	956.25	983.60	983.48



RUSTICATION GROOVE DETAIL

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT Nº 2 DETAILS
BRIDGE Nº MAH. 680-0705

UNDER SOUTH AVE.
MAHONING CO. I-680
STA. 757 +81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.D.P.		R.A.H.	W.K.P.	5-4-70	

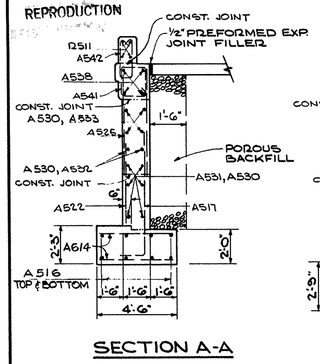
MAY 25 '71

MICROFILMED
JUL 11 1979
REPRODUCTION

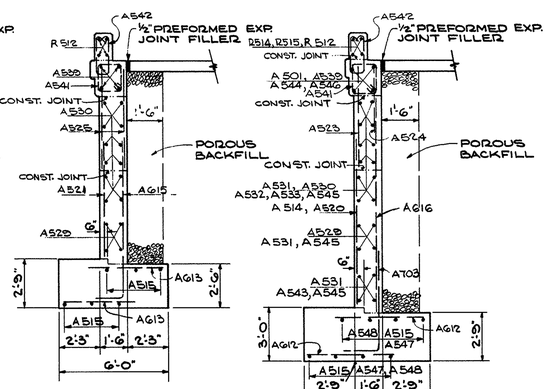
FED. RD.	STATE	PROJECT	
2	OHIO		

536/656

MAH-680-6.9C

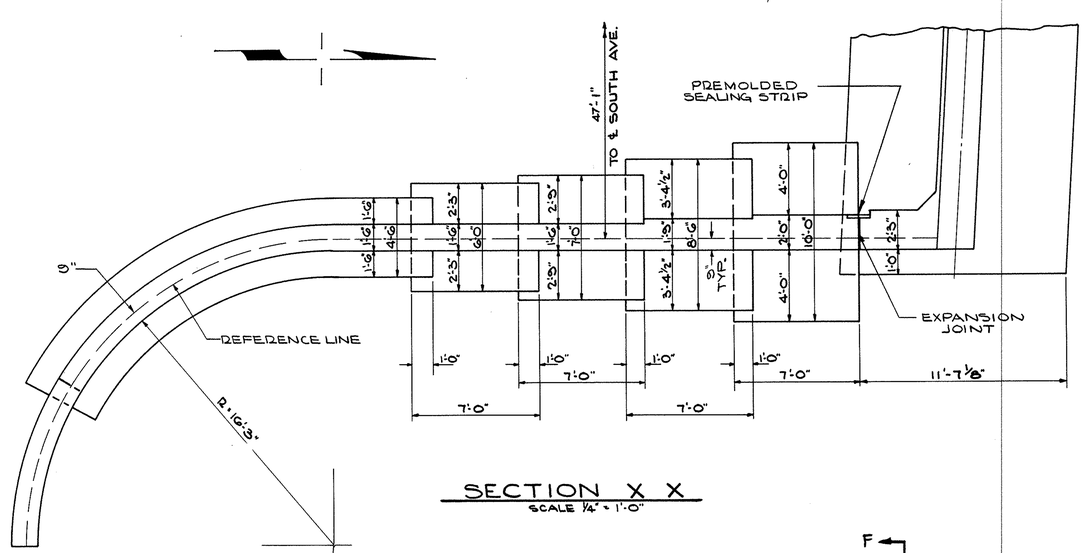


SECTION A-A

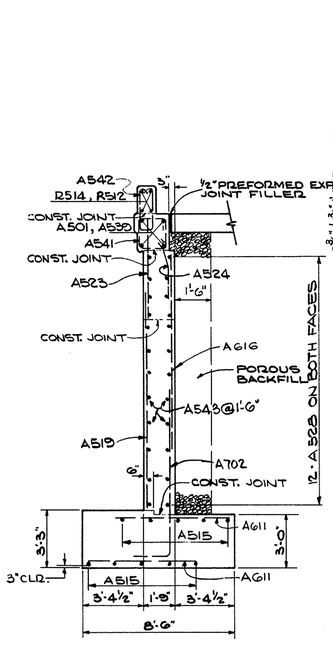


SECTION B-B

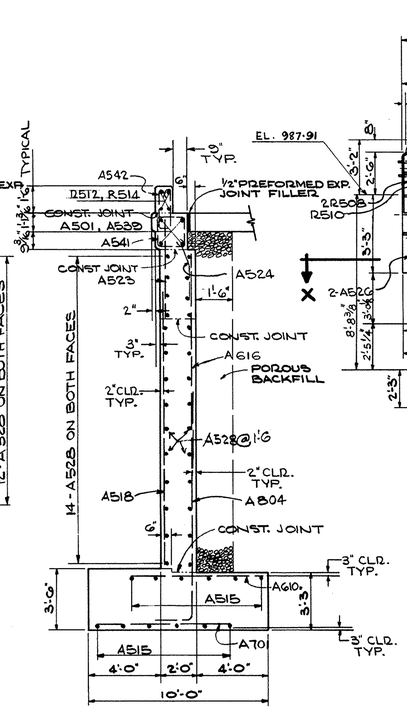
SECTION C-C



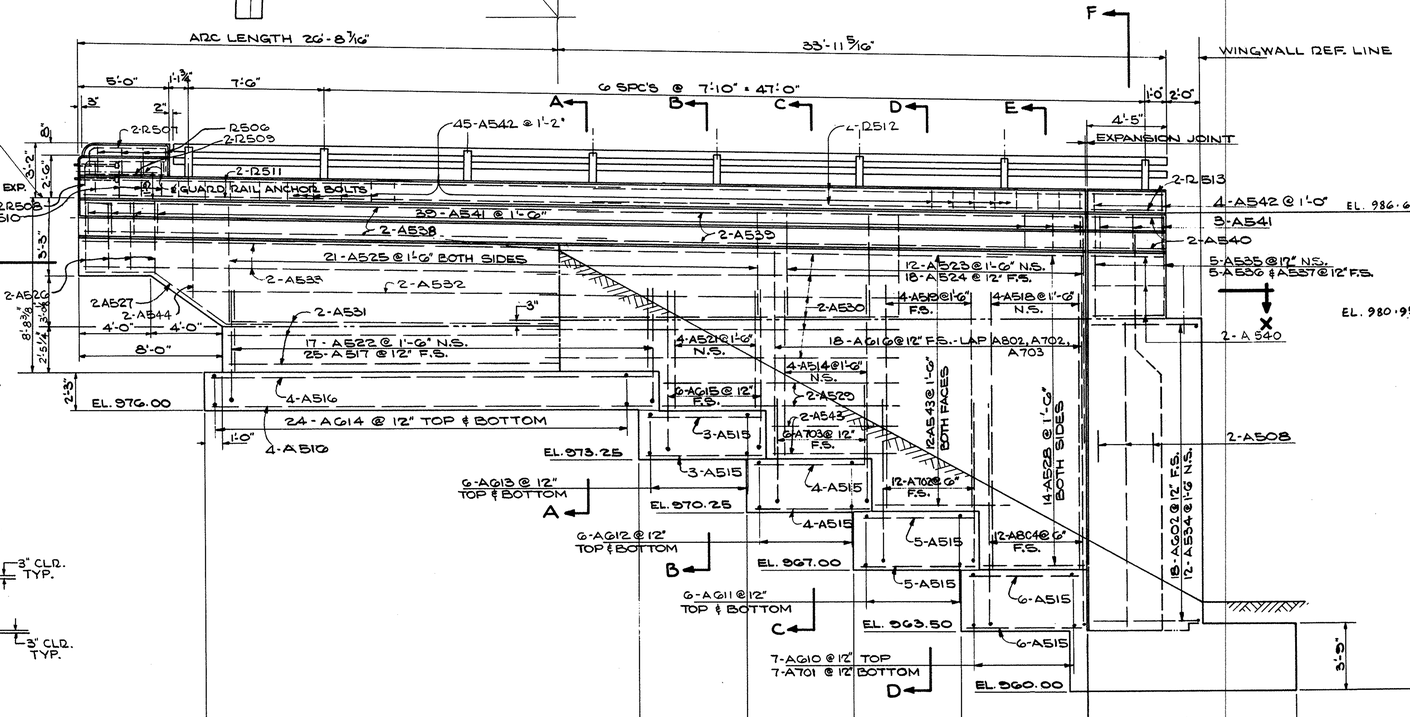
SECTION X X
SCALE ¼" = 1'-0"



SECTION D-D



SECTION E-E


ARC LENGTH 26'-8 7/16"
33'-11 5/16"
WINGWALL REF. LINE
℄ SPC'S @ 7'-10" = 47'-0"
A
B
C
D
E
F
5'-0"
1'-1¾"
7'-6"
3"
2"
1'-0"
2'-0"
4'-5"
EXPANSION JOINT
EL. 987.91
8"
3'-2"
2'-6"
3'-3"
2'-3"
2-R501
R506
2-R509
2-R511
R510
2-R508
45-A542 @ 1'-2"
2-R512
2-R513
4-A542 @ 1'-0"
EL. 986.66
3-A541
2-A540
5-A535 @ 12" N.S.
5-A550 & A551 @ 12" F.S.
EL. 980.95
2-A 540
2-A508
20'-11¾"
3'-5"
6 GUARD RAIL ANCHOR BOLTS
39-A541 @ 1'-0"
2-A538
2-A539
21-A525 @ 1'-6" BOTH SIDES
2-A532
2-A531
17-A522 @ 1'-6" N.S.
25-A517 @ 12" F.S.
2-A530
12-A523 @ 1'-0" N.S.
18-A524 @ 12" F.S.
4-A521 @ 1'-6" F.S.
4-A518 @ 1'-0" N.S.
4-A521 @ 1'-6" N.S.
18-AG16 @ 12" F.S. - LAP A802, A702, A703
4-A514 @ 1'-6" N.S.
6-AG15 @ 12" F.S.
2-A520
2-A543
6-A703 @ 12" F.S.
2-A543 @ 1'-6" BOTH FACES
14-A528 @ 1'-6" BOTH SIDES
18-AG02 @ 12" F.S.
12-A534 @ 1'G N.S.
2-A527
2-A544
4'-0"
4'-0"
8'-0"
A542
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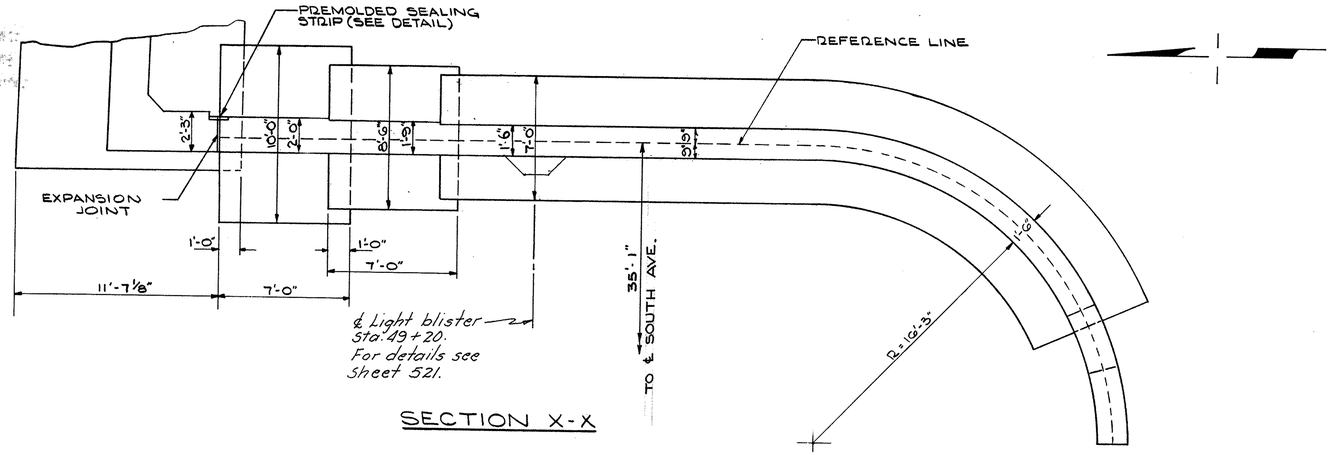
A586

MICROFILMED
JUL 11 1979
REPRODUCTION

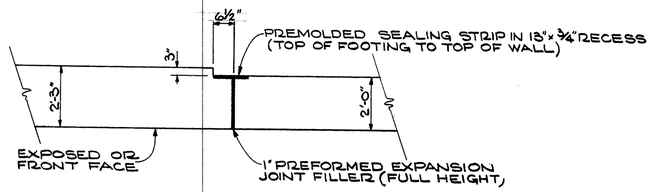
FED. RD.	STATE	PROJECT	
2	OHIO		

537/656

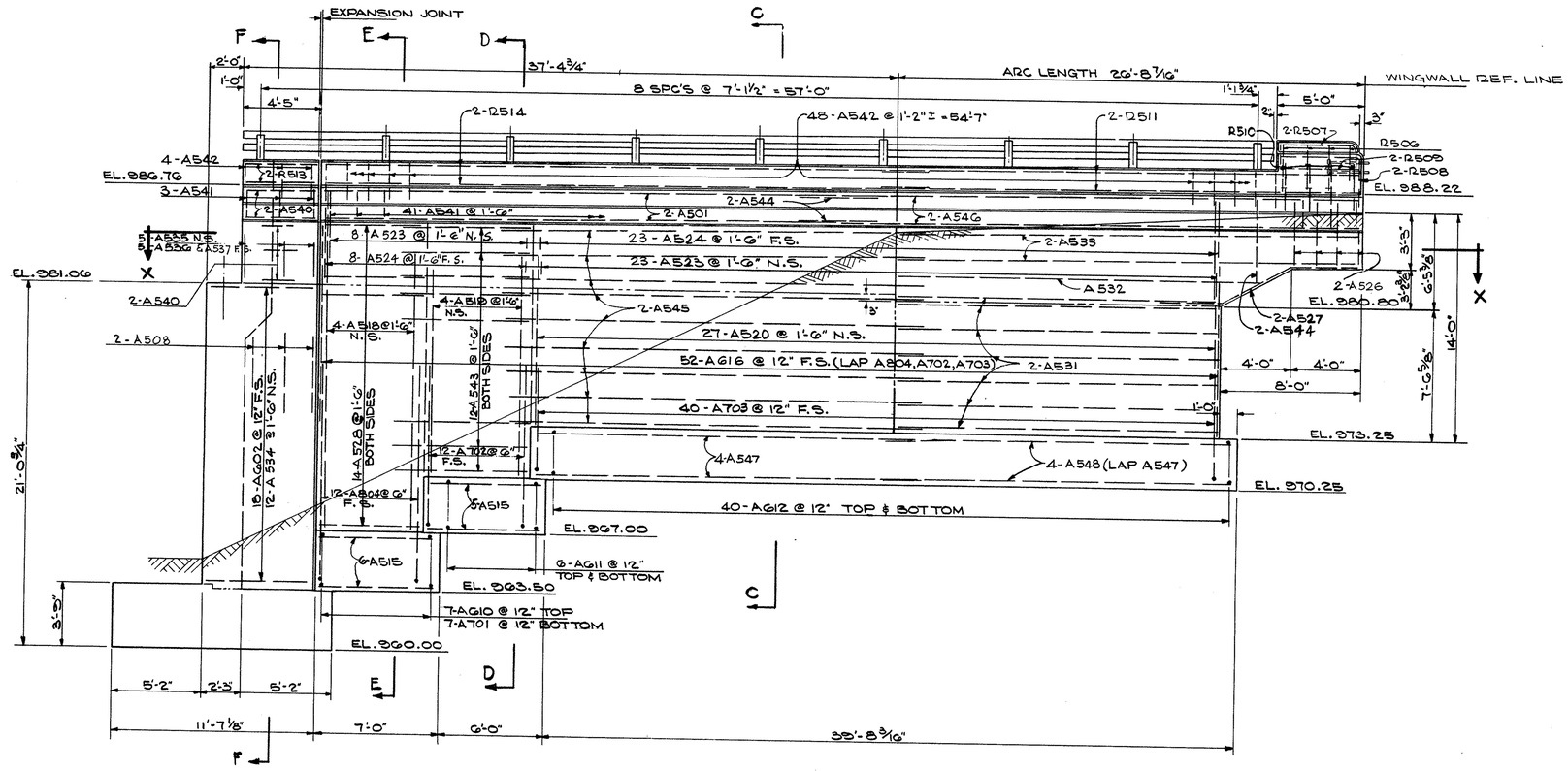
MAH - 680 - 6.98



SECTION X-X

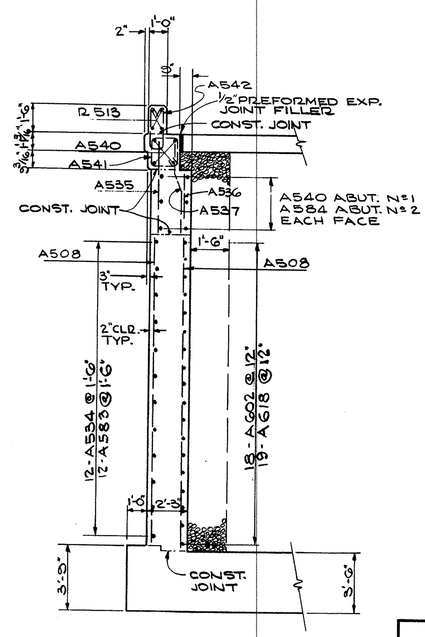


EXPANSION JOINT DETAIL



ELEVATION SOUTHWEST WINGWALL

FOR SECTIONS C-C; D-D; & E-E - SEE DWG. NO 5/12



SECTION F-F

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

SOUTHWEST WINGWALL ABUT N° 1
BRIDGE N° MAH. 680-0705
UNDER SOUTH AVE
MAHONING CO. I-680
STA. 757+81.28

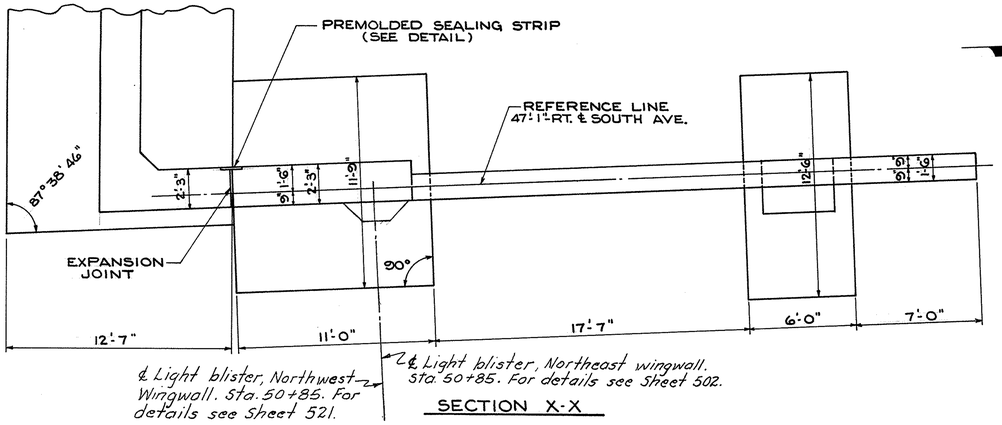
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GCP	J.P		RAH	W.K.D	5-4-70	

MICROFILMED
JUL 11 1979
REPRODUCTION

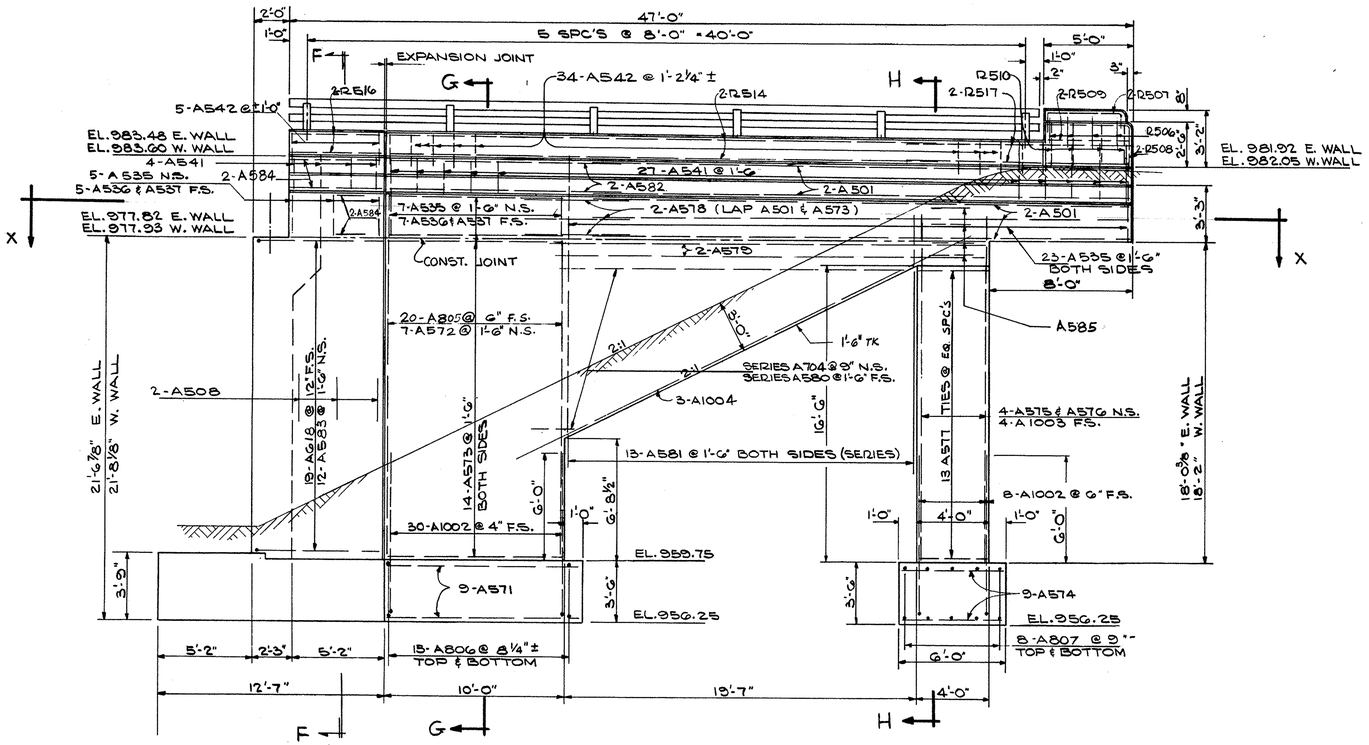
FED. RD.	STATE	PROJECT	
2	OHIO		

538
656

MAH - 680 - 6.98

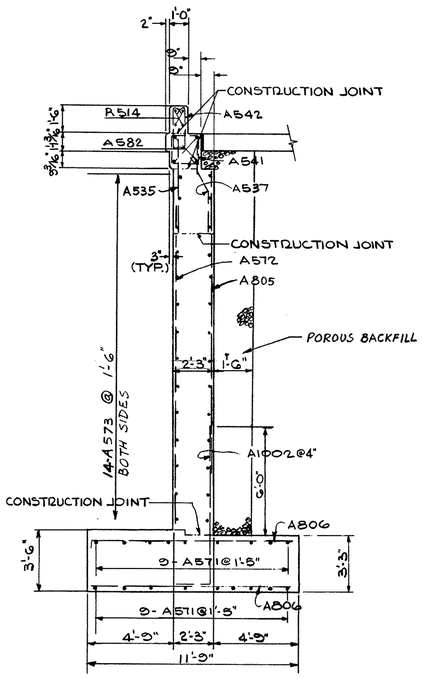


SECTION X-X

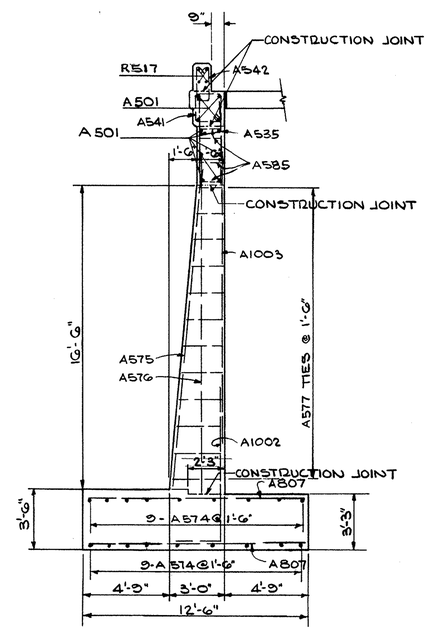


SEE SHT. Nº 6/12

ELEVATION - WINGWALLS FOR ABUT. Nº 2



SECTION G G



SECTION H H

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES	7/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

WINGWALLS FOR ABUT Nº 2
BRIDGE Nº MAH. 680-0705
UNDER SOUTH AVE
MAHONING CO. I-680
STA. 757+81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GCP	JP		RAH	WKD	5-4-70	

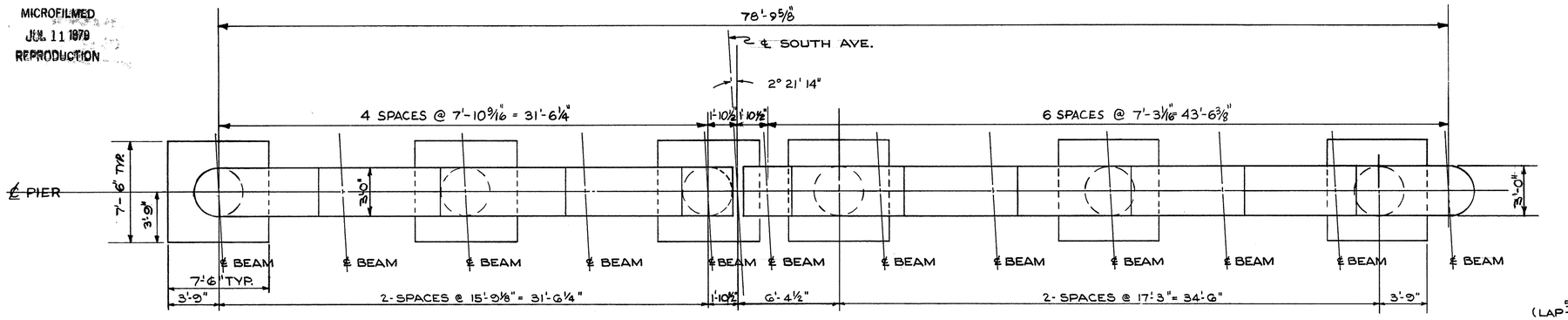
MAY

MICROFILMED
JUL 11 1979
REPRODUCTION

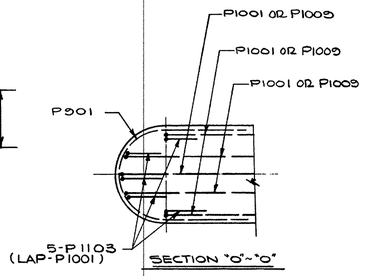
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

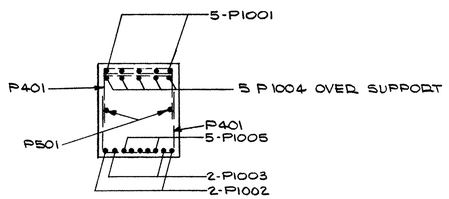
539
656



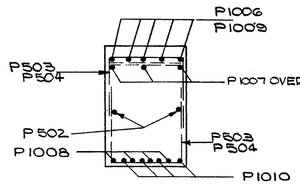
PLAN



SECTION "O"-"O"



SECTION A-A



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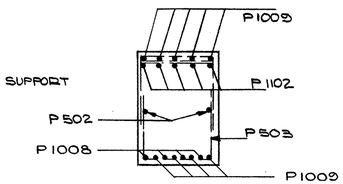
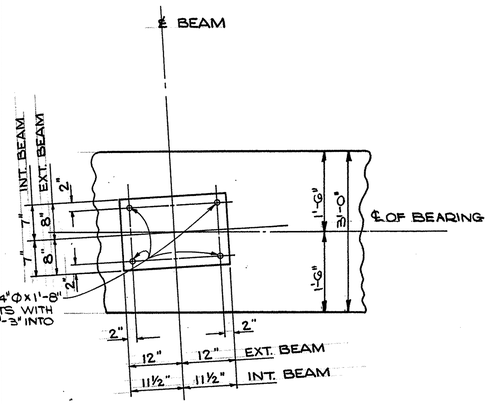
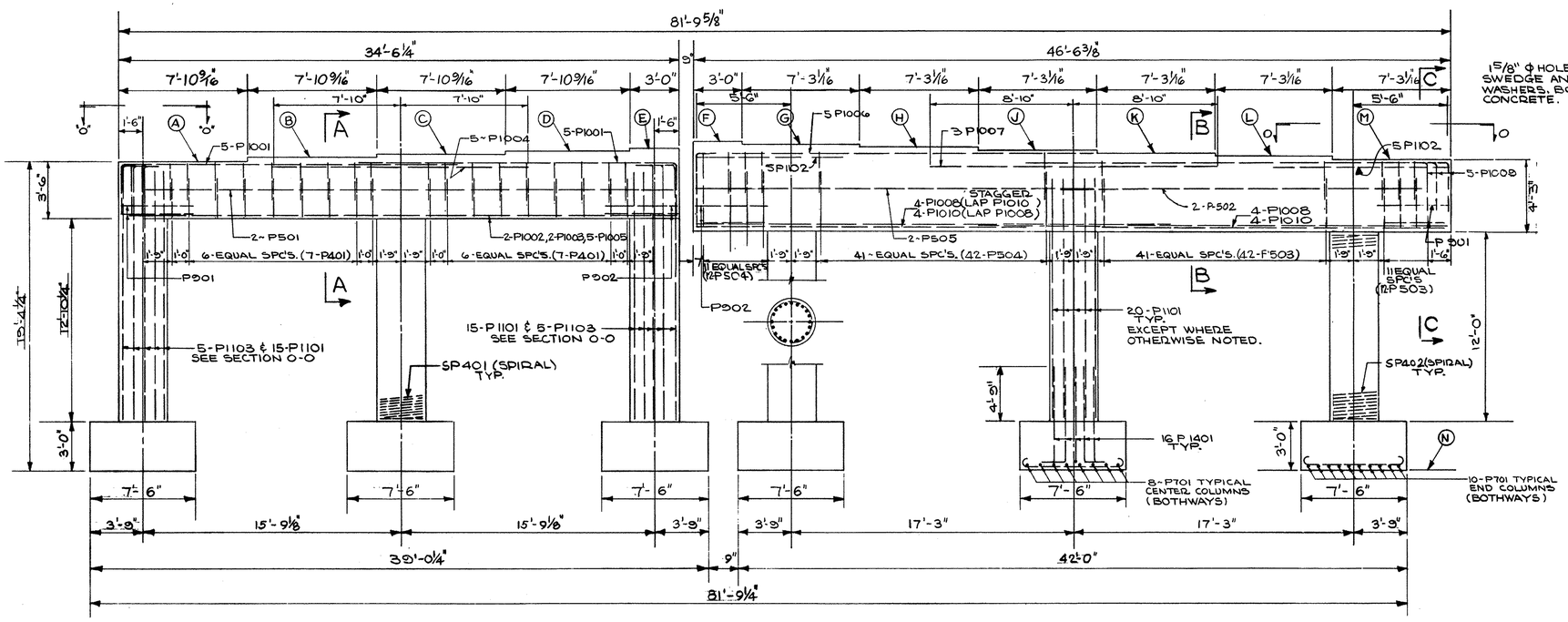


SECTION C-C



TYPICAL ANCHOR BOLT LAYOUT FOR PIER

NOTE:
SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.



ELEVATION

	A	B	C	D	E	F	G	H	J	K	L	M	N
PIER	979.17	979.41	979.54	979.67	979.80	979.80	979.70	979.59	979.48	979.36	979.27	979.07	952.82

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

8/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

PIER DETAILS
BRIDGE Nº MAH. 680-0705

UNDER SOUTH AVE.
MAHONING CO. I-680
STA. 757+ 81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.D.P.		R.A.H.	W.K.D.	5-4-70	

MAY

MICROFILMED
JUL 11 1979
REPRODUCTION

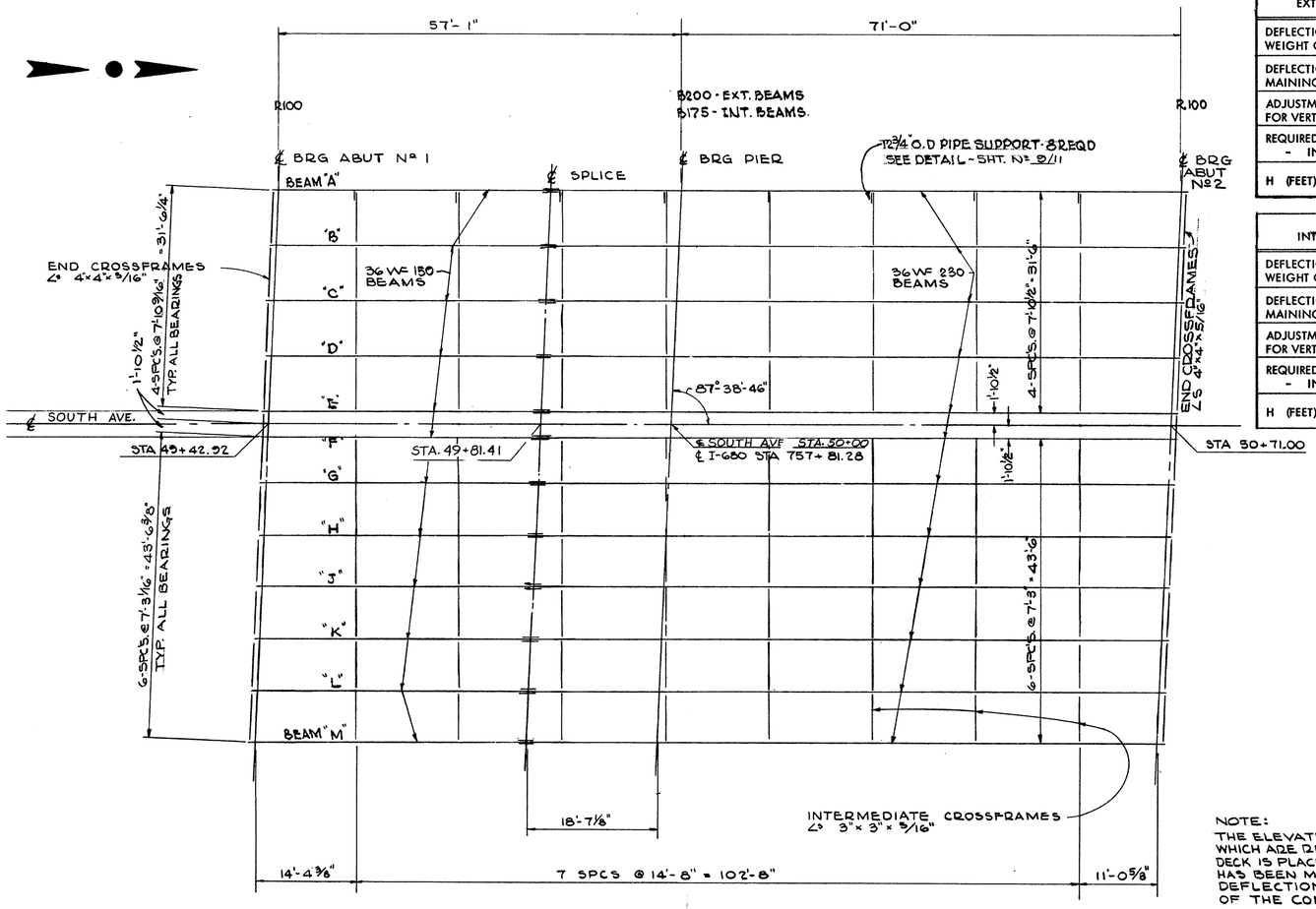
FED. RD.	STATE	PROJECT	
2	OIHO		

MAH-680-6.98

540
656

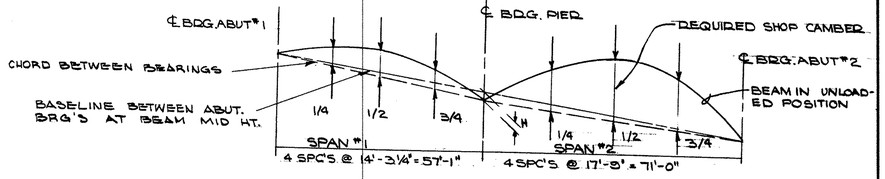
EXTERIOR BEAMS	SPAN #1			PIER	SPAN #2		
	1/4	1/2	3/4		1/4	1/2	3/4
DEFLECTION DUE TO WEIGHT OF STEEL	0.02	0.01	0.00		0.09	0.16	0.13
DEFLECTION DUE TO REMAINING DEAD LOAD	0.23	0.22	0.02		0.44	0.85	0.70
ADJUSTMENT REQUIRED FOR VERTICAL CURVES	0.00	0.00	0.00		-0.08	-0.14	-0.12
REQUIRED SHOP CAMBER - INCHES -	0.25	0.23	0.02		0.45	0.87	0.71
H (FEET)				-0.01			

INTERIOR BEAMS	SPAN #1			PIER	SPAN #2		
	1/4	1/2	3/4		1/4	1/2	3/4
DEFLECTION DUE TO WEIGHT OF STEEL	0.02	0.01	0.00		0.09	0.16	0.13
DEFLECTION DUE TO REMAINING DEAD LOAD	0.17	0.18	0.04		0.29	0.54	0.43
ADJUSTMENT REQUIRED FOR VERTICAL CURVES	0.00	0.00	0.00		-0.08	-0.14	-0.12
REQUIRED SHOP CAMBER - INCHES -	0.19	0.19	0.04		0.30	0.56	0.44
H (FEET)				-0.01			

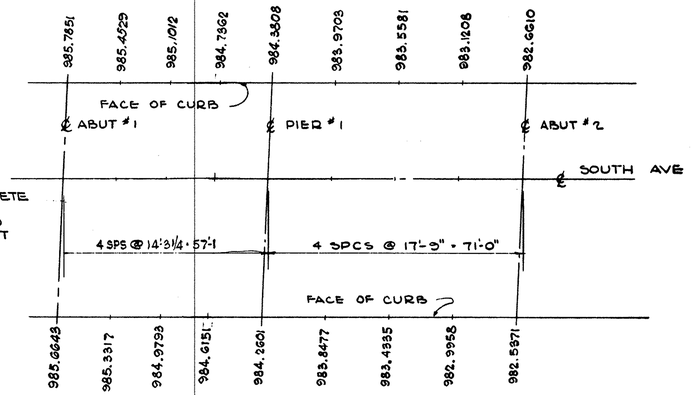


FRAMING PLAN

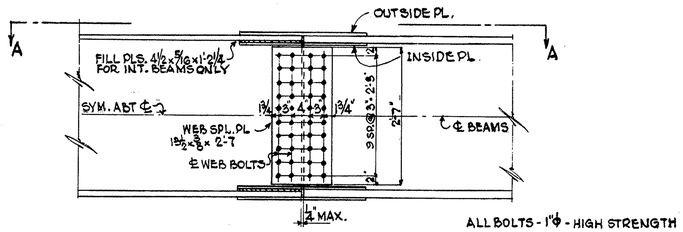
NOTE:
THE ELEVATIONS SHOWN ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE DECK IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTION CAUSED BY THE WEIGHT OF THE CONCRETE.



CAMBER DIAGRAM



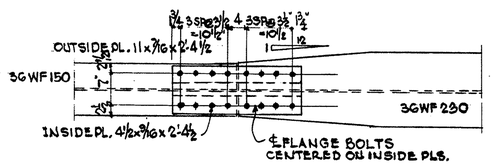
DECK ELEVATIONS



ALL BOLTS - 1"ϕ - HIGH STRENGTH

BEAM SPLICE DETAIL

WEB SPLICE



SECTION A-A

TOP & BOTT. FLGS. ALIKE

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE Nº MAH. 680-0705

UNDER SOUTH AVE.
MAHONING CO. I-680
STA. 757+81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Q.A.H.	J. D. P.		Q.A.H.	W.K.P.	5-4-70	

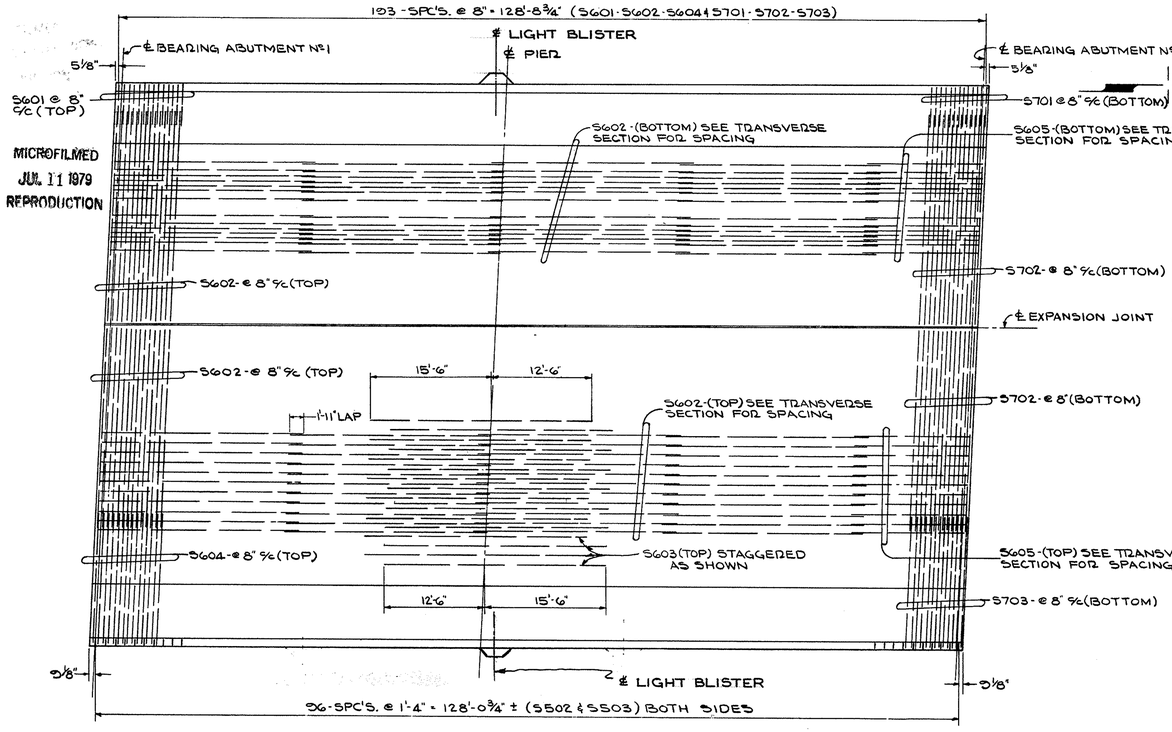
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

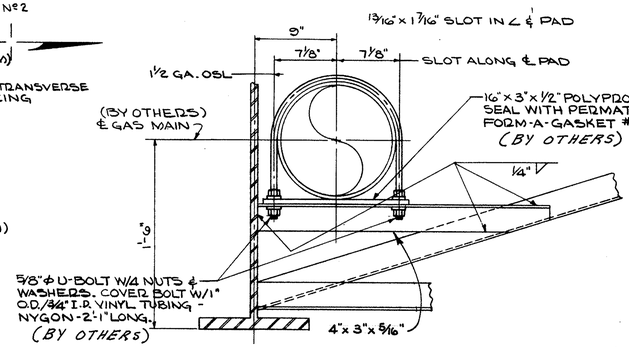
541
656

MAH. 680 - 6.38

MICROFILMED
JUL 11 1979
REPRODUCTION

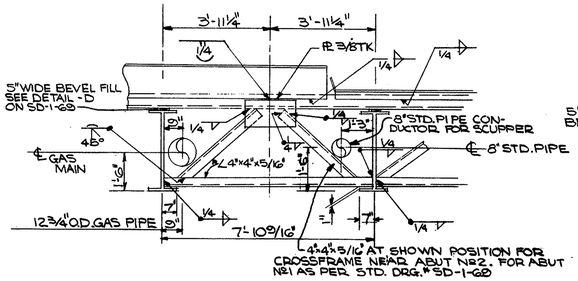


SLAB REINFORCING PLAN

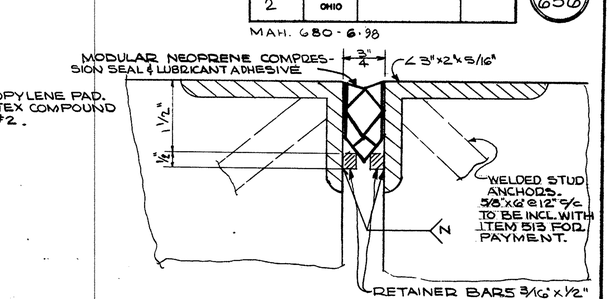


GAS PIPE SUPPORT DETAIL

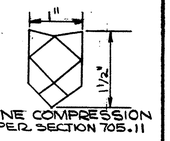
SCALE: 1½" = 1'-0"

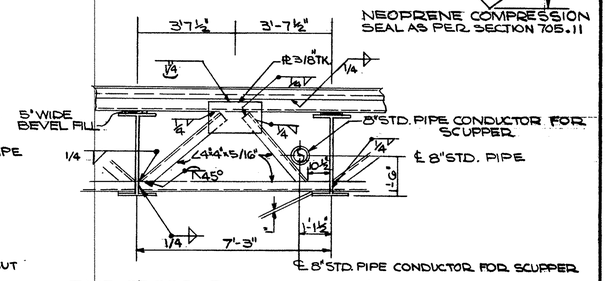


END CROSSFRAME DETAIL FOR BAY WITH GAS PIPE



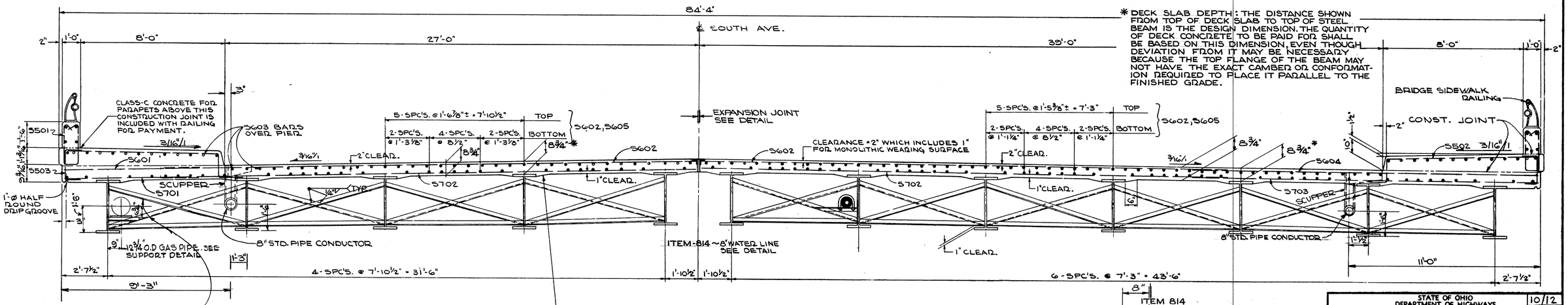
EXPANSION JOINT DETAIL @ 60° F.





END CROSSFRAME DETAIL FOR BAY WITH 8" STD. PIPE CONDUCTOR FOR SCUPPER AT ABUT Nº2 ONLY

NOTE: ALL OTHER BAYS AS PER SD-1-68



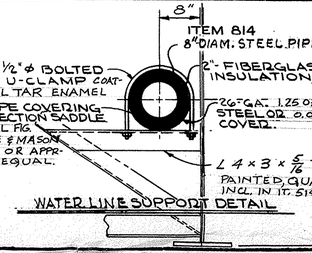
INTERMEDIATE CROSSFRAME - ANGLES 3 x 3 x 5/16. WELD BOTH SIDES OF VERTICAL LEG AND TOP SIDE OF HORIZONTAL LEG TO BEAM WITH ¼" CONTINUOUS FILLET WELD.

A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

TRANSVERSE SECTION
(Looking Forward)

* DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

NOTE:
See Special End Cross Frame
At Water Line on Sheet 520



WATER LINE SUPPORT DETAIL

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

10/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

SLAB REINFORCING PLAN
BRIDGE Nº MAH. 680-0705

UNDER SOUTH AVE.
MAHONING CO. I-680
STA. 757+81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.H.	J.S.P.		R.A.H.	W.K.P.	5-4-70	

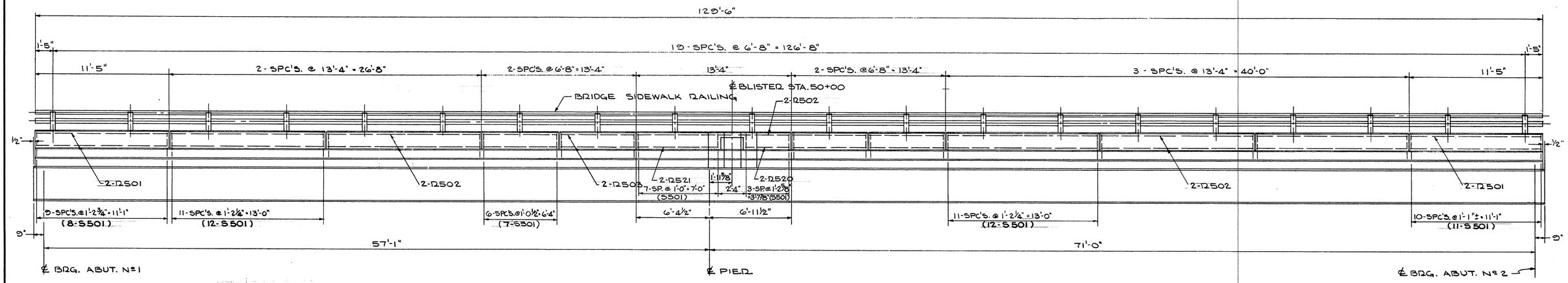
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

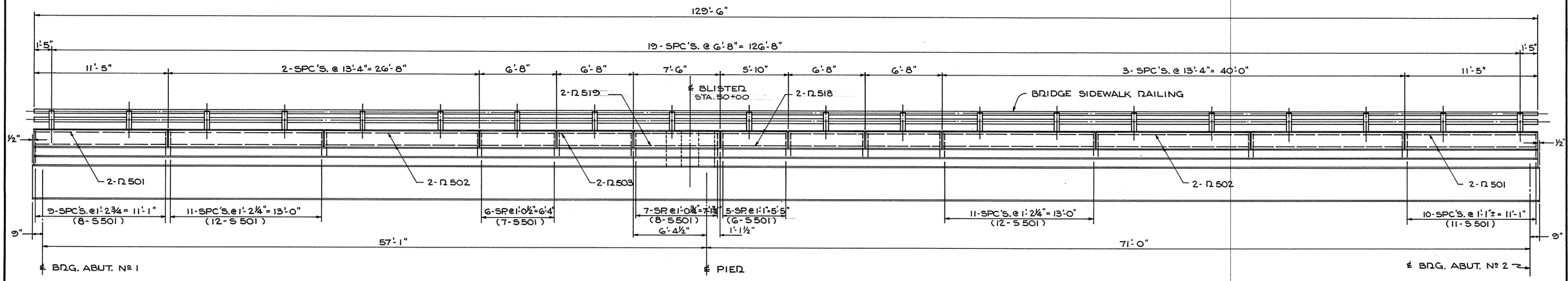
FED. RD.	STATE	PROJECT	
2	OHIO		

542
656

MAH. 680 - 6.98



RAILING DETAIL, RIGHT SIDE ~ SOUTH AVE.



RAILING DETAIL, LEFT SIDE ~ SOUTH AVE.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

11/12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING DETAILS

BRIDGE Nº MAH-680-0705
UNDER SOUTH AVE.
MAHONING COUNTY I-680
STA. 757+81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.D.P.	J.D.P.		R.A.H.	W.K.D.	5-4-70	

MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680-6.98

543
656

MICROFILMED
JUL 11 1979
REPRODUCTION

ABUTMENTS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
A501	212	30'-0"	6,633	ST
A502	60	19'-6"	1,220	ST
A503	112	7'-0"	818	ST
A504	56	17'-0"	993	ST
A505	56	17'-8"	1,033	ST
A506	60	7'-6"	469	ST
A507	48	3'-0"	150	ST
A508	36	17'-2"	644	ST
A514	4	9'-5"	39	ST
A515	58	6'-6"	393	ST
A516	8	24'-11"	208	BT
A517	25	6'-11"	180	BT
A518	8	15'-8"	131	ST
A519	8	12'-6"	104	ST
A520	27	9'-2"	258	ST
A521	4	6'-8"	28	ST
A522	17	4'-5"	78	ST
A523	43	5'-7"	250	ST
A524	49	4'-7"	234	BT
A525	42	5'-9"	252	ST
A526	16	2'-11"	49	ST
A527	4	11'-0"	46	BT
A528	56	5'-8"	331	ST
A529	4	14'-0"	58	ST
A530	12	21'-6"	269	BT
A531	20	18'-6"	386	BT
A532	4	20'-6"	86	BT
A533	8	26'-6"	221	BT
A534	24	6'-1"	152	ST
A535	126	3'-11"	515	ST
A536	20	3'-3"	68	ST
A537	34	4'-5"	157	BT
A538	4	30'-0"	125	BT
A539	4	28'-6"	119	ST
A540	20	3'-10"	80	ST
A541	148	6'-5"	991	BT
A542	179	6'-0"	1,120	BT
A543	56	7'-7"	443	ST
A544	8	4'-6"	38	ST
A545	18	27'-5"	515	ST
A546	4	30'-0"	125	BT
A547	8	22'-0"	184	ST
A548	8	20'-7"	172	BT
A 571	36	10'-6"	394	ST
A572	14	19'-7"	286	ST
A573	56	9'-8"	565	ST
A574	36	5'-6"	207	ST
A575	8	17'-6"	146	ST
A576	8	19'-9"	165	ST
2 Sets of 13 Series A577	26	Varies from 10'-3" to 13'-3" at 3" Inc.	319	BT
A578	12	5'-9"	72	ST
A579	8	26'-3"	219	ST
2 Sets of 7 Series A580	14	Varies from 3'-9" to 21'-9" at 3'-0" Inc.	186	ST
4 Sets of 13 Series A581	52	Varies from 2'-9" to 11'-9" at 0'-9" Inc.	393	ST
A582	8	13'-0"	108	ST
A583	24	7'-1"	177	ST
A584	16	5'-1"	85	ST
A585	8	10'-3"	86	BT
A586	8	11'-0"	92	BT
A601	164	15'-11"	3,922	BT
A602	36	6'-11"	374	BT
A603	72	6'-9"	730	ST
A610	14	7'-6"	158	ST
A611	24	6'-0"	216	ST
A612	92	5'-3"	725	ST
A613	12	4'-6"	81	ST
A614	48	4'-0"	288	ST
A615	6	10'-1"	91	BT
A616	70	9'-8"	1,017	ST
A618	38	7'-10"	447	BT
A619	164	6'-4"	1,559	BT
A701	14	7'-6"	215	ST
A702	24	6'-8"	327	BT
A703	46	9'-11"	933	BT
2 Sets of 13 Series A704	26	Varies from 3'-9" to 21'-9" at 1'-6" Inc.	678	ST
A801	548	9'-1"	13,285	ST
A802	92	17'-3"	4,237	ST
A803	92	17'-10"	4,377	ST
A804	24	13'-4"	854	BT
A805	40	21'-3"	2,270	ST
A806	80	11'-3"	1,802	ST
A807	32	12'-0"	1,025	ST
A1001	366	8'-2"	12,865	BT
A1002	76	10'-6"	3,434	BT
A1003	8	18'-0"	620	ST
A1004	6	28'-0"	723	ST

ABUTMENTS TOTALS 81,118

PIERS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
P401	36	6'-11"	166	BT
P501	2	32'-10"	68	ST
P502	2	22'-7"	47	ST
P503	108	8'-1"	910	BT
P504	108	8'-11"	1,005	BT
P505	2	23'-11"	50	ST
P701	104	8'-8"	1,843	BT
P901	4	10'-3"	139	BT
P902	4	8'-2"	111	BT
P1001	10	21'-10"	943	BT
P1002	2	31'-6"	271	ST
P1003	2	32'-9"	283	ST
P1004	5	15'-8"	337	ST
P1005	5	34'-0"	732	ST
P1006	5	29'-0"	624	BT
P1007	3	17'-8"	228	ST
P1008	8	21'-0"	723	ST
P1009	5	28'-9"	619	BT
P1010	8	28'-2"	970	ST
P1101	110	15'-9"	9,205	ST
P1102	10	11'-0"	584	ST
P1103	10	16'-6"	877	BT
P1401	96	9'-11"	7,285	BT
PIER TOTALS			28,020	

SUPERSTRUCTURE

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
S501	246	5'-7"	1,432	BT.
S502	194	11'-0"	2,226	BT.
S503	194	3'-3"	658	BT.
S601	194	7'-7"	2,210	ST.
S602	924	30'-0"	41,635	ST.
S603	56	28'-0"	2,355	ST.
S604	194	19'-7"	5,706	ST.
S605	134	16'-11"	3,405	ST.
S701	194	7'-11"	3,141	ST.
S702	388	30'-0"	23,792	ST.
S703	194	19'-11"	7,899	ST.
TOTAL			94,459	
LIGHT BLISTER BARS, TOTAL			475	
SUPERSTRUCTURE TOTALS			94,934	

RAILING - TO BE INCLUDED IN ITEM 517 FOR PAYMENT

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
R501	16	11'-1"		ST
R502	42	13'-0"		ST
R503	32	6'-4"		ST
R506	16	3'-3"		BT
R507	8	6'-7"		BT
R508	8	8'-3"		BT
R509	8	4'-8"		ST
R510	16	7'-7"		BT
R511	8	30'-0"		BT
R512	4	27'-5"		ST
R513	8	4'-1"		ST
R514	12	30'-0"		ST
R516	8	5'-1"		ST
R517	8	13'-3"		ST
R518	4	5'-6"		ST
R519	4	7'-2"		ST
R520	2	8'-8"		ST
R521	2	7'-0"		ST

SPIRAL REINFORCING LIST

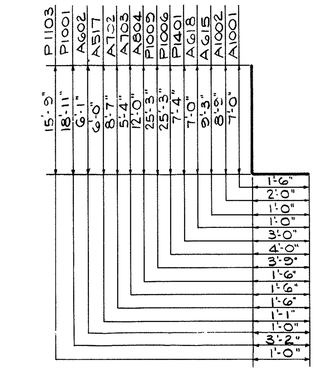
MARK	NUMBER	CORE DIA.	LENGTH	PITCH	NO. TURNS	WEIGHT
SP401	3	2'-8"	12'-10-1/4"	4-1/2"	37	740
SP402	3	2'-8"	12'-0"	4-1/2"	35	694
				SPIRAL TOTAL		1,434

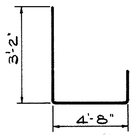
REPLACEMENT BARS

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
RE401	1	6'-3"		BT
RE501	2	6'-7"		ST
RE601	4	6'-11"		ST
RE701	2	7'-3"		ST
RE801	2	7'-6"		ST
RE901	1	7'-10"		ST
RE1001	1	8'-2"		ST
RE1101	1	8'-7"		ST
RE1401	1	2'-6"		ST

TOTALS

ABUTMENTS	81,118
PIERS	29,454
SUPERSTRUCTURES	94,934
GRAND TOTAL	205,316





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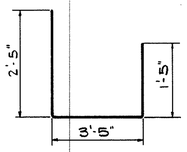

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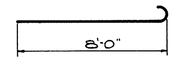

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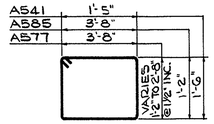

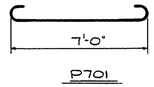

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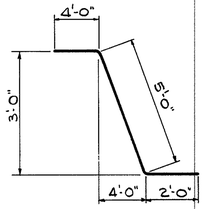

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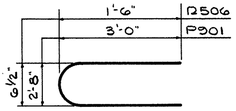

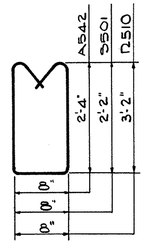

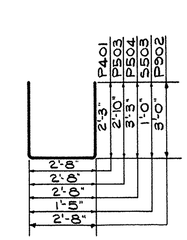

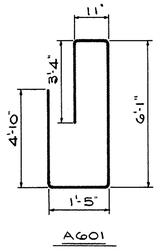

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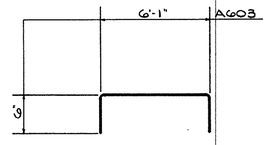

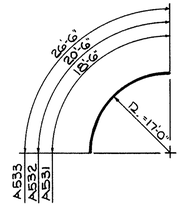

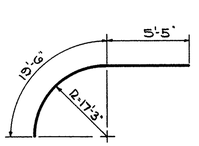

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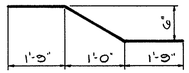

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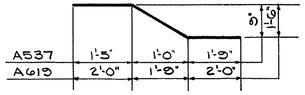

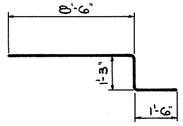

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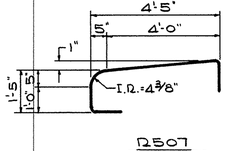

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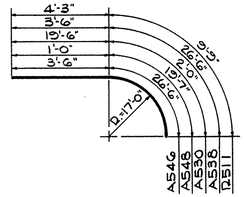




RE401

NOTE:

THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER.

1-1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. FOUR 1" x 1" x 1/8" STEEL ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LBS. PER LIN. FT. OF SPACER, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF LBS. OF THESE SPACERS, BASED ON 0.80 LBS. PER LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A701 IS A NO. 7 SIZE BAR AND A1000 IS A NO. 10 SIZE.

ALL BAR DIMENSIONS ARE GIVEN OUT TO OUT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

12 / 12

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE

BRIDGE Nº MAH.680-0705
UNDER SOUTH AVE.
MAHONING CO. I-680
STA. 757+81.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.C.P.	J.D.P.		D.A.H.	W.K.D.	5-4-70	

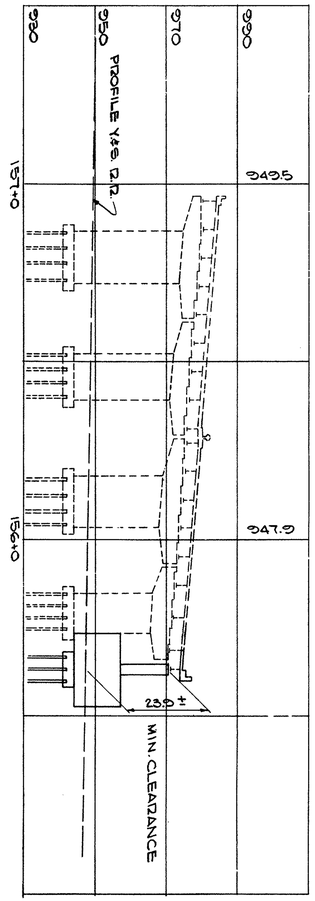
MAY 25 1971

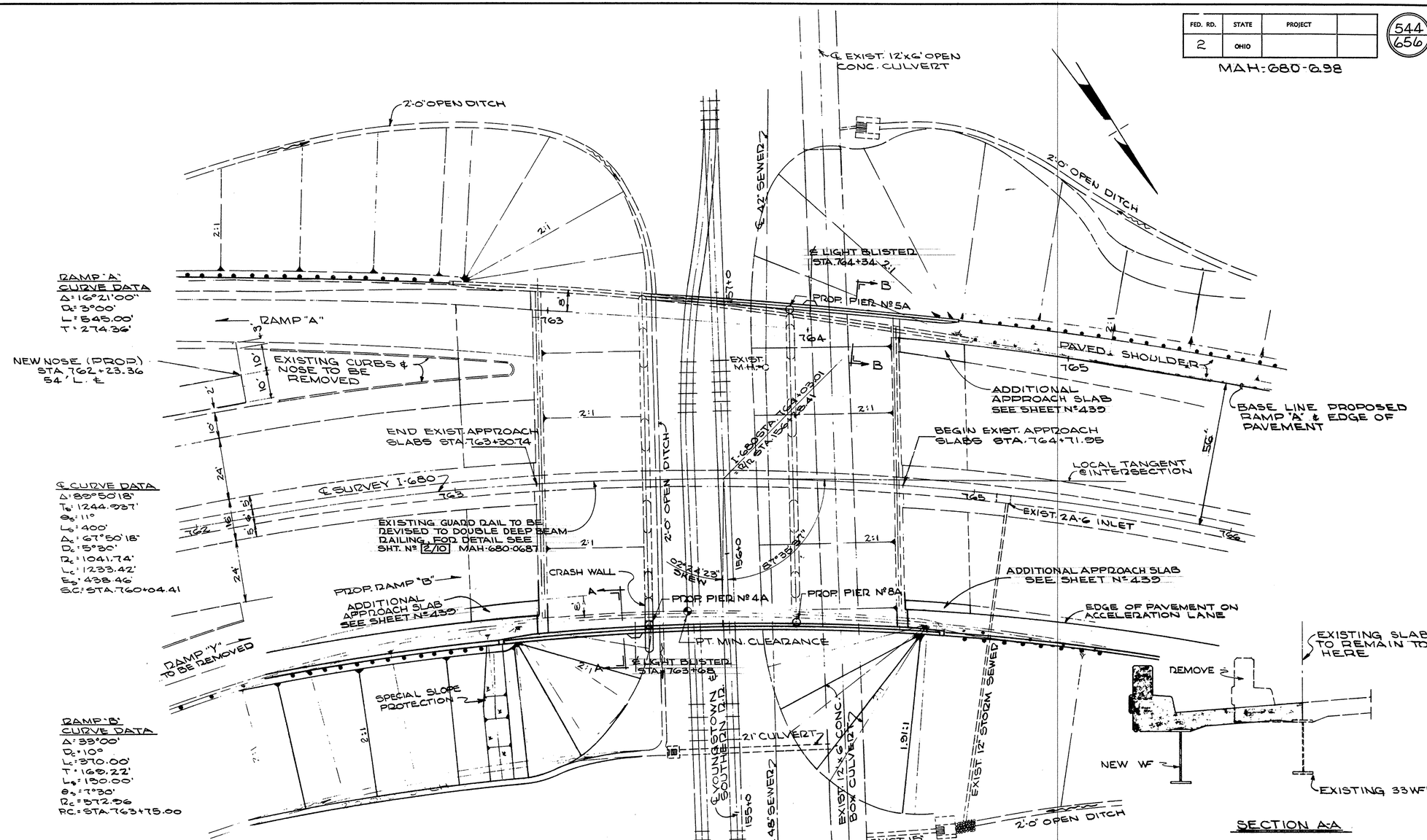
MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

544/656

MAH:680-0.98





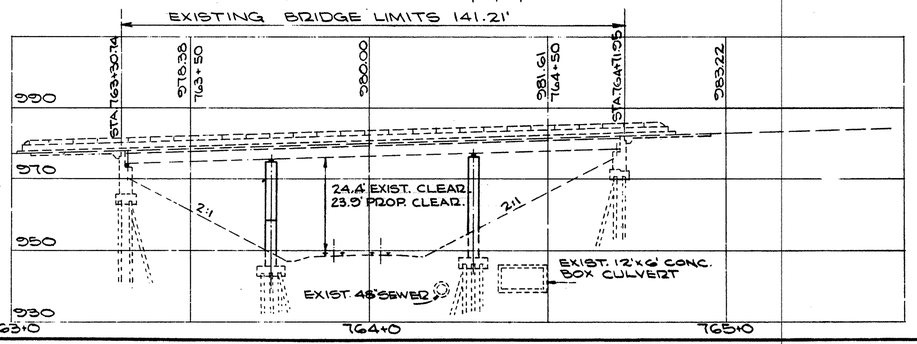
SECTION A-A

SECTION B-B SIMILAR EXCEPT FOR SLOPE OF ROADWAY.

ALL PILES TO BE ~12 BP53
THE AVERAGE ESTIMATED PAY LENGTH IS AS FOLLOWS.
1- ABUTMENTS - 40'-0"
2- PIER Nº 4A - 20'-0"
3- PIERS Nº 5A Nº 8A - 15'-0"

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES.
SPANS: 40'-0" 56'-6" 40'-0" ℄/℄ PIERS & ABUT.
SKEW: 02°24'23" R.R. SUBSTRUCTURES PARALLEL TO R.R.
ROADWAY: VARIES
LOAD FREQUENCY: CF 2000 ADEQUATE FOR A.A.S.H.O. ALTERNATE LOADING.
WEARING SURFACE: 1" MONOLITHIC
APPROACH SLABS: 25' LONG
ALIGNMENT: VARIES
SUPERELEVATION: 0.083%
SLOPE PROTECTION: 601 AGGREGATE
R.R. TRAFFIC COUNT: 2 FRT. TRAINS/DAY & 4 SWITCH/DAY



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1/3

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

SITE PLAN

BRIDGE Nº MAH-680-0693
STRUCTURE OVER YOUNGSTOWN & SOUTHERN RR.
YOUNGSTOWN MAHONING COUNTY
STA. 763+30.76 TO STA. 764+80.26

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	WM		JM	WKD	5-12-70	

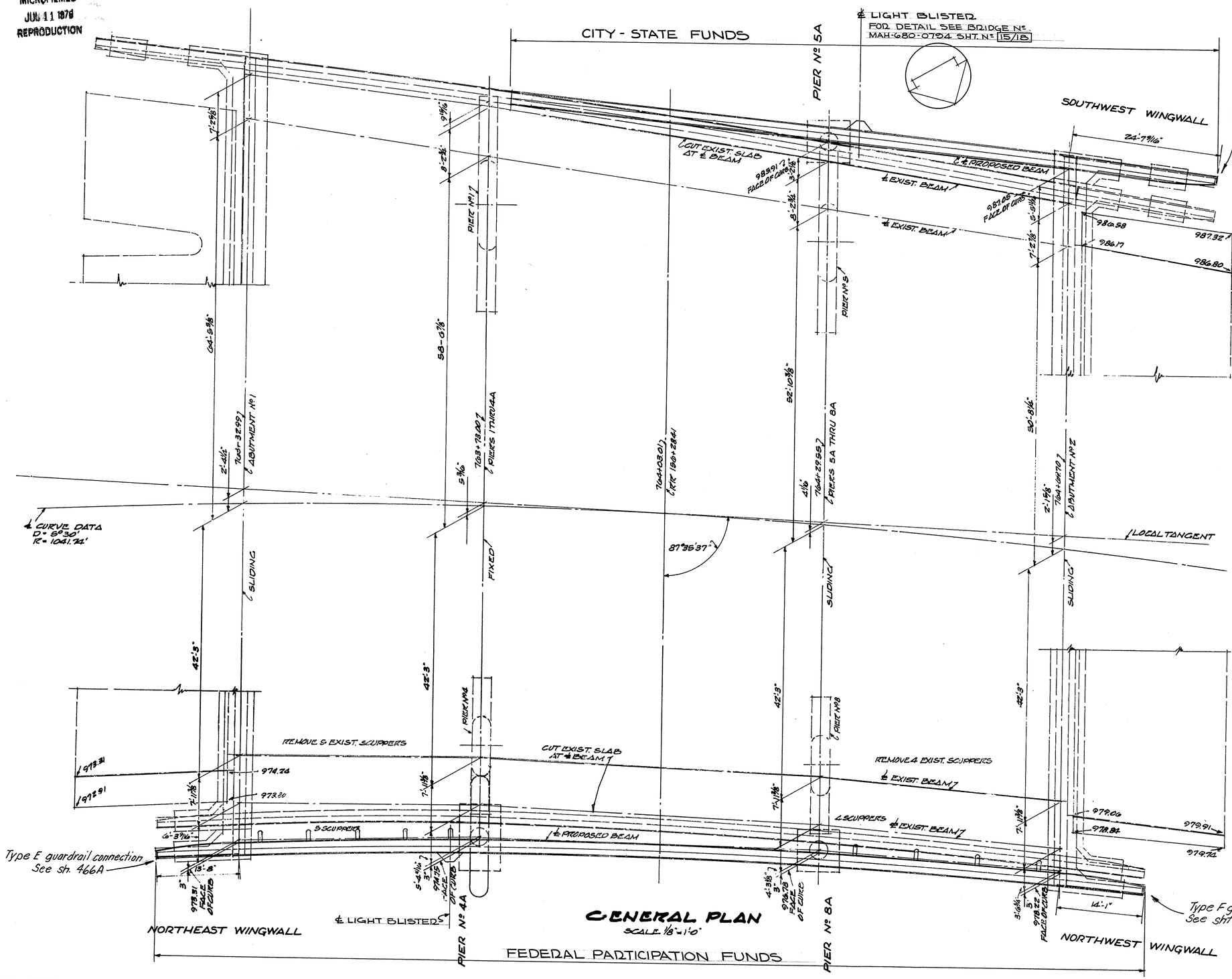
MAY 25 1971

MICROFILMED
JUL 11 1978
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH 680 - 6.98

545
656



GENERAL PLAN
SCALE 1/8"=1'-0"

FEDERAL PARTICIPATION FUNDS

GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1969, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING	HS20-44 "AND THE INTERSTATE ALTERNATE LOADING"
CONCRETE CLASS C	UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE
STRUCTURAL STEEL	ASTM A36 - UNIT STRESS 20,000 P.S.I.
REINFORCING STEEL	ASTM A615, A616 OR A617 - UNIT STRESS 20,000 P.S.I. SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A306 OR A499, A82 or A615

ALL EXISTING AND NEW STEEL WILL BE GIVEN ONE FIELD PRIME COAT AND ONE FIELD FINISH COAT OF PAINT.

CONSTRUCTION DRAWINGS SHOWING DETAILS OF THE METHOD PROPOSED TO CONSTRUCT THE PIERS WILL BE SUBMITTED FOR THE APPROVAL OF THE DIRECTOR OF HIGHWAYS AND THE RAILROAD COMPANY BEFORE CONSTRUCTION OF THE PIERS IS COMMENCED.

CONSTRUCTION CLEARANCE OF 21'-0" VERTICALLY ABOVE THE TOP OF THE RAILROAD RAILS AND 8'-0" HORIZONTALLY FROM THE CENTER OF TRACKS SHALL BE MAINTAINED AT ALL TIMES.

STANDARD DRAWING REFERENCES:
SD-1-69 - Dated 6-12-69

SUPPLEMENTAL SPEC.
808 Revised 1-1-71
836 Dated 1-1-71

CONCRETE ABOVE CURB IS INCLUDED IN ITEM 517 - RAILING, FOR PAYMENT

REINFORCING BARS IN THE RAILING ARE INCLUDED IN ITEM 517 - RAILING, FOR PAYMENT

ROAD AND RAILROAD TRAFFIC MUST NOT BE DISRUPTED DURING CONSTRUCTION.

FOR QUANTITY PARTICIPATION BREAKDOWN SEE SHEET 545A.

SUMMARY OF QUANTITIES
℗ HP12x53 piles formerly designated 12 BP53

Item	Total	Unit	Description	Super-structure	Abut-ments	Piers	General
517	141.21	Lin.ft.	Double Deep Beam Railing Electrical Equipment	141.21			
* 625							
808	61	Units	Chemical Admixture Type A, B or D	61			
202	Lump	Lump	Portions of existing structure removed.				Lump
601	131	S.Y.	Crushed aggregate slope protection.		131		
503	Lump	Lump	Cofferdams, cribs and sheeting.				Lump
503	165	C.Y.	Unclassified excavation including rock or shale.		101	64	
505	Lump	Lump	Test pile.				Lump
507	755	L.F.	Steel Piles, HP 12x53 ℗		440	315	
509	35,880	Lbs.	Reinforcing steel.	16,600	4,726	14,554	
510	92	Each	Dowel holes.		92		
511	19	C.Y.	Class C concrete, abutment footings.		19		
511	23	C.Y.	Class C concrete, pier footings.			23	
511	44	C.Y.	Class C concrete, abutments above footings.		44		
511	49	C.Y.	Class C concrete, piers above footings.			49	
511	61	C.Y.	Class C concrete, superstructure.	61			
513	35,665	Lbs.	Structural steel.	35,665			
514	Lump	Lump	Field painting of structural steel old and new.	Lump			
516	Lump	Lump	Structural expansion and contraction joints.	Lump			
516	Lump	Lump	Bearing devices.	Lump			
517	279	L.F.	Railing, aluminum railing removed & re-erected accord. to plan	232	47		
518	9	Each	Scuppers including supports	9			
518	Lump	Lump	Porous backfill.			Lump	

* - CARRIED TO SHEET 425 GENERAL LIGHTING SUMMARY.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

GENERAL PLAN

BRIDGE Nº MAH-680-0693

STRUCTURE OVER YOUNGSTOWN & SOUTHERN RR

YOUNGSTOWN MAHONING COUNTY

STA. 763+30.76 TO STA. 764+80.26

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5-12-70	

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

545A
656

MAH-680-6.98

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	CITY-STATE FUNDS	FEDERAL PARTICIPATION
202	LUMP	SUM	PORTIONS OF EXISTING STRUCTURE REMOVED	38%	62%
503	LUMP	SUM	COFFERDAMS, CRIBS AND SHEETING	33%	67%
503	165	CU. YD.	UNCLASSIFIED EXCAVATION INCLUDING		
			ROCK OR SHALE	54	111
505	LUMP	SUM	TEST PILE		100%
507	755	LIN. FT.	STEEL PILES HP12 x 53	275	480
509	35,880	LBS.	REINFORCING STEEL	13,000	22,880
510	92	EACH	DOWEL HOLES	36	56
511	19	CU. YD.	CLASS C CONCRETE, ABUTMENT FOOTINGS	8	11
511	23	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS	5	18
511	44	CU. YD.	CLASS C CONCRETE, ABUTMENTS ABOVE FOOTINGS	24	20
511	49	CU. YD.	CLASS C CONCRETE, PIERS ABOVE FOOTINGS	9	40
511	61	CU. YD.	CLASS C CONCRETE, SUPERSTRUCTURE	23	38
513	35,665	LBS.	STRUCTURAL STEEL	14,434	21,231
514	LUMP	SUM	FIELD PAINTING OF STRUCTURAL STEEL	40%	60%
			OLD AND NEW		
516	LUMP	SUM	STRUCTURAL EXPANSION AND CONTRACTION	36%	64%
			JOINTS		
516	LUMP	SUM	BEARING DEVICES	43%	57%
517	279	LIN. FT.	RAILING, ALUMINUM RAILING REMOVED AND		
			RE-ERECTED ACCORDING TO PLAN	117	162
517	141.21	LIN. FT.	DOUBLE DEEP BEAM RAILING		141.21
518	LUMP	SUM	POROUS BACKFILL	50%	50%
518	9	EACH	SCUPPERS INCLUDING SUPPORTS		9
601	131	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION	52	79
625			ELECTRICAL EQUIPMENT		
808	61	UNITS	CHEMICAL ADMIXTURE FOR CONCRETE		
			TYPE A, B OR D	23	38

May 25, 1971

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

ESTIMATED QUANTITIES
PARTICIPATION
BRIDGE NO. MAH-680-0693
OVER YOUNGSTOWN & SOUTHERN R.R.

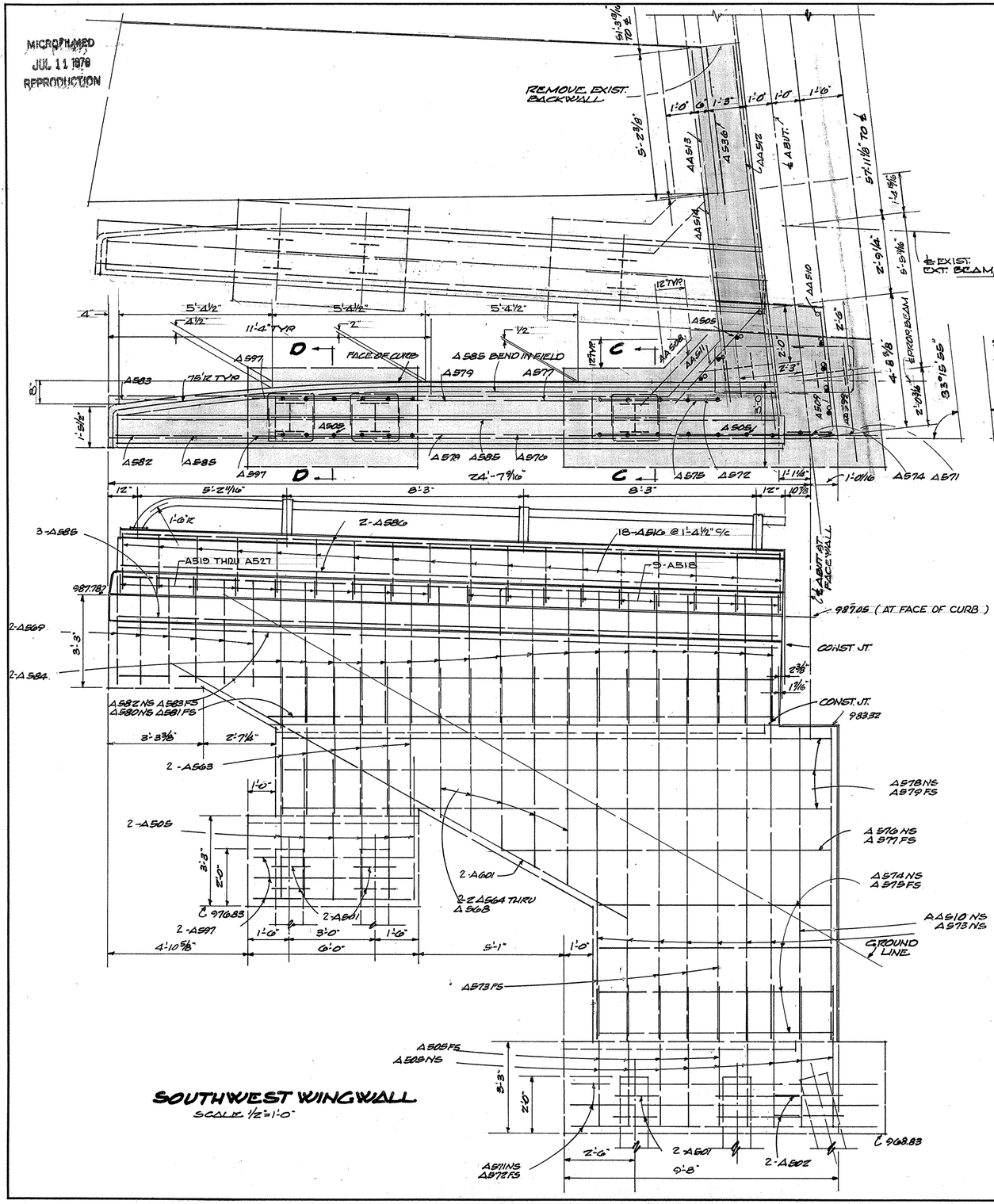
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CW	GFJ					

MICROFILMED
JUL 11 1979
REPRODUCTION

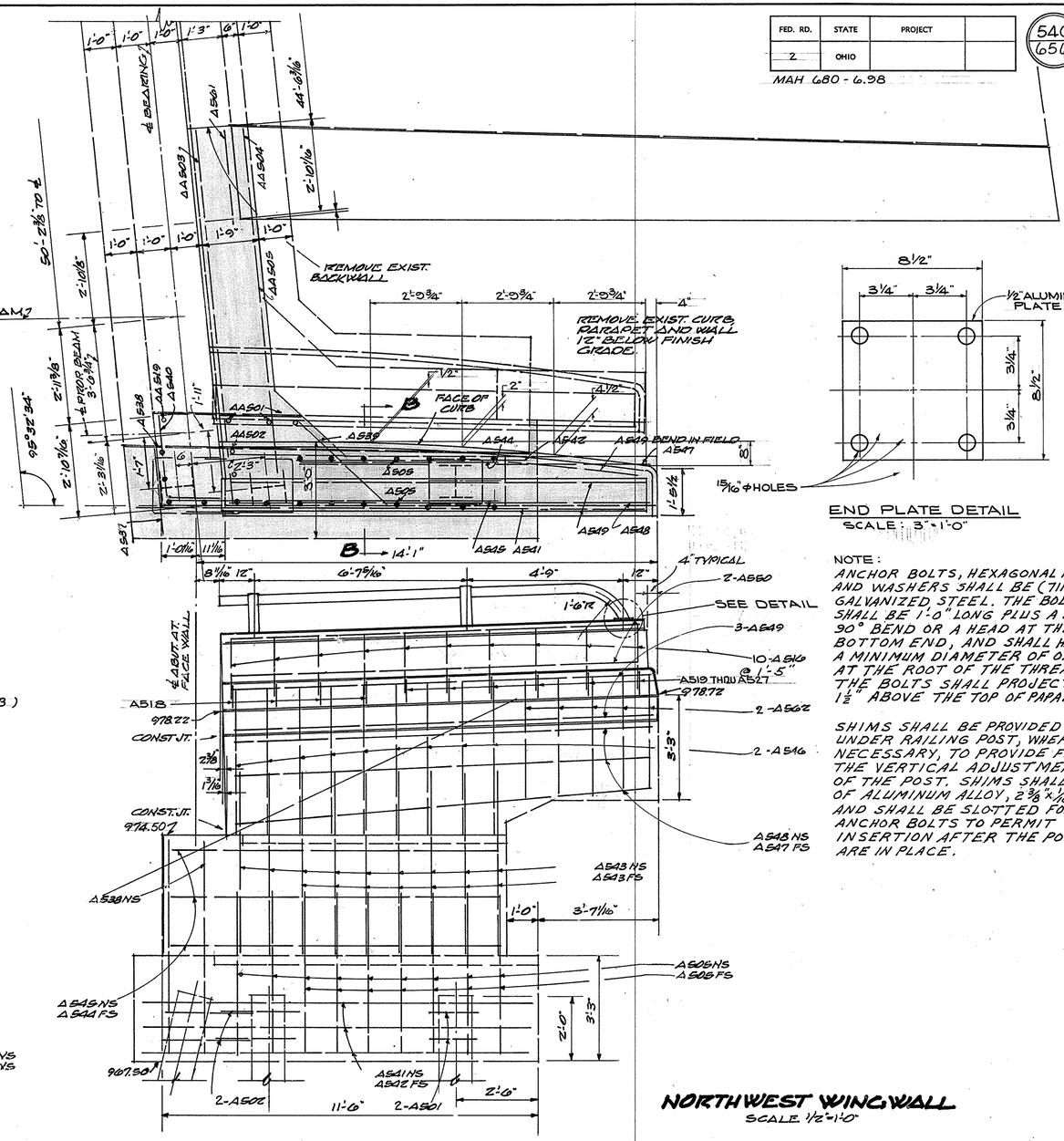
FED. RD.	STATE	PROJECT	
2	OHIO		

MAH 680 - 6.98

546
656



SOUTHWEST WINGWALL
SCALE 1/2"=1'-0"

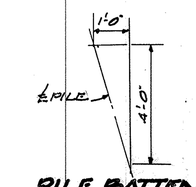


NORTHWEST WINGWALL
SCALE 1/2"=1'-0"

END PLATE DETAIL
SCALE: 3"=1'-0"

NOTE:
ANCHOR BOLTS, HEXAGONAL NUTS, AND WASHERS SHALL BE (711.02) GALVANIZED STEEL. THE BOLTS SHALL BE 1'-0" LONG PLUS A 2½" 90° BEND OR A HEAD AT THE BOTTOM END, AND SHALL HAVE A MINIMUM DIAMETER OF 0.62" AT THE ROOT OF THE THREAD. THE BOLTS SHALL PROJECT 1½" ABOVE THE TOP OF PARAPET.

SHIMS SHALL BE PROVIDED UNDER RAILING POST, WHERE NECESSARY, TO PROVIDE FOR THE VERTICAL ADJUSTMENT OF THE POST. SHIMS SHALL BE OF ALUMINUM ALLOY, 2⅜"x1/16"x8", AND SHALL BE SLOTTED FOR ANCHOR BOLTS TO PERMIT INSERTION AFTER THE POST ARE IN PLACE.



PILE BATTER

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3 / 9

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

WEST WINGWALL DETAILS

BRIDGE Nº MAH-680-0693
STRUCTURE OVER YOUNGSTOWN & SOUTHERN RR.
YOUNGSTOWN MAHONING COUNTY
STA. 763+30.76 TO STA. 764+80.26

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	

MAY 25 1971

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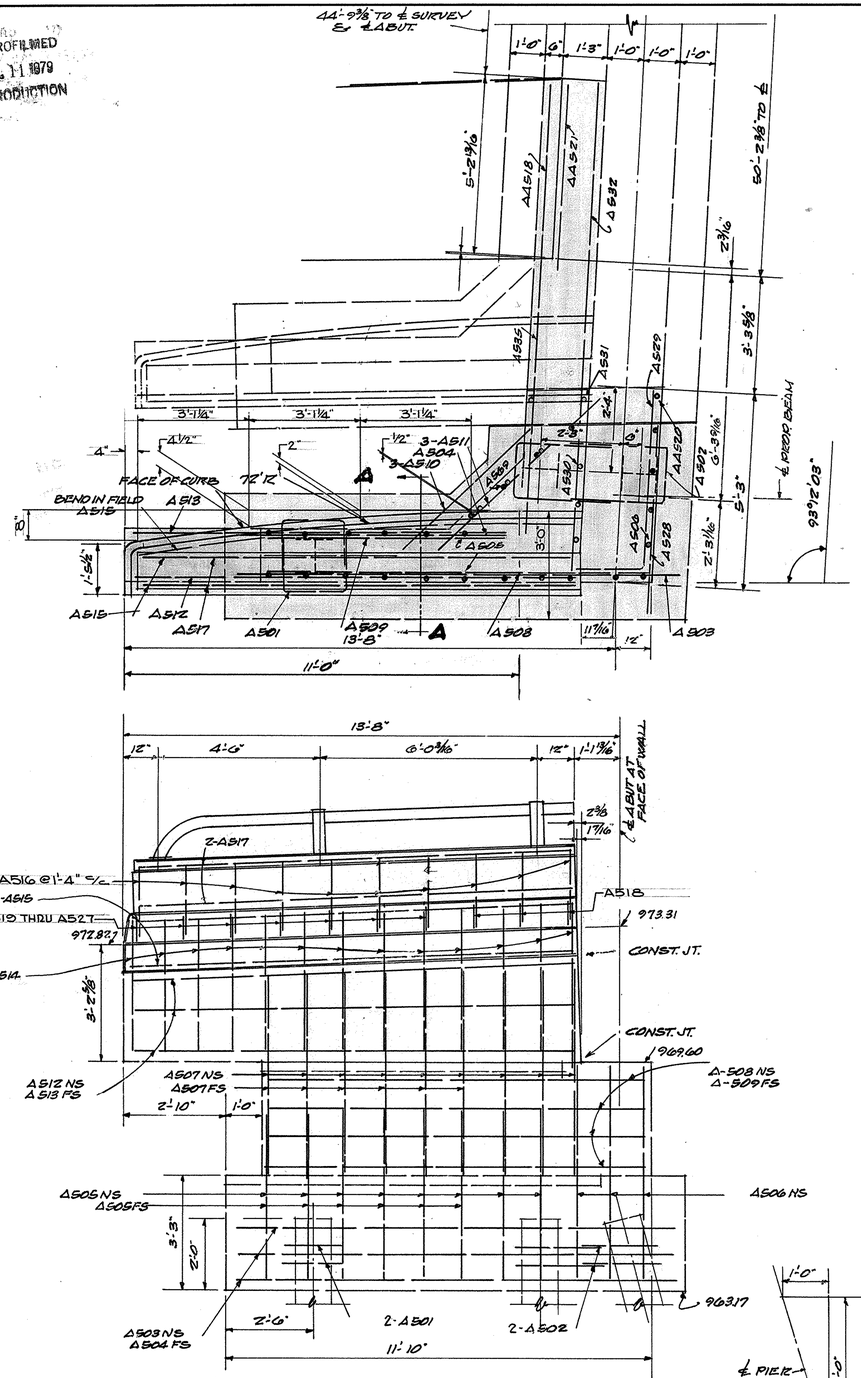
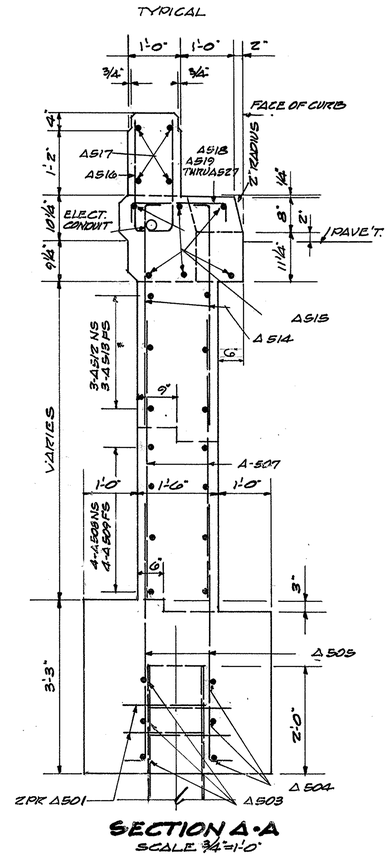


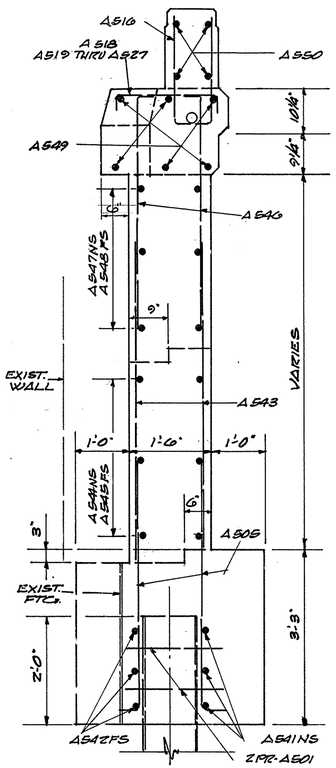
NORTHEAST WINGWALL
SCALE 1/2"=1'-0"

PILE BATTER

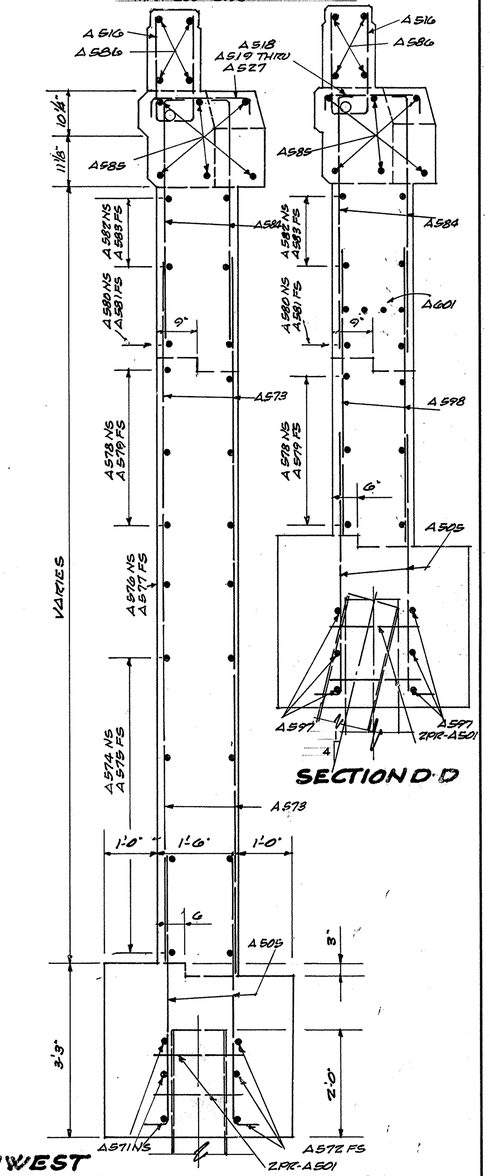
TYPICAL



SECTION A-A
SCALE ¾"=1'-0"



NORTHWEST WINGWALL
SECTION B-B
SCALE ¾"=1'-0"



SECTION D-D

SOUTHWEST WINGWALL SEC. CC
SCALE ¾"=1'-0"

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH 680-6.98

547
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STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

MISC. WINGWALL DETAILS

BRIDGE Nº MAH-680-0693

STRUCTURE OVER YOUNGSTOWN & SOUTHERN RR.

YOUNGSTOWN MAHONING COUNTY

STA. 763+30.76 TO STA. 764+80.26

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	

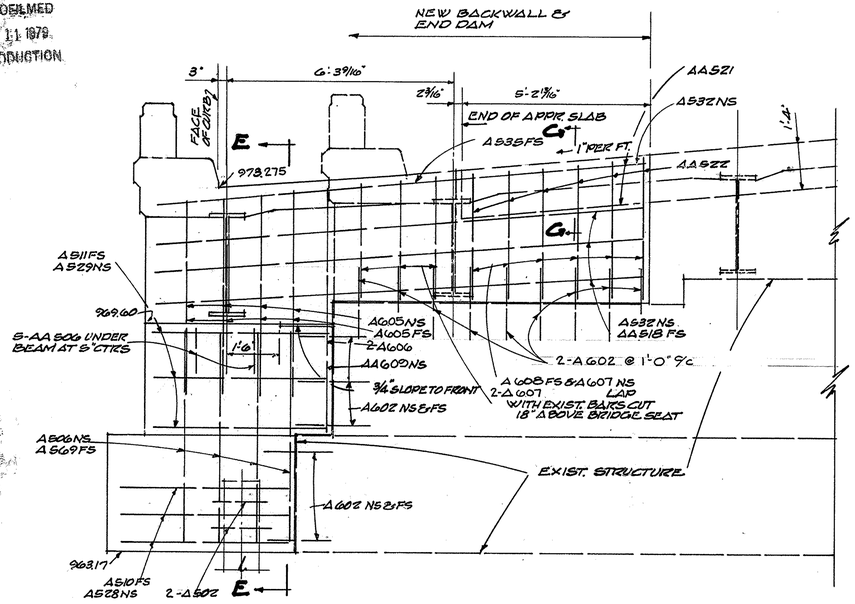
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

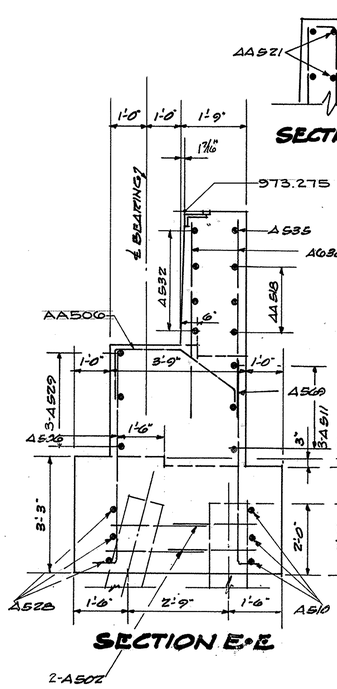
548/656

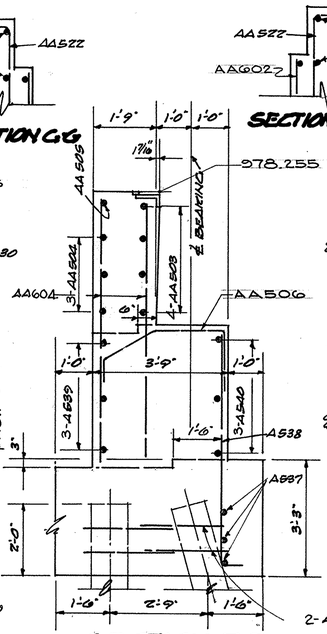
MAH. 680-6.98

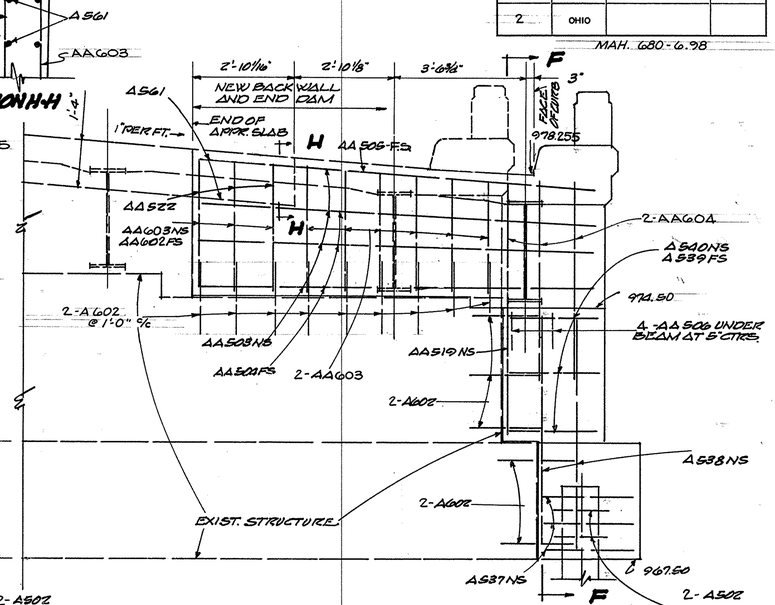


EAST ABUTMENT- NORTH END

SCALE 1/2"=1'-0"

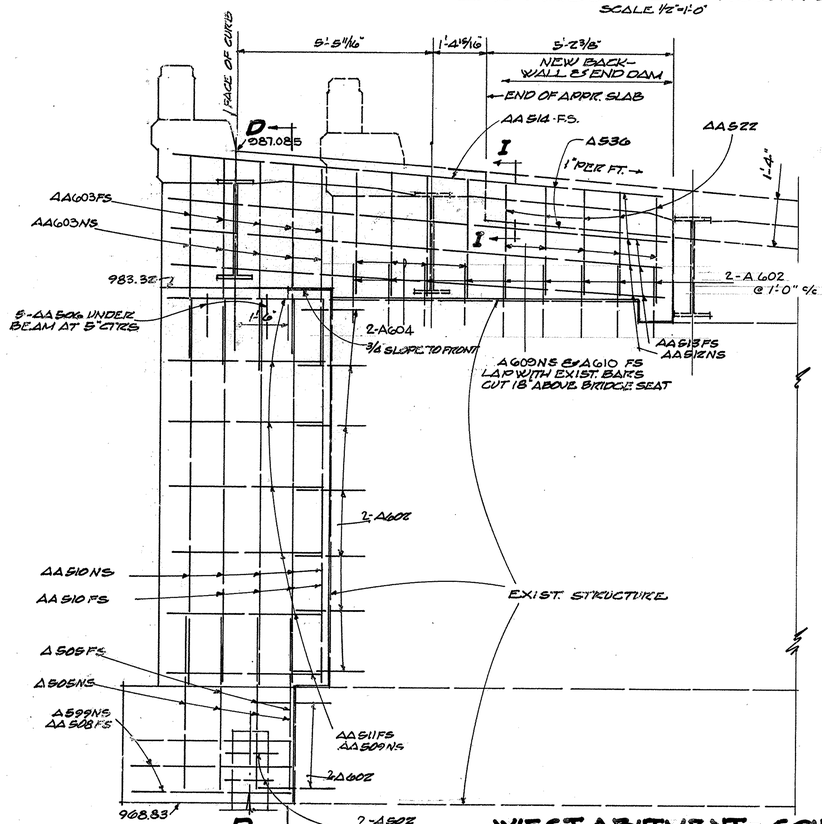




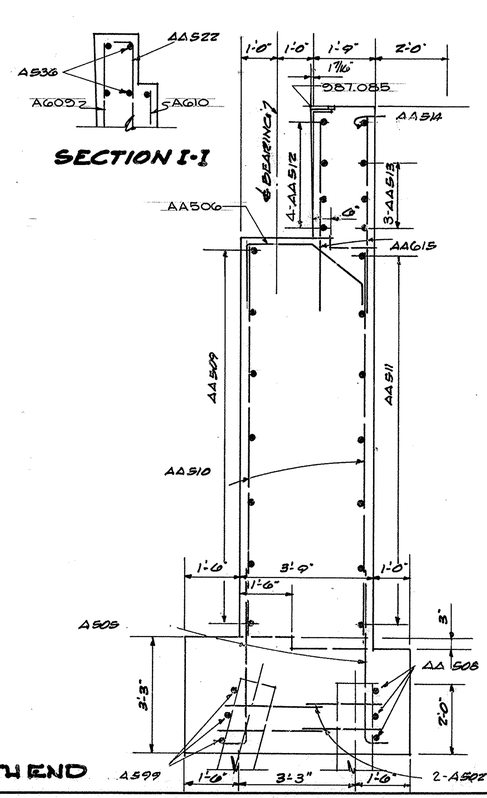


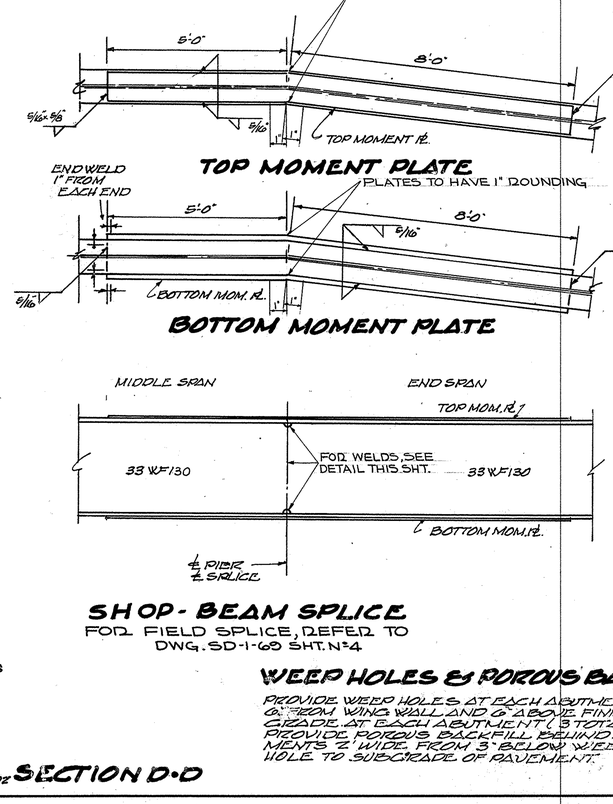
WEST ABUTMENT- NORTH END

SCALE 1/2"=1'-0"



WEST ABUTMENT- SOUTH END



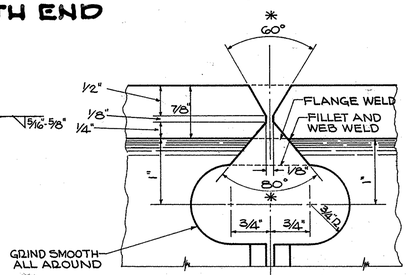


SHOP-BEAM SPLICE

FOR FIELD SPLICE, REFER TO DWG. SD-1-69 SHT. N°4

WEEP HOLES & POROUS BACKFILL

PROVIDE WEEP HOLES AT EACH ABUTMENT 6" FROM WING WALL AND 6" ABOVE FINISH GRADE AT EACH ABUTMENT (3 TOTAL). PROVIDE POROUS BACKFILL BEHIND ABUTMENTS 2' WIDE FROM 3' BELOW WEEP HOLE TO SUBGRADE OF PAVEMENT.



* - INDICATES GRINDING FLUSH

END PREPARATION OF ROLLED BEAMS FOR SHOP WELDING

TOP & BOTTOM

ALL FULL PENETRATION WELDS SHALL BE BACK-GOUGED AND WELDED AFTER WELDING FAR SIDE. ALL GRINDING SHALL BE PARALLEL TO THE DIRECTION OF STRESS. ALL FLANGE TO FLANGE AND WEB TO WEB SPLICES ARE TO BE GROUND.

DOWEL HOLES

ALL DOWEL BARS WILL EXTEND INTO EXISTING STRUCTURE 12"

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

MISC. ABUTMENT DETAILS

BRIDGE Nº MAH-680-0693

STRUCTURE OVER YOUNGSTOWN & SOUTHERN RR.
YOUNGSTOWN MAHONING COUNTY
STA. 763+30.76 TO STA. 764+80.26

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	

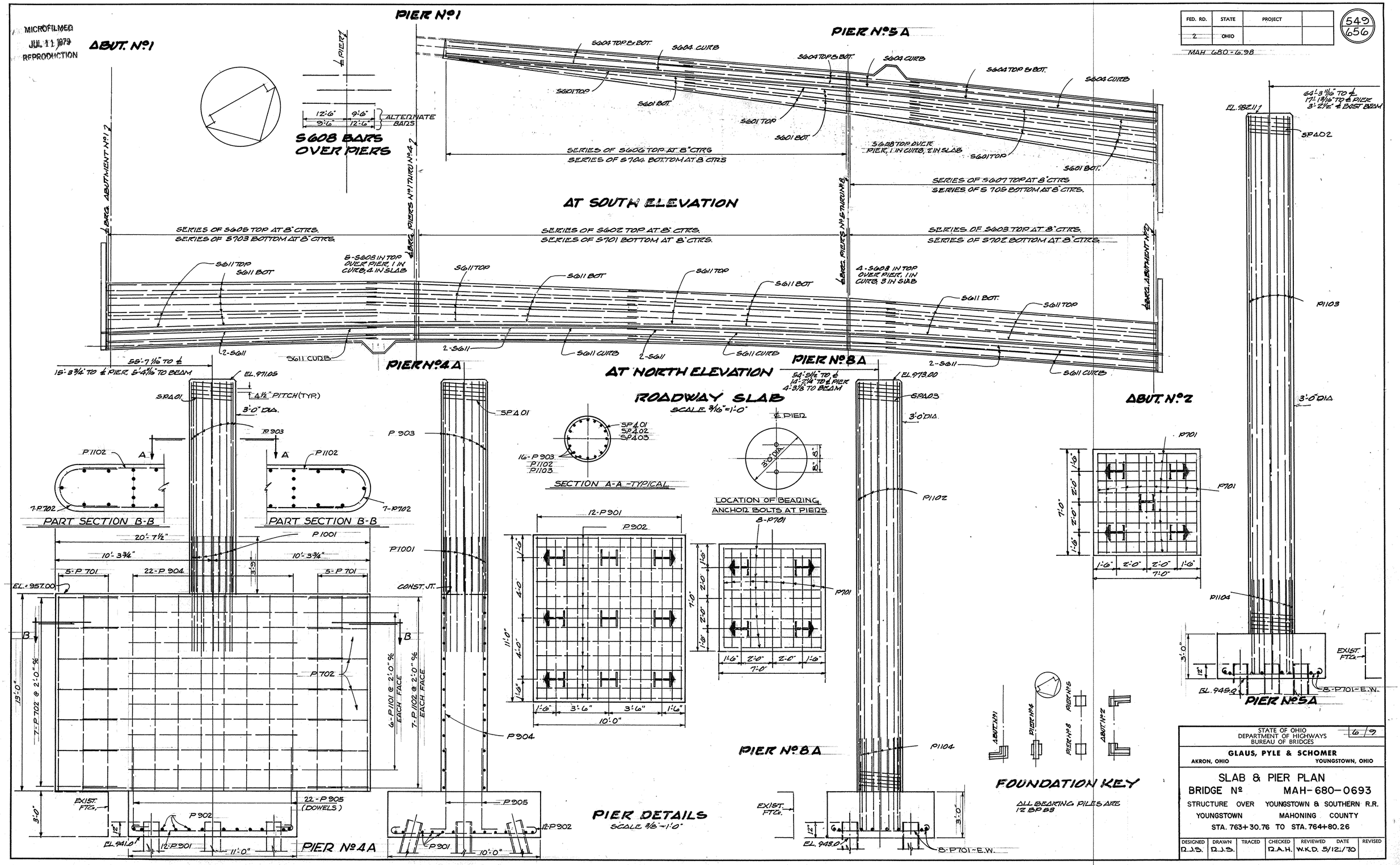
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

549
656

MAH 680-6.98



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SLAB & PIER PLAN
BRIDGE Nº MAH-680-0693
STRUCTURE OVER YOUNGSTOWN & SOUTHERN R.R.
YOUNGSTOWN MAHONING COUNTY
STA. 763+30.76 TO STA. 764+80.26

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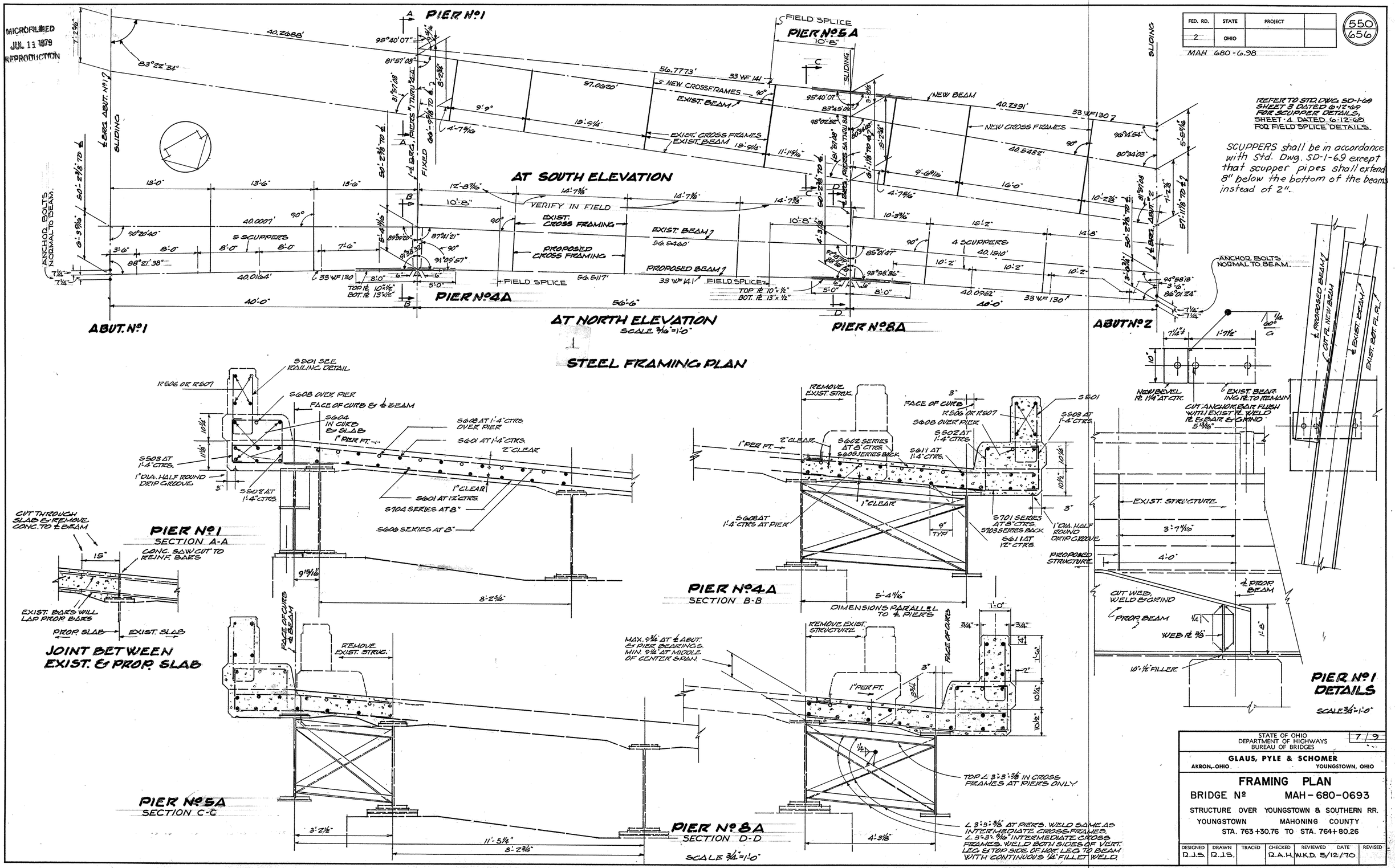
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

550
656

MAH 680-6.98



REFER TO STD. DWG. SD-1-69 SHEET 3 DATED 6-12-69 FOR SCUPPER DETAILS, SHEET 4 DATED 6-12-69 FOR FIELD SPLICE DETAILS.

SCUPPERS shall be in accordance with Std. Dwg. SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

7/9

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

FRAMING PLAN

BRIDGE No MAH-680-0693

STRUCTURE OVER YOUNGSTOWN & SOUTHERN RR.
YOUNGSTOWN MAHONING COUNTY
STA. 763+30.76 TO STA. 764+80.26

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R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	

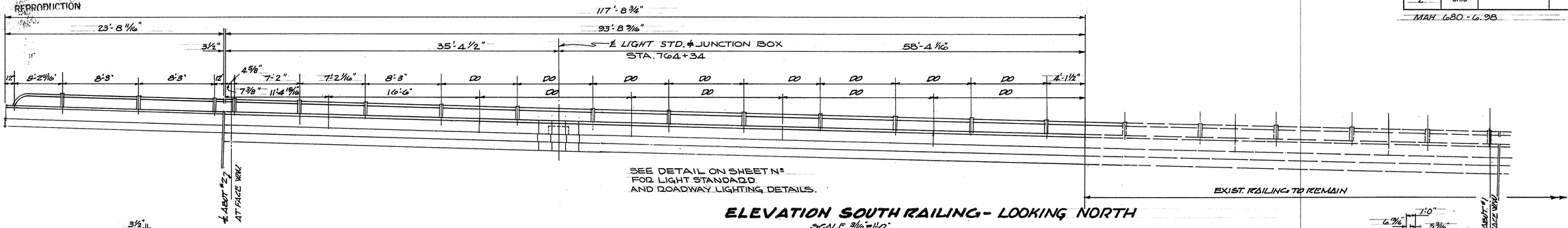
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

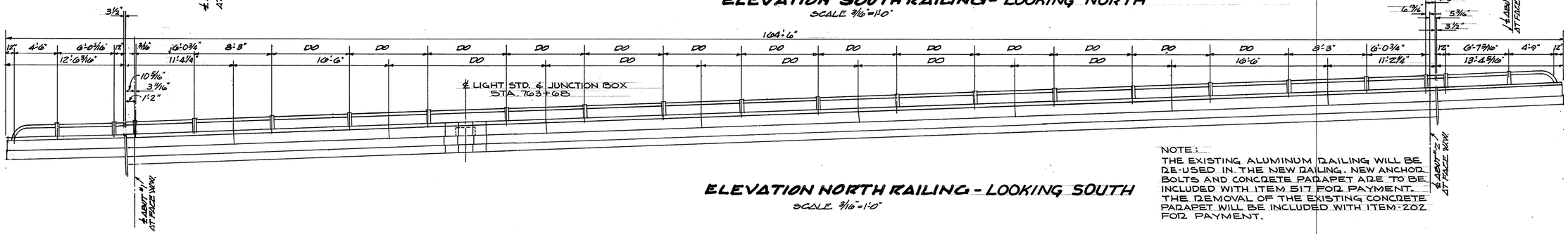
550-A
656

MAH 680-6.98



ELEVATION SOUTH RAILING - LOOKING NORTH

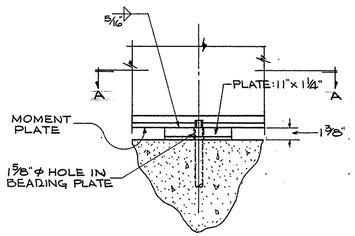
SCALE 3/16"=1'0"



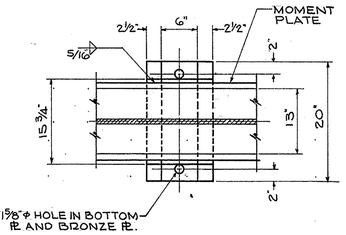
ELEVATION NORTH RAILING - LOOKING SOUTH

SCALE 3/16"=1'0"

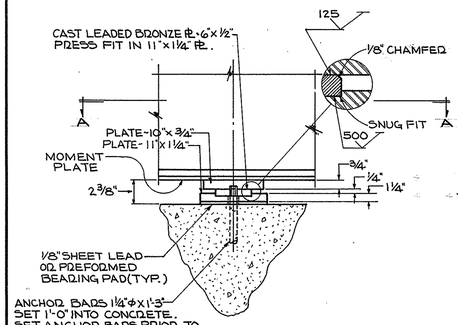
NOTE:
THE EXISTING ALUMINUM RAILING WILL BE RE-USED IN THE NEW RAILING. NEW ANCHOR BOLTS AND CONCRETE PARAPET ARE TO BE INCLUDED WITH ITEM 511 FOR PAYMENT. THE REMOVAL OF THE EXISTING CONCRETE PARAPET WILL BE INCLUDED WITH ITEM 202 FOR PAYMENT.



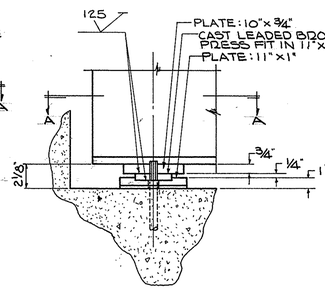
FIXED - PIER BEARING PLATE



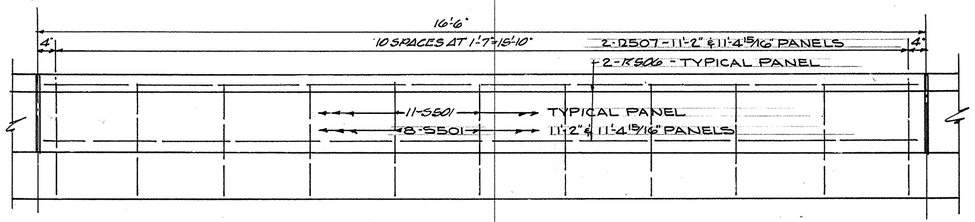
SECTION-A-A



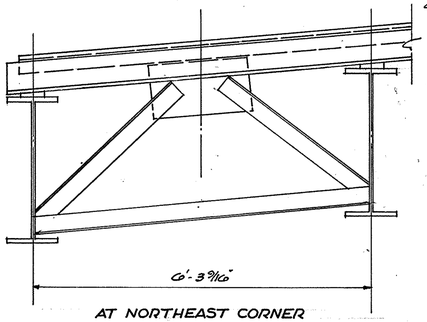
EXPANSION - PIER BEARING PLATE



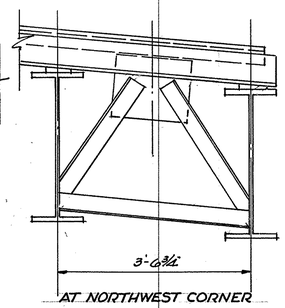
ABUTMENT BEARING PLATE



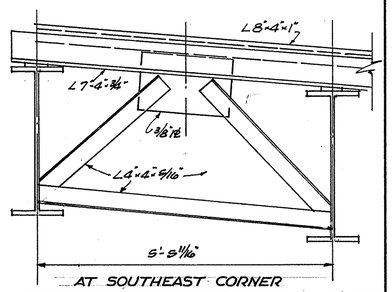
TYPICAL RAILING PANEL



AT NORTHEAST CORNER



AT NORTHWEST CORNER



AT SOUTHEAST CORNER

END CROSSFRAMES

SCALE 3/4"=1'0"

REFER TO STD. DWG. SD-1-69 DATED 6-12-69, FOR ADDITIONAL INFORMATION AND CURB PLATE DETAILS.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

RAILING & MISC. DETAILS

BRIDGE Nº MAH-680-0693

STRUCTURE OVER YOUNGSTOWN & SOUTHERN RR.
YOUNGSTOWN — MAHONING COUNTY
STA. 763+30.76 TO STA. 764+80.26

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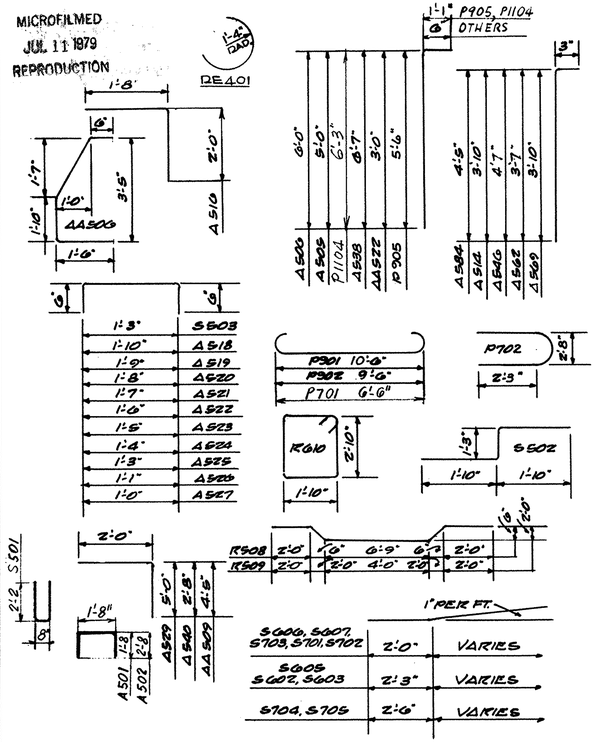
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

1-64 DAD
RE401



1.

NORTHEAST WINGWALL REINFORCING BAR SCHEDULE

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
1.	A 501	4	4'-9"	Bent	20
2.	A 502	4	6'-9"	Bent	28
3.	A 503	3	12'-4"	Straight	39
4.	A 504	3	7'-6"	Straight	23
5.	A 505	14	5'-4"	Bent	78
6.	A 506	7	6'-4"	Bent	46
7.	A 507	15	5'-3"	Straight	82
8.	A 508	4	10'-6"	Straight	44
9.	A 509	4	6'-8"	Straight	28
10.	A 510	3	5'-6"	Straight	17
11.	A 511	3	6'-0"	Straight	19
12.	A 512	3	12'-5"	Straight	38
13.	A 513	3	10'-5"	Straight	33
14.	A 514	26	3'-11"	Bent	106
15.	A 515	6	12'-1"	Straight	76
16.	A 516	10	3'-6"	Bent	37
17.	A 517	4	11'-10"	Straight	49
18.	A 518	3	2"-7"	Bent	8
19.	A 519	1	2'-5"	Bent	3
20.	A 520	1	2'-4"	Bent	3
21.	A 521	1	2'-3"	Bent	2
22.	A 522	1	2'-2"	Bent	2
23.	A 523	1	2'-2"	Bent	2
24.	A 524	1	2'-1"	Bent	2
25.	A 525	1	2'-0"	Bent	2
26.	A 526	1	2'-10"	Bent	2
27.	A 527	1	2'-9"	Bent	2
28.	A 528	3	5'-0"	Straight	16
29.	A 529	3	6'-10"	Bent	23
30.	A 532	4	13'-6"	Straight	56
31.	A 535	1	6'-6"	Straight	7
32.	A 569	4	3'-11"	Bent	16
33.	AA 506	5	6'-8"	Bent	34
34.	AA 518	3	12'-0"	Straight	38
35.					
36.	AA 521	2	5'-6"	Straight	11
37.	AA 522	6	3'-4"	Bent	21
38.	A 602	28	2'-0"	Straight	84
39.	A 605	8	5'-9"	Straight	69
40.	A 606	2	6'-11"	Straight	21
41.	A 607	12	3'-6"	Straight	63
42.	A 608	6	2'-2"	Straight	20
43.	A 608	1	3'-2"	Straight	5

4.

SOUTHWEST WINGWALL REINFORCING BAR SCHEDULE CONTINUED

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
46.	AA 511	7	4'-9"	Straight	35
47.	AA 512	4	14'-0"	Straight	58
48.	AA 513	3	12'-0"	Straight	38
49.	AA 514	1	6'-10"	Straight	7
50.	A 610	5	1'-10"	Straight	14
53.	AA 522	5	3'-4"	Bent	17
52.	A 601	6	18'-6"	Straight	168
53.	A 602	36	2'-0"	Straight	108
54.	A 603	10	5'-9"	Straight	86
55.	A 604	8	3'-7"	Straight	43

PIER #4A

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
1.	P 701	10	12'-6"	Straight	256
2.	P 702	14	8'-8"	Bent	248
3.	P 901	12	13'-0"	Bent	530
4.	P 902	12	12'-0"	Bent	490
5.	P 903	16	13'-9"	Straight	748
6.	P 904	22	12'-9"	Straight	954
7.	P 905	22	6'-4"	Bent	474
8.	P 1001	16	7'-6"	Straight	516
9.	P 1101	12	11'-0"	Straight	702
10.	P 1102	14	17'-8"	Straight	1314

Item Number A	Bar Number B	Number of Bars C	Core Diameter D	Length E	Pitch F	Number of Turns G	Weight H
1.	SP 401	1	2'-8"	13'-10-1/2"	4-1/2"	40	265

PIER #5A

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
1.	P 701	16	9'-0"	Bent	294
2.	P 1103	16	33'-10"	Straight	2,876
3.	P 1104	16	7'-0"	Bent	595

Item Number A	Bar Number B	Number of Bars C	Core Diameter D	Length E	Pitch F	Number of Turns G	Weight H
1.	SP 402	1	2'-8"	33'-11-1/2"	4-1/2"	94	625

5.

PIER #8A

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
1.	P 701	16	9'-0"	Bent	294
2.	P 1102	16	26'-10"	Straight	2,281
3.	P 1104	16	7'-0"	Bent	616

Item Number A	Bar Number B	Number of Bars C	Core Diameter D	Length E	Pitch F	Number of Turns G	Weight H
1.	SP 403	1	2'-8"	26'-10"	4-1/2	75	497

LEFT (SOUTH) SIDE

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
SLAB					
1.	S 502	71	4'-8"	Bent	346
2.	S 503	71	2"-0"	Bent	148
3.	R 509	1	13'-8"	Bent	14
4.	S 601	22	32'-8"	Straight	1,079
5.	S 604	18	32'-7"	Straight	881
6.	Series S 606	Set of 79	Varies from 2'-10" to 5'-2"at 11/32"	Bent	475
7.	Series S 607	Set of 61	Varies from 5'-2" to 7'-5" at 7/16"	Bent	576
8.	S 608	2	22'-0"	Straight	66
9.	S 609	16	5'-0"	Straight	120
10.	Series S 704	Set of 79	Varies from 2'-10" to 5'-2" at 11/32"	Bent	646
11.	Series S 705	Set of 61	Varies from 5'-2" to 7'-5" at 7/16"	Bent	784
CURB					
1.	S 501	63	4'-9"	Bent	312
2.	R 509	1	13'-8"	Bent	14

2.

NORTHWEST WINGWALL REINFORCING BAR SCHEDULE

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
1.	A 501	4	4'-9"	Bent	20
2.	A 502	4	6'-9"	Bent	28
3.	A 505	16	5'-4"	Bent	89
4.	A 516	10	3'-6"	Bent	37
5.	A 518	4	2'-7"	Bent	11
6.	A 519	1	2'-6"	Bent	3
7.	A 520	1	2'-5"	Bent	3
8.	A 521	1	2'-4"	Bent	2
9.	A 522	1	2'-3"	Bent	2
10.	A 523	1	2'-2"	Bent	2
11.	A 524	1	2'-1"	Bent	2
12.	A 525	1	2'-0"	Bent	2
13.	A 526	1	1'-10"	Bent	2
14.	A 527	1	2'-9"	Bent	2
15.	A 537	3	2'-7"	Straight	8
16.	A 538	4	6'-11"	Bent	29
17.	A 539	3	2'-6"	Straight	8
18.	A 540	3	4'-6"	Bent	14
19.	A 541	3	11'-11"	Straight	37
20.	A 542	3	7'-0"	Straight	22
21.	A 543	16	5'-9"	Straight	96
22.	A 544	3	6'-0"	Straight	19
23.	A 545	3	10'-2"	Straight	32
24.	A 546	18	4'-8"	Bent	88
25.	A 547	3	10'-10"	Straight	34
26.	A 548	3	12'-10"	Straight	40
27.	A 549	6	13'-0"	Straight	81
28.	A 550	4	12'-8"	Straight	53
29.	A 561	2	3'-6"	Straight	7
30.	A 562	10	3'-8"	Bent	38
31.					
32.					
33.	AA 503	4	11'-2"	Straight	47
34.	AA 504	3	9'-2"	Straight	29
35.	AA 505	1	11'-3"	Straight	12
36.	AA 506	4	6'-7"	Bent	27
37.	AA 519	1	3'-7"	Straight	4
38.	AA 522	3	3'-4"	Bent	10
39.	A 602	28	2'-0"	Straight	84
40.	AA 602	3	1'-11"	Straight	9
41.	AA 603	15	3'-0"	Straight	68
42.	AA 604	6	7'-4"	Straight	66

6.

CURB CONTINUED

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
3.	S 604	6	32'-7"	Straight	294
4.	S 608	1	22'-0"	Straight	33
5.	R 610	4	8'-8"	Bent	36
RAILING					
1.	R 506	20	16'-2"	Straight	337
2.	R 507	4	10'-11"	Straight	46
3.	R 508	2	12'-2"	Bent	25
4.	R 509	2	13'-8"	Bent	29
RIGHT (NORTH) SIDE					
SLAB					
1.	S 502	104	4'-9"	Bent	506
2.	S 503	104	2'-0"	Bent	217
3.	Series S 602	Set of 85	Varies from 7'-7" to 6'-6" at 5/32"	Bent	899
4.	Series S 603	Set of 61	Varies from 6'-6" to 5'-9" at 5/32"	Bent	561
5.	Series S 605	Set of 61	Varies from 8'-6" to 7'-7" at 5/32"	Bent	737
6.	S 608	7	22'-0"	Straight	231
7.	S 611	66	35'-10"	Straight	3,552
8.	Series S 701	Set of 85	Varies from 7'-7" to 6'-6" at 5/32"	Bent	1,223
9.	Series S 702	Set of 61	Varies from 6'-6" to 5'-9" at 5/32"	Bent	764
10.	Series S 703	Set of 61	Varies from 8'-6" to 7'-7" at 5/32"	Bent	1,002
CURB					
1.	S 501	93	4'-9"	Bent	461
2.	S 608	2	22'-0"	Straight	66
3.	S 611	8	35'-10"	Straight	431

LIGHT BLISTER BARS-TOTAL-1190 LBS.

3.

SOUTHWEST WINGWALL REINFORCING BAR SCHEDULE

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E	Weight F
1.	A 501	12	4'-9"	Bent	59
2.	A 502	4	6'-9"	Bent	28
3.	A 505	33	5'-4"	Bent	184
4.	A 516	18	3'-6"	Bent	66
5.	A 518	9	2'-7"	Bent	24
6.	A 519	1	2'-6"	Bent	3
7.	A 520	1	2'-5"	Bent	3
8.	A 521	1	2'-4"	Bent	2
9.	A 522	1	2'-3"	Bent	2
10.	A 523	1	2'-2"	Bent	2
11.	A 524	1	2'-1"	Bent	2
12.	A 525	1	2'-0"	Bent	2
13.	A 526	1	1'-10"	Bent	2
14.	A 527	1	2'-9"	Bent	2
15.	A 536	2	6'-0"	Straight	13
16.	A 563	12	5'-3"	Straight	66
17.	A 564	2	5'-4"	Straight	11
18.	A 565	2	5'-9"	Straight	12
19.	A 566	2	6'-4"	Straight	13
20.	A 567	2	7'-0"	Straight	15
21.	A 568	2	7'-8"	Straight	16
22.	A 569	12	3'-11"	Bent	49
23.	A 571	3	10'-8"	Straight	33
24.	A 572	3	5'-2"	Straight	16
25.	A 573	12	13'-3"	Straight	166
26.	A 574	4	8'-4"	Straight	35
27.	A 575	4	4'-3"	Straight	18
28.	A 576	1	11'-8"	Straight	12
29.	A 577	1	7'-6"	Straight	8
30.	A 578	3	19'-5"	Straight	61
31.	A 579	3	15'-0"	Straight	47
32.	A 580	1	17'-9"	Straight	19
33.	A 581	1	15'-9"	Straight	16
34.	A 582	2	23'-4"	Straight	49
35.	A 583	2	21'-4"	Straight	45
36.	A 584	36	4'-6"	Bent	175
37.	A 585	6'	23'-5"	Straight	147
38.	A 586	4	23'-1"	Straight	96
39.	A 597	6	5'-6"	Straight	34
40.	A 599	3	4'-5"	Straight	14
41.	AA 506	5	6'-8"	Bent	28
42.	AA 508	3	3'-6"	Straight	11
43.	AA 509	7	6'-3"	Bent	46
44.	AA 510	11	11'-1"	Straight	127
45.	A 609	5	3'-2"	Straight	24

7.

REPLACEMENT BAR LIST

Item Number A	Bar Number B	Number of Bars C	Length D	Shape E
1.	RE 401	1	6'-3"	Bent
2.	RE 501	1	6'-7"	Straight
3.	RE 601	2	6'-11"	Straight
4.	RE 701	1	7'-2"	Straight
5.	RE 901	1	7'-10"	Straight
6.	RE 1001	1	8'-2"	Straight
7.	RE 1101	1	8'-6"	Straight

REINFORCING STEEL

A. THE LENGTH SHOWN IN THE BAR SCHEDULE FOR SPIRAL BARS IS THE DISTANCE FROM THE TOP OF FOOTING TO TOP OF PIER, MINUS 2". THE NUMBER OF TURNS SHOWN IS THE LENGTH DIVIDED BY THE PITCH PLUS 3 TURNS.
FOUR STEEL ANGLE SPACERS 1" x 1" x 1/8" SHALL BE PROVIDED FOR EACH SPIRAL UNIT. A SPACER IS ASSUMED TO WEIGH 0.80 LBS. PER FOOT AND THE WEIGHT IS INCLUDED WITH SPIRAL WEIGHT IN THE SCHEDULE.

B. THE BAR SIZE IS SPECIFIED IN THE BAR MARK. THE FIRST DIGIT IS THE BAR SIZE NUMBER WHERE 3 DIGITS ARE USED AND THE FIRST TWO DIGITS IS THE BAR SIZE NUMBER WHERE 4 DIGITS ARE USED. EXAMPLE, A701 IS A NO.7 SIZE AND A1000 IS A NO.10 SIZE BAR. BAR DIMENSIONS ARE GIVEN OUT TO OUT.

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH. 680 - 6.98

550-B
656

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5/5

GLAUS, PYLE, SCHOMER, BURNS & DeHAVEN
AKRON, OHIO YOUNGSTOWN, OHIO

REINFORCING BAR SCHEDULE
BRIDGE Nº MAH-680-0693

STRUCTURE OVER YOUNGSTOWN & SOUTHERN R.R.
YOUNGSTOWN MAHONING COUNTY
STA. 763+30.76 TO STA. 764+80.26

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	D.W.		R.A.H.	W.K.D.	5-12-70	

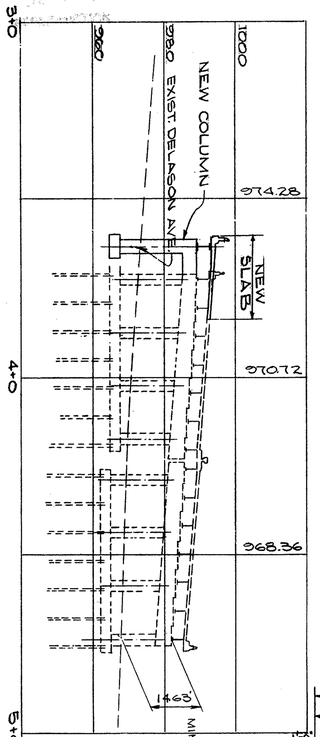
MAY 25 1971

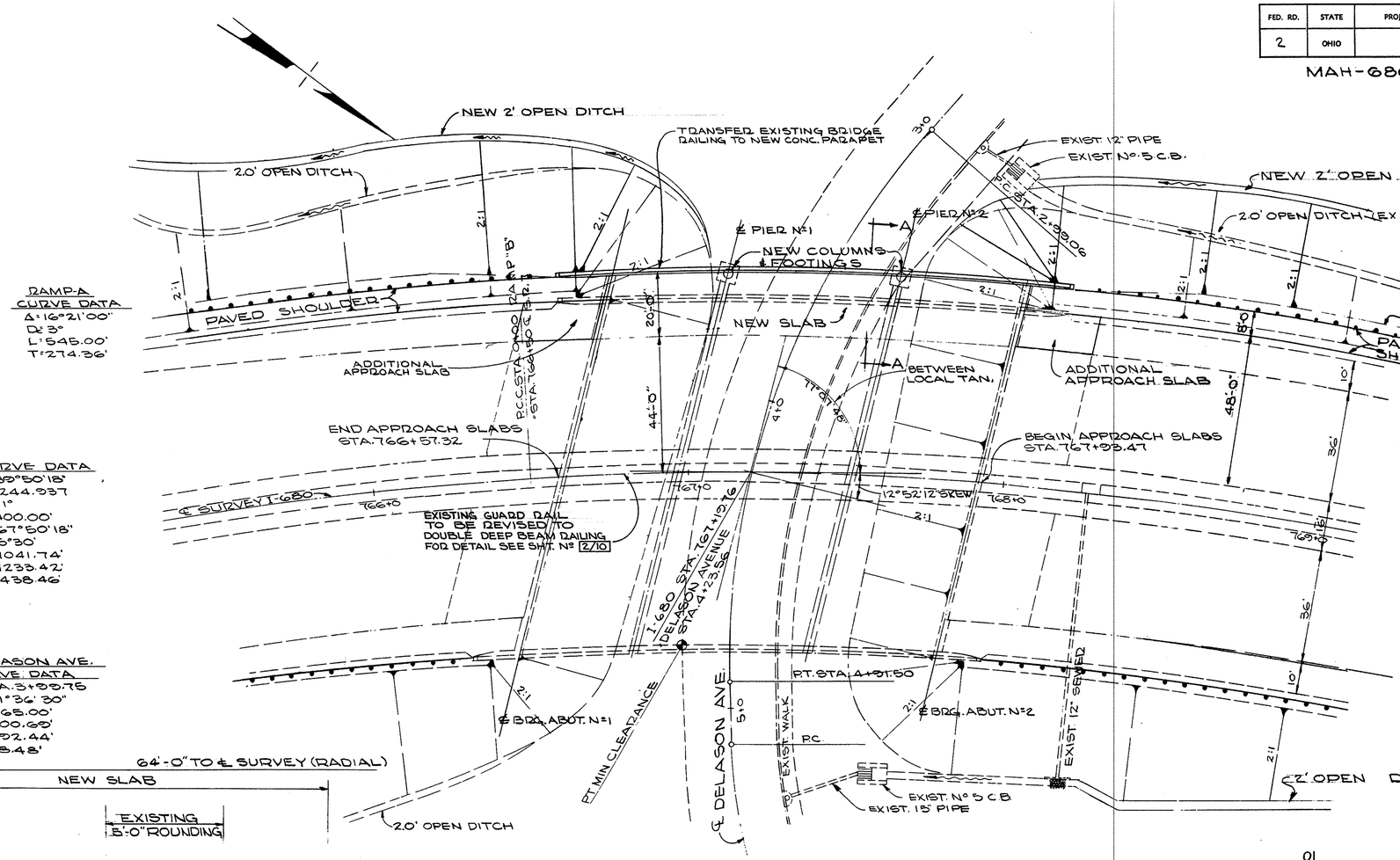
MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

551
656

MAH-680-6.98

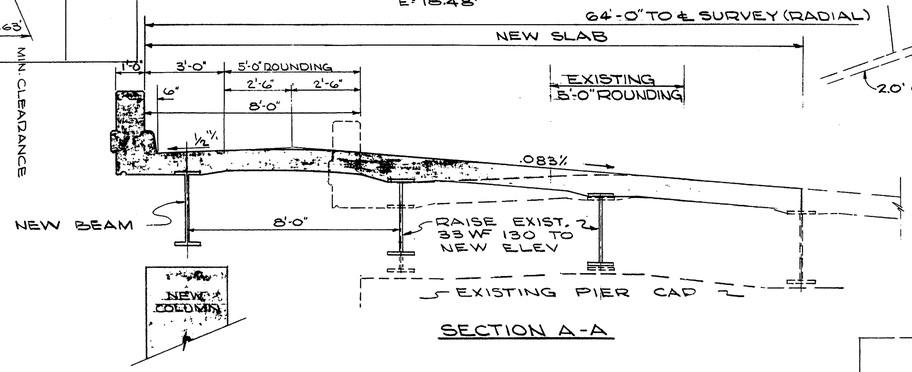




RAMP-A
CURVE DATA
Δ = 16°21'00"
D = 3°
L = 545.00'
T = 274.36'

℄ CURVE DATA
Δ_s = 88°50'18"
T_s = 1244.937
θ_s = 11°
L_s = 400.00'
Δ_c = 67°50'18"
D_c = 5°30'
R_c = 1041.74'
L_c = 1233.42'
E_s = 438.46'

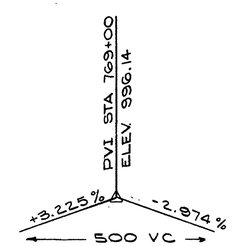
DELASON AVE.
CURVE DATA
P.I. STA. 3+99.78
Δ = 41°36'30"
R = 265.00'
T = 100.68'
L = 192.44'
E = 18.48'

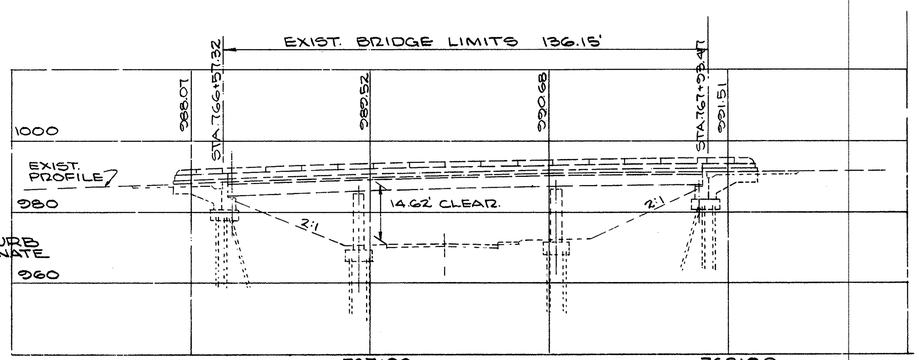


SECTION A-A

FOUNDATION SOUNDINGS

FOUNDATION DESIGN & FOUNDATION QUANTITIES ARE BASED ON A STUDY OF SOIL SAMPLING SOUNDINGS MADE AT THE SITE. THIS SOUNDING INFORMATION MAY BE INSPECTED IN THE OFFICE OF THE BUREAU OF BRIDGES IN COLUMBUS OR IN THE DIVISION OFFICE BUT THE STATE DOES NOT GAURANTEE THE ACCURACY THEREOF.





AVERAGE ESTIMATED PAY LENGTH FOR PILES
REAR ABUTMENT ------ 26'
REAR PIER ---------- 17'
FORWARD ABUTMENT --- 21'

EXISTING STRUCTURE
TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK & SUBSTRUCTURE
SPAN: 36'-6" 55'-6" 39'-6" ℄ BRGS.
SKEW: 12° 52' 12" L.F.
ROADWAY: 112'-0" ℄ℓ PARAPETS (RADIAL) WITH 6' MEDIAN CURB
LOAD FREQUENCY: CF 2000 ADEQUATE A.A.S.H.O. OR ALTERNATE
WEARING SURFACE: 1" MONOLITHIC
APPROACH SLAB: 25' LONG AS-1-67
ALIGNMENT: 5° 30' CURVE RT.
SUPERELEVATION: 0.0833 ft/ft
SLOPE PROTECTION: 601 CONCRETE
TRAFFIC COUNT: DELASON AVE (ADT 1979) 5618

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

1/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

SITE PLAN

BRIDGE Nº MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWC	WM		SM	WKD	5-12-70	

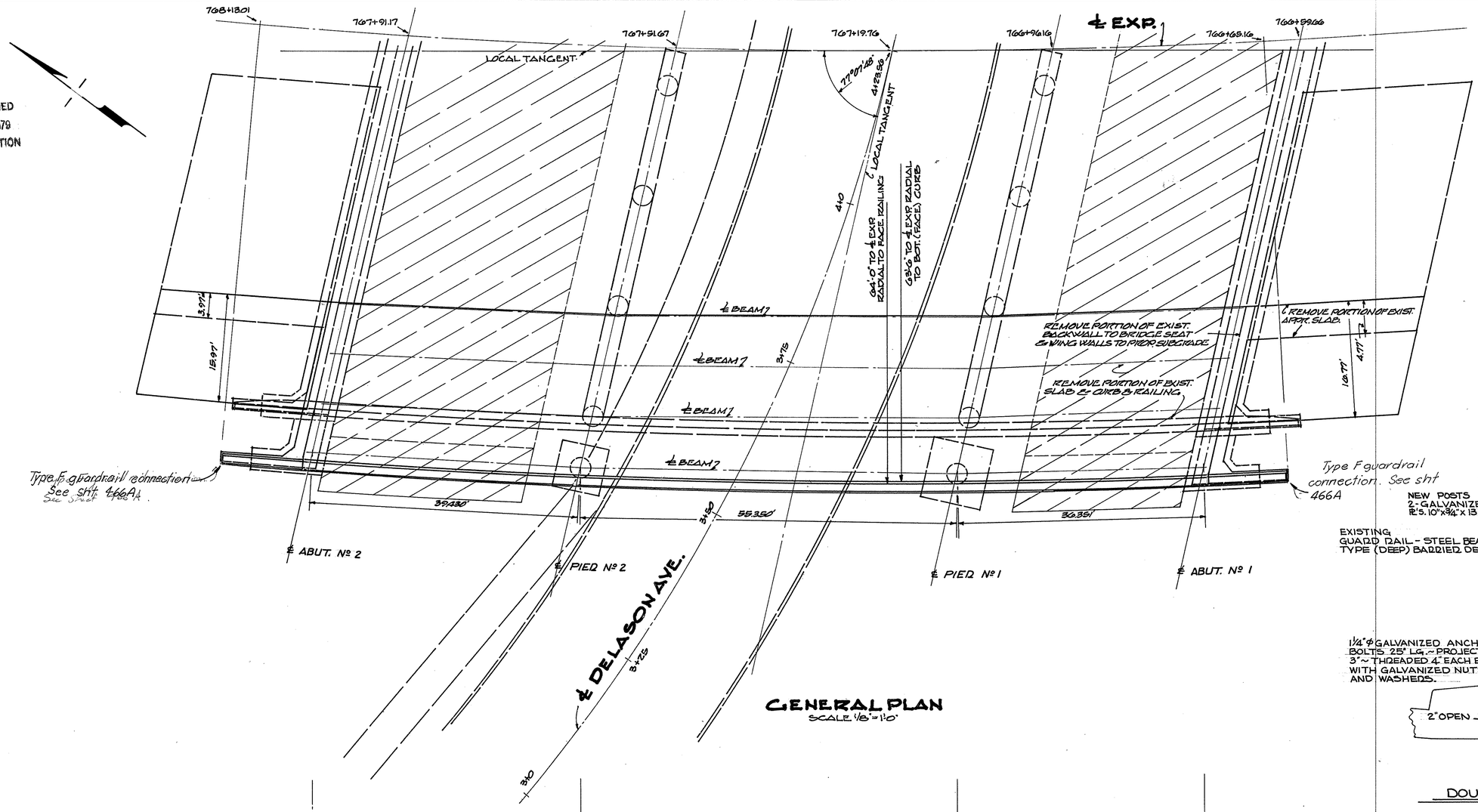
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

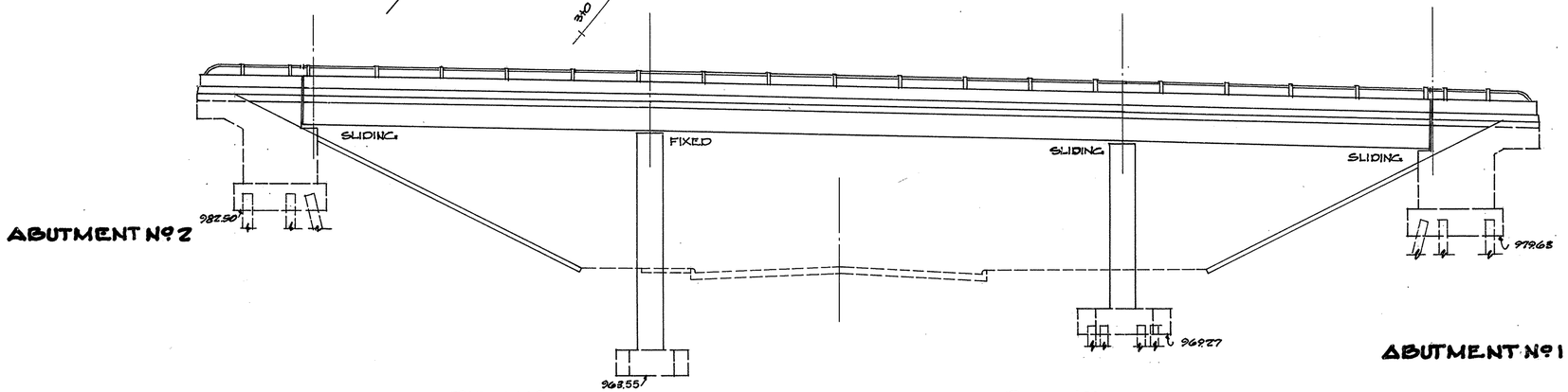
MAH-680-6.98

551-A
656

MICROFILMED
JUL 11 1979
REPRODUCTION



GENERAL PLAN
SCALE 1/8"=1'-0"



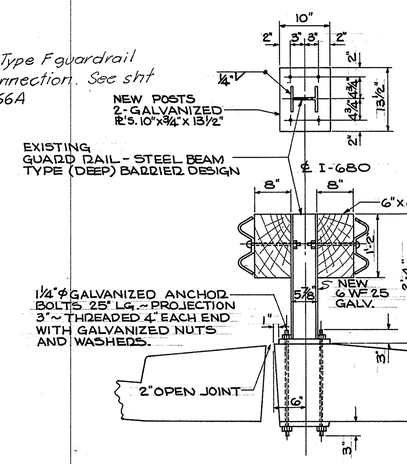
ABUTMENT Nº 2

PIER Nº 2

PIER Nº 1

ABUTMENT Nº 1

GENERAL ELEVATION
SCALE 1/8"=1'-0"



DOUBLE DEEP BEAM RAILING

NOTE:
EXISTING POSTS TO REMAIN AT 12'-6" ℄, NEW POSTS TO BE INSTALLED AT 12'-6" ℄ ALTERNATING WITH EXISTING POSTS. EXISTING DEEP BEAM GUARD RAIL TO BE REMOVED. NEW TYPE-5 GUARDRAIL SHALL BE INSTALLED TO NEW & EXIST. POSTS AS PER DETAIL. SEE STD. DWG. GR-2.8 FOR ADDITIONAL DETAILS.

SEE SHEET Nº 10 10 FOR STD. DWGS, ESTIMATED QUANTITIES & GENERAL NOTES.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

2/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

GENERAL PLAN & ELEVATION

BRIDGE Nº MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/76	

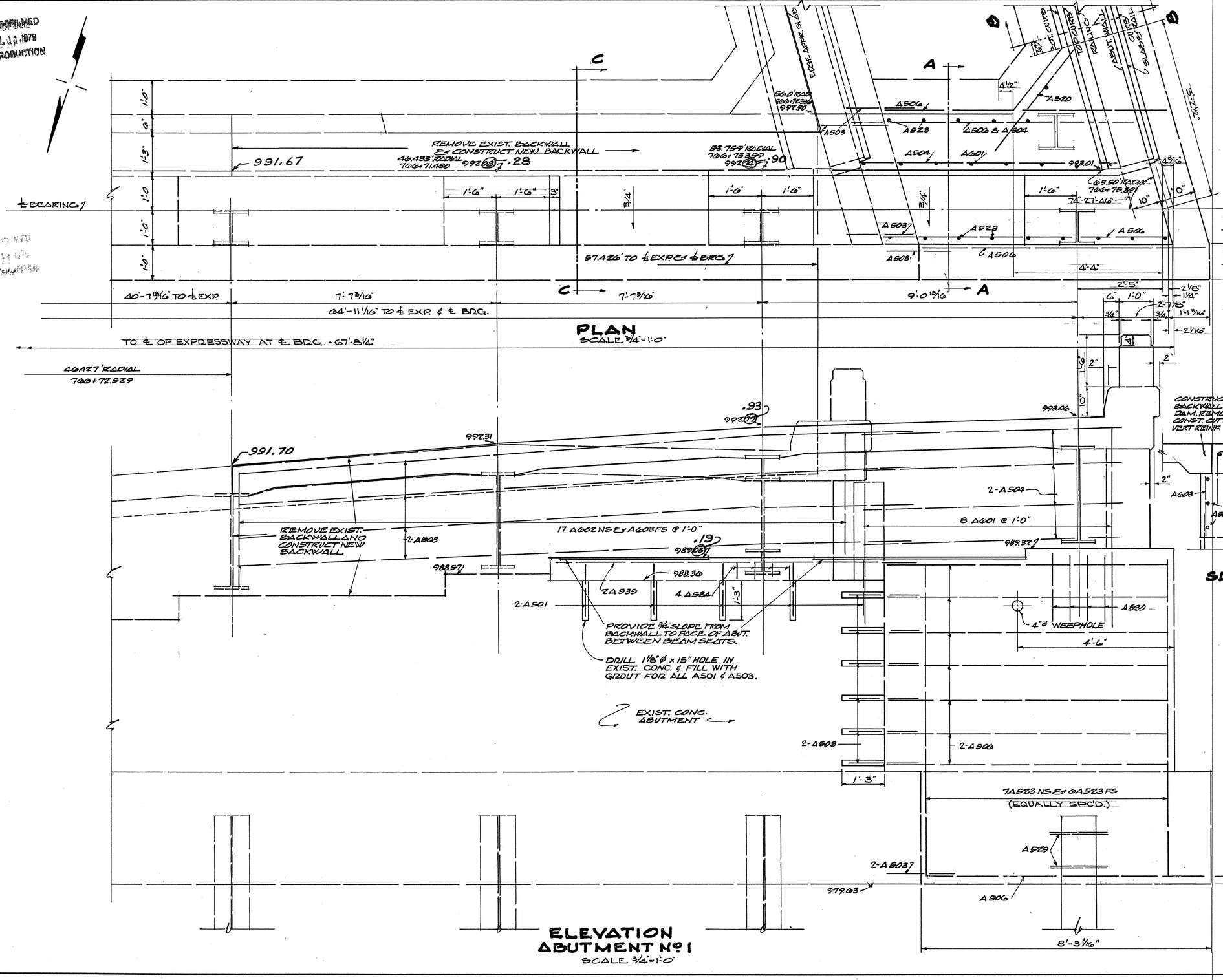
MAY 25 1971

MICROFILMED
JUL 11 1978
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

551-B
656



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

3 / 10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUT. Nº1 WINGWALL DET.

BRIDGE Nº MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.J.S.	D.J.S.		D.A.H.	W.K.D.	5/12/70	2-2-72

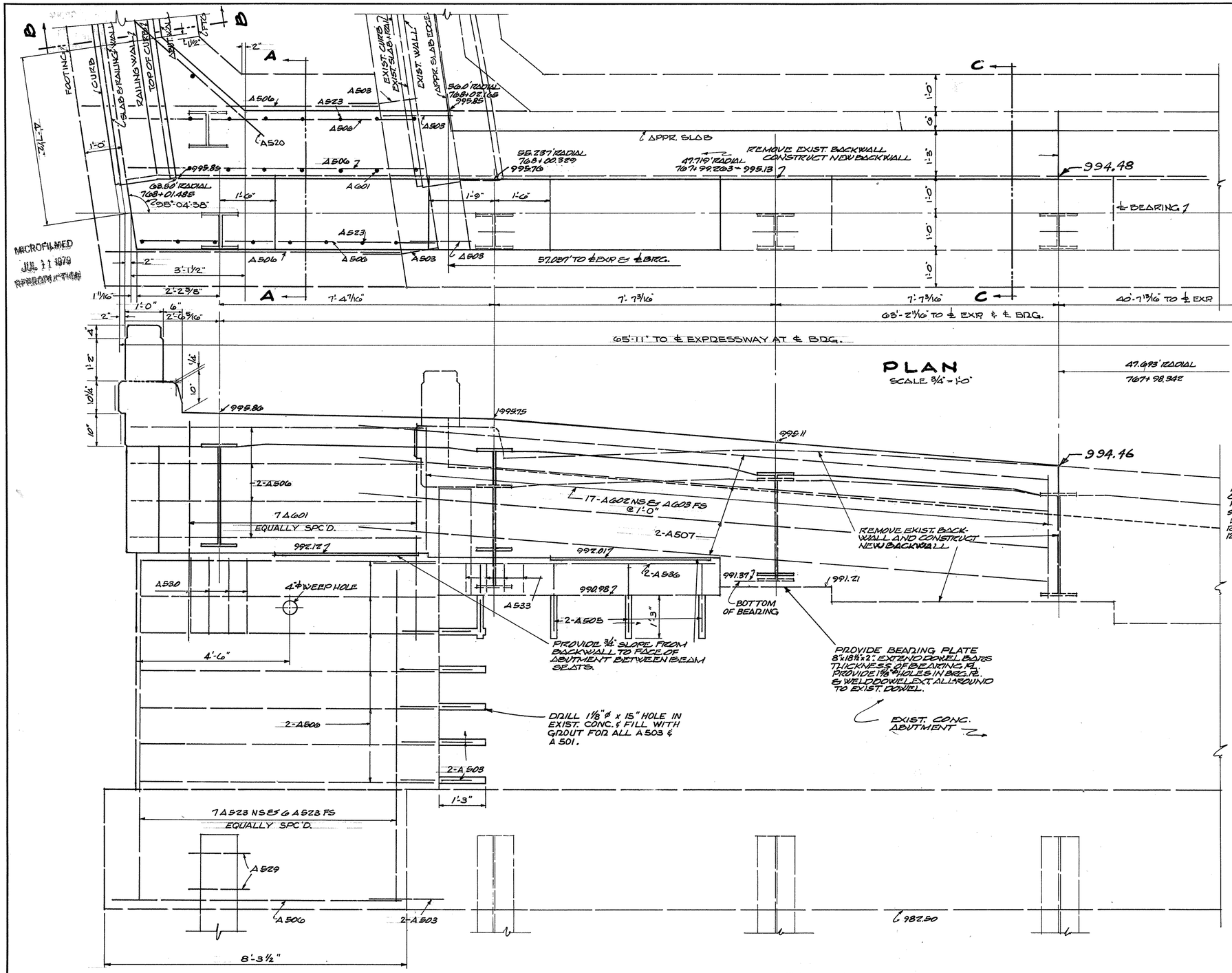
MAY 25 1971

FED. RD.	STATE	PROJECT	
2	OHIO		

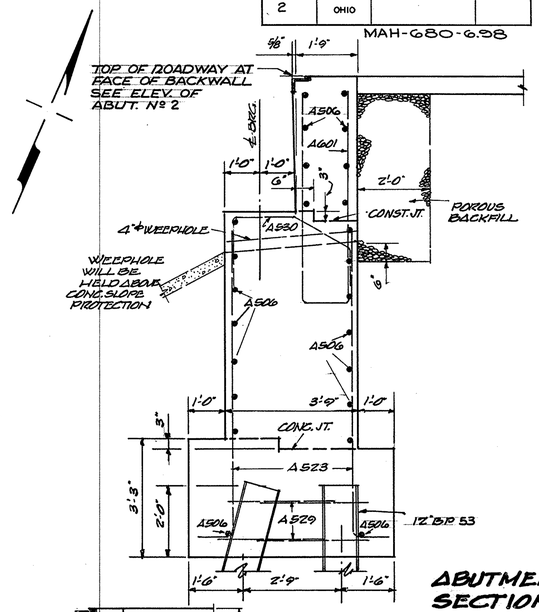
551-C
656

MAH-680-6.58

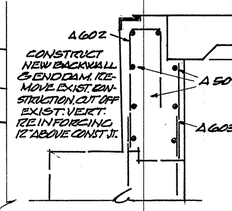
MICROFILMED
JUL 11 1979
REPRODUCTION



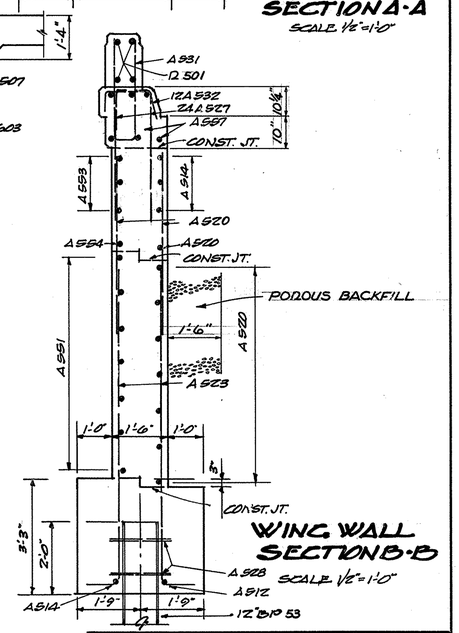
ELEVATION
ABUTMENT Nº 2
SCALE 3/4" = 1'-0"



ABUTMENT
SECTION A-A
SCALE 1/2" = 1'-0"



SECTION C-C



WING. WALL
SECTION B-B
SCALE 1/2" = 1'-0"

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

4/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUT. Nº 2 WINGWALL DET.

BRIDGE Nº MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	4-2-72

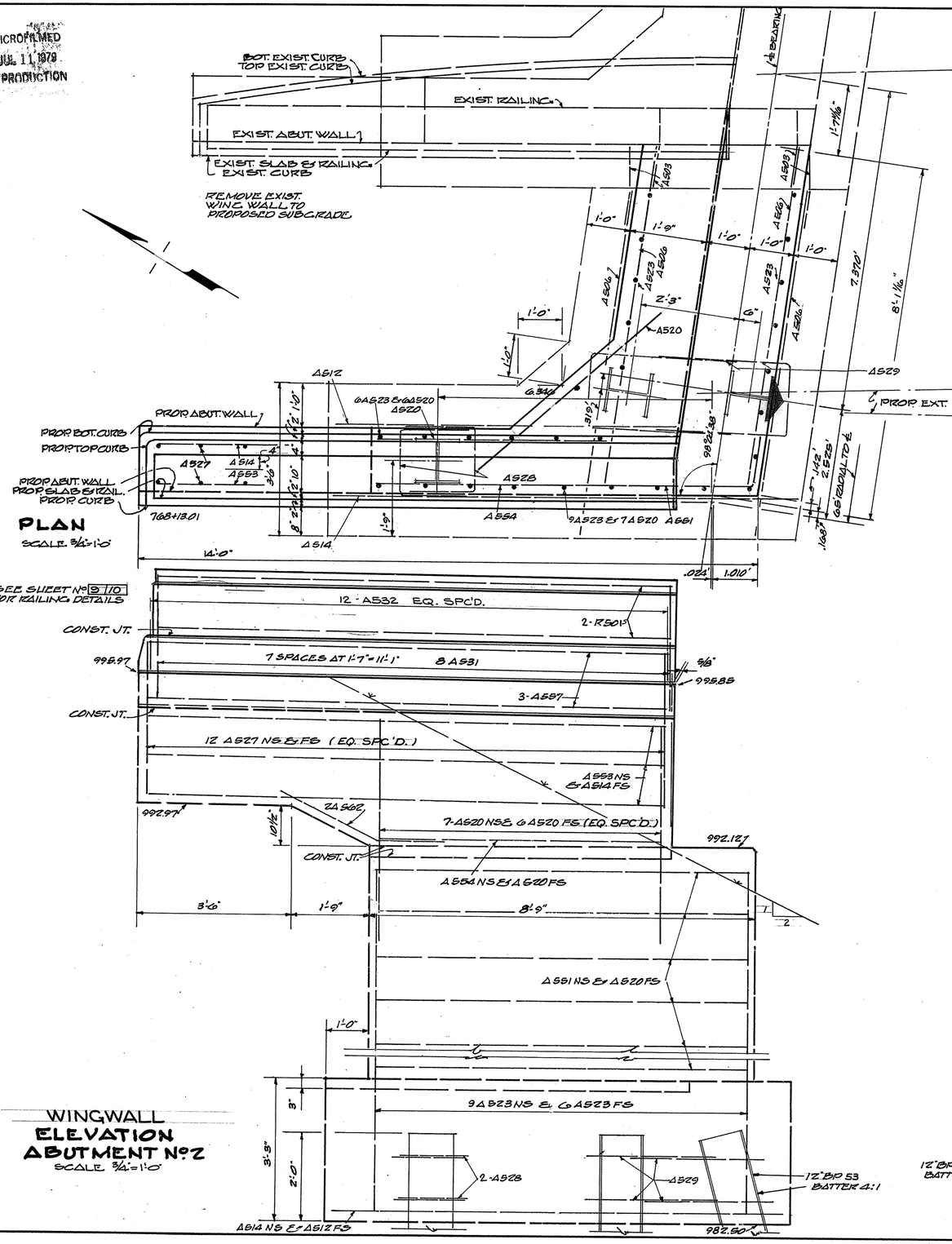
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

551-D
656



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

5/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

ABUTMENT DETAIL

BRIDGE No MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	

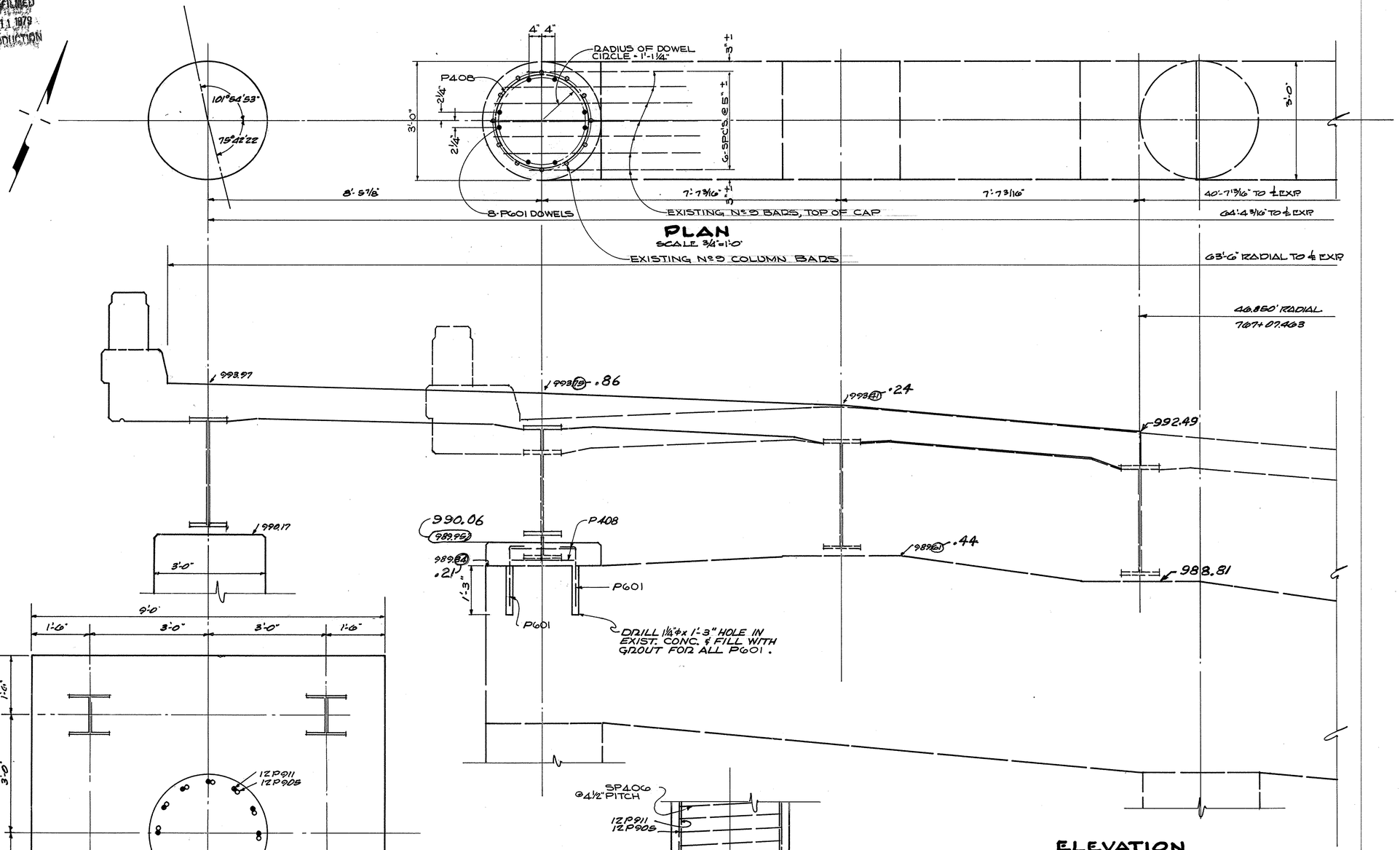
MAY 9 = 1973

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

MAH-680-6.98

551-E
656



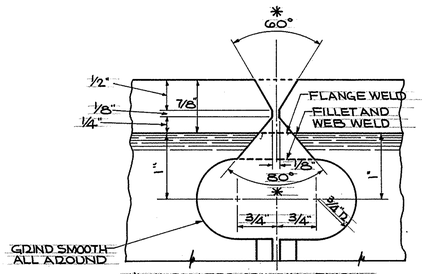
PLAN
SCALE 3/4"=1'-0"

FOOTING PLAN
SCALE 3/4"=1'-0"

FOOTING SECTION
SCALE 3/4"=1'-0"

ELEVATION PIER Nº1
SCALE 3/4"=1'-0"

NOTE:
SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BEARING DEVICES SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF THE ANCHOR BAR HOLES.



END PREPARATION OF ROLLED BEAMS FOR SHOP WELDING TOP & BOTTOM

NOTE:
ALL FULL PENETRATION WELDS SHALL BE BACK-GOUGED AND WELDED AFTER WELDING FAR SIDE. ALL GRINDING SHALL BE PARALLEL TO THE DIRECTION OF STRESS. ALL FLANGE TO FLANGE AND WEB TO WEB SPLICES ARE TO BE GROUND.

RAILING ~ END PLATE DETAIL
SCALE: 3"=1'-0"

NOTE:
SEE NOTE FOR ANCHOR BOLTS AND SHIMS ON SHEET 546.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

6/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

PIER Nº 1 DETAILS

BRIDGE Nº MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.J.S.	D.J.S.		D.A.H.	W.K.D.	5/12/70	2-2-72

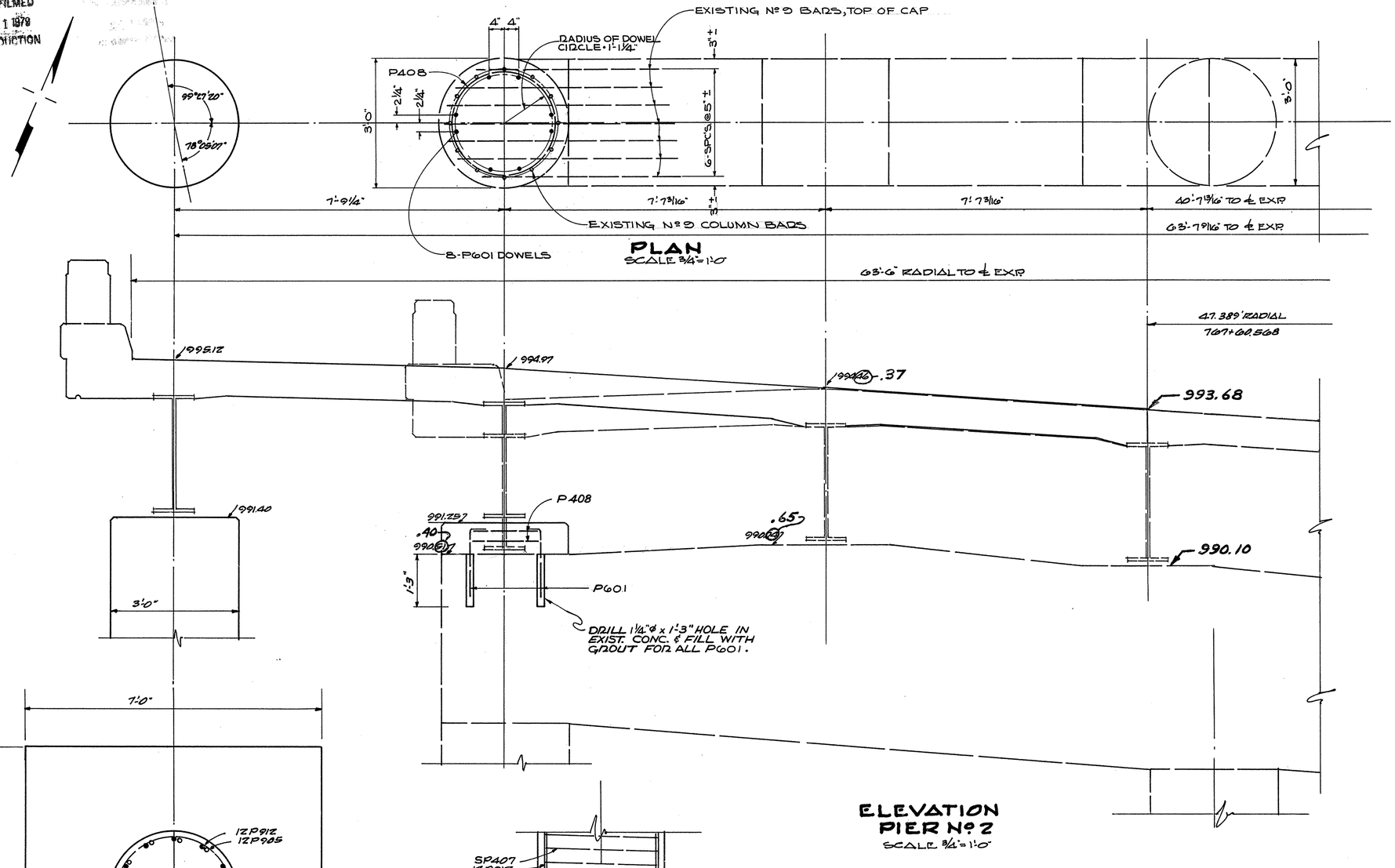
MAY 25 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

551-F
656

MAH-680-638



PLAN
SCALE 3/4"=1'-0"

ELEVATION
PIER Nº 2
SCALE 3/4"=1'-0"

FOOTING PLAN
SCALE 3/4"=1'-0"

FOOTING SECTION
SCALE 3/4"=1'-0"

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

7/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

PIER Nº 2 DETAILS

BRIDGE Nº MAH-680-0687
OVER DELASON AVE
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.J.S.	D.J.S.		D.A.H.	W.K.D.	5/12/70	2-2-72

MAY 25 1971

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JUL 11 1979
REPRODUCTION

FED. RD.	STATE	PROJECT	
2	OHIO		

551-G
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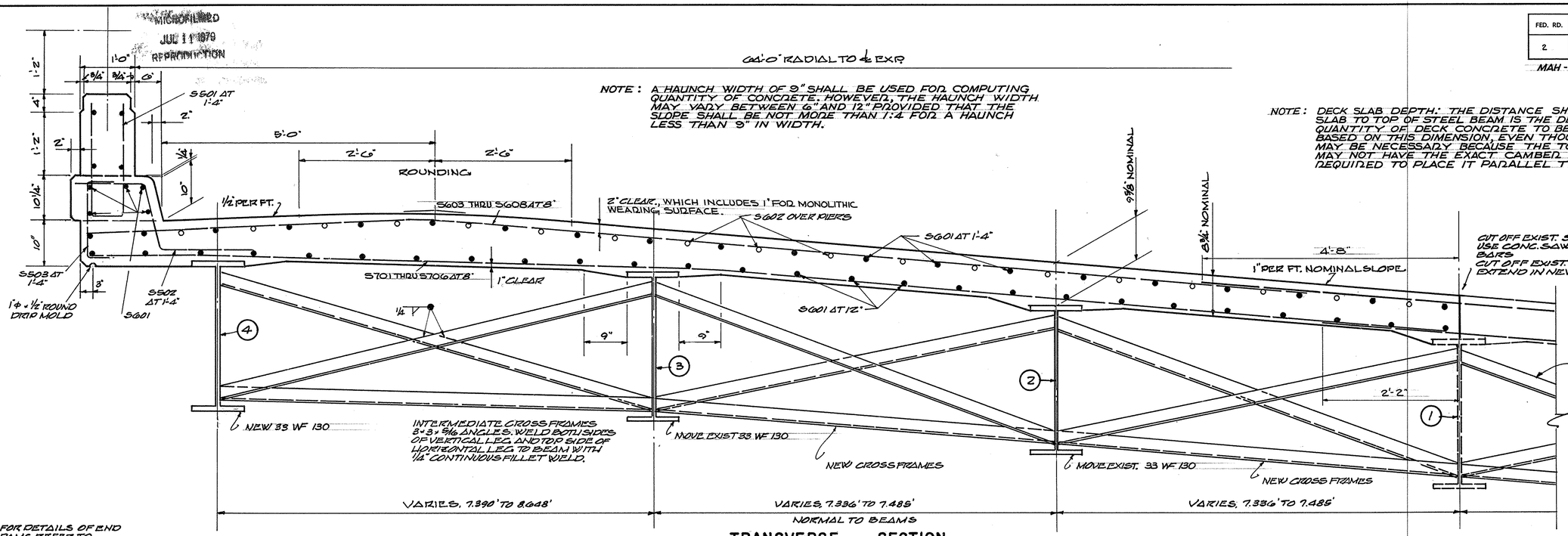
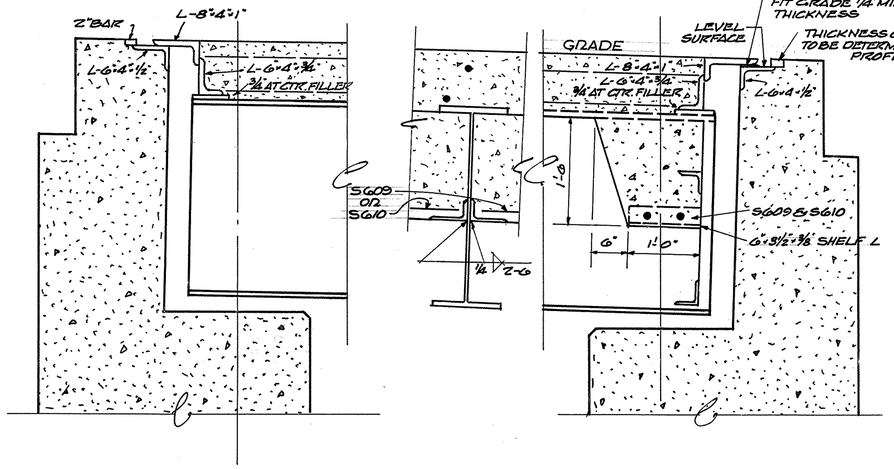
MAH - 680 - 6.98



FOR DETAILS OF END DAMS REFER TO STD DWG. SD-1-65

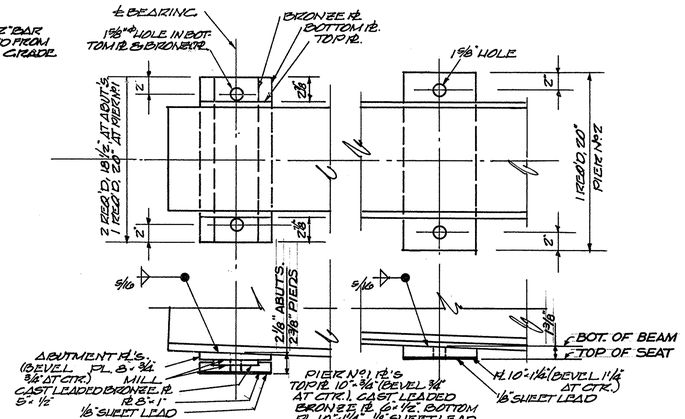
TRANSVERSE SECTION

SCALE 1"=1'-0"

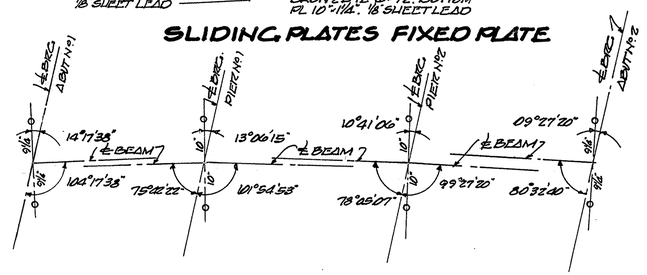


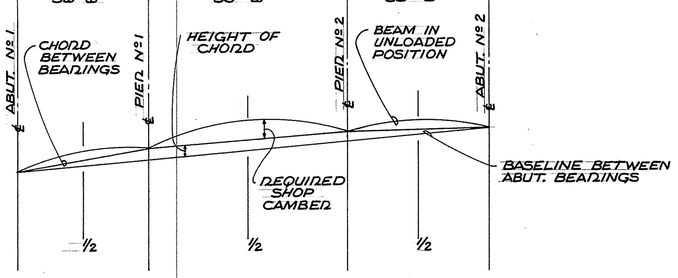
SECTION F-F
ABUTMENT Nº 2 ONLY

SECTION E-E
ABUTMENT Nº 1 ONLY



SLIDING PLATES FIXED PLATE





LAYOUT DIAGRAM

	ABUT.-1	1/2	PIER-1	1/2	PIER-2	1/2	ABUT-2
DEFLECTION DUE TO WEIGHT OF STEEL	—	0.01	—	0.05	—	0.02	—
DEFECTION DUE TO REMAINING DEAD LOAD	—	0.04	—	0.25	—	0.08	—
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	—	0.25	—	0.55	—	0.28	—
REQUIRED SHOP CAMBER (INCHES)	—	0.30	—	0.85	—	0.36	—
HEIGHT OF CHORD (INCHES)	—	4.80	9.60	8.64	7.68	3.84	—

SEE SHEET Nº 5/10 FOR LOCATION OF SECTION CUTS E-E & F-F.

8/10

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

TRANSVERSE SECTION

BRIDGE Nº MAH-680-0687

OVER DELASON AVE.

YOUNGSTOWN MAHONING COUNTY

STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	

MAY 25 1971

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SECTION A-A
SHOWING CROSS FRAMES OVER PIERS

SECTION B-B

SECTION C-C
SHOWING END DIAPHRAGM

SECTION D-D

FRAMING PLAN
SCALE 3/16"=1'-0"

100 S502 @ 1'-4" AND 100 S503 IN CURB

198 #6 BARS AT 8" IN TOP
198 #7 BARS AT 8" IN BOTTOM

198 EXIST. #6 BARS AT 8" IN TOP
198 EXIST. #7 BARS AT 8" IN BOTTOM

SLAB PLAN
SCALE 3/16"=1'-0"

SEE SHEET 8/10 FOR SECTIONS E-E & F-F

CUT EXIST. END DAM AND WELD NEW END DAM TO END OF REMAINING PORTION OF EXIST. DAM. WELD ALL AROUND AND GRIND ROADWAY FACE. CONNECTION WILL BE MADE SO MEMBERS WILL FUNCTION PROPERLY. PAY'T. INCLUDED IN ITEM 516.

REMOVE EXIST. CROSS FRAMES BETWEEN BEAMS 1 & 3. PROVIDE NEW CROSS FRAMES BETWEEN BEAMS 1 & 4.

MOMENT P.I.'s CTR. OVER PIER. SPLICE BEAM PROPOSED BEAM ONLY

℄ FIELD SPLICE

NEW INTERMEDIATE CROSS FRAMES, 3'-3"-9/16 L

NEW INTERMEDIATE CROSS FRAMES 3"-3"-9/16 LS

CUT EXIST. SLAB AT ℄ OF EXIST. BEAM

℄ BRG. ABUTMENT #1 SLIDING

℄ PIER #1 SLIDING

℄ PIER #2 FIXED

℄ BRG. ABUTMENT #2 SLIDING

NEW END DAM

NEW END CROSS FRAMES 2'-4"-9/16 LS

SCUPPERS

SEE TRANSVERSE SECTION SHEET 8/10 FOR SPACING OF LONGITUDINAL REINFORCEMENT

S602 BARS @ 1'-4" IN TOP
BARS @ 1'-10" IN BOTT.

S602 BARS AT 1'-4" OVER PIERS IN TOP

S601 BARS AT 1'-4" IN TOP

S601 BARS AT 12" IN BOTTOM

SCUPPERS shall be in accordance with Std. Dwg. SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

FACE OF CURB

½" PER FT. SLOPE

FOR DETAILS SEE STD. DWG. SD-1-69 SHT. No. 3, DETAIL-A

SCUPPER DETAIL

FOR BOLTED FIELD SPLICE SEE SD-1-69 SHT. No. 4/4

SHOP BEAM SPLICE DETAIL

FOR RAILING DETAILS, EXIST. RAILING WILL BE USED ON NEW PART. PROVIDE 4 NEW 3/4"ø 12" GALV. BOLTS FOR EACH RAILING SUPPORT.

FOR END PL. DETAIL SEE SHT. No. 6/10

ABUTMENT No. 2

RAILING ELEVATION
SCALE ½"=1'-0"

ABUTMENT No. 1

NOTE:
THE EXISTING ALUMINUM RAILING WILL BE RE-USED IN THE NEW RAILING. NEW ANCHOR BOLTS AND CONCRETE PARAPET ARE TO BE INCLUDED WITH ITEM 517 FOR PAYMENT. THE REMOVAL OF THE EXISTING CONCRETE PARAPET WILL BE INCLUDED WITH ITEM 202 FOR PAYMENT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

9/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO — YOUNGSTOWN, OHIO

SLAB PLAN & RAILING DET.

BRIDGE No. MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.		R.A.H.	W.K.D.	5/12/70	

MAY 28 1971

MICROFILMED
JUL 11 1979
REPRODUCTION

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2	OHIO		

552/656

MAH-680-6.98

A. REINFORCING STEEL NOTES.

1. Spiral Reinforcement. The length shown in the steel schedule for spiral bars is the distance from the top of the footing to top of pier. The number of turns shown in the steel schedule for the spiral bars is the length divided by the pitch plus three turns (total number of closed coils) expressed as the nearest whole number. One and one-half closed coils shall be provided at the ends of each spiral unit. Four (4) steel angle spacers weighing approx. 0.86 lbs. per lineal ft. of spacers shall be provided for each spiral unit. They shall be equally spaced along the periphery of each coil. The number of pounds of these spacers, based on 0.80 lbs. per lineal ft. will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

2. Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A700 is a No. 7 size bar and A1014 is a No. 10 size.

C. GENERAL NOTES

Design Specifications: This structure conforms to the requirements of design specifications for highway structures of the State of Ohio Department of Highways dated 9-1-57 together with current revisions thereof.

Design Data: Design Loading - CF 2000
Concrete Class C - Unit stress 1200 PSI for superstructure
Unit stress 1333 PSI for substructure

Reinforcing Steel - ASTM A615, A616, or A617, deformed, intermediate or hard grade. Unit stress 20,000 PSI except that spiral reinforcement MAY be plain bars, ASTM A306 or A499, A82 or A615.

Structural Steel - ASTM A36 Unit stress 20,000 PSI

Welds on non-stress carrying members are shown thus: N

End Dam Painting: Portions of end dams which will be in contact with steel or with concrete shall not be painted. All other portions shall be cleaned and painted in accordance with Item 514.

Traffic Maintenance: Modifications to the existing structure shall be accomplished without disruption to mainline or crossroad traffic.

Piling. All piles shall be 12" BP 53 steel "H" piles and shall be driven to firm contact with rock using a hammer of not less than 11,000 ft. lbs. per blow. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity, according to the formula in Sec. 507.05 is not less than the following value for a pile hammer of the indicated energy rating.

For the abutment piles:
50 tons per pile using a 11,000 ft. lb. hammer.
45 tons per pile using a 15,000 ft. lb. or greater hammer.
For pier piles:
55 tons per pile using a 11,000 ft. lb. hammer.
50 tons per pile using a 15,000 ft. lb. or greater hammer.
If the energy rating of the hammer is between the rating as shown above; the required formula capacity shall be determined by interpolation. The design load is 35 tons per pile for the abutment and pier piles.

Concrete Deck Placing. In order to facilitiate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections between the transverse construction joints which are normal to the centerline of the bridge and are located near the center of any span.

Embankment Const. The embankment shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the Abutments. Excavation shall then be made for the Abutments and for piers #1 and #2.
Porous Backfill. Full length of abutments and wings, shall extend up to the underside of the approach slab or to the finished ground surface.

All reinforcing shall have a 3" min. cover where concrete is in contact with earth. All other reinforcing steel shall have a 2" min. cover except where noted otherwise.

Field Bending of Reinforcing Bars. Where necessary bend bars in field to maintain clear distance to face of concrete. Field bending included with Item 509 for payment.

Reference shall be made to Standard Drawings:

	SD-1-69	Dated 6-12-69
	AS-1-67	REVISED 6-12-69
And to Supplemental Specifications:	808	Dated 1-1-71
	836	Dated 1-1-71

C. GENERAL NOTES (continued)

Field Painting Structural Steel. The field painting of the structural steel will consist of painting all the new steel and all the existing steel.

Footing, Pier 2, shall extend a minimum of 3 inches into bedrock or to the elevation shown, whichever is lower.

D. ESTIMATED QUANTITIES

75% State & 25% City

Item	Total	Units	Description	Superstructure	Abutments	Piers	General
503	Lump Sum		COFFERDAMS, CRIBS AND SHEETING				Lump Sum
202	Lump Sum		Portions of Exist. Structure Removed				
503	126	C.Y.	Unclassified Excavation		77	49	
505	Lump Sum		Test Pile				Lump Sum
507	213	Lin.Ft.	Piles - Steel HP12x53 ‡		145	68	
509	37,964	Lbs.	Reinforcing Steel	30,429	3,508	4,027	
510	58	Each	Dowel Holes		42	16	
511	97	C.Y.	Class "C" Concrete - Superstructure	97			
511	12	C.Y.	Class "C" Concrete - Piers above footings			12	
511	37	C.Y.	Class "C" Concrete - Abut. above footings		37		
511	30	C.Y.	Class "C" Concrete - Footings		15	15	
513	24,768	Lbs.	Structural Steel	24,768			
514	Lump Sum		Field Paint of Structural Steel, OLD & NEW				Lump Sum
516	Lump Sum		Structural Expansion Joints				Lump Sum
516	Lump Sum		Bearing Devices				Lump Sum
517	156.13	Lin.Ft.	Aluminum Railing Removed and Re-erected as per plan	133.05	23.08		
518	2	Each	Scuppers including Supports	2			
518	22	C.Y.	Porous Backfill		22		
601	59	Sq.Yd.	Concrete Slope Protection				59
625*			Electrical Equipment				
808	97	Units	Chemical admixture for concrete Type A, B or D	97			
517	186.15	Lin.Ft.	Double deep beam railing	186.15			

*=Carried to Sheet 424 General Lighting Summary
‡=HP12x53 piles formely designated 12BP53

Mark (1)	Number (2)	Length (3)	Weight (4)	Shape (5)
PIERS NO. 1 & 2				
P 601	16	2'-4"	56	Bent
P 408	4	8'-4"	22	Bent
P 701	14	8'-2"	234	Bent
P 904	16	11'-0"	598	Bent
P 905	24	7' - 1"	578	Bent
P 911	12	17' - 8"	721	Straight
P 912	12	24' - 10"	1013	Straight
PIER TOTAL			3222	

SPIRAL REINFORCING LIST

Mark	Number	Core Diameter	Length of Spiral (Height)	Pitch	No. of Turns	Weight Inc. Spacers
SP 406	1	2' - 8"	17' - 11"	4-1/2"	51	339
SP 407	1	2' - 8"	25' - 1"	4-1/2"	70	466
SPIRAL REINFORCING TOTAL						805
GRAND TOTAL - PIERS						4027

SUPERSTRUCTURE

S 501	104	4' - 7"	498	Bent
S 502	100	4' - 1"	426	Bent
S 503	100	2' - 1"	217	Bent
S 601	204	30' - 0"	9192	Straight
S 602	87	22' - 0"	2875	Straight
S 603	27	24' - 0"	973	Straight
S 604	27	23' - 8"	960	Straight
S 605	42	23' - 4"	1472	Straight
S 606	42	23' - 0"	1451	Straight
S 607	30	22' - 8"	1022	Straight
S 608	30	22' - 4"	1007	Straight
S 609	2	8' - 9"	26	Straight
S 610	4	7' - 3"	44	Straight
S 701	27	26' - 3"	1449	Straight
S 702	27	25' - 11"	1430	Straight
S 703	42	25' - 7"	2196	Straight
S 704	42	25' - 2"	2161	Straight
S 705	30	24' - 10"	1523	Straight
S 706	30	24' - 7"	1507	Straight
SUPERSTRUCTURE TOTAL			30429	

REINFORCING BAR SCHEDULE

Mark (1)	Number (2)	Length (3)	Weight (4)	Shape (5)
ABUTMENTS NO. 1 & 2				
A 501	10	1' - 9"	18	Straight
A 503	26	2' - 10"	79	Straight
A 504	8	8' - 0"	67	Straight
A 505	8	2' - 0"	17	Straight
A 506	40	7' - 9"	323	Straight
A 507	8	18' - 9"	156	Straight
A 508	8	19' - 6"	163	Straight
A 511	6	11' - 3"	70	Straight
A 512	2	8' - 0"	17	Straight
A 513	3	11' - 0"	34	Straight
A 514	5	10' - 6"	55	Straight
A 516	7	9' - 6"	69	Bent
A 519	3	11' - 3"	35	Straight
A 520	62	5' - 0"	323	Straight
A 523	55	9' - 10"	564	Bent
A 525	2	3' - 5"	7	Bent
A 527	48	4' - 0"	200	Bent
A 528	8	4' - 6"	38	Bent
A 529	8	7' - 6"	63	Bent
A 530	8	6' - 7"	55	Bent
A 531	15	6' - 0"	94	Bent
A 532	24	2' - 4"	58	Bent
A 533	4	4' - 5"	18	Bent
A 534	4	4' - 1"	17	Bent
A 535	2	10' - 6"	22	Straight
A 536	2	9' - 3"	19	Straight
A 551	7	9' - 4"	68	Bent
A 553	3	11' - 8"	37	Straight
A 554	1	6' - 6"	7	Straight
A 557	6	11' - 8"	73	Straight
A 562	2	4' - 5"	9	Bent
A 601	15	13' - 1"	295	Bent
A 602	34	5' - 10"	302	Bent
A 603	34	2' - 8"	136	Straight
ABUTMENTS TOTAL			3508	

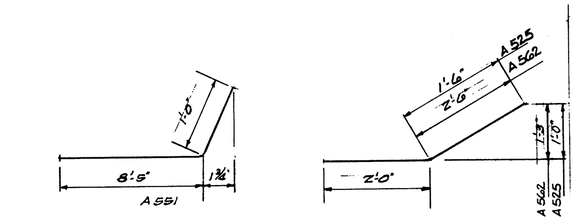
Mark (1)	Number (2)	Length (3)	Weight (4)	Shape (5)
REPLACEMENT BARS				
RE 401	1	6' - 3"		Bent
RE 501	1	6' - 7"		Straight
RE 601	1	6' - 11"		Straight
RE 701	1	7' - 3"		Straight
RE 901	1	7' - 10"		Straight

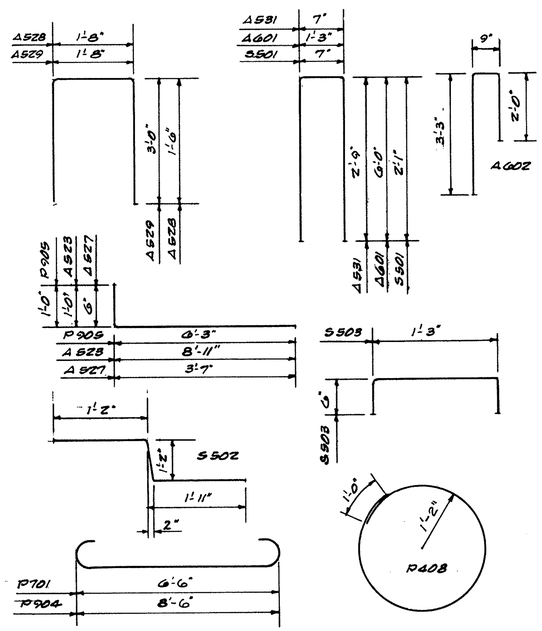
TOTAL REINFORCING

ABUTMENT TOTAL	3,508
PIERS TOTAL	4,027
SUPERSTRUCTURE TOTAL	30,429
GRAND TOTAL	37,964

RAILING - TO BE INCLUDED IN ITEM 517 FOR PAYMENT

Mark (1)	Number (2)	Length (3)	Weight (4)	Shape (5)
R 501	4	11'-6"		Straight
R 502	4	10'-11"		Straight
R 503	4	12'-6"		Straight
R 504	28	15'-0"		Straight





STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

10/10

GLAUS, PYLE & SCHOMER
AKRON, OHIO YOUNGSTOWN, OHIO

REINFORCING SCHEDULE & ESTIMATED QUANTITIES

BRIDGE Nº MAH-680-0687
OVER DELASON AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 767+19.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJS	RJS		RAH	WKD	5-12-70	

MAY 25 1971

835901

CENTERLINE SURVEY PLAT

I-680 MAH 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

553 / 656

1 / 104

MAH 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55, PGS. 47-54 Incl. ON FEB. 17-1966.

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 22 & 23 ON AUGUST 1, 1969 - PER MONUMENT ASSEMBLY RELOCATIONS. (& R/W I-680)

APPROVED	19
DEPUTY DIRECTOR OF PUBLIC WORKS	
APPROVED	19
DIVISION DEPUTY DIRECTOR	
RECEIVED 7-31	19 69
RECORDED Aug 1.	19 69
BOOK 60	PAGE 22-23
HORACE G. TETLOW COUNTY RECORDER	

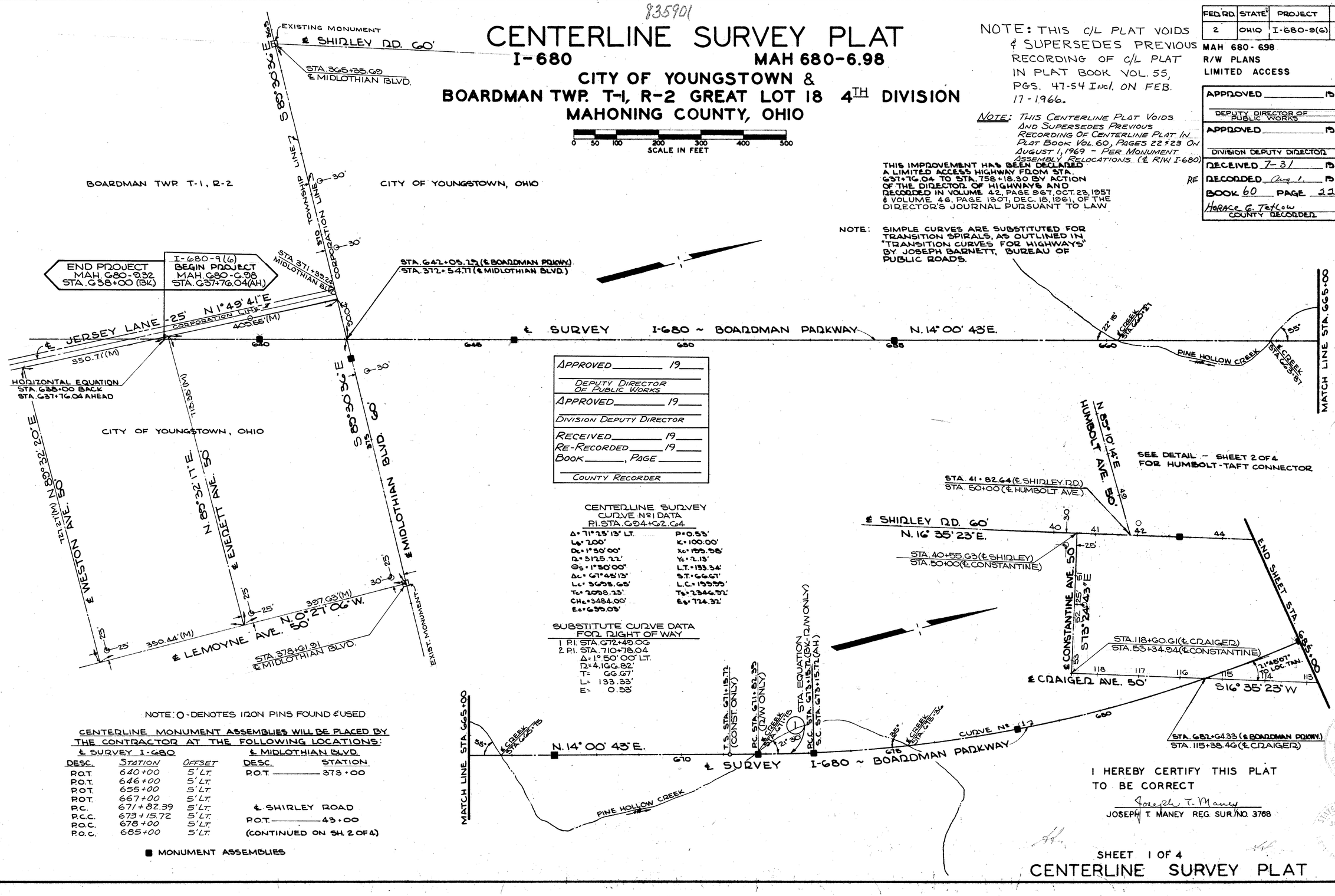
11:05 AM

RE

$20.00

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. G37+76.04 TO STA. 758+18.30 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967, OCT. 23, 1957 & VOLUME 46, PAGE 1301, DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

NOTE: SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.



APPROVED	19
DEPUTY DIRECTOR OF PUBLIC WORKS	
APPROVED	19
DIVISION DEPUTY DIRECTOR	
RECEIVED	19
RE-RECORDED	19
BOOK , PAGE	
COUNTY RECORDER	

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA. G04+62.04

Δ = 71° 25' 13" LT.	P = 0.53'
Lc = 200'	K = 100.00'
Dc = 1° 50' 00"	Xc = 199.98'
R = 3125.22'	Yc = 2.13'
Gs = 1° 50' 00"	L.T. = 133.34'
Δc = 67° 45' 13"	S.T. = 66.67'
Lc = 3655.65'	L.C. = 133.33'
Tc = 2098.23'	Ts = 2344.57'
CHc = 3484.00'	Es = 724.31'
Ec = 699.08'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA. G72+49.00
2 P.I. STA. 710+78.04
Δ = 1° 50' 00" LT.
D = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

NOTE: O - DENOTES IRON PINS FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS:

℄ SURVEY I-680 DESC.	STATION	OFFSET
P.O.T.	640+00	5' LT.
P.O.T.	646+00	5' LT.
P.O.T.	655+00	5' LT.
P.O.T.	667+00	5' LT.
P.C.	671+82.39	5' LT.
P.C.C.	673+15.72	5' LT.
P.O.C.	678+00	5' LT.
P.O.C.	685+00	5' LT.

℄ MIDLOTHIAN BLVD. DESC.	STATION
P.O.T.	373+00

℄ SHIRLEY ROAD
P.O.T. 43+00

(CONTINUED ON SH. 2 OF 4)

■ MONUMENT ASSEMBLIES

I HEREBY CERTIFY THIS PLAT TO BE CORRECT

Joseph T. Maney

JOSEPH T. MANEY REG. SUR. NO. 3768

STATE OF OHIO JOSEPH T. MANEY 3768 REGISTERED SURVEYOR

SHEET 1 OF 4

CENTERLINE SURVEY PLAT

State Highway Dept. Ohio
Div. Land & Utilities Sec.
JAN 27 1969
Received
Checked
By

835902

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55, PGS. 47-54 Incl. ON FEB 17-1966.

CENTERLINE SURVEY PLAT

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

NOTE: THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. 637+76.04 TO STA. 758+18.38 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967, OCT. 23, 1957, & VOLUME 46, PAGE 1307, DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

554 / 656

MAH 680 - 6.98
R/W PLANS
LIMITED ACCESS

2 / 104

APPROVED _____ 19____
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19____
DIVISION DEPUTY DIRECTOR

RECEIVED 7-3/ 1969 11:06 AM
RECORDED August 1 1969
BOOK 60 PAGE 24-25
Horace E. Tetlow
COUNTY RECORDER

#25.00

SEE DETAIL BELOW FOR HUMBOLT-TAFT CONNECTOR

SCALE IN FEET 0 50 100 200 300 400 500

BEGIN SHEET STA. 685+00

℄ TAFT AVE. N 88°40'16" E

℄ COOPER AVE. 50'

N. 34° 38' 33" W.

STA. 21+83.66 (℄ COOPER)

550.13'(M) N. 34° 41' 21" W. 415.83'(M)

N. 34° 41' 21" W.

STA. 45+67.39 (℄ SHIRLEY RD.) STA. 30+00 (℄ TAFT AVE.)

STA. 44+22.80 (℄ SHIRLEY RD.) STA. 10+00 (℄ COOPER AVE.)

STA. 45+26.03 (℄ SHIRLEY RD.) STA. 10+49.81 (℄ TAYLOR)

STA. 45+34.71 (℄ SHIRLEY RD.) STA. 30+89.02 (℄ TAYLOR AVE.)

INDIANOLA AVE. 50'

N. 55° 18' 35" E. 344.59

STA. 48+20.43 (℄ DELOC. INDIANOLA) STA. 30+96.22 (℄ TAYLOR)

MURRAY AVE. 50'

N. 55° 15' 21" E. 345.03

STA. 45+46.67 ℄ TAYLOR

END SHEET STA. 707+00

℄ TAYLOR AVE. 40'

N. 34° 38' 36" W.

SURVEY I-680 ~ BOARDMAN PARKWAY

℄ TAYLOR AVE 50'

N. 73° 21' 21" W.

55° 42' TO LOC. TAN

34° 41' 09" TO LOC. TAN

℄ SHIRLEY RD. 60'

STA. 48+23.33 (℄ BOARDMAN PKWY.) STA. 50+00.00 (℄ SHIRLEY RD.)

STA. 48+17.48 (℄ BOARDMAN PKWY.) STA. 10+00.00 (℄ TAYLOR AVE.)

STA. 656+72.94 (℄ BOARDMAN PKWY.) STA. 50+00.51 (℄ DELOC. INDIANOLA)

CURVE Nº 1

N55°18'35"E 140.66'

℄ DELOC. INDIANOLA N 48°23'30" E

N 43°28'34" E 204.16'

51°05'43" TO LOC. TAN

STA. 51+63.63 (℄ DELOC. INDIANOLA) STA. 30+50.14 (℄ HOMEWOOD)

P.I. STA. 45+11.74 ℄ HOMEWOOD

N. 46° 25' 57" W. 120'

P.I. STA. 35+33.24 ℄ HOMEWOOD

N. 34° 40' 46" W

℄ HOMEWOOD AVE. 40'

N. 34° 40' 46" W.

INDIANOLA AVE.

STA. 55+08.80 (℄ SHIRLEY RD.) STA. 33+62.65 (℄ HOMEWOOD)

N. 73° 24' 37" W.

℄ HOMEWOOD AVE 50'

N. 73° 24' 37" W.

STA. 103+89.95 (℄ CRAIGER) STA. 7+14.81 (℄ TAYLOR)

S 16° 35' 23" W

℄ CRAIGER AVE. 50'

STA. 104+07.48 (℄ CRAIGER) STA. 30+27.71 (℄ HOMEWOOD)

N 16° 35' 23" E

℄ SPAULDING ROAD 50'

N 19° 43' 16" E

N 25° 11' 44" W

STA. 48+81.46 (℄ POWERS WAY) STA. 100+00 (℄ CRAIGER)

STA. 45+46 (℄ POWERS WAY) STA. 50+00 (℄ SPAULDING)

℄ POWERS WAY GO'

N 25° 11' 44" W

STA. 62+91.05 (℄ SHIDLEY) STA. 54+84.11 (℄ POWERS WAY)

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 24 & 25 ON AUGUST 1, 1969 - PER MONUMENT ASSEMBLY RELOCATIONS (℄ R/W I-680)

APPROVED _____ 19____
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19____
DIVISION DEPUTY DIRECTOR

RECEIVED _____ 19____
RE-RECORDED _____ 19____
BOOK _____, PAGE _____
COUNTY RECORDER

NOTE: O-DENOTES IRON PINS FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS:

℄ HUMBOLT-TAFT CONNECTOR	
DESC.	STATION
P.O.T.	10+50
P.C.	11+38.66
P.O.T.	13+25

℄ SURVEY I-680		
DESC.	STATION	OFFSET
P.O.C.	692+00	5' LT.
P.O.C.	700+00	5' LT.
P.O.C.	706+00	5' LT

℄ SHIRLEY RD.	
DESC.	STATION
P.O.T.	47+00
P.O.T.	52+50
P.O.T.	56+00
P.O.T.	62+00

℄ DELOC. INDIANOLA AVE.	
P.O.T.	48+20.43
P.O.T.	51+25

■ MONUMENT ASSEMBLIES

CENTERLINE SURVEY CURVE Nº 1 DATA
P.I. STA. 654+62.64

Δ = 71° 25' 13" LT.	P = 0.53'
L_s = 200'	K = 100.00'
D_s = 1° 50' 00"	X_s = 199.98'
R = 3,125.22'	Y_c = 2.13'
θ_s = 1° 50' 00"	LT. = 133.34'
Δ_c = 67° 45' 13"	S.T. = 66.67'
L_c = 3,695.65'	L.C. = 199.99'
T_s = 2,088.23'	T_s = 2,346.92'
CH = 3484.06'	E_s = 724.32'
E = 639.03'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. 672+49.06
2. P.I. STA. 710+78.04
Δ = 1° 50' 00" LT.
D = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

STA 10+00 (℄ CONNECTOR) STA. 45+51.42 (℄ HUMBOLT)

STA. 41+82.64 (℄ SHIDLEY) STA. 50+00 (℄ HUMBOLT)

℄ HUMBOLT AVE. -50'

N 85° 10' 14" E

N 04° 55' 53" W

P.C. STA. 11+38.66

P.T. STA. 12+34.44

℄ CONNECTOR

N 30° 31' 39" E

STA 13+73.00 (℄ CONNECTOR) STA. 45+41.44 (℄ TAFT)

S 34° 28' 54" E

P.C. STA. 44+87.32

P.T. STA. 46+21.64

℄ TAFT AVE. -50'

N 85° 10' 16" E

STA. 45+27.39 (℄ SHIDLEY) STA. 50+00 (℄ TAFT)

℄ SHIRLEY ROAD

N. 73° 35' 23" W.

HUMBOLT-TAFT CONNECTOR

℄ HUMBOLT-TAFT CONNECTOR CURVE DATA
P.I. STA. 11+87.78
Δ = 31° 21' 31" RT
R = 175.00'
T = 49.12'
L = 95.78'
CH = 94.59'
E = 6.76'

℄ EXISTING TAFT AVE. CURVE DATA
P.I. STA. 45+60.59
Δ = 56° 50' 50" LT.
D = 135.38'
T = 73.27'
L = 134.32'
CH = 128.87'
E = 18.56'

I HEREBY CERTIFY THIS PLAT TO BE CORRECT
Joseph T. Maney
JOSEPH T. MANEY REG. SUR. NO. 3768

SHEET 2 OF 4
CENTERLINE SURVEY PLAT

JUN 27 1969
LOADED
BY

835903

CENTERLINE SURVEY PLAT

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-I, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

SCALE IN FEET: 0 50 100 200 300 400 500

NOTE: THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. G37+76.04 TO STA. 758+18.30 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967 OCT. 23, 1957, & VOLUME 46, PAGE 1307 DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

555
656

MAH 680 - 6.98
R/W PLANS
LIMITED ACCESS

3
104

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED 7-3/ 19 68 11:07 AM
Re- RECORDED August 1 19 69
BOOK 60 PAGE 26-27
HORACE E. TRITSCH
COUNTY RECORDER

$50.00

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55, PGS. 47-54 Incl. ON FEB 17-1966.

℄ RELOC. SHADY RUN CURVE DATA

CURVE Nº 1	CURVE Nº 2	CURVE Nº 3
Δ = 33°15'00" LT.	Δ = 11° 30' 56" LT.	Δ = 16° 00' 00" RT.
Dc = 10°00'00"	Dc = 6° 00' 00"	Dc = 12°00'00"
R = 572.96'	R = 954.93'	R = 477.46'
T = 171.08'	T = 96.25'	T = 67.10'
L = 332.50'	L = 191.95'	L = 133.33'
CH = 327.85	CH = 191.60'	CH = 132.30'
P.I. STA. 35+46.25	P.I. STA. 47+60.80	P.I. STA. 50+67.10

CURVE Nº 4	CURVE Nº 5
Δ = 21°02'32" LT.	Δ = 21° 48' 00" RT.
Dc = 12° 00' 00"	Dc = 9° 00' 00"
R = 477.46'	R = 636.62'
T = 88.67'	T = 122.31'
L = 175.35'	L = 241.67'
CH = 174.37'	CH = 240.22'
P.I. STA. 52+45.03	P.I. STA. 56+65.45

CENTERLINE SURVEY CURVE Nº 1 DATA
P.I. STA. 6+84+G2.64

Δ = 71° 25' 13" LT.	P = 0.53'
Lc = 200'	K = 100.00'
Dc = 1° 50' 00"	Xc = 199.38'
R = 3,125.22'	Yc = 2.13'
θc = 1° 50' 00"	LT = 133.34'
Δc = 67° 45' 13"	ST = 66.67'
Lc = 3,685.65'	LC = 199.38'
Tc = 2,098.23'	Tc = 2,346.92'
CH = 3,484.06'	Ec = 724.32'
Ec = 639.03'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. G72+49.06
2. P.I. STA. 710+78.04
   Δ = 1° 50' 00" LT.
   Dc = 4.166.82'
   T = 66.67'
   L = 133.33'
   E = 0.58'

℄ POWERSDALE-MABEL CONNECTOR CURVE DATA
P.I. STA. 12+32.54
Δ = 90° 04' 18" LT.
R = 160.00
T = 160.20'
L = 251.58'
CH = 226.42'
E = 66.42'

CENTERLINE SURVEY CURVE Nº 2 DATA
P.I. STA. 735+65.13

Δ = 32° 44' 51" LT.	
Dc = 1° 28' 00"	
R = 3906.53'	
T = 1,147.81'	
L = 2,232.78'	
CH = 2,202.52'	
E = 165.13'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. 724+17.52
2. P.I. STA. 735+65.13
   Δ = 32° 44' 51" LT.
   Dc = 1° 28' 00"
   R = 3906.53'
   T = 1,147.81'
   L = 2,232.78'
   CH = 2,202.52'
   E = 165.13'

℄ UNION ST. CURVE DATA

CURVE 'A'	CURVE 'B'
P.I. STA. 45+11.02	P.I. STA. 47+18.31
Δ = 28° 22' 47" RT.	Δ = 23° 41' 28" LT.
R = 437.81'	R = 347.29'
T = 110.70'	T = 72.84'
L = 216.86'	L = 143.60'
CH = 214.65'	CH = 142.58'
E = 13.78'	E = 7.56'

℄ CONSTRUCTION RAMP 'F' CURVE DATA
P.I. STA. 723+58.44

Δ = 48° 00' RT.	Tc = 59.00'	K = 74.86'
Lc = 150.00'	CH = 116.01'	Xc = 149.17'
Dc = 18° 00'	Ec = 5.42'	Yc = 11.73'
R = 318.31'	Tc = 217.89'	L.T. = 100.29'
θc = 13° 30'	Ec = 33.34'	S.T. = 50.27'
Δc = 21° 00'	P = 2.94'	L.C. = 199.63'
Lc = 116.67'		

RAMP 'F' SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. 722+40.84
2. P.I. STA. 724+57.49
   Δ = 13° 30' RT.
   R = 424.68'
   T = 50.27'
   L = 100.07'
   E = 2.96'

NOTE: ☐ - DENOTES MONUMENTS FOUND & USED
○ - DENOTES IRON PINS FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS

℄ I-680			℄ RELOC. SHADY RUN		℄ RAMP 'F'	
DESC.	STATION	OFFSET	DESC.	STATION	DESC.	STATION
P.O.T.	712+11.37	5' Lt.	P.C.	37+15.17	P.O.T.	720+80.92
P.O.T.	718+00	5' Lt.	P.T.	41+07.67		
P.O.C.	724+17.92	5' Lt.	P.C.	46+64.51	℄ POWERSDELL-MABEL CONNECTOR	
P.O.C.	730+00	5' Lt.	P.T.	48+56.44	P.C.	10+72.34
			P.C.	50+00.00	P.T.	13+23.87
			P.T.	51+33.33		
			P.C.	51+56.36		
			P.T.	53+81.71		
			P.C.	54+48.14		

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 26 & 27 ON AUGUST 1, 1969 - PER MONUMENT ASSEMBLY RELOCATIONS (℄ R/W I-680)

■ MONUMENT ASSEMBLIES

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED _____ 19___
RE-RECORDED _____ 19___
BOOK _____, PAGE _____
COUNTY RECORDER

I HEREBY CERTIFY THIS PLAT TO BE CORRECT

Joseph T. Maney
JOSEPH T. MANEY REG. SUR. NO 3768

SHEET 3 OF 4

CENTERLINE SURVEY PLAT

835904

CENTERLINE SURVEY PLAT

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

FED. RD	STATE	PROJECT	
2	OHIO	I-680-9(6)	

556/656

MAH 680 - 6.98
R/W PLANS
LIMITED ACCESS

4/104

NOTE: THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. 737+76.04 TO STA. 758+18.30 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967, OCT. 23, 1957, & VOLUME 46, PAGE 1307, DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

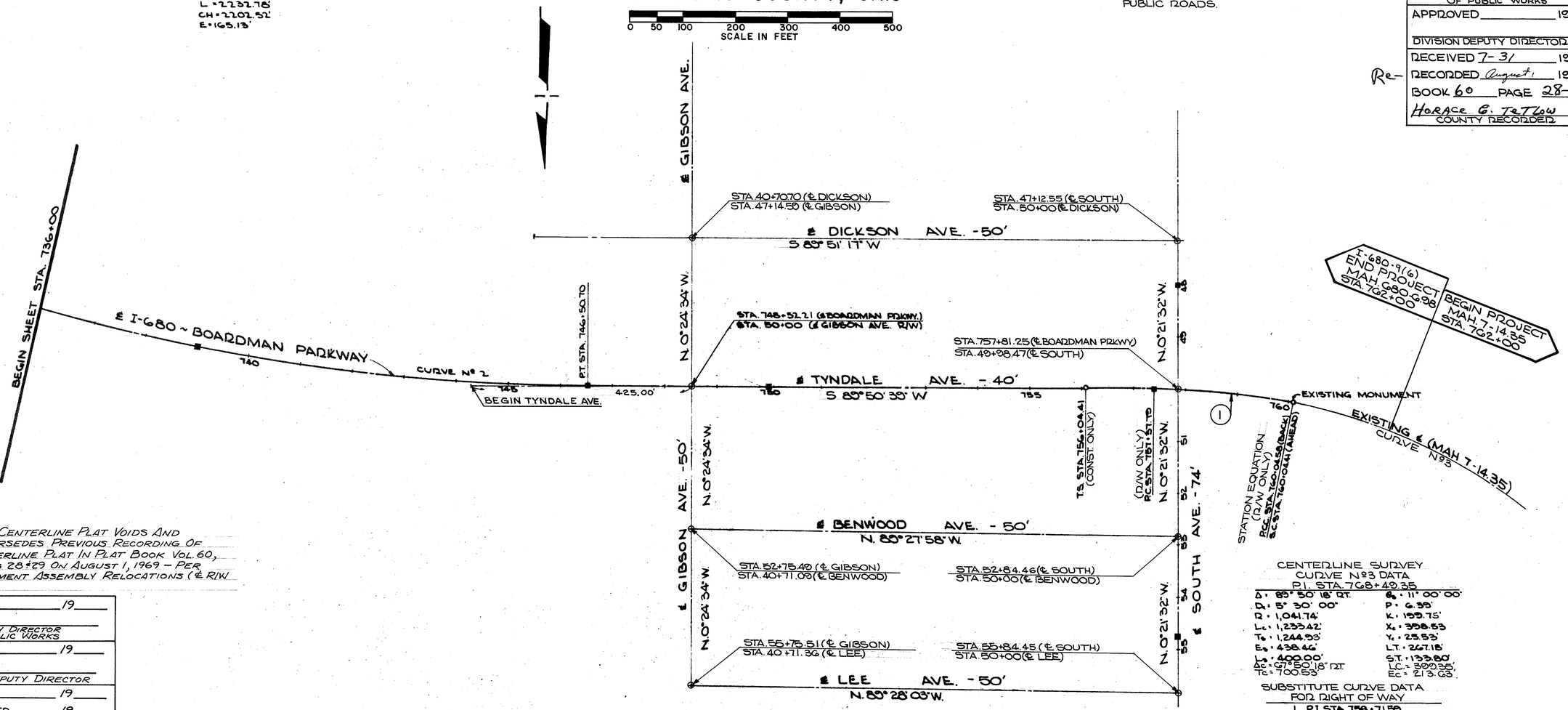
APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED 7-31 1969 11:08 AM
RECORDED August 1 1969
BOOK 60 PAGE 28-29
HORACE G. TETLOW
COUNTY RECORDER

Re-

$10.00

CENTERLINE SURVEY
CURVE No 2 DATA
P.I. STA. 735+65.73
Δ = 31° 44' 51" LT.
Dc = 1° 28' 00"
R = 3906.83'
T = 1147.81'
L = 2232.78'
CH = 2202.52'
E = 165.13'



CENTERLINE SURVEY
CURVE No 3 DATA
P.I. STA. 768+49.35

Δ = 89° 50' 18" RT.	θ_s = 11° 00' 00"
Dc = 5° 30' 00"	P = 6.38'
R = 1,041.74'	K = 199.75'
Lc = 1,633.42'	X_s = 358.53'
Ts = 1,244.93'	Y_s = 25.53'
Es = 438.46'	L.T. = 267.18'
Ls = 400.00'	S.T. = 133.80'
Ac = 67° 50' 18" RT.	LC = 300.35'
Tc = 700.53'	Ec = 213.03'

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1. P.I. STA. 758+71.59
Δ = 11° 00' 00" RT.
R = 1,389.61'
T = 133.80'
L = 266.79'
CH = 266.36'
E = 6.43'

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 28 & 29 ON AUGUST 1, 1969 – PER MONUMENT ASSEMBLY RELOCATIONS (℄ R/W I-680)

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED _____ 19___
RE-RECORDED _____ 19___
BOOK _____, PAGE _____
COUNTY RECORDER

NOTE: O-DENOTES SPIKES (SET BY CITY OF YOUNGSTOWN) FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS

℄ SURVEY I-680			℄ SOUTH AVE.	
DESC.	STATION	OFFSET	DESC.	STATION
P.O.C.	739+00	5' LT.	R.O.T.	48+00
P.T.	746+50.70	5' LT.	R.O.T.	54+75
R.O.T.	750+00	5' LT.		
P.C.	757+37.79	5' LT.		

■ MONUMENT ASSEMBLIES

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55 PGS. 47-54 Incl. ON FEB 17-1966.

I HEREBY CERTIFY THIS PLAT TO BE CORRECT

Joseph T. Maney
JOSEPH T. MANEY REG. SUR. NO 3768

SHEET 4 OF 4
CENTERLINE SURVEY PLAT

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2

MAHONING COUNTY, OHIO

SCALE 0 50 100 200 300

THE FOLLOWING IS A LIST OF COMPANIES OR CITY DEPARTMENTS WHICH HAVE UTILITIES LOCATED WITHIN THE LIMITS OF THIS PROJECT:

(A) THE EAST OHIO GAS COMPANY
101 E. BOARDMAN STREET
YOUNGSTOWN, OHIO 44503

(B) OHIO EDISON COMPANY
730 SOUTH AVENUE
YOUNGSTOWN, OHIO 44502

(C) CITY OF YOUNGSTOWN
SEWER DEPARTMENT
CITY HALL
YOUNGSTOWN, OHIO 44503

(D) THE OHIO BELL TELEPHONE COMPANY
2405 MARKET STREET
YOUNGSTOWN, OHIO 44507

(E) CITY OF YOUNGSTOWN
DIVISION OF WATER
CITY HALL
YOUNGSTOWN, OHIO 44503

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

557/656

5/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MAHONING COUNTY
BOARDMAN TWP.
LOT 18 4TH DIVISION T-1 R-2

THE LAKE PARK CEMETERY ASSOC. TO BE ACQUIRED BY MAH. 680-9.32

BOT. FILL 2

FUTURE RAMP 'M'

RAMP 'L'

END PROJECT I-680-9(15) MAH. 680-9.32 STA. 638+00 (BACK)

BEGIN PROJECT I-680-9 (14) MAH. 680-6.98 STA. 637+76.04 (AHEAD)

BEGIN WORK MAH. 680-6.98 STA. 634+55

END ACQUISITION I-680-9(10) STA. 636+31

BEGIN ACQUISITION I-680-9(6) STA. 636+31

CORPORATION LINE

JERSEY LANE

EVERETT AVE.

WESTON AVE.

LEMOYNE

TO BE ACQUIRED BY MAH. 680-9.32

SHIRLEY RD.

MAC DRIVE ACCESS TO 138

OHIO EDISON EASEMENT- 25'

PINE HOLLOW CREEK

BOARDMAN EXPRESSWAY

RAMP 'K'

RAMP 'J'

LANDLOCKED 15,676 S.F.

LANDLOCKED - 16,128 S.F.

Ball Field Cyclone Fence

MIDLOTHIAN BLVD.

MATCH LINE STA. 665+00

Nº	OWNER	Nº	OWNER
100-WL	JOHN NOVAK	116-WL	FRANK A. NAPLES & MARIE A. NAPLES
101-WL	JOHN ZELINA & OLGA ZELINA	99-WL	DOMINIC PEDALINE & ESTHER PEDALINE
102-WL	HENRY L. BEACH & EVELYN MAE BEACH	117-WL	ROBERT C. HODGE & MARIE ELIZABETH HODGE
103-WL	ROBERT A. ALLAN & MILDRED A. ALLAN	118-WL	JOHN MATZYE, JR. & MARGARET A. MATZYE
104-WL	VICTOR FEDOR CHAK & HELEN A. FEDOR CHAK	119-WL	DOMINIC CARANO & STELLA M. CARANO
105-WL	EMANUEL MANIS & MARY B. MANIS	120-WL	DORIS MAY WELKER & DORIS M. WELKER
106-WL	JOHN F. CURALL & THELMA J. CURALL	121-WL	WILLIAM K. CROOKS & AGNES CROOKS
107-WL	JAMES W. ANDERSON & JEAN ALICE ANDERSON	123-WL	WILLIS IPE & ELIZA. MAY IPE
108-WL	KENNETH R. WILSON & ALDA M. WILSON	124-WL	CHARLES R. HOGG
109-WL	JOHN E. JONES & DOROTHY J. JONES	125-WL	JOHN HAAS & KATHERINA HAAS
110-WL	RAYMOND T. MSANDREWS & BETTY M SANDREWS	126-WL	JOHN HAAS
111-WL	HARRY W. JACOBSON & ANITA C. JACOBSON	127-WL	PAUL R. TOLAND & MARTHA J. TOLAND
112-WL	FRANK WSZOLEK & BERTHA M. WSZOLEK	128-WL	JOHN WIETELMANN
113-WL	ALFRED SQUILLANTE	129-WL	ESTATE OF DAVID B. CONRATH & CLIFFORD E. FISHER
114-WL	JOSEPH L. FEDOR & MARY F. FEDOR	130-WL	DELORES WELLS
115-WL	RAY BRUNETTI & LUCILLE BRUNETTI	131-WL	WILLIAM A. LONG & BETTY A. LONG

Nº	OWNER
132-WL	JENNIE E. POLLEY
133-WL	ALEXANDER GUARINO
134-WL	THE ESTATE OF HATTIE HALLWOOD Dec'd.
135-WL	ROBERT HAY MACLENNAN
136-WL	MATILDA ZIGO
137	DOMINIC TOCCO & ANNETTE TOCCO
138-LA	CARL A. BERNDT & PEARL BERNDT
139-WL	INDIANOLA REALTY, INC.
139-A-WL	" " "
140A-WL	JOHN SHOFI & ELIZABETH SHOFI
141-WL	MICHAEL R. BOHN & MARY ALICE BOHN
142-WL	JESSIE M. IPE
143A-WL	CITY OF YOUNGSTOWN, OHIO
143B-WL	" " " "
143C-WL	" " " "
144-WL	THE COMMISSIONERS OF MAHONING COUNTY, OHIO

302A-WL	WILLIAM O. WALKER & MARION WALKER
303A-LA	EDITH H. JIMPKINS
304A-WL	ESTATE OF JAMES E. CONZETT & ETTA CONZETT
305A-LA	
139-B-WL	ROBERT W. ISAACSON & RUTH A. ISAACSON

EXTENDED RAISED MEDIAN WEST ALONE MIDLOTHIAN BLVD.

REVISION	DESCRIPTION	BY	DATE
	REVISED L.A. LINE & DELETED PCL 137 LA		12-6-71
6.	Added fence to Pcl. 143.	EW	12-9-69
5	Added Pcl. 139 B EL	EW.	8-7-69
4	Changed All Names Previously Revised on Earlier Sepias	MKM.	7-25-69
3	ADDED (L) RESIDUE, PCL. 139-B-WL.		7/1/69
2	ADDED PCL. 139-B-WL. REV. PCL. 139-WL.		12/1/68
1	ADDED PARCEL 143-WA	EHC	11/29/68

PARCELS 302A-WL, 303A-LA, 304A-LA & 305A-LA ADDED. FED. PROJ. NO FOR CONSTRUCTION SHOWN IN ENG'S BEGIN PROJECT FLAGS. ADDED END ACQUISITION FLAG FOR MAH I-680-9.32. 5-6-70

SHEET 1 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2

MAHONING COUNTY, OHIO

SCALE

0 50 100 200 300

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

558/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

6/104

Nº	OWNER
271-WD	ELIZABETH SCHLOSSAR
272-WD	MILDRED MARUSKIN
273-WD	PETER F. JAKUBOVIC & IRENE JAKUBOVIC, a/k/a IRENE C. JAKUBOVIC
278-WL	HELEN L. HURAJT
279-WL	PETER S. CHIZMAR
280-WL	JOSEPH VAGNER & JUSTINA VAGNER
281-WL	MARIE E. HORVAT ET. AL. - OWNERS
282-WL	MICHAEL SHRISKY & MARTIN SHRISKY
283-WL	JOHN PAVLICH & MARY PAVLICH
284-WL	& BERTHA RAJSICH, a/k/a RAJA RAJSICH
292-WL	ESTATE OF GLADYS L. CLEMENS, Decd.
293-WL	DONEL REALTY COMPANY, A PARTNERSHIP
644 WA	JHO KRUPPA & ELLA KRUPPA
676 WA	CHARLES RICHARD WIESENSEE & VERONICA C. WIESENSEE

Nº	OWNER
143C-WL	CITY OF YOUNGSTOWN, OHIO
144A-WL	THE COMMISSIONERS OF MAHONING COUNTY, OHIO
149-WL	MARTHA B. KRUPA
150-WL	JOHN MALENIC
151-WL	JOHN P. MALENIC & MARY F. MALENIC
152-WL	STEPHEN NESHITE, OWNER; PAULINE NESHITE, LIFE ESTATE
153-WL	SUSIE VETRECIN
154-WL	THE SAFEWAY INVESTMENT COMPANY, A PARTNERSHIP
155-WL	WILLIAM H. TOTH & PATRICIA L. TOTH
156-WL	THOMAS MASI & BETTY JEAN MASI
157-WL	RICHARD PUCCI
158-WL	POWERS ESTATE CEMETERY
160-WL	GERTRUDE POWERS CLARK & MURIEL H. POWERS
161-WL	FELIX V. TESNER & LOUISE C. TESNER
166AWL	See 166 WL
163-WL	PACENTIZANI CLUB OF YOUNGSTOWN, OHIO, AN OHIO CORPORATION
164-WL	THE DORIS REALTY COMPANY, A PARTNERSHIP
165A-WL	GROUP # XVII SLOVAK CATHOLIC SOKOL

Nº	OWNER
165B-WL	GROUP # XVII SLOVAK CATHOLIC SOKOL
166-WL	MICHAEL TYCH a/k/a MICHAEL TYCH, JR. & PEARL TYCH
167-WL	LJUBAN RUSNOV & DOROTHY RUSNOV
168-WL	MARY B. JANCI
169-WL	MARTIN HOLECKO
170-WL	JOHN MURAR
171-WL	SUSAN OPATICH
172-WL	SUSAN RITCHIE & JAMES RITCHIE
173-WL	DOMINIC AGOSTINELLI
174-WL	MARY SOPKOVIC a.k.a. MARY SOPIKOVICH
178A-WL	MINNIE D. WINTER
179-WL	THOMAS BIROSCAK
180-WL	MARY ANN HALAPARDA
181-WL	JOHN GORZDULIC, ET AL
182-WL	MARY LILKO
183-WL	ANNA STEFANIK & STEPHEN BAJTOS
184-WL	JOHN J. MARTINKO

Nº	OWNER
185-WL	FRANK CERIMELE a/k/a CERIMELI-OWNER
186-WL	KATHERINE PERLICH a/k/a KATA PERLIC
190-WL	JOHN KAVULIC & MARY KAVULIC
200-WL	MIKE TKACIK & FRANCIS TKACIK
201-WL	MIKE BABINCHAK & SUSIE BABINCHAK
202-WL	CATHERINE ONDERKO
203-WL	MAZIE E. CAPLINGER
205-WL	AMELIA AGOSTINELLI
206-WL	PAUL HABOVSKY
207-WL	SUSIE VETRECIN
208-WL	MICHAEL SABO, ET. AL.
167AWL	LJUBAN RUSNOV

Nº	OWNER
234 A-WD	ANDREW MULICHAK
234 B-WD	" "
209C-WD	THOMAS J. BASIC & DOLORES MARIE BASIC
209C-LA	" " " " " " " "
209-LA	AGNES WALLOW
210-WL	MARY MANSKY a/k/a MARY CIKA MANSKI & JOSEPH J. MANSKY
211-WL	EDWARD HUDAK & CATHERINE HUDAK,
212-WL	PETER J. GUIDO a/k/a PETER J. GUIDO & AMELIA GUIDO a.k.a. AMELIA E. GUIDO
213-WL	MARY YOSAY
214-WL	MIKE PIHONSKY & ANNA K. PIHONSKY
215-WL	JOSEPH SAGULA & MARY SAGULA
216-WL	ANNA KLANICA

Nº	OWNER
265 PR	JOHN BABIK & HELEN BABIK
266 PR	STEVE J. OLSAVSKY & LOUISE K OLSAVSKY
217-WL	HELEN BAKER
218-LA	SUSAN SEMAN
219-LA	YOLANDA HELEN POLLIFRONE
237-LA	EUGENE C. NAPLES & THERESA F. NAPLES
238-LA	THOMAS M. TORBA & MARIE TORBA
239-LA	ANDREW J. LESKO & ANNA M. LESKO
240-LA	PETER J. SHUNTICH & HELEN A. SHUNTICH
241-WL	SUSIE BALI
242-WL	ANNA C. SICH
243-WL	THE FIRST SLOVAK PRESBYTERIAN CHURCH OF YOUNGSTOWN, OHIO
243-WD	
244A-WL	MILTON A. ROEMISCH, TRUSTEE

Nº	OWNER
245-WL	JOHN HARMOCI & SUSIE HARMOCI
246-WL	ROSE HURCHIK - OWNER
247-WL	ANNA ZOFIE
247A-WL	THE SMITH SPAULDING LAND COMPANY
248AWL	NICK STIJAKOVICH & SOPHIE D. STIJAKOVICH
248-WL	STEVE J. HRUSOVSKI & HELEN M. HRUSOVSKI
249-WL	WADE H. ROSE, OWNER
250-WL	STEPHEN MOTOSKO & THOMAS MOTOSKO
251-WL	MICHAEL RUSKY & MARTHA A. RUSKY
252-WL	FRANK SYLYESTER, EXECUTOR OF THE ESTATE OF ANGELO SYLYESTER, DECD
264-WD	FRANK M. BANJO & HELEN BANJO
268-WD	ANDREW BOSNAK

REVISION	DESCRIPTION	BY	DATE
5	Added Property Lines 10/19/65 R.S. Surveyed All Homes Previously	MKM	7-25-69
4	Revised per Earlier Surveys		
3	Revised Pcls 166-167 WL Areas and Added Pcls 166A WL	MKM	7-25-69
2	CHANGED PARCEL 143E-WL TO 160-WL & 161-WL CHANGED TO TOTAL TAKES	R.R.C.S./BW	6-11-69
1	PARCELS 166-WL & 167 WL	EHC	11-25-68

Name Change Per 646WA Survey 6-17-70
Added Pcls 671WA, 675 WA, & 646 WA Parcel 5/22/70
Added PR Pcls 265 & 266 7-25-69 MKM
Delered Pcl. 645WA Survey 7-20-70

SHEET 2 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2

MAHONING COUNTY, OHIO

SCALE

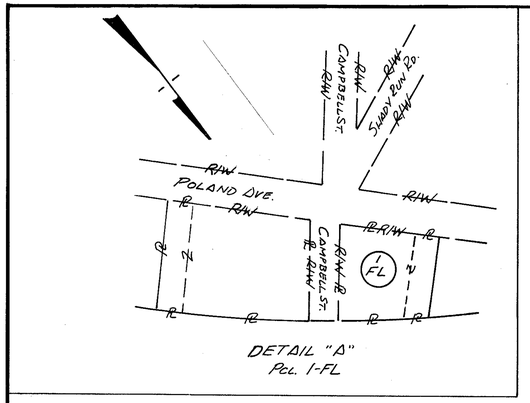
0 50 100 200 300

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

559/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

7/104



DETAIL "A"
PCL. 1-FL

Nº	OWNER
191-S	MORRIS M. BOYD
192-S	MILDRED G. DOUGLAS
346-T	See Pcl 346PR
1-FL	MARION URICHICH & HELEN
	URICHICH
233-WD	OHIO EDISON CO.
233A-S	MACDON INDUSTRIAL & DEVELOPMENT, INC.
233A-X	" " " "
254-WD	MIKE PALAGANO
255-WA	JOHN MARKOVICH & ROSE MARKOVICH
261-WD	MARGARET PAULICH
261-T	" " " "

Nº	OWNER
283-WL	JOHN PAVLICH & MARY PAVLICH
284-WL	BERTHA RAUSICH, a.k.a. BAVA RAUSICH
285A-WL	CLYDE O. BRAGG & VIRGINIA L. BRAGG
286-WL	ANNA SISKO
287-WL	GIOVANNA MARINUCCI
288-WL	GEORGE J. MOCHAN
289-WL	GEORGE ADORNATO & SERENA ADORNATO
290-WL	JAMES E. GREGORY
291-WL	WILLIAM A. MOKROVICH & MARY ANN MOKROVICH
292-WL	DOREL REALTY COMPANY, A PARTNERSHIP
294-WL	STEVE ZARUBA
295-WL	JOHN T. HOLESKO
296-WL	HELEN SEKERAK
297-WL	THE CATHOLIC SLOVAK FALCON CLUB COMPANY, AN OHIO CORPORATION
298-WL	ANNA STARON
299-WL	STEVEN MOTOSKO & HOWARD MOORE
300-WL	JAMES BELLA & MARY BELLA
301-WL	IRENE FRANKO
302-WL	GEORGE CHAMER a.k.a GEORGE CSAMER
303-WL	PAUL GEGUS, OLGA M. GEGUS & MARGARET ANN GEGUS
304-WL	PETER J. KICOS, GUARDIAN FOR JOHN KALAPUT, INCOMPETENT
305-WL	JOHN JANDRASKOVIC & KATHERINE JANDRASKOVIC
306-WL	KATHERINE KOSHAN PETRENCHICK a.k.a. KATARINA PETRENCHICK
307-WL	FRANK V. GURGOS & MARY B. GURGOS
309-WL	MICHAEL REDUSA aka MICHAEL P. REDUGA, Executor of the Estate of CATHRINE REDUGA, Decd.
308-WL	STEVE R. KOVACH & ALICE L. KOVACH
310-WL	MARY K. BARON
311-WL	MARGARET W. BLACK ET. AL.
312-WL	MARY SAFAREK
313-WL	TRIPOM LUKOVICH & CATHERINE LUKOVICH
314-WL	JOSEPH T. BUNDY & SARA L. BUNDY
315-WL	JOHN ROCK ETAL
316-WL	MARY ANNA REPASKY
317-WL	JOHN MARTINEC, JR. aka JOHN MARTINEC
318-WL	AMELIA SAVINA
319-WL	GEORGE KOPCHINAK & HEDWIG KOPCHINAK
321-WL	ANDREW W. MIGLETS
322-WL	HELEN NOVOTNY
324-WL	JOHN TEKAC
325-WL	WILLIAM J. SCHRAIDER, EXECUTOR of the Estate of JOHN M. SCHRAIDER Decd
326-WL	PAUL HABOVSKY
327-WL	HELEN M. LASKEY
328-WL	WILLIAM WELDON & JENNIE WELDON
330-WL	JOHN R. BENNEDEK
331-WL	CLIFFORD W. HOLLISTER
332-WL	MARIE M. BUDAY
334-WL	MARY ANNA CHISMAR
335-WL	EDWARD SALATA, EXECUTOR OF THE ESTATE OF MICHAEL SALATA Sr. Decd
336-WL	NICK MINNIE & JOSEPHINE MINNIE
337-WL	EDNA L. KACHMAR
338-WL	ANNA KULIK aka. ANNA WILICHKO KULEK
339-WL	MARGARET NYERGES
346 PR	JOHN KRUPA
347-LA	ANDY OLEXA & SUSANNA OLEXA
348-WL	ANNA DANYA a.k.a. ANNA ZIDZIK
349-WL	WALTER BIELSKI & JULIA BIELSKI
350-WL	JOHN YANEK & MARY YANEK
351-WL	LOUIS J. CSIZMADIA
352-WL	JULIA TOVARNAK, OWNER
353-T	DORIS & GENEVIEVE KIGHT
354-T	MARIE SICH

REVISION	DESCRIPTION	BY	DATE
4	Changed All Names Previously Revised on Earlier Sepias. Added Pcl 346PR	M.R.M.	7-25-69 2-3-69
3	DELETED WA PCLS 221 THRU 228		7/15/69
2	CHANGED DIMENSIONS OF PARCEL 192 S	R.R.C.	5/26/69
1			

3-5-82 ADDED PCL 1-FL

SEE DETAIL "A" THIS SHEET FOR PCL 1-FL

SHEET 3 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1 R-2

MAHONING COUNTY, OHIO

SCALE 0 50 100 200 300

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

560/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

8/104

NOTE: PARCEL 428-EL SOLD TO NORMA CARTER AND REGISTERED IN VOL. 7, PAGE 316. VARIOUS STATE LANDS

Nº	OWNER
143D-WL	CITY OF YOUNGSTOWN, OHIO
143A-WD	" " " "
143 T-1	" " " "
143 T-2	" " " "
178B-WL	MINNIE R. WINTER
244B-WL	MILTON A. ROEMISCH, TRUSTEE
244C-WL	" " "
244D-WD	" " "
285B-WL	JOHN J. VASKO & ANN D. VASKO
293 A T	CHESTER TORELLO
356-WD	JULIA PODOLSKY
358D-WD	AGNES VIGUOTTI, EXECUTRIX OF THE ESTATE OF JOHN LOUCHANSKY, DECEASED.
360-WD	LEONE ELISER
361-WD	TERESA HABULAN
358-S	The Midwest Investment Company & partnership
362-WL	EMILEE M. SICH
362-	" " "
362-T	" " "
364B-WL	MARY ANN LoGUIDICE
365A-WL	LEOLA ROGERS
356AWD	JULIA PODOLSKY-OWNER; LOIS MOFFO, LAND CONTRACT HOLDER.

Nº	OWNER
365B-WL	JAMES ROGERS JR.
366-WL	DOROTHY A. MERDICH
367A-WL	LEON DUNN
367B-WL	" "
367C-WL	SANFORD BARTH
367T-T-1	" "
368-WL	SAMUEL H. COPPERMAN
369-WL	JOSEPH RENIOL
370-WL	RHETA F. WEIMER
371-T	JOSEPH WISEMAN
373-T	ANDREW ROSENFELD & JEAN WEISEN
374-WD	ANDREW BERNAT
374-T	" "
375-WD	HELEN LUCAS
376-WD	VICTOR CENTOFANTI, ET. AL.
380-WD	MIKE TEPSICK
384-WD	STEVE STANKOVICH & MARY STANKOVICH
385-WD	BERTHA SMITH
386-WD	THOMAS SOICH a.k.a. THOMAS E. SOICH
387-WD	IVAN DUBIC & JENNIE DUBIC

Nº	OWNER
388-WD	ELWYN V. JENKINS
389-WL	WALTER J. McKENRICK, Jr.
389-WD	
390-WL	STANISLAW DOMANSKI & SOFIA DOMANSKI
391-WL	JAMES CATO & LULA MAE CATO
392-WL	THOMAS ADAMIAK & VICTORIA ADAMIAK
393-WL	JOE A. KOLMAN
394-WL	WALTER W. SOICH & BETTY JANE SOICH
395-WL	JOSEPH C. PAVLICK & RAE C. PAVLICH
396-	LEON DUNN & SANFORD BARTH
397-WD	THE DOREL REALTY COMPANY, A PARTNERSHIP
398-	HAROLD D. LEACH & AL. WESTER
398A	" " " " "
398-T	" " " " "
401-WD	THE INLAND INVESTMENT COMPANY
402-WL	MARY THURIK
402-SL	" "
403A-WL	ESTATE OF JAMES COLUCCI, ET. AL.
403B-WL	" " " " " "

Nº	OWNER
403C-WL	ESTATE OF JAMES COLUCCI, ET. AL.
403D-WL	" " " " " "
403E-WL	" " " " " "
403F-WD	" " " " " "
403G-WL	" " " " " "
406-WL	ANGES PYATNICK
407-WL	MARY APPENZELLER
413-WL	THRIFT INVESTMENT COMPANY
414-WL	NOBEL DRESSEL & MARY DRESSEL
415-WL	STEVE KUNOWSKI
415-SL	" "
417-WL	CAROLINE S. ZITKOVICH
418-WL	JOHN EMERICH & JOSEFIA EMERICH
419-WL	MICHAEL F. SHIMEK
420-WL	ELIZABETH COYNE BAILIFF
421-WL	ROBERT L. EVANS & ROSE MARIE EVANS
422-WL	DOROTHY ISABEL REKUS
423-WL	GILDA CENA, ET. AL.
424-WL	AGNES COYNE PERSON
426-WL	FRANK FRATTAROLI & ANN FRATTAROLI
427-WL	GEORGE DOBOSY & GEORGE DOBOSY, EXECUTOR OF THE ESTATE of MARY DOBOSY, DEC'D.
428-WL 428-EL	JOHN M. DAVID & CATHERINE DAVID
429-WL	ALBERT BAKER & EDNA BAKER
430-WL	JOHN M. YASH & HELEN M. YASH
431-WD	GEORGE S. GERAS & MARTHA A. GERAS
431-T	" " " " " "
432-WD	THE HAWK PALMER COMPANY
432-T	" " " "
433-WD	KATIE DLACICH
433-T	" " "
446-WL	TONY & JESSE BLANGERO
438-WL	LAWRENCE KOVACH & RITA KOVACH
439-WL	WILLIAM J. LAMPRICH
440-WL	JAMES THOMPSON
443-WL	GEORGE KOVACIC
444-WD	
445-WL	AMERICO PATELLA, VERONICA V. SCERBA
447-WL	
450-WL	EUGENIA RUCAREAN - OWNER
453-WL	SOPHIE BODA
454-WL	JOHN GORA
455-WL	SAM NASSAR
456-WL	ESTHER KISH
457-WL	JOSEPH FODIAK & ANNA FODIAK
458-WL	LUIGI NERONI
459-WL	JACOB J. SNYDER, JR. & JOSEPHINA SNYDER
460-WL	CARL A. FALVO & LOUISE FALVO
462-WL	THOMAS J. FABEK
463-WL	HOMES, INC.
464-WL	HOMER L. BIEBER & JESSIE G. BIEBER
465-WL	SARA G. TRAFICANT
466-WL	JAMES PATELLA & ROSE PATELLA
470-WL	RUTH BASICH
471-WL	IKE J. RIEHL
440A-WL	CAROL THOMPSON
* 432 EL	THE HAWK PALMER COMPANY

Nº	OWNER
472-WL	MARY SCOARSTE
473-WL	JOSEPH PERAZICH & JULIA PERAZICH
474-WL	PAULINE B. KANOS & JOHN S. KANOS
475-WL	NED J. KAUFMAN & ANN KAUFMAN
476-WD	NICK VISA
478-WL	JACK SCARNECCHIA & DOLORES SCARNECCHIA
479-WL	RAFFAELE DIVECCHIO & ENGIELENE DIVECCHIO
480-WL	FEDOR DENYS
481-S	JOHN SALATSKY
482A-WD	THE CONCRETE, SAND & STONE CO.
482C-WL	" " " " " "
482D-WL	" " " " " "
483-WL	JOHN C. BADILA
484-WL	THOMAS ARMENI & IDA ARMENI
485-WL	BERTHA LACKEY
486-WL	LOUIE DeVICCHIO & BETTY DeVICCHIO
487A-WL	THE DOREL REALTY COMPANY, A PARTNERSHIP
487B-WL	MINNIE R. WINTER
488-WL	EDWARD J. GABRICK & VERA J. GABRICK

Nº	OWNER
489-WL	MARY GABRICK
491-WL	THOMAS A. BLANGERO & PATRICA MAE BLANGERO
492A-WL	DOLLAR SAVINGS & TRUST CO. -TRUSTEE
492B-WL	" " " " " "
493-WL	ESTATE OF KATE SETNYK, DECEASED
495-WL	JAMES A. OWEN, ET AL
497-WL	FRANK N. PATELLA & NORA E. PATELLA
498-WL 498-EL	GEORGE M. SHIPROCK & JULIA M. SHIPROCK
499-WL	PETER FEDOROWICZ & KAROLINA FEDOROWICZ
502-WL	JOSEPH FLEECE
504-WL	THE ESTATE OF MARY FABIAN, DECEASED
505-WL	AGATA KESIC a.k.a. AGATHA KESIC
506-WL	FRANK FRATTAROLI & ANN FRATTAROLI
507-S	UNION CARBIDE & CARBON CORPORATION
508A-WL	ARTHUR E. WESTER - ET. AL.
508ASL	" " " " "
508AS	" " " " "
508-SL	ADOLPH JOHNSON & SON COMPANY
503-P12	AUGUSTINE T. CARMELA TORRESE, OWNERS WILLIAM F. & CAROLYN G. HERKINS, LAND CONTRACT
428-WD	JOHN M. DAVID & CATHERLINE DAVID

NOTE: PARCEL 498-EL SOLD TO NORMA CARTER AND REGISTERED IN VOLUME 7, PAGE 316, NEW DEEDS VARIOUS STATE LANDS

3-5-82 ADDED NOTE FOR PCL 1-FL

REVISION	DESCRIPTION	BY	DATE
	GENERAL REVISIONS: A. Changed All Names Previously Revised on Earlier Sepias. B. Changed All WA Pcls to "T" Pcls. and Revised All "WD" Pcls. to Standard Highway Easements Previously Revised on Earlier Sepias.	MKM	7-25-69

3-21-79 CHANGED PCL 428-WD TO 428-EL AND ADDED NOTE OF SALE. ADDED PCL 498-EL AND NOTE OF SALE.

4-17-74
ADDED PCL 428-WD PER I.O.C. DATED 4-10-74 BY S.D.L.

ADDED PCL. 356 AWD 9-10-73
ADDED PARCELS 432-EL & 444-EL. SMITH 7-23-70

DELETED WD DESIGNATION FROM PCLS 362 & 396 IN THE PARCEL LISTING 5-07-70

ADDED PCL 358-S 12-12-69

Changed Pcls. 508 SL & 508 S to 508 ASL & 508 AS. 11-20-69 White

Changed Pcl. 356WD to a Standard Highway Easement. 11-19-69 EW

Changed Pcls 398 WD & 398 AWD to Standard Highway Easement. 10-17-69 white

Changed Pcl 396WD to a Standard Highway Easement 8-27-69 EW

Revised Pcl. 440 WL Area and Added Pcl. 440A WL 10-13-67

Changed Pcl. 293 T-1 to AT and Deleted Pcl. 293 T-2 MKM. 7-25-69

Changed Pcl. 362 WD to Standard Highway Easement 6-5-69 MKM.

Name Changed Pcl. 358 S 12-23-69 R.S.

SEE SHEET 7 DETAIL "A" PCL 1-FL

SHEET 4 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP T-1, R-2

MAHONING COUNTY, OHIO

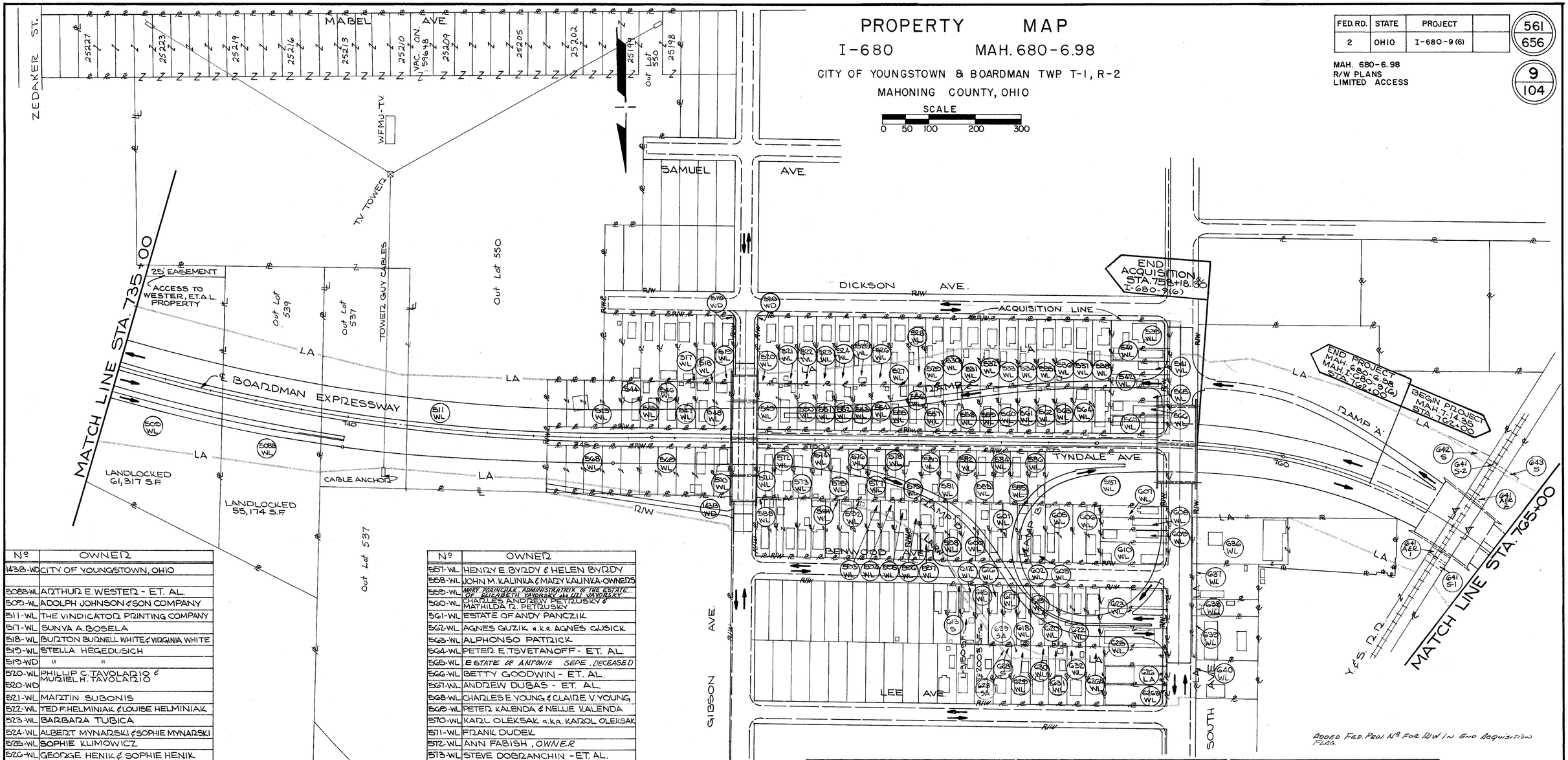
SCALE 0 50 100 200 300

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

561/656

9/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



ADDED FED. PROJ. Nº FOR R/W IN END ACQUISITION PLAN.

Nº	OWNER
143B-WD	CITY OF YOUNGSTOWN, OHIO
508B-WL	ANTHUN E. WESTER - ET. AL.
509-WL	ADOLPH JOHNSON & SON COMPANY
511-WL	THE VINDICATOR PRINTING COMPANY
517-WL	SUNVA A. BOSELA
518-WL	BURTON BURNELL WHITE & VIRGINIA WHITE
519-WL	STELLA HEGEDUSICH
519-WD	" "
520-WL 520-WD	PHILLIP C. TAVOLARIO & MURIEL H. TAVOLARIO
521-WL	MARTIN SUBONIS
522-WL	TED F. HELMINIAK & LOUISE HELMINIAK
523-WL	BARBARA TUBICA
524-WL	ALBERT MYNARSKI & SOPHIE MYNARSKI
525-WL	SOPHIE KLIMOWICZ
526-WL	GEORGE HENIK & SOPHIE HENIK
527-WL	ANDREW KUSHNER
528-WL	ALFRED TAVOLARIO & AGNES TAVOLARIO
529-WL	JOHN S. ROSA & HELEN M. ROSA
530-WL	GENEVIEVE KOMSA
531-WL	JOHN HREHOVCIK
532-WL	JESUS M. MARTINEZ & ANTONIA MARTINEZ
533-WL	JAN IWANICKI & BLANCHE IWANICKI
534-WL	KATE CHUDIK
535-WL	HAROLD G. BOWEN & RUTH I. BOWEN
536-WL	*LILLIAN A. HETNER*
537-WL	KATHERYN SIKORA
538-WL	MARY RYCHLICKY
539-WL	CHARLES LEE
540-WL	ANNA P. TAORMINA
541-WL	ZIGMUND HELMINIAK - ET. AL.
542-WL	ANNA P. TAORMINA
543-WL	CHARLES YOUNG - TRUSTEE FOR YOUNGSTOWN PIGEON CLUB
544-WL	STEFAN JAKUBOWSKI

Nº	OWNER
545-WL	MICHAEL FILL & JANE L. FILL
546-WL	STEVE BONDOR
547-WL	ANDY BALASH & MARY BALASH
548-WL	PAULINE JACOBS & SAM JACOBS
549-WL	ADOLPH BARWICKI a.k.a. ADOLF BARWICKI
550-WL	ANNA WOOD - ET. AL.
551-WL	VALERIO P. W. QUARANTA & ANNA MARIE QUARANTA
552-WL	JOHN HOMA & MARY HOMA
553-WL	MIKE DULICK & ROSIA DULICK
554-WL	MICHAEL KAMINSKI & SOPHIE KAMINSKI
555-WL	RUDOLPH J. EDWARD BROZMAN EXECUTORS of the ESTATE OF MICHEAL BROZMAN Dec'd
556-WL	JOHN TYCH

Nº	OWNER
557-WL	HENRY E. BYRDY & HELEN BYRDY
558-WL	JOHN M. KALINKA & MARY KALINKA-OWNERS
559-WL	*MARY MARINCHAK, ADMINISTRATRIX OF THE ESTATE OF ELIZABETH YAVORSKY a/k/a LIZ JAVORSKY*
560-WL	CHARLES & ANDREW BETTZUSKY & MATHILDA Z. PETTZUSKY
561-WL	ESTATE OF ANDY PANCZIK
562-WL	AGNES GUZIK a.k.a. AGNES GUSICK
563-WL	ALPHONSO PATTRICK
564-WL	PETER E. TSVETANOFF - ET. AL.
565-WL	*ESTATE OF ANTONIE SEPE, DECEASED*
566-WL	BETTY GOODWIN - ET. AL.
567-WL	ANDREW DUBAS - ET. AL.
568-WL	CHARLES E. YOUNG & CLAIRE V. YOUNG
569-WL	PETER KALENDA & NELLIE KALENDA
570-WL	KARL OLEKSAK a.k.a. KAROL OLEKSAK
571-WL	FRANK DUDEK
572-WL	ANN FABISH, *OWNER*
573-WL	STEVE DOBRANCHIN - ET. AL.
574-WL	STELLA F. VELICHKO
575-WL	WALTER NATYSHAK & ANNE NATYSHAK
576-WL	HENRY F. NOSEK & SOPHIE NOSEK
577-WL	JOHN EVICH & ISABEL B. EVICH
578-WL	JOHN A. DVORNEKOVICH & DOROTHY J. DVORNEKOVICH
579-WL	MIKE LULIKA & MARY LULIKA
580-WL	ANN CULLEN
581-WL	MARGARET S. SYMPSON
582-WL	MARY DUPEY
583-WL	JOSEPH KELLEY & CHRISTINE KELLEY
584-WL	FRANK SUSOR & MARY SUSOR
585-WL	ANNE MUMAW
586-WL	JOHN BALCHICK & ELIZABETH BALCHICK
587-WL	MIKE, PAUL L. & STEVE RIDARSKY
588-WL	RAFFAELLO JOHN PERA & MARY S. PERA
591-WL	MARY SWATOWSKI a.k.a. MARY SWATOSKI
592-WL	*PAUL B. TEMELKOFF & SONJA A. TEMELKOFF*
593-WL	SOPHIE GUCWA
594-WL	FRANK PRUCNAL & STELLA PRUCNAL

Nº	OWNER
595-WL	VIRGINIA *KARASIEWSKY*
596-WL	WILLIAM JOHNSTONE & JOHNNIE MAE JOHNSTONE
597-WL	MARY STIPETICH
598-WL	MINNIE DI FABIO
G00-WL	STEPHEN TERLECKI & LEONA TERLECKI
G01-WL	JOSEPH VIANO
G02-WL	STANLEY BARWICKI & JULIA O. BARWICKI
G03-WL	KATHERINE SZABAT
G05-WL	*JOHN J. HORNEY, JR., ADMINISTRATOR OF THE ESTATE OF THERESA ANN HORNEY, DECEASED*
G06-WL	ANGELO FAMULARO & ROSE FAMULARO
G07-WL	JOSEPHINE FINN
G08-WL	NELLIE MOLALI
G09-WL	*AGNES E. SWANECK, ET AL*
G10-WL	EVA LUKOSEVECUS
G13-S	*JOHN FARGOIS & ANNA FARGOIS*
G14-WL	MARY J. ALTIER
G15-WL	*CHRISTINA SWIDERSKI, ET AL. OWNERS*
G16-WL	*FRANK J. KANIK, ET AL*

Nº	OWNER
G17-WL	CARMELA D'ANALLI
G18-WL	WLADZSLAW GUBALA
G19-WL	JOHN C. FEKETY
G20-WL	SOPHIE IGNATH a.k.a. SOPHIE F. IGNATA
G22-WL	ALBERT HARRIS & ANGELLA HARRIS
G23-WL	BERT B. SLEVIN ET AL #
G25-WL	KATHERYN SLEVIN ET AL
G28-WL	JOHN LEON
G29-WL	ROBERT J. CAMPANA & REGINA C. CAMPANA
G30-WL	ERMA PETTRELLA
G31-WL	WILLIAM SWIDERSKI & CHRISTINE SWIDERSKI
G32-WL	*MARY KIEPER, ET AL*
G2GA-WL	ISABELLE C. BEES (HUSBAND BURT)
G2GB-WL	BURT BEES (WIFE ISABELLE C.)
G36-WL	MIKE RIDARSKY, ET AL.
G37-WL	BERTHA HORNEY
G38-WL	*FRANK* GRANITO, ET AL.
G39-WL	REGINA GENEVIEVE KARPOWICZ
G40-WL	ROBERT & PAULINE BALALIK

Nº	OWNER
GH AER.1	YOUNGSTOWN & SOUTHERN RAILWAY Co.
641 S-1	" "
GH AER2	" "
641 S-2	" "
642-S	ARMBRECHT MOTOR TRUCK SALES, INC.
643-S	The JUDITH REALTY Co. & S.H. COPPERMAN.

ADDED PCLS 628 SA & 629 SA 7-5-72

PCLS 637-LA THRU 640-LA REVISED TO WL PCL'S FOR DEVELOPEMENT OF GREEN STRIP 1-15-70
PCL 636-LA REVISED TO 636-WL (TOTAL TAKE) FOR DEVELOPEMENT OF GREEN STRIP 2-25-70

Revised Name Pcl 638LA 9-16-69 Solomon
Name Change Pcl 643-S 8-6-69
Changed All Names Previously Revised on Earlier Sht/s – 7-25-69 – M.E.M.
Showed Ownership Pcls 623 WL & 625 WL Same Smith 7-23-70

REVISION	DESCRIPTION	BY	DATE
1	ADDED PARCELS 641/642/643	RRC	7/18/69

SHEET 5 OF 5

PROPERTY MAP

FED. RD.	STATE	PROJECT	
2	OHIO	I-680 -9(6)	

562
656

MAH. 680-698
R/W PLANS
LIMITED ACCESS

10
104

KEY MAP

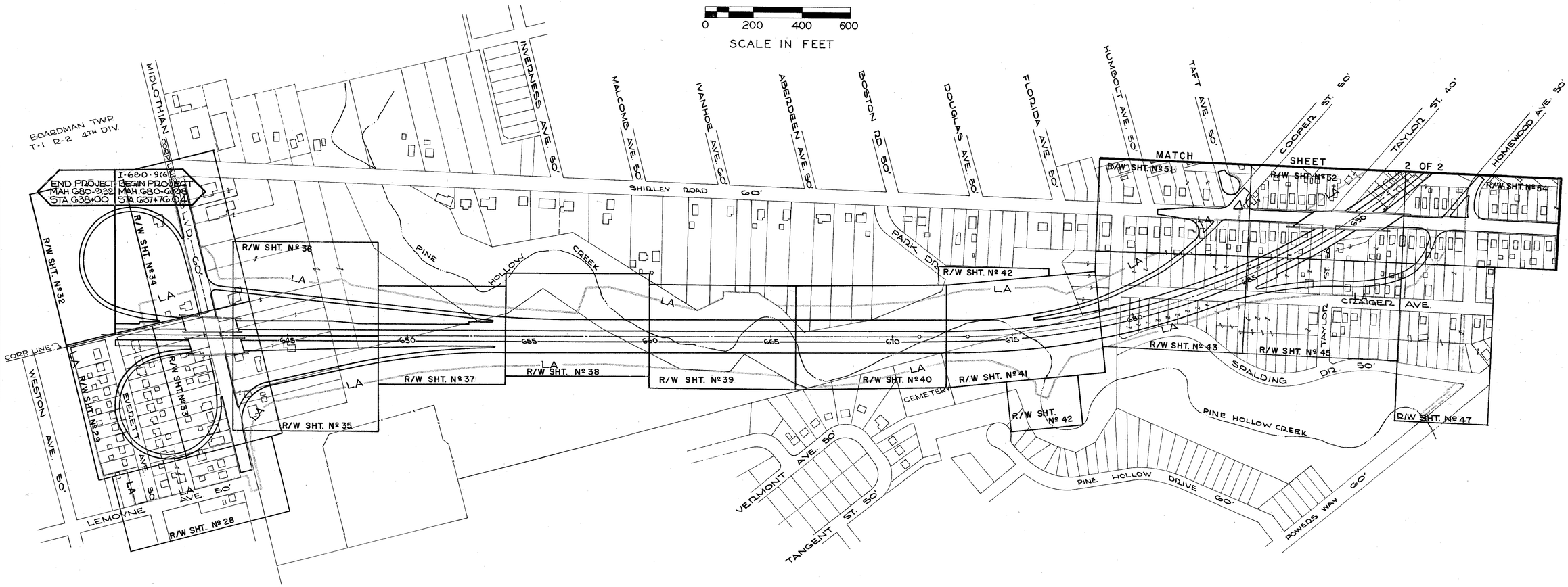
I-680 MAH 680-698

MAHONING COUNTY

CITY OF YOUNGSTOWN

0 200 400 600

SCALE IN FEET



SHEET 1 OF 2

KEY MAP

State Highway Dept. Div. 4
R/W, Engr. & Admin. Sect.
JAN 27 1969
LOGGED
Grds. ____ Mil. Sh. ____

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

563
656

11
104

MAH. 680-698
R/W PLANS
LIMITED ACCESS

KEY MAP

I-680 MAH. 680-698

MAHONING COUNTY

CITY OF YOUNGSTOWN

0 200 400 600

SCALE IN FEET

I-680-9(6)
END PROJECT
MAH.680-6.98
STA.762+00

BEGIN PROJECT
MAH.-7-14.35
STA.762+00

MATCH SHEET 1 OF 2

MATCH LINE "A"

HUNTER AVE. 50'
HUMBOLT AVE.
R/W SHT. Nº55
TAFT AVE. 50'
COOPER AVE.
R/W SHT. Nº58
INDIANOLA AVE.
MURRAY ST.
TAYLOR AVE. 40'
R/W SHT. Nº58
HOMEWOOD AVE.
R/W SHT. Nº60
HARMON 50'
FITHIAN 50'
POLAND
R/W SHT. Nº62
CAMPBELL ST.
R/W SHT. Nº64
SHADY RUN RD.
R/W SHT. Nº65
POWERSDALE AVE.
CALEDONIA AVE.
CAMERON AVE.
R/W SHT. Nº74
R/W SHT. Nº71
R/W SHT. Nº67
R/W SHT. Nº72
R/W SHT. Nº77
MABEL ST.
PARNELL ST.
ALEXANDER ST.
R/W SHT. Nº79
VAR. R/W
VAR. RAN
R/W SHT. Nº69
SHIRLEY RD.
R/W SHT. Nº54

MABEL AVE. 50'
ZEDAKER 50'
R/W SHT. Nº81
SAMUEL AVE.
R/W SHT. Nº85
PARNELL ST.
R/W SHT. Nº83
ALEXANDER ST.
R/W SHT. Nº79
R/W SHT. Nº42
R/W SHT. Nº86
R/W SHT. Nº87
R/W SHT. Nº88
TYNDALE AVE.
R/W SHT. Nº89
R/W SHT. Nº90
DICKSON AVE.
R/W SHT. Nº94
ACCESS ROAD
BENWOOD AVE.
R/W SHT. Nº96
R/W SHT. Nº92
LEE AVE.
R/W SHT. Nº98
KNOX ST. 40'
SOUTHERN R.R.
YOUNGSTOWN
R/W SHT. Nº100
R/W SHT. Nº101
BELLEVIEW AVE. 40'
R/W SHT. Nº102
R/W SHT. Nº103
DELASON AVE. 50'
HEASLEY AVE. 60'
ELLENWOOD AVE. 50'
CHALMERS AVE. 60'
MARION AVE. 60'

SHEET 2 OF 2

KEY MAP

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

TOTAL NUMBER OF OWNERS: 424 TOTAL NUMBER OF OWNERS WITH STRUCTURES: 288

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

564
656

12
104

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
100-WL	JOHN NOVAK	689	501	13,868 S.F.	—	13,868 S.F.	—	13,868 S.F.	YES	—	—	29		
101-WL	JOHN ZELINA & OLGA ZELINA	659	426	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
102-WL	HENRY L. BEACH & EVELYN MAE BEACH	659	446	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
103-WL	ROBERT A. ALLAN & MILDRED A. ALLAN	659	134	7500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
104-WL	VICTOR FEDORCHAK & HELEN A. FEDORCHAK	659	67	7500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
105-WL	EMANUEL MANIS & MARY B. MANIS	654	305	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
106-WL	JOHN F. CURALL & THELMA J. CURALL	654	297	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
107-WL	JAMES W. ANDERSON & JEAN ALICE ANDERSON	654	287	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
108-WL	KENNETH R. WILSON & ALDA M. WILSON	654	282	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
109-WL	JOHN E. JONES & DOROTHY J. JONES	654	283	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
110-WL	RAYMOND H. McANDREWS & BETTY McANDREWS	659	429	12,706 S.F.	—	12,706 S.F.	—	12,706 S.F.	YES	—	—	29		
111-WL	HARRY W. JACOBSON & ANITA C. JACOBSON	846	193	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
112-WL	FRANK WSZOLEK & BERTHA M. WSZOLEK	659	202	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
113-WL	ALFRED SQUILLANTE	912 1016	269 36	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
114-WL	JOSEPH L. FEDOR & MARY F. FEDOR	659	133	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
115-WL	RAY BRUNETTI & LUCILLE BRUNETTI	659	73	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
116-WL	FRANK A. NAPLES & MARIE A. NAPLES	659	126	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
117-WL	ROBERT C. HODGE & MARIE ELIZABETH HODGE	659	135	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29	ADVANCE ACQUISITION ACQUIRE AS PCL. 18WL	H
118-WL	JOHN MATZYE, JR. & MARGARET A. MATZYE	659	270	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
119-WL	DOMINIC CARANO & STELLA M. CARANO	1029	548-550	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
120-WL	DORIS MAY WELKER aka DORIS M. WELKER	720 & 854	504 & 623	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	28,29		
121-WL	WILLIAM K. CROUKS & AGNES CROUKS	685	496 & 497	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	YES	—	—	28,29		
122													NOT USED	
123-WL	WILLIS IPE & ELIZA. MAY IPE	425	336	24,000 S.F.	—	24,000 S.F.	—	24,000 S.F.	YES	—	—	32,34		
124-WL	CHARLES R. HOGG	491	355	15,831 S.F.	—	15,831 S.F.	—	15,831 S.F.	NO	—	—	33		
125-WL	JOHN HAAS & KATHERINA HAAS	524	369	10,115.5 S.F.	—	10,115.5 S.F.	—	10,115.5 S.F.	YES	—	—	33		
126-WL	JOHN HAAS	501	324	10,075 S.F.	—	10,075 S.F.	—	10,075 S.F.	YES	—	—	33		
127-WL	PAUL R. TOLAND & MARTHA J. TOLAND	579	232	10,034 S.F.	—	10034 S.F.	—	10,034 S.F.	YES	—	—	33		
128-WL	JOHN WIETELMANN	466	291	9,993 S.F.	—	9,993 S.F.	—	9,993 S.F.	YES	—	—	33		
129-WL	ESTATE OF DAVID B. CONRATH & CLIFFORD E. FISHER	641	404	9,953 S.F.	—	9,953 S.F.	—	9,953 S.F.	NO	—	—	33		
130-WL	DELORES WELLS	900 & 632	153 & 153	9,912 S.F.	—	9,912 S.F.	—	9,912 S.F.	YES	—	—	33		
131-WL	WILLIAM A. LONG & BETTY A. LONG	758	261	9,871 S.F.	—	9,871 S.F.	—	9,871 S.F.	YES	—	—	33		
132-WL	JENNIE E. POLLEY	674 & 586	581, 582 & 141	9,830 S.F.	—	9,830 S.F.	—	9,830 S.F.	YES	—	—	33		
133-WL	ALEXANDER GUARINO	853	579	9,786 S.F.	—	9,786 S.F.	—	9,786 S.F.	YES	—	—	33		
99-WL	DOMINIC PEDALINE & ESTHER PEDALINE	928	499	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	28,29		

General Revisions:
A. Changed all names previously revised on earlier sepias.
B. Changed all WA Pcls to T Pcls and revised all "WD" Pcl's to Standard Highway Easements previously revised on earlier sepias.

State Highway Dept. of Ohio
Right of Way Section
JAN 27 1969
Legals
Cols. Ohio

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

565/656

13/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

** = INDICATES PARCEL ADDED AT THE END OF SUMMARY

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES

LANDLOCKED = (L)

	PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
	134-WL	ESTATE OF HATTIE HALLWOOD, DEC'D.	339 537	306 8	9,749 S.F.	—	9,749 S.F.	—	9,749 S.F.	YES	—	—	33		
	135-WL	ROBERT HAY MACLENNAN	466	573	9,713 S.F.	—	9,713 S.F.	—	9,713 S.F.	YES	—	—	28,33		
	136-WL	MATILDA ZIGO	1090	406	9,671 S.F.	—	9,671 S.F.	—	9,671 S.F.	YES	—	—	28		
	137	DOMINIC TOCCO & ANNETTE TOCCO	846	87	63,358 S.F.	—	—	—	—	NO	63,358 S.F.	—	34		
	138-LA	CARL A. BERNDT & PEARL BERNDT	821	679	39,950 S.F.	—	—	—	—	NO	39,950 S.F.	—	34	R/W LINE CHANGED TO LA LINE	
	138-T						1,056 S.F.	—	1,056 S.F.				34	GRADING	
	139-WL 139-A-WL 139-SL 139-X	INDIANOLA REALTY, INC.	875	518	288,367.5.F.	4,534 S.F.	5,919 S.F. 100,279 S.F. 1,583 S.F. 1,185 S.F.	4,534 S.F.	1,385 S.F. 100,279 S.F. 1,583 S.F. 1,185 S.F.	NO	180,586 S.F.	—	34 35,36,37 37 34	SLOPE EASEMENT CHANNEL CONST.	I-FUNDS
	140A-WL	JOHN SHOFI & ELIZABETH SHOFI	335,618,506	183,141,114	2.50 Ac.	—	2.50 Ac.	—	2.50 Ac.	YES	—	—	33,35,36		
	139B-WL	ROBERT W. ISAACSON & RUTH A. ISAACSON	1161	218	65,340 S.F.	102 S.F.	47,438 S.F.	102 S.F.	47,336 S.F.	YES	—	—	33,34,36		
	141-WL	MICHAEL R. BOHN & MARY ALICE BOHN	691 617	493 & 254 439	43,560 S.F.	—	43,560 S.F.	—	43,560 S.F.	YES	—	—	33,35		
	139.BEL	See Pcl. 139 B-WL				—	17,902 S.F.	—	17,902 S.F.	YES	—	—	34,36	EXCESS LAND	STATE
	142-WL	JESSIE M. IPE	403 419	52 254	43,560 S.F.	—	27,432 S.F.	—	27,432 S.F.	YES	—	16,128 S.F.(L)	33,35		
**	143A-WL 143B-WL 143C-WL 143-X	CITY OF YOUNGSTOWN, OHIO	481	568	1,179,170 S.F.	17,860 S.F.	12,353 S.F. 245,956 S.F. 8,127 S.F. 109 S.F.	8,927 S.F.	3,426 S.F. 245,956 S.F. 8,121 S.F. 109 S.F.	NO NO NO NO	15,676 S.F.(L)	880,125 S.F.	28,33 35,37,38,39 39 37	CHANNEL CONST.	
	143D-WL	" " " "	256	102	20,358 S.F.	NONE	3,040 S.F.	—	3,040 S.F.	NO		8,586 S.F.	67		
	143A-WD						7,826 S.F.	—	7,826 S.F.	NO			65,67		
	143 T-1						597 S.F.	—	597 S.F.	NO			65,67	GRADING	
	143 T-2						756 S.F.	—	756 S.F.	NO			67	GRADING	
	143B-WD	" " " "	445	131	700,880 S.F.	NONE	12,405 S.F.	—	12,409 S.F.	NO	—	688,471 S.F.	89,92		
	143-WA	" " " "	481	568			120 S.F.	—	120 S.F.	NO			28	FACI SIGN LOCATION	
	144-WL 144A-WL 144-X 144 S-1 144 S-2 144 S-3	THE COMMISSIONERS OF MAHONING COUNTY, OHIO	181 188	616 77	871,200 S.F.	7,840 S.F.	3,615 S.F. 474,345 S.F. 283 S.F. 525 S.F. 2,946 S.F. 588 S.F.	—	3,615 S.F. 474,345 S.F. 283 S.F. 525 S.F. 2,946 S.F. 588 S.F.	NO YES	385,400 S.F.	—	37 38,39,40,41 37 38 42 42	CHANNEL CONST. SEWER EASEMENT SEWER EASEMENT SEWER EASEMENT	I-FUNDS
	145, 146, 147 & 148													NOT USED	
	149-WL	MARTHA B. KRUPA	686, 674	418, 359; 360	43,741 S.F.	—	916 S.F.	—	916 S.F.	NO	42,825 S.F.	—	39		
	150-WL	JOHN MALENIC	648	426	43,031 S.F.	—	6,593 S.F.	—	6,593 S.F.	NO	37,038 S.F.	—	39,40		
	151-WL	JOHN P. MALENIC & MARY F. MALENIC	610	290	43,603 S.F.	—	8,018 S.F.	—	8,018 S.F.	NO	35,585 S.F.	—	40		
	152-WL	PAULINE NESHITE LIFE ESTATE, STEPHEN NESHITE, OWNER	1114	314	43,585 S.F.	—	6,892 S.F.	—	6,892 S.F.	NO	36,693 S.F.	—	40		
	153-WL	SUSIE VETRECIN	744	99	44,404 S.F.	—	6,756 S.F.	—	6,756 S.F.	NO	37,648 S.F.	—	40		
	207-WL		758 367	474 397	5573.33 S.F.	—	5573.33 S.F.	—	5573.33 S.F.	YES	—	—	50		
	154-WL 154-S	THE SAFEWAY INVESTMENT COMPANY, A PARTNERSHIP	1062	334	65,483 S.F.	—	7,399 S.F. 421 S.F.	—	7,399 S.F. 421 S.F.	NO	58,084 S.F.	—	40 42	SEWER EASEMENT	
	155-WL	WILLIAM H. TOTH & PATRICIA L. TOTH	811	543	15,893 S.F.	—	1,005 S.F.	—	1,005 S.F.	NO	—	14,888 S.F.	40		
	156-WL	THOMAS MASI & BETTY JEAN MASI	803	243	15,947 S.F.	—	3,439 S.F.	—	3,439 S.F.	NO	—	12,508 S.F.	40		
	157-WL	RICHARD PUCCI	1130	211	25,630 S.F.	—	5,967 S.F.	—	5,967 S.F.	NO	—	19,663 S.F.	40		
	157 PR														
	158-WL	POWERS ESTATE CEMETERY	WILL	2/160	43,308 S.F.	—	8,209 S.F.	—	8,209 S.F.	NO	—	35,099 S.F.	40	FOR LOSS OF LAND IMPROVEMENTS DURING CONSTRUCTION.	
	159,													NOT USED	
	160-WL	GERTRUDE POWERS CLARK & MURIEL H. POWERS	704 1141	216 615	111,200 S.F.	NONE	55,012 S.F.	—	55,012 S.F.(L)	NO	—	56,188 S.F.	41,42,43		
	161-WL	FELIX V. TESNER AND LOUISE C. TESNER	854	531	150,400	NONE	45,076 S.F.	—	45,076 S.F.(L)	NO		105,324	40,41,42	*NO PROPERTY DESCRIPTION IN DEED **DEED ACREAGE PRESENTLY LANDLOCKED. (Pcl. 161-WL)	
	162													NOT USED	
	163-WL 163-T	PACENTRANI CLUB OF YOUNGSTOWN, OHIO, AN OHIO CORPORATION	764	350	106,650 S.F.	—	45,678 S.F. 1,123 S.F.	—	45,678 S.F. 1,123 S.F.	NO	—	60,972 S.F.	43,45 45	UTILITY CONNECTION	
	164-WL	THE DOREL REALTY COMPANY, A PARTNERSHIP	1106	559	2,878 S.F.	—	2,878 S.F.	—	2,878 S.F.	NO	—	—	43		
	165A-WL	GROUP #XVII SLOVAK CATHOLIC SOKOL	665	280	42,005 S.F. 20,995 S.F.	—	17,650 S.F. 15,368 S.F.	—	17,650 S.F. 15,368 S.F.	NO NO	24,355 S.F. 5,627 S.F.	—	41,43 43		

GENERAL REVISIONS
A. Changed All Nomas Previously Revised on Earlier Copies.
B. Changed All WA Pcl's to "T" Pcl's and Revised All "WD" Pcl's to Standard Highway Easements Previously Revised on Earlier Copies.
Revised Area Pcl. 160-WL 10/9/68 R.S.
Revised Taxes, Residues and Added (L) to Lists 12/3/68
Revised Pcl. 139-WL, Added 139-B-WL 12/3/68

DELETED PARCEL 137-LA 12-6-71

Add note to Remarks Column - Pcl. 161-WL - 10-22-69

Revised Pcl. 139-WL & Revised Pcl. 139-WL, DEA-INC - 7/14/69 Pcl. 139-B-WL & Parcel 139-BEL as Parcel 139-WL, DEA-INC - 7/14/69

JAN 27 1969

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680- 9 (6)	

566
656

14
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.RO. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
166-WL	MICHAEL TYCH a.k.a. MICHAEL TYCH, JR. & PEARL TYCH	908	423	7,898 S.F.	—	7,898 S.F.	—	7,898 S.F.	NO	—	—	43,49		
166A-WL	" " " " " " " " " "			6,099 S.F.		6,099 S.F.		6,099 S.F.	YES			49		
167-WL	LJUBANI RUSNOV & DOROTHY RUSNOV	637	196	6,998.5 S.F.	—	6,998.5 S.F.	—	6,998.5 S.F.	YES	—	—	43,		
167A-WL	LJUBAN RUSNOV	695	139	6,998.5 S.F.		6,998.5 S.F.		6,998.5 S.F.	NO			49		
168-WL	MARY B. JANCI	688, 694, 706	311, 168, 625	14,000 S.F.	—	14,000 S.F.	—	14,000 S.F.	YES	—	—	43, 49		
169-WL	MARTIN HOLECKO	850 1081 273 648	GGG 242 107 540	12,584 S.F.	—	12,584 S.F.	—	12,584 S.F.	YES	—	—	43, 49		
170-WL	JOHN MURAR	850 847	G72 511	25,200 S.F.	—	25,200 S.F.	—	25,200 S.F.	YES	—	—	43, 49		
171-WL	SUSAN OPATICH	452 850 810	79 GG8 5G4	17,500 S.F.	—	17,500 S.F.	—	17,500 S.F.	NO	—	—	43,45		
172-WL	SUSAN RITCHIE & JAMES RITCHIE	837, 850	494, 670	5,600 S.F.	—	5,600. S.F.	—	5,600 S.F.	YES	—	—	50		
204-WL	" " " " "	834, 837	656, 497	5,600 S.F.		5,600 S.F.		5,600 S.F.	NO			45		
173-WL	DOMINIC AGOSTINELLI	850 808 764	GG4 675 347	11,900 S.F.	—	11,900 S.F.	—	11,900 S.F.	NO	—	—	45		
174-WL	MARY SOPKOVIC a.k.a. MARY SOPKOVICH	G30 998	524 283	13,192 S.F.	—	13,192 S.F.	—	13,192 S.F.	YES	—	—	45,50		
175, 176	¢177													
178A-WL	MINNIE R. WINTER	880	G75	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	NO	—	—	45	NOT USED	
178B-WL		813	54	11,204 S.F.	—	2,048 S.F.	—	2,048 S.F.		9,156 S.F.	—	85		
179-WL	THOMAS BIROSCAK	694, 314	159, 432	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	45		
180-WL	MARY ANN HALAPARDA	1085	297	G,299 S.F.	—	G,299 S.F.	—	G,299 S.F.	NO	—	—	45		
181-WL	JOHN GORDULIC, CARL GORDULIC, SOPHIE D. WATSON, SOPHIE GORDULIC, AGNES GOLLADAY, MARY ANN HOLAPARDA, MARGARET J. MONTMARNO	1132	113	5,599 S.F.	—	5,599 S.F.	—	5,599 S.F.	YES	—	—	45		
182-WL	MARY LILKO	280 403	175 561	5,942 S.F.	—	5,942 S.F.	—	5,942 S.F.	YES	—	—	45		
183-WL	ANNA STEFANIK & STEPHEN BAJTOS	208 368	G27 15	5,599 S.F.	—	5,599 S.F.	—	5,599 S.F.	YES	—	—	45		
184-WL	JOHN J. MARTINKO	919 287, 919	G36-G40 166, 638	5,599 S.F.	—	5,599 S.F.	—	5,599 S.F.	YES	—	—	45, 47		
186-WL	FRANK CERIMELE a.k.a. CERIMELI - OWNER; JOHN DEGENERO &	939	413	5,599 S.F.	—	3,499 S.F.	—	3,499 S.F.	YES	—	2,100 S.F.	47		
186-WA	GLADYS L. DEGENERO - HOLDERS OF LAND CONTRACT	123	223			1,500 S.F.	—	1,500 S.F.				47	BLDG. REMOVAL	
186-WL	KATHERINE PERLICH a.k.a. KATA PERLIC	719 G54 539	G 513 313	16,797 S.F.	—	2,062 S.F.	—	2,062 S.F.	NO	—	14,735 S.F.	47		
187, 188,	189, 190												NOT USED	
191-S	MORRIS M. BOYD	836	713	22,290 S.F.	—	2,296 S.F.	—	2,296 S.F.	NO	—	22,290 S.F.	47	SEWER EASE.	
192-S	MILDRED G. DOUGLAS	989 879	409 638	10,800 S.F.	—	3,120 S.F.	—	3,120 S.F.	NO	10,800 S.F.	—	47	SEWER EASE.	
193, 194,	195, 196, 197, 198												NOT USED	
199-WL	JOHN KAVULIC & MARY KAVULIC	525	148	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	49		
200-WL	MIKE TKACIK & FRANCIS TKACIK	296	87	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	49		
201-WL	MIKE BABINCHAK & SUSIE BABINCHAK	317	475	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	49,50		
202-WL	CATHERINE ONDERKO	508	325	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
203-WL	MAZIE E. CAPLINGER	939	715	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
204-WL													SEE 172 WL	
205-WL	AMELIA AGOSTINELLI	556, 1064	147, 623	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
206-WL	PAUL HABOVSKY	836	728	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	50		
207-WL	SUSIE VETRECIN												SEE 153-WL	
208-WL	MICHAEL SABO, JOHN A. SABO, EDWARD Wm. SABO & MARGARET E. STEVENSON	270 G28	591 421	5,882 S.F.	—	5,882 S.F.	—	5,882 S.F.	NO	—	—	50		

I-FUNDS

General Revisions:
A. Changed all names previously raised on earlier sepias.
B. Changed all WA Pcl's to T Pcl's and raised all WL Pcl's to Standard Highway Easements previously revised on earlier sepias.
Added Pcl 166 AWL 2-19-69
Added Pcl 167 AWL

RECEIVED
JAN 29 1969
Legals
Cert. No.

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

567
656

15
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
210-WL	MARY MANSKY a.k.a. MARY CIKA MANSKI & JOSEPH J. MANSKY a.k.a. JOSEPH MANSKY	545, 591, 672 & 970	610, 497 366 & 553	21,607 S.F.	—	21,607 S.F.	—	21,607 S.F.	YES	—	—	50		
211-WL	EDWARD HUDAK & CATHERINE HUDAK	810 810	243 239	8,260 S.F.	—	8,260 S.F.	—	8,260 S.F.	YES	—	—	50		
212-WL	PETER GUIDO a.k.a. PETER J. GUIDO & AMELIA GUIDO a.k.a. AMELIA E. GUIDO	833	605	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
213-WL	MARY YOSAY	873 245	646 68	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50, 52		FUNDS
214-WL	MIKE PIHONSKY & ANNA K. PIHONSKY	553	257	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	52		I-FUNDS
215-WL	JOSEPH SAGULA & MARY SAGULA	553	281	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	52		
216-WL	ANNA KLANICA	507 999	417 303	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	52		
217-WL 217-WA	HELEN BAKER	1050	180	5,599 S.F.	—	1,899 S.F. 1,521 S.F.	— —	1,899 S.F. 1,521 S.F.	YES	—	3,700 S.F.	52 52	BLDG. REMOVAL	
218-LA	MIKE SEMAN	1185	456	5,599 S.F.	—	NONE	—	NONE	NO	—	5,599 S.F.	52	D/W LINE CHANGED TO LA LINE PEDESTRIAN POINT OF ACCESS	
219-LA	YOLANDA HELEN POLLIFRONE	1178	23	5,599 S.F.	—	NONE	—	NONE	NO	—	5,599 S.F.	52	D/W LINE CHANGED TO LA LINE PEDESTRIAN POINT OF ACCESS	
220													NOT USED	
221, 222, 223, 224, 225, 226, 227 & 228													NOT REQUIRED	
229, 230, 231, 232													NOT USED	
233-WD 233-T	OHIO EDISON COMPANY	467	494	10,609 S.F.	—	18 S.F. 40 S.F.	—	18 S.F. 40 S.F.	NO	10,591 S.F.	—	54 54	TEMPORARY GRADING	100% CITY FUNDS
233A-S 233A-X	MACDON INDUSTRIAL & DEVELOPMENT, INC., AN OHIO CORPORATION	857	1	458,730 S.F.	—	1,951 S.F. 1,500 S.F.	— —	1,951 S.F. 1,500 S.F.	NO NO	458,730 S.F.	—	47 47	SEWER EASEMENT CHANNEL EASEMENT	I
234A-WD 234A-EL	ANDREW MULICHAK	964	227	5,925 S.F.	—	65 S.F. 5,860 S.F.	— —	65 S.F. 5,860 S.F.	NO NO	—	—	49 49	C.L. 32805	I STATE
234B-WD 234B-EL		964	227	4,329 S.F.	—	3,126 S.F. 1,203 S.F.	— —	3,126 S.F. 1,203 S.F.	NO NO	—	—	49 49	C.L. 32804	I STATE
209C-LA 209C-WD 209C-WA	THOMAS J. BASIC & DOLORES MARIE BASIC	1032	74	4,324 S.F.	—	NONE 137 S.F. 3,182 S.F.	— — —	NONE 137 S.F. 3,182 S.F.	— YES	4,187 S.F.	—	49, 50 49 49, 50	D/W LINE CHANGED TO LA LINE BLDG. REMOVAL	FUNDS
209-LA	AGNES WALLOW	489	45	4,907 S.F.	—	NONE	—	NONE	NO	4,907 S.F.	—	50	D/W LINE CHANGED TO LA LINE	
237-LA	EUGENE C. NAPLES & THERESA F. NAPLES	642	162	5,849 S.F.	—	NONE	—	NONE	NO	5,849 S.F.	—	50	D/W LINE CHANGED TO LA LINE	H
238-LA	THOMAS M. TORBA & MARIE TORBA	843	621	5,639 S.F.	—	NONE	—	NONE	NO	5,639 S.F.	—	50	D/W LINE CHANGED TO LA LINE RESIDENCE POINT OF ACCESS	
239-LA	ANDREW J. LESKO & ANNA M. LESKO	921	124	5,639 S.F.	—	NONE	—	NONE	NO	5,639 S.F.	—	50	D/W LINE CHANGED TO LA LINE RESIDENCE POINT OF ACCESS	

REVISIONS:
DELETED WA PLS. 221 THRU 228 — 11/5/69
PLS 234A-EL & 234B-EL ADDED - 6/18/69

Changed Name, Book & Page
Pcl 218 LA 8/18/69 M.K.M.

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias
B. Changed All WD Pcls to "T" Pcls and Revised All "WD" Pcls to Standard Highway Easements Previously Revised on Earlier Sepias.

SMITH, HINCHMAN & GRYLLS
AUG 8 1969
LOGGED

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

568 / 656

16 / 104

MAH. 680 – 6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
240-LA	PETER J. SHUNTICH & HELEN A. SHUNTICH	584	374	5,639 S.F.	———	NONE	———	NONE	NO	5,639 S.F.	———	50	R/W LINE CHANGED TO L.A. LINE	
240-S						421 S.F.	———	421 S.F.				50	PEDESTRIAN POINT OF ACCESS SEWER EASEMENT	
241-WL	SUSIE BALI	781	361	5,670 S.F.	———	607 S.F.	———	607 S.F.	YES	5,063 S.F.(L)	———	50		
241-S						1,020 S.F.	———	1,020 S.F.				50	SEWER EASEMENT	
241-WA						2,593 S.F.	———	2,593 S.F.				50	BLDG. REMOVAL	
242-WL	ANNA C. SICH	439	213	5,908 S.F.	———	1,822 S.F.	———	1,822 S.F.	YES	4,086 S.F.(L)	———	50		
242-S		295	190			1,029 S.F.	———	1,029 S.F.				50	SEWER EASEMENT	
242-WA						1,641 S.F.	———	1,641 S.F.				50	BLDG. REMOVAL	
243-WL	THE FIRST SLOVAK PRESBYTERIAN CHURCH OF YOUNGSTOWN, OHIO	268	98	34,424 S.F.	———	7,298 S.F.	———	7,298 S.F.	YES	25,134 S.F.	———	50		
243-WD		803	681			1,992 S.F.	———	1,992 S.F.	NO			50,56		
243-S		223	36			3,771 S.F.	———	3,771 S.F.				50	SEWER EASEMENT	
243-WA						5,315 S.F.	———	5,315 S.F.				50	BLDG. REMOVAL	
244A-WL	MILTON A. ROEMISCH, *TRUSTEE*	806	489 & 496	13,035 S.F.	———	13,035 S.F.	———	13,035 S.F.	YES	———	———	50,52		
244B-WL		806	435	15,600 S.F.	———	15,600 S.F.	———	15,600 S.F.	NO	———	———	71,72		
244C-WL		806	429	5,633 S.F.	———	5,633 S.F.	———	5,633 S.F.	NO	———	———	74,77		
244-WD	" " "	808	508	3,645 S.F.	———	3,645 S.F.	———	3,645 S.F.	NO	———	———	69		
245-WL	JOHN HAJMOCI & SUSIE HAJMOCI	296	475	11,000 S.F.	———	11,000 S.F.	———	11,000 S.F.	YES	———	———	50		I-FUNDS
246-WL	ROSE HURCHIK - OWNER; JULIANA TEREK - LIFE ESTATE	683	383	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	50,52,56		
247-WL	ANNA VARKONDA, f.k.a. ANNA LUNIC *n.k.a. ANNA ZOFIE*	502, 467, 471	182, 641, 100	4,485.8 S.F.	———	4,485.8 S.F.	———	4,485.8 S.F.	YES	———	———	52		
247A-WL	THE SMITH SPALDING *LAND COMPANY*	258	614	2,234.2 S.F.	———	2,234.2 S.F.	———	2,234.2 S.F.	NO	———	———	50,52		
248A-WL	NICK STIJAKOVICH & SOPHIE R. STIJAKOVICH	582	566	11,583 S.F.	———	11,583 S.F.	———	11,583 S.F.	YES	———	———	52,56		
248 WL	STEVE J. HRUSOVSKI & HELEN M. HRUSOVSKI	848	194	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
249-WL	WADE H. ROSE, *OWNER; CECELIA NEPELKA, HOLDER OF LAND CONTRACT*	740	465	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
250-WL	STEPHEN MOTOSKO & THOMAS MOTOSKO	931	320	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
251-WL	MICHAEL RUSKY & MARTHA A. RUSKY *aka. MARTHA M. RUSKY*	1034	347	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
252-WL	*FRANK SYLVESTER, EXECUTOR of the ESTATE of ANGELO SELVESTIR, aka ANGELO SYLVESTER aka EVANGELISTO SILVESTRI, DEC'D.*	352	142	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	NO	———	———	52		
253													NOT USED	
254-WD	MIKE PALAGANO	504	178	4,800 S.F.	———	79 S.F.	———	79 S.F.	NO	———	———	52		I
254-EL						4,721 S.F.	———	4,721 S.F.				52		STATE
255-WA	JOHN MARKOVICH & ROSE MARKOVICH	575	473	4,860 S.F.	———	400 S.F.	———	400 S.F.	NO	———	4,860 S.F.	52	DRIVE CONST.	I
256, 257, 258, 259 & 260													NOT USED	
261-WD	MARGARET PAVLICH	921	558	32,347 S.F.	———	14 S.F.	———	14 S.F.	NO	71,901 S.F.	———	54		100% CITY
261-T						650 S.F.	———	650 S.F.				54	DRIVE CONST.	100% CITY
261-WA						29 S.F.	———	29 S.F.				54	DRIVE CONST.	100% CITY
262 & 263													NOT USED	
264-WD	FRANK M. BANJO & HELEN BANJO	987	655	7,700 S.F.	———	7,700 S.F.	———	7,700 S.F.	YES	———	———	55		
265-P.R.	JOHN BABIK & HELEN BABIK	592	11	7,728 S.F.	———							55	PROPERTY RIGHTS	
266-P.R.	STEVE J. OLSAVSKY & LOUISE K. OLSAVSKY	1075	612	7,550 S.F.	———							55	PROPERTY RIGHTS	
267													NOT USED	
268-WD	ANDREW BOSNAK *aka. ANDY BOSNAK*	605, 1137	122, 609	12,996 S.F.	———	9,467 S.F.	———	9,467 S.F.	NO	3,529 S.F.	———	55		
268-T		869	418			1,187 S.F.	———	1,187 S.F.				55	GRADING	
269 & 270													NOT USED	
271-WD	ELIZABETH SCHLOSSAR *aka ELIZABETH SCHLOSSER*	665	604	15,988 S.F.	———	293 S.F.	———	293 S.F.	NO	15,695 S.F.	———	55		
		441	380											
272-WD	MILDRED MARUSKIN	776	591	10,770 S.F.	———	403 S.F.	———	403 S.F.	NO	10,367 S.F.	———	49		I-FUNDS
		819	293											
		803	338											
273-WD	PETER F. JAKUBOVIC *aka* PETER F. JACUBOVIC & *IRENE JAKUBOVIC aka IRENE JACUBOVIC*	664, 803	411, 672	15,000 S.F.	———	4,250 S.F.	———	4,250 S.F.	NO	10,750 S.F.	———	56		H
274, 275, 276 & 277													NOT USED	
278-WL	HELEN L. HUDAJT	628	305	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	50,52,56		
		757	306											
279-WL	PETER S. CHIZMAR	609, 201	396	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	52,56		
		1867, 887	384											
280-WL	JOSEPH VAGNER & JUSTINA VAGNER	366	329	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	52,56		
281-WL	MARIE E. HORVAT, VERONICA HORVAT (SISTER HERMINE) THOMAS J. HORVAT, ANN VASKO, & *CATHERINE M. HORVATH aka KATHERINE HORVAT, OWNERS* ROBERT A. ALLEN & ELAINE ALLEN - HOLDERS OF LAND CONTRACT	1055, 879, 1056, 1042 LEASE & CONTRACT BOOK 105	382, 614, 384, 437 CONTRACT Pg. 194	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	56		

REVISIONS:
PCL 254-T DELETED, PCL 254-EL ADDED 6/18/69

General Revisions:
A. Changed all WA Pcl's to T
B. Changed all WA Pcl's to T
Standard Highway Easements previously revised on earlier sepias.

Changed Pcl 243 WA To 243-T White 8-17-70
" 243 T To 243-WA Twilis 10-1-70

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

569
656

17
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
282-WL	MICHAEL SHRISKY aka MICHAEL SARISKY & MARTIN SHRISKY aka MARTIN SARISKY	251 250	575 57	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
283-WL	JOHN PAVLICH & MARY PAVLICH	316	457	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
284-WL	BERTHA RAJSICH - a.k.a. BAJA RAJSICH	318 781 & 1082	172 279 & 216	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
285A-WL	CLYDE O. BRAGG & VIRGINIA L. BRAGG	1067	126	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
285B-WL	JOHN J. VASKO & ANN D. VASKO	950	33	4,450 S.F.	—	4,450 S.F.	—	4,450 S.F.	YES	—	—	71		
286-WL	ANNA SISKO nka ANNA SISKO PAINTER	682 674 307 & 674	306 525 311 & 524	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
287-WL	GIOVANNA MARINUCCI	777	475	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
288-WL	GEORGE J. MOCHAN	1045 1022	307-309 80	4,410 S.F.	—	4,410 S.F.	—	4,410 S.F.	YES	—	—	56		
289-WL	GEORGE ADORNATO & SERENA ADORNATO	507	134	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	58		
290-WL	JAMES E. GREGORY	732 692	249 249	7,028 S.F.	—	7,028 S.F.	—	7,028 S.F.	YES	—	—	58		
291-WL	WILLIAM A. MOKROVICH & MARY ANN MOKROVICH	600	281	6,228 S.F.	—	6,228 S.F.	—	6,228 S.F.	YES	—	—	58		
292-WL	ESTATE OF GLADYS L. CLEMENS, DECEASED	737	433	7,494 S.F.	—	7,494 S.F.	—	7,494 S.F.	YES	—	—	52,56		
293-WL	DONEL REALTY COMPANY, A PARTNERSHIP	880	584	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	NO	—	—	56	(See Pcl 164)	
293-AT	CHESTER TORELLO	1066	442	10,400 S.F.	—	150 S.F.	—	150 S.F.	NO	10,400 S.F.	—	64	GRADING LOT No 26155	
294-WL	STEVE ZARUBA	1051	305	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	YES	—	—	56		
295-WL	JOHN T. HOLESKO	771 541	185 467	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	YES	—	—	56		
296-WL	HELEN SEKERAK	904 207	282 & 284 328	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	YES	—	—	56		
297-WL	THE CATHOLIC SLOVAK FALCON CLUB COMPANY, AN OHIO CORPORATION	268	107	14,250 S.F.	—	14,250 S.F.	—	14,250 S.F.	YES	—	—	56,58		
298-WL	ANNA STARON	586	32	7,440 S.F.	—	7,440 S.F.	—	7,440 S.F.	YES	—	—	58		
299-WL	STEVEN MOTOSKO & HOWARD MOORE	1078	646	5,850 S.F.	—	5,850 S.F.	—	5,850 S.F.	YES	—	—	58		
300-WL	JAMES BELLA & MARY BELLA	565	621	3,648 S.F.	—	3,648 S.F.	—	3,648 S.F.	YES	—	—	58		
301-WL	IRENE FRANKO	574 625	260/261 87	8,475 S.F.	—	8,475 S.F.	—	8,475 S.F.	YES	—	—	58		
302-WL	GEORGE CHAMER a.k.a. GEORGE CSAMER	469 468 234	103 338 228	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
303-WL	PAUL GEGUS a.k.a. PAUL R. GEGUS, OLGA P. GEGUS & MARGARET ANN GEGUS	911 840	725 74	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58		
304-WL	ESTATE OF CATHRINE REDUGA, DEC'D. - MICHAEL REDUGA aka MICHAEL R. REDUGA, EXECUTOR	326	583	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
305-WL	JOHN JANDROKOVIC & KATHERINE JANDROKOVIC	584	132	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58		
306-WL	KATHERINE KOSHAN PETRENCHICK a.k.a. KATARINA PETRENCHICK	880	305	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
307-WL	FRANK V. GURGOS & MARY B. GURGOS	836	484, 487, 489	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58		
308-WL	PETER J. KICOS, GUARDIAN FOR JOHN KALAFUT, INCOMPETENT	990	234	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
309-WL	STEVE R. KOVACH & ALICE L. KOVACH	728	11	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
310-WL	MARY K. BARON	549	358	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58,60		

H - FUNDS

GENERAL REVISIONS
A. Changed All Names & Previously Revised on Earlier Sepias.
B. Changed All WD Pcls to "T" Pcls. and Revised All "WD" Pcl #'s to "T" Pcl #'s & Previously Revised on Earlier Sepias.
Standard Highway Easements Added
Deleted Pcl 293-T & 293-AT.
Changed Pcl 295-T to 295-AT. 4-25-69

DEPT. HIGHWAYS DIST. FIVE & BUR. SURVEYS & RIGHTS STATE OF OHIO
JAN 27 1969
LOGGED
CHK'D

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

570
656

18
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
311-WL	MARGARET W. BLACK, ET AL SEE LINE SHEET Nº 60 FOR COMPLETE LIST OF OWNERS	313	78&79	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	60		
312-WL 312-WA	MARY SAFANEK	805 661	458 126	4,640 S.F.	———	2,858 S.F. 1,091 S.F.	——— ———	2,858 S.F. 1,091 S.F.	YES	———	1,782 S.F.	60 60	 BLDG. REMOVAL	
313-WL 313-WA	TRIPO M. LUKOVICH & CATHERINE LUKOVICH	692	10	6,580 S.F.	———	4,377 S.F. 1,528 S.F.	——— ———	4,377 S.F. 1,528 S.F.	YES	———	2,203 S.F.	60 60	 BLDG. REMOVAL	
314-WL 314-WA	JOSEPH T. BUNDY & SARA L. BUNDY	917	494	6,155 S.F.	———	3,693 S.F. 1,787 S.F.	——— ———	3,693 S.F. 1,787 S.F.	YES	———	2,462 S.F.	60 60	 BLDG. REMOVAL	
315-WL	JOHN ROCK aka JOHN ROCK Sr. & JOHN ROCK, EXECUTOR of the ESTATE of ELIZABETH ROCK, DECEASED	356	35	5,731 S.F.	———	3,003 S.F.	———	3,003 S.F.	NO	———	2,728 S.F.	60		
316-WL	MARY ANNA REPASKY	757	162	4,738 S.F.	———	2,085 S.F.	———	2,085 S.F.	NO	———	2,653 S.F.	60		
317-WL	JOHN MARTINEC, JR., a.k.a. JOHN MARTINEC	640 335	169 576	4,402 S.F.	———	1,535 S.F.	———	1,535 S.F.	YES	———	2,867 S.F.	60		
318-WL	AMELIA SAVINA aka AMELIA SOUINET	1091	23	4,166 S.F.	———	1,017 S.F.	———	1,017 S.F.	NO	———	3,149 S.F.	60		
319-WL	GEORGE KORCHNAK & HEDWIG KORCHNAK	961	437	4,594 S.F.	———	429 S.F.	———	429 S.F.	NO	———	4,165 S.F.	60		
320													NOT USED	
321-WL	ANDREW W. MIGLETS	754 568	56 600	2,325 S.F.	———	2,325 S.F.	———	2,325 S.F.	YES	———	———	58		
322-WL	HELEN NOVOTNY	914 575	83 377	15,000 S.F.	———	15,000 S.F.	———	15,000 S.F.	YES	———	———	58		
323													NOT USED	
324-WL	JOHN TEKAC	1082	340	13,600 S.F.	1,600 S.F.	13,600	1,600 S.F.	12,000 S.F.	YES	———	———	58		
325-WL	WILLIAM J. SCHRAIDER, EXECUTOR of the ESTATE of JOHN M. SCHRAIDER, DECEASED	339	58	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	58		
326-WL	PAUL HABOVSKY	650 549 330:307	477 238 71:89	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	NO	———	———	58		
327-WL	HELEN M. LASKEY	860	518	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	58		
328-WL	WILLIAM WELDON & JENNIE WELDON	696	622	15,000 S.F.	———	15,000 S.F.	———	15,000 S.F.	YES	———	———	58,60		
329													NOT USED	
330-WL	JOHN R. BENNEDEK	1084	19	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	60		
331-WL	CLIFFORD W. HOLLISTER	886	105	8,025 S.F.	———	8,025 S.F.	———	8,025 S.F.	YES	———	———	60		
332-WL	MARIE M. BUDAY	859 827 545	473 207 158	16,575 S.F.	———	16,575 S.F.	———	16,575 S.F.	YES	———	———	60		
333													NOT USED	
334-WL	MARY ANNA CHISMAR	533	339	8,250 S.F.	750 S.F.	8,250 S.F.	750 S.F.	7,500 S.F.	YES	———	———	60		
335-WL	EDWARD SALATA, EXECUTOR of the ESTATE of MICHAEL SALATA Sr., DECEASED	556	232	4,500 S.F.	———	4,500 S.F.	———	4,500 S.F.	YES	———	———	60		
336-WL	NICK MINNIE & JOSEPHINE MINNIE	555	442	4,500 S.F.	———	4,500 S.F.	———	4,500 S.F.	YES	———	———	60		
337-WL	EDNA L. KACHMAR	963 888	628 174	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	60		
338-WL 338A-WL	ANNA KULIK a.k.a. ANNA WILICHKO KULEK	541 345	82 113	17,234 S.F.	2,440 S.F.	16,140 S.F. 1,094 S.F.	2,440 S.F. ———	13,700 S.F. 1,094 S.F.	YES NO	——— ———	——— ———	60 60		
339-WL	MARGARET NYENGES	807	51	7,808 S.F.	1,500 S.F.	7,808 S.F.	1,500 S.F.	6,308 S.F.	NO	———	———	60		
340,341,	342, 343, 344 & 345												NOT USED	
346-S 346-T 346-PR	JOHN KRUPA	658, 291 643, 221 317	53, 295 207, 460 337	15,000 S.F.	——— ——— ———	111 S.F. 526 S.F.	——— ——— ———	111 S.F. 526 S.F.	NO NO	13,000 S.F.	———	62 62 62	SEWER EASEMENT DRIVE CONST. LOSS OF RIGHTS TO EXISTING ROAD	
347-LA 347-S	ANDY OLEXA & SUSANNA OLEXA aka SUSAN OLEXA	309 317	581 337	7,500 S.F.	———	NONE 743 S.F.	——— ———	NONE 743 S.F.	——— NO	7,500 S.F.	———	62 62	R/W LINE CHANGED TO LA LINE SEWER EASEMENT	
348-WL 348-S 348-WA	ANNA ZIDZIK aka ANNA DANYA	233	166	7,500 S.F.	———	487 S.F. 955 S.F. 1,672 S.F.	——— ——— ———	487 S.F. 955 S.F. 1,672 S.F.	YES	7,013 S.F. (L)	———	62 62 62	 SEWER EASEMENT BLDG. REMOVAL	

I-FUNDS

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All W.H. R/S & T R/S and Revised All W.D. R/S to Standard Highway Easements Previously Revised on Earlier Sepias.
Added Rel. 346 PR - 2-3-69.

State Highway Dist. 9
R/W Engr. & Right of Way
JAN 27 1969
Locked
Date ..... Init. ....

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

571
656

19
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.RO. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
349-WL	WALTER BIELSKI & JULIA BIELSKI	878	392	7,500 S.F.	——	1,422 S.F.	——	1,422 S.F.	YES	6,078 S.F.(L)	——	G2		
349-S						708 S.F.	——	708 S.F.				G2	SEWER EASEMENT	
349-WA						1,150 S.F.	——	1150 S.F.				G2	BLDG. REMOVAL	
350-WL	JOHN YANEK & MARY YANEK	340	433	6,000 S.F.	——	1,544 S.F.	——	1,544 S.F.	YES	4,456 S.F. (L)	——	G2		
350-S						588 S.F.	——	588 S.F.				G2	SEWER EASEMENT	
350-WA						1,256 S.F.	——	1,256 S.F.				G2	BLDG. REMOVAL	
351-WL	LOUIS J. CSIZMADIA	923	485	6,000 S.F.	——	1,833 S.F.	——	1,833 S.F.	YES	4,167 S.F. (L)	——	G2		
351-S						622 S.F.	——	622 S.F.				G2	SEWER EASEMENT	
351-WA						844 S.F.	——	844 S.F.				G2	BLDG. REMOVAL	
352-WL	JULIA TOVARNAK OWNER;	741	144	9,218 S.F.	——	3,715 S.F.	——	3,715 S.F.	YES	5,503 S.F.	——	G2		
352-S	GEORGE J. NISKI & BARBARA A. NISKI, HOLDERS OF LAND CONTRACT	486	490			1,172 S.F.	——	1,172 S.F.				G2	SEWER EASEMENT	
352-WA		(1133	707 L.C)			380 S.F.	——	380 S.F.				G2	BLDG. REMOVAL	
353-T	GENEVIEVE KIGHT & DORIS KIGHT	1167	158	25,856 S.F.	8875 S.F.	220 S.F.	——	220 S.F.	NO	——	25,856 S.F.	G2	GRADING	
354-T	MARIE SICH	833	573	4,822 S.F.	——	127 S.F.	——	127 S.F.	NO	4,822 S.F.	——	G2	GRADING	
**	JULIA PODOLSKY				——		——			——	——			
356-WD		1035	94	16,185 S.F.	——	6,069 S.F.	——	6,069 S.F.	YES	——	10,116 S.F.	64,65,66	DEED AREA CORRECTED	
356-T		906	556&559			365 S.F.	——	365 S.F.				64,65,66	DRIVE. CONST.	
356-WA						1,029 S.F.	——	1,029 S.F.				64,66	BLDG. REMOVAL	
356 S						172 S.F.		172 S.F.				64,66	Sewer Easement	
359-WD	AGNES VIGLIOTTI, EXECUTRIX OF THE ESTATE OF JOHN LUSCHANSKY aka JOHN LUCANSKY aka JOHN LUCSANSKY, DECEASED	286	50	13,053 S.F.	——	313 S.F.	——	313 S.F.	NO	——	12,740 S.F.	G5		
360-WD	LEONE ELISER AKA LEONA D. ELISER	436,1069	550 452	11,647 S.F.	——	1,605 S.F.	——	1,605 S.F.	NO	——	10,042 S.F.	G5		
361-WD	TERESA HABULAN	1134	261	14,595 S.F.	——	5443 S.F.	——	5443SF	NO	——	9,152 S.F.	G5		
357													NOT USED	
358-S	The Midwest Investment Company, a partnership	1102	9	15,899 S.F.	——	67 S.F.	——	67 S.F.	NO	——	15,832 S.F.	64	Sewer Easement	
362-WL	EMILEE M. SICH	1029	G25	14,600 SF	——	789 S.F.	——	789 SF	NO	——	12,367 S.F.	G7		
362-			629			1,444 S.F.	——	1,444 S.F.	YES			G5		
362-T						2,132 S.F.	——	2,132 S.F.				G7	GRADING	
363													NOT USED	
364A-WL	KADIMAK REALTY, A PARTNERSHIP	1158	416	6,820 S.F.	——	6,820 S.F.	——	6,820 S.F.	NO	——	——	G7		
364B-WL	MARY ANN L°GUIDICE	1182	353	5,464 S.F.	——	292 S.F.	——	292 S.F.	NO	——	5,172 S.F.	77		
365A-WL	LEOLA ROGERS	842	563	3,149 S.F.	——	3,149 S.F.	——	3,149 S.F.	NO	——	——	G7		
365B-WL	JAMES ROGERS, JR.	1088	127	3,150 S.F.	——	3,150 S.F.	——	3,150 S.F.	NO	——	——	G7		
366-WL	DOROTHY A. MENDICH	854	8	12,289 S.F.	——	12,289 S.F.	——	12,289 S.F.	NO	——	——	G7		
367A-WL	LEON DUNN	1151	48	6,123 S.F.	——	6,123 S.F.	——	6,123 S.F.	NO	——	——	G7	LOT NO. 26172	
367B-WL	"			5,515 S.F.	——	4,352 S.F.	——	4,352 S.F.	NO	1,163 S.F.	——	81	LOT NO. 19541	
367C-WD	THE FOREMOST INVESTMENT COMPANY, A PARTNERSHIP	879	714	3,486 S.F.	——	1,330 S.F.	——	1,330 S.F.	NO	——	2,156 S.F.	69	LOT NO. 5969	
367 T-2	" " " " "					587 S.F.	——	587 S.F.				69	GRADING	
367 T-1	SANFORD BARTH	1172	363	8,269 S.F.	——	2,876 S.F.	——	2,876 S.F.	NO	——	8,269 S.F.	69	GRADING - LOT NO. 5963,4,5	
367 CWL				5,475 SF	——	5,475	——	5,475 SF	NO	——		81 & 83	LOT NO. 19538	
368-WL	SAMUEL H. COPPERMAN	842	390	5750 S.F.		5750 S.F.		5750 S.F.	NO	——	——	G7		
369-WL	JOSEPH DENIOL	1020	226	5750 S.F.	——	5750 S.F.	——	5750 SF	NO	——	——	G7		
370-WL	RHETA F. WEIMER	801	674	12,349 S.F.	——	12,349 S.F.	——	12,349 S.F.	NO	——	——	G7		
371-S	JOSEPH WISEMAN	805	368	5,770 S.F.	——	797 S.F.	——	797 S.F.	NO	——	——	G7	SEWER EASEMENT	
371-T						2,308 S.F.	——	2,308 S.F.	NO	——	5,770 S.F.	G7	GRADING	
371-LA						NONE	——	NONE				G7	R/W LINE CHANGED TO LA LINE	
372													NOT USED	
373-T	ANDREW ROSENFELD & JEAN WEISER	817	223	2,901 S.F.	——	1,038 S.F.	——	1,038 S.F.	NO	——	2,901 S.F.	G7,69	GRADING	
373-S					——	38 S.F.	——	38 S.F.	NO			G7,68	SEWER EASEMENT	
374-WD	ANDREW BERNAT	518	404	2,826 S.F.		80 S.F.	——	80 S.F.	NO	——	2,746 S.F.	69		
374-T						152 S.F.	——	152 S.F.				69	GRADING	
375 WD	HELEN LUCAS	1140	515&517	2,992 S.F.	——	404 S.F.	——	404 S.F.	NO	——	2,588 S.F.	69		
376-WD	VICTOR CENTOFANTI, ALBERT CENTOFANTI, HENRY	786	642	3,308 S.F.	——	864 S.F.	——	864 S.F.	YES	——	2,444 S.F.	69		
376-WA	CENTOFANTI, JOSEPH CENTOFANTI, YOLANDA CENTOFANTI, MARY CENTOFANTI & ADELINE PELUSO					2,444 S.F.	——	2,444 S.F.				69	BLDG. REMOVAL	
377,378	379												NOT USED	
380-WD	MIKE TEPSICK	1137	218	9,110 S.F.	——	167 S.F.	——	167 SF	NO	8,943 SF	——	69		
380-T						1,307 S.F.	——	1307 S.F.				69	GRADING & DRIVE CONST.	
381,382	383												NOT USED	
384-WD	STEVE STANKOVICH & MARY STANKOVICH	664	264	9,431 S.F.	——	78 S.F.	——	78 S.F.	NO	9,353 S.F.	——	69		
384-T						2,156 S.F.	——	2,156 S.F.				69	GRADING	
**	356AWD JULIA PODOLSKY, OWNER: LOIS MOFFO, LAND CONTRACT HOLDER	1262	769	10,116 SF		10,116 S.F.		10,116 S.F.	YES			64-65-66	LAND CONTRACT RECORDED: VOL 1211 P. 582	
		1035	82											
		906	556											
		906	559											

FUNDS — S — H

ADDED PCL. 356AWD & CORRECTED DEED AREA AND RESIDUE PCL. 356WD 9-10-73
ADDED PCLS 356-S, 358-S, REVISED 12-12-69 Solomon
DEED AREA PCL. 373-T PROPS-12-19-69
NAME CHANGE PCL 358S 12-23-69 Solomon
Changed Name Pcl. 358 S to 356 T-1 Standard Highway Easement Pcl. 342 - 5-6-70
Added Pcl. 356 T-2 Standard Highway Easement Pcl. 356 WA 11-19-69 White

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All W.D. Pcls to T. Pcls and Revised All W.D. Pcls to Standard Highway Easements Previously Revised on Earlier Sepias.
Changed Pcl. 356 WD to 356 T-1 to 356 WA

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

572
656

20
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
385-WD	BERTHA SMITH	969	352	13,277 S.F.	—	1,210 S.F.	—	1,210 S.F.	YES	12,067 S.F.	—	69		
385-T						4,820 S.F.	—	4,820 S.F.				69	GRADING	
386-WD	THOMAS SOICH a.k.a. THOMAS E. SOICH	1010	342	9,154 S.F.	—	1,475 S.F.	—	1,475 S.F.	NO	6,316 S.F.	—	69		
386-SL						1,363 S.F.	—	1,363 S.F.				69	SLOPE EASEMENT	
387-WD	IVAN DUBIC & JENNIE DUBIC	1135	215	9,838 S.F.	—	2,042 S.F.	—	2,042 S.F.	NO	4,848 S.F.	—	67,69		
387-SL						2,948 S.F.	—	2,948 S.F.				67,69	SLOPE EASEMENT	
388-WD	ELWYN V. JENKINS	808	306	3,444 S.F.		517 S.F.	—	517 S.F.	NO	2,281 S.F.	—	67		
388-SL						646 S.F.	—	646 S.F.				67	SLOPE EASEMENT	
389-WL	WALTER G. McKENRICK, Jr.	1076	224	15,474 S.F.	—	2,434 S.F.	—	2,434 S.F.	NO	—	12,294 S.F.	67		
389-WD						746 S.F.	—	746 S.F.				67		
389-T						772 S.F.	—	772 S.F.				67	GRADING	
390-WL	STANISLAW DOMANSKI & SOFIA DOMANSKI	703 G55	552 551	14,422 S.F.	—	14,422 S.F.	—	14 422 S.F.	YES	—	—	67		
391-WL	JAMES CATO & LULA MAE CATO	959	444	6,525 S.F.	—	6,525 S.F.	—	6,525 S.F.	YES	—	—	67		
392-WL	THOMAS ADAMIAK & VICTORIA ADAMIAK	339 648	509 375	13,120 S.F.	—	13,120 S.F.	—	13,120 S.F.	YES	—	—	67		
393-WL	JOE A. KOLMAN aka. JOSEPH A. KOLMAN aka JOSEPH KOLMAN	493, 648 1088, 1090	191, 465 206, 886	13,155 S.F.	—	13,155 S.F.	—	13,155 S.F.	YES	—	—	67		
394-WL	WALTER W. SOICH & BETTY JANE SOICH	631	428	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	67		
395-WL	JOSEPH PAVLICK aka. JOSEPH C. PAVLICK & RAE C. PAVLICK	841 724	398 358	12,979 S.F.	—	12,979 S.F.	—	12,979 S.F.	YES	—	—	67		
396-	LEON DUNN & SANFORD BARTH, A PARTNERSHIP	812	292	6,071 S.F.	—	1,965 S.F.	—	1,965 S.F.	NO	4,106 S.F.	—	67		
397-WD	THE DOREL REALTY COMPANY, A PARTNERSHIP	1111	430	8,364 S.F.	—	2,465 S.F.	—	2,465 S.F.	NO	5,899 S.F.	—	65,67	(See 164)	
398	HAROLD D. LEACH, A.E. WESTER aka ARTHUR E. WESTER	660	287	110,066 S.F.	—	31,983 S.F.	—	31,983 S.F.	NO	61,641 S.F.	15,439 S.F.	64,65		
398A-		860	508			1,003 S.F.	—	1,003 S.F.				65		
398-T						4,526 S.F.	—	4,526 S.F.				64	GRADING	
399&400													NOT USED	
401-WD	THE INLAND INVESTMENT COMPANY, A PARTNERSHIP	887	720	6,500 S.F.	—	32 S.F.	—	32 S.F.	NO	6,468 S.F.	—	64		
401-T						268 S.F.	—	268 S.F.				64	GRADING	
402-WL	MARY THURIK	629	331	4,623 S.F.	—	32 S.F.	—	32 S.F.	YES	3,074 S.F.	—	71		
402-SL		489	548			1,517 S.F.	—	1,517 S.F.				71	SLOPE EASEMENT	
402-WA						1,364 S.F.	—	1,364 S.F.				71	BLDG. REMOVAL	
403A-WL	ESTATE OF JAMES COLUCCI, ESTATE OF JOSEPH J. COLUCCI, ESTATE	WILL 203	350	13,686 S.F.	—	13,686 S.F.	—	13,686 S.F.	NO	—	—	71	LOTS 17150, 17158 & 17159	
403B-WL	OF ANDREW COLUCCI, CLARA SEPPE COLUCCI a.k.a. ADA C. COLUCCI,	WILL CASE	*30019	4,582 S.F.	—	4,582 S.F.	—	4,582 S.F.	NO	—	—	71	LOT 17161	
403C-WL	STEPHEN COLUCCI, FRANCES TIMPANA, MARIE PARILLA, BELDINA	410	492	10,400 S.F.	—	10,400 S.F.	—	10,400 S.F.	NO	—	—	72	LOTS 17143 & 17144	
403D-WL	GABARINO	WILL 65	118	9,600 S.F.	—	9,600 S.F.	—	9,600 S.F.	NO	—	—	72	LOTS 17123 & 17124	
403E-WL		359	362	18,568 S.F.	—	18,568 S.F.	—	18,568 S.F.	NO	—	—	71,74	LOTS 17138, 17139 & 17140	
403F		WILL 55	125	2,600 S.F.	—	1,745 S.F.	—	1,745 S.F.	NO	855 S.F.	—	74	LOT 17084	
403F-1						750 S.F.	—	750 S.F.	NO			74		
403G-WL				1,300 S.F.	—	1,300 S.F.	—	1,300 S.F.	NO	—	—	74	LOT 17083	
404&405													NOT USED	
406-WL	AGNES PYATNICK G94/368, 972/563 & 565 & 569 & 567,	909	145	9,359 S.F.	—	9,359 S.F.	—	9,359 S.F.	YES	—	—	71,72		
407-WL	MARY APPENZELLER	490	156	10,100 S.F.	—	10,100 S.F.	—	10,100 S.F.	YES	—	—	72		
408,409,	410,411 & 412												NOT USED	
413-WL	THRIFT INVESTMENT COMPANY, A PARTNERSHIP	1059	48	5,200 S.F.	—	5,200 S.F.	—	5,200 S.F.	NO	—	—	71		
414-WL	NOBLE DRESSEL & MARY DRESSEL	961	271	5,200 S.F.	—	5,200 S.F.	—	5,200 S.F.	NO	—	—	71		
415-WL	STEVE KUROWSKI	806	175	4,400 S.F.	—	109 S.F.	—	109 S.F.	YES	1,650 S.F.	—	71		
415-SL						2,641 S.F.	—	2,641 S.F.				71	SLOPE EASEMENT	
415-WA						573 S.F.	—	573 S.F.				71	BLDG. REMOVAL	
416													NOT USED	
417-WL	CAROLINE S. ZITKOVICH a.k.a. CAROLINE ZITKOVICH	1051 534	344 368	5,200 S.F.	—	51 S.F.	—	51 S.F.	NO	5,149 S.F.	—	71		
418-WL	JOHN EMERICH & JOSEFIA EMERICH	796	630	5,200 S.F.	—	5,200 S.F.	—	5,200 S.F.	YES	—	—	71		

H-FUNDS

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All WA Rel's to "T" Rel's and Revised All "WD" Rel's to Standard Highway Easements Previously Revised on Earlier Sepias:
Changed Rel. 396WD to a Standard Highway Easement. 8-21-69 EW.
Changed Rel. 398 WD & 398AWD to a Standard Highway Easement. 10-17-69 white

RECEIVED
DEPT. OF HIGHWAYS
JAN 27 1970
LOCATED
Cle... ...ent St...

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

573/656

21/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
419-WL	MICHAEL F. SHIMEK	792 621	141, 143, 145 284	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	71		———
420-WL	ELIZABETH COYNE BAILIFF	504	306	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	71		
421-WL	ROBERT L. EVANS & ROSE MARIE EVANS	695	103	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	NO	———	———	71		
422-WL	DOROTHY ISABEL REKUS f.k.a. DOROTHY ISABEL McGRATH	627	193	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	NO	———	———	71, 72		
423-WL	GILDA CERA, DORA CERA, IDA DURKIN, ADA HAGAN, JEAN DILORETO RENA CAVAHAUGH, JOSEPH DILORETO & LARRY DILORETO	1028	663	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	71, 72		
424-WL	AGNES COYNE PERSON aka AGNES COYNE	189, 277	66, 472	7,638 S.F.	———	7,638 S.F.	———	7,638 S.F.	NO	———	———	71, 72, 74, 77		
425													NOT USED	
426-WL	FRANK FRATTAROLI & ANN FRATTAROLI	1119	839	7,810 S.F.	———	669 S.F.	———	669 S.F.	NO	7,141 S.F.	———	71, 74		
427-WL	GEORGE DOBOZY & GEORGE DOBOZY, EXECUTOR OF THE ESTATE OF MARY DOBOZY, DECD	671	627	5,200 S.F.	———	250 S.F.	———	250 S.F.	NO	4,950 S.F.	———	74		
428-WL	JOHN M. DAVID & CATHERINE DAVID	968	321	5,200 S.F.	———	2,000 S.F.	———	2,000 S.F.	YES	3,200 S.F.	———	74		
428-EL	JOHN M. DAVID & CATHERINE DAVID	1007	585	3,200 S.F.	———	3,200 S.F.	———	3,200 S.F.	YES	———	———	74	EL. Sold in Vol. 7831, Various State Lands Registered	STATE
429-WL	ALBERT BAKER & EDNA BAKER	539	522	5,200 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	1,200 S.F.	———	74		
429-WA						810 S.F.	———	810 S.F.				74	BLDG. REMOVAL	
430-WL	JOHN M. YASH & HELEN M. YASH	776	363	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
431 WD	GEORGE S. GERAS & MARTHA A. GERAS	915	246	5,200 S.F.	———	54 S.F.	———	54 S.F.	NO	5,146 S.F.	———	74		
431-T						425 S.F.	———	425 S.F.				74	GRADING	
432-WD	THE HAWK PALMER COMPANY	275	22	5,200 S.F.	———	497 S.F.	———	497 S.F.	NO	No	———	74		
432-T						940 S.F.	———	940 S.F.				74	GRADING	
432-EL	" " " "					4703 S.F.		4703 S.F.				74		STATE
433-WD	KATIE DLACICH	503	599	5,200 S.F.	———	1,626 S.F.	———	1,626 S.F.	YES	3,574 S.F.	———	74		
433-T		1108	693, 695, 697			1,379 S.F.	———	1,379 S.F.	[redacted]			74	GRADING	
433-WA		1108	699, 701			129 S.F.	———	129 S.F.				74	BLDG. REMOVAL	
434, 435, 436 & 437													NOT USED	
438-WL	LAWRENCE KOVACH & RITA KOVACH	778	291	15,600 S.F.	———	3,257 S.F.	———	3,257 S.F.	YES	———	12,343 S.F.	77		
438-WA						2,236 S.F.	———	2,236 S.F.				77	BLDG. REMOVAL	
439-WL	WILLIAM J. LAMPRICH	639, 638	418, 38	10,400 S.F.	———	8,337 S.F.	———	8,337 S.F.	NO	———	2,063 S.F. (L)	74, 77		
440-AWL	CAROL THOMPSON	521	43	5,633 S.F.	———	5,633 S.F.	———	5,633 S.F.	YES	———	———	74,	REPLAT PB. 36 PG. 95	
440-WL	JAMES THOMPSON	679, 687	161, 591	10,833 S.F.		10,833 S.F.		10,833 S.F.	YES			74, 77		
441 & 442													NOT USED	
443-WL	GEORGE KOVACIC	225	133	5,392 S.F.	———	5,392 S.F.	———	5,392 S.F.	YES	———	———	77		
444-EL	CONCRETE SAND & STONE COMPANY					707 S.F.		707 S.F.						STATE
													SEE PARCEL 482	
445-WL	AMERICO PATELLA	1139	113	2,045 S.F.	———	2,045 S.F.		2,045 S.F.	YES	———	———	77		
446-WL	TONY BLANGERO & JESSE BLANGERO	548	388	4,055 S.F.	———	23 S.F.	———	23 S.F.	NO	———	4,032 S.F.	77		
446-T						210 S.F.	———	210 S.F.				77	GRADING	
447-WL	VERONICA K. SCERBA	1048, 918	149, 716	4,212 S.F.	———	455 S.F.	———	455 S.F.	NO	———	3,757 S.F.	77		
448 & 449													NOT USED	
450-WL	EUGENIA RUCAREAN f.k.a. EUGENIA COLUMBAN, OWNER; & ANNIE RUCAREAN - LIFE ESTATE	686	560	11,585 S.F.	———	708 S.F.	———	708 S.F.	NO	———	10,877 S.F.	77		
451 & 452													NOT USED	
453-WL	SOPHIE BODA	572 1047	495 319	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
454-WL	JOHN GORA	946	515	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
455-WL	SAM NASSAR	855 1024	607 264	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
456-WL	ESTHER KISH	606 237	499 115	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74, 77		
457-WL	JOSEPH FODIAL & ANNA FODIAL	753	553	9,100 S.F.	———	9,100 S.F.	———	9,100 S.F.	YES	———	———	74, 77		
458-WL	LUIGI NERONI	235	81	5,681 S.F.	———	5,681 S.F.	———	5,681 S.F.	NO	———	———	77		
459-EL						6,864 S.F.		6,864 S.F.				74		STATE
459-WL	JACOB J. SNYDER, JR. & JOSEPHINE SNYDER	493	254	11,700 S.F.	———	4,836 S.F.	———	4,836 S.F.	YES	———	———	74		
459-S		669	326			581 S.F.	———	581 S.F.				74	SEWER EASEMENT	
459-WA						395 S.F.	———	395 S.F.				74	BLDG. REMOVAL	

FUNDS: I-71H

Revisions
ADDED 459-EL 7/1/69
GENERAL REVISIONS
11. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All WD R/S to "T" R/S and Revised All "WD" R/S to Standard Highway Easements Previously Revised on Earlier Sepias.
Revised R/S 440 WL to 440 WL-T 10-13-67

ADDED R/S 444-EL SMM 7-23-70

4-17-74 ADDED R/S 442-WD PER I.O.C DATED 4-10-74 AND ADDED NOTE IN

5-21-79 CHANGED R/S 427-WD TO 427-EL AND REMOVED ABOUT SOUTH OF R/S

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
DWG. BY

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

574/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

22/104

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
460-WL	CARL A. FALVO & LOUISE FALVO f.k.a. LOUISE SCIMONE	1057	292	3,000 S.F.	———	322 S.F.	———	322 S.F.	NO	3,578 S.F.	———	74,81		I-FUNDS
460-S		551	307			70 S.F.	———	70 S.F.				74,81	SEWER EASEMENT	
461													NOT USED	
462-WL	THOMAS J. FABEK	570	397	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	NO	———	———	74,77		
463-WL	HOMES, INC.	978	47	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES			74,81		
464-WL	HOMER L. BIEBER & JESSIE G. BIEBER	870	212	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES	———	———	74,81		
		955	691											
465-WL	SARA G. TRAFICANT	719, 575	277, 106	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES	———	———	74,81		
466-WL	JAMES PATELLA & ROSE PATELLA	929	329	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES	———	———	81		
467, 468	& 469												NOT USED	
470-WL	RUTH BASICH aka. RUTH BASIC	647, 920	360, 660	4,338 S.F.	———	550 S.F.	———	550 S.F.	YES	3,788 S.F.	———	77		
470-WA		919	693			362 S.F.	———	362 S.F.				77	BLDG. REMOVAL	
		448	463											
471-WL	IKE J. RIEHL	1085	179	4,338 S.F.	———	1,648 S.F.	———	1,648 S.F.	YES	2,690 S.F.	———	77		
472-WL	MARY SCOARSTE	449	514	4,338 S.F.	———	2,747 S.F.	———	2,747 S.F.	YES	1,591 S.F.	———	77,79,83		
472-WA		448	195			1,070 S.F.	———	1,070 S.F.				77,79	BLDG. REMOVAL	
		471	504											
473-WL	JOSEPH PERAZICH & JULIA PERAZICH	927	110	4,375 S.F.	———	4,375 S.F.	———	4,375 S.F.	YES	———	———	77,79,83		
474-WL	PAULINE B. KANOS & JOHN S. KANOS	815	207	4,375 S.F.	———	4,375 S.F.	———	4,375 S.F.	YES	———	———	79		
475-WL	NED J. KAUFMAN & ANN KAUFMAN	1020, 906	281, 534	5,000 S.F.	———	5,000 S.F.	———	5,000 S.F.	YES	———	———	79		
476-WD	NICK VISA	990	726	10,536 S.F.	———	71 S.F.	———	71 S.F.	NO	———	10,465 S.F.	79		
477													NOT USED	
478-WL	JACK SCARNECCHIA & DOLORES SCARNECCHIA	1101	685	4,452 S.F.	———	1,933 S.F.	———	1,933 S.F.	YES	2,519 S.F.	———	81		
478-S						475 S.F.	———	475 S.F.				81	SEWER EASEMENT	
478-WA						1,735 S.F.	———	1,735 S.F.				81	BLDG. REMOVAL	
479-WL	RAFFAELE DIVECCHIO & ENGIELENE DIVECCHIO aka.	506	162	4,260 S.F.	———	1,100 S.F.	———	1,100 S.F.	YES	3,160 S.F.(L)	———	81		
479-S	ANGIELINA DIVECCHIO					511 S.F.	———	511 S.F.				81	SEWER EASEMENT	
479-WA						1,210 S.F.	———	1210 S.F.				81	BLDG. REMOVAL	
480-WL	FEDOR DENYS a.k.a. FRED DENYS	345	292	4,260 S.F.	———	367 S.F.	———	367 S.F.	YES	3,893 S.F.(L)	———	81		
480-S		1135	470			566 S.F.	———	566 S.F.				81	SEWER EASEMENT	
480-WA						1,944 S.F.	———	1,944 S.F.				81	BLDG. REMOVAL	
481-S	JOHN SALATSKY	1153	645	8,520 S.F.	———	259 S.F.	———	259 S.F.	NO	8,520 S.F.	———	81	SEWER EASEMENT	
481-PR		1150	127		———	———	———	———			———		LOSS OF RIGHTS TO EXISTING ROAD	
482A-WL	THE CONCRETE, STONE & SAND COMPANY a.k.a. THE CONCRETE	109	554	5,377 S.F.	———	5377 S.F.	———	5,377 S.F.	NO	———	———	77,83		
444-WL	SAND & STONE COMPANY			4,241 S.F.	———	3,534 S.F.	———	3,534 S.F.	NO	———	———	77		
482C-WL				5,405 S.F.	———	5,405 S.F.	———	5,405 S.F.	NO	———	———	81,83		
482D-WL				1,998 S.F.		1,998 S.F.	———	1,998 S.F.	NO	———	———	83		
483-WL	JOHN C. BADILA aka. JOHN C. BEDILO	848	490	3,284 S.F.	———	3,284 S.F.	———	3,284 S.F.	YES	———	———	83		
484-WL	THOMAS ARMENI & IDA ARMENI	601	76	3,609 S.F.	———	3,609 S.F.	———	3,609 S.F.	YES	———	———	83		
485-WL	BERTHA LACKEY	625	330	3,930 S.F.	———	3,930 S.F.	———	3,930 S.F.	YES	———	———	83		
		601	29											
486-WL	LOUIE DeVICCHIO & BETTY DeVICCHIO	676	432	8,859 S.F.	———	8,859 S.F.	———	8,859 S.F.	YES	———	———	83		
487A-WL	THE DOREL REALTY COMPANY, A PARTNERSHIP	1103	406	6,424 S.F.	———	6,424 S.F.	———	6,424 S.F.	NO	———	———	81, 83		
487B-WL	MINNIE R. WINTER	1106	101	5,186 S.F.	———	5,186 S.F.	———	5,186 S.F.	NO	———	———	81,83		
488-WL	EDWARD J. GABRICK & VERA J. GABRICK	1017	366	10,252 S.F.	———	10,252 S.F.	———	10,252 S.F.	YES	———	———	81,83		
489-WL	MARY GABRICK	674	188	5,295 S.F.	———	5,295 S.F.	———	5,295 S.F.	YES	———	———	81,83		
		530	282											
490													NOT USED	
491-WL	THOMAS A. BLANGERO & PATRICIA MAE BLANGERO	650	395	10,980 S.F.	———	10,980 S.F.	———	10,980 S.F.	YES	———	———	81		

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias
B. Changed All W/A Pcl's to "T" Pcl's and Revised All "WD" Pcl's to Standard Highway Easements Previously Revised on Earlier Sepias.

STATE HIGHWAY DEPT. OF OHIO
DIST. DISTR. & ROADS SECT.
APP'D 8/1/1980
LOGGED
CHK'D

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

575/656

23/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

RE: PCLS. 527-WL THRU 540-WL INCL.
1 - PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BRR DATED FEB. 12, 1969.
3 - TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4 - EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T AND 537-WA. 5 - PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540-WL, TOTAL TAKE. - DATE OF THESE REVISIONS: 3/12/69 J.R. BALENTINE

6/23/69 Added Pcl. 493-EL Changed B.P.R. Authority Date Deleted Item #2 of the Revisions Made as per Letter of 3-14-69 from Ohio Turnpike Commission Added Parcel 498-WA & Phantom Parcels.

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
492A-WL	DOLLAR SAVINGS & TRUST CO. (CORPORATION) TRUSTEE	825	195	11,071 S.F.	———	7,168 S.F.	———	7,168 S.F.	NO	3,903 S.F.	———	81		I
492B-WL				5,583 S.F.	———	1,782 S.F.	———	1,782 S.F.	NO	3,781 S.F.	———	81,85		I
492C-WL	DOLLAR SAVINGS & TRUST CO. - TRUSTEE	698	114	23,870 S.F.	———	16,491 S.F.	———	16,491 S.F.	NO	———	7,387 S.F.(L)	85,86		I
493-WL	THE ESTATE OF KATE SETNYK, DEC'D	340	101	11,123 S.F.	———	5,120 S.F.	———	5,120 S.F.	NO	———	———	81		I
493-EL						6003 S.F.		6,003 SF	NO			81		STATE
495-WL	JAMES A. OWEN, JR. EXECUTOR OF THE ESTATE OF JAMES A. OWEN, SR. DECEASED & DOROTHY O. KUZAN, EXECUTRIX OF THE ESTATE OF JAMES A. OWEN, SR. DECEASED	1016	101	5623 S.F.	———	256 S.F.	———	256 S.F.	NO	5367 S.F.	———	85		I
497-WL	FRANK N. PATELLA & NORA E. PATELLA	733	540	25,480 S.F.	———	25,480 S.F.	———	25,480 S.F.	YES	———	———	77,83		I
494,496													NOT USED	
498-WL	GEORGE M. SHIPROCK & JULIA M. SHIPROCK	525	380	4,411.05 S.F.	———	1,305.88 S.F.	———	1,305.88 S.F.	NO	———	———	79,83		I
498-EL						3,105.17 S.F.		3,105.17 S.F.	YES			79,83	Pcl. 498-EL sold to Norma Carter, Registered Inval. 7/16 3% various State Bonds	STATE
498 WA	" " " " " "												BLDG REMOVAL	I
499-WL	PETER FEDOROWICZ & KAROLINA FEDOROWICZ	720	319	4,359 S.F.	———	439 S.F.	———	439 S.F.	YES	———	3,920 S.F.	83		I
500 &	501												NOT USED	
502-WL	JOSEPH FLEECE	903	638	3,780 S.F.	———	3,780 S.F.	———	3,780 S.F.	YES	———	———	83		
503-PR	AUGUSTINE TORRES & (CARMELA TORRES, OWNERS; WILLIAM F. JENKINS & CAROLYN E. JENKINS, HOLDERS OF LAND CONTRACT	839	19	6,120 S.F.	———	NONE	———	NONE		———	6,120 S.F.	83	PROPERTY RIGHTS	
504-WL	THE ESTATE OF MARY FABIAN, DEC'D	176	394	7,062 S.F.	———	7,062 S.F.	———	7,062 S.F.	YES	———	———	83		
505-WL	AGATA KESIC a.k.a. AGATHA KESIC	1012 284	360 & 362 261	6,915 S.F.	———	6,915 S.F.	———	6,915 S.F.	YES	———	———	83		
506-WL	FRANK FRATTAROLI & ANN FRATTAROLI	669	21	7,182 S.F.	———	1,758 S.F.	———	1,758 S.F.	YES	———	5,424 S.F.(L)	83		
506-WA						1,082 S.F.	———	1,082 S.F.					BLDG. REMOVAL	
507-S	UNION CARBIDE & CARBON CORPORATION, A NEW YORK CORPORATION	660	73	128,938 S.F.	———	3,355 S.F.	———	3,355 S.F.	NO	———	128,938 S.F.	42	SEWER EASEMENT	
508A-WL	ARTHUR E. WESTER, WARD W. WESTER & HAROLD D. LEACH	934	399	177,622 S.F.	———	119,554 S.F.	———	119,554 S.F.	NO	———	58,068 S.F.(L)	81,83,85,86		
508B-WL				144,911 S.F.	———	57,119 S.F.	———	57,119 S.F.	NO	32,618 S.F.	55,174 S.F.(L)	87		
508ASL						1,200 S.F.	———	1,200 S.F.				83	SLOPE EASEMENT	
508AS						1,888 S.F.	———	1,888 S.F.				83	SEWER EASEMENT	
509-WL	ADOLPH JOHNSON & SON COMPANY, AN OHIO CORPORATION	922	437	220,000 S.F.	———	127,122 S.F.	———	127,122 S.F.	YES	31,561 S.F.	61,317 S.F.(L)	85,86,87		
509-WA		934	401			684 S.F.		684 S.F.				85	BLDG. REMOVAL	
510													NOT USED	
511-WL	THE VINDICATOR PRINTING COMPANY	703, 681	77, 244	755,420 S.F.	———	102,755 S.F.	———	102,755 S.F.	NO	629,882 S.F.	20,783 S.F.	87,88,89		
511-T		677	343, 345			13,477 S.F.		13,477 S.F.					To Construct Access Road	
512,513,	514,515 & 516	677	347, 349										NOT USED	
517-WL	SUNYA A. BOSELA	642	579	5,618 S.F.	———	100 S.F.	———	100 S.F.	YES	5,518 S.F.	———	90		
517-WA		1060	566			602 S.F.	———	602 S.F.				90	BLDG. REMOVAL	
518-WL	BURTON BURNELL WHITE & VIRGINIA WHITE	1006	332	5,617 S.F.	———	300 S.F.	———	300 S.F.	NO	5,317 S.F.	———	90		
519-WL	STELLA HEGEDUSICH	747	282	5,617 S.F.	———	708 S.F.	———	708 S.F.	NO	4,798 S.F.	———	90		
519-WD		651	170			21 S.F.	———	21 S.F.	NO			90		
519-T						46 S.F.	———	46 S.F.	NO			90	GRADING	
520-WL	PHILLIP C. TAVOLARIO & MURIEL H. TAVOLARIO	1092	606	6,711 S.F.	———	1,095 S.F.	———	1,095 S.F.	YES	5,578 S.F.	———	90		
520-WD						38 S.F.	———	38 S.F.	NO			90		
520-T						218 S.F.	———	218 S.F.	NO			90	SEWER CONSTR.	
521-WL	MARTIN SUBONIS	629	145	5,616 S.F.	———	923 S.F.	———	923 S.F.	YES	4,693 S.F.	———	90		
521-T		633 291	7 627			200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
522-WL	TED F. HELMINIAK & LOUISE HELMINIAK	860	215	5,615 S.F.	———	1,034 S.F.	———	1,034 S.F.	NO	4,581 S.F.	———	90		
522-T						200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
523-WL	BARBARA TUBICA	421	285	5,615 S.F.	———	1,145 S.F.	———	1,145 S.F.	NO	4,470 S.F.	———	90		
523-T		316	625			200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
524-WL	ALBERT MYNARSKI & SOPHIE MYNARSKI	435	361	5,615 S.F.	———	1,301 S.F.	———	1,301 S.F.	NO	4,314 S.F.	———	90		
524-T						200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
525-WL	SOPHIE KLIMOWICZ	929	515	5,615 S.F.	———	1,503 S.F.	———	1,503 S.F.	YES	4,112 S.F.	———	90		
525-T						200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
526-WL	GEORGE HENIK & SOPHIE HENIK	981	383	5,615 S.F.	———	1,706 S.F.	———	1,706 S.F.	NO	3,909 S.F.	———	90		
526-T						200 S.F.	———	200 S.F.				90	SEWER CONSTR.	
527-WL	ANDREW KUSHNER	480	287	5,614 S.F.	———	5,614 S.F.	———	5,614 S.F.	YES	———	———	90		
528-WL	ALFRED TAVOLARIO & AGNES TAVOLARIO	1064	416	5,614 S.F.	———	5,614 S.F.	———	5,614 S.F.	YES	———	———	90,94		
529-WL	JOHN S. ROSA & HELEN M. ROSA	899	621	5,614 S.F.	———	5,614 S.F.	———	5,614 S.F.	YES	———	———	94		

I-FUNDS

Added Pcl. 511-T 7-15-71
Added Note to Remarks For Sale of Pcl. 498-EL 5-21-79

GENERAL REVISIONS
1. Changed All Names Previously Revised on Earlier Sepias
2. Changed All WD Pcl's & T-Pcl's and Revised All WD Pcl's to Standard Highway Easements Previously Revised on Earlier Sepias.
Changed Pcls. 508 SL & 508 S to 508 ASL & 508 AS. 11-30-69 White

STATE OF OHIO
JOHN S. ROSA
LICENSED
PROFESSIONAL ENGINEER

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

576
656

24
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

	PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
*	530-WL	GENEVIEVE KOMSA	1022	454	5,614 S.F.	—	5,614 S.F.	—	5,614 S.F.	YES	—	—	94		
*	531-WL	JOHN HRENOVCIK	291 1160	465 634	5,613 S.F.	—	5,613 S.F.	—	5,613 S.F.	YES	—	—	94		
*	532-WL	JESUS M. MARTINEZ & ANTONIA MARTINEZ	1046	214	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	YES	—	—	94		
*	533-WL	JAN IWANICKI & BLANCHE IWANICKI	558	481	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	YES	—	—	94		
*	534-WL	KATE CHUDIK	333	359	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	YES	—	—	94		
*	535-WL 535-T 535AWL	HAROLD G. BOWEN & RUTH I. BOWEN	943 941	533 78	5,612 S.F.	—	3,012 S.F. 200 S.F. 2,600 S.F.	— — —	3,012 S.F. 200 S.F. 2,600 S.F.	YES NO YES	—	—	94 94 94	SEWER CONST. SEE ITEM 4, REVISIONS DATED 3-12-69	
*	536WL	LILLIAN A. HETNER	1103	404	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	YES	—	—	94		
*	537-WL 537-T 537-WA 537AWL	KATHERYN SIKORA	688	590	5,611 S.F.	—	2,836 S.F. 200 S.F. 83 S.F. 2,775 S.F.	— — — —	2,836 S.F. 200 S.F. 83 S.F. 2,775 S.F.	YES NO YES	—	—	94 94 94 94	SEWER CONST. BLDG REMOVAL SEE ITEM 4, REVISIONS DATED 3-12-69	
*	538-WL	MARY RYCHLICKY	649 334	455 255	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	YES	—	—	94		
*	539-WL	CHARLES LEE	732 732	686 688	6,103 S.F.	620 S.F.	6,103 S.F.	620 S.F.	5,483 S.F.	YES	—	—	94		
*	540 WL	ANNA P. TAORMINA aka ANNA P. TAORMENA	776 514	154 351	3,146 S.F.	314 S.F.	3,146 S.F.	314 S.F.	2,832 S.F.	YES	—	—	94		
	542-WL		687	163	3,080 S.F.	315 S.F.	3,080 S.F.	315 S.F.	2,765 S.F.	YES	—	—	94		
	541-WL	ZIGMUND HELMINIAK, STANLEY HELMINIAK, HENRY HELMINIAK & HELEN PLECHA a.k.a. HELEN HELMINIAK	1011 999	93 711	3,090 S.F.	308 S.F.	3,090 S.F.	308 S.F.	2,782 S.F.	YES	—	—	94 94		
	542													SEE 540	
	543-WL	CHARLES YOUNG - TRUSTEE FOR YOUNGSTOWN PIGEON CLUB	871	372	16,000 S.F.	—	16,000 S.F.	—	16,000 S.F.	YES	—	—	88		
	544-WL	STEFAN JAKUBOWSKI	671	432	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	88,90		
	545-WL	MICHAEL FILL & JANE L. FILL	685	616	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	546-WL	STEVE BONDOR	885 238	76 333	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	547-WL	ANDY BALASH & MARY BALASH	316	423	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	548-WL	PARASCHIVA JAICAN a.k.a. PAULINE JACOBS & SAM JACOBS a.k.a. JACOB SIMON a.k.a. SIMON JAICAN	529 271 253	440 11 11	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	YES	—	—	90		
	549-WL	ADOLPH BARWICKI a.k.a. ADOLF BARWICKI	1018 441	327 242	8,780 S.F.	—	8,780 S.F.	—	8,780 S.F.	YES	—	—	90		
	550-WL	ANNA WOOD, HELEN HRUSHOVSKY, CLARA GALLAS, IRENE PRYSTASH, RUTH LISCHAK, JOSEPH S. HORNEY, JOHN J. HORNEY, STEVE HORNEY & GEORGE HORNEY	975 862	107 691	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	551-WL	VALERION W. QUARANTA & ANNA MARIE QUARANTA	789	418	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	552-WL	JOHN HOMA & MARY HOMA	202	488	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	553-WL	MIKE DULICK & ROSIA DULICK	198	295	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	554-WL	MICHAEL KAMINSKI & SOPHIE KAMINSKI	630	241	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	555-WL	RUDOLPH BROZMAN & EDWARD BROZMAN, EXECUTORS OF THE ESTATE OF MICHEAL BROZMAN, Decd.	979	581	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	556-WL	JOHN TYCH	663	6	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90,94		
	557-WL	HENRY E. BYRDY & HELEN BYRDY	729	141	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	94		
	558-WL	JOHN M. KALINKA & MARY KALINKA-OWNERS; WALTER PRESTASH - LIFE ESTATE	1048	510	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	YES	—	—	94		
*	559-WL	MARY PORINCHAK, ADMINISTRATRIX OF THE ESTATE OF ELIZABETH YAVORSKY aka LIZI JAVORSKY	189	617	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	94		

I-FUNDS

RE: PCLS 527-WL THRU 530-WL INCL: Changed APR. Authority Date, Deleted Item #3 of the revision made on 3-12-69, removed all phantom parcels & Deleted Pedestrian access remarks for Pcls 539WL & 540WL.

1. PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969.
3. TOTAL TAKE "TBA'S WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 530-A-WL AND 530-B-WL NOW REVISED AND CHANGED TO PCL 530 WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69 J.R. BALENTINE

GENERAL REVISIONS

A. Changed All Names Previously Revised on Earlier Sepias

B. Changed All WL Pcls to "T" Pcl's and Revised All "WL" Pcl's to Standard Highway Easements Previously Revised on Earlier Sepias.

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

577
656

25
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
560-WL	CHARLES ANDREW PETRUSKY & MATHILDA R. PETRUSKY	815	226	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
561-WL	ESTATE OF ANDY PANCZIK, DECEASED & ANIELA PANCZIK	301	464	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
562-WL	AGNES GUZIK a.k.a. AGNES GUSICK a.k.a. AGNES GUSIK	1019 238	393 100	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
563-WL	ALPHONSO PATRICK	630	170	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
564-WL	PETER E. TSVETANOFF, JORDON E. TSVETANOFF & CYRIL E. TSVETANOFF	756 766	472&476 474	8,000 S.F.	———	8,000 S.F.	———	8,000 S.F.	YES	———	———	94		
565-WL	THE ESTATE OF ANTONIE SEPE, DEC'D	271	176	3,310 S.F.	310 S.F.	3310 S.F.	310 S.F.	3,000 S.F.	NO	———	———	94		
566-WL	BETTY GOODWIN, GERTRUDE VICAREL & DANIEL SKICA	708	290	3,309 S.F.	330 S.F.	3,309 S.F.	330 S.F.	2,979 S.F.	YES	———	———	94		
567-WL	ANDREW DUBAS, FRANCES LOSIE f.k.a. FRANCES DUBAS, WALTER DUBAS, DOROTHY MINOTTI f.k.a. DOROTHY DUBAS-OWNERS; EVA DUBAS- LIFE ESTATE	908	635	4,411 S.F.	488 S.F.	4,411 S.F.	488 S.F.	3,923 S.F.	YES	———	———	94		
568-WL	CHARLES E. YOUNG & CLAIRE V. YOUNG	918	165	20,334 S.F.	———	20,334 S.F.	———	20,334 S.F.	NO	———	———	89,92		
569-WL	PETER KALENDA a.k.a. PETE KALENDA & NELLIE KALENDA	837 305	480 528	16,594 S.F.	———	16,594 S.F.	———	16,594 S.F.	YES	———	———	92		
570-WL	KARL OLEKSAK a.k.a. KAROL OLEKSAK	662 363	537 64	4,188 S.F.	———	4,188 S.F.	———	4,188 S.F.	YES	———	———	92		
571-WL	FRANK DUDEK	450 295	520 602	4,220 S.F.	———	4,220 S.F.	———	4,220 S.F.	YES	———	———	92		
572-WL	ANN FABISH OWNER; EDWARD J. BROZMAN and SUSAN E. BROZMAN, HOLDERS OF LAND CONTRACT	986 986	300 297	4,252 S.F.	———	4,252 S.F.	———	4,252 S.F.	YES	———	———	92		
573-WL	STEVE DOBRANCHIN, JOHN DOBRANCHIN, FR. BENEDICT DOBRANCHIN MICHAEL DOBRANCHIN, GEORGE DOBRANCHIN, MARY ANTIONETTE GORSKY & HELEN T. TOMAN	1021	14	4,274 S.F.	———	4,274 S.F.	———	4,274 S.F.	YES	———	———	92		
574-WL	STELLA F. VELICHKO	561	102	4,292 S.F.	———	4,292 S.F.	———	4,292 S.F.	YES	———	———	92		
575-WL	WALTER NATYSHAK & ANNE NATYSHAK	667	35	4,311 S.F.	———	4,311 S.F.	———	4,311 S.F.	YES	———	———	92		
576-WL	HENRY F. NOSEK & SOPHIE NOSEK	680	339	4,333 S.F.	———	4,333 S.F.	———	4,333 S.F.	YES	———	———	92		
577-WL	JOHN EVICH & ISABEL B. EVICH	860	258	4,346 S.F.	———	4,346 S.F.	———	4,346 S.F.	YES	———	———	92		
578-WL	JOHN A. DVORNEKOVICH & DOROTHY J. DVORNEKOVICH	676	159	4,364 S.F.	———	4,364 S.F.	———	4,364 S.F.	YES	———	———	92		
579-WL	MIKE LULKA & MARY LULKA	671	527	4,384 S.F.	———	4,384 S.F.	———	4,384 S.F.	NO (YES)	———	———	92,96		
580-WL	ANN CULLEN	669 658 640 209	123 556 456 496	4,403 S.F.	———	4,403 S.F.	———	4,403 S.F.	YES	———	———	96		
581-WL	MARGARET S. SYMPSON	895 663	409 96	4,421 S.F.	———	4,421 S.F.	———	4,421 S.F.	YES	———	———	96		
582-WL	MARY DUPEY	550 210	34 330	4,440 S.F.	———	4,440 S.F.	———	4,440 S.F.	YES	———	———	96		
583-WL	JOSEPH KELLEY & CHRISTINE KELLEY	741	482	4,124 S.F.	———	4,124 S.F.	———	4,124 S.F.	YES	———	———	96		
584-WL	FRANK P. SUSOR a.k.a. FRANK SUSOR and MARY SUSOR	494	310	4,141 S.F.	———	4,141 S.F.	———	4,141 S.F.	YES	———	———	96		
585-WL	ANN E. MUMAW a.k.a. ANNE MUMAW	586 583 578	160 404 466	4,158 S.F.	———	4,158 S.F.	———	4,158 S.F.	YES	———	———	96		
586-WL	JOHN BALCHICK & ELIZABETH BALCHICK	386	243	4,166 S.F.	———	4,166 S.F.	———	4,166 S.F.	YES	———	———	96		
587-WL	MIKE RIDARSKY, PAUL L. RIDARSKY & STEVE RIDARSKY, A PARTNERSHIP	852	281	28,704 S.F.	1,327 S.F.	28,704 S.F.	1,327 S.F.	27,377 S.F.	NO	———	———	96		

I-FUNDS

GENERAL REVISIONS:

A. Changed All Names Previously Revised on Earlier Sepias

B. Changed All WA Pcls to "T" Pcls and Revised All W.D.'s to Standard Highway Easements Previously Revised on Earlier Sepias

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

578
656

26
104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.RO. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
588-WL 588-T	RAFFAELLO JOHN PERA & MARY S. PERA	790	452	5,625 S.F.	———	106 S.F. 1,814 S.F.	———	106 S.F. 1,814 S.F.	~~YES~~ NO	———	5,519 S.F.	92 92	DRIVE CONST.	
589/590													NOT USED	
591-WL	MARY SWATOWSKI a.k.a. MARY SWATOSKI	928 308	475 234	7,500 S.F.	———	160 S.F.	———	160 S.F.	NO	———	7,340 S.F.	92		
592-WL 592-WA	PAUL B. TEMELKOFF & SONJA A. TEMELKOFF	1150	106	7,500 S.F.	———	830 S.F. 647 S.F.	———	830 S.F. 647 S.F.	YES	———	6,661 S.F.	92 92	BLDG. REMOVAL	
593-WL 593-WA	SOPHIE GUCWA a.k.a. ZOFIE GUCWA a.k.a. ZOPIYA GUCWA	485 222	154 452	3,750 S.F.	———	689 S.F. 660 S.F.	———	689 S.F. 660 S.F.	YES	———	3,061 S.F.	92 92	BLDG. REMOVAL	
594-WL 594-T	FRANK PRUCNAL & STELLA PRUCNAL	1047	452	3,750 S.F.	———	998 S.F. 351 S.F.	———	998 S.F. 351 S.F.	YES	———	2,752 S.F.	92 92	BLDG. REMOVAL	
595-WL	VIRGINIA FILIPOWICZ n.k.a. VIRGINIA KARASIEWSKY	806	629	3,750 S.F.	———	1,437 S.F.	———	1,437 S.F.	YES	———	2,313 S.F.	92		
596-WL	WILLIAM JOHNSTONE & JOHNNIE MAE JOHNSTONE	1050	605	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———		92,96		
597-WL	MARY STIPETICH	837	321	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96		
598-WL	MINNIE DI FABIO	982 800 455	366 330 126	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
599													NOT USED	
600-WL	STEPHEN TERLECKI & LEONA TERLECKI	755 744	360 258	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
601-WL	JOSEPH VIANO	250 230	55 380	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
602-WL	STANLEY BARWICKI & JULIA O. BARWICKI	932	581	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96		
603-WL	KATHERINE SZABAT	1029 357	204 496	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96		
604													NOT USED	
605-WL	JOHN J. HORNEY, JR., ADMINISTRATOR OF THE ESTATE OF THERESA ANN HORNEY a.k.a. THERESA HORNEY a.k.a. THERESA ANN HORNI a.k.a. TESA HORNI a.k.a. THERESA HARNEY a.k.a. THERESA HORNI a.k.a. THESA HORNEY, DECEASED	649 318 240	488 639 62	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
606-WL	ANGELO FAMULARO & ROSE FAMULARO	445	88	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
607-WL	JOSEPHINE FINN	645	97	3,426.37 S.F.	293.37 S.F.	3,426.37 S.F.	293.37 S.F.	3,133 S.F.	YES	———	———	96		
608-WL	NELLIE MOLALI	713	234	3,413 S.F.	293 S.F.	3,413 S.F.	293 S.F.	3,120 S.F.	YES	———	———	96		
609-WL	AGNES E. SWANECK, DORIS DeMAIN, ELEANOR HORSTMANN, JOHN E. OWCARZ, PATRICIA McDONOUGH	1072	380	3,426.37 S.F.	293.3 S.F.	3,426.37 S.F.	293.37 S.F.	3,133 S.F.	YES	———	———	96		
610-WL	EVA LUKOSEVECUS	265 192	215 361	5,794.5 S.F.	507 S.F.	5,794.5 S.F.	507 S.F.	5,287.5 S.F.	YES	———	———	96		
611/612													NOT USED	
613-S	JOHN FARGOIS & ANNA FARGOIS	290	276	3,750 S.F.	———	104 S.F.	———	104 S.F.	NO	———	3,750 S.F.	96		
614-WL 614-S 614-T	MARY J. ALTIER	937 1084 1084	250 244 242	3,750 S.F.	———	600 S.F. 425 S.F. 971 S.F.	———	600 S.F. 425 S.F. 971 S.F.	YES	———	3,150 S.F.(L)	96 96 96	SEWER EASEMENT BLDG. REMOVAL	
615-WL 615-S 615-WA	CHRISTINA SWIDERSKI; FRANCES MAJDECKI, STELLA KACZOWKA, OWNERS; JESSIE FIRLET a.k.a. TEKLA FIRLIT; LIFE ESTATE	1110	570	3,750 S.F.	———	1,747 S.F. 375 S.F. 64 S.F.	———	1,747 S.F. 375 S.F. 64 S.F.	YES	———	2,003 S.F.(L)	96 96,98 96	SEWER EASEMENT BLDG. REMOVAL	
616-WL	FRANK J. KANIK, STEPHEN F. KANIK, ANDREW M. KANIK, JOSEPH G. KANIK, ANNE TOKARSKY, HELEN F. ZALKA, VIRGINIA M. ZIELINSKI	908 308	287 100	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———		96,98		
617-WL	CARMELA RANALLI	1132	574	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
618-WL	WLADZSLAW GUBALA	209	264	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
619-WL	JOHN C. FEKETY	1007 957	394 1	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
1-FL	MARION URICHICH & HELEN URICHICH	1279 1350	112 541	15,463 SF 32,564 SF		15,463 SF		15,463 SF	YES	15,463 SF 32,564 SF		69-A	FLOWAGE & FLOODING EASEMENT	

H-FUNDS

3-5-82
ADDED Pcl
1-FL

GENERAL REVISIONS

A. Changed All Names Previously Revised on Earlier Sepias

B. Changed All WA R/S to "T" R/S and Revised All "WD" R/S to Standard Highway Easements Previously Revised on Earlier Sepias

State Highway Dept. of Ohio
DIV. ENGR. & ADMIN. SECT.
JAN 27 1983
LOGGED
BY

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

579/656

27/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
G20-WL	SOPHIE IGNATH a.k.a. SOPHIE F. IGNATA	1022 770	260 445	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
G21													NOT USED	
G22-WL	ALBERT HARRIS & ANGELLA HARRIS	994 994	157 155	11,250 S.F.	———	11,250 S.F.	———	11,250 S.F.	YES	———	———	96,98		
G23-WL	BERT B. SLEVIN ET. AL. & KATHERYN SLEVIN ET. AL.	G73 G16	476 454	10,838 S.F.	947 S.F.	10,838 S.F.	947 S.F.	9,891 S.F.	YES	———	———	96,98		
G24													NOT USED	
G25-WL	BERT B. SLEVIN ET. AL. & KATHERYN SLEVIN ET. AL.	860	634	9,368 S.F.	440 S.F.	9,368 S.F.	440 S.F.	8,928 S.F.	YES	———		98		
G26A-WL	ISABELLE C. BEES (HUSBAND BURT)	881	583	15,000 S.F.	508 S.F.	1,000 S.F.	———	1,000 S.F.	NO	———	13,053 S.F.	98		H-FUNDS
G26-LA	" " " " "	857	455			———	———	———				98	D/W LINE CHANGED TO LA LINE PEDESTRIAN POINT OF ACCESS	
G26B-WL	BURT BEES (WIFE ISABELLE C.)	640	223			508 S.F.	508 S.F.	———	NO			98	PEDESTRIAN POINT OF ACCESS	
G28-S	JOHN LEON	998	567	5,000 S.F.	———	256 S.F.	———	256 S.F.	NO	———	5,000 S.F.	98	SEWER EASEMENT	
628SA	" " (SEE REMARKS COLUMN)												REPLACE FLOWERS-SHRUBS-TREES ETC. DESTROYED BY CONTRACTOR. SEE SHT. 98	
G29-WL	ROBERT T. CAMPANA & REGINA C. CAMPANA	774	373	5,000 S.F.	———	161 S.F.	———	161 S.F.	NO	———	4,839 S.F.	98		
G29-S						839 S.F.	———	839 S.F.				98	SEWER EASEMENT	
G29-SA	" " (SEE REMARKS COLUMN)												7" EVERGREEN DESTROYED BY CONTRACTOR SEE SHT. 98	
G30-WL	ERMA PETRELLA	854	188	5,000 S.F.	———	714 S.F.	———	714 S.F.	NO	———	4,286 S.F.	98		
G30-S		534	91			286 S.F.	———	286 S.F.				98	SEWER EASEMENT	
G31-WL	WILLIAM SWIDERSKI & CHRISTINE SWIDERSKI	G42	576	5,000 S.F.	———	1,000 S.F.	———	1,000 S.F.	YES	———	4,000 S.F.	98		
G32-WL	MARY WIEFER, STANLEY P. SEIDLER, ANNE TROLL, STELLA BRINCKO, TED SEIDLER, ALEXANDER SEIDLER	1099	64	5,000 S.F.	———	1,000 S.F.	———	1,000 S.F.	YES	———	4,000 S.F.	98		
G36-WL	MIKE RIDARSKY, PAUL J. RIDARSKY, & STEVE RIDARSKY	533/1154	24, 3	48,035 S.F.	11,660 S.F.	48,035 S.F.	11,660 S.F.	36,375 S.F.	YES	———	———	100¢ 101		
G37-WL	BERTHA HORNEY	306	337	11,400 S.F.	836 S.F.	11,400 S.F.	836 S.F.	10,564 S.F.	YES	———	———	100		
G38-WL	RUDOLPH GRANITO & GLORIA OGRAM F.K.A. GLORIA GRANITO	1201 554 554-549-548	76 146 146-381-382	5,400 S.F.	398 S.F.	5,400 S.F.	398 S.F.	5,002 S.F.	YES	———	———	100		
G39-WL	REGINA GENEVIEVE KARPOWICZ	998	614	14,400 S.F.	1,067 S.F.	14,400 S.F.	1,067 S.F.	13,333 S.F.	YES	———	———	100		
G40-WL	ROBERT a.k.a. ROBERT F. BAKALIK & PAULINE BALALIK	852 966	406 633	11,591 S.F.	———	11,591 S.F.	——— ———	11,591 S.F.	YES	———	———	100		
261A-WA	ANTHONY PAVLICH & MARGARET PAVLICH	744	376	39,568 S.F.	———	111 S.F.	———	111 S.F.	NO	39,568 S.F.	———	54	DRIVE CONST.	100% CITY
143F-WL	CITY OF YOUNGSTOWN, OHIO	1073	301	5,600 S.F.	2,800 S.F.	5,600 S.F.	2,800 S.F.	2,800 S.F.	NO	———	———	102		CITY-STATE FUNDS
G41 AERIAL-1	YOUNGSTOWN AND SOUTHERN RAILWAY COMPANY	209	165	13,591 S.F.	———	540 S.F.	———	540 S.F.	NO	———	13,591 S.F.	104	AERIAL EASEMENT	
G41 AERIAL-2	" " " " "	116	361	2,800 S.F.	———	410 S.F.	———	410 S.F.	NO	2,800 S.F.	———	104	" "	
G41 S1	" " " " "	209	165	13,591 S.F.	———	6600 S.F.	———	6600 S.F.	NO	———	13,591 S.F.	104	SEWER EASEMENT	
G41 S2	" " " " "	116	361	2,800 S.F.	———	400 S.F.	———	400 S.F.	NO	2,800 S.F.	———	104	" "	
G42-S	ARMBRECHT MOTOR TRUCK SALES, INCORPORATED	1021	598	78,608 S.F.	———	758 S.F.	——	758 S.F.	NO	78,608 S.F.	——	101	" " *	I-FUNDS
G43-S	THE JUDITH REALTY CO. & S. H. COPPERMAN	391	388	108,338 S.F.	——	326 S.F.	——	326 S.F.	NO	108,338 S.F.	——	101	SEWER EASE. FROM 1ST PARCEL OF 2	I-FUNDS
302A-WL	WILLIAM O. WALKER & MARION WALKER	687	633	7,500 S.F.	——	300 S.F.	——	300 S.F.	NO	——	7200 SF	29		I-FUNDS
302A-T						1,000 S.F.	——	1000 S.F.				28	DRIVE CONSTRUCTION	I-FUNDS
303A-LA	EDITH H. SIMPKINS	742	529	7,500 S.F.	——	No Take		No Take	No		7500 SF	28	Loss of Access To LeMoyne Ave	I-FUNDS
304A-WL	ESTATE OF JAMES E. CONZETT DEC'D & ETTA CONZETT	644	121	9,602 S.F.	——	104 S.F.	——	104 S.F.	No	——	9498 SF	28		I-FUNDS
304A-LA		1092	71			No Take	——	No Take				28	Loss of Access to LeMoyne Ave	I-FUNDS
304B-LA						No Take	——	No Take				28	Loss of Access To Midlothian Blvd	I-FUNDS
305A-LA	MARTIN A. MARKOVICH & MARY JANE MARKOVICH	682	509	9561 S.F.		No Take	——	No Take	No	—	9561	28	Acquired On MAH 1-680-9.32 As 305LA (Loss of Access To Midlothian Blvd.)	I-FUNDS
699 WA	JOHN MARTINKO	1177	589			No Take	——	No Take	No	—		49	Drive Construction	I-FUNDS
645 WA	JOHN J. & ETHEL V. LESKOVYANSKY	815	55			No Take	——	No Take	No	—		49	Drive Construction	I-FUNDS
696 WA	CHARLES RICHARD WIESENSEE & VERONICA C. WIESENSEE	1208	55			No Take	——	No Take	No	—		49	Drive Construction	I-FUNDS
										Added Pcls. 699 WA, 645 WA, 696 WA Pryor 5/22/70			ADDED REMARKS PCL 305A-LA. DELETED PCL 645 WA 7-20-70 SMITH ADDED PCLS 302-AWL, 302-AT, 303A-LA & 304A-WL, 304A-LA, 304B-LA & 305A-LA 5-6-70 PCL 636-LA REVISED TO 636-WL (TOTAL TAKE) FOR DEVELOPMENT OF GREEN STRIP - 2-25-70 Change Net Area PCL 639WL - 3-27-70 PCL'S 637-LA THRU 640-LA REVISED TO WL PCL'S (TOTAL TAKES) FOR DEVELOPMENT OF GREEN STRIP 1-14-70 ADDED PCLS 628SA & 629SA 7-5-72 Revised Name Pcl #638AL 9/16/69 Subsequent Name Change Pcl. 643-S 7/8/69 ADDED PARCELS 642-S AND 643-S 7/10/69 ADDED EXIST. PRO. PCL'S 636-LA, 637-LA, 638LA & 639-LA REVISIONS	

ADDED PCL. 645 WA 4-24-73
NAME CHANGE PCL. 696 WA - SMITH 6-17-70
NAME CHANGE PCLS. 644 WA & 696 WA 6-10-70
ADDED DEED BOOK & PAGE PCLS. 644, 645, 696 WA

GENERAL REVISIONS:

A. CHANGED ALL NAMES PREVIOUSLY REVISED ON EARLIER SEPIAS.

B. CHANGED ALL WA PCL'S TO "T" PCL'S AND REVISED ALL "WD" PCL'S TO STANDARD HIGHWAY EASEMENTS PREVIOUSLY REVISED ON EARLIER SEPIAS.
SHOWED OWNERSHIP OF PCLS 623WL & 625WL SAME

* RIGHTS OR EASEMENTS OF ACCESS TO OR FROM SAID L/A FROM 194 LT. OF ℄ STA. 768+12.6 TO 150 LT OF ℄ STA. 763+80.01 GRANTED TO PREVIOUS OWNER BY ENTRY NO. 14,415 L.A. 61 ℄ STA. 765+50.00 GRANTED TO OWNER AS RECORDED BY COURT OF COMMON PLEAS JOURNAL VOLUME 2663, PAGE 325

** RIGHTS OR EASEMENTS OF ACCESS FROM OR TO SAID L/A HIGHWAY FROM 182 LT. OF ℄ STA. 764+16.30 TO 182 LT. OF ℄ STA. 765+80.00 GRANTED TO OWNER BY COURT OF COMMON PLEAS JOURNAL VOLUME 2663, PAGE 535.

State Highway Dept. Dist. 4
R/W Engr. & Admin Sect.
JAN 27 1970
LOGGED
Sht. No.

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

580 / 656

28 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: SEE SUPPLEMENTAL SHT. Nº 30 FOR PARCEL DIMENSIONS, BEARINGS & STA OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO 29

MATCH SHEET NO. 33

DOMINIC PEDALINE & ESTHER PEDALINE
#4006 2 STY. FRAME
99 WL
WILLIAM O. WALKER & MARION WALKER
#4002 1½ STY. FRAME
30486
30485
302 A T
Note: TREE NOT TO BE DISTURBED
(VACANT LOT)
DORIS M. WELKER
#3034
#3030
120 WL
121 WL
30483
30482
30481
WILLIAM K. CROOKS & AGNES CROOKS
PLAT Nº 1 BROWNLEE WOODS PB.15 PG.86
30437
ROBERT HAY MAC LENNAN
#1565
TO BE ABANDONED
135 WL
#1571
MATILDA ZIGO
136 WL
EVERETT AVE.
N 89°-32'-17" E
LEMOYNE AVE.
N 0°-27'-06" W
MIDLOTHIAN BLVD.
S 89°-30'-36" E
143A WL
143 WA
THE CITY OF YOUNGSTOWN, OHIO
PROP. SIDEWALK
CONSTRUCTION LIMITS
EXIST. R/W
R/W FENCE
R/W LINE CURVE DATA
CH. BRG. = S 79°00'30" E
CH. DIST. = 254.28
R = 99.20
4800.3 RT. 643+61.87
LT. 377+58.11
40' LT. 378+10
33' LT. 378+30
45' LT. 378+45
40' RT. 378+10
STA. 378+00
STA. 379+00
STA. 380+00
END ACQUISITION MIDLOTHIAN BLVD. STA 379+87.40
20' GRAVEL DR.
9' SLAG DR.
5' CONC. SIDEWALK
5' PRIVET HEDGE
WOOD FENCE
CHAIN LINK FENCE
FENCE POSTS
UNDERGROUND TELE. CABLE
OBT. U/G.
G.L.P. GAS
WATER M.H.
SAN M.H.
SIGN
FLOWERS
BUSHES
TREES
MAPLES
PINES
SYCAMORE
TWIN WILD CHERRY
20" SEWER
8" WATER
6" L.P. GAS
12" SEWER
12" WATER
15" SAN.
30" SAN. SEWER
36" SEWER
6" WATER
4" WATER
8" SAN.
12" TWIN BEAD
24" STUMP
10" WILD CHERRY
20" OAK
2.5' CONC. WK.
8.5' MAC. DR.
TO BE ABANDONED
FIREPLACE
4' LILAC HEDGE
7' PRIVET HEDGE
20" MAPLE
10' DIA. POND
5' SPIREA HEDGE
2' FLAGSTONE
1 P. FND. & USED
EXIST. R/W
R/W FENCE
5' CONC. SIDEWALK
SLAG
SIGN
FACE
1 STY. FR. PLANT
2 STY. FR.
FR. GAR.
CONC. DR.
EVERGREEN PLANTINGS
DEFENCE POSTS
GAL. WATER
GAL. L.P. GAS
CONC. WK.
CONC. DRIVE
FUTURE CONST. LIMITS
EXIST. R/W
5' CONC. WALK
3' CONC. WALK
3' WIRE FENCE
3' SQUARE CONC. STEPS
10' SLAG DRIVE
1 STY. FR. H'SE.
1½ STY. FR. H'SE.
10.5' ASP. DR.
4' L.P. GAS
G' WATER
G' TREE
4' TREE
2' TREE
24" TREE
1 P. FND. & USED
30" SYCAMORE
W.V.
C.B.
SAN M.H.
W.B.
E.B.
ASPH.
G.V.
G.Y.
LA/RW
LA/R2W
LA
CITY OF YOUNGSTOWN MAHONING COUNTY
Point of Residential Access Sta. 7+12.00 - 12' Width
Point of Residential Access Sta. 8+79.00 - 12' Width
Point of Residential Access Sta. 379+41.71 - 12' Width
ESTATE OF JAMES E. CONZETT DEC'D & ETTA CONZETT
30439
#1601 1½ STY. FRAME
#1607 1½ STY. FRAME
#1602 1½ STY. FRAME
30488
EDITH H. SIMPKINS
FLOWERS
1 CAR FR. GAR.
FRAME GAR.
MARTIN A. MARKOVICH & MARY JANE MARKOVICH
39440
304 A LA
304 A WL
304 B LA
303 A LA
305 A LA
N 0°27'06" W - 179.48'
S 89°30'36" E 50.00'
S 0°29'24" W 33.00'
N 0°27'06" W 13.00'
S 89°30'36" E 16.00'
S 51°01'18" W 20.45'
670.71 RT. 643+72.65
719.30 RT. 643+41.82
622.70 RT. 643+24.04
637.66 RT. 643+27.78
PARCEL 304A-WL
A. S 89°30'36" E 16.00'
B. S 51°01'18" W 20.45'
C. N 0°27'06" W 13.00'

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
302A-T			1,000 S.F.	NONE	1,000 S.F.		
303A-LA	7500 S.F.	NONE	NO TAKE	NONE	NO TAKE		
304A-WL	96023 S.F.	NONE	1045 S.F.	NONE	1045 S.F.		94985 S.F.
304A-LA			NO TAKE	NONE	NO TAKE		
304B-LA			NO TAKE	NONE	NO TAKE		
305A-LA	95613 S.F.	NONE	NO TAKE	NONE	NO TAKE		95613 S.F.

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
143A-WL	1,179,170 S.F.	17,860 S.F.	12,353 S.F.	8,927 S.F.	3,426 S.F.	150,535 S.F.	809,939 S.F.
143-WA			120 S.F.	NONE	120 S.F.		

ALL PARCELS THIS SHEET I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	1/29/69	ADDED PARCEL 143-WA
2	7/25/69	Changed All Names Previously Revised on Earlier Sepias. 5-4-70 Added Pcls 302A-T, 303A-LA, 304A-WL, 304A-LA, 304B-LA & 305A-LA

R/W SHEET NO. 28 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

581
656

29
104

MATCH SHEET NO. 33

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

I.P. FND. & USED

OHIO EDISON HIGHLINE
JERSEY LANE 25'
150.11' EXIST. R/W

N 48°00'-43" E 1355.00

SURVEY I-680

MATCH SHEET NO. 32

BEGIN PROJECT
MAH.680-6.98
STA. 638+00 (BACK)
STA. 637+76.04 AHEAD

END PROJECT
MAH.680-9.32
STA. 638+00 (BACK)

ALFRED SQUILLANTE

JOSEPH L. FEDOR & MARY F. FEDOR

NOTE: SEE SUPPLEMENTAL SHT. No. 30 & 31 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA

SUBDIVISION OF O.L. #1409
P.B. 30 PG. 87
CITY OF YOUNGSTOWN
MAHONING CO.

DOMINIC CARANO & STELLA M. CARANO

ROBERT C. HODGE & MARIE ELIZABETH HODGE

RAY BRUNETTI & LUCILLE BRUNETTI

FRANK A. NAPLES & MARIE A. NAPLES

JOHN MATZYE, JR. & MARGARET A. MATZYE

WILLIAM K. CROOKS & AGNES CROOKS

FRANK WSZOLEK & BERTHA M. WSZOLEK

RAYMOND H. McANDREWS & BETTY McANDREWS

HARRY W. JACOBSON & ANITA C. JACOBSON

ADVANCE ACQUISITION

MYRTLE M. DEESZ & DORIS M. WELKER

EXIST. R/W 87.61'

EVERETT AVE. 50'
℄ N 89°-32'-17" E

8" SAN. ♀

SAN. M.H.

6" WATER

HYD.

4" L.P.

5' CONC. SIDEWALK

EXIST. R/W

RAMP "N-W"

RAMP "10"

NOTE: SEE SUPPLEMENTAL SHT. No. 30 & 31 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA

CONST. LIMITS

JOHN NOVAK

JOHN ZELINA & OLGA ZELINA

ROBERT A. ALLAN & MILDRED A. ALLAN

EMANUEL MANIS & MARY B. MANIS

CITY OF YOUNGSTOWN
MAHONING, CO.

VICTOR FEDORCHAK & HELEN A. FEDORCHAK

HENRY L. BEACH & EVELYN MAE BEACH

JOHN F. CURALL & THELMA J. CURALL

KENNETH R. WILSON & ALDA M. WILSON

JOHN E. JONES & DOROTHY J. JONES

JAMES W. ANDERSON & JEAN ALICE ANDERSON

ESTIMATED FUTURE CONST. LIMITS

VACANT LOT

DOMINIC PEDALINE & ESTHER PEDALINE

WILLIAM O. WALKER & MARION WALKER

MATCH SHEET NO. 28

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

R/W SHEET NO. 29 OF 104

PARCEL No.	DEED AREA	TOTAL P.R.O	TO BE ACQUIRED GROSS	NET	NET RESIDUE LEFT	RIGHT
302A-WL	75003 S.F.	None	3003 S.F.	None		72003 S.F.

REV	DATE	DESCRIPTION
1	7-26-89	Changed All Names, Previously Revised on Earlier Copies.

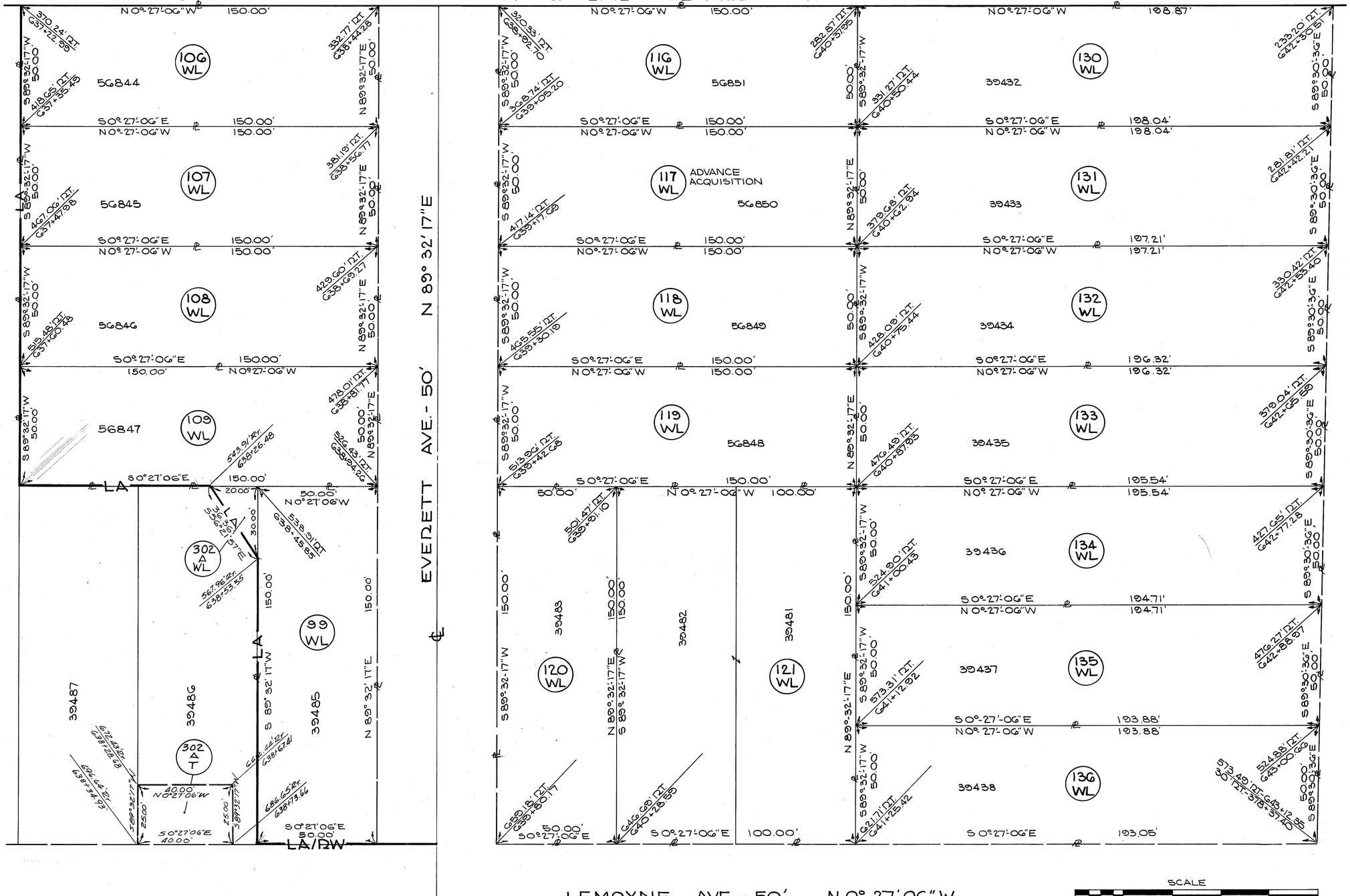
COMPLETION DATE —

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

582
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

30
104



MIDLOTHIAN BLVD. - 60'
S 89° 30' 36" E

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
99-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
302A-WL	7,500 S.F.	—	300 S.F.	—	300 S.F.	—	7200 S.F.
106-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
107-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
108-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
109-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
302A-T		—	1000 S.F.	—	1,000 S.F.	—	—
116-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
118-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
118-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
119-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
120-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
121-WL	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	—	—
130-WL	9,912 S.F.	—	9,912 S.F.	—	9,912 S.F.	—	—
131-WL	9,871 S.F.	—	9,871 S.F.	—	9,871 S.F.	—	—
132-WL	9,830 S.F.	—	9,830 S.F.	—	9,830 S.F.	—	—
133-WL	9,786 S.F.	—	9,786 S.F.	—	9,786 S.F.	—	—
134-WL	9,749 S.F.	—	9,749 S.F.	—	9,749 S.F.	—	—
135-WL	9,713 S.F.	—	9,713 S.F.	—	9,713 S.F.	—	—
136-WL	9,671 S.F.	—	9,671 S.F.	—	9,671 S.F.	—	—

REVISION	DESCRIPTION	BY	DATE
	PCL's 302A-WL & 302A-T ADDED		5-6-70

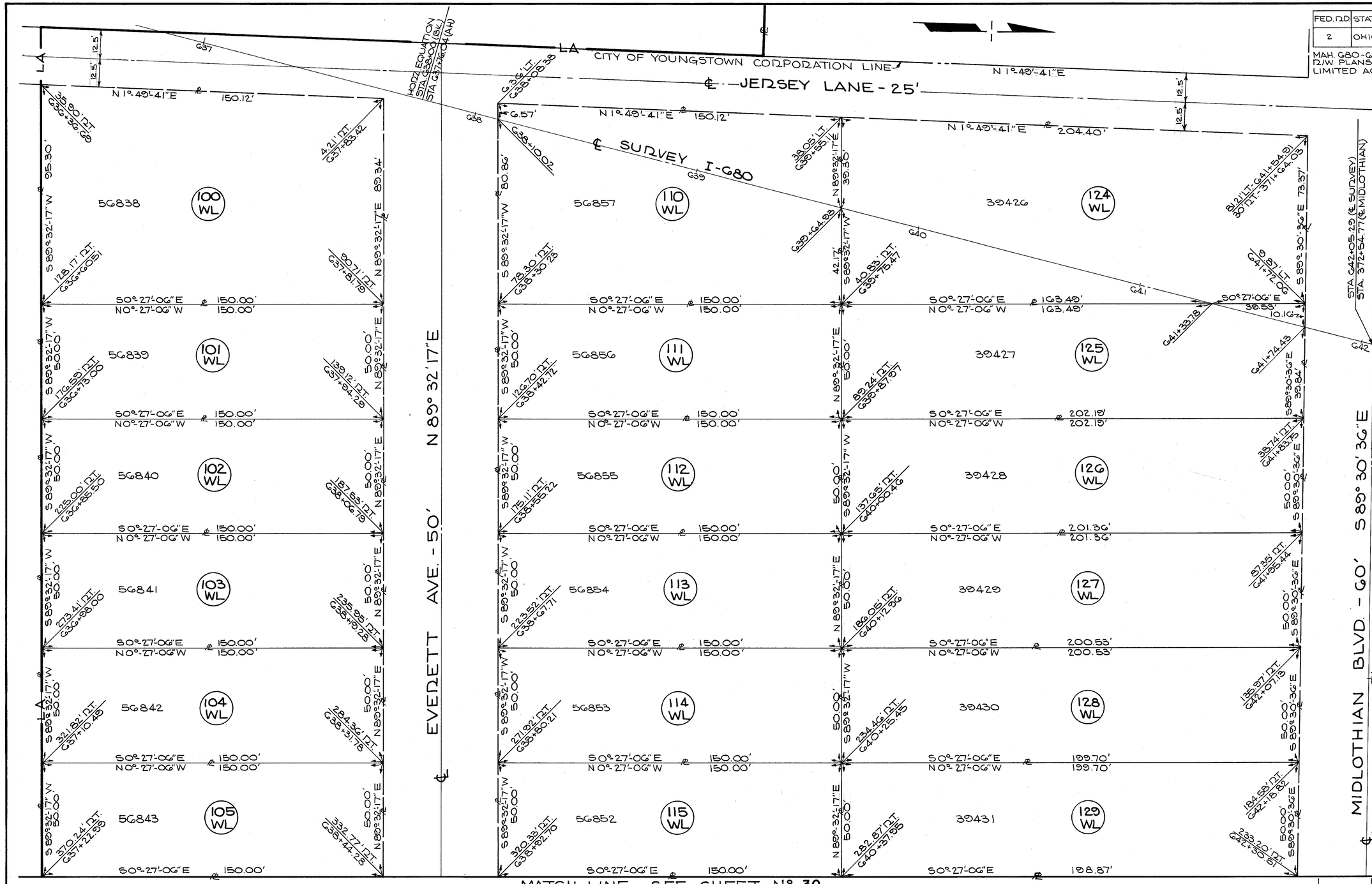
R/W SUPPLEMENTAL SHEET

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

583 / 656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

31 / 104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
100-WL	13,868 S.F.	-	13,868 S.F.	-	13,868 S.F.	-	-
101-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
102-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
103-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
104-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
105-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
110-WL	12,706 S.F.	-	12,706 S.F.	-	12,706 S.F.	-	-
111-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
112-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-

372

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
113-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
114-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
115-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
124-WL	15,831 S.F.	-	15,831 S.F.	-	15,831 S.F.	-	-
125-WL	10,115 S.F.	-	10,115 S.F.	-	10,115 S.F.	-	-
126-WL	10,075 S.F.	-	10,075 S.F.	-	10,075 S.F.	-	-
127-WL	10,034 S.F.	-	10,034 S.F.	-	10,034 S.F.	-	-
128-WL	9,993 S.F.	-	9,993 S.F.	-	9,993 S.F.	-	-
129-WL	9,953 S.F.	-	9,953 S.F.	-	9,953 S.F.	-	-

373

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

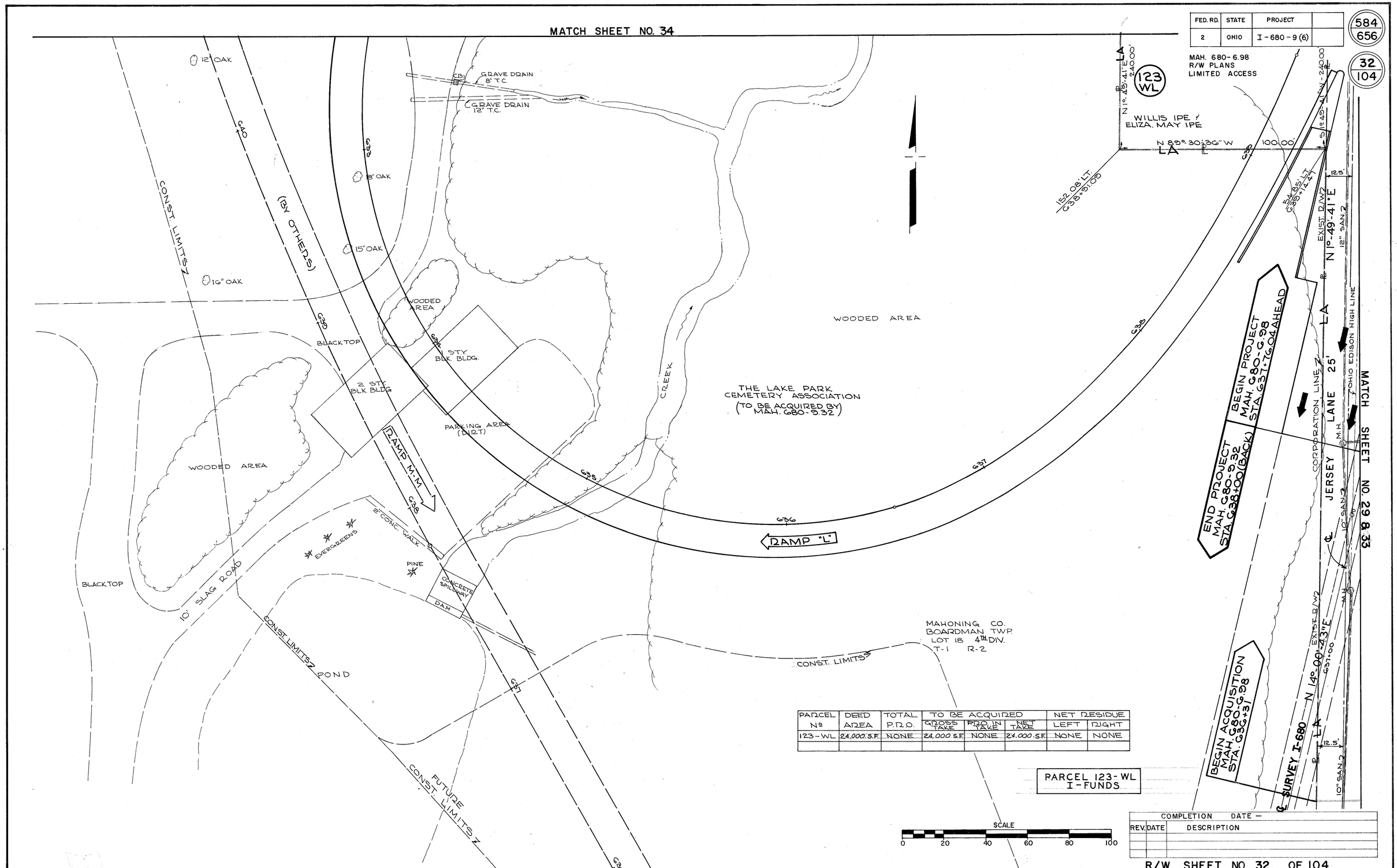
JAN 27 1969

FED. RD.	STATE	PROJECT
2	OHIO	I-680-9(6)

584/656

32/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
123-WL	24,000 S.F.	NONE	24,000 S.F.	NONE	24,000 S.F.	NONE	NONE

PARCEL 123-WL
I-FUNDS

COMPLETION DATE —

REV.	DATE	DESCRIPTION

R/W SHEET NO. 32 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

585/656

33/104

MATCH SHEET NO. 35 & 36

MATCH SHEET NO. 34

MATCH SHEET NO. 28

MATCH SHEET NO 29

18" ELM
1" MAPLE
2" MAPLE
FENCE
42974
42975
42976
N14°-00'-43"E
643+00
12" BUCKEYE
GARAGE
GLASS HOT HOUSE
WOODED AREA
12" TULIP
PT. OL. 1225
JESSIE M. IPE
(LANDLOCKED)
0.37 Ac
FR. GARAGE
FR. GARAGE
PT. OL. 1225
PT. OL. 1225
R/W LINE CURVE DATA
CH. BRG. = S 60°-42'-14" E
CH. = 35.31'
R = 130.00'
L = 35.42'
140A WL
1.5' CONC. WALK
2½-STY. BRICK #1522
10' ASPHALT DR.
S 0°-51'-05" E 435.72'
N 0°-51'-05" W 435.72'
12" TULIP
2.5' WALK
1½ STY. FR. #1544
8' ASPHALT DR.
3-8" MAPLE
15" MAPLE
35' PINE
4' STEPS
3' WALK
141 WL
142 WL
2 STY. FR. #1546
3' STEPS
8' SLAG DR.
POLE
8' WALK
15" MAPLE
12" GUM
143A WL
THE CITY OF YOUNGSTOWN, OHIO
R/W LINE CURVE DATA
CH. BRG. = S 79°-00'-26" E
CH. = 92.68'
R = 254.28'
L = 93.20'
CONST. LIMITS
PROP. SIDEWALK
COTTONWOOD ROW
R.R. TIE FENCE
BUSH
139B WL
ROBERT W. ISAACSON & RUTH A. ISAACSON
S 0°-51'-05" E 435.72'
N 0°-51'-05" W 435.72'
8' SLAG DR.
THE CAMPBELL ALLOTMENT CO. IPE PLAT CITY OF YOUNGSTOWN MAHONING CO.
PB 22 PG 107
JOHN SHOFI & ELIZABETH SHOFI
MICHAEL R. BOHN & MARY ALICE BOHN
30' LT. 371+67.07
30' LT. 372+36.15
24" ELM
15000' TO PINE
2-20" BLUE SPRUCE
I.P. FND. & USED
20" SPRUCE
30' LT. 374+31.07
30' LT. 375+31.07
RAMP "J"
N 89°-30'-36" W 74.02'
N 89°-30'-36" W 175.08'
N 89°-30'-36" W 100.00'
N 89°-30'-36" W 100.00'
15" SEWER
I.M.H.
2 U.G. TELE.
6" L.P. GAS
8" L.P. GAS
6" WATER
HYD.
STA. 642+05.23 (℄ I-680)
STA. 372+54.77 (℄ S.R. 625)
MONUMENT ASSEMBLY
MIDLOTHIAN BLVD. S.R. 625 60'
S 89°-30'-36" E 297.23'
372
373
374
375
376
377
641+00
30" SEWER
4" L.P. GAS
6" WATER
16" H.P. GAS
GUY
73.91'
CONC APRON
EXIST. 5' WALK
EXIST. R/W 50'
R/W FENCE
3.5' BUSH
ESTATE OF HATTIE HALLWOOD, DECEASED
30" MAPLE
HEDGE
39436
8" PEAR
20" CATALPA
8" STUMP
FLOWERS
ROSE
12" PINE
22" PINE
1 STY FR. #1561
LILAC
GRAPE
STEPS
4" PLUM
STONE WALK
GARDEN
2' GRAVEL RUNNERS
CONST. LIMITS
OHIO EDISON HIGH LINE ANCHOR POLE
12.5'
REPLAT OF PART OF PLAT No 1 BROWNLEE WOODS PB 16 PG. 177
JOHN HAAS & KATHERINA HAAS
PICKET FENCE
9.5' ASPHALT DR.
CONC.
4' STEPS
4' CONC. WALK
1½ STY. BRICK #1517
FR. SHELTER
3.7' STEPS
6.5' STEPS
8.5' ASPHALT DR.
1½ STY. FR. #1523
2 STY. FR. #1525
4' STEPS
5' ASPH. DR.
5' STEPS
2 STY. BRK. & FR. #1539
4' STEPS
5-8" ASH
18" ELM
TWIN 15" ELMS
TWIN 12" ELMS
3' WIRE FENCE
5' PINE SHRUBS
6" MAPLE
5' PINE
18" ELM
CONC.
1½ STY. FR. #1541
7' SLAG
2.5' CONC. WALK
3' WALK
#1543 1½ STY. BRICK
3' STEPS
8' ASPH. DR.
1½ STY BRK #1555
BRK. GARAGE
CHARLES R. HOGG
JERSEY LANE 25' EXIST R/W
203.92'
203.53'
202.72'
201.9'
641
39427
39426
39428
39429
39430
39431
39432
39433
39434
39435
125 WL
126 WL
127 WL
128 WL
129 WL
130 WL
131 WL
132 WL
133 WL
134 WL
124 WL
BRICK GAR.
FR. GARAGE
FR. & BLK. GAR.
35' PINE
197.69'
197.02'
196.02'
128.65'
133.46'
201.09'
200.27'
RAMP "L"
RAMP "O"
℄ SURVEY
MONUMENT ASSEMBLY
I-680
640+00
PLAT No 1 BROWNLEE WOODS PB 15 PG. 86
CITY OF YOUNGSTOWN MAHONING CO.
JOHN HAAS
PAUL R. TOLAND & MARTHA J. TOLAND
JOHN WIETELMAN
ESTATE OF DAVID B. CONRATH, DECEASED CLIFFORD E. FISHER
DELORES WELLS
WILLIAM A. LONG & BETTY A. LONG
JENNIE E. POLLEY
ALEXANDER GUARINO
FR. GARAGE
CAR PORT
NOTE: SEE SUPPLEMENTAL SHT. No 30 & 31 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

PARCEL No.	DEED AREA	TOTAL TAKE	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PROM. TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
139B-WL	65340 S.F.	102 S.F.	47,438 S.F.	102 S.F.	47,336 S.F.	NONE
140A-WL	2.50 Ac.	2.50 Ac.	2.50 Ac.	NONE	2.50 Ac.	NONE
141-WL	43,560 S.F.	NONE	43,560 S.F.	NONE	43,560 S.F.	NONE
142-WL	43,560 S.F.	NONE	27,432 S.F.	NONE	27,432 S.F.	NONE
143A-WL	1178,170 S.F.	17,860 S.F.	12,955 S.F.	8,927 S.F.	3,422 S.F.	15,053 S.F.
						16,128 S.F.

REV	DATE	DESCRIPTION
1	12/1/68	Moved P.I. 139-B Inc.
2	1/16/68	Revised Tract Areas & Acquire P.I. 140-A Inc.
3	1/25/69	Changed All Names Previously Revised on Carter Signs.

COMPLETION DATE -

ALL PARCELS THIS SHEET I-FUNDS

SCALE
0 20 40 60 80 100

R/W SHEET NO. 33 OF 104

JAN 31 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

586
656

34
104

MATCH SHEET NO. 36

MATCH SHEET NO. 33

MATCH SHEET NO. 32

42969 — DOMINIC TOCCO / ANNETTE TOCCO — 2 STY. BRK. #1418 — PLANTER — 5' CONC. WALK — 5' STEPS — 453.32' R — 30' — 30' — 60' — EXIST R/W — 12" H.P. GAS — 4" L.P. GAS — SHIRLEY RD. — CONC. APRON — SIGN POST PLANTER — 30' LT 364+92.56 — R/B CO. — ASPHALT PARKING AREA — CYCLONE FENCE — 15" SEWER — MH — UG TELE — 6" L.P. GAS — 6" WATER — STA. 365+35.69 — EXIST. MON. — 365+00 — 366+00 — 365+92.56 ℄ LA

42970 — 235' CYCLONE FENCE — 45' STEPS — 1 STY. BRK. BLDG. #1422 — 3 STONE PLANTERS — No TAKE — 137 — 30' LT 367+05.57 — 20.00' — 10°-25'-24"-E 10.00' — FENCE — LAWN — ASPHALT PARKING LOT — BRICK SIGN BASE — 138 T — 138 LA — N 89°-30'-36"-W — S 89°-30'-36"-E-105.57' — CONSTRUCTION LIMITS — EXIST R/W — I.P. FND. USED — 105.57' — PROP 5' SIDEWALK — CONC. APRON — EXIST. 5' WALK — 15" SEWER — 367+00 — 368+00 — 367+05.57 ℄ — 15" STORM — M.H. — CB — MIDLOTHIAN BLVD. S.R. 625 60' ℄ — 16" H.P. GAS — EXIST R/W — HEDGE — MAC APRON — LA — 5" MAPLE — 3" FIR — 15" PINE — 9" PIN OAK — 12" MAPLE — 10" MAPLE — 40" PINE — 55" PINE — 24" MAPLE — 15" MAPLE — 3.5' CONC. WALK — 11' DRIVE — 15" MAPLE — 6' STEPS — 5.2' STEPS — #1459 — 2 STY. FR. — 5' STEPS — CONC. — 25' CONC. WALK — C42 — C41 — C651 — CONST. LIMITS — RAMP M-M (BY OTHERS) — 12" H.P. GAS

42971 — THE CAMPBELL ALLOTMENT CO. IPE PLAT PB. 22 PG. 107 CITY OF YOUNGSTOWN MAHONING CO. — HIGH LINE — 6" CONC. CURB — 435.6' — 25' EASEMENT FOR OHIO EDISON HIGH LINE — PEARL BERNDT & CARL A. BERNDT — POINT OF ACCESS COMMERCIAL DRIVE STA. 368+525.35 WIDE — 12" 3/0 T&G — 30' LT 368+78.57 — 40' LT 368+78.57 — N 80°-25'-24"-E 82.25' — N 65°-18'-52"-E — N 0°-29'-24"-E-10.00' — 30' LT 368+78.57 — R/W FENCE — GUARD RAIL — EXISTING 7"x15" CMP — 15" SEWER — MH — UG TELE — CB — 6" WATER — 18" SEWER — 8" L.P. GAS — 30" COMB. — 369+00 — 370+00 — 371+00 — STA 371+39.24 — HIGH LINE OHIO EDISON — CITY OF YOUNGSTOWN CORPORATION LINE — S 89°-30'-36" E — S 89°-30'-36" E 100.00' — 16" H.P. GAS — EXIST R/W — LA — GUARD RAIL — 30" SEWER — C625 — C630 — RAMP "L" — 30' RT 368+48.45 — 30' RT 370+15 — 30' RT 370+39.02 — C631 — 30' RT 370+00 — C632 — 30' RT 369+99 — EXIST R/W — 5' STEPS — 10' SLAG DRIVE — 2 STY. FR. #1495 — 1 STY. FR. — 371+39.02 — 12" SAN. — LANE - 25' — JERSEY — EXIST R/W — N 1°-49'-41" E — S 1°-49'-41" W 240.00' — 24000' — N 1°-49'-41" E — LA — C642 — C641 — CONST. LIMITS — RAMP M-M (BY OTHERS) — 12" H.P. GAS

42972 — 10' — CITY OF YOUNGSTOWN SEWER EASEMENT VOL. PG. — 24" SEWER — 102.64' LT 369+60.06 — CREEK — WOODED AREA — 1398 EL — 139 X — INDIANOLA REALTY, INC. — 75' LT-370+36.01 — 30' LT-370+36.01 — 41.42' — N 30°-30'-36" E — 80.85' — N 88°-30'-36"-W 86.01' — S 89°-30'-36"-E LA 86.01' — CONST. LIMITS — 139 WL — 55' LT 370+00 — 370+36.80 — 41.41' LT — 45° — 42.42' — N 0°-51'-05"-W 390.63' — N 1°-39'-37"-E 238.14' — R/W FENCE — LA — 42973 — 5' STEPS — ASPHALT — 2 STY. FR. #1442 — RAMP "K" — ROBERT W. ISAACSON & RUTH A. ISAACSON — 139 B WL — TWIN 20" OAKS — 15' ASPHALT DRIVE — 10" PEACH — 30' LT 370+35.80 — 41.41' LT — 42974 — N89°30'36"W 150' — 12" PINE — I.P. FND & USED — N 89°-30'-36"-W-161.50' — CONC. APRON — 18" SEWER — 6" WATER — 8" L.P. GAS — 30' — HIGH LINE OHIO EDISON — 370+37.01 — 30' LT — S 89°-30'-36" E — 371+00 — 30' — M.H. — 30" COMB. — M.H. — M.H. — 16" H.P. GAS — S 89°-30'-36" E 100.00' — LA — 30' RT 370+15 — 30' RT 370+39.02 — 5' STEPS — 10' SLAG DRIVE — 371+39.02 — 2 STY. FR. #1495 — 1 STY. FR. — 12" SAN. — LANE - 25' — JERSEY — EXIST R/W — N 1°-49'-41" E — S 1°-49'-41" W 240.00' — 24000' — N 1°-49'-41" E — LA — C642 — C641 — CONST. LIMITS — RAMP M-M (BY OTHERS) — 12" H.P. GAS

PARCEL Nº	DEED AREA	TOTAL PRO.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
123-WL	84,000 S.F.	NONE	24,000 S.F.	NONE	24,000 S.F.	NONE	NONE
137	63,358 S.F.	NONE	NONE	NONE	NONE	63,358 S.F.	NONE
138-LA	39,950 S.F.	NONE	NONE	NONE	NONE	39,950 S.F.	NONE
138-T			1,056 S.F.	NONE	1,056 S.F.		
139-WL	288,367 S.F.	4,534 S.F.	5,919 S.F.	4,534 S.F.	1,385 S.F.	180,586 S.F.	NONE
139-X			1,189 S.F.	NONE	1,189 S.F.		
139B-WL	65,340 S.F.	102 S.F.	47,438 S.F.	102 S.F.	47,356 S.F.	NONE	NONE
139B-EL		NONE	17,902 S.F.	NONE	17,902 S.F.		

THE LAKE PARK CEMETERY ASSOCIATION (TO BE ACQUIRED BY MAH. 680-9.32)

WOODED AREA

WILLIS IPE & ELIZA. MAY IPE — MAHONING CO. BOARDMAN TWP. LOT 18 4TH DIV. T-1 R-2

123 WL

Revised LA Pcl. 137 4-24-72

SCALE 0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1.	12-7-68	Added Pcl. 139-B-WL, Revised 139-WL
2.	7-14-69	Revised Brgs., Deed Areas, Revised Pcl.'s 139-WL, 139-B-WL
3.	8-7-67	Added Pcl. 139-B-EL — White

Pcl. 139-B-EL-STATE FUNDS - ALL OTHER PARCELS THIS SHEET I-FUNDS

R/W SHEET NO. 34 OF 104

EXTENDED RAISED MEDIAN TO STA. 366+20 ALONG MIDLOTHIAN BLVD.
REVISED LA LINE TO FOLLOW E PROP. MIDLOTHIAN BLVD R/W STA. 365+92.56 TO STA. 369+99 ALONG DEEDED RADIUS OF 5779.65'

JAN 27 1969
LOGGED
DATE
BY

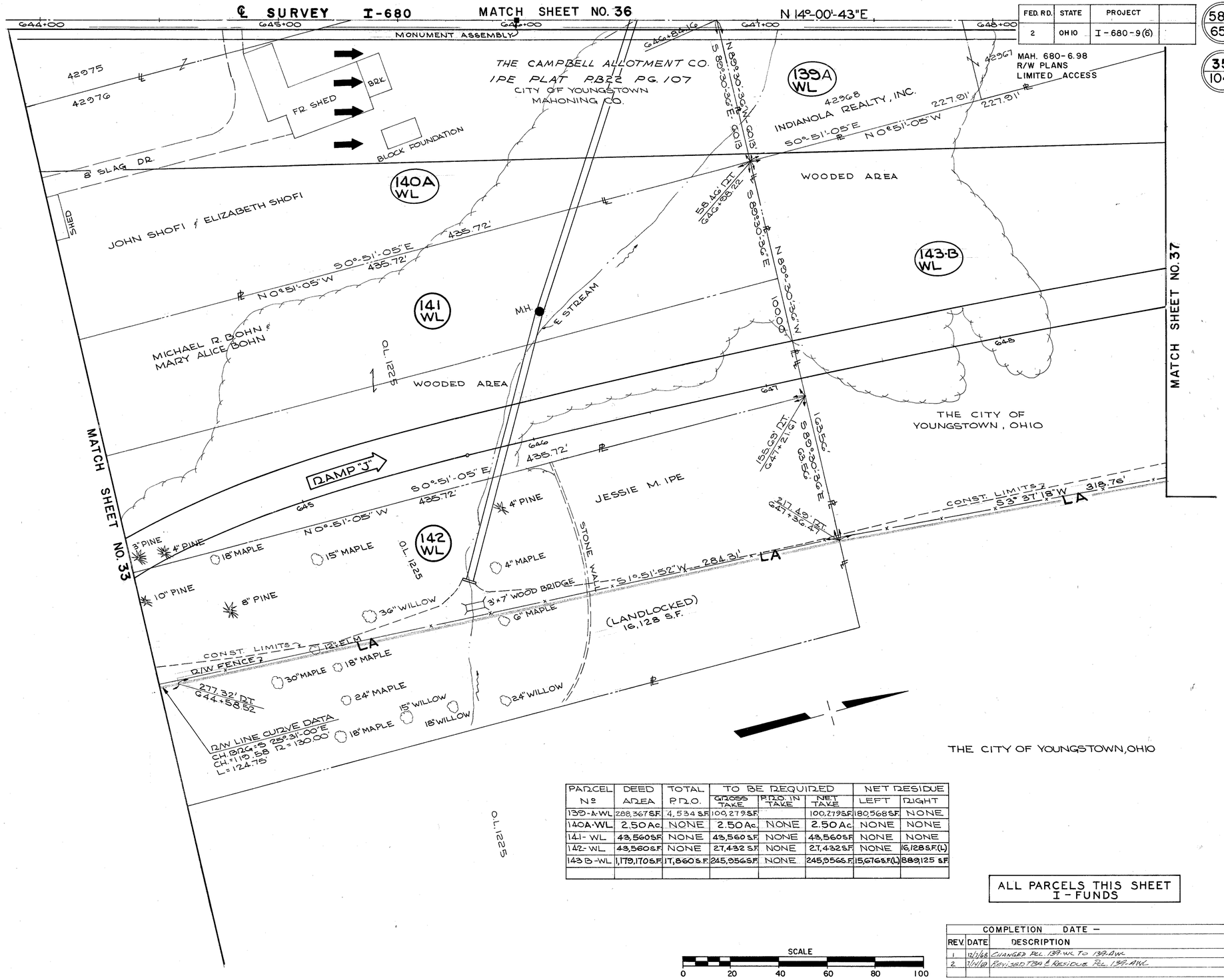
Ohio Department of Highways
Right of Way Division
Land Utilization Section

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

587/656

35/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE REQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
139-A-WL	288,367 S.F.	4,534 S.F.	100,279 S.F.		100,279 S.F.	180,568 S.F.	NONE
140A-WL	2.50 Ac.	NONE	2.50 Ac.	NONE	2.50 Ac.	NONE	NONE
141-WL	43,560 S.F.	NONE	43,560 S.F.	NONE	43,560 S.F.	NONE	NONE
142-WL	43,560 S.F.	NONE	27,432 S.F.	NONE	27,432 S.F.	NONE	16,128 S.F.(L)
143B-WL	1,179,170 S.F.	17,860 S.F.	245,956 S.F.	NONE	245,956 S.F.	15,676 S.F.(L)	889,125 S.F.

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE –

REV.	DATE	DESCRIPTION
1	12/7/68	CHANGED PCL. 139-WL TO 139-AWL
2	7/14/69	REVISED TBA & RESIDUE PCL. 139-AWL

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

588
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

36
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
139A-WL	288,367 S.F.	4,534 S.F.	100,279 S.F.		100,279 S.F.	180,586 S.F.	NONE
139B-WL	65,340 S.F.	102 S.F.	47,438 S.F.	102 S.F.	47,336 S.F.	17,902 S.F. (L)	NONE
140A-WL	2.50 Ac.	NONE	2.50 Ac.	NONE	2.50 Ac.	NONE	NONE
139B-EL		NONE	17,902 S.F.	NONE	17,902 S.F.	NONE	NONE

CITY OF YOUNGSTOWN SEWER EASEMENT
24" SEWER
42972
42973
THE CAMPBELL ALLOTMENT CO.
IPE PLAT P.B. 22 PG. 107
CITY OF YOUNGSTOWN
MAHONING CO.
INDIANOLA REALTY, INC.
WOODED AREA
CREEK
N 0°-51'-05"W 390.53'
139B EL
S 89°-08'-34"E 100.00'
LOT 42968
LOT 42967
SLIDES
18" MAPLE
240' LT G44+65
36" PIPE
WOOD SHED
ROBERT W. ISAACSON
RUTH A. ISAACSON
30" MAPLE
233.22' LT G46+28.08
262.93' LT G47+40
E STREAM
WOODED AREA
O.P.R. Participation Line
N11°-38'-31"E 238.14'
LA
C/L R/W FENCE
N 16°-23'-31"E 103.22'
N10°-51'-05"W 115.80'
CONSTRUCTION LIMITS
PAVILION
CYCLONE FENCE
PLAY TRAIN
WOOD PLAY HSE
SAND BOX
DRINKING FOUNTAIN
24" MAPLE
42974
139B WL
SWING
MONKEY BARS
CHINNING BAR
18" MAPLE
10" MAPLE
8" MAPLE
12" MAPLE
N 83°-07'-45"E 86.11'
210' LT G47+60
N 23°-47'-00"E 421.11'
CONSTRUCTION LIMITS
BLK GAD.
2 STY FR. HSE
ASPHALT
SEE-SAW
SLIDES
JUNGLE JIM BARS
PUMP HSE
POOL
FR. PLAY HSE
WIRE FENCE
RAMP "K"
N 0°-51'-08"W 435.72'
184.61' LT G46+30.77
G45
G46
G47
G48
MATCH SHEET NO. 33
42975
DIRT LANE
140A WL
JOHN SHOFI & ELIZABETH SHOFI
RAMP "L"
NURSERY
N 89°-30'-36"W 189.87'
S 89°-30'-36"E
WOODED AREA
139A WL
MATCH SHEET NO. 37
42976
WIRE FENCE
G46+83.16
℄ SURVEY I-680 MONUMENT ASSEMBLY
N 14°-00'43"E
G44+00
G45+00
G46+00
G47+00
G48+00
MATCH SHEET NO. 35
SCALE 0 20 40 60 80 100

R/L 139B EL STATE FUNDS ALL OTHER PARCELS THIS SHEET I-FUNDS

REV.	DATE	DESCRIPTION
1	12/1/81	Added 139B-WL, Revised R/W Rqmts. To 139A-WL
2	12/1/81	Revised Parcel Areas on Table, Plus 139A Added 139B-EL
3	6-1-84	Added R/L 139B-EL W.H.K.

COMPLETION DATE —

R/W SHEET NO. 36 OF 104

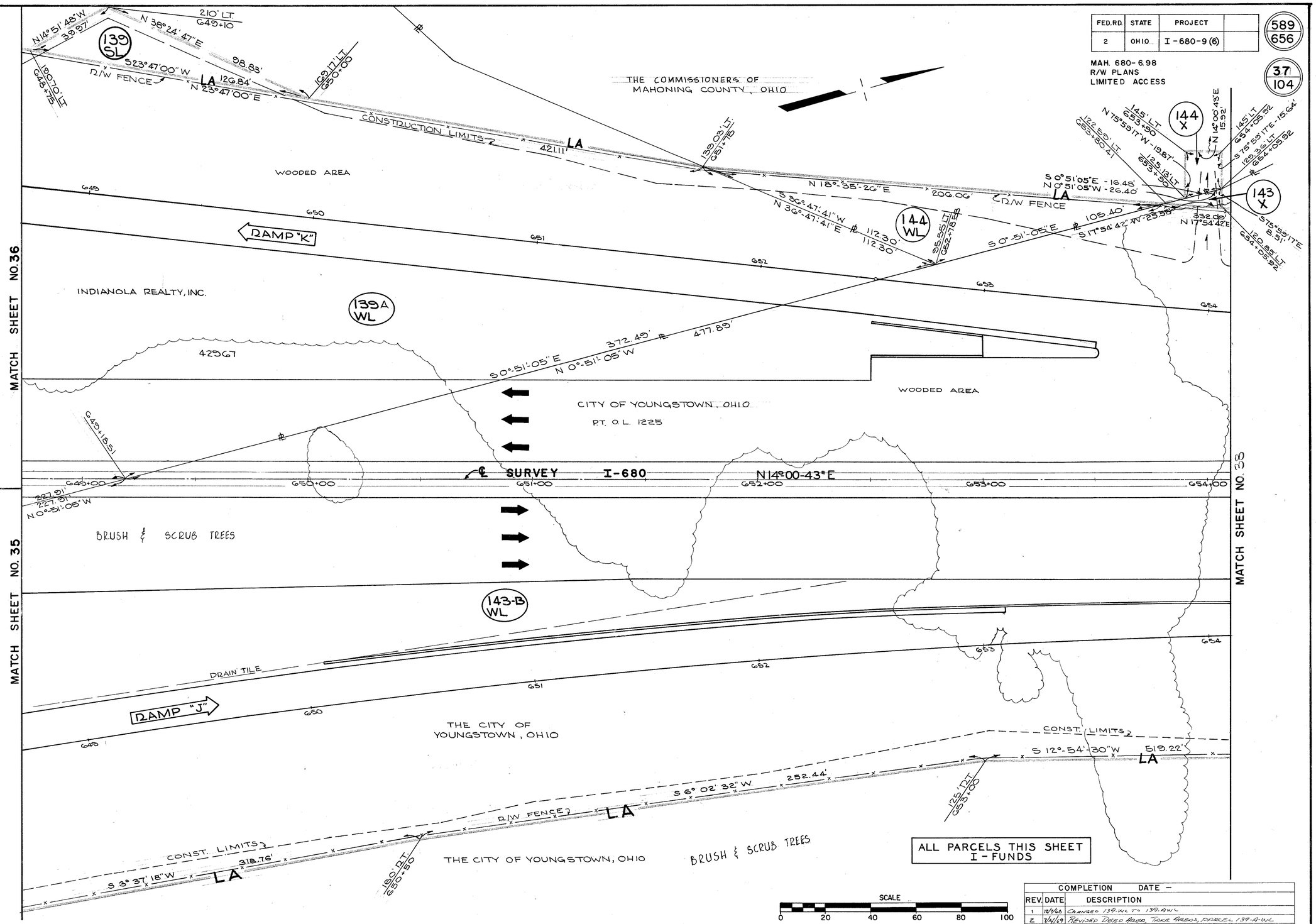
JAN 27 1989
LOGGED
CAD

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

589
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

37
104



PARCEL No.	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
139-A-WL	288,367 S.F.	4,534 S.F.	100,279 S.F.		100,279 S.F.	180,586 S.F.	NONE
139-SL			1,583 S.F.	NONE	1,583 S.F.		
143-B-WL	1,179,170 S.F.	17,860 S.F.	245,956 S.F.	NONE	245,956 S.F.	15,676 S.F.(L)	889,125 S.F.
143-X			109 S.F.	NONE	109 S.F.		
144-WL	871,200 S.F.	7,840 S.F.	3,615 S.F.	NONE	3,615 S.F.	385,400 S.F.	NONE
144-X			283 S.F.	NONE	283 S.F.		

COMPLETION DATE -

REV.	DATE	DESCRIPTION
1	12/7/68	Changed 139-WL to 139-AWL
2	7/14/69	Revised Deed Area, Take Areas, Parcel 139-A-WL
3	7/25/69	Changed All Names Previously Revised on Earlier Sepias.

R/W SHEET NO. 37 OF 104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
143 B-WL	1,178,170 S.F.	17,860 S.F.	245,556 S.F.	NONE	245,556 S.F.	15,676 S.F.(L)	889,125 S.F.
144 A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	385,400 S.F.	NONE
144 S-1			525 S.F.	NONE	525 S.F.		

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

590
656

38
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

144 S-1

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

240' LT 658+00

N 14°00'43"E 15.00'

240' LT 658+15

M.H.

S 88°04'00" E 400.00'

205' LT 658+10

205' LT 657+40

205' LT 658+25

15.00'

N 14°00'43"E 85.00'

N 28°09'56"E 380.55'

D/W FENCE

LA

27" CMP

CONSTRUCTION LIMITS

27" CMP SEWER

72"x72" BOX CULVERT

PINE HOLLOW CREEK

THE CITY OF YOUNGSTOWN, OHIO

(LANDLOCKED) 15,676 S.F.

WOODED AREA

D/W FENCE N 17°54'42"E 332.09'

LA

CONSTRUCTION LIMITS

100' LT 657+11.72

D/W FENCE N 60°55'09"W 108.74'

LA

CONSTRUCTION LIMITS

S 50°-36'-55"W

N 50°-36'-55"E

120.30'

120.30'

144-A WL

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

655

656

657

658

RAMP "K"

MATCH SHEET NO. 37

MATCH SHEET NO. 39

8" ASH

8" ASH

MONUMENT ASSEMBLY

℄ SURVEY I-680 N 14°-00'-43" E

655+00

656+00

657+00

658+00

659+00

8" MAPLE

TRIPLE 4" MAPLE

143-B WL

THE CITY OF YOUNGSTOWN, OHIO

SCRUB TREES & BRUSH.

O.L. 1225

655

656

RAMP "J"

657

658

659

289.27' LT 658+08.30

S 46°-42'-55"W 82.52'

658+52.33

S 46°-42'-55"W

N 46°-42'-55"E

WOODED AREA

107.68'

107.68'

S 36°-10'-56"W 200.00'

N 36°-10'-56"E 200.00'

58.18' RT 655+42.64

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

D/W FENCE

S 12°-54'-30"W 519.22'

LA

LA

D/W FENCE

S 17°-27'-55"W

309.59'

LA

115' RT 658+10.12

ALL PARCELS THIS SHEET
I - FUNDS

SCALE
0 20 40 60 80 100

R/W SHEET NO. 38 OF 104

REV	DATE	DESCRIPTION
1	12-5-69	Changed Ad Names, Property Revised on Earlier Series

COMPLETION DATE -

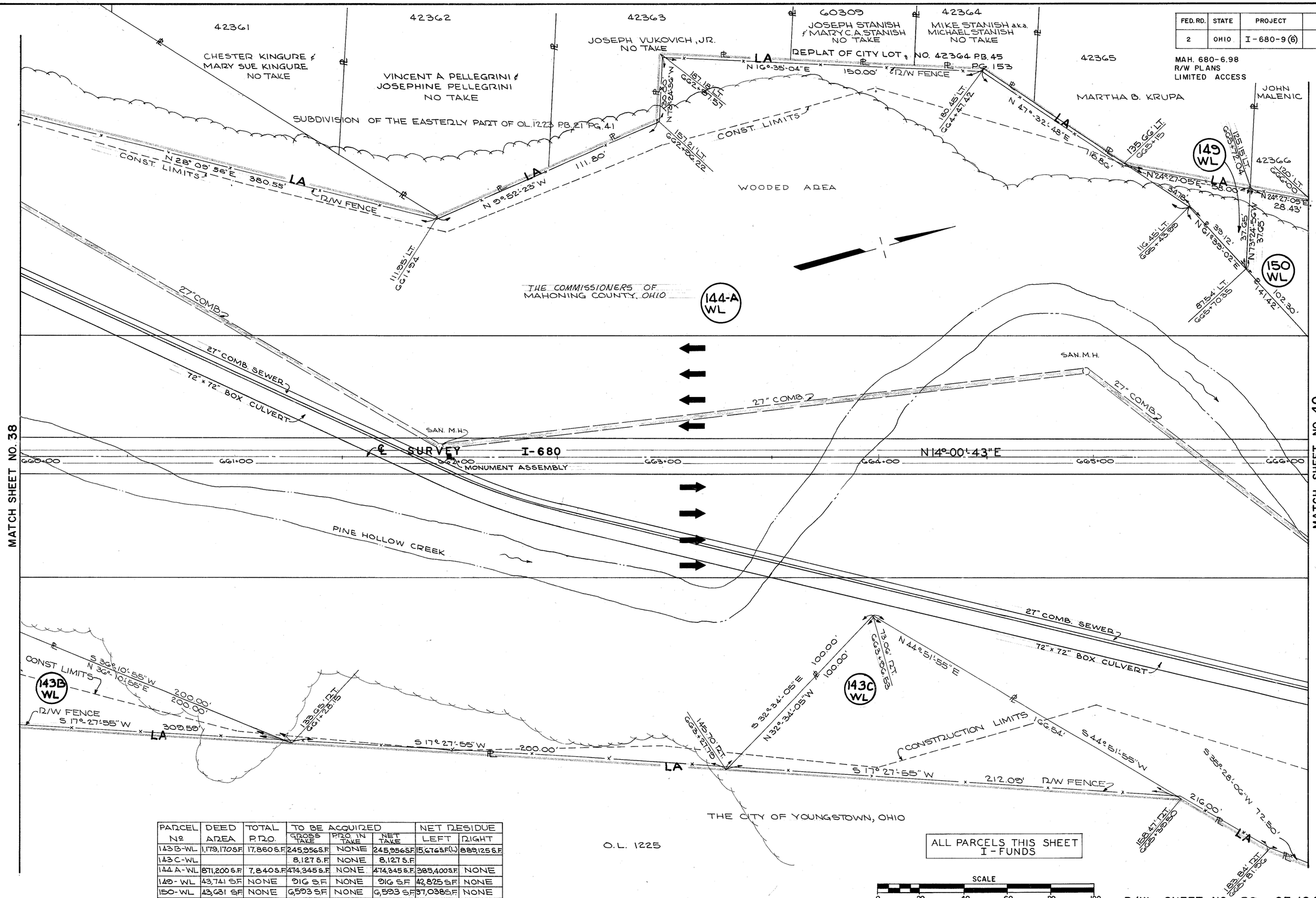
State Highway Depart. Ohio
RIGHT OF WAY DIVISION
JAN 27 1969
L66629
SHEET NO.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

591/656

39/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
143B-WL	1,179,170 S.F.	17,860 S.F.	245,956 S.F.	NONE	245,956 S.F.	15,676 S.F.(L)	889,125 S.F.
143C-WL			8,127 S.F.	NONE	8,127 S.F.		
144A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	385,400 S.F.	NONE
149-WL	43,741 S.F.	NONE	916 S.F.	NONE	916 S.F.	42,825 S.F.	NONE
150-WL	43,631 S.F.	NONE	6,593 S.F.	NONE	6,593 S.F.	37,038 S.F.	NONE

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION	COMPLETION DATE
1	7-25-69	Changed All Names Previously Revised on Earlier Sepias.	

R/W SHEET NO. 39 OF 104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
144-A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	389,400 S.F.	NONE
150-WL	43,631 S.F.	NONE	6,593 S.F.	NONE	6,593 S.F.	37,038 S.F.	NONE
151-WL	43,603 S.F.	NONE	8,018 S.F.	NONE	8,018 S.F.	35,585 S.F.	NONE
152-WL	43,585 S.F.	NONE	6,892 S.F.	NONE	6,892 S.F.	36,693 S.F.	NONE
153-WL	44,404 S.F.	NONE	6,756 S.F.	NONE	6,756 S.F.	37,648 S.F.	NONE
154-WL	65,403 S.F.	NONE	7,300 S.F.	NONE	7,300 S.F.	58,004 S.F.	NONE
155-WL	15,883 S.F.	NONE	1,005 S.F.	NONE	1,005 S.F.	NONE	14,888 S.F.
156-WL	15,947 S.F.	NONE	3,439 S.F.	NONE	3,439 S.F.	NONE	12,508 S.F.
157-WL	25,630 S.F.	NONE	5,967 S.F.	NONE	5,967 S.F.	NONE	19,663 S.F.
161-WL	*150,900 S.F.*	*NONE*	*45,076 S.F.*	*NONE*	*45,076 S.F.*	*NONE*	*105,3245 S.F.*
158-WL	43,308 S.F.	NONE	8,209 S.F.	NONE	8,209 S.F.	NONE	35,099 S.F.
143E-WL	149,411 S.F.	NONE	100,088 S.F.	NONE	100,088 S.F.	NONE	49,323 S.F.

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ = 71°25'13" LT		P = 0.53'	
L_s = 200'		K = 100.00'	
D_c = 1°50'00"		X_c = 199.98'	
R = 3125.22'		Y_c = 2.13'	
Θ_s = 1°50'00"		L.T. = 133.34'	
Δ_c = 67°45'13"		S.T. = 66.67'	
L_c = 3655.65'		L.C. = 199.99'	
T_c = 2058.23'		T_s = 2346.92'	
CH_c = 3484.06'		E_s = 724.32'	
E_c = 639.03'			

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
Δ = 1°50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

592 / 656

40 / 104

MATCH SHEET NO. 39

MATCH SHEET NO. 41

SUBDIVISION OF THE EASTERLY PART OF OL. Nº 122 P.B. 21 Pg. 41

JOHN MALENIC — 42366 — 150 WL

JOHN P. MALENIC & MARY F. MALENIC — 42367 — 151 WL

PAULINE NESHITE, LIFE ESTATE; STEPHEN NESHITE, OWNER. — 42368 — 152 WL

SUSIE VETRECIN — 42369 — 153 WL

42370 — 154 WL

THE SAFEWAY INVESTMENT COMPANY, A PARTNERSHIP

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

WILLIAM H. TOTH & PATRICIA L. TOTH

THOMAS MASI & BETTY JEAN MASI

N 14°00'43" E 83.01'

N 14°00'43" E 57.63'

CONSTRUCTION LIMITS

N 14°00'43" E 558.36'

N 42°05'03" E 21.75'

N 42°05'03" E 94.44'

N 42°05'03" E 80.81'

N 17°56'53" E 100.24'

N 0°07'26" E 200.35'

R/W FENCE

S 73°24'56" E 74.75'

N 73°24'56" W 74.75'

S 20°20'25" W 85.12'

I.P. FND.

S 20°20'25" W 89.17'

S 20°20'25" W 283.76'

N 22°20'25" E 85.56'

N 14°00'43" E

WOODED AREA

SURVEY I-680

666+00 667+00 668+00 669+00 670+00 671+00 672+00

MONUMENT ASSEMBLY

T.S. STA 671+15.72 (CONST. ONLY)

P.C. STA 671+82.38 (R/W ONLY)

S 9°-17'-42" E 199.07'

N 9°-17'-42" W 199.07'

WATER FOUNTAIN — CONC.

SWING — TEETER TOTTER — SLIDE

144A WL

4" STONE WALL

27" COMB. SEWER

M.H.

PICNIC TABLES

RESTROOM — STONE BLK OFFICE BLOCK — RESTROOM

4 CONC. WALK

72" × 72" BOX CULVERT

PINE HOLLOW CREEK

N 0°-18'-20" W - 344.01'

N 0°-18'-20" W 205.25'

S 0°-18'-20" E 922.31'

N 0°-18'-20" W 140.00'

S 0°-18'-20" E 205.25'

N 0°-18'-20" W 120.00'

S 0°-18'-20" E 158.36'

CONSTRUCTION LIMITS

D/W FENCE

155 WL — 156 WL — 157 WL — 157 P2 — 158 WL — 161 WL

POWERS ESTATE CEMETERY

25858 — 25857 — 25855

Loss of Land Improvements caused by Construction of Project & not Compensated for in Appropriation action, RICHARD PUCCI Case Nº 190131, which was not appealed.

SUBDIVISION & REPLAT P.B. 36 PG. 281

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	5/6/69	CHANGED PARCEL 143E-WL TO 1GOWL & 1GHWL
2	7-25-69	Changed All Names Previously Revised on Earlier Sepias.
3	10/9/69	Revised Area Pcl 161 WL R.S.

R/W SHEET NO. 40 OF 104

STATE HIGHWAY DEPT. DIV. 4 NW. ENGR. & ADMIN. CENTER
JAN 27 1969
LOGGED
CHKD
SHT. No.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6 98
R/W PLANS
LIMITED ACCESS

593 / 656

41 / 104

MATCH LINE - SEE SHEET NO. 42

MATCH SHEET NO. 40

MATCH SHEET NO. 43

N 0°-07'-26"E 200.35'

R/W FENCE

154.63 LT. G73+00

6" ASH

8" HAWTHORNE

8" MULBERRY

4" HAWTHORNE

TWIN 4" DOGWOOD

8" W. CHERRY

4" DOGWOOD

24" ELM

12" ELM

WOOD BRIDGE

4' STONE PATH

27" CORR. P.

BUR. 27" CORR. P.

TWIN 3" DOGWOOD

4" ASH

6" ELM

PINE HOLLOW CREEK

STA. EQUATION
P.C.C. STA. G73+18.72 (BACK - R/W ONLY)
S.C. STA. G73+18.72 (AHEAD - CONST. ONLY)

WOODED AREA

N 3°-57'-13" E 327.97'

CONST. LIMITS

13' ASPHALT DR. TO BE ABANDONED

36" COMB. P.

3 6" ELM

24" ELM

37" ELM

6" ASH

4" DOGWOOD

30" COMB. SEWER

10" W. CHERRY

30" COMB. P.

M.H.

6" ELM

8" BASSWOOD

6" ASH

6" W. CHERRY

72"x72" BOX CULVERT

24" ELM

22" ELM

18" ELM

10" ELM

SEWER

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

144A WL

5" MAPLE

8" OAK

4" ELM

12" ELM

6" ELM

7" MAPLE

℄ SURVEY I-680

G73 G74 G75 G76 G77 G78

S 0°-18'-20" E 822.31'

N 0°-18'-20" W 344.01'

161 WL

O.L. 1084

FELIX V. TESNER & LOUISE C. TESNER

S 89°-41'-59" W 196.65'

LA

R/W FENCE

100' RT. G74+00

CONST. LIMITS

S 30°-46'-56" W

111.27'

140' RT. G75+00

WOODED AREA

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ = 71°-25'-18" LT.	P = 0.53'
Ls = 200.00'	K = 100.00'
Dc = 1°-50'-00"	Xc = 199.88'
R = 3,125.22'	Yc = 2.13'
θ = 1°-50'-00"	LT. = 133.34'
Δc = 67°-45'-13"	ST. = 66.67'
Lc = 3,695.65'	L.C. = 199.99'
Tc = 2,098.2'	Ts = 2,346.92'
CH = 3,484.0'	Es = 724.32'
EC = 630.03'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

S 45°18'00"W - 99.26'

225' LT. G76+50

15" COMB. P.

CONST. LIMITS

LA N 38° 42' 16" E 143.19'

R/W FENCE

M.H.

30" ELM

WOODED AREA

145.30' LT. G77+76.41

THE CAMPBELL LAND CO.

N 89°-52'-43" E 1165.21'

N 1°-52'-44" W

CONST. LIMITS

27176

27175

165A WL

PLAT Nº 2

S 89°-52'-43" W

G78

27174

RAMP "H"

G76

G77

Pb 15 Pg. 50

120.55'

26.45' LT. G77+70.71

S 0°-18'-20" E, 108.58'

S 0°-18'-20" E 253.80'

N 0°-18'-20" W 390.30'

BRUSH

CURVE Nº. 17

MONUMENT ASSEMBLY

G78

GROUP Nº XVII SLOVAK CATHOLIC SOKOL

15" COMB. P.

30" COMB. P.

7" MAPLE

6" ELM

4" ELM

M.H.

14" W. CHERRY

15" ELM

18" ELM

WOODED AREA

O.L. 1084

GERTRUDE POWERS CLARK & MURIEL H. POWERS

7" ELM

8" MAPLE

12" ELM

N 44°00'47" E 82.39'

N 29°22'33" E 22.66'

160 WL

CONST. LIMITS

S 0°-09'-57" E 198.02'

R/W FENCE

LA

563°53'05"E 88.47'

79.66' S 43°-34'-03" E

120' RT. G71+35

MATCH LINE 150' RT. ℄ SURVEY - SEE SHEET NO. 42

ALL PARCELS THIS SHEET
I-FUNDS

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
144A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	385,400 S.F.	NONE
161-WL	150,400 S.F.	NONE	45,076 S.F.	NONE	45,076 S.F.	NONE	105,324 S.F.
160-WL	111,200 S.F.	NONE	55,012 S.F.	NONE	55,012 S.F.	NONE	56,188 S.F.
165A-WL	42,005 S.F.	NONE	17,650 S.F.	NONE	17,650 S.F.	24,355 S.F.	NONE

SCALE
0 20 40 60 80 100

Added Brgs & Distances on Rt., Pcl. 160-WL & 161-WL 12-15-69

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	5/8/69	CHANGED PARCEL 143E-WL TO 160-WL & 161-WL
2	7-25-69	Changed All Names Previously Revised on Earlier Sepias.
3	10/9/69	Revised Area Pcl 161 WL, 160 WL

R/W SHEET NO. 41 OF 104

State Highway Dept. of Ohio
R/W Engineering & Right of Way Section
JAN 27 1969
LOGGED
Bill 324

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

594 / 656

42 / 104

N 42° 26' 56" W 16.69'

13' ASPHALT DRIVE

283.28' LT. STA 672+10.92

269.42' LT. STA 672+00.96

35' CONC.

246.60' LT. STA 672+36.66

209.54' LT. STA 672+93.79

260.56' LT. STA 671+94.92

154 S-1

144 S-2

237.83' LT. STA 672+32.28

S 52° 56' 40" E 105.34'

N 56° 27' 04" E 107.31'

S 56° 21' 01" W 87.07'

WOODED AREA

THE SAFEWAY INVESTMENT CO.

191.18' LT. STA 672+83.54

124.63' LT. STA 673+00

S 80° 07' 26" W 16.08'

M.H.

N 11° 13' 42" E 123.40'

200.84' LT. STA 674+25.68

S 3° 57' 13" W 118.76'

LA

MATCH LINE - SEE SHEET NO. 41

144A WL

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
144 S-2	SEE SHT	NO. 41	2,946 S.F.	NONE	2,946 S.F.	SEE SHT	NO 41
144 S-3	SEE SHT	No. 41	588 S.F.	NONE	588 S.F.	SEE SHT	NO 41
154-S	SEE SHT	NO 40	421 S.F.	NONE	421 S.F.	SEE SHT	NO 40

MAHONING COUNTY COMMISSIONERS

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

WOODED AREA

N 19° 09' 27" E 20.37'

15" COMB.

254.28' LT. STA 674+34.64

N 70° 50' 33" W 5.61'

224.15' LT. STA 674+21.27

144 S-3

250.38' LT. STA 674+96.39

S 70° 50' 33" E 26.01'

225' LT. STA 675+30

S 3° 57' 13" W 21.11'

MATCH LINE - 150' RT.

SEE SHEET NO. 41

161 WL

160 WL

S 45° 18' 00" W 99.26'

CONST. LIMITS Z

R/W FENCE

363° 53' 05" E 88.41'

72"-72' BOX CULVERT

30" COMB. SEWER

CONST. LIMITS Z

R/W FENCE

S 43° 54' 03" E 19.66'

180' RT. STA 676+75

114.38'

S 55° 51' 21" E

M.H.

THE CITY OF YOUNGSTOWN, OHIO

200' RT. STA 675+75

N 82° 34' 29" W 56.00'

WOODED AREA

72.28'

25° 14' 30"

S

30" COMB. SEWER

256' RT. STA 675+75

S 31° 10' 50" W 41.23'

S 21° 43' 58" W 43.68'

PINE HOLLOW CREEK

261' RT. STA 676+25

M.H.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
161-WL	150,900 S.F.	NONE	45,076 S.F.	NONE	45,076 S.F.	NONE	105,324 S.F.
160-WL	111,200 S.F.	NONE	55,012 S.F.	NONE	55,012 S.F.	NONE	56,188 S.F.

* NO PROPERTY DESCRIPTION IN DEED

UNION CARBIDE and CARBON CORPORATION, A NEW YORK CORPORATION

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
507-S	128,938 S.F.	—	3,355 S.F.	NONE	3,355 S.F.	—	128,938 S.F.

N 71° 35' 04" W

728+00

RAMP 'F'

MATCH LINE SEE SHEET Nº 83

128.77' RT. STA 728+19.58 @ RAMP 'F'

130 AG. RT. STA 728+40.39 @ RAMP 'F'

105.34'

S 36° 33' 46" W 205.36

M.H.

N 36° 33' 46" E 170.12'

507 S

EXIST. 72" STORM SEWER

285.89' RT. STA 727+98.38 @ RAMP 'F'

S 53° 26' 14" E 200.00'

292.12' RT. STA 727+87.39 @ RAMP 'F'

EXIST. 10'x7' BOX CULVERT

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

Added Brg's & Distances on R/W Pcl. 160-WL & 161-WL 12-15-69

REV.	DATE	DESCRIPTION
		COMPLETION DATE -
1.	5/8/69	CHANGED PARCEL 143 E-WL TO 160-WL & 161-WL
2.	7/25/69	Changed All Names Previously Revised on Earlier Sepias.
3.	10/9/69	Revised Area Pcl 161 R.S.

R/W SHEET NO. 42 OF 104

State Highway Dept. Bldg. 46
Rec. Check & Admin. Sect.
JAN 27 1969
Locations
Engineering Bldg.

MATCH SHEET NO. 49

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

595/656

43/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: SEE SUPPLEMENTAL SHT. Nº 44 & 46 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

REPLAT OF YOUNGSTOWN CITY LOTS & OUTLOT P.B. 44 PG. 11

MATCH SHEET NO. 45

MATCH SHEET NO. 41

CONSTANTINE AVE. (NOT CONSTRUCTED)

CRAIGER AVE. 50' (NOT CONSTRUCTED)

℄ SURVEY I-680

℄ SPALDING ROAD - 50' (NOT CONSTRUCTED)

OHIO EDISON HIGH LINE

RAMP 'H'

GROUP #XVII SLOVAK CATHOLIC SOKOL

MARY B. JANCI

GLASS PLANTER

WOOD PLANTER

MICHAEL TYCH & PEARL TYCH

LJUBAN RUSNOV

MARTIN HOLECKO

JOHN MURAR

SUSAN OPATICH

GERTRUDE POWERS CLARK & MURIEL H. POWERS

THE CAMPBELL LAND CO. PLAT NO. 2 P.B. 15 PG. 50

THE DOREL REALTY CO. A PARTNERSHIP

PACENTRANI CLUB OF YOUNGSTOWN, OHIO - AN OHIO CORPORATION

REPLAT OF A. POWERS ESTATE FIRST PLAT PB 15 PG. 74

MACDON INDUSTRIAL & DEVELOPMENT, INC.

WOODED AREA

1 STY BRICK BLDG.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
160-WL	111,200 S.F.	NONE	85,028 S.F.	NONE	85,028 S.F.	NONE	56,188 S.F.
163-WL	106,850 S.F.	NONE	45,678 S.F.	NONE	45,678 S.F.	—	60,972 S.F.
164-WL	29,718 S.F.	NONE	29,718 S.F.	NONE	29,718 S.F.	NONE	NONE
165A-WL	42,005 S.F.	NONE	17,650 S.F.	NONE	17,650 S.F.	NONE	24,355 S.F.

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ =	71°25'18"LT	P =	0.53'
L_s =	200.00'	K =	100.00'
D_c =	1°50'00"	X_s =	199.98'
R =	3125.22'	Y_s =	2.13'
Θ_s =	1°50'00"	L.T. =	133.34'
Δ_c =	67°45'18"	S.T. =	66.67'
L_c =	3695.65'	L.C. =	199.99'
T_c =	2098.23'	T_s =	2346.92'
CH_L =	3484.06'	E_s =	724.32'
E_c =	630.03'		

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 672+48.06
2 P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

Revised Areas P/s 166 & 167 WL 7-25-69
Added P/s 166 & 167 A-WL 7-25-69
Revised Areas P/s 160 WL 10/9/69 R.S.

SCALE 0 20 40 60 80 100

ALL PARCELS THIS SHEET I-FUNDS

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	9/30/69	163-WL CHANGED LA LINE, INCREASED AREA 10 SQ.FT.
2	5/6/69	143 E-WL CHANGED TO 160-WL
3	7-25-69	Changed All Names Previously Revised on Earlier Sepias.

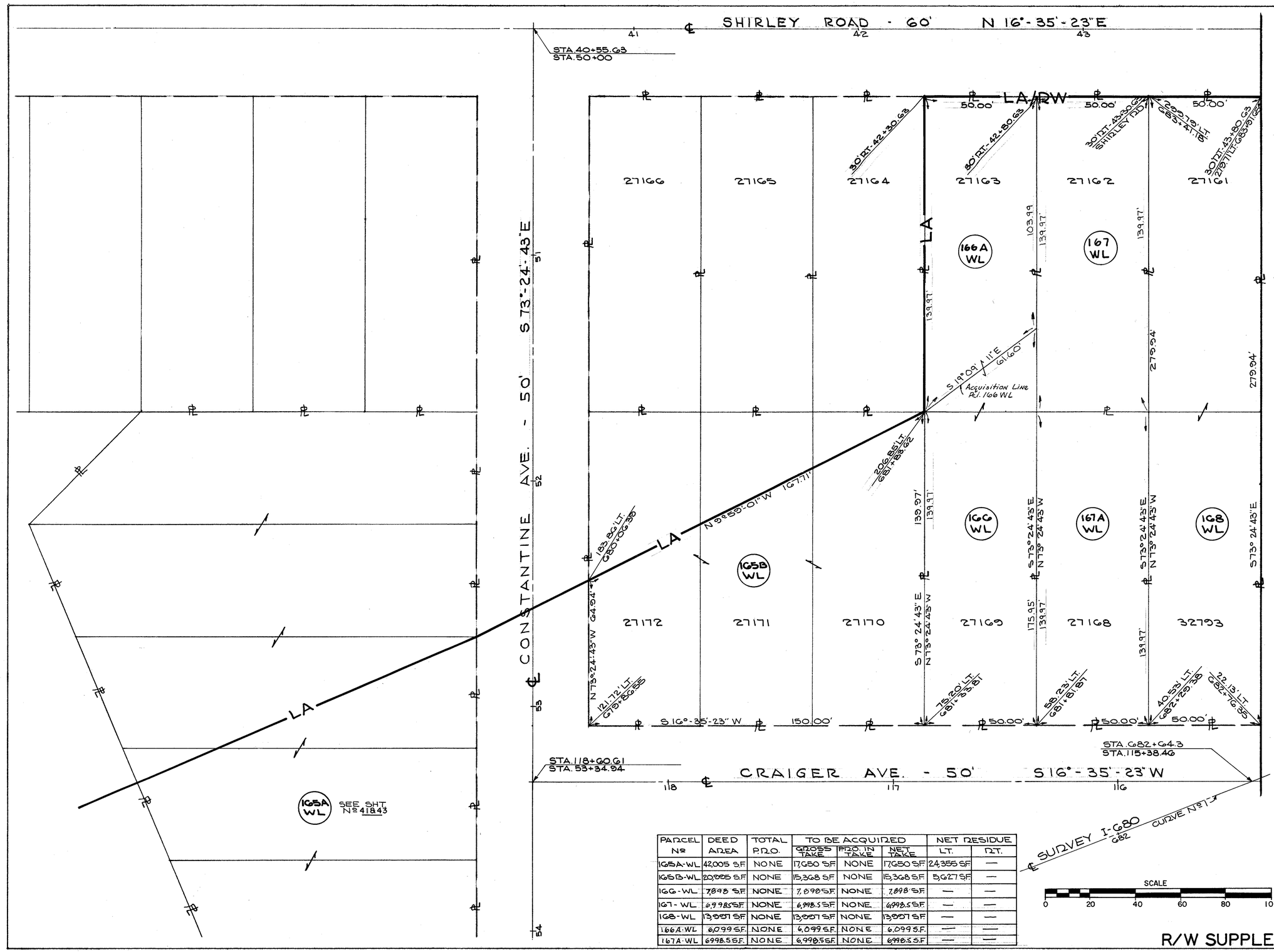
R/W SHEET NO. 43 OF

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

596
656

44
104



CENTERLINE SURVEY
CURVE No 1 DATA
P.I. STA. 694+62.64

Δ = 71°25'-13" LT.	CH_c = 3484.06'
L_s = 200'	E_c = 639.03'
D_c = 1°50'00"	LT. = 133.34'
R = 3125.22'	S.T. = 66.67'
Θ_s = 1°50'00"	L.C. = 199.99'
Δ_c = 67° 45'13"	T_s = 2,346.92'
L_c = 3,695.65'	E_s = 724.32'
T_c = 2,098.23'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA. 672+49.06
2 P.I. STA. 710+78.04
Δ = 1°50'00" LT.
R = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
165A-WL	42,005 S.F.	NONE	17,650 S.F.	NONE	17,650 S.F.	24,355 S.F.	—
165B-WL	20,995 S.F.	NONE	15,368 S.F.	NONE	15,368 S.F.	5,627 S.F.	—
166-WL	7,898 S.F.	NONE	7,898 S.F.	NONE	7,898 S.F.	—	—
167-WL	6,998.5 S.F.	NONE	6,998.5 S.F.	NONE	6998.5 S.F.	—	—
168-WL	13,997 S.F.	NONE	13,997 S.F.	NONE	13,997 S.F.	—	—
166A-WL	6,099 S.F.	NONE	6,099 S.F.	NONE	6,099 S.F.	—	—
167A-WL	6998.5 S.F.	NONE	6,998.5 S.F.	NONE	6998.5 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
2	Revised areas Pcl's 166 & 167		7-25-69
1	Added 166 AWL & 167 AWL	EHC	11-25-68
	PARCELS 166-WL & 167-W CHANGED TO TOTAL TAKE		

R/W SUPPLEMENTAL SHEET

State Highway Dept. of Ohio - Div. of Right of Way
Date Filed Oct 27 1969
Logged
Checked BM BK

MATCH SHEET NO. 50

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

597 / 656

45 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: FOR PARCEL DIMENSIONS, BEARINGS, STA.-OFFSETS & AREAS NOT SHOWN ON THIS SHEET-SEE R/W SHEET Nº 46 & 48

MATCH SHEET NO. 43

MATCH SHEET NO. 47

SUSAN OPATICH

REPLAT OF YOUNGSTOWN CITY LOTS & OUT LOTS P.B. 44 PG. 11

MONUMENT ASSEMBLY

℄ SURVEY I-680 — ℄ CURVE Nº 1

25402 | 25401 | 25400 | 25399 | 25398 | 25397 | 25396

MARY SOPKOVIC aka. MARY SOPKOVICH

DOMINIC AGOSTINELLI

SUSAN RITCHIE & JAMES RITCHIE

204 WL | 171 WL | 173 WL | 174 WL

RAMP "G"

1½ ST'Y BR. HSE. #2602

BLOCK GAR.

8" MAPLE | 4" CHERRY | 4" TWIN MAPLE | 8" ASPHALT DR. | 10" MAPLE | 10" TWIN MAPLE

WIRE FENCE

EXIST. R/W | CONST. LIMITS | LA/R/W

STA 109+89.95
STA 7+14.87

12" WATER MAIN

N 73°-27'-21" W

MINNIE R. WINTER 25395 | THOMAS BIROSCAK 25394 | MARY ANN HALAPARDA 25393 | JOHN GORDULIC, ET AL 25392 | 25391 | 25390 | JOHN MARTINKO 25389

REPLAT OF A. POWERS ESTATE FIRST PLAT P.B. 15 PG. 74

178A WL | 179 WL | 180 WL | 181 WL | 182 WL | 183 WL | 184 WL

FR. SHED | BLOCK GAR. | FRAME GAR. | GAR.

2½ ST'Y FR. HSE. #2548 | 2½ ST'Y FR. HSE. #2540 | 2½ ST'Y BR. HSE. #2536 | 2 ST'Y FR. HSE. #2532 | 2½ ST'Y FR. HSE. #2528

CONST. LIMITS | R/W FENCE | 5' SIDEWALK | EXIST R/W

2" PINE | 6" PINE SHRUBS | 15" OAK | 5" CHERRY | 2" CHERRY | 4" TWIN CHERRY | 6" CHERRY | 8" MAPLE | 6" APPLE | 8" CHERRY

BRICK WALK | 2½ CONC. WALK | 7.5' SLAG DR. | 8' CONC. DR. | 2½ CONC. WALK | 5' SLAG DR.

MARY LILKO (WELL DRILLED) | ANNA STEFANIK & STEPHEN GAJTOS | 6" DRILLED WELL

25' I.P. | 109+64.97 | L.P. FND. & USED | BRICK WALL

CRAIGER AVE. 50'

S 16°-35'-23" W

℄ 109 | 108 | 107

12" WATER MAIN | 15" SAN. | 110 MH. | 111.8" SAN. | 112 | MH. 113

4" L.P. GAS | 18" MAPLE | 12" MAPLE | 6" BUCKEY | 2-6" BUCKEY | 8" CHERRY | 16" CHERRY | 10" CHERRY | 24" CHERRY | 1" SPRUCE | SHRUB | 3' CONC. | 2' CONC. WALK | 7' SLAG DRIVE | 2½ ST'Y FR. HSE. #2547 | #2545 | #2543 | SHRUB 24" CHERRY | 2½ CONC. WALK | ROSES | FLOWERS | FR. GAR.

TAYLOR AVE. 50'

℄ N 73°-27'-21" W

163 WL | 163 T

HYD. | 6" WATER MAIN | R/W FENCE | LA/R/W

N 16°-35'-23" E 70.00' | 82.00' | N 45°-13'-18" W | 103.29' | 23' LT. | 172.26' | 61

S 52°-04'-53" W | 68.4' | 40.06' | LT. GAS DT. | 50.88' | 119.26' | P.U.H. | N 73°-24'-51" W 146.7' | 1 STY. BRICK BLDG. | 120'

SLAG PARKING LOT

PARCEL Nº	DEED AREA	TOTAL R.R.O.	TO BE ACQUIRED GROSS TAKE	R.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
163-WL	106,650 S.F.	NONE	45,678 S.F.	NONE	45,678 S.F.	NONE	60,972 S.F.
163-T			1,123 S.F.	NONE	1,123 S.F.		

REPLAT OF A POWERS ESTATE FIRST PLAT P.B. 15 PG. 74

25405 | 25406 | 25407 | 25408 | 25409 | 25410 | 25411 | 25412

PACENTRANI CLUB OF YOUNGSTOWN, OHIO, AN OHIO CORPORATION

THE FOREMOST INVESTMENT COMPANY, A PARTNERSHIP

14" OAK | 18" OAK | 20" OAK | 20' CONC. DR. | 3' CONC. | SHRUB | 2 CAR. BR. GAR. | 1½ ST'Y BR. HSE. #2603 | 120' | 6" CHERRY | 4" PINE | 8" MALBERRY

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ = 71°-25'-13" LT.	P = 0.53'
Ls = 200'	K = 100.00'
Dc = 19°-50'-00"	Xc = 199.38'
R = 3,125.22'	Yc = 2.13'
Θs = 1°-50'-00"	L.T. = 133.34'
Δc = 67°-45'-13"	S.T. = 66.67'
Lc = 3,695.65'	L.C. = 199.99'
Tc = 2,098.23'	Ts = 2,340.92'
CHc = 3,484.06'	Es = 724.32'
Ec = 630.03'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
   Δ = 1° 50' 00"
   R = 4166.82'
   T = 66.67'
   L = 133.33'
   E = 0.53'

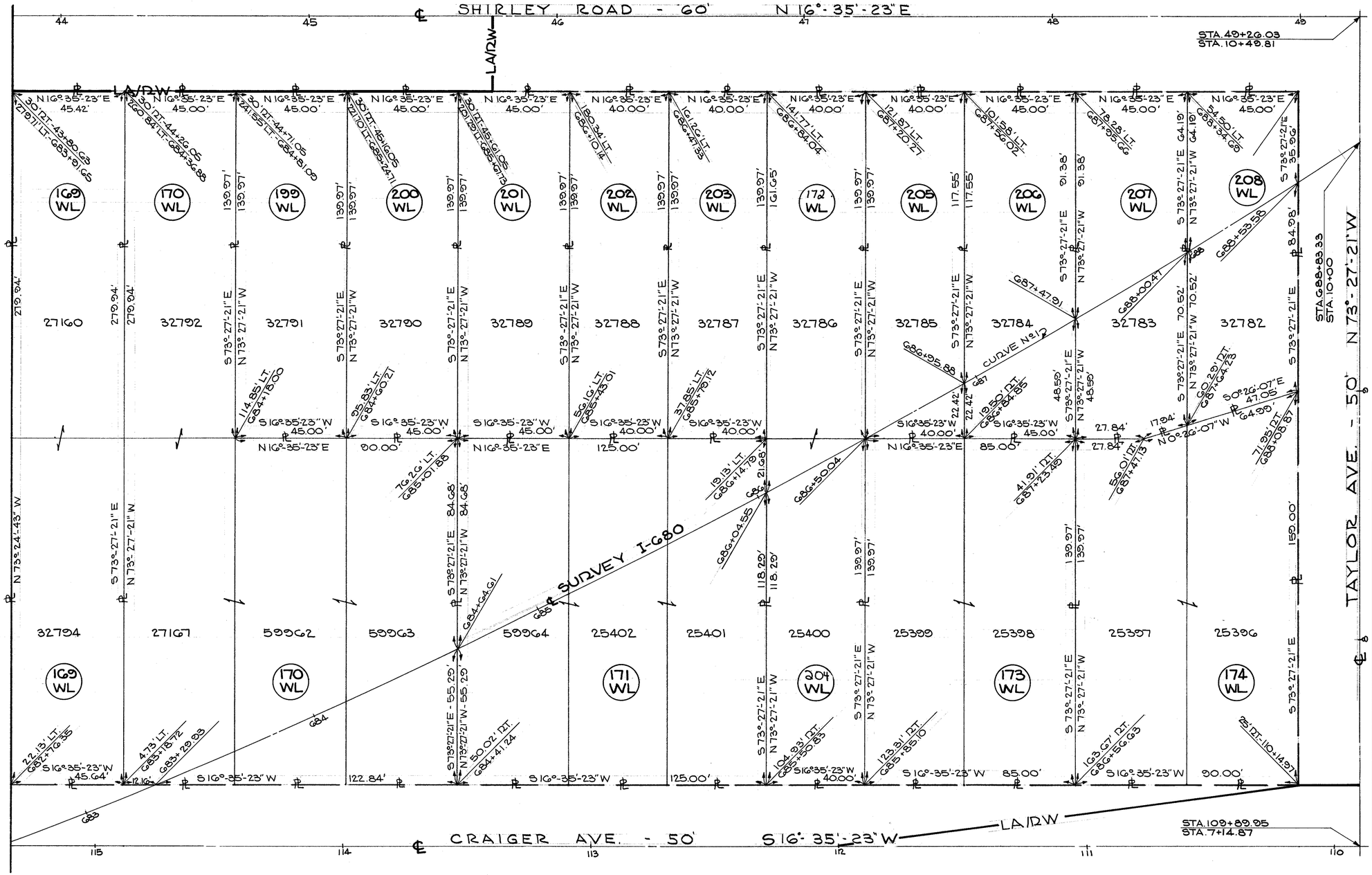
ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7-25-69	Changed All Names Previously Revised on Earlier Copies.

R/W SHEET NO. 45 OF 104

State Highway Dept. No. 4
R/W SHEET & ADMIN. SECT.
JAN 27 1969
LOGGED
CHKD. BY



PARCEL №	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED BY DEED TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
169-WL	12,584 S.F.	—	12,584 S.F.	—	12,584 S.F.	—	—
170-WL	25,200 S.F.	—	25,200 S.F.	—	25,200 S.F.	—	—
171-WL	17,500 S.F.	—	17,500 S.F.	—	17,500 S.F.	—	—
172-WL *	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
173-WL	11,900 S.F.	—	11,900 S.F.	—	11,900 S.F.	—	—
174-WL	13,192 S.F.	—	13,192 S.F.	—	13,192 S.F.	—	—
199-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
200-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
201-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
202-WL	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
203-WL	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
205-WL	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
206-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
207-WL	5673.395 S.F.	—	5673.395 S.F.	—	5673.395 S.F.	—	—
208-WL	5,882 S.F.	—	5,882 S.F.	—	5,882 S.F.	—	—
204-WL *	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—

REVISION	DESCRIPTION	BY	DATE

FED.RD	STATE	PROJECT	
2	OH10	I-680-9(6)	

598
656

MAH-680-698
R/W PLANS
LIMITED ACCESS

46
104

SCALE
0 20 40 60 80 100

R/W SUPPLEMENTAL SHEET

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	LT.	RT.
191-S	22,290 S.F.	——	2,296 S.F.	——	2,296 S.F.	——	22,290 S.F.
192-S	10,800 S.F.	——	3,120 S.F.	——	3,120 S.F.	10,800 S.F.	——
233A-S	458,730 S.F.	——	1,951 S.F.	——	1,951 S.F.	458,730 S.F.	——
233A-X		——	1,500 S.F.	——	1,500 S.F.	——	——

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

599/656

47/104

MAH. 680- 6.98
R/W PLANS
LIMITED ACCESS

NOTE: FOR PARCEL DIMENSIONS, BEARINGS, STA-OFFSETS & AREAS SEE R/W SHEET Nº 48

MATCH SHEET NO. 45

MATCH SHEET NO. 52

NOTE: PARCEL 233A-X IS TO BE ACQUIRED TO PROVIED AN OUTLET FOR THE STORM SEWER. NO WORK IS TO BE DONE ON THIS PARCEL. THE AREA TO BE ACQUIRED IS A STEEP HILLSIDE WITH SMALL TREES AND ROCK OUTCROPING.

MACDON INDUSTRIAL & DEVELOPMENT, INC., AN OHIO CORPORATION

FRANK CERIMELE a.k.a. 185-WA CERIMELI, OWNER
185-WL JOHN DEGENERO & GLADYS L DEGENERO, HOLDERS OF LAND CONTRACT

PINE HOLLOW CREEK

233A-X

233A-S

191-S

192-S

SPALDING RD. 50'

CRAIGER AVE. 50'

HOMEWOOD AVE 50'

POWERSWAY 60'

EXIST. R/W

DIRT PARKING AREA

O.L. 1214

WOODED AREA

N 19° 43' 16" E

N 25° 11' 44" W

S 25° 11' 44" E

S 64° 48' 16" W - 10.00'

N 64° 48' 16" E - 10.00'

S 64° 48' 16" W - 30.00'

N 25° 11' 44" W - 50.00'

S 73° 24' 37" E - 115.32'

N 73° 24' 37" W - 120.00'

N 16° 35' 23" E

S 16° 35' 23" W

STA 104+07.45

STA 104+27.71

STA 105+50.00 (℄ POWERS WAY) (℄ SPALDING)

STA 15+42.45

MORRIS M. BOYD 25436

THOMAS SUCICH / LOUISE SUCICH 25434

MILDRED G. DOUGLAS 25425

JOHN VUKOVICH ET. AL. 25427

25437 25424 25423 25426 25433

KATHERINE PERLICH a.k.a. KATA PERLIC 25385

ANTHONY POLLIFRONE 25384 25383 25382

VACANT LOT 25388 25387

1½ STY. FR. HSE. #2522 — 185-WA

1½ STY. BRK. HSE. #2514

2 STY. FR. HSE #2503

1 CAR FR. GAR.

CONC. BLK. GAR.

FR. SHED

185-WL 186-WL 184-WL

RAMP "G"

CONSTRUCTION LIMITS

R/W FENCE

SCALE 0 20 40 60 80 100

COMPLETION DATE -		
REV.	DATE	DESCRIPTION
1	7-25-69	Changed All Names Previously Revised on Earlier Sepias.

R/W SHEET NO. 47 OF 104

ALL PARCELS THIS SHEET I-FUNDS

Ohio Highway Dept. Div. 4
R/W - ENGR. & ADMIN SECT.
MAR 27 1969
LOGGED
CHKD. BY

Property of the Ohio Department of Transportation
Right of Way Section
Please return to the Right of Way Section

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

600 / 656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

48 / 104

℄ SHIRLEY ROAD - 60'

STA. 49+20.03
STA. 10+49.81

STA. 55+08.80
℄ SHIRLEY RD.

℄ SURVEY I-680

STA. 685+33.33
STA. 10+00

685+13.27 G85

4.97'

3.32'

689+19.24

STA. 689+72.48
STA. 50+00

N 16°-35'-23"E 173.08'

32781

O.L. 1213

N 73°-27'-21"W

℄ TAYLOR AVE. - 50'

℄ HOMEWOOD AVE. - 50'
N 73°-24'-37"W

℄ CRAIGER AVE. - 50' S 16°-35'-23"W

LA/RW

136.65'

105.88'

105.23'

62.40'

42.40'

45.23'

45.00'

40.00'

55.00'

139.97'

99.97'

90.51' P.T.
690+58.66

℄ 43.88'
℄ 43.88'
N 34°-23'-29"W

690+10.78 P.T.

120.21' P.T.
690+85.51

144.36' P.T.
691+16.16

168.82' P.T.
691+46.30

193.55' P.T.
691+75.55

218.68' P.T.
692+05.24

243.98' P.T.
692+34.06

269.61' P.T. 692+62.44
30' R.T. 54+03.80

235.51' P.T. 693+30.39
30' R.T. 54+43.80

30' R.T. 54+83.80

94.97'

103.05'

T.B.A.
1.521 S.F.

217 WA

PEDESTRIAN POINT OF ACCESS 6' WIDE STA 54+28

PEDESTRIAN POINT OF ACCESS 6' WIDE STA 54+65

312.54' P.T. 691+81.76

S 50°-34'-12"E

335.06' P.T. 692+12.99

(L)

114.63' P.T. 688+40.21

189.47' P.T. 689+59.60

187.41' P.T. 689+59.60

139.07' P.T. 688+76.08

161.04' P.T. 688+98.09

186.17' P.T. 689+44.06

208.85' P.T. 689+15.04

233.25' P.T. 690+07.45

256.65' P.T. 690+31.55

280.25' P.T. 690+57.26

304.20' P.T. 690+56.55

328.46' P.T. 691+25.44

353.00' P.T. 691+55.92

357.68' P.T. 691+36.16

S 37°-08'-44"E 97.38'

264.32' P.T. 690+62.09

S 69°-13'-57"E 380.13'

S 15°-24'-56"E 47.17'

381.46' P.T. 690+00.97

404.73' P.T. 690+29.97

25' R.T. -100+64.97

251.22' P.T. 688+06.22
25' R.T. -105+18.85

302.70' P.T. 688+72.13
25' R.T. -106+34.95

324.62' P.T. 689+02.54
25' R.T. -107+34.95

348.26' P.T. 689+34.42
25' R.T. -107+52.45

370.83' P.T. 689+64.04
25' R.T. -107+12.45

218.44' P.T. 688+25.45
25' R.T. -105+79.95

395.72' P.T. 689+93.27
25' R.T. -106+72.45

STA. 109+89.95
STA. 7+14.87

LOT	178A WL	179 WL	180 WL	181 WL	182 WL	183 WL	184 WL	185 WL	186 WL	185 WA	217 WL	217 WA	218 LA	219 LA
	25395	25394	25393	25392	25391	25390	25389	25388						
									25387	25386	25385			
												25363	25362	25361

PARCEL Nº	DEED AREA	TOTAL PRO.	TO BE ACQUIRED GROSS TAKE	PRO. IN TAKE	NET TAKE	NET RESIDUE L.T.	R.T.
234A-WD	5,925 S.F.	NONE	665 S.F.	NONE	665 S.F.	—	—
234B-WD	4,320 S.F.	NONE	3,126 S.F.	NONE	3,126 S.F.	—	—
272-WD	10,770 S.F.	NONE	403 S.F.	NONE	403 S.F.	10,367 S.F.	—
234A-EL			5,860 S.F.	NONE	5,860 S.F.	—	—
234B-EL			1,203 S.F.	NONE	1,203 S.F.	—	—

PARCELS 234A-EL & 234B-EL - STATE FUNDS
ALL OTHER PARCELS THIS SHEET "I" FUNDS

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

601
656

49
104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 55

CH. BDG. - N 35°46'-18"E
CH. - 20.82'
D - 35.00°
ARC - 21.24'

25' LT. 45+00.02

41.68' LT. 44+22

272 WD
5G 30G
CH. BDG. - N 73°37'-08"E
MILDRED D. MARUSKIN
CH. - 29.64'
D - 45.00°
ARC - 30.21'

16' MAPLE

12" MAPLE

41.76'
N 16°35'-23"E
41.76'

70.12' LT. 44+26.05

234-B WD

234 B EL

234 A EL

646 WA

645 WA

644 WA

209C WA

234A WD

209 WA

209C WA

209 LA

200 WL

199 WL

170 WL

169 WL

168 WL

167 WL

166 WL

166A WL

201 WL

SHEET NO. 50

SEE SUPPLEMENTAL SHT Nº 51

MATCH SHEET NO. 43

SCALE 0 20 40 60 80 100

NOTE: SEE SUPPLEMENTAL SHT. Nº 44 & 46 FOR PARCEL DIMENSIONS, BEARING & STA.-OFFSETS FOR PARCELS IN THIS AREA.

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	12/5/69	PARCELS 166-WL & 167-WL CHANGED TO TOTAL TAKES
2	11/5/69	PARCEL 234A-WD & 272-WD CORRECTED DEED AREA & RESIDUE

PCLS. 234A-EL & 234B-EL ADDED 6/18/69
DELETED PCL 645 WA - SMITH 7-20-70

R/W SHEET NO. 49 OF 104

Revised Areas Pcls 166 WL & 167 WL; Added Pcl's 166 & 167 AWL
Changed All Names Previously Revised on Earlier Sepias. 7-25-69
Added Pcls. 649 WA, 645 WA, 646 WA, Pryor 5/22/70

ADDED PCL 645-WA - 4-24-73
ADDED CONSTRUCTION LIMITS TO PCLS 644 & 646 WA

NAME CHANGE PCL 644 WA - SMITH 4-7-70
NAME CHANGE PCLS. 644 WA & 646 WA - SMITH 6-10-70

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
BY
DATE

I-680 2-2

NOTE: SEE SUPPLEMENTAL SHT. No. 51 & 53 FOR PARCEL DIMENSIONS, BEARINGS & STA.-OFFSETS FOR PARCELS IN THIS AREA.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

602 / 656

50 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY
CURVE No. 1 DATA
P.I. STA 694+62.64

Δ = 71°25'13" LT	CH = 3484.06'
L_s = 200.00'	E_c = 639.05'
D_c = 1°50'00"	L.T. = 133.34'
R = 3125.22'	S.T. = 66.67'
Θ_s = 1°50'00"	L.C. = 199.99'
Δ_c = 67°45'13"	T_s = 2346.92'
L_c = 3695.65'	E_s = 724.32'
T_c = 2098.23'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
Δ = 1°50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

MATCH SHEET NO. 56

MATCH SHEET NO. 49

MATCH SHEET NO. 52

COOPER AVE. N 34°-38'-33" W 50'

EXIST. R/W

5' CONC. WALK

6" WATER MAIN

15" SAN.

I.P. FND. & USED

9' SLAG DR.

BRK. GAR.

THOMAS M. TORBA / MARIE TORBA

THE BRUCE R. CAMPBELL et al. PLAT OF LOTS PB. 17 PG. 87

ANDREW J. LESKO / ANNA M. LESKO

RES. POINT OF ACCESS 10' WIDE STA. 41+86.5

PEDESTRIAN POINT OF ACCESS 6' WIDE STA. 48+28

PETER J. SHUNTICH / HELEN A. SHUNTICH

SUSIE BALI (LANDLOCKED)

ANNA C. SICH (LANDLOCKED)

EUGENE C. NAPLES / THERESA F. NAPLES

32801

32802

32803

32800

32797

32796

32798

THOMAS J. BASIC / DOLORES MARIE BASIC

BRICK BLDG. # 2630

AGNES WALLOW

2 ST'Y FR. HSE. #2622

1 ST'Y FR. HSE.

2½ ST'Y FR. HSE. #2618

2½ ST'Y BR. HSE. #2616

2½ ST'Y FR. HSE. #2612

2 ST'Y FR. HSE. #2608

2 ST'Y DR. HSE. #2606

14.5' CONC. DR. (TO BE ABANDONED)

PARKING AREA

63.15'

209C LA

209C WA

209 LA

237 LA

238 LA

239 LA

240 LA

240 S

241 WA

241 S

241 WL

242 WA

242 S

242 WL

243 WA

243 S

243 WL

244-A WL

245 WL

246 WL

247A WL

JOHN CALVIN CHURCH

THE FIRST SLOVAK PRESBYTERIAN CHURCH OF YOUNGSTOWN, OHIO

4" APPLE 12" APPLE

ROSE CHURCHILL LIFE USUFRUCT ESTATE / JULIANA F. EREK, 26275

MONUMENT ASSEMBLY

TAYLOR AVE. N 34°-38'-36" W 40'

EXIST. R/W

6" WATER MAIN

12" L.P. GAS

3" L.P. GAS

MILTON A. ROEMISCH TRUSTEE

32779

JOHN HARMOCI / SUSIE HARMOCI

32778

32777

32760

LILAC BUSHES

SHRUBS

ROCK CUT CONSTRUCTION

G' CONC. SIDEWALK

G' CONC. CURB

8" WATER MAIN

N 16°-35'-23" E

SHIRLEY ROAD 60'

STA. 43+34.77
STA. 30+02.02

STA. 45+26.03
STA. 10+48.81

STA. 689+72.48
STA. 50+00

12" WATER MAIN

15" SAN.

12" GUM

20' SYCAMORES

18' SYCAMORE

I.P. FND. & USED

177.74'

R/W FENCE

EXIST. R/W 45'

THE BRUCE R. CAMPBELL ET. AL PLAT OF LOTS PB. 17 PG. 87

#2627 1 ST'Y FR. HSE.

#2623 2½ ST'Y FR. HSE.

#2621 2½ ST'Y FR. HSE.

#2615 2 ST'Y FR. HSE.

#2611 2½ ST'Y BR. HSE.

#2605 2 ST'Y FR. HSE.

#2631 2 ST'Y FR. HSE.

#2535 2 ST'Y FR. HSE.

#2531 2½ ST'Y FR. HSE.

MAZIE E. CAPLINGER

CATHERINE ONDERKO

JAMES RITCHIE / SUSAN RITCHIE

AMELIA AGOSTINELLI

PAUL HADOVSKY

MICHAEL SABO / JOHN A. SABO / EDWARD Wm. SABO / MARGARET E. STEVENSON

SUSIE VETRECIN

MARY MANSKY a.k.a. MARY CIKA MANSKI & JOSEPH J. MANSKY

EDWARD J. HUDAK / CATHERINE HUDAK

PETER GUIDO a.k.a. PETER J. GUIDO / AMELIA GUIDO a.k.a. AMELIA E. GUIDO

MARY YOSAY

172 WL

174 WL

202 WL

203 WL

205 WL

206 WL

207 WL

208 WL

210 WL

211 WL

212 WL

213 WL

CURVE No. 2

L = 688.33'
T = 344.79'
R = 4707'

TO LOC. TANG.

O.L. 12.13

TAYLOR AVE. N 73°-27'-21" W 50'

12" WATER MAIN

4" L.P. GAS

EXIST. R/W

25' 25'

SURVEY I-680

NOTE: SEE SUPPLEMENTAL SHT. No. 46 & 48 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO. 45

SCALE 0 20 40 60 80 100

Changed Pcl. 243-T- to 243-WA 10-1-70

Changed Pcl 243 WA to 243 T, White 8-17-70

COMPLETION DATE —			
REV.	DATE	DESCRIPTION	
1	7-25-69	Changed All Names Previously Revised on Earlier Sepias	M.K.M.

ALL PARCELS THIS SHEET I-FUNDS

R/W SHEET NO. 50 OF 104

State Highway Dept. Div. 4 R/W Engr. & Admin. Sect.
Approved JUN 27 1969
Checked ... Signed By ...

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

603 / 656

51 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

STA 44+92.80 (℄ SHIRLEY RD)
STA 10+00 (℄ COOPER AVE.)

℄ COOPER AVE. - 50' N 34°-38'-33"W

EXIST. R/W LINE CURVE DATA
CH. BRG. S 80° 58' 25" W
CH. = 18.08' R. = 10.00'
ARC. = 22.47'

25' RT. 10+79.41

N 34°38'33"W 8.48'

25' RT. 11+43.11

25' RT. 10+87.80

R/W LINE CURVE DATA
CH. BRG. S 85° 41' 26" E
CH. = 23.41' R. = 35.00'
ARC. = 23.93'

209D WD

R/W

30' LT. 45+60.81

30' LT. 45+72.31

209C LA

209C WA

T.B.A. = 2182 S.F.

70.78' LT. 46+38.21

N 16°35'23"W 2.50'

25' RT. 11+30.71

LA

209 LA

30' LT. 46+73.21

237 LA

30' LT. 47+13.21

238 LA

30' LT. 47+53.21

239 LA

240 LA

135.09' LT. G88+18.61
30' LT. 48+00.05

30' LT. 47+93.21

240 S

138.77' LT. G88+62.17

S 73°24'37"E

241 WA

241 S

N 20°49'52"W 41.70'

25.37'

N 20°49'52"W 50.37'

S 20°37'07"E 50.22'

N 20°37'07"W 50.22'

121.11' LT. G88+99.57

242 WA

242 S

182.44' LT. G89+14.77

167.84' LT. G89+32.72

LANDLOCKED 4,086 S.F.

142.26' LT. G89+67.48

58.41'

243 T *

193.10' LT. G90+02.92

N 16°35'23"E 59.49'

158.25' LT. G90+54.04

32.35'

N 34°38'36"W 170.06'

164.47' LT. G90+87.06

148.54' LT. G90+91.86

154.14' LT. G91+44.52

148.50' LT. G91+48.96

N 20°49'52"W

123.98' LT. G89+52.16

S 20°37'07"E

N 20°37'07"W

243 S

N 55° 21.2' E 139.45' 190.98' 221.26'

40.16'

6.90 + 97.42 127.55'

243 WD

243 WL

241 WL

242 WL

S 16°35'23"E 140.00'

S 73°24'37"E 60.74'

N 73°24'37"W 60.74'

95.72' LT. G88+82.70

73.67' LT. G89+17.00

62.51' LT. G89+55.97

20.00'

S 34°-38'-36" E 249.53'

N 16°-35'-23" E 48.41'

STA 49+34.77
STA. 30+80.02

℄ TAYLOR AVE. - 40' N 34°-38'-36"W

2G282 | 43G45 | 43G46 | 2G281

R/W N 34°38'36"W 50.00'

226.22' LT. G91+34.90

226.52' LT. G92+41.56

85.00'

273 WD

R/W 60.00'

N 34°38'36"W

127.22' LT. G91+51.15

126.61' LT. G91+52.73

35.00' N 55°21'24"E

30.00' S 34°38'36"E

133.13' LT. G92+15.92

143.15' LT. G92+65.18

N 55°21'24"E

LA/R/W

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDE LT.	NET RESIDE RT.
209C-WD	4,324 S.F.	NONE	137 S.F.	NONE	137 S.F.	4,187 S.F.	—
209C-LA	4,324 S.F.	NONE	—	—	—		
209 -LA	4,907 S.F.	NONE	—	—	—	4,907 S.F.	—
237- LA	5,845 S.F.	NONE	—	—	—	5,845 S.F.	—
238-LA	5,639 S.F.	NONE	—	—	—	5,639 S.F.	—
239-LA	5,639 S.F.	NONE	—	—	—	5,639 S.F.	—
240-LA	5,639 S.F.	NONE	—	—	—	5,639 S.F.	—
240-S			421 S.F.	—	421 S.F.		
241-WL	5,670 S.F.	NONE	607 S.F.	—	607 S.F.	5,063 S.F.(L)	—
241- S			1,020 S.F.	—	1,020 S.F.		
242-WL	5,908 S.F.	NONE	1,822 S.F.	—	1,822 S.F.	4,086 S.F.(L)	—
242-S			1,029 S.F.	—	1,029 S.F.		
243-WL	34,424 S.F.	NONE	7,298 S.F.	—	7,298 S.F.	25,134 S.F.	—
243-WD			1,992 S.F.	—	1,992 S.F.		
243-S			3,771 S.F.	—	3,771 S.F.		
273-WD	15,000 S.F.	NONE	4,250 S.F.	—	4,250 S.F.	10,750 S.F.	—
243-T*			5,315 S.F.		5,315 S.F.		

Area of overlap:
Pcl 243-T overlaps
2685 sq. ft. of Pcl. 243-S

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
1.	Changed Pcl 243WA to "T"	EW	8-17-70

R/W SUPPLEMENTAL SHEET

STATE HIGHWAY DEPT. OH. 4
R/W ENGR & ADMIN SECT.
DATE OCT 27 1969
LOGGED
CHKD. BW SK.

NOTE: SEE SUPPLEMENTAL SHT No 53 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO. 56

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

604/656

52/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY CURVE No 1 DATA
P.I. STA 694+62.64

Δ	71° 25' 18" LT	T_s	2098.23'
L_s	200.00'	CH_s	3484.06'
D_c	1° 50' 00"	E_s	639.03'
R	3125.22'	L.T.	133.34'
Θ_s	1° 50' 00"	S.T.	66.67'
Δ_c	67° 45' 18"	L.C.	199.99'
L_c	3695.65'	T_s	2346.92'

E_s = 724.32'

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 672+49.06
2 P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
254-WD	4,800 S.F.	NONE	79 S.F.	NONE	79 S.F.		
254-EL			4,721 S.F.	NONE	4,721 S.F.		
255-WA	4,860 S.F.	NONE	400 S.F.	NONE	400 S.F.		4,860 S.F.

NOTE: SEE SUPPLEMENTAL SHT. No 48 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO. 47

SCALE 0 20 40 60 80 100

MATCH SHEET NO. 50

MATCH SHEET NO. 54

REVISIONS:
3 7-28-69 Changed All Names Previously Revised on Earlier Sepias. Name Change Pcl 218 LA 8-18-69 M.K.M.

REV	DATE	DESCRIPTION
		COMPLETION DATE -
1	7/15/69	DELETED WA PCL'S 221 THRU 227
2	6/18/86	DELETED 254-T, ADDED 254-EL

PARCEL 254-EL STATE FUNDS
ALL OTHER PARCELS - I-FUNDS

R/W SHEET NO. 52 OF 104

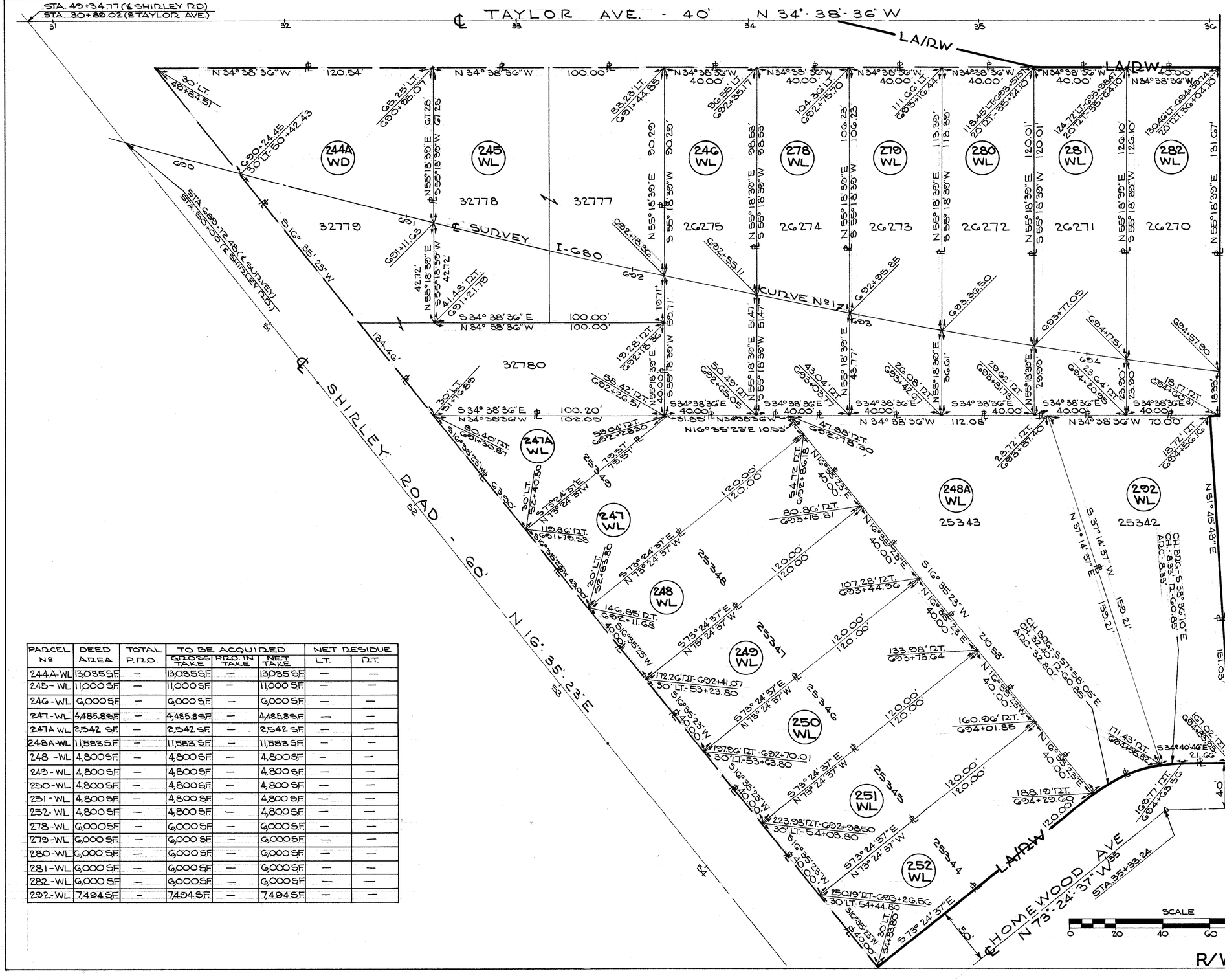
State Highway Dept. Ohio 4
R/W Right & Access Sect.
JUN 27 1988
Logged
Sent By

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

605 / 656

53 / 104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	LT.	RT.
244A-WL	13,035 S.F.	—	13,035 S.F.	—	13,035 S.F.	—	—
245 - WL	11,000 S.F.	—	11,000 S.F.	—	11,000 S.F.	—	—
246 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
247 - WL	4,485.8 S.F.	—	4,485.8 S.F.	—	4,485.8 S.F.	—	—
247A WL	2,542 S.F.	—	2,542 S.F.	—	2,542 S.F.	—	—
248A-WL	11,583 S.F.	—	11,583 S.F.	—	11,583 S.F.	—	—
248 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
249 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
250 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
251 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
252 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
278 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
279 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
280 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
281 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
282 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
292 - WL	7,494 S.F.	—	7,494 S.F.	—	7,494 S.F.	—	—

CENTERLINE SURVEY
CURVE N21 DATA
P.I. STA. G94+62.64

Δ = 71°25'-13" LT.	CHc = 3,484.06'
Ls = 200'	Ec = G330.03'
Dc = 1°50' 00"	LT. = 1133.34'
R = 3,125.22'	S.T. = G6.67'
θs = 1°50' 00"	L.C. = 199.99'
Δc = 67°45'13"	Ts = 2,346.92'
Lc = 3,695.65'	Es = 724.32'
Tc = 2,098.23'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1. P.I. STA. G72+49.06
2. P.I. STA. 710+78.04
   Δ = 19°50' 00" LT.
   D = 4,166.82'
   T = G6.67'
   L = 133.33'
   E = 0.53'

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

Ohio Highway Dept. Div. of R/W, Engr. & Admin. Sect.
Jan 27 1969
L-29649
Cross-ref. SM Pl.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
233-WD	10,609 S.F.	NONE	185 S.F.	NONE	185 S.F.	——	10,591 S.F.
233-T			40 S.F.	NONE	40 S.F.		
261-WD	71,915 S.F.	NONE	14 S.F.	NONE	14 S.F.	71,901 S.F.	——
261-T			650 S.F.	NONE	650 S.F.		
261-WA			29 S.F.	NONE	29 S.F.		
261A-WA			111 S.F.	NONE	111 S.F.		

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

606
656

54
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 52

ANTHONY PAVLICH
MARGARET PAVLICH

REPLAT OF A. POWERS ESTATE
P.B. 15 PG. 74

SLAG PARKING

240.5' 212.3' 184.1' 155.5' 127.7' 99.5'

25321 25320 25319 25318 43594 43593 43592

430.1'

1 STY. BLK BLDG.

O. L. 572

50" WILLOW

SCRUB TREES

S 8° 35' E

TELEPHONE POLE CURB

TELE. POLE CUP #8

10" APPLE

8" ELM

2-6" ELM

40' 40' 40' 40' 40'

EXIST. R/W

261A WA

261 WA

37' LT 60+10

37' LT 60+14.5

12" CONC. DRIVE

12" APPLE

10" HOPE

10" OAK

8" APPLE

10" ASPEN

12" WILLOW

MARGARET PAVLICH

BR. GAR.

261 T

SLAG DRIVE

40' LT 61+35

S73°24'37"W-10.00'

186.25'

N16°35'23"E 65.00'

1 STY BR & BLK. # 1751

114.28'

CONC.

80' LT 62+00

N73°24'37"E 10.00'

30' LT 62+00

2 STY BR. BLDG.

261 WD

37' EXIST. R/W

ASPH. PARK.

5' CONC. WALK

STEEL POST

4" GAS

12" LP GAS

6" LP GAS

30'

8" LP GAS

12" H.P. GAS

3" LP GAS

MH

12" H.P. GAS

DESIGN

8" WATER

6" CONC. SIDEWALK

S 16°35'23"W 65.00'

ELEC. VAULT

3" LP GAS

6" LP GAS

+SIGN

8" WATER

CB

SHIRLEY RD. (60')

N 16°-35'-23"E

30' LT 60+10

30' LT 60+14.5

30' LT 61+90

30' LT 62+30

55+00 60+00 61+00 62+00

4" H.P. GAS

15" COMB.

MONUMENT ASSEMBLY

STA 62+91.05 (℄ SHIRLEY)
STA 54+84.11 (℄ POWERS WAY)

+SIGN

6" LP GAS

12" LP GAS

SIGN

CONC. WALL

6" CONC. SIDEWALK

EXIST. R/W

4" CRAB APPLE

I.P. FND. & USED

233 T

233 WD

8" LP GAS

POLAND AVE. (60')

4" VEW

2" PINE

2½ STY FR. # 2405

JOHN POLLOCK & MADY POLLOCK

FENCE

SLAG PARKING

ROCCO POCHIRO & JEAN POCHIRO

1 STY. BR. BLDG.

1 STY. BR. BLDG.

OL. 574

EAST OHIO GAS COMPANY

STONE WALL

THE OHIO EDISON CO.

12" APPLE

166.7'

6' CONC. SIDEWALK

30'

54'

80'

MH

POWERS WAY (60')

25352 25351 25350 25371

120.92' 101.84' 82.72' 63.64'

2-6" CHERRY

3" PEACH

2" CHERRY

6" PLUM

3" PEACH

6" CHERRY

MINNIE R. WINTER

BUSHES

CYCLONE FENCE

EXIST. R/W

N 25° 11' 44" W

12" WATER

+SIGN

5' CONC. SIDEWALK

20" H.P. GAS

6" LP GAS

8" LP GAS

FF. SWEO

1 CONC.

12" ELM

16" ELM

18" ELM

20" ELM

SLAG DR.

SCALE
0 20 40 60 80 100

CH. BRG.-N1°25'04"E
CH.-14.13' R-27.00'
ARC-14.30'

30' LT 62+61.84

S52°42'45"E 3.35'

30' LT 62+68.20

S16°35'23"W 12.24'

30' LT 62+80.44

PARCEL 261-WD

N16°35'23"E-11.34'

30' RT 62+01.12

30' RT - 62+12.46
30' LT - 54+05.52

CH. BRG. S50°26'24"W
CH.-7.80' R-7.00'
ARC-8.27'

S25°11'44"E - 6.52'

N72°07'08"W-10.34'

30' LT 53+90

30' LT 53+99.00

S25°11'44"E-9.00'

PARCELS 233-WD & 233-T

ALL PARCELS THIS SHEET
100% CITY FUNDS

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7/25/69	DELETED 228-WA
2	7-28-69	Changed All Names Previously Revised on Earlier Copies

R/W SHEET NO. 54 OF 104

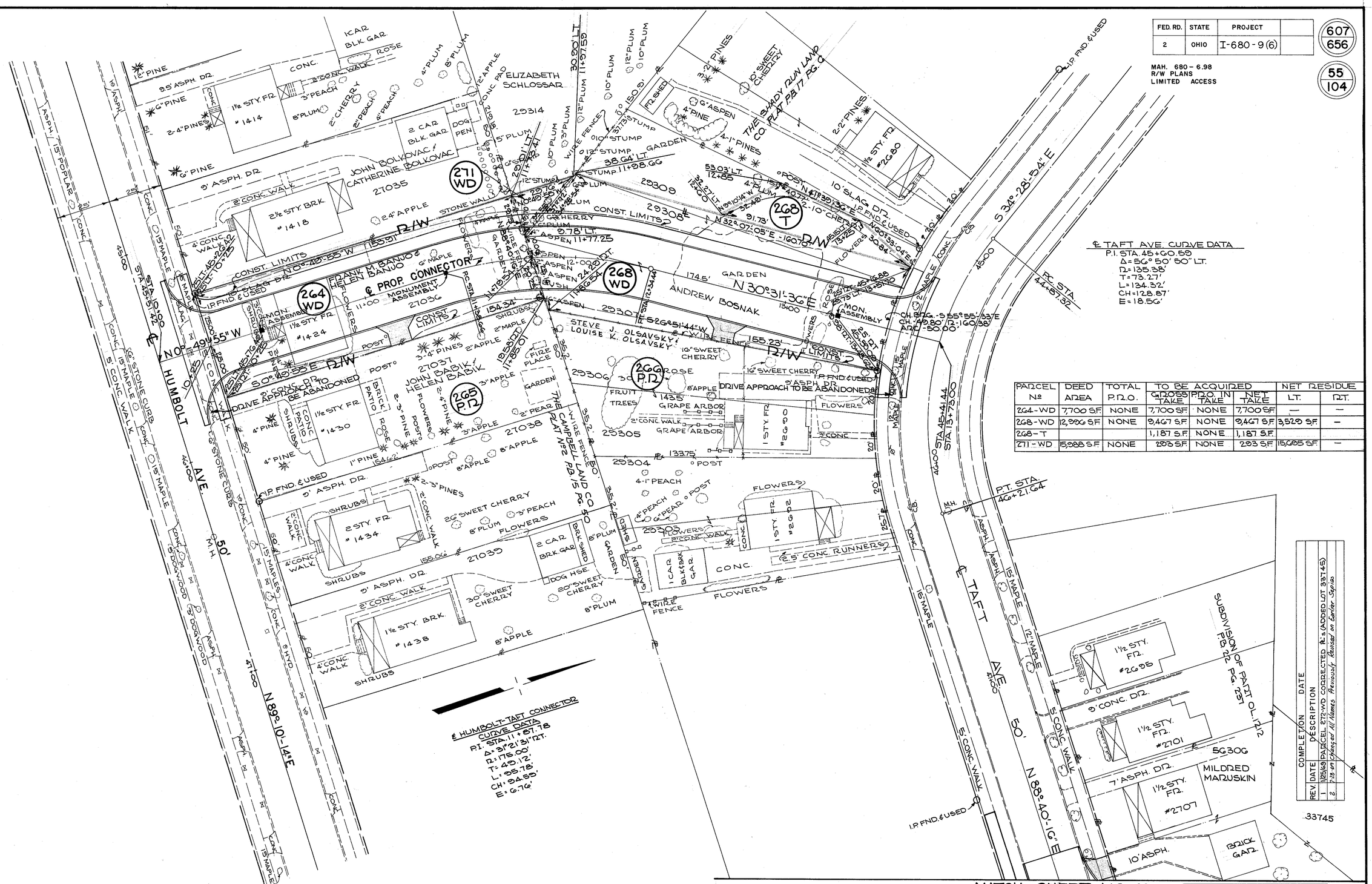
STATE HIGHWAY DEPT. OF OHIO
R/W - ENGR. & ADJUST. SECT.
JAN 27 1969
L-3668(5)
CHKD. BW DR.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

607
656

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

55
104



PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
264-WD	7,700 S.F.	NONE	7,700 S.F.	NONE	7,700 S.F.	—	—
268-WD	12,996 S.F.	NONE	9,467 S.F.	NONE	9,467 S.F.	3,529 S.F.	—
268-T			1,187 S.F.	NONE	1,187 S.F.		
271-WD	15,988 S.F.	NONE	293 S.F.	NONE	293 S.F.	15,695 S.F.	—

REV.	DATE	DESCRIPTION	COMPLETION DATE
1	1/25/69	PARCEL 272-WD CORRECTED R's (ADDED LOT 33745)	
2	7-28-69	Changed All Names Previously Revised on Earlier Sepias	

MATCH SHEET NO. 49

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

R/W SHEET NO. 55 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

608
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

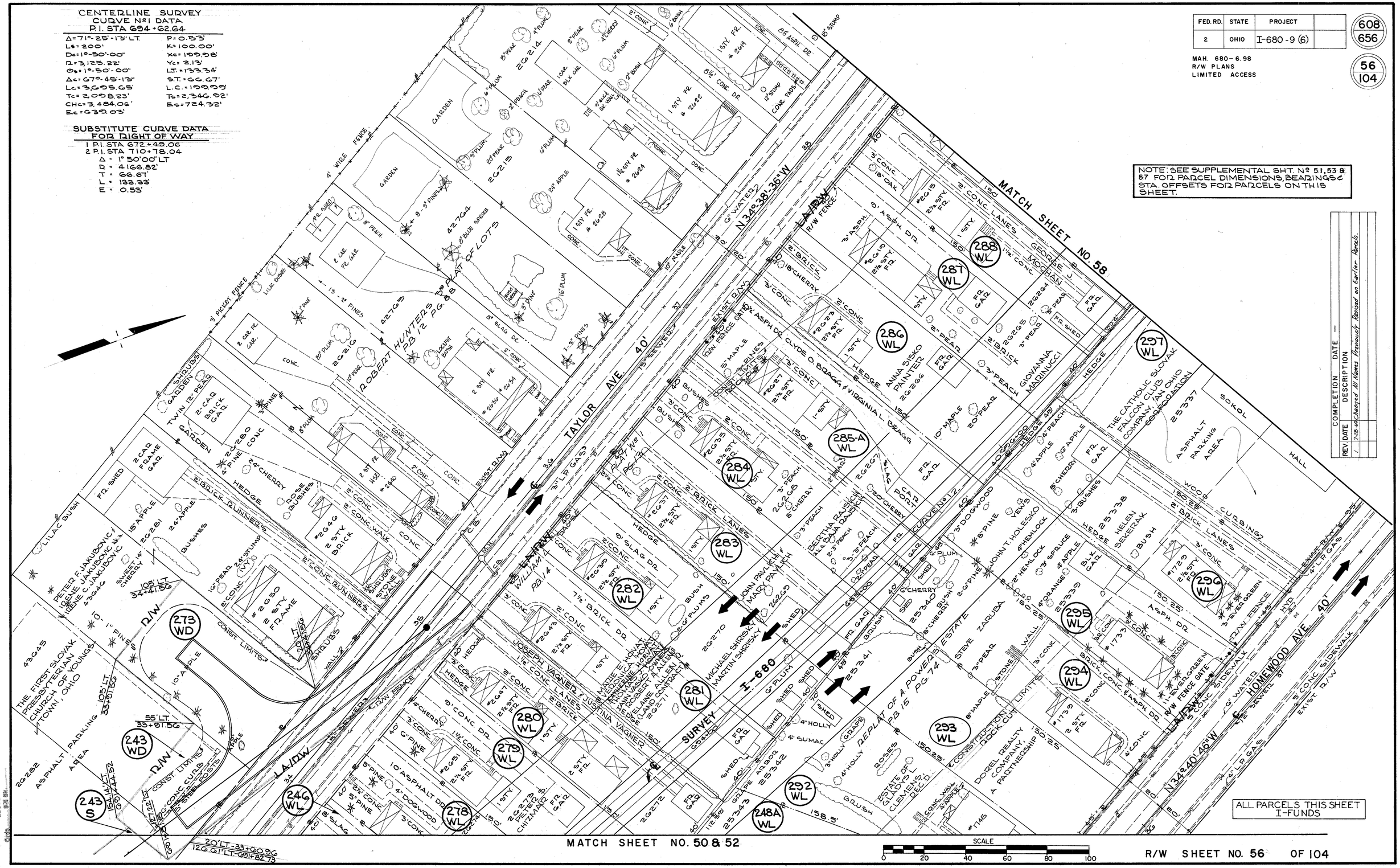
56
104

CENTERLINE SURVEY
CURVE No. 1 DATA
P.I. STA 694+62.64

Δ=71°-25'-13" LT.	P=0.53'
Ls=200'	K=100.00'
Dc=1°-50'-00"	Xc=199.98'
R=3,125.22'	Yc=2.13'
Θs=1°-50'-00"	LT.=133.34'
Δc=67°-45'-13"	S.T.=66.67'
Lc=3,695.65'	L.C.=199.99'
Tc=2,098.23'	Ts=2,346.92'
CHc=3,484.06'	Es=724.32'
Ec=639.03'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1 P.I. STA 672+49.06
2 P.I. STA 710+78.04
Δ = 1° 50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

NOTE: SEE SUPPLEMENTAL SHT. No. 51, 53 & 57 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.



COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	7-28-69	Changed All Names Previously Revised on Earlier Parcels.

R/W SHEET NO. 56 OF 104

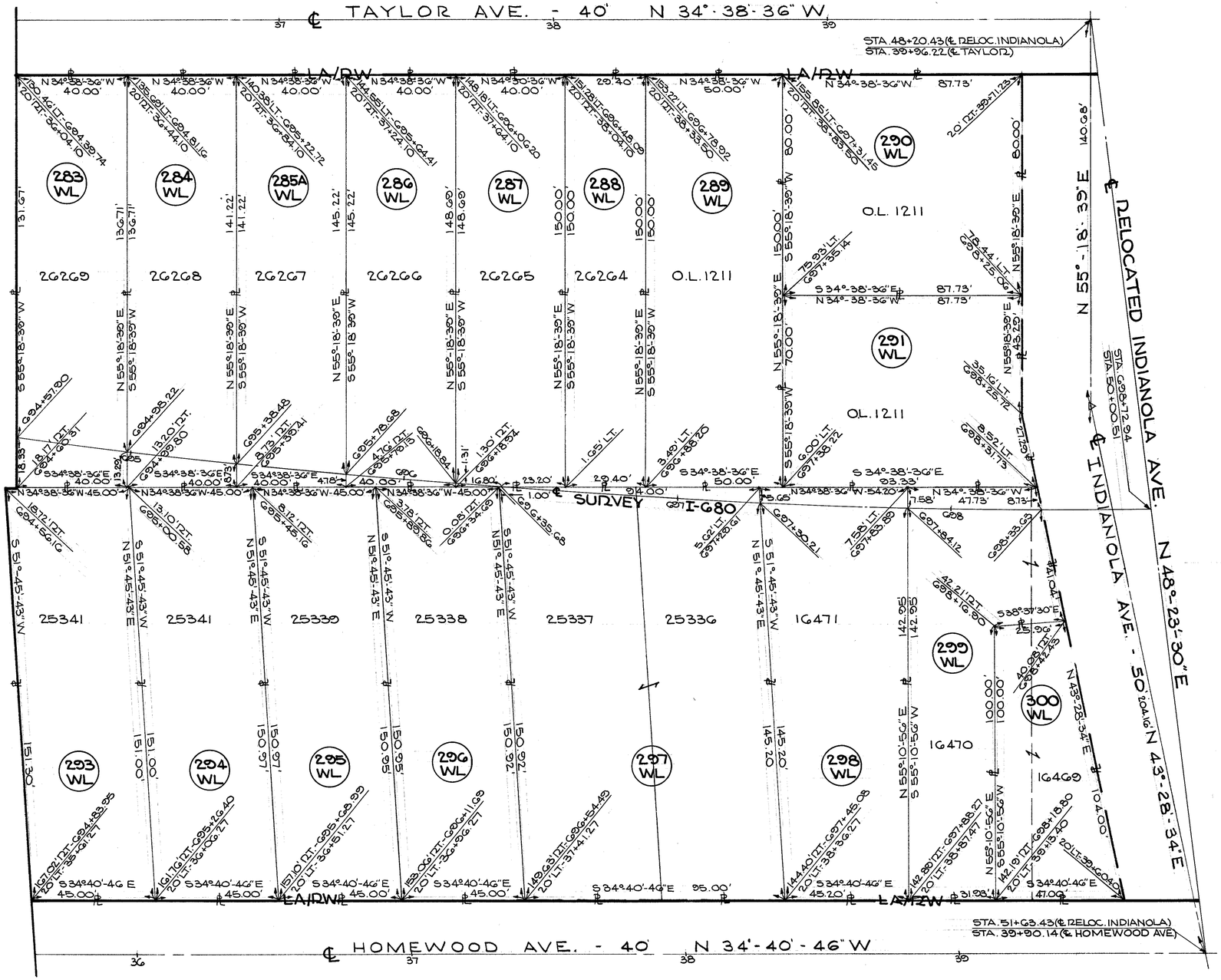
Ohio Highway Dept. Div. 4
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
Cards
Sht. Sh.

FED. RD.	STATE	PROJECT	
2	OH10	I-G80-9(G)	

609
656

57
102

MAH. G80-G.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
283-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
284-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
285A-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
286-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
287-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
288-WL	4,410 S.F.	—	4,410 S.F.	—	4,410 S.F.	—	—
289-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
290-WL	7,028 S.F.	—	7,028 S.F.	—	7,028 S.F.	—	—
291-WL	6,228 S.F.	—	6,228 S.F.	—	6,228 S.F.	—	—
293-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
294-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
295-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
296-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
297-WL	14,250 S.F.	—	14,250 S.F.	—	14,250 S.F.	—	—
298-WL	7,440 S.F.	—	7,440 S.F.	—	7,440 S.F.	—	—
299-WL	5,850 S.F.	—	5,850 S.F.	—	5,850 S.F.	—	—
300-WL	3,648 S.F.	—	3,648 S.F.	—	3,648 S.F.	—	—

CENTERLINE SURVEY
CURVE Nº1 DATA
P.I. STA. G04+62.64

Δ = 71° 25' 13" LT.
L_s = 200'
D_c = 1° 50' 00"
R = 3,125.22'
Θ_s = 1° 50' 00"
Δ_c = 67° 45' 13"
L_c = 3,685.65'
T_c = 2,098.23'
CH_c = 3,484.06'
E_c = 638.03'
L.T. = 133.34'
S.T. = 66.67'
L.C. = 199.99'
T_s = 2,346.92'
E_s = 724.32'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA. 672+49.06
2 P.I. STA. 710+78.04
Δ = 1° 50' 00" LT.
R = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

CENTERLINE SURVEY
CURVE Nº1 DATA
P.I. STA G94+62.64

Δ = 71°25'13" LT
L_s = 200.00'
D_c = 1°50'00"
R = 3125.22'
θ_s = 1°50'00"
Δ_c = 67°45'13"
L_c = 3695.65'
T_c = 2098.23'
CH_c = 3484.06'
E_c = 639.03'
L.T. = 133.34'
S.T. = 66.67'
L.C. = 199.99'
T_s = 2346.92'
E_s = 724.32'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1 P.I. STA G72+45.06
2 P.I. STA 710+78.04
Δ = 1°50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

NOTE: SEE SUPPLEMENTAL SHT. Nº 57 & 59 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

610
656

58
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 56

MATCH SHEET NO. 60

TAYLOR AVE. 40'

HOMEWOOD AVE. 40'

INDIANOLA AVE. 50'

RELOC.

SURVEY I-680

CURVE Nº1

ROBERT HUNTER'S 2ND PLAT OF LOTS P.B. 6 PG. 45

ROBERT HUNTER'S 1ST PLAT OF LOTS P.B. 3 PG. 167

2ND SUBDIVISION OF LOTS IN CITY OUTLOT Nº 570 P.B. 11 PG. 22

PT. O.L. 1211

289 WL — JAMES E. GREGORY — 87.85' — 8 WAL.NUT — HEDGE
290 WL — 2½-STY. BRICK #2609 — CONST. LIMITS — 2-STY. F.R. #2605 — F.R. GARAGE — 24" ELM — 4 SUMAC — ROSE — PUMP & WELL — 10" MAPLE
291 WL — WILLIAM A. MOKROVICH, MARY ANN MOKROVICH — 12" BUCKEYE — BLOCK SHED — BLOCK GAR. — GRAPE ARBOR — 4-PEACHES — F.R. GAR.
292 WL — GEORGE ADORNATO, SERENA ADORNATO — 15" PEAR — 3 PEAR BUSHES — 1-STY. F.R. #1511 — STONE WALL — BR. WALL
299 WL — ANNA STARON — 16471 — 5-4" HEMLOCKS — 20" CHERRY — 10" WALNUT — 25336 ASPHALT PARKING LOT
300 WL — 16470 STEVEN MOTOSIKO & HOWARD MOORE — OLD FOUNDATION — 6" PLUM — PINE TREES — 28" — 8" SYCAMORE
297 WL — SOKOL HALL — CONST. LIMITS — 2-STY. F.R. #1713 — 2½-STY. F.R. #1709 — DIRT DR. — CONC. PATIO — CONC. WALL
298 WL — CONC. PATIO — ST. WALL — 2-STY. BRICK #1525 — JAMES BELLA, MARY BELLA — BLOCK PATIO — HEDGE — ROSES — FLOWER BEDS — CONC. WALL — 47' — 150.25'
THE CATHOLIC SLOVAK FALCON CLUB COMPANY, AN OHIO CORPORATION — PIPES — CONC.
321 WL — 2-STY. BRICK #2543 — 1½-STY. DUPLEX #2541 — 4 SUMAC — 4 PINE — ROSE — 12' APPLE — 6' PINE — BUSH — 30' ELM — 24' APPLE — HEDGE — 2' CONC. LANES
322 WL — HELEN NOVOTNY — PT. O.L. 1211 — 10" ELM — 14' APPLE — 2' STONE — CONC. PATIO — 1½-STY. BRICK DUPLEX #2539 — 2' CONC.
324 WL — JOHN TEKAC — PT. O.L. 1211 — 2-STY. F.R. #2537 — 1½-STY. — CONC. — 8' APPLE — 8' PLUM — 6' PLUMS — PUMP & WELL — ROSES — 2' CHERRY — 4' CHERRY — 2' PLUM — 4' PLUM — 10" APPLE — 3-BUSHES — 2' CONC. — 4' CONC.
325 WL — ELLEN SCHRAIDER & JOHN M. SCHRAIDER — 26195 — 50' FLOWER BEDS — 3' CONC. — 2-STY. F.R. #2527 — 1½-STY. F.R. — 3' CONC. — 1-8" DSN — CONC. — ASH DR. — 150' — HEDGE — FENCE
326 WL — PAUL HABOVSKY — 30" CHERRY — 4" CHERRY — 30" SYCAMORE — 2-STY. F.R. #2517 — BUSHES — SLAG DR. — 6" APPLE — 28" MAPLE — BUSH — 18" CHERRY — 2" CHERRY — 2" CONC. LANES
327 WL — 26192 BRUSH — 26191 — 18" MAPLE — 8" MAPLE — 3" PLUM — 3" APPLE — 24" MAPLE — 30" MAPLE — 8" APPLE — 3" PEAR — ROSE — 150'
328 WL — HELEN M. LASKEY — BUSH — 14" CHERRY — FR. GAR. — 10' WOOD PATIO — 3 BUSHES — 2" MAPLE — WILLIAM WELDON & JENNIE WELDON — 18" CHERRY — 6" CHERRY — 4" PLUM — 14" PLUM — 16" CHERRY — 12" PEAR — 26188 — 26187
303 WL — GEORGE CHAMER a.k.a. GEORGE CSAMER — 16466 — 16465 — 8" PEAR — 8" PLUM — 16" MAPLE — 10" PEAR — 2-ROSES — 2-EVERGN. — 3-SAPLINGS — 150' — HEDGE — FENCE — 2' CONC.
304 WL — MICHAEL REDUCA a.k.a. MICHAEL R. REDUCA EXECUTOR OF THE ESTATE OF CATHERINE REDUCA, DECEASED — 16463 — 28" MAPLE — SM. APPLE — 3" PEAR — 2-STY. F.R. #1683 — 2½ STY. F.R. #1689 — 2-STY. F.R. #1681 — 2-STY. F.R. #1677 — 3' CONC. — 4' CONC. — SHRUBS — CONC. PATIO — 8' ASPHALT DR. — BRICK WALL
305 WL — JOHN JANDROKOVIC & KATHERINE JANDROKOVIC — 16463 — 22 MAPLE — ROSE — BUSH — 2-STY. F.R. #1673 — 2½-STY. F.R. #1671 — 2' CONC. — 4' CONC. — 8' ASPHALT DR. — CONC. WALL — RAMP "A"
306 WL — KATHERINE KOSHANJ PETRENCHICK a.k.a. KATARINA PETRENCHICK — 16462 — 16461 — BUSHES — PUMP & WELL — 2-STY. F.R. #1667 — 2½-STY. F.R. #1661 — 7' ASPH. DR. — 6' ASPH. DR. — 4' CONC. — 5' CONC. — 2' CONC. — 752
307 WL — FRANK V. GURGOS, MARY B. GURGOS — 16462 — FR. GAR. — STONE WALL — 16460 — 12" PEAR — 16459 — BUSH — 20" CHERRY — PETER J. KICOS, GUARDIAN FOR JOHN KALAFUT, INCOMPETENT
308 WL — FR. GAR. — FR. SHED — 6' PLUM
309 WL — STEVE R. KOVACH, ALICE L. KOVACH — BUSHES — 150' — FENCE — HEDGE — ROSE — BUSH
301 WL — IRENE FRANKO — 16467 — 12" MAPLE — 10" MAPLE — 18" MAPLE — 12" PEAR — 2-STY. F.R. #1695 — GRASS DR. — 2' CONC. — 3' CONC. — 4' CONC. — SHRUBS — 150' — HEDGE
302 WL — PAUL GEGUS a.k.a. PAUL R. GEGUS, OLGA P. GEGUS, MARGARET ANN GEGUS — 16464 — 2-STY. F.R. #1693 — 2½ STY. F.R. #1689 — 2-STY. F.R. #1683 — 2-STY. F.R. #1681 — 2-STY. F.R. #1677 — 3' CONC. — 4' CONC. — SHRUBS — CONC. PATIO — 8' ASPHALT DR. — BRICK WALL — 150' — HEDGE — FENCE
GRAVEL DR. — 55.5' — 28" SYCAMORE — 40" OAK — 8" ELMS — 20" MAPLE — 8" WALNUT — 10" WALNUT — 6" SYCAMORE — 8" PEACH — 8" PLUM — 16" MAPLE — 18" MAPLE — 12" PEAR — 6" GUM — 85" DBL. TANG TO LOC. — 8" PINE — 6" PLUM — 5-4" HEMLOCKS — 20" CHERRY — 10" WALNUT — 28" — 12" MAPLE — 10" MAPLE — 18" MAPLE — 12" PEAR — 3" PEAR — SM. APPLE — SM. PEACH — SM. PLUM — 6" PEAR — 8" PLUM — 8" PEACH — 6" SYCAMORE — 16" MAPLE — 10" PEAR — 2-ROSES — 2-EVERGN. — 3-SAPLINGS — 22 MAPLE — 28" MAPLE — 8" APPLE — 3" PEAR — 24" MAPLE — 30" MAPLE — 18" APPLE — 3" APPLE — 8" PLUM — 3" PLUM — 4" PLUM — 14" PLUM — 16" CHERRY — 12" PEAR — 26188 — 26187 — 26191 — 26192 BRUSH — 18" MAPLE — 8" MAPLE — 30" CHERRY — 4" CHERRY — 30" SYCAMORE — 2" CHERRY — 18" CHERRY — 6" CHERRY — 14" CHERRY — 2" MAPLE — 6" APPLE — 28" MAPLE — 3 BUSHES — 2" CONC. LANES — 10' WOOD PATIO — 3' BUSHES — 4' PLUM — 14' PLUM — 16' CHERRY — 12'

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-8(6)	

611
656

59
104

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

STA. 48+20.43 (℄ RELOC. INDIANOLA)
STA. 39+56.22 (℄ TAYLOR)

TAYLOR AVE. - 40' N 34°-38'-36"W

℄ N 34°-38'-36"W 80.00'

LA/RW — N 34°-38'-36"W 100.00' — N 34°-38'-36"W 50.00' — N 34°-38'-36"W 100.00' — N 34°-38'-36"W 50.00'

41+38.21 — 42+18.21 — 43+18.23 — 44+18.23 — 45+18.23

20' DT 40+25.25

20' LT-40+38.23 / 158.66' LT-698+94.37

15G.18' LT-698+92.65 / 20' RT-41+38.23

116.77' LT-700+00.51

171.74' LT-700+85.10

20' LT-42+18.23 / 178.41' LT-700+83.67

20' DT-42+18.23 / 20' LT-42+18.23

20' DT-43+18.23 / 149.27' LT-701+68.25

20' RT-43+18.23 / 137.77' LT-702+68.72

20' DT-44+68.23 / 124.25' LT-703+43.72

20' DT-45+18.23 / 116.35' LT-705+05.05

321 WL — 322 WL — 324 WL — 325 WL — 326 WL — 327 WL — 328 WL — 330 WL

N 55°-18'-39"E — S 55°-18'-39"W

118.07' — 150.00' — 150.00' — 150.00' — 170.00' — 148.45' — 143.97' — 138.66' — 125.66' — 117.92'

O.L. 1211 — O.L. 1211 — 26195 — 26192 — 26191 — 26188 — 26187 — O.L. 1210

N 55°-18'-39"E — S 55°-18'-39"W

℄ SURVEY I-680

703+75.42

703+24.83

N 43°-28'-34"E — S 43°-28'-34"W

INDIANOLA AVE. - 50'

RELOCATED INDIANOLA AVE.

STA. 698+72.04
STA. 50+00.61

40.68' LT 698+76.30

8.66' LT 698+83.30

G.30' LT 698+83.52

2.11' LT 700+73.52

1.55' DT 701+23.99

1.55' 701+23.51

701+73.71 / 6.08' LT 701+73.18

702+23.99

11.24' DT 702+22.12

24.34' — 24.34'

703+21.34 / 24.08' DT

31.67' DT 703+70.82

97.08'

698+34.76

698+82.97

7.60' LT 698+54.65

698+54.45

6.05' LT 699+99.75

4.13' LT 700+39.77

700+39.59

1.36' LT 700+84.17

700+84.63

701+03.60

5.64' DT 701+98.38

9.72' DT 702+08.07

14.92' DT 702+53.60

20.75' DT 702+97.97

26.46' DT 703+37.26

32.67' DT 703+76.40

142.82' — 142.82' — 144.34' — 144.34' — 146.24' — 148.98' — 150.32' — 150.26' — 150.24' — 150.21' — 150.18' — 150.16'

1G468 — 1G467 — 1G466 — 1G465 — 1G464 — 1G463 — 1G462 — 1G461 — 1G460 — 1G459 — 1G458 — 1G457

301 WL — 302 WL — 303 WL — 304 WL — 305 WL — 306 WL — 307 WL — 308 WL — 309 WL — 310 WL — 311 WL

20' LT-40+11.49 — 20' LT-40+15.49 / 144.76' DT-699+50.88 — 20' LT-40+30.49 / 144.23' DT-699+93.88 — 20' LT-41+30.49 / 146.04' DT-700+32.07 — 20' LT-41+51.49 / 148.68' DT-700+74.97 — 20' LT-42+21.49 / 151.50' DT-701+18.04 — 20' LT-42+66.49 / 155.28' DT-701+55.78 — 20' LT-43+06.49 / 159.15' DT-701+93.69 — 20' LT-43+51.49 / 164.08' DT-702+36.22 — 20' LT-43+96.49 / 169.63' DT-702+78.67 — 173.00' 105°-16'-18" RT — 20' LT-44+36.49 / 175.51' DT-703+16.49

S 34°40'-46"E — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 40.00'

℄ LA/RW

STA. 51+63.43 (℄ RELOC. INDIANOLA)
STA. 39+80.14 (℄ HOMEWOOD AVE.)

℄ HOMEWOOD AVE. - 40' N 34°-40'-46"W

CENTERLINE SURVEY
CURVE N°1 DATA
P.I. STA. 694+62.64

Δ = 71°25'-13" LT.	CH_c = 3,484.06'
L_s = 200'	E_c = 639.03'
D_c = 1°50'00"	L.T. = 133.34'
R = 3,125.22'	S.T. = 66.67'
θ_s = 1°50'00"	L.C. = 199.98'
Δ_c = 67°45'13"	T_s = 2,346.92'
L_c = 3,695.65'	E_s = 724.32'
T_c = 2,098.23'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA. 672+49.06
2 P.I. STA. 710+78.04
Δ = 1°50'00" LT.
R = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE R.T.
301 - WL	8,475 S.F.	—	8,475 S.F.	—	8,475 S.F.	—	—
302 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
303 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
304 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
305 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
306 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
307 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
308 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
309 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
310 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
311 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
321 - WL	2,325 S.F.	—	2,325 S.F.	—	2,325 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE R.T.
322 - WL	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	—	—
324 - WL	13,600 S.F.	1,600 S.F.	13,600 S.F.	1,600 S.F.	12,000 S.F.	—	—
325 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
326 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
327 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
328 - WL	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	—	—
330 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—

SCALE
0 — 20 — 40 — 60 — 80 — 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W - ENGR. & CONSTR.
JAN 27 1969
Date ____ Logged ____ Bill Sk. ____

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

612
656

60
104

MATCH SHEET NO. 62

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

STA 708+79.53
STA 42+04.00

STA 50+05.04
STA 41+86.93

N 48°-14'-46" E

STA 42+41.96

MATCH SHEET NO. 67 & 69

ALL PARCELS THIS SHEET I-FUNDS

MATCH SHEET NO. 58

N 34°-38'-36" W

TAYLORAT AVE. 40'

℄ SURVEY I-680

℄ HOMEWOOD AVE. 40'

℄ CAMPBELL ST. N 22°-22'-07" E

N 46°-25'-57" W

N 34°-40'-46" W

CURVE NO 12

CURVE NO 1

MONUMENT ASSEMBLY

RAMP "X"

ROCK CUT CONST. LIMITS

EXIST R/W

EXIST. R/W 50'

EXIST. R/W 40'

EXIST. R/W 45'

EXIST. R/W 30'

EXIST. R/W 60'

EXIST. R/W 66'

EXIST. R/W 80'

EXIST. R/W 120'

EXIST. R/W 150'

EXIST. R/W 200'

EXIST. R/W 300'

EXIST. R/W 400'

EXIST. R/W 500'

EXIST. R/W 600'

EXIST. R/W 700'

EXIST. R/W 800'

EXIST. R/W 900'

EXIST. R/W 1000'

EXIST. R/W 1100'

EXIST. R/W 1200'

EXIST. R/W 1300'

EXIST. R/W 1400'

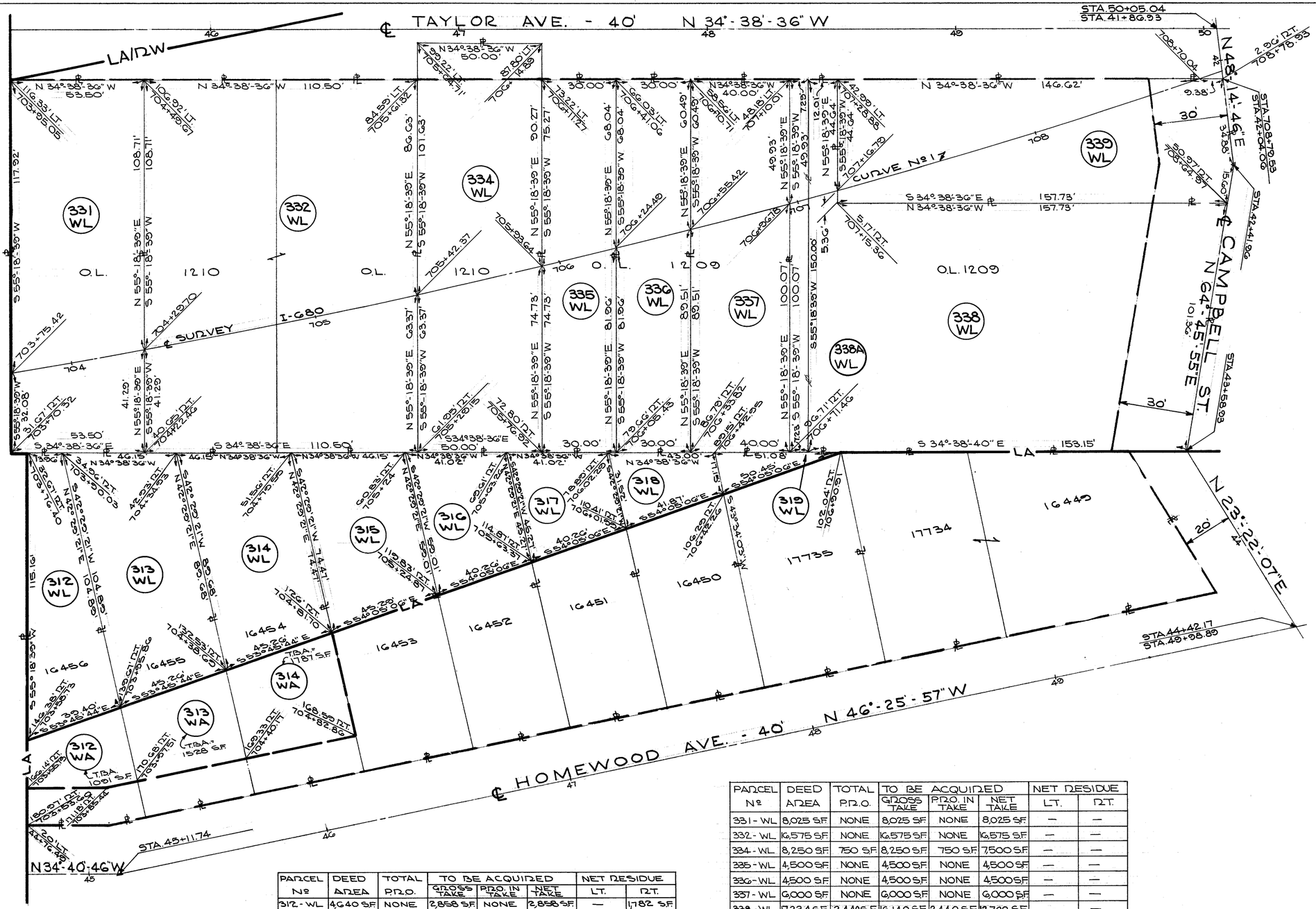
EXIST. R/W

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

613
656

61
104



CENTERLINE SURVEY
CURVE No 1 DATA
P.I. STA 694+62.64

Δ = 71° 25' 13" LT.	P = 0.53'
Ls = 200'	K = 100° 00'
Dc = 1° 50' 00"	Xc = 199.98'
R = 3,125.22'	Yc = 2.13'
Θs = 1° 50' 00"	L.T. = 133.34'
Δc = 67° 45' 13"	S.T. = 66.67'
Lc = 3,695.65'	L.C. = 199.99'
Tc = 2,098.23'	Ts = 2,346.92'
CHc = 3,484.06'	Es = 724.32'
Es = 639.03'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1 P.I. STA 672+49.06
2 P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
331-WL	8,025 S.F.	NONE	8,025 S.F.	NONE	8,025 S.F.	—	—
332-WL	16,575 S.F.	NONE	16,575 S.F.	NONE	16,575 S.F.	—	—
334-WL	8,250 S.F.	750 S.F.	8,250 S.F.	750 S.F.	7,500 S.F.	—	—
335-WL	4,500 S.F.	NONE	4,500 S.F.	NONE	4,500 S.F.	—	—
336-WL	4,500 S.F.	NONE	4,500 S.F.	NONE	4,500 S.F.	—	—
337-WL	6,000 S.F.	NONE	6,000 S.F.	NONE	6,000 S.F.	—	—
338-WL	17,234 S.F.	2,440 S.F.	16,140 S.F.	2,440 S.F.	13,700 S.F.	—	—
338A-WL			1,094 S.F.	—	1,094 S.F.		
339-WL	7,808 S.F.	1,500 S.F.	7,800 S.F.	1,500 S.F.	6,308 S.F.	—	—

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
312-WL	4,640 S.F.	NONE	2,858 S.F.	NONE	2,858 S.F.	—	1,782 S.F.
313-WL	6,580 S.F.	NONE	4,377 S.F.	NONE	4,377 S.F.	—	2,203 S.F.
314-WL	6,155 S.F.	NONE	3,693 S.F.	NONE	3,693 S.F.	—	2,462 S.F.
315-WL	5,731 S.F.	NONE	3,003 S.F.	NONE	3,003 S.F.	—	2,728 S.F.
316-WL	4,738 S.F.	NONE	2,085 S.F.	NONE	2,085 S.F.	—	2,653 S.F.
317-WL	4,402 S.F.	NONE	1,535 S.F.	NONE	1,535 S.F.	—	2,867 S.F.
318-WL	4,166 S.F.	NONE	1,017 S.F.	NONE	1,017 S.F.	—	3,149 S.F.
319-WL	4,594 S.F.	NONE	429 S.F.	NONE	429 S.F.	—	4,165 S.F.

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
	ADDED R/S FOR 338-A WL		5-6-70

R/W SUPPLEMENTAL SHEET

JAN 27 1969
LOGGED

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

614
656

62
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

PARCEL No	DEED AREA	TOTAL P.Q.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.B.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
353-T	17,812 S.F.	NONE	220 S.F.	——	220 S.F.	——	17,812 S.F.
354-T	4,822 S.F.	NONE	127 S.F.	——	127 S.F.	4,822 S.F.	——

ALL PARCELS THIS SHEET
I-FUNDS

NOTE: SEE SUPPLEMENTAL SHT. No 65 FOR PARCEL DIMENSIONS & BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

REV	DATE	DESCRIPTION	COMPLETION DATE --
1		Added PR, 346 PR	
2	7-25-69	Changed All Names Previously Revised on Earlier Sheets.	

SCALE 0 20 40 60 80 100

State Highway Dept. Div. 4
R/W Engr. & Admin Sect
JAN 27 1969
LOGGED
CHKD. BY

MATCH SHEET NO. 60

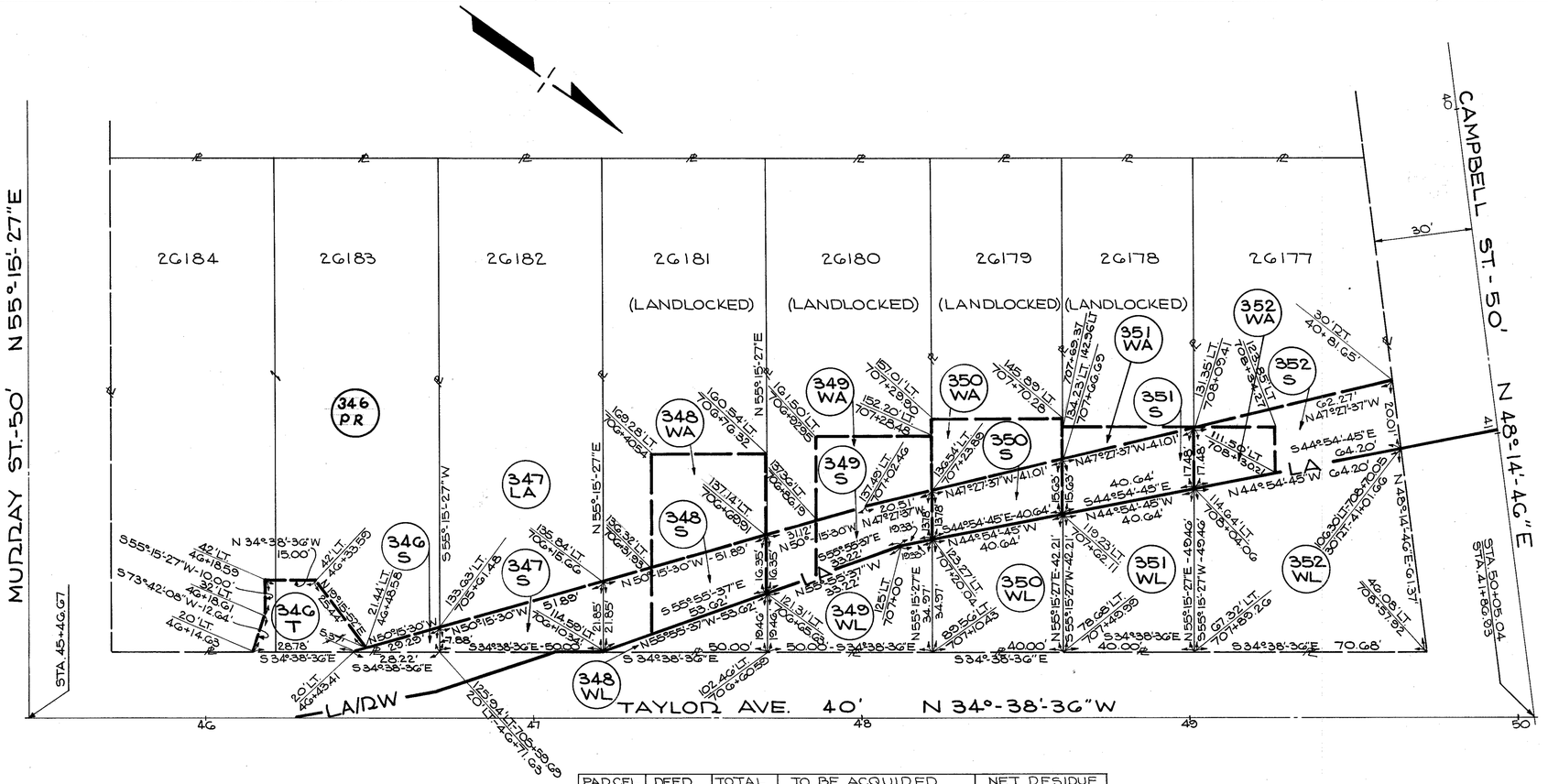
R/W SHEET NO. 62 OF 104

FED RD.	STATE	PROJECT	
2	OHIO	I-680-9(G)	

615
656

63
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	R.T.
346 - S	15,000 S.F.	—	1115 S.F.	—	1115 S.F.	15,000 S.F.	—
346 - T			526 S.F.	—	526 S.F.		
347 - LA	7,500 S.F.	—	NONE	—	NONE	7,500 S.F.	—
347 - S			743 S.F.	—	743 S.F.		
348 - WL	7,500 S.F.	—	487 S.F.	—	487 S.F.	7013 S.F.(L)	—
348 - S			955 S.F.	—	955 S.F.		
349 - WL	7,500 S.F.	—	1,422 S.F.	—	1,422 S.F.	6,078 S.F.(L)	—
349 - S			708 S.F.	—	708 S.F.		
350 - WL	6,000 S.F.	—	1,544 S.F.	—	1,544 S.F.	4,456 S.F.(L)	—
350 - S			588 S.F.	—	588 S.F.		
351 - WL	6,000 S.F.	—	1,833 S.F.	—	1,833 S.F.	4,167 S.F.(L)	—
351 - S			622 S.F.	—	622 S.F.		
352 - WL	9,218 S.F.	—	3,715 S.F.	—	3,715 S.F.	5,503 S.F.	—
352 - S			1,172 S.F.	—	1,172 S.F.		
346 - P.R.	15,000 S.F.	—	—	—	—	15000 S.F.	

State Highway Dept. D
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
Cards Will Go

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
1	Added Pcl 346 PR.		

R/W SUPPLEMENTAL SHEET

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

616
656

64
104

N89°50'38"W EXIST R/W

DEWEY AVE. 50'

EXIST. R/W

8" TWIN CHERRY

9' SLAG DR.

BURNETT HEIGHTS ALLOTMENT P.B. 11 PG. 74

DOREL REALTY COMPANY, A PARTNERSHIP

6" MAPLE
10" CHERRY
6" OAK
6" OAK

WOODS

26155

CHESTER TORELLO

26156

10" MAPLE

THE INLAND INVESTMEST COMPANY, A PARTNERSHIP

26157

P.C. STA. 37+75.17

SEE DETAIL 'A'

401 T

401 WD

R/W

S89°-31'-04"W 5.00'

CONST LIMITS

EXIST. R/W

6" L.P. GAS

RELOC. SHADY RUN RDY.

STA. 38+78.76 (RELOC. SHADY RUN RDY.)
STA. 10+00 (POWERSDALE)

N05°-28'-56"W

203 AT

N89°-31'-04"E 5.00'

STL. GUARD RAIL

46' SLAG WALK

8" WATER

15" SEWER

30.00'

30' LT 11+05

25' LT 11+38

6" L.P. GAS

UNION ST. 40'

N44°-10'-31"E

8" WATER

21" SEWER

SLAG DR.

SIGN

EXIST. R/W

4" L.P. GAS

1" PINE
2" BRK. WK.
12' SLAG DR.
24" CHERRY
2" TILE WALL
BUSH
12" OAK
10" OAK
12" CONC. WK.
WALL
BRICK PATIO
#851 2½ STY. FR.
4" PEACH
2" PEACH
BUSH

MARY K. BRINZA
aka. MARY BRINZA
OLGA GURA
HELEN MAY
12" MAPLE
BUSH

24831

24821

24822

WOODS

SUBDIVISION OF OUT-LOT Nº 1 IN BURNETT HEIGHTS ALLOMENT P.B. 15 PG. 81

24832

1½ STY FR. #971

1½ STY FR. #977

1½ STY FR. #979

8½' CONC. DR.

8½' ASPH. DR.

8' CONC. DR.

3' CONC.

4' CONC. SIDEWALK

8" WATER

15" SEWER

8" GAS

15" OAK

4" L.P. GAS

THE BELMONT BUILDERS, INC.

38.66'

STAG

CONST. LIMITS

EXIST. R/W

24833

1½ STY FR. #985

10' SLAG DR.

CONST. LIMITS

8" SEWER

24834

DOREL REALTY COMPANY

R/W LINE CURVE DATA
CH. BRG. N44° 40' 51"E
CH.=17.15' R=12.10'
ARC.=19.07'

401 T

2.40 LT 38+40.00

2.07 LT 38+43.62

30 LT 10+26.84

N44°-40'-51"E 17.15'

30 LT 10+43.62

N0°-28'-56"W 40.00'
N89°-50'-38"E 5.00'
S0°-28'-56"E 37.64'

25 LT 10+68.81

12.15'

12.15'

R/W

401 WD

DETAIL 'A'

POWERSDALE AVE. 50'

6" L.P. GAS

EXIST. R/W

8" WATER

6' GUARD RAIL

2.8'

CONST. LIMITS

℄ CONST. L.T.
STA. 2+88.11
2+00

N 29°-09'-26"E 8.00'

℄ R/W N 29°-09'-26"E

3" L.P. GAS

36

STA. 36+21.05

MON. FND. USED

N47°-59'-20"E

48" COMB. SEWER

C.B.

M.H.

15" MAPLE

12" MAPLE

12" MAPLE

12" MAPLE

10' CONC. DR.

12" MAPLE

12" MAPLE

12" MAPLE

12" MAPLE

8' ASPH. DR.

6" MULBERRY

5' ASPH. DR.

3' CONC. WALK

EXIST. R/W

N 89°-28'-56"E

S 29°-09'-26"W

R/W 102.55

24827

WOODS

34.49 P.T. 39+46.40

R/W

S 89°-31'-04"W 122.78'

24826

HAROLD D. LEACH & A.E. WESTER

℄ RELOC. SHADY RUN ROAD
CURVE Nº 1 DATA
P.I. STA. 39+46.25
Δ=38°15'00" LT.
Dc=10°00'00"
R=572.96'
T=171.08'
L=332.80'
CH=327.86'

109.22' P.T. 38+85.86

24825

80' P.T. 40+50

S71°-27'-08"W 48.42'

80' P.T. 40+91.36

24824

15" MAPLE

109.22'

STONE WALL

S 18°-35'-39"W

EXIST. R/W

N19°-35'-39"E

STA. 40+98.86

48" COMB. SEWER

EXIST. R/W

CONST. LIMITS

98.70' P.T. 41+50

CB

356 S

356 WD

℄ R/W

M.H.

STA. 38+19.56

HEDGE

STONE WALL

1½ STY FR. #915

24.8'

253.00 PAVD

356 T

356 WA

356 AWD

10" STUMP

40" ASPEN

358 S

135

S 4.9°

The Midwest Investment Company, a parnership

2½ STY FR. #971

JULIA PODOLSKY, OWNER:
LOIS MOFFO, L.C. HOLDER

STONE WALL

WOODS

HUNTER ST. 50'

ASPH. PAV'T.

N 55°-51'-14"E

STA. 38+48.43

MON. FND. USED

℄ SHADY RUN RD. 40'

8" WATER

4" L.P. GAS

EXIST. R/W

N62°-14'-09"E

120'

38

37

S89°-50'-38"W EXIST R/W

R/W

S 89°-31'-04"E 26.18'

24850

S 5°-51'-38"E 151.11'

24825

N 74°-49'-57"E 64.60'

ARC-171.83'

CH. BRG.-N65°-34'-38"E CH-171.13' RAD.-547.96' ARC-171.85'

N 64°-40'-38"E 43.80'

N 50°-41'-37"E

N 45°-01'-21"E - 55.04'

CONST. LIMITS

S 56°-35'-38"W 143.21'

PROP. 5' SIDEWALK

N 56°-35'-38"E 143.21'

R/W

℄ RELOC. SHADY RUN ROAD

N 56°-35'-38"E

24823

42+00

S 37°-22'-14"W-72.80'

N 57°-22'-14"E

24822

398 T

398

111.46'

CH. BRG.-S 52°-51'-38"E CH.-220.08' ARC-221.18'

24828

12" OAK

CURVE Nº 1

40+00

P.T. 41+07.67

P.C. 41+00

82.47'

82.47'

30 LT 40+05.78

30 LT 40+50

40' LT 41+07.67

35 LT 42+00

CONSTRUCTION NO. 65

MATCH SHEET NO. 65

NOTE: SEE SUPPLEMENTAL SHT. Nº 66 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCEL 356

358-S

ALL PARCELS THIS SHEET
I-FUNDS

Changed Name Pcl. 358 12-23-69 Solomon

ADDED ~ Pcl. 356 (S), 358 (S) 12-12-69 Solomon
CHANGED NAME Pcl. 358 (S) TO 358 (T) 12-16-69

REV.	DATE	DESCRIPTION
1.	7-28-69	Changed All Names Previously Revised to Easter Seguss.
2.	10-17-69	Changed 348 WD to a Standard Highway Easement
		Changed Pcl 356 WA to 356 T-1. Changed Pcl 356 T to 356 WA. white 11-21-69

COMPLETION DATE —

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
203AT	10400 S.F.	—	150 S.F.	—	150 S.F.	10,400 S.F.	—
398	110066 S.F.	—	31,983 S.F.	—	31,983 S.F.	61,641 S.F.	15,439 S.F.
398-T			4,526 S.F.	—	4,526 S.F.		
				—			
401-WD	6500 S.F.	—	32 S.F.	—	32 S.F.	6468 S.F.	—
401-T			268 S.F.		268 S.F.		

ADDED PCL. 356 AWD 9-10-73
Changed Pcl 356 WD to a Standard Highway Easement.
Changed Pcl. 356 WA to 356 T-1. Changed Pcl 356 T to 356 WA. white 11-21-69

SCALE
0 20 40 60 80 100

R/W SHEET NO. 64 OF 104

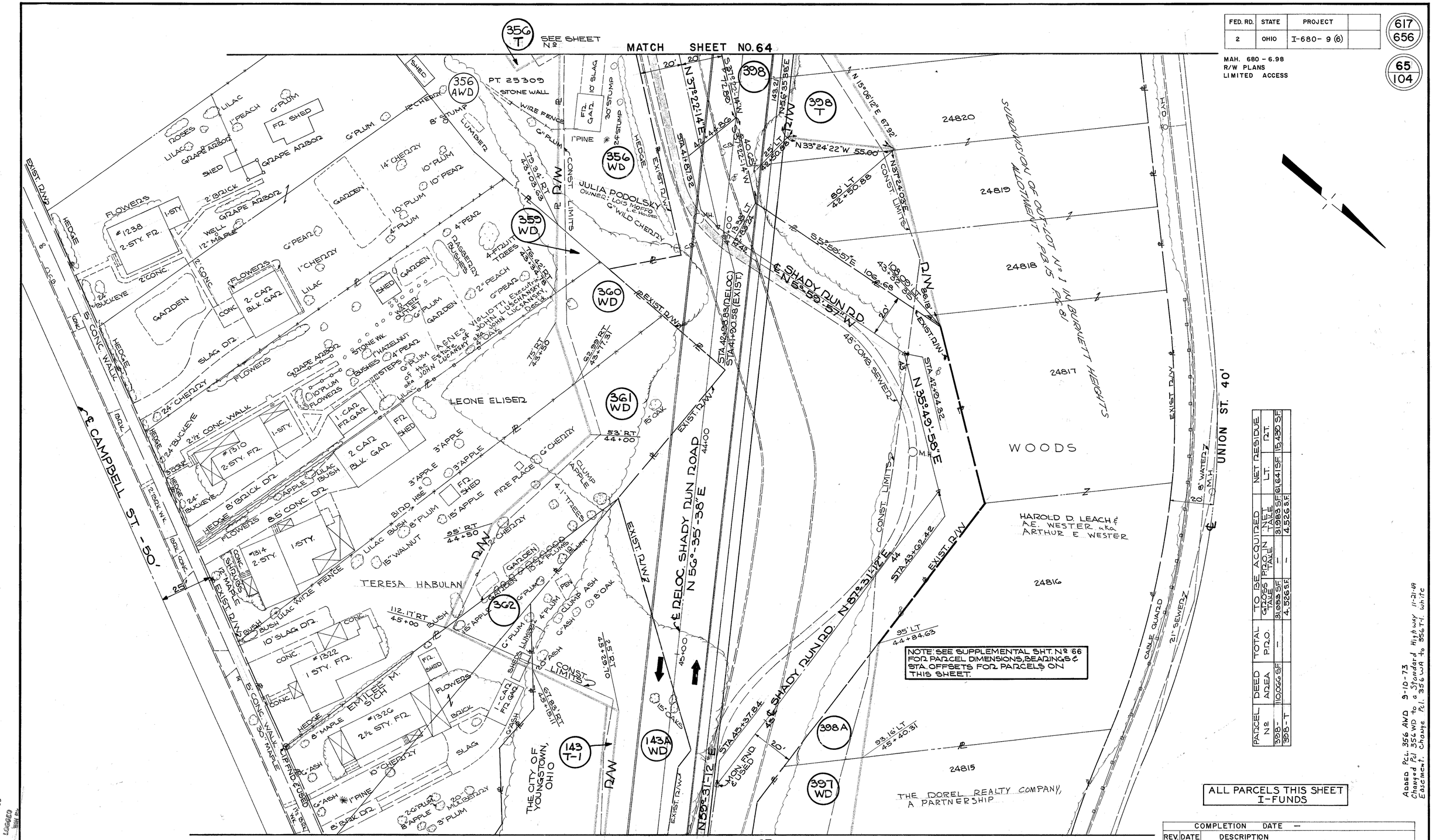
JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680- 9 (6)	

617
656

65
104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
398-	110,066 S.F.	-	31,983 S.F.	-	31,983 S.F.	61,641 S.F.	15,430 S.F.
398-T			4,526 S.F.	-	4,526 S.F.		

ALL PARCELS THIS SHEET
I-FUNDS

ADDED PCL. 356 AWD 9-10-73
Changed Pcl 356 WD to a Standard Highway 11-21-69
Easement. Change Pcl. 356 WA to 356 T-1. White

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	7-28-69	Changed All Names Previously Revised on Earlier Sepias.
2	8-5-69	Changed Pcl 362 WD to Standard Highway Easement M.K.M.
3.	10-17-69	Changed Pcls 398 WD & 398 AWD to Standard Highway Easement. White.

R/W SHEET NO. 65 OF 104

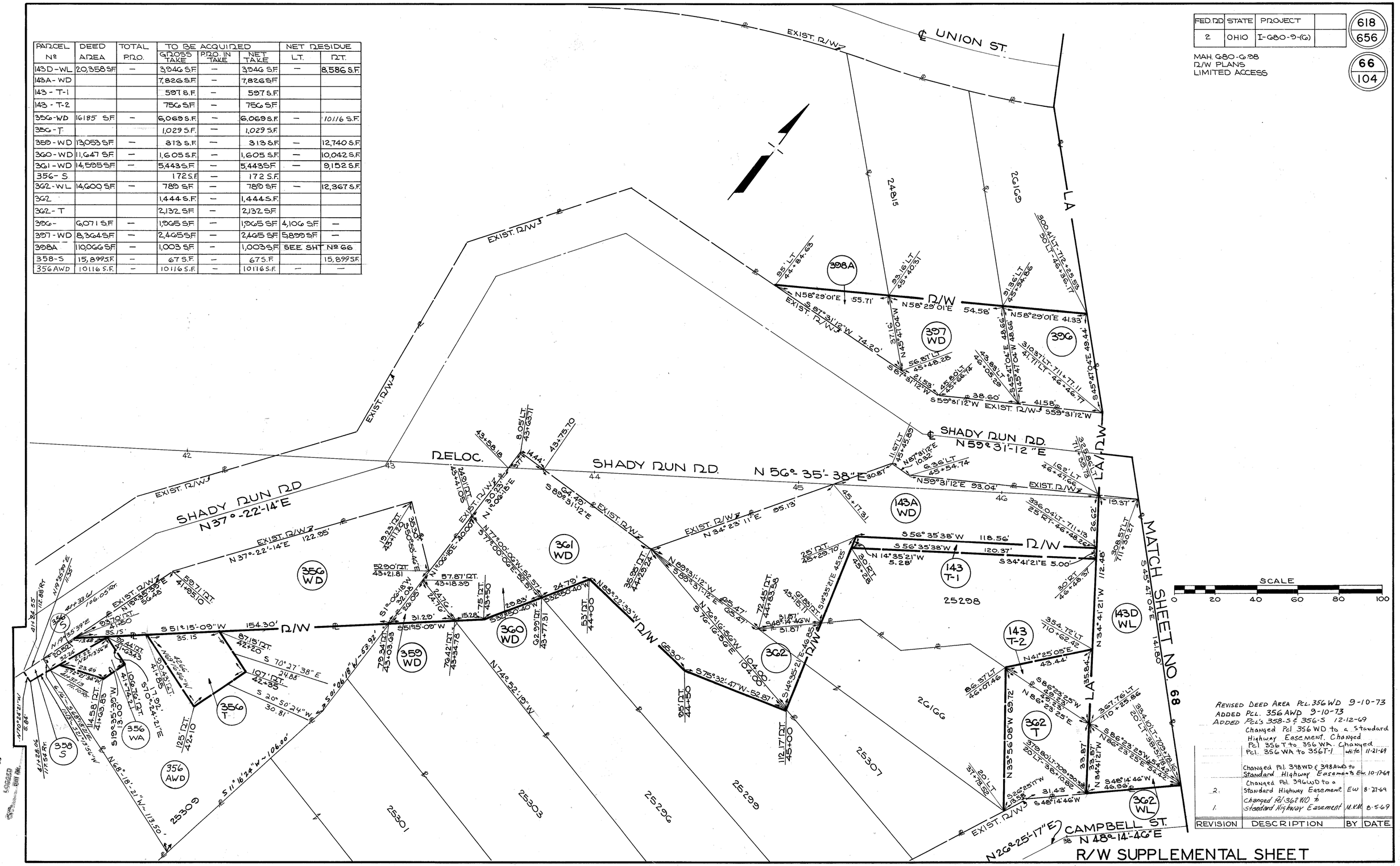
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9-(6)	

618
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

66
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
143D-WL	20,358 S.F.	—	3,946 S.F.	—	3,946 S.F.	—	8,586 S.F.
143A-WD			7,826 S.F.	—	7,826 S.F.		
143-T-1			597 S.F.	—	597 S.F.		
143-T-2			756 S.F.	—	756 S.F.		
356-WD	16185 S.F.	—	6,069 S.F.	—	6,069 S.F.	—	10116 S.F.
356-T			1,029 S.F.	—	1,029 S.F.		
359-WD	13,053 S.F.	—	313 S.F.	—	313 S.F.	—	12,740 S.F.
360-WD	11,647 S.F.	—	1,605 S.F.	—	1,605 S.F.	—	10,042 S.F.
361-WD	14,595 S.F.	—	5,443 S.F.	—	5,443 S.F.	—	9,152 S.F.
356-S			172 S.F.	—	172 S.F.		
362-WL	14,600 S.F.	—	789 S.F.	—	789 S.F.	—	12,367 S.F.
362			1,444 S.F.	—	1,444 S.F.		
362-T			2,132 S.F.	—	2,132 S.F.		
396-	6,071 S.F.	—	1,965 S.F.	—	1,965 S.F.	4,106 S.F.	—
397-WD	8,364 S.F.	—	2,465 S.F.	—	2,465 S.F.	5,899 S.F.	—
398A	110,066 S.F.	—	1,003 S.F.	—	1,003 S.F.	SEE SHT Nº 66	
358-S	15,899 S.F.	—	67 S.F.	—	67 S.F.		15,899 S.F.
356AWD	10116 S.F.	—	10116 S.F.	—	10116 S.F.	—	—



REVISED DEED AREA PCL. 356 WD 9-10-73
ADDED PCL. 356 AWD 9-10-73
ADDED PCL's 358-S & 356-S 12-12-69

REVISION	DESCRIPTION	BY	DATE
	Changed Pcl 356 WD to a Standard Highway Easement. Changed Pcl 356 T to 356 WA. Changed Pcl. 356 WA to 356T-1	White	11-21-69
	Changed Pcl. 398WD & 398AWD to Standard Highway Easements	EW	10-17-69
2.	Changed Pcl. 396WD to a Standard Highway Easement.	EW	8-27-69
1.	Changed Pcl 362 WD to Standard Highway Easement	M.K.M.	8-5-69

R/W SUPPLEMENTAL SHEET

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

619/656

67/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 71

MATCH SHEET NO. 72

MATCH SHEET NO. 65

MATCH SHEET NO. 69

MATCH SHEET NO. 62

MATCH SHEET NO. 60

STA 712+54.63
STA 50+00

℄ UNION ST. 40'
N 48°-51'-50"E

℄ UNION ST. 50'
N 65°-04'-47"E

℄ SHADY RUN RD. - 40'
℄ RELOC. SHADY RUN ROAD
N 48°-21'-56"E

℄ RELOC. SHADY RUN ROAD
N 45°-04'-42"E

℄ CAMPBELL ST. - 50'
N 48°-14'-46"E

N 59°-31'-12"E

N 56°-35'-38"E

N 64°-45'-51"E

N 61°-04'-42"E

N 78°-06'-00"E

RAMP "E"

I-680 SURVEY

CONST. LIMITS

EXIST. R/W

R/W FENCE

LEON DUNN / SANFORD BARTH, A PARTNERSHIP — 26169

THE DORIEL REALTY COMPANY, A PARTNERSHIP — 26168

WOODS — 26167

WALTER W SOICH & BETTY JANE SOICH — 17172

JOSEPH C. PAVLICK & RAE C. PAVLICK — 17171

JOE A. KOLMAN — 17170

BURNETT HEIGHTS ALLOTMENT P.B. 11 PG. 74

THOMAS ADAMIAK / VICTORIA ADAMIAK — 17169

JAMES CATO / LULA MAE CATO — 17168

WOODS — STANISLAW DOMANSKI / SOFIA DOMANSKI — 17167

WOODS — 17166

MR. HENRY L. BURNETT'S PLAT OF LOTS AT LANSINGVILLE PB 2 PG. 35

5956 — 5955 — 5957 — 5958

WALTER G. McKENRICK, Jr.

ELWYN V. JENKINS

IVAN DUBIC / JENNIE DUBIC — 2-STY. FR. #611

2-STY. FR. #617

2-STY. FR. #629

105' ASPH. DR.

10' BRICK DR.

15' SLAG DR.

5' BRICK DR.

FR. GAR. #727

2-STY. FR. #725

1-STY. FR. #723

1-STY. BRICK #715

1-STY. FR. #707

2½-STY. FR. #629

FR. GAR

CONC. WELL ○

WOOD PILE

WIRE FENCE

BR. WALL

HEDGE

BUSH

SWING

10'-1" FRUIT TREES

3 STA EQUATION
1ST STA 712+13.51 (AHEAD)
STA 712+13.51 (BACK)
2ND STA 712+13.51 (AHEAD)

P.T. STA 711+44.70 (R/W ONLY)

P.C. STA 710+11.37
P.C.C. STA 712+11.37

℄ RELOC. SHADY RUN ROAD
CURVE Nº2 DATA
P.I. STA 47+60.80
Δ = 11° 30' 56" LT
D = 6° 00' 00"
R = 954.93'
T = 96.29'
L = 191.93'
CH = 191.60'

℄ RELOC. SHADY RUN ROAD
CURVE Nº3 DATA
P.I. STA 50+67.10
Δ = 16° 00' 00" RT
D = 12° 00' 00"
R = 477.46'
T = 67.10'
L = 133.33'
CH = 132.90'

NOTE: SEE SUPPLEMENTAL SHT. Nº 66 & 68 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

THE CITY OF YOUNGSTOWN, OHIO — HEAVY WOODS — 25298

KADIMAK REALTY A PARTNERSHIP — 26176

LEOLA ROGERS — 26175

DOROTHY A. MERDICH — 26174

JAMES ROGERS JR. — 26173

LEON DUNN — 26172

SAMUEL H. COPPERMAN — 26171

JOSEPH RENIOL — 26170

RHETA F. WEIMER — 5959

ADDITION TO HENRY L. BURNETT'S PLAT OF LOTS AT LANSINGVILLE PB 2 PG. 123

ANDREW ROSENFELD & JEAN WEISER — 5960

JOSEPH WISEMAN — 5961

W.J. BURKE — 5962

EMILEE M. SICH

FLOWERS

MON. FND. N 48°21'-56"E 48 USED

MON. FND. & USED

STA 47+38.07

STA 48+00

STA 49+00

STA 50+00

STA 51+00

STA 710+46.03
STA 49+62.21

STA 710+43.46 (I-680)
STA 49+81.47 (RELOC.)

75°34'59" (LOC. TANG.)

78°48'20" (LOC. TANG.)

STA 708+79.53
STA 42+04.06

CURVE Nº1 — CURVE Nº2 — CURVE Nº3

CENTERLINE SURVEY
CURVE Nº1 DATA
P.I. STA 694+62.64

Δ = 7° 25' 13" LT	Δ_s = 6° 45' 13"	L.T. = 133.34'	
L_s = 200.00'	L_c = 3695.65'	S.T. = 66.67'	
D_c = 1° 50' 00"	T_c = 2098.23'	L.C. = 199.99'	
R = 3125.22'	CH_c = 3484.06'	T_s = 2346.92'	
Θ_s = 1° 50' 00"	E_c = 630.03'	E_s = 724.32'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 672+49.06	
2 P.I. STA 710+78.04	
Δ = 1° 50' 00" LT.	R = 4,166.82'
T = 66.67'	L = 133.33'
E = 0.58'	

SCALE 0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	2-28-69	Changed All Names Previously Revised on Earlier Sepias.
2	5-27-69	Changed 346WD to a Standard Highway Easement. E.W.

ALL PARCELS THIS SHEET I-FUNDS

R/W SHEET NO. 67 OF 104

OHIO DEPARTMENT OF HIGHWAYS
R/W ENGR. & AGENT SECT.
JAN 27 1969
LOGGED

FED. RD	STATE	PROJECT	
2	OHIO	I-680-9(6)	

620 / 656

68 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

UNION ST. - 40'
N 48°51'-50" E

UNION ST. - 50'
N 65°-04'-47" E

EXIST. R/W

LA

MATCH SHEET NO. 70

MATCH SHEET NO. 69

SURVEY

I-680

PT. STA. 711+44.70 (R/W ONLY)

STA EQUATION
SY STA 712+11.37 (AHEAD)
STA 712+11.37 (BACK)

SHADY RUN RD.
N 59°-31'-12" E

PROP. SHADY RUN RD.
N 45°-04'-42" E

N 48°-21'-56" E

CAMPBELL ST. - 50'
N 48°-14'-46" E

N 64°-45'-55" E

N 61°04'-42" E

N 73°06'-00" E

PARCEL No.	DEED AREA	TOTAL TO BE ACQUIRED P.R.O.	NET RESIDUE LT.	NET RESIDUE R.T.
368-WD	3,444 S.F.	—	517 S.F.	—
368-SL		517 S.F.	—	—
389-WL	15,474 S.F.	—	646 S.F.	—
389-SL		646 S.F.	—	12,294 S.F.
389-WD				
389-T		772 S.F.	—	—
390-WL	14,422 S.F.	—	14,422 S.F.	—
391-WL	6,525 S.F.	—	6,525 S.F.	—
392-WL	13,120 S.F.	—	13,120 S.F.	—
393-WL	13,155 S.F.	—	13,155 S.F.	—
394-WL	5,600 S.F.	—	5,600 S.F.	—
395-WL	12,979 S.F.	—	12,979 S.F.	—
373-S	2,901 S.F.	—	385 S.F.	2,901

PARCEL No.	DEED AREA	TOTAL TO BE ACQUIRED P.R.O.	NET RESIDUE LT.	NET RESIDUE R.T.
364A-WL	6,820 S.F.	—	6,820 S.F.	—
365A-WL	3,149 S.F.	—	3,149 S.F.	—
365B-WL	3,150 S.F.	—	3,150 S.F.	—
366-WL	12,289 S.F.	—	12,289 S.F.	—
367A-WL	6,123 S.F.	—	6,123 S.F.	—
368-WL	5,750 S.F.	—	5750 S.F.	—
369-WL	5750 S.F.	—	5750 S.F.	—
510-WL	12,349 S.F.	—	12,349 S.F.	—
371-T	5,770 S.F.	—	2,308 S.F.	3,462 S.F.
371-S	3,770 S.F.	—	2,991 S.F.	779 S.F.
371-LA		—	NONE	—
373-T	2,901 S.F.	—	1038 S.F.	—

DEVISION	DESCRIPTION	BY	DATE
2	Changed Deed Area Pcl 373T	R.S.	12/12/69
1	ADDED PARCELS 371-S & 373-T	RRC	7/9/69

SCALE
0 20 40 60 80 100

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 6
Right of Way & Admin. Sec.
JAN 27 1969
Engineer
Signed
Title

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

621 / 656

69 / 104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 67

I.P. FND. & USED — EXIST. R/W — I.P. FND. & USED

5' CONC. SIDEWALK — 4" L.P. GAS

15" SEWER — M.H. — N 50° 33'-06" E — ℄ UNION ST. 50' — 15" SEWER

8" WATER

SIGN — C.B. — CONC. — O.F.H. — CONC. — ASPH. — CONC. — C.B.

5' CONC. SIDEWALK

2-STY. FR. #611 — 5' ASPH. DR. — 5952 — 5951 — 5950 — 5949 — EXIST. R/W — 5948 — 5947 — 5946 — 5944

8" OAK — 15' BR. — 12" MAPLE — 15" OAK — 18" OAK — 10' DIRT DR. — 2-STY. FR. #607 — 5954 — 5953 — 2-STY. FR. #527 — 2'-CONC. Z — 8' CONC. DR. — HEDGE FENCE — FR. GAR. — 32" OAK — 24" OAK — CONC. WALL — 10'5 ASPH. DR. — 2½ STY. FR. HSE. #517 — WADSWORTH FEED SQ. A CORPORATION — 1 STY. BR. BLDG. — CONC. WALL — 2 STY. BRICK BLDG. #1545 — CONC. — STEEL POST WIRE — 6" L.P. GAS — 12" WATER

MR HENRY L. BURNETT'S PLAT OF LOTS AT LANSINGVILLE
P.B. 2 P.G. 35
BERTHA SMITH

STEVE STANKOVICH & MARY STANKOVICH

HAROLD LUNAU & HAZEL LUNAU

THOMAS SOICH a.k.a. THOMAS E. SOICH — SHED

FLORIAN CHITAROVICH

HELEN Mc KAY — PIGEON COOPS — FLOWERS — STONE WALL — BUSH — 10' DIRT DR. — 8" TWIN MAPLE — BUSH

MIKE TEPSICK — 8" WALNUT — BLK. WALL

℄ CONST. LIMITS — 387 SL — 386 SL — 385 T — 384 T — 385 WD — 384 WD — 387 WD — 386 WD — 367C WD — 5945 — 380 T — 380 WD — 5971

WOODS — 3-STY. FR. & STUCCO #542 — BLOCK GAR. — TILE WALL — 25' LT 52+58.18 — 15" OAK — 25' LT 54+89.38 — 25' LT 54+26.28 — EXIST. R/W — 25' LT 55+24.85 — 15" MAPLE — GUY — D/W — 20' — 48" COMB. SEWER — 5' CONC. WALL — 1 STY. FR. — 2-STY. FR. BLDG. #1553 — 1 STY. FR. — 4" ASPH. DR. — 12' — 30" POPLAR — 24" POPLAR — 24" ELM — 24" POPLAR — 25' LT 57+44.50 — 15" OAK — SIGN — D/W — 20" POPLAR — 24" STONE

℄ RELOC. SHADY RUN ROAD
CURVE Nº 5

N 32° 30'-05" E — STA 54+17.49 (RELOC.) — STA 54+24.03 (EXIST.) — STA 55+24.59 — 55+00 — 56+00 — 57+00 — N 61° 47'-10" E

SHADY RUN ROAD 40'
CURVE Nº 4

N 40° 02'-10" E — 54+00 — 55+00 — 56+00 — 57+00 — 58+00 — M.H.

℄ 48" COMB. SEWER — 58+00 — 5' CONC. STEPS — 5068 — 5' CONC. WALK — 5' CB. — SIGN — GUY — 6" L.P. GAS

2-STY. FR. #532 — 5067 — HELEN LUCAS — 3-STY. FR. #1624 — 5069 — THE FOREMOST INVESTMENT CO. A PARTNERSHIP — 5070 — 15" ASH DR. — 30" POPLAR — 24" POPLAR — 24" ELM — 24" MAPLE — 24" ELM — 2-8" POPLAR — MILTON A. ROEMISCH TRUSTEE — 24" MAPLE — 6" ELM — 24" ELM — 24" MAPLE — 24" ELM — 24" MAPLE — 24" ELM — 24" MAPLE

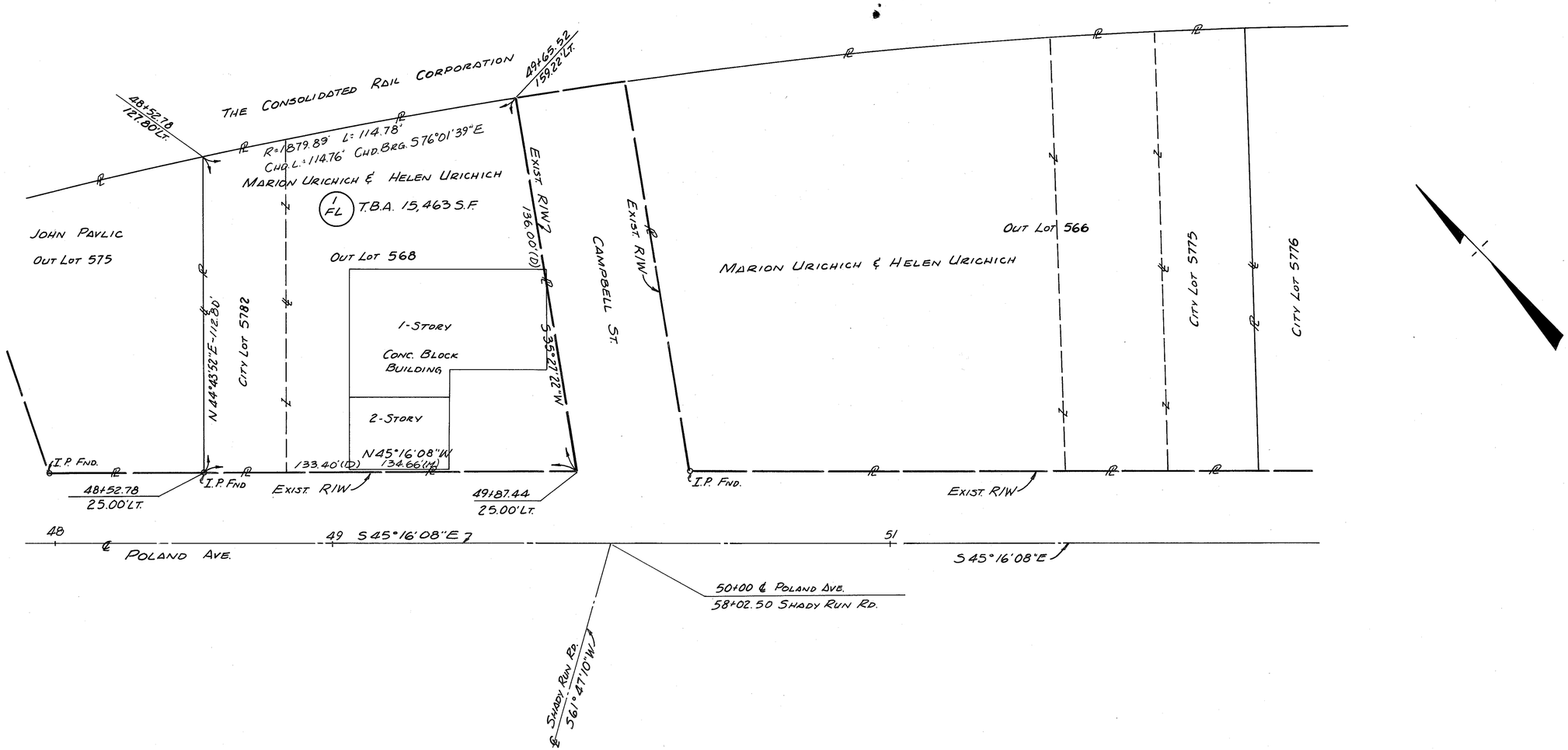
FHWA REGION	STATE	PROJECT NO.	FUNDS
5	OHIO	I-680-9(6)	

621A / 656

MAH-680-6.98
R/W PLANS

694 / 104

CITY OF YOUNGSTOWN
MAHONING COUNTY



SCALE
0 20 40 60 80

REV.	DATE	DESCRIPTION
	3-5-82	ADDED PLL 1-FL T. PLAN

R/W SHEET NO. 69-A OF 104

FED. R.D.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

622 / 656

70 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

UNION ST. - 50' N 50°-33'-06" E

EXIST. R/W

MATCH SHEET NO. 68

N 73°-06'-00" E

SHADY RUN RD. - 40'

N 40°-02'-10" E

EXIST. R/W

R/W

RELOC. SHADY RUN RD.

N 32°-30'-05" E

N 61°-47'-10" E

POLAND AVE. - 50'

S 45°-16'-08" E

CAMPBELL ST. - 40'

N 39°-38'-32" E

STA. 58+02.50 (℄ SHADY RUN)
STA. 50+00 (℄ POLAND)

STA. 50+00 (℄ CAMPBELL)
STA. 50+05.70 (℄ POLAND)

5954 5953 5952 5951 5950 5949 5948 5947 5946 5944 5945 5971 5970 5969 5968 5967 5966 5965 5964 5963

387 SL 386 SL 385 T 385 WD 384 T 384 WD 376 WD 367C WD 380 T 380 WD 375 WD 374 WD 374 T 244 WD 376 WA 367 T-2 367 T-1

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
244 -WD	3,645 S.F.	—	3,645 S.F.	—	3,645 S.F.	—	—
				—			
367C -WD	3,486 S.F.	—	1,330 S.F.	—	1,330 S.F.	—	2,156 S.F.
367 T-2			587 S.F.	—	587 S.F.		
367 T-1	8,269 S.F.	—	2,876 S.F.	—	2,876 S.F.	—	8,269 S.F.
374 - WD	2,826 S.F.	—	80 S.F.	—	80 S.F.	—	2,746 S.F.
374 - T			152 S.F.		152 S.F.		
375-WD	2,992 S.F.	—	404 S.F.	—	404 S.F.	—	2,588 S.F.
376-WD	3,308 S.F.	—	864 S.F.	—	864 S.F.	—	2,444 S.F.
380-WD	9,110 S.F.	—	167 S.F.	—	167 S.F.	8,943 S.F.	—
380 - T			1,307 S.F.	—	1,307 S.F.		
384-WD	9,431 S.F.	—	78 S.F.	—	78 S.F.	9,353 S.F.	—
384 - T			2,156 S.F.	—	2,156 S.F.		
385-WD	13,277 S.F.	—	1,210 S.F.	—	1,210 S.F.	12,067 S.F.	—
385 - T			4,820 S.F.	—	4,820 S.F.		
386-WD	9,154 S.F.	—	1,475 S.F.	—	1,475 S.F.	6,316 S.F.	—
386-SL			1,363 S.F.		1,363 S.F.		
387-WD	9,838 S.F.	—	2,042 S.F.	—	2,042 S.F.	4,848 S.F.	—
387-SL			2948 S.F.	—	2948 S.F.		

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
3	ADDED 'WD' SUFFIX TO PCL 375	SMITH	7-23-70
2.	CHANGED ALL NAMES. PREVIOUSLY REVISED ON EARLIER SEPIAS.	MKM	7-28-69
1.	CHANGED ALL 'WD' P/L's TO STANDARD HIGHWAY EASEMENTS. PREVIOUSLY REVISED ON EARLIER SEPIAS.	MKM	7-28-69

R/W SUPPLEMENTAL SHEET

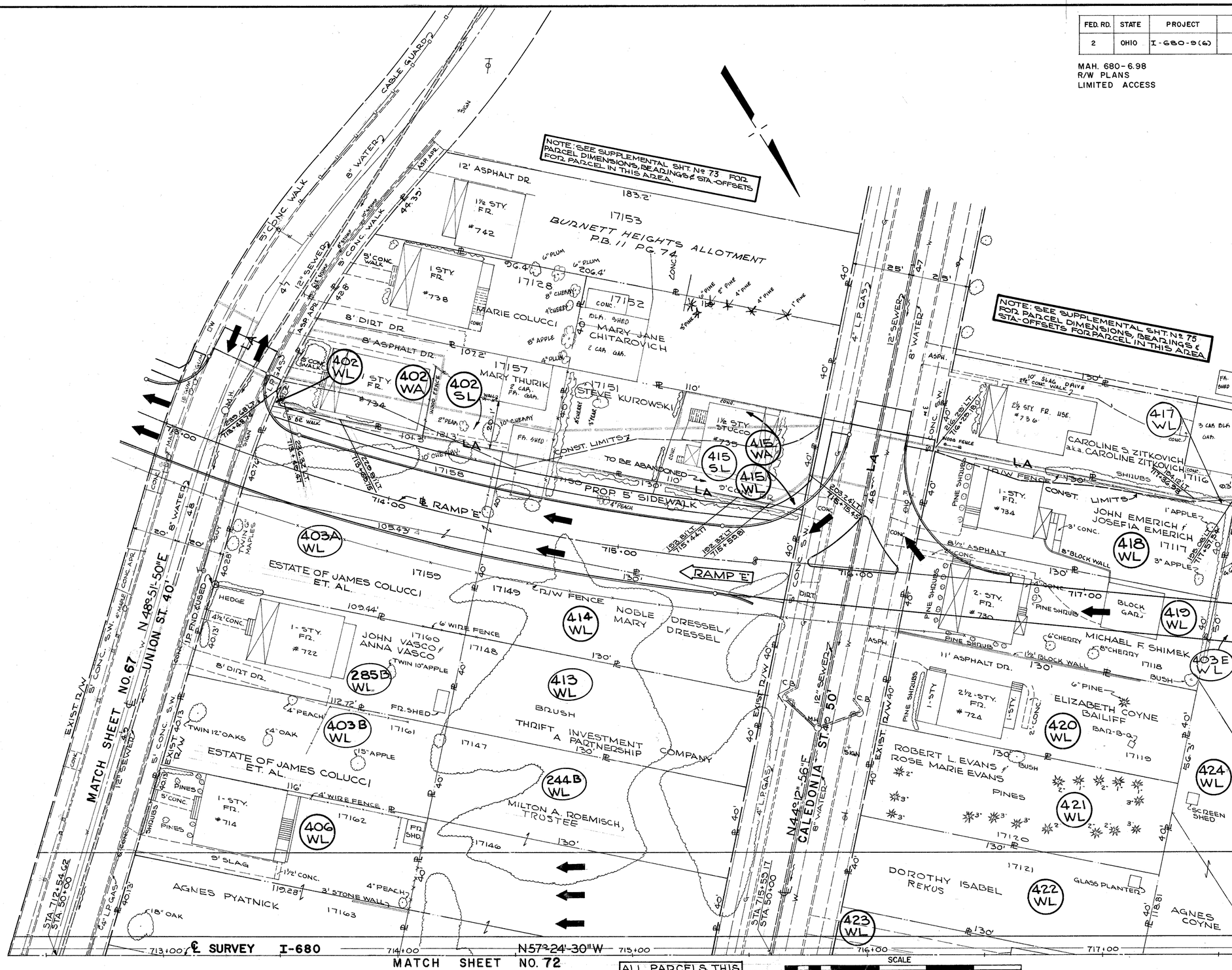
State Highway Dept. Div. 4
R/W. ENGR. & ADMIN. SECT.
JAN 27 1969
1596663
MICRO FILM

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

623
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

71
104



ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

R/W SHEET NO. 71 OF 104

REV.	DATE	DESCRIPTION	COMPLETION DATE
1	7-28-69	Changed All Names Previously Revised on Earlier Series.	

NOTE: SEE SUPPLEMENTAL SHT. No 73875 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

FED.RD.	STATE	PROJECT	
8	OHIO	I-680-9(6)	

624 / 656

72 / 104

MAH. 680-6/98 AGNES COYNE
R/W PLANS
LIMITED ACCESS

℄ SURVEY I-680 MATCH SHEET NO. 71 N57°-24'-30"W

MATCH SHEET NO 67

N 48°-51'-50"E

UNION ST. 50'

N65°04'-47"E

MABEL AVE. 50'

N45°-47'-04"W

CALEDONIA ST. 50'

N44°-12'-56"E

N89°-31'-04"E

MATCH SHEET NO. 77

LA/RW

EXIST. R/W

CONSTRUCTION LIMITS

406 WL

407 WL

244B WL

423 WL

424 WL

403C WL

403D WL

17163 — 5' CONC. — 1-STY. FR. #706 — 15" CHERRY — 122.56' — 5-1" PINES — 24" CATALPA — 1" CONC. WALL — 4" L.P. GAS — 8" SEWER — 40.13' EXIST R/W — 40' R

BURNETT HEIGHTS ALLOTMENT PB. 11 PG. 74

MILTON A. ROEMISCH, TRUSTEE

17145 — 130' R — 17164 — 10' SLAG DR. — 125.84' — FR. GAR. — BUSH — MARY APPENZELLER — 12" APPLE — 10" APPLE — 17165 — I.P. FND. & USED — HEDGE ROW — 129.12'

TREES & BRUSH — 17144 — 17143 — 130' R — 40' R — ESTATE OF JAMES COLUCCI ET. AL.

12" APPLE — R/W FENCE — I.P. FND. & USED — 40' R EXIST. — 4" L.P. GAS — 40' R EXIST. R/W — 8" WATER — 12" SEWER — 5' CONC. — 65' EXIST. R/W — 40'

STA. 712+54.32 — STA. 50+30.00 — STA. 715+55.17 — STA. 51+30.00

2½ STY. FR. #712 — BLK. GAR. — 3½' ASPH. — J GILA CERA ET. AL. 17122 — HEDGE — 1" CHERRY — 4" CHERRY — 17142 — 130' — 112' — BRUSH — 4" ELM — 17123 — 17124 — 405' R

BRUSH & THORNAPPLE — ESTATE OF JAMES COLUCCI ET. AL. — R/W FENCE — EXIST R/W — 6" WATER — 8" SEWER — 84' RT. 717+84.68 — 6" APPLE — TWIN 6" APPLE — LIBERTY — 40' — 130'

I.P. FND. & USED — CB — 40' R EXIST. — 4" L.P. GAS — 12" SEWER — 5' CONC. — 65' EXIST. R/W — 40' — 8" WATER — 8" SEWER — 15" SEWER — 12" SEWER — 8" CHOKE CHERR. — 8" PEACH — 10" APPLE — 10" PEAR — 8" APPLE — 10" PEAR — 6" PEAR — 130' R — 114' — 40' — 8" PEACH — 10" MAPLE — 8" CHERRY — 4" APPLE — MARIE DOMENICA DI THOMAS — GARDEN — 8" CHERRY — 17131 — 17130 — 17129 — 30' R — WIRE FENCE — 717' R

STA. 50+31.06 ℄ UNION — 52' — 8" CATALPA — 6" CATALPA — 4" L.P. GAS — 8" WATER — 15" SEWER — 8" MAPLE — 1" TULIP — 12" CATALPA — 12" ASH — 20" MAPLE — 6" MAPLE — 12" MAPLE — 3" CONC. — EXIST R/W — 40' R — 130' R — 142.54 — 2½ STY FR. HSE # 626 — FR. SHED — CONC. — 5' PEACH — PROP SIDEWALK — 37.75' R — 25' — 5" CHERRY — 4.0' — HELEN BELL — 37304 — 5" SPRUCE — 3" CONC. — 2 STY. FR. HSE # 622 — 1 STY. — 57598 — 108.58' — REPLAT OF CT. LOTS 37303 & 37305 PB 32 PG 53 — AHMAD RADMAN & RADMAN BARBARA — 10" PEAR — 12" APPLE — SLAG WALK — 37302 — 2 STY. FR. HSE # 618 — ASPH. DR. — 1 CAR FR. GAR. — 6" MAPLE — 12" MAPLE — 10" CHERRY — SHED FR. — SHRUBS — 1 CAR FR. GAR. — CONC. — 37308 — 37307 — 37306 — SUBDIVISION OF LOT 576 PB 18 PG 180 — 8" CHERRY — 6" CATALPA — 10" MAPLE — 1 CAR FR. GAR. — 6' SLAG DR. — 2 STY. FR. HSE # 617 — 2 STY. FR. HSE # 615 — 10" APPLE — 6" CATALPA — SLAG DR. — 8" ASH — 2 STY. FR. HSE # 619 — 37309 — NOBLE I. DRESSEL & MARY A. DRESSEL — 2 STY. FR. HSE # 621 — 37310 — ELIZABETH VRANICH — 2 STY. FR. HSE # 623 — 1 CAR BLK. GAR. — 2" PEACH — 4" NUT — 10" CATALPA — 8" MAPLE — 8" STONE WALL — 6" MAPLE — 4" MAPLE — 10" MAPLE — TWIN 4" NUT — 10" CHERRY — 4" APPLE — 4" MAPLE — 8" ASH — 4" L.P. GAS — 8" CONC. — 4" STEPS — CONC. WALK — 25' — 24' — 40' — 37.75' R — 132.0' — 108.58' — 57598 — 37303 — 37305 — 37304 — 37310 — 37309 — 37308 — 37307 — 37306 — 57576

STA 51+58.06 ℄ CALEDONIA — STA 52+13.90 — 350' R — BUSHES — 8" CHERRY — 3-4" PEACH — 6" PLUM — 6" PEAR — 17127 — 8" PLUM — 17126 — 4" PEAR — 8" CHERRY — 2-CAR BLK. GAR. — 8" PEAR — 3" PEACH — 56.8' R — 105' — 2 STY. BR. HSE # 614 — 17125 — 6" PEAR — 3-4" PEAR — WIRE FENCE — CONC. WALK — 40' — 17' R

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE-
1	7-28-69	Changed All Names Previously Revised on Earlier Sheets.

R/W SHEET NO. 72 OF 104

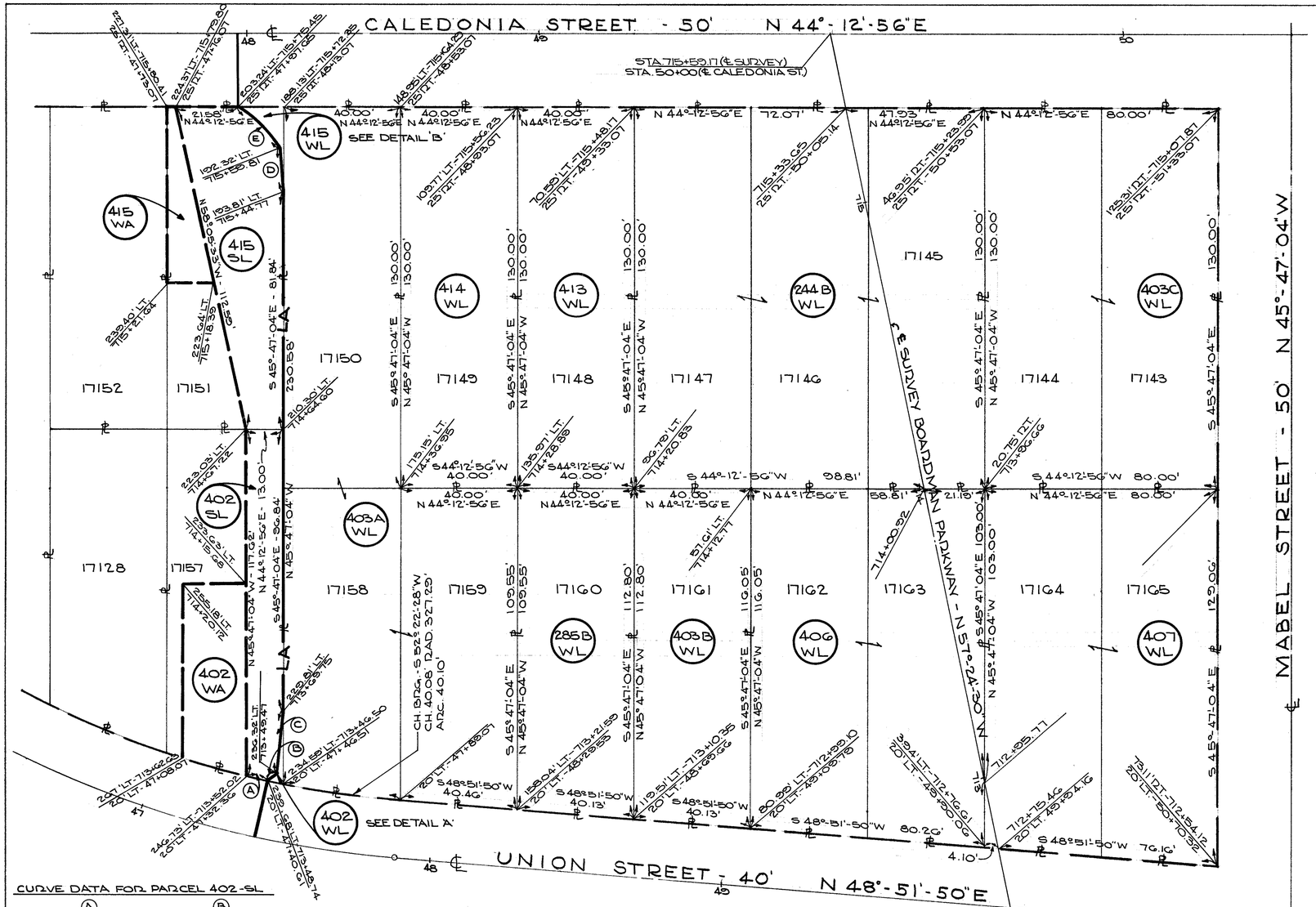
JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

625
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

73
104



CURVE DATA FOR PARCEL 402-SL

(A) CH.BRG.-S 57°-32'-21"W CH.-7.77' RAD.-327.29' ARC-7.77'

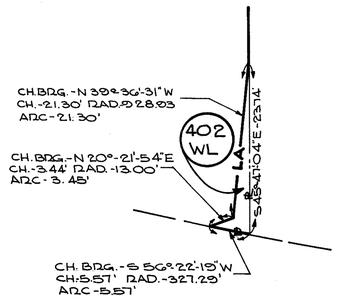
(B) CH.BRG.-S 20°-21'-54"W CH.-3.44' RAD.-13.00' ARC-3.45'

(C) CH.BRG.-S 39°-36'-31"E CH.-21.30' RAD.-928.93' ARC-21.30'

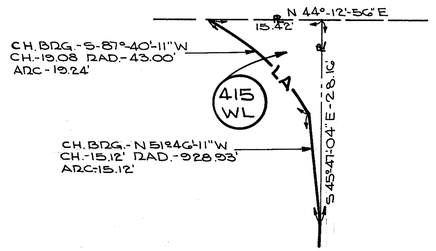
CURVE DATA FOR PARCEL 415-SL

(D) CH.BRG.-S 51°-46'-11"E CH.-15.12' RAD.-928.93' ARC-15.12'

(E) CH.BRG.-N 87°-40'-11"E CH.-19.08' RAD.-43.00' ARC-19.24'



DETAIL 'A'



DETAIL 'B'

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	PRO. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
244B-WL	15,600 S.F.	NONE	15,600 S.F.	NONE	15,600 S.F.	NONE	NONE
285B-WL	4,450 S.F.	NONE	4,450 S.F.	NONE	4,450 S.F.	NONE	NONE
402-WL	4,623 S.F.	NONE	32 S.F.	NONE	32 S.F.	3,074 S.F.	——
402-SL			1,517 S.F.	NONE	1,517 S.F.		
402-WA			1,364 S.F.	NONE	1,364 S.F.		
403A-WL	13,686 S.F.	NONE	13,686 S.F.	NONE	13,686 S.F.	NONE	NONE
403B-WL	4,582 S.F.	NONE	4,582 S.F.	NONE	4,582 S.F.	NONE	NONE
403C-WL	10,400 S.F.	NONE	10,400 S.F.	NONE	10,400 S.F.	NONE	NONE
406-WL	9,359 S.F.	NONE	9,359 S.F.	NONE	9,359 S.F.	NONE	NONE
407-WL	10,100 S.F.	NONE	10,100 S.F.	NONE	10,100 S.F.	NONE	NONE
413-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
414-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
415-WL	4,400 S.F.	NONE	109 S.F.	NONE	109 S.F.	1,650 S.F.	——
415-SL			2,641 S.F.	NONE	2,641 S.F.		
415-WA			573 S.F.	NONE	573 S.F.		

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT
JAN 27 1998

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

626
656

74
104

NOTE: PARCEL 428-EL SOLD TO NORMA CARTER AND REGISTERED IN VOL 7, PAGE 314, NEW DEEDS VARIOUS STATE LANDS

℄ POWERSDALE-MABEL CONNECTOR
CURVE DATA
P.I. STA. 12+32.54
Δ = 90°04'18" LT.
R = 160.00'
T = 160.20'
L = 251.53'
CH = 226.42'
E = 66.42'

POWERSDALE AVE. 50'
N09°28'56"W
8" WATER
6" L.P. GAS
EXIST R/W

MABEL AVE. 50'
S89°26'46"W
14" SEWER
EXIST R/W

℄ RAMP 'E'

℄ CONNECTOR

℄ SURVEY I-680

N57°24'30"W

NOTE: SEE SUPPLEMENTAL SHT. No 78,876 FOR PARCEL DIMENSIONS BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET

DOG HOUSE

DROP 5' SIDEWALK

CONST. LIMITS

ABANDONED

PROPOSED R/W

EXIST R/W

RAMP 'E'

MATCH SHEET NO. 71

MATCH SHEET NO. 77

MATCH SHEET NO. 81

SCALE
0 20 40 60 80 100

R/W SHEET NO. 74 OF 104

PARCELS 459-EL & 432-EL STATE FUNDS, ALL OTHER PARCELS THIS SHEET I-FUNDS

Revised Area Rel 480 WL & Added Rel. 480-A WL 10-18-67
Changed Rel. 473-WL & Rt. 1 Deleted Rel. 693 T-L

Added Rel. 427-EL
Changed All Names Previously Revised on Earlier Copies.
Changed All WD Rel. to Stand. Right Control. Previously Revised on Earlier Copies

APPD. AM. EL. PARCEL TO REL 432 Sam 7-13-70

REV.	DATE	DESCRIPTION
	11-1-67	
1	7-26-67	
2	7-26-68	

COMPLETION DATE —

ADDED PEL 427-EL DATED 4-16-74 & 4-17-74 S.A.G.
5-21-74 CHANGED PEL 428-WD TO 428-EL AND ADDED NOTE ON SAME.

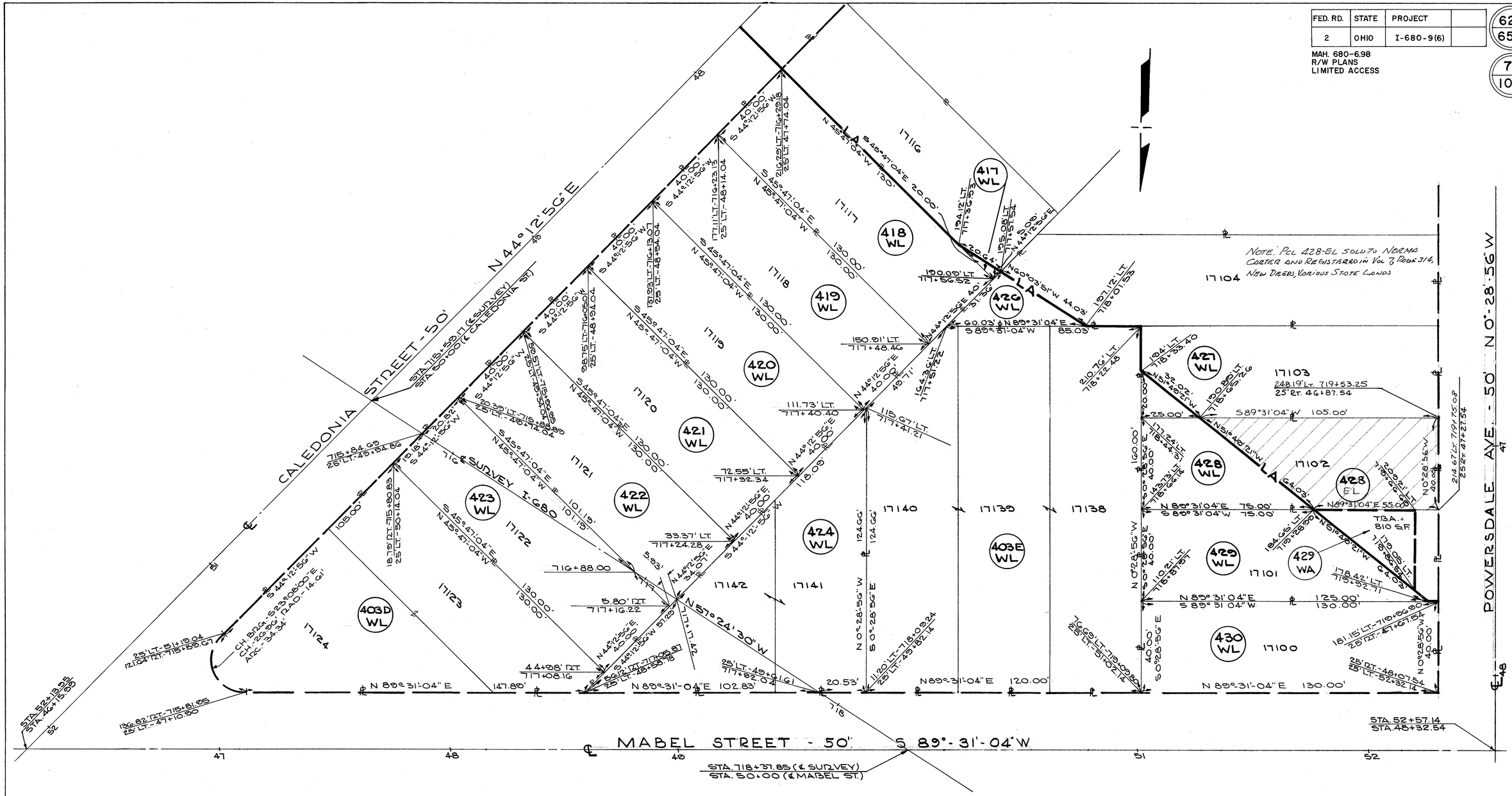
State Highway Dept. Div. 4
R/W ENGR. & ADMIN SECT
JUN 27 1969
LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

627
656

75
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
417-WL	5,200 S.F.	NONE	51 S.F.	NONE	51 S.F.	5,149 S.F.	—
418-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
419-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
420-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
421-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
422-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
423-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
424-WL	7,638 S.F.	NONE	7,638 S.F.	NONE	7,638 S.F.	NONE	NONE
426-WL	7,810 S.F.	NONE	669 S.F.	NONE	669 S.F.	7,141 S.F.	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
403D-WL	9,600 S.F.	NONE	9,600 S.F.	NONE	9,600 S.F.	NONE	NONE
403E-WL	18,568 S.F.	NONE	18,568 S.F.	NONE	18,568 S.F.	NONE	NONE
427-WL	5,200 S.F.	NONE	250 S.F.	NONE	250 S.F.	4,950 S.F.	—
428-WL	5,200 S.F.	NONE	2,000 S.F.	NONE	2,000 S.F.	3,200 S.F.	—
429-WL	5,200 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	1,200 S.F.	—
430-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
428-EL	3,200 S.F.	NONE	3,200 S.F.	NONE	3,200 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
	CHANGED PCL. 428-WD TO 428-EL AND ADDED NOTE OF SALE		5-21-79
	ADDED PCL 428-WD PER I.D.C. DATED 4-10-79 BY S.D.A.		4-17-79

R/W SUPPLEMENTAL SHEET

Ohio Highway Dept. Div. 4
R/W. ENGR. & ADMIN. SECT.
JUN 27 1980
LOGGED
CHK.

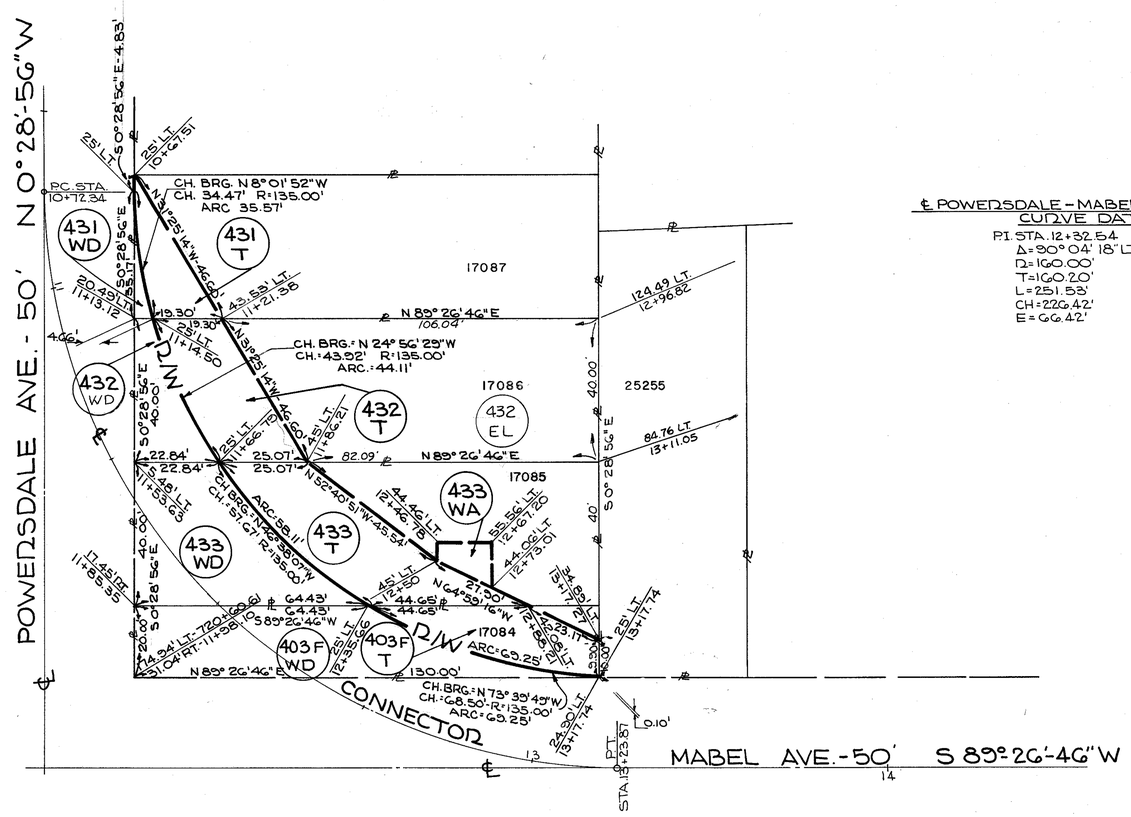
FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

628
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

76
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
431-WD	5,200 S.F.	—	54 S.F.	—	54 S.F.	5,146 S.F.	—
431-T			425 S.F.	—	425 S.F.		
* 432 WD	5,200 S.F.	—	497 S.F.	—	497 S.F.	—	—
432-T			940 S.F.	—	940 S.F.		—
433-WD	5,200 S.F.	—	1,626 S.F.	—	1,626 S.F.	3,574 S.F.	—
433-T			1,379 S.F.	—	1,379 S.F.		
		—					
403F-WD	2,600 S.F.	—	1,745 S.F.	—	1,745 S.F.	855 S.F.	—
403F-T			750 S.F.	—	750 S.F.		
* 432 EL			4703 S.F.		4703 S.F.		



℄ POWERSDALE - MABEL CONNECTOR CURVE DATA

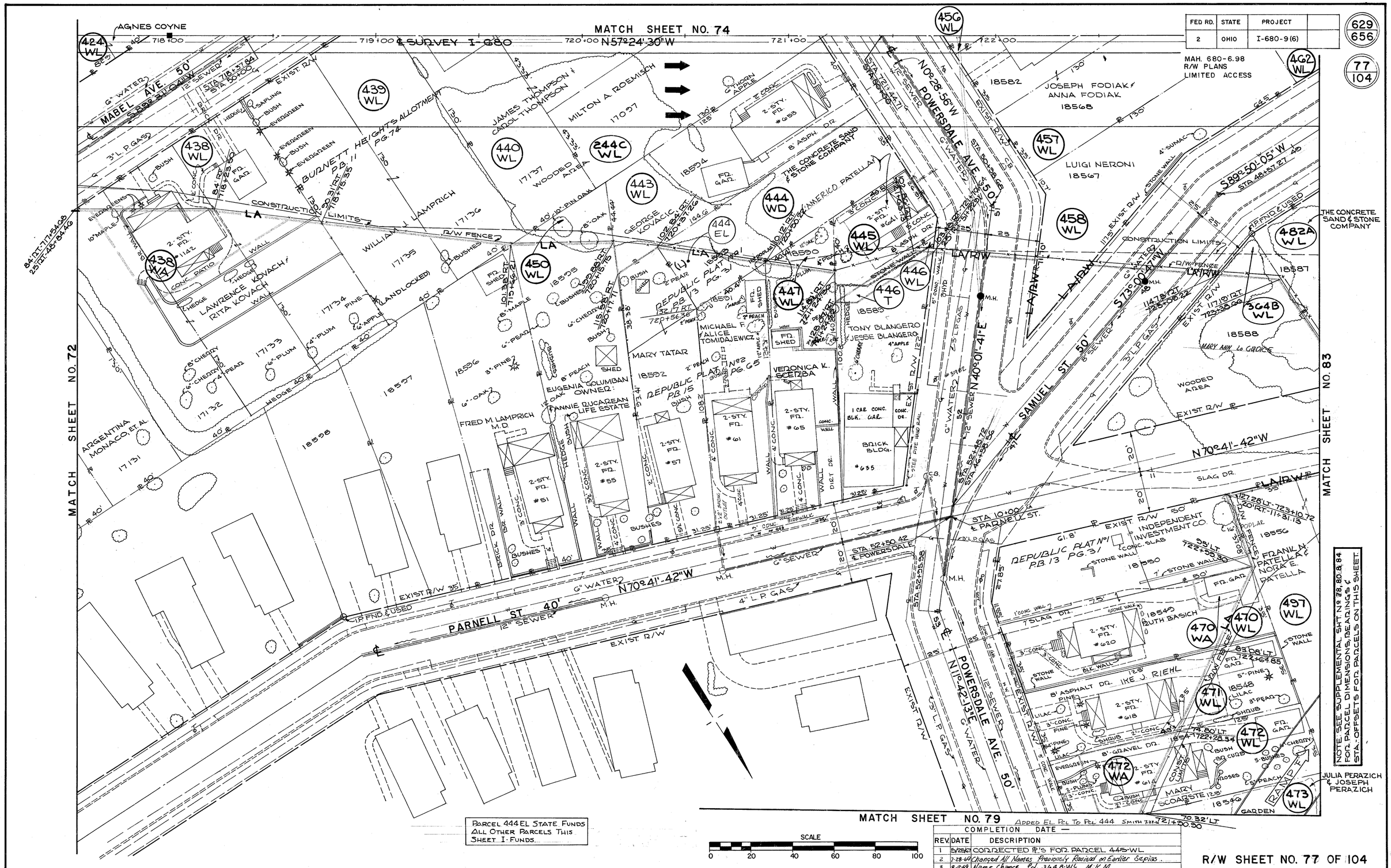
P.I. STA. 12+32.54
Δ = 90° 04' 18" LT.
R = 160.00'
T = 160.20'
L = 251.53'
CH = 226.42'
E = 66.42'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
4	ADDED AN EL PCL TO PCL 432WD	SMITH	7-23-70
3	Deleted Pcl. 293 T-2		7-25-69
2	Changed All Names Previously Revised on Earlier Sepias.	MKM.	7-28-69
1	Changed All "WD" Pcls. to Standard Highway Easements Previously Revised on Earlier Sepias	MKM.	7-28-69

R/W SUPPLEMENTAL SHEET

JAN 27 1969
LOGGED



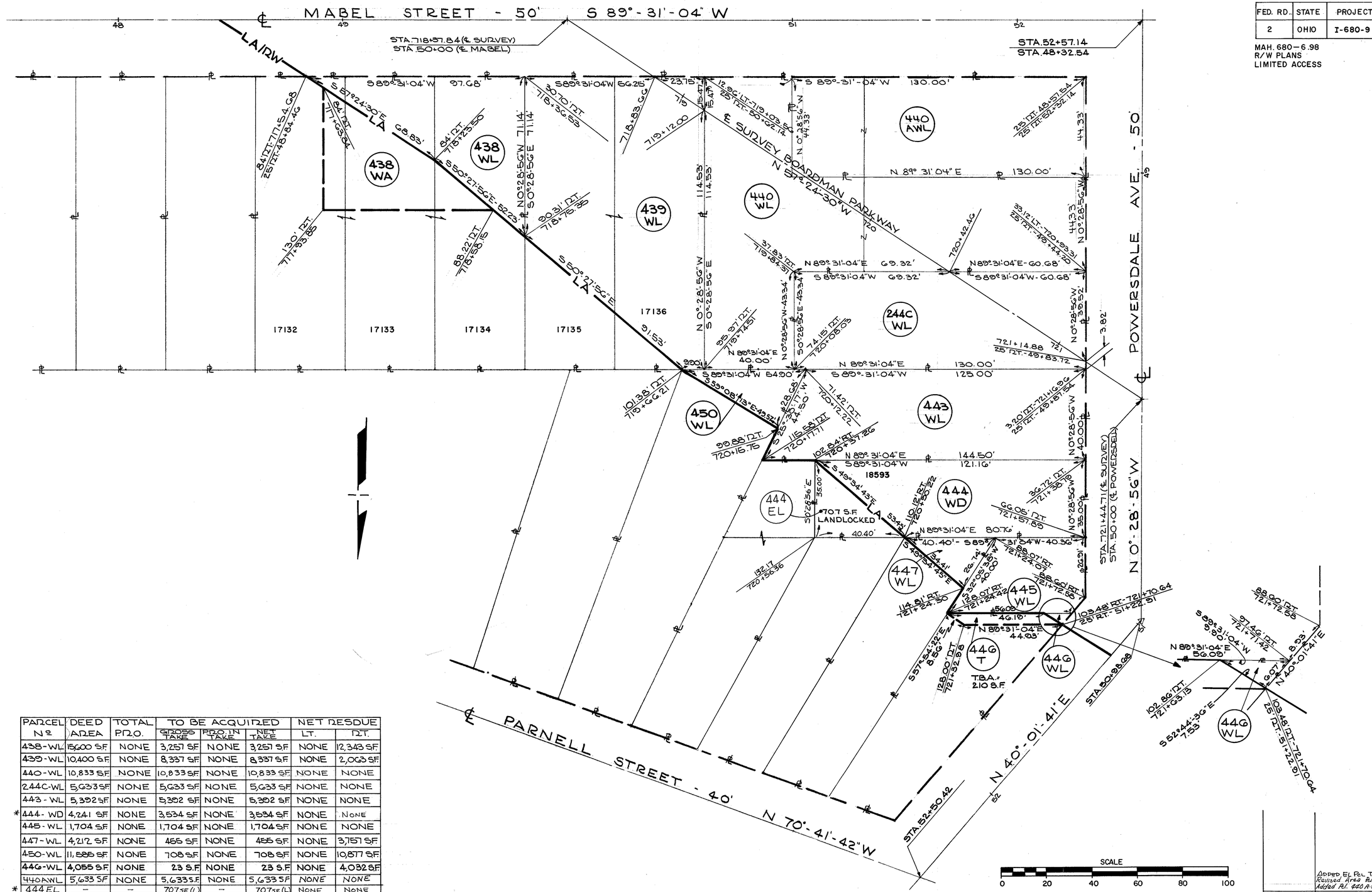
COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	5/25/67	CORRECTED PP'S FOR PARCEL 445-WL
2	7-28-69	Changed All Names Previously Revised on Earlier Sepias.
3	8-12-69	Name Change Pcl. 364B-WL M.K.M.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

MAH. 680 — 6.98
R/W PLANS
LIMITED ACCESS

630 / 656

78 / 104



PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESDUE LT.	NET RESDUE P.T.
438-WL	15,600 S.F.	NONE	3,251 S.F.	NONE	3,251 S.F.	NONE	12,343 S.F.
439-WL	10,400 S.F.	NONE	8,337 S.F.	NONE	8,337 S.F.	NONE	2,063 S.F.
440-WL	10,833 S.F.	NONE	10,833 S.F.	NONE	10,833 S.F.	NONE	NONE
244C-WL	5,633 S.F.	NONE	5,633 S.F.	NONE	5,633 S.F.	NONE	NONE
443-WL	5,382 S.F.	NONE	5,382 S.F.	NONE	5,382 S.F.	NONE	NONE
* 444-WD	4,241 S.F.	NONE	3,534 S.F.	NONE	3,534 S.F.	NONE	NONE
445-WL	1,704 S.F.	NONE	1,704 S.F.	NONE	1,704 S.F.	NONE	NONE
447-WL	4,212 S.F.	NONE	455 S.F.	NONE	455 S.F.	NONE	3,757 S.F.
450-WL	11,585 S.F.	NONE	708 S.F.	NONE	708 S.F.	NONE	10,877 S.F.
446-WL	4,055 S.F.	NONE	23 S.F.	NONE	23 S.F.	NONE	4,032 S.F.
440AWL	5,633 S.F.	NONE	5,633 S.F.	NONE	5,633 S.F.	NONE	NONE
* 444 EL	—	—	707 S.F. (L)	—	707 S.F. (L)	NONE	NONE

REVISION	DESCRIPTION	BY	DATE
	Added EL Pcl. To Pcl. 444 Revised Area Rd. 440 WL & Added Rt. 440 A WL	SMITH	7-23-70
		MAH	10-13-67

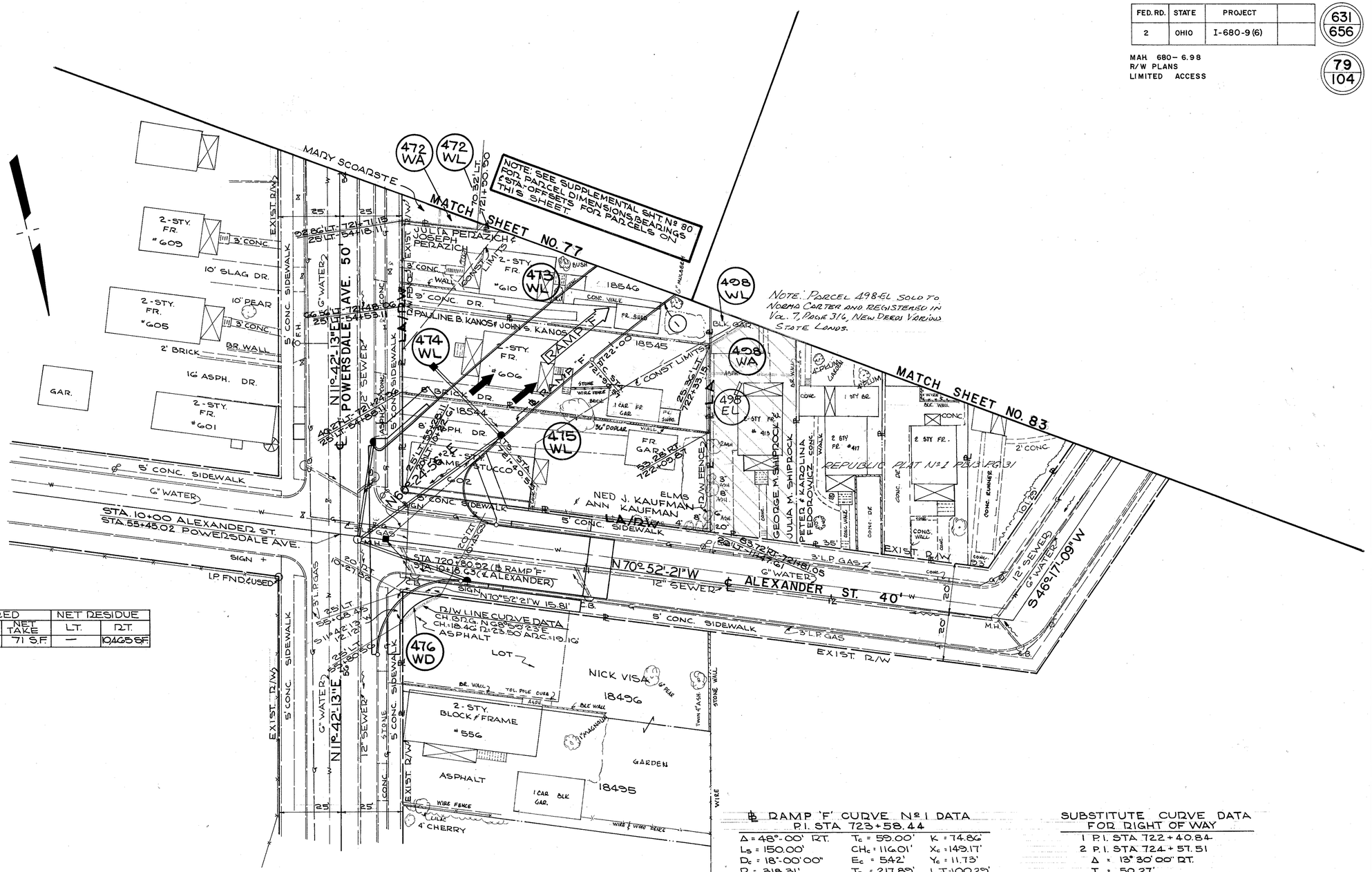
R/W SUPPLEMENTAL SHEET

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

631
656

MAH 680-6.98
R/W PLANS
LIMITED ACCESS

79
104



PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
476-WD	10,536 S.F.	NONE	71 S.F.	NONE	71 S.F.	—	10,465 S.F.

℄ RAMP 'F' CURVE No 1 DATA
P.I. STA 723+58.44

Δ = 48°-00' RT.	T_c = 59.00'	K = 74.86'
L_s = 150.00'	CH_c = 116.01'	X_c = 149.17'
D_c = 18°-00'00"	E_c = 5.42'	Y_c = 11.73'
R = 318.31'	T_s = 217.89'	L.T. = 100.29'
θ_s = 13°30'00"	E_s = 33.34'	S.T. = 50.27'
Δ_c = 21°00'00"	P = 2.94'	L.C. = 199.63'
L_c = 116.67'		

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA 722+40.84
2 P.I. STA 724+57.51
Δ = 13°30'00" RT.
T = 50.27'
R = 424.69'
L = 100.07'
CH = 99.88'
E = 2.96'

PARCEL 498-EL STATE FUNDS
ALL OTHER PARCELS THIS SHEET
I- FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1.	7-28-69	Changed All Names Previously Revised on Earlier Sepias.
2.	7-23-70	ADDED PARCEL 498-WA SMITH
3.	5-21-71	ADDED NOTE OF SALE PCL. 498-EL

R/W SHEET NO. 79 OF 104

State Highway Dept. Div. 4
R/W ENGR & ADMIN SEPT
JAN 27 1969
LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

632 / 656

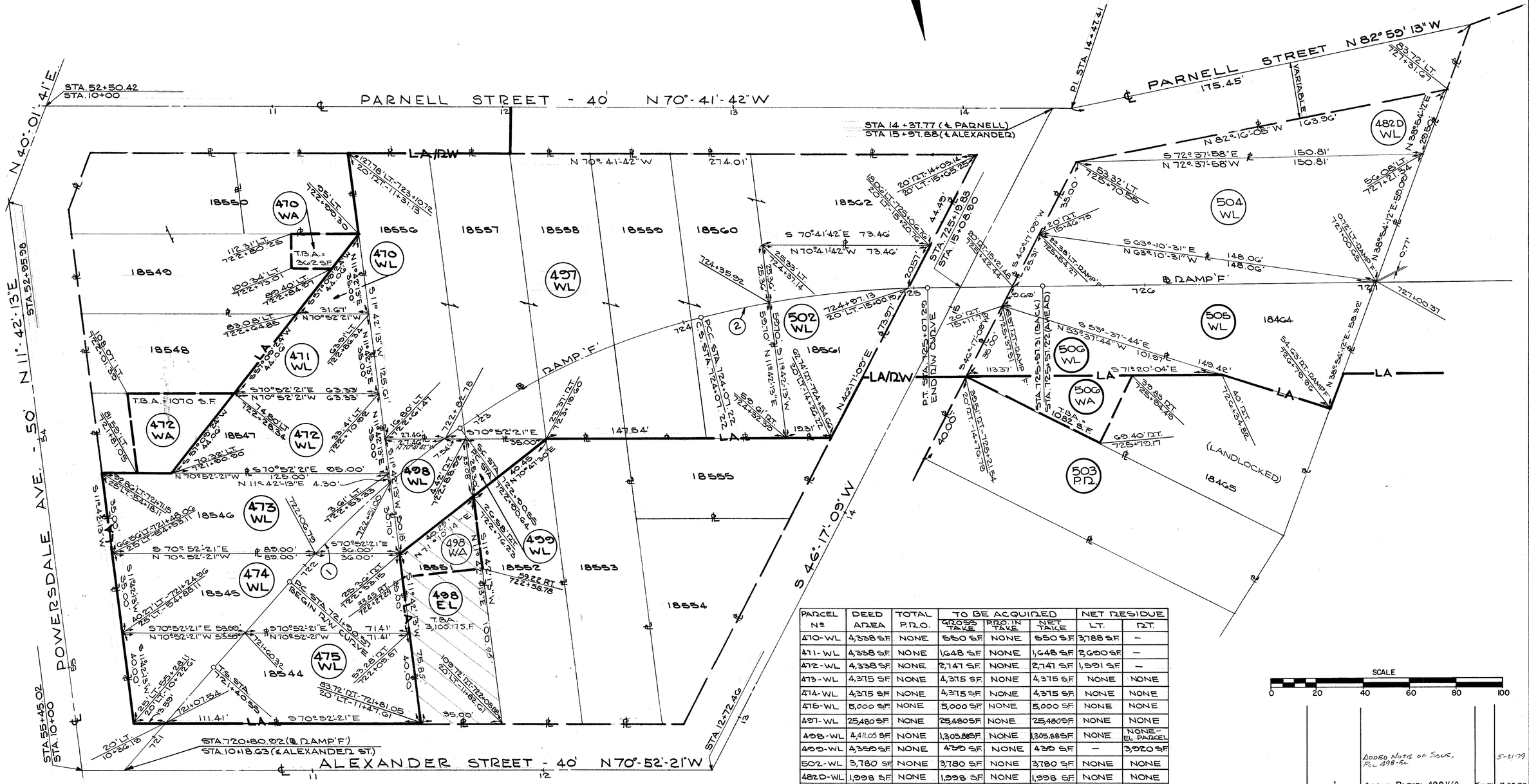
80 / 104

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 722+40.84
2 P.I. STA 724+57.51
Δ = 13° 30' 00" RT.
T = 50.27'
R = 424.69'
L = 100.07'
CH = 99.88'
E = 2.96'

℄ RAMP 'F' CURVE No 1 DATA
P.I. STA 723+58.44

Δ = 48° 00' 00" RT.	Tc = 59.00'	K = 74.86'
Ls = 150.00'	CHc = 116.01'	Xc = 140.17'
Dc = 18° 00' 00"	Ec = 5.42'	Yc = 11.73'
R = 318.31'	Ts = 217.89'	LT. = 100.29'
θs = 13° 30' 00"	Es = 33.34'	ST. = 50.27'
Δc = 21° 00' 00"	P = 2.94'	L.C. = 199.63'
Lc = 116.67'		


STA. 52+50.42
STA. 10+00
N 40°-01'-41"E
℄ PARNELL STREET - 40' N 70°-41'-42"W
℄ LA/RW
N 70°-41'-42"W 274.01'
STA 14+37.77 (℄ PARNELL)
STA 15+97.88 (℄ ALEXANDER)
P.I. STA 14+47.41
℄ PARNELL STREET N 82° 59' 13" W
175.45'
YARIABLE
163.36'
N 82°-16'-05" W
S 72° 37'-58" E 150.81'
N 72° 37'-58" W 150.81'
N 38°-54'-12" E 29.85'
N 11°-42'-13"E
STA. 52+95.98
POWERSDALE AVE. - 50'
S 46°-17'-09" W
STA. 55+45.02
STA. 10+00
ALEXANDER STREET - 40' N 70°-52'-21"W
STA. 12+72.46
STA 720+80.92 (℄ RAMP 'F')
STA 10+18.63 (℄ ALEXANDER ST.)
℄ RAMP 'F'
℄ LA/RW
18550
18549
18548
18547
18546
18545
18544
18556
18557
18558
18559
18560
18561
18562
18555
18554
18553
18552
18564
18565
(LANDLOCKED)
470 WA
470 WL
471 WL
472 WA
472 WL
473 WL
474 WL
475 WL
497 WL
498 WL
498 WA
498 EL
499 WL
499 WA
502 WL
503 P.U.
504 WL
505 WL
506 WL
506 WA
482D WL
T.B.A. = 362 S.F.
T.B.A. = 1070 S.F.
T.B.A. = 3,105.175 S.F.
T.B.A. = 1082 S.F.
P.C. STA. 724+00.00 BEGIN R/W CURVE
P.T. STA. 725+07.29 END R/W CURVE
P.T. STA. 725+51.72 (AHEAD)
P.T. STA. 725+51.31 (BACK)
℄ RAMP 'F'
℄ LA
℄ PARNELL
℄ ALEXANDER
℄ POWERSDALE
℄ RAMP 'F' CURVE
℄ RAMP 'F' CURVE No 1
℄ RAMP 'F' CURVE No 2
℄ RAMP 'F' CURVE No 3
℄ RAMP 'F' CURVE No 4
℄ RAMP 'F' CURVE No 5
℄ RAMP 'F' CURVE No 6
℄ RAMP 'F' CURVE No

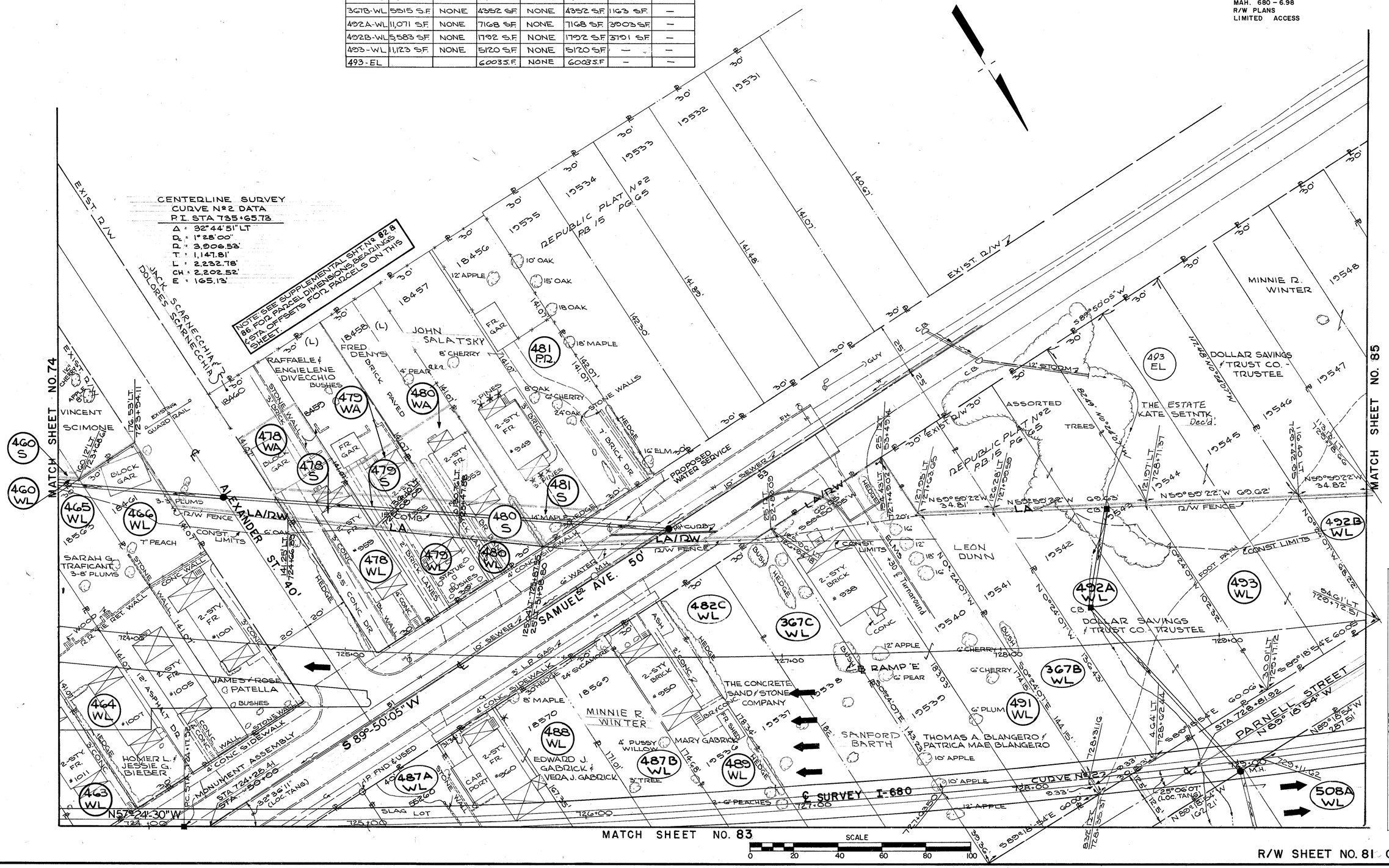
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

633
656

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

81
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
491-WL	10,980 S.F.	NONE	10,980 S.F.	NONE	10,980 S.F.	—	—
367B-WL	5515 S.F.	NONE	4352 S.F.	NONE	4352 S.F.	1163 S.F.	—
492A-WL	11,071 S.F.	NONE	7168 S.F.	NONE	7168 S.F.	3903 S.F.	—
492B-WL	5,583 S.F.	NONE	1792 S.F.	NONE	1792 S.F.	3791 S.F.	—
493-WL	11,123 S.F.	NONE	5120 S.F.	NONE	5120 S.F.	—	—
493-EL			6003 S.F.	NONE	6003 S.F.	—	—



PARCEL 493-EL STATE FUNDS
ALL OTHER PARCELS THIS SHEET
I- FUNDS

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	6/13/69	Added Pcl. 493-EL
2	7-28-69	Changed All Names Previously Revised on Earlier Copies.
3	12-12-69	Added turnaround on Pcl 491

R/W SHEET NO. 81 OF 104

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT
JAN 27 1969

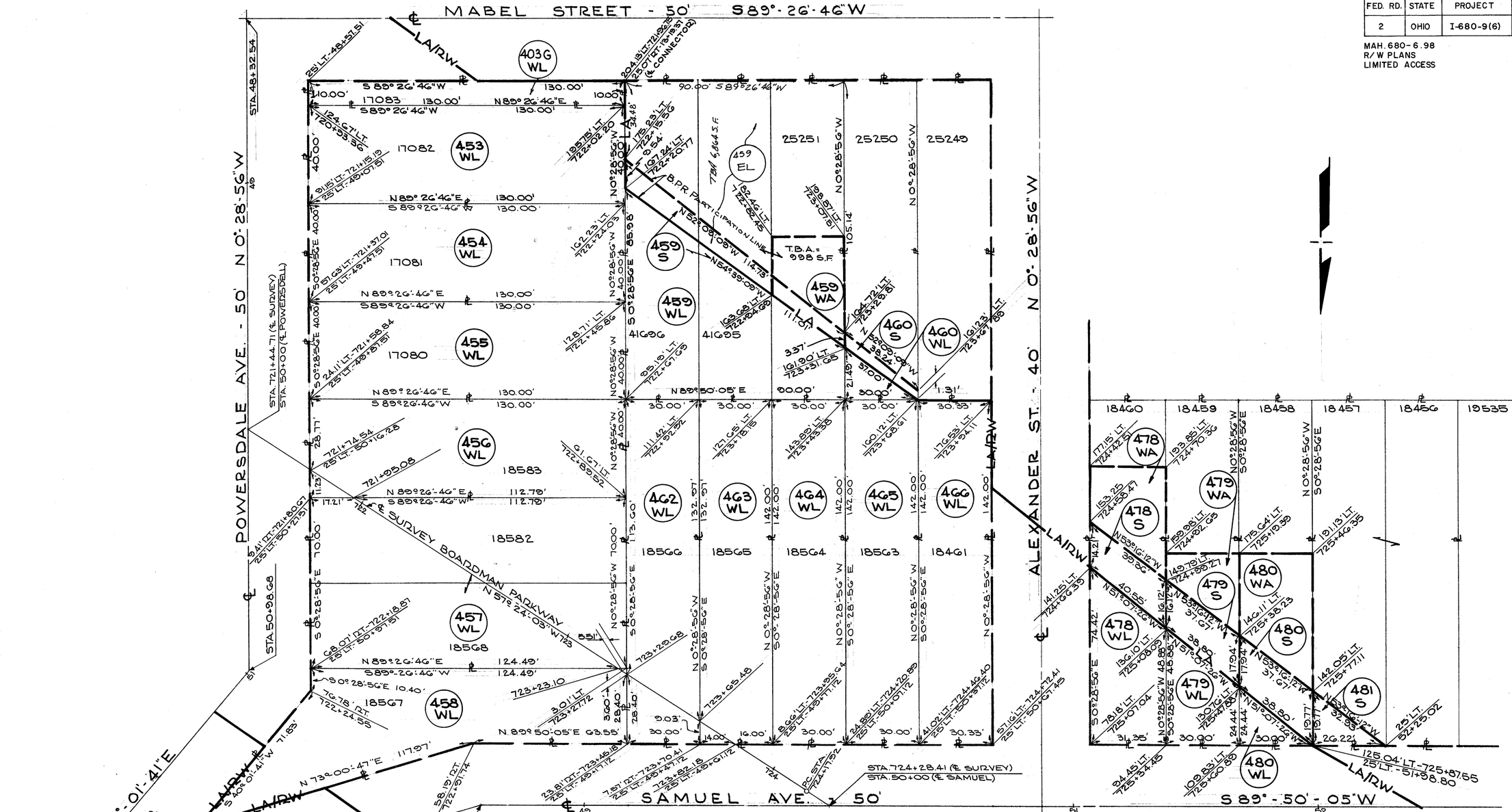
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

634
656

82
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

105.14
3.37
1.51



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
453-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
403G-WL	1,300 S.F.	–	1,300 S.F.	–	1,300 S.F.	–	–
454-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
455-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
456-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
457-WL	9,100 S.F.	–	9,100 S.F.	–	9,100 S.F.	–	–
458-WL	5,681 S.F.	–	5,681 S.F.	–	5,681 S.F.	–	–
459-WL	11,700 S.F.	–	4,836 S.F.	–	4,836 S.F.	–	–
459-S			581 S.F.	–	581 S.F.		
460-WL	3,900 S.F.	–	322 S.F.	–	322 S.F.	3578 S.F.	–
460-S			70 S.F.	–	70 S.F.		

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
462-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
463-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
464-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
465-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
466-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
478-WL	4,452 S.F.	–	1,933 S.F.	–	1,933 S.F.	2,519 S.F.	–
478-S			475 S.F.	–	475 S.F.		
479-WL	4,260 S.F.	–	1,100 S.F.	–	1,100 S.F.	3,160 S.F.(L)	–
479-S			511 S.F.	–	511 S.F.		
480-WL	4,260 S.F.	–	367 S.F.	–	367 S.F.	3,893 S.F.(L)	–
480-S			566 S.F.	–	566 S.F.		
481-S	8,520 S.F.	–	258 S.F.	–	258 S.F.	8,520 S.F.	–

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
1	ADDED 459-EL		7/1/69

R/W SUPPLEMENTAL SHEET

JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

635
656

83
104

MAH. 680- 6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 81

MATCH SHEET NO. 77

MATCH SHEET NO. 79

MATCH LINE SEE SHEET NO. 42

SAMUEL AVE. 50'
(LOC. TANG.)
N 89°50'05"E
STA. 724+28.41
STA. 5+00.00
724+00.00
P.C. STA. 724+17.52
32° 36' 11"
10" SEWER
G"WATER
3" L.P. GAS
4' CONC. SIDEWALK
3" L.P. GAS
EXIST. R/W 30'
56.77'

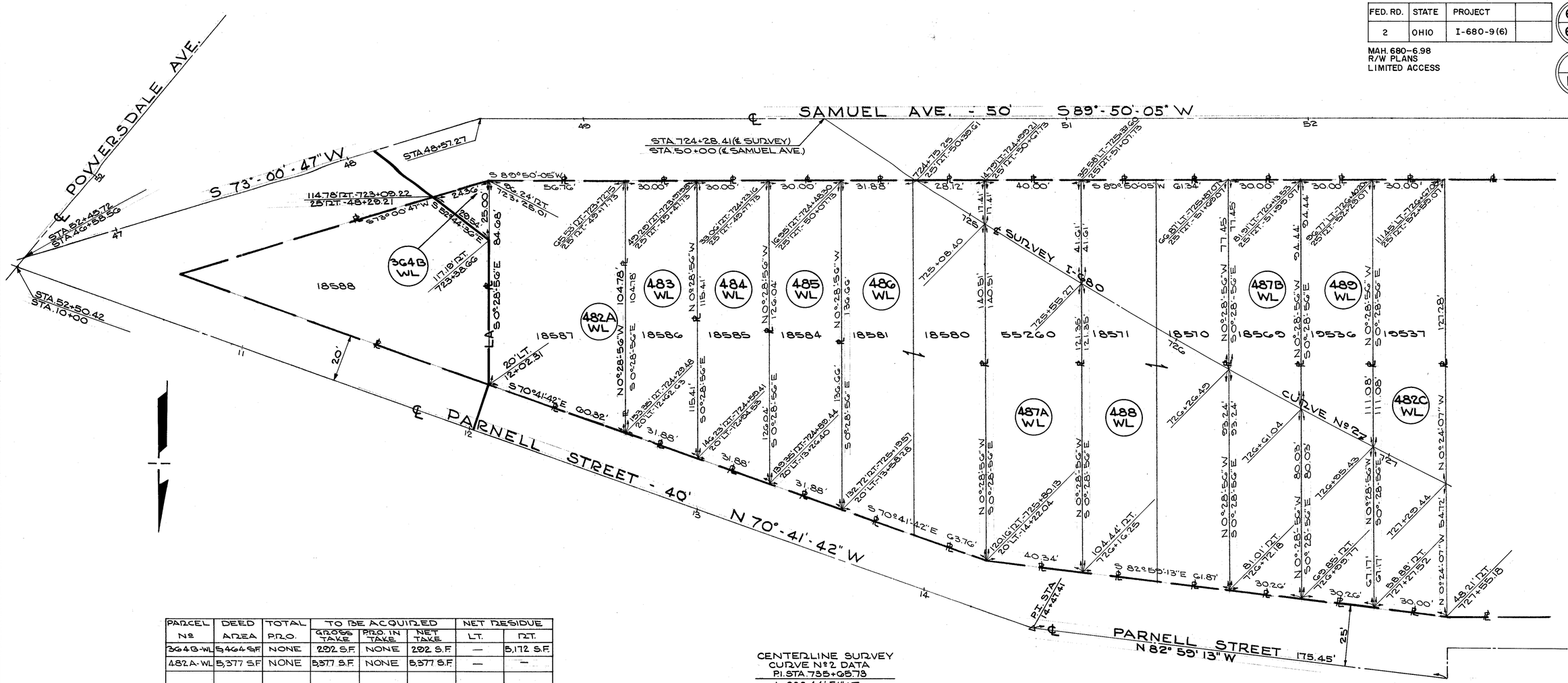
PARNELL ST. 40'
N 70° 41' 42" W
EXIST. R/W 35'
R/W FENCE/HEDGE
SLAG DRIVE
WOODED AREA
CONST. LIMITS
PARNELL ST.
N 89° 18' 54" W
EXIST. R/W 30.56'
PART OL. 539
N 89° 18' 54" W
70.43' RT. 727+66.19
PARNELL ST.
N 88° 59' 13" W
EXIST. R/W
175.45'
VARIABLE
S 38° 54' 12" W 40.32'
118.95'
P.T. STA 14+41.41
STA 14+21.77
STA 15+97.85
162.84'
RAMP 'F'
N 71° 35' 04" W
N 71° 35' 04" W - 80.00
CONST. LIMITS
229.56'
S 71° 25' 04" E
40' RT. 728+15 (RAMP F)
40' RT. (RAMP F) 728+49.91
40' RT. 726+34.82
40' RT. 726+00.55
40' RT. RAMP 'F' 725+95
40' RT. 728+00.00
40' RT. 728+21.08 (RAMP F)
128.11' RT. (728+19.88 RAMP F)
180.46' RT. (728+40.31 RAMP F)
S 66° 52' 37" E - 20.56'
N 38° 24' 56" E 42.43'
N 37° 06' 22" W 98.71'
95.49'
S 37° 06' 22" E
LA
R/W FENCE
LA
R/W FENCE
LA
R/W FENCE

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

636
656

84
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
364B-WL	5,464 S.F.	NONE	292 S.F.	NONE	292 S.F.	—	5,172 S.F.
482A-WL	5,377 S.F.	NONE	5,377 S.F.	NONE	5,377 S.F.	—	—
482C-WL	5,405 S.F.	NONE	5,405 S.F.	NONE	5,405 S.F.	NONE	NONE
483-WL	3,284 S.F.	NONE	3,284 S.F.	NONE	3,284 S.F.	NONE	NONE
484-WL	3,609 S.F.	NONE	3,609 S.F.	NONE	3,609 S.F.	NONE	NONE
485-WL	3,930 S.F.	NONE	3,930 S.F.	NONE	3,930 S.F.	NONE	NONE
486-WL	8,859 S.F.	NONE	8,859 S.F.	NONE	8,859 S.F.	NONE	NONE
487A-WL	6,424 S.F.	NONE	6,424 S.F.	NONE	6,424 S.F.	NONE	NONE
487B-WL	5,186 S.F.	NONE	5,186 S.F.	NONE	5,186 S.F.	NONE	NONE
488-WL	10,252 S.F.	NONE	10,252 S.F.	NONE	10,252 S.F.	NONE	NONE
489-WL	5,295 S.F.	NONE	5,295 S.F.	NONE	5,295 S.F.	NONE	NONE

CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+05.73

Δ = 32°-44'-51" LT.
D_c = 1°-2.8'
R = 3,900.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Ohio
R/W ENG'S Approval
JAN 27 1969
Locker
Chkd. BW 5

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.	
492-B WL	5,583 S.F.	NONE	1,792 S.F.	NONE	1,792 S.F.	3,791 S.F.	—	
178-B WL	11,204 S.F.	NONE	2,048 S.F.	NONE	2,048 S.F.	9,156 S.F.	—	
435 WL	5,623 S.F.	NONE	256 S.F.	NONE	256 S.F.	5,367 S.F.	—	
508A-WL	177,622 S.F.	NONE	119,554 S.F.	NONE	119,554 S.F.	—	58,068 S.F.	(L)
509 - WL	220,000 S.F.	NONE	127,122 S.F.	NONE	127,122 S.F.	31,561 S.F.	61,317 S.F.	(L)
492C-WL	23,870 S.F.	NONE	16,491 S.F.	NONE	16,491 S.F.	—	7,379 S.F.	(L)

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

637
656

85
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+65.73
Δ = 3°04'41" LT.
D_c = 1°28'00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

MATCH SHEET NO. 81

MATCH SHEET NO. 87

MATCH SHEET NO. 86

SAMUEL AVE. 50'
℄ S 89°50'05" W

℄ ZEDAKER ST.
N 0°24'07" W
50'

PARNELL ST.
℄ N 89°18'54" W
EXIST. R/W
200'

REPUBLIC PLAT Nº 2
P.B. K PG. 65

19555
19554
19553
19552
19551
19550
19549
19548
19547
19546
19545

JAMES A. OWEN JR. Executor of the estate of JAMES A. OWEN SR. deceased
N 0°24'07" W 50.00'

THE FOREMOST INVESTMENT CO.

HANNAH LANG

5" OAK

BRUSH

THE DOLLAR SAVINGS & TRUST CO.

I.P. FND & USED

435 WL

MINNIE R. WINTER

178-B WL

492-B WL

508-A WL

509 WL

492C WL

ARTHUR E. WESTER,
WARD W. WESTER,
HAROLD D. LEACH

ADOLPH JOHNSON & SON COMPANY
An Ohio Corporation

25' EASEMENT FOR ACCESS TO WESTER & LEACH PROPERTY-D.B. 534 PG. 401

EXIST. CHAIN LINK FENCE

12.5' 12.5'

L.A. R/W

CONSTRUCTION LIMITS

R/W FENCE

442.27'

N 76° 38' 38" W

140' LT 735+55

734+00

114.76' LT 733+25

128.38' LT 732+25.12

108.04' LT 732+38.57

110.98' LT 731+80.75

116.40' LT 729+42.65

124.61' LT 726+72.51

DIRT

1 STY. BLK. BLDG.

SLAG DRIVE

THE DOLLAR SAVINGS & TRUST COMPANY, TRUSTEE

S 0°24'07" E 119.26'

N 0°24'07" W 119.26'

DUMP AREA

SLATE

112.27'

137.27'

732+78.58

733+00

732+25.06

732+00

731+00

730+00

735+00

734+00

EXIST. CHAIN LINK FENCE

S 0°24'07" E
N 0°24'07" W

200' FENCE

WOODED AREA

206.09'

197.01'

RAMP 'F'

PART O.L. 539

PART OL. 539

N 50°50'22" W 34.82'

G.G. 62'

S 50°24'07" E 68.22'

S 89°18'54" E 130.00'

287.51'

N 50°50'22" W 24.82'

S 89°18'54" E 130.00'

S 89°18'54" E 130.05'

GG 62.04'

S 89°18'54" E 130.00'

PARNELL ST.
N 89°18'54" W
EXIST. R/W

MONUMENT ASSEMBLY

CURVE Nº 2

ALL PARCELS THIS SHEET I-FUNDS

REV.	DATE	COMPLETION DATE — DESCRIPTION
1	10/1/68	CHANGED LA LINE FOR PARCELS 509-WL & 508-WA
2	7-28-69	Changed All Notes Previously Revised on Earlier Sheets.

SCALE
0 20 40 60 80 100

R/W SHEET NO. 85 OF 104

State Highway Dept. Div. 4
R/W Plans & Admin. Sect.
JAN 27 1969
Approved
Date
By

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

638/656

86/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 85

MATCH SHEET NO. 83

MATCH SHEET NO. 87

RAMP 'F'

RAMP 'F'

730+00

731+00

732+00

733+00

250'

300'

S 71°-35'-04"-E 229.50'

S 64°-17'-03"-E

CONSTRUCTION LIMITS

261.02'

D/W FENCE

LA

210' RT 732+00

S 79°-13'-13"-E 102.82'

D/W FENCE

LA

192.87' RT 732+95.84

S 79°-13'-13"-E 50.97'

LA R/W

508A WL

509 WL

492C WL

S 0°-24'-07"-E 206.08'

N 0°-24'-07"-W 206.08'

S 0°-24'-07"-E 197.01'

N 0°-24'-07"-W 197.01'

733+00

185.26' RT 733+44.01

S 79°-13'-13"-E 164.23'

CONSTRUCTION LIMITS

LA

165' RT 735+00

S 81°-24'-25"-E - 271.84'

PART OL. 539

ADOLPH JOHNSON & SON COMPANY, AN OHIO Corporation
(LANDLOCKED)
61,317 S.F.

THE DOLLAR SAVINGS & TRUST COMPANY-TRUSTEE
(LANDLOCKED)
7,379 S.F.

ARTHUR E. WESTER,
WARD W. WESTER &
HAROLD D. LEACH

(LANDLOCKED)
58,068 S.F.

PART OL. 539

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.T.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT	NET RESIDUE RT.
508A-WL	177,622 S.F.	NONE	119,554 S.F.	NONE	119,554 S.F.	–	58,068 S.F. (L)
508-WL	220,000 S.F.	NONE	127,122 S.F.	NONE	127,122 S.F.	31,561 S.F.	61,317 S.F. (L)
492C-WL	23,870 S.F.	NONE	16,491 S.F.	NONE	16,491 S.F.	–	7,379 S.F. (L)

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION

R/W SHEET NO. 86 OF 104

State Highway Dept. Dist. 4
R/W Engrs. & Admin. Corp.
JAN 27 1969
Logged
Chkd. BW Ck.

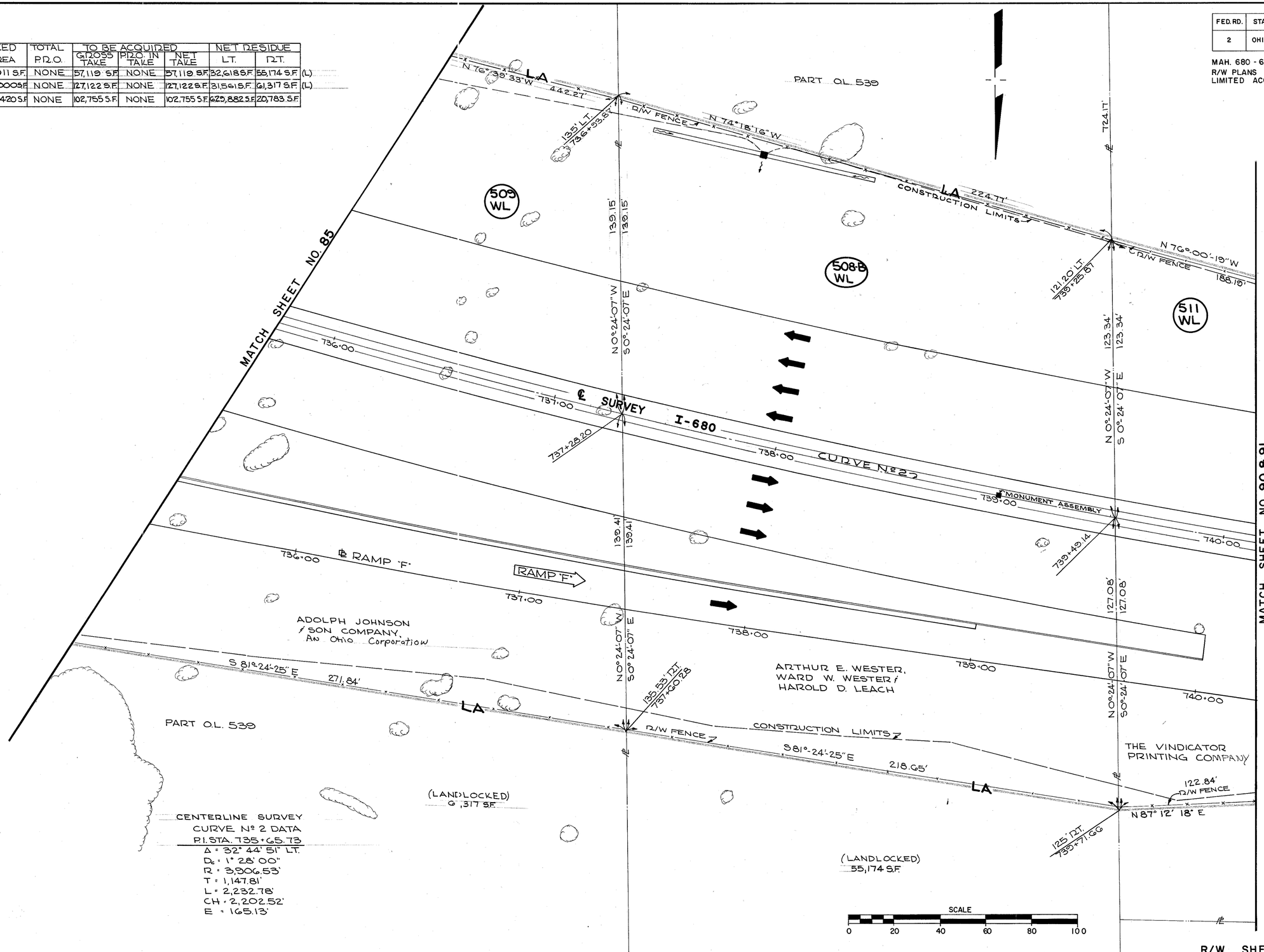
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

639
656

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

87
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.	
508B-WL	144,911 S.F.	NONE	57,119 S.F.	NONE	57,119 S.F.	32,618 S.F.	55,174 S.F.	(L)
509-WL	220,000 S.F.	NONE	127,122 S.F.	NONE	127,122 S.F.	31,561 S.F.	61,317 S.F.	(L)
511-WL	753,420 S.F.	NONE	102,755 S.F.	NONE	102,755 S.F.	629,882 S.F.	20,783 S.F.	



CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+65.73
Δ = 32° 44' 51" LT.
D_c = 1° 28' 00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

ALL PARCELS THIS SHEET
I - FUNDS

REV.	DATE	DESCRIPTION	COMPLETION DATE -
1	10/1/68	CHANGED LA LINE ON PARCELS 508B-WL & 509-WL	

R/W SHEET NO. 87 OF 104

State Highway Dept. Div. 4
R/W - ENGR & ADMIN SECT.
JAN 27 1969
LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

640
656

88
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
511-WL	753,420 S.F.	NONE	102,755 S.F.	NONE	102,755 S.F.	629,882 S.F.	20,783 S.F.
543-WL	16,000 S.F.	NONE	16,000 S.F.	NONE	16,000 S.F.	—	—
544-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+65.73
Δ = 32° 44' 51" LT.
D_c = 1° 28' 00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

THE VINDICATOR
PRINTING COMPANY

MATCH SHEET NO. 87

MATCH SHEET NO. 89

MATCH SHEET NO. 90

PT. O.L. 537

Out Lot Line

O.L. 550

LA

N 76°-00'-19" W 188.19'

105' LT. 741+18.96

GUY WIRE TO TV TOWER
5 CABLES

R/W FENCE

N 86°-12'-12" W

CONSTRUCTION LIMITS (ROCK CUT)

292.53'

511 WL

CURVE Nº 22

℄ SURVEY I-680

741+00 742+00 743+00 744+00

744+27.06

745+00

746+00

113.38' LT. 744+19.85

TWIN 4" PEACH

MAPLE CLUSTER

WIRE FENCE

119.46' LT. 745+84.66

8" TWIN LOCUST

18726

18725

SCALE 1"=40' NPL M82 W.C.C.

10" LOCUST

12" SILVER BALL

M.H.

6" WATER
DICKSON AVE. 50'
12" SEWER

11" MAPLE

16" MAPLE

EDGE PAVE

4" L.P. GAS

18717

LOCUST & MULBERRY

SHED

18750

6" APPLE

1 STY. FR. H5E #714

35 SYNC WALL

16" LOCUST

MULBERRY

15" PLUM

15" WILLOW

8" CHOKE CHERRY

6" MAPLE

FRANK L. COGO

STEPS

WALL

GRAPES

8" CATALPA

JOSEPH & ANNA LEKAVICIUS

PEACH

GARDEN

WALL

6" APPLE

GAR.

PEACH

PEACH

R/W FENCE

S 89°-50'-30" W 160.00'

40.00'

16" APPLE

5" APPLE

FR. GAR.

544 WL

543 WL

10" CATALPA

5" PEACH

SAMUEL GIBSON PLACE Nº 3
P.B. 15 PG. 6

SLAG

PARKING AREA

1-STY. FR. #727

3" PEACH

113.60' 100.00

100

100

100.00'

N 0°-24'-34" W

S 0°-24'-34" E

2" CONC.

BUSH

2½ STY. FR. H5E

CHARLES YOUNG - TRUSTEE FOR YOUNGSTOWN PIGEON CLUB

19052 19053 19054 19055 19056

13.57' LT. 744+26.22

4" PINE

745+86.80 19.48' LT.

STEFAN JAKUBOWSKI BUSH

40.00'

N 89°-50'-30" E 160.00'

+ SIGN

EXIST. R/W

GUY

5' CONC.

20'

S 89° 50' 30" W

TYNDALE AVE. 40'

SCALE
0 20 40 60 80 100

ALL PARCELS THIS SHEET
1 - FUNDS

REVISIONS	DATE	DESCRIPTION

COMPLETION DATE —

R/W SHEET NO. 88 OF 104

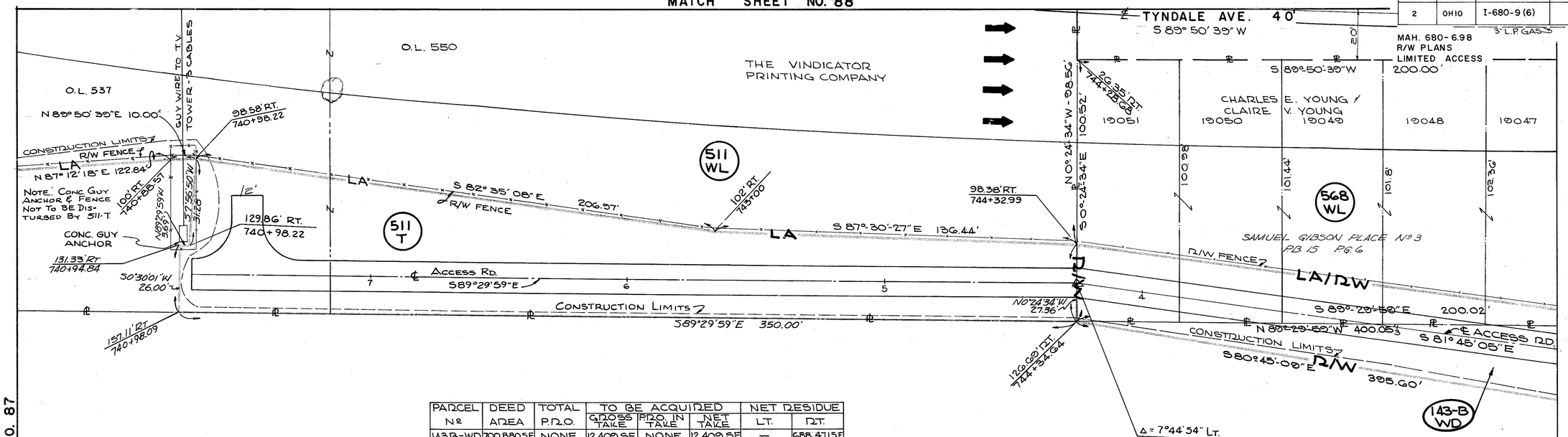
State Highway Dept. Bur. of R/W Engr. & Admin. Servs.
JAN 27 1969
Logged
Bur.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

641
656

89
104

MATCH SHEET NO. 88



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
143B-WD	700,880 S.F.	NONE	12,408 S.F.	NONE	12,408 S.F.	—	688,471 S.F.
511-WL	753,420 S.F.	NONE	102,755 S.F.	NONE	102,755 S.F.	629,882 S.F.	20,783 S.F.
568-WL	20,334 S.F.	NONE	20,334 S.F.	NONE	20,334 S.F.	—	—
511-T		NONE	13,477 S.F.	NONE	13,477 S.F.		

MATCH SHEET NO. 87

O.L. 537

MATCH SHEET NO. 92

THE CITY OF YOUNGSTOWN, OHIO

ALL PARCELS THIS SHEET
I - FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
	7-15-71	ADDED PARCEL 511-T

R/W SHEET NO. 89 OF 104

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT
JAN 27 1969
ISSUED

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE L.T.	NET RESIDUE R.T.
517-WL	5,618 S.F.	NONE	100 S.F.	NONE	100 S.F.	5,518 S.F.	–
518-WL	5,617 S.F.	NONE	300 S.F.	NONE	300 S.F.	5,317 S.F.	–
519-WL	5,617 S.F.	NONE	798 S.F.	NONE	798 S.F.	4,798 S.F.	–
519-WD			21 S.F.	NONE	21 S.F.		
519-T			46 S.F.	NONE	46 S.F.		
544-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
545-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
546-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
547-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
548-WL	8,000 S.F.	NONE	8,000 S.F.	NONE	8,000 S.F.	–	–

CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+65.73
Δ = 32° 44' 51" LT.
D_c = 1° 28' 00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

* RE: PCLS 527-WL THRU 540-WL INCL:

1. PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969.
3. TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540 WL, TOTAL TAKE.

DATE OF THESE REVISIONS : 3/12/69
J. R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, & Removed All Phantom Parcels.

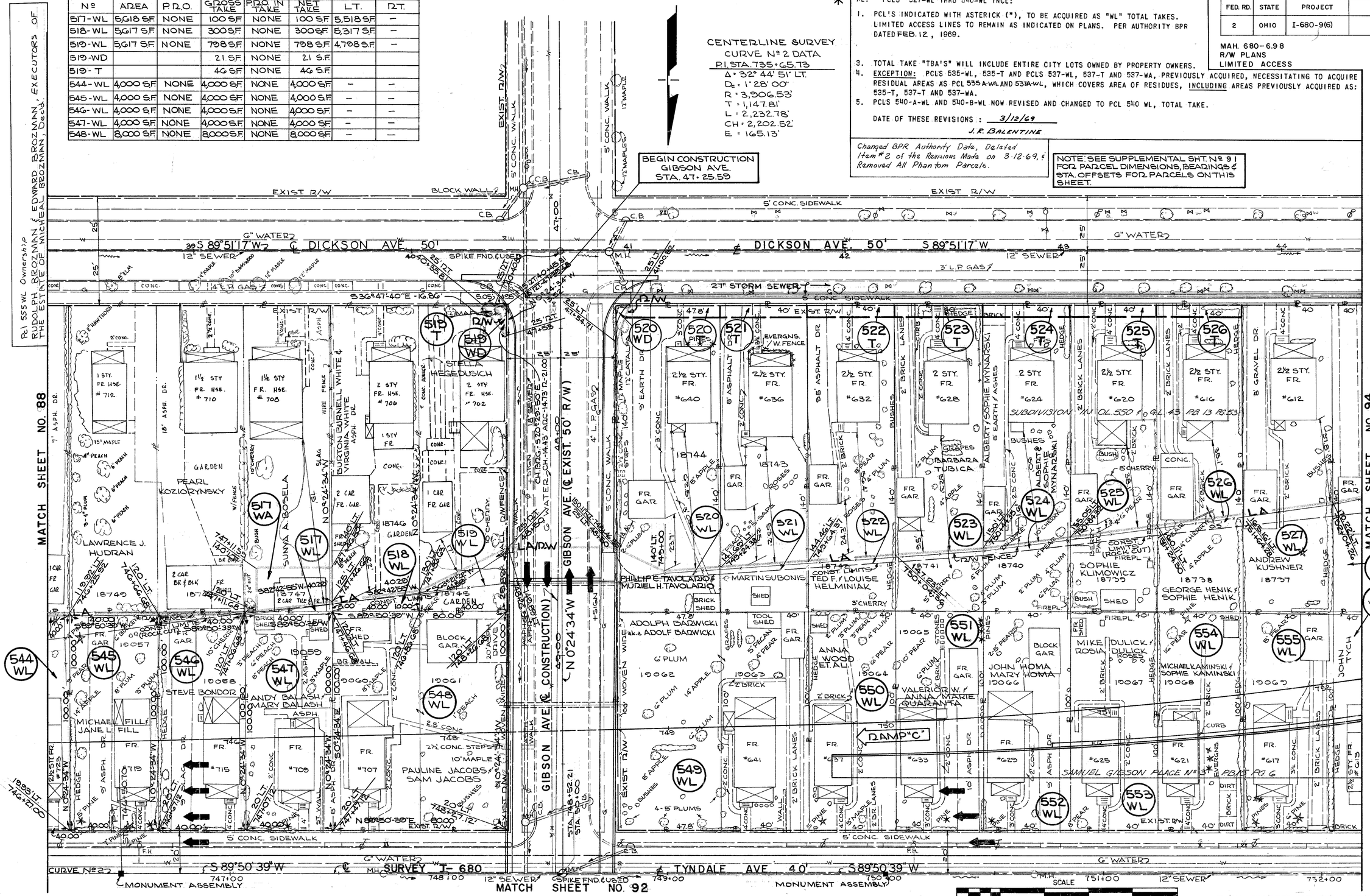
NOTE: SEE SUPPLEMENTAL SHT. Nº 91 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

642/656

90/104



COMPLETION DATE -

REV.	DATE	DESCRIPTION
1	7-28-69	Changed All Names Previously Revised on Earlier Sepias

SCALE 0 20 40 60 80 100

R/W SHEET NO. 90 OF 104

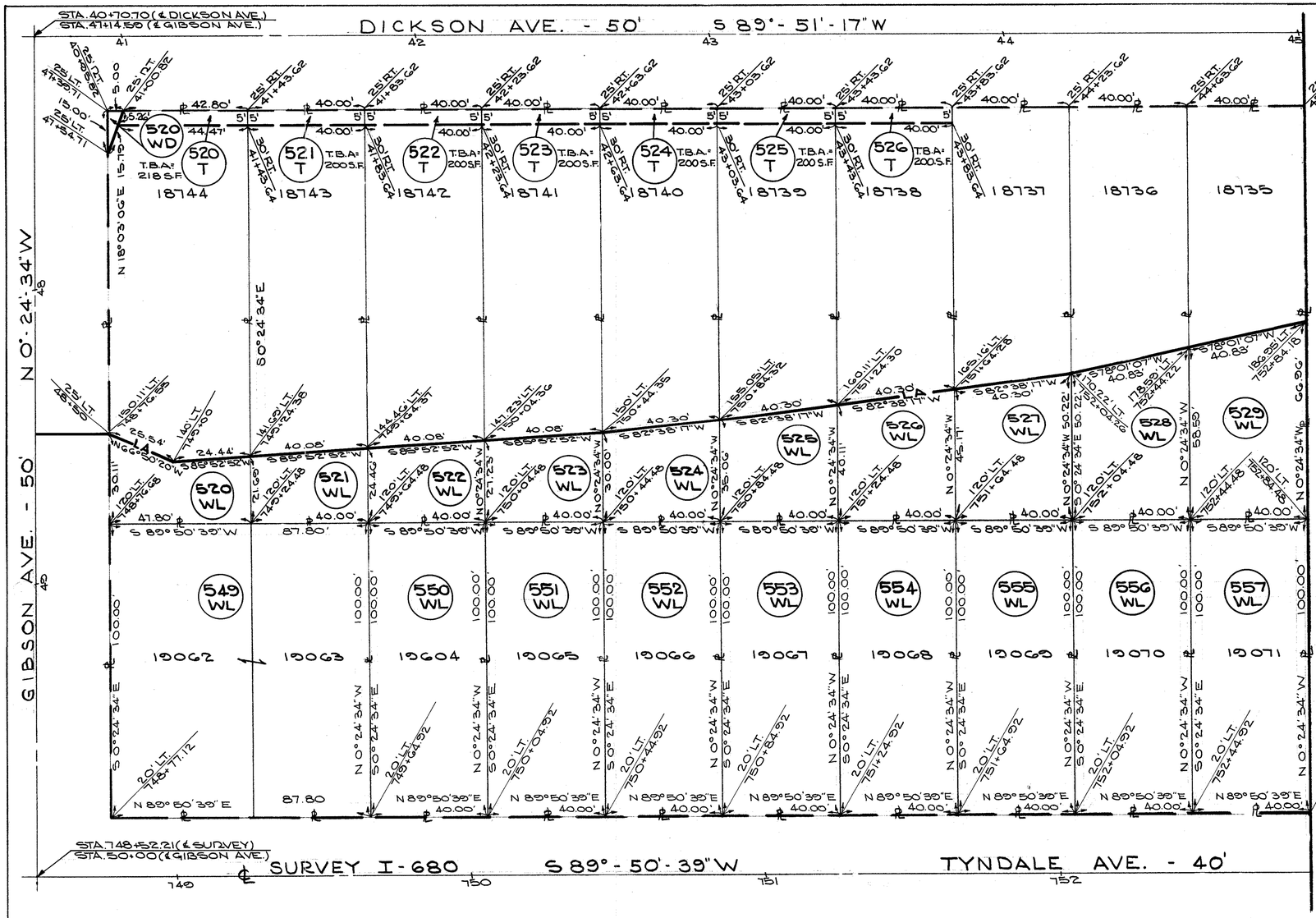
State Highway Dept. Div. 4 R/W - ENGR & ADMIN SECT. JAN 27 1969 LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

643 / 656

91 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



* RE: PCLS 527-WL THRU 540-WL INCL.

1 - PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES - LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969

3 - TOTAL TAKE "TBA'S WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.

4 - EXCEPTION: PCLS 535WL, 535-T AND PCLS 537WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535-AWL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA

5 - PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540-WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69

J. R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, and Removed All Phantom Parcels.

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.T.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
520-WL	6,711 S.F.	NONE	1,035 S.F.	NONE	1,035 S.F.	5,578 S.F.	—
520-WD			38 S.F.	NONE	38 S.F.		
521-WL	5,616 S.F.	NONE	923 S.F.	NONE	923 S.F.	4,693 S.F.	—
522-WL	5,615 S.F.	NONE	1,034 S.F.	NONE	1,034 S.F.	4,581 S.F.	—
523-WL	5,615 S.F.	NONE	1,145 S.F.	NONE	1,145 S.F.	4,470 S.F.	—
524-WL	5,615 S.F.	NONE	1,301 S.F.	NONE	1,301 S.F.	4,314 S.F.	—
525-WL	5,615 S.F.	NONE	1,503 S.F.	NONE	1,503 S.F.	4,112 S.F.	—
526-WL	5,615 S.F.	NONE	1,706 S.F.	NONE	1,706 S.F.	3,909 S.F.	—
* 527-WL	5,614 S.F.	NONE	5,614 S.F.	NONE	5,614 S.F.	—	—
* 528-WL	5,614 S.F.	NONE	5,614 S.F.	NONE	5,614 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.T.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
* 529-WL	5,614 S.F.	NONE	5,614 S.F.	NONE	5,614 S.F.	—	—
549-WL	8,780 S.F.	NONE	8,780 S.F.	NONE	8,780 S.F.	—	—
550-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
551-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
552-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
553-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
554-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
555-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
556-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
557-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

Ohio Highway Dept. Div. of R/W ENGR. & SURVEY
JUN 27 1969
196668
Cross Ref. Dwg. No.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

644
656

92
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 90

℄ SURVEY I-680

℄ TYNDALE AVE. 40'

MONUMENT ASSEMBLY

S 89°50'39" W

N 89°27'58" W

℄ BENWOOD AVE. 50'

℄ ACCESS RD

S 81°45'05" E

R/W S 80°45'09" E 395.60'

℄ EXIST. 50' R/W

℄ GIBSON AVE. (℄ CONSTRUCTION)

N 0°24'34" W

N 0°14'55" E

MATCH SHEET NO. 89

MATCH SHEET NO. 96

THE CITY OF YOUNGSTOWN, OHIO

PETER KALENDA a.k.a. PETE KALENDA
NELLIE KALENDA

KARL a.k.a. KAROL OLEKSAK

ANN FABISH, OWNER

STEVE DOBRANCHIN ET. AL.

STELLA F. VELICHKO

WALTER / ANNE NATTYSHAK

JOHN EVICH / ISABEL B. EVICH

JOHN A. / DOROTHY J. DVORNEKOVICH

MIKE / MARY LULKA

VIRGINIA FILIPOWICZ

FRANK DUDEK

HENRY F. NOSEK
SOPHIE NOSEK

ANIELA STASIAK

LOUIS J. BARTLO
NORMA D. BARTLO

MARY SWATOWSKI a.k.a. MARIE SWATOSKI

SOPHIE GUCWA
ZOPIYA GUCWA

FRANK / STELLA PRUCNAL

PAUL P. TEMELKOFF
SONJA A. TEMELKOFF

SAMUEL GIBSON PLACE No 3 PB 15 PG 6

H.K. WICK PLAT PB 15 PG 95

RAMP "D"

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
143B-WD	700,880 S.F.	NONE	12,409 S.F.	NONE	12,409 S.F.	—	688,471 S.F.
568-WL	20,334 S.F.	NONE	20,334 S.F.	NONE	20,334 S.F.	—	—
569-WL	16,584 S.F.	NONE	16,584 S.F.	NONE	16,584 S.F.	—	—
570-WL	4,188 S.F.	NONE	4,188 S.F.	NONE	4,188 S.F.	—	—

NOTE: SEE SUPPLEMENTAL SHT. No 93 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

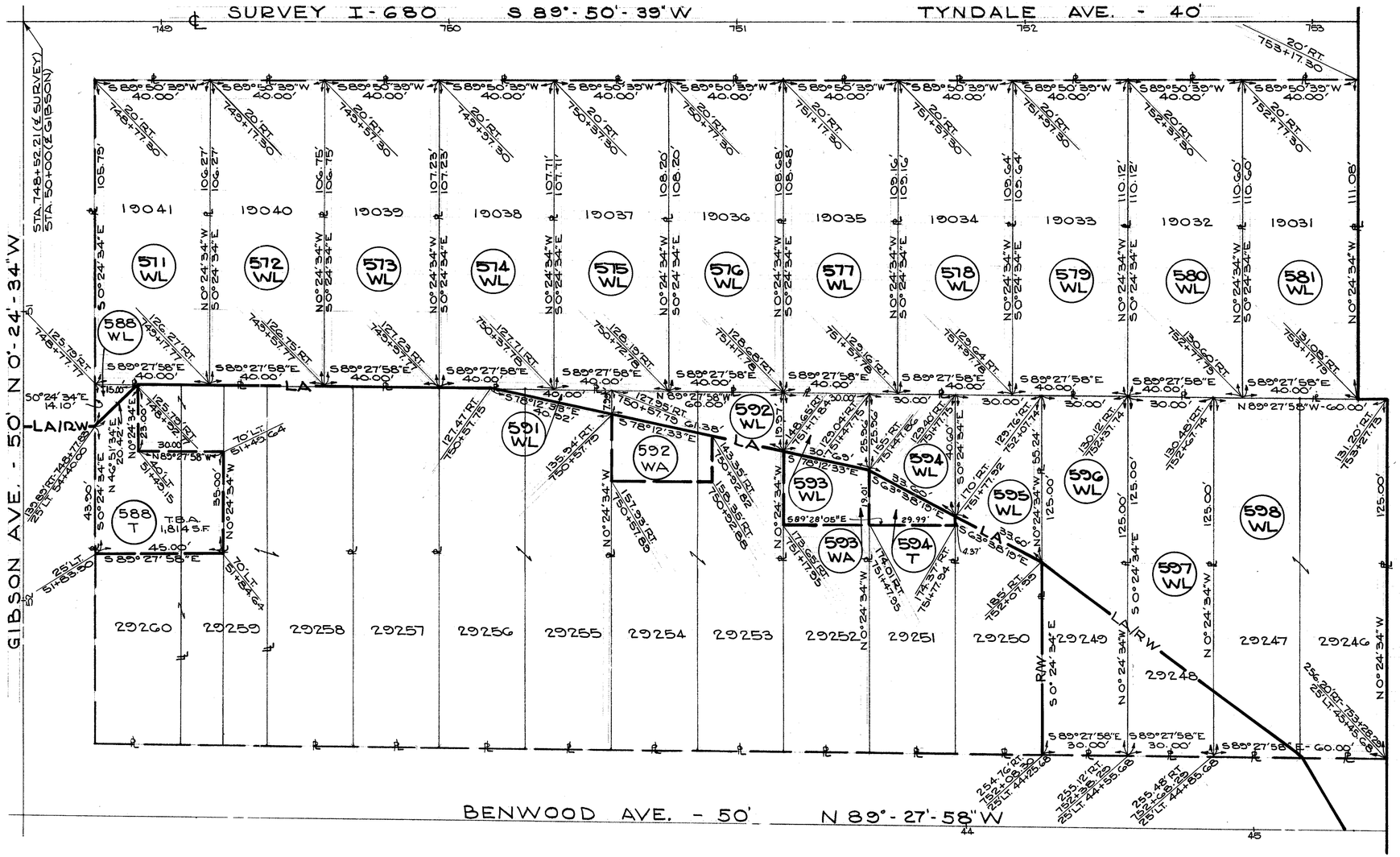
ALL PARCELS THIS SHEET
I - FUNDS

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7-28-69	Changed All Names Previously Revised on Earlier Sapias.
2	7-28-69	Changed All WA Pcls. to T Pcls. Previously Revised on Earlier Sapias.

R/W SHEET NO. 92 OF 104

JAN 27 1969


SURVEY I-680 S 89°-50'-39"W
TYNDALE AVE. - 40'
GIBSON AVE. - 50' N 0°-24'-34"W
BENWOOD AVE. - 50' N 89°-27'-58"W
STA. 748+52.21 (℄ SURVEY)
STA. 50+00 (℄ GIBSON)
748
749
750
751
752
753
19041
19040
19039
19038
19037
19036
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19034
19033
19032
19031
571 WL
572 WL
573 WL
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577 WL
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579 WL
580 WL
581 WL
588 WL
588 T
T.B.A. 1,811 4 S.F.
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29249
29248
29247
29246
L-A
L-A IRW
L-A RW
R/W
S 89°27'58"E 40.00'
N 89°27'58"W 60.00'
S 89°27'58"E 30.00'
N 0°24'34"W 125.00'
S 0°24'34"E 125.00'
N 0°24'34"W 111.08'
S 0°24'34"E 43.50'
N 0°24'34"W 35.00'
S 89°27'58"E 45.00'
N 85°27'58"W 30.00'
N 0°24'34"W 25.00'
S 0°24'34"E 14.10'
S 78°12'33"E 40.38'
N 0°24'34"W 125.00'
S 89°28'05"E 29.99'
N 0°24'34"W 55.24'
S 0°24'34"E 125.00'
N 0°24'34"W 125.00

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

646
656

94
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY
CURVE Nº 3 DATA
P.I. STA 768+49.35

Δ = 89° 50' 18" RT.	θs = 11° 00' 00"
Dc = 5° 30' 00"	Δc = 67° 50' 18" RT.
R = 1,041.74'	Tc = 700.53'
Lc = 1,233.42'	Lc = 399.35'
Ts = 1,244.96'	Ec = 213.63
Es = 438.46	L.T. = 267.18'
Ls = 400.00'	S.T. = 133.80'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1. P.I. STA. 758+71.59
Δ = 11° 00' 00" RT.
R = 1,389.61'
T = 133.80'
L = 266.79'
CH = 266.38'
E = 6.43'

* RE: PCLS 527-WL THRU 540-WL INCL:

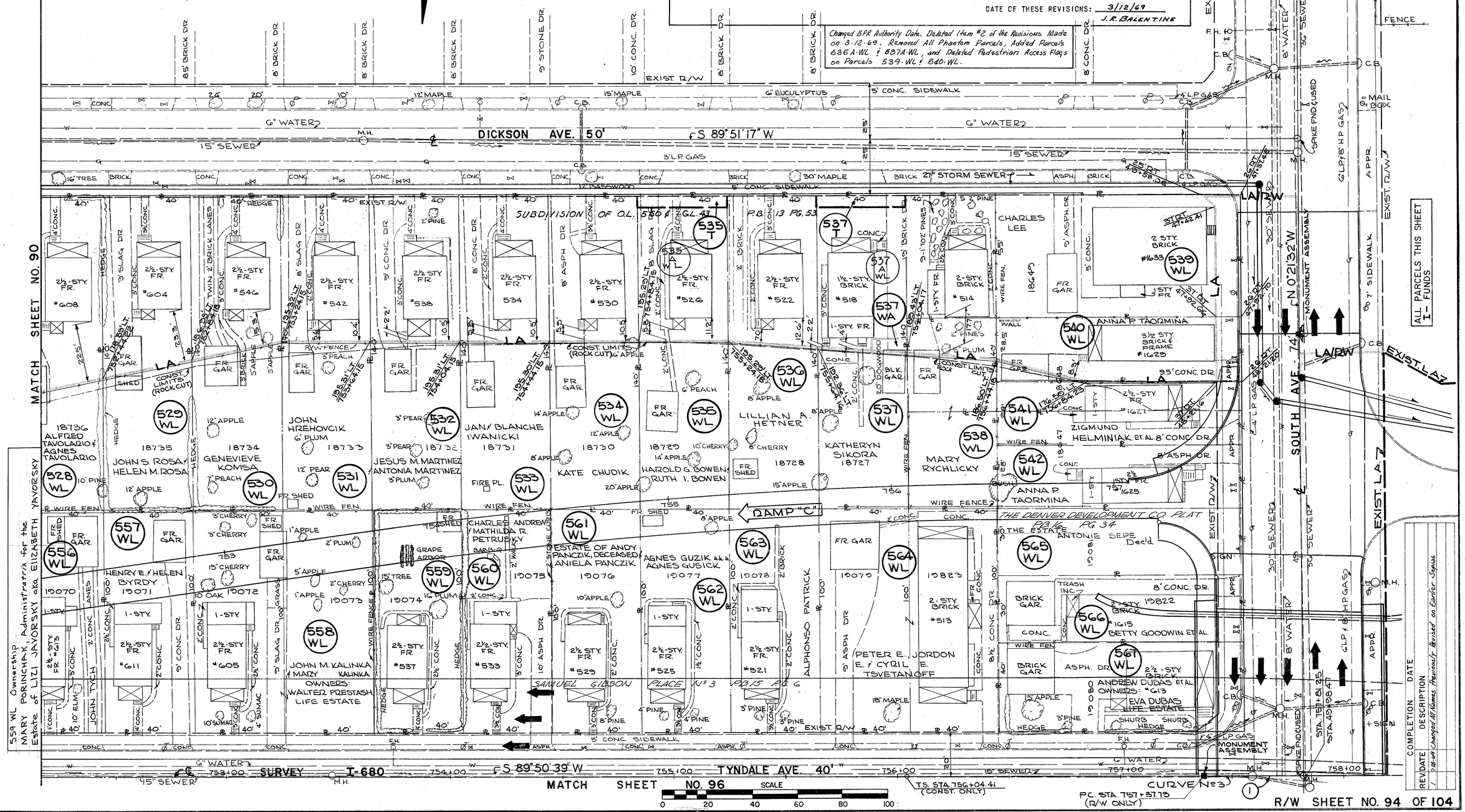
1. PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969.

NOTE: SEE SUPPLEMENTAL SHT. Nº 91 & 95 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

3. TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540-WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69
J.R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, Removed All Phantom Parcels, Added Parcels 535A-WL & 537A-WL, and Deleted Pedestrian Access Flags on Parcels 539-WL & 540-WL.



REV.	DATE	DESCRIPTION	COMPLETION DATE
1	7-28-69	Changed All Names Previously Revised on Earlier Sepias	

R/W SHEET NO. 94 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	1-680-9(6)	

647
646
95
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

* RE: PCLS 527-WL THRU 540-WL INCL.

1. PCL'S INDICATED WITH ASTERICK(*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB 12, 1969.

3. TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 540-A-WL AND 540 B-WL NOW REVISED AND CHANGED TO PCL. 540-WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69
J.R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, Removed All Phantom Parcels, Added Parcels 535A-WL & 537A-WL, and Deleted Pedestrian Access Flags on Parcels 539-WL & 540-WL.

DICKSON AVE. - 50' S 89°-51'-17" W

STA. 47+11.02 ℄ SOUTH
STA. 50+00 ℄ DICKSON

TYNDALE AVE. - 40'

℄ SURVEY I-680 S 89°-50'-39 W

SOUTH AVE.

CENTERLINE SURVEY
CURVE N°3 DATA
P.I. STA. 768+49.35

Δ=89° 50' 18" RT.	Δc=67° 50' 18" RT.
D=5° 30' 00"	Tc=700.53'
R=1,041.74'	Θs=11° 00' 00"
Lc=1,233.42'	LT.=267.18'
Ts=1,244.96'	ST.=133.80'
Es=438.46'	L.C.=399.35'
Ls=400.00'	Ec=213.63'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1. P.I. STA. 758+71.59
Δ=11° 00' 00" RT.
R=1,380.61'
T=133.80'
L=266.79'
CH=266.38'
E=6.43'

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
* 530-WL	5,614 S.F.	—	5,614 S.F.	—	5,614 S.F.	—	—
* 531-WL	5,613 S.F.	—	5,613 S.F.	—	5,613 S.F.	—	—
* 532-WL	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	—	—
* 533-WL	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	—	—
* 534-WL	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	—	—
O* 535-WL	5,612 S.F.	—	3,012 S.F.	—	3,012 S.F.	—	—
* 536-WL	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	—	—
O* 537-WL	5,611 S.F.	—	2,836 S.F.	—	2,836 S.F.	—	—
* 538-WL	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	—	—
* 539-WL	6,103 S.F.	620 S.F.	6,103 S.F.	620 S.F.	5,483 S.F.	—	—
* 540-WL	3,146 S.F.	314 S.F.	3,146 S.F.	314 S.F.	2,832 S.F.	—	—
O 535AWL	—	—	2,600 S.F.	—	2,600 S.F.	—	—
O 537AWL	—	—	2,775 S.F.	—	2,775 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
541-WL	3,080 S.F.	308 S.F.	3,080 S.F.	308 S.F.	2,782 S.F.	—	—
542-WL	3,080 S.F.	315 S.F.	3,0809.F.	315 S.F.	2,765 S.F.	—	—
558-WL	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	—	—
559-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
560-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
561-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
562-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
563-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
564-WL	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	—	—
565-WL	3,310 S.F.	310 S.F.	3,310 S.F.	310 S.F.	3,000 S.F.	—	—
566-WL	3,309 S.F.	330 S.F.	3,309 S.F.	330 S.F.	2,979 S.F.	—	—
567-WL	4,411 S.F.	488 S.F.	4,411 S.F.	488 S.F.	3,923 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W Engr's Office
JAN 27 1969
Logged
Bill Bk.

MATCH SHEET NO. 94

FED. RD.	STATE	PROJECT	
2	OH10	I-680-9(6)	

648 / 656

96 / 104

753+00 MH S 89°50'39" W 754+00 TYNDALE AVE. 40' 755+00 3" L.P. GAS 756+00 ℄ I-680 757+00 CURVE No 3 MONUMENT ASSEMBLY

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS
4" L.P. GAS

NOTE: SEE SUPPLEMENTAL SHT. No 93, 97 & 99 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

T.S. STA. 756+04.41 (CONST. ONLY)
P.C. STA. 757+35.75 (R/W ONLY)

579 WL — MIKE, MARY LULKA — 2½-STY. FR. #612 — 1-STY. CONC.
580 WL — MARGARET S. SYMPSON — 2½-STY. FR. #608 — 1-STY.
581 WL — ANNA CULLER
582 WL — 2½-STY. FR. #602 — 1-STY.
583 WL — 2½-STY. FR. #538 — 1-STY.
584 WL — 2½-STY. FR. #534 — 1-STY.
585 WL — 2½-STY. FR. #532 — 1-STY.
586 WL — 2½-STY. FR. #528 — 1-STY. ASPH.
587 WL — SLAG LOT — MIKE RIDARSKY, PAUL L. RIDARSKY, STEVE RIDARSKY, A PARTNERSHIP — O.L. 549

SAMUEL GIBSON PLACE No 3 P.B. 15 PG 6

EXIST. R/W — 7' CONC. SIDEWALK — SIGN — 5' CONC. SIDEWALK — C.B. — 30" SEWER — 8" WATER — 36" SEWER — 6" L.P. & 8" H.P. GAS — EXIST LA — RAMP TO BE ABANDONED

19033 WILLIAM & JOHNNIE MAE JOHNSTONE 29249 — 19032 — 19031 — 19030 MARY DUPEY — 19029 JOSEPH KELLEY ET AL, CHRISTINE KELLEY — 19028 FRANK SUSOR, MARY SUSOR — 19027 ANNE MUMAW — 19026 JOHN & ELIZABETH BALCHICK

WIRE FENCE

29248 — 29247 — 29246 — 29245 — 29244 — 29242 JOSEPH VIANO 29243 — 29241 — 29240 — 29239 — 29238 — 29237 — 29236 ANGELO FAMULARO, ROSE FAMULARO — 29235 JOSEPHINE FINN — 29234 — 29233 — 29232 — 29231 NELLIE MOLALI

596 WL — 597 WL MARY STIPETICH — 598 WL MINNIE DIFABIO — 599 WL — 600 WL — 601 WL — 602 WL — 603 WL — 604 WL — 605 WL — 606 WL — 607 WL — 608 WL — 609 WL — 610 WL EVA LUKOSEVECUS

RAMP "D" — RAMP "B" — H.K. WICK PLAT P.B. 15 PG 25 — STANLEY JULIA O. BARWICH — KATHERINE SZABAT — WLADZISLAW GUBALA — JOHN C. FEKETY — SOPHIE IGNATA a.k.a. SOPHIE F. IGNATA — JOHN E. OWCARZ ET AL — BERT B. SLEVIN ET AL, KATHERYN SLEVIN ET AL — ANGELLA ALBERT HARRIS

LA F&W — 8.5' CONC. DR. — CRACK OUT & CONST. LIMITS R/W FENCE

BENWOOD AVE. 50' ℄ N 89°27'58" W — 5" L.P. GAS — 12" SEWER — G" WATER

613 S — 614 S — 614 WL — 614 T — 615 WL — 615 S — 615 WA — 616 WL — 617 WL — 618 WL — 619 WL — 620 WL — 622 WL — 623 WL

29274 — 29273 — 29272 — 29271½ — 29270 — 29269 — 29268 — 29267 — 29266 — 29265 — 29264 — 29263 — 29262 — 29261

AGOSTINO & CARMELLA TOWESE — JOHN FARGO & ANNE FARGO — MARY J. ALTIERI — FRANK KANIK ET AL — CHISTINA SWIDERSKI ET AL — CARMELA PANNALI — SLAG LOT — SOPHIE IGNATA — 1-STY. BLOCK #1511 — FR. SHED

Parcel 605 WL Ownership
JOHN J. HORNEY, JR., Administrator of the Estate of THERESA ANN HORNEY a.k.a. THERESA HORNEY a.k.a. THERESA HORNEY a.k.a. THERESA HORNEY a.k.a. THESA HORNEY, Deid.

SLAG SHOWED OWNERSHIP OF PCLS 625WL & 625WL SAME SMITH 7-29-70

ALL PARCELS THIS SHEET I-FUNDS

MATCH LINE - SEE SHEET No 100 - 74'

SCALE 0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7-28-69	Changed All Names Previously Revised on Earlier Sepias
2	7-28-69	Changed All WL Pcls to "I" Pcls Previously Revised on Earlier Sepias.

State Highway Dept. Div. 4 R/W ENGR'S ADMIN. SEC'T. JAN 27 1969 Date Bill No.

State Highway Dept. Div. 4 R/W ENGR'S ADMIN. SEC'T. JAN 27 1969 Date 1-29-69 Bill No. 1-29-69

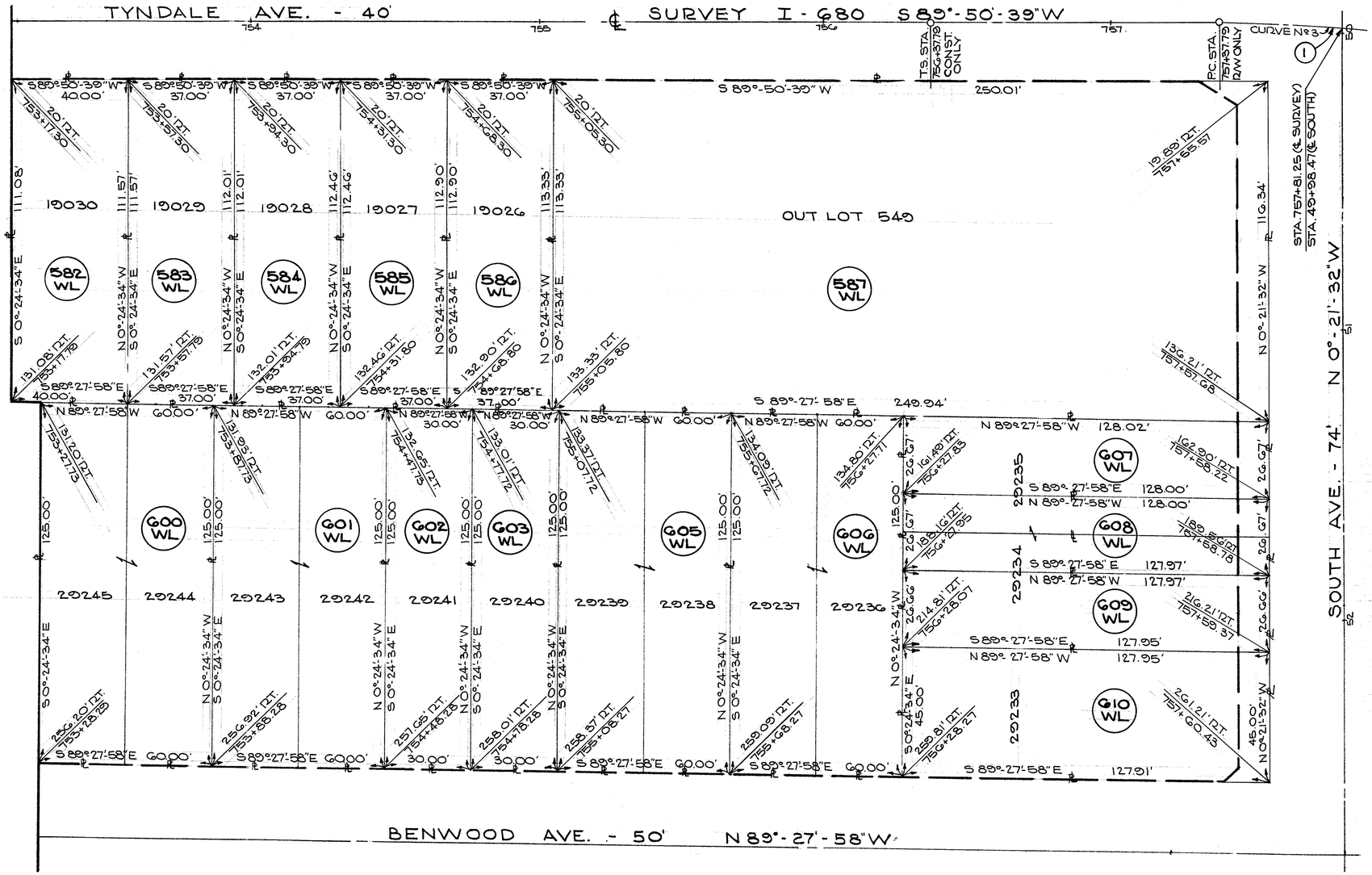
R/W SHEET NO. 96 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

649
656

97
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	L.T.	R.T.
582-WL	4,440 S.F.	–	4,440 S.F.	–	4,440 S.F.	–	–
583-WL	4,124 S.F.	–	4,124 S.F.	–	4,124 S.F.	–	–
584-WL	4,141 S.F.	–	4,141 S.F.	–	4,141 S.F.	–	–
585-WL	4,158 S.F.	–	4,158 S.F.	–	4,158 S.F.	–	–
586-WL	4,166 S.F.	–	4,166 S.F.	–	4,166 S.F.	–	–
587-WL	28,704 S.F.	1,327 S.F.	28,704 S.F.	1,327 S.F.	27,377 S.F.	–	–
600-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
601-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
602-WL	3,750 S.F.	–	3,750 S.F.	–	3,750 S.F.	–	–
603-WL	3,750 S.F.	–	3,750 S.F.	–	3,750 S.F.	–	–
605-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
606-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
607-WL	3,426.375 S.F.	293.37 S.F.	3,426.375 S.F.	293.37 S.F.	3,133 S.F.	–	–
608-WL	3,413 S.F.	293 S.F.	3,413 S.F.	293 S.F.	3,120 S.F.	–	–
609-WL	3,426.375 S.F.	293.37 S.F.	3,426.375 S.F.	293.37 S.F.	3,133 S.F.	–	–
610-WL	5,794.5 S.F.	507 S.F.	5,794.5 S.F.	507 S.F.	5,287.5 S.F.	–	–

CENTERLINE SURVEY
CURVE N° 3 DATA
P.I. STA. 758+49.35

Δ = 89°50'18" RT.
Dc = 5°30'00"
R = 1,041.74'
Lc = 1,633.42'
Tc = 1,244.96'
Ec = 438.46'
Ls = 400.00'

Δc = 67°50'18" RT.
Tc = 700.58'
Θs = 11°00'00"
L.T. = 267.18'
S.T. = 133.80'
L.C. = 390.35'
Ec = 213.63'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1. P.I. STA. 758+71.59
Δ = 11°00'00" RT.
R = 1,389.61'
T = 133.80'
L = 266.79'
CH = 266.38'
E = 6.43'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SECT.
JAN 27 1969
Logged
Bill St.

State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SECT.
JAN 27 1969
Logged
Bill St.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

650
656

98
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 96

MATCH LINE - SEE SHT. Nº 100

RAMP "D"

LEE AVE. 50' N 89°28'03"W

SOUTH AVE. + 74' N 0°21'32"W

THE HENRY K WICK ESTATE PLAT PB 17 PG 85

CHISTINA SWIDERSKI, ETAL

WLADZSLAW GUBALA

JOHN C FEKETY

ANGELLA HARRIS & ALBERT HARRIS

SOPHIE IGNATH

FRANK J KANK ETAL

DANALLI

JOHN LEONI

ERMA PETRELLA

ROBERT T. CAMPANA
REGINA C. CAMPANA

WILLIAM & CHRISTINE SWIDERSKI

MARY KIEFER
STANLEY P. SEIDLER
ANNE TROLL
STELLA BRINCKO
TED SEIDLER
ALEXANDRA SEIDLER

BERT B. SLEVIN ET AL &
KATHERYN SLEVIN ET AL

ISABELLE C. BEES
1-STY. BLOCK
#1483

BURT BEES
1-STY. BLOCK
#1481

1-STY. BLOCK W/ BRICK FRONT
#1495

PEDESTRIAN POINT OF ACCESS 6' WIDE STA. 55+06

PEDESTRIAN POINT OF ACCESS 6' WIDE STA. 55+36.15

STA. 55+82.92
STA. 50+00

NOTE: SEE SUPPLEMENTAL SHT. Nº 99 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

NOTE "A" (SA PARCELS)
SPECIAL WAIVER OF DAMAGE RESULTING FROM DAMAGE TO FLOWERS, SHRUBS, & TREES - PCL. 628SA, & DAMAGE TO A 7" EVERGREEN - PCL 629SA, CAUSED BY CONSTRUCTION OF THIS IMPROVEMENT.

ALL PARCELS THIS SHEET
I- FUNDS

SCALE
0 20 40 60 80 100

ADDED PCLS 628SA & 629SA 7-5-72

REV	DATE	DESCRIPTION
		COMPLETION DATE —
1	10/21/68	CORRECTED PE's FOR PARCEL 626B-WL, ADDED PARCEL 626-LA
2	7-12-69	Changed All Names Previously Revised on Earlier Sepias
3	7-23-70	Showed Ownership of Pcls 623WL & 625WL SAME Smith

R/W SHEET NO. 98 OF 104

State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SERV.
JAN 27 1969
Lucas
Ottawa
Hill Dk.

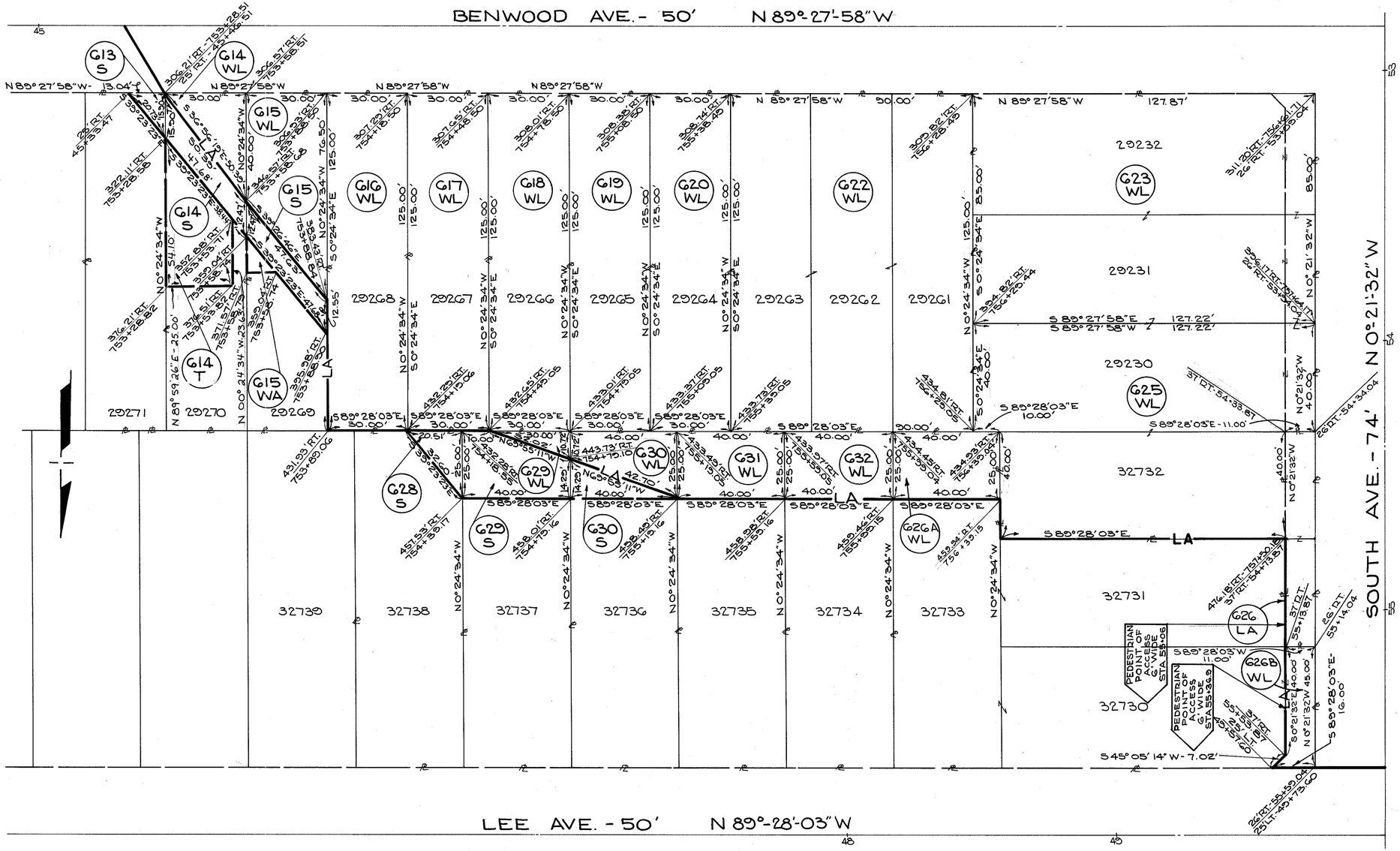
State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SERV.
JAN 27 1969
L-06623

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

651
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

99
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
G23-WL	10,838 S.F.	947 S.F.	10,838 S.F.	947 S.F.	9,891 S.F.	—	—
G25-WL	9368 S.F.	440 S.F.	9368 S.F.	440 S.F.	8,928 S.F.	—	
G28-S	5,000 S.F.	—	256 S.F.	—	256 S.F.	—	5,000 S.F.
G29-WL	5,000 S.F.	—	161 S.F.	—	161 S.F.	—	4,839 S.F.
G29-S			839 S.F.	—	839 S.F.		
G30-WL	5,000 S.F.	—	714 S.F.	—	714 S.F.	—	4,286 S.F.
G30-S			286 S.F.	—	286 S.F.		
G31-WL	5,000 S.F.	—	1,000 S.F.	—	1,000 S.F.	—	4,000 S.F.
G32-WL	5,000 S.F.	—	1,000 S.F.	—	1,000 S.F.	—	4,000 S.F.
G26A-WL	15,000 S.F.	508 S.F.	1,000 S.F.	NONE	1,000 S.F.		13,053 S.F.
G26B-WL			508 S.F.	508 S.F.	NONE		

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESID LT.	NET RESID RT.
G13-S	3,750 S.F.	—	104 S.F.	—	104 S.F.	—	3,750 S.F.
G14-WL	3,750 S.F.	—	600 S.F.	—	600 S.F.	—	3,150 S.F.(L)
G14-S		—	425 S.F.	—	425 S.F.		
G15-WL	3,750 S.F.	—	1,747 S.F.	—	1,747 S.F.	—	2,003 S.F.(L)
G15-S			375 S.F.	—	375 S.F.		
G16-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G17-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G18-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G19-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G20-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G22-WL	11,250 S.F.	—	11,250 S.F.	—	11,250 S.F.	—	—

REVISION	DESCRIPTION	BY	DATE
3	SHOWED OWNERSHIP OF PARCELS 623WL & 625WL SAME	7-23-70 SMITH	
2	Changed all "WA" Pcl's To "T" Pcl's previously revised on earlier scpia.		7-28-69
1	CORRECED PL'S FOR PARCEL G26B-WL, ADDED PARCEL G26-LA	EHC	10/2/68

SCALE
0 20 40 60 80 100

R/W SUPPLEMENTAL SHEET

JAN 27 1969
LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

652
656

100
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 98

MATCH SHEET NO. 96

SOUTH AVE. 74'

N0° 21' 32" W

55 54 53 52 51 49

36" SEWER

M.H.

SPIKE FND. & USED

6" L.P. & 8" H.P. GAS

STA 757+81.25
STA 481+98.47

C.B.

SIGN

APPR.

EXIST. L.A.

EXIST. R/W

44.5' EXIST. R/W

LA

FACI SIGN

37' LT. 54+64.25

37' LT. 54+56.25

37' LT. 55+68.22

37' LT. 82+56.25

37' LT. 51+56.25
185.67 RT. 768+29.00

37' LT. 757+18.32

37' LT. 760+00.25

END L.A.

10' SLAG DR.

2½ STY. BRK. TAVERN

640 WL

2 STY. BRK. DWG.

639 WL

2½ STY. BRK.

638 WL

10' ASPH. DR.

10' CONC. DR.

2½ STY. FR. HSE.

9' CONC. DR.

637 WL

GAS ISLAND

636 WL

2 STY. BLK. BLDG.

CONC. WALL

CURVE No. 3

MACADAM PARKING LOT

O.L. 534

BLK. GAR.

138.83'

136.85'

12G81

12G83

12G82

12G84

12G85

150' (D)

APRICOT

LOCUST

SUMAC

10" PEAR

8" PEAR

12" PEAR

6" ELM

15" PEAR

N89° 21' 12" E - 150.00'

60425

60426

PAULINE BAKALIK & ROBERT BAKALIK

ROBERT F. BAKALIK

REGINA GENEVIEVE KARPOWICZ

BERTHA HORNEY

MIKE, PAUL J. & STEVE NIDARSKY

FD. SHED

Gloria Ogram f/k/a Gloria Granito & Rudolph Granito

REPLAT OF LOTS 12G79, 12G80 & PART 12G81 - VOL. 45, PG. 221

LEO GUTHMAN'S PLAT - VOL. 8, PG. 159

44.5' 39' 50' 38' 12' 24' 26'

S 0° 21' 32" E 50'

12" MULBERRY

12" TRIPLE CHERRY

1 STY. BRK. GARAGE

S 89° 21' 12" W - 441.50'

S 87° 38' 01" E - 244.42'

5-12" ELM

14" ELM

24" ELM

RAMP 'Y' TO BE REMOVED

STA EQUATION (RW ONLY)
P.C. STA 760+04.58 (BACK)
P.C. STA 760+04.41 (AHEAD)

℄ SURVEY I-680

EXISTING MON.

Pt. of O.L. 533

Pt. of O.L. 533

MATCH LINE STA 761+00 - SEE SHT. No 101

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
G36-WL	48,035 S.F.	11,660 S.F.	48,035 S.F.	11,660 S.F.	36,375 S.F.	———	———
G37-WL	11,400 S.F.	836 S.F.	11,400 S.F.	836 S.F.	10,564 S.F.	———	———
G38-WL	5,400 S.F.	398 S.F.	5,400 S.F.	398 S.F.	5,002 S.F.	———	———
G39-WL	14,400 S.F.	1067 S.F.	14,400 S.F.	1067 S.F.	13,333 S.F.	———	———
G40-WL	11,591 S.F.	NONE	11,591 S.F.	NONE	11,591 S.F.	———	———

3- Pcl's 637-LA thru 640-LA, Revised to WL Parcels (Total Takes) For Developement of Green Strip — 1-16-70
4 - Pcl 636-LA Revised to 636-WL (Total Take) For Developement of Green Strip 2-25-70

CENTERLINE SURVEY
CURVE No 3
P.I. STA 768+49.35

Δ = 89° 50' 18" RT.	θ_s = 11° 00' 00"
D_c = 5° 30' 00"	P = 6.38'
R = 1,041.74'	K = 199.75'
L_c = 1,233.42'	X_c = 398.58'
T_s = 1,244.93'	Y_c = 25.53'
E_s = 438.46'	L.T. = 267.18'
L_s = 400.00	S.T. = 133.80'
Δ_c = 61° 50' 18"	L.C. = 395.35'
T_c = 700.58'	E_c = 213.63'

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

(1) P.I. STA 758+71.59
Δ = 11° 00' 00" RT.
R = 1,398.61'
T = 133.80'
L = 266.79'
CH = 266.38'
E = 6.43'

ALL PARCELS THIS SHEET I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —			
REV.	DATE	DESCRIPTION	J.P.T.
		3 Change Net Area Pcl 639 WL 5-27-70	
1	7/16/69	ADDED PRO. Pcls 636-LA, 637-LA, 638-LA & 639-LA	
		AND REVISED R/S FOR SAID PCLS.	
2	9/16/69	Revised Name Pcl #638 LA Solomon	

R/W SHEET NO. 100 OF 104

STATE HIGHWAY DEPT. OHIO
RIGHT OF WAY DIV.
APPROVED
JAN 27 1969
LOCATION ENGR.
RIGHT OF WAY ENGR.

STATE HIGHWAY DEPT. OHIO
RIGHT OF WAY DIV.
APPROVED
JAN 27 1969
LOCATION ENGR.
RIGHT OF WAY ENGR.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
636-WL	48,035 S.F.	11,660 S.F.	48,035 S.F.	11,660 S.F.	36,375 S.F.	———	———
642-S	78,608 S.F.	———	758 S.F.	———	758 S.F.	78,608 S.F.	———
643-S	108,338 S.F.	———	326 S.F.	———	326 S.F.	108,338 S.F.	———

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

653
656

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

101
104

160' LT - 763+00

642 S

CONSTR. LIMITS

N 39°50'33"E 164.46'

LT - 763+79.73

S 35°50'33"W 11.82'

N 39° 13'52" W - 92.42'

N 49° 00' 33" E - 92.43'

EXISTING LA

150' LT - 763+80.01

151.95' LT - 764+14.91

163.36' LT - 764+14.38

N54° 09'27"W 30.00'

163.32' LT - 764+40.44

N 35° 50' 33" E 10.80

155.07' LT - 764+40.94

CONSTR. LIMITS

S 55° 09' 27" E 30.02'

643 S

EXISTING LA

EXISTING LA

EXISTING LA

MATCH SHEET Nº 100

MATCH SHEET Nº 102

I-680 (MAH-7-14.35)

763

764

766

767

752

156

157

155

℄ YOUNGSTOWN SOTHERN RAILWAY

S89°21'12"W - 441.50' ℗

℗ N1°14'07"E 87.20

S88°45'53"E - 1.30' ℗

℗ 35.00' N1°14'07"E

MIKE RIDARSKY, ET AL

EXISTING LA

636 WL

Pt. OF O.L. 533

S87°38'01"E 27.10' ℗

℗ S87°38'01"E

N 2°21'59"E - 5.00' ℗

S 2°21'59"W - 5.00' ℗

S 87°38'01"E - 244.42'

NOTE: FOR YOUNGSTOWN AND SOUTHERN RAILWAY PARCELS, SEE SHEET Nº 104.

EXISTING LA

NOTE: BEARINGS USED ON THIS SHEET ARE BASED ON MAH-7-14.35 & PLAT AS RECORDED IN VOLUME 47 PAGES 55 & 56 OF THE MAHONING COUNTY RECORDS.

SCALE
0 20 40 60 80 100

REV.	DATE	COMPLETION DATE — DESCRIPTION
1	7/16/69	ADDED PARCELS 642-S & 643-S
2	2/12/70	REVISED WL (TOTAL TAKE) ADDED FOR DEVELOPMENT OF GREEN STRIP

R/W SHEET Nº 101 OF 104

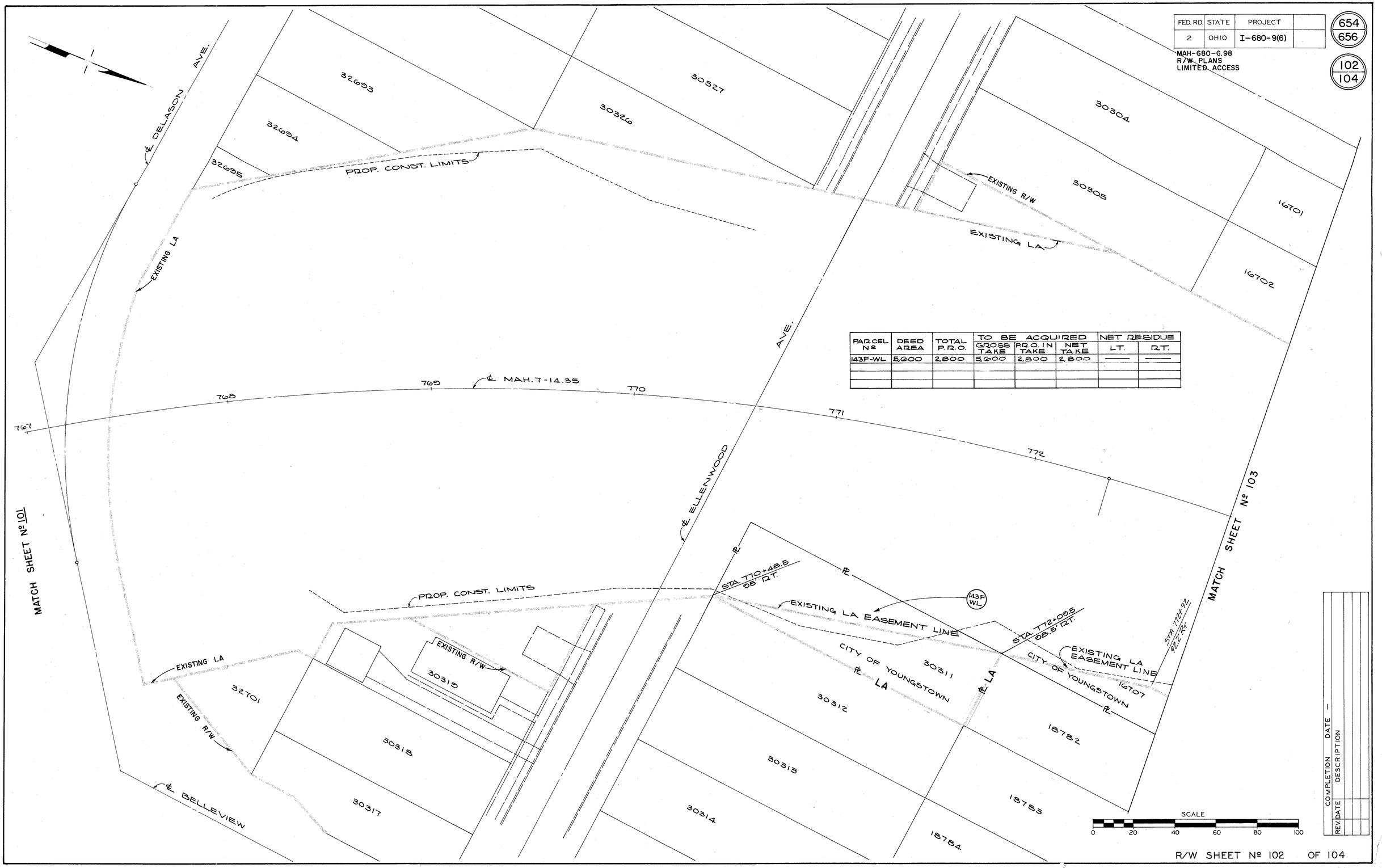
STATE HIGHWAY DEPT. OF OHIO
R/W DIVISION
JAN 27 1969
LOCATION
DRAWN
TRACED
CHECKED
JAN 27 1969
APPROVED
DATE

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

654
656

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

102
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	LT.	RT.
143F-WL	5,600	2,800	5,600	2,800	2,800	—	—

REV.	DATE	DESCRIPTION	COMPLETION DATE —

R/W SHEET Nº 102 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

655
656

103
104

16701

16702

16714

16715

EXISTING LA

EXISTING LA

MATCH SHEET Nº 102

CHALMERS AVE.

MADISON AVE.

℄ MAH.7-14.35

774 775 776 777 778 779

EXISTING LA
EASEMENT LINE

774+37.50
105' Rt

PROP. CONST. LIMITS

CITY OF YOUNGSTOWN
16707

CITY OF YOUNGSTOWN
16708

EXISTING LA
EASEMENT LINE

18782

774+34.50
125.3 Rt

774+82.5
127'

18793

775+52.7
140'

775+90.5
169.5'

CITY OF YOUNGSTOWN

EXISTING LA
EASEMENT LINE

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE AQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	LT.	RT.

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —

R/W SHEET Nº 103 OF 104

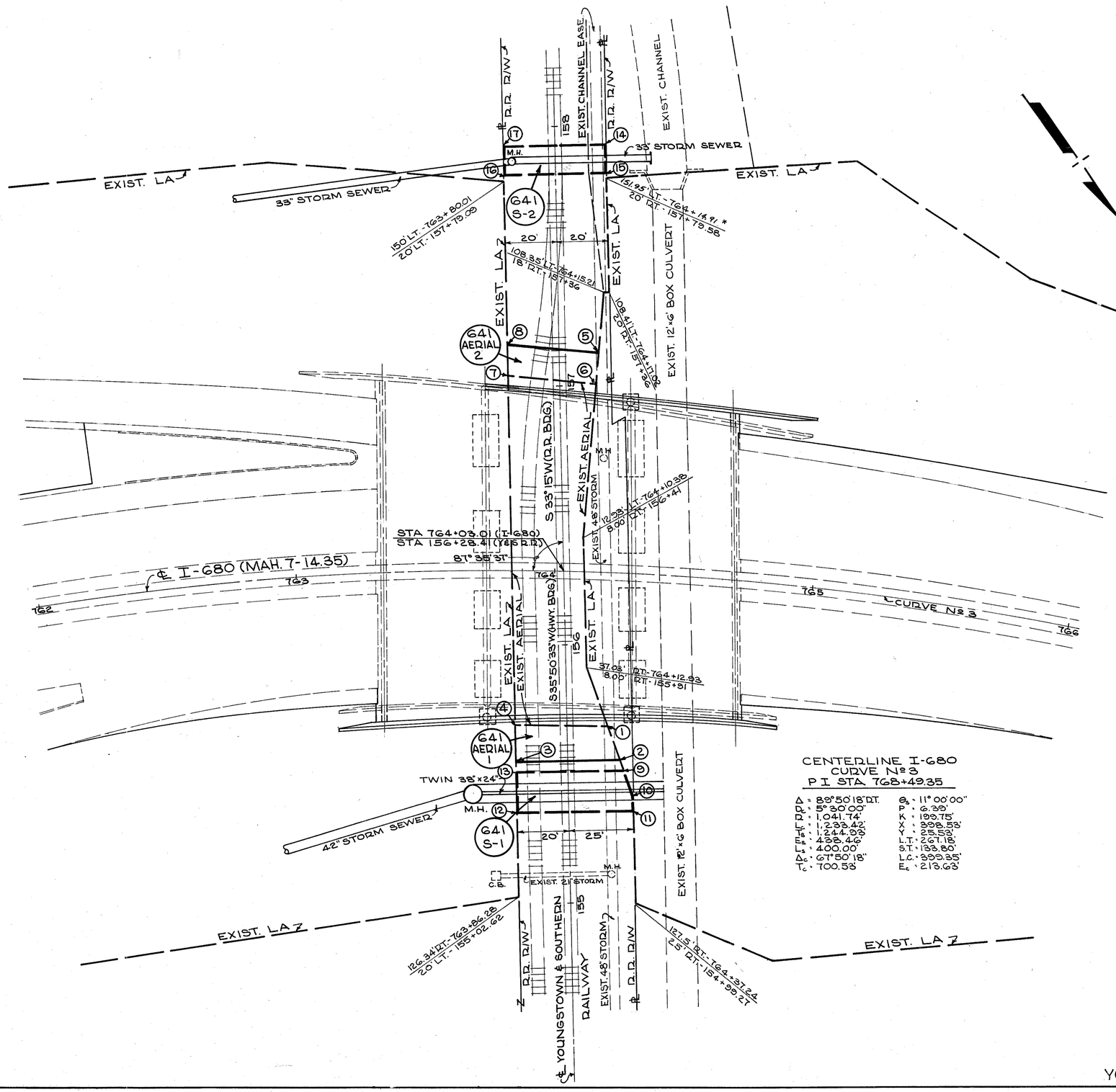
JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

656
656

104
104

MAH 680-698
R/W PLANS
LIMITED ACCESS



PARCEL DESCRIPTION

PARCEL NUMBER	POINT Nº	℄ I-680 STATION	℄ I-680 OFF-SET	℄ Y&S R.R. STATION	℄ Y&S R.R. OFF-SET	BEARING	DISTANCE
641 AERIAL 1	1	764+23.30*	59.33	155+68.14	16.70		
	2	764+28.68	72.46	155+54.72	20.80	N 18°50'16"E	14.03'
	3	763+84.82	74.32	155+54.72	20.00	S 54°00' 27"E	40.80'
	4	763+84.43	59.33	155+69.72	20.00	S 35°50' 33"W	15.00'
	1	764+23.30*	59.33	155+68.14	16.70	N 51°41' 32"W	36.73'
641 AERIAL 2	5	764+14.12	84.33	157+12.10	15.53		
	6	764+13.56*	72.41*	157+00.23	14.31	N 41°43' 56"E	11.93'
	7	763+81.41	74.91*	157+03.59	20.00	S 47°56'12"E	34.52'
	8	763+81.17	86.91	157+15.00	20.00	S 35°50'33"W	12.00'
	5	764+14.12	84.33	157+12.10	15.53	N 47°56'12"W	35.75'
641 S-1	9	764+30.17	76.00	155+51.00	21.04		
	10	764+34.24	85.86	155+41.00	25.00	N 18°50'16"E	10.46'
	11	764+34.63	90.84	155+36.00	25.00	N 35°50'33"E	5.00'
	12	763+85.33	93.03	155+36.00	20.00	S 54°00'27"E	45.00'
	13	763+84.52	78.04	155+51.00	20.00	S 35°50'33"W	15.00'
	9	764+30.17	76.00	155+51.00	21.04	N 54°00'27"W	41.04'
641 S-2	14	764+14.38	163.36	157+01.00	20.00		
	15	764+14.84	153.37	157+81.00	20.00	N 35°50'33"E	10.00'
	16	763+70.88	151.91	157+81.00	20.00	S 54°00'27"E	40.00
	17	763+70.81	161.91	157+01.00	20.00	S 35°50'33"W	10.00'
	14	764+14.38	163.36	157+01.00	20.00	N 54°00'27"W	40.00

* ERROR IN STATION & OFFSET ON MAH-7-14.35 R/W FOUND AND CORRECTED.

NOTE: BEARINGS USED ON THIS SHEET ARE BASED ON MAH-7-14.35 ℄ PLAT AS RECORDED IN VOL. 47 PGS. 55 & 56 OF THE MAHONING COUNTY RECORDS.

CENTERLINE I-680 CURVE Nº 3
P I STA. 768+49.35

Δ = 88°50'18" RT.	θ_s = 11°00'00"
D = 5°30'00"	P = 6.39'
L = 1,041.74'	X = 199.75'
L_H = 1,233.42'	X = 398.52'
E_M = 1,244.93'	Y = 25.52'
E_M = 438.46'	L.T. = 267.18'
L_s = 400.00'	S.T. = 133.80'
Δ_c = 67°50'18"	L.C. = 399.35'
T_c = 700.53'	E_c = 213.63'

YOUNGSTOWN & SOUTHERN RAILROAD

PARCEL NUMBER	EASEMENT REQUIRED	TOTAL AREA
641 AERIAL 1	AERIAL	540 SQ. FT.
641 AERIAL 2	AERIAL	419 SQ. FT.
641 S-1	SEWER	660 SQ. FT.
641 S-2	SEWER	400 SQ. FT.

SCALE
0 20 40 60 80 100

Corrected offsets for Point Nos 10 & 14 White 8-18-69

YOUNGSTOWN & SOUTHERN RAILROAD PLAT

State Highway Dept. Div. 4
R/W PLANS & ARCHIVES SECT.
JAN 27 1969
Checked
Date
Drawing No.

I-680 1-2

FED. RD.	STATE	PROJECT	
2	OHIO	I-680- 9(6)	

1
653

MAHONING COUNTY
MAH -680 - 6.98

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STATE OF OHIO
DEPARTMENT OF HIGHWAYS
MAH-680 - 6.98
BOARDMAN TOWNSHIP & CITY OF YOUNGSTOWN
MAHONING COUNTY
RECONSTRUCTION OF EXISTING SEPARATED CROSSING WITH YOUNGSTOWN AND SOUTHERN RAILWAY COMPANY

FEDERAL Nos.
I-680-9(6) R/W ONLY
I-680-9(14)240 CONST. ONLY

1969 SPECIFICATIONS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SEC. 5511.02 OF THE REVISED CODE OF OHIO.

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT.

THE RIGHT OF WAY FOR THIS PROJECT WILL BE PROVIDED BY THE STATE OF OHIO.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED _____
DATE _____ DIVISION DEPUTY DIRECTOR

APPROVED _____
DATE _____ DEPUTY DIRECTOR OF PLANNING & PROGRAMMING

APPROVED _____
DATE _____ ENGINEER OF BRIDGES

APPROVED _____
DATE _____ ENGINEER OF LOCATION & DESIGN

APPROVED _____
DATE _____ DEPUTY DIRECTOR OF RIGHT-OF-WAY

APPROVED _____
DATE _____ DEPUTY DIRECTOR OF DESIGN & CONSTRUCTION

APPROVED _____
DATE _____ FIRST ASSISTANT DIRECTOR

APPROVED _____
DATE _____ DIRECTOR OF HIGHWAYS

APPROVED _____
DATE _____ DEPUTY DIRECTOR OF PUBLIC WORKS, CITY OF YOUNGSTOWN

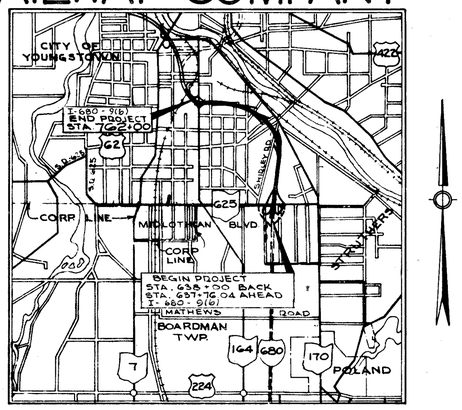
=CONVENTIONAL SIGNS=

CORPORATION LINE
FENCE LINE
CENTER LINE
GUARD RAIL (EXISTING)
GUARD RAIL (PROPOSED)
POWER POLES (THE OHIO EDISON CO.)
TELEPHONE POLES (THE OHIO BELL TEL. CO.)
TREES OR STUMPS (EXISTING)
TREES OR STUMPS (TO BE REMOVED)
GAS LINE (THE EAST OHIO GAS CO.) G
WATER LINE (CITY OF YOUNGSTOWN WATER DEPT.) W
TELEPHONE DUCT (UNDERGROUND) (OHIO BELL TEL. CO.) T
SANITARY SEWER (CITY OF YOUNGSTOWN & MAH. CO.) S
STORM SEWER (CITY OF YOUNGSTOWN & MAH. CO.) ST
COMBINED STORM & SANITARY SEWER (CITY OF YOUNGSTOWN & MAH. CO.) CS

=LINE DATA=

BEGIN PROJECT	STA. 637+76.04
END PROJECT	STA. 762+00
NET LENGTH OF PROJECT	12,423.96 FEET OR 2.353 MILES
BEGIN WORK	STA. 637+45 (BK)
END WORK	STA. 784+00 (AHD)
NET LENGTH OF WORK	14,678.96 FEET OR 2.780 MILES
ADD FOR INTERSECTING STREETS (SEE SHEET Nº 24)	6,152.40 FEET OR 1.165 MILES
TOTAL LENGTH OF WORK	3.945 MILES

=LOCATION MAP=



SCALE OF MILES
0 1/4 1/2 3/4 1 2 3 4

PORTION TO BE IMPROVED
STATE ROADS
OTHER ROADS

=SCALE=
PLAN
PROFILE: HORIZ
0 25 50 100 150

PREPARED & RECOMMENDED BY
GLAUS, PYLE & SCHOMER
ARCHITECT AND CONSULTING ENGINEERS
AKRON, OHIO YOUNGSTOWN, OHIO

FILE Nº MAHONING COUNTY MAH-680-6.98
DATE OF LETTING _____ 19 ____
CONTRACT Nº _____

SUPPLEMENTAL PRINTS OF ST'D CONSTRUCTION DRAWINGS

DWG. Nº	ODH. APP. DATE	BPR. APP. DATE	DWG. Nº	ODH. APP. DATE	BPR. APP. DATE	DWG. Nº	ODH. APP. DATE	BPR. APP. DATE	DWG. Nº	ODH. APP. DATE	BPR. APP. DATE
BP-1	6-1-65		F-2	3-10-60					MH-1A	10-1-68	
BP-2	12-1-68		F-3	3-10-60		HW-E	6-1-65		MH-2	10-1-68	
BP-3	12-1-68		F-5	3-10-60		I-2A	10-1-68		HL-1	11-1-65	
BP-4	12-1-68		F-6	10-1-66		L-1	6-1-65		HL-2	11-1-65	
BP-5	6-1-65		FACI-1	9-15-67		L-2	1-17-68		HL-3	11-1-65	
BP-7	1-1-66		PACI-2	6-1-65		MC-1	10-1-67		HL-4	1-1-66	
BP-8	11-1-67		GR-1	1-1-67		MC-2	6-1-65				
CB2-2A1B	6-1-65		GR-2A	1-1-67		MC-3	11-1-68		AS-1-67	1-11-68	
CB2-3½-4	6-1-68		GR-2B	2-15-68		MC-4	6-1-65		BR-1-65	11-24-65	
CB-5	6-6-68		GR-3			MC-5	6-1-65		BR-2-67	11-6-67	
CB-6	6-1-65		GR-4			MC-6	6-1-65		RB-1-55	2-2-55	
CB-48A	6-6-68		GR-5	1-15-68		MC-7	10-1-68		SD-1-65	11-8-65	
F-1	3-10-60		GR-6	7-15-68		MH-1	10-1-68				

SUPPLEMENTAL SPECIFICATIONS	
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814	1-1-67
815	1-1-67
816	8-6-65
808	1-13-67
825	1-1-67
828	1-1-67

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

APPROVED

_____ DIVISION ENGINEER

_____ DATE

JAN 27 1969

835901

CENTERLINE SURVEY PLAT

I-680 MAH 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

553 / 656

1 / 104

MAH 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55, PGS. 47-54 Incl. ON FEB. 17-1966.

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 22 & 23 ON AUGUST 1, 1969 - PER MONUMENT ASSEMBLY RELOCATIONS. (& R/W I-680)

APPROVED	19
DEPUTY DIRECTOR OF PUBLIC WORKS	
APPROVED	19
DIVISION DEPUTY DIRECTOR	
RECEIVED 7-31	19 69
RECORDED Aug 1.	19 69
BOOK 60	PAGE 22-23
HORACE G. TETLOW COUNTY RECORDER	

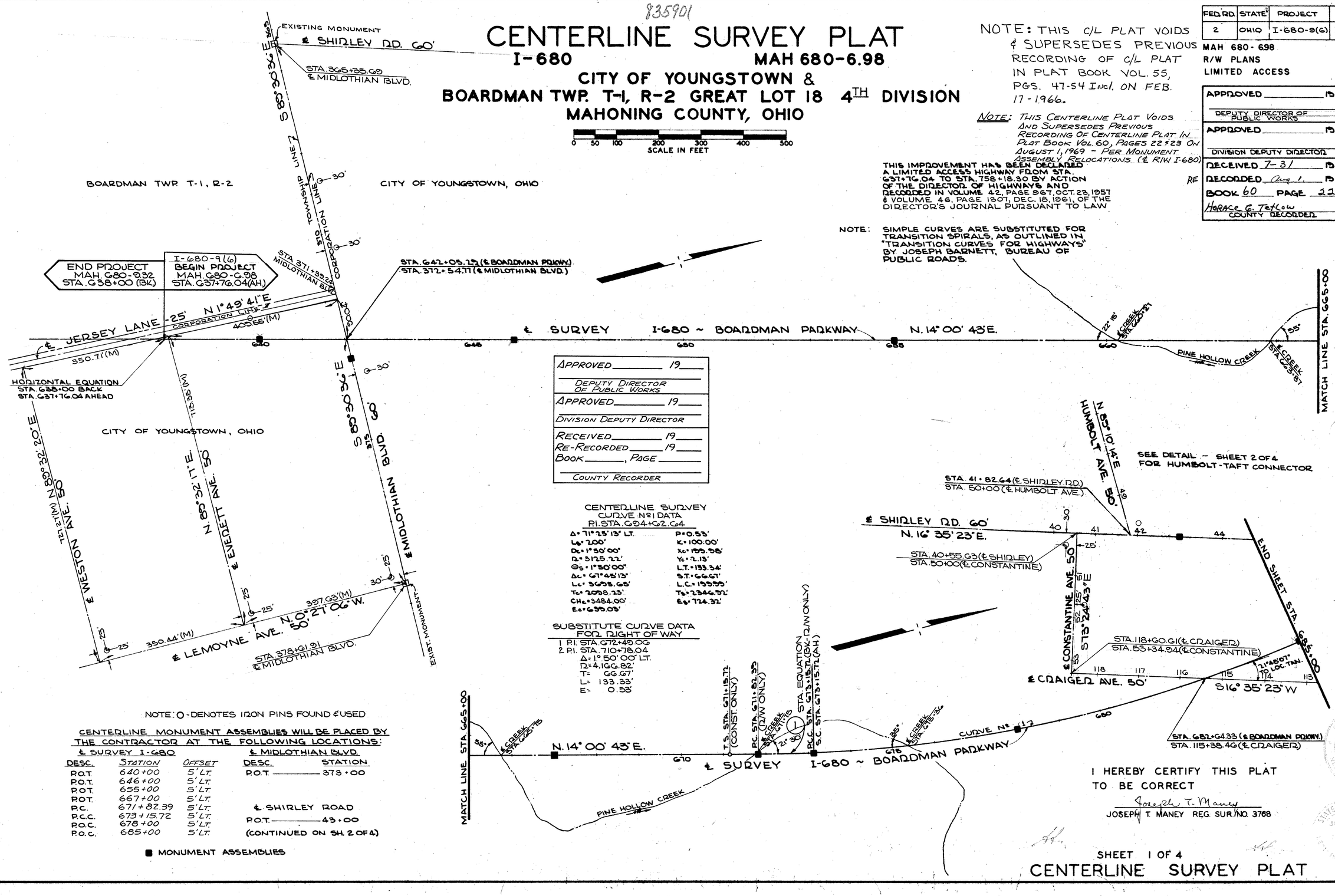
11:05 AM

RE

$20.00

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. G37+76.04 TO STA. 758+18.30 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967, OCT. 23, 1957 & VOLUME 46, PAGE 1301, DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

NOTE: SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.



APPROVED	19
DEPUTY DIRECTOR OF PUBLIC WORKS	
APPROVED	19
DIVISION DEPUTY DIRECTOR	
RECEIVED	19
RE-RECORDED	19
BOOK , PAGE	
COUNTY RECORDER	

CENTERLINE SURVEY
CURVE No 1 DATA
P.I. STA. G04+62.04

Δ = 71° 25' 13" LT.	P = 0.53'
L_s = 200'	K = 100.00'
D_c = 1° 50' 00"	X_c = 199.98'
R = 3125.22'	Y_c = 12.13'
Θ_s = 1° 50' 00"	L.T. = 133.34'
Δ_c = 67° 45' 13"	S.T. = 66.67'
L_c = 3605.65'	L.C. = 133.33'
T_c = 2098.23'	T_s = 2344.57'
CH_c = 3484.00'	E_s = 724.31'
E_c = 699.08'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA. G72+49.00
2 P.I. STA. 710+78.04
Δ = 1° 50' 00" LT.
D = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

NOTE: O - DENOTES IRON PINS FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS:

℄ SURVEY I-680 DESC.	STATION	OFFSET
P.O.T.	640+00	5' LT.
P.O.T.	646+00	5' LT.
P.O.T.	655+00	5' LT.
P.O.T.	667+00	5' LT.
P.C.	671+82.39	5' LT.
P.C.C.	673+15.72	5' LT.
P.O.C.	678+00	5' LT.
P.O.C.	685+00	5' LT.

℄ MIDLOTHIAN BLVD. DESC.	STATION
P.O.T.	373+00

℄ SHIRLEY ROAD
P.O.T. 43+00

(CONTINUED ON SH. 2 OF 4)

■ MONUMENT ASSEMBLIES

I HEREBY CERTIFY THIS PLAT TO BE CORRECT

Joseph T. Maney

JOSEPH T. MANEY REG. SUR. NO. 3768

STATE OF OHIO JOSEPH T. MANEY 3768 REGISTERED SURVEYOR

SHEET 1 OF 4

CENTERLINE SURVEY PLAT

State Highway Dept. Ohio
Div. Land & Utilities Sec.
JAN 27 1969
Received
Checked
By

835902

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55, PGS. 47-54 Incl. ON FEB 17-1966.

CENTERLINE SURVEY PLAT

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

NOTE: THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. 637+76.04 TO STA. 758+18.38 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967, OCT. 23, 1957, & VOLUME 46, PAGE 1307, DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

554 / 656

MAH 680 - 6.98
R/W PLANS
LIMITED ACCESS

2 / 104

APPROVED _____ 19____
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19____
DIVISION DEPUTY DIRECTOR

RECEIVED 7-3/ 1969 11:06 AM
RECORDED August 1 1969
BOOK 60 PAGE 24-25
Horace E. Tetlow
COUNTY RECORDER

#25.00

SEE DETAIL BELOW FOR HUMBOLT-TAFT CONNECTOR

SCALE IN FEET 0 50 100 200 300 400 500

BEGIN SHEET STA. 685+00

℄ TAFT AVE. N 88°40'16" E

℄ COOPER AVE. 50'

N. 34° 38' 33" W.

STA. 21+83.66 (℄ COOPER)

550.13'(M) N. 34° 41' 21" W. 415.83'(M)

N. 34° 41' 21" W.

STA. 45+67.39 (℄ SHIRLEY RD.) STA. 30+00 (℄ TAFT AVE.)

STA. 44+22.80 (℄ SHIRLEY RD.) STA. 10+00 (℄ COOPER AVE.)

STA. 45+26.03 (℄ SHIRLEY RD.) STA. 10+49.81 (℄ TAYLOR)

STA. 45+34.71 (℄ SHIRLEY RD.) STA. 30+89.02 (℄ TAYLOR AVE.)

INDIANOLA AVE. 50'

N. 55° 18' 35" E. 344.59

STA. 48+20.43 (℄ DELOC. INDIANOLA) STA. 30+96.22 (℄ TAYLOR)

MURRAY AVE. 50'

N. 55° 15' 21" E. 345.03

STA. 45+46.67 ℄ TAYLOR

END SHEET STA. 707+00

℄ TAYLOR AVE. 40'

N. 34° 38' 36" W.

SURVEY I-680 ~ BOARDMAN PARKWAY

℄ TAYLOR AVE 50'

N. 73° 21' 21" W.

55° 42' TO LOC. TAN

34° 41' 09" TO LOC. TAN

℄ SHIRLEY RD. 60'

STA. 48+23.33 (℄ BOARDMAN PKWY.) STA. 50+00.00 (℄ SHIRLEY RD.)

STA. 48+17.48 (℄ BOARDMAN PKWY.) STA. 10+00.00 (℄ TAYLOR AVE.)

STA. 656+72.94 (℄ BOARDMAN PKWY.) STA. 50+00.51 (℄ DELOC. INDIANOLA)

CURVE Nº 1

N55°18'35"E 140.66'

℄ DELOC. INDIANOLA N 48°23'30" E

N 43°28'34" E 204.16'

51°05'43" TO LOC. TAN

STA. 51+63.63 (℄ DELOC. INDIANOLA) STA. 30+50.14 (℄ HOMEWOOD)

P.I. STA. 45+11.74 ℄ HOMEWOOD

N. 46° 25' 57" W. 120'

P.I. STA. 35+33.24 ℄ HOMEWOOD

N. 34° 40' 46" W

℄ HOMEWOOD AVE. 40'

N. 34° 40' 46" W.

INDIANOLA AVE.

STA. 55+08.80 (℄ SHIRLEY RD.) STA. 33+62.65 (℄ HOMEWOOD)

N. 73° 24' 37" W.

℄ HOMEWOOD AVE 50'

N. 73° 24' 37" W.

STA. 103+89.95 (℄ CRAIGER) STA. 7+14.81 (℄ TAYLOR)

S 16° 35' 23" W

℄ CRAIGER AVE. 50'

STA. 104+07.48 (℄ CRAIGER) STA. 30+27.71 (℄ HOMEWOOD)

N 16° 35' 23" E

℄ SPAULDING ROAD 50'

N 19° 43' 16" E

N 25° 11' 44" W

STA. 48+81.46 (℄ POWERS WAY) STA. 100+00 (℄ CRAIGER)

STA. 45+46 (℄ POWERS WAY) STA. 50+00 (℄ SPAULDING)

℄ POWERS WAY GO'

N 25° 11' 44" W

STA. 62+91.05 (℄ SHIDLEY) STA. 54+84.11 (℄ POWERS WAY)

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 24 & 25 ON AUGUST 1, 1969 - PER MONUMENT ASSEMBLY RELOCATIONS (℄ R/W I-680)

APPROVED _____ 19____
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19____
DIVISION DEPUTY DIRECTOR

RECEIVED _____ 19____
RE-RECORDED _____ 19____
BOOK _____, PAGE _____
COUNTY RECORDER

NOTE: O-DENOTES IRON PINS FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS:

℄ HUMBOLT-TAFT CONNECTOR	
DESC.	STATION
P.O.T.	10+50
P.C.	11+38.66
P.O.T.	13+25

℄ SURVEY I-680		
DESC.	STATION	OFFSET
P.O.C.	692+00	5' LT.
P.O.C.	700+00	5' LT.
P.O.C.	706+00	5' LT

℄ SHIRLEY RD.	
DESC.	STATION
P.O.T.	47+00
P.O.T.	52+50
P.O.T.	56+00
P.O.T.	62+00

℄ DELOC. INDIANOLA AVE.	
P.O.T.	48+20.43
P.O.T.	51+25

■ MONUMENT ASSEMBLIES

CENTERLINE SURVEY CURVE Nº 1 DATA
P.I. STA. 654+62.64

Δ = 71° 25' 13" LT.	P = 0.53'
L_s = 200'	K = 100.00'
D_s = 1° 50' 00"	X_s = 199.98'
R = 3,125.22'	Y_c = 2.13'
θ_s = 1° 50' 00"	LT. = 133.34'
Δ_c = 67° 45' 13"	S.T. = 66.67'
L_c = 3,695.65'	L.C. = 199.99'
T_s = 2,088.23'	T_s = 2,346.92'
CH = 3484.06'	E_s = 724.32'
E = 639.03'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. 672+49.06
2. P.I. STA. 710+78.04
Δ = 1° 50' 00" LT.
D = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

STA 10+00 (℄ CONNECTOR) STA. 45+51.42 (℄ HUMBOLT)

STA. 41+82.64 (℄ SHIDLEY) STA. 50+00 (℄ HUMBOLT)

℄ HUMBOLT AVE. -50'

N 85° 10' 14" E

N 04° 55' 53" W

P.C. STA. 11+38.66

P.T. STA. 12+34.44

℄ CONNECTOR

N 30° 31' 39" E

STA 13+73.00 (℄ CONNECTOR) STA. 45+41.44 (℄ TAFT)

S 34° 28' 54" E

P.C. STA. 44+87.32

P.T. STA. 46+21.64

℄ TAFT AVE. -50'

N 85° 10' 16" E

STA. 45+27.39 (℄ SHIDLEY) STA. 50+00 (℄ TAFT)

℄ SHIRLEY ROAD

N. 73° 35' 23" W.

HUMBOLT-TAFT CONNECTOR

℄ HUMBOLT-TAFT CONNECTOR CURVE DATA
P.I. STA. 11+87.78
Δ = 31° 21' 31" RT
R = 175.00'
T = 49.12'
L = 95.78'
CH = 94.59'
E = 6.76'

℄ EXISTING TAFT AVE. CURVE DATA
P.I. STA. 45+60.59
Δ = 56° 50' 50" LT.
D = 135.38'
T = 73.27'
L = 134.32'
CH = 128.87'
E = 18.56'

I HEREBY CERTIFY THIS PLAT TO BE CORRECT
Joseph T. Maney
JOSEPH T. MANEY REG. SUR. NO. 3768

SHEET 2 OF 4
CENTERLINE SURVEY PLAT

JUN 27 1969
LOADED
BY

835903

CENTERLINE SURVEY PLAT

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-I, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

SCALE IN FEET: 0 50 100 200 300 400 500

NOTE: THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. G37+76.04 TO STA. 758+18.30 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967 OCT. 23, 1957, & VOLUME 46, PAGE 1307 DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

555
656

MAH 680 - 6.98
R/W PLANS
LIMITED ACCESS

3
104

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED 7-3/ 19 68 11:07 AM
Re- RECORDED August 1 19 69
BOOK 60 PAGE 26-27
HORACE E. TRITSCH
COUNTY RECORDER

$50.00

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55, PGS. 47-54 Incl. ON FEB 17-1966.

℄ RELOC. SHADY RUN CURVE DATA

CURVE Nº 1	CURVE Nº 2	CURVE Nº 3
Δ = 33°15'00" LT.	Δ = 11° 30' 56" LT.	Δ = 16° 00' 00" RT.
Dc = 10°00'00"	Dc = 6° 00' 00"	Dc = 12°00'00"
R = 572.96'	R = 954.93'	R = 477.46'
T = 171.08'	T = 96.25'	T = 67.10'
L = 332.50'	L = 191.95'	L = 133.33'
CH = 327.85	CH = 191.60'	CH = 132.30'
P.I. STA. 35+46.25	P.I. STA. 47+60.80	P.I. STA. 50+67.10

CURVE Nº 4	CURVE Nº 5
Δ = 21°02'32" LT.	Δ = 21° 48' 00" RT.
Dc = 12° 00' 00"	Dc = 9° 00' 00"
R = 477.46'	R = 636.62'
T = 88.67'	T = 122.31'
L = 175.35'	L = 241.67'
CH = 174.37'	CH = 240.22'
P.I. STA. 52+45.03	P.I. STA. 56+65.45

CENTERLINE SURVEY CURVE Nº 1 DATA
P.I. STA. 6+84+G2.64

Δ = 71° 25' 13" LT.	P = 0.53'
Lc = 200'	K = 100.00'
Dc = 1° 50' 00"	Xc = 199.38'
R = 3,125.22'	Yc = 2.13'
θc = 1° 50' 00"	LT = 133.34'
Δc = 67° 45' 13"	ST = 66.67'
Lc = 3,685.65'	LC = 199.38'
Tc = 2,098.23'	Tc = 2,346.92'
CH = 3,484.06'	Ec = 724.32'
Ec = 639.03'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. G72+49.06
2. P.I. STA. 710+78.04
   Δ = 1° 50' 00" LT.
   Dc = 4.166.82'
   T = 66.67'
   L = 133.33'
   E = 0.58'

℄ POWERSDALE-MABEL CONNECTOR CURVE DATA
P.I. STA. 12+32.54
Δ = 90° 04' 18" LT.
R = 160.00
T = 160.20'
L = 251.58'
CH = 226.42'
E = 66.42'

CENTERLINE SURVEY CURVE Nº 2 DATA
P.I. STA. 735+65.13

Δ = 32° 44' 51" LT.	
Dc = 1° 28' 00"	
R = 3906.53'	
T = 1,147.81'	
L = 2,232.78'	
CH = 2,202.52'	
E = 165.13'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. 724+17.52
2. P.I. STA. 735+65.13
   Δ = 32° 44' 51" LT.
   Dc = 1° 28' 00"
   R = 3906.53'
   T = 1,147.81'
   L = 2,232.78'
   CH = 2,202.52'
   E = 165.13'

℄ UNION ST. CURVE DATA

CURVE 'A'	CURVE 'B'
P.I. STA. 45+11.02	P.I. STA. 47+18.31
Δ = 28° 22' 47" RT.	Δ = 23° 41' 28" LT.
R = 437.81'	R = 347.29'
T = 110.70'	T = 72.84'
L = 216.86'	L = 143.60'
CH = 214.65'	CH = 142.58'
E = 13.78'	E = 7.56'

℄ CONSTRUCTION RAMP 'F' CURVE DATA
P.I. STA. 723+58.44

Δ = 48° 00' RT.	Tc = 59.00'	K = 74.86'
Lc = 150.00'	CH = 116.01'	Xc = 149.17'
Dc = 18° 00'	Ec = 5.42'	Yc = 11.73'
R = 318.31'	Tc = 217.89'	L.T. = 100.29'
θc = 13° 30'	Ec = 33.34'	S.T. = 50.27'
Δc = 21° 00'	P = 2.94'	L.C. = 199.63'
Lc = 116.67'		

RAMP 'F' SUBSTITUTE CURVE DATA FOR RIGHT OF WAY
1. P.I. STA. 722+40.84
2. P.I. STA. 724+57.49
   Δ = 13° 30' RT.
   R = 424.68'
   T = 50.27'
   L = 100.07'
   E = 2.96'

NOTE: ☐ - DENOTES MONUMENTS FOUND & USED
○ - DENOTES IRON PINS FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS

℄ I-680			℄ RELOC. SHADY RUN		℄ RAMP 'F'	
DESC.	STATION	OFFSET	DESC.	STATION	DESC.	STATION
P.O.T.	712+11.37	5' Lt.	P.C.	37+15.17	P.O.T.	720+80.92
P.O.T.	718+00	5' Lt.	P.T.	41+07.67		
P.O.C.	724+17.92	5' Lt.	P.C.	46+64.51	℄ POWERSDELL-MABEL CONNECTOR	
P.O.C.	730+00	5' Lt.	P.T.	48+56.44	P.C.	10+72.34
			P.C.	50+00.00	P.T.	13+23.87
			P.T.	51+33.33		
			P.C.	51+56.36		
			P.T.	53+81.71		
			P.C.	54+48.14		

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 26 & 27 ON AUGUST 1, 1969 - PER MONUMENT ASSEMBLY RELOCATIONS (℄ R/W I-680)

■ MONUMENT ASSEMBLIES

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED _____ 19___
RE-RECORDED _____ 19___
BOOK _____, PAGE _____
COUNTY RECORDER

I HEREBY CERTIFY THIS PLAT TO BE CORRECT

Joseph T. Maney
JOSEPH T. MANEY REG. SUR. NO 3768

SHEET 3 OF 4

CENTERLINE SURVEY PLAT

835904

CENTERLINE SURVEY PLAT

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2 GREAT LOT 18 4TH DIVISION MAHONING COUNTY, OHIO

FED. RD	STATE	PROJECT	
2	OHIO	I-680-9(6)	

556/656

MAH 680 - 6.98
R/W PLANS
LIMITED ACCESS

4/104

NOTE: THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STA. 737+76.04 TO STA. 758+18.30 BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 42, PAGE 967, OCT. 23, 1957, & VOLUME 46, PAGE 1307, DEC. 18, 1961, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

SIMPLE CURVES ARE SUBSTITUTED FOR TRANSITION SPIRALS, AS OUTLINED IN "TRANSITION CURVES FOR HIGHWAYS" BY JOSEPH BARNETT, BUREAU OF PUBLIC ROADS.

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

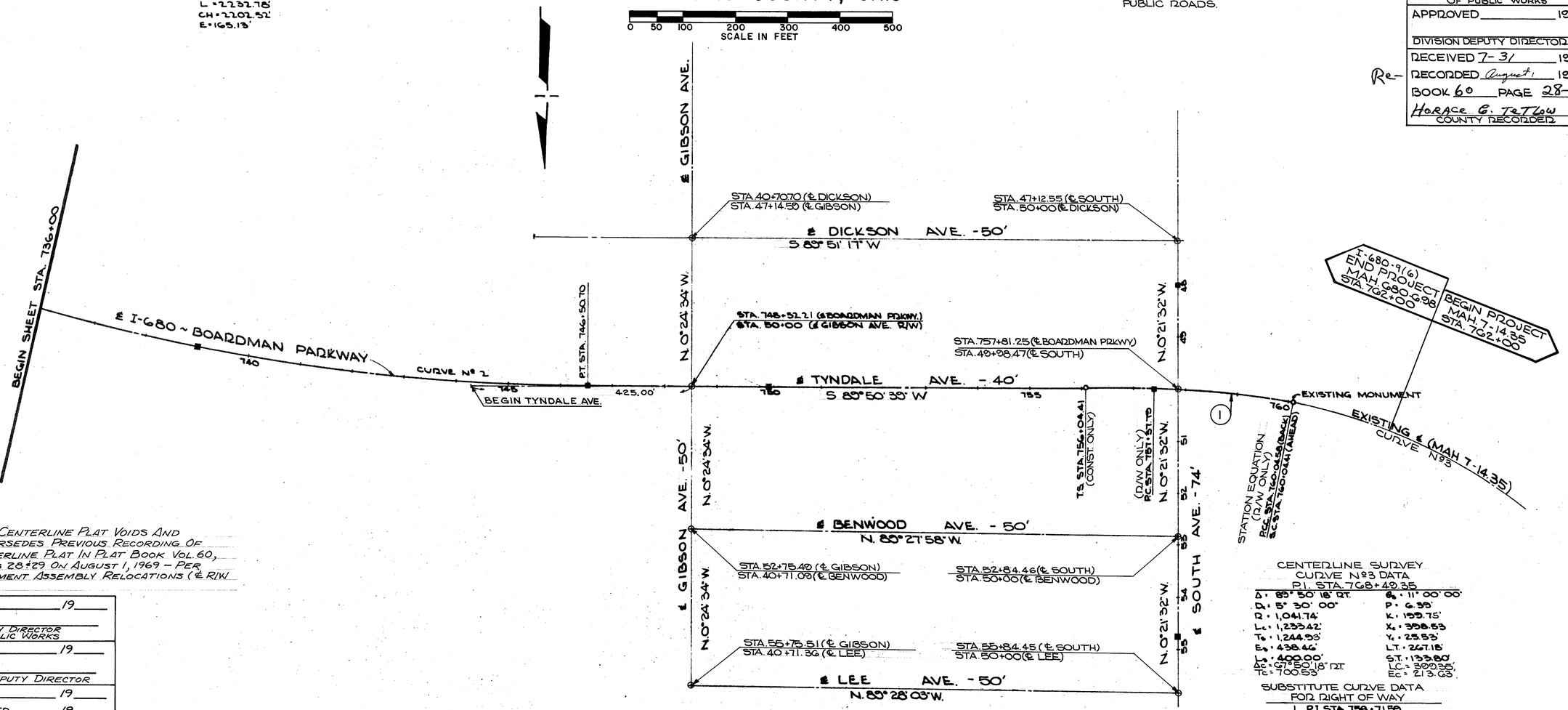
APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED 7-31 1969 11:08 AM
RECORDED August 1 1969
BOOK 60 PAGE 28-29
HORACE G. TETLOW
COUNTY RECORDER

Re-

$10.00

CENTERLINE SURVEY
CURVE No 2 DATA
P.I. STA. 735+65.73
Δ = 31° 44' 51" LT.
Dc = 1° 28' 00"
R = 3906.83'
T = 1147.81'
L = 2232.78'
CH = 2202.52'
E = 165.13'



CENTERLINE SURVEY
CURVE No 3 DATA
P.I. STA. 768+49.35

Δ = 89° 50' 18" RT.	θ_s = 11° 00' 00"
Dc = 5° 30' 00"	P = 6.38'
R = 1,041.74'	K = 199.75'
Lc = 1,633.42'	X_s = 358.53'
Ts = 1,244.93'	Y_s = 25.53'
Es = 438.46'	L.T. = 267.18'
Ls = 400.00'	S.T. = 133.80'
Ac = 67° 50' 18" RT.	LC = 300.35'
Tc = 700.53'	Ec = 213.03'

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1. P.I. STA. 758+71.59
Δ = 11° 00' 00" RT.
R = 1,389.61'
T = 133.80'
L = 266.79'
CH = 266.36'
E = 6.43'

NOTE: THIS CENTERLINE PLAT VOIDS AND SUPERSEDES PREVIOUS RECORDING OF CENTERLINE PLAT IN PLAT BOOK VOL. 60, PAGES 28 & 29 ON AUGUST 1, 1969 – PER MONUMENT ASSEMBLY RELOCATIONS (℄ R/W I-680)

APPROVED _____ 19___
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19___
DIVISION DEPUTY DIRECTOR

RECEIVED _____ 19___
RE-RECORDED _____ 19___
BOOK _____, PAGE _____
COUNTY RECORDER

NOTE: O-DENOTES SPIKES (SET BY CITY OF YOUNGSTOWN) FOUND & USED

CENTERLINE MONUMENT ASSEMBLIES WILL BE PLACED BY THE CONTRACTOR AT THE FOLLOWING LOCATIONS

℄ SURVEY I-680			℄ SOUTH AVE.	
DESC.	STATION	OFFSET	DESC.	STATION
P.O.C.	739+00	5' LT.	R.O.T.	48+00
P.T.	746+50.70	5' LT.	R.O.T.	54+75
R.O.T.	750+00	5' LT.		
P.C.	757+37.79	5' LT.		

■ MONUMENT ASSEMBLIES

NOTE: THIS C/L PLAT VOIDS & SUPERSEDES PREVIOUS RECORDING OF C/L PLAT IN PLAT BOOK VOL. 55 PGS. 47-54 Incl. ON FEB 17-1966.

I HEREBY CERTIFY THIS PLAT TO BE CORRECT

Joseph T. Maney
JOSEPH T. MANEY REG. SUR. NO 3768

SHEET 4 OF 4
CENTERLINE SURVEY PLAT

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2

MAHONING COUNTY, OHIO

SCALE 0 50 100 200 300

THE FOLLOWING IS A LIST OF COMPANIES OR CITY DEPARTMENTS WHICH HAVE UTILITIES LOCATED WITHIN THE LIMITS OF THIS PROJECT:

(A) THE EAST OHIO GAS COMPANY
101 E. BOARDMAN STREET
YOUNGSTOWN, OHIO 44503

(B) OHIO EDISON COMPANY
730 SOUTH AVENUE
YOUNGSTOWN, OHIO 44502

(C) CITY OF YOUNGSTOWN
SEWER DEPARTMENT
CITY HALL
YOUNGSTOWN, OHIO 44503

(D) THE OHIO BELL TELEPHONE COMPANY
2405 MARKET STREET
YOUNGSTOWN, OHIO 44507

(E) CITY OF YOUNGSTOWN
DIVISION OF WATER
CITY HALL
YOUNGSTOWN, OHIO 44503

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

557/656

5/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MAHONING COUNTY
BOARDMAN TWP.
LOT 18 4TH DIVISION T-1 R-2

THE LAKE PARK CEMETERY ASSOC. TO BE ACQUIRED BY MAH. 680-9.32

BOT. FILL 2

FUTURE RAMP 'M'

RAMP 'L'

END PROJECT I-680-9(15) MAH. 680-9.32 STA. 638+00 (BACK)

BEGIN PROJECT I-680-9 (14) MAH. 680-6.98 STA. 637+76.04 (AHEAD)

BEGIN WORK MAH. 680-6.98 STA. 634+55

END ACQUISITION I-680-9(10) STA. 636+31

BEGIN ACQUISITION I-680-9(6) STA. 636+31

CORPORATION LINE

JERSEY LANE

EVERETT AVE.

WESTON AVE.

LEMOYNE

TO BE ACQUIRED BY MAH. 680-9.32

SHIRLEY RD.

MAC DRIVE ACCESS TO 138

OHIO EDISON EASEMENT- 25'

PINE HOLLOW CREEK

BOARDMAN EXPRESSWAY

RAMP 'K'

RAMP 'J'

LANDLOCKED 15,676 S.F.

LANDLOCKED - 16,128 S.F.

Ball Field Cyclone Fence

MIDLOTHIAN BLVD.

MATCH LINE STA. 665+00

Nº	OWNER	Nº	OWNER
100-WL	JOHN NOVAK	116-WL	FRANK A. NAPLES & MARIE A. NAPLES
101-WL	JOHN ZELINA & OLGA ZELINA	99-WL	DOMINIC PEDALINE & ESTHER PEDALINE
102-WL	HENRY L. BEACH & EVELYN MAE BEACH	117-WL	ROBERT C. HODGE & MARIE ELIZABETH HODGE
103-WL	ROBERT A. ALLAN & MILDRED A. ALLAN	118-WL	JOHN MATZYE, JR. & MARGARET A. MATZYE
104-WL	VICTOR FEDOR CHAK & HELEN A. FEDOR CHAK	119-WL	DOMINIC CARANO & STELLA M. CARANO
105-WL	EMANUEL MANIS & MARY B. MANIS	120-WL	DORIS MAY WELKER & DORIS M. WELKER
106-WL	JOHN F. CURALL & THELMA J. CURALL	121-WL	WILLIAM K. CROOKS & AGNES CROOKS
107-WL	JAMES W. ANDERSON & JEAN ALICE ANDERSON	123-WL	WILLIS IPE & ELIZA. MAY IPE
108-WL	KENNETH R. WILSON & ALDA M. WILSON	124-WL	CHARLES R. HOGG
109-WL	JOHN E. JONES & DOROTHY J. JONES	125-WL	JOHN HAAS & KATHERINA HAAS
110-WL	RAYMOND T. MSANDREWS & BETTY M SANDREWS	126-WL	JOHN HAAS
111-WL	HARRY W. JACOBSON & ANITA C. JACOBSON	127-WL	PAUL R. TOLAND & MARTHA J. TOLAND
112-WL	FRANK WSZOLEK & BERTHA M. WSZOLEK	128-WL	JOHN WIETELMANN
113-WL	ALFRED SQUILLANTE	129-WL	ESTATE OF DAVID B. CONRATH & CLIFFORD E. FISHER
114-WL	JOSEPH L. FEDOR & MARY F. FEDOR	130-WL	DELORES WELLS
115-WL	RAY BRUNETTI & LUCILLE BRUNETTI	131-WL	WILLIAM A. LONG & BETTY A. LONG

Nº	OWNER
132-WL	JENNIE E. POLLEY
133-WL	ALEXANDER GUARINO
134-WL	THE ESTATE OF HATTIE HALLWOOD Dec'd.
135-WL	ROBERT HAY MACLENNAN
136-WL	MATILDA ZIGO
137	DOMINIC TOCCO & ANNETTE TOCCO
138-LA	CARL A. BERNDT & PEARL BERNDT
139-WL	INDIANOLA REALTY, INC.
139-A-WL	" " "
140A-WL	JOHN SHOFI & ELIZABETH SHOFI
141-WL	MICHAEL R. BOHN & MARY ALICE BOHN
142-WL	JESSIE M. IPE
143A-WL	CITY OF YOUNGSTOWN, OHIO
143B-WL	" " " "
143C-WL	" " " "
144-WL	THE COMMISSIONERS OF MAHONING COUNTY, OHIO

302A-WL	WILLIAM O. WALKER & MARION WALKER
303A-LA	EDITH H. JIMPKINS
304A-WL	ESTATE OF JAMES E. CONZETT & ETTA CONZETT
305A-LA	
139-B-WL	ROBERT W. ISAACSON & RUTH A. ISAACSON

EXTENDED RAISED MEDIAN WEST ALONE MIDLOTHIAN BLVD.

REVISION	DESCRIPTION	BY	DATE
	REVISED L.A. LINE & DELETED PCL 137 LA		12-6-71
6.	Added fence to Pcl. 143.	EW	12-9-69
5	Added Pcl. 139 B EL	EW.	8-7-69
4	Changed All Names Previously Revised on Earlier Sepias	MKM.	7-25-69
3	ADDED (L) RESIDUE, PCL. 139-B-WL.		7/1/69
2	ADDED PCL. 139-B-WL. REV. PCL. 139-WL.		12/1/68
1	ADDED PARCEL 143-WA	EHC	11/29/68

PARCELS 302A-WL, 303A-LA, 304A-LA & 305A-LA ADDED. FED. PROJ. NO FOR CONSTRUCTION SHOWN IN ENG'S BEGIN PROJECT FLAGS. ADDED END ACQUISITION FLAG FOR MAH I-680-9.32. 5-6-70

SHEET 1 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2

MAHONING COUNTY, OHIO

SCALE

0 50 100 200 300

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

558/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

6/104

Nº	OWNER
271-WD	ELIZABETH SCHLOSSAR
272-WD	MILDRED MARUSKIN
273-WD	PETER F. JAKUBOVIC & IRENE JAKUBOVIC, a/k/a IRENE C. JAKUBOVIC
278-WL	HELEN L. HURAJT
279-WL	PETER S. CHIZMAR
280-WL	JOSEPH VAGNER & JUSTINA VAGNER
281-WL	MARIE E. HORVAT ET. AL. - OWNERS
282-WL	MICHAEL SHRISKY & MARTIN SHRISKY
283-WL	JOHN PAVLICH & MARY PAVLICH
284-WL	& BERTHA RAJSICH, a/k/a RAJA RAJSICH
292-WL	ESTATE OF GLADYS L. CLEMENS, Decd.
293-WL	DONEL REALTY COMPANY, A PARTNERSHIP
644 WA	JHO KRUPPA & ELLA KRUPPA
676 WA	CHARLES RICHARD WIESENSEE & VERONICA C. WIESENSEE

Nº	OWNER
143C-WL	CITY OF YOUNGSTOWN, OHIO
144A-WL	THE COMMISSIONERS OF MAHONING COUNTY, OHIO
149-WL	MARTHA B. KRUPA
150-WL	JOHN MALENIC
151-WL	JOHN P. MALENIC & MARY F. MALENIC
152-WL	STEPHEN NESHITE, OWNER; PAULINE NESHITE, LIFE ESTATE
153-WL	SUSIE VETRECIN
154-WL	THE SAFEWAY INVESTMENT COMPANY, A PARTNERSHIP
155-WL	WILLIAM H. TOTH & PATRICIA L. TOTH
156-WL	THOMAS MASI & BETTY JEAN MASI
157-WL	RICHARD PUCCI
158-WL	POWERS ESTATE CEMETERY
160-WL	GERTRUDE POWERS CLARK & MURIEL H. POWERS
161-WL	FELIX V. TESNER & LOUISE C. TESNER
166AWL	See 166 WL
163-WL	PACENTIZANI CLUB OF YOUNGSTOWN, OHIO, AN OHIO CORPORATION
164-WL	THE DORIS REALTY COMPANY, A PARTNERSHIP
165A-WL	GROUP # XVII SLOVAK CATHOLIC SOKOL

Nº	OWNER
165B-WL	GROUP # XVII SLOVAK CATHOLIC SOKOL
166-WL	MICHAEL TYCH a/k/a MICHAEL TYCH, JR. & PEARL TYCH
167-WL	LJUBAN RUSNOV & DOROTHY RUSNOV
168-WL	MARY B. JANCI
169-WL	MARTIN HOLECKO
170-WL	JOHN MURAR
171-WL	SUSAN OPATICH
172-WL	SUSAN RITCHIE & JAMES RITCHIE
173-WL	DOMINIC AGOSTINELLI
174-WL	MARY SOPKOVIC a.k.a. MARY SOPIKOVICH
178A-WL	MINNIE D. WINTER
179-WL	THOMAS BIROSCAK
180-WL	MARY ANN HALAPARDA
181-WL	JOHN GORZDULIC, ET AL
182-WL	MARY LILKO
183-WL	ANNA STEFANIK & STEPHEN BAJTOS
184-WL	JOHN J. MARTINKO

Nº	OWNER
185-WL	FRANK CERIMELE a/k/a CERIMELI-OWNER
186-WL	KATHERINE PERLICH a/k/a KATA PERLIC
190-WL	JOHN KAVULIC & MARY KAVULIC
200-WL	MIKE TKACIK & FRANCIS TKACIK
201-WL	MIKE BABINCHAK & SUSIE BABINCHAK
202-WL	CATHERINE ONDERKO
203-WL	MAZIE E. CAPLINGER
205-WL	AMELIA AGOSTINELLI
206-WL	PAUL HABOVSKY
207-WL	SUSIE VETRECIN
208-WL	MICHAEL SABO, ET. AL.
167AWL	LJUBAN RUSNOV

Nº	OWNER
234 A-WD	ANDREW MULICHAK
234 B-WD	" "
209C-WD	THOMAS J. BASIC & DOLORES MARIE BASIC
209C-LA	" " " " " " " "
209-LA	AGNES WALLOW
210-WL	MARY MANSKY a/k/a MARY CIKA MANSKI & JOSEPH J. MANSKY
211-WL	EDWARD HUDAK & CATHERINE HUDAK,
212-WL	PETER J. GUIDO a/k/a PETER J. GUIDO & AMELIA GUIDO a.k.a. AMELIA E. GUIDO
213-WL	MARY YOSAY
214-WL	MIKE PIHONSKY & ANNA K. PIHONSKY
215-WL	JOSEPH SAGULA & MARY SAGULA
216-WL	ANNA KLANICA

Nº	OWNER
265 PR	JOHN BABIK & HELEN BABIK
266 PR	STEVE J. OLSAVSKY & LOUISE K OLSAVSKY
217-WL	HELEN BAKER
218-LA	SUSAN SEMAN
219-LA	YOLANDA HELEN POLLIFRONE
237-LA	EUGENE C. NAPLES & THERESA F. NAPLES
238-LA	THOMAS M. TORBA & MARIE TORBA
239-LA	ANDREW J. LESKO & ANNA M. LESKO
240-LA	PETER J. SHUNTICH & HELEN A. SHUNTICH
241-WL	SUSIE BALI
242-WL	ANNA C. SICH
243-WL	THE FIRST SLOVAK PRESBYTERIAN CHURCH OF YOUNGSTOWN, OHIO
243-WD	
244A-WL	MILTON A. ROEMISCH, TRUSTEE

Nº	OWNER
245-WL	JOHN HARMOCI & SUSIE HARMOCI
246-WL	ROSE HURCHIK - OWNER
247-WL	ANNA ZOFIE
247A-WL	THE SMITH SPAULDING LAND COMPANY
248AWL	NICK STIJAKOVICH & SOPHIE D. STIJAKOVICH
248-WL	STEVE J. HRUSOVSKI & HELEN M. HRUSOVSKI
249-WL	WADE H. ROSE, OWNER
250-WL	STEPHEN MOTOSKO & THOMAS MOTOSKO
251-WL	MICHAEL RUSKY & MARTHA A. RUSKY
252-WL	FRANK SYLYESTER, EXECUTOR OF THE ESTATE OF ANGELO SYLYESTER, DECD
264-WD	FRANK M. BANJO & HELEN BANJO
268-WD	ANDREW BOSNAK

REVISION	DESCRIPTION	BY	DATE
5	Added Property Lines 10/19/65 R.S. Surveyed All Homes Previously	MKM	7-25-69
4	Revised per Earlier Surveys		
3	Revised Pcls 166-167 WL Areas and Added Pcls 166A WL	MKM	7-25-69
2	CHANGED PARCEL 143E-WL TO 160-WL & 161-WL CHANGED TO TOTAL TAKES	R.R.C.S./BW	6-11-69
1	PARCELS 166-WL & 167 WL	EHC	11-25-68

Name Change Per 646WA Survey 6-17-70
Added Pcls 671WA, 675 WA, & 646 WA Parcel 5/22/70
Added PR Pcls 265 & 266 7-25-69 MKM
Delered Pcl. 645WA Survey 7-20-70

SHEET 2 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1, R-2

MAHONING COUNTY, OHIO

SCALE

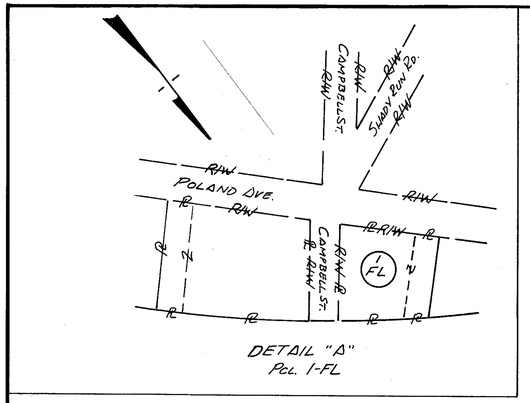
0 50 100 200 300

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

559/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

7/104



DETAIL "A"
PCL. 1-FL

Nº	OWNER
191-S	MORRIS M. BOYD
192-S	MILDRED G. DOUGLAS
346-T	See Pcl 346PR
1-FL	MARION URICHICH & HELEN
	URICHICH
233-WD	OHIO EDISON CO.
233A-S	MACDON INDUSTRIAL & DEVELOPMENT, INC.
233A-X	" " " "
254-WD	MIKE PALAGANO
255-WA	JOHN MARKOVICH & ROSE MARKOVICH
261-WD	MARGARET PAULICH
261-T	" " " "

Nº	OWNER
283-WL	JOHN PAVLICH & MARY PAVLICH
284-WL	BERTHA RAUSICH, a.k.a. BAVA RAUSICH
285A-WL	CLYDE O. BRAGG & VIRGINIA L. BRAGG
286-WL	ANNA SISKO
287-WL	GIOVANNA MARINUCCI
288-WL	GEORGE J. MOCHAN
289-WL	GEORGE ADORNATO & SERENA ADORNATO
290-WL	JAMES E. GREGORY
291-WL	WILLIAM A. MOKROVICH & MARY ANN MOKROVICH
292-WL	DOREL REALTY COMPANY, A PARTNERSHIP
294-WL	STEVE ZARUBA
295-WL	JOHN T. HOLESKO
296-WL	HELEN SEKERAK
297-WL	THE CATHOLIC SLOVAK FALCON CLUB COMPANY, AN OHIO CORPORATION
298-WL	ANNA STARON
299-WL	STEVEN MOTOSKO & HOWARD MOORE
300-WL	JAMES BELLA & MARY BELLA
301-WL	IRENE FRANKO
302-WL	GEORGE CHAMER a.k.a GEORGE CSAMER
303-WL	PAUL GEGUS, OLGA M. GEGUS & MARGARET ANN GEGUS
304-WL	PETER J. KICOS, GUARDIAN FOR JOHN KALAPUT, INCOMPETENT
305-WL	JOHN JANDRASKOVIC & KATHERINE JANDRASKOVIC
306-WL	KATHERINE KOSHAN PETRENCHICK a.k.a. KATARINA PETRENCHICK
307-WL	FRANK V. GURGOS & MARY B. GURGOS
309-WL	MICHAEL REDUSA aka MICHAEL P. REDUGA, Executor of the Estate of CATHRINE REDUGA, Decd.
308-WL	STEVE R. KOVACH & ALICE L. KOVACH
310-WL	MARY K. BARON
311-WL	MARGARET W. BLACK ET. AL.
312-WL	MARY SAFAREK
313-WL	TRIPOM LUKOVICH & CATHERINE LUKOVICH
314-WL	JOSEPH T. BUNDY & SARA L. BUNDY
315-WL	JOHN ROCK ETAL
316-WL	MARY ANNA REPASKY
317-WL	JOHN MARTINEC, JR. aka JOHN MARTINEC
318-WL	AMELIA SAVINA
319-WL	GEORGE KOPCHINAK & HEDWIG KOPCHINAK
321-WL	ANDREW W. MIGLETS
322-WL	HELEN NOVOTNY
324-WL	JOHN TEKAC
325-WL	WILLIAM J. SCHRAIDER, EXECUTOR of the Estate of JOHN M. SCHRAIDER Decd
326-WL	PAUL HABOVSKY
327-WL	HELEN M. LASKEY
328-WL	WILLIAM WELDON & JENNIE WELDON
330-WL	JOHN R. BENNEDEK
331-WL	CLIFFORD W. HOLLISTER
332-WL	MARIE M. BUDAY
334-WL	MARY ANNA CHISMAR
335-WL	EDWARD SALATA, EXECUTOR OF THE ESTATE OF MICHAEL SALATA Sr. Decd
336-WL	NICK MINNIE & JOSEPHINE MINNIE
337-WL	EDNA L. KACHMAR
338-WL	ANNA KULIK aka. ANNA WILICHKO KULEK
339-WL	MARGARET NYERGES
346 PR	JOHN KRUPA
347-LA	ANDY OLEXA & SUSANNA OLEXA
348-WL	ANNA DANYA a.k.a. ANNA ZIDZIK
349-WL	WALTER BIELSKI & JULIA BIELSKI
350-WL	JOHN YANEK & MARY YANEK
351-WL	LOUIS J. CSIZMADIA
352-WL	JULIA TOVARNAK, OWNER
353-T	DORIS & GENEVIEVE KIGHT
354-T	MARIE SICH

REVISION	DESCRIPTION	BY	DATE
4	Changed All Names Previously Revised on Earlier Sepias. Added Pcl 346PR	M.R.M.	7-25-69 2-3-69
3	DELETED WA PCLS 221 THRU 228		7/15/69
2	CHANGED DIMENSIONS OF PARCEL 192 S	R.R.C.	5/26/69
1			

3-5-82 ADDED PCL 1-FL

SEE DETAIL "A" THIS SHEET FOR PCL 1-FL

SHEET 3 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP. T-1 R-2

MAHONING COUNTY, OHIO

SCALE 0 50 100 200 300

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

560/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

8/104

NOTE: PARCEL 428-EL SOLD TO NORMA CARTER AND REGISTERED IN VOL. 7, PAGE 316. VARIOUS STATE LANDS

Nº	OWNER
143D-WL	CITY OF YOUNGSTOWN, OHIO
143A-WD	" " " "
143 T-1	" " " "
143 T-2	" " " "
178B-WL	MINNIE R. WINTER
244B-WL	MILTON A. ROEMISCH, TRUSTEE
244C-WL	" " "
244D-WD	" " "
285B-WL	JOHN J. VASKO & ANN D. VASKO
293 A T	CHESTER TORELLO
356-WD	JULIA PODOLSKY
358D-WD	AGNES VIGUOTTI, EXECUTRIX OF THE ESTATE OF JOHN LOUCHANSKY, DECEASED.
360-WD	LEONE ELISER
361-WD	TERESA HABULAN
358-S	The Midwest Investment Company & partnership
362-WL	EMILEE M. SICH
362-	" " "
362-T	" " "
364B-WL	MARY ANN LoGUIDICE
365A-WL	LEOLA ROGERS
356AWD	JULIA PODOLSKY-OWNER; LOIS MOFFO, LAND CONTRACT HOLDER.

Nº	OWNER
365B-WL	JAMES ROGERS JR.
366-WL	DOROTHY A. MERDICH
367A-WL	LEON DUNN
367B-WL	" "
367C-WL	SANFORD BARTH
367T-T-1	" "
368-WL	SAMUEL H. COPPERMAN
369-WL	JOSEPH RENIOL
370-WL	RHETA F. WEIMER
371-T	JOSEPH WISEMAN
373-T	ANDREW ROSENFELD & JEAN WEISEN
374-WD	ANDREW BERNAT
374-T	" "
375-WD	HELEN LUCAS
376-WD	VICTOR CENTOFANTI, ET. AL.
380-WD	MIKE TEPSICK
384-WD	STEVE STANKOVICH & MARY STANKOVICH
385-WD	BERTHA SMITH
386-WD	THOMAS SOICH a.k.a. THOMAS E. SOICH
387-WD	IVAN DUBIC & JENNIE DUBIC

Nº	OWNER
388-WD	ELWYN V. JENKINS
389-WL	WALTER J. McKENRICK, Jr.
389-WD	
390-WL	STANISLAW DOMANSKI & SOFIA DOMANSKI
391-WL	JAMES CATO & LULA MAE CATO
392-WL	THOMAS ADAMIAK & VICTORIA ADAMIAK
393-WL	JOE A. KOLMAN
394-WL	WALTER W. SOICH & BETTY JANE SOICH
395-WL	JOSEPH C. PAVLICK & RAE C. PAVLICH
396-	LEON DUNN & SANFORD BARTH
397-WD	THE DOREL REALTY COMPANY, A PARTNERSHIP
398-	HAROLD D. LEACH & AL. WESTER
398A	" " " " "
398-T	" " " " "
401-WD	THE INLAND INVESTMENT COMPANY
402-WL	MARY THURIK
402-SL	" "
403A-WL	ESTATE OF JAMES COLUCCI, ET. AL.
403B-WL	" " " " " "

Nº	OWNER
403C-WL	ESTATE OF JAMES COLUCCI, ET. AL.
403D-WL	" " " " " "
403E-WL	" " " " " "
403F-WD	" " " " " "
403G-WL	" " " " " "
406-WL	ANGES PYATNICK
407-WL	MARY APPENZELLER
413-WL	THRIFT INVESTMENT COMPANY
414-WL	NOBEL DRESSEL & MARY DRESSEL
415-WL	STEVE KUNOWSKI
415-SL	" "
417-WL	CAROLINE S. ZITKOVICH
418-WL	JOHN EMERICH & JOSEFIA EMERICH
419-WL	MICHAEL F. SHIMEK
420-WL	ELIZABETH COYNE BAILIFF
421-WL	ROBERT L. EVANS & ROSE MARIE EVANS
422-WL	DOROTHY ISABEL REKUS
423-WL	GILDA CENA, ET. AL.
424-WL	AGNES COYNE PERSON
426-WL	FRANK FRATTAROLI & ANN FRATTAROLI
427-WL	GEORGE DOBOSY & GEORGE DOBOSY, EXECUTOR OF THE ESTATE of MARY DOBOSY, DEC'D.
428-WL 428-EL	JOHN M. DAVID & CATHERINE DAVID
429-WL	ALBERT BAKER & EDNA BAKER
430-WL	JOHN M. YASH & HELEN M. YASH
431-WD	GEORGE S. GERAS & MARTHA A. GERAS
431-T	" " " " " "
432-WD	THE HAWK PALMER COMPANY
432-T	" " " "
433-WD	KATIE DLACICH
433-T	" " "
446-WL	TONY & JESSE BLANGERO
438-WL	LAWRENCE KOVACH & RITA KOVACH
439-WL	WILLIAM J. LAMPRICH
440-WL	JAMES THOMPSON
443-WL	GEORGE KOVACIC
444-WD	
445-WL	AMERICO PATELLA, VERONICA V. SCERBA
447-WL	
450-WL	EUGENIA RUCAREAN - OWNER
453-WL	SOPHIE BODA
454-WL	JOHN GORA
455-WL	SAM NASSAR
456-WL	ESTHER KISH
457-WL	JOSEPH FODIAK & ANNA FODIAK
458-WL	LUIGI NERONI
459-WL	JACOB J. SNYDER, JR. & JOSEPHINA SNYDER
460-WL	CARL A. FALVO & LOUISE FALVO
462-WL	THOMAS J. FABEK
463-WL	HOMES, INC.
464-WL	HOMER L. BIEBER & JESSIE G. BIEBER
465-WL	SARA G. TRAFICANT
466-WL	JAMES PATELLA & ROSE PATELLA
470-WL	RUTH BASICH
471-WL	IKE J. RIEHL
440A-WL	CAROL THOMPSON
* 432 EL	THE HAWK PALMER COMPANY

Nº	OWNER
472-WL	MARY SCOARSTE
473-WL	JOSEPH PERAZICH & JULIA PERAZICH
474-WL	PAULINE B. KANOS & JOHN S. KANOS
475-WL	NED J. KAUFMAN & ANN KAUFMAN
476-WD	NICK VISA
478-WL	JACK SCARNECCHIA & DOLORES SCARNECCHIA
479-WL	RAFFAELE DIVECCHIO & ENGIELENE DIVECCHIO
480-WL	FEDOR DENYS
481-S	JOHN SALATSKY
482A-WD	THE CONCRETE, SAND & STONE CO.
482C-WL	" " " " " "
482D-WL	" " " " " "
483-WL	JOHN C. BADILA
484-WL	THOMAS ARMENI & IDA ARMENI
485-WL	BERTHA LACKEY
486-WL	LOUIE DeVICCHIO & BETTY DeVICCHIO
487A-WL	THE DOREL REALTY COMPANY, A PARTNERSHIP
487B-WL	MINNIE R. WINTER
488-WL	EDWARD J. GABRICK & VERA J. GABRICK

Nº	OWNER
489-WL	MARY GABRICK
491-WL	THOMAS A. BLANGERO & PATRICA MAE BLANGERO
492A-WL	DOLLAR SAVINGS & TRUST CO. -TRUSTEE
492B-WL	" " " " " "
493-WL	ESTATE OF KATE SETNYK, DECEASED
495-WL	JAMES A. OWEN, ET AL
497-WL	FRANK N. PATELLA & NORA E. PATELLA
498-WL 498-EL	GEORGE M. SHIPROCK & JULIA M. SHIPROCK
499-WL	PETER FEDOROWICZ & KAROLINA FEDOROWICZ
502-WL	JOSEPH FLEECE
504-WL	THE ESTATE OF MARY FABIAN, DECEASED
505-WL	AGATA KESIC a.k.a. AGATHA KESIC
506-WL	FRANK FRATTAROLI & ANN FRATTAROLI
507-S	UNION CARBIDE & CARBON CORPORATION
508A-WL	ARTHUR E. WESTER - ET. AL.
508ASL	" " " " "
508AS	" " " " "
508-SL	ADOLPH JOHNSON & SON COMPANY
503-P12	AUGUSTINE T. CARMELA TORRESE, OWNERS WILLIAM F. & CAROLYN G. HERKINS, LAND CONTRACT
428-WD	JOHN M. DAVID & CATHERLINE DAVID

NOTE: PARCEL 498-EL SOLD TO NORMA CARTER AND REGISTERED IN VOLUME 7, PAGE 316, NEW DEEDS VARIOUS STATE LANDS

3-5-82 ADDED NOTE FOR PCL 1-FL

REVISION	DESCRIPTION	BY	DATE
	GENERAL REVISIONS: A. Changed All Names Previously Revised on Earlier Sepias. B. Changed All WA Pcls to "T" Pcls. and Revised All "WD" Pcls. to Standard Highway Easements Previously Revised on Earlier Sepias.	MKM	7-25-69

3-21-79 CHANGED PCL 428-WD TO 428-EL AND ADDED NOTE OF SALE. ADDED PCL 498-EL AND NOTE OF SALE.

4-17-74
ADDED PCL 428-WD PER I.O.C. DATED 4-10-74 BY S.D.L.

ADDED PCL. 356 AWD 9-10-73
ADDED PARCELS 432-EL & 444-EL. SMITH 7-23-70

DELETED WD DESIGNATION FROM PCLS 362 & 396 IN THE PARCEL LISTING 5-07-70

ADDED PCL 358-S 12-12-69

Changed Pcls. 508 SL & 508 S to 508 ASL & 508 AS. 11-20-69 White

Changed Pcl. 356WD to a Standard Highway Easement. 11-19-69 EW

Changed Pcls 398 WD & 398 AWD to Standard Highway Easement. 10-17-69 white

Changed Pcl 396WD to a Standard Highway Easement 8-27-69 EW

Revised Pcl. 440 WL Area and Added Pcl. 440A WL 10-13-67

Changed Pcl. 293 T-1 to AT and Deleted Pcl. 293 T-2 MKM. 7-25-69

Changed Pcl. 362 WD to Standard Highway Easement 6-5-69 MKM.

Name Changed Pcl. 358 S 12-23-69 R.S.

SEE SHEET 7 DETAIL "A" PCL 1-FL

SHEET 4 OF 5

PROPERTY MAP

PROPERTY MAP

I-680 MAH. 680-6.98

CITY OF YOUNGSTOWN & BOARDMAN TWP T-1, R-2

MAHONING COUNTY, OHIO

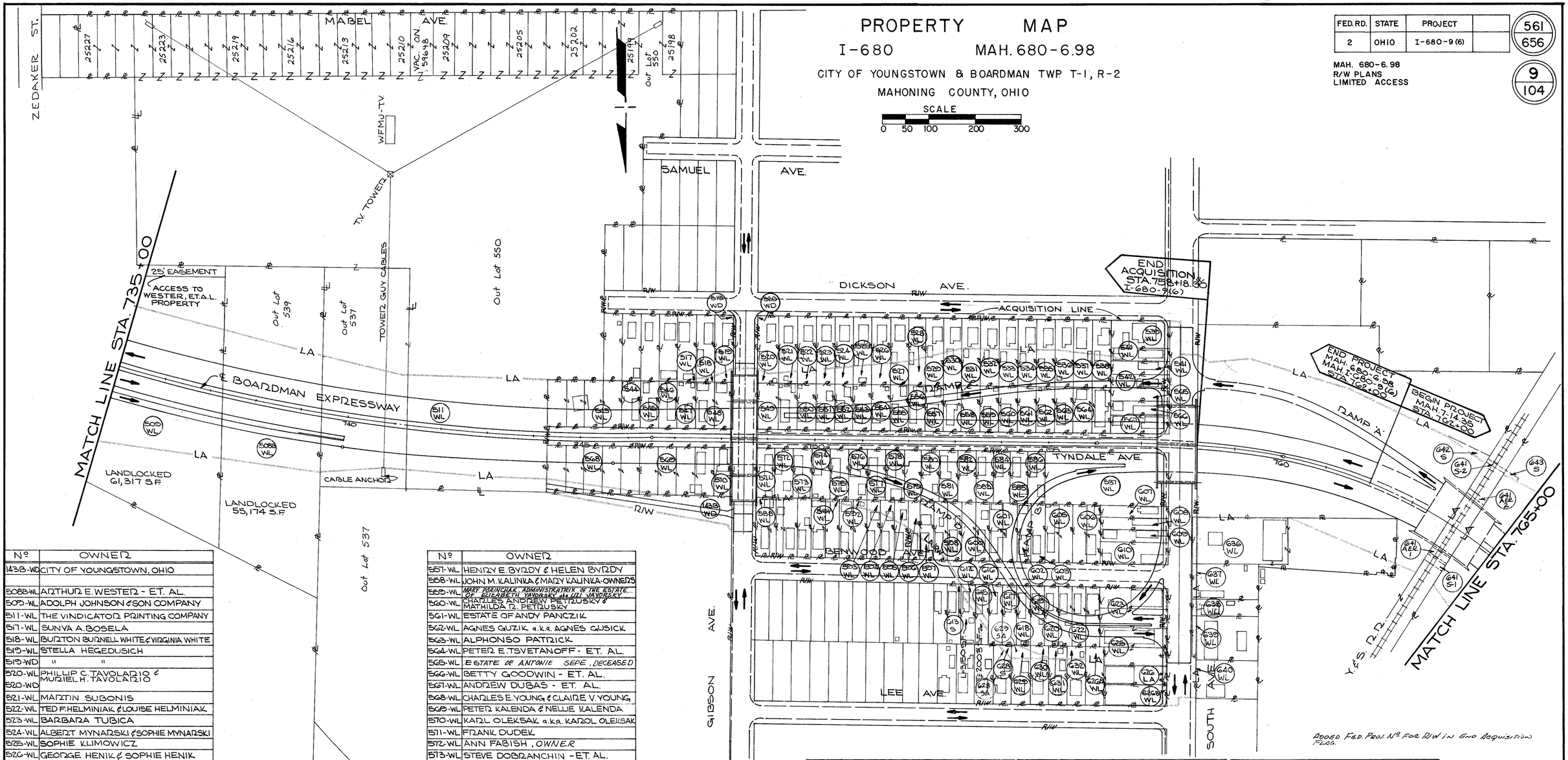
SCALE 0 50 100 200 300

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

561/656

9/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



ADDED FED. PROJ. Nº FOR R/W IN END ACQUISITION PLAN.

Nº	OWNER
143B-WD	CITY OF YOUNGSTOWN, OHIO
508B-WL	ANTHUN E. WESTER - ET. AL.
509-WL	ADOLPH JOHNSON & SON COMPANY
511-WL	THE VINDICATOR PRINTING COMPANY
517-WL	SUNVA A. BOSELA
518-WL	BURTON BURNELL WHITE & VIRGINIA WHITE
519-WL	STELLA HEGEDUSICH
519-WD	" "
520-WL 520-WD	PHILLIP C. TAVOLARIO & MURIEL H. TAVOLARIO
521-WL	MARTIN SUBONIS
522-WL	TED F. HELMINIAK & LOUISE HELMINIAK
523-WL	BARBARA TUBICA
524-WL	ALBERT MYNARSKI & SOPHIE MYNARSKI
525-WL	SOPHIE KLIMOWICZ
526-WL	GEORGE HENIK & SOPHIE HENIK
527-WL	ANDREW KUSHNER
528-WL	ALFRED TAVOLARIO & AGNES TAVOLARIO
529-WL	JOHN S. ROSA & HELEN M. ROSA
530-WL	GENEVIEVE KOMSA
531-WL	JOHN HREHOVCIK
532-WL	JESUS M. MARTINEZ & ANTONIA MARTINEZ
533-WL	JAN IWANICKI & BLANCHE IWANICKI
534-WL	KATE CHUDIK
535-WL	HAROLD G. BOWEN & RUTH I. BOWEN
536-WL	*LILLIAN A. HETNER*
537-WL	KATHERYN SIKORA
538-WL	MARY RYCHLICKY
539-WL	CHARLES LEE
540-WL	ANNA P. TAORMINA
541-WL	ZIGMUND HELMINIAK - ET. AL.
542-WL	ANNA P. TAORMINA
543-WL	CHARLES YOUNG - TRUSTEE FOR YOUNGSTOWN PIGEON CLUB
544-WL	STEFAN JAKUBOWSKI

Nº	OWNER
545-WL	MICHAEL FILL & JANE L. FILL
546-WL	STEVE BONDOR
547-WL	ANDY BALASH & MARY BALASH
548-WL	PAULINE JACOBS & SAM JACOBS
549-WL	ADOLPH BARWICKI a.k.a. ADOLF BARWICKI
550-WL	ANNA WOOD - ET. AL.
551-WL	VALERIO P. W. QUARANTA & ANNA MARIE QUARANTA
552-WL	JOHN HOMA & MARY HOMA
553-WL	MIKE DULICK & ROSIA DULICK
554-WL	MICHAEL KAMINSKI & SOPHIE KAMINSKI
555-WL	RUDOLPH J. EDWARD BROZMAN EXECUTORS of the ESTATE OF MICHEAL BROZMAN Dec'd
556-WL	JOHN TYCH

Nº	OWNER
557-WL	HENRY E. BYRDY & HELEN BYRDY
558-WL	JOHN M. KALINKA & MARY KALINKA-OWNERS
559-WL	*MARY MARINCHAK, ADMINISTRATRIX OF THE ESTATE OF ELIZABETH YAVORSKY a/k/a LIZ JAVORSKY*
560-WL	CHARLES & ANDREW BETTZUSKY & MATHILDA Z. PETTZUSKY
561-WL	ESTATE OF ANDY PANCZIK
562-WL	AGNES GUZIK a.k.a. AGNES GUSICK
563-WL	ALPHONSO PATTRICK
564-WL	PETER E. TSVETANOFF - ET. AL.
565-WL	*ESTATE OF ANTONIE SEPE, DECEASED*
566-WL	BETTY GOODWIN - ET. AL.
567-WL	ANDREW DUBAS - ET. AL.
568-WL	CHARLES E. YOUNG & CLAIRE V. YOUNG
569-WL	PETER KALENDA & NELLIE KALENDA
570-WL	KARL OLEKSAK a.k.a. KAROL OLEKSAK
571-WL	FRANK DUDEK
572-WL	ANN FABISH, *OWNER*
573-WL	STEVE DOBRANCHIN - ET. AL.
574-WL	STELLA F. VELICHKO
575-WL	WALTER NATYSHAK & ANNE NATYSHAK
576-WL	HENRY F. NOSEK & SOPHIE NOSEK
577-WL	JOHN EVICH & ISABEL B. EVICH
578-WL	JOHN A. DVORNEKOVICH & DOROTHY J. DVORNEKOVICH
579-WL	MIKE LULIKA & MARY LULIKA
580-WL	ANN CULLEN
581-WL	MARGARET S. SYMPSON
582-WL	MARY DUPEY
583-WL	JOSEPH KELLEY & CHRISTINE KELLEY
584-WL	FRANK SUSOR & MARY SUSOR
585-WL	ANNE MUMAW
586-WL	JOHN BALCHICK & ELIZABETH BALCHICK
587-WL	MIKE, PAUL L. & STEVE RIDARSKY
588-WL	RAFFAELLO JOHN PERA & MARY S. PERA
591-WL	MARY SWATOWSKI a.k.a. MARY SWATOSKI
592-WL	*PAUL B. TEMELKOFF & SONJA A. TEMELKOFF*
593-WL	SOPHIE GUCWA
594-WL	FRANK PRUCNAL & STELLA PRUCNAL

Nº	OWNER
595-WL	VIRGINIA *KARASIEWSKY*
596-WL	WILLIAM JOHNSTONE & JOHNNIE MAE JOHNSTONE
597-WL	MARY STIPETICH
598-WL	MINNIE DI FABIO
G00-WL	STEPHEN TERLECKI & LEONA TERLECKI
G01-WL	JOSEPH VIANO
G02-WL	STANLEY BARWICKI & JULIA O. BARWICKI
G03-WL	KATHERINE SZABAT
G05-WL	*JOHN J. HORNEY, JR., ADMINISTRATOR OF THE ESTATE OF THERESA ANN HORNEY, DECEASED*
G06-WL	ANGELO FAMULARO & ROSE FAMULARO
G07-WL	JOSEPHINE FINN
G08-WL	NELLIE MOLALI
G09-WL	*AGNES E. SWANECK, ET AL*
G10-WL	EVA LUKOSEVECUS
G13-S	*JOHN FARGOIS & ANNA FARGOIS*
G14-WL	MARY J. ALTIER
G15-WL	*CHRISTINA SWIDERSKI, ET AL. OWNERS*
G16-WL	*FRANK J. KANIK, ET AL*

Nº	OWNER
G17-WL	CARMELA D'ANALLI
G18-WL	WLADZSLAW GUBALA
G19-WL	JOHN C. FEKETY
G20-WL	SOPHIE IGNATH a.k.a. SOPHIE F. IGNATA
G22-WL	ALBERT HARRIS & ANGELLA HARRIS
G23-WL	BERT B. SLEVIN ET AL #
G25-WL	KATHERYN SLEVIN ET AL
G28-WL	JOHN LEON
G29-WL	ROBERT J. CAMPANA & REGINA C. CAMPANA
G30-WL	ERMA PETTRELLA
G31-WL	WILLIAM SWIDERSKI & CHRISTINE SWIDERSKI
G32-WL	*MARY KIEPER, ET AL*
G2GA-WL	ISABELLE C. BEES (HUSBAND BURT)
G2GB-WL	BURT BEES (WIFE ISABELLE C.)
G36-WL	MIKE RIDARSKY, ET AL.
G37-WL	BERTHA HORNEY
G38-WL	*FRANK* GRANITO, ET AL.
G39-WL	REGINA GENEVIEVE KARPOWICZ
G40-WL	ROBERT & PAULINE BALALIK

Nº	OWNER
GH AER.1	YOUNGSTOWN & SOUTHERN RAILWAY Co.
641 S-1	" "
GH AER2	" "
641 S-2	" "
642-S	ARMBRECHT MOTOR TRUCK SALES, INC.
643-S	The JUDITH REALTY Co. & S.H. COPPERMAN.

ADDED PCLS 628 SA & 629 SA 7-5-72

PCLS 637-LA THRU 640-LA REVISED TO WL PCL'S FOR DEVELOPEMENT OF GREEN STRIP 1-15-70
PCL 636-LA REVISED TO 636-WL (TOTAL TAKE) FOR DEVELOPEMENT OF GREEN STRIP 2-25-70

Revised Name Pcl 638LA 9-16-69 Solomon
Name Change Pcl 643-S 8-6-69
Changed All Names Previously Revised on Earlier Sht/s – 7-25-69 – M.E.M.
Showed Ownership Pcls 623 WL & 625 WL Same Smith 7-23-70

REVISION	DESCRIPTION	BY	DATE
1	ADDED PARCELS 641/642/643	RRC	7/18/69

SHEET 5 OF 5

PROPERTY MAP

FED. RD.	STATE	PROJECT	
2	OHIO	I-680 -9(6)	

562
656

MAH. 680-698
R/W PLANS
LIMITED ACCESS

10
104

KEY MAP

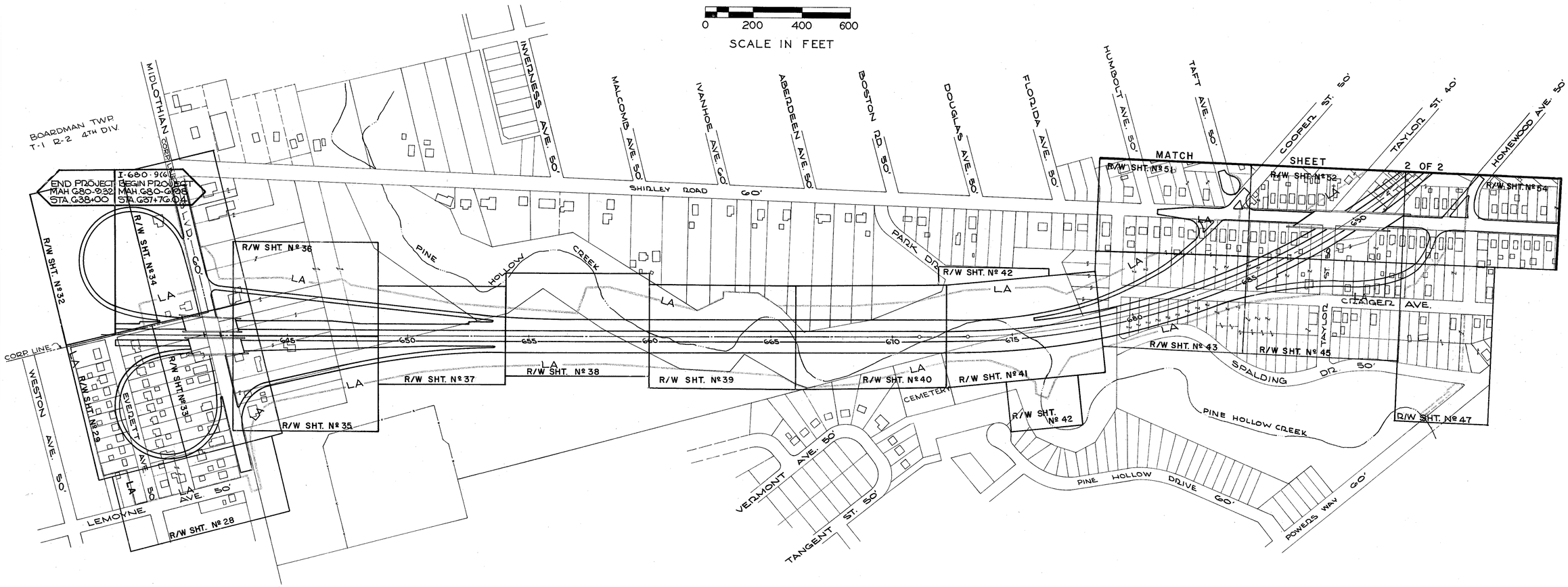
I-680 MAH 680-698

MAHONING COUNTY

CITY OF YOUNGSTOWN

0 200 400 600

SCALE IN FEET



SHEET 1 OF 2

KEY MAP

State Highway Dept. Div. 4
R/W, Engr. & Admin. Sect.
JAN 27 1969
LOGGED
Grds. ____ Mil. Sh. ____

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

563
656

11
104

MAH. 680-698
R/W PLANS
LIMITED ACCESS

KEY MAP

I-680 MAH. 680-698

MAHONING COUNTY

CITY OF YOUNGSTOWN

0 200 400 600

SCALE IN FEET

I-680-9(6)
END PROJECT
MAH.680-6.98
STA.762+00

BEGIN PROJECT
MAH.-7-14.35
STA.762+00

MATCH SHEET 1 OF 2

MATCH LINE "A"

HUNTER AVE. 50'
HUMBOLT AVE.
R/W SHT. Nº55
TAFT AVE. 50'
COOPER AVE.
R/W SHT. Nº58
INDIANOLA AVE.
MURRAY ST.
TAYLOR AVE. 40'
R/W SHT. Nº58
HOMEWOOD AVE.
R/W SHT. Nº60
HARMON 50'
FITHIAN 50'
POLAND
R/W SHT. Nº62
CAMPBELL ST.
R/W SHT. Nº64
SHADY RUN RD.
R/W SHT. Nº65
POWERSDALE AVE.
CALEDONIA AVE.
CAMERON AVE.
R/W SHT. Nº74
R/W SHT. Nº71
R/W SHT. Nº67
R/W SHT. Nº72
R/W SHT. Nº77
MABEL ST.
PARNELL ST.
ALEXANDER ST.
R/W SHT. Nº79
VAR. R/W
VAR. RAN
R/W SHT. Nº69
SHIRLEY RD.
R/W SHT. Nº54

MABEL AVE. 50'
ZEDAKER 50'
R/W SHT. Nº81
SAMUEL AVE.
R/W SHT. Nº85
PARNELL ST.
R/W SHT. Nº83
ALEXANDER ST.
R/W SHT. Nº79
R/W SHT. Nº42
R/W SHT. Nº86
R/W SHT. Nº87
R/W SHT. Nº88
TYNDALE AVE.
R/W SHT. Nº89
R/W SHT. Nº90
DICKSON AVE.
R/W SHT. Nº94
ACCESS ROAD
BENWOOD AVE.
R/W SHT. Nº96
R/W SHT. Nº92
LEE AVE.
R/W SHT. Nº98
KNOX ST. 40'
SOUTHERN R.R.
YOUNGSTOWN
R/W SHT. Nº100
R/W SHT. Nº101
BELLEVIEW AVE. 40'
R/W SHT. Nº102
R/W SHT. Nº103
DELASON AVE. 50'
HEASLEY AVE. 60'
ELLENWOOD AVE. 50'
CHALMERS AVE. 60'
MARION AVE. 60'

SHEET 2 OF 2

KEY MAP

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

TOTAL NUMBER OF OWNERS: 424 TOTAL NUMBER OF OWNERS WITH STRUCTURES: 288

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

564
656

12
104

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
100-WL	JOHN NOVAK	689	501	13,868 S.F.	—	13,868 S.F.	—	13,868 S.F.	YES	—	—	29		
101-WL	JOHN ZELINA & OLGA ZELINA	659	426	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
102-WL	HENRY L. BEACH & EVELYN MAE BEACH	659	446	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
103-WL	ROBERT A. ALLAN & MILDRED A. ALLAN	659	134	7500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
104-WL	VICTOR FEDORCHAK & HELEN A. FEDORCHAK	659	67	7500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
105-WL	EMANUEL MANIS & MARY B. MANIS	654	305	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
106-WL	JOHN F. CURALL & THELMA J. CURALL	654	297	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
107-WL	JAMES W. ANDERSON & JEAN ALICE ANDERSON	654	287	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
108-WL	KENNETH R. WILSON & ALDA M. WILSON	654	282	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
109-WL	JOHN E. JONES & DOROTHY J. JONES	654	283	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
110-WL	RAYMOND H. McANDREWS & BETTY McANDREWS	659	429	12,706 S.F.	—	12,706 S.F.	—	12,706 S.F.	YES	—	—	29		
111-WL	HARRY W. JACOBSON & ANITA C. JACOBSON	846	193	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
112-WL	FRANK WSZOLEK & BERTHA M. WSZOLEK	659	202	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
113-WL	ALFRED SQUILLANTE	912 1016	269 36	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
114-WL	JOSEPH L. FEDOR & MARY F. FEDOR	659	133	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
115-WL	RAY BRUNETTI & LUCILLE BRUNETTI	659	73	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
116-WL	FRANK A. NAPLES & MARIE A. NAPLES	659	126	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
117-WL	ROBERT C. HODGE & MARIE ELIZABETH HODGE	659	135	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29	ADVANCE ACQUISITION ACQUIRE AS PCL. 18WL	H
118-WL	JOHN MATZYE, JR. & MARGARET A. MATZYE	659	270	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
119-WL	DOMINIC CARANO & STELLA M. CARANO	1029	548-550	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	29		
120-WL	DORIS MAY WELKER aka DORIS M. WELKER	720 & 854	504 & 623	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	28,29		
121-WL	WILLIAM K. CROUKS & AGNES CROUKS	685	496 & 497	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	YES	—	—	28,29		
122													NOT USED	
123-WL	WILLIS IPE & ELIZA. MAY IPE	425	336	24,000 S.F.	—	24,000 S.F.	—	24,000 S.F.	YES	—	—	32,34		
124-WL	CHARLES R. HOGG	491	355	15,831 S.F.	—	15,831 S.F.	—	15,831 S.F.	NO	—	—	33		
125-WL	JOHN HAAS & KATHERINA HAAS	524	369	10,115.5 S.F.	—	10,115.5 S.F.	—	10,115.5 S.F.	YES	—	—	33		
126-WL	JOHN HAAS	501	324	10,075 S.F.	—	10,075 S.F.	—	10,075 S.F.	YES	—	—	33		
127-WL	PAUL R. TOLAND & MARTHA J. TOLAND	579	232	10,034 S.F.	—	10034 S.F.	—	10,034 S.F.	YES	—	—	33		
128-WL	JOHN WIETELMANN	466	291	9,993 S.F.	—	9,993 S.F.	—	9,993 S.F.	YES	—	—	33		
129-WL	ESTATE OF DAVID B. CONRATH & CLIFFORD E. FISHER	641	404	9,953 S.F.	—	9,953 S.F.	—	9,953 S.F.	NO	—	—	33		
130-WL	DELORES WELLS	900 & 632	153 & 153	9,912 S.F.	—	9,912 S.F.	—	9,912 S.F.	YES	—	—	33		
131-WL	WILLIAM A. LONG & BETTY A. LONG	758	261	9,871 S.F.	—	9,871 S.F.	—	9,871 S.F.	YES	—	—	33		
132-WL	JENNIE E. POLLEY	674 & 586	581, 582 & 141	9,830 S.F.	—	9,830 S.F.	—	9,830 S.F.	YES	—	—	33		
133-WL	ALEXANDER GUARINO	853	579	9,786 S.F.	—	9,786 S.F.	—	9,786 S.F.	YES	—	—	33		
99-WL	DOMINIC PEDALINE & ESTHER PEDALINE	928	499	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	28,29		

General Revisions:
A. Changed all names previously revised on earlier sepias.
B. Changed all WA Pcls to T Pcls and revised all "WD" Pcl's to Standard Highway Easements previously revised on earlier sepias.

State Highway Dept. of Ohio
Right of Way Section
JAN 27 1969
Legals
Cols. Ohio

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

565/656

13/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

** = INDICATES PARCEL ADDED AT THE END OF SUMMARY

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES

LANDLOCKED = (L)

	PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
	134-WL	ESTATE OF HATTIE HALLWOOD, DEC'D.	339 537	306 8	9,749 S.F.	—	9,749 S.F.	—	9,749 S.F.	YES	—	—	33		
	135-WL	ROBERT HAY MACLENNAN	466	573	9,713 S.F.	—	9,713 S.F.	—	9,713 S.F.	YES	—	—	28,33		
	136-WL	MATILDA ZIGO	1090	406	9,671 S.F.	—	9,671 S.F.	—	9,671 S.F.	YES	—	—	28		
	137	DOMINIC TOCCO & ANNETTE TOCCO	846	87	63,358 S.F.	—	—	—	—	NO	63,358 S.F.	—	34		
	138-LA	CARL A. BERNDT & PEARL BERNDT	821	679	39,950 S.F.	—	—	—	—	NO	39,950 S.F.	—	34	R/W LINE CHANGED TO LA LINE	
	138-T						1,056 S.F.	—	1,056 S.F.				34	GRADING	
	139-WL 139-A-WL 139-SL 139-X	INDIANOLA REALTY, INC.	875	518	288,367.5.F.	4,534 S.F.	5,919 S.F. 100,279 S.F. 1,583 S.F. 1,185 S.F.	4,534 S.F.	1,385 S.F. 100,279 S.F. 1,583 S.F. 1,185 S.F.	NO	180,586 S.F.	—	34 35,36,37 37 34	SLOPE EASEMENT CHANNEL CONST.	I-FUNDS
	140A-WL	JOHN SHOFI & ELIZABETH SHOFI	335,618,506	183,141,114	2.50 Ac.	—	2.50 Ac.	—	2.50 Ac.	YES	—	—	33,35,36		
	139B-WL	ROBERT W. ISAACSON & RUTH A. ISAACSON	1161	218	65,340 S.F.	102 S.F.	47,438 S.F.	102 S.F.	47,336 S.F.	YES	—	—	33,34,36		
	141-WL	MICHAEL R. BOHN & MARY ALICE BOHN	691 617	493 & 254 439	43,560 S.F.	—	43,560 S.F.	—	43,560 S.F.	YES	—	—	33,35		
	139.BEL	See Pcl. 139 B-WL				—	17,902 S.F.	—	17,902 S.F.	YES	—	—	34,36	EXCESS LAND	STATE
	142-WL	JESSIE M. IPE	403 419	52 254	43,560 S.F.	—	27,432 S.F.	—	27,432 S.F.	YES	—	16,128 S.F.(L)	33,35		
**	143A-WL 143B-WL 143C-WL 143-X	CITY OF YOUNGSTOWN, OHIO	481	568	1,179,170 S.F.	17,860 S.F.	12,353 S.F. 245,956 S.F. 8,127 S.F. 109 S.F.	8,927 S.F.	3,426 S.F. 245,956 S.F. 8,121 S.F. 109 S.F.	NO NO NO NO	15,676 S.F.(L)	880,125 S.F.	28,33 35,37,38,39 39 37	CHANNEL CONST.	
	143D-WL	" " " "	256	102	20,358 S.F.	NONE	3,040 S.F.	—	3,040 S.F.	NO		8,586 S.F.	67		
	143A-WD						7,826 S.F.	—	7,826 S.F.	NO			65,67		
	143 T-1						597 S.F.	—	597 S.F.	NO			65,67	GRADING	
	143 T-2						756 S.F.	—	756 S.F.	NO			67	GRADING	
	143B-WD	" " " "	445	131	700,880 S.F.	NONE	12,405 S.F.	—	12,409 S.F.	NO	—	688,471 S.F.	89,92		
	143-WA	" " " "	481	568			120 S.F.	—	120 S.F.	NO			28	FACI SIGN LOCATION	
	144-WL 144A-WL 144-X 144 S-1 144 S-2 144 S-3	THE COMMISSIONERS OF MAHONING COUNTY, OHIO	181 188	616 77	871,200 S.F.	7,840 S.F.	3,615 S.F. 474,345 S.F. 283 S.F. 525 S.F. 2,946 S.F. 588 S.F.	—	3,615 S.F. 474,345 S.F. 283 S.F. 525 S.F. 2,946 S.F. 588 S.F.	NO YES	385,400 S.F.	—	37 38,39,40,41 37 38 42 42	CHANNEL CONST. SEWER EASEMENT SEWER EASEMENT SEWER EASEMENT	I-FUNDS
	145, 146, 147 & 148													NOT USED	
	149-WL	MARTHA B. KRUPA	686, 674	418, 359; 360	43,741 S.F.	—	916 S.F.	—	916 S.F.	NO	42,825 S.F.	—	39		
	150-WL	JOHN MALENIC	648	426	43,031 S.F.	—	6,593 S.F.	—	6,593 S.F.	NO	37,038 S.F.	—	39,40		
	151-WL	JOHN P. MALENIC & MARY F. MALENIC	610	290	43,603 S.F.	—	8,018 S.F.	—	8,018 S.F.	NO	35,585 S.F.	—	40		
	152-WL	PAULINE NESHITE LIFE ESTATE, STEPHEN NESHITE, OWNER	1114	314	43,585 S.F.	—	6,892 S.F.	—	6,892 S.F.	NO	36,693 S.F.	—	40		
	153-WL	SUSIE VETRECIN	744	99	44,404 S.F.	—	6,756 S.F.	—	6,756 S.F.	NO	37,648 S.F.	—	40		
	207-WL		758 367	474 397	5573.33 S.F.	—	5573.33 S.F.	—	5573.33 S.F.	YES	—	—	50		
	154-WL 154-S	THE SAFEWAY INVESTMENT COMPANY, A PARTNERSHIP	1062	334	65,483 S.F.	—	7,399 S.F. 421 S.F.	—	7,399 S.F. 421 S.F.	NO	58,084 S.F.	—	40 42	SEWER EASEMENT	
	155-WL	WILLIAM H. TOTH & PATRICIA L. TOTH	811	543	15,893 S.F.	—	1,005 S.F.	—	1,005 S.F.	NO	—	14,888 S.F.	40		
	156-WL	THOMAS MASI & BETTY JEAN MASI	803	243	15,947 S.F.	—	3,439 S.F.	—	3,439 S.F.	NO	—	12,508 S.F.	40		
	157-WL	RICHARD PUCCI	1130	211	25,630 S.F.	—	5,967 S.F.	—	5,967 S.F.	NO	—	19,663 S.F.	40		
	157 PR														
	158-WL	POWERS ESTATE CEMETERY	WILL	2/160	43,308 S.F.	—	8,209 S.F.	—	8,209 S.F.	NO	—	35,099 S.F.	40	FOR LOSS OF LAND IMPROVEMENTS DURING CONSTRUCTION.	
	159,													NOT USED	
	160-WL	GERTRUDE POWERS CLARK & MURIEL H. POWERS	704 1141	216 615	111,200 S.F.	NONE	55,012 S.F.	—	55,012 S.F.(L)	NO	—	56,188 S.F.	41,42,43		
	161-WL	FELIX V. TESNER AND LOUISE C. TESNER	854	531	150,400	NONE	45,076 S.F.	—	45,076 S.F.(L)	NO		105,324	40,41,42	*NO PROPERTY DESCRIPTION IN DEED **DEED ACREAGE PRESENTLY LANDLOCKED. (Pcl. 161-WL)	
	162													NOT USED	
	163-WL 163-T	PACENTRANI CLUB OF YOUNGSTOWN, OHIO, AN OHIO CORPORATION	764	350	106,650 S.F.	—	45,678 S.F. 1,123 S.F.	—	45,678 S.F. 1,123 S.F.	NO	—	60,972 S.F.	43,45 45	UTILITY CONNECTION	
	164-WL	THE DOREL REALTY COMPANY, A PARTNERSHIP	1106	559	2,878 S.F.	—	2,878 S.F.	—	2,878 S.F.	NO	—	—	43		
	165A-WL	GROUP #XVII SLOVAK CATHOLIC SOKOL	665	280	42,005 S.F. 20,995 S.F.	—	17,650 S.F. 15,368 S.F.	—	17,650 S.F. 15,368 S.F.	NO NO	24,355 S.F. 5,627 S.F.	—	41,43 43		

GENERAL REVISIONS
A. Changed All Nomas Previously Revised on Earlier Copies.
B. Changed All WA Pcl's to "T" Pcl's and Revised All "WD" Pcl's to Standard Highway Easements Previously Revised on Earlier Copies.
Revised Area Pcl. 160-WL 10/9/68 R.S.
Revised Taxes, Residues and Added (L) to Lists 12/3/68
Revised Pcl. 139-WL, Added 139-B-WL 12/3/68

DELETED PARCEL 137-LA 12-6-71

Add note to Remarks Column - Pcl. 161-WL - 10-22-69

Revised Pcl. 139-WL & Revised Pcl. 139-WL, DEA-INC - 7/14/69 Pcl. 139-B-WL & Parcel 139-BEL as Parcel 139-WL, DEA-INC - 7/14/69

JAN 27 1969

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680- 9 (6)	

566
656

14
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.RO. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
166-WL	MICHAEL TYCH a.k.a. MICHAEL TYCH, JR. & PEARL TYCH	908	423	7,898 S.F.	—	7,898 S.F.	—	7,898 S.F.	NO	—	—	43,49		
166A-WL	" " " " " " " " " "			6,099 S.F.		6,099 S.F.		6,099 S.F.	YES			49		
167-WL	LJUBANI RUSNOV & DOROTHY RUSNOV	637	196	6,998.5 S.F.	—	6,998.5 S.F.	—	6,998.5 S.F.	YES	—	—	43,		
167A-WL	LJUBAN RUSNOV	695	139	6,998.5 S.F.		6,998.5 S.F.		6,998.5 S.F.	NO			49		
168-WL	MARY B. JANCI	688, 694, 706	311, 168, 625	14,000 S.F.	—	14,000 S.F.	—	14,000 S.F.	YES	—	—	43, 49		
169-WL	MARTIN HOLECKO	850 1081 273 648	GGG 242 107 540	12,584 S.F.	—	12,584 S.F.	—	12,584 S.F.	YES	—	—	43, 49		
170-WL	JOHN MURAR	850 847	G72 511	25,200 S.F.	—	25,200 S.F.	—	25,200 S.F.	YES	—	—	43, 49		
171-WL	SUSAN OPATICH	452 850 810	79 GG8 5G4	17,500 S.F.	—	17,500 S.F.	—	17,500 S.F.	NO	—	—	43,45		
172-WL	SUSAN RITCHIE & JAMES RITCHIE	837, 850	494, 670	5,600 S.F.	—	5,600. S.F.	—	5,600 S.F.	YES	—	—	50		
204-WL	" " " " "	834, 837	656, 497	5,600 S.F.		5,600 S.F.		5,600 S.F.	NO			45		
173-WL	DOMINIC AGOSTINELLI	850 808 764	GG4 675 347	11,900 S.F.	—	11,900 S.F.	—	11,900 S.F.	NO	—	—	45		
174-WL	MARY SOPKOVIC a.k.a. MARY SOPKOVICH	G30 998	524 283	13,192 S.F.	—	13,192 S.F.	—	13,192 S.F.	YES	—	—	45,50		
175, 176	¢177													
178A-WL	MINNIE R. WINTER	880	G75	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	NO	—	—	45	NOT USED	
178B-WL		813	54	11,204 S.F.	—	2,048 S.F.	—	2,048 S.F.		9,156 S.F.	—	85		
179-WL	THOMAS BIROSCAK	694, 314	159, 432	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	45		
180-WL	MARY ANN HALAPARDA	1085	297	G,299 S.F.	—	G,299 S.F.	—	G,299 S.F.	NO	—	—	45		
181-WL	JOHN GORDULIC, CARL GORDULIC, SOPHIE D. WATSON, SOPHIE GORDULIC, AGNES GOLLADAY, MARY ANN HOLAPARDA, MARGARET J. MONTMARNO	1132	113	5,599 S.F.	—	5,599 S.F.	—	5,599 S.F.	YES	—	—	45		
182-WL	MARY LILKO	280 403	175 561	5,942 S.F.	—	5,942 S.F.	—	5,942 S.F.	YES	—	—	45		
183-WL	ANNA STEFANIK & STEPHEN BAJTOS	208 368	G27 15	5,599 S.F.	—	5,599 S.F.	—	5,599 S.F.	YES	—	—	45		
184-WL	JOHN J. MARTINKO	919 287, 919	G36-G40 166, 638	5,599 S.F.	—	5,599 S.F.	—	5,599 S.F.	YES	—	—	45, 47		
186-WL	FRANK CERIMELE a.k.a. CERIMELI - OWNER; JOHN DEGENERO &	939	413	5,599 S.F.	—	3,499 S.F.	—	3,499 S.F.	YES	—	2,100 S.F.	47		
186-WA	GLADYS L. DEGENERO - HOLDERS OF LAND CONTRACT	123	223			1,500 S.F.	—	1,500 S.F.				47	BLDG. REMOVAL	
186-WL	KATHERINE PERLICH a.k.a. KATA PERLIC	719 G54 539	G 513 313	16,797 S.F.	—	2,062 S.F.	—	2,062 S.F.	NO	—	14,735 S.F.	47		
187, 188,	189, 190												NOT USED	
191-S	MORRIS M. BOYD	836	713	22,290 S.F.	—	2,296 S.F.	—	2,296 S.F.	NO	—	22,290 S.F.	47	SEWER EASE.	
192-S	MILDRED G. DOUGLAS	989 879	409 638	10,800 S.F.	—	3,120 S.F.	—	3,120 S.F.	NO	10,800 S.F.	—	47	SEWER EASE.	
193, 194,	195, 196, 197, 198												NOT USED	
199-WL	JOHN KAVULIC & MARY KAVULIC	525	148	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	49		
200-WL	MIKE TKACIK & FRANCIS TKACIK	296	87	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	49		
201-WL	MIKE BABINCHAK & SUSIE BABINCHAK	317	475	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	49,50		
202-WL	CATHERINE ONDERKO	508	325	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
203-WL	MAZIE E. CAPLINGER	939	715	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
204-WL													SEE 172 WL	
205-WL	AMELIA AGOSTINELLI	556, 1064	147, 623	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
206-WL	PAUL HABOVSKY	836	728	G,300 S.F.	—	G,300 S.F.	—	G,300 S.F.	YES	—	—	50		
207-WL	SUSIE VETRECIN												SEE 153-WL	
208-WL	MICHAEL SABO, JOHN A. SABO, EDWARD Wm. SABO & MARGARET E. STEVENSON	270 G28	591 421	5,882 S.F.	—	5,882 S.F.	—	5,882 S.F.	NO	—	—	50		

I-FUNDS

General Revisions:
A. Changed all names previously raised on earlier sepias.
B. Changed all WA Pcl's to T Pcl's and raised all WL Pcl's to Standard Highway Easements previously revised on earlier sepias.
Added Pcl 166 AWL 2-19-69
Added Pcl 167 AWL

RECEIVED
JAN 29 1969
Legals
Cert. No.

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

567
656

15
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
210-WL	MARY MANSKY a.k.a. MARY CIKA MANSKI & JOSEPH J. MANSKY a.k.a. JOSEPH MANSKY	545, 591, 672 & 970	610, 497 366 & 553	21,607 S.F.	—	21,607 S.F.	—	21,607 S.F.	YES	—	—	50		
211-WL	EDWARD HUDAK & CATHERINE HUDAK	810 810	243 239	8,260 S.F.	—	8,260 S.F.	—	8,260 S.F.	YES	—	—	50		
212-WL	PETER GUIDO a.k.a. PETER J. GUIDO & AMELIA GUIDO a.k.a. AMELIA E. GUIDO	833	605	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50		
213-WL	MARY YOSAY	873 245	646 68	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	50, 52		FUNDS
214-WL	MIKE PIHONSKY & ANNA K. PIHONSKY	553	257	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	52		I-FUNDS
215-WL	JOSEPH SAGULA & MARY SAGULA	553	281	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	52		
216-WL	ANNA KLANICA	507 999	417 303	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	52		
217-WL 217-WA	HELEN BAKER	1050	180	5,599 S.F.	—	1,899 S.F. 1,521 S.F.	— —	1,899 S.F. 1,521 S.F.	YES	—	3,700 S.F.	52 52	BLDG. REMOVAL	
218-LA	MIKE SEMAN	1185	456	5,599 S.F.	—	NONE	—	NONE	NO	—	5,599 S.F.	52	D/W LINE CHANGED TO LA LINE PEDESTRIAN POINT OF ACCESS	
219-LA	YOLANDA HELEN POLLIFRONE	1178	23	5,599 S.F.	—	NONE	—	NONE	NO	—	5,599 S.F.	52	D/W LINE CHANGED TO LA LINE PEDESTRIAN POINT OF ACCESS	
220													NOT USED	
221, 222, 223, 224, 225, 226, 227 & 228													NOT REQUIRED	
229, 230, 231, 232													NOT USED	
233-WD 233-T	OHIO EDISON COMPANY	467	494	10,609 S.F.	—	18 S.F. 40 S.F.	—	18 S.F. 40 S.F.	NO	10,591 S.F.	—	54 54	TEMPORARY GRADING	100% CITY FUNDS
233A-S 233A-X	MACDON INDUSTRIAL & DEVELOPMENT, INC., AN OHIO CORPORATION	857	1	458,730 S.F.	—	1,951 S.F. 1,500 S.F.	— —	1,951 S.F. 1,500 S.F.	NO NO	458,730 S.F.	—	47 47	SEWER EASEMENT CHANNEL EASEMENT	I
234A-WD 234A-EL	ANDREW MULICHAK	964	227	5,925 S.F.	—	65 S.F. 5,860 S.F.	— —	65 S.F. 5,860 S.F.	NO NO	—	—	49 49	C.L. 32805	I STATE
234B-WD 234B-EL		964	227	4,329 S.F.	—	3,126 S.F. 1,203 S.F.	— —	3,126 S.F. 1,203 S.F.	NO NO	—	—	49 49	C.L. 32804	I STATE
209C-LA 209C-WD 209C-WA	THOMAS J. BASIC & DOLORES MARIE BASIC	1032	74	4,324 S.F.	—	NONE 137 S.F. 3,182 S.F.	— — —	NONE 137 S.F. 3,182 S.F.	— YES	4,187 S.F.	—	49, 50 49 49, 50	D/W LINE CHANGED TO LA LINE BLDG. REMOVAL	FUNDS
209-LA	AGNES WALLOW	489	45	4,907 S.F.	—	NONE	—	NONE	NO	4,907 S.F.	—	50	D/W LINE CHANGED TO LA LINE	
237-LA	EUGENE C. NAPLES & THERESA F. NAPLES	642	162	5,849 S.F.	—	NONE	—	NONE	NO	5,849 S.F.	—	50	D/W LINE CHANGED TO LA LINE	H
238-LA	THOMAS M. TORBA & MARIE TORBA	843	621	5,639 S.F.	—	NONE	—	NONE	NO	5,639 S.F.	—	50	D/W LINE CHANGED TO LA LINE RESIDENCE POINT OF ACCESS	
239-LA	ANDREW J. LESKO & ANNA M. LESKO	921	124	5,639 S.F.	—	NONE	—	NONE	NO	5,639 S.F.	—	50	D/W LINE CHANGED TO LA LINE RESIDENCE POINT OF ACCESS	

REVISIONS:
DELETED WA PLS. 221 THRU 228 — 11/5/69
PLS 234A-EL & 234B-EL ADDED - 6/18/69

Changed Name, Book & Page
Pcl 218 LA 8/18/69 M.K.M.

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias
B. Changed All WD Pcls to "T" Pcls and Revised All "WD" Pcls to Standard Highway Easements Previously Revised on Earlier Sepias.

SMITH, HINCHMAN & GRYLLS
AUG 8 1969
LOGGED

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

568 / 656

16 / 104

MAH. 680 – 6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
240-LA	PETER J. SHUNTICH & HELEN A. SHUNTICH	584	374	5,639 S.F.	———	NONE	———	NONE	NO	5,639 S.F.	———	50	R/W LINE CHANGED TO L.A. LINE	
240-S						421 S.F.	———	421 S.F.				50	PEDESTRIAN POINT OF ACCESS SEWER EASEMENT	
241-WL	SUSIE BALI	781	361	5,670 S.F.	———	607 S.F.	———	607 S.F.	YES	5,063 S.F.(L)	———	50		
241-S						1,020 S.F.	———	1,020 S.F.				50	SEWER EASEMENT	
241-WA						2,593 S.F.	———	2,593 S.F.				50	BLDG. REMOVAL	
242-WL	ANNA C. SICH	439	213	5,908 S.F.	———	1,822 S.F.	———	1,822 S.F.	YES	4,086 S.F.(L)	———	50		
242-S		295	190			1,029 S.F.	———	1,029 S.F.				50	SEWER EASEMENT	
242-WA						1,641 S.F.	———	1,641 S.F.				50	BLDG. REMOVAL	
243-WL	THE FIRST SLOVAK PRESBYTERIAN CHURCH OF YOUNGSTOWN, OHIO	268	98	34,424 S.F.	———	7,298 S.F.	———	7,298 S.F.	YES	25,134 S.F.	———	50		
243-WD		803	681			1,992 S.F.	———	1,992 S.F.	NO			50,56		
243-S		223	36			3,771 S.F.	———	3,771 S.F.				50	SEWER EASEMENT	
243-WA						5,315 S.F.	———	5,315 S.F.				50	BLDG. REMOVAL	
244A-WL	MILTON A. ROEMISCH, *TRUSTEE*	806	489 & 496	13,035 S.F.	———	13,035 S.F.	———	13,035 S.F.	YES	———	———	50,52		
244B-WL		806	435	15,600 S.F.	———	15,600 S.F.	———	15,600 S.F.	NO	———	———	71,72		
244C-WL		806	429	5,633 S.F.	———	5,633 S.F.	———	5,633 S.F.	NO	———	———	74,77		
244-WD	" " "	808	508	3,645 S.F.	———	3,645 S.F.	———	3,645 S.F.	NO	———	———	69		
245-WL	JOHN HAJMOCI & SUSIE HAJMOCI	296	475	11,000 S.F.	———	11,000 S.F.	———	11,000 S.F.	YES	———	———	50		I-FUNDS
246-WL	ROSE HURCHIK - OWNER; JULIANA TEREK - LIFE ESTATE	683	383	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	50,52,56		
247-WL	ANNA VARKONDA, f.k.a. ANNA LUNIC *n.k.a. ANNA ZOFIE*	502, 467, 471	182, 641, 100	4,485.8 S.F.	———	4,485.8 S.F.	———	4,485.8 S.F.	YES	———	———	52		
247A-WL	THE SMITH SPALDING *LAND COMPANY*	258	614	2,234.2 S.F.	———	2,234.2 S.F.	———	2,234.2 S.F.	NO	———	———	50,52		
248A-WL	NICK STIJAKOVICH & SOPHIE R. STIJAKOVICH	582	566	11,583 S.F.	———	11,583 S.F.	———	11,583 S.F.	YES	———	———	52,56		
248 WL	STEVE J. HRUSOVSKI & HELEN M. HRUSOVSKI	848	194	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
249-WL	WADE H. ROSE, *OWNER; CECELIA NEPELKA, HOLDER OF LAND CONTRACT*	740	465	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
250-WL	STEPHEN MOTOSKO & THOMAS MOTOSKO	931	320	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
251-WL	MICHAEL RUSKY & MARTHA A. RUSKY *aka. MARTHA M. RUSKY*	1034	347	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	YES	———	———	52		
252-WL	*FRANK SYLVESTER, EXECUTOR of the ESTATE of ANGELO SELVESTIR, aka ANGELO SYLVESTER aka EVANGELISTO SILVESTRI, DEC'D.*	352	142	4,800 S.F.	———	4,800 S.F.	———	4,800 S.F.	NO	———	———	52		
253													NOT USED	
254-WD	MIKE PALAGANO	504	178	4,800 S.F.	———	79 S.F.	———	79 S.F.	NO	———	———	52		I
254-EL						4,721 S.F.	———	4,721 S.F.				52		STATE
255-WA	JOHN MARKOVICH & ROSE MARKOVICH	575	473	4,860 S.F.	———	400 S.F.	———	400 S.F.	NO	———	4,860 S.F.	52	DRIVE CONST.	I
256, 257, 258, 259 & 260													NOT USED	
261-WD	MARGARET PAVLICH	921	558	32,347 S.F.	———	14 S.F.	———	14 S.F.	NO	71,901 S.F.	———	54		100% CITY
261-T						650 S.F.	———	650 S.F.				54	DRIVE CONST.	100% CITY
261-WA						29 S.F.	———	29 S.F.				54	DRIVE CONST.	100% CITY
262 & 263													NOT USED	
264-WD	FRANK M. BANJO & HELEN BANJO	987	655	7,700 S.F.	———	7,700 S.F.	———	7,700 S.F.	YES	———	———	55		
265-P.R.	JOHN BABIK & HELEN BABIK	592	11	7,728 S.F.	———							55	PROPERTY RIGHTS	
266-P.R.	STEVE J. OLSAVSKY & LOUISE K. OLSAVSKY	1075	612	7,550 S.F.	———							55	PROPERTY RIGHTS	
267													NOT USED	
268-WD	ANDREW BOSNAK *aka. ANDY BOSNAK*	605, 1137	122, 609	12,996 S.F.	———	9,467 S.F.	———	9,467 S.F.	NO	3,529 S.F.	———	55		
268-T		869	418			1,187 S.F.	———	1,187 S.F.				55	GRADING	
269 & 270													NOT USED	
271-WD	ELIZABETH SCHLOSSAR *aka ELIZABETH SCHLOSSER*	665	604	15,988 S.F.	———	293 S.F.	———	293 S.F.	NO	15,695 S.F.	———	55		
		441	380											
272-WD	MILDRED MARUSKIN	776	591	10,770 S.F.	———	403 S.F.	———	403 S.F.	NO	10,367 S.F.	———	49		I-FUNDS
		819	293											
		803	338											
273-WD	PETER F. JAKUBOVIC *aka* PETER F. JACUBOVIC & *IRENE JAKUBOVIC aka IRENE JACUBOVIC*	664, 803	411, 672	15,000 S.F.	———	4,250 S.F.	———	4,250 S.F.	NO	10,750 S.F.	———	56		H
274, 275, 276 & 277													NOT USED	
278-WL	HELEN L. HUDAJT	628	305	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	50,52,56		
		757	306											
279-WL	PETER S. CHIZMAR	609, 201	396	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	52,56		
		1867, 887	384											
280-WL	JOSEPH VAGNER & JUSTINA VAGNER	366	329	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	52,56		
281-WL	MARIE E. HORVAT, VERONICA HORVAT (SISTER HERMINE) THOMAS J. HORVAT, ANN VASKO, & *CATHERINE M. HORVATH aka KATHERINE HORVAT, OWNERS* ROBERT A. ALLEN & ELAINE ALLEN - HOLDERS OF LAND CONTRACT	1055, 879, 1056, 1042 LEASE & CONTRACT BOOK 105	382, 614, 384, 437 CONTRACT Pg. 194	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	56		

REVISIONS:
PCL 254-T DELETED, PCL 254-EL ADDED 6/18/69

General Revisions:
A. Changed all WA Pcl's to T
B. Changed all WA Pcl's to T
Standard Highway Easements previously revised on earlier sepias.

Changed Pcl 243 WA To 243-T White 8-17-70
" 243 T To 243-WA Twilis 10-1-70

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

569
656

17
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
282-WL	MICHAEL SHRISKY aka MICHAEL SARISKY & MARTIN SHRISKY aka MARTIN SARISKY	251 250	575 57	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
283-WL	JOHN PAVLICH & MARY PAVLICH	316	457	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
284-WL	BERTHA RAJSICH - a.k.a. BAJA RAJSICH	318 781 & 1082	172 279 & 216	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
285A-WL	CLYDE O. BRAGG & VIRGINIA L. BRAGG	1067	126	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
285B-WL	JOHN J. VASKO & ANN D. VASKO	950	33	4,450 S.F.	—	4,450 S.F.	—	4,450 S.F.	YES	—	—	71		
286-WL	ANNA SISKO nka ANNA SISKO PAINTER	682 674 307 & 674	306 525 311 & 524	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
287-WL	GIOVANNA MARINUCCI	777	475	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	56		
288-WL	GEORGE J. MOCHAN	1045 1022	307-309 80	4,410 S.F.	—	4,410 S.F.	—	4,410 S.F.	YES	—	—	56		
289-WL	GEORGE ADORNATO & SERENA ADORNATO	507	134	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	YES	—	—	58		
290-WL	JAMES E. GREGORY	732 692	249 249	7,028 S.F.	—	7,028 S.F.	—	7,028 S.F.	YES	—	—	58		
291-WL	WILLIAM A. MOKROVICH & MARY ANN MOKROVICH	600	281	6,228 S.F.	—	6,228 S.F.	—	6,228 S.F.	YES	—	—	58		
292-WL	ESTATE OF GLADYS L. CLEMENS, DECEASED	737	433	7,494 S.F.	—	7,494 S.F.	—	7,494 S.F.	YES	—	—	52,56		
293-WL	DONEL REALTY COMPANY, A PARTNERSHIP	880	584	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	NO	—	—	56	(See Pcl 164)	
293-AT	CHESTER TORELLO	1066	442	10,400 S.F.	—	150 S.F.	—	150 S.F.	NO	10,400 S.F.	—	64	GRADING LOT No 26155	
294-WL	STEVE ZARUBA	1051	305	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	YES	—	—	56		
295-WL	JOHN T. HOLESKO	771 541	185 467	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	YES	—	—	56		
296-WL	HELEN SEKERAK	904 207	282 & 284 328	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	YES	—	—	56		
297-WL	THE CATHOLIC SLOVAK FALCON CLUB COMPANY, AN OHIO CORPORATION	268	107	14,250 S.F.	—	14,250 S.F.	—	14,250 S.F.	YES	—	—	56,58		
298-WL	ANNA STARON	586	32	7,440 S.F.	—	7,440 S.F.	—	7,440 S.F.	YES	—	—	58		
299-WL	STEVEN MOTOSKO & HOWARD MOORE	1078	646	5,850 S.F.	—	5,850 S.F.	—	5,850 S.F.	YES	—	—	58		
300-WL	JAMES BELLA & MARY BELLA	565	621	3,648 S.F.	—	3,648 S.F.	—	3,648 S.F.	YES	—	—	58		
301-WL	IRENE FRANKO	574 625	260/261 87	8,475 S.F.	—	8,475 S.F.	—	8,475 S.F.	YES	—	—	58		
302-WL	GEORGE CHAMER a.k.a. GEORGE CSAMER	469 468 234	103 338 228	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
303-WL	PAUL GEGUS a.k.a. PAUL R. GEGUS, OLGA P. GEGUS & MARGARET ANN GEGUS	911 840	725 74	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58		
304-WL	ESTATE OF CATHRINE REDUGA, DEC'D. - MICHAEL REDUGA aka MICHAEL R. REDUGA, EXECUTOR	326	583	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
305-WL	JOHN JANDROKOVIC & KATHERINE JANDROKOVIC	584	132	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58		
306-WL	KATHERINE KOSHAN PETRENCHICK a.k.a. KATARINA PETRENCHICK	880	305	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
307-WL	FRANK V. GURGOS & MARY B. GURGOS	836	484, 487, 489	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58		
308-WL	PETER J. KICOS, GUARDIAN FOR JOHN KALAFUT, INCOMPETENT	990	234	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
309-WL	STEVE R. KOVACH & ALICE L. KOVACH	728	11	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	YES	—	—	58		
310-WL	MARY K. BARON	549	358	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	YES	—	—	58,60		

H - FUNDS

GENERAL REVISIONS
A. Changed All Names & Previously Revised on Earlier Sepias.
B. Changed All WD Pcls to "T" Pcls. and Revised All "WD" Pcl #'s to "T" Pcl #'s & Previously Revised on Earlier Sepias.
Standard Highway Easements Added
Deleted Pcl 293-T & 293-AT.
Changed Pcl 295-T to 295-AT. 4-25-69

DEPT. HIGHWAYS DIST. FIVE & BUR. SURVEYS & RIGHTS STATE OF OHIO
JAN 27 1969
LOGGED
CHK'D

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

570
656

18
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
311-WL	MARGARET W. BLACK, ET AL SEE LINE SHEET Nº 60 FOR COMPLETE LIST OF OWNERS	313	78&79	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	60		
312-WL 312-WA	MARY SAFANEK	805 661	458 126	4,640 S.F.	———	2,858 S.F. 1,091 S.F.	——— ———	2,858 S.F. 1,091 S.F.	YES	———	1,782 S.F.	60 60	 BLDG. REMOVAL	
313-WL 313-WA	TRIPO M. LUKOVICH & CATHERINE LUKOVICH	692	10	6,580 S.F.	———	4,377 S.F. 1,528 S.F.	——— ———	4,377 S.F. 1,528 S.F.	YES	———	2,203 S.F.	60 60	 BLDG. REMOVAL	
314-WL 314-WA	JOSEPH T. BUNDY & SARA L. BUNDY	917	494	6,155 S.F.	———	3,693 S.F. 1,787 S.F.	——— ———	3,693 S.F. 1,787 S.F.	YES	———	2,462 S.F.	60 60	 BLDG. REMOVAL	
315-WL	JOHN ROCK aka JOHN ROCK Sr. & JOHN ROCK, EXECUTOR of the ESTATE of ELIZABETH ROCK, DECEASED	356	35	5,731 S.F.	———	3,003 S.F.	———	3,003 S.F.	NO	———	2,728 S.F.	60		
316-WL	MARY ANNA REPASKY	757	162	4,738 S.F.	———	2,085 S.F.	———	2,085 S.F.	NO	———	2,653 S.F.	60		
317-WL	JOHN MARTINEC, JR., a.k.a. JOHN MARTINEC	640 335	169 576	4,402 S.F.	———	1,535 S.F.	———	1,535 S.F.	YES	———	2,867 S.F.	60		
318-WL	AMELIA SAVINA aka AMELIA SOUINET	1091	23	4,166 S.F.	———	1,017 S.F.	———	1,017 S.F.	NO	———	3,149 S.F.	60		
319-WL	GEORGE KORCHNAK & HEDWIG KORCHNAK	961	437	4,594 S.F.	———	429 S.F.	———	429 S.F.	NO	———	4,165 S.F.	60		
320													NOT USED	
321-WL	ANDREW W. MIGLETS	754 568	56 600	2,325 S.F.	———	2,325 S.F.	———	2,325 S.F.	YES	———	———	58		
322-WL	HELEN NOVOTNY	914 575	83 377	15,000 S.F.	———	15,000 S.F.	———	15,000 S.F.	YES	———	———	58		
323													NOT USED	
324-WL	JOHN TEKAC	1082	340	13,600 S.F.	1,600 S.F.	13,600	1,600 S.F.	12,000 S.F.	YES	———	———	58		
325-WL	WILLIAM J. SCHRAIDER, EXECUTOR of the ESTATE of JOHN M. SCHRAIDER, DECEASED	339	58	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	58		
326-WL	PAUL HABOVSKY	650 549 330:307	477 238 71:89	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	NO	———	———	58		
327-WL	HELEN M. LASKEY	860	518	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	58		
328-WL	WILLIAM WELDON & JENNIE WELDON	696	622	15,000 S.F.	———	15,000 S.F.	———	15,000 S.F.	YES	———	———	58,60		
329													NOT USED	
330-WL	JOHN R. BENNEDEK	1084	19	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	60		
331-WL	CLIFFORD W. HOLLISTER	886	105	8,025 S.F.	———	8,025 S.F.	———	8,025 S.F.	YES	———	———	60		
332-WL	MARIE M. BUDAY	859 827 545	473 207 158	16,575 S.F.	———	16,575 S.F.	———	16,575 S.F.	YES	———	———	60		
333													NOT USED	
334-WL	MARY ANNA CHISMAR	533	339	8,250 S.F.	750 S.F.	8,250 S.F.	750 S.F.	7,500 S.F.	YES	———	———	60		
335-WL	EDWARD SALATA, EXECUTOR of the ESTATE of MICHAEL SALATA Sr., DECEASED	556	232	4,500 S.F.	———	4,500 S.F.	———	4,500 S.F.	YES	———	———	60		
336-WL	NICK MINNIE & JOSEPHINE MINNIE	555	442	4,500 S.F.	———	4,500 S.F.	———	4,500 S.F.	YES	———	———	60		
337-WL	EDNA L. KACHMAR	963 888	628 174	6,000 S.F.	———	6,000 S.F.	———	6,000 S.F.	YES	———	———	60		
338-WL 338A-WL	ANNA KULIK a.k.a. ANNA WILICHKO KULEK	541 345	82 113	17,234 S.F.	2,440 S.F.	16,140 S.F. 1,094 S.F.	2,440 S.F. ———	13,700 S.F. 1,094 S.F.	YES NO	——— ———	——— ———	60 60		
339-WL	MARGARET NYENGES	807	51	7,808 S.F.	1,500 S.F.	7,808 S.F.	1,500 S.F.	6,308 S.F.	NO	———	———	60		
340,341,	342, 343, 344 & 345												NOT USED	
346-S 346-T 346-PR	JOHN KRUPA	658, 291 643, 221 317	53, 295 207, 460 337	15,000 S.F.	——— ——— ———	111 S.F. 526 S.F.	——— ——— ———	111 S.F. 526 S.F.	NO NO	13,000 S.F.	———	62 62 62	SEWER EASEMENT DRIVE CONST. LOSS OF RIGHTS TO EXISTING ROAD	
347-LA 347-S	ANDY OLEXA & SUSANNA OLEXA aka SUSAN OLEXA	309 317	581 337	7,500 S.F.	———	NONE 743 S.F.	——— ———	NONE 743 S.F.	——— NO	7,500 S.F.	———	62 62	R/W LINE CHANGED TO LA LINE SEWER EASEMENT	
348-WL 348-S 348-WA	ANNA ZIDZIK aka ANNA DANYA	233	166	7,500 S.F.	———	487 S.F. 955 S.F. 1,672 S.F.	——— ——— ———	487 S.F. 955 S.F. 1,672 S.F.	YES	7,013 S.F. (L)	———	62 62 62	 SEWER EASEMENT BLDG. REMOVAL	

I-FUNDS

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All W.H. R/S & T R/S and Revised All W.D. R/S to Standard Highway Easements Previously Revised on Earlier Sepias.
Added Rel. 346 PR - 2-3-69.

State Highway Dist. 9
R/W Engr. & Right of Way
JAN 27 1969
Locked
Date ..... Init. ....

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

571
656

19
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.RO. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
349-WL	WALTER BIELSKI & JULIA BIELSKI	878	392	7,500 S.F.	——	1,422 S.F.	——	1,422 S.F.	YES	6,078 S.F.(L)	——	G2		
349-S						708 S.F.	——	708 S.F.				G2	SEWER EASEMENT	
349-WA						1,150 S.F.	——	1150 S.F.				G2	BLDG. REMOVAL	
350-WL	JOHN YANEK & MARY YANEK	340	433	6,000 S.F.	——	1,544 S.F.	——	1,544 S.F.	YES	4,456 S.F. (L)	——	G2		
350-S						588 S.F.	——	588 S.F.				G2	SEWER EASEMENT	
350-WA						1,256 S.F.	——	1,256 S.F.				G2	BLDG. REMOVAL	
351-WL	LOUIS J. CSIZMADIA	923	485	6,000 S.F.	——	1,833 S.F.	——	1,833 S.F.	YES	4,167 S.F. (L)	——	G2		
351-S						622 S.F.	——	622 S.F.				G2	SEWER EASEMENT	
351-WA						844 S.F.	——	844 S.F.				G2	BLDG. REMOVAL	
352-WL	JULIA TOVARNAK OWNER;	741	144	9,218 S.F.	——	3,715 S.F.	——	3,715 S.F.	YES	5,503 S.F.	——	G2		
352-S	GEORGE J. NISKI & BARBARA A. NISKI, HOLDERS OF LAND CONTRACT	486	490			1,172 S.F.	——	1,172 S.F.				G2	SEWER EASEMENT	
352-WA		(1133	707 L.C)			380 S.F.	——	380 S.F.				G2	BLDG. REMOVAL	
353-T	GENEVIEVE KIGHT & DORIS KIGHT	1167	158	25,856 S.F.	8875 S.F.	220 S.F.	——	220 S.F.	NO	——	25,856 S.F.	G2	GRADING	
354-T	MARIE SICH	833	573	4,822 S.F.	——	127 S.F.	——	127 S.F.	NO	4,822 S.F.	——	G2	GRADING	
**	JULIA PODOLSKY				——		——			——	——			
356-WD		1035	94	16,185 S.F.	——	6,069 S.F.	——	6,069 S.F.	YES	——	10,116 S.F.	64,65,66	DEED AREA CORRECTED	
356-T		906	556&559			365 S.F.	——	365 S.F.				64,65,66	DRIVE. CONST.	
356-WA						1,029 S.F.	——	1,029 S.F.				64,66	BLDG. REMOVAL	
356 S						172 S.F.		172 S.F.				64,66	Sewer Easement	
359-WD	AGNES VIGLIOTTI, EXECUTRIX OF THE ESTATE OF JOHN LUSCHANSKY aka JOHN LUCANSKY aka JOHN LUCSANSKY, DECEASED	286	50	13,053 S.F.	——	313 S.F.	——	313 S.F.	NO	——	12,740 S.F.	G5		
360-WD	LEONE ELISER AKA LEONA D. ELISER	436,1069	550 452	11,647 S.F.	——	1,605 S.F.	——	1,605 S.F.	NO	——	10,042 S.F.	G5		
361-WD	TERESA HABULAN	1134	261	14,595 S.F.	——	5443 S.F.	——	5443SF	NO	——	9,152 S.F.	G5		
357													NOT USED	
358-S	The Midwest Investment Company, a partnership	1102	9	15,899 S.F.	——	67 S.F.	——	67 S.F.	NO	——	15,832 S.F.	64	Sewer Easement	
362-WL	EMILEE M. SICH	1029	G25	14,600 SF	——	789 S.F.	——	789 SF	NO	——	12,367 S.F.	G7		
362-			629			1,444 S.F.	——	1,444 S.F.	YES			G5		
362-T						2,132 S.F.	——	2,132 S.F.				G7	GRADING	
363													NOT USED	
364A-WL	KADIMAK REALTY, A PARTNERSHIP	1158	416	6,820 S.F.	——	6,820 S.F.	——	6,820 S.F.	NO	——	——	G7		
364B-WL	MARY ANN L°GUIDICE	1182	353	5,464 S.F.	——	292 S.F.	——	292 S.F.	NO	——	5,172 S.F.	77		
365A-WL	LEOLA ROGERS	842	563	3,149 S.F.	——	3,149 S.F.	——	3,149 S.F.	NO	——	——	G7		
365B-WL	JAMES ROGERS, JR.	1088	127	3,150 S.F.	——	3,150 S.F.	——	3,150 S.F.	NO	——	——	G7		
366-WL	DOROTHY A. MENDICH	854	8	12,289 S.F.	——	12,289 S.F.	——	12,289 S.F.	NO	——	——	G7		
367A-WL	LEON DUNN	1151	48	6,123 S.F.	——	6,123 S.F.	——	6,123 S.F.	NO	——	——	G7	LOT NO. 26172	
367B-WL	"			5,515 S.F.	——	4,352 S.F.	——	4,352 S.F.	NO	1,163 S.F.	——	81	LOT NO. 19541	
367C-WD	THE FOREMOST INVESTMENT COMPANY, A PARTNERSHIP	879	714	3,486 S.F.	——	1,330 S.F.	——	1,330 S.F.	NO	——	2,156 S.F.	69	LOT NO. 5969	
367 T-2	" " " " "					587 S.F.	——	587 S.F.				69	GRADING	
367 T-1	SANFORD BARTH	1172	363	8,269 S.F.	——	2,876 S.F.	——	2,876 S.F.	NO	——	8,269 S.F.	69	GRADING - LOT NO. 5963,4,5	
367 CWL				5,475 SF	——	5,475	——	5,475 SF	NO	——		81 & 83	LOT NO. 19538	
368-WL	SAMUEL H. COPPERMAN	842	390	5750 S.F.		5750 S.F.		5750 S.F.	NO	——	——	G7		
369-WL	JOSEPH DENIOL	1020	226	5750 S.F.	——	5750 S.F.	——	5750 SF	NO	——	——	G7		
370-WL	RHETA F. WEIMER	801	674	12,349 S.F.	——	12,349 S.F.	——	12,349 S.F.	NO	——	——	G7		
371-S	JOSEPH WISEMAN	805	368	5,770 S.F.	——	797 S.F.	——	797 S.F.	NO	——	——	G7	SEWER EASEMENT	
371-T						2,308 S.F.	——	2,308 S.F.	NO	——	5,770 S.F.	G7	GRADING	
371-LA						NONE	——	NONE				G7	R/W LINE CHANGED TO LA LINE	
372													NOT USED	
373-T	ANDREW ROSENFELD & JEAN WEISER	817	223	2,901 S.F.	——	1,038 S.F.	——	1,038 S.F.	NO	——	2,901 S.F.	G7,69	GRADING	
373-S					——	38 S.F.	——	38 S.F.	NO			G7,68	SEWER EASEMENT	
374-WD	ANDREW BERNAT	518	404	2,826 S.F.		80 S.F.	——	80 S.F.	NO	——	2,746 S.F.	69		
374-T						152 S.F.	——	152 S.F.				69	GRADING	
375 WD	HELEN LUCAS	1140	515&517	2,992 S.F.	——	404 S.F.	——	404 S.F.	NO	——	2,588 S.F.	69		
376-WD	VICTOR CENTOFANTI, ALBERT CENTOFANTI, HENRY	786	642	3,308 S.F.	——	864 S.F.	——	864 S.F.	YES	——	2,444 S.F.	69		
376-WA	CENTOFANTI, JOSEPH CENTOFANTI, YOLANDA CENTOFANTI, MARY CENTOFANTI & ADELINE PELUSO					2,444 S.F.	——	2,444 S.F.				69	BLDG. REMOVAL	
377,378	379												NOT USED	
380-WD	MIKE TEPSICK	1137	218	9,110 S.F.	——	167 S.F.	——	167 SF	NO	8,943 SF	——	69		
380-T						1,307 S.F.	——	1307 S.F.				69	GRADING & DRIVE CONST.	
381,382	383												NOT USED	
384-WD	STEVE STANKOVICH & MARY STANKOVICH	664	264	9,431 S.F.	——	78 S.F.	——	78 S.F.	NO	9,353 S.F.	——	69		
384-T						2,156 S.F.	——	2,156 S.F.				69	GRADING	
**	356AWD JULIA PODOLSKY, OWNER: LOIS MOFFO, LAND CONTRACT HOLDER	1262	769	10,116 SF		10,116 S.F.		10,116 S.F.	YES			64-65-66	LAND CONTRACT RECORDED: VOL 1211 P. 582	
		1035	82											
		906	556											
		906	559											

FUNDS — S — H

ADDED PCL. 356AWD & CORRECTED DEED AREA AND RESIDUE PCL. 356WD 9-10-73
ADDED PCLS 356-S, 358-S, REVISED 12-12-69 Solomon
DEED AREA PCL. 373-T PROPS-12-19-69
NAME CHANGE PCL 358S 12-23-69 Solomon
Changed Name Pcl. 358 S to 356 T-1 Standard Highway Easement Pcl. 342 - 5-6-70
Added Pcl. 356 T-2 Standard Highway Easement Pcl. 356 WA 11-19-69 White

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All W.D. Pcls to T. Pcls and Revised All W.D. Pcls to Standard Highway Easements Previously Revised on Earlier Sepias.
Changed Pcl. 356 WD to 356 T-1 to 356 WA

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

572
656

20
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
385-WD	BERTHA SMITH	969	352	13,277 S.F.	—	1,210 S.F.	—	1,210 S.F.	YES	12,067 S.F.	—	69		
385-T						4,820 S.F.	—	4,820 S.F.				69	GRADING	
386-WD	THOMAS SOICH a.k.a. THOMAS E. SOICH	1010	342	9,154 S.F.	—	1,475 S.F.	—	1,475 S.F.	NO	6,316 S.F.	—	69		
386-SL						1,363 S.F.	—	1,363 S.F.				69	SLOPE EASEMENT	
387-WD	IVAN DUBIC & JENNIE DUBIC	1135	215	9,838 S.F.	—	2,042 S.F.	—	2,042 S.F.	NO	4,848 S.F.	—	67,69		
387-SL						2,948 S.F.	—	2,948 S.F.				67,69	SLOPE EASEMENT	
388-WD	ELWYN V. JENKINS	808	306	3,444 S.F.		517 S.F.	—	517 S.F.	NO	2,281 S.F.	—	67		
388-SL						646 S.F.	—	646 S.F.				67	SLOPE EASEMENT	
389-WL	WALTER G. McKENRICK, Jr.	1076	224	15,474 S.F.	—	2,434 S.F.	—	2,434 S.F.	NO	—	12,294 S.F.	67		
389-WD						746 S.F.	—	746 S.F.				67		
389-T						772 S.F.	—	772 S.F.				67	GRADING	
390-WL	STANISLAW DOMANSKI & SOFIA DOMANSKI	703 G55	552 551	14,422 S.F.	—	14,422 S.F.	—	14 422 S.F.	YES	—	—	67		
391-WL	JAMES CATO & LULA MAE CATO	959	444	6,525 S.F.	—	6,525 S.F.	—	6,525 S.F.	YES	—	—	67		
392-WL	THOMAS ADAMIAK & VICTORIA ADAMIAK	339 648	509 375	13,120 S.F.	—	13,120 S.F.	—	13,120 S.F.	YES	—	—	67		
393-WL	JOE A. KOLMAN aka. JOSEPH A. KOLMAN aka JOSEPH KOLMAN	493, 648 1088, 1090	191, 465 206, 886	13,155 S.F.	—	13,155 S.F.	—	13,155 S.F.	YES	—	—	67		
394-WL	WALTER W. SOICH & BETTY JANE SOICH	631	428	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	YES	—	—	67		
395-WL	JOSEPH PAVLICK aka. JOSEPH C. PAVLICK & RAE C. PAVLICK	841 724	398 358	12,979 S.F.	—	12,979 S.F.	—	12,979 S.F.	YES	—	—	67		
396-	LEON DUNN & SANFORD BARTH, A PARTNERSHIP	812	292	6,071 S.F.	—	1,965 S.F.	—	1,965 S.F.	NO	4,106 S.F.	—	67		
397-WD	THE DOREL REALTY COMPANY, A PARTNERSHIP	1111	430	8,364 S.F.	—	2,465 S.F.	—	2,465 S.F.	NO	5,899 S.F.	—	65,67	(See 164)	
398	HAROLD D. LEACH, A.E. WESTER aka ARTHUR E. WESTER	660	287	110,066 S.F.	—	31,983 S.F.	—	31,983 S.F.	NO	61,641 S.F.	15,439 S.F.	64,65		
398A-		860	508			1,003 S.F.	—	1,003 S.F.				65		
398-T						4,526 S.F.	—	4,526 S.F.				64	GRADING	
399&400													NOT USED	
401-WD	THE INLAND INVESTMENT COMPANY, A PARTNERSHIP	887	720	6,500 S.F.	—	32 S.F.	—	32 S.F.	NO	6,468 S.F.	—	64		
401-T						268 S.F.	—	268 S.F.				64	GRADING	
402-WL	MARY THURIK	629	331	4,623 S.F.	—	32 S.F.	—	32 S.F.	YES	3,074 S.F.	—	71		
402-SL		489	548			1,517 S.F.	—	1,517 S.F.				71	SLOPE EASEMENT	
402-WA						1,364 S.F.	—	1,364 S.F.				71	BLDG. REMOVAL	
403A-WL	ESTATE OF JAMES COLUCCI, ESTATE OF JOSEPH J. COLUCCI, ESTATE	WILL 203	350	13,686 S.F.	—	13,686 S.F.	—	13,686 S.F.	NO	—	—	71	LOTS 17150, 17158 & 17159	
403B-WL	OF ANDREW COLUCCI, CLARA SEPPE COLUCCI a.k.a. ADA C. COLUCCI,	WILL CASE	*30019	4,582 S.F.	—	4,582 S.F.	—	4,582 S.F.	NO	—	—	71	LOT 17161	
403C-WL	STEPHEN COLUCCI, FRANCES TIMPANA, MARIE PARILLA, BELDINA	410	492	10,400 S.F.	—	10,400 S.F.	—	10,400 S.F.	NO	—	—	72	LOTS 17143 & 17144	
403D-WL	GABARINO	WILL 65	118	9,600 S.F.	—	9,600 S.F.	—	9,600 S.F.	NO	—	—	72	LOTS 17123 & 17124	
403E-WL		359	362	18,568 S.F.	—	18,568 S.F.	—	18,568 S.F.	NO	—	—	71,74	LOTS 17138, 17139 & 17140	
403F		WILL 55	125	2,600 S.F.	—	1,745 S.F.	—	1,745 S.F.	NO	855 S.F.	—	74	LOT 17084	
403F-1						750 S.F.	—	750 S.F.	NO			74		
403G-WL				1,300 S.F.	—	1,300 S.F.	—	1,300 S.F.	NO	—	—	74	LOT 17083	
404&405													NOT USED	
406-WL	AGNES PYATNICK G94/368, 972/563 & 565 & 569 & 567,	909	145	9,359 S.F.	—	9,359 S.F.	—	9,359 S.F.	YES	—	—	71,72		
407-WL	MARY APPENZELLER	490	156	10,100 S.F.	—	10,100 S.F.	—	10,100 S.F.	YES	—	—	72		
408,409,	410,411 & 412												NOT USED	
413-WL	THRIFT INVESTMENT COMPANY, A PARTNERSHIP	1059	48	5,200 S.F.	—	5,200 S.F.	—	5,200 S.F.	NO	—	—	71		
414-WL	NOBLE DRESSEL & MARY DRESSEL	961	271	5,200 S.F.	—	5,200 S.F.	—	5,200 S.F.	NO	—	—	71		
415-WL	STEVE KUROWSKI	806	175	4,400 S.F.	—	109 S.F.	—	109 S.F.	YES	1,650 S.F.	—	71		
415-SL						2,641 S.F.	—	2,641 S.F.				71	SLOPE EASEMENT	
415-WA						573 S.F.	—	573 S.F.				71	BLDG. REMOVAL	
416													NOT USED	
417-WL	CAROLINE S. ZITKOVICH a.k.a. CAROLINE ZITKOVICH	1051 534	344 368	5,200 S.F.	—	51 S.F.	—	51 S.F.	NO	5,149 S.F.	—	71		
418-WL	JOHN EMERICH & JOSEFIA EMERICH	796	630	5,200 S.F.	—	5,200 S.F.	—	5,200 S.F.	YES	—	—	71		

H-FUNDS

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All WA Rel's to "T" Rel's and Revised All "WD" Rel's to Standard Highway Easements Previously Revised on Earlier Sepias:
Changed Rel. 396WD to a Standard Highway Easement. 8-21-69 EW.
Changed Rel. 398 WD & 398AWD to a Standard Highway Easement. 10-17-69 white

RECEIVED
DEPT. OF HIGHWAYS
JAN 27 1970
LOCATED
Cle... ...ent St...

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

573/656

21/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
419-WL	MICHAEL F. SHIMEK	792 621	141, 143, 145 284	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	71		———
420-WL	ELIZABETH COYNE BAILIFF	504	306	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	71		
421-WL	ROBERT L. EVANS & ROSE MARIE EVANS	695	103	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	NO	———	———	71		
422-WL	DOROTHY ISABEL REKUS f.k.a. DOROTHY ISABEL McGRATH	627	193	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	NO	———	———	71, 72		
423-WL	GILDA CERA, DORA CERA, IDA DURKIN, ADA HAGAN, JEAN DILORETO RENA CAVAHAUGH, JOSEPH DILORETO & LARRY DILORETO	1028	663	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	71, 72		
424-WL	AGNES COYNE PERSON aka AGNES COYNE	189, 277	66, 472	7,638 S.F.	———	7,638 S.F.	———	7,638 S.F.	NO	———	———	71, 72, 74, 77		
425													NOT USED	
426-WL	FRANK FRATTAROLI & ANN FRATTAROLI	1119	839	7,810 S.F.	———	669 S.F.	———	669 S.F.	NO	7,141 S.F.	———	71, 74		
427-WL	GEORGE DOBOZY & GEORGE DOBOZY, EXECUTOR OF THE ESTATE OF MARY DOBOZY, DECD	671	627	5,200 S.F.	———	250 S.F.	———	250 S.F.	NO	4,950 S.F.	———	74		
428-WL	JOHN M. DAVID & CATHERINE DAVID	968	321	5,200 S.F.	———	2,000 S.F.	———	2,000 S.F.	YES	3,200 S.F.	———	74		
428-EL	JOHN M. DAVID & CATHERINE DAVID	1007	585	3,200 S.F.	———	3,200 S.F.	———	3,200 S.F.	YES	———	———	74	EL. Sold in Vol. 7831, Various State Lands Registered	STATE
429-WL	ALBERT BAKER & EDNA BAKER	539	522	5,200 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	1,200 S.F.	———	74		
429-WA						810 S.F.	———	810 S.F.				74	BLDG. REMOVAL	
430-WL	JOHN M. YASH & HELEN M. YASH	776	363	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
431 WD	GEORGE S. GERAS & MARTHA A. GERAS	915	246	5,200 S.F.	———	54 S.F.	———	54 S.F.	NO	5,146 S.F.	———	74		
431-T						425 S.F.	———	425 S.F.				74	GRADING	
432-WD	THE HAWK PALMER COMPANY	275	22	5,200 S.F.	———	497 S.F.	———	497 S.F.	NO	No	———	74		
432-T						940 S.F.	———	940 S.F.				74	GRADING	
432-EL	" " " "					4703 S.F.		4703 S.F.				74		STATE
433-WD	KATIE DLACICH	503	599	5,200 S.F.	———	1,626 S.F.	———	1,626 S.F.	YES	3,574 S.F.	———	74		
433-T		1108	693, 695, 697			1,379 S.F.	———	1,379 S.F.	[redacted]			74	GRADING	
433-WA		1108	699, 701			129 S.F.	———	129 S.F.				74	BLDG. REMOVAL	
434, 435, 436 & 437													NOT USED	
438-WL	LAWRENCE KOVACH & RITA KOVACH	778	291	15,600 S.F.	———	3,257 S.F.	———	3,257 S.F.	YES	———	12,343 S.F.	77		
438-WA						2,236 S.F.	———	2,236 S.F.				77	BLDG. REMOVAL	
439-WL	WILLIAM J. LAMPRICH	639, 638	418, 38	10,400 S.F.	———	8,337 S.F.	———	8,337 S.F.	NO	———	2,063 S.F. (L)	74, 77		
440-AWL	CAROL THOMPSON	521	43	5,633 S.F.	———	5,633 S.F.	———	5,633 S.F.	YES	———	———	74,	REPLAT PB. 36 PG. 95	
440-WL	JAMES THOMPSON	679, 687	161, 591	10,833 S.F.		10,833 S.F.		10,833 S.F.	YES			74, 77		
441 & 442													NOT USED	
443-WL	GEORGE KOVACIC	225	133	5,392 S.F.	———	5,392 S.F.	———	5,392 S.F.	YES	———	———	77		
444-EL	CONCRETE SAND & STONE COMPANY					707 S.F.		707 S.F.						STATE
													SEE PARCEL 482	
445-WL	AMERICO PATELLA	1139	113	2,045 S.F.	———	2,045 S.F.		2,045 S.F.	YES	———	———	77		
446-WL	TONY BLANGERO & JESSE BLANGERO	548	388	4,055 S.F.	———	23 S.F.	———	23 S.F.	NO	———	4,032 S.F.	77		
446-T						210 S.F.	———	210 S.F.				77	GRADING	
447-WL	VERONICA K. SCERBA	1048, 918	149, 716	4,212 S.F.	———	455 S.F.	———	455 S.F.	NO	———	3,757 S.F.	77		
448 & 449													NOT USED	
450-WL	EUGENIA RUCAREAN f.k.a. EUGENIA COLUMBAN, OWNER; & ANNIE RUCAREAN - LIFE ESTATE	686	560	11,585 S.F.	———	708 S.F.	———	708 S.F.	NO	———	10,877 S.F.	77		
451 & 452													NOT USED	
453-WL	SOPHIE BODA	572 1047	495 319	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
454-WL	JOHN GORA	946	515	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
455-WL	SAM NASSAR	855 1024	607 264	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74		
456-WL	ESTHER KISH	606 237	499 115	5,200 S.F.	———	5,200 S.F.	———	5,200 S.F.	YES	———	———	74, 77		
457-WL	JOSEPH FODIAL & ANNA FODIAL	753	553	9,100 S.F.	———	9,100 S.F.	———	9,100 S.F.	YES	———	———	74, 77		
458-WL	LUIGI NERONI	235	81	5,681 S.F.	———	5,681 S.F.	———	5,681 S.F.	NO	———	———	77		
459-EL						6,864 S.F.		6,864 S.F.				74		STATE
459-WL	JACOB J. SNYDER, JR. & JOSEPHINE SNYDER	493	254	11,700 S.F.	———	4,836 S.F.	———	4,836 S.F.	YES	———	———	74		
459-S		669	326			581 S.F.	———	581 S.F.				74	SEWER EASEMENT	
459-WA						395 S.F.	———	395 S.F.				74	BLDG. REMOVAL	

FUNDS: I-71H

Revisions
ADDED 459-EL 7/1/69
GENERAL REVISIONS
11. Changed All Names Previously Revised on Earlier Sepias.
B. Changed All WD R/S to "T" R/S and Revised All "WD" R/S to Standard Highway Easements Previously Revised on Earlier Sepias.
Revised R/S 440 WL to 440 WL-T 10-13-67

ADDED R/S 444-EL SMM 7-23-70

4-17-74 ADDED R/S 442-WD PER I.O.C DATED 4-10-74 AND ADDED NOTE IN

5-21-79 CHANGED R/S 427-WD TO 427-EL AND REMOVED ABOUT SOUTH OF R/S

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
DWG. BY

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

574/656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

22/104

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
460-WL	CARL A. FALVO & LOUISE FALVO f.k.a. LOUISE SCIMONE	1057	292	3,000 S.F.	———	322 S.F.	———	322 S.F.	NO	3,578 S.F.	———	74,81		I-FUNDS
460-S		551	307			70 S.F.	———	70 S.F.				74,81	SEWER EASEMENT	
461													NOT USED	
462-WL	THOMAS J. FABEK	570	397	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	NO	———	———	74,77		
463-WL	HOMES, INC.	978	47	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES			74,81		
464-WL	HOMER L. BIEBER & JESSIE G. BIEBER	870	212	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES	———	———	74,81		
		955	691											
465-WL	SARA G. TRAFICANT	719, 575	277, 106	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES	———	———	74,81		
466-WL	JAMES PATELLA & ROSE PATELLA	929	329	4,232 S.F.	———	4,232 S.F.	———	4,232 S.F.	YES	———	———	81		
467, 468	& 469												NOT USED	
470-WL	RUTH BASICH aka. RUTH BASIC	647, 920	360, 660	4,338 S.F.	———	550 S.F.	———	550 S.F.	YES	3,788 S.F.	———	77		
470-WA		919	693			362 S.F.	———	362 S.F.				77	BLDG. REMOVAL	
		448	463											
471-WL	IKE J. RIEHL	1085	179	4,338 S.F.	———	1,648 S.F.	———	1,648 S.F.	YES	2,690 S.F.	———	77		
472-WL	MARY SCOARSTE	449	514	4,338 S.F.	———	2,747 S.F.	———	2,747 S.F.	YES	1,591 S.F.	———	77,79,83		
472-WA		448	195			1,070 S.F.	———	1,070 S.F.				77,79	BLDG. REMOVAL	
		471	504											
473-WL	JOSEPH PERAZICH & JULIA PERAZICH	927	110	4,375 S.F.	———	4,375 S.F.	———	4,375 S.F.	YES	———	———	77,79,83		
474-WL	PAULINE B. KANOS & JOHN S. KANOS	815	207	4,375 S.F.	———	4,375 S.F.	———	4,375 S.F.	YES	———	———	79		
475-WL	NED J. KAUFMAN & ANN KAUFMAN	1020, 906	281, 534	5,000 S.F.	———	5,000 S.F.	———	5,000 S.F.	YES	———	———	79		
476-WD	NICK VISA	990	726	10,536 S.F.	———	71 S.F.	———	71 S.F.	NO	———	10,465 S.F.	79		
477													NOT USED	
478-WL	JACK SCARNECCHIA & DOLORES SCARNECCHIA	1101	685	4,452 S.F.	———	1,933 S.F.	———	1,933 S.F.	YES	2,519 S.F.	———	81		
478-S						475 S.F.	———	475 S.F.				81	SEWER EASEMENT	
478-WA						1,735 S.F.	———	1,735 S.F.				81	BLDG. REMOVAL	
479-WL	RAFFAELE DIVECCHIO & ENGIELENE DIVECCHIO aka.	506	162	4,260 S.F.	———	1,100 S.F.	———	1,100 S.F.	YES	3,160 S.F.(L)	———	81		
479-S	ANGIELINA DIVECCHIO					511 S.F.	———	511 S.F.				81	SEWER EASEMENT	
479-WA						1,210 S.F.	———	1210 S.F.				81	BLDG. REMOVAL	
480-WL	FEDOR DENYS a.k.a. FRED DENYS	345	292	4,260 S.F.	———	367 S.F.	———	367 S.F.	YES	3,893 S.F.(L)	———	81		
480-S		1135	470			566 S.F.	———	566 S.F.				81	SEWER EASEMENT	
480-WA						1,944 S.F.	———	1,944 S.F.				81	BLDG. REMOVAL	
481-S	JOHN SALATSKY	1153	645	8,520 S.F.	———	259 S.F.	———	259 S.F.	NO	8,520 S.F.	———	81	SEWER EASEMENT	
481-PR		1150	127		———	———	———	———			———		LOSS OF RIGHTS TO EXISTING ROAD	
482A-WL	THE CONCRETE, STONE & SAND COMPANY a.k.a. THE CONCRETE	109	554	5,377 S.F.	———	5377 S.F.	———	5,377 S.F.	NO	———	———	77,83		
444-WL	SAND & STONE COMPANY			4,241 S.F.	———	3,534 S.F.	———	3,534 S.F.	NO	———	———	77		
482C-WL				5,405 S.F.	———	5,405 S.F.	———	5,405 S.F.	NO	———	———	81,83		
482D-WL				1,998 S.F.		1,998 S.F.	———	1,998 S.F.	NO	———	———	83		
483-WL	JOHN C. BADILA aka. JOHN C. BEDILO	848	490	3,284 S.F.	———	3,284 S.F.	———	3,284 S.F.	YES	———	———	83		
484-WL	THOMAS ARMENI & IDA ARMENI	601	76	3,609 S.F.	———	3,609 S.F.	———	3,609 S.F.	YES	———	———	83		
485-WL	BERTHA LACKEY	625	330	3,930 S.F.	———	3,930 S.F.	———	3,930 S.F.	YES	———	———	83		
		601	29											
486-WL	LOUIE DeVICCHIO & BETTY DeVICCHIO	676	432	8,859 S.F.	———	8,859 S.F.	———	8,859 S.F.	YES	———	———	83		
487A-WL	THE DOREL REALTY COMPANY, A PARTNERSHIP	1103	406	6,424 S.F.	———	6,424 S.F.	———	6,424 S.F.	NO	———	———	81, 83		
487B-WL	MINNIE R. WINTER	1106	101	5,186 S.F.	———	5,186 S.F.	———	5,186 S.F.	NO	———	———	81,83		
488-WL	EDWARD J. GABRICK & VERA J. GABRICK	1017	366	10,252 S.F.	———	10,252 S.F.	———	10,252 S.F.	YES	———	———	81,83		
489-WL	MARY GABRICK	674	188	5,295 S.F.	———	5,295 S.F.	———	5,295 S.F.	YES	———	———	81,83		
		530	282											
490													NOT USED	
491-WL	THOMAS A. BLANGERO & PATRICIA MAE BLANGERO	650	395	10,980 S.F.	———	10,980 S.F.	———	10,980 S.F.	YES	———	———	81		

GENERAL REVISIONS
A. Changed All Names Previously Revised on Earlier Sepias
B. Changed All W/A Pcl's to "T" Pcl's and Revised All "WD" Pcl's to Standard Highway Easements Previously Revised on Earlier Sepias.

STATE HIGHWAY DEPT. OF OHIO
DIST. DISTR. & ROADS SECT.
APP'D 8/1/1980
LOGGED
CHK'D

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

575/656

23/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

RE: PCLS. 527-WL THRU 540-WL INCL.
1 - PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BRR DATED FEB. 12, 1969.
3 - TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4 - EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T AND 537-WA. 5 - PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540-WL, TOTAL TAKE. - DATE OF THESE REVISIONS: 3/12/69 J.R. BALENTINE

6/23/69 Added Pcl. 493-EL Changed B.P.R. Authority Date Deleted Item #2 of the Revisions Made as per Letter of 3-14-69 from Ohio Turnpike Commission Added Parcel 498-WA & Phantom Parcels.

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
492A-WL	DOLLAR SAVINGS & TRUST CO. (CORPORATION) TRUSTEE	825	195	11,071 S.F.	———	7,168 S.F.	———	7,168 S.F.	NO	3,903 S.F.	———	81		I
492B-WL				5,583 S.F.	———	1,782 S.F.	———	1,782 S.F.	NO	3,781 S.F.	———	81,85		I
492C-WL	DOLLAR SAVINGS & TRUST CO. - TRUSTEE	698	114	23,870 S.F.	———	16,491 S.F.	———	16,491 S.F.	NO	———	7,387 S.F.(L)	85,86		I
493-WL	THE ESTATE OF KATE SETNYK, DEC'D	340	101	11,123 S.F.	———	5,120 S.F.	———	5,120 S.F.	NO	———	———	81		I
493-EL						6003 S.F.		6,003 SF	NO			81		STATE
495-WL	JAMES A. OWEN, JR. EXECUTOR OF THE ESTATE OF JAMES A. OWEN, SR. DECEASED & DOROTHY O. KUZAN, EXECUTRIX OF THE ESTATE OF JAMES A. OWEN, SR. DECEASED	1016	101	5623 S.F.	———	256 S.F.	———	256 S.F.	NO	5367 S.F.	———	85		I
497-WL	FRANK N. PATELLA & NORA E. PATELLA	733	540	25,480 S.F.	———	25,480 S.F.	———	25,480 S.F.	YES	———	———	77,83		I
494,496													NOT USED	
498-WL	GEORGE M. SHIPROCK & JULIA M. SHIPROCK	525	380	4,411.05 S.F.	———	1,305.88 S.F.	———	1,305.88 S.F.	NO	———	———	79,83		I
498-EL						3,105.17 S.F.		3,105.17 S.F.	YES			79,83	Pcl. 498-EL sold to Norma Carter, Registered Inval. 7/16 3% various State Bonds	STATE
498 WA	" " " " " "												BLDG REMOVAL	I
499-WL	PETER FEDOROWICZ & KAROLINA FEDOROWICZ	720	319	4,359 S.F.	———	439 S.F.	———	439 S.F.	YES	———	3,920 S.F.	83		I
500 &	501												NOT USED	
502-WL	JOSEPH FLEECE	903	638	3,780 S.F.	———	3,780 S.F.	———	3,780 S.F.	YES	———	———	83		
503-PR	AUGUSTINE TORRES & (CARMELA TORRES, OWNERS; WILLIAM F. JENKINS & CAROLYN E. JENKINS, HOLDERS OF LAND CONTRACT	839	19	6,120 S.F.	———	NONE	———	NONE		———	6,120 S.F.	83	PROPERTY RIGHTS	
504-WL	THE ESTATE OF MARY FABIAN, DEC'D	176	394	7,062 S.F.	———	7,062 S.F.	———	7,062 S.F.	YES	———	———	83		
505-WL	AGATA KESIC a.k.a. AGATHA KESIC	1012 284	360 & 362 261	6,915 S.F.	———	6,915 S.F.	———	6,915 S.F.	YES	———	———	83		
506-WL	FRANK FRATTAROLI & ANN FRATTAROLI	669	21	7,182 S.F.	———	1,758 S.F.	———	1,758 S.F.	YES	———	5,424 S.F.(L)	83		
506-WA						1,082 S.F.	———	1,082 S.F.					BLDG. REMOVAL	
507-S	UNION CARBIDE & CARBON CORPORATION, A NEW YORK CORPORATION	660	73	128,938 S.F.	———	3,355 S.F.	———	3,355 S.F.	NO	———	128,938 S.F.	42	SEWER EASEMENT	
508A-WL	ARTHUR E. WESTER, WARD W. WESTER & HAROLD D. LEACH	934	399	177,622 S.F.	———	119,554 S.F.	———	119,554 S.F.	NO	———	58,068 S.F.(L)	81,83,85,86		
508B-WL				144,911 S.F.	———	57,119 S.F.	———	57,119 S.F.	NO	32,618 S.F.	55,174 S.F.(L)	87		
508ASL						1,200 S.F.	———	1,200 S.F.				83	SLOPE EASEMENT	
508AS						1,888 S.F.	———	1,888 S.F.				83	SEWER EASEMENT	
509-WL	ADOLPH JOHNSON & SON COMPANY, AN OHIO CORPORATION	922	437	220,000 S.F.	———	127,122 S.F.	———	127,122 S.F.	YES	31,561 S.F.	61,317 S.F.(L)	85,86,87		
509-WA		934	401			684 S.F.		684 S.F.				85	BLDG. REMOVAL	
510													NOT USED	
511-WL	THE VINDICATOR PRINTING COMPANY	703, 681	77, 244	755,420 S.F.	———	102,755 S.F.	———	102,755 S.F.	NO	629,882 S.F.	20,783 S.F.	87,88,89		
511-T		677	343, 345			13,477 S.F.		13,477 S.F.					To Construct Access Road	
512,513,	514,515 & 516	677	347, 349										NOT USED	
517-WL	SUNYA A. BOSELA	642	579	5,618 S.F.	———	100 S.F.	———	100 S.F.	YES	5,518 S.F.	———	90		
517-WA		1060	566			602 S.F.	———	602 S.F.				90	BLDG. REMOVAL	
518-WL	BURTON BURNELL WHITE & VIRGINIA WHITE	1006	332	5,617 S.F.	———	300 S.F.	———	300 S.F.	NO	5,317 S.F.	———	90		
519-WL	STELLA HEGEDUSICH	747	282	5,617 S.F.	———	708 S.F.	———	708 S.F.	NO	4,798 S.F.	———	90		
519-WD		651	170			21 S.F.	———	21 S.F.	NO			90		
519-T						46 S.F.	———	46 S.F.	NO			90	GRADING	
520-WL	PHILLIP C. TAVOLARIO & MURIEL H. TAVOLARIO	1092	606	6,711 S.F.	———	1,095 S.F.	———	1,095 S.F.	YES	5,578 S.F.	———	90		
520-WD						38 S.F.	———	38 S.F.	NO			90		
520-T						218 S.F.	———	218 S.F.	NO			90	SEWER CONSTR.	
521-WL	MARTIN SUBONIS	629	145	5,616 S.F.	———	923 S.F.	———	923 S.F.	YES	4,693 S.F.	———	90		
521-T		633 291	7 627			200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
522-WL	TED F. HELMINIAK & LOUISE HELMINIAK	860	215	5,615 S.F.	———	1,034 S.F.	———	1,034 S.F.	NO	4,581 S.F.	———	90		
522-T						200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
523-WL	BARBARA TUBICA	421	285	5,615 S.F.	———	1,145 S.F.	———	1,145 S.F.	NO	4,470 S.F.	———	90		
523-T		316	625			200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
524-WL	ALBERT MYNARSKI & SOPHIE MYNARSKI	435	361	5,615 S.F.	———	1,301 S.F.	———	1,301 S.F.	NO	4,314 S.F.	———	90		
524-T						200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
525-WL	SOPHIE KLIMOWICZ	929	515	5,615 S.F.	———	1,503 S.F.	———	1,503 S.F.	YES	4,112 S.F.	———	90		
525-T						200 S.F.	———	200 S.F.	NO			90	SEWER CONSTR.	
526-WL	GEORGE HENIK & SOPHIE HENIK	981	383	5,615 S.F.	———	1,706 S.F.	———	1,706 S.F.	NO	3,909 S.F.	———	90		
526-T						200 S.F.	———	200 S.F.				90	SEWER CONSTR.	
527-WL	ANDREW KUSHNER	480	287	5,614 S.F.	———	5,614 S.F.	———	5,614 S.F.	YES	———	———	90		
528-WL	ALFRED TAVOLARIO & AGNES TAVOLARIO	1064	416	5,614 S.F.	———	5,614 S.F.	———	5,614 S.F.	YES	———	———	90,94		
529-WL	JOHN S. ROSA & HELEN M. ROSA	899	621	5,614 S.F.	———	5,614 S.F.	———	5,614 S.F.	YES	———	———	94		

I-FUNDS

Added Pcl. 511-T 7-15-71
Added Note to Remarks For Sale of Pcl. 498-EL 5-21-79

GENERAL REVISIONS
1. Changed All Names Previously Revised on Earlier Sepias
2. Changed All WD Pcl's & T-Pcl's and Revised All WD Pcl's to Standard Highway Easements Previously Revised on Earlier Sepias.
Changed Pcls. 508 SL & 508 S to 508 ASL & 508 AS. 11-30-69 White

STATE OF OHIO
JOHN S. ROSA
LICENSED
PROFESSIONAL ENGINEER

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

576
656

24
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

	PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
*	530-WL	GENEVIEVE KOMSA	1022	454	5,614 S.F.	—	5,614 S.F.	—	5,614 S.F.	YES	—	—	94		
*	531-WL	JOHN HRENOVCIK	291 1160	465 634	5,613 S.F.	—	5,613 S.F.	—	5,613 S.F.	YES	—	—	94		
*	532-WL	JESUS M. MARTINEZ & ANTONIA MARTINEZ	1046	214	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	YES	—	—	94		
*	533-WL	JAN IWANICKI & BLANCHE IWANICKI	558	481	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	YES	—	—	94		
*	534-WL	KATE CHUDIK	333	359	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	YES	—	—	94		
*	535-WL 535-T 535AWL	HAROLD G. BOWEN & RUTH I. BOWEN	943 941	533 78	5,612 S.F.	—	3,012 S.F. 200 S.F. 2,600 S.F.	— — —	3,012 S.F. 200 S.F. 2,600 S.F.	YES NO YES	—	—	94 94 94	SEWER CONST. SEE ITEM 4, REVISIONS DATED 3-12-69	
*	536WL	LILLIAN A. HETNER	1103	404	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	YES	—	—	94		
*	537-WL 537-T 537-WA 537AWL	KATHERYN SIKORA	688	590	5,611 S.F.	—	2,836 S.F. 200 S.F. 83 S.F. 2,775 S.F.	— — — —	2,836 S.F. 200 S.F. 83 S.F. 2,775 S.F.	YES NO YES	—	—	94 94 94 94	SEWER CONST. BLDG REMOVAL SEE ITEM 4, REVISIONS DATED 3-12-69	
*	538-WL	MARY RYCHLICKY	649 334	455 255	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	YES	—	—	94		
*	539-WL	CHARLES LEE	732 732	686 688	6,103 S.F.	620 S.F.	6,103 S.F.	620 S.F.	5,483 S.F.	YES	—	—	94		
*	540 WL	ANNA P. TAORMINA aka ANNA P. TAORMENA	776 514	154 351	3,146 S.F.	314 S.F.	3,146 S.F.	314 S.F.	2,832 S.F.	YES	—	—	94		
	542-WL		687	163	3,080 S.F.	315 S.F.	3,080 S.F.	315 S.F.	2,765 S.F.	YES	—	—	94		
	541-WL	ZIGMUND HELMINIAK, STANLEY HELMINIAK, HENRY HELMINIAK & HELEN PLECHA a.k.a. HELEN HELMINIAK	1011 999	93 711	3,090 S.F.	308 S.F.	3,090 S.F.	308 S.F.	2,782 S.F.	YES	—	—	94 94		
	542													SEE 540	
	543-WL	CHARLES YOUNG - TRUSTEE FOR YOUNGSTOWN PIGEON CLUB	871	372	16,000 S.F.	—	16,000 S.F.	—	16,000 S.F.	YES	—	—	88		
	544-WL	STEFAN JAKUBOWSKI	671	432	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	88,90		
	545-WL	MICHAEL FILL & JANE L. FILL	685	616	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	546-WL	STEVE BONDOR	885 238	76 333	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	547-WL	ANDY BALASH & MARY BALASH	316	423	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	548-WL	PARASCHIVA JAICAN a.k.a. PAULINE JACOBS & SAM JACOBS a.k.a. JACOB SIMON a.k.a. SIMON JAICAN	529 271 253	440 11 11	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	YES	—	—	90		
	549-WL	ADOLPH BARWICKI a.k.a. ADOLF BARWICKI	1018 441	327 242	8,780 S.F.	—	8,780 S.F.	—	8,780 S.F.	YES	—	—	90		
	550-WL	ANNA WOOD, HELEN HRUSHOVSKY, CLARA GALLAS, IRENE PRYSTASH, RUTH LISCHAK, JOSEPH S. HORNEY, JOHN J. HORNEY, STEVE HORNEY & GEORGE HORNEY	975 862	107 691	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	551-WL	VALERION W. QUARANTA & ANNA MARIE QUARANTA	789	418	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	552-WL	JOHN HOMA & MARY HOMA	202	488	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	553-WL	MIKE DULICK & ROSIA DULICK	198	295	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	554-WL	MICHAEL KAMINSKI & SOPHIE KAMINSKI	630	241	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	555-WL	RUDOLPH BROZMAN & EDWARD BROZMAN, EXECUTORS OF THE ESTATE OF MICHEAL BROZMAN, Decd.	979	581	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90		
	556-WL	JOHN TYCH	663	6	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	90,94		
	557-WL	HENRY E. BYRDY & HELEN BYRDY	729	141	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	94		
	558-WL	JOHN M. KALINKA & MARY KALINKA-OWNERS; WALTER PRESTASH - LIFE ESTATE	1048	510	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	YES	—	—	94		
*	559-WL	MARY PORINCHAK, ADMINISTRATRIX OF THE ESTATE OF ELIZABETH YAVORSKY aka LIZI JAVORSKY	189	617	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	YES	—	—	94		

I-FUNDS

RE: PCLS 527-WL THRU 530-WL INCL: Changed APR. Authority Date, Deleted Item #3 of the revision made on 3-12-69, removed all phantom parcels & Deleted Pedestrian access remarks for Pcls 539WL & 540WL.

1. PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969.
3. TOTAL TAKE "TBA'S WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 530-A-WL AND 530-B-WL NOW REVISED AND CHANGED TO PCL 530 WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69 J.R. BALENTINE

GENERAL REVISIONS

A. Changed All Names Previously Revised on Earlier Sepias

B. Changed All WL Pcls to "T" Pcl's and Revised All "WL" Pcl's to Standard Highway Easements Previously Revised on Earlier Sepias.

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

577
656

25
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
560-WL	CHARLES ANDREW PETRUSKY & MATHILDA R. PETRUSKY	815	226	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
561-WL	ESTATE OF ANDY PANCZIK, DECEASED & ANIELA PANCZIK	301	464	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
562-WL	AGNES GUZIK a.k.a. AGNES GUSICK a.k.a. AGNES GUSIK	1019 238	393 100	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
563-WL	ALPHONSO PATRICK	630	170	4,000 S.F.	———	4,000 S.F.	———	4,000 S.F.	YES	———	———	94		
564-WL	PETER E. TSVETANOFF, JORDON E. TSVETANOFF & CYRIL E. TSVETANOFF	756 766	472&476 474	8,000 S.F.	———	8,000 S.F.	———	8,000 S.F.	YES	———	———	94		
565-WL	THE ESTATE OF ANTONIE SEPE, DEC'D	271	176	3,310 S.F.	310 S.F.	3310 S.F.	310 S.F.	3,000 S.F.	NO	———	———	94		
566-WL	BETTY GOODWIN, GERTRUDE VICAREL & DANIEL SKICA	708	290	3,309 S.F.	330 S.F.	3,309 S.F.	330 S.F.	2,979 S.F.	YES	———	———	94		
567-WL	ANDREW DUBAS, FRANCES LOSIE f.k.a. FRANCES DUBAS, WALTER DUBAS, DOROTHY MINOTTI f.k.a. DOROTHY DUBAS-OWNERS; EVA DUBAS- LIFE ESTATE	908	635	4,411 S.F.	488 S.F.	4,411 S.F.	488 S.F.	3,923 S.F.	YES	———	———	94		
568-WL	CHARLES E. YOUNG & CLAIRE V. YOUNG	918	165	20,334 S.F.	———	20,334 S.F.	———	20,334 S.F.	NO	———	———	89,92		
569-WL	PETER KALENDA a.k.a. PETE KALENDA & NELLIE KALENDA	837 305	480 528	16,594 S.F.	———	16,594 S.F.	———	16,594 S.F.	YES	———	———	92		
570-WL	KARL OLEKSAK a.k.a. KAROL OLEKSAK	662 363	537 64	4,188 S.F.	———	4,188 S.F.	———	4,188 S.F.	YES	———	———	92		
571-WL	FRANK DUDEK	450 295	520 602	4,220 S.F.	———	4,220 S.F.	———	4,220 S.F.	YES	———	———	92		
572-WL	ANN FABISH OWNER; EDWARD J. BROZMAN and SUSAN E. BROZMAN, HOLDERS OF LAND CONTRACT	986 986	300 297	4,252 S.F.	———	4,252 S.F.	———	4,252 S.F.	YES	———	———	92		
573-WL	STEVE DOBRANCHIN, JOHN DOBRANCHIN, FR. BENEDICT DOBRANCHIN MICHAEL DOBRANCHIN, GEORGE DOBRANCHIN, MARY ANTIONETTE GORSKY & HELEN T. TOMAN	1021	14	4,274 S.F.	———	4,274 S.F.	———	4,274 S.F.	YES	———	———	92		
574-WL	STELLA F. VELICHKO	561	102	4,292 S.F.	———	4,292 S.F.	———	4,292 S.F.	YES	———	———	92		
575-WL	WALTER NATYSHAK & ANNE NATYSHAK	667	35	4,311 S.F.	———	4,311 S.F.	———	4,311 S.F.	YES	———	———	92		
576-WL	HENRY F. NOSEK & SOPHIE NOSEK	680	339	4,333 S.F.	———	4,333 S.F.	———	4,333 S.F.	YES	———	———	92		
577-WL	JOHN EVICH & ISABEL B. EVICH	860	258	4,346 S.F.	———	4,346 S.F.	———	4,346 S.F.	YES	———	———	92		
578-WL	JOHN A. DVORNEKOVICH & DOROTHY J. DVORNEKOVICH	676	159	4,364 S.F.	———	4,364 S.F.	———	4,364 S.F.	YES	———	———	92		
579-WL	MIKE LULKA & MARY LULKA	671	527	4,384 S.F.	———	4,384 S.F.	———	4,384 S.F.	NO (YES)	———	———	92,96		
580-WL	ANN CULLEN	669 658 640 209	123 556 456 496	4,403 S.F.	———	4,403 S.F.	———	4,403 S.F.	YES	———	———	96		
581-WL	MARGARET S. SYMPSON	895 663	409 96	4,421 S.F.	———	4,421 S.F.	———	4,421 S.F.	YES	———	———	96		
582-WL	MARY DUPEY	550 210	34 330	4,440 S.F.	———	4,440 S.F.	———	4,440 S.F.	YES	———	———	96		
583-WL	JOSEPH KELLEY & CHRISTINE KELLEY	741	482	4,124 S.F.	———	4,124 S.F.	———	4,124 S.F.	YES	———	———	96		
584-WL	FRANK P. SUSOR a.k.a. FRANK SUSOR and MARY SUSOR	494	310	4,141 S.F.	———	4,141 S.F.	———	4,141 S.F.	YES	———	———	96		
585-WL	ANN E. MUMAW a.k.a. ANNE MUMAW	586 583 578	160 404 466	4,158 S.F.	———	4,158 S.F.	———	4,158 S.F.	YES	———	———	96		
586-WL	JOHN BALCHICK & ELIZABETH BALCHICK	386	243	4,166 S.F.	———	4,166 S.F.	———	4,166 S.F.	YES	———	———	96		
587-WL	MIKE RIDARSKY, PAUL L. RIDARSKY & STEVE RIDARSKY, A PARTNERSHIP	852	281	28,704 S.F.	1,327 S.F.	28,704 S.F.	1,327 S.F.	27,377 S.F.	NO	———	———	96		

I-FUNDS

GENERAL REVISIONS:

A. Changed All Names Previously Revised on Earlier Sepias

B. Changed All WA Pcls to "T" Pcls and Revised All W.D.'s to Standard Highway Easements Previously Revised on Earlier Sepias

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

578
656

26
104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.RO. IN TAKE	TO BE ACQUIRED NET TAKE	TO BE ACQUIRED STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
588-WL 588-T	RAFFAELLO JOHN PERA & MARY S. PERA	790	452	5,625 S.F.	———	106 S.F. 1,814 S.F.	———	106 S.F. 1,814 S.F.	~~YES~~ NO	———	5,519 S.F.	92 92	DRIVE CONST.	
589/590													NOT USED	
591-WL	MARY SWATOWSKI a.k.a. MARY SWATOSKI	928 308	475 234	7,500 S.F.	———	160 S.F.	———	160 S.F.	NO	———	7,340 S.F.	92		
592-WL 592-WA	PAUL B. TEMELKOFF & SONJA A. TEMELKOFF	1150	106	7,500 S.F.	———	830 S.F. 647 S.F.	———	830 S.F. 647 S.F.	YES	———	6,661 S.F.	92 92	BLDG. REMOVAL	
593-WL 593-WA	SOPHIE GUCWA a.k.a. ZOFIE GUCWA a.k.a. ZOPIYA GUCWA	485 222	154 452	3,750 S.F.	———	689 S.F. 660 S.F.	———	689 S.F. 660 S.F.	YES	———	3,061 S.F.	92 92	BLDG. REMOVAL	
594-WL 594-T	FRANK PRUCNAL & STELLA PRUCNAL	1047	452	3,750 S.F.	———	998 S.F. 351 S.F.	———	998 S.F. 351 S.F.	YES	———	2,752 S.F.	92 92	BLDG. REMOVAL	
595-WL	VIRGINIA FILIPOWICZ n.k.a. VIRGINIA KARASIEWSKY	806	629	3,750 S.F.	———	1,437 S.F.	———	1,437 S.F.	YES	———	2,313 S.F.	92		
596-WL	WILLIAM JOHNSTONE & JOHNNIE MAE JOHNSTONE	1050	605	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———		92,96		
597-WL	MARY STIPETICH	837	321	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96		
598-WL	MINNIE DI FABIO	982 800 455	366 330 126	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
599													NOT USED	
600-WL	STEPHEN TERLECKI & LEONA TERLECKI	755 744	360 258	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
601-WL	JOSEPH VIANO	250 230	55 380	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
602-WL	STANLEY BARWICKI & JULIA O. BARWICKI	932	581	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96		
603-WL	KATHERINE SZABAT	1029 357	204 496	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96		
604													NOT USED	
605-WL	JOHN J. HORNEY, JR., ADMINISTRATOR OF THE ESTATE OF THERESA ANN HORNEY a.k.a. THERESA HORNEY a.k.a. THERESA ANN HORNI a.k.a. TESA HORNI a.k.a. THERESA HARNEY a.k.a. THERESA HORNI a.k.a. THESA HORNEY, DECEASED	649 318 240	488 639 62	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
606-WL	ANGELO FAMULARO & ROSE FAMULARO	445	88	7,500 S.F.	———	7,500 S.F.	———	7,500 S.F.	YES	———	———	96		
607-WL	JOSEPHINE FINN	645	97	3,426.37 S.F.	293.37 S.F.	3,426.37 S.F.	293.37 S.F.	3,133 S.F.	YES	———	———	96		
608-WL	NELLIE MOLALI	713	234	3,413 S.F.	293 S.F.	3,413 S.F.	293 S.F.	3,120 S.F.	YES	———	———	96		
609-WL	AGNES E. SWANECK, DORIS DeMAIN, ELEANOR HORSTMANN, JOHN E. OWCARZ, PATRICIA McDONOUGH	1072	380	3,426.37 S.F.	293.3 S.F.	3,426.37 S.F.	293.37 S.F.	3,133 S.F.	YES	———	———	96		
610-WL	EVA LUKOSEVECUS	265 192	215 361	5,794.5 S.F.	507 S.F.	5,794.5 S.F.	507 S.F.	5,287.5 S.F.	YES	———	———	96		
611/612													NOT USED	
613-S	JOHN FARGOIS & ANNA FARGOIS	290	276	3,750 S.F.	———	104 S.F.	———	104 S.F.	NO	———	3,750 S.F.	96		
614-WL 614-S 614-T	MARY J. ALTIER	937 1084 1084	250 244 242	3,750 S.F.	———	600 S.F. 425 S.F. 971 S.F.	———	600 S.F. 425 S.F. 971 S.F.	YES	———	3,150 S.F.(L)	96 96 96	SEWER EASEMENT BLDG. REMOVAL	
615-WL 615-S 615-WA	CHRISTINA SWIDERSKI; FRANCES MAJDECKI, STELLA KACZOWKA, OWNERS; JESSIE FIRLET a.k.a. TEKLA FIRLIT; LIFE ESTATE	1110	570	3,750 S.F.	———	1,747 S.F. 375 S.F. 64 S.F.	———	1,747 S.F. 375 S.F. 64 S.F.	YES	———	2,003 S.F.(L)	96 96,98 96	SEWER EASEMENT BLDG. REMOVAL	
616-WL	FRANK J. KANIK, STEPHEN F. KANIK, ANDREW M. KANIK, JOSEPH G. KANIK, ANNE TOKARSKY, HELEN F. ZALKA, VIRGINIA M. ZIELINSKI	908 308	287 100	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———		96,98		
617-WL	CARMELA RANALLI	1132	574	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
618-WL	WLADZSLAW GUBALA	209	264	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
619-WL	JOHN C. FEKETY	1007 957	394 1	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
1-FL	MARION URICHICH & HELEN URICHICH	1279 1350	112 541	15,463 SF 32,564 SF		15,463 SF		15,463 SF	YES	15,463 SF 32,564 SF		69-A	FLOWAGE & FLOODING EASEMENT	

H-FUNDS

3-5-82
ADDED Pcl
1-FL

GENERAL REVISIONS

A. Changed All Names Previously Revised on Earlier Sepias

B. Changed All WA R/S to "T" R/S and Revised All "WD" R/S to Standard Highway Easements Previously Revised on Earlier Sepias

State Highway Dept. of Ohio
DIV. ENGR. & ADMIN. SECT.
JAN 27 1983
LOGGED
BY

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

579/656

27/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

DEED AREA = AREA SHOWN BY THE RECORDED INSTRUMENT, LESS ANY OUTSALES LANDLOCKED = (L)

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	REMARKS	FUNDS
G20-WL	SOPHIE IGNATH a.k.a. SOPHIE F. IGNATA	1022 770	260 445	3,750 S.F.	———	3,750 S.F.	———	3,750 S.F.	YES	———	———	96,98		
G21													NOT USED	
G22-WL	ALBERT HARRIS & ANGELLA HARRIS	994 994	157 155	11,250 S.F.	———	11,250 S.F.	———	11,250 S.F.	YES	———	———	96,98		
G23-WL	BERT B. SLEVIN ET. AL. & KATHERYN SLEVIN ET. AL.	G73 G16	476 454	10,838 S.F.	947 S.F.	10,838 S.F.	947 S.F.	9,891 S.F.	YES	———	———	96,98		
G24													NOT USED	
G25-WL	BERT B. SLEVIN ET. AL. & KATHERYN SLEVIN ET. AL.	860	634	9,368 S.F.	440 S.F.	9,368 S.F.	440 S.F.	8,928 S.F.	YES	———		98		
G26A-WL	ISABELLE C. BEES (HUSBAND BURT)	881	583	15,000 S.F.	508 S.F.	1,000 S.F.	———	1,000 S.F.	NO	———	13,053 S.F.	98		H-FUNDS
G26-LA	" " " " "	857	455			———	———	———				98	D/W LINE CHANGED TO LA LINE PEDESTRIAN POINT OF ACCESS	
G26B-WL	BURT BEES (WIFE ISABELLE C.)	640	223			508 S.F.	508 S.F.	———	NO			98	PEDESTRIAN POINT OF ACCESS	
G28-S	JOHN LEON	998	567	5,000 S.F.	———	256 S.F.	———	256 S.F.	NO	———	5,000 S.F.	98	SEWER EASEMENT	
628SA	" " (SEE REMARKS COLUMN)												REPLACE FLOWERS-SHRUBS-TREES ETC. DESTROYED BY CONTRACTOR. SEE SHT. 98	
G29-WL	ROBERT T. CAMPANA & REGINA C. CAMPANA	774	373	5,000 S.F.	———	161 S.F.	———	161 S.F.	NO	———	4,839 S.F.	98		
G29-S						839 S.F.	———	839 S.F.				98	SEWER EASEMENT	
G29-SA	" " (SEE REMARKS COLUMN)												7" EVERGREEN DESTROYED BY CONTRACTOR SEE SHT. 98	
G30-WL	ERMA PETRELLA	854	188	5,000 S.F.	———	714 S.F.	———	714 S.F.	NO	———	4,286 S.F.	98		
G30-S		534	91			286 S.F.	———	286 S.F.				98	SEWER EASEMENT	
G31-WL	WILLIAM SWIDERSKI & CHRISTINE SWIDERSKI	G42	576	5,000 S.F.	———	1,000 S.F.	———	1,000 S.F.	YES	———	4,000 S.F.	98		
G32-WL	MARY WIEFER, STANLEY P. SEIDLER, ANNE TROLL, STELLA BRINCKO, TED SEIDLER, ALEXANDER SEIDLER	1099	64	5,000 S.F.	———	1,000 S.F.	———	1,000 S.F.	YES	———	4,000 S.F.	98		
G36-WL	MIKE RIDARSKY, PAUL J. RIDARSKY, & STEVE RIDARSKY	533/1154	24, 3	48,035 S.F.	11,660 S.F.	48,035 S.F.	11,660 S.F.	36,375 S.F.	YES	———	———	100¢ 101		
G37-WL	BERTHA HORNEY	306	337	11,400 S.F.	836 S.F.	11,400 S.F.	836 S.F.	10,564 S.F.	YES	———	———	100		
G38-WL	RUDOLPH GRANITO & GLORIA OGRAM F.K.A. GLORIA GRANITO	1201 554 554-549-548	76 146 146-381-382	5,400 S.F.	398 S.F.	5,400 S.F.	398 S.F.	5,002 S.F.	YES	———	———	100		
G39-WL	REGINA GENEVIEVE KARPOWICZ	998	614	14,400 S.F.	1,067 S.F.	14,400 S.F.	1,067 S.F.	13,333 S.F.	YES	———	———	100		
G40-WL	ROBERT a.k.a. ROBERT F. BAKALIK & PAULINE BALALIK	852 966	406 633	11,591 S.F.	———	11,591 S.F.	——— ———	11,591 S.F.	YES	———	———	100		
261A-WA	ANTHONY PAVLICH & MARGARET PAVLICH	744	376	39,568 S.F.	———	111 S.F.	———	111 S.F.	NO	39,568 S.F.	———	54	DRIVE CONST.	100% CITY
143F-WL	CITY OF YOUNGSTOWN, OHIO	1073	301	5,600 S.F.	2,800 S.F.	5,600 S.F.	2,800 S.F.	2,800 S.F.	NO	———	———	102		CITY-STATE FUNDS
G41 AERIAL-1	YOUNGSTOWN AND SOUTHERN RAILWAY COMPANY	209	165	13,591 S.F.	———	540 S.F.	———	540 S.F.	NO	———	13,591 S.F.	104	AERIAL EASEMENT	
G41 AERIAL-2	" " " " "	116	361	2,800 S.F.	———	410 S.F.	———	410 S.F.	NO	2,800 S.F.	———	104	" "	
G41 S1	" " " " "	209	165	13,591 S.F.	———	6600 S.F.	———	6600 S.F.	NO	———	13,591 S.F.	104	SEWER EASEMENT	
G41 S2	" " " " "	116	361	2,800 S.F.	———	400 S.F.	———	400 S.F.	NO	2,800 S.F.	———	104	" "	
G42-S	ARMBRECHT MOTOR TRUCK SALES, INCORPORATED	1021	598	78,608 S.F.	———	758 S.F.	——	758 S.F.	NO	78,608 S.F.	——	101	" " *	I-FUNDS
G43-S	THE JUDITH REALTY CO. & S. H. COPPERMAN	391	388	108,338 S.F.	——	326 S.F.	——	326 S.F.	NO	108,338 S.F.	——	101	SEWER EASE. FROM 1ST PARCEL OF 2	I-FUNDS
302A-WL	WILLIAM O. WALKER & MARION WALKER	687	633	7,500 S.F.	——	300 S.F.	——	300 S.F.	NO	——	7200 SF	29		I-FUNDS
302A-T						1,000 S.F.	——	1000 S.F.				28	DRIVE CONSTRUCTION	I-FUNDS
303A-LA	EDITH H. SIMPKINS	742	529	7,500 S.F.	——	No Take		No Take	No		7500 SF	28	Loss of Access To LeMoyne Ave	I-FUNDS
304A-WL	ESTATE OF JAMES E. CONZETT DEC'D & ETTA CONZETT	644	121	9,602 S.F.	——	104 S.F.	——	104 S.F.	No	——	9498 SF	28		I-FUNDS
304A-LA		1092	71			No Take	——	No Take				28	Loss of Access to LeMoyne Ave	I-FUNDS
304B-LA						No Take	——	No Take				28	Loss of Access To Midlothian Blvd	I-FUNDS
305A-LA	MARTIN A. MARKOVICH & MARY JANE MARKOVICH	682	509	9561 S.F.		No Take	——	No Take	No	—	9561	28	Acquired On MAH 1-680-9.32 As 305LA (Loss of Access To Midlothian Blvd.)	I-FUNDS
699 WA	JOHN MARTINKO	1177	589			No Take	——	No Take	No	—		49	Drive Construction	I-FUNDS
645 WA	JOHN J. & ETHEL V. LESKOVYANSKY	815	55			No Take	——	No Take	No	—		49	Drive Construction	I-FUNDS
696 WA	CHARLES RICHARD WIESENSEE & VERONICA C. WIESENSEE	1208	55			No Take	——	No Take	No	—		49	Drive Construction	I-FUNDS
										Added Pcls. 699 WA, 645 WA, 696 WA Pryor 5/22/70			ADDED REMARKS PCL 305A-LA. DELETED PCL 645 WA 7-20-70 SMITH ADDED PCLS 302-AWL, 302-AT, 303A-LA & 304A-WL, 304A-LA, 304B-LA & 305A-LA 5-6-70 PCL 636-LA REVISED TO 636-WL (TOTAL TAKE) FOR DEVELOPMENT OF GREEN STRIP - 2-25-70 Change Net Area PCL 639WL - 3-27-70 PCL'S 637-LA THRU 640-LA REVISED TO WL PCL'S (TOTAL TAKES) FOR DEVELOPMENT OF GREEN STRIP 1-14-70 ADDED PCLS 628SA & 629SA 7-5-72 Revised Name Pcl #638AL 9/16/69 Subsequent Name Change Pcl. 643-S 7/8/69 ADDED PARCELS 642-S AND 643-S 7/10/69 ADDED EXIST. PRO. PCL'S 636-LA, 637-LA, 638LA & 639-LA REVISIONS	

ADDED PCL. 645 WA 4-24-73
NAME CHANGE PCL. 696 WA - SMITH 6-17-70
NAME CHANGE PCLS. 644 WA & 696 WA 6-10-70
ADDED DEED BOOK & PAGE PCLS. 644, 645, 696 WA

GENERAL REVISIONS:

A. CHANGED ALL NAMES PREVIOUSLY REVISED ON EARLIER SEPIAS.

B. CHANGED ALL WA PCL'S TO "T" PCL'S AND REVISED ALL "WD" PCL'S TO STANDARD HIGHWAY EASEMENTS PREVIOUSLY REVISED ON EARLIER SEPIAS.
SHOWED OWNERSHIP OF PCLS 623WL & 625WL SAME

* RIGHTS OR EASEMENTS OF ACCESS TO OR FROM SAID L/A FROM 194 LT. OF ℄ STA. 768+12.6 TO 150 LT OF ℄ STA. 763+80.01 GRANTED TO PREVIOUS OWNER BY ENTRY NO. 14,415 L.A. 61 ℄ STA. 765+50.00 GRANTED TO OWNER AS RECORDED BY COURT OF COMMON PLEAS JOURNAL VOLUME 2663, PAGE 325

** RIGHTS OR EASEMENTS OF ACCESS FROM OR TO SAID L/A HIGHWAY FROM 182 LT. OF ℄ STA. 764+16.30 TO 182 LT. OF ℄ STA. 765+80.00 GRANTED TO OWNER BY COURT OF COMMON PLEAS JOURNAL VOLUME 2663, PAGE 535.

State Highway Dept. Dist. 4
R/W Engr. & Admin Sect.
JAN 27 1970
LOGGED
Sht. No.

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

580 / 656

28 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: SEE SUPPLEMENTAL SHT. Nº 30 FOR PARCEL DIMENSIONS, BEARINGS & STA OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO 29

MATCH SHEET NO. 33

DOMINIC PEDALINE & ESTHER PEDALINE
#4006 2 STY. FRAME
99 WL
WILLIAM O. WALKER & MARION WALKER
#4002 1½ STY. FRAME
30486
30485
302 A T
Note: TREE NOT TO BE DISTURBED
(VACANT LOT)
DORIS M. WELKER
#3034
#3030
120 WL
121 WL
30483
30482
30481
WILLIAM K. CROOKS & AGNES CROOKS
PLAT Nº 1 BROWNLEE WOODS PB.15 PG.86
30437
ROBERT HAY MAC LENNAN
#1565
TO BE ABANDONED
135 WL
#1571
MATILDA ZIGO
136 WL
EVERETT AVE.
N 89°-32'-17" E
LEMOYNE AVE.
N 0°-27'-06" W
MIDLOTHIAN BLVD.
S 89°-30'-36" E
143A WL
143 WA
THE CITY OF YOUNGSTOWN, OHIO
PROP. SIDEWALK
CONSTRUCTION LIMITS
EXIST. R/W
R/W FENCE
R/W LINE CURVE DATA
CH. BRG. = S 79°00'30" E
CH. DIST. = 254.28
R = 99.20
4800.3 RT. 643+61.87
LT. 377+58.11
40' LT. 378+10
33' LT. 378+30
45' LT. 378+45
40' RT. 378+10
STA. 378+00
STA. 379+00
STA. 380+00
END ACQUISITION MIDLOTHIAN BLVD. STA 379+87.40
20' GRAVEL DR.
9' SLAG DR.
5' CONC. SIDEWALK
5' PRIVET HEDGE
WOOD FENCE
CHAIN LINK FENCE
FENCE POSTS
UNDERGROUND TELE. CABLE
OBT. U/G.
G.L.P. GAS
WATER M.H.
SAN M.H.
SIGN
FLOWERS
BUSHES
TREES
MAPLES
PINES
SYCAMORE
TWIN WILD CHERRY
20" SEWER
8" WATER
6" L.P. GAS
12" SEWER
12" WATER
15" SAN.
30" SAN. SEWER
36" SEWER
6" WATER
4" WATER
8" SAN.
12" TWIN BEAD
24" STUMP
10" WILD CHERRY
20" OAK
2.5' CONC. WK.
8.5' MAC. DR.
TO BE ABANDONED
FIREPLACE
4' LILAC HEDGE
7' PRIVET HEDGE
20" MAPLE
10' DIA. POND
5' SPIREA HEDGE
2' FLAGSTONE
1 P. FND. & USED
EXIST. R/W
R/W FENCE
5' CONC. SIDEWALK
SLAG
SIGN
FACE
1 STY. FR. PLANT
2 STY. FR.
FR. GAR.
CONC. DR.
EVERGREEN PLANTINGS
DEFENCE POSTS
GAL. WATER
GAL. L.P. GAS
CONC. WK.
CONC. DRIVE
FUTURE CONST. LIMITS
EXIST. R/W
5' CONC. WALK
3' CONC. WALK
3' WIRE FENCE
3' SQUARE CONC. STEPS
10' SLAG DRIVE
1 STY. FR. H'SE.
1½ STY. FR. H'SE.
10.5' ASP. DR.
4' L.P. GAS
G' WATER
G' TREE
4' TREE
2' TREE
24" TREE
1 P. FND. & USED
30" SYCAMORE
W.V.
C.B.
SAN M.H.
W.B.
E.B.
ASPH.
G.V.
G.Y.
LA/RW
LA/R2W
LA
CITY OF YOUNGSTOWN MAHONING COUNTY
Point of Residential Access Sta. 7+12.00 - 12' Width
Point of Residential Access Sta. 8+79.00 - 12' Width
Point of Residential Access Sta. 379+41.71 - 12' Width
ESTATE OF JAMES E. CONZETT DEC'D & ETTA CONZETT
30439
#1601 1½ STY. FRAME
#1607 1½ STY. FRAME
#1602 1½ STY. FRAME
30488
EDITH H. SIMPKINS
FLOWERS
1 CAR FR. GAR.
FRAME GAR.
MARTIN A. MARKOVICH & MARY JANE MARKOVICH
39440
304 A LA
304 A WL
304 B LA
303 A LA
305 A LA
N 0°27'06" W - 179.48'
S 89°30'36" E 50.00'
S 0°29'24" W 33.00'
N 0°27'06" W 13.00'
S 89°30'36" E 16.00'
S 51°01'18" W 20.45'
670.71 RT. 643+72.65
719.30 RT. 643+41.82
622.70 RT. 643+24.04
637.66 RT. 643+27.78
PARCEL 304A-WL
A. S 89°30'36" E 16.00'
B. S 51°01'18" W 20.45'
C. N 0°27'06" W 13.00'

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
302A-T			1,000 S.F.	NONE	1,000 S.F.		
303A-LA	7500 S.F.	NONE	NO TAKE	NONE	NO TAKE		
304A-WL	96023 S.F.	NONE	1045 S.F.	NONE	1045 S.F.		94985 S.F.
304A-LA			NO TAKE	NONE	NO TAKE		
304B-LA			NO TAKE	NONE	NO TAKE		
305A-LA	95613 S.F.	NONE	NO TAKE	NONE	NO TAKE		95613 S.F.

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
143A-WL	1,179,170 S.F.	17,860 S.F.	12,353 S.F.	8,927 S.F.	3,426 S.F.	150,535 S.F.	809,939 S.F.
143-WA			120 S.F.	NONE	120 S.F.		

ALL PARCELS THIS SHEET I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	1/29/69	ADDED PARCEL 143-WA
2	7/25/69	Changed All Names Previously Revised on Earlier Sepias. 5-4-70 Added Pcls 302A-T, 303A-LA, 304A-WL, 304A-LA, 304B-LA & 305A-LA

R/W SHEET NO. 28 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

581
656

29
104

MATCH SHEET NO. 33

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

I.P. FND. & USED

OHIO EDISON HIGHLINE
JERSEY LANE 25'
150.11' EXIST. R/W

N 48°00'-43" E 1355.00

SURVEY I-680

MATCH SHEET NO. 32

BEGIN PROJECT
MAH.680-6.98
STA. 638+00 (BACK)
STA. 637+76.04 AHEAD

END PROJECT
MAH.680-9.32
STA. 638+00 (BACK)

ALFRED SQUILLANTE

JOSEPH L. FEDOR & MARY F. FEDOR

NOTE: SEE SUPPLEMENTAL SHT. No. 30 & 31 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA

SUBDIVISION OF O.L. #1409
P.B. 30 PG. 87
CITY OF YOUNGSTOWN
MAHONING CO.

DOMINIC CARANO & STELLA M. CARANO

ROBERT C. HODGE & MARIE ELIZABETH HODGE

RAY BRUNETTI & LUCILLE BRUNETTI

FRANK A. NAPLES & MARIE A. NAPLES

JOHN MATZYE, JR. & MARGARET A. MATZYE

WILLIAM K. CROOKS & AGNES CROOKS

FRANK WSZOLEK & BERTHA M. WSZOLEK

RAYMOND H. McANDREWS & BETTY McANDREWS

HARRY W. JACOBSON & ANITA C. JACOBSON

ADVANCE ACQUISITION

MYRTLE M. DEESZ & DORIS M. WELKER

EXIST. R/W 87.61'

EVERETT AVE. 50'
℄ N 89°-32'-17" E

8" SAN. ♀

SAN. M.H.

6" WATER

HYD.

4" L.P.

5' CONC. SIDEWALK

EXIST. R/W

RAMP "N-W"

RAMP "10"

NOTE: SEE SUPPLEMENTAL SHT. No. 30 & 31 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA

CONST. LIMITS

JOHN NOVAK

JOHN ZELINA & OLGA ZELINA

ROBERT A. ALLAN & MILDRED A. ALLAN

EMANUEL MANIS & MARY B. MANIS

CITY OF YOUNGSTOWN
MAHONING, CO.

VICTOR FEDORCHAK & HELEN A. FEDORCHAK

HENRY L. BEACH & EVELYN MAE BEACH

JOHN F. CURALL & THELMA J. CURALL

KENNETH R. WILSON & ALDA M. WILSON

JOHN E. JONES & DOROTHY J. JONES

JAMES W. ANDERSON & JEAN ALICE ANDERSON

ESTIMATED FUTURE CONST. LIMITS

VACANT LOT

DOMINIC PEDALINE & ESTHER PEDALINE

WILLIAM O. WALKER & MARION WALKER

MATCH SHEET NO. 28

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

R/W SHEET NO. 29 OF 104

PARCEL No.	DEED AREA	TOTAL P.R.O	TO BE ACQUIRED GROSS	NET	NET RESIDUE LEFT	RIGHT
302A-WL	75003 S.F.	None	3003 S.F.	None		72003 S.F.

REV	DATE	DESCRIPTION
1	7-26-89	Changed All Names, Previously Revised on Earlier Copies.

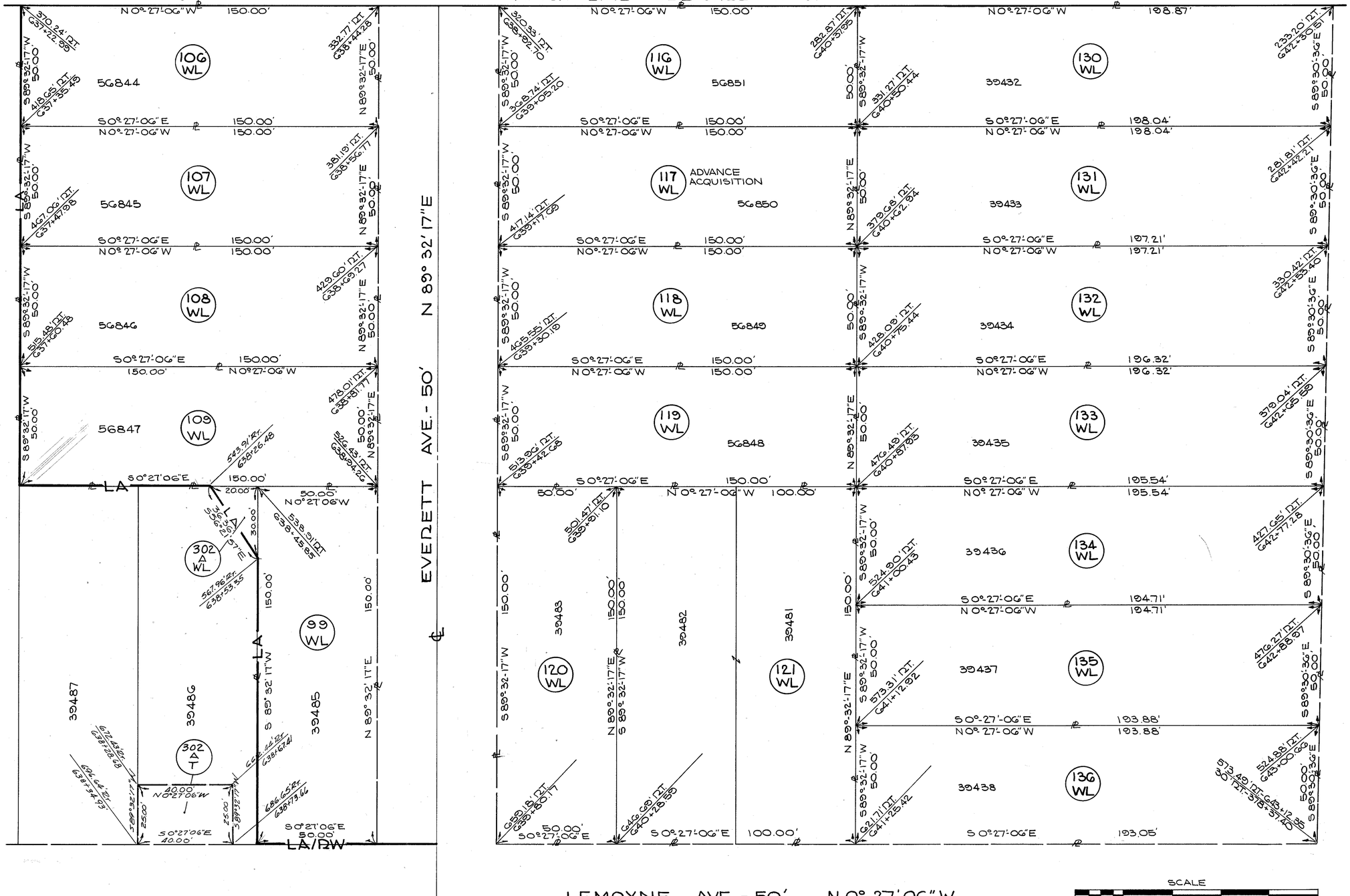
COMPLETION DATE —

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

582
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

30
104



MIDLOTHIAN BLVD. - 60'
S 89° 30' 36" E

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
99-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
302A-WL	7,500 S.F.	—	300 S.F.	—	300 S.F.	—	7200 S.F.
106-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
107-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
108-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
109-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
302A-T		—	1000 S.F.	—	1,000 S.F.	—	—
116-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
118-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
118-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
119-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
120-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
121-WL	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	—	—
130-WL	9,912 S.F.	—	9,912 S.F.	—	9,912 S.F.	—	—
131-WL	9,871 S.F.	—	9,871 S.F.	—	9,871 S.F.	—	—
132-WL	9,830 S.F.	—	9,830 S.F.	—	9,830 S.F.	—	—
133-WL	9,786 S.F.	—	9,786 S.F.	—	9,786 S.F.	—	—
134-WL	9,749 S.F.	—	9,749 S.F.	—	9,749 S.F.	—	—
135-WL	9,713 S.F.	—	9,713 S.F.	—	9,713 S.F.	—	—
136-WL	9,671 S.F.	—	9,671 S.F.	—	9,671 S.F.	—	—

REVISION	DESCRIPTION	BY	DATE
	PCL's 302A-WL & 302A-T ADDED		5-6-70

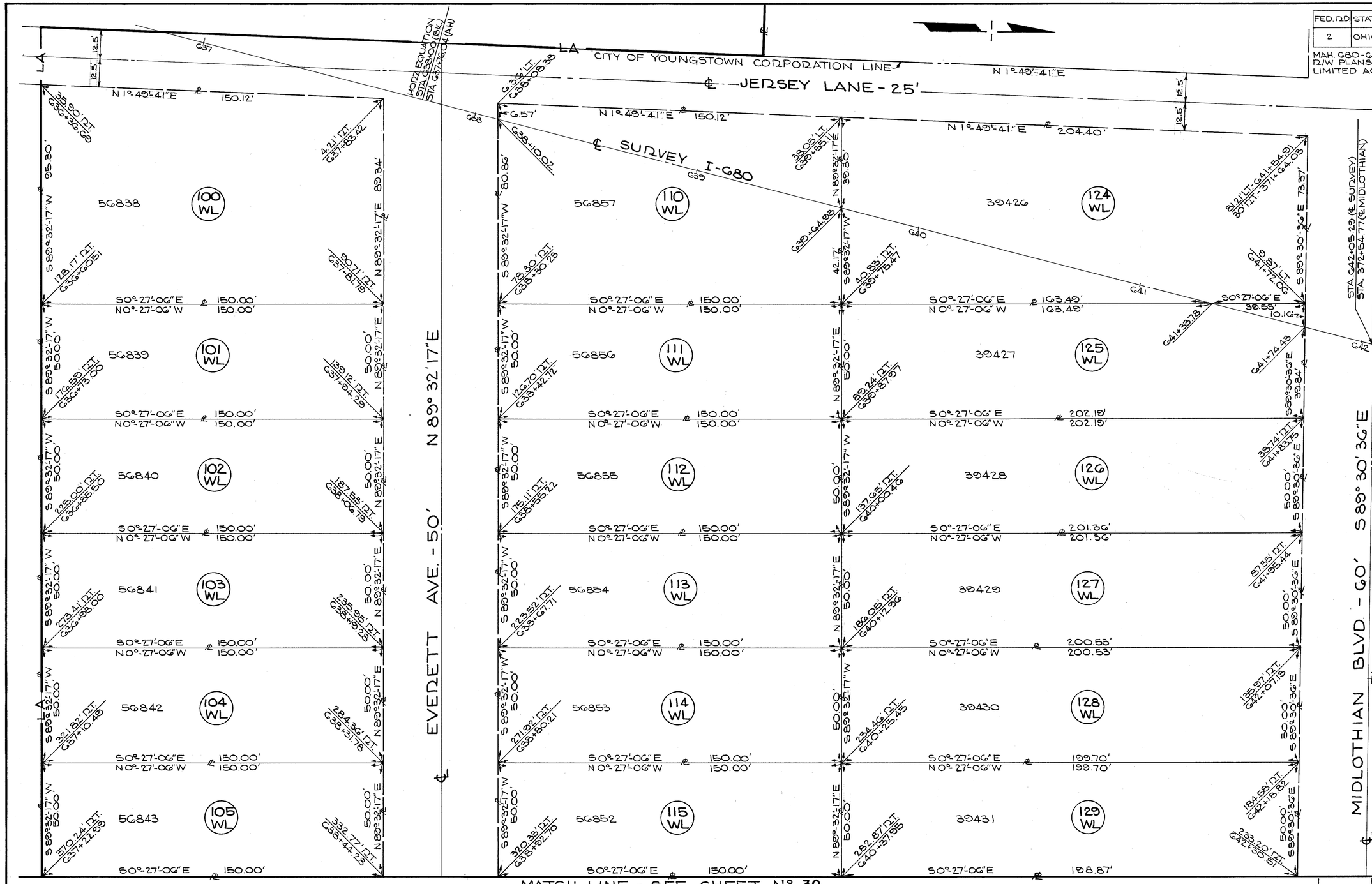
R/W SUPPLEMENTAL SHEET

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

583 / 656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

31 / 104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
100-WL	13,868 S.F.	-	13,868 S.F.	-	13,868 S.F.	-	-
101-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
102-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
103-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
104-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
105-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
110-WL	12,706 S.F.	-	12,706 S.F.	-	12,706 S.F.	-	-
111-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
112-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-

372

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
113-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
114-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
115-WL	7,500 S.F.	-	7,500 S.F.	-	7,500 S.F.	-	-
124-WL	15,831 S.F.	-	15,831 S.F.	-	15,831 S.F.	-	-
125-WL	10,115 S.F.	-	10,115 S.F.	-	10,115 S.F.	-	-
126-WL	10,075 S.F.	-	10,075 S.F.	-	10,075 S.F.	-	-
127-WL	10,034 S.F.	-	10,034 S.F.	-	10,034 S.F.	-	-
128-WL	9,993 S.F.	-	9,993 S.F.	-	9,993 S.F.	-	-
129-WL	9,953 S.F.	-	9,953 S.F.	-	9,953 S.F.	-	-

373

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

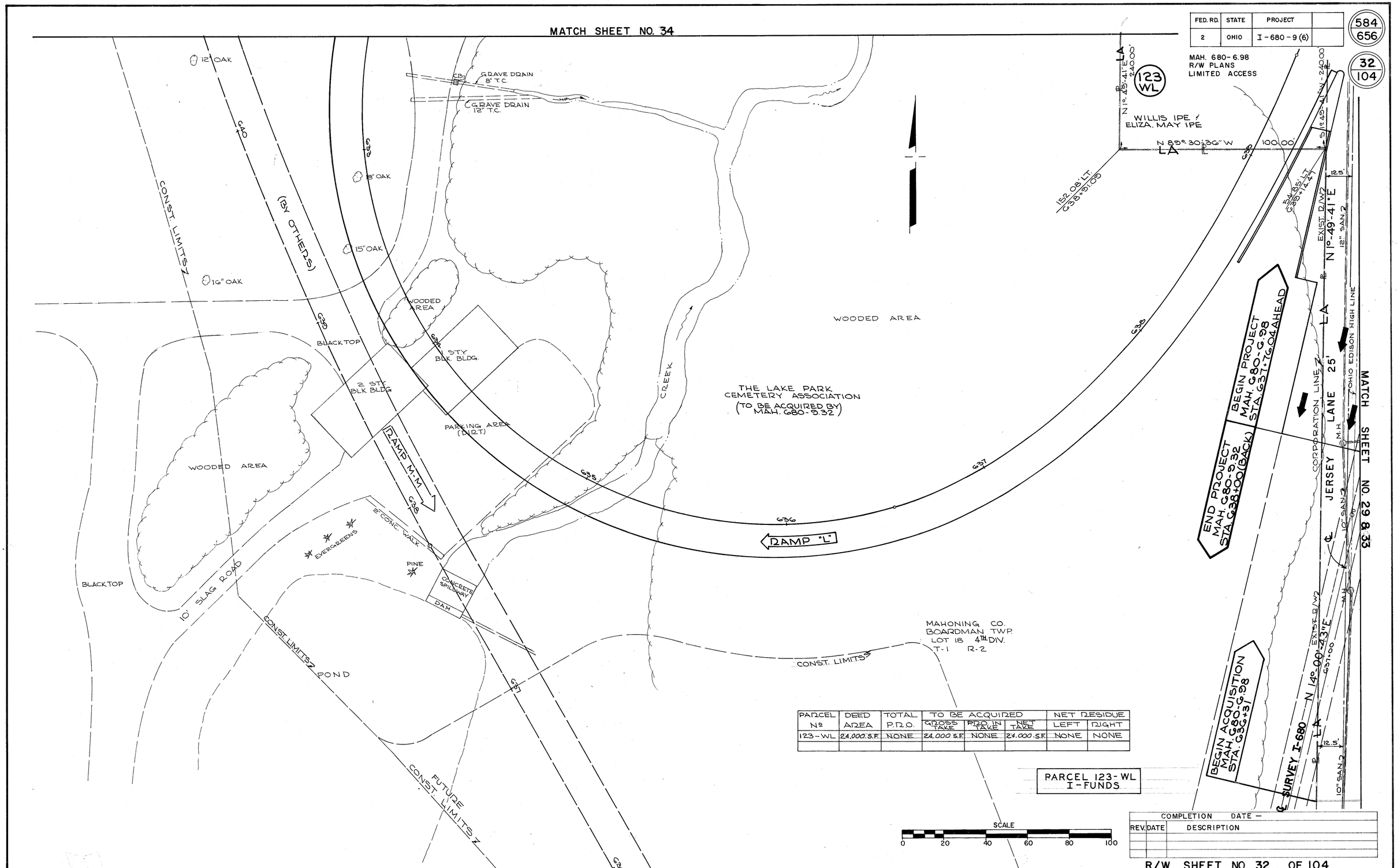
JAN 27 1969

FED. RD.	STATE	PROJECT
2	OHIO	I-680-9(6)

584/656

32/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
123-WL	24,000 S.F.	NONE	24,000 S.F.	NONE	24,000 S.F.	NONE	NONE

PARCEL 123-WL
I-FUNDS

COMPLETION DATE —

REV.	DATE	DESCRIPTION

R/W SHEET NO. 32 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

585/656

33/104

MATCH SHEET NO. 35 & 36

MATCH SHEET NO. 34

MATCH SHEET NO. 28

MATCH SHEET NO 29

18" ELM
1" MAPLE
2" MAPLE
FENCE
42974
42975
42976
N14°-00'-43"E
643+00
12" BUCKEYE
GARAGE
GLASS HOT HOUSE
WOODED AREA
12" TULIP
PT. OL. 1225
JESSIE M. IPE
(LANDLOCKED)
0.37 Ac
FR. GARAGE
FR. GARAGE
PT. OL. 1225
PT. OL. 1225
R/W LINE CURVE DATA
CH. BRG. = S 60°-42'-14" E
CH. = 35.31'
R = 130.00'
L = 35.42'
140A WL
1.5' CONC. WALK
2½-STY. BRICK #1522
10' ASPHALT DR.
S 0°-51'-05" E 435.72'
N 0°-51'-05" W 435.72'
12" TULIP
2.5' WALK
1½ STY. FR. #1544
8' ASPHALT DR.
3-8" MAPLE
15" MAPLE
35' PINE
4' STEPS
3' WALK
141 WL
142 WL
2 STY. FR. #1546
3' STEPS
8' SLAG DR.
POLE
8' WALK
15" MAPLE
12" GUM
143A WL
THE CITY OF YOUNGSTOWN, OHIO
R/W LINE CURVE DATA
CH. BRG. = S 79°-00'-26" E
CH. = 92.68'
R = 254.28'
L = 93.20'
CONST. LIMITS
PROP. SIDEWALK
COTTONWOOD ROW
R.R. TIE FENCE
BUSH
139B WL
ROBERT W. ISAACSON & RUTH A. ISAACSON
S 0°-51'-05" E 435.72'
N 0°-51'-05" W 435.72'
8' SLAG DR.
THE CAMPBELL ALLOTMENT CO. IPE PLAT CITY OF YOUNGSTOWN MAHONING CO.
PB 22 PG 107
JOHN SHOFI & ELIZABETH SHOFI
MICHAEL R. BOHN & MARY ALICE BOHN
30' LT. 371+67.07
30' LT. 372+36.15
24" ELM
15000' TO PINE
2-20" BLUE SPRUCE
I.P. FND. & USED
20" SPRUCE
30' LT. 374+31.07
30' LT. 375+31.07
RAMP "J"
N 89°-30'-36" W 74.02'
N 89°-30'-36" W 175.08'
N 89°-30'-36" W 100.00'
N 89°-30'-36" W 100.00'
15" SEWER
I.M.H.
2 U.G. TELE.
6" L.P. GAS
8" L.P. GAS
6" WATER
HYD.
STA. 642+05.23 (℄ I-680)
STA. 372+54.77 (℄ S.R. 625)
MONUMENT ASSEMBLY
MIDLOTHIAN BLVD. S.R. 625 60'
S 89°-30'-36" E 297.23'
372
373
374
375
376
377
641+00
30" SEWER
4" L.P. GAS
6" WATER
16" H.P. GAS
GUY
73.91'
CONC APRON
EXIST. 5' WALK
EXIST. R/W 50'
R/W FENCE
3.5' BUSH
ESTATE OF HATTIE HALLWOOD, DECEASED
30" MAPLE
HEDGE
39436
8" PEAR
20" CATALPA
8" STUMP
FLOWERS
ROSE
12" PINE
22" PINE
1 STY FR. #1561
LILAC
GRAPE
STEPS
4" PLUM
STONE WALK
GARDEN
2' GRAVEL RUNNERS
CONST. LIMITS
OHIO EDISON HIGH LINE ANCHOR POLE
12.5'
REPLAT OF PART OF PLAT No 1 BROWNLEE WOODS PB 16 PG. 177
JOHN HAAS & KATHERINA HAAS
PICKET FENCE
9.5' ASPHALT DR.
CONC.
4' STEPS
4' CONC. WALK
1½ STY. BRICK #1517
FR. SHELTER
3.7' STEPS
6.5' STEPS
8.5' ASPHALT DR.
1½ STY. FR. #1523
2 STY. FR. #1525
4' STEPS
5' ASPH. DR.
5' STEPS
2 STY. BRK. & FR. #1539
4' STEPS
5-8" ASH
18" ELM
TWIN 15" ELMS
TWIN 12" ELMS
3' WIRE FENCE
5' PINE SHRUBS
6" MAPLE
5' PINE
18" ELM
CONC.
1½ STY. FR. #1541
7' SLAG
2.5' CONC. WALK
3' WALK
#1543 1½ STY. BRICK
3' STEPS
8' ASPH. DR.
1½ STY BRK #1555
BRK. GARAGE
CHARLES R. HOGG
JERSEY LANE 25' EXIST R/W
203.92'
203.53'
202.72'
201.9'
641
39427
39426
39428
39429
39430
39431
39432
39433
39434
39435
125 WL
126 WL
127 WL
128 WL
129 WL
130 WL
131 WL
132 WL
133 WL
134 WL
124 WL
BRICK GAR.
FR. GARAGE
FR. & BLK. GAR.
35' PINE
197.69'
197.02'
196.02'
128.65'
133.46'
201.09'
200.27'
RAMP "L"
RAMP "O"
℄ SURVEY
MONUMENT ASSEMBLY
I-680
640+00
PLAT No 1 BROWNLEE WOODS PB 15 PG. 86
CITY OF YOUNGSTOWN MAHONING CO.
JOHN HAAS
PAUL R. TOLAND & MARTHA J. TOLAND
JOHN WIETELMAN
ESTATE OF DAVID B. CONRATH, DECEASED CLIFFORD E. FISHER
DELORES WELLS
WILLIAM A. LONG & BETTY A. LONG
JENNIE E. POLLEY
ALEXANDER GUARINO
FR. GARAGE
CAR PORT
NOTE: SEE SUPPLEMENTAL SHT. No 30 & 31 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

PARCEL No.	DEED AREA	TOTAL PRO.	TO BE ACQUIRED CROSS TAKE	NET RESIDUE PRO. TAKE	LEFT	RIGHT
139B-WL	65340 S.F.	102 S.F.	47,436 S.F.	47,436 S.F.	NONE	NONE
140A-WL	2.50 Ac.	2.50 Ac.	NONE	2.50 Ac.	NONE	NONE
141-WL	43,560 S.F.	NONE	43,560 S.F.	43,560 S.F.	NONE	NONE
142-WL	43,560 S.F.	NONE	27,432 S.F.	27,432 S.F.	NONE	16,128 S.F.(L)
143A-WL	1.78 170 S.F.	17,860 S.F.	12,953 S.F.	8,927 S.F.	3,426 S.F.	15,053 S.F.(L)
						890939 S.F.

REV	DATE	DESCRIPTION
1	12/16/68	Moved P.I. 139-B Inc.
2	1/16/68	Revised Tract Areas & Residue P.I. 140-A Inc.
3	1/25/69	Changed All Names Previously Revised on Carter Copies.

COMPLETION DATE -

ALL PARCELS THIS SHEET I-FUNDS

SCALE
0 20 40 60 80 100

R/W SHEET NO. 33 OF 104

SEE HIGHWAY PROJ. No. & CITY, RIVER & HARBOR SECT.
JAN 21 1969
LOCATED
CHIEF ENGINEER

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

586
656

34
104

MATCH SHEET NO. 36

MATCH SHEET NO. 33

MATCH SHEET NO. 32

42969 — DOMINIC TOCCO / ANNETTE TOCCO — 2 STY. BRK. #1418 — PLANTER — 5' CONC. WALK — 5' STEPS — 453.32' R — 30' — 30' — 60' — EXIST R/W — 12" H.P. GAS — 4" L.P. GAS — SHIRLEY RD. — CONC. APRON — SIGN POST PLANTER — 30' LT 364+92.56 — R/B CO. — ASPHALT PARKING AREA — CYCLONE FENCE — 15" SEWER — MH — UG TELE — 6" L.P. GAS — 6" WATER — STA. 365+35.69 — EXIST. MON. — 365+00 — 366+00 — 365+92.56 ℄ LA

42970 — 235' CYCLONE FENCE — 45' STEPS — 1 STY. BRK. BLDG. #1422 — 3 STONE PLANTERS — No TAKE — 137 — 30' LT 367+05.57 — 20.00' — 10°-25'-24"-E 10.00' — FENCE — LAWN — ASPHALT PARKING LOT — BRICK SIGN BASE — 138 T — 138 LA — N 89°-30'-36"-W — S 89°-30'-36"-E-105.57' — CONSTRUCTION LIMITS — EXIST R/W — I.P. FND. USED — 105.57' — PROP 5' SIDEWALK — CONC. APRON — EXIST. 5' WALK — 15" SEWER — 367+00 — 368+00 — 367+05.57 ℄ — 15" STORM — M.H. — CB — MIDLOTHIAN BLVD. S.R. 625 60' ℄ — 16" H.P. GAS — EXIST R/W — HEDGE — MAC APRON — LA — 5" MAPLE — 3" FIR — 15" PINE — 9" PIN OAK — 12" MAPLE — 10" MAPLE — 40" PINE — 55" PINE — 24" MAPLE — 15" MAPLE — 3.5' CONC. WALK — 11' DRIVE — 15" MAPLE — 6' STEPS — 5.2' STEPS — #1459 — 2 STY. FR. — 5' STEPS — CONC. — 25' CONC. WALK — C42 — C41 — C651 — CONST. LIMITS — RAMP M-M (BY OTHERS) — 12" H.P. GAS

42971 — THE CAMPBELL ALLOTMENT CO. IPE PLAT PB. 22 PG. 107 CITY OF YOUNGSTOWN MAHONING CO. — HIGH LINE — 6" CONC. CURB — 435.6' — 25' EASEMENT FOR OHIO EDISON HIGH LINE — PEARL BERNDT & CARL A. BERNDT — POINT OF ACCESS COMMERCIAL DRIVE STA. 368+525.35 WIDE — 12" 3/0 T&G — 30' LT 368+78.57 — 40' LT 368+78.57 — N 80°-25'-24"-E 82.25' — N 65°-18'-52"-E — N 0°-29'-24"-E-10.00' — 30' LT 368+78.57 — R/W FENCE — GUARD RAIL — EXISTING 7"x15" CMP — 15" SEWER — MH — UG TELE — CB — 6" WATER — 18" SEWER — 8" L.P. GAS — 30" COMB. — 369+00 — 370+00 — 371+00 — STA 371+39.24 — HIGH LINE OHIO EDISON — CITY OF YOUNGSTOWN CORPORATION LINE — S 89°-30'-36" E — S 89°-30'-36" E 100.00' — 16" H.P. GAS — EXIST R/W — LA — GUARD RAIL — 30" SEWER — C625 — C630 — RAMP "L" — 30' RT 368+48.45 — 30' RT 370+15 — 30' RT 370+39.02 — C631 — 30' RT 370+00 — C632 — 30' RT 369+99 — EXIST R/W — 5' STEPS — 10' SLAG DRIVE — 2 STY. FR. #1495 — 1 STY. FR. — 371+39.02 — 12" SAN. — LANE - 25' — JERSEY — EXIST R/W — N 1°-49'-41" E — S 1°-49'-41" W 240.00' — 24000' — N 1°-49'-41" E — LA — C642 — C641 — CONST. LIMITS — RAMP M-M (BY OTHERS) — 12" H.P. GAS

42972 — 10' — CITY OF YOUNGSTOWN SEWER EASEMENT VOL. PG. — 24" SEWER — 102.64' LT 369+60.06 — CREEK — WOODED AREA — 1398 EL — 139 X — INDIANOLA REALTY, INC. — 75' LT-370+36.01 — 30' LT-370+36.01 — 41.42' — N 30°-30'-36" E — 80.85' — N 88°-30'-36"-W 86.01' — S 89°-30'-36"-E LA 86.01' — CONST. LIMITS — 139 WL — 55' LT 370+00 — 370+36.80 — 41.41' LT — 45° — 42.42' — N 0°-51'-05"-W 390.63' — N 1°-39'-37"-E 238.14' — R/W FENCE — LA — 42973 — 5' STEPS — ASPHALT — 2 STY. FR. #1442 — RAMP "K" — ROBERT W. ISAACSON & RUTH A. ISAACSON — 139 B WL — TWIN 20" OAKS — 15' ASPHALT DRIVE — 10" PEACH — 30' LT 370+35.80 — 41.41' LT — 42974 — N89°30'36"W 150' — 12" PINE — I.P. FND & USED — N 89°-30'-36"-W-161.50' — CONC. APRON — 18" SEWER — 6" WATER — 8" L.P. GAS — 30' — HIGH LINE OHIO EDISON — 370+37.01 — 30' LT — S 89°-30'-36" E — 371+00 — 30' — M.H. — 30" COMB. — M.H. — M.H. — 16" H.P. GAS — S 89°-30'-36" E 100.00' — LA — 30' RT 370+15 — 30' RT 370+39.02 — 5' STEPS — 10' SLAG DRIVE — 371+39.02 — 2 STY. FR. #1495 — 1 STY. FR. — 12" SAN. — LANE - 25' — JERSEY — EXIST R/W — N 1°-49'-41" E — S 1°-49'-41" W 240.00' — 24000' — N 1°-49'-41" E — LA — C642 — C641 — CONST. LIMITS — RAMP M-M (BY OTHERS) — 12" H.P. GAS

PARCEL Nº	DEED AREA	TOTAL PRO.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
123-WL	84,000 S.F.	NONE	24,000 S.F.	NONE	24,000 S.F.	NONE	NONE
137	63,358 S.F.	NONE	NONE	NONE	NONE	63,358 S.F.	NONE
138-LA	39,950 S.F.	NONE	NONE	NONE	NONE	39,950 S.F.	NONE
138-T			1,056 S.F.	NONE	1,056 S.F.		
139-WL	288,367 S.F.	4,534 S.F.	5,919 S.F.	4,534 S.F.	1,385 S.F.	180,586 S.F.	NONE
139-X			1,189 S.F.	NONE	1,189 S.F.		
139B-WL	65,340 S.F.	102 S.F.	47,438 S.F.	102 S.F.	47,356 S.F.	NONE	NONE
139B-EL		NONE	17,902 S.F.	NONE	17,902 S.F.		

THE LAKE PARK CEMETERY ASSOCIATION (TO BE ACQUIRED BY MAH. 680-9.32)

WOODED AREA

WILLIS IPE & ELIZA. MAY IPE — MAHONING CO. BOARDMAN TWP. LOT 18 4TH DIV. T-1 R-2

123 WL

Revised LA Pcl. 137 4-24-72

SCALE 0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1.	12-7-68	Added Pcl. 139-B-WL, Revised 139-WL
2.	7-14-69	Revised Brgs., Deed Areas, Revised Pcl.'s 139-WL, 139-B-WL
3.	8-7-67	Added Pcl. 139-B-EL — White

Pcl. 139-B-EL-STATE FUNDS - ALL OTHER PARCELS THIS SHEET I-FUNDS

R/W SHEET NO. 34 OF 104

EXTENDED RAISED MEDIAN TO STA. 366+20 ALONG MIDLOTHIAN BLVD.
REVISED LA LINE TO FOLLOW E PROP. MIDLOTHIAN BLVD R/W STA. 365+92.56 TO STA. 369+99 ALONG DEEDED RADIUS OF 5779.65'

JAN 27 1969
LOGGED
DATE
BY

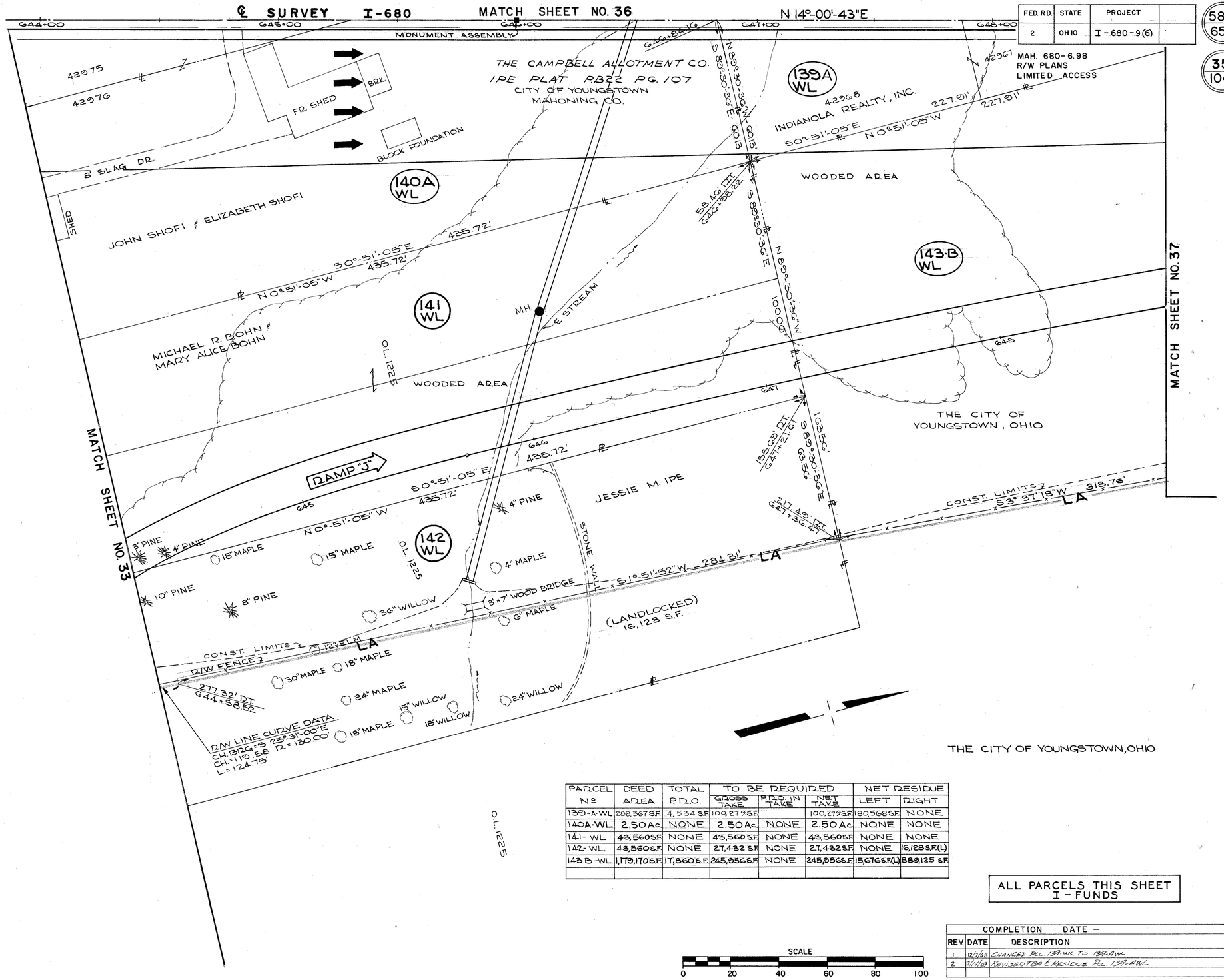
Ohio Department of Highways
Right of Way Division
Land Utilization Section

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

587/656

35/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE REQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
139-A-WL	288,367 S.F.	4,534 S.F.	100,279 S.F.		100,279 S.F.	180,568 S.F.	NONE
140A-WL	2.50 Ac.	NONE	2.50 Ac.	NONE	2.50 Ac.	NONE	NONE
141-WL	43,560 S.F.	NONE	43,560 S.F.	NONE	43,560 S.F.	NONE	NONE
142-WL	43,560 S.F.	NONE	27,432 S.F.	NONE	27,432 S.F.	NONE	16,128 S.F.(L)
143B-WL	1,179,170 S.F.	17,860 S.F.	245,956 S.F.	NONE	245,956 S.F.	15,676 S.F.(L)	889,125 S.F.

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE –

REV.	DATE	DESCRIPTION
1	12/7/68	CHANGED PCL. 139-WL TO 139-AWL
2	7/14/69	REVISED TBA & RESIDUE PCL. 139-AWL

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

588
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

36
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
139A-WL	288,367 S.F.	4,534 S.F.	100,279 S.F.		100,279 S.F.	180,586 S.F.	NONE
139B-WL	65,340 S.F.	102 S.F.	47,438 S.F.	102 S.F.	47,336 S.F.	17,902 S.F. (L)	NONE
140A-WL	2.50 Ac.	NONE	2.50 Ac.	NONE	2.50 Ac.	NONE	NONE
139B-EL		NONE	17,902 S.F.	NONE	17,902 S.F.	NONE	NONE

CITY OF YOUNGSTOWN SEWER EASEMENT
24" SEWER
42972
42973
THE CAMPBELL ALLOTMENT CO.
IPE PLAT P.B. 22 PG. 107
CITY OF YOUNGSTOWN
MAHONING CO.
INDIANOLA REALTY, INC.
WOODED AREA
CREEK
N 0°-51'-05"W 390.53'
139B EL
S 89°-08'-34"E 100.00'
LOT 42968
LOT 42967
SLIDES
18" MAPLE
240' LT G44+65
36" PIPE
WOOD SHED
ROBERT W. ISAACSON
RUTH A. ISAACSON
30" MAPLE
233.22' LT G46+28.08
262.93' LT G47+40
E STREAM
WOODED AREA
O.P.R. Participation Line
N11°-38'-31"E 238.14'
LA
C/L R/W FENCE
N 16°-23'-31"E 103.22'
N10°-51'-05"W 115.80'
CONSTRUCTION LIMITS
PAVILION
CYCLONE FENCE
PLAY TRAIN
WOOD PLAY HSE
SAND BOX
DRINKING FOUNTAIN
24" MAPLE
42974
139B WL
SWING
MONKEY BARS
CHINNING BAR
18" MAPLE
10" MAPLE
8" MAPLE
12" MAPLE
N 83°-07'-45"E 86.11'
210' LT G47+60
N 23°-47'-00"E 421.11'
CONSTRUCTION LIMITS
BLK GAD.
2 STY FR. HSE
ASPHALT
SEE-SAW
SLIDES
JUNGLE JIM BARS
PUMP HSE
POOL
FR. PLAY HSE
WIRE FENCE
RAMP "K"
N 0°-51'-08"W 435.72'
184.61' LT G46+30.77
G45
G46
G47
G48
MATCH SHEET NO. 33
42975
DIRT LANE
140A WL
JOHN SHOFI & ELIZABETH SHOFI
RAMP "L"
NURSERY
N 89°-30'-36"W 189.87'
S 89°-30'-36"E
WOODED AREA
139A WL
MATCH SHEET NO. 37
42976
WIRE FENCE
G46+83.16
℄ SURVEY I-680 MONUMENT ASSEMBLY
N 14°-00'43"E
G44+00
G45+00
G46+00
G47+00
G48+00
MATCH SHEET NO. 35
SCALE 0 20 40 60 80 100

R/L 139B EL STATE FUNDS ALL OTHER PARCELS THIS SHEET I-FUNDS

REV.	DATE	DESCRIPTION
1	12/1/81	Added 139B-WL, Revised R/W Rqmts. To 139A-WL
2	12/1/81	Revised Parcel Areas on Table, Plus 139A Added 139B-EL
3	6-1-84	Added R/L 139B-EL W.H.K.

COMPLETION DATE —

R/W SHEET NO. 36 OF 104

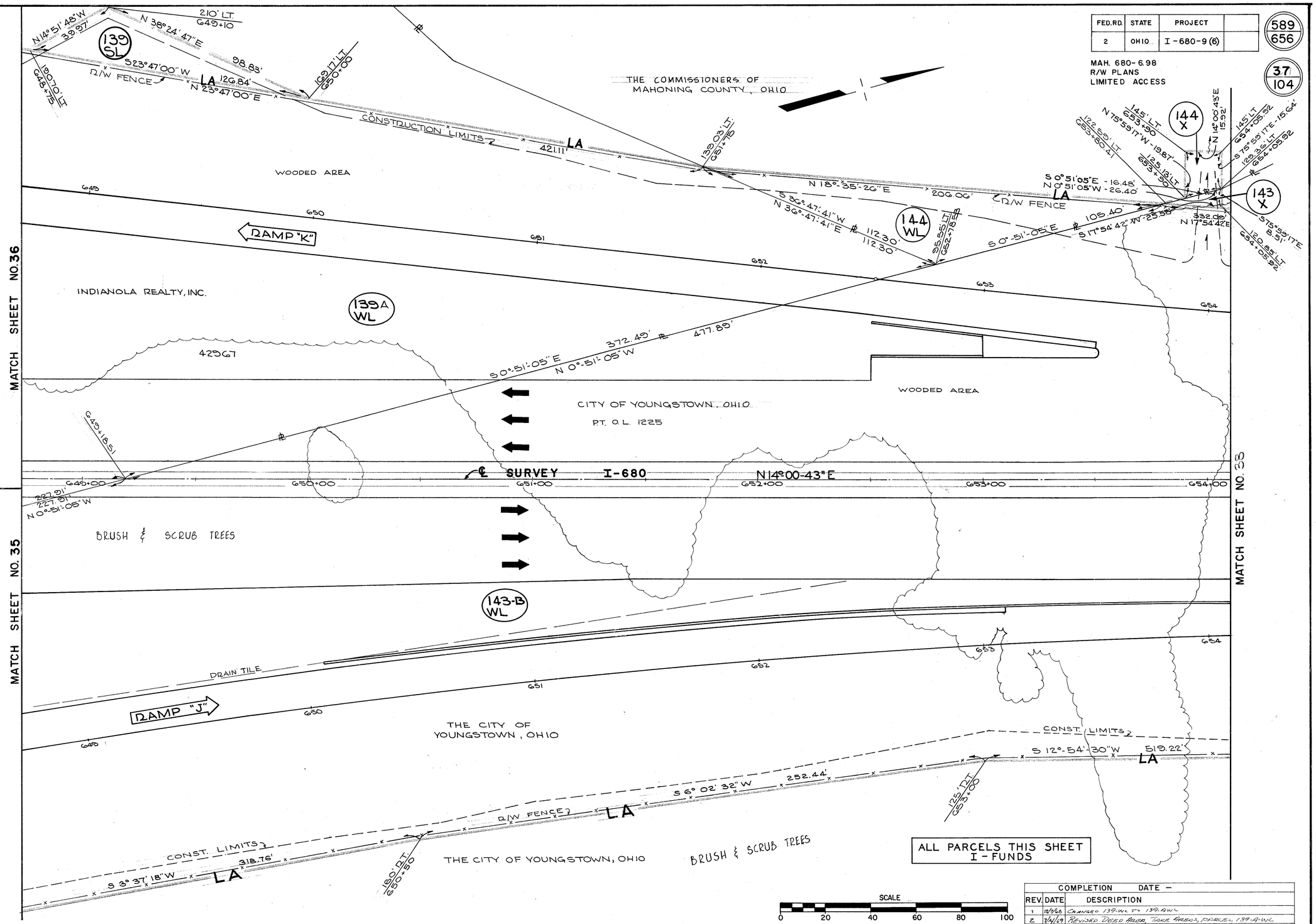
JAN 27 1989
LOGGED
CAD

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

589
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

37
104



PARCEL No.	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
139-A-WL	288,367 S.F.	4,534 S.F.	100,279 S.F.		100,279 S.F.	180,586 S.F.	NONE
139-SL			1,583 S.F.	NONE	1,583 S.F.		
143-B-WL	1,179,170 S.F.	17,860 S.F.	245,956 S.F.	NONE	245,956 S.F.	15,676 S.F.(L)	889,125 S.F.
143-X			109 S.F.	NONE	109 S.F.		
144-WL	871,200 S.F.	7,840 S.F.	3,615 S.F.	NONE	3,615 S.F.	385,400 S.F.	NONE
144-X			283 S.F.	NONE	283 S.F.		

COMPLETION DATE -

REV.	DATE	DESCRIPTION
1	12/7/68	Changed 139-WL to 139-AWL
2	7/14/69	Revised Deed Area, Take Areas, Parcel 139-A-WL
3	7/25/69	Changed All Names Previously Revised on Earlier Sepias.

R/W SHEET NO. 37 OF 104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
143 B-WL	1,178,170 S.F.	17,860 S.F.	245,556 S.F.	NONE	245,556 S.F.	15,676 S.F.(L)	889,125 S.F.
144 A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	385,400 S.F.	NONE
144 S-1			525 S.F.	NONE	525 S.F.		

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

590
656

38
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

144 S-1

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

240' LT 658+00

N 14°00'43"E 15.00'

240' LT 658+15

M.H.

S 88°04'00" E 400.00'

205' LT 658+10

205' LT 657+40

205' LT 658+25

15.00'

N 14°00'43"E 85.00'

N 28°09'56"E 380.55'

D/W FENCE

LA

27" CMP

CONSTRUCTION LIMITS

THE CITY OF YOUNGSTOWN, OHIO

(LANDLOCKED) 15,676 S.F.

WOODED AREA

D/W FENCE N 17°54'42"E 332.09'

LA

CONSTRUCTION LIMITS

100' LT 657+11.72

D/W FENCE N 60°55'09"W 108.74'

LA

CONSTRUCTION LIMITS

27" COMB. SEWER

72"x72" BOX CULVERT

PINE HOLLOW CREEK

S 50°-36'-55"W

N 50°-36'-55"E

120.30'

120.30'

144-A WL

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

655 656 657 658

RAMP "K"

MATCH SHEET NO. 37

MATCH SHEET NO. 39

8" ASH

8" ASH

MONUMENT ASSEMBLY

℄ SURVEY I-680 N 14°-00'-43" E

655.00 656.00 657.00 658.00 659.00

8" MAPLE

TRIPLE 4" MAPLE

143-B WL

THE CITY OF YOUNGSTOWN, OHIO

SCRUB TREES & BRUSH.

O.L. 1225

655 656 657 658 659

RAMP "J"

289.33' LT 658+08.30

S 46°-42'-55"W 82.57'

658+52.33

S 46°-42'-55"W

N 46°-42'-55"E

WOODED AREA

107.68' 107.68'

S 36°-10'-56"W 200.00'

N 36°-10'-56"E 200.00'

58.18' LT 659+42.64

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

LA D/W FENCE S 12°-54'-30"W 519.22' LA

LA D/W FENCE S 17°-27'-55"W 309.59'

115' LT 658+19.12

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

R/W SHEET NO. 38 OF 104

REV	DATE	DESCRIPTION
1	12-5-69	Changed Alf Names, Previously Revised on Earlier Sepias.

COMPLETION DATE -

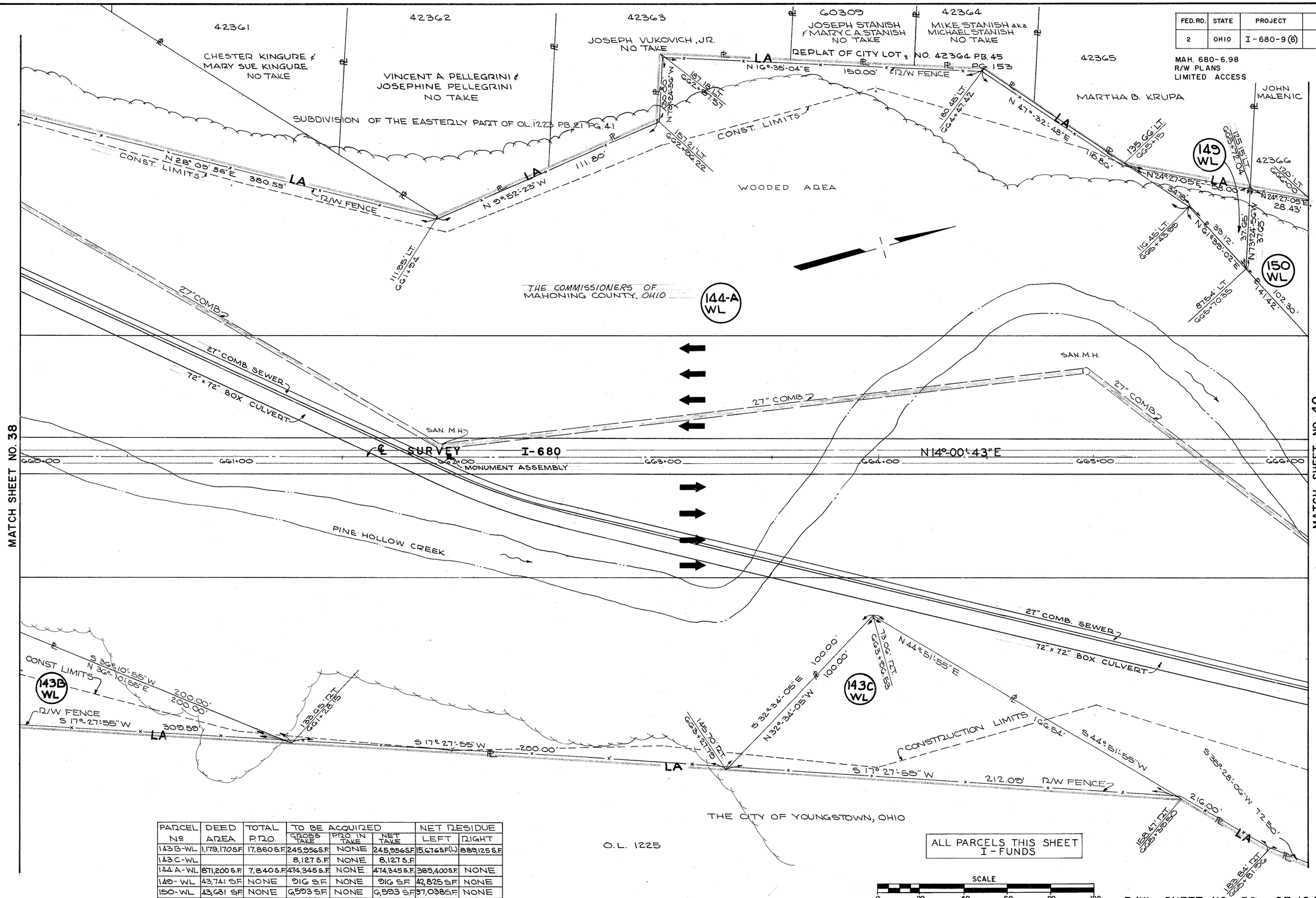
State Highway Comm. Ohio
Div. Engr. & Admin. Secty.
JAN 27 1969
L66659
Engr. Sign Mk.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

591/656

39/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
143B-WL	1,179,170 S.F.	17,860 S.F.	245,956 S.F.	NONE	245,956 S.F.	15,676 S.F.(L)	889,125 S.F.
143C-WL			8,127 S.F.	NONE	8,127 S.F.		
144A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	385,400 S.F.	NONE
149-WL	43,741 S.F.	NONE	916 S.F.	NONE	916 S.F.	42,825 S.F.	NONE
150-WL	43,631 S.F.	NONE	6,593 S.F.	NONE	6,593 S.F.	37,038 S.F.	NONE

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION	COMPLETION DATE
1	7-25-69	Changed All Names Previously Revised on Earlier Sepias.	

R/W SHEET NO. 39 OF 104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
144-A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	389,400 S.F.	NONE
150-WL	43,631 S.F.	NONE	6,593 S.F.	NONE	6,593 S.F.	37,038 S.F.	NONE
151-WL	43,603 S.F.	NONE	8,018 S.F.	NONE	8,018 S.F.	35,585 S.F.	NONE
152-WL	43,585 S.F.	NONE	6,892 S.F.	NONE	6,892 S.F.	36,693 S.F.	NONE
153-WL	44,404 S.F.	NONE	6,756 S.F.	NONE	6,756 S.F.	37,648 S.F.	NONE
154-WL	65,403 S.F.	NONE	7,300 S.F.	NONE	7,300 S.F.	58,004 S.F.	NONE
155-WL	15,883 S.F.	NONE	1,005 S.F.	NONE	1,005 S.F.	NONE	14,888 S.F.
156-WL	15,947 S.F.	NONE	3,439 S.F.	NONE	3,439 S.F.	NONE	12,508 S.F.
157-WL	25,630 S.F.	NONE	5,967 S.F.	NONE	5,967 S.F.	NONE	19,663 S.F.
161-WL	*150,900 S.F.*	*NONE*	*45,076 S.F.*	*NONE*	*45,076 S.F.*	*NONE*	*105,3245 S.F.*
158-WL	43,308 S.F.	NONE	8,209 S.F.	NONE	8,209 S.F.	NONE	35,099 S.F.
143E-WL	149,411 S.F.	NONE	100,088 S.F.	NONE	100,088 S.F.	NONE	49,323 S.F.

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ = 71°25'13" LT		P = 0.53'	
L_s = 200'		K = 100.00'	
D_c = 1°50'00"		X_c = 199.98'	
R = 3125.22'		Y_c = 2.13'	
Θ_s = 1°50'00"		L.T. = 133.34'	
Δ_c = 67°45'13"		S.T. = 66.67'	
L_c = 3655.65'		L.C. = 199.99'	
T_c = 2058.23'		T_s = 2346.92'	
CH_c = 3484.06'		E_s = 724.32'	
E_c = 639.03'			

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
Δ = 1°50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

592 / 656

40 / 104

MATCH SHEET NO. 39

MATCH SHEET NO. 41

SUBDIVISION OF THE EASTERLY PART OF OL. Nº 122 P.B. 21 Pg. 41

JOHN MALENIC — 42366 — 150 WL

JOHN P. MALENIC & MARY F. MALENIC — 42367 — 151 WL

PAULINE NESHITE, LIFE ESTATE; STEPHEN NESHITE, OWNER. — 42368 — 152 WL

SUSIE VETRECIN — 42369 — 153 WL

42370 — 154 WL

THE SAFEWAY INVESTMENT COMPANY, A PARTNERSHIP

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

WILLIAM H. TOTH & PATRICIA L. TOTH

THOMAS MASI & BETTY JEAN MASI

N 14°00'43" E 83.01'

N 14°00'43" E 57.63'

CONSTRUCTION LIMITS

N 14°00'43" E 558.36'

N 42°05'03" E 21.75'

N 42°05'03" E 94.44'

N 42°05'03" E 80.81'

N 17°56'53" E 100.24'

N 0°07'26" E 200.35'

R/W FENCE

S 73°24'56" E 74.75'

N 73°24'56" W 74.75'

S 20°20'25" W 85.12'

I.P. FND.

S 20°20'25" W 89.17'

S 20°20'25" W 283.76'

N 22°20'25" E 85.56'

N 14°00'43" E

WOODED AREA

SURVEY I-680

666+00 667+00 668+00 669+00 670+00 671+00 672+00

MONUMENT ASSEMBLY

T.S. STA 671+15.72 (CONST. ONLY)

P.C. STA 671+82.38 (R/W ONLY)

S 9°-17'-42" E 199.07'

N 9°-17'-42" W 199.07'

WATER FOUNTAIN — CONC.

SWING — TEETER TOTTER — SLIDE

144A WL

4" STONE WALL

27" COMB. SEWER

M.H.

PICNIC TABLES

RESTROOM — STONE BLK OFFICE BLOCK — RESTROOM

4 CONC. WALK

72" × 72" BOX CULVERT

PINE HOLLOW CREEK

N 0°-18'-20" W - 344.01'

N 0°-18'-20" W 205.25'

S 0°-18'-20" E 922.31'

N 0°-18'-20" W 140.00'

S 0°-18'-20" E 205.25'

N 0°-18'-20" W 120.00'

S 0°-18'-20" E 158.36'

CONSTRUCTION LIMITS

D/W FENCE

155 WL — 156 WL — 157 WL — 157 P2 — 158 WL — 161 WL

POWERS ESTATE CEMETERY

25858 — 25857 — 25855

Loss of Land Improvements caused by Construction of Project & not Compensated for in Appropriation action, RICHARD PUCCI Case Nº 190131, which was not appealed.

SUBDIVISION & REPLAT P.B. 36 PG. 281

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	5/6/69	CHANGED PARCEL 143E-WL TO 1GOWL & 1GHWL
2	7-25-69	Changed All Names Previously Revised on Earlier Sepias.
3	10/9/69	Revised Area Pcl 161 WL R.S.

R/W SHEET NO. 40 OF 104

STATE HIGHWAY DEPT. DIV. 4 NW. ENGR. & ADMIN. CENTER
JAN 27 1969
LOGGED
CHKD
SHT. No.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6 98
R/W PLANS
LIMITED ACCESS

593 / 656

41 / 104

MATCH LINE - SEE SHEET NO. 42

MATCH SHEET NO. 40

MATCH SHEET NO. 43

N 0°-07'-26"E 200.35'

R/W FENCE

154.63 LT. G73+00

6" ASH

8" HAWTHORNE

8" MULBERRY

4" HAWTHORNE

TWIN 4" DOGWOOD

8" W. CHERRY

4" DOGWOOD

24" ELM

12" ELM

WOOD BRIDGE

4' STONE PATH

27" CORR. P.

BUR. 27" CORR. P.

TWIN 3" DOGWOOD

4" ASH

6" ELM

PINE HOLLOW CREEK

STA. EQUATION
P.C.C. STA. G73+18.72 (BACK - R/W ONLY)
S.C. STA. G73+18.72 (AHEAD - CONST. ONLY)

WOODED AREA

N 3°-57'-13" E 327.97'

CONST. LIMITS

13' ASPHALT DR. TO BE ABANDONED

36" COMB. P.

3 6" ELM

24" ELM

37" ELM

6" ASH

4" DOGWOOD

30" COMB. SEWER

10" W. CHERRY

30" COMB. P.

M.H.

6" ELM

8" BASSWOOD

6" ASH

6" W. CHERRY

72"x72" BOX CULVERT

24" ELM

22" ELM

18" ELM

10" ELM

SEWER

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

144A WL

5" MAPLE

8" OAK

4" ELM

12" ELM

6" ELM

7" MAPLE

℄ SURVEY I-680

G73 G74 G75 G76 G77 G78

S 0°-18'-20" E 822.31'

N 0°-18'-20" W 344.01'

161 WL

O.L. 1084

FELIX V. TESNER & LOUISE C. TESNER

S 89°-41'-59" W 196.65'

R/W FENCE

LA

100' RT. G74+00

CONST. LIMITS

S 30°-46'-56" W 111.27'

140' RT. G75+00

WOODED AREA

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ = 71°-25'-18" LT.	P = 0.53'
Ls = 200.00'	K = 100.00'
Dc = 1°-50'-00"	Xc = 199.88'
R = 3,125.22'	Yc = 2.13'
θ = 1°-50'-00"	LT. = 133.34'
Δc = 67°-45'-18"	ST. = 66.67'
Lc = 3,695.65'	L.C. = 199.99'
Tc = 2,098.2'	Ts = 2,346.92'
CH = 3,484.0'	Es = 724.32'
EC = 630.03'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

S 45°18'00" W - 99.26'

MATCH LINE 150' RT. ℄ SURVEY - SEE SHEET NO. 42

225' LT. G76+50

15" COMB. P.

CONST. LIMITS

N 38°-42'-16" E 143.19'

R/W FENCE

M.H.

30" ELM

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

WOODED AREA

145.30' LT. G77+76.41'

RAMP "H"

G76

G77

G78

THE CAMPBELL LAND CO. PLAT Nº 2

N 89°-52'-43" E 165.21'

N 1°-52'-44" W 165.27'

CONST. LIMITS

27176

27175

27174

165A WL

N 89°-52'-43" E

S 89°-52'-43" W

Pb 15 Pg. 50

120.55'

26.45' LT. G77+90.72

S 0°-18'-20" E, 108.58'

S 0°-18'-20" E 253.80'

N 0°-18'-20" W 390.30'

BRUSH

MONUMENT ASSEMBLY

CURVE Nº. 17

TRIPLE 3" DOGWOOD

15" ELM

18" ELM

14" W. CHERRY

16" ELM

4" ELM

7" MAPLE

WOODED AREA

O.L. 1084

GERTRUDE POWERS CLARK & MURIEL H. POWERS

7" ELM

8" MAPLE

12" ELM

N 44°-00'-47" E 82.39'

N 29°-22'-33" E 22.66'

30" COMB. P.

160 WL

CONST. LIMITS

S 0°-09'-57" E 198.02'

R/W FENCE

LA

563°53'05"E 88.47'

79.66' S 43°-34'-03" E

120' RT. G71+35

ALL PARCELS THIS SHEET
I-FUNDS

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
144A-WL	871,200 S.F.	7,840 S.F.	474,345 S.F.	NONE	474,345 S.F.	385,400 S.F.	NONE
161-WL	150,400 S.F.	NONE	45,076 S.F.	NONE	45,076 S.F.	NONE	105,324 S.F.
160-WL	111,200 S.F.	NONE	55,012 S.F.	NONE	55,012 S.F.	NONE	56,188 S.F.
165A-WL	42,005 S.F.	NONE	17,650 S.F.	NONE	17,650 S.F.	24,355 S.F.	NONE

SCALE
0 20 40 60 80 100

Added Brgs & Distances on Rt., Pcl. 160-WL & 161-WL 12-15-69

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	5/8/69	CHANGED PARCEL 143E-WL TO 160-WL & 161-WL
2	7-25-69	Changed All Names Previously Revised on Earlier Sepias.
3	10/14/69	Revised Area Pcl 161 WL, 160 WL

R/W SHEET NO. 41 OF 104

State Highway Dept. of Ohio
R/W Engineering & Right of Way Section
JAN 27 1969
LOGGED
Bill 324

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

594 / 656

42 / 104

N 42° 26' 56" W 16.69'

13' ASPHALT DRIVE

283.28' LT. STA 672+10.92

269.42' LT. STA 672+00.96

35' CONC.

246.60' LT. STA 672+36.66

209.54' LT. STA 672+93.79

260.56' LT. STA 671+94.92

154 S-1

144 S-2

237.83' LT. STA 672+32.28

S 52° 56' 40" E 105.34'

N 56° 27' 04" E 107.31'

S 56° 21' 01" W 87.07'

WOODED AREA

THE SAFEWAY INVESTMENT CO.

191.18' LT. STA 672+83.54

124.63' LT. STA 673+00

S 80° 07' 26" W 16.08'

M.H.

N 11° 13' 42" E 123.40'

200.84' LT. STA 674+25.68

S 3° 57' 13" W 118.76'

LA

MATCH LINE - SEE SHEET NO. 41

144A WL

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
144 S-2	SEE SHT	NO. 41	2,946 S.F.	NONE	2,946 S.F.	SEE SHT	NO 41
144 S-3	SEE SHT	No. 41	588 S.F.	NONE	588 S.F.	SEE SHT	NO 41
154-S	SEE SHT	NO 40	421 S.F.	NONE	421 S.F.	SEE SHT	NO 40

MAHONING COUNTY COMMISSIONERS

THE COMMISSIONERS OF MAHONING COUNTY, OHIO

WOODED AREA

N 19° 09' 27" E 20.37'

15" COMB.

254.28' LT. STA 674+34.64

N 70° 50' 33" W 5.61'

224.15' LT. STA 674+21.27

144 S-3

250.38' LT. STA 674+96.39

S 70° 50' 33" E 26.01'

225' LT. STA 675+30

S 3° 57' 13" W 21.11'

MATCH LINE - 150' RT.

SEE SHEET NO. 41

161 WL

160 WL

S 45° 18' 00" W 99.26'

CONST. LIMITS Z

R/W FENCE

363° 53' 05" E 88.41'

72"-72' BOX CULVERT

30" COMB. SEWER

CONST. LIMITS Z

R/W FENCE

S 43° 54' 03" E 19.66'

180' RT. STA 676+75

114.38'

S 55° 51' 21" E

M.H.

THE CITY OF YOUNGSTOWN, OHIO

200' RT. STA 675+75

N 82° 34' 29" W 56.00'

WOODED AREA

72.28'

25° 14' 30"

S

30" COMB. SEWER

256' RT. STA 675+75

S 31° 10' 50" W 41.23'

S 21° 43' 58" W 43.68'

PINE HOLLOW CREEK

261' RT. STA 676+25

M.H.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
161-WL	150,900 S.F.	NONE	45,076 S.F.	NONE	45,076 S.F.	NONE	105,324 S.F.
160-WL	111,200 S.F.	NONE	55,012 S.F.	NONE	55,012 S.F.	NONE	56,188 S.F.

* NO PROPERTY DESCRIPTION IN DEED

UNION CARBIDE and CARBON CORPORATION, A NEW YORK CORPORATION

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
507-S	128,938 S.F.	—	3,355 S.F.	NONE	3,355 S.F.	—	128,938 S.F.

N 71° 35' 04" W

728+00

RAMP 'F'

MATCH LINE SEE SHEET Nº 83

128.77' RT. STA 728+19.58 @ RAMP 'F'

130 AG. RT. STA 728+40.39 @ RAMP 'F'

105.34'

S 36° 33' 46" W 205.36

M.H.

N 36° 33' 46" E 170.12'

507 S

EXIST. 72" STORM SEWER

285.89' RT. STA 727+98.38 @ RAMP 'F'

S 53° 26' 14" E 200.00'

292.12' RT. STA 727+87.39 @ RAMP 'F'

EXIST. 10'x7' BOX CULVERT

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

Added Brg's & Distances on R/W Pcl. 160-WL & 161-WL 12-15-69

REV.	DATE	DESCRIPTION
		COMPLETION DATE -
1.	5/8/69	CHANGED PARCEL 143 E-WL TO 160-WL & 161-WL
2.	7/25/69	Changed All Names Previously Revised on Earlier Sepias.
3.	10/9/69	Revised Area Pcl 161 R.S.

R/W SHEET NO. 42 OF 104

State Highway Dept. Bldg. 46
Rec. Check & Admin. Sect.
JAN 27 1969
Locations
Engineering Bldg.

MATCH SHEET NO. 49

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

595/656

43/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: SEE SUPPLEMENTAL SHT. Nº 44 & 46 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

REPLAT OF YOUNGSTOWN CITY LOTS & OUTLOT P.B. 44 PG. 11

MATCH SHEET NO. 45

MATCH SHEET NO. 41

CONSTANTINE AVE. (NOT CONSTRUCTED)

CRAIGER AVE. 50' (NOT CONSTRUCTED)

℄ SURVEY I-680

℄ SPALDING ROAD - 50' (NOT CONSTRUCTED)

OHIO EDISON HIGH LINE

RAMP 'H'

GROUP #XVII SLOVAK CATHOLIC SOKOL

MARY B. JANCI

GLASS PLANTER

WOOD PLANTER

MICHAEL TYCH & PEARL TYCH

LJUBAN RUSNOV

MARTIN HOLECKO

JOHN MURAR

SUSAN OPATICH

GERTRUDE POWERS CLARK & MURIEL H. POWERS

THE CAMPBELL LAND CO. PLAT NO. 2 P.B. 15 PG. 50

THE DOREL REALTY CO. A PARTNERSHIP

PACENTRANI CLUB OF YOUNGSTOWN, OHIO - AN OHIO CORPORATION

REPLAT OF A. POWERS ESTATE FIRST PLAT PB 15 PG. 74

MACDON INDUSTRIAL & DEVELOPMENT, INC.

WOODED AREA

1 STY BRICK BLDG.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
160-WL	111,200 S.F.	NONE	85,028 S.F.	NONE	85,028 S.F.	NONE	56,188 S.F.
163-WL	106,850 S.F.	NONE	45,678 S.F.	NONE	45,678 S.F.	—	60,972 S.F.
164-WL	29,718 S.F.	NONE	29,718 S.F.	NONE	29,718 S.F.	NONE	NONE
165A-WL	42,005 S.F.	NONE	17,650 S.F.	NONE	17,650 S.F.	NONE	24,355 S.F.

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ =	71°25'18"LT	P =	0.53'
L_s =	200.00'	K =	100.00'
D_c =	1°50'00"	X_s =	199.98'
R =	3125.22'	Y_s =	2.13'
Θ_s =	1°50'00"	L.T. =	133.34'
Δ_c =	67°45'18"	S.T. =	66.67'
L_c =	3695.65'	L.C. =	199.99'
T_c =	2098.23'	T_s =	2346.92'
CH_L =	3484.06'	E_s =	724.32'
E_c =	630.03'		

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 672+48.06
2 P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

Revised Areas P/s 166 & 167 WL 7-25-69
Added P/s 166 & 167 A-WL 7-25-69
Revised Areas P/s 160 WL 10/9/69 R.S.

SCALE 0 20 40 60 80 100

ALL PARCELS THIS SHEET I-FUNDS

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	9/30/69	163-WL CHANGED LA LINE, INCREASED AREA 10 SQ.FT.
2	5/6/69	143 E-WL CHANGED TO 160-WL
3	7-25-69	Changed All Names Previously Revised on Earlier Sepias.

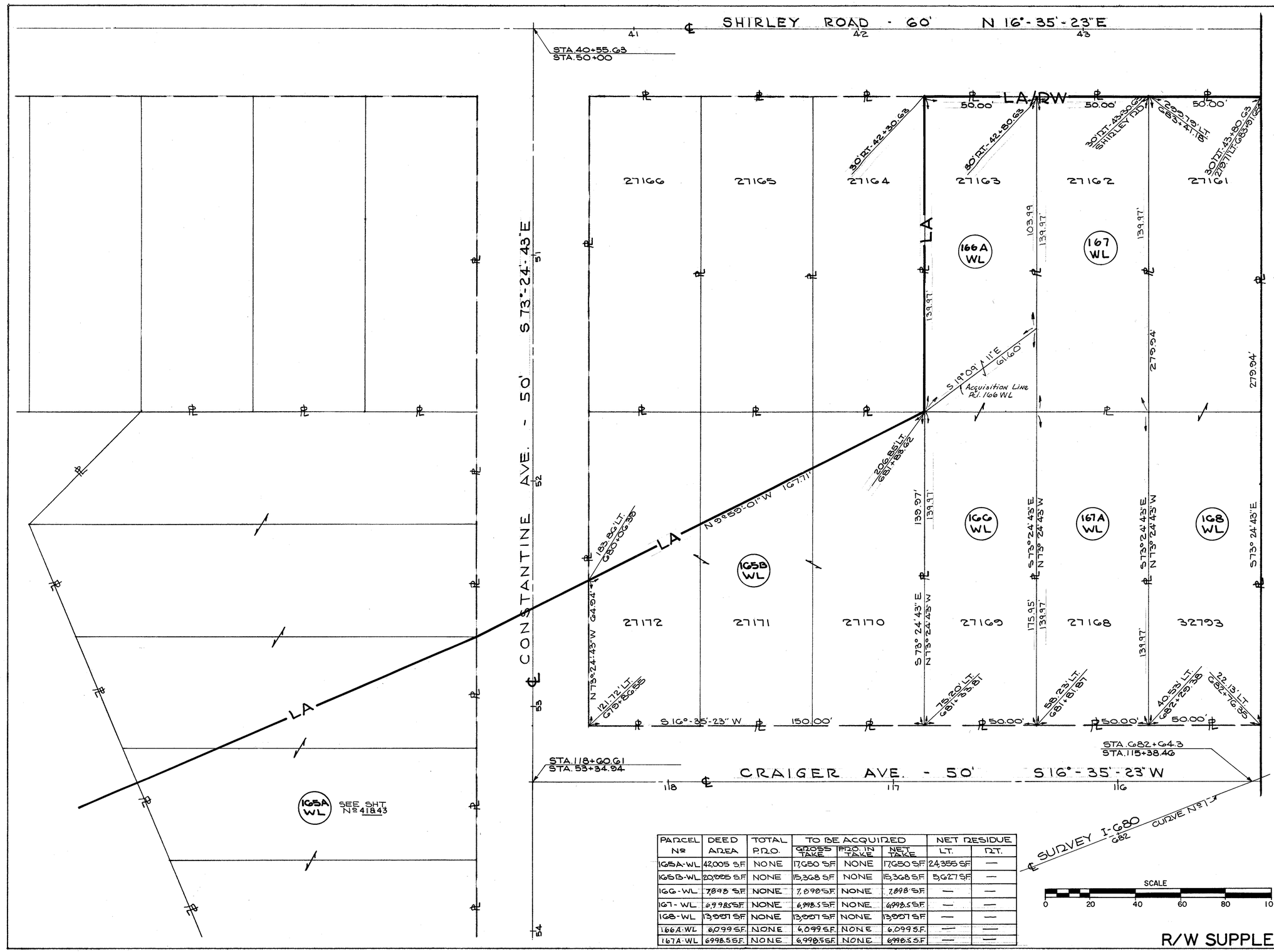
R/W SHEET NO. 43 OF

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

596
656

44
104



CENTERLINE SURVEY
CURVE No 1 DATA
P.I. STA. 694+62.64

Δ = 71°25'-13" LT.	CH_c = 3484.06'
L_s = 200'	E_c = 639.03'
D_c = 1°50'00"	LT. = 133.34'
R = 3125.22'	S.T. = 66.67'
Θ_s = 1°50'00"	L.C. = 199.99'
Δ_c = 67° 45'13"	T_s = 2,346.92'
L_c = 3,695.65'	E_s = 724.32'
T_c = 2,098.23'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA. 672+49.06
2 P.I. STA. 710+78.04
Δ = 1°50'00" LT.
R = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
165A-WL	42,005 S.F.	NONE	17,650 S.F.	NONE	17,650 S.F.	24,355 S.F.	—
165B-WL	20,995 S.F.	NONE	15,368 S.F.	NONE	15,368 S.F.	5,627 S.F.	—
166-WL	7,898 S.F.	NONE	7,898 S.F.	NONE	7,898 S.F.	—	—
167-WL	6,998.5 S.F.	NONE	6,998.5 S.F.	NONE	6998.5 S.F.	—	—
168-WL	13,997 S.F.	NONE	13,997 S.F.	NONE	13,997 S.F.	—	—
166A-WL	6,099 S.F.	NONE	6,099 S.F.	NONE	6,099 S.F.	—	—
167A-WL	6998.5 S.F.	NONE	6,998.5 S.F.	NONE	6998.5 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
2	Revised areas Pcl's 166 & 167		7-25-69
1	Added 166 AWL & 167 AWL	EHC	11-25-68
	PARCELS 166-WL & 167-W CHANGED TO TOTAL TAKE		

R/W SUPPLEMENTAL SHEET

State Highway Dept. of Ohio - Div. of Right of Way
Date Filed Oct 27 1969
Logged
Checked BM BK

MATCH SHEET NO. 50

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

597 / 656

45 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

NOTE: FOR PARCEL DIMENSIONS, BEARINGS, STA.-OFFSETS & AREAS NOT SHOWN ON THIS SHEET-SEE R/W SHEET Nº 46 & 48

MATCH SHEET NO. 43

MATCH SHEET NO. 47

SUSAN OPATICH

REPLAT OF YOUNGSTOWN CITY LOTS & OUT LOTS P.B. 44 PG. 11

MONUMENT ASSEMBLY

℄ SURVEY I-680 — ℄ CURVE Nº 1

25402 | 25401 | 25400 | 25399 | 25398 | 25397 | 25396

MARY SOPKOVIC aka. MARY SOPKOVICH

DOMINIC AGOSTINELLI

SUSAN RITCHIE & JAMES RITCHIE

204 WL | 171 WL | 173 WL | 174 WL

RAMP "G"

1½ ST'Y BR. HSE. #2602

BLOCK GAR.

8" MAPLE | 4" CHERRY | 4" TWIN MAPLE | 8" ASPHALT DR. | 10" MAPLE | 10" TWIN MAPLE

WIRE FENCE

EXIST. R/W | CONST. LIMITS | LA/R/W

STA 109+89.95
STA 7+14.87

12" WATER MAIN

N 73°-27'-21" W

MINNIE R. WINTER 25395 | THOMAS BIROSCAK 25394 | MARY ANN HALAPARDA 25393 | JOHN GORDULIC, ET AL 25392 | 25391 | 25390 | JOHN MARTINKO 25389

REPLAT OF A. POWERS ESTATE FIRST PLAT P.B. 15 PG. 74

178A WL | 179 WL | 180 WL | 181 WL | 182 WL | 183 WL | 184 WL

FR. SHED | BLOCK GAR. | FRAME GAR. | GAR.

2½ ST'Y FR. HSE. #2548 | 2½ ST'Y FR. HSE. #2540 | 2½ ST'Y BR. HSE. #2536 | 2 ST'Y FR. HSE. #2532 | 2½ ST'Y FR. HSE. #2528

CONST. LIMITS | R/W FENCE | 5' SIDEWALK | EXIST R/W

2" PINE | 6" PINE SHRUBS | 15" OAK | 5" CHERRY | 2" CHERRY | 4" TWIN CHERRY | 6" CHERRY | 8" MAPLE | 6" APPLE | 8" CHERRY

BRICK WALK | 2½ CONC. WALK | 7.5' SLAG DR. | 8' CONC. DR. | 2½ CONC. WALK | 5' SLAG DR.

MARY LILKO (WELL DRILLED) | ANNA STEFANIK & STEPHEN GAJTOS | 6" DRILLED WELL

25' I.P. | 109+64.97 | L.P. FND. & USED | BRICK WALL

CRAIGER AVE. 50'

S 16°-35'-23" W

℄ 109 | 108 | 107

12" WATER MAIN | 15" SAN. | 110 MH. | 111.8" SAN. | 112 | MH. 113

4" L.P. GAS | 18" MAPLE | 12" MAPLE | 6" BUCKEY | 2-6" BUCKEY | 8" CHERRY | 16" CHERRY | 10" CHERRY | 24" CHERRY | 1" SPRUCE | SHRUB | 3' CONC. | 2' CONC. WALK | 7' SLAG DRIVE | 2½ ST'Y FR. HSE. #2547 | #2545 | #2543 | SHRUB 24" CHERRY | ROSES | FLOWERS | FR. GAR.

TAYLOR AVE. 50'

℄ N 73°-27'-21" W

163 WL | 163 T

HYD. | 6" WATER MAIN | R/W FENCE | LA/R/W | 4" L.P. GAS

N 16°-35'-23" E 70.00' | 32.00' | N 45°-13'-18" W | 103.29' | 23' LT. | 172.26' CL | S 52°-04'-53" W | 68.4' 40.06' LT. | N 73°-24'-51" W 146.1' | 50.88' | 119.26' CL

1 STY. BRICK BLDG. | 120' | SLAG PARKING LOT

EXIST R/W | 40' | 45' | 45' | 25' | 25'

5-G | 8" MAPLE | 14" OAK | 18" OAK | 20" OAK | 20' CONC. DR. | 3' CONC. | SHRUB | 2 CAR. BR. GAR. | 1½ STY BR. HSE. #2603 | 120'

REPLAT OF A. POWERS ESTATE FIRST PLAT P.B. 15 PG. 74

25405 | 25406 | 25407 | 25408 | 25409 | 25410 | 25411 | 25412

PACENTRANI CLUB OF YOUNGSTOWN, OHIO, AN OHIO CORPORATION

THE FOREMOST INVESTMENT COMPANY, A PARTNERSHIP

6" CHERRY | 4" PINE | 6" CHERRY

PARCEL Nº	DEED AREA	TOTAL R.R.O.	TO BE ACQUIRED GROSS TAKE	R.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
163-WL	106,650 S.F.	NONE	45,678 S.F.	NONE	45,678 S.F.	NONE	60,972 S.F.
163-T			1,123 S.F.	NONE	1,123 S.F.		

CENTERLINE SURVEY
CURVE Nº 1 DATA
P.I. STA 694+62.64

Δ = 71°-25'-13" LT.	P = 0.53'
Ls = 200'	K = 100.00'
De = 19°-50'-00"	Xc = 199.38'
R = 3,125.22'	Yc = 2.13'
Θs = 1°-50'-00"	L.T. = 133.34'
Δc = 67°-45'-13"	S.T. = 66.67'
Lc = 3,695.65'	L.C. = 199.99'
Tc = 2,098.23'	Ts = 2,340.92'
CHc = 3,484.06'	Es = 724.32'
Ec = 630.03'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
   Δ = 1° 50' 00"
   R = 4166.82'
   T = 66.67'
   L = 133.33'
   E = 0.53'

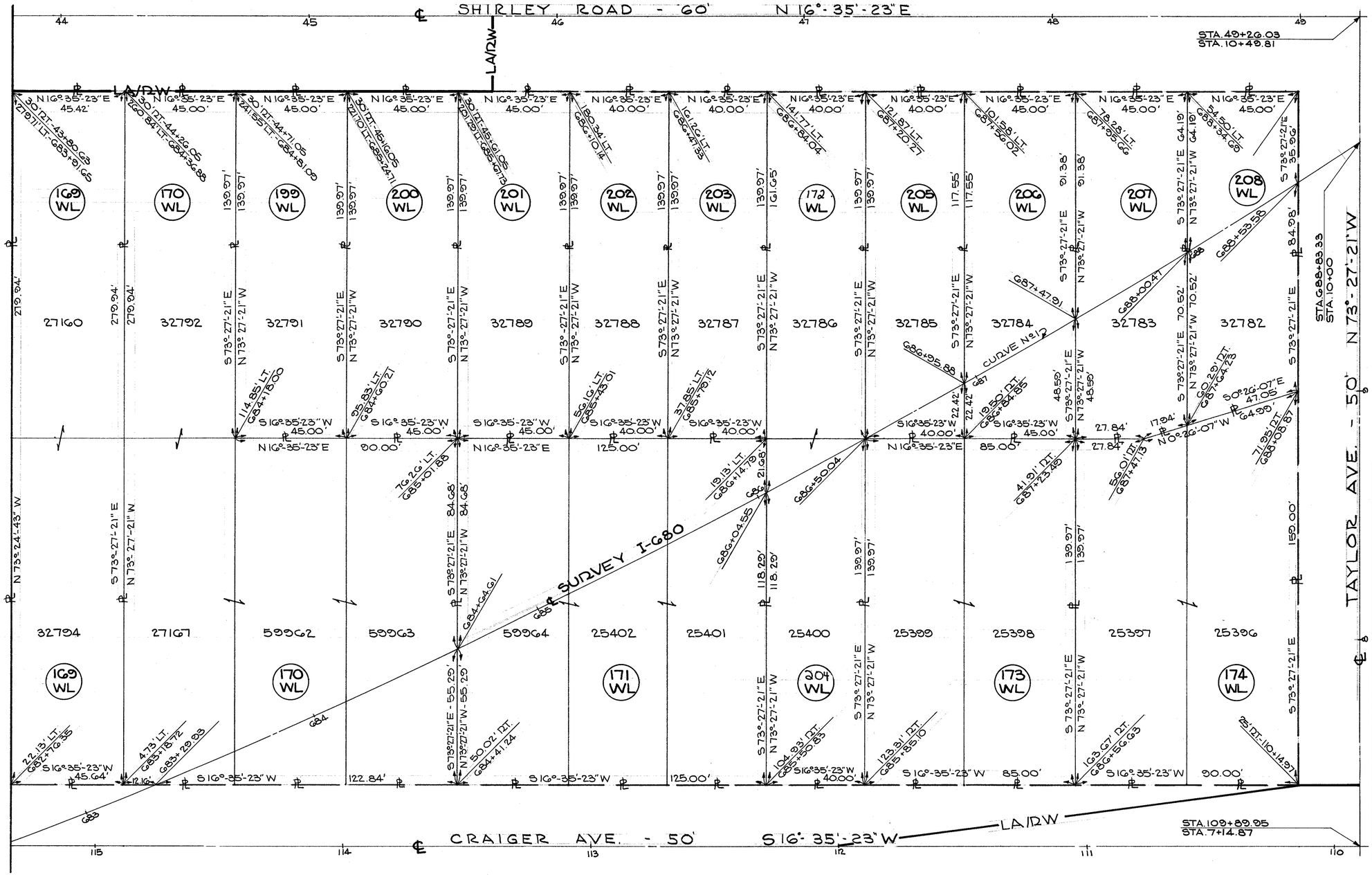
ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7-25-69	Changed All Names Previously Revised on Earlier Copies.

R/W SHEET NO. 45 OF 104

State Highway Dept. No. 4
R/W SHEET & ADMIN. SECT.
JAN 27 1969
LOGGED
CHKD. BY



PARCEL №	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED BY DEED TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
169-WL	12,584 S.F.	—	12,584 S.F.	—	12,584 S.F.	—	—
170-WL	25,200 S.F.	—	25,200 S.F.	—	25,200 S.F.	—	—
171-WL	17,500 S.F.	—	17,500 S.F.	—	17,500 S.F.	—	—
172-WL *	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
173-WL	11,900 S.F.	—	11,900 S.F.	—	11,900 S.F.	—	—
174-WL	13,192 S.F.	—	13,192 S.F.	—	13,192 S.F.	—	—
199-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
200-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
201-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
202-WL	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
203-WL	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
205-WL	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—
206-WL	9,300 S.F.	—	9,300 S.F.	—	9,300 S.F.	—	—
207-WL	5673.395 S.F.	—	5673.395 S.F.	—	5673.395 S.F.	—	—
208-WL	5,882 S.F.	—	5,882 S.F.	—	5,882 S.F.	—	—
204-WL *	5,600 S.F.	—	5,600 S.F.	—	5,600 S.F.	—	—

REVISION	DESCRIPTION	BY	DATE

FED.RD	STATE	PROJECT	
2	OH10	I-680-9(6)	

598
656

MAH-680-698
R/W PLANS
LIMITED ACCESS

46
104

SCALE
0 20 40 60 80 100

R/W SUPPLEMENTAL SHEET

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	LT.	RT.
191-S	22,290 S.F.	——	2,296 S.F.	——	2,296 S.F.	——	22,290 S.F.
192-S	10,800 S.F.	——	3,120 S.F.	——	3,120 S.F.	10,800 S.F.	——
233A-S	458,730 S.F.	——	1,951 S.F.	——	1,951 S.F.	458,730 S.F.	——
233A-X		——	1,500 S.F.	——	1,500 S.F.	——	——

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

599/656

47/104

MAH. 680- 6.98
R/W PLANS
LIMITED ACCESS

NOTE: FOR PARCEL DIMENSIONS, BEARINGS, STA-OFFSETS & AREAS SEE R/W SHEET Nº 48

MATCH SHEET NO. 45

MATCH SHEET NO. 52

NOTE: PARCEL 233A-X IS TO BE ACQUIRED TO PROVIED AN OUTLET FOR THE STORM SEWER. NO WORK IS TO BE DONE ON THIS PARCEL. THE AREA TO BE ACQUIRED IS A STEEP HILLSIDE WITH SMALL TREES AND ROCK OUTCROPING.

MACDON INDUSTRIAL & DEVELOPMENT, INC., AN OHIO CORPORATION

FRANK CERIMELE a.k.a. 185-WA CERIMELI, OWNER
185-WL JOHN DEGENERO & GLADYS L DEGENERO, HOLDERS OF LAND CONTRACT

PINE HOLLOW CREEK

233A-X

233A-S

191-S

192-S

SPALDING RD. 50'

CRAIGER AVE. 50'

HOMEWOOD AVE 50'

POWERSWAY 60'

EXIST. R/W

DIRT PARKING AREA

O.L. 1214

WOODED AREA

N 19° 43' 16" E

N 25° 11' 44" W

S 25° 11' 44" E

S 64° 48' 16" W - 10.00'

N 64° 48' 16" E - 10.00'

S 64° 48' 16" W - 30.00'

N 25° 11' 44" W - 50.00'

S 73° 24' 37" E - 115.32'

N 73° 24' 37" W - 120.00'

N 16° 35' 23" E

S 16° 35' 23" W

STA 104+07.45

STA 104+27.71

STA 105+50.00 (℄ POWERS WAY) (℄ SPALDING)

STA 15+42.45

MORRIS M. BOYD 25436

THOMAS SUCICH / LOUISE SUCICH 25434

MILDRED G. DOUGLAS 25425

JOHN VUKOVICH ET. AL. 25427

25437 25424 25423 25426 25433

KATHERINE PERLICH a.k.a. KATA PERLIC 25385

ANTHONY POLLIFRONE 25384 25383 25382

VACANT LOT 25388 25387

1½ STY. FR. HSE. #2522 — 185-WA

1½ STY. BRK. HSE. #2514

2 STY. FR. HSE #2503

1 CAR FR. GAR.

CONC. BLK. GAR.

FR. SHED

185-WL 186-WL 184-WL

RAMP "G"

CONSTRUCTION LIMITS

R/W FENCE

SCALE 0 20 40 60 80 100

COMPLETION DATE -		
REV.	DATE	DESCRIPTION
1	7-25-69	Changed All Names Previously Revised on Earlier Sepias.

R/W SHEET NO. 47 OF 104

ALL PARCELS THIS SHEET I-FUNDS

Ohio Highway Dept. Div. 4
R/W - ENGR. & ADMIN SECT.
MAR 27 1969
LOGGED
CHKD. BY

Property of the Ohio Department of Transportation
Right of Way Section
Please return to the Right of Way Section

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

600 / 656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

48 / 104

℄ SHIRLEY ROAD - 60'

STA. 49+20.03
STA. 10+49.81

STA. 55+08.80
℄ SHIRLEY RD.

℄ SURVEY I-680

STA. 685+33.33
STA. 10+00

685+13.27 G85

4.97'

3.32'

689+19.24

STA. 689+72.48
STA. 50+00

N 16°-35'-23"E 173.08'

32781

O.L. 1213

N 73°-27'-21"W

℄ TAYLOR AVE. - 50'

℄ HOMEWOOD AVE. - 50'
N 73°-24'-37"W

℄ CRAIGER AVE. - 50' S 16°-35'-23"W

LA/RW

136.65'

105.88'

105.23'

62.40'

42.40'

45.23'

45.00'

40.00'

55.00'

139.97'

99.97'

90.51' P.T.
690+58.66

℄ 43.88'
℄ 43.88'
N 34°-23'-29"W

690+10.78 P.T.

120.21' P.T.
690+85.51

144.36' P.T.
691+16.16

168.82' P.T.
691+46.30

193.55' P.T.
691+75.55

218.68' P.T.
692+05.24

243.98' P.T.
692+34.06

269.61' P.T. 692+62.44
30' R.T. 54+03.80

235.51' P.T. 693+30.39
30' R.T. 54+43.80

30' R.T. 54+83.80

94.97'

103.05'

T.B.A.
1.521 S.F.

217 WA

PEDESTRIAN POINT OF ACCESS 6' WIDE STA 54+28

PEDESTRIAN POINT OF ACCESS 6' WIDE STA 54+65

312.54' P.T. 691+81.76

S 50°-34'-12"E

335.06' P.T. 692+12.99

(L)

114.63' P.T. 688+40.21

189.47' P.T. 689+59.60

187.41' P.T. 689+59.60

139.07' P.T. 688+76.08

161.04' P.T. 688+98.09

186.17' P.T. 689+44.06

208.85' P.T. 689+15.04

233.25' P.T. 690+07.45

256.65' P.T. 690+31.55

280.25' P.T. 690+57.26

304.20' P.T. 690+56.55

328.46' P.T. 691+25.44

353.00' P.T. 691+55.92

357.68' P.T. 691+36.16

S 37°-08'-44"E 97.38'

264.32' P.T. 690+62.09

S 69°-13'-57"E 380.13'

S 15°-24'-56"E 47.17'

381.46' P.T. 690+00.97

404.73' P.T. 690+29.97

25' R.T. -100+64.97

251.22' P.T. 688+06.22
25' R.T. -105+18.85

302.70' P.T. 688+72.13
25' R.T. -106+34.95

324.62' P.T. 689+02.54
25' R.T. -107+34.95

348.26' P.T. 689+34.42
25' R.T. -107+52.45

370.83' P.T. 689+64.04
25' R.T. -107+12.45

218.44' P.T. 688+25.45
25' R.T. -105+79.95

395.72' P.T. 689+93.27
25' R.T. -106+72.45

STA. 109+89.95
STA. 7+14.87

LOT	178A WL	179 WL	180 WL	181 WL	182 WL	183 WL	184 WL	185 WL	186 WL	185 WA	217 WL	217 WA	218 LA	219 LA
	25395	25394	25393	25392	25391	25390	25389	25388						
									25387	25386	25385			
												25363	25362	25361

PARCEL Nº	DEED AREA	TOTAL PRO.	TO BE ACQUIRED GROSS TAKE	PRO. IN TAKE	NET TAKE	NET RESIDUE L.T.	R.T.
234A-WD	5,925 S.F.	NONE	665 S.F.	NONE	665 S.F.	—	—
234B-WD	4,320 S.F.	NONE	3,126 S.F.	NONE	3,126 S.F.	—	—
272-WD	10,770 S.F.	NONE	403 S.F.	NONE	403 S.F.	10,367 S.F.	—
234A-EL			5,860 S.F.	NONE	5,860 S.F.	—	—
234B-EL			1,203 S.F.	NONE	1,203 S.F.	—	—

PARCELS 234A-EL & 234B-EL - STATE FUNDS
ALL OTHER PARCELS THIS SHEET "I" FUNDS

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

601
656

49
104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 55

CH. BDG. - N 35°46'-18"E
CH. - 20.82'
D - 35.00°
ARC - 21.24'

25' LT. 45+00.02

41.68' LT. 44+22

272 WD
5G 30G
CH. BDG. - N 73°37'-08"E
MILDRED D. MARUSKIN
CH. - 29.64'
D - 45.00°
ARC - 30.21'

16' MAPLE

12" MAPLE

41.76'
N 16°35'-23"E
41.76'

70.12' LT. 44+26.05

234-B WD

234 B EL

234 A EL

646 WA

645 WA

644 WA

209C WA

234A WD

209 WA

209C WA

209 LA

200 WL

199 WL

170 WL

169 WL

168 WL

167 WL

166 WL

166A WL

201 WL

SHEET NO. 50

SEE SUPPLEMENTAL SHT Nº 51

MATCH SHEET NO. 43

SCALE 0 20 40 60 80 100

NOTE: SEE SUPPLEMENTAL SHT. Nº 44 & 46 FOR PARCEL DIMENSIONS, BEARING & STA.-OFFSETS FOR PARCELS IN THIS AREA.

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	12/5/69	PARCELS 166-WL & 167-WL CHANGED TO TOTAL TAKES
2	11/5/69	PARCEL 234A-WD & 272-WD CORRECTED DEED AREA & RESIDUE

PCLS. 234A-EL & 234B-EL ADDED 6/18/69
DELETED PCL 645 WA - SMITH 7-20-70

R/W SHEET NO. 49 OF 104

Revised Areas Pcls 166 WL & 167 WL; Added Pcl's 166 & 167 AWL
Changed All Names Previously Revised on Earlier Sepias. 7-25-69
Added Pcls. 649 WA, 645 WA, 646 WA, Pryor 5/22/70

ADDED PCL 645-WA - 4-24-73
ADDED CONSTRUCTION LIMITS TO PCLS 644 & 646 WA

NAME CHANGE PCL 644 WA - SMITH 4-7-70
NAME CHANGE PCLS. 644 WA & 646 WA - SMITH 6-10-70

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
BY
DATE

I-680 2-2

NOTE: SEE SUPPLEMENTAL SHT. No. 51 & 53 FOR PARCEL DIMENSIONS, BEARINGS & STA.-OFFSETS FOR PARCELS IN THIS AREA.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

602 / 656

50 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY
CURVE No. 1 DATA
P.I. STA 694+62.64

Δ = 71°25'13" LT	CH = 3484.06'
L_s = 200.00'	E_c = 639.05'
D_c = 1°50'00"	L.T. = 133.34'
R = 3125.22'	S.T. = 66.67'
Θ_s = 1°50'00"	L.C. = 199.99'
Δ_c = 67°45'13"	T_s = 2346.92'
L_c = 3695.65'	E_s = 724.32'
T_c = 2098.23'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1. P.I. STA 672+49.06
2. P.I. STA 710+78.04
Δ = 1°50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

MATCH SHEET NO. 56

MATCH SHEET NO. 49

MATCH SHEET NO. 52

COOPER AVE. N 34°-38'-33" W 50'

EXIST. R/W

5' CONC. WALK

6" WATER MAIN

15" SAN.

I.P. FND. & USED

9' SLAG DR.

BRK. GAR.

THOMAS M. TORBA / MARIE TORBA

THE BRUCE R. CAMPBELL et al. PLAT OF LOTS PB. 17 PG. 87

ANDREW J. LESKO / ANNA M. LESKO

RES. POINT OF ACCESS 10' WIDE STA. 41+86.5

PEDESTRIAN POINT OF ACCESS 6' WIDE STA. 48+28

PETER J. SHUNTICH / HELEN A. SHUNTICH

SUSIE BALI (LANDLOCKED)

ANNA C. SICH (LANDLOCKED)

EUGENE C. NAPLES / THERESA F. NAPLES

32801

32802

32803

32800

32797

32796

32798

THOMAS J. BASIC / DOLORES MARIE BASIC

BRICK BLDG. # 2630

AGNES WALLOW

2 ST'Y FR. HSE. #2622

1 ST'Y FR. HSE.

2½ ST'Y FR. HSE. #2618

2½ ST'Y BR. HSE. #2616

2½ ST'Y FR. HSE. #2612

2 ST'Y FR. HSE. #2608

2 ST'Y DR. HSE. #2606

14.5' CONC. DR. (TO BE ABANDONED)

PARKING AREA

63.15'

209C LA

209C WA

209 LA

237 LA

238 LA

239 LA

240 LA

240 S

241 WA

241 S

241 WL

242 WA

242 S

242 WL

243 WA

243 S

243 WL

244-A WL

245 WL

246 WL

247A WL

JOHN CALVIN CHURCH

THE FIRST SLOVAK PRESBYTERIAN CHURCH OF YOUNGSTOWN, OHIO

4" APPLE 12" APPLE

ROSE CHURCHILL LIFE USUFRUCT ESTATE / JULIANA F. EREK, 26275

MONUMENT ASSEMBLY

TAYLOR AVE. N 34°-38'-36" W 40'

EXIST. R/W

6" WATER MAIN

12" L.P. GAS

3" L.P. GAS

MILTON A. ROEMISCH TRUSTEE

32779

JOHN HARMOCI / SUSIE HARMOCI

32778

32777

32760

LILAC BUSHES

SHRUBS

ROCK CUT CONSTRUCTION

G' CONC. SIDEWALK

G' CONC. CURB

8" WATER MAIN

N 16°-35'-23" E

SHIRLEY ROAD 60'

STA. 43+34.77
STA. 30+02.02

STA. 45+26.03
STA. 10+48.81

STA. 689+72.48
STA. 50+00

12" WATER MAIN

15" SAN.

12" GUM

20' SYCAMORES

18' SYCAMORE

I.P. FND. & USED

177.74'

R/W FENCE

EXIST. R/W 45'

THE BRUCE R. CAMPBELL ET. AL PLAT OF LOTS PB. 17 PG. 87

#2627 1 ST'Y FR. HSE.

#2623 2½ ST'Y FR. HSE.

#2621 2½ ST'Y FR. HSE.

#2615 2 ST'Y FR. HSE.

#2611 2½ ST'Y BR. HSE.

#2605 2 ST'Y FR. HSE.

#2631 2 ST'Y FR. HSE.

#2535 2 ST'Y FR. HSE.

#2531 2½ ST'Y FR. HSE.

MAZIE E. CAPLINGER

CATHERINE ONDERKO

JAMES RITCHIE / SUSAN RITCHIE

AMELIA AGOSTINELLI

PAUL HADOVSKY

MICHAEL SABO / JOHN A. SABO / EDWARD Wm. SABO / MARGARET E. STEVENSON

SUSIE VETRECIN

MARY MANSKY a.k.a. MARY CIKA MANSKI & JOSEPH J. MANSKY

EDWARD J. HUDAK / CATHERINE HUDAK

PETER GUIDO a.k.a. PETER J. GUIDO / AMELIA GUIDO a.k.a. AMELIA E. GUIDO

MARY YOSAY

172 WL

174 WL

202 WL

203 WL

205 WL

206 WL

207 WL

208 WL

210 WL

211 WL

212 WL

213 WL

CURVE No. 2

L = 688.33'
T = 344.79'
R = 4707'

TO LOC. TANG.

O.L. 12.13

TAYLOR AVE. N 73°-27'-21" W 50'

12" WATER MAIN

4" L.P. GAS

EXIST. R/W

25' 25'

SURVEY I-680

NOTE: SEE SUPPLEMENTAL SHT. No. 46 & 48 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO. 45

SCALE 0 20 40 60 80 100

Changed Pcl. 243-T- to 243-WA 10-1-70

Changed Pcl 243 WA to 243 T, White 8-17-70

COMPLETION DATE —			
REV.	DATE	DESCRIPTION	
1	7-25-69	Changed All Names Previously Revised on Earlier Sepias	M.K.M.

ALL PARCELS THIS SHEET I-FUNDS

R/W SHEET NO. 50 OF 104

State Highway Dept. Div. 4 R/W Engr. & Admin. Sect.
Approved JUN 27 1969
Checked ... Signed By ...

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

603 / 656

51 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

STA 44+92.80 (℄ SHIRLEY RD)
STA 10+00 (℄ COOPER AVE.)

℄ COOPER AVE. - 50' N 34°-38'-33"W

EXIST. R/W LINE CURVE DATA
CH. BRG. S 80° 58' 25" W
CH. = 18.08' R. = 10.00'
ARC. = 22.47'

25' RT. 10+79.41

N 34°38'33"W 8.48'

25' RT. 11+43.11

25' RT. 10+87.80

R/W LINE CURVE DATA
CH. BRG. S 85° 41' 26" E
CH. = 23.41' R. = 35.00'
ARC. = 23.93'

209D WD

R/W

30' LT. 45+60.81

30' LT. 45+72.31

209C LA

209C WA

T.B.A. = 2182 S.F.

70.78' LT. 46+38.21

N 16°35'23"W 2.50'

25' RT. 11+30.71

LA

209 LA

30' LT. 46+73.21

237 LA

30' LT. 47+13.21

238 LA

30' LT. 47+53.21

239 LA

240 LA

135.09' LT. G88+18.61
30' LT. 48+00.05

30' LT. 47+93.21

240 S

138.77' LT. G88+62.17

S 73°24'37"E

241 WA

241 S

N 20°49'52"W 41.70'

25.37'

N 20°49'52"W 50.37'

S 20°37'07"E 50.22'

N 20°37'07"W 50.22'

121.11' LT. G88+99.57

242 WA

242 S

182.44' LT. G89+14.77

167.84' LT. G89+32.72

LANDLOCKED 4,086 S.F.

142.26' LT. G89+67.48

58.41'

243 T *

193.10' LT. G90+02.92

N 16°35'23"E 59.49'

158.25' LT. G90+54.04

32.35'

N 34°38'36"W 170.06'

164.47' LT. G90+87.06

148.54' LT. G90+91.86

154.14' LT. G91+44.52

148.50' LT. G91+48.96

N 20°49'52"W

123.98' LT. G89+52.16

S 20°37'07"E

N 20°37'07"W

243 S

N 55° 21.2' E 139.45' 190.98' 221.26'

40.16'

6.90 + 97.42 127.55'

243 WD

243 WL

241 WL

242 WL

S 16°35'23"E 140.00'

S 73°24'37"E 60.74'

N 73°24'37"W 60.74'

95.72' LT. G88+82.70

73.67' LT. G89+17.00

62.51' LT. G89+55.97

20.00'

S 34°-38'-36" E 249.53'

N 16°-35'-23" E 48.41'

STA 49+34.77
STA. 30+80.02

℄ TAYLOR AVE. - 40' N 34°-38'-36"W

2G282 | 43G45 | 43G46 | 2G281

R/W N 34°38'36"W 50.00'

226.22' LT. G91+34.90

226.52' LT. G92+41.56

85.00'

273 WD

R/W 60.00'

N 34°38'36"W

127.22' LT. G91+51.15

126.61' LT. G91+52.73

35.00' N 55°21'24"E

30.00' S 34°38'36"E

133.13' LT. G92+15.92

143.15' LT. G92+65.18

N 55°21'24"E

LA/R/W

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDE LT.	NET RESIDE RT.
209C-WD	4,324 S.F.	NONE	137 S.F.	NONE	137 S.F.	4,187 S.F.	—
209C-LA	4,324 S.F.	NONE	—	—	—		
209 -LA	4,907 S.F.	NONE	—	—	—	4,907 S.F.	—
237- LA	5,845 S.F.	NONE	—	—	—	5,845 S.F.	—
238-LA	5,639 S.F.	NONE	—	—	—	5,639 S.F.	—
239-LA	5,639 S.F.	NONE	—	—	—	5,639 S.F.	—
240-LA	5,639 S.F.	NONE	—	—	—	5,639 S.F.	—
240-S			421 S.F.	—	421 S.F.		
241-WL	5,670 S.F.	NONE	607 S.F.	—	607 S.F.	5,063 S.F.(L)	—
241- S			1,020 S.F.	—	1,020 S.F.		
242-WL	5,908 S.F.	NONE	1,822 S.F.	—	1,822 S.F.	4,086 S.F.(L)	—
242-S			1,029 S.F.	—	1,029 S.F.		
243-WL	34,424 S.F.	NONE	7,298 S.F.	—	7,298 S.F.	25,134 S.F.	—
243-WD			1,992 S.F.	—	1,992 S.F.		
243-S			3,771 S.F.	—	3,771 S.F.		
273-WD	15,000 S.F.	NONE	4,250 S.F.	—	4,250 S.F.	10,750 S.F.	—
243-T*			5,315 S.F.		5,315 S.F.		

Area of overlap:
Pcl 243-T overlaps
2685 sq. ft. of Pcl. 243-S

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
1.	Changed Pcl 243WA to "T"	EW	8-17-70

R/W SUPPLEMENTAL SHEET

STATE HIGHWAY DEPT. OH. 4
R/W ENGR & ADMIN SECT.
DATE OCT 27 1969
LOGGED
CHKD. BW SK.

NOTE: SEE SUPPLEMENTAL SHT No 53 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO. 56

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

604/656

52/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY CURVE No 1 DATA
P.I. STA 694+62.64

Δ	71° 25' 18" LT	T_s	2098.23'
L_s	200.00'	CH_s	3484.06'
D_c	1° 50' 00"	E_s	639.03'
R	3125.22'	L.T.	133.34'
Θ_s	1° 50' 00"	S.T.	66.67'
Δ_c	67° 45' 18"	L.C.	199.99'
L_c	3695.65'	T_s	2346.92'

E_s = 724.32'

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 672+49.06
2 P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED PRO. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
254-WD	4,800 S.F.	NONE	79 S.F.	NONE	79 S.F.		
254-EL			4,721 S.F.	NONE	4,721 S.F.		
255-WA	4,860 S.F.	NONE	400 S.F.	NONE	400 S.F.		4,860 S.F.

NOTE: SEE SUPPLEMENTAL SHT. No 48 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

MATCH SHEET NO. 47

SCALE 0 20 40 60 80 100

MATCH SHEET NO. 50

MATCH SHEET NO. 54

REVISIONS:
3 7-28-69 Changed All Names Previously Revised on Earlier Sepias. Name Change Pcl 218 LA 8-18-69 M.K.M.

REV	DATE	DESCRIPTION
		COMPLETION DATE -
1	7/15/69	DELETED WA PCL'S 221 THRU 227
2	6/18/86	DELETED 254-T, ADDED 254-EL

PARCEL 254-EL STATE FUNDS
ALL OTHER PARCELS - I-FUNDS

R/W SHEET NO. 52 OF 104

State Highway Dept. Ohio 4
R/W Right & Access Sect.
JUN 27 1988
Logged
Sent By

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

605 / 656

53 / 104

STA. 49+34.77 (℄ SHIRLEY RD)
STA. 30+88.02 (℄ TAYLOR AVE.)

℄ TAYLOR AVE. - 40' N 34°-38'-36" W

31 32 33 34 35 36

LA/RW

244A WD · 245 WL · 246 WL · 278 WL · 279 WL · 280 WL · 281 WL · 282 WL

32778 · 32777 · 32779 · 26275 · 26274 · 26273 · 26272 · 26271 · 26270 · 32780

℄ SURVEY I-680

CURVE N21

℄ SHIRLEY ROAD - 60' N 16°-35'-23" E

247A WL · 247 WL · 248 WL · 249 WL · 250 WL · 251 WL · 252 WL · 248A WL

25343 · 25342 · 25348 · 25347 · 25346 · 25345 · 25344

LA/RW

℄ HOMEWOOD AVE N 73°-24'-37" W

STA. 35+33.24

CENTERLINE SURVEY
CURVE N21 DATA
P.I. STA. 694+62.64

Δ = 71°25'-13" LT.	CH = 3,484.06'
Ls = 200'	Ec = 699.03'
Dc = 1°50'00"	LT. = 1338.34'
R = 3,125.22'	S.T. = 666.67'
θs = 1°50'00"	L.C. = 1999.99'
Δc = 67°45'13"	Ts = 2,346.92'
Lc = 3,695.65'	Es = 724.32'
Tc = 2,098.23'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1. P.I. STA. 672+49.06
2. P.I. STA. 710+78.04
   Δ = 19°50'00" LT.
   R = 4,166.82'
   T = 666.67'
   L = 1333.33'
   E = 53.53'

SCALE 0 20 40 60 80 100

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
244A-WL	13,035 S.F.	—	13,035 S.F.	—	13,035 S.F.	—	—
245 - WL	11,000 S.F.	—	11,000 S.F.	—	11,000 S.F.	—	—
246 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
247 - WL	4,485.8 S.F.	—	4,485.8 S.F.	—	4,485.8 S.F.	—	—
247A WL	2,542 S.F.	—	2,542 S.F.	—	2,542 S.F.	—	—
248A-WL	11,583 S.F.	—	11,583 S.F.	—	11,583 S.F.	—	—
248 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
249 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
250 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
251 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
252 - WL	4,800 S.F.	—	4,800 S.F.	—	4,800 S.F.	—	—
278 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
279 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
280 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
281 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
282 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
292 - WL	7,494 S.F.	—	7,494 S.F.	—	7,494 S.F.	—	—

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

Ohio Highway Dept. Div. of HWY. ENGR & ADMIN SECT.
JAN 27 1969
L-09649
Cross-ref. SM Pl.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
233-WD	10,609 S.F.	NONE	185 S.F.	NONE	185 S.F.	——	10,591 S.F.
233-T			40 S.F.	NONE	40 S.F.		
261-WD	71,915 S.F.	NONE	14 S.F.	NONE	14 S.F.	71,901 S.F.	——
261-T			650 S.F.	NONE	650 S.F.		
261-WA			29 S.F.	NONE	29 S.F.		
261A-WA			111 S.F.	NONE	111 S.F.		

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

606
656

54
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 52

ANTHONY PAVLICH
MARGARET PAVLICH

REPLAT OF A. POWERS ESTATE
P.B. 15 PG. 74

SLAG PARKING

240.5' 212.3' 184.1' 155.5' 127.7' 99.5'

25321 25320 25319 25318 43594 43593 43592

430.1'

1 STY. BLK BLDG.

O. L. 572

50" WILLOW

SCRUB TREES

S 8° 35' E

TELEPHONE POLE CURB

TELE. POLE CUP #8

10" APPLE

8" ELM

2-6" ELM

40' 40' 40' 40' 40'

EXIST. R/W

261A WA

261 WA

37' LT 60+10

37' LT 60+14.5

12" CONC. DRIVE

12" APPLE

10" HOPE

10" OAK

8" APPLE

10" ASPEN

12" WILLOW

MARGARET PAVLICH

BR. GAR.

261 T

SLAG DRIVE

40' LT 61+35

S73°24'37"W-10.00'

186.25'

N16°35'23"E 65.00'

1 STY BR & BLK. # 1751

114.28'

CONC.

80' LT 62+00

N73°24'37"E 10.00'

30' LT 62+00

2 STY BR. BLDG.

261 WD

37' EXIST. R/W

ASPH. PARK.

5' CONC. WALK

STEEL POST

4" GAS

12" LP GAS

6" LP GAS

30'

8" LP GAS

12" H.P. GAS

3" LP GAS

MH

12" H.P. GAS

DESIGN

8" WATER

6" CONC. SIDEWALK

S 16°35'23"W 65.00'

ELEC. VAULT

3" LP GAS

6" LP GAS

+SIGN

8" WATER

CB

SHIRLEY RD. (60')

N 16°-35'-23"E

30' LT 60+10

30' LT 60+14.5

30' LT 61+90

30' LT 62+30

55+00 60+00 61+00 62+00

4" H.P. GAS

15" COMB.

MONUMENT ASSEMBLY

STA 62+91.05 (℄ SHIRLEY)
STA 54+84.11 (℄ POWERS WAY)

+SIGN

6" LP GAS

12" LP GAS

SIGN

CONC. WALL

6" CONC. SIDEWALK

EXIST. R/W

4" CRAB APPLE

I.P. FND. & USED

233 T

233 WD

8" LP GAS

POLAND AVE. (60')

4" VEW

2" PINE

2½ STY FR. # 2405

JOHN POLLOCK & MADY POLLOCK

FENCE

SLAG PARKING

ROCCO POCHIRO & JEAN POCHIRO

1 STY. BR. BLDG.

1 STY. BR. BLDG.

OL. 574

EAST OHIO GAS COMPANY

STONE WALL

THE OHIO EDISON CO.

12" APPLE

166.7'

6' CONC. SIDEWALK

30'

54'

80'

MH

POWERS WAY (60')

25352 25351 25350 25371

120.92' 101.84' 82.72' 63.64'

2-6" CHERRY

3" PEACH

2" CHERRY

6" PLUM

3" PEACH

6" CHERRY

MINNIE R. WINTER

BUSHES

CYCLONE FENCE

EXIST. R/W

N 25° 11' 44" W

12" WATER

+SIGN

5' CONC. SIDEWALK

20" H.P. GAS

6" LP GAS

8" LP GAS

FF. SWEO

1 CONC.

12" ELM

16" ELM

18" ELM

20" ELM

SLAG DR.

SCALE
0 20 40 60 80 100

CH. BRG.-N1°25'04"E
CH.-14.13' R-27.00'
ARC-14.30'

30' LT 62+61.84

S52°42'45"E 3.35'

30' LT 62+68.20

S16°35'23"W 12.24'

30' LT 62+80.44

PARCEL 261-WD

N16°35'23"E-11.34'

30' RT 62+01.12

30' RT - 62+12.46
30' LT - 54+05.52

CH. BRG. S50°26'24"W
CH.-7.80' R-7.00'
ARC-8.27'

S25°11'44"E - 6.52'

N72°07'08"W-10.34'

30' LT 53+90

30' LT 53+99.00

S25°11'44"E-9.00'

PARCELS 233-WD & 233-T

ALL PARCELS THIS SHEET
100% CITY FUNDS

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7/25/69	DELETED 228-WA
2	7-28-69	Changed All Names Previously Revised on Earlier Copies

R/W SHEET NO. 54 OF 104

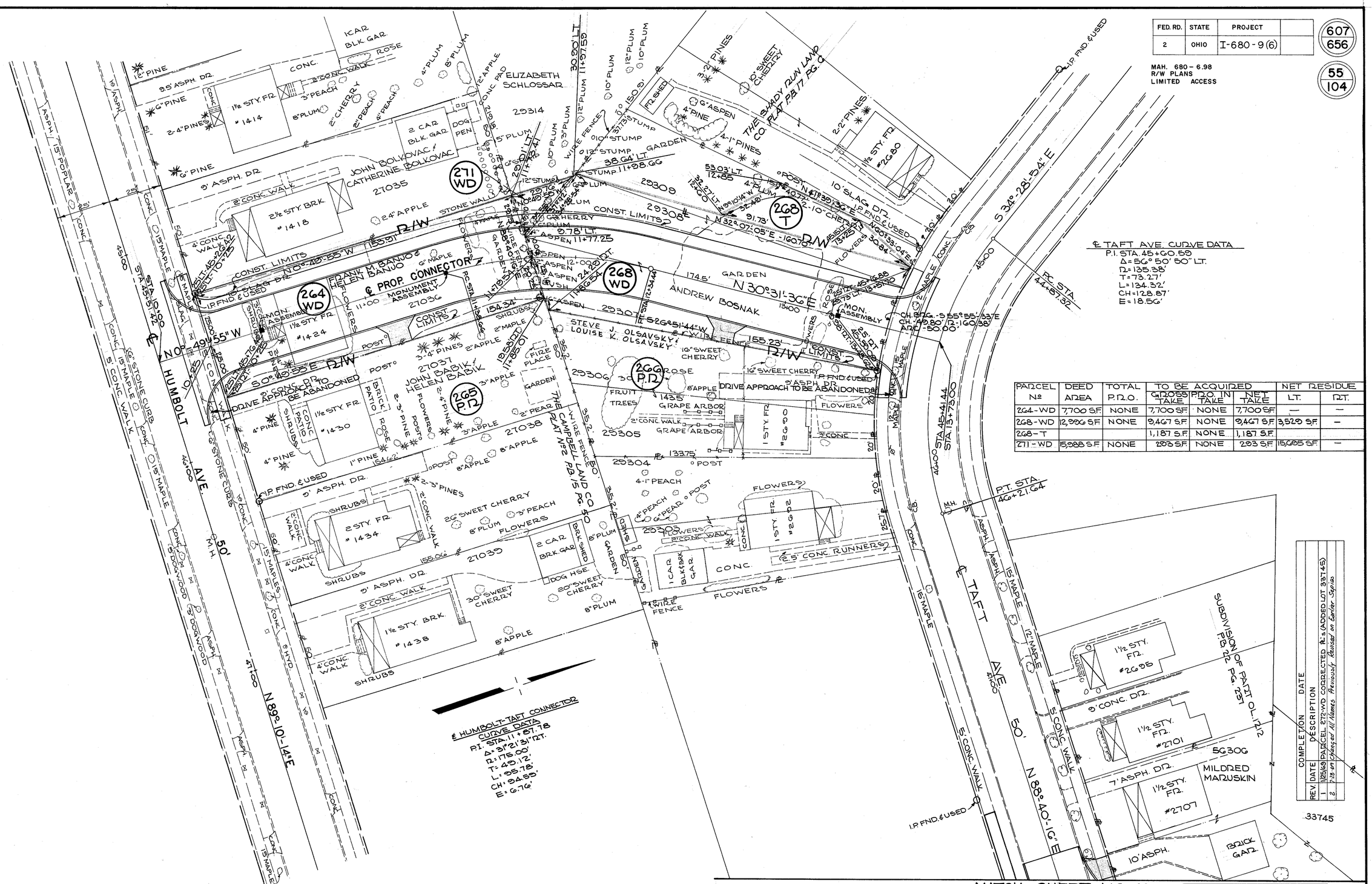
STATE HIGHWAY DEPT. OF OHIO
R/W - ENGR. & ADJUST. SECT.
JAN 27 1969
L-3668(5)
CHKD. BW DR.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

607
656

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

55
104



PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
264-WD	7,700 S.F.	NONE	7,700 S.F.	NONE	7,700 S.F.	—	—
268-WD	12,996 S.F.	NONE	9,467 S.F.	NONE	9,467 S.F.	3,529 S.F.	—
268-T			1,187 S.F.	NONE	1,187 S.F.		
271-WD	15,988 S.F.	NONE	293 S.F.	NONE	293 S.F.	15,695 S.F.	—

REV.	DATE	DESCRIPTION	COMPLETION DATE
1	1/25/69	PARCEL 272-WD CORRECTED R's (ADDED LOT 33745)	
2	7-28-69	Changed All Names Previously Revised on Earlier Sepias	

MATCH SHEET NO. 49

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

R/W SHEET NO. 55 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

608
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

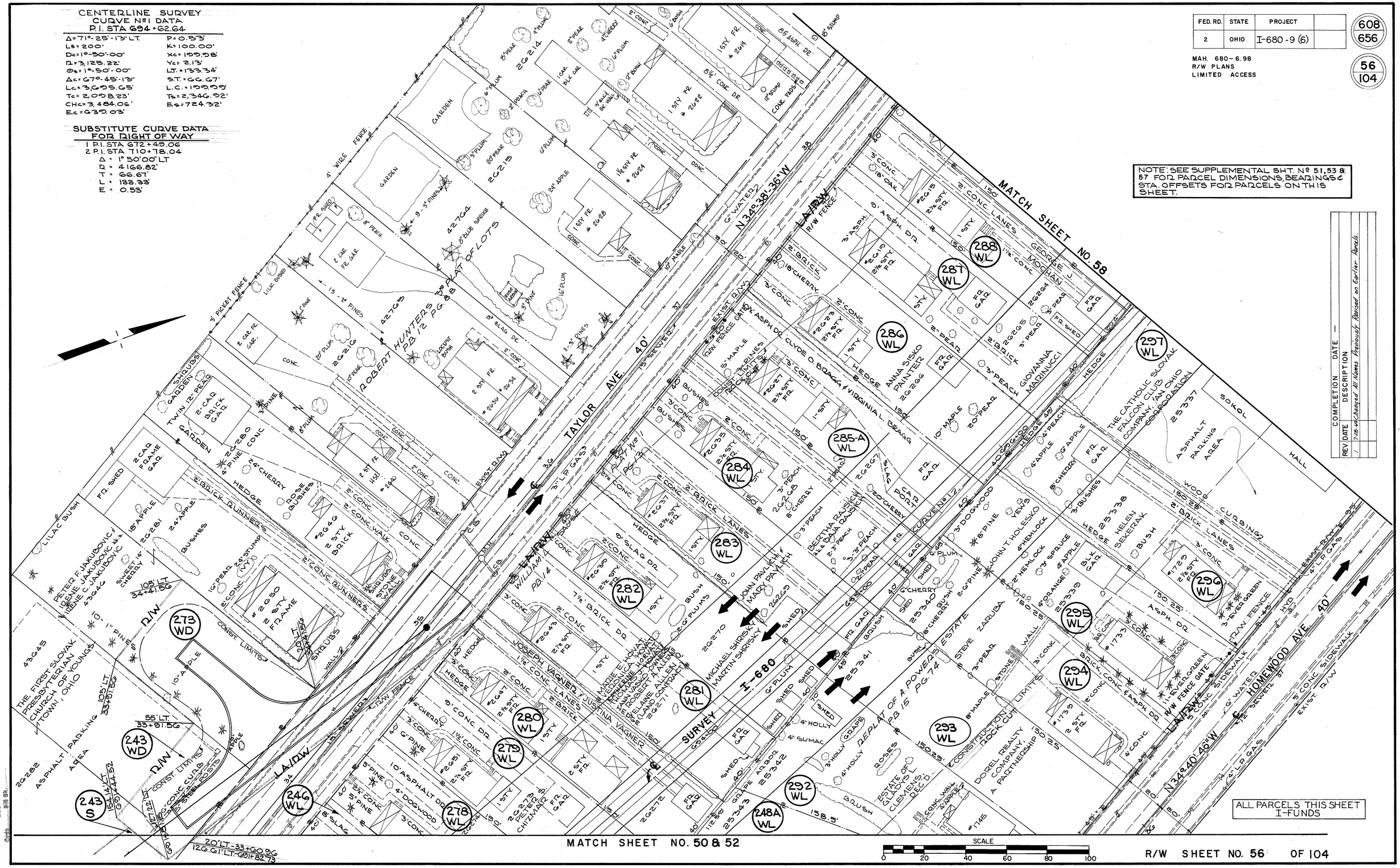
56
104

CENTERLINE SURVEY
CURVE No. 1 DATA
P.I. STA 694+62.64

Δ=71°-25'-13" LT.	P=0.53'
Ls=200'	K=100.00'
Dc=1°-50'-00"	Xc=199.98'
R=3,125.22'	Yc=2.13'
Θs=1°-50'-00"	LT.=133.34'
Δc=67°-45'-13"	S.T.=66.67'
Lc=3,695.65'	L.C.=199.99'
Tc=2,098.23'	Ts=2,346.92'
CHc=3,484.06'	Es=724.32'
Ec=639.03'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1 P.I. STA 672+49.06
2 P.I. STA 710+78.04
Δ = 1° 50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

NOTE: SEE SUPPLEMENTAL SHT. No. 51, 53 & 57 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.



COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	7-28-69	Changed All Names Previously Revised on Earlier Parcels.

R/W SHEET NO. 56 OF 104

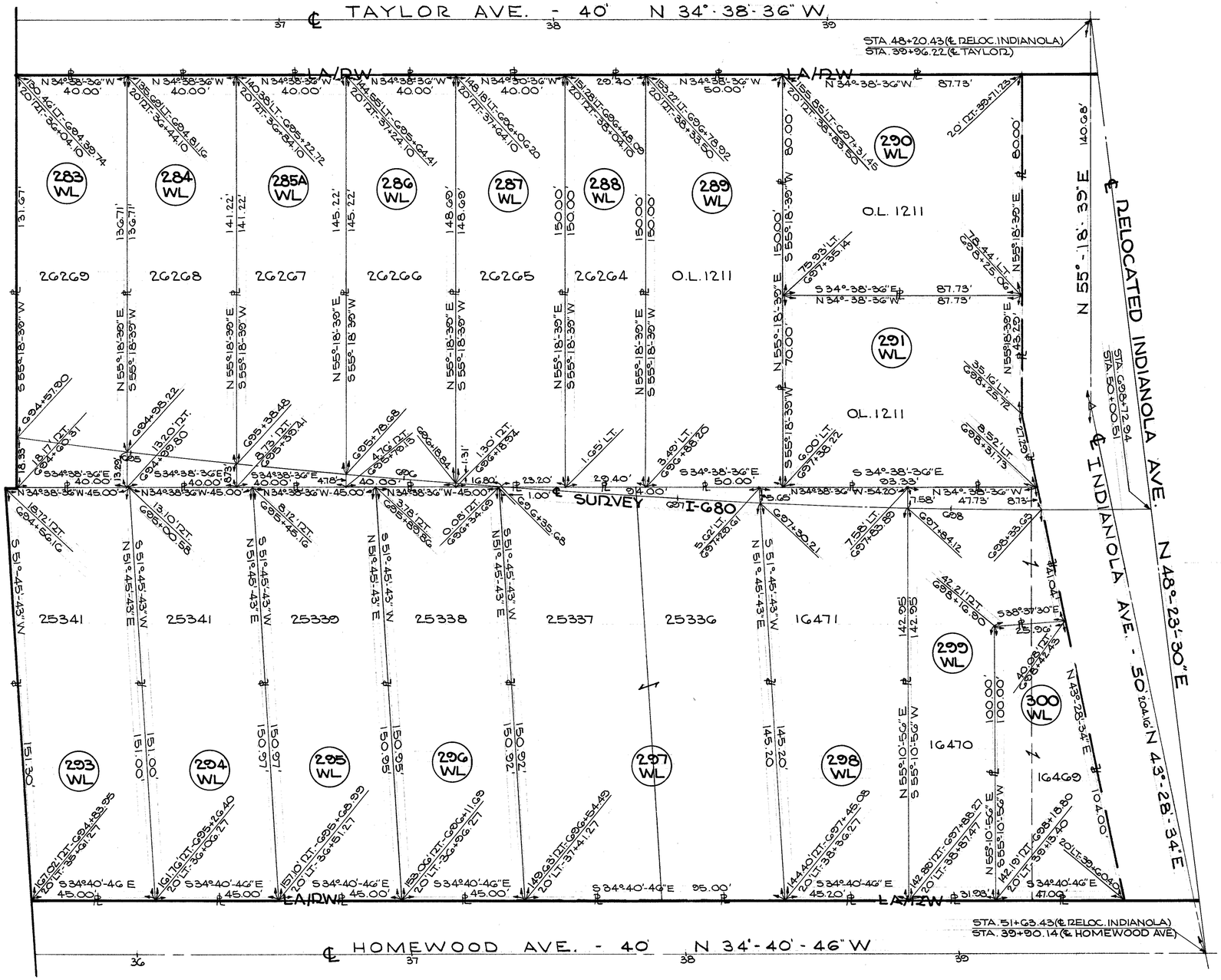
Ohio Highway Dept. Div. 4
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
Cards
Sht. Sh.

FED. RD.	STATE	PROJECT	
2	OH10	I-G80-9(G)	

609
656

57
102

MAH. G80-G.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
283-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
284-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
285A-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
286-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
287-WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
288-WL	4,410 S.F.	—	4,410 S.F.	—	4,410 S.F.	—	—
289-WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
290-WL	7,028 S.F.	—	7,028 S.F.	—	7,028 S.F.	—	—
291-WL	6,228 S.F.	—	6,228 S.F.	—	6,228 S.F.	—	—
293-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
294-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
295-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
296-WL	6,761 S.F.	—	6,761 S.F.	—	6,761 S.F.	—	—
297-WL	14,250 S.F.	—	14,250 S.F.	—	14,250 S.F.	—	—
298-WL	7,440 S.F.	—	7,440 S.F.	—	7,440 S.F.	—	—
299-WL	5,850 S.F.	—	5,850 S.F.	—	5,850 S.F.	—	—
300-WL	3,648 S.F.	—	3,648 S.F.	—	3,648 S.F.	—	—

CENTERLINE SURVEY
CURVE Nº1 DATA
P.I. STA. G04+62.64

Δ = 71° 25' 13" LT.
L_s = 200'
D_c = 1° 50' 00"
R = 3,125.22'
Θ_s = 1° 50' 00"
Δ_c = 67° 45' 13"
L_c = 3,685.65'
T_c = 2,098.23'
CH_c = 3,484.06'
E_c = 638.03'
L.T. = 133.34'
S.T. = 66.67'
L.C. = 199.99'
T_s = 2,346.92'
E_s = 724.32'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA. 672+49.06
2 P.I. STA. 710+78.04
Δ = 1° 50' 00" LT.
R = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

CENTERLINE SURVEY
CURVE Nº1 DATA
P.I. STA G94+62.64

Δ = 71°25'13" LT
L_s = 200.00'
D_c = 1°50'00"
R = 3125.22'
θ_s = 1°50'00"
Δ_c = 67°45'13"
L_c = 3695.65'
T_c = 2098.23'
CH_c = 3484.06'
E_c = 639.03'
L.T. = 133.34'
S.T. = 66.67'
L.C. = 199.99'
T_s = 2346.92'
E_s = 724.32'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1 P.I. STA G72+45.06
2 P.I. STA 710+78.04
Δ = 1°50'00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

NOTE: SEE SUPPLEMENTAL SHT. Nº 57 & 59 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

610
656

58
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 56

MATCH SHEET NO. 60

TAYLOR AVE. 40'

HOMEWOOD AVE. 40'

INDIANOLA AVE. 50'

RELOC.

SURVEY I-680

CURVE Nº1

ROBERT HUNTER'S 2ND PLAT OF LOTS P.B. 6 PG. 45

ROBERT HUNTER'S 1ST PLAT OF LOTS P.B. 3 PG. 167

2ND SUBDIVISION OF LOTS IN CITY OUTLOT Nº 570 P.B. 11 PG. 22

PT. O.L. 1211

289 WL — JAMES E. GREGORY — 87.85' — 8 WAL.NUT — HEDGE
290 WL — 2½-STY. BRICK #2609 — CONST. LIMITS — 2-STY. F.R. #2605 — F.R. GARAGE — 24" ELM — 4 SUMAC — ROSE — PUMP & WELL — 10" MAPLE
291 WL — WILLIAM A. MOKROVICH, MARY ANN MOKROVICH — 12" BUCKEYE — BLOCK SHED — BLOCK GAR. — GRAPE ARBOR — 4-PEACHES — F.R. GAR.
292 WL — GEORGE ADORNATO, SERENA ADORNATO — 15" PEAR — 3 PEAR BUSHES — 1-STY. F.R. #1511 — STONE WALL — BR. WALL
299 WL — ANNA STARON — 16471 — 5-4" HEMLOCKS — 20" CHERRY — 10" WALNUT — 25336 ASPHALT PARKING LOT
300 WL — 16470 STEVEN MOTOSIKO & HOWARD MOORE — OLD FOUNDATION — 6" PLUM — PINE TREES — 28" — 8" SYCAMORE
297 WL — SOKOL HALL — CONST. LIMITS — 2-STY. F.R. #1713 — 2½-STY. F.R. #1709 — DIRT DR. — CONC. PATIO — CONC. WALL
298 WL — CONC. PATIO — ST. WALL — 2-STY. BRICK #1525 — JAMES BELLA, MARY BELLA — BLOCK PATIO — HEDGE — ROSES — FLOWER BEDS — CONC. WALL — 47' — 150.25'
THE CATHOLIC SLOVAK FALCON CLUB COMPANY, AN OHIO CORPORATION — PIPES — CONC.
321 WL — 2-STY. BRICK #2543 — 1½-STY. DUPLEX #2541 — 4 SUMAC — 4 PINE — ROSE — 12' APPLE — 6' PINE — BUSH — 30' ELM — 24' APPLE — HEDGE — 2' CONC. LANES
322 WL — HELEN NOVOTNY — PT. O.L. 1211 — 10" ELM — 14' APPLE — 2' STONE — CONC. PATIO — 1½-STY. BRICK DUPLEX #2539 — 2' CONC.
324 WL — JOHN TEKAC — PT. O.L. 1211 — 2-STY. F.R. #2537 — 1½-STY. — CONC. — 8' APPLE — 8' PLUM — 6' PLUMS — PUMP & WELL — ROSES — 2' CHERRY — 4' CHERRY — 2' PLUM — 4' PLUM — 10" APPLE — 3-BUSHES — 2' CONC. — 4' CONC.
325 WL — ELLEN SCHRAIDER & JOHN M. SCHRAIDER — 26195 — 50' FLOWER BEDS — 3' CONC. — 2-STY. F.R. #2527 — 1½-STY. F.R. — 3' CONC. — 1-8" DSN — CONC. — ASH DR. — 150' — HEDGE — FENCE
326 WL — PAUL HABOVSKY — 30" CHERRY — 4" CHERRY — 30" SYCAMORE — 2-STY. F.R. #2517 — BUSHES — SLAG DR. — 6" APPLE — 28" MAPLE — BUSH — 18" CHERRY — 2" CHERRY — 2" CONC. LANES
327 WL — 26192 BRUSH — 26191 — 18" MAPLE — 8" MAPLE — 3" PLUM — 3" APPLE — 24" MAPLE — 30" MAPLE — 8" APPLE — 3" PEAR — ROSE — 150'
328 WL — HELEN M. LASKEY — BUSH — 14" CHERRY — FR. GAR. — 10' WOOD PATIO — 3 BUSHES — 2" MAPLE — WILLIAM WELDON & JENNIE WELDON — 18" CHERRY — 6" CHERRY — 4" PLUM — 14" PLUM — 16" CHERRY — 12" PEAR — 26188 — 26187
303 WL — GEORGE CHAMER a.k.a. GEORGE CSAMER — 16466 — 16465 — 8" PEAR — 8" PLUM — 16" MAPLE — 10" PEAR — 2-ROSES — 2-EVERGN. — 3-SAPLINGS — 150' — HEDGE — FENCE — 2' CONC.
304 WL — MICHAEL REDUCA a.k.a. MICHAEL R. REDUCA EXECUTOR OF THE ESTATE OF CATHERINE REDUCA, DECEASED — 16463 — 28" MAPLE — SM. APPLE — 3" PEAR — 2-STY. F.R. #1683 — 2½ STY. F.R. #1689 — 2-STY. F.R. #1681 — 2-STY. F.R. #1677 — 3' CONC. — 4' CONC. — SHRUBS — CONC. PATIO — 8' ASPHALT DR. — BRICK WALL
305 WL — JOHN JANDROKOVIC & KATHERINE JANDROKOVIC — 16463 — 22 MAPLE — ROSE — BUSH — 2-STY. F.R. #1673 — 2½-STY. F.R. #1671 — 2' CONC. — 4' CONC. — 8' ASPHALT DR. — CONC. WALL — RAMP "A"
306 WL — KATHERINE KOSHANJ PETRENCHICK a.k.a. KATARINA PETRENCHICK — 16462 — 16461 — BUSHES — PUMP & WELL — 2-STY. F.R. #1667 — 2½-STY. F.R. #1661 — 7' ASPH. DR. — 6' ASPH. DR. — 4' CONC. — 5' CONC. — 2' CONC. — 752
307 WL — FRANK V. GURGOS, MARY B. GURGOS — 16462 — FR. GAR. — STONE WALL — 16460 — 12" PEAR — 16459 — BUSH — 20" CHERRY — PETER J. KICOS, GUARDIAN FOR JOHN KALAFUT, INCOMPETENT
308 WL — FR. GAR. — FR. SHED — 6' PLUM
309 WL — STEVE R. KOVACH, ALICE L. KOVACH — BUSHES — 150' — FENCE — HEDGE — ROSE — BUSH
301 WL — IRENE FRANKO — 16467 — 12" MAPLE — 10" MAPLE — 18" MAPLE — 12" PEAR — 2-STY. F.R. #1695 — GRASS DR. — 2' CONC. — 3' CONC. — 4' CONC. — SHRUBS — 150' — HEDGE
302 WL — PAUL GEGUS a.k.a. PAUL R. GEGUS, OLGA P. GEGUS, MARGARET ANN GEGUS — 16464 — 2-STY. F.R. #1693 — 2½ STY. F.R. #1689 — 2-STY. F.R. #1683 — 2-STY. F.R. #1681 — 2-STY. F.R. #1677 — 3' CONC. — 4' CONC. — SHRUBS — CONC. PATIO — 8' ASPHALT DR. — BRICK WALL — 150' — HEDGE — FENCE
GRAVEL DR. — 55.5' — 28" SYCAMORE — 40" OAK — 8" ELMS — 20" MAPLE — 8" WALNUT — 10" WALNUT — 6" SYCAMORE — 8" PEACH — 8" PLUM — 16" MAPLE — 18" MAPLE — 12" PEAR — 6" GUM — 85" DBL. TANG TO LOC. — 8" PINE — 6" PLUM — 5-4" HEMLOCKS — 20" CHERRY — 10" WALNUT — 28" — 25336 ASPHALT PARKING LOT — OLD FOUNDATION — GRAVEL DR. — 5' SIDEWALK — 5' CONC. SIDEWALK — 4' L.P. GAS — EXIST. R/W — 4' CONC. SIDEWALK — 2' CONC. — 5' CONC. — 4' CONC. — 3' CONC. — 2' CONC. LANES — 4' SUMAC — 4' PINE — ROSE — 12' APPLE — 6' PINE — BUSH — 30' ELM — 24' APPLE — 10' ELM — 14' APPLE — 2' STONE — 8' APPLE — 6' PLUMS — 2' PLUM — 4' PLUM — 2' CHERRY — 4' CHERRY — 10' APPLE — 3-BUSHES — 30' CHERRY — 4' CHERRY — 30' SYCAMORE — 2' CHERRY — 18' CHERRY — 6' CHERRY — 14' CHERRY — 2' MAPLE — 3' APPLE — 3' PEAR — 12' PEAR — 16' CHERRY — 14' PLUM — 4' PLUM — 3' PLUMS — 3' PEACH — BERRY PATCH — GRAPE ARBOR — GRAPES — HEDGE — FENCE — BUSH — 3 BUSHES — ROSES — 10' WOOD PATIO — 2' CONC. LANES — ASH DR. — SLAG DR. — 150' — 2-STY. F.R. #2543 — 1½-STY. DUPLEX #2541 — 1½-STY. BRICK DUPLEX #2539 — 2-STY. F.R. #2537 — 1½-STY. — 2-STY. F.R. #2527 — 1½-STY. F.R. — 2-STY. F.R. #2517 — FR. GAR. — 2-STY. BRICK #2543 — 2-STY. BRICK #1525 — 2½-STY. F.R. #1671 — 2½-STY. F.R. #1661 — 2½-STY. F.R. #1709 — 2½-STY. F.R. #1713 — 1-STY. F.R. #1511 — 2-STY. F.R. #1695 — 2-STY. F.R. #1693 — 2-STY. F.R. #1689 — 2-STY. F.R. #1683 — 2-STY. F.R. #1681 — 2-STY. F.R. #1677 — 2-STY. F.R. #1673 — 2-STY. F.R. #1667 — 2½-STY. F.R. #1671 — 2½-STY. F.R. #1661 — 1-STY. F.R. #1511 — 1½-STY. DUPLEX #2541 — 1½-STY. BRICK DUPLEX #2539 — 2-STY. F.R. #2537 — 1½-STY. — 2-STY. F.R. #2527 — 1½-STY. F.R. — 2-STY. F.R. #2517 — FR. GAR. — 2-STY. BRICK #2543 — 2-STY. BRICK #1525 — 2½-STY. F.R. #1671 — 2½-STY. F.R. #1661 — 2½-STY. F.R. #1709 — 2½-STY. F.R. #1713 — 1-STY. F.R. #1511 — 2-STY. F.R. #1695 — 2-STY. F.R. #1693 — 2-STY. F.R. #1689 — 2-STY. F.R. #1683 — 2-STY. F.R. #1681 — 2-STY. F.R. #1677 — 2-STY. F.R. #1673 — 2-STY. F.R. #1667 — 2½-STY. F.R. #1671 — 2½-STY. F.R. #1661

N 55°18'39"E — N 48°23'30"E — N 43°28'34"E — N 34°40'46"W — N 34°38'36"W

STA 48+20.43 = STA 30+68.22 — STA 51+00.00 = STA 51+38.43 — STA 704.16 = STA 30+00.00

SCALE 0 20 40 60 80 100

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	7-28-69	Changed All Names. Previously Revised on Earlier Series.

ALL PARCELS THIS SHEET I-FUNDS

DESIGNED ARTHUR DEAL DWG. BY K.W. LINGER & ADMIN. SERV.
JAN 31 1969
LOGGED
CHKD. BY

R/W SHEET NO. 58 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-8(6)	

611
656

59
104

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

STA. 48+20.43 (℄ RELOC. INDIANOLA)
STA. 39+56.22 (℄ TAYLOR)

TAYLOR AVE. - 40' N 34°-38'-36"W

℄ N 34°-38'-36"W 80.00'

LA/RW — N 34°-38'-36"W 100.00' — N 34°-38'-36"W 50.00' — N 34°-38'-36"W 100.00' — N 34°-38'-36"W 50.00'

41+38.21 — 42+18.21 — 43+18.23 — 44+18.23 — 45+18.23

20' DT 40+25.25

20' LT-40+38.23 / 158.66' LT-698+94.37

15G.18' LT-698+92.65 / 20' RT-41+38.23

116.77' LT-700+00.51

171.74' LT-700+85.10

20' LT-42+18.23 / 178.41' LT-700+83.67

20' DT-42+18.23 / 20' LT-42+18.23

20' DT-43+18.23 / 149.27' LT-701+68.25

20' RT-43+18.23 / 137.77' LT-702+68.72

20' DT-44+68.23 / 124.25' LT-703+43.72

20' DT-45+18.23 / 116.35' LT-705+05.05

321 WL — 322 WL — 324 WL — 325 WL — 326 WL — 327 WL — 328 WL — 330 WL

N 55°-18'-39"E — S 55°-18'-39"W

118.07' — 150.00' — 150.00' — 150.00' — 170.00' — 148.45' — 143.97' — 138.66' — 125.66' — 117.92'

O.L. 1211 — O.L. 1211 — 26195 — 26192 — 26191 — 26188 — 26187 — O.L. 1210

N 55°-18'-39"E — S 55°-18'-39"W

℄ SURVEY I-680

703+75.42

703+24.83

N 43°-28'-34"E — S 43°-28'-34"W

INDIANOLA AVE. - 50'

RELOCATED INDIANOLA AVE.

STA. 698+72.04
STA. 50+00.61

40.68' LT 698+76.30

8.66' LT 698+83.30

G.30' LT 698+83.52

2.11' LT 700+73.52

1.55' DT 701+23.99

1.55' 701+23.51

701+73.71 / 6.08' LT 701+73.18

702+23.99

11.24' DT 702+22.12

24.34' — 24.34'

703+21.34 / 24.08' DT

31.67' DT 703+70.82

82.08'

698+34.76

698+82.97

7.60' LT 698+54.65

698+54.45

6.05' LT 699+99.75

4.13' LT 700+39.77

700+39.59

1.36' LT 700+84.17

700+84.63

701+03.60

5.64' DT 701+98.38

9.72' DT 702+08.07

14.92' DT 702+53.60

2.07' DT 702+97.97

2.64' DT 703+37.26

32.67' DT 703+76.40

142.82' — 142.82' — 144.34' — 144.34' — 146.24' — 148.98' — 150.32' — 150.29' — 150.26' — 150.24' — 150.21' — 150.18' — 150.16'

1G468 — 1G467 — 1G466 — 1G465 — 1G464 — 1G463 — 1G462 — 1G461 — 1G460 — 1G459 — 1G458 — 1G457

144.34'

N 55°-18'-39"E — S 55°-18'-39"W

301 WL — 302 WL — 303 WL — 304 WL — 305 WL — 306 WL — 307 WL — 308 WL — 309 WL — 310 WL — 311 WL

20' LT-40+11.49 — 20' LT-40+15.49 / 144.76' DT-699+50.88 — 20' LT-40+30.49 / 144.23' DT-699+93.88 — 20' LT-41+30.49 / 146.04' DT-700+32.07 — 20' LT-41+51.49 / 148.68' DT-700+74.97 — 20' LT-42+21.49 / 151.50' DT-701+18.04 — 20' LT-42+66.49 / 155.28' DT-701+55.78 — 20' LT-43+06.49 / 159.15' DT-701+93.69 — 20' LT-43+51.49 / 164.08' DT-702+36.22 — 20' LT-43+96.49 / 169.63' DT-702+78.67 — 173.00' 105°-16'-11" RT — 20' LT-44+36.49 / 175.51' DT-703+16.39 — 20' LT-44+76.49

S 34°40'-46"E — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 45.00' — 40.00' — 45.00' — 40.00'

℄ LA/RW

STA. 51+63.43 (℄ RELOC. INDIANOLA)
STA. 39+80.14 (℄ HOMEWOOD AVE.)

℄ HOMEWOOD AVE. - 40' N 34°-40'-46"W

CENTERLINE SURVEY
CURVE N°1 DATA
P.I. STA. 694+62.64

Δ = 71°25'-13" LT.	CH_c = 3,484.06'
L_s = 200'	E_c = 639.03'
D_c = 1°50'00"	L.T. = 133.34'
R = 3,125.22'	S.T. = 66.67'
θ_s = 1°50'00"	L.C. = 199.98'
Δ_c = 67°45'13"	T_s = 2,346.92'
L_c = 3,685.65'	E_s = 724.32'
T_c = 2,098.23'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA. 672+49.06
2 P.I. STA. 710+78.04
Δ = 1°50'00" LT.
R = 4,166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE R.T.
301 - WL	8,475 S.F.	—	8,475 S.F.	—	8,475 S.F.	—	—
302 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
303 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
304 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
305 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
306 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
307 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
308 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
309 - WL	6,750 S.F.	—	6,750 S.F.	—	6,750 S.F.	—	—
310 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
311 - WL	6,000 S.F.	—	6,000 S.F.	—	6,000 S.F.	—	—
321 - WL	2,325 S.F.	—	2,325 S.F.	—	2,325 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE R.T.
322 - WL	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	—	—
324 - WL	13,600 S.F.	1,600 S.F.	13,600 S.F.	1,600 S.F.	12,000 S.F.	—	—
325 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
326 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
327 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—
328 - WL	15,000 S.F.	—	15,000 S.F.	—	15,000 S.F.	—	—
330 - WL	7,500 S.F.	—	7,500 S.F.	—	7,500 S.F.	—	—

SCALE
0 — 20 — 40 — 60 — 80 — 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W - ENGR. & CONSTR.
JAN 27 1969
LOGGED
Cycle ____ Bill Sht. ____

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

612
656

60
104

MATCH SHEET NO. 62

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

STA 708+79.53
STA 42+04.00

STA 50+05.04
STA 41+86.93

N 48°-14'-46" E

STA 42+41.96

MATCH SHEET NO. 67 & 69

ALL PARCELS THIS SHEET I-FUNDS

MATCH SHEET NO. 58

N 34°-38'-36" W

TAYLORAT AVE. 40'

℄ SURVEY I-680

℄ HOMEWOOD AVE. 40'

℄ CAMPBELL ST. N 22°-22'-07" E

N 46°-25'-57" W

N 34°-40'-46" W

CURVE NO 12

CURVE NO 1

MONUMENT ASSEMBLY

RAMP "X"

ROCK CUT CONST. LIMITS

EXIST R/W

EXIST. R/W 50'

EXIST. R/W 40'

EXIST. R/W 45'

EXIST. R/W 30'

EXIST. R/W 60'

EXIST. R/W 66'

EXIST. R/W 80'

EXIST. R/W 120'

EXIST. R/W 150'

EXIST. R/W 200'

EXIST. R/W 300'

EXIST. R/W 400'

EXIST. R/W 500'

EXIST. R/W 600'

EXIST. R/W 700'

EXIST. R/W 800'

EXIST. R/W 900'

EXIST. R/W 1000'

EXIST. R/W 1100'

EXIST. R/W 1200'

EXIST. R/W 1300'

EXIST. R/W 1400'

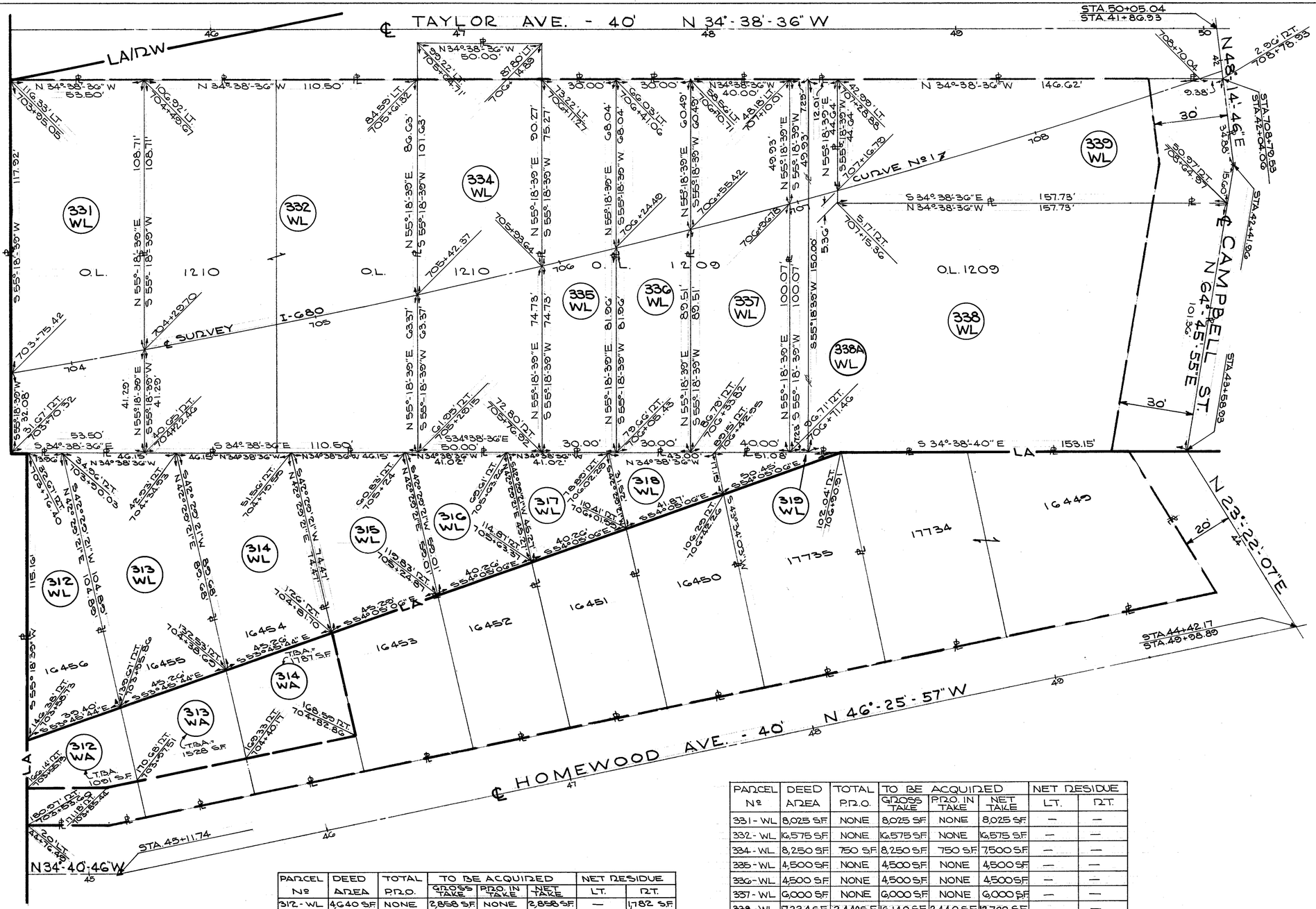
EXIST. R/W

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

613
656

61
104



CENTERLINE SURVEY
CURVE No 1 DATA
P.I. STA 694+62.64

Δ=71° 25' 13" LT.	P=0.53'
Ls=200'	K=100° 00'
Dc=1° 50' 00"	Xc=199.98'
R=3,125.22'	Yc=2.13'
Θs=1° 50' 00"	L.T.=133.34'
Δc=67° 45' 13"	S.T.=66.67'
Lc=3,695.65'	L.C.=199.99'
Tc=2,098.23'	Ts=2,346.92'
CHc=3,484.06'	Es=724.32'
Es=639.03'	

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1 P.I. STA 672+49.06
2 P.I. STA 710+78.04
Δ = 1° 50' 00" LT
R = 4166.82'
T = 66.67'
L = 133.33'
E = 0.53'

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
331-WL	8,025 S.F.	NONE	8,025 S.F.	NONE	8,025 S.F.	—	—
332-WL	16,575 S.F.	NONE	16,575 S.F.	NONE	16,575 S.F.	—	—
334-WL	8,250 S.F.	750 S.F.	8,250 S.F.	750 S.F.	7,500 S.F.	—	—
335-WL	4,500 S.F.	NONE	4,500 S.F.	NONE	4,500 S.F.	—	—
336-WL	4,500 S.F.	NONE	4,500 S.F.	NONE	4,500 S.F.	—	—
337-WL	6,000 S.F.	NONE	6,000 S.F.	NONE	6,000 S.F.	—	—
338-WL	17,234 S.F.	2,440 S.F.	16,140 S.F.	2,440 S.F.	13,700 S.F.	—	—
338A-WL			1,094 S.F.	—	1,094 S.F.		
339-WL	7,808 S.F.	1,500 S.F.	7,800 S.F.	1,500 S.F.	6,308 S.F.	—	—

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
312-WL	4,640 S.F.	NONE	2,858 S.F.	NONE	2,858 S.F.	—	1,782 S.F.
313-WL	6,580 S.F.	NONE	4,377 S.F.	NONE	4,377 S.F.	—	2,203 S.F.
314-WL	6,155 S.F.	NONE	3,693 S.F.	NONE	3,693 S.F.	—	2,462 S.F.
315-WL	5,731 S.F.	NONE	3,003 S.F.	NONE	3,003 S.F.	—	2,728 S.F.
316-WL	4,738 S.F.	NONE	2,085 S.F.	NONE	2,085 S.F.	—	2,653 S.F.
317-WL	4,402 S.F.	NONE	1,535 S.F.	NONE	1,535 S.F.	—	2,867 S.F.
318-WL	4,166 S.F.	NONE	1,017 S.F.	NONE	1,017 S.F.	—	3,149 S.F.
319-WL	4,594 S.F.	NONE	429 S.F.	NONE	429 S.F.	—	4,165 S.F.

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
	ADDED R/S FOR 338-A WL		5-6-70

R/W SUPPLEMENTAL SHEET

JAN 27 1969
LOGGED

FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

614
656

62
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

PARCEL No	DEED AREA	TOTAL P.Q.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.B.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
353-T	17,812 S.F.	NONE	220 S.F.	——	220 S.F.	——	17,812 S.F.
354-T	4,822 S.F.	NONE	127 S.F.	——	127 S.F.	4,822 S.F.	——

ALL PARCELS THIS SHEET
I-FUNDS

NOTE: SEE SUPPLEMENTAL SHT. No 65 FOR PARCEL DIMENSIONS & BEARINGS & STA. OFFSETS FOR PARCELS IN THIS AREA.

REV	DATE	DESCRIPTION	COMPLETION DATE --
1		Added PR, 346 PR	
2	7-25-69	Changed All Names Previously Revised on Earlier Sheets.	

SCALE 0 20 40 60 80 100

State Highway Dept. Div. 4
R/W Engr. & Admin Sect
JAN 27 1969
LOGGED
CHKD. BY

MATCH SHEET NO. 60

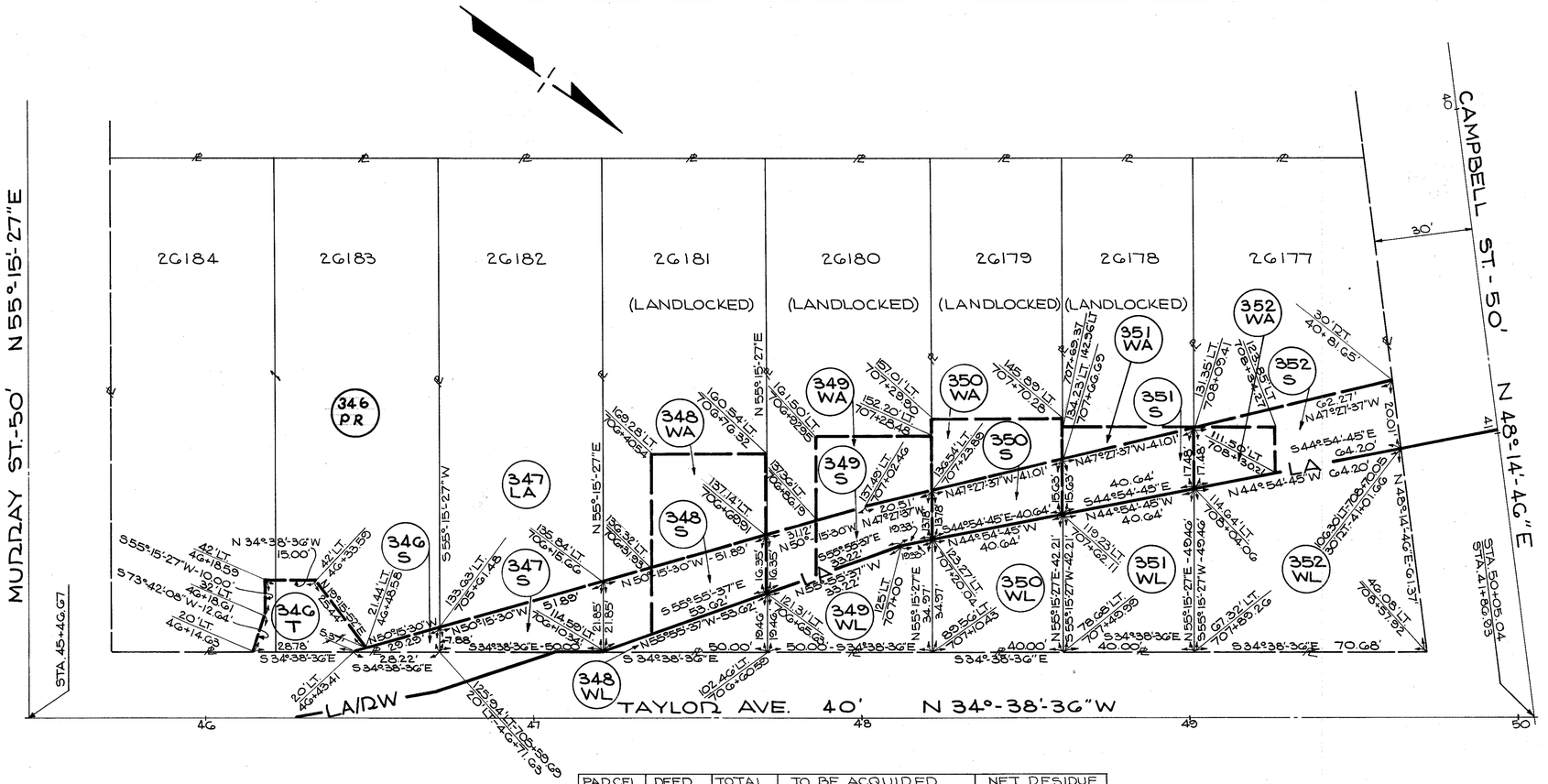
R/W SHEET NO. 62 OF 104

FED RD.	STATE	PROJECT	
2	OHIO	I-680-9(G)	

615
656

63
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	R.T.
346 - S	15,000 S.F.	—	1115 S.F.	—	1115 S.F.	15,000 S.F.	—
346 - T			526 S.F.	—	526 S.F.		
347 - LA	7,500 S.F.	—	NONE	—	NONE	7,500 S.F.	—
347 - S			743 S.F.	—	743 S.F.		
348 - WL	7,500 S.F.	—	487 S.F.	—	487 S.F.	7013 S.F.(L)	—
348 - S			955 S.F.	—	955 S.F.		
349 - WL	7,500 S.F.	—	1,422 S.F.	—	1,422 S.F.	6,078 S.F.(L)	—
349 - S			708 S.F.	—	708 S.F.		
350 - WL	6,000 S.F.	—	1,544 S.F.	—	1,544 S.F.	4,456 S.F.(L)	—
350 - S			588 S.F.	—	588 S.F.		
351 - WL	6,000 S.F.	—	1,833 S.F.	—	1,833 S.F.	4,167 S.F.(L)	—
351 - S			622 S.F.	—	622 S.F.		
352 - WL	9,218 S.F.	—	3,715 S.F.	—	3,715 S.F.	5,503 S.F.	—
352 - S			1,172 S.F.	—	1,172 S.F.		
346 - P.R.	15,000 S.F.	—	—	—	—	15000 S.F.	

State Highway Dept. D
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
Cards Will Go

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
1	Added Pcl 346 PR.		

R/W SUPPLEMENTAL SHEET

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

616
656

64
104

N89°50'38"W EXIST R/W

DEWEY AVE. 50'

EXIST. R/W

8" TWIN CHERRY

9' SLAG DR.

BURNETT HEIGHTS ALLOTMENT P.B. 11 PG. 74

DOREL REALTY COMPANY, A PARTNERSHIP

6" MAPLE
10" CHERRY
6" OAK
6" OAK

WOODS

26155

CHESTER TORELLO

26156

10" MAPLE

THE INLAND INVESTMEST COMPANY, A PARTNERSHIP

26157

P.C. STA. 37+75.17

SEE DETAIL 'A'

401 T

401 WD

R/W

S89°-31'-04"W 5.00'

CONST LIMITS

EXIST. R/W

6" L.P. GAS

RELOC. SHADY RUN RDY.

STA. 38+78.76 (RELOC. SHADY RUN RDY.)
STA. 10+00 (POWERSDALE)

N05°-28'-56"W

203 AT

N89°-31'-04"E 5.00'

STL. GUARD RAIL

46' SLAG WALK

8" WATER

15" SEWER

30.00'

30' LT 11+05

25' LT 11+38

6" L.P. GAS

UNION ST. 40'

N44°-10'-31"E

8" WATER

21" SEWER

SLAG DR.

SIGN

EXIST. R/W

4" L.P. GAS

1" PINE
2" BRK. WK.
12' SLAG DR.
24" CHERRY
2" TILE WALL
BUSH
12" OAK
10" OAK
12" CONC. WK.
WALL
BRICK PATIO
#851 2½ STY. FR.
4" PEACH
2" PEACH
BUSH

MARY K. BRINZA
aka. MARY BRINZA
OLGA GURA
HELEN MAY
12" MAPLE
BUSH

24831

24821

24822

WOODS

SUBDIVISION OF OUT-LOT Nº 1 IN BURNETT HEIGHTS ALLOMENT P.B. 15 PG. 81

24832

1½ STY FR. #971

1½ STY FR. #977

1½ STY FR. #979

8½' CONC. DR.

8½' ASPH. DR.

8' CONC. DR.

3' CONC.

4' CONC. SIDEWALK

8" WATER

15" SEWER

8" GAS

15" OAK

4" L.P. GAS

THE BELMONT BUILDERS, INC.

38.66'

STAG

CONST. LIMITS

EXIST. R/W

24833

1½ STY FR. #985

10' SLAG DR.

CONST. LIMITS

8" SEWER

24834

DOREL REALTY COMPANY

R/W LINE CURVE DATA
CH. BRG. N44° 40' 51"E
CH.=17.15' R=12.10'
ARC.=19.07'

401 T

2.40 LT 38+40.00

2.07 LT 38+43.62

30 LT 10+26.84

N44°-40'-51"E 17.15'

30 LT 10+43.62

N0°-28'-56"W 40.00'
N89°-50'-38"E 5.00'
S0°-28'-56"E 37.64'

25 LT 10+68.81

12.15'

12.15'

R/W

401 WD

DETAIL 'A'

POWERSDALE AVE. 50'

6" L.P. GAS

EXIST. R/W

8" WATER

6' GUARD RAIL

2.8'

CONST. LIMITS

℄ CONST. L.T.
STA. 2+88.11
2+00

N 29°-09'-26"E 8.00'

℄ R/W N 29°-09'-26"E

3" L.P. GAS

36

STA. 36+21.05

MON. FND. USED

N47°-59'-20"E

48" COMB. SEWER

C.B.

M.H.

15" MAPLE

12" MAPLE

12" MAPLE

12" MAPLE

10' CONC. DR.

12" MAPLE

12" MAPLE

12" MAPLE

12" MAPLE

8' ASPH. DR.

6" MULBERRY

5' ASPH. DR.

3' CONC. WALK

EXIST. R/W

N 89°-28'-56"E

S 29°-09'-26"W

R/W 102.55

24827

WOODS

34.49 P.T. 39+46.40

R/W

S 89°-31'-04"W 122.78'

24826

HAROLD D. LEACH & A.E. WESTER

℄ RELOC. SHADY RUN ROAD
CURVE Nº 1 DATA
P.I. STA. 39+46.25
Δ=38°15'00" LT.
Dc=10°00'00"
R=572.96'
T=171.08'
L=332.80'
CH=327.86'

109.22' P.T. 38+85.86

24825

80' P.T. 40+50

S71°-27'-08"W 48.42'

80' P.T. 40+91.36

24824

15" MAPLE

109.22'

STONE WALL

S 18°-35'-39"W

EXIST. R/W

N19°-35'-39"E

STA. 40+98.86

48" COMB. SEWER

EXIST. R/W

CONST. LIMITS

98.70' P.T. 41+50

CB

356 S

356 WD

℄ R/W

M.H.

STA. 38+19.56

HEDGE

STONE WALL

1½ STY FR. #915

24.8'

253.00 PAVD

356 T

356 WA

356 AWD

10" STUMP

40" ASPEN

358 S

135

S 4.9°

The Midwest Investment Company, a parnership

2½ STY FR. #971

JULIA PODOLSKY, OWNER:
LOIS MOFFO, L.C. HOLDER

STONE WALL

WOODS

HUNTER ST. 50'

ASPH. PAV'T.

N 55°-51'-14"E

STA. 38+48.43

MON. FND. USED

℄ SHADY RUN RD. 40'

8" WATER

4" L.P. GAS

EXIST. R/W

N62°-14'-09"E

120'

38

37

S89°-50'-38"W EXIST R/W

R/W

S 89°-31'-04"E 26.18'

24850

S 5°-51'-38"E 151.11'

24825

N 74°-49'-57"E 64.60'

ARC-171.83'

CH. BRG.-N65°-34'-38"E CH-171.13' RAD.-547.96' ARC-171.85'

N 64°-40'-38"E 43.80'

N 50°-41'-37"E

N 45°-01'-21"E - 55.04'

CONST. LIMITS

S 56°-35'-38"W 143.21'

PROP. 5' SIDEWALK

N 56°-35'-38"E 143.21'

R/W

℄ RELOC. SHADY RUN ROAD

N 56°-35'-38"E

24823

42+00

S 37°-22'-14"W-72.80'

N 57°-22'-14"E

24822

398 T

398

111.46'

CH. BRG.-S 52°-51'-38"E CH.-220.08' ARC-221.18'

24828

12" OAK

CURVE Nº 1

40+00

P.T. 41+07.67

P.C. 41+00

82.47'

82.47'

30 LT 40+05.78

30 LT 40+50

40' LT 41+07.67

35 LT 42+00

CONSTRUCTION NO. 65

MATCH SHEET NO. 65

NOTE: SEE SUPPLEMENTAL SHT. Nº 66 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCEL 356

358-S

ALL PARCELS THIS SHEET
I-FUNDS

Changed Name Pcl. 358 12-23-69 Solomon

ADDED ~ Pcl. 356 (S), 358 (S) 12-12-69 Solomon
CHANGED NAME Pcl. 358 (S) TO 358 (T) 12-16-69

REV.	DATE	DESCRIPTION
1.	7-28-69	Changed All Names Previously Revised to Easter Seguss.
2.	10-17-69	Changed 348 WD to a Standard Highway Easement
		Changed Pcl 356 WA to 356 T-1. Changed Pcl 356 T to 356 WA. white 11-21-69

COMPLETION DATE —

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
203AT	10400 S.F.	—	150 S.F.	—	150 S.F.	10,400 S.F.	—
398	110066 S.F.	—	31,983 S.F.	—	31,983 S.F.	61,641 S.F.	15,439 S.F.
398-T			4,526 S.F.	—	4,526 S.F.		
				—			
401-WD	6500 S.F.	—	32 S.F.	—	32 S.F.	6468 S.F.	—
401-T			268 S.F.		268 S.F.		

ADDED PCL. 356 AWD 9-10-73
Changed Pcl 356 WD to a Standard Highway Easement.
Changed Pcl. 356 WA to 356 T-1. Changed Pcl 356 T to 356 WA. white 11-21-69

SCALE
0 20 40 60 80 100

R/W SHEET NO. 64 OF 104

JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680- 9 (6)	

617/656

65/104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 64

SEE SHEET No. 356 T

MATCH SHEET NO. 67

EXIST. R/W 2

EXIST. R/W

CONST. LIMITS

R/W

356 AWD — PT. 25309 — STONE WALL — WIRE FENCE — LUMBER — 8" STUMP — 12" CHERRY — 6" PLUM — 1" PINE — 24" STUMP — 10" SLAG — FR. GAR. — HEDGE — EXIST R/W

356 WD — JULIA PODOLSKY, OWNER: LOIS MOFFO, LIFE HOLDER — 6" WILD CHERRY

359 WD — 4 FRUIT TREES — RASPBERRY BUSHES — 2" PEACH — 6" PEAR — 6" PLUM — 4" PLUM — 4" PEAR — 10" PLUM — 10" PEAR — 14" CHERRY — 10" PLUM

360 WD — AGNES VIGLIOTTI, Executrix of the Estate of JOHN LUCSANSKY aka JOHN LUCSANSKY, Deceased — 6" PLUM — 2" PEAR — 6" PEAR — 4" PEAR — WATER OUTLET — STONE WK. — 1" HAZELNUT — BUSHES — 4" PEAR — 3" PLUM — STEPS — 10" PLUM — 24" CHERRY — LILAC — LEONE ELISER

361 WD — 15" OAK

362 WD — TERESA HABULAN — 15" APPLE — 6" PLUM — 4" PLUM — PEN — CLUMP ASH — 8" OAK — 15" PLUM — 15" WALNUT — 6" PLUM — 15" APPLE — 3" APPLE — BIRD HSE. — LILAC BUSH — 6" PLUM — 3" APPLE — 3" APPLE — 3" APPLE — CLUMP APPLE — 4-1" TREES — FIRE PLACE — 6" CHERRY — 15" CHERRY — 6" CHERRY — 10" PLUM — 10" PLUM — 10" PEAR — 4" PLUM — 4" PEAR — 6" PEAR — 1" CHERRY — 2" PEACH — 6" PLUM — 24" CHERRY — 10" PLUM — 3" APPLE — 3" PLUM — 20" MULBERRY — 6" ASH — 1" PINE — 6" ASH — 10" CHERRY — 10" CHERRY — 8" MAPLE — 8" MAPLE — 8" MAPLE

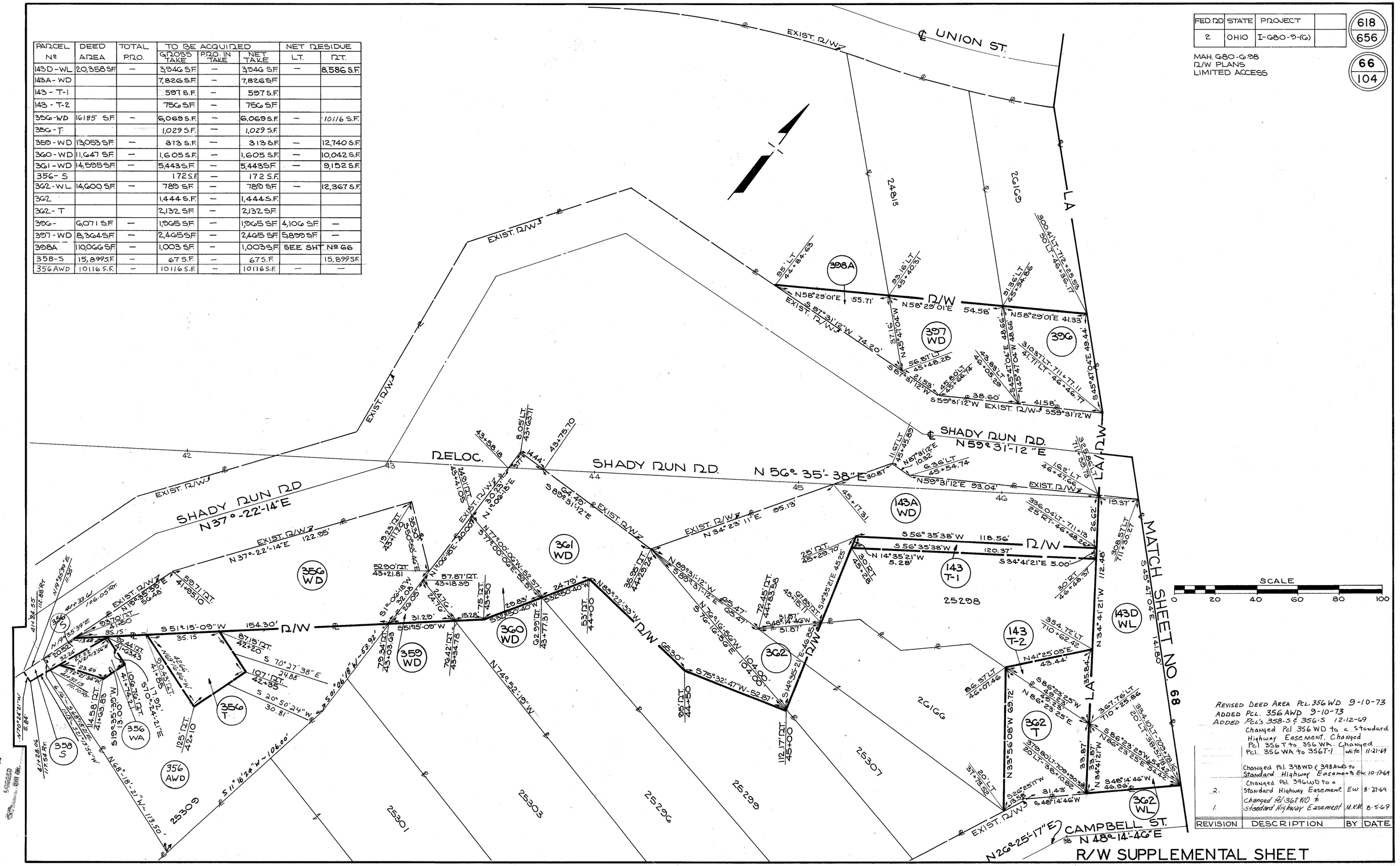
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9-(6)	

618
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

66
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
143D-WL	20,358 S.F.	—	3,946 S.F.	—	3,946 S.F.	—	8,586 S.F.
143A-WD			7,826 S.F.	—	7,826 S.F.		
143-T-1			597 S.F.	—	597 S.F.		
143-T-2			756 S.F.	—	756 S.F.		
356-WD	16185 S.F.	—	6,069 S.F.	—	6,069 S.F.	—	10116 S.F.
356-T			1,029 S.F.	—	1,029 S.F.		
359-WD	13,053 S.F.	—	313 S.F.	—	313 S.F.	—	12,740 S.F.
360-WD	11,647 S.F.	—	1,605 S.F.	—	1,605 S.F.	—	10,042 S.F.
361-WD	14,595 S.F.	—	5,443 S.F.	—	5,443 S.F.	—	9,152 S.F.
356-S			172 S.F.	—	172 S.F.		
362-WL	14,600 S.F.	—	789 S.F.	—	789 S.F.	—	12,367 S.F.
362			1,444 S.F.	—	1,444 S.F.		
362-T			2,132 S.F.	—	2,132 S.F.		
396-	6,071 S.F.	—	1,965 S.F.	—	1,965 S.F.	4,106 S.F.	—
397-WD	8,364 S.F.	—	2,465 S.F.	—	2,465 S.F.	5,899 S.F.	—
398A	110,066 S.F.	—	1,003 S.F.	—	1,003 S.F.	SEE SHT Nº 66	
358-S	15,899 S.F.	—	67 S.F.	—	67 S.F.		15,899 S.F.
356AWD	10116 S.F.	—	10116 S.F.	—	10116 S.F.	—	—



REVISED DEED AREA PCL. 356 WD 9-10-73
ADDED PCL. 356 AWD 9-10-73
ADDED PCL's 358-S & 356-S 12-12-69

REVISION	DESCRIPTION	BY	DATE
	Changed Pcl 356 WD to a Standard Highway Easement. Changed Pcl 356 T to 356 WA. Changed Pcl. 356 WA to 356T-1	White	11-21-69
	Changed Pcl. 398WD & 398AWD to Standard Highway Easements	EW	10-17-69
2.	Changed Pcl. 396WD to a Standard Highway Easement.	EW	8-27-69
1.	Changed Pcl 362 WD to Standard Highway Easement	M.K.M.	8-5-69

R/W SUPPLEMENTAL SHEET

Ohio Highway Dept. Div. 4
R/W ENGR & ADMIN SECT.
JAN 27 1969
LOGGED
CIVIL ENG. DIV.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

619/656

67/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 71

MATCH SHEET NO. 72

MATCH SHEET NO. 65

MATCH SHEET NO. 69

MATCH SHEET NO. 62

MATCH SHEET NO. 60

STA 712+54.63
STA 50+00

℄ UNION ST. 40'
N 48°-51'-50"E

℄ UNION ST. 50'
N 65°-04'-47"E

℄ SHADY RUN RD. - 40'
℄ RELOC. SHADY RUN ROAD
N 48°-21'-56"E

℄ RELOC. SHADY RUN ROAD
N 45°-04'-42"E

℄ CAMPBELL ST. - 50'
N 48°-14'-46"E

N 59°-31'-12"E

N 56°-35'-38"E

N 64°-45'-51"E

N 61°-04'-42"E

N 78°-06'-00"E

RAMP "E"

I-680 SURVEY

CONST. LIMITS

EXIST. R/W

R/W FENCE

LEON DUNN / SANFORD BARTH, A PARTNERSHIP — 26169

THE DORIEL REALTY COMPANY, A PARTNERSHIP — 26168

WOODS — 26167

WALTER W SOICH & BETTY JANE SOICH — 17172

JOSEPH C. PAVLICK & RAE C. PAVLICK — 17171

JOE A. KOLMAN — 17170

BURNETT HEIGHTS ALLOTMENT P.B. 11 PG. 74

THOMAS ADAMIAK / VICTORIA ADAMIAK — 17169

JAMES CATO / LULA MAE CATO — 17168

WOODS — STANISLAW DOMANSKI / SOFIA DOMANSKI — 17167

WOODS — 17166

MR. HENRY L. BURNETT'S PLAT OF LOTS AT LANSINGVILLE PB 2 PG. 35

5956 — 5955 — 5957 — 5958

WALTER G. McKENRICK, Jr.

ELWYN V. JENKINS

IVAN DUBIC / JENNIE DUBIC — 2-STY. FR. #611

2-STY. FR. #617

2-STY. FR. #629

105' ASPH. DR.

10' BRICK DR.

15' SLAG DR.

5' BRICK DR.

FR. GAR. #727

2-STY. FR. #725

1-STY. FR. #723

1-STY. BRICK #715

1-STY. FR. #707

2½-STY. FR. #629

FR. GAR

CONC. WELL ○

WOOD PILE

WIRE FENCE

BR. WALL

HEDGE

BUSH

SWING

10'-1" FRUIT TREES

3 STA EQUATION
1ST STA 712+13.51 (AHEAD)
STA 712+13.51 (BACK)
2ND STA 712+13.51 (AHEAD)

P.T. STA 711+44.70 (R/W ONLY)

P.C. STA 710+11.37
P.C.C. STA 712+11.37

℄ RELOC. SHADY RUN ROAD
CURVE Nº2 DATA
P.I. STA 47+60.80
Δ = 11° 30' 56" LT
D = 6° 00' 00"
R = 954.93'
T = 96.29'
L = 191.93'
CH = 191.60'

℄ RELOC. SHADY RUN ROAD
CURVE Nº3 DATA
P.I. STA 50+67.10
Δ = 16° 00' 00" RT
D = 12° 00' 00"
R = 477.46'
T = 67.10'
L = 133.33'
CH = 132.90'

NOTE: SEE SUPPLEMENTAL SHT. Nº 66 & 68 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

THE CITY OF YOUNGSTOWN, OHIO — HEAVY WOODS — 25298

KADIMAK REALTY A PARTNERSHIP — 26176

LEOLA ROGERS — 26175

DOROTHY A. MERDICH — 26174

JAMES ROGERS JR. — 26173

LEON DUNN — 26172

SAMUEL H. COPPERMAN — 26171

JOSEPH RENIOL — 26170

RHETA F. WEIMER — 5959

ADDITION TO HENRY L. BURNETT'S PLAT OF LOTS AT LANSINGVILLE PB 2 PG. 123

ANDREW ROSENFELD & JEAN WEISER — 5960

JOSEPH WISEMAN — 5961

W.J. BURKE — 5962

EMILEE M. SICH

FLOWERS

MON. FND. N 48°21'-56"E 48 USED

MON. FND. & USED

STA 47+38.07

STA 48+00

STA 49+00

STA 50+00

STA 51+00

STA 710+46.03
STA 49+62.21

STA 710+43.46 (I-680)
STA 49+81.47 (RELOC.)

75°34'59" (LOC. TANG.)

78°48'20" (LOC. TANG.)

STA 708+79.53
STA 42+04.06

CURVE Nº1 — CURVE Nº2 — CURVE Nº3

CENTERLINE SURVEY
CURVE Nº1 DATA
P.I. STA 694+62.64

Δ = 7° 25' 13" LT	Δ_s = 6° 45' 13"	L.T. = 133.34'	
L_s = 200.00'	L_c = 3695.65'	S.T. = 66.67'	
D_c = 1° 50' 00"	T_c = 2098.23'	L.C. = 199.99'	
R = 3125.22'	CH_c = 3484.06'	T_s = 2346.92'	
Θ_s = 1° 50' 00"	E_c = 630.03'	E_s = 724.32'	

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 672+49.06	
2 P.I. STA 710+78.04	
Δ = 1° 50' 00" LT.	R = 4,166.82'
T = 66.67'	L = 133.33'
E = 0.58'	

SCALE 0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	2-28-69	Changed All Names Previously Revised on Earlier Sepias.
2	5-27-69	Changed 346WD to a Standard Highway Easement. E.W.

ALL PARCELS THIS SHEET I-FUNDS

R/W SHEET NO. 67 OF 104

OHIO DEPARTMENT OF HIGHWAYS
R/W ENGR. & AGENT SECT.
JAN 27 1969
LOGGED

FED. RD	STATE	PROJECT	
2	OHIO	I-680-9(6)	

620 / 656

68 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

UNION ST. - 40'
N 48°51'-50" E

UNION ST. - 50'
N 65°-04'-47" E

EXIST. R/W

LA

MATCH SHEET NO. 70

MATCH SHEET NO. 69

SURVEY

I-680

PT. STA. 711+44.70 (R/W ONLY)

STA EQUATION
SY STA 712+11.37 (AHEAD)
STA 712+11.37 (BACK)

SHADY RUN RD.
N 59°-31'-12" E

PROP. SHADY RUN RD.
N 45°-04'-42" E

N 48°-21'-56" E

CAMPBELL ST. - 50'
N 48°-14'-46" E

N 64°-45'-55" E

N 61°04'-42" E

N 73°06'-00" E

PARCEL No.	DEED AREA	TOTAL TO BE ACQUIRED P.R.O.	NET RESIDUE LT.	NET RESIDUE R.T.
368-WD	3,444 S.F.	—	517 S.F.	—
368-SL		517 S.F.	—	—
389-WL	15,474 S.F.	—	646 S.F.	—
389-SL		646 S.F.	—	12,294 S.F.
389-WD				
389-T		772 S.F.	—	—
390-WL	14,422 S.F.	—	14,422 S.F.	—
391-WL	6,525 S.F.	—	6,525 S.F.	—
392-WL	13,120 S.F.	—	13,120 S.F.	—
393-WL	13,155 S.F.	—	13,155 S.F.	—
394-WL	5,600 S.F.	—	5,600 S.F.	—
395-WL	12,979 S.F.	—	12,979 S.F.	—
373-S	2,901 S.F.	—	385 S.F.	2,901

PARCEL No.	DEED AREA	TOTAL TO BE ACQUIRED P.R.O.	NET RESIDUE LT.	NET RESIDUE R.T.
364A-WL	6,820 S.F.	—	6,820 S.F.	—
365A-WL	3,149 S.F.	—	3,149 S.F.	—
365B-WL	3,150 S.F.	—	3,150 S.F.	—
366-WL	12,289 S.F.	—	12,289 S.F.	—
367A-WL	6,123 S.F.	—	6,123 S.F.	—
368-WL	5,750 S.F.	—	5750 S.F.	—
369-WL	5750 S.F.	—	5750 S.F.	—
510-WL	12,349 S.F.	—	12,349 S.F.	—
371-T	5,770 S.F.	—	2,308 S.F.	3,462 S.F.
371-S	3,770 S.F.	—	2,991 S.F.	779 S.F.
371-LA		—	NONE	—
373-T	2,901 S.F.	—	1038 S.F.	—

DEVISION	DESCRIPTION	BY	DATE
2	Changed Deed Area Pcl 373T	R.S.	12/12/69
1	ADDED PARCELS 371-S & 373-T	RRC	7/9/69

SCALE
0 20 40 60 80 100

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 6
Right of Way & Admin. Sec.
JAN 27 1969
Engineer
Signed
Title

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

621 / 656

69 / 104

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 67

I.P. FND. & USED — EXIST. R/W — I.P. FND. & USED

5' CONC. SIDEWALK — 4" L.P. GAS

15" SEWER — M.H. — N 50° 33'-06" E — ℄ UNION ST. 50' — 15" SEWER

8" WATER

SIGN — C.B. — CONC. — O.F.H. — CONC. — ASPH. — CONC. — C.B.

5' CONC. SIDEWALK

2-STY. FR. #611 — 5' ASPH. DR. — 5952 — 5951 — 5950 — 5949 — EXIST. R/W — 5948 — 5947 — 5946 — 5944

8" OAK — 15' BR. — 12" MAPLE — 15" OAK — 18" OAK — 10' DIRT DR. — 2-STY. FR. #607 — 5954 — 5953 — 2-STY. FR. #527 — 2'-CONC. Z — 8' CONC. DR. — HEDGE FENCE — FR. GAR. — 32" OAK — 24" OAK — CONC. WALL — 10'5 ASPH. DR. — 2½ STY. FR. HSE. #517 — WADSWORTH FEED SQ. A CORPORATION — 1 STY. BR. BLDG. — CONC. WALL — 2 STY. BRICK BLDG. #1545 — CONC. — STEEL POST WIRE — 6" L.P. GAS — 12" WATER

MR HENRY L. BURNETT'S PLAT OF LOTS AT LANSINGVILLE
P.B. 2 P.G. 35
BERTHA SMITH

STEVE STANKOVICH & MARY STANKOVICH

HAROLD LUNAU & HAZEL LUNAU

THOMAS SOICH a.k.a. THOMAS E. SOICH — SHED

FLORIAN CHITAROVICH

HELEN Mc KAY — PIGEON COOPS — FLOWERS — STONE WALL — BUSH — 10' DIRT DR. — 8" TWIN MAPLE — BUSH

MIKE TEPSICK — 8" WALNUT — BLK. WALL

℄ CONST. LIMITS — 387 SL — 386 SL — 385 T — 384 T — 385 WD — 384 WD — 387 WD — 386 WD — 367C WD — 5945 — 380 T — 380 WD — 5971

WOODS — 3-STY. FR. & STUCCO #542 — BLOCK GAR. — TILE WALL — 25' LT 52+58.18 — 15" OAK — 25' LT 54+89.38 — 25' LT 54+26.28 — EXIST. R/W — 25' LT 55+24.85 — 15" MAPLE — GUY — D/W — 20' — 48" COMB. SEWER — 5' CONC. WALL — 1 STY. FR. — 2-STY. FR. BLDG. #1553 — 1 STY. FR. — 4" ASPH. DR. — 12' — 30" POPLAR — 24" POPLAR — 24" ELM — 24" POPLAR — 25' LT 57+44.50 — 15" OAK — SIGN — D/W — 20" POPLAR — 24" STONE

℄ RELOC. SHADY RUN ROAD
CURVE Nº 5

N 32° 30'-05" E — STA 54+17.49 (RELOC.) — STA 54+24.03 (EXIST.) — STA 55+24.59 — 55+00 — 56+00 — 57+00 — N 61° 47'-10" E

SHADY RUN ROAD 40'
CURVE Nº 4

N 40° 02'-10" E — 54+00 — 55+00 — 56+00 — 57+00 — 58+00 — M.H.

℄ 48" COMB. SEWER — 58+00 — 5' CONC. STEPS — 5068 — 5' CONC. WALK — 5' CB. — SIGN — GUY — 6" L.P. GAS

2-STY. FR. #532 — 5067 — HELEN LUCAS — 3-STY. FR. #1624 — 5069 — THE FOREMOST INVESTMENT CO. A PARTNERSHIP — 5070 — 15" ASH DR. — 30" POPLAR — 24" POPLAR — 24" ELM — 24" MAPLE — 24" ELM — 2-8" POPLAR — MILTON A. ROEMISCH TRUSTEE — 24" MAPLE — 6" ELM — 24" ELM — 24" MAPLE — 24" ELM — 24" MAPLE — 24" ELM — 24" MAPLE

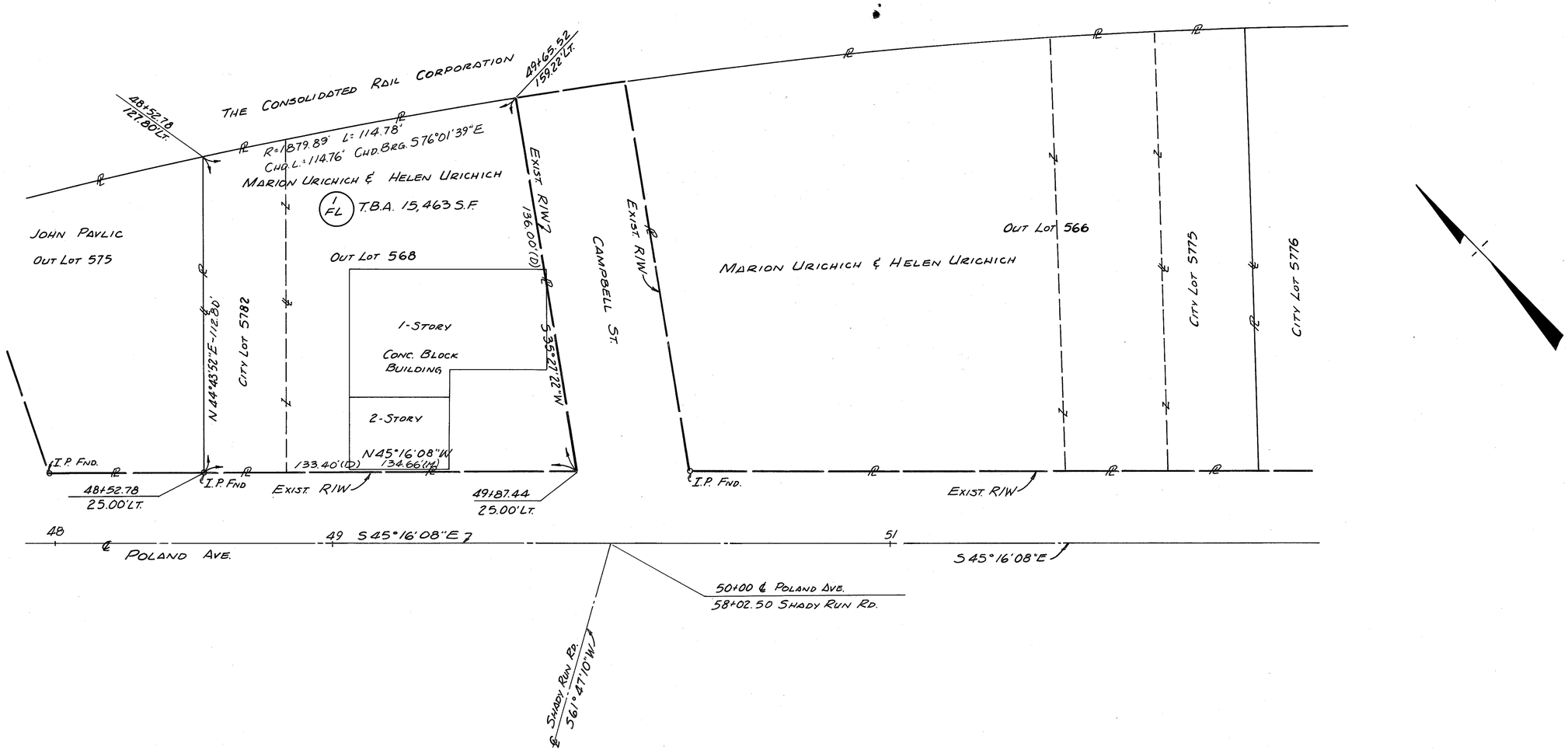
FHWA REGION	STATE	PROJECT NO.	FUNDS
5	OHIO	I-680-9(6)	

621A / 656

MAH-680-6.98
R/W PLANS

694 / 104

CITY OF YOUNGSTOWN
MAHONING COUNTY



SCALE
0 20 40 60 80

REV.	DATE	DESCRIPTION
	3-5-82	ADDED PLL 1-FL T. PLAN

R/W SHEET NO. 69-A OF 104

FED. R.D.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

622 / 656

70 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

UNION ST. - 50' N 50°-33'-06" E

EXIST. R/W

MATCH SHEET NO. 68

N 73°-06'-00" E

SHADY RUN RD. - 40'

N 40°-02'-10" E

EXIST. R/W

R/W

RELOC. SHADY RUN RD.

N 32°-30'-05" E

N 61°-47'-10" E

POLAND AVE. - 50'

S 45°-16'-08" E

CAMPBELL ST. - 40'

N 39°-38'-32" E

STA. 58+02.50 (℄ SHADY RUN)
STA. 50+00 (℄ POLAND)

STA. 50+00 (℄ CAMPBELL)
STA. 50+05.70 (℄ POLAND)

5954 5953 5952 5951 5950 5949 5948 5947 5946 5944 5945 5971 5970 5969 5968 5967 5966 5965 5964 5963

387 SL 386 SL 385 T 385 WD 384 T 384 WD 376 WD 367C WD 380 T 380 WD 375 WD 374 WD 374 T 244 WD 376 WA 367 T-2 367 T-1

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
244 -WD	3,645 S.F.	—	3,645 S.F.	—	3,645 S.F.	—	—
				—			
367C -WD	3,486 S.F.	—	1,330 S.F.	—	1,330 S.F.	—	2,156 S.F.
367 T-2			587 S.F.	—	587 S.F.		
367 T-1	8,269 S.F.	—	2,876 S.F.	—	2,876 S.F.	—	8,269 S.F.
374 - WD	2,826 S.F.	—	80 S.F.	—	80 S.F.	—	2,746 S.F.
374 - T			152 S.F.		152 S.F.		
375-WD	2,992 S.F.	—	404 S.F.	—	404 S.F.	—	2,588 S.F.
376-WD	3,308 S.F.	—	864 S.F.	—	864 S.F.	—	2,444 S.F.
380-WD	9,110 S.F.	—	167 S.F.	—	167 S.F.	8,943 S.F.	—
380 - T			1,307 S.F.	—	1,307 S.F.		
384-WD	9,431 S.F.	—	78 S.F.	—	78 S.F.	9,353 S.F.	—
384 - T			2,156 S.F.	—	2,156 S.F.		
385-WD	13,277 S.F.	—	1,210 S.F.	—	1,210 S.F.	12,067 S.F.	—
385 - T			4,820 S.F.	—	4,820 S.F.		
386-WD	9,154 S.F.	—	1,475 S.F.	—	1,475 S.F.	6,316 S.F.	—
386-SL			1,363 S.F.		1,363 S.F.		
387-WD	9,838 S.F.	—	2,042 S.F.	—	2,042 S.F.	4,848 S.F.	—
387-SL			2948 S.F.	—	2948 S.F.		

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
3	ADDED 'WD' SUFFIX TO PCL 375	SMITH	7-23-70
2.	CHANGED ALL NAMES. PREVIOUSLY REVISED ON EARLIER SEPIAS.	MKM	7-28-69
1.	CHANGED ALL 'WD' P/L's TO STANDARD HIGHWAY EASEMENTS. PREVIOUSLY REVISED ON EARLIER SEPIAS.	MKM	7-28-69

R/W SUPPLEMENTAL SHEET

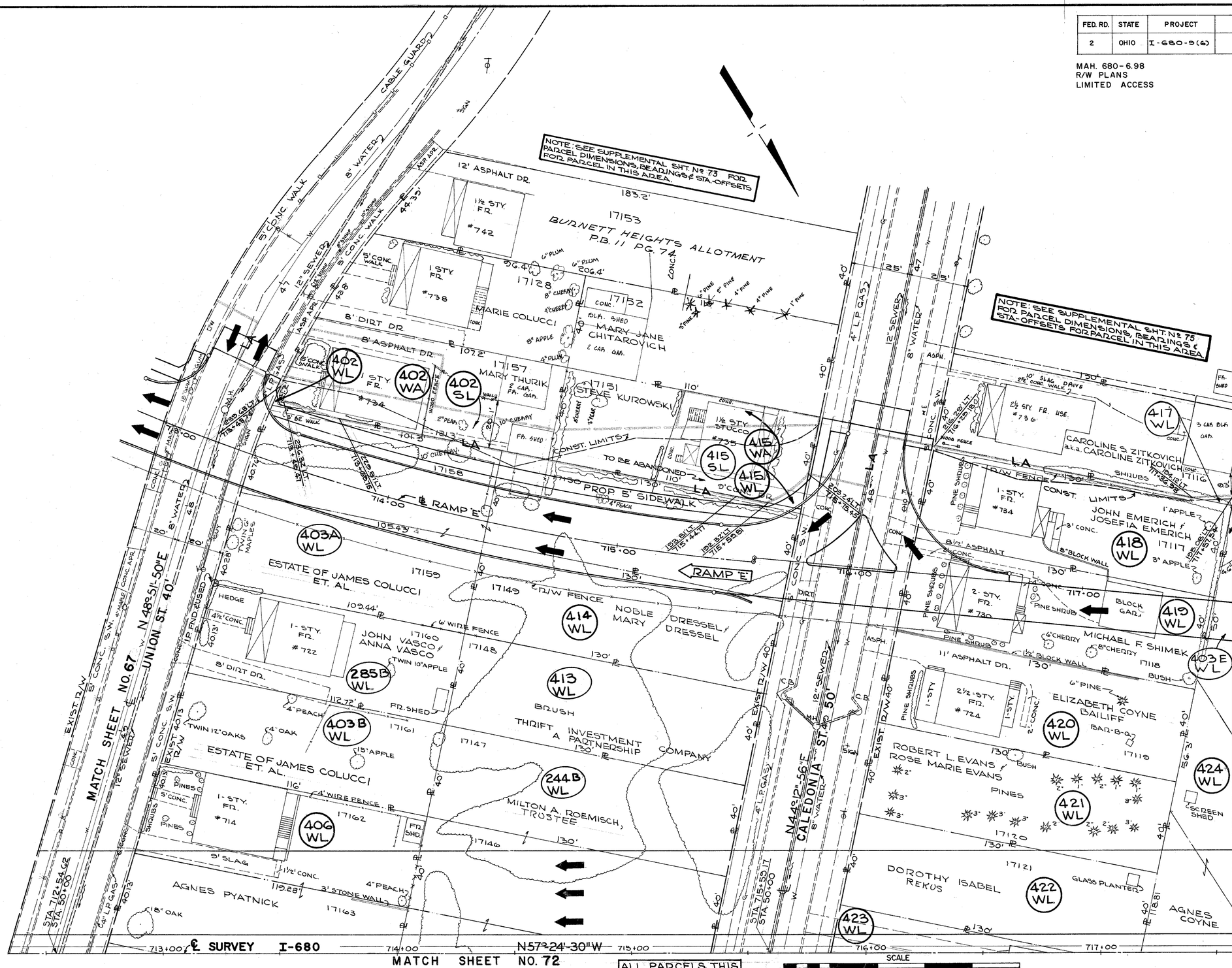
State Highway Dept. Div. 4
R/W. ENGR. & ADMIN. SECT.
JAN 27 1969
1596663
MICRO FILM

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

623
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

71
104



ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

R/W SHEET NO. 71 OF 104

REV.	DATE	DESCRIPTION	COMPLETION DATE
1	7-28-69	Changed All Names Previously Revised on Earlier Series.	

NOTE: SEE SUPPLEMENTAL SHT. No 73875 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

FED.RD.	STATE	PROJECT	
8	OHIO	I-680-9(6)	

624 / 656

72 / 104

MAH. 680-6/98 AGNES COYNE
R/W PLANS
LIMITED ACCESS

℄ SURVEY I-680 MATCH SHEET NO. 71 N57°-24'-30"W

MATCH SHEET NO 67

N 48°-51'-50"E

UNION ST. 50'

N65°04'-47"E

MABEL AVE. 50'

N45°-47'-04"W

CALEDONIA ST. 50'

N44°-12'-56"E

N89°-31'-04"E

MATCH SHEET NO. 77

LA/RW

EXIST. R/W

CONSTRUCTION LIMITS

406 WL

407 WL

244B WL

423 WL

424 WL

403C WL

403D WL

17163 — 5' CONC. — 1-STY. FR. #706 — 15" CHERRY — 122.56' — 5-1" PINES — 24" CATALPA — 1" CONC. WALL — 4" L.P. GAS — 8" SEWER — 40.13' EXIST R/W — 40' R

BURNETT HEIGHTS ALLOTMENT PB. 11 PG. 74

MILTON A. ROEMISCH, TRUSTEE

17145 — 130' R — 17164 — 10' SLAG DR. — 125.84' — FR. GAR. — BUSH — MARY APPENZELLER — 12" APPLE — 10" APPLE — 17165 — I.P. FND. & USED — HEDGE ROW — 129.12'

TREES & BRUSH — 17144 — 17143 — 130' R — 40' R — ESTATE OF JAMES COLUCCI ET. AL.

12" APPLE — R/W FENCE — I.P. FND. & USED — 40' R EXIST. — 4" L.P. GAS — 40' R EXIST. R/W — 8" WATER — 12" SEWER — 5' CONC. — 65' EXIST. R/W — 40'

STA. 712+54.32 — STA. 50+30.00 — STA. 715+55.17 — STA. 51+30.00

2½ STY. FR. #712 — BLK. GAR. — 3½' ASPH. — J GILA CERA ET. AL. 17122 — HEDGE — 1" CHERRY — 4" CHERRY — 17142 — 130' — 112' — BRUSH — 4" ELM — 17123 — 17124 — 405' R

BRUSH & THORNAPPLE — ESTATE OF JAMES COLUCCI ET. AL. — R/W FENCE — EXIST R/W — 6" WATER — 8" SEWER — 84' RT. 717+84.68 — 6" APPLE — TWIN 6" APPLE — LIBERTY — 40' — 130'

I.P. FND. & USED — CB — 40' R EXIST. — 4" L.P. GAS — 12" SEWER — 5' CONC. — 65' EXIST. R/W — 40' — 8" WATER — 8" SEWER — 15" SEWER — 12" SEWER — 8" CHOKE CHERR. — 8" PEACH — 10" APPLE — 10" PEAR — 8" APPLE — 10" PEAR — 6" PEAR — 130' R — 114' — 40' — 8" PEACH — 10" MAPLE — 8" CHERRY — 4" APPLE — MARIE DOMENICA DI THOMAS — GARDEN — 8" CHERRY — 17131 — 17130 — 17129 — 30' R — WIRE FENCE — 717' R

STA. 50+31.06 ℄ UNION — 52' — 8" CATALPA — 6" CATALPA — 4" L.P. GAS — 8" WATER — 15" SEWER — 8" MAPLE — 1" TULIP — 12" CATALPA — 12" ASH — 20" MAPLE — 6" MAPLE — 12" MAPLE — 3" CONC. — EXIST R/W — 40' R — 130' R — 142.54 — 2½ STY FR. HSE # 626 — FR. SHED — CONC. — 5' PEACH — PROP SIDEWALK — 37.75' R — 25' — 5" CHERRY — 4.0' — HELEN BELL — 37304 — 5" SPRUCE — 3" CONC. — 2 STY. FR. HSE # 622 — 1 STY. — 57598 — 108.58' — REPLAT OF CT. LOTS 37303 & 37305 PB 32 PG 53 — AHMAD RADMAN & RADMAN BARBARA — 10" PEAR — 12" APPLE — SLAG WALK — 37302 — 2 STY. FR. HSE # 618 — ASPH. DR. — 1 CAR FR. GAR. — 6" MAPLE — 12" MAPLE — 10" CHERRY — SHED FR. — SHRUBS — 1 CAR FR. GAR. — CONC. — 37308 — 37307 — 37306 — SUBDIVISION OF LOT 576 PB 18 PG 180 — 8" CHERRY — 6" CATALPA — 10" MAPLE — 1 CAR FR. GAR. — 6' SLAG DR. — 2 STY. FR. HSE # 617 — 2 STY. FR. HSE # 615 — 10" APPLE — 6" CATALPA — SLAG DR. — 8" ASH — 2 STY. FR. HSE # 619 — 37309 — NOBLE I. DRESSEL & MARY A. DRESSEL — 2 STY. FR. HSE # 621 — 37310 — ELIZABETH VRANICH — 2 STY. FR. HSE # 623 — 1 CAR BLK. GAR. — 2" PEACH — 4" NUT — 10" CATALPA — 8" MAPLE — 8" STONE WALL — 6" MAPLE — 4" MAPLE — 10" MAPLE — TWIN 4" NUT — 10" CHERRY — 4" APPLE — 4" MAPLE — 8" ASH — 4" L.P. GAS — 8" CONC. — 4" STEPS — CONC. WALK — 25' — 24' — 40' — 37.75' R — 132.0' — 108.58' — 57598 — 37303 — 37305 — 37304 — 37310 — 37309 — 37308 — 37307 — 37306 — 57576

STA 51+58.06 ℄ CALEDONIA — STA 52+13.90 — 350' R — BUSHES — 8" CHERRY — 3-4" PEACH — 6" PLUM — 6" PEAR — 17127 — 8" PLUM — 17126 — 4" PEAR — 8" CHERRY — 2-CAR BLK. GAR. — 8" PEAR — 3" PEACH — 56.8' R — 105' — 2 STY. BR. HSE # 614 — 17125 — 6" PEAR — 3-4" PEAR — WIRE FENCE — CONC. WALK — 40' — 17' R

ALL PARCELS THIS SHEET I-FUNDS

SCALE 0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE-
1	7-28-69	Changed All Names Previously Revised on Earlier Sheets.

R/W SHEET NO. 72 OF 104

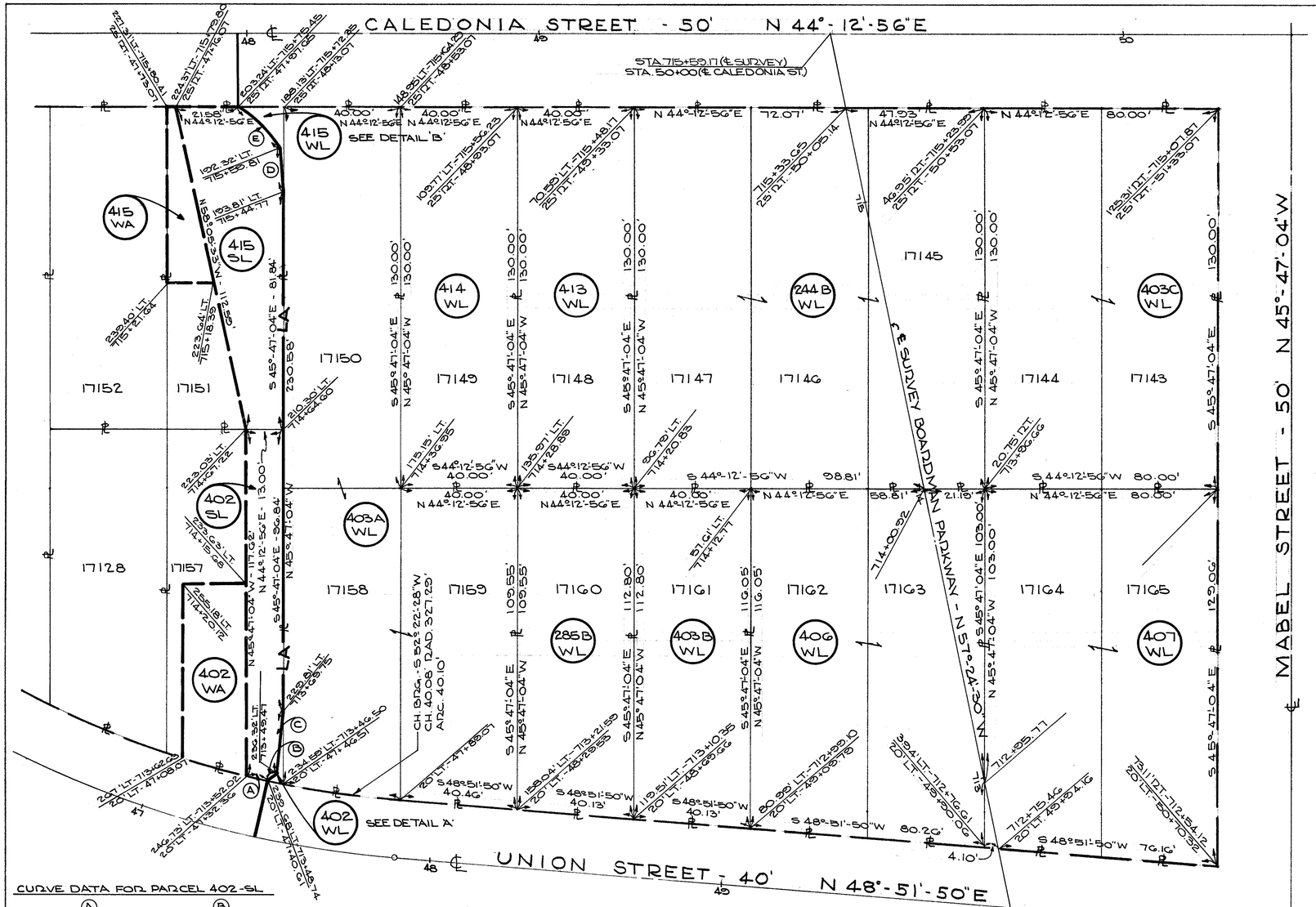
JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

625
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

73
104



CURVE DATA FOR PARCEL 402-SL

(A) CH.BRG.-S 57°-32'-21"W CH.-7.77' RAD.-327.29' ARC-7.77'

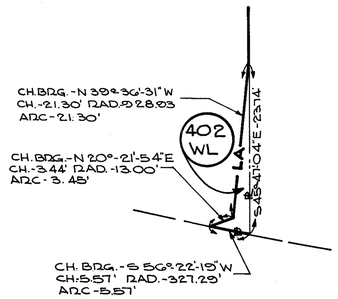
(B) CH.BRG.-S 20°-21'-54"W CH.-3.44' RAD.-13.00' ARC-3.45'

(C) CH.BRG.-S 39°-36'-31"E CH.-21.30' RAD.-928.93' ARC-21.30'

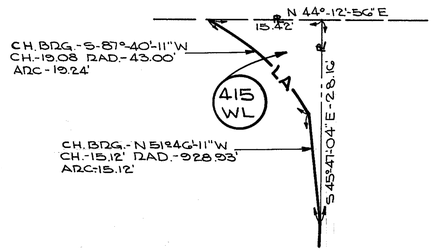
CURVE DATA FOR PARCEL 415-SL

(D) CH.BRG.-S 51°-46'-11"E CH.-15.12' RAD.-928.93' ARC-15.12'

(E) CH.BRG.-N 87°-40'-11"E CH.-19.08' RAD.-43.00' ARC-19.24'



DETAIL 'A'



DETAIL 'B'

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	PRO. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
244B-WL	15,600 S.F.	NONE	15,600 S.F.	NONE	15,600 S.F.	NONE	NONE
285B-WL	4,450 S.F.	NONE	4,450 S.F.	NONE	4,450 S.F.	NONE	NONE
402-WL	4,623 S.F.	NONE	32 S.F.	NONE	32 S.F.	3,074 S.F.	——
402-SL			1,517 S.F.	NONE	1,517 S.F.		
402-WA			1,364 S.F.	NONE	1,364 S.F.		
403A-WL	13,686 S.F.	NONE	13,686 S.F.	NONE	13,686 S.F.	NONE	NONE
403B-WL	4,582 S.F.	NONE	4,582 S.F.	NONE	4,582 S.F.	NONE	NONE
403C-WL	10,400 S.F.	NONE	10,400 S.F.	NONE	10,400 S.F.	NONE	NONE
406-WL	9,359 S.F.	NONE	9,359 S.F.	NONE	9,359 S.F.	NONE	NONE
407-WL	10,100 S.F.	NONE	10,100 S.F.	NONE	10,100 S.F.	NONE	NONE
413-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
414-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
415-WL	4,400 S.F.	NONE	109 S.F.	NONE	109 S.F.	1,650 S.F.	——
415-SL			2,641 S.F.	NONE	2,641 S.F.		
415-WA			573 S.F.	NONE	573 S.F.		

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT
JAN 27 1998

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

626
656

74
104

NOTE: PARCEL 428-EL SOLD TO NORMA CARTER AND REGISTERED IN VOL 7, PAGE 314, NEW DEEDS VARIOUS STATE LANDS

℄ POWERSDALE-MABEL CONNECTOR
CURVE DATA
P.I. STA. 12+32.54
Δ = 90°04'18" LT.
R = 160.00'
T = 160.20'
L = 251.53'
CH = 226.42'
E = 66.42'

POWERSDALE AVE. 50'
N09°28'56"W
8" WATER
6" L.P. GAS
EXIST R/W

MABEL AVE. 50'
S89°26'46"W
14" SEWER
EXIST R/W

℄ RAMP 'E'

℄ CONNECTOR

℄ SURVEY I-680

N57°24'30"W

NOTE: SEE SUPPLEMENTAL SHT. No 78,876 FOR PARCEL DIMENSIONS BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET

DOG HOUSE

DROP 5' SIDEWALK

CONST. LIMITS

ABANDONED

PROPOSED R/W

EXIST R/W

RAMP 'E'

MATCH SHEET NO. 71

MATCH SHEET NO. 77

MATCH SHEET NO. 81

SCALE
0 20 40 60 80 100

R/W SHEET NO. 74 OF 104

PARCELS 459-EL & 432-EL STATE FUNDS, ALL OTHER PARCELS THIS SHEET I-FUNDS

Revised Area Rel 480 WL & Added Rel. 480-A WL 10-18-67
Changed Rel. 473-WL & Rt. 1 Deleted Rel. 693 T-L

APPD. AM. EL PARCS. TO REL 432 SUM. 7-13-70

REV	DATE	DESCRIPTION
	11-1-67	Added 459-EL
	7-26-67	Changed All Names Previously Revised on Earlier Sepias.
	7-26-67	Changed All WD Rel. to Stand. Right Control. Previously Revised on Earlier Sepias

COMPLETION DATE —

ADDED PCL 427 WL INDORSE T.O.C. DATED 4-16-74 BY S.A.G.
5-21-74 CHANGED PCL 428-WD TO 428-EL AND ADDED NOTE OR SAG.

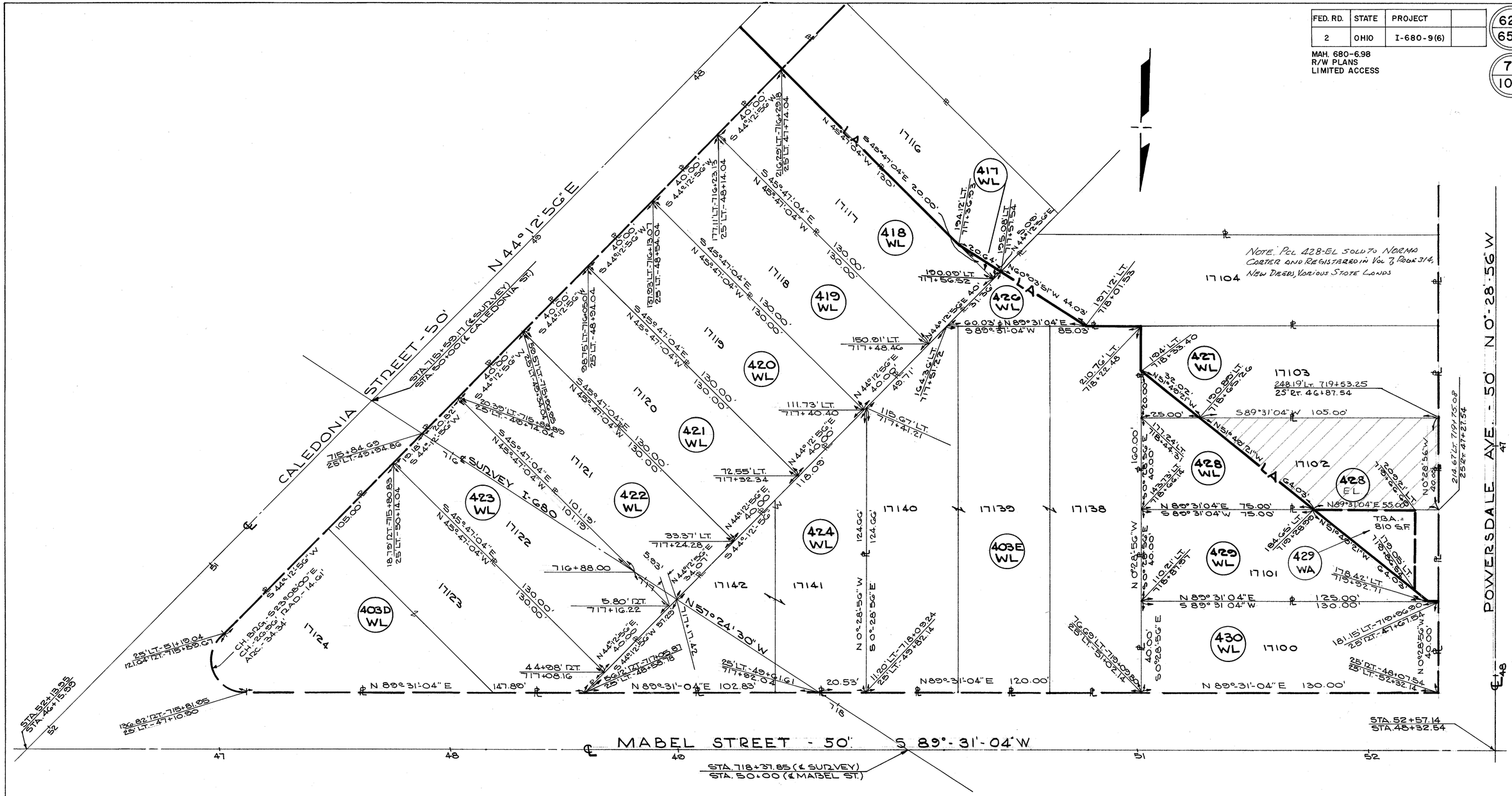
State Highway Dept. Div. 4
R/W ENGR. & ADMIN SECT
JUN 27 1969
LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

627
656

75
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
417-WL	5,200 S.F.	NONE	51 S.F.	NONE	51 S.F.	5,149 S.F.	—
418-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
419-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
420-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
421-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
422-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
423-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
424-WL	7,638 S.F.	NONE	7,638 S.F.	NONE	7,638 S.F.	NONE	NONE
426-WL	7,810 S.F.	NONE	669 S.F.	NONE	669 S.F.	7,141 S.F.	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
403D-WL	9,600 S.F.	NONE	9,600 S.F.	NONE	9,600 S.F.	NONE	NONE
403E-WL	18,568 S.F.	NONE	18,568 S.F.	NONE	18,568 S.F.	NONE	NONE
427-WL	5,200 S.F.	NONE	250 S.F.	NONE	250 S.F.	4,950 S.F.	—
428-WL	5,200 S.F.	NONE	2,000 S.F.	NONE	2,000 S.F.	3,200 S.F.	—
429-WL	5,200 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	1,200 S.F.	—
430-WL	5,200 S.F.	NONE	5,200 S.F.	NONE	5,200 S.F.	NONE	NONE
428-EL	3,200 S.F.	NONE	3,200 S.F.	NONE	3,200 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
	CHANGED PCL. 428-WD TO 428-EL AND ADDED NOTE OF SALE		5-21-79
	ADDED PCL 428-WD PER I.D.C. DATED 4-10-79 BY S.D.A.		4-17-79

R/W SUPPLEMENTAL SHEET

Ohio Highway Dept. Div. 4
R/W. ENGR. & ADMIN. SECT.
JUN 27 1980
LOGGED
CHK.

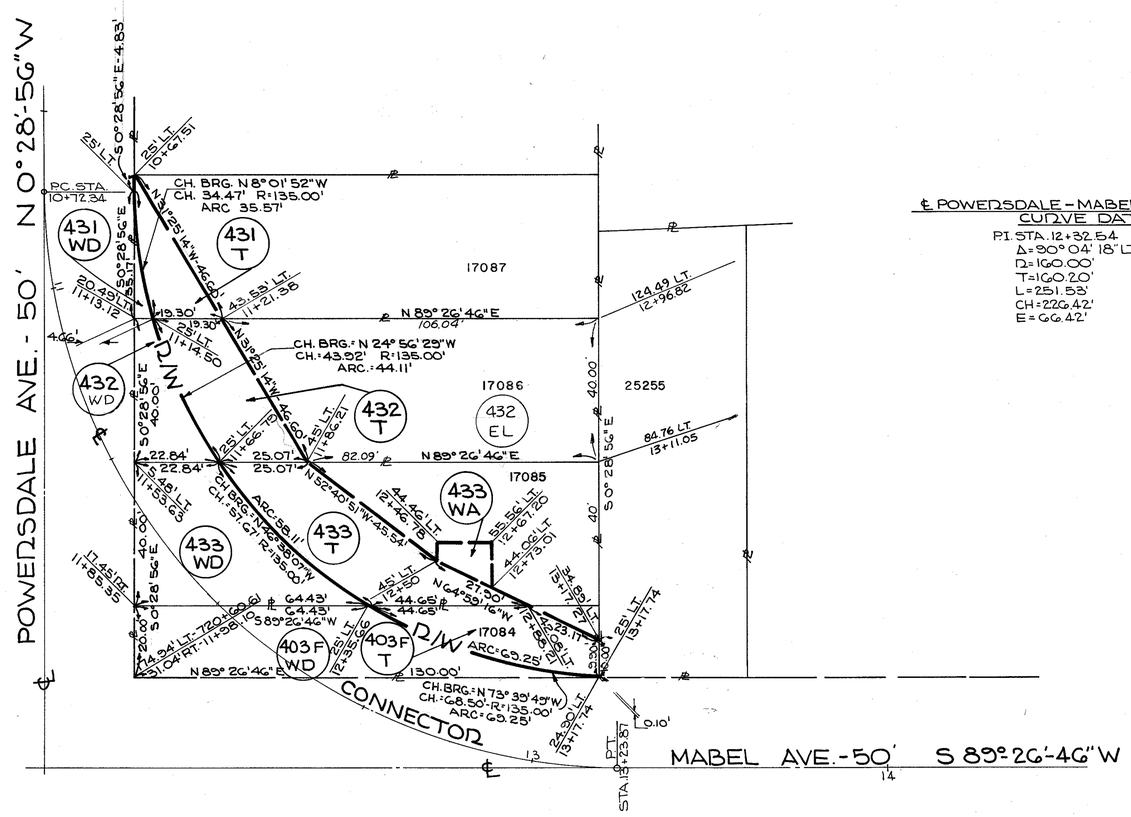
FED.RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

628
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

76
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
431-WD	5,200 S.F.	–	54 S.F.	–	54 S.F.	5,146 S.F.	–
431-T			425 S.F.	–	425 S.F.		
* 432 WD	5,200 S.F.	–	497 S.F.	–	497 S.F.	–	–
432-T			940 S.F.	–	940 S.F.		–
433-WD	5,200 S.F.	–	1,626 S.F.	–	1,626 S.F.	3,574 S.F.	–
433-T			1,379 S.F.	–	1,379 S.F.		
		–					
403F-WD	2,600 S.F.	–	1,745 S.F.	–	1,745 S.F.	855 S.F.	–
403F-T			750 S.F.	–	750 S.F.		
* 432 EL			4703 S.F.		4703 S.F.		



℄ POWERSDALE - MABEL CONNECTOR CURVE DATA

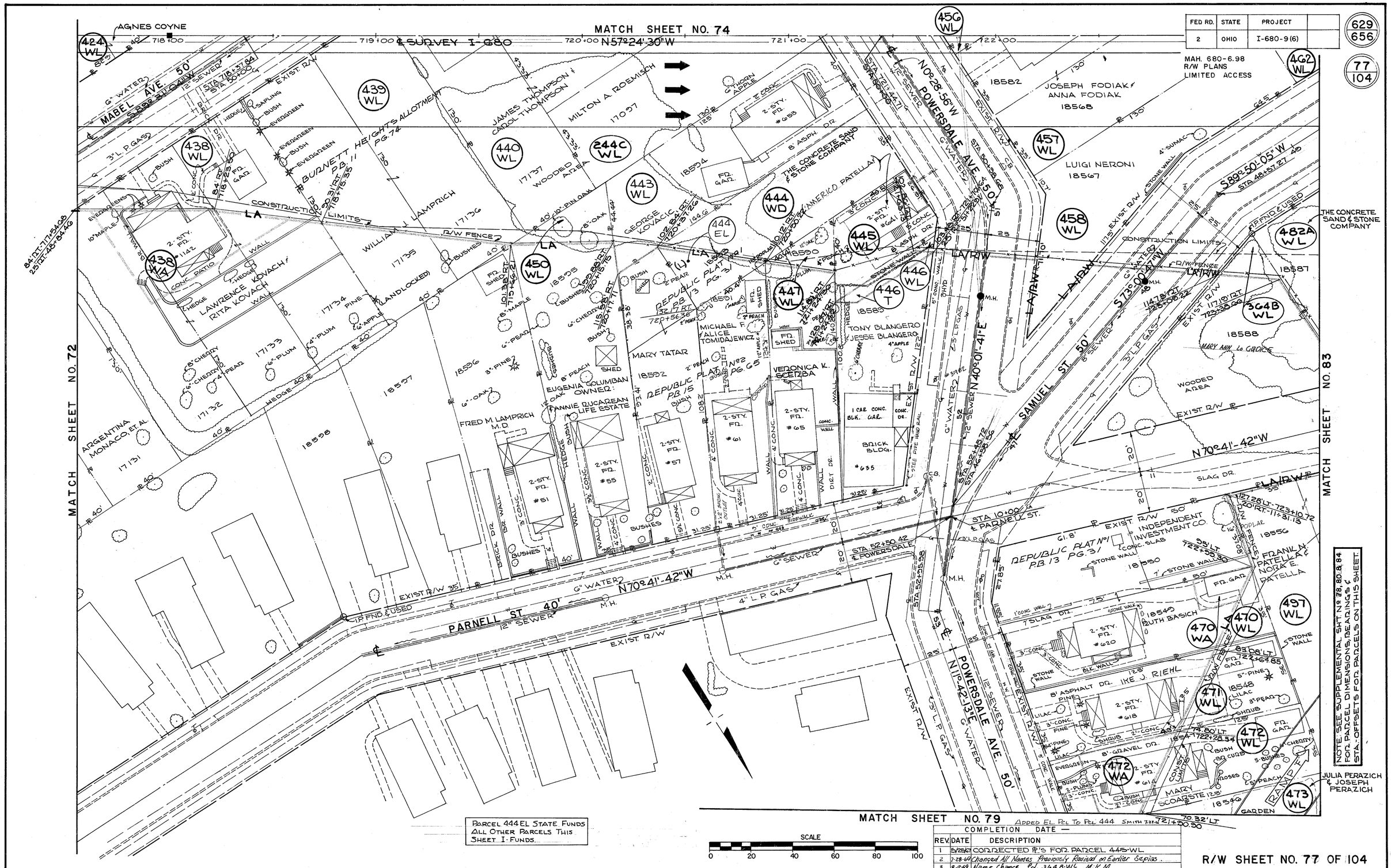
P.I. STA. 12+32.54
Δ = 90° 04' 18" LT.
R = 160.00'
T = 160.20'
L = 251.53'
CH = 226.42'
E = 66.42'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
4	ADDED AN EL PCL TO PCL 432WD	SMITH	7-23-70
3	Deleted Pcl. 293 T-2		7-25-69
2	Changed All Names Previously Revised on Earlier Sepias.	MKM.	7-28-69
1	Changed All "WD" Pcls. to Standard Highway Easements Previously Revised on Earlier Sepias	MKM.	7-28-69

R/W SUPPLEMENTAL SHEET

JAN 27 1969
LOGGED



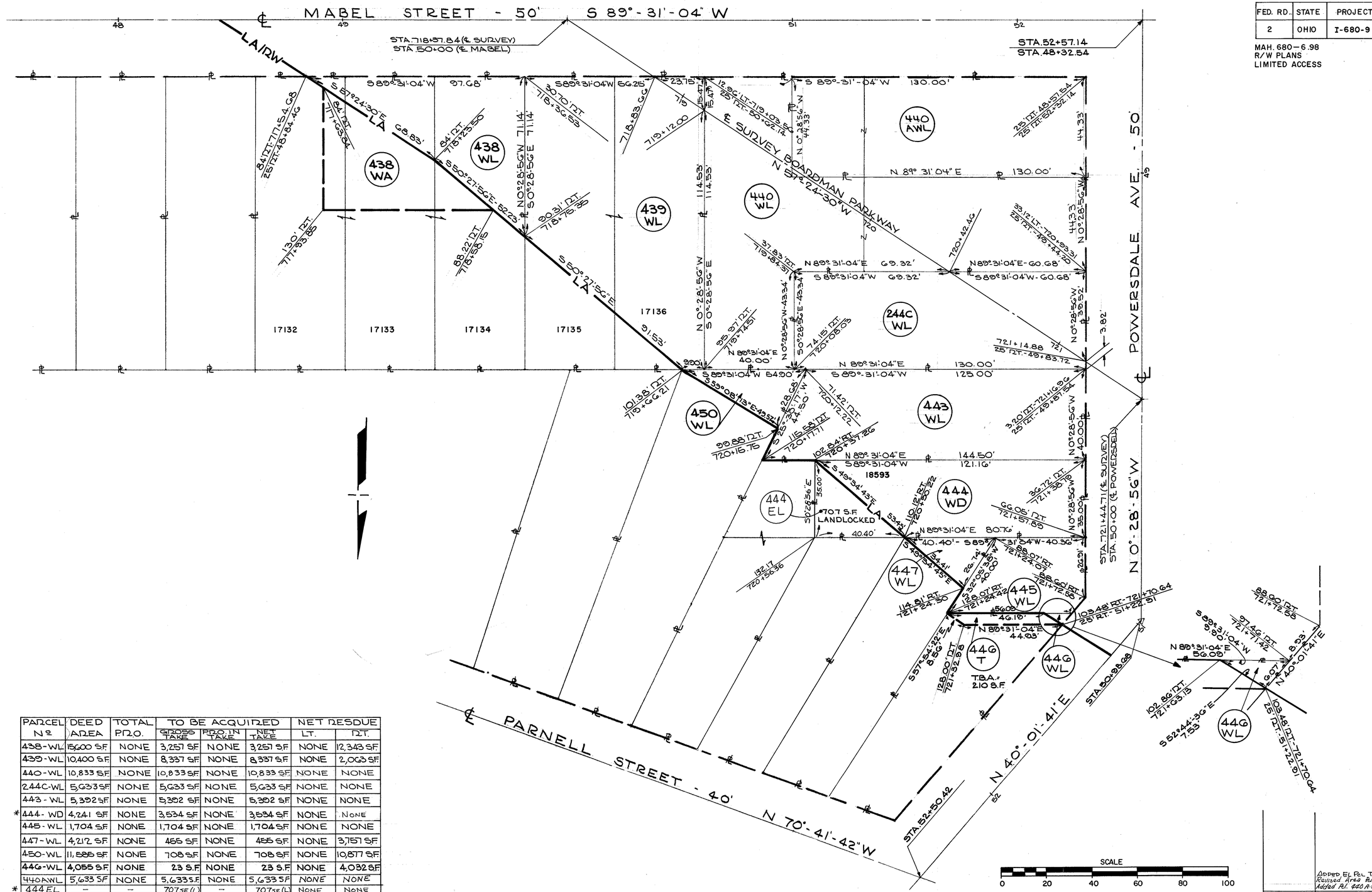
COMPLETION DATE —		
REV.	DATE	DESCRIPTION
1	5/25/67	CORRECTED PP'S FOR PARCEL 445-WL
2	7-28-69	Changed All Names Previously Revised on Earlier Sepias.
3	8-12-69	Name Change Pcl. 364B-WL M.K.M.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

MAH. 680 — 6.98
R/W PLANS
LIMITED ACCESS

630 / 656

78 / 104



PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESDUE LT.	NET RESDUE P.T.
438-WL	15,600 S.F.	NONE	3,251 S.F.	NONE	3,251 S.F.	NONE	12,343 S.F.
439-WL	10,400 S.F.	NONE	8,337 S.F.	NONE	8,337 S.F.	NONE	2,063 S.F.
440-WL	10,833 S.F.	NONE	10,833 S.F.	NONE	10,833 S.F.	NONE	NONE
244C-WL	5,633 S.F.	NONE	5,633 S.F.	NONE	5,633 S.F.	NONE	NONE
443-WL	5,382 S.F.	NONE	5,382 S.F.	NONE	5,382 S.F.	NONE	NONE
* 444-WD	4,241 S.F.	NONE	3,534 S.F.	NONE	3,534 S.F.	NONE	NONE
445-WL	1,704 S.F.	NONE	1,704 S.F.	NONE	1,704 S.F.	NONE	NONE
447-WL	4,212 S.F.	NONE	455 S.F.	NONE	455 S.F.	NONE	3,757 S.F.
450-WL	11,585 S.F.	NONE	708 S.F.	NONE	708 S.F.	NONE	10,877 S.F.
446-WL	4,055 S.F.	NONE	23 S.F.	NONE	23 S.F.	NONE	4,032 S.F.
440AWL	5,633 S.F.	NONE	5,633 S.F.	NONE	5,633 S.F.	NONE	NONE
* 444 EL	—	—	707 S.F. (L)	—	707 S.F. (L)	NONE	NONE

REVISION	DESCRIPTION	BY	DATE
	Added EL Pcl. To Pcl. 444 Revised Area Rd. 440 WL & Added Rt. 440 A WL	SMITH	7-23-70
		MAH	10-13-67

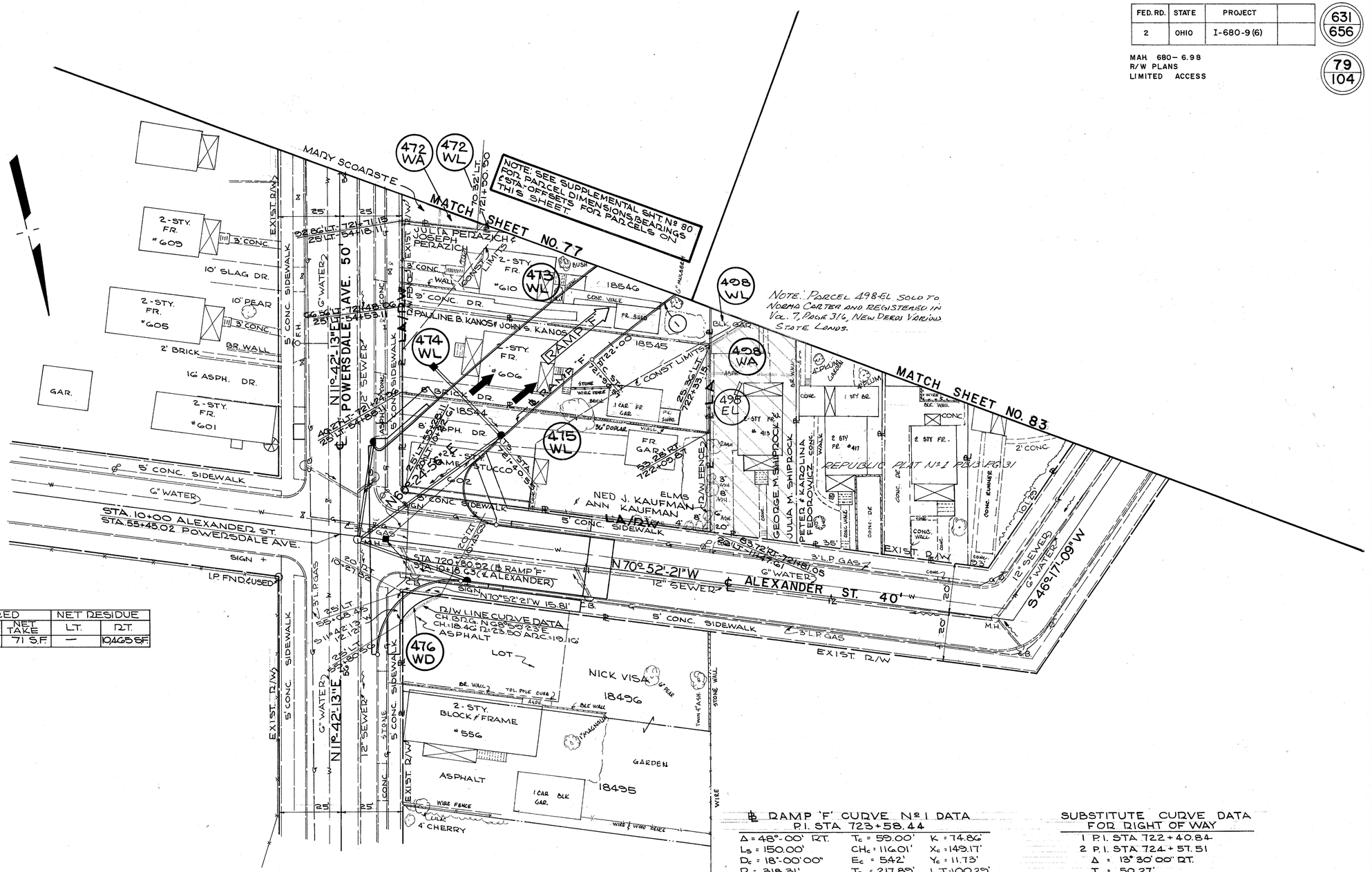
R/W SUPPLEMENTAL SHEET

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

631
656

MAH 680-6.98
R/W PLANS
LIMITED ACCESS

79
104



PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
476-WD	10,536 S.F.	NONE	71 S.F.	NONE	71 S.F.	—	10,465 S.F.

℄ RAMP 'F' CURVE No 1 DATA
P.I. STA 723+58.44

Δ = 48°-00' RT.	T_c = 59.00'	K = 74.86'
L_s = 150.00'	CH_c = 116.01'	X_c = 149.17'
D_c = 18°-00'00"	E_c = 5.42'	Y_c = 11.73'
R = 318.31'	T_s = 217.89'	L.T. = 100.29'
θ_s = 13°30'00"	E_s = 33.34'	S.T. = 50.27'
Δ_c = 21°00'00"	P = 2.94'	L.C. = 199.63'
L_c = 116.67'		

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1 P.I. STA 722+40.84
2 P.I. STA 724+57.51
Δ = 13°30'00" RT.
T = 50.27'
R = 424.69'
L = 100.07'
CH = 99.88'
E = 2.96'

PARCEL 498-EL STATE FUNDS
ALL OTHER PARCELS THIS SHEET
I- FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1.	7-28-69	Changed All Names Previously Revised on Earlier Sepias.
2.	7-23-70	ADDED PARCEL 498-WA SMITH
3.	5-21-71	ADDED NOTE OF SALE PCL. 498-EL

R/W SHEET NO. 79 OF 104

State Highway Dept. Div. 4
R/W ENGR & ADMIN SEPT
JAN 27 1969
LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

632 / 656

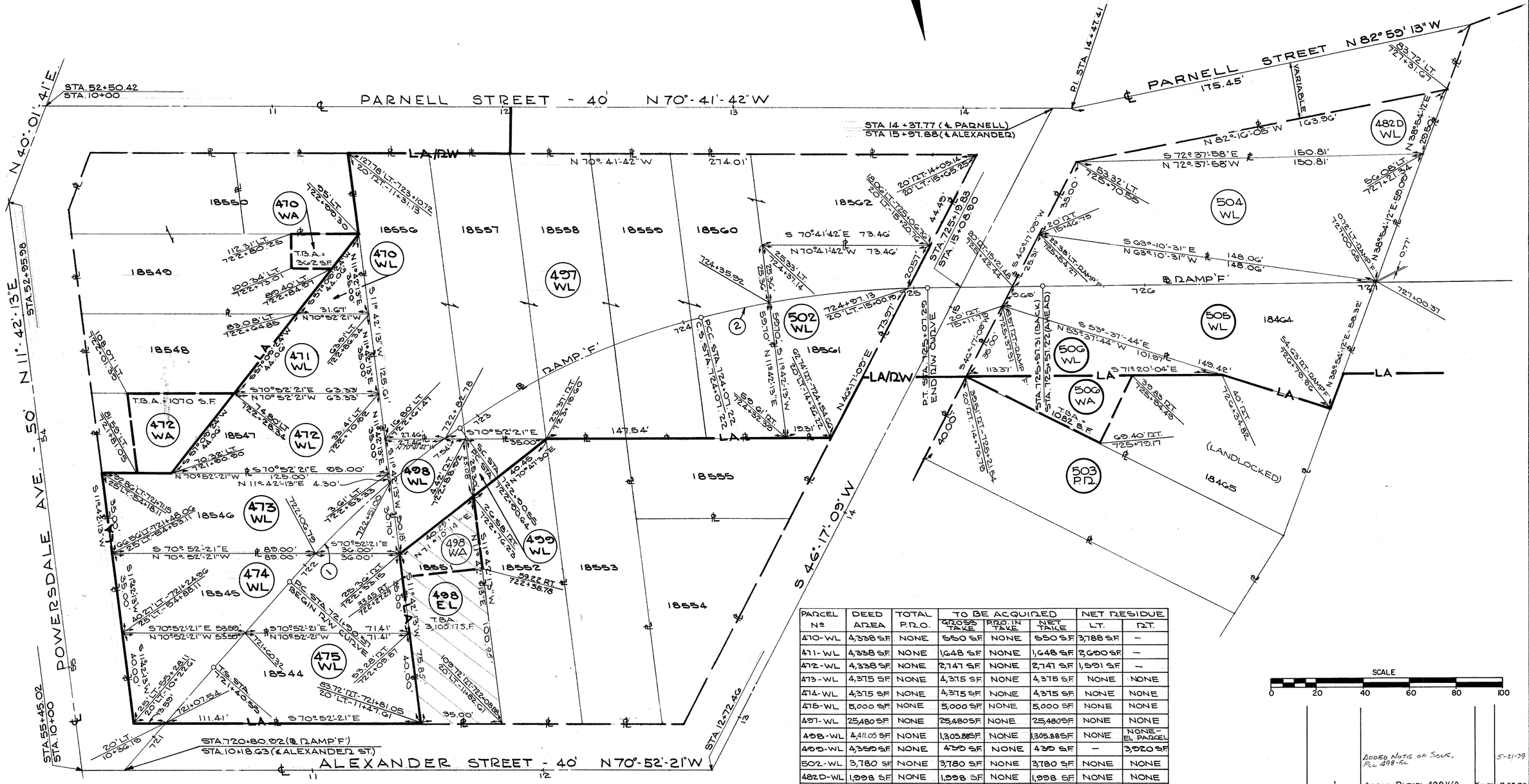
80 / 104

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

1 P.I. STA 722+40.84
2 P.I. STA 724+57.51
Δ = 13° 30' 00" RT.
T = 50.27'
R = 424.69'
L = 100.07'
CH = 99.88'
E = 2.96'

℄ RAMP 'F' CURVE No 1 DATA
P.I. STA 723+58.44

Δ = 48° 00' 00" RT.	Tc = 59.00'	K = 74.86'
Ls = 150.00'	CHc = 116.01'	Xc = 140.17'
Dc = 18° 00' 00"	Ec = 5.42'	Yc = 11.73'
R = 318.31'	Ts = 217.89'	LT. = 100.29'
θs = 13° 30' 00"	Es = 33.34'	ST. = 50.27'
Δc = 21° 00' 00"	P = 2.94'	L.C. = 199.63'
Lc = 116.67'		


STA. 52+50.42
STA. 10+00
N 40°-01'-41"E
℄ PARNELL STREET - 40' N 70°-41'-42"W
℄ LA/RW
N 70°-41'-42"W 274.01'
STA 14+37.77 (℄ PARNELL)
STA 15+97.88 (℄ ALEXANDER)
P.I. STA 14+47.41
℄ PARNELL STREET N 82° 59' 13" W
175.45'
YARIABLE
163.36'
N 82°-16'-05" W
S 72° 37'-58" E 150.81'
N 72° 37'-58" W 150.81'
N 38°-54'-12" E 29.85'
N 11°-42'-13"E
STA. 52+95.98
POWERSDALE AVE. - 50'
S 46°-17'-09" W
STA. 55+45.02
STA. 10+00
ALEXANDER STREET - 40' N 70°-52'-21"W
STA. 12+72.46
STA 720+80.92 (℄ RAMP 'F')
STA 10+18.63 (℄ ALEXANDER ST.)
℄ RAMP 'F'
℄ LA/RW
18550
18549
18548
18547
18546
18545
18544
18556
18557
18558
18559
18560
18561
18562
18555
18554
18553
18552
18564
18565
(LANDLOCKED)
470 WA
470 WL
471 WL
472 WA
472 WL
473 WL
474 WL
475 WL
497 WL
498 WL
498 WA
498 EL
499 WL
499 WA
502 WL
503 P.U.
504 WL
505 WL
506 WL
506 WA
482D WL
T.B.A. = 362 S.F.
T.B.A. = 1070 S.F.
T.B.A. = 3,105.175 S.F.
T.B.A. = 1082 S.F.
P.C. STA. 724+00.00 BEGIN R/W CURVE
P.T. STA. 725+07.29 END R/W CURVE
P.T. STA. 725+51.72 (AHEAD)
P.T. STA. 725+51.31 (BACK)
℄ RAMP 'F'
℄ LA
℄ PARNELL
℄ ALEXANDER
℄ POWERSDALE
℄ RAMP 'F' CURVE
℄ RAMP 'F' CURVE No 1
℄ RAMP 'F' CURVE No 2
℄ RAMP 'F' CURVE No 3
℄ RAMP 'F' CURVE No 4
℄ RAMP 'F' CURVE No 5
℄ RAMP 'F' CURVE No 6
℄ RAMP 'F' CURVE No

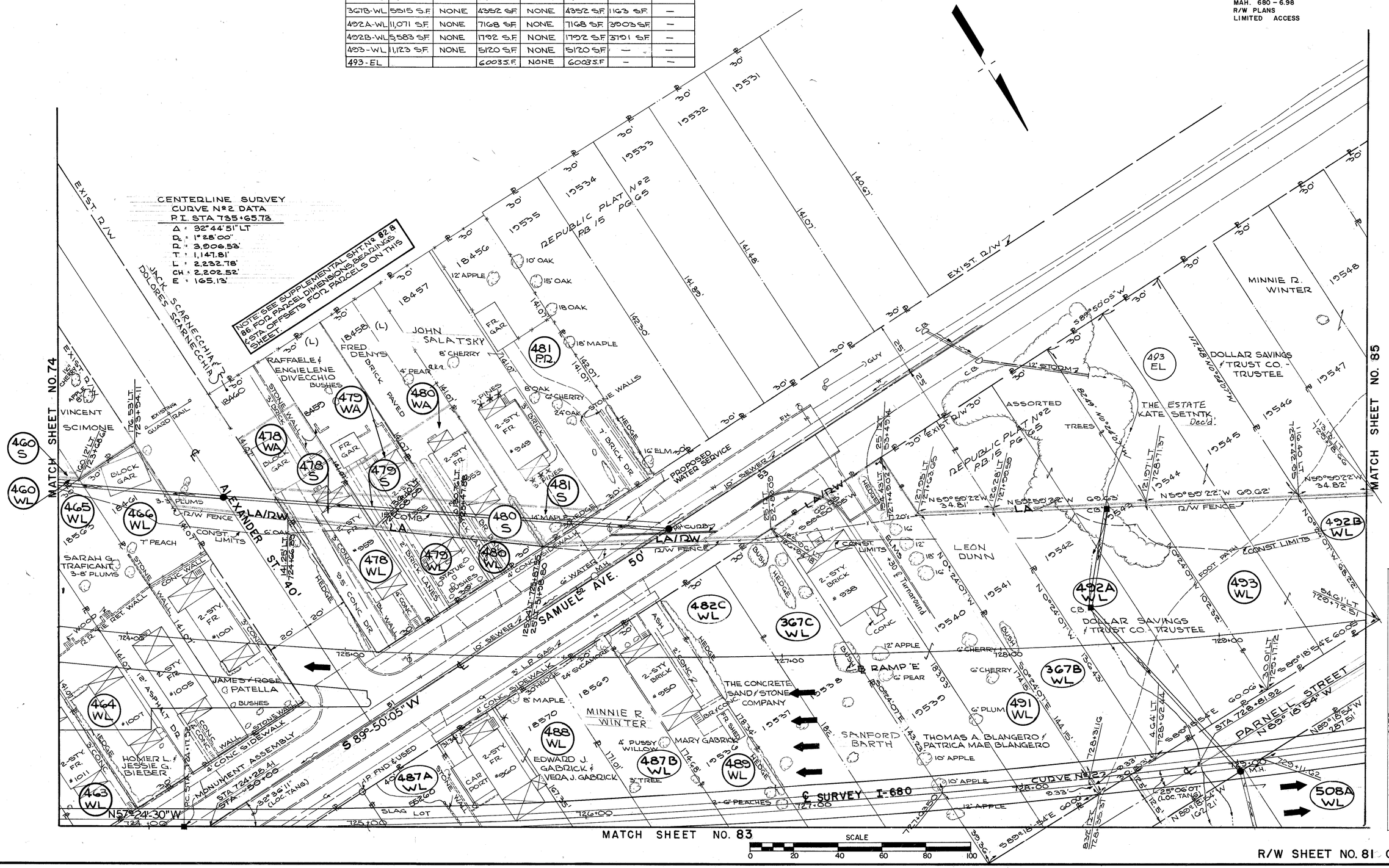
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

633
656

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

81
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
491-WL	10,980 S.F.	NONE	10,980 S.F.	NONE	10,980 S.F.	—	—
367B-WL	5515 S.F.	NONE	4352 S.F.	NONE	4352 S.F.	1163 S.F.	—
492A-WL	11,071 S.F.	NONE	7168 S.F.	NONE	7168 S.F.	3903 S.F.	—
492B-WL	5,583 S.F.	NONE	1792 S.F.	NONE	1792 S.F.	3791 S.F.	—
493-WL	11,123 S.F.	NONE	5120 S.F.	NONE	5120 S.F.	—	—
493-EL			6003 S.F.	NONE	6003 S.F.	—	—



PARCEL 493-EL STATE FUNDS
ALL OTHER PARCELS THIS SHEET
I- FUNDS

COMPLETION DATE —

REV.	DATE	DESCRIPTION
1	6/13/69	Added Pcl. 493-EL
2	7-28-69	Changed All Names Previously Revised on Earlier Copies.
3	12-12-69	Added turnaround on Pcl 491

R/W SHEET NO. 81 OF 104

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT
JAN 27 1969

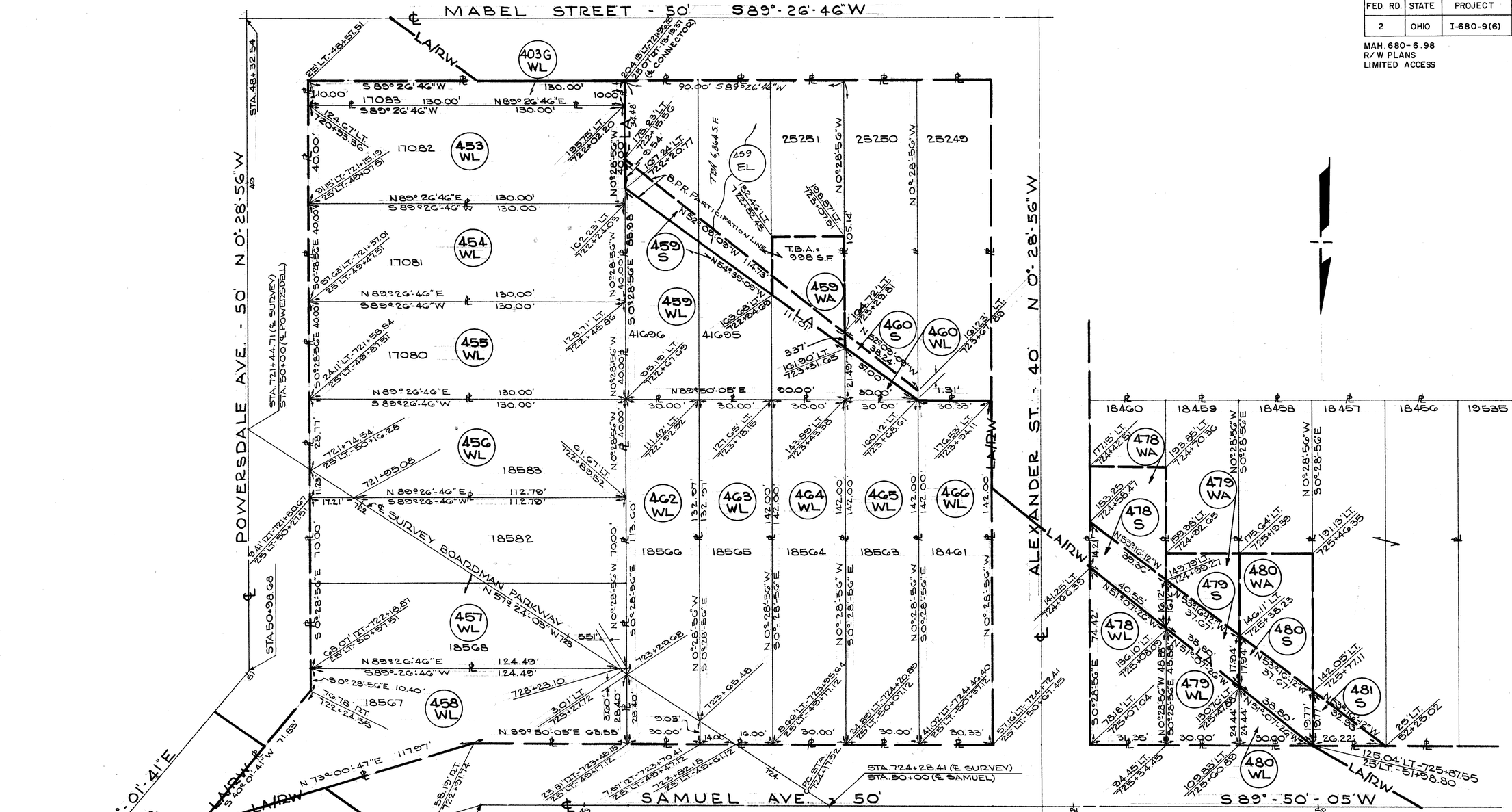
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

634
656

82
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

105.14
3.37
1.51



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
453-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
403G-WL	1,300 S.F.	–	1,300 S.F.	–	1,300 S.F.	–	–
454-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
455-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
456-WL	5,200 S.F.	–	5,200 S.F.	–	5,200 S.F.	–	–
457-WL	9,100 S.F.	–	9,100 S.F.	–	9,100 S.F.	–	–
458-WL	5,681 S.F.	–	5,681 S.F.	–	5,681 S.F.	–	–
459-WL	11,700 S.F.	–	4,836 S.F.	–	4,836 S.F.	–	–
459-S			581 S.F.	–	581 S.F.		
460-WL	3,900 S.F.	–	322 S.F.	–	322 S.F.	3578 S.F.	–
460-S			70 S.F.	–	70 S.F.		

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
462-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
463-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
464-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
465-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
466-WL	4,232 S.F.	–	4,232 S.F.	–	4,232 S.F.	–	–
478-WL	4,452 S.F.	–	1,933 S.F.	–	1,933 S.F.	2,519 S.F.	–
478-S			475 S.F.	–	475 S.F.		
479-WL	4,260 S.F.	–	1,100 S.F.	–	1,100 S.F.	3,160 S.F.(L)	–
479-S			511 S.F.	–	511 S.F.		
480-WL	4,260 S.F.	–	367 S.F.	–	367 S.F.	3,893 S.F.(L)	–
480-S			566 S.F.	–	566 S.F.		
481-S	8,520 S.F.	–	258 S.F.	–	258 S.F.	8,520 S.F.	–

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE
1	ADDED 459-EL		7/1/69

R/W SUPPLEMENTAL SHEET

JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

635
656

83
104

MAH. 680- 6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 81

MATCH SHEET NO. 77

MATCH SHEET NO. 79

MATCH LINE SEE SHEET NO. 42

SAMUEL AVE. 50'
(LOC. TANG.)
N 89°50'05"E
STA. 724+28.41
STA. 5+00.00
724+00.00
P.C. STA. 724+17.52
32° 36' 11"
10" SEWER
G"WATER
3" L.P. GAS
4' CONC. SIDEWALK
3" L.P. GAS
EXIST. R/W 30'
56.77'

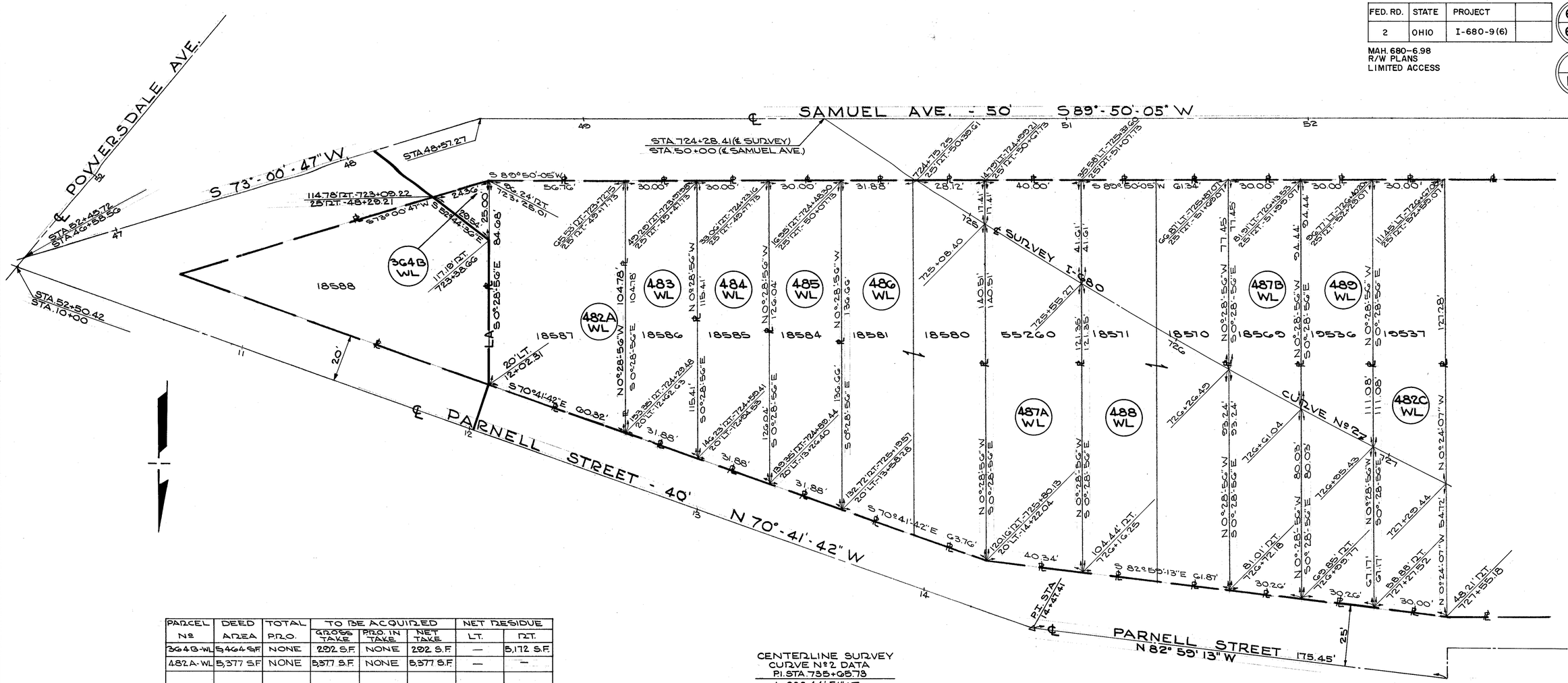
PARNELL ST. 40'
N 70° 41' 42" W
EXIST. R/W 35'
R/W FENCE/HEDGE
SLAG DRIVE
WOODED AREA
CONST. LIMITS
PARNELL ST.
N 89° 18' 54" W
EXIST. R/W 30.56'
PART OL. 539
N 89° 18' 54" W
70.43' RT. 727+66.19
PARNELL ST.
N 88° 59' 13" W
EXIST. R/W
175.45'
VARIABLE
S 38° 54' 12" W 40.32'
118.95'
P.T. STA 14+41.41
STA 14+21.77
STA 15+97.85
162.84'
RAMP 'F'
N 71° 35' 04" W
N 71° 35' 04" W - 80.00
CONST. LIMITS
229.56'
S 71° 25' 04" E
40' RT. 728+15 (RAMP F)
40' RT. (RAMP F) 728+49.91
40' RT. 726+34.82
40' RT. 726+00.55
40' RT. RAMP 'F' 725+95
40' RT. 728+00.00
40' RT. 728+21.08 (RAMP F)
128.11' RT. (728+19.88 RAMP F)
180.46' RT. (728+40.31 RAMP F)
S 66° 52' 37" E - 20.56'
N 38° 24' 56" E 42.43'
N 37° 06' 22" W 98.71'
95.49'
S 37° 06' 22" E
LA
R/W FENCE
LA
R/W FENCE
LA
R/W FENCE

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

636
656

84
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
364B-WL	5,464 S.F.	NONE	292 S.F.	NONE	292 S.F.	—	5,172 S.F.
482A-WL	5,377 S.F.	NONE	5,377 S.F.	NONE	5,377 S.F.	—	—
482C-WL	5,405 S.F.	NONE	5,405 S.F.	NONE	5,405 S.F.	NONE	NONE
483-WL	3,284 S.F.	NONE	3,284 S.F.	NONE	3,284 S.F.	NONE	NONE
484-WL	3,609 S.F.	NONE	3,609 S.F.	NONE	3,609 S.F.	NONE	NONE
485-WL	3,930 S.F.	NONE	3,930 S.F.	NONE	3,930 S.F.	NONE	NONE
486-WL	8,859 S.F.	NONE	8,859 S.F.	NONE	8,859 S.F.	NONE	NONE
487A-WL	6,424 S.F.	NONE	6,424 S.F.	NONE	6,424 S.F.	NONE	NONE
487B-WL	5,186 S.F.	NONE	5,186 S.F.	NONE	5,186 S.F.	NONE	NONE
488-WL	10,252 S.F.	NONE	10,252 S.F.	NONE	10,252 S.F.	NONE	NONE
489-WL	5,295 S.F.	NONE	5,295 S.F.	NONE	5,295 S.F.	NONE	NONE

CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+05.73

Δ = 32°-44'-51" LT.
D_c = 1°-2.8'
R = 3,900.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Ohio
R/W ENG'S Approval
JAN 27 1969
Locker
Chkd. BW 5

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	P.T.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.	
492-B WL	5,583 S.F.	NONE	1,792 S.F.	NONE	1,792 S.F.	3,791 S.F.	—	
178-B WL	11,204 S.F.	NONE	2,048 S.F.	NONE	2,048 S.F.	9,156 S.F.	—	
435 WL	5,623 S.F.	NONE	256 S.F.	NONE	256 S.F.	5,367 S.F.	—	
508A-WL	177,622 S.F.	NONE	119,554 S.F.	NONE	119,554 S.F.	—	58,068 S.F.	(L)
509 - WL	220,000 S.F.	NONE	127,122 S.F.	NONE	127,122 S.F.	31,561 S.F.	61,317 S.F.	(L)
492C-WL	23,870 S.F.	NONE	16,491 S.F.	NONE	16,491 S.F.	—	7,379 S.F.	(L)

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

637
656

85
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+65.73
Δ = 3°04'41" LT.
D_c = 1°28'00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

MATCH SHEET NO. 81

MATCH SHEET NO. 87

MATCH SHEET NO. 86

SAMUEL AVE. 50'
℄ S 89°50'05" W

℄ ZEDAKER ST.
N 0°24'07" W
50'

PARNELL ST.
℄ N 89°18'54" W
EXIST. R/W
200'

REPUBLIC PLAT Nº 2
P.B. K PG. 65

19555
19554
19553
19552
19551
19550
19549
19548
19547
19546
19545

JAMES A. OWEN JR. Executor of the estate of JAMES A. OWEN SR. deceased
N 0°24'07" W 50.00'

THE FOREMOST INVESTMENT CO.

HANNAH LANG

5" OAK

BRUSH

THE DOLLAR SAVINGS & TRUST CO.

I.P. FND & USED

435 WL

MINNIE R. WINTER

178-B WL

492-B WL

508-A WL

509 WL

492C WL

ARTHUR E. WESTER,
WARD W. WESTER,
HAROLD D. LEACH

ADOLPH JOHNSON & SON COMPANY
An Ohio Corporation

25' EASEMENT FOR ACCESS TO WESTER & LEACH PROPERTY-D.B. 534 PG. 401

EXIST. CHAIN LINK FENCE

12.5' 12.5'

L.A. R/W

CONSTRUCTION LIMITS

R/W FENCE

442.27'

N 76° 38' 38" W

140' LT 735+55

734+00

114.76' LT 733+25

128.38' LT 732+25.12

108.04' LT 732+38.57

110.98' LT 731+80.75

116.40' LT 729+42.65

124.61' LT 726+72.51

DIRT

1 STY. BLK. BLDG.

SLAG DRIVE

THE DOLLAR SAVINGS & TRUST COMPANY, TRUSTEE

S 0°24'07" E 119.26'

N 0°24'07" W 119.26'

DUMP AREA

SLATE

112.27'

137.27'

732+78.58

733+00

732+25.06

732+00

731+00

730+00

735+00

734+00

EXIST. CHAIN LINK FENCE

S 0°24'07" E
N 0°24'07" W

200' FENCE

WOODED AREA

206.09'

197.01'

RAMP 'F'

PART O.L. 539

PART OL. 539

N 50°50'22" W 34.82'

G.G. 62'

S 50°24'07" E 68.22'

S 89°18'54" E 130.00'

287.51'

N 50°50'22" W 24.82'

S 89°18'54" E 130.00'

S 89°18'54" E 130.05'

GG 62.04'

S 89°18'54" E 130.00'

PARNELL ST.
N 89°18'54" W
EXIST. R/W

MONUMENT ASSEMBLY

CURVE Nº 2

ALL PARCELS THIS SHEET I-FUNDS

REV.	DATE	COMPLETION DATE — DESCRIPTION
1	10/1/68	CHANGED LA LINE FOR PARCELS 509-WL & 508-WA
2	7-28-69	Changed All Notes Previously Revised on Earlier Sheets.

SCALE
0 20 40 60 80 100

R/W SHEET NO. 85 OF 104

State Highway Dept. Div. 4
R/W Plans & Admin. Sect.
JAN 27 1969
Approved
Date
By

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

638/656

86/104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 85

MATCH SHEET NO. 83

MATCH SHEET NO. 87

RAMP 'F'

RAMP 'F'

730+00

731+00

732+00

733+00

250'

300'

S 71°-35'-04"-E 229.50'

S 64°-17'-03"-E

CONSTRUCTION LIMITS

261.02'

D/W FENCE

LA

210' RT 732+00

S 79°-13'-13"-E 102.82'

D/W FENCE

LA

192.87' RT 732+95.84

S 79°-13'-13"-E 50.97'

LA R/W

508A WL

509 WL

492C WL

S 0°-24'-07"-E 206.08'

N 0°-24'-07"-W 206.08'

S 0°-24'-07"-E 197.01'

N 0°-24'-07"-W 197.01'

733+00

185.26' RT 733+44.01

S 79°-13'-13"-E 164.23'

CONSTRUCTION LIMITS

LA

165' RT 735+00

S 81°-24'-25"-E - 271.84'

PART OL. 539

ADOLPH JOHNSON & SON COMPANY, AN OHIO Corporation
(LANDLOCKED)
61,317 S.F.

THE DOLLAR SAVINGS & TRUST COMPANY-TRUSTEE
(LANDLOCKED)
7,379 S.F.

ARTHUR E. WESTER,
WARD W. WESTER &
HAROLD D. LEACH

(LANDLOCKED)
58,068 S.F.

PART OL. 539

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.T.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT	NET RESIDUE RT.
508A-WL	177,622 S.F.	NONE	119,554 S.F.	NONE	119,554 S.F.	–	58,068 S.F. (L)
508-WL	220,000 S.F.	NONE	127,122 S.F.	NONE	127,122 S.F.	31,561 S.F.	61,317 S.F. (L)
492C-WL	23,870 S.F.	NONE	16,491 S.F.	NONE	16,491 S.F.	–	7,379 S.F. (L)

ALL PARCELS THIS SHEET
I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION

R/W SHEET NO. 86 OF 104

State Highway Dept. Dist. 4
R/W Engrs. & Admin. Corp.
JAN 27 1969
Logged
Chkd. BW Ck.

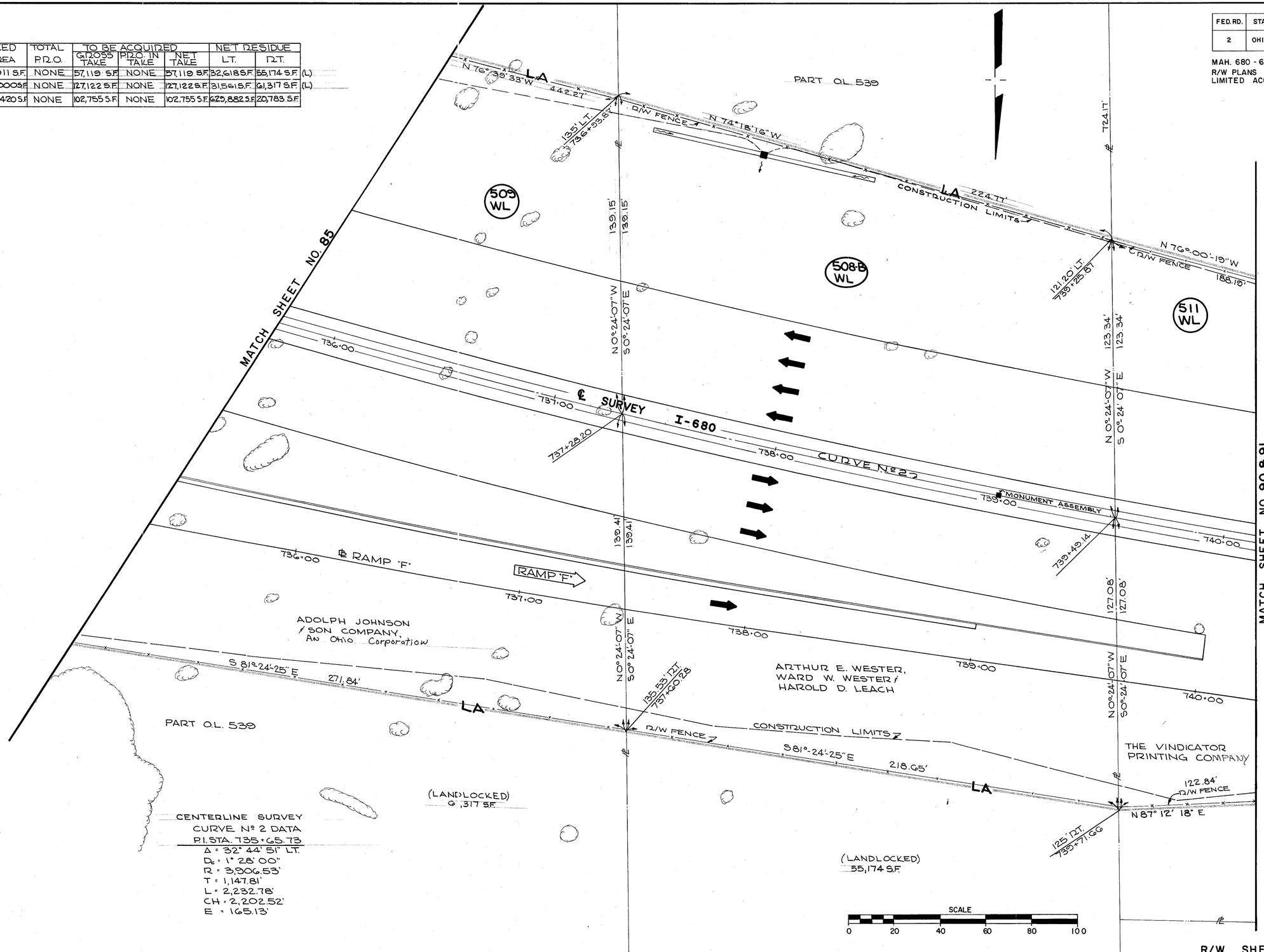
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

639
656

MAH. 680 - 6.98
R/W PLANS
LIMITED ACCESS

87
104

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.	
508B-WL	144,911 S.F.	NONE	57,119 S.F.	NONE	57,119 S.F.	32,618 S.F.	55,174 S.F.	(L)
509-WL	220,000 S.F.	NONE	127,122 S.F.	NONE	127,122 S.F.	31,561 S.F.	61,317 S.F.	(L)
511-WL	753,420 S.F.	NONE	102,755 S.F.	NONE	102,755 S.F.	629,882 S.F.	20,783 S.F.	



CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+65.73
Δ = 32° 44' 51" LT.
D_c = 1° 28' 00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

ALL PARCELS THIS SHEET
I - FUNDS

REV.	DATE	DESCRIPTION	COMPLETION DATE -
1	10/1/68	CHANGED LA LINE ON PARCELS 508B-WL & 509-WL	

R/W SHEET NO. 87 OF 104

State Highway Dept. Div. 4
R/W - ENGR & ADMIN SECT.
JAN 27 1969
LOGGED

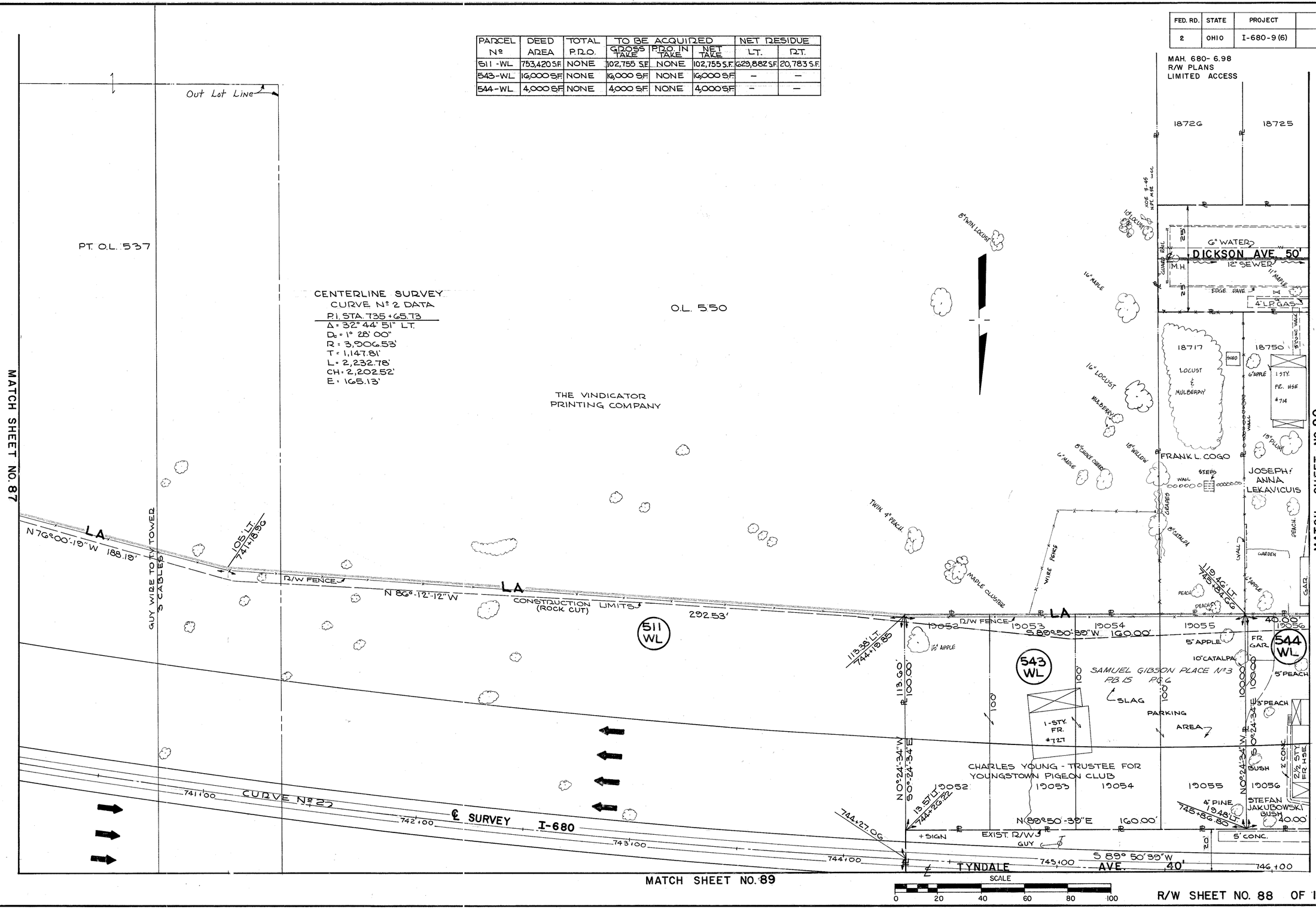
FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

640
656

88
104

MAH. 680- 6.98
R/W PLANS
LIMITED ACCESS

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
511-WL	753,420 S.F.	NONE	102,755 S.F.	NONE	102,755 S.F.	629,882 S.F.	20,783 S.F.
543-WL	16,000 S.F.	NONE	16,000 S.F.	NONE	16,000 S.F.	–	–
544-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–



ALL PARCELS THIS SHEET I-- FUNDS

COMPLETION DATE –

REV.	DATE	DESCRIPTION

R/W SHEET NO. 88 OF 104

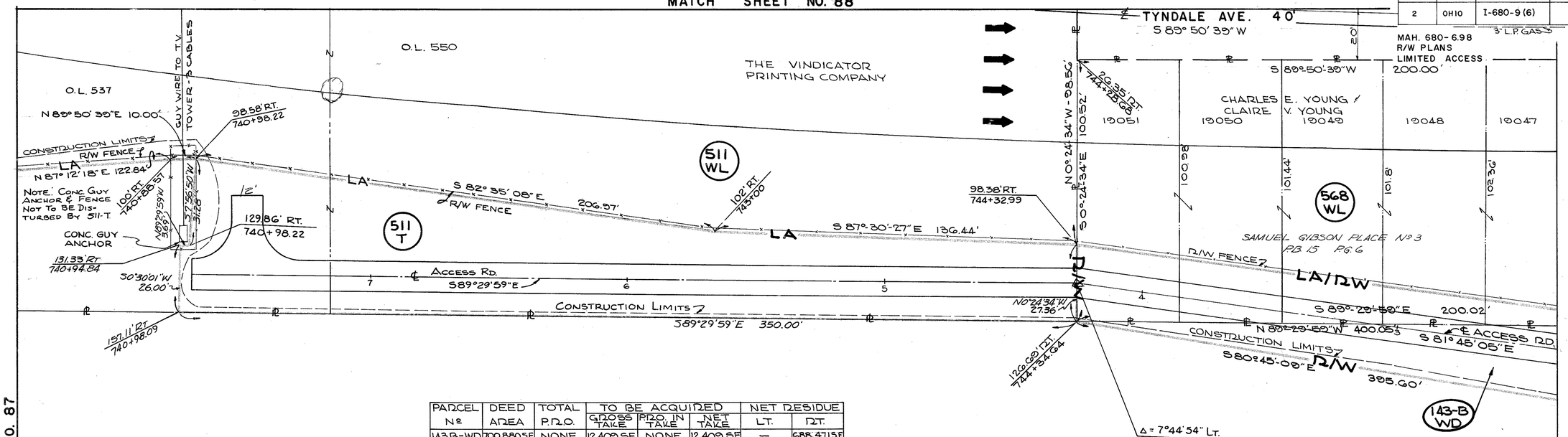
State Highway Dist. Div. 4
R/W ENGR & ADMIN SECT
JAN 27 1969
LOGGED
Dist. ..... Bill No. .....

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

641
656

89
104

MATCH SHEET NO. 88



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LT.	RT.
143B-WD	700,880 S.F.	NONE	12,408 S.F.	NONE	12,408 S.F.	—	688,471 S.F.
511-WL	753,420 S.F.	NONE	102,755 S.F.	NONE	102,755 S.F.	629,882 S.F.	20,783 S.F.
568-WL	20,334 S.F.	NONE	20,334 S.F.	NONE	20,334 S.F.	—	—
511-T		NONE	13,477 S.F.	NONE	13,477 S.F.		

MATCH SHEET NO. 87

O.L. 537

MATCH SHEET NO. 92

THE CITY OF YOUNGSTOWN, OHIO

ALL PARCELS THIS SHEET
I - FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —		
REV.	DATE	DESCRIPTION
	7-15-71	ADDED PARCEL 511-T

R/W SHEET NO. 89 OF 104

State Highway Dept. Div. 4
R/W ENGR & ADMIN SECT
JAN 27 1969
ISSUED

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE L.T.	NET RESIDUE R.T.
517-WL	5,618 S.F.	NONE	100 S.F.	NONE	100 S.F.	5,518 S.F.	–
518-WL	5,617 S.F.	NONE	300 S.F.	NONE	300 S.F.	5,317 S.F.	–
519-WL	5,617 S.F.	NONE	798 S.F.	NONE	798 S.F.	4,798 S.F.	–
519-WD			21 S.F.	NONE	21 S.F.		
519-T			46 S.F.	NONE	46 S.F.		
544-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
545-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
546-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
547-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	–	–
548-WL	8,000 S.F.	NONE	8,000 S.F.	NONE	8,000 S.F.	–	–

CENTERLINE SURVEY
CURVE Nº 2 DATA
P.I. STA. 735+65.73
Δ = 32° 44' 51" LT.
D_c = 1° 28' 00"
R = 3,906.53'
T = 1,147.81'
L = 2,232.78'
CH = 2,202.52'
E = 165.13'

* RE: PCLS 527-WL THRU 540-WL INCL:

1. PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969.
3. TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540 WL, TOTAL TAKE.

DATE OF THESE REVISIONS : 3/12/69
J. R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, & Removed All Phantom Parcels.

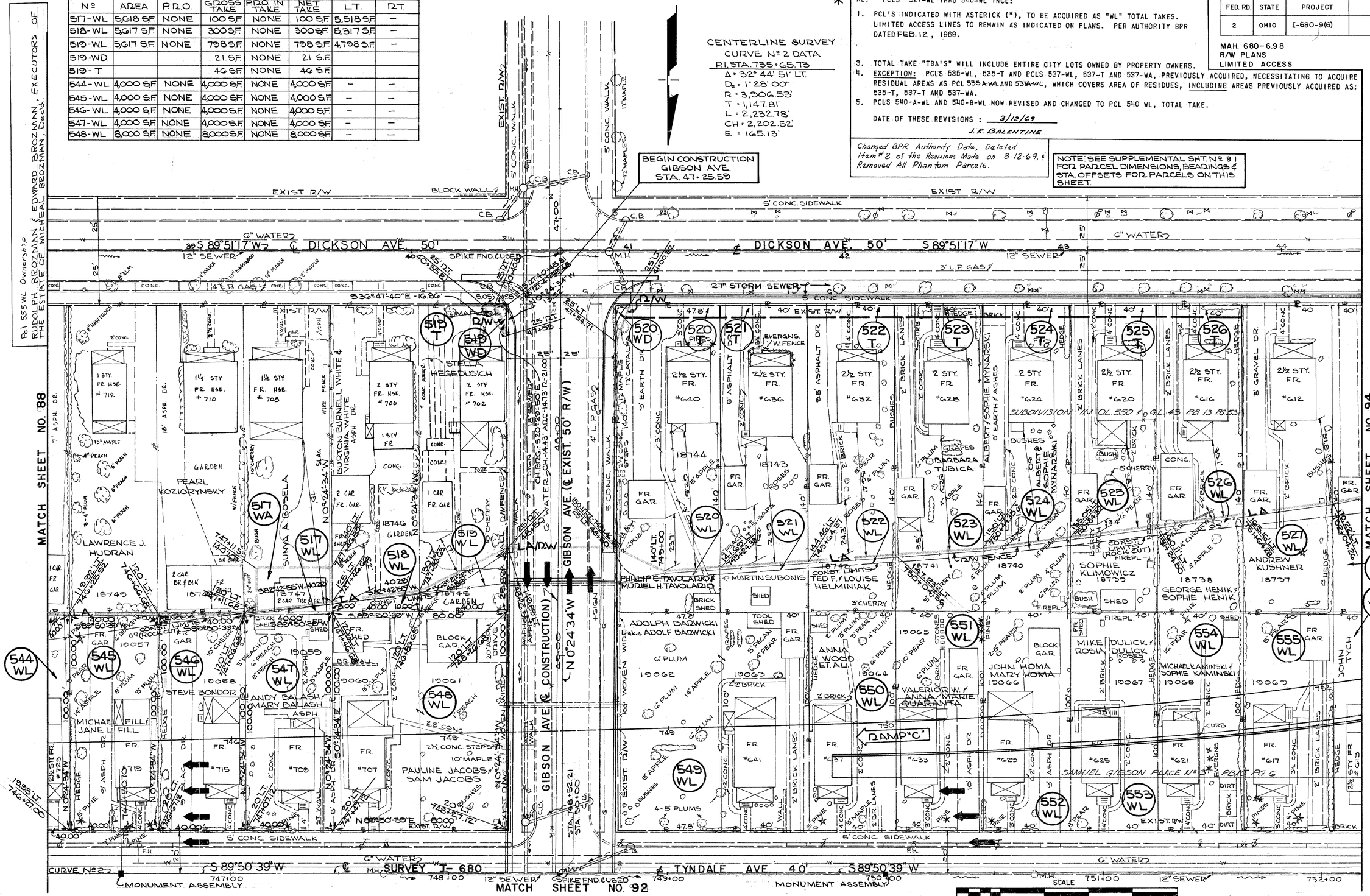
NOTE: SEE SUPPLEMENTAL SHT. Nº 91 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

642/656

90/104



COMPLETION DATE -

REV.	DATE	DESCRIPTION
1	7-28-69	Changed All Names Previously Revised on Earlier Sepias

R/W SHEET NO. 90 OF 104

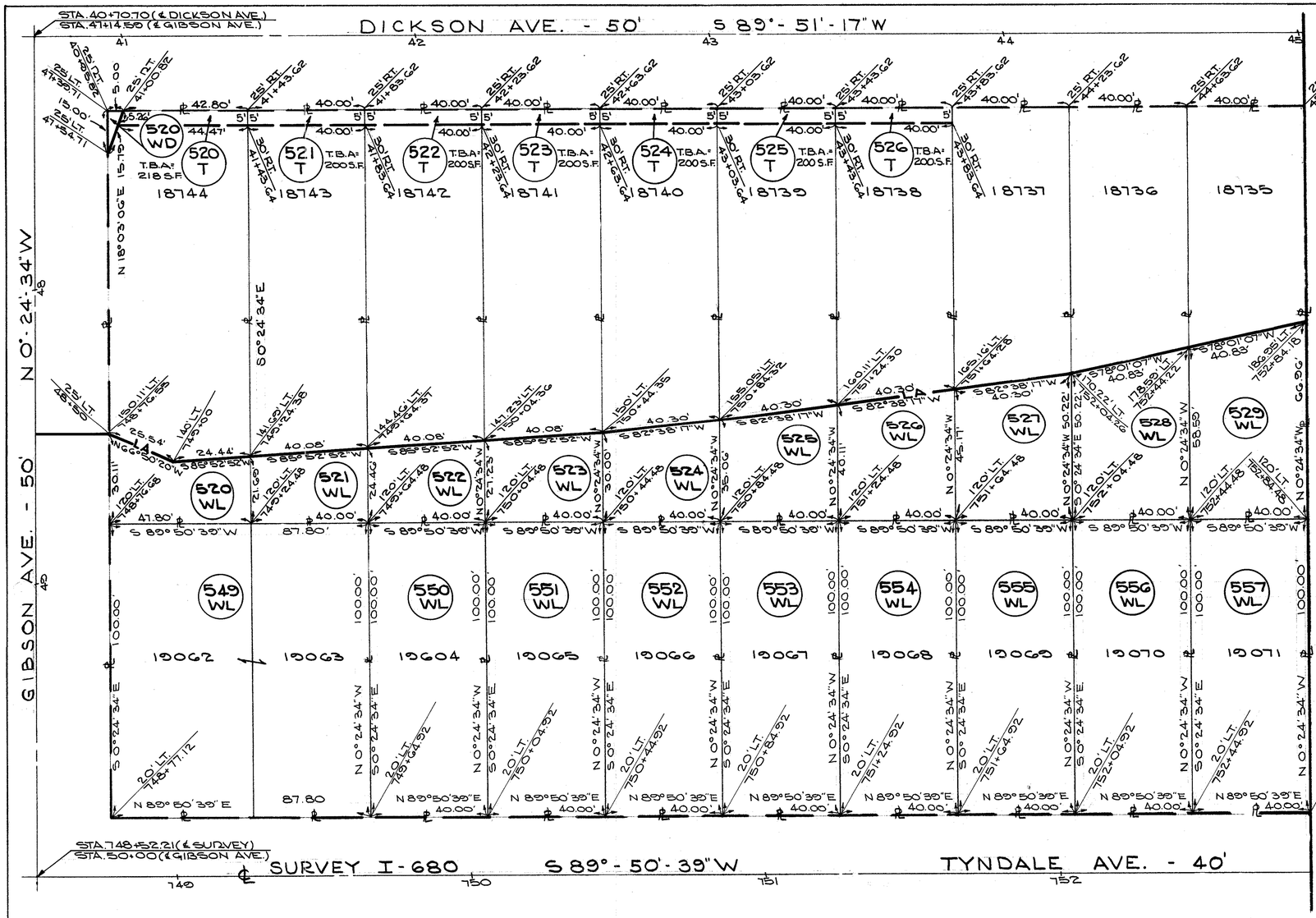
State Highway Dept. Div. 4 R/W - ENGR & ADMIN DEPT. JAN 27 1969 LOGGED

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

643 / 656

91 / 104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



* RE: PCLS 527-WL THRU 540-WL INCL.

1 - PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES - LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969

3 - TOTAL TAKE "TBA'S WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.

4 - EXCEPTION: PCLS 535WL, 535-T AND PCLS 537WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535-AWL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA

5 - PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540-WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69

J. R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, and Removed All Phantom Parcels.

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.T.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
520-WL	6,711 S.F.	NONE	1,035 S.F.	NONE	1,035 S.F.	5,578 S.F.	—
520-WD			38 S.F.	NONE	38 S.F.		
521-WL	5,616 S.F.	NONE	923 S.F.	NONE	923 S.F.	4,693 S.F.	—
522-WL	5,615 S.F.	NONE	1,034 S.F.	NONE	1,034 S.F.	4,581 S.F.	—
523-WL	5,615 S.F.	NONE	1,145 S.F.	NONE	1,145 S.F.	4,470 S.F.	—
524-WL	5,615 S.F.	NONE	1,301 S.F.	NONE	1,301 S.F.	4,314 S.F.	—
525-WL	5,615 S.F.	NONE	1,503 S.F.	NONE	1,503 S.F.	4,112 S.F.	—
526-WL	5,615 S.F.	NONE	1,706 S.F.	NONE	1,706 S.F.	3,909 S.F.	—
* 527-WL	5,614 S.F.	NONE	5,614 S.F.	NONE	5,614 S.F.	—	—
* 528-WL	5,614 S.F.	NONE	5,614 S.F.	NONE	5,614 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.T.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.T.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
* 529-WL	5,614 S.F.	NONE	5,614 S.F.	NONE	5,614 S.F.	—	—
549-WL	8,780 S.F.	NONE	8,780 S.F.	NONE	8,780 S.F.	—	—
550-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
551-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
552-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
553-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
554-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
555-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
556-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—
557-WL	4,000 S.F.	NONE	4,000 S.F.	NONE	4,000 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

Ohio Highway Dept. Div. of R/W ENGR. & SURVEY
JUN 27 1969
196668
Cross Ref. Dwg. No.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

644
656

92
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 90

℄ SURVEY I-680

℄ TYNDALE AVE. 40'

MONUMENT ASSEMBLY

S 89°50'39" W

N 89°27'58" W

℄ BENWOOD AVE. 50'

℄ ACCESS RD

S 81°45'05" E

R/W S 80°45'09" E 395.60'

℄ EXIST. 50' R/W

℄ GIBSON AVE. (℄ CONSTRUCTION)

N 0°24'34" W

N 0°14'55" E

MATCH SHEET NO. 89

MATCH SHEET NO. 96

THE CITY OF YOUNGSTOWN, OHIO

PETER KALENDA a.k.a. PETE KALENDA
NELLIE KALENDA

KARL a.k.a. KAROL OLEKSAK

ANN FABISH, OWNER

STEVE DOBRANCHIN ET. AL.

STELLA F. VELICHKO

WALTER / ANNE NATTYSHAK

JOHN EVICH / ISABEL B. EVICH

JOHN A. / DOROTHY J. DVORNEKOVICH

MIKE / MARY LULKA

VIRGINIA FILIPOWICZ

FRANK DUDEK

HENRY F. NOSEK
SOPHIE NOSEK

ANIELA STASIAK

LOUIS J. BARTLO
NORMA D. BARTLO

MARY SWATOWSKI a.k.a. MARIE SWATOSKI

SOPHIE GUCWA
ZOPIYA GUCWA

FRANK / STELLA PRUCNAL

PAUL P. TEMELKOFF
SONJA A. TEMELKOFF

SAMUEL GIBSON PLACE No 3 PB 15 PG 6

H.K. WICK PLAT PB 15 PG 95

RAMP "D"

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
143B-WD	700,880 S.F.	NONE	12,409 S.F.	NONE	12,409 S.F.	—	688,471 S.F.
568-WL	20,334 S.F.	NONE	20,334 S.F.	NONE	20,334 S.F.	—	—
569-WL	16,584 S.F.	NONE	16,584 S.F.	NONE	16,584 S.F.	—	—
570-WL	4,188 S.F.	NONE	4,188 S.F.	NONE	4,188 S.F.	—	—

NOTE: SEE SUPPLEMENTAL SHT. No 93 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

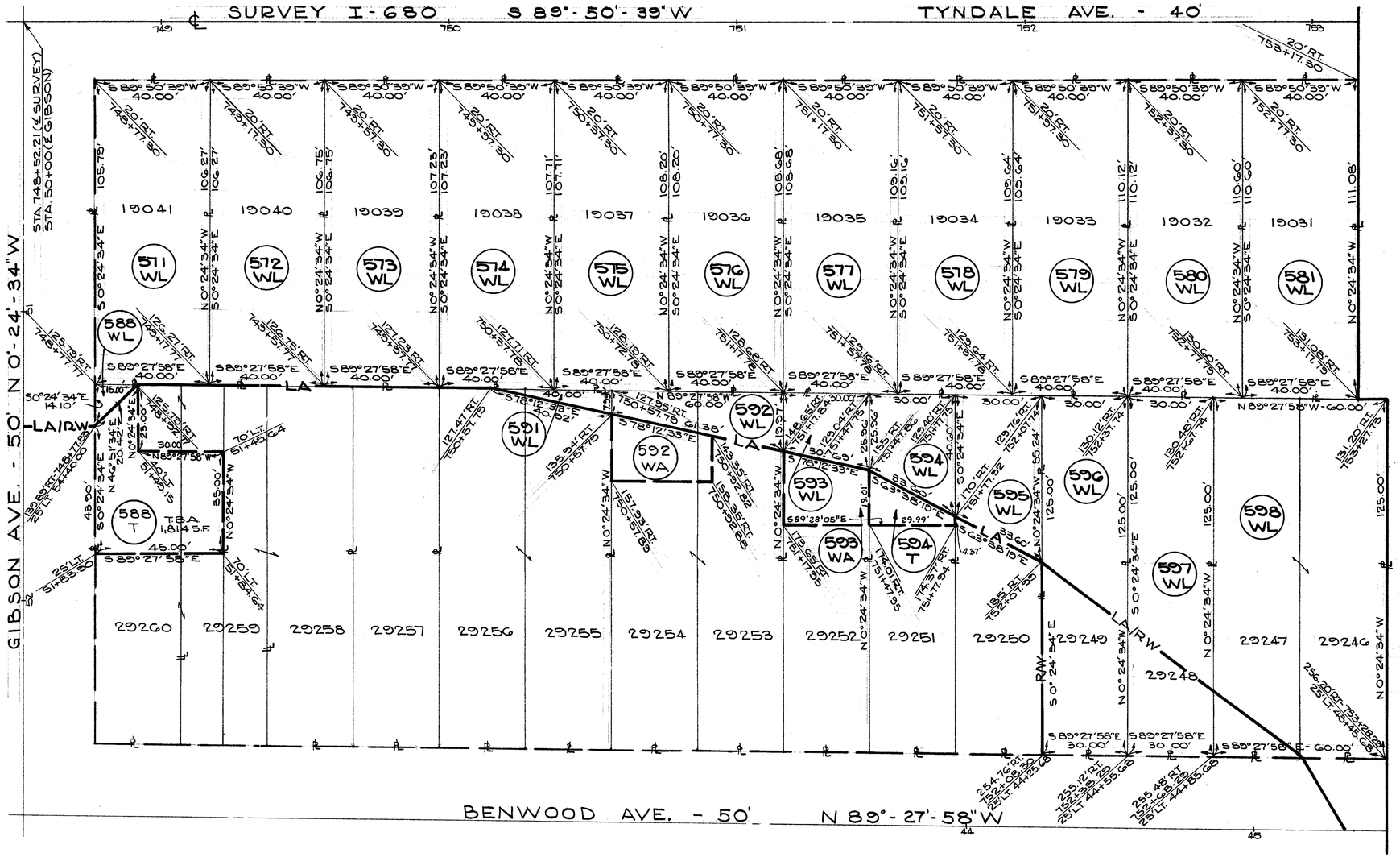
ALL PARCELS THIS SHEET
I - FUNDS

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7-28-69	Changed All Names Previously Revised on Earlier Sapias.
2	7-28-69	Changed All WA Pcls. to T Pcls. Previously Revised on Earlier Sapias.

R/W SHEET NO. 92 OF 104

JAN 27 1969


SURVEY I-680 S 89°-50'-39"W
TYNDALE AVE. - 40'
GIBSON AVE. - 50' N 0°-24'-34"W
BENWOOD AVE. - 50' N 89°-27'-58"W
STA. 748+52.21 (℄ SURVEY)
STA. 50+00 (℄ GIBSON)
748
749
750
751
752
753
19041
19040
19039
19038
19037
19036
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19033
19032
19031
571 WL
572 WL
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579 WL
580 WL
581 WL
588 WL
588 T
T.B.A. 1,811 4 S.F.
591 WL
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598 WL
29260
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29248
29247
29246
L-A
L-A IRW
L-A RW
R/W
S 89°27'58"E 40.00'
N 89°27'58"W 60.00'
S 89°27'58"E 30.00'
N 0°24'34"W 125.00'
S 0°24'34"E 125.00'
N 0°24'34"W 111.08'
S 0°24'34"E 43.50'
N 0°24'34"W 35.00'
S 89°27'58"E 45.00'
N 85°27'58"W 30.00'
N 0°24'34"W 25.00'
S 0°24'34"E 14.10'
S 78°12'33"E 40.38'
N 0°24'34"W 125.00'
S 89°28'05"E 29.99'
N 0°24'34"W 55.24'
S 0°24'34"E 125.00'
N 0°24'34"W 125.00

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

646
656

94
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

CENTERLINE SURVEY
CURVE Nº 3 DATA
P.I. STA 768+49.35

Δ = 89° 50' 18" RT.	θ_s = 11° 00' 00"
D_c = 5° 30' 00"	Δ_c = 67° 50' 18" RT.
R = 1,041.74'	T_c = 700.53'
L_c = 1,233.42'	L_c = 399.35'
T_s = 1,244.96'	E_c = 213.63
E_s = 438.46	L.T. = 267.18'
L_s = 400.00'	S.T. = 133.80'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY
1. P.I. STA. 758+71.59
Δ = 11° 00' 00" RT.
R = 1,389.61'
T = 133.80'
L = 266.79'
CH = 266.38'
E = 6.43'

* RE: PCLS 527-WL THRU 540-WL INCL:

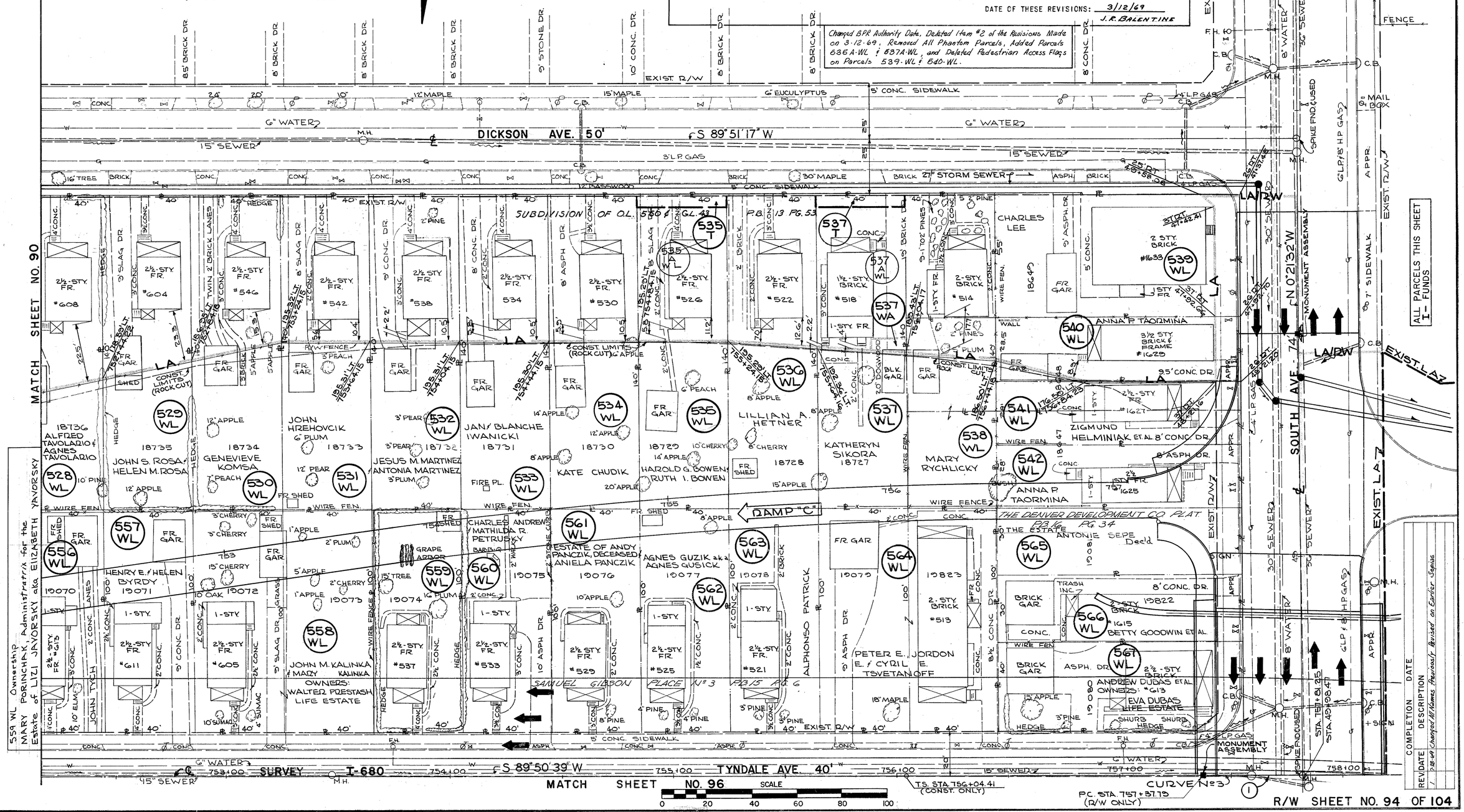
1. PCL'S INDICATED WITH ASTERICK (*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB. 12, 1969.

NOTE: SEE SUPPLEMENTAL SHT. Nº 91 & 95 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

3. TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 540-A-WL AND 540-B-WL NOW REVISED AND CHANGED TO PCL 540-WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69
J.R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, Removed All Phantom Parcels, Added Parcels 535A-WL & 537A-WL, and Deleted Pedestrian Access Flags on Parcels 539-WL & 540-WL.



REV.	DATE	DESCRIPTION	COMPLETION DATE
1	7-28-69	Changed All Names Previously Revised on Earlier Sepias	

R/W SHEET NO. 94 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	1-680-9(6)	

647
646
95
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

* RE: PCLS 527-WL THRU 540-WL INCL.

1. PCL'S INDICATED WITH ASTERICK(*), TO BE ACQUIRED AS "WL" TOTAL TAKES. LIMITED ACCESS LINES TO REMAIN AS INDICATED ON PLANS. PER AUTHORITY BPR DATED FEB 12, 1969.

3. TOTAL TAKE "TBA'S" WILL INCLUDE ENTIRE CITY LOTS OWNED BY PROPERTY OWNERS.
4. EXCEPTION: PCLS 535-WL, 535-T AND PCLS 537-WL, 537-T AND 537-WA, PREVIOUSLY ACQUIRED, NECESSITATING TO ACQUIRE RESIDUAL AREAS AS PCL 535A-WL AND 537A-WL, WHICH COVERS AREA OF RESIDUES, INCLUDING AREAS PREVIOUSLY ACQUIRED AS: 535-T, 537-T AND 537-WA.
5. PCLS 540-A-WL AND 540 B-WL NOW REVISED AND CHANGED TO PCL. 540-WL, TOTAL TAKE.

DATE OF THESE REVISIONS: 3/12/69
J.R. BALENTINE

Changed BPR Authority Date, Deleted Item #2 of the Revisions Made on 3-12-69, Removed All Phantom Parcels, Added Parcels 535A-WL & 537A-WL, and Deleted Pedestrian Access Flags on Parcels 539-WL & 540-WL.

DICKSON AVE. - 50' S 89°-51'-17" W

STA. 47+11.02 ℄ SOUTH
STA. 50+00 ℄ DICKSON

TYNDALE AVE. - 40'

℄ SURVEY I-680 S 89°-50'-39 W

SOUTH AVE.

CENTERLINE SURVEY
CURVE N°3 DATA
P.I. STA. 768+49.35

Δ=89° 50' 18" RT.	Δc=67° 50' 18" RT.
D=5° 30' 00"	Tc=700.53'
R=1,041.74'	Θs=11° 00' 00"
Lc=1,233.42'	LT.=267.18'
Ts=1,244.96'	ST.=133.80'
Es=438.46'	L.C.=399.35'
Ls=400.00'	Ec=213.63'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1. P.I. STA. 758+71.59
Δ=11° 00' 00" RT.
R=1,380.61'
T=133.80'
L=266.79'
CH=266.38'
E=6.43'

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
* 530-WL	5,614 S.F.	—	5,614 S.F.	—	5,614 S.F.	—	—
* 531-WL	5,613 S.F.	—	5,613 S.F.	—	5,613 S.F.	—	—
* 532-WL	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	—	—
* 533-WL	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	—	—
* 534-WL	5,612 S.F.	—	5,612 S.F.	—	5,612 S.F.	—	—
O* 535-WL	5,612 S.F.	—	3,012 S.F.	—	3,012 S.F.	—	—
* 536-WL	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	—	—
O* 537-WL	5,611 S.F.	—	2,836 S.F.	—	2,836 S.F.	—	—
* 538-WL	5,611 S.F.	—	5,611 S.F.	—	5,611 S.F.	—	—
* 539-WL	6,103 S.F.	620 S.F.	6,103 S.F.	620 S.F.	5,483 S.F.	—	—
* 540-WL	3,146 S.F.	314 S.F.	3,146 S.F.	314 S.F.	2,832 S.F.	—	—
O 535AWL	—	—	2,600 S.F.	—	2,600 S.F.	—	—
O 537AWL	—	—	2,775 S.F.	—	2,775 S.F.	—	—

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
541-WL	3,080 S.F.	308 S.F.	3,080 S.F.	308 S.F.	2,782 S.F.	—	—
542-WL	3,080 S.F.	315 S.F.	3,0809.F.	315 S.F.	2,765 S.F.	—	—
558-WL	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	—	—
559-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
560-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
561-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
562-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
563-WL	4,000 S.F.	—	4,000 S.F.	—	4,000 S.F.	—	—
564-WL	8,000 S.F.	—	8,000 S.F.	—	8,000 S.F.	—	—
565-WL	3,310 S.F.	310 S.F.	3,310 S.F.	310 S.F.	3,000 S.F.	—	—
566-WL	3,309 S.F.	330 S.F.	3,309 S.F.	330 S.F.	2,979 S.F.	—	—
567-WL	4,411 S.F.	488 S.F.	4,411 S.F.	488 S.F.	3,923 S.F.	—	—

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W Engr's Office
JAN 27 1969
Logged
Bill Bk.

MATCH SHEET NO. 94

FED. RD.	STATE	PROJECT	
2	OH10	I-680-9(6)	

648 / 656

96 / 104

753+00 MH S 89°50'39" W 754+00 TYNDALE AVE. 40' 755+00 3" L.P. GAS 756+00 ℄ I-680 757+00 CURVE No 3 MONUMENT ASSEMBLY

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS
4" L.P. GAS

NOTE: SEE SUPPLEMENTAL SHT. No 93, 97 & 99 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

T.S. STA. 756+04.41 (CONST. ONLY)
P.C. STA. 757+35.75 (R/W ONLY)

579 WL — MIKE, MARY LULKA — 2½-STY. FR. #612 — 1-STY. CONC.
580 WL — MARGARET S. SYMPSON — 2½-STY. FR. #608 — 1-STY.
581 WL — ANNA CULLER
582 WL — 2½-STY. FR. #602 — 1-STY.
583 WL — 2½-STY. FR. #538 — 1-STY.
584 WL — 2½-STY. FR. #534 — 1-STY.
585 WL — 2½-STY. FR. #532 — 1-STY.
586 WL — 2½-STY. FR. #528 — 1-STY. ASPH.
587 WL — SLAG LOT — MIKE RIDARSKY, PAUL L. RIDARSKY, STEVE RIDARSKY, A PARTNERSHIP — O.L. 549

SAMUEL GIBSON PLACE No 3 P.B. 15 PG 6

EXIST. R/W — 7' CONC. SIDEWALK — SIGN — 5' CONC. SIDEWALK — C.B. — 30" SEWER — 8" WATER — 36" SEWER — 6" L.P. & 8" H.P. GAS — EXIST LA — RAMP TO BE ABANDONED

19033 WILLIAM & JOHNNIE MAE JOHNSTONE 29249 — 19032 — 19031 — 19030 MARY DUPEY — 19029 JOSEPH KELLEY ET AL, CHRISTINE KELLEY — 19028 FRANK SUSOR, MARY SUSOR — 19027 ANNE MUMAW — 19026 JOHN & ELIZABETH BALCHICK

WIRE FENCE

29248 — 29247 — 29246 — 29245 — 29244 — 29242 JOSEPH VIANO 29243 — 29241 — 29240 — 29239 — 29238 — 29237 — 29236 ANGELO FAMULARO, ROSE FAMULARO — 29235 JOSEPHINE FINN — 29234 — 29233 — 29232 — 29231 NELLIE MOLALI

596 WL — 597 WL MARY STIPETICH — 598 WL MINNIE DIFABIO — 599 WL — 600 WL — 601 WL — 602 WL — 603 WL — 604 WL — 605 WL — 606 WL — 607 WL — 608 WL — 609 WL — 610 WL EVA LUKOSEVECUS

RAMP "D" — RAMP "B" — H.K. WICK PLAT P.B. 15 PG 25 — STANLEY JULIA O. BARWICH — KATHERINE SZABAT — WLADZISLAW GUBALA — JOHN C. FEKETY — SOPHIE IGNATA a.k.a. SOPHIE F. IGNATA — JOHN E. OWCARZ ET AL — BERT B. SLEVIN ET AL, KATHERYN SLEVIN ET AL — ANGELLA ALBERT HARRIS

LA F&W — 8.5' CONC. DR. — CRACK OUT & CONST. LIMITS R/W FENCE

BENWOOD AVE. 50' ℄ N 89°27'58" W — 5" L.P. GAS — 12" SEWER — G" WATER

613 S — 614 S — 614 WL — 614 T — 615 WL — 615 S — 615 WA — 616 WL — 617 WL — 618 WL — 619 WL — 620 WL — 622 WL — 623 WL

29274 — 29273 — 29272 — 29271½ — 29270 — 29269 — 29268 — 29267 — 29266 — 29265 — 29264 — 29263 — 29262 — 29261

AGOSTINO & CARMELLA TOWESE — JOHN FARGO & ANNE FARGO — MARY J. ALTIERI — FRANK KANIK ET AL — CHISTINA SWIDERSKI ET AL — CARMELA PANNALI — SLAG LOT — SOPHIE IGNATA — 1-STY. BLOCK #1511 — FR. SHED

Parcel 605 WL Ownership
JOHN J. HORNEY, JR., Administrator of the Estate of THERESA ANN HORNEY a.k.a. THERESA HORNEY a.k.a. THERESA HORNEY a.k.a. THERESA HORNEY a.k.a. THESA HORNEY, Deid.

SLAG SHOWED OWNERSHIP OF PCLS 625WL & 625WL SAME SMITH 7-29-70

ALL PARCELS THIS SHEET I-FUNDS

MATCH LINE - SEE SHEET No 100 - 74'

SCALE 0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —
1	7-28-69	Changed All Names Previously Revised on Earlier Sepias
2	7-28-69	Changed All WL Pcls to "I" Pcls Previously Revised on Earlier Sepias.

State Highway Dept. Div. 4 R/W ENGR'S ADMIN. SEC'T. JAN 27 1969 Date Bill No.

State Highway Dept. Div. 4 R/W ENGR'S ADMIN. SEC'T. JAN 27 1969 Date 1-29-69 Bill No. 1-29-69

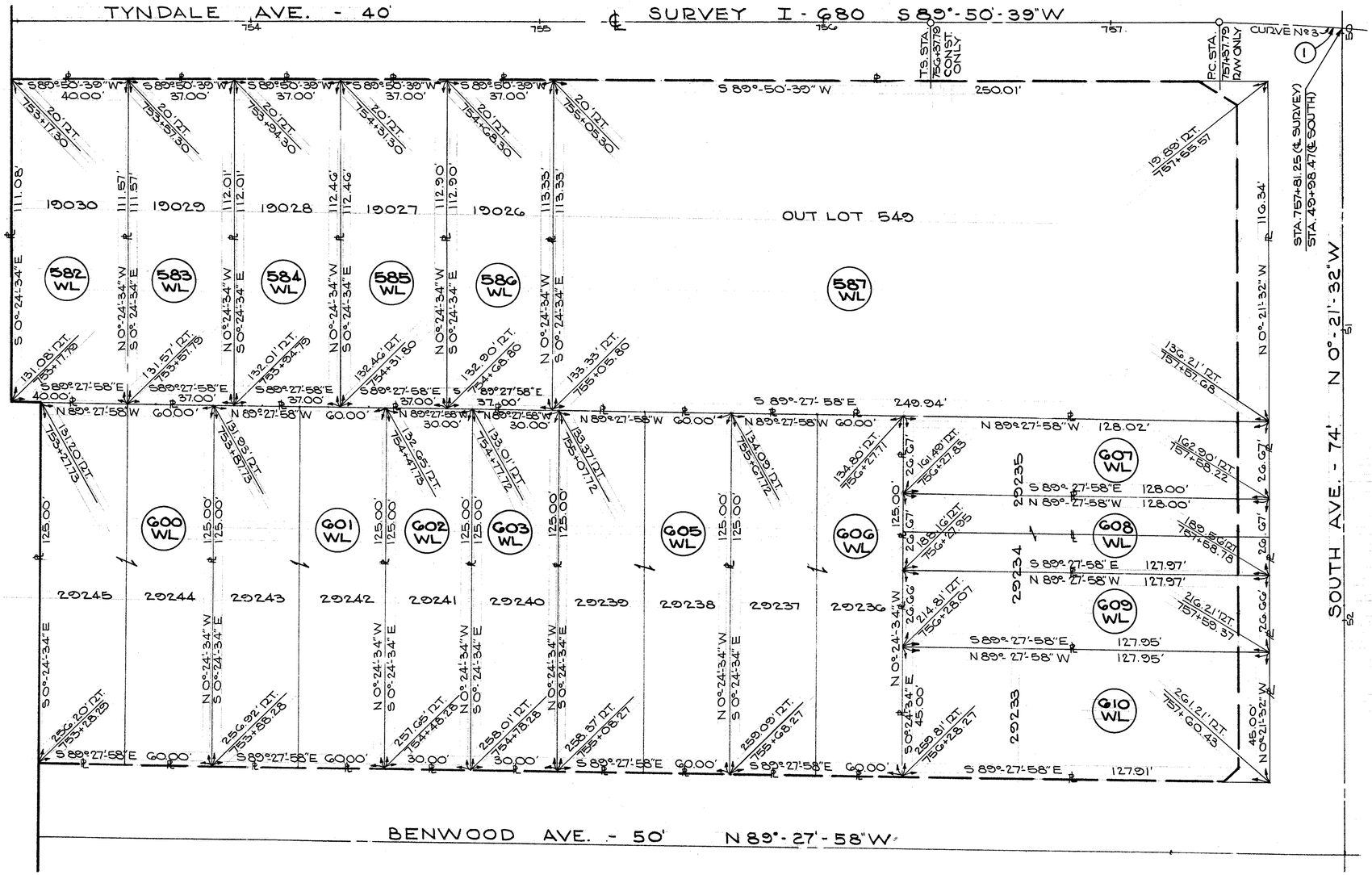
R/W SHEET NO. 96 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

649
656

97
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	L.T.	R.T.
582-WL	4,440 S.F.	–	4,440 S.F.	–	4,440 S.F.	–	–
583-WL	4,124 S.F.	–	4,124 S.F.	–	4,124 S.F.	–	–
584-WL	4,141 S.F.	–	4,141 S.F.	–	4,141 S.F.	–	–
585-WL	4,158 S.F.	–	4,158 S.F.	–	4,158 S.F.	–	–
586-WL	4,166 S.F.	–	4,166 S.F.	–	4,166 S.F.	–	–
587-WL	28,704 S.F.	1,327 S.F.	28,704 S.F.	1,327 S.F.	27,377 S.F.	–	–
600-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
601-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
602-WL	3,750 S.F.	–	3,750 S.F.	–	3,750 S.F.	–	–
603-WL	3,750 S.F.	–	3,750 S.F.	–	3,750 S.F.	–	–
605-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
606-WL	7,500 S.F.	–	7,500 S.F.	–	7,500 S.F.	–	–
607-WL	3,426.375 S.F.	293.37 S.F.	3,426.375 S.F.	293.37 S.F.	3,133 S.F.	–	–
608-WL	3,413 S.F.	293 S.F.	3,413 S.F.	293 S.F.	3,120 S.F.	–	–
609-WL	3,426.375 S.F.	293.37 S.F.	3,426.375 S.F.	293.37 S.F.	3,133 S.F.	–	–
610-WL	5,794.5 S.F.	507 S.F.	5,794.5 S.F.	507 S.F.	5,287.5 S.F.	–	–

CENTERLINE SURVEY
CURVE N° 3 DATA
P.I. STA. 758+49.35

Δ = 89°50'18" RT.
Dc = 5°30'00"
R = 1,041.74'
Lc = 1,633.42'
Tc = 1,244.96'
Ec = 438.46'
Ls = 400.00'

Δc = 67°50'18" RT.
Tc = 700.58'
Θs = 11°00'00"
L.T. = 267.18'
S.T. = 133.80'
L.C. = 390.35'
Ec = 213.63'

SUBSTITUTE CURVE DATA
FOR RIGHT OF WAY

1. P.I. STA. 758+71.59
Δ = 11°00'00" RT.
R = 1,389.61'
T = 133.80'
L = 266.79'
CH = 266.38'
E = 6.43'

SCALE
0 20 40 60 80 100

REVISION	DESCRIPTION	BY	DATE

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SECT.
JAN 27 1969
Logged
Bill St.

State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SECT.
JAN 27 1969
Logged
Bill St.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

650
656

98
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 96

MATCH LINE - SEE SHT. Nº 100

RAMP "D"

LEE AVE. 50' N 89°28'03"W

SOUTH AVE. + 74' N 0°21'32"W

THE HENRY K WICK ESTATE PLAT PB 17 PG 85

CHISTINA SWIDERSKI, ETAL

WLADZSLAW GUBALA

JOHN C FEKETY

ANGELLA HARRIS & ALBERT HARRIS

SOPHIE IGNATH

FRANK J KANK ETAL

DANALLI

JOHN LEONI

ERMA PETRELLA

ROBERT T. CAMPANA
REGINA C. CAMPANA

WILLIAM & CHRISTINE SWIDERSKI

MARY KIEFER
STANLEY P. SEIDLER
ANNE TROLL
STELLA BRINCKO
TED SEIDLER
ALEXANDRA SEIDLER

BERT B. SLEVIN ET AL &
KATHERYN SLEVIN ET AL

ISABELLE C. BEES
1-STY. BLOCK
#1483

BURT BEES
1-STY. BLOCK
#1481

1-STY. BLOCK W/ BRICK FRONT
#1495

PEDESTRIAN POINT OF ACCESS 6' WIDE STA. 55+06

PEDESTRIAN POINT OF ACCESS 6' WIDE STA. 55+36.15

STA. 55+82.92
STA. 50+00

NOTE: SEE SUPPLEMENTAL SHT. Nº 99 FOR PARCEL DIMENSIONS, BEARINGS & STA. OFFSETS FOR PARCELS ON THIS SHEET.

NOTE "A" (SA PARCELS)
SPECIAL WAIVER OF DAMAGE RESULTING FROM DAMAGE TO FLOWERS, SHRUBS, & TREES - PCL. 628SA, & DAMAGE TO A 7" EVERGREEN - PCL 629SA, CAUSED BY CONSTRUCTION OF THIS IMPROVEMENT.

ALL PARCELS THIS SHEET
I- FUNDS

SCALE
0 20 40 60 80 100

ADDED PCLS 628SA & 629SA 7-5-72

REV	DATE	DESCRIPTION
		COMPLETION DATE —
1	10/21/68	CORRECTED PE's FOR PARCEL 626B-WL, ADDED PARCEL 626-LA
2	7-12-69	Changed All Names Previously Revised on Earlier Sepias
3	7-23-70	Showed Ownership of Pcls 623WL & 625WL SAME Smith

R/W SHEET NO. 98 OF 104

State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SERV.
JAN 27 1969
Lucas
Ottawa
Hill Dk.

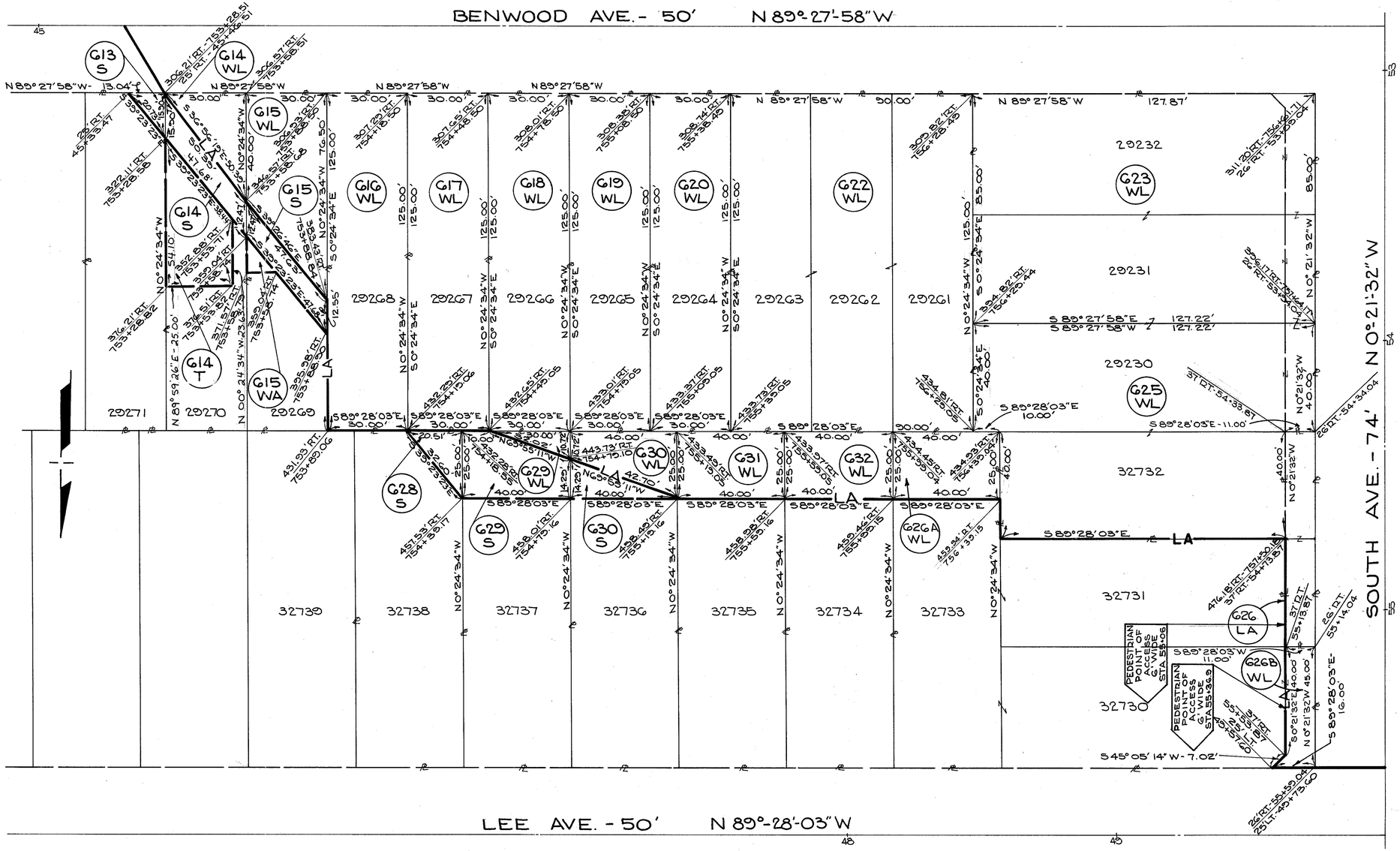
State Highway Dept. Div. 4
R/W ENGR'S ADMIN. SERV.
JAN 27 1969
L-06623

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9 (6)	

651
656

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

99
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LT.	NET RESIDUE RT.
G23-WL	10,838 S.F.	947 S.F.	10,838 S.F.	947 S.F.	9,891 S.F.	—	—
G25-WL	9368 S.F.	440 S.F.	9368 S.F.	440 S.F.	8,928 S.F.	—	
G28-S	5,000 S.F.	—	256 S.F.	—	256 S.F.	—	5,000 S.F.
G29-WL	5,000 S.F.	—	161 S.F.	—	161 S.F.	—	4,839 S.F.
G29-S			839 S.F.	—	839 S.F.		
G30-WL	5,000 S.F.	—	714 S.F.	—	714 S.F.	—	4,286 S.F.
G30-S			286 S.F.	—	286 S.F.		
G31-WL	5,000 S.F.	—	1,000 S.F.	—	1,000 S.F.	—	4,000 S.F.
G32-WL	5,000 S.F.	—	1,000 S.F.	—	1,000 S.F.	—	4,000 S.F.
G26A-WL	15,000 S.F.	508 S.F.	1,000 S.F.	NONE	1,000 S.F.		13,053 S.F.
G26B-WL			508 S.F.	508 S.F.	NONE		

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESID LT.	NET RESID RT.
G13-S	3,750 S.F.	—	104 S.F.	—	104 S.F.	—	3,750 S.F.
G14-WL	3,750 S.F.	—	600 S.F.	—	600 S.F.	—	3,150 S.F.(L)
G14-S		—	425 S.F.	—	425 S.F.		
G15-WL	3,750 S.F.	—	1,747 S.F.	—	1,747 S.F.	—	2,003 S.F.(L)
G15-S			375 S.F.	—	375 S.F.		
G16-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G17-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G18-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G19-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G20-WL	3,750 S.F.	—	3,750 S.F.	—	3,750 S.F.	—	—
G22-WL	11,250 S.F.	—	11,250 S.F.	—	11,250 S.F.	—	—

REVISION	DESCRIPTION	BY	DATE
3	SHOWED OWNERSHIP OF PARCELS 623WL & 625WL SAME	7-23-70 SMITH	
2	Changed all "WA" Pcl's To "T" Pcl's previously revised on earlier scpia.		7-28-69
1	CORRECED R/S FOR PARCEL G26B-WL, ADDED PARCEL G26-LA	EHC	10/2/68

SCALE
0 20 40 60 80 100

R/W SUPPLEMENTAL SHEET

State Highway Dept. Div. 4
R/W ENGR.
JAN 27 1969
LOGGED
Bill No.

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

652
656

100
104

MAH. 680-6.98
R/W PLANS
LIMITED ACCESS

MATCH SHEET NO. 98

MATCH SHEET NO. 96

SOUTH AVE. 74'

N0° 21' 32" W

55 54 53 52 51 49

36" SEWER

M.H.

SPIKE FND. & USED

6" L.P. & 8" H.P. GAS

STA 757+81.25
STA 481+98.47

C.B.

SIGN

APPR.

EXIST. L.A.

EXIST. R/W

44.5' EXIST. R/W

LA

FACI SIGN

37' LT. 54+64.25

37' LT. 54+56.25

37' LT. 55+68.22

37' LT. 82+56.25

37' LT. 51+56.25
185.67 RT. 768+29.00

37' LT. 757+18.32

37' LT. 760+00.25

END L.A.

10' SLAG DR.

2½ STY. BRK. TAVERN

640 WL

2 STY. BRK. DWG.

639 WL

2½ STY. BRK.

638 WL

10' ASPH. DR.

10' CONC. DR.

2½ STY. FR. HSE.

9' CONC. DR.

637 WL

GAS ISLAND

636 WL

2 STY. BLK. BLDG.

CONC. WALL

CURVE No. 3

MACADAM PARKING LOT

O.L. 534

BLK. GAR.

138.83'

136.85'

12G81

12G83

12G82

12G84

12G85

150' (D)

APRICOT

LOCUST

SUMAC

10" PEAR

8" PEAR

12" PEAR

6" ELM

15" PEAR

N89° 21' 12" E - 150.00'

60425

60426

PAULINE BAKALIK & ROBERT BAKALIK

ROBERT F. BAKALIK

REGINA GENEVIEVE KARPOWICZ

BERTHA HORNEY

MIKE, PAUL J. & STEVE NIDARSKY

FD. SHED

Gloria Ogram f/k/a Gloria Granito & Rudolph Granito

REPLAT OF LOTS 12G79, 12G80 & PART 12G81 - VOL. 45, PG. 221

LEO GUTHMAN'S PLAT - VOL. 8, PG. 159

44.5' 39' 50' 38' 12' 24' 26'

S 0° 21' 32" E 50'

12" MULBERRY

12" TRIPLE CHERRY

1 STY. BRK. GARAGE

S 89° 21' 12" W - 441.50'

S 87° 38' 01" E - 244.42'

5-12" ELM

14" ELM

24" ELM

RAMP 'Y' TO BE REMOVED

STA EQUATION (RW ONLY)
P.C. STA 760+04.58 (BACK)
P.C. STA 760+04.41 (AHEAD)

℄ SURVEY I-680

EXISTING MON.

Pt. of O.L. 533

Pt. of O.L. 533

MATCH LINE STA 761+00 - SEE SHT. No 101

PARCEL No	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	TO BE ACQUIRED P.R.O. IN TAKE	TO BE ACQUIRED NET TAKE	NET RESIDUE LEFT	NET RESIDUE RIGHT
G36-WL	48,035 S.F.	11,660 S.F.	48,035 S.F.	11,660 S.F.	36,375 S.F.	———	———
G37-WL	11,400 S.F.	836 S.F.	11,400 S.F.	836 S.F.	10,564 S.F.	———	———
G38-WL	5,400 S.F.	398 S.F.	5,400 S.F.	398 S.F.	5,002 S.F.	———	———
G39-WL	14,400 S.F.	1067 S.F.	14,400 S.F.	1067 S.F.	13,333 S.F.	———	———
G40-WL	11,591 S.F.	NONE	11,591 S.F.	NONE	11,591 S.F.	———	———

3- Pcl's 637-LA thru 640-LA, Revised to WL Parcels (Total Takes) For Developement of Green Strip — 1-16-70
4 - Pcl 636-LA Revised to 636-WL (Total Take) For Developement of Green Strip 2-25-70

CENTERLINE SURVEY
CURVE No 3
P.I. STA 768+49.35

Δ = 89° 50' 18" RT.	θ_s = 11° 00' 00"
D_c = 5° 30' 00"	P = 6.38'
R = 1,041.74'	K = 199.75'
L_c = 1,233.42'	X_c = 398.58'
T_s = 1,244.93'	Y_c = 25.53'
E_s = 438.46'	L.T. = 267.18'
L_s = 400.00	S.T. = 133.80'
Δ_c = 61° 50' 18"	L.C. = 395.35'
T_c = 700.58'	E_c = 213.63'

SUBSTITUTE CURVE DATA FOR RIGHT OF WAY

(1) P.I. STA 758+71.59
Δ = 11° 00' 00" RT.
R = 1,398.61'
T = 133.80'
L = 266.79'
CH = 266.38'
E = 6.43'

ALL PARCELS THIS SHEET I-FUNDS

SCALE
0 20 40 60 80 100

COMPLETION DATE —			
REV.	DATE	DESCRIPTION	J.P.T.
		3 Change Net Area Pcl 639 WL 5-27-70	
1	7/16/69	ADDED PRO. Pcls 636-LA, 637-LA, 638-LA & 639-LA	
		AND REVISED R/S FOR SAID PCLS.	
2	9/16/69	Revised Name Pcl #638 LA Solomon	

R/W SHEET NO. 100 OF 104

STATE HIGHWAY DEPT. OHIO
RIGHT OF WAY DIV.
APPROVED
JAN 27 1969
LOCATION ENGR.
RIGHT OF WAY ENGR.

STATE HIGHWAY DEPT. OHIO
RIGHT OF WAY DIV.
APPROVED
JAN 27 1969
LOCATION ENGR.
RIGHT OF WAY ENGR.

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED GROSS TAKE	P.R.O. IN TAKE	NET TAKE	NET RESIDUE LEFT	RIGHT
636-WL	48,035 S.F.	11,660 S.F.	48,035 S.F.	11,660 S.F.	36,375 S.F.	———	———
642-S	78,608 S.F.	———	758 S.F.	———	758 S.F.	78,608 S.F.	———
643-S	108,338 S.F.	———	326 S.F.	———	326 S.F.	108,338 S.F.	———

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

653
656

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

101
104

160' LT - 763+00

642 S

CONSTR. LIMITS

N 39°50'33"E 164.46'

LT - 763+79.73

S 35°50'33"W 11.82'

N 39° 13'52" W - 92.42'

N 49° 00' 33" E - 92.43'

EXISTING LA

150' LT - 763+80.01

151.95' LT - 764+14.91

163.36' LT - 764+14.38

N54° 09'27"W 30.00'

163.32' LT - 764+40.44

N 35° 50' 33" E 10.80

155.07' LT - 764+40.94

CONSTR. LIMITS

S 55° 09' 27" E 30.02'

643 S

EXISTING LA

EXISTING LA

EXISTING LA

MATCH SHEET Nº 100

MATCH SHEET Nº 102

I-680 (MAH-7-14.35)

763

764

766

767

752

156

157

155

℄ YOUNGSTOWN SOTHERN RAILWAY

S89°21'12"W - 441.50' ℗

℗ N1°14'07"E 87.20

S88°45'53"E - 1.30' ℗

℗ 35.00' N1°14'07"E

MIKE RIDARSKY, ET AL

EXISTING LA

636 WL

Pt. OF O.L. 533

S87°38'01"E 27.10' ℗

℗ S87°38'01"E

N 2°21'59"E - 5.00' ℗

S 2°21'59"W - 5.00' ℗

S 87°38'01"E - 244.42'

NOTE: FOR YOUNGSTOWN AND SOUTHERN RAILWAY PARCELS, SEE SHEET Nº 104.

EXISTING LA

NOTE: BEARINGS USED ON THIS SHEET ARE BASED ON MAH-7-14.35 & PLAT AS RECORDED IN VOLUME 47 PAGES 55 & 56 OF THE MAHONING COUNTY RECORDS.

SCALE
0 20 40 60 80 100

REV.	DATE	COMPLETION DATE — DESCRIPTION
1	7/16/69	ADDED PARCELS 642-S & 643-S
2	2/12/70	REVISED WL (TOTAL TAKE) ADDED FOR DEVELOPMENT OF GREEN STRIP

R/W SHEET Nº 101 OF 104

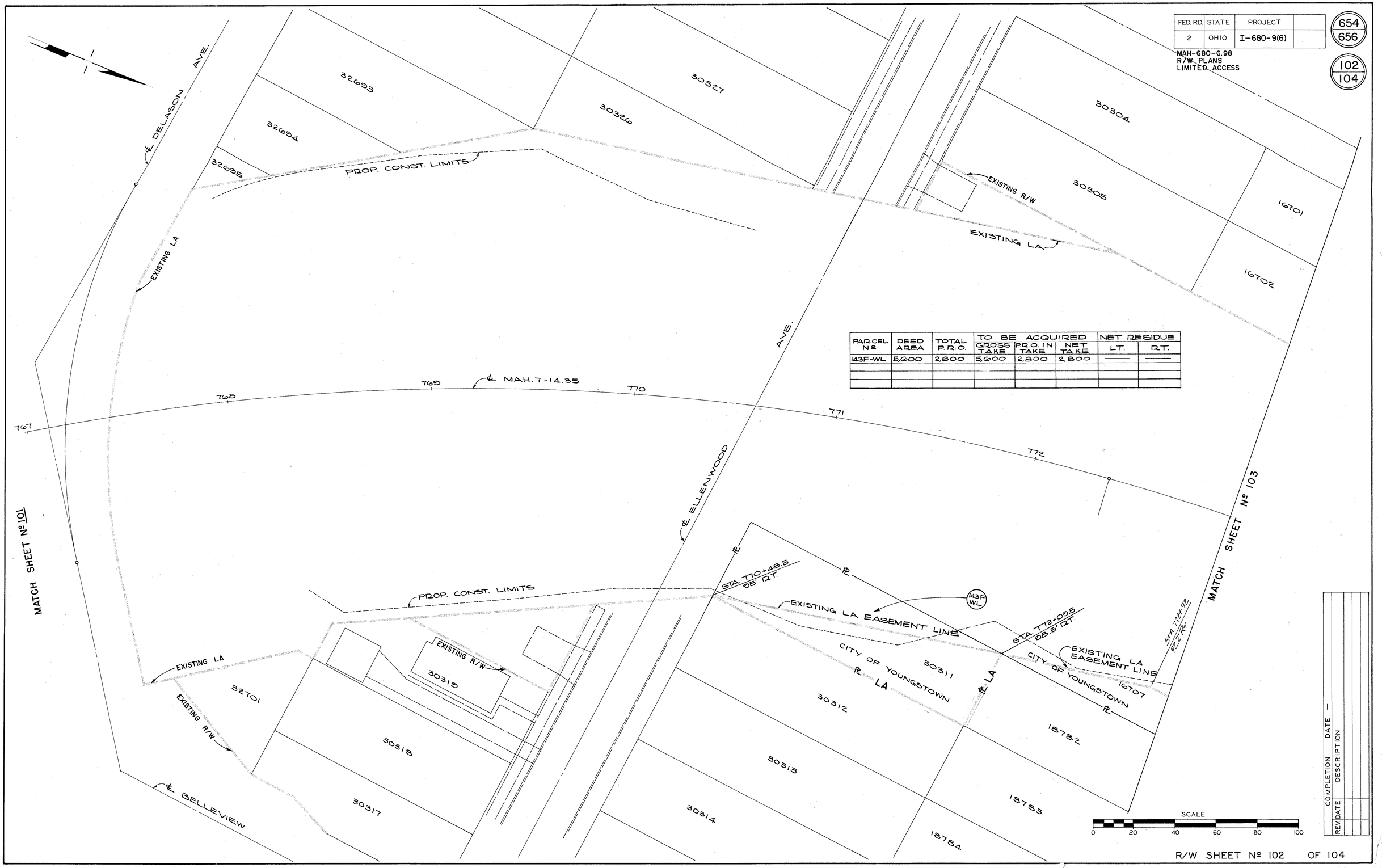
STATE HIGHWAY DEPT. OF OHIO
R/W DIVISION
JAN 27 1969
LOCATION
DRAWN
TRACED
CHECKED
JAN 27 1969
APPROVED
DATE

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

654
656

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

102
104



PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE ACQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	LT.	RT.
143F-WL	5,600	2,800	5,600	2,800	2,800	—	—

REV.	DATE	DESCRIPTION	COMPLETION DATE —

R/W SHEET Nº 102 OF 104

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

MAH-680-6.98
R/W PLANS
LIMITED ACCESS

655
656

103
104

16701

16702

16714

16715

EXISTING LA

EXISTING LA

MATCH SHEET Nº 102

CHALMERS AVE.

MADISON AVE.

℄ MAH.7-14.35

774 775 776 777 778 779

EXISTING LA
EASEMENT LINE

774+37.50
105' Rt

PROP. CONST. LIMITS

CITY OF YOUNGSTOWN
16707

CITY OF YOUNGSTOWN
16708

EXISTING LA
EASEMENT LINE

18782

774+34.50
125.3 Rt

774+82.5
127'

18793

775+52.7
140'

775+90.5
169.5'

CITY OF YOUNGSTOWN

EXISTING LA
EASEMENT LINE

PARCEL Nº	DEED AREA	TOTAL P.R.O.	TO BE AQUIRED			NET RESIDUE	
			GROSS TAKE	P.R.O. IN TAKE	NET TAKE	LT.	RT.

SCALE
0 20 40 60 80 100

REV.	DATE	DESCRIPTION
		COMPLETION DATE —

R/W SHEET Nº 103 OF 104

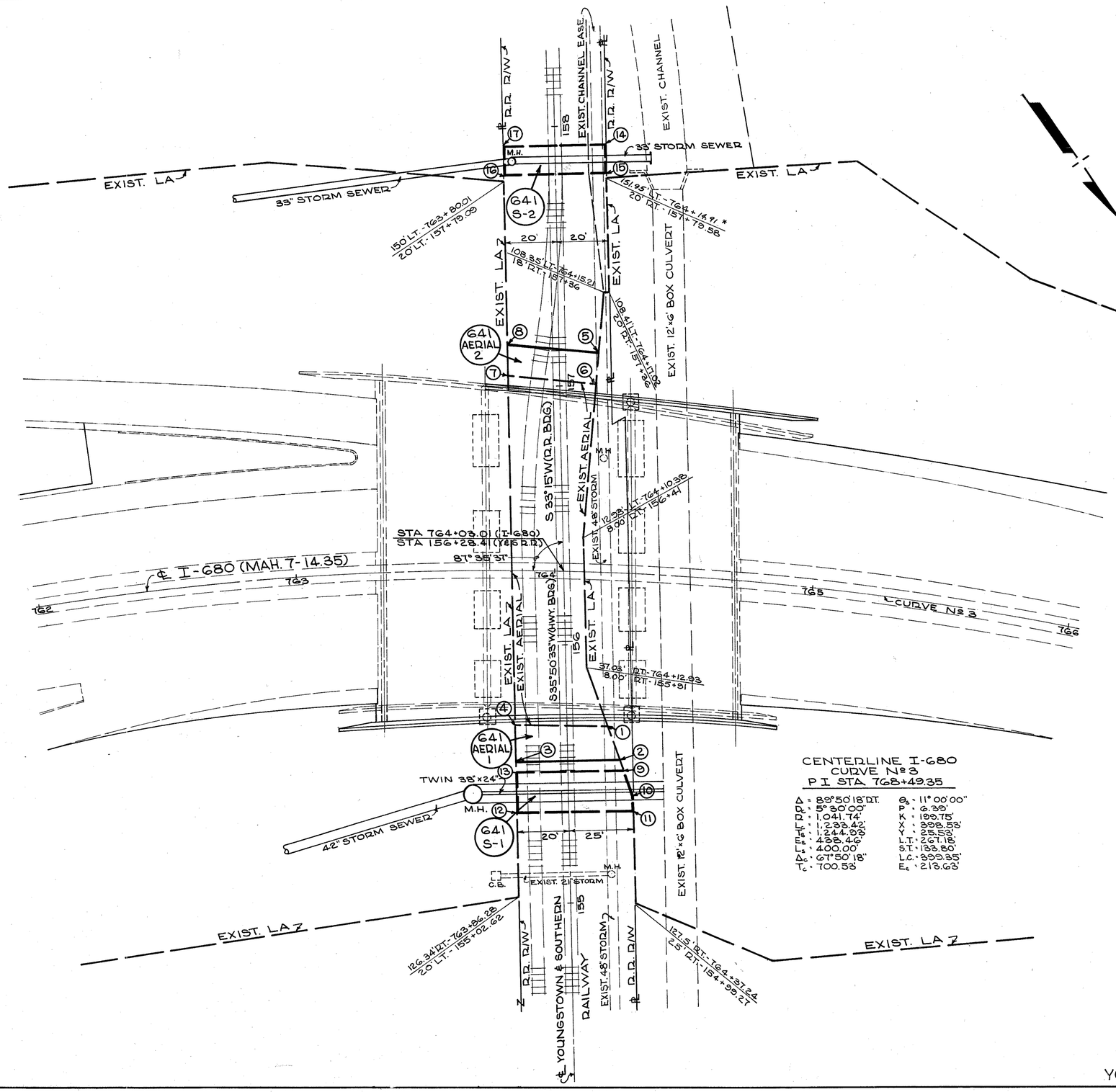
JAN 27 1969

FED. RD.	STATE	PROJECT	
2	OHIO	I-680-9(6)	

656
656

104
104

MAH 680-698
R/W PLANS
LIMITED ACCESS



CENTERLINE I-680
CURVE No 3
P I STA 768+49.35

Δ = 88°50'18" RT.	θ_s = 11°00'00"
D = 5°30'00"	P = 6.39'
L = 1,041.74'	K = 199.75'
L_H = 1,233.42'	X = 388.52'
E_M = 1,244.93'	Y = 215.52'
E_M = 438.46'	L.T. = 267.18'
L_s = 400.00'	S.T. = 133.80'
Δ_c = 67°50'18"	L.C. = 399.35'
T_c = 700.53'	E_c = 213.63'

PARCEL DESCRIPTION

PARCEL NUMBER	POINT No	℄ I-680 STATION	℄ I-680 OFF-SET	℄ Y&S R.R. STATION	℄ Y&S R.R. OFF-SET	BEARING	DISTANCE
641 AERIAL 1	1	764+23.30*	59.33	155+68.14	16.70		
	2	764+28.68	72.46	155+54.72	20.80	N 18°50'16"E	14.03'
	3	763+84.82	74.32	155+54.72	20.00	S 54°00' 27"E	40.80'
	4	763+84.43	59.33	155+69.72	20.00	S 35°50' 33"W	15.00'
	1	764+23.30*	59.33	155+68.14	16.70	N 51°41' 32"W	36.73'
641 AERIAL 2	5	764+14.12	84.33	157+12.10	15.53		
	6	764+13.56*	72.41*	157+00.23	14.31	N 41°43' 56"E	11.93'
	7	763+81.41	74.91*	157+03.99	20.00	S 47°56'12"E	34.52'
	8	763+81.17	86.91	157+15.99	20.00	S 35°50'33"W	12.00'
	5	764+14.12	84.33	157+12.10	15.53	N 47°56'12"W	35.75'
641 S-1	9	764+30.17	76.00	155+51.00	21.04		
	10	764+34.24	85.86	155+41.00	25.00	N 18°50'16"E	10.46'
	11	764+34.63	90.84	155+36.00	25.00	N 35°50'33"E	5.00'
	12	763+85.33	93.03	155+36.00	20.00	S 54°09'27"E	45.00'
	13	763+84.52	78.04	155+51.00	20.00	S 35°50'33"W	15.00'
	9	764+30.17	76.00	155+51.00	21.04	N 54°09'27W	41.04'
641 S-2	14	764+14.38	163.36	157+01.00	20.00		
	15	764+14.84	153.37	157+81.00	20.00	N 35°50'33"E	10.00'
	16	763+70.88	151.91	157+81.00	20.00	S 54°09'27"E	40.00
	17	763+70.81	161.91	157+01.00	20.00	S 35°50'33"W	10.00'
	14	764+14.38	163.36	157+01.00	20.00	N 54°09'27W	40.00

* ERROR IN STATION & OFFSET ON MAH-7-14.35 R/W FOUND AND CORRECTED.

NOTE: BEARINGS USED ON THIS SHEET ARE BASED ON MAH-7-14.35 ℄ PLAT AS RECORDED IN VOL. 47 PGS. 55 & 56 OF THE MAHONING COUNTY RECORDS.

YOUNGSTOWN & SOUTHERN RAILROAD

PARCEL NUMBER	EASEMENT REQUIRED	TOTAL AREA
641 AERIAL 1	AERIAL	540 SQ. FT.
641 AERIAL 2	AERIAL	419 SQ. FT.
641 S-1	SEWER	660 SQ. FT.
641 S-2	SEWER	400 SQ. FT.

SCALE
0 20 40 60 80 100

Corrected offsets for Point Nos 10 & 14 White 8-18-69

YOUNGSTOWN & SOUTHERN RAILROAD PLAT

State Highway Dept. Div. 4
R/W PLANS & ARCHIVES SECT.
JAN 27 1969
RECEIVED
DIST. NO.

I-680-9(14)240
I-680-9(20)240

SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98

(1/38)

THE H.C. NUTTING COMPANY
SOIL ENGINEERS (1/15)
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA, AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

GENERAL INFORMATION

INTRODUCTION

The project consists of a 2.4 mile segment of I-680 (MAH-680-6.98) beginning approximately 425-ft. south of Midlothian Boulevard and just east of the west end of Everett Avenue, immediately south of the corporation limits of Youngstown, Ohio. The alignment crosses Pine Hollow Creek and Shady Run and extends northwestward ending at existing I-680 on South Avenue, Youngstown, Ohio.

Maximum proposed cuts and fill embankments are shown in the Project Index, on this sheet.

GEOLOGY AND OBSERVATIONS OF THE PROJECT

The alignment traverses the upland plateau crossing the V-shaped valleys of Pine Hollow Creek and Shady Creek enroute and terminates on the upland adjacent to the west break in slope leading down to the Mahoning Valley. The project is located in a glaciated portion of the Allegheny Plateau in an area where shallow glacial ground moraine overlies sandstone and shale bedrock of Pennsylvania age.

An area of man-made dump was observed near the east end of the project.

EXPLORATION

Exploratory borings were made by means of truck-mounted mechanical hollow-stem augers with split spoon sampling in overburden and diamond coring in rock between June 2 and July 6, 1965.

INVESTIGATIONAL FINDINGS

Materials occurring immediately below the proposed grade consist predominately of sandy silts (A-4a), silt and clay (A-6a) and silty clay (A-6b). Gravel occurs in the extreme bottoms of Pine Hollow Creek and Shady Run. Shale and sandstone bedrock will also be encountered.

Bedrock is anticipated in the excavations in the following areas:

Stations 678+00 to 709+00 and 711+50 to 723+00 - shale at right and left grade, left ditch and left back slope.

Stations 746+00 to 750+00 - shale at right and left grade, right and left ditches and both back slopes.

Stations 750+00 to 761+00 - sandstone at right and left grade, right and left ditches and lower part of both back slopes; shale in upper parts of back slopes.

Ramp B - Stations 752+50 to 756+50 - shale in grade, ditches, and lower left back slope.

Ramp C - Stations 750+00 to 755+50 - sandstone in grade and left ditch and lower left back slope.

Ramp D - Stations 750+00 to 758+00 - shale and sandstone in grade, left ditch and lower back slope.

Ramp E - Stations 716+50 to 721+00 - shale in grade and ditches and back slopes.

Ramp F - Stations 721+00 to 726+00 - shale in grade, ditches and lower left back slope.
Stations 726+00 to 729+50 - shale and sandstone in ditches and lower left back slope.

Ramp G - Stations 685+00 to 690+00 - shale in grade, ditches and lower left back slope.

Ramp H - Stations 678+50 to 684+50 - shale in grade and ditches.

Between Stations 640+00 and 654+00, embankment foundation materials consist of sandy silt (A-4a) and some silt and clay (A-6a) generally having moisture contents near the plastic limit. Between Stations 659+00 and 677+50, embankment foundation materials consist of gravel with sand (A-1-b) and gravel with sand and silt (A-2-4).

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS — 250 SAMPLES TESTED

DESCRIPTION	H.R.B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Gravel	A-1-a(0)	A-1-a	76	5	5	9	5	27	6	10	1
Gravel and/or stone fragments with sand	A-1-b(0)	A-1-b	60	9	10	13	8	25	6	11	4
Coarse and fine sand	A-3(0)	A-3a	0	2	87	—	11 —	NP	NP	11	1
Gravel or stone fragments with sand and silt	A-2-4(0)	A-2-4	48	10	14	18	10	27	7	15	13
Gravel with sand, silt and clay	A-2-6(0)	A-2-6	36	26	10	12	16	33	13	10	1
Sandy silt	A-4(4)	A-4a	19	9	17	35	19	24	7	15	138
Silt	A-4(8)	A-4b	12	8	5	53	22	27	9	14	13
Silt and clay	A-6(6)	A-6a	18	10	13	32	27	32	12	18	45
Silty clay	A-6(9)	A-6b	18	10	9	28	35	37	22	20	22
Clay	A-7-6(14)	A-7-6	6	5	6	29	54	49	24	20	12
Random fill			VISUAL CLASSIFICATION								
Weathered shale			VISUAL CLASSIFICATION								
Shale			VISUAL CLASSIFICATION								
Sandstone			VISUAL CLASSIFICATION								
Weathered Sandstone			VISUAL CLASSIFICATION								
Limestone			VISUAL CLASSIFICATION								

Topsoil = X'= Approximate depth.

Auger boring - plan view.

Core boring - plan view.

Water content nearly equal to or greater than liquid limit.

Indicates a non-plastic material with a high water content.

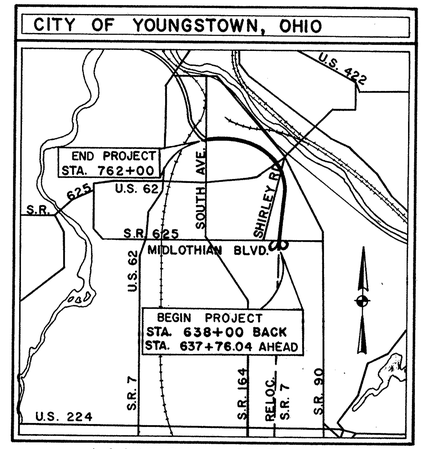
Note: Figures beside borings indicates water content in percent. e.g. 15

W —— Free water.

▼—— Static water level.

Auger boring plotted to vertical scale only - profile.

Core boring plotted to vertical scale only - profile.



LOCATION MAP

PROJECT INDEX

STATIONS FROM — TO	PLAN VIEW SHEET	PROFILE SHEET	CUT (MAX.)	FILL EMB. (MAX.)
I-680				
638+00 — 762+00	4, 5, 6, & 7		36'	60'
RAMP B				
748+00 — 756+61	8	8	34'	—
RAMP C				
749+75 — 757+85	9	9	32'	—
RAMP D				
751+08 — 758+99	9	9	28	—
RAMP E				
710+00 — 725+00	10	10	19'	70'
RAMP F				
721+50 — 740+00	11	11	15'	16'
RAMP G				
682+69 — 693+82	12	12	17'	—
RAMP H				
675+40 — 684+85	12	12	20'	43
RAMP J				
642+50 — 654+10	13	13	5'	23'
RAMP K				
642+00 — 653+51	13	13	3'	36'
RAMP L				
629+60 — 642+07	14	14	6'	36'
RAMP O				
630+00 — 641+44	14	14	6'	14
RAMP X				
699+80 — 707+00	8	8	11'	—
RELOCATED SHADY RUN RD.				
37+50 — 58+00	15	13	3'	29'

MAY 25 1971

SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98
THE H.C. NUTTING COMPANY
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

2/38
2/15

SUMMARY OF SOIL TEST DATA

NOTE: NP shown in Liquid Limit and Plasticity index columns indicates that the material is non-plastic

I-680

Station	Offset	Sample From	Sample To	Stratum From	Stratum To	Physical Characteristics % AGG.	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SHTL Class
640+50	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.0	21	5	14	40	20	25	4	15	A-4a(5)
		3.0	4.0	3.0	7.0	20	8	15	36	21	23	7	16	A-4a(4)
		7.0	8.5	7.0	10.0	20	15	22	20	23	22	7	13	A-4a(2)
644+00	CL	0.0	1.0	0.0	2.0	8	6	16	37	33	27	10	15	A-4a(7)
		2.0	3.0	2.0	5.0	10	7	17	31	35	29	13	15	A-6a(7)
		5.0	6.0	5.0	6.0	7	4	11	33	45	40	20	30	A-6b(12)
647+10	CL	0.0	0.0	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	1.0	12	9	22	45	12	29	9	31	A-4a(4)
651+00	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	4.0	0	4	7	48	41	40	19	24	A-6b(12)
		4.0	5.0	4.0	6.5	15	9	16	33	27	26	10	18	A-4a(5)
		6.5	7.0	6.5	9.0	Brown and Black Shale								Visual
653+50	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.5	11	7	16	37	29	30	11	20	A-6a(6)
		3.5	4.0	3.5	8.5	12	8	16	42	22	22	6	16	A-4a(6)
		8.5	10.0	8.5	10.0	18	8	14	39	21	20	4	16	A-4a(5)
656+00	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	1.0	16	7	15	38	24	29	10	16	A-4a(5)
		1.0	5.0	1.0	5.0	4	6	11	55	24	27	6		A-4b(8) *
		5.0	6.0	5.0	10.0	5	5	12	57	21	22	4	17	A-4b(8)
		10.0	11.0	10.0	12.0	10	6	14	49	21	22	5	18	A-4a(7)
		10.0	12.5	12.0	12.5	Black Shale								Visual
658+30	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	4.0	11	7	17	39	26	29	10	15	A-4a(6)
		4.0	5.0	4.0	8.0	32	12	16	24	16	24	8	11	A-4a(1)
		8.0	9.0	8.0	9.0	Brown Weathered Shale								Visual
660+90	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	2.6	[a]76	5	5	9	5	27	6	10	A-1a(0)
663+65	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.0	[a]66	8	9	10	7	29	6	16	A-1b(0)
		3.0	3.5	3.0	3.5	33	14	19	25	9	32	10	32	A-2-4(0)
665+55	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	2.3	[a]68	7	8	11	6	34	7	13	A-2-4(0)
669+00	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.5	0.5	1.5	[a]48	13	10	20	9	30	4	19	A-2-4(0)
671+15	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.0	[a]65	8	7	10	10	32	9	10	A-2-4(0)
		3.0	3.5	3.0	3.5	[a]30	15	11	27	17	26	7	7	A-4a(2)
675+75	CL	0.0	1.0	0.0	4.5	[b]56	12	7	17	8	30	6	9	A-1b(0)
678+00	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.0	14	8	15	40	23	29	10	14	A-4a(6)
		3.0	4.0	3.0	7.0	18	12	2	51	17	26	10	13	A-4b(6)
		7.0	8.5	7.0	10.0	14	9	25	38	14	19	2	12	A-4a(3)
		10.0	11.5	10.0	11.5	33	18	23	16	10	21	6	14	A-2-4(0)
		11.5	13.0	11.5	13.0	[c]34	16	14	26	10	23	7	10	A-4a(1)
		13.0	14.5	13.0	14.5	Brown & Gray Weathered Shale								Visual
682+00	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.5	0	4	5	59	32	30	10	18	A-4b(8)
		3.5	4.0	3.5	8.5	34	9	18	24	15	27	11	16	A-6a(1)
		8.5	10.0	8.5	10.0	[c]37	7	12	28	16	27	9	14	A-4a(2)
		10.0	11.5	10.0	11.5	Layered Weathered Shale								Visual
682+00	100'L	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	5.0	18	8	14	35	25	27	9	14	A-4a(5)
		5.0	6.0	5.0	10.0	14	8	16	38	24	22	6	20	A-4a(5) *
		10.0	11.0	10.0	11.0	16	7	16	38	23	22	6	14	A-4a(5) **
		11.0	12.0	11.0	15.0	32	18	9	22	19	27	9	11	A-4a(1)
686+00	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	2.0	[b]12	6	9	51	22		NP	15	A-4b(8)
		2.0	3.0	2.0	5.0	21	9	16	38	16	24	6	14	A-4a(4)
		5.0	6.0			Brown Weathered Shale								Visual
		6.0	6.5			Brown Weathered Shale								Visual

(a) Rock Fragments
(b) Fill
(c) Shale Fragments

* Moisture-Density and CBR
** Moisture-Density

Station	Offset	Sample From	Sample To	Stratum From	Stratum To	Physical Characteristics % AGG.	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SHTL Class
688+60	CL	0.0	0.5	0.0	0.5	Gravel, Cinders & Clay, (fill)								Visual
		0.5	1.0	0.5	3.5	6	6	13	53	22		NP	15	A-4b(8)
		3.5	4.0	3.5	7.0	43	17	10	17	13	27	8	14	A-2-4(0)
		7.0	8.5	7.0	8.5	25	9	16	34	16	23	6	11	A-4a(3)
		8.5	10.0			Brown & Gray Weathered Shale								
693+90	CL	0.0	1.0	0.0	1.0	Topsoil								Visual
		1.0	3.0	1.0	3.0	13	7	14	44	22	26	5	21	A-4a(6)
		3.0	4.0	3.0	4.0	33	6	15	29	17	25	8	18	A-4a(2)
		4.0	5.5			Brown & Gray Weathered Shale								Visual
693+90	103'L	0.5	1.0	0.5	2.0	Brown Silty Clay & Cinders, (fill)								Visual
		2.0	2.5	2.0	5.0	16	8	17	35	24	27	11	19	A-6a(5)
		5.0	6.0	5.0	10.0	10	11	32	29	18	22	6	20	A-4a(3)
		10.0	11.5	10.0	11.5	3	2	13	54	28	28	9	13	A-4b(8)
		11.5	13.0			Brown & Gray Weathered Shale								Visual
		13.0	17.0			Brown Sandstone								Visual
698+35	CL	0.0	0.5	0.0	0.5	Blacktop and Brick								Visual
		0.5	1.0	0.5	2.0	Cinders, Sand & Gravel								Visual
		2.0	3.0	2.0	4.5	[b]25	12	22	30	11	20	3	13	A-4a(1)
		4.5	5.0	4.5	7.0	11	9	20	46	14		NP	17	A-4a(5)
		7.0	8.5	7.0	8.5	12	8	25	42	13		NP	12	A-4a(4)
		8.5	10.0			Brown Weathered Shale								
702+00	CL	0.0	1.0	0.0	1.5	Topsoil								Visual
		1.5	2.0	1.5	4.0	2	2	4	60	32	33	12	22	A-6a(9)
		4.0	5.0	4.0	7.0	29	2	12	35	22	32	12	22	A-6a(5)
		7.0	8.0			Brown &Gray Weathered Shale								Visual
		10.0	11.0			Brown & Gray Weathered Shale								Visual
705+32	24'L	0.0	1.0	0.0	3.0	Cinders and Brick, (fill)								Visual
		3.0	4.0	3.0	5.0	2	4	6	56	32	29	9	21	A-4b(8)
		5.0	6.0	5.0	7.0	28	6	17	31	18	24	8	15	A-4a(3)
		7.0	8.5	7.0	11.0	16	9	19	38	18	21	5	12	A-4a(4)
		11.5	12.5			Brown Sandstone & Shale								Visual
705+70	70'L	0.0	1.0	0.0	1.0	Blacktop & Gravel								Visual
		1.0	2.0	1.0	5.0	25	7	18	29	21	24	9	12	A-4a(3)
		5.0	6.0	5.0	7.0	16	7	20	35	22	24	8	12	A-4a(4)
		7.0	8.0	7.0	10.0	27	21	12	30	10	30	10	9	A-4a(1)
		10.0	11.0			Black Shale								Visual
		15.0	16.0			Black Shale								Visual
		20.0	21.0			Black Shale								Visual
		21.0	21.1			Brown Sandstone								Visual
709+00	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.5	14	30	16	11	29	37	17	13	A-6b(3)
		3.5	4.0			Brown & Black Shale								Visual
		7.0	8.5			Black Shale								Visual
710+60	CL	0.0	1.0	0.0	2.5	Clay, Brick, & Cinders, (fill)								Visual
		2.5	3.0	2.5	3.0	31	7	4	35	23	37	15	15	A-6a(b)
712+75	CL	0.0	1.0	0.0	1.0	Topsoil								Visual
		1.0	2.0	1.0	4.0	31	7	13	29	20	30	12	16	A-6a(4)
		4.0	5.0	4.0	6.0	4	10	11	25	50	42	17	18	A-7-6(11)
		6.0	7.5	6.0	7.5	6	15	10	31	38	39	15	16	A-6a(9)
		7.5	9.0			Brown & Gray Shale								Visual
715+75	CL	0.0	1.0	0.0	1.0	[b]16	9	12	33	30	40	15	16	A-6a(8)
		1.0	2.0	1.0	4.2	2	6	6	44	42	38	13	12	A-6a(9)
		4.0	4.2			Weathered Shale								Visual
715+75	70'L	0.0	1.0	0.0	2.0	Brick, Slag & Gravel, (fill)								Visual
718+50	CL	0.0	1.0	0.0	1.0	Cinders & Gravel								Visual
		1.0	2.0	1.0	5.0	3	6	4	31	56	47	21	21	A-7-6(14)
		5.0	6.0	5.0	6.0	19	9	13	23	36	38	16	16	A-6b(7)
		6.0	7.5			Brown & Gray Shale								Visual
		7.5	9.0			Brown &Gray Shale								Visual
		9.0	10.5			Brown & Gray Shale								Visual
721+65	CL	0.0	1.0	0.0	1.0	Cinders, Sand & Gravel								Visual
		1.0	2.0	1.0	6.0	4	18	12	41	25	30	8	9	A-4a(6)
		6.0	7.5			Brown &Gray Weathered Shale								Visual
		7.5	9.0			Brown & Gray Weathered Shale								Visual
724+00	CL	0.0	1.0	0.0	1.0	Blacktop & Gravel								Visual
		1.0	2.0	1.0	5.0	8	8	13	43	28	28	7	8	A-4a(7)
		5.0	6.0			Brown & Gray Weathered Shale								Visual
728+60	CL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	0.5	24	9	12	32	23	28	8	8	A-4a(4)
		5.0	6.5			Brown & Gray Weathered Shale								Visual
730+10	56'L	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.0	3	3	3	60	31	29	8	20	A-4b(8)
		3.0	4.0	3.0	6.0	8	4	18	41	28	26	9	8	A-4a(7)
		6.0	7.5			Brown Weathered Shale								Visual
		7.5	9.0			Gray Shale								Visual
		9.0	10.0			Gray Shale								Visual

(b) Fill

Station	Offset	Sample From	Sample To	Stratum From	Stratum To	Physical Characteristics % AGG.	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SHTL Class
732+10	56'L	0.0	1.0	0.0	3.0	Brown & Gray Clay, Sand, Cinders & Brick, (fill)								Visual
		3.0	4.0	3.0	6.0	1	1	6	60	32	33	14	24	A-6a(10)
		6.0	7.5	6.0	7.5	8	6	5	41	40	40	16	12	A-6b(11)
		7.5	9.0			Brown & Gray Weathered Shale								Visual
		9.0	9.4			Brown & Gray Weathered Shale								Visual
732+30	CL	0.0	1.0	0.0	6.5	Brown & Gray Sand, Cinders & Clay, (fill)								Visual
		5.0	6.0	0.0	6.5	Brown & Gray Sand, Cinders & Clay, (fill)								Visual
		6.5	7.0	6.5	8.0	12	8	16	38	26	28	11	18	A-6a(7)
		8.0	8.2			Brown Weathered Shale								Visual
736+00	CL	0.0	0.5	0.0	0.5	Topsil								Visual
		0.5	1.0	0.5	5.5	7	3	6	63	21	42	24	23	A-7-6(14)
		5.5	7.0			Brown & Gray Weathered Shale								Visual
		7.0	8.5			Brown & Gray Weathered Shale								Visual
		8.5	10.0			Brown & Gray Weathered Shale								Visual
736+00	56'L	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	5.0	8	6	6	29	51	44	17	16	A-7-6(12)
		5.0	6.0	5.0	7.0	7	8	11	25	49	38	14	19	A-6a(10)
		7.0	8.5			Brown Weathered Shale								Visual
		8.5	10.0			Brown Weathered Shale								Visual
740+00	CL	0.0	1.0	0.0	3.0	32	7	10	30	21	32	13	15	A-6a(4)
		3.0	4.0	3.0	6.0	2	2	2	16	78	65	38	23	A-7-6(20)
		6.0	7.5	6.0	7.5	5	6	8	32	49	44	19	18	A-7-6(12)
		7.5	9.0			Brown Weathered Shale								Visual
740+00	56'L	0.0	5.0	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	4.5	25	7	13	36	19	27	7	15	A-4a(4)
		4.5	5.0	4.5	6.0	4	10	16	48	22	30	9	11	A-4a(7)
		6.0	7.5			Brown Weathered Shale								Visual
		7.5	9.0			Brown & Gray Shale								Visual
741+00	77.5'R	0.0	1.	0.0	4.0	Cinders and Clay, (fill)								Visual
		4.0	5.0	4.0	5.0	20	6	9	40	25	27	8	18	A-4a(6)
741+00	CL	0.0	1.0	0.0	4.0	Cinders and Clay, (fill)								Visual
		4.0	5.0	4.0	5.0	12	7	9	47	25	27	8	22	A-4a(7)
742+00	CL	0.0	1.0	0.0	7.0	Cinders and Slag, (fill)								Visual
		5.0	6.0	0.0	7.0	Cinders and Slag, (fill)								Visual
		7.0	8.5	7.0	8.5	11	19	14	26	30	38	14	10	A-6a(6)
742+00	75'R	0.0	1.0	0.0	15.0	Cinders and Slag, (fill)								Visual
		5.0	6.0	0.0	15.0	Cinders and Slag, (fill)								Visual
		10.0	11.0	0.0	15.0	Cinders and Slag, (fill)								Visual
		15.0	16.5	16.0	16.5	14	4	13	23	46	39	17	22	A-6b(10)
743+00	CL	0.0	1.0	0.0	16.5	Cinders and Slag, (fill)								Visual
		5.0	6.0	0.0	16.5	Cinders and Slag, (fill)								Visual
		10.0	11.0	0.0	16.5	Cinders and Slag, (fill)								Visual
		15.0	16.0	0.0	16.5	Cinders and Slag, (fill)								Visual
		16.5	18.0	16.5	19.5	16	10	14	35	25	28	9	19	A-4a(5)
		19.5	21.0	19.5	21.0	38	9	11	26	16	27	6	20	A-4a(1)
743+00	72'R	0.0	1.0	0.0	17.0	Cinders and Slag, (fill)								Visual
		5.0	6.0	0.0	17.0	Cinders and Slag, (fill)								Visual
		10.0	11.0	0.0	17.0	Cinders and Slag, (fill)								Visual
		15.0	16.0	0.0	17.0	Cinders and Slag, (fill)								Visual
		17.0	18.5	17.0	18.5	21	8	2	19	50	46	20	14	A-7-6(14)
		18.5	20.0	18.5	20.0	20	14	8	22	36	38	13	13	A-6a(6)
744+00	CL	0.0	1.0	0.0	4.5	Cinders and Gravel, (fill)								Visual
		4.5	5.0	4.5	7.0	2	2	4	52	40	36	14	17	A-6a(10)
		7.0	6.5			Brown Weathered Shale								Visual
		8.5	10.0			Brown Weathered Shale								Visual
		10.0	10.5			Brown Weathered Shale								Visual
744+00	56'L	0.0	1.0	0.0	8.5	Cinders, Brick, Clay and Rock (fill)								Visual
		5.0	6.0	0.0	8.5	Cinders, Brick, Clay and Rock (fill)								Visual
		7.0	8.5	0.0	8.5	Cinders, Brick, Clay and Rock (fill)								Visual
		8.5	9.5			Brown Weathered Shale								Visual
744+00	70'R	0.0	1.0	0.0	4.0	Cinders, Clay, Glass (fill)								Visual
		4.0	5.0	4.0	5.0	10	7	14	39	30	30	14	19	A-6a(9)
		5.0	6.5	5.0	6.5	20	9	16	35	20	23	7	14	A-4a(4)
745+00	CL	0.0	1.0	0.0	2.0	Cinders and Clay								Visual
		2.0	3.0	2.0	5.0	[b]25	8	9	26	32	36	18	23	A-6b(8)
		5.0	6.5	5.0	6.5	[b]21	11	16	28	24	28	12	21	A-6a(4)
745+00	70.5'R	0.0	1.0	0.0	5.0	[b]40	9	16	22	13	21	6	6	A-2-4(0)
		5.0	6.0	5.0	6.0	b 7	6	19	47	21	38	5	33	A-4a(6)
		6.0	7.5	6.0	7.5	13	7	16	36	28	30	12	18	A-6a(6)
746+00	CL	0.0	1.0	0.0	1.0	Cinders, (fill)								Visual
		1.0	2.0	1.0	2.0	[b]33	9	14	28	16	24	7	14	A-4a(2)
		2.0	3.0	2.0	5.0	12	10	18	36	24	26	10	17	A-4a(5)

(b) Fill
(d) Trace Brick
(e) Trace Cinders

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Station	Offset	Sample From	Sample To	Stratum From	Stratum To	% AGG.	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SHTL Class
746+00	71'R	0.0	1.0	0.0	2.0	[b]30	9	17	28	16	22	6	6	A-4a(2)
		2.0	3.0	2.0	5.0	17	8	17	33	25	27	10	16	A-4a(4)
		5.0	6.5	5.0	6.5	15	9	18	36	22	22	6	13	A-4a(5)
747+00	71'R	0.0	1.0	0.0	5.0	[b]29	9	16	29	17	24	7	6	A-4a(2)
		5.0	6.0	5.0	7.0	[b]14	10	17	39	20	36	8	23	A-4a(5)
		7.0	8.5	7.0	8.5	3	3	8	64	22	28	7	20	A-4b(8)
747+30	17'R	0.0	1.0	0.0	5.0	[d]19	11	17	33	20	24	7	9	A-4a(3)
		5.0	6.0	5.0	6.0	[e]10	4	8	48	30	33	5	27	A-4a(8)
		6.0	7.0	6.0	7.0	1	3	4	58	34	32	12	25	A-6a(9)
		7.0	8.5	7.0	8.5	18	5	12	42	23	29	12	17	A-6a(7)
		8.5	10.0	8.5	13.0	15	7	15	41	22	23	6	15	A-6a(6)
		13.0	14.5	13.0	19.0	12	8	18	40	22	22	5	16	A-4a(5)
		19.0	19.5	19.0	19.5	14	17	28	30	11		NP	15	A-4a(8)
751+85	14'L	0.0	1.0	0.0	1.0	Concrete and Gravel								
		1.0	2.0	1.0	2.0	10	4	9	44	33	34	15	23	A-6a(10)
		2.0	3.0	2.0	5.0	18	7	1	50	24	27	10	15	A-4b(8)
		5.0	10.0	5.0	10.0	8	9	20	40	23	23	6	15	A-4a(6)
		10.0	11.5	10.0	13.0	10	10	20	40	20	21	2	13	A-4a(5)
		13.0	14.5	13.0	22.0	22	10	17	35	16	18	3	12	A-4a(3)
		17.5	19.0	13.0	22.0	25	9	17	33	16	22	5	13	A-4a(3)
		20.5	22.0	13.0	22.0	24	9	17	33	17	18	3	9	A-4a(3)
756+00	14'L	0.0	1.0	0.0	1.0	Concrete and Gravel								
		1.0	2.0	1.0	5.0	[b]28	13	17	27	15	25	7	15	A-4a(2)
		5.0	6.0	5.0	13.0	19	7	16	39	19	22	6	13	A-4a(5)
		10.0	11.5	5.0	13.0	14	9	18	39	20	21	5	15	A-4a(5)
		13.0	14.0	13.0	14.0	31	7	16	33	13	21	3	16	A-4a(2)
		14.0	14.2			Sandstone								Visual
759+82	CL	0.0	1.0	0.0	3.0	Brown Clay and Cinders, (fill)								Visual
		3.0	4.0	3.0	7.0	24	15	25	22	14	18	4	18	A-4a(0)
		7.0	8.0	7.0	10.0	63	4	12	13	8	20	4	6	A-1b(0)
		10.0	10.5			Sandstone								Visual
						RAMP "B"								
750+50	BL	0.0	1.0	0.0	8.0	16	9	18	38	19	21	5	13	A-4a(5)
		5.0	6.0	0.0	8.0	12	8	20	41	19	21	6	16	A-4a(5)
		8.0	9.0	8.0	14.5	22	7	20	34	17	17	3	11	A-4a(3)
		10.0	11.5	8.0	14.5	18	11	18	37	16	17	3	11	A-4a(3)
		14.5	16.0	14.5	19.0	54	5	1	32	8	17	4	12	A-4a(1)
		19.0	20.5	19.0	20.5	6	2	42	40	10		NP	21	A-4a(3)
755+20	BL	0.0	1.0	0.0	1.0	Cinders and Gravel								Visual
		1.0	5.0	1.0	5.0	6	6	14	42	32	20	11	17	A-6a(9) **
		5.0	6.0	5.0	12.5	21	7	17	35	20	22	7	14	A-4a(4)
		8.0	12.0	5.0	12.5	11	7	16	46	20	23	6	16	A-4a(6)
		12.5	14.0	12.5	17.0	9	10	20	42	19	21	5	11	A-4a(5)
		14.0	15.5	12.5	17.0	12	10	20	39	19	20	4	12	A-4a(5)
		17.0	18.5	17.0	20.3	20	10	18	36	16	17	3	9	A-4a(3)
						RAMP "C"								
753+50	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	1.5	10	3	8	48	31	36	17	22	A-6b(11)
		1.5	3.0	1.5	10.0	27	9	14	33	17	23	7	14	A-4a(3)
		5.0	6.0	1.5	10.0	14	9	19	37	21	24	8	16	A-4a(5)
		10.0	11.5	10.0	13.0	33	7	16	30	14	22	5	12	A-4a(2)
		13.0	14.5	13.0	22.0	24	8	18	36	14	18	4	11	A-4a(3)
		17.5	19.0	13.0	22.0	16	10	21	39	14	17	2	12	A-4a(3)
		22.0	23.5	22.0	23.7	42	9	17	21	11	20	4	14	A-2-4(0)
756+65	BL	0.0	0.5	0.0	0.5	Blacktop								Visual
		0.5	1.0	0.5	1.5	Brown Clay Mixed with Blacktop, (fill)								
		1.5	2.0	1.5	10.0	13	7	18	38	24	26	9	15	A-4a(5)
		5.0	6.0	1.5	10.0	11	9	17	41	22	26	8	16	A-4a(5)
		10.0	11.5	10.0	13.0	22	9	18	34	17	21	4	10	A-4a(3)
		13.0	14.5	13.0	14.5	17	10	18	35	20	23	6	6	A-4a(4)
		14.5	14.6	14.5	14.6	Brown Sandstone								Visual
						RAMP "D"								
749+50	BL	0.0	1.0	0.0	1.5	[b]19	7	12	39	23	32	10	20	A-4a(5)
		1.5	2.0	1.5	6.5	9	7	20	41	23	27	8	18	A-4a(6)
		6.0	7.5	6.0	13.5	17	8	20	33	21	25	9	14	A-4a(4)
		9.0	10.5	6.0	13.5	13	11	20	38	13	21	4	16	A-4a(4)
		13.5	15.0	13.5	19.5	21	11	13	35	15	21	4	11	A-4a(3)
		15.0	16.5	13.5	19.5	20	10	13	36	16	19	4	10	A-4a(3)
		18.0	19.5	13.5	19.5	22	11	13	34	15	17	3	11	A-4a(3)
		19.5	21.0	19.5	24.0	Brown and Gray Weathered Shale & Sandstone								Visual
		22.5	24.0	19.5	24.0	Brown and Gray Weathered Shale & Sandstone								Visual
754+60	BL	0.0	1.0	0.0	1.0	Brick and Concrete								Visual
		1.0	2.0	1.0	5.0	13	6	16	39	26	27	11	18	A-6a(6)
		5.0	6.0	5.0	10.0	11	9	20	41	19	21	5	15	A-4a(5)
		10.0	11.5	10.0	14.5	25	11	19	33	12	20	3	13	A-4a(2)
		14.5	16.0	14.5	17.5	42	6	32	14	6		NP	8	A-2-4(0)
		17.5	18.0	17.5	20.5	Weathered Sandstone								Visual
		18.0	20.5	17.5	20.5	Weathered Sandstone								Visual

**Moisture-Density

(b) Fill

Station	Offset	Sample From	Sample To	Stratum From	Stratum To	% AGG.	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SHTL Class
						RAMP "E"								
713+39	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.0	12	4	7	51	26	25	5	17	A-4b(8)
		3.0	4.0	3.0	5.0	4	2	6	22	66	60	34	28	A-7-6(20)
		5.0	6.0	5.0	7.0	4	16	14	22	44	46	22	16	A-7-6(11)
		7.0	8.5	7.0	9.5	Brown & Gray Weathered Shale								Visual
		8.5	9.5	7.0	9.5	Brown & Gray Weathered Shale								Visual
716+25	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	5.0	20	14	11	17	38	38	17	19	A-6b(7)
		5.0	6.0	6.0	6.0	2	5	11	54	30	52	24	26	A-7-6(15)
		6.0	7.5	6.0	7.5	Brown & Gray Weathered Shale								Visual
720+20	BL	0.0	0.5	0.0	0.5	Concrete and Gravel								Visual
		0.5	1.0	0.5	3.0	39	13	15	20	13	27	6	10	A-2-4(0)
		3.0	4.0	3.0	6.0	22	10	5	34	29	39	16	20	A-6b(9)
		6.0	7.5	6.0	7.5	20	2	3	33	42	46	28	20	A-7-6(15)
		7.5	9.0	7.5	10.0	Brown & Gray Weathered Shale								Visual
		9.0	10.0	7.5	10.0	Brown & Gray Weathered Shale								Visual
724+75	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	4.5	18	9	17	34	22	25	10	17	A-4a(4)
		4.5	5.0	4.5	7.5	Brown & Gray Weathered Shale								Visual
		5.0	6.5	4.5	7.5	Brown & Gray Weathered Shale								Visual
		6.5	7.5	4.5	7.5	Brown & Gray Weathered Shale								Visual
						RAMP "F"								
721+75	31'L	0.0	1.0	0.0	1.0	Cinders & Clay, (fill)								Visual
		1.0	2.0	1.0	3.0	34	10	8	40	8		NP	8	A-4a(3)
		3.0	4.0	3.0	6.0	38	6	3	35	18	31	12	15	A-6a(5)
		6.0	7.5	6.0	9.2	Brown & Gray Weathered Shale								Visual
		7.5	9.0	6.0	9.2	Beown & Gray Weathered Shale								Visual
725+30	BL	0.0	1.0	0.0	1.0	Brick and Concrete, (fill)								Visual
		1.0	2.0	1.0	6.0	20	8	24	31	17	23	7	14	A-4a(3)
		6.0	7.5	6.0	7.5	46	4	9	23	18	27	11	13	A-4a(1)
729+00	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	2.0	22	5	12	41	20	28	5	16	A-4a(5)
		2.0	3.0	2.0	3.0	Brown Weathered Sandstone								Visual
733+00	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	2.5	28	7	12	39	14		NP	28	A-4a(4)
						RAMP "G"								
684+80	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.5	0.5	1.5	29	7	15	29	20	28	12	10	A-6a(4)
		1.5	3.0	1.5	3.0	26	8	14	33	19	26	8	12	A-4a(3)
		3.0	4.5	3.0	9.0	6	4	13	54	23	28	8	11	A-4b(8)
		7.5	9.0	3.0	9.0	2	2	14	57	25	27	8	7	A-4b(8)
688+25	BL	0.0	1.0	0.0	1.0	Blacktop, Cinders & Slag, (fill)								Visual
		1.0	1.5	1.0	3.0	[b]18	8	12	44	18	25	6	12	A-4a(5)
		2.5	3.0	1.0	3.0	[b]15	9	19	39	18	25	8	14	A-4a(5)
		3.0	4.5	3.0	5.5	1	1	8	59	31	28	8	10	A-4b(8)
		5.5	10.5	5.5	10.5	Brown Weathered Shale								Visual
		10.5	13.0	10.5	13.0	Brown & Gray Weathered Shale								Visual
		13.0	16.5	13.0	16.5	Br. & Gray Weathered Shale w/Sandstone Seams								Visual
692+60	BL	0.0	1.5	0.0	1.5	Cinders & Clay, (fill)								Visual
		1.5	3.0	1.5	3.0	13	10	19	38	20	22	5	20	A-4a(5)
		3.0	4.5	3.0	10.5	14	10	20	37	19	22	6	20	A-4a(4)
		7.5	9.0	3.0	10.5	18	10	20	35	17	21	5	19	A-4a(4)
		10.5	12	10.5	12.0	14	10	20	37	19	22	6	18	A-4a(4)
		12.0	13.5	12.0	13.5	45	9	13	21	12	25	8	22	A-2-4(0)
		13.5	15.0	13.5	16.5	35	11	15	25	14	22	5	12	A-4a(1)
		15.0	16.5	13.5	16.5	30	10	15	31	14	24	6	10	A-4a(1)
						RAMP "H"								
679+20	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	4.0	11	4	7	48	30	28	8	18	A-4a(8)
		4.0	5.0	4.0	7.0	15	10	21	34	20	26	9	16	A-4a(4)
		7.0	8.5	7.0	11.5	57	5	9	19	10	25	8	10	A-2-4(0)
		11.5	13.0	11.5	13.0	30	18	12	26	14	27	8	12	A-4a(11)
		13.0	14.5	13.0	14.5	Brown Weathered Shale								Visual
683+40	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	5.5	36	26	10	12	16	33	13	10	A-2-6(1)
		5.5	6.0	5.5	10.0	Brown & Gray Weathered Shale								Visual
		7.0	8.5	5.5	10.0	Brown & Gray Weathered Shale								Visual
		8.5	10.0	5.5	10.0	Brown & Gray Weathered Shale								Visual
						RAMP "J"								
643+11	BL	0.0	1.0	0.0	1.0	Topsoil, (fill)								Visual
		1.0	2.0	1.0	3.0	[b]10	8	14	38	30	29	12	16	A-6a(7)
		3.0	4.0	3.0	5.5	[b]11	2	4	36	47	47	38	19	A-6b(10)
		5.5	7.0	5.5	7.0	[b]40	10	8	16	26	26	39	17	A-6b(4)
		7.0	8.5	7.0	8.5	Gray Weathered Shale								Visual
646+00	BL	0.0	1.0	0.0	3.0	Topsoil, Shale & Organics, (fill)								Visual
		3.0	3.5	3.0	3.5	[b]18	8	19	24	31	36	13	26	A-6a(5)
650+00	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	5.0	0	3	3	27	67	39	15	19	A-6a(10)
		5.0	6.0	5.0	7.8	2	1	1	21	75	47	20	20	A-7-6(13)
						RAMP "K"								
641+83	BL	0.0	1.5	0.0	1.5	[b]16	32	8	26	18	31	11	14	A-6a(2)
		4.5	6.0	1.5	9.0	[b]46	9	7	23	15	28	8	14	A-4a(1)
		7.5	9.0	1.5	9.0	[b]44	4	12	25	15	25	6	10	A-4a(1)
		9.0	10.5	9.0	12.0	Brown & Gray Weathered Shale								Visual
		10.5	12.0	9.0	12.0	Brown & Gray Weathered Shale								Visual

(b) Fill

SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98
THE H.C. NUTTING COMPANY
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

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Station	Offset	Sample From	Sample To	Stratum From	Stratum To	% AGG.	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SHTL Class
645+80	BL	0.0	1.5	0.0	1.5	Topsoil								Visual
		3.0	4.0	1.5	4.0	6	6	14	55	19		NP	17	A-4a(8)
		4.0	5.5	4.0	7.5	7	8	14	38	33	30	12	15	A-6a(8)
		7.5	8.5	7.5	8.5	Brown & Gray Weathered Shale								Visual
649+00	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	2.5	8	5	26	38	23	22	6	11	A-4a(5)
		2.5	3.0	2.5	7.5	Brown & Gray Weathered Shale								Visual
		5.0	6.0	2.5	7.5	Brown & Gray Weathered Shale								Visual
		7.0	7.5	2.5	7.5	Brown & Gray Weathered Shale								Visual
653+00	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	4.0	15	8	15	34	28	30	12	17	A-6a(5)
		4.0	5.0	4.0	7.5	16	10	15	33	26	25	9	16	A-4a(6)
		7.5	8.0	7.5	8.0	Black Shale								Visual
						RAMP "L"								
630+20	BL	0.0	1.0	0.0	1.0	Topsoil								Visual
		1.0	2.0	1.0	3.0	23	8	13	34	22	29	9	18	A-4a(4)
		3.0	4.0	3.0	5.0	4	6	5	37	48	37	14	18	A-6a(10)
		5.0	6.0	5.0	8.0	18	4	2	38	38	37	13	14	A-6a(9)
		8.0	9.0	8.0	9.0	Brown & Gray Weathered Shale & Sandstone								Visual
634+80	BL	0.0	1.0	0.0	1.0	Crushed Stone and Cinders								Visual
		1.0	2.0	1.0	6.0	[b]10	8	16	37	29	31	14	19	A-6a(8)
		5.0	6.0	1.0	6.0	[b] 6	5	19	38	32	31	13	18	A-6a(8)
		6.0	7.0	6.0	8.5	0	3	24	37	36	32	14	21	A-6a(9)
		8.5	9.5	8.5	9.5	Brown & Gray Weathered Shale								Visual
639+25	17'R.	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.5	0.5	3.5	12	8	17	41	22		NP	20	A-4a(8)
		3.5	4.0	3.5	8.5	Brown & Gray Weathered Shale								Visual
		7.0	8.5	3.5	8.5	Brown & Gray Weathered Shale								Visual
						RAMP "O"								
632+00	BL	0.0	1.0	0.0	1.0	Topsoil								Visual
		1.0	2.0	1.0	3.0	[b] 8	6	24	40	22	24	6	12	A-4a(5)
		3.0	4.0	3.0	8.5	22	10	17	23	28	31	11	18	A-6a(3)
		7.0	8.5	3.0	8.5	31	11	14	23	21	32	13	16	A-6a(3)
		8.5	10.0	8.5	10.0	Black Shale								Visual
635+05	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	5.5	[b]22	7	27	26	18	25	8	16	A-4a(2)
		5.0	5.5	0.5	5.5	[b]21	7	26	28	18	24	7	18	A-4a(2)
		5.5	6.0	5.5	7.0	56	10	14	13	7	23	6	16	A-1b(0)
		7.0	8.5	7.0	10.0	33	14	12	27	14	25	5	16	A-4a(2)
		8.5	10.0	7.0	10.0	26	16	12	29	17	28	8	11	A-4a(2)
		10.0	10.5	10.0	10.5	Brown and Gray Weathered Shale								Visual
638+25	BL	0.0	0.5	0.0	0.5	Topsoil								Visual
		0.5	1.0	0.5	3.0	[b]23	10	19	28	20	24	6	6	A-4a(3)
		3.0	4.0	3.0	5.0	17	10	22	33	18	20	4	14	A-4a(3)
		5.0	6.0	5.0	7.0	7	4	46	31	12		NP	17	A-4a(1)
		7.0	8.5	7.0	9.0	0	2	87	-11-				11	A-3a(0)
		9.0	10.0	9.0	10.0	Dark Gray Shale								Visual
						RAMP "X"								
703+15	BL	0.0	1.0	0.0	1.0	Topsoil								Visual
		1.0	2.0	1.0	5.0	30	1	2	52	15	24	7	10	A-4a(6)
		5.0	6.0	5.0	9.5	27	8	18	31	16	22	6	14	A-4a(2)
		10.0	11.5	9.5	11.5	20	9	19	34	18	22	6	12	A-4a(3)
		11.5	12.0	11.5	12.0	Brown & Gray Weathered Shale & Sandstone								Visual
707+05	BL	0.0	1.0	0.0	3.5	Black Cinders & Clay, (fill)								Visual
		3.5	4.0	3.5	6.5	26	10	20	26	18	25	6	16	A-4a(2)
		6.5	7.0	6.5	10.0	Brown & Gray Weathered Shale								Visual
		10.0	10.5	10.0	10.5	Brown Weathered Sandstone								Visual
						"SHADY RUN ROAD"								
39+00	CL	0.0	1.0	0.0	1.0	Topsoil								Visual
		1.0	2.0	1.0	3.5	13	8	19	38	22	22	6	12	A-4a(5)
		3.5	4.0	3.5	7.0	Brown Weathered Shale								Visual
		6.5	7.0	3.5	7.0	Brown Weathered Shale								Visual
43+40	CL	0.0	1.0	0.0	5.0	[b]23	23	8	26	20	34	11	18	A-6a(2)
		5.0	6.0	5.0	7.0	[b]30	6	15	28	21	31	10	25	A-4a(3)
		7.0	8.5	7.0	8.5	Gray & Brown Weathered Shale								Visual
47+50	CL	0.0	1.0	0.0	3.0	[b]34	14	12	21	19	31	10	18	A-4a(1)
		3.0	4.0	3.0	7.0	[b]27	6	5	44	18	34	14	16	A-6a(7)
		7.0	8.5	7.0	10.0	Shale, Rock, Clay, (fill)								Visual
		8.5	10.0	7.0	10.0	Shale, Rock, Clay, (fill)								Visual
		10.0	10.2	10.0	10.2	Gray Sandstone								Visual
51+60	CL	0.0	1.0	0.0	3.0	Cinders & Brick, (fill)								Visual
		3.0	4.0	3.0	7.0	[b]30	12	11	26	21	31	11	19	A-6a(2)
		7.0	8.5	7.0	10.0	64	8	5	19	4	28	9	20	A-2-4(0)
		10.0	10.5	10.0	10.5	Gray & Brown Weathered Shale								Visual
55+00	CL	0.0	1.0	0.0	5.0	Cinders & Rock-Clay (fill)								Visual
		5.0	6.0	5.0	6.5	37	9	12	22	20	31	10	18	A-4a(1)

(b) Fill

MAY 26 1971

SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

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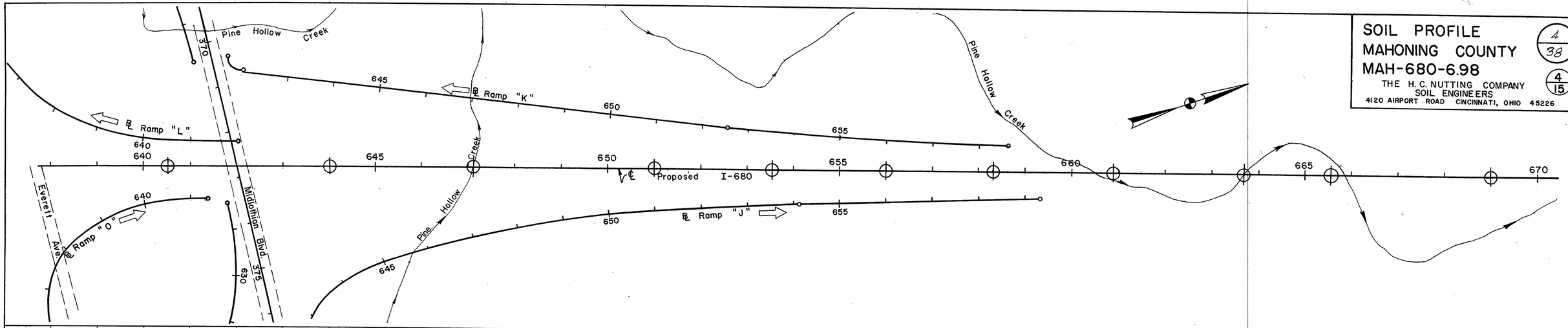
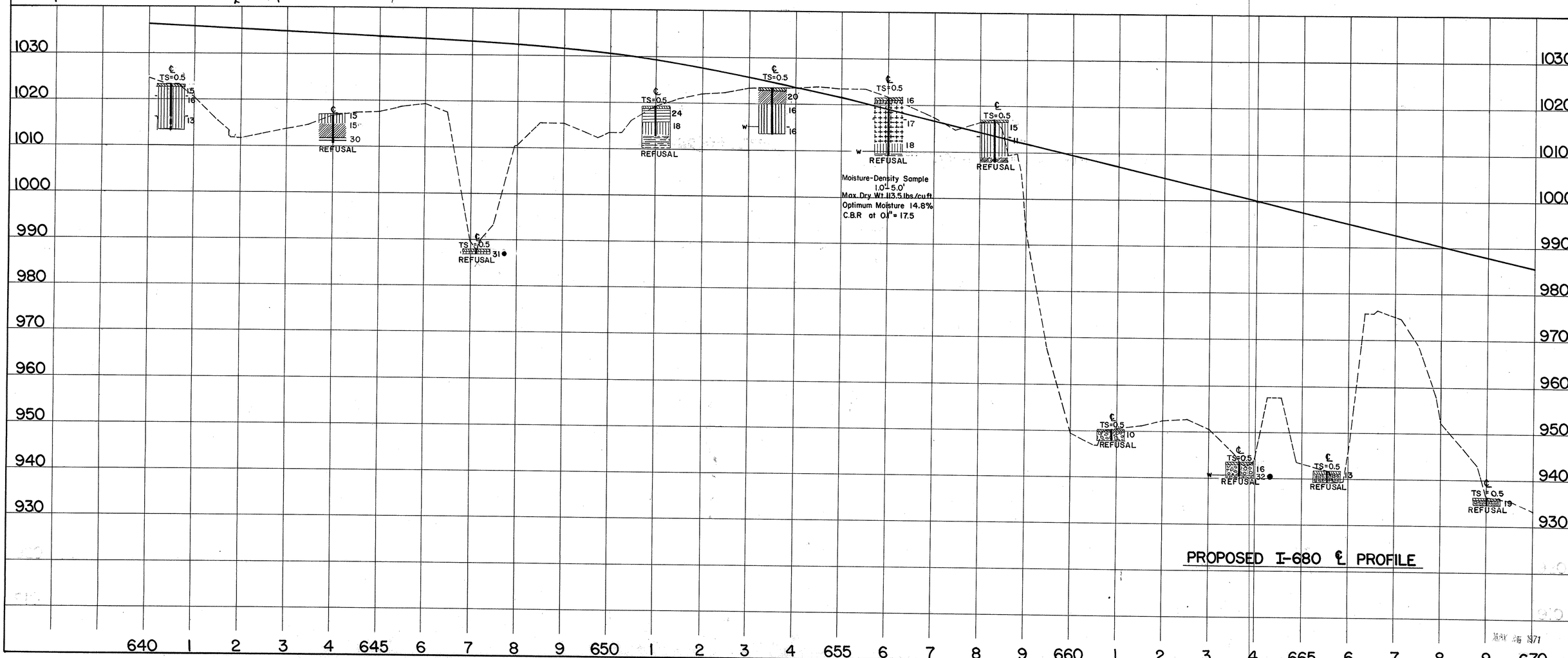
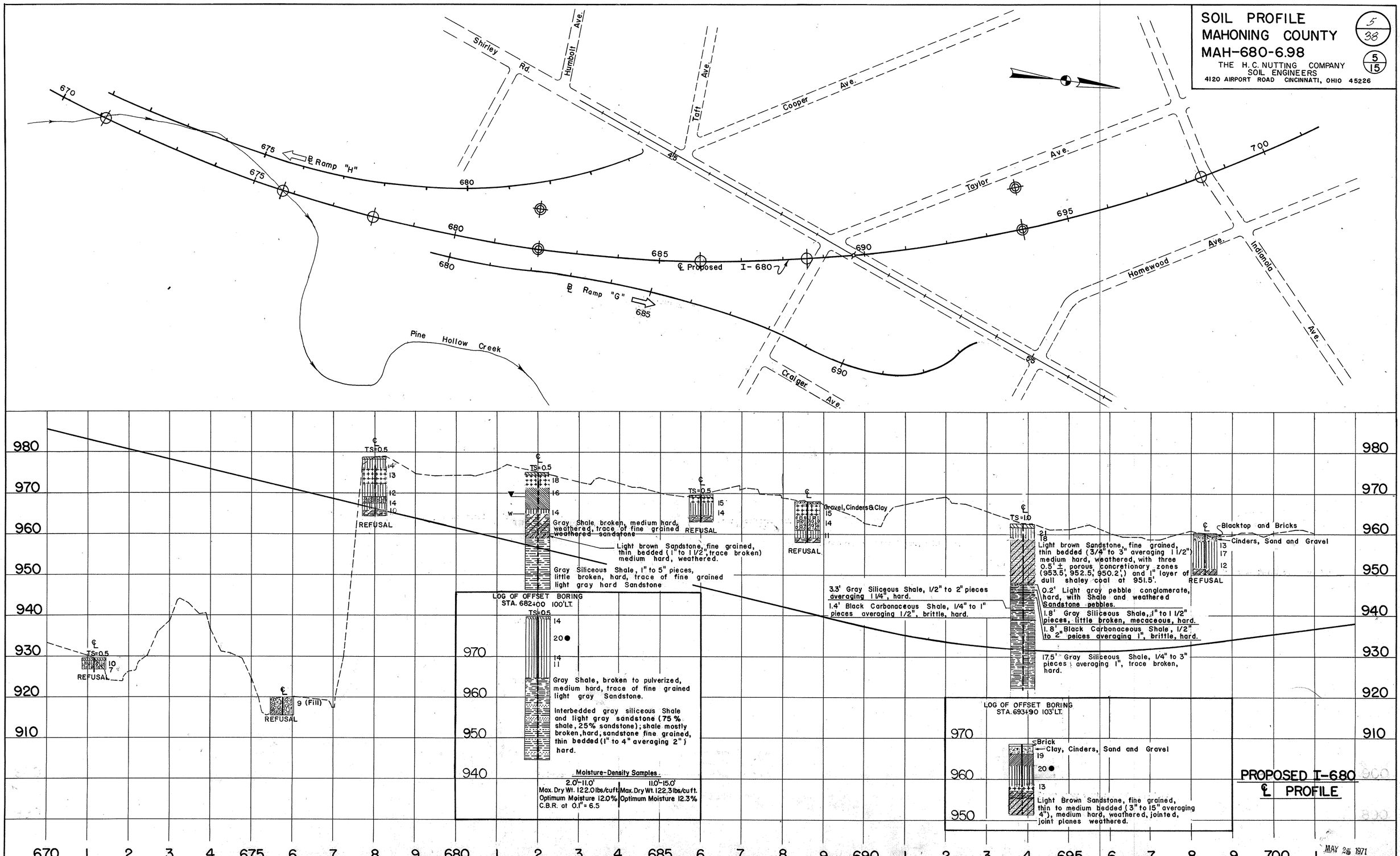




PROPOSED I-680 ℄ PROFILE

MAY 26 1971


SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98
THE H. C. NUTTING COMPANY
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226
5/38
5/15
Shirley Rd.
Humbolt Ave.
Taft Ave.
Cooper Ave.
Taylor Ave.
Homewood Ave.
Indianola Ave.
Craiger Ave.
Pine Hollow Creek
℄ Ramp "H"
℄ Ramp "G"
℄ Proposed I-680
670
675
680
685
690
695
700
45
55
980
970
960
950
940
930
920
910
TS=0.5
REFUSAL
9 (Fill)
Gray Shale broken, medium hard, weathered, trace of fine grained weathered sandstone
Light brown Sandstone, fine grained, thin bedded (1" to 1 1/2", trace broken) medium hard, weathered.
Gray Siliceous Shale, 1" to 5" pieces, little broken, hard, trace of fine grained light gray hard Sandstone
Gravel, Cinders & Clay
LOG OF OFFSET BORING
STA. 682+00 100'LT.
Gray Shale, broken to pulverized, medium hard, trace of fine grained light gray Sandstone.
Interbedded gray siliceous Shale and light gray sandstone (75% shale, 25% sandstone); shale mostly broken, hard, sandstone fine grained, thin bedded (1" to 4" averaging 2") hard.
Moisture-Density Samples
2.0'-11.0' Max. Dry Wt. 122.0 lbs/cu ft. Optimum Moisture 12.0% C.B.R. at 0.1" = 6.5
11.0'-15.0' Max. Dry Wt. 122.3 lbs/cu ft. Optimum Moisture 12.3%
3.3' Gray Siliceous Shale, 1/2" to 2" pieces averaging 1 1/4", hard.
1.4' Black Carbonaceous Shale, 1/4" to 1" pieces averaging 1/2", brittle, hard.
Light brown Sandstone, fine grained, thin bedded (3/4" to 3" averaging 1 1/2") medium hard, weathered, with three 0.5' ± porous concretionary zones (953.5', 952.5', 950.2',) and 1" layer of dull shaley coal at 951.5'.
0.2' Light gray pebble conglomerate, hard, with Shale and weathered Sandstone pebbles.
1.8' Gray Siliceous Shale, 1" to 1 1/2" pieces, little broken, mecaceous, hard.
1.8' Black Carbonaceous Shale, 1/2" to 2" peices averaging 1", brittle, hard.
17.5' Gray Siliceous Shale, 1/4" to 3" pieces averaging 1", trace broken, hard.
Blacktop and Bricks
Cinders, Sand and Gravel
LOG OF OFFSET BORING
STA. 693+90 103'LT.
Brick
Clay, Cinders, Sand and Gravel
Light Brown Sandstone, fine grained, thin to medium bedded (3" to 15" averaging 4"), medium hard, weathered, jointed, joint planes weathered.
PROPOSED I-680
℄ PROFILE
MAY 25 1971

SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

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Murray
Taylor St.
Shady Run
Powersdell Ave.
Samuel Ave.
℄ Ramp "E"
705
710
715
720
725
730
℄ Proposed I-680
705 Ramp "X"
Homewood Ave.
Harman
Fithian
Campbell St.
Union St.
Mabel St.
Caledonia St.
Parnell St.
Hiram
725 ℄ Ramp "F"

970
960
950
940
930
920
910
900

℄ TS=1.5 22 22 REFUSAL

℄ TS=0.5 13 REFUSAL

℄ TS=1.0 16 18 16 REFUSAL

℄ 16 12 REFUSAL

℄ Cinders & Gravel 21 16 REFUSAL

℄ Cinders, Sand & Gravel 9 REFUSAL

℄ Blacktop & Gravel 8 REFUSAL

℄ TS=0.5 8 REFUSAL

LOG OF OFFSET BORINGS

STA. 705+32 24' LT.
Cinders & Brick 21 15 12

STA. 705+70 70' LT.
Blacktop & Gravel 12 12 9 REFUSAL

℄ Clay, Brick & Cinders 15 REFUSAL

Light brown sandstone, fine-grained, thin to medium bedded (1/2" to 14" averaging 4"), medium hard, weathered, finely micaceous, with rare concretions, trace of brown weathered shale.

LOG OF OFFSET BORING
STA. 715+75 70' LT.

Brick, Slag & Gravel
A
B
C
D
E
F

A- Light brown sandstone, fine grained, thin bedded (1/2" to 6" averaging 1-1/2"), medium hard, weathered, micaceous, top 6" shaley.
B- Gray shale, (1/8" to 3" pieces averaging 1-1/2"), some broken, medium hard, sparsely concretionary, weathered.
C- Light gray siliceous shale, (1" to 3" pieces) broken, hard.
D- Gray siliceous shale, (1/2" to 3" pieces averaging 1"), streaks of gray fine-grained sandstone, hard.
E- Light gray sandstone, fine-grained, thick bedded (1-2" bed), hard.
F- Gray siliceous shale, (1/2" to 3" pieces), broken, hard.

LOG OF OFFSET BORING
STA. 730+10 56' LT.

980
970
960
TS=0.5 20 8

701 2 3 4 705 6 7 8 9 710 1 2 3 4 715 6 7 8 9 720 1 2 3 4 725 6 7 8 9 730 1 2 3

MAY 25 1971

PROPOSED I-680 ℄ PROFILE

SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

7/38

7/15

Samuel Ave.
Zedaker St.
Dickson Ave
South Ave.
Gibson Ave.
Benwood Ave.
℄ Proposed I-680
℄ Ramp "B"
℄ Ramp "C"
℄ Ramp "D"
℄ Ramp "F"
730
735
740
745
750
755
760

LOG OF OFFSET BORING
STA. 730+10 56'LT.
TS=0.5
20
8
STA. 732+10 56'LT.
Clay, Sand, Cinders & Bricks
24
12
REFUSAL

LOG OF OFFSET BORING
STA. 736+00 56'LT.
TS=0.5
16
19
REFUSAL

LOG OF OFFSET BORINGS

STA. 740+00 56' LT.	STA. 741+00 77.5 RT.	STA. 742+00 75' RT.	STA. 743+00 72' RT.	STA. 744+00 56' LT.	STA. 745+00 70.5' LT.	STA. 746+00 71' RT.	STA. 747+00 71' RT.
TS=0.5	Cinders & Clay	Cinder & Slag		Cinders, Brick, Clay & Rock.			
15	16	22	22	REFUSAL	6	6	6
11		W	W		33	16	23
REFUSAL		14	13		18	13	20

LOG OF OFFSET BORINGS

STA. 744+00 70' RT.	STA. 747+30 17' RT.
Cinders, Clay & Grass	9
19	27
14	25
	17
	15
	16
	15
	REFUSAL

Sand, Cinders, Clay
TS=0.5
REFUSAL
Cinders & Clay
Cinders & Slag
Cinders & Gravel
Cinders & Clay
Cinders
W
14' LT. Concrete & Gravel
Light brown sandstone, fine grained, thin bedded, (1/2" to 5" averaging 2"), medium hard, weathered, with high angle joint in bottom 1'.
4' LT. Concrete & Gravel
Clay & Cinders

PROPOSED I-680
℄ PROFILE

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SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98

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THE H.C. NUTTING COMPANY
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4120 AIRPORT ROAD CINCINNATI, OHIO 45226

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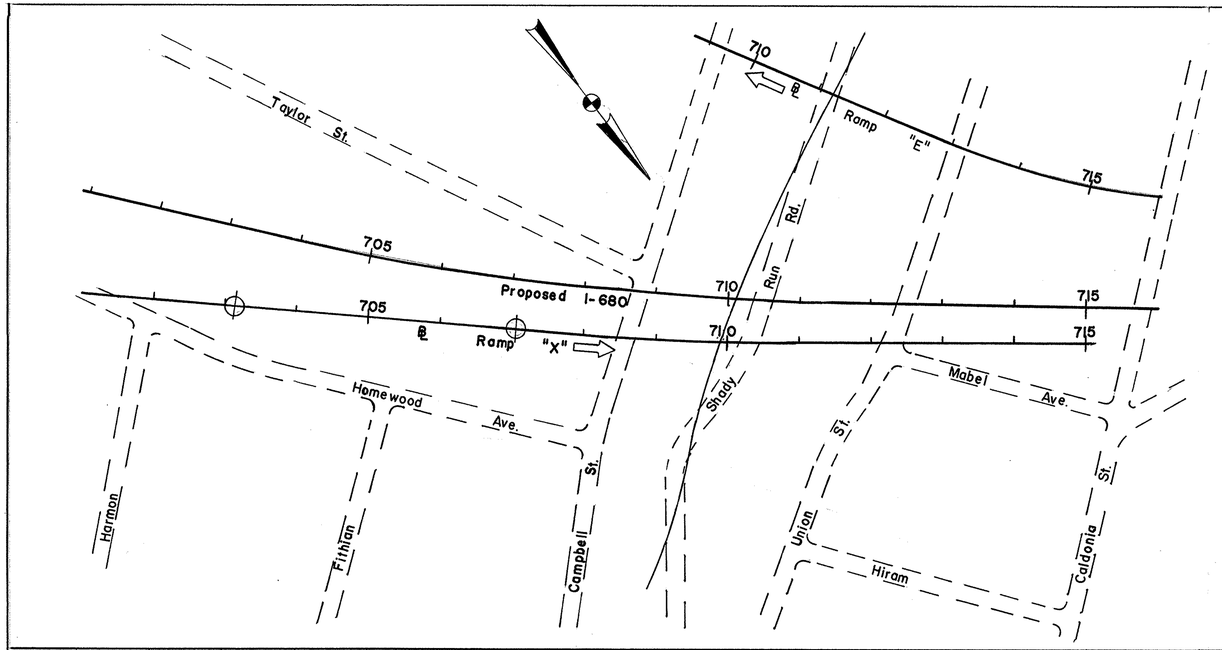

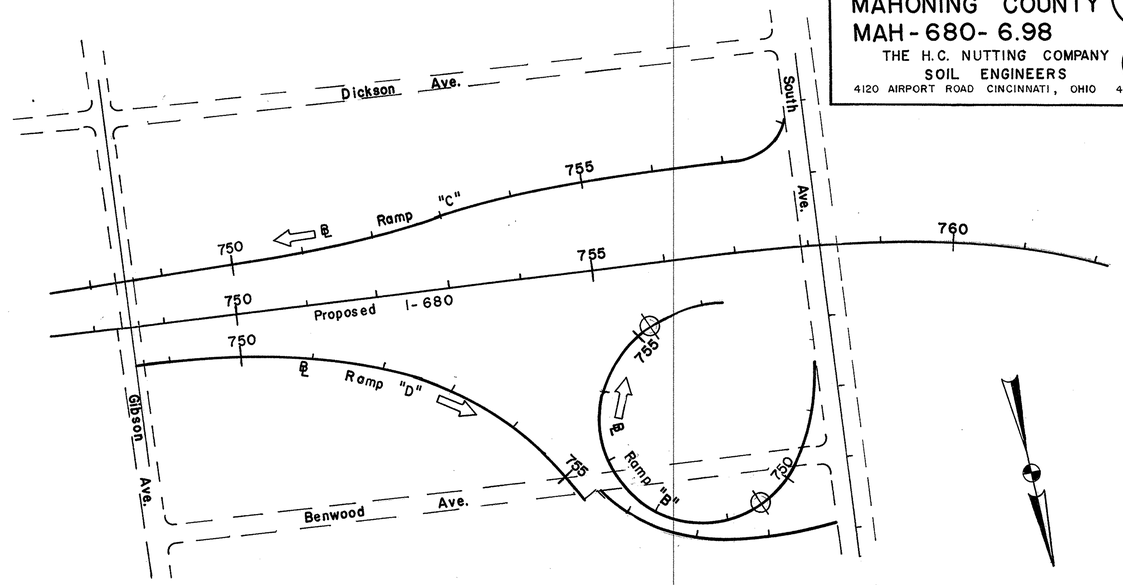

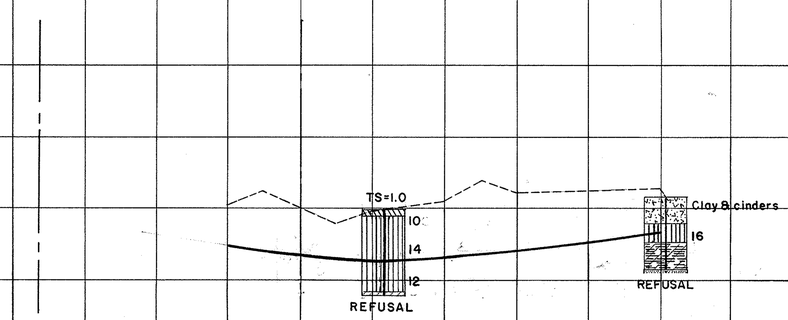

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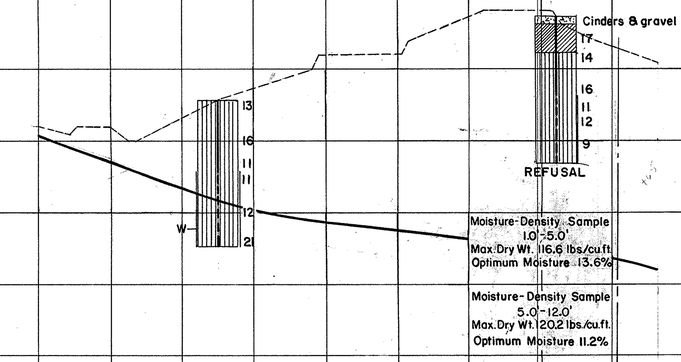

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1000 990 980 970 960 950 940 930

7 8 9 700 1 2 3 4 705 6 7 8 9 710 1

8 9 750 1 2 3 4 755 6 7 8 9 760

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SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98

THE H.C. NUTTING CO.
SOIL ENGINEERS

4120 AIRPORT ROAD CINCINNATI, OHIO 45226

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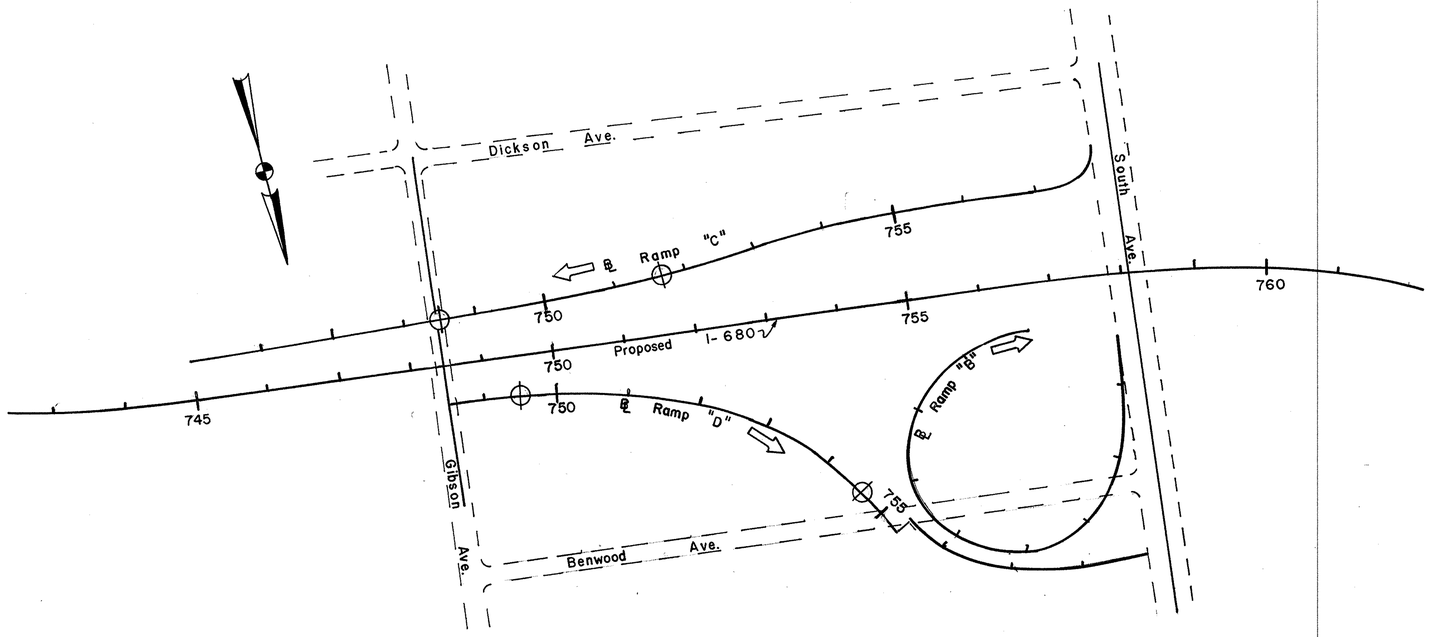

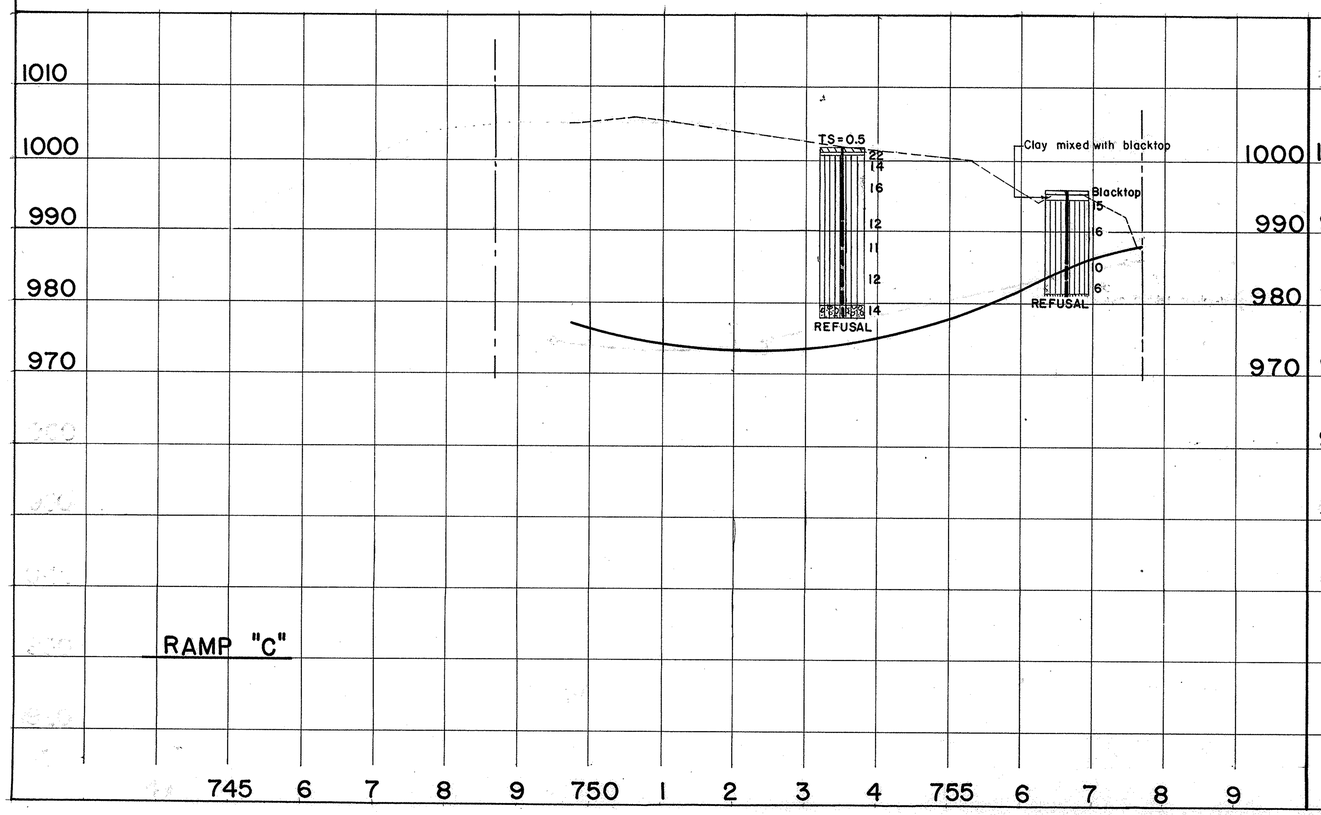

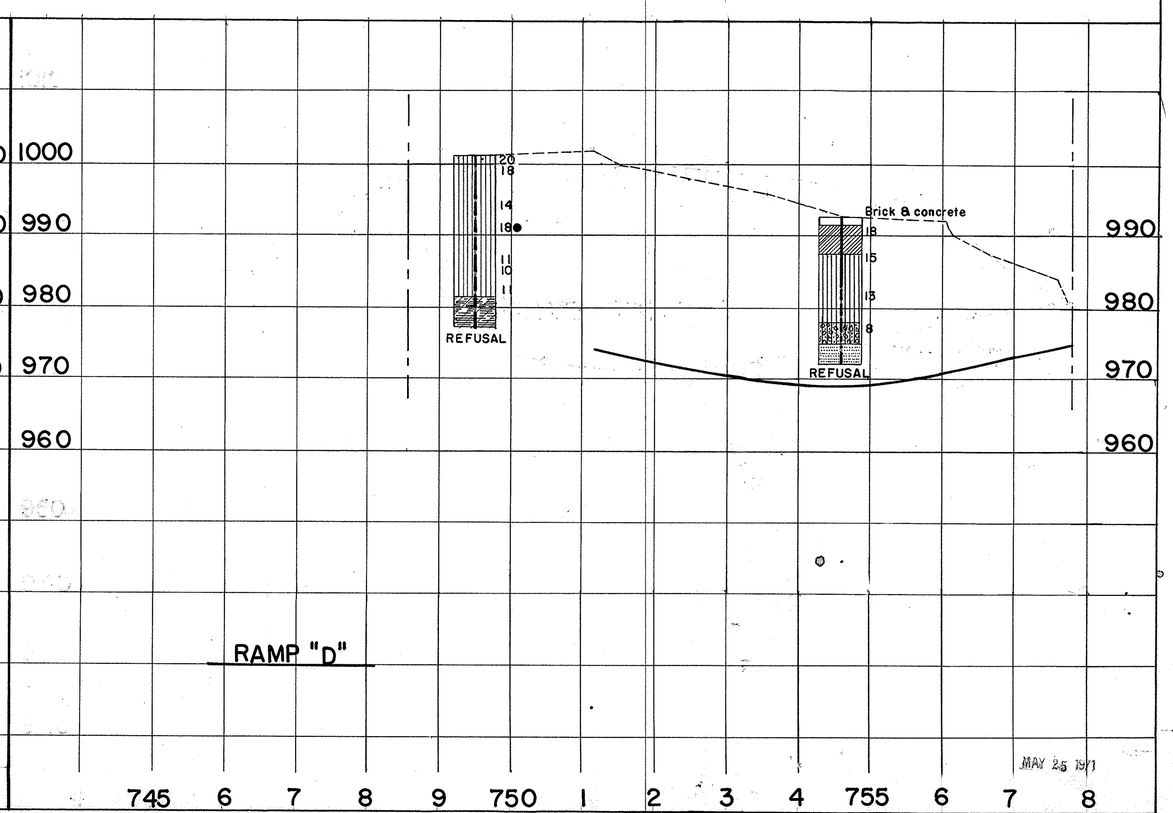

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SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98
THE H.C. NUTTING CO.
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

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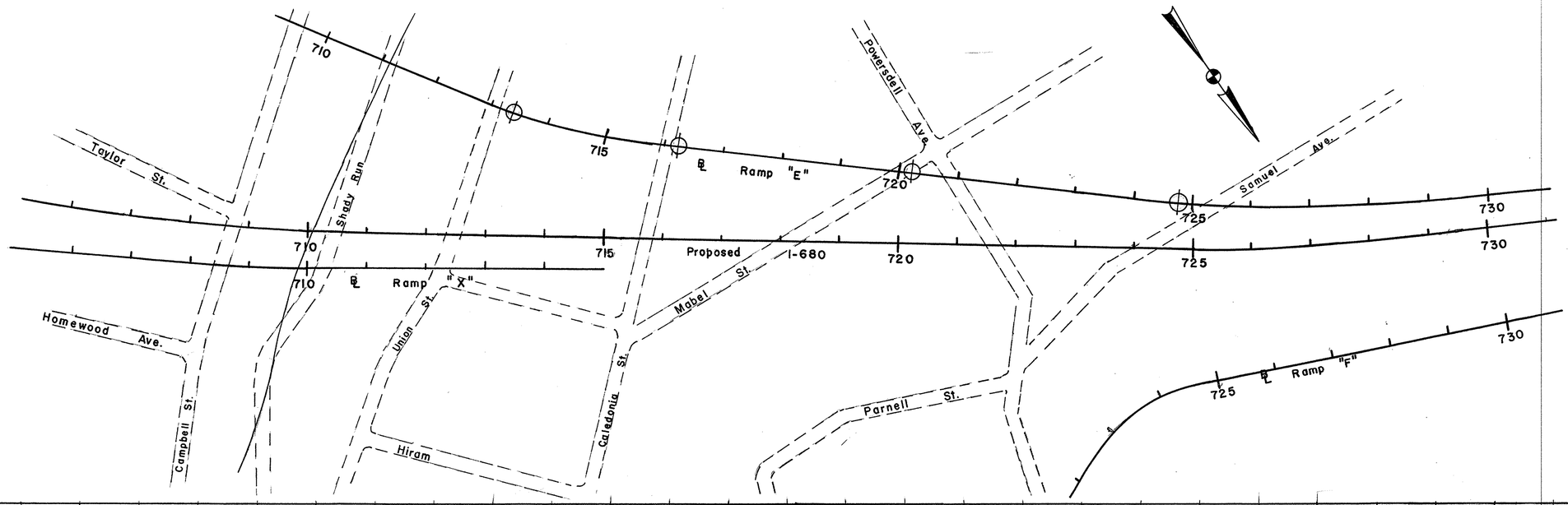

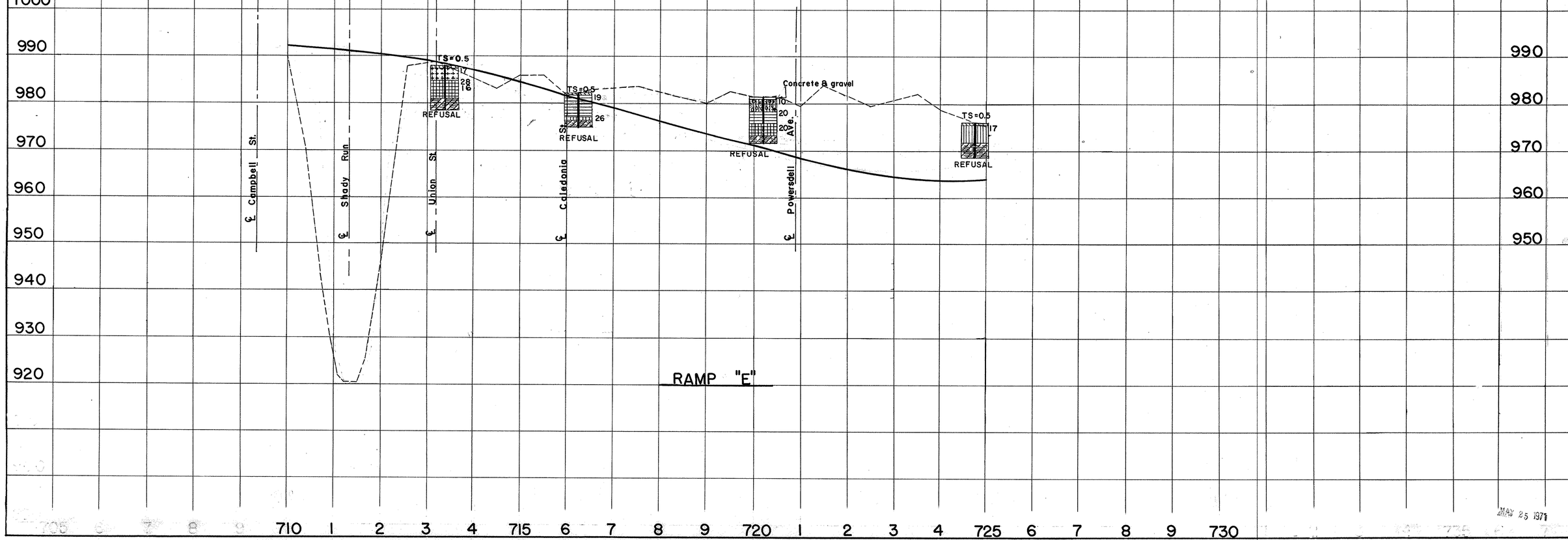

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SOIL PROFILE
MAHONING COUNTY
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THE H.C. NUTTING CO.
SOIL ENGINEERS
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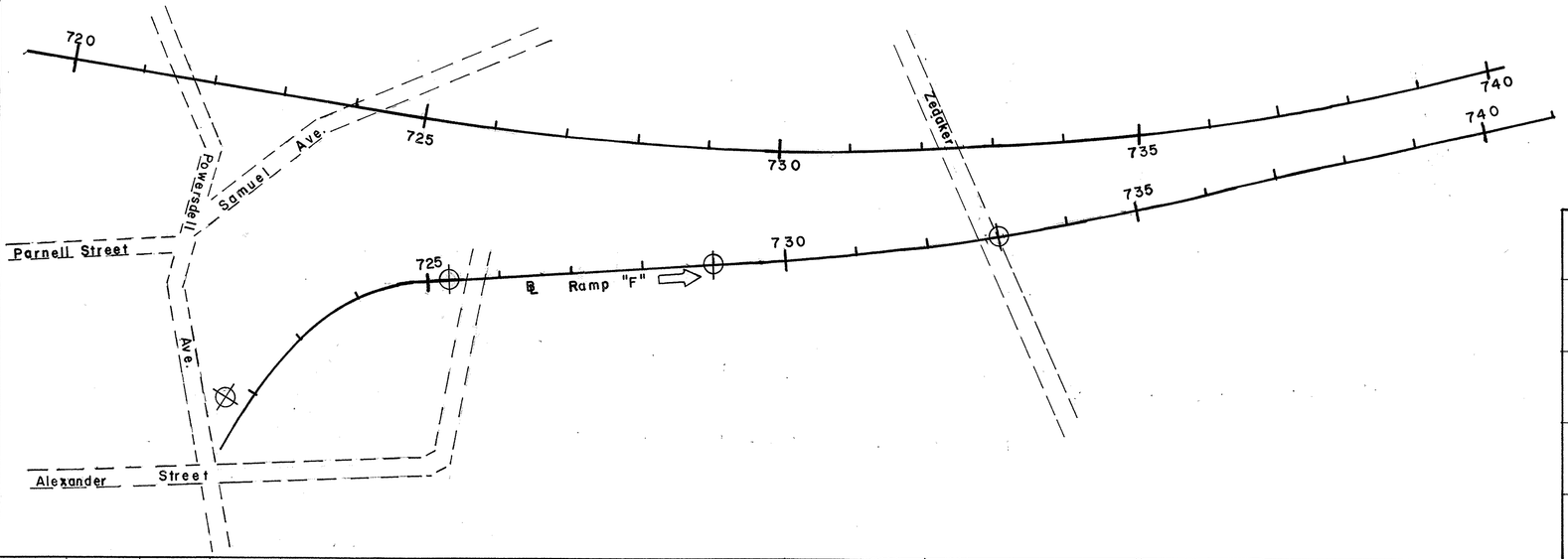

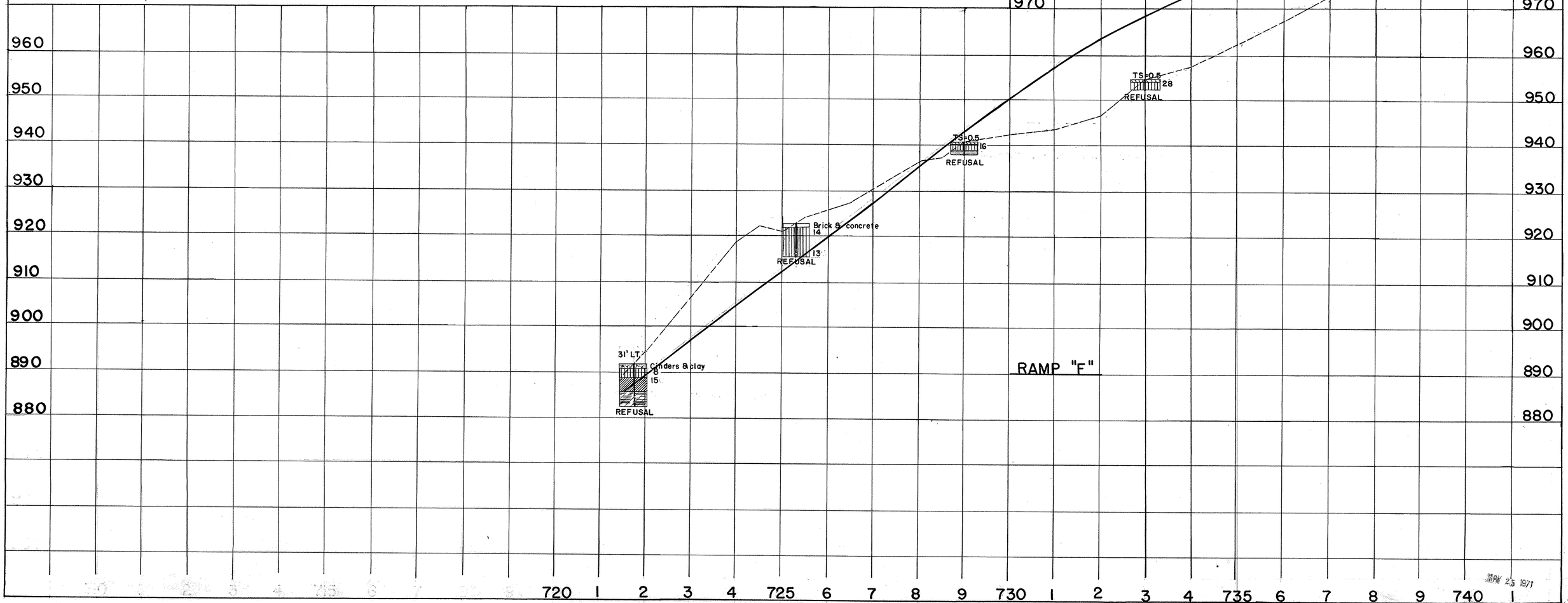

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SOIL PROFILE
MAHONING COUNTY
MAH-680-6.98

THE H.C. NUTTING CO.
SOIL ENGINEERS
4120 AIRPORT ROAD CINCINNATI, OHIO 45226

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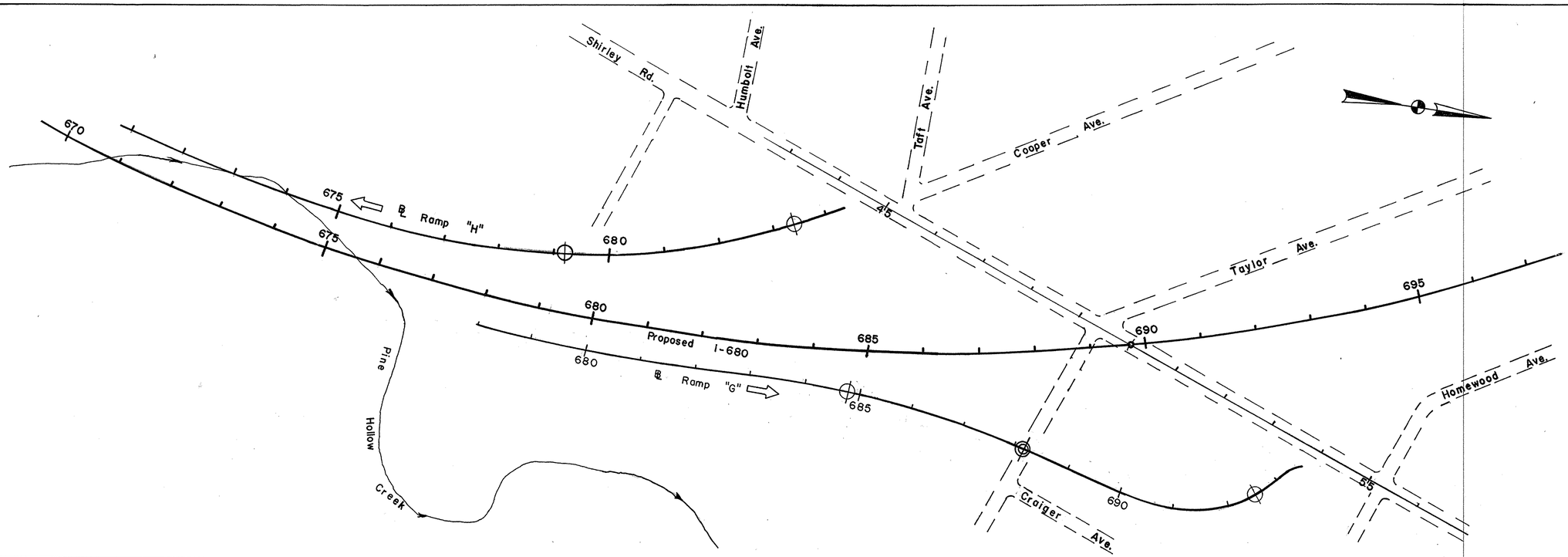
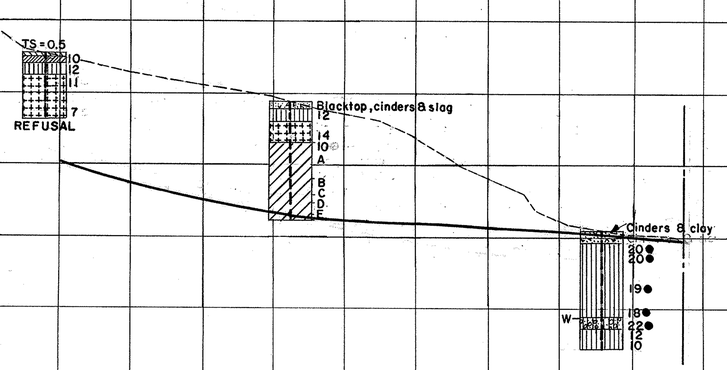
12/15



A- Brown shale, fragmented to pulverized, soft, weathered.
B- Interbedded brown shale (75%) and brown sandstone (25%); shale fragmented, soft weathered, sandstone broken, soft, weathered.
C- Gray clay, shale, broken, soft weathered, jointed.
D- Gray and brown clay shale, fragmented to pulverized, soft, weathered.
E- Black carbonaceous shale, fragmented, brittle, weathered.



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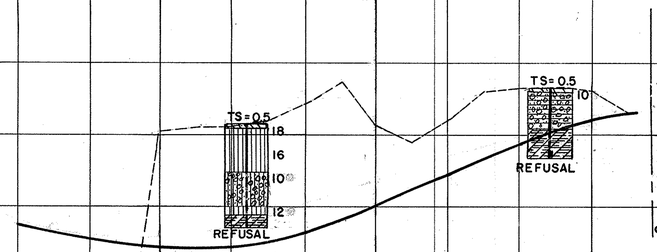

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MAR 26 1971

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MAHONING COUNTY
MAH-680-6.98

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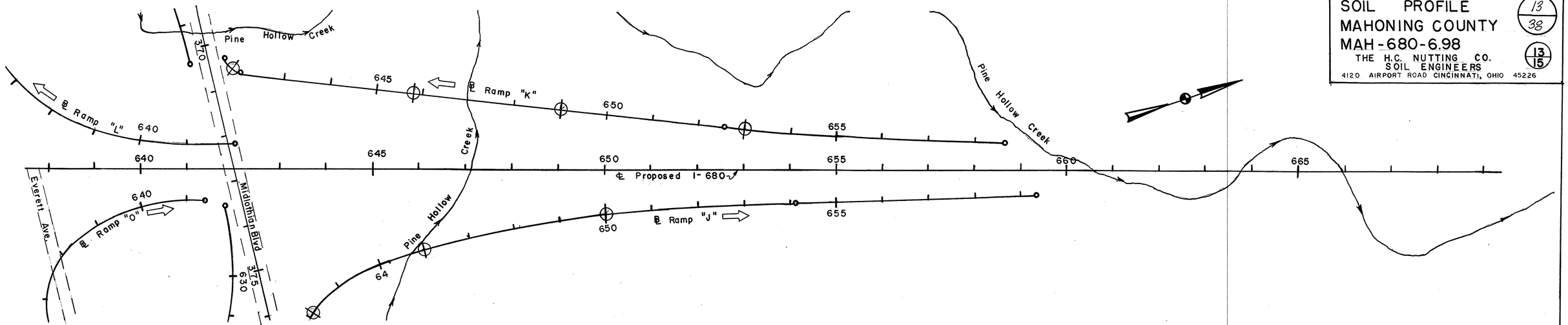

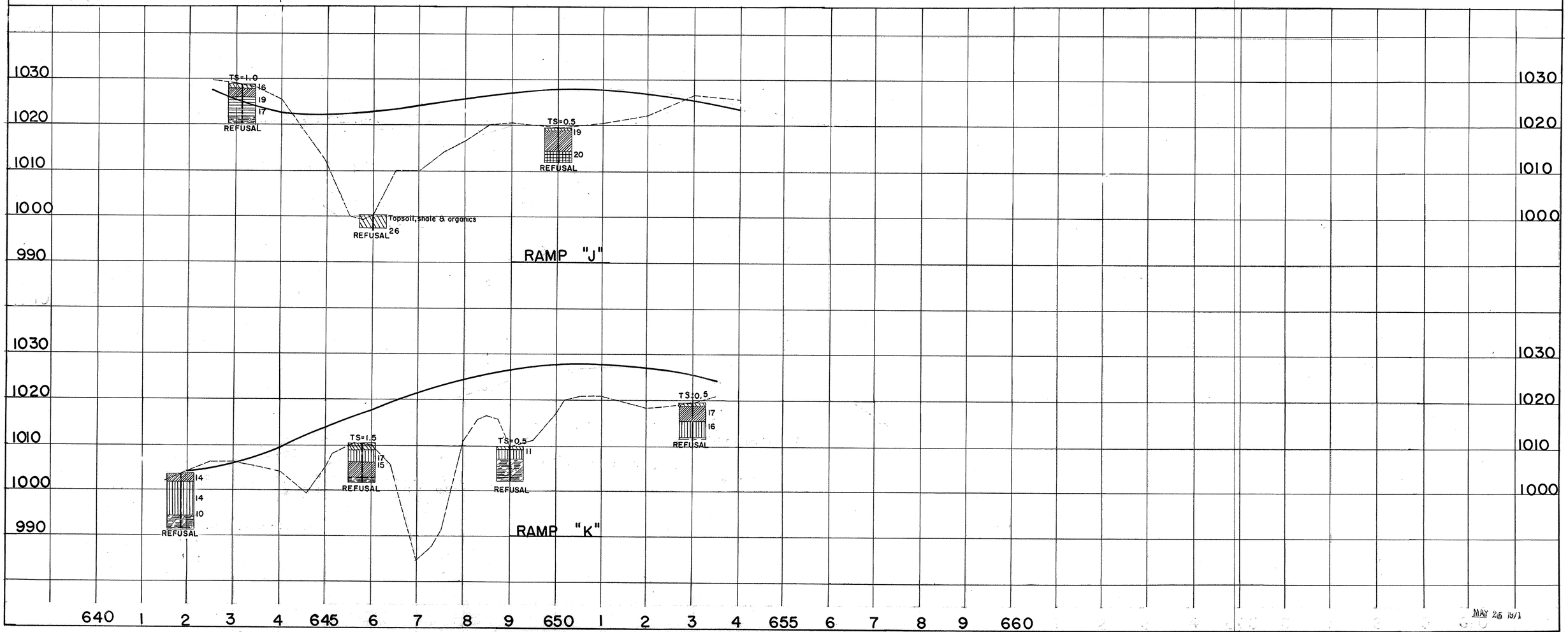

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MAHONING COUNTY
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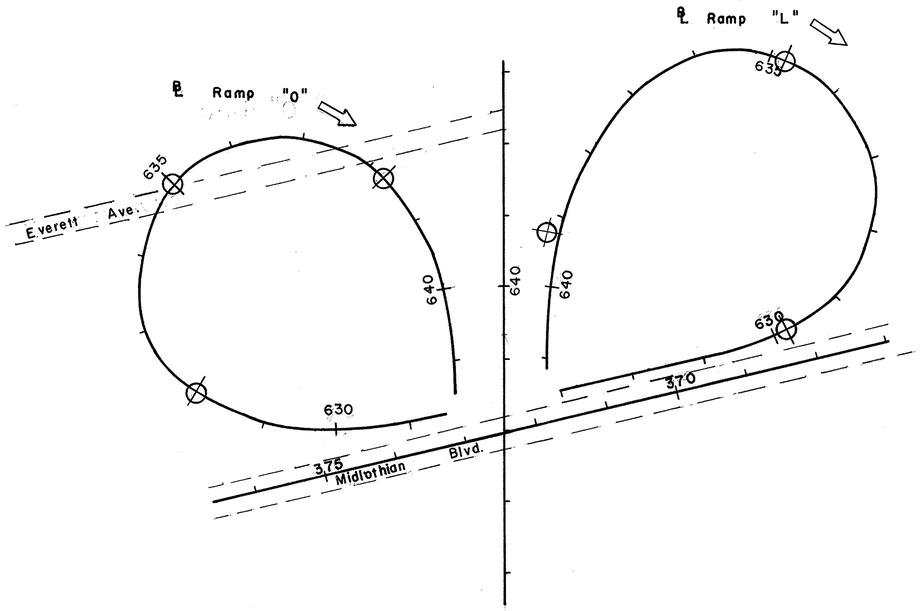



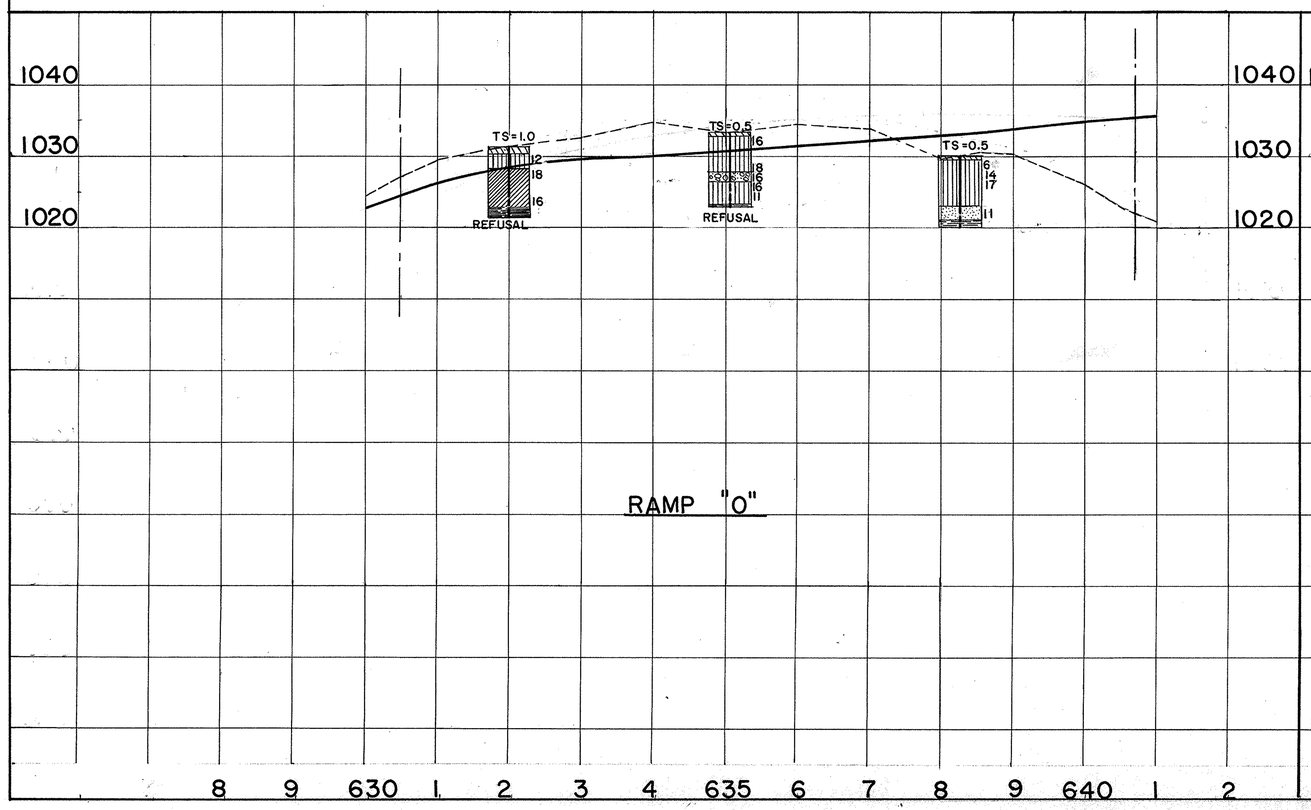

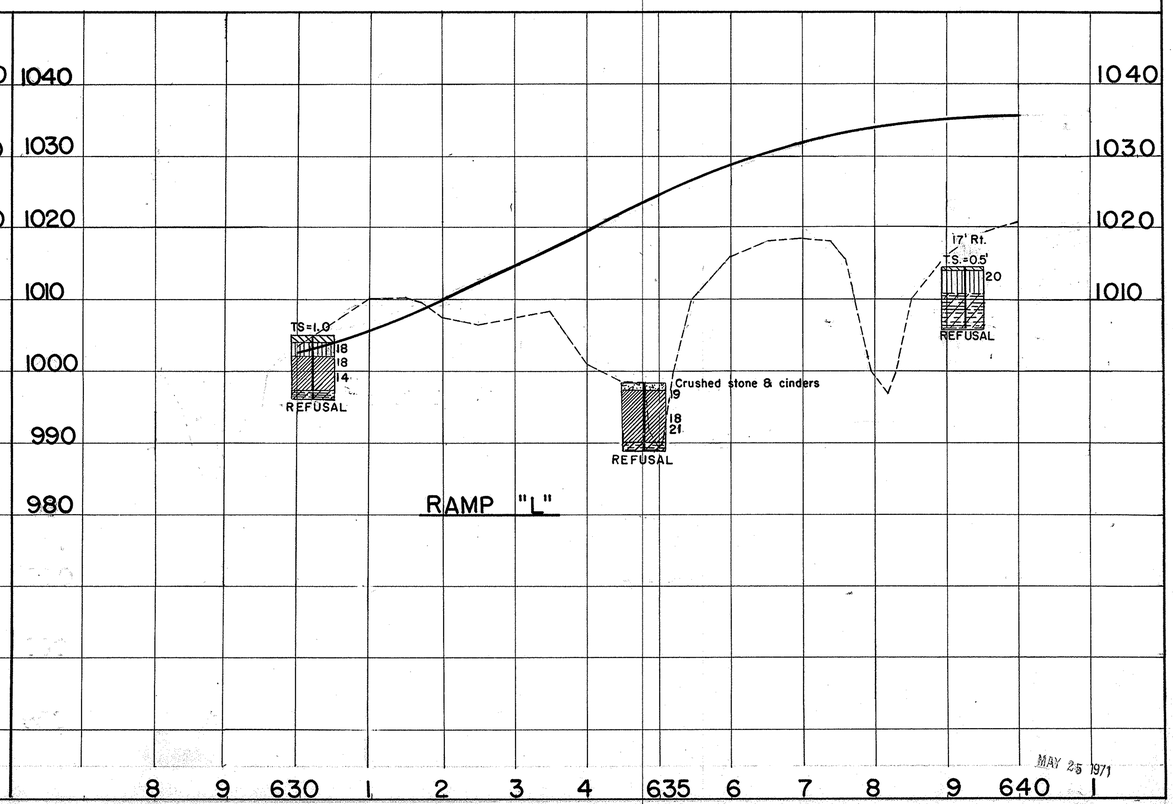

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SOIL PROFILE

MAHONING COUNTY

15/38

MAH-680-6.98

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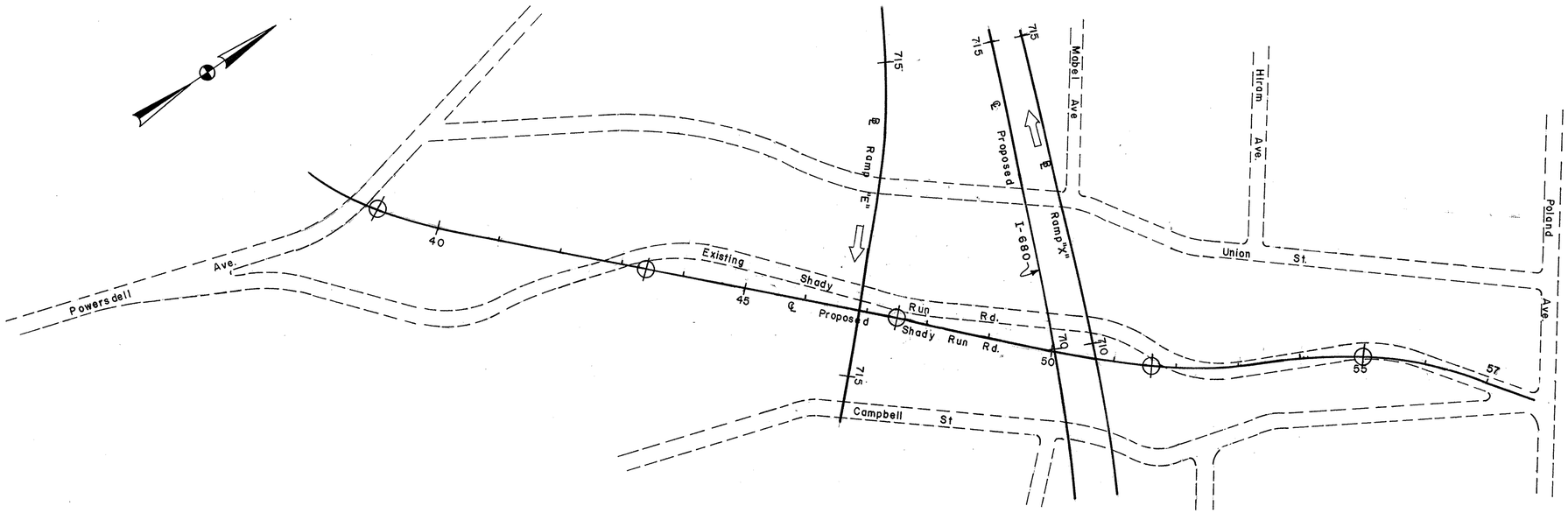
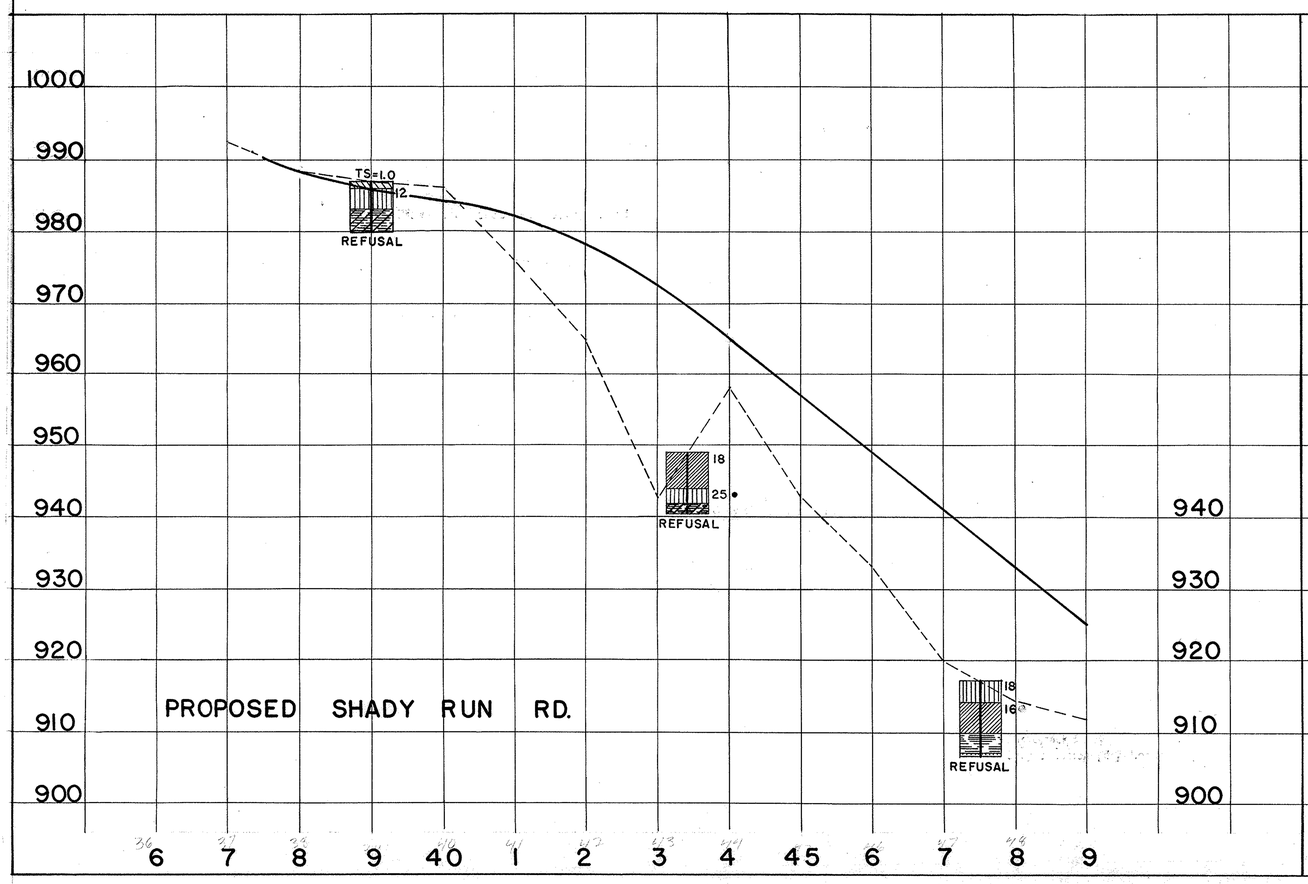
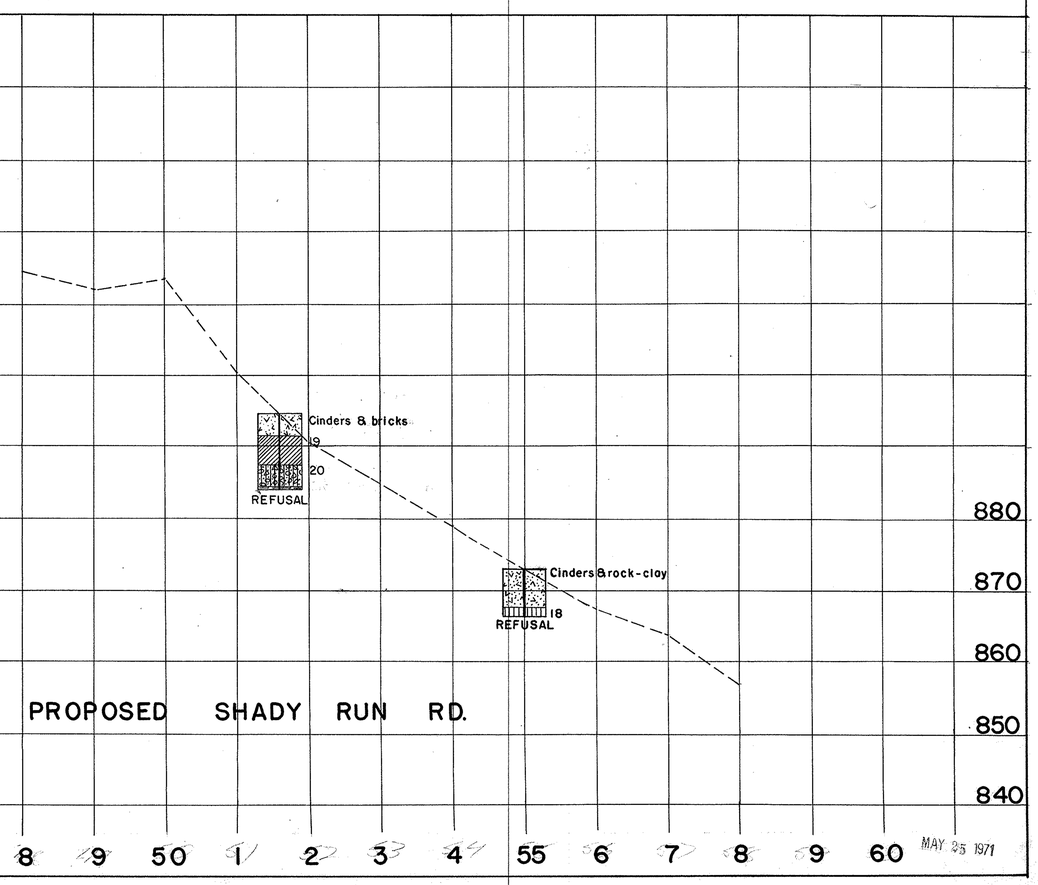
4120 AIRPORT ROAD CINCINNATI, OHIO 45226







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MAHONING COUNTY
MAH.-680- 6.98

Geology of the Site

The structure site is located on the glaciated Allegheny Plateau. The difference in surface elevation within the area explored is on the order of 10-ft. with a prevailing downward slope to the north. The bedrock is shallow consisting of Pottsville formations of Pennsylvania age

Exploration

The exploration, consisting of seven drive sample-core-borings, was made between May 22 and 25, 1965. Right of access could not be obtained to explore either end of the north abutment.

Investigational Findings

The borings disclose shallow overburden overlying shale, sandstone, fire clay and coal. The thickness of the overburden at the points investigated varies from 5 to 12-ft. At holes 4, 5, 6 and 7, artifical fill, consisting of medium stiff to hard sandy clays containing various proportions of cinders, slag, gravel and rock fragments, comprises the entire 5 to 12-ft. of overburden. Judging from the boring information, evidence observed in nearby Pine Hollow, and conversations with long time residents in the area, it would appear that relatively large volumes of fill, including large blocks of concrete, are buried in the north half of the site. At holes 1 through 3, the undisturbed overburden consists of medium stiff to hard sandy clays containing various amounts of coal and rock fragments. The overburden was derived mainly from relatively local sandstone and shale terrains, transported and deposited by glacial and glacio-fluvial processes.

In general, the bedrock surface slopes gently toward the north, the difference in elevations being on the order of 10-ft. within the structure limits. However, based on the elevation (1010.5) at which refusal was reached in a center line boring at Station 643, it would appear that the bedrock surfaces rises north of the north abutment.

The exploration was carried to relatively shallow depths in bedrock, the maximum penetration being about 18-ft. at hole No. 6. Approximately the upper 5-ft. of the rock is rather highly weathered and moderately to badly broken. The degree of weathering gradually decreases with depth. Southward from hole No.5, the uppermost layer consists of 1 to 2-ft. of bituminous coal resting on approximately 5-ft. of slickensided fire clay and/or weathered shale, which in turn is underlain by 2 to 10-ft. of rock which shows rapid multiple lateral facies changes from shale to interbedded shale and fine-grained sandstone to fine-grained sandstone. Below the last rock unit, a 1-ft. bed of coal persists throughout the site at about elevation 993 to 997.

North of hole No.5, the rock surface is somewhat lower (elev. 997±) and the upper bed of coal and immediately subjacent rocks have been removed by erosion and approximately 3-ft. of weathered sandstone or shale rests on the lower bed of coal.

A 2.5-ft. void was penetrated between elevations 997 and 999.5 under 4-ft. of weathered shale in hole No.7. A slope mine is reported to have been operating in this area before World War I and the void penetrated in hole No.7 may represent part of the workings. Residents of the area report that a slope or drift mine opening was located near, probably slightly east of the east ends of the south pier and south abutment. Evidence of such an opening is now completely hidden under fill.

Free water was encountered in hole No. 1 at elevations 1007.2, 1002.6 in hole No. 4, 999.6 in hole No. 5, 998.9 in hole No. 6 and 999.5 in hole No. 7, hence at or near the top of rock in all cases.

LEGEND

- AUGER BORING LOCATION-PLAN VIEW.
- PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR — TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y — FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W — INDICATES FREE WATER ELEVATION.
- INDICATES STATIC WATER ELEVATION.

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procurred for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

8"	3"	2.0mm		0.42mm		0.074mm	0.005mm
Boulders	Cobbles	Gravel	Coarse Sand		Fine Sand	Silt	Clay
		No. 10 sieve		No. 40 sieve		No. 200 sieve	

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0924
OVER MIDLOTHIAN BLVD.
SEC. MAH.-680-6.98, I-680- 9(6) 240

CHECKED BY	REVIEWED BY	DATE
S.J.B	C.R.L.	11/15/65

MAY 25 1971

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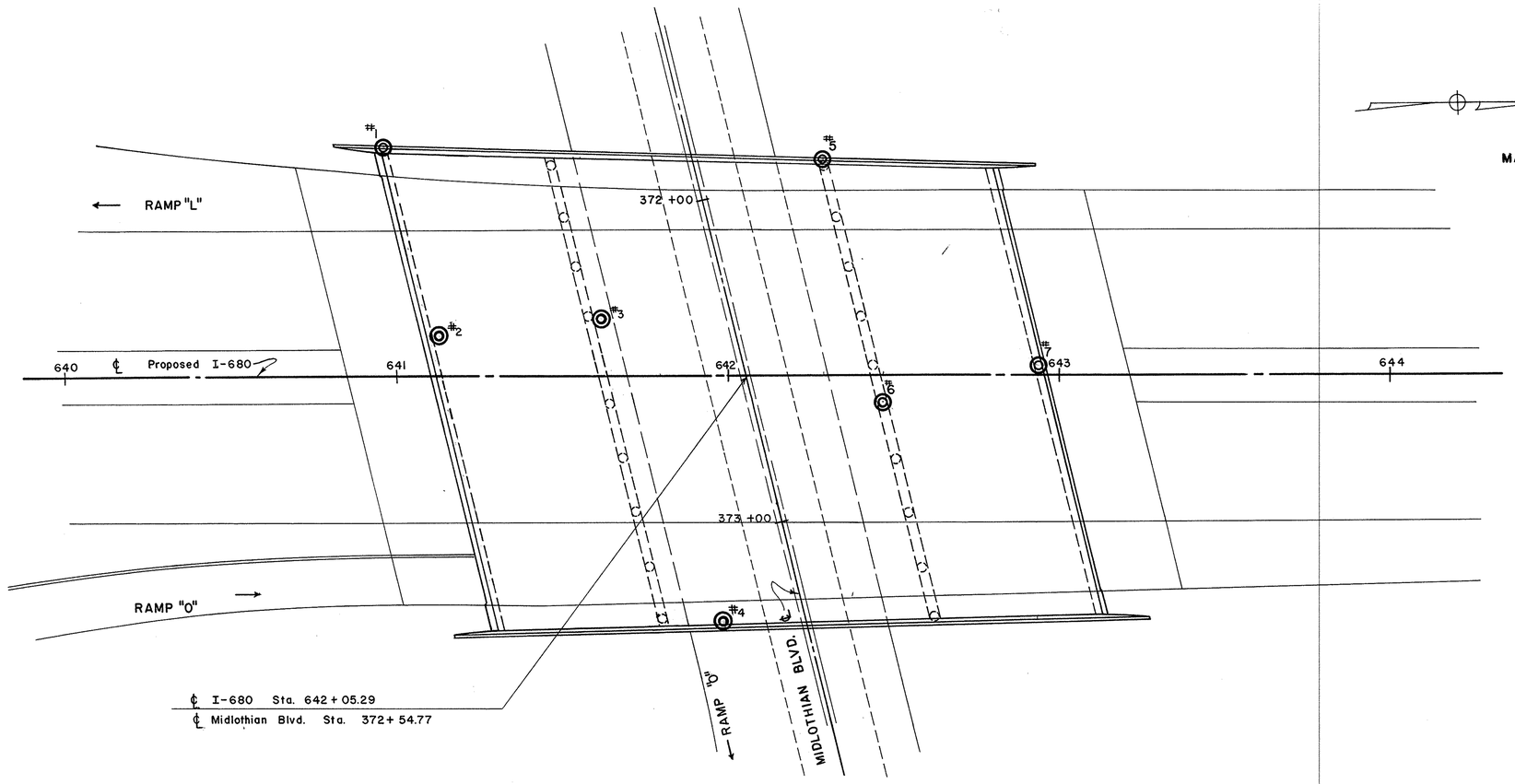
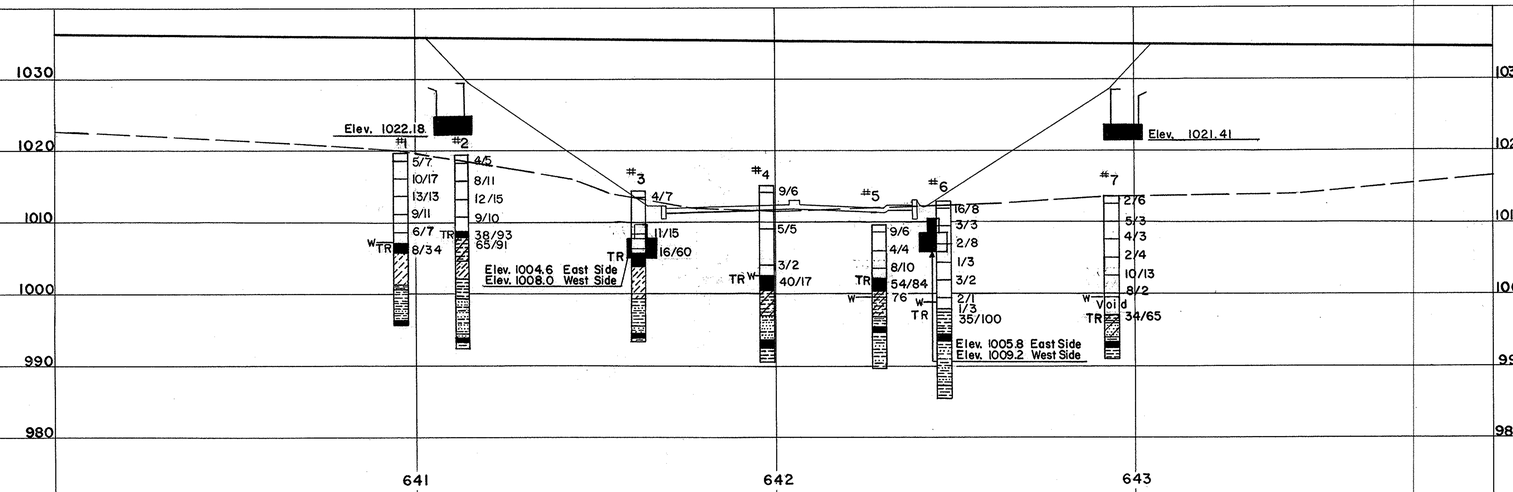
MAH.- 680 - 6.98





MAY 26 1971

SCALE:
PLAN 1"= 20'
PROFILE 1"= 20' HORIZ.
1"= 10' VERT.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0924
OVER MIDLOTHIAN BLVD.
SEC. MAH.-680-6.98, I-680-9(6)240

PLAN AND PROFILE

REVIEWED BY C.R.L. 11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

LOG OF BORING

DATE STARTED 5-23-65 SAMPLER: TYPE Split Spoon DIA. 2" O. D. WATER ELEVATION
DATE COMPLETED 5-23-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE 1007.2
BORING NUMBER 1 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 640+96, 69'Lt. Bridge No. MAH 680-1214 SURFACE ELEVATION 1019.7

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1019.7	0											
1019.2		1	Topsoil, moist - very loose	1			Visual					
	2	5-7	Brown sandy silty clay with broken sandstone, moist - stiff	2	20	6	13	35	26	30	13	16
1014.7	4	8-10-17	Brown sandy silty clay with broken sandstone, moist - stiff	3	19	12	15	32	22	29	11	14
	6	11-13-13	Brown and gray silty clay with broken sandstone, moist - very stiff	4	28	5	11	27	29	31	14	8
	8	7-9-11	Brown and gray sandy silty clay with broken sandstone, moist - very stiff	5	9	11	21	33	26	28	11	16
1009.7	10											
	12	6-6-7	Brown gravelly silty sand, moist - stiff	6	23	10	23	30	14	21	4	14
1007.2												
1005.7	14	10-8-34	Coal	7			Visual					
	16		Light gray fire clay, broken, slickensided, hard, trace plant stems									
	18	90%										
1001.3												
1000.7			Dark gray shale, 1/2"to 2" averaging 1", trace broken, medium hard									
	20		Gray shale, 3/4" to 2-1/2" averaging 1-1/4", trace broken, hard, trace streaks of hard gray sandstone									
	22											
996.5	24	96%										
995.7			Coal, bright, broken									
	26		% Recovery Boring Completed									

LOG OF BORING

DATE STARTED 5-24-65 SAMPLER: TYPE Split Spoon DIA. 2" O. D. WATER ELEVATION
DATE COMPLETED 5-24-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 2 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 641+13, 12'Lt. Bridge No. MAH 680-1214 SURFACE ELEVATION 1019.4

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1019.4	0											
1018.9		2	Topsoil, moist - loose	1			Visual					
1016.9	2	4-5	Brown sandy clayey silt, moist - stiff	2	13	7	13	44	23	26	7	15
	4	5-8-11	Brown and gray sandy silty clay with broken sandstone, moist - very stiff	3	24	5	13	31	27	29	12	14
	6	9-12-15	Brown and gray sandy silty clay with broken sandstone, moist - very stiff	4	26	10	16	28	20	27	10	14
1011.9	8	8-9-10	Brown and gray sandy clayey silt with shale and coal fragments, moist - very stiff	5	15	16	17	31	21	25	8	14
1008.9	10	11	Brown and gray sandy clayey silt with shale and coal fragments, moist - very stiff	6	24	11	15	32	18	25	6	14
1007.9	12	38-93	Coal	7			Visual					
		65	Gray weathered shale	8			Visual					
		91	Gray weathered shale	9			Visual					
1004.4	14											
	16		Light gray fire,clay, broken, slickensided, hard									
1002.4	18		Gray siliceous shale, 1/4" to 2-1/2" averaging 1", trace broken, hard									
999.4	20	92%										
	22		Interbedded gray sandstone and siliceous gray shale (50-50%), sandstone fine grained, shaley (1/8" to 2"), hard; shale 1/16" to 2", averaging 1/2" pieces, hard									
	24	100%										
994.4			Gray shaley sandstone, fine-grained, 1/2"to 3", averaging 1-3/4" beds, hard, trace coal streaks									
993.7	26	90%	Coal, bright, broken									
993.4			Gray shale, 1/8"to 2" pieces, trace broken, hard									
	28		% Recovery Boring Completed									
	30											

LOG OF BORING

DATE STARTED 5-24-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-24-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 3 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 641+62, 17.5'Lt. Bridge No. MAH 680-1214 SURFACE ELEVATION 1014.2

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1014.2	0											
1013.2		3-4	Topsoil, moist - loose	1			Visual					
	2	7	Brown silty clay with broken sandstone, slightly moist - very stiff	2	28	6	9	25	32	34	14	16
1009.2	4											
	6	7-11-15	Brown and gray gravelly silty clay, moist - hard	3	16	7	11	27	39	32	13	13
	8	11-16	Brown and gray gravelly, sandy, silty clay, moist - hard	4	15	12	10	29	34	33	14	8
1005.7		60										
1004.7	10		Coal	5			Visual					
1003.7			Coal, broken weathered									
	12		Light gray fire clay, 1" to 4" averaging 2-3/4", badly broken to crushed at bottom (over drilled in part of core lost in 1st. run), slickensided, hard									
999.1	14	56%										
	16		Gray siliceous shale, 1/2" to 2-1/2" averaging 1-1/2" hard, with streaks of hard gray sandstone									
995.3	18	109%										
994.3	20		Gray shaley sandstone, fine-grained, thin bedded, 1/4"to3"averaging 2"beds, jointed, hard									
993.5			Coal, bright, some broken									
993.2		97%	Gray siliceous shale, one piece, hard									
	22		% Recovery Boring Completed									
	24											

LOG OF BORING

DATE STARTED 5-25-65 SAMPLER: TYPE Split Spoon DIA. 2" O. D. WATER ELEVATION
DATE COMPLETED 5-25-65 CASING: LENGTH H.S.A. DIA. 3.5" I. D. IMMEDIATE 1002.9
BORING NUMBER 4 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 641+97.5, 75'Rt. Bridge No. MAH-680-1214 SURFACE ELEVATION 1015.1

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1015.1	0											
	2	8-9-6	Brown gravelly, clayey sand, trace cinders, (fill) dry - stiff	1	30	10	14	24	22	32	12	9
	4											
	6	4-5-5	Brown and gray gravelly clayey sand with coal fragments, (fill) moist - medium stiff	2	31	13	14	21	21	32	12	15
	8											
1005.1	10											
1002.6	12	3-3-2	Brown and gray gravelly, sandy silt clay with coal fragments, moist - medium stiff	3	26	9	15	25	25	28	9	16
1000.6	14	17-40-17	Coal	4			Visual					
	16		Gray siliceous shale, 1" to 6", averaging 2" pieces, little broken, weathered, medium hard									
996.7	18											
	20	88%	Light gray sandstone, fine-grained, thin bedded (1"to 7", averaging 3"), hard, trace hard gray streaks of shale									
993.5	22											
992.4			Coal, bright and dull, trace broken									
990.6	24	100%	Gray siliceous shale, 1/4" to 6" averaging 2" pieces, hard									
	26		% Recovery Boring Completed									

LOG OF BORING

DATE STARTED 5-23-65 SAMPLER: TYPE Split Spoon DIA. 2" O. D. WATER ELEVATION
DATE COMPLETED 5-23-65 CASING: LENGTH H. S. A. DIA. 3.5" I. D. IMMEDIATE 999.6
BORING NUMBER 5 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 642+29, 65'Lt., Bridge No. MAH-680-1214 SURFACE ELEVATION 1009.6

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1009.6	0											
	2	8-9-6	Brown gravelly, clayey sand, trace coal, (fill) slightly moist - stiff	1	44	17	12	15	12	30	10	21
	4	4-4-4	Gray and brown gravelly, clayey sand, trace cinders, (fill) moist - stiff	2	41	5	8	19	27	36	15	19
1004.6	6	7-8-10	Gray silty clay, moist - very stiff	3	9	10	8	36	37	35	15	12
1002.1	8	54-84	Coal	4			Visual					
1000.1	10	76	Gray weathered shale	5			Visual					
999.6												
	12		Light gray argillaceous shale, 1"to 3" averaging 1-1/2" pieces, little broken, weathered, medium hard, trace plant stems									
996.9	14		Dark gray siliceous shale, 1-1/2"to 2-1/2" averaging 2", hard									
995.5		90%	Coal, broken									
994.6	16		Gray siliceous shale, 1/4" to 10" averaging 3", jointed hard, streaks of hard gray sandstone									
	18	109%										
989.6	20	100%										
			% Recovery Boring Completed									
	22											

LOG OF BORING

DATE STARTED 5-23-66 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-23-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE 998.9
BORING NUMBER 6 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 642+47, 8'Rt. Bridge No. MAH - 680-1214 SURFACE ELEVATION 1012.9

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1012.9	0											
		3-16-8	Cinders and slag, (fill) moist - medium dense	1			Visual					
1010.4	2											
	4	2-3-3	Brown gravelly, silty sand, (fill) moist - loose	2	36	17	13	23	11	31	6	17
1007.9												
	6	1-2-8	Brown silty clay with broken sandstone, (fill) moist - medium stiff	3	11	5	8	51	25	31	9	22
1005.4	8											
		1-1-3	Brown and gray sandy, silt clay, (fill) moist - medium stiff	4	13	13	10	27	37	43	19	19
1002.9	10											
		4-3-2	Gray gravelly clayey sand with shale fragments, (fill) moist - medium stiff	5	36	12	8	19	25	38	22	14
	12											
998.9	14	1-2-1	Gray gravelley clayey sand with shale and coal fragments, (fill) moist - medium stiff	6	42	14	14	16	14	42	18	17
997.4		1-1-3	Gray sandy silty clay with coal fragments, very moist - soft	7	20	14	12	22	32	38	19	24
	16	35-100	Gray shale	8			Visual					
995.2	18											
994.3			Gray siliceous shale 1"to 2-1/2"averaging 1-3/4"pieces, little broken, trace fossil plants, hard									
993.5			Coal, broken, bright									
	20		Gray siliceous shale, 1/2" to 10" averaging 2" pieces, trace streaks of hard gray sandstone and macerated plants, hard									
	22											
	24	96%										
987.2	26											
985.2			Black carbonaceous shale, 1/2" to 2" averaging 1-1/2" pieces, trace broken, jointed, hard									
	28	90%	& Recovery Boring Completed									

LOG OF BORING

DATE STARTED 5-22-65 SAMPLER: TYPE Split Spoon DIA. 2" O. D. WATER ELEVATION
DATE COMPLETED 5-22-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE 999.5
BORING NUMBER 7 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 642+94, 3'Lt., Bridge No. MAH-680-1214 SURFACE ELEVATION 1013.5

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1013.5	0											
1012.5		1-2	Dark brown sandy silt, (fill) moist - loose	1	4	5	20	49	22	38	10	16
	2	6	Dark brown gravelly, silty sand, (fill) moist - medium stiff	2	38	16	15	22	9	31	6	29
	4	4-5-3	Brown gravelly, clayey silt, trace cinders, (fill) moist - medium stiff	3	29	13	18	28	12	23	6	16
1008.5	6	5-4-3	Brown clayey sand, trace brick, cinders, (fill) wet - soft	4	25	10	16	32	17	25	8	22
1006.0	8											
		2-2-4	Brown and gray gravelly, sandy, silty clay, (fill) moist - medium stiff	5	13	7	14	29	37	38	18	24
1003.5	10											
	12	8-10-13	Gray gravelly, clayey sand, moist - very stiff	6	26	18	11	17	28	33	14	10
999.5	14	11-8-2	Gray gravelly, clayey sand, very moist - stiff	7	38	17	11	20	14	32	12	12
	16		Void									
997.0		34-65	Gray weathered shale and broken coal	8			Visual					
996.0	18		Gray sandstone, silty fine-grained, thin bedded (1/4" to 5" averaging 2-1/2") jointed, weathered, medium hard									
994.0	20		Gray siliceous shale, 2"+pieces, hard, trace fossil plants									
993.4			Coal, broken									
992.6	22	85%	Gray siliceous, 1/2" to 6" averaging 3" pieces, hard									
991.0			To Recovery Boring Completed									
	24											

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD · CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0924
OVER MIDLOTHIAN BLVD.
SEC. MAH.-680-6.98, I-680-9(6)240

BORING DATA

		REVIEWED BY	DATE
		C.R.L.	11/15/65

MAR 25 1971

MICROFILMED
JUL 12 1979
REPRODUCTION

MAHONING COUNTY
MAH.-680-6.98

Geology of the Site

The site is located within the upper reaches of the south valley slopes of the Mahoning River. The difference in surface elevation within the area explored is approximately 20-ft., the surface sloping downward from south to north. The bedrock is shallow and consists of Pottsville shales and some sandstones of Pennsylvania age.

Exploration

The exploration planned was based on a four span double bridge structure. Ten drive sample-core borings were made, one at alternate ends of each substructure unit, between May 1 and 8, 1965. Because of the shallow depth at which bedrock was encountered, the design of the structure was subsequently modified to conform to a new proposed cross-section. The proposed cross-section and site plan are illustrated on the plan and profile.

Investigational Findings

The borings indicate shallow overburden overlying shale and some sandstone bedrock. The thickness of the overburden at the points investigated varies between 1 and 10-ft/, the top 1 to 1.5-ft. (except 4.5-ft. at hole 2 and 2.5-ft. at hole 5) consisting mostly of structural pavement and base elements. The undisturbed fill is comprised of medium stiff to hard sandy clay containing gravel and/or sandstone fragments. The undisturbed overburden was derived mainly from relatively local shale and sandstone terrains, transported, deposited by glacial and glacio-fluvial processes.

In general, the bedrock surface slopes somewhat irregularly toward the north from approximately elevation 963 to 947. Along the axis of the individual substructure units, the borings indicate that the surface of the bedrock is essentially horizontal except at the north pier and north abutment where differences in elevations of 7.5 and 3-ft. respectively are indicated. Approximately the upper 4 to 10-ft. of the bedrock is rather highly weathered and moderately to badly broken. The deeper zone of more intense weathering encountered in the borings is largely restricted to the north-pier and abutment area.

The exploration was carried well into bedrock, the maximum penetration being 37-ft. at the location of hole No. 4, as was necessary due to the proposed depth of cut in this area. Within the south half of the structure where the existing grade is relatively high, the layers of rock include both argillaceous and siliceous shales and subordinate amounts of fine-grained sandstones particularly in the upper part of the rock section. There is a lateral facies change in the bedrock in the north half of the structure, where the existing grade is relatively low, and fine-grained sandstone occupy most of the material above subgrade. At and below subgrade elevations, shales including hard brittle carbonaceous shales, form the subgrade and only the easterly end of the north abutment will be founded on fine-grained sandstone.

The borings revealed no evidence of ground water within the depths explored.

LEGEND

- AUGER BORING LOCATION-PLAN VIEW.
- PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR — TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y — FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W — INDICATES FREE WATER ELEVATION.
- INDICATES STATIC WATER ELEVATION.

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

GENERAL INFORMATION

Drive Sample Borings — Drive-Press Sample Borings — Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procurred for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel		Sand			Silt	Clay
	8"	3"	2.0mm		0.42mm		0.074mm	0.005mm
			Coarse	Fine				
		No. 10 sieve		No. 40 sieve		No. 200 sieve		

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

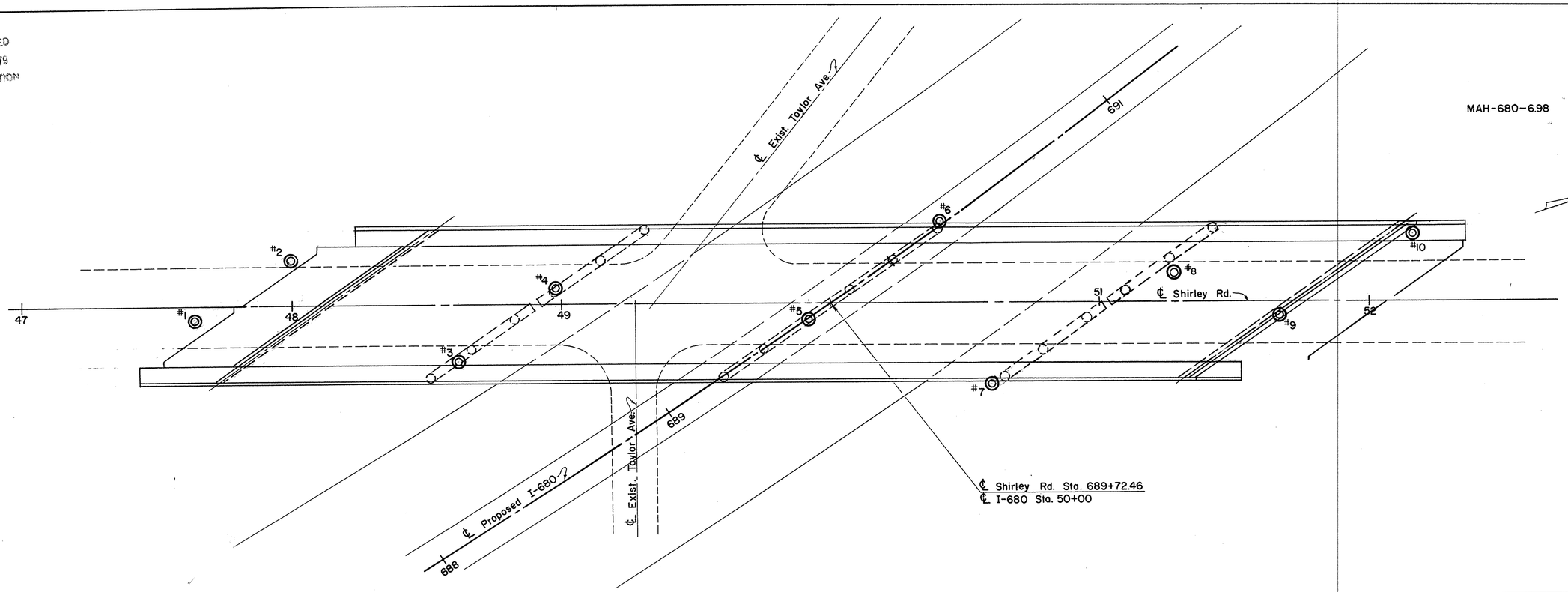
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0835
UNDER SHIRLEY RD.
SEC. MAH.-680-6.98 I-680-9(6) 240

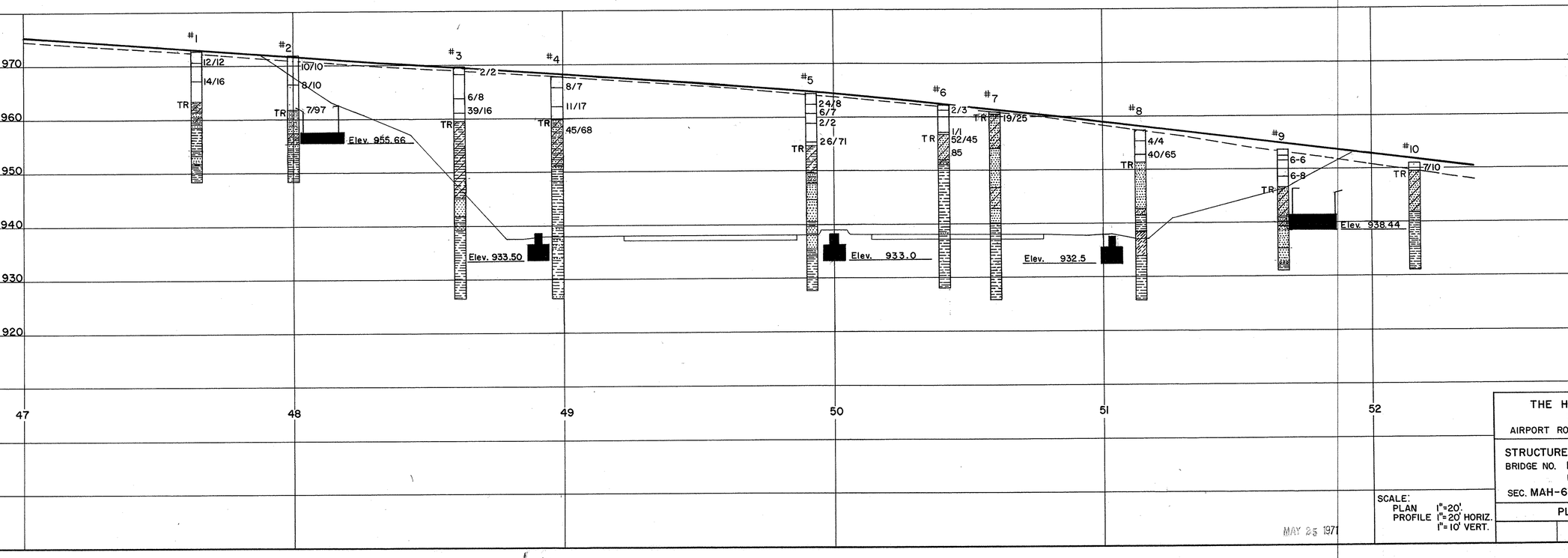
CHECKED BY	REVIEWED BY	DATE
S.J.B	C.R.L.	11/15/65

MAY 25 1971

MICROFILMED
JUL 1 8 1979
REPRODUCTION

MAH-680-6.98





MAY 25 1971

SCALE:
PLAN 1"=20'
PROFILE 1"=20' HORIZ.
1"=10' VERT.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0835
UNDER SHIRLEY RD.
SEC. MAH-680-6.98 I-680-9(6)240

PLAN AND PROFILE

		REVIEWED BY	DATE
		C.R.L.	11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

LOG OF BORING

DATE STARTED 5-5-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-5-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 1 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER HRS. Backfilled
STATION & OFFSET 47+64, 5'Rt. Bridge No. MAH 680-1304 SURFACE ELEVATION 972.8

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
972.8	0											
971.8			Blacktop and slag									
	2	10-12-12	Brown silty clay, moist - very stiff	1	2	6	7	55	30	30	8	17
968.3	4											
	6	8-14-16	Brown gravelly clayey sand with broken sandstone, moist - very stiff	2	30	13	27	17	13	23	10	13
	8											
963.3	10											
961.3			Light brown argillaceous shale, broken, sparcely concretionary, weathered, soft.									
960.5	12	80%	Light brown and gray sandstone, color banded, shaley to thin bedded (1"+), medium hard (gray) to friable.									
959.9												
959.6												
958.6	14		Light brown argillaceous shale, broken, soft, weathered.									
	16	66%	Light gray and light brown sandstone, fine-grained, thin bedded, (1/2" & 2"), medium hard, weathered.									
954.3	18											
953.3			Light brown argillaceous shale, pulverized, soft									
951.9	20	70%	Light gray sandstone, fine-grained, shaley (1/4"+), hard.									
951.6												
	22		Gray argillaceous shale, broken, pulverized between 954.3 & 955.3, trace of 1/8"+ beds of fine-grained gray sandstone, weathered along fracture surfaces, medium hard to brittle.									
948.3	24	103%	Gray argillaceous shale, broken, medium hard.									
	26		Light gray sandstone, fine-grained, thin bedded (1"to 6", averaging 2"), high angle joint at 952.4, joint surfaces weathered, trace fossil plant debris, hard.									
	28		Gray argillaceous shale, 2"+pieces, medium hard.									
	30		Dark gray siliceous shale, laminations obscure, 2"to 4", 3"pieces, broken between 951.3 & 951.0, hard.									
		% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 5-6-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-6-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 4 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER HRS. Backfilled
STATION & OFFSET 48+98, 6'Lt., Bridge No. MAH 680-1304 SURFACE ELEVATION 967.9

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
967.9	0											
966.9			Blacktop and slag, street									
	2	10-8-7	Brown gravelly, clayey sand with sandstone fragments, moist - stiff	1	44	13	15	15	13	25	10	15
963.4	4											
	6	8-11-17	Brown silty clay with sandstone fragments, moist - very stiff	2	24	5	7	36	28	30	10	12
959.9	8											
	10	45-68	Brown weathered shale and sandstone	3		Visual						
	12											
953.4	14											
952.4	16		Gray shale, broken, highly weathered, iron oxide stained, soft									
951.6			Light gray sandstone, fine-grained, thin bedded(1"to1-1/2"), some bedding planes iron oxide stained*									
951.1			Gray shale, broken, weathered iron oxide stained, weathered, soft /*weathered med. hard									
950.4	18	68%	Light gray sandstone, fine-grained, thin bedded(1-1/2"to 3"avg. 2"), some bedding planes iron oxide**									
948.4			Gray argillaceous shale, broken to pulverized, iron oxide on /**stained, med. hard									
	20		some fracture surfaces, soft									
	22	90%	Gray siliceous shale, 1" to 7" pieces, averaging 3", 0.2' crushed zone at 934.5 and 0.2' broken zone at 928.4, high angle joints at 945.9 to 945.1 and at 944.5, (broken along joints), joint surfaces weathered, some bedding planes weathered down to 943.0, with 4" bed of fine-grained gray sandstone at 939.5, 0.2' beds of sandstone 937.4 and 936.5, 0.1' bed at 935.6, 0.2' bed at 934, rare streaks of sandstone 933.4 to 928.4 and 0.3' shaley sandstone at 926.7 to 926.4 (all sandstone fine-grained, hard and gray), with traces of fossil plant stems, hard									
	24											
	26											
	28	82%										
	30											
	32	106%										
	34											
	36											
	38	96%										
	40											
926.4		102%										
	42		% Recovery									
	44		Boring Completed									

LOG OF BORING

DATE STARTED 5-7-65 SAMPLER: TYPE Split Spoon DIA. 2" O.D. WATER ELEVATION
DATE COMPLETED 5-7-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 2 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER HRS. Backfilled
STATION & OFFSET 48+00, 17'Lt. Bridge No. MAH 680-1304 SURFACE ELEVATION 971.9

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
971.9	0											
970.9			Blacktop and slag, (street)									
	2	4-10-10	Brown clayey sandy gravel, trace coal, (fill) moist - medium dense	1	51	10	12	17	10	25	9	14
967.4	4											
	6	7-8-10	Brown sandy clayey silt, moist - stiff	2	10	10	21	42	17	21	5	15
963.9	8											
			Brown gravelly, clayey sand, moist - stiff	3	44	12	15	15	14	27	10	13
961.9	10	6-7		4		Visual						
		87	Brown and gray weathered shale and sandstone									
	12											
957.4	14											
	16		Gray argillaceous shale, broken, 1/2"to 1"pieces, broken surfaces stained with iron oxide, macerated fossil plants and mica flakes on some bedding surfaces, with 3"layer of fine-grained shaley weathered sandstone at top, weathered, soft									
955.4												
	18	74%	Gray argillaceous shale, 1/4"to 2", averaging 1"pieces, some broken in upper 1/3 , some surfaces with iron oxide films, with 1"layer shaley hard gray sandstone near top, medium hard									
952.4	20											
	22	95%	Gray argillaceous shale, 1/4"to 2-1/2", averaging 1" pieces, trace broken, trace macerated fossil plants, medium hard									
948.4	24											
		% Recovery	Boring Completed									
	26											
	28											

LOG OF BORING

DATE STARTED 5-8-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-8-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 5 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER HRS. Backfilled
STATION & OFFSET 49+92, 6'Rt. Bridge No. MAH 680-1304 SURFACE ELEVATION 964.3

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
964.3	0											
963.3			Blacktop, brick and concrete, street									
961.8	2	95-24-8	Slag, clay and sandstone, (fill) dry - dense	1	68	15	10	-7	-	-	-	19
	4	8-6-7	Brown and gray gravelly sandy silty clay, moist - stiff	2	28	7	14	37	14	26	8	11
959.8	6	2-2-2	Brown and gray clayey gravel, moist - loose	3	63	7	8	15	7	24	8	16
955.8	8											
954.8		26-71	Brown clayey silt with sandstone fragments, moist - hard	4	12	4	9	55	20	25	8	10
	10		Light gray siliceous shale, 1/2"to 1" pieces, with streaks of fine-grained sandstone, crushed zone 0.5' below top, broken at bottom, bedding and fracture surfaces with films of iron oxide, weathered, medium hard									
	12	72%										
949.6	14											
947.8	16		Light gray siliceous shale and gray fine-grained sandstone (50-50%) micro-interbedded, bedding planes oxidized and bearing films of iron oxide, hard									
	18	98%	Light gray sandstone, fine-grained, thin and cross bedded (1/2"to 9", averaging 3"), some bedding planes oxidized (1/2" to 2"), with coarse mica and flakes of carbon and bedding planes, hard									
944.8	20											
	22		Light gray sandstone, fine-grained, (1/2" to 2"), with 0.2' weathered zone at top and 0.6' weathered zone 2.5' below top, weathered along bedding planes, hard									
940.5	24	100%										
939.8			Light gray siliceous shale, 1"to 4", averaging 2" pieces, traces of streaks of fine-grained gray sandstone, hard									
938.3	26		Light gray sandstone, fine-grained, cross bedded, bedding oxidized slightly, thin bedded (2'to 3") jointed at 939.1, hard, with traces of streaks of gray shale									
	28	98%	Light gray sandstone, fine-grained, horizontally and thin bedded (1-1/2" to 9", averagine 4"), bedding oxidized to depth of 1/4"+), joint at 937.9, hard									
935.4												
934.8	30		Light gray siltstone, 1" to 3" pieces, hard									
934.2			Light gray siltstone, 1" to 3" pieces, hard									
	32	94%	Black carbonaceous (bone) shale, 1" to 5", averaging 3", rare iron oxide films on bedding planes, jointed, hard, brittle									
	34											
	36	120%										
927.8	38		% Recovery Boring Completed									
	40											

LOG OF BORING

DATE STARTED 5-4-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-4-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 3 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER HRS. Backfilled
STATION & OFFSET 48+62, 21'Rt. Bridge No. MAH 680-1304 SURFACE ELEVATION 969.7

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
969.7	0		Concrete									
968.8			Topsoil, clay and cinders, (fill)	1	Visual							
	2	2-2	Brown sandy, silt clay, moist - medium stiff	2	0	9	21	56	14	27	10	18
964.7	4											
	6	5-6-8	Brown and gray gravelly, clayey sand, moist - stiff	3	27	7	18	32	16	22	7	14
962.2	8											
		12-39-16	Brown sandy, silty clay with sandstone fragments, moist - hard	4	11	12	17	42	18	26	8	10
959.5	10											
	12		Light brown argillaceous shale, 1" to 2" pieces, mostly broken, soft, weathered									
	14	86%										
954.5	16		Gray siliceous shale, 2"to 4" averaging 2-1/2", medium hard to hard, iron oxide films on some surfaces, weathered									
	18	94%										
949.0	20											
	22		Gray argillaceous shale, 1" to 4"pieces averaging 2-1/2", iron oxide on some surfaces, weathered, brittle to medium hard									
	24	106%										
945.1	26		Light gray sandstone, fine-grained, horizontally and thin bedded (2" to 6", averaging 3-1/2"), trace streaks of gray shale, hard									
941.8	28											
940.8			Gray siliceous shale, 3"-4" pieces, hard									
940.0	30	84%	Gray argillaceous shale, broken, medium hard									
939.3			Light gray sandstone, fine-grained, shaley, thin bedded (1"to 6", averaging 3"), hard									
	32		Gray argillaceous shale, 1"to 6"pieces, averaging 3-1/2", iron oxide films on rare bedding planes, trace streaks of fine-grained sandstone between 934.5 & 926.5, hard									
	34	98%										
	36											
	38	96%										
	40											
	42	100%										
926.5	44		% Recovery									
	46		Boring Completed									

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0835
UNDER SHIRLEY RD.
SEC. MAH-680-6.98 I-680-9(6) 240

BORING DATA

		REVIEWED BY	DATE
		C.R.L.	11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

LOG OF BORING

DATE STARTED 5-2-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-3-65 CASING: LENGTH H. S. A. DIA. 3. 5"I. D. IMMEDIATE None
BORING NUMBER 6 CORE BARREL: TYPE N, X, M, SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 50+41, 30'Lt. Bridge No. MAH 680-1304 SURFACE ELEVATION 962.2

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
962.2	0											
961.2	2	1-2	Topsoil, moist - loose	1			Visual					
	4	3	Brown gravelly sandy clayey silt, moist - medium stiff	2	26	10	12	33	19	25	7	12
956.7	6	3-1-1	Brown clayey silt , moist - medium stiff	3	12	6	13	47	22	25	6	20
	8	50-52-45	Brown weathered sandstone and shale	4			Visual					
952.0	10	85	Brown weathered sandstone and shale	5			Visual					
~~951.9~~			~~Light brown argillaceous shale, badly broken, weathered soft~~									
~~951.1~~	12		~~Light gray and tan sandstone, color banded, fine-grained horz. bedded, thin bedded (1/2"to 2"avg. 1-1/4" somewhat broken, med. hard, tan layers weathered~~									
	14	40%	Gray siltstone, 1" to 2" pieces, mostly broken to pulverized between 947 & 943, lower 0.7' pulverized, traces of fossil plants, medium hard, checks on drying									
	16											
	18	75%										
	20											
	22	46%										
938.2	24		Gray conglomeritic sandstone, thin bedded, matrix fine-grained sandstone, some pebbles up to 1/2" in diameter, matrix mineralized (pepper and salt), hard									
~~938.0~~												
936.9	26		Black carbonaceous (bone) shale, 1/2"to 2-1/2", averaging 1" pieces, hard									
	28	66%	Light gray siliceous shale, 2" to 4" averaging 2-1/2"pieces, broken, brittle									
933.2												
~~933.0~~	30		~~Gray argillaceous shale, pulverized~~									
931.1			Gray argillaceous shale, 1" to 6", averaging 2-1/2"pieces, hard									
	32	88%	Light gray siliceous shale, 1"to 7", averaging 3-1/2"pieces, hard									
929.1	34		Black carbonaceous (bone) shale, two 2"and one 10"pieces, hard									
928.0												
	36		% Recovery Boring Completed									

LOG OF BORING

DATE STARTED 5-3-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-3-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 7 CORE BARREL: TYPE N.X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 50+60, 30'Rt. Bridge No. MAH 680-1304 SURFACE ELEVATION 960.9

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
960.9	0											
~~960.7~~			~~Concrete~~									
	2	9-19-25	Brown weathered sandstone	1			Visual					
	4											
955.9												
	6		Rust brown sandstone, fine-grained, horizontally bedded, thin bedded (1/2"+), badly broken, finely micaceous, friable, weathered.									
954.1		25%										
	8		Tan sandstone, fine-grained, horizontally bedded, thin bedded (1"to 4", averaging 2"), badly broken 0.1'+ zone at 951, sparcely concretionary (1"± clay ironstone concretions), between 950.9 and 949.4, high angle joint at 948.8, bedding and joint plane surfaces heavily oxidized, slightly friable to medium hard.								
	10	83%										
	12											
946.8	14	95%										
	16		Light gray and tan sandstone, color banded (50-50), light gray hard, tan mostly friable and broken and weathered, thin bedded, (1/4"to 3-1/2", averaging 1-1/2"), cross bedded, flecks of carbon on bedding planes.									
942.9	18	96%										
	20		Light gray sandstone, fine-grained, horizontally bedded, thin-bedded (3/4"to 3", averaging 1-1/2"), somewhat broken, traces of fossil plant stems, hard.									
939.9												
~~939.2~~	22		Gray siliceous shale, 1" to 3"pieces, averaging 2", hard.									
~~938.6~~		94%										
938.8	24		Black carbonaceous (bone) shale, 1" and 2"pieces, hard.									
936.5			Gray shale, pulverized.									
	26		Dark gray siliceous shale, carbonaceous, hard.									
		83%	Light gray siliceous shale, breaks irregularly, 1/2"to 6"pieces, averaging 1-1/2"thin iron oxide films on some surfaces, high angle joint at top, hard.									
932.9	28											
931.9			Gray siltstone, broken, brittle.									
	30	73%	Black carbonaceous (bone) shale, 1"to 3" pieces averaging 1-1/2", 0.5'broken zone at top 2" crushed zone 1" above bottom.									
	32											
	34	93%										
925.9	36		% Recovery Boring Completed									
	38											

LOG OF BORING

DATE STARTED 5-7-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-8-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 8 CORE BARREL: TYPE N, X, M, SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 51+14, 5'Lt. Bridge No. MAH 680-1304 SURFACE ELEVATION 957.3

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
957.3	0											
956.3			Blacktop, brick and concrete, street									
	2	3-4-4	Brown gravelly clayey silt, moist - medium stiff	1	18	4	12	47	19	25	4	21
953.3	4											
		40-65	Brown silty sandy, gravel with sandstone fragments, moist - very dense	2	59	14	13	8	6		NP	10
951.3	6											
	8	63%	Light brown sandstone, fine-grained, cross and thin bedded (1"to 4", averaging 1-1/2"), trace broken, trace light gray fine-grained sandstone, intersecting joints (947.8-945.8), bedding and joint planes, oxidized, friable									
	10											
	12	100%										
942.6	14											
941.5	16	96%	Light gray sandstone, fine-grained, thin-bedded(2"to3"), bedding planes, weathered, medium hard									
~~939.8~~	18	64%	Black carbonaceous (bone) shale, 1" to2"pieces, little broken, trace iron oxide on bedding and fracture planes, hard but brittle									
938.3			Light gray shale, pulverized									
	20		Light gray fire clay, siliceous, obscurely slickensided, 1" to 4", irregular pieces, trace broken, hard									
	22	92%										
934.0	24											
	26		Black carbonaceous shale, 1-1/2" to 6", averaging 2-1/2" pieces, trace broken, jointed, checks on drying, hard but brittle									
	28	78%										
	30											
925.8		80%										
	32		% Recovery Boring Completed									
	34											
	36											
	38											
	40											

LOG OF BORING

DATE STARTED 5-7-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-7-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 9 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 51+67, 5' Rt. Bridge No. MAY 680-1304 SURFACE ELEVATION 953.5

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
953.5	0											
952.5			Blacktop, brick and concrete				Visual					
	2	15-6-6	Brown silty sandy gravel, moist - medium dense	1	58	10	13	13	6	21	1	16
	4											
	6	3-6-8	Brown gravelly sandy silt, moist - medium dense	2	15	6	14	47	18		NP	18
946.5												
	8	80%	Light brown sandstone, fine-grained, cross bedded, thin bedded (1/2"to 2-1/2", averaging 1"), jointed bedding and joint planes oxidized, weathered, friable									
	10	67%										
941.2	12											
940.2		95%	Light brown and light gray shale and sandstone (50-50), fine-grained, thin bedded (1/2"±), medium hard, weathered.									
939.1	14		Light brown sandstone, fine-grained, thin bedded (2"to 4") weathered, friable									
938.5			Light gray sandstone, fine-grained, thin bedded (1"to 3", averaging 2"), hard									
	16		Light brown sandstone, fine-grained, thin bedded (1/4"to 10", averaging 3-1/2"), jointed at 937, iron oxide on joint and bedding planes, medium hard									
935.3	18	104%										
	20		Light gray sandstone, fine-grained, thin bedded (2"to 4", averaging 3"), with rare streaks of carbon, hard									
932.7												
~~932.0~~	22		Light gray pebble conglometate fine-grained, gray sandstone matrix, thin bedded(1"to3", avg. 2")hard									
931.0		100%	Black carbonaceous (bone) shale, 2"to 2-1/2"pieces, hard, brittle.									
	24		% Recovery Boring Completed									
	26											

LOG OF BORING

DATE STARTED 5-1-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-2-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 10 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 52+16, 25'Lt. Bridge No. MAH 680-1304 SURFACE ELEVATION 951.0

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
951.0	0											
~~950.8~~			~~Concrete~~									
949.5	2	5-7-10	Cinders, clay and sandstone, (fill) moist - medium dense	1			Visual					
947.3	4		Tan sandstone, fine-grained, thin bedded (1/4"to 2-1/2", averaging 1"), horizontally bedded, slightly friable, weathered									
		76%										
945.5	6		Tan sandstone, fine-grained, thin bedded, broken to pulverized, horizontally bedded, soft, friable, with evidence of clay in joint, weathered									
943.9	8		Light brown sandstone, fine-grained, thin bedded (2"+), horizontally bedded, medium hard, weathered.									
		87%	Light brown sandstone, fine-grained, cross bedded, thin bedded, medium hard, weathered, 0.2' at bottom badly broken, with 5-1/4"-1/16"randomly oriented layers of bright coal(probably flattened plant stems).									
941.8	10											
		25%	Dark gray siliceous shale, marina, 1/8"to 2-1/2"averaging 3/4"pieces, jointed, hard, films of iron oxide on some bedding and joint planes									
939.0	12	80%										
938.0			Light gray siltstone, 1" to 2" pieces, hard									
~~937.8~~			~~Black bone shale, carbonaceous, hard, 1"to 2" pieces, broken, iron oxide on bedding~~									
	14	80%	Light gray clay shale, broken, soft, fresh									
935.3	16											
			Light gray siltstone, 3/4"-2", averaging 1-1/4"pieces, hard									
	18											
931.0	20	90%										
			% Recovery Boring Completed									
	22											
	24											
	26											

MAY 28 1971

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH.680-0835
UNDER SHIRLEY RD.
SEC. MAH-680-6.98 I-680-9(6)240

BORING DATA

REVIEWED BY C.R.L. DATE 11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

MAHONING COUNTY
MAH.-680-6.98

Geology of the Site

The site is located within the upper reaches of the south valley slopes of the Mahoning River. The difference in elevation within the area explored is in excess of 20-ft. sloping downward from south to north. The bedrock is shallow consisting of Pottsville members of Pennsylvania age.

Exploration

The exploration planned was based on a four span structure. Five drive sample core borings were made, one at each of the proposed substructure units, between May 17 and 20, 1965. Because of the shallow depth at which rock was encountered, the design of the structure was subsequently modified to conform to a new proposed cross-section. The proposed cross-section and site plan are illustrated on the plan and profile.

Investigational Findings

The borings indicate shallow overburden overlying sandstone and shale bedrock. The thickness of the overburden at the points tested varies between 4 and 9-ft. The undisturbed overburden was derived largely from relatively local shale and sandstone terrains and transported and deposited by glacial and glacio-fluvial agents. It includes silts and lean clays containing rock fragments in varying amounts.

The exploration was carried well into the bedrock formation; 36-ft. at the location of hole No. 2 which was necessary by the depth of cut required in this area. Approximately the first 5-ft. of rock is rather highly weathered. The degree of weathering gradually decreases with greater depth.

Within the south half of the site where the existing grade is relatively high, the uppermost layers of rock include both argillaceous and siliceous shales. At the north end of the site the existing grade is relatively low, the first rock encountered consists of a rather fine textured sandstone. At and below subgrade elevation the rock consists of alternating layers of siliceous shale and fine textured sandstone and includes thin zones of pebble conglomerate and conglomeritic sandstones. The borings revealed no evidence of any ground water within the depths explored.

LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

GENERAL INFORMATION

Drive Sample Borings — Drive-Press Sample Borings — Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procurred for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
8"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)		0.074mm (No. 200 sieve)	0.005mm

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0817
UNDER INDIANOLA AVE.
SEC. MAH.-680-6.98, I-680-9(6)240

CHECKED BY	REVIEWED BY	DATE
S.J.B	C.R.L.	11/15/65

MAY 25 1971

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JUL 19 1979
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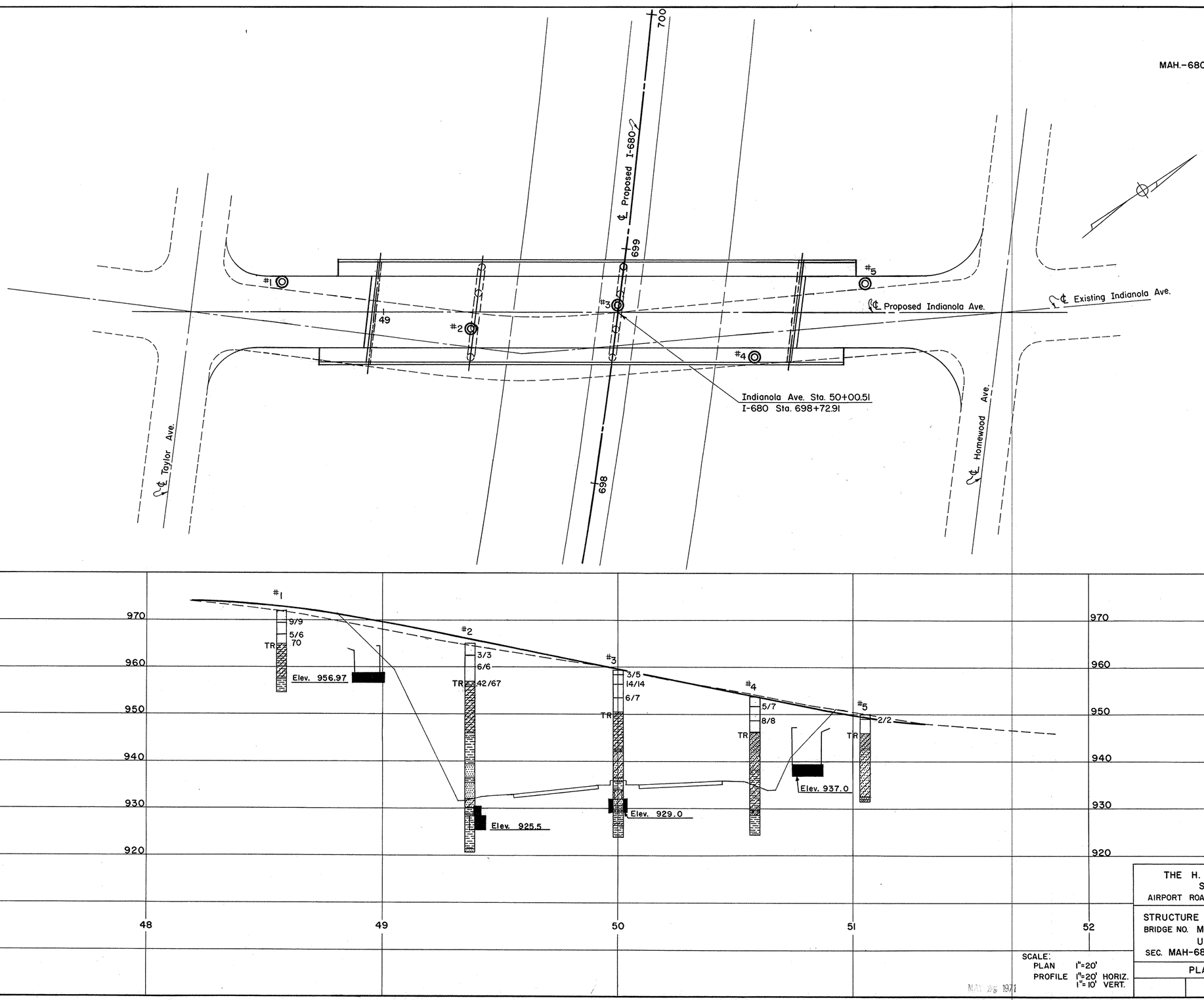

SCALE:
PLAN 1"=20'
PROFILE 1"=20' HORIZ.
1"=10' VERT.

MAY 25 1971

THE H. C. NUTTING COMPANY
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PLAN AND PROFILE

		REVIEWED BY	DATE
		C.R.L.	11/15/65

MICROFILMED
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REPRODUCTION

25/38 3/3

LOG OF BORING

Date Started 5/19/65 Sampler: Type Split Spoon Dia. 2" O. D. Water Elevation
Date Completed 5/19/65 Casing: Length Hollow Stem Auger Dia. 3.5"I. D. Immediate None
Boring Number 1 Core Barrel: Type NXM Size ____ After ____ Hrs. Backfilled
Station & Offset 48+57, 13' L. Bridge No. MAH-680-1323 Surface Elevation 972.0

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	% Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
972.0	0											
970.5	2		Blacktop, brick and slag, street									
	4	12-9-9	Brown sandy clayey silt with sandstone fragments, moist - stiff	1	16	9	23	38	14	22	5	12
	6	4-5-6	do do	2	16	11	18	35	20	22	7	14
965.0	8	70	Brown weathered shale and sandstone	3	Visual							
963.0	10											
	12	75%	Tan shale, 1/4" to 2" averaging 3/4", some broken, weathered, soft									
957.5	14	73%										
	16		Gray siliceous shale, trace interbedded brown shale, 1/2" to 2" averaging 3/4", trace broken gray shale, hard, brown shale weathered and medium hard									
954.5	18	%Recovery										
	20		BORING COMPLETED									
	22											

LOG OF BORING

Date Started 5/20/65 Sampler: Type Split Spoon Dia. 2"O. D. Water Elevation
Date Completed 5/20/65 Casing: Length Hollow Stem Auger Dia. 3.5"I. D. Immediate None
Boring Number 2 Core Barrel: Type NXM Size ____ After ____ Hrs. Backfilled
Station & Offset 49+37, 7' Rt. Bridge No. MAH-680-1323 Surface Elevation 965.0

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	% Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
965.0	0											
963.5	2		Blacktop, brick and slag (street)									
	4	5-3-3	Brown sandy silty clay, very moist - medium stiff	1	13	8	16	45	18	26	9	18
	6	5-6-6	Brown sandy silt with sandstone fragments, moist - stiff	2	21	9	16	39	15	20	3	16
957.0	8											
956.0	10	42-67	Brown weathered shale	3	Visual							
	12	66%	Brown shale, fragmented (90%) highly weathered, soft, trace interbedded brown fine grained sandstone (broken)									
951.2	14											
949.0	16	74%	Gray argillaceous shale, 1/2" to 2" averaging 1" pieces, little broken, weathered, medium hard									
946.0	18		Brown shale, broken, weathered, soft, trace brown, medium hard, weathered, fine-grained sandstone (1"+ beds)									
	20											
	22	83%	Gray shale, 1/4" to 3" averaging 1", some broken, jointed, thick films iron oxide on joint surfaces, weathered, medium hard, with one 3" layer, medium hard, weathered, fine grained sandstone bed near top									
	24											
939.5	26	94%										
	28		Light gray sandstone, fine-grained, thin bedded (1-1/4" to 10", averaging 4"), hard, with evidence of interbedded gray shale									
936.5	30	100%	Gray shale, 1" to 3" averaging 2" pieces, hard									
935.5	32		Light gray sandstone, fine grained, thin to medium bedded (2" to 21", averaging 4"), trace streaks gray, hard shale, hard									
932.0	34	90%	Light gray sandstone, fine-grained, thin to medium bedded (1" to 14" averaging 6"), streaks hard gray shale, some bedding planes with iron oxide films, weathered, hard									
929.9	36		Gray siliceous shale, 1" to 3-1/2" averaging 2" pieces, hard									
928.7	38	98%	Light gray sandstone, fine grained, shaly (1/8" to 2"beds) hard									
928.2	40		Gray siliceous shale, 1/2" to 3-1/2" averaging 1-3/4" pieces, trace nodules (to 1/2") and fossil plant fragments, hard									
	42	91%										
921.2	44											
920.5	46	%Recovery	Light gray sandstone, fine grained (1/2" to 6" beds) streaks gray shale, hard									
	48		BORING COMPLETED									
	50											

LOG OF BORING

Date Started 5/18/65 Sampler: Type Split Spoon Dia. 2" O. D. Water Elevation
Date Completed 5/18/65 Casing: Length Hollow Stem Auger Dia. 3.5"I. D. Immediate None
Boring Number 3 Core Barrel: Type NXM Size ____ After ____ Hrs. Backfilled
Station & Offset 50+00, 3' L. Bridge No. MAH-680-1323 Surface Elevation 959.4

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	% Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
959.4	0											
	2	1-3-5	Brown silty sandy clay, moist - stiff	1	14	7	19	40	20	28	11	16
	4	9-14-14	do do	2	Visual							
	6	4-6-7	Brown sandy silt with sandstone fragments, moist - stiff	3	23	8	20	36	13	20	4	14
950.4	8											
	10											
	12	71%	Brown shale, 1" to 2" pieces, some broken, jointed, weathered, soft, traces broken weathered friable tan sandstone down to 947									
	14	53%										
942.5	16	94%										
942.2	18		Gray pebble conglomerate, weathered along bedding, hard									
	20	96%	Rust brown sandstone, fine-grained, thin bedded (1/2" to 4", averaging 1-1/2"), weathered, medium hard									
939.9	22	94%	Tan sandstone, fine-grained, thin bedded (1/2" to 10" averaging 6"), trace nodules to 1/2"ø, weathered, medium hard									
936.5	24		Gray sandstone, coarse grained, thin bedded(1/2"to1-1/4")broken, friable, trace plant stems									
935.6	26		Gray siliceous shale, 1" to 1-1/2" pieces, hard									
935.4	28	92%	Gray shale, 1-1/4" to 2-1/2" pieces averaging 1-3/4", fossiliferous, marine, hard									
933.9	30		Tan sandstone, fine-grained, thin bedded (1" to 11", averaging 4") weathered, medium hard									
930.6	32											
929.8	34		Gray siliceous shale, jointed, joint surfaces weathered, hard									
929.5	36	90%	Gray pebble conglomerate, broken, hard, some pebbles chert. Gray siliceous shale, 1/2" to 3" averaging 1-3/4" pieces, hard, 0.2' soft broken weathered zone at 926.6									
926.4	38											
	40	92%	Gray siliceous shale, 1/2" to 3" averaging 1-1/2" pieces, thin films iron oxide on few bedding planes, trace clay ironstone nodules and fossil plants, hard.									
923.9		%Recovery										
			BORING COMPLETED									

LOG OF BORING

Date Started 5/17/65 Sampler: Type Split Spoon Dia. 2"O. D. Water Elevation
Date Completed 5/17/65 Casing: Length Hollow Stem Auger Dia. 3.5"I. D. Immediate None
Boring Number 5 Core Barrel: Type NXM Size ____ After ____ Hrs. Backfilled
Station & Offset 51+05, 12' L. MAH-680-1323 Surface Elevation 950.0

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	% Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
950.0	0											
	2	1-2-2	Brown sandy clayey silt, moist - medium stiff	1	13	7	16	47	17	21	5	19
946.0	4											
	6	35%	Tan sandstone, fine-grained, thin bedded (1-1/2" to 6" averaging 2"), trace broken, jointed at high angles, weathered, friable to medium hard, trace shale at 942.3									
	8	33%										
	10	100%										
	12	71%										
	14											
	16	90%										
932.5	18		Light gray sandstone, fine-grained, thin bedded(1/2"to 2", averaging 1-1/4") weathered along*									
931.9	20		Light gray siliceous fire clay, broken, slickensided, hard *bedding, mica on bedding									
931.5	22	%Recovery	/planes, hard									
	24		BORING COMPLETED									
	26											

LOG OF BORING

Date Started 5/19/65 Sampler: Type Split Spoon Dia. 2"O. D. Water Elevation
Date Completed 5/19/65 Casing: Length Hollow Stem Auger Dia. 3.5"I. D. Immediate None
Boring Number 4 Core Barrel: Type NXM Size ____ After ____ Hrs. Backfilled
Station & Offset 50+58, 19' Rt. Bridge No. MAH-680-1323 Surface Elevation 953.7

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	% Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
953.7	0											
952.7	2		Blacktop, brick and slag, street									
	4	4-5-7	Brown silt, moist - stiff	1	2	2	8	72	16		NP	18
949.7	6	8-8-8	Brown clayey silt, moist - medium stiff	2	12	3	9	56	20	23	5	20
946.2	8											
	10	54%	Tan sandstone, fine grained, thin bedded (1" to 6" averaging 3", weathered, medium hard									
	12											
	14	100%										
938.2	16											
	13	73%	Gray siliceous shale, 2"+ pieces, 0.5' pulverized zone at bottom, fracture surfaces thinly coated with iron oxide, weathered, medium hard									
935.2	20											
	22	102%	Gray shale, 1" to 5", averaging 2-1/2" pieces, trace broken at top and bottom, films iron oxide on fractures, streaks of sandstone at top, weathered, medium hard									
929.5	24											
928.4	26	94%	Gray conglomeritic sandstone, thin bedded (3"+) hard, matrix fine gray sandstone, pebbles to 1" (sandstone with reaction rims and trace coal pebbles), weathered, firmly cemented									
	28		Gray siliceous shale, 1/2" to 3", averaging 1-1/4" pieces, hard, trace fossil plants									
924.2	30	80%										
	32	%Recovery										
	34		BORING COMPLETED									

THE H. C. NUTTING COMPANY
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SEC. MAH-680-6.98, I-680-9(6)240

BORING DATA

		REVIEWED BY	DATE
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MAHONING COUNTY
MAH.-680-6.98

Geology of the Site

The structure site is located on Shady Run, a dry V-shaped tributary valley within the upper reaches of westerly slopes of the valley of the Mahoning River. Within the area explored, Shady Run is approximately 50-ft. deep. The bedrock is shallow consisting of Pottsville shales and sandstones of Pennsylvania age.

Exploration

The exploration consisted of six drive sample-core borings made between May 21 and June 9, 1965. Two borings were made at each abutment and two at the north pier. The south pier falls on a steep slope with rock outcrop. No borings were made for this pier.

Investigational Findings

The borings indicate a varying depth of overburden overlying sandstone and shale. The thickness of the overburden at the points explored varies from 0 to 19-ft. and consists of 0 to 9-ft. of soil, developed from the weathering of Pottsville sandstones and shales, and 0 to 10-ft. of fill. The maximum overburden thickness,both natural soil and fill, was penetrated in hole No. 5. The undisturbed soil includes very stiff silty and sandy clays containing rock fragments in varying amounts. The undisturbed soil was derived largely from relatively local shale and sandstone terrains and transported and deposited by glacial and glacio fluvial processes. The fill is composed of medium stiff lean clays plus varying amounts of cinders, gravel and weathered shale.

The exploration was carried well into bedrock, 36.5-ft. at hole No.2, which was necessary due to the depth of cut required in this area. At the proposed abutments, approximately the upper 5 to 15-ft. of rock is rather highly weathered, whereas only 3-ft. of highly weathered bedrock was penetrated in the explorations in the bottom of Shady Run. The degree of weathering decreases gradually with increasing depth.

In the area of the south abutment where the existing grade is relatively high and bedrock outcrops, the bedrock column penetrated, consists primarily of shale with some interbedded fine-grained sandstones. In the bottom of Shady Run, where the elevation is relatively low, the upper part of the bedrock consists of fine-grained sandstone and shale overlying interbedded siliceous shale and fine-grained sandstone. The existing grade is again high in the area of the north abutment. The elevations of the top of rock in this area varies from a high of about 952.5 in hole No. 6 to a low of 931.4 in hole No.5. Here, shale overlies siliceous shale or interbedded fine grained sandstones and siliceous shales.

The borings reveal no evidence of any ground water within the depths explored.

LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- H HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- ⊠ INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procurred for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

8"	3"	2.0mm		0.42mm		0.074mm	0.005mm
Boulders	Cobbles	Gravel	Coarse Sand		Fine Sand	Silt	Clay
		No. 10 sieve		No. 40 sieve		No. 200 sieve	

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

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STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0794
OVER SHADY RUN RD.
SEC. MAH.-680-6.98, I-680-9-(6) 240

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MICROFILMED
JUL 12 1979
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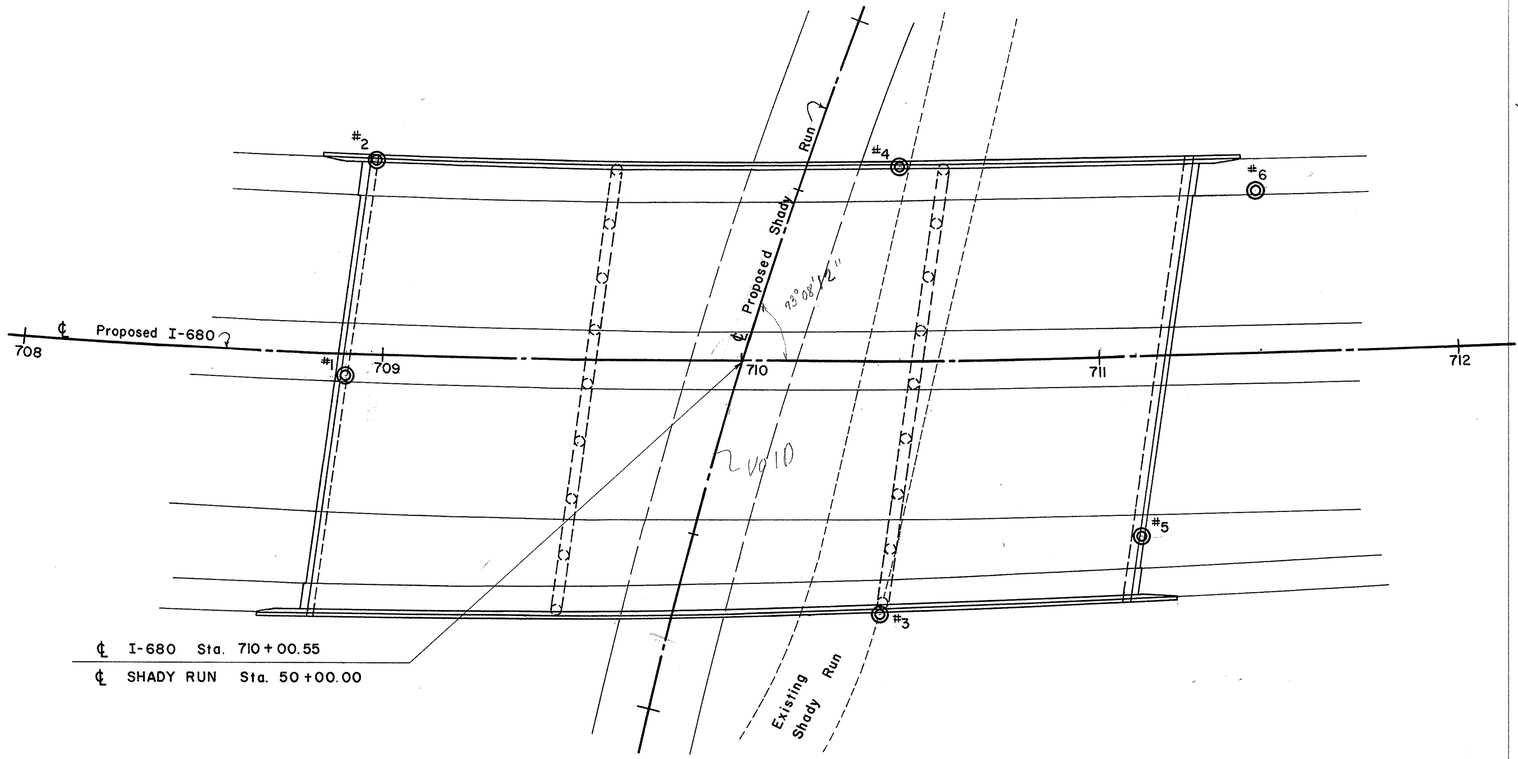
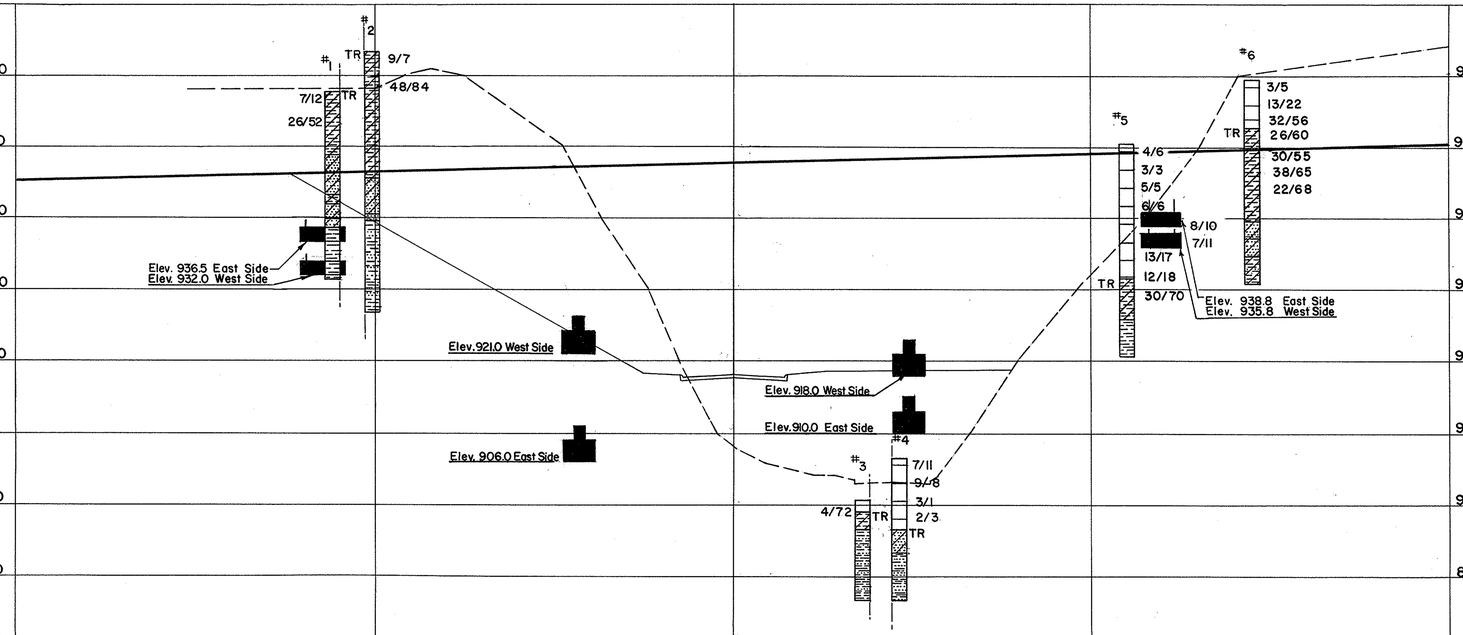
MAH.-680-6.98





MAY 26 1971

SCALE:	
PLAN	1" = 20'
PROFILE	1" = 20' HORIZ. 1" = 10' VERT.

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STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0794
OVER SHADY RUN RD.
SEC. MAH.-680-6.98 I-680-9-(6) 240

PLAN AND PROFILE

		REVIEWED BY	DATE
		C.R.L.	11/15/65

28 / 38 — 3 / 3

LOG OF BORING

DATE STARTED 5-21-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-21-65 CASING: LENGTH H. S. A. DIA. 3.5" I. D. IMMEDIATE None
BORING NUMBER 1 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER ____ HRS. Backfilled
STATION & OFFSET 708+90, 6' Rt. Bridge No. MAH 680-1343 SURFACE ELEVATION 957.8

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
957.8	0											
	2	6-7-12	Brown and gray weathered shale	1		Visual						
	4											
	6	26-52	Brown and gray weathered shale	2		Visual						
949.8	8											
948.8		30%	Gray and brown shale, pulverized, weathered, soft with 1" bed brown weathered fine-grained sandstone at bottom.									
	10		Light brown sandstone, fine-grained, thin to medium bedded (1/2" to 13" averaging 3"), high angle jointing, weathered medium hard									
	12	98%										
943.2	14											
941.8	16	75%	Brown shale, pulverized, weathered, soft, evidence of nodules to 2"Ø., trace brown sandstone									
939.8	18	70%	Light brown sandstone, broken, fine-grained, jointed, evidence of shale, weathered, medium hard									
938.8			Gray sandstone, fine-grained, thin bedded(1-1/2"to 7", averaging 4"), weathered, medium hard									
937.7	20		Gray shale, 1/2"to 3"averaging 1-1/2" pieces, weathered along bedding, hard									
	22	102%	Gray shale, 1/2" to 3-1/2" averaging 1-1/2", jointed at high angle, broken in jointed zones (particularly 934.8 to 935.5), weathered along joints, hard, except medium hard adjacent to joints									
	24											
931.3	26	76%										
		% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 6-3-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 6-3-65 CASING: LENGTH H. S. A. DIA. 3.5" I. D. IMMEDIATE None
BORING NUMBER 3 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER ____ HRS. Backfilled
STATION & OFFSET 710+38, 70'Rt. Bridge No. MAH-680-1343 SURFACE ELEVATION 900.7

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
900.7	0											
900.2			Blacktop									
899.2	2	3-4	Cinders and slag, (fill)	1		Visual						
		72	Brown and gray weathered shale	2		Visual						
896.7	4											
	6		Interbedded light gray sandstone and gray siliceous shale, (80% sandstone, 20% shale), sandstone fine-grained, thin bedded (1/2"to 6" averaging 2"), hard; shale, 1/4" to 6" pieces averaging 1", hard.									
	8	84%										
	10											
	12											
886.7	14	100%										
		% Recovery	Boring Completed									
	16											
	18											
	20											

LOG OF BORING

DATE STARTED 6-7-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 6-7-65 CASING: LENGTH None DIA. ____ IMMEDIATE Could not tell
BORING NUMBER 5 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER ____ HRS. Backfilled
STATION & OFFSET 711+10, 50'Rt. Bridge No. MAH 680-1343 SURFACE ELEVATION 950.4'

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
950.4	0											
	2	3-4-6	Topsoil, cinders, gravel (fill) moist - medium stiff	1		Visual						
	4	4-3-3	Brown sandy silty clay with cinders and gravel, (fill) moist - medium stiff	2	28	10	11	31	20	30	10	14
	6	4-5-5	Brown sandy silty clay with cinders and gravel, (fill) moist - medium stiff	3	14	8	16	38	24	26	7	18
	8	3-6-6	Brown sandy silty clay with cinders and gravel, (fill) moist - medium stiff	4	27	6	11	33	23	28	8	15
940.4	10											
	12	7-8-10	Brown silty clay with slab and sandstone fragments, moist - very stiff	5	28	4	8	35	25	28	10	13
	14	10-7-11	Brown sandy clayey silt, shale and sandstone fragments, moist - very stiff	6	51	12	8	20	9	23	4	14
	16	11-13-17	Brown and gray silty clay with shale and sandstone fragments, moist - very stiff	7	37	9	4	26	24	32	12	14
	18	10-12-18	Brown and gray silty clay with shale and sandstone fragments, moist - very stiff	8	31	5	3	36	25	32	13	10
931.4	20											
	22	30-70	Gray weathered shale									
925.4	24											
	26		Gray siliceous shale, 1/4" to 4" pieces averaging 1-1/2", trace broken, hard checks on drying									
	28											
920.4	30	88%										
		% Recovery	Boring Completed									
	32											
	34											

LOG OF BORING

DATE STARTED 5-21-65 SAMPLER: TYPE Split Spoon DIA. 2" O. D. WATER ELEVATION
DATE COMPLETED 5-22-65 CASING: LENGTH H. S. A. DIA. 3.5" I. D. IMMEDIATE None
BORING NUMBER 2 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER ____ HRS. Backfilled
STATION & OFFSET 708+97, 54'Lt. Bridge MAH 680-1343 SURFACE ELEVATION 963.3

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
963.3	0											
	2	3-9-7	Brown and gray weathered shale	1		Visual						
	4											
	6	21-48-84	Brown and gray weathered shale	2		Visual						
954.3	8											
	10	60%	Gray shale, 1/4" to 1/2" pieces, broken soft, weathered									
	12											
	14	73%										
	16											
945.8	18	60%										
	20	52%	Brown sandstone, fine-grained, thin bedded (1/2" to 8", averaging 3-1/4"), weathered, medium hard, with evidence of soft shale on bedding planes									
940.4	22	90%										
938.6	24		Gray sandstone, fine-grained, thin bedded (one-10" bed), hard									
938.3			Gray shale, hard, with 1/2" soft gray shale at top									
	26		Interbedded gray shale and gray sandstone (80-20%), trace iron oxide on some bedding planes, both hard; shale, 1/4" to 3" averaging 1-1/2"; sandstone fine-grained, thin bedded (1" to 6", averaging 1-3/4").									
	28	94%										
	30											
	32	92%										
	34											
926.8	36	104%										
		% Recovery	Boring Completed									
	38											
	40											

LOG OF BORING

DATE STARTED 6-2-65 SAMPLER: TYPE Split Spoon DIA. 2"I. D. WATER ELEVATION
DATE COMPLETED 6-2-65 CASING: LENGTH H. S. A. DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 4 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER ____ HRS. Backfilled
STATION & OFFSET 710+44, 54'Lt. Bridge No. MAH 680-1343 SURFACE ELEVATION 906.5

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
906.5	0											
	2	3-7-11	Brown and gray weathered shale clay, and slag, (fill)	1		Visual						
	4	18-9-8	Brown and gray weathered shale, clay and slag, (fill)	2		Visual						
901.5	6	2-3-1	Brown and gray silty clay with shale and sandstone fragments, very moist - medium stiff	3	28	11	7	29	25	32	11	22
	8	3-2-3	Brown and gray silty clay with shale and sandstone fragments, very moist - medium stiff	4	45	13	8	19	15	30	9	19
896.7	10											
	12	52%	Light brown sandstone, fine-grained, thin bedded (1" to 6" and broken), medium hard, weathered									
893.2	14	88%										
	16		Interbedded gray siliceous shale and light gray sandstone (50%-50%); shale 1/4" to 1-1/2" pieces averaging 3/4",hard, with crushed zone at 892+; sandstone fine-grained thin bedded (2" to 4" averaging 3"), hard									
	18											
	20	92%										
886.7		% Recovery	Boring Completed									
	22											
	24											

LOG OF BORING

DATE STARTED 6-9-65 SAMPLER: TYPE Split Spoon DIA. 2" O. D. WATER ELEVATION
DATE COMPLETED 6-9-65 CASING: LENGTH None DIA. ____ IMMEDIATE Lost water @ 19'
BORING NUMBER 6 CORE BARREL: TYPE N. X. M. SIZE 2-1/8"I. D. AFTER ____ HRS. Backfilled
STATION & OFFSET 711+45, 45'Lt. Bridge No. MAH 680-1343 SURFACE ELEVATION 959.6'

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
959.6	0											
	2	2-3-5	Topsoil and cinders, (fill) moist - medium stiff	1								
956.6	4	13-22	Brown and gray silty clay with shale and sandstone fragments, (fill) moist - medium stiff	2	32	10	8	33	17	40	15	16
	6	32-56	Brown and gray silty clay with shale and sandstone fragments, moist - very stiff	3	26	8	6	36	24	30	9	12
952.6	8	26-60	Brown and gray silty clay with shale and sandstone fragments, moist - very stiff	4	36	18	8	21	17	31	11	14
	10	30-55	Brown and gray weathered shale	5								
	12	38-65	Brown and gray weathered shale	6								
	14	22-68	Brown and gray weathered shale	7								
	16	100	Brown and gray weathered shale	8								
	18			9								
939.6	20											
	22	74%	Interbedded light gray sandstone (90%) and gray siliceous shale (10%); sandstone fine-grained, thin bedded (3/4" to 6" averaging 2"), hard, weathered;jointed, joints weathered; shale 1/4" to 2" pieces averaging 1/2" hard									
934.6	24											
	26	95%	Gray shale, 1/4" to 3" pieces to pulverized, medium hard, weathered, trace thin seams of fine-grained sandstone									
930.6	28											
	30	% Recovery	Boring Completed									
	32											

MICROFILMED
JUL 12 1979
REPRODUCTION

MAR 25 1971

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0794
OVER SHADY RUN RD.
SEC. MAH.-680-6.98, I-680-9-(6) 240

BORING DATA

		REVIEWED BY	DATE
		C.R.L.	11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

MAHONING COUNTY
MAH.- 680- 6.98

Geology of the Site

The structure site is located on Shady Run, a dry V-shaped tributary valley within the upper reaches of the westerly slopes of the Mahoning River. Within the area explored, Shady Run is approximately 70-ft. deep. The bedrock is shallow, consisting of Pottsville shales and sandstones of Pennsylvania age.

Exploration

The exploration consisted of three drive-sample-core borings, one at each pier and one at the left abutment, made between June 4 and 6, 1965. Right of access could not be obtained to investigate the right abutment.

Investigational Findings

The borings indicate a varying depth of overburden overlying sandstone and shale. The thickness of the overburden at the points investigated varies from 5 to 17.5-ft., the greater proportion of which is artificial fill composed of cinders, slag and some clay resting on undisturbed sandy silt clay with or without gravel and/or rock fragments. The maximum thickness of overburden, mostly fill, was penetrated in hole No. 4 on the left abutment. Judging from rock outcroping in the south side of Shady Run and other borings in the vicinity, the overburden is less than 10-ft. thick and little if any fill is present at the right abutment.

The exploration was carried well into bedrock, 22.5-ft. at hole No. 4 in the left abutment, where the existing grade is relatively high. At this abutment, approximately the upper 15-ft. of the rock is rather highly weathered shale, sufficiently soft to sample by drive methods, which is succeeded downward by less intensely weathered shale and fine grained sandstone. It is judged that similar relatively soft shales will be encountered in the right abutment at about elevation 985 or higher and will extend downward five to ten feet below the proposed footing elevation. At the pier locations, near the bottom of Shady Run, approximately the upper 2 to 5-ft. of the rock is rather highly weathered shale overlying alternating beds of shale (locally siliceous) and fine grained sandstones. In all of the borings, the degree of weathering gradually decreases with increasing depth.

There was no indication of ground water in the borings.

LEGEND

- AUGER BORING LOCATION-PLAN VIEW.
- PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR — TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y — FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W — INDICATES FREE WATER ELEVATION.
- INDICATES STATIC WATER ELEVATION.

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procurred for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
8"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)		0.074mm (No. 200 sieve)	0.005mm

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

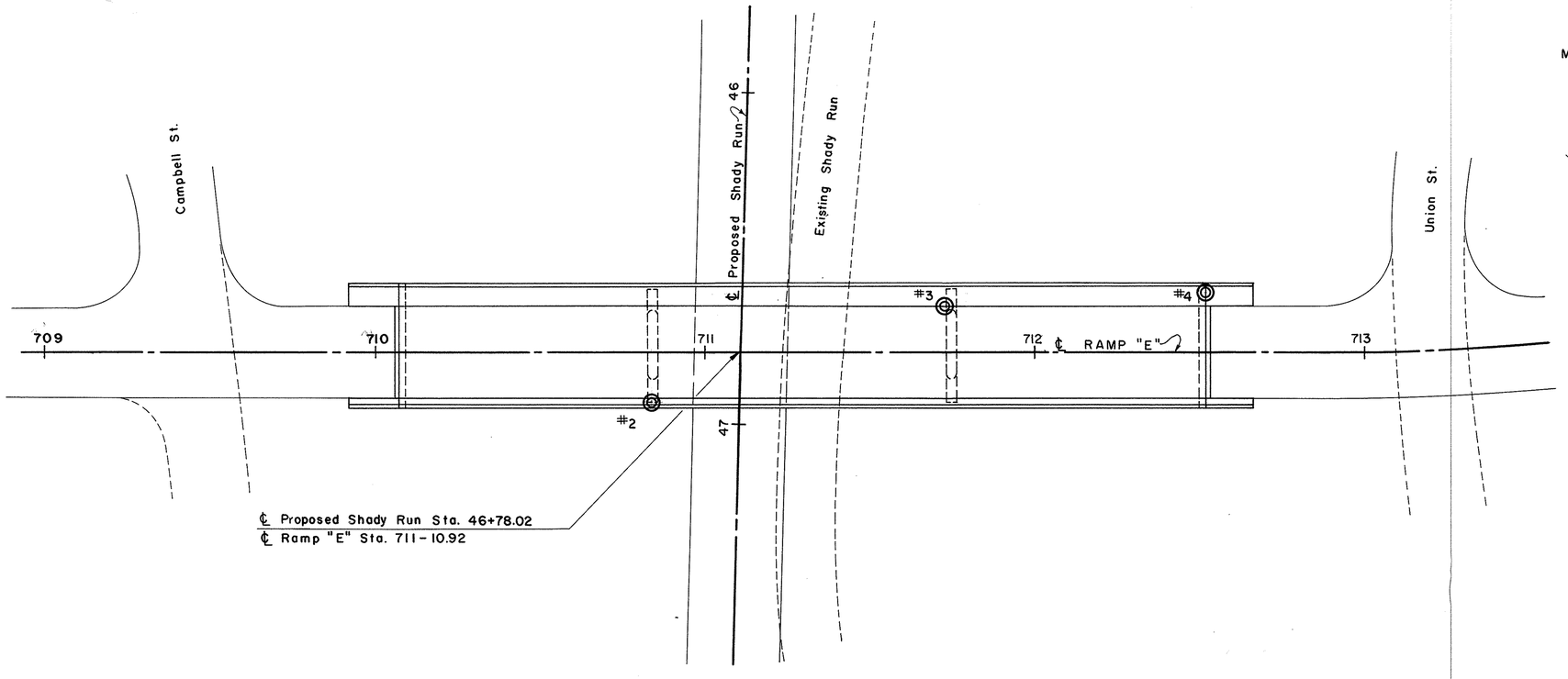
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0792
RAMP "E" OVER RELOC. SHADY RUN RD.
SEC. MAH.- 680-6.98, I-680-9 (6) 240

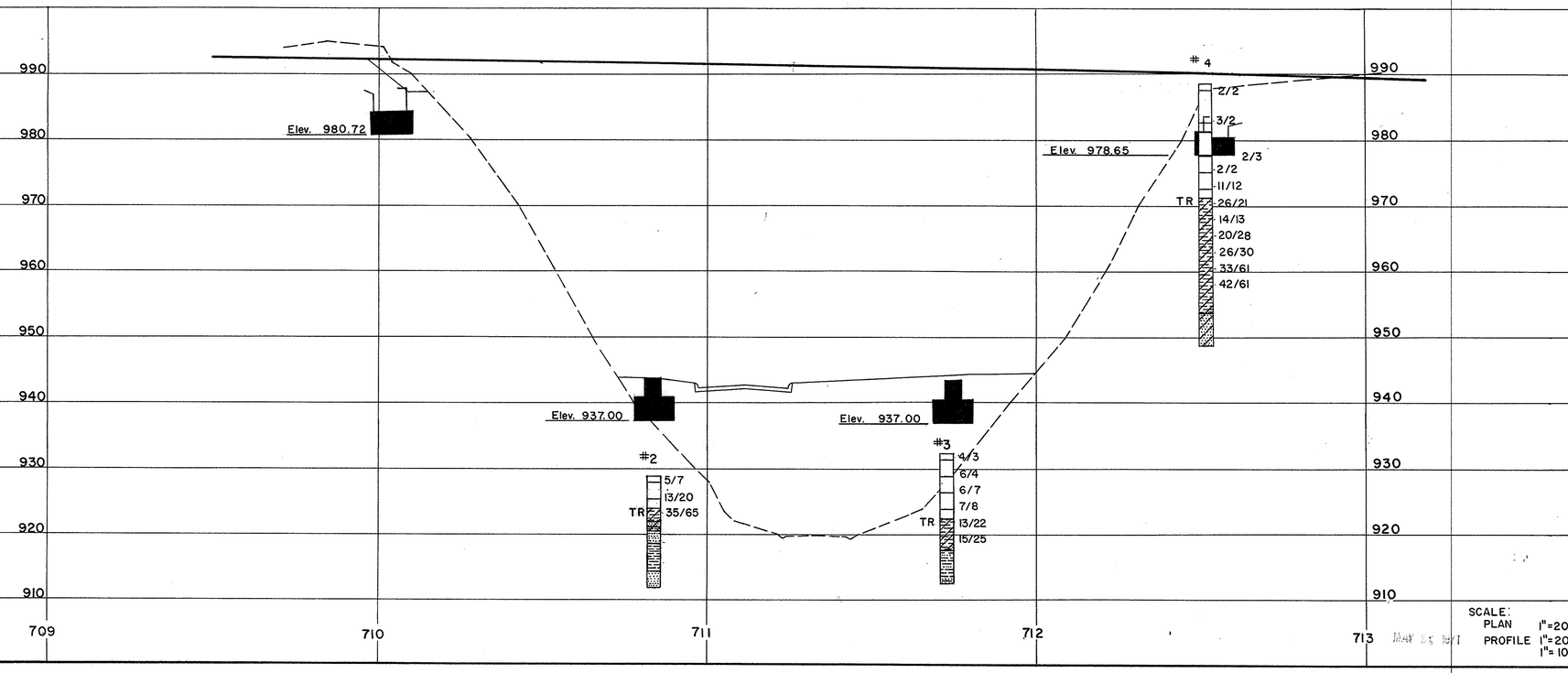
CHECKED BY	REVIEWED BY	DATE
S.J.B	C.R.L.	11/15/65

MAY 26, 1971

MICROFILMED
JUL 12 1979
REPRODUCTION

MAH-680-6.98





SCALE:
PLAN 1"=20'
PROFILE 1"=20' HORIZ.
1"=10' VERT.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0792
RAMP "E" OVER RELOC. SHADY RUN
SEC. MAH-680-6.98 I-680-9-(6)240

PLAN AND PROFILE

REVIEWED BY C. R. L. 11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

LOG OF BORING

DATE STARTED 6-5-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 6-5-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE Unable to Tell
BORING NUMBER 2 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER ____ HRS. Backfilled

STATION & OFFSET 710+84, 15.0' Rt. Bridge No. MAH 680-1347 SURFACE ELEVATION 928.9

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
928.9	0											
926.9	2	4-5-7	Topsoil and limestone fragments, (fill) moist - medium stiff	1			Visual					
923.9	4	8-13-20	Brown and gray silty clay with limestone fragments and weathered shale, moist - stiff	2	18	6	6	53	17	34	14	17
921.9	6	35-65	Brown and gray weathered shale	3			Visual					
920.9	8		White sandstone, fine-grained, thin bedded(1/2"to 2"averaging1"trace broken), med. hard, weathered Gray shale, broken, medium hard, weathered									
918.5	10	86%	Light gray sandstone, fine-grained, thin bedded (1-1/2"to 5"averaging 3"), hard, trace interbedded hard gray shale									
914.4	12		Gray shale, 1/2" pieces, trace broken, hard									
911.9	14											
	16	80%	Light gray sandstone, fine-grained, thin bedded (1" to 4" averaging 2"), hard									
	18	% Recovery	Boring Completed									
	20											

LOG OF BORING

DATE STARTED 6-6-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 6-6-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE Could Not Tell
BORING NUMBER 3 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER ____ HRS. Backfilled

STATION & OFFSET 711+73, 14'Lt. Bridge No. MAH 680-1347 SURFACE ELEVATION 932.4

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
932.4	0											
	2	3-4-3	Cinders, brick, topsoil and gravel, moist - loose	1			Visual					
927.9	4	3-6-4-	Cinders, brick, topsoil and gravel, moist - loose	2			Visual					
	6	6-6-7	Brown and gray gravelly sandy silty clay, moist - stiff	3	29	10	5	28	28	32	12	16
	8											
		6-7-8	Brown and gray gravelly sandy silty clay, moist - stiff	4	38	11	5	25	21	32	11	14
922.4	10											
	12	10-13-22	Brown and gray weathered shale	5			Visual					
	14	9-15-25	Brown and gray weathered shale	6			Visual					
917.4	16		Interbedded gray shale and light gray sandstone (75-25%), shale, siliceous, 1" to 2" pieces hard, sandstone fine-grained, thin bedded (1" to 3"), hard									
	18											
912.4	20	76%										
	22	% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 6-4-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 6-4-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 4 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER ____ HRS. Backfilled

STATION & OFFSET 712+52, 18'Lt. Bridge No. MAH 6.80-1347 SURFACE ELEVATION 988.6

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
988.6	0											
	2	2-2-2	Cinders, slag and some clay, dry - loose	1			Visual					
	4											
	6	3-2-2	Cinders, slag and some clay, dry - loose	2			Visual					
	8											
	10											
	12	3-2-3	Cinders, slag and some clay, dry - loose	3			Visual					
	14	4-2-2	Cinders, slag and some clay, dry - loose	4			Visual					
973.6	16	7-11-12	Brown sandy silty clay dry- hard	5	8	8	12	35	37	29	10	12
971.1	18											
	20	22-26-21	Brown and gray weathered shale	6			Visual					
	22	16-14-13	Brown and gray weathered shale	7								
	24	14-20-28	Brown and gray weathered shale	8								
	26	14-26-30	Brown and gray weathered shale	9								
	28	17-23-61	Brown and gray weathered shale	10								
	30	20-42-82	Brown and gray weathered shale	11								
	32											
	34											
953.6	36		Brown and light gray sandstone, fine-grained, thin bedded, (1" to 2-1/2" averaging 1-3/4"), medium hard, weathered									
	38	96%										
948.6	40											
	42	% Recovery	Boring Completed									

MAY 26 1971

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0792
RAMP "E" OVER RELOC. SHADY RUN RD.
SEC. MAH.-680-6.98, I-680-9.(6)240

BORING DATA

REVIEWED BY C.R.L. DATE 11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

MAHONING COUNTY
MAH.-680-6.98

Geology of the Site

The site is located within the upper reaches of the west valley slopes of the Mahoning River. The difference in surface elevation within the area explored is on the order of 10-ft., sloping downward from south to north. Bedrock was encountered at a depth of about 20-ft. below existing grade except at the north abutment where there is about 16-ft. of overburden. The bedrock consists of Pottsville sandstones and shales of Pennsylvania age.

Exploration

The exploration, consisting of five drive sample-core-borings, one at each end of each substructure unit, was made between April 29 and May 1, 1965.

Investigational Findings

The borings disclose shallow overburden overlying sandstone and shale bedrock. The thickness of the overburden at the points investigated varies between 16 and 20-ft., with the minimum thickness penetrated only at the north abutment. Three to five-ft. of loose fill, consisting of sandy clay and slag was encountered in holes No. 1 and 2. The undisturbed overburden is composed of medium stiff to hard sandy clays containing varying amounts of gravel and/or sandstone fragments. The undisturbed overburden was derived mainly from relatively local sandstone and shale terrains, transported and deposited by glacial and glacio-fluvial processes.

In general the bedrock surface slopes quite uniformly toward the north; the differences in elevation being on the order of 10-ft.

The exploration was carried to relatively shallow depths in bedrock, the maximum penetration bring 16-ft. at hole No. 4., which was necessary due to the depth of cut in this area. Approximately the upper 6-ft. of the rock is rather highly weathered and moderately to badly broken. The degree of weathering gradually decreases with increased depth.

At the south abutment, the uppermost layers of rock consist of broken soft to brittle shales over fine-grained sandstones. North of this substructure unit, the upper most layers consist of fine-grained sandstones with some intercalated siliceous shales appearing at the proposed locations of the north pier and north abutment. Below subgrade the elevation of the piers, the bedrock, consists of fine grained sandstones.

The borings revealed no evidence of ground water within the depths explored.

LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procurred for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
8"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)		0.074mm (No. 200 sieve)	0.005mm

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

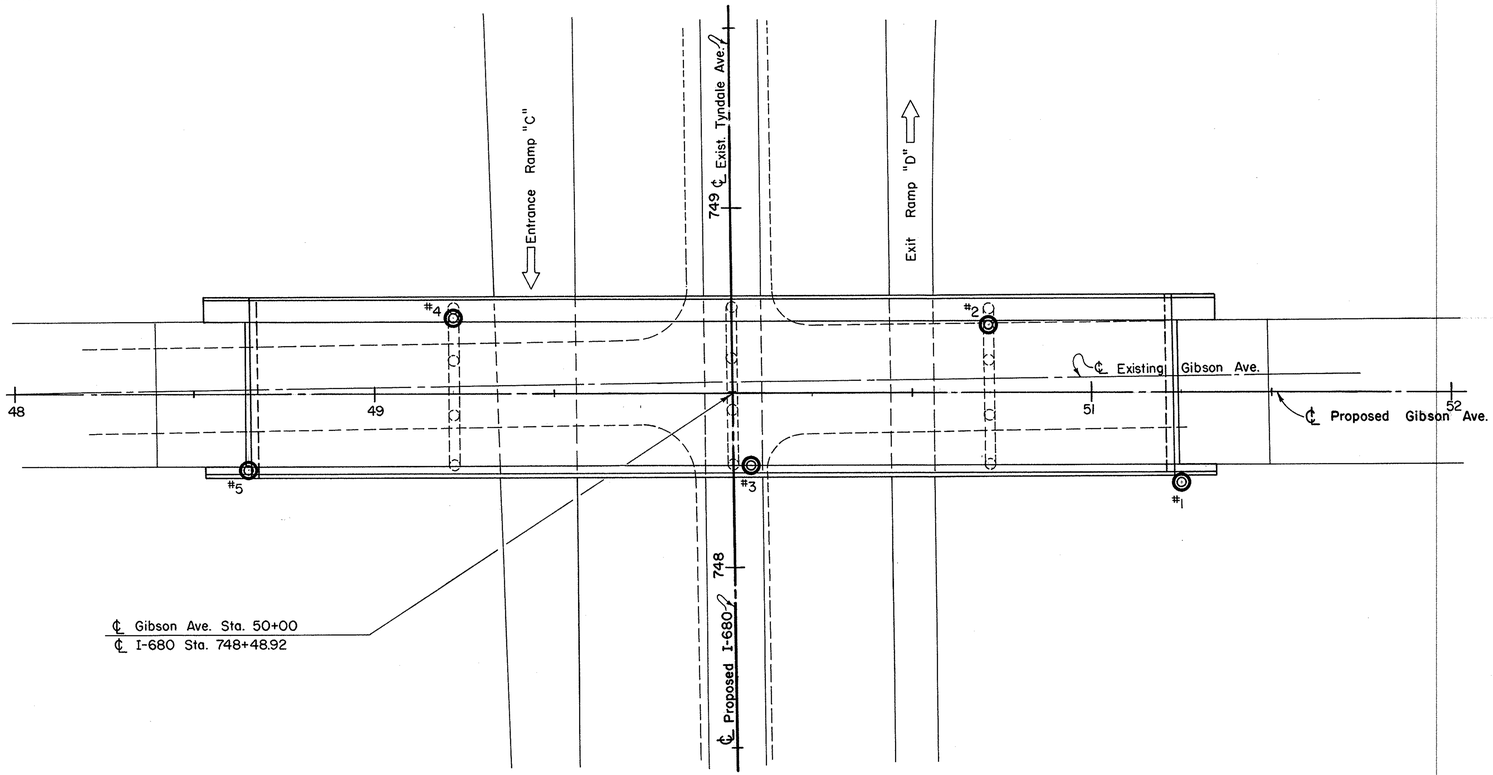
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0723
UNDER GIBSON AVE.
SEC. MAH-680-6.98, I-680-9(6)240

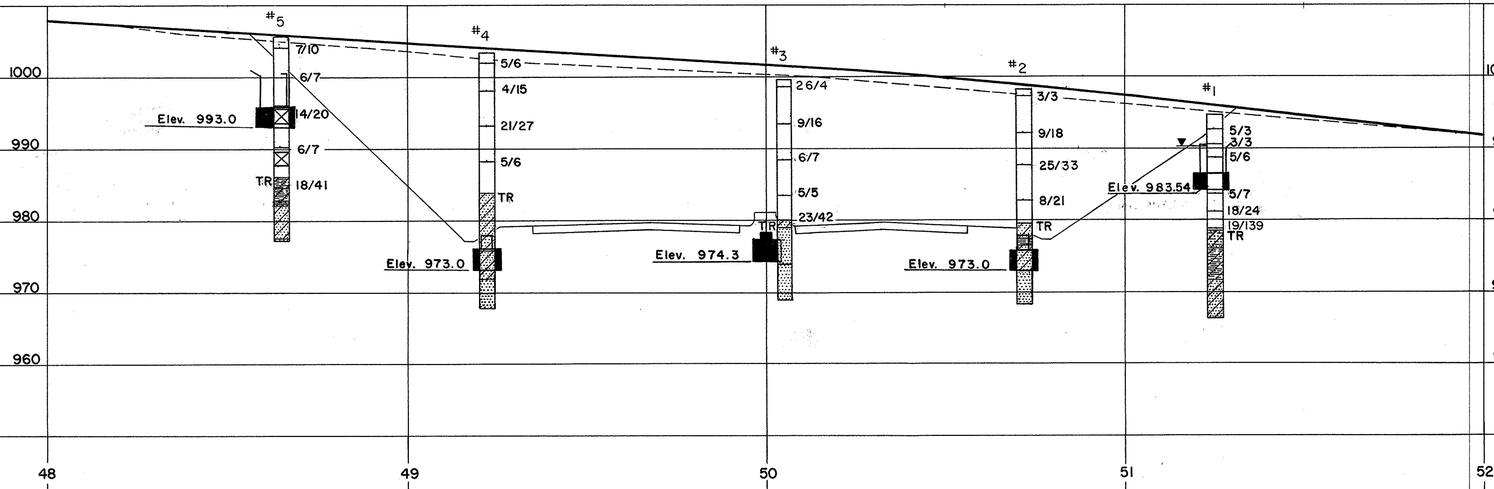
CHECKED BY	REVIEWED BY	DATE
S.J.B	C.R.L.	11/15/65

MAY 26 1971

MICROFILMED
JUL 1 8 1979
REPRODUCTION

MAH-680-6.98





MAY 26 1971

SCALE:
PLAN 1"=20'
PROFILE 1"=20' HORIZ.
1"=10' VERT.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH. 680-0723
UNDER GIBSON AVE.
SEC. MAH.-680-6.98, I-680-9-(6)240

PLAN AND PROFILE

		REVIEWED BY	DATE
		C.R.L.	11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

LOG OF BORING

DATE STARTED 4-29-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 4-29-65 CASING: LENGTH HSA DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 1 CORE BARREL: TYPE NXM SIZE 2-1/8"I. D. AFTER HRS. 990.1
STATION & OFFSET 51+25, 25'R. Centerline Bridge NO. MAH 680-1418 SURFACE ELEVATION 994.6

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
994.6	0											
993.6			Blacktop and slag, (fill)	1	Visual							
991.6	2	11-5-3	Brown silty sand and gravel with slag, (fill) moist - loose	2	46	18	18	-18-				10
989.6	4	3-3-3	Brown sandy silt clay with sandstone fragments, moist - stiff	3	26	7	15	30	22	31	12	26
	6	5-5-6	Brown and gray sandy silty clay with sandstone fragments, moist - medium stiff	4	20	8	18	34	20	25	8	17
	8											
984.6	10											
	12	3-5-7	Brown and gray sandy clayey silt, moist - medium stiff	5	10	10	20	39	21	23	7	15
982.1	14	12-18-24	Brown and gray gravelly sandy silt, moist - very stiff	6	22	9	18	35	16	23	5	13
978.5	16	10-19-39	Brown and gray gravelly sandy silt, moist - very stiff	7	14	9	20	38	19	23	5	14
		100	Gray weathered sandstone and shale	8	Visual							
976.1	18											
	20	67%	Gray siliceous shale, horizontally bedded, 1/2"to 3" averaging 1" pieces, somewhat broken, medium hard, weathered, traces of iron oxide on many bedding planes, with fossil plant stems, 1/2" layer of fine-grained, finely micaceous, medium hard, weathered tan sandstone at 975.3' & 975.0'.									
971.8	22											
	24	63%	Light brown and light gray sandstone, color banded, (1-6" gray bed at 968.1', 1-2"gray bed at 967.5'& 1-8"gray bed at 967.1'), thin bedded (1" to 8", averaging 3"), fine-grained, horizontally bedded; brown sandstone slightly friable, medium hard, weathered, gray sandstone, medium hard.									
	26											
966.1	28	100%										
	30	% Recovery	Boring Completed									
	32											
	34											

LOG OF BORING

DATE STARTED 5-1-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-1-65 CASING: LENGTH HSA DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 3 CORE BARREL: TYPE NXM SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 50+05, 20'R. NO. MAH 680-1418 SURFACE ELEVATION 999.5

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
999.5	0											
998.5		50-26	Blacktop, slag and sandstone, (street)	1	Visual							
	2	4	Brown gravelly sandy clay, moist -medium stiff	2	16	13	21	33	17	23	7	12
994.5	4											
	6	4-9-16	Brown and gray sandy, clayey silt, moist- stiff	3	14	9	21	38	18	22	5	12
989.5	8											
	10											
	12	5-6-7	Gray gravelly, sandy, clayey silt, moist - stiff	4	16	11	19	36	18	18	4	10
	14											
	16	4-5-5	Gray gravelly, sandy, clayey, silt, moist - stiff	5	37	8	14	28	13	18	4	11
980.0	18											
979.0	20	23-42	Brown weathered sandstone	6								
	22		Light gray sandstone, fine-grained, horizontally bedded, thin bedded (2" to6", averaging 3-1/2"), medium hard, high angle joints near top and middle of first run, joints friable, medium hard, coarse mica and carbon flakes on some bedding planes, with 0.2'bed of hard argillaceous gray shale at 972'									
	24	66%										
	26											
	28	96%										
969.0	30											
	32	% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 4-30-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 4-30-65 CASING: LENGTH HSA DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 5 CORE BARREL: TYPE NXM SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 48+65, 21'Rt. Centerline, NO. MAH 680-1418 SURFACE ELEVATION 1005.6

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1005.6	0											
1002.2			Concrete									
	2	3-7-10	Brown and gray gravelly, sandy clayey silt, moist - very stiff	1	17	9	17	35	22	25	7	13
	4											
	6	5-6-7	Brown and gray gravelly, sandy clayey silt, moist - very stiff	2	14	9	19	39	19	23	7	14
	8											
996.1	10											
	12	7-14-20	Brown gravelly, sandy clayey silt, moist - stiff	3	20	9	18	35	18	23	6	13
993.6	14	S-1	Gray gravelly sandy clayey silt, moist - stiff	S1	32	8	14	31	15	24	7	
991.1	16	5-6-7	Gray gravelly sandy silt, moist - stiff	4	20	10	18	36	16	18	4	11
	18	S-2	Gray gravelly sandy silt, moist - stiff	S2	26	10	16	36	12	17	5	
986.1	20											
984.6	22	10-18-41	Gray weathered shale	5	Visual							
982.8		90%	Gray shale, badly broken, soft to brittle, weathered, with fossil plant stems.									
982.6	24		Tan sandstone, fine-grained, thin bedded (2"+), horizontally bedded, medium hard, weathered.									
982.1	26	78%	Gray shale, medium hard, weathered.									
977.4	28	100%	Tan sandstone, fine-grained, thin bedded (1"+), medium hard, weathered.									
977.1	30		Tan sandstone, fine-grained, thin bedded (2" to 2-1/2"), horizontally bedded, partly broken, medium hard, weathered.									
	32		Light gray sandstone, fine-grained, thin bedded (1-1/2"+), micaceous, hard.									
		% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 4-30-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 4-30-65 CASING: LENGTH HSA DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 2 CORE BARREL: TYPE NXM SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 50+72, 19'Lt., Centerline, Bridge No. MAH 680-1418 SURFACE ELEVATION 998.2

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
998.2	0											
997.7	2		Topsoil, (fill) moist - loose	1	Visual							
	2	3-3	Brown silty sand with slag, (fill) moist - loose	2	22	9	41	19	9		NP	16
993.2	4											
	6	7-9-18	Brown and gray gravelly sandy clayey silt, moist - very stiff to hard	3	21	11	20	30	18	22	6	14
	8											
	10	14-25-33	Brown and gray sandy silt, moist - very stiff to hard	4	14	9	20	39	18		NP	12
	12											
983.7	14											
	16	7-9-21	Gray gravelly sandy silt with sandstone fragments, moist - stiff	5	29	8	16	33	14	17	2	12
979.5	18											
977.4	20	83%	Tan sandstone, fine-grained, horizontally bedded, thin-bedded (1/2" to 3", averaging 1-1/4"), friable, soft, weathered strongly oxidized along bedding planes.									
976.5	22		Gray siliceous shale, 1/2" pieces, medium hard with fossil plant stems.									
	24	38%	Tan sandstone, fine-grained, horizontally bedded, thin-bedded (1"+), badly broken, soft, friable, weathered.									
973.0	26		Tan sandstone, fine-grained, cross bedded, thin-bedded, (1"to 4", averaging 2-1/2"), medium hard.									
969.9	28											
969.2		100%	Light gray sandstone, fine-grained, thin bedded, top 3" shaley, hard.									
968.2	30		Tan sandstone, fine-grained, horizontally bedded, thin bedded (1"to 3", averaging 1-1/2"), medium hard.									
	32											
		% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 4-30-65 SAMPLER: TYPE Split Spoon DIA. 2"O. D. WATER ELEVATION
DATE COMPLETED 5-1-65 CASING: LENGTH HSA DIA. 3.5"I. D. IMMEDIATE None
BORING NUMBER 4 CORE BARREL: TYPE NXM SIZE 2-1/8"I. D. AFTER HRS. Backfilled
STATION & OFFSET 49+22, 21'L., NO. MAH 680-1418 SURFACE ELEVATION 1003.3

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
1003.3	0											
1002.9			Concrete									
	2	3-5-6	Brown and gray gravelly, sandy clayey silt, moist - medium stiff	1	21	9	18	34	18	22	5	16
999.3	4											
	6	3-4-15	Brown and gray gray gravelly sandy clayey silt with broken sandstone, moist - medium stiff	2	24	9	19	34	14	21	5	14
994.3	8											
	10	20-21-27	Brown and gray gravelly sandy clayey silt, moist - hard	3	39	9	13	25	14	21	5	11
	12											
989.3	14											
	16	4-5-6	Gray sandy silt, moist - medium stiff	4	14	10	18	40	18	18	3	13
983.9	18											
	20		Light brown sandstone, fine-grained, horizontally bedded, thin-bedded (1/2"to 2", averaging 1"), broken, finely micaceous, friable, weathered.									
	22											
	24	26%										
	26	50%										
975.9	28											
	30	68%	Light brown sandstone, fine-grained, horizontally bedded, thin-bedded, (1-1/2"to 4", averaging 2-1/2"), finely micaceous, with iron oxide films on some bedding planes, medium hard, weathered.									
971.9	32		Light gray sandstone, fine-grained, horizontally bedded, shaley(1-1/4"+beds), brittle, with fine disseminated carbon on bedding planes.									
971.6	34	105%	Tan sandstone, fine-grained, lower 1-ft. cross bedded, thin bedded (2"to 3"), medium hard, iron oxide on some bedding planes, with gray shale streaks.									
967.8	36											
	38	% Recovery	Boring Completed									

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BORING DATA

		REVIEWED BY	DATE
		C.R.L.	11/15/65

MICROFILMED
JUL 12 1979
REPRODUCTION

MAHONING COUNTY
MAH.—680—6.98

Geology of the Site

The site is located within the upper reaches of the westerly valley slopes of the Mahoning River. The difference in surface elevations within the area explored is on the order of 4-ft. sloping downward from south to north. The bedrock is shallow and consists of Pottsville sandstones and some shales of Pennsylvania age.

Exploration

The exploration consisted of six drive sample-core-borings, one at each end of each substructure unit, made between May 9 and 17, 1965.

Investigational Findings

The borings disclose a varying depth of overburden overlying a predominately sandstone bedrock. The thickness of the overburden at the points investigated varies from 7.5 to 28.5-ft., of which 0 to 5-ft. consists of man-made fill. The fill is comprised of loose to medium dense and stiff sandy clay and slag, sand and clay, and sandy clay with gravel. The fill, when present, is underlain by medium-stiff to very stiff sandy clay with or without gravel and/or sandstone fragments, and silty clay with fine sand seams and very dense sand and gravel and silty sand containing sandstone fragments. The undisturbed overburden was derived mainly from relatively local shale and sandstone terrains, transported and deposited by glacial and glacio-fluvial processes.

In general, the bedrock surface slopes downward to the north. The average difference in elevation between the south and north abutments is about 15-ft. The borings also disclose that the elevation of the rock surface at opposite ends of the individual sub-structure units varies between 6 and 13-ft.

The exploration was carried well into bedrock, the maximum penetration being 23.5-ft. at the location of hole No. 2. Approximately the upper 5 to 8-ft. of rock is rather highly weathered and moderately to quite badly broken. The degree of weathering gradually decreases with increasing depth.

Within the area investigated, the bedrock consists almost entirely of fine-grained sandstones and includes at least two thin zones (0.5-ft.+) of pebble conglomerate. Some shale, mostly interbedded with sandstone, occurs below subgrade elevation particularly in the north half of the site.

Free water was encountered in holes No. 3 and 5 at about elevation 968.

LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- H HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X=NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y=NUMBER OF BLOWS FOR SECOND 6-INCHES.
- ⊠ INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

GENERAL INFORMATION

Drive Sample Borings — Drive-Press Sample Borings — Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procurred for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
	8"	3" 2.0mm	0.42mm		0.074mm	0.005mm
		No. 10 sieve	No. 40 sieve		No. 200 sieve	

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

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CHECKED BY	REVIEWED BY	DATE
S.J.B	C.R.L.	11/15/65

MAY 26 1971

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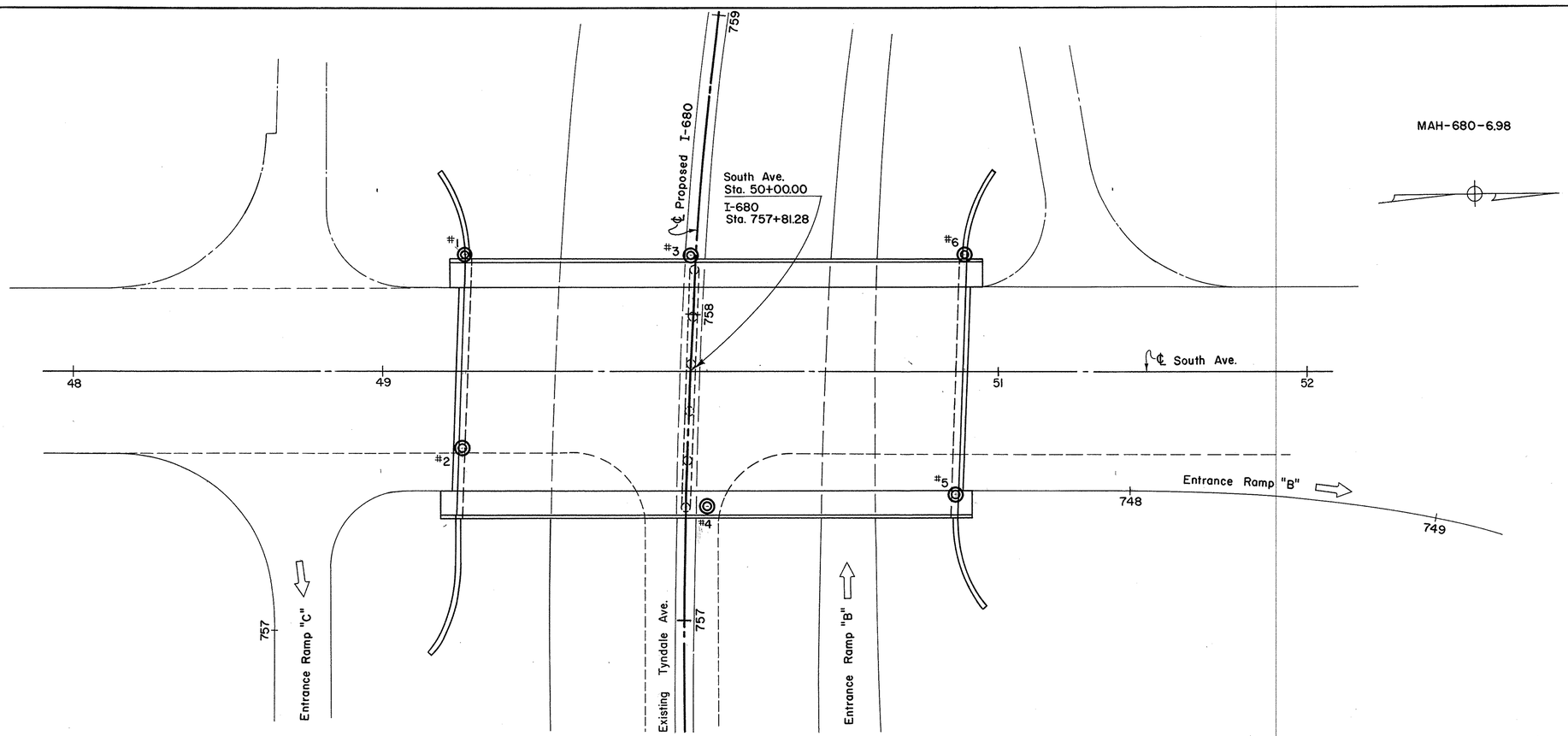
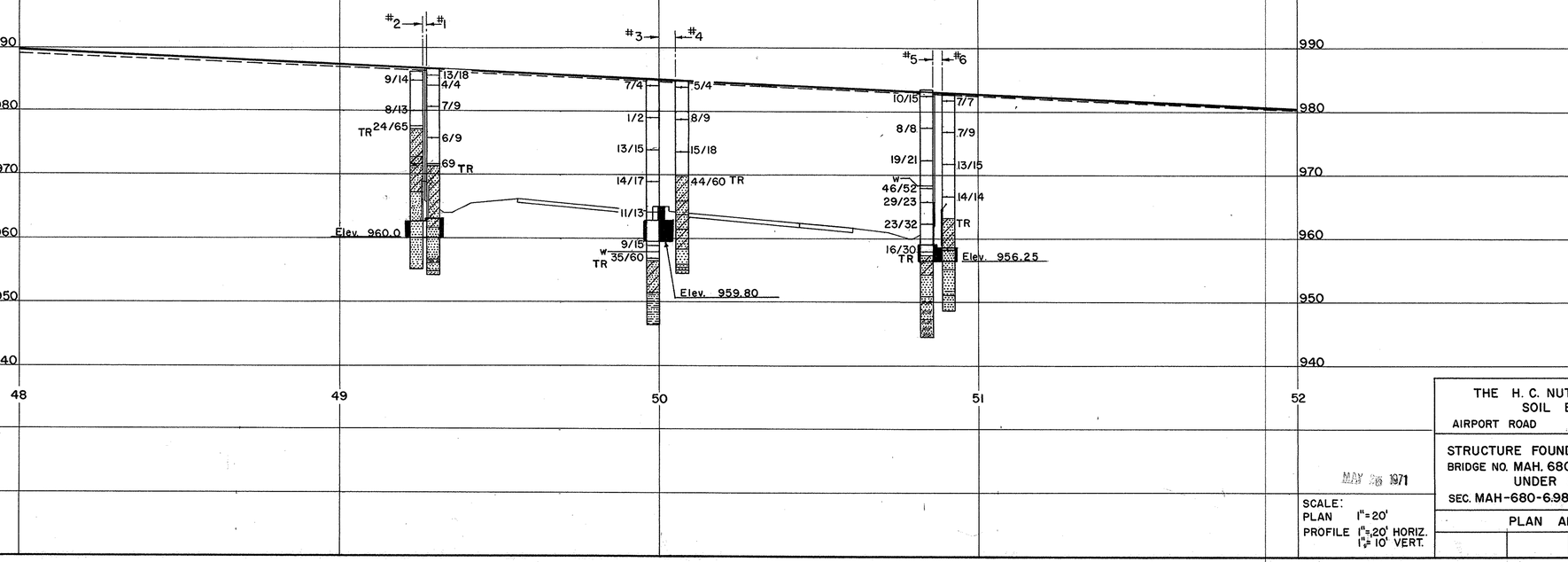
MAH-680-6.98





MAY 28 1971

SCALE:
PLAN 1"=20'
PROFILE 1"=20' HORIZ.
1"=10' VERT.

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PLAN AND PROFILE

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LOG OF BORING

DATE STARTED 5-9-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-9-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 1 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER ____ HRS. Backfilled
STATION & OFFSET 49+27, 38'Lt. Bridge No. MAH 680-1435 SURFACE ELEVATION 986.6

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
986.6	0											
985.1	2	12-13-18	Slag and sand, (fill) dry - medium dense	1		Visual						
	4	4-4-4	Brown clayey silt, moist - medium stiff	2	5	3	9	59	24	28	7	21
981.6	6	7-7-9	Brown sandy silty clay, moist - stiff	3	10	9	20	38	23	24	8	14
976.6	8											
	10	3-6-9	Brown gravelly clayey sand with sandstone fragments, very moist - medium stiff	4	34	13	13	25	15	24	5	27
971.6	12											
971.1	14	69	Brown and gray silty clay with sandstone fragments, moist - very stiff	5	36	6	20	20	18	26	9	11
	16		Light brown sandstone, fine-grained, thin bedded (1"to 6", averaging 2"), some broken, weathered, friable, with evidence of clay seams									
	18											
	20	18%										
	22											
	24	88%										
961.6	26		Light brown sandstone, fine-grained, thin bedded (1"to 2-1/2", averaging 1-1/2"), cross-bedded, high angle joint at 958, medium hard, with pebble conglomerate 960.3-960.0									
	28	102%										
958.6	30		Light gray shale, 2"to 3" pieces, trace iron oxide stain, hard									
958.0			Light brown, trace gray sandstone, fine-grained, thin-bedded (8", 6" & 2-1/2"), iron oxide stained, medium hard									
954.6	32	100%	Light gray sandstone, fine-grained, thin-bedded (1/2"to3", avg. 1"), trace mica flakes on bedding planes, hard									
954.1	34	% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 5-17-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-17-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 2 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER ____ HRS. Backfilled
STATION & OFFSET 49+26, 25"Rt., Bridge No. MAH 680-1435 SURFACE ELEVATION 986.1'

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
986.1	0		Concrete sidewalk									
985.6	2	6-9-14	Brown and gray sandy clayey silt, moist- stiff	1	16	8	20	37	19	23	6	13
	4											
	6	4-8-13	Brown and gray sandy clayey silt, moist - stiff	2	11	11	20	40	18	22	6	14
978.6	8											
977.1		18-24-65	Brown and gray clayey sand with shale fragments,	3	32	10	12	31	15	28	9	11
	10		Tan sandstone, fine-grained, thin bedded (1/4" to 5"averaging 2"), weathered, medium hard									
	12	96%										
972.7	14											
971.6			Light gray sandstone, fine-grained thin bedded(1/2"+), cross bedded, weathered, medium hard									
971.3	16		Tan shale, broken, weathered, soft									
	18	80%	Tan sandstone, fine-grained, thin bedded (3/4"to 3"averaging 1-1/2"), trace broken, weathered, medium hard, with evidence of shale at bottom									
967.1	20		Light gray sandstone, fine-grained, thin bedded (1/2" to 2-1/2"averaging 1-1/2"), fine mica on bedding planes, hard									
	22											
	24	60%										
	26											
	28	130%										
	30	107%										
955.1	32	% Recovery	Boring Completed									

LOG OF BORING

DATE STARTED 5-12-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-12-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 3 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER ____ HRS. Backfilled
STATION & OFFSET 50+00, 38'Lt., Bridge No. MAH 680-1435 SURFACE ELEVATION 985.0

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
985.0	0											
	2	7-7-4	Brown gravelly, clayey sand, (fill) moist - stiff	1	28	10	19	28	15	24	8	9
	4											
980.0	6	2-1-2	Brown lean clay, moist - medium stiff	2	0	2	5	57	36	40	21	25
	8											
975.0	10											
	12	10-13-15	Mottled brown and gray clayey silt, moist - stiff	3	4	2	6	40	48	22	2	18
970.0	14											
	16	11-14-17	Mottled brown and gray silty clay, moist - stiff	4	0	8	9	19	64	56	29	24
965.0	18											
	20											
	22	8-11-13	Gray clay with silt lenses, (varved) moist - stiff	5	0	0	2	36	62	35	15	23
	24											
	26	6-9-15	Gray clay with silt lenses, (varved) moist - stiff	6	0	1	1	33	65	36	14	26
958.0	28		Gray silty sand with sandstone fragments, wet - very									
956.5		17-35-60	dense	7	25	5	27	35	8		NP	24
	30		Brown and gray sandstone (75%brown), fine-grained, thin bedded (1/2"to 3"averaging 1"), weathered, medium hard, with 0.2' soft pulverized gray shale at bottom									
	32	28%										
951.5	34		Interbedded gray shale and gray fine-grained sandstone (75% shale), thin bedded (1/8" to 2", averaging 3/4"), trace broken, medium hard (shale) to hard (sandstone)									
	36											
	38	76%										
946.5	40	% Recovery	Boring Completed.									
	42											

LOG OF BORING

DATE STARTED 5-13-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-13-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 4 CORE BARREL: TYPE N.X.M SIZE 2-1/8"I.D. AFTER ____ HRS. Backfilled
STATION & OFFSET 50+05, 44'Rt. Bridge No. MAH 680-1435 SURFACE ELEVATION 984.9

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
984.9	0											
	2	5-5-4	Brown sandy clay and slag, (fill) moist - loose	1		Visual						
	4											
979.9	6	5-8-9	Brown gravelly, sandy silt, moist - stiff	2	26	8	17	31	18	22	6	14
	8											
974.9	10											
	12	10-15-18	Brown clayey sand and gravel, with sandstone fragments, moist - stiff	3	49	5	17	19	10	21	5	12
	14											
969.9	16	14-44-60	Brown weathered sandstone	4		Visual						
	18											
965.9	20		Light gray sandstone, fine-grained, thin bedded (2"to 4" averaging 3-1/4"), iron oxide stained, weathered, medium hard									
963.8	22	86%	Light gray sandstone, fine-grained, thin bedded (1/4"to 2-1/2" averaging 3/4"), cross bedded, mica flakes and iron oxide on bedding planes, weathered, medium hard									
961.5	24		Tan sandstone, fine-grained, thin bedded, (2"to 3"), little broken, weathered, medium hard with near vertical joint at 962									
958.2	26	84%										
	28		Light gray sandstone, fine-grained, thin bedded (3/4"to 3" averaging 2-1/4"), some bedding planes stained with iron oxide to depth of 1"+, hard, with 1" layer of hard gray pebble conglomerate 0.2' above bottom									
955.9	30		Light gray sandstone, fine-grained thin bedded(one 6" layer)* of carbon particles w/rare finely *									
955.6			Gray conglomeritic sandstone, thin-bedded(1"), broken, fine sand matrix and pebble size aggregate									
954.4			Light gray sandstone, fine-grained, thin bedded(1" to 2-1/2" averaging1-1/2), w/ carbon on bedding**									
	32	113%	% Recovery									
	34		Boring Completed									

/* broken shells, w/pinhole porosity, hard
/** planes, hard

MAY 26 1971

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MAH.680-0705
UNDER SOUTH AVE.
SEC. MAH.-680-6.98, I-680-9(6)240

BORING DATA

REVIEWED BY C.R.L. DATE 11/15/65

MAH-680-6.98

37
38
3
4

MICROFILMED
JUL 12 1979
REPRODUCTION

LOG OF BORING

DATE STARTED 5-13-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-13-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE 968.4
BORING NUMBER 5 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER HRS. Backfilled

STATION & OFFSET 50+86, 40'Rt., Bridge No. MAH 680-1435 SURFACE ELEVATION 983.4

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
983.4	0											
~~982.9~~		22	~~Slag and sand, (fill)~~	1		Visual						
	2	10-15	Brown silty clay, moist - medium stiff	2	1	4	8	57	30	27	8	20
978.4	4											
	6	8-8-8	Brown sandy clayey silt with broken sandstone, moist - stiff	3	15	9	20	38	18	22	6	14
	8											
973.4	10											
	12	12-19-21	Brown sandy silt, moist - dense	4	13	5	19	44	19	21	3	19
	14											
968.4												
~~966.9~~	16	46-52	Brown gravelly silty sand and sandstone fragments, moist - very dense	5	42	10	28	12	8		NP	12
	18	29-29-23	Gray silty clay, moist - very stiff	6	5	4	5	38	48	31	12	12
	20											
	22	16-23-32	Gray silty clay, moist - hard	7	14	3	5	34	44	33	14	14
	24											
957.9		16										
~~957.4~~	26	30	Gray gravelly silty sand, moist - very dense	8	14	4	9	34	39	31	14	21
	28	33%	Tan sandstone, fine-grained, thin bedded (1-1/2" to 3" averaging 2"), weathered, medium hard, with 0.2' layer of pulverized clay and sandstone at bottom	9	29	15	27	-29-				16
954.4												
	30		Gray sandstone, fine-grained, thin-bedded (1" to 3" averaging 1-1/2"), 50% broken, hard, with 0.2'± layer of pulverized gray shale in bottom 1/4 of run									
950.9	32	54%										
	34		Interbedded gray sandstone and brown shale (55% sandstone), fine-grained, thin-bedded, sandstone hard, shale weathered and soft									
947.4	36	26%										
	38		Interbedded gray sandstone and shale, (50-50) sandstone fine-grained, thin bedded, shale broken, weathered, medium hard, jointed									
944.4		60%										
	40	% Recovery	Boring Completed									
	42											

LOG OF BORING

DATE STARTED 5-12-65 SAMPLER: TYPE Split Spoon DIA. 2"O.D. WATER ELEVATION
DATE COMPLETED 5-12-65 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE None
BORING NUMBER 6 CORE BARREL: TYPE N.X.M. SIZE 2-1/8"I.D. AFTER HRS. Backfilled

STATION & OFFSET 50+89, 38'Lt. Bridge No. MAH 680-1435 SURFACE ELEVATION 982.7

Elev.	Depth	Stn. Pen. (N)	Description	Sa. No.	Physical Characteristics: % Agg.	% CS	% FS	% Silt	% Clay	LL	PI	WC
982.7	0											
	2	3-7-7	Sand, clay and wood, (fill) moist - medium dense	1		Visual						
	4											
977.7												
	6	6-7-9	Brown gravelly, silty clay, moist - medium stiff	2	16	4	8	44	28	34	15	23
	8											
972.7	10											
	12	10-13-15	Brown and gray silty clay, moist - stiff	3	1	0	1	38	60	41	18	24
	14											
967.7												
	16	12-14-14	Brown and gray silty clay, (varved) moist - stiff	4	1	1	0	42	56	35	13	24
	18											
963.2	20											
	22		Light brown sandstone, fine-grained, thin bedded (1/2" to 5" averaging 2-1/2"), little broken, cross bedded, weathered, friable, with evidence of clay in run									
	24	62%										
958.2												
	26		Light brown sandstone, fine-grained, thin bedded, badly broken with evidence of clay in run and clay-ironstone nodules									
955.2	28	57%										
			Gray sandstone, fine-grained, 1" to 4" averaging 2-1/2", broken at bottom, hard, 1-1/2" layer clay-ironstone near middle, with evidence of clay seams, with trace soft gray shale at bottom									
	30	80%										
951.2	32											
			Gray sandstone, fine-grained, thin-bedded, 1/4"to 2" averaging 3/4", some broken, high angle joint rear middle, joint surfaces weathered, hard, evidence of shale in run									
948.7	34	80%										
	36	% Recovery	Boring Completed									
	38											
	40											

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BORING DATA

		REVIEWED BY	DATE
		CRL	11/15/65