

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

PART II

For PART I See ASD-71-11.12

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-80S-6(9)176

1
75

MEDINA COUNTY
MED-80S-5.14 PART II

I-80S-6(9)176

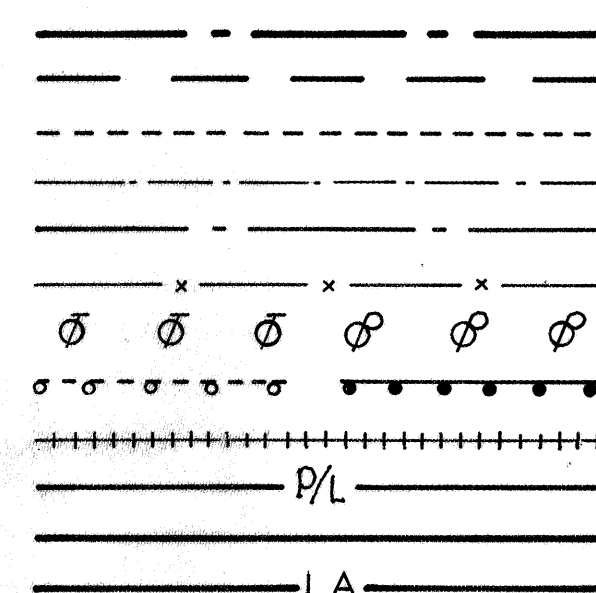
LIMITED ACCESS

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 Section 5511.02, of the Revised Code of Ohio.

WEIGH STATIONS
MEDINA COUNTY
GUILFORD TOWNSHIP

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
CENTER LINE OR BASE LINE
FENCE LINE
POLE LINE (TELEPHONE & POWER)
GUARD RAIL- EXISTING & PROPOSED
RAILROAD
PROPERTY LINE
RIGHT OF WAY
RIGHT OF WAY WITH LIMITED ACCESS

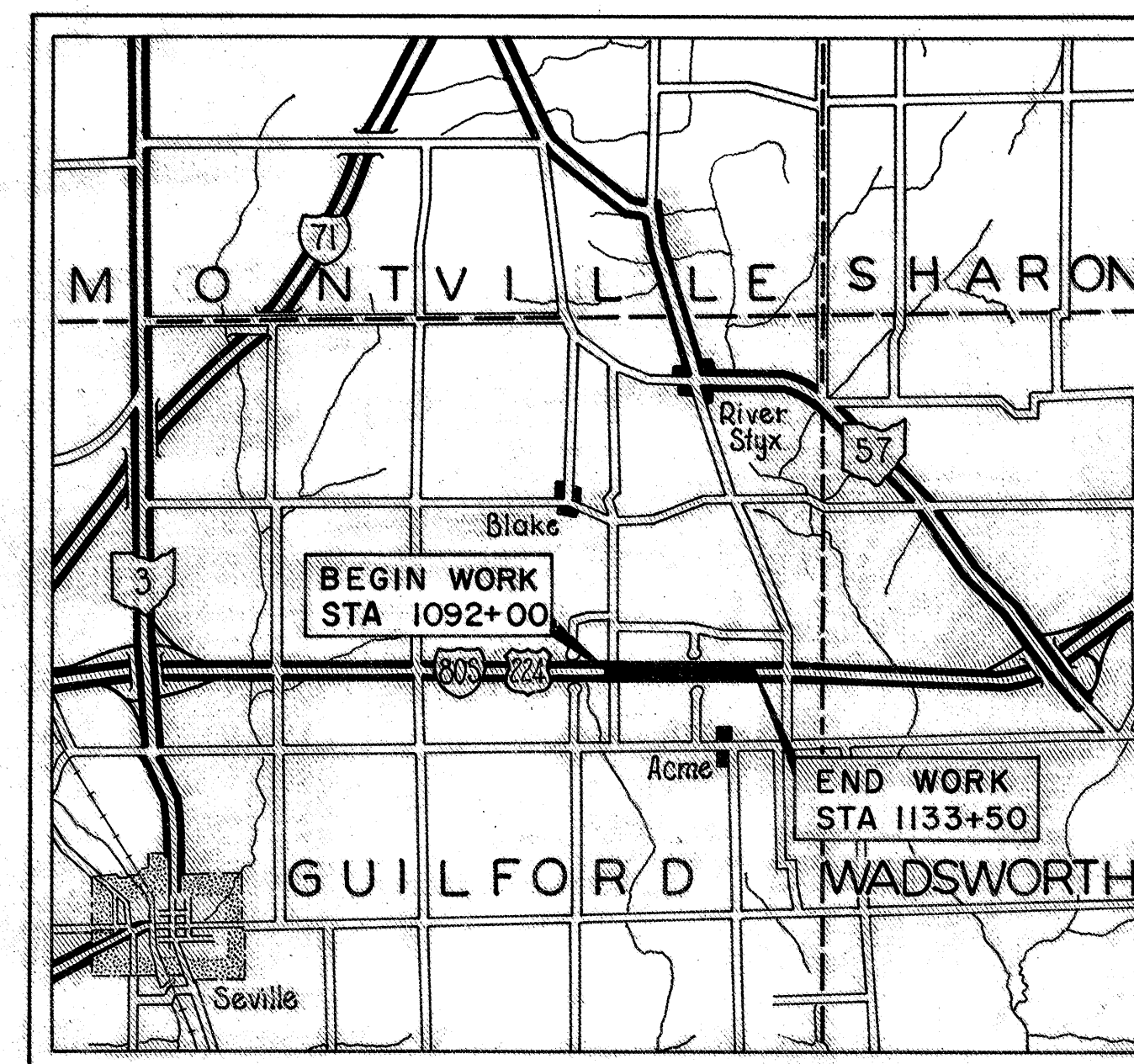


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LINE DATA

Begin Work	Sta. 1092+00
End Work	Sta. 1133+50
Gross Length of Work	4,150 Lin. Ft.
Add for Sign Sta. 1062+00 E.B.	25 Lin. Ft.
Add for Sign Sta. 1084+00 E.B.	25 Lin. Ft.
Add for Sign Sta. 1135+00 E.B.	25 Lin. Ft.
Add for Sign Sta. 1160+00 E.B.	25 Lin. Ft.
Add for Sign Sta. 1021+00 W.B.	25 Lin. Ft.
Add for Sign Sta. 1142+00 W.B.	25 Lin. Ft.
Add for Sign Sta. 1176+00 W.B.	25 Lin. Ft.
Add for Sign Sta. 1180+00 W.B.	50 Lin. Ft.
Add for Sign Sta. 1152+00 W.B.	25 Lin. Ft.
Net Length of Work	4,400 Lin. Ft. or 0.833 Miles
Net Length of Project	0.00 Lin. Ft. or 0.000 Miles



LOCATION MAP

Scale of Miles

PORTION TO BE IMPROVED
STATE & INTERSTATE HIGHWAYS
OTHER ROADS

SCALES

PLAN
PROFILE-HORIZONTAL
PROFILE-VERTICAL
CROSS SECTIONS

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS							
BP-1	6-1-65	CB-5	9-1-69	F-3	3-10-69	BP-5	6-1-65
BP-2	12-1-68	CB-8	9-1-69	MC-4	6-13-69		
BP-3	12-1-68	F-2	3-10-69	GR-2A	1-1-67		
BP-4	12-1-68	FACT-1	9-15-67	HL-1	11-1-65		
BP-6	6-1-65	FACT-2	6-1-65	HL-2	11-1-65		
BP-7	1-1-66	HW-E	6-1-65	HL-3	11-1-65		
CB-22A&B	6-1-65			GR-1	1-1-67		
CB-3	6-1-65	MC-3	6-20-69	L-1	6-1-65		

SUPPLEMENTAL SPECIFICATIONS			
815	1-1-69		
816	1-1-69		
1001	1-1-69		
938	8-12-69		
806	1-1-69		

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

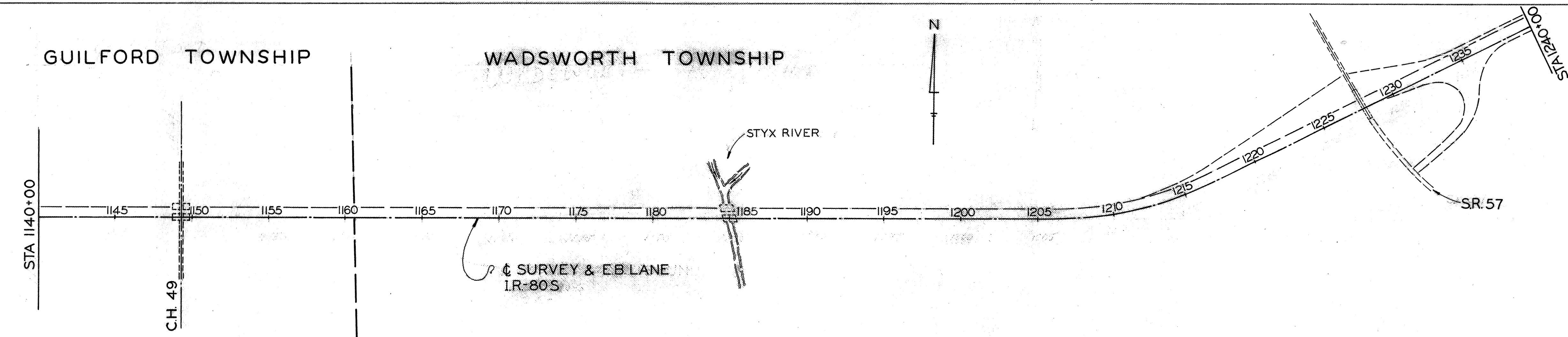
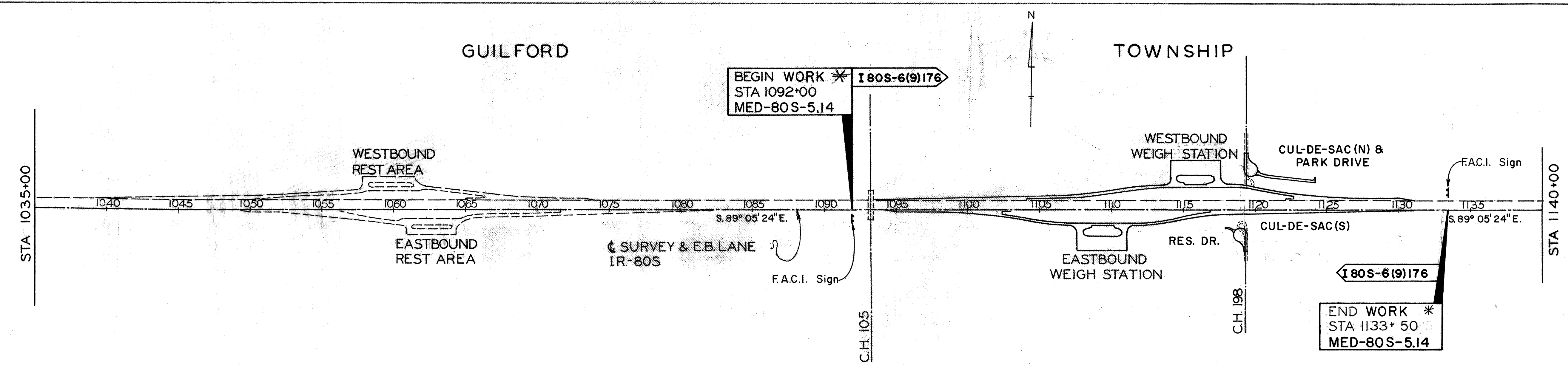
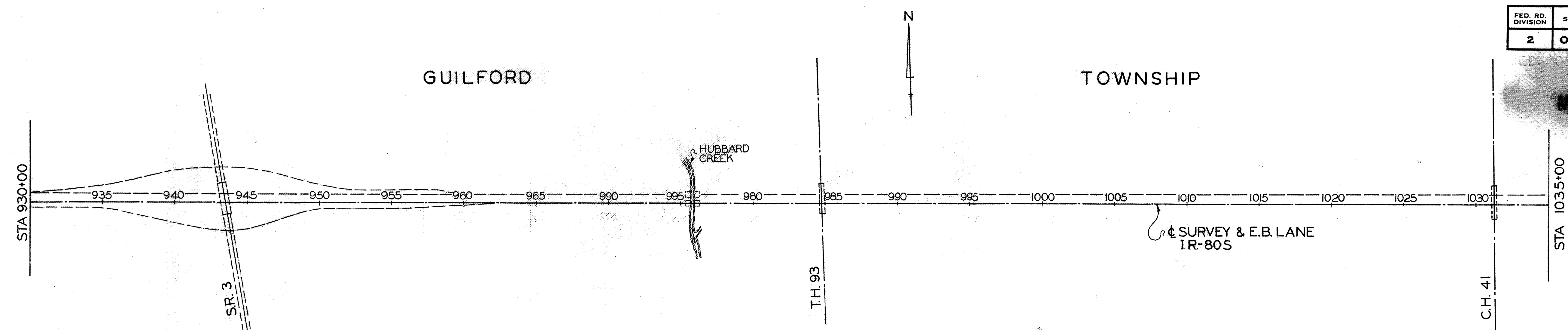
APPROVED:

DIVISION ENGINEER

DATE

FILE	MEDINA CO. MED-80S-5.14	Part II
Nº	DATE OF LETTING	
249-M	CONTRACT Nº	

MEDINA COUNTY
MED-80S-5.14 PART II



LEGEND

— PROPOSED WORK

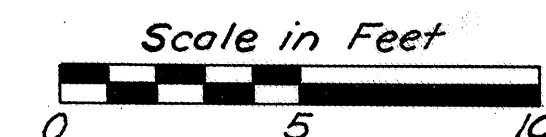
- - - EXISTING WORK

SCALE IN FEET

400 0 400

TYPICAL SECTIONS

TYPE 45I

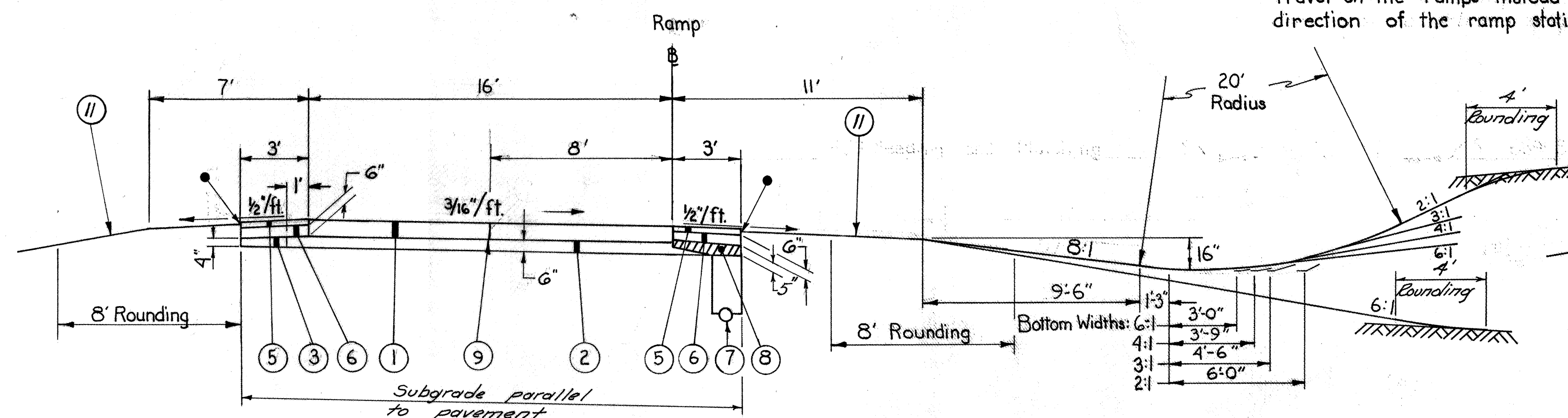


FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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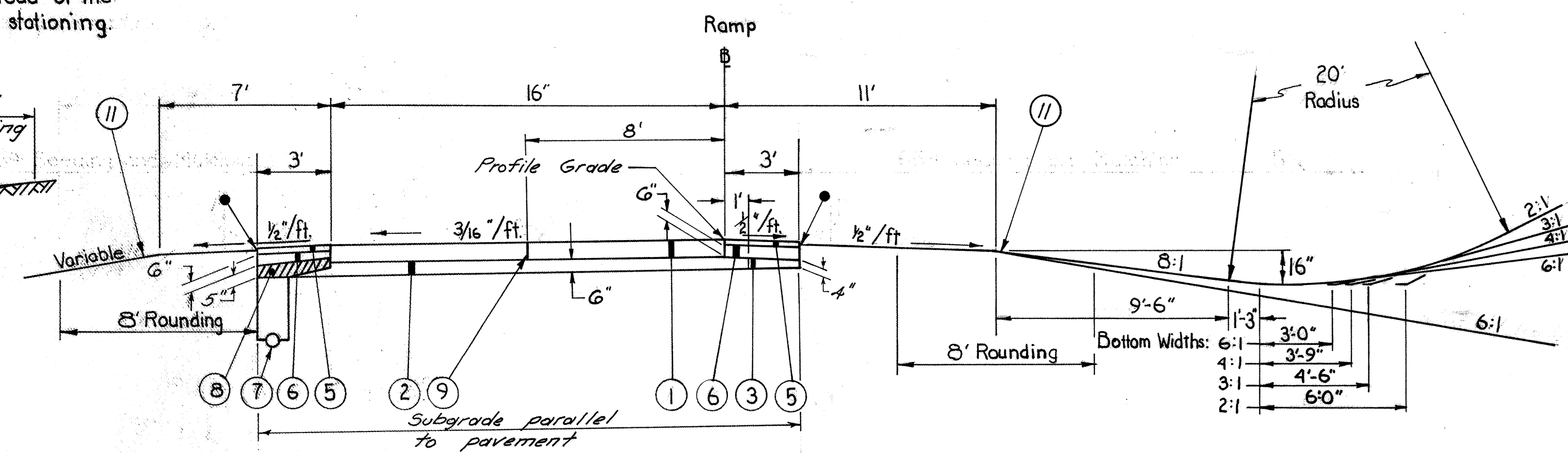
MEDINA COUNTY
MED-002-14 PART II

NOTE: The Ramp Typical Sections as shown are referenced to the direction of travel on the ramps instead of the direction of the ramp stationing.



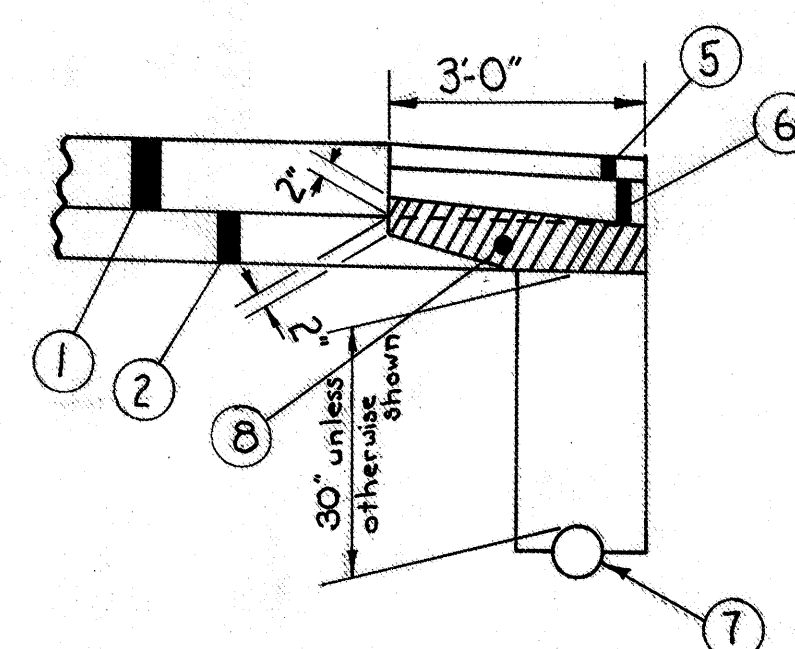
NORMAL SECTION-RAMP
LIMITING STATIONS

- * RAMP "A" - Sta. 1102+01.47 to Sta. 1105+25 = 323.53 Lin. Ft.
- ** RAMP "B" - Sta. 1119+50 to Sta. 1121+16.06 = 166.06 Lin. Ft.
- *** RAMP "C" - Sta. 1104+00 to Sta. 1105+75 = 175.00 Lin. Ft.
- RAMP "D" - Sta. 1119+80 to Sta. 1123+14.59 = 334.59 Lin. Ft.
- * Pmt slope varies from 1104+25 to 1105+25. See Superelevation Tables.
- ** Pmt slope varies from 1119+50 to 1120+00. See Superelevation Tables.
- Pmt slope varies from 1119+80 to 1121+00. See Superelevation Tables.



NORMAL SECTION-RAMP
LIMITING STATION

- ** RAMP "A" - Sta. 1105+25 to Sta. 1109+33.24 = 408.24 Lin. Ft.
- * RAMP "B" - Sta. 1109+99.88 to Sta. 1114+58.33 = 458.45 Lin. Ft.
- *** RAMP "C" - Sta. 1110+50 to Sta. 1115+16.18 = 466.18 Lin. Ft.
- RAMP "D" - Sta. 1115+82.82 to Sta. 1119+80 = 397.18 Lin. Ft.
- * Pmt slope varies from 1105+25 to 1106+25 and from 1108+25 to 1109+33.24. See Superelevation Tables.
- ** Pmt slope varies from 1109+99.88 to 1111+25 and from 1113+75 to 1114+58.33. See Superelevation Tables.
- *** Pmt slope varies from 1110+50 to 1111+50 and from 1114+00 to 1115+16.18. See Superelevation Tables.
- Pmt slope varies from 1115+82.82 to 1117+00 and from 1118+50 to 1119+80. See Superelevation Tables.



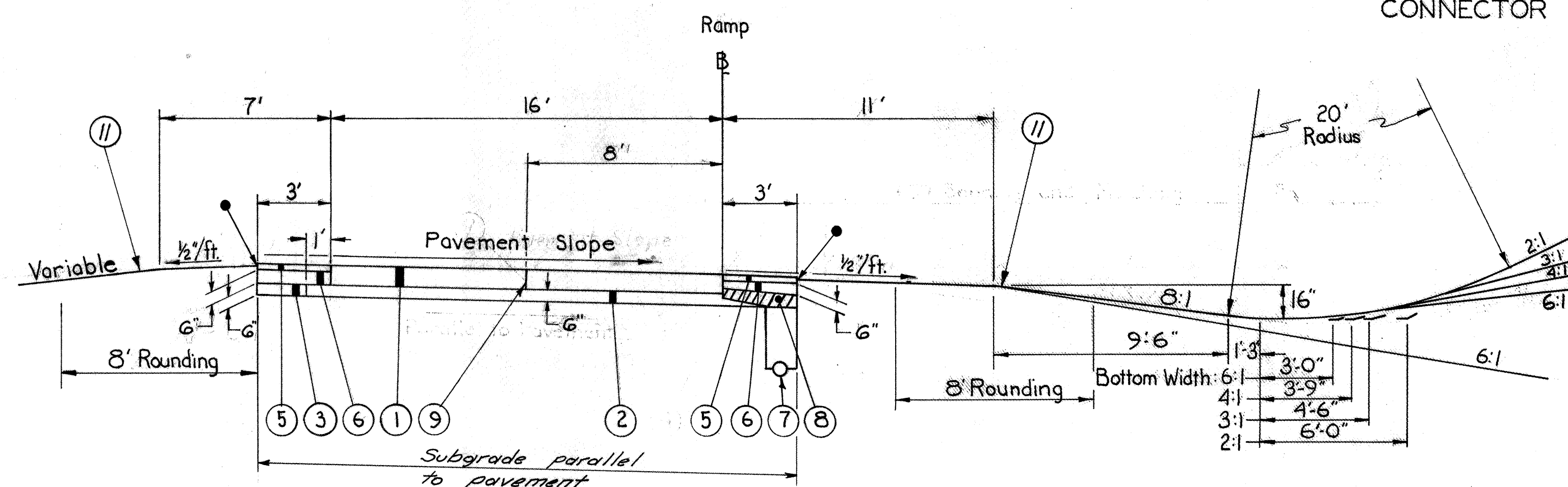
DETAIL OF SPECIAL DRAINAGE
CONNECTOR

SEQUENCE OF OPERATIONS

- (1) Install pipe underdrain
- (2) Place subbase material, Grading A as per plan, out to outside edge of underdrain or one foot beyond edge of pavement where no underdrain is present.
- (3) Construct 45I Concrete Pavement
- (4) Remove subbase and any contaminated backfill over underdrain and replace with No. 8 aggregate as shown by (8)
- (5) Complete berm construction.
- ⊗ Payment shall be made for all subbase placed in this operation.

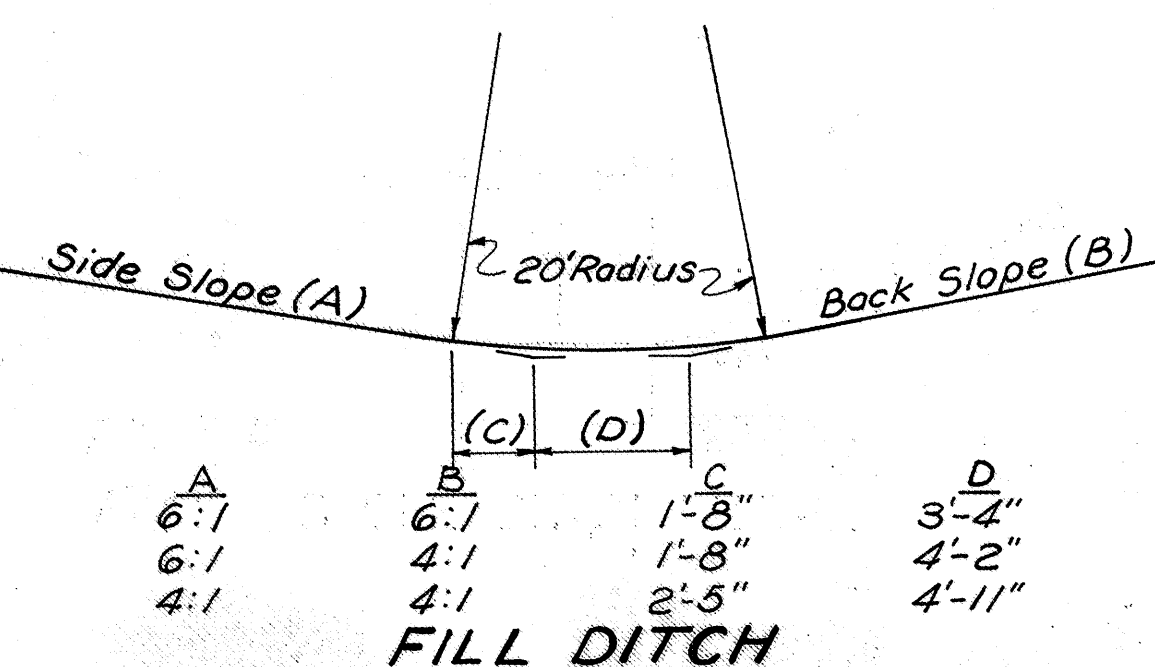
LEGEND

- (1) Item 45I 9" Reinforced Portland Cement Concrete Pavement
- (2) Item 310 Subbase, Grading A, as per plan, variable thickness as indicated
- (3) Item 310 Subbase, Regular Grading, variable thickness as indicated.
- (5) Item 301 3" Bituminous Aggregate Base, 702.01 (85-100) or 702.09, RT-10 (See Note in Proposal)
- (6) Item 304 Aggregate Base, variable thickness as indicated.
- (7) Item 605 6" Pipe Underdrains.
- (8) Item Special Drainage Connector, Using No. 8 Aggregate (See Note in Proposal)
- (9) Standard Longitudinal Joint
- (11) Item 659 Seeding and Mulching, as per plan. See General Notes
- Drop Shoulder 1"



SUPERELEVATED SECTION - RAMPS
LIMITING STATIONS

- RAMP "B" - Sta. 1114+58.33 to Sta. 1119+50 = 496.16 Lin. Ft.
- RAMP "C" - Sta. 1105+75 to Sta. 1110+50 = 475.00 Lin. Ft.

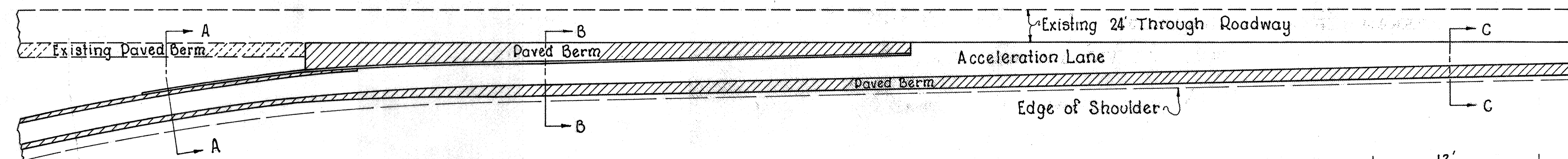
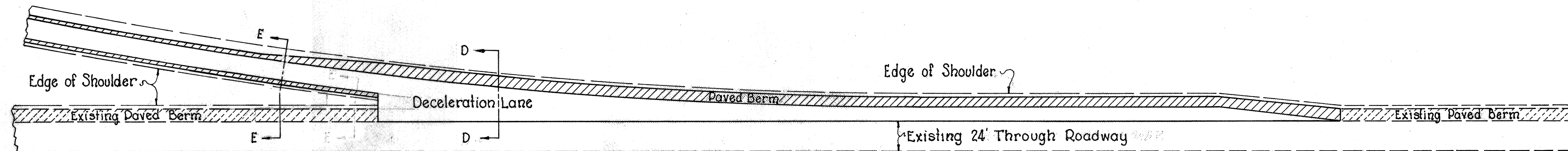


FILL DITCH

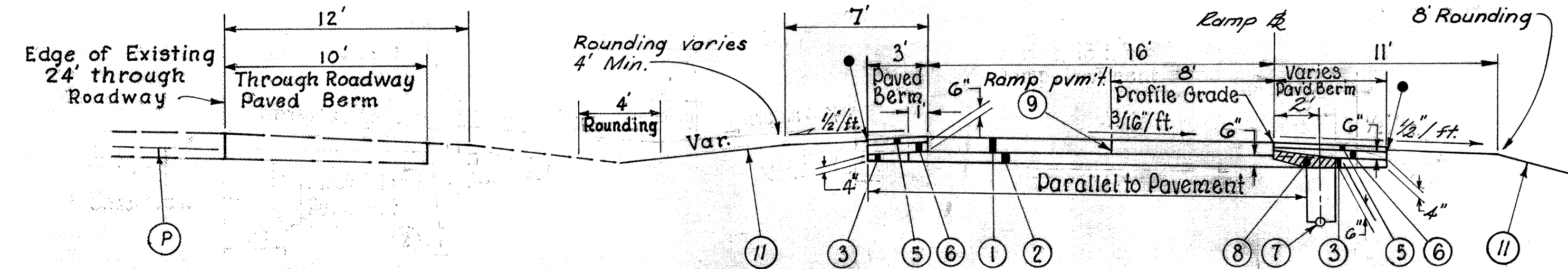
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NOTE: FOR DETAILS OF PAVEMENT, PAVED BERM AND SHOULDER TRANSITIONS, SEE ACCELERATION RAMP AND DECELERATION RAMP DETAILS, SHEETS NO. 20 THRU 25

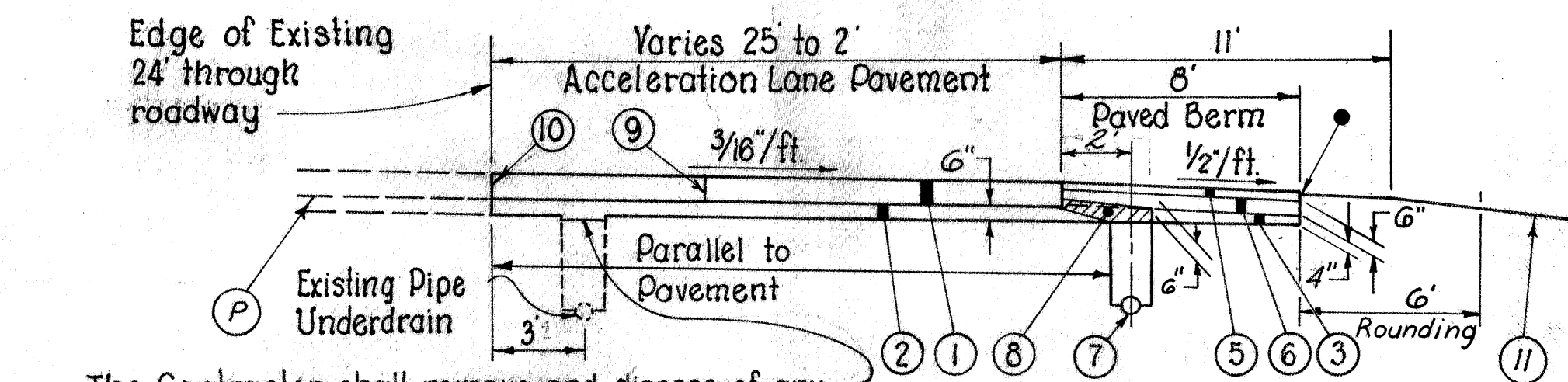


PLAN



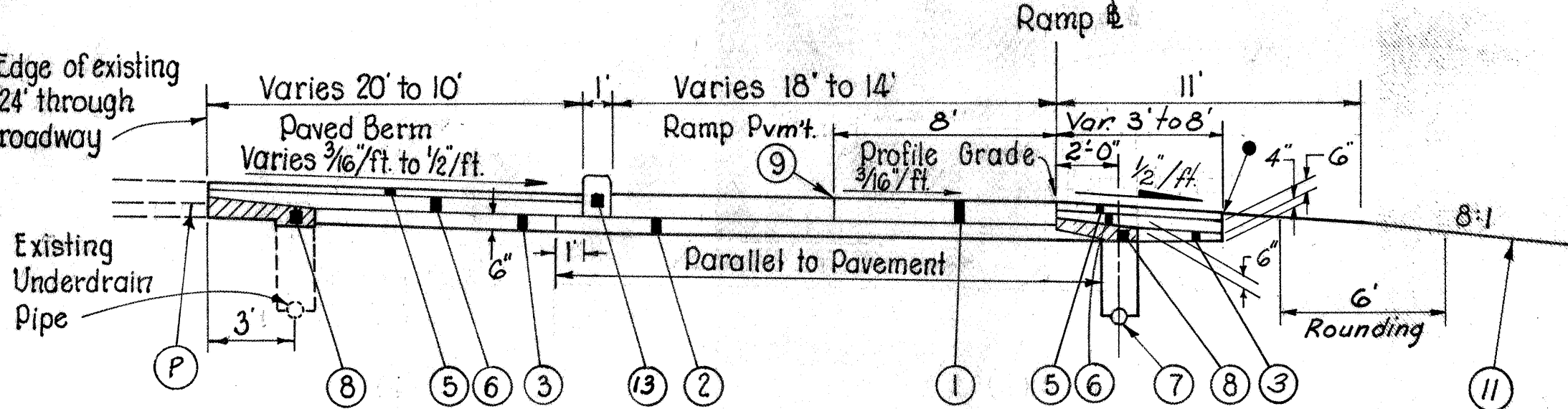
SECTION E-E

Scale in Feet
0 5 10
Applies to all sections

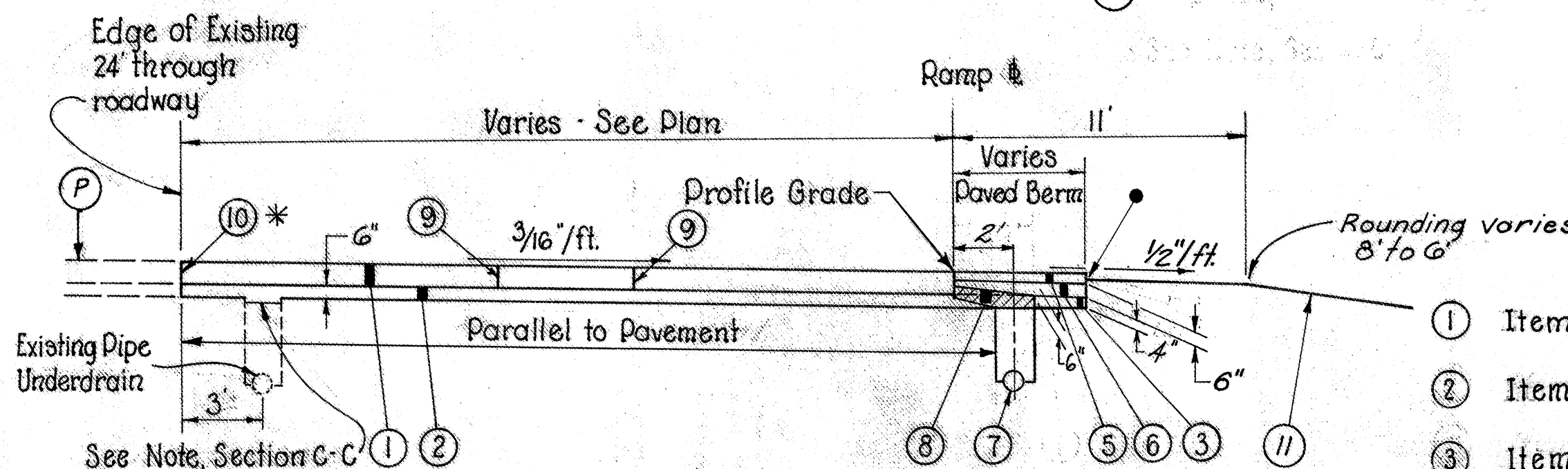


SECTION C-C

RAMP B ~ Sta. 1121+16.06 to Sta. 1133+16.06 = 1,200.00 Lin. Ft.
RAMP C ~ Sta. 1092+00.00 to Sta. 1104+00.00 = 1,200.00 Lin. Ft.



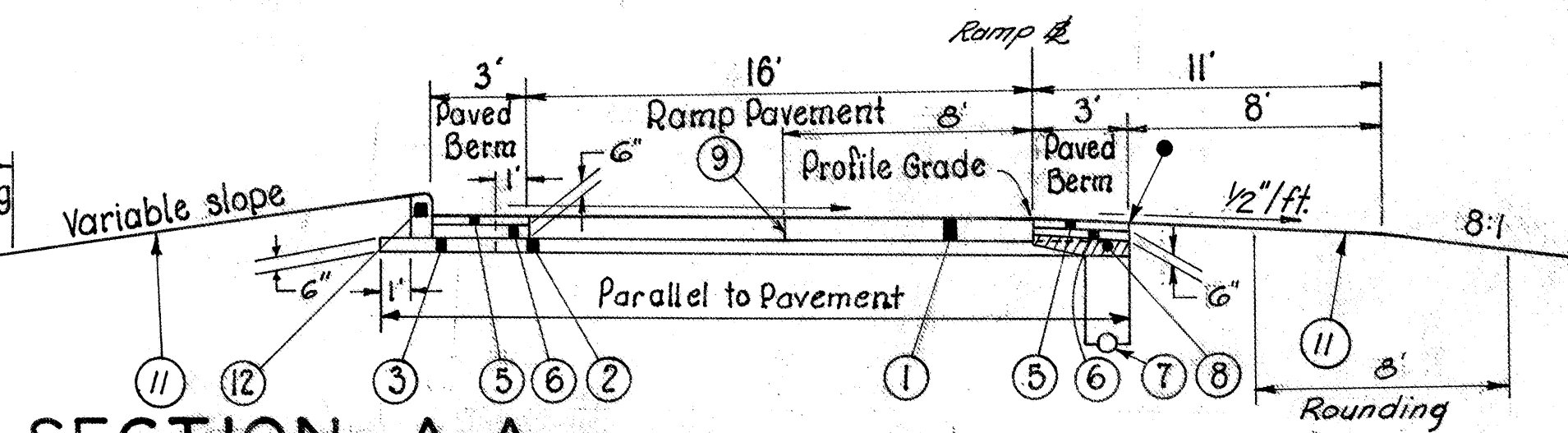
SECTION B-B



SECTION D-D

RAMP A ~ Sta. 1094+00.00 to Sta. 1102+01.47 = 801.47 Lin. Ft.
RAMP D ~ Sta. 1123+14.59 to Sta. 1131+16.06 = 801.47 Lin. Ft.

* The Joint shown applies to Ramp A only. For Ramp D a Standard Longitudinal Joint shall be used.



SECTION A-A

- ① Item 451 9" Reinforced Portland Cement Concrete Pavement
- ② Item 310 Subbase, Grading A as per plan, variable thickness as indicated.
- ③ Item 310 Subbase, Regular Grading, variable thickness as indicated.
- Ⓟ 9" Reinforced Concrete Pavement on 6" Subbase.
- ⑤ Item 301 3" Bituminous Aggregate Base, 702.01 (85-100) or 702.09, RT-10. (See note in Proposal)
- ⑥ Item 304 Aggregate Base, variable thickness as indicated.
- ⑦ Item 605 6" Pipe Underdrains
- ⑧ Special Drainage Connection Using No. 8 Aggregate (See Note in Proposal)
- ⑨ Standard Longitudinal Joint
- ⑩ Standard Expansion Bolt Joint, spaced at 5 foot centers, as per Standard Drawing BP-3. Cost of joint included in price bid for Item 451.
- ⑫ Item 609 Concrete Curb, Standard Type 7
- ⑬ Item 609 Concrete Curb, Standard Type 8
- ⑪ Item 659 Seeding and Mulching, as per plan, See General Notes
- Drop Shoulder 1"

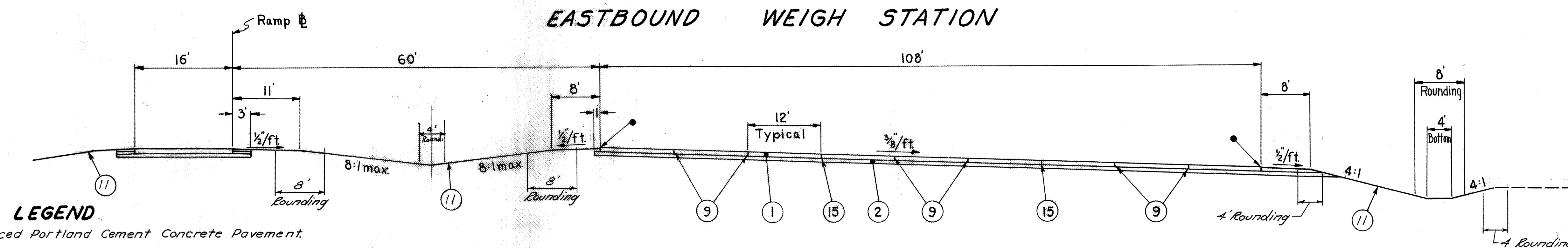
TYPICAL SECTIONS

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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MEDINA COUNTY
MED-SDS-5.14 PART II

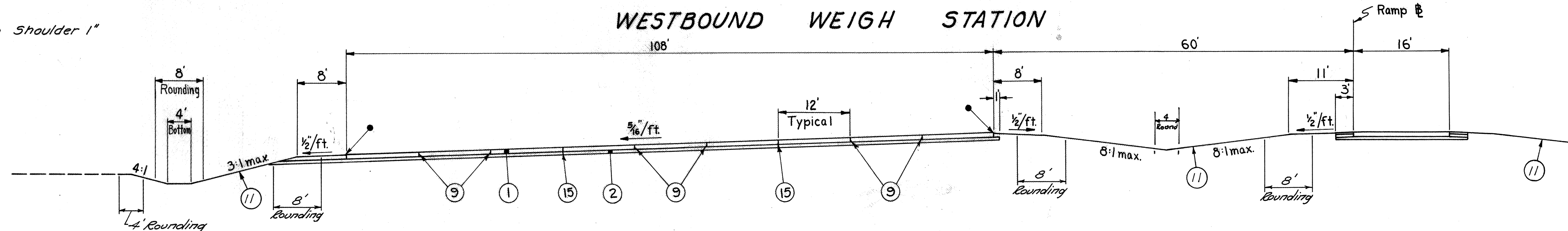
Scale in Feet
0 10 20



LEGEND

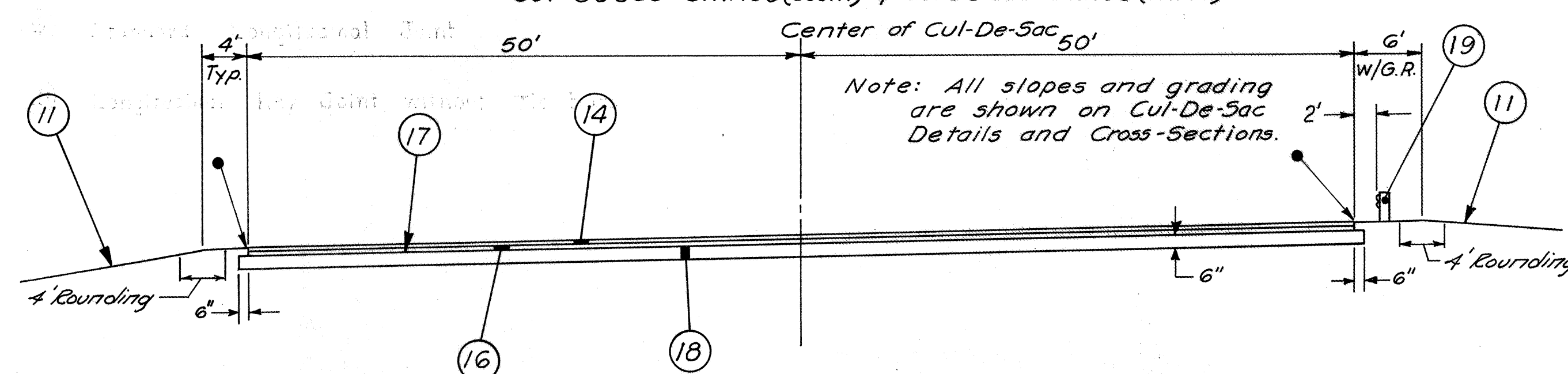
- ① 451 9" Reinforced Portland Cement Concrete Pavement.
- ② 310 6" Subbase, Grading A, as per plan.
- ⑨ Standard Longitudinal Joint.
- ⑪ 659 Seeding and Mulching, as per plan, see General Notes
- ⑭ 404 1 1/4" Asphalt Concrete (70-85).
- ⑮ Longitudinal Key Joint without Tie Bars.
- ⑯ 402 1 1/2" Asphalt Concrete (70-85).
- ⑰ 408 Bituminous prime coat, 702.09, RT-2 or RT-3 applied at the rate of 0.40 gal. per sq. yd.
- ⑱ 304 Aggregate Base, as indicated.
- ⑲ 606 Guard rail, Type 4.

- Drop Shoulder 1"

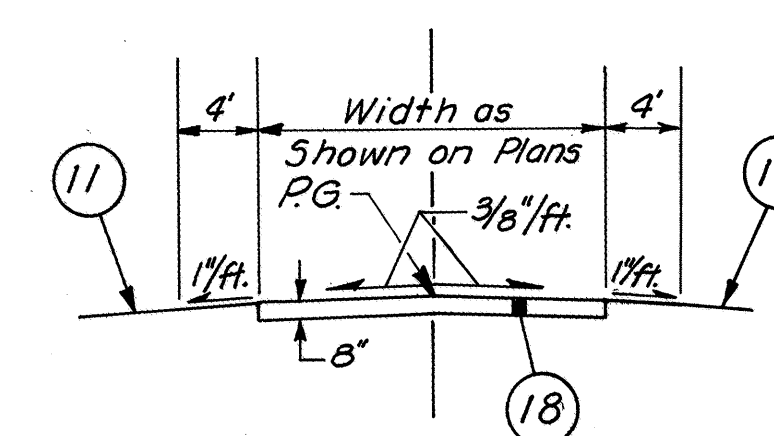


CUL-DE-SACS

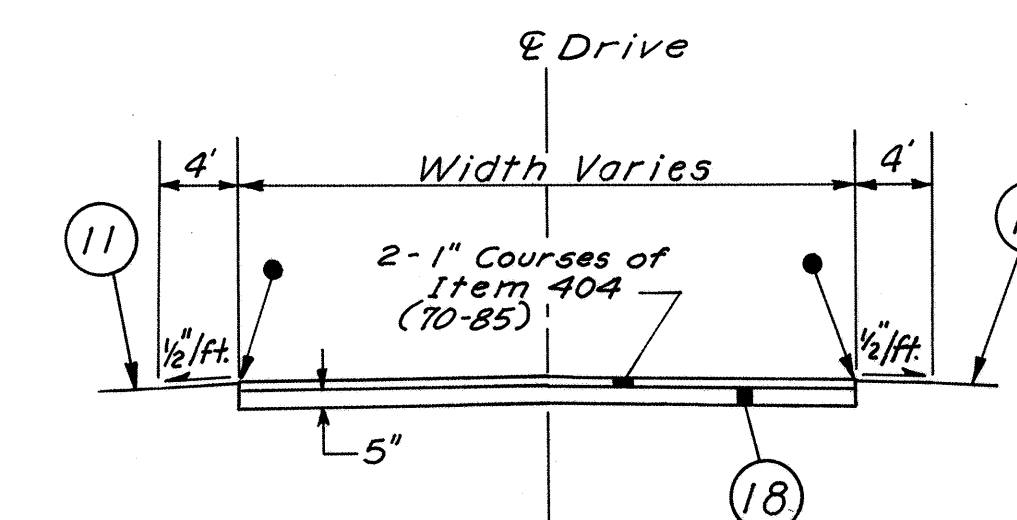
Cul-De-Sac C.H. 198 (South) & Cul-De-Sac C.H. 198 (North)



DRIVEWAY



DRIVEWAY APRON



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GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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MEDINA COUNTY
MED-80S-5.14 PART II

FIELD OFFICE

A FIELD OFFICE SHALL BE LOCATED ON EACH PROJECT.

THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 300 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.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U. S. G. S. DATUM.

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.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

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

CONSTRUCTION LAYOUT STAKES

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

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. THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL IN ALL CASES BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS AND SPECIFICATIONS.

FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS

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

1. STA 1092+00 EASTBOUND
2. STA 1133+50 WESTBOUND

SIGN DETAILS SHALL BE AS SPECIFIED ON STANDARD DRAWING FACI-1, CODE N-55(1)-120(2).

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

SCARIFICATION OF EXISTING FLEXIBLE PAVEMENT

EXISTING FLEXIBLE PAVEMENT WITHIN THE LIMITS OF THE PROPOSED CONSTRUCTION, WHICH WILL BE COVERED WITH LESS THAN 6 INCHES OF EMBANKMENT SHALL BE THOROUGHLY SCARIFIED FOR ITS FULL DEPTH, MIXED WITH SUFFICIENT SOIL, AND PROPERLY RECOMPACTED TO INSURE THE ELIMINATION OF ANY PLANES OF SEPARATION BETWEEN THE EXISTING PAVEMENT AND THE EMBANKMENT PLACED THEREON. PAYMENT FOR THE SCARIFICATION AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203, EXCAVATION.

TRAFFIC SIGNING NOTES

GENERAL NOTES PERTAINING TO SIGNING ARE ON SHEET NO. 50

LIGHTING NOTES

GENERAL NOTES PERTAINING TO LIGHTING ARE ON SHEET NO. 66

SPEED CHANGE LANE CONTRACTION JOINT SPACING

SIXTY (60) FOOT CONTRACTION JOINT SPACING SHALL BE USED ON THE SPEED CHANGE LANES IN LIEU OF THE FORTY (40) FOOT SPACING SHOWN ON STANDARD DRAWING BP-4.

ITEM 310 SUBBASE, GRADING A, AS PER PLAN

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

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 ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED.

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

SIZE	18"	30"	48"	60"
TREES	135	32		
STUMPS	6			

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.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN LINES 10 FT. OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT-OF-WAY LINE IF SUCH LINE IS LESS THAN 10 FT. FROM THE WORK LIMITS.

SEEDING FORMULA

THE FOLLOWING STANDARD SEED MIXTURE SHALL BE USED THROUGHOUT THE LIMITS OF THIS PROJECT:

30% KENTUCKY BLUEGRASS
60% KENTUCKY 31 FESCUE
10% ALSIKE CLOVER

EROSION CONTROL

ITEM 601 ROCK PROTECTION, 660 SODDING AND 667 JUTE MATTING 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.

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.

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 INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEM.

CONNECTIONS TO EXISTING PIPE UNDERDRAINS

AT PLACES WHERE THE PLANS PROVIDE PROPOSED PIPE UNDERDRAINS TO BE CONNECTED TO EXISTING UNDERDRAINS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE LAYING THE PROPOSED PIPE. THE COST OF THIS OPERATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE UNDERDRAINS.

CONSTRUCTION EQUIPMENT CROSSING

CONSTRUCTION EQUIPMENT SHALL BE LIMITED TO CROSSING THE EXISTING MEDIAN AT ONLY ONE LOCATION (PREFERABLY STA. 1109+35). WHEN NO LONGER NEEDED, THE EQUIPMENT CROSSING SHALL BE RESTORED TO ITS ORIGINAL CONDITION BY GRADING, SEEDING OR SODDING ETC. AS NECESSARY, UNDER THE DIRECTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE STATE.

TRAFFIC MAINTENANCE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. DURING PAVEMENT REMOVAL AND REPLACEMENT AND CONSTRUCTION OPERATIONS ADJACENT TO THE EXISTING PAVEMENT, ONE-LANE TRAFFIC WILL BE MAINTAINED AND THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC IN THIS AREA. ONE-LANE TRAFFIC AREAS SHALL BE CONTROLLED WITH TEMPORARY TRAFFIC CONTROL DEVICES ARRANGED AS INDICATED ON PAGE 436 OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", CURRENT EDITION, LATEST REVISION. MAXIMUM LENGTH OF ONE-LANE TRAFFIC ZONES SHALL BE TWO (2) MILES. ALL SIGNS THAT ARE TO CONVEY MESSAGES DURING HOURS OF DARKNESS SHALL BE REFLECTORIZED OR ILLUMINATED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN BERMS DAMAGED BY ONE-LANE TRAFFIC OPPOSITE THE CONSTRUCTION AREAS.

THE CONTRACTOR SHALL NOT BE PERMITTED TO WORK BEYOND 3:00 P. M. FRIDAY, OR 3:00 P. M. ON THE DAY PRECEDING A HOLIDAY. THE CONTRACTOR SHALL PROVIDE THE SERVICES OF ONE (1) SPECIAL DUTY STATE HIGHWAY PATROLMAN FOR THE EXCLUSIVE PURPOSE OF CONTROLLING ONE-LANE TRAFFIC, EXCEPT THAT A PATROLMAN WILL NOT BE REQUIRED WHEN THE CONTRACTOR IS NOT AT WORK. CONTACT THE LOCAL POST OF THE HIGHWAY PATROL FOR INFORMATION REGARDING ARRANGEMENTS AND PAYMENT BY THE CONTRACTOR FOR THE SERVICES OF A SPECIAL DUTY HIGHWAY PATROLMAN.

EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN THE MEDIAN OR WITHIN THIRTY (30) FEET OF THE OUTSIDE EDGE OF THE EXISTING IR 80S PAVEMENT.

PAYMENT FOR ALL THE ABOVE OPERATIONS SHALL BE PAID IN ACCORDANCE WITH THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

TEMPORARY WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL

The following estimated quantities are to be used as directed by the Engineer for temporary control measures. (See proposal note)

Item Spec.	Commercial Fertilizer (12-12-12)	4 Ton
Item Spec.	Temporary Seeding and Mulching	45,000 Sq. Yd.
Item Spec.	Water	22 M Gal.

COMPUTATIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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MEDINA COUNTY MED-80S-5.14 PART II

ITEM 451 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

RAMP A

1094+00.00 TO 1095+00.00 =	100.00 LIN FT	=	66.67 SQ YDS
AREA = 100.00 x 12 FT/ (2x9)			
1095+00.00 TO 1097+47.99 =	247.99 LIN FT		
AREA = 247.99 x 12 FT/9		=	330.65 SQ YDS
1097+47.99 TO 1102+01.47 =	453.48 LIN FT		
AVG WIDTH = 21.0567 FT			
AREA = 453.48 x 21.0567 FT/9		=	1,060.98 SQ YDS
1102+01.47 TO 1109+33.24 =	731.77 LIN FT		
AREA = 731.77 x 16 FT/9		=	1,300.92 SQ YDS
ADD FOR END TAPER = 16.67 FT x 2 FT/ (2x9)		=	1.85 SQ YDS

TOTAL ITEM 451 (RAMP A) = 2,761.07 SQ YDS

RAMP B

1109+99.88 TO 1117+16.06 =	716.18 LIN FT		
AREA = 716.18 x 16 FT/9		=	1,273.21 SQ YDS
1117+16.06 TO 1118+16.06 =	100.00 LIN FT		
AREA = 100.00 x (18+16 FT)/(2x9)		=	188.89 SQ YDS
1118+16.06 TO 1121+16.06 =	300.00 LIN FT		
AREA = 300.00 x (16+14 FT)/(2x9)		=	500.00 SQ YDS
1121+16.06 TO 1133+16.06 =	1,200.00 LIN FT		
AREA = 1,200.00 x (25+0 FT)/(2x9)		=	1,666.67 SQ YDS
ADD FOR END TAPER = 96 LIN FT x 2 FT/(2x9)		=	10.67 SQ YDS

TOTAL ITEM 451 (RAMP B) = 3,639.44 SQ YDS

RAMP C

1092+00.00 TO 1104+00.00 =	1,200.00 LIN FT		
AREA = 1,200.00 x (25+0 FT)/(2x9)		=	1,666.67 SQ YDS
1104+00.00 TO 1107+00.00 =	300.00 LIN FT		
AREA = 300.00 x (14+16 FT)/(2x9)		=	500.00 SQ YDS
1107+00.00 TO 1108+00.00 =	100.00 LIN FT		
AREA = 100.00 x (16+18 FT)/(2x9)		=	188.89 SQ YDS
1108+00.00 TO 1115+16.18 =	716.18 LIN FT		
AREA = 716.18 x 16 FT/9		=	1,273.21 SQ YDS
ADD FOR END TAPER = 96 LIN FT x 2 FT/(2x9)		=	10.67 SQ YDS

TOTAL ITEM 451 (RAMP C) = 3,639.44 SQ YDS

RAMP D

1115+82.82 TO 1123+14.59 =	731.77 LIN FT		
AREA = 731.77 x 16 FT/9		=	1,300.92 SQ YDS
1123+14.59 TO 1127+68.07 =	453.48 LIN FT		
AVG WIDTH = 21.0567 FT			
AREA = 453.48 x 21.0567 FT/9		=	1,060.98 SQ YDS
1127+68.07 TO 1130+16.06 =	247.99 LIN FT		
AREA = 247.99 x 12 FT/9		=	330.65 SQ YDS
1130+16.06 TO 1131+16.06 =	100.00 LIN FT		
AREA = 100.00 x 12 FT/(2x9)		=	66.67 SQ YDS
ADD FOR END TAPER = 16.67 FT x 2 FT/(2x9)		=	1.85 SQ YDS

TOTAL ITEM 451 (RAMP D) = 2,761.07 SQ YDS

PARKING AREA

EASTBOUND AREA = 46,156.26 SQ FT			
WESTBOUND AREA = 46,156.26 SQ FT			
TOTAL AREA = 92,312.52 SQ FT			
AREA = 92,312.52 SQ FT/9		=	10,256.95 SQ YDS

TOTAL ITEM 451 = 23,057.97 SQ YDS

TO SUMMARY USE = 23,058 SQ YDS

ITEM 310 SUBBASE, GRADING A

RAMP A

AREA FROM ITEM 451 =	2,761.07 SQ YDS		
VOLUME = 2,761.07 SQ YDS x 6 INCH/ (12x3)		=	460.18 CU YDS
ADD FOR UNDER SHOULDER:			
RT: 1094+00.00 TO 1095+00.00 =	100.00 LIN FT		
1105+25.00 TO 1109+33.24 =	408.24 LIN FT		
LT: 1102+01.47 TO 1105+25.00 =	323.53 LIN FT		
TOTAL LENGTH =	831.77 LIN FT		
AREA + (0.50+0.4427 FT) x 1 FT/2 = 0.4714 SQ FT			
VOLUME = 831.77 x 0.4714 SQ FT/27		=	14.52 CU YDS
RT: 1095+00.00 TO 1102+01.47 =	701.47 LIN FT		
VOLUME = 701.47 x 2.6667 FT x 6 INCH/ (12x27)		=	34.64 CU YDS
RT: 1102+01.47 TO 1103+01.47 =	100.00 LIN FT		
VOLUME = 100.00 x (2.6667+3.00 FT) x 6 INCH/ (2x12x27)		=	5.25 CU YDS
RT: 1103+01.47 TO 1105+25.00 =	223.53 LIN FT		
LT: 1105+25.00 TO 1109+33.24 =	408.24 LIN FT		
TOTAL LENGTH =	631.77 LIN FT		
VOLUME = 631.77 x 3 FT x 6 INCH/ (12x27)		=	35.10 CU YDS

ADD FOR EXISTING UNDERDRAINS:			
1094+30.55 TO 1102+02.30 =	771.75 LIN FT		
VOLUME = 771.75 x 1.3333 FT x 1 INCH/ (12x27)		=	3.18 CU YDS

TOTAL ITEM 310 (RAMP A) = 552.87 CU YDS

RAMP B

AREA FROM ITEM 451 =	3,639.44 SQ YDS		
VOLUME = 3,639.44 SQ YDS x 6 INCH/ (12x3)		=	606.57 CU YDS
ADD FOR UNDER SHOULDER:			
RT: 1109+99.88 TO 1114+58.33 =	458.45 LIN FT		
1132+00.00 TO 1133+16.06 =	116.06 LIN FT		
TOTAL LENGTH =	574.51 LIN FT		
VOLUME = 574.51 x 0.4714 SQ FT/27		=	10.03 CU YDS
LT: 1114+58.33 TO 1116+66.06 =	207.73 LIN FT		
1116+66.06 TO 1117+16.06 =	50.00 LIN FT		
TOTAL LENGTH =	257.73 LIN FT		
VOLUME = 257.73 x 1 FT x 6 INCH/ (12x27)		=	4.77 CU YDS
LT: 1117+16.06 TO 1121+16.06 =	400.00 LIN FT		
VOLUME = 400.00 x 2 FT x 6 INCH/ (12x27)		=	14.81 CU YDS
LT: 1109+99.88 TO 1114+58.33 =	458.45 LIN FT		
RT: 1114+58.33 TO 1116+66.06 =	207.73 LIN FT		
TOTAL LENGTH =	666.18 LIN FT		
VOLUME = 666.18 x 3 FT x 6 INCH/ (12x27)		=	37.01 CU YDS

RT: 1116+66.06 TO 1118+16.06 =	150.00 LIN FT		
VOLUME = 150.00 x (3.00+2.6667 FT) x 6 INCH/ (2x12x27)		=	7.87 CU YDS
RT: 1118+16.06 TO 1132+00.00 =	1,383.94 LIN FT		
VOLUME = 1,383.94 x 2.6667 FT x 6 INCH/ (12x27)		=	68.34 CU YDS
ADD FOR EXISTING UNDERDRAINS:			
1121+16.06 TO 1131+88.06 =	1,072.00 LIN FT		
VOLUME = 1,072.00 x 1.3333 x 1 INCH/ (12x27)		=	4.41 CU YDS

TOTAL ITEM 310 (RAMP B) = 753.81 CU YDS

RAMP C

AREA FROM ITEM 451 =	3,639.44 SQ YDS		
VOLUME = 3,639.44 SQ YDS x 6 INCH/ (12x3)		=	606.57 CU YDS
ADD FOR UNDER SHOULDER:			
LT: 1092+00.00 TO 1095+00.00 =	300.00 LIN FT		
1110+50.00 TO 1115+16.18 =	466.18 LIN FT		
TOTAL LENGTH =	766.18 LIN FT		
VOLUME = 766.18 x 0.4714 SQ FT/27		=	13.38 CU YDS
RT: 1108+00.00 TO 1110+50.00 =	250.00 LIN FT		
VOLUME = 250.00 x 1 FT x 6 INCH/ (12x27)		=	4.63 CU YDS
RT: 1104+00.00 TO 1108+00.00 =	400.00 LIN FT		
VOLUME = 400.00 x 2 FT x 6 INCH/ (12x27)		=	14.81 CU YDS
LT: 1095+00.00 TO 1107+00.00 =	1,200.00 LIN FT		
VOLUME = 1,200.00 x 2.6667 FT x 6 INCH/ (12x27)		=	59.26 CU YDS
LT: 1107+00.00 TO 1108+50.00 =	150.00 LIN FT		
VOLUME = 150.00 x (2.6667+3.00 FT) x 6 INCH/ (2x12x27)		=	7.87 CU YDS

ITEM 310 SUBBASE, GRADING A (CONTINUED)

RAMP C (CONTINUED)

LT: 1108+50.00 TO 1110+50.00 =	200.00 LIN FT		
RT: 1110+50.00 TO 1115+16.18 =	466.18 LIN FT		
TOTAL LENGTH =	666.18 LIN FT		
VOLUME = 666.18 x 3 FT x 6 INCH/ (12x27)		=	37.01 CU YDS
ADD FOR EXISTING UNDERDRAINS:			
1093+28.00 TO 1104+00.00 =	1,072.00 LIN FT		
VOLUME = 1,072.00 x 1.3333 FT x 1 INCH/ (12x27)		=	4.41 CU YDS

TOTAL ITEM 310 (RAMP C) = 747.94 CU YDS

RAMP D

AREA FROM ITEM 451 =	2,761.07 SQ YDS		
VOLUME = 2,761.07 SQ YDS x 6 INCH/ (12x3)		=	460.18 CU YDS
ADD FOR UNDER SHOULDER:			
LT: 1115+82.82 TO 1119+80.00 =	397.18 LIN FT		
RT: 1119+80.00 TO 1123+14.59 =	334.59 LIN FT		
LT: 1131+00.00 TO 1131+16.06 =	16.06 LIN FT		
TOTAL LENGTH =	747.83 LIN FT		
VOLUME = 747.83 x 0.4714 SQ FT/27		=	13.06 CU YDS
RT: 1115+82.82 TO 1119+80.00 =	397.18 LIN FT		
LT: 1119+80.00 TO 1122+14.59 =	234.59 LIN FT		
TOTAL LENGTH =	631.77 LIN FT		
VOLUME = 631.77 x 3 FT x 6 INCH/ (12x27)		=	35.10 CU YDS
LT: 1122+14.59 TO 1123+14.59 =	100.00 LIN FT		
VOLUME = 100.00 x (3.00+2.6667 FT) x 6 INCH / (2x12x27)		=	5.25 CU YDS
LT: 1123+14.59 TO 1131+00.00 =	785.41 LIN FT		
VOLUME = 785.41 x 2.6667 FT x 6 INCH/ (12x27)		=	38.79 CU YDS
ADD FOR EXISTING UNDERDRAINS:			
1123+13.76 TO 1130+85.50 =	771.74 LIN FT		
VOLUME = 771.74 x 1.3333 FT x 1 INCH/ (12x27)		=	3.18 CU YDS

TOTAL ITEM 310 (RAMP D) = 555.56 CU YDS

PARKING AREA

AREA FROM ITEM 451 =	10,256.95 SQ YDS		
VOLUME = 10,256.95 SQ YDS x 6 INCH/ (12x3)		=	1,709.49 CU YDS
ADD FOR UNDER SHOULDER:			
PARKING AREA CIRCUMFERENCE = 350.00 FT = 860.02 LIN FT			
VOLUME = 860.02 x 1 FT x 6 INCH/ (12x27)		=	15.93 CU YDS
VOLUME = 350.00 x 11.43 FT x 6 INCH/ (12x27)		=	74.08 CU YDS

TOTAL ITEM 310 (PARKING AREA) = 1,799.50 CU YDS

TOTAL ITEM 310, GRADING A = 4,409.68 CU YDS

TO SUMMARY USE = 4,410 CU YDS

ITEM 310 SUBBASE, REGULAR GRADING

RAMP A

RT: 1094+00.00 TO 1095+00.00 =	100.00 LIN FT		
VOLUME = 100.00 x (3.6324+2.8252 SQ FT)/(2x27)		=	11.96 CU YDS
RT: 1095+00.00 TO 1102+01.47 =	701.47 LIN FT		
VOLUME = 701.47 x 2.0784 SQ FT/27		=	54.00 CU YDS
RT: 1102+01.47 TO 1103+01.47 =	100.00 LIN FT		
VOLUME = 100.00 x (2.0784+0 SQ FT)/(2x27)		=	3.85 CU YDS
RT: 1105+25.00 TO 1107+03.24 =	178.24 LIN FT		
VOLUME = 178.24 x 0.8072 SQ FT/27		=	5.33 CU YDS
RT: 1108+63.24 TO 1109+33.24 =	70.00 LIN FT		
VOLUME = 70.00 x 0.8072 SQ FT/27		=	2.09 CU YDS
LT: 1102+01.47 TO 1105+25.00 =	323.53 LIN FT		
VOLUME = 323.53 x 0.8072 SQ FT/27		=	9.67 CU YDS

TOTAL ITEM 310 (RAMP A) = 86.90 CU YDS

COMPUTATIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

8
75

MEDINA COUNTY MED-80S-5.14 PART II

ITEM 310 SUBBASE REGULAR GRADING (CONTINUED)

RAMP B

RT: 1111+74.88 TO 1114+58.33 =	283.45 LIN FT	
VOLUME = 283.45 x 0.8072 SQ FT/27		= 8.47 CU YDS
RT: 1116+66.06 TO 1118+16.06 =	150.00 LIN FT	
VOLUME = 150.00 x (0.0+2.0784 SQ FT)/(2x27)		= 5.77 CU YDS
RT: 1118+16.06 TO 1132+00.00 =	1,383.94 LIN FT	
VOLUME = 1,383.94 x 2.0784 SQ FT/27		= 106.53 CU YDS
RT: 1132+00.00 TO 1132+20.06 =	20.06 LIN FT	
VOLUME = 20.06 x 2.8252 SQ FT/27		= 2.09 CU YDS
RT: 1132+20.06 TO 1133+16.06 =	96.00 LIN FT	
VOLUME = 96.00 x (2.8252+3.6324 SQ FT)/(2x27)		= 11.48 CU YDS
LT: 1114+58.33 TO 1115+65.00 =	106.67 LIN FT	
VOLUME = 106.67 x 2 FT x 6 INCH/(12x27)		= 3.95 CU YDS
LT: 1115+65.00 TO 1116+66.06 =	101.06 LIN FT	
VOLUME = 101.06 x 3.6667 FT x 6 INCH/(12x27)		= 6.86 CU YDS
LT: 1116+66.06 TO 1117+16.06 =	50.00 LIN FT	
VOLUME = 50.00 x (4+3 FT) x 6 INCH/(2x12x27)		= 3.24 CU YDS
LT: 1116+77.50 TO 1121+16.06 =	438.56 LIN FT	
VOLUME = 438.56 x 13.3802 AVG FT x 6 INCH/(12x27)		= 100.55 CU YDS
- 438.56 LIN FT x 1 FT x 6 INCH/(12x27)		

TOTAL ITEM 310 (RAMP B) = 248.94 CU YDS

RAMP C

LT: 1092+00.00 TO 1092+96.00 =	96.00 LIN FT	
VOLUME = 96.00 x (3.6324+2.8252 SQ FT)/(2x27) =		= 11.48 CU YDS
LT: 1092+96.00 TO 1095+00.00 =	204.00 LIN FT	
VOLUME 204.00 x 2.8252 SQ FT/27		= 21.35 CU YDS
LT: 1095+00.00 TO 1107+00.00 =	1,200.00 LIN FT	
VOLUME 1,200.00 x 2.0784 SQ FT/27		= 92.37 CU YDS
LT: 1107+00.00 TO 1108+50.00 =	150.00 LIN FT	
VOLUME = 150.00 x (2.0784+0 SQ FT)/(2x27)		= 5.77 CU YDS
LT: 1110+50.00 TO 1113+41.18 =	291.18 LIN FT	
VOLUME = 291.18 x 0.8072 SQ FT/27		= 8.71 CU YDS
RT: 1104+00.00 TO 1108+37.50 =	437.50 LIN FT	
VOLUME = 437.50 x 13.4126 FT (AVG WIDTH) x 6 INCH/(12x27)		= 100.55 CU YDS
- 437.50 x 1 FT x 6 INCH/(12x27)		
RT: 1108+00.00 TO 1108+50.00 =	50.00 LIN FT	
VOLUME = 50.00 x (3+4 FT) x 6 INCH/(2x12x27)		= 3.24 CU YDS
RT: 1108+50.00 TO 1109+50.00 =	100.00 LIN FT	
VOLUME = 100.00 x 3.6667 FT x 6 INCH/(12x27)		= 6.79 CU YDS
RT: 1109+50.00 TO 1110+50.00 =	100.00 LIN FT	
VOLUME = 100.00 x 2 FT x 6 INCH/(12x27)		= 3.70 CU YDS

TOTAL ITEM 310 (RAMP C) = 253.96 CU YDS

RAMP D

LT: 1115+82.82 TO 1116+52.82 =	70.00 LIN FT	
VOLUME = 70.00 LIN FT x 0.8072 SQ FT/27		= 2.09 CU YDS
LT: 1118+12.82 TO 1119+80.00 =	167.18 LIN FT	
VOLUME = 167.18 x 0.8072 SQ FT/27		= 5.00 CU YDS
LT: 1122+14.59 TO 1123+14.59 =	100.00 LIN FT	
VOLUME = 100.00 x (0+2.0784 SQ FT)/(2x27)		= 3.85 CU YDS
LT: 1123+14.59 TO 1130+16.06 =	701.47 LIN FT	
VOLUME = 701.47 x 2.0784 SQ FT/27		= 54.00 CU YDS
LT: 1130+16.06 TO 1131+00.00 =	83.94 LIN FT	
VOLUME = 83.94 x (2.0784+2.8578 SQ FT)/(2x27)		= 7.67 CU YDS
LT: 1131+00.00 TO 1131+16.06 =	16.06 LIN FT	
VOLUME = 16.06 x 3.6324 SQ FT/27		= 2.16 CU YDS
RT: 1119+80.00 TO 1123+14.59 =	334.59 LIN FT	
VOLUME = 334.59 x 0.8072 SQ FT/27		= 10.00 CU YDS

TOTAL ITEM 310 (RAMP D) = 84.77 CU YDS

TOTAL ITEM 310 REGULAR GRADING = 674.57 CU YDS

TO SUMMARY USE = 675 CU YDS

SHOULDER SURFACE AREA CALCULATION

RAMP A

RT: 1094+00.00 TO 1095+00.00 =	100.00 LIN FT	
AREA = 100.00 x (10+8 FT)/2		= 900.00 SQ FT
RT: 1095+00.00 TO 1102+01.47 =	701.47 LIN FT	
AREA = 701.47 x 8 FT		= 5,611.76 SQ FT
RT: 1102+01.47 TO 1103+01.47 =	100.00 LIN FT	
AREA = 100.00 x (8+3 FT)/2		= 550.00 SQ FT
RT: 1103+01.47 TO 1107+03.24 =	401.77 LIN FT	
AREA = 401.77 x 3 FT		= 1,205.31 SQ FT
RT: 1108+63.24 TO 1109+33.24 =	70.00 LIN FT	
AREA = 70.00 x 3 FT		= 210.00 SQ FT
LT: 1102+01.47 TO 1109+33.24 =	731.77 LIN FT	
AREA = 731.77 x 3 FT		= 2,195.31 SQ FT

TOTAL AREA (RAMP A) = 10,672.38 SQ FT

RAMP B

RT: 1111+74.88 TO 1116+66.06 =	491.18 LIN FT	
AREA = 491.18 x 3 FT		= 1,473.54 SQ FT
RT: 1116+66.06 TO 1118+16.06 =	150.00 LIN FT	
AREA = 150.00 x (8+3 FT)/2		= 825.00 SQ FT
RT: 1118+16.06 TO 1132+20.06 =	1,404.00 LIN FT	
AREA = 1,404.00 x 8 FT		= 11,232.00 SQ FT
RT: 1132+20.06 TO 1133+16.06 =	96.00 LIN FT	
AREA = 96.00 x (8+10 FT)/2		= 864.00 SQ FT
LT: 1109+99.88 TO 1116+66.06 =	666.18 LIN FT	
AREA = 666.18 x 3 FT		= 1,998.54 SQ FT
LT: 1116+66.06 TO 1117+16.06 =	50.00 LIN FT	
AREA = 50.00 x (3+2 FT)/2		= 125.00 SQ FT
LT: 1116+77.50 TO 1121+16.06 =	438.56 LIN FT	
AREA = 438.56 x 13.3802 FT (AVG)		= 5,868.02 SQ FT

TOTAL AREA (RAMP B) = 22,386.10 SQ FT

RAMP C

LT: 1092+00.00 TO 1092+96.00 =	96.00 LIN FT	
AREA = 96.00 x (10+8 FT)/2		= 864.00 SQ FT
LT: 1092+96.00 TO 1107+00.00 =	1,404.00 LIN FT	
AREA = 1,404.00 x 8 FT		= 11,232.00 SQ FT
LT: 1107+00.00 TO 1108+50.00 =	150.00 LIN FT	
AREA = 150.00 x (8+3 FT)/2		= 825.00 SQ FT
LT: 1108+50.00 TO 1113+41.18 =	491.18 LIN FT	
AREA = 491.18 x 3 FT		= 1,473.54 SQ FT
RT: 1104+00.00 TO 1108+37.50 =	437.50 LIN FT	
AREA = 437.50 x 13.4126 FT (AVG)		= 5,868.01 SQ FT
RT: 1108+00.00 TO 1108+50.00 =	50.00 LIN FT	
AREA = 50.00 x (2+3 FT)/2		= 125.00 SQ FT
RT: 1108+50.00 TO 1115+16.18 =	666.18 LIN FT	
AREA = 666.18 x 3 FT		= 1,998.54 SQ FT
TOTAL AREA (RAMP C)		= 22,386.09 SQ FT

RAMP D

LT: 1115+82.82 TO 1116+52.82 =	70.00 LIN FT	
AREA = 70.00 x 3 FT		= 210.00 SQ FT
LT: 1118+12.82 TO 1122+14.59 =	401.77 LIN FT	
AREA = 401.77 x 3 FT		= 1,205.31 SQ FT
LT: 1122+14.59 TO 1123+14.59 =	100.00 LIN FT	
AREA = 100.00 x (3+8 FT)/2		= 550.00 SQ FT
LT: 1123+14.59 TO 1130+16.06 =	701.47 LIN FT	
AREA = 701.47 x 8 FT		= 5,611.76 SQ FT
LT: 1130+16.06 TO 1131+16.06 =	100.00 LIN FT	
AREA = 100.00 x (8+10 FT)/2		= 900.00 SQ FT
RT: 1115+82.82 TO 1123+14.59 =	731.77 LIN FT	
AREA = 731.77 x 3 FT		= 2,195.31 SQ FT

TOTAL AREA (RAMP D) = 10,672.38 SQ FT

ITEM 301 3" BITUMINOUS AGGREGATE BASE, AS PER PLAN

W.B. I.R. 80S

LT: 1116+75.75 TO 1123+13.76 =	638.01 LIN FT	
LT: 1131+16.06 TO 1133+33.00 =	216.94 LIN FT	
TOTAL LENGTH = 854.95 LIN FT		
VOLUME = 854.95 x 2.67 FT x 3 INCH / (12 x 27)		= 21.14 CU YDS

RAMP A

AREA FROM ITEM 409 =	10,672.38 SQ FT	
VOLUME = 10,672.38 SQ FT x 3 INCH/ (12x27)		= 98.82 CU YDS

RAMP B

AREA FROM ITEM 409 =	22,386.10 SQ FT	
VOLUME = 22,386.10 SQ FT x 3 INCH/ (12x27)		= 207.28 CU YDS

RAMP C

AREA FROM ITEM 409 =	22,386.09 SQ FT	
VOLUME = 22,386.09 SQ FT x 3 INCH/ (12x27)		= 207.28 CU YDS

RAMP D

AREA FROM ITEM 409 =	10,672.38 SQ FT	
VOLUME = 10,672.38 SQ FT x 3 INCH/ (12x27)		= 98.82 CU YDS

TOTAL ITEM 301, AS PER PLAN = 633.34 CU YDS

TO SUMMARY USE = 634 CU YDS

ITEM 304 AGGREGATE BASE

RAMP A

RT: 1094+00.00 TO 1095+00.00 =	100.00 LIN FT	
VOLUME = 100.00 x (5.0+4.0 SQ FT)/(2x27)		= 16.67 CU YDS
RT: 1095+00.00 TO 1101+01.47 =	701.47 LIN FT	
VOLUME = 701.47 x 3.7777 SQ FT/27		= 98.15 CU YDS
RT: 1102+01.47 TO 1103+01.47 =	100.00 LIN FT	
VOLUME = 100.00 x (3.7777+1.2501 SQ FT)/(2x27)		= 9.31 CU YDS
RT: 1103+01.47 TO 1105+25.00 =	223.53 LIN FT	
LT: 1105+25.00 TO 1109+33.24 =	408.24 LIN FT	
TOTAL LENGTH =	631.77 LIN FT	
VOLUME = 631.77 x 1.2501 SQ FT/27		= 29.25 CU YDS
RT: 1105+25.00 TO 1107+03.24 =	178.24 LIN FT	
RT: 1108+63.24 TO 1109+33.24 =	70.00 LIN FT	
LT: 1102+01.47 TO 1105+25.00 =	323.53 LIN FT	
TOTAL LENGTH =	571.77 LIN FT	
VOLUME = 571.77 x 1.50 SQ FT/27		= 31.77 CU YDS

TOTAL ITEM 304 (RAMP A) = 185.15 CU YDS

RAMP B

RT: 1111+74.88 TO 1114+58.33 =	283.45 LIN FT	
LT: 1114+58.33 TO 1116+66.06 =	207.73 LIN FT	
TOTAL LENGTH =	491.18 LIN FT	
VOLUME = 491.18 x 1.50 SQ FT/27		= 27.29 CU YDS
RT: 1114+58.33 TO 1116+66.06 =	207.73 LIN FT	
LT: 1109+99.88 TO 1114+58.33 =	458.45 LIN FT	
TOTAL LENGTH =	666.18 LIN FT	
VOLUME = 666.18 x 1.2501 SQ FT/27		= 30.84 CU YDS
RT: 1116+66.06 TO 1118+16.06 =	150.00 LIN FT	
VOLUME = 150.00 x (1.2501+3.7777 SQ FT)/(2x27)		= 13.97 CU YDS

Calc. - L.I.P. G-16-69
Checked - R.V.H. G-19-69
Rev. - J.S.W. 7-2-70
Checked - L.V.P. 7-2-70

ITEM 304 AGGREGATE BASE (continued)

COMPUTATIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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MEDINA COUNTY

MED-80S-5.14 PART II

ITEM 304 AGGREGATE BASE (CONTINUED)

RAMP B (CONTINUED)

RT: 1118+16.06 TO 1132+00.00 =	1,383.94 LIN FT		
VOLUME = 1,383.94 x 3.7777 SQ FT/27		=	193.63 CU YDS
LT: 1116+66.06 TO 1117+16.06 =	50.00 LIN FT		
VOLUME = 50.00 x (1.50+1.00 SQ FT)/ (2x27)		=	2.31 CU YDS
LT: 1116+77.50 TO 1121+16.06 =	438.56 LIN FT		
VOLUME = 438.56 x 13.3802 FT (AVG) x 6 INCH/ (12x27)		=	103.70 CU YDS
- (438.56 LIN FT x 0.3056 SQ FT/27)			
RT: 1131+00.-0 TO 1132+20.06 =	20.06 LIN FT		
VOLUME = 20.06 x 4.00 SQ FT/27		=	2.97 CU YDS
RT: 1132+20.06 TO 1133+16.06 =	96.00 LIN FT		
VOLUME = 96.00 x (4.00+5.00 SQ FT)/ (2x27)		=	16.00 CU YDS
TOTAL ITEM 304 (RAMP B)		=	390.71 CU YDS

RAMP C

LT: 1092+00.00 TO 1092+96.00 =	96.00 LIN FT		
VOLUME = 96.00 x (5.00+4.00 SQ FT) / (2x27)		=	16.00 CU YDS
LT: 1092+96.00 TO 1095+00.00 =	204.00 LIN FT		
VOLUME = 204.00 x 4.00 SQ FT/27		=	30.22 CU YDS
LT: 1095+00.00 TO 1107+00.00 =	1,200.00 LIN FT		
VOLUME = 1,200.00 x 3.7777 SQ FT/27		=	167.90 CU YDS
LT: 1107+00.00 TO 1108+50.00 =	150.00 LIN FT		
VOLUME = 150.00 x (3.7777+1.2501 SQ FT) / (2x27)		=	13.97 CU YDS
LT: 1108+50.00 TO 1110+50.00 =	200.00 LIN FT		
RT: 1110+50.00 TO 1115+16.18 =	466.18 LIN FT		
TOTAL LENGTH =	666.18 LIN FT		
VOLUME 666.18 x 1.2501 SQ FT/27		=	30.84 CU YDS
LT: 1110+50.00 TO 1113+41.18 =	291.18 LIN FT		
RT: 1108+00.00 TO 1110+50.00 =	250.00 LIN FT		
TOTAL LENGTH =	541.18 LIN FT		
VOLUME = 541.18 x 1.50 SQ FT/27		=	30.07 CU YDS
RT: 1104+00.00 TO 1108+37.50 =	437.50 LIN FT		
VOLUME = 437.50 x 13.4126 FT (AVG) x 6 INCH/(12x27)		=	103.72 CU YDS
- (437.50 LIN FT x 0.3056 SQ FT/27)			
RT: 1108+00.00 TO 1108+50.00 =	50.00 LIN FT		
VOLUME = 50.00 x (1.00+1.50 SQ FT)/ (2x27)		=	2.31 CU YDS
TOTAL ITEM 304 (RAMP C)		=	395.03 CU YDS

RAMP D

LT: 1115+82.82 TO 1116+52.82 =	70.00 LIN FT		
LT: 1118+12.82 TO 1119+80.00 =	167.18 LIN FT		
RT: 1119+80.00 TO 1123+14.59 =	334.59 LIN FT		
TOTAL LENGTH =	571.77 LIN FT		
VOLUME = 571.77 x 1.50 SQ FT/27		=	31.77 CU YDS
LT: 1119+80.00 TO 1122+14.59 =	234.59 LIN FT		
RT: 1115+82.82 TO 1119+80.00 =	387.18 LIN FT		
TOTAL LENGTH =	631.77 LIN FT		
VOLUME = 631.77 x 1.2501 SQ FT/27		=	29.25 CU YDS
LT: 1122+14.59 TO 1123+14.59 =	100.00 LIN FT		
VOLUME = 100.00 x (1.2501+3.7777 SQ FT)/ (2x27)		=	9.31 CU YDS
LT: 1123+14.59 TO 1130+16.06 =	701.47 LIN FT		
VOLUME = 701.47 x 3.7777 SQ FT/27		=	98.15 CU YDS
LT: 1130+16.06 TO 1131+00.00 =	83.94 LIN FT		
VOLUME = 83.94 x (3.7777+4.7777 SQ FT)/ (2x27)		=	13.30 CU YDS
LT: 1131+00.00 TO 1131+16.06 =	16.06 LIN FT		
VOLUME = 16.06 x (4.7777+5.00 SQ FT)/ (2x27)		=	2.91 CU YDS
TOTAL ITEM 304 (RAMP D)		=	184.69 CU YDS

NORTH CUL-DE-SAC

AREA = 10,228.00 SQ FT			
VOLUME = 10,228.00 SQ FT x 6 INCH/ (12x27)		=	189.41 CU YDS
ADD FOR UNDER SHOULDER:			
439.60 LIN FT x 6 INCH x 6 INCH/ (12x12x27)		=	4.07 CU YDS
TOTAL ITEM 304 (NORTH CUL-DE-SAC)		=	193.48 CU YDS

ITEM 304 AGGREGATE BASE (continued)

W.B. I.R. 80S

LT: 1116+75.75 TO 1123+13.76 =	638.01 LIN FT		
LT: 1131+16.06 TO 1133+33.00 =	216.94 LIN FT		
TOTAL LENGTH =	854.95 LIN FT		
VOLUME = 854.95 x 1.0013 SQ FT / 27		=	31.71 CU YDS

SOUTH CUL-DE-SAC

AREA = 10,508.00 SQ FT			
VOLUME = 10,508.00 SQ FT x 6 INCH/ (12x27)		=	194.59 CU YDS
ADD FOR UNDER SHOULDER:			
441.00 LIN FT x 6 INCH x 6 INCH/ (12x12x27)		=	4.08 CU YDS
TOTAL ITEM 304 (SOUTH CUL-DE-SAC)		=	198.67 CU YDS

TOTAL ITEM 304		=	1,579.44 CU YDS
TO SUMMARY USE		=	1,580 CU YDS

ITEM SPECIAL DRAINAGE CONNECTION

RAMP A

RT: 1095+00.00 TO 1102+01.47 =	701.47 LIN FT		
VOLUME = 701.47 x 1.2512 SQ FT/27		=	32.51 CU YDS
RT: 1102+01.47 TO 1103+01.47 =	100.00 LIN FT		
VOLUME = 100.00 x (1.2512+1.3549 SQ FT)/ (2x27)		=	4.83 CU YDS
RT: 1103+01.47 TO 1105+25.00 =	223.53 LIN FT		
VOLUME = 223.53 x 1.3549 SQ FT/27		=	11.22 CU YDS
LT: 1105+25.00 TO 1109+33.24 =	408.24 LIN FT		
VOLUME = 408.24 x 1.3549 SQ FT/27		=	20.49 CU YDS
TOTAL ITEM SPECIAL (RAMP A)		=	69.05 CU YDS

RAMP B

LT: 1110+00.00 TO 1114+58.33 =	458.33 LIN FT		
VOLUME = 458.33 x 1.3549 SQ FT/27		=	23.00 CU YDS
LT: 1116+77.50 TO 1121+16.06 =	438.56 LIN FT		
VOLUME = 438.56 x 4.3890 SQ FT/27		=	71.29 CU YDS
RT: 1114+58.33 TO 1116+66.06 =	207.73 LIN FT		
VOLUME = 207.73 x 1.3549 SQ FT/27		=	10.42 CU YDS
RT: 1116+66.06 TO 1118+16.06 =	150.00 LIN FT		
VOLUME = 150.00 x (1.3549+1.2512 SQ FT)/ (2x27)		=	7.24 CU YDS
RT: 1118+16.06 TO 1132+00.00 =	1,383.94 LIN FT		
VOLUME = 1,383.94 x 1.2512 SQ FT/27		=	64.13 CU YDS
TOTAL ITEM SPECIAL (RAMP B)		=	176.08 CU YDS

RAMP C

LT: 1095+00.00 TO 1099+95.00 =	495.00 LIN FT		
VOLUME = 495.00 x 1.2512 SQ FT/27		=	22.94 CU YDS
LT: 1100+05.00 TO 1107+00.00 =	695.00 LIN FT		
VOLUME = 695.00 x 1.2512 SQ FT/27		=	32.21 CU YDS
LT: 1107+00.00 TO 1108+50.00 =	150.00 LIN FT		
VOLUME = 150.00 x (1.2512+1.3549 SQ FT)/ (2x27)		=	7.24 CU YDS
LT: 1108+50.00 TO 1110+50.00 =	200.00 LIN FT		
VOLUME = 200.00 x 1.3549 SQ FT/27		=	10.04 CU YDS
RT: 1104+00.00 TO 1108+37.50 =	437.50 LIN FT		
VOLUME = 437.50 x 4.3890 SQ FT/27		=	71.12 CU YDS
RT: 1110+50.00 TO 1115+16.18 =	466.18 LIN FT		
VOLUME = 466.18 x 1.3549 SQ FT/27		=	23.29 CU YDS
TOTAL ITEM SPECIAL (RAMP C)		=	166.94 CU YDS

W.B. I.R. 80S

LT: 1116+75.75 TO 1123+13.76 =	638.01 LIN FT		
LT: 1131+16.06 TO 1133+33.00 =	216.94 LIN FT		
TOTAL LENGTH =	854.95 LIN FT		
VOLUME = 854.95 x 1.3333 SQ FT / 27		=	42.22 CU YDS

ITEM SPECIAL DRAINAGE CONNECTION (CONTINUED)

RAMP D

RT: 1115+83.00 TO 1119+80.00 =	397.00 LIN FT		
VOLUME = 397.00 x 1.3549 SQ FT/27		=	19.92 CU YDS
LT: 1119+80.00 TO 1122+14.59 =	234.59 LIN FT		
VOLUME = 234.59 x 1.3549 SQ FT/27		=	11.77 CU YDS
LT: 1122+14.59 TO 1123+14.59 =	100.00 LIN FT		
VOLUME = 100.00 x (1.3549+1.2512 SQ FT)/ (2x27)		=	4.83 CU YDS
LT: 1123+14.59 TO 1131+00.00 =	785.41 LIN FT		
VOLUME = 785.41 x 1.2512 SQ FT/27		=	36.40 CU YDS
TOTAL ITEM SPECIAL (RAMP D)		=	72.92 CU YDS

TOTAL ITEM SPECIAL DRAINAGE CONNECTION		=	527.21 CU YDS
TO SUMMARY USE		=	528 CU YDS

ITEM 404 1-1/4" ASPHALT CONCRETE (70-85)

NORTH CUL-DE-SAC

AREA = 10,228.00 SQ FT			
VOLUME = 10,228.00 SQ FT x 1.25 INCH/ (12x27)		=	39.46 CU YDS

SOUTH CUL-DE-SAC

AREA = 10,508.00 SQ FT			
VOLUME = 10,508.00 SQ FT x 1.25 INCH/ (12x27)		=	40.54 CU YDS

TOTAL ITEM 404		=	80.00 CU YDS
TO SUMMARY USE		=	80 CU YDS

ITEM 402 1-1/2" ASPHALT CONCRETE (70-85)

NORTH CUL-DE-SAC

AREA 10,228.00 SQ FT			
VOLUME = 10,228.00 SQ FT x 1.5 INCH/ (12x27)		=	47.35 CU YDS

SOUTH CUL-DE-SAC

AREA = 10,508.00 SQ FT			
VOLUME=10,508.00 SQ FT x 1.5 INCH/ (12x27)		=	48.65 CU YDS

TOTAL ITEM 402		=	96.00 CU YDS
TO SUMMARY USE		=	96 CU YDS

ITEM 408 BITUMINOUS PRIME COAT

RATE OF APPLICATION = 0.40 GAL PER SQ YD

NORTH CUL-DE-SAC

AREA = 10,228.00 SQ FT			
VOLUME = 10,228 SQ FT x 0.40 GAL/SQ YD/9		=	454.58 GALS

SOUTH CUL-DE-SAC

AREA = 10,508.00 SQ FT			
VOLUME = 10,508.00 SQ FT x 0.40 GAL/SQ YD/9		=	467.02 GALS

TOTAL ITEM 408		=	921.60 GALS
TO SUMMARY USE		=	922 GALS

Rev. 7-7-70

COMPUTATIONS

Calc. ~ J.S.W. 7-2-70
Checked ~ L.J.P. 7-2-70
Checked ~ R.V.H. 6-19-69

COMPUTATIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

10
75

MEDINA COUNTY
MED-80S-5.14 PART II

ITEM 203 SUBGRADE COMPACTION

RAMP A

AREA UNDER PAVEMENT	=	2,761.07 SQ YDS
AREA UNDER SHOULDERS	=	1,185.82 SQ YDS
TOTAL ITEM 203 (RAMP A)	=	3,946.89 SQ YDS

RAMP B

AREA UNDER PAVEMENT	=	3,639.44 SQ YDS
AREA UNDER CURB	=	57.06 SQ YDS
AREA UNDER SHOULDERS	=	2,487.34 SQ YDS
DEDUCT FOR ROCK CUT (STA 1123+00 TO 1133+16.06)	=	2,876.59 SQ YDS
TOTAL ITEM 203 (RAMP B)	=	3,307.25 SQ YDS

RAMP C

AREA UNDER PAVEMENT	=	3,639.44 SQ YDS
AREA UNDER CURB	=	56.94 SQ YDS
AREA UNDER SHOULDERS	=	2,487.34 SQ YDS
TOTAL ITEM 203 (RAMP C)	=	6,183.72 SQ YDS

RAMP D

AREA UNDER PAVEMENT	=	2,761.07 SQ YDS
AREA UNDER SHOULDERS	=	1,185.82 SQ YDS
DEDUCT FOR ROCK CUT (STA 1123+14.59 TO 1131+16.06)	=	2,181.83 SQ YDS
TOTAL ITEM 203 (RAMP D)	=	1,765.06 SQ YDS

PARKING AREA

AREA UNDER PAVEMENT	=	10,256.95 SQ YDS

NORTH CUL-DE-SAC

AREA UNDER PAVEMENT = 10,228.00 SQ FT/9 =	=	1,136.44 SQ YDS

SOUTH CUL-DE-SAC

AREA UNDER PAVEMENT = 10,508.00 SQ FT/9 =	=	1,167.56 SQ YDS

TOTAL ITEM 203	=	27,763.87 SQ YDS
TO SUMMARY USE	=	27,764 SQ YDS

ITEM 451 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN

W.B. I.R. 80S

1116+75.75 TO 1133+33.00 = 1,657.25 LIN FT		
AREA = 1,657.25 x 12 FT / 9	=	2,209.67 SQ YDS

TOTAL ITEM 451, AS PER PLAN	=	2,209.67 SQ YDS
TO SUMMARY USE	=	2,210 SQ YDS

ITEM SPECIAL REMOVAL AND REPLACEMENT OF EXISTING SUBBASE USING ITEM 310, GRADING A

W.B. I.R. 80S

1116+75.75 TO 1133+33.00 = 1,657.25 LIN FT		
VOLUME = 1,657.25 x 14.67 FT x 6 INCH / (12 x 27)	=	450.22 CU YDS
DEDUCT UNDER SPEED CHANGE LANE		
1123+13.76 TO 1131+16.06 = 802.30 LIN FT		
VOLUME = 802.30 x 2.67 FT x 6 INCH / (12 x 27)	=	- 39.67 CU YDS
TOTAL	=	410.55 CU YDS

TOTAL ITEM SPECIAL	=	410.55 CU YDS
TO SUMMARY USE	=	411 CU YDS

EARTHWORK AND SEEDING QUANTITIES

STATION TO	STATION	EXCAVATION CU YDS	EMBANKMENT CU YDS	SEEDING SQ YDS
EASTBOUND				
1094+00	1098+00	417	242	1,834
1098+00	1109+50	1,093	13,342	12,861
1109+50	1121+00	8,153	16,437	16,824
1121+00	1133+50	28,809	572	17,484
WESTBOUND				
1092+00	1104+00	2,796	968	6,712
1104+00	1115+00	2,341	11,753	14,545
1115+00	1127+00	27,809	5,466	18,445
1127+00	1131+50	6,853	81	4,387
TOTALS		78,271	48,861	93,092

TOTAL 203 EXC. NOT INCLUDING EMB. TO SUMMARY	=	78,271 CU YDS

TOTAL 203 EMBANKMENT TO SUMMARY	=	48,861 CU YDS

TOTAL 659 SEEDING AND MULCHING	=	93,092 SQ YDS

DEDUCT FOR JUTE MATTING & ROCK CHANNEL PROTECTION	=	- 3,027 SQ YDS

NET 659 SEEDING AND MULCHING TO SUMMARY	=	90,065 SQ YDS

ITEM 659 COMMERCIAL FERTILIZER (12-12-12)

RATE OF APPLICATION = 20 Lbs PER 1000 SQ FT

TOTAL SEEDING AND MULCHING =	90,065 SQ YDS

TOTAL JUTE MATTING =	2,958 SQ YDS

TOTAL AREA =	93,023 SQ YDS

WEIGHT = 93,023 x 9/1000 (20/2000)	=	8.37 TONS

TO SUMMARY USE	=	8.37 TONS

GENERAL SUMMARY

PART II												* 100% State Participation				
ITEM	SHEET NUMBER											ITEM	PART II TOTAL	UNIT	DESCRIPTION	
	General Notes	Comps.	13	14	15	16	17	18		51	68					68*
ROADWAY CODE Y021																
201	Lump												201	Lump	Lump	Clearing and Grubbing
202						Lump							202	Lump	Lump	Existing Structures Removed
202								227					202	227	Lin. Ft.	Existing Paved Gutter Removed and Disposed of
202			14		147			26					202	187	Lin. Ft.	Pipe Removed, 15" and Under
202								699	1511				202	2,210	Sq. Yds.	Existing Pavement Removed and Disposed of
203		78,271											203	78,271	Cu. Yds.	Excavation not including Embankment Construction, as per plan
203		48,861											203	48,861	Cu. Yds.	Embankment
203		27,764											203	27,764	Sq. Yds.	Subgrade Compaction
606					87.5			100					606	187.5	Lin. Ft.	Guard Rail, Type 4
606					2			2					606	4	Each	Anchor Assembly
607			2,156	746	1,396	1,328	1,490	1,464					607	8,580	Lin. Ft.	Fence, Type 47
202								Lump					202	Lump	Lump	Parcel N°7-WL-T Removal of one frame aircraft hangar
EROSION CONTROL CODE Y005																
601					46	33	2						601	81	Cu. Yds.	Rock Channel Protection, Type B
659		8.37											659	8.37	Tons	Commercial Fertilizer (12-12-12)
659		90,065											659	90,065	Sq. Yds.	Seeding and Mulching, as per plan
667					347			667	1,344				667	2,958	Sq. Yds.	Seeding and Jute Matting
Spec.	4												Spec.	4	Ton	Commercial Fertilizer (12-12-12)
Spec.	45,000												Spec.	45,000	Sq. Yd.	Temporary Seeding and Mulching
Spec.	22												Spec.	22	M. Gal.	Water
DRAINAGE CODE Y021																
602			0.3		1.0	2.5	0.9						602	4.7	Cu. Yds.	Concrete Masonry
603						226							603	226	Lin. Ft.	48" Conduit, Type A, 706.02
603			18	21	42	46	42						603	169	Lin. Ft.	6" Conduit, Type B
603					47								603	47	Lin. Ft.	12" Conduit, Type B
603			24		165	58	111						603	358	Lin. Ft.	15" Conduit, Type B
603					81		267						603	348	Lin. Ft.	18" Conduit, Type B
603					34								603	34	Lin. Ft.	12" Conduit, Type D, 706.01, 706.02 or 706.08
603			10	10	30	60	30						603	140	Lin. Ft.	6" Conduit, Type F
604					1								604	1	Each	Standard No. 2-2-B Catch Basin
604					1								604	1	Each	Standard No. 3 Catch Basin, Modified as per plan
604					1		2						604	3	Each	Standard No. 5 Catch Basin
604							1						604	1	Each	Standard No. 8 Catch Basin
605					50			95	368				605	513	Lin. Ft.	6" Unclassified Pipe Underdrains
605			1,212	1,158	377	1,193	986						605	4,926	Lin. Ft.	6" Shallow Pipe Underdrains
605					768								605	768	Lin. Ft.	6" Deep Pipe Underdrains
605								150	1,016				605	1,166	Lin. Ft.	6" Pipe Underdrains, 707.01 Class III or 707.12
TRAFFIC CONTROL CODE Y021																
202									Lump				202	Lump	Lump	Removal of Existing Sign Installations, as per plan
620									82				620	82	Each	Delineator, Type C-2, Post Mounted
621									1,880				621	1,880	Miles	4" Edge Lines
621									0.071				621	0.071	Miles	4" Lane Lines
621									1,602				621	1,602	Lin. Ft.	8" Channelizing Lines
621									680				621	680	Lin. Ft.	24" Broad Transverse Stripes
621									1,101				621	1,101	Lin. Ft.	Curb Marking
621									5,400				621	5,400	Lin. Ft.	Parking Lot Stall Marking
621									2,387				621	2,387	Lin. Ft.	Existing Pavement Markings Removed, as per plan
815									2				815	2	Each	Variable Sign Message Unit, as per plan
815									520				815	520	Sq. Ft.	Interim Covering for Signs, as per plan
815									613				815	613	Sq. Ft.	Sign Erection, Extru-Sheet Type, Ground Mounted, as per plan

Rev. ~ J.S.W. 7-7-70
Checked ~ C.E.H. 7-7-70

Rev. 6-29-70

Calc. ~ J.S.W. 11-4-69
Checked ~ L.V.P. 11-5-69

GENERAL SUMMARY

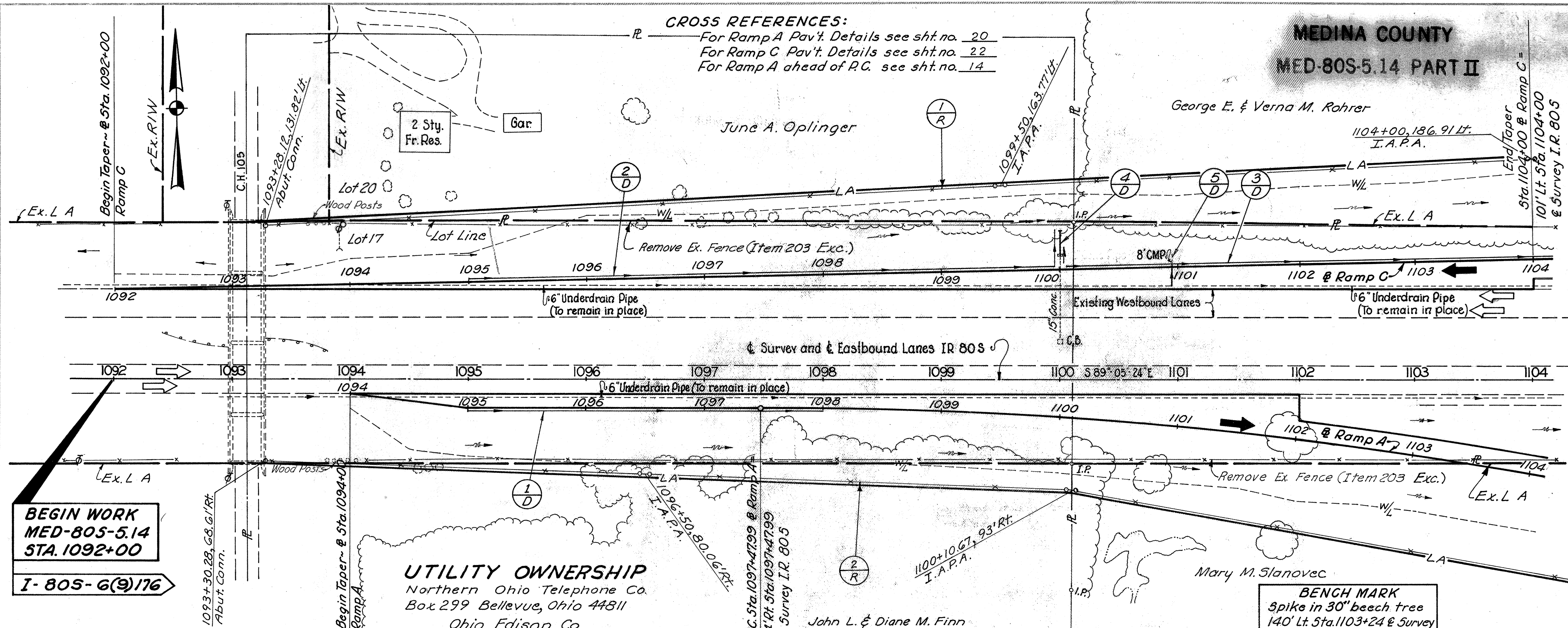
PART II											* 100 % State Participation			
ITEM	SHEET		NUMBER								ITEM	PART II TOTAL	UNIT	DESCRIPTION
	General Notes	Comps.	13	14	15	16	17	18	51	68				
TRAFFIC CONTROL CODE Y021 (continued)														
815									32		815	32	Sq. Ft.	Sign Erection, Flat Sheet Type, Ground Mounted, as per plan
816									72.5		816	72.5	Lin. Ft.	Structural Supports, 6 lb. Beam, as per plan
816									179.0		816	179.0	Lin. Ft.	Structural Supports, 8 lb. Beam, as per plan
816									298.0		816	298.0	Lin. Ft.	Structural Supports, 10-WF-21
816									14		816	14	Each	Breakaway Sign Support Connection, as per plan
816									Lump		816	Lump	Lump	Remove and Re-erect Existing Ground Mounted Signs
816									16.6		816	16.6	Cu. Yds.	Concrete Foundations, Type 1
LIGHTING CODE Y022														
625									2		625	2	Each	Light Pole, Design 11AT10B 34.2
606									12		606	12	Each	Guard Post, as per plan
625									12		625	12	Each	Light Pole, Design 11A 10B 32.5
625									12		625	12	Each	Light Pole, Design 11AT 15B 34.2
625									26		625	26	Each	Light Pole Foundation, 24" x 24" x 6' Deep
625									20		625	20	Each	Luminaire, Type III, 400 Watt, 713.11
625									6		625	6	Each	Luminaire, Type III, 400 Watt, 713.11 with Integral Photoelectric Control
625									26		625	26	Each	Lamp, 400 Watt, 713.14 Mercury
625								2	26		625	28	Each	Ground Rod
625									8	10*	625	18	Each	Pull Box, 18" Circular, 713.09
625									16		625	16	Each	Pull Box, 24" Circular, 713.09
625									1		625	1	Each	Marker
625									8,908	962*	625	9,870	Lin. Ft.	Trench, 24" Deep
625										962*	625	962	Lin. Ft.	Conduit, 1 1/2", 713.04, Type II or III
625									1,169		625	1,169	Lin. Ft.	Conduit, 3", 713.04, Type II or III
625									2,793		625	2,793	Lin. Ft.	No. 1/0 AWG, 600 Volt Feeder Circuit Cable
625									1,110		625	1,110	Lin. Ft.	No. 4 AWG, 600 Volt Distribution Circuit Cable
625									2,380		625	2,380	Lin. Ft.	No. 10 AWG, Pole and Bracket Cable, 19 Strand
625									11,872		625	11,872	Lin. Ft.	1 1/2" Duct-cable with Three No. 4 AWG 600 Volt Cables
625									96		625	96	Each	Connector Kit, Type I
625									52		625	52	Each	Connector Kit, Type II
625									26		625	26	Each	Connector Kit, Type III
625									6		625	6	Each	Connector Kit, Type VIII B
625									Lump		625	Lump	Lump	Service Pole No. 2
625									Lump		625	Lump	Lump	Service Pole No. 3
PAVEMENT CODE Y021														
301		634									301	634	Cu. Yds.	Bituminous Aggregate Base, 702.01(85-100) or 702.09, RT-10, as per plan
304		1,580			32			192			304	1,804	Cu. Yds.	Aggregate Base
310		675									310	675	Cu. Yds.	Subbase
310		4,410									310	4,410	Cu. Yds.	Subbase, Grading A as per plan
402		96									402	96	Cu. Yds.	Asphalt Concrete (70-85)
404		80			2			3			404	85	Cu. Yds.	Asphalt Concrete (70-85)
408		922									408	922	Gals.	Bituminous Prime Coat, 702.09 RT-2 or RT-3
451		23,058									451	23,058	Sq. Yds.	9" Reinforced Portland Cement Concrete Pavement
451		2,210									451	2,210	Sq. Yds.	9" Reinforced Portland Cement Concrete Pavement, as per plan
609					113		113				609	226	Lin. Ft.	Concrete Curb, Standard Type T
609					439		438				609	877	Lin. Ft.	Concrete Curb, Standard Type B
Special		528									Special	528	Cu. Yds.	Drainage Connection, Using No. 8 Aggregate
Special		411									Special	411	Cu. Yds.	Removal and Replacement of Existing Subbase using Item 310
Subbase, Grading A as per plan														
Field Office														
614	Lump										614	Lump	Lump	Construction Layout Stakes
619	Lump										614	Lump	Lump	Maintaining Traffic

Rev. ~ J.S.W. 7-7-70
Checked ~ C.E.H. 7-7-70

Calc. ~ J.S.W. 11-4-69
Checked ~ L.J.P. 11-5-69

MEDINA COUNTY
MED-80S-5.14 PART II

CROSS REFERENCES:
 For Ramp A Pav't. Details see sht. no. 20
 For Ramp C Pav't. Details see sht. no. 22
 For Ramp A ahead of P.C. see sht. no. 14



UTILITY OWNERSHIP
Northern Ohio Telephone Co.
Box 299 Bellevue, Ohio 44811
Ohio Edison Co.
47 North Main St., Akron, Ohio 44300
Wadsworth Electric Co.
Municipal Light & Water Dept.
Wadsworth, Ohio 44281

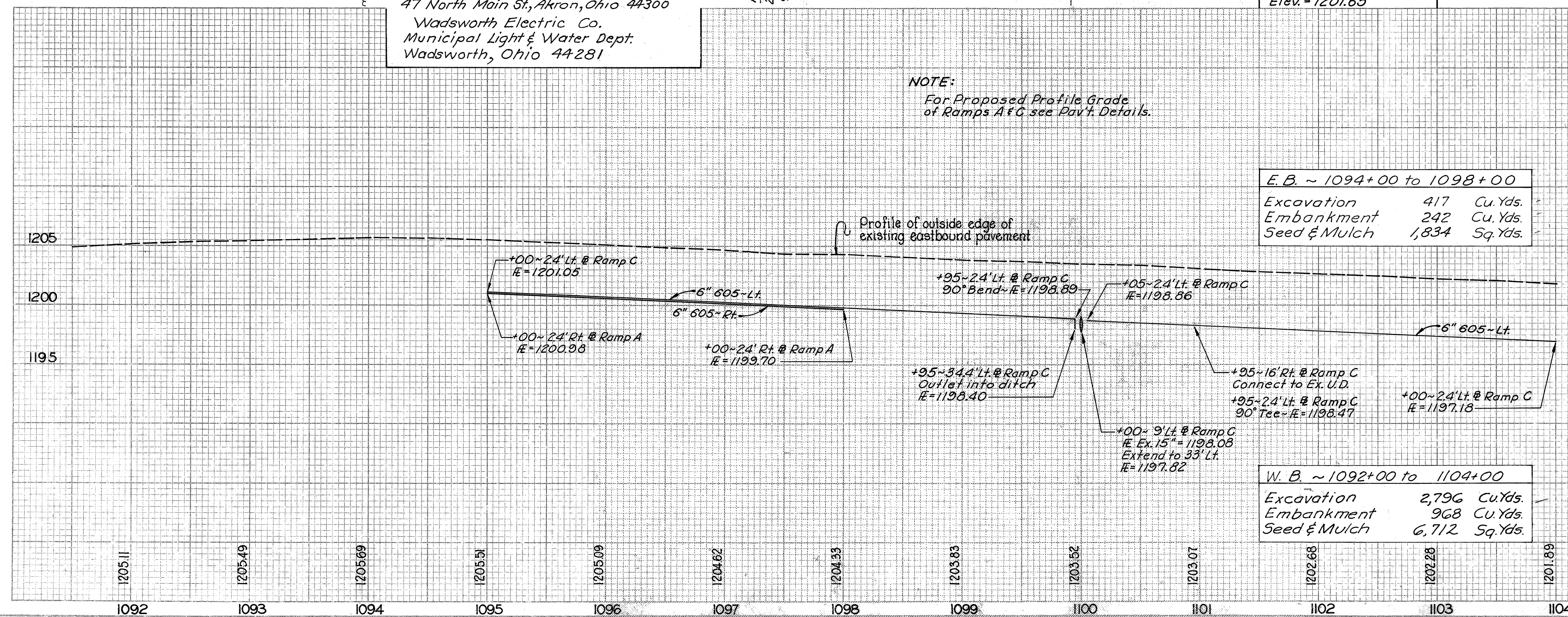
BEGIN WORK
MED-805-5.14
STA. 1092+00

I-805-6(9)176

Mary M. Slanovec

BENCH MARK Spike in 30" beech tree 140' Lt. Sta. 1103+24 E Survey Elev. = 1201.65

NOTE:
For Proposed Profile Grade
of Ramps A & C see Pav't. Details.



<i>E.B. ~ 1094+00 to 1098+00</i>		
<i>Excavation</i>	<i>417</i>	<i>Cu. Yds.</i>
<i>Embankment</i>	<i>242</i>	<i>Cu. Yds.</i>
<i>Seed & Mulch</i>	<i>1,834</i>	<i>Sq. Yds.</i>

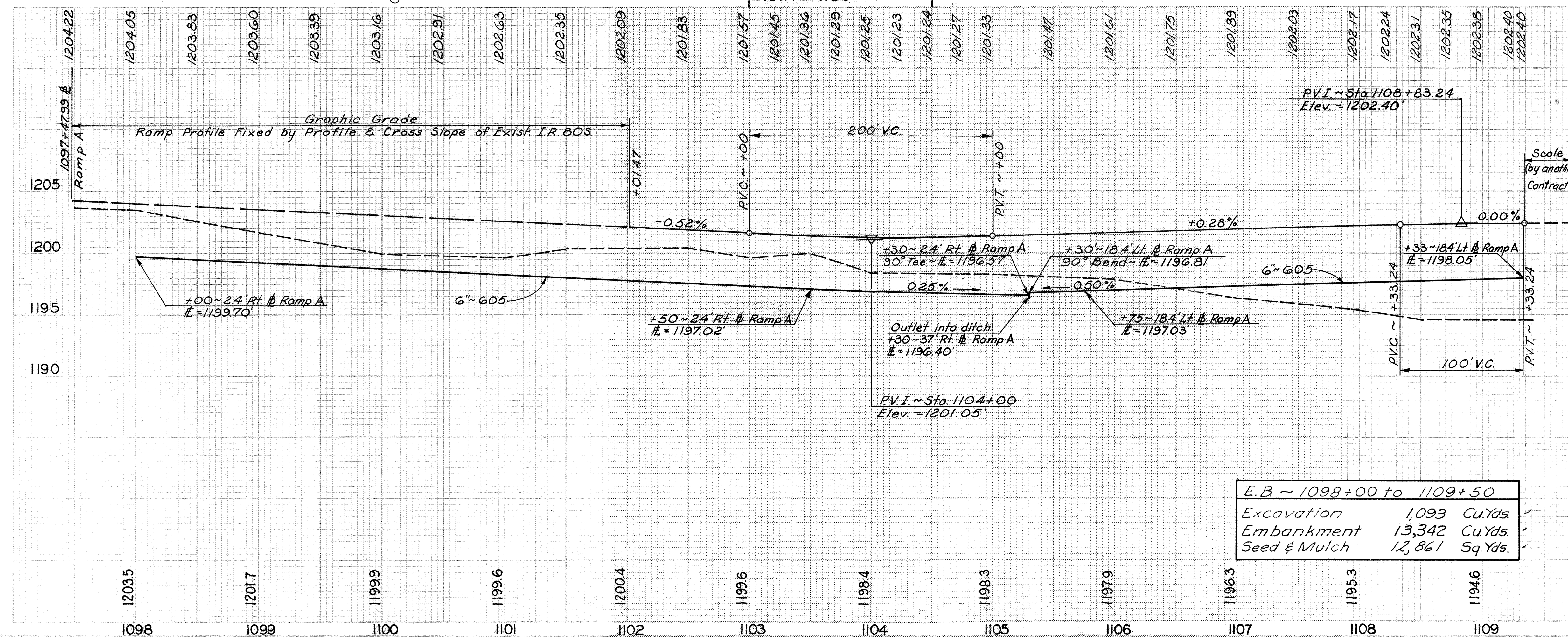
W. B. ~ 1092+00 to 1104+00
Excavation 2,796 Cu.Yds.
Embankment 968 Cu.Yds.
Seed & Mulch 6,712 Sq.Yds.

[illegible]

STA 1092+00 TO STA 1104+00 IR 80S

Calc. ~ L.J.P. 6-20-69
Checked by CCC C-27-69

14
75

[illegible]

EASTBOUND WEIGH STATION-RAMP "A"

CROSS REFERENCES
For Ramp B Pav't Details see sht. no. 21
For E.B. Weigh Station Details see sht. no. 24
For Cul-De-Sac, Typical Section Ex.C.H. 1985. &
Res. Drive Details see sht. no. 43

* Modified as per plan

*** 70G.01, 70G.02 or 70G.03

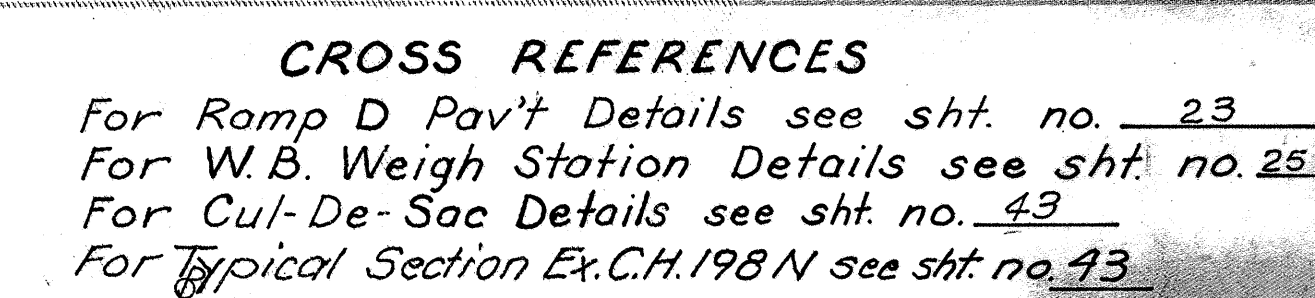
ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	REF.	ESTIMATED QUANTITIES										BENDS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				202 Pipe Removed 15' & Under Lin. Ft.	304 Aggregate Base Cu Yds.	404 Asphalt Concrete (10-85) Cu Yds.	501 Rock Cham. Pad Type B Cu Yds.	602 Conc. Massing Cu Yds.	G03 Conduit			G04 Catch Basins			G05 Guard Rail			G06 Curb Std.	G07 Fence, Type 47	G08 Seeding & Lure Matting Sq. Yds.	G09 Anchor Assembly Each	G10 Bends C"	SEE SHT. NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

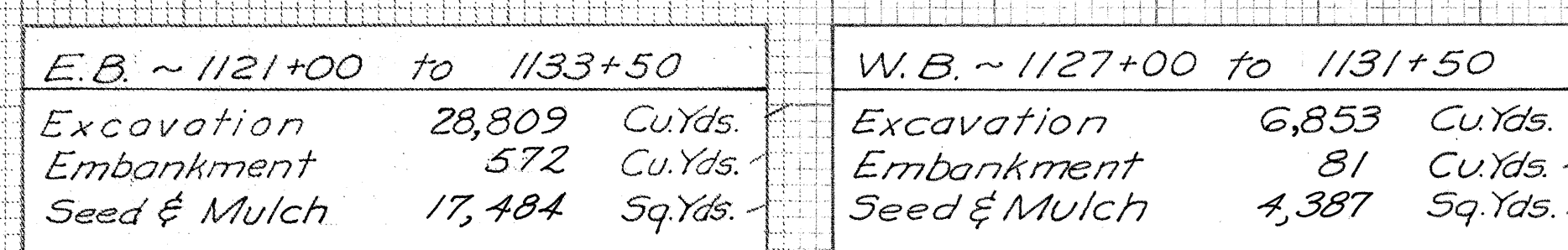
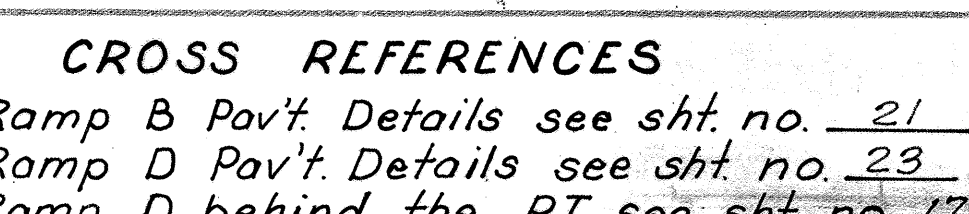
WESTBOUND WEIGH STATION - RAMP "C"

REF. NO.	STATION TO STATION	SIDE	REF.	202 Exist. Struc. Removed	201 Pavt. Chopt. Type B	602 Concrete Masonry	603 Type A 48"	603 Type B 48"	603 Type C 48"	604 Type D 48"	605 Type E 48"	606 Type F 48"	607 Type G 48"	608 Type H 48"	609 Type I 48"	610 Type J 48"	611 Type K 48"	612 Type L 48"	613 Type M 48"	614 Type N 48"	615 Type O 48"	616 Type P 48"	617 Type Q 48"	618 Type R 48"	619 Type S 48"	620 Type T 48"	621 Type U 48"	622 Type V 48"	623 Type W 48"	624 Type X 48"	625 Type Y 48"	626 Type Z 48"	627 Type AA 48"	628 Type AB 48"	629 Type AC 48"	630 Type AD 48"	631 Type AE 48"	632 Type AF 48"	633 Type AG 48"	634 Type AH 48"	635 Type AI 48"	636 Type AJ 48"	637 Type AK 48"	638 Type AL 48"	639 Type AM 48"	640 Type AN 48"	641 Type AO 48"	642 Type AP 48"	643 Type AQ 48"	644 Type AR 48"	645 Type AS 48"	646 Type AT 48"	647 Type AU 48"	648 Type AV 48"	649 Type AW 48"	650 Type AX 48"	651 Type AY 48"	652 Type AZ 48"	653 Type BA 48"	654 Type BB 48"	655 Type BC 48"	656 Type BD 48"	657 Type BE 48"	658 Type BF 48"	659 Type BG 48"	660 Type BH 48"	661 Type BI 48"	662 Type BJ 48"	663 Type BK 48"	664 Type BL 48"	665 Type BM 48"	666 Type BN 48"	667 Type BO 48"	668 Type BP 48"	669 Type BQ 48"	670 Type BR 48"	671 Type BS 48"	672 Type BT 48"	673 Type BU 48"	674 Type BV 48"	675 Type BW 48"	676 Type BX 48"	677 Type BY 48"	678 Type BZ 48"	679 Type CA 48"	680 Type CB 48"	681 Type CC 48"	682 Type CD 48"	683 Type CE 48"	684 Type CF 48"	685 Type CG 48"	686 Type CH 48"	687 Type CI 48"	688 Type CJ 48"	689 Type CK 48"	690 Type CL 48"	691 Type CM 48"	692 Type CN 48"	693 Type CO 48"	694 Type CP 48"	695 Type CQ 48"	696 Type CR 48"	697 Type CS 48"	698 Type CT 48"	699 Type CU 48"	700 Type CV 48"	701 Type CW 48"	702 Type CX 48"	703 Type CY 48"	704 Type CZ 48"	705 Type DA 48"	706 Type DB 48"	707 Type DC 48"	708 Type DD 48"	709 Type DE 48"	710 Type DF 48"	711 Type DG 48"	712 Type DH 48"	713 Type DI 48"	714 Type DJ 48"	715 Type DK 48"	716 Type DL 48"	717 Type DM 48"	718 Type DN 48"	719 Type DO 48"	720 Type DP 48"	721 Type DQ 48"	722 Type DR 48"	723 Type DS 48"	724 Type DT 48"	725 Type DU 48"	726 Type DV 48"	727 Type DW 48"	728 Type DX 48"	729 Type DY 48"	730 Type DZ 48"	731 Type EA 48"	732 Type EB 48"	733 Type EC 48"	734 Type ED 48"	735 Type EE 48"	736 Type EF 48"	737 Type EG 48"	738 Type EH 48"	739 Type EI 48"	740 Type EJ 48"	741 Type EK 48"	742 Type EL 48"	743 Type EM 48"	744 Type EN 48"	745 Type EO 48"	746 Type EP 48"	747 Type EQ 48"	748 Type ER 48"	749 Type ES 48"	750 Type ET 48"	751 Type EU 48"	752 Type EV 48"	753 Type EW 48"	754 Type EX 48"	755 Type EY 48"	756 Type EZ 48"	757 Type FA 48"	758 Type FB 48"	759 Type FC 48"	760 Type FD 48"	761 Type FE 48"	762 Type FF 48"	763 Type FG 48"	764 Type FH 48"	765 Type FI 48"	766 Type FJ 48"	767 Type FK 48"	768 Type FL 48"	769 Type FM 48"	770 Type FN 48"	771 Type FO 48"	772 Type FP 48"	773 Type FQ 48"	774 Type FR 48"	775 Type FS 48"	776 Type FT 48"	777 Type FU 48"	778 Type FV 48"	779 Type FW 48"	780 Type FX 48"	781 Type FY 48"	782 Type FZ 48"	783 Type GA 48"	784 Type GB 48"	785 Type GC 48"	786 Type GD 48"	787 Type GE 48"	788 Type GF 48"	789 Type GG 48"	790 Type GH 48"	791 Type GI 48"	792 Type GJ 48"	793 Type GK 48"	794 Type GL 48"	795 Type GM 48"	796 Type GN 48"	797 Type GO 48"	798 Type GP 48"	799 Type GQ 48"	800 Type GR 48"	801 Type GS 48"	802 Type GT 48"	803 Type GU 48"	804 Type GV 48"	805 Type GW 48"	806 Type GX 48"	807 Type GY 48"	808 Type GZ 48"	809 Type HA 48"	810 Type HB 48"	811 Type HC 48"	812 Type HD 48"	813 Type HE 48"	814 Type HF 48"	815 Type HG 48"	816 Type HH 48"	817 Type HI 48"	818 Type HJ 48"	819 Type HK 48"	820 Type HL 48"	821 Type HM 48"	822 Type HN 48"	823 Type HO 48"	824 Type HP 48"	825 Type HQ 48"	826 Type HR 48"	827 Type HS 48"	828 Type HT 48"	829 Type HU 48"	830 Type HV 48"	831 Type HW 48"	832 Type HX 48"	833 Type HY 48"	834 Type HZ 48"	835 Type IA 48"	836 Type IB 48"	837 Type IC 48"	838 Type ID 48"	839 Type IE 48"	840 Type IF 48"	841 Type IG 48"	842 Type IH 48"	843 Type II 48"	844 Type IJ 48"	845 Type IK 48"	846 Type IL 48"	847 Type IM 48"	848 Type IN 48"	849 Type IO

WESTBOUND WEIGH STATION - RAMP "C"



WEST BOUND WEIGH STATION-RAMP'D



	TOTALS	227	1016

CALC. ~ L.I.P. G-20-69 REV. ~ L.I.P. 7-1-70

SUPERELEVATION TABLES

MEDINA COUNTY
MED-80S-5 14 PART II

RAMP A SLOPE REVERSAL STA 1104+25 TO STA 1106+25			
STATION	LT EDGE ELEV	JOINT ELEV	PROFILE ELEV
1104+25	1201.48	1201.36	1201.23
+50	1201.48	1201.36	1201.24
+75	1201.47	1201.37	1201.27
1105+00	1201.45	1201.39	1201.33
+25	1201.42	1201.41	1201.40
+30	1201.41	1201.41	1201.41
+50	1201.39	1201.43	1201.47
+75	1201.38	1201.46	1201.54
1106+00	1201.39	1201.50	1201.61
+25	1201.43	1201.55	1201.68

RAMP B SLOPE REMOVAL FOR SCALE AT STA 1109+33.24 TO STA 1109+99.88			
STATION	LT EDGE ELEV	JOINT ELEV	PROFILE ELEV
1109+99.88	1202.40	1202.40	1202.40
1110+00	1202.40	1202.40	1202.40
+25	1202.31	1202.34	1202.37
+50	1202.16	1202.22	1202.28
+75	1201.94	1202.04	1202.13
1111+00	1201.70	1201.81	1201.92
+25	1201.40	1201.53	1201.65

RAMP C SLOPE REVERSAL STA 1109+75 TO STA 1111+50			
STATION	PROFILE ELEV	JOINT ELEV	RT EDGE ELEV
1109+75	1199.00	1199.12	1199.25
1110+00	1198.89	1198.97	1199.06
+25	1198.78	1198.82	1198.86
+50	1198.68	1198.68	1198.68
+75	1198.62	1198.57	1198.53
1111+00	1198.58	1198.49	1198.41
+25	1198.57	1198.46	1198.35
+50	1198.59	1198.46	1198.34

RAMP D SLOPE REMOVAL FOR SCALE AT STA 1115+16.18 TO STA 1115+82.82			
STATION	PROFILE ELEV	JOINT ELEV	RT EDGE ELEV
1115+82.82	1199.98	1199.98	1199.98
1116+00	1199.96	1199.94	1199.92
+25	1199.86	1199.80	1199.75
+50	1199.69	1199.60	1199.52
+75	1199.43	1199.32	1199.21
1117+00	1199.10	1198.97	1198.85

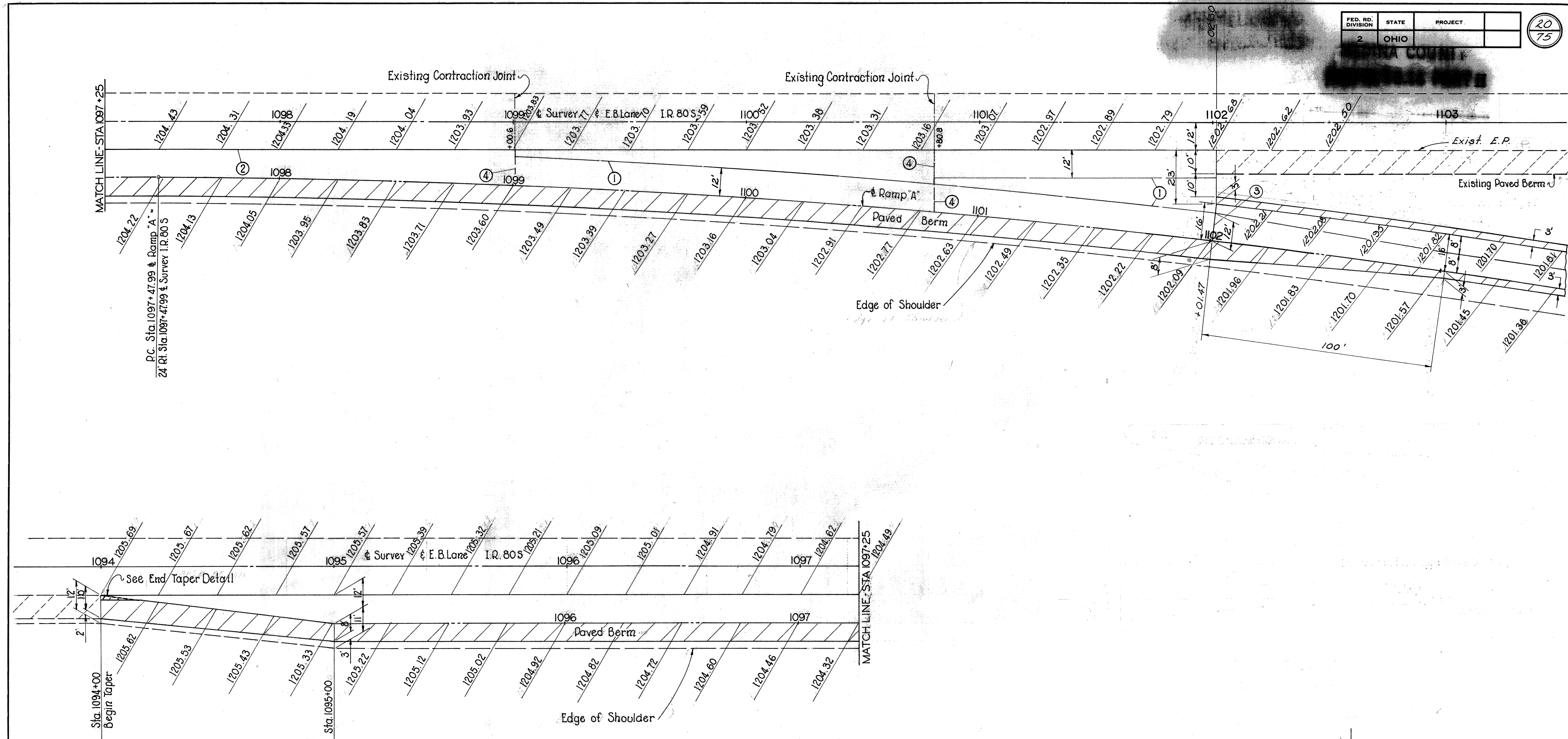
RAMP A SLOPE REMOVAL FOR SCALE AT STA 1109+33.24 TO STA 1109+99.88			
STATION	LT EDGE ELEV	JOINT ELEV	PROFILE ELEV
1108+25	1201.99	1202.11	1202.24
+50	1202.08	1202.19	1202.31
+75	1202.20	1202.27	1202.35
1109+00	1202.30	1202.34	1202.38
+25	1202.38	1202.39	1202.40
+33.24	1202.40	1202.40	1202.40

PI STA 1116+72.03 RAMP B S = 0.0312 FT/FT			
STATION	LT EDGE ELEV	JOINT ELEV	PROFILE ELEV
1113+75	1197.83	1197.95	1198.08
1114+00	1197.50	1197.61	1197.72
+25	1197.22	1197.29	1197.36
+50	1196.96	1196.98	1197.00
+57	1196.90	1196.90	1196.90
+75	1196.72	1196.68	1196.64
1115+00	1196.48	1196.38	1196.28
+25	1196.24	1196.08	1195.92
+50	1195.97	1195.76	1195.56

RAMP C SLOPE REMOVAL FOR SCALE AT STA 1115+16.18 TO STA 1115+82.82			
STATION	PROFILE ELEV	JOINT ELEV	RT EDGE ELEV
1114+00	1199.66	1199.53	1199.41
+25	1199.78	1199.66	1199.55
+50	1199.87	1199.79	1199.71
+75	1199.94	1199.89	1199.85
1115+00	1199.97	1199.95	1199.94
+16.18	1199.98	1199.98	1199.98

RAMP D SLOPE REVERSAL STA 1118+50 TO STA 1121+00			
STATION	PROFILE ELEV	JOINT ELEV	RT EDGE ELEV
1118+50	1195.41	1195.28	1195.16
+75	1194.52	1194.40	1194.28
1119+00	1193.56	1193.46	1193.36
+25	1192.60	1192.53	1192.46
+50	1191.64	1191.60	1191.56
+75	1190.68	1190.67	1190.67
+80	1190.49	1190.49	1190.49
1120+00	1189.72	1189.74	1189.77
+25	1188.76	1188.81	1188.87
+50	1187.80	1187.88	1187.97
+75	1186.84	1186.95	1187.07
1121+00	1185.88	1186.00	1186.13

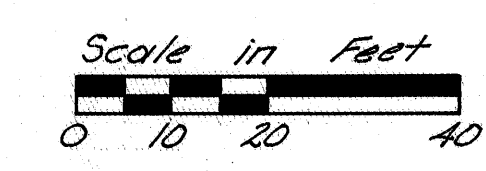
WESLEYAN COUNTY
ROAD DEPARTMENT



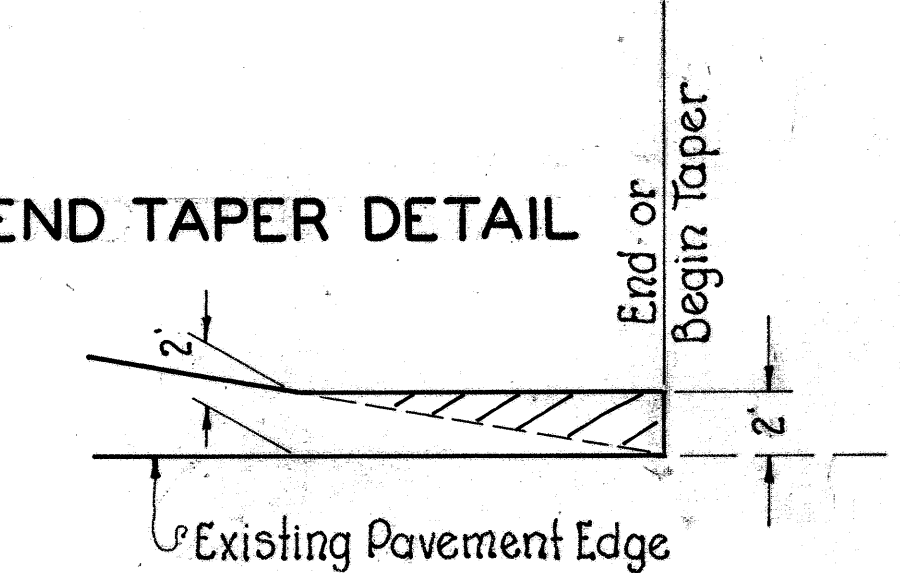
JOINT LEGEND

- ① Standard Longitudinal Joint
- ② Longitudinal Expansion Bolt Joint (5'-0" c/c)
- ③ Standard Expansion Joint
- ④ Standard Contraction Joint

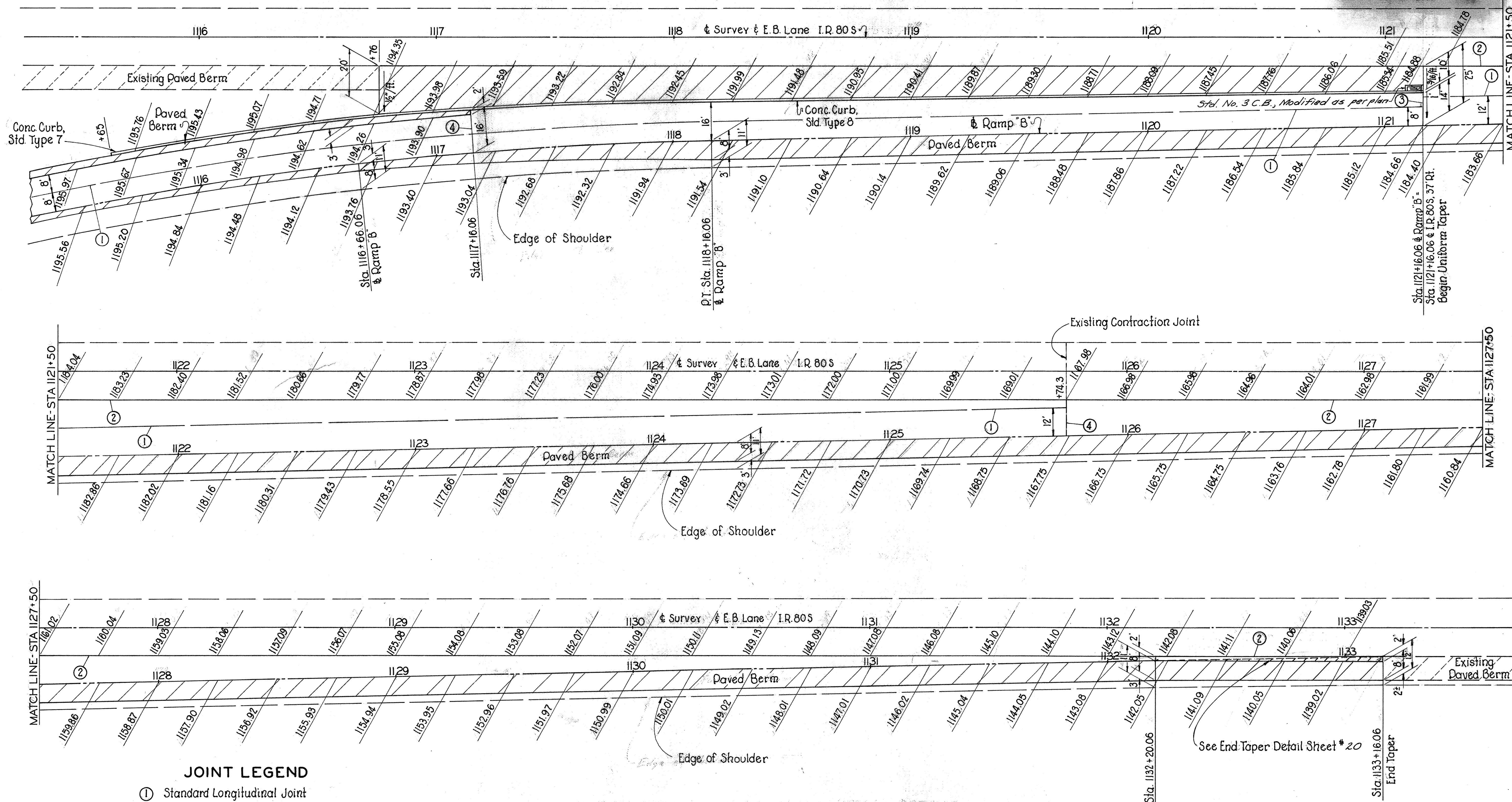
Note: All existing contraction joints in existing mainline pavement shall be extended across the abutting ramp terminal pavement.



END TAPER DETAIL



The cross hatched area shown in the end taper detail shall be constructed of concrete pavement to an elevation 2" lower than the adjacent pavement and surfaced with 301. The shaded area shall be paid for as full depth 451 and the surface treatment shall be paid for as 301.

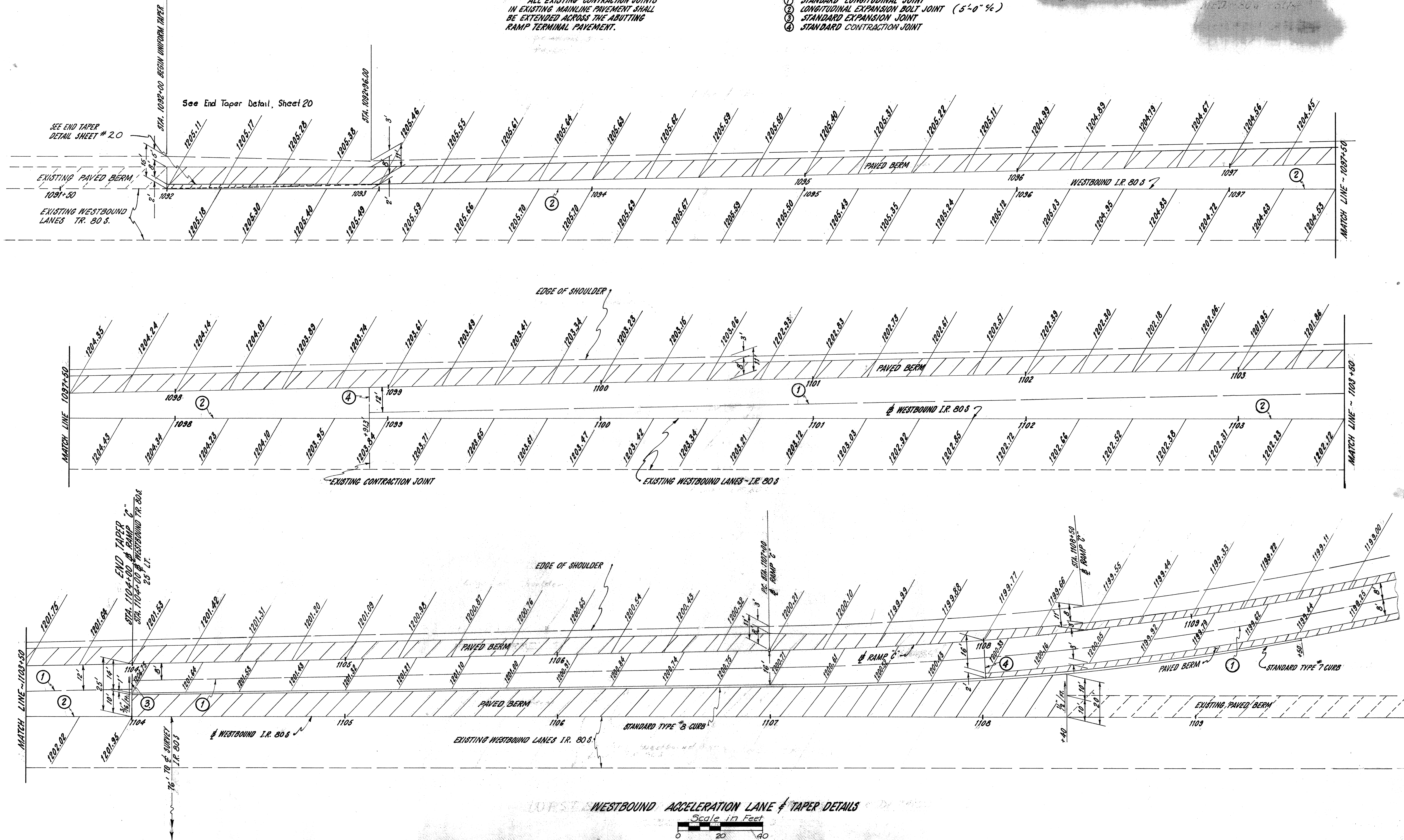


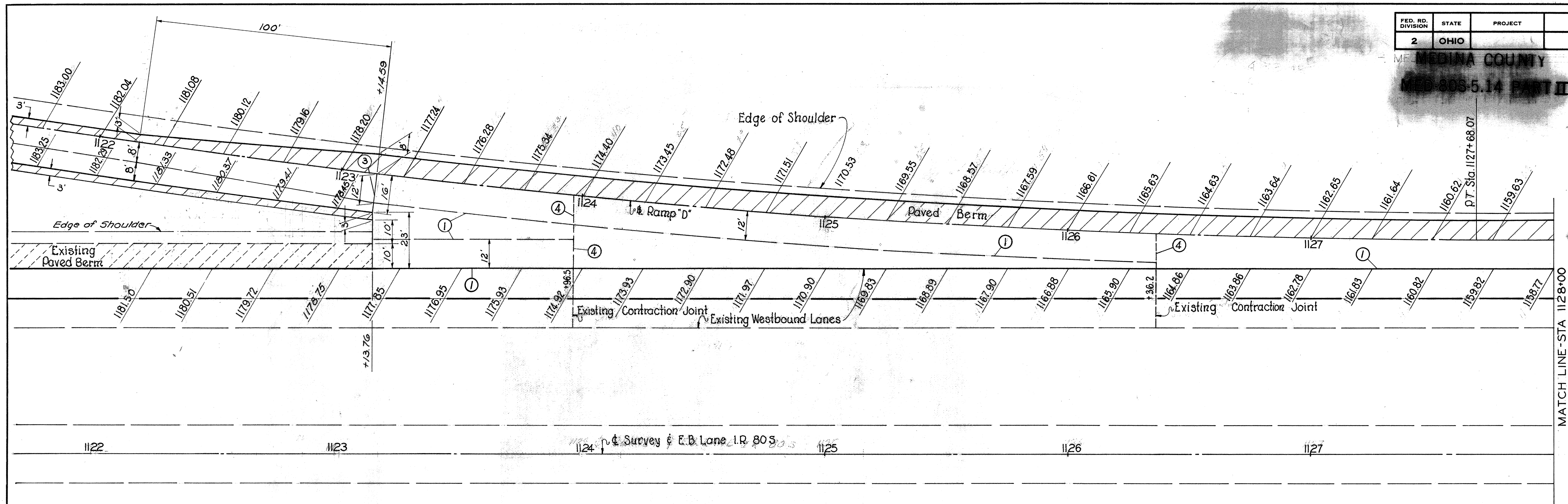
NOTE :

ALL EXISTING CONTRACTION JOINTS IN EXISTING MAINLINE PAVEMENT SHALL BE EXTENDED ACROSS THE ABUTTING RAMP TERMINAL PAVEMENT.

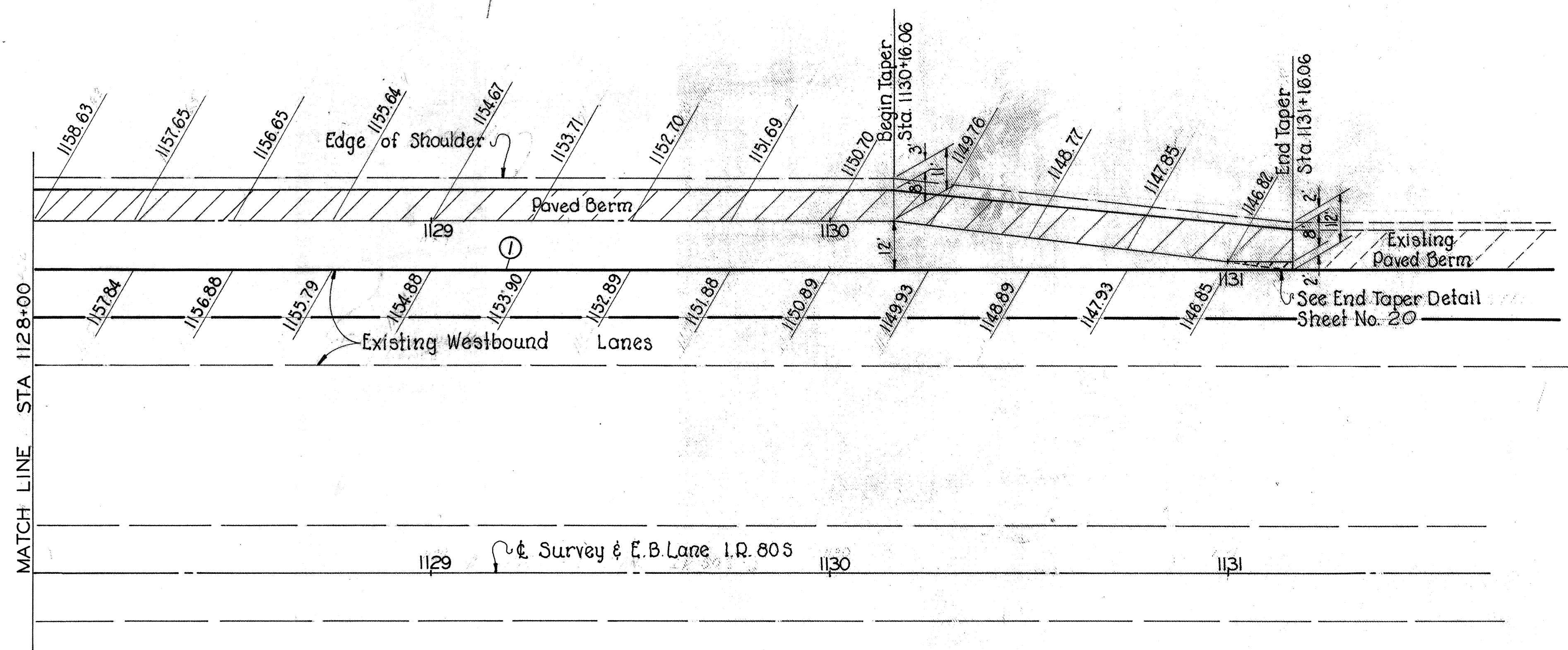
JOINT LEGEND

- ① STANDARD LONGITUDINAL JOINT
- ② LONGITUDINAL EXPANSION BOLT JOINT (5'-0" x 1/2")
- ③ STANDARD EXPANSION JOINT
- ④ STANDARD CONTRACTION JOINT



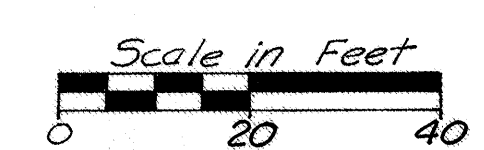


MATCH LINE - STA 1128+00



- JOINT LEGEND**
- ① Standard Longitudinal Joint
 - ③ Standard Expansion Joint
 - ④ Standard Contraction Joint

Note: All existing contraction joints in existing mainline pavement shall be extended across the abutting pavement.

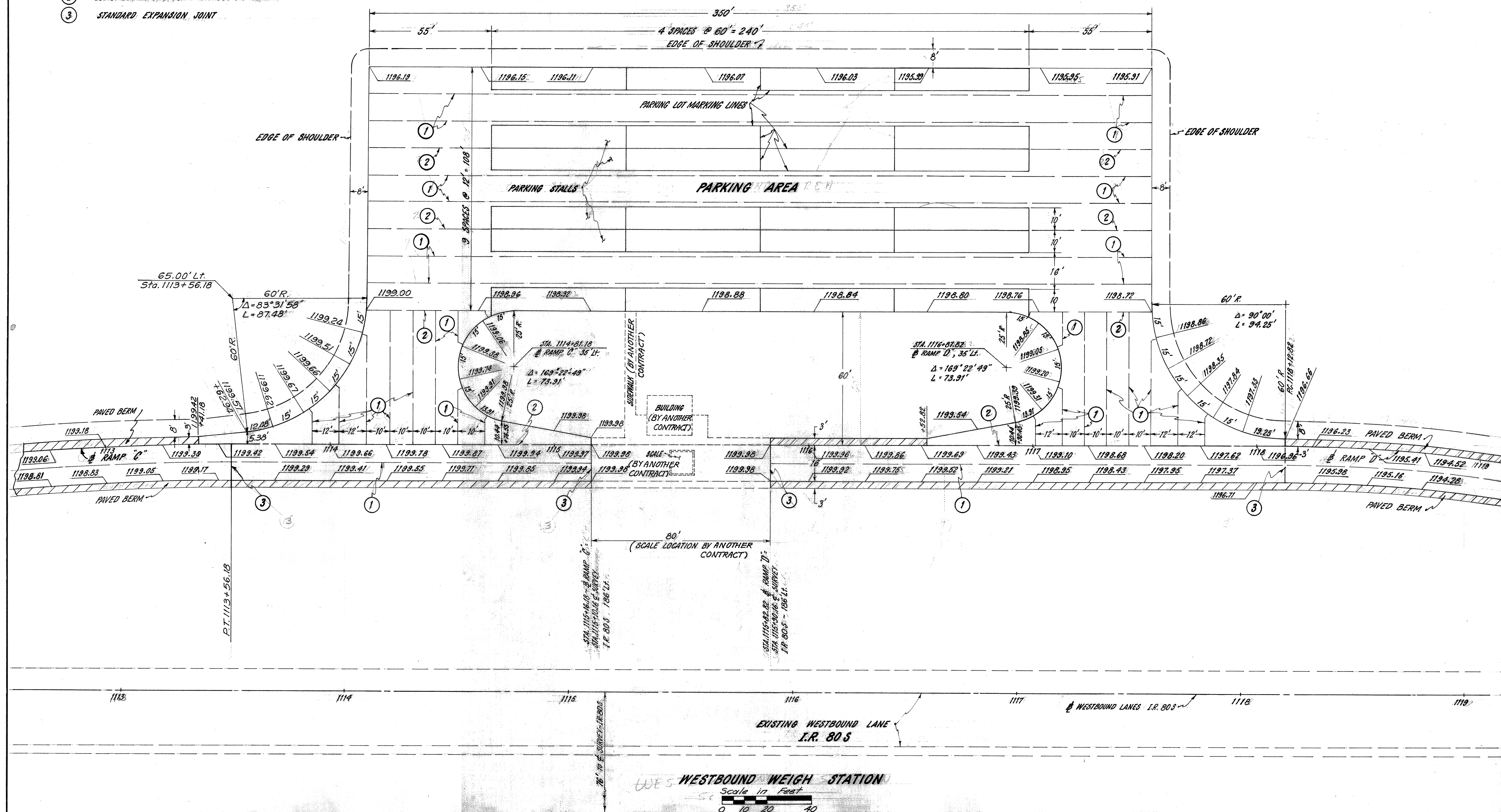


MEDINA COUNTY
MED-80S-5.14 PART II

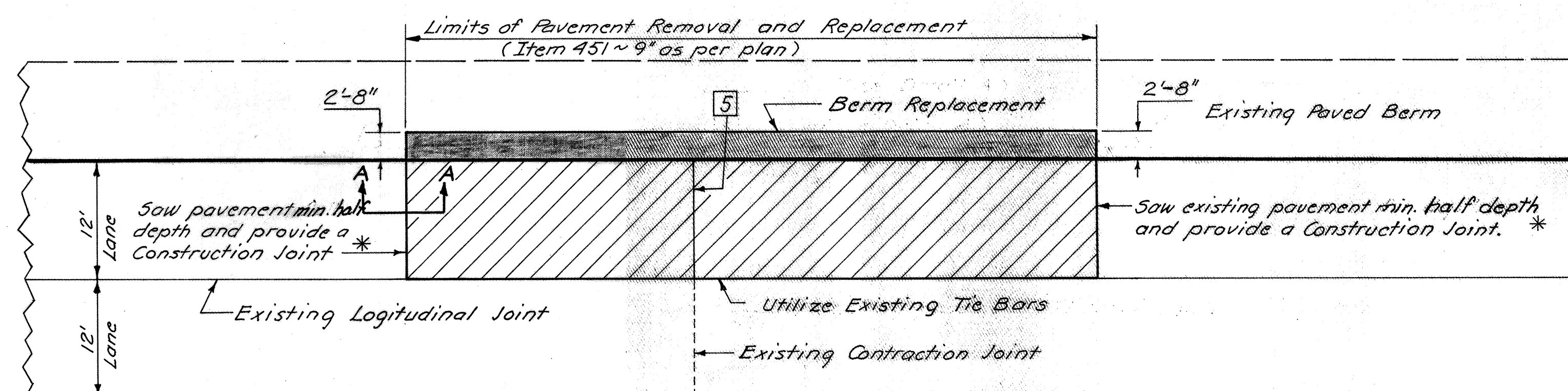
JOINT LEGEND

- ① STANDARD LONGITUDINAL JOINT
- ② LONGITUDINAL KEY JOINT WITHOUT TIE BARS
- ③ STANDARD EXPANSION JOINT

NOTE: THE PARKING LOT STALL MARKINGS SHALL CONFORM TO ITEM 621.13 FOR QUANTITY - SEE SHEET # 51



MEDINA COUNTY
MED-80S-5.14 PART II

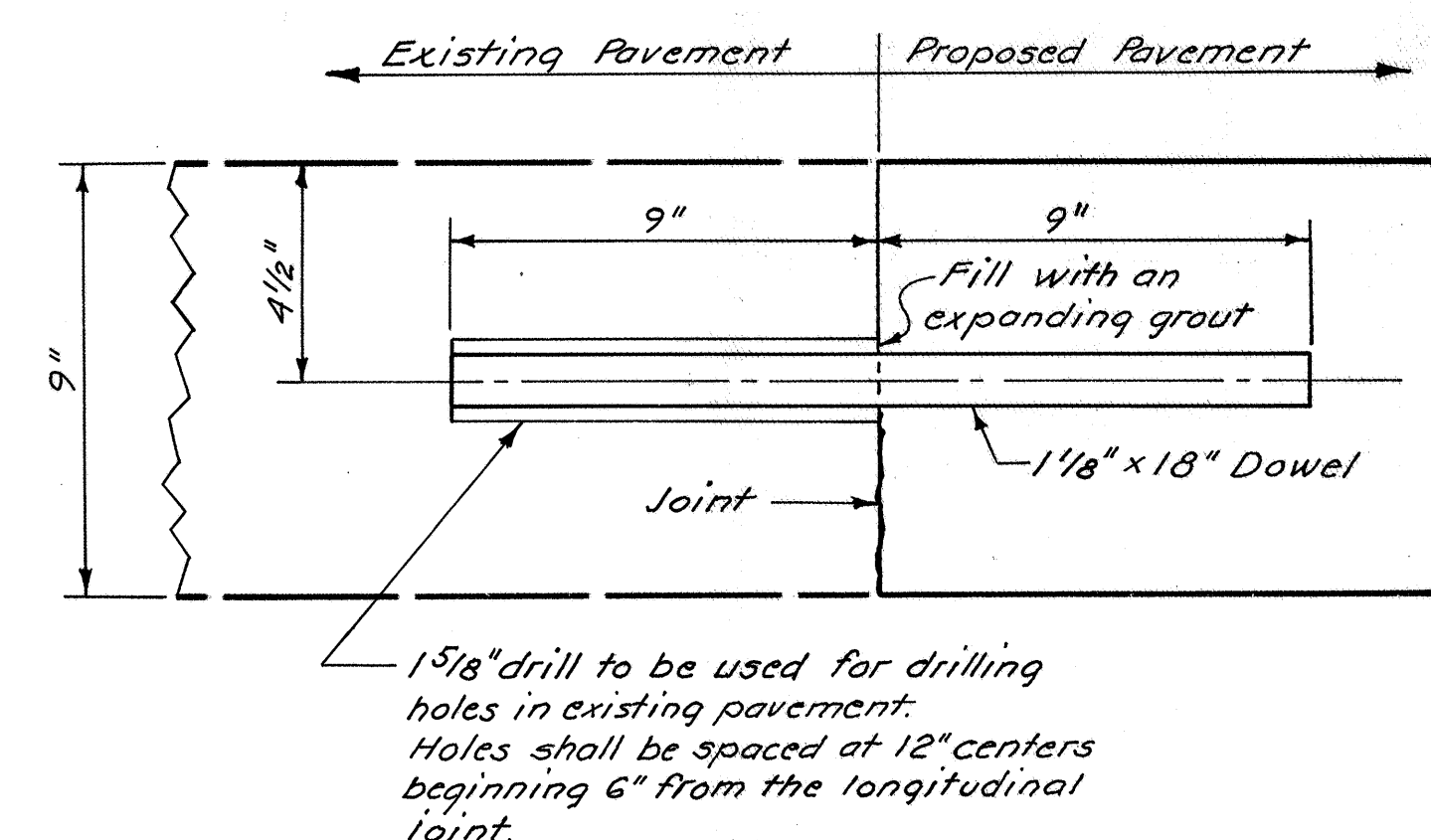


* If the limits of Pavement Removal and Replacement fall on an existing Contraction Joint, the existing Joint (Dowels) shall be utilized.

Scale in Feet
0 5 10

5 Standard Contraction Joint shall be located as straight line extension of the existing Joint.

TYPICAL PAVEMENT REPLACEMENT DETAIL
PLAN



CONSTRUCTION JOINT
SECTION A-A

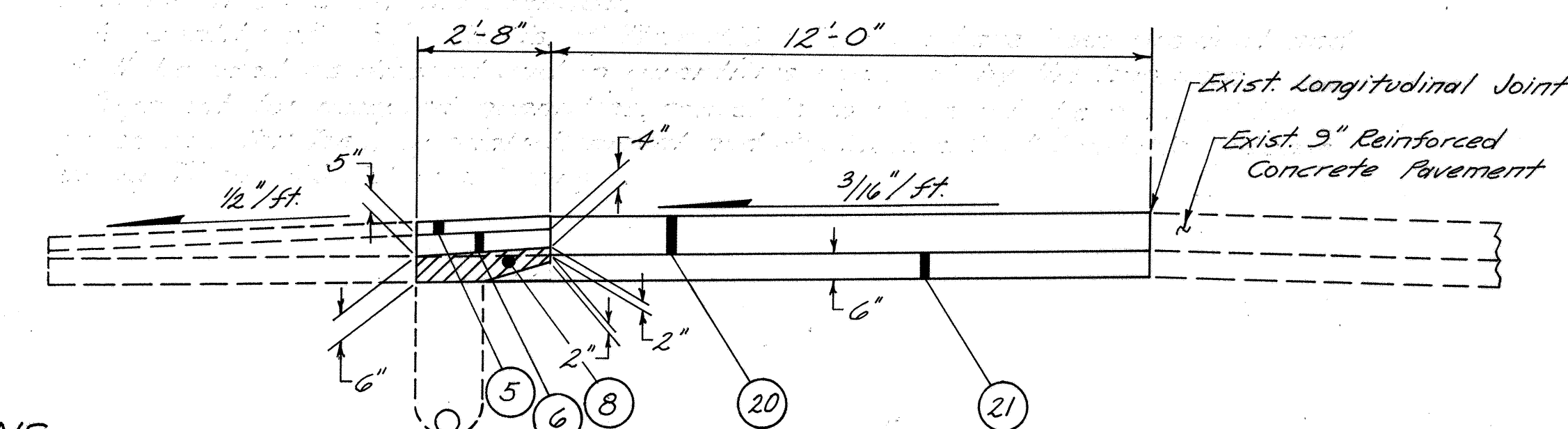
Scale in Inches
0 3 6 9 12

NOTES:

Dowels shall be of the type specified by Standard Drawing BP-4 for Construction Joints.
The drilling of the Dowel Holes and the placing of the Dowels shall be as specified in 510.02.
The cost of the Construction Joint which includes the cost of furnishing and placing the Dowels, Dowel Holes, and Expanding Grout and the cost of excavation of the existing paved berm to place the new concrete slab and the drainage connection in areas where excavation is not being performed for the Weigh Station shall be included in the price bid for Item 451 ~ 9" Reinforced Portland Cement Concrete Pavement, as per plan.

Item Special ~ Removal and Replacement of Existing Subbase using Item 310 Subbase, Grading A as per plan.

This work shall consist of the removal of existing subbase in the area of pavement replacement, preparing new subgrade and placing and compacting a new 6" subbase in accordance with the requirements of Item 310.
Payment for the accepted quantity complete and in place will be made at the price bid for Item Special ~ Removal and Replacement of Existing Subbase using Item 310 Subbase, Grading A as per plan.



TYPICAL PAVEMENT REPLACEMENT

LEGEND

SEQUENCE OF OPERATIONS

- (1) Remove pavement, subbase and 2'-8" of paved berm.
- (2) Place subbase material, Grading A as per plan, out to outside edge of existing underdrain. Payment shall be made for all subbase placed in this operation.
- (3) Construct 451 Concrete Pavement.
- (4) Remove subbase and any contaminated backfill over underdrain and replace with No. 8 Aggregate as shown by ⑧.
- (5) Complete berm construction.

- ②0 Item 451 ~ 9" Reinforced Portland Cement Concrete Pavement, as per plan
- ②1 Special ~ Removal and Replacement of Existing Subbase Using Item 310 Subbase, Grading A as per plan
- ⑧ Special ~ Drainage Connection Using No. 8 Aggregate (See Note in Proposal)
- ⑤ Item 301 ~ 3" Bituminous Aggregate Base, 702.01 (85-100) or 702.09, RT-10 (See Note in Proposal)
- ⑥ Item 304 ~ Aggregate Base, variable thickness as indicated

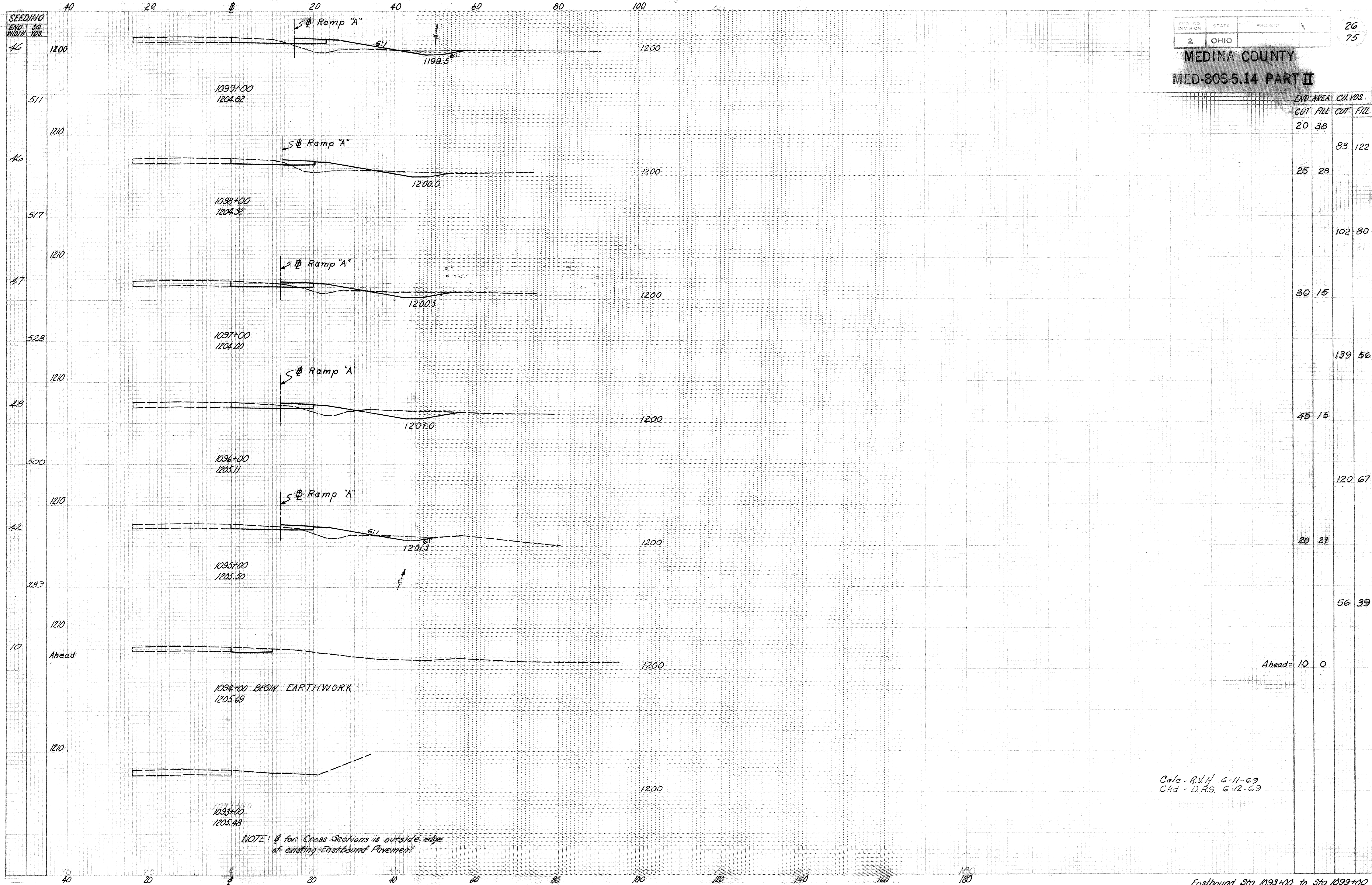
Scale in Feet
1 0 1 2 3 4 5

SEEDING
END. 32
WIDTH 128

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

26
75

MEDINA COUNTY
MED-80S5.14 PART II

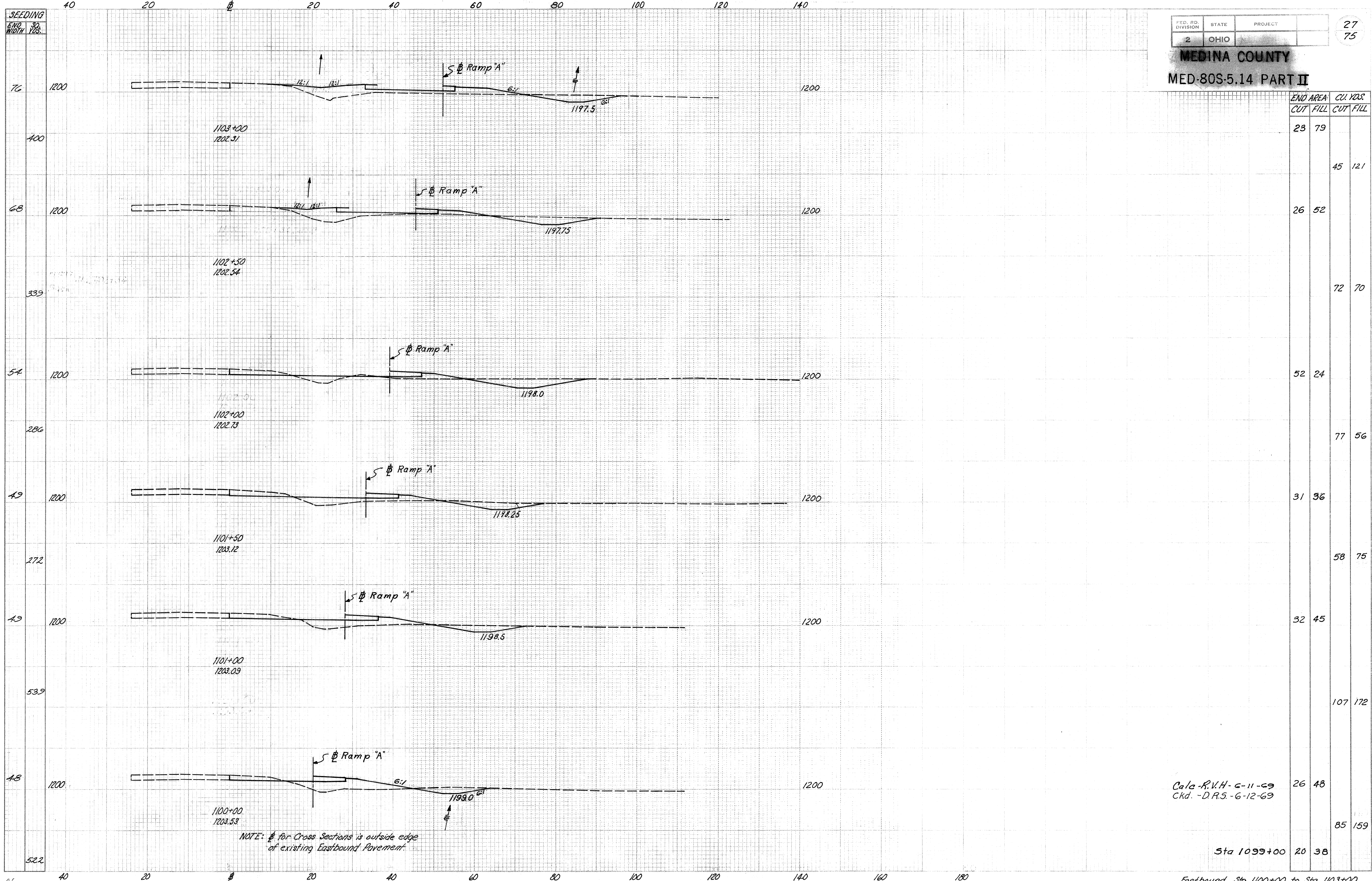


SEEDING
END
WIDTH
YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

27
75

MEDINA COUNTY
MED-80S-5.14 PART II



END AREA	CUT		FILL		CUT		FILL	
	CUT	FILL	CUT	FILL	CUT	FILL	CUT	FILL
23		79						
			45	121				
26		52						
			72	70				
52		24						
			77	56				
31		36						
			58	75				
32		45						
			107	172				
26		48						
			85	159				
20		38						

Calc. R.V.H. - 6-11-69
Chd. - D.R.S. - 6-12-69

Sta 1099+00

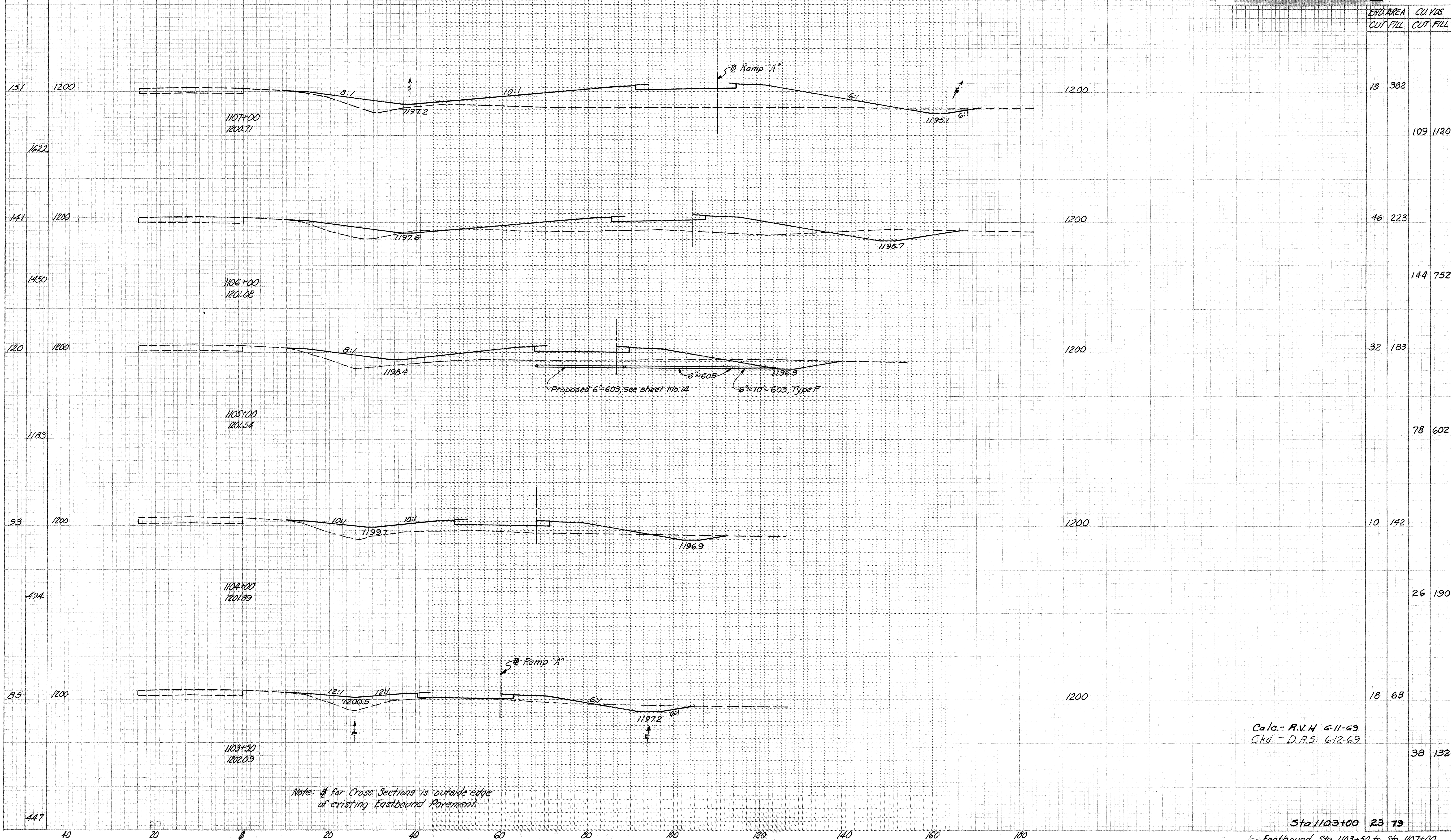
Eastbound Sta. 1100+00 to Sta. 1103+00

SEEDING
END SO.
WIDTH VOS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

28
75

MEDINA COUNTY
MED-80S-5.14 PART II



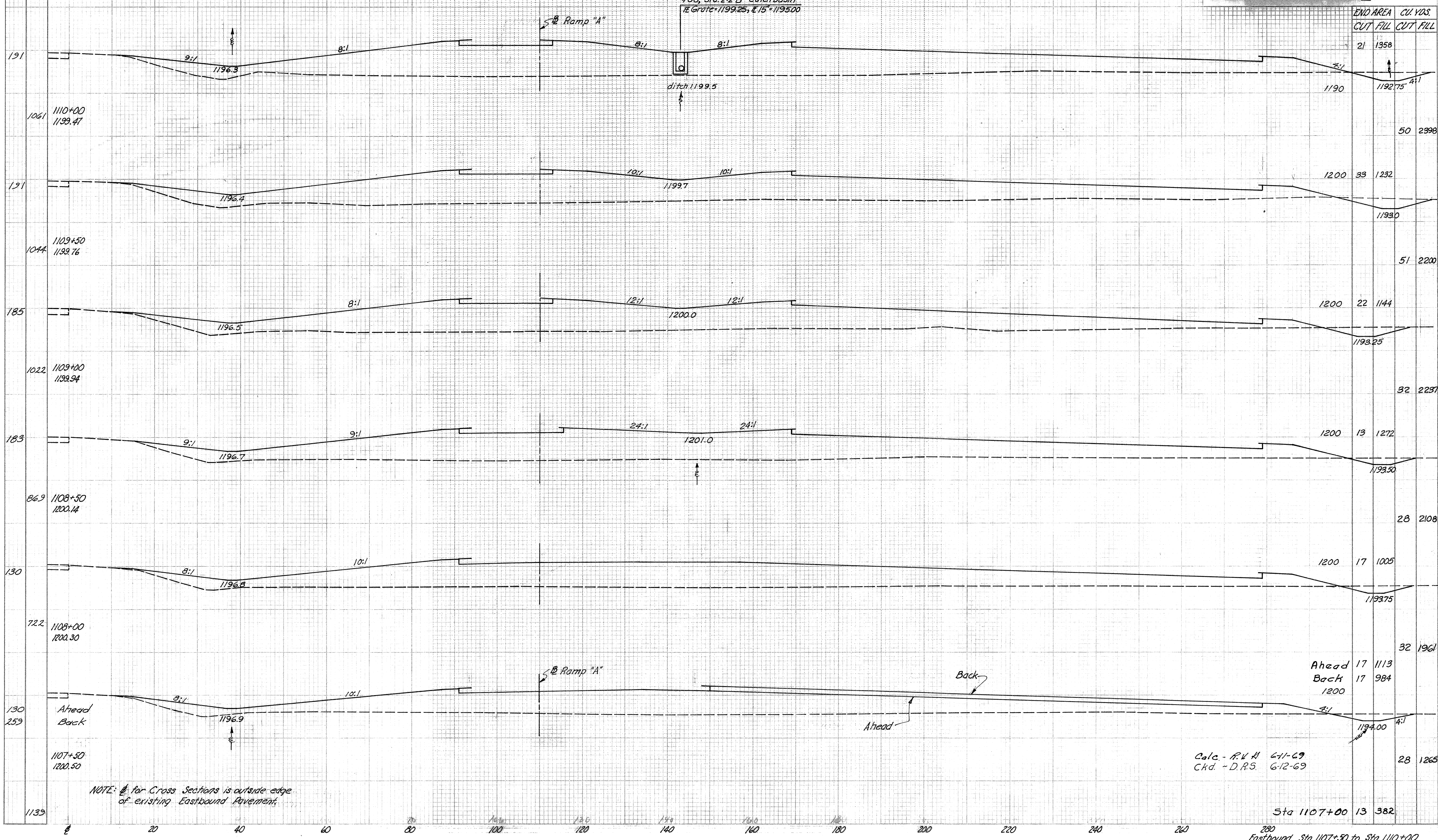
END AREA CUT FILL	CU YDS CUT FILL
13 382	109 1120
46 223	144 752
32 183	78 602
10 142	26 190
18 63	38 132

SEEDING
END 30
WIDTH 125

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

29
75

FRANKLIN COUNTY
MED 805-5.14 PART II

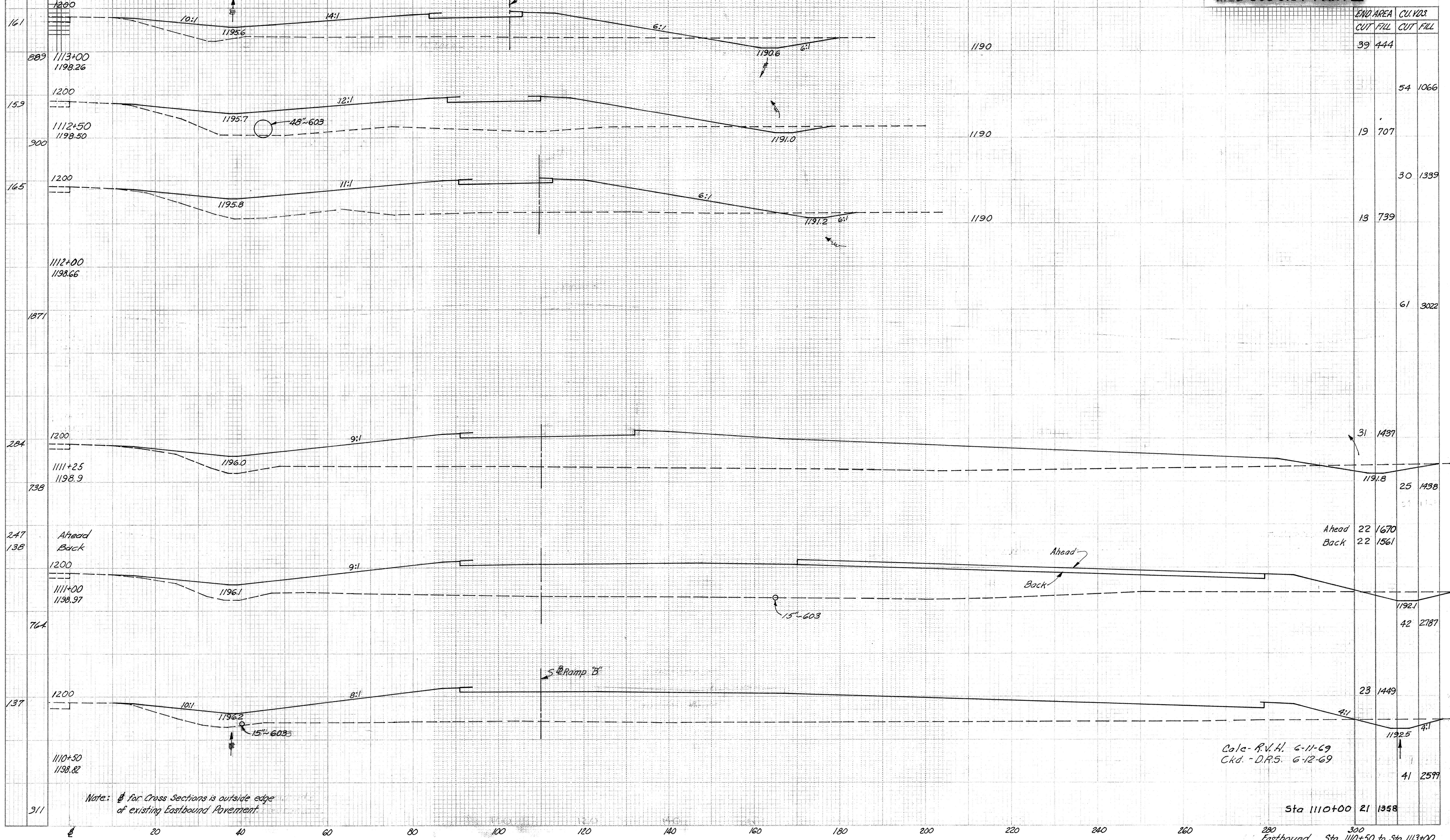


SEEDING
END 50
WIDTH 100

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

30
75

MEDINA COUNTY
MED-80S-5.14 PART II



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
39	444		
		54	1066
19	707		
		30	1339
13	739		
		61	3022
31	1437		
		25	1438
Ahead	22	1670	
Back	22	1561	
		42	2787
23	1449		
		41	2599
		21	1358

Calc. - R.V.H. 6-11-69
Ckd. - D.R.S. 6-12-69

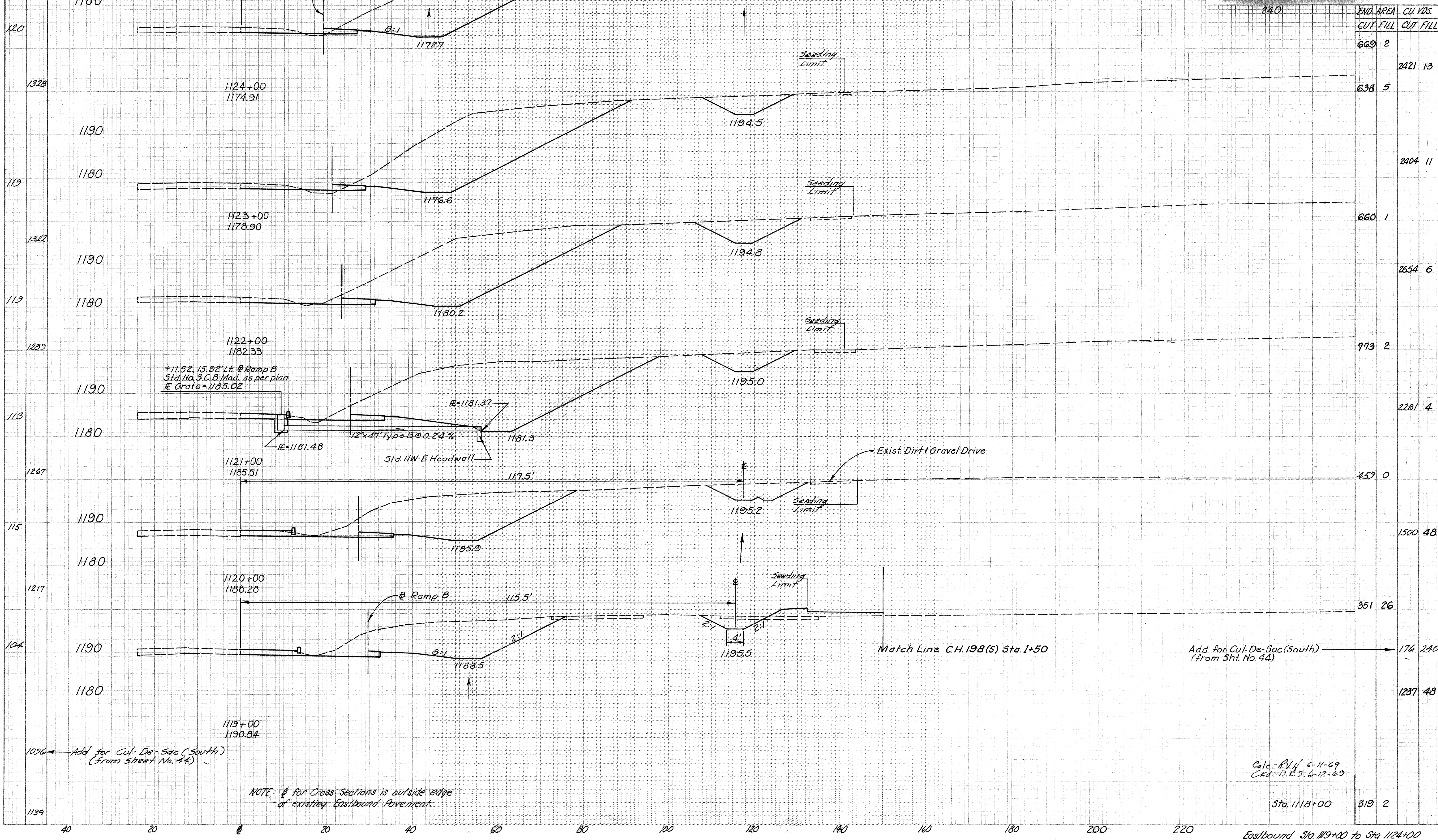
Sta 1110+00 to Sta 1113+00
Eastbound

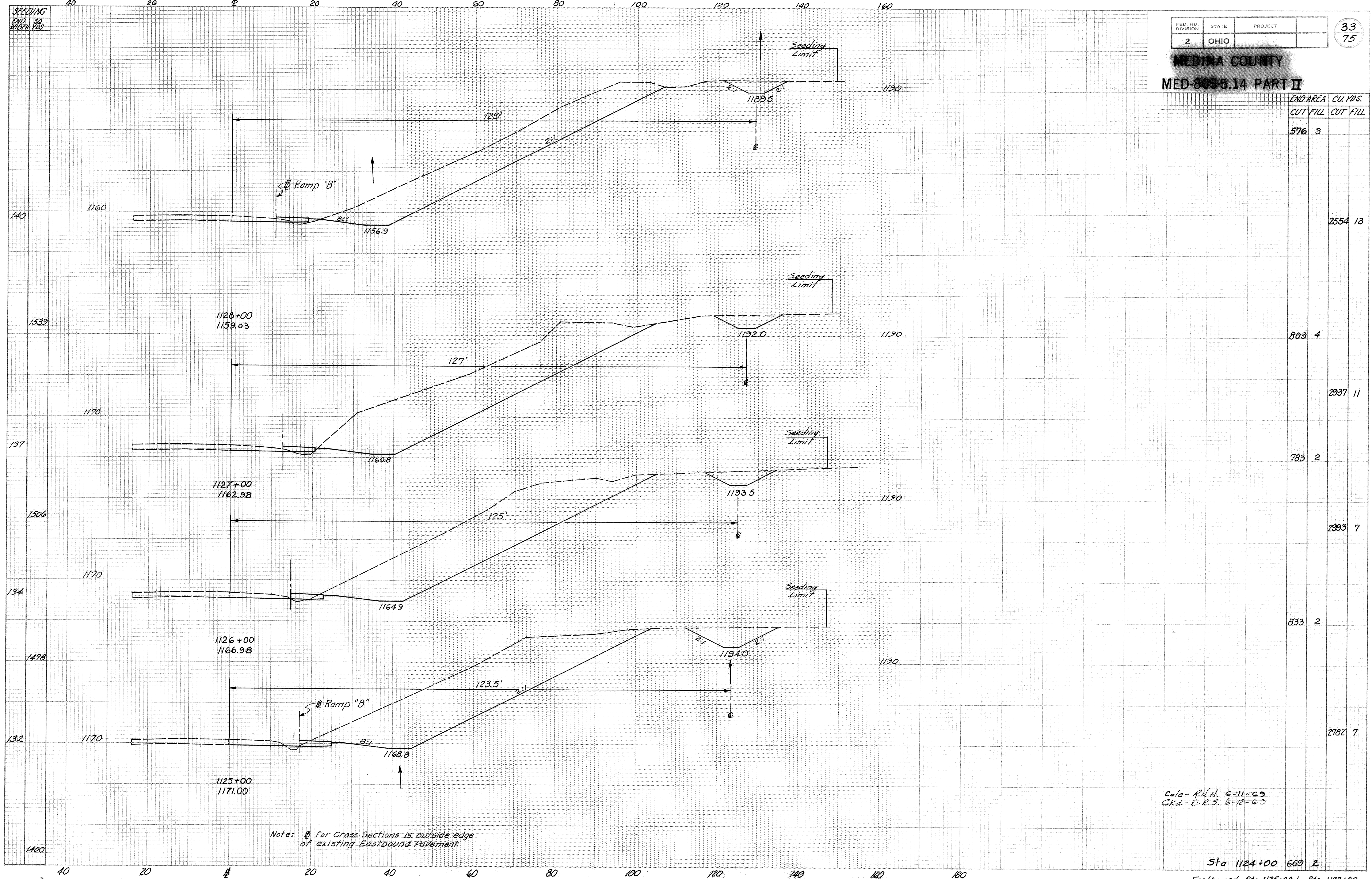
SEEDING
END 30
WIDTH 125

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

32
75

MEDINA COUNTY
NEO 5.14 PART II





FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

3.3
75

MEDINA COUNTY
MED-80S5.14 PART II

END AREA	CUT	FILL	CUT	FILL
576	3			
2554	13			
803	4			
2937	11			
783	2			
2993	7			
833	2			
2782	7			
Sta 1124+00	669	2		

Calc - R.D.H. 6-11-69
Ckd - O.R.S. 6-12-69

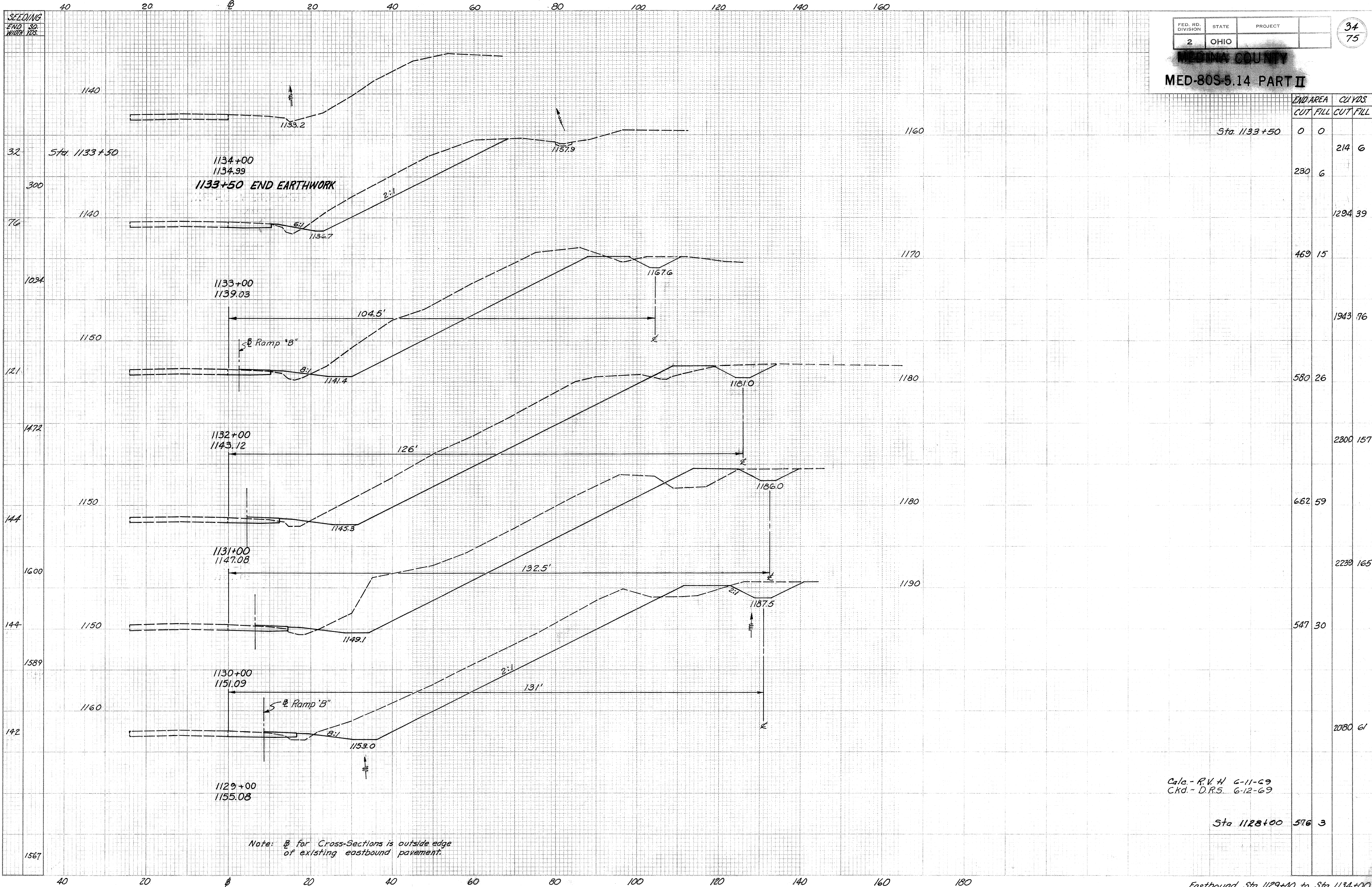
Eastbound Sta 1125+00 to Sta. 1128+00

SEEDING
END 30
WIDE YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

34
75

MEDINA COUNTY
MED-80S-5.14 PART II



Note: Φ for Cross-Sections is outside edge of existing eastbound pavement.

Calc. - R.V.H. 6-11-69
Chk. - D.R.S. 6-12-69

Sta. 1128+00 576 3

Eastbound Sta. 1129+00 to Sta. 1134+00

SEEDING
END SQ.
WIDTH YDS.

280

260

240

220

200

180

160

140

120

100

80

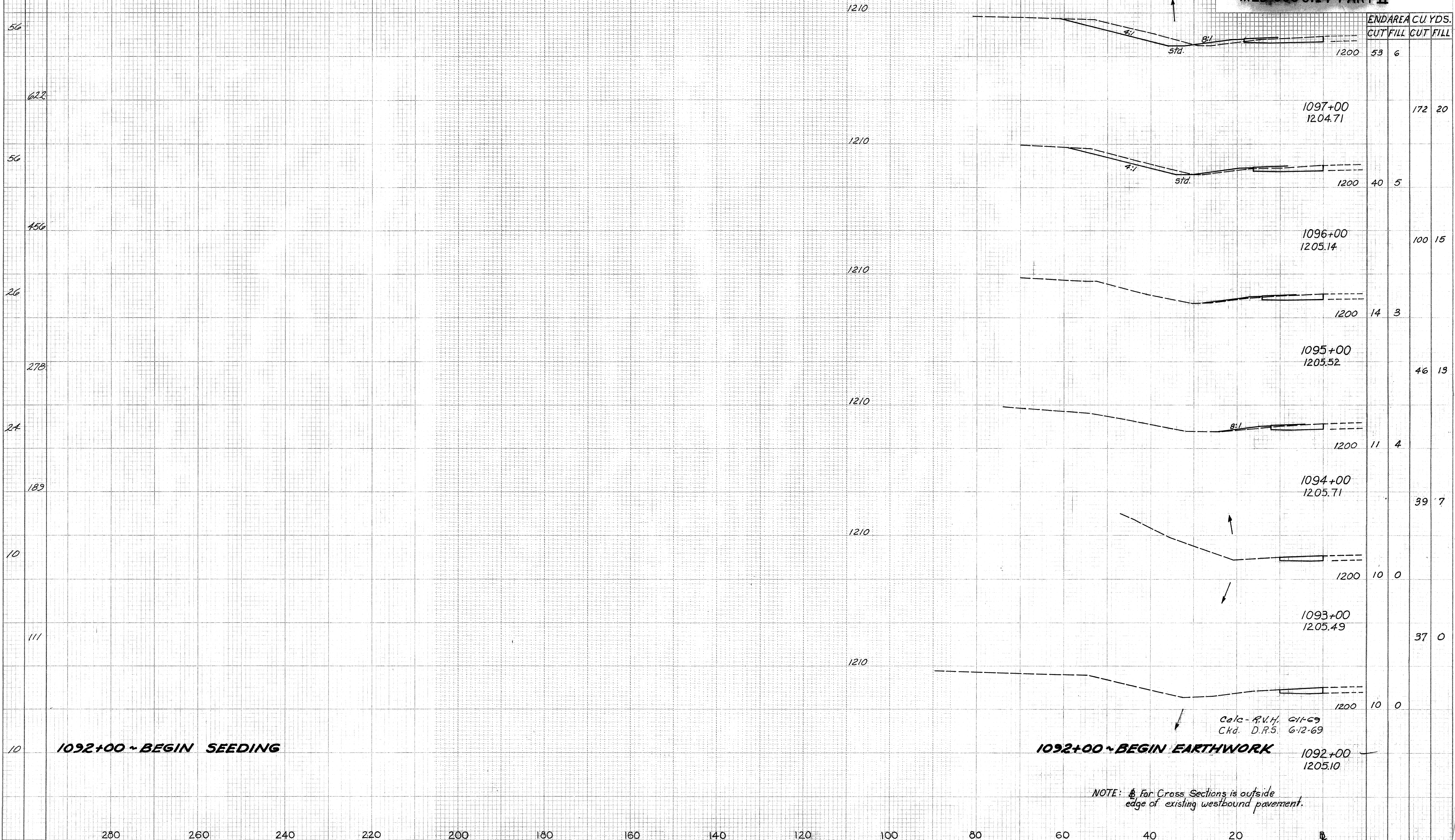
60

40

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

35
75

MEDINA COUNTY
MED-80S-5.14 PART II



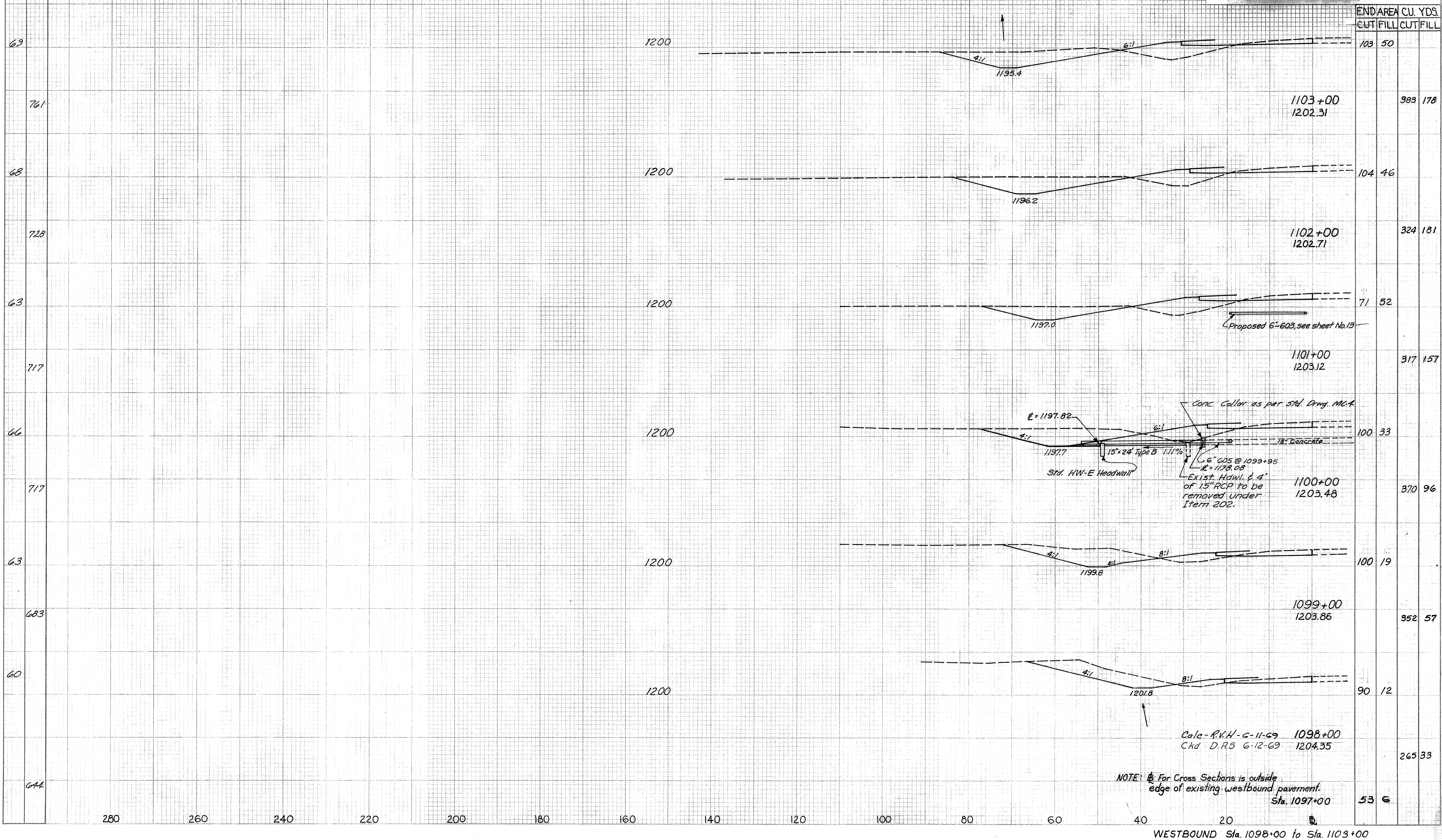
SEEDING
END SQ.
WIDTH YDS.

240 220 200 180 160 150 140 130 120 100 80 60 40

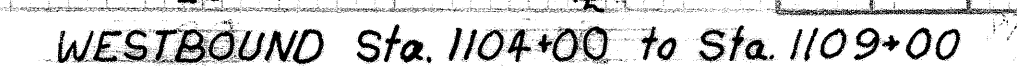
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

36
75

MEDINA COUNTY
MED 803-3.14 PART II



ND AREA CU. YDS.			
UT	FILL	CUT	FILL



SEEDING
END SQ
WIDTH YDS.

280

260

240

220

200

180

160

140

120

100

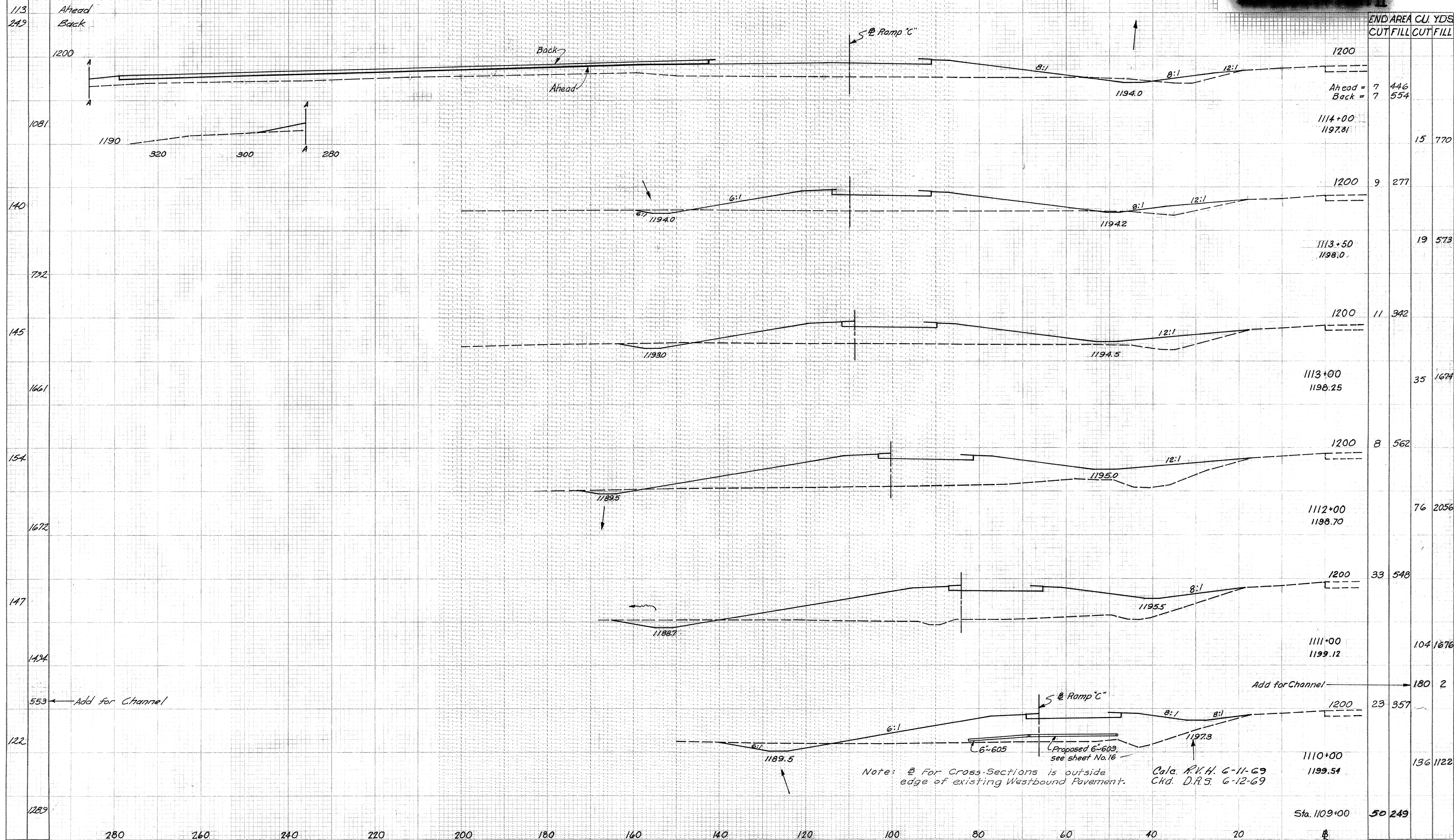
80

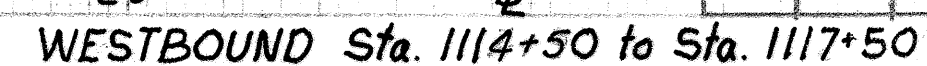
60

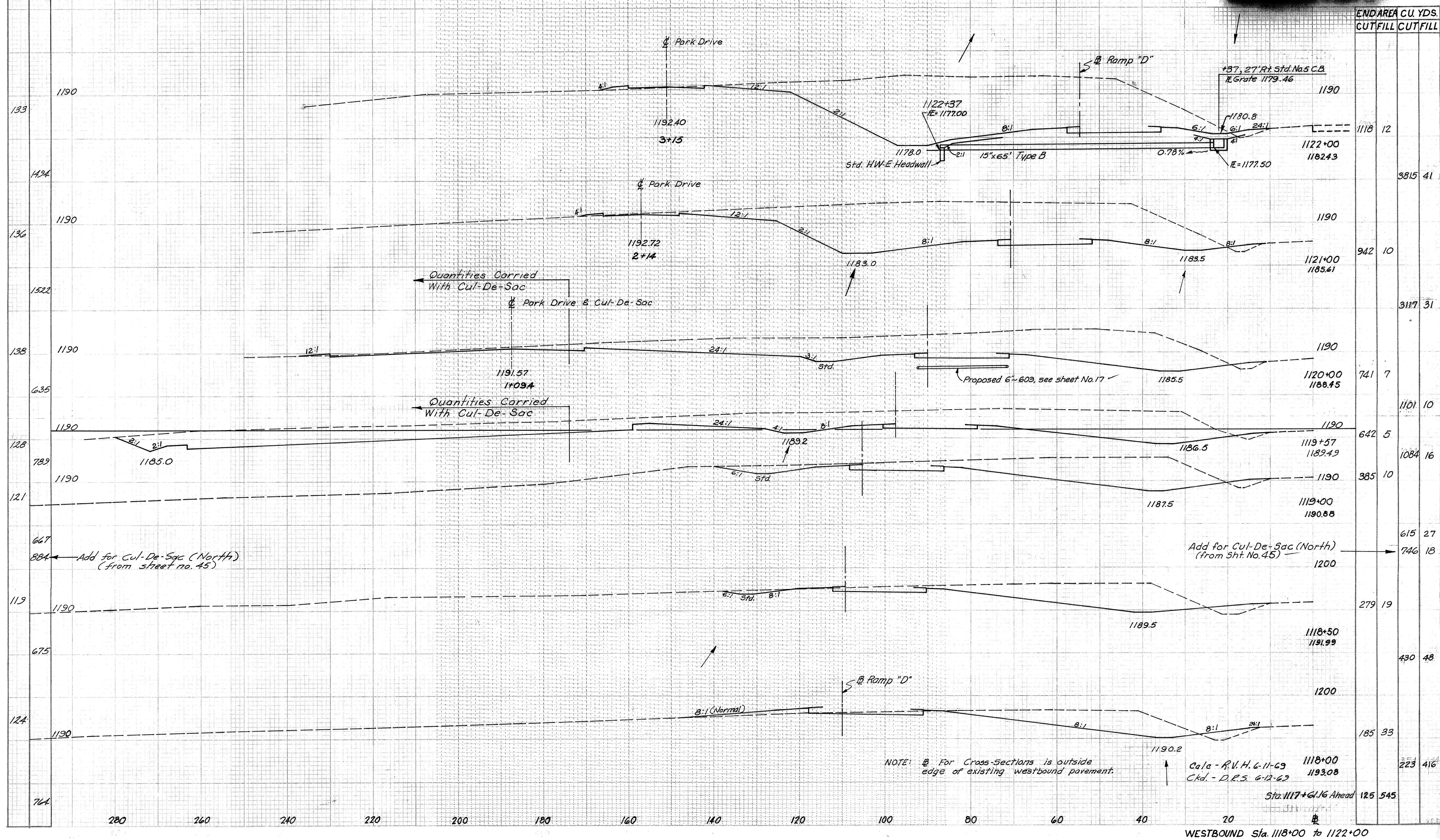
40

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

38
75



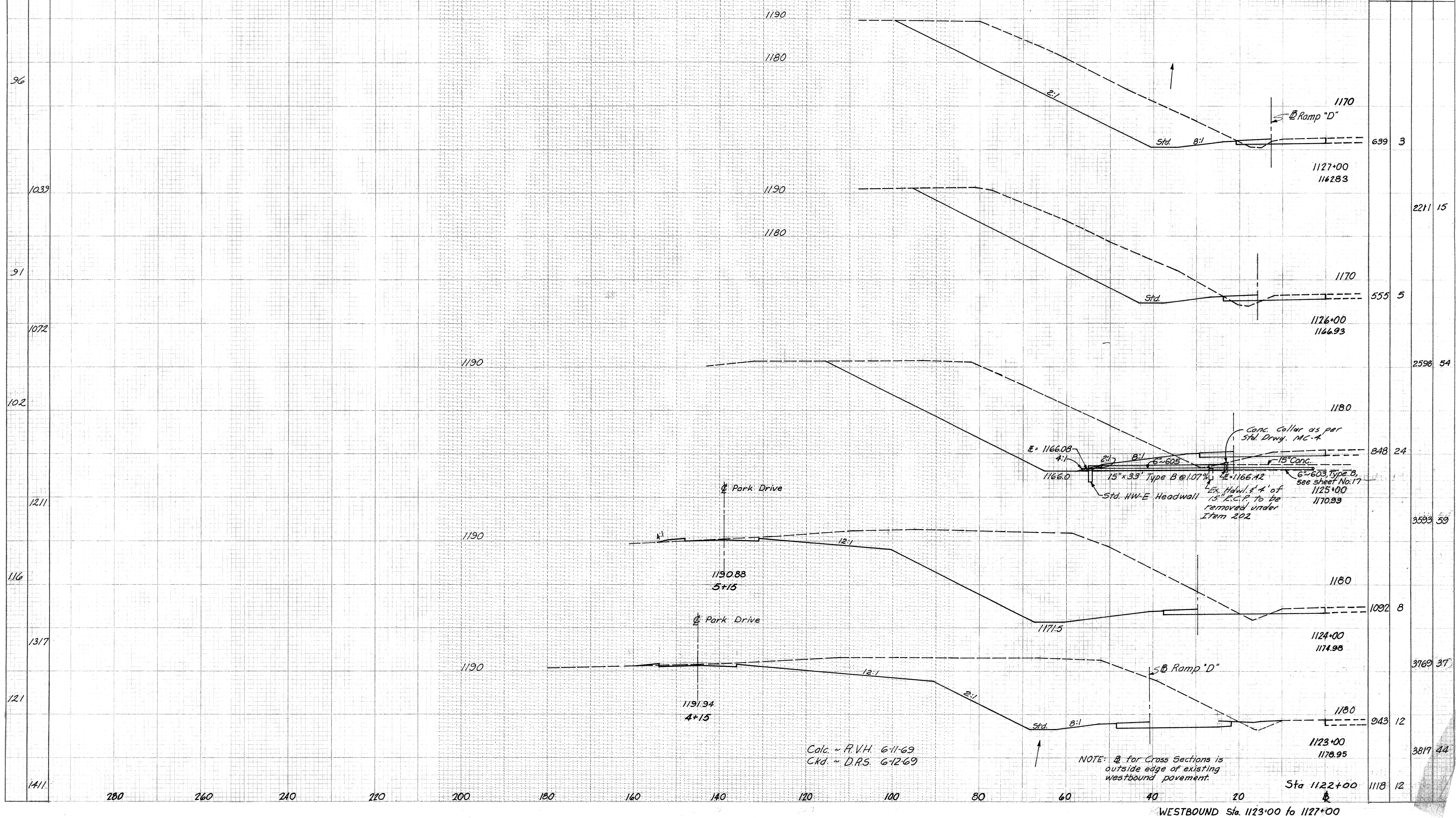




SEEDING	
END	SQ.
WIDTH	YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

END AREA	CU. YDS.
CUT	FILL



SEEDING
END SQ.
WIDTH YDS.

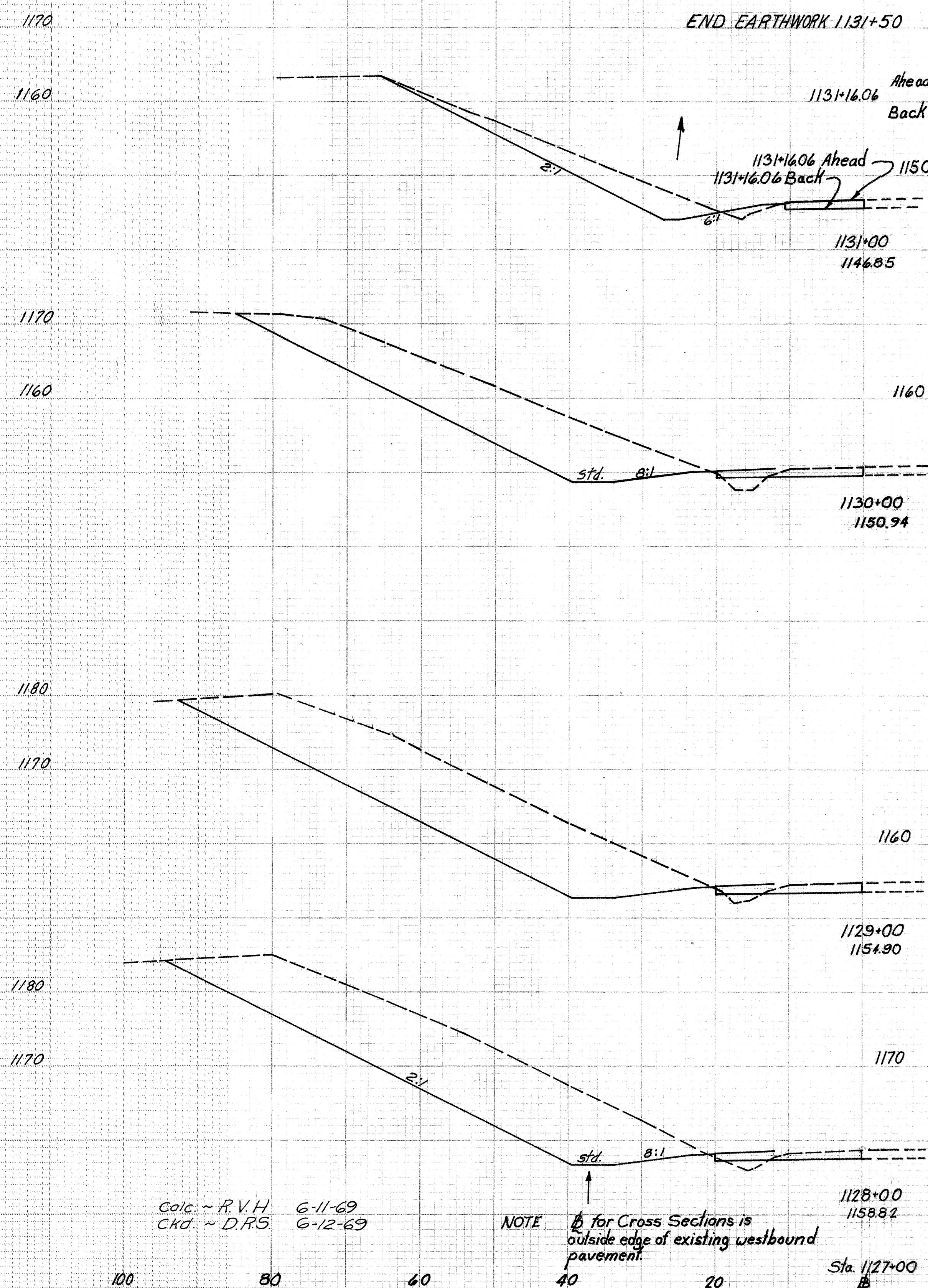
280 260 240 220 200 180 160 140 120 100 80 60 40

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

42
75

FRANKLIN COUNTY
PROJECT II

28	END SEEDING 1132+00
156	
28	1131+50
187	
71	1131+16.06
127	
71	
856	
83	
972	
92	
1033	
94	
1056	



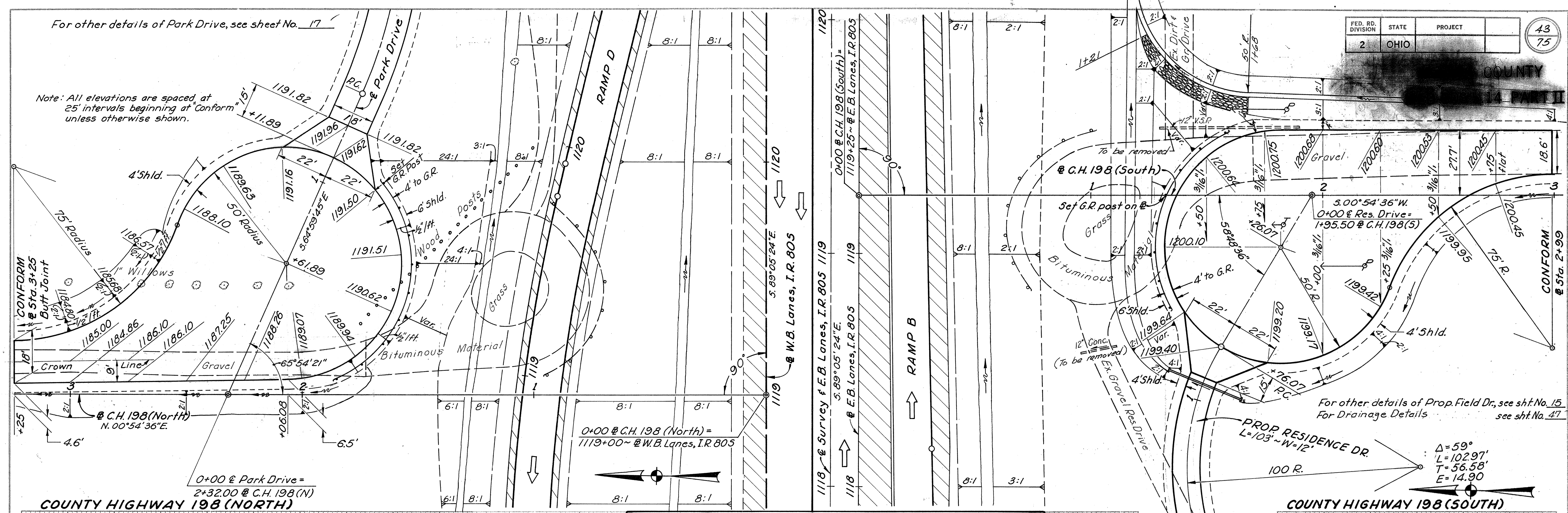
END AREA CU. YDS.	
CUT	FILL
0	0
66	4
62	4
835	24
1609	19
523	3
2033	15
575	5
2248	15
639	3

280 260 240 220 200 180 160 140 120 100 80 60 40

WESTBOUND Sta. 1128+00 to Sta. 1131+00

For other details of Park Drive, see sheet No. 17

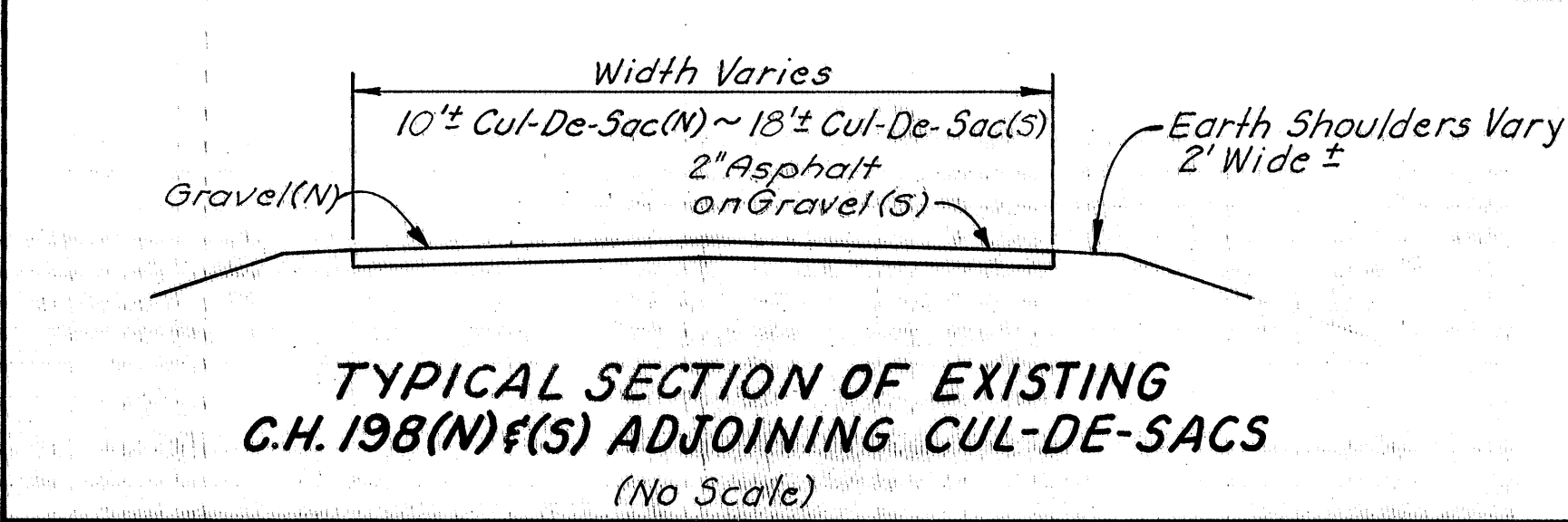
Note: All elevations are spaced at 25' intervals beginning at 'Conform' unless otherwise shown.



FED. RD. DIVISION	STATE	PROJECT	43
2	OHIO		75

COUNTY HIGHWAY 198 (NORTH)

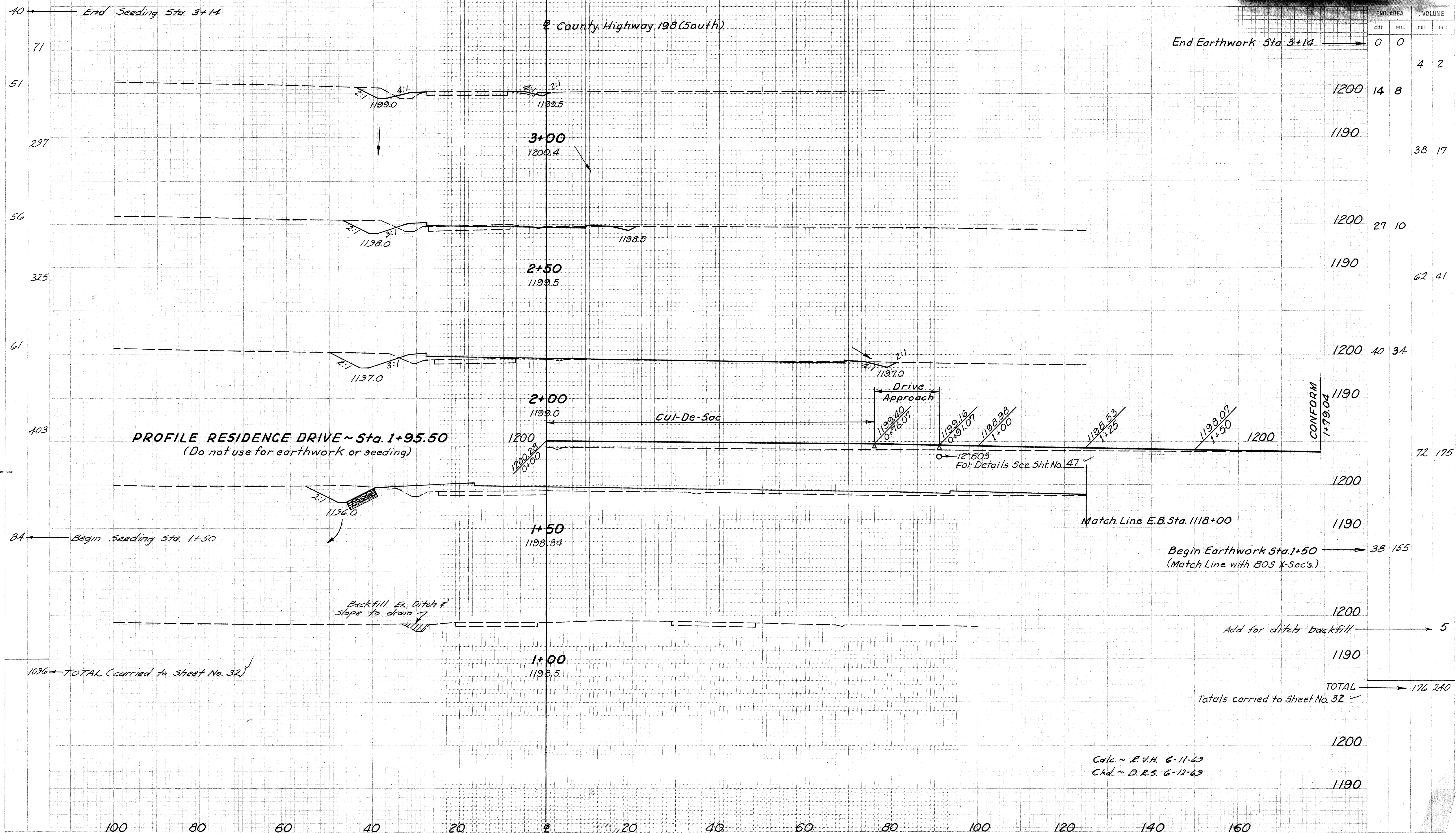
COUNTY HIGHWAY 198 (SOUTH)



SEEDING	
END WIDTH	50 FDS

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

44
75



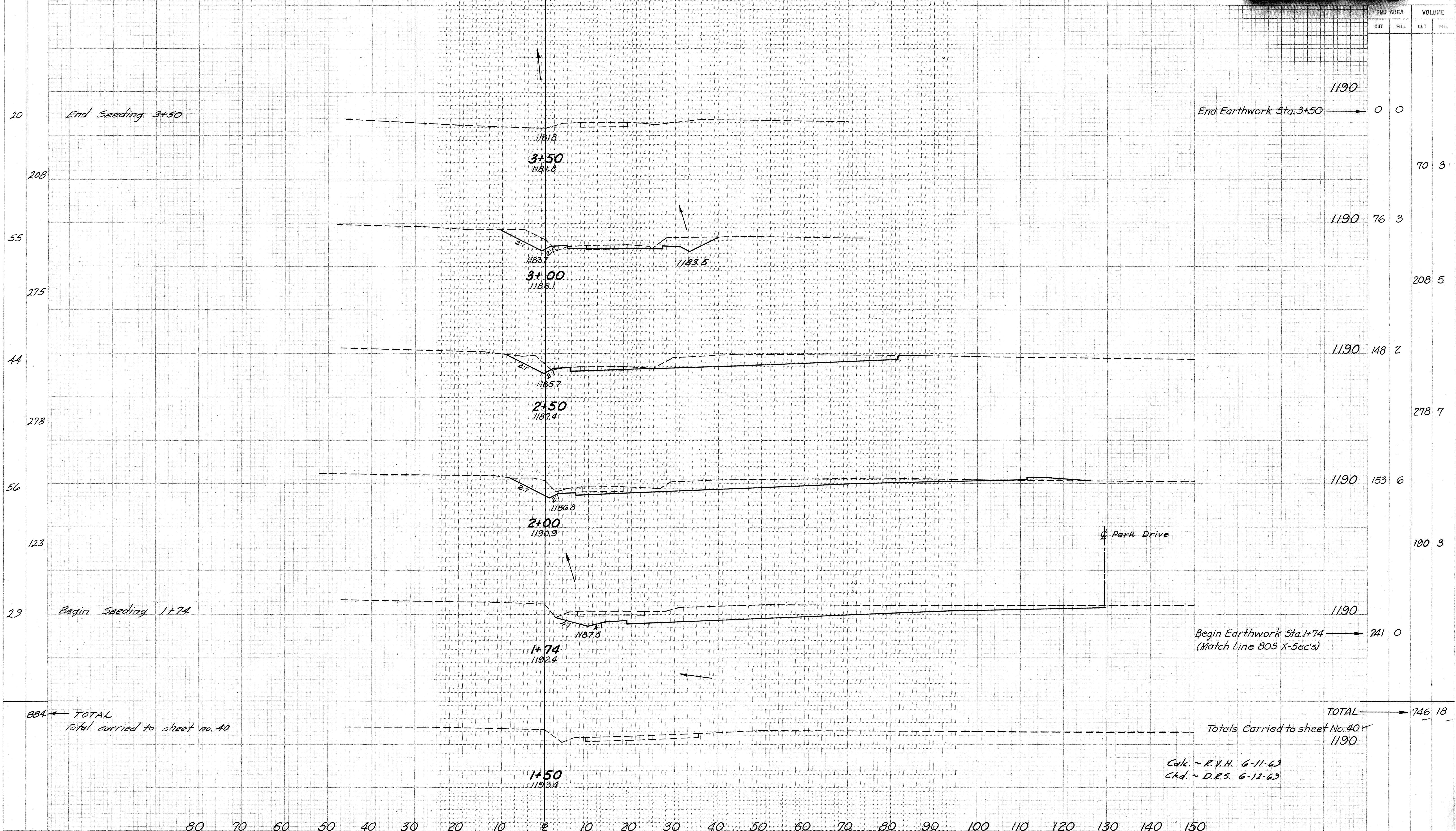
CROSS SECTIONS ~ CUL-DE-SAC ~ COUNTY HIGHWAY 198 (SOUTH)

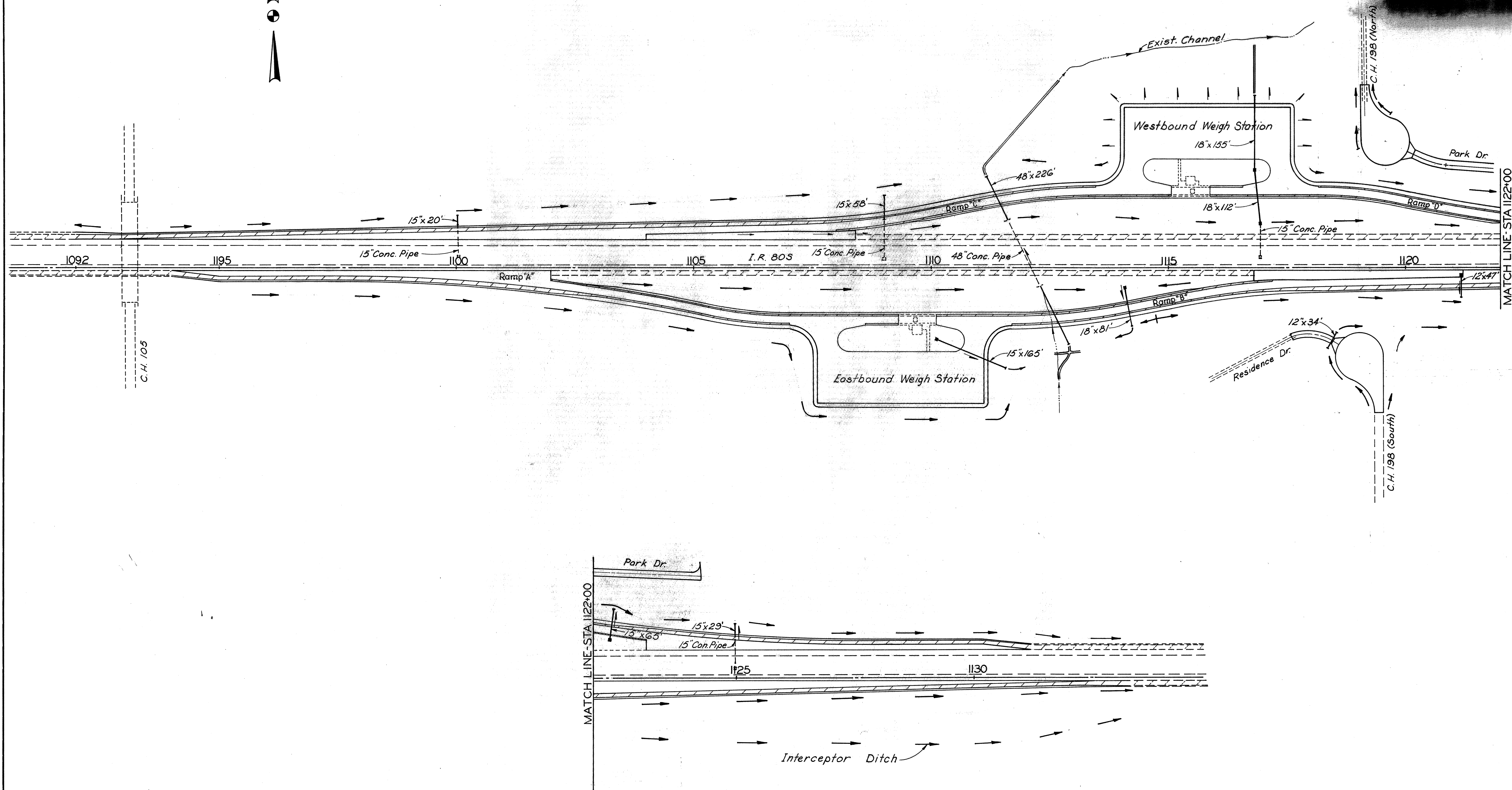
Calc. ~ R.V.H. 6-11-69
Chd. ~ D.R.S. 6-12-69

SEEDING	
END WIDTH	SC YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

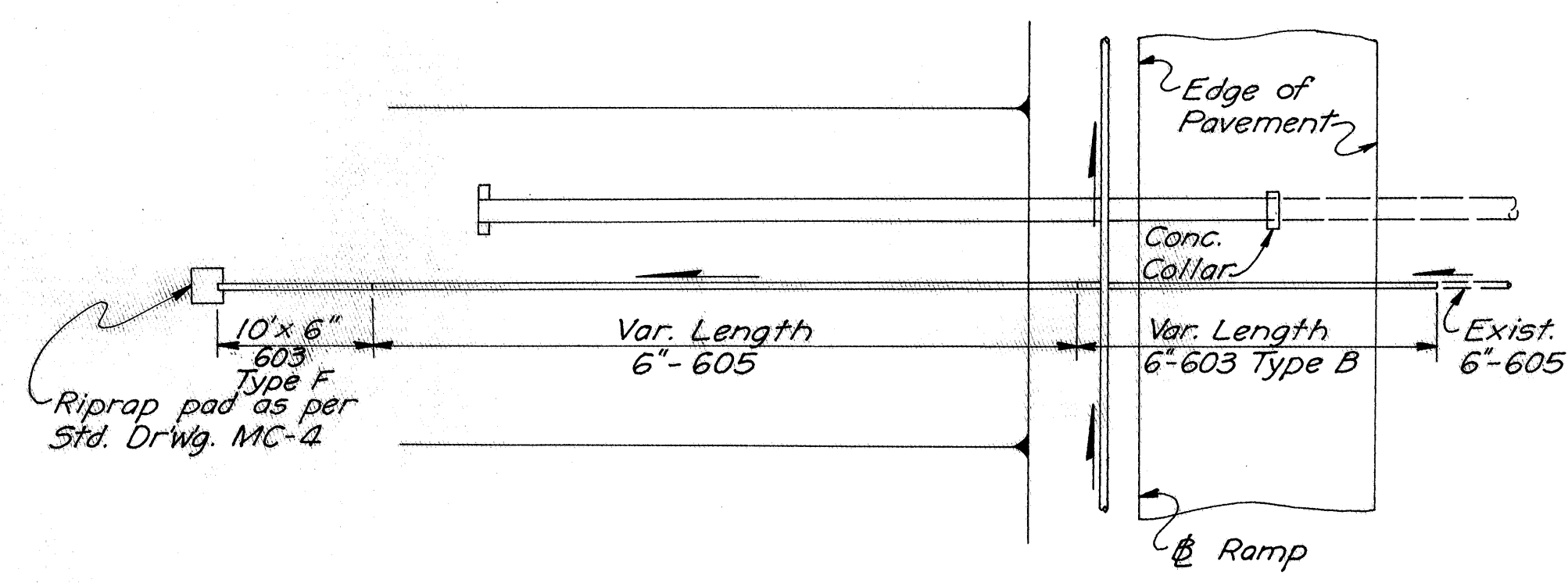
45
75



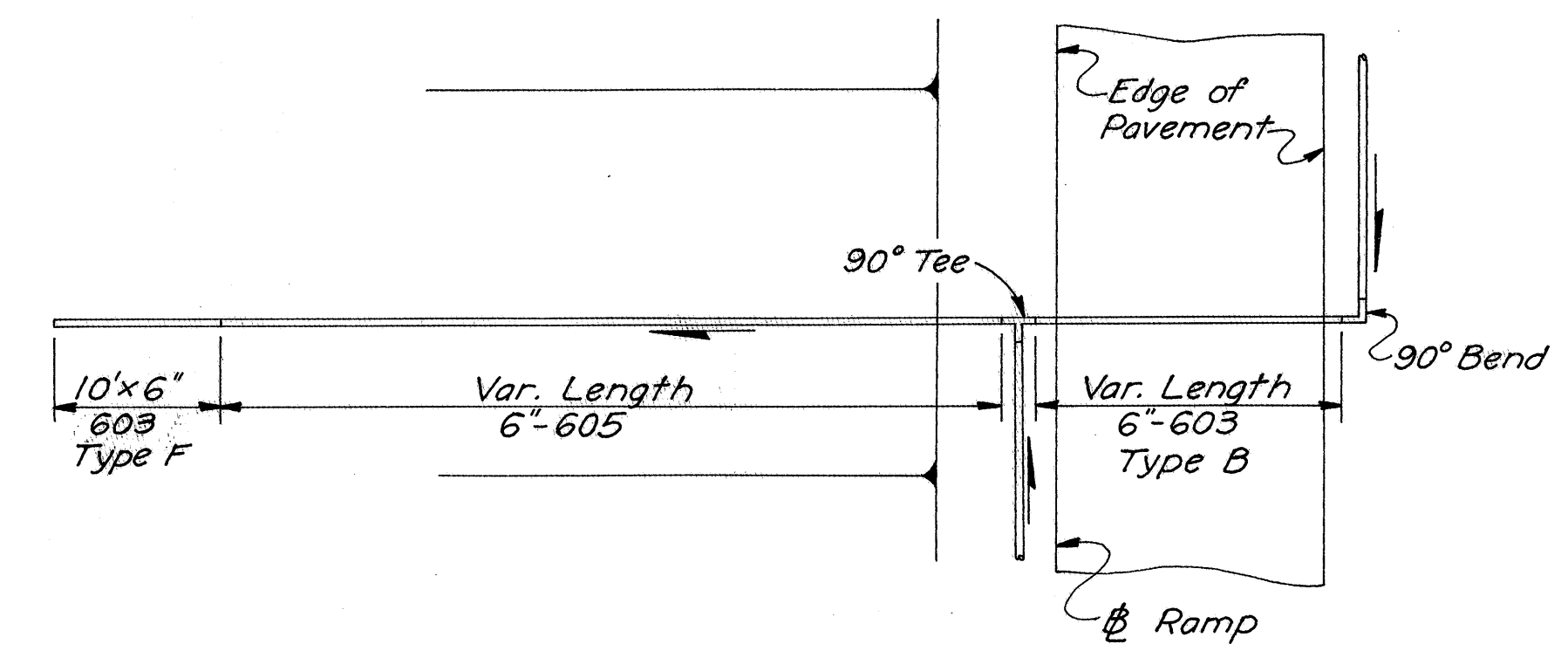


Scale in Feet
0 100 200

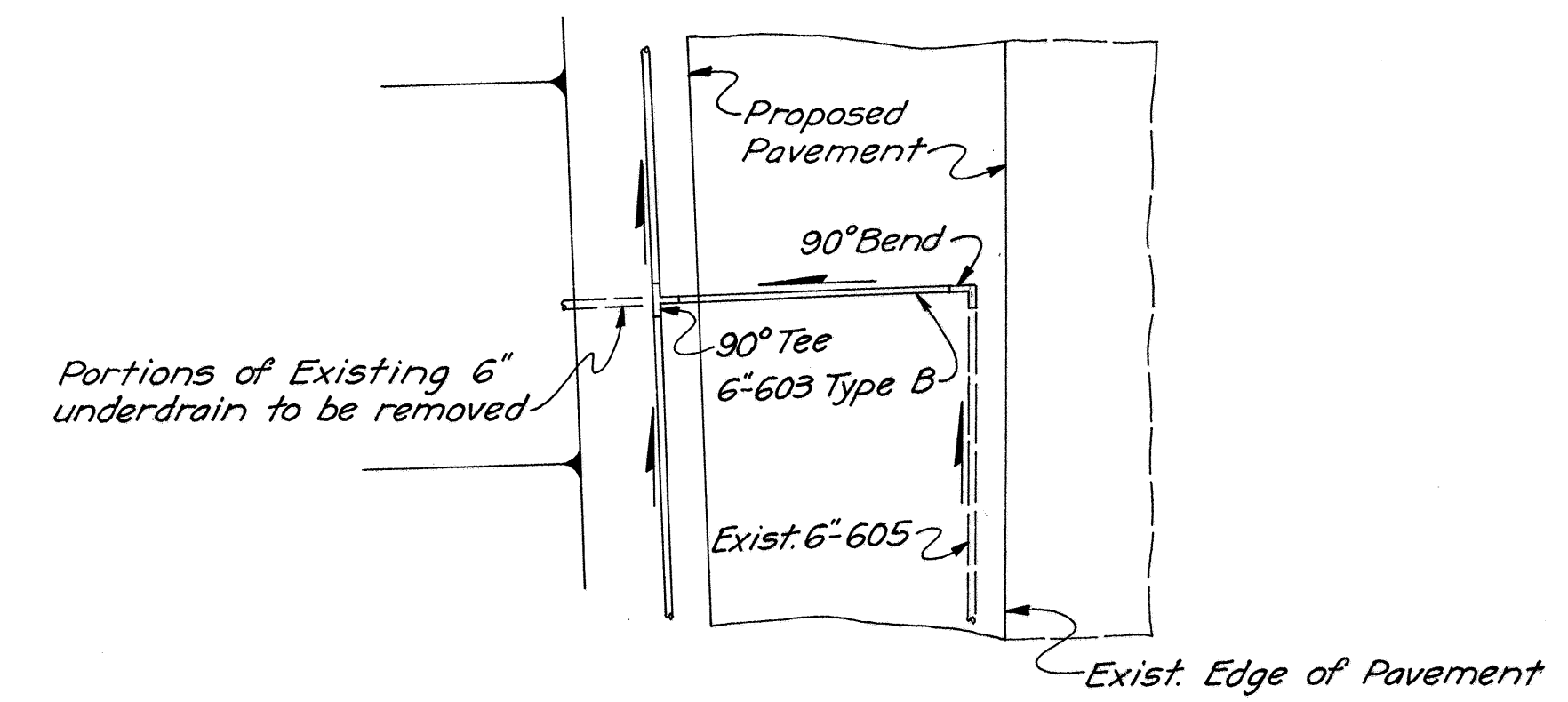
MEDINA COUNTY
MED 0055 IN PART II



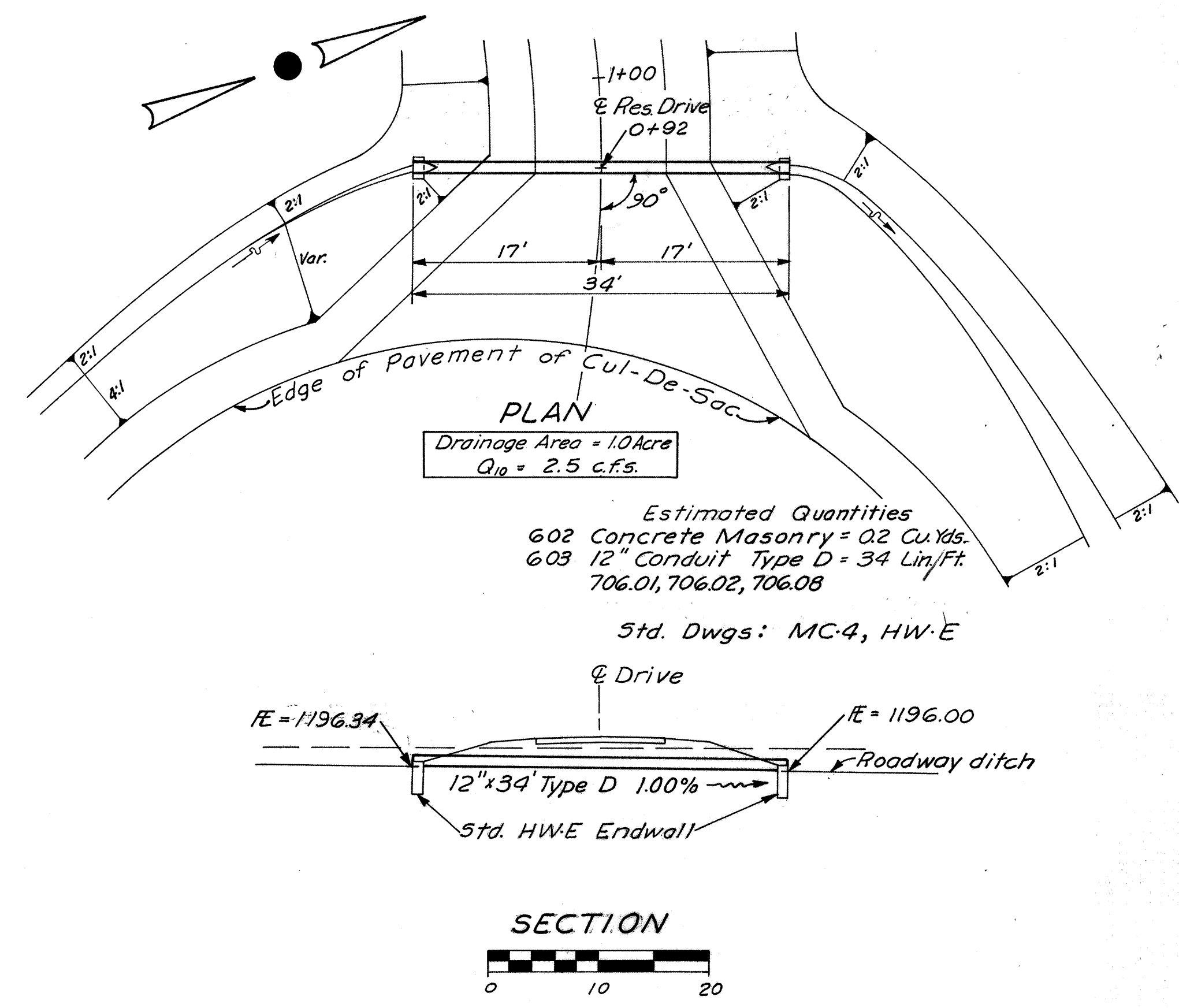
UNDERDRAIN OUTLET DETAIL A



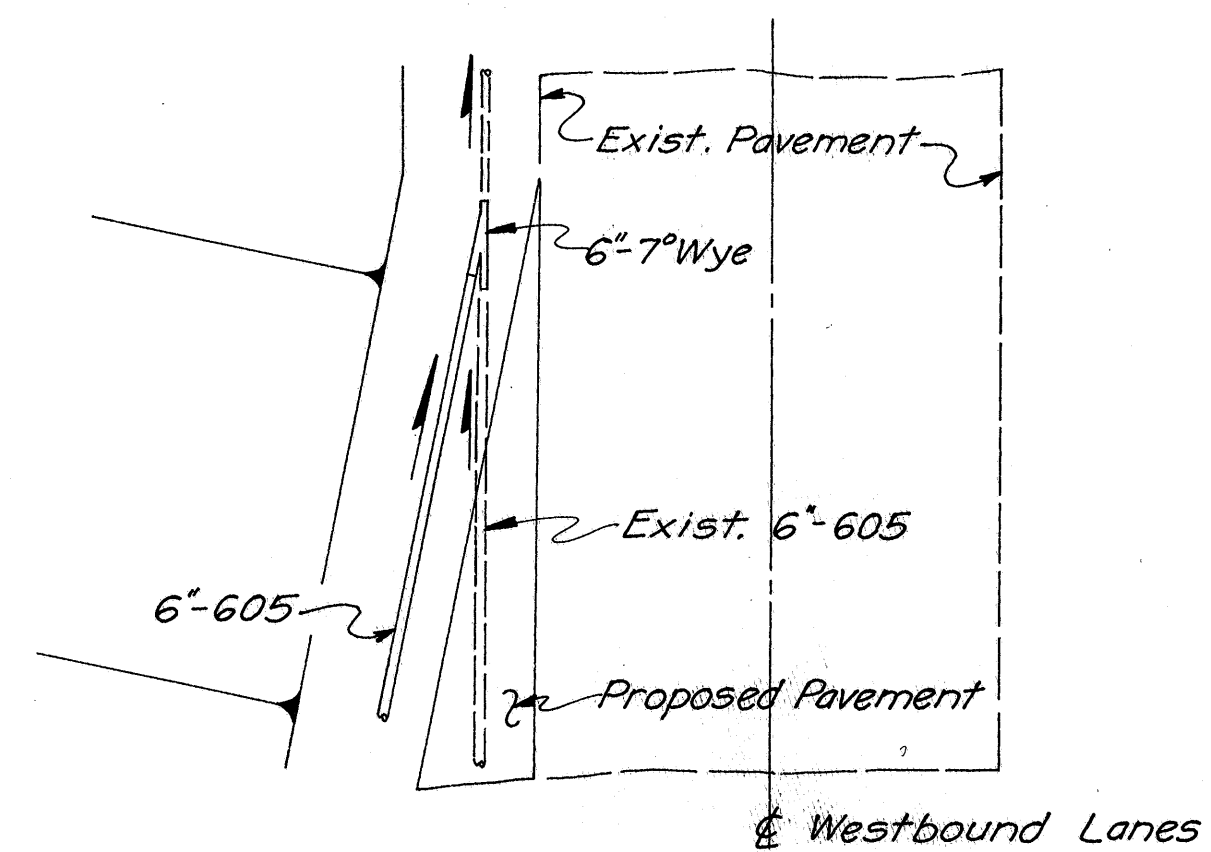
UNDERDRAIN OUTLET DETAIL B



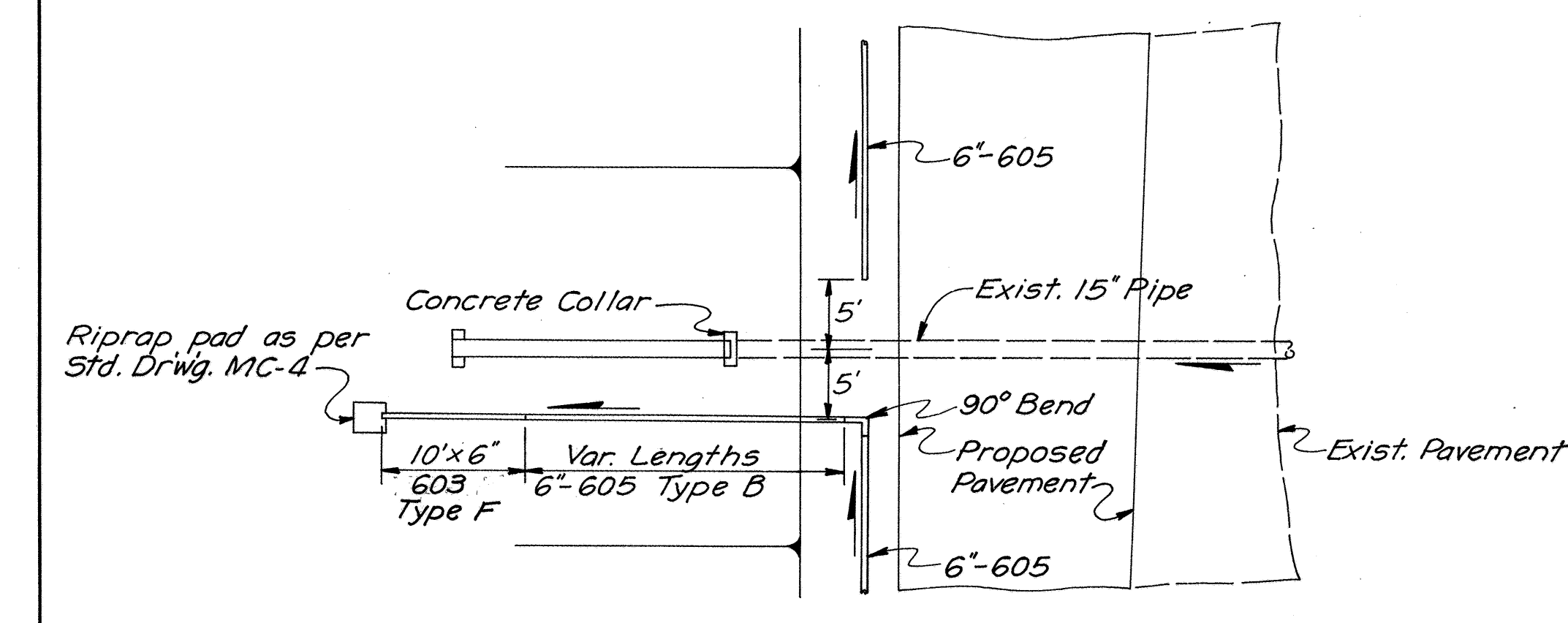
UNDERDRAIN OUTLET DETAIL D



RES. DRIVE STA. 0+92 C.H. 198-S



UNDERDRAIN OUTLET DETAIL C

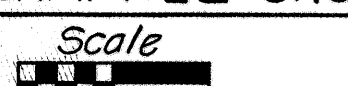
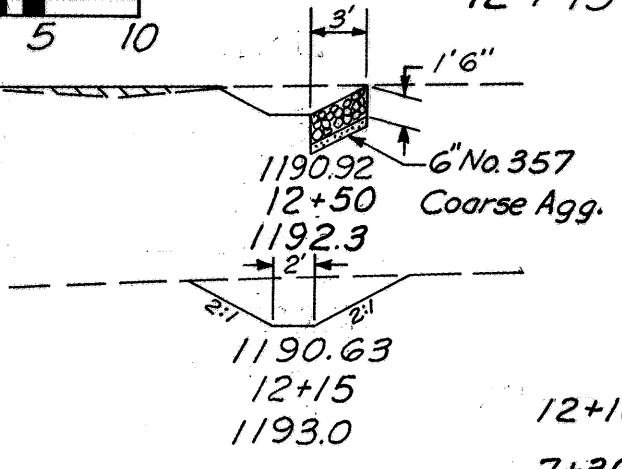


UNDERDRAIN OUTLET DETAIL E

ESTIMATED QUANTITIES

202	Portion of Existing Structure Removed	Lump
602	Concrete Masonry	2.2 Cu.Yds.
603	48" Conduit, Type A, 706.02	226 Lin.Ft.
601	Rock Channel Protection Type B	20 Cu.Yds.
Std. Dwg. MC-4, HW-E		

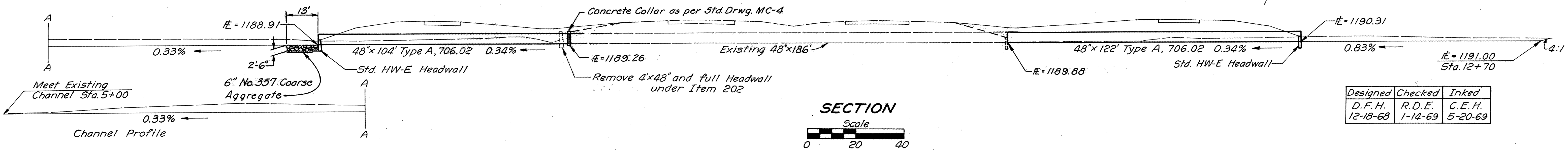
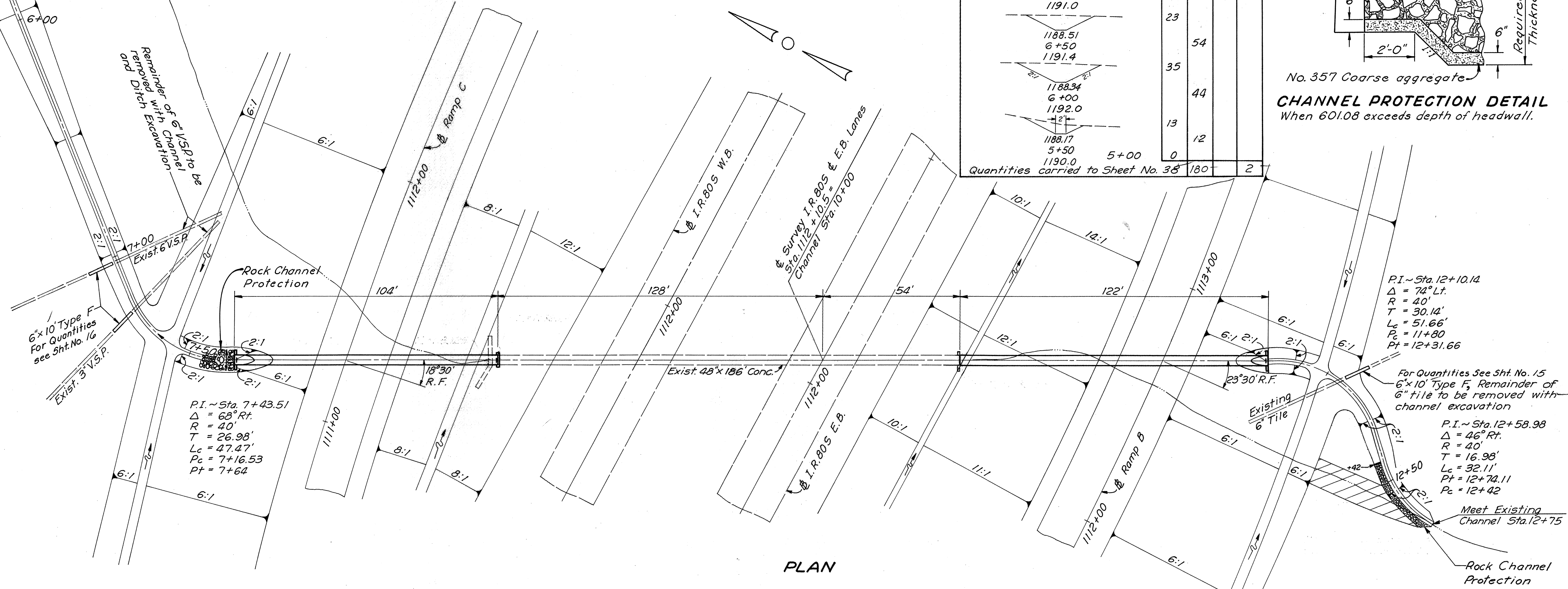
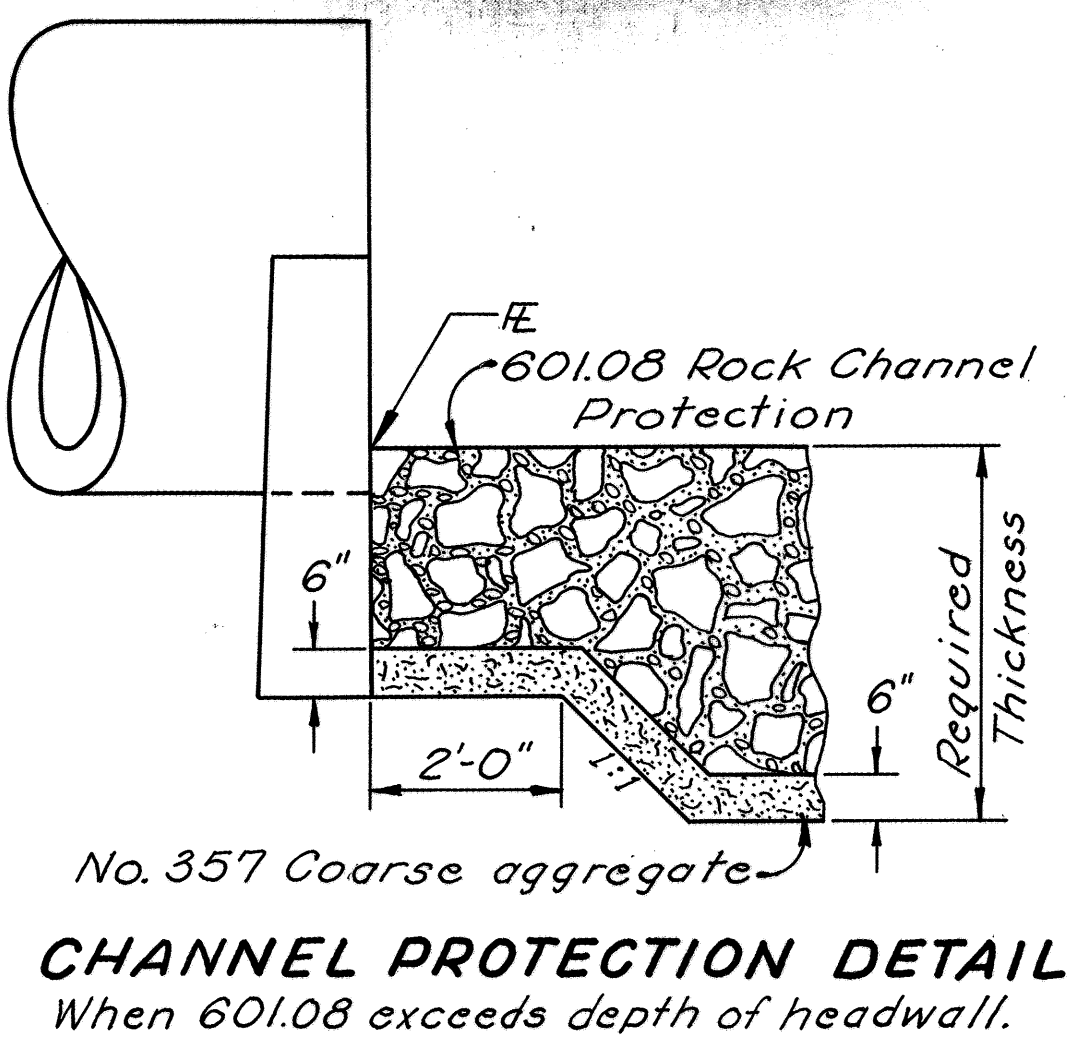
CHANNEL CROSS SECTIONS

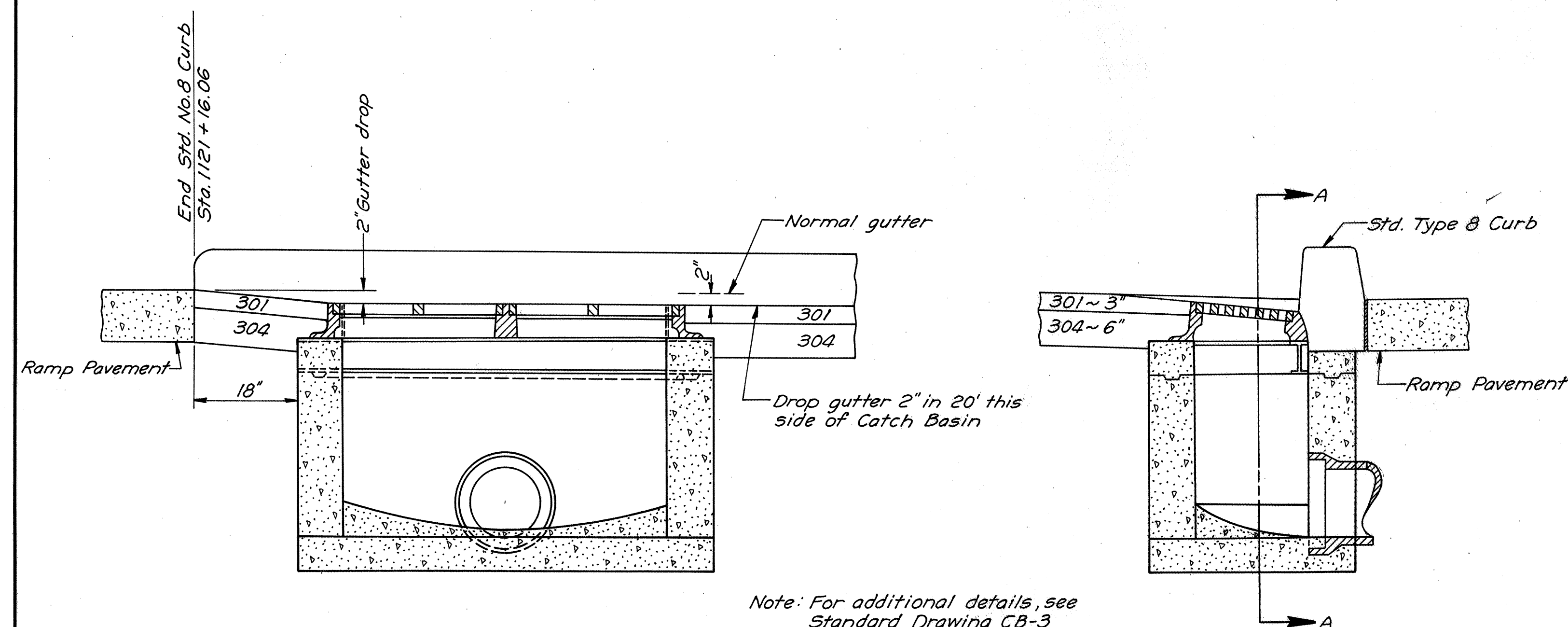
Sta.	Excav.	Emb.
	E.A.C.Y.	E.A.C.Y.
12+75	3	1
12+50	16	1
12+30	0	0
12+10	2	0
7+30	0	0
7+25	1	1
7+00	13	13
6+50	35	35
6+00	23	23
5+50	54	54
5+00	35	35
4+50	44	44
4+00	13	12
3+50	0	0

Quantities carried to Sheet No. 38

180	2



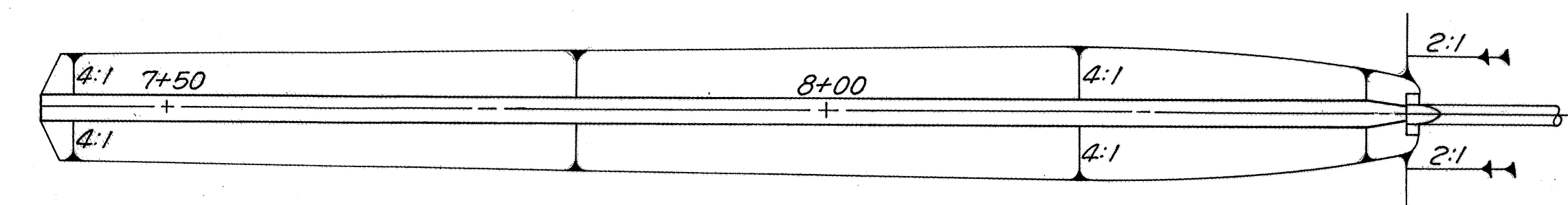
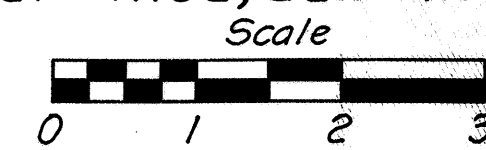
Designed	Checked	Inked
D.F.H.	R.D.E.	C.E.H.
12-18-68	1-14-69	5-20-69



SECTION A-A

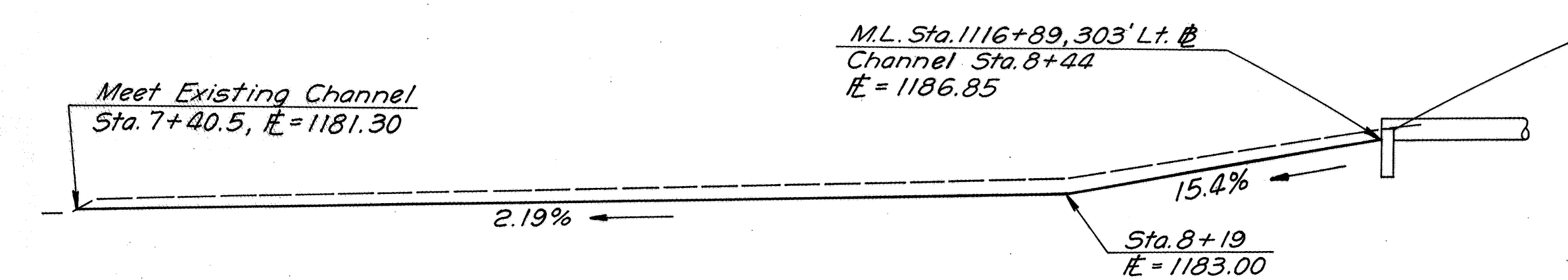
Note: For additional details, see Standard Drawing CB-3

STA. 1121 + 11.52, 22.1' Rt. of I.R. 80 S

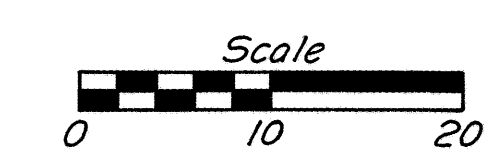


PLAN

CHANNEL CROSS SECTIONS		203
	E.A.C.Y.	
1186.85 8+44	5	9
1183.00 8+19 1184.0	12	25
1181.30 7+43 1182.0	6	0
	0	0
Quantities carried to Sheet No. 39		34



SECTION



SIGNING NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

50
75

MEDINA COUNTY
MED-80S-5.14 PART II

TRAFFIC SIGN ERECTION

THE CONTRACTOR SHALL ERECT SIGN PANELS FURNISHED BY ANOTHER CONTRACT AS NOTED ON THE SCHEMATIC SIGNING LAYOUT SHEETS 52 & 53. THE PANELS SHALL BE MOUNTED ON THE BRACKETS OR BEAM SUPPORTS PROVIDED IN THE PLANS.

THE CONTRACTOR SHALL SUBMIT TO THE DIVISION TRAFFIC ENGINEER AND *THE OFFICE OF DESIGN SERVICES 255 FRONT ST.* COLUMBUS, OHIO 43215, 120 CALENDAR DAYS PRIOR TO THE START OF ANY SCHEDULED ERECTION WORK. THE SCHEDULE SHALL INCLUDE PROPOSED DATES, TIME, SIGN NUMBERS AND DELIVERY POINT.

THE PRICE BID PER SQUARE FOOT FOR "815 SIGN ERECTION BY TYPE", SHALL INCLUDE ALL NECESSARY EQUIPMENT, LABOR AND TOOLS TO ERECT THE SIGNS. ALL SIGN MATERIAL AND ACCESSORIES WILL BE FURNISHED AND TRANSPORTED TO A DESIGNATED DELIVERY POINT, ON OR NEAR THE PROJECT, BY OTHERS. SEE SPECIAL NOTE ON VARIABLE MESSAGE SIGN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HANDLING AND STORAGE OF THE SIGN PANELS AND ACCESSORIES FROM THE TIME OF ARRIVAL AT THE DELIVERY POINT.

ANY UNUSED MATERIALS SHALL BE STORED NEATLY WITHIN THE LIMITS OF THE PROJECT AT LOCATIONS APPROVED BY THE ENGINEER FOR REMOVAL BY STATE FORCES.

IDENTIFICATION OF TRAFFIC SIGNS

IDENTIFICATION OF ALL TRAFFIC SIGNS IS BY REFERENCE NUMBER OR CODE NUMBER. REFERENCE NUMBERS REFER TO THE SIGN DESIGN BEARING THE SAME NUMBER. CODE NUMBERS REFER TO STANDARD DRAWINGS WITH THE SAME NUMBER.

ORIENTATION OF SIGN FACES

SIGNS SHALL BE ERECTED SO THAT THE FACE OF THE SIGN IS VERTICAL AND AT A RIGHT ANGLE TO THE CENTER OF THE LANE WHICH SERVES EXCEPT WHERE OTHERWISE NOTED. WHERE LANES DIVIDE AND ON SHARP HORIZONTAL CURVES, SIGN FACES SHALL BE PLACED PERPENDICULAR TO THE TANGENT POINT OF THE CURVE AT THE STATION LOCATION, SO AS TO BE MOST EFFECTIVE BOTH DAY AND NIGHT.

SIGN SUPPORT SYMBOLS

SIGNS ON ONE SUPPORT	
SIGNS ON TWO SUPPORTS	
SIGNS ON THREE SUPPORTS	

ITEM 815 VARIABLE SIGN MESSAGE UNIT, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLATION OF THE COMPLETED VARIABLE SIGN MESSAGE UNIT IN A WS-3 SIGN FURNISHED BY ANOTHER CONTRACT AND ERECTED UNDER THIS CONTRACT BY SEPARATE PAY ITEM.

THE VARIABLE SIGN MESSAGE UNIT SHALL BE FABRICATED IN ACCORDANCE WITH SPECIFICATIONS AND DETAILS SHOWN ON SHEET NO. 64.

THE WORK SHALL ALSO INCLUDE FURNISHING AND INSTALLATION OF ALL CABLE AND 2 INCH CONDUIT FROM THE ADJACENT PULL BOX TO THE SIGN, AND TO AND INCLUDING THE PHOTO-ELECTRIC CELL.

DETAIL DRAWINGS OF CABINET AND ELECTRICAL DETAILS INCLUDING ATTACHMENT HARDWARE MUST BE SUBMITTED A MINIMUM OF 120 DAYS PRIOR TO SCHEDULED DELIVERY OF SIGNS.

THE BASIS OF PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE FOR EACH UNIT WHICH SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS TO PROVIDE A COMPLETE AND ACCEPTED ITEM OF WORK.

RESTORATION OF DISTURBED AREAS

THE CONTRACTOR SHALL REPLACE ALL MEDIAN PAVEMENT, SEEDED AND SODDED AREAS, PAVED SHOULDERS AND ALL OTHER SURFACES DISTURBED BY SIGNING OPERATIONS TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE WORK WAS STARTED. ALL REPLACEMENTS SHALL BE DONE IN ACCORDANCE WITH THE PERTINENT SPECIFICATION ITEMS AND AS DIRECTED BY THE ENGINEER. PAYMENT FOR ALL RESTORATION WORK, INCLUDING MATERIALS, EQUIPMENT, LABOR, INCIDENTALS AND DISPOSAL OF ALL SURPLUS MATERIALS, SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE RESPECTIVE 816 ITEMS.

STRUCTURAL SIGN SUPPORTS QUANTITIES

QUANTITIES FOR ITEM 816 STRUCTURAL BEAM SUPPORTS APPEARING IN THE SUMMARY TABLES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT SUPPORT LENGTHS PRIOR TO FABRICATION AND GALVANIZING OF SUPPORTS. DETAILS FOR PLAN QUANTITIES ARE SHOWN ON SHEET NO. 57.

6-LB. AND 8-LB. BEAM SUPPORTS

THESE SUPPORTS ARE COMPOSED OF TWO DRIVE POSTS BOLTED BACK TO BACK AS SHOWN IN DETAIL ON SHEET NO. 57.

GALVANIZED SUPPORTS

ALL COMPONENTS OF GROUND MOUNTED SIGN SUPPORTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-123. ALL BOLTS, NUTS AND WASHERS (PLAIN AND LOCK) SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, EXCEPT WHERE ALUMINUM OR STAINLESS STEEL IS REQUIRED.

ITEM 816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS

PAYMENTS FOR THIS ITEM SHALL BE BASED ON PLAN DIMENSIONS (OR DIMENSIONS AS MODIFIED BY THE ENGINEER) IN LIEU OF PLAN QUANTITIES AS SPECIFIED IN SUPPLEMENTAL SPECIFICATIONS 816.

DIMENSIONS

DIMENSIONS OF SIGNS ARE INDICATED ON THE PLANS WITH THE HORIZONTAL DIMENSION SHOWN FIRST, THEN THE VERTICAL DIMENSION.

ITEM 815 INTERIM COVERING FOR SIGNS

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING AN INTERIM COVER AND ATTACHMENT MATERIALS FOR SIGNS AS DIRECTED BY THE ENGINEER. THIS ITEM MAY ALSO INCLUDE THE SUBSEQUENT REMOVAL OF COVERS WHEN DIRECTED BY THE ENGINEER.

MATERIALS FOR COVERING THE VARIABLE MESSAGE SIGN SHALL BE 1/2 INCH PLASTIC COATED PLYWOOD, PAINTED INTERSTATE GREEN.

MATERIAL FOR COVERING ALL OTHER SIGNS SHALL BE AASHO M182, CLASS 2 WATERPROOF BURLAP FABRIC.

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.

A QUANTITY OF 520 SQ FT FOR ITEM 815, INTERIM COVERING FOR SIGNS, HAS BEEN INCLUDED TO COVER SIGNS AS DIRECTED BY THE ENGINEER.

ITEM 621 EXISTING PAVEMENT MARKINGS REMOVED

THIS ITEM SHALL CONSIST OF THE REMOVAL OR OBLITERATION OF PAINTED PAVEMENT MARKINGS FROM THE PAVEMENT.

THE MARKINGS MAY BE REMOVED EITHER MECHANICALLY, OR BY ANY OTHER METHOD APPROVED BY THE ENGINEER EXCEPT THAT THE METHOD SHALL NOT BE INJURIOUS TO THE APPEARANCE, TEXTURE, OR STRENGTH OF THE PAVEMENT.

PAYMENT FOR ITEM 621 EXISTING PAVEMENT MARKINGS REMOVED SHALL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT AND SHALL CONSTITUTE FULL COMPENSATION FOR ALL WORK, INCLUDING MATERIALS, EQUIPMENT, LABOR, INCIDENTALS AND DISPOSAL OF SURPLUS MATERIALS.

ITEM 816 REMOVE AND RE-ERECT EXISTING GROUND MOUNTED SIGN

THE EXISTING GROUND MOUNTED SIGNS AT STATION 1118+00 (W.B.), 1180+00 (W.B.) AND STATION 1124+00 (E.B.) SHALL BE REMOVED AND RE-ERECTED AT THE LOCATIONS SHOWN ON THE PLANS. THIS WORK WILL BE PAID FOR AS A LUMP SUM ITEM. THE COST OF THIS ITEM SHALL INCLUDE FULL COMPENSATION FOR ALL WORK REQUIRED IN THE REMOVAL AND THE RE-ERECTION OF THESE SIGNS.

REMOVAL OF EXISTING DELINEATORS

THE EXISTING DELINEATORS FROM STATION 1094+00 (E.B.) TO STATION 1102+00 (E.B.), STATION 1116+75 (E.B.) TO STATION 1133+25 (E.B.), AND FROM STATION 1092+00 (W.B.) TO STATION 1108+50 (W.B.), STATION 1123+00 (W.B.) TO STATION 1131+25 (W.B.), SHALL BE REMOVED AND DISPOSED OF. THE COST OF THE REMOVAL AND THE DISPOSAL OF THE DELINEATORS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION.

ITEM 202 REMOVAL OF EXISTING SIGN INSTALLATIONS, 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.

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.

ITEM 816 BREAKAWAY SIGN SUPPORT CONNECTION

THIS ITEM CONSISTS OF CUTTING AND DRILLING THE STRUCTURAL SUPPORT: FURNISHING AND ATTACHING THE FUSE PLATE AND FURNISHING AND ATTACHING THE BASE PLATES FOR EACH STRUCTURAL SIGN SUPPORT AS INDICATED ON THE PLANS.

ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED TO FABRICATE AND INSTALL THIS ITEM FOR EACH SIGN SUPPORT (EXCLUSIVE OF THE STRUCTURAL SIGN SUPPORT) WILL BE MEASURED AND PAID FOR AT THE UNIT PRICE BID FOR ITEM 816 EACH BREAKAWAY SIGN SUPPORT CONNECTION.

TRAFFIC CONTROL QUANTITIES

MEDINA COUNTY MED-80S-5.14 PART II

621~TRAFFIC ZONE PAINT MARKING

Ref.	Station	Side	4" Edge Line	4" Lane Line	Removal of 4" Edge Line	8" Channel Line	Broad Transverse Stripes	Curb Marking	Parking Lot Stall Marking
			Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.
I.R.80S	1092+00 to 1098+72	Lt.			672				
I.R.80S	1094+00 to 1099+19	Rt.			519				
I.R.80S	1099+19 to 1102+02	Rt.				283			
I.R.80S	1099+19 to 1102+02	Rt.					344		
I.R.80S	1123+14 to 1125+92	Lt.				278			
I.R.80S	1123+14 to 1125+92	Lt.					336		
I.R.80S	1125+92 to 1131+16	Lt.			524				
I.R.80S	1126+44 to 1133+16	Rt.			672				
Ramp A	1094+00 to 1107+03	Rt.	1,303						
Ramp A	1097+09 to 1099+18	Lt.		78					
Ramp A	1099+18 to 1102+01	Lt.				283			
Ramp A	1102+01 to 1109+33	Lt.	732						
Ramp A	1108+63 to 1109+33	Rt.	70						
Ramp B	1110+00 to 1117+16	Lt.	716						
Ramp B	1111+75 to 1133+16	Rt.	2,141						
Ramp B	1115+65 to 1121+16	Lt.						551	
Ramp B	1121+16 to 1123+56	Lt.				240			
Ramp B	1123+56 to 1126+44	Lt.		108					
Ramp C	1092+00 to 1113+41	Lt.	2,141						
Ramp C	1098+72 to 1101+60	Rt.		108					
Ramp C	1101+60 to 1104+00	Rt.				240			
Ramp C	1104+00 to 1109+50	Rt.					550		
Ramp C	1108+00 to 1115+16	Rt.	716						
Ramp D	1115+83 to 1116+53	Lt.	70						
Ramp D	1115+83 to 1123+15	Rt.	732						
Ramp D	1118+13 to 1131+16	Lt.	1,303						
Ramp D	1123+15 to 1125+93	Rt.				278			
Ramp D	1125+92 to 1128+04	Rt.		80					
E.B. Weigh Station Parking Lot									2,700
W.B. Weigh Station Parking Lot									2,700
Totals ~ Lin. Ft.			9,924	374	2,387	1,602	680	1,101	5,400
Totals ~ Miles			1.880	0.071					

620~DELINEATORS

Ref.	Station	Side	Spacing	Post Mounted Type C-2
				Each
Ramp A	1094+00 to 1105+00	Rt.	100	12
Ramp A	1105+60 to 1106+80	Rt.	60	3
Ramp B	1111+75 to 1113+85	Rt.	70	4
Ramp B	1114+65	Rt.	~	1
Ramp B	1114+65 to 1116+25	Lt.	80	3
Ramp B	1116+25 to 1117+85	Rt.	80	3
Ramp B	1118+85 to 1132+85	Rt.	100	15
Ramp C	1092+15 to 1107+15	Lt.	100	16
Ramp C	1107+95 to 1108+75	Lt.	80	2
Ramp C	1108+75 to 1110+35	Rt.	80	3
Ramp C	1110+35 to 1111+15	Lt.	80	2
Ramp C	1111+85 to 1113+25	Lt.	70	3
Ramp D	1118+36 to 1120+16	Lt.	60	4
Ramp D	1121+16 to 1131+16	Lt.	100	11
Total				82

815~SIGN ERECTION *

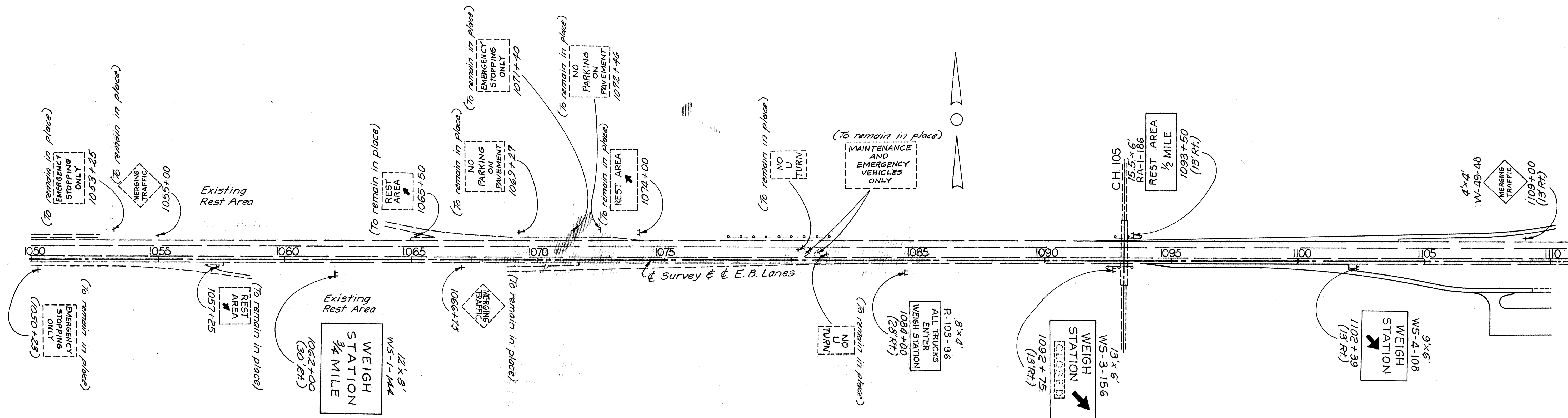
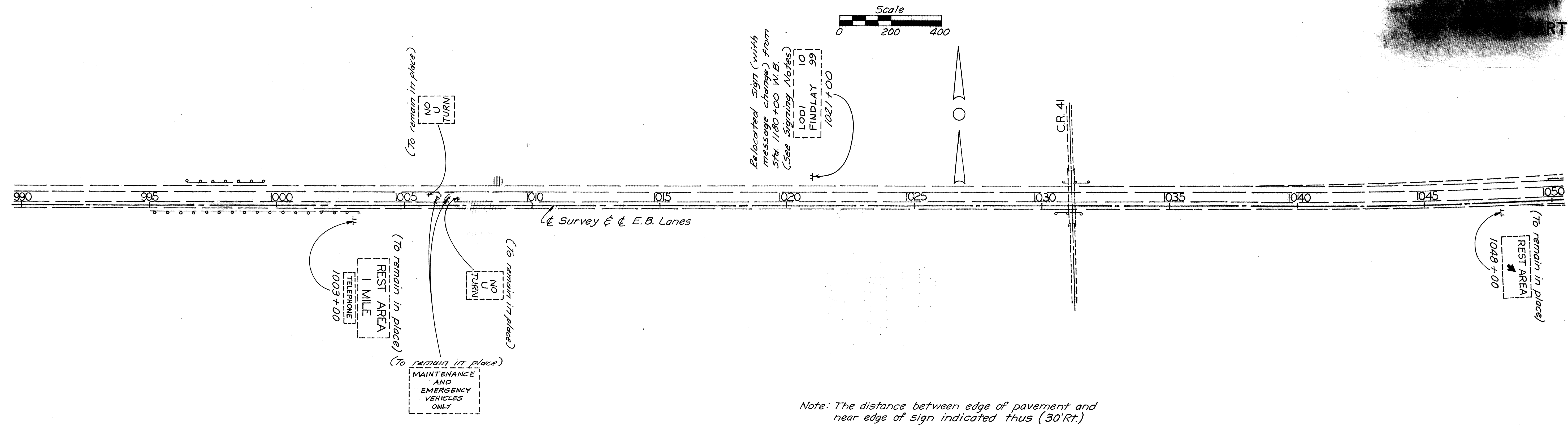
Station	Side	EXTRUSHEET						FLAT SHEET		Variable Sign Message Unit as per Plan	Interim Covering for Signs as per Plan	Concrete Foundations Type I	816~SIGN SUPPORTS			625 Ground Rods	816 Remove & Re-Erect Existing Ground Mounted Sign	816 Breakaway Sign Support Connection *	202 Removal of Existing Sign Installations as per plan
		WS-4-108 9'-0"x6'-0"	WS-3-156 13'-0"x6'-0"	RA-103-96 8'-0"x4'-0"	WS-1-124 12'-0"x8'-0"	RA-1-186 15'-6"x6'-0"		W-49-48 4'-0"x4'-0"					6 lb. Beam	8 lb. Beam	10 W.F. 21				
		Each	Each	Each	Each	Each		Each					Lin. Ft.	Lin. Ft.	Lin. Ft.				
1062+00	E.B.				1								2.5		23.0			2	
1084+00	E.B.			1									0.2		18.0				
1092+75	E.B.		1							1			2.5		18.0			2	
1093+50	W.B.					1							2.5		18.0			2	
1102+39	E.B.	1											0.4		18.0				
1109+00	W.B.							1					0.1	17.5	18.0				
1116+00	E.B.							1					0.1	17.5					
1118+00	W.B.														18.0		Lump	2	
1122+83	W.B.	1											0.4		18.0		Lump		
1124+00	E.B.												0.2	18.0	17.5		Lump		
1131+25	W.B.		1							1			2.5	19.5			1	2	
1135+00	E.B.																		Lump
1142+00	W.B.			1									0.2		17.0				Lump
1152+00	W.B.														18.5				
1176+00	W.B.				1								2.5		19.0			2	
To be used as directed											520				19.0				
1180+00	W.B.												2.5		19.0		Lump	2	
Totals		2	2	2	2	1		2		2	520	16.6	72.5	179.0	238.0	2	Lump	14	Lump
Totals ~ Sq. Ft.		108	156	64	192	93		32											
Type		EXTRUSHEET						FLAT SHEET											
Type Totals ~ Sq. Ft.		613						32											

* As per Plan
50 Lin. Ft. of existing Guard Rail at Sta. 1118+00 (W.B.) & Sta. 1180+00 (W.B.) is to be removed and disposed of under Item 203 Excavation.

SIGNING PLAN

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

52
75

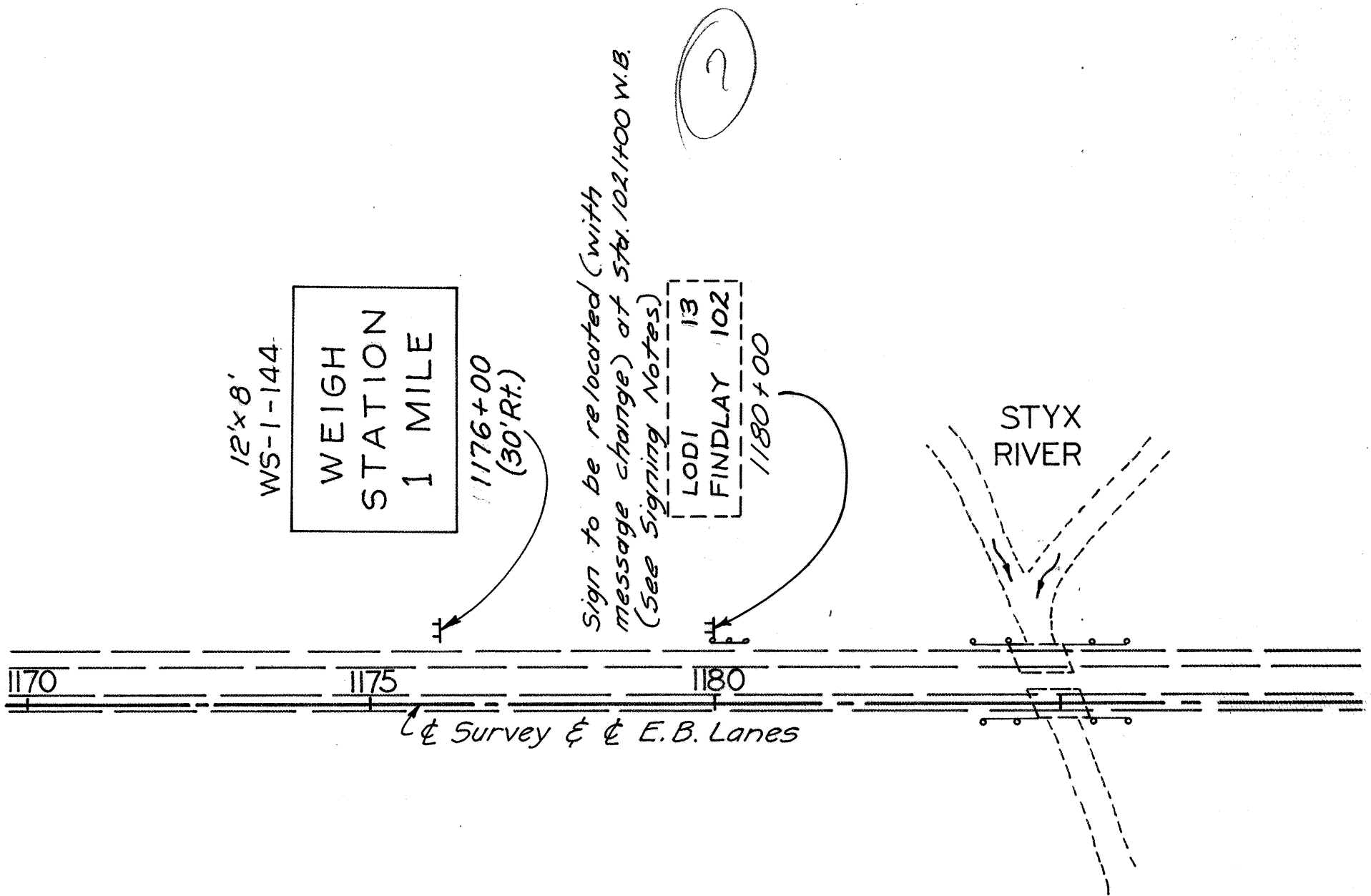
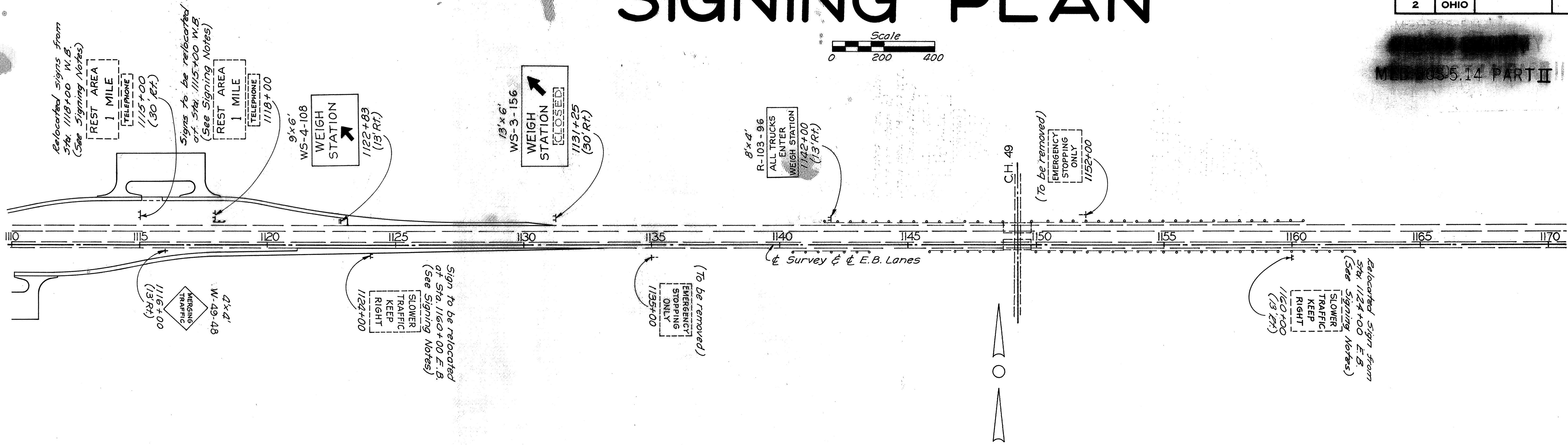
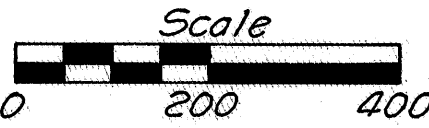


SIGNING PLAN

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

53
75

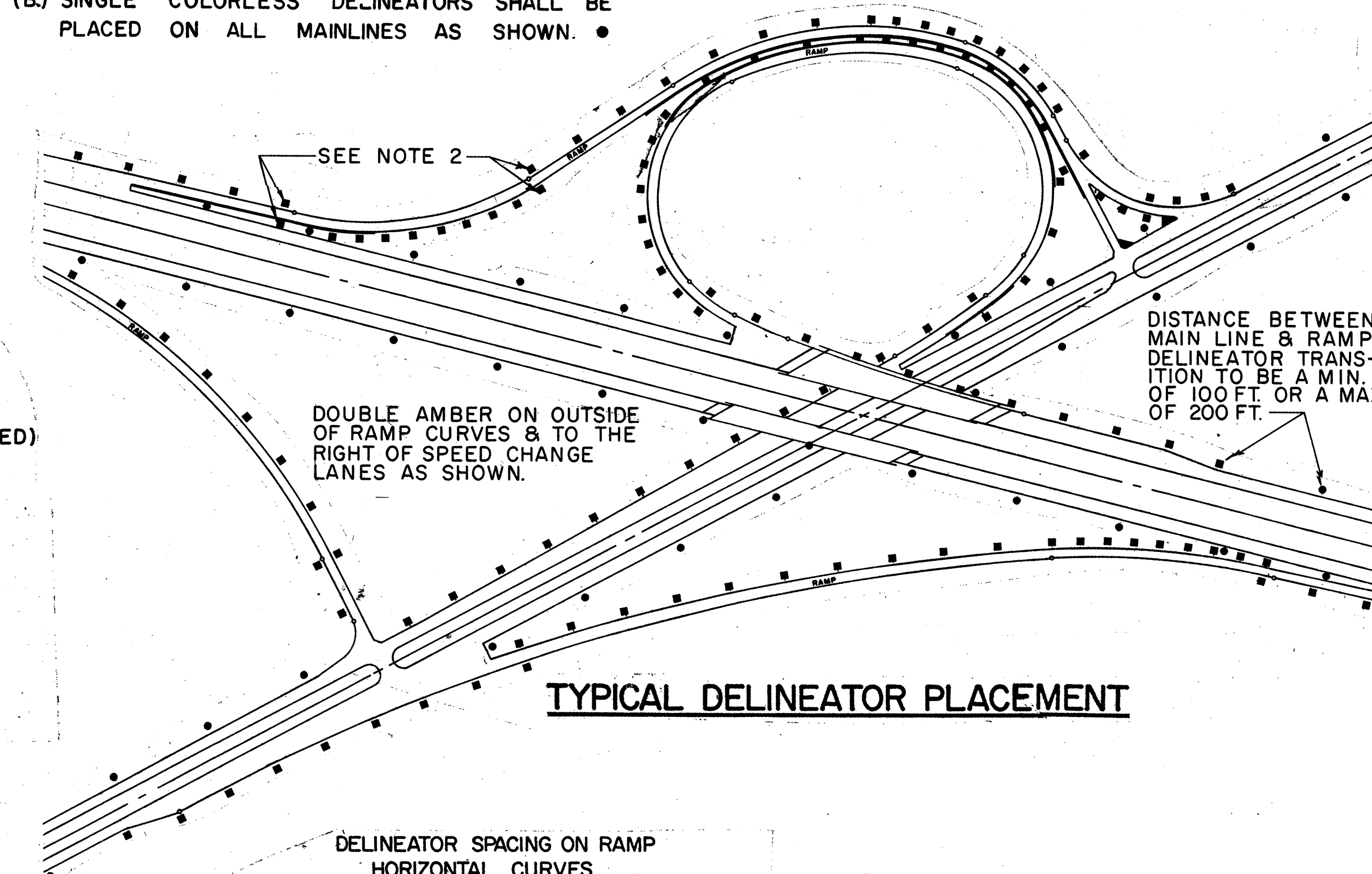
MED 103.5.14 PART II



MEDINA COUNTY MED-805-5.14 PART II

NOTE:

- (A) DOUBLE AMBER DELINEATORS SHALL BE PLACED ON ALL RAMP AS SHOWN. ■
- (B) SINGLE COLORLESS DELINEATORS SHALL BE PLACED ON ALL MAINLINES AS SHOWN. ●



TYPICAL DELINEATOR PLACEMENT

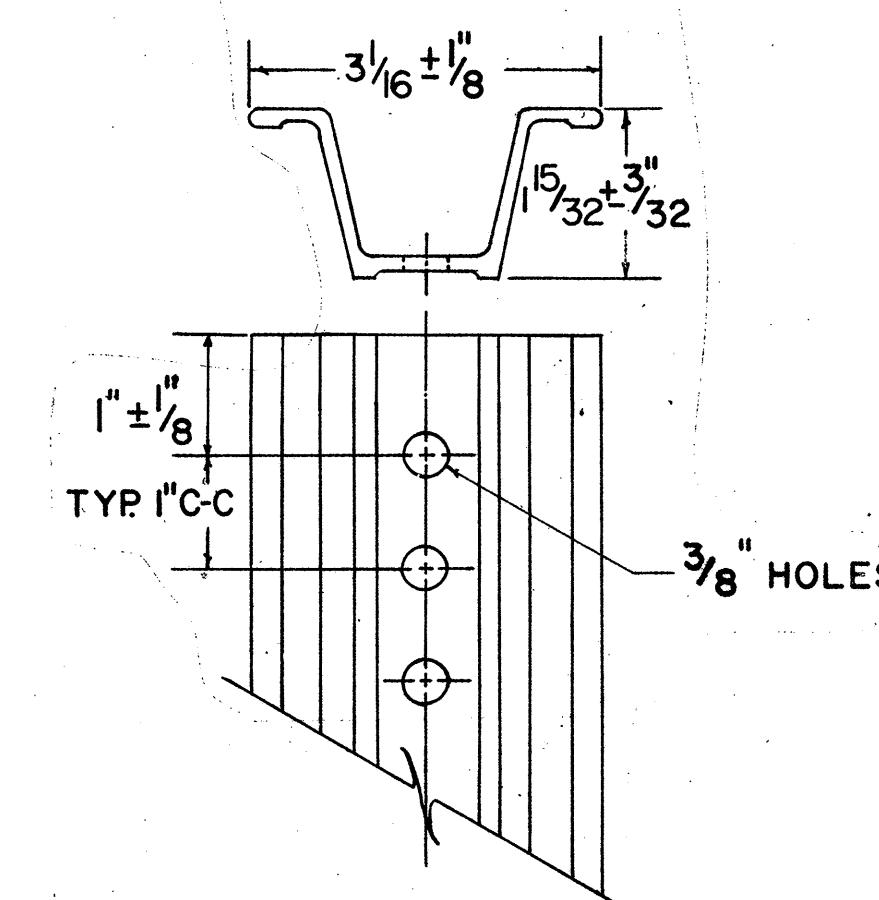
DELINEATOR SPACING ON RAMP HORIZONTAL CURVES

RADI, FT.	FROM	TO	SPACING ON CURVE	* TRANSITION SPACING	
TANGENT	1,801	1,401	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.

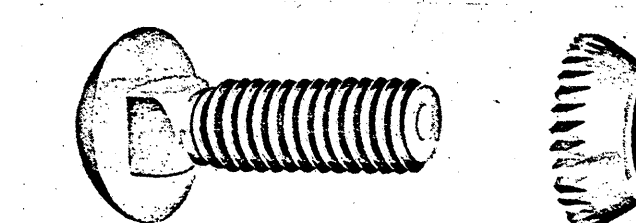
NOTES

- TYPE A1 OR B1 DELINEATORS ON THE RIGHT OF THE THROUGH ROADWAY ARE TO BE SPACED AT 200 FT. INTERVALS THROUGHOUT, REGARDLESS OF CURVES.
- WHEN CROSSING FROM LEFT TO RIGHT OR FROM RIGHT TO LEFT ON THE RAMP, THE DELINEATORS AT THE POINT OF CROSSOVER ARE TO BE AT THE SAME STATION ON EACH SIDE.
- NO DELINEATORS ARE TO BE PLACED IN PAVED BERM.
- WHEN RADII OF CURVE ON RAMP REQUIRE 100' SPACING THE DELINEATORS SHALL BE PLACED ON THE RIGHT IN RELATION TO THE FLOW OF TRAFFIC.



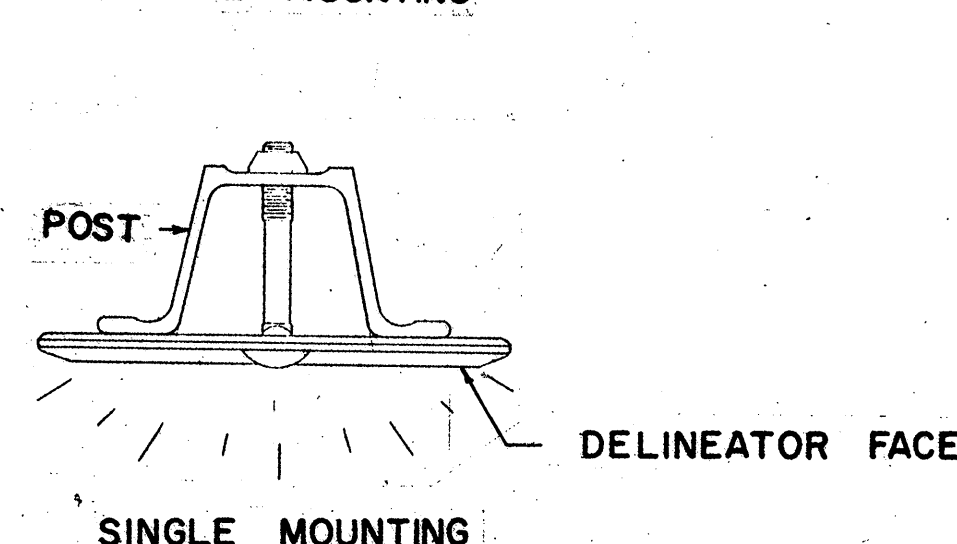
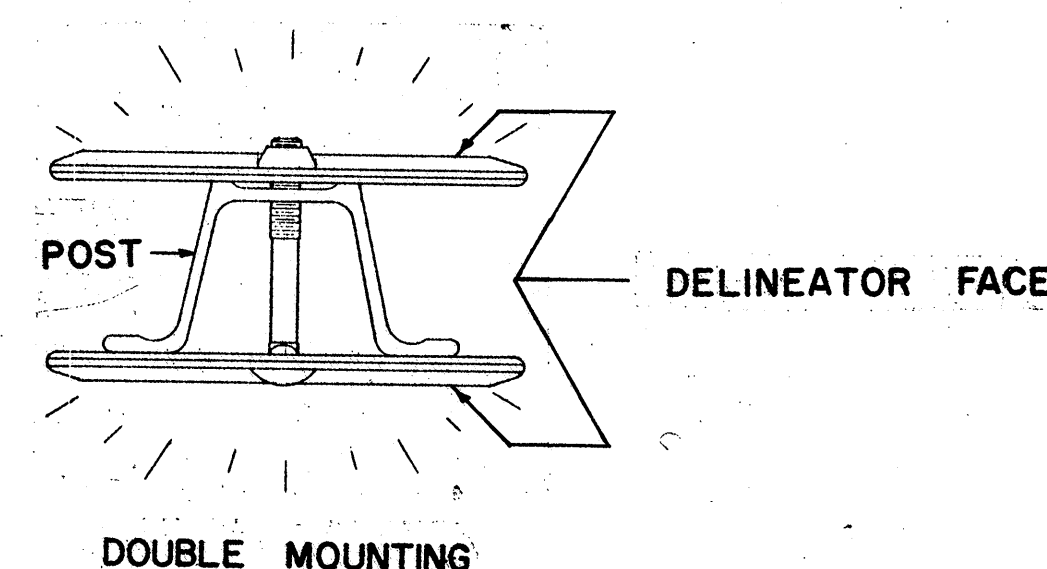
2LB./FT.

DELINEATOR DRIVE POST

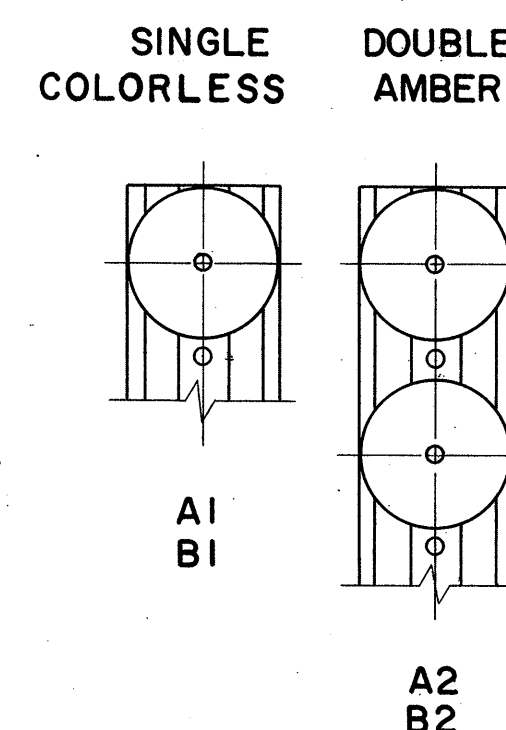


TAMPER RESISTANT FASTENERS SHALL BE USED TO FASTEN DELINEATORS TO POST AS/OR SIMILAR TO ONE SHOWN ABOVE.

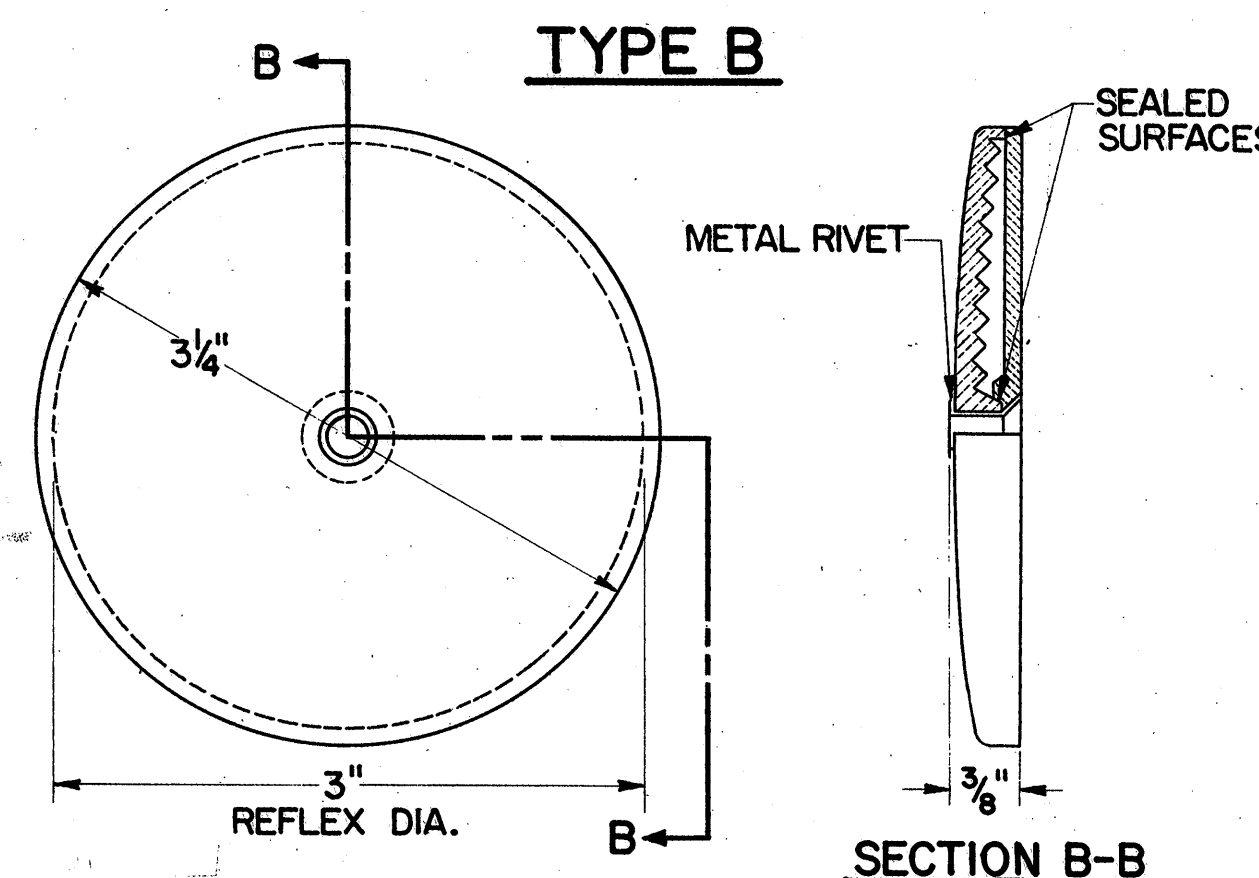
TAMPER RESISTANT FASTENERS



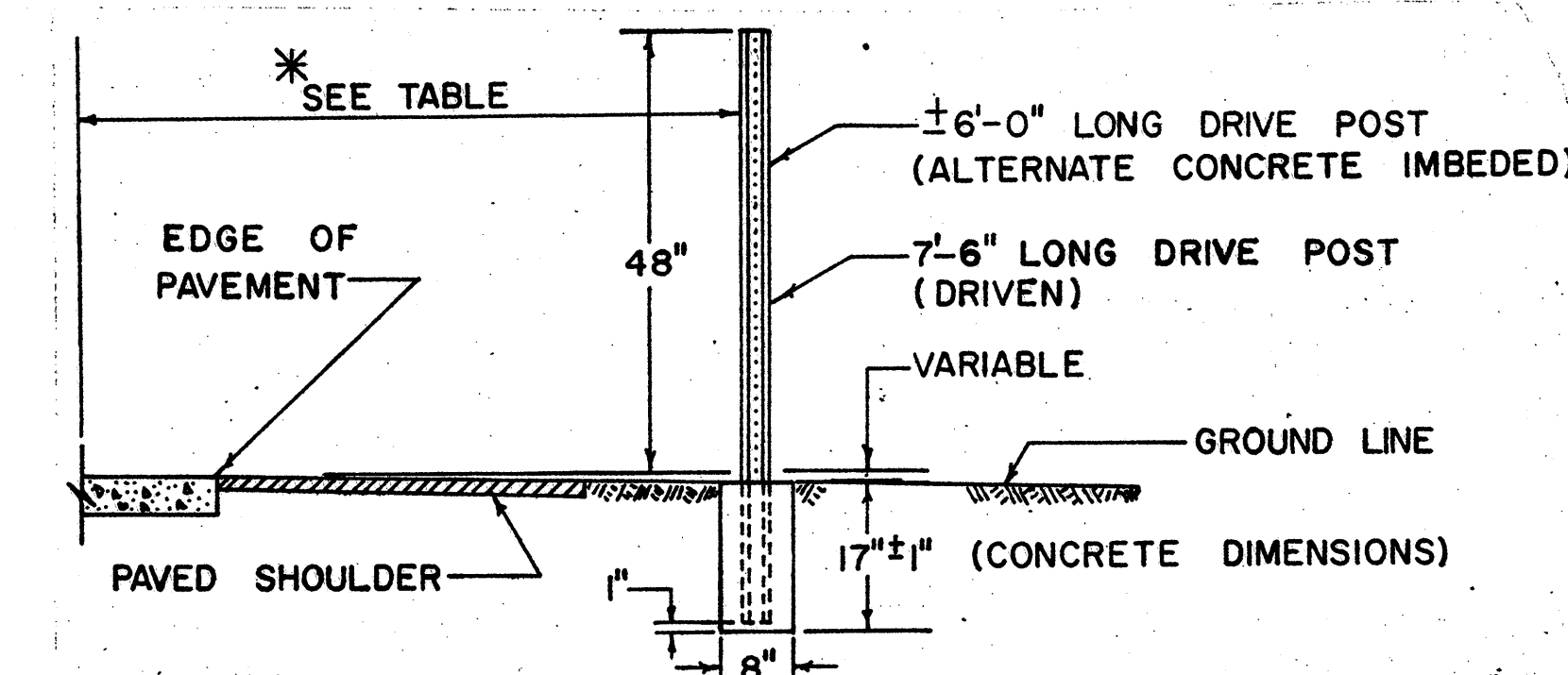
DELINEATOR MOUNTING



SECTION A-A



SECTION B-B

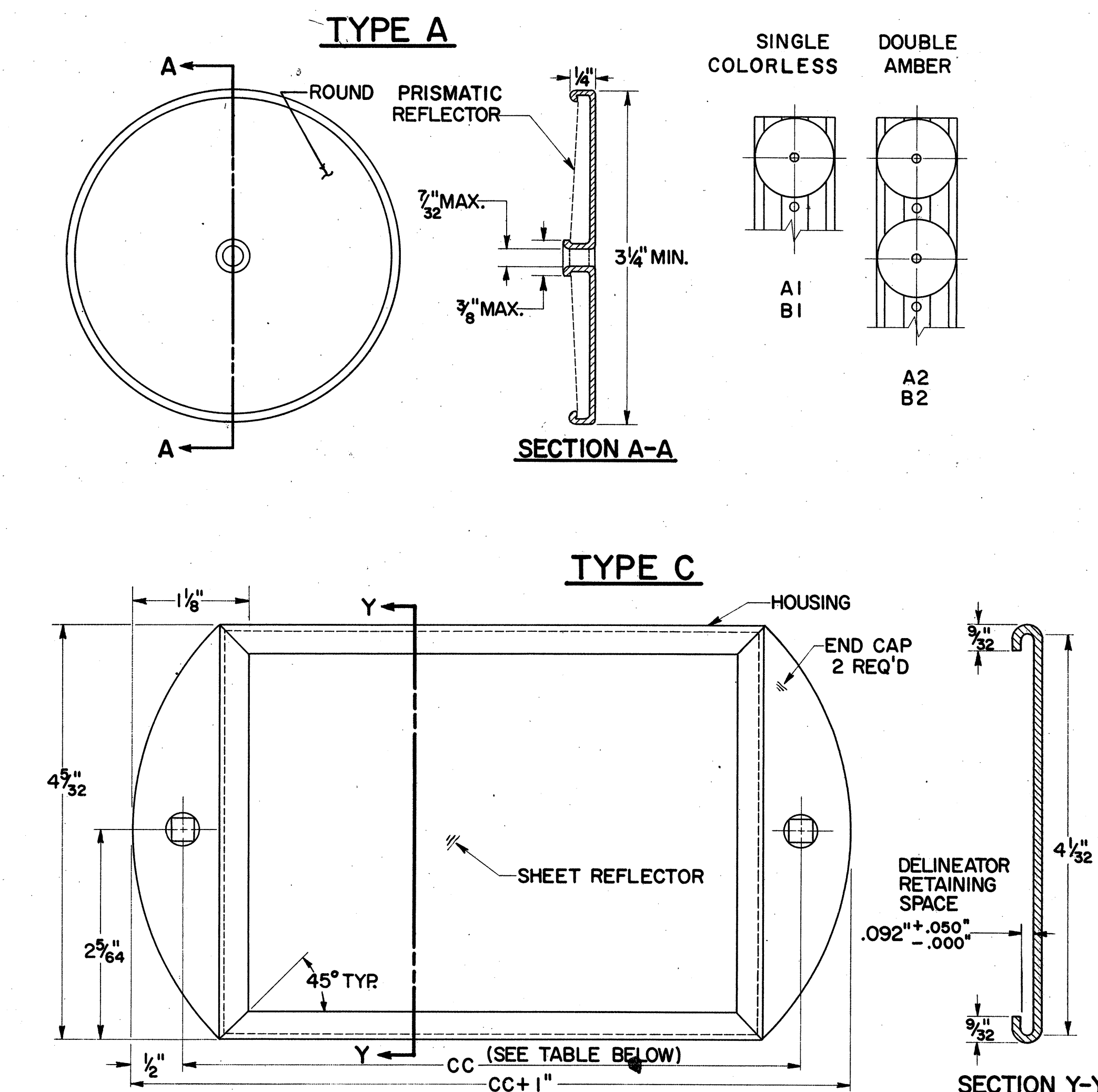


LATERAL PLACEMENT OF DELINEATORS

* TABLE

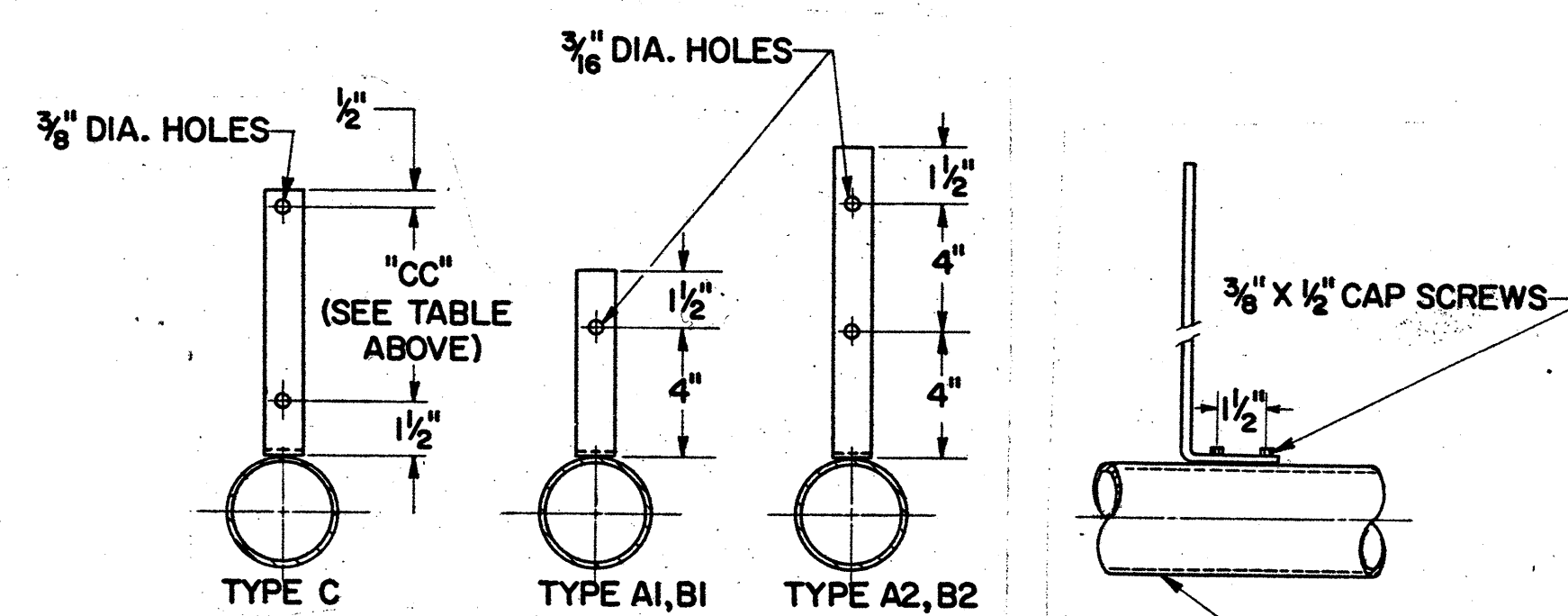
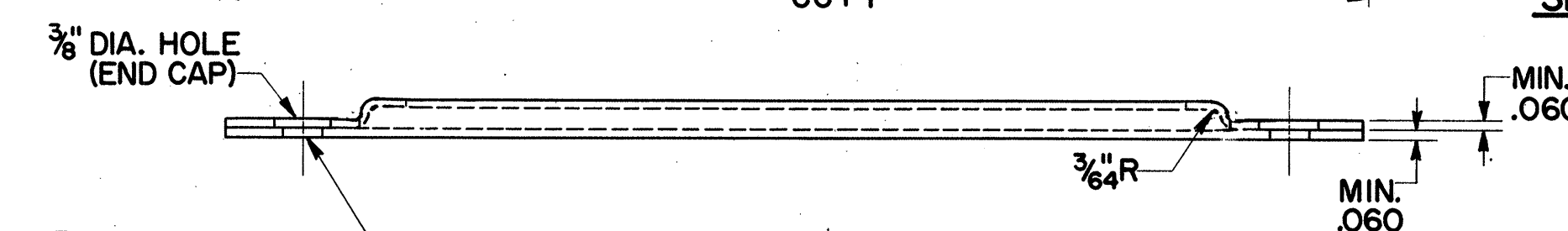
TYPE DELINEATOR	NO GUARDRAIL	GUARDRAIL
SINGLE COLORLESS	12'-6"	6" OUTSIDE
DOUBLE AMBER RIGHT SIDE	** 8'-6"	6" OUTSIDE
DOUBLE AMBER LEFT SIDE	4'-6"	6" OUTSIDE

** THIS DIMENSION SHALL VARY ON SPEED CHANGE LANES TO MAINTAIN MINIMUM DISTANCE OF 2'-6" FROM EDGE OF PAVED SHOULDER.



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

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

DELINEATOR DETAILS

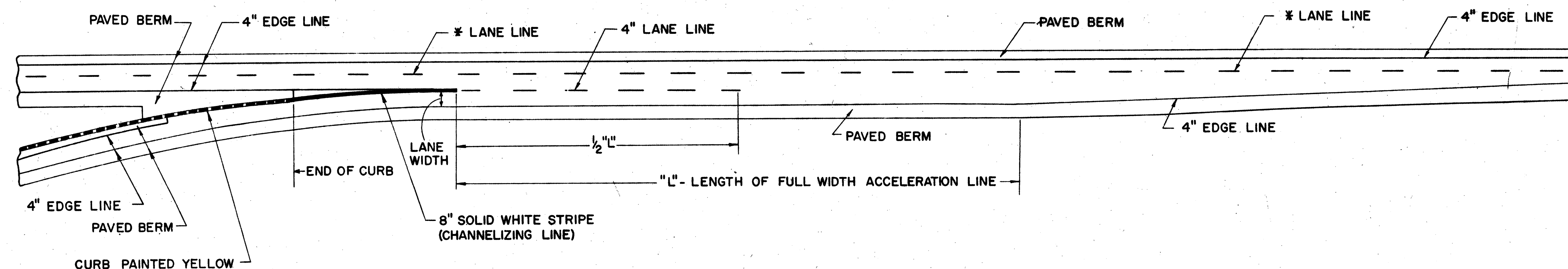
620

APPROVED *Robert Calmer*
ENGINEER OF TRAFFIC

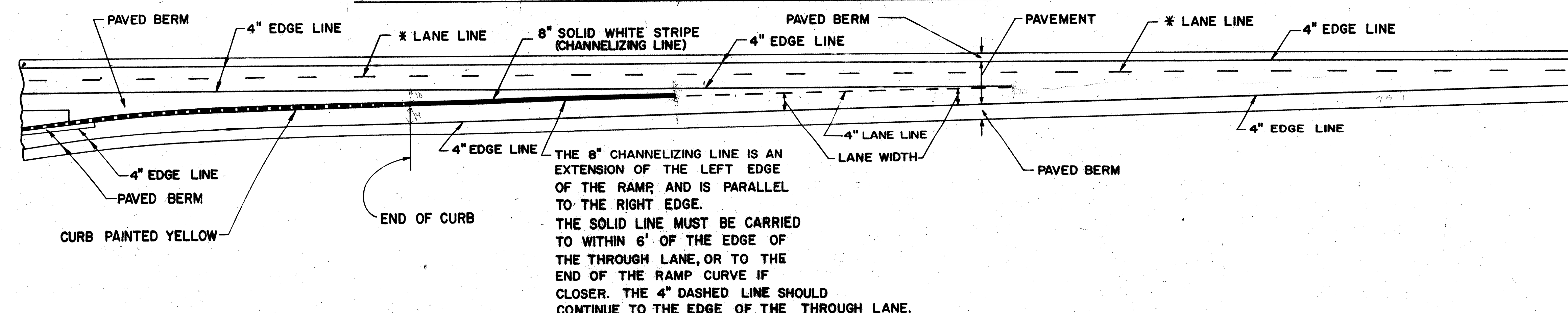
DATE
9-25-62
5-24-65
9-12-67

MEDINA COUNTY MED-805-5.14 PART II

ENTRANCE TERMINAL - PARALLEL ACCELERATION LANE

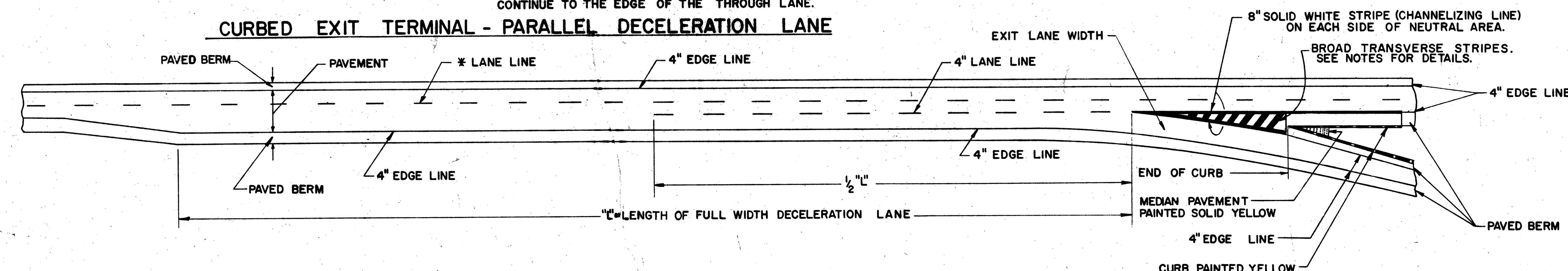


ENTRANCE TERMINAL - TAPERED ACCELERATION LANE

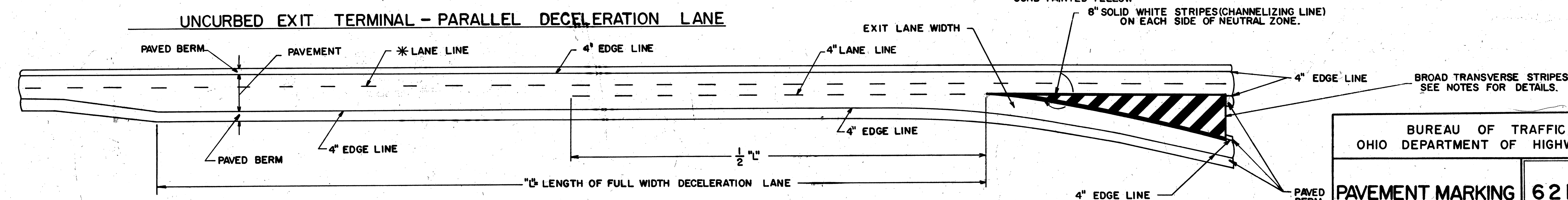


THE 8" CHANNELIZING LINE IS AN EXTENSION OF THE LEFT EDGE OF THE RAMP, AND IS PARALLEL TO THE RIGHT EDGE. THE SOLID LINE MUST BE CARRIED TO WITHIN 6' OF THE EDGE OF THE THROUGH LANE, OR TO THE END OF THE RAMP CURVE IF CLOSER. THE 4" DASHED LINE SHOULD CONTINUE TO THE EDGE OF THE THROUGH LANE.

CURBED EXIT TERMINAL - PARALLEL DECELERATION LANE



UNCURBED EXIT TERMINAL - PARALLEL DECELERATION LANE



NOTES

DIAGONAL STRIPES AT EXIT RAMP 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.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

PAVEMENT MARKING 621

APPROVED *Robert E. Lower*
ENGINEER OF TRAFFIC

DATE
7-17-61
4-6-62
5-24-65
9-2-67
4-17-68

MEDINA COUNTY MED-805-5/4 PART II

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.

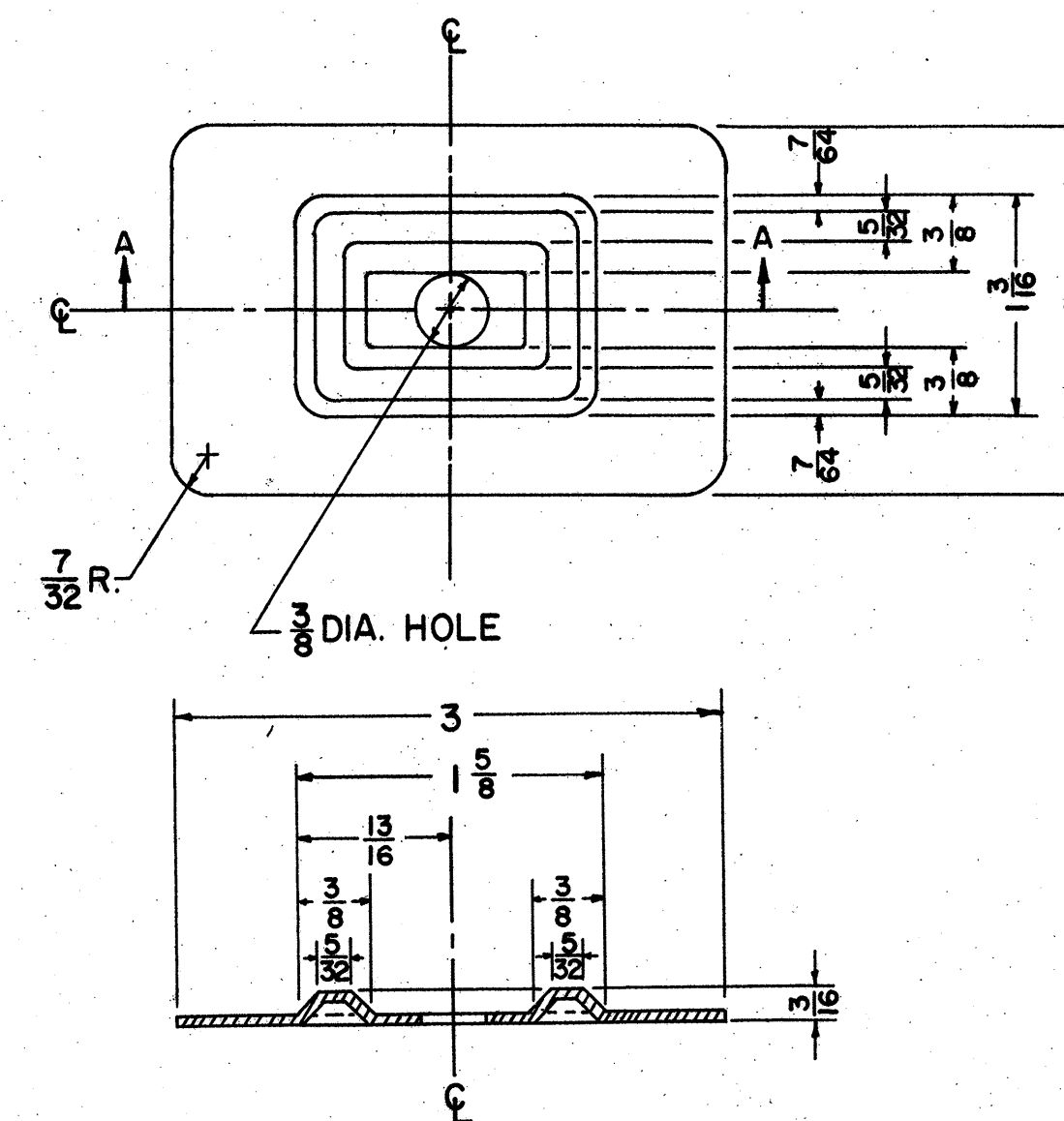
4. SCREWS, NUTS, AND WASHERS FOR SIGN ERECTION SHALL BE ALUMINUM EXCEPT AS NOTED ABOVE. 5/16" TRUSS HEAD SLOTTED MACHINE SCREWS WITH HEX. NUTS PLAIN AND LOCKWASHERS SHALL BE USED. PLAIN WASHERS SHALL BE 5/16" WIDE, USED ON SIGN FACE ONLY.

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".

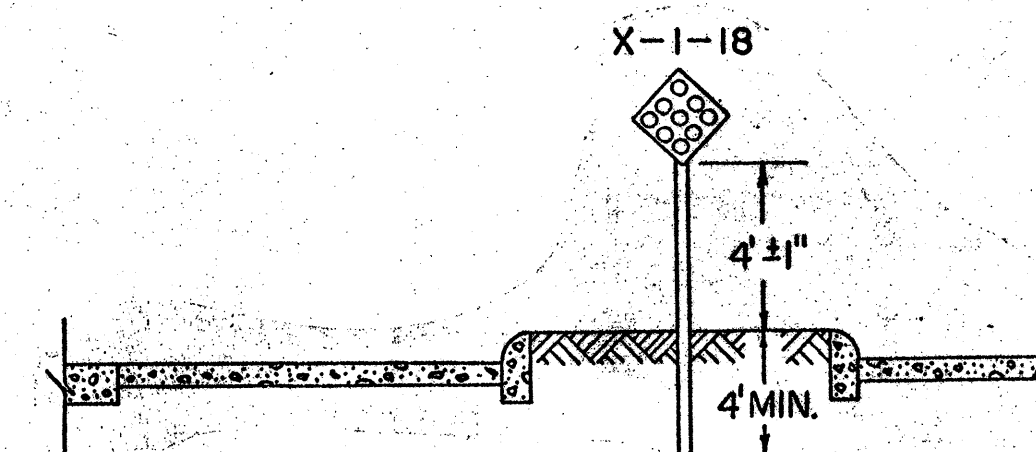
8. GALVANIZED STEEL BEARING PLATES SHALL BE INCLUDED BETWEEN ALL SHEET ALUMINUM SIGNS ATTACHED TO VERTICAL SUPPORTS AT EACH SIGN BOLT LOCATION.



SECTION AA

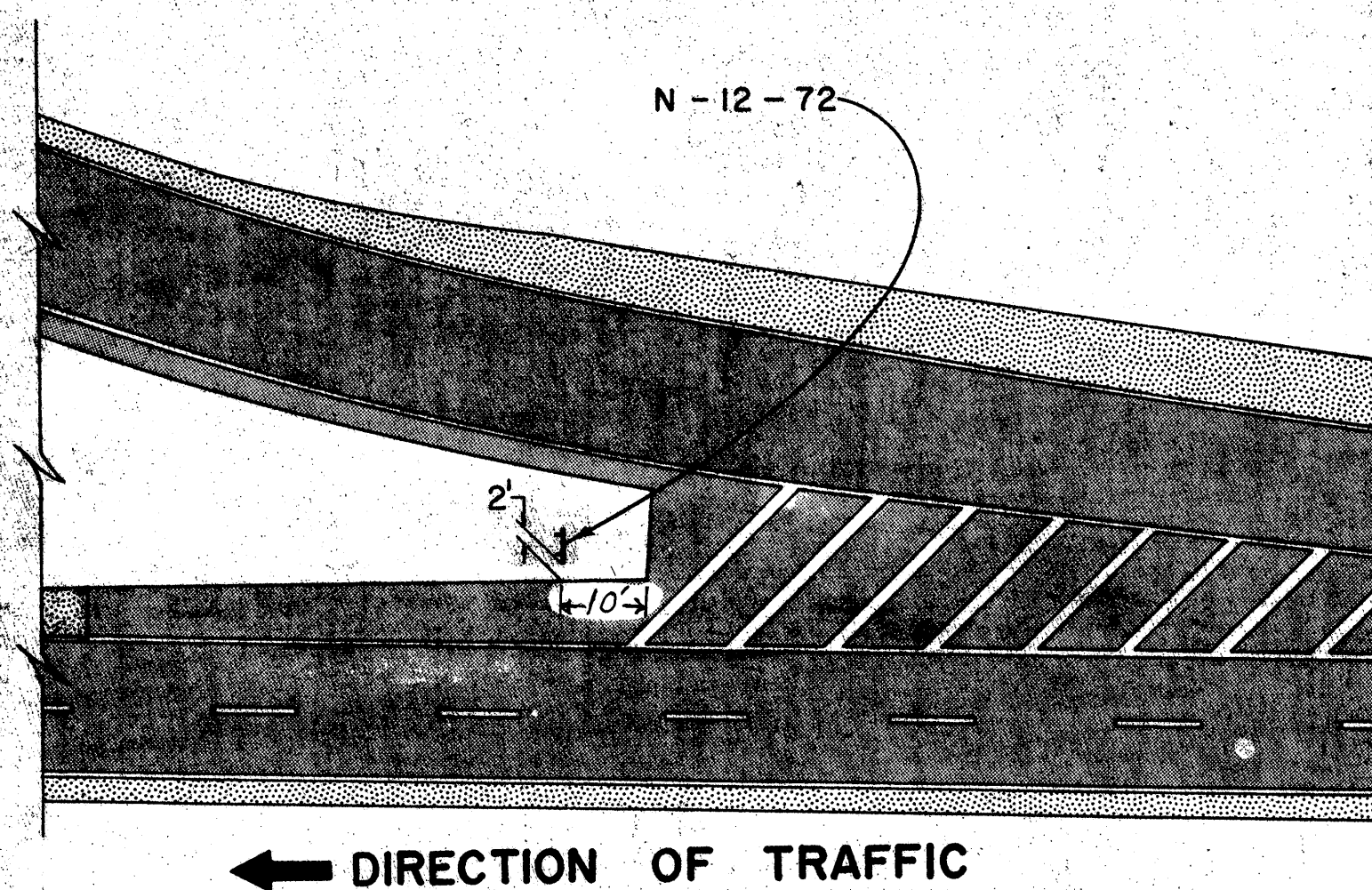
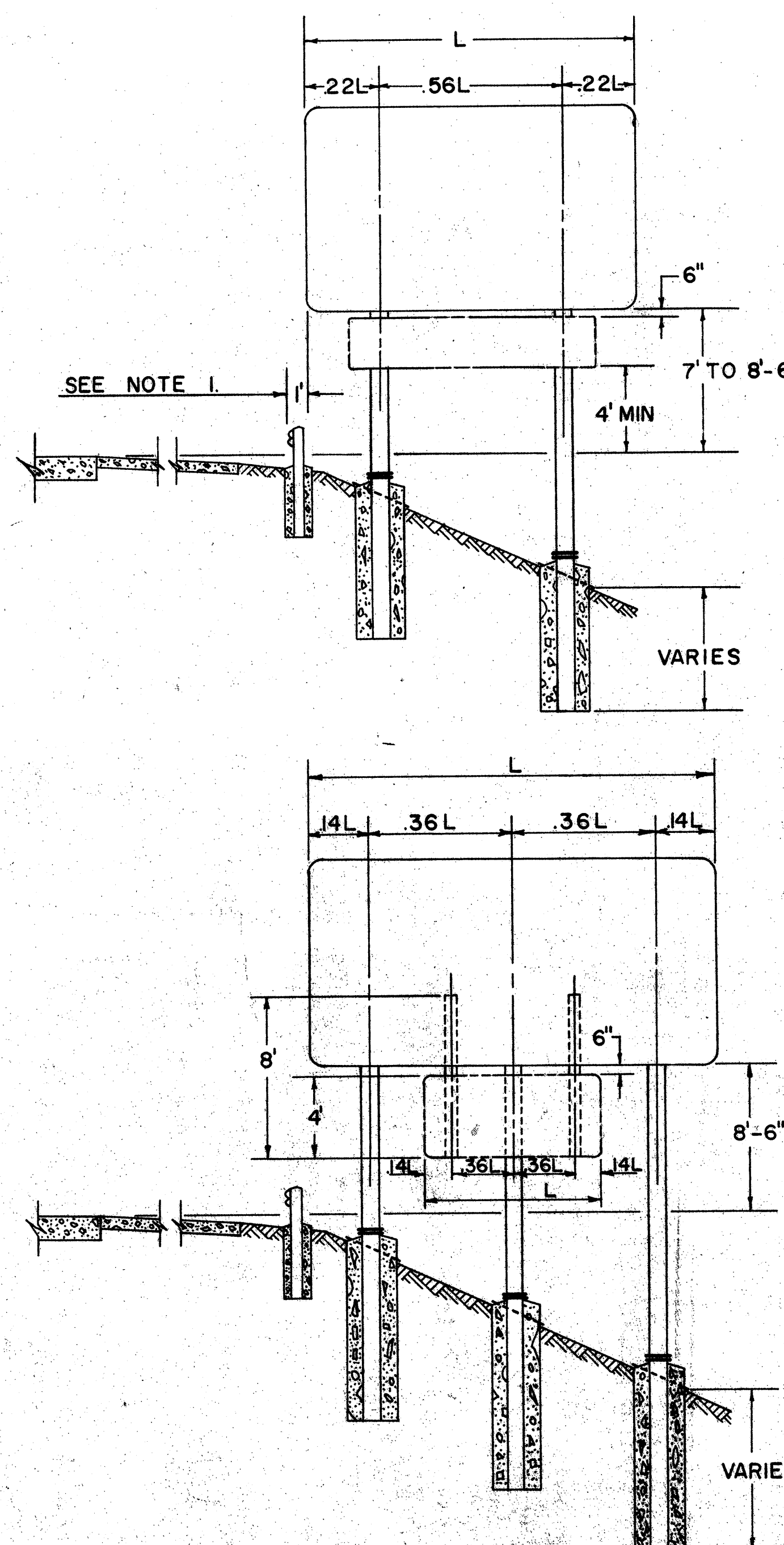
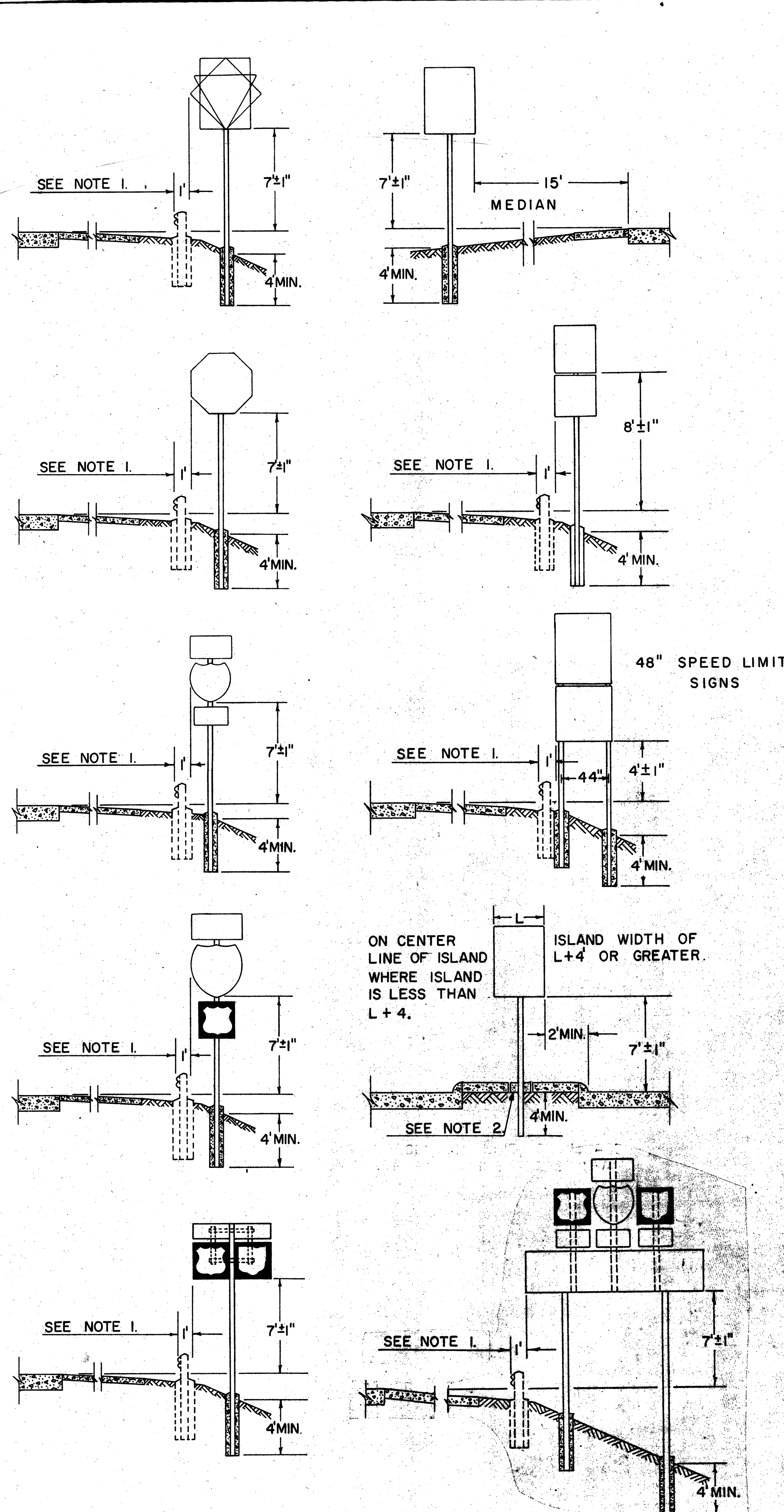
NOTE:
THE PLATE IS SYMMETRICAL ABOUT EITHER CENTERLINE.
METAL SHALL BE 16 GAUGE STEEL.
ALL DIMENSIONS ARE IN INCHES.

BEARING PLATE DETAIL

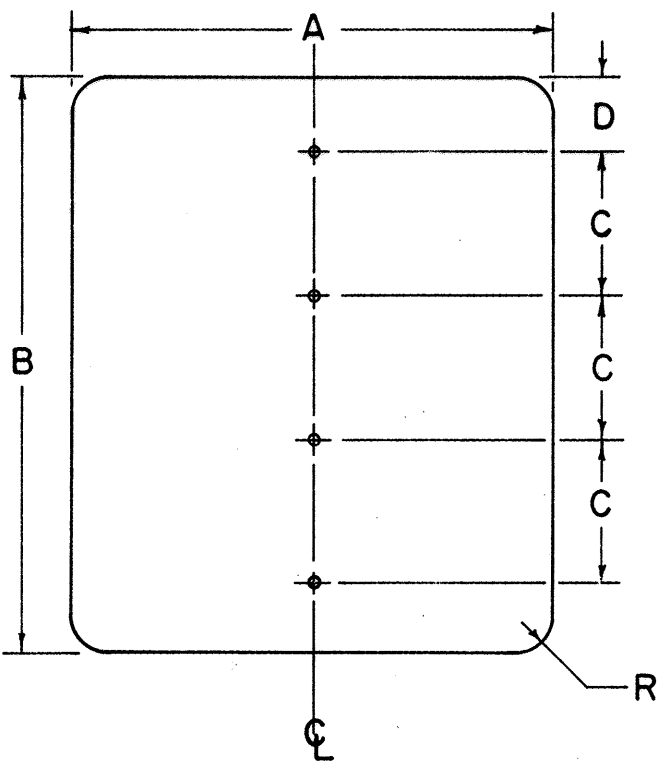


SIGN SUPPORT SPACING

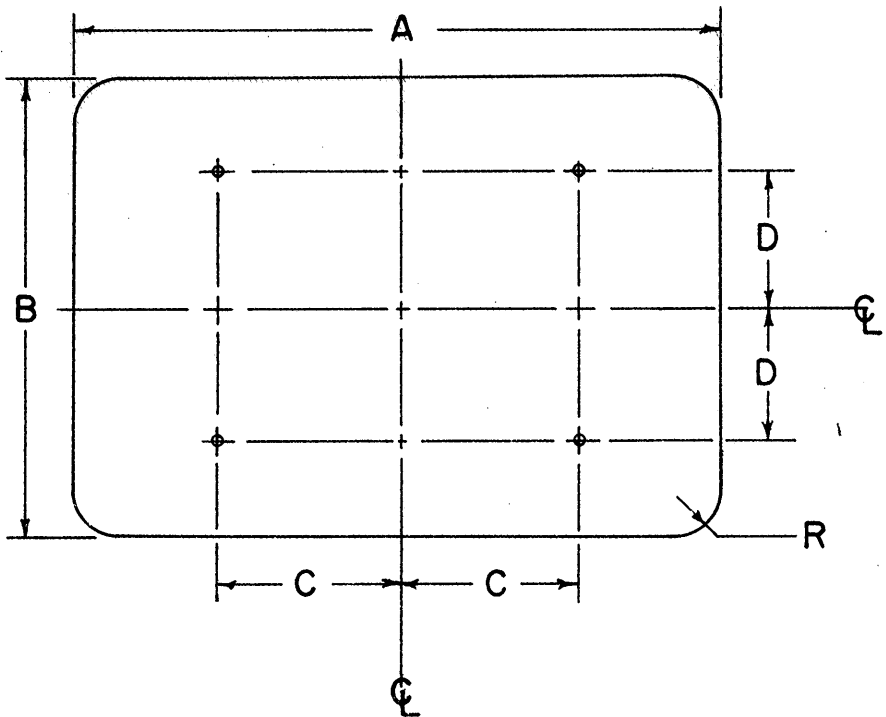
L=FT	2 SUPPORTS				3 SUPPORTS				L=FT	2 SUPPORTS				3 SUPPORTS			
	.22	.56	.14	.36	.22	.56	.14	.36		.22	.56	.14	.36	.22	.56	.14	.36
5.0	1.10	2.80	0.70	1.80	17.0	3.74	9.52	2.38	6.12								
6.0	1.32	3.36	0.84	2.16	18.0	3.96	10.08	2.52	6.48								
7.0	1.54	3.92	0.98	2.52	19.0	4.18	10.64	2.66	6.84								
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								



MEDINA COUNTY
MED-805-5.14 PART II

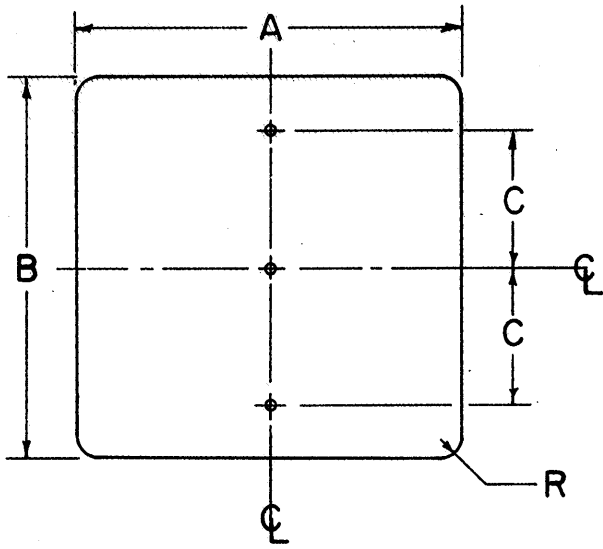


A	B	C	D	R	GAUGE
48	48	12	6	3	.100
48	60	15	7 1/2	3	.100

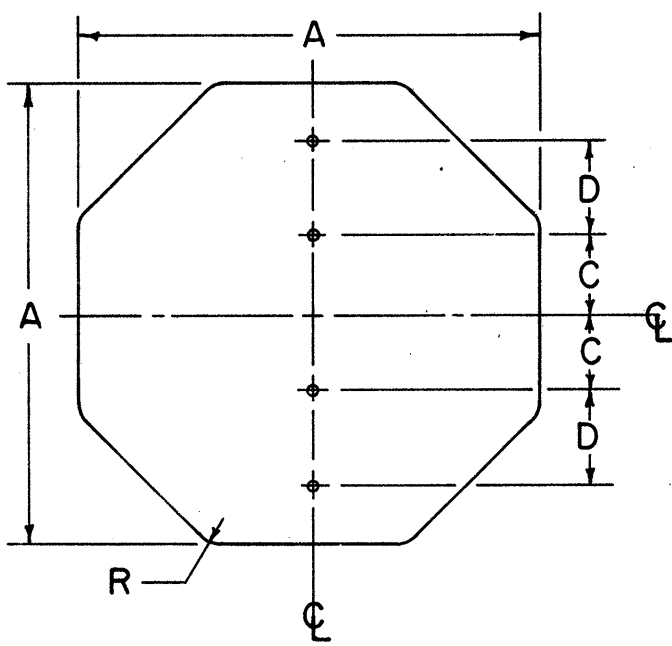


A	B	C	D	R	GAUGE
48	48	22	16	3	.100
48	60	22	22	3	.100

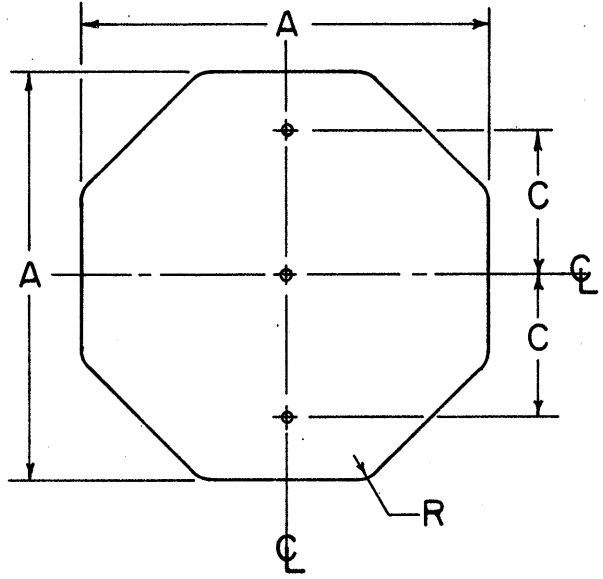
SPEED LIMIT SIGNS ON TWO SUPPORTS



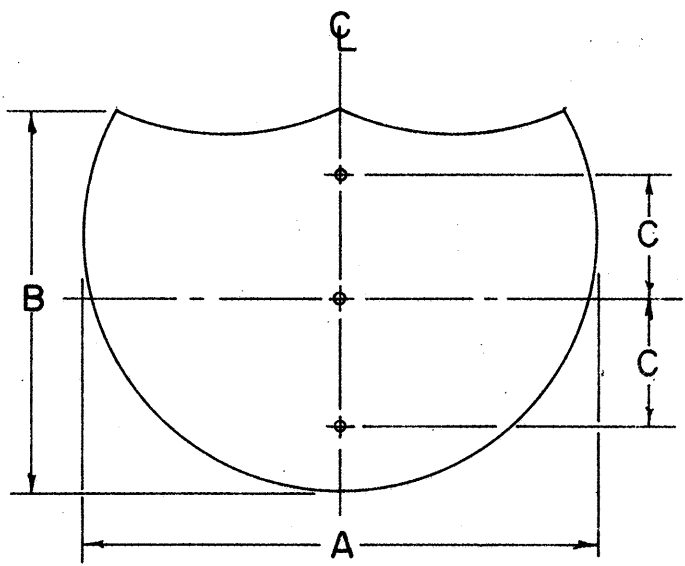
A	B	C	R	GAUGE
30	42	12	1 1/2	.080
36	36	11	1 1/2	.080
36	42	15	1 1/2	.080
36	48	15	1 1/2	.080
48	24	10	3	.100
48	36	13	3	.100



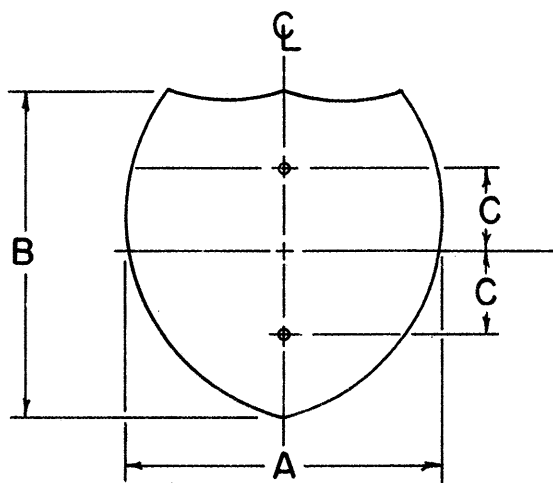
A	C	D	R	GAUGE
48	8	10	1 1/2	.100



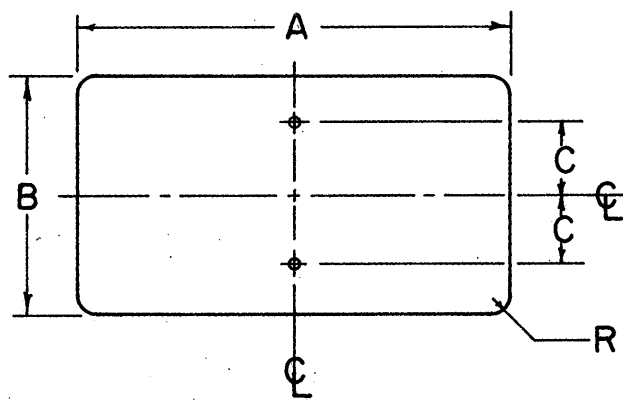
A	C	R	GAUGE
30	8	1 1/2	.080
36	8	1 1/2	.080



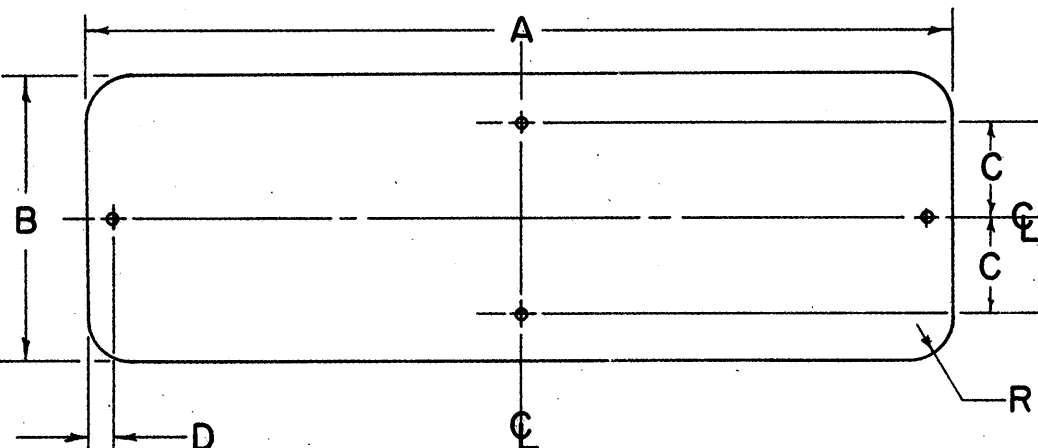
A	B	C	GAUGE
36	36	11	.080
48	36	11	.100



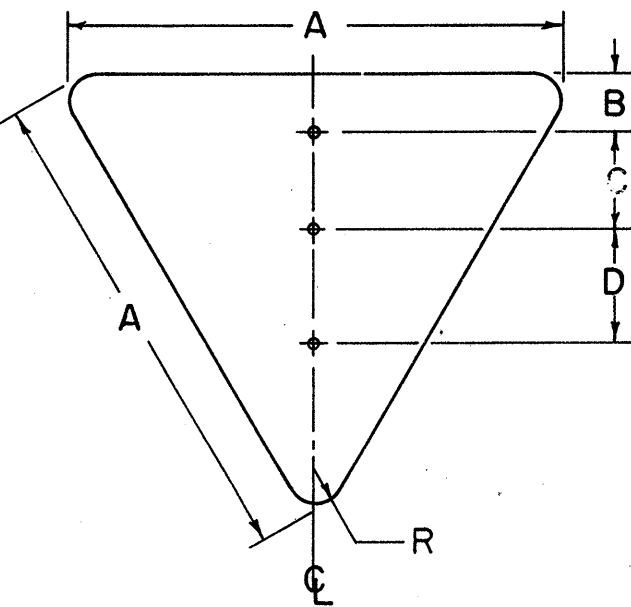
A	B	C	GAUGE
24	24	8	.063
30	24	8	.080



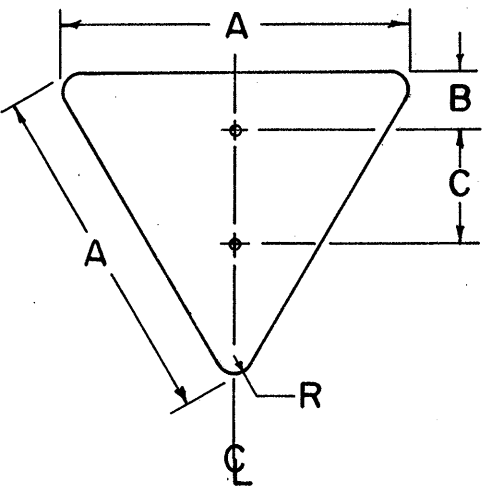
A	B	C	R	GAUGE
12	6	3	1 1/2	.063
20	15	6	1 1/2	.063
24	12	4 1/2	1 1/2	.063
24	18	15	1 1/2	.063
24	30	8	1 1/2	.063
24	48	10	1 1/2	.100
30	36	10 1/2	1 1/2	.080
36	18	7 1/2	1 1/2	.080



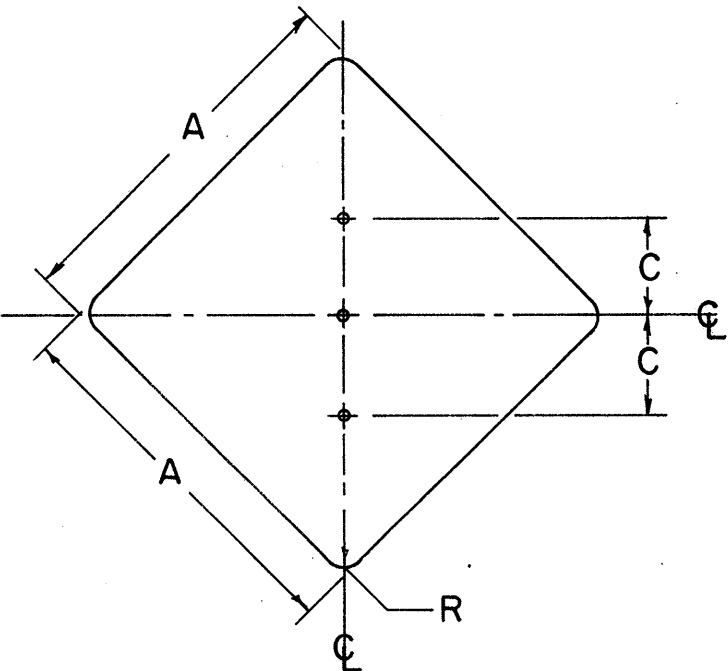
A	B	C	D	R	GAUGE
36	12	4	1	1 1/2	.080



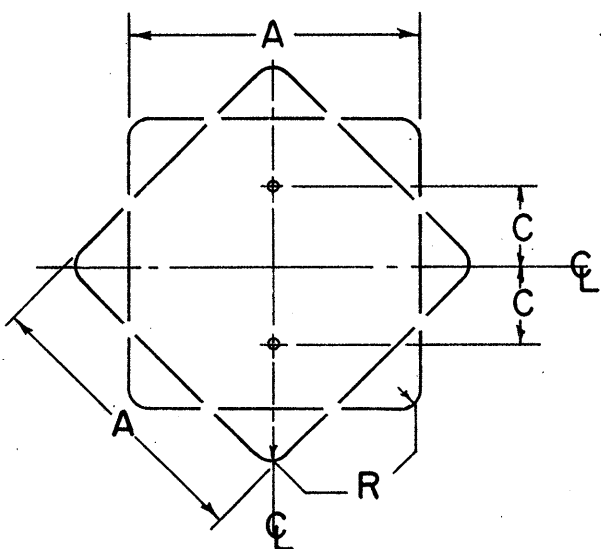
A	B	C	D	R	GAUGE
48	4	10	15	3	.100
60	5	10	15	4	.100



A	B	C	R	GAUGE
36	3	16	2 1/2	.080

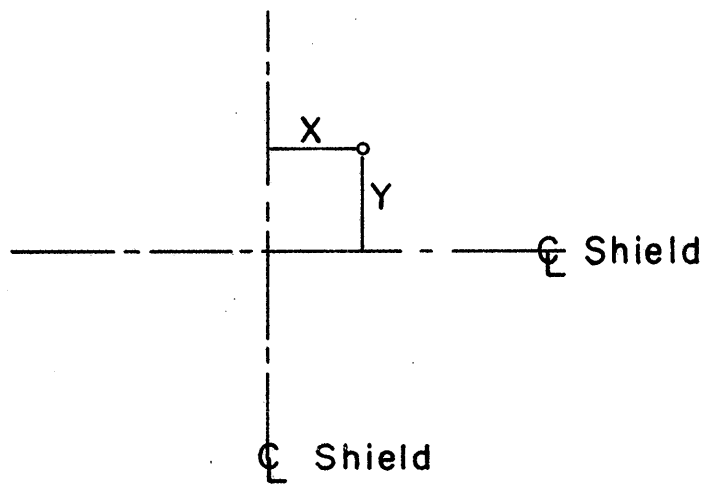


A	C	R	GAUGE
36	12	3	.080
48	14	3	.100



A	C	R	GAUGE
18	7 1/2	1 1/2	.063
24	8	1 1/2	.063
30	8	1 1/2	.080

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 DEMENSIONS 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

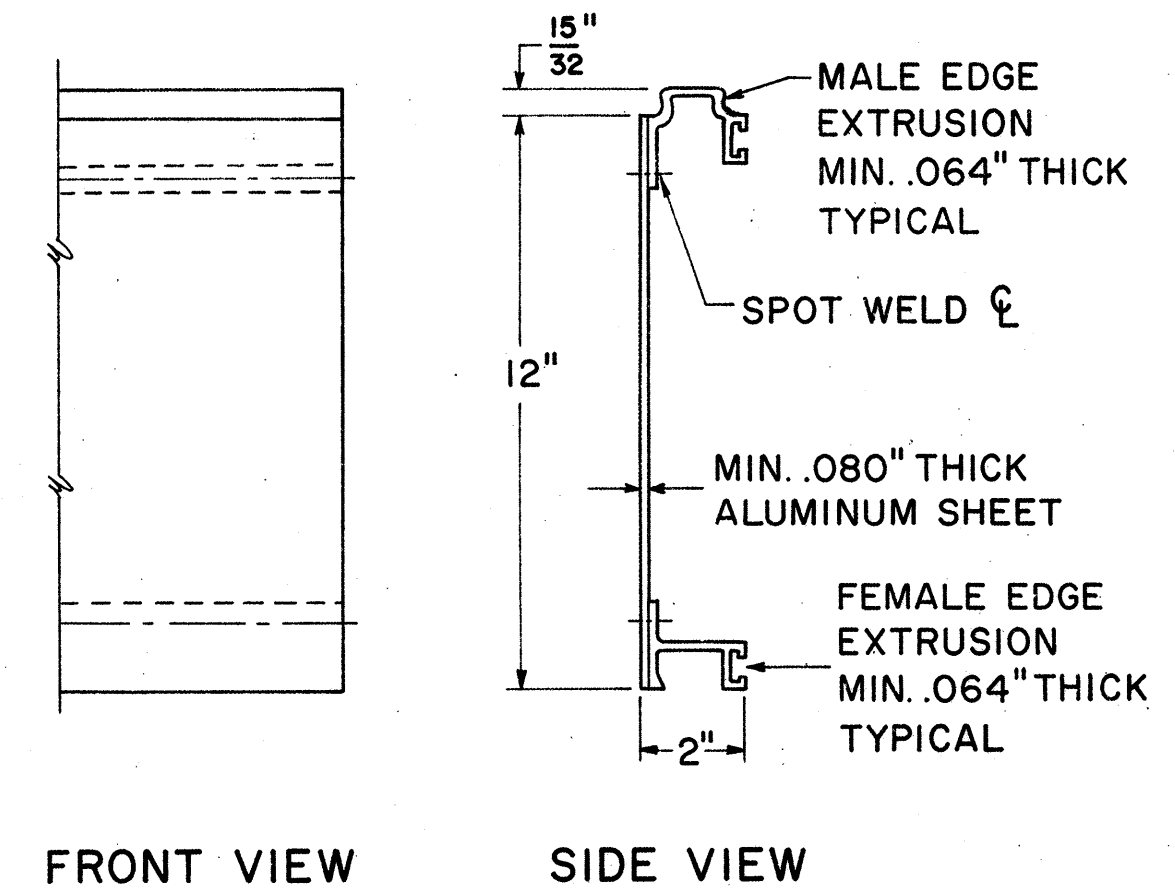
SBD

APPROVED _____
ENGINEER OF TRAFFIC

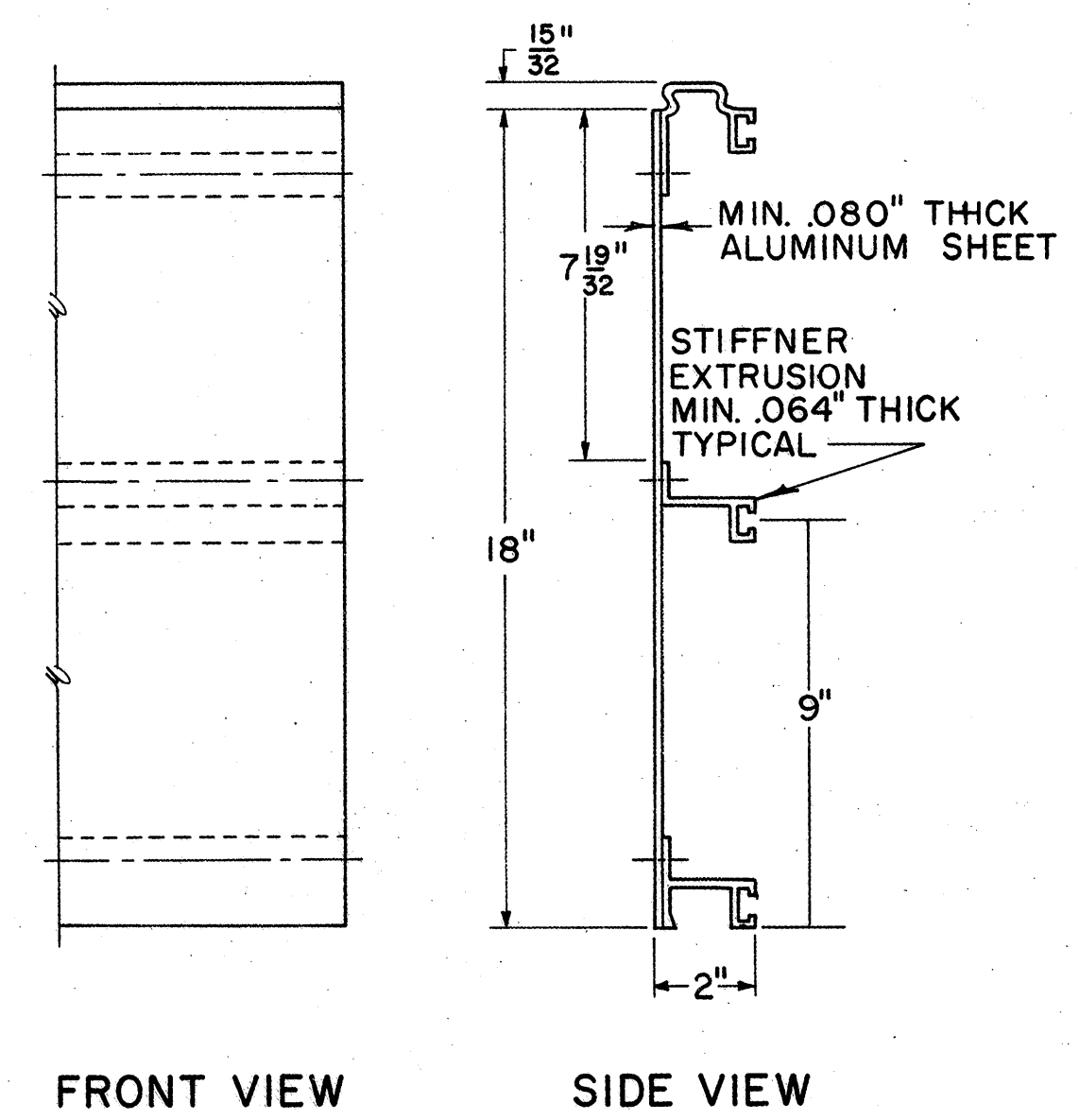
DATE
4-14-67

MEDINA COUNTY MED-805-5.14 PART II

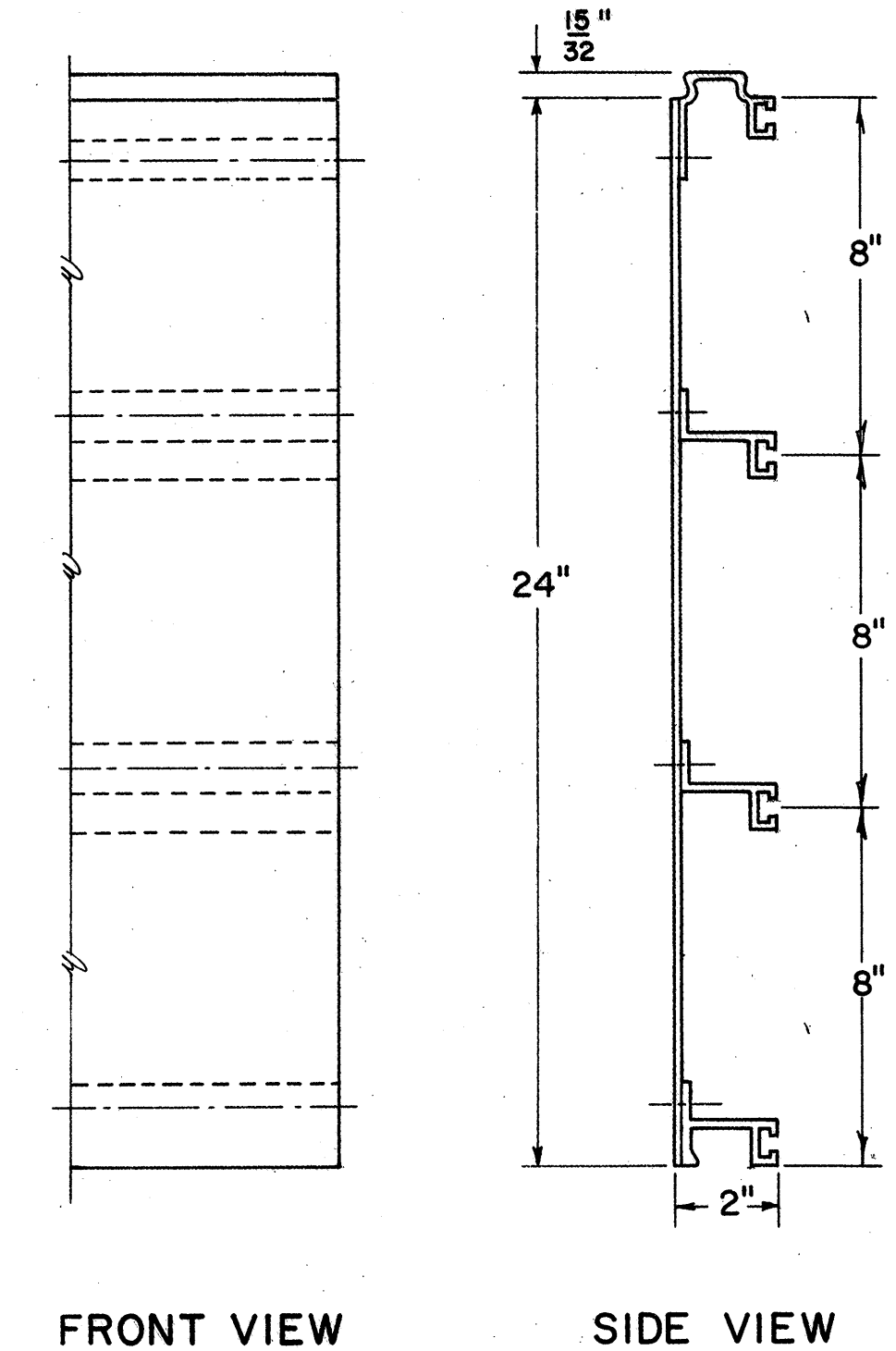
12" EXTRUSHEET PANEL



18" EXTRUSHEET PANEL



24" EXTRUSHEET PANEL



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.

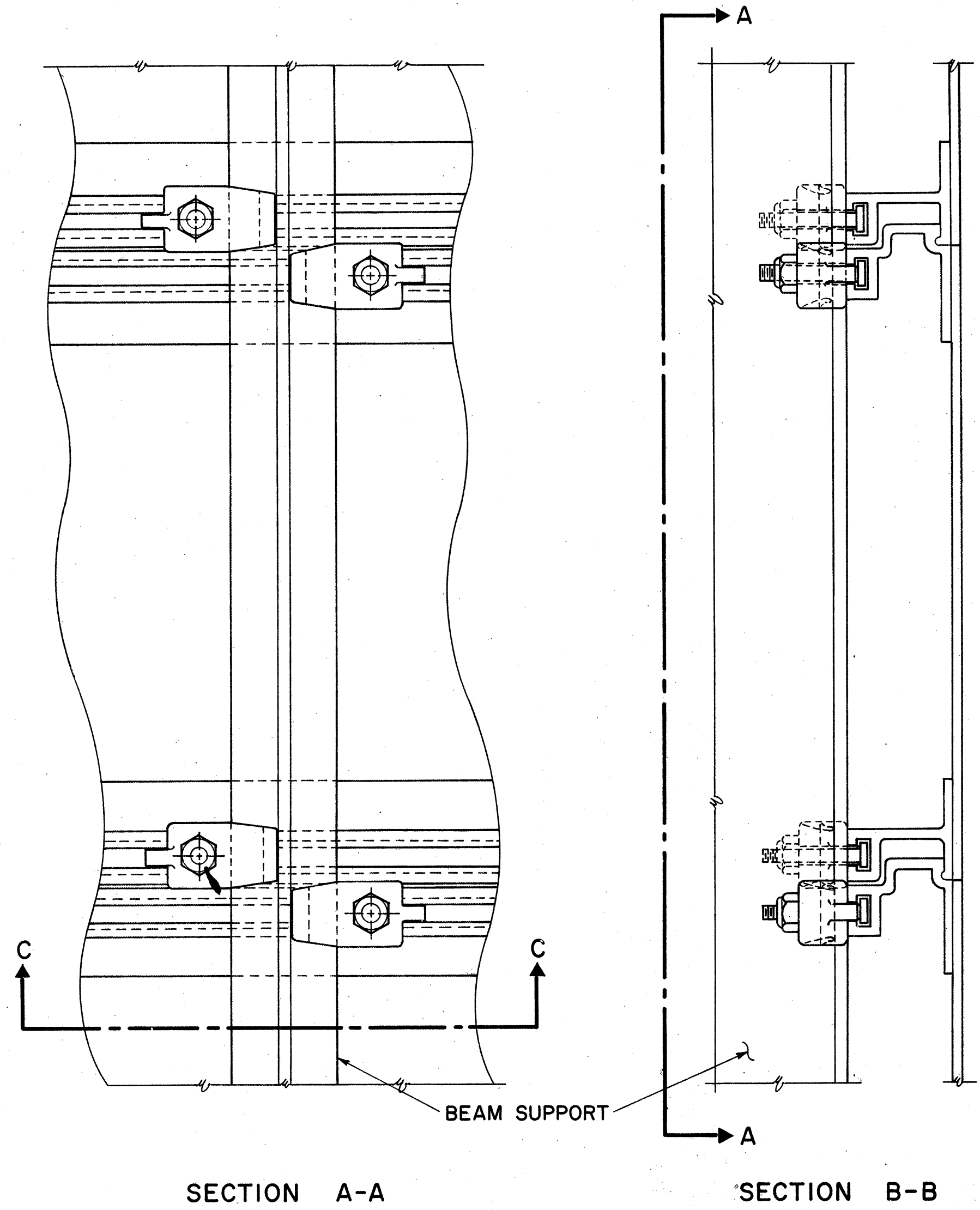
INDIVIDUAL PANELS SHALL BE THE SAME LENGTH AS THE HORIZONTAL LENGTH OF SIGN WITH NO SPLICES.

PANELS SHALL BE INTERLOCKED AND ERECTED WITH THE MALE EXTRUSION LOCATED AT THE TOP EDGE OF THE SIGN.

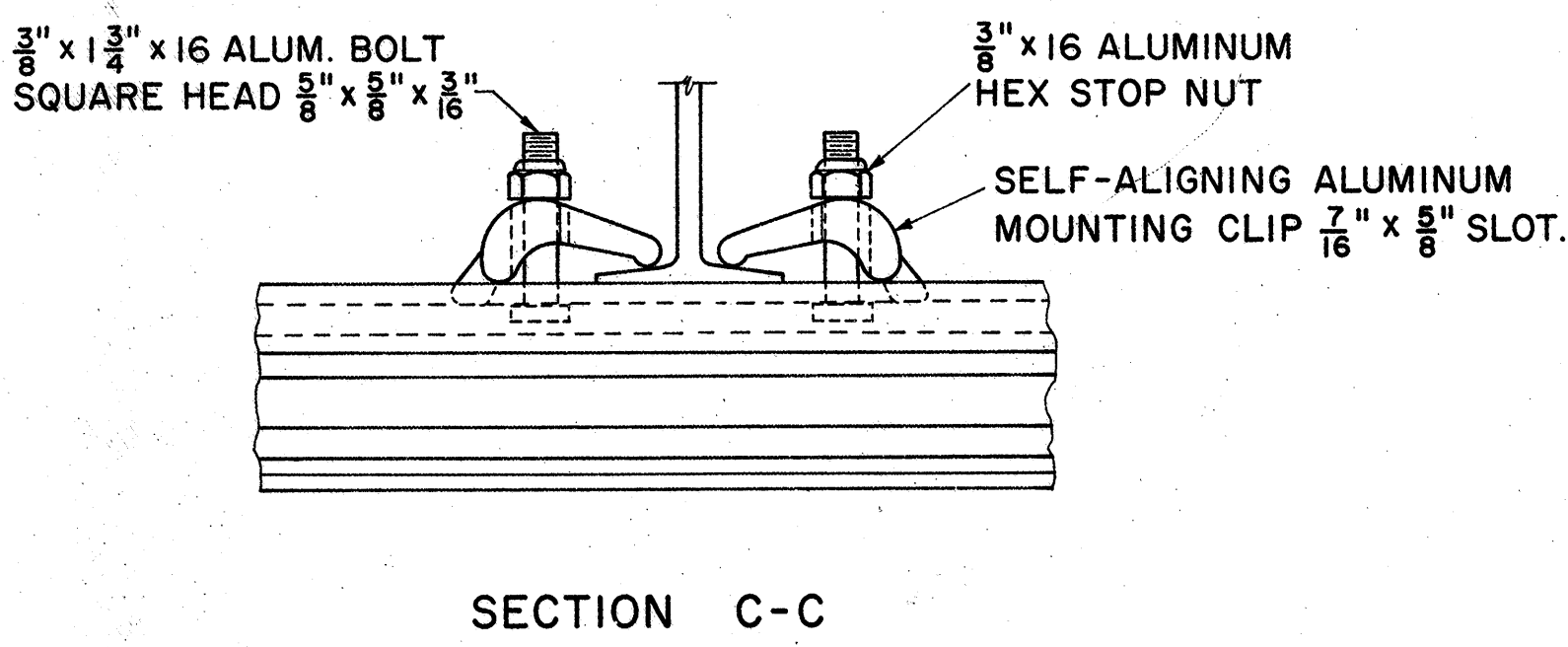
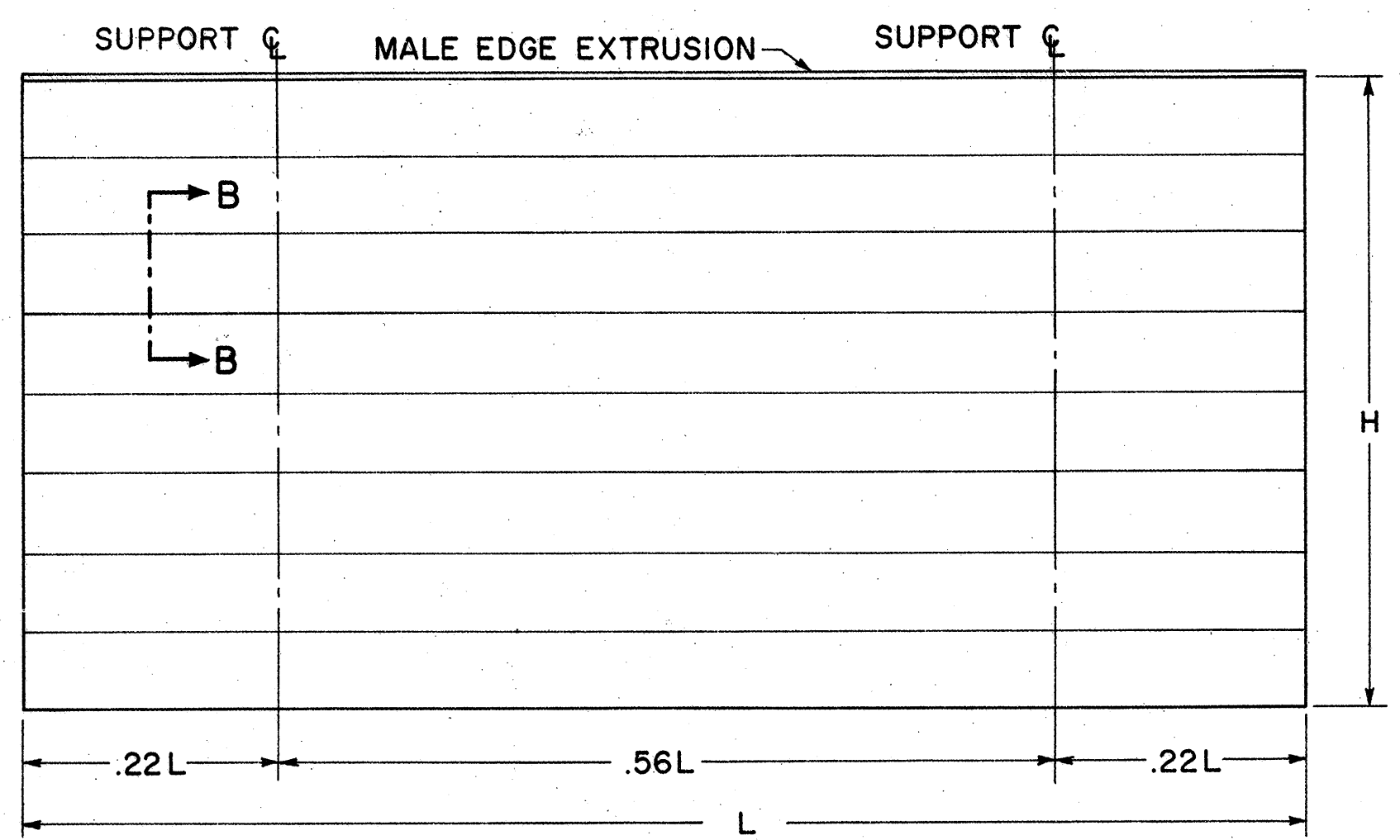
EXTRUSHEET PANELS SHALL BE FASTENED TO EACH VERTICAL SUPPORT MEMBER WITH MOUNTING CLIPS; ALTERNATELY AT EACH HORIZONTAL EXTRUSION; BOTH SIDES AT EACH JOINT, AND ON BOTH SIDES AT TOP AND BOTTOM EDGE OF SIGN.

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.

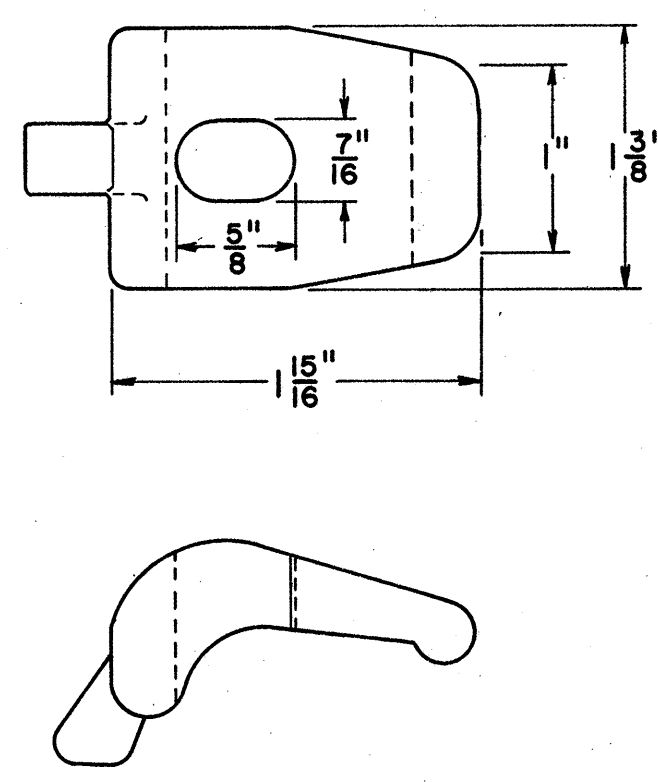
THE MAXIMUM SIGN LENGTH FOR TWO SUPPORTS IS 19'-0".
THE MAXIMUM SIGN LENGTH FOR THREE SUPPORTS IS 29'-0".



GENERAL ARRANGEMENT



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		DATE 9-25-63 5-19-64 10-21-65
ALUMINUM EXTRUSHEET PANEL SIGN		ECD I
APPROVED <i>Fred C. Zapp</i> ENGINEER OF TRAFFIC		

MEDINA COUNTY
MED-805-5.14 PART II

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.

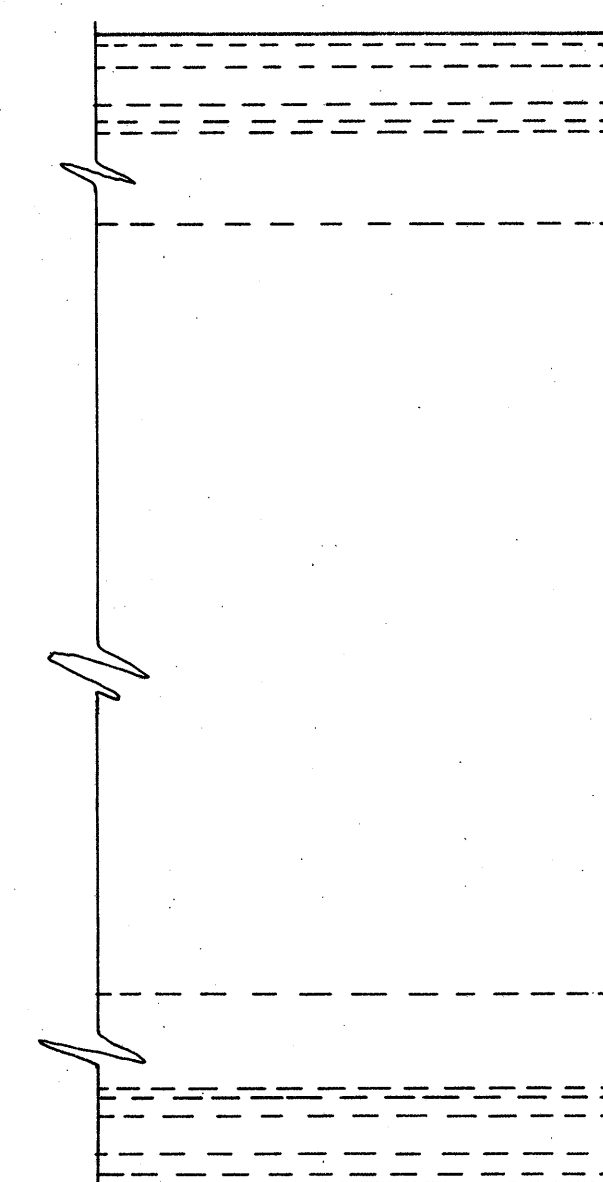
THE MAXIMUM SIGN LENGTH FOR TWO SUPPORTS IS 19'-0".
THE MAXIMUM SIGN LENGTH FOR THREE SUPPORTS IS 29'-0".

SPOT WELDS

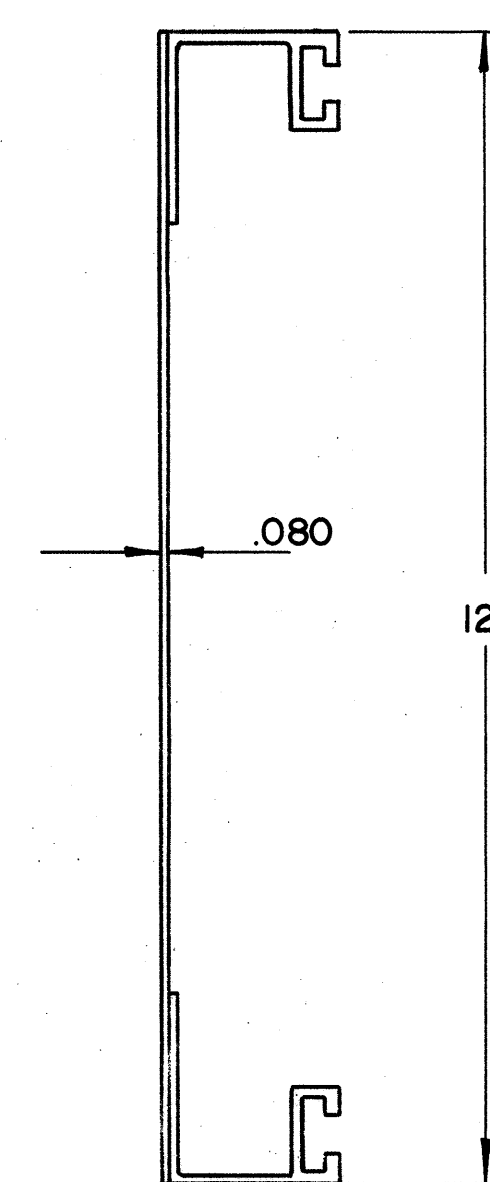
PANEL SIZE	MAXIMUM SPOT WELD SPACING CENTER TO CENTER BETWEEN ROWS	
12 INCH	4 INCH	10 INCH
18 & 24 INCH	4 INCH	8 INCH

BUREAU OF TRAFFIC OHIO DEPARTMENT OF HIGHWAYS	
ALUMINUM BOLTED EXTRUSHEET PANEL SIGN	ECD 2
APPROVED <i>Fred C. Taylor</i> ENGINEER OF TRAFFIC	
DATE 10-14-65	

12" BOLTED-EXTRUSHEET PANEL

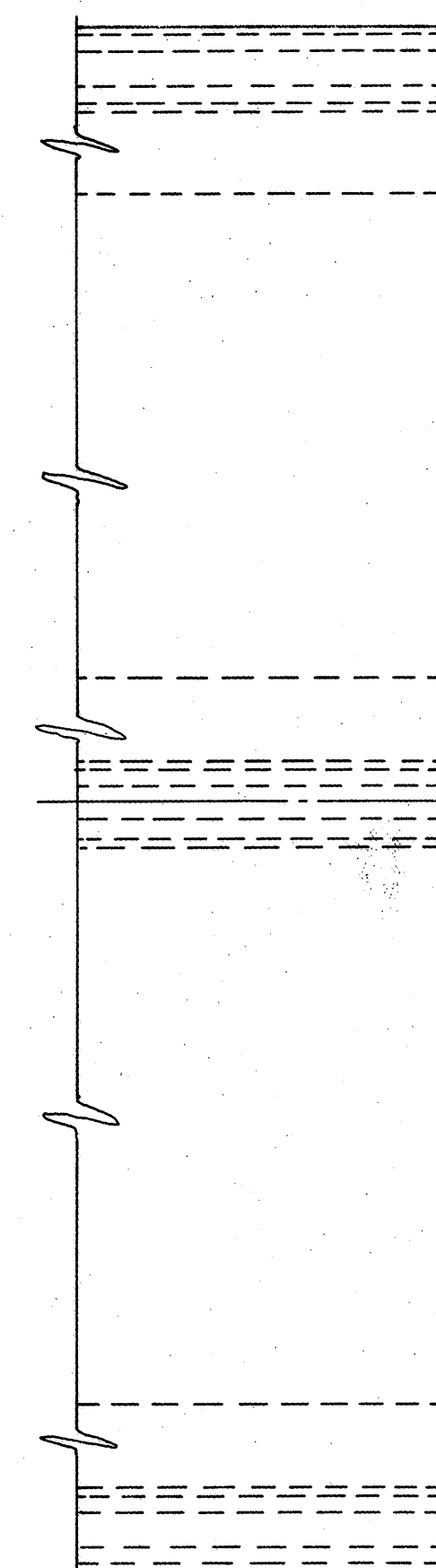


FRONT VIEW

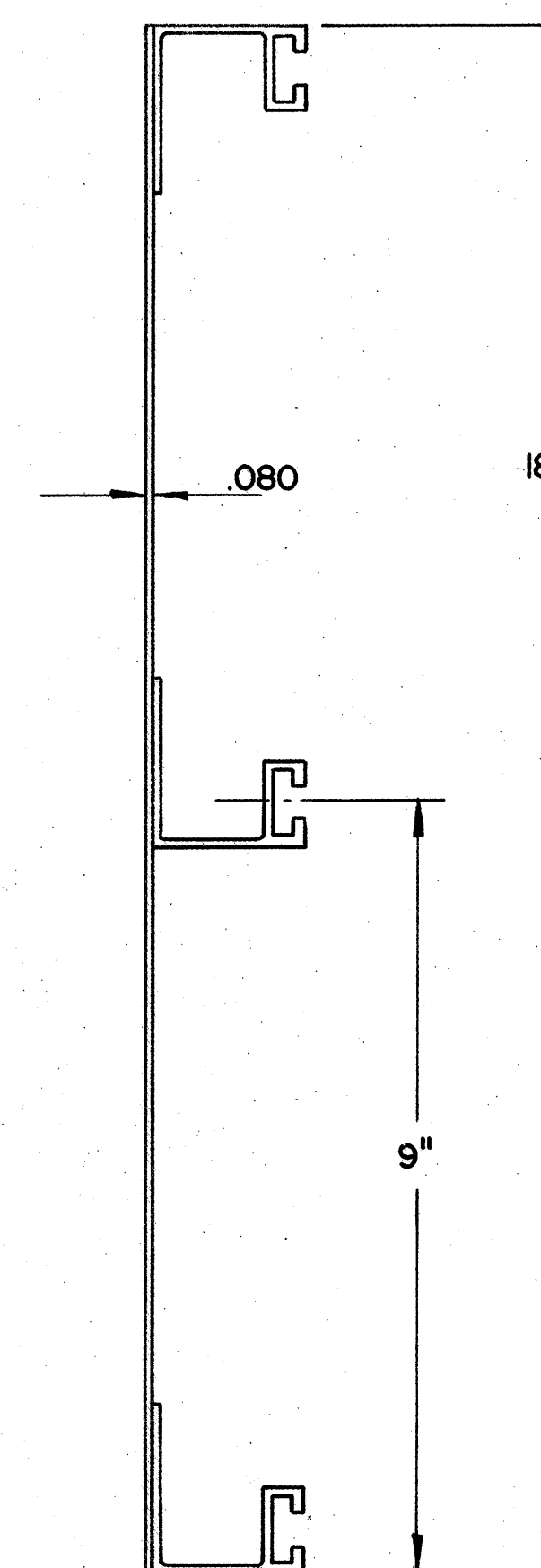


SIDE VIEW

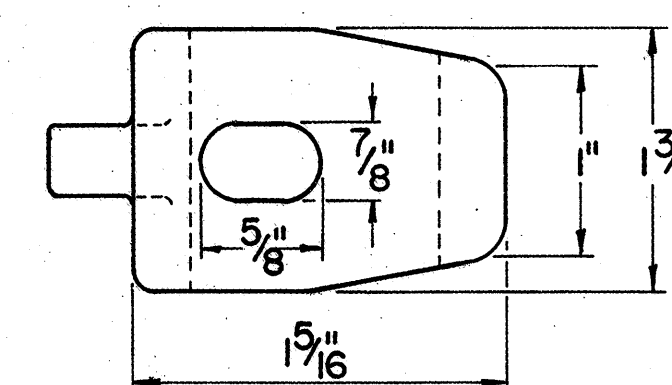
18" BOLTED-EXTRUSHEET PANEL



FRONT VIEW



SIDE VIEW



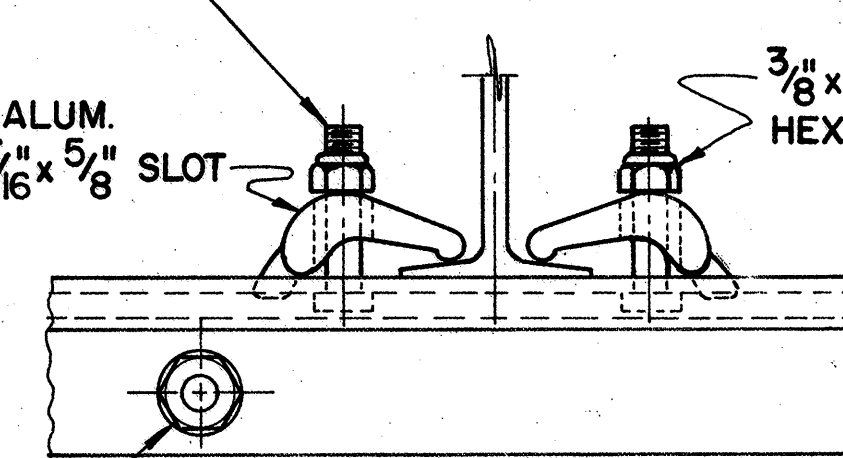
CLIP DETAIL

3/8" x 1 3/4" -16 ALUM. BOLT
SQUARE HEAD 5/8" x 5/8" x 3/16"

SELF-ALIGNING ALUM.
MOUNTING CLIP 7/16" x 5/8" SLOT

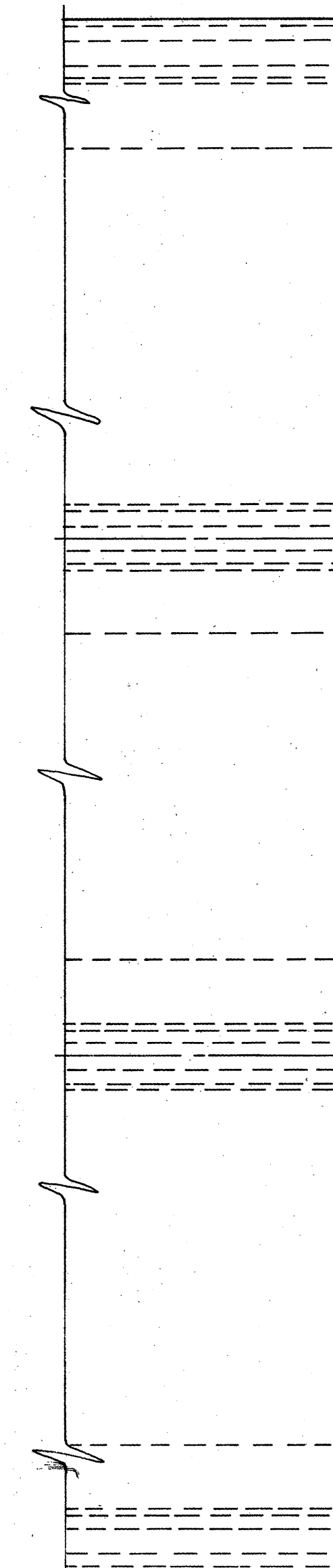
3/8"-16 x 3/4" LONG
ALUM. BOLT, NUT
& LOCKWASHER

3/8" x 16 ALUM.
HEX. STOP NUT.

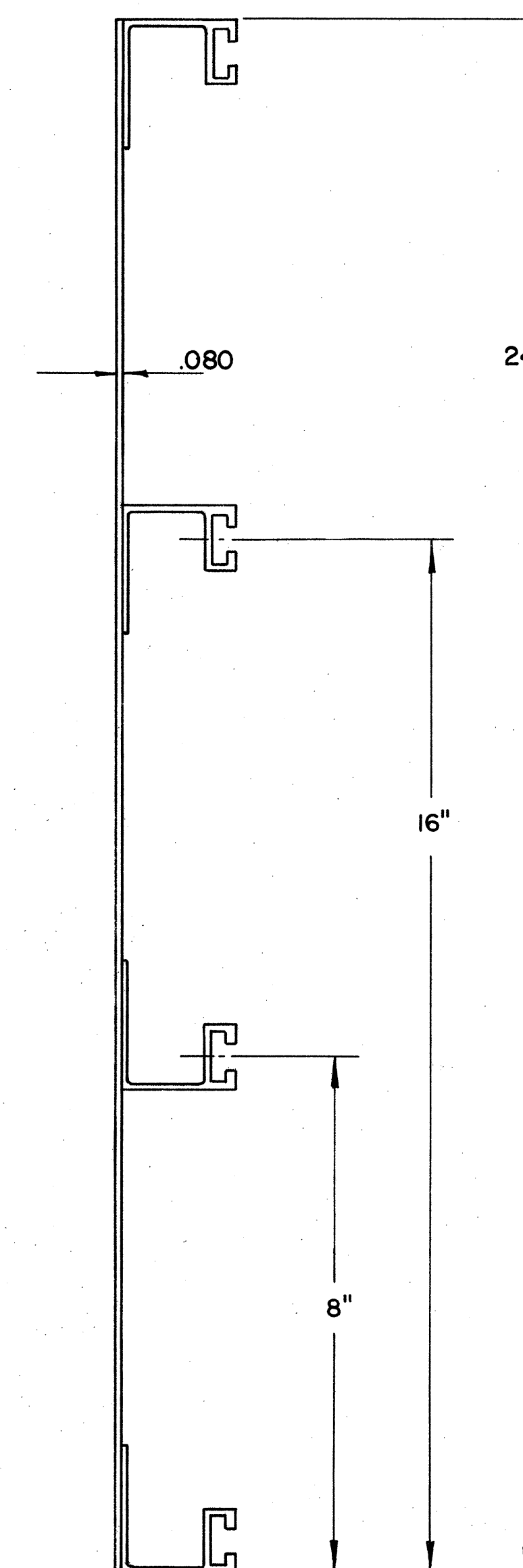


SECTION C-C

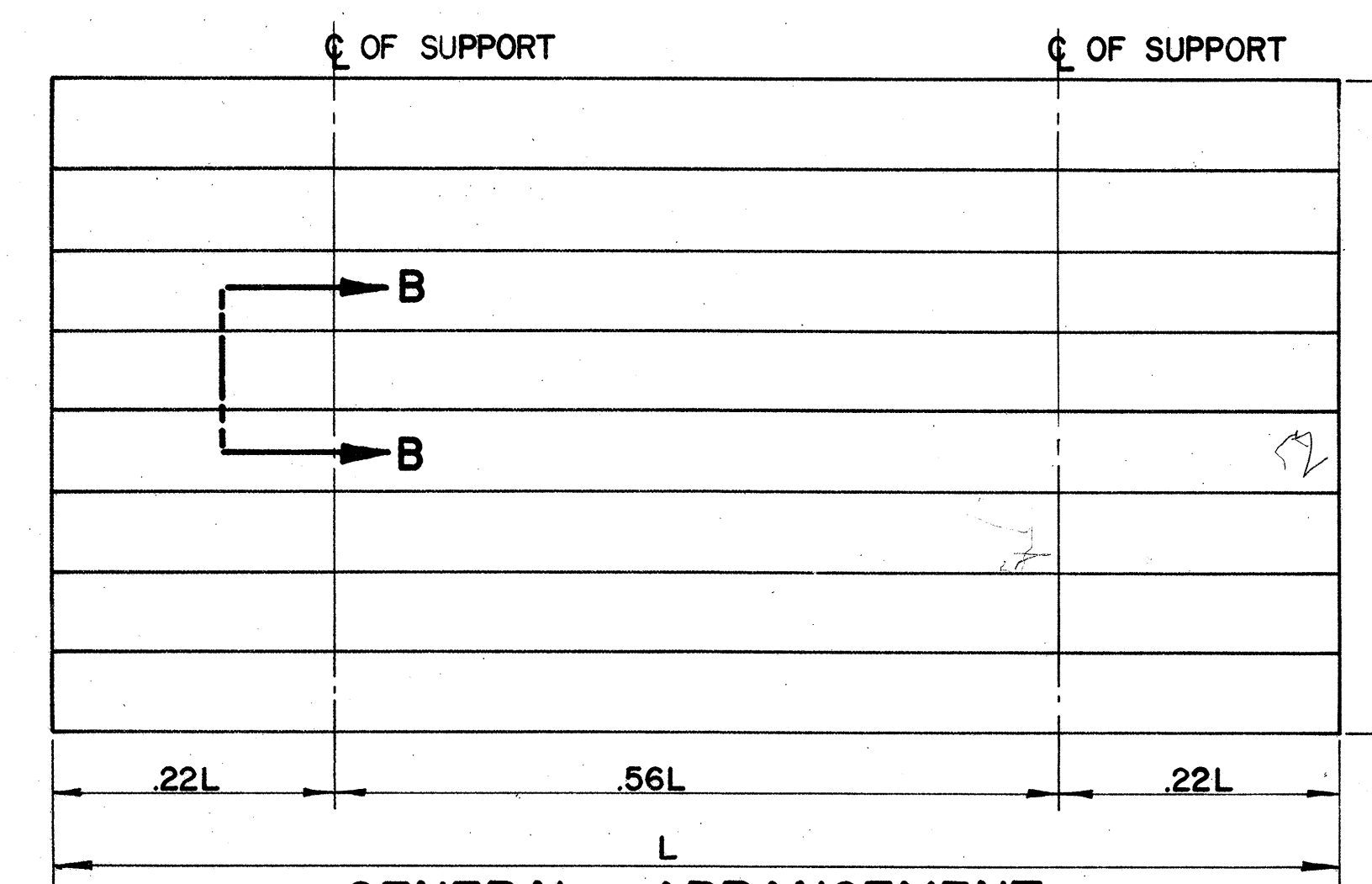
24" BOLTED-EXTRUSHEET PANEL



FRONT VIEW

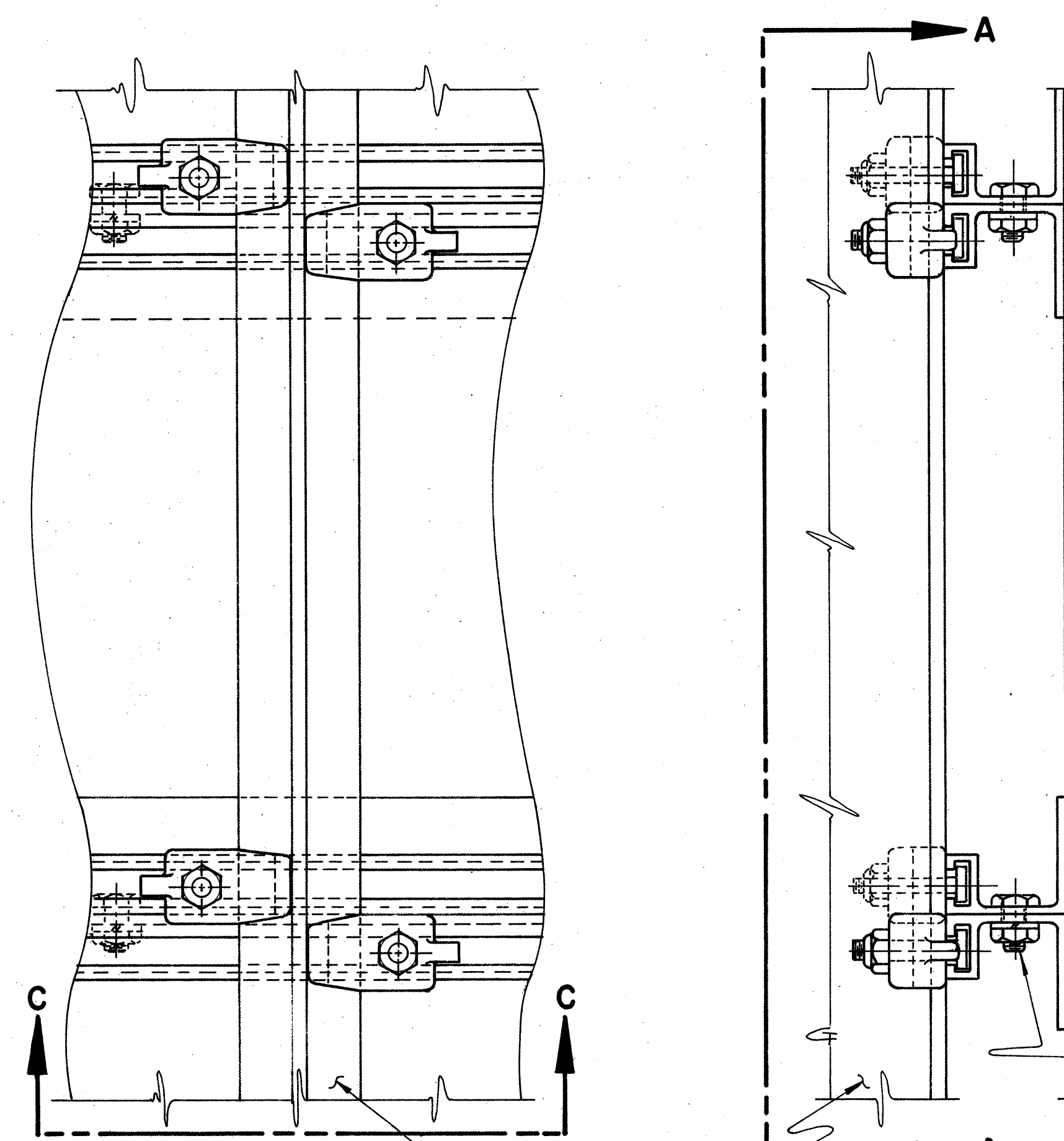


SIDE VIEW



GENERAL ARRANGEMENT

ALUMINUM BOLTED-EXTRUSHEET PANEL SIGN

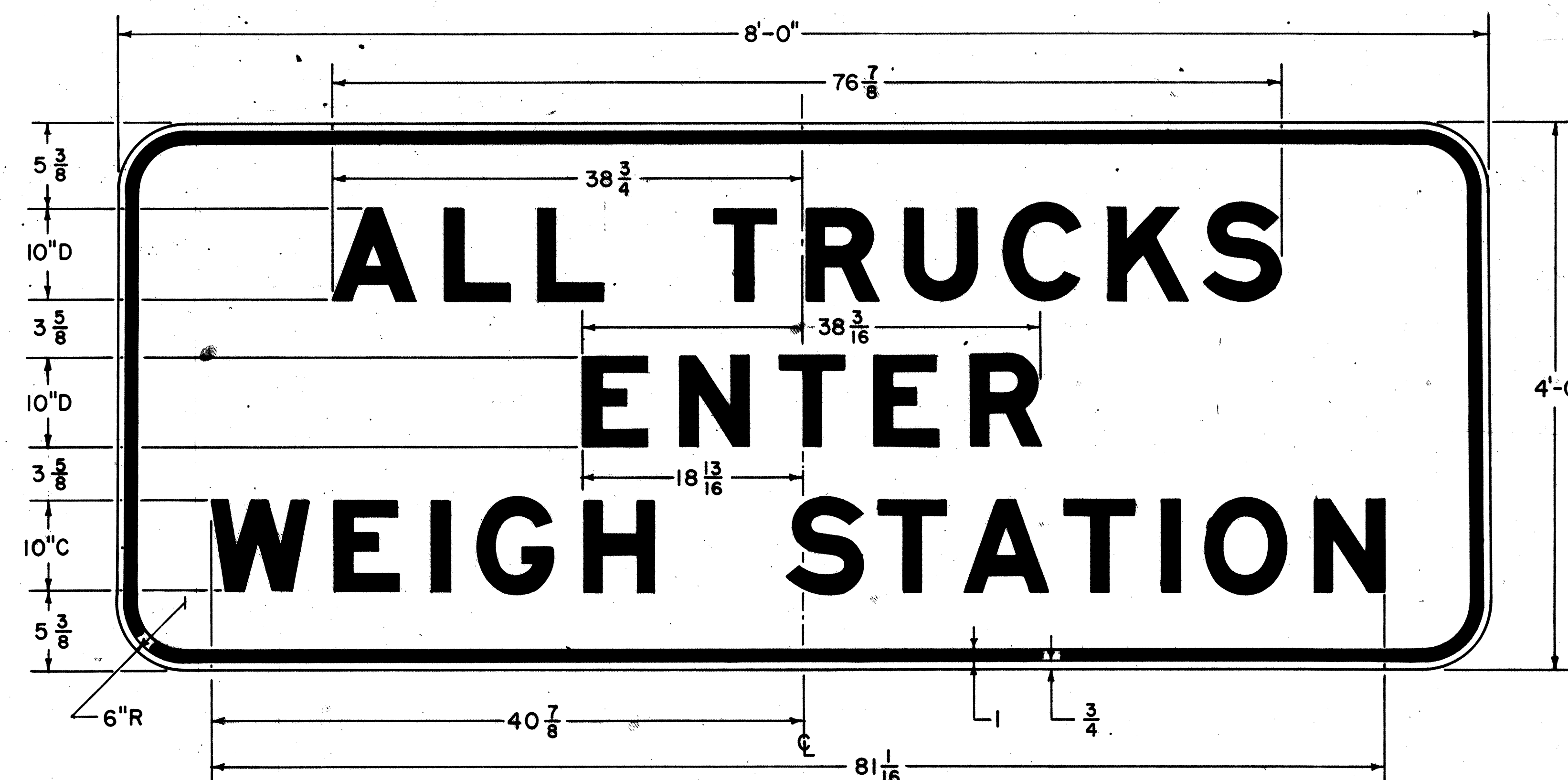


SECTION A-A

SECTION B-B

MEDINA COUNTY
MED-805-5.14 PART II

R-103-96



NOTE:
ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE SHOWN.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

TRAFFIC
SIGNS

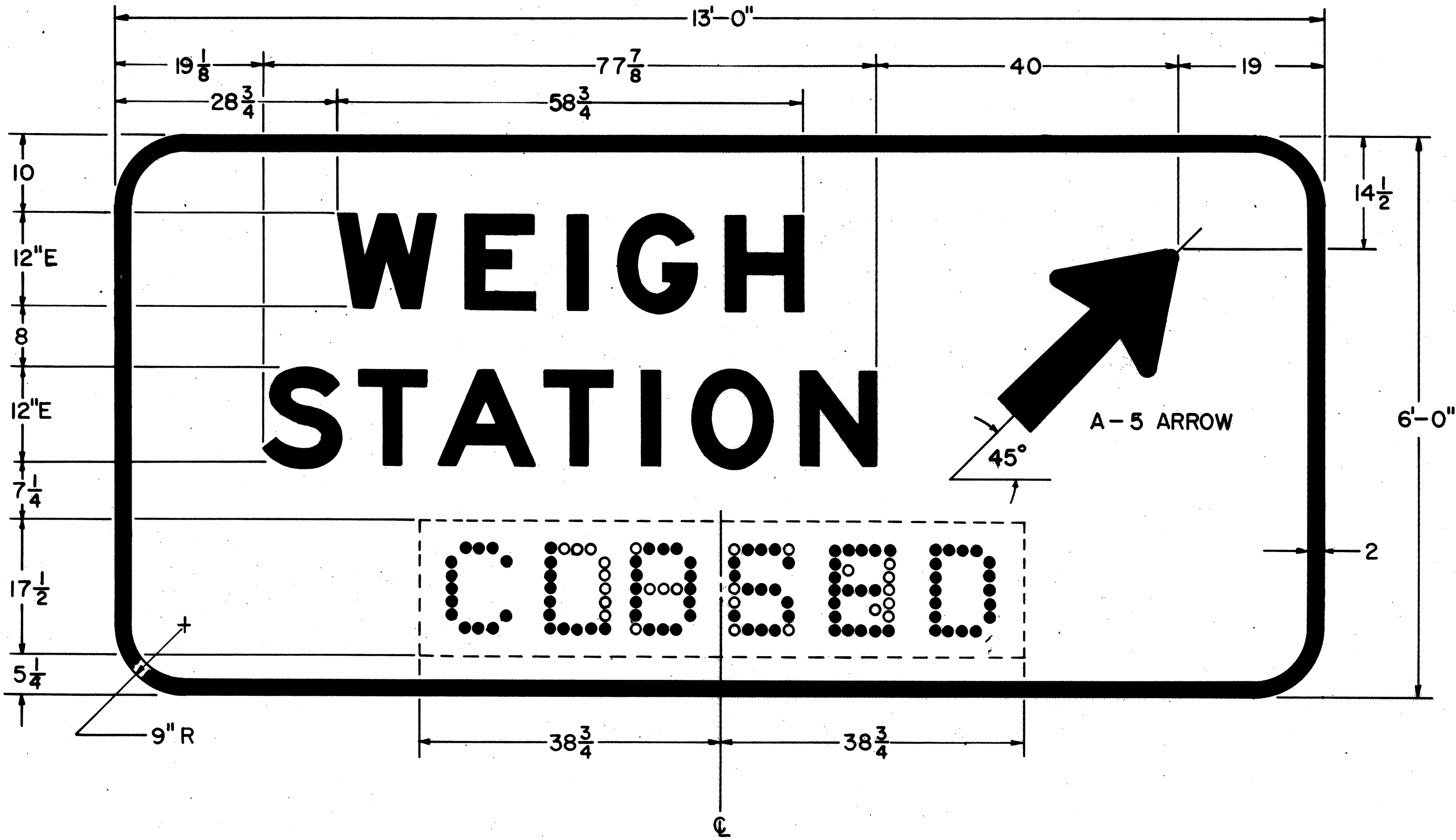
R-103

DATE
7-12-68
3-15-68

APPROVED
ENGINEER OF TRAFFIC

R-103

WS-3-156



GENERAL:
THIS DRAWING INDICATES THE DESIRED SIGN SIZE AND LEGEND LAYOUT.
SEE DRAWING WS-3A FOR DETAILS OF THE ILLUMINATED SECTION.

MATERIALS:
THE SIGN SHALL BE FABRICATED FROM MATERIALS SPECIFIED
IN SUPPLEMENTAL SPECIFICATION 815, AND WILL BE DESIGNED
FROM ALUMINUM EXTRUSHEETS.

THE BACKGROUND OF THE NON-ILLUMINATED SECTION SHALL BE
TYPE F GREEN REFLECTIVE SHEETING.

THE COPY OF THE NON-ILLUMINATED SECTION SHALL BE WHITE
DEMOUNTABLE REFLECTIVE UNIT TYPE.

NOTE:
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.
SEE SHEET WS-3A FOR DETAILS OF "OPEN"-"CLOSED" UNIT.

			W		E		I		G		H		TOTAL
		12"E	12.25	4.12	8.38	4.38	2.50	4.25	9.25	4.37	9.25	58 3/4	
	S		T		A		T		I		O	N	TOTAL
12"E	9.12	2.38	8.38	2.50	10.50	2.50	8.37	3.88	2.50	4.25	10.00	4.25	77 7/8

BUREAU OF TRAFFIC OHIO DEPARTMENT OF HIGHWAYS	
WEIGH STATION	DATE 2-21-68
WS-3-156	
APPROVED _____ ENGINEER OF TRAFFIC	

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, 1969.

REFERENCE SHALL BE MADE TO STANDARD CONSTRUCTION DRAWINGS HL-1, HL-2 AND HL-3.

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.

IN LIEU OF THE LOCATIONS INDICATED ON STANDARD DRAWING HL-1 AND SHEET NO. 70, THE CENTERLINE OF THE LIGHT POLE FOUNDATION SHALL BE AS FOLLOWS:

SPEED CHANGE LANES	14 FT. FROM EDGE OF PAVEMENT
RAMPS	10 FEET FROM EDGE OF PAVEMENT
I.R. 80S	14 FEET FROM EDGE OF PAVEMENT
PARKING LOT	8 FEET FROM EDGE OF PAVEMENT

625.03 GENERAL

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

OHIO EDISON CO. 47 NORTH MAIN STREET, AKRON, OHIO 44300

WADSWORTH ELECTRIC CO. MUNICIPAL LIGHT & WATER DEPT., WADSWORTH, OHIO 44281

TELEPHONE SERVICE FOR THE WEIGH STATION WILL BE PROVIDED BY:

NORTHERN OHIO TELEPHONE CO. BOX 299, BELLEVUE, OHIO 44811

625.07 - 713.11 LUMINAIRES, EXCEPT UNDERPASS LUMINAIRES

LUMINAIRES SHALL BE 400 WATT WITH 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.

625.08 - 713.14 LAMPS

MERCURY LAMPS SHALL BE GENERAL ELECTRIC "BONUS LINE", WESTINGHOUSE "LIFEGUARD", PENNSYLVANIA "ROUGH SERVICE", OR EQUAL APPROVED BY THE ENGINEER.

625.11 - 713.09 PULL BOXES

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 ENDS 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.

IN ADDITION TO THE REQUIREMENTS OF THIS ITEM, A TREATED 1" x 2" WOOD STAKE OR 3/8" DIAMETER ALUMINUM OR STEEL PIN AT LEAST 30 INCHES LONG SHALL BE DRIVEN INTO THE CENTER OF THE PULL BOX. THE CONNECTOR KITS IN THE BOX SHALL BE SECURELY TAPED TO THE TOP OF THE STAKE OR PIN IN SUCH A MANNER THAT ALL PARTS OF THE KITS ARE SUSPENDED WITHIN THE AIR BELL ABOVE THE ELEVATION OF THE UPPERMOST OPENING OR NOTCH CUT INTO THE LOWER CIRCUMFERENCE OF THE AIR BELL.

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 REDUCE THE SIZE OF THE AIR CHAMBER BELOW THAT REQUIRED FOR SUSPENSION OF THE CONNECTOR KITS ABOVE THE UPPER ELEVATION OF THE LOWER EDGE OF THE BELL IN PLACE.

PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH PULL BOX.

625.12 - TRENCH

EXCAVATION FOR TRENCHES SHALL NOT EXCEED 12" IN WIDTH WITHOUT PRIOR APPROVAL OF THE ENGINEER.

625.14 - 625.15 CABLE AND DUCT-CABLE IDENTIFICATION

ALL CABLES, EXCEPT STRUCTURE GROUNDING SYSTEM CABLE, ENTERING AN ACCESSIBLE ENCLOSURE SUCH AS A PULL BOX, JUNCTION BOX, HANDHOLE, TRANSFORMER BASE, OR DEVICE HOUSING, ETC., FOR THE PURPOSE OF BEING TERMINATED OR CONNECTED TO ANOTHER CABLE SHALL BE IDENTIFIED IN SUCH ENCLOSURE WITH TAGS OR BANDS AS DESCRIBED IN 713.18.

NO CABLE SPLICES WILL BE PERMITTED BETWEEN TERMINATIONS. EXOTHERMICALLY WELDED JOINTS IN STRUCTURE GROUNDING SYSTEMS ARE NOT CONSIDERED AS SPLICES.

PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE RESPECTIVE CABLE ITEMS.

LIGHTING NOTES

PROTECTION OF COMPLETED WORK

CONDUIT AND/OR DUCT CABLE TERMINALS SHALL BE SEALED, AS REQUIRED BY 625.13, IMMEDIATELY UPON COMPLETION OF INSTALLATION. WHEN THE INSTALLATION OF CONDUIT AND DUCT-CABLE IS INTERMITTENT, THEY SHALL BE PROTECTED BY TEMPORARY SEALING OR CAPPING UNTIL THE INSTALLATION IS COMPLETE. THIS MAY VARY FROM OVERNIGHT, BETWEEN WORKDAYS TO EXTENDED PERIODS OF TIME WHEN PARTIAL INSTALLATIONS ARE LEFT DORMANT BEFORE FINAL COMPLETION.

EMPTY CONDUITS SHALL BE CAPPED OR OTHERWISE CLOSED IMMEDIATELY UPON INSTALLATION UNTIL PULL WIRE OR CABLE IS INSTALLED AND FINAL SEALING COMPLETED.

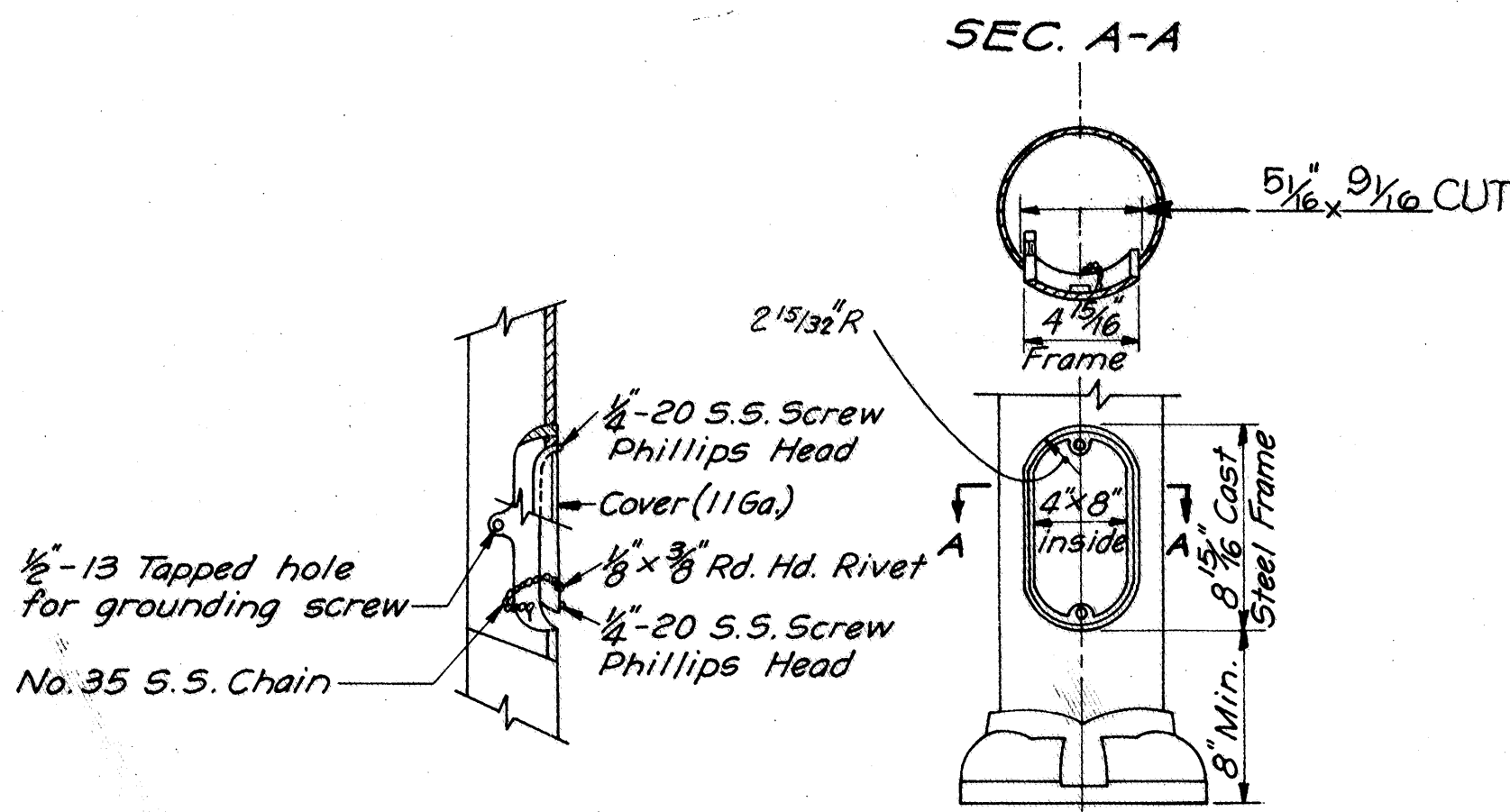
LIGHT POLE HAND HOLES AND OPENINGS OF TRANSFORMER BASE POLES SHALL HAVE COVERS INSTALLED IMMEDIATELY UPON ERECTION OF THE POLE.

ALL CABLE CONNECTOR KITS AND EXPOSED CABLE ENDS SHALL BE ADEQUATELY PROTECTED BY ENCLOSING IN PLASTIC BAGS, TAPING, OR OTHER APPROVED MEANS, UNTIL CABLE CONNECTIONS HAVE BEEN COMPLETED.

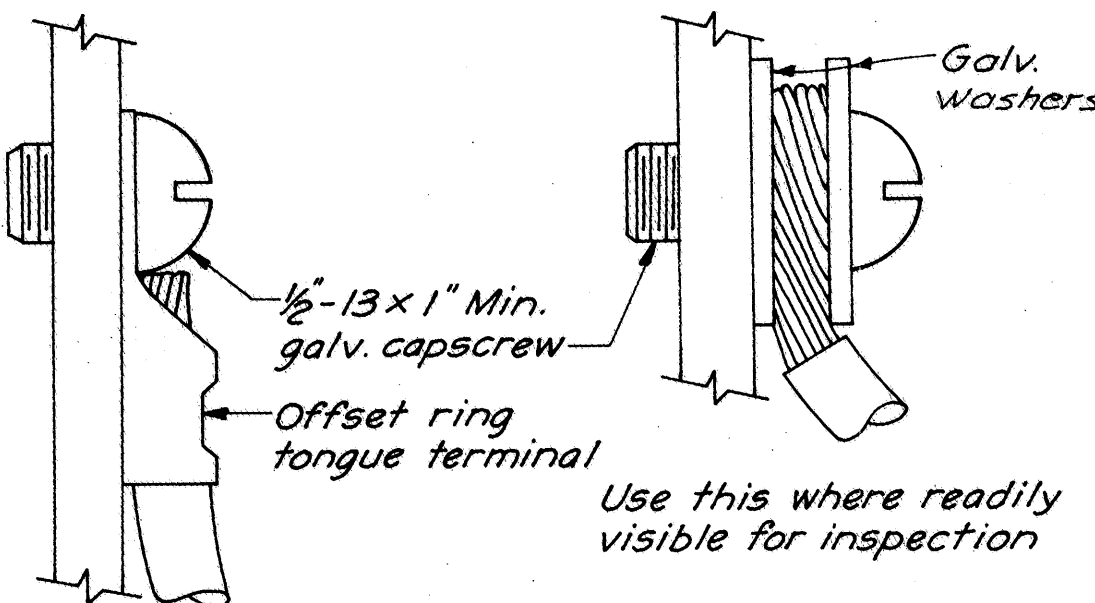
PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES BID FOR EACH OF THE RESPECTIVE ITEMS.

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.

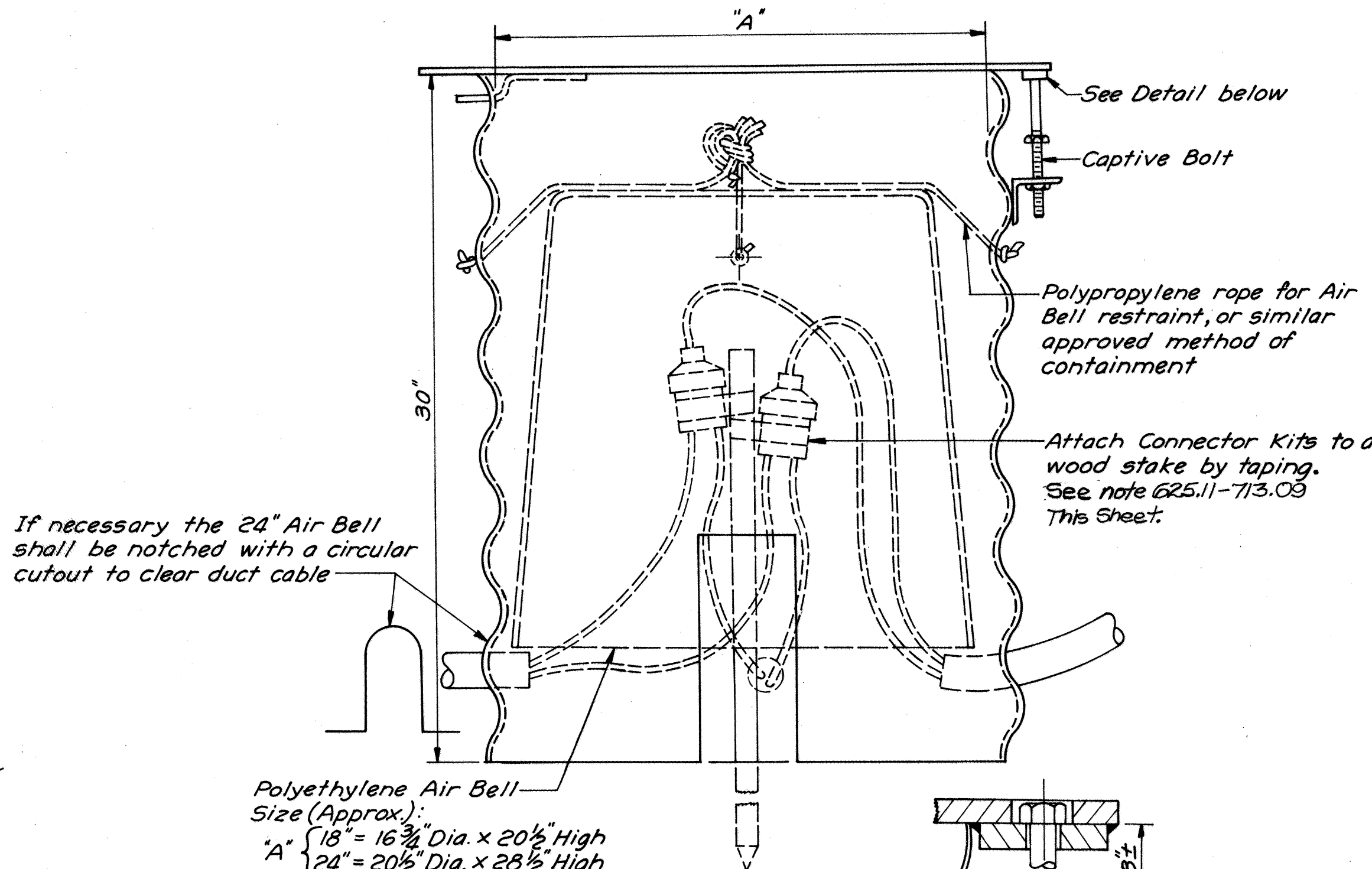


HANDHOLE FRAME & COVER



Use this where not readily visible for inspection

TERMINATIONS FOR GROUND CABLE



Note: The above method of pull box cover attachment, using a single bolt, shall be alternate to the two bolt attachment shown on Std. Constr. Drwg. HL-3. Aggregate shall be installed as per Std. Constr. Drwg. HL-3.

ENLARGED DETAIL OF FLUSH BOLT HEAD PULL BOX DETAILS

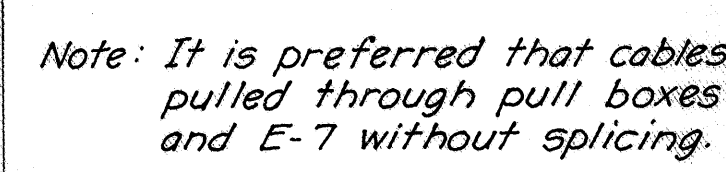
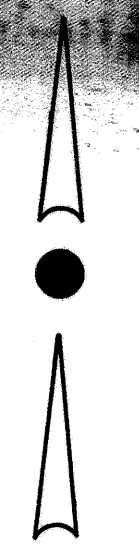
Pole Design Number

11 A 10B 32.5

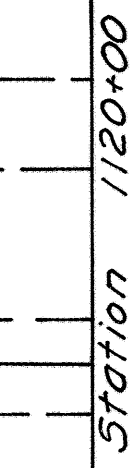
Mounting Height (Top of foundation to center of arm at Luminaire)
Bracket Arm Length
Base Type (A = Anchor Base, AT = Aluminum Transformer Base)
Gauge Pole

MECHANICAL PROPERTIES FOR ANCHOR BASE LIGHT POLES

Pole Design Number	Shaft Size	Taper Inches / Ft.	Gauge	Foundation Anchor Bolts			Arm Length	Nominal Mtg. Height	Elastic Defl. Rate, Inches per 100 lbs.	At 2/3 of Yield Stress			At Yield Stress			Transformer Base Style
				Size	Dia. Bolt Circle, Inches	Proj. Above Foundation				Load 18" Down from Top, lbs.	Total Defl. Inches	Perm. Set, Inches	Load 18" Down from Top, lbs.	Total Defl. Inches	Perm. Set, Inches	
11A/10B32.5	8.0"x3.87"x 29'-6"	0.14	11	1"x40"	11.0	2 5/8"	10'	32.5'	3.32	517	17.66	0.50	776	28.84	3.08	
11AT10B34.2	8.0"x3.87"x 29'-6"	0.14	11	1"x40"	15.0	3 1/2"	10'	34.2'	3.32	517	17.66	0.50	776	28.84	3.08	AT-A
11AT15B34.2	9.0"x4.87"x 29'-6"	0.14	11	1"x40"	15.0	3 1/2"	15'	34.2'	2.16	659	14.73	0.50	989	24.00	2.64	AT-A



For Eastbound Weigh Station Crossovers,
see Sheet No.

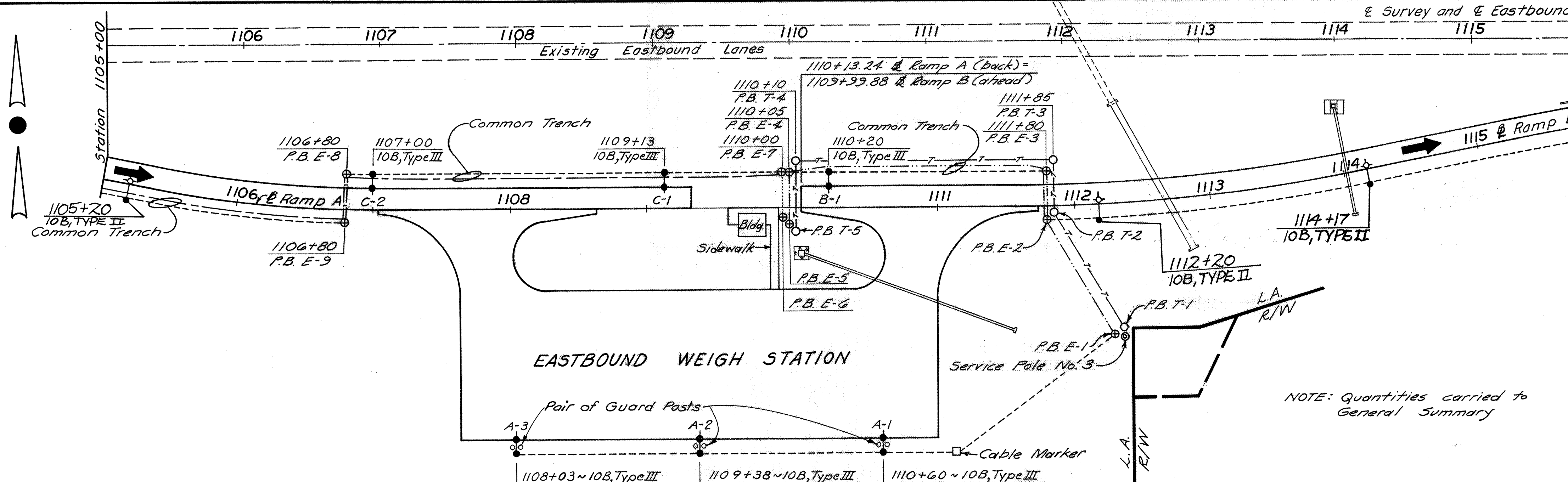
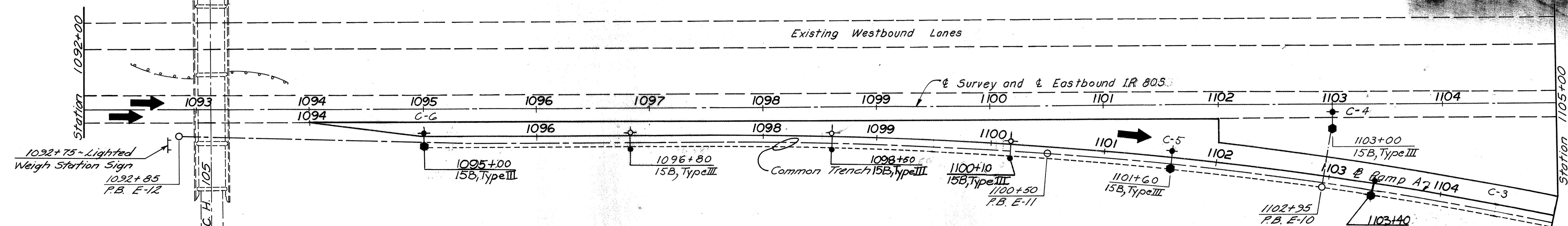


	Aluminum Transformer Base Pole with Luminaire, 34.2' Mounting Height.
	Steel Anchor Base Pole with Luminaire, 32.5' Mounting Height.
	Future Light.
	Pull Box, 18" Circular, 713.09.
	Pull Box, 24" Circular, 713.09.
	1/2" Telephone Conduit, 713.04, Type II or III with Pull Wire (100% State).
	Three 1/2 No. 4 Distribution Circuit Cables in 3" Conduit, 713.04, Type II or III.
	Three 1/2 No. 4 Feeder Circuit Cables in 3" Conduit, 713.04, Type II or III. *
	1/2" Duct-cable with Three No. 4 AWG 600 Volt Cables (Lighting Circuit) *
	1/2" Duct-cable with Three No. 4 AWG 600 Volt Cables (Sign Circuit)
	Six 1/2 No. 4 Distribution Circuit Cables in 3" Conduit, 713.04, Type II or III.
	Two 1/2 No. 4 Duct-cables in 3" Conduit, 713.04, Type II or III.

C-1 The letter designates the circuit and the number designates the

* Between Pull Box E-6 and E-7 a $\frac{3}{8}$ " No.4 Duct-cable is also enclosed in the 3" Conduit.

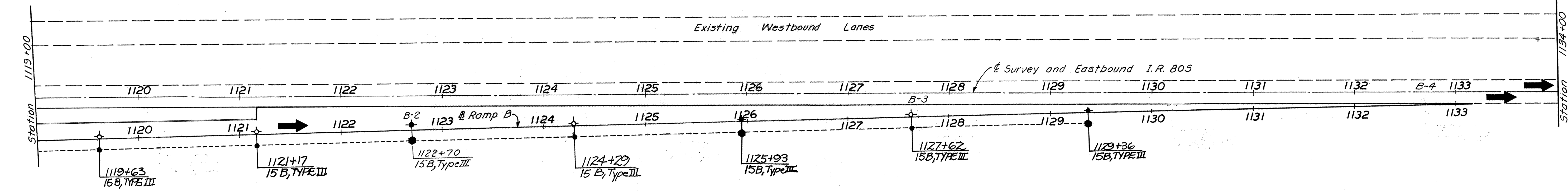




SUMMARY OF LIGHTING QUANTITIES					
ITEM	W.B. QUANT.	E.B. QUANT.	TOTAL	UNIT	DESCRIPTION
G06	6	6	12	Each	Guard Posts, as per plan
G25	1	1	2	Each	Light Pole, Design 11AT 10B 34.2
G25	6	6	12	Each	Light Pole, Design 11A 10B 32.5
G25	6	6	12	Each	Light Pole, Design 11AT 15B 34.2
G25	13	13	26	Each	Light Pole Foundation 24"x24"x6' Deep
G25	10	10	20	Each	Luminaire, Type III, 400 Watt, 713.11
G25	3	3	6	Each	Luminaire, Type III, 400 Watt, 713.11 with Integral Photoelectric Control
G25	13	13	26	Each	Lamp, 400 Watt, 713.14 Mercury
G25	13	13	26	Each	Ground Rod
G25	5	3	8	Each	Pull Box, 18" Circular, 713.09
G25	7	9	16	Each	Pull Box, 24" Circular, 713.09
G25	-	1	1	Each	Marker
G25	4426	4482	8908	Lin.Ft.	Trench, 24" Deep
G25	679	490	1,169	Lin.Ft.	Conduit, 3", 713.04, Type II or III
G25	1,722	1,071	2,793	Lin.Ft.	No. 1/0 AWG, 600 Volt Feeder Circuit Cable
G25	555	555	1,110	Lin.Ft.	No. 4 AWG, 600 Volt Distribution Circuit Cable
G25	1,190	1,190	2,380	Lin.Ft.	No. 10 AWG, Pole and Bracket Cable, 19 Strand
G25	5858	6014	11872	Lin.Ft.	1 1/2" Duct-Cable with Three No. 4 AWG 600 Volt Cables
G25	48	48	96	Each	Connector Kit, Type I
G25	26	26	52	Each	Connector Kit, Type II
G25	13	13	26	Each	Connector Kit, Type III
G25	3	3	6	Each	Connector Kit, Type VII B
G25	Lump	-	Lump	Lump	Service Pole No. 2
G25	-	Lump	Lump	Lump	Service Pole No. 3
100% STATE PARTICIPATION (Telephone Circuit)					
G25	5	5	10	Each	Pull Box, 18" Circular, 713.09
G25	586	376	962	Lin.Ft.	Trench, 24" Deep
G25	586	376	962	Lin.Ft.	Conduit, 1 1/2", 713.04, Type II or III

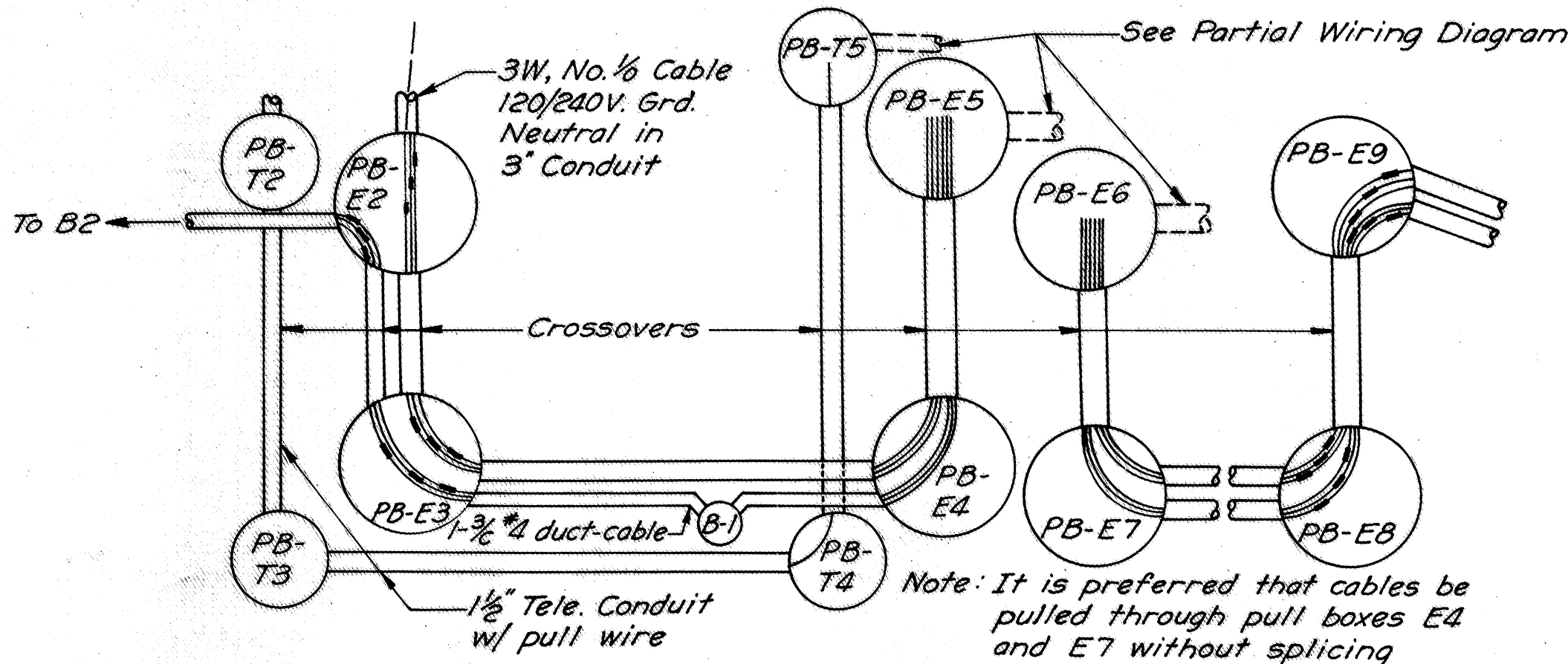
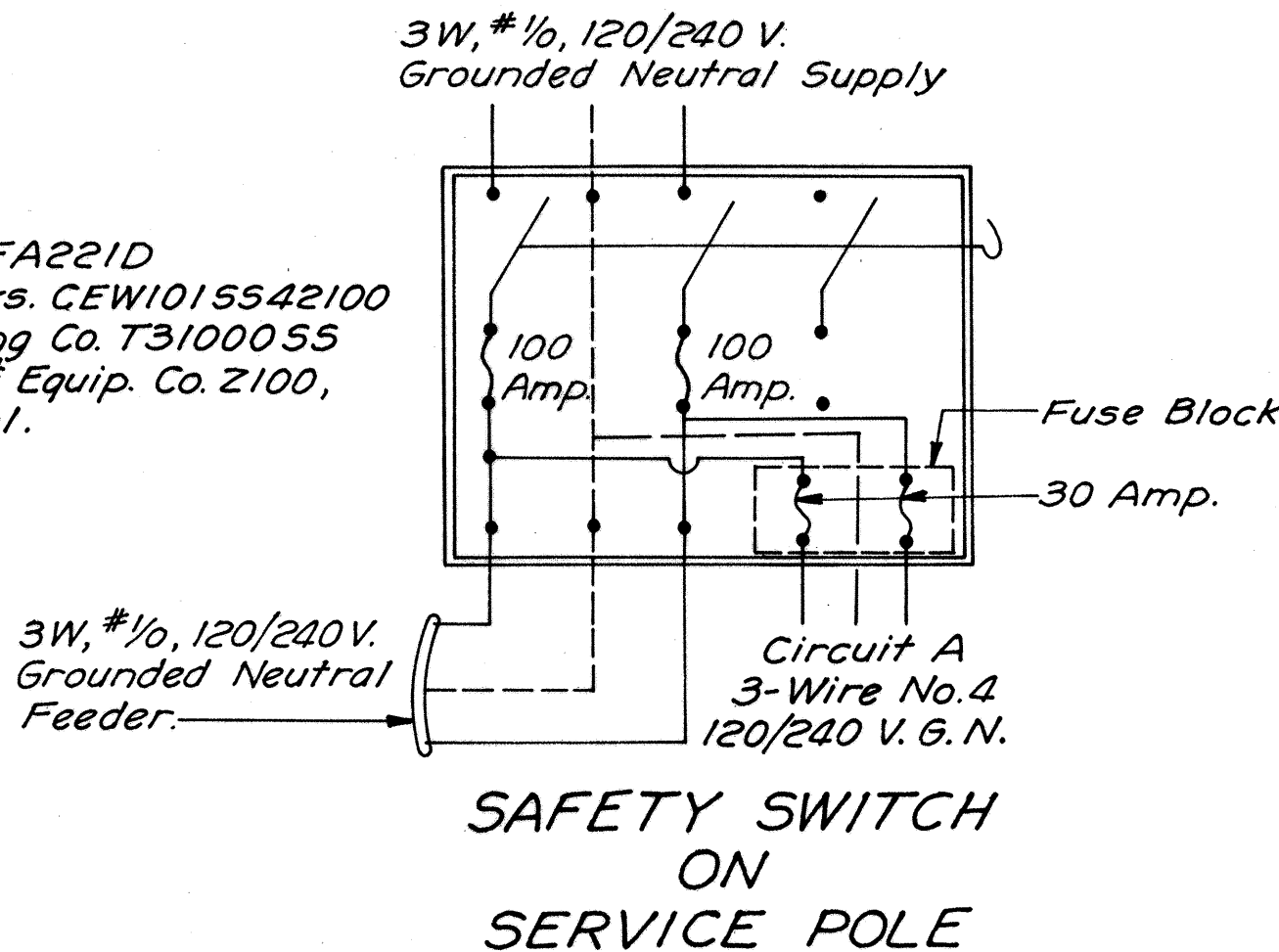
- LEGEND**
- Aluminum Transformer Base Pole with Luminaire, 34.2' Mounting Height
 - Steel Anchor Base Pole with Luminaire, 32.5' Mounting Height
 - Future Light
 - Pull Box, 18" Circular, 713.09
 - Pull Box, 24" Circular, 713.09
 - 1/2" Telephone Conduit, 713.04, Type II or III with Pull Wire (100% State)
 - Three 1/2" No. 4 Distribution Circuit Cables in 3" Conduit, 713.04, Type II or III
 - Three 1/2" No. 10 Feeder Circuit Cables in 3" Conduit, 713.04, Type II or III (*)
 - 1 1/2" Duct-cable with Three No. 4 AWG 600 Volt Cables (Lighting Circuit)
 - 1 1/2" Duct-cable with Three No. 4 AWG 600 Volt Cables (Sign Circuit)
 - Six 1/2" No. 4 Distribution Circuit Cables in 3" Conduit, 713.04, Type II or III
 - Two 3/4" No. 4 Duct-cables in 3" Conduit, 713.04, Type II or III
 - A-2 The letter designates the circuit and the number designates the pole

(*) Between Pull Box E-4 and E-5 a 3/4" No. 4 Duct-cable is also enclosed in the 3" Conduit.

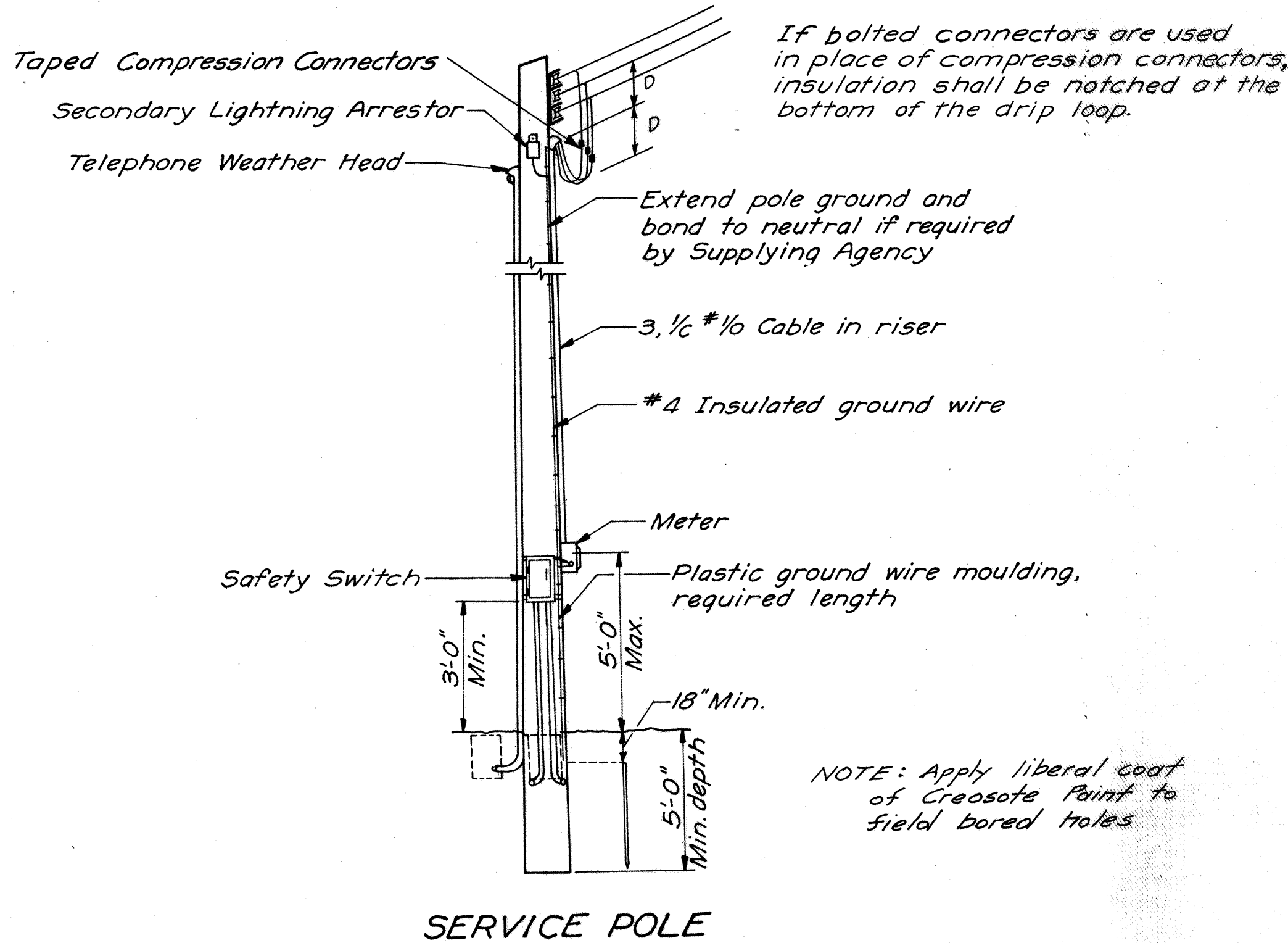


MEDINA COUNTY
MED-80S-5.14 PART II

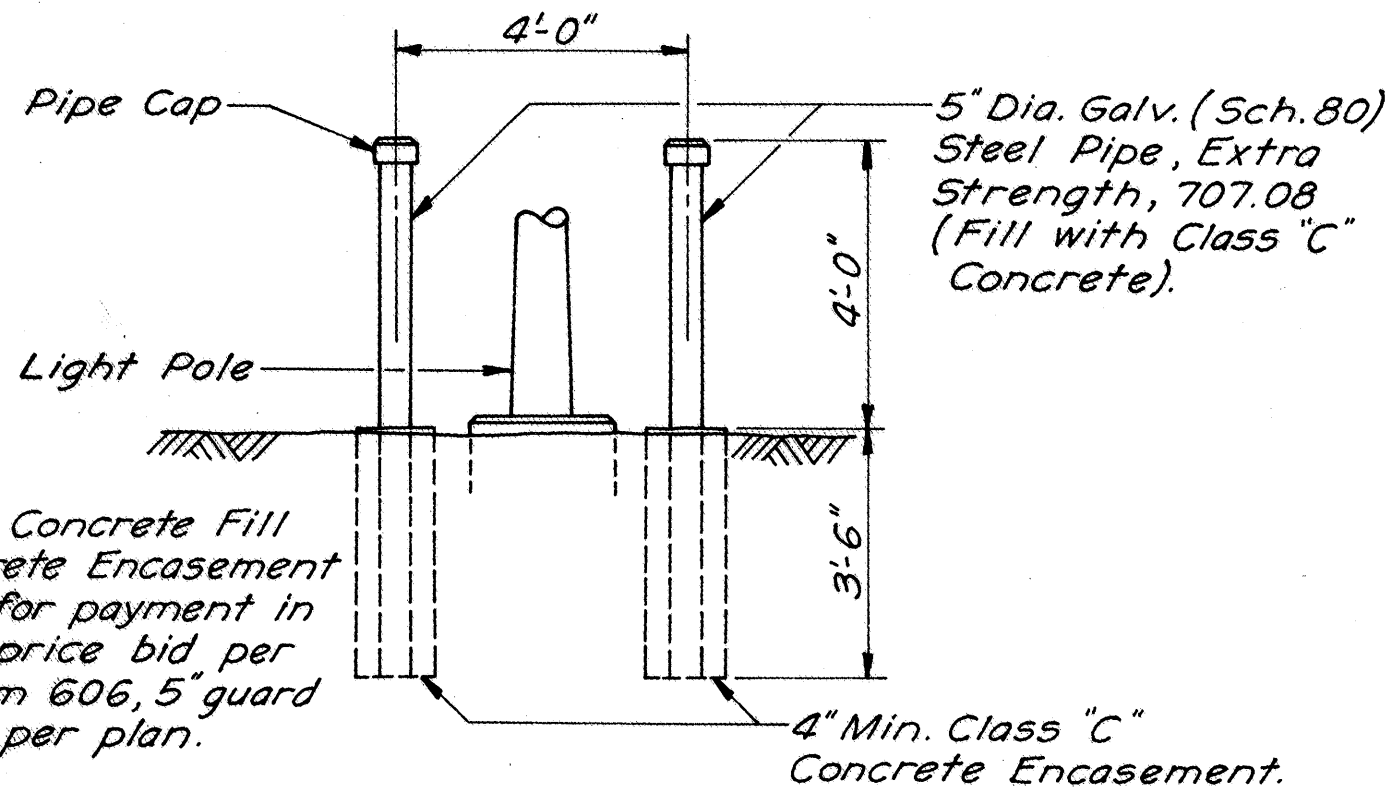
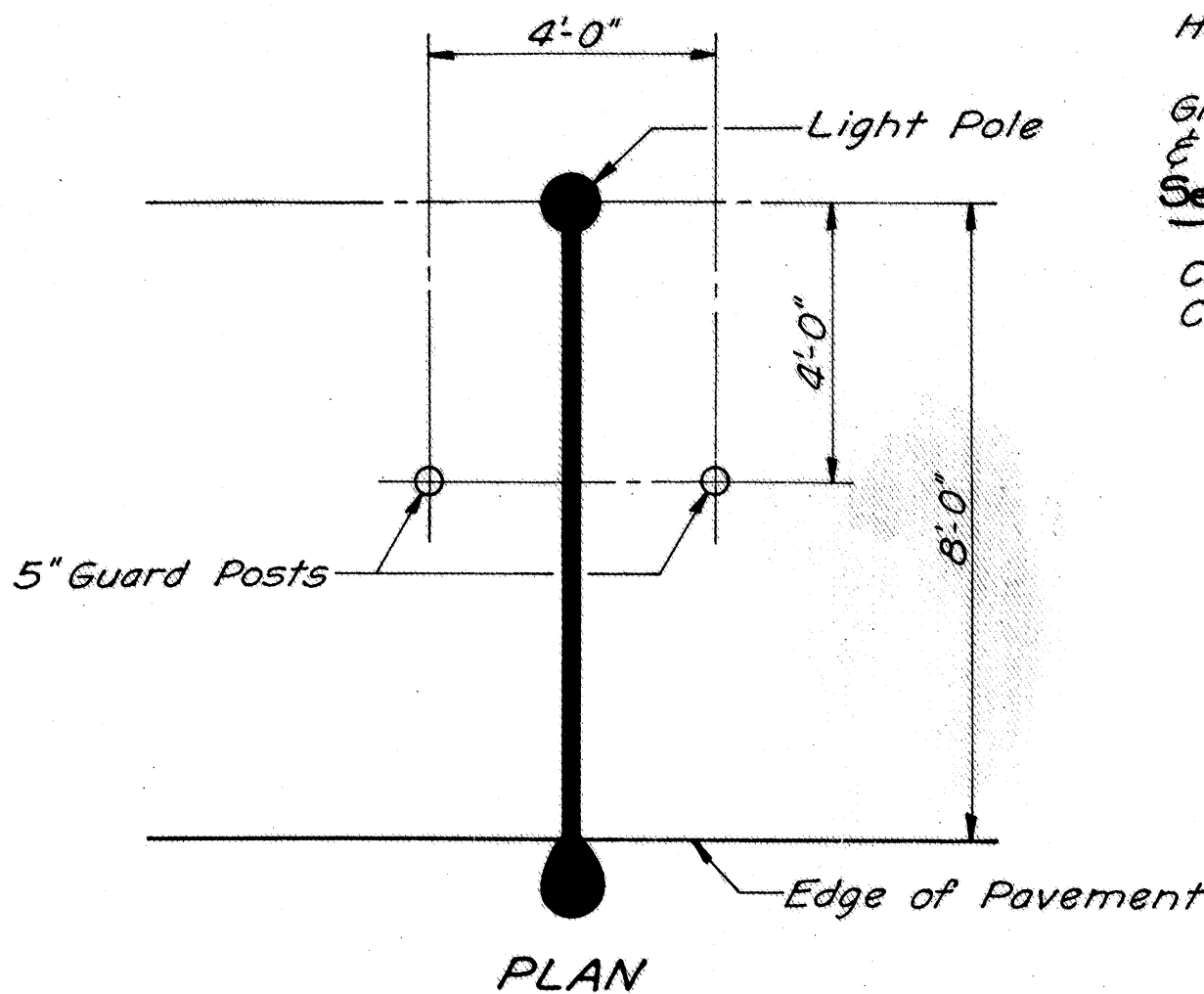
Safety Switch:
Square D W999FA221D
Columbus Elec. Wks. CEW1015542100
TWYCO Engineering Co. T3100055
Control Systems & Equip. Co. Z100,
or approved equal.



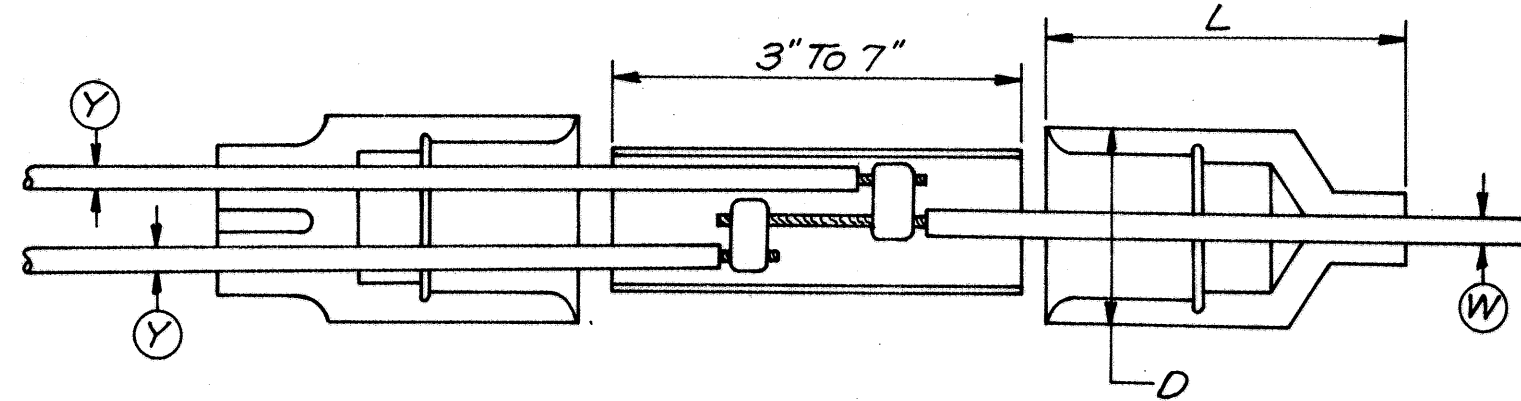
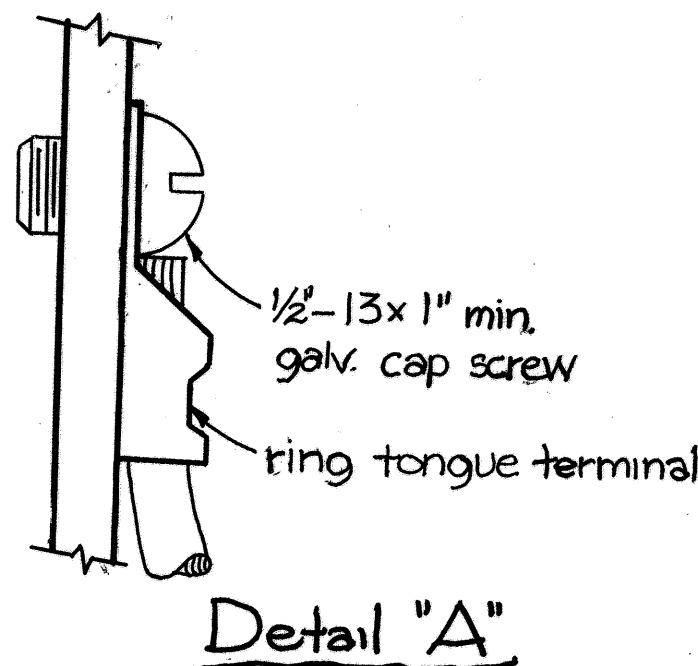
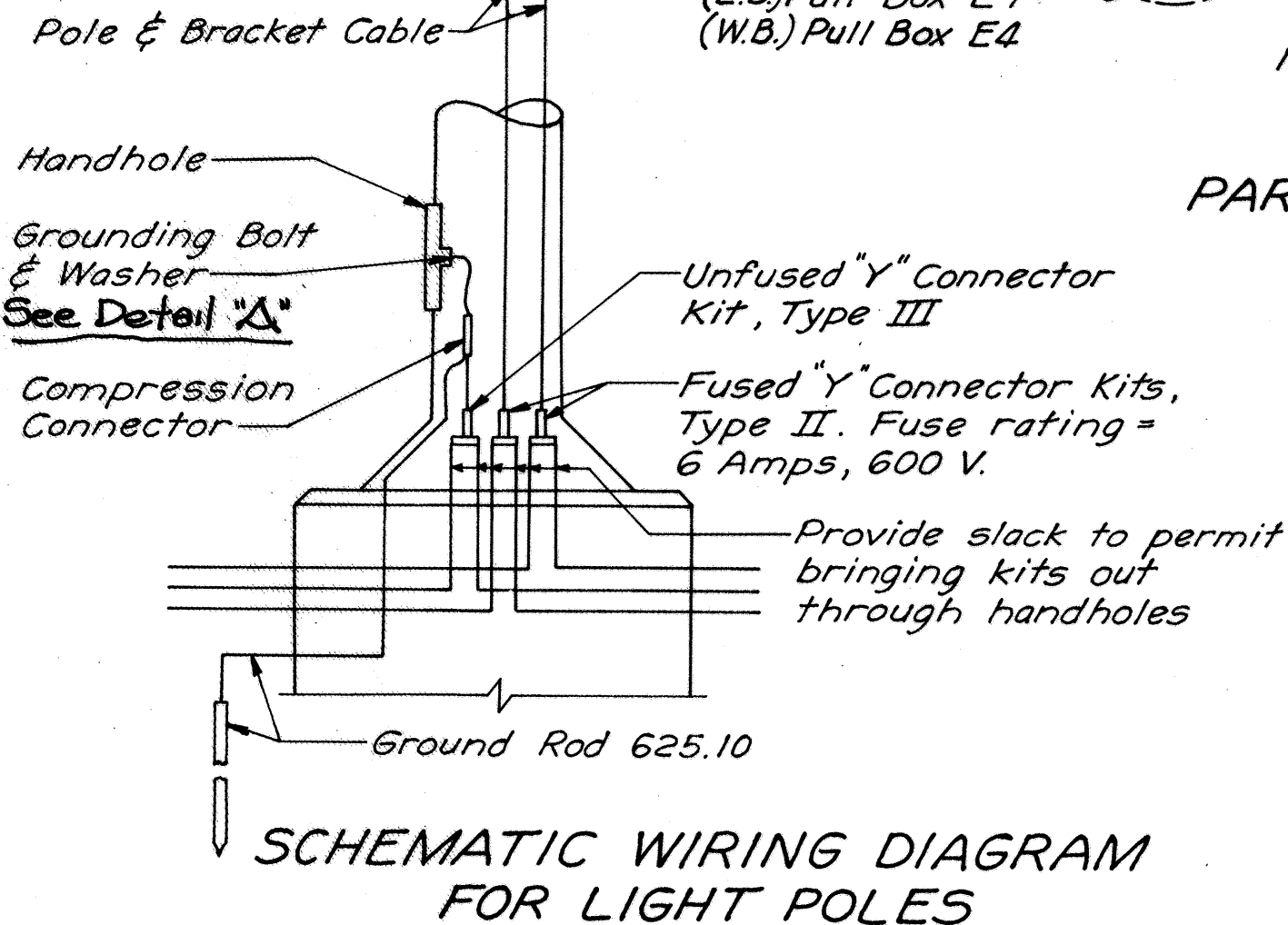
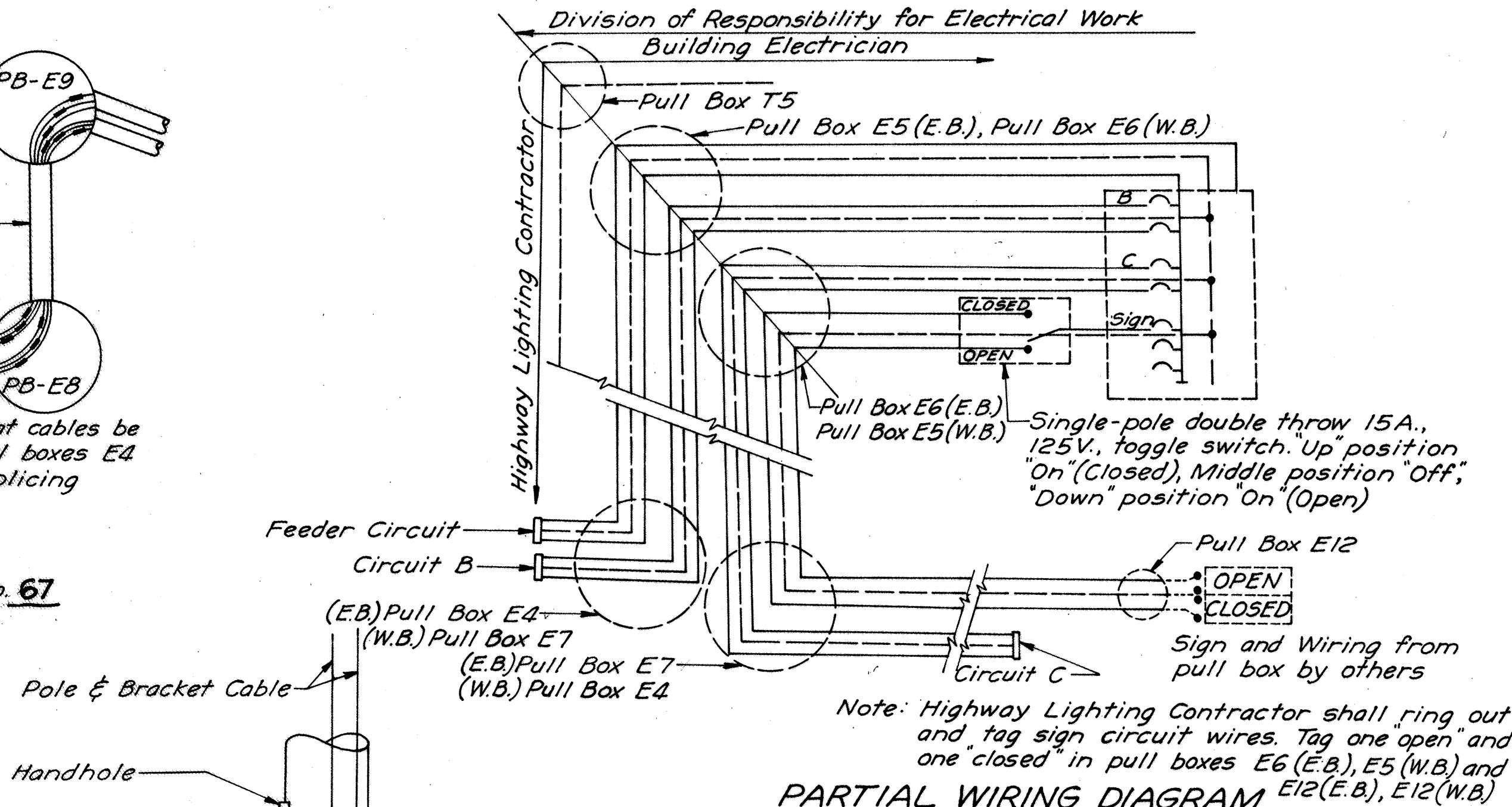
CIRCUIT DIAGRAM OF CROSSOVERS
EASTBOUND WEIGH STATION
For Westbound Weigh Station Crossovers, see sheet No. 67



NOTE: Apply liberal coat of Creosote Paint to field bored holes



GUARD POSTS DETAIL



D	L	CABLE DIAMETER		SYMBOL FOR		AWG 600 V. CABLE PER 713.02
		Min.	Max.	(Y)	(W)	
1 29/32	4 1/8	.320"	.430"	D	D	No. 6 & No. 4
1 29/32	4 1/8	.420"	.585"	E	E	No. 2 & No. 3/8

Note: The Type I, II & III Connector Kits shall be sized according to the wire size shown in the plans.

NOTES

FOUNDATION: Foundations for light poles shall be poured-in-place concrete (vibrated and spaded 5/109). 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. Hgt. 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'

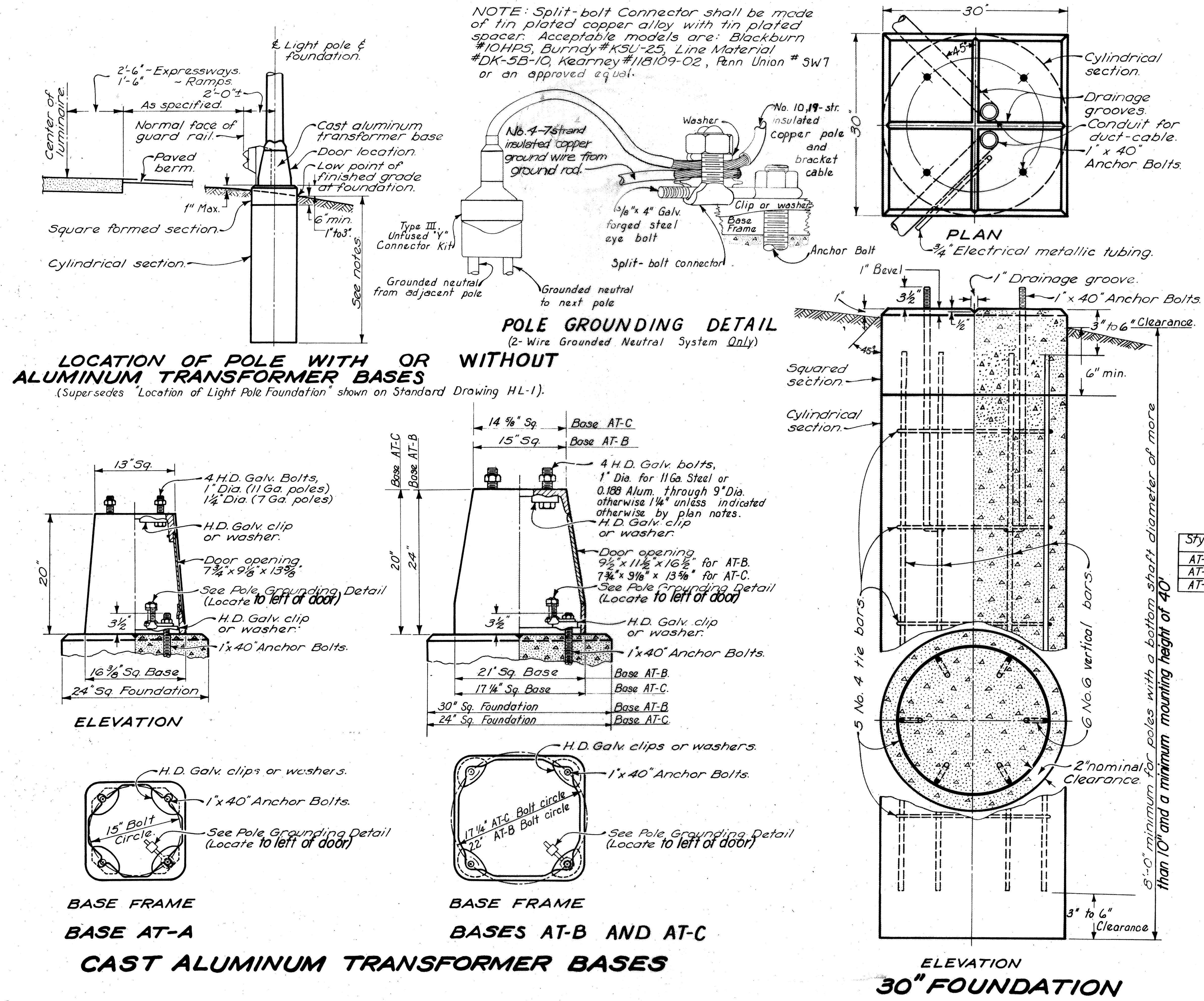
Both the bottom of the cast steel pole base and the top of the aluminum transformer base shall be coated or painted with a heavy film of zinc rich paint (Federal Specification TT-P-641-Type II) to reduce galvanic action between the two dissimilar metals.

PAYMENT: 30" Light Pole Foundations shall be paid for at the unit price bid per each foundation.

Aluminum base complete with hardware, eye bolt and connector, 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.

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 #3W7 or an approved equal.



Revised 7-23-69
Revised 7-1-69
Revised 1-24-69
Revised 5-14-68
Issued 11-6-67

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT
03732 (0)	2	OHIO	I-80S-6(9)

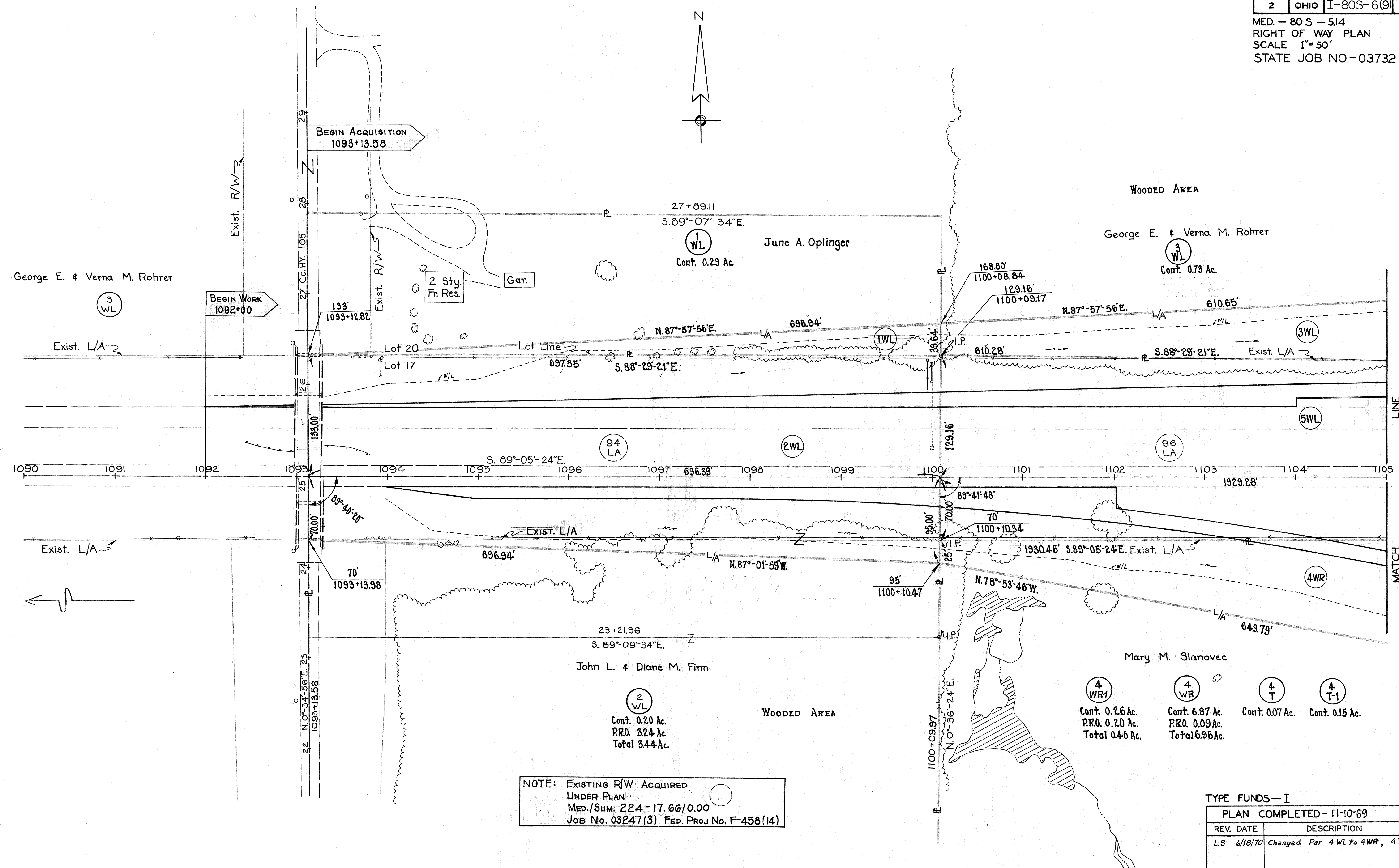
MED.-80S-5.14
WEIGH STATION



TOTAL NO. OWNERS-11					TOTAL NO. COMPLETE TAKES- 2			TOTAL OWNERS WITH STRUCTURES INVOLVED- 1							REMARKS	OTHER DESIGNATED EASEMENTS	TYPE FUND
PARCEL NO.	OWNER	DEED RECORD			DEED AREA	TOTAL PRO	TOTAL TAKE	PRO IN TAKE	NET TAKE	NET RES. LT.	NET RES. RT.	BLDG'S TO BE ACQ'D	SHEET NO.				
		BOOK	PAGE	DATE													
1-WL	JUNE A. OPLINGER	338	500	66	2.515	0.25	0.29	—	0.29	1.98	—	No	2				
2-WL	JOHN L. & DIANE M. FINN	341/320	33/47	64	12.09	4.22	3.44	3.24	0.20	—	7.67	No	2				
3-WL	GEORGE E. & VERNA M. ROHRER	246	390	62	95.28	10.19	0.73	—	0.73	84.76	—	No	2 & 3				
4-WR	MARY M. SLANOVEC	293	106	62	25.75	0.52	6.96	0.09	6.87	—	18.10	No	2 & 3	Right To Gas & Oil Reserved			
4-WR1							0.46	0.20	0.26			No	3				
4-T							0.07	—	0.07			No	3				
4-T-1							0.15	—	0.15			No	3				
5-WL	VIRGIL E. & MILDRED MORRISON	247	186	57	107.30	11.42	9.83	8.79	1.04	94.84	—	No	3				
5-X							0.10	—	0.10			No	3				
5A-WL	FREDERICK LEO & MAJORIE ANN TIGHE	374	322	69	6.413	0.25	6.53	0.25	6.28	—	—	No	3	NOTE: ACTUAL AREA OF 5A-WL = 6.53 Ac.			
6-WL	WOODCREST INC.	260	266	58	10.91	0.20	0.80	—	0.80	9.75	—	No	4			I	
6-WD							0.26	0.10	0.16			No	3				
6-T							0.43	—	0.43			No	4				
7-WL	ALLAN G. & ALYCE L. KRAUS	343	327	66	1.00	-0-	0.65	—	0.65		0.33	Yes	4				
7-T							0.05	—	0.05			Yes	4				
7-WD							1023 S.F.	—	1023 S.F.			No	3				
8	JOSEPH & MARY M. SLANOVEC	340	514	66	1.01	-0-	1650 S.F.	—	1650 S.F.		0.97	No	4				
9-WL	E. KIRK FRIEDEL	304/289 253/247	96/459 94/308	63/62 58/57	36.98	—	—	—	—	—	—	—	4	No R/W REQUIRED.			
10-WL	DANIEL E. & GLENNA J. WELTZIEN	337/330/327	187/358/286	66 & 65	37.50 + 8 Lots	10.74	8.45	8.02	0.43		* 26.33	No	4	* + 7 lots Skypark Subdn			
10	DANIELE & GLENNA J. WELTZIEN et al	337/330/327 unrecorded land contract	187/358/286	66 & 65 66	45100 SF	0	190 S.F.	—	190 S.F.	—	44910 SF	No	3	Lot 3 Skypark Subdn			
6A	CHARLES C. & HELEN A. COOK	247	256	57	0.14	0.14	0.14	0.14	0.14	0		No	3	EXISTING PAR. 97A ACQUIRED AS AN EASEMENT UNDER MED/SUM-224-1766/0.00			
UTILITIES		CENTERLINE-REFERENCE-MONUMENTS				SYMBOLS			TYPE		FENCE QUANTITIES		GENERAL NOTES		COMPLETION DATE 11-10-69		
															DATE REVISION DESCRIPTION		
															11-20-69 Par. 10WL Rev. total P.R.O. & Net Residue		
															3-23-70 Rev. Name on Par. 10WD		
															4-2-70 Revised Parcels 5WL 5A-WL 5X W.D.F.		
															4-6-70 Changed Par 10WD to Par 10		
															5-1-70 Changed Par 8WD to Par 8		
															6/18/70 Changed Par 4WL to 4WR + 4WD to 4WR1 Also Added Note Right To Gas & Oil Reserved		
															10-5-72 Par. 6AWL Changed to GA. J.R.Y.		
															SURVEYED DRAWN BY DESIGN CHECKED SUPERVISED		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-80S-6(9)	72

MED. — 80 S — 5.14
RIGHT OF WAY PLAN
SCALE 1"=50'
STATE JOB NO.—03732 (0)



NOTE: EXISTING R/W ACQUIRED
UNDER PLAN
MED./SUM. 224 - 17.66/0.00
JOB No. 03247(3) FED. PROJ No. F-458(14)

TYPE FUNDS—I	
PLAN COMPLETED—11-10-69	
REV. DATE	DESCRIPTION
L.S. 6/18/70	Changed Per 4 WL to 4 WR, 4 WD to 4 WR-1

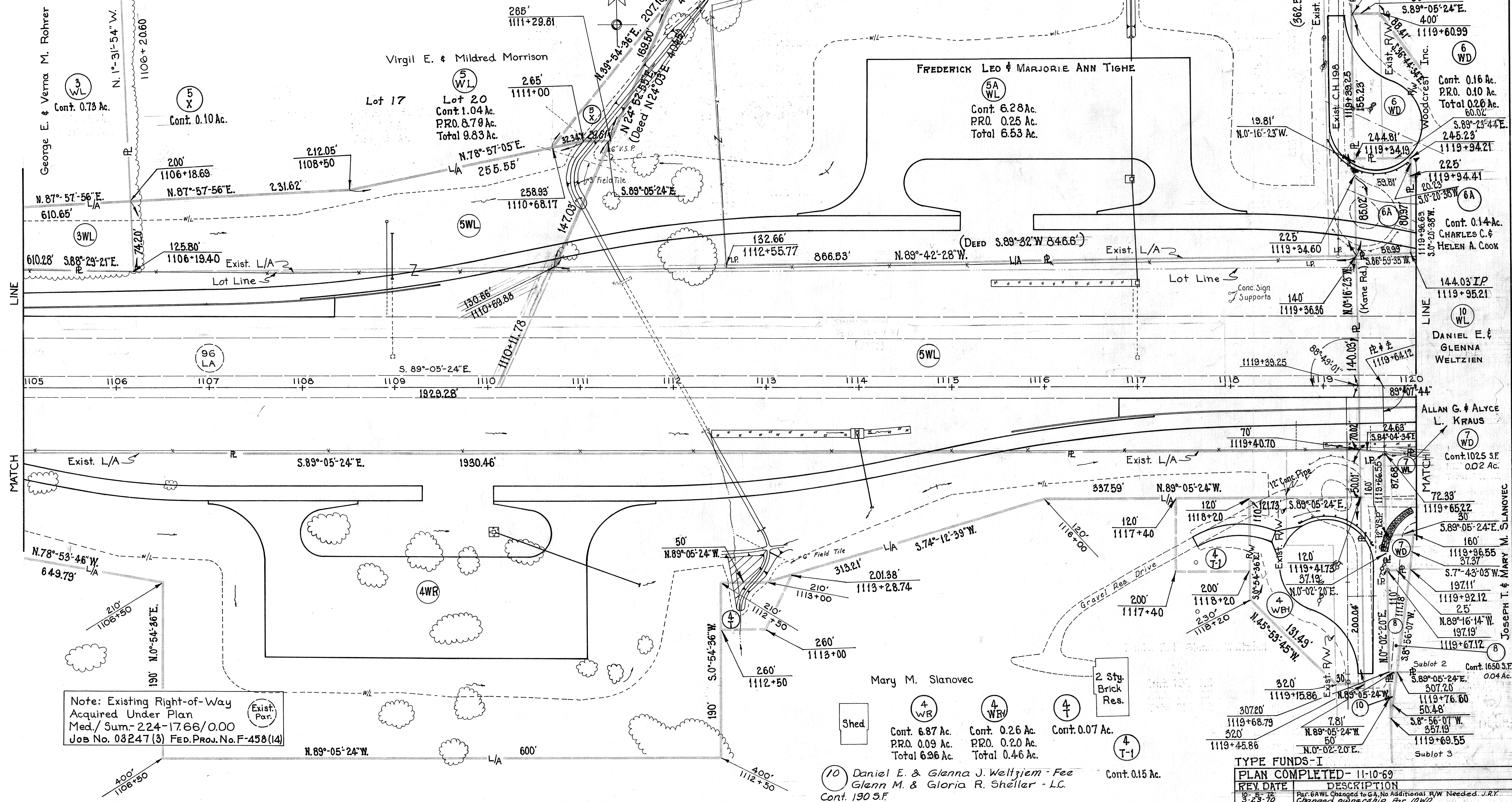
MEDINA COUNTY GUILFORD TOWNSHIP LOT-17&20 T-IN R-14W

MED-80S-514
RIGHT-OF-WAY PLAN
SCALE: 1"=50'
STATE JOB NO-03732(0)

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-80S-6 (9)

73
3
5

WOODED AREA



Note: Existing Right-of-Way
Acquired Under Plan
Med./ Sum- 224-17.66/0.00
JOB No. 03247(3) FED. PROJ. No. F-458(14)

(10) Daniel E. & Glenna J. Weltzien - Fee
Glenn M. & Gloria R. Sheller - LC
Cont. 190 S.F.

TYPE FUNDS - I	
PLAN COMPLETED - 11-10-69	
REV. DATE	DESCRIPTION
3-23-70	Par. 6AWL changed to CH, No Additional R/W Needed. J.R.Y.
3/24/70	Changed ownership for 10WD
4/2/70	Deleted Parcel 6AWD & Revised Parcel 6AWL
4-6-70	Revised Parcels 5AWL, 5WL, & 5X (W.D.E.)
5-1-70	Par. 10WD changed to Par. 10
6-18-70	Par. 8WD changed to Par. 8 Changed Par. 4WL to 4WR & 4WD to 4WR

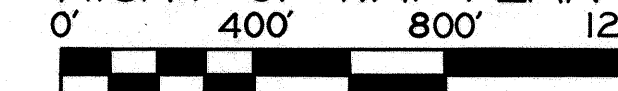
MEDINA COUNTY GUILFORD TOWNSHIP LOT-17 & 20 T-IN R-14W

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-80S-6(9)

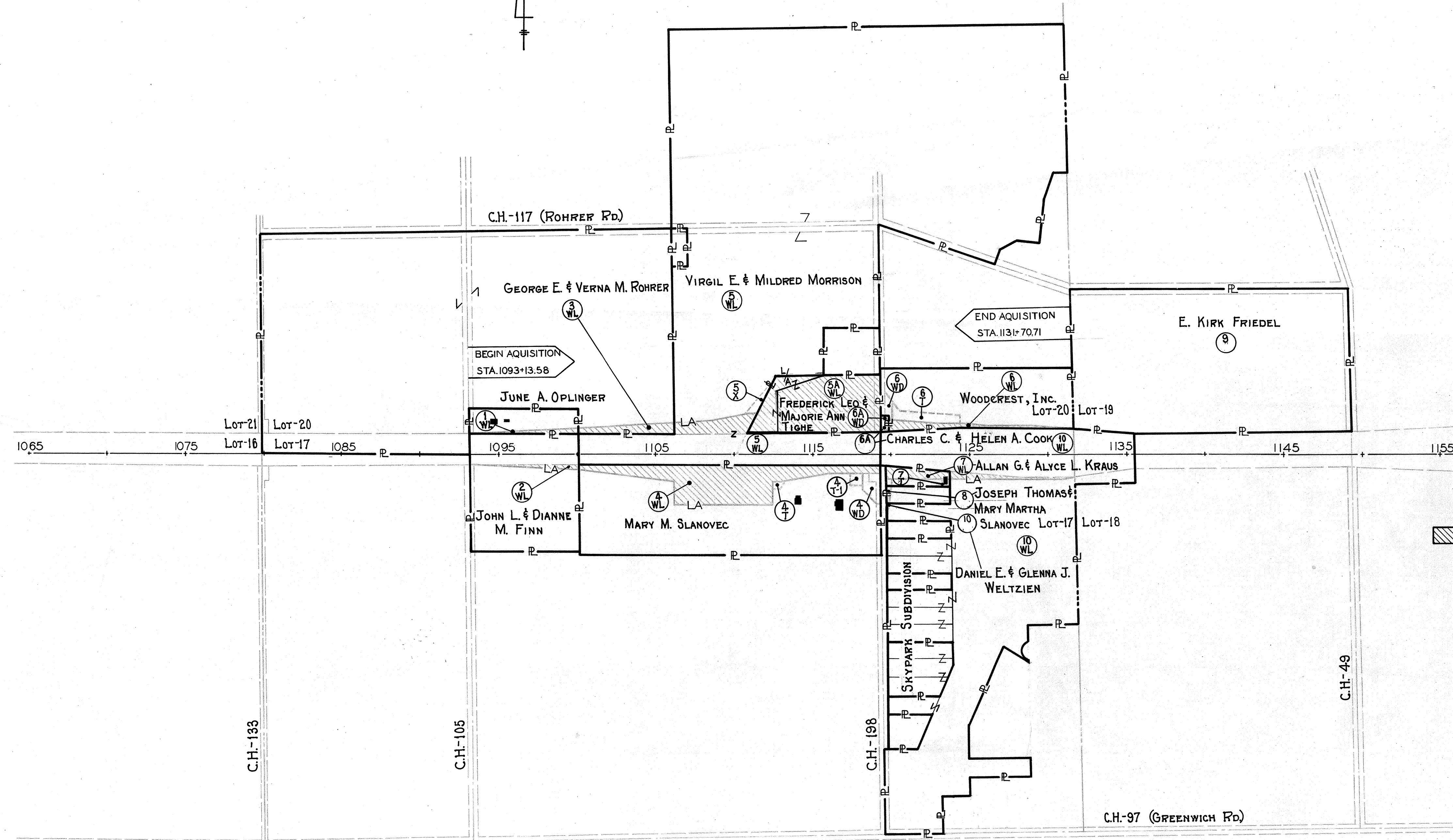
75

MED-80S-5.14
WEIGH STATION
RIGHT-OF-WAY PLAN

5
5



SCALE: 1"=400'
STATE JOB NO.-03732 (0)



— AREA TO BE ACQUIRED UNDER LIMITED ACCESS.

MEDINA COUNTY GUILFORD TOWNSHIP LOT-17, 18, 19 & 20 T-IN R-14W

TYPE FUNDS-I	
PLAN COMPLETED- 11-10-69	
REV. DATE	DESCRIPTION