I-675-8(15)54

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO	I-675-8(15)54	

1/616

GRE-675-5.37
GREENE COUNTY

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

RE MICROFILMED AUG 25 1989
JUL 28 1989
MICROFILMED JUN 17 1985

CONVENTIONAL SIGNS

CENTER LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
RIGHT OF WAY — LA R/W (Limited Access) — R/W (Without Limited Access) — LA (Limited Access Line)
COUNTY LINE
FENCE LINE
RAILROAD
PROPOSED GUARD RAIL
EXIST. GUARD RAIL
SEWERS & DRAINS — Exist. — Prop.
STREAMS
POLE LINE — Service — Power — Tel. — Light
TREES & STUMPS
MAIL BOX (M)
EXIST R/W
PROPERTY LINE (P)
CATCH BASIN — Existing, (A) Abandon, Proposed
MAN HOLE — Existing, (A) Abandon, Proposed

GRE-675-5.37

GRADE SEPARATION WITH THE CONSOLIDATED RAIL CORPORATION

(MAD RIVER TOWNSHIP)
(MONTGOMERY COUNTY)
BEAVER CREEK TOWNSHIP
GREENE COUNTY

INDEX OF SHEETS

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Service Road B, Plan & Profile	120
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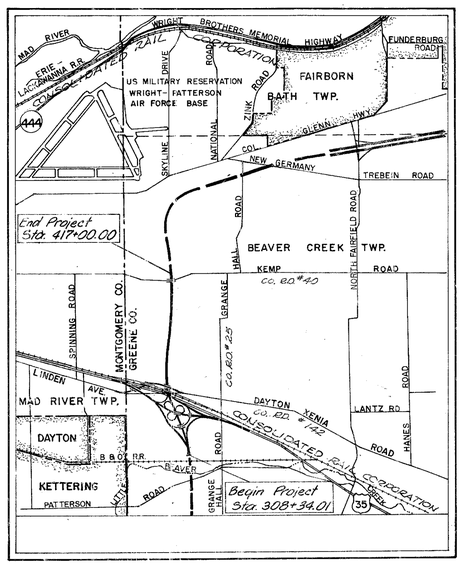
Right of Way	565-601⊕

⊕ NOTE!
Sheet Numbers:
366 thru 371 AND
602 thru 616
NOT USED

LINE DATA

		PROJECT	WORK
Begin Work	Sta. 308+09.01		
Begin Project	Sta. 308+34.01		25.00
End Project	Sta. 417+00.00	10,865.99	
End Work	Sta. 417+35.00		35.00
Net Length Of Project =		10,865.99 Lin.Ft. or 2.057 Miles	10,925.79
ADD FOR:			
US 35	Sta. 1048+33.00 - Sta. 360+66.00 *		22,028.66
Dayton Xenia Rd.	Sta. 9+80.00 - Sta. 49+07.00		3,920.00
Wildonna Dr.	Sta. 0+26.50 - Sta. 4+20.51		394.01
Kemp Rd.	Sta. 13+28.98 - Sta. 29+00.00		1571.02
Total Length of Work =			38,839.68 Lin.Ft. or 7.356 Miles

* Station Equations
Sta. 1106+93.02 Back = Sta. 0+00.00 Ahead
Sta. 82+00.00 Back = Sta. 440+34.64 Ahead



LOCATION MAP

SCALE OF MILES
1 1/2 0 1 2

PORTION TO BE IMPROVED
STATE AND FEDERAL ROADS (444) (35)
OTHER ROADS
FUTURE IMPROVEMENT

SCALE OF DRAWINGS
PLAN 0 50 100
PROFILE 0 50 100
CROSS SECTIONS 0 10 20 0 10 20

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

TC-41.10	3-26-79	LA-1	6-1-79
TC-41.20	3-26-79	F-1	5-1-76
TC-42.10	8-19-77	F-2	5-1-76
TC-42.20	3-26-79	F-3	5-1-76
TC-51.10	3-30-79		
TC-51.11	4-3-79	F-5	5-1-76
TC-52.10	4-3-79	F-6	5-1-76
TC-52.20	4-3-79		
TC-61.10	2-26-82	AS-1-72	6-30-72
TC-72.20	10-26-81	BR-1-67	10-15-71
TC-82.10	4-11-79	BR-2-67	10-15-71
TC-84.20	4-17-79	RB-1-55	2-2-59
TC-85.20	4-18-79	SD-1-69	6-12-69

LIMITED ACCESS

This improvement 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, Revised Code of Ohio,

1979 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of *Transportation* including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved William M. Crumpton
Date 1-6-82 District Deputy Director of Transportation

Approved Robert B. Pfeifer
Date 3-3-82 Engineer, Bureau of Bridges and Structural Design

Approved D. Howard E. Nolan
Date 4-5-82 Chief Engineer, Planning and Design

Approved David L. Weis
Date 4-5-82 Director, Department of Transportation

Sheet 1 revised 6-16-82 EBL
Sheet 2 revised 6-21-82 S.M.K.
Sheet 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 15A, 15B, 15C revised 10-12-82 EBL
Sheet 16 revised 7-19-82 EBL
Sheet 66A revised, sheet 66B added 4-12-83 EBL
Sheet 66C revised, sheet 66D added 8-18-83 EBL

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-1	6-1-65	CB-2-2-A&B	5-1-79	GR-2B	2-5-82	MC-6	6-1-65	HL-4	1-21-76	MH-2	6-12-75
BP-2	12-6-76	CB-3	5-1-79	GR-3	2-5-82	MC-7	10-15-76	HL-5	9-6-73	TC-7.65	3-1-79
BP-3	12-6-76	CB-3A	5-1-79	GR-4	2-5-82	MC-8	6-12-75	HL-6	3-22-77	TC-12.30	6-10-81
BP-4	7-16-81	CB-4	5-1-79	GR-4A	2-5-82	MC-9	11-1-77	HL-7	1-21-76	TC-18.24	4-25-79
BP-5	7-16-81	CB-5	5-1-79	GR-5	2-5-82	MC-9A	5-1-81	HL-8	1-21-76	TC-18.26	5-31-79
BP-6	6-1-65	CB-6	5-1-79	GR-6	1-1-71	MC-10	5-1-76	HL-9	3-22-77	TC-21.10	5-24-79
BP-7	12-6-76	CB-8	5-1-79	HW-4A	4-1-80	MC-11	8-1-78	HL-10	6-1-79	TC-21.40	3-1-79
BP-9	12-6-76	CB-458A	5-1-79	HW-4B	4-1-80	MH-1	6-12-75	HL-11	6-1-79	TC-22.10	3-1-79
BP-10	1-3-75	GR-1	2-5-82	I-3A&B	4-1-80	MH-3	6-12-75	HL-12	4-6-73	TC-22.20	3-1-79
				MC-1	6-13-69	MH-5	6-12-75	HL-15	1-21-76	TC-31.21	3-6-79
				MC-3	6-1-73	HL-1	9-6-73	HL-16	4-6-73	TC-32.10	3-8-79
				MC-4	7-26-76	HL-2	7-27-73	HL-19	3-22-77	TC-32.11	3-21-79
				MC-5	6-12-75	HL-3	7-27-73	HL-22	11-9-77	TC-35.10	10-5-77

SUPPLEMENTAL SPECIFICATIONS

809	1-1-71	927	10-19-81
810	10-19-81	940	3-16-81
836	3-12-75	948	2-19-74
839	11-25-70	954	6-3-78
847	4-3-76	957	12-19-78
848	3-4-80	958	12-18-78
849	10-19-81	959	12-19-78
857	12-19-78		
858	12-19-78		
859	12-19-78		
		1001	1-3-77

STATE OF OHIO
IRWIN E. HARRIS
22683
REGISTERED PROFESSIONAL ENGINEER

PLANS PREPARED BY
KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:
DIVISION ADMINISTRATOR DATE

FILE NO. GRE-675-5.37
Date of Letting
Contract No.

MICROFILMED
AUG 25 1989

SCHEMATIC PLAN

0 100 200 300 400

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

616

GRE-675-5.37
GREENE COUNTY

I-675 North of U.S. 35	
DESIGN	DESIGNATION
1985 ADT	40,392
Design → ~~2000~~ ADT	~~49,258~~ 73,300
~~D.H.V.~~	~~5,418~~
D	60%
T	6%
V	70 M.P.H.

Note: Any reference made to "Penn Central R.R." through out the plans shall be considered to read Consolidated Rail Corporation (CONRAIL).

I-675 South of U.S. 35	
DESIGN	DESIGNATION
1985 ADT	39955
Design → ~~2000~~ ADT	~~48,726~~ 66,600
~~D.H.V.~~	~~5,360~~
D	60%
T	6%
V	70 M.P.H.

Rev. 6-21-82 S.M.K.

SCHEMATIC PLAN, DRAINAGE PATTERN & DESIGN DESIGNATION

MICROFILMED
AUG 25 1989

SCHEMATIC PLAN

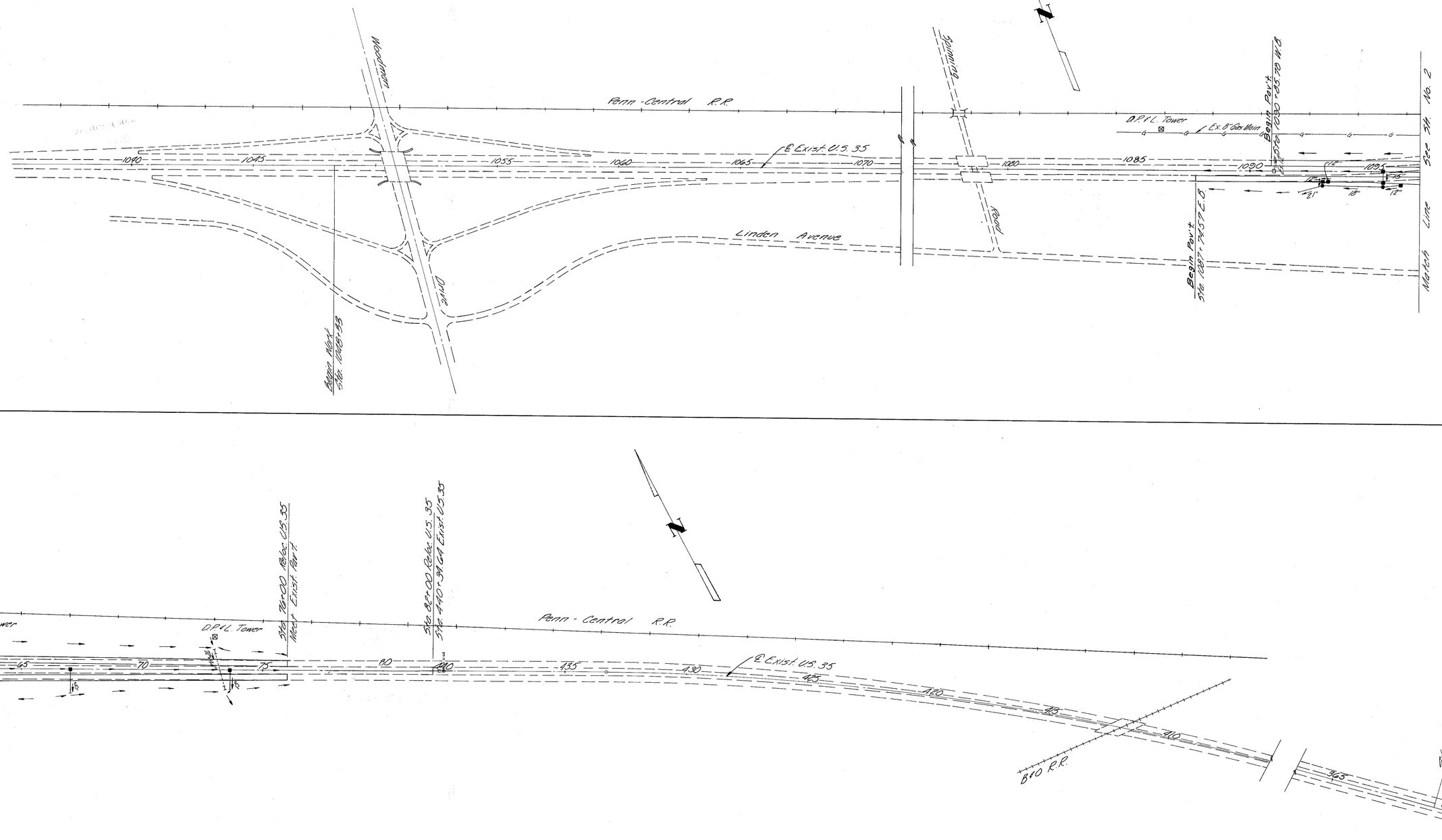
0 100 200 300 400

MICROFILMED
JUN 17 1965

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

3
6.16

GRE-675-5.37
GREENE COUNTY



SCHEMATIC PLAN, DRAINAGE PATTERN & DESIGN DESIGNATION

MICROFILMED
AUG 25 1989

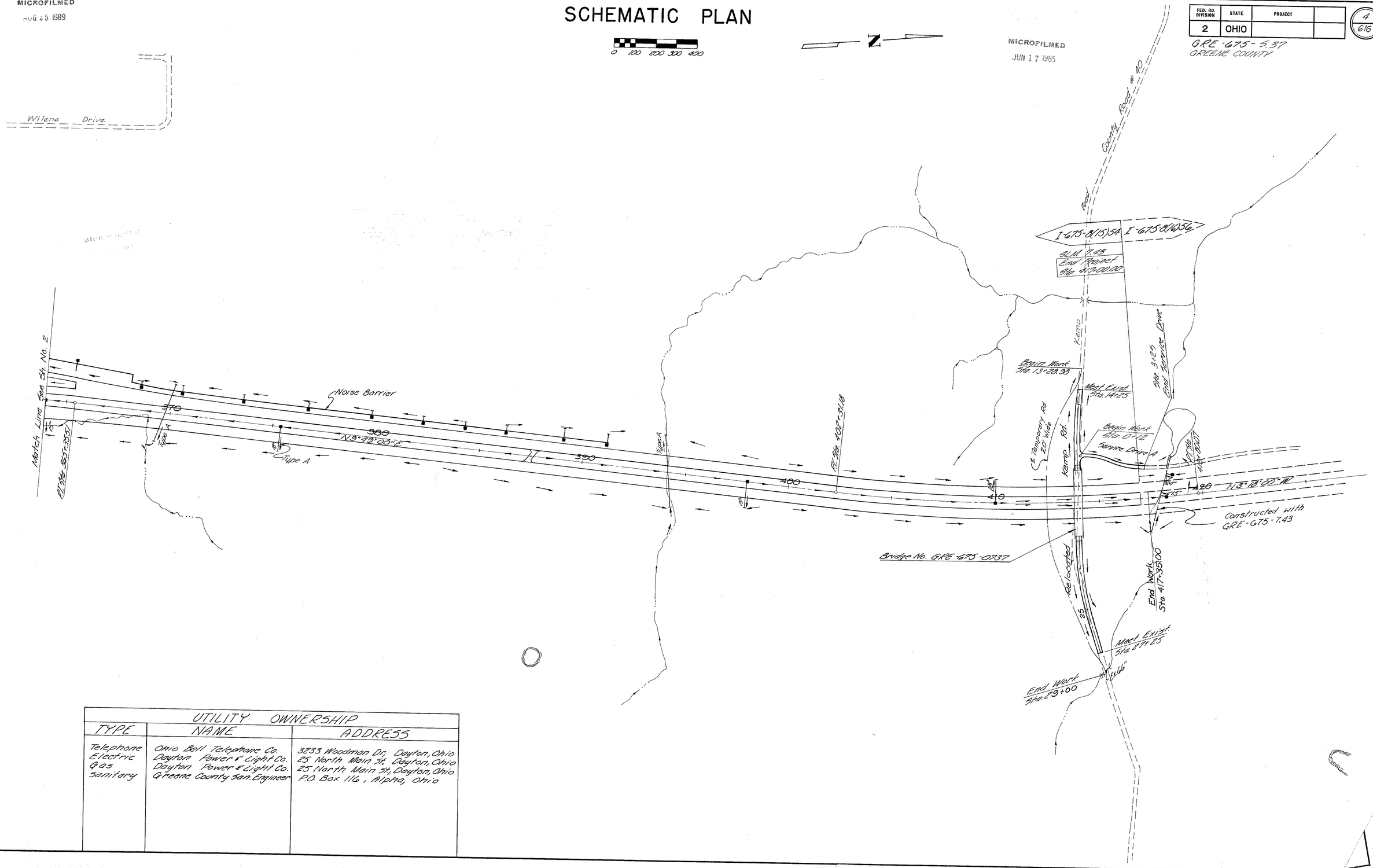
SCHEMATIC PLAN

MICROFILMED
JUN 17 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

4
616

GRE-675-5.37
GREENE COUNTY



UTILITY OWNERSHIP		
TYPE	NAME	ADDRESS
Telephone	Ohio Bell Telephone Co.	3233 Woodman Dr, Dayton, Ohio
Electric	Dayton Power & Light Co.	25 North Main St, Dayton, Ohio
Gas	Dayton Power & Light Co.	25 North Main St, Dayton, Ohio
Sanitary	Greene County San. Engineer	P.O. Box 116, Alpha, Ohio

FHWA REGION	STATE	PROJECT	
5	OHIO		

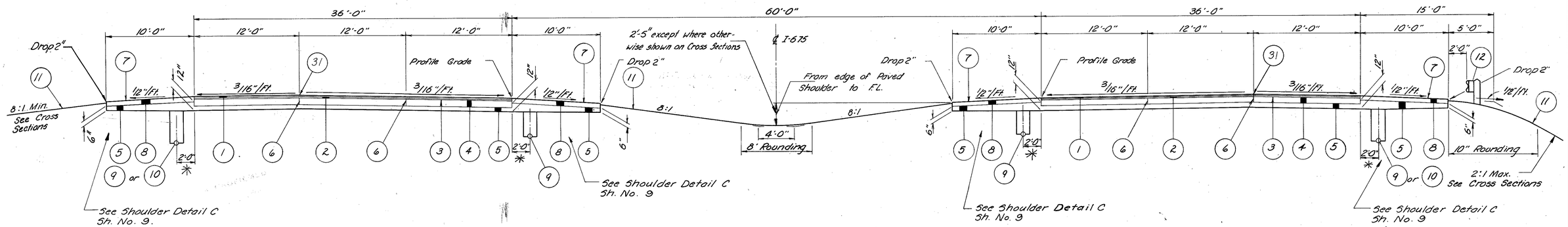
5/616

GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

0 1 2 3 4 5 10
SCALE



NORMAL SECTION
(See Pvt Details for Slope & Width Variations)
Sta. 329+25.00 (N.B. & S.B.) to Sta. 338+00.00 (N.B. & S.B.)

* The location of Underdrains has been changed during the development of the Plans. They shall be Offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

848, ASPHALT CONCRETE

Subsequent to the completion of plans, the asphalt concrete used on this project has been revised from items 402, 403, and 404 to supplemental specification 848. All reference to 402, 403, and 404 appearing on the plans shall be considered to read as follows: 402 becomes 848 Asphalt Concrete Intermediate Course, Type 2; 403 becomes 848 Asphalt Concrete Intermediate Course, Type 1; 404 becomes 848 Asphalt Concrete Surface Course, Type 1.

On this project, item 848, table 2-2, properties of mixtures shall be for HEAVY traffic volumes.

LEGEND

(1)	404	1¼"	Asphalt Concrete, AC-20
(2)	402	1¾"	Asphalt Concrete, AC-20
(3)	407		Tack Coat RC-250, MS-2, RS-1, SS-1, or SS-1h applied at the rate of 0.1 Gal. per Sq. Yd.
(4)	305	9"	Portland Cement Concrete Base
(5)	310		Subbase Type II 6" Thickness except as noted
(6)			Standard Longitudinal Joint
(7)	409		Seal Coat, Bituminous Material MC-800, MC-3000; CBAE 800, RS-1, RS-2, CRS-1, CRS-2, RT-9, RT-10 applied at the rate of 0.3 Gal./Sq. Yd. & No. 8 Aggregate applied at the rate of 0.008 Cu. Yd./Sq. Yd.
(8)	301	6"	Bituminous Aggregate Base AC-20 or RT-11 or RT-12
(9)	605	6"	Pipe Underdrain, 30" cover - bottom of Subbase to top of pipe except where otherwise noted. (See Plans for Locations) Shallow
(10)	605	6"	Pipe Underdrain, 50" cover - bottom of subbase to top of pipe except where otherwise noted (See Plans for Locations) Deep
(11)	659		Seeding and Mulching (See General Notes)
(12)	606		Guard Rail - Type 5 (See Plans for Locations)
(13)	622		Concrete Barrier, Std. Type B
(14)	408		Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer-20; applied at the rate of 0.4 Gal. per Sq. Yd.
(15)	304	8"	Aggregate Base, except as noted
(16)	609		Curb, Std. Type 2-B
(17)	605		Aggregate Drains (See General Notes)
(18)	404		Variable Thickness Asphalt Concrete AC-20, 1½" Max.
(19)	606		Guard Rail, Type 5 Barrier Design
(20)	612		Concrete Median, Std. Type, Modified as per plan (See sheet 19)
(21)	609		Curb Std. Ty. 6 (Modified as per plan See sheet 17)
(22)	404	1"	Asphalt Concrete, AC-20
(23)	402	1½"	Asphalt Concrete, AC-20
(24)	304	6"	Aggregate Base
(25)	404	1½"	Asphalt Concrete, AC-20
(26)	402	2"	Asphalt Concrete, AC-20
(27)	301	4"	Bituminous Aggregate Base AC-20, RT-11 or RT-12
(28)	402	0"	Min., 4" Max. Asphalt Concrete, AC-20
(29)	609		Asphalt Concrete Curb, AC-20, Std. Type 1
(30)	402	1"	Asphalt Concrete, AC-20
(31)			Hot Longitudinal Joints
(32)	605	6"	Pipe Underdrain. 18" cover - bottom of subbase to top of pipe except where otherwise noted (See Plans for Locations)
(33)	601		Paved Gutter, Standard Type 2
(34)	304	12"	Aggregate Base
(35)	612	4"	Concrete Median, as per plan, (See Sheet No. 22)
(36)			Special Construction of Railroad Track
(37)	609		Curb, Std. Type 6
(38)	451	9"	Reinforced Portland Cement Concrete Pavement using 701.08 Expansive Hydraulic Cement See General Notes & Note in Proposal.

305 PORTLAND CEMENT CONCRETE BASE

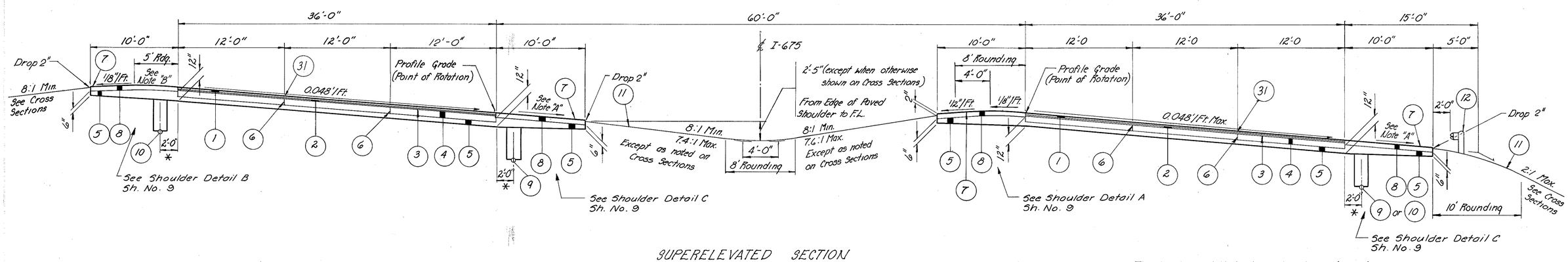
All references to Item 801 Portland Cement Concrete Base appearing throughout this plan shall be construed as Item 305 Portland Cement Concrete Base.

GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

0 1 2 3 4 5 10
SCALE



Note "A", 1/2"/Ft. or S.E. Rate whichever is greater

Note "B", For Shoulder Slopes adjacent to Collector Distributor see Sh. No. 12 ℄ Pavt. Details

SUPERELEVATED SECTION

(See Pavt. Details for Slopes ℄ Width Variations)
(See Superelevation Tables for Edge Elevations)

Sta. 308 + 34.01 (N.B. ℄ S.B.) to Sta. 329+25.00 (N.B. ℄ S.B.)
Sta. 338 + 00.00 (N.B.) to Sta. 355+00.00 (N.B.)
Sta. 338 + 00.00 (S.B.) to Sta. 365+35.51 (S.B.)

* The location of Underdrains has been changed during the development of the plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note: For Item Legend see Sh. No. 5

I-675 TYPICAL SECTIONS

FHWA REGION	STATE	PROJECT	
5	OHIO		

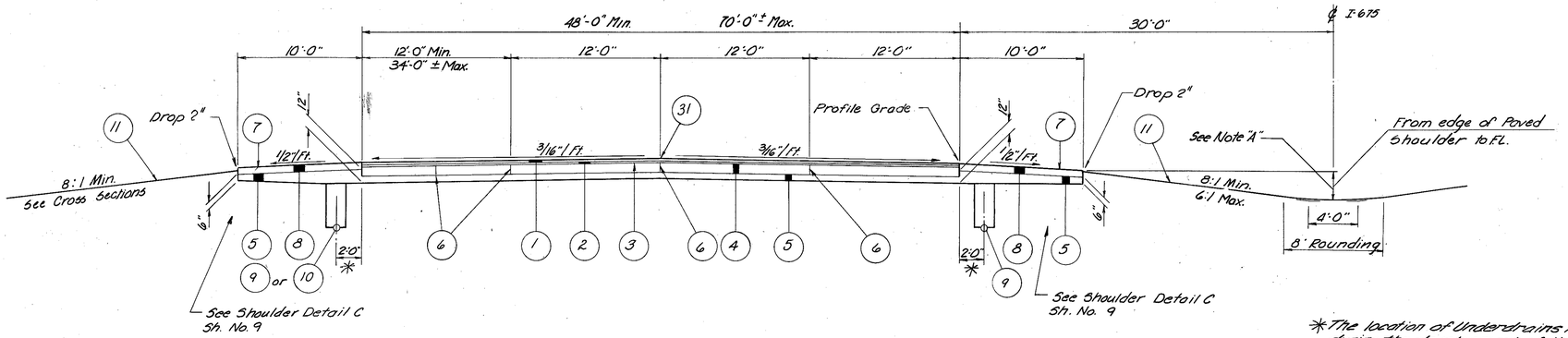
7
616

GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

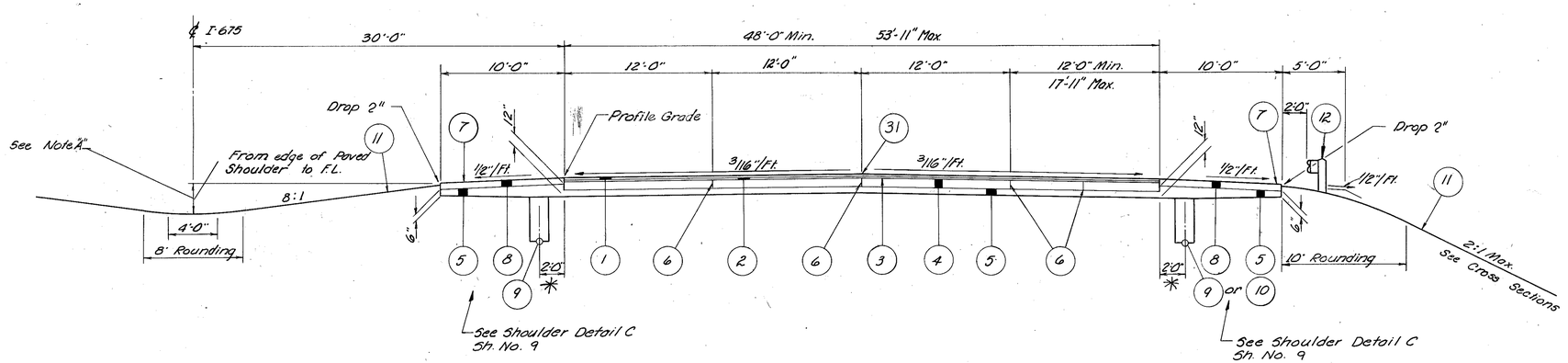
TYPE 848 ON 305

0 1 2 3 4 5 10
SCALE



Note "A", 2'-5" except where otherwise shown on Cross Sections

*The location of Underdrains has been changed during the development of the Plans. They shall be placed as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.



NORMAL SECTION

(See Pav't. Details for Slope & Width Variations)
Sta. 368+25.00 (N.B. & S.B.) to Sta 399+73.00 (N.B. & S.B.)

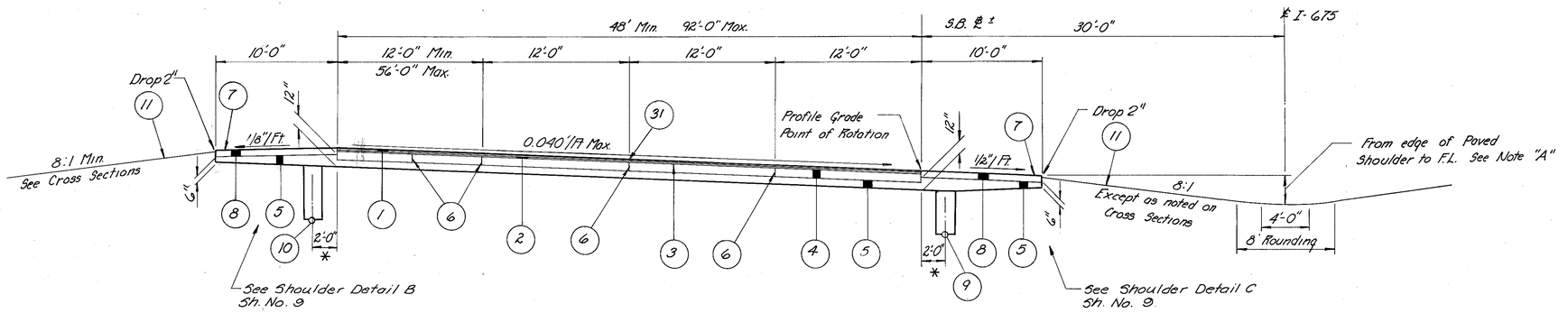
Note: For Item Legend see Sh. No. 5

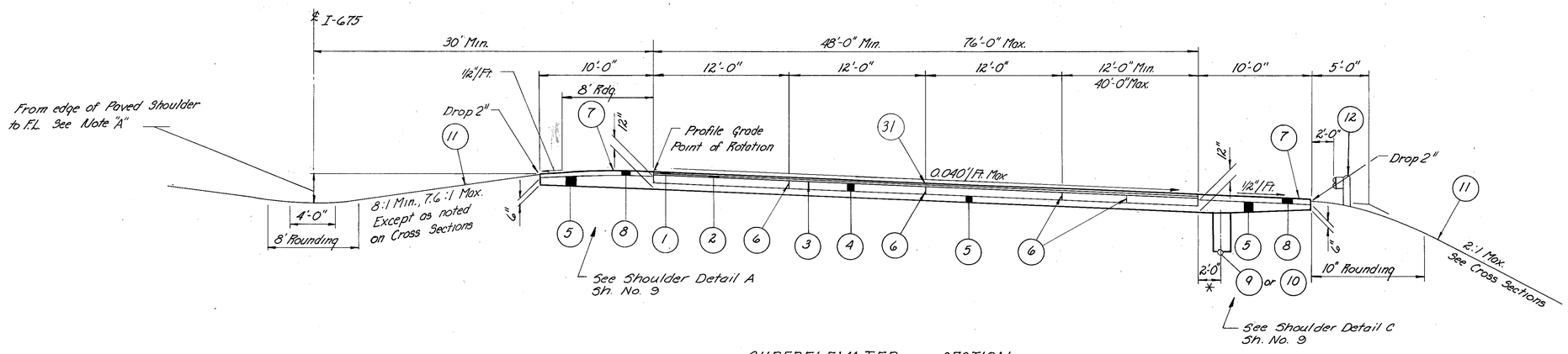
GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

0 1 2 3 4 5 10
SCALE





SUPERELEVATED SECTION

(See Pav't. Details for slope & Width Variations)
(See Superelevation Tables for Edge Elevations)

Sta. 355 + 00.00 (N.B.) to Sta. 368 + 25.00 (N.B.)
Sta. 362.5 + 35.51 (S.B.) to Sta. 368 + 25.00 (S.B.)
Sta. 399 + 75.00 (N.B. & S.B.) to Sta. 417 + 00.00 (N.B. & S.B.)

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note "A", 2'-5" except where shown otherwise on Cross Sections

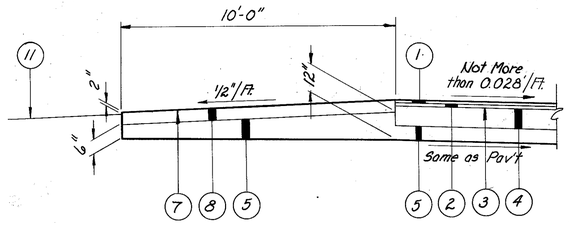
Note: For Item Legend, see Sh. No. 5

FHWA REGION	STATE	PROJECT	
5	OHIO		

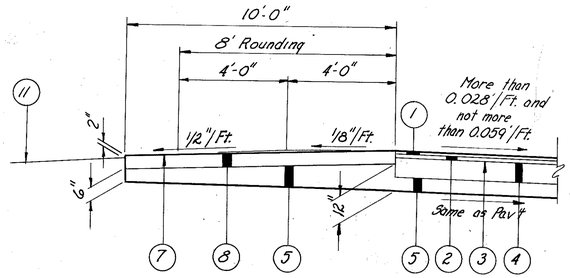
9/616

GDE 675-5.37
GREENE COUNTY

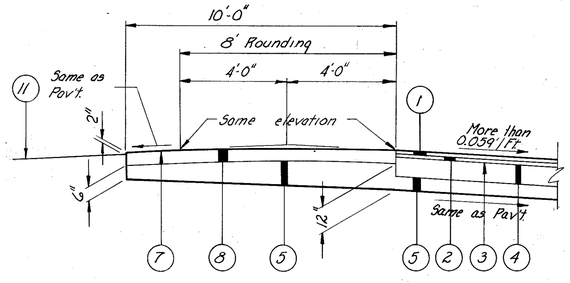
PAVED SHOULDER DETAILS



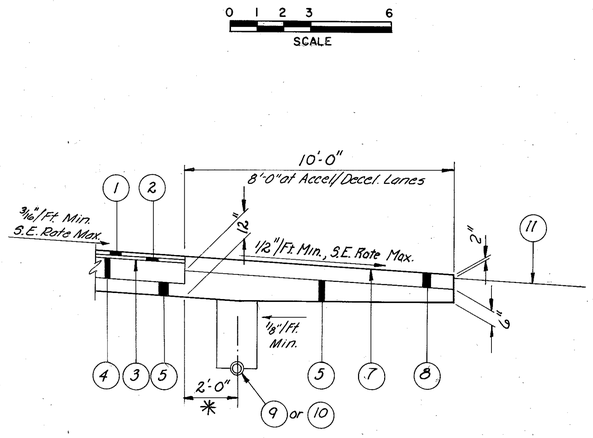
DETAIL A



DETAIL A

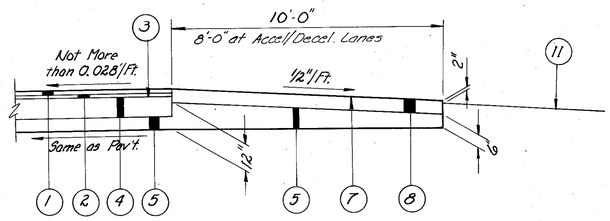


DETAIL A

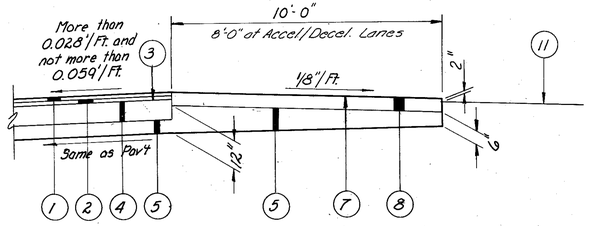


DETAIL C

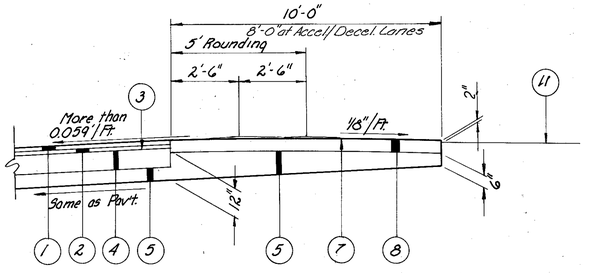
* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.



DETAIL B



DETAIL B



DETAIL B

Note : For Item Legend See Sh. No. 5

FHWA REGION	STATE	PROJECT	
5	OHIO		

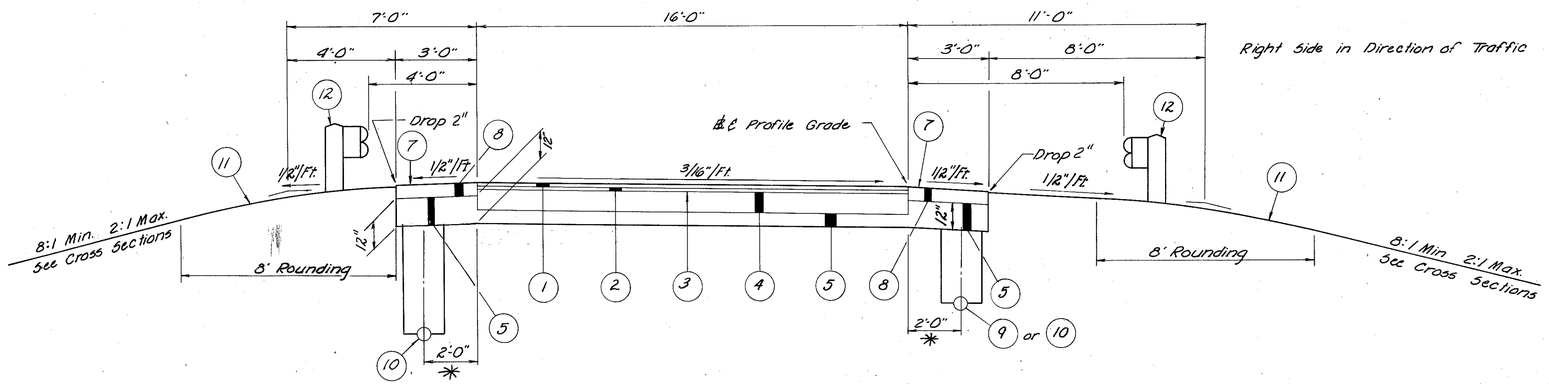
10
616

GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

0 1 2 3 4 5
SCALE

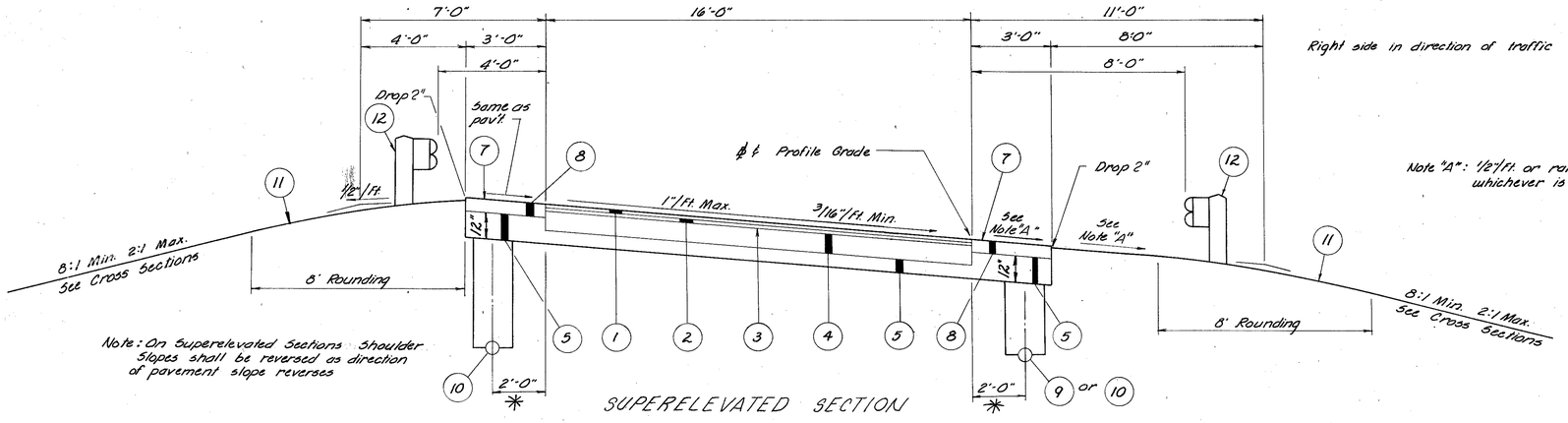


NORMAL SECTION

(See Pavement Details for Slope & Width Variations)

Ramp B Sta. 331+73.16 to Sta. 338+00.00
Ramp C Sta. 324+50.00 to Sta. 331+90.03

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile sheets.



Note: On Superelevated Sections Shoulder Slopes shall be reversed as direction of pavement slope reverses

Note "A": 1/2"/ft. or rate of superelevation whichever is greater

SUPERELEVATED SECTION

(See Pavement Details for Slope and Width Variations)
(See Superelevation Tables for Edge Elevations)

Ramp B	Sta.	338+00.00	to	Sta.	352+92.93
Ramp C	Sta.	315+25.00	to	Sta.	324+50.00
Ramp D	Sta.	337+83.02	to	Sta.	352+11.41
Ramp E	Sta.	322+38.15	to	Sta.	335+01.54
Ramp F	Sta.	328+19.32	to	Sta.	333+50.00
Ramp F	Sta.	333+50.00	to	Sta.	340+58.57 (Opposite Hand for Superelevation)
Ramp G	Sta.	344+72.18	to	Sta.	354+01.66
Ramp H	Sta.	323+21.06	to	Sta.	338+85.09

Note: For Item Legend, see Sh. No. 5

RAMP TYPICAL SECTIONS

FHWA REGION	STATE	PROJECT	
5	OHIO		

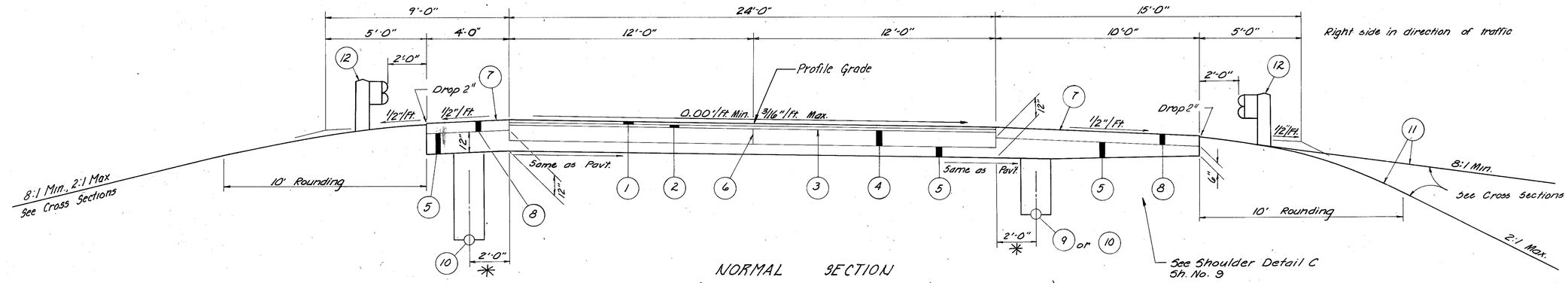
11
616

GRE-675-537
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

0 1 2 3 4 5
SCALE

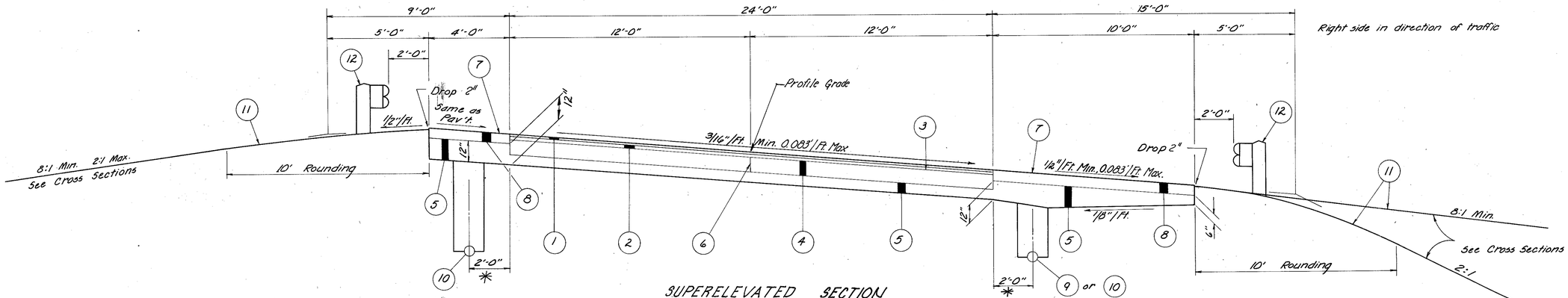


NORMAL SECTION

(See Pavement Details for Slope & Width Variations)

Ramp A	Sta. 301+17.15	to	Sta. 304+81.91
Ramp A	Sta. 310+15.24	to	Sta. 310+60.84
Ramp A	Sta. 310+60.84	to	Sta. 311+06.43 (Opposite Hand for Pavement Slopes)
Ramp A	Sta. 340+58.57	to	Sta. 341+18.54 (Opposite Hand for Pavement Slopes)
Ramp A	Sta. 341+18.54	to	Sta. 341+78.50

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.



SUPERELEVATED SECTION

(See Pavement Details for Slope & Width Variations)
(See Superelevation Tables for Edge Elevations)

Ramp A	Sta. 304+81.91	to	Sta. 310+15.24
Ramp A	Sta. 311+06.43	to	Sta. 320+84.18 (Opposite Hand for Superelevation)
Ramp A	Sta. 320+84.18	to	Sta. 324+21.88 Structure No. GRE-675-057G & Approach Slabs (Opposite Hand for Superelevation)
Ramp A	Sta. 324+21.88	to	Sta. 329+47.42 (Opposite Hand for Superelevation)
Ramp A	Sta. 329+47.42	to	Sta. 332+39.66 Structure No. GRE-35-0074 & Approach Slabs (Opposite Hand for Superelevation)
Ramp A	Sta. 332+39.66	to	Sta. 340+58.57 (Opposite Hand for Superelevation)
Ramp A	Sta. 341+78.50	to	Sta. 355+00.00

Note: For Item Legend see Sh. No. 5

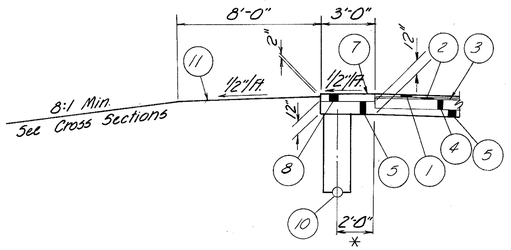
RAMP A TYPICAL SECTIONS

TYPICAL SECTIONS

TYPE 848 ON 305

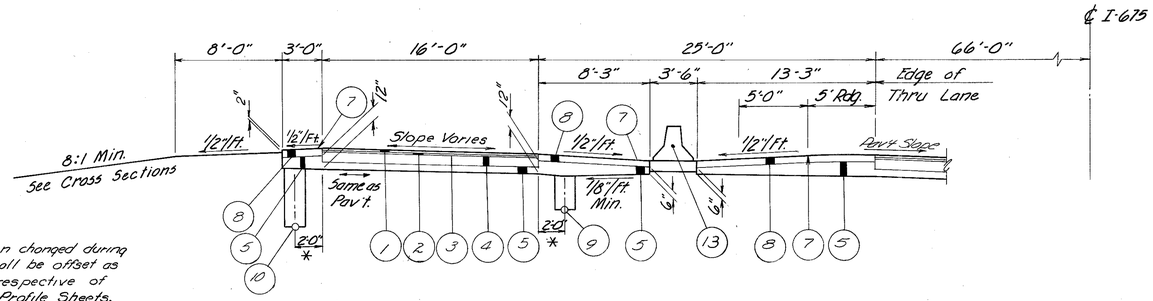
0 1 2 3 4 5 10
SCALE

GRE-675-5.37
GREENE COUNTY

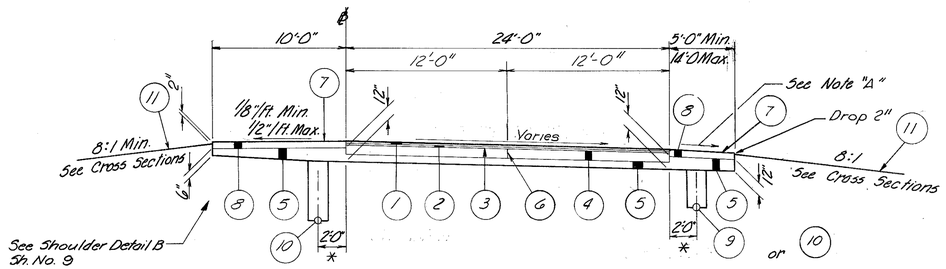


3' SHOULDER DETAIL

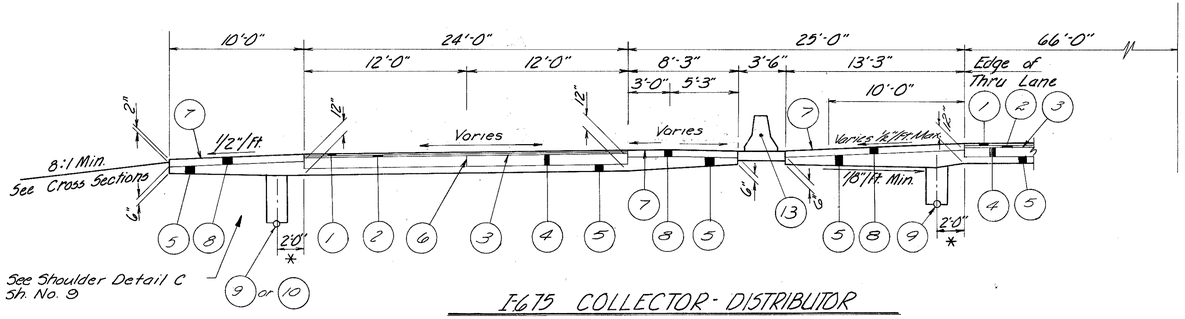
* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.



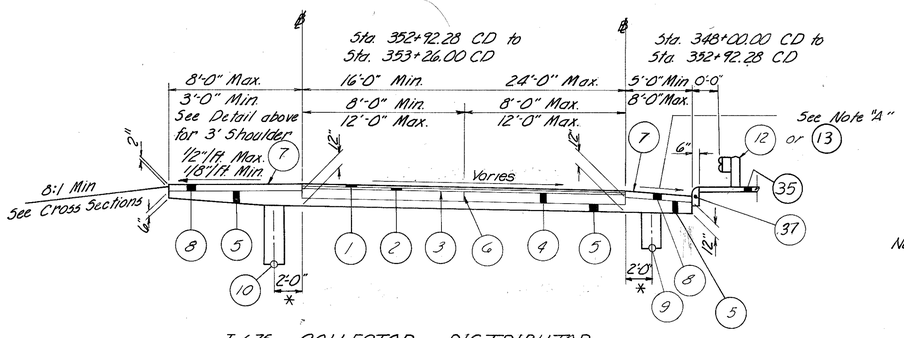
I675 COLLECTOR DISTRIBUTOR
(See Pavt. Details for Slope & Width Variations & Edge Elevations)
I-675 Sta. 344+67.74 to Sta. 348+00.00



I-675 COLLECTOR - DISTRIBUTOR
(See Pavt. Details for Slope & Width Variations & Edge Elevations)
Sta. 353+26.00 CD to Sta. 365+89.72 CD

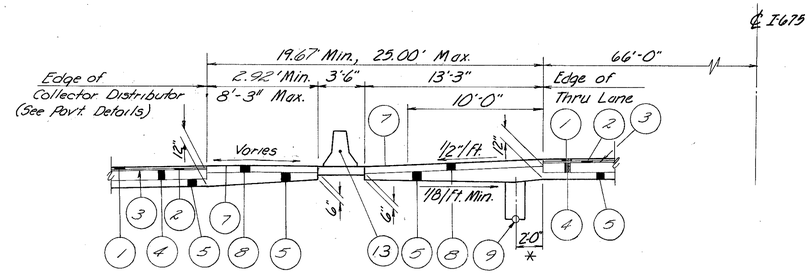


I-675 COLLECTOR - DISTRIBUTOR
See Pav't Details for Slope & Width Variations & Edge Elevations
I-675 Sta. 334+99.46 to Sta. 344+67.74



I-675 COLLECTOR DISTRIBUTOR
See Pavt. Details for Slope & Width Variations & Edge Elevations
Sta. 348+00.00 CD to Sta. 353+26.00 CD.

Note "A", 1/2"/Ft. or S.E. rate whichever is greater



I-675 COLLECTOR - DISTRIBUTOR
See Pav't Details for Slope & Width Variations & Edge Elevations
I-675 Sta. 332+94.62 to Sta. 334+99.46

Note: For Item Legend see Sht. No. 5

TYPICAL SECTIONS

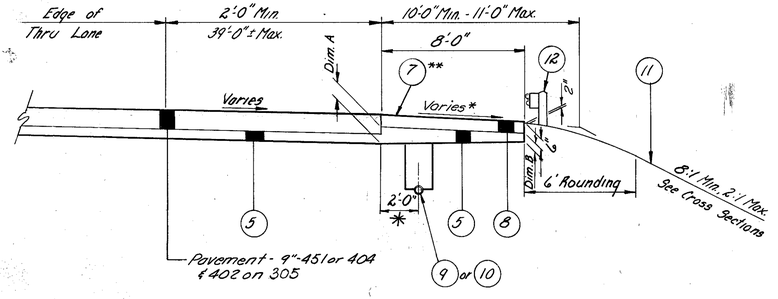
MISCELLANEOUS DETAILS

NO SCALE

FHWA REGION	STATE	PROJECT	
5	OHIO		

13
616

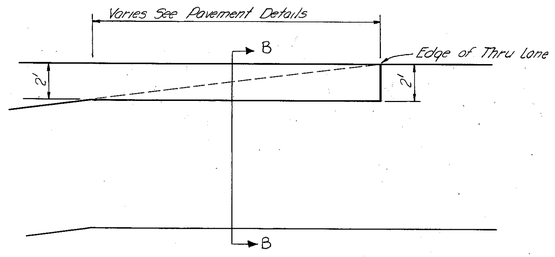
GRE-675-5.37
GREENE COUNTY



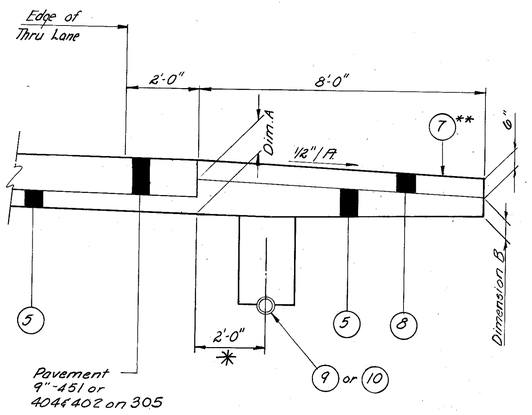
ACCELERATION & DECELERATION LANES – NORMAL

ACCELERATION & DECELERATION LANES – SUPERELEVATED

*** See Shoulder Details, Sh. No. 9



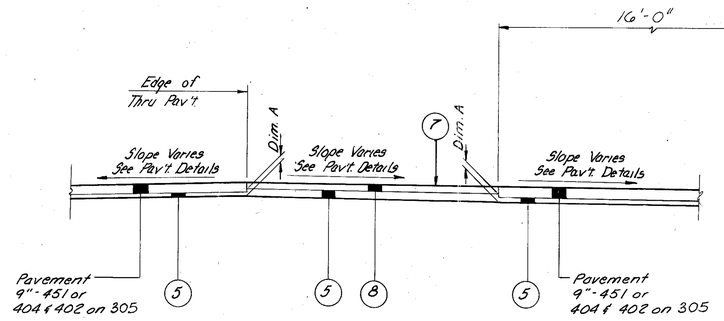
PLAN VIEW
END TREATMENT FOR SPEED CHANGE LANE TAPERS



SECTION B-B

PAVEMENT ITEMS 404 & 402 on 305
Dimension A = 12"
Dimension B = 6"

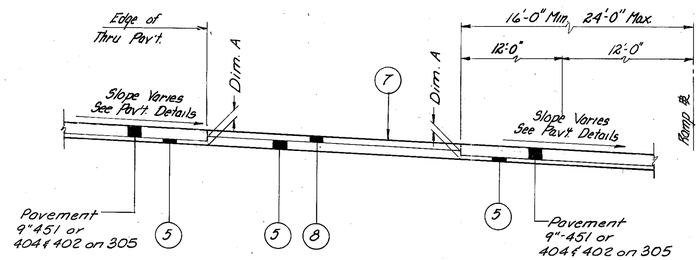
PAVEMENT ITEM 451
Dimension A = 9"
Dimension B = 3"



NORMAL SECTION OR HIGH SIDE OF SUPERELEVATION

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

** Omit when adjacent to Concrete Pavement.



LOW SIDE OF SUPERELEVATION

NOTES.
See Pavement Details for Joint Locations
See Sheet No. 5 for Item Legend.

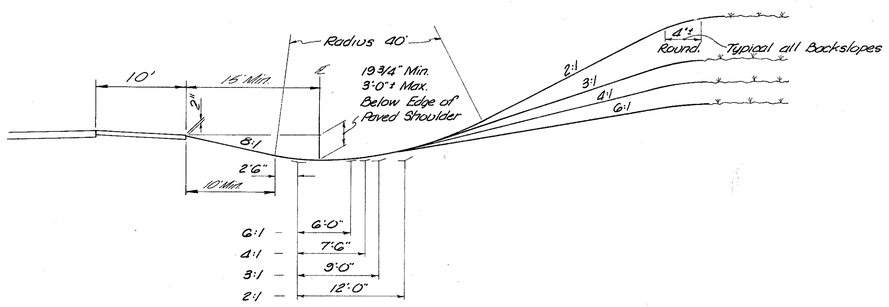
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

14
616

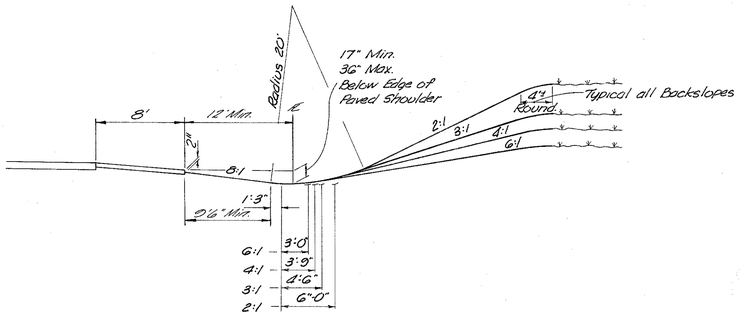
GRE-675-5.37
GREENE COUNTY

GRADING DETAILS

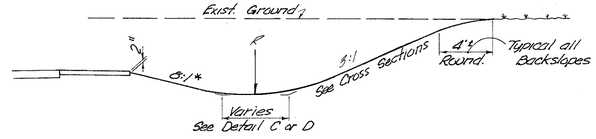
NO SCALE



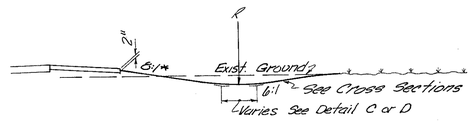
DETAIL C
I-675, US 35 & RAMPS
CUT SECTION-40' RADIUS



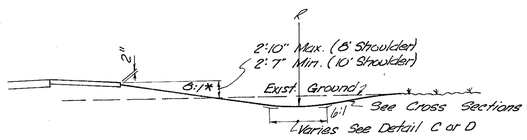
DETAIL D
ALL OTHER ROADS
CUT SECTION - 20' RADIUS



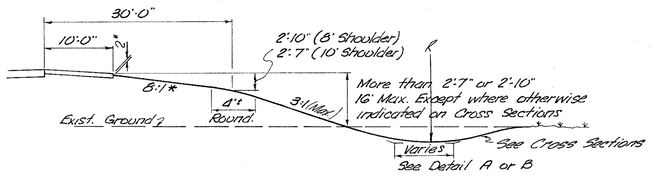
DEEP CUT IN SOIL



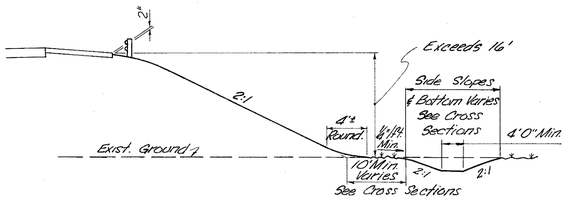
SHALLOW CUT



LOW FILL

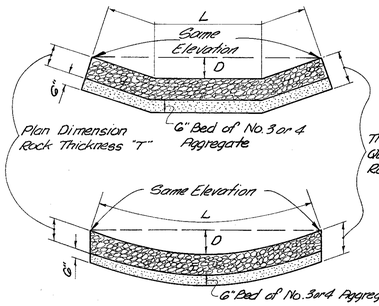


MEDIUM FILL



DEEP FILL

* For Slope Variations at Noise Barrier, See Noise Barrier Details.

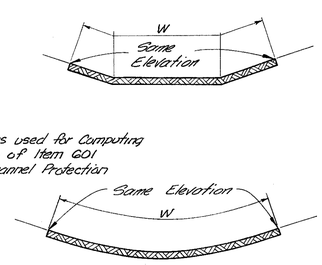


Thickness used for Computing
Quantity of Item 601
Rock Channel Protection

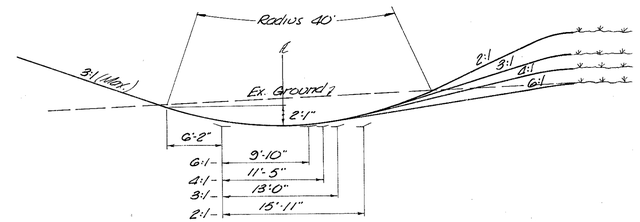
ROCK CHANNEL PROTECTION

Note: Sod shall be centered on flow line of circular ditches

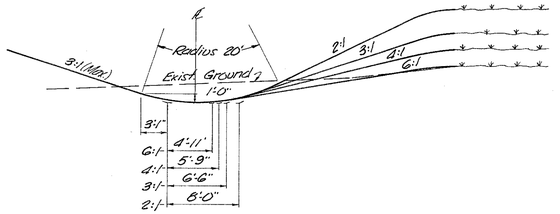
See plans for dimensions D, L, T, & W



SOD CHANNEL LINING



DETAIL A
I-675, US 35 & RAMPS
40' RADIUS



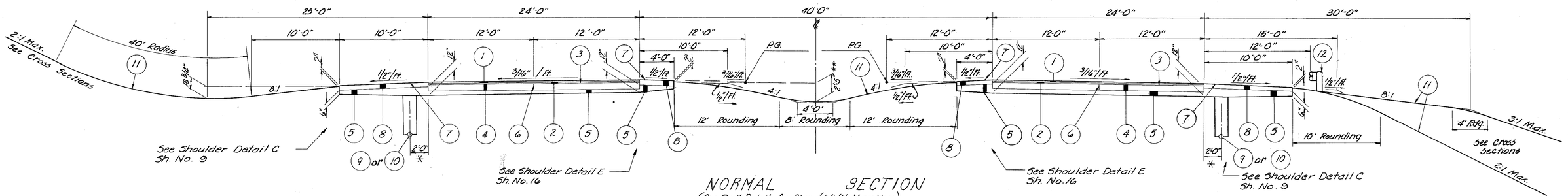
DETAIL B
ALL OTHER ROADS
20' RADIUS

GDE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

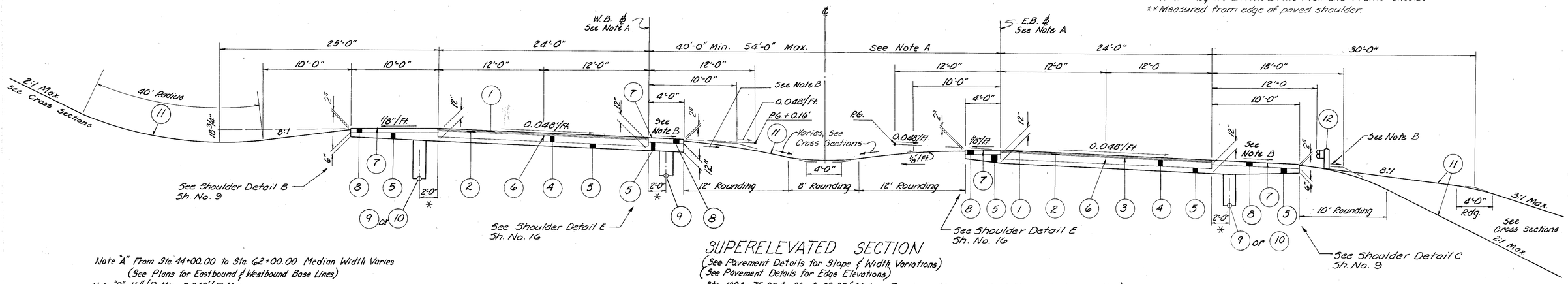
TYPE 848 ON 305

0 1 2 3 4 5 10
SCALE



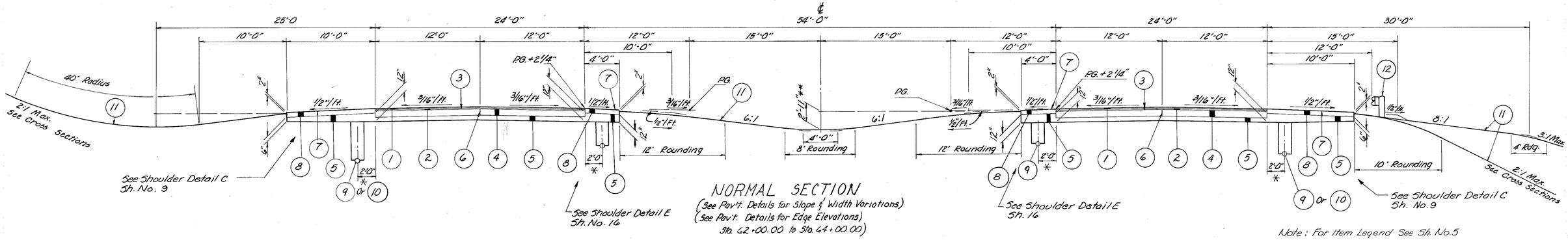
NORMAL SECTION
(See Pav't Details for Slope & Width Variations)
Sta. 1087+74.57 Rt & 1090+85.78 Lt. to Sta. 1094+75.00

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.
** Measured from edge of paved shoulder.



Note "A" From Sta. 44+00.00 to Sta. 62+00.00 Median Width Varies
(See Plans for Eastbound & Westbound Base Lines)
Note "B" 1/2"/Ft. Min., 0.048"/Ft. Max.

SUPERELEVATED SECTION
(See Pavement Details for Slope & Width Variations)
(See Pavement Details for Edge Elevations)
Sta. 1094+75.00 to Sta. 4+28.35 (Station Equation: Sta. 1106+93.02 Bk = Sta. 0+00.00 Ah'd.)
Sta. 4+28.35 to Sta. 6+58.90 Structure No. GRE-35-0009 & Approach Slabs
Sta. 56+07.82 to Sta. 58+72.02 Structure No. GRE-35-0107 R/L & Approach Slabs
Sta. 58+72.02 to Sta. 62+00.00 (See Note "A")



NORMAL SECTION
(See Pav't. Details for Slope & Width Variations)
(See Pav't. Details for Edge Elevations)
Sta. 62+00.00 to Sta. 64+00.00)

Note: For Item Legend See Sh. No. 5

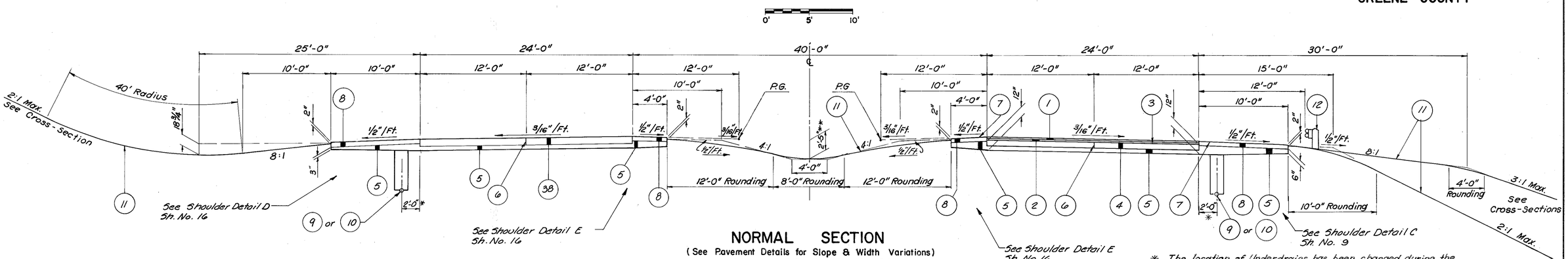
US 35 TYPICAL SECTION

TYPICAL SECTIONS

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

15A
616

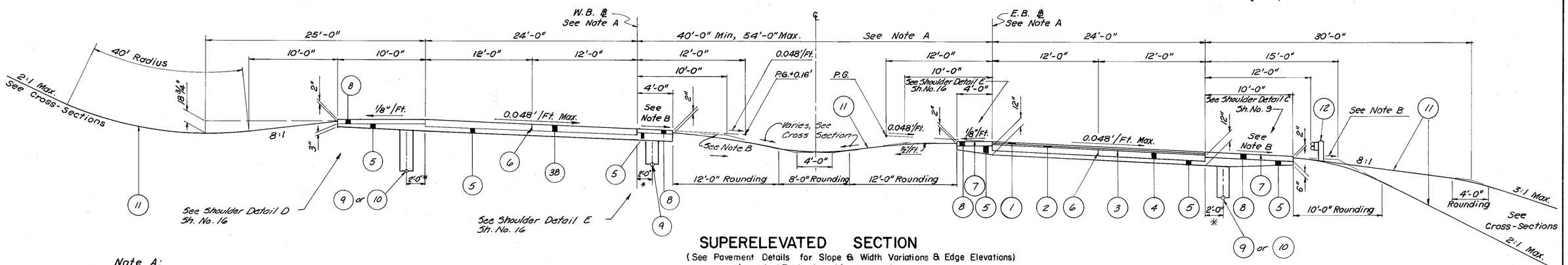
GRE-675-5.37
GREENE COUNTY



NORMAL SECTION

(See Pavement Details for Slope & Width Variations)
Sta. 6+58.90 to Sta. 14+25.00
Sta. 40+00.00 to Sta. 41+50.00

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan & Profile Sheets.
** Measure from edge of paved shoulder.



SUPERELEVATED SECTION

(See Pavement Details for Slope & Width Variations & Edge Elevations)
Sta. 14+25.00 to Sta. 28+51.00
Sta. 28+51.00 to Sta. 33+22.62 Structure No. GRE-675-0589 & Approach Slabs
Sta. 33+22.62 to Sta. 40+00.00
Sta. 41+50.00 to Sta. 44+00.00
Sta. 44+00.00 to Sta. 56+07.82 (See Note A)

Note A:
From Sta. 44+00.00 to Sta. 62+00.00 Median Width Varies (See Plans for Eastbound & Westbound Base Lines)

Note B:
½"/Ft. Min, 0.048'/Ft. Max.

NOTE: For Item Legend See Sheet No. 5.

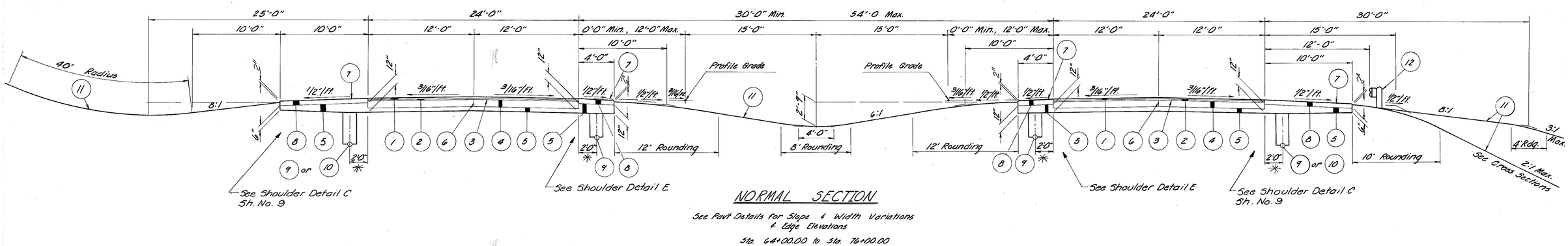
US 35 TYPICAL SECTIONS

GDE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

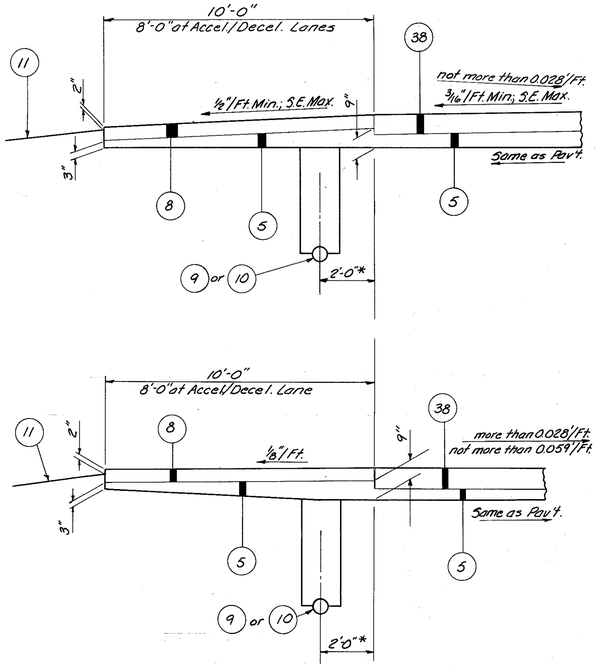
0 1 2 3 4 5 10
SCALE



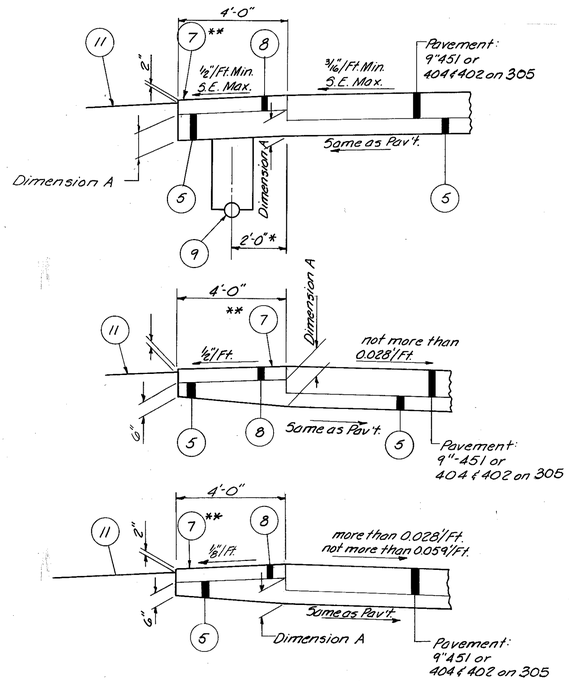
NORMAL SECTION

See Pavt Details for Slope & Width Variations & Edge Elevations

Sta. 64+00.00 to Sta. 76+00.00



SHOULDER DETAIL D



SHOULDER DETAIL E

Dimension A = 12"- For Pavement Items 404 & 402 on 305
Dimension A = 9"- For Pavement Item 451

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

** Omit when adjacent to Concrete Pavement.

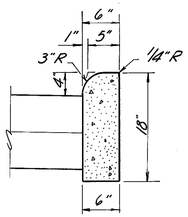
Note: For Item Legend, See Sh. No. 5

GRE - 675 - 5.37
GREENE COUNTY

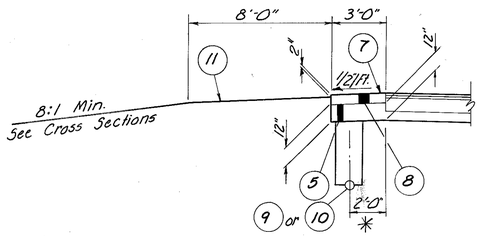
TYPICAL SECTIONS

MISCELLANEOUS DETAILS

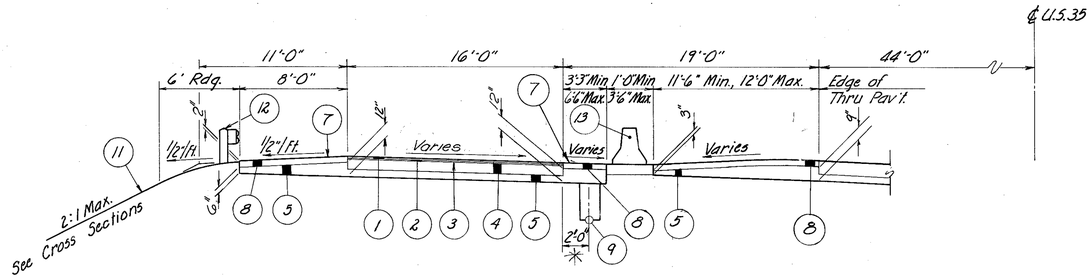
0 1 2 3 4 5 10
SCALE



CONCRETE CURB
TYPE 6. MOD. AS PER PLAN
Not to Scale

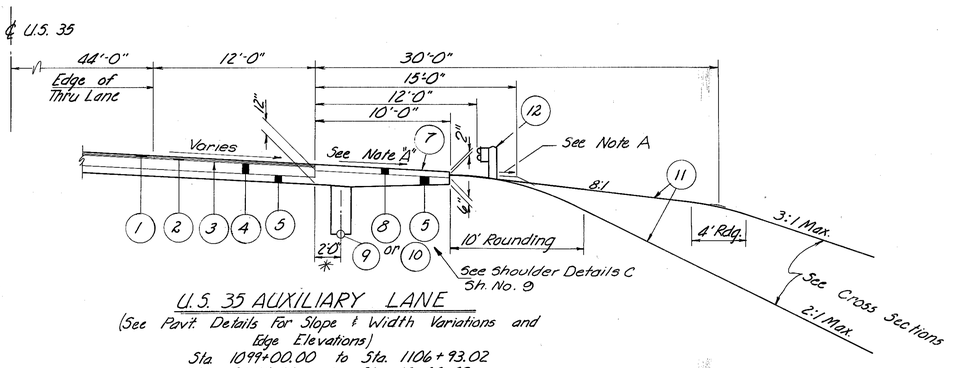


SHOULDER DETAIL FOR 16'
COLLECTOR - DISTRIBUTOR PAV'T.

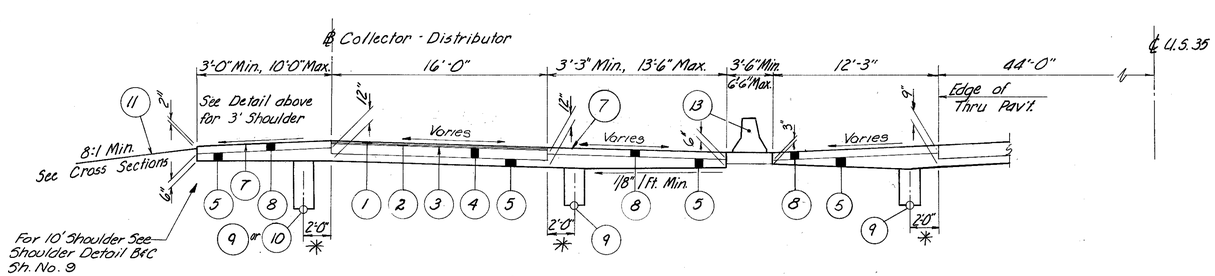


U.S. 35 COLLECTOR - DISTRIBUTOR
(See Pav't Detail for Slope & Width Variations & Edge Elevations)
Sta. 46+10.00 W.B. to Sta. 51+85.12 W.B.

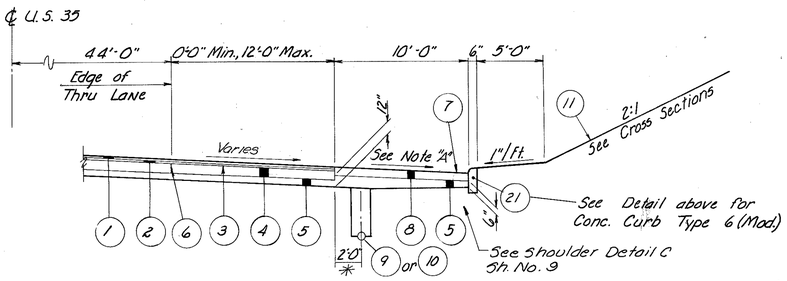
Note "A": 1/2"/Ft. or S.E. Rate whichever is greater.



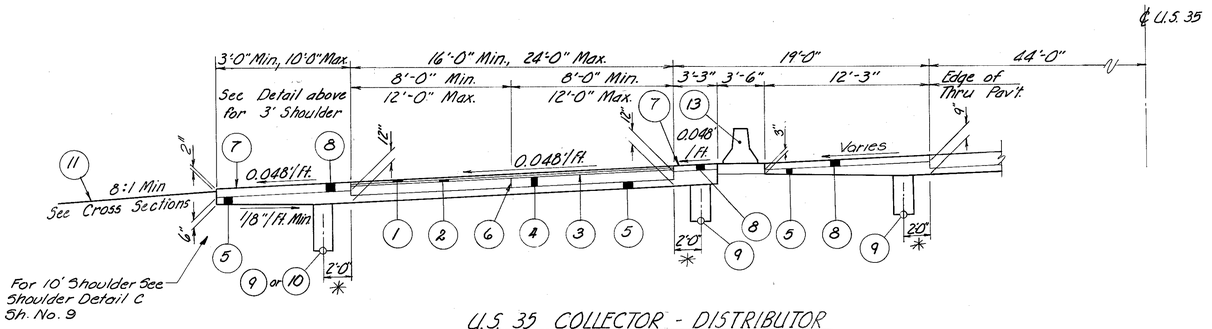
U.S. 35 AUXILIARY LANE
(See Pav't. Details for Slope & Width Variations and Edge Elevations)
Sta. 1099+00.00 to Sta. 1106+93.02
Sta. 0+00.00 to Sta. 10+00.02



U.S. 35 COLLECTOR - DISTRIBUTOR
(See Pav't. Details for Slope & Width Variations & Edge Elevations)
Sta. 36+39.20 C.D. to Sta. 46+11.66 C.D.



U.S. 35 AUXILIARY LANE & SPECIAL CURB SECTION
(See Pav't. Details for Slope & Width Variations and Edge Elevations)
Sta. 1092+90 to Sta. 1099+00.00



U.S. 35 COLLECTOR - DISTRIBUTOR
(See Pav't. Details for Slope & Width Variations & Edge Elevations)
Sta. 19+59.00 to Sta. 36+39.20

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note: For Item Legend See Sh. No. 5

U.S. - 35 MISCELLANEOUS TYPICAL SECTIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

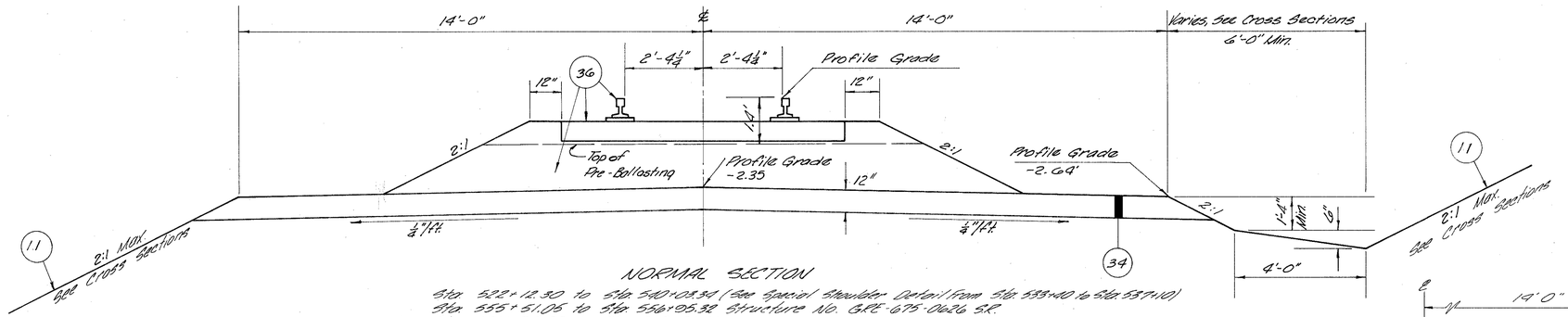
18
6/6

GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

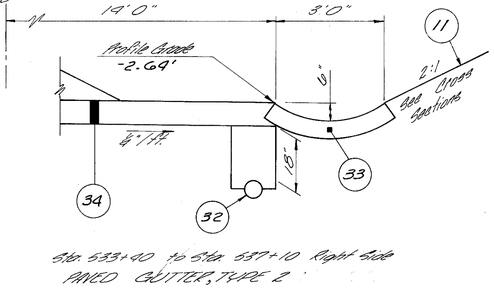
0 1 2 3 6
SCALE

PENN-CENTRAL RAILROAD

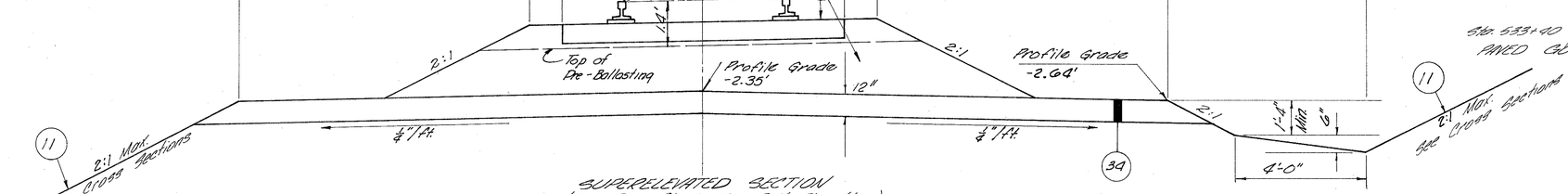


NORMAL SECTION

Sta. 522+12.30 to Sta. 540+03.34 (See Special Shoulder Detail From Sta. 533+40 to Sta. 537+10)
Sta. 555+51.05 to Sta. 556+05.32 Structure No. GRE-675-0626 SR.
Sta. 556+05.32 to Sta. 560+26.36

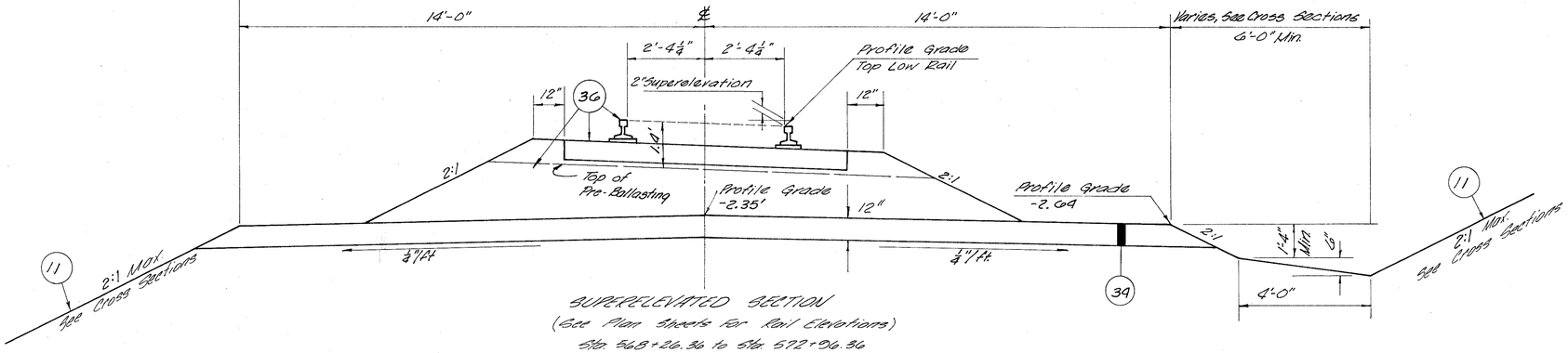


Sta. 533+40 to Sta. 537+10 Right Side
PAVED GUTTER, TYPE 2



SUPERELEVATED SECTION
(See Plan Sheets for Rail Elevations)

Sta. 540+03.34 to Sta. 542+86.23
Sta. 542+86.23 to Sta. 547+53.01 Structure No. GRE-675-0615
Sta. 547+53.01 to Sta. 555+51.05



SUPERELEVATED SECTION
(See Plan Sheets for Rail Elevations)

Sta. 568+26.36 to Sta. 572+96.36

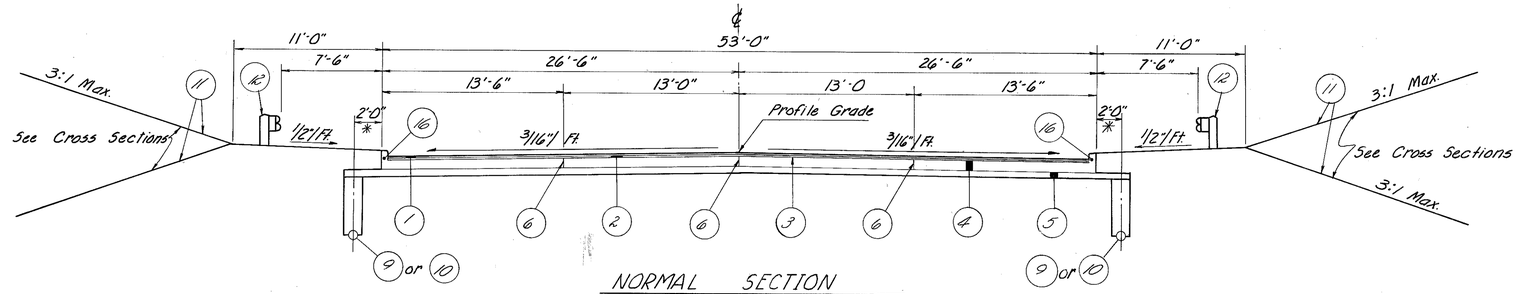
Note: For Item Legend, See Sh. No. 5

GRE - 675 - 5.37
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

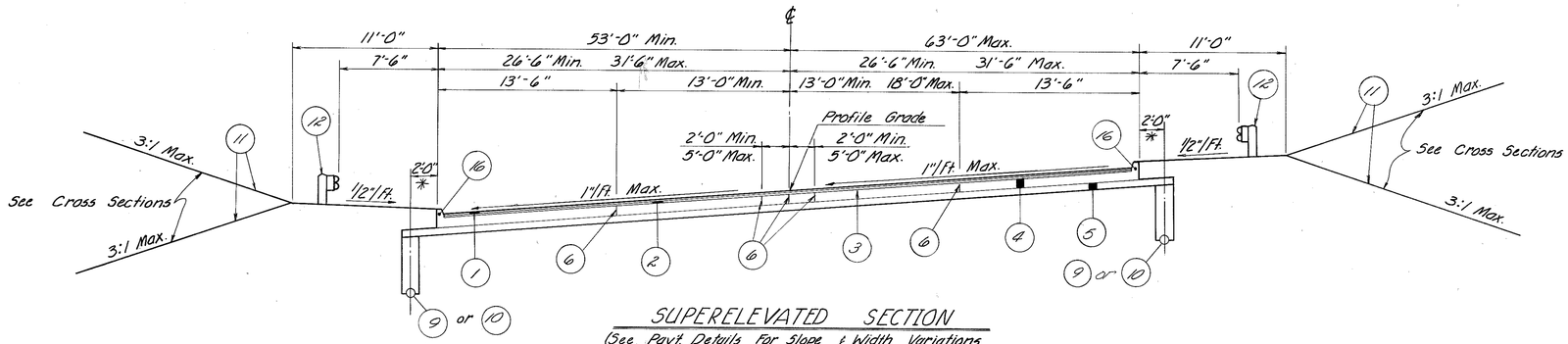
0 1 2 3 4 5 10
SCALE



NORMAL SECTION

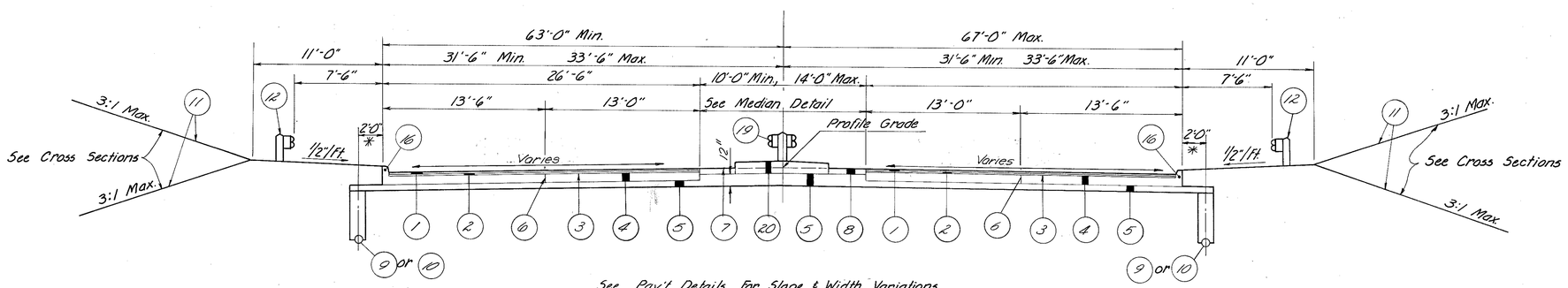
(See Pavt. Details For Slope & Width Variations)
Sta. 36+00.00 to Sta. 36+67.50
Sta. 36+67.50 to Sta. 41+39.64 Structure No. GRE-675-0616 & Approach Slabs
Sta. 41+39.64 to Sta. 41+50.00

*The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

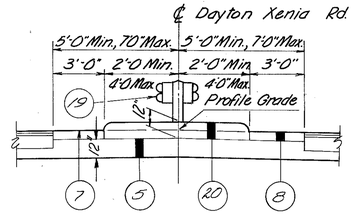


SUPERELEVATED SECTION

(See Pavt. Details For Slope & Width Variations & Edge Elevations)
Sta. 14+74.50 to Sta. 18+30.89
Sta. 29+39.77 to Sta. 36+00.00 (See Special Ditch Section, Left Side)
Sta. 41+50.00 to Sta. 45+50.84

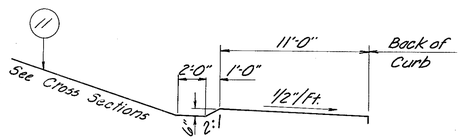


See Pavt. Details For Slope & Width Variations & Edge Elevations
Sta. 18+30.89 to Sta. 29+39.77 (See Special Ditch Section, Left Side)



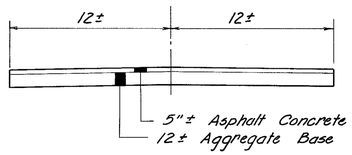
ITEM 612 CONCRETE MEDIAN MOD. AS PER PLAN

(See Pavt. Details For Median Width Variations)
Sta. 18+30.89 to Sta. 29+39.77
See Sheet 22 for additional details



SPECIAL DITCH SECTION

Sta. 28+00 to Sta. 32+00, Left Side



DAYTON XENIA RD.

Not to Scale

Note: For Item Legend, See Sh. No. 5

RELOC. DAYTON-XENIA RD. TYPICAL SECTIONS

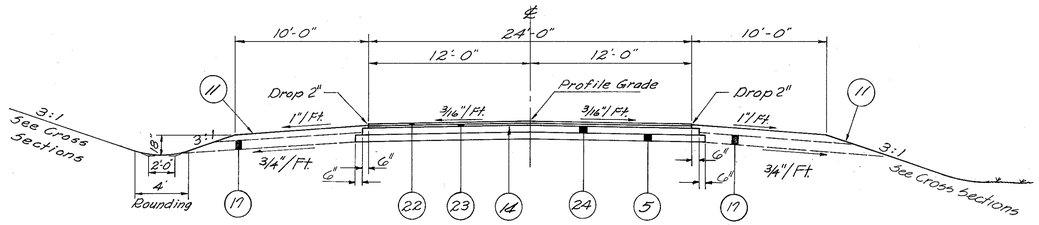
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

20
616

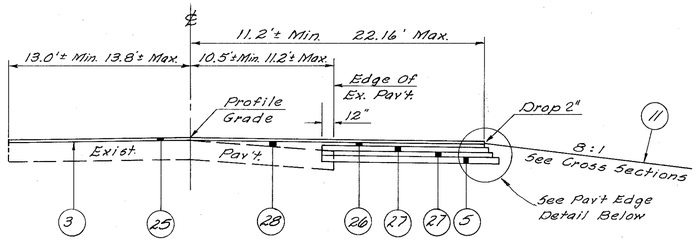
GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS
TYPE 848 ON 304

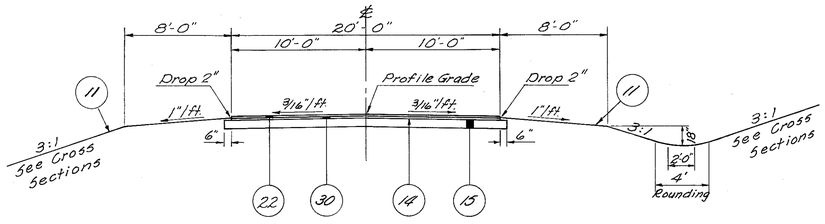
0 1 2 3 4 5 10
SCALE



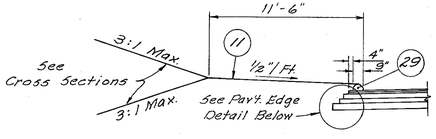
WILDONNA DRIVE
(See Pav't Details For Slope & Width Variations)
Sta. 0+76.00 to Sta. 4+10



DAYTON XENIA R.D.
(See Pav't Details For Slope & Width Variations)
Sta. 46+50.00 to Sta. 49+00.00

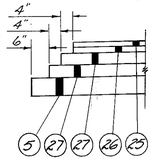


SERVICE ROAD B
(See Pav't Details For Slope & Width Variations)
Sta. 0+62.48 to Sta. 3+80.00

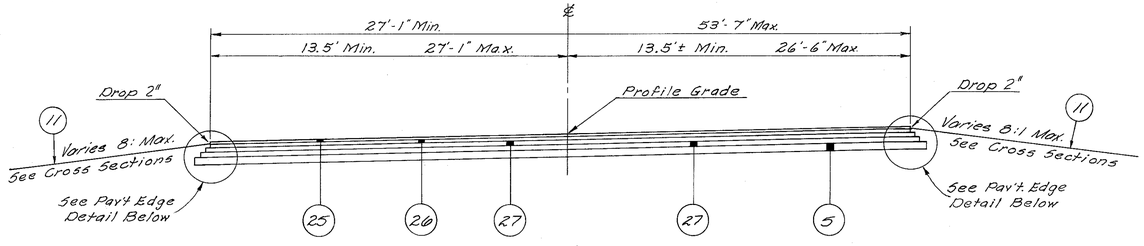


SHOULDER TREATMENT
WITH ASPHALT CURB

See Std. Drwg. BP-5 For Details Of Asphalt Concrete Curb



PAVEMENT EDGE DETAIL
No Scale



DAYTON XENIA R.D.
(See Pav't. Details For Slope & Width Variations)
Sta. 11+00.00 to Sta. 14+74.50 (See Detail For Shoulder Treatment With Asphalt Curb)
Sta. 45+50.84 to Sta. 46+50.00 (See Detail For Shoulder Treatment With Asphalt Curb)

For Item Legend, See Sh. No. 5
For Slope Treatment, See Sh. No. 14

DAYTON XENIA R.D., WILDONNA DR. & SERVICE RD. B TYPICAL SECTIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

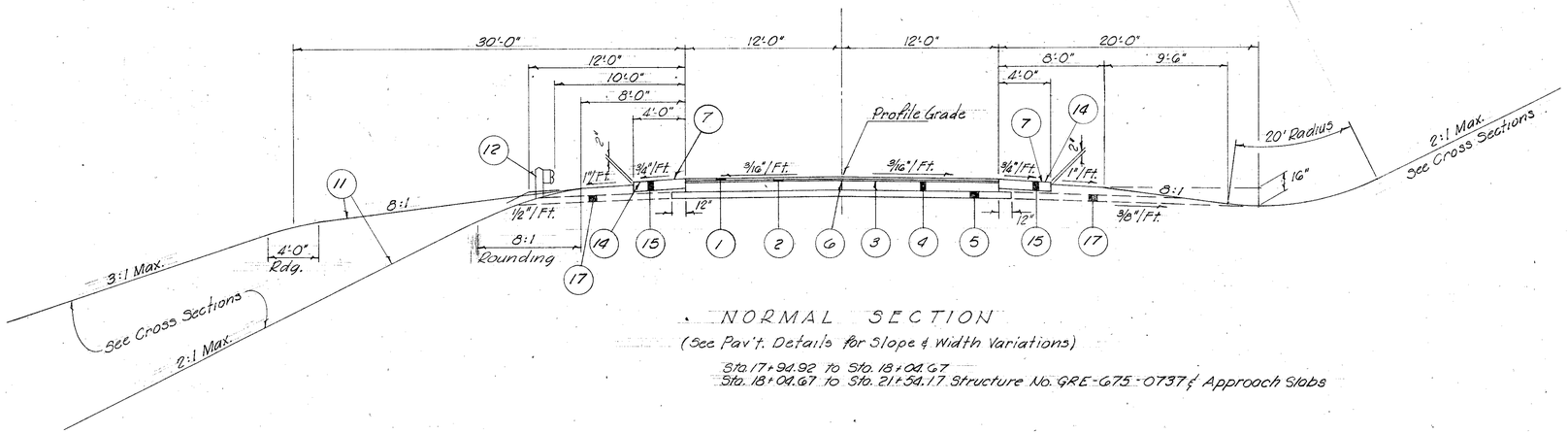
21
616

GRE-675-5.37
GREENE COUNTY

TYPICAL SECTIONS

TYPE 848 ON 305

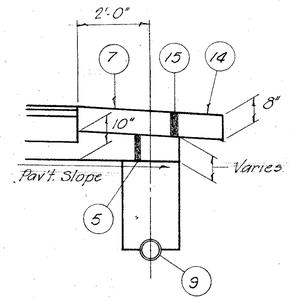
0 1 2 3 4 5 10
SCALE



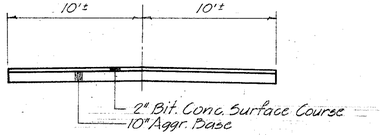
NORMAL SECTION

(See Pav't. Details for Slope & Width Variations)

Sta. 17+94.92 to Sta. 18+04.67
Sta. 18+04.67 to Sta. 21+54.17 Structure No. GRE-675-0737 & Approach Slabs

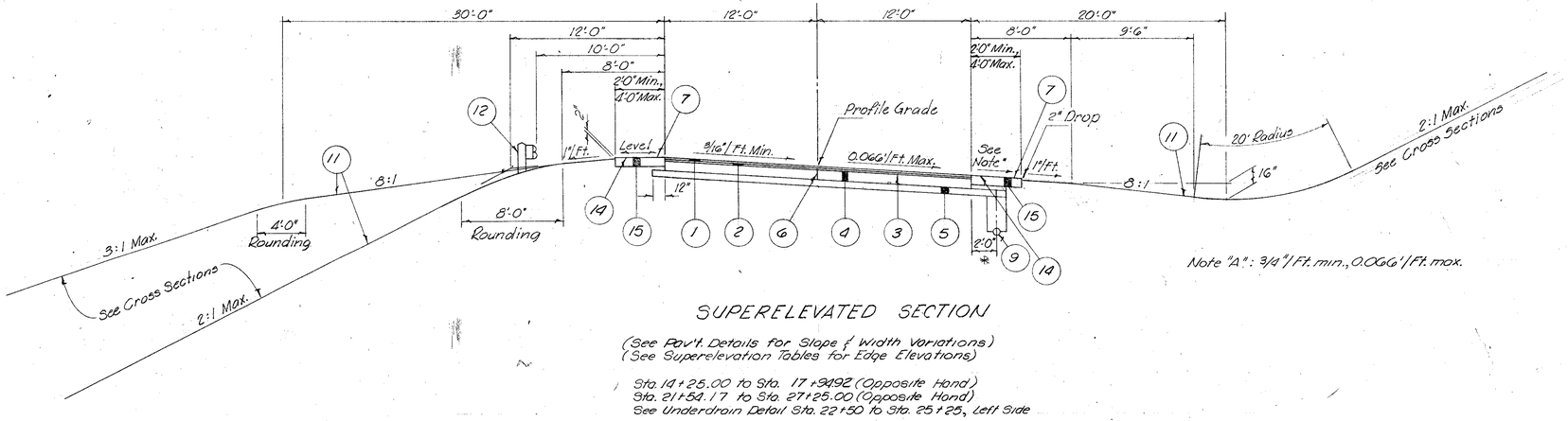


SHOULDER DETAIL



Existing Pavement

Not to scale



Note "A": 3/16"/Ft. min., 0.066'/Ft. max.

SUPERELEVATED SECTION

(See Pav't. Details for Slope & Width Variations)
(See Superelevation Tables for Edge Elevations)

Sta. 14+25.00 to Sta. 17+94.92 (Opposite Hand)
Sta. 21+54.17 to Sta. 27+25.00 (Opposite Hand)
See Underdrain Detail Sta. 22+50 to Sta. 25+25, Left Side

* The location of Underdrains has been changed during the development of the plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note: For Item Legend, see Sh. No. 5

KEMP ROAD TYPICAL SECTIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

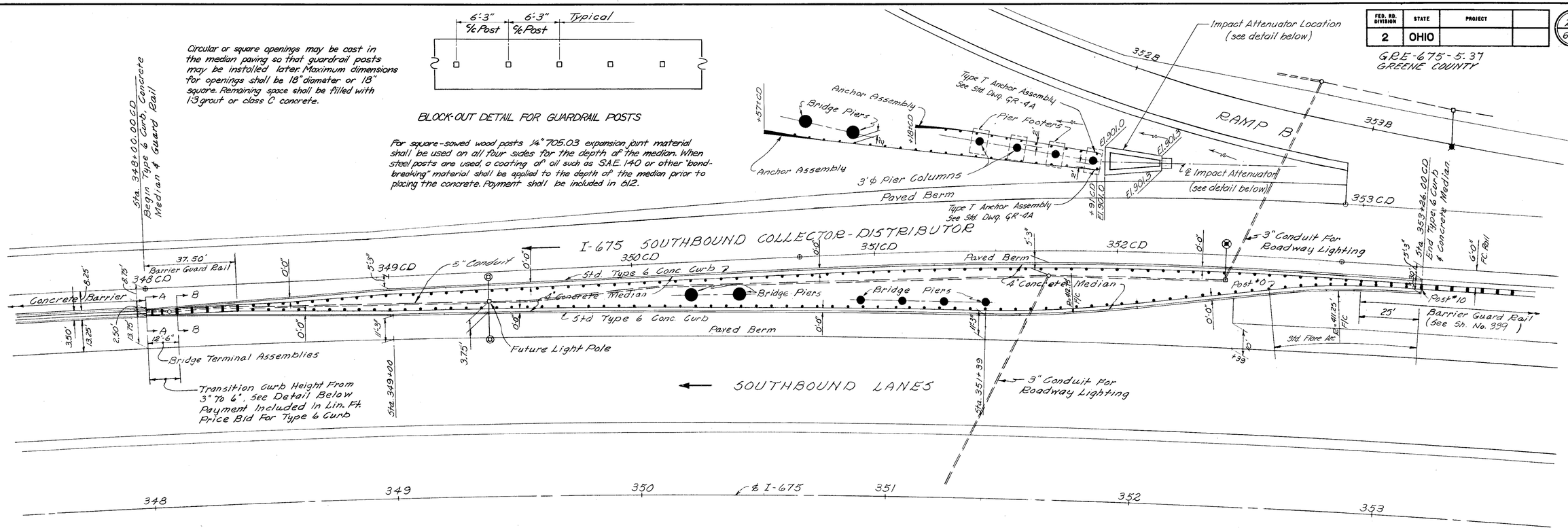
22
616

G.R.E-675-5.37
GREENE COUNTY

Circular or square openings may be cast in the median paving so that guardrail posts may be installed later. Maximum dimensions for openings shall be 18" diameter or 18" square. Remaining space shall be filled with 1:3 grout or class C concrete.

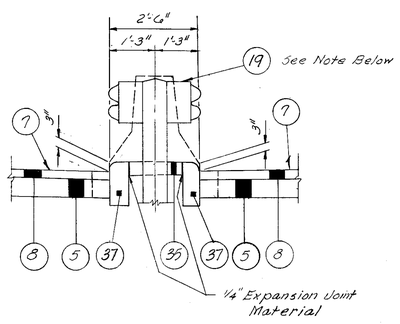
BLOCK-OUT DETAIL FOR GUARDRAIL POSTS

For square-sawed wood posts ¼" 705.03 expansion joint material shall be used on all four sides for the depth of the median. When steel posts are used, a coating of oil such as S.A.E. 140 or other "bond-breaking" material shall be applied to the depth of the median prior to placing the concrete. Payment shall be included in 612.

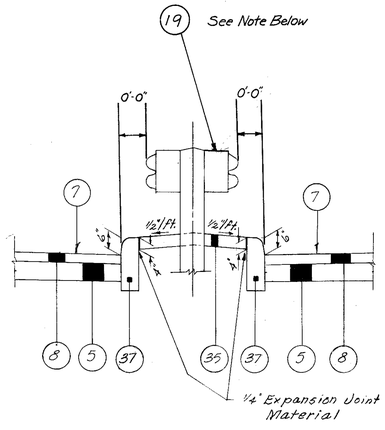


Note:
All Dimensions Shown To Guard Rail Are To The Face Of Guard Rail.

DETAIL
CONCRETE MEDIAN - STA. 348+00 CD to STA. 353+26
SCALE: 1"=20'

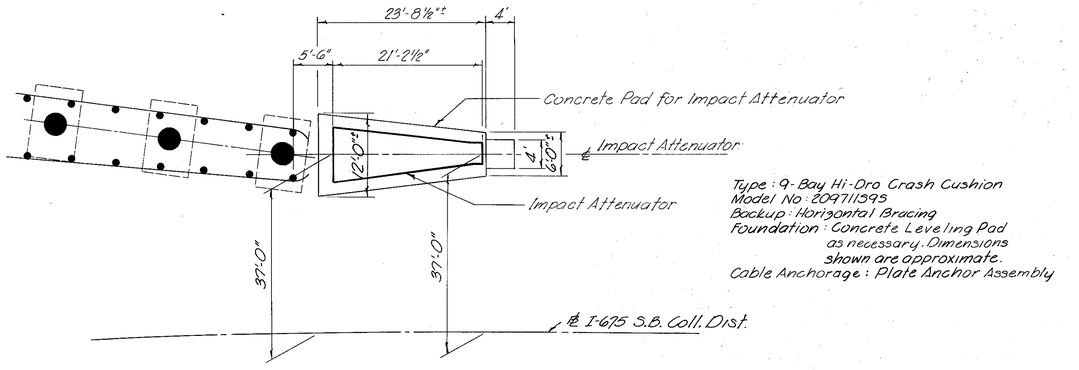


SECTION A-A



SECTION B-B

NOTE:
Thickness Of Spacer Blocks Shall Be Varied Between Section A-A & Section B-B So That The Rail Elements Can Be Attached To The Face Of The Concrete Barrier As Per Standard Drawing GR-3.



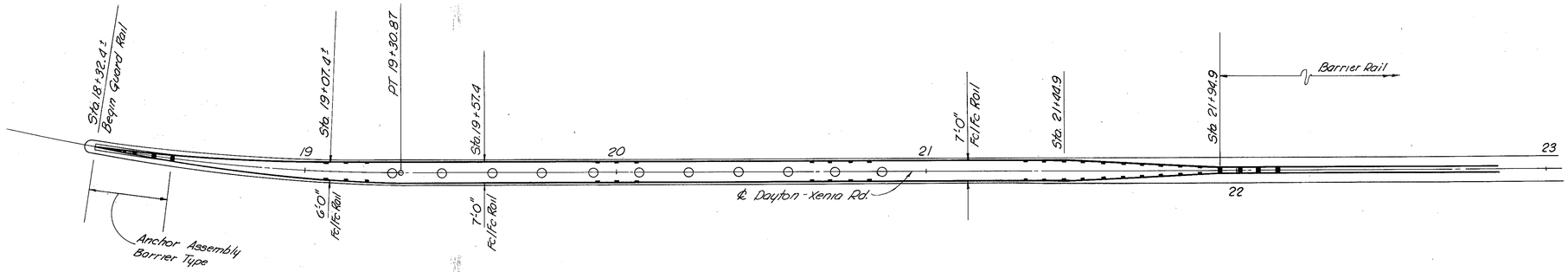
IMPACT ATTENUATOR DETAIL

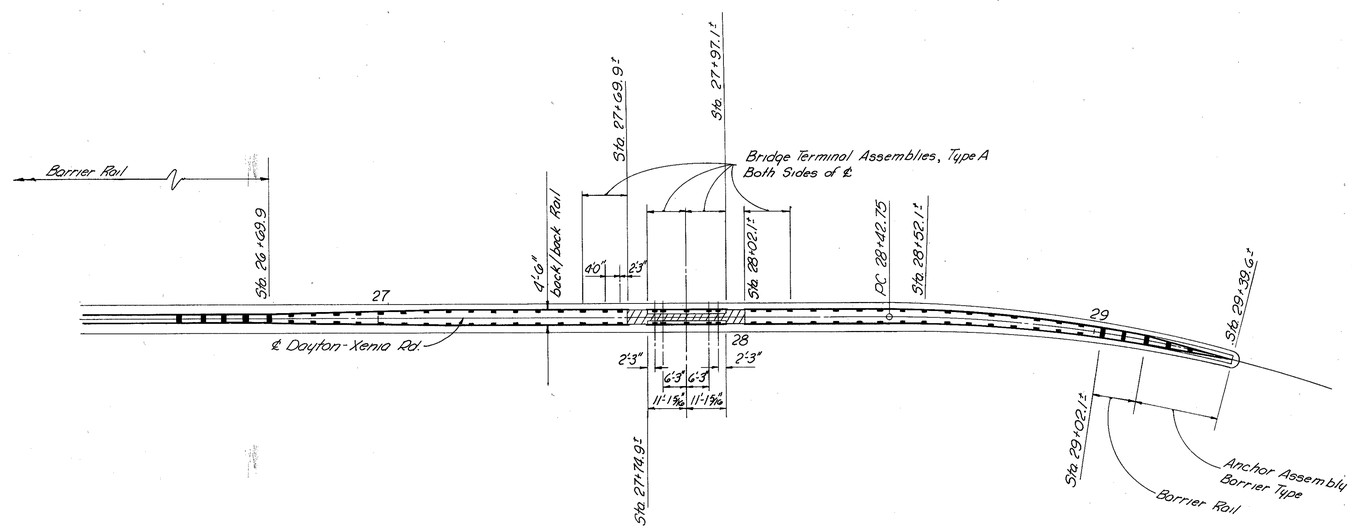
Type: 9-Bay Hi-Dro Crash Cushion
Model No: 209711395
Backup: Horizontal Bracing
Foundation: Concrete Leveling Pad as necessary. Dimensions shown are approximate.
Cable Anchorage: Plate Anchor Assembly

All Guard Rail and Appurtenances shall be in Accordance with the Standard Drawings.

MISCELLANEOUS DETAILS

GRE-675-5.37
GREENE COUNTY





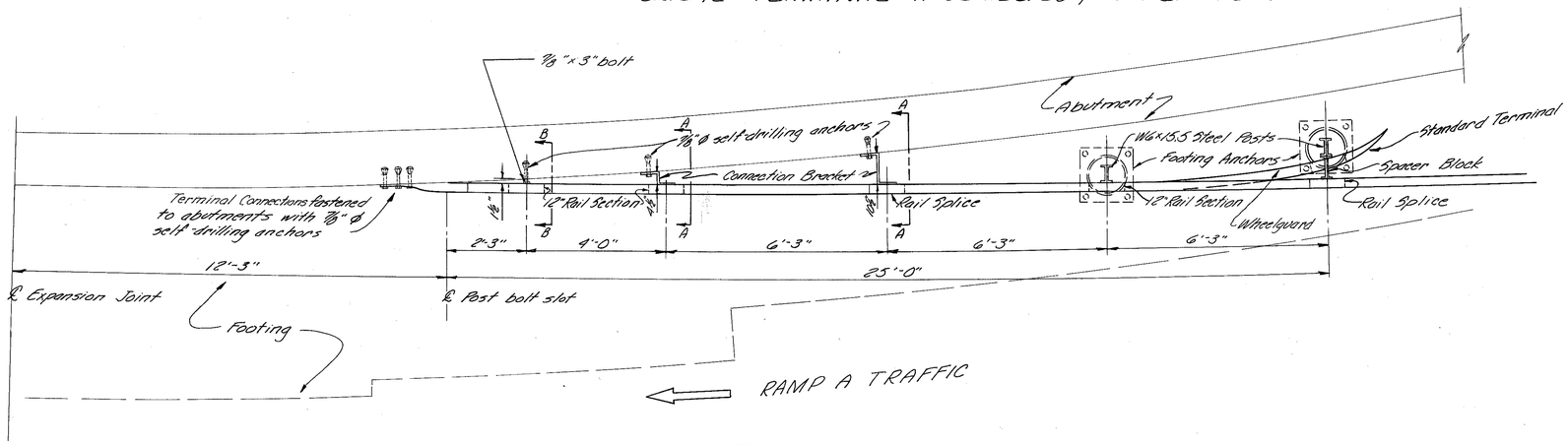
DAYTON-XENIA RD GUARD RAIL DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

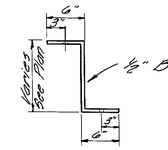
24
616

GRE-675-5.37
GREENE COUNTY

BRIDGE TERMINAL ASSEMBLIES, AS PER PLAN



SOUTHEAST WING WALL
ABUTMENT NO. 2
BRIDGE NO. GRE-675-0615

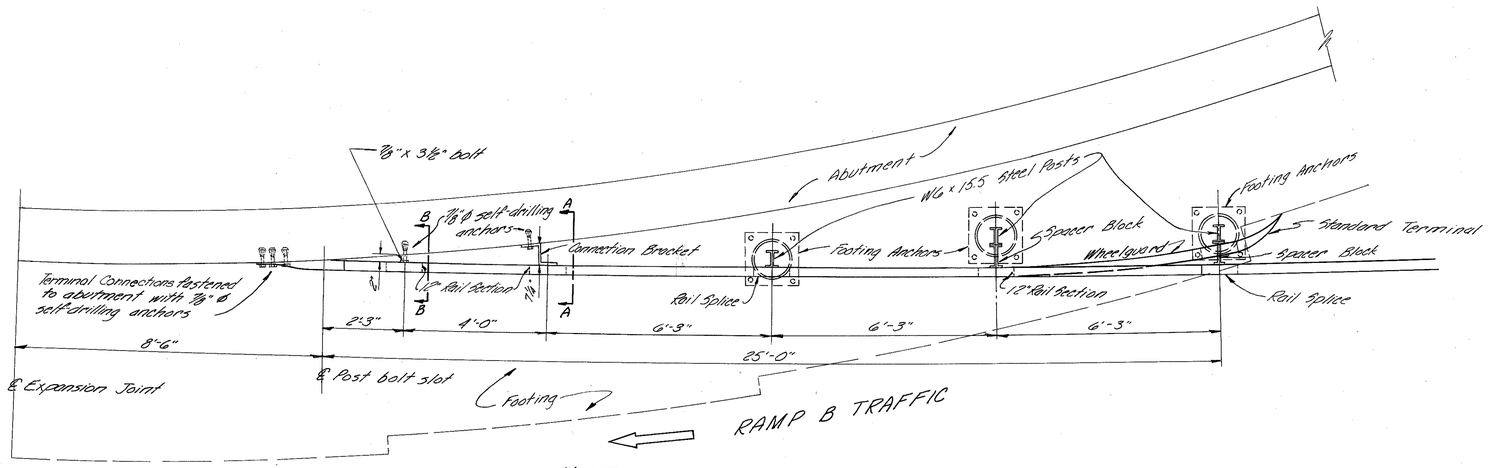


Plan

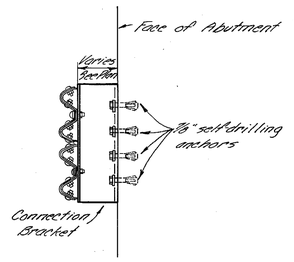
Elevation

Note:
All ½" Bent Steel Plates shall be galvanized in accordance with the requirements of 606.02

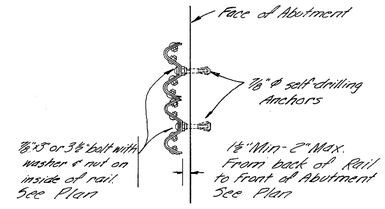
CONNECTION BRACKET



NORTHWEST WING WALL
ABUTMENT NO. 1
BRIDGE NO. GRE-675-0616



SECTION A-A



SECTION B-B

ITEM 606-Bridge Terminal Assemblies, As per plan

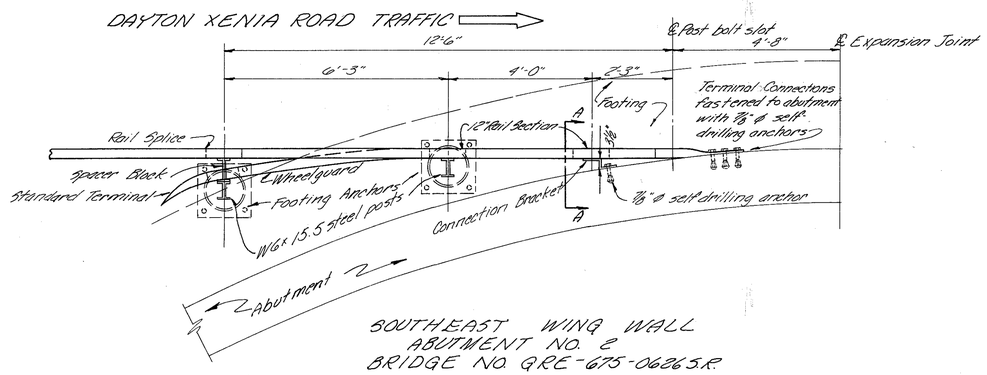
PAYMENT: The Unit Price bid for Bridge Terminal Assemblies As per plan, shall include the additional cost in excess of normal guard rail cost, for steel posts, Concrete encasement, wheel guards, Terminal Connections, connection brackets, self drilling anchors and incidentals necessary to complete this Item.

Cost of Footing anchors shall be included in the unit price bid for guardrail.

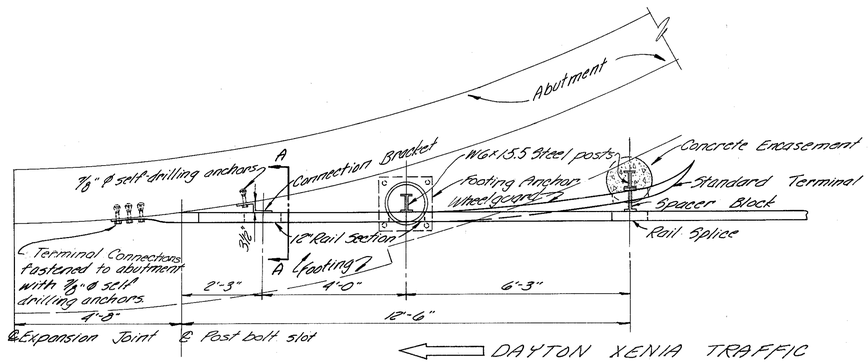
For detail of Fastening Terminal Connectors to abutment, See Std. Drawing No. GR-3.

All Guard Rail and Appurtenances shall be in Accordance with the Standard Drawings.

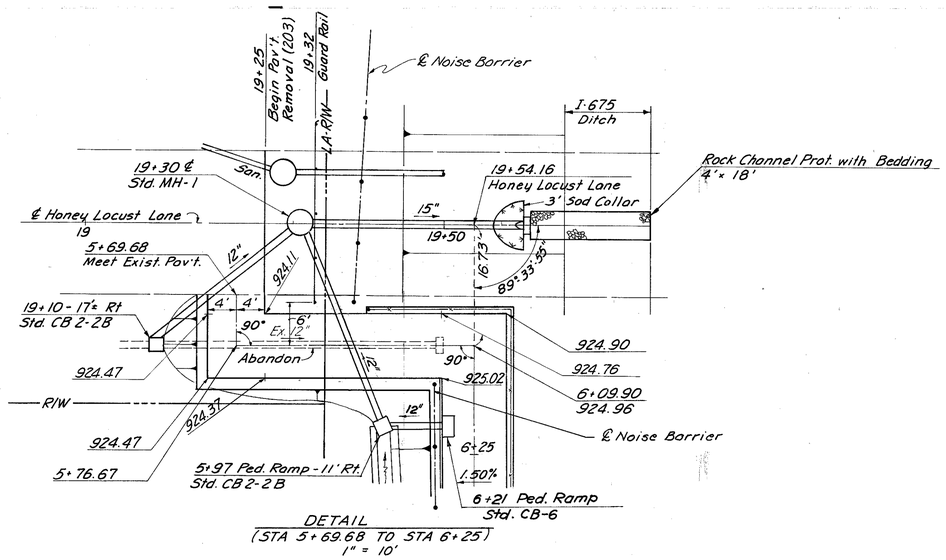
For detail of Footing Anchors, See Standard Drwg. No. GR-1.



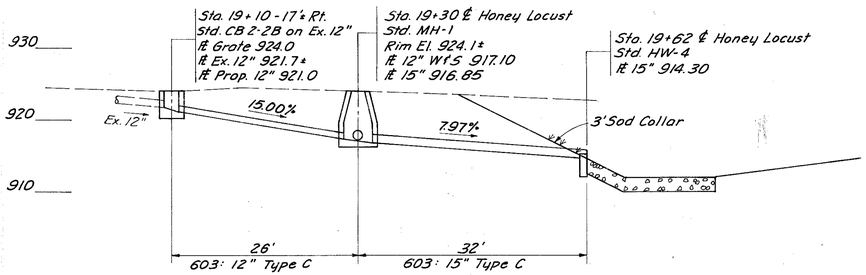
SOUTHEAST WING WALL
ABUTMENT NO. 2
BRIDGE NO. GRE-675-0626S.R.

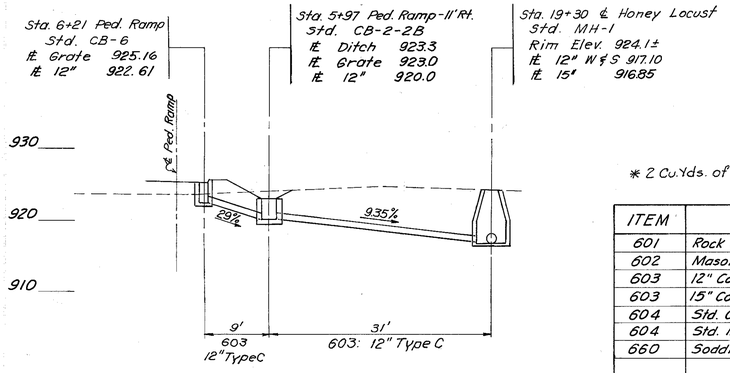


NORTHWEST WING WALL ABUTMENT NO. 1 BRIDGE NO. GRE-675-0626S.R.



DETAIL
(STA 5+69.68 TO STA 6+25)
1" = 10'



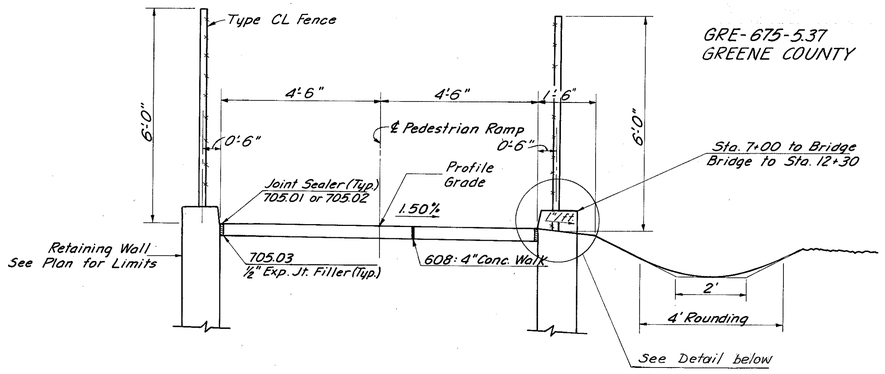


* 2 Cu.Yds. of this Item is "as per plan"; See Sht. No. 373

ESTIMATED QUANTITIES Carried to Sht. No. 104

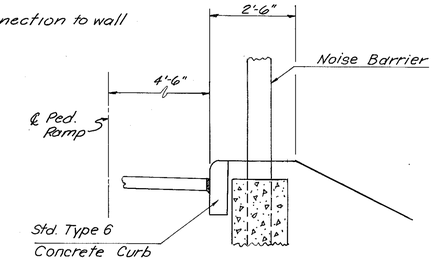
ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection, Type B, Bedding	5 *	Cu. Yd.
602	Masonry	0.27	Cu. Yd.
603	12" Conduit, Type C	66	Lin. Ft.
603	15" Conduit, Type C	32	Lin. Ft.
604	Std. CB 2-2B	2	Ea.
604	Std. MH-1	1	Ea.
660	Sodding	3	Sq. Yd.
604	Std. CB-6	1	Ea.

Quantities Calculated: D.H.S., 11/77
Quantities Checked: I.E.H., 12/77
Revised: B.O.B., 9/81



TYPICAL SECTION PEDESTRIAN RAMP
½" = 1'-0"

See Bridge Dwgs. for CL Post connection to wall



DETAIL
Sta. 6+14.40 Rt. to Sta. 7+00 Rt.
½" = 1'-0"

PEDESTRIAN RAMP TYPICAL SECTION & DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

26
616

GRE-675-5.37
GREENE COUNTY

GENERAL NOTES

MOBILIZATION AS PER PLAN ~ The Contractor shall provide a suitable field office having a minimum of 800 sq.ft. of floor space which shall be in accordance with 619.01 and 619.02. Payment shall be included in the lump sum price bid for Item 624, Mobilization, as per plan.

ELEVATION DATUM

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

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 THESE PLANS.

UNDERGROUND UTILITIES

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE STATE OF OHIO MAKES NO GUARANTEE AS TO THEIR ACCURACY OR COMPLETENESS.

ESTIMATED QUANTITIES

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

LOCATION AND SIZE OF *EXISTING PIPES*

THE LOCATION, SIZE, TYPE AND DEPTH OF ALL EXISTING PIPES ARE SHOWN AS NEAR EXACT AS THE AVAILABLE INFORMATION WILL PERMIT. THE STATE WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS.

TEMPORARY EASEMENTS

UNDER NO CIRCUMSTANCES ARE THE TEMPORARY EASEMENTS FOR PURPOSES OF REMOVAL OF BUILDINGS TO BE USED FOR STORAGE OF MATERIAL AND EQUIPMENT. UPON THE COMPLETION OF WORK IN THIS AREA, THE TEMPORARY EASEMENTS SHALL BE IMMEDIATELY VACATED.

EARTHWORK COMPUTATION METHOD

THE QUANTITIES OF EXCAVATION AND EMBANKMENT BETWEEN CROSS SECTIONS ON CURVED ALIGNMENT HAVE BEEN COMPUTED BY A METHOD THAT MAKES A CORRECTION IN ARC LENGTH BETWEEN THE AREA CENTROIDS OF EACH SECTION. THE FORMULA USED TO COMPUTE THE PLAN QUANTITIES SHOWN ON THE CROSS SECTIONS IS AS FOLLOWS:

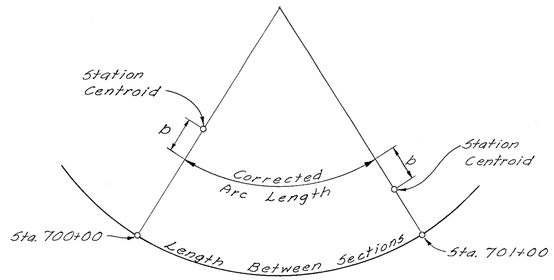
EARTHWORK COMPUTATION METHOD -- CONTINUED

VOLUME = AVERAGE AREA X ADJUSTED ARC LENGTH

$$V = \left(\frac{A_1 + A_2}{2}\right) \times \left[(STA_2 - STA_1)\left(\frac{R_2 + E_2}{2R_2} + \frac{R_1 + E_1}{2R_1}\right)\right] \times \frac{1}{27}$$

WHERE:

- V = VOLUME OF EARTHWORK IN CUBIC YARDS.
- A_1 = AREA OF FIRST CROSS SECTION IN SQUARE FEET.
- A_2 = AREA OF NEXT CROSS SECTION IN SQUARE FEET.
- STA_1 = BASE LINE STATION IN FEET OF THE FIRST CROSS SECTION.
- STA_2 = BASE LINE STATION IN FEET OF THE NEXT CROSS SECTION.
- R_1 = RADIUS IN FEET OF CURVED ALIGNMENT AT FIRST CROSS SECTION.
- R_2 = RADIUS IN FEET OF CURVED ALIGNMENT AT THE NEXT CROSS SECTION.
- E = THE ECCENTRICITY OF THE CENTROID WITH RESPECT TO THE BASE LINE LOCATION (E IS CONSIDERED POSITIVE IF LOCATED ON THE OUTSIDE OF THE CURVE, AND CONSIDERED NEGATIVE IF LOCATED ON THE INSIDE OF THE CURVE.)



EXAMPLE

FOR THE VOLUME BETWEEN A CROSS SECTION LOCATED ON A CURVE AND AN ADJOINING CROSS SECTION LOCATED ON A TANGENT THE VALUE OF (R + E)/(2R) IN THE ABOVE FORMULA FOR THE CROSS SECTION LOCATED ON THE TANGENT IS ONE HALF (1/2).

THE ABOVE EQUATION HAS BEEN USED FOR CROSS SECTIONS LOCATED ON SPIRALS BY COMPUTING THE EFFECTIVE BASE LINE RADIUS AT EACH CROSS SECTION WITH THE FOLLOWING EQUATION:

$$R = rL/L$$

WHERE:

- R = RADIUS AT STATION ON SPIRAL IN FEET
- r = RADIUS OF THE CURVE ADJACENT TO THE SPIRAL IN FEET
- L = LENGTH OF SPIRAL IN FEET
- l = LENGTH FROM SPIRAL TS TO STATION ON SPIRAL.

WHERE THE ADJUSTED ARC LENGTHS WERE USED TO COMPUTE EARTHWORK VOLUMES ON CURVED ALIGNMENTS, THE LENGTHS ARE SHOWN ON THE CROSS SECTIONS IN THE END AREA COLUMNS OPPOSITE THEIR RESPECTIVE VOLUMES.

REMOVAL OF EXISTING PIPE

THE REMOVAL OF ALL EXISTING PIPE DRAINS WITHIN THE LIMITS OF PROPOSED EXCAVATION ITEMS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICES BID FOR THE RESPECTIVE EXCAVATION ITEMS, UNLESS OTHERWISE ITEMIZED IN THE PLANS.

CONNECTION TO EXISTING PIPE

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, 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 CONDUIT.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS.

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:

SIZES	NO. TREES	NO. STUMPS
18"	1335	83
30"	283	47
48"	20	2
60"	2	0

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

LOCATIONS OF GUARD RAIL

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

SEEDING:

1.) INTERSTATE ROADWAY, RAMPS AND INTERCHANGE ROADS

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

2.) RELOCATED LOCAL ROADS

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

ITEM SPECIAL -- DRILLED *WATER WELL ABANDONED*

THE EXISTING CONCRETE OR STONE SLAB WELL COVER AND PUMPING EQUIPMENT SHALL BE REMOVED AND DISPOSED OF. THE CASING SHALL BE CUT OFF AT LEAST ONE FOOT BELOW THE PROPOSED FINISHED GRADE OUTSIDE PROPOSED PAVEMENT AREAS OR AT LEAST ONE FOOT BELOW THE PROPOSED SUBGRADE ELEVATION INSIDE PROPOSED PAVEMENT AREAS. THE WELL SHALL BE FILLED FROM BOTTOM TO TOP WITH CLEAN PUDDLED CLAY OR CONCRETE.

THE UNIT PRICE BID FOR EACH "DRILLED *Water* WELL ABANDONED" SHALL INCLUDE PAYMENT FOR ALL LABOR, TOOLS, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

ARCHAEOLOGICAL SITES ADJACENT TO RIGHT-OF-WAY

AS A RESULT OF A CULTURAL RESOURCE SURVEY, ARCHAEOLOGICAL SENSITIVE AREAS HAVE BEEN IDENTIFIED ADJACENT TO THE PROPOSED RIGHTS-OF-WAY. THESE ARCHAEOLOGICALLY SENSITIVE AREAS HAVE BEEN DENOTED ON MAPPING THAT IS AVAILABLE FOR REVIEW AT THE OHIO HISTORICAL CENTER, 1982 VELMA AVENUE, COLUMBUS, OH; THE BUREAU OF CONTRACT SALES, 25 SOUTH FRONT STREET, COLUMBUS, OH; AND THE DISTRICT 8 OFFICE, ON SR 741 NEAR LEBANON. THESE IDENTIFIED AREAS CANNOT BE USED FOR BORROW, WASTE OR ANY OTHER PROJECT RELATED ACTIVITIES SUCH AS TEMPORARY OFF SITE STORAGE OR FIELD OFFICE PLACEMENT ETC., UNLESS PRIOR APPROVAL IS OBTAINED FROM THE OHIO HISTORIC PRESERVATION OFFICE AT THE OHIO HISTORICAL CENTER IN COLUMBUS.

UTILITIES ALERT~ At least 48 hours before digging, the Contractor should call the Ohio Utilities Protection Service, toll free, 800-362-2764. Non-member utility companies must be called directly.

FOR UTILITY OWNERS, SEE SHEET NO. 4

QUANTITY CALCD & TONS
BY DJP DATE 2-28-72
CHD. HLE DATE 4-3-72
KING AND GAVARIS
CONSULTING ENGINEERS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37
GREENE COUNTY

GENERAL NOTES

203 PROOF ROLLING

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE IN PROOF ROLLING OF SUBGRADE FOR THE MAINLINE, RAMPS, U. S. 35 AND DAYTON-XENIA ROAD, PAVEMENTS, AND FOR PAVED SHOULDERS.

EROSION CONTROL

ITEMS 207, 601, 660 & 667 ARE PROVIDED IN THESE PLANS FOR EROSION CONTROL. ROCK OR TURF 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. WHEREVER PAVED GUTTER OR RIPRAP USING 6" REINFORCED CONCRETE IS INDICATED IN THE PLAN, THE UPPER EDGE SHALL BE 3" TO 6" BELOW FINISHED GRADE. ALL SOD SHALL BE PLACE ON A MINIMUM OF 6" OF SOIL AS PER 203.02.

EROSION PROTECTION AT CULVERTS AND OTHER OUTLETS

EROSION PROTECTION, SUCH AS PAVED GUTTERS, ROCK CHANNEL PROTECTION, ETC., WHERE PROVIDED IN THE PLAN AT STRUCTURES AND OTHER PIPE OUTLETS, SHALL BE PLACED IMMEDIATELY AFTER INSTALLATION OF THE PIPE OR STRUCTURE.

PROJECT FEATHERS

THE LENGTH OF PROJECT FEATHERS ARE INDICATED ON THE PLAN SHEETS. THE BUTT JOINT TYPE FEATHER SHALL BE USED WHERE THE FEATHER IS ON EXISTING ASPHALT PAVEMENT AND THE FEATHER EDGE TYPE SHALL BE USED WHERE THE FEATHER IS ON EXISTING CONCRETE PAVEMENT. SEE STANDARD CONSTRUCTION DRAWING BP-5 FOR DETAILS OF PLACING FEATHERED AREAS.

FARM DRAINS

ALL FARM DRAINS WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS UNDER THE DIRECTION OF THE ENGINEER. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS AND WHICH CROSS THE ROADWAY SHALL BE REPLACED WITHIN THE RIGHT-OF-WAY LIMITS BY 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF THE ROADWAY DITCHES SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603 TYPE F CONDUIT. THE OPTIMUM OULET ELEVATION SHALL BE, IF POSSIBLE, ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL TILE FIELDS WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603 TYPE E CONDUIT AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

FARM DRAINS -- CONTINUED

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603	8" CONDUIT, TYPE B	400 LIN. FT.
ITEM 603	10" CONDUIT, TYPE B	400 LIN. FT.
ITEM 603	6" CONDUIT, TYPE C	250 LIN. FT.
ITEM 603	8" CONDUIT, TYPE C	250 LIN. FT.
ITEM 603	6" CONDUIT, TYPE E	250 LIN. FT.
ITEM 603	8" CONDUIT, TYPE E	250 LIN. FT.
ITEM 603	6" CONDUIT, TYPE F	50 LIN. FT.
ITEM 603	8" CONDUIT, TYPE F	50 LIN. FT.
ITEM 601	ROCK CHANNEL PROTECTION, TYPE B	10 CU. YDS. WITH BEDDING

NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL REQUESTED BY THE ENGINEER, AND IN CASE NONE IS ENCOUNTERED THE ITEM SHALL BE NON-PERFORMED.

ITEM 605 AGGREGATE DRAINS *FOR KEMP RD. ONLY*

AGGREGATE DRAINS SHALL BE PLACED AT FIFTY (50) FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS AND AT TWENTY-FIVE (25) FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS, EXCEPT WHERE ITEM 605 PIPE UNDERDRAINS HAVE BEEN PROVIDED.

SEE SHEET 372.

TREATED SANITARY FLOW INTO THE NON-INTERSTATE HIGHWAY DRAINAGE SYSTEMS

TREATED SANITARY FLOW MAY BE DISCHARGED INTO THE NON-INTERSTATE HIGHWAY DRAINAGE SYSTEM PROVIDED THE OWNER HAS SECURED THE APPROVAL OF THE LOCAL HEALTH AUTHORITIES AND HAS ACQUIRED FROM THE DEP'T. OF TRANSPORTATION THE OFFICIAL PERMIT TO HAVE THE CONNECTION MADE.

IN EACH CASE WHERE A PERMIT HAS BEEN ISSUED FOR A SANITARY CONNECTION TO BE MADE INTO A HIGHWAY DRAINAGE CONDUIT, IT SHALL BE PROVIDED WITH AN INSPECTION WELL, IN ACCORDANCE WITH THE DETAIL SHOWN ON STANDARD DRAWING MC-8.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER, IN MAKING THE ABOVE DESCRIBED CONNECTIONS:

ITEM 603,	6" CONDUIT, TYPE C	100 LIN. FT.
*ITEM 604,	INSPECTION WELLS	2 EACH

AND NECESSARY BENDS AND BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER, AND IN CASE NONE IS ENCOUNTERED THE ITEM SHALL BE NON-PERFORMED.

*NO INSPECTION WELL IS REQUIRED IF EFFLUENT IS DISCHARGED INTO AN OPEN DITCH, CHANNEL, CATCH BASIN OR MANHOLE.

SANITARY FLOW INTO INTERSTATE HIGHWAY DRAINAGE SYSTEMS

THIS PLAN MAKES NO PROVISION FOR CONNECTING, NOR SHALL THE ENGINEER OR CONTRACTOR CONNECT, ANY EXISTING OR NEW DRAINAGE INTO THE INTERSTATE HIGHWAY DRAINAGE SYSTEM WHEN SUCH DRAINS CARRY FLOW FROM ANY PLUMBING FIXTURES INCLUDING FLOOR DRAINS AND SINK DRAINS OR DRAINS FROM LIVESTOCK, LOTS OR BARNS.

SANITARY FLOW INTO INTERSTATE HIGHWAY DRAINAGE SYSTEMS -- CONTINUED

EXISTING PIPE CARRYING FLOW WHICH COMES WITHIN THE CATEGORY OUTLINED ABOVE SHALL BE PLUGGED WITH CLASS C CONCRETE AT THE RIGHT-OF-WAY LINE. PAYMENT FOR SAID PLUGGING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION.

UNRECORDED SANITARY CONNECTIONS

ANY UNRECORDED ACTIVE CONNECTION TO A SANITARY SEWER ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED TO THE EXISTING SEWER, AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603- 100 LIN. FT. 6" CONDUIT, TYPE C, 706.01, 706.02, 706.08 WITH JOINTS AS PER 706.11 OR 706.12
ITEM 603- 100 LIN. FT. 6" CONDUIT, TYPE B, *706.01, 706.02, or 706.08 with joints, as per 706.11 or 706.12.*

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL REQUESTED BY THE ENGINEER.

CONTRACTION AND EXPANSION JOINTS

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

SPRING DRAINS

REFERENCE IS MADE TO THE DETAILED DRAWING ON STANDARD DRAWING MC-1 SHOWING THE METHOD OF DRAINING ANY SPRING THAT MAY BE SHOWN ON THE PLAN OR ENCOUNTERED DURING CONSTRUCTION AS DETERMINED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE:

ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAIN, 707.01 TYPE III, *707.12* TYPE III OR 707.15, AS PER PLAN	100 LIN. FT.
ITEM 605, AGGREGATE DRAINS FOR SPRINGS,	30 LIN. FT.

THE CONTRACTOR SHALL NOT ORDER MATERIALS FOR "SPRING DRAINS" UNTIL AUTHORIZED BY THE ENGINEER AND IN THE EVENT NO SPRINGS ARE ENCOUNTERED, THE ITEM SHALL BE NON-PERFORMED.

AGRICULTURAL LIMING, AS PER PLAN

THE LOCATION AND NEED FOR AGRICULTURAL LIMING WILL BE DETERMINED BY LABORATORY TESTS, AFTER ROUGH GRADING OPERATIONS HAVE BEEN PERFORMED. QUANTITIES OF AGRICULTURAL LIMING, AS SHOWN ON THE PLANS, ARE SUFFICIENT FOR THE ENTIRE PROJECT, BUT WILL BE NONPERFORMED FOR THE AREAS WHERE TESTS SHOW THAT THE LIMING IS NOT REQUIRED.

CHANNEL EMBANKMENTS

PORTIONS OF THE EXISTING CHANNEL OUTSIDE THE ROADBED SHALL BE FILLED AND SLOPED TO DRAIN AS CALLED FOR ON THE PLANS AND INCLUDED FOR PAYMENT IN THE PRICE BID FOR ITEM 203 EMBANKMENT. THE CONTRACTOR SHALL USE EITHER SUITABLE OR UNSUITABLE MATERIAL TO THE EXTENT AVAILABLE FOR CHANNEL EMBANKMENTS.

AREAS WHERE CHANNEL EMBANKMENTS ARE TO BE PLACED SHALL BE CLEARED OF WEEDS AND BRUSH.

THE REQUIREMENTS FOR MOISTURE, DENSITY CONTROL, BENCHING, AND SUITABLE MATERIALS SHALL BE WAIVED.

THE DEPTH OF LAYERS IN WHICH THE EMBANKMENTS ARE PLACED AND THEIR COMPACTION SHALL, IN LIEU OF THE REQUIREMENTS OF ITEM 203, CONFORM WITH ACCEPTABLE CONSTRUCTION PRACTICES AS DETERMINED BY THE ENGINEER.

NO PROVISION OF THE SPECIFICATIONS SHALL BE WAIVED FOR EMBANKMENTS WHICH SUPPORT ANY PORTION OF THE NEW ROADBED OR STRUCTURAL MEMBERS.

AN ESTIMATED QUANTITY OF 5 CUBIC YARDS HAS BEEN PROVIDED IN THE PLANS FOR CHANNEL EMBANKMENT. *See Sheet 393 for location and estimated quantity.*

ATTACHMENT OF GUARDRAIL TO CONCRETE PARAPETS:

CONCRETE INSERT ANCHOR ASSEMBLIES PER STANDARD CONSTRUCTION DRAWINGS GR-3 AND GR-1 SHALL BE PLACED DURING PARAPET CONSTRUCTION.

COATED DOWEL BARS

Dowel bars required on Std. Dwg. BP-4 shall be coated in accordance with Supplemental Specification 948.

GENERAL NOTES

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON STANDARD DRAWING MC-1. FOR LOCATIONS, SEE SHEET NO. 565, 566

APPROACH SLAB

JACKING HOLES, AS SHOWN ON AS-1-72, SHALL BE OMITTED. THE REINFORCING IN THE TOP OF SLAB SHALL BE 3" CLEAR.

ELEVATIONS SHOWN ON CROSS SECTIONS

IN THE CROSS SECTIONS OF THIS SET OF PLANS, THE FIRST ELEVATION SHOWN TO THE NEAREST TENTH OF A FOOT IS THE EXISTING GROUND ELEVATION, AND THE SECOND ELEVATION SHOWN TO THE NEAREST HUNDREDTH OF A FOOT IS THE PROFILE GRADE ELEVATION.

EXAMPLE:	STA.	330+00	CENTERLINE STATION
		873.9	EXISTING GROUND ELEVATION
		875.30	PROFILE GRADE ELEVATION

WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR EROSION AND SILTATION CONTROL MEASURES.

ITEM	TOTAL	UNIT	DESCRIPTION
207	176,000	SQ. YD.	TEMPORARY SEEDING AND MULCHING
659	400	M. GAL.	WATER
207	8,580	LIN. FT.	TEMPORARY SLOPE DRAINS
207	1,500	CU. YD.	TEMPORARY BENCHES, DIKES, DAMS, AND SEDIMENT BASINS
659	44,000	SQ. YD.	REPAIR SEEDING & MULCHING
659	38	TON	COMMERCIAL FERTILIZER
659	2,000	M.SQ.FT.	MOWING
207	8,000	EACH	STRAW OR HAY BALES
601	50	CU.YD.	TYPE C ROCK CHANNEL PROTECTION (WITHOUT BEDDING)

FUTURE LANE CONSTRUCTION

TO PROVIDE FOR FUTURE LANE CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND INSTALL STANDARD LONGITUDINAL JOINTS WITH FEMALE END OF THE STANDARD HOOK BOLT CAST INTO THE CONCRETE PAVEMENT AT 30" SPACING AS CALLED FOR ON STANDARD DRAWING BP-3.

THE ABOVE JOINTS SHALL BE PLACED AT THE FOLLOWING LOCATIONS:

U.S. 35 EASTBOUND LANES - STA.	1087+74.57	TO STA.	76+00 MEDIAN SIDE
EASTBOUND LANES - STA.	64+00	TO STA.	76+00 OUTER SIDE
WESTBOUND LANES - STA.	1090+85.78	TO STA.	76+00 MEDIAN SIDE
WESTBOUND LANES - STA.	64+00	TO STA.	76+00 OUTER SIDE

AFTER THE FORMS HAVE BEEN REMOVED, THE 5/8" TAP BOLT SHALL BE RE-INSERTED INTO THE HOOK BOLT TO PROTECT THE THREADS AND LEFT IN PLACE IN LIEU OF THE MALE END OF THE HOOK BOLT. THE EXPOSED METAL SHALL THEN BE PAINTED WITH TWO COATS OF ASPHALT VARNISH.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT PAVEMENT ITEM.

ITEM 202 - SANITARY LIFT STATION - REMOVED FOR STORAGE

THIS ITEM SHALL CONSIST OF THE REMOVAL FOR STORAGE OF THE EXISTING SANITARY LIFT STATION. THE LIFT STATION CONSISTS OF 2 SEWAGE PUMPS (400 G.P.M., 40' T.D.H.), AN 8' DIAMETER X 7'± STEEL PLATE PUMP CHAMBER WITH A 3' DIAMETER X 12'± STACK AND A CONC. MANHOLE (WET WELL) 19'± DEEP.

THIS ITEM SHALL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "ITEM SPECIAL - SANITARY LIFT STATION, REMOVED FOR STORAGE WHICH PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR EXCAVATION, REMOVING AND STORING OF LIFT STATION AND EQUIPMENT, BACKFILLING, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM. THE LIFT STATION SHALL BE STORED ON THE PROJECT FOR PICKUP BY THE GREENE COUNTY SANITARY ENGINEER.

MEDIAN PAVED SHOULDERS

THE MEDIAN PAVED SHOULDERS ON THE MAINLINE ARE 10' WIDE AS SHOWN ON THE TYPICAL SECTIONS. THE QUANTITIES FOR THE SHOULDERS AND EARTHWORK HAVE BEEN CALCULATED FOR THE 10' SHOULDERS, BUT THE CROSS SECTIONS AND DETAIL SHEETS HAVE NOT BEEN REVISED.

WATERING AND MOWING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

659	WATER	1,000 M.GAL.
659	MOWING	2,000 M.SQ.FT.

LONGITUDINAL SLOPE DRAINS

ERODIBLE GRANULAR MATERIAL MAY BE ENCOUNTERED IN THE CUT SLOPES BETWEEN STA. 25+00± AND STA. 32+00±, DAYTON-XENIA RD. AN ESTIMATED QUANTITY OF 3,600 LIN. FT. OF UNCLASSIFIED PIPE UNDERDRAIN USING 6" 707.01 OR 707.12 HAS BEEN PROVIDED IN THE GENERAL SUMMARY TO BE USED AS LONGITUDINAL SLOPE DRAINS AS DIRECTED BY THE ENGINEER.

ITEM 203 EMBANKMENT AS PER PLAN

IT IS ANTICIPATED THAT THE MATERIAL TO MAKE THE EMBANKMENT ON THIS PROJECT WILL BE SANDY SILT OR GRANULAR MATERIAL. THE OUTER 12 INCHES OF GRANULAR EMBANKMENT SHALL BE CONSTRUCTED OF "SOIL" AND THE CUT SLOPES IN GRANULAR MATERIAL SHALL BE UNDERCUT TO A DEPTH OF 12 INCHES BELOW FINISHED GRADE AND THE UNDERCUT MATERIAL REPLACED WITH "SOIL" AS DEFINED UNDER 203.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE MATERIAL PLACED ON THE OUTER 12 INCHES OF THE EMBANKMENT SHALL BE PLACED CONCURRENTLY, IN THE SAME LIFTS, AND COMPACTED WITH THE REMAINDER OF THE EMBANKMENT SECTION, AND UNDER NO CIRCUMSTANCES SHALL IT BE PLACED AS A SEPARATE LAYER OVER PREVIOUSLY COMPLETED EMBANKMENT. PAYMENT FOR THE REMOVAL OF 12 INCH DEPTH OF GRANULAR MATERIAL WILL BE AT THE UNIT PRICE BID FOR 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION. PAYMENT FOR "SOIL" TO REPLACE THE GRANULAR MATERIAL WILL BE AT THE UNIT PRICE BID FOR 203 EMBANKMENT, AS PER PLAN.

AREAS TO BE UNDERCUT WILL BE DESIGNATED BY THE ENGINEER. IT IS ANTICIPATED THAT UNDERCUTTING WILL BE REQUIRED IN THE FOLLOWING AREAS:

I-675:	350+00	- 366+00 RT.	RAMP A:	302+00	- 315+00 RT.
	403+00	- 416+00 RT.		340+00	- 347+00 RT.
	337+00	- 340+00 LT.			
	353+61	- 364+00 LT.	RAMP B:	340+00	- 346+00 LT.
	404+00	- 416+62 LT.		349+00	- 351+00 LT.
U.S.35:	1090+00	- 1093+00 RT.	RAMP H:	324+00	- 326+90 RT.
	1092+00	- 1099+00 LT.			
	1095+00	- 1101+00 RT.	DAYTON-XENIA:	13+50	- 17+00 RT.
	1106+00	- 1106+93.02 LT. BK.		16+00	- 26+00 LT.
	0+00 AH	- 4+00 LT.		20+00	- 21+00 RT.
	7+00	- 13+00 LT.		27+00	- 28+00 RT.
	6+00	- 19+00 RT.		28+00	- 33+00 LT.
				29+00	- 30+00 RT.
			WILDONNA:	1+00	- 3+50 RT. & LT.
			KEMP RD.:	22+00	- 24+00 LT.
				22+00	- 26+00 RT.

ITEM 203 - EMBANKMENT AS PER PLAN - CONTINUED

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	21,051 CU. YD.
ITEM 203 - EMBANKMENT, AS PER PLAN	21,051 CU. YD.

ADDITIONAL EXCAVATION

ON RELOCATED DAYTON-XENIA RD. BETWEEN STA. 22+00 AND STA. 28+00 FROST SUSCEPTIBLE SILT IS ANTICIPATED AT SUBGRADE. TO THIS EXTENT THE CONTRACTOR SHALL EXCAVATE AN ADDITIONAL 2 FEET OF MATERIAL EXTENDING EACH WAY FROM THE CENTERLINE TO THE PIPE UNDERDRAIN TRENCH AND REPLACE THE EXCAVATED MATERIAL WITH 310 SUBBASE MATERIAL.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	3,312 CU. YD.
ITEM 310 - SUBBASE, TYPE II	3,312 CU. YD.

ITEM 451 - 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT USING *701.08, EXPANSIVE HYDRAULIC CEMENT ~ SEE NOTE IN PROPOSAL*

THIS WORK SHALL CONSIST OF CONSTRUCTING A 9" REINFORCED CONCRETE PAVEMENT, USING *701.08, EXPANSIVE HYDRAULIC CEMENT* AT PORTIONS OF WESTBOUND U.S. 35 AS INDICATED ON TYPICAL SECTION SHEET 15A *AND THE PAVEMENT CALCULATIONS.*

ITEM SPECIAL: SEEDING AND NYLON FIBER MATTING

The work shall consist of furnishing, placing and maintaining seeding and nylon fiber matting on areas shown on the plans as directed by the engineer. The nylon fiber mat shall meet the requirements of supplemental specification 940, Type 1. Prior to placement of the matting the area to be covered shall be prepared in accordance with Item 659 with the following exceptions:

1. *The surface shall be free of rock, clods, and foreign material 1½" or greater in dimension.*
2. *No mulch shall be applied.*

Nylon fiber matting shall be placed in accordance with 667 with exception that 12"x 3"x 1" Triangular wooden stakes be used in lieu of wire staples.

After the fiber mat has been installed in place, a layer of dry fine soil shall be placed to fill the voids in the mat. The layer shall be no deeper than the mat and care should be taken so as not to disturb the prepared surface.

REVIEW OF DRAINAGE FACILITIES~ Before any work is started on the project, and again before final acceptance by the State, representatives of the State and the Contractor along with local representatives shall make an inspection of the existing sewers within the work limits which are to remain in service and which may be affected by the work. The condition of the existing conduits and their appurtenances shall be determined from field observations. Records of the inspections shall be kept in writing by the State.

All new conduits, inlets, catch basins and manholes constructed as a part of the project shall be free of all foreign matter and in a clean condition before the project will be accepted by the State.

All existing sewers inspected initially by the above-mentioned parties shall be maintained and left in a condition reasonably comparable to that determined by the orginal inspection. Any change in the condition resulting from the Contractor's operations shall be corrected by the Contractor to the satisfaction of the Engineer.

Payment for all operations described above shall be included in the unit prices bid for the pertinent 603 conduit items of the contract.

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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616

GRE-675-5,37
GREENE COUNTY

ITEM SPECIAL - CONSTRUCTION OF RAILROAD TRACK.

NOTE: ALL REFERENCES IN THESE PLANS TO THE PENN-CENTRAL RAILROAD SHALL BE CONSIDERED TO READ THE CONSOLIDATED RAIL CORPORATION (CONRAIL).

SCOPE OF WORK - GENERAL

THIS WORK INCLUDES THE FURNISHING AND INSTALLATION OF ALL MATERIALS REQUIRED FOR LAYING, BALLASTING, RAISING, LINING AND SURFACING OF TRACKS AS COVERED BY THE PLANS AND THE REMOVAL OF THE EXISTING TRACK AFTER THE PERMANENT TRACK HAS BEEN PLACED IN SERVICE.

APPROXIMATE LENGTH OF WORK AND SCOPE OF CONTRACTOR'S WORK:

1. THE TOTAL LENGTH OF TRACK RELOCATION IS APPROXIMATELY 5,080 LINEAL FEET. IN THE TRACK TRANSITION AREAS, STA. 522+12± TO STA. 532+56± AND STA. 568+59± TO STA. 572+96±, THE RAILROAD WILL MOVE THE TRACK AND SUPPLY THE BALLAST. BETWEEN STA. 532+56± AND STA. 568+59± THE CONTRACTOR SHALL PERFORM THE EARTHWORKS AND CONSTRUCT THE SUBBALLAST, BALLAST AND TRACK. IN THE TRACK TRANSITION AREAS THE CONTRACTOR SHALL PERFORM THE EARTHWORK AND CONSTRUCT THE NEW SUBBALLAST.
2. CO-ORDINATE WORK AT THE ENDS OF THE NEWLY CONSTRUCTED TRACK AND CO-OPERATE WITH OTHERS WHO WILL BE LINING OVER AND CONNECTING UP EXISTING TRACK TO THE NEWLY CONSTRUCTED TRACK.
3. REMOVE APPROXIMATELY 3,600 LINEAL FEET OF EXISTING TRACK AFTER THE NEW TRACK HAS BEEN PLACED IN PERMANENT SERVICE.
4. DO OFFICE AND FIELD ENGINEERING AS REQUIRED ON ALL CONSTRUCTION FOR THE RELOCATION AND REMOVAL OF THE RAILROAD. THIS INCLUDES LAYOUT WORK, PROVIDING AND MAINTAINING ALL GRADE, SURFACE AND LINE STAKES.
5. THE CONTRACTOR MUST WORK CLOSELY WITH THE RAILROAD FORCES AND CO-ORDINATE THE COMPLETION OF HIS WORK WITH THE REQUIREMENTS OF THE RAILROAD AND THE STATE.

ALL OF THE TRACK WORK IS TO BE DONE ON SUBGRADE PREVIOUSLY PREPARED, INCLUDING SUBBALLAST ACCORDING TO THE PLANS OR BRIDGE DECK. THE SUBGRADE, INCLUDING THE SUBBALLAST PREVIOUSLY PREPARED AS DETAILED ON SHEET NO. 18 AND THE BRIDGE STRUCTURES ARE NOT INCLUDED IN THIS WORK.

ALL WORK IS TO BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER AND SHALL CONFORM TO ALL PROVISIONS OF THE RAILROAD'S M.W.-4. WHILE NOT RELIEVING THE CONTRACTOR FROM COMPLYING WITH ANY OTHER SECTION, THE CONTRACTOR'S ATTENTION IS ESPECIALLY DIRECTED TO THE FOLLOWING SECTIONS:

ITEM	SECTION
A. ALIGNMENT	55.0- 55.3
B. BALLAST	103.0 - 103.5
C. CROSS SECTION	103.3, 37.0, 35.0
D. CROSS TIES	107.0.- 109.0
E. DRAINAGE	33.0
F. GUAGE	53.0 - 53.1
G. GEOMETRY	57.0 - 59.3, 63.0 - 63.3
H. MATERIAL HANDLING	101.2 - 101.3, 113.7
I. RAIL	113.0 - 113.5, 113.9 - 113.12, 119.0 - 119.8
J. RAIL ANCHORS	125.0 - 125.4
K. RAIL JOINTS	121.0 - 121.2
L. SPIKING	127.0 - 127.2
M. TIE PLATES	123.0 - 123.2

THE CHIEF ENGINEER, DESIGN AND CONSTRUCTION, OR HIS DULY AUTHORIZED REPRESENTATIVE, SHOULD BE SUBSTITUTED FOR CHIEF ENGINEER, MAINTENANCE OF WAY, OR EQUIVALENT TERMS AS REFERRED TO IN THE M.W.4.

RAIL

THE RAIL FURNISHED FOR THE TRACK SHALL BE CONTINUOUS WELDED RAIL (C.W.R.) MEETING ALL PROVISIONS FOR CONRAIL MAIN TRACK RAIL AS DEFINED IN M.W. 4. THE RAIL SHALL BE OF 132# OR 140# NEW RE SECTION, OR 131#, 132#, 133#, OR 140# R.E., 127# DUDLEY, 152#, OR 155# PS SECTION. ANY SUBSTITUTIONS OF OTHER WEIGHT RAIL SECTIONS MUST BE SPECIFICALLY APPROVED IN WRITING BY THE CHIEF ENGINEER, DESIGN & CONSTRUCTION IN ADVANCE OF THEIR USE.

CONTINUOUS WELDED RAIL USED ON THIS PROJECT MUST BE OBTAINED FROM A SOURCE APPROVED IN WRITING BY THE CHIEF ENGINEER AND TRANSPORTED AND HANDLED IN A MANNER APPROVED BY HIM. ANY APPROVAL OF SUPPLIER CANNOT BE CONSTRUED TO MEAN THAT RAIL ACTUALLY RECEIVED ON THE JOB SITE WILL BE ACCEPTABLE. ALL RAIL MUST MEET PROVISIONS OF M.W. 4 ON THE JOB SITE AND MAY BE REJECTED FOR ANY REASON THEREIN OR FOR REASON OF DAMAGE IN TRANSIT. RAIL SHALL FURTHER BE WARRANTED TO BE FREE FROM DEFECTS DETECTABLE BY SPERRY OR SIMILAR RAIL TEST CAR. ANY RAIL OR PORTION OF CWR RAIL STRING FOUND DEFECTIVE WITHIN ONE YEAR BY TESTING CAR SHALL BE REPLACED BY CUTTING-OUT AND FIELD-WELDING-IN A SOUND RAIL SEGMENT.

RAIL - CONTINUED

ALL STRINGS OF C.W.R. SHALL BE JOINED BY FIELD WELDS PRODUCED BY A PROCESS APPROVED BY THE CHIEF ENGINEER AND WHICH SHALL BE PROVIDED WITH SAFETY STRAPS. WHERE INSULATED JOINTS ARE REQUIRED FOR SIGNAL CIRCUITS, GLUED, FACTORY PREFABRICATED INSULATED JOINTS WILL BE INSTALLED. THESE JOINTS ARE TO MEET ALL REQUIREMENTS OF M.W. 4 AND SHALL BE FIELD-WELDED INTO C.W.R. STRINGS.

BALLAST

BALLAST SHALL CONFORM TO CONRAIL STANDARD SPECIFICATION M.W. 170 "SPECIFICATIONS FOR STONE BALLAST" DATED 4-77, CLASS "A" BALLAST SHALL BE USED.

BALLAST SHALL BE PLACED ACCORDING TO THE LIMITS SHOWN ON SHEET NO. 18 . IT SHALL BE PLACED IN APPROXIMATELY EQUAL LIFTS AND PROPERLY COMPACTED BY VIBRATORY ROLLERS AND/OR TAMPERS TO AN ELEVATION TWO INCHES (2") BELOW THE FINAL ELEVATION OF THE BOTTOM OF TIE. BALLAST ABOVE THIS LINE SHALL BE PLACED WITH TRACK AND TAMPED WHEN TRACK IS RAISED TO FINAL GRADE.

THE TERM "PRE-BALLASTING" SHALL BE USED TO DESIGNATE THE PLACEMENT OF BALLAST BY GRADING TECHNIQUES TO 2" BELOW TIE BOTTOM.

TIES

ALL TIES MUST HAVE HAD A PRESERVATIVE PRESSURE TREATMENT OF DISTILLATE COAL TAR CREOSOTE SOLUTION TO A FINAL RETENTION OF 6 LBS. PER CUBIC FOOT. ANTI-SPLITTING DEVICES SHALL HAVE BEEN APPLIED TO THE ENDS OF ALL TIES. TIES SHALL CONFORM TO CONRAIL SPECIFICATION C.E. 22 "SPECIFICATIONS FOR CROSS TIES," DATED 6/10/77. ALL TIES SHALL BE SIZE 4 OR 5 AND PLACED ACCORDING TO M.W. 4.

TIE PLATES

TIE PLATES SHALL BE OF STANDARD SIZE FOR THE RAIL FURNISHED, CONFORM TO A.R.E.A. SPECIFICATIONS, OF EQUIVALENT AND ACCEPTABLE QUALITY TO THOSE IN EXISTING TRACK. TIE PLATES SHALL BE USED UNDER RUNNING RAILS ON ALL CROSS TIES, PROPERLY PLACED ON THE TIE AND WITH THE SHOULDER OF THE TIE PLATE IN FULL BEARING AGAINST THE RAIL.

RAIL ANCHORS

AN APPROVED TYPE OF ANCHOR SUCH AS IMPROVED FAIR, WOODINGS OR TRUE TEMPER CHANNELOC SHALL BE USED. RAIL ANCHORS SHALL BE EQUIVALENT TO THOSE IN EXISTING TRACK AND BE OF A SIZE TO CORRESPOND TO THE RAIL SECTION USED. EACH CWR STRING IS TO BE ANCHORED: A) FOR 200' AT EACH END IN BOTH DIRECTIONS ON EVERY TIE; B) THROUGHOUT THE REMAINDER OF THE RAIL ON EVERY OTHER TIE. CWR LESS THAN 400 FEET IN LENGTH AND ALL BUFFER RAIL IS TO BE ANCHORED IN BOTH DIRECTIONS ON EVERY TIE.

SPIKES

ALL SPIKES SHALL BE 5/8" x 6" FULL THROATED. FOUR SPIKES SHALL BE APPLIED IN EACH TIE PLATE - 2 RAIL-HOLDING SPIKES AND 2 PLATE-HOLDING SPIKES. SPIKES SHALL BE DRIVEN VERTICALLY WITH HEAD POINTING TOWARDS THE RAIL. BENT, THROAT-CUT, BADLY RUSTED OR BROKEN SPIKES SHALL NOT BE USED.

FINAL SURFACE AND LINE

THE TRACK, AFTER CONSTRUCTED ON THE BALLAST BED, SHALL THEN BE RAISED ON ADDITIONAL BALLAST AS REQUIRED, BY LIFTS TO ITS FINAL GRADE AND PROPERLY TAMPED BY AN APPROVED METHOD. AS WORKED UPON, THE TRACK SHALL BE MAINTAINED IN APPROXIMATELY TRUE ALIGNMENT. IN MAKING ALL LIFTS, CARE SHOULD BE TAKEN TO LOOSEN JOINTS AND RESEAT THEM IF NECESSARY, MAINTAINING PROPER EXPANSION SPACE TO PREVENT KINKING OR BENDING. BOTH RAILS TO BE RAISED AT THE SAME TIME AS UNIFORMLY AS POSSIBLE.

THE FINAL RAISE SHALL BE MADE TO THE FINAL GRADE AND THOROUGHLY TAMPED BY AN APPROVED METHOD FROM THE ENDS OF TIES TO 15" INSIDE OF EACH RAIL. THE SPACE AT THE CENTER OF THE TIES SHALL BE COMPLETELY FILLED WITH BALLAST, BUT NOT TAMPED. THE CONTRACTOR SHALL LINE AND DRESS THE BALLAST TO CONFORM TO THE STANDARD ROADBED SECTION SHOWN ON THE PLANS. SUPERELEVATION FOR THE MAIN TRACK SHALL BE IN ACCORDANCE WITH THE PLANS AND RAILROAD'S M.W. 4. AFTER FINAL TAMPING, TRACKS SHALL BE BROUGHT TO AN ACCEPTABLE FINAL ALIGNMENT AS DEFINED IN THE M.W. 4.

GENERAL

UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL CLEAN UP, REMOVE AND DISPOSE OF ALL RUBBISH AND WASTE RESULTING FROM HIS OPERATIONS AND SHALL REMOVE FROM THE RIGHT OF WAY ANY AND ALL TEMPORARY STRUCTURES AND/OR FACILITIES IN CONNECTION WITH THE WORK.

WORK BY RAILROAD FORCES

ALL REALIGNMENT AND DISCONNECTION WORK ON EXISTING MAIN TRACK IN SERVICE AND EXISTING LIVE TRACK CONNECTIONS WILL BE DONE BY CONRAIL FORCES. AFTER CONSTRUCTED BY THE CONTRACTOR, THE FINAL CONNECTIONS FOR THE NEW TRACKS TO THE EXISTING TRACKS WILL BE MADE BY THE RAILROAD FORCES.

BASIS OF PAYMENT

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SPECIAL - CONSTRUCTION OF RAILROAD TRACK.

ITEM SPECIAL - NOISE BARRIER

DESCRIPTION:

This work shall consist of furnishing and installing Steel Noise Barrier Wall in accordance with this provision and in reasonably close conformity with the dimensions, lines and grades shown on the plans, or as directed by the Engineer.

MATERIAL:

Transmission Loss: The Barrier shall provide a Transmission Loss of no less than 22 dB (A-Weighted) Based on Generalized Truck Noise Spectrum.

Interlocking Panels: Steel Facing Material shall be cold formed steel conforming to ASTM A446, Grade B. The Steel Panels shall have a minimum covering width of 16 inches, with a minimum section modulus of 0.019 $in.^3$ per inch, and a minimum thickness of 22 Gage. To prevent vibration and noise leaks, each panel shall have a male and female rib providing a friction interlock connection with adjacent panels. The friction interlock connection shall provide sufficient connection strength to support its own weight without the use of fasteners when connected to another panel and held in the vertical and horizontal positions. Panels shall be galvanized in accordance with ASTM A525, Class G-90.

Protective Color Coating: All Panels and Flashings shall be Polyvinyl Fluoride Film (PVF) (Tedlar) with a minimum thickness of 1 - 1/2 Mils coated on both sides. The color shall be determined later. The PVF Film shall be factory applied by a qualified laminator to a cleaned and chemically treated galvanized steel surface per Federal Specification TT-C-490.

Posts: Posts shall be fabricated from hot rolled steel conforming to ASTM A36 and galvanized in accordance with 711.02, except that the coating weight shall be a minimum of 2.0 ounces per square foot of surface. Post size shall be as shown on the plans.

Girts: Girts shall be fabricated from hot rolled steel conforming to ASTM A36 and galvanized in accordance with 711.02, except that the coating weight shall be a minimum of 2.0 ounces per square foot of surface. Girt size shall be as shown on the plans.

Steel Flashing and Caps: All corner flashings, caps and other flashings shall be of the same material as the steel panels. The protective coating requirements shall be the same as that of the panels.

Self-Drilling Screws: All Self-Drilling Screws shall be of Class 410 Stainless Steel, conforming to Federal Specification QQ-S-763-C. Cadmium coated in accordance with ASTM A165.

Bolts and Nuts: Bolts and Nuts shall be of the size shown on the plans and galvanized per 711.02.

Anchor Bolts, Nuts, Washers for attaching Posts to Pedestrian Overpass Wall shall be galvanized in accordance with 711.02.

CONSTRUCTION

The Noise Barrier shall be installed in accordance with Plan Details. Minor surface scratches shall be sealed with color-matching enamels in accordance with Manufacturer's recommendations. Joints and Connections shall be secured in such a manner as to be structurally sound with no visible openings to decrease Noise Attenuation efficiency. The Face of the Noise Barrier Wall shall be vertically aligned so as to not deviate from the vertical by more than 1/2 inch in ten feet.

Concrete in the drilled shafts shall be vibrated with special care being given not to over vibrate.

ITEM SPECIAL - NOISE BARRIER

This Item shall consist of installing Noise Barriers of varying heights. The Location and Construction Details are shown in this Plan.

This Item shall be paid for at the Unit Price Bid per square foot for Item Special - Noise Barrier which payment will constitute full Compensation for providing all Panels, Posts, Flashings, Girts, Hardware and Concrete and for all Labor, Tools, Equipment, and incidentals necessary to complete this Item.

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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5,37

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6/6

MAINTENANCE OF TRAFFIC

GENERAL

IT IS THE INTENTION TO PERFORM THE REQUIRED WORK WITH THE LEAST INCONVENIENCE TO, AND THE MAXIMUM SAFETY OF THE CONTRACTOR AND THE TRAVELING PUBLIC. ANY VARIANCES FROM THESE MAINTENANCE OF TRAFFIC NOTES MUST BE APPROVED IN ADVANCE IN WRITING BY THE ENGINEER, EXCEPT AS MODIFIED BELOW OR AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS. THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS INDICATED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, AS OF DATE OF BID AND PERTINENT ITEMS OF THE SPECIFICATIONS AND PROPOSAL SHALL APPLY.

EQUIPMENT, VEHICLES AND MATERIAL SHALL NOT BE STORED OR PARKED ON THE PROJECT WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED PAVEMENT, UNLESS BEHIND GUARD RAIL.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THESE PERSONS SHALL BE RESPONSIBLE FOR PLACING OR REPLACING NECESSARY TRAFFIC CONTROL DEVICES TO MAINTAIN THE TRAVELED PAVEMENT SAFELY.

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, TEMPORARY ROADS AND TEMPORARY PAVEMENT, EXCEPT WHERE MODIFIED BY SUBSEQUENT NOTES OR APPROVED BY THE ENGINEER.

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

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

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES REQUIRED BY THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION, AS OF DATE OF BID , THESE PLANS AND PERTINENT ITEMS OF THE SPECIFICATIONS AND PROPOSAL SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

U. S. 35

TWO LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT IN BOTH THE EASTBOUND AND WESTBOUND DIRECTIONS, EXCEPT THAT ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE PERMITTED ON THE EXISTING WESTBOUND PAVEMENT WHILE WORK IS BEING PERFORMED CONNECTING THE PROPOSED EASTBOUND PAVEMENT TO THE EXISTING EASTBOUND PAVEMENT AND ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE PERMITTED ON THE PROPOSED EASTBOUND PAVEMENT, WHILE WORK IS BEING PERFORMED CONNECTING THE PROPOSED WESTBOUND PAVEMENT TO THE EXISTING WESTBOUND PAVEMENT. TO PROVIDE FOR ONE LANE DIRECTIONAL TRAFFIC, THE CONTRACTOR SHALL CONSTRUCT MEDIAN CROSSOVERS PAVED WITH CLASS B TEMPORARY PAVEMENT AND TEMPORARY CONCRETE MEDIAN BARRIER AND INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS DETAILED ON SHEETS 32 - 36.

GRANGE HALL ROAD

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT. DURING THE ERECTION OF STEEL FOR THE BRIDGES ON U.S. 35 OVER GRANGE HALL RD., THE CONTRACTOR MAY CLOSE THE ROAD TO TRAFFIC FOR A MAXIMUM OF 20 MINUTES AT HOURS OTHER THAN 6-9 A.M., 3-6 P.M.

DAYTON-XENIA ROAD

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT, PROPOSED PAVEMENT OR TEMPORARY ROADS PAVED WITH CLASS B TEMPORARY PAVEMENT AS DETAILED ON SHEET NOS. 35, 37, 38 AND 39 UNTIL SUCH TIME AS THE PROPOSED PAVEMENT IS AVAILABLE TO TRAFFIC. DURING THE ERECTION OF STEEL FOR BRIDGE NOS. GRE-675-0615 AND GRE-675-0616 THE CONTRACTOR MAY CLOSE THE ROAD TO TRAFFIC FOR A MAXIMUM OF 20 MINUTES AT HOURS OTHER THAN 6-9 A.M., 3-6 P.M.

HONEY LOCUST LANE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES UNTIL DAYTON-XENIA RD. AND WILDONNA DRIVE ARE AVAILABLE TO TRAFFIC.

KEMP ROAD

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT OR TEMPORARY ROADS PAVED WITH CLASS B TEMPORARY PAVEMENT AS DETAILED ON SHEET NOS. 35, 40, 121 AND 122 UNTIL SUCH TIME AS THE PROPOSED PAVEMENT IS AVAILABLE TO TRAFFIC.

SEQUENCE OF CONSTRUCTION

THE FOLLOWING SEQUENCE OF CONSTRUCTION IS A GUIDE TO THE CONTRACTOR FOR THE MAINTENANCE OF TRAFFIC IN THE U.S. 35 AREA. SHOULD THE CONTRACTOR ELECT TO PURSUE ALTERNATE METHODS, HE SHALL PRESENT THE ALTERNATE METHODS TO THE ENGINEER IN WRITING PRIOR TO INITIATING HIS OPERATIONS.

STAGE 1:

1. CONSTRUCT THE SANITARY SEWER SYSTEM SERVING THE AREA NORTH OF U.S. 35 AND THE PORTION OF THE SANITARY SEWER CROSSING DAYTON-XENIA RD. AT STATION 14+80±.

2. CONSTRUCT RELOCATED U.S. 35 (EB & WB) FROM STA. 10+00± TO STA. 44+00± EB & WB, INCLUDING THE FOLLOWING BRIDGES:
   - U.S. 35 OVER I-675
   - RAMP A OVER U.S. 35

STAGE 2: (AFTER COMPLETION OF STAGE 1.)

3. CONSTRUCT TEMPORARY ROADS NO. 1 & 2 FOR DAYTON-XENIA RD. AND DETOUR TRAFFIC. SEE SHEET NOS. 37, 39.

4. CONSTRUCT DAYTON-XENIA RD. FROM STA. 11+00± TO STA. 22+00±, INCLUDING THE PIERS FOR THE U.S. 35 BRIDGE OVER DAYTON-XENIA RD. AND THE FOLLOWING BRIDGES:
   - A. CONRAIL R.R. OVER DAYTON-XENIA RD.
   - B. CONRAIL R.R. OVER I-675.
   - C. DAYTON-XENIA RD. OVER I-675.

5. COMPLETE RELOCATED CONRAIL R.R.

6. AFTER COMPLETION OF DAYTON-XENIA RD. FROM STA. 11+00± TO STA. 22+00± CONSTRUCT TEMPORARY ROAD NO. 3 FOR DAYTON-XENIA RD. AS DETAILED ON SHEET NO. 37. REMOVE TEMPORARY RD. NO. 1 AND CONSTRUCT RELOCATED U.S. 35 (EB & WB) FROM STA. 0+00± TO STA. 10+00±.

STAGE 3: (AFTER COMPLETION OF STAGE 2)

7. CONSTRUCT MEDIAN CROSSOVERS ON U.S. 35 AS DETAILED ON SHEET NOS. 33, 34, 35. CONSTRUCT U.S. 35 (EB) FROM STA. 1087+74.57 TO STA. 1106+93.02 AND FROM STA. 44+00 EB TO STA. 76+00. TRAFFIC IS TO BE MAINTAINED BY USE OF CROSSOVERS AND ONE LANE OF TRAFFIC IN ~~EACH DIRECTION~~ WILL BE PERMITTED ON THE EXISTING WESTBOUND LANES, EXCEPT FOR THE AREA AROUND THE U.S. 35 AND DAYTON-XENIA RD. INTERSECTIONS WHERE THE EASTBOUND TRAFFIC IS TO BE DIVERTED BACK TO THE EXISTING EASTBOUND LANES AS SHOWN ON SHEET NO. 32. THE TIME TO COMPLETE THIS PHASE OF THE WORK SHALL NOT EXCEED 120 CALENDAR DAYS.

8. CONSTRUCT U.S. 35 (WB) FROM STA. 1090+85.78 TO STA. 1106+93.02 AND FROM STA. 44+00 WB TO STA. 76+00. TRAFFIC IS TO BE MAINTAINED BY USE OF CROSSOVERS AND ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE PERMITTED ON PORTIONS OF THE NEW EASTBOUND LANES AS DETAILED ON SHEET NOS. 33, 34. THE TIME TO COMPLETE THIS PHASE OF THE WORK SHALL NOT EXCEED 120 CALENDAR DAYS.

STAGE 4: (AFTER COMPLETION OF STAGE 3)

9. AFTER U.S. 35 EB & WB IS COMPLETED AND OPEN TO TRAFFIC, COMPLETE DAYTON-XENIA RD. AND WILDONNA DRIVE.

10. COMPLETE REMAINDER OF INTERCHANGE.

EACH STAGE OF CONSTRUCTION SHALL BE COMPLETED PRIOR TO COMMENCING THE NEXT STAGE.

LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS

IN ADDITION TO THE GENERAL REQUIREMENTS OF ITEM 614 ON THIS PROJECT, THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD R-75 "ROAD CLOSED" SIGNS, SIGN SUPPORTS AND LIGHTS DURING THE PERIODS THAT THE AFFECTED ROADS ARE CLOSED TO TRAFFIC AT THE LOCATIONS INDICATED ON SHEETS 32, 39.

PRIOR TO PROHIBITING THE TURNS FROM U.S. 35 AT GRANGE HALL RD., THE CONTRACTOR SHALL ERECT "GRANGE HALL RD, EXIT CLOSED AHEAD" SIGNS. TWO SIGNS SHALL BE ERECTED ON THE EASTBOUND APPROACH APPROXIMATELY 1/2 MILE WEST OF THE WOODMAN DRIVE INTERCHANGE AND TWO SIGNS SHALL BE ERECTED ON THE WESTBOUND APPROACH APPROXIMATELY 1/2 MILE EAST OF THE PATTERSON RD. INTERSECTION.

SIMILARLY, PRIOR TO ELIMINATING THE TURNS AT THE DAYTON-XENIA RD. INTERSECTION, THE CONTRACTOR SHALL REMOVE THE ABOVE SIGNS AND ERECT "DAYTON-XENIA RD. EXIT CLOSED AHEAD" SIGNS AT THE SAME LOCATIONS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE LIGHTS, SIGNS AND BARRICADES AT THE WORK LIMITS ON ALL INTERSECTING ROADS WHICH REMAIN OPEN TO TRAFFIC, AND MOVABLE GATES ON INTERSECTING ROADS CLOSED TO TRAFFIC AT ALL POINTS WHERE LOCAL TRAFFIC MOVEMENTS TERMINATE. BARRICADES AND GATES SHALL BE AS DETAILED ON STANDARD DRAWING MC-3.

TEMPORARY LIGHTING

SEE SHEET NO. 147 FOR REQUIREMENTS.

TEMPORARY TRAFFIC CONTROL, TEMPORARY RDS. #1, #2, #3 AND KEMP RD. TEMPORARY RD.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO FIGURE C-24 IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION, AS OF DATE OF BID FOR THE TRAFFIC CONTROL REQUIREMENTS FOR THE KEMP RD, TEMPORARY RD, AND TEMPORARY RDS. #1, #2 AND #3. THE SPEED INDICATED ON THE OW-143 SIGNS SHALL BE AS FOLLOWS:

CURVE RADIUS	SPEED
150′	20 MPH
200′	25 MPH
716′	40 MPH
955′	45 MPH

RADII OF CENTERLINE MARKINGS SHALL CONFORM TO THE RADII OF THE TEMPORARY RDS. EXCEPT WHERE OTHERWISE INDICATED.

PAVEMENT MARKINGS

PAVEMENT MARKINGS AS INDICATED IN THE MAINTENANCE OF TRAFFIC PLANS SHALL BE INSTALLED ON ALL NEWLY PAVED AREAS BEFORE THEY CAN BE OPENED TO TRAFFIC.

ALL EXISTING OR TEMPORARY PAVEMENT MARKINGS THAT WILL CONFLICT WITH PROPER TRAFFIC FLOW SHALL BE REMOVED BY THE CONTRACTOR WHEN DIRECTED BY THE ENGINEER. REMOVAL SHALL BE ACCOMPLISHED BY GRINDING, SANDBLASTING OR OTHER METHODS APPROVED BY THE ENGINEER EXCEPT THAT PAINTING (BLACK) OVER PAVEMENT MARKINGS IS NOT AN ACCEPTABLE METHOD.

PAYMENT FOR ALL OF THE ABOVE SHALL BE MADE UNDER ONE OF THE FOLLOWING:

ITEM 614 TEMPORARY CENTERLINE, *CLASS I*
ITEM 614 TEMPORARY EDGE LINES, *CLASS I*
ITEM 621 REMOVAL OF PAVEMENT MARKINGS

ITEM SPECIAL - REPLACEMENT DRUMS

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER AND PAID FOR UNDER ITEM SPECIAL, REPLACEMENT DRUMS. PAYMENT FOR EACH NEW DRUM SHALL INCLUDE (1) THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM AND (2) PROVIDING, MAINTAINING AND REMOVING NEW DRUMS IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUMS.

ITEM SPECIAL - REPLACEMENT SIGNS

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE BID PRICE PER SQUARE FOOT FOR "ITEM SPECIAL, REPLACEMENT SIGNS." PAYMENT SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED SIGNS, HARDWARE AND SUPPORTS; AND PROVIDING NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC. REPLACEMENT SIGNS SHALL BE NEW BUT OTHER MATERIALS MAY BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

MAINTENANCE OF TRAFFIC

ESTIMATED QUANTITIES
BY: DJP 2-28-72
CHKD: HLF 4-03-72
REVISED: IEH 5-30-79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

31
6/6

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ESTIMATED QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED IN THE GENERAL SUMMARY FOR MAINTAINING TRAFFIC. THE MATERIAL USED FOR ITEM 404 FOR MAINTAINING TRAFFIC SHALL CONSIST OF ITEM 301, ITEM 402, ITEM 404 OR A PREMIXED MATERIAL APPROVED BY THE ENGINEER. THE MATERIAL USED FOR ITEM 410, TRAFFIC COMPACTED SURFACE, AS PER PLAN, SHALL COMPLY WITH THE MATERIAL SPECIFICATIONS OF 304.02:

ITEM 404	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	100 CU. YD.
ITEM 410	TRAFFIC COMPACTED SURFACE, AS PER PLAN	600 CU. YD.
ITEM 616	WATER	12 M GAL.
ITEM 616	CALCIUM CHLORIDE	12 TON
ITEM 614	*Temporary Edge Lines, Class I*	*3 Miles*
ITEM 614	*Temporary Center Lines, Class I*	*1 Mile*
ITEM 621	REMOVAL OF PAVEMENT MARKING LINES	8,000 LIN. FT.
ITEM 606	GUARD RAIL, TYPE 6	6,812.5 LIN. FT.
ITEM 606	ANCHOR ASSEMBLY, AS PER PLAN	2 EACH
ITEM 202	GUARD RAIL REMOVED, INCLUDING ANCHOR ASSEMBLY	6,862.5 LIN. FT.
ITEM 622	TEMPORARY *Concrete Barrier*	14,348 LIN. FT.
ITEM SPECIAL	REPLACEMENT SIGNS	200 SQ. FT.
ITEM SPECIAL	REPLACEMENT DRUMS	200 EACH

AN ESTIMATED QUANTITY OF 500 M GAL. OF ITEM 616 WATER AND 50 TONS OF ITEM 616 CALCIUM CHLORIDE HAVE BEEN PROVIDED IN THE GENERAL SUMMARY FOR DUST CONTROL.

PAYMENT FOR ALL OF THE ABOVE INCLUDING PROVIDING, ERECTING, MAINTAINING (EXCEPT AS PROVIDED FOR ELSEWHERE IN THESE PLANS) AND REMOVING ALL LIGHTS, SIGNS, BARRICADES, DRUMS, CONES, ELECTRIC FLASHING ARROWS, REGULATORY SIGNS, AND ALL OTHER TRAFFIC CONTROL DEVICES BUT NOT INCLUDING:

ITEM 404	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC
ITEM 410	TRAFFIC COMPACTED SURFACE, AS PER PLAN
ITEM 615	TEMPORARY ROADS
ITEM 615	TEMPORARY PAVEMENT, TYPE B
ITEM 616	WATER
ITEM 616	CALCIUM CHLORIDE
ITEM 614	TEMPORARY PAVEMENT MARKING *Lines*
ITEM 621	REMOVAL OF PAVEMENT MARKINGS
ITEM 606	GUARD RAIL
ITEM 606	ANCHOR ASSEMBLY, AS PER PLAN
ITEM 202	GUARD RAIL REMOVED, INCLUDING ANCHOR ASSEMBLY
ITEM 622	TEMPORARY *Concrete Barrier (See Std. Dwg. MC-9A)*
ITEM SPECIAL	REPLACEMENT SIGNS
ITEM SPECIAL	REPLACEMENT DRUMS

For Item 606 Anchor Assembly as per plan See Sht. No. 146
SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

MAINTENANCE OF EXISTING TRAFFIC SIGNAL CONTROLS

DURING THE CONSTRUCTION OF THIS PROJECT, THE EXISTING TRAFFIC SIGNAL CONTROLS AT THE INTERSECTIONS OF U.S. 35 WITH DAYTON-XENIA ROAD AND U.S. 35 WITH GRANGE HALL ROAD SHALL BE MAINTAINED BY THE CONTRACTOR AS LONG AS THESE INTERSECTIONS ARE USED BY TRAFFIC.

THE EXISTING TRAFFIC SIGNAL CONTROLS SHALL BE MAINTAINED WITH EXISTING CONTROLLERS AND SIGNAL HEADS AND/OR OTHER EQUIPMENT AS MAY BE REQUIRED. ALL SIGNAL EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL MEET THE APPLICABLE REQUIREMENTS OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION AND SHALL BE APPROVED BY THE ENGINEER. USED EQUIPMENT IN GOOD CONDITION MAY BE FURNISHED.

THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF U.S. 35 AND DAYTON-XENIA ROAD IS AN ACTUATED SIGNAL. IF THE ALIGNMENT OF A TEMPORARY ROADWAY OR OTHER CONSTRUCTION WORK SHOULD INTERFERE WITH THE OPERATION OF THE EXISTING VEHICLE DETECTORS OR THEIR LEAD-IN CABLES, THE CONTRACTOR SHALL PROVIDE TEMPORARY VEHICLE DETECTION EQUIPMENT.

THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF U.S. 35 AND GRANGE HALL ROAD IS AN ACTUATED SIGNAL. BEFORE MAKING ANY REVISIONS OR ADJUSTMENTS TO THE EXISTING SIGNALS OPERATION THE CONTRACTOR SHALL HAVE OBTAINED THE ENGINEER'S APPROVAL OF PROPOSED REVISIONS OR ADJUSTMENTS.

DURING THE CONSTRUCTION PHASE THAT TWO-WAY TRAFFIC IS MAINTAINED ON U.S. 35 AT GRANGE HALL ROAD ON THE EXISTING WESTBOUND LANES A TEMPORARY SIGNAL SHALL BE IN OPERATION. THE CONTRACTOR SHALL SUBMIT A TEMPORARY SIGNAL PLAN TO THE ENGINEER FOR APPROVAL. THE TEMPORARY SIGNAL PLAN SHALL MEET THE FOLLOWING REQUIREMENTS:

MAINTENANCE OF EXISTING TRAFFIC SIGNAL CONTROLS - CONTINUED

1. A MINIMUM OF TWO SIGNAL HEADS FACING EACH APPROACH SUPPORTED OVER THE PAVEMENT BEING USED TO MAINTAIN TRAFFIC, IN PROPER VIEW OF THE APPROACHING TRAFFIC, AT A DISTANCE OF NOT LESS THAN THIRTY-FIVE FEET NOR MORE THAN NINETY FEET FROM THE STOP LINE LOCATION.
2. THE NORTHBOUND GRANGE HALL ROAD APPROACH SHALL HAVE AN ADDITIONAL HEAD SIDE MOUNTED ON A TRAFFIC SIGNAL POLE APPROXIMATELY 12'-0" ABOVE THE INTERSECTION PAVEMENT, VISABLE FOR NOT LESS THAN 500 FEET, AFTER ERECTION OF THE PROPOSED EASTBOUND U.S. 35 BRIDGE STEEL.
3. EACH APPROACH SHALL HAVE NOT LESS THAN TWO NO TURNS (R-22-36) SIGNS.
4. CONTROLLER MAY BE PRE-TIMED WITH THREE DIALS (TIME CLOCK SELECTED) WITH PHASING, TIMING SPLITS AND HOURS FOR EACH DIAL AS DIRECTED BY THE ENGINEER.
5. SHALL HAVE MANUAL CONTROL ACCESSIBLE TO POLICE OFFICIALS.
6. SHALL HAVE AN EMERGENCY FLASHER UNIT WIRED TO FLASH RED IN ALL DIRECTIONS.

THE CONTRACTOR SHALL ARRANGE WITH THE DAYTON POWER & LIGHT CO. FOR MAINTENANCE OF EXISTING SERVICE LINES OR CONSTRUCTION OF TEMPORARY SERVICE LINES AS REQUIRED FOR POWER SERVICE TO EXISTING AND/OR TEMPORARY TRAFFIC SIGNALS THAT HE IS MAINTAINING AS PART OF THIS PROJECT, AND SHALL PAY FOR THE ELECTRICAL ENERGY USED.

ALL EXISTING TRAFFIC SIGNAL EQUIPMENT AND ALL TEMPORARY EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL BE REMOVED BY HIM AND SHALL BECOME HIS PROPERTY UPON THE COMPLETION OF THE PROJECT.

SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL REQUIREMENTS FOR ITEM 614 MAINTAINING TRAFFIC.

PAYMENT FOR ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR THE MAINTENANCE OF TRAFFIC SIGNAL CONTROLS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 615 LOCATION	TEMPORARY PAVEMENT Cl.B Sq. Yd.	TEMPORARY ROADS LUMP
U. S. 35		
MEDIAN CROSS OVERS	2,438	LUMP
DAYTON-XENIA RD.		
TEMP. RD. No. 1 - STA. 10+00.00 TO STA. 27+82.61	3,489	LUMP
TEMP. RD. No. 2 - STA. 33+40.29 TO STA. 40+00.00	1,349	LUMP
TEMP. RD. No. 3 - STA. 50+00.00 TO STA. 56+00.05	1,111	LUMP
KEMP RD.		
TEMP. RD. - STA. 10+00.00 TO STA. 25+70.27	3,218	LUMP
TOTALS TO GENERAL SUMMARY	11,605	LUMP

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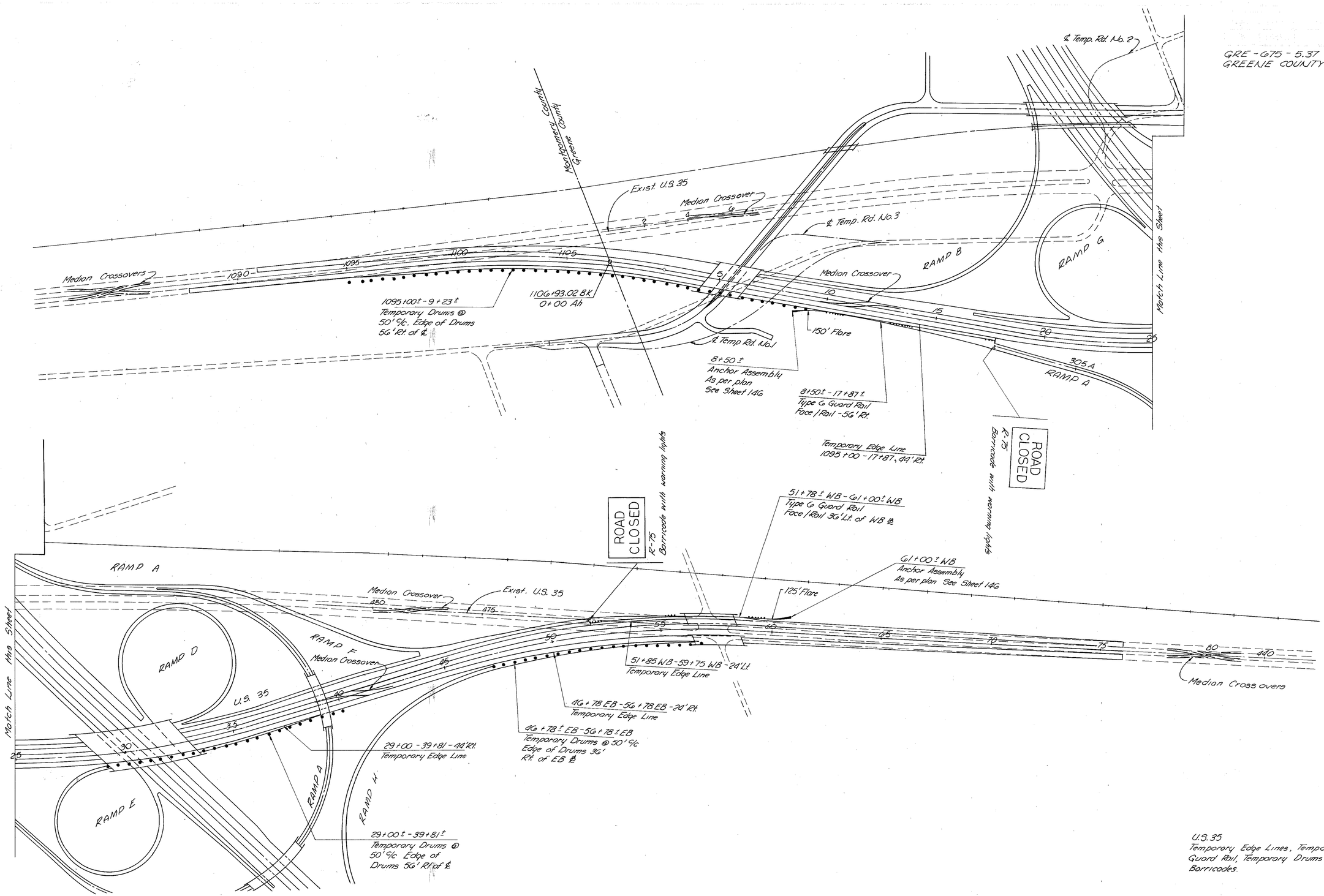
GREENE COUNTY



U.S. 35
Temporary Edge Lines, Temporary Guard Rail, Temporary Drums & Barricades.

MAINTENANCE OF TRAFFIC

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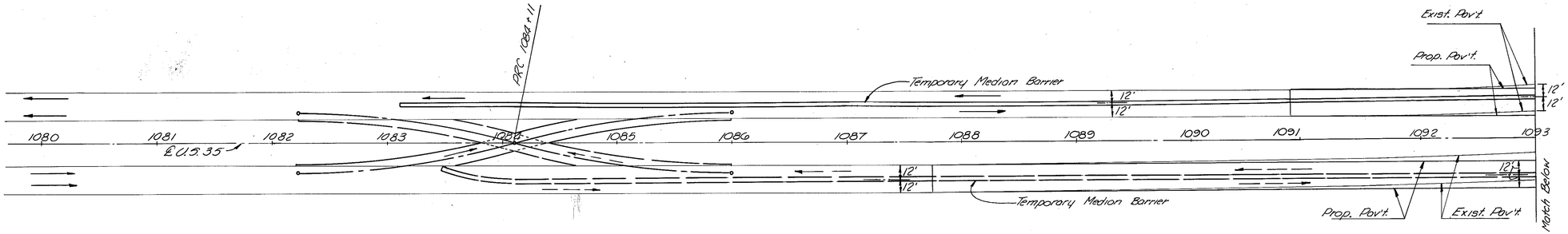
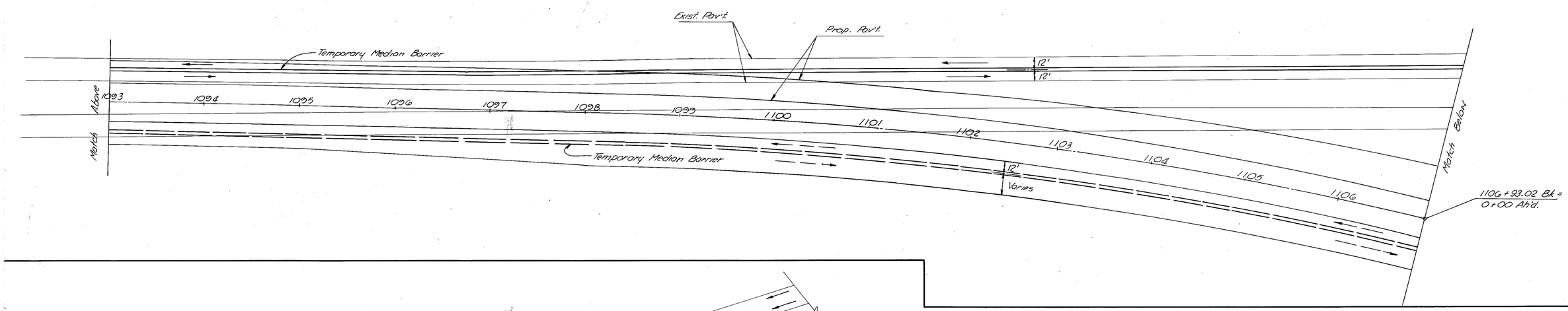
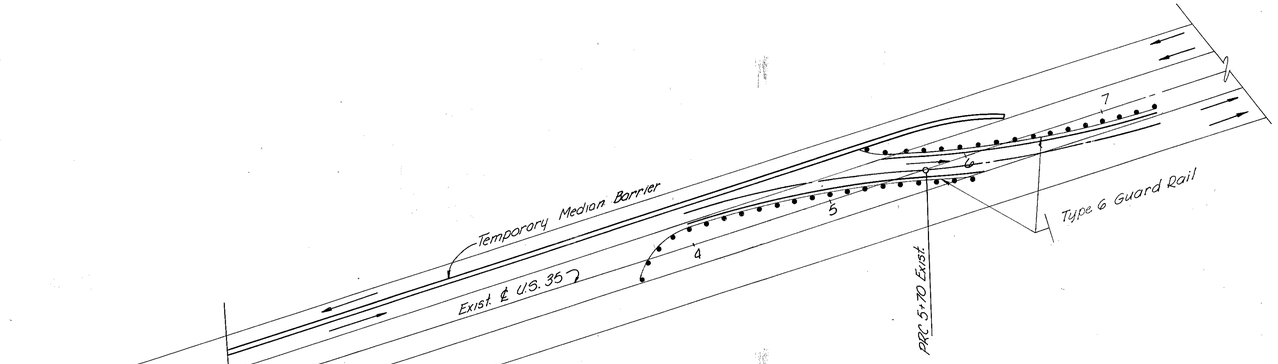
GREENE COUNTY







Notes:

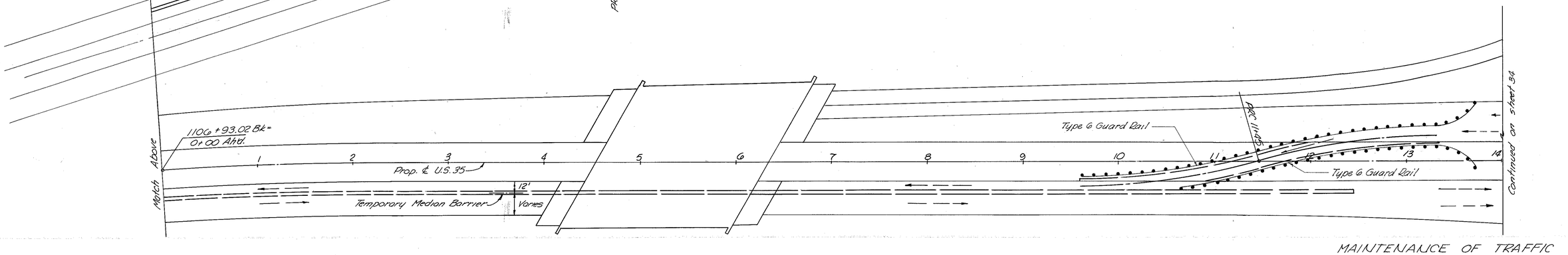
Eastbound Traffic shifted to WB Lanes

Westbound Traffic shifted to EB Lanes

For Traffic Control lead-in to cross overs and cross over details See Sheet 35

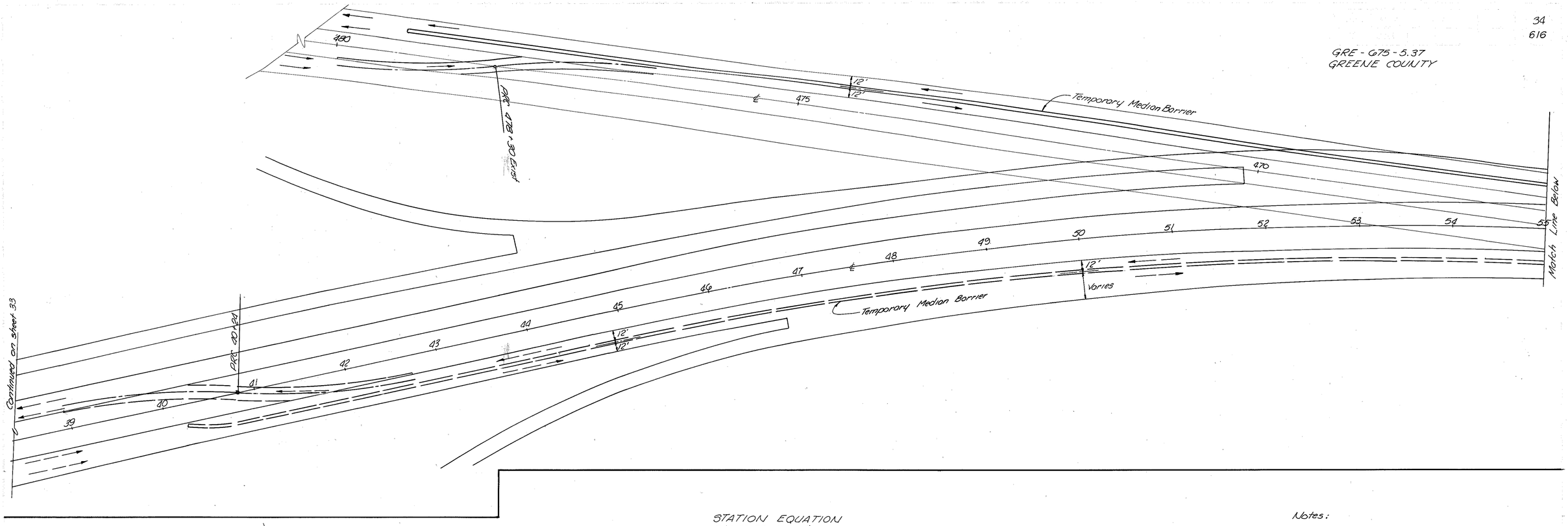
For Temporary Lane Closures See Sheet 35

For detail of Temporary Median Barrier See Std. Dwg. MC-9A



MAINTENANCE OF TRAFFIC

GRE - G75 - 5.37
GREENE COUNTY



STATION EQUATION
61+45.35 Prop. ℄ =
460+89.29 Exist. ℄ Back =
460+39.41 Exist. ℄ Ahead
Exist. Stationing increases Westwardly

Notes:

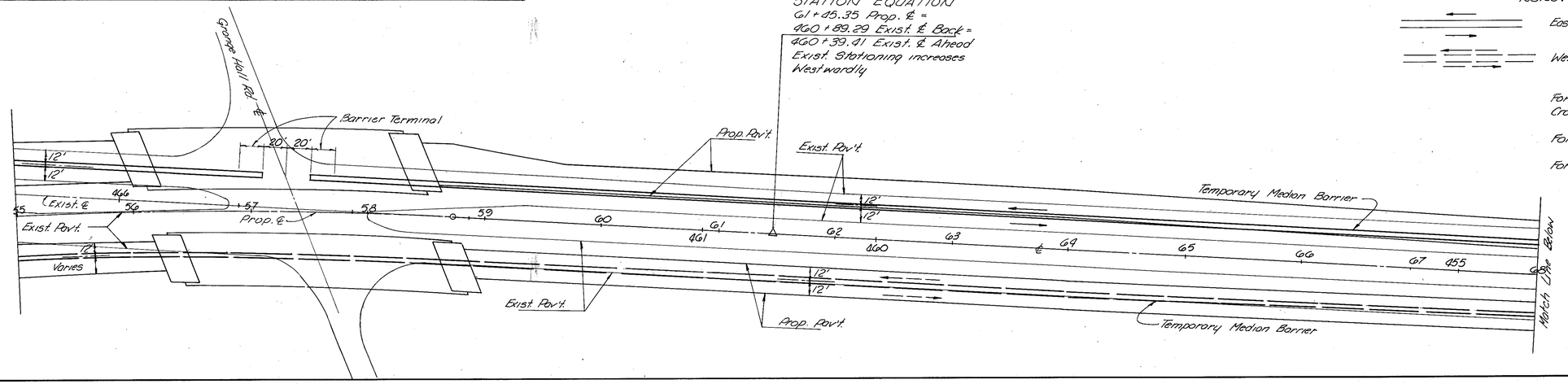
Eastbound Traffic shifted to WB Lanes

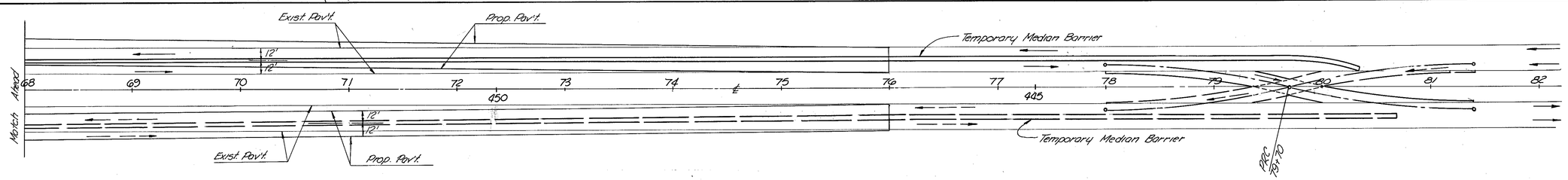
Westbound Traffic shifted to EB Lanes

For Traffic Control lead-in to Cross overs and Cross over details See Sheet 35

For Temporary Lane Closures See Sheet 35

For detail of Temporary Median Barrier See Std. Dwg. MC9A





MAINTENANCE OF TRAFFIC

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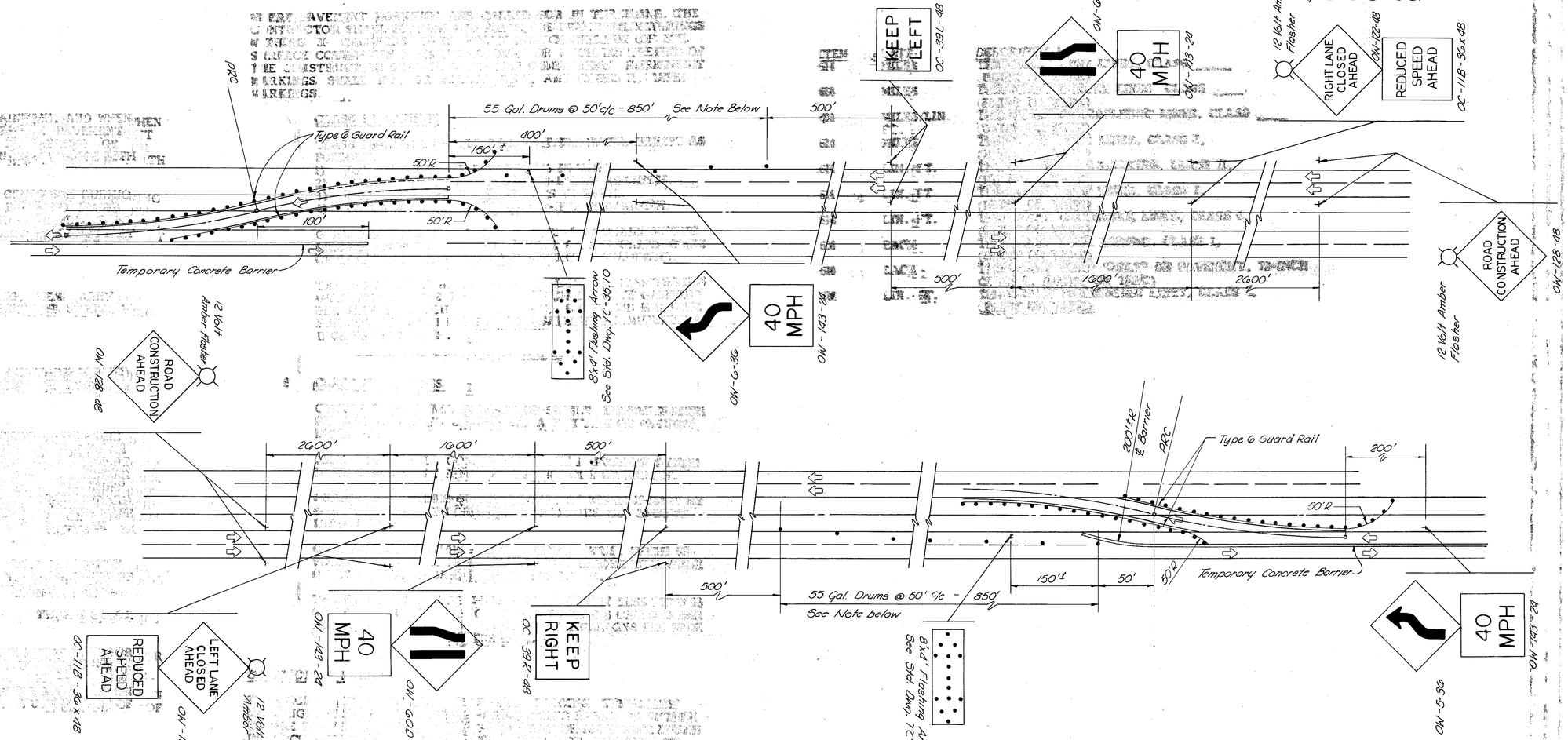
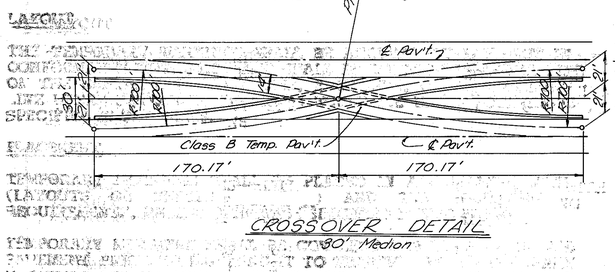
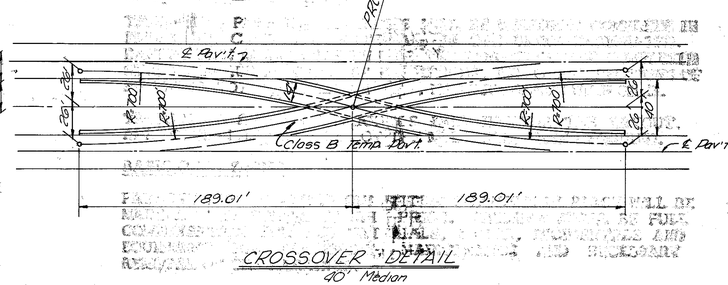
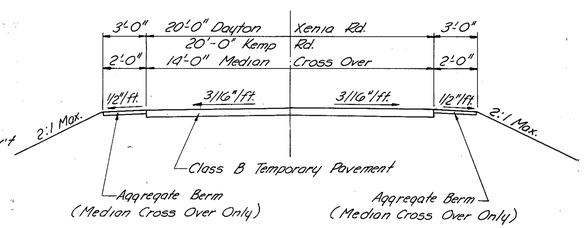




CROSSOVER DETAIL
80' Median



CROSSOVER DETAIL
40' Median



Note: Curves shall be built with pavement crown removed.

TYPICAL SECTION
TEMPORARY ROADS & MEDIAN CROSS OVERS
No Scale

NOTES

Mount OW-138-30 sign on 1st, 5th and last drum in taper. See Sheet 146 for mounting method.

Six (6) special black and orange "WATCH FOR STOPPED TRAFFIC" signs (48" x 48") shall be available on the job at all times. There shall be two for each direction of traffic and two spares. These signs shall be mounted on a portable barricade and are to be used in the event that traffic backs up. They will be located approximately 1/4 mile in advance of the back up and will be moved back as the back up increases. Existing speed limit signs shall be covered in areas where traffic is restricted to less than two lanes in one direction.

614 TEMPORARY PAVEMENT MARKINGS

614 TEMPORARY PAVEMENT MARKINGS

GENERAL

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND WHEN NECESSARY, REMOVE TEMPORARY RETROREFLECTIVE PAVEMENT MARKINGS ON EXISTING, RECONSTRUCTED, RESURFACED OR TEMPORARY ROADS WITHIN THE WORK LIMITS, IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE MARKINGS SHALL BE MAINTAINED IN GOOD CONDITION DURING THE REQUIRED SERVICE PERIOD TO PROVIDE DAY AND NIGHT VISIBILITY. THE MARKINGS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER TO MAINTAIN REQUIRED VISIBILITY AT NO ADDITIONAL COST TO THE STATE.

MATERIALS

UNLESS OTHERWISE INDICATED ON THE PLANS, TEMPORARY PAVEMENT MARKINGS MAY BE OF PAINT OR PAVEMENT MARKING TAPE.

A. PAINT

PAINT SHALL COMPLY WITH 708.14 AND SHALL BE APPLIED IN ACCORDANCE WITH 621 EXCEPT AS MODIFIED HEREIN.

B. PAVEMENT MARKING TAPE

FLEXIBLE RETROREFLECTIVE PREFORMED PRESSURE SENSITIVE TAPE SHALL HAVE STRAIGHT EDGES AND BE FREE OF CRACKS. THE TAPE SHALL CONSIST OF PIGMENT AND FILLERS WITH SUFFICIENT BINDER AND PLASTICIZER TO RETAIN GLASS BEADS HAVING A REFRACTIVE INDEX MEETING THE MINIMUM REFLECTIVE INTENSITY STANDARD STATED IN THE MANUFACTURERS INFORMATION. THE TAPE SHALL BE FLEXOLITE "WET REFLECTIVE" 3M "SCOTCHLANE", OR AN APPROVED EQUAL.

THE GLASS BEADS SHALL BE DISTRIBUTED UNIFORMLY THROUGHOUT THE TAPE WITH SUFFICIENT SURFACE BEADS TO PROVIDE OPTIMUM REFLECTORIZATION AT ALL TIMES.

PAVEMENT MARKING TAPE SHALL COMPLY WITH THE COLOR REQUIREMENTS OF 708.14.

THE TAPE SHALL HAVE A PRECOATED ADHESIVE LAYER FOR PAVEMENT APPLICATION WITHOUT THE USE OF HEAT, SOLVENTS OR ADDITIONAL ADHESIVES. THE ADHESIVE SHALL BE SUFFICIENT TO RETAIN COMPLETE MARKINGS ON THE PAVEMENT SURFACE THROUGHOUT THE USEFUL LIFE OF THE MARKINGS.

IN ADDITION TO THE FOREGOING, ALL TEMPERATURE-APPLICATION REQUIREMENTS AND OTHER APPLICABLE MANUFACTURERS MATERIAL AND APPLICATION INSTRUCTIONS SHALL BE FOLLOWED.

LAYOUT

THE TEMPORARY MARKINGS SHALL BE ACCURATELY LAID OUT IN CONFORMANCE WITH 621.051 AND SHALL BE LOCATED IN A TRUE LINE ON THE CENTER LINE, LANE LINE, EDGE LINE, OR CHANNELIZING LINE WHERE PERMANENT MARKINGS WOULD LIE UNLESS OTHERWISE SPECIFIED IN THE PLANS.

PLACEMENT

TEMPORARY MARKINGS SHALL BE PLACED IN ACCORDANCE WITH (LAYOUTS ON SHEETS) AND THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE PLANS.

TEMPORARY MARKINGS SHALL BE COMPLETE AND IN PLACE ON ALL PAVEMENT PRIOR TO EXPOSING IT TO TRAFFIC. WHEN TEMPORARY MARKINGS ARE NO LONGER NEEDED, THEY SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH 621.134 AND NECESSARY PAVEMENT MARKINGS INSTALLED BEFORE THE FLOW OF TRAFFIC IS CHANGED TO THE NEXT PHASE OR RETURNED TO ITS NORMAL CHANNEL.

WHERE PAVEMENT MARKINGS ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL FURNISH AND PLACE THE PERMANENT MARKINGS WITHING 30 CALENDAR DAYS FOLLOWING COMPLETION OF ALL SURFACE COURSES IN A SINGLE ROADWAY OR PRIOR TO THE END OF THE CONSTRUCTION SEASON, WHICHEVER COMES FIRST. PERMANENT MARKINGS SHALL NOT BE PLACED OVER ANY CLASS I, TAPE MARKINGS.

A. CLASS I MARKINGS

CLASS I MARKINGS SHALL BE AS DEFINED IN 621, EXCEPT AS FOLLOWS:

1) LANE LINES SHALL BE 4-INCHES IN WIDTH.
2) TRANSVERSE LINES SHALL BE 8-INCHES IN WIDTH.
3) STOP LINES SHALL BE 12-INCHES IN WIDTH.
4) CROSS WALK LINES SHALL BE 8-INCHES IN WIDTH.

GORE MARKINGS SHALL CONSIST OF TWO CHANNELIZING LINES PLACED AT THE THEORETICAL OR TEMPORARY GORE OF RAMPS AND DIVERGING OR CONVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR SOLID 4-INCH LINES, 24 GALLONS PER MILE FOR SOLID 6-INCH LINES, 48 GALLONS PER MILE FOR SOLID 12-INCH LINES, AND 4 GALLONS PER MILE FOR 4-INCH DASHED LINES.

B. CLASS II MARKINGS

CENTER LINES SHALL CONSIST OF SINGLE, YELLOW 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

LANE LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

CHANNELIZING LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 20-FOOT INTERVALS.

GORE MARKINGS SHALL BE TWO CONTINUOUS, WHITE 50-FOOT BY 4-INCH LINES PLACED AT THE THEORETICAL GORE OF AN EXIT RAMP OR DIVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR GORE MARKINGS, 0.8 GALLONS PER MILE FOR CHANNELIZING LINE, AND 0.4 GALLONS PER MILE FOR LANE LINE AND CENTER LINE.

CONFLICTING MARKINGS

THE CONTRACTOR SHALL, PRIOR TO PLACING TEMPORARY MARKINGS, REMOVE ALL EXISTING CONFLICTING MARKINGS VISIBLE TO THE TRAVELING PUBLIC DURING DAYLIGHT OR NIGHTTIME HOURS IN ACCORDANCE WITH 621.134. THE COST FOR REMOVAL OF CONFLICTING MARKINGS SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS.

METHOD OF MEASUREMENT

TEMPORARY PAVEMENT MARKINGS WILL BE MEASURED COMPLETE IN PLACE, BY CLASS AND MATERIAL, IN THE UNITS DESIGNATED. DASHED LINE QUANTITIES WILL BE THE LENGTH OF THE COMPLETED STRIPE, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED, IN ACCORDANCE WITH 621.15.

TEMPORARY PAVEMENT MARKINGS WILL INCLUDE THE LAYOUT, APPLICATION AND REMOVAL OF THE MARKINGS, WHEN REQUIRED.

BASIS OF PAYMENT

PAYMENT FOR ACCEPTED QUANTITIES COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND NECESSARY REMOVAL OF THE MARKINGS.

ITEM	UNIT	DESCRIPTION
614	MILES	TEMPORARY LANE LINES, CLASS ____, (PAINT OR TAPE)
614	MILES	TEMPORARY CENTER LINES, CLASS ____, (PAINT OR TAPE)
614	MILES/LIN. FT.	TEMPORARY CHANNELIZING LINES, CLASS ____, (PAINT OR TAPE)
614	MILES	TEMPORARY EDGE LINES, CLASS I, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY GORE MARKING, CLASS II, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY STOP LINES, CLASS I, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY CROSSWALK LINES, CLASS I, (PAINT OR TAPE)
614	EACH	TEMPORARY LANE ARROWS, CLASS I, (PAINT OR TAPE)
614	EACH	TEMPORARY WORD "ONLY" ON PAVEMENT, 72-INCH, CLASS I, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY TRANSVERSE LINES, CLASS I, (PAINT OR TAPE)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

37
6/6

GRE -675-5.37
GREENE COUNTY

Sta. 10+20.83 D.X. Rd. 2 ℄
P.I. Sta. 10+40.83 Temp. Rd.
Δ : 23°-04'-26"
R : 200.00'
T : 40.83'
L : 80.54'
D_a : 28°-38'-52"

Sta. 13+10.00 D.X. Rd. 32.00' Rt. :
P.I. Sta. 13+34.32 Temp. Rd.
Δ : 8°-20'-45"
R : 716.20'
T : 52.25'
L : 104.32'
D_c : 8°-00'-00"

Sta. 23+09.22 D.X. Rd. - 19.00' Rt. :
P.I. Sta. 24+08.22 Temp. Rd.
Δ : 57°-16'-41"
R : 200.00'
T : 109.22'
L : 199.94
D_a : 28°-38'-52"

Sta. 10+95.94 D.X. Rd. 32.00' Rt. :
P.I. Sta. 11+21.37 Temp. Rd.
Δ : 23°-04'-26"
R : 200.00'
T : 40.83'
L : 80.54'
D_a : 28°-38'-52"

Sta. 11+75.56 US 35 - 284.19' Lt. :
P.I. Sta. 55+30.56 Temp. Rd.
Δ : 7°-55'-56"
R : 716.20'
T : 49.66'
L : 99.15'
D_a : 8°-00'-00"

Sta. 10+27.80 US 35 - 255.41' Lt. :
P.I. Sta. 25+97.61 Temp. Rd.
Δ : 38°-31'-11"
R : 572.96'
T : 200.20'
L : 385.20
D_a : 10°-00'-00"

Sta. 17+39.00 D.X. Rd. - 185.00' Rt. :
P.I. Sta. 18+41.62 Temp. Rd.
Δ : 43°-09'-32"
R : 954.93'
T : 377.40'
L : 719.32'
D_a : 6°-00'-00"

NOTE
At Sta. 12+00± on Temp. Rd. No. 1, the existing inlet shall be protected so it can be returned to service after removal of the Temp. Rd.
Payment for this work shall be included in the Lump Sum Bid for Item 615 - Temporary Roads, as per plan.

See Sheet 32 for Temporary Road Traffic Control Requirements

For Profiles Of Temporary Roads No. 1 & 3, See Sh. No. 38

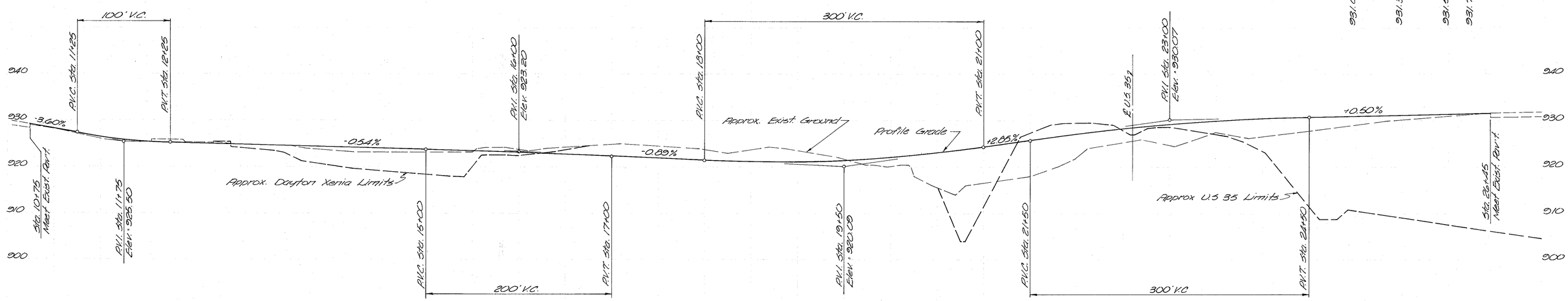
TEMPORARY ROAD Nos. 1 & 3

DAYTON-XENIA TEMPORARY ROAD

GRE-675-5.37
GREENE COUNTY

925.10 927.30 926.50 925.68 925.46 925.23 925.09 924.82 924.55 924.28 924.01 923.74 923.60 923.45 923.29 923.11 922.93 922.73 922.53 922.31 921.87 921.42 921.24 921.13 921.11 921.16 921.29 921.45 921.75 922.14 922.58 923.10 923.60 923.57 925.79 926.45 927.12 927.71 928.25 928.75 929.19 929.58 929.93 930.23 930.47 930.67 930.82

931.07 931.32 931.57 931.70

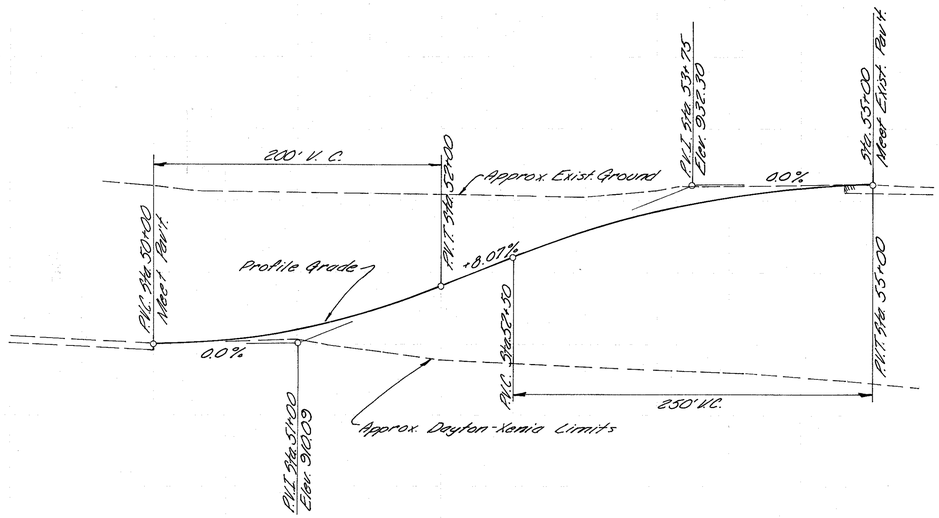


11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

For Plan, See Sh. No. 37

TEMPORARY ROAD NO. 1

910.03 910.22 910.39 911.23 912.11 913.25 914.63 916.28 918.17 922.20 924.12 925.84 927.35 928.66 929.78 930.68 931.39 931.90 932.20 932.30



50 51 52 53 54 55

For Plan, See Sh. No. 37

TEMPORARY ROAD NO 3

PROFILES, DAYTON-XENIA TEMPORARY ROAD

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

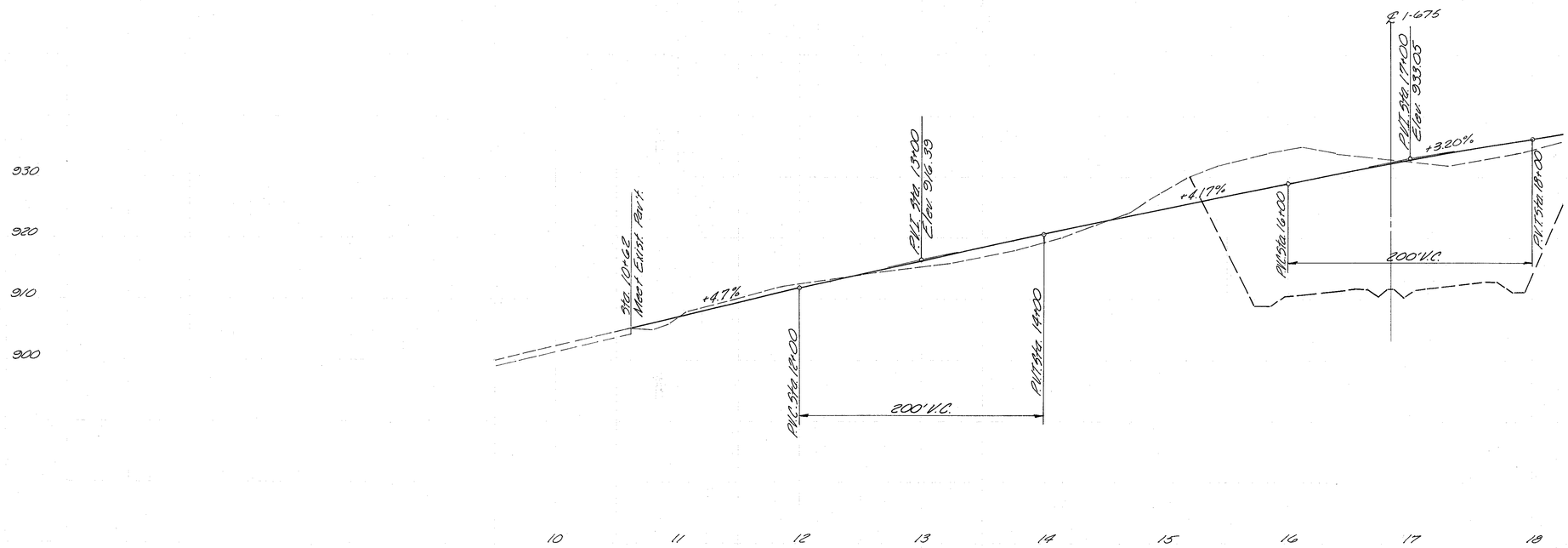
39
616

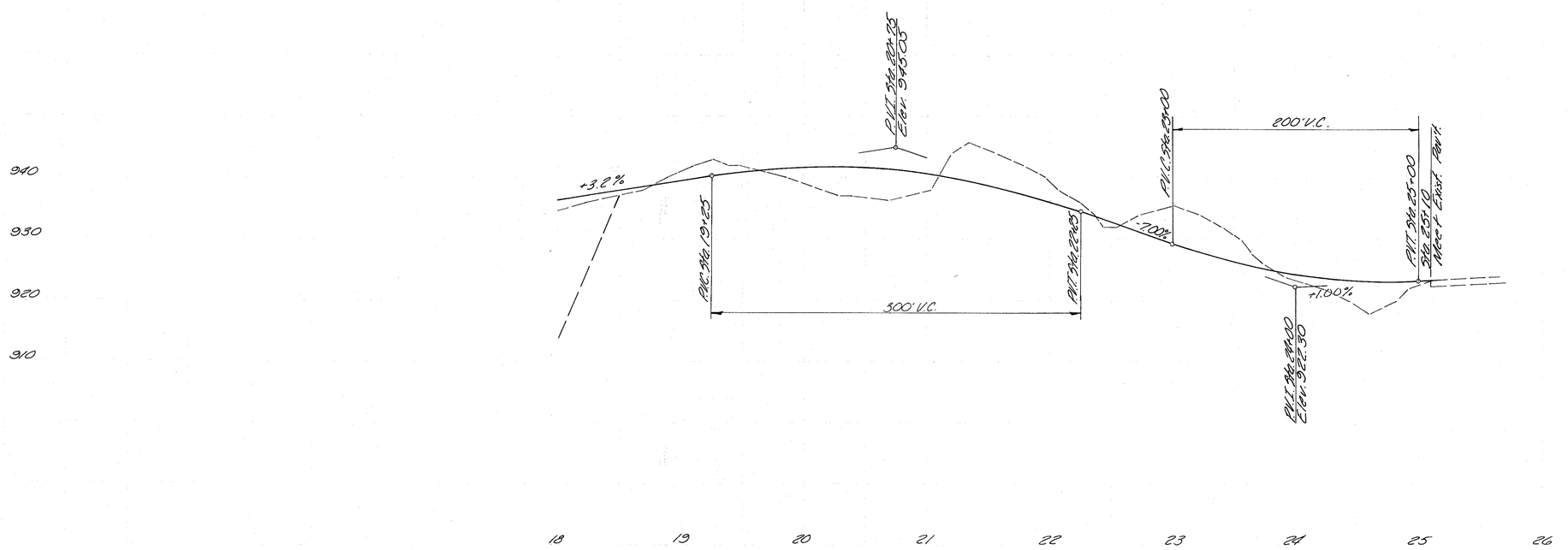
GRE-675-537
GREENE COUNTY

TEMPORARY RD. No. 2

DAYTON XENIA TEMPORARY ROAD

GRE-675-5.37
GREENE COUNTY





For Plan, See Sh. No. 121 & 122

PROFILE - KEMP ROAD TEMPORARY ROAD

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

41
616

GRE-675-5.37
GREENE COUNTY
QUANTITY CALCULATIONS
BY DLP DATE 3-27-72
CHKD. HHS DATE 4-3-72
KING AND GAFARIS
CONSULTING ENGINEERS
Revised O.H.S. 3/79

SUMMARY OF EARTHWORK AND SEEDING

STATION FROM	STATION TO	EXCAVATION CUBIC YARDS	EMBANKMENT CUBIC YARDS	SEEDING SQUARE YARDS
I-675				
308+21.67	320+00	7,938	105,189	37,218
320+00	330+00	7,129	18,111	16,750
330+00	340+00	38,999	12,402	20,607
340+00	350+00	79,313	1,385	23,728
350+00	360+00	105,278	1,110	28,800
360+00	370+00	38,153	27,703	27,399
370+00	380+00	5,662	44,746	25,067
380+00	390+00	4,035	51,034	25,000
390+00	400+00	5,463	119,113	30,455
400+00	410+00	144,687	41	24,316
410+00	417+00	132,643	58	20,082
US 35 INTERCHANGE				
US 35				
1087+74.57	1095+00	4,671	186	9,385
1095+00	1106+93.02	13,850	20,801	25,084
0+00	10+00	34,567	47,365	25,102
10+00	20+00	27,616	37,447	23,607
20+00	29+01	13,260	54,203	18,187
32+50	40+00	452	112,279	12,852
40+00	50+00	21,173	120,126	24,906
50+00	60+00	2,032	106,636	21,857
60+00	70-00	1,838	87,554	24,355
70+00	76+00	1,369	7,161	9,583
RAMP A				
301+31	310+00	16,374	14,005	14,251
310+00	321+37	28,909	16,574	16,130
323+06	329+44	8,355	62,449	18,743
331+05	340+00	957	88,497	13,964
340+00	350+04	53,607	689	12,801
RAMP B				
330+13	353+08	73,259	638	25,062
RAMP C				
318+08	333+42	11,306	14,314	26,573
RAMP D				
337+01	362+50	24,849	32,557	45,078

STATION FROM	STATION TO	EXCAVATION CUBIC YARDS	EMBANKMENT CUBIC YARDS	SEEDING SQUARE YARDS
US 35 INT. CONT.				
RAMP E				
322+00	336+00	45,904	11,597	37,537
RAMP F				
327+30	336+77	14,779	54,113	25,712
RAMP G				
344+03	355+02	38,505	7,824	35,303
RAMP H				
323+00	337+09	6,510	39,395	24,070
DAYTON - XENIA RD.				
11+00	20+00	21,436	195	8,622
20+00	30+00	130,421	82	16,608
30+00	37+10	27,108	9,290	9,057
41+00	49+00	1,174	9,520	4,418
WENRICK DRIVE		254	0	250
WILDONNA DRIVE		3,957	18	2,696
STEDMAN LANE		89	65	313
PENN - CENTRAL				
522+123	530+00	423	194	2,059
530+00	540+00	4021	3916	7,460
540+00	550+00	5656	10,621	5,837
550+00	560+00	29,015	1278	16,593
560+00	572+96	16,816	161	15,765
GRANGE HALL RD		1,150	4,457	5,548
KEMP RD		7501	706	9,174
CHANNEL		125721	0	22,680
HONEY LOCUST L.N.		205	47	569
SERVICE ROAD B		1,282	522	2,412
PEDESTRIAN RAMP		92	418	415
SERVICE ROAD A		81	0	Incl. with M.L.

STATION FROM	STATION TO	EXCAVATION CUBIC YARDS	EMBANKMENT CUBIC YARDS	SEEDING SQUARE YARDS
Est. Quan. Sh. No. 72		644	0	
Est. Quan. Sh. No. 73		0	3	
Est. Quan. Sh. No. 103		1480	5	
Est. Quan. Sh. No. 106		0	12	
Est. Quan. Sh. No. 118		28	28	
Est. Quan. Sh. No. 117		398	0	
Drainage Detail Sh. No.				1872
Channel Easements				
Parcel 325X				436
Parcel 361X				131
Parcel 362T				532
Adjustment for Partial Design Change		19,695	- 28,188	
TOTALS		1,412,089	1,336,052	903,950
203 Total Excavation		1,412,089		
203 Total Embankment			1,336,052	
Seeding for Item 659 Roadside Clean Up Areas				10,333
Gross Area Between Seeding Limits (Exclusive of Paved Areas)				914,283
Deductions: Rock Channel Protection				2,198
Riprap				7,637
Paved Gutter				370
Total to be Deducted				- 10,205
NET AREA FOR 659 LIMING & FERTILIZING				904,078
Deductions: Seeding and Jute Matting				6,054
Sodding				20,000
Reinforced Sodding				1,064
Total to be Deducted				- 27,118
NET AREA TO BE SEEDED AND MULCHED				876,960

ESTIMATED QUANTITIES

QUANTITY CALCU & CHK'D
CALC'D. D.W.P. DATE 3-6-72
CHK'D. D.C. DATE 3-14-72
KING AND GAVARIS
CONSULTING ENGINEERS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

42
6/6

GRE-675-5.37
GREENE COUNTY

ITEM 203 SUBGRADE COMPACTION

	SQ. YD.
I-675 Sta. 308+34.01 to Sta. 417+00, Port. Paved Shoulders and Approach Slabs	160,899
US-35 Ramps A, B, C, D, E, F, G and H, I-675 S.B. Coll.-Dist. and US-35 N.B. Coll.-Dist. Port. Paved Shoulders and Approach Slabs	158,633
Dayton Xenia Rd.- Port. and Approach Slabs	22,365
Kemp Rd.: Port. Paved Shoulders and Approach Slabs	3,782
TOTALS TO GENERAL SUMMARY TOTAL	345,679

ITEM 203 PROOF ROLLING

	HOURS
160,899 SY / 3000	54
158,633 SY / 3000	53
22,365 SY / 3000	7
3,782 SY / 3000	1
TOTAL	115

604 REFERENCE MONUMENTS *

LOCATION	EACH
308+00.01 to 380+00.00 I-675	15
1098+22.25 to 75+00.00 US-35	18
380+00.00 to 417+00.00 I-675	9
TOTAL TO GENERAL SUMMARY	42

ITEM 607 GATE, TYPE CL *

LOCATION	EACH	EACH
Sta. 23+00 Dayton Xenia Rd. Lt. (18' Wide)	1	
Sta. 26+00 Dayton Xenia Rd. Rt. (18' Wide)	1	
Sta. 367+99.07 I-675 Lt. (14' Wide)		1
TOTAL TO GENERAL SUMMARY	2	1

407 Cover Aggregate: 22,093 (Gal. of Tack) x 10 x 7 1/4 s.y. ÷ 2000 = 774 Tons

ITEM 659 LIMING AND FERTILIZING

	SQ. YD.	TONS
NET AREA to be Limed and Fertilized	904,078	
Commerical Fertilizer 20#/1000 Sq. Ft.	904,078	82
Agricultural Liming 100#/1000 Sq. Ft.	904,078	407

601 ROCK CHANNEL PROTECTION TYPE B FOR STREAM CROSSINGS *

See Standard Drawing F-6

STATION	SIDE	CU YD
308+27 ℄ I-675	Rt.	10.7
309+10 ℄ I-675	Rt.	10.7
310+20 ℄ I-675	Rt.	31.1
312+20 ℄ I-675	Rt.	13.3
315+25 ℄ I-675	Rt.	13.3
325+75 ℄ I-675	Lt.	10.7
350+70 ℄ I-675	Rt.	7.1
363+65 ℄ I-675	Rt.	5.3
370+05 ℄ I-675	Lt.	13.3
370+35 ℄ I-675	Lt.	16.0
393+53 ℄ I-675	Lt.	13.3
393+95 ℄ I-675	Lt.	16.0
394+06 ℄ I-675	Rt.	17.8
394+91 ℄ I-675	Rt.	17.8
397+40 ℄ I-675	Rt.	10.7

STATION	SIDE	CU YD
1105+65 ℄ US-35	Lt.	7.1
1106+10 ℄ US-35	Lt.	7.1
9+90 ℄ US-35	Lt.	7.1
11+85 ℄ US-35	Rt.	8.9
12+10 ℄ US-35	Rt.	8.9
40+15 ℄ US-35	Lt.	5.3
43+50 ℄ US-35	Rt.	7.1
44+30 ℄ US-35	Rt.	5.3
45+60 ℄ US-35	Lt.	14.2
47+50 ℄ US-35	Lt.	5.3
53+65 ℄ US-35	Rt.	10.7
55+90 ℄ US-35	Lt.	8.9
56+60 ℄ US-35	Rt.	10.7
58+10 ℄ US-35	Lt.	10.7
59+15 ℄ US-35	Rt.	17.8
60+70 ℄ US-35	Rt.	10.7
64+15 ℄ US-35	Rt.	10.7
64+65 ℄ US-35	Rt.	10.7
72+80 ℄ US-35	Lt.	11.6
73+25 ℄ US-35	Rt.	11.6
46+45 ℄ US-35	Lt.	7.1
TOTAL TO GENERAL SUMMARY		404.6

ITEM 607 TYPE 47 FENCE QUANTITIES *

LOCATION	SIDE	LIN. FT.
Bridge at B&O RR to Headwall of Prop. Pipe	Rt.	581
Headwall of Prop. Pipe to Headwall of Prop. Pipe	Rt.	2360
Headwall of Prop. Pipe to Bridge at Grange Hall Rd.	Rt.	1317
Bridge at Grange Hall Rd to Headwall of Prop. Pipe	Rt.	1551
Headwall of Prop. Pipe to 88.00' Rt. of Sta. 76+00 US-35	Rt.	263
101.83' Lt. of Sta. 76+00 US-35 to Headwall of Prop. Pipe	Rt.	311
Headwall of Prop. Pipe to Bridge at Grange Hall Rd.	Rt.	1508
At each side of Bridge at Grange Hall Rd.	Rt.	80
Bridge at Grange Hall Rd. to Headwall of Prop. Pipe	Rt.	1160
Headwall of Prop. Pipe to Penn Central R.R. Bridge at I-675	Rt.	2277
Between Bridges at B&O R.R. Bridge	℄	44
Bridge at B&O RR to Headwall of Prop. Pipe	Lt.	658
Headwall of Prop. Pipe to 193.00' Rt. of Sta. 8+00 US-35	Lt.	4311
214.00' Lt. of Sta. 1105+50 US-35 to Headwall of Prop. Pipe.	Lt.	98
Headwall of Prop. Pipe to 194.00' Lt. of Sta. 21+00 Dayton Xenia Rd.	Lt.	600
Dayton-Xenia Rd. Bridge to exist. Penn-Central R.R. R/W Fence	Rt	1250
TOTAL TO GENERAL SUMMARY		18,477

* See R/W Plans for Locations

ITEM 607 TYPE CL FENCE QUANTITIES *

LOCATION	SIDE	LIN. FT.
Penn Central RR Bridge at I-675 to Dayton Xenia Rd. Bridge at I-675	Rt.	30
Dayton Xenia Rd. Bridge at I-675 to Headwall of Prop. Pipe	Rt.	1080
Headwall of Prop. Pipe to Headwall of Prop. Pipe	Rt.	2611
Headwall of Prop. Pipe to Bridge at Kemp Rd.	Rt.	2071
Bridge at Kemp Rd. to Headwall of Prop. Pipe	Rt.	396
193.00' Rt. of Sta. 8+00 US-35 to US-35 Bridge at Dayton Xenia Rd.	Lt.	205
US-35 Bridge at Dayton Xenia Rd. to 84.55' Rt. of Sta. 1005+20.02 US-35	Lt.	1618
US-35 Bridge at Dayton Xenia Rd. to Penn Central R.R. Bridge at Dayton Xenia Rd. (Lt. Side of Dayton Xenia Rd.)	Lt.	708
US-35 Bridge at Dayton Xenia Rd. to Penn Central R.R. Bridge at Dayton Xenia Rd. (Rt. Side of Dayton Xenia Rd.	Lt.	697
Penn Central RR Bridge at Dayton Xenia Rd. to Dayton Xenia Rd. Bridge at I-675	Lt.	762
Penn Central RR Bridge at I-675 to Dayton Xenia Rd. Bridge at I-675	Lt.	39
Dayton Xenia Rd. Bridge at I-675 to Noise Barrier	Lt.	209
Noise Barrier to Headwall of Prop. Pipe	Lt.	265
Headwall of Prop. Pipe to Headwall of Prop. Pipe	Lt.	2408
Headwall of Prop. Pipe to Bridge at Kemp Rd.	Lt.	2015
Bridge at Kemp Rd. to 104.00' Lt. of Sta. 417+00 I-675	Lt.	268
TOTAL TO GENERAL SUMMARY		16,312

For fencing quantities at Pedestrian Overpass see sheet 10G.

LEGEND

M.S. = Median Shoulder
O.S. = Outer Shoulder
N.B. = North Bound
S.B. = South Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. CET DATE 9-78
CHKD. JRS DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

43
616

404 : 1½" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base
402 : 1¾" Asphalt Conc. AC-20 310 : 6" Subbase Type II
407 : TackCoat 0.1 Gal./S.Y.

409 : Seal Coat Bit. Mat'l. 0.3 Gal./S.Y. 310 : Subbase Type II
409 : Seal Coat Aggregate 0.008 C.Y./S.Y. thickness as noted
301 : 6" Bituminous Aggregate Base

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
GRE-6.75-5.37														
308+34.01 - 320+00.00	Pav't.	1,165.99	72.00	324.0	453.3	932.8	9,327.9	1,554.7						
320+00.00 - 334+00.00	Pav't.	1,400.00	72.00	389.0	544.3	1,120.0	11,200.0	1,866.7						
334+00.00 - 348+00.00	Pav't.	1,400.00	72.00	389.0	544.3	1,120.0	11,200.0	1,866.7						
348+00.00 - 362+00.00	Pav't.	1,400.00	72.00	389.0	544.3	1,120.0	11,200.0	1,866.7						
362+00.00 - 365+35.51	Pav't.	335.51	72.00	93.2	130.4	268.4	2,684.1	447.3						
365+35.51 - 371+80.00	Pav't. N.B.	644.49	36.00	89.5	125.3	257.8	2,578.0	429.7						
365+35.51 - 375+39.77	Pav't. S.B.	1,004.26	36.00	139.5	195.2	401.7	4,017.0	669.5						
371+80.00 - 402+31.18	Pav't. N.B.	3,051.18	48.00	565.2	790.9	1,627.3	16,273.0	2,712.2						
375+39.77 - 402+31.18	Pav't. S.B.	2,691.41	48.00	498.4	697.6	1,435.4	14,354.2	2,392.4						
402+31.18 - 417+00.00	Pav't.	1,468.82	96.00	544.2	761.4	1,566.7	15,667.4	2,611.2						
308+34.01 - 309+34.01	M.S. S.B.	99.32							7.00	23.2	0.6	12.9	5.75	21.2
309+34.01 - 311+00.00	M.S. S.B.	164.93							10.00	55.0	1.5	30.5	7.75	47.3
311+00.00 - 320+00.00	M.S. S.B.	894.24							10.00	298.1	7.9	165.6	7.90	261.6
320+00.00 - 326+18.26	M.S. S.B.	614.30							10.00	204.8	5.5	113.8	7.90	179.7
326+18.26 - 327+75.00	M.S. S.B.	156.74							10.00	52.2	1.4	29.0	7.50	43.5
327+75.00 - 334+00.00	M.S. S.B.	625.00							10.00	208.3	5.6	115.7	8.20	189.8
334+00.00 - 341+30.17	M.S. S.B.	730.17							10.00	243.4	6.5	135.2	8.20	221.8
341+30.17 - 361+00.00	M.S. S.B.	1980.57							10.00	660.2	17.6	366.8	8.20	601.5
361+00.00 - 365+35.51	M.S. S.B.	437.89							10.00	146.0	3.9	81.1	8.20	133.0
365+35.51 - 376+00.00	M.S. S.B.	1064.49							10.00	354.8	9.5	197.1	8.20	323.3
376+00.00 - 390+00.00	M.S. S.B.	1400.00							10.00	466.7	12.4	259.3	8.20	425.2
390+00.00 - 401+25.00	M.S. S.B.	1125.00							10.00	375.0	10.0	208.3	8.20	341.7
401+25.00 - 402+31.18	M.S. S.B.	106.18							10.00	35.4	0.9	19.7	7.50	29.5
402+31.18 - 404+00.00	M.S. S.B.	168.17							10.00	56.1	1.5	31.2	7.50	46.7
404+00.00 - 417+00.00	M.S. S.B.	1295.75							10.00	431.9	11.5	240.0	7.50	359.9
308+34.01 - 309+34.01	M.S. N.B.	100.68							7.00	23.5	0.6	13.1	6.10	22.7
309+34.01 - 320+00.00	M.S. N.B.	1072.81							10.00	357.6	9.5	198.7	8.20	325.8
320+00.00 - 326+18.26	M.S. N.B.	622.22							10.00	207.4	5.5	115.2	8.20	189.0
326+18.26 - 334+00.00	M.S. N.B.	781.76							10.00	260.6	6.9	144.8	8.20	237.4
334+00.00 - 340+00.00	M.S. N.B.	600.00							10.00	200.0	5.3	111.1	8.20	182.2
340+00.00 - 341+30.17	M.S. N.B.	130.17							10.00	43.4	1.2	24.1	7.50	36.2
341+30.17 - 341+75.00	M.S. N.B.	44.59							10.00	14.9	0.4	8.3	7.50	12.4
341+75.00 - 348+00.00	M.S. N.B.	621.59							10.00	207.2	5.5	115.1	7.80	179.6
348+00.00 - 362+00.00	M.S. N.B.	1392.36							10.00	464.1	12.4	257.8	7.80	402.2
362+00.00 - 364+75.00	M.S. N.B.	273.50							10.00	91.2	2.4	50.6	7.80	79.0
364+75.00 - 365+35.51	M.S. N.B.	60.18							10.00	20.1	0.5	11.1	7.50	16.7
365+35.51 - 366+50.00	M.S. N.B.	114.49							10.00	38.2	1.0	21.2	7.50	31.8
366+50.00 - 376+00.00	M.S. N.B.	950.00							10.00	316.7	8.4	175.9	8.20	288.5
376+00.00 - 390+00.00	M.S. N.B.	1400.00							10.00	466.7	12.4	259.3	8.20	425.2
390+00.00 - 402+31.18	M.S. N.B.	1231.18							10.00	410.4	10.9	228.0	8.20	373.9
402+31.18 - 404+00.00	M.S. N.B.	169.37							10.00	56.5	1.5	31.4	8.20	51.4
404+00.00 - 417+00.00	M.S. N.B.	1304.25							10.00	434.8	11.6	241.5	8.20	396.1
315+25.00 - 316+25.00	O.S. S.B.	98.18							10.04	32.9	0.9	18.3	10.04	36.5
328+25.00 - 331+25.00	O.S. S.B.	300.00							12.13	121.3	3.2	67.4	12.13	134.7
331+25.00 - 332+94.62	O.S. S.B.	169.62							17.46	98.7	2.6	54.8	17.46	109.7
332+94.62 - 335+84.88	O.S. S.B.	290.26							13.25	128.2	3.4	71.2	10.60	114.0
335+84.88 - 336+44.88	O.S. S.B.	60.00							12.75	25.5	0.7	14.2	10.30	22.9
336+44.88 - 339+45.00	O.S. S.B.	300.12							12.25	122.5	3.3	68.1	9.80	108.9
339+45.00 - 339+85.00	O.S. S.B.	40.00							12.75	17.0	0.5	9.4	10.30	15.3
339+85.00 - 341+30.17	O.S. S.B.	145.17							13.25	64.1	1.7	35.6	10.10	54.3
341+30.17 - 348+00.00	O.S. S.B.	680.44							13.25	300.5	8.0	167.0	9.90	249.5
348+00.00 - 349+00.00	O.S. S.B.	101.58							12.50	42.3	1.1	23.5	9.40	35.4
349+00.00 - 351+39.00	O.S. S.B.	242.73							11.25	91.0	2.4	50.6	8.40	75.5
351+39.00 - 352+39.00	O.S. S.B.	101.01							15.62	52.9	1.4	29.4	11.7	44.0
Sub-Totals				3,421.2	4,787.0	9850.1	98,501.6	16,417.1		8321.3	221.5	4623.9		7476.5
TOTALS				3,421	4787	9850	98,502	16,417		8321	222	4623		7477

LEGEND

M.S. = Median Shoulder
O.S. = Outer Shoulder
N.B. = North Bound
S.B. = South Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES	
CALC. C.E.T.	DATE 9-78
CHKD. J.R.S.	DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

402 : 1 1/4" Asphalt Conc. AC-20 305 : 9" Port. Cem Conc. Base
402 : 1 3/4" Asphalt Conc. AC-20 310 : 6" Subbase Type II
407 : Tack Coat, 0.1 Gal./S.Y.

409 : Seal Coat Bit. Mat'l. 0.3 Gal./S.Y. 310 : Subbase Type II
409 : Seal Coat Aggregate 0.008 C.Y./S.Y. thickness as
301 : 6" Bituminous Aggregate Base noted

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	Average Width	402 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
GRE-675-5.37 cont.														
352+39.00-361+00.00	O.S. S.B.	874.34							10.00	291.4	7.8	161.9	7.50	242.9
361+00.00-363+35.51	O.S. S.B.	239.16							10.00	79.7	2.1	44.3	7.50	66.4
363+35.51-364+35.51	O.S. S.B.	101.57							12.00	40.6	1.1	22.6	9.00	33.9
364+35.51-365+35.51	O.S. S.B.	101.59							14.00	47.4	1.3	26.3	10.50	39.5
375+39.77-376+00.00	O.S. S.B.	60.23							10.00	20.1	0.5	11.2	8.20	18.3
376+00.00-390+00.00	O.S. S.B.	1400.00							10.00	466.7	12.4	259.3	8.20	425.2
390+00.00-402+31.18	O.S. S.B.	1231.18							10.00	410.4	10.9	228.0	8.20	373.9
402+31.18-404+00.00	O.S. S.B.	166.99							10.00	55.7	1.5	30.9	8.20	50.7
404+00.00-417+00.00	O.S. S.B.	1285.88							10.00	428.6	11.4	238.1	8.20	390.5
308+34.01-308+71.67	O.S. N.B.	37.66							10.00	12.6	0.3	7.0	7.50	10.5
308+71.67-309+00.00	O.S. N.B.	28.84							10.00	9.6	0.3	5.3	7.50	8.0
309+00.00-315+14.35	O.S. N.B.	625.52							10.00	208.5	5.6	115.8	7.50	173.8
323+14.35-326+18.26	O.S. N.B.	309.43							10.00	103.1	2.8	57.3	7.50	86.0
326+18.26-327+50.00	O.S. N.B.	131.74							10.00	43.9	1.2	24.4	7.50	36.6
327+50.00-329+83.86	O.S. N.B.	233.86							10.00	78.0	2.1	43.3	8.10	71.0
337+83.86-340+00.00	O.S. N.B.	216.14							10.00	72.0	1.9	40.0	8.20	65.6
340+00.00-341+30.17	O.S. N.B.	130.17							10.00	43.4	1.2	24.1	8.20	39.5
341+30.17-348+89.00	O.S. N.B.	747.08							10.00	249.0	6.6	138.3	8.20	226.9
371+80.00-376+00.00	O.S. N.B.	420.00							10.00	140.0	3.7	77.8	8.20	127.6
376+00.00-390+00.00	O.S. N.B.	1400.00							10.00	466.7	12.4	259.3	8.20	425.2
390+00.00-401+25.00	O.S. N.B.	1125.00							10.00	375.0	10.0	208.3	8.20	341.7
401+25.00-402+31.18	O.S. N.B.	106.18							10.00	35.4	0.9	19.7	7.70	30.3
402+31.18-417+00.00	O.S. N.B.	1484.78							10.00	494.9	13.2	275.0	7.50	412.4
348+89-355+00	O.S. N.B. Planimetered	13,708								456.9	12.2	253.9	13,708×1	507.7
Ramp C, Speed Change Ln.														
308+34.01-308+71.67	Pavt. S.B.	37.66	11.00	1.6	2.2	4.6	46.0	7.7						
308+71.67-315+25.00	Pavt. S.B.	640.77	18.20	45.0	63.0	129.5	1295.4	215.9						
308+34.01-308+71.67	O.S. S.B.	37.66							8.00	10.0	0.3	5.6	6.70	9.3
308+71.67-315+25.00	O.S. S.B.	638.58							8.00	170.3	4.5	94.6	6.70	158.5
CD, Speed Change Ln.														
316+25.00-317+21.00	Pavt. S.B.	94.35	2.00	0.7	1.0	2.1	21.0	3.5						
317+21.00-326+18.26	Pavt. S.B.	880.80	11.35	38.6	54.0	111.0	1110.3	185.0						
326+18.26-328+25.00	Pavt. S.B.	206.74	22.85	18.2	25.5	52.5	524.8	87.5						
316+25.00-317+21.00	O.S. S.B.	94.20							10.12	31.8	0.8	17.7	10.12	35.3
317+21.00-318+25.00	O.S. S.B.	102.01							11.12	37.8	1.0	21.0	11.12	42.0
318+25.00-319+75.00	O.S. S.B. - Planimetered	1764 S.F.								58.8	1.6	32.7	1764×1	65.3
319+75.00-320+00.00	O.S. S.B.	24.50							8.00	6.5	0.2	3.6	6.70	6.1
320+00.00-326+18.26	O.S. S.B.	604.91							8.00	161.3	4.3	89.6	6.70	150.1
326+18.26-328+25.00	O.S. S.B.	206.74							8.00	55.1	1.5	30.6	6.70	51.3
365+35.51-375+39.77	Pavt. S.B. Planimetered	26,777 S.F.		103.3	144.6	297.5	2975.0	495.8						
365+35.51-375+39.77	O.S. S.B.	1003.00							10.00	334.3	8.9	185.7	8.20	304.6
Ramp H, Speed Change Ln.														
315+14.35-315+31.02	Pavt. N.B.	16.67	2.00	0.1	0.2	0.4	3.7	0.6						
315+31.02-316+14.35	Pavt. N.B. - Planimetered	580 S.F.		2.2	3.1	6.4	64.5	10.7						
316+14.35-319+65.37	Pavt. N.B.	357.49	12.00	16.6	23.2	47.7	476.7	79.4						
319+65.37H-323+21.06H	Pavt. Planimetered	7467 S.F.		28.8	40.3	83.0	829.6	138.3						
315+14.35-315+31.02	O.S. N.B.	16.98							8.74	4.9	0.1	2.7	6.56	4.1
315+31.02-316+14.35	O.S. N.B.	84.98							8.74	24.8	0.7	13.8	6.56	20.6
316+14.35-319+65.37	O.S. N.B.	358.39							8.00	95.6	2.5	53.1	6.00	79.6
319+65.37H-322+00.00H	O.S. N.B.	234.47							8.00	62.5	1.7	34.7	6.00	52.1
322+00.00H-323+21.06H	O.S. N.B.	120.98							8.00	32.3	0.9	17.9	6.70	30.0
Sub-Totals				255.1	357.1	734.7	7,347	1224.4		5715.6	152.4	3,175.4		5,213
TOTALS				255	357	735	7,347	1224		5716	152	3,175		5,213

LEGEND

M.S. = Median Shoulder
O.S. = Outer Shoulder
N.B. = North Bound
S.B. = South Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES	
CALC. C.E.T	DATE 9-78
CHKD. J.R.S.	DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

45/616

404 : 1¼" Asphalt Conc. AC-20 — 305: 9" Port. Cem. Conc. Base
402 : 1½" Asphalt Conc. AC-20 — 310 : 6" Subbase Type II
407 : Tack Coat .01 Gal./S.Y.

409 : Seal Coat Bit. Mat'l. 0.3 Gal./S.Y. — 310: Subbase Type ___, ___" thickness as noted
409 : Seal Coat Aggregate 0.003 C.Y./S.Y.
301 : 6" Bituminous Aggregate Base

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	409 Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
Ramp D Speed Change														
329+83.86 - 337+83.86	Pav't. N.B. Planimetered	13,102 S.F.		50.6	70.7	145.6	1455.7	242.6						
329+83.86 - 330+00.53	O.S. N.B.	16.67							8.84	4.9	0.1	2.7	7.30	4.5
330+00.53 - 330+83.86	O.S. N.B.	83.33							8.84	24.5	0.7	13.6	7.30	22.5
330+83.86 - 333+29.54	O.S. N.B.	245.68							8.00	65.5	1.7	36.4	6.70	61.0
333+29.54 D - 337+83.02 D	O.S. N.B.	453.01							8.00	120.8	3.2	67.1	6.70	112.4
Ramp A, Speed Change														
355+00.00 - 365+35.51	Pav't. Planimetered	31905 S.F.		123.1	172.3	354.5	3545.0	590.8						
365+35.51 - 371+80.00	Pav't.	644.69	17.37	43.2	60.5	124.4	1244.3	207.4						
355+00.00 - 361+00.00	O.S. N.B.	586.12							10.00	195.4	5.2	108.5	8.20	178.0
361+00.00 - 365+35.51	O.S. N.B.	426.26							10.00	142.1	3.8	78.9	8.20	129.5
365+35.51 - 370+60.00	O.S. N.B.	524.49							10.00	174.8	4.7	97.1	8.20	159.3
370+60.00 - 371+80.00	O.S. N.B.	120.00							10.00	40.0	1.1	22.2	8.20	36.4
I-675 Collector Distributor														
328+25.00 - 332+59.46	Pav't.	434.57	16.00	26.8	37.5	77.3	772.6	128.8						
332+59.46 - 334+99.46	Pav't.	240.22	20.00	18.5	25.9	53.4	533.8	89.0						
336+53.08 - 341+30.17	Pav't.	477.09	24.00	44.2	61.8	127.2	1272.2	212.0						
341+30.17 - 342+47.88	Pav't.	120.35	24.00	11.1	15.6	32.1	320.9	53.5						
344+67.54 - 348+00.00	Pav't.	339.64	16.00	21.0	29.3	60.4	603.8	100.6						
348+00.00 CD - 348+92.28 CD	Pav't.	92.28	16.00	5.7	8.0	16.4	164.1	27.3						
348+92.28 CD - 350+69.75 CD	Pav't.	177.47	17.77	12.2	17.0	35.0	350.4	58.4						
350+69.75 CD - 352+92.27 CD	Pav't.	223.79	21.77	18.8	26.3	54.1	541.3	90.2						
357+79.48 CD - 364+39.72 CD	Pav't.	656.09	24.00	60.8	85.0	175.0	1749.6	291.6						
364+39.72 CD - 365+89.72 CD	Pav't.	150.00	24.00	13.9	19.4	40.0	400.0	66.7						
328+25.00 - 332+59.46	Rt.	434.57							8.00	115.9	3.1	64.4	6.70	107.8
332+59.46 - 334+99.46	Rt.	240.22							8.00	64.1	1.7	35.6	6.70	59.6
336+53.08 - 341+30.17	Rt.	477.09							10.00	159.0	4.2	88.4	8.20	144.9
341+30.17 - 342+47.88	Rt.	120.79							10.00	40.3	1.1	22.4	8.20	36.7
344+67.74 - 345+33.00	Rt. Planimetered	6633 S.F.								22.1	0.6	12.3	6633	24.6
345+33.00 - 348+00.00	Rt.	273.32							3.00	27.3	0.7	15.2	3.00	30.4
348+00.00 CD - 348+92.28 CD	Rt.	92.28							3.00	9.2	0.2	5.1	3.00	10.3
348+92.28 CD - 350+69.75 CD	Rt.	177.47							4.11	24.3	0.6	13.5	3.45	22.7
350+69.75 CD - 352+97.27 CD	Rt.	225.44							6.61	49.7	1.3	27.6	4.96	41.4
357+79.48 CD - 364+39.72 CD	Rt.	661.97							10.00	220.7	5.9	122.6	7.50	183.9
364+39.72 CD - 365+89.72 CD	Rt.	150.00							10.00	50.0	1.3	27.8	7.50	41.7
332+94.62 - 334+99.46	Lt.	204.84							5.59	38.1	1.0	21.2	4.55	34.5
334+99.46 - 335+84.88	Lt.	85.42							8.25	23.5	0.6	13.1	6.20	19.6
335+84.88 - 336+53.08	Lt.	68.20							7.25	16.5	0.4	9.2	5.44	13.7
336+53.08 - 338+75.00	Lt.	221.92							6.25	46.2	1.2	25.7	4.69	38.5
338+75.00 - 338+85.00	Lt.	10.00							6.75	2.3	0.1	1.3	5.06	1.9
338+85.00 - 339+44.50	Lt.	59.50							7.25	14.4	0.4	8.0	5.40	11.9
339+44.50 - 339+84.50	Lt.	40.00							7.75	10.3	0.3	5.7	5.81	8.6
339+84.50 - 341+00.00	Lt.	115.50							8.25	31.8	0.8	17.6	6.20	26.5
341+00.00 - 341+30.17	Lt.	30.17							8.25	8.3	0.2	4.6	6.90	7.7
341+30.17 - 348+00.00	Lt.	682.53							8.25	187.7	5.0	104.3	6.90	174.4
348+00.00 CD - 348+92.28 CD	Lt.	92.28							7.25	22.3	0.6	12.4	6.10	20.8
348+92.28 CD - 350+69.75 CD	Lt.	177.47							5.25	31.1	0.8	17.3	4.60	30.2
350+69.75 CD - 352+92.27 CD	Lt.	222.21							5.25	38.9	1.0	21.6	4.60	37.9
352+92.27 CD - 357+71.87 CD	Lt.	479.60							5.25	83.9	2.2	46.6	4.60	81.7
357+71.87 CD - 362+64.72 CD	Lt.	485.98							5.25	85.0	2.3	47.2	4.60	82.8
362+64.72 CD - 364+39.72 CD	Lt.	172.40							8.65	49.7	1.3	27.6	7.20	46.0
364+39.72 CD - 364+89.72 CD	Lt.	50.00							13.03	21.7	0.6	12.1	10.50	19.4
364+89.72 CD - 365+89.72 CD	Lt.	100.00							14.00	46.7	1.2	25.9	11.20	41.5
Sub-Totals				449.9	629.3	1295.4	12,953.7	2158.9		2309.0	61.2	1282.8		2105.2
TOTALS				450	629	1295	12,954	2159		2309	61	1283		2105

LEGEND

O.S. = Outer Shoulder
M.S. = Median Shoulder
E.B. = East Bound
W.B. = West Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 9-78
CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

46/616

GRE-675-5.37
GREENE COUNTY

404 : 1½" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base
402 : 1¾" Asphalt Conc. AC-20 310 : 6" Subbase Type II
407 : Tack Coat 0.1 Gal. / S.Y.
409 : Seal Coat Bit. Mat'l 0.3 Gal./S.Y. 310 : Subbase Type II
409 : Seal Coat Aggregate 0.008 C.Y./S.Y. thickness as noted
301 : 6" Bituminous Aggregate Base

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
I-675 Coll. Dist. including														
Ramp E, Speed Change														
334+99.96-336+53.08	Pav't. Planimetered	5366 S.F.		20.7	29.0	59.6	596.3	99.4						
335+01.54E-336+53.08E	Lt.	149.82							10.00	49.8	1.3	27.7	8.20	45.4
I-675 Coll. Dist. including														
Ramp G, Speed Change														
342+47.88-344+67.54	Pav't. Planimetered	6287 S.F.		24.3	34.0	69.9	698.6	116.4						
342+47.88G-344+72.18G	Lt.	224.01							10.00	74.7	2.0	41.5	8.20	68.0
I-675 Coll. Dist. including														
Ramp B, Speed Change														
352+92.27CD-357+79.48CD	Pav't. Planimetered	17205 S.F.		66.4	92.9	191.2	1911.7	318.6						
352+92.93B-353+42.93B	Lt.	49.94							9.00	15.0	0.4	8.3	7.45	13.8
353+42.93B-356+50.00B	Lt.	300.67							10.00	102.2	2.7	56.8	8.20	93.1
356+50.00B-357+79.48B	Lt.	129.31							10.00	43.1	1.1	23.9	7.50	35.9
Relocated U.S. 35														
1087+74.57-1090+85.78	Pav't. E.B.	311.21	24.00	28.8	40.3	83.0	829.9	138.3						
1090+85.78-1093+00.00	Pav't. E.B. & W.B.	214.22	48.00	39.7	55.5	114.3	1142.5	190.4						
1093+00.00-1095+00.00	Pav't. E.B. & W.B.	200.00	48.00	37.0	51.8	106.7	1066.7	177.8						
1095+00.00-1098+00.00	Pav't. W.B.	300.00	24.00	27.8	38.9	80.0	800.0	133.3						
1095+00.00-1098+00.00	Pav't. E.B.	300.00	30.17	34.9	48.9	100.6	1005.6	167.6						
1098+00.00-1098+44.25	Pav't. E.B. & W.B.	44.25	60.00	10.2	14.3	29.5	295.0	49.2						
1098+44.25-1106+93.02	Pav't. W.B.	855.72	24.00	79.3	110.9	228.2	2281.9	380.3						
1098+44.25-1106+93.02	Pav't. E.B.	860.51	36.00	116.8	163.4	336.2	3362.1	560.3						
0+00.00 - 2+41.20	Pav't. W.B.	243.18	24.00	22.5	31.5	64.8	648.5	108.1						
0+00.00 - 2+41.20	Pav't. E.B.	238.85	36.00	33.2	46.4	95.5	955.4	159.2						
2+41.20 - 4+46.55	Pav't. W.B.	205.35	24.00	19.0	26.6	54.8	547.6	91.3						
2+41.20 - 4+06.74	Pav't. E.B.	166.54	36.00	23.0	32.2	66.2	662.2	110.4						
61 77.10 - 14+00.00	Pav't. W.B.	722.90	24.00					321.3						
6+37.29 - 10+00.02	Pav't. E.B.	362.73	36.00	50.4	70.5	145.1	1450.9	241.8						
10+00.02 - 17+86.93	Pav't. E.B.	786.91	24.00	72.9	102.0	209.8	2098.4	349.7						
14+00.00-16+60.00	Pav't. W.B.	260.00	24.00					115.6						
16+60.00 - 17+86.93	Pav't. W.B.	126.93	24.00					56.4						
17+86.93 - 28+79.49	Pav't. E.B.	1101.51	24.00	102.0	142.8	293.7	2937.4	489.6						
17+86.93 - 28+22.51	Pav't. W.B.	1027.10	24.00					456.5						
33+03.82 - 36+39.20	Pav't. W.B.	332.63	24.00					147.8						
33+41.42 - 36+39.20	Pav't. E.B.	297.78	24.00	27.6	38.6	79.4	794.1	132.3						
36+39.20 - 44+00.00	Pav't. E.B.	760.80	24.00	70.5	98.6	202.9	2028.8	338.1						
36+39.20 - 44+00.00	Pav't. W.B.	760.80	24.00					338.1						
44+00.00 - 44+68.90EB	Pav't. E.B.	68.90	24.00	6.4	8.9	18.4	183.7	30.6						
44+00.00 - 45+16.49WB	Pav't. W.B.	116.49	24.00					51.8						
44+68.90 EB-55+00.00EB	Pav't. E.B.	1027.93	24.00	95.2	133.2	274.1	2741.2	456.9						
45+16.49 WB-55+00.00WB	Pav't. W.B.	986.53	24.00					438.5						
55+00.00 EB-56+15.88 EB	Pav't. E.B.	115.52	24.00	10.7	15.0	30.8	308.1	51.3						
55+00.00 WB-56+00.02 WB	Pav't. W.B.	100.33	24.00					44.6						
58+18.58 EB-61+91.61 EB	Pav't. E.B.	309.08	24.00	28.6	40.1	82.4	824.2	137.4						
58+62.66 WB-62+08.39 WB	Pav't. W.B.	346.79	24.00	32.1	44.9	92.5	924.8	154.1						
62+00.00 - 76+00.00	Pav't. E.B. & W.B.	1400.00	48.00	259.3	362.9	746.7	7466.7	1244.4						
1087+74.57-1088+74.57	M.S. E.B.	100.00							4.50	15.0	0.4	8.3	3.38	12.5
1088+74.57-1091+85.78	M.S. E.B.	311.21							4.00	41.5	1.1	23.1	3.00	34.6
1090+85.78-1091+85.78	M.S. W.B.	100.00							4.50	15.0	0.4	8.3	3.38	12.5
1091+85.78-1106+93.02	M.S. E.B. & W.B.	1507.24							8.00	401.9	10.7	223.3	6.81	380.2
0+00.00 - 4+28.35	M.S. E.B. & W.B.	428.35							8.00	114.2	3.0	63.5	7.00	111.1
6+69.14 - 17+86.93	M.S. W.B.	1135.79							4.00			84.1	3.32	139.7
17+86.93 - 28+59.20	M.S. W.B.	1088.33							4.00			80.6	3.00	120.9
6+23.66 - 17+86.93	M.S. E.B.	1181.27							4.00	157.5	4.2	87.5	3.31	144.8
17+86.93 - Bridge	M.S. E.B.	1131.16							4.00	150.8	4.0	83.8	4.00	167.6
Bridge - 36+39.20	M.S. E.B.	351.23							4.00	46.8	1.2	26.0	4.00	52.0
Sub-Totals				1339.3	1874.1	3856.3	38562.3	8397.4		1227.5	32.5	846.7		1432.1
TOTALS				1,339	1,874	3856	38,562	8,397		1228	33	847		1,432

451	
9" Reinf. Conc. Pav't.	S.Y.
11823.0	
693.3	
338.5	
2738.9	
887.0	
2028.8	
310.6	
2630.7	
267.5	
1927.7	
11,823	

Using Type K Shrinkage Compensating Cement

LEGEND

M.S. = Median Shoulder
O.S. = Outer Shoulder
E.B. = East Bound
W.B. = West Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES	
CALC. C.E.T.	DATE 9-78
CHKD. J.R.S.	DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

47
616

404 : 1½" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base
402 : 1¾" Asphalt Conc. AC-20 310: 6" Subbase Type II
407 : Tack Coat 0.1 Gal./S.Y.

409 : 3 coat Coat Bit. Mat'l 0.3 Gal./S.Y. 310: Subbase Type II
409 : 3 coat Coat Aggregate OOOS CY/S.Y. thickness as
301 : 6" Bituminous Aggregate Base noted

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	409 Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
Relocated U.S. 35 cont.														
36+39.20 - 44+68.90	M.S., E.B.	829.70							4.00	110.6	3.0	61.5	3.00	92.2
44+68.90 - Bridge	M.S., E.B.	1140.52							4.00	152.1	4.1	84.5	3.00	126.7
58+72.01 - 76+00.00	M.S., E.B. & W.B.	1727.99							8.00	460.8	12.3	256.0	7.81	499.8
1087+74.57 - 1095+00.00	O.S., E.B.	725.43							10.00	241.8	6.4	134.3	8.20	220.3
1095+00.00 - 1095+50.00	O.S., E.B.	50.00							9.00	15.0	0.4	8.3	7.45	13.8
1095+50.00 - 1098+44.25	O.S., E.B.	294.25							10.00	98.1	2.6	54.5	8.20	89.4
1098+44.25 - 1106+93.02	O.S., E.B.	835.52							10.00	278.5	7.4	154.7	8.20	253.7
0+00.00 - 2+41.20	O.S., E.B.	237.43							10.00	79.1	2.1	44.0	8.20	72.1
2+41+20 - 3+93.65	O.S., E.B.	152.45							10.00	50.8	1.4	28.2	8.20	46.3
6+24.20 - 10+00.02	O.S., E.B.	375.82							10.00	125.3	3.3	69.6	8.20	114.2
17+86.93 - 28+50.00	O.S., E.B.	1076.40							10.00	358.8	9.6	199.3	7.50	299.0
28+50.00 - 28+96.00	O.S., E.B. - Planimetered	1270 S.F.								42.3	1.1	23.5	Avg. T=1.00	47.0
39+80.72 EB-95+06.00 EB	O.S.	525.28							10.00	175.1	4.7	97.3	8.20	159.5
95+06.00 EB-96+18.04 EB	O.S. - Planimetered	2264 S.F.								75.5	2.0	41.9	Avg. T=1.00	83.9
58+90 EB-75+00.00	O.S., E.B.	1601.61							10.00	533.9	14.2	296.6	8.20	480.4
75+00.00 - 76+00.00	O.S., E.B.	100.00							7.00	23.3	0.6	13.0	6.10	22.6
1090+85.78 - 1097+00.00	O.S., W.B.	614.22							10.00	204.7	5.5	113.7	8.20	186.5
1097+00.00 - 1098+44.25	O.S., W.B.	144.25							10.00	48.1	1.3	26.7	7.50	40.1
1098+44.25 - 1101+53.02	O.S., W.B.	312.96							10.00	104.2	2.8	57.9	7.50	86.8
16+00.00 - 17+86.93	O.S., W.B.	186.93							10.76			25.3	9.42	44.3
17+86.93 - 19+39.00	O.S., W.B.	150.07							14.64			40.7	12.81	71.2
19+39.00 - 19+59.00	O.S., W.B.	19.75							10.14			3.7	6.26	4.6
19+59.00 - 21+03.72	O.S., W.B.	142.88							11.26			29.8	5.85	31.0
21+03.72 - 21+75	O.S., W.B.	70.36							12.25			16.0	6.32	16.5
21+75 - 22+15	O.S., W.B.	39.49							11.75			8.6	6.08	8.9
22+15 - 22+25	O.S., W.B.	9.87							11.25			2.1	5.84	2.1
22+25 - 22+65	O.S., W.B.	39.49							11.75			8.6	6.08	8.9
22+65 - 28+05.64	O.S., W.B.	533.70							12.25			121.1	6.32	124.9
Relocated U.S. 35														
32+92.78 - 36+39.20	O.S., W.B.	341.98							12.25			77.6	6.32	80.0
36+39.20 - 44+65	O.S., W.B.	825.80							12.25			187.3	6.62	202.5
44+65 - 45+05	O.S., W.B.	40.00							11.75			8.7	6.08	9.0
45+05 - 45+15	O.S., W.B.	10.00							11.25			2.1	5.84	2.2
45+15 E - 45+55 W.B.	O.S., W.B.	40.29							11.75			8.8	6.08	9.1
45+55 W.B. - 48+00 W.B.	O.S.	246.89							12.25			56.0	6.32	57.8
48+00 W.B. - 50+85.12 W.B.	O.S.	287.32							12.25			65.2	6.32	67.3
50+85.12 W.B. - 51+85.12 W.B.	O.S.	100.76							11.25			21.0	5.84	21.8
55+75 W.B. - 55+89.59 W.B.	O.S.	14.74							7.50			2.0	4.06	2.2
59+75.00 W.B. - 62+08.39 W.B.	O.S.	233.39							10.00	77.8	2.1	43.2	8.10	70.0
62+00.00 - 75+00.00	O.S., W.B.	1300.00							10.00	433.3	11.6	240.7	8.20	394.8
75+00.00 - 76+00.00	O.S., W.B.	100.00							7.00	23.3	0.6	13.0	6.10	22.6
Bridge - 36+39.20	M.S., W.B.	363.07							4.00			27.3	3.00	41.0
36+39.20 E - 45+16.49 W.B.	M.S., W.B.	877.29							4.00			65.0	3.42	111.1
45+16.49 W.B. - Bridge	M.S., W.B.	1088.19							4.00			80.6	4.00	161.2
Ramp A, Speed Change														
10+00.02 - 17+86.93	Pvt. E.B. - Planimetered	188803 S.F.		72.9	102.0	209.8	2097.8	349.6						
293+31.33 A - 301+17.16 A	Rt.	785.36							10.00	261.8	7.0	145.4	8.20	238.5
Ramp E, Speed Change														
33+53.00 - 39+80.72	Pvt. E.B. - Planimetered	5037 S.F.		19.4	27.2	56.0	559.7	93.3						
33+60.00 - 36+39.20	O.S., E.B.	283.49							8.00	75.6	2.0	42.0	6.00	63.0
36+39.20 - 38+00.00	O.S., E.B.	160.80							8.00	42.9	1.1	23.8	6.00	35.7
38+00.00 - 39+80.72	O.S., E.B.	180.72							8.00	48.2	1.3	26.8	6.70	44.8
Ramp H, Speed Change														
16+78.04 EB - 16+20.54 EB	Pvt. E.B. Planimetered	12367 S.F.		47.7	66.8	137.4	1374.1	229.0						
16+78.04 EB - 55+98.04 EB	O.S.	9120.23							8.00	242.7	6.5	134.8	6.70	225.9
55+98.04 EB - 56+09.54 EB	O.S.	11.41							8.00	3.0	0.1	1.7	6.70	2.8
Sub-Totals				190.0	196.0	403.2	4031.6	671.9		4,386.6	117.1	3,294.4		5,116.0
TOTALS				190	196	403	4032	672		4,387	117	3,294		5,116

LEGEND

M.S. = Median Shoulder
O.S. = Outer Shoulder
W.B. = West Bound
Lt. = Left Shoulder
Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 9-78
CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 : 1½" Asphalt Conc. AC-20 / 402 : 1¾" Asphalt Conc. AC-20 / 407 : Tack Coat 0.1 Gal./S.Y.				305 : 9" Port. Cem Conc. Base / 310 : 6" Subbase Type II		409 : 2 Gal Coat Bit. Mat'l. 0.3 Gal./S.Y. / 409 : 2 Gal Coat Aggregate Q.003 C.Y./S.Y. / 301 : 6" Bituminous Aggregate Base				310 : Subbase Type II thickness as noted		451	
			Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume		451
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.		9" Reinf. Conc. Pav't. S.Y.
Relocated U.S. 35 cont.																
Ramp B, Speed Change																
1101+53.02 - 2+41.20	Pav't. W.B. Planimetered	7806 S.F.		30.1	42.2	86.7	867.3	144.6								
2+41.20 - 4+00.00	Pav't. W.B.	158.80	21.52	13.2	18.4	38.0	379.6	63.3								
4+00.00 - 4+62.00	Pav't. W.B.	62.00	24.28	5.8	8.1	16.7	167.2	27.9								
1101+53.02 - 1102+33.02	O.S. W.B.	81.02							8.00	21.6	0.6	12.0	6.00	18.0		
1102+33.02 - 2+41.20	O.S. W.B.	711.75							8.00	189.8	5.1	105.4	6.00	158.2		
2+41.20 - 4+00.00	O.S. W.B.	158.80							8.00	42.3	1.1	23.5	6.00	35.3		
4+00.00 - 4+71.00	O.S. W.B.	71.00							8.00	18.9	0.5	10.5	6.70	17.6		
US-35 CD Speed Change																
6+84.5 - 10+00.00	Pav't. Planimetered	1476 S.F.						27.3								164.0
10+00.00 - 16+00.00	Pav't.	600.00	16.00					177.8								1066.7
16+00.00 - 16+60.00	Pav't.	60.00	24.25					26.9								161.7
12+75.00 - 16+60.00	Lt.	385.00							8.00			57.0	4.00	57.0		
51+85.12 CD - 55+93.28 CD	Pav't. Planimetered	9947 S.F.						184.2								1105.2
58+59.50 WB - 59+75.00 WB	Pav't. Planimetered	854 S.F.		3.3	4.6	9.5	94.9	15.8								
51+85.12 CD - 54+45.99 CD	O.S. W.B.	261.60							8.00			38.6	4.30	41.5		
54+45.99 CD - 55+80.76 CD	O.S. W.B.	135.10							8.00			20.0	4.30	21.5		
58+50 ℄ WB - 58+75.00 WB	O.S.	25.00							8.00	6.7	0.2	3.7	6.00	5.6		
58+75.00 WB - 59+75.00 WB	O.S.	100.00							8.00	26.7	0.7	14.8	6.00	22.2		
6+89 - 12+75	Lt. Planimetered	8548 S.F.										158.3	854 @ 10½"	277.0		
US 35 Collector Distributor																
16+60.00 CD - 16+82.16 CD	Pav't.	22.16	16.00	1.4	1.9	3.9	39.4	6.6								
16+82.16 CD - 18+57.62 CD	Pav't.	175.45	16.00	10.8	15.2	31.2	312.3	52.0								
18+57.62 CD - 20+97.62 CD	Pav't.	240.19	20.00	18.5	25.9	53.4	533.8	89.0								
22+69.16 US 35 - 27+82.38 US 35	Pav't.	503.37	24.00	46.6	65.2	134.2	1342.3	223.7								
32+80.00 US 35 - 36+39.20 US 35	Pav't.	352.67	16.00	21.8	30.5	62.7	627.0	104.5								
36+39.20 CD - 37+51.53 CD	Pav't.	112.56	16.00	7.0	9.7	20.0	200.1	33.4								
37+51.53 CD - 39+81.59 CD	Pav't.	230.06	16.00	14.2	19.9	40.9	409.0	68.2								
39+81.59 CD - 41+89.73 CD	Pav't.	207.71	16.00	12.8	17.9	36.9	369.3	61.5								
41+89.73 CD - 44+09.08 CD	Pav't.	219.35	16.00	13.5	19.0	39.0	390.0	65.0								
48+08.34 WB - 51+85.12 WB	Pav't.	381.70	16.00	23.6	33.0	67.9	678.6	113.1								
16+60.00 CD - 16+82.16 CD	Lt.	22.16							8.00	5.9	0.2	3.3	6.70	5.5		
16+82.16 CD - 18+57.62 CD	Lt.	175.37							8.00	46.8	1.2	26.0	6.70	43.5		
18+57.62 CD - 20+97.62 CD	Lt.	239.74							8.00	63.9	1.7	35.5	6.70	59.5		
22+69.16 US 35 - 27+66 ±	Lt.	485.13							10.00	145.5	4.3	89.4	8.20	147.3		
32+78.80 - 33+65	Lt. Planimetered	756 S.F.								25.2	0.7	14.0	756 x 1	28.0		
33+65.00 - 36+39.20	Lt.	268.55							3.00	26.9	0.7	14.9	3.00	29.8		
36+39.20 CD - 37+51.53 CD	Lt.	112.29							3.00	11.2	0.3	6.2	3.00	12.5		
37+51.53 CD - 39+81.59 CD	Lt.	230.06							3.00	23.0	0.6	12.8	3.00	25.6		
39+81.59 CD - 41+89.73 CD	Lt.	208.24							3.00	20.8	0.6	11.6	3.00	23.1		
41+89.73 CD - 42+34.08 CD	Lt.	44.35							3.00	4.4	0.1	2.5	3.00	4.9		
42+34.08 CD - 44+09.08 CD	Lt.	175.00							6.50	37.9	1.0	21.1	5.25	34.0		
48+08.34 WB - 51+85.12 WB	Lt.	382.86							8.00	102.1	2.7	56.7	6.00	85.1		
19+36.00 CD - 20+97.62 CD	Rt.	161.62							3.25	17.5	0.5	9.7	3.25	19.5		
21+03.72 US 35 - 27+98 US 35	Rt.	682.79							3.25	74.0	2.0	41.1	3.25	82.2		
32+84.50 - 36+39.20	Rt.	349.13							3.25	37.8	1.0	21.0	3.25	42.0		
36+39.20 CD - 37+51.53 CD	Rt.	112.86							3.93	14.8	0.4	8.2	3.93	16.4		
37+51.53 CD - 38+43 US 35	Rt.	91.00							5.81	17.6	0.5	9.8	5.81	19.6		
38+43 US 35 - 39+03 US 35	Rt.	60.00							6.50	13.0	0.3	7.2	4.83	10.8		
39+03 US 35 - 39+44 US 35	Rt.	41.00							6.60	9.0	0.2	5.0	4.95	7.5		
39+44 US 35 - 39+84 US 35	Rt.	40.00							9.50	12.7	0.3	7.0	7.13	10.6		
39+84 US 35 - 41+89.73 CD	Rt.	205.00							12.67	86.6	2.3	48.1	9.50	72.1		
41+89.73 CD - 44+74.50 CD	Rt.	284.77							9.07	86.1	2.3	47.8	6.80	71.7		
44+74.50 CD - 45+09.50 CD	Rt.	35.00							4.73	5.5	0.1	3.1	4.73	6.1		
45+09.50 CD - 45+44.50 CD	Rt.	35.00							3.85	4.5	0.1	2.5	3.85	5.0		
Sub-Totals				222.6	311.5	641.0	6410.8	1484.8		1198.7	32.3	948.3		1516.2		2497.6
TOTALS				223	312	641	6411	1485		1199	32	948		1516		2498

Using Type K Shrinkage Compensating Cement

LEGEND

M.S. = Median Shoulder
O.S. = Outer Shoulder
Lt. = Left Shoulder
Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 9-78
CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

404 : 1 1/4" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base
402 : 1 3/4" Asphalt Conc. AC-20 310: 6" Subbase Type II
407 : Tack Coat 0.1 Gal./S.Y.

409 : 3 coat Coat Bit. Matl. 0.3 Gal./S.Y. 310: Subbase Type II
409 : 3 coat Coat Aggregate 0.008 C.Y./S.Y. thickness as
301 : 6" Bituminous Aggregate Base noted.

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	409 Average Width	409 Volume	409 Volume	301 Volume	310 Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
U.S. 35 Collector Distributor cont.														
45+44.50 C.D.-46+11.66 C.D.	Rt.	67.16							3.58	8.0	0.2	4.4	3.58	8.9
46+10.00 W.B.-50+85.12 W.B.	Rt.	480.15							3.25	52.0	1.4	28.9	3.25	57.8
50+85.12 W.B.-51+85.12 W.B.	Rt.	101.04							4.25	14.3	0.4	8.0	4.25	15.9
Ramp G Speed Change														
21+03.72 U.S.35-22+69.16 U.S.35	Pav't. Planimetered	5638 S.F.		21.8	30.4	62.7	626.5	104.4						
354+01.66 G-355+62.96 G	Lt.	157.08							10.00	52.4	1.4	29.1	8.20	47.7
Ramp D Speed Change														
352+11.41 D-352+21.41 D	Pav't.	10.00	19.09	0.7	1.0	2.1	21.2	3.5						
Ramp F Speed Change														
44+09.08 C.D.-46+11.66 C.D.	Pav't. Planimetered	6936 S.F.		26.8	37.5	77.1	770.6	128.4						
46+10.00 W.B.-47+66.68 W.B.	Pav't. Planimetered	34573 S.F.		13.3	18.7	38.4	384.1	64.0						
47+66.68 W.B.-48+08.34 W.B.	Pav't.	42.21	18.00	2.9	4.1	8.4	84.4	14.1						
326+70.87 F-328+19.32 F	Rt.	148.02							8.00	39.5	1.1	21.9	6.70	36.7
45+60.00 C.D.-46+11.61 C.D.	Lt.	51.66							8.00	13.8	0.4	7.7	6.00	11.5
46+10.00 W.B.-47+66.68 W.B.	Lt.	159.44							8.00	42.5	1.1	23.6	6.00	35.4
47+66.68 W.B.-48+08.34 W.B.	Lt.	42.35							7.00	9.9	0.3	5.5	5.25	8.2
Ramp A														
301+17.15 A-312+19.02 A	Pav't.	1101.87	24.00	102.1	142.8	293.8	2938.3	489.7						
312+19.02 A-316+47.18 A	Pav't.	428.16	24.00	39.7	55.5	114.2	1141.8	190.3						
316+47.18 A-320+84.18 A	Pav't.	437.00	24.00	40.5	56.6	116.5	1165.3	194.2						
324+21.88 A-329+47.42 A	Pav't.	525.54	24.00	48.7	68.1	140.1	1401.4	233.6						
332+39.66 A-340+58.57 A	Pav't.	818.91	24.00	75.8	106.1	218.4	2183.8	364.0						
340+58.57 A-348+58.57 A	Pav't.	800.00	24.00	74.1	103.7	213.3	2133.3	355.6						
348+58.57 A-352+00.00 A	Pav't.	341.43	24.00	31.6	44.2	91.0	910.5	151.7						
352+00.00 A-355+00.00 A	Pav't.	293.68	24.00	27.2	38.1	78.3	783.2	130.5						
301+17.15 A-304+81.91 A	Lt.	364.76							4.00	48.6	1.3	27.0	4.00	54.0
304+81.91 A-306+81.91 A	Lt.	201.95							4.00	26.9	0.7	15.0	4.00	29.9
306+81.91 A-308+15.24 A	Lt.	135.94							4.00	18.1	0.5	10.1	4.00	20.1
308+15.24 A-310+15.24 A	Lt.	201.95							4.00	26.9	0.7	15.0	4.00	29.9
310+15.24 A-311+06.43 A	Lt.	91.19							4.00	12.2	0.3	6.8	4.00	13.5
311+06.43 A-313+06.43 A	Lt.	198.05							4.00	26.4	0.7	14.7	4.00	29.3
313+06.43 A-320+80.43 A	Lt.	762.55							4.00	101.7	2.7	56.5	4.00	113.0
324+24.43 A-329+45.43 A	Lt.	515.27							4.00	67.7	70.5	38.2	4.00	76.3
332+43.43 A-338+58.57 A	Lt.	618.91							4.00	80.9	2.2	44.9	4.00	89.9
338+58.57 A-340+58.57 A	Lt.	198.05							4.00	26.4	0.7	14.7	4.00	29.3
340+58.57 A-341+78.50 A	Lt.	119.93							4.00	16.0	0.4	8.9	4.00	17.8
341+78.50 A-343+78.50 A	Lt.	201.59							4.00	26.9	0.7	14.9	4.00	29.9
343+78.50 A-348+98.00 A	Lt.	527.75							4.00	70.4	1.9	39.1	4.00	78.2
301+17.15 A-304+81.91 A	Rt.	364.76							10.00	121.6	3.2	67.5	8.20	110.8
304+81.91 A-306+81.91 A	Rt.	197.63							10.00	65.9	1.8	36.6	8.20	60.0
306+81.91 A-308+15.24 A	Rt.	130.17							10.00	43.4	1.2	24.1	8.20	39.5
308+15.24 A-310+15.24 A	Rt.	197.63							10.00	65.9	1.8	36.6	8.20	60.0
310+15.24 A-310+50.00 A	Rt.	34.76							10.00	11.6	0.3	6.4	8.20	10.6
310+50.00 A-311+06.43 A	Rt.	56.43							10.00	18.8	0.5	10.5	7.80	16.3
311+06.43 A-311+75.00 A	Rt.	68.85							10.00	23.0	0.6	12.8	7.50	19.1
311+75.00 A-312+19.02 A	Rt.	44.49							10.00	14.8	0.4	8.2	7.50	12.4
316+47.18 A-320+84.18 A	Rt.	437.37							10.00	149.1	4.0	82.8	7.90	130.9
Sub-Totals				505.2	706.8	1454.3	14,544.4	2424		1295.6	103.4	720.4		1292.8
TOTALS				505	707	1454	14,544	2424		1296	103	720		1293

LEGEND

Rt. = Right Shoulder
Lt. = Left Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 10-78
CHKD. J.R.S. DATE 11-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

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616

404 : 1¼" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base
402 : 1¾" Asphalt Conc. AC-20 310: 6" Subbase Type II
407 : Tack Coat 0.1 Gal./S.Y.

409 : Seal Coat Bit. Mat'l 0.3 Gal./S.Y. 310: Subbase Type II
409 : Seal Coat Aggregate 0.003 C.Y./S.Y. thickness as noted
301 : 6" Bituminous Aggregate Base

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
Ramp A cont.														
324+20A - 329+49A	Rt.	538.01							10.00	179.4	4.8	99.6	7.90	157.4
332+37A - 338+30.00A	Rt.	604.35							10.00	201.5	5.4	111.9	7.90	176.8
338+30.00A - 340+58.57A	Rt. Planimetered	2350 S.F.								78.3	2.1	43.5		87.0
348+58.57A - 350+07.00	Rt.	145.40							12.00	58.2	1.6	32.3	9.70	52.2
350+07.00A - 352+00.00A	Rt.	191.20							10.00	63.7	1.7	35.4	8.20	58.1
352+00.00A - 355+00.00A	Rt.	292.57							10.00	97.5	2.6	54.2	8.20	88.9
Ramp C, Speed Change														
312+19.02A - 313+06.43A	Pavt. Planimetered	229 S.F.		0.9	1.2	2.5	25.4	4.2						
313+06.43A - 314+69.02A	Pavt.	163.60	8.10	5.1	7.2	14.7	147.2	24.5						
314+69.02A - 316+47.18A	Pavt. Planimetered	3601 S.F.		13.9	19.4	40.0	400.1	66.7						
312+19.02A - 312+60.69A	Rt.	42.37							8.00	11.3	0.3	6.3	6.00	9.4
312+60.69A - 312+75.00A	Rt.	14.61							8.00	3.9	0.1	2.2	6.00	3.2
312+75.00A - 313+06.43A	Rt.	32.22							8.00	8.6	0.2	4.8	6.50	7.8
313+06.43A - 314+69.02A	Rt.	168.06							8.00	44.8	1.2	24.9	6.50	40.5
333+73.99C - 333+25.00C	Rt.	48.99							8.00	13.1	0.3	7.3	6.50	11.8
333+25.00C - 331+90.03C	Rt.	134.97							8.00	36.0	1.0	20.0	6.00	30.0
Ramp F, Speed Change														
340+58.57A - 341+78.50A	Pavt.	119.93	18.50	8.6	12.0	24.7	246.5	41.1						
341+78.50A - 343+78.50A	Pavt.	197.31	14.50	11.0	15.4	31.8	317.9	53.0						
343+78.50A - 347+78.57A	Pavt.	393.04	7.00	10.6	14.9	30.6	305.7	50.9						
347+78.57A - 348+58.57A	Pavt.	78.82	2.00	0.6	0.9	1.8	17.5	2.9						
340+58.57A - 341+25.00A	Rt.	66.43							8.00	17.7	0.5	9.8	6.00	14.8
341+25.00A - 341+78.50A	Rt.	53.50							8.00	14.3	0.4	7.9	6.70	13.3
341+78.50A - 343+78.50A	Rt.	196.54							8.00	52.4	1.4	29.1	6.70	48.8
343+78.50A - 347+78.57A	Rt.	389.63							8.00	103.9	2.8	57.7	6.70	96.7
347+78.57A - 348+51.07A	Rt.	71.02							8.00	18.9	0.5	10.5	6.70	17.6
348+51.07A - 348+58.57A	Rt.	7.34							10.00	2.4	0.1	1.4	8.20	2.2
Ramp B														
334+10.00B - 338+11.69B	Pavt.	401.69	16.00	24.8	34.7	71.4	714.1	119.0						
338+11.69B - 340+11.69B	Pavt.	201.26	16.00	12.4	17.4	35.8	357.8	59.6						
340+11.69B - 352+79.16B	Pavt.	1283.41	16.00	79.2	110.9	228.2	2281.6	380.3						
352+79.16B - 352+92.93B	Pavt.	13.80	16.00	0.9	1.2	2.5	24.5	4.1						
339+85.69B - 340+11.69B	Rt.	26.67							3.00	2.7	0.1	1.5	3.00	3.0
340+11.69B - 352+79.16B	Rt.	1302.31							3.00	130.2	3.5	72.4	3.00	144.7
352+79.16B - 352+92.93B	Rt.	13.83							3.00	1.4	0.1	0.8	3.00	1.5
334+17.00B - 338+11.69B	Lt.	394.69							3.00	39.5	1.1	21.9	3.00	43.9
338+11.69B - 340+11.69B	Lt.	199.76							3.00	20.0	0.5	11.1	3.00	22.2
340+11.69B - 351+92.00B	Lt.	1177.53							3.00	117.8	3.1	65.4	3.00	130.8
351+92.00B - 352+79.16B	Lt.	86.61							8.00	23.1	0.6	12.8	6.70	21.5
352+79.16B - 352+92.93B	Lt.	13.76							8.00	3.7	0.1	2.0	6.70	3.4
Ramp C														
315+25.00 - 318+25.00C	Pavt.	293.39	16.00	18.1	25.3	52.2	521.6	86.9						
318+25.00C - 322+85.81C	Pavt.	465.31	16.00	28.7	40.2	82.7	827.2	137.9						
322+85.81C - 331+90.03C	Pavt.	904.22	16.00	55.8	78.1	160.8	1607.5	267.9						
319+67.50C - 322+85.81C	Rt.	325.12							3.00	32.5	0.9	18.1	3.00	36.1
Sub-Totals				270.6	378.8	779.7	7794.6	1299		1376.8	37	764.8		1323.6
TOTALS				271	379	780	7795	1299		1377	37	765		1324

LEGEND

Lt. = Left Shoulder
Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES	
CALC. C.E.T	DATE 9-78
CHKD. J.R.S	DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

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616

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 : 1¼" Asphalt Conc AC-20 305: 9" Port. Cem. Conc. Base 402 : 1¾" Asphalt Conc AC-20 310 : 6" Subbase Type II 407: Tack Coat 0.1 Gal /S.Y.						409 : 3 coat Coat Bit. Matl. 0.3 Gal/S.Y. 310: Subbase Type II 409 : 3 coat Coat Aggregate 0.0025 C.Y./S.Y. , thickness as noted 301 : 6" Bituminous Aggregate Base					
			Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
Ramp C cont														
322+85.81C-331+90.03C	Rt.	904.22							3.00	90.4	2.4	50.2	3.00	100.5
315+25.00 -318+25.00	Lt.	292.46							8.00	78.0	2.1	43.3	6.70	72.6
318+25.00C-319+75.00C	Lt.	149.50							5.50	27.4	0.7	15.2	4.85	26.9
319+75.00C-322+85.81C	Lt.	310.24							3.00	31.0	0.8	17.2	3.00	34.5
322+85.81C-330+90.03C	Lt.	804.22							3.00	80.4	2.1	44.7	3.00	89.4
330+90.03C-331+90.03C	Lt.	100.00							5.50	18.3	0.5	10.2	4.85	17.9
Ramp D														
337+83.02D-339+83.02D	Pav't.	203.92	16.00	12.6	17.6	36.2	361.6	60.3						
339+83.02D-350+61.41D	Pav't.	1113.01	16.00	68.7	96.2	197.9	1978.7	329.8						
350+61.41D-352+11.41D	Pav't.	152.83	16.00	9.4	13.2	27.2	271.7	45.3						
337+83.02D-338+83.02D	Rt.	99.71							5.50	18.3	0.5	10.2	4.85	17.9
338+83.02D-339+83.02D	Rt.	99.52							3.00	10.0	0.3	5.5	3.00	11.1
339+83.02D-350+61.41D	Rt.	1071.90							3.00	107.2	2.9	59.5	3.00	119.1
350+61.41D-352+11.41D	Rt.	148.85							6.50	32.3	0.9	17.9	5.60	30.9
337+83.02D-339+83.02D	Lt.	207.48							3.00	20.7	0.6	11.5	3.00	23.1
339+83.02D-350+61.41D	Lt.	1154.15							3.00	115.4	3.1	64.1	3.00	128.2
350+61.41D-351+29.50D	Lt.	72.43							3.00	7.2	0.2	4.0	3.00	8.0
Ramp E														
323+12.00E-324+38.15E	Pav't.	127.54	16.00	7.9	11.0	22.7	226.7	37.8						
324+38.15E-334+26.54E	Pav't.	1022.89	16.00	63.2	88.4	181.8	1818.5	303.1						
334+26.54E-335+01.54E	Pav't.	76.68	16.00	4.7	6.6	13.6	136.3	22.7						
323+67.00E-324+38.15E	Rt.	75.62							3.00	7.6	0.2	4.2	3.00	8.4
324+38.15E-334+26.54E	Rt.	1063.86							3.00	106.4	2.8	59.1	3.00	118.2
334+26.54E-335+01.54E	Rt.	78.67							3.00	7.9	0.2	4.4	3.00	8.7
323+02.15E-324+38.15E	Lt.	134.93							5.46	24.6	0.7	13.6	4.85	24.2
324+38.15E-334+01.54E	Lt.	957.08							3.00	95.7	2.6	53.2	3.00	106.3
334+01.54E-334+26.54E	Lt.	24.81							3.44	2.8	0.1	1.6	3.44	3.2
334+26.54E-335+01.54E	Lt.	74.27							6.94	17.2	0.4	9.5	6.05	16.6
Ramp F														
328+19.32F-331+00.11F	Pav't.	283.93	16.00	17.5	24.5	50.5	504.8	84.1						
331+00.11F-335+95.80F	Pav't.	495.69	16.00	30.6	42.8	88.1	881.2	146.9						
335+95.80F-338+58.57F	Pav't.	259.83	16.00	16.0	22.4	46.2	461.9	77.0						
338+58.57F-340+58.57F	Pav't.	200.00	16.00	12.3	17.3	35.6	355.6	59.3						
328+19.32F-329+19.32F	Rt.	99.62							5.50	18.3	0.5	10.1	4.85	17.9
329+19.32F-331+00.11F	Rt.	180.41							3.00	18.0	0.5	10.0	3.00	20.0
331+00.11F-335+95.80F	Rt.	495.69							3.00	49.6	1.3	27.5	3.00	55.1
335+95.80F-338+58.57F	Rt.	263.32							3.00	26.3	0.7	14.6	3.00	29.3
338+58.57F-340+58.57F	Rt.	200.00							5.50	36.7	1.0	20.4	4.50	33.3
328+19.32F-331+00.11F	Lt.	287.65							3.00	28.8	0.8	16.0	3.00	32.0
331+00.11F-335+95.80F	Lt.	495.69							3.00	49.6	1.3	27.5	3.00	55.1
335+95.80F-338+24.80F	Lt.	223.40							3.00	22.3	0.6	12.4	3.00	24.8
Ramp G														
344+72.18G-346+22.18G	Pav't.	152.57	16.00	9.4	13.2	27.1	271.2	45.2						
346+22.18G-353+26.66G	Pav't.	727.10	16.00	41.9	62.8	129.3	1292.6	215.4						
353+26.66G-354+01.66G	Pav't.	76.68	16.00	4.7	6.6	13.6	136.3	22.7						
345+50.00G-346+22.18G	Rt.	76.28							3.00	7.6	0.2	4.2	3.00	8.5
346+22.18G-353+26.66G	Rt.	753.97							3.00	75.4	2.0	41.9	3.00	83.8
353+26.66G-354+01.66G	Rt.	78.67							3.00	7.9	0.2	4.4	3.00	8.7
344+72.18G-346+22.18G	Lt.	148.96							6.5	32.3	0.9	17.9	5.0	30.9
Sub - Totals				301.9	422.6	869.8	8697.1	1449.6		1271.6	34.1	706		1365.1
TOTALS				302	423	870	8697	1450		1272	34	706		1365

LEGEND

Lt. = Left Shoulder
Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 9-78
CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

52
616

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 : 1½" Asphalt Conc. AC-20 / 402 : 1¾" Asphalt Conc. AC-20 / 407 : Tack Coat 0.1 Gal./S.Y.				305: 9" Port. Cem. Conc. Base / 310 : 6" Subbase Type II		409 : Seal Coat Bit. Mat'l 0.3 Gal./S.Y. 310 : Subbase Type II / 409 : Seal Coat Aggregate 0.008 C.Y./S.Y. thickness as noted / 301 : 6" Bituminous Aggregate Base						404: 1½" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base / 402: 1¾" Asphalt Conc. AC-20 310: 6" Subbase Type II / 407: Tack Coat 0.1 Gal./S.Y.						
			Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume	404 Volume	402 Volume	407 Volume	Average Width	305 Area	Average Width	310 Volume
		Ft	Ft	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft	Gal.	C.Y.	C.Y.	S.F.	C.Y.	C.Y.	C.Y.	Gal.	Ft	S.Y.	Ft	C.Y.
Ramp G (cont.)																					
346+22.18 G - 353+01.66 G	Lt.	675.39							3.00	67.5	1.8	37.5	3.00	75.0							
353+01.66 G - 353+26.66 G	Lt.	24.81							3.88	3.2	0.1	1.8	3.63	3.3							
353+26.66 G - 354+01.66 G	Lt.	74.23							7.38	18.2	0.5	10.1	6.23	17.1							
Ramp H																					
323+21.06 H - 324+21.06 H	Pav't.	100.14	16.00	6.2	8.7	17.8	178.0	29.7													
324+21.06 H - 335+05.09 H	Pav't.	1096.14	16.00	67.7	94.7	194.9	1948.7	324.8													
335+05.09 H - 338+85.09 H	Pav't.	382.92	16.00	23.6	33.1	68.1	680.7	113.5													
323+21.06 H - 324+21.06 H	Rt.	99.95							5.50	18.3	0.5	10.2	4.85	18.0							
324+21.06 H - 335+05.09 H	Rt.	1081.76							3.00	108.2	2.9	60.1	3.00	120.2							
335+05.08 H - 336+85.09 H	Rt.	179.74							3.00	18.0	0.5	10.0	3.00	20.0							
336+85.09 H - 338+85.09 H	Rt.	199.47							5.50	36.6	1.0	20.3	4.85	35.8							
323+21.06 H - 324+21.06 H	Lt.	100.31							3.00	10.0	0.3	5.6	3.00	11.1							
324+21.06 H - 335+05.09 H	Lt.	1110.52							3.00	111.1	3.0	61.7	3.00	123.4							
335+05.09 H - 337+14 H	Lt.	212.42							3.00	21.2	0.6	11.8	3.00	23.6							
Relo. Dayton-Xenia Rd.																					
14+74.50 - 15+80.89	Pav't.	106.39	52.00												21.4	29.9	61.5	53.00	626.5	58.50	115.3
15+80.89 - 18+30.89	Pav't.	250.00	57.00												55.0	77.0	158.3	58.00	1611.1	63.50	294.0
18+30.89 - 19+30.89	Pav't.	100.00	52.00												20.1	28.1	57.8	53.00	588.9	58.50	108.3
19+30.89 - 28+42.75	Pav't.	911.86	52.00												183.0	256.1	526.9	53.00	5369.8	58.50	987.8
28+42.75 - 29+39.77	Pav't.	97.02	52.00												19.5	27.2	56.1	53.00	571.3	58.50	105.1
29+39.77 - 31+82.31	Pav't.	242.54	57.00												53.4	74.7	153.6	58.00	1563.0	63.50	285.2
31+82.31 - 36+67.50	Pav't.	485.19	52.00												97.4	136.2	280.3	53.00	2857.2	58.50	525.6
91+39.64 - 95+50.84	Pav't.	411.20	52.00												82.5	115.5	237.6	53.00	2421.5	58.50	445.5
Intersection, Wildonna Dr.																					
0+26.50 - 0+76.00	Pav't. Planimetered	2261 S.F.													8.7	12.2	25.1	2339 S.F.	259.9	2414 S.F.	44.7
Intersection, Service Rd. B.																					
0+30.68 - 0+64.98	Pav't. Planimetered	945 S.F.													3.6	5.1	10.5	992 S.F.	110.2	1043 S.F.	19.3
Intersection Stedman Lane																					
0+96.[illegible] - 1+23.58	Pav't. Planimetered	3341 S.F.													12.9	18.0	37.1	3444 S.F.	382.7	3612 S.F.	66.9
Sub-Totals					97.5	136.5	280.8	2807.4	468		412.3	11.2	229.1		447.5	557.5	780	1604.8		16,362.1		2997.7
TOTALS					98	137	281	2807	468		412	11	229		448	558	780	1605		16,362		2998

LEGEND

Lt = Left Shoulder
Rt = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES	
CALC. C.E.T	DATE 9-78
CHKD. J.R.S	DATE 10-78

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

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616

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 : 1½" Asphalt Conc. AC-20 402 : 2" Asphalt Conc. AC-20 407 : Tack Coat 0.1 Gal./S.Y.				301 : 8" Bit. Aggregate Base 310 : 6" Subbase Type II										612 : Concrete Median 409 : Seal Coat Bit. Mat'l. 0.3 Gal./S.Y. 409 : Seal Coat Cover Aggr. 0.008 C.Y./S.Y.				301 : 8" Bit. Aggregate Base 310 : Subbase, Type II thickness as noted			404 : 1" Asphalt Concrete 402 : 1½" Asphalt Concrete 408 : Prime Coat 0.4 Gal./S.Y.			304 : 6" Aggregate Base 310 : 6" Subbase, Type II			
			Average Width	404 Volume	402 Volume	407 Volume	Average Width	301 Volume	Average Width	310 Volume							612 Area	Average Width	409 Volume	409 Volume	301 Volume	Average Width	310 Volume	404 Volume	402 Volume	408 Volume	Average Width	304 Volume	Average Width	310 Volume				
		Ft.	Ft.	C.Y.	C.Y.	Gal.	Ft.	C.Y.	Ft.	C.Y.							S.Y.	Ft.	Gal.	C.Y.	C.Y.	Ft.	C.Y.	C.Y.	C.Y.	Gal.	Ft.	C.Y.	Ft.	C.Y.				
Rte. Dayton-Xenia Rd.																																	
11+00.00 - 14+74.50	Pav't. Lt.	374.50	20.33	35.2	47.0		20.83	192.6	21.50	149.1																							
11+00.00 - 12+23.65	Pav't. Rt.	123.65	13.50	7.7	10.3		14.00	42.7	14.67	33.6																							
12+23.65 - 13+38.35	Pav't. Rt.	114.70	13.50	7.2	9.6		13.50	38.2	13.50	28.7																							
13+38.35 - 14+74.50	Pav't. Rt.	136.15	20.00	12.6	16.8		20.50	68.9	21.17	53.4																							
45+50.84 - 46+50.00	Pav't. Rt. & Lt.	99.16	95.16	20.7	27.6		96.15	113.0	97.50																								
46+50.00 - 49+00.00	Pav't. Widening	250.00					7.48	46.2	8.15	37.7																							
46+50.00 - 49+00.00	Pav't. Surfacing	250.00	29.93	34.6	46.2																												
46+50.00 - 49+00.00	Pav't. Surfacing	250.00			9.0①						65.1①																						
Intersection Wenrick Dr.																																	
0+14.08 - 0+53.49	Pav't. Planimetered	2043 S.F.		9.5	12.6		2102 S.F.	51.9	2180 S.F.	40.4																							
Concrete Median																																	
18+30.89 - 19+30.89		100.00	6.00														66.7	6.00	20.0	0.5	11.1	12.00	44.4										
19+30.89 - 28+42.75		911.86	8.00														810.5	6.00	182.4	4.9	101.3	14.00	472.8										
25+92.75 - 29+39.77		97.02	6.00														64.7	6.00	19.4	0.5	10.8	12.00	43.1										
Returns @ Lt. Ld. ends of median	Planimetered	13.05 S.F.															1.4																
Wenrick Drive																																	
0+53.49 - 1+25.00	Pav't.	71.51	37.90																					8.4	12.5	120.5	38.90	51.5	39.90	52.8			
Stedman Lane																																	
1+23.58 - 1+75.00	Pav't.	51.42	22.15																					3.5	5.3	50.6	23.15	22.0	24.15	23.0			
Wildonna Drive																																	
0+76.00 - 3+77.20	Pav't.	301.20	29.00																					22.3	33.5	321.3	25.00	139.4	26.00	149.0			
3+77.20 - 4+20.51	Pav't. Planimetered	1132 S.F.																						3.5	5.2	50.3	1179.5 S.F.	21.8	1227.0 S.F.	22.7			
Resurfacing	Planimetered	755 S.F.								8.4														2.3	3.5④								
Service Road B																																	
0+64.48 - 3+80.00	Pav't.	315.52	20.00																					19.5	19.5④	280.5	21.00	②163.6					
Sub-Totals				127.5	179.1		553.5		342.9	73.5							943.3		221.8	5.9	123.2		560.3	59.5	79.5	823.2		398.3		243.5			
TOTALS				128	179		554		343	74							943		222	6	123		560	60	80	823		398		244			

① Variable Thickness
② Average Width = 23.45'
③ Thickness = 1"
④ Thickness = 8"

LEGEND

Lt. = Left Shoulder
Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES			
CALC. CET	DATE 9-78		
CHKD. JRS	DATE 10-78		

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

404: 1½" Asphalt Conc. AC-20 — 305: 9" Part. Cem. Conc. Base
402: 1¾" Asphalt Conc. AC-20 — 310: 6" Subbase Type II
407: Tack Coat 0.1 Gal./S.Y.

409: Seal Coat Bit. Mat'l. 0.3 Gal./S.Y. — 408: Bit. Prime Coat 0.4 Gal./S.Y.
409: Seal Coat Aggregate 0.008 C.Y./S.Y. — 304: 8" Aggregate Base

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Average Width	310 Volume	409 Volume	409 Volume	408 Volume	304 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	Ft.	C.Y.	Gal.	C.Y.	Gal.	C.Y.
Kemp Rd													
14+25.00 - 15+20.32	Pav't.	95.32	22.00	8.1	11.3	23.3	233.0	24.00	42.4				
15+20.32 - 18+04.67	Pav't.	284.35	24.00	26.3	36.9	75.8	758.3	26.00	136.9				
21+54.17 - 22+50.00	Pav't.	95.83	24.00	8.9	12.4	25.6	255.5	26.00	46.1				
22+50.00 - 25+25.00	Pav't.	275.00	24.00	25.5	35.6	73.3	733.3	27.75	141.3				
25+25.00 - 26+25.00	Pav't.	100.00	24.00	9.3	13.0	26.7	266.7	26.00	48.1				
26+25.00 - 27+25.00	Pav't.	100.00	21.75	8.4	11.7	24.2	241.7	23.75	44.0				
14+25.00 - 15+20.32	Lt. & Rt.	95.32	6.00							19.1	0.5	25.4	14.1
15+20.32 - 17+90.67	Lt. & Rt.	270.35	8.00							72.1	1.9	96.1	53.4
17+90.67 - 18+04.67	Lt. & Rt.	14.00	20.00							9.3	0.2	12.4	6.9
21+54.17 - 21+68.17	Lt. & Rt.	14.00	20.00							9.3	0.2	12.4	6.9
21+68.17 - 26+25.00	Lt. & Rt.	456.83	8.00							121.8	3.2	162.4	90.2
26+25.00 - 27+25.00	Lt. & Rt.	100.00	6.00							20.0	0.5	26.7	14.8
Sub-Totals				86.5	120.9	248.9	2488.5		458.8	251.6	6.5	335.4	186.3
TOTALS				87	121	249	2489		459	252	7	335	186

ESTIMATED QUANTITIES
UNDERDRAINS

ESTIMATED QUANTITIES
CALC. I.E.H DATE 2-79
CHKD. C.E.T. DATE 2-79

FHWA REGION	STATE	PROJECT	
5	OHIO		

55/616

GRE-675-5.37

LEGEND
L = Left Side
LM = Left Side Median
RM = Right Side Median
R = Right Side

Ref. No.	Station – Station	Side	605: 6" Pipe Underdrain Shallow Lin. Ft.	Deep Lin. Ft.	Unclassified Lin. Ft.	603 6" Conduit Type B L.F.	F L.F.	6" Bends & Branches 30° Ea.	45° Ea.	90° Ea.	Tee Ea.	Cross Ea.	Wye Ea.	Animal Guard Ea.	Outlet Type See Sh.	660 Sodding S.Y.	Remarks
1UD	308 + 40 - 322 + 00	RM	1389				10						1	—	B		
2UD	308 + 40 ℄ - 321 + 68C	L	1133		218		10			1				1	A		
3UD	319 + 75 - 330 + 68	L	25	663	907		10				2			—	E		
4UD	322 + 03 - 330 + 68	RM	886				10				1			—	E		
5UD	323 + 20 - 330 + 68	R	753			40				1				—	D		Connect to 54 UD
6UD	327 + 75 - 330 + 68	L, LM	293			64				1				—	F		Connect to 3 UD
7UD	330 + 78 - 333 + 18	L		269			10						1	1	G		
8UD	330 + 75 - 339 + 65	LM	905				10						1	—	B		
9UD	330 + 75 - 339 + 22	RM	862				10						1	—	B		
10UD	330 + 82 ℄ - 338 + 50D	R		800			10			1	1			1	A		
11UD	332 + 94 - 339 + 95	L	701				10				1			—	E		
12UD	333 + 27 - 334 + 95	L		192			10			1				1	A		
13UD	337 + 87 D - 338 + 92 ℄	R		103		40				1				—	F		Connect to 10 UD
14UD	333 + 82 E - 340 + 30 ℄	L		529	131		10				1			—	E		
15UD	340 + 05 - 343 + 00	L	298			40				1				—	F		Connect to 16 UD
16UD	339 + 73 - 352 + 55	LM, RM	1289				56					1		—	F		Connect to 17 UD
17UD	339 + 34 - 340 + 05	RM	93				10				1		1	—	B		
18UD	339 + 05 - 354 + 95	R	271	884	395	40	20				1			—	F		Connect to 17 UD
19UD	340 + 42 ℄ - 346 + 90 G	L		495	165		20			1	1	1		2	A, A		Outlet @ 340 + 75 ℄ Lt. ℄ 346 + 90 G, Lt.
20UD	345 + 53 ℄ - 352 + 87 CD	L		736		33	10			1				—	F		Connect to 19 UD
21UD	340 + 75 ℄ - 352 + 95 CD	L, R	1223			28	10			1				—	D		Connect to 19 UD
22UD	351 + 88 - 363 + 94	R		1177			30						1	1	G		
23UD	352 + 52.5 - 363 + 95	LM	1134				30						1	—	B		
24UD	352 + 88 - 365 + 30	L		1249			30			1				—	E		
25UD	353 + 30 B - 370 + 50 CD	L	350	1331	50		30				1			1	A		
26UD	352 + 88 ℄ - 365 + 85 CD	L, R	1257				30						1	—	B		
27UD	364 + 00 - 401 + 50	LM	3749			52	30				2			—	E, F		Outlet to CB. @ 364 + 00, Con. to 33 UD @ 401 + 50
28UD	364 + 06 - 375 + 45	R	1170				30			1	1			1	A		
29UD	366 + 75 - 375 + 45	RM	850			60	20			1				—	F		Connect to 28 UD
30UD	370 + 65 CD - 397 + 95 ℄	L	2834				20			1	1			2	A, A		Outlet @ 370 + 79 CD ℄ 397 + 95 ℄
31UD	375 + 50 - 398 + 00	LM	2284				20						2	—	B, B		Outlet @ 375 + 50 ℄ 398 + 00
32UD	375 + 55 - 397 + 95	R	1541	575	175		20			2				2	A, A		Outlet @ 375 + 55 ℄ 397 + 95
33UD	398 + 05 - 409 + 95	L	170	868	168		10			1	1			1	A		
34UD	398 + 05 - 416 + 95	RM	1800		95	52					1			—	D		Connect to 35 UD
35UD	398 + 05 - 416 + 95	R		1957			10				1			1	D	13	
36UD	410 + 05 - 416 + 95	L, R		683		52	56			1				—	F	7	Connect to 34 UD
37UD	US 35: 1087 + 74.57 - 1095 + 45	R		295	475			1						—	—		Connect to Exist. Underdrain
38UD	US 35: 1091 + 02 - 1098 + 50	L		275	472		10		1		1			1	G		
39UD	US 35: 1095 + 50 - 1101 + 95	R			637		10						1	—	B		
40UD	US 35: 1096 + 75 - 4 + 20	LM	1440			28	10		1	1				—	F, B		Connect to 38 UD @ 1096 + 75 Outlet to CB @ 4 + 20
41UD	US 35: 1102 + 05 - 3 + 90	R	906				20			2				2	A, A		Outlet @ 1102 + 05 ℄ 3 + 90
42UD	US 35: 4 + 00 - 4 + 65	L	86				20			1				1	A		
43UD	6 + 31 US 35 - 310 + 32A	R	1483	246	325		40			1	1			1	A		
44UD	12 + 80 US 35 - 354 + 00 G	L, R	812			34				1				—	F		
45UD	US 35: 16 + 25 - 28 + 87	RM	1258				30						1	—	B		
46UD	349 + 67G - 27 + 63 US 35	L	705	299	99		30			1	2		1	2	G, A		Outlet @ 349 + 67G ℄ 27 + 25 US 35
47UD	32 + 84 US 35 - 39 + 00 CD	L	599			27	10						1	—	C		
48UD	US 35: 33 + 13 - 38 + 00	RM	489				20						1	—	B		
49UD	US 35: 38 + 00 - 46 + 75 EB	R	864			46	10				1			—	C		
50UD	39 + 00 CD - 43 + 00 ± CD	R	393				10		1					—	B		
51UD	US 35: 42 + 75 - 56 + 00 WB	LM	1330				20			1	1			—	B, E		Outlet @ 42 + 75 ℄ 56 + 00 WB
52UD	43 + 00 ± CD - 45 + 60 CD	R	253				10		1					—	B		
53UD	45 + 66 WB US 35 Lt - 51 + 80 CD Rt.	–	613				10							—	—		Connect to Inlet @ 45 + 65 WB with 6" Type F
54UD	322 + 10H - 56 + 17 EB US 35	R	2439		218		110				2	1		3	D, A, A		Outlet @ 323 + 30H, 335 + 50H, 56 + 00 EB US 35
55UD	US 35: 58 + 75 WB - 73 + 60 ℄	L, M	1499				10				1			—	E		
56UD	US 35: 58 + 93 EB - 66 + 95 ℄	R	819				10				1			1	D		
57UD	US 35: 60 + 25 WB - 73 + 60 ℄	L	1343			28				1				—	F		Connect to 55 UD
58UD	US 35: 60 + 25 EB - 66 + 95 ℄	R, M	662			28				1				—	D		Connect to 56 UD
59UD	US 35: 67 + 05 - 73 + 55	R, M	650			28				1				—	D		Connect to 60 UD
60UD	US 35: 67 + 05 - 73 + 55	R	676				10				1			1	D		
61UD	US 35: 73 + 65 - 75 + 95	L, M	230			28				1				—	D		Connect to 62 UD
62UD	US 35: 73 + 65 - 75 + 95	L	237				10				1			1	D		
63UD	US 35: 73 + 65 - 75 + 95	R, M	230			28				1				—	D		Connect to 64 UD
64UD	US 35: 73 + 65 - 75 + 95	R	237				10				1			1	D		
	Subtotal		47513	13626	4030	776	1022	1	4	31	30	3	15	29		20	

Ref. No.	Station – Station	Side	605: 6" Pipe Underdrain Shallow Lin. Ft.	Deep Lin. Ft.	Unclassified Lin. Ft.	603 6" Conduit Type B L.F.	F L.F.	6" Bends & Branches 30° Ea.	45° Ea.	90° Ea.	Tee Ea.	Cross Ea.	Wye Ea.	Animal Guard Ea.	Outlet Type See Sh.	660 Sodding S.Y.	Remarks
G5UD	306 + 50A - 310 + 15A	L		370		28				1				—	F		Connect to 43 UD
G6UD	310 + 25A - 320 + 75A	L	123	919	49		10						1	1	G		
G7UD	310 + 42A Rt - 332 + 00 Clt			660			10			1				1	A		
G8UD	324 + 30A - 329 + 39A	L	509				10			1				1	A		
G9UD	332 + 50A - 344 + 20A	L	588	603	49		10			1				1	A		
70UD	339 + 25F - 345 + 00A	R		586			10			1			1	—	B		
71UD	345 + 00A - 346 + 15A	R		137			10						1	—	B		
72UD	345 + 75A - 348 + 50A	L		329			10			1	1			1	A		
73UD	346 + 50A - 351 + 90A	R	522			33	10			1				—	F		Connect to 72 UD
74UD	350 + 07B - 353 + 17B	L	191		118	20				1				—	D		Connect to 75 UD
75UD	350 + 07B - 352 + 50B	R		286			10				1			1	D		
76UD	334 + 22B - 349 + 93B	L	1552			20	16			1				—	D		Connect to 77 UD
77UD	340 + 00B - 349 + 93B	R		1041			26				1			1	D		
78UD	321 + 80C - 331 + 85C	L, R	685	100	265	20	10				3			1	A		
79UD	338 + 72D - 347 + 93D	R	430	397	149		10				1	1		1	A		
80UD	341 + 10D - 343 + 50D	L		257		20					1			—	F		Connect to 79 UD
81UD	348 + 07D - 352 + 20D	R	423				20				1			1	A		
82UD	323 + 10E - 333 + 75E	L		947	110		20				1			1	B		
83UD	330 + 00E - 333 + 68E	R		397		20					1			—	F		
84UD	326 + 75E - 339 + 25E	R, L	1247				40	30			3	1		1	A, F		Outlet @ 329 + 50, Connect to 70 UD @ 339 + 25
85UD	349 + 80G - 352 + 25G	R		263		20					1			—	F		
86UD	347 + 10G - 349 + 63G	L		307			10					1		1	D		
87UD	347 + 10G - 349 + 68G	R		277		20					1			—	D		Connect to 86 UD
88UD	D.X. Rd: 11 + 60 - 14 + 82	L	320				10		1					—	B		
89UD	D.X. Rd: 15 + 11 - 25 + 00	L		841	115		10	1						—	B		
90UD	D.X. Rd: 17 + 25 - 25 + 00	R		707			20		1					—	B		
90UD				60 *										—	—		
91UD	D.X. Rd: 25 + 00 - 36 + 70	R	360	259	502		20		1					—	B		
92UD	D.X. Rd: 25 + 00 - 36 + 55	L	245	493	315		20	1						—	B		
92UD				110 *										—	—		
93UD	D.X. Rd: 41 + 15 - 43 + 05	L	170				20		1					—	B		
94UD	D.X. Rd: 43 + 10 - 44 + 39	L	114 *				10		1					—	B		
95UD	D.X. Rd: 44 + 39 - 44 + 50.84	L			96		10		1					—	B		
96UD	308 + G9 ± I-675	L	50 *										1	—	—		Connect to 2 UD
97UD	308 + G9 ± I-675	R	38 *										1	—	—		Connect to 1 UD
98UD	4 + 25 ± US. 35	L	51 *										1	—	—		Connect to 42 UD
99UD	3 + G9 ± US 35	R	38 *										1	—	—		Connect to 41 UD
100UD	6 + G3 ± US 35	R	38 *										1	—	—		Connect to 43 UD
101UD	7 + 15 ± US 35	L	58 *									1		—	—		Connect to 76 UD
102UD	27 + G1 ± US 35	L	69 *										1	—	—		Connect to 46 UD
103UD	28 + 53 ± US 35	R	26 *										1	—	—		Connect to 45 UD
104UD	323 + 45 ± E	R, L	18 *										1	—	—		Connect to 82 UD
105UD	352 + 02 ± D	R, L	18 *										1	—	—		Connect to 81 UD
106UD	33 + 19 ± US 35	L	61 *										1	—	—		Connect to 47 UD
107UD	33 + 76 ± US 35	R	41 *										1	—	—		Connect to 48 UD
108UD	55 + G1 ± W.B. U.S. 35	L	38 *										1	—	—		Connect to 51 UD
109UD	55 + 71 ± E.B. U.S. 35	R	29 *										1	—	—		Connect to 54 UD
110UD	58 + 93 ± W.B. U.S. 35	L	37 *										1	—	—		Connect to 55 UD
111UD	59 + 14 ± E.B. U.S. 35	R	26 *										1	—	—		Connect to 56 UD
112UD	320 + 54 ± A	R, L	26 *										1	—	—		Connect to 66 UD
113UD	324 + 52 ± A	R, L	26 *										1	—	—		Connect to 68 UD
114UD	329 + 16 ± A	R, L	26 *										1	—	—		Connect to 68 UD
115UD	332 + 72 ± A	R, L	26 *										1	—	—		Connect to 69 UD
116UD	36 + 46 ± Dayton-Xenia	R, L	57 *										2	—	—		Connect to 91 UD ℄ 92 UD
117UD	41 + 83 ± Dayton-Xenia	R, L	55 *										1	—	—		Connect to 93 UD
118UD	17 + 80 ± - 18 + 00 Kemp Rd.	R, L	26 *											—	—		
118UD	17 + 80 ± - 18 + 00 Kemp Rd.	L	21				10		1					1	A		
119UD	21 + 70 ± Kemp Rd.	R, L	26 *										1	—	—		Connect to 120 UD
120UD	21 + 60 - 25 + 25 Kemp Rd.	L	386				10				1			1	A		
121UD	531 + 55 - 537 + 30 Railroad	R	575				10				1			1	A		
	Totals this column		8347	10176	1768	241	352	2	7	25	29	—	4	15		—	
	Totals preceding column		47513	13626	4030	776	1022	1	4	31	31	3	15	29		20	
	Total		55860	23801	5798	1017	1374	3	11	56	60	3	19	44		20	
Totals to General Summary			55860 / 1188 *	23801 / 170 *	5798	1017	1374	—	—	—	—	—	—	—		20	* 707.01 Type III or 707.12 Type III or 707.15

GENERAL SUMMARY

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GRE - 675 - 5.37
GREENE COUNTY

ITEM	SHEET NUMBERS																							ITEM	GRAND TOTAL	UNIT	DESCRIPTION
	27	28	31	55	41	42	72	22	73	79	80		103	104	105		106	117	118		119	120	122	406K				
																											ROADWAY
201																								201	Lump	Lump	Clearing & Grubbing
202									824						55		223		266				83		202	1,451	Lin.Ft.	Pipe Removed 24" & Under
202															900				85						202	491	Lin.Ft.	Pipe Removed Over 24"
202									Lump						Lump				Lump						202	Lump	Lump	Structures Removed
202									32						40,012		1,702		37						202	41,903	Sq.Yd.	Pavement Removed
202																	372								202	372	Sq.Ft.	Walk Removed
202															1680				81						202	1761	Lin.Ft.	Curb Removed
202									76						373										202	448	Lin.Ft.	Gutter Removed
202															1006										202	1006	Sq.Yd.	Concrete Median Removed
202																							423		202	423	Lin.Ft.	Guard Rail Removed
202									7								1								202	8	Each	Manhole Removed
202															2		10								202	12	Each	Inlet Removed
202									5																202	5	Each	Manhole Abandoned
202															5				1						202	6	Each	Inlet Abandoned
202													Lump						Lump						202	Lump	Lump	Portions of Structures Removed
202			6862.5																						202	6862.5	Lin.Ft.	Guard Rail Removed, including Anchor Assembly
203		24,363			1412,089																				203	1436,452	Cu.Yd.	Excavation not including Embankment Construction
203		21,051			1,336,052																				203	1,357,103	Cu.Yd.	Embankment, as per plan
203						345,679																			203	345,679	Sq.Yd.	Subgrade Compaction
203						115																			203	115	Hour	Proof Rolling
404			100																						404	100	Cu.Yd.	Bituminous Concrete for Maintaining Traffic
410			600																						410	600	Cu.Yd.	Traffic Compacted Surface, as per plan
604						42																			604	42	Each	Reference Monument, Standard
606			2																						606	2	Each	Anchor Assembly, Modified as per plan
606			6812.5																						606	6812.5	Lin.Ft.	Guard Rail, Type 6
606									5925.0		1162.5				8449		3175.0		2432				687.5		606	21,331.0	Lin.Ft.	Guard Rail, Type 5
606									50						212.5		262.5		487.5						606	1012.5	Lin.Ft.	Guard Rail, Type 5, Barrier Design
Special																								55597	Special	55,597	Sq.Ft.	Noise Barrier
606									7		5				13		11		4						606	40	Each	Anchor Assembly, Standard Type T
606									7		5				13		7		6				8		606	46	Each	Anchor Assembly, Standard Type A
606									7		2				4		5		2						606	20	Each	Anchor Assembly, Barrier Design, Standard Type A
606									3						22		2		12				4		606	43	Each	Bridge Terminal Assembly, Standard Type A
606																	2		2						606	4	Each	Bridge Terminal Assembly, Modified as per plan
607																	81								607	81	Lin.Ft.	Fence, Type CL, 6 Ft. High
607						18,477																			607	18,477	Lin.Ft.	Fence, Type 39
607						16,312																			607	16,312	Lin.Ft.	Fence, Type CL
607						1																			607	1	Each	14' Gate, Type CL
607						2																			607	2	Each	18' Gate, Type CL
615			Lump																						615	Lump	Lump	Temporary Roads
615			11,605																						615	11,605	Sq.Yd.	Temporary Pavement, Class B
608																	3291								608	3291	Sq.Ft.	4" Concrete Walk
616			512																						616	512	M Gal.	Water
616			62																						616	62	Tons	Calcium Chloride
622			14,348																						622	14,348	Lin.Ft.	Temporary Concrete Barrier
630																	93								630	93	M Sq.Ft.	Road Side Clean-up
Special									3		1				6				2						Special	12	Each	Drilled Water Well Abandoned
202									2		1				10				2						202	15	Each	Septic Tank Removed
202											1								1						202	2	Each	Privy Vault Removed
Special																					Lump				Special	Lump	Lump	Construction of Railroad Track
Special								1																	Special	1	Each	Impact Attenuator Hi-dro System, Model No. 20971 1S9S
614			3																						614	3	Miles	Temporary Edge Lines, Class I
614			1																						614	1	Mile	Temporary Center Lines, Class I
621			8000																						621	8000	Lin.Ft.	Removal of Pavement Marking Lines
Special			200																						Special	600	Sq.Ft.	Replacement Signs
Special			200																						Special	200	Each	Replacement Drums
																											EROSION CONTROL
601							32			27			147												601	213	Cu.Yd.	Rock Channel Protection, Type A with Bedding
601	10					405	7			6			1378	17			99					3	2		601	1857	Cu.Yd.	Rock Channel Protection, Type B with Bedding
601														6											601	6	Cu.Yd.	Rock Channel Protection as per plan
601							4722			1833			971				111								601	7637	Sq.Yd.	R-6 Rip rap using 6" Reinforced Concrete Slab
601		50																							601	50	Cu.Yd.	Rock Channel Protection, Type C Without Bedding
601																	370								601	370	Lin.Ft.	Paved Gutter, Standard Type 2
601										43				19											601	62	Cu.Yd.	Rock Channel Protection, Type C With Bedding
659					876,960																				659	876,960	Sq.Yd.	Seeding and Mulching
659		38				82																			659	120	Ton	Commercial Fertilizer
659						407																			659	407	Ton	Agricultural Liming, As Per Plan
660				20			4307			7040			7574	579			410					6	4		660	20,000	Sq.Yd.	Sodding
660													488	543									33		660	1004	Sq.Yd.	Reinforced Sodding, Standard
667																									667	6,054	Sq.Yd.	Seeding and Jute Matting
Special										270				587			6054								Special	857	Sq.Yd.	Seeding & Nylon Fiber Matting
207		176,000																							207	176,000	Sq.Yd.	Temporary Seeding and Mulching
659		1400																							659	1400	M Gal.	Water
207		8580																							207	8580	Lin.Ft.	Temporary Slope Drains
207		1500																							207	1500	Cu.Yd.	Temporary Benches, Dikes, Dams and Sediment Basins
659		44,000																							659	44,000	Sq.Yd.	Repair Seeding and Mulching
659		4000																							659	4000	M Sq.Ft.	Mowing
207		8000																							207	8,000	Ea.	Straw or Hay Bales

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
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GRE - 675 - 5.37
GREENE COUNTY

GENERAL SUMMARY

ITEM	SHEET NUMBERS																									ITEM	GRAND TOTAL	UNIT	DESCRIPTION
	27		28		55		72		79		103		104		117		120		122										
																													DRAINAGE
602							18.7		12.5		74.2		1.1		3.8		0.5		0.2							602	111.0	Cu.Yd.	Masonry
603															67											603	67	Lin.Ft.	Conduit Type A; 21" - 706.02 & 706.08; or 24" - 707.05
603											249															603	249	Lin.Ft.	Conduit Type A; 30" - 706.02 1250 D-Load; or 36" - 707.05
603							377																			603	377	Lin.Ft.	Conduit Type A; 42" - 706.02; or 48" - 707.05
603															62											603	62	Lin.Ft.	48" Conduit Type A - 706.02 3000 D-Load under railroad as per plan
603							654																			603	654	Lin.Ft.	Conduit Type A; 48" - 706.02; or 54" - 707.05
603									297																	603	297	Lin.Ft.	Conduit Type A; 54" - 706.02; or 66" - 707.07
603									347																	603	347	Lin.Ft.	Conduit Type A; 66" - 706.02 2000 D-Load; or 72" - 707.07
603											251															603	251	Lin.Ft.	72" Conduit Type A - 706.02
603											312															603	312	Lin.Ft.	72" Conduit Type A - 706.02 3000 D-Load under railroad as per plan
603											30															603	30	Lin.Ft.	71"x47" Conduit Type A - 707.05 (0.138")
603							334																			603	334	Lin.Ft.	Conduit Type A; 78" - 706.02 1750 D-Load; or 102" - 707.07 (0.109")
603											394															603	394	Lin.Ft.	Conduit Type A; 84" - 706.02 2250 D-Load; or 96" - 707.07
603											169															603	169	Lin.Ft.	Conduit Type A; 84" - 706.02; or 102" - 707.07
603											485															603	485	Lin.Ft.	Conduit Type A; 84" - 706.02 2750 D-Load; or 108" - 707.07 (0.138")
603											169															603	169	Lin.Ft.	Conduit Type A; 84" - 706.02 1250 D-Load; or 114" - 707.07
603											278															603	278	Lin.Ft.	Conduit Type A; 84" - 706.02 3000 D-Load; or 114" - 707.07 (0.168")
603					1017																					603	1017	Lin.Ft.	6" Conduit Type B
603	400																									603	400	Lin.Ft.	8" Conduit Type B
603	400																									603	400	Lin.Ft.	10" Conduit Type B
603											25				777											603	802	Lin.Ft.	12" Conduit Type B
603							78		280		2418				773		52									603	3001	Lin.Ft.	15" Conduit Type B
603							129		233		264				188											603	849	Lin.Ft.	18" Conduit Type B
603											116				125											603	241	Lin.Ft.	21" Conduit Type B
603											302				547											603	849	Lin.Ft.	24" Conduit Type B
603											120															603	120	Lin.Ft.	30" Conduit Type B,
603											109															603	109	Lin.Ft.	48" Conduit Type B, 706.02 or 707.13
603											281															603	281	Lin.Ft.	48" Conduit Type B, 706.02 1750 D-Load or 707.13
603	350														10											603	360	Lin.Ft.	6" Conduit Type C
603	250														113											603	363	Lin.Ft.	8" Conduit Type C
603									291		80		144		182				228							603	925	Lin.Ft.	12" Conduit Type C
603							349				56		32		226											603	658	Lin.Ft.	15" Conduit Type C
603							16				250															603	266	Lin.Ft.	18" Conduit Type C
603											117															603	117	Lin.Ft.	21" Conduit Type C
603											86				322											603	408	Lin.Ft.	24" Conduit Type C
603															98											603	98	Lin.Ft.	27" Conduit Type C
603											92															603	92	Lin.Ft.	30" Conduit Type C
603											249															603	249	Lin.Ft.	42" Conduit Type C 706.02, or 707.13
603											196															603	196	Lin.Ft.	48" Conduit Type C 706.02 or 707.13
603											268															603	268	Lin.Ft.	54" Conduit Type C 706.02 or 707.14
603											217															603	217	Lin.Ft.	60" Conduit Type C 706.02 or 707.14
603											40															603	40	Lin.Ft.	60" Conduit Type C 706.02 or 707.14, Radius Pipe, as per plan
603															53		57		192							603	302	Lin.Ft.	12" Conduit Type D
603													99													603	99	Lin.Ft.	15" Conduit Type D
603																			96							603	96	Lin.Ft.	18" Conduit Type D
603											110															603	110	Lin.Ft.	Conduit Type D; 54" - 706.02; or 60" - 707.01
603	250																									603	250	Lin.Ft.	6" Conduit Type E
603	250																									603	250	Lin.Ft.	8" Conduit Type E
603	50				1374																					603	1424	Lin.Ft.	6" Conduit Type F
603	50																									603	50	Lin.Ft.	8" Conduit Type F
603									47				102													603	149	Lin.Ft.	12" Conduit Type F
603											316		108		106											603	530	Lin.Ft.	12" Conduit Type F, 707.05
603											479						32									603	511	Lin.Ft.	15" Conduit Type F, 707.05
603											56															603	56	Lin.Ft.	18" Conduit Type F, 707.05
604									1				7		3				2							604	13	Ea.	Standard No. 2-2-B Catch Basin
604															4											604	4	Ea.	Standard No. 3 Catch Basin
604															18											604	18	Ea.	Standard No. 3A Catch Basin
604							2		4		2															604	8	Ea.	Standard No. 4 Catch Basin
604							3																			604	3	Ea.	Standard No. 4A Catch Basin
604							1				16															604	17	Ea.	Standard No. 5 Catch Basin
604															4											604	4	Ea.	Standard No. 5 Catch Basin with Type B Grate
604							1																			604	1	Ea.	Standard No. 5A Catch Basin
604											5															604	5	Ea.	Standard No. 5A Catch Basin with Type B Grate
604											9		2													604	11	Ea.	Standard No. 6 Catch Basin
604									10																	604	10	Ea.	Standard No. 8 Catch Basin without apron
604											14															604	14	Ea.	Standard No. 8 Catch Basin
604							2				8															604	10	Ea.	Standard No. I-3B Inlet
604													1		5											604	6	Ea.	Standard No. 1 Manhole
604											2															604	2	Ea.	Standard No. 3 Manhole
604											1															604	1	Ea.	Standard No. 5 Manhole
604	2														1											604	3	Ea.	Inspection Well, Standard

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CRE-675-5.37
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GENERAL SUMMARY

ITEM	SHEET NUMBERS																				SANITARY SEWER PARTICIPATION			ITEM	GRAND TOTAL	UNIT	DESCRIPTION
	27		28		55		72	73	79	103		104	117		120	122		372	305		100% GREENE COUNTY	18.48% PROJECT 81.52% GREENE COUNTY	100% PROJECT				
																											DRAINAGE
605																		610						605	610	Lin.Ft.	Aggregate Drains
605	30																							605	30	Lin.Ft.	Aggregate Drains for Springs
605					55360																			605	55360	Lin.Ft.	6" Shallow Pipe Underdrains
605					1188																			605	1188	Lin.Ft.	6" Shallow Pipe Underdrains, 707.01 Type III, 707.12 Type III or 707.15
605					23801																			605	23801	Lin.Ft.	6" Deep Pipe Underdrains
605					170																			605	170	Lin.Ft.	6" Deep Pipe Underdrains, 707.01 Type III, 707.12 Type III or 707.15
605					5798																			605	5798	Lin.Ft.	6" Unclassified Pipe Underdrains
605	100																							605	100	Lin.Ft.	6" Unclassified Pipe Underdrains, 707.01, Type III or 707.12 Type III or 707.15 as per plan
605			3600																					605	3600	Lin.Ft.	6" Unclassified Pipe Underdrains, 707.01 Type III or 707.12 Type III
																											SANITARY SEWER - TYPE CODE 4060
202								LUMP															LUMP	202	LUMP	LUMP	Sanitary Lift Station removed
603																											
603																			833				833	603	833	Lin.Ft.	8" Conduit Type B, 706.01, 706.02. or 706.08 with 706.11 or 706.12 Joints
603																			18				18	603	18	Lin.Ft.	8" Conduit Type C, 706.01, 706.02. or 706.08 with 706.11 or 706.12 Joints
603																			18				18	603	18	Lin.Ft.	8" Conduit Type C 706.01, Class 3, 706.02. or 706.08 E3 with 706.11 or 706.12 Joints
603																			398				398	603	398	Lin.Ft.	10" Conduit Type C, 706.01, 706.02 or 706.08 with 706.11 or 706.12 Joints
603																			298				298	603	298	Lin.Ft.	12" Conduit Type B, 706.02 2500 D-Load with 706.11 Joints
603																			53		53		-	603	53	Lin.Ft.	12" Conduit Type B, 706.02 3000 D-Load with 706.11 Joints
603																			75		75		-	603	75	Lin.Ft.	12" Conduit Type B, 706.02 3000 D-Load with 706.11 Joints, Bore and Jack
603																			383				383	603	383	Lin.Ft.	12" Conduit Type C, 706.01, 706.02 or 706.08 with 706.11 or 706.12 Joints
603																			599		309		290	603	599	Lin.Ft.	12" Conduit Type C, 706.01 Class 3, 706.02: or 706.08 E3 with 706.11 or 706.12 Joints
603																			370		370		-	603	370	Lin.Ft.	12" Conduit Type C, 706.02 with 706.11 Joints
603																			100		100		-	603	100	Lin.Ft.	12" Conduit Type C, 706.02 with 706.11 Joints, Bore & Jack
603																			918		918		-	603	918	Lin.Ft.	12" Conduit Type C, 706.02 2250 D-Load with 706.11 Joints
603																			272				272	603	272	Lin.Ft.	12" Conduit Type C, 706.02 2500 D-Load with 706.11 Joints
603																			320		320		-	603	320	Lin.Ft.	15" Conduit Type B, 706.02 2500 D-Load with 706.11 Joints
603																			130		130		-	603	130	Lin.Ft.	18" Conduit Type B, 706.02 2500 D-Load with 706.11 Joints, Bore and Jack
604																			14		7		7	604	14	Ea.	Standard No. 3 Manhole with 706.11 Joints
604																			3				3	604	3	Ea.	Standard No. 3 Manhole with Drop Pipe and 706.11 Joints
604																			2		2		-	604	2	Ea.	Standard No. 3 Manhole with 706.11 Joints & Watertight Frame & Cover
604													2										2	604	2	Ea.	Manhole Reconstructed to Grade with 706.11 Joints
604													3										3	604	3	Ea.	Manhole Adjusted to Grade
511																			15.9		9		6.9	511	15.9	Cu.Yd.	Class C Concrete for Encasement
Special																							GRAND TOTAL				
603	100																						100	603	100	Lin.Ft.	6" Conduit, Type B, 706.01, 706.02, or 706.08 with 706.11 or 706.12 joints
603	100																						100	603	100	Lin.Ft.	6" Conduit Type C, 706.01, 706.02 or 706.08 with 706.11 or 706.12 Joints
																											BUILDING REMOVALS
202																								202	Lump	Lump	Parcel No. 306 WL-1, Removal of two concrete silos, remains of concrete block milkhouse with foundation, ruins of frame shed, ruins of 1-story frame residence, ruins of 2-story frame residence with foundation, and one metal corn crib.
202																								202	Lump	Lump	Parcel No. 315 WL, Removal of 1-story brick over concrete block commercial garage, 500 gallon underground oil waste tank.
202																								202	Lump	Lump	Parcel No. 334 WL, Removal of one frame picnic house and barbeque pit
202																								202	Lump	Lump	Parcel No. 335 WD, Removal of one, 1-story concrete block building with full basement and concrete retaining wall
202																								202	Lump	Lump	Parcel No. 342 WL, WD, Removal of one, 1 story frame and concrete block shed and one frame shed

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

59/616

GRE-675-5.37
GREENE COUNTY

ITEM	SHEET NUMBERS																											ITEM	GRAND TOTAL	UNIT	DESCRIPTION
	43	44	45	46	47	48	49	50	51	52	53	54	31	73	80	42		107		119	120		123	28						
																														PAVEMENT
301	4623	3175	1283	847	3294	948	720	765	706	229	677				29			16										301	17,312	Cu.Yd.	Bituminous Aggregate Base AC-20; or RT-11 or RT-12
304											398	186						185		4022	195		191					304	5177	Cu.Yd.	Aggregate Base
801	98,502	7347	12,954	38,562	4032	6411	14,544	7795	8697	19,169		2489																305	220,502	Sq.Yd.	9" Portland Cement Concrete Base
451				11,823		2498																						451	14,321	Sq.Yd.	9" Reinforced Portland Cement Concrete Pavement using 701.08 Expansive Hydraulic Cement
310	23,894	6437	4264	9829	5788	3001	3717	2623	2815	3914	1147	459			29			463		61				3312				310	71,753	Cu.Yd.	Subbase Type II
848	4787	357	629	1874	196	312	707	379	923	917	259	121						15		9	20							848	11,005	Cu.Yd.	Asphalt Concrete Intermediate Course, Type 2, AC-20
848	3421	255	450	1339	140	223	505	271	302	656	188	87						10			20							848	7867	Cu.Yd.	Asphalt Concrete Surface Course, Type1, AC-20
407	9850	735	1295	3856	403	641	1454	780	870	1886	74	249																407	22,093	Gal.	Tack Coat: RC-250, MS-2, RS-1, SS-1, or SS-1h
408											823	335				774		139		185	355		225					407	774	Ton	Cover Aggregate
409	8321	5716	2309	1228	4387	1199	1296	1377	1272	412	222	252			52			29										408	2062	Gal.	Bituminous Prime Coat. MC-30, MC-70, Primer 20, RT-2 or RT-3
409	222	152	61	33	117	32	103	37	34	11	6	7			2			1										409	28,072	Gal.	Seal Coat, Bituminous Material: MC-800, MC-3000, CSS-1h, CSS-800, RS-1, RS-2, CRS-1, CRS-2, RT-9 or RT-10
848																				23	10		31					409	818	Cu.Yd.	Seal Coat, Cover Aggregate No. 8
																												848	64	Cu.Yd.	Asphalt Concrete, Surface Course, Type 1, AC-20 (Driveways)
452																				857								452	857	Sq.Yd.	8" Plain Portland Cement Concrete Pavement
609																				5335								609	5335	Lin.Ft.	Curb, Standard Type 2-8
609																		1426		81			64					609	1571	Lin.Ft.	Curb, Standard Type 6
609																		610										609	610	Lin.Ft.	Curb, Standard Type 6 Modified, As Per Plan
609																				475								609	475	Lin.Ft.	Asphalt Concrete Curb, AC-20, Standard Type 1
611																		2307					249					611	2551	Sq.Yd.	Reinforced Concrete Approach Slabs (T=1.5')
611																				353								611	353	Sq.Yd.	Reinforced Concrete Approach Slabs (T=1.17')
612																		716										612	716	Sq.Yd.	4" Concrete Median, As Per Plan
Special																943												612	943	Sq.Yd.	Concrete Median, Standard Type Modified as per plan
622														84				565		104			48					Special	801	Lin.Ft.	Pressure Relief Joint, Standard Type A
																		3944										622	3944	Lin.Ft.	Concrete Barrier, Standard Type B
																		50										622	50	Lin.Ft.	Concrete Barrier, Standard Type B Modified as per plan
618																															
623																												618	Lump	Lump	Maintaining Traffic
624																												623	Lump	Lump	Construction Layout Stakes
																												624	Lump	Lump	Mobilization as per plan

See Sheet No. 125 For Estimated Quantities — Traffic Control
See Sheet No. 149 For Estimated Quantities — Roadway Lighting

STRUCTURES OVER 20' SPAN

See Sheet No. 411 For Estimated Quantities — Bridge No. GRE-675-0576 under Ramp A
See Sheet No. 423 For Estimated Quantities — Bridge No. GRE-675-0589 under Reloc. US-35
See Sheet No. 455 For Estimated Quantities — Bridge No. GRE-675-0615 under Penn Central RR
See Sheet No. 473 For Estimated Quantities — Bridge No. GRE-675-0616 under Dayton-Xenia Rd.
See Sheet No. 514 For Estimated Quantities — Bridge No. GRE-675-0737 under Ramp Rd.
See Sheet No. 526 For Estimated Quantities — Bridge No. GRE-35-0000 US-35 over Dayton-Xenia Rd.
See Sheet No. 539 For Estimated Quantities — Bridge No. GRE-35-0074 US-35 under Ramp A
See Sheet No. 549 For Estimated Quantities — Bridge No. GRE-35-0107 R/L US-35 over Grange Hall Rd.
See Sheet No. 491 For Estimated Quantities — Bridge No. GRE-675-0626 SB Penn-Central RR over Dayton-Xenia Rd.
See Sheet No. 503 For Estimated Quantities — Bridge No. GRE-675-0632 over I-675

CENTERLINE TIES

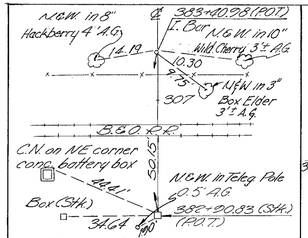
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

60
616

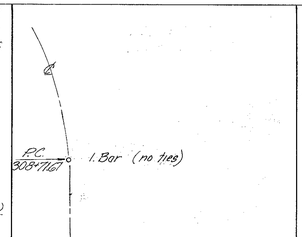
GRE-675-5.37
GREENE COUNTY

NOTE
For additional Centerline, Mainline Ties see Sheet 64

For Penn Central R.R. & Witnesses See Sh. No. 63
For Wildanna Drive & Witnesses See Sh. No. 64
For Honey Locust Lane & Witnesses See Sh. No. 64



Sta. 382+90.83 ℄ &
Sta. 383+10.98 ℄



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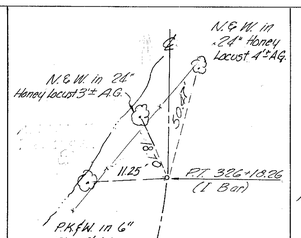

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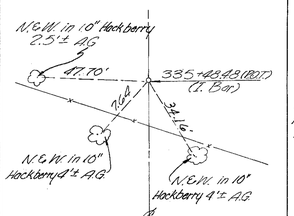

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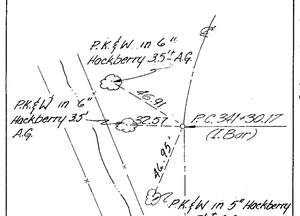

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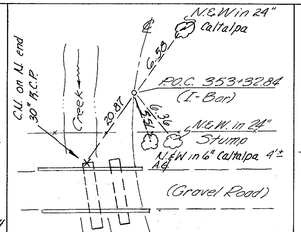

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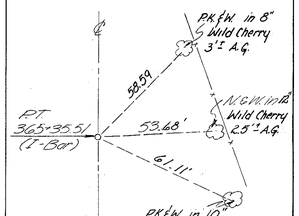

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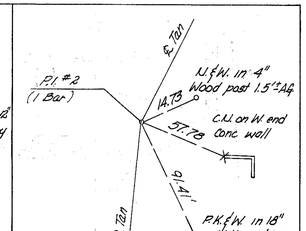

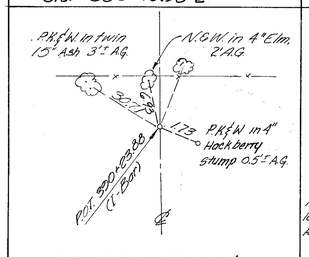

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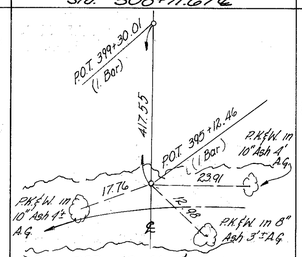

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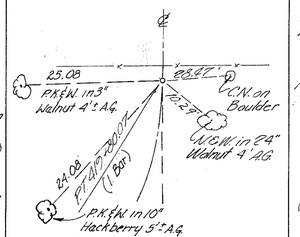

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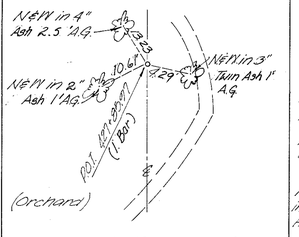

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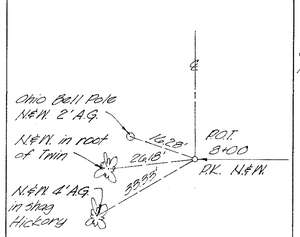

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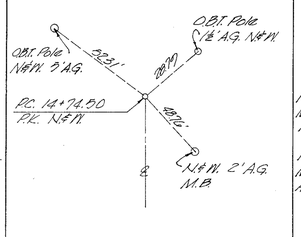

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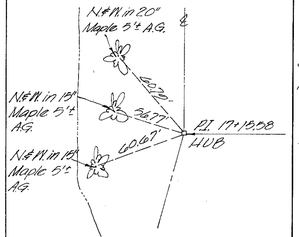

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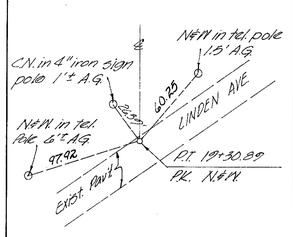

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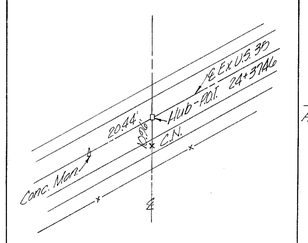

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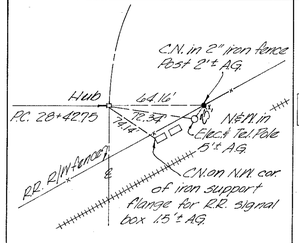

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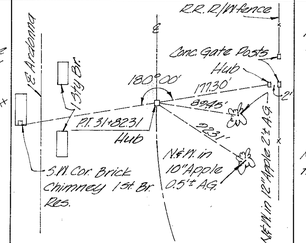

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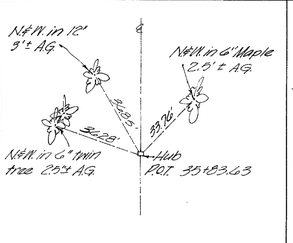

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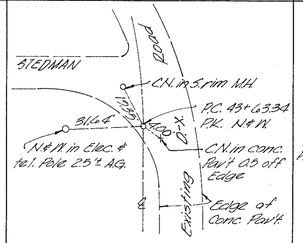

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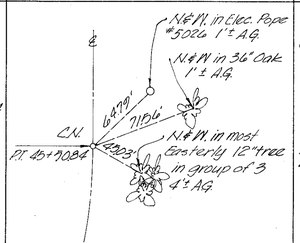

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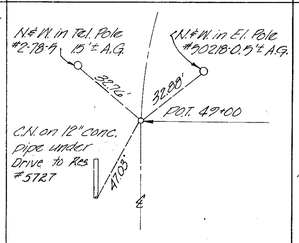
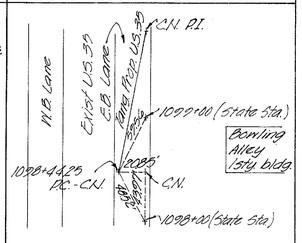


Sta. 49+00 ℄ D.X. Rd.



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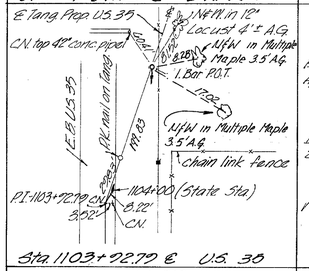

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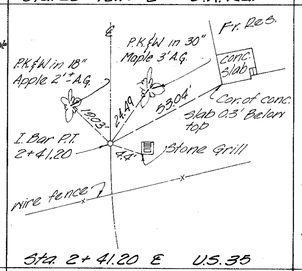

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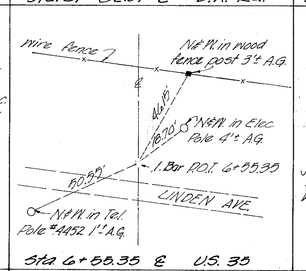

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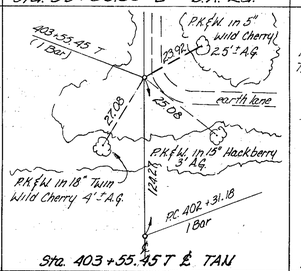

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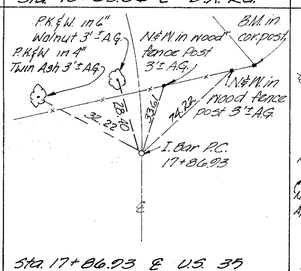

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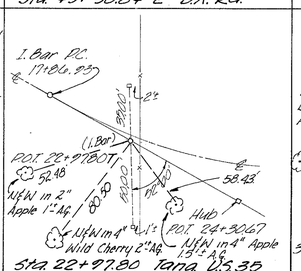
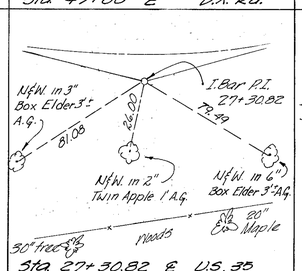


Sta. 22+97.80 Tang. U.S. 35



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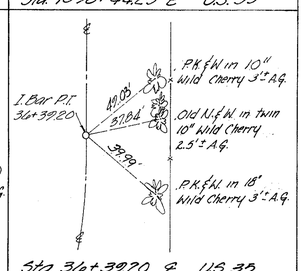

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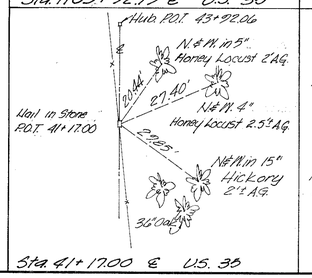

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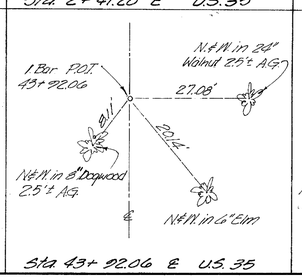

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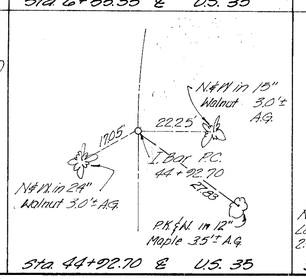

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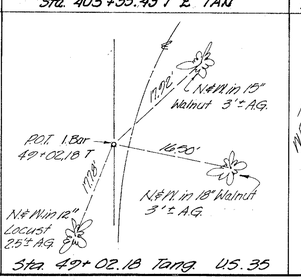

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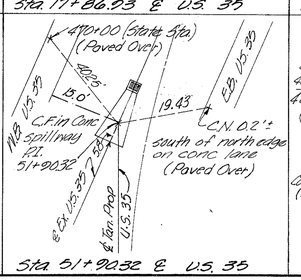
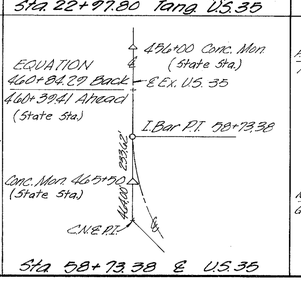
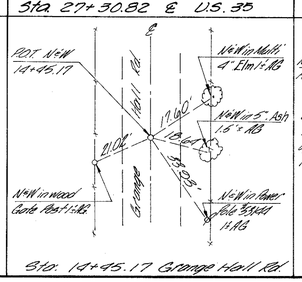


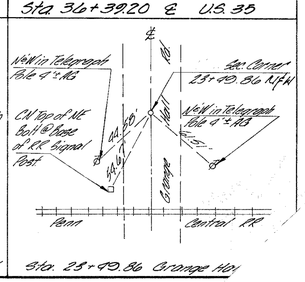
Sta. 51+90.32 ℄ U.S. 35



Sta. 58+73.38 ℄ U.S. 35



Sta. 14+45.17 Grange Hall Rd.



Sta. 25+49.86 Grange Hall

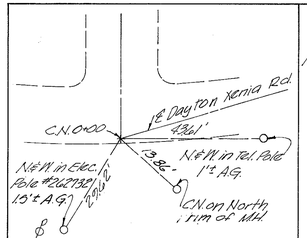
CENTERL

CENTERLINE TIES

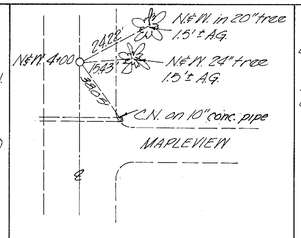
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

61/616

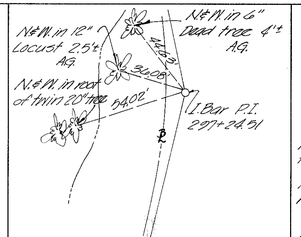
G.R.E-675-5.37
GREENE COUNTY



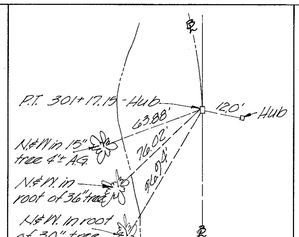
Sta. 0+00 ℄ Stedman Lane



Sta. 4+00 ℄ Stedman Lane



Sta. 297+24.51 ℄ Ramp A



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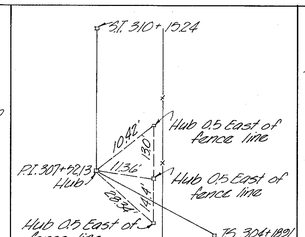
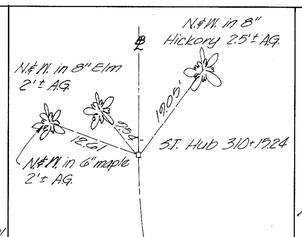
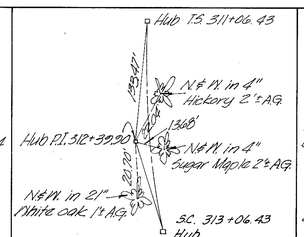


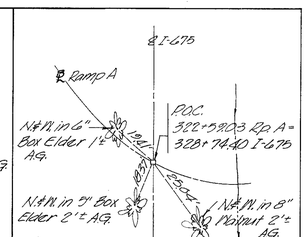
Sta. 307+52.13 ℄ Ramp A



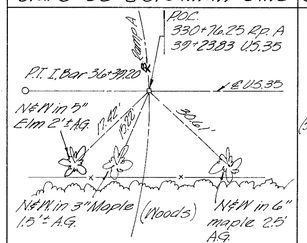
Sta. 310+19.24 ℄ Ramp A



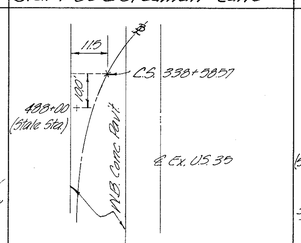
Sta. 312+39.90 ℄ Ramp A



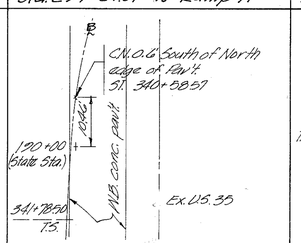
Sta. 322+59.03 ℄ Ramp A



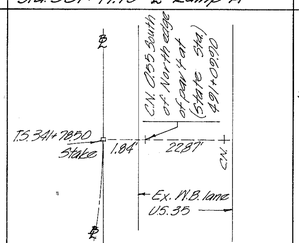
Sta. 330+76.25 ℄ Ramp A



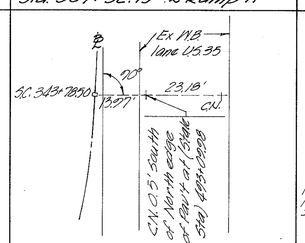
Sta. 338+58.57 ℄ Ramp A



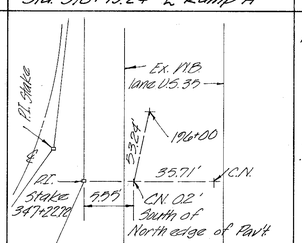
Sta. 340+58.57 ℄ Ramp A



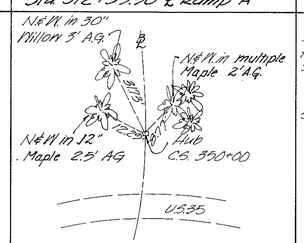
Sta. 341+78.50 ℄ Ramp A



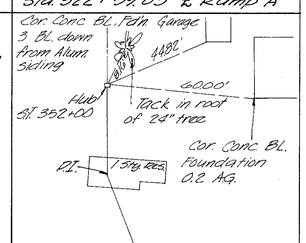
Sta. 343+78.50 ℄ Ramp A



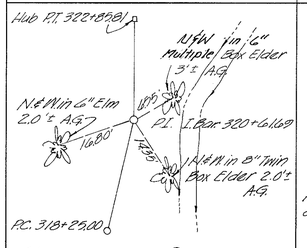
Sta. 347+22.72 ℄ Ramp A



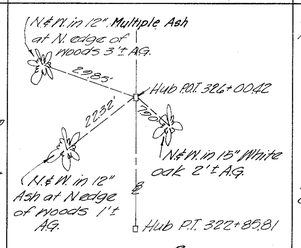
Sta. 350+00.00 ℄ Ramp A



Sta. 352+00.00 ℄ Ramp A



Sta. 320+61.69 ℄ Ramp C



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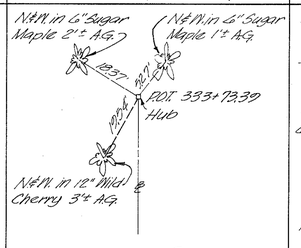

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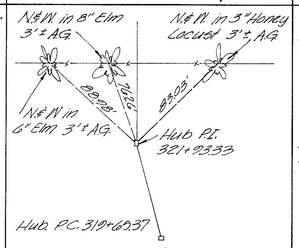
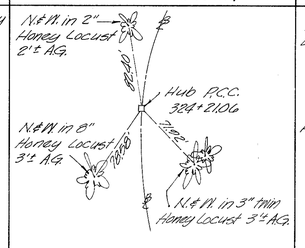
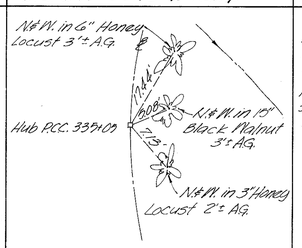


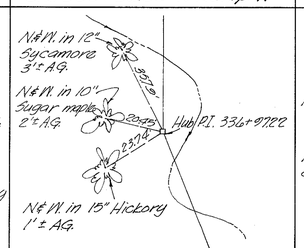
Sta. 321+93.33 ℄ Ramp H



Sta. 324+21.06 ℄ Ramp H



Sta. 335+05.09 ℄ Ramp H



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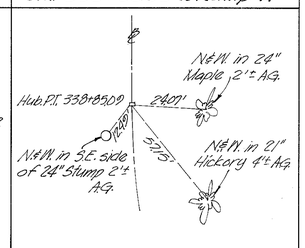

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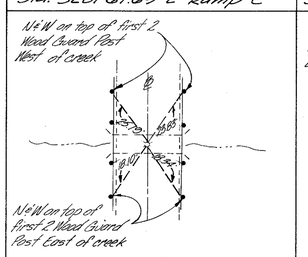
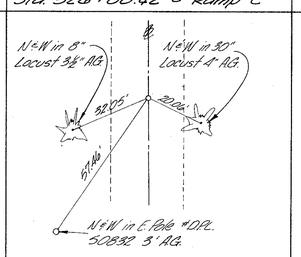
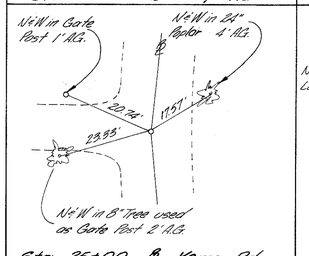


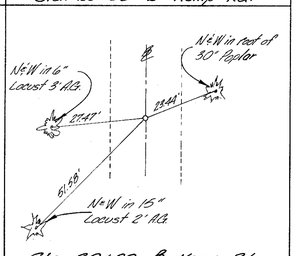
Sta. 10+00 ℄ Kemp Rd.



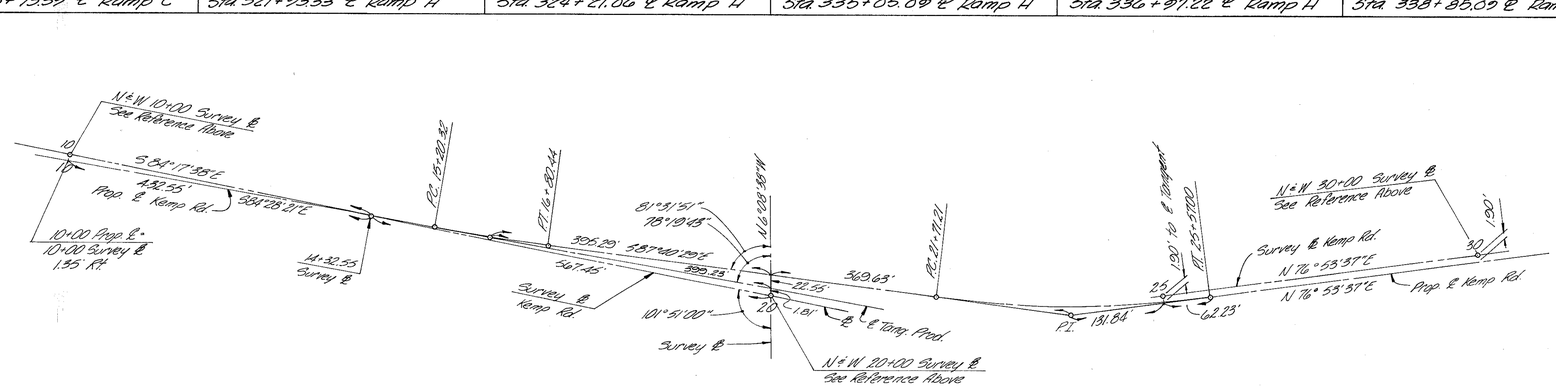
Sta. 20+00 ℄ Kemp Rd.



Sta. 25+00 ℄ Kemp Rd.



Sta. 30+00 ℄ Kemp Rd.



KEMP ROAD

For Wildanna Drive & Witnesses, See Sh. No. 64
For Honey Locust Lane & Witnesses, See Sh. No. 64
For Penn Central R.R. & Witnesses, See Sh. No. 63

CENTERLINE TIES

CURVE DATA

CURVE NO.	Δ	Dc	R	Ls	θs	T or Ts	Lc	E or Es	P.I. Station	P.I. Co-ordinates North	P.I. Co-ordinates East	P.C. or T.S. Station	P.C. or T.S. Co-ordinates North	P.C. or T.S. Co-ordinates East	S.C. Station	S.C. Co-ordinates North	S.C. Co-ordinates East	C.S. Station	C.S. Co-ordinates North	C.S. Co-ordinates East	P.T. or S.T. Station	P.T. or S.T. Co-ordinates North	P.T. or S.T. Co-ordinates East	Remarks
1 ℄	25°37'00"	1°28'00"	3906.53			888.14	1746.59	99.69	317+59.81	634333.38	1552746.47	308+71.67	633449.13	1552663.40							326+18.26	635166.62	1552439.07	
2 ℄	30°04'00"	1°15'00"	4583.66			1231.05	2405.33	162.44	353+61.22	637740.04	1551489.69	341+30.17	636585.09	1551915.77							365+35.51	638953.07	1551699.57	
3 ℄	13°07'00"	0°45'00"	7639.44			878.28	1748.89	50.32	411+09.46	643460.05	1552479.42	402+31.18	642594.63	1552329.67							419+80.07	644336.88	1552428.86	
35-1 ℄	15°59'10"	1°28'00"	3906.53			548.54	1089.96	38.33	1103+92.79	638021.96	1549232.95	1098+44.25	638218.99	1548721.01							2+41.20	637691.56	1549670.82	
35-2 ℄	27°10'00"	1°28'00"	3906.53			943.89	1852.27	112.41	27+30.82	636192.00	1551658.17	17+86.93	636760.53	1550904.71							36+39.20	636030.21	1552588.09	
35-3 ℄	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+90.32	635764.34	1554116.25	44+92.70	635883.92	1553428.95							58+73.38	635414.27	1554719.67	
35-3 E.B.	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+66.52	635748.71	1554089.37	44+68.90	635868.29	1553402.08							58+49.59	635398.64	1554692.80	
35-3 W.B.	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	52+14.11	635779.96	1554143.12	45+16.49	635899.54	1553455.82							58+97.18	635429.89	1554746.54	
A-1	5°14'19"	0°40'00"	8594.37			393.18	785.81	8.99	297+24.51	636952.98	1550556.69	293+31.33	637189.80	1550242.83							301+17.15	636688.49	1550847.61	
A-2	26°39'59"	8°00'00"	716.20	200.00	8°00'00"	270.23	133.33	22.23	307+52.13	636270.21	1551325.52	304+81.91	636451.99	1551125.58	306+81.91	636310.84	1551267.02	308+15.24	636200.98	1551342.22	310+15.24	636018.04	1551422.62	
A-3	8°00'00"			200.00	8°00'00"							311+06.43	635932.94	1551455.30	313+06.43	635749.99	1551535.79							
A-4	204°10'17"	8°00'00"	716.20			—	2552.14	—	—	—	—	313+06.43	635749.99	1551535.79							338+58.57	636671.56	1552590.55	Δ > 180°
A-5	8°00'00"			200.00	8°00'00"													338+58.57	636671.56	1552590.55	340+58.57	636775.78	1552420.05	
A-6	53°23'52"	6°30'00"	881.47	200.00	6°30'00"	544.22	621.50	107.31	347+22.72	637095.43	1551837.89	341+78.50	636833.50	1552314.93	343+78.50	636936.26	1552143.48	350+00.00	637437.72	1551798.43	352+00.00	637634.57	1551763.73	
B-1	9°00'00"			200.00	9°00'00"							338+11.69	637243.10	1550406.21	340+11.69	637135.45	1550574.50							
B-2	114°04'22"	9°00'00"	636.62			981.68	1267.48	533.41	349+93.36	636695.83	1551452.24				340+11.69	637135.45	1550574.50				352+79.16	637676.55	1551495.60	
B-3	7°30'17"	1°30'00"	3819.72			250.52	500.32	8.21	355+29.68	637926.82	1551506.66	352+79.16	637676.55	1551495.60							357+79.48	638176.39	1551484.94	
C-1	32°15'24"	7°00'00"	818.51			236.69	460.81	33.54	320+61.69	634618.38	1552499.97	318+25.00	634385.15	1552540.29							322+85.81	634794.09	1552341.39	
D-1	6°48'08"	1°30'00"	3819.72			227.01	453.49	6.74	335+56.55	636073.01	1552187.49	333+29.54	635860.94	1552266.06							337+83.02	636294.70	1552134.70	
D-2	24°30'00"			200.00	24°30'00"										339+83.02	636492.41	1552118.12	337+83.02	636294.70	1552134.70				
D-3	248°01'41"	23°00'00"	249.11			—	1078.38	—	—	—	—	339+83.02	636492.41	1552118.12							350+61.41	636200.05	1552409.80	Δ > 180°
D-4	20°15'00"			150.00	20°15'00"										352+11.41	636204.18	1552260.67	350+61.41	636200.05	1552409.80				
D-5	9°21'22"	4°00'00"	1432.39			117.21	233.90	4.79	353+28.62	636223.18	1552145.01	352+11.41	636204.18	1552260.67							354+45.31	636260.73	1552033.98	
E-1	25°00'00"			200.00	25°00'00"							322+38.15	636132.06	1551928.85	324+38.15	636165.73	1551733.41							
E-2	247°05'56"	25°00'00"	229.18			—	988.40	—	—	—	—	324+38.15	636165.73	1551733.41							334+26.54	635875.06	1551981.27	Δ > 180°
E-3	36°14'47"	16°00'00"	358.10			117.21	226.54	18.69	335+43.75	635987.72	1552013.57	334+26.54	635875.06	1551981.27							336+53.08	636097.68	1551973.01	
F-1	34°22'15"	8°00'00"	716.20			221.50	429.64	33.47	328+91.07	636015.67	1553295.98	326+70.47	635962.12	1553510.91							331+00.11	636181.20	1553148.81	
F-2	21°01'19"	8°00'00"	716.20			132.88	262.77	12.22	337+28.68	636650.95	1552731.16	335+95.80	636551.65	1552819.45							338+58.57	636711.98	1552613.12	
G-1	37°29'17"	16°00'00"	358.10			121.52	234.30	20.06	354+48.17	636630.60	1551244.76	353+26.66	636742.83	1551198.16							355+60.96	636569.91	1551350.03	
G-2	162°01'49"	23°00'00"	249.11			1575.51	704.48	1345.98	361+97.69	638197.90	1550594.01	346+22.18	637000.20	1551617.61							353+26.66	636742.83	1551198.16	
G-3	18°22'30"			150.00	18°22'30"										346+22.18	637000.20	1551617.61	344+72.18	636869.13	1551689.18				
G-4	3°21'52"	1°30'00"	3819.72			112.18	224.30	1.65	343+60.06	636765.22	1551731.46	342+47.88	636659.01	1551767.57							344+72.18	636869.13	1551689.18	
H-1	4°33'25"	1°00'00"	5729.58			227.97	455.70	4.53	321+93.33	634776.56	1552647.35	319+65.37	634552.54	1552689.58							324+21.06	635003.23	1552623.06	
H-2	86°43'19"	8°00'00"	716.20			676.35	1084.03	268.89	330+97.41	635675.73	1552550.99	324+21.06	635003.23	1552623.06							335+05.09	635786.15	1553218.26	
H-3	20°54'00"	5°30'00"	1041.74			192.14	380.00	17.57	336+97.22	635817.51	1553407.82	335+05.09	635786.15	1553218.26							338+85.09	635779.19	1553596.10	
W-1	6°40'33"	3°00'00"	1909.86			111.39	222.53	3.25	351+81.14	637582.44	1551563.10	350+69.75	637473.44	1551586.02							352+92.27	637693.37	1551553.00	
W-2	20°02'07"	3°00'00"	1909.86			337.37	667.84	29.57	361+09.24	638504.80	1551455.03	357+71.87	638168.82	1551485.62							364+39.72	638830.92	1551541.41	
W-3	5°01'02"	0°30'00"	11459.16			502.04	1003.45	10.99	370+91.76	639461.23	1551708.34	365+89.72	638975.92	1551579.81							375+93.16	639955.92	1551793.94	
X-1	3°12'52"	0°46'25"	7405.58			207.79	415.46	2.91	18+89.95	636758.19	1551031.91	16+82.16	636879.16	1550862.97							20+97.62	636646.88	1551207.37	
X-2	1°40'53"	1°29'49"	3827.53			56.17	112.33	0.41	36+95.37	636098.42	1552656.97	36+39.20	636108.04	1552601.63							37+51.53	636090.42	1552712.56	
X-3	3°03'10"	1°28'00"	3906.53			104.10	208.15	1.39	40+85.69	636042.82	1553043.31	39+81.59	636057.65	1552940.27							41+89.73	636022.53	1553146.41	
X-4	10°26'06"	4°00'00"	1432.39			130.80	260.88	5.96	53+15.92	635740.77	1554244.58	51+85.12	635784.81	1554121.42							54+45.99	635675.15	1554357.73	
X-5	4°43'00"	3°30'00"	1637.02			67.42	134.76	1.39	55+13.41	635641.33	1554416.05	54+45.99	635675.15	1554357.73							55+80.76	635612.42	1554476.96	
PC-1	11°05'44"	0°45'00"	7639.49	85.00	0°19'07"	784.53	1394.41	35.99	547+87.88	637557.47	1551437.78	540+03.34	637175.28	1552122.92	540+88.34	637216.55	1552048.61	554+82.75	637774.17	1550772.65	555+67.75	637800.67	1550691.89	
PC-2	3°00'00"	1°00'00"	5729.65	170.00	0°51'00"	235.04	130.00	2.17	570+61.40	638263.68	1549271.81	568+26.36	638190.82	1549405.27	569+96.36	638244.31	1549333.91	571+26.36	638287.83	1549211.41	572+96.36	638348.13	1549052.47	
DX-1	45°38'20"	10°00'00"	572.96			241.08	456.39	48.65	17+15.58	637384.51	1549630.12	14+74.50	637476.01	1549407.08							19+30.89	637479.99	1549851.48	
DX-2	50°56'00"	15°00'00"	381.97			181.92	339.56	41.11	30+24.67	637913.21	1550855.80	28+42.75	637841.16	1550688.76							31+82.31	637828.93	1551017.02	
DX-3	18°45'00"	10°00'00"	572.96			94.60	187.50	7.76	44+57.94	637237.94	1552147.49	43+63.34	637281.76	1552063.66							45+50.84	637223.38	1552240.96	
Y-1	22°22'16"	8°00'00"	716.20			141.62	279.64	13.87	3+92.79	638147.98	1551254.56	2+51.17	638022.47	1551188.94							5+30.81	638289.01	1551267.46	
Z-1	3°12'08"	2°00'00"	2864.79			80.08	160.12	1.12	16+00.40	643773.13	1552064.51	15+20.32	643780.86	1551984.80							16+80.44	643769.88	1552144.52	
Z-2	15°25'54"	4°00'00"	1432.39			194.07	385.79	13.09	23+65.28	643742.10	1552828.80	21+71.21	643749.97	1552634.80							25+57.00	643786.11	1553017.81	

U.S. 35 INTERCHANGE (curves 35-1 ℄ through X-5)

Curve No. A-4 Center Point Co-ordinates 636097.85 N 1552161.83 E

Curve No. D-3 Center Point Co-ordinates 636444.65 N 1552362.61 E

Curve No. E-2 Center Point Co-ordinates 635938.21 N 1551760.97 E

W = I-675 Southbound Collector Distributor   X = U.S. 35 Westbound Collector Distributor   PC = Penn Central Transportation Co.   DX = Dayton Xenia Rd.   Y = Wildonna Dr.   Z = Kemp Rd.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

63
616

GRE-675-5.37
GREENE COUNTY

E 1550.500 E 1551.000 E 1551.500 E 1552.000 E 1552.500

N 637.000 N 636.500 N 636.000 N 635.500 N 635.000 N 634.500

Sta. 10+00.00 ℄

5 32°57'49"E 295A

Curve No. A-1

5 47°43'30"E 300A

Sta. 293+31.39 A

Pt. Sta. 293+31.39 A

Pt. Sta. 301+17.15 A

Sta. 301+17.15 A

5 47°43'30"E 305A

Curve No. A-2

Pt. Sta. 304+81.91 A

Sta. 304+81.91 A

5 27°03'30"E 310A

Curve No. A-3

Sta. 306+81.91 A

Sta. 308+15.24 A

Sta. 310+15.24 A

Sta. 311+06.43 A

Curve No. A-4

5 29°03'30"E 315A

Sta. 314+69.02 A ℄ Ramp A

Sta. 333+73.99 C

330C ℄ Ramp C

N 42°03'57"W

Match Line

Sta. 336+72.85 ℄ I-675
Sta. 31+09.59 ℄ US 35

Sta. 339+30.72

Curve No. E-1

N 83°05'43"E 325E

Sta. 339+38.15 E

Pt. Sta. 339+38.15 E

Curve No. E-2

Sta. 339+53.08 E

Pt. Sta. 334+26.54 E

Curve No. E-3

N 20°15'00"W 335E

Sta. 336+53.08 ℄

115.00

335

N 20°15'00"W ℄ I-675

330

Sta. 328+74.40 ℄ I-675
Sta. 322+59.03 ℄ Ramp A

325A

Curve No. A-4

320A

Pt. Sta. 320+18.26

Curve No. E

Match Line

℄ I-675

Curve No. 1 ℄

320

N 42°03'57"W 325C

℄ Ramp C

Pt. Sta. 322+83.96 C

Curve No. C-1

N 9°48'33"W 320C

Sta. 318+32.00

Sta. 318+75.00 ℄

Pt. Sta. 316+32.00

Sta. 522+12.30
Iron Bar
N & W's in S. end of ties
Ex. Track
Hub
99°04'45"
℄ of ∆ Tower @ highest point
Ex. D.P.R.L. Towers
10.36'
C.N.
Hub on ℄ of Tower
10.31'
Ext.
10.32'
2nd Tower East of D.X. Rd.
3rd Tower East of D.X. Rd.
C.N.'s on face of bot. cross braces

Sta. 522+12.30 ℄ Penn Central R.R

Dayton Xenia Rd.
N & W in Pole No. 262732 1'± A.G.
MH
C.N. on S. rim
N & W in 28" Cotton-wood 0.5'± A.G.
75.63'
61.75'
T.S. 540+03.34 Iron Bar
S.C. 540+82.34 Iron Bar
N & W in Tel. & Telg. Pole 2'± A.G.
Ex. Penn Central Tracks

Sta. 540+03.34 ℄ Penn Central R.R

S.T. 555+67.75 Iron Bar
C.S. 554+82.75 Iron Bar
N & W in Tel. & Telg. Pole, 3'± of Signal Box 5'± A.G.
Earth Drive
48.04'
23.21'
18.80'
Wire Fence
C.N. on 2" iron fence post, 10'± E. of W. end 1.5'± A.G.
N & W in Tel. & Telg. Pole 5'± A.G.
Signal Box
Ex. Penn Central Tracks

Sta. 555+67.75 ℄ Penn Central R.R

T.S. 568+26.36 Iron Bar
N & W in Tel. & Telg. Pole 4'± A.G.
C.N. on N.W. Cor. Conc. headwall
31.03'
20.10'
18.49'
Ex. Penn Central Tracks
Wire Fence
S.C. 569+96.36 Iron Bar
C.N. on S.W. Cor. Conc. headwall

Sta. 568+26.36 ℄ Penn Central R.R

N & W in Tel. & Telg. Pole 4'± A.G.
P.K. Nail
Station Equation
S.T. 572+85.04 Back
572+36.34 Ahd.
C.S. 571+26.36 Iron Bar
22.69'
31.19'
Ex. Penn Central Tracks
C.N. in top of W. Conc. Gate Post
C.N. in iron pin at top of E. Conc. Gate Post

Sta. 572+96.36 ℄ Penn Central R.R

US 35 INTERCHANGE - GEOMETRIC LAYOUT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

69 / 616

GRE-675-5.37
GREENE COUNTY

E 1353,500 E 1353,000 E 1352,500 E 1352,000 E 1351,500 E 1351,000 E 1350,500

N 636,000 N 635,500 N 635,000 N 634,500 N 634,000

Sta. 336+72.85 ℄ I-675
Sta. 31+09.59 ℄ US 35

Sta. 39+23.83 ℄ US 35
Sta. 330+76.25 ℄ Ramp A

Curve No. 35-2 ℄

℄ US 35

Sta 44+00.00 ℄

Sta 41+00.00 EB

S 80°07'49" E

S 78°29'43" E

Curve No. 11-3

Sta 46+72.04 EB

Curve No. 35-3 ℄

Curve No. 35-3 EB

S 59°52'49" E

Sta 42+00.00 ℄

S 59°52'49" E

Sta 41+49.59 EB

P.T. Sta 38+73.38 ℄

N 80°36'17" E

P.C.C. Sta 335+05.09 H

P.C. Sta 41+89.04 EB

P.T. Sta 338+05.09 H

P.C. Sta 41+92.70 ℄

N 20°15'00" W

Curve No 4 ℄ Ramp A

330A

335A

335H

330H

℄ Ramp A

℄ Ramp H

Curve No H-2

Curve No H-3

Sta 328+74.40 ℄ I-675
Sta 322+59.03 ℄ Ramp A

320A

N 20°07'09" W

P.T. Sta 326+18.06 ℄

325

325H

P.C.C. Sta 324+21.06 H

Curve No 1 ℄ I-675

Curve No H-1

N 70°04'22" W

H025

P.C. Sta 319+65.37 H

78.02'

Sta 319+64.37

Sta 319+64.37 ℄

Sta 44+00.00 ℄

Sta 42+00.00 ℄

Sta 41+05.62 ℄

Sta 381+48.70 ℄

Sta 4+22.80 Temp. Williams Dr.

Sta 8+09.60 ℄ Williams Dr.

Sta 407+71.81 T ℄ TAN.

Sta 369+18.02 ℄

Sta 16+00 ℄ Honey Locust Lane

Sta 21+30.84 ℄ Honey Locust Lane

Sta 27+00 ℄ Honey Locust Lane

US 35 INTERCHANGE GEOMETRIC LAYOUT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

65
616

GRE-675-5.37
GREENE COUNTY

N G36,500 N G37000 N G37500 N G38000 N G38500

E 1550.500 E 1551.000 E 1551.500 E 1552.000

Match Line

℄ US 35
S 52°-57'-49"-E

S 54°-23'-44"-E
335B
℄ Ramp B

Sta 4+60.00 ℄
690'
Sta 331+73.16 B

Sta 16+60.00 CD
690'
Sta 21+03.72 ℄

S 54°-23'-44"-E
10
S 52°-57'-49"-E
℄ US 35
15
S 63°-23'-44"-E 340B
20
S 57°-36'-36"-E
200'
Curve No. Y-1
PT Sta 20+97.62 CD
N 22°-32'-54"-W
PC Sta 17+06.93
Curve No. G-1
Sta 22+69.16 ℄
320'
N 60°-02'-11"-W
355G
Curve No. G-1
PT Sta 355+60.34 B
PC Sta 353+28.44 B
Curve No. G-2
Curve No. G-3
Curve No. G-4
Curve No. G-5
Curve No. B-1
Curve No. B-2
Curve No. B-3
Curve No. W-1
Curve No. W-2
Curve No. W-3
Curve No. 2 ℄
℄ Ramp G
350G
℄ Ramp B
375B
℄ I-675
Sta 340+00.00 ℄
Sta 336+72.33 ℄ I-675
Sta 31+09.39 ℄ US 35
PC Sta 342+47.88 G
PC Sta 341+30.12 ℄
Curve No. G-4
S 18°-46'-45"-E
520°-08'-35"-E
540°-31'-05"-E
N 2°-31'-54"-E
N 11°-32'-38"-W
N 5°-12'-05"-W
N 20°-15'-00"-W
N 9°-49'-00"-E
N 14°-30'-02"-E
N 4°-58'-24"-W
350CD
355CD
360CD
370CD
375CD
200'
115.00'
91.00'
PC Sta 350+69.75 CD
PT Sta 352+92.27 CD
PC Sta 352+79.68 B
PT Sta 357+79.40 B
PC Sta 357+71.87 CD
PT Sta 363+89.72 CD
PT Sta 364+39.72 CD
PT Sta 370+93.16 CD
PT Sta 375+39.77 ℄
PT Sta 365+35.13
Sta 342+72.88 G
Sta 344+22.16 G
Sta 352+92.27 CD
Sta 357+79.40 CD
Sta 363+89.72 CD
Sta 370+93.16 CD
Sta 375+39.77 ℄
Sta 340+00.00 ℄
Sta 336+72.33 ℄ I-675
Sta 31+09.39 ℄ US 35
Sta 341+30.12 ℄
N G36,500 N G37000 N G37500 N G38000 N G38500 N G39000

Theoretical Spiral = 160.47'
Curve No. G-2
Dc = 23°
SC Sta 346+22.16 G
Curve No. G-4
Curve No. G-3
CS Sta 344+22.16 G
Sta 344+61.63 G
1160°-02'-50"-E
150.00 Spiral
149.33' Chord
5309
34°-02'
S 10°-31'-05"-E
Dc = 1°-30'
Theoretical 175'
200'
0°01'34"
10.47' Spiral
10.46' Chord
16.99'
349'
375'
100.57'
S 22°-03'-52"-E
100.11'
S 22°-08'-35"-E
PI Sta G-4

DETAIL - CURVE NO. G-3

Match Line
370CD
Curve No. W-3
N 14°-30'-02"-E
375CD
N 9°-49'-00"-E
370
375
℄ I-675
N 9°-49'-00"-E
200'
Sta 370+93.16 CD
Sta 375+39.77 ℄

US. 35 INTERCHANGE GEOMETRIC LAYOUT

U.S. 35 INTERCHANGE GEOMETRIC LAYOUT

G.R.E. - 675 - 5.37
GREENE COUNTY

PAVEMENT LEGEND

404 1½" Asphalt Concrete AC-20
402 1¾" Asphalt Concrete AC-20
407 Tack Coat RC-250, 702.04, MS-2, RS-1, SS-1 or SS-1h applied at the rate of 0.1 Gal. per Sq. Yd.
801 9" Portland Cement Concrete Base
310 Subbase Type II 6" thickness except as noted

404 1" Asphalt Concrete AC-20.
402 1½" Asphalt Concrete AC-20.
408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 Gal. Per Sq. Yd.
304 6" Aggregate Base
310 6" Subbase Type II

304 6" Aggregate Base

304 8" Aggregate Base

404 2" Asphalt Concrete AC-20.
408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 Gal. Per Sq. Yd.
304 6" Aggregate Base

452 8" Plain Portland Cement Concrete Pavement

404 1½" Asphalt Concrete AC-20.
402 1½" Asphalt Concrete AC-20.
408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 Gal. Per Sq. Yd.
304 8" Aggregate Base

404 1½" Asphalt Concrete AC-20
402 2" Asphalt Concrete AC-20.
301 2 - 4" Courses - Bituminous Aggregate Base AC-20 or RT-11 or RT-12
310 6" Subbase Type II

612 Concrete Median, Modified as Per Plan

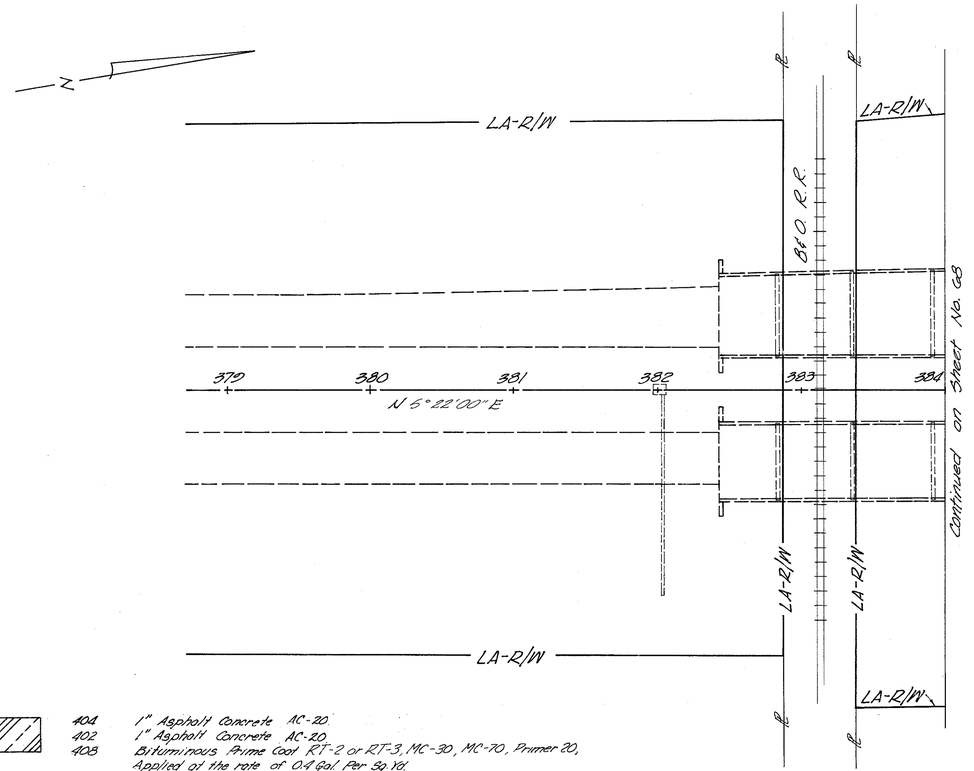
404 1½" Asphalt Concrete AC-20.
402 0" Min. 4" Max. Asphalt Concrete AC-20
407 Tack Coat, RC-250, 702.04, MS-2, RS-1, SS-1 or SS-1h Applied at the rate of 0.1 Gal. Per Sq. Yd.

404 1" Asphalt Concrete AC-20.
402 0" Min. 3" Max. Asphalt Concrete AC-20
407 Tack Coat, RC-250, 702.04, MS-2, RS-1, SS-1 or SS-1h Applied at the rate of 0.1 Gal. Per Sq. Yd.

301 3" Bituminous Aggregate Base AC-20; or RT-11 or RT-12

304 6" Aggregate Base
310 6" Subbase Type II

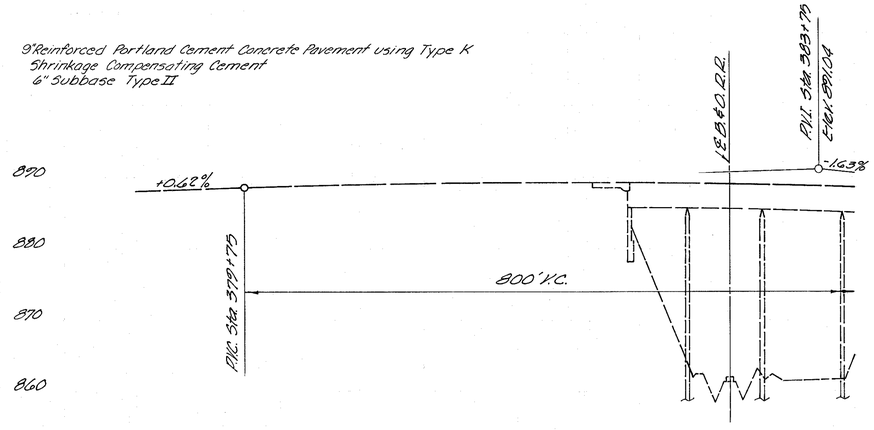
404 1¼" Asphalt Concrete AC-20.
402 1¾" Asphalt Concrete AC-20.
407 Tack Coat, RC-250, 702.04, MS-2, RS-1, SS-1 or SS-1h Applied at the rate of 0.1 Gal. Per Sq. Yd.
305 8" Portland Cement Concrete Base
301 4" Bituminous Aggregate Base AC-20; or RT-11 or RT-12



404 1" Asphalt Concrete AC-20.
402 1" Asphalt Concrete AC-20.
408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 Gal. Per Sq. Yd.
304 8" Aggregate Base

612 4" Concrete Median As Per Plan

451 9" Reinforced Portland Cement Concrete Pavement using Type K Shrinkage Compensating Cement
310 6" Subbase Type II



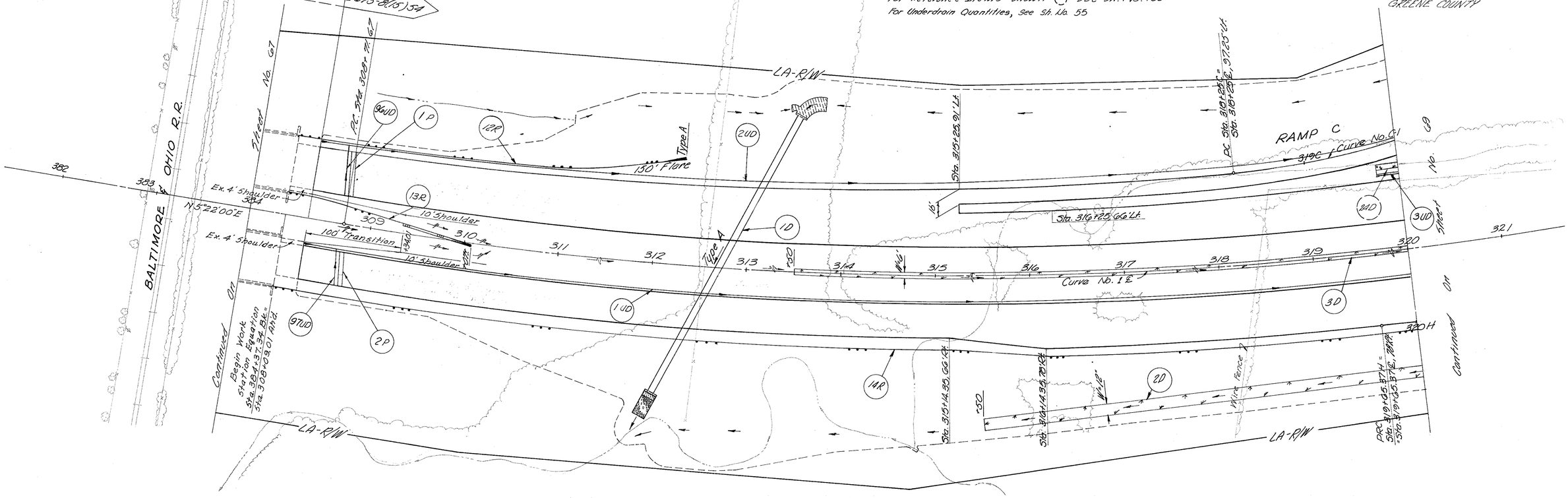
STA. 379+00 to STA. 384+00

Typical Section of Adjoining Project is the same as the Typical Section for this Project.

BM #1 Elev. 873.09
Nail in Root of 24" Oak, 20'±
South of Fence Line
Sta. 314+05 530' Lt.

For Curve Data See Sh. No. 62
For Estimated Quantities See Sh. No. 43-54, 72, 73
For Ramp C Profile See Sh. No. 100
For Pav't. Details, See Sh. No. 335, 336 & 341
For I-675 Superelevation See Sh. No. 328
For Reference Items shown See Sh. No. 103-107
For Underdrain Quantities, See Sh. No. 55

GRE-675-5.37
GREENE COUNTY



STA. 384+00 TO STA. 384+37.34 Bk. / STA. 308+09.01 Ah'd TO STA. 320+

MICROFILMED
MAR 25 1989

BM #2 Elev. 877.11
Nail in Root of 21" Linden, 12'± West of Path
Sta 326+40 470' Lt.

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 72, 73
For Ramp B Plan & Profile See Sh. No. 92 & 97
For Ramp C Plan & Profile See Sh. No. 90 & 100
For Ramp H Plan & Profile See Sh. No. 90 & 102
For Fourth Outside See sheet No. 336, 337, 341 & 342
For F-675 Superelevation See Sh. No. 328
For Reference Items shown ( ) See Sh. No. 103 - 107
For Underdrain Quantities, See Sh. No. 55

GRE-675-5.37
GREENE COUNTY

LA-R/W
Curve #C-1
PT Sta 322+85.81C
RAMP C
Curve #A-1 & 320A
RAMP A
℄ Ramp E
Sta. 326+59.46 RT
(Collector-Distributor)
Sta. 331+25.6, 97.25 Lt.
Continued On Sheet No. 68
Continued On Sheet No. 70
Curve No. 1
125' Flare
Type A
Sign Support #400
Curve #H-1
RAMP H
PCC Sta. 323+21.06H
Curve No. H-2
Sta. 323+21.06H
Sta. 329+85.36 66' Rt.
Sta. 333+29.54 & 78' Rt.
Sta. 333+29.54 & 78' Rt.
Section Line
PT Sta. 326+18.26
Sta. 326+74.40 & F-675
Sta. 322+59.03 Ramp A
N 20° 15' 00" W
Sta. 332+59.46 RT
(0.43' Lt.)
(Collector-Distributor)
Sta. 333+23.50
Ft. Sta. 333+23.50
Sta. 333+29.54 & 78' Rt.
PVT Sta. 334+00

871.15 870.93 870.75 870.59 870.46 870.35 870.28 870.24 870.22 870.21 870.23 870.36 870.46 870.59 870.75 871.10 871.45 871.80 872.15 872.50 872.85 873.20 873.55 873.90 874.25 874.60 874.95 875.30 875.65 876.00 876.15 876.35 876.55 876.75 876.95 877.14 877.39 877.60 877.83 878.06 878.30 878.55

UNDERDRAIN ℄ ELEVATIONS

1UD
- 321+97 - 28' Rt. — ℄ 865.65
- 321+82 - 28' Rt. (Y) — 865.55
- 322+00 - ℄ (CB) — ℄ G" 865.25

3UD
- 322+00 - 80.0' Lt. (T) — ℄ G" 862.10
- 322+00 - 105' Lt. (CB) — ℄ G" 862.00

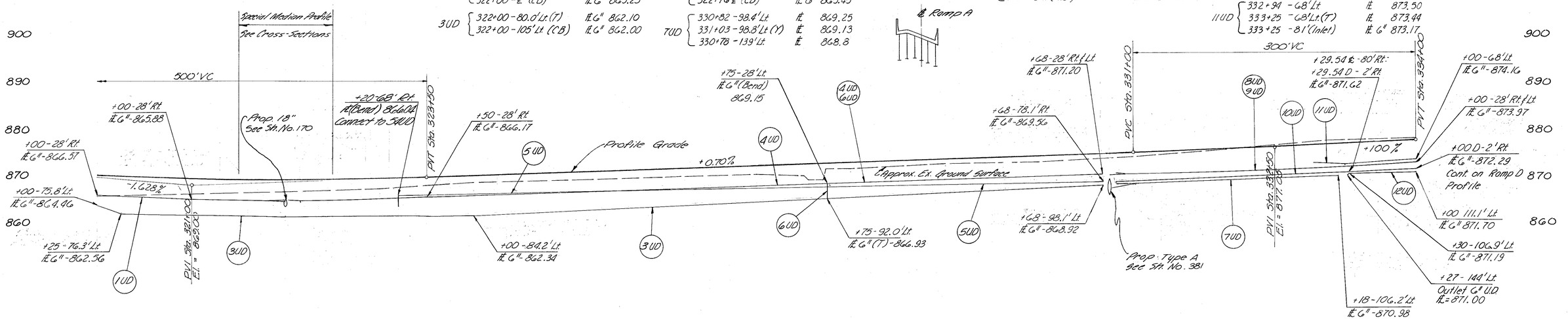
4UD
- 322+03 - 28' Rt. — ℄ 865.75
- 322+16 - 28' Rt. (T) — ℄ 865.65
- 322+16 ℄ (CB) — ℄ G" 865.45

7UD
- 330+82 - 98.4' Lt. — ℄ 869.25
- 331+03 - 98.8' Lt. (Y) — ℄ 869.13
- 330+78 - 139' Lt. — ℄ 868.8

8UD & 9UD
- 330+82 - 28' Rt., 28' Lt. — ℄ 871.47
- 330+93 - 28' Rt., 28' Lt. (Y) — ℄ 871.37
- 330+75 ℄ (C.B.) — ℄ G" 871.00

10UD
- 330+82 - 80' Rt. (Bend) — ℄ 869.63
- 330+82 - 122' Rt. — ℄ 869.50

11UD
- 332+94 - 68' Lt. — ℄ 873.50
- 333+25 - 68' Lt. (T) — ℄ 873.44
- 333+25 - 81' (Inlet) — ℄ G" 873.17



STA. 320+00 TO STA. 334+00

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 72, 73
For I-675 Superelevation, See Sh. No. 329
For Pavement Details, See Sh. No. 337, 338, 343 & 344
For Ramp A Plan & Profile, See Sh. No. 94 & 98
For Ramp D Plan & Profile, See Sh. No. 94 & 100
For Ramp E Plan & Profile, See Sh. No. 91 & 101
For Ramp G Plan & Profile, See Sh. No. 94 & 102
For U.S. 35 Plan & Profile, See Sh. No 85
For Reference Items Shown ◯ See Sh. No. 103 - 107

For Underdrain Quantities, See Sh. No. 55

SEE PLAN VIEW & TABLE BELOW FOR UNDERDRAIN ℄ ELEVATIONS

UNDERDRAIN ℄ ELEVATIONS

15 UD	340+05 - 68' Lt. (Bend)	℄ 6" - 880.39
	Connect to 16 UD	
16 UD	339+73 - 28' Lt.	℄ 6" - 880.25
	340+05 - 28' Lt. (Cross)	℄ 6" - 880.02
	Connect to 17 UD	
17 UD	339+34 - 28' Rt.	℄ 6" - 879.31
	340+05 - 28' Rt. (T)	℄ 6" - 877.67
	339+68 - 28' Rt. (Y)	℄ 6" - 877.00
	339+50 ℄ (CB)	℄ 6" - 876.75
18 UD	339+05 - 68' Rt.	℄ 6" - 878.37
	340+05 - 68' Rt. (T)	℄ 6" - 878.17
	Connect to 17 UD	

STA. 334+00 TO STA. 348+00

MICROFILMED
AUG 25 1989

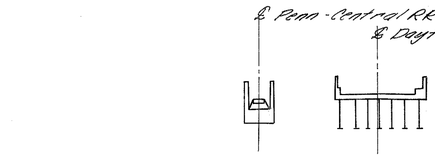
Sta 348+75 EXISTING STRUCTURE TO BE REMOVED
Type: Single Span through Girder on Conc. & Masonry Abutments
Span: 84'-2"
See Str. No. GRE 675-06.15

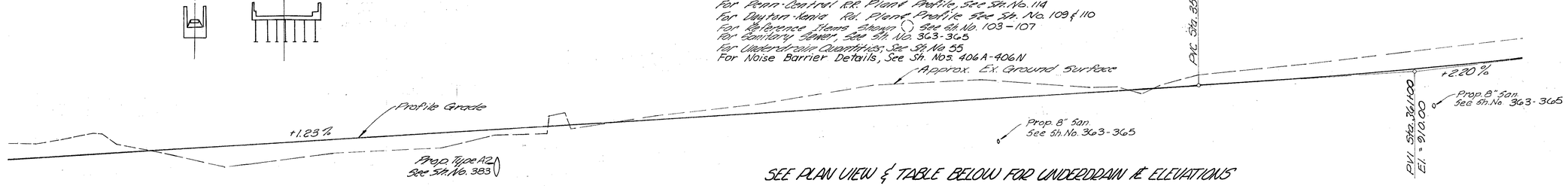
U.S. ROUTE 35
PENN CENTRAL RR
DAYTON-XENIA ROAD
HONEY LOCUST LANE
RAMP A
RAMP B
Ex. L.A. R/W
L.A. R/W
R/W
Curve No. B-2
Curve No. B-3
Curve No. W-2
Ramp B Impact Attenuator
Abandoned Dr. Drive
Ex. Above Central RR
Collector Distributor
Prop. Noise Barrier
Wire Fence
6" Type F
Drilled Well
Septic Tanks
Leaching Field
10" San. Abandoned
Plug
Ex. Abandoned Conduit Ohio Bell Tel. Co.
7'-8"x5'-5" C.M.P.
3 Wood Post Bridge
Loading Field
Conc. Paved Gutter
Ft. Shed
Old Pole
Type VA
Conc. Blk. Headwalls
Conc. Blk. Ft. Shed
Dog Well
Fr. Gar.
Gravel
Parking
Chicken Coop
Stone Wall
Billboards
Ex. L.A. R/W
Temporary Rd. No. 2 - 20 Wide See Sh. No. 39
Private Gravel Road
Pedestrian Bridge
Bridge No. GRE-675-0632 (See Sh. No. 96)
6" Reinforced Conc. Rip rap
18" Sod Strip
To be removed under 203
To Be Removed Under 203
GRE-675-6.37 GREENE COUNTY
Culvert No. 74
Continued on
For Prop. Drive & Honey Locust Lane C.O. see Str. No. 90

B.M. #4 Elev. 901.27
Chiseled □ on S.W. Corner of High Tension Tower Base
Sta. 348+80 126' Rt.

B.M. #5 Elev. 921.99
S.E. Corner of Bottom Conc. Step, 5531 Honey Locust Lane
Sta. 361+90 110' Lt.

For Curve Data, See Sheet No. 62
For Estimated Quantities, See Sh. No. 43-54, 72, 73
For I-675 Superelevation, See Sh. No. 329
For Pavt Details, See Sh. No. 338, 339, 343 & 344
For Ramp A Plan & Profile See Sh. No. 94, 96 & 98
For Ramp B Plan & Profile See Sh. No. 96 & 99
For Collector Distributor Plan, See Sh. No. 93 & 96
For Penn-Central R.R. Plan & Profile, See Sh. No. 114
For Dayton-Xenia Rd. Plan & Profile See Sh. No. 109 & 110
For Reference Items Shown ( ) See Sh. No. 103 - 107
For Sanitary Sewer, See Sh. No. 363-365
For Underdrain Quantities; See Sh. No 55
For Noise Barrier Details, See Sh. Nos. 406A-406N





SEE PLAN VIEW & TABLE BELOW FOR UNDERDRAIN & ELEVATIONS

23UD { 352+70 - 28' Lt. (Wye) - ℄ El. 895.17
352+52.5 ± ℄ (CB) - ℄ 6" - 894.58

24UD { 352+88 - 68' Lt. (Bend) - ℄ El. 895.16
352+88 ± - 87' ± Lt. (CB) - ℄ 6" - 895.00

25UD { 353+30B - 2' Lt. - ℄ El. 895.60
353+40B - 2' Lt. (TEE) ℄ El. 895.48
353+40B - 43' Lt. - ℄ El. 895.25

26UD { 353+07C-D - 26' Rt. (Wye) - ℄ El. 897.07 (Plug open End)
352+68 ± ℄ - 87' ± Lt. (CB) - ℄ 6" - 896.75

893.96 894.57 895.19 895.81 896.42 897.04 897.66 898.28 898.89 899.51 900.13 900.74 901.36 901.95 902.59 903.21 903.83 904.45 905.06 905.68 906.30 906.91 907.53 907.85 908.13 908.53 908.89 909.26 909.65 910.06 910.46 910.92 911.37 911.84 912.32

348 349 350 351 352 353 354 355 356 357 358 359 360 361 362

STA 348+00 TO STA. 362+00

ESTIMATED QUANTITIES

DRAINAGE

QUANTITY CALCULATIONS
BY H.E. DATE 12-15-71
CHKD. D.R. DATE 4-3-72
KING and GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. - 2/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

72
616

GRE - 675 - 5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	Bends & Branches	203 Excavation	601 Rock Channel Protection Type A	601 Rock Channel Protection Type B	601 Riprap Using 6" Reinf. Conc. Slab	602 Masonry	603 Type B 15"	603 Type C 15"	603 Type B 18"	603 Type C 18"	603 Type A	603 Type A	603 Type A	604 Catch Basin No. 4	604 Catch Basin No. 4A	604 Catch Basin No. 5	604 Catch Basin No. 5A	604 Median Inlet No. 7-35	660 Seeding	SEE SHEET NO.
				Cu. Yd.	Cu. Yd.	Cu. Yd.	Sq. Yd.	Cu. Yd.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Each	Each	Each	Each	Each	Sq. Yd.	
	DRAINAGE																					
10	312+70	Rt. & Lt.	1	34	30		61	10.56							334						34	68.374
20	315+50 to 322+02	Rt.																			900	68.69
30	313+30 to 322+16	Rt.				5		0.33			129	16				2					665	68.69, 70
40	Not Used																					
50	330+75	Rt. & Lt.		590			47	2.66						259			1				139	69, 381
60	333+25	Lt.				2		0.27	66											1	3	69, 374
70	339+50 to 344+00	Rt. & Lt.	1				71	2.66	12					395			1			1	331	70, 382
80	337+48 to 339+54	Rt.					823														102	70
90	352+32.5 to 356+00	Rt. & Lt.					33	2.20					317				1	1	1		381	71, 383
100	352+88± to 356+25	Lt.								344											100	71, 383
110	347+88 to 348+89	Rt.																			67	70, 71
120	341+04 to 344+58	Rt.					1127														137	70
130	341+19 to 346+97 Ramp B	Lt.																			714	70
140	350+30 Ramp A to 362+00	Rt.					2560														390	71
150	347+12 to 350+00 Ramp B	Lt. & Rt.																			105	70, 71
					With Bedding	With Bedding							42"- 706.02 or 48"- 707.05	48"- 706.02 or 54"- 707.05	78"- 706.02 (0.1750) or 102"- 707.07 (0.108")							
	SUB-TOTALS		2	624	30	7	4722	18.68	78	344	129	16	377	654	334	2	3	1	1	2	4367	
	TOTALS TO GENERAL SUMMARY			—	30	7	4722	18.7	78	344	129	16	377	654	334	2	3	1	1	2	4367	

* See Detail Sheet for size.

C. B. CO., NO. 275 24883

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
BY DP DATE 1-11-72
CHKD. HE DATE 1-31-72
KING AND GAVARIS CONSULTING ENGINEERS
Revised: I.E.H. -3/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

73
616

GRE -675 - 5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	202 Pipe Removed 36"-Under Lin. Ft.	202 Conc. Gutter Removed Lin. Ft.	202 Septic Tank Removed Each	202 Ex. Structure Removed Lump	202 Conc. Pav't. Removed Sq. Yd.	202 Manhole Abandoned Each	202 Manhole Removed Each	203 Fill Wells Cu. Yd.	606 Guard Rail Type 5 Lin. Ft.	606 Guard Rail Type 5 Barrier Design Lin. Ft.	606 Anchor Assembly Type A Each	606 Anchor Assembly Barrier Design Each	606 Bridge Terminal Assembly Type 1 Each	Special Drilled Well Abandoned Each	202 Temporary Water Station Removed Lump	Special Press Relief Jt. Type A L.F.	SEE SHEET NO.
	ROADWAY																		
1R	346+00 - 349+20	Lt. & Rt.				Lump													70,71
2R	348+55	Rt.															Lump		71
3R	349+80	Lt.							2										71
4R	351+33 - 354+10	Lt.	277						2										71
5R	355+45 & 357+25	Lt.						2											71
6R	358+50 - 361+23	Lt. & Rt.	550						3										71
7R	350+50	Rt.			1								Type A	Type T					71
8R	350+80	Rt.														1			71
9R	352+40	Lt.			1											1			71
10R	352+60	Lt.														1			71
11R	361+60	Lt.														1			71
12R	Bridge - 312+28±	Lt.									387.5		1		1				68
13R	Bridge - 310+07±	Med.									125.0	50		1	1				68
14R	Bridge - 327+38.4±	Rt.									1937.5		1		1				68,69,90
15R	327+31 - 330+46±	Rt.									175		1	1					69
16R	327+30 - 330+17±	Med.									875.0			2					69
17R	328+20± - 330+31	Lt.									175		1	1					69
18R	333+21 - 337+73.0±	Rt.									412.5		1	1					69,70
19R	330+61 - 333+28±	Med.									625.0			2					70
20R	336+61± - 340+64	Lt.									387.5		1	1					70
21R	337+70 - 340+50±	Rt.									237.5		1	1					70,71
22R	343+32 - 352+07±	Med.									6000			2					71
23R	340+20	Rt.		75															71
24R																			
25R																			
26R																			
27R	361+80	Rt.					32												71
28R																			
29R																			
30R	352+60	Rt.								3									71
31R	361+20	Lt.						2											71
32R	308+40	Lt.						1											71
33R	320+58 - 322+31	Med.									137.5		1	1					69
1D	308 + 73	Lt.															48		68
2D	308 + 73	Rt.															36		68
	SUB-TOTALS		827	75	2	Lump	32	5	7	3	5925.0	50	7	7	7	3	Lump	84	
	TOTALS TO GENERAL SUMMARY		827	75	2	Lump	32	5	7	3	5925	50	7	7	7	3	Lump	84	

Note: 24R, 25R, 26R, 28R & 29R Not Used

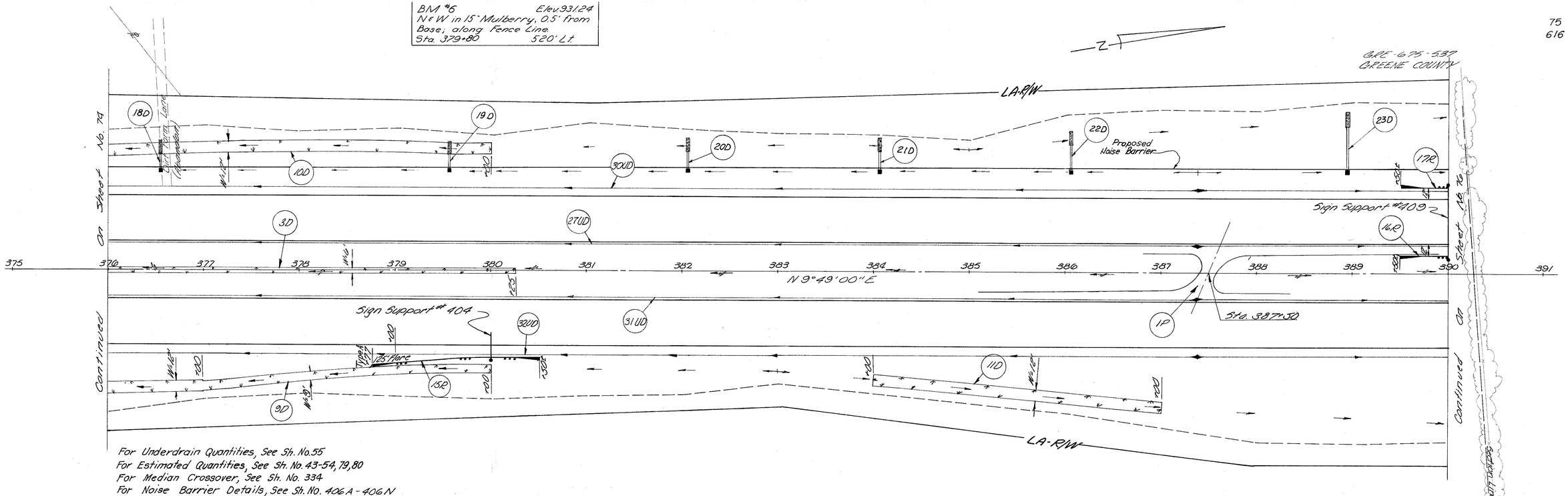
C. B. CO., NO. 375 24983

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 79, 80
For Pavement Details, See Sheet No. 339, 340 & 344
For I-675 Superelevation See Sheet No 329
For Underdrain Quantities, See Sheet No. 55
For Noise Barrier Details, See Sheet No. 406A-406N

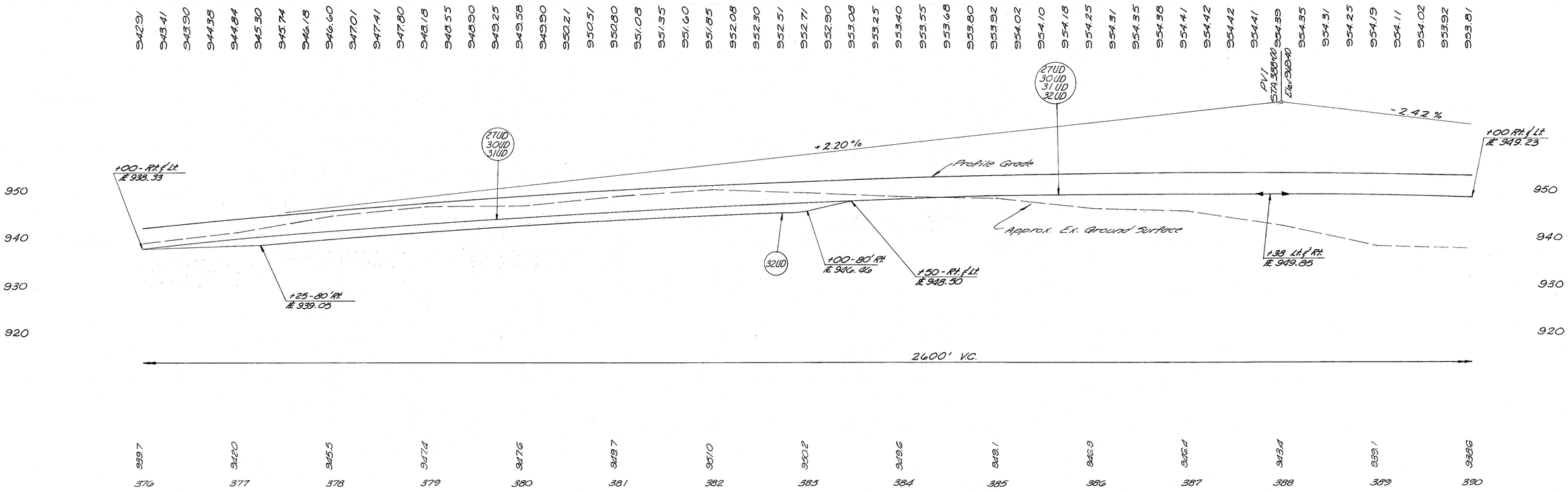
STA. 362+00 TO STA 376+00

BM #6 Elev. 931.24
N&W in 15" Mulberry, 0.5' from Base; along Fence Line.
Sta. 379+80 520' Lt.

G.R.E. 6.75-5.37
GREENE COUNTY



For Underdrain Quantities, See Sh. No. 55
For Estimated Quantities, See Sh. No. 43-54, 79, 80
For Median Crossover, See Sh. No. 334
For Noise Barrier Details, See Sh. No. 406A-406N



STA. 376+00 TO STA. 390+00

BM #7 Elev. 932.89
N & W in Root of Lone 36" Triple Poplar, 75'± N.E. of Fence Corner
Sta. 390+80 295' Lt

For Curve Data, See Sheet No. 62
For Estimated Quantities, See Sheet No. 43-54, 79, 80
For E-6.75 Superelevation, See Sheet No. 330
For Underdrain Quantities, See Sheet No. 55
For Noise Barrier Details, See Sheet No. 406A-406N

BRF-6.75-6.87
GREENE COUNTY

Continued on Sheet No. 75

Continued on Sheet No. 77

Proposed Noise Barrier
24D
17R
125' Flare
see Type A
Sign Support #409
16R
30UD
27UD
5D
31UD
4D
32UD
Type A
Section Line
LA-R/W
N 9°49'00" E
27UD
6D
33UD
34UD
5D
35UD
12D
Curve No. 3 ℄
Gr. Drive

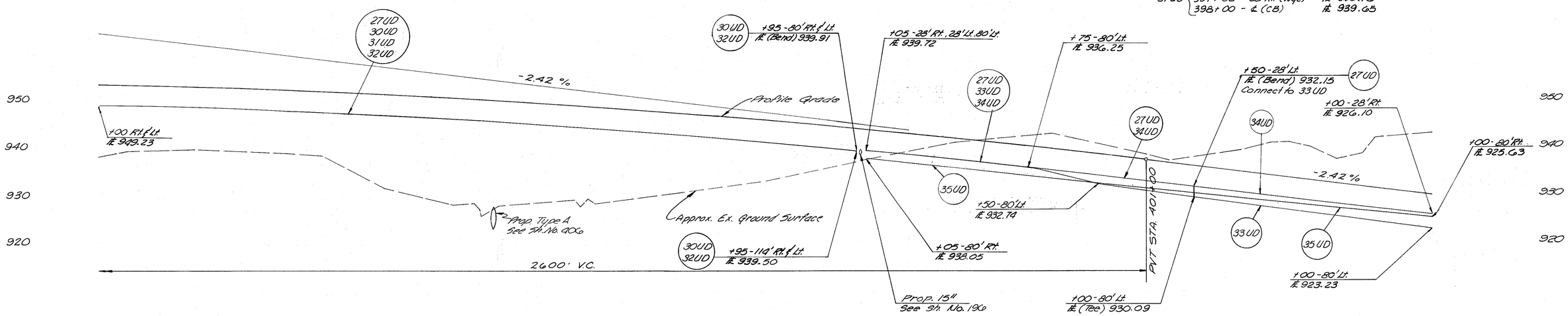
390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405

953.81 953.69 953.55 953.41 953.26 953.09 952.91 952.72 952.52 952.31 952.09 951.86 951.61 951.36 951.09 950.82 950.53 950.23 949.92 949.59 949.26 948.92 948.56 948.20 947.82 947.43 947.03 946.62 946.20 945.77 945.32 944.87 944.40 943.92 943.43 942.94 942.42 941.90 941.37 940.83 940.27 939.71 939.13 938.54 937.94 936.73 935.52 934.31 933.10 931.89 930.68

BM #8 Elev. 946.31
N & W in Root of 18" Wild Cherry, along Fence Line.
Sta. 403+50 120' Rt

UNDERDRAINS ℄ ELEVATIONS

31UD
- 397+95 - 28' Rt. ℄ 940.29
- 397+82 - 28' Rt. (Wye) ℄ 940.16
- 398+00 - ℄ (CB) ℄ 939.65



338.6 339.2 339.7 340.0 339.2 339.0 338.5 337.7 337.7 341.6 343.4 339.1 340.0 339.3 338.1 339.6
390 391 392 393 394 395 396 397 398 399 400 401 402 403 404
+30 - 337.7
+35 - 338.8
+72 - 328.5
+94 - 329.9 327.6
+28 - 337.8
+31 - 341.5
+50 - 341.7
+72 - 340.6
+27 - 339.2
+20 - 342.6

STA. 390+00 TO 404+00

For Curve Data, See Sh. No. 62
For I-675 Superelevation, See Sh. No. 330
For Kemp Rd. Plant Profile, See Sh. No. 121
For Estimated Quantities, See Sh. No. 43-54, 79, 80
For Reference Items Shown ◯ See Sh. No. 123
For Temporary Rd. Plan & Profile, See Sh. No. 36-40, 121 & 122
For Service Dr. A, Plant Profile, See Sh. No. 123
For Underdrain Quantities, See Sh. No. 55
LA-R/W
Wire Fence
Sheet No. 76
Continued On
Sta. 414+00.81 ℄ I-675
Sta. 19+76.42 ℄ Kemp Rd.
Curve No. 3 ℄
See Cross Sections For Special Median Grading
℄ Temporary Rd. 20' Wide
KEMP ROAD
BM #9 Elev. 918.12
R.R. Spike in South side of Tel. Pole in Front of #6445 Kemp Rd
Sta. 414+40 355' Lt.
½ Section Line
Gr. Drive
P.T. 16+80.44
P.C. 21+71.21
2 Sty. Stucco Res. #4286
1 Sty. Stucco Res.
End Project Sta. 417+00.00 SLM. 7.43
GRE-675-5.37 GREENE COUNTY
I-675-8(15)54
I-675-8(16)56
Constructed with Gre-675-7.43
℄ Service Dr. A
R/W
1½ Sty. Br. Res. #4276
Dr. Well
Ex. 2C No. 4 AWG DUCT CABLE (INSTALLED GRE-675-7.43)
Meet Exist. 3+25
Ex. Pull Box
B/T Drive
Fr. Gar.
Type B
Type F
End Work Sta. 417+35
10'x6' Sod Strip
Covered Conc. Patio
Conc. Steps
Fr. Gar.
w/Transformer
1½ Sty. Fr. Res. #4262
10'x12' Sod Strip
Type A
Stone Wall
Fr. Shed
1½ Sty. Br. Res.
Ex. R/W
Continued On Sheet No. 78
TYPICAL SECTION OF ADJOINING PROJECT IS THE SAME AS THE TYPICAL SECTION OF THIS PROJECT
930.68 929.47 928.26 927.05 925.84 924.63 923.42 922.21 921.00 919.79 918.58 917.37 916.16 915.57 915.02 914.49 914.01 913.55 913.13 912.74 912.38 912.06 911.77 911.51 911.29 911.09 910.94 910.81 910.72 910.57 910.42 910.27 910.12 909.97 909.82
UNDERDRAIN ℄ ELEVATIONS
36UD: 416+95 -80' Lt. (Bend) - 902.39
34UD: 416+95 -28' Rt. (Tee) - 902.20
35UD 416+95 -80' Rt. (Tee) - 902.11
35UD 416+95 -142' Rt. - 902.00
Approx. Ex. Ground Surface
℄ Kemp Rd.
400' V.C.
PVC STA. 410+00
PVI STA. 412+00 Elev. 911.32
PVT STA. 414+00
-2.42%
-0.30%
Profile Grade
+00-28' Rt. ℄ 926.10
+00-80' Lt. ℄ 923.23
+00-80' Rt. ℄ 925.63
+05-80' Lt. ℄ 908.59
Prop 18" See Sh. No. 198
+25-80' Lt. ℄ 910.53
+95-114' Lt. ℄ 909.75
+95-80' Lt. ℄ (Bend) 910.00
+00-80' Rt. ℄ 905.07
+00-28' Rt. ℄ 905.54
Type A
940 930 920 910 900 890
943.6 944.5 944.4 943.3 +50-941.4 943.0 +70-942.7 939.6 937.0 +37-937.7 934.4 931.2 +50-928.9 +56.5-926.7 +65.5-931.1 +78-931.4 926.2 920.8 +20-919.8 +56-913.4 912.1 908.5 908.3
404 405 406 407 408 409 410 411 412 413 414 415 416 417 418

B.M. "10" Elev. 895.24
Chiseled □ on Extreme N. end of Conc. Spillway Structure at Dam.
Sta. 419+10 450'± Lt.

GRE-675-5.37
GREENE COUNTY

Z

R/W

LA-R/W

℄ Service Drive By Others

No. 77

Street

Type A

Constructed with GRE-675-7.43

R.T. Sta 419+80.07

ORCHARD

Curve No. 3 ℄

N 3°18'00" W

Wire Fence

Continued On

LA-R/W

Wire Fence

B.M. "11 Elev. 906.82
Spike & Washer in 24" Walnut, South Edge of Woods
Sta. 427+50 50' Lt.

For Service Drive & Plan & Profile, See Sht. No. 123
For Curve Data, See Sheet No. 62

418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433

908.5 908.4 908.2

930 920 910 900 890 880 870

-0.30%

PVC. Sta. 422+50

PVI. Sta. 427+00
Elev. 906.82

+2.72%

PVT. Sta. 431+50

300' V.C.

930 920 910 900 890 880 870

88.9 / 107.253 / 119.285.8 — A18
903.3 — A19
142.970 / 922.4 / 132.9252 — A20
926.9 — A21
165.9262 / 924.1 — A22
917.8 — A23
913.4 — A24
911.9 — A25
911.4 — A26
165.9139 / 911.4 / 115.9152 — A27
915.0 — A28
911.6 — A29
140.9093 — A30
193.9108 / 910.8 / 140.9104 — A31
902.4 — A32
135.8942 / 893.1 — A32
150.8922 — A33

STA. A18+00 TO STA. A33+00

ESTIMATED QUANTITIES

DRAINAGE

QUANTITY CALCULATIONS
BY H.F. DATE 12-15-71
CHKD. Q.P. DATE 1-3-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. - 2/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

79
616

GRE - 675 - 5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	Bends & Branches: 10"x18" Bend	601: Rock Channel Protection Type A Cu. Yd.	601: Rock Channel Protection Type B Cu. Yd.	601: Riprap Using 6" Reinf. Conc. Slab Sq. Yd.	601: Rock Channel Protection Type C Cu. Yd.	602: Masonry Cu. Yd.	603: Type F 12" Lin. Ft.	603: Type C 12" Lin. Ft.	603: Type B 15" Lin. Ft.	603: Type B 18" Lin. Ft.	603: Lin. Ft.	603: Type A Lin. Ft.	603: Type A Lin. Ft.	604: Catch Basin No. 4 Each	604: Catch Basin 2-2B Each	604: Catch Basin No. 8 Each	660: Sodding Sq. Yd.	Item Spec. Seeding w/ Nylon Fiber Matting Sq. Yd.	SEE SHEET NO.
	DRAINAGE																				
10	369+00 to 372+50	Lt. Rt.						0.27			157					1			562		74,401
20	369+81.2	Rt & Lt				53		4.12						297					35		74,380
30	375+50 to 380+25	Lt. Rt.			2			0.33				119				1			316		74,75,406
40	394+15	Rt & Lt		27		95		4.84							347				26		76,405
50	394+50 to 398+00	Lt. Rt.			2			0.27			123					1			232		76,196
60	401+25 to 410+00	Lt. Lt.			2			0.33				114				1			582		76,77,198
70	362+00 to 369+53	Rt.				1735													191		74
80	365+41 CP to 365+91 CP	Rt.																	33		74
90	369+23 to 380+00	Rt.																	1308		74,75
100	375+00 CP to 380+00	Lt.																	743		74,75
110	384+00 to 387+00	Rt.																	407		75
120	403+50 to 416+50	Rt.																	1757		76,77
130	408+00 to 410+50	Lt.																	855		77
140	363+75 to 367+75	Lt.					3	0.21	47								1		3	270	74,406N
150	368+48	Lt.					4	0.21		15								1	3		74,406N
160	370+46	Lt.	1				4	0.21		33								1	3		74,406N
170	373+46	Lt.	1				4	0.21		31								1	3		74,406N
180	376+55	Lt.	1				4	0.21		18								1	3		75,406N
190	379+55	Lt.					4	0.21		17								1	3		75,406N
200	382+05	Lt.	1				4	0.21		20								1	3		75,406N
210	384+05	Lt.	1				4	0.21		21								1	3		75,406N
220	386+05	Lt.	1				4	0.21		28								1	3		75,406N
230	388+95	Lt.	1				4	0.21		48								1	3		
240	391+15	Lt.	1				4	0.21		60								1	3		
	SUB-TOTALS			27	6	1833	43	12.47	47	291	280	233		297	347	4	1	10	7040	270	
	TOTALS TO GENERAL SUMMARY			27	6	1833	43	12.5	47	291	280	233		297	347	4	1	10	7040	270	

With Bedding

With Bedding

With Bedding

or

36"-70.02 CY
60"-70.02 CY

66"-706.02 (10-2000) or
72"-70.02 CY

Without Apron

C. H. CO., NO. 379 #####

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
BY DP DATE 1-11-72
CHKD. WE DATE 4-3-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: LEH 3/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

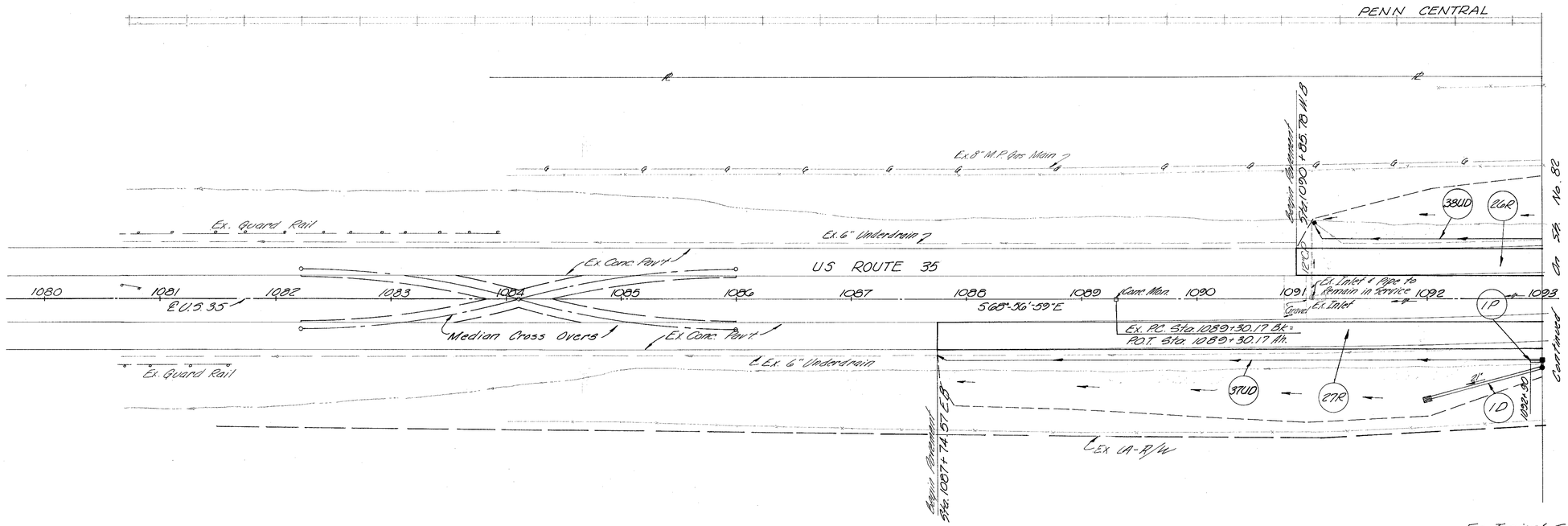
80/616

GPE-6.75-5.37
GREENE COUNTY

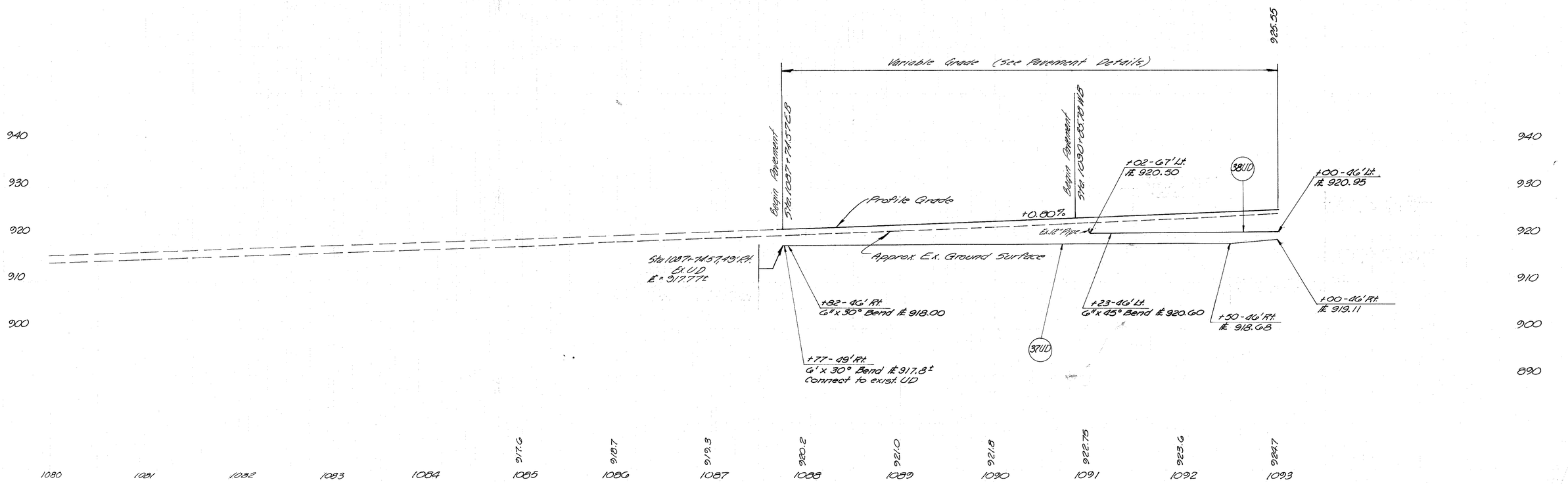
REF. NO.	STATION TO STATION	SIDE	606 Guard Rail Type 5 Lin Ft	606 Anchor Assembly Each	606 Anchor Assembly Barrier Design Each	Special Drilled Well Abandoned Each	202 Privy Vault Removed Each	202 Septic Tank Removed Each	409 Seal Coat Bituminous Material Gal	409 Seal Coat Cover Aggregate No. 8 Cu Yd	301 6" Bituminous Aggregate Base Cu Yd	310 Subbase Type II Thickness as noted Cu Yd	SEE SHEET NO.
	ROADWAY												
1R	368+33	Lt.					1						74
2R	368+76	Lt.						1					74
3R	Not Used												
4R	413+20	Lt.				1							77
5R	Not Used.												
6R	Not Used												
7R	412+57 - 415+44	Med.	475.0		2								77
8R	Not Used												77
9R	Not Used												
10R	Not Used												
11R	Not Used												
12R	Not Used	Rt.											
13R	360+05 - 370+81	Med.	137.5	1	1								74
14R	360+85.00-371+34.00	Lt.	137.5	1	1								74
15R	372+77 - 380+50	Rt.	137.5	1	1								75
16R	380+50 - 391+20	Med.	137.5	1	1								75,76
17R	380+50 - 391+24	Lt.	137.5	1	1								75,76
	Pavement												
1P	381+30 Planimetered	Med.							51.4	1.4	28.5	28.5	75
	SUB-TOTALS		1162.5	5	5 (Type A) 2 (Type T)	1	1	1	51.4	1.4	28.5	28.5	
TOTALS	TO GENERAL SUMMARY		1162.5	5	5 2	1	1	1	52	2	29	29	

C. B. CO., NO. 375 24883

BRE 675-5.37
GREENE COUNTY

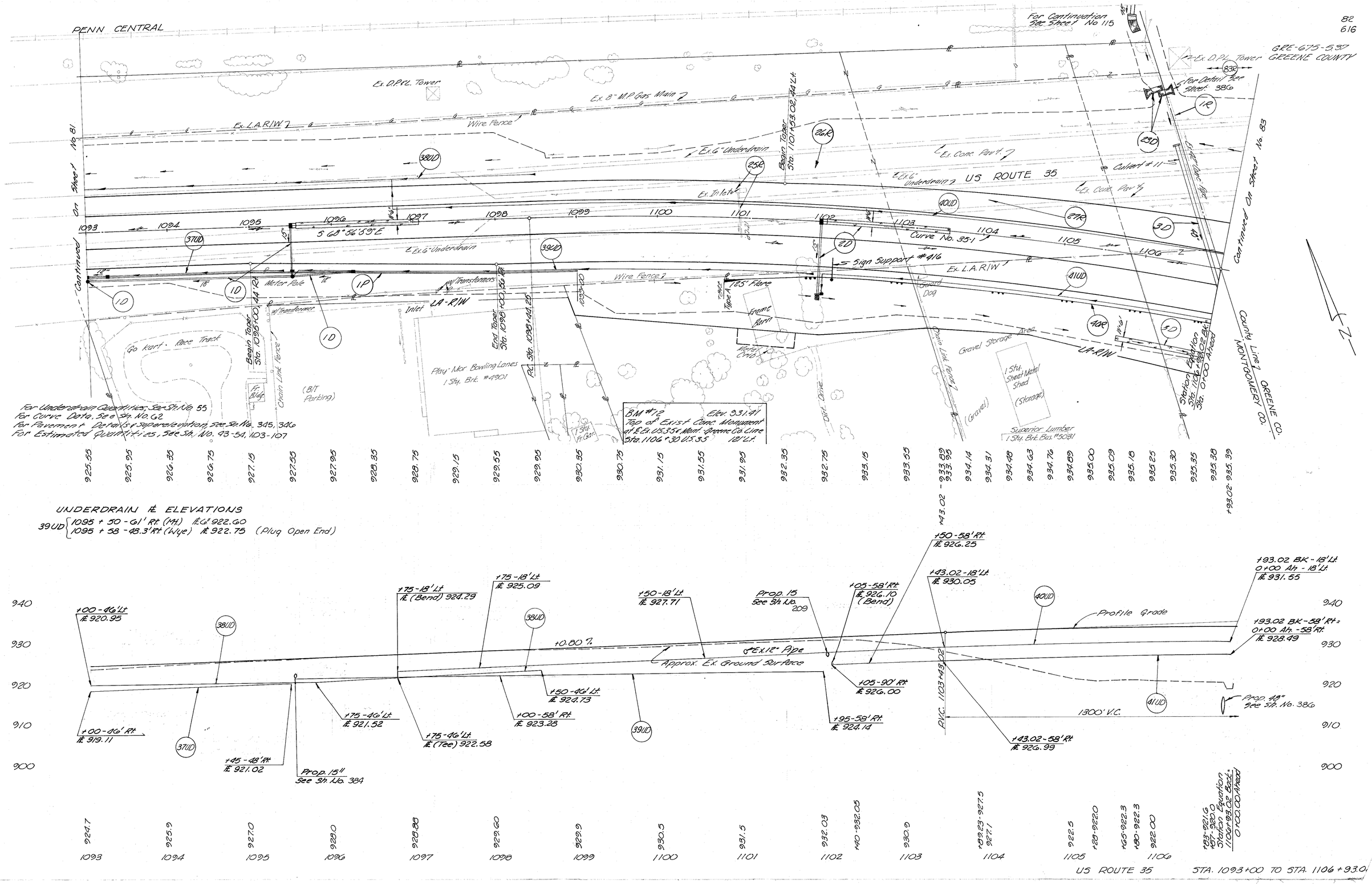


B.M. #11	Elev. 921.08
Top of Exist. Conc. Monument	
Sta. 1089+30.17 U.S. 35 ℄	

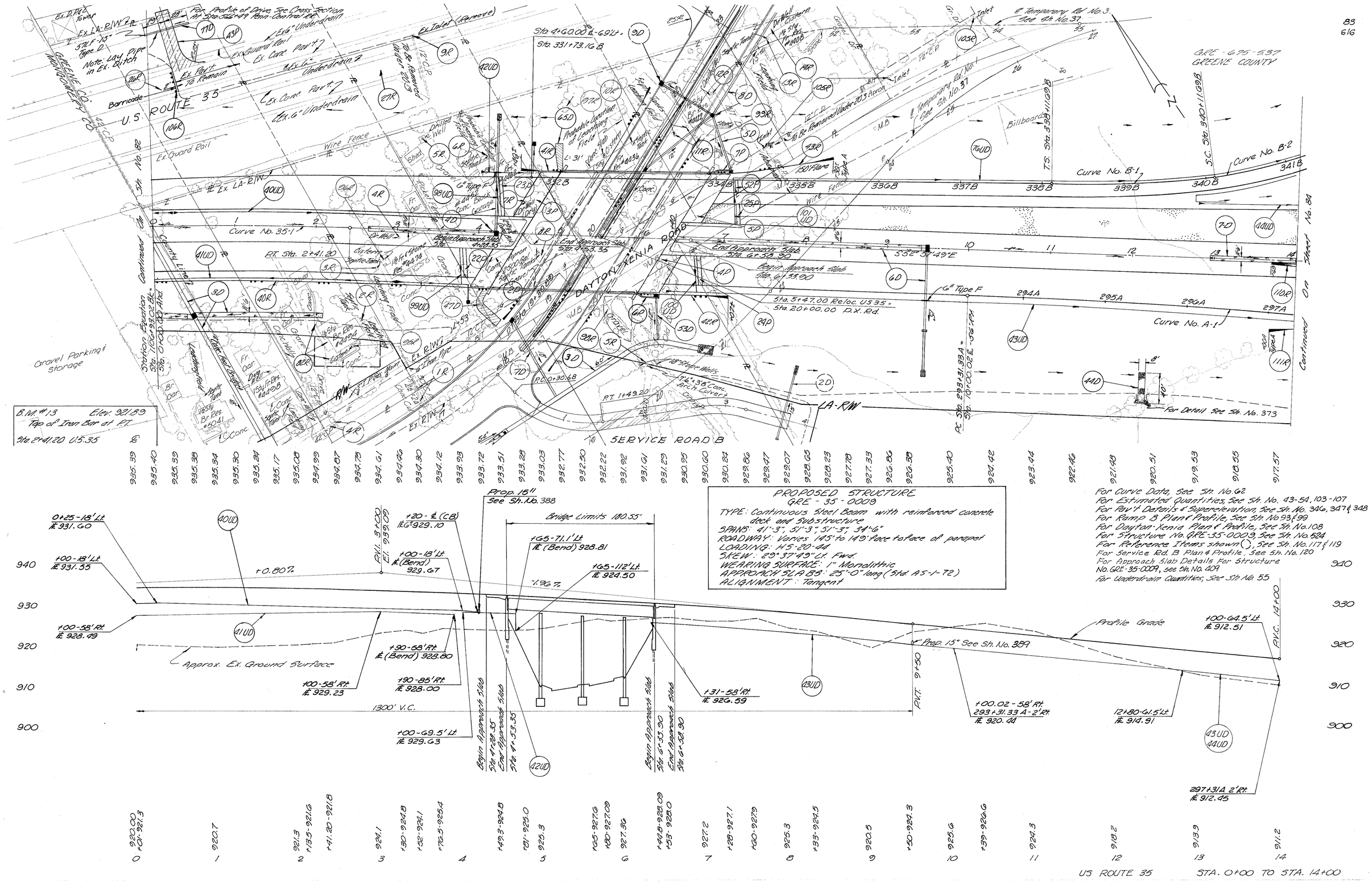


For Typical Section of Ex. Pav't. See Sh. No. 345
For Pavement Details & Superelevation, See Sh. No. 345
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Median Cross Overs See Sh. No. 33-35
For Underdrain Quantities, See Sh. No. 55

U.S. ROUTE 35 STA. 1080+00 TO STA. 1093+C


PENN CENTRAL
For Continuation See Sheet No 115
GRE-675-5.37
GREENE COUNTY
Ex. D.P.&L. Tower
Ex. 8" M.P. Gas Main
Ex. L.A.R/W
Wire Fence
Ex. 6" Underdrain
Begin Taper Sta. 1101+53.02, 44' Lt.
Ex. Conc. Pav't.
US ROUTE 35
Culvert #11
Ex. Inlet
S 68°56'59"E
Curve No. 35-1
Sign Support #416
Meter Pole
Inlet
LA-R/W
125' Flare
Frame Barn
Guard Dog
Gravel Storage Area
Go Kart - Race Track
Chain Link Fence
(B/T Parking)
Play-Mor Bowling Lanes 1 Sty. Brk. #4901
Dirt Drive
1 Sty. Sheet Metal Shed (Storage)
(Gravel)
Superior Lumber 1 Sty. Brk. Bus. #5031
Station Equation Sta. 1106+93.02 Bk = Sta. 0+00 Ahead
County Line
GREENE CO.
MONTGOMERY CO.
Continued On Sheet No. 81
Continued On Sheet No. 83
For Underdrain Quantities, See Sh. No. 55
For Curve Data, See Sh. No. 62
For Pavement Details & Superelevation, See Sh. No. 345, 346
For Estimated Quantities, See Sh. No. 43-54, 103-107
BM #12 Elev. 931.41
Top of Exist Conc. Monument at ℄ Ex. US 35 & Mont.-Greene Co. Line Sta. 1106+30 U.S. 35 121' Lt.
UNDERDRAIN ℄ ELEVATIONS
39UD 1095 + 50 - 61' Rt. (Mt.) ℄ 922.60
1095 + 58 - 48.3' Rt. (Wye) ℄ 922.75 (Plug Open End)
+00-46' Lt. ℄ 920.95
+00-46' Rt. ℄ 919.11
+45-48' Rt. ℄ 921.02
Prop. 15" See Sh. No. 384
+75-46' Lt. ℄ 921.52
+75-18' Lt. ℄ (Bend) 924.29
+75-46' Lt. ℄ (Tee) 922.58
+75-18' Lt. ℄ 925.09
+00-58' Rt. ℄ 923.28
+50-46' Lt. ℄ 924.73
+50-18' Lt. ℄ 927.71
Prop. 15 See Sh. No. 209
+95-58' Rt. ℄ 924.14
+05-58' Rt. ℄ 926.10 (Bend)
+05-90' Rt. ℄ 926.00
+43.02-18' Lt. ℄ 930.05
+43.02-58' Rt. ℄ 926.99
+50-58' Rt. ℄ 926.25
+93.02 BK-18' Lt. 0+00 Ah-18' Lt. ℄ 931.55
+93.02 BK-58' Rt. = 0+00 Ah.-58' Rt. ℄ 928.49
Profile Grade
+0.80 %
Ex. 12" Pipe
Approx. Ex. Ground Surface
P.V.C. 1103+43.02
1300' V.C.
Prop. 48" See Sh. No. 386
940
930
920
910
900
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
US ROUTE 35
STA. 1093+00 TO STA. 1106+93.0

MICROFILMED
AUG 25 1989

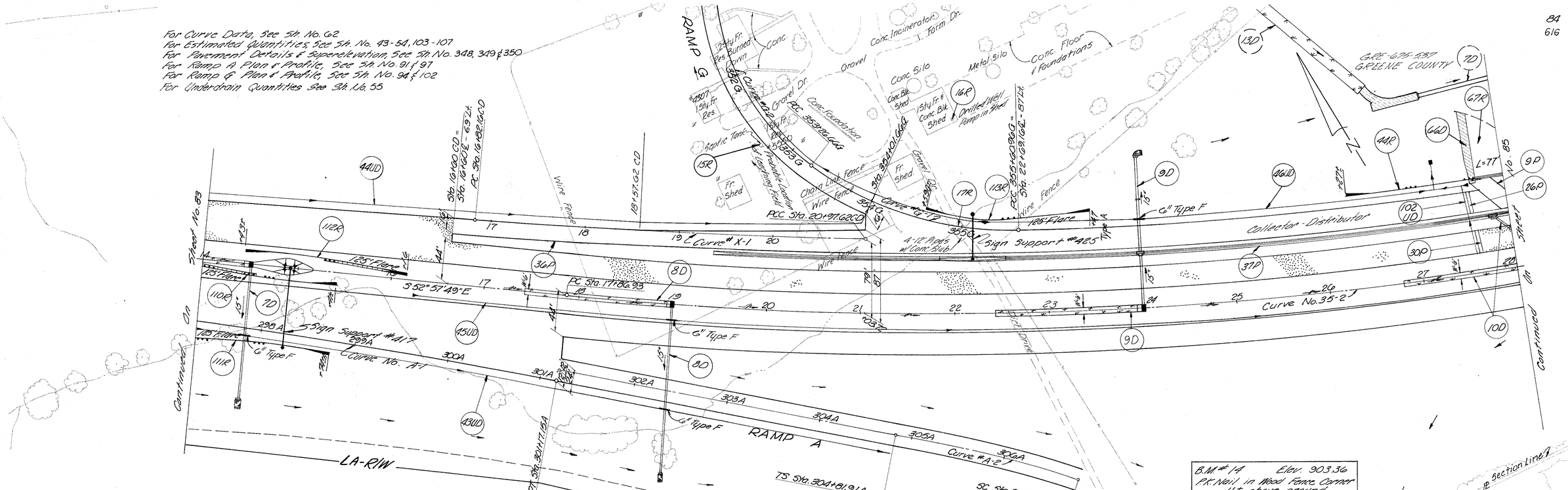


PROPOSED STRUCTURE
GRE - 35 - 0009

TYPE: Continuous Steel Beam with reinforced concrete deck and Substructure
SPANS: 41'-3", 51'-3", 51'-3", 34'-6"
ROADWAY: Varies 145' to 149' face to face of parapet
LOADING: HS-20-44
SKEW: 29°37'49" Lt. Fwd.
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: 25'-0" long (Std. AS-1-72)
ALIGNMENT: Tangent

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Pav't Details & Superelevation, See Sh. No. 346, 347 & 348
For Ramp B Plan & Profile, See Sh. No. 93 & 99
For Dayton-Xenia Plan & Profile, See Sh. No. 108
For Structure No. GRE-35-0009, See Sh. No. 524
For Reference Items shown (), See Sh. No. 117 & 119
For Service Rd. B Plan & Profile, See Sh. No. 120
For Approach Slab Details For Structure No. GRE-35-0009, See Sh. No. 409
For Underdrain Quantities, See Sh. No. 55

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Pavement Details & Superelevation, See Sh. No. 348, 349 & 350
For Ramp A Plan & Profile, See Sh. No. 91 & 97
For Ramp G Plan & Profile, See Sh. No. 94 & 102
For Underdrain Quantities See Sh. No. 55



B.M. # 14	Elev. 903.36	
P.K. Nail in Wood Fence Corner 1'E above ground		
Sta. 18+45	0.5.35	60' Rt.

US ROUTE 35 STA. 14+00 TO STA. 28+00

MICROFILMED
AUG 26 1989

Sta. 336+72.85 I-675
Sta. 31+09.59 US 35

Continued On Sheet No. 84

Curve No. D-22
Curve No. D-23
Curve No. D-24
Curve No. D-25
Curve No. D-26
Curve No. D-27
Curve No. D-28
Curve No. D-29
Curve No. D-30
Curve No. D-31
Curve No. D-32
Curve No. D-33
Curve No. D-34
Curve No. D-35
Curve No. D-36
Curve No. D-37
Curve No. D-38
Curve No. D-39
Curve No. D-40
Curve No. D-41
Curve No. D-42

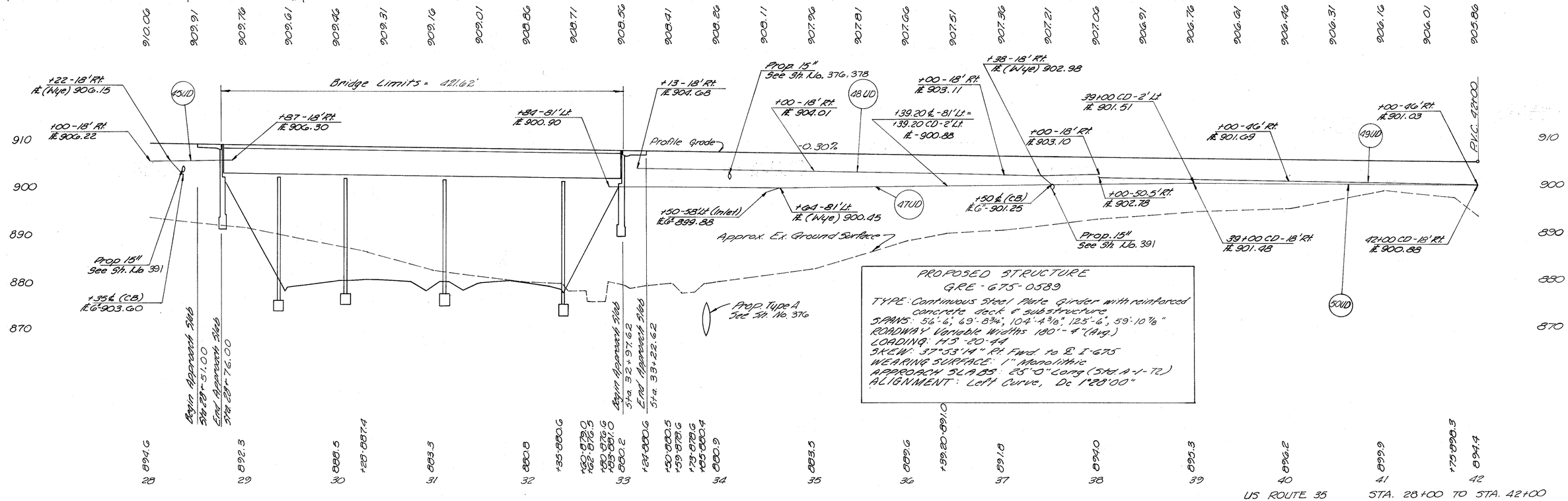
RAMP D

C-S Sta. 350+61.91 D
C-S Sta. 352+11.91 D
Sta. 30+39.08 E 87°-53'-37" Rt.
P.I. Sta. 35+41+75.51 D
Sta. 351+41.37 Equa
Sta. 352+11.91 Equa
Sta. 36+39.20 E P.O.T.
P.I. Sta. 36+39.20 C-D
P.T. Sta. 37+51.53 C-D
P.I. Sta. 39+81.39 C-D
P.T. Sta. 41+89.75 C-D
Sta. 39+80.72 E, 44' Rt.

6" Type F
Collector-Distributor
2nd Approach Slab Sta. 33+22.62
Begin Approach Slab Sta. 32+97.62
End Approach Slab Sta. 33+22.62
Begin Approach Slab Sta. 28+51.00
End Approach Slab Sta. 29+76.00
Section Line
Type A
Type F
Type E
Curve No. E-1
Curve No. E-2
RAMP E
L = 68'
L = 111'
150' Flare
18" Sod Strip
6" Reinforced Conc. Riprap
Sta. 39+23.83 U/S 35
Sta. 350+76.25 Ramp A
RAMP A
Sta. 39+80.72 E, 44' Rt.
GRE-675-5.37
GREENE COUNTY
Continued On Sheet No. 86
580°01'49"E

For Underdrain Quantities, See Sh. No. 55
For Approach Slab Details For Structure No. GRE-675-0589, See Sh. No. 409
For Reference Items shown ( ), See Sh. No. 72 & 73
For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Revt. Details & Superelevation See Sh. No. 351, 352
For Ramp A Plan & Profile, See Sh. No. 92, 95 & 98
For Ramp D Plan & Profile, See Sh. No. 95 & 100
For Ramp E Plan & Profile, See Sh. No. 91 & 101
For I-675 Plan & Profile, See Sh. No. 70
For Structure No. GRE-675-0589, See Sh. No. 421

B. M. #15 Elev. 882.69
P.K. Nail in E. side of 10" Elm
Sta. 34+50 US 35 30' Lt.



PROPOSED STRUCTURE
GRE-675-0589

TYPE: Continuous Steel Plate Girder with reinforced concrete deck & substructure.
SPANS: 56'-6", 69'-8 3/4", 104'-4 3/8", 125'-6", 59'-10 7/8"
ROADWAY: Variable Widths 180'-4" (Avg.)
LOADING: HS-20-44
SKEW: 37°53'14" Rt. Fwd. to ℄ I-675
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: 25'-0" Long (Std. A+/-72)
ALIGNMENT: Left Curve, Dc 1°28'00"

US ROUTE 35 STA. 28+00 TO STA. 42+00

GRE-675-5.37
GREENE COUNTY

For Underdrain Quantities, See Sh. No. 55
For Ramp H Plan & Profile, See Sh. No. 92 & 102
For Ramp F Plan & Profile, See Sh. No. 95 & 101
For Pavement Details & Superelevation, See Sh. No. 353-355
For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Sanitary Sewer, See Sh. No. 363, 365

B.M. #16 Elev. 886.22 P.K. Nail in root of 48" Oak North Side Sta. 43+50 U.S. 35 5'Rt.	B.M. #17 Elev. 891.98 Cross notch in Inlet P.I. Curve No. 35-3 ℄ Sta. 51+90 U.S. 35 62'Lt.

UNDERDRAIN ℄ ELEVATIONS

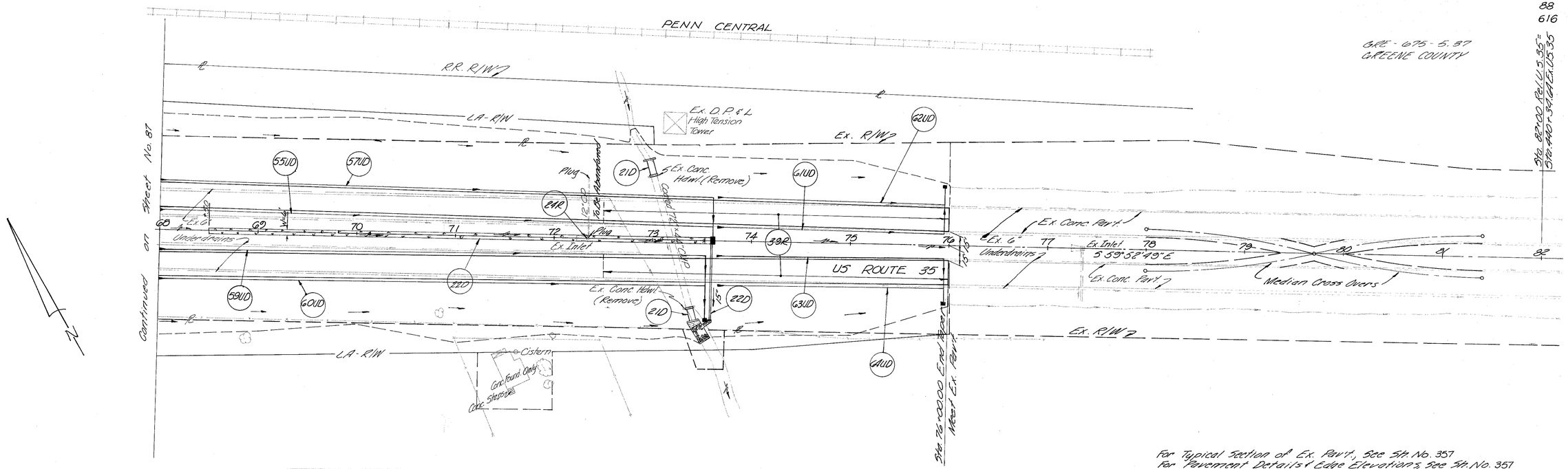
49UD	42+75 -46' Rt. (Tee)	℄ 900.56
	42+75 ℄ (CB)	℄6" 900.26
50UD	42+90 CD-18' Rt. (Bend)	℄ 900.70
	43+00 ℄ -58' Lt. (Inlet)	℄6" 900.00
51UD	42+75 ℄ (CB)	℄6" 900.26
	42+93 -18' Lt. (Bend)	℄ 901.48
52UD	43+00 ℄ -58' Lt (Inlet)	℄6" 900.00
	43+12 CD-18' Rt. (Bend)	℄ 901.26

GRE - 675 - 5.37
GREENE COUNTY

B.M. #18 Elev. 898.47
Top of N.W. Anchor Bolt of Semaphore #94, S. Side of Penn-Central R.R.
Sta. 59+30 U.S. 35 226' Lt.

For Underdrain Quantities, See Sh. No. 55
For Curve Data, See Sh. No. 62
For Pav't. Details & Superelevation, See Sh. No. 355, 356 & 357
For Structure No. GRE-35-0107 R/L, See Sh. No. 548
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Approach Slab Details For Structure No. GRE-35-0107 R/L, see Sh. No. 409

PROPOSED STRUCTURE
GRE-35-0107 R/L
TYPE: Continuous steel beam with reinforced concrete deck and substructure
SPANS: 65'-6", 83'-6 3/4", 60'-3 1/8"
ROADWAY: Lt. 50'-0", Rt. 42'-0" face to face of Parapet
LOADING: HS-20-44
SKEW: 22°51'26" Rt. Fwd. to ℄ Grange Hall Rd.
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: 25'-0" long (Std. AS-1-72)
ALIGNMENT: Right Curve Dc = 1°28'00"



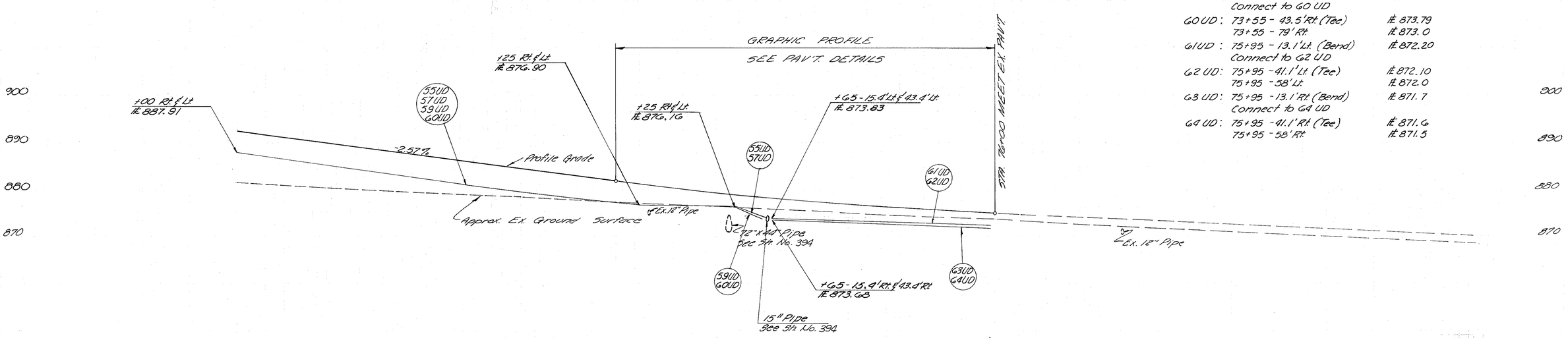
B.M. #19	Elev. 873.84
Nail in Wood Fence Corner, 25' ± East of Culvert	
Sta. 73+75 U.S. 35	89' Rt.

For Typical Section of Ex. Pavt., See Sh. No. 357
For Pavement Details & Edge Elevations, See Sh. No. 357
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Median Cross Overs, See Sh. No. 33-35
For Underdrain Quantities, See Sh. No. 55

892.37
891.09
889.80
888.52
887.23
885.95
884.66
883.38
882.09

UNDERDRAIN ℄ ELEVATIONS

57 UD:	73+60 - 43.4' Lt. (Bend) Connect to 55 UD	℄ 873.93
55 UD:	73+60 - 15.4' Lt. (Tee)	℄ 873.81
	73+60 ℄ (CB)	℄ G° 873.75
59 UD:	73+55 - 15.5' Rt. (Bend) Connect to 60 UD	℄ 873.89
60 UD:	73+55 - 43.5' Rt. (Tee)	℄ 873.79
	73+55 - 79' Rt.	℄ 873.0
61 UD:	75+95 - 13.1' Lt. (Bend) Connect to 62 UD	℄ 872.20
62 UD:	75+95 - 41.1' Lt. (Tee)	℄ 872.10
	75+95 - 58' Lt.	℄ 872.0
63 UD:	75+95 - 13.1' Rt. (Bend) Connect to 64 UD	℄ 871.7
64 UD:	75+95 - 41.1' Rt. (Tee)	℄ 871.6
	75+95 - 58' Rt.	℄ 871.5

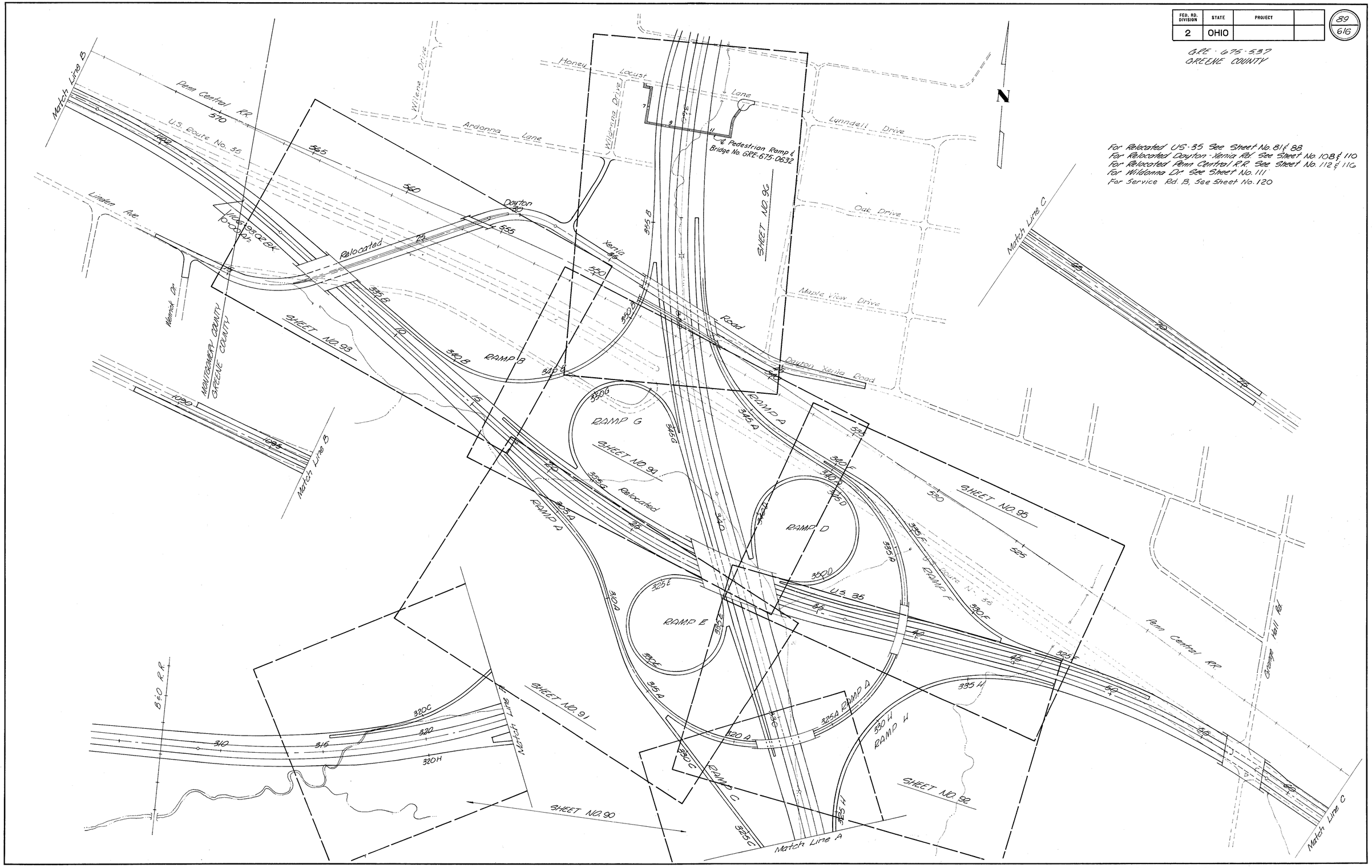


US ROUTE 35 STA. 68+00 TO STA. 82+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

89
616

GRE - 675 - 5.37
GREENE COUNTY



For Relocated US-35 See Sheet No. 81 & 88
For Relocated Dayton-Xenia Rd. See Sheet No. 108 & 110
For Relocated Penn Central R.R. See Sheet No. 112 & 116
For Wildonna Dr. See Sheet No. 111
For Service Rd. B, See Sheet No. 120

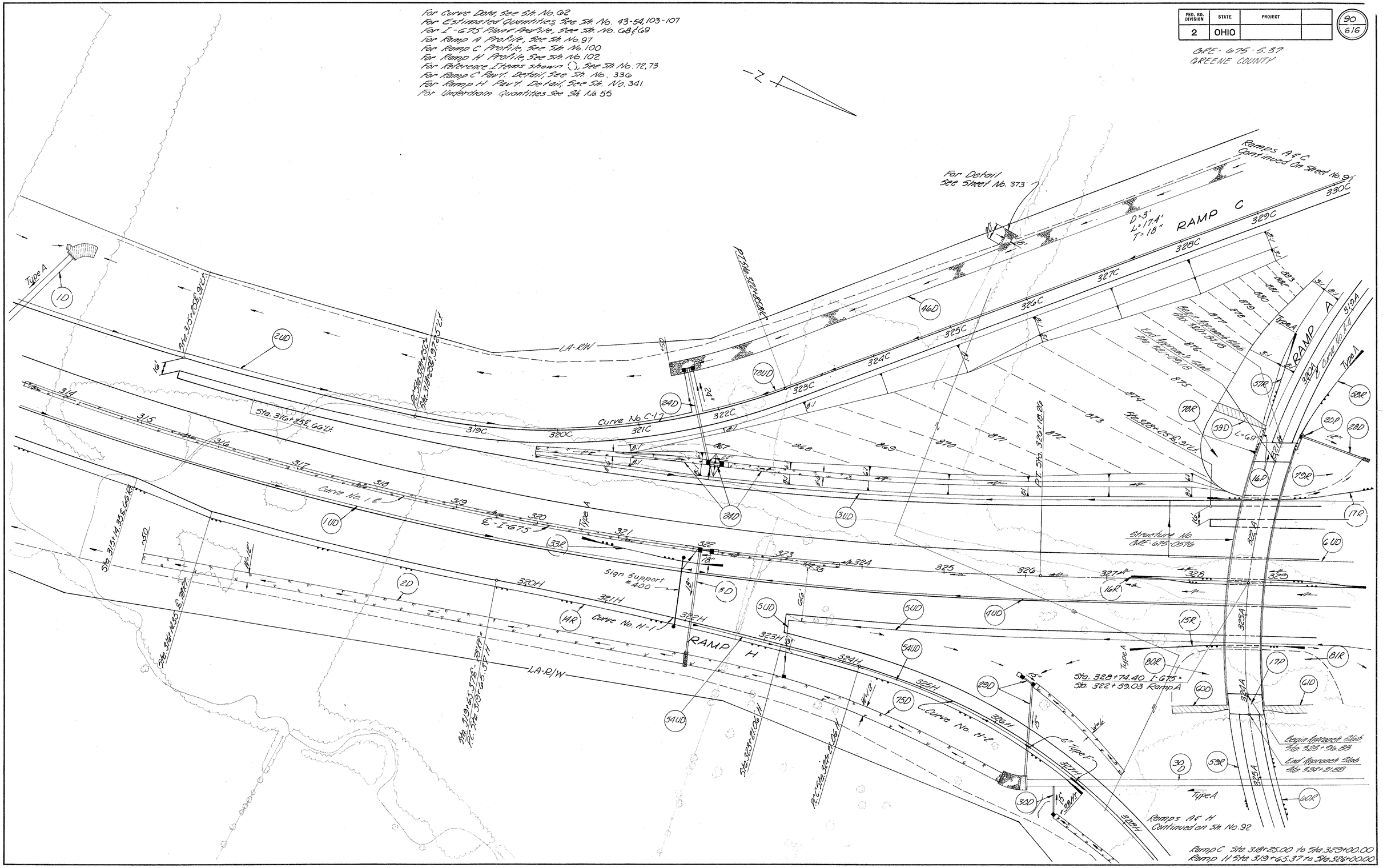
U.S.-35 INTERCHANGE PLAN SHEET LAYOUT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

90
616

GRE-675-5.37
GREENE COUNTY

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 103-107
For I-675 Plan & Profile, See Sh. No. 68 & 69
For Ramp A Profile, See Sh. No. 97
For Ramp C Profile, See Sh. No. 100
For Ramp H Profile, See Sh. No. 102
For Reference Items shown ( ), See Sh. No. 72, 73
For Ramp C Pav't. Detail, See Sh. No. 336
For Ramp H Pav't. Detail, See Sh. No. 341
For Underdrain Quantities See Sh. No. 55



U.S. 35 INTERCHANGE

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 103-107
For I-675 Plan & Profile, See Sh. No. 69 & 70
For U.S. 35 Plan & Profile, See Sh. No. 84 & 85
For Reference Items Shown ◯, See Sh. No. 72 & 73
For Ramp A Profile, See Sh. No. 97
For Ramp C Profile, See Sh. No. 100
For Ramp E Profile, See Sh. No. 101
For Ramp A & C Pav't Detail, See Sh. No. 358
For Ramp E Pav't. Details, See Sh. No. 337 & 351
For Underdrain Quantities, See Sh. No. 55

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

92
616

Structure No. GRE-35-0074
Sta. 39+23.83 U.S. 35 =
Sta. 330+76.25, Ramp A
Section Line
GRE-675-5.37
GREENE COUNTY
P.T. Sta. 36+39.20
℄ Reloc. U.S. 35
Curve No. 35-2
Curve No. D-1
Curve No. H-3
Curve No. H-2
Curve No. A-4
S 80° 07' 49" E
Continued on Sh. No. 95
Continued On Sh. No. 86
Continued On Sh. No. 91
Continued On Sh. No. 90
RAMP A
RAMP E
RAMP H
Collector-Distributor
Tape A
Begin Approach Slab
Sta. 324+21.88
End Approach Slab
Sta. 324+47.42
Begin Approach Slab
Sta. 320+84.18
End App. Slab
Sta. 321+09.18
Sta. 323+74.10 I-675 =
Sta. 322+59.05 Ramp A
Structure No. GRE-675-0576
PT. Sta. 326+18.26
Begin Approach Slab
Sta. 323+03.96
End Approach Slab
Sta. 323+29.64
Sta. 330+88.42
Sta. 330+88.42
Sta. 330+76.25
Ramp C
Vanes
Curb
Cone
Flare
Taper
Wall
Slope
Ditch
Fence
Gore
Island
Ramp
Lane
Shoulder
Median
Guardrail
Concrete
Asphalt
Pavement
Drainage
Culvert
Manhole
Inlet
Catch Basin
Headwall
Wingwall
Abutment
Pier
Bridge
Overpass
Underpass
Interchange
Right-of-Way
Easement
Boundary
Property
Utility
Electric
Telephone
Gas
Water
Sewer
Storm
Sanitary
Combined
Force Main
Lift Station
Pump
Valve
Meter
Hydrant
Tower
Pole
Guy Wire
Transformer
Conduit
Duct
Cable
Fiber Optic
Signal
Light
Sign
Post
Mast Arm
Span Wire
Loop
Detector
Controller
Cabinet
Pedestal
Junction Box
Handhole
Vault
Splice
Terminal
Connector
Ground
Rod
Bond
Wire
Cable
Fiber
Optic
Signal
Light
Sign
Post
Mast Arm
Span Wire
Loop
Detector
Controller
Cabinet
Pedestal
Junction Box
Handhole
Vault
Splice
Terminal
Connector
Ground
Rod
Bond
Wire
Cable
Fiber
Optic

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Reference Items shown ○ See Sh. No. 72 & 73
For I-675 Plan & Profile, See Sh. No. 69 & 70
For U.S. 35 Plan & Profile, See Sh. No. 85 & 86
For Ramp A Profile, See Sh. No. 97 & 98
For Ramp H Profile, See Sh. No. 102
For Structure No. GRE-675-0576, See Sh. No. 410
For Structure No. GRE-35-0074, See Sh. No. 538
For Sanitary Sewer, See Sh. No. 363-365
For Underdrain Quantities, See Sh. No. 55

Ramp A Sta. 319+00.00 to Sta. 330+76.25
Ramp H Sta. 326+00.00 to Sta. 337+03.00

U.S. 35 INTERCHANGE

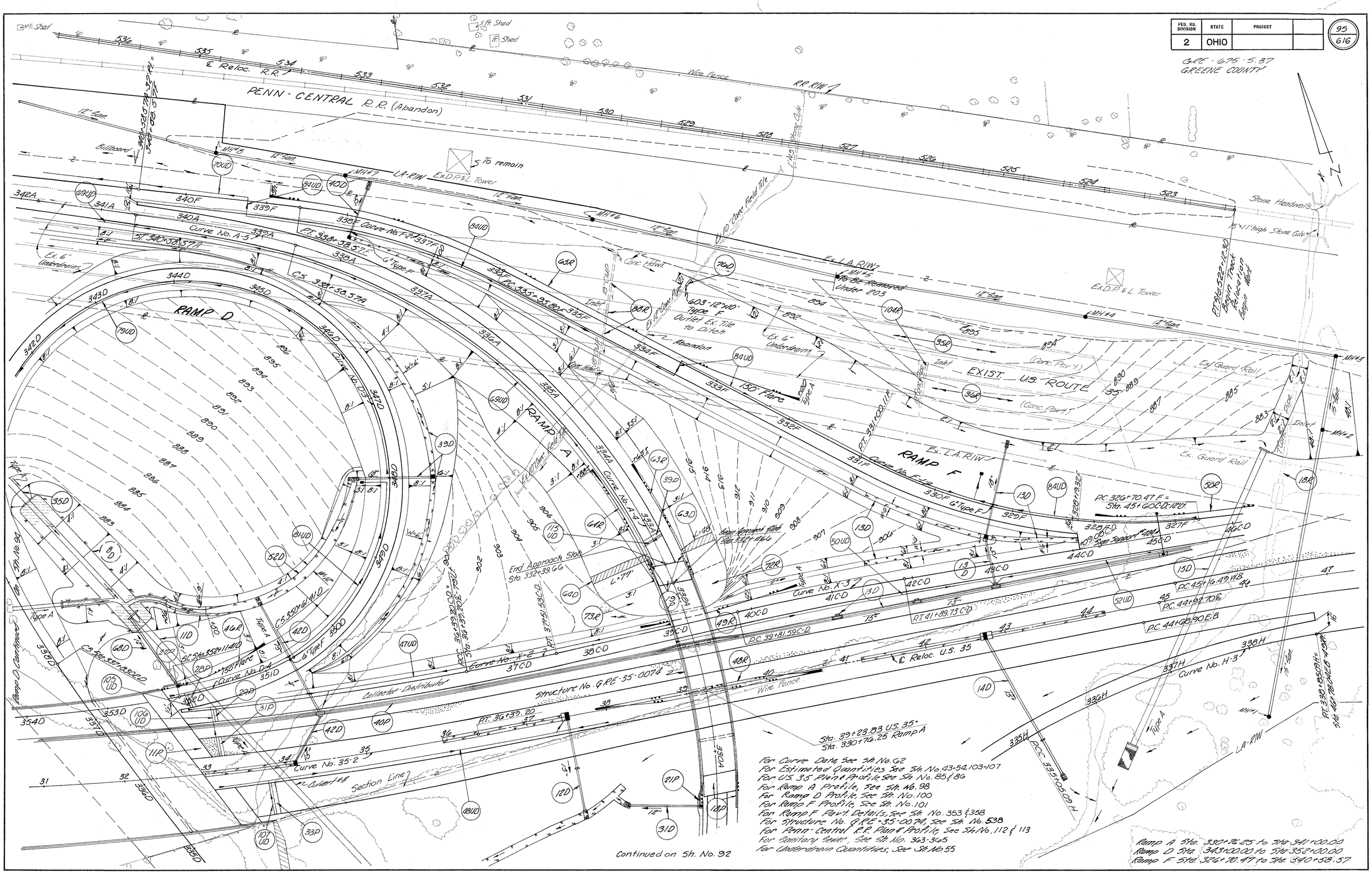
U.S. 35 INTERCHANGE

U.S. 35 INTERCHANGE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

95
616

GRE - 675 - 5.37
GREENE COUNTY



For Curve Data, See Sh. No. 62
For Estimated Quantities See Sh. No. 43-54, 103-107
For U.S. 35 Plan & Profile, See Sh. No. 85 & 86
For Ramp A Profile, See Sh. No. 98
For Ramp D Profile, See Sh. No. 100
For Ramp F Profile, See Sh. No. 101
For Ramp F Pav't. Details, See Sh. No. 353 & 358
For Structure No. GRE-35-0074, See Sh. No. 538
For Penn-Central R.R. Plan & Profile, See Sh. No. 112 & 113
For Sanitary Sewer, See Sh. No. 363-365
For Underdrain Quantities, See Sh. No. 55

Ramp A Sta. 330+76.25 to Sta. 341+00.00
Ramp D Sta. 343+00.00 to Sta. 352+00.00
Ramp F Sta. 326+70.47 to Sta. 340+58.57

U.S. 35 INTERCHANGE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

96
616

GRE-675-5.37
GREENE COUNTY

EXIST. U.S. ROUTE 35

RAMP B

RAMP A

DAYTON-XENIA RD.

WILDONNA DR.

AUGUST LANE

STEDMAN LANE

Ex. L.A. R/W

Ex. R/W

L.A. R/W

Prop. Noise Barrier

Barricade

Curve No. B-2

Curve No. A-1

Curve No. 1-2

Curve No. 2-2

Curve No. 4-3

Curve No. 4-4

Impact Attenuator

Sign Support

Abandon

Plug

Remove

Temporary Ex. R/W (20' Wide - See Sh. No. 39)

Ex. Abandoned Conduit-Ohio Bell

Ex. 12" W.L.

Ex. 8" Gas Line

Ex. 12" V.T. Pipe

Ex. 12" C.I. Pipe

Ex. 8" San.

Ex. 10" San.

Ex. 6" San.

Ex. 4" Force Main

Ex. 3" Force Main

Ex. 2" Force Main

Ex. 8" Storm

Ex. 12" Storm

Ex. 15" Storm

Ex. 18" Storm

Ex. 24" Storm

Ex. 30" Storm

Ex. 36" Storm

Ex. 42" Storm

Ex. 48" Storm

Ex. 54" Storm

Ex. 60" Storm

Ex. 66" Storm

Ex. 72" Storm

Ex. 78" Storm

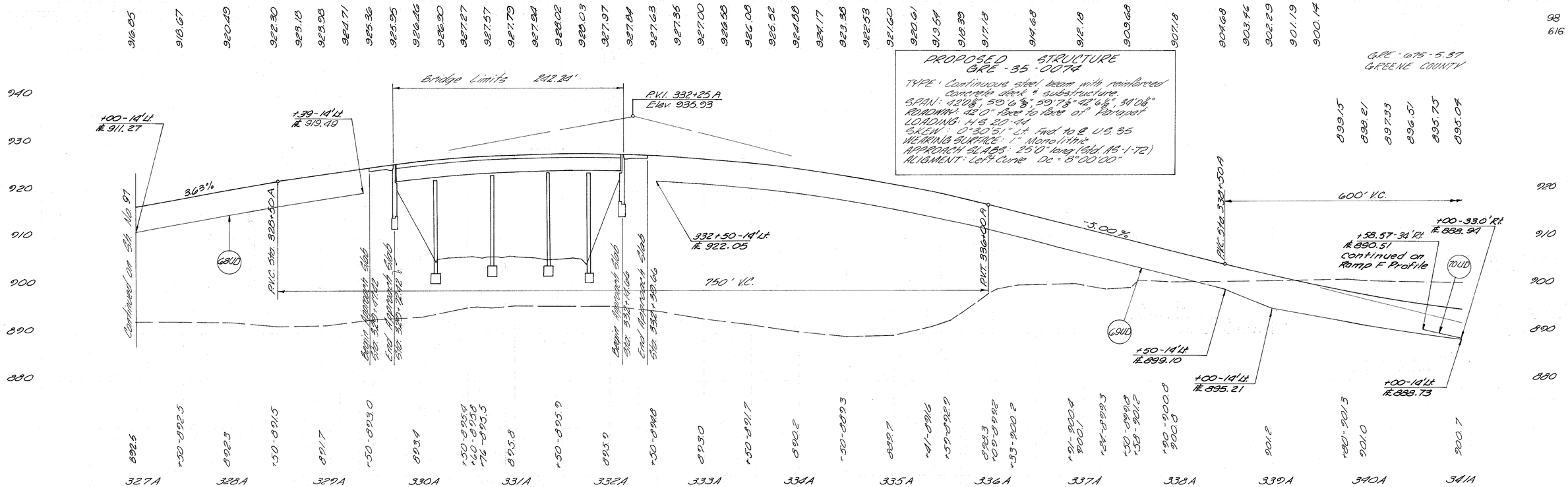
Ex. 84" Storm

Ex. 90" Storm

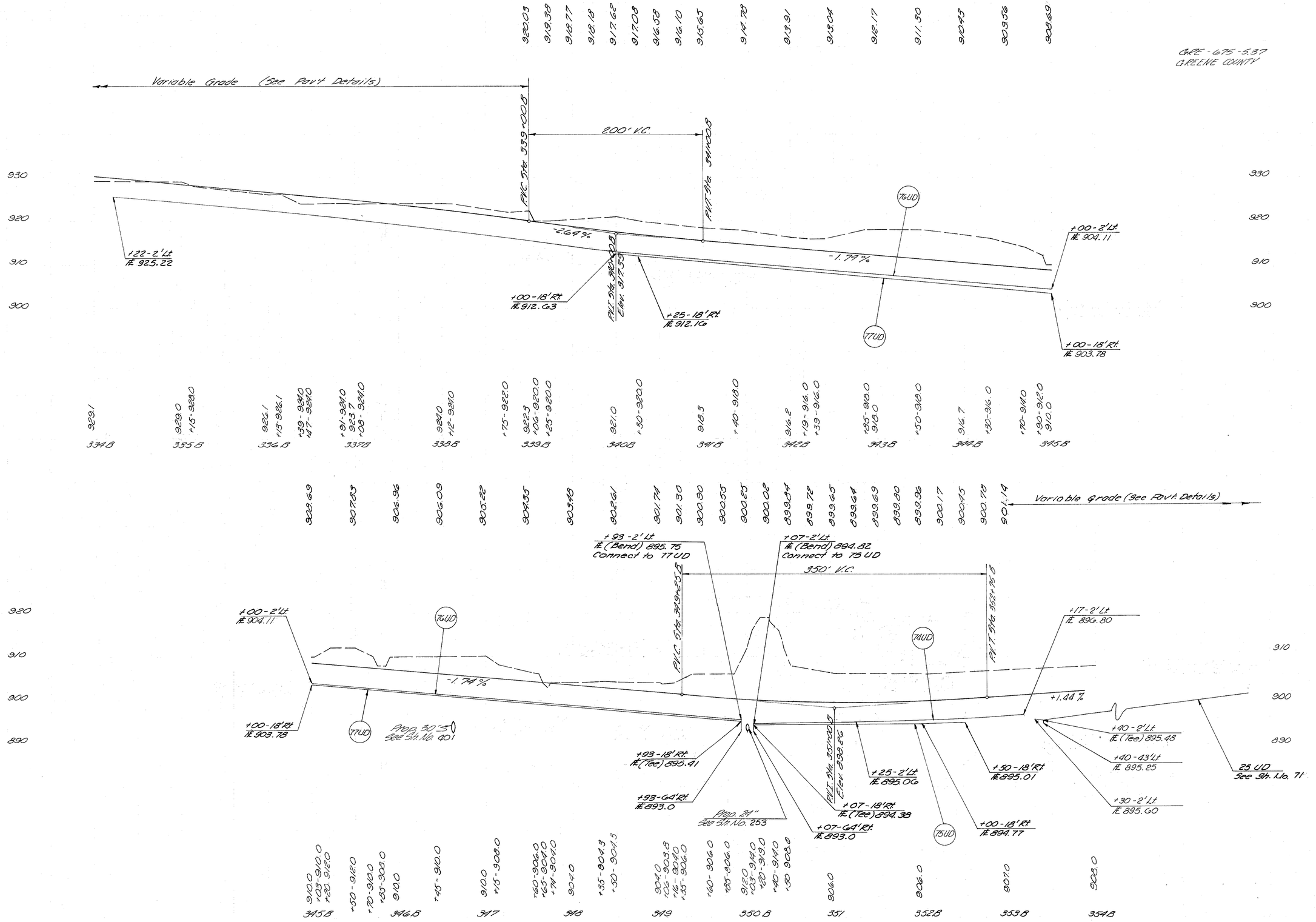
Ex.

GRE - 675 - 5.37
GREENE COUNTY

PROFILE RAMP A STA. 299+00 TO STA. 327+00

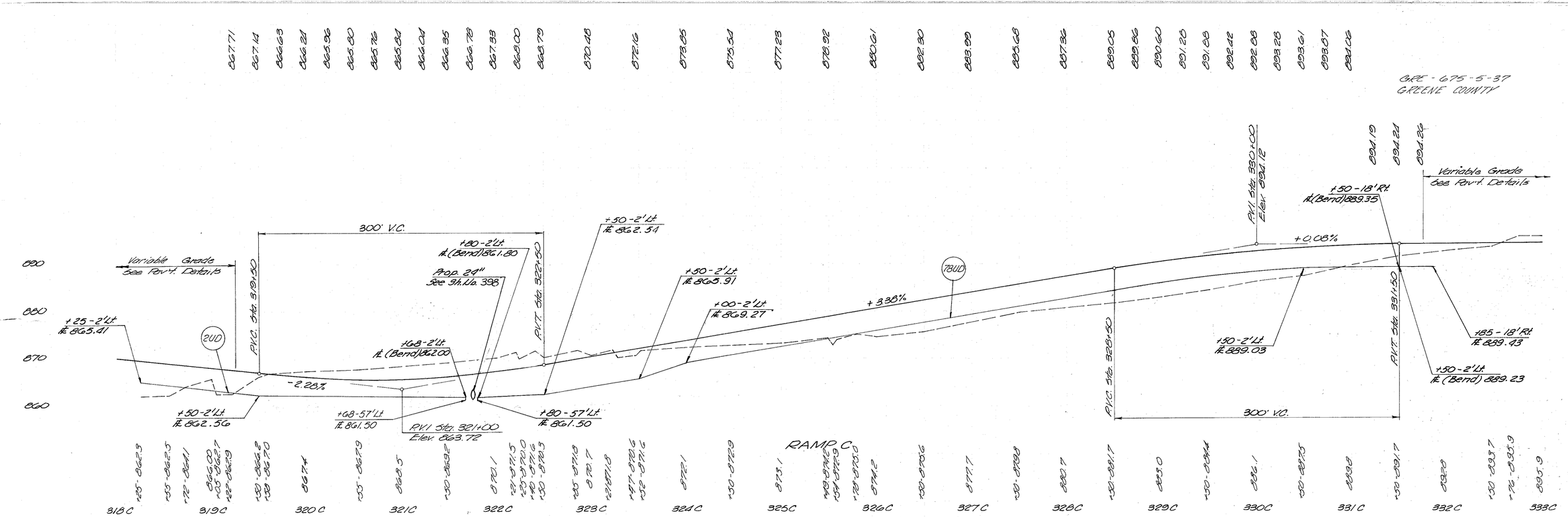

PROPOSED STRUCTURE
GRE-35-0074
TYPE: Continuous steel beam with reinforced concrete deck & substructure.
SPAN: 420'6", 50'6⅜", 50'7⅝", 42'6⅝", 34'0⅜"
ROADWAY: 42'0" face to face of Parapet
LOADING: HS 20-44
SKEW: 0°30'51" Lt. Ahd to ℄ US 35
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: 25'0" long (Std. RS-1-72)
ALIGNMENT: Left Curve Dc = 8°00'00"
GRE-0075-5.37
GREENE COUNTY
Bridge Limits 242.22'
P.V.I. 332+25.A
Elev. 935.93
+00-14' Lt.
℄ 911.27
+39-14' Lt.
℄ 919.49
3.63%
Continuous on Sta. No. 2.97
68UD
P.V.C. Sta. 328+50.A
Apprx. Approach Slab
Sta. 329+17.00
End Approach Slab
Sta. 329+42.22
Apprx. Approach Slab
Sta. 333+11.00
End Approach Slab
Sta. 332+80.66
332+50-14' Lt.
℄ 922.05
750' V.C.
P.V.T. 336+00.A
-5.00 %
600' V.C.
P.V.C. Sta. 338+50.A
+00-33.0' Rt.
℄ 888.94
+58.57-34' Rt.
℄ 890.51
Continued on
Ramp F Profile
70UD
69UD
+50-14' Lt.
℄ 899.10
+00-14' Lt.
℄ 895.21
+00-14' Lt.
℄ 888.73
899.15 899.21 897.33 896.51 895.75 895.04
916.85 918.67 920.49 922.30 923.18 923.98 924.71 925.36 925.95 926.46 926.90 927.27 927.57 927.79 927.94 928.02 928.03 927.97 927.84 927.63 927.35 927.00 926.58 926.08 925.52 924.88 924.17 923.38 922.53 921.60 920.61 919.54 918.39 917.18 914.68 912.18 909.68 907.18 904.68 903.46 902.29 901.19 900.14
327A 328A 329A 330A 331A 332A 333A 334A 335A 336A 337A 338A 339A 340A 341A
UNDERDRAIN ℄ ELEVATIONS
70UD { 344+90 A - 23.2' Rt. ℄ 882.75; 344+81 A - 23.4' Rt. (Wye) ℄ 882.60; 345+00 A - 53.5' Rt. (CB) ℄ℰG" 882.41
71UD { 345+00 A - 23.0' Rt. ℄ 883.80; 345+33 A - 22.1' Rt. (Wye) ℄ 883.65; 345+17 A - 52.5' Rt. (CB) ℄ℰG" 883.25
PROFILE RAMP A STA. 327+00 To STA. 354+00
600' V.C.
+00-33.0' Rt.
℄ 888.94
+25-14' Lt.
℄ 885.79
+70-14' Lt.
℄ (Bend) 885.50
P.V.T. Sta. 344+50.A
+75-74' Lt.
℄ 886.00
+75-14' Lt.
℄ 886.53
+50-19.2' Rt.
℄ (Bend) 887.00
+50-14' Lt.
℄ 887.89
P.V.C. Sta. 349+00.A
300' V.C.
Variable Grade
See Prof't Detail
+50-14' Rt.
℄ 889.00
+75-14' Rt.
℄ 892.21
P.V.T. Sta. 352+00.A
+0.99 %
+1.34%
Prop. 21"
See Sh. No. 378 & 379
Prop. Type A
See Sh. No. 379
Prop. 15"
See Sh. No. 378 & 379
+00-14' Lt.
℄ 888.73
P.V.I. 341+50.A
Elev. 889.25
+75-26.1' Rt.
℄ 882.81
+70-56' Lt.
℄ 885.0
+50-14' Lt.
℄ (Tee) 886.90
+15-20.1' Rt.
℄ 884.22
+50-16' Rt.
℄ 887.39
+90-14' Rt.
℄ 892.40
P.V.T. 350+50.A
Elev. 894.13
900.7 900.1 899.5 899.7 899.6 899.4 899.5 899.3 899.1 899.0 900.0 900.1 900.2 900.3 900.4 900.5 900.7 900.9 901.1 901.2 901.4 901.5 901.7 901.9 902.0 902.2 902.3 902.5 902.7 902.9 903.1 903.2 903.4 903.5 903.7 903.8 904.0 904.2 904.3 904.5 904.6 904.8 904.9 905.1 905.3 905.4 905.6 905.8 905.9 906.1 906.3 906.4 906.6 906.8 906.9 907.1 907.3 907.4 907.6 907.8 907.9 908.1 908.3 908.4 908.6 908.8 908.9 909.1 909.3 909.4 909.6 909.8 909.9 910.1 910.3 910.4 910.6 910.8 910.9

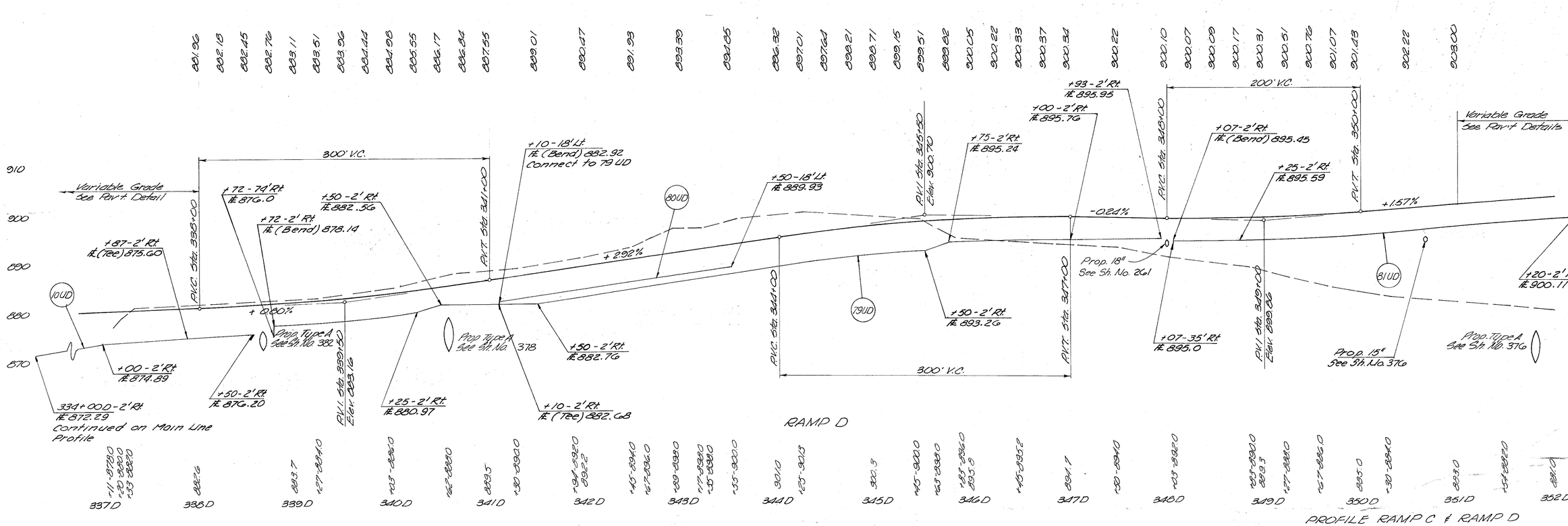
GRE - 6.75 - 5.37
GREENE COUNTY

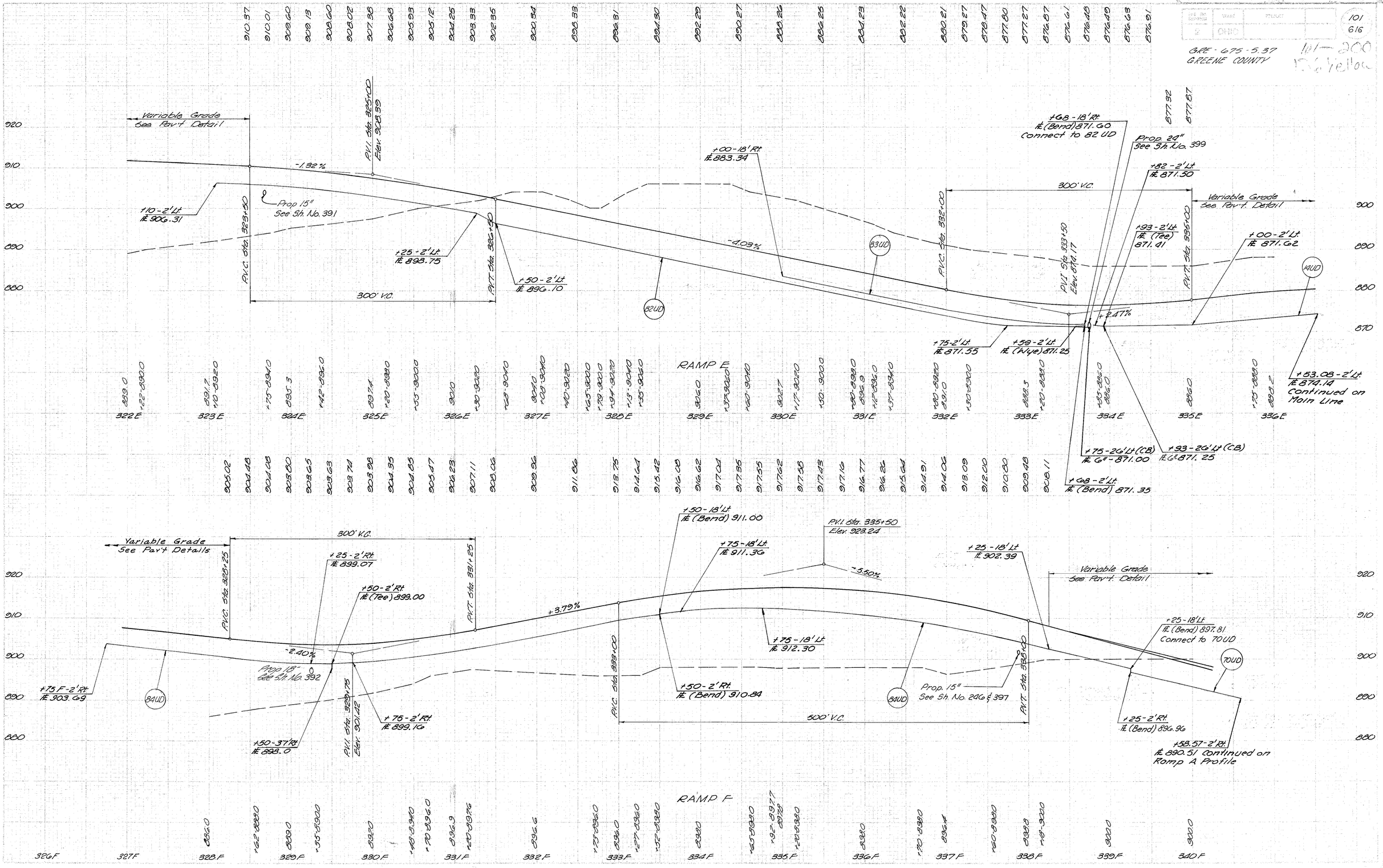


RAMP B STA. 337+00 To STA. 354+00

GRE - 675 - 5 - 37
GREENE COUNTY

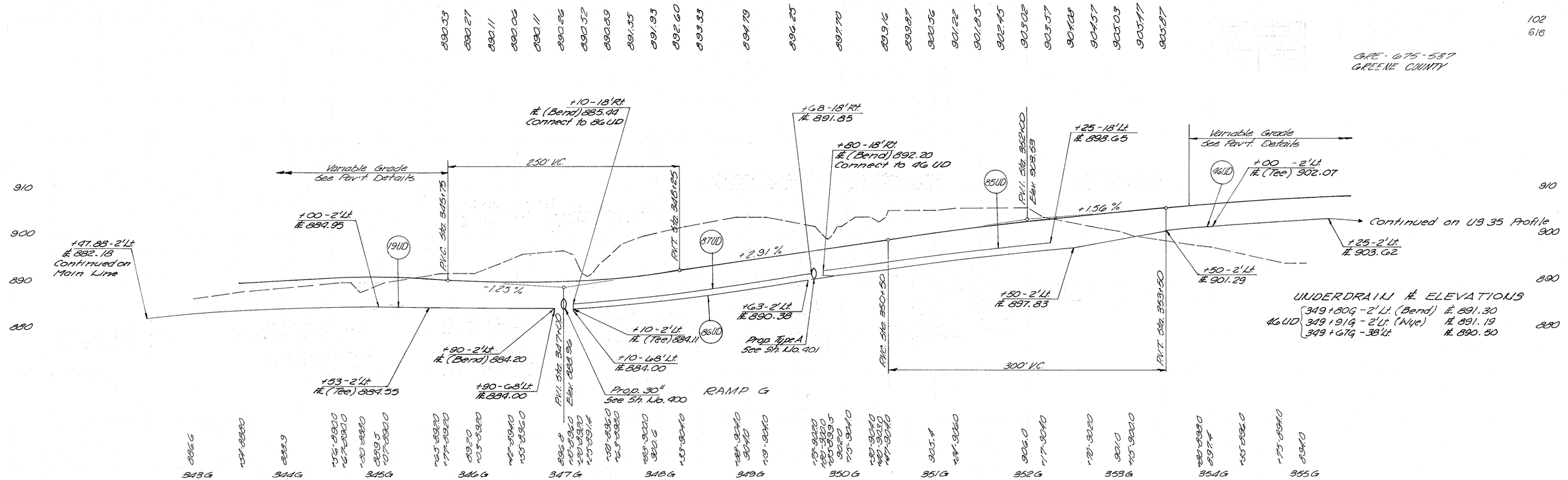


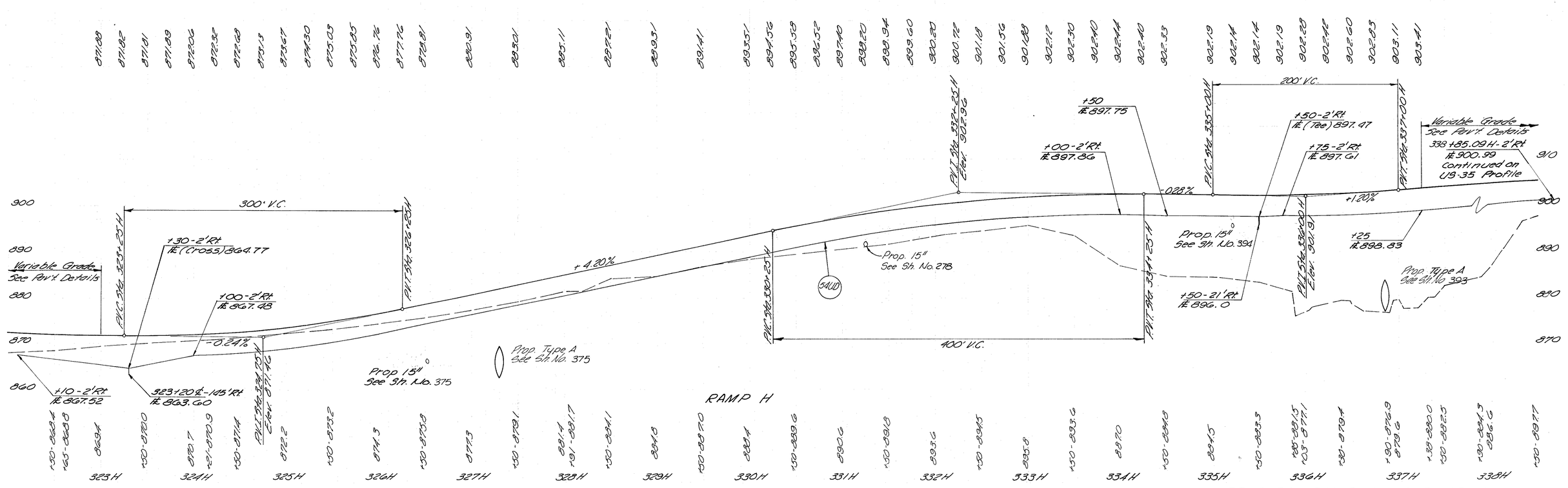




PROFILES RAMP E & RAMP F

GRE-675-537
GREENE COUNTY





PROFILES - RAMP G & RAMP H

ESTIMATED QUANTITIES

DRAINAGE

QUANTITY CALCULATIONS
BY H.F. DATE 10-18-71
CHKD. D.P. DATE 4-3-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 2/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37
GREENE COUNTY

Note:
All Stations listed below refer to US-35 except where otherwise noted.

REF. NO.	STATION TO STATION	SIDE	Bends & Branches: Tee **	Bends 12"x15°	Bends 12"x20°	Bends 24"x20°	Bends 15"x10°	Bends 15"x15°	Bends 15"x20°	Bends 15"x25°	Bends 18"x15°	202 Portions of Existing Structures Removed (Lump)	203 Excavation (Cu.Yd.)	203 Embankment (Cu.Yd.)	601 Rock* Channel Protection Type A (Cu.Yd.)	601 Rock* Channel Protection Type B (Cu.Yd.)	601 Riprap using 6" Reinf. Conc. Slab (Sq.Yd.)	602 Masonry (Cu.Yd.)
	DRAINAGE US-35																	
1 D	1092+03 - 1096+25	Rt.														2		0.39
2 D	1102+00	Rt.														2		0.27
3 D	1106+82 to 6+71	Lt.&Rt.	2													20	6	3.03
4 D	4+20	Lt.														2		0.27
5 D	7+05	Lt.		1														
6 D	6+40 to 9+50	℄, Rt.								2						2		0.27
7 D	14+50	Rt.														3		0.27
8 D	19+00	Rt.														3		0.27
9 D	24+00	Lt.						1	1							4		0.27
10 D	26+78 to 28+35	Lt.&Rt.							2							3		0.27
11 D	33+86	Lt.&Rt.											1465					12.42
12 D	37+50	Rt.							2							3		0.27
13 D	41+00 - 329+25F	Lt.									2					2		0.33
14 D	42+75	Rt.								2			15			2		0.27
15 D	45+42	Lt.&Rt.												5	78		10	8.80
16 D	45+65 WB	Lt.								2						2		0.27
17 D	49+00	Rt.														5		0.27
18 D	55+93	Rt.						1	1							2		0.27
19 D	58+05	Lt.&Rt.				1										5		1.38
20 D	62+50 to 67+00	℄, Rt.														2		0.27
21 D	73+18	Lt.&Rt.										Lump				21	6	2.86
22 D	73+60	Rt.														4		0.27
23 D	Not Used																	
24 D	321+74C	Lt.&Rt.																0.46
25 D	308+48A - 309+62A	Rt.													19		5	3.56
26 D	310+27A	Lt.&Rt.														3		0.33
27 D	333+75E	Lt.&Rt.														3		0.46
28 D	320+67A	Lt.		1												2		0.21
29 D	326+00H - 326+67H	Lt.&Rt.																
30 D	325+06.5A - 327+29.5H	Lt.&Rt.	1												50		9	14.73
31 D	329+36A	Lt.		1												2		0.21
32 D	346+62B - 349+70G	Lt.&Rt.														3		1.52
33 D	350+00B	Lt.&Rt.														2		0.46
34 D	347+00 I-675 - 347+00G	Lt.&Rt.														6		0.60
35 D	340+57D	Lt.&Rt.																10.56
36 D	Not Used																	
37 D	344+89.5A to 345+17A	Lt.&Rt.																
38 D	42+06.5 D.X.Rd.	Lt.&Rt.																6.66
39 D	348+00D	Lt.&Rt.														4		0.35
40 D	338+00A	Rt.														3		0.27
41 D	350+75 I-675	Rt.														2		0.27
42 D	34+10 - 350+67D	Lt.&Rt.						2								3		0.27
43 D	Not Used																	
44 D	295+50±A	Rt.														26		
45 D	35+35 - 38+00	Rt.																
46 D	321+50C - 331+00C	Lt.														1227		
47 D	4+10± US-35	Rt.																
48 D	330+30 - 332+83 I-675	Rt.															935	
49 D	349+61G - 351+00G	Lt.																
50 D	347+03G - 349+56G	Lt.																
51 D	348+50B - 349+98B	Rt.																
52 D	348+02D - 352+06D	Rt.																
53 D	6+18± US-35	Rt.																
54 D	353+54B - 362+00 I-675	Lt.																
55 D	See Sheet 104																	
56 D	See Sheet 104																	
57 D	See Sheet 104																	
58 D	331+25H	Lt.&Rt.														3		0.27
59 D	320+73±A	Rt.																
60 D	324+13±A	Rt.																
61 D	324+17±A	Lt.																
62 D	329+35±A	Rt.																
63 D	332+50±A	Rt.																
64 D	332+62±A	Lt.																
65 D	332+09±B	Lt.																
	SUB-TOTALS											Lump	1480	5	147	1378	971	74.18
TOTALS	TO GENERAL SUMMARY											Lump			147	1378	971	74.2

603 (Lin.Ft.) — part 1

REF. NO.	Type B 12"	Type C 12"	Type F 12"	Type B 15"	Type A	Type C 15"	Type F 15"	Type B 18"	Type C 18"	Type F 18"	Type B 21"	Type C 21"	Type B 24"	Type C 24"	Type A	Type B 30"
1 D	25	80		55		5			250			101				
2 D				90												
3 D																
4 D				137												
5 D			76													
6 D				100			51									
7 D				142												
8 D				178												
9 D				110			51									
10 D				176			58									
11 D																
12 D				58			59									
13 D				261				58		56						
14 D				138			60									
15 D					394											
16 D				44			82									
17 D				110												
18 D				62			59									
19 D														34		
20 D				88												
21 D																
22 D				80												
23 D																
24 D													120	16		
25 D																
26 D								115								
27 D													84	16		
28 D			82													
29 D				115		16										
30 D						35										
31 D			99													
32 D															249	
33 D													98			
34 D				87										20		120
35 D																
36 D																
37 D											116	16				
38 D																
39 D								91								
40 D				64												
41 D				73												
42 D				166			59									
43 D																
44 D																
45 D																
46 D																
47 D																
48 D																
49 D																
50 D																
51 D																
52 D																
53 D			59													
54 D																
55 D																
56 D																
57 D																
58 D				84												
59 D – 65 D																
SUB-TOTALS	25	80	316	2418	394	56	479	264	250	56	116	117	302	86	249	120
TOTALS	25	80	316	2418	394	56	479	264	250	56	116	117	302	86	249	120

603 (Lin.Ft.) — part 2

REF. NO.	Type C 30"	Type C 42"	Type D	Type B 48"	Type C 48"	Type A 72"	Type A 72"	Type A 71"x47"	Type A	Type A	Type A	Type A	Type B 48"	Type C 54"	Type C 60"	Type C 60"
3 D				281	196								109	268	217	40
11 D										485						
19 D	42	249														
21 D								30								
25 D			110													
30 D									278			169				
35 D											169					
38 D						251	312									
SUB-TOTALS	42	249	110	281	196	251	312	30	278	485	169	169	109	268	217	40
TOTALS	42	249	110	281	196	251	312	30	278	485	169	169	109	268	217	40

(All other rows have no entries in these columns.)

Vertical notes written in the 603 columns:
- Type B 48": 706.02 (D1750) or 707.13
- Type C 48": 706.02 or 707.13
- Type B 48" (second): or 707.13 / 706.02
- Type C 54": or 707.14 / 706.02
- Type C 60": or 707.14 / 706.02
- Type C 60" (second): or 707.14 Radius Pipe as per plan / 706.02
- Type F 12": 707.05
- Type A (after Type B 15"): 84"-706.02 (D2250) or 96"-707.07
- Type F 15": 707.05
- Type F 18": 707.05
- Type A (after Type C 24"): 30" 706.02 (D1250) or 36" 707.05
- Type D: 54"-706.02 or 60"-707.01
- Type A 72": 706.02
- Type A 72" (second): 706.02; 3000 D Load under railroad as per plan
- Type A 71"x47": 707.05 (0.138")
- Type A: 84"-706.02 (D3000) or 114"-707.07 (0.168")
- Type A: 84"-706.02 (D2750) or 108"-707.07 (0.138")
- Type A: 84"-706.02 or 102"-707.07
- Type A: 84"-706.02 (D1250) or 114"-707.07

604 / 660 / See Sheet

REF. NO.	604 Catch Basin No.4 (Ea.)	No.5 (Ea.)	No.6 (Ea.)	No.8 (Ea.)	5A (Ea.)	Median Inlet No.I-3B (Ea.)	MH No.3 (Ea.)	MH No.5 (Ea.)	660 Sodding (Sq.Yd.)	660 Reinforced Sodding (Sq.Yd.)	SEE SHEET NO.
1 D			4	1			2		103		81,82,384
2 D				1					103		82,209
3 D					4				446		82,83,386
4 D				1					103		83,388
5 D			1								83,389
6 D				1					205		83,389
7 D				1					103		83,84,390
8 D				1					103		84,390
9 D				1		1			103		84,218
10 D				1		1			103		84,85,391
11 D									13		85,376
12 D				1					103		85,391
13 D		1				3			274		85,86,392
14 D				1					203		86,394
15 D									19		86,393
16 D						1			3		86,223
17 D				1					103		86,225
18 D		1							3		87,227
19 D					1				111		87,395
20 D				1					299		87,231
21 D									19		88,394
22 D				1					339		88,394
23 D											
24 D		2							241		90,398
25 D									14		91,396
26 D		1							203		91,396
27 D		2							351		91,398
28 D			1						3		92,381
29 D		2							100		92,375
30 D		1							111		92,375
31 D			1						3		92,396
32 D									11		94,400
33 D		1							158		94,253
34 D	2					1			372		94,399
35 D									10		94,378
36 D											
37 D		2							200		94,378,379
38 D								1	9		94,96,379
39 D		1							204		95,261
40 D		1							69		95,246
41 D			1						5		96,378,379
42 D				1		1			69		85,376,378
43 D											
44 D											83
45 D									297		85,92
46 D											90,91
47 D										45	83
48 D									124		92
49 D									125		94
50 D									247		94
51 D									109		94
52 D									399		95
53 D			1								83,387
54 D									1176		96
55 D											
56 D											
57 D											
58 D		1							103		92,278
59 D										64	92
60 D										70	92
61 D										98	92
62 D										69	92
63 D										43	95
64 D										72	95
65 D										27	83
SUB-TOTALS	2	16	9	14	5	8	2	1	7574	488	
TOTALS	2	16	9	14	5	8	2	1	7574	488	

Vertical note in 5A column: With Type B Grate

* With Bedding
** See Drainage Detail Sheets for sizes

C. B. CO., NO. 375 24953

DRAINAGE

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES

DRAINAGE

Note:
All Stations listed below refer to US-35 except where otherwise noted

QUANTITY CALCULATIONS
BY. H.F. DATE 10-19-71
CHKD. DP DATE 4-3-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 2/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

104
616

GRE-675-5.37
GREENE COUNTY

See Sht. No. 373

REF. NO.	STATION TO STATION	SIDE	Bends & Branches 6"15° Bend	12"22½° Bend	12"45° Bend	601 Rock Channel Protection Type B Cu. Yd.	601 Rock Channel Protection As Per Plan Cu. Yd.	602 Masonry Cu. Yd.	603 Type D 15" Lin. Ft.	603 Type F 12" Lin. Ft.	603 Type C 12" Lin. Ft.	603 Type C 15" Lin. Ft.	604 Manhole MH-1 Each	604 Catch Basin, No. 6 Each	Catch Basin 2-28 Each	601 Rock Channel Protection Type C As Per Plan Cu. Yd.	660 Reinforced Sodding Sq. Yd.	660 Sodding Sq. Yd.	Item Special Seeding & Nylon Fiber Matting Sq. Yd.	SEE SHEET NO.
	DRAINAGE					With Bedding	With Bedding									With Bedding				
55D	353+47 - 356+35 I-675	Lt.		2				0.21		27					1	9			193	96,406N
56D	357+15 - 359+90 I-675	Lt.						0.21		28					1	5			202	96,406N
57D	361+27 - 363+30 I-675	Lt.			2			0.21		37					1	5			151	96,406N
66D	27+67± US 35	Lt.															72			84
67D	323 ± 21 ± E	Lt.															63			85
68D	352 ± 10 ± D	Rt.		1							108			1						95,376
69D	33+82 ± US 35	Rt.															107			86
70D	35+23± US 35	Lt.															96			87
71D	56+43± US 35	Rt.															58			87
72D	58+56± US 35	Lt.															71			87
73D	59+17± US 35	Rt.															90			87
74D	Not Used																			
75D	322+12H to 326+45 H	Rt.																552		90
76D	333+86 ± F	Rt.								10										95
77D	0+23 ± US 35	Lt.							57											93
78D	58+79 ± US 35	Lt.															18			87
79D	59+00 ± US 35	Rt.															18			87
80D	343+22± Ramp B	Lt.							42											94
81D	343+38 Ramp B	Lt.				14	4													94
82D	23+38 to 24+15	Rt. - Honey Locust Lane						0.21			78				2			3		96,406
83D	6'83 Ped. Ramp - Rt 20' Honey Locust	Lt. & Rt.				3	2	0.27			66	32	1	1	2			3	41	25,96
84D	Not Used																			
85D	12'32 Pedestrian Ramp	Rt.																12		95,96,502
	SUB-TOTALS					17	6	1.11	99	102	108	144	32	1	2	7		19	543	579	587
TOTALS	TO GENERAL SUMMARY					17	6	1.1	99	102	108	144	32	1	2	7		19	543	579	587

707.05

C. B. CO., NO. 375 24963

ESTIMATED QUANTITIES

WORKSHEET CALCULATIONS
BY DP DATE 1-14-71
CHKD. HF DATE 4-3-72
KING AND GAVARIS CONSULTING ENGINEERS
Revised: I.E.H. 3/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

105
616

GRE-675-5.37
GREENE COUNTY

Note: All Stations Listed Below Refer To US-35 Except Where Otherwise Noted.

REF. NO.	STATION TO STATION	SIDE	202										606					SPECIAL	SEE SHEET NO.
			Pipe Removed 24" & Under	Pipe Removed Over 24"	Inlet Removed	Inlet Abandoned	Exist. Structure Removed	Ex. Conc. Pav't. Removed	El. Curb Ftr. Removed	Ex. Curb Removed	Ex. Conc. Median Removed	Septic Tank Removed	Guard Rail Type 5	Guardrail Type 5 Barrier Design	Anchor Assembly	Anchor Assembly Barrier Design	Bridge Terminal Assembly Type A	Drilled Well Abandoned	
			Lin. Ft.	Lin. Ft.	Each	Each	Lump	Sq. Yd.	Lin. Ft.	Lin. Ft.	Sq. Yd.	Each	Lin. Ft.	Lin. Ft.	Each	Each	Each	Each	
	ROADWAY																		
1R	1100+25	Lt.		174															82
2R	2+60	Rt.										1							83
3R	2+70	Rt.										1							83
4R	3+03	Rt.																1	83
5R	3+87	Lt.																1	83
6R	4+05	Lt.										1							83
7R	4+55	Lt.																1	83
8R	4+70	Rt.										2							83
9R	5+10	Lt.			1														83
10R	5+80	Lt.										1							83
11R	6+40	Lt.										2							83
12R	6+73	Lt.																1	83
13R	7+42	Lt.										1							83
14R	7+47	Lt.																1	83
15R	10+85	Lt.										1							84
16R	22+00	Lt.																1	84
17R	22+05	Lt.					Lump												84
18R	46+80	Lt.					Lump												86
19R	51+85	Lt.				1													86
20R	55+02	Lt.				1													87
21R	57+20 - 59+20	Lt. & Rt.		232															87
22R	62+00	C				1													87
23R	67+07	C				1													87
24R	72+34	C				1													88
25R	1101+00	Lt. & Rt.	55		1														82
26R	1090+85.78 - 0+31	Lt.						6460											81,82,83
27R	1087+24.57 - 13+63	Rt. & Lt.						9011											81,82,83,93
28R	5+10 ± - 10+00 ±	Lt.						1371											93
29R	13+63 - 27+25	Lt.						0561											93,94
30R	13+63 - 21+50	Lt.								1510	084								93,94
31R	21+50	Lt.									22								94
32R	10+00 - 21+00	Lt.							100										94
33R	10+70 - 21+60	Lt.							183										94
34R	22+40 - 29+20	Lt.								170									94
35R	27+25 - 51+00	Lt.						6112											86,94,95
36R	27+25 - 40+00	Lt.						5573											86,94,95
37R	56+22 - 57+20	Rt. & Lt.						1002											87
38R	57+51 - 58+50	Rt. & Lt.						0866											87
39R	70+50 - 76+00	Rt. & Lt.						1867											88
40R	1100+35 ± - Bridge	Rt.											987.5		1		1		82,83
41R	4+40 ± - Bridge	Lt.											37.5			1	1		83
42R	Bridge - 7+11 ±	Rt.											100.0			1	1		83
43R	Bridge - 8+30 ±	Lt.											125.0		1		1		83
44R	26+27 ± - Bridge	Lt.											125.0			1	1		84
45R	Bridge - 33+33.5 ±	Lt.											137.5		1		1		85
46R	350+84.05 ± - Bridge	Rt.											125.0		1		1		85
47R	Bridge - 39+07 ±	Rt.											637.5			1	1		85
48R	37+64 - 40+71 ±	Med.											475.0			2			85
49R	38+48.40 - 40+50.00	Lt.											175.0		1	1			85
50R	327+00 ± - Bridge	Lt.											1175.0			1	1		86,87
51R	53+00.5 MB - Bridge 1B	Med.											237.5	75.0		1	1		86,87,355
52R	54+07 ± - Bridge	Rt.											125.0		1		1		86,87
53R	Bridge - 55+80 ±	Lt.											137.5		1		1		87
54R	Bridge - 60+38 ±	Med.											125.0	37.5		1	1		87
55R	Bridge - 62+80 ±	Rt.											350.0			1	1		87
56R	320+00 ± - 324+00 ±	Rt.											562.5		1	1			91
57R	320+47 ± - Bridge	Rt.											137.5		1		1		92
58R	319+35 ± - Bridge	Lt.											125.0		1		1		92
59R	Bridge - Bridge	Rt.											572.0				2		92
60R	Bridge - Bridge	Lt.											527.0				2		92
61R	328+08 ± - 330+30 ±	Rt.											100.0	100.0	1		1		91
62R	333+47.11 - 338+02.4 ±	Rt.											812.5		1	1			92
63R	Bridge - 339+65.12 ±	Rt.											137.5			1	1		95
64R	Bridge - 333+88.41 ±	Lt.											137.5			1	1		95
65R	332+00 ± - 338+97 ±	Rt.											662.5		1	1			95
	SUB-TOTALS		55	406	2	5	Lump	40,042	373	1680	1006	10	8449.0	212.5	13	13	4	22	6
	TOTALS TO GENERAL SUMMARY		55	406	2	5	Lump	40,042	373	1680	1006	10	8449	212.5	13	13	4	22	6

C. & CO., NO. 375 24885

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
BY DP DATE 11-16-71
CHKD. HE DATE 4-4-72
KING AND GAVARIS CONSULTING ENGINEERS
Revised: I.E.H. 3/179

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

106/616

GRE-675-5.37
GREENE COUNTY

Note: All Stations Listed Below Refer To US-35 Except Where Otherwise Noted

REF. NO.	STATION TO STATION	SIDE	202 Pavement Removed Sq. Ft.	202 Pipe Removed 24" Under Lin. Ft.	202 Inlet Removed Each	202 Guard Cable Removed Sq. Yd.	202 Manhole Removed Each	203 Fill Cistern Cu. Yd.	606 Guard Rail Type 5 Lin. Ft.	606 Guard Rail Type 5 Barrier Design Lin. Ft.	606 Anchor Assembly Each	606 Anchor Assembly Barrier Design Each	606 Bridge Terminal Assembly Rt. Rail Each	606 Bridge Terminal Assembly Type 4 Each	608 4" Conc. Walk Sq. Ft.	609 Grading & Jute Matting Sq. Yd.	650 Roadside Cleanup M Sq. Ft.	607 Fence Type CL 6Ft. High Lin. Ft.	SEE SHEET NO.
	ROADWAY																		
66R	20 + 31	Rt.														401			85
67R	27 + 71	Lt.														234			84,85
68R	33 + 54	Rt.														428			85
69R	37 + 96	Lt.														331			85
70R	320 + 62A	Rt.														354			85
71R	320 + 56A	Lt.														400			85
72R	332 + 21A	Rt.														218			85
73R	332 + 32A	Lt.														260			85
74R	54 + 40	Rt.														254			87
75R	55 + 05	Lt.														205			87
76R	58 + 68	Rt.														305			87
77R	58 + 26	Lt.														340			87
78R	321 + 04A	Rt.														368			92
79R	320 + 92A	Lt.														322			92
80R	324 + 08A	Rt.									Type A	Type T				480			92
81R	324 + 19A	Lt.														533			92
82R	2 + 20	Rt.	372																83
83R	1105+70 - 4+15	Lt.															45		82,93
84R	0+80 - 17+70	Lt.															48		93,94,96
85R	350+57CD± - 351+91CD	Lt.							112.5			2							96,22
86R	351+18CD± - 351+91CD	Lt.							50.0			2							96,22
87R	36 + 70	Lt.		33															87
88R	330 + 55E	Rt. & Lt.		150	1														95
89R	347 + 88A - 350+53A	Lt.							237.5		1	1							94,96
90R	348+00CD - 355+25CD	Rt.							1125	137.5			1	2					96,22
91R	357+94.7 G75-360+56.7 G75	℄							425.0				2						71,96
92R	Not Used																		
93R	348+25.7 G75-46+50 DX	Rt. & Lt.				1792													96
94R	357+23 I-675	Lt.		40															96
95R	2 + 48	Rt.						4											93
96R	2 + 86	Rt.						4											93
97R	5 + 48	Lt.						4											93
98R	5 + 90	Rt.														201			93
99R	6 + 86	Lt.														188			93
100R	349 + 00B	Lt.			1														93
101R	347 + 35B	Rt.			2														94
102R	340 + 22B	Rt.			1														94
103R	345 + 40A	Lt.			1														94
104R	330 + 75F	Rt.			1														95
105R	339+60B - 337+20B	Lt.			3														93
106R	0 + 30	Lt.							25.0										83
107R	350+30 C	Lt.					1												93
108R	348+30A - 348+72B	Lt.							37.5										93
109R	19+32 Honey Locust	Lt.							25.0										96
110R	18+60 - 15+41.5	Med.							75.0	62.5		1	1						83,84
111R	207+00M - 208+74.5	Rt.							137.5		1	1							83,84
112R	14+53.3 - 16+16	Med.							75.0	62.5		1	1						84
113R	354+30.4 - 23+47.85 B5	Lt.							137.5		1	1							84
114R	344+10A - 332+65 C	Rt.							137.5		1	1							91
115R	344+00M - 345+79.4	Lt.							137.5		1	1							91
116R	Bridge Mod. 355+23.6	Lt.							262.5		1		1						96,24
117R	356+87.44 - Bridge Mod.	Rt.							175.0		1		1						94,96,24
	Pedestrian Ramp																		
118R	5+69.68 - 7+89.5	Rt. & Lt.													1926				25,96
119R	11+93.5 - 13+47.20	Rt. & Lt.													1365				25,96
120R	Not Used																		
121R	12+29.50 - 13+10	Rt.																80.5	25,96
	SUB-TOTALS		372	223	10	1792	1	12	3175	262.5	7	11	5	2	3291	6054	93	80.5	
TOTALS	TO GENERAL SUMMARY		372	223	10	1792	1	12	3175	262.5	7	11	5	2	3291	6054	93	81	

This quantity carried to Sht. No. 41

C. B. CO., NO. 375 24883

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES

Quantity Calculations
by D.P. date 5-13-71
chkd R.L.P. date 5-21-71
KING and GAVARIS
Consulting Engineers
Revised: D.H.S. 3-79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

107
616

GRE-675-5.37
GREENE COUNTY

See Sht. No. 17 for modification

See Sht. No. 22

REF. NO.	STATION TO STATION	SIDE	301 6" Bit. Aggregate Base Cu.Yd.	304 6" Aggregate Base Cu.Yd.	304 8" Aggregate Base Cu.Yd.	310 6" Type II Cu.Yd.	402 1½" Asphalt Concrete Cu.Yd.	404 1" Asphalt Concrete Cu.Yd.	408 Prime Coat Gal.	409 Seal Coat Bituminous Material Gal.	409 Seal Coat Cover Aggregate Cu.Yd.	Special Pressure Relief Joint Lin.Ft.	609 Concrete Curb Type G Lin.Ft.	609 Concrete Curb Type G Modified Lin.Ft.	611 Approach Slabs T=15" Sq.Yd.	612 4" Concrete Median as per plan Sq.Yd.	622 Concrete Barrier Type B Lin.Ft.	622 Concrete Barrier Type B Mod. Lin.Ft.	SEE SHEET NO.
	Pavement																		
	U.S. -35																		
1P	1092+90 - 1099+00	Rt.												610					81,82
2P	4+28.35 - 4+53.35	Rt.				21.9									131.2				83
3P	4+28.35 - 4+53.35	Lt.				26.0									156.2				83
4P	6+33.90 - 6+58.90	Rt.				21.9									131.2				83
5P	6+33.90 - 6+58.90	Lt.				28.4									170.1				83
6P	5+95 - 6+25	Rt.	3.2			3.2				5.7	0.2		31						83
7P	6+80 - 7+08	Lt.	3.2			3.2				5.7	0.2		31						83
8P	28+51.00 - 28+76.00	Rt.				26.3							15		157.9				85,421
9P	28+51.00 - 28+76.00	Lt.				36.6									219.4				85
10P	32+97.62 - 33+81±	Rt.				23.8							16		103.1				85,421
11P	32+97.62 - 33+22.62	Lt.				42.4									254.2				85
12P	56+07.80 - 56+32.80	Rt.				18.6									111.6				87
13P	56+07.80 - 56+32.80	Lt.				22.5									134.7				87
14P	58+47.01 - 59+14±	Rt.				18.8							28		112.5				87,548
15P	58+47.01 - 58+77±	Lt.				22.5							28		134.7				87,548
	Ramp A																		
16P	320+77± - 321+09.18					18.8							14		112.5				92,410
17P	323+96.88 - 324+21.88					18.8									112.5				92
18P	329+37± - 329+72.42					18.8							13		112.5				92
19P	332+10.66 - 332+60±					18.8							26		112.5				95
20P	320+60 - 320+88	Lt.	3.2			3.2				5.7	0.2		31						95,538
21P	329+29 - 329+57	Lt.	3.2			3.2				5.7	0.2		31						95,538
22P	3+73± U.S 35	Rt.										36							83
23P	4+27±	Lt.										48							83
24P	6+70±	Rt.										36							83
25P	7+17±	Lt.										26							83
26P	27+61±	Lt.										24							84
27P	352+06.10 - 352+33.10	Rt.	3.2			3.2				5.7	0.2		31						85
28P	351+98.0	Lt.										16							85
	U.S. 35																		
29P	33+19±	Rt.										16							85
30P	27+65±	Lt.										24							84
31P	33+23±	Lt.										24							84
32P	28+57±	Rt.										24							84
33P	33+80±	Rt.										40							84
	I-675 SB "C-D"																		
34P	332+59.06 - 348+00	Lt.															1934.7		91,92,94
35P	348+00 - 353+26	Rt.											1045			716.4			96
36P	323+49± E	Rt.										16							85
	U.S.-35 WB C-D																		
37P	19+13 - 28+20	Lt.															763.8	25	84,85,351
38P	329+12± A	℄										24							92
39P	332+76± A	℄										24							95
	U.S.-35 WB C-D																		
40P	32+62 - 51+85.12	Lt.															1745.3	25	85,86,351
41P	562+00 Penn Central	Lt.			31.6														93
42P	550+00 Penn Central	Lt.			25.6														94
43P	566+49 Penn Central	Lt.			34.0														83
44P	Honey Locust Ln. Cul-de-sac.			59.6		61.5	14.4	9.6	138.7										96
45P	29+15 Honey Locust Ln.	Rt.			33.7														96
	U.S. - 35																		
46P	55+65 ± WB	Lt.										36							87
47P	55+75 ± EB	Rt.										27							87
48P	58+97 ± WB	Lt.										36							87
49P	59+18 ± EB	Rt.										24							87
50P	320+50 ± A	℄										24							92
51P	324+48 ± A	℄										24							92
52P	334+25 ± B	Rt.										16							83
53P	6+14.40 - 7+00.00	Ped. Ramp Rt.											86						96
	SUB-TOTALS		16.0	59.6	124.9	462.4	14.4	9.6	138.7	28.5	1.0	565	1426	610	2,306.8	716.4	3943.8	50	
TOTALS			16	60	125	463	15	10	139	29	1	565	1426	610	2,307	716	3944	50	

C. H. CO., NO. 375 44888

GRE · 675 · 5.37
GREENE COUNTY

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 118, 119
For Reference Items shown ◯, See Sh. No. 103-107
For US-35 Plan & Profile, See Sh. No. 83
For Pav't Details, See Sh. No. 359 & 360
For Typical Section of Ex. Pav't, See Sh. No. 19
For Service Rd. B Plan & Profile, See Sh. No. 120
For Underdrain Quantities, See Sh. No. 55
For Sewage Lift Station, See Sh. No. 367-371

RELOC. DAYTON - XENIA RD. STA. 11+00 - STA 24+00

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 117-119
For Reference Items Shown ○, See Sh. No. 72
For Wilderina Drive Plan & Profile, See Sh. No. 111
For I-675 Plan & Profile, See Sh. No. 71
For Structure No. GRE-675-06.16, See Sh. No. 471
For Pavement Details, See Sh. No. 360
For Approach Slab Details For Structure No. GRE-675-06.16, See Sh. No. 409
For Underdrain Quantities, See Sh. No. 55

MICROFILMED
AUG 25 1989

GRE-675-5.37
GREENE COUNTY

Continued On Sh. No. 108

Continued On Sh. No. 110

Sta. 39+84.03 ℓ Dr. Ahd.
Sta. 39+55.68 ℓ I-675

Curve Data
P.I. = 8+91.45
Δ = 46°00'00"
R = 100.00'
T = 42.45'
L = 80.29

PROPOSED STRUCTURE
GRE 675-06.16
TYPE: Continuous Welded Plate Girder with Reinf. Conc. Deck and Substructure
SPANS: 59'0", 75'6⅞", 101'7⅜", 101'9⅝", 68'7¼"
ROADWAY: 52'0" face to face of curbs
LOADING: H5 20-44
SKEW: Varies
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: 30' Long (AS-1-72)
ALIGNMENT: Tangent

Bridge Limits = 412.14'
℄ I-675
-1.50%
+2.75%
-0.62%
500'V.C.
92UD: 110'-707.01 Type III or 707.12
Prop. 12" ○ See Sh. No. 288
Prop. 15" See Sh. No. 402
Elev. 906.18
Penn Central R.R.
Bents Approach Slab Sta. 38+67.50
End Approach Slab Sta. 39+97.50
P.V.I. Sta. 25+75
P.V.I. Sta. 30+75
P.V.I. Sta. 33+00
P.V.I. Sta. 38+00
P.A.T. Sta. 35+50 Elev. 926.42

+00-35.5'Lt. ℄ 902.30
+00-35.5'Rt. ℄ 902.26
+05-35.5'Lt. ℄ (Bend) 902.11
+95-35.5'Lt. ℄ (Bend) 902.11
+25-35.5'Lt. ℄ 902.69
+05-35.5'Rt. ℄ (Bend) 900.39
+95-35.5'Rt. ℄ (Bend) 901.66
+00-33'± Lt. (CB) EG 902.10
+00-40'Rt. (MH) EG 900.38 I.E. - 900.38 EG 901.63 S.W. - 901.63
+00-34.3'Rt. ℄ 901.18
+00-28.5'Lt. ℄ 914.16
+00-28.5'Lt. ℄ 917.60
+00-28.5'Rt. ℄ 916.92
+00-28.5'Rt. ℄ 912.51
+70-28.5'Rt. ℄ 919.16
+00-28.5'Rt ℄ Lt. ℄ 919.02
+55-28.5'Lt. ℄ 919.13

940
930
920
910
900
890

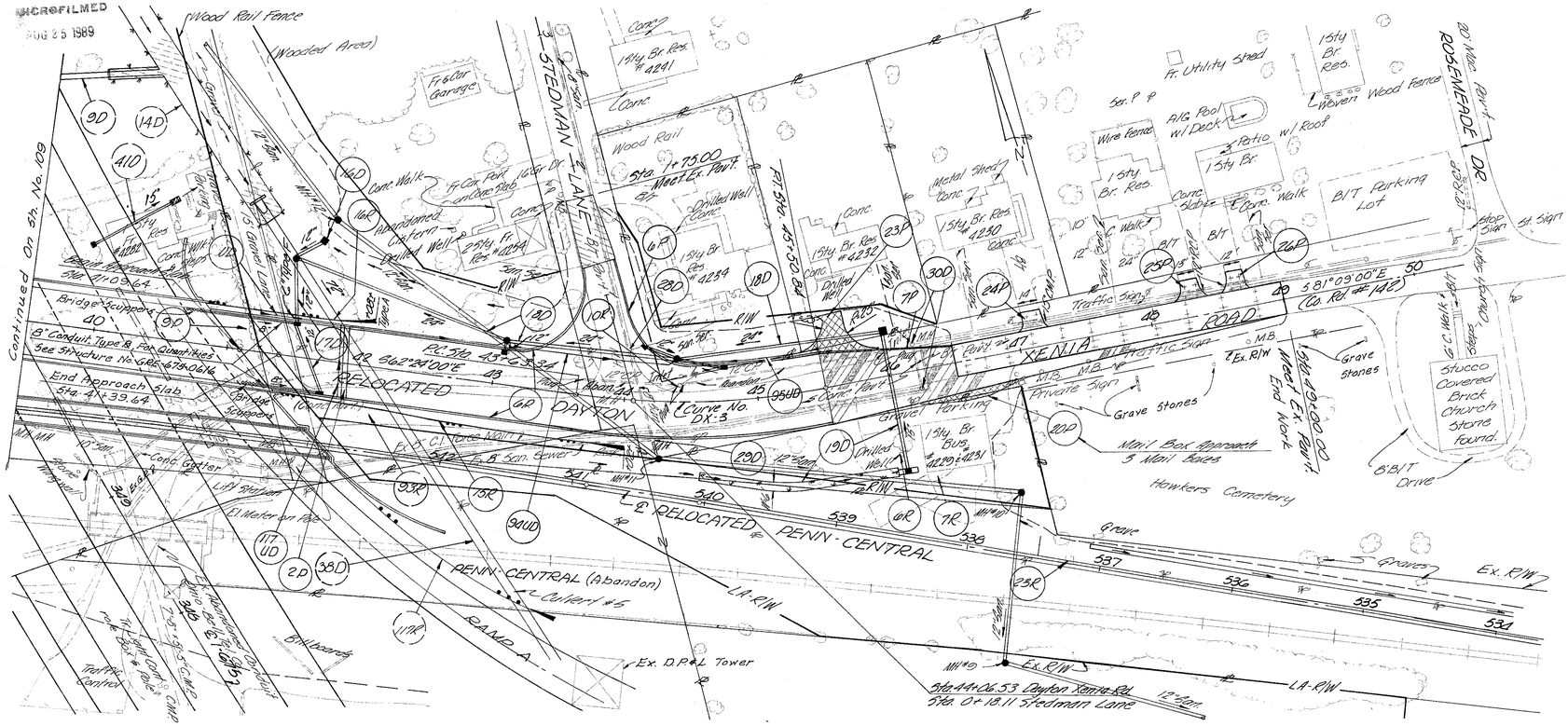
925.7 925.61 925.49 924.93 924.67 924.23 923.6 923.0 922.9 922.5 922.3 922.5 922.6 922.8 922.6 922.3 922.1 922.3 922.5 922.8 923.1 923.9 924.8 925.9 926.5 927.5 928.0 928.5 929.0 929.2 929.4 929.8 930.1 930.4 930.8 931.2 931.6 931.8 932.1 932.4 932.6 932.8 933.0 933.2 933.4 933.6 933.8 934.0 934.2 934.4 934.6 934.8 935.0 935.2 935.4 935.6 935.8 936.0 936.2 936.4 936.6 936.8 937.0 937.2 937.4 937.6 937.8 938.0 938.2 938.4 938.6 938.8 939.0 939.2 939.4 939.6 939.8 940.0 940.2

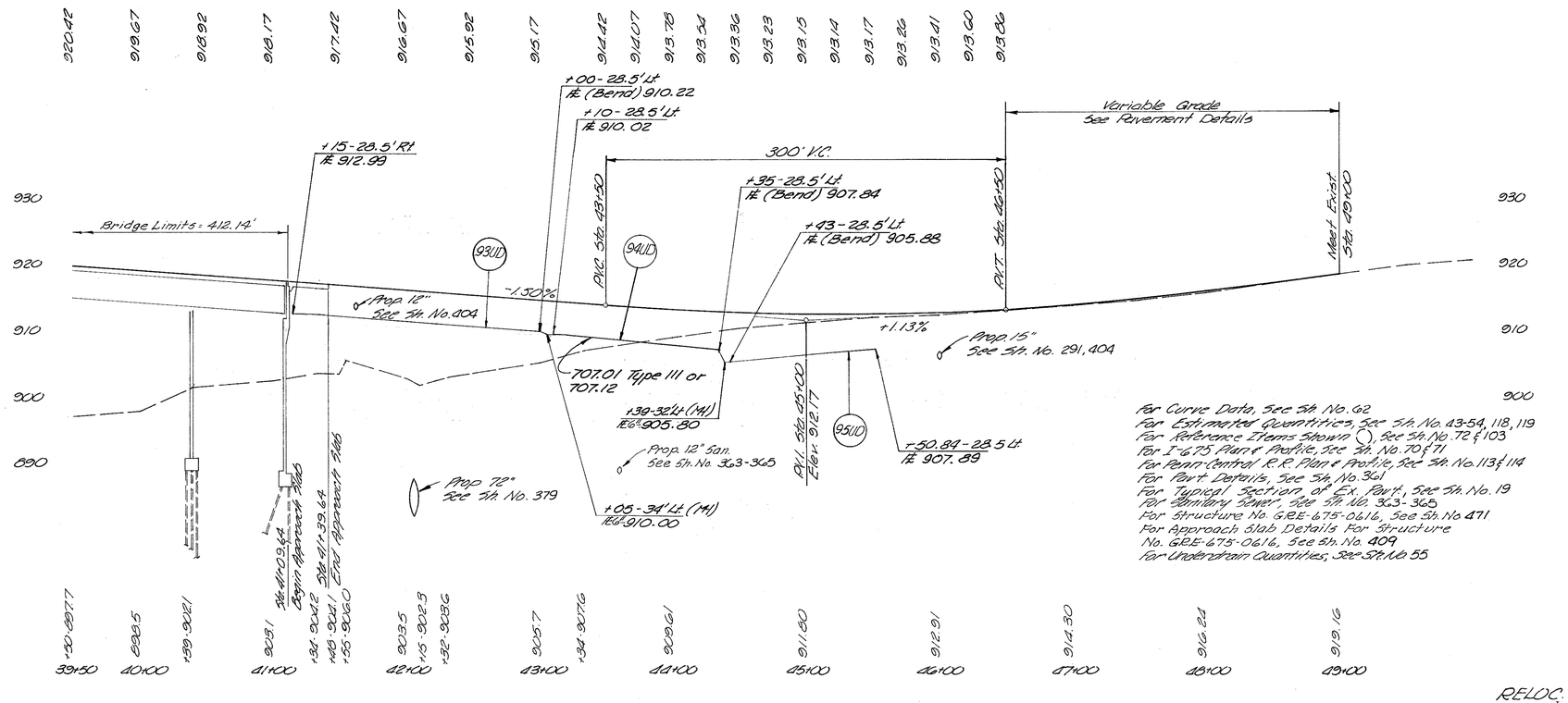
24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 +50

RELOCATED DAYTON - XENIA RD. STA. 24+00 - STA 39+50

MICROFILMED
AUG 25 1989

110
616
GRE-675-5.37 GREENE COUNTY



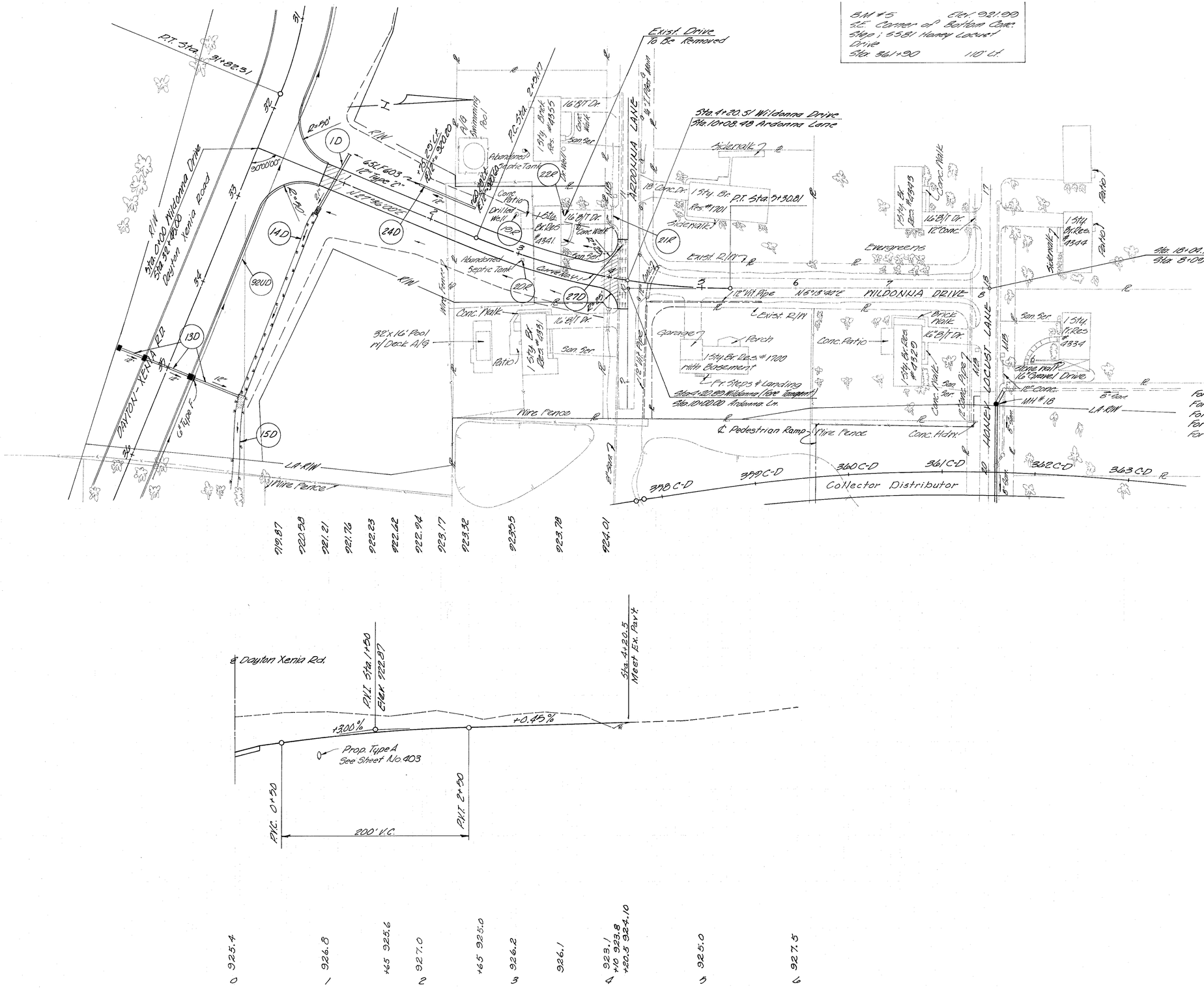


For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 118, 119
For Reference Items Shown ( ), See Sh. No. 72 & 103
For I-675 Plan & Profile, See Sh. No. 70 & 71
For Penn-Central R.R. Plan & Profile, See Sh. No. 113 & 114
For Part Details, See Sh. No. 301
For Typical Section of Ex. Pavt., See Sh. No. 19
For Sanitary Sewer, See Sh. No. 363-365
For Structure No. GRE-675-0616, See Sh. No. 471
For Approach Slab Details For Structure No. GRE-675-0616, See Sh. No. 409
For Underdrain Quantities, See Sh. No. 55

RELOC. DAYTON-XENIA RD. STA 39+50 - STA. 50+00

GRE-675-5.37
GREENE COUNTY

B.M. #5 Elev. 931.00
S.E. Corner of Bottom Conc. Step; 5581 Honey Locust Drive
Sta. 361+90 110' Lt.

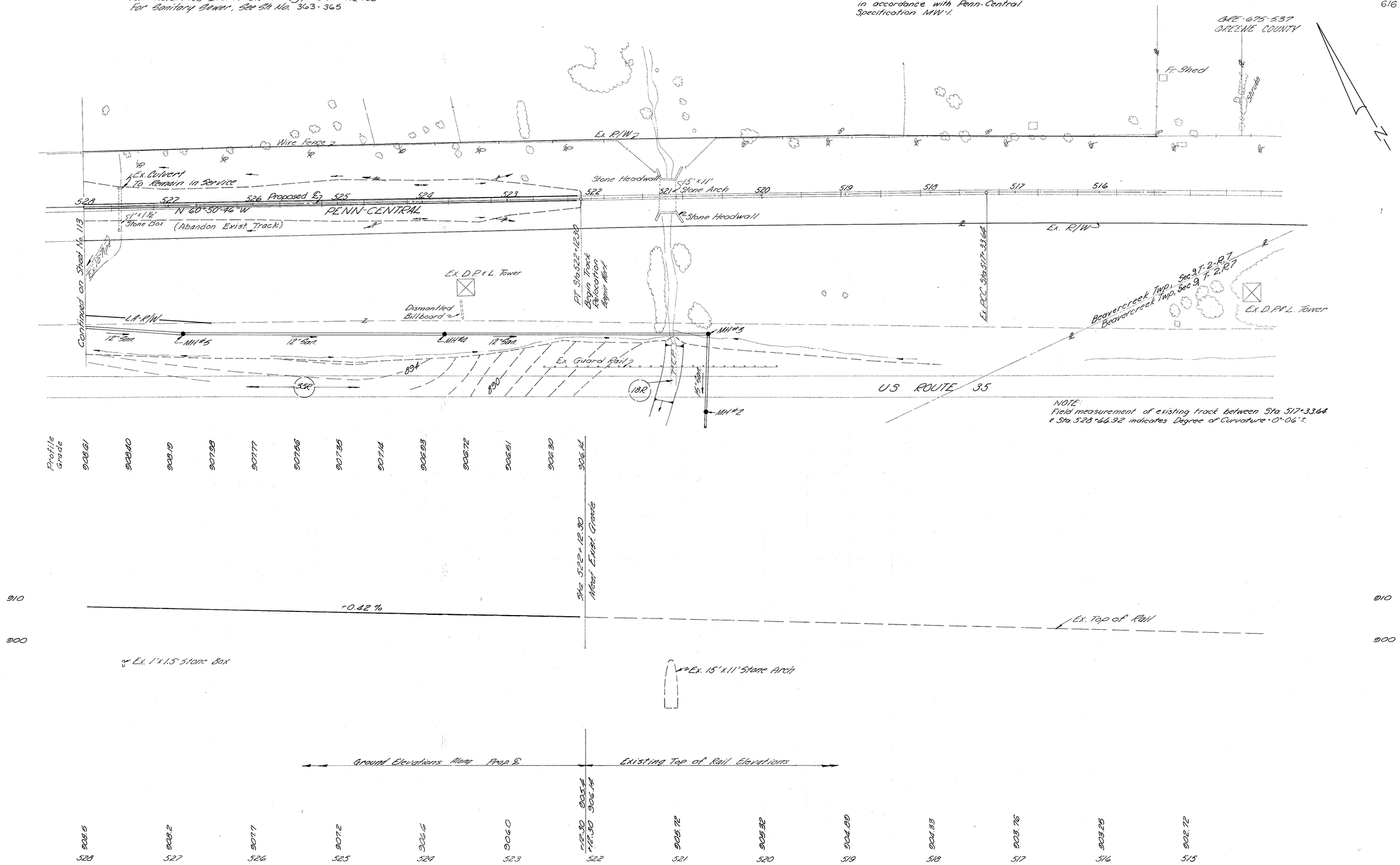


For Estimated Quantities, See Sh. No. 43-54, 118, 119
For Curve Data, See Sh. No. 62
For Dayton-Xenia Rd. Plan & Profile, See Sh. No. 109
For I-675 Plan & Profile, See Sh. No. 71
For Sanitary Sewer, See Sh. No. 363-365

WILDONNA DR. STA. 0+00 to STA. 5+00

For Estimated Quantities, See Sh. No. 117, 119
For Reference Items shown ( ), See Sh. No. 105
For Sanitary Sewer, See Sh. No. 363-365

NOTE:
Proposed Curve & Spiral Alignments are in accordance with Penn-Central Specification MW-1.



NOTE:
Field measurement of existing track between Sta. 517+33.64 & Sta. 528+66.92 indicates Degree of Curvature = 0°-06'±.

PENN - CENTRAL R.R. STA. 516 to STA. 528

NOTE:
Proposed Curve & Spiral Alignments are in accordance with Penn-Central Specification MW-1.
GRE-675-5.37
GREENE COUNTY
For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 117, 119
For Penn-Central R.R. Superelevation, See Below
For Dayton Xenia Rd. Plan & Profile, See Sh. No. 110
For Reference Items shown ( ), See Sh. No. 103-107
For Sanitary Sewer, See Sh. No. 363-365
For Underdrain Quantities, See Sh. No. 55
STEDMAN LANE
Church
Hawkers Cemetery
Fr. Shed
1 Sty. Conc. Blk. Kennel
Std. Type 2 Paved Gutter
Graves
Ex. R/W
Sta. 537+10
Sta. 533+40
End Work Sta. 49+20 Match Ex. Pav't.
B/T Pav't.
Gravel Parking
1 Sty. Br. Bus. #4229 #4231
Abandoned Septic Tank & Leaching Bed
Drilled Well
1 Sty. Br. Res. #4234
1 Sty. Br. Res. #4232
1 Sty. Br. Res. #4230
2 Sty. Fr. Res. #4254
Fr. Car Port on Conc. Slab
Conc. Walk
Ex. 8" C.I. Force Main
Ex. 8" San. Sewer
MH #11
12" San.
S.C. 540+88.34
T.S. 540+03.34
Curve No. PC-1
Fr. Toilet
(Abandon Track)
N 60°50'46" W
Proposed ℄
PENN-CENTRAL
LA-R/W
MH #10
MH #9
MH #8
MH #7
MH #6
MH #5
Continued on Sheet No. 114
Continued on Sheet No. 112
Existing D.P.&L. Co. Tower To remain
Exist. D.P.&L. Tower To be removed by others
Ex. LA-R/W
Billboard
Conc. Blk. Sign
S.C. 343+78.50A
T.S. 341+78.50A
340+58.57F = 340+58.57A-32'Rt.
RAMP A
RAMP F
U.S. ROUTE 35
S.T. 340+58.57A
C.S. 338+58.57A
P.T. 338+58.57F
6" Type F
18" C.M. Pipe
Profile Grade Top of Low Rail 918.26
Top of High Rail 918.34
500' VC
PVT-STA. 534+75
PVC-STA. 529+75
PVI-STA. 532+25 Elev. 910.39
+0.81%
+0.42%
Sta. 537+30, 13.5' Rt. ℄ 6" - 908.81
Sta. 531+55, 13.5' Rt. ℄ 6" (Bend) - 904.56
Sta. 531+55, 23.5' Rt. Outlet 6" ℄ = 904.06
Prop. 12" San. See Sh. No. 363-365
930
920
910
900
542
541
540
539
538
537
536
535
534
533
532
531
530
529
528

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AUG 25 1989

NOTE:
Proposed Curve & Spiral Alignments are in accordance with Penn-Central Specification NW-1.

℄ Curve Data
P.I. 547+87.88
D_a = 0°45'00"
Δ = 11°05'44"
R = 7639.49
T = 784.53
L_c = 1394.91
L_s = 85.00
E = 35.99

For Reference Items shown ( ), See Sh. No. 103-107
For Curve Data, See Sh. No. G2
For Estimated Quantities, See Sh. No. 117-119
For Penn Central R.R. superelevation, See Below
For I-675 Plans Profile, See Sh. No. 70 & 71
For Dayton Xenia Rd. Plan & Profile, See Sh. No. 108 & 110
For Structure No. GRE-675-0615, See Sh. No. 453
For Structure No. GRE-675-0626.5R, See Sh. No. 489
For Underdrain Quantities, See Sh. No. 55

Sta. 548+75 Existing Penn Central
Sta. 27+85.99 D.X. Rd.

Sta. 548+75 EXISTING STRUCTURE TO BE REMOVED
Type: Single Span through Girder on Conc. & Masonry Abut.
Span: 84'-2"
See Sh. No. GRE-675-0615

PROPOSED STRUCTURE
GRE-675-0626.5R
TYPE: Superstructure-Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure
SPANS: 64'-7⅞", 70'-0"
LOADING: Cooper E-80, Diesel Impact
SKEW: 48°36'30" Lft. Fwd.
ALIGNMENT: Tangent

PROPOSED STRUCTURE
GRE-675-0615
TYPE: Superstructure-Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure
SPANS: 83'-1⅛", 83'-1⅜", 101'-10⅜", 102'-3⅛", 68'-3⅜"
LOADING: Cooper E-80, Diesel Impact
SKEW: Varies, See Plans
ALIGNMENT: Left Curve

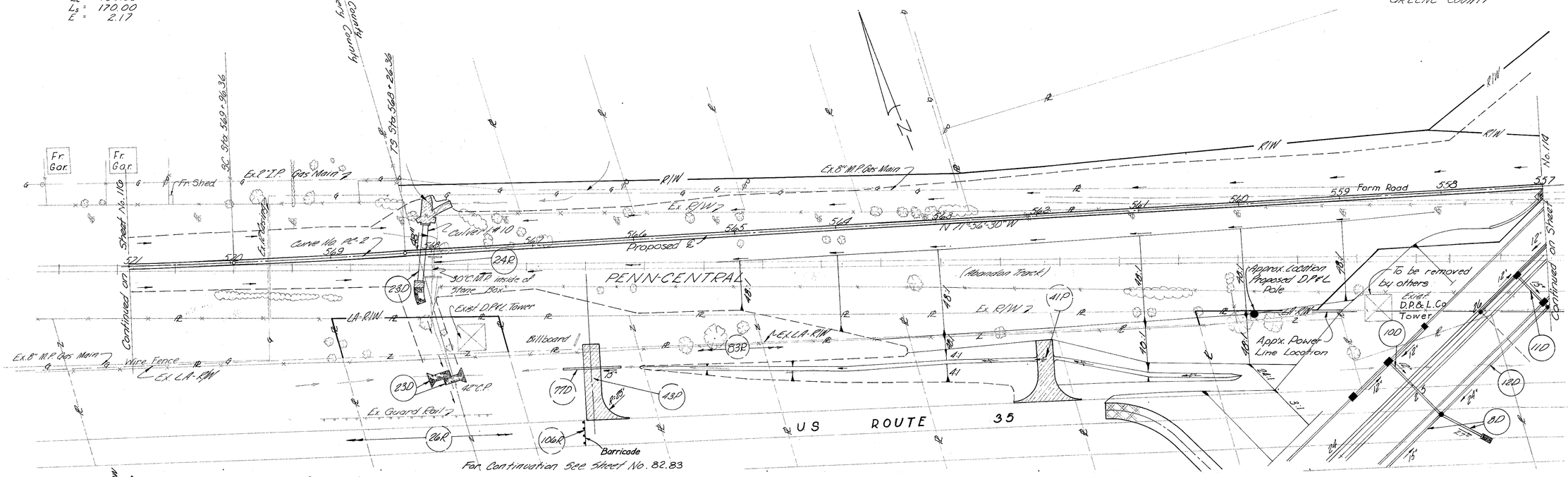
PENN-CENTRAL R.R. STA. 542+00 to STA. 557+00

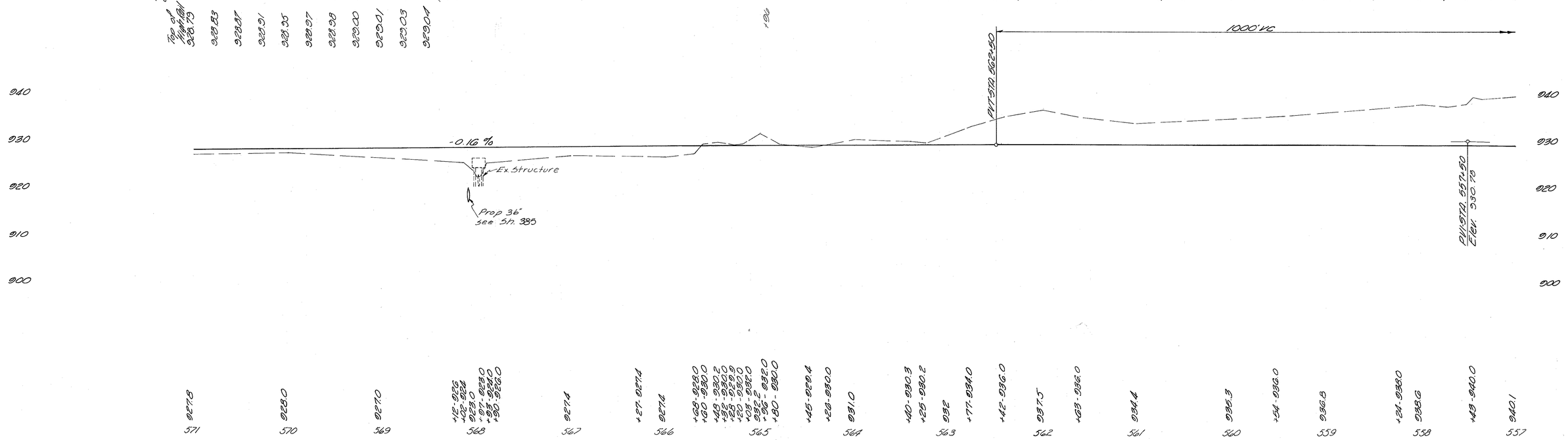
℄ Curve Data
PI 570+61.40
D_c = 1°00'00"
Δ = 3°00'00"
R = 5729.65
T = 235.04
L_c = 130.00
L_s = 170.00
E = 2.17

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 117-119
For Penn-Central R.R. Superelevation, See Below
For Dayton Xenia Rd. Plan & Profile, See Sh. No. 109
For Reference Items Shown ○, See Sh. No. 103-107

NOTE:
Proposed Curve & Spiral Alignments are in accordance with Penn-Central Specification MW-1.

GRE-675-5.37
GREENE COUNTY

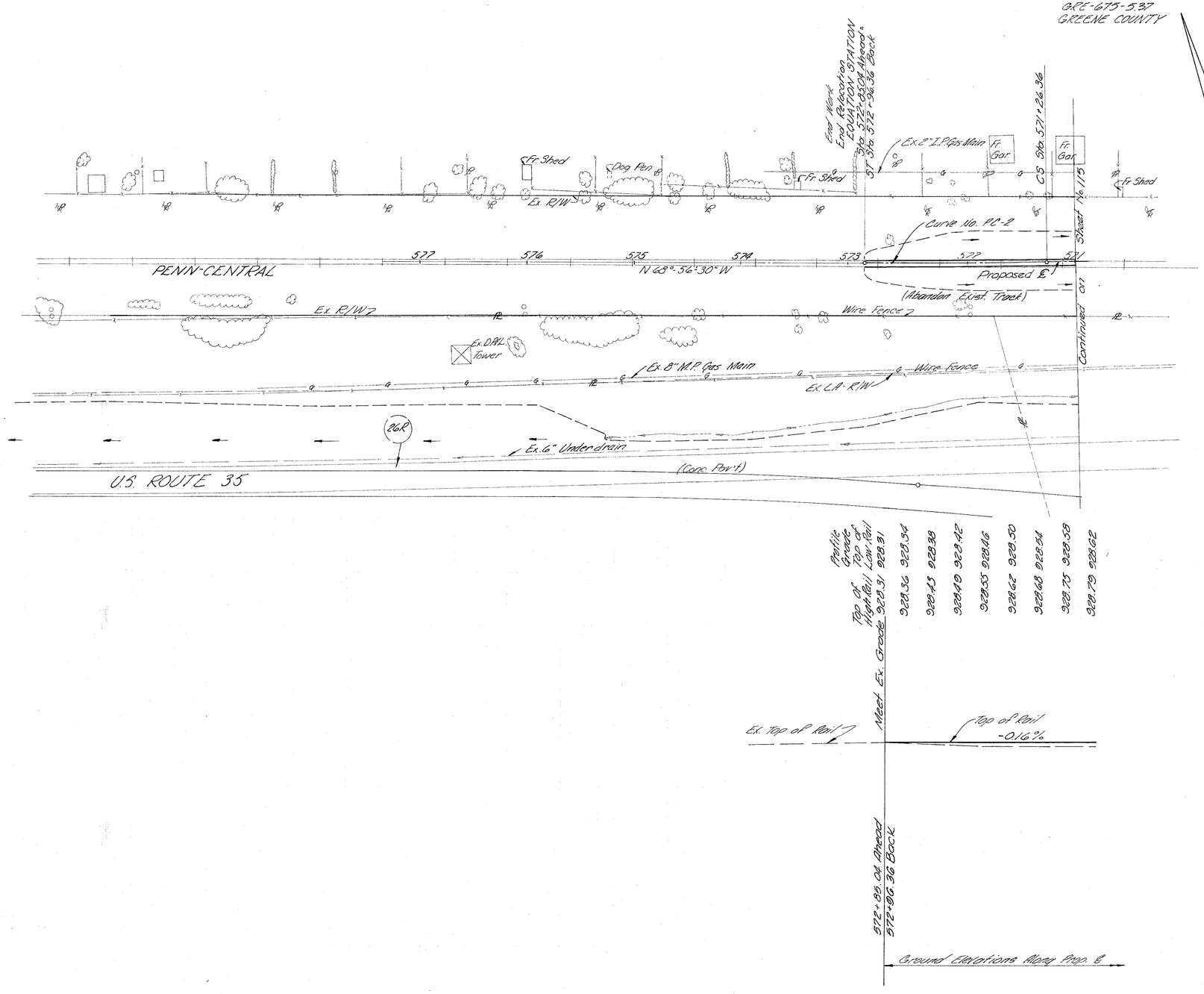


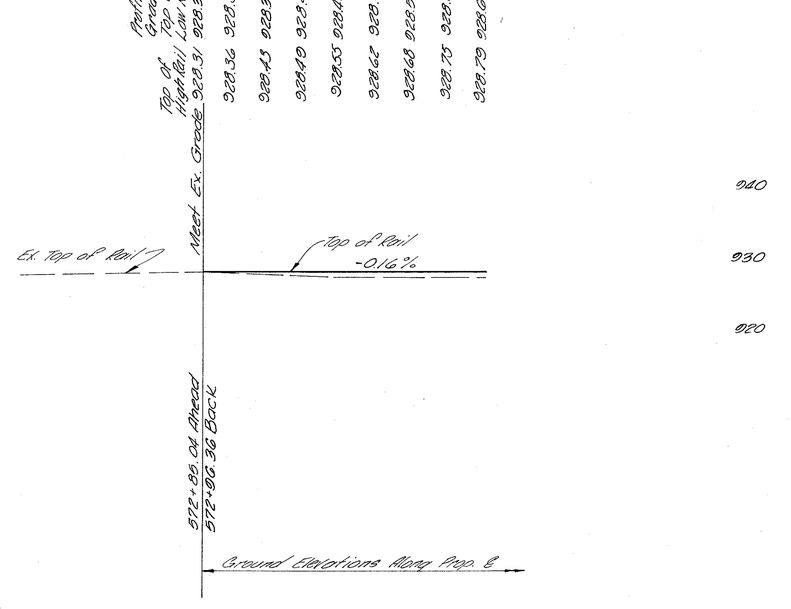


PENN-CENTRAL R.R. STA. 557+00 to STA. 571+00

NOTE:
Proposed Curve & Spiral Alignments are in accordance with Penn-Central Specification NW-1

GRE-675-537
GREENE COUNTY





For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 117, 119
For Reference Items shown ○, See Sh. No. 103-107
For Penn-Central R.R. Superelevation, See Below.

ESTIMATED QUANTITIES

DRAINAGE

QUANTITY CALCULATIONS
BY H.L.F. DATE 11-24-71
CHKD. D.V.P. DATE 4-3-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 2/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

117
6/6

GRE-675-5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	Bends & Branches 12"x61°	8"x87½°	15"x22½°	8"x30°	8"x30°	12"x45° Bend	8"x45° Wye	203 Excavation Cu. Yd.	601 Rock Channel Protection Type B Cu. Yd.	601 Std. Type 2 Paved Gutter Lin. Ft.	601 6" Rein. Concrete Riprap Sq. Yd.	602 Masonry Cu. Yd.	603 Type C 6" L.F.	Type C 8" L.F.	Type B 12" L.F.	Type C 12" L.F.	Type D 12" L.F.	Type F 12" L.F.	Type B 15" L.F.	Type C 15" L.F.	Type B 18" L.F.	Type A 21" L.F.	Type B 21" L.F.	Type C 24" L.F.	Type B 24" L.F.	Type C 27" L.F.	Type A 48" L.F.	604 Inspection Well No.	MH-1 No.	CB-3 No.	CB-3A No.	CB-7-2.5 No.	CB-5 w/ Type B Cone No.	Manhole & Catch Basin Frames & Covers Type A Std. No.	660 Sodding Sq. Yd.	SEE SHEET NO.
																													Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Sq. Yd.	
1D	0+90 Wildonna Drive Dayton-Xenia Rd.	Lt. & Rt.									2			0.92										67													11	111,402
2D	11+05 to 11+80	Lt																	15																			108,388
3D	12+52 to 15+15	Rt	1																							268												108,388
4D	Not Used																																					
5D	Not Used																																					
6D	Not Used																																					
7D	18+41	Rt. & Lt.																					107							1								108,387
8D	21+00 to 25+12.5	Rt.		1							3			0.53			113				300						48		2		2					5	108,402
9D	22+00	Lt. & Rt.															73														1						108,401
10D	24+50 to 25+50	Lt. & Rt.															100				73										2						108,401
11D	26+00 to 28+00	Lt. & Rt.															136				112		7								3	1					108,401,402
12D	25+00 to 33+00	Rt.															239				182		14		125		150			1	3						108,401,402
13D	35+00	Lt. & Rt.												0.21			51	30		56											2		1			3	108,238
14D	32+87 to 34+38	Lt.																																			101	109
15D	34+05 to 35+89	Lt.											60																								32	109
16D	41+02.31 to 41+61.5	Lt.																26																1				110,403
17D	41+42.31 to 41+75	Lt. & Rt.															57			50											2						110,403
18D	41+42.31 to 46+00	Lt.															8	61								322				2		2		1			110,403
19D	46+00	Lt. & Rt.																			106													1			100	110,291
20D	12+57 to 14+82	Lt.																				226											2					108
	Penn Central R.R.																																					
21D	533+40 to 537+10	Rt.										370																										113
22D	547+75 to 549+00	Lt.																																			25	114
23D	568+13	Lt. & Rt.								398	39		47	2.18													62									25	115,385
24D	1+75 to 2+60 Wildonna Dr.	Lt.																65																				111
25D	13+35± Dayton-Xenia Rd.	Rt.													10																							108
26D	14+42± to 15+20± Dayton-Xenia Rd.	Rt.	1	1		2		1								113														1								108
27D	4+08± Wildonna Dr.	Lt.																																				111
28D	43+99± Dayton-Xenia Rd.	Lt.																																		1	1	110
29D	44+76± Dayton-Xenia Rd.	Rt.																																		1		110,364
30D	46+21± Dayton-Xenia Rd.	Rt. & Lt.																																			2	110
31D	15+27 - 15+50 ± O.X. Rd.	Lt.						1											38																			108,386
	SUB-TOTALS									398	39	370	111	3.84	10	113	777	182	53	106	773	226	188	67	125	322	547	48	62	1	5	4	18	3	4	2	3	410	
TOTALS	TO GENERAL SUMMARY									—	39	370	111	3.8	10	113	777	182	53	106	773	226	188	67	125	322	547	48	62	1	5	4	18	3	4	2	3	410	

With Bedding

107 CB

708.02 (0-24") - 707.05

21"-708.02

Sanitary

Sanitary

1000.22 (0-36")

C. B. CO., NO. 378 24993

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
BY DP DATE 10-14-71
CHKD. HLE DATE 3-17-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 3/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

118/616

GRE-675-5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	202 Existing Structure Removed (Lump)	202 Concrete Pavement Removed (Sq. Yd.)	202 Pipe Removed 24"+Under (Lin. Ft.)	202 Pipe Removed Over 24" (Lin. Ft.)	202 Concrete Curb Removed (Lin. Ft.)	202 Inlet Abandoned (Each)	202 Portions of Exist. Structures Removed (Lump)	203 Excavation (Cu. Yd.)	203 Embankment (Cu. Yd.)	606 Guard Rail Type 5 (Lin. Ft.)	606 Guardrail Type 5 Barrier Design (Lin. Ft.)	606 Anchor Assembly (Each) Type A	606 Anchor Assembly (Each) Type T	606 Anchor Assembly Barrier Design (Each)	606 Bridge Terminal Assembly Type A (Each)	606 Bridge Terminal Assembly As-Per-Plan (Each)	Special Drilled Well Abandoned (Each)	202 Privy Vault Removed (Each)	202 Septic Tank Removed (Each)	SEE SHEET NO.
	ROADWAY																					
	DAYTON XENIA RD.																					
1R	16 + 95	LT.	Lump			50																108
2R	0+58 - 1+18 Warwick Dr.	RT.		37.3																		108
3R	12 + 54 - 15 + 00	RT.			245																	108
4R	15 + 50	LT.				35			Lump													108
5R	10 + 10	RT.	Lump																			108
6R	95 + 96	RT.																	1			110
7R	96 + 20	RT.																		1		110
8R	0+15 - 1+10 Warwick Dr.	RT.					81															108
9R	18+32± - 20+39 GS	Med.										1119.4	487.5	Type A	Type T	2	8					108, 109, 23
10R	10 + 42±	LT.						1														109
11R	18+33 - 21+66±	RT.										300.0		1	1							108
12R	18+44± - 21+80	LT.										300.0		1	1							108
13R	35+57± - Bridge	RT.										125.0		1			1					109
14R	36 + 32± - Bridge	LT.										37.5			1		1					109
15R	Bridge - 44+02±	RT.										250.0			1		1					110
16R	Bridge - 42+08±	LT.										100.0		1			1					110
17R	26+50± - Bridge Abut.	RT.										100.0		1				1				109, 24
18R	Bridge Abut. - 28+84±	LT.										100.0		1				1				109, 24
																						110
	WILLOWVILLA DR.																					
19R	2 + 83	LT.																	1			111
20R	3 + 05	RT.																		1		111
21R	3 + 00	LT.			21																	111
22R	3+30 - 4+00	LT.								28	28											111
	PENN CENTRAL RR.																					
23R	537 + 25	E																			1	113
24R	568 + 00	LT.	Lump																			115
	SUB-TOTALS		Lump	37.3	266	85	81	1	Lump	28	28	2431.9	487.5	6	4	2	12	2	2	1	2	
	TOTALS TO GENERAL SUMMARY		Lump	37	266	85	81	1	Lump			2432	487.5	6	4	2	12	2	2	1	2	

C. B. CO., NO. 375 24093

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
BY DP DATE 5-24-71
CHKD. HF DATE 1-17-72
KING AND GOTARIS
CONSULTING ENGINEERS
Revised O.H.S. 3-79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

119
616

GRE-675-5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	309 12" Aggregate Base Cu. Yd.	309 6" Aggregate Base Cu. Yd.	309 8" Aggregate Base Cu. Yd.	310 6" Subbase Type II Cu. Yd.	402 1½" Asphalt Concrete Cu. Yd.	404 1½" Asphalt Concrete Cu. Yd.	404 1½" Asphalt Concrete Cu. Yd.	404 2" Asphalt Concrete Cu. Yd.	408 Prime Coat Gal.	452 8" Plain Concrete Pavement Sq. Yd.	609 Asphalt Concrete Curb Type 1 Lin. Ft.	609 Curb Type 2.8 Lin. Ft.	609 Curb Type 6 Lin. Ft.	611 Aggregate Slope 7:1 Sq. Yd.	Special Pressure Relief Joint Type A Lin. Ft.	Special Construction at Railroad Track Lump	SEE SHEET NO.
	PAVEMENT																		
	Dayton-Xenia Rd.																		
								Driveways	Driveways	Driveways									
1P	36+51																52		109
2P	41+88																52		110
3P	Not Used																		
4P	11+00.00 - 14+71.50	Lt.											375						108
5P	19+71.50 - 36+67.50	Rt.&Lt.												4443					108,109
6P	41+30.64 - 45+50.84	Rt.&Lt.												892					110
7P	45+50.84 - 46+50.00	Lt.											100						110
8P	36+67.50 - 36+97.50	Rt.&Lt.				30.6										176.7			109
9P	41+09.64 - 41+39.64	Rt.&Lt.				30.6										176.7			110
10P	11 + 41	Lt.			11.9		1.8		1.8		20.4								108
11P	13 + 08	Lt.			16.7		2.6		2.6		29.5								108
12P	14 + 18	Lt.		15.3						5.1	36.7								108
13P	15 + 58	Lt.		5.6								83.3							108
14P	11+00 - 12+59	Rt.			28.7		4.5		4.5		51.6								108
15P	12+65	Rt.													47				108
16P	0+58 Warrick Dr.	Rt.										34.2							108
17P	0+85 - 1+10 Warrick Dr.	Rt.													34				108
18P	1+18 Warrick Dr.	Rt.										14.7							108
19P	15 + 32	Rt.			17.8							108.3							108
20P	46+20 - 46+94	Rt.		5.6						1.9	13.4								110
21P	23 + 00	Lt.										338.4							108,93
22P	26 + 00	Rt.										278.0							109
23P	29 + 69	Lt.		13.9						1.6	33.3								110
24P	37 + 13	Lt.						0.6											110
25P	48 + 34	Lt.						0.7											110
26P	48 + 68	Lt.						0.6											110
	PENN CENTRAL RR																		
	522+12.30 - 522+06.86		3906.7															Lump	112-116
	SUB-TOTALS		3906.7	40.4	74.3	61.2	8.9	1.9	8.9	11.6	184.9	856.9	475	5335	81	353.4	104	Lump	
TOTALS	TO GENERAL SUMMARY			4022		61	9	23			185	857	475	5335	81	353	104	Lump	

QUANTITY CALCULATIONS
BY D.P. DATE 3-10-72
CHKD. H.F. DATE 4-3-72
KING AND GAVARIS
CONSULTING ENGINEERS

For US 35 Plan & Profile, See Sh. No. 83
For Dayton Xenia Rd. Plan & Profile, See Sh. No. 108
For Reference Items Shown ( ), See Sh. No. 103-107, 117-119
For Pav't Detail, See Sh. No. 359
For Underdrain Quantities, See Sh. No. 55
For Estimated Quantities See Sh. No. 43-54, 120

			Bends 15"x20°	Bends 15"x25°	601 Rock Channel Protection Type B C.Y.	602 Masonry C.Y.	603 Type D 12" L.F.	603 Type F 707.05 15" L.F.	603 Type B 15" L.F.	660 Sodding S.Y.	304 6" Agg. Base C.Y.	304 8" Agg. Base C.Y.	402 1" Asp. Conc. C.Y.	404 1" Asp. Conc. C.Y.	404 2" Asp. Conc. C.Y.	408 Prime Coat Gal.
DRAINAGE 1-D	2+64 - 3+31	Rt.	1	1	3	0.54	57									120
2-D	3+72	℄						32	52	6						297
PAVEMENT	0+64.48 - 3+80											163.6	19.5	19.5		280.5 120
1P	2+00	Rt.									12.5				4.2	30.0 120
2P	2+76	Rt.									18.5				6.2	44.4 120
SUB-TOTALS					3	0.54	57	32	52	6	31.0	163.6	19.5	19.5	10.4	354.9
TO GENERAL SUMMARY					3	0.5	57	32	52	6	31	164	20	20	10	355

Driveways

With Bedding

SERVICE ROAD B

MICROFILMED
AUG 25 1989

QUANTITY CALCULATIONS
BY D.P. DATE 11-23-71
CHKD. H.F. DATE 3-9-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H.-2/79

For Typical Section of Ex. Pav't, See Sh. No. 21
For Curve Data, See Sh. No. 62
For Superelevation, See Sh. No. 333
For Pav't. Details, See Sh. No. 362
For Profile of Temporary Road, See Sh. No. 40
For Estimated Quantities, See Sh. No. 43-54, 123
For Underdrain Quantities, See Sh. No. 55

933.87 933.36 932.78 932.12 931.38 930.58 929.74 928.05 927.21 926.41 925.70 925.07 924.53 924.09 923.73 923.45 923.27

Item	Station	Side	Sheet	202 Pipe Removed 24" & Under (Lin. Ft.)	202 Guard Rail Removed (Lin. Ft.)	602 Masonry (Cu. Yd.)	603 Type C 12" (Lin. Ft.)	603 Type D 12" (Lin. Ft.)	603 Type D 18" (Lin. Ft.)	604 Catch Basin No. 22-B (Each)	606 Guard Rail Type 5 (Lin. Ft.)	606 Anchor Assembly Type A (Each)	606 Bridge Terminal Assembly Type A (Each)	660 Sodding (Sq. Yd.)	660 Reinf. Sodding (Sq. Yd.)	601 Type B Rock C.P. With Bedding (Cu. Yd.)
ROADWAY																
1R	14+84	Rt.	121	28												
2R	15+60	Lt.	121	55												
3R	16+76± – Bridge	Rt.	121								112.5	1	1			
4R	17+62.5±–70'± Lt. Bridge	Lt.	121								62.5	1	1			
5R	Bridge – 22+26±	Rt.									62.5	1	1			
6R	Bridge – 22+83±	Lt.	121								112.5	1	1			
7R	26+90 – 28+65	Lt.	122		217						175.0	2				
8R	26+87.5 – 29+00	Rt.	122		206						162.5	2				
DRAINAGE																
1D	14+61 – 15+07	Rt.	121						46							
2D	15+18 – 16+00	Lt.	121													
3D	22+08 – 22+78	Rt.	121													
4D	22+70 – 25+00	Lt.	121,122			0.21	228	82		2				4		2
5D	24+88 – 25+40	Rt.	122					72								
6D	18 × 86±	Lt.	121					38							1	
7D	18 × 86±	Rt.	121												2	
8D	21 × 74±	Lt.	121												5	
9D	21 × 74±	Rt.	121												5	
SUB-TOTALS				83	423	0.21	228	192	46	2	687.5	8	4	4	33	2
TO GENERAL SUMMARY				83	423	0.2	228	192	46	2	687.5	8	4	4	33	2

KEMP RD. STA. 23+00 to STA. 29+00

PAVEMENT
KEMP RD.

	Station	Side	304 6" Aggregate Base Cu. Yd.	404 2" Asphalt Concrete Cu. Yd.	408 Prime Coat Gal.	Special Press Relief Joint Lin. Ft. (Type A)	609 Type G Curb Lin. Ft.	611 Approach Slabs T-15" Sq. Yd.	Sheet
1P	17+89± - 18+29.67	Rt. & Lt.					32	121.8	121
2P	21+29.17 - 21+71±	Rt. & Lt.					32	121.8	121
3P	14 + 84	Rt.	17.0	3.7	26.7				121
4P	15 + 60	Lt.	28.2	9.9	67.8				121
5P	0+12 - 3+25 Service Dr. A	Rt. & Lt.	75.5	3.9	28.0				121, 123
6P	22 + 42	Rt.	22.2	3.2	23.3				121
7P	24 + 44	Lt.	27.8	5.8	38.9				122
8P	24 + 96	Rt.	14.7	3.9	27.8				122
9P	22 + 50	Lt.	5.1	1.7	12.9				121
10P	17 + 85	Rt. & Lt.				24			121
11P	21 + 75±	Rt. & Lt.				24			121
SUB-TOTALS			190.5	31.2	224.9	48	64	243.6	
TO GENERAL SUMMARY			191	31	225	48	64	244	

Driveways

TRAFFIC CONTROL GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
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202 REMOVAL OF TEMPORARY BEAM RAIL

TEMPORARY BEAM RAIL 606.04 MOUNTED ON DRUMS, INCLUDING ALL ATTACHED POSTS, SIGNS, DELINEATORS, ETC., SHALL BE CAREFULLY DISMANTLED, REMOVED, AND THE SITE CLEANED FOR USE BY TRAFFIC. BEAM RAIL AND OTHER COMPONENTS SHALL BE DISPOSED OF.

TO ASSURE MAINTENANCE OF ADEQUATE TRAFFIC CONTROL AT ALL TIMES, NO ITEMS SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT OF TEMPORARY BEAM RAIL REMOVED AND DISPOSED OF.

858 BALLAST

SUPERSEDING THE PROVISIONS OF SUPPLEMENTAL SPECIFICATION 858, BALLAST FOR MERCURY VAPOR LUMINAIRES SHALL BE LOCATED WITHIN THE LUMINAIRE HOUSING OR IN A WATERPROOF HOUSING CONTIGUOUS TO THE LUMINAIRE HOUSING.

858 ENCLOSURE PADLOCKS

DISCONNECT SWITCH ENCLOSURES FURNISHED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 858 SHALL INCLUDE A PADLOCK EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS, AND KEYING IN ACCORDANCE WITH THE FOREGOING SPECIFICATION.

857 SIGNS, ERECTED

IN ADDITION TO THE PROVISIONS OF SUPPLEMENTAL SPECIFICATION 857, THE FOLLOWING REQUIREMENT SHALL APPLY. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCHEDULE OF SIGN ERECTION AT LEAST 120 DAYS IN ADVANCE OF ANY ERECTION WORK. THE SCHEDULE SHALL BE IN WRITING WITH 2 COPIES AND SHALL INCLUDE ERECTION DATES, SIGN NUMBERS AND DELIVERY POINT. THE COPIES WILL BE DISTRIBUTED BY THE ENGINEER TO THE FOLLOWING AGENCIES:

(A) THE TRAFFIC ENGINEER OF THE AFFECTED FIELD DISTRICT OF THE DEPARTMENT.
(B) BUREAU OF DESIGN SERVICES, 25 SOUTH FRONT STREET, COLUMBUS, OHIO 43215.

857 COVERING OF SIGNS

A QUANTITY OF 1617 SQUARE FEET FOR THIS ITEM HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

857 NO. 3 POSTS FOR TEMPORARY SIGNS

POSTS FOR TEMPORARY SIGNS SHALL BE FURNISHED AND ATTACHED TO DRUMS OF 606.04 TEMPORARY BEAM RAIL OR 606.041 TEMPORARY DRUMS, IN ACCORDANCE WITH PLAN DETAILS.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT OF POST FURNISHED AND IN PLACE.

857 MILE MARKER LOCATION

THE LOCATION OF MILE MARKERS ON THE PLANS ARE APPROXIMATE AND A MORE PRECISE LOCATION WILL BE PROVIDED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 30 DAYS IN ADVANCE OF THE PLANNED DATE OF MARKER INSTALLATION. THE ENGINEER WILL CONTACT THE BUREAU OF TECHNICAL SERVICES WHICH WILL LOCATE THE LONGITUDINAL POSITION OF MILE MARKERS BY MEANS OF A PAINT MARK ON THE PAVEMENT EDGE. ALTERNATE MARKS WILL NOT BE PROVIDED ON DIVIDED HIGHWAYS AND THE CONTRACTOR SHALL SET MARKERS FOR THE OPPOSITE ROADWAY ACROSS FROM THE PROVIDED MARK. DELINEATORS WHOSE NORMAL POSITION FALLS WITHIN 50 FEET OF A MILE MARKER SHALL BE OMITTED.

INSTALLATION AND/OR REMOVAL OF INTERIM TRAFFIC CONTROL ITEMS

INTERIM TRAFFIC CONTROL ITEMS MAY BE REQUIRED TO OPEN THE AVAILABLE PORTIONS OF THE EXPRESSWAY SYSTEM TO TRAFFIC AT THE TIME THAT THIS PROJECT IS COMPLETED. (INTERIM TRAFFIC CONTROL ITEMS ARE NOT INTENDED FOR USE AS TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION OF THIS PROJECT). THE PORTION OF THE I-675 ROUTE WHICH MAY BE OPENED TO TRAFFIC WHEN THIS PROJECT IS COMPLETED COULD BE: BOTH THE "NORTH" AND "SOUTH" ADJOINING CONSTRUCTION SECTIONS; EITHER SECTION; OR NONE. FOR ANY OF THESE CONDITIONS AN INTERIM TRAFFIC PLAN WILL BE SPECIFIED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REMOVAL AND/OR INSTALLATION OF SPECIFIED INTERIM TRAFFIC CONTROL ITEMS OF THE TYPES LISTED BELOW, ON THIS PROJECT AND ON THE ADJOINING PROJECTS.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM	DESCRIPTION	QUANTITY
606	GUARD RAIL, TYPE 6	3950 LF
606	TEMPORARY DRUMS	225 EA
202	TEMPORARY BEAM RAIL REMOVED AND DISPOSED OF	3,400 LF
847	Removal of Pavement Markings	7,400 LF
614	Temporary Edge Lines, Class I, Tape	0.55 Mi
614	Temporary Lane Lines, Class I, Tape	0.23 Mi
857	Removal of Overlay Sign	5 EA
857	Temporary Sign Post, No. 3 Post	200 LF
620	TEMPORARY DELINEATOR, TYPE D	30 EA
857	SIGNS, FLAT SHEET	200 SF
857	GROUND MOUNTED SIGN SUPPORT, NO. 4 POST	90 LF
606	ANCHOR ASSEMBLY, AS PER PLAN	2 EA

For Anchor Assemblies, See Sht. No. 146

857 Structural Support Mounted on Concrete Barrier, As Per Plan

This work shall consist of furnishing and installing No. 4 Posts as shown on sheet TC-17.

Work shall consist of placing a 6" pipe insert in the concrete barrier at the correct location to form the post mounting hole. A No. 4 Post, approximately 10 feet long shall be inserted into the mounting hole. The hole shall be filled as shown on sheet TC-17.

The quantity furnished and installed will be paid for at the contract price bid per Linear Foot, 857 Structural Support mounted on Concrete Barrier, As Per Plan, which price shall be full compensation for furnishing and installing the post, including necessary materials, hardware, labor and equipment.

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GENERAL SUMMARY

TRAFFIC CONTROL

PROJECT PARTICIPATION EXCEPT AS NOTED

GRAND TOTAL	ITEM	UNIT	DESCRIPTION	TC-1	TC-11	TC-12	TC-13	TC-14	TC-15	TC-16
221.0	857	L.F	Ground Mounted Support, No. 3 Post, driven			221.0				
885.0	857	L.F	Ground Mounted Support, No. 4 Post, driven	90.0		745.0				
38.0	857	L.F	Ground Mounted Support, S4x7.7		38.0					
140.0	857	L.F	Ground Mounted Support, W6x8.5		140.0					
139.0	857	L.F	Ground Mounted Support, W8x17		139.0					
48.0	857	L.F	Ground Mounted Support, W10x21		48.0					
238.0	857	L.F	Ground Mounted Support, W12x31		238.0					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design G, 47' Span		1					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design G, 51' Span		1					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design G, 52' Span		1					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design G, 63' Span		1					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design G, 71' Span		1					
2	857	Ea.	Overhead Sign Support, No. 7.G5, Design 8, 82' Span		2					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design 8, 87' Span		1					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design 8, 89' Span		1					
1	857	Ea.	Overhead Sign Support, No. 7.G5, Design 8, 97' Span		1					
2	857	Ea.	Overhead Sign Support, No. 12.30, Design 10, 30' Arm		2					
1	857	Ea.	Overpass Structure Mounted Sign Support, No. 18.26, Design 10		1					
3	857	Ea.	Overpass Structure Mounted Sign Support, No. 18.24		3					
20.0	857	L.F	Structural Support Mounted on Concrete Barrier, as per plan			20.0				
123.9	857	C.Y.	Concrete for Anchor Base Foundations		123.9					
24.2	857	C.Y.	Concrete for Embedded Foundations		24.2					
20	857	Ea.	Breakaway Beam Connections		20					
745.5	857	S.F.	Signs, Flat Sheet	200		545.5				
5466.5	857	S.F.	Signs, Extrusheet		5466.5					
1617	857	S.F.	Covering of Signs	1617						
1055.5	857	S.F.	Signs, Overlay		1055.5					
15	858	Ea.	Sign Service				15			
24	858	Ea.	Signs Wired				24			
4	858	Ea.	Signs Wired, Overpass Structure Mounted				4			
15	855	Ea.	Disconnect Switch with Enclosure, Type X				15			
3	858	Ea.	Switch Enclosure Mounting Bracket Assembly				3			
49	858	Ea.	Ballast, Type CMRI-175-48.0				49			
8	858	Ea.	Ballast, Type CMRI-250-48.0				8			
49	855	Ea.	Mercury Vapor Luminaire Type TG3121 with 175 Watt Lamp				49			
8	858	Ea.	Mercury Vapor Luminaire Type TG-31.21 with 250 Watt Lamp				8			
15	625	Ea.	Ground Rod				15			
57	620	Ea.	Delineators, Type A, Post Mounted							57
1	620	Ea.	Delineators, Type A, Bracket Mounted							1
183	620	Ea.	Delineators, Type C, Post Mounted							183
17	620	Ea.	Delineators, Type C, Bracket Mounted							17
128	620	Ea.	Delineators, Type D, Post Mounted							128
2529	847	Mi.	4 Inch Edge Lines, 847.09					8.57	16.72	
75	847	L.F.	24 Inch Stop Lines, 847.09					75		
16.74	847	Mi.	4 Inch Lane Lines, 847.09					5.18	11.56	
10736	847	L.F.	8 Inch Channelizing Lines, 847.09					1142	9594	
3668	847	L.F.	24 Inch Broad Transverse Lines, 847.09					748	2920	
0.87	847	Mi.	4 Inch Center Lines, 847.09					0.87		
3400	202	L.F.	Temporary Beam Rail Removed and Disposed of	3400						
3950	606	L.F.	Guard Rail, Type G,	3950						
225	606	Ea.	Temporary Drums,	225						
30	620	Ea.	Temporary Delineators, Type D	30						
5	851	Ea.	Removal of Overlay Sign	5						
0.55	614	Mi.	Temporary Edge Lines, Class I, Tape	0.55						
0.23	614	Mi.	Temporary Lane Lines, Class I, Tape	0.23						
7400	847	L.F.	Removal of Pavement Markings	7400						
200	851	L.F.	Temporary Sign Post, No. 3 Post	200						
2	606	Ea.	Anchor Assembly, Modified as per plan	2						

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MAJOR GUIDE SIGN PLAN

FED. NO. DIVISION	STATE	PROJECT
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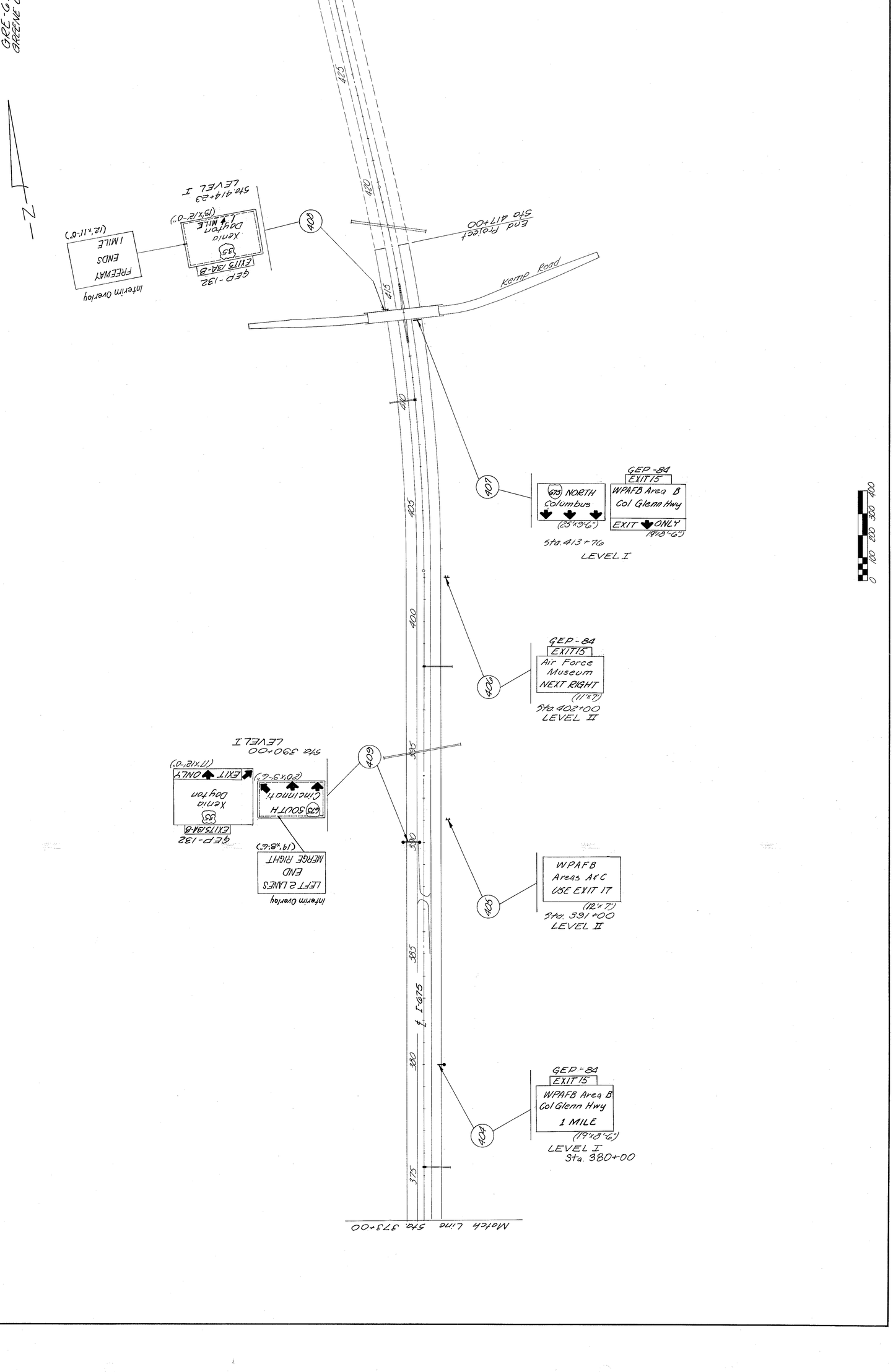
MAJOR GUIDE SIGN PLAN



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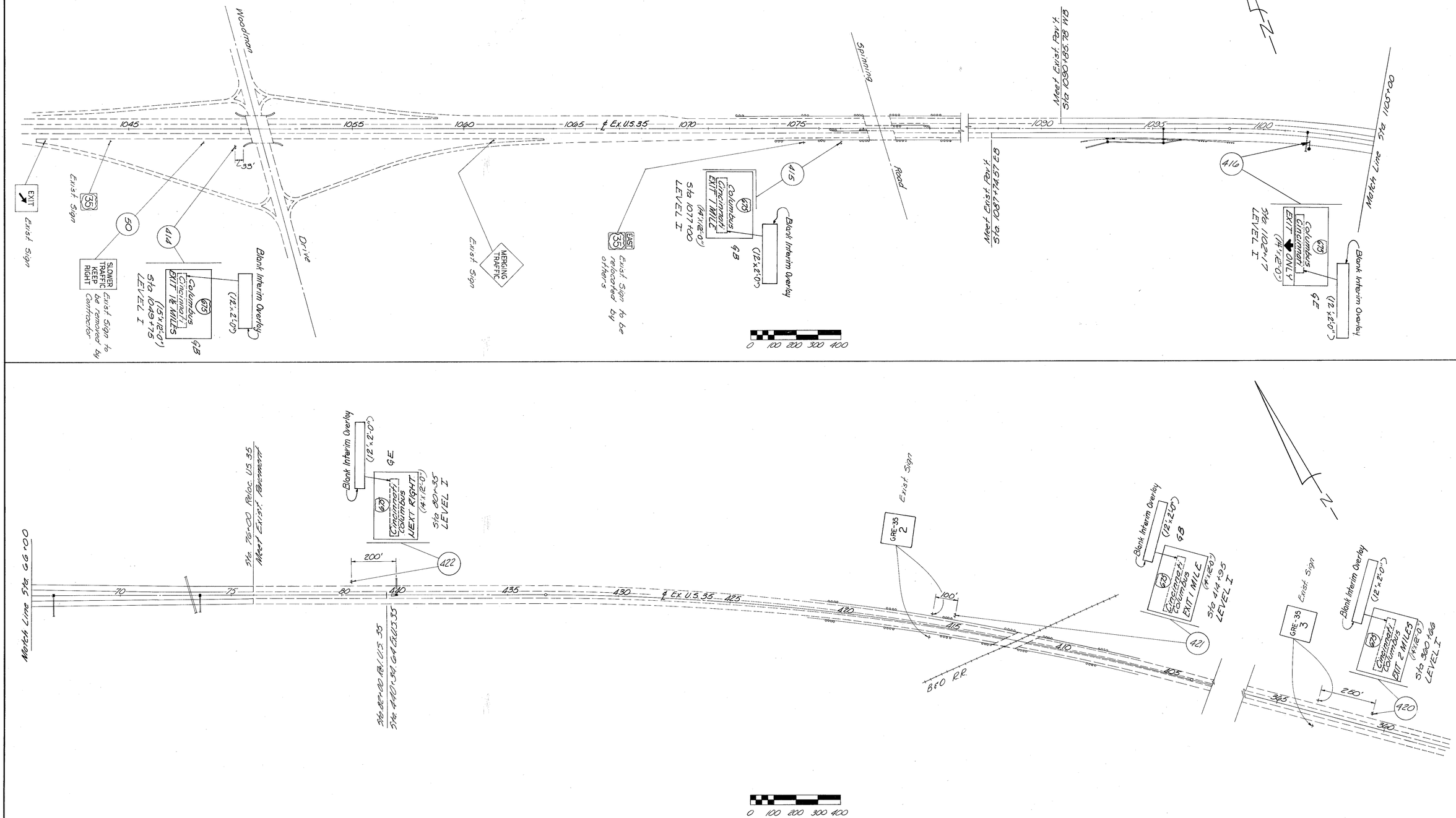

MAJOR GUIDE SIGN PLAN

FED. RD. DIVISION	STATE	PROJECT	
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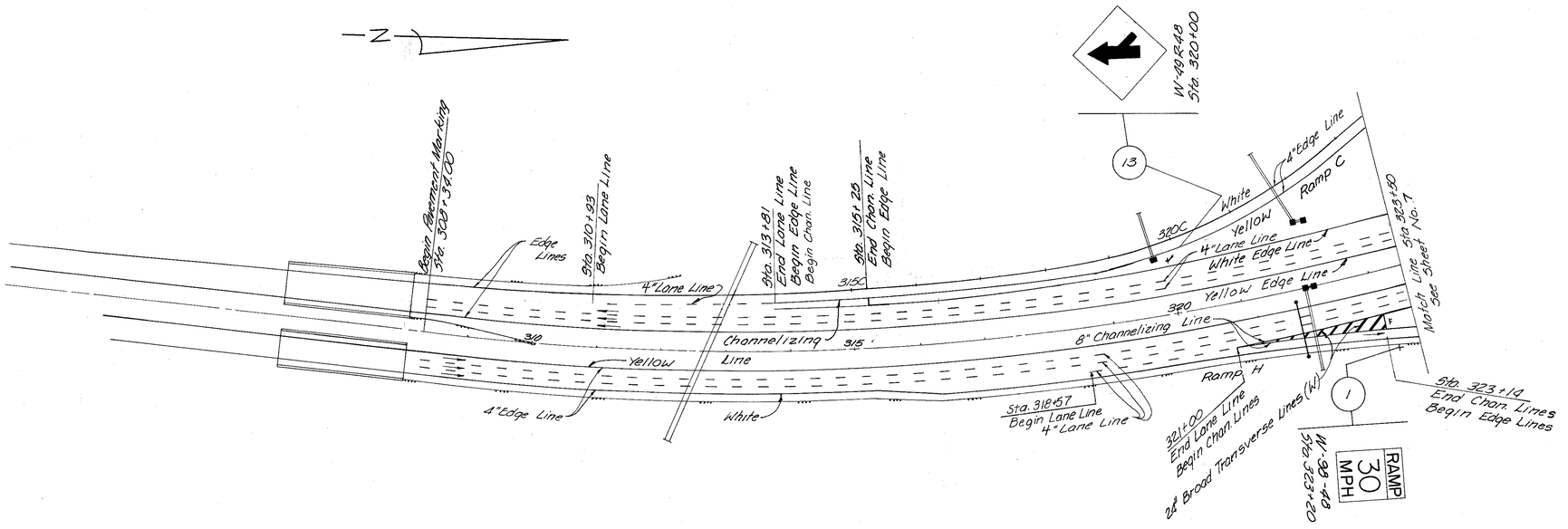

Note: Install signs 7 & 8 one foot off survey centerline so survey line of sight is not blocked. Mount 2 Type D Delineators back to back on each post.

NOTE: If Temporary Terminal is Installed, Conflicting Permanent Pavement Markings Shall Be Non-Performed. (See Sheet TC-10)

TRAFFIC CONTROL PLAN

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Legend

(W) - White Line
(Y) - Yellow Line
C. L.- Channelizing Line
L.L. - Lane Line
E.L. - Edge Line

Match Line Sta 323+50 ℄ See Sheet No. 6

Ramp C

325C

323+93 Begin L.L.

4" Lane Line

326+81 End L.L. Begin E.L.

8" Channelizing Line

328+25 End C.L. Begin E.L.

325

4" Edge Line

325H

320A

Edge Lines

330C

Channelizing Line Broad Transverse Lines (W)

315+44 A Begin C.Ls.

315A

316+47 A End C.Ls. Begin E.Ls.

Edge Lines

Ramp E

330E

310A

W-49R-30 Sta 33+00

RAMP 30 MPH

W-30-48 Sta 339+50

W-49R-48 Sta 28+00

4" Lane Line

Ramp A

305A

17+87 US.35 End C.Ls. Begin E.Ls.

24" Broad Transverse Lines

8" Channelizing Lines

14+75 US.35 Begin C.Ls.

Match Line Sta 13+00 See Sheet No. 8

332+50 C-D Begin C.L.

12

335+00 C-D End E.L. Begin C.L.

Broad Transverse Line (W)

Channelizing Line

335+59 C-D End C.L. Begin L.L.

31+01 US.35 End L.L. End E.L. Begin L.L.

24

29+81 US.35 End E.L. Begin C.L.

325E

14

Edge Lines

20

25

Edge Lines

18+58 C-D Begin C.L.

16+50 US.35 End C.L. Begin E.L.

Edge Line (W)

8" Channelizing Line

15+40 US.35 End L.L. Begin C.L. Begin E.L.

13+00 US.35 Begin L.L.

335G

22+11 C-D End C.Ls. Begin L.L.

27

21+04 C-D End E.L. Begin C.L.

28

29

Broad Transverse Lines (W)

W-49R-30 Sta 14+00

RAMP 30 MPH

W-98-48 Sta 22+30

W-49R-30 Sta 19+10

332+94 Begin L.L.

335+05 End L.L.

4" Lane Line

335

33+41 US.35 End L.L.

35

U.S. 35

35+38 US.35 End L.L. Begin C.L.S.

35+41 US.35 Begin L.L.

35+79 C-D End C.L.

35C-D

32+79 C-D End C.L. Begin E.Ls.

8" Channelizing Lines

23

335D

340D

RAMP 30 MPH

W-98-48 Sta 00+55

W-49R-30 Sta 35+79

20

W-49R-48 Sta 337+75

I-675

343+75 C-D End L.L. Begin C.Ls.

Channelizing Lines

344+68 C-D End C.L. Begin E.Ls.

Broad Transverse Lines (W)

346+68 C-D End C.L.

345G

Ramp G

345B

4" Edge Line

Ramp B

345B

W-49R-48 Sta 14+00

NOTE: If Temporary Terminals and Ramp Closures are Installed, Conflicting Permanent Pavement Markings Shall Be Non-Performed. (See Sheet TC-10)

335H

Ramp H

W-49R-48 Sta 41+50

4" Edge Line

15

7" Lane Line

40 C-D

45

40

335C

Begin C.L.

End E.L.

Match Line Sta 47+50 See Sheet No. 8

45+10 C-D End C.Ls.

RAMP 40 MPH

W-98-48 Sta 45+20 C-D

25

335A

Ramp A

4" Edge Line

330F

Ramp F

335F

44+09 C-D End E.Ls. Begin C.Ls.

21

W-49R-48 Sta 337+75

340+59 A End E.L. Begin C.L.

Channelizing Line

343+02 A End E.L. End C.L.

345A

Ramp A

4" Lane Line

340A

11

348+92 C-D Begin C.L.

W-49R-48 Sta 347+00

Edge Lines

3

38+48 C-D Sta 38+67 M

Dayton Xenia Rd.

352+93 C-D End E.L. Begin C.L.

RAMP 40 MPH

W-98-48 Sta 354+10 C-D

10

Broad Transverse Lines (W)

Match Line Sta 353+50 ℄ See Sheet No. 6

TRAFFIC CONTROL PLAN

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SPEED LIMIT 55 R-1-48 Sta 65+00

EAST 35 M-1-36-2 Sta 62+00

Sta 78+00

75

17

16

White
Yellow
Yellow
White

65

60

58

4" Lane Line

50+38 End Lane Line

8" Channelizing Line

47+98 Sta Begin Lane Line

Ramp H

4" Edge Line

White
Yellow

50

White

4" Edge Line

Match Line Sta 47+50 See Sheet No.7

50+75 End Lane Line

54+75 WB End Chan. Lines Begin Lane Line

51+85 C-D End Edge Lines Begin Chan. Lines

Channelizing Lines

24" Stop Line Broad Transverse Lines (W)

Wenrich Dr

R-1-30 Sta 0+55

STOP

30

31

32

45 MPH W-2-30 W-143-18 Sta 12+00

To

Center Line Solid Double (Y)

(Y) Solid & Broken Center Line

Broad Transverse Lines (Y)

4" Lane Line

Center Line Solid Double

C-25R-24 Sta 1+80

33

SERVICE ROAD "B"

3

1

22

STOP R-1-30 Sta 05+00

Station Equation Sta 1105+59.02 Back = Sta 1104+00 Ahead

-1.57 Sta 0+00 Ahead

48

W-60D-36 Sta 18+00

Ramp A 295A

Match Line Sta 13+00 See Sheet No.7

10

5

White

4" Lane Line

Yellow

1105

4" Edge Line

1100

Yellow

White

1095

Match Line Sta 1094+00 See Below

1098+00 Begin Lane Line

340B

Ramp B

335B

SL-24+75 Sta 24+75

W-1-30 W-143-18 Sta 22+00

35 MPH

4+60 End Chan. Line Begin Edge Line

8" Channelizing Line

31+40 Lane Line

End Lane Line

Begin Chan. Line

Begin Edge Line

1+00 Begin Lane Line

47

LEFT LANE ENDS W-52-36 Sta 22+00

34

Boyton Xenia Rd.

46

W-8L-36 Sta 24+00

Edge Line (Yellow)

Match Line Sta 27+00 See Sheet No.9

45

45 MPH W-1-30 W-143-18 Sta 22+00

18

WEST 35 M-40-36 M-1-36-2 Sta 1097+00

Sta 1097+74.57

1085

Match Line Sta 1094+00 See Above

White

Yellow 1090

4" Edge Line

4" Lane Line

Yellow

White

Sta 1091+65.28

19

SPEED LIMIT 55 R-1-48 Sta 1087+00

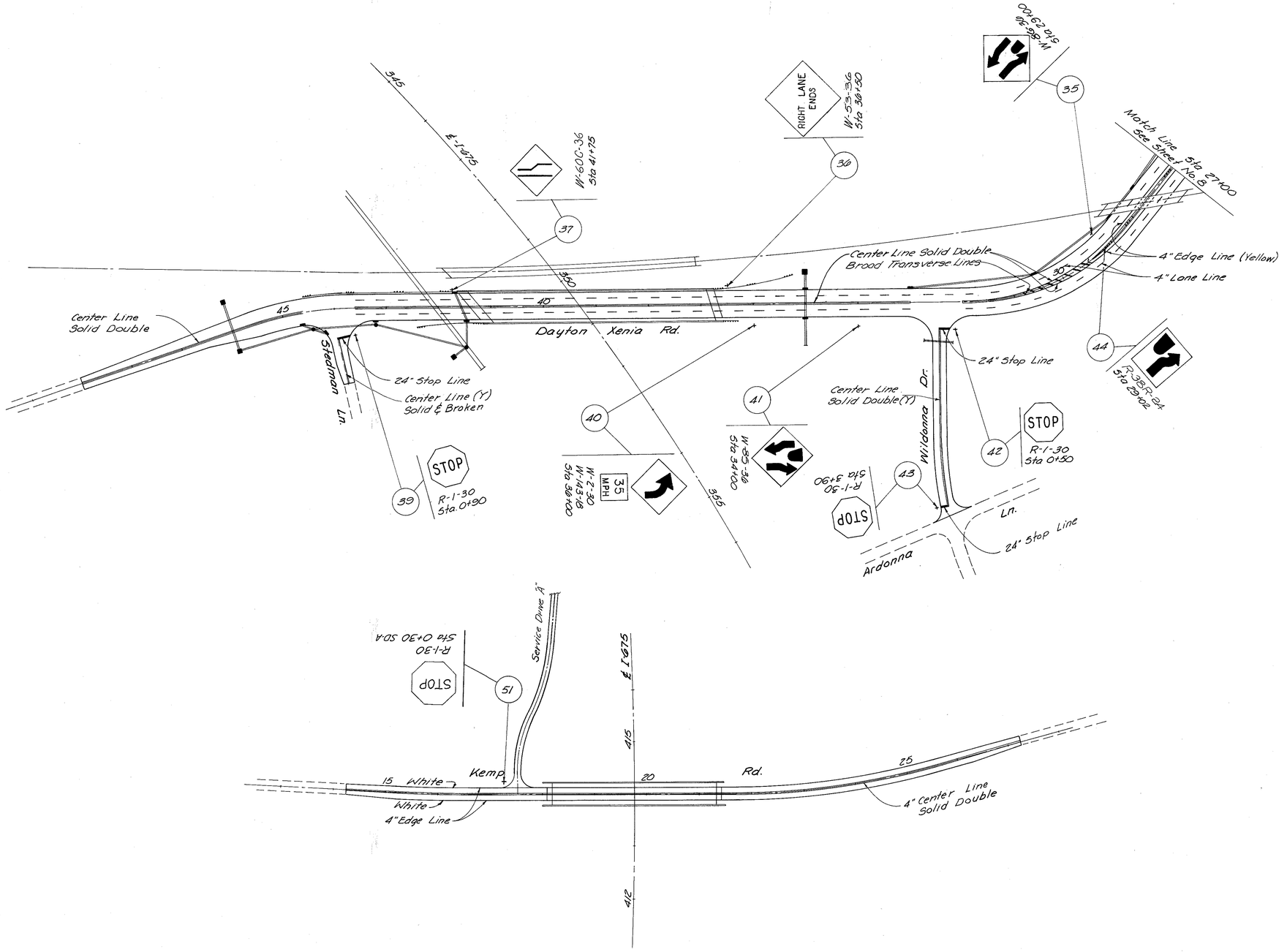
TRAFFIC CONTROL PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

132
616

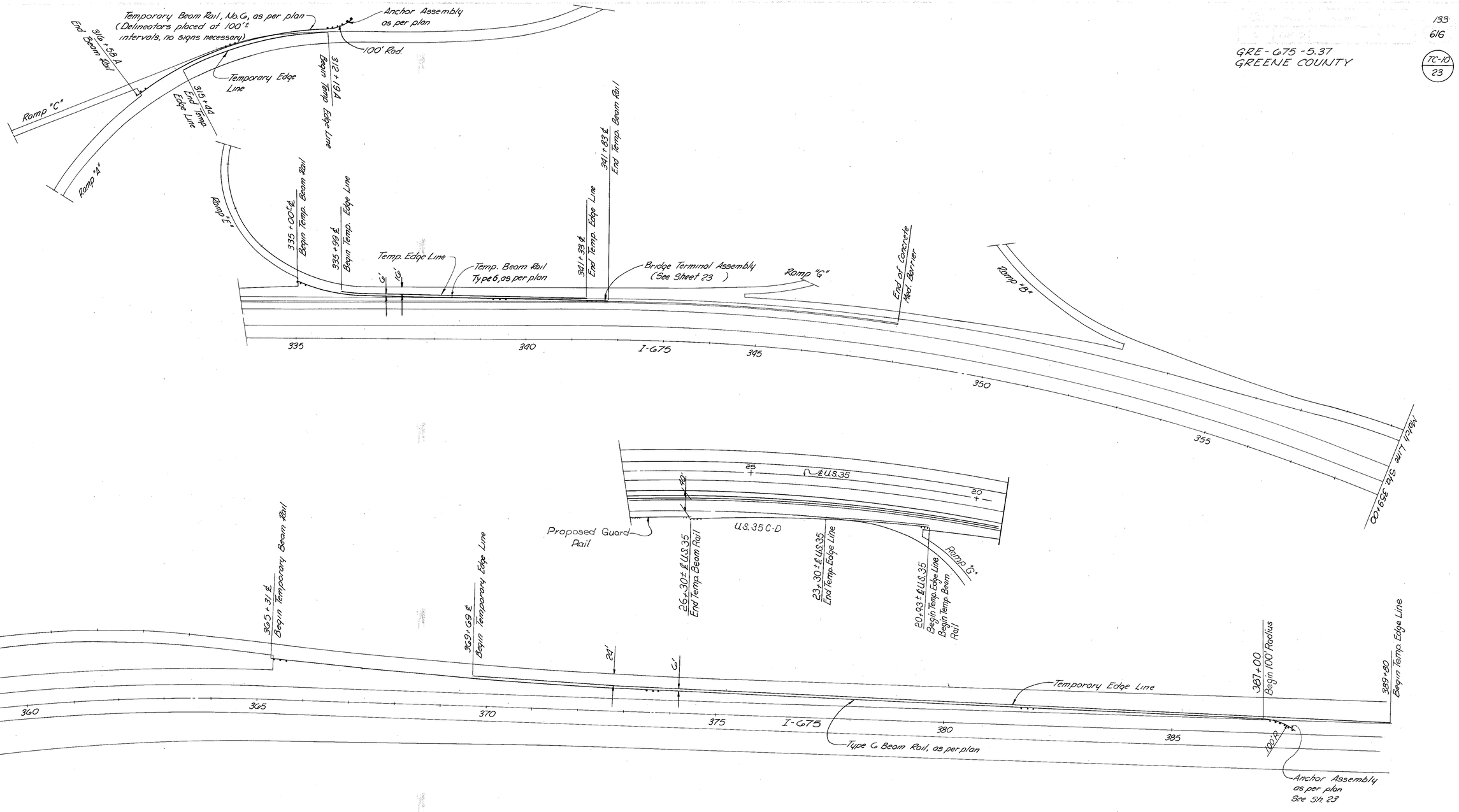
GRE-675-5.37
GREENE COUNTY

TC-9
23



TRAFFIC CONTROL PLAN

GRE-675-5.37
GREENE COUNTY



Note:
If Temporary Terminal is Installed, Conflicting Permanent Pavement Markings Shall be Non-Performed.

TRAFFIC CONTROL PLAN

SIGN QUANTITIES

QUANTITY CALCULATIONS
BY L.G.S. DATE 6-71
CHECKED K.A.F. DATE 2-72
Revised N.H.H. - 7/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-537
GREENE COUNTY

Sheet No.	Roadway	Station	Reference No.	857 Supports – No. 7.65: Design 6 Span=47'-0" (EA.)	Design 6 Span=51'-0" (EA.)	Design 6 Span=52'-0" (EA.)	Design 6 Span=63'-0" (EA.)	Design 6 Span=71'-0" (EA.)	Design 8 Span=82'-0" (EA.)	Design 8 Span=87'-0" (EA.)	Design 8 Span=89'-0" (EA.)	No. 12.30: Design 10 30' Arm (EA.)	No. 7.65: Design 8 Span 97'-0" (EA.)	Overpass Structure Mounted Sign Supports: No. 18 26 Design 10 (EA.)	No. 18 24 (EA.)	857 Extru-Sheet Size (Ft.x Ft.)	Area (S.F.)	Signs Overlay (S.F.)	857 Supports: Ground Mounted Support S4x7.7 (L.F.)	Ground Mounted Support W6x8.5	Ground Mounted Support W8x17 (L.F.)	Ground Mounted Support W10x21 (L.F.)	Ground Mounted Support W12x31 (L.F.)	Break-Away Connections (EA.)	857 Conc. for Ground Mounted Sign Support Foundation (Cu. Yd.)	857 Concrete for Anchor Base Foundation (Cu. Yd.)
	I-675	321+82	400a								/					13'-0"x7'-6"	97.5									11.3
			400b													13'-0"x10'-0"	130.0									
			400c													14'-0"x7'-6"	105.0									
			GEP-96													8'-0"x2'-0"	16.0									
			GEP-96													8'-0"x2'-0"	16.0									
	I-675	323+25	401													8'-0"x5'-0"	40.0			35				2	0.66	
	I-675	337+94	403													8'-0"x5'-0"	40.0			35				2	0.66	
	I-675	380+00	404									/				19'-0"x9'-0"	171.0									4.8
			GEP-84													7'-0"x2'-0"	14.0									
	I-675	391+00	405													12'-0"x7'-0"	84.0				48.5			2	2.20	
	I-675	402+00	406													11'-0"x7'-0"	77.0				41.5			2	2.20	
			GEP-84													7'-0"x2'-0"	14.0									
	I-675	390+00	409a						/							20'-0"x10'-0"	200.0	161.5								11.0
			409b													17'-0" 12'-6"	212.5									
			GEP132													11'-0"x2'-0"	22.0									
	I-675	369+56	410a										/			25'-0"x10'-0"	250.0	204.0								11.0
			410b													14'-0"x10'-0"	140.0									
			410c													14'-0"x10'-0"	140.0									
			GEP-96													8'-0"x2'-0"	16.0									
			GEP-96													8'-0"x2'-0"	16.0									
	I-675 C-D	354+00CD	411a					/								9'-0"x8'-6"	76.5									10.0
			GEP-96													8'-0"x2'-0"	16.0									
			411b													12'-0"x6'-6"	78.0									
			GEP-96													8'-0"x2'-0"	16.0									
	I-675C-D	339+40CD	412a		/											12'-0"x8'-6"	102.0	77.0								12.4
			412b													12'-0"x6'-6"	78.0									
			GEP-96													8'-0"x2'-0"	16.0									
	I-675C-D	334+89CD	413													8'-0"x5'-0"	40.0			35				2	0.66	
	U.S.35	1049+75	414													15'-0"x12'-0"	180.0	24.0					58.0	2	3.00	
	U.S.35	1077+00	415													14'-0"x12'-0"	168.0	24.0					60.5		3.00	
	U.S.35	1102+17	416									/				14'-0"x12'-0"	168.0	24.0								4.7
	U.S.35	14+92	417a							/						17'-0"x10'-0"	170.0									13.0
			417b													17'-0"x12'-6"	212.5	24.0								
	Ramp A	307+20	418													12'-0"x8'-0"	96.0	77.0			49.0			–	2.20	
	Ramp A	315+28	419a				/									16'-0"x8'-6"	136.0									10.0
			419b													14'-0"x6'-6"	91.0	65.0								
	U.S.35	360+66	420													14'-0"x12'-0"	168.0	24.0					58.0	2	3.00	
	U.S.35	414+95	421													14'-0"x12'-0"	168.0	24.0					61.5	–	3.00	
	U.S.35	80+35	422													14'-0"x12'-0"	168.0	24.0				48.0		2	2.46	
	U.S.35	53+65WB	423a						/							17'-0"x10'-0"	170.0									10.9
			423b													17'-0"x10'-0"	170.0	24.0								
	U.S.35	45+10CD	424a			/										12'-0"x8'-6"	102.0	77.0								12.4
			424b													14'-0"x6'-6"	91.0									
	U.S.35	22+20	425a	/												9'-0"x8'-6"	76.5									12.4
			425b													15'-0"x6'-6"	97.5	70.0								
	I-675	335+17	402											/		14'-0"x7'-6"	105.0									
			GEP-96													8'-0"x2'-0"	16.0									
	I-675	413+76	407a												/	25'-0"x10'-0"	250.0									
			407b												/	19'-0"x9'-0"	171.0									
			GEP-84													7'-0"x2'-0"	14.0									
	I-675	414+23	408												/	13'-0"x12'-6"	162.5	132.0								
			GEP 132													11'-0"x2'-0"	22.0									
	I-675	352+50B	426													8'-0"x5'-0"	40.0			35					0.66	
	US-35	18+10	427													6'-0"x5'-0"	30.0		33						0.54	
TOTAL TO GENERAL SUMMARY				/	/	/	/	/	2	/	/	2	/	/	3		5466.5	1055.5	33	140	139.0	48.0	238	20	24.2	123.9

SIGN QUANTITIES

QUANTITY CALCULATIONS
BY K. Frank DATE 5-25-71
CHECKED L.S.S. DATE 2-9-72
Revised N.H.H. 7/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37
GREENE COUNTY

135/616

TC-12/23

LOCATION				SIGN ERECTION / 857 FLAT-SHEET																																																				857 SUPPORTS										
SHEET NO.	ROADWAY	STATION	REFERENCE NO.	R-1-30 EA.	EA.	EA.	EA.	R-10-48 EA.	EA.	EA.	R-19-24 EA.	R-123-36 EA.	EA.	EA.	R-38R-24 EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	W-1-30 EA.	W-2-30 EA.	EA.	W-49R-30 EA.	EA.	EA.	W-49R-48 EA.	W-52-36 EA.	EA.	W-53-36 EA.	EA.	EA.	W-60D-36 EA.	W-60C-36 EA.	W-85-36 EA.	W-86-36 EA.	W-98-48 EA.	EA.	W-143-18 EA.	EA.	EA.	EA.	EA.	EA.	M-1-30-2 EA.	M-5-30-3 EA.	EA.	M-39-36 EA.	M-40-36 EA.	EA.	IM-37-36 EA.	N-41 EA.			Structural Support #2 Drive Post L.F.	Structural Support #3 Drive Post L.F.	Structural Support #4 Drive Post L.F.							Structural Support Mounted on Conc. Barrier as per plan L.F.		
	Ramp H	323+20	1																																					1																			33.0									
	I-675																																																																			
		348+50	3																										1																												30.5									
		376+78	4																																														1*					1						31.0										
		386+75	5					1																																																			32.0									
		387+70	6									1																																															14.0									
		387+32	7								1																																														13.0										
		387+68	8								1																																														13.0										
		387+20	9									1																																															14.0									
		354+10	10																																					1																			32.0									
		347+00	11																										1																												32.5									
		334+00	12																							1																																							10.0		
		320+00	13																										1																												32.0									
	U.S. 35	28+00	14																										1																												33.5									
		44+50	15																										1																												33.5									
		62+00	16																																												1*			1								31.0										
		65+00	17					1																																																			32.0									
		1097+00	18																																												1*				1							31.0										
		1087+00	19					1																																																			32.0									
	Ramp A																																																																			
		337+75	21																										1																												32.0									
	Service Rd. B	0+50	22	1																																																					13.0										
	Ramp D	335+00	23																																					1																			32.0									
	Ramp E	339+50	24																																					1																			32.0									
	Ramp F	45+20	25																																					1																			32.0									
	U.S. 35	35+79	26																										1																												32.0									
	Ramp G	22+30	27																																					1																			32.0									
	U.S. 35	19+70	28																							1																																							10.0		
		14+00	29																										1																												33.0									
	Dayton Xenia	12+00	30																					1																	1																		15.0									
	Wenrick Dr.	0+55	31	1																																																					13.0										
	Dayton Xenia	14+00	32																																		1																						14.5									
		18+80	33												1																																										12.0										
		24+75	34																				1																	1																		14.5									
		29+00	35																																			1																					14.0									
		36+50	36																													1																											13.0									
		41+75	37																																	1																							13.0									
	Stedman Ln.	0+90	39	1																																																					13.0										
	Dayton Xenia	36+00	40																					1																	1																		14.5									
		34+00	41																																		1																						14.0									
	Wildonna Dr.	0+50	42	1																																																					13.0										
		3+90	43	1																																																					13.0										
	Dayton Xenia	29+02	44												1																																										12.0										
		26+00	45																				1																	1																		14.5									
		24+00	46																																			1																					14.0									
		22+00	47																											1																													14.0									
		18+00	48																																1																								14.0									
	Service Dr. 'A'	0+30	51	1																																																					13.0										
TOTAL NUMBER OF SIGN FACES				6				3			2	2			2								2	2		2			8	1		1			1	1	2	2	6		4						2	1		1	1		1														
AREA PER SIGN FACE				6.25				20.00			5.00	9.0			5.00								6.25	6.25		6.25			16.00	9.00		9.00			9.00	9.00	9.00	9.00	20.00		2.25						9.00	12.00		4.50	4.50		4.50														
SUBTOTAL SQ. FT.				37.5				60.0			10.00	18.0			10.0								12.5	12.5		12.5			128.0	9.0		9.0			9.0	9.0	18.0	18.0	120.0		9.0						18.0	12.0		4.5	4.5		4.5														
TOTAL TO GENERAL SUMMARY																															545.5																											221.0	745.0							20.0		

* Drill as per Route Shield

ITEM 858 SIGN LIGHTING QUANTITIES

QUANTITY CALCULATION
BY N.H.H. DATE 2/79
CHECKED C.E.T. DATE 3/79
Revised N.H. T-79

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37

136
616

TC-13
23

LOCATION										MERCURY VAPOR LUMINAIRE TYPE								BALLAST TYPE												
SHEET NO.	ROADWAY	STATION	REFERENCE NO.	SIGN SERVICE			DISCONNECT SWITCH ENCLOSURE MOUNTING BRACKETS	DISCONNECT SWITCH					175 WATT H39 KB		250 WATT H37 KB			CMRI-175-480	CMRI-250-480							625 GROUND ROD	SIGNS WIRED	STRUCTURE MOUNTED SIGN WIRED	REMARKS
				EA.			EA.	EA.																			EA.	EA.	EA.	
	I-675	321+82	400	1				1																			1			
			400A										2					2										1		
			400B										2					2										1		
			400C										2					2										1		
	I-675	335+17	402	1			1	1					2					2									1		1	
	I-675	380+00	404	1				1					2					2									1	1		
	I-675	413+76	407	1			1	1																			1			
			407A										3					3											1	
			407B										2					2											1	
	I-675	414+23	408	1			1	1							2				2								1		1	
	I-675	390+00	409	1				1																			1			
			409A										3					3										1		
			409B												2				2									1		
	I-675	369+56	410	1				1																			1			
			410A										3					3										1		
			410B										2					2										1		
			410C										2					2										1		
	I-675 C-D	354+00 C-D	411	1				1																			1			
			411A										1					1										1		
			411B										2					2										1		
	I-675 C-D	339+40 C-D	412	1				1																			1			
			412A										2					2										1		
			412B										2					2										1		
	U.S. 35	1102+17	416	1				1							2				2								1	1		
	U.S. 35	14+92	417	1				1																			1			
			417A										2					2										1		
			417B												2				2									1		
	Ramp A	315+28	419	1				1																			1			
			419A										2					2										1		
			419B										2					2										1		
	U.S. 35	53+65 WB	423	1				1																			1			
			423A										2					2										1		
			423B										2					2										1		
	U.S. 35	45+10 CD	424	1				1																			1			
			424A										2					2										1		
			424B										2					2										1		
	U.S. 35	22+20	425	1				1																			1			
			425A										1					1										1		
			425B										2					2										1		
TOTAL				15			3	15					49		8			49	8								15	24	4	

PAVEMENT MARKING

Item 847 Except as Noted

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

137 / 616

GRE-675-5.37
GREENE COUNTY

TC-14.23

QUANTITY CALCULATION
BY K Frank DATE 5/20/11
CHECKED [illegible] DATE 5-9-12

Revised N.H.H. 7/79

ROADWAY	STA	TO	STA	SIDE	4" EDGE LINE	4" LANE LINE	8" CHANNEL LINE	24" BROAD TRANSVERSE LINES WHITE	24" STOP LINE
					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
U.S. 35	1087+74	to	1106+93	Rt.	1919 *				
	0+00	to	76+00	Rt.	7600 *				
	1087+74	to	1106+93	Rt.		1919			
	0+00	to	76+00	Rt.		7600			
	1098+00	to	1106+93	Rt.		893			
	0+00	to	10+00	Rt.		1000			
	1087+74	to	1106+93	Rt.	1919				
	0+00	to	10+00	Rt.	1000				
	17+87	to	31+01	Rt.	1314				
	39+81	to	47+98	Rt.	817				
	56+78	to	76+00	Rt.	1922				
	1090+86	to	1106+93	Lt.	1607*				
	0+00	to	76+00	Lt.	7600*				
	1090+86	to	1106+93	Lt.		1607			
	0+00	to	76+00	Lt.		7600			
	1090+86	to	1101+53	Lt.	1067				
	3+40	to	4+60	Lt.	120				
	15+40	to	51+85	Lt.	3645				
	59+75	to	76+00	Lt.	1625				
Collector - Distributor U.S. 35	4+60	to	21+04	Lt.	1644				
	22+11	to	30+38	Lt/Rt.		827			
	22+69	to	30+38	Lt.	769				
	30+38	to	34+79	Lt.			441		
	30+38	to	34+79	Lt.				148	
	32+79 C-D	to	44+09 C-D	Rt.	1130				
	48+08 C-D	to	51+85 C-D	Rt.	377				
	51+85	to	59+75	Lt.	790				
	13+00	to	15+40	Lt.		240			
	15+40	to	16+60	Lt.			120		
	16+60	to	51+85	Lt.	3525*				
	51+85 C-D	to	54+81 C-D	Rt.			296		
	51+85	to	54+75	Lt.				426	
	51+85	to	54+70	Lt.			285		
	54+75	to	56+75	Lt.		200			
SUB-TOTAL "A"					20,390	21,886	1142	574	

ROADWAY	STA	TO	STA	SIDE	4" EDGE LINE	4" LANE LINE	4" LANE LINE	8" CHANNEL LINE	4" CENTER LINE SOLID DOUBLE	4" CENTER LINE BROKEN AND SOLID	24" BROAD TRANSVERSE LINES YELLOW	24" STOP LINE
					LIN. FT.		LIN. FT.	LIN. FT.	LIN. FT	LIN. FT.	LIN. FT.	LIN. FT.
Dayton Xenia Road	11+00	to	12+24	Lt. & Rt.					124			
	13+38	to	15+81	Lt. & Rt.					243			
	15+81	to	17+60	Rt.					179			
	15+81	to	17+60	Lt.					179			
	18+25	to	29+42	Rt.	1117 *							
	18+25	to	29+42	Lt.	1117 *							
	29+42	to	31+83	Rt.					241			
	29+42	to	31+83	Lt.					241			
	33+07	to	43+09	Lt. & Rt.					1002			
	44+53	to	49+00	Lt. & Rt.					447			
	14+74	to	17+60	Rt.			286					
	18+25	to	43+09	Rt.			2484					
	14+74	to	31+83	Lt.			1709					
	33+07	to	43+09	Lt.			1002					
	15+81	to	17+60	Lt. & Rt.							62	
	29+42	to	31+83	Lt. & Rt.							112	
Wenrick Dr.	0+57	to	2+05	&						148		
	0+55			Lt.								20
Wildonna Dr.	0+50			Lt.								19
	31+90			Rt.								12
	0+52	to	3+88	Lt. & Rt.					336			
Stedman Ln.	0+90			Lt.								24
	0+92	to	2+40	Lt. & Rt.						148		
Kemp Rd.	14+25	to	27+25	Lt.	1300							
	14+25	to	27+25	Rt.	1300							
	14+25	to	27+25	Lt. & Rt.					1300			
SUB-TOTAL "B"					4834		5481		4292	296	174	75

SUB-TOTAL "A" LIN. FT.	20,390		21,886	1142	—	—	574		—	
SUB-TOTAL "B" LIN. FT.	4834		5481		4292	296	174		75	
TOTAL LIN. FT. THIS SHEET	25,224		27,367	1142	4292	296	748		75	
TOTAL MILES THIS SHEET	4.77		5.18		0.81	0.06				

* Yellow Edge Lines - Total Project Participation = 24,485 L.F. or 4.64 MI.

PAVEMENT MARKING QUANTITIES

PAVEMENT MARKING

Item 847 Except as Noted

QUANTITY CALCULATION
BY K. Frank DATE 5-2021
CHECKED TMJ DATE 5-10-21

Revised: N.H.H. 7-79

FED. RD. DIVISION	STATE	PROJECT	
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GRE-675-5.37
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ROADWAY	STA	TO	STA	SIDE	4" EDGE LINE		4" LANE LINE	8" CHANNEL LINE			24" BROAD TRANSVERSE LINES WHITE			
					LIN. FT.		LIN. FT.	LIN. FT.			LIN. FT.			
I-675	308+34	to	417+00	Lt.	10866*									
	308+34	to	417+00	Lt.			10866							
	308+34	to	417+00	Lt.			10860							
	313+81	to	316+26	Lt.	245									
	326+81	to	365+36	Lt.	3855									
	375+40	to	417+00	Lt.	4160									
	390+00	to	417+00	Lt.			2700							
	308+34	to	417+00	Rt.	10866*									
	308+34	to	417+00	Rt.			10860							
	308+34	to	417+00	Rt.			10866							
	308+34	to	315+14	Rt.	680									
	323+14	to	329+84	Rt.	670									
	337+84	to	364+60	Rt.	2676									
	371+81	to	417+00	Rt.	4519									
	371+81	to	417+00	Rt.			4519							
Collector-Distributor I-675	316+26	to	335+00	Lt.	1874									
	332+60	to	335+99	Lt.				339						
	332+60	to	335+99	Lt.							235			
	335+99	to	343+75	Lt.			776							
	343+75	to	340+68	Lt.				293						
	336+53	to	342+48	Lt.	595									
	339+68	to	352+93 C-D	Lt.	825									
	348+92 C-D	to	355+27 C-D	Rt.				635						
	348+92 C-D	to	355+27 C-D	Lt.							435			
	357+80 C-D	to	375+93 C-D	Rt.	1813									
	323+93	to	326+81 ℄	Lt.			288							
	326+81	to	328+25	Lt.				144						
	328+25	to	365+90 C-D	Rt.	3765*									
	365+90 C-D	to	370+23 C-D	Rt.				433						
	365+36 ℄	to	369+69 ℄	Lt.				433						
	365+36 ℄	to	369+69 ℄	Lt.							751			
	365+36 ℄	to	390+00 ℄	Lt.				2464						
Ramp A	293+31 A	to	318+69	Rt.	2138									
	316+47 A	to	343+02 A	Rt.	2655									
	340+59 A	to	371+81 A	Rt.	3122									
	293+31 A	to	371+81 A	℄			7850							
	298+05 A	to	301+17 A	Lt.				312						
	14+75 US 35	to	17+87 US 35	Rt.				312						
	298+05 A	to	301+17 A	Lt.							402			
	301+17 A	to	355+00 A	Lt.	5383*									
	355+00 A	to	364+60 A	Lt.				960						
Ramp B	1101+53 US 35	to	1108+93 US 35	Lt.	540									
	0+00 US 35	to	4+60 US 35	Lt.	460									
	331+73 B	to	357+80 B	℄	2607									
	1+00 US 35	to	3+40 US 35	Lt.			240							
	3+40 US 35	to	4+60 US 35	Lt.				120						
	331+73 B	to	352+93 B	Rt.	2120*									
	352+93 B	to	355+27 B	Rt.				234						
Ramp C	308+34 C	to	333+74 C	℄	2540									
	310+93 C	to	313+81 C	Rt.			288							
	313+81 C	to	315+25 C	Rt.				144						
	315+25 C	to	331+90 C	Rt.	1665*									
	331+90 C	to	333+00 C	Rt.				110						
	331+90 C	to	333+00 C	Rt.							108			
	315+44 A	to	316+47 A	Rt.				103						
SUB-TOTAL "A"					70639		60125	7036			1931			

ROADWAY	STA	TO	STA	SIDE	4" EDGE LINE		4" LANE LINE	8" CHANNEL LINE			24" BROAD TRANSVERSE LINES WHITE			
					LIN. FT.		LIN. FT.	LIN. FT.			LIN. FT.			
Ramp D	329+84 E	to	354+45 D	℄	2461									
	332+94 D	to	335+05 D	Lt.			211							
	335+05 D	to	337+84 D	Lt.				279						
	335+05 D	to	337+84 D	Lt.							291			
	335+05 E		337+84 E	Rt.				279						
	337+84 D	to	352+11 D	Lt.	1427*									
	352+11 D	to	354+45 D	Lt.				234						
Ramp E	39+81 US 35	to	29+81 US 35	Rt.	1000									
	322+38 E	to	336+53 E	℄	1415									
	33+41 US 35	to	31+01 US 35	Rt.			240							
	31+01 US 35	to	29+81 US 35	Rt.				120						
				Rt.										
	322+38 E	to	335+00 E	Rt.	1262*									
	335+00 E	to	335+99 E	Rt.				99						
Ramp F	48+08 WB US 35	to	45+60 WB US 35	Lt.	248									
	326+70 F	to	340+59 F	℄	1389									
	327+20 F	to	328+19 F	Lt.				99						
	327+20 F	to	328+19 F	Lt.							94			
	45+10 C-D	to	44+09 C-D	℄				101						
	328+19 F	to	340+59 F	Lt.	1240*									
	340+59 A	to	343+02 A	Lt.				241						
Ramp G	342+48 G	to	355+61 G	℄	1313									
	343+75 G	to	344+72 G	Rt.				97						
	343+75 CD	to	336+68 CD								87			
	344+72 G	to	354+02 G	Rt.	930*									
	354+02 G	to	355+03 G	Rt.				101						
	354+02 G	to	354+93 G	Rt.							283			
	18+58 US 35	to	22+11 US 35	Lt.				353						
Ramp H	315+14 H	to	338+85 H	℄	2371									
	46+78 US 35	to	56+78 US 35	Rt.	1000									
	318+57 H	to	321+00 H	Lt.			243							
	321+00 H	to	323+21 H	Lt.				221						
	321+00 H	to	323+21 H	Lt.							234			
	321+00 E	to	323+14 ℄	Rt.				214						
	323+21 H	to	338+85 H	Lt.	1564*									
	46+78 US 35	to	47+98 US 35	Lt.				120						
	47+98 US 35	to	50+38 US 35	Lt.			240							
SUB-TOTAL "B"					17620		934	2558			989			
SUB-TOTAL "A" LIN. FT.					70639		60125	7036			1931			
SUB-TOTAL "B" LIN. FT.					17620		934	2558			989			
TOTAL LIN. FT. THIS SHEET					88259		61059	9594			2920			
TOTAL MILES THIS SHEET					16.72		11.56							

*: Yellow Edge Lines - Project Participation - 21,092 L.F or 7.78 M

ITEM 620 DELINEATORS

QUANTITY CALCULATIONS
BY: N.H.H. DATE : 1-79
CHECKED: C.E.T. DATE : 1-79

FHWA REGION	STATE	PROJECT	
5	OHIO		

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GRE-G75-5.37
GREENE COUNTY

TC-16
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COLUMN NO. 1

ROADWAY	STA TO STA	SIDE	SPACING	TYPE A POST	TYPE A BRACKET	TYPE B POST	TYPE B BRACKET	TYPE C POST	TYPE C BRACKET	TYPE D POST	TYPE D BRACKET
I-G75	310+00 - 314+00	Rt	400	2							
	323+25 - 329+25	Rt	400	2							
	338+00 - 348+00	Rt	400	4							
	373+00 - 417+00	Rt	400	12							
	352+50 - 364+50	Lt	400	4							
	377+00 - 415+00	Lt	400	11							
Collector Distributor (I-G75)	320+00 - 334+00	Lt	200					8			
	337+00 - 342+00	Lt	200					4			
	345+50 - 352+50	Lt	200					5			
	358+00 - 376+00	Lt	200					10			
Ramp A	294+10 - 305+10	Rt	200					7			
	305+10	Lt								1	
	305+90 - 309+40	Lt	80							6	
	310+20	Lt								1	
	310+20 - 311+20	Rt	200					1			
	312+00	Rt						1			
	312+00 - 316+50	Lt	80							7	
	316+50 - 321+00	Rt	80					7			
	321+50 - 324+00	Rt	80						4		
	324+50 - 329+00	Rt	80					7			
	329+50 - 332+00	Rt	80						4		
	332+50 - 338+00	Rt	80					8			
	338+00 - 340+00	Lt	80							4	
	340+80	Lt								1	
	341+80 - 348+40	Lt	90							8	
	348+40 - 352+00	Rt	90					5			
	353+00 - 371+00	Rt	200					10			
Ramp B	1101+60 US35 - 1106+60 US35	Lt	200					4			
	0+30 US35 - 4+30 US35	Lt	200					3			
	332+40 - 333+40	Lt	200						1		
	334+40 - 339+40	Lt	200					4			
	340+20	Lt						1			
	340+20 - 352+20	Rt	80							16	
	352+20	Lt						1			
	353+00 - 357+00	Lt	200					3			
Ramp C	308+80 - 319+80	Lt	200					6			
	319+80 - 322+80	Rt	90							4	
	322+80 - 331+80	Lt	200					5			
Ramp D	331+00 - 339+00	Rt	200					5			
	339+00 - 339+60	Lt	90							1	
	339+90 - 351+30	Lt	60							20	
	351+30	Rt						1			
	352+10 - 353+70	Rt	200						1		
Ramp E	39+00 US35 - 34+00 US35	Rt	200					3			
	33+00 US35 - 30+00 US35	Rt	200						2		
	323+20 - 323+80	Lt	90					1			
	323+80 - 334+90	Rt	60							19	
	334+90 - 336+10	Lt	60					3			
	336+40							1			
Ramp F	48+10 US35 - 45+10 US35	Lt	200					3			
	327+50 - 328+50	Rt	80					2			
	328+50 - 330+50	Lt	80							3	
	331+00 - 331+80	Lt	100							1	
	331+80 - 335+80	Rt	200					3			
	336+80 - 340+80	Rt	80					5			
	341+80 - 347+80	Rt	90					7			
Ramp G	343+60 - 345+60	Lt	200					2			
	345+60	Rt								1	
	345+90 - 353+10	Rt	60							13	
	353+50 - 353+90	Rt	70							1	
	353+90 - 355+50	Lt	70					3			
Ramp H	315+50 - 323+50	Rt	200					5			
	323+50 - 324+30	Lt	100							1	
	324+80 - 336+80	Lt	80							16	
	336+80 - 338+90	Rt	100					2			
	47+80 US35 - 55+80 US35	Rt	200					5			
SUB-TOTALS				35				151	12	124	

COLUMN NO. 2

ROADWAY	STA TO STA	SIDE	SPACING	TYPE A POST	TYPE A BRACKET	TYPE B POST	TYPE B BRACKET	TYPE C POST	TYPE C BRACKET	TYPE D POST	TYPE D BRACKET
US 35	1089+00 - 1095+00	Rt	400	3							
	18+00 - 28+00	Rt	400	4							
	40+00 - 45+00	Rt	400	2							
	57+00	Rt			1						
	59+00 - 75+00	Rt	400	5							
	1092+00 - 1100+00	Lt	400	3							
	60+00 - 76+00	Lt	400	5							
US 35 Speed Change Lane	1096+00 - 1106+00	Rt	200					6			
	0+00 - 4+00	Rt	200					3			
	5+00	Rt							1		
	6+00 - 10+00	Rt	200					3			
Collector Distributor (US-35)	12+80 - 20+80	Lt	200					5			
	23+50 - 27+50	Lt	200					3			
	28+50 - 30+50	Lt	200						2		
	34+00 - 44+00	Lt	200					6			
	49+00 - 52+00	Lt	200					2			
	52+80 - 55+20	Lt	200					3			
	56+00 - 58+00	Lt	200						2		
	59+00	Lt						1			
I-G75	387+32									2	
	387+68									2	
SUB-TOTALS				22	1			32	5	4	

COLUMN NO. 3

ROADWAY	STA TO STA	SIDE	SPACING	TYPE A POST	TYPE A BRACKET	TYPE B POST	TYPE B BRACKET	TYPE C POST	TYPE C BRACKET	TYPE D POST	TYPE D BRACKET
SUB-TOTALS											

SUB-TOTAL	TYPE A POST	TYPE A BRACKET	TYPE B POST	TYPE B BRACKET	TYPE C POST	TYPE C BRACKET	TYPE D POST	TYPE D BRACKET
COLUMN NO. 1	35				151	12	124	
COLUMN NO. 2	22	1			32	5	4	
COLUMN NO. 3								
TOTAL TO TRAFFIC CONTROL GENERAL SUMMARY	57	1			183	17	128	

400' Spacing Mainline

FED. RD. DIVISION	STATE	PROJECT	
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GREENE COUNTY

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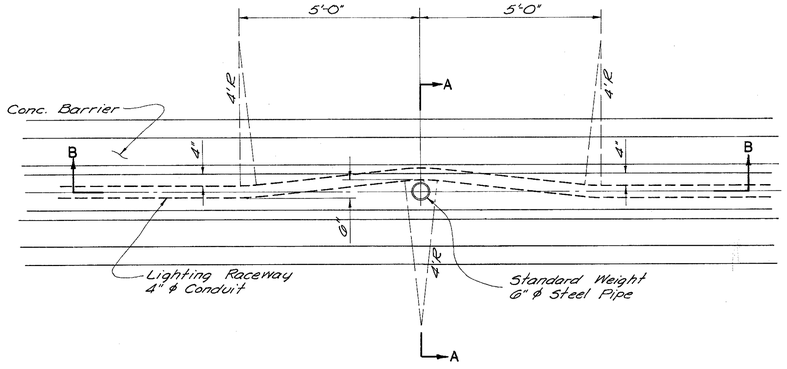
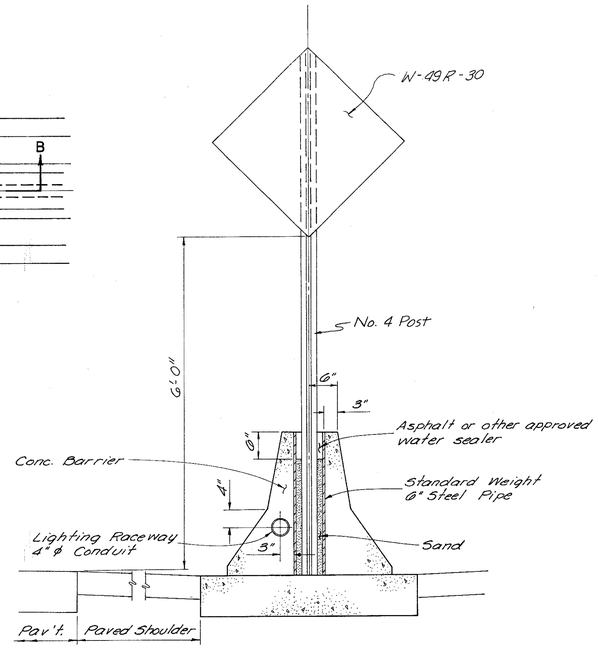
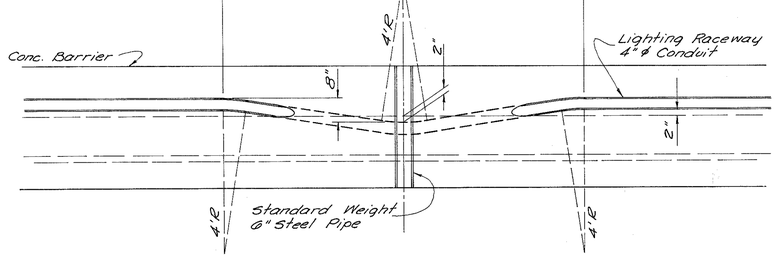


PLAN

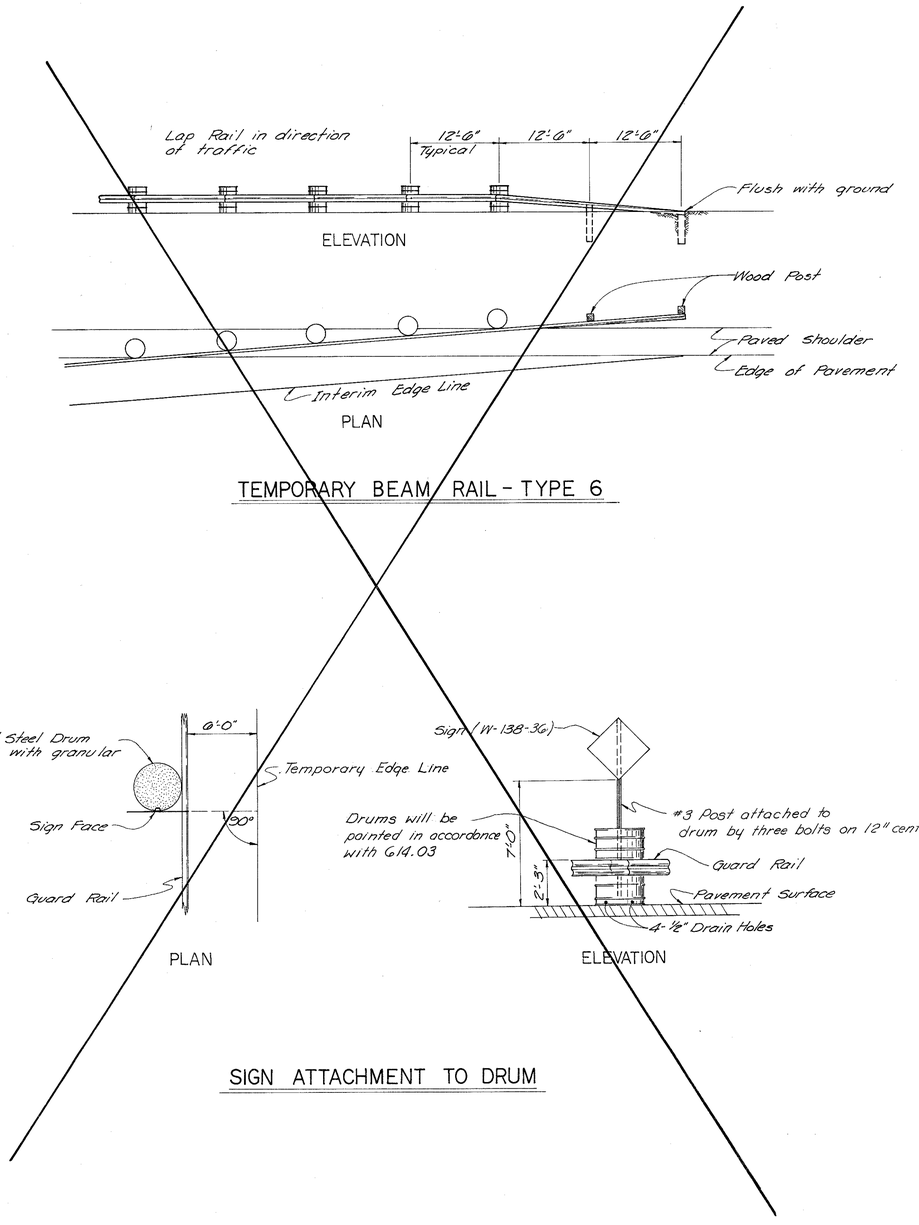


SECTION A-A



SECTION B-B

SIGN ATTACHMENT TO CONCRETE BARRIER



TEMPORARY BEAM RAIL - TYPE 6

SIGN ATTACHMENT TO DRUM

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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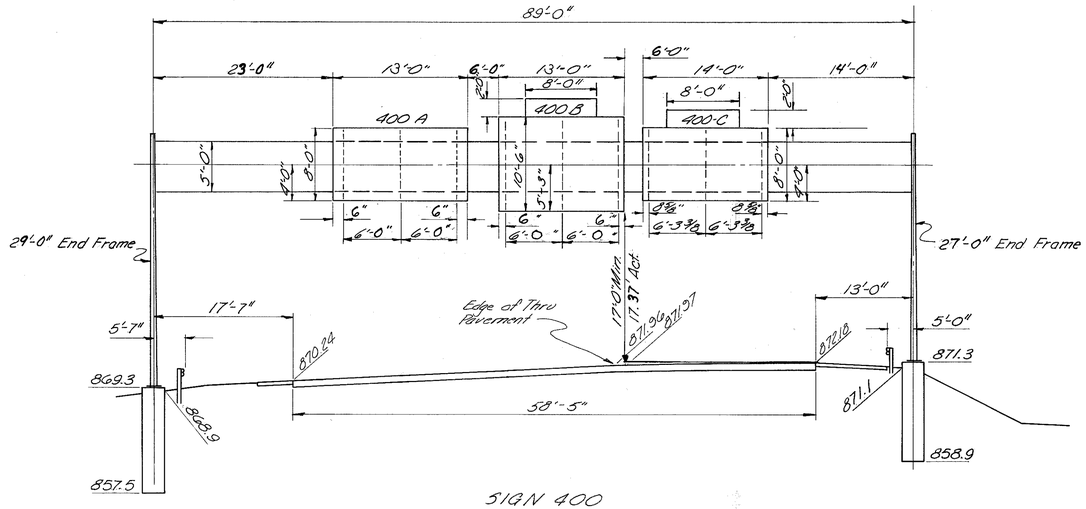
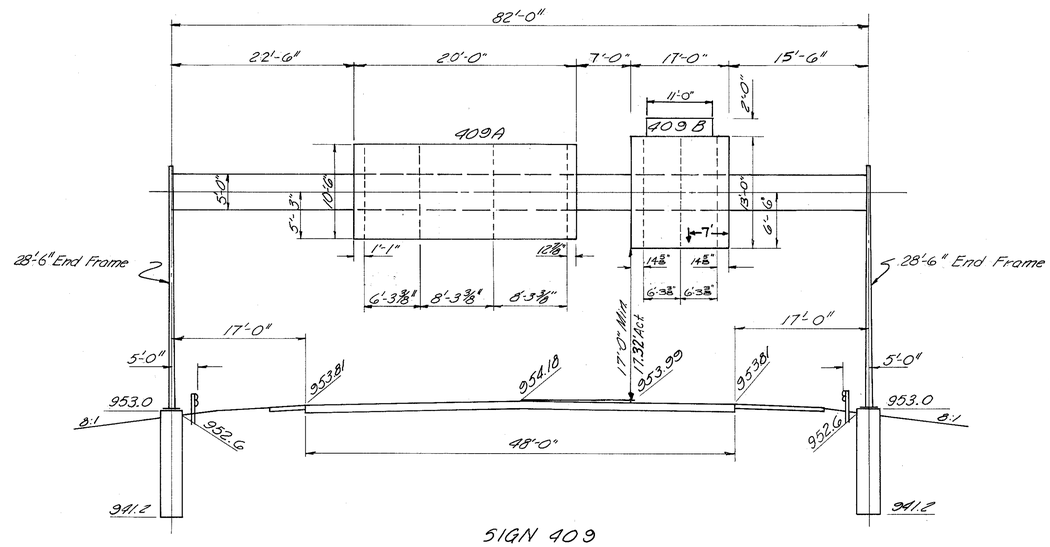
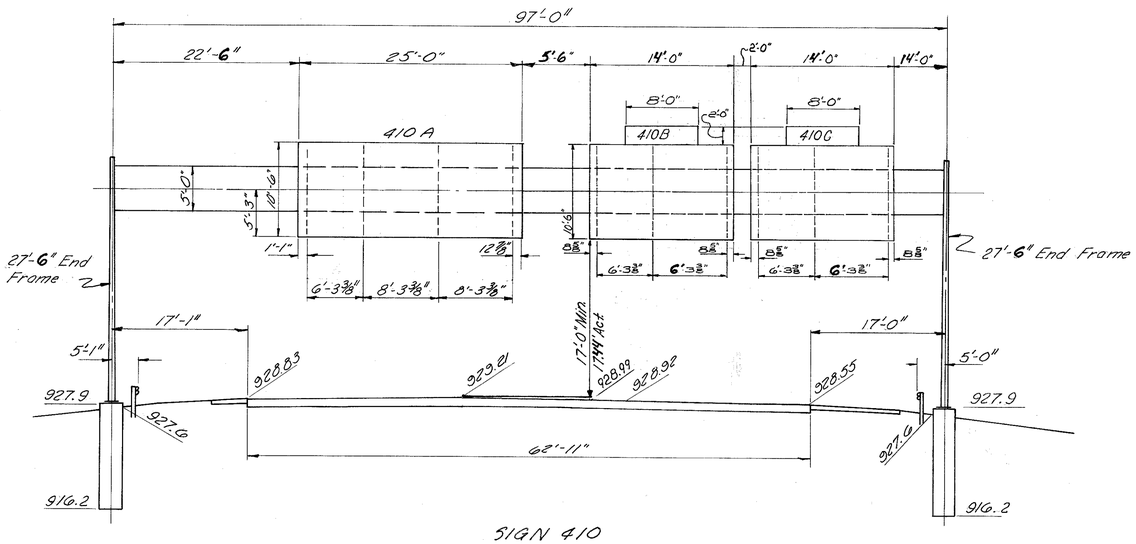
GRE-675-5.37
GREENE COUNTY



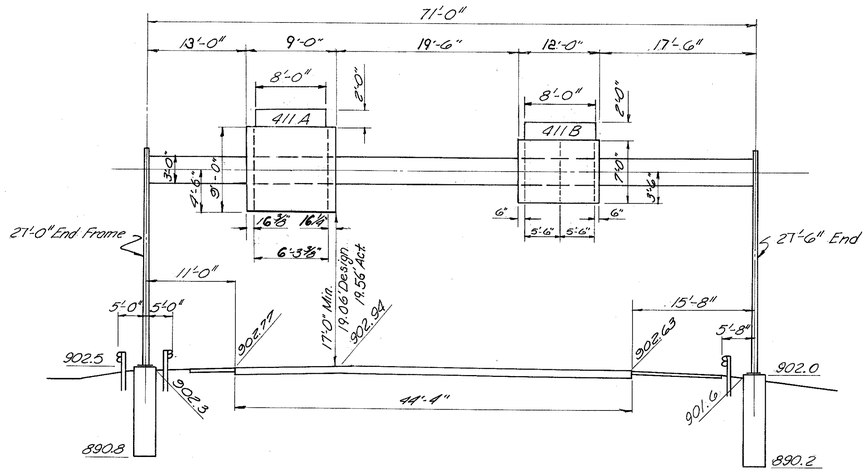
SIGN 400
No. 7.65 Design No. 8
Sta. 321+82 Northbound I-675



SIGN 409
No. 7.65 Design No. 8
Sta. 390+00 Southbound I-675



SIGN 410
No. 7.65 Design 8
Sta. 369+56 Southbound I-675



SIGN 411
No. 7.65 Design No. 6
Sta. 354+00 Collector Distributor
Southbound I-675

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2	OHIO		

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GREENE COUNTY

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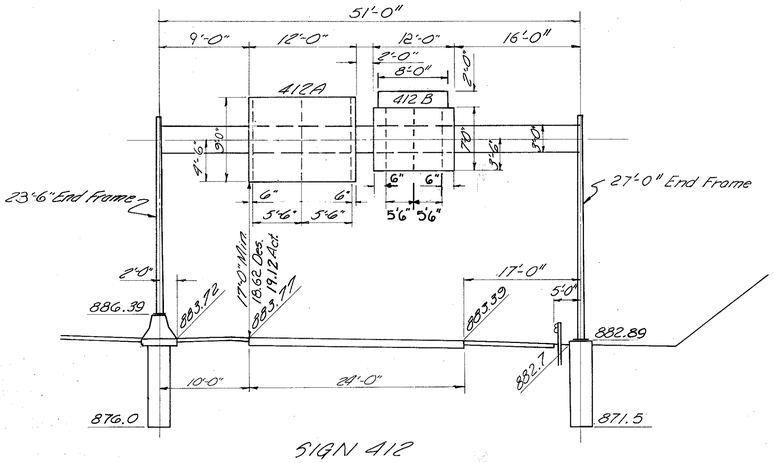
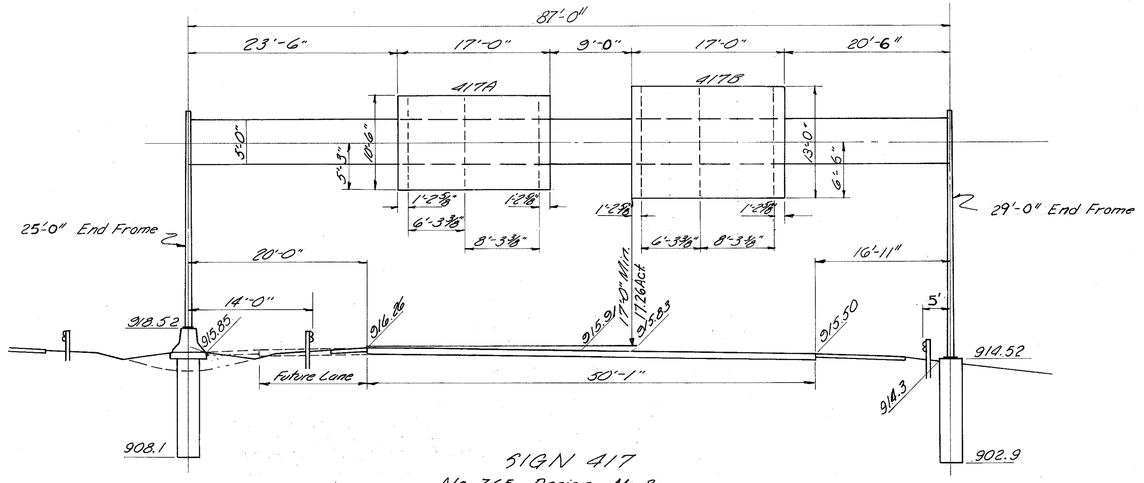
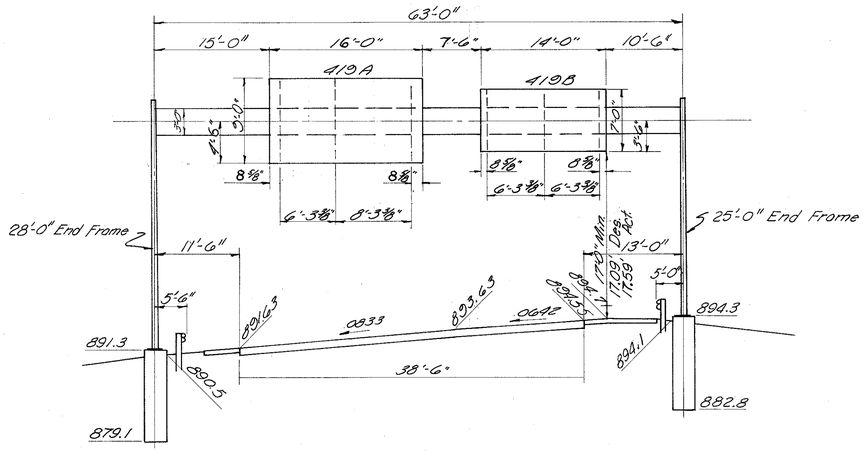


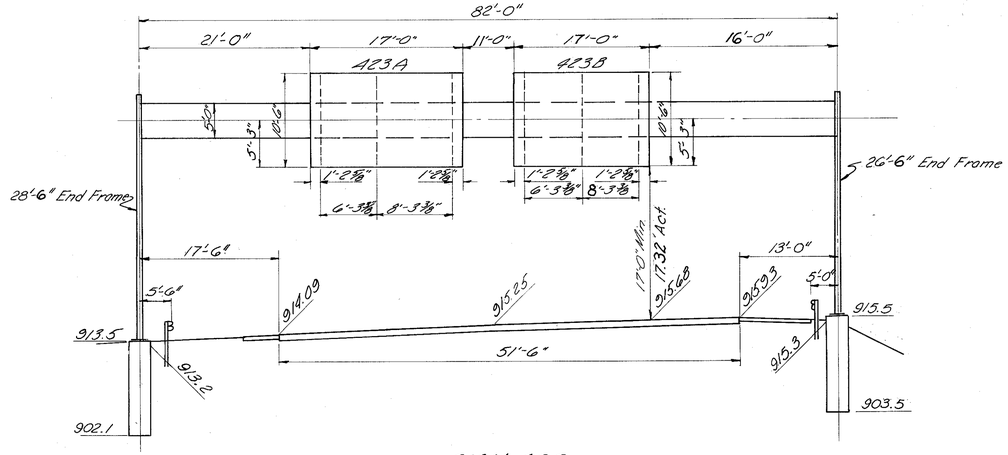
SIGN 412
No. 765 Design No. 6
Sta. 339+90 Collector Distributor
Southbound I-675



SIGN 417
No. 765 Design No. 8
Sta. 14+92 Eastbound
U.S 35



SIGN 419
No. 765 Design No. 6
Sta. 315+28 Ramp A



SIGN 423
No. 765 Design No. 8
Sta. 53+65 Westbound U.S.35

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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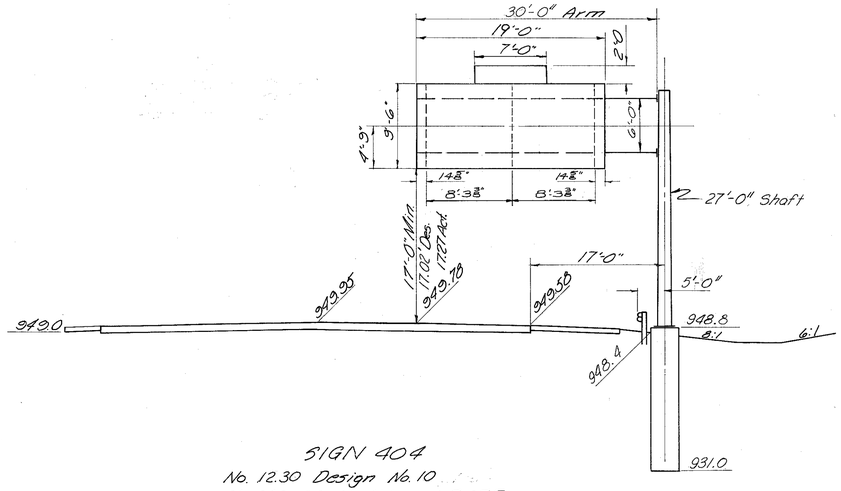
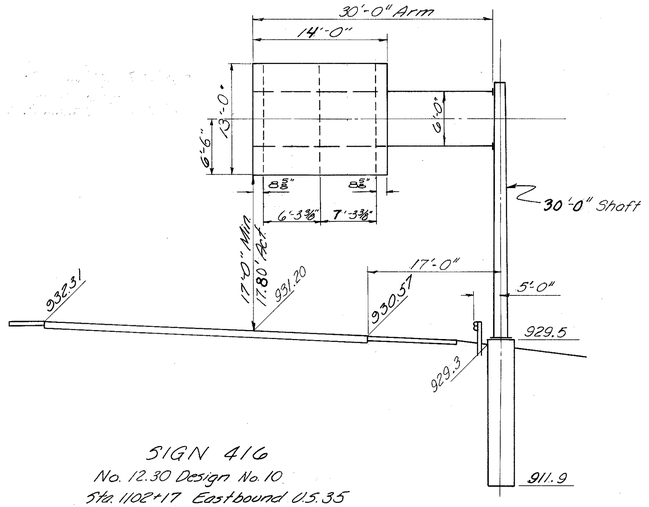
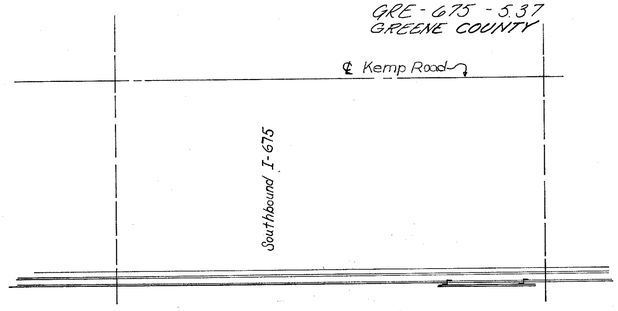
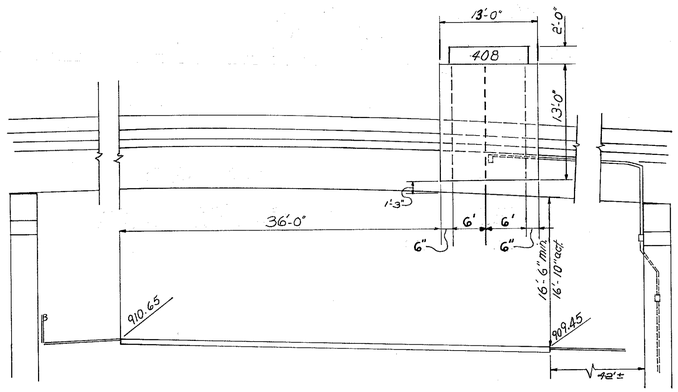


SIGN 404
No. 12.30 Design No. 10
Sta. 380+00 Northbound I-675

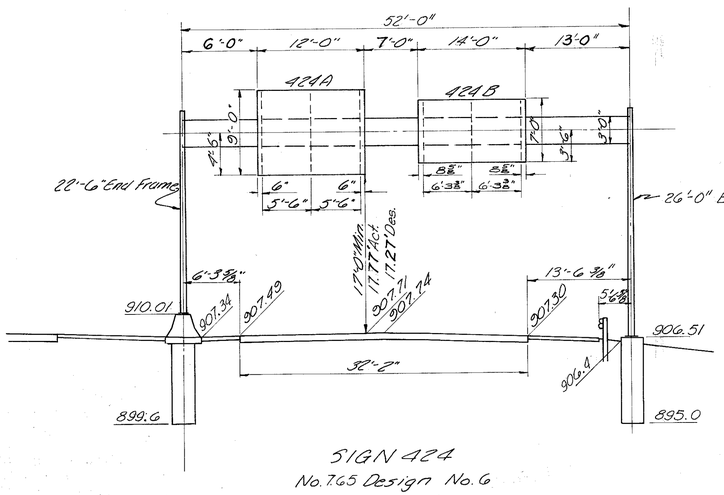


SIGN 416
No. 12.30 Design No. 10
Sta. 1102+17 Eastbound U.S. 35

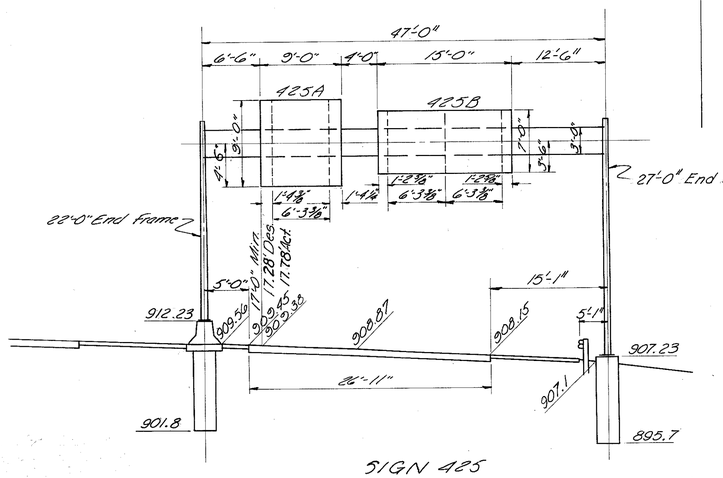




SIGN 408
Structure Mounted Sign Support
Sta. 414+23 Southbound I-675
For details See Std. Dr. TC-18.24



SIGN 424
No. 7.65 Design No. 6
Sta. 45+10 Collector Distributor
Westbound U.S. 35



SIGN 425
No. 7.65 Design No. 6
Sta. 22+20 Collector Distributor
Westbound U.S. 35

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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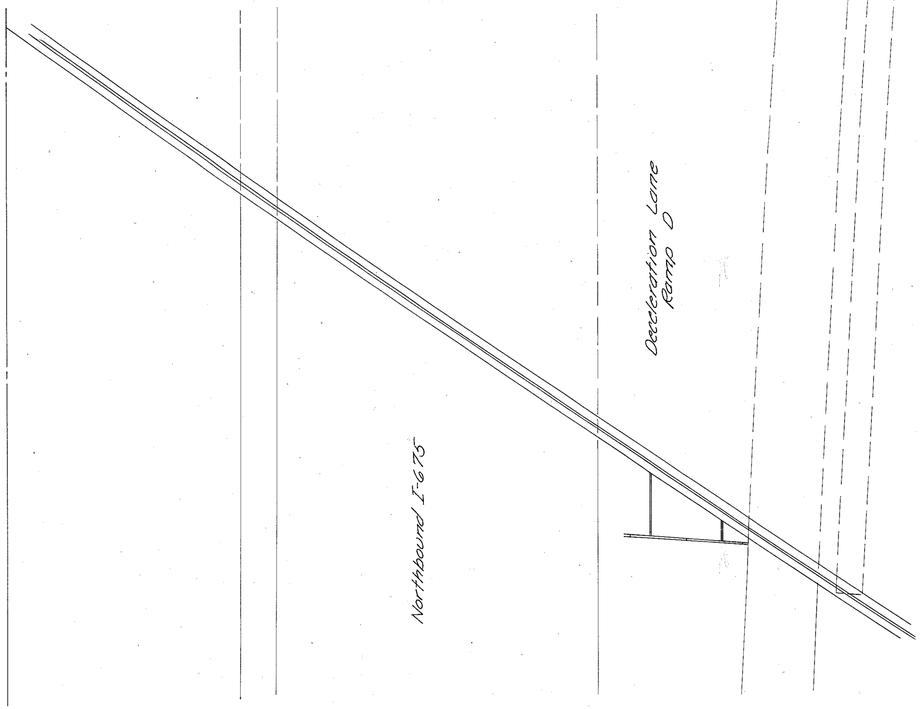
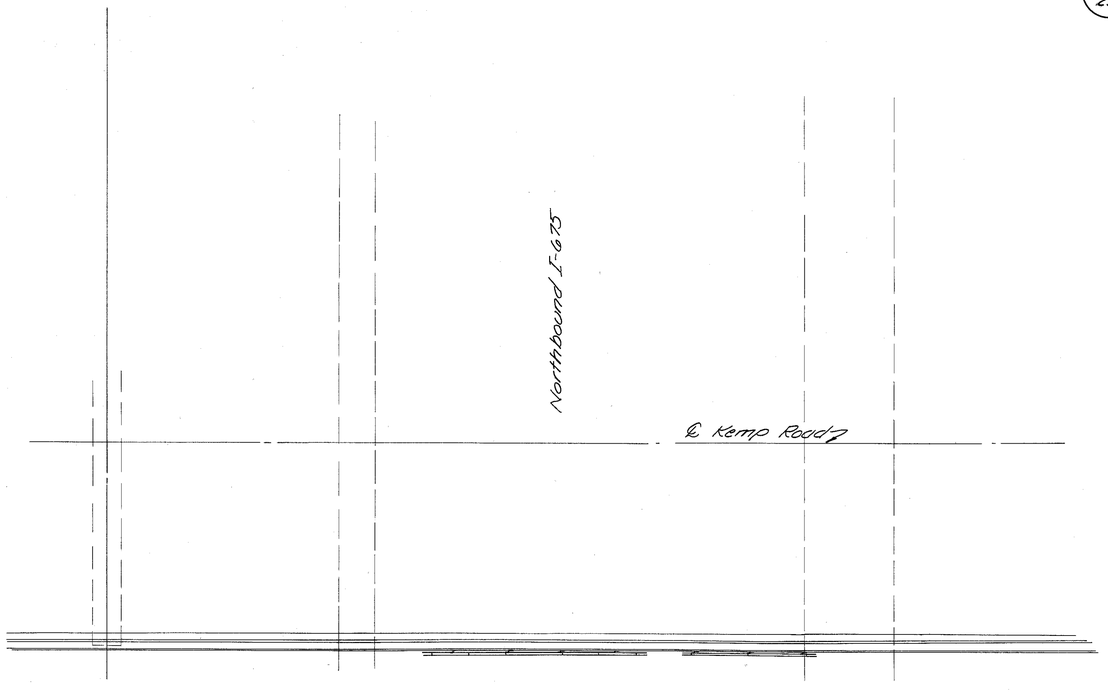
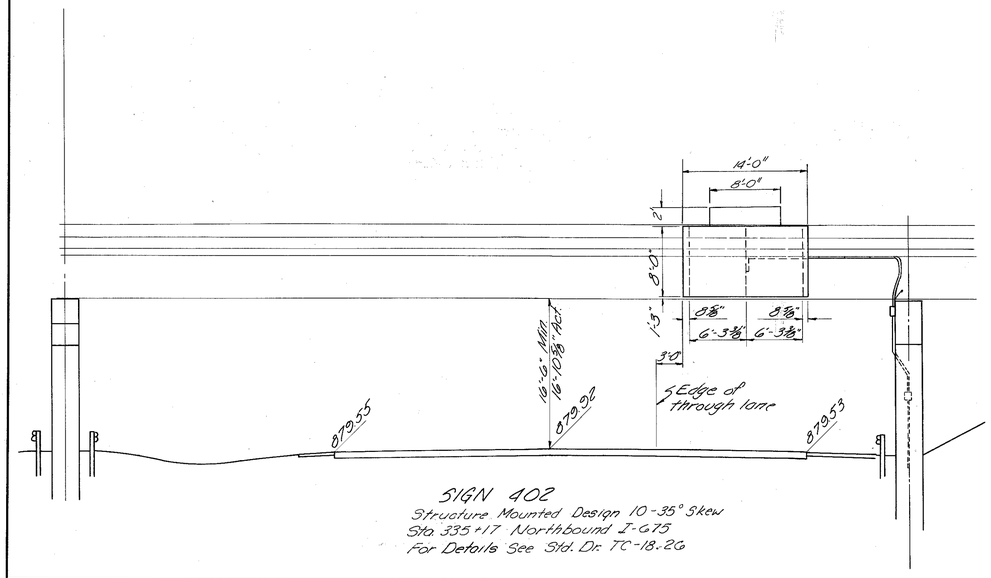
GRE-675-5.37
GREENE COUNTY

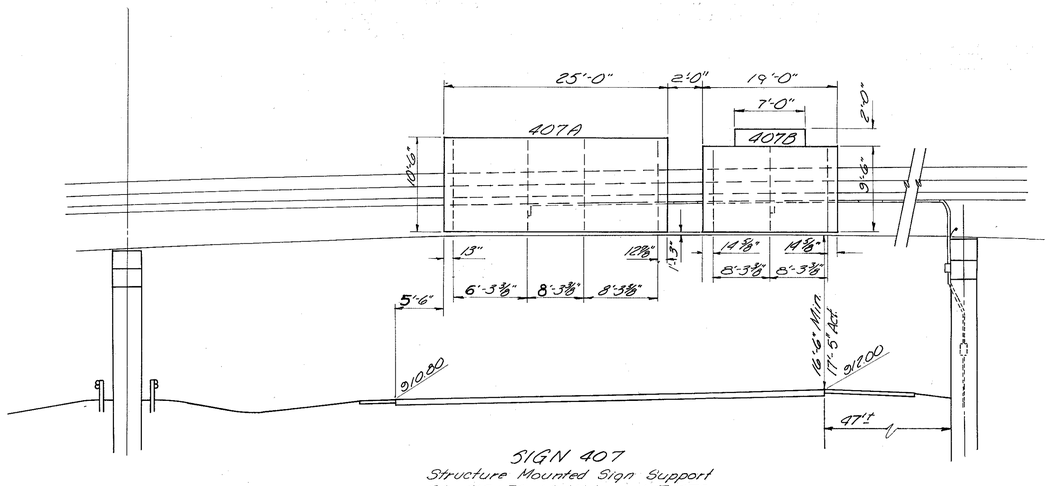
TC-21
23







SIGN 402
Structure Mounted Design 10-35° Skew
Sta 335+17 Northbound I-675
For Details See Std. Dr. TC-18.26



SIGN 407
Structure Mounted Sign Support
Sta 413+76 Northbound I-675
For Details See Std Dr. TC-18.24

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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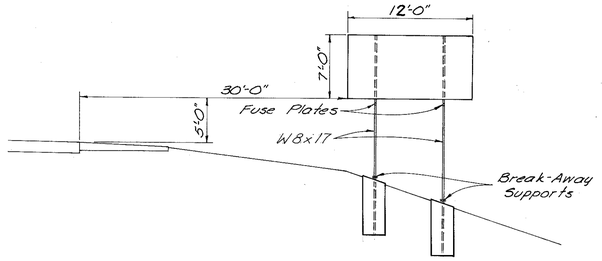
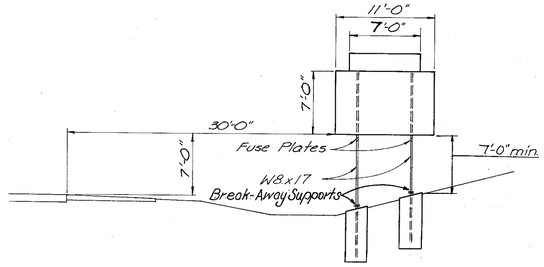
GRE-675-5.37
GREENE COUNTY



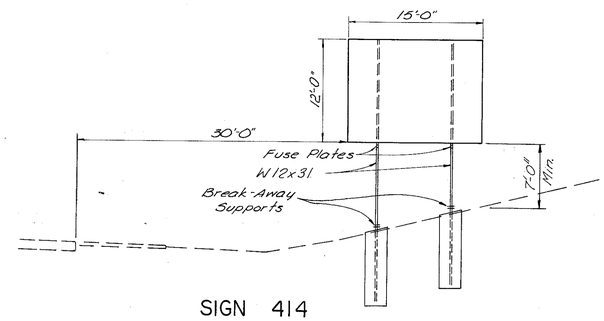
SIGN 405

STA 391+00 NORTHBOUND I-675



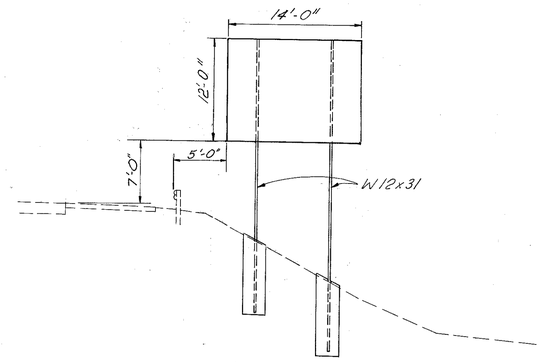
SIGN 406

STA 402+00 NORTHBOUND I-675



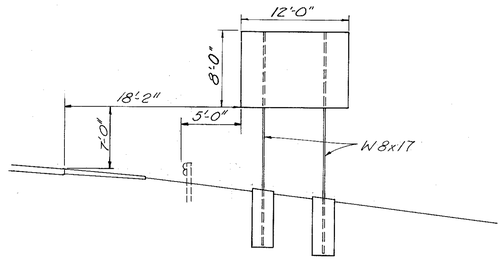
SIGN 414

STA 1049+75 EASTBOUND EXIST. U.S. 35



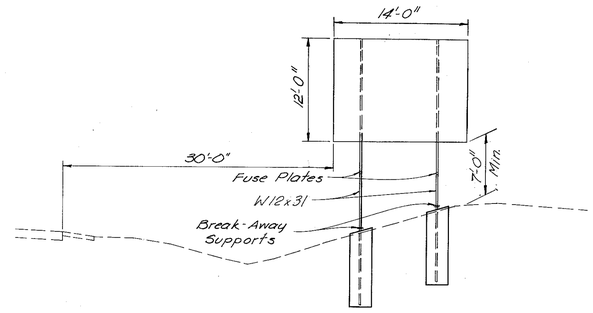
SIGN 415

STA 1077+00 EASTBOUND EXIST. U.S. 35



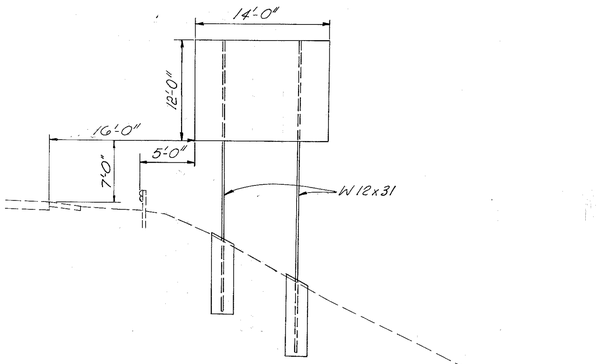
SIGN 418

STA 307+20 RAMP A



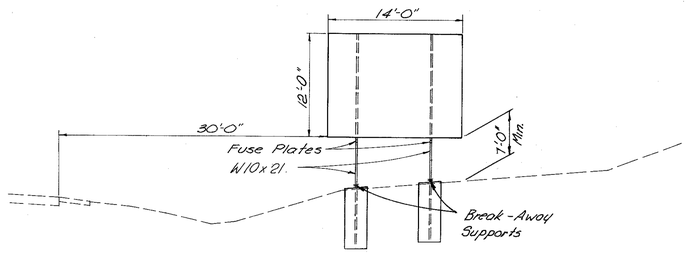
SIGN 420

STA 360+66 WESTBOUND EXIST. U.S. 35



SIGN 421

STA 414+95 WESTBOUND EXIST. U.S. 35



SIGN 422

STA 80+35 WESTBOUND EXIST. U.S. 35

GROUND MOUNTED SIGN SUPPORTS

GRE-675-5.37
GREENE COUNTY

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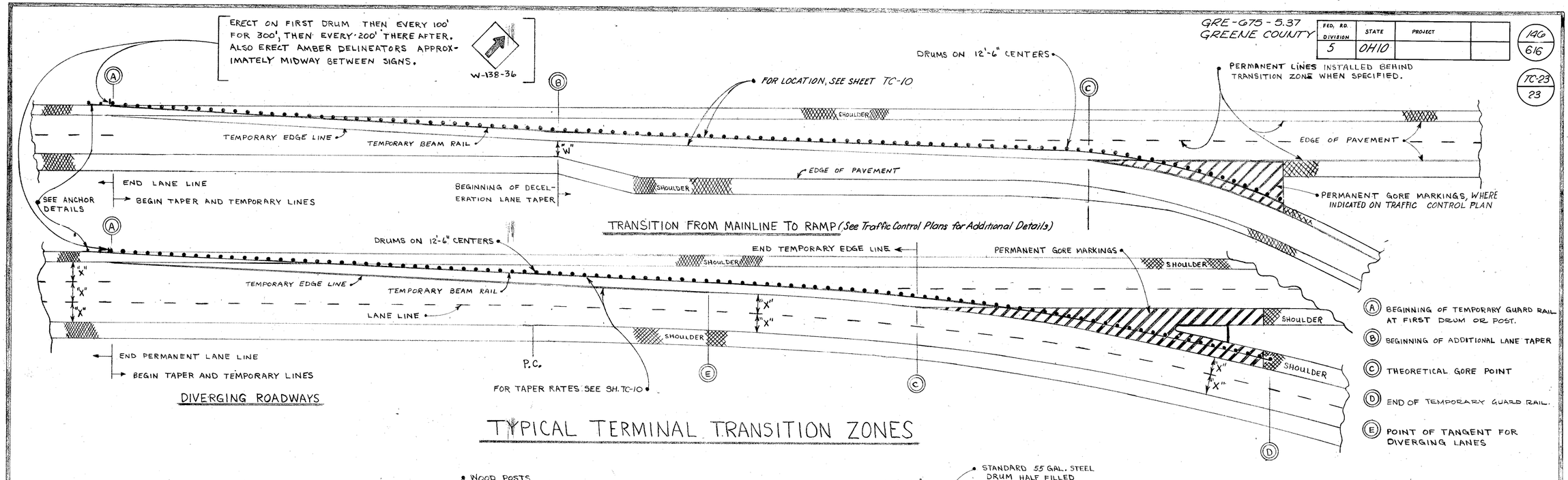
TC-23
23

ERECT ON FIRST DRUM THEN EVERY 100' FOR 300', THEN EVERY 200' THEREAFTER. ALSO ERECT AMBER DELINEATORS APPROXIMATELY MIDWAY BETWEEN SIGNS.

W-138-36



(A) BEGINNING OF TEMPORARY GUARD RAIL AT FIRST DRUM OR POST.

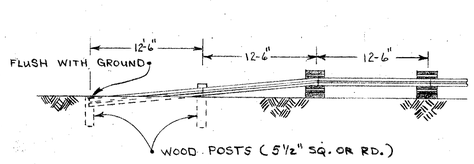
(B) BEGINNING OF ADDITIONAL LANE TAPER

(C) THEORETICAL GORE POINT

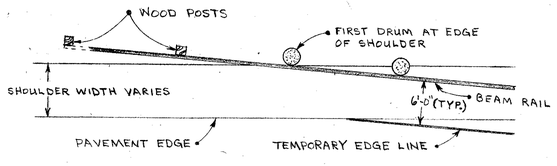
(D) END OF TEMPORARY GUARD RAIL.

(E) POINT OF TANGENT FOR DIVERGING LANES

TYPICAL TERMINAL TRANSITION ZONES

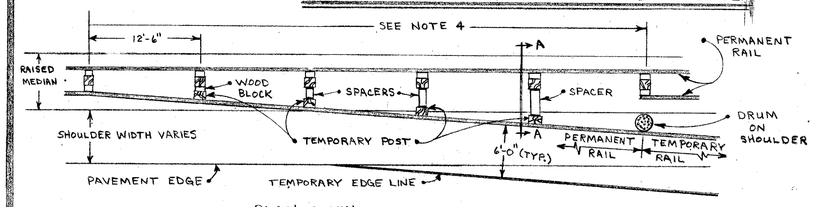


ELEVATION VIEW

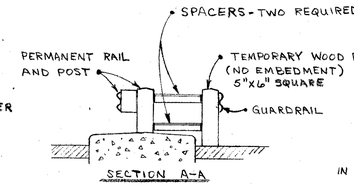


PLAN VIEW

ANCHOR DETAIL IN UNPAVED AREAS

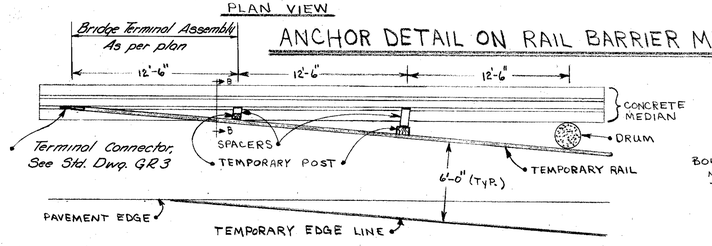


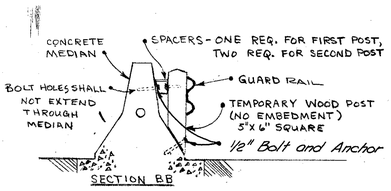
PLAN VIEW



SECTION A-A

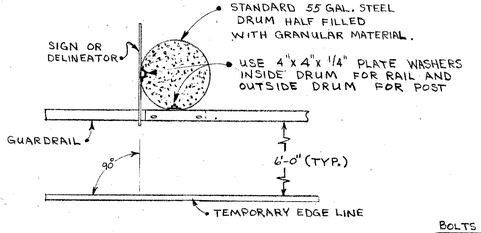
ANCHOR DETAIL ON RAIL BARRIER MEDIAN

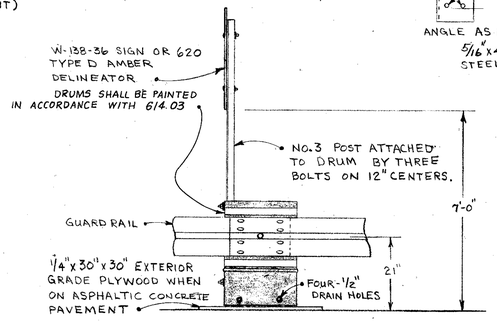




SECTION BB

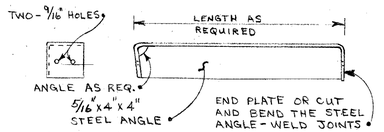
ANCHOR DETAIL ON CONCRETE BARRIER MEDIAN





DRUM DETAILS

BOLTS WITH WASHERS
½" x 3½" WEDGE EXPANSION TYPE FOR CONCRETE
½" x 4" LAG SCREW FOR WOOD POSTS



SPACER DETAIL

BUREAU OF DESIGN SERVICES
DIVISION OF HIGHWAYS
OHIO DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

TEMPORARY TERMINAL TRANSITION DETAILS

DATE

APPROVED: _____ Engineer of Design Services

FED. RD. DIVISION	STATE	PROJECT	
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GRE-675-5,37

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LIGHTING GENERAL NOTES

SPECIFICATIONS

THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 713 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.

STANDARD CONSTRUCTION DRAWING HL-3

POLE BASE DETAILS SHOWN ON THIS DRAWING ARE ESSENTIALLY FOR GALVANIZED STEEL POLES. FOR ALUMINUM DESIGNS, OR OTHER PERMITTED STEEL MATERIAL DESIGNS, VARIATIONS FROM THESE DETAILS WILL BE ACCEPTABLE, AS APPROVED BY THE ENGINEER.

625.03 - GENERAL

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS THE DAYTON POWER & LIGHT COMPANY, COURT HOUSE PLAZA, S.W., DAYTON, OHIO 45402. THIS PROJECT HAS BEEN DESIGNED ON THE BASIS OF 5% VOLTAGE DROP WITH A MAXIMUM UNIFORMITY OF 4.0 TO 1 FOR CONVENTIONAL UNITS.

625.07 - 713.11 LUMINAIRES

HORIZONTAL STYLE C LUMINAIRES, DESIGNED FOR USE WITH 310 WATT HIGH PRESSURE SODIUM LAMPS, SHALL HAVE SINGLE RATED 480 VOLT, 310 WATT INTEGRAL REGULATOR BALLASTS, STYLE C LUMINAIRES SHALL BE GENERAL ELECTRIC M-1000, WESTINGHOUSE OV50, **ITT AMERICAN** OR EQUAL APPROVED BY THE ENGINEER.

HORIZONTAL STYLE B LUMINAIRES, DESIGNED FOR USE WITH 200 WATT HIGH PRESSURE SODIUM LAMPS, SHALL HAVE SINGLE RATED 480 VOLT, 200 WATT INTEGRAL REGULATOR BALLASTS. STYLE B LUMINAIRES SHALL BE GENERAL ELECTRIC M-400, WESTINGHOUSE OV-25, **TUDOR, ITT AMERICAN 400** OR EQUAL APPROVED BY THE ENGINEER.

THE HIGH PRESSURE SODIUM BALLAST, INCLUDING STARTING AIDS, MUST PROTECT ITSELF AGAINST NORMAL LAMP FAILURE MODES. THE BALLAST SHALL BE CAPABLE OF OPERATION WITH THE LAMP IN AN OPEN OR SHORT CIRCUIT CONDITION FOR SIX MONTHS WITHOUT SIGNIFICANT LOSS OF BALLAST LIFE.

THE LUMINAIRE MANUFACTURER SHALL SUPPLY BALLAST ELECTRICAL DATA AND LAMP OPERATING VOLT-WATT TRACES FOR NOMINAL AND PLUS OR MINUS TEN PERCENT (±10%) RATED LINE VOLTAGE TO VERIFY BALLAST PERFORMANCE AND COMPLIANCE WITH LAMP SPECIFICATIONS, FOR THE RATED LIFE OF THE LAMP.

713.14 LAMPS

HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALOX", WESTINGHOUSE "CERAMALUX", SYLVANIA "LUMALUX", OR EQUAL APPROVED BY THE ENGINEER. ALL H.P.S. LAMPS SHALL BE OF THE 100 VOLT DESIGN, ANSI S56.

ITEM SPECIAL, LIGHT POLE ANCHOR BOLTS FOR BRIDGES

ANCHOR BOLTS FOR MOUNTING LIGHT POLES ON BRIDGES AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF 713.01 AND DETAILS SHOWN ON THE PLANS AND STANDARD DRAWINGS, OR THE APPROVED SHOP DRAWINGS, FOR THE RESPECTIVE POLES TO BE PLACED THEREON. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH SET OF THE SIZE REQUIRED AND NECESSARY TO INSTALL ONE POLE, AND THIS PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING AND PLACING BOLTS.

625 STRUCTURE GROUNDING SYSTEM

THE CONTRACTOR SHALL INSTALL A COMPLETE STRUCTURE GROUNDING SYSTEM USING NO. 4 AWG CABLE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING HL-7 AND SECTION 625.20 FOR THE FOLLOWING BRIDGES:

- GRE-675-0576 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-675-0589 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-675-0616 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-675-0737 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-35-0009 - ONE FIXED PIER ON DAYTON-XENIA RD. CENTERLINE, OTHERS EXPANSION TYPE
- GRE-35-0074 - ONE FIXED PIER ON U.S. 35 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-35-0107L - ONE FIXED PIER ON EAST SIDE OF GRANGE HALL RD., OTHERS EXPANSION TYPE
- GRE-35-0107R - ONE FIXED PIER ON EAST SIDE OF GRANGE HALL RD., OTHERS EXPANSION TYPE

FOR THIS WORK A QUANTITY OF 1 EACH, IS INCLUDED IN THE LIGHTING GENERAL SUMMARY FOR THE BID ITEMS 625 "STRUCTURE GROUNDING SYSTEM, BY BRIDGE NUMBER."

CONDUIT ON STRUCTURES

EXPANSION FITTINGS FOR CONDUIT ON STRUCTURES SHALL BE OZ TYPE AX, CROUSE-HINDS TYPE XJ-4, APPLETON TYPE XJ-4, OR EQUAL APPROVED BY THE ENGINEER. EACH EXPANSION FITTING SHALL HAVE A COPPER EXTERNAL BONDING JUMPER. **INCLUDE IN GRE-675-0576, -0589, -0616, GRE-35-0009, -0074, -0107L, AND -0107R, STRUCTURES.**

AT THE STRUCTURAL HINGE JOINT IN THE WEST SPAN OF BRIDGE GRE-675-0576 AND IN THE EAST SPAN OF BRIDGE GRE-675-0589 DEFLECTION FITTINGS SHALL BE INSTALLED IN THE CONDUIT. THE DEFLECTION FITTINGS SHALL BE OZ TYPE DX, SPRING CITY TYPE EDF, OR EQUAL APPROVED BY THE ENGINEER.

ELECTRICAL SERVICE FOR ILLUMINATED SIGNS

THE PAY ITEMS IN THE LIGHTING GENERAL SUMMARY INCLUDE THE PULL BOX OR JUNCTION BOX ADJACENT TO EACH LIGHTED SIGN AND THE ELECTRICAL SERVICE CONNECTIONS LEADING INTO THE BOX, INCLUDING CONNECTOR KITS IN THE PULL BOX OR JUNCTION BOX. QUANTITIES FOR ELECTRICAL SERVICE FROM THE CONNECTOR KITS IN THE PULL BOX OR JUNCTION BOX TO THE SIGN ARE INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY.

HIGH VOLTAGE DIRECT CURRENT TEST

A HIGH VOLTAGE DIRECT CURRENT TEST, AS DESCRIBED IN SUPPLEMENTAL SPECIFICATION 839, SHALL BE PERFORMED ON ALL DISTRIBUTION CABLE AND DUCT CABLE SYSTEMS TO BE INSTALLED ON THIS PROJECT. THE TEST SHALL NOT BE PERFORMED UNTIL AFTER ALL NEW CONSTRUCTION, SUCH AS GUARD RAIL, FENCE, DELINEATOR POSTS, SIGN SUPPORTS, ETC., IN THE IMMEDIATE VICINITY OF THE LOCATION OF THE CABLE RUN BEING TESTED, HAS BEEN COMPLETED.

CONNECTOR KITS

AT THE OPTION OF THE CONTRACTOR, TYPE IX CABLE CONNECTIONS MAY BE SUBSTITUTED WHERE TYPE II OR III CABLE CONNECTIONS ARE SPECIFIED IN HAND HOLES OR TRANSFORMER BASES OF LIGHT POLES. TYPE I THROUGH TYPE VII CABLE CONNECTIONS IN PULL BOXES, JUNCTION BOXES, AND OTHER ENCLOSURES BELOW GROUND MAY BE ACCOMPLISHED BY USE OF EITHER OF FOLLOWING:

1. A SLEEVE OR TEE CABLE CONNECTOR CONFORMING TO THE GENERAL REQUIREMENTS OF STYLE "S" OR "H", OR OTHER CONNECTING DEVICE APPROVED BY THE ENGINEER. THE CONNECTOR SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND THE CONNECTION SHALL BE SEALED AND WATERPROOFED WITH A HI-DIELECTRIC COMPOUND SUCH AS "AQUA SEAL" AS MANUFACTURED BY KEARNEY, OR SCOTCH #2200 COMPOUND MANUFACTURED BY 3-M COMPANY, OR EQUAL APPROVED BY THE ENGINEER. THE SEALING MATERIAL SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS TO MAKE A WATERTIGHT CONNECTION. CONNECTIONS NOT ACCOMPLISHED IN-LINE OR IN TEE FORM SHALL BE ADDITIONALLY PROTECTED BY USE OF A HI-DIELECTRIC PVC, OR OTHER APPROVED MATERIAL, BOOT WITH AN APPROVED FASTENING DEVICE.
2. A PREASSEMBLED KIT, AS MANUFACTURED BY JOY OR BUSSMAN, OR APPROVED EQUAL, WITH A WATERPROOF OR WATERTIGHT RATING ACCEPTABLE TO THE ENGINEER.

625.07 - 713.13 UNDERPASS LUMINAIRES

UNDERPASS LUMINAIRES SHALL BE HOLOPHANE "UNDERPASS WALLPACK", WESTINGHOUSE, OR GENERAL ELECTRIC WL-250 UNDERPASS UNIT OR EQUAL APPROVED BY THE ENGINEER, AND SHALL BE FURNISHED WITH AN INTEGRAL FUSE HOLDER AND A 10-AMPERE FUSE. THE INTEGRAL HIGH PRESSURE SODIUM BALLAST SHALL BE OF A REGULATOR TYPE RATED FOR 480 VOLTS, 100 WATTS.

ALUMINUM TRANSFORMER BASES

TRANSFORMER BASES SHALL BE MARKED OR LABELED TO IDENTIFY THAT THEY MEET THE REQUIREMENTS OF FHWA NOTICE N5040.20.

ITEM SPECIAL, SERVICE TO UNDERPASS LIGHTING

THIS ITEM SHALL CONSIST OF PROVIDING COMPLETE ELECTRICAL SERVICE, EXCEPT FOR LUMINAIRES, LAMPS, AND STRUCTURE GROUNDING, FOR AN UNDERPASS LIGHTING SYSTEM ON BRIDGE NOS. GRE-675-0589 AND GRE-35-0009. THE INSTALLATION WORK SHALL INCLUDE CONDUITS, CONDUIT GROUNDING, MOUNTINGS, FITTINGS, JUNCTION BOXES, CABLES, AND ALL INCIDENTALS NECESSARY TO COMPLETE, READY FOR USE, THE SERVICE AS DETAILED ON SHEETS 162, 163 AND 164. THE LUMP SUM PRICE BID FOR "ITEM SPECIAL-SERVICE TO UNDERPASS LIGHTING" SHALL INCLUDE PAYMENT FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. COMPONENT PARTS NOT SPECIFICALLY MENTIONED BUT REQUIRED FOR SATISFACTORY OPERATION OF THIS ITEM SHALL BE FURNISHED AND CONSIDERED PAID FOR AS PART OF THE ITEM.

ITEM SPECIAL - TEMPORARY LIGHTING

THE CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING FOR TEMPORARY MEDIAN CROSSOVERS AND LANE REDUCTION TRANSITIONS FROM TWO LANES TO ONE LANE ON U.S. 35. LIGHTING SHALL BE PROVIDED FOR THE FOLLOWING APPROXIMATE STATION LIMITS:

FROM	TO
STA. 1073+70±	STA. 1086+00±
STA. 3+00±	STA. 14+70±
STA. 476+00±	STA. 487+30±
STA. 77+00±	STA. 88+70±
STA. 9+50±	STA. 21+75±
STA. 31+25±	STA. 42+75±

FOR MEDIAN CROSSOVER DETAILS SEE SHEET NOS. 32-35.

TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES AND SHALL BE INSTALLED BEFORE MEDIAN CROSSOVERS ARE USED FOR TRAFFIC.

THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF HIS PROPOSED DETAILED TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL. THESE PLANS SHALL SHOW LOCATION OF POLES, LENGTH OF BRACKET ARMS, TYPE AND SIZE OF LUMINAIRES AND LAMPS, MOUNTING HEIGHT, POWER SOURCE, AND OTHER PERTINENT INFORMATION.

RECONDITIONED OR APPROVED USED MATERIALS MAY BE FURNISHED FOR THE TEMPORARY LIGHTING SYSTEM. CONSTRUCTION MAY BE WITH WOOD POLES AND OVERHEAD WIRING. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE A FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. MOUNTING HEIGHT FOR TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 27 FEET AND MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. THE TEMPORARY LIGHTING INSTALLATIONS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN NO LONGER NEEDED.

THE CONTRACTOR SHALL FURNISH ALL ELECTRICAL ENGERGY, MATERIALS, LABOR AND EQUIPMENT NECESSARY TO INSTALL, OPERATE, MAINTAIN AND REMOVE THE TEMPORARY LIGHTING.

THE LUMP SUM BID PRICE FOR "ITEM SPECIAL-TEMPORARY" Lighting SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE THE TEMPORARY LIGHTING AS SPECIFIED.

ITEM SPECIAL - CABLE SPLICING KIT

THIS ITEM SHALL CONSIST OF PROVIDING AND INSTALLING AN APPROVED CABLE SPLICING KIT AS DESCRIBED IN PARAGRAPH 5 OF SECTION 713.15 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATION. THE COST OF ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH "ITEM SPECIAL-CABLE SLICING KIT."

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GREENE COUNTY

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LIGHTING GENERAL NOTES

PULL BOXES WITH GRADE ADJUSTMENT EXTENSION

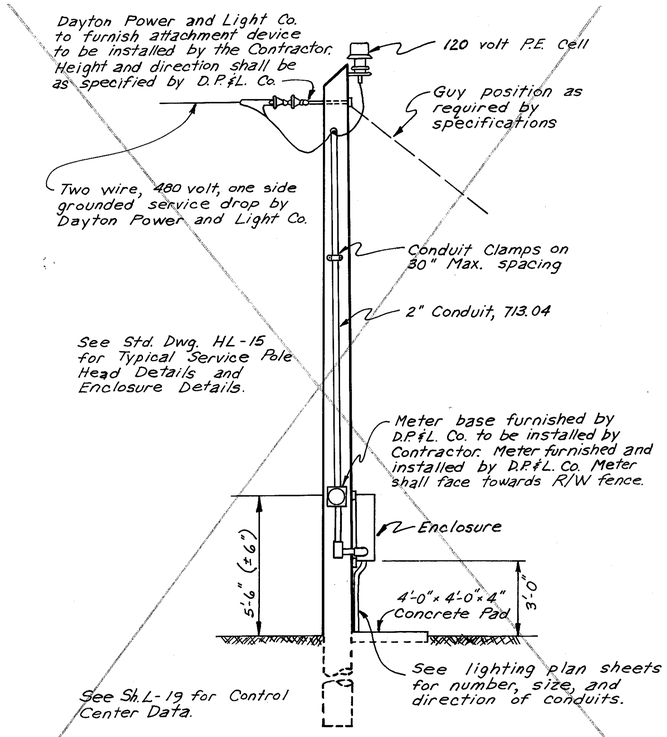
PULL BOXES INSTALLED IN DEPRESSED OR EARTH BARRIER MEDIANS AS PART OF A LIGHTING CABLE CROSSOVER SHALL BE LOCATED APPROXIMATELY 6 FEET FROM THE LOWEST POINT IN THE MEDIAN ALONG THE CENTERLINE OF THE CROSSOVER AND PROVIDED WITH GRADE ADJUSTMENT EXTENSIONS TO INSURE CONDUIT DRAINAGE. IN ADDITION, THE NORMAL AGGREGATE TYPE DRAIN, AS SHOWN ON STANDARD CONSTRUCTION DRAWING HL-10, SHALL BE EXTENDED FROM THE PULL BOX TO THE LOW POINT OF THE MEDIAN ALONG THE CENTERLINE OF THE CROSSOVER. PAYMENT FOR THE AGGREGATE DRAIN SHALL BE INCLUDED IN THE BID ITEM FOR "PULL BOX, 18" CIRCULAR, 713.09, WITH GRADE ADJUSTMENT EXTENSION."

ESTIMATED QUANTITIES

AN ESTIMATED QUANTITY OF " 480 LIN. FT. OF 605, 4" SHALLOW PIPE UNDERDRAINS" IS PROVIDED IN THE LIGHTING GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN PROVIDING POSITIVE DRAINAGE FOR PULL BOXES IN FILL AREAS. IT IS INTENDED THAT ALL PULL BOXES IN THESE AREAS BE PROVIDED WITH SUCH DRAINAGE, PROVIDED THE LENGTH OF UNDERDRAIN NECESSARY TO OBTAIN A SATISFACTORY OUTFALL DOES NOT EXCEED 20 FEET APPROXIMATELY. A PERFORATED PVC PIPE OR CONDUIT MATERIAL APPROVED BY THE ENGINEER MAY BE USED IN THE CONSTRUCTION OF THIS ITEM.

POLYVINYL CHLORIDE PLASTIC CONDUIT

THIS SPECIFICATION COVERS POLYVINYL CHLORIDE PLASTIC CONDUIT FOR EITHER DIRECT BURIAL IN EARTH OR FOR ENCASEMENT IN CONCRETE AND SHALL BE OF THE SIZE AND TYPE SPECIFIED.
DETAIL REQUIREMENTS. CONDUIT FURNISHED UNDER THIS SPECIFICATION SHALL CONFORM TO NEMA STANDARDS PUBLICATION NO. TC6-74 WITH THE EXCEPTION THAT CONDUIT AND CONDUIT FITTINGS COMPOSED OF ACRYLONITRILE - BUTADIENE - STYRENE (ABS) SHALL NOT BE ACCEPTABLE.



SERVICE POLES AND CONTROL CENTERS K, T & U

LIGHT POLE DATA

REFERENCE LETTER	DESIGN NUMBER	FOUNDATION ANCHOR BOLTS: SIZE DIAM. × LENGTH	FOUNDATION ANCHOR BOLTS: BOLT CIRCLE DIAM.	TRANSFORMER BASE STYLE
A	AT25B41.7	1" × 40"	15 "	AT-A
B	AT15B41.7	1" × 40"	15"	AT-A
C	A15B10B41.7	1¼" × 80"	19¾"	None *
D	A15B10B41.7 D1	1¼" × 80"	19¾"	None *
E	ST15B41.7	1" × 40"	15"	Steel
F	AT25B34.2	1" × 40"	15"	AT-A
G	AT15B34.2	1" × 40"	15"	AT-A
H	AT10B34.2	1" × 40"	15"	AT-A
I	A15B14.0 D2	1" × 40"	11"	None
J	A10B10.3 D3	1" × 40"	11 "	None
K	ST12B41.7	1" × 40"	15"	Steel
L	A15B10B41.7D4	1¼" × 85"	19¾"	None *

* - Light pole mounted in barrier wall — For details of pole base see Standard Drawing HL-22

D1 - Provide luminaire and lamp for 10' bracket arm only. The 15' arm pole and bracket cable ends shall be taped and secured.

D2 - Light pole cut from shaft size 8" × 4.92" × 22'-0". See detail of light pole T-1-13 on Sheet No. L-18.

D3 - Light pole cut from shaft size 8" × 4.92" × 22'-0". See detail of light pole T-3-3 on Sheet No. L-18.

D4 - Median mounted light pole on bridge — See Bridge Plans
Provide luminaire and lamp for 10' bracket arm only. The 15' arm pole and bracket cable ends shall be taped and secured.

CONTROL CENTERS R & S

CONTROL CENTERS "R" AND "S" SHALL EACH HAVE THREE CONTROL PANELS AS DETAILED ON SHEET NO. L-19. THE COMBINATION FUSED SAFETY SWITCH AND LIGHTING CONTACTOR FOR ALL CIRCUITS EXCEPT CIRCUIT S-4 (DAYTIME UNDERPASS LIGHTING CIRCUIT) SHALL BE RATED 600 VOLTS, 30 AMPS. THE COMBINATION FUSED SAFETY SWITCH AND LIGHTING CONTACTOR FOR CIRCUIT S-4 SHALL BE RATED 600 VOLTS, 100 AMPS.
CONTROL PANEL NO. 1 WILL OPERATE ROADWAY LIGHTING UNITS BY USE OF A PHOTO-ELECTRIC RELAY. CONTROL PANELS NO. 2 AND 3 WILL OPERATE NIGHTTIME AND DAYTIME UNDERPASS LIGHTING UNITS, RESPECTIVELY, BY USE OF 24 HOUR ASTRONOMICAL DIAL TIME CONTROLS WHICH SHALL AUTOMATICALLY ADJUST FOR SEASONAL CHANGES.
THE SEQUENCE OF OPERATION FOR UNDERPASS LIGHTING SHALL BE AS FOLLOWS:

1) THE TIME CONTROL FOR DAYTIME UNDERPASS LIGHTING SHALL BE ADJUSTED TO TURN ON LIGHTS AUTOMATICALLY AT SUNRISE AND OFF AT SUNSET.
2) THE TIME CONTROL FOR NIGHTTIME UNDERPASS LIGHTING SHALL BE FIELD ADJUSTED TO TURN ON LIGHTS APPROXIMATELY 5 TO 8 MINUTES BEFORE DAYTIME LIGHTS TURN OFF AND TURN OFF THE NIGHTTIME LIGHTS APPROXIMATELY 5 TO 8 MINUTES AFTER DAYTIME LIGHTS TURN ON.

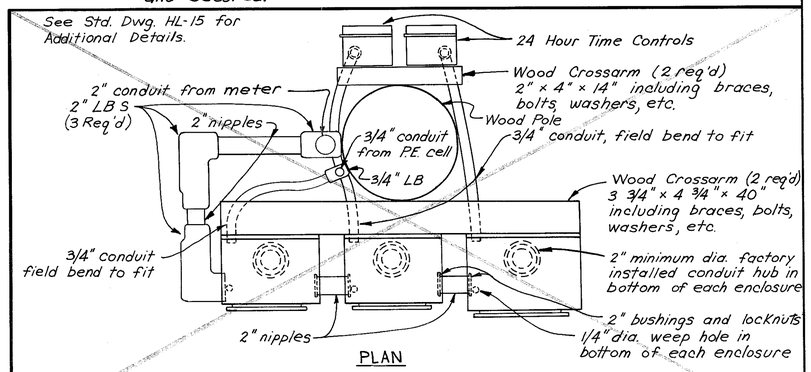
TIME CONTROLS SHALL HAVE THE FOLLOWING SPECIAL FEATURES:

1) A SPDT SWITCH WITH CONTACTS RATED AT 120 VOLTS, 40 AMPS.
2) MANUAL ON/OFF SWITCH

CONTROL CENTERS R & S (CONTINUED)

3) A SPRINGWOUND CARRY-OVER WHICH SHALL KEEP PRESET SCHEDULE ON TIME FOR 10 HOURS DURING A POWER OUTAGE, AND AUTOMATICALLY REWINDS AFTER POWER IS RESTORED.
4) A NEMA TYPE 3 INDOOR-OUTDOOR ENCLOSURE WITH HASP AND 3/4" KNOCKOUTS IN SIDES, BOTTOM AND BACK, MOUNTED ON THE SERVICE POLE AS SHOWN ON SHEET NO. L-1A. THE CONTRACTOR SHALL PROVIDE A PADLOCK FOR EACH TIMER.

24 HOUR ASTRONOMICAL DIAL TIME CONTROLS SHALL BE AMF PARAGON MODEL NO. 4215-00 SZ, INTERMATIC MODEL NO. V45475 SCR, OR EQUAL APPROVED BY THE ENGINEER.
THE CONTRACTOR SHALL FURNISH AND INSTALL THE TIME CONTROLS AS PART OF THE LUMP SUM BID ITEM FOR "SERVICE POLE AND CONTROL CENTER."



PLAN

SERVICE POLES AND CONTROL CENTERS R & S

LIGHTING GENERAL SUMMARY

STRUCTURES (See Sheet L-1 for Structure Groundings)									ROADWAY												
GRE-675-0576	GRE-675-0589	GRE-675-0615&0616	GRE-675-0737	GRE-35-0009	GRE-35-0074	GRE-35-0107L	GRE-35-0107R	Structure Totals								Road-way Totals	GRAND TOTAL	ITEM	UNIT	DESCRIPTION	Ref. Letter
L-9	L-12, L-13 & L-16	L-10		L-11 & L-17	L-9	L-13	L-13		L-1,2	L-4	L-9	L-10	L-11	L-12	L-13						
											1					1	1	625	Ea.	Light Pole Design AT 25B 41.7	A
											16	3	10	2	4	35	35	625	Ea.	Light Pole Design AT15B 41.7	B
														1		1	1	625	Ea.	Light Pole Design A 15B 10B 41.7	C
											1	3		4	2	10	10	625	Ea.	Light Pole Design A 15B 10B41.7D1	D
												1				1	1	625	Ea.	Light Pole Design ST15B 41.7	E
													1			1	1	625	Ea.	Light Pole Design AT 25B 34.2	F
											4	4	1			9	9	625	Ea.	Light Pole Design AT 15B 34.2	G
											2	9	8	5	1	25	25	625	Ea.	Light Pole Design AT 10B 34.2	H
		1						1									1	625	Ea.	Light Pole Design A15B 14.0D2	I
		1						1									1	625	Ea.	Light Pole Design A10B 10.3D3	J
	1			1			1	3									3	625	Ea.	Light Pole Design ST 12B 41.7	K
	1							1									1	625	Ea.	Light Pole Design A 15B 10B 41.7D4	L
											17	4	10	2	4	37	37	625	Ea.	Light Pole Foundation 24"ø x 8' deep	
											6	13	10	5	1	35	35	625	Ea.	Light Pole Foundation 24"ø x 6' deep	
											1	4		6	5	16	16	625	Ea.	Median Light Pole Foundation	
	2			1			1	4			18	7	10	8	6	49	53	625	Ea.	Luminaire, Type III, Style C, 310W H.P.S., 480V.	
		1						1			2	9	9	5	1	26	27	625	Ea.	Luminaire, Type II, Style B, 200W. H.P.S., 480V.	
		1						1			4	4	1			9	10	625	Ea.	Luminaire, Type III, Style B, 200W. H.P.S., 480V.	
	25			8				33									33	625	Ea.	Luminaire, Underpass, 100 watt Type IV, H.P.S.	
		2						2									2	625	Ea.	Glare Shield 713.11, 200 watt Luminaire	
		2						2		25	24	21	20	13	10	113	115	625	Ea.	Ground Rod	
											5	9	8	3	11	36	36	625	Ea.	Pull Box 18" Cir. 713.09	
											2		1	2	1	6	6	625	Ea.	Pull Box 24" Cir. 713.09	
												1		1		2	2	625	Ea.	Median Pull Box	
											8298	4249	6557	2188	5936	27,228	27,228	625	L.F.	Trench 24" Deep	
														84	96	180	180	625	L.F.	Conduit 2", 713.04 encased in concrete	
328	440	1587		407	300	241	249	3552									3,552	625	L.F.	Conduit 2", 713.04	
											860	1008	609	283	466	3226	3226	625	L.F.	Conduit 3", 713.04	
	442							442									442	625	L.F.	Conduit 4", 713.04	
	674							674									674	625	L.F.	No. 2 AWG, 1c, 5000 volt Distribution Cable	
	2024	1000		1116		522	72	4734			2732	4016	2112	3470	3944	16,274	21,008	625	L.F.	No. 4 AWG, 1c, 5000 volt Distribution Cable	
	208							208						148		148	356	625	L.F.	No. 2/0 AWG, 1c, 5000 volt Distribution Cable	
	262	188		108			108	666			2686	2115	2070	1443	853	9,167	9833	625	L.F.	No. 10 AWG Pole and Bracket Cable	
											7725	3341	7467	3060	5464	27,057	27,057	625	L.F.	1½" Duct Cable with two No. 4 AWG, 5000 volt Cables	
														1125		1,125	1125	625	L.F.	2" Duct Cable with two No. 2/0 AWG 5000 volt Cables	
	2	2		1			1	6			24	20	20	13	7	84	90	625	Ea.	Connector Kit Type II	
	2	2		1			1	6			24	20	20	13	7	84	90	625	Ea.	Connector Kit Type III	
	6			8				14			22	20	30	20	22	114	128	SPEC.	Ea.	Cable Splicing Kit	
2	3	4		2	1	1	1	14									14	625	Sets	Light Pole Anchor Bolts for Structures 713.01	
1								1									1	625	Ea.	Structure Grounding System, GRE-675-0576	
	1							1									1	625	Ea.	Structure Grounding System, GRE-675-0589	
		1						1									1	625	Ea.	Structure Grounding System, GRE-675-0616	
			1					1									1	625	Ea.	Structure Grounding System, GRE-675-0737	
				1				1									1	625	Ea.	Structure Grounding System, GRE-35-0009	
					1			1									1	625	Ea.	Structure Grounding System, GRE-35-0074	
						1		1									1	625	Ea.	Structure Grounding System, GRE-35-0107L	
							1	1									1	625	Ea.	Structure Grounding System, GRE-35-0107R	
															Lump	Lump	Lump	625	Lump	Service Pole & Control Center K, as per plan	
													Lump			Lump	Lump	625	Lump	Service Pole & Control Center R, as per plan	
														Lump		Lump	Lump	625	Lump	Service Pole & Control Center S, as per plan	
											Lump					Lump	Lump	625	Lump	Service Pole & Control Center T, as per plan	
											Lump					Lump	Lump	625	Lump	Service Pole & Control Center U, as per plan	
	Lump							Lump									Lump	Spec.	Lump	Service to Underpass Lighting, GRE-675-0589,	
				Lump				Lump									Lump	Spec.	Lump	Service to Underpass Lighting, GRE-35-0009,	
									Lump							Lump	Lump	839	Lump	High Voltage Test	
									Lump							Lump	Lump	Spec.	Lump	Temporary Lighting,	
									480							480	480	605	L.F.	4" Shallow Pipe Underdrain	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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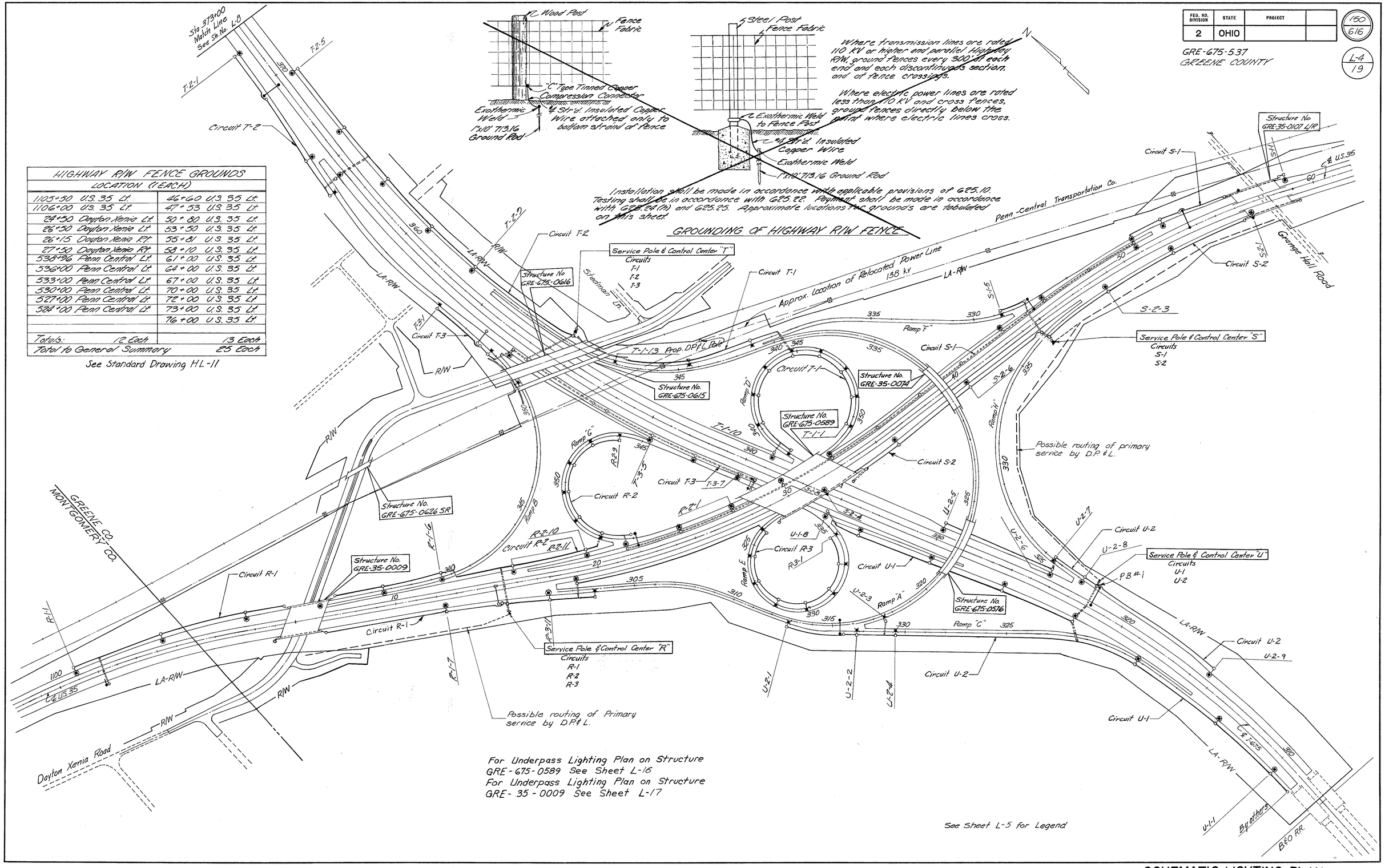
L-4
19

GRE-675-5.37
GREENE COUNTY

HIGHWAY R/W FENCE GROUNDS LOCATION (1 EACH)	
1105+50 U.S. 35 Lt.	46+60 U.S. 35 Lt.
1106+00 U.S. 35 Lt.	47+53 U.S. 35 Lt.
24+50 Dayton Xenia Lt.	50+80 U.S. 35 Lt.
26+50 Dayton Xenia Lt.	53+50 U.S. 35 Lt.
26+15 Dayton Xenia Rt.	55+81 U.S. 35 Lt.
27+50 Dayton Xenia Rt.	58+10 U.S. 35 Lt.
538+96 Penn Central Lt.	61+00 U.S. 35 Lt.
536+00 Penn Central Lt.	64+00 U.S. 35 Lt.
533+00 Penn Central Lt.	67+00 U.S. 35 Lt.
530+00 Penn Central Lt.	70+00 U.S. 35 Lt.
527+00 Penn Central Lt.	72+00 U.S. 35 Lt.
524+00 Penn Central Lt.	73+00 U.S. 35 Lt.
	76+00 U.S. 35 Lt.
Totals: 12 Each	13 Each
Total to General Summary	25 Each

See Standard Drawing HL-11

GROUNDING OF HIGHWAY R/W FENCE



For Underpass Lighting Plan on Structure GRE-675-0589 See Sheet L-16
For Underpass Lighting Plan on Structure GRE-35-0009 See Sheet L-17

See Sheet L-5 for Legend

SCHEMATIC LIGHTING PLAN

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2	OHIO		

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GRE-675-5.37
GREENE COUNTY

L-5/19

LEGEND

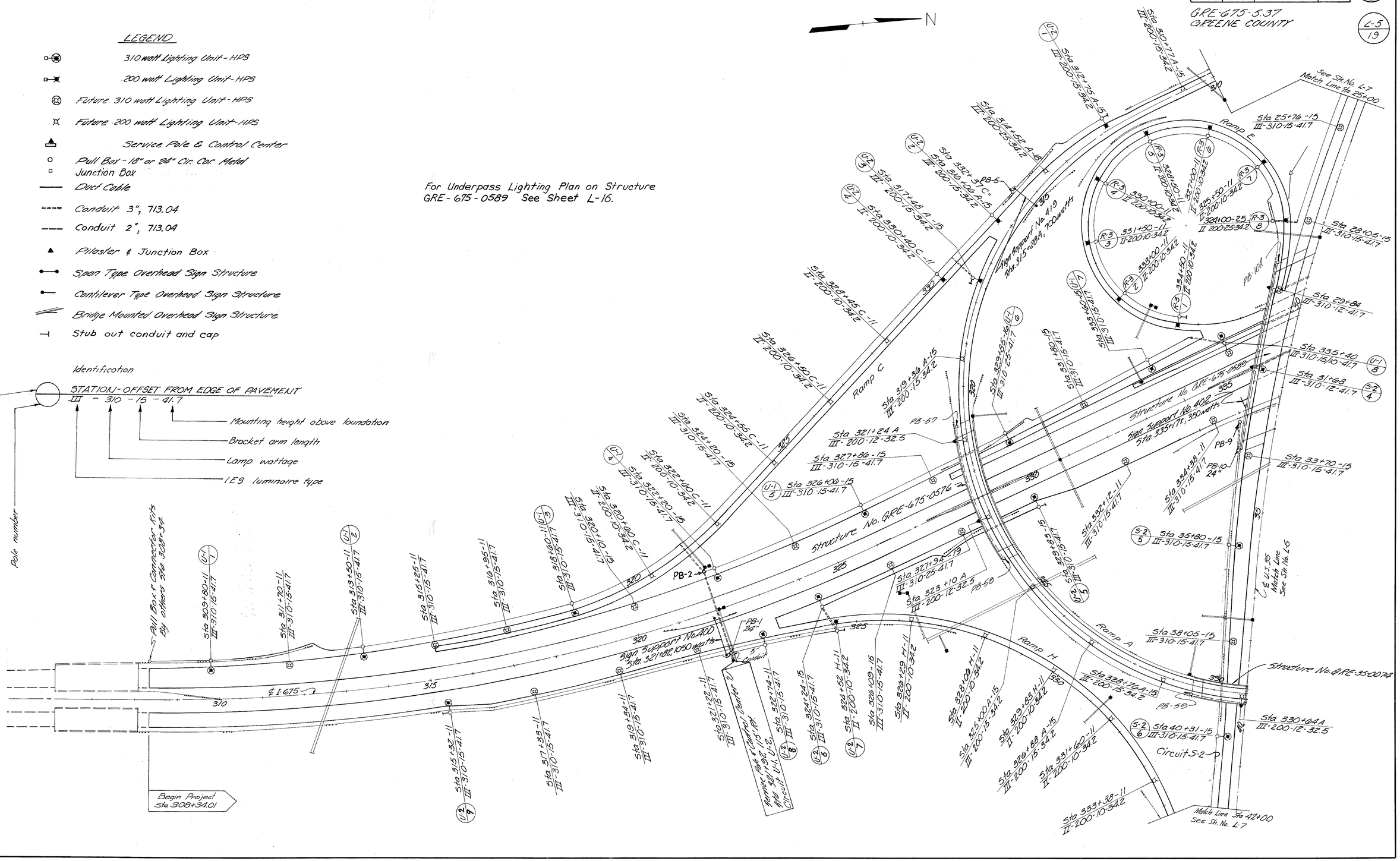
- 310 watt Lighting Unit - HPS
- 200 watt Lighting Unit - HPS
- Future 310 watt Lighting Unit - HPS
- Future 200 watt Lighting Unit - HPS
- Service Pole & Control Center
- Pull Box - 18" or 24" Cir. Cor. Metal
- Junction Box
- Duct Cable
- Conduit 3", 713.04
- Conduit 2", 713.04
- Pilaster & Junction Box
- Span Type Overhead Sign Structure
- Cantilever Type Overhead Sign Structure
- Bridge Mounted Overhead Sign Structure
- Stub out conduit and cap

Identification

STATION - OFFSET FROM EDGE OF PAVEMENT
III - 310 - 15 - 41.7

- Mounting height above foundation
- Bracket arm length
- Lamp wattage
- IES luminaire type
- Circuit identification
- Pole number

For Underpass Lighting Plan on Structure GRE-675-0589 See Sheet L-16.



LIGHTING PLAN I-675 Sta 308+34 to Sta 336+80

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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6/6

GRE-675-5.37
GREENE COUNTY

L-6
19

See Sheet No L-7 Match Line

Ramp C

Ramp B

Ramp D

Ramp A

Ramp F

Sign Support No 425 Sta 22+20 525 watts

Sta 21+40 III-310-15/10-41.7

Sta 24+42 III-310-15/10-41.7

Sta 27+23 III-310-15/10-41.7

Sta 30+07 III-310-15/10-41.7

Structure GRE-675-0589

Sta 32+91 III-310-15/10-41.7

Sta 35+44 III-310-15/10-41.7

Sta 38+09 III-310-15/10-41.7

Sta 40+64 III-310-15/10-41.7

Match Line Sta 42+00 See Sh. No. L-7

See Sh. No. L-5 Match Line & US 35

Sta 335+40 525 watts

Sta 340+20 III-310-15/10-41.7

PB-22

PB-21 Median Pull Box

℄ I-675 ℄

Sta 338+86-15 III-310-15-41.7

Sta 341+20-15 III-310-15-41.7

Sta 343+54-15 III-310-15-41.7

Sta 345+88-15 III-310-15-41.7

Sta 348+22-20 III-310-25-41.7

Sta 350+50-11 II-200-10-34.2

Sta 338+25-11 II-200-10-34.2

Sta 340+00-11 II-200-10-34.2

Sta 341+50-11 II-200-10-34.2

Sta 343+00-11 II-200-10-34.2

Sta 344+50-11 II-200-10-34.2

Sta 349+00-11 II-200-10-34.2

Sta 347+50-11 II-200-10-34.2

Sta 346+00-11 II-200-10-34.2

Sta 344+67 III-310-15/10-41.7

Sta 347+35 III-310-15/10-41.7

Sta 347+11.25 III-310-15/10-41.7

Sta 349+40 III-310-15/10-41.7

Sta 353+55-11 II-200-10-34.2

Sta 350+05-11 II-200-10-34.2

Sta 347+55-11 II-200-10-34.2

Sta 346+05-11 II-200-10-34.2

Sta 345+66 B-11 II-200-10-34.2

Sta 347+58 B-11 II-200-10-34.2

DAYTON POWER & LIGHT CO. 138 KV Line

Sta 349+20 B-11 II-200-10-34.2

Install Glare Shield Sta 351+33.5 II-200-10-34.2 Mounted on Wall See Detail on Sheet L-19

Sta 30+50 D.X.R III-200-12-32.5

Pull Box in Conc. Med.

PB-20

PB-19

PB-18

PB-17

PB-16

Dayton Xenia Rd.

Wilkinson Dr.

Sta 352+45 III-310-15-41.7

Sta 353+32.5 C-D-15 II-200-15-34.2

Sta 354+80 C-D-18 III-200-25-34.2

Sta 356+33 C-D-15 II-200-15-34.2

Sta 356+90-15 III-310-15-41.7

Sta 358+45 C-D III-200-15-34.2

Sta 359+45-15 III-310-15-41.7

Sign Support No. 411 Sta. 354+00 C-D 350 watts

℄ Pedestrian Overpass

Match Line Sta 360+00 See Sh. No. L-8

Sta 350+71-15 Jumper III-310-15-41.7

Sta 40+07 D.X.R III-200-12-32.5

Sta 352+17-15 III-310-25-41.7

Sta 353+57-15 III-310-15-41.7

Sta 354+45-15 III-310-15-41.7

Sta 355+00-15 III-310-15-41.7

Sta 356+43-15 III-310-15-41.7

Sta 357+28-15 III-310-15-41.7

Sta 359+28-15 III-310-15-41.7

Install Glare Shield Sta 348+12.5 A-11 II-200-15-34.2 Mounted on Wall

Steadman Ln.

Prop. D.P.&L. Pole

Sta 342+74 A-11 III-200-15-34.2

Sta 341+20 A-11 III-200-15-34.2

Sta 339+50 F-11 III-200-15-34.2

Sta 338+20 A-15 III-200-15-34.2

Sta 337+67 F-11 II-200-10-34.2

Sta 336+28 A-15 III-200-15-34.2

Sta 334+40 A-15 III-200-15-34.2

Sta 332+52 A-15 III-200-15-34.2

Sta 335+67 F-11 II-200-10-34.2

Sta 333+07 F-11 II-200-10-34.2

Sta 332+27 F-11 II-200-10-34.2

Sta 330+47 F-11 II-200-10-34.2

Structure No. GRE-35-0074

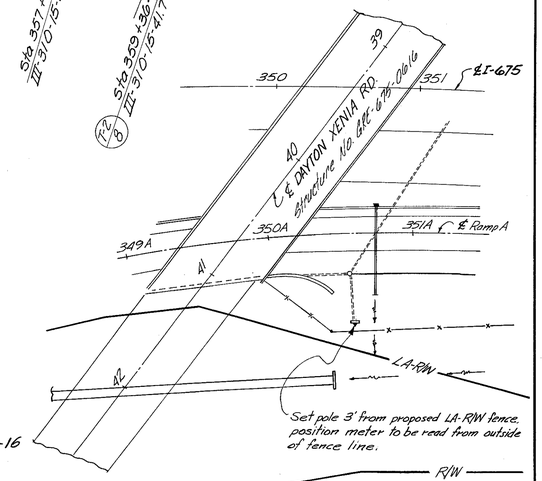
Service Pole & Control Center "T" Sta 350+60A, 66' Rt. Circuits T-1, T-2, T-3

Note: For Conduit Location from Sta 349+00 Lt. to Sta 352+45 Lt. in median between Collector-Distributor & Southbound I-675 pavement see Miscellaneous Details, Sheet No. 22.

See Structure Drawings for position of wall mounted light poles.

For Underpass Lighting Plan for Structure GRE-675-0589 See Sheet L-16

See Sheet L-5 for Lighting Legend



Set pole 3' from proposed LA-R/W fence, position meter to be read from outside of fence line.

SERVICE POLE & CONTROL CENTER 'T'

LIGHTING PLAN I-675 STA 336+80 to STA 360+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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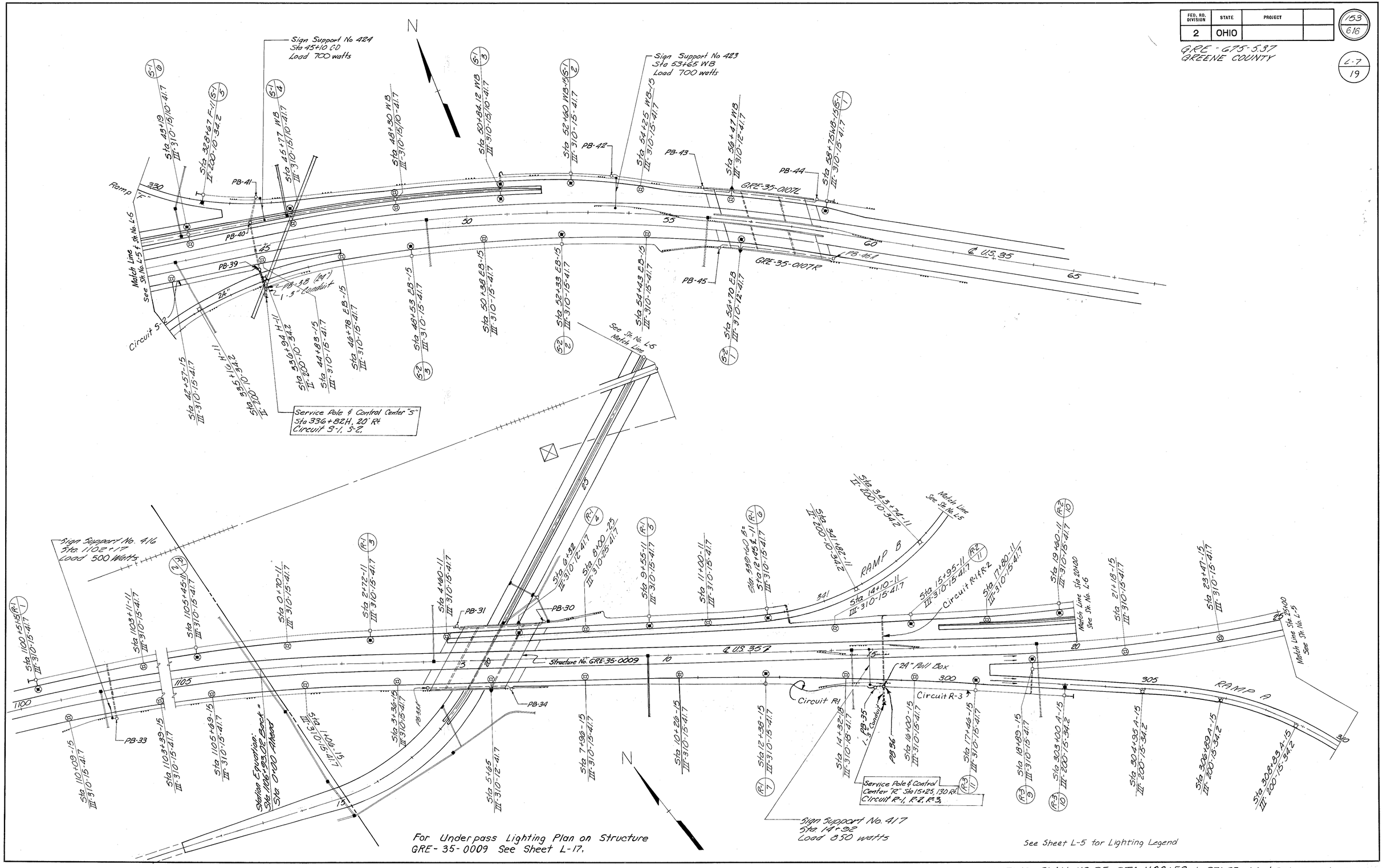
GRE - 675-5.37
GREENE COUNTY

L-7
19



For Underpass Lighting Plan on Structure
GRE-35-0009 See Sheet L-17.

See Sheet L-5 for Lighting Legend

LIGHTING PLAN US 35 STA 1100+50 to STA 25+00 & STA 42+00 to STA 60+00

FED. RD. DIVISION	STATE	PROJECT	
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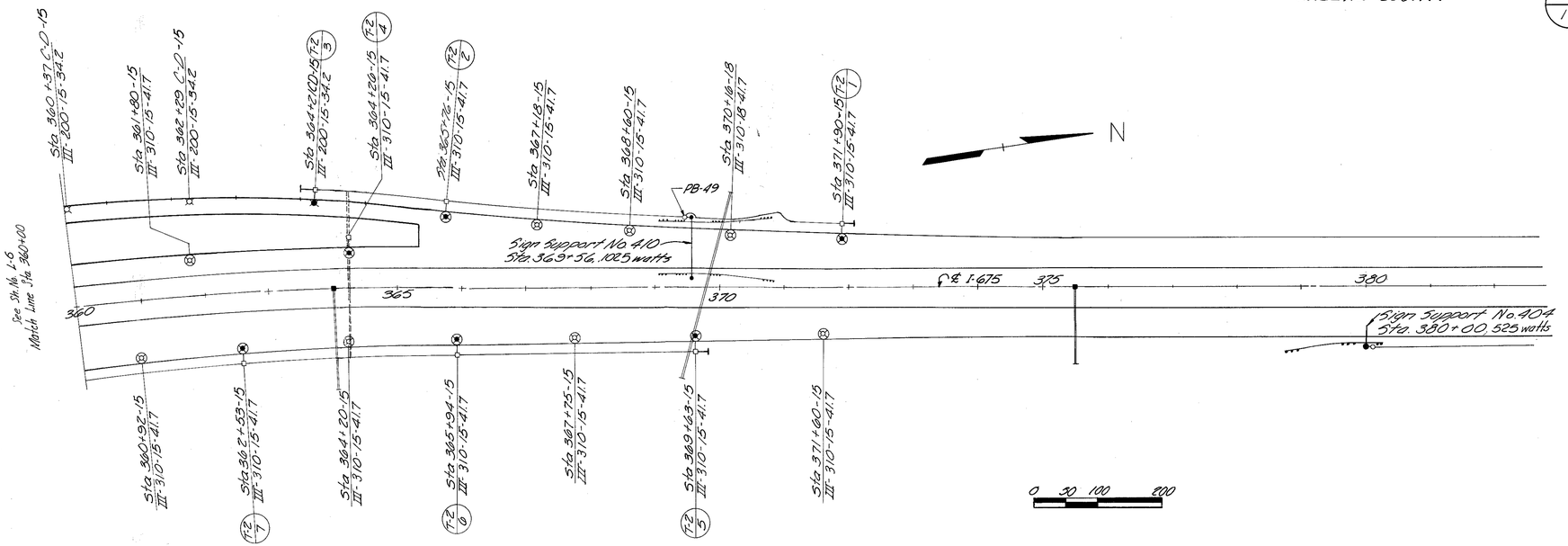
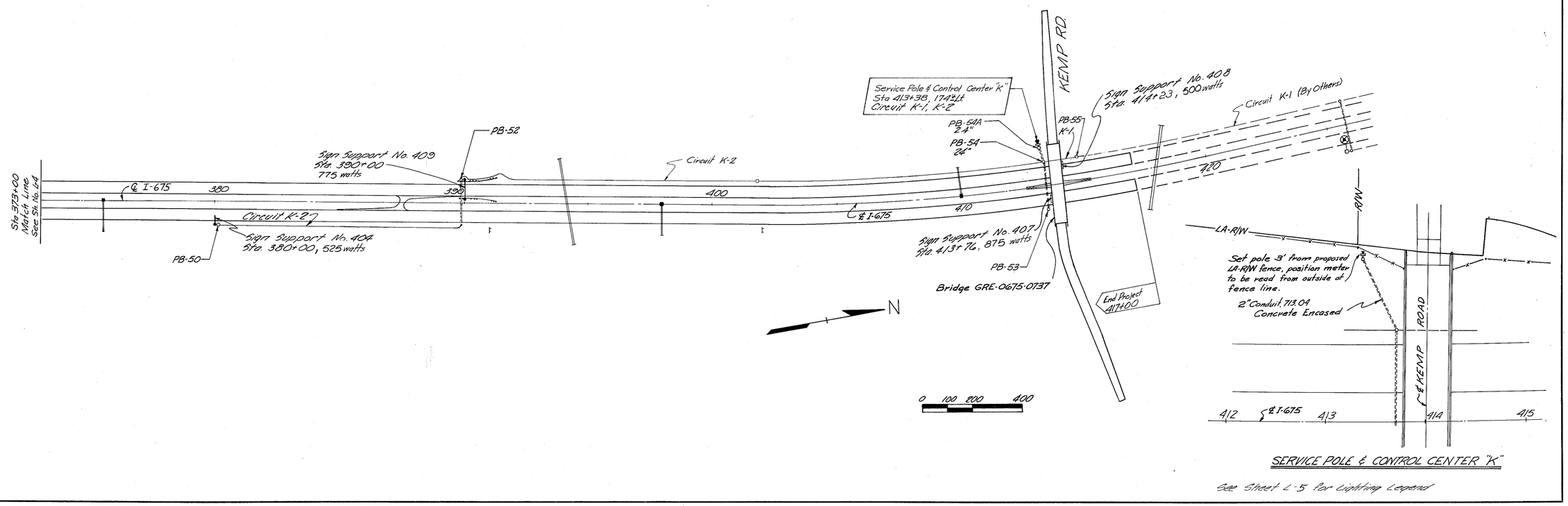
15A / 616

GRE-675-5.37
GREENE COUNTY

L-8 / 19





SERVICE POLE & CONTROL CENTER "K"

See Sheet L-5 for Lighting Legend

LIGHTING PLAN I-675 STA 360+00 to STA 417+00

QUANTITY CALCULATIONS
BY KAE DATE 5/4/72
CKD. [illegible] DATE 5/10/72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised by: NHH Date 5/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37 GREENE COUNTY

ESTIMATED LIGHTING QUANTITIES

Side	Station	Station	Light Pole Design AT15B41.7 (Ref. B) Ea.	Light Pole Design AT25B41.7 (Ref. A) Ea.	Light Pole Design AT15B34.2 (Ref. G) Ea.	Light Pole Design AT10B34.2 (Ref. H) Ea.	Light Pole Design A15B10B41.701 (Ref. D) Ea.	Light Pole Foundation 24"x8' Ea.	Light Pole Foundation 24"x6' Ea.	Median Light Pole Foundation Ea.	Luminaire Type III 310W Ea.	Luminaire Type III 200W Ea.	Luminaire Type II 200W Ea.	Lamp, 310W Ea.	Lamp, 200W Ea.	Ground Rod Ea.	Trench 24" Deep L.F.	Pull Box 18" Cir. Cor. Metal Ea.	Pull Box 24" Cir. Cor. Metal Ea.	Conduit, 2" 713.04 L.F.	Conduit, 3" 713.04 L.F.	1c No. 4AWG 5000V Distribution Cable L.F.	1c No. 10AWG Pole & Bracket Cable L.F.	2-No. 4 AWG cables 1½" Duct Cable L.F.	Connector Kits Type II Ea.	Connector Kits Type III Ea.	Item Special - Cable Splicing Kit	Junction Box 18"x8"x6" Ea.	Light Pole Anchor Bolts for Structure Set	Service Pole & Control Center "U" Lump	Service Pole & Control Center "T" Lump	Pullbox No.	Circuit No.
Rt.	321+92																18		1		36	168					4			Lump		1, 1A	Circuit U-2
Rt.	321+92	315+32															660							670									
Rt.	315+32		1					1			1			1		1							114		1	1							
Rt.	321+92	322+74															82							92									
Rt.	322+74		1					1			1			1		1							114		1	1							
Rt.	322+74 ℄	324+30H															156							166									
Rt.	324+30H																																
Rt.	324+30H	324+52H															22							32									
Rt.	324+52H					1			1				1		1	1							89		1	1							
Rt.	324+30H	324+24℄	1					1			1			1		1	56				56	132	114		1	1							
Rt.	324+24℄	329+83℄	1					1			1			1		1	559						114	569	1	1							
Lt.&Rt.	321+92																195				195	860											
Lt.&Rt.	321+92																	1									2					2	Circuit U-1
Lt.	321+92	322+20															28							38									
Lt.	322+20		1					1			1			1		1							114		1	1							
Lt.	322+20	326+06															386							396									
Lt.	326+06		1					1			1			1		1							114		1	1							
Lt.	326+06	329+85															379							389									
Lt.	329+85			1				1			1			1		1							134		1	1							
Lt.	329+85	333+60															375							385									
Lt.	333+60		1					1			1			1		1							114		1	1							
Lt.	333+60	334+60															100							110									
Lt.	334+60																																
Lt.	334+60	335+40															92				92	204											
Lt.	335+40						1			1	1			1		1							154		1	1							
Lt.	321+92℄	321+65C															84				84	376											
Lt.	321+65C																										2						
Lt.	321+65C	318+60C															305							315									
Lt.	318+60C		1					1			1			1		1							114		1	1							
Lt.	318+60C	313+50℄															510							520									
Lt.	313+50		1					1			1			1		1							114		1	1							
Lt.	313+50	309+80															370							380									
Lt.	309+80		1					1			1			1		1							114		1	1							
Lt.	309+80	308+34															146							156									
Lt.	321+65C	330+40C															875							885									Circuit U-2
Lt.	330+40C					1			1				1		1	1							89		1	1							
Lt.	330+40C	330+93C															53							63									
Lt.	330+93C																										2						
Lt.	330+93C	332+37C‡															144							154									
Rt.	316+06A‡				1				1			1			1	1							99		1	1							
Rt.	316+06A	315+38A															68							78									
Rt.	315+38A																																
Rt.	315+38A	312+75A															275							285									
Rt.	312+75A				1				1			1			1	1							99		1	1							
Lt.&Rt.	330+93C	317+48A															64				64	148											
Rt.	317+48A				1				1			1			1	1							99		1	1							
Rt.	320+92A																															57	
Rt.	320+92A	321+24A															10			32*													
Rt.	321+24A																											1*	1*				
Rt.	321+24A	323+10A																		186*													
Rt.	323+10A																											1*	1*				
Rt.	323+10A	324+20A															10			110*													
Rt.	324+20A																															58	
Rt.	329+52A																															59	
Rt.	329+52A	330+64A															10			112▲													
Rt.	330+64A																											1▲	1▲				
Rt.	330+64A	332+52A															10			188▲													
Rt.	332+52A																															60	
Rt.	350+60A																39		1		78	294					6				Lump	15	Circuit T-2
Rt.	350+60A	356+43℄															583							593									
Rt.	356+43		1					1			1			1		1							114		1	1							
Rt.	356+43	359+36															293							303									
Rt.	359+36		1					1			1			1		1							114		1	1							
Rt.	359+36	362+53															317							327									
Rt.	362+53		1					1			1			1		1							114		1	1							
Rt.	362+53	364+10															157							167									
Rt.	364+10																										2						
Rt.	364+10	365+94															184							194									
Rt.	365+94		1					1			1			1		1							114		1	1							
Rt.	365+94	369+63															369							379									
Rt.	369+63		1					1			1			1		1							114		1	1							
Rt.&Lt.	364+10																190				190	400					2						
Lt.	364+10	364+26															16							26									
Lt.	364+26		1					1			1			1		1							114		1	1							
Lt.	364+10℄	364+64C-D															65				65	150											
Lt.	364+64C-D																										2						
Lt.	364+64C-D	364+21C-D															43							53									
Lt.	364+21C-D				1				1			1			1	1							99		1	1							
Total to General Summary *(Stru.)																				328*								–	2*				
Total to General Summary ▲(Stru.)																				300▲								–	1▲				
Total to General Summary (Rdwy.)			16	1	4	2	1	17	6	1	18	4	2	–	–	24	8298	5	2	-	860	2732	2686	7725	24	24	22	–	–	Lump	Lump	–	–

‡ Station Equation - 332+37C = 316+06A *Structure No. GRE-675-0576 ▲Structure No. GRE-35-0074

ESTIMATED LIGHTING QUANTITIES

QUANTITY CALCULATIONS
BY KAF DATE 5/4/72
CHKD. [illegible] DATE 5/11/72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised by: N.H.H. Date: 5/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37 GREENE COUNTY

156/616

L-10/19

Reference Letter →

SIDE	STATION	STATION	B: Light Pole Design AT15B41.7	E: Light Pole Design ST15B41.7	G: Light Pole Design AT15B34.2	H: Light Pole Design AT10B34.2	D: Light Pole Design A15B10B41.7D1	I: Light Pole (Wall Mtd.) Design A15B14.0D2	J: Light Pole (Wall Mtd.) Design A10B10.3D3	Light Pole Foundation 24"x8'	Light Pole Foundation 24"x6'	Median Light Pole Foundation	Glare Shield for 200w Luminaire	Luminaire Type III 310w	Luminaire Type III 200w	Luminaire Type II 200w	Lamp, 310w	Lamp, 200w	Ground Rod	Trench 24" Deep	Median Pull Box	Pull Box 18" Cir. Cor. Metal	Conduit, 2", 713.04	Conduit, 3", 713.04	**4" Conduit in Barrier Median	1c No.4 AWG 5000V Distribution Cable	1c No.10 AWG Pole & Bracket Cable	2-No.4 AWG cables 1½" Duct Cable	Connector Kits Type II	Connector Kits Type III	Cable Splicing Kit		Junction Box 18"x8"x6"	Light Pole Anchor Bolts for Structure	Pullbox No.	Circuit No.
			Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	L.F.	Ea.	Ea.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	Ea.	Ea.	Ea.		Ea.	Set	–	–
Lt.	364+64CD	365+76 ℄																		164								174								Circuit T-2
Lt.	365+76 ℄		1							1				1			1		1								114		1	1						
Lt.	365+76 ℄	369+46 ℄																		370								380								
Lt.	369+46 ℄																					1									2				49	
Lt.	369+46 ℄	371+90 ℄																		244								254								
Lt.	371+90 ℄		1							1				1			1		1								114		1	1						
Rt.&Lt.	350+60 A	351+65 ℄																		245				245		510										Circuit T-3
Lt.	351+65																					1									2				16	
Lt.	351+65	352+45																		80				80		180										
Lt.	352+45			1						1				1			1		1								114		1	1						
Lt.	352+45 ℄	352+75 B																		88				88		196										
Lt.	352+75 B																														2					
Lt.	352+75 B	353+32 C-D																		57								67								
Lt.	353+32 C-D				1						1				1			1	1								99		1	1						
Lt.	353+32 C-D	353+90 C-D																		58								68								
Lt.	353+90 C-D																					1									2				19	
Lt.	353+90 C-D	356+53 C-D																		263								273								
Lt.	356+53 C-D				1						1				1			1	1								99		1	1						
Lt.	352+75 B	351+35±B																		10			140*			300*										
Lt.	350+60 B																																			
Lt.	350+60 B	351+35±B																		10			75*													
Lt.	351+35±B								1*				1*			1*		1*	1*				22*				89*		1*	1*			1*	1*		
Rt.	350+60 A	348+14±A																		20			246*			512*										Circuit T-1
Rt.	347+30 A																														2					
Rt.	347+30 A	344+44 A																		286								296								
Rt.	344+44 A				1						1				1			1	1								99		1	1						
Rt.	344+44 A	341+10 A																		334								344								
Rt.	341+10 A				1						1				1			1	1								99		1	1						
Rt.	341+10 A	339+60 F																		150								160								
Rt.	339+60 F																																			
Rt.	347+30 A	348+14±A																		10			84*			188*										
Rt.	348+14±A							1*					1*		1*			1*	1*				17*				99*		1*	1*			1*	1*		
Rt.	339+60 F	344+40 D																		129				129		298										
Rt.	344+40 D																														2					
Rt.	344+40 D	344+50 D																		10								20								
Rt.	344+50 D					1					1					1		1	1								89		1	1						
Rt.	344+50 D	346+00 D																		150								160								
Rt.	346+00 D					1					1					1		1	1								89		1	1						
Rt.	346+00 D	347+50 D																		150								160								
Rt.	347+50 D					1					1					1		1	1								89		1	1						
Rt.	347+50 D	349+00 D																		150								160								
Rt.	349+00 D					1					1					1		1	1								89		1	1						
Rt.	349+00 D	350+50 D																		150								160								
Rt.	350+50 D					1					1					1		1	1								89		1	1						
Rt.	344+40 D	343+00 D																		140								150								
Rt.	343+00 D					1					1					1		1	1								89		1	1						
Rt.	343+00 D	341+50 D																		150								160								
Rt.	341+50 D					1					1					1		1	1								89		1	1						
Rt.	341+50 D	340+00 D																		150								160								
Rt.	340+00 D					1					1					1		1	1								89		1	1						
Rt.	340+00 D	338+79 D																		121								131								
Rt.	338+79 D																														2					
Rt.	338+79 D	338+25 D																		54								64								
Rt.	338+25 D					1					1					1		1	1								89		1	1						
Rt.	338+79 D	338+86 ℄																		52				52		124										
Rt.	338+86 ℄		1							1				1			1		1								114		1	1						
Lt.	351+65	348+10																		355				355		730										Circuit T-3
Lt.	348+10																					1									2				20	
Lt.	348+10	347+11.25																		10				10	**89	218										
Lt.	347+11.25											1							1																	
Lt.	347+11.25	344+67																							**244	508										
Lt.	344+67						1					1		1			1		1								154		1	1						
Lt.	344+67	342+35																							**232	484										
Lt.	342+35						1					1		1			1		1								154		1	1						
Lt.	342+35	340+20																							**215	450										
Lt.	340+20						1					1		1			1		1								154		1	1						
Lt.	340+20	339+30																			1				**90	200					2				21	
Lt.	339+30																			49				49		118										
Lt.	339+30																					1									2				22	
Rt.	36+65 D.X.R.																					1													62	
Rt.	36+65 D.X.R.	38+36 D.X.R.																		10			171*													
Rt.	38+36 D.X.R.																																1*	1*		
Rt.	38+36 D.X.R.	41+78 D.X.R.																		10			342*													
Rt.	41+78 D.X.R.																					1													61	
Lt.	41+35 D.X.R.																					1													64	
Lt.	36+45 D.X.R.																					1													63	
Lt.	36+45 D.X.R.	40+07 D.X.R.																		10			362*													
Lt.	40+07 D.X.R.																																1*	1*		
Lt.	40+07 D.X.R.	41+35 D.X.R.																		10			128*													
Total to General Summary *(Stru)								1*	1*				2*		1*	1*		–	2*				1587*			1000*	188*		2*	2*			–	4*		
Total to General Summary (Rdwy.)			3	1	4	9	3	–	–	4	13	4	–	7	4	9	–	–	21	4249	1	9	–	1008	—	4016	2115	3341	20	20	20	–	–	–	–	–

*Structure No. GRE-675-0615 & 0616

**Included in price bid per Lin. Ft. of Concrete Barrier Median

ESTIMATED LIGHTING QUANTITIES

QUANTITY CALCULATIONS
BY KAE DATE 3/4/72
CHD. BH DATE 3/11/72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: N.H.H. Date: 5/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-3.37 GREENE COUNTY

157 / 616

I-11 / 19

Reference Letter → B K G H F

SIDE	STATION	STATION	Light Pole Design AT 15.5 34.7 Ea.	Light Pole Design ST 12.9 41.7 Ea.	Light Pole Design AT 15.5 34.2 Ea.	Light Pole Design AT 10.5 34.2 Ea.	Light Pole Design AT 25.5 34.2 Ea.	Light Bs. Foundation 12'-8" Ea.	Light Bs. Foundation 12'-10" Ea.	Luminaire Type III 310 w Ea.	Luminaire Type III 200 w Ea.	Luminaire Type I 200 w Ea.	Lamp, 310 w Ea.	Lamp, 200 w Ea.	Ground Rod Ea.	Trench 24" Deep L.F.	Pull Box 18" Cir. Cor. Metal Ea.	Pull Box 24" Cir. Cor. Metal Ea.	Conduit 2" ITE/A L.F.	Conduit 3" ITE/A L.F.	#14 4 AWG 5000V Distribution Cable L.F.	#10 4 AWG Pole & Bracket Cable L.F.	2-No. 4 AWG Cables in 2" Duct Cable L.F.	Connector Kits Type II Ea.	Connector Kits Type III Ea.	ITEM SPECIAL-CABLE SPLICING KIT Ea.	Service Pole & Control Center 2" Lump	Junction Box 18"x18"x12" Ea.	Light Pole Anchor Bolts & Shields Set	Pullbox No.	Circuit No.
RA	15+25 US 35															43		1		86	530					6	Lump			36	
RA	15+25 US 35	15+02 US 35														23							99								
RA	15+02 US 35																1									2				35	
RA	15+02 US 35	6+06 US 35														896							1812								
RA	15+02 US 35	12+38 US 35																					274								
RA	12+38 US 35		1					1		1			1		1							114		1	1						
RA	6+06 US 35																1														
RA	6+06 US 35	5+65 US 35														10			41*		204*					2				34	
RA	5+65 US 35																											1*	1*		
RA	5+65 US 35	5+33 US 35																	32*		168*										
RA	5+33 US 35																									2*		1*			
RA	5+33 US 35	5+28 US 35																	5*		60*										
RA	5+28 US 35																									2*		1*			
RA	5+28 US 35	4+87 US 35																	41*		204*										
RA	4+87 US 35																									2*		1*			
RA	4+87 US 35	4+82 US 35																	5*		30*										
RA	4+82 US 35																									2*		1*			
RA	4+82 US 35	4+04 US 35														10	1		78*											33A	
LA/RA	15+25 US 35															168				168	752										
LA	15+25 US 35																									4					
LA	15+25 US 35	13+00 US 35														225							235								
LA	13+00 US 35	340+10B														39				39	98										
LA	340+10B	339+60B #														50							60								
LA	12+45 US 35 #		1					1		1			1		1							114		1	1						
LA	12+43 US 35	9+55 US 35														200							300								
LA	9+55 US 35		1					1		1			1		1							114		1	1						
LA	9+55 US 35	6+93 US 35														262							272								
LA	6+93 US 35																1									2				30	
LA	6+93 US 35	6+32 US 35														10			61*		142*										
LA	6+32 US 35			1*						1*			1*									108*		1*	1*			1*	1*		
LA	6+32 US 35	4+88 US 35														10			144*		308*										
LA	4+88 US 35																1									2				31	
LA	4+88 US 35	2+72 US 35														216							226								
LA	2+72 US 35		1					1		1			1		1							114		1	1						
LA	2+72 US 35	1105+45 US 35														420							430								
LA	1105+45 US 35		1					1		1			1		1							114		1	1						
LA	1105+45 US 35	1102+27 US 35														318							328								
LA	1102+27 US 35																									2				32	
LA	1102+27 US 35	1100+51 US 35														176							186								
LA	1102+27 US 35		1					1		1			1		1							114		1	1						
LA/RA	1102+27 US 35															133				133	306										
RA	1102+27 US 35																1									2				33	
RA	15+25 US 35	17+46 US 35														221							231								
RA	17+46 US 35		1					1		1			1		1							114		1	1						
RA	17+46 US 35	302+19A														140							150								
RA	302+19A																1									2					
RA	302+19A	303+00A														81							91								
RA	303+00A			1				1		1			1		1							99		1	1						
RA	302+19A	18+89 US 35														59				59	138										
RA	18+89 US 35		1					1		1			1		1							114		1	1						
RA	18+89 US 35	28+12 US 35														923							933								
RA	28+12 US 35																									2					
RA/LA	28+12 US 35	328+00E														59				59	138										
LA	328+00E						1		1			1			1								110		1	1						
LA	328+00E	325+50E				1			1			1			1	150							160		1	1						
LA	325+50E																						89									
LA	325+50E	327+00E				1			1			1			1	150							160		1	1						
LA	327+00E																						89									
LA	327+00E	328+50E				1			1			1			1	150							160		1	1						
LA	328+50E																						89									
LA	328+50E	330+00E				1			1			1			1	150							160		1	1						
LA	330+00E																						89									
LA	330+00E	331+50E				1			1			1			1	150							160		1	1						
LA	331+50E																						89									
LA	331+50E	333+00E				1			1			1			1	150							160		1	1						
LA	333+00E																						89									
LA	333+00E	334+50E				1			1			1			1	150							160		1	1						
LA	334+50E																						89									
LA	15+25 US 35	15+95 US 35														70							80									
LA	15+95 US 35		1					1		1			1		1							114		1	1						
LA	15+95 US 35	19+60 US 35														365							375									
LA	19+60 US 35		1					1		1			1		1							114		1	1						
LA	19+60 US 35	20+30 US 35														70							80									
LA	20+30 US 35	353+45 G														65				65	150										
LA	353+45 G	353+55 G														10							20									
LA	353+55 G					1			1			1			1								89		1	1						
LA	353+55 G	354+48 G														93							103				2					
LA	354+48 G	22+10 US 35														52	1						62				2				23	
Total To General Summary (Struc)				1*						1*				–					407*		1116*	105*			1*	1*	8*		–	2*		
Total To General Summary (Rdwy)			10	–	1	8	1	10	10	10	1	9	–	–	20	6557	8	1	–	609	2112	2070	7467			20	20	30	Lump	–	–	–	–

Circuits 21, 58-2

Circuits 22, 58-2

* Structure No. GRE-35-0000 ≠ Station Equation – 339+60 B = 12+45 US. 35

ESTIMATED LIGHTING QUANTITIES

QUANTITY CALCULATIONS
BY: EAE DATE: 2/14/12
CHKD. NHH DATE: 2/14/12
KING AND GALANIS CONSULTING ENGINEERS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

159 / 616

L-12 / 19

Revised by: NHH Date: 5/19 GRE-675-5.37 GREENE COUNTY

Reference Letter → B D K H C

SIDE	STATION	STATION	Light Pole Design AT13.5B41.7		Light Pole Design AT13.5B41.7D1	Light Pole Design ST12B41.7	Light Pole Design AT10B34.2	Light Pole Design AT15B10B41.7			Light Pole Foundation 24"x8'	Light Pole Foundation 24"x6'	Mast Light Foundation		Luminaire Type III 310 W		Luminaire Type II 200 W		Lamp 310 W	Lamp 200 W		Ground Rod		Trench 24" Deep	Pull Box 12" Dia. Cor. Metal	Pull Box 18" Dia. Cor. Metal	Median Pull Box	Conduit, 2" 713.04 encased	Conduit, 2" 713.04	Conduit, 3" 713.04	**4" Conduit in Barrier Wall	#6 AWG 5000V Distribution Cable	#4 AWG 5000V Distribution Cable	#4 AWG 5000V Distribution Cable	#6 AWG cable & Bracket Cable	2" #6 AWG cable 2" Duct Cable	2" No. 4 AWG cables 1-2" Duct Cable		Connector Kits			Service Pole & Control Center 3"	ITEM SPECIAL - CABLE SPLICING KITS	Junction Box 18"x8"x12"		Light Pole Anchor Bolts for Structure							Pullbox No.	Circuit No.
			Ea.		Ea.	Ea.	Ea.	Ea.			Ea.	Ea.	Ea.		Ea.		Ea.		Ea.	Ea.		Ea.		L.F.	Ea.	Ea.	Ea.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.		Ea.	Ea.		Lump	Ea.	Ea.		Set							–	–
Lt.	27+60 US35																							58					58						136																
Lt.	27+60 US35				1								1		1				1			1													154						1	1									
Lt.	27+60 US35	28+42 US35																												58				*282		584															
Lt.	28+42 US35				1								1		1				1			1													154						1	1									
Lt.	28+42 US35	27+23 US35																																*281		582															
Lt.	27+23 US35				1								1		1				1			1													154						1	1									
Lt.	353+45 G	352+05 G																						140																											
Lt.	352+05 G						1					1					1			1		1													89						1	1									
Lt.	352+05 G	350+55 G																						150																											
Lt.	350+55 G						1					1					1			1		1													89						1	1									
Lt.	350+55 G	349+05 G																						150																											
Lt.	349+05 G						1					1					1			1		1													89						1	1									
Lt.	349+05 G	347+55 G																						150																											
Lt.	347+55 G						1					1					1			1		1													89						1	1									
Lt.	347+55 G	346+05 G																						150																											
Lt.	346+05 G						1					1					1			1		1													89						1	1									
Rt.	336+82 H																							9	1				18					38	114							Lump	4						38	
Rt.	336+82 H	44+73 US35																						45					90					110	330								4						39	
Rt.	44+73 US35																									1																									
Rt.	44+73 US35	40+31 US35																						442																											
Rt.	40+31 US35		1								1				1				1			1													114						1	1									
Rt.	40+31 US35	35+80 US35																						451																											
Rt.	35+80 US35		1								1				1				1			1													114						1	1									
Rt.	35+80 US35	33+58 US35																						222																											
Rt.	33+58 US35																								1																											
Rt.	33+58 US35	334+20 I-675																						84							84					188														10	
Rt.	334+20 I-675																									1																									9	
Rt.	44+73 US35	33+58 US35																						–																											
Rt.	33+58 US35	324+64 US35																						10											94*			208*	416*		1125	1125									
Rt.	324+64 US35																																		7*		34*		68*					2*	1*						
Rt.	324+64 US35	321+27 US35																																	6*		32*		64*						1*						
Rt.	321+27 US35																																		9*		38*		76*						1*						
Rt.	321+27 US35	321+51 US35																																	15*		50*		100*						1*						
Rt.	321+51 US35	324+82 US35																																	10*		40*		80*						1*						
Rt.	324+82 US35	321+27 US35																																	8*		36*		72*						1*						
Rt.	321+27 US35	321+17 US35																																	21*		102*		204*						1*						
Rt.	321+17 US35	321+09 US35																																	50*		120*		120*						1*						
Rt.	321+09 US35	321+08 US35																																	12*		48*		44*						1*						
Rt.	321+08 US35	321+06 US35																																	10*		40*		40*						1*						
Rt.	321+06 US35	320+96 US35																																	59*		138*		138*												
Rt.	320+96 US35	320+37 US35																																	9*				38*					2*	1*						
Rt.	320+37 US35	320+28 US35																																										2*	1*						
Rt.	320+28 US35	320+24 US35																																	44*															
Rt.	320+24 US35	319+80 US35																																											1*	1*						
Rt.	319+80 US35	319+54 US35																						10											66*															
Rt.	319+54 US35	319+18 US35																								1																									10A	
Rt-Lt.	44+73 US35																							117					117						254														39A	
Lt.	44+73 US35																										1																									40	
Lt.	44+73 US35	65+77 WB35																																**102				224					2								
Lt.	65+77 WB35			1									1		1				1			1													154						1	1									
Lt.	65+77 WB35	48+30 WB35																																**255				530													
Lt.	48+30 WB35												1						1															**254				528													
Lt.	50+84.12 WB35					1							1		2				2			1													154						1	1									
Total to General Summary *(Struc)					1*										1*				–					440*											674*	208	1460*	108*				1*	1*		6*	–		2*						
Total to General Summary (Rdwy)		2		4	–	5	1			2	5	6		8		5		–	–		13		2188	2	3	1	84	–	283	–	–	148	3470	1443	1125	3060				13	13		Lump	20	–		–				–	–

*Structure No. GRE-675-0589

**Included in price bid per Lin Ft of Concrete Barrier Median

Circuit 3-1

Circuit 8

Circuit 5-1

ESTIMATED LIGHTING QUANTITIES

QUANTITY CALCULATIONS
BY KAF DATE 5/4/79
CHKD. JAH DATE 5/11/79
KING AND GAVANIS
CONSULTING ENGINEERS

Revised by N.H.H. Date 5/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-537 GREENE COUNTY

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1-13/19

Reference Letter → B K D H L

SIDE	STATION	STATION	Light Pole Design AT15B 41.5	Light Pole Design ST28 41.7	Light Pole Design AT15B 41.5 Bracket 101	Light Pole Design AT10B 34.2	Light Pole Design AT15B 10A 41.7 DA		Light Pole Foundation 24"x 8'	Light Pole Foundation 24"x 8'	Median Light Pole Foundation	Luminaire Type III 310 w	Luminaire Type II 200 w	Lamp, 310 w	Lamp, 200 w	Ground Rod	Trench 24" Deep	Pull Box 24" Cir. Cor. Metal	Pull Box 18" Cir. Cor. Metal	Conduit 2" 7/3 Cu. Conc. encased in conc.	Conduit 2" 7/3 Cu	Conduit 3" 7/3 Cu	**4" Conduit in Barrier Median	Conduit 4" 7/3 Cu	#6 No. 4 AWG 5000 V Distribution Cable	#6 No. 10 AWG Pole & Bracket Cable	2-No. 4 AWG cables 1/2" Duct Cable	Connector Kits Type II	Connector Kits Type III	ITEM SPECIAL - CABLE SPLICING KIT	Junction Box 18"x 8"x 6"	Light Pole Anchor Bolts in Structure	Service Pole & Control Center X"	Pullbox No.	Circuit No.
			Ea		Ea	Ea	Ea		Ea	Ea	Ea	Ea		Ea	Ea	Ea	L.F	Ea	Ea	L.F	L.F	L.F	L.F	L.F	L.F	L.F	L.F	Ea	Ea	Ea.	Ea	Set	Lump		
Lt	50+88.12 WB 35																34					34			88										
Lt	50+88.12 WB 35	52+60 WB 35							1			1		1		1	116										186								
Lt	52+60 WB 35		1																							114			1	1					
Lt	52+60 WB 35	53+55 WB 35															95										105								
Lt	53+55 WB 35																		1										2					42	
Lt	53+55 WB 35	55+90 WB 35															235										245								
Lt	55+90 WB 35																		1										2					43	
Lt	55+90 WB 35	56+87 WB 35															10				57*				134*						1*	1*			
Lt	56+87 WB 35																																		
Lt	56+87 WB 35	58+31 WB 35															10				184*				388*										
Lt	58+31 WB 35																		1										2					44	
Lt	58+31 WB 35	58+75 WB 35															44										54								
Lt	58+75 WB 35		1						1			1		1		1										114			1	1					
Rt	336+82 H	48+53 EB 35															378										388								
Rt	48+53 EB 35		1						1			1		1		1										112			1	1					
Rt	48+53 EB 35	52+33 EB 35															380										390								
Rt	52+33 EB 35		1						1			1		1		1										114			1	1					
Rt	52+33 EB 35	56+44 EB 35															411										421								
Rt	56+44 EB 35																		1										2					45	
Rt	56+44 EB 35	56+70 EB 35															10				26▲				72▲										
Rt	56+70 EB 35			1▲								1▲		1▲												108▲			1▲	1▲		1▲			
Rt	56+70 EB 35	58+93 EB 35															10				223▲														
Rt	58+93 EB 35																		1															45A	
Lt & Rt	44+73 US 35	327+32 F															60					60			140										
Rt	327+32 F																		1										2					41	
Rt	327+32 F	328+67 F															135										145								
Rt	328+67 F					1					1		1		1	1										89			1	1					
Lt	44+73 US 35	43+19 US 35																						**154		328									
Lt	43+19 US 35				1						1	1		1		1										154			1	1					
Lt	43+19 US 35	40+64 US 35																						**255		530									
Lt	40+64 US 35										1					1																			
Lt	40+64 US 35	38+09 US 35																						**255		530									
Lt	38+09 US 35										1					1																			
Lt	38+09 US 35	35+44 US 35																						**265		550									
Lt	35+44 US 35										1					1																			
Lt	35+44 US 35	32+91 US 35																						**253		526									
Lt	32+91 US 35				1						1	1		1		1											154			1	1				
Lt	32+91 US 35	30+07 US 35																						**27	257■	588■									
Lt	30+07 US 35						1■					1■		1■													154■			1■	1■		1■			
Lt	30+07 US 35	27+63 US 35																						**99	185■										
Rt	380+10 I-675																		1										2					50	
Rt	380+10 I-675	389+90 I-675															980										1000								
Rt	389+90 I-675																																		
R.E.U	389+90 I-675																186					186			412										
Lt	389+90 I-675																		1										2					52	
Lt	389+90 I-675	413+71 I-675															2381										2401								
Lt	413+71 I-675																												4					54	
R.E.U	413+71 I-675																186					186			392										
Rt	413+71 I-675																		1										2					53	
Lt	413+71 I-675	414+90 I-675															119										120								
Lt	414+90 I-675																		1										2					55	
Lt	413+38 I-675																		1													Lump		54A	
Lt	413+38 I-675	413+71 I-675															96			96					424										
Total to General Summary ■ (Stru)						1■						1■												402■	545■	154■			1■	1■		1■			
Total to General Summary * (Stru)																					241*				522*						–	1*			
Total to General Summary ▲ (Stru)			1▲									1▲									209▲				72▲	108▲			1▲	1▲		–	1▲			
Total to General Summary (Rdwy)	4		–	2	1	–			4	1	5	6		1		–	–	10	5936	1	11	96	–	466	–	3944	853	5464	7	7	22	–	–	Lump		–	–

*Structure No GRE-35-0107L ▲Structure No GRE-35-0107R ■Structure No GRE-675-0589
** Included in price bid per Lin. Ft. of Concrete Barrier Median

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

100
616

GRE-675-5.37
GREENE COUNTY

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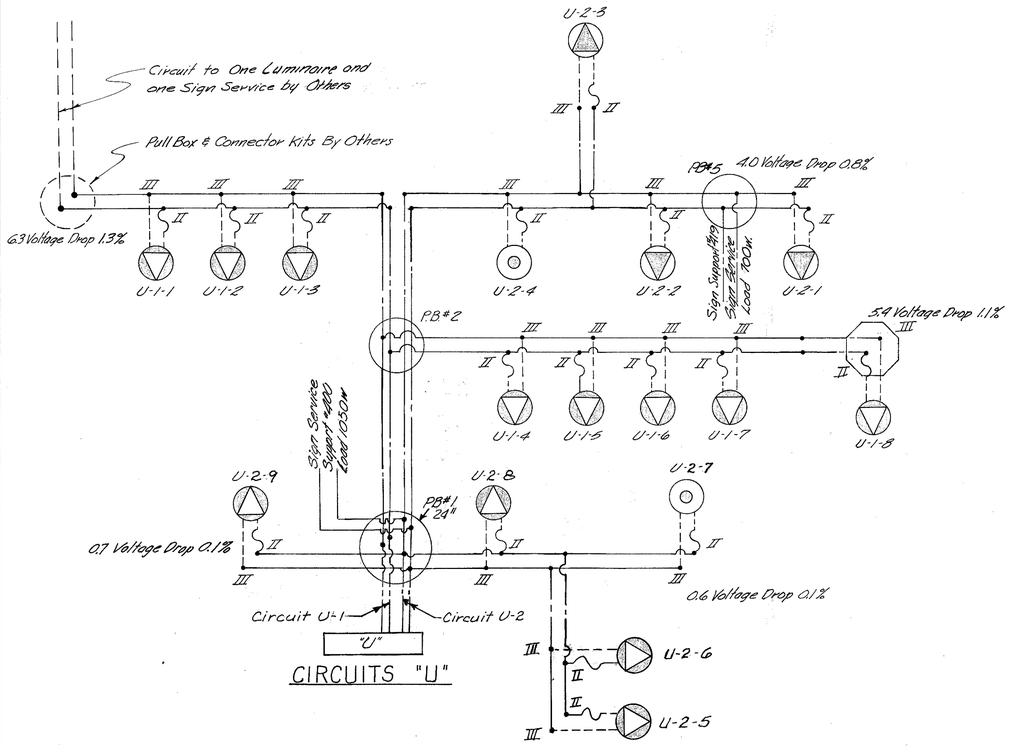
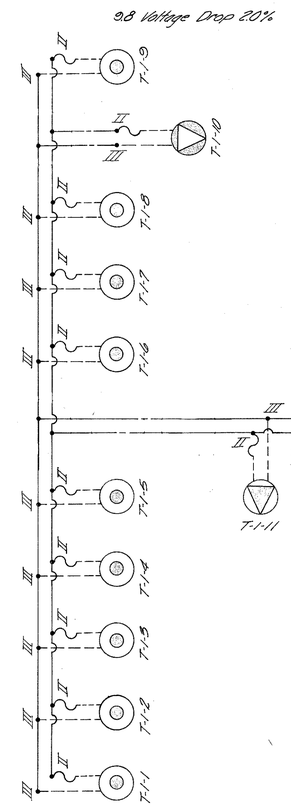
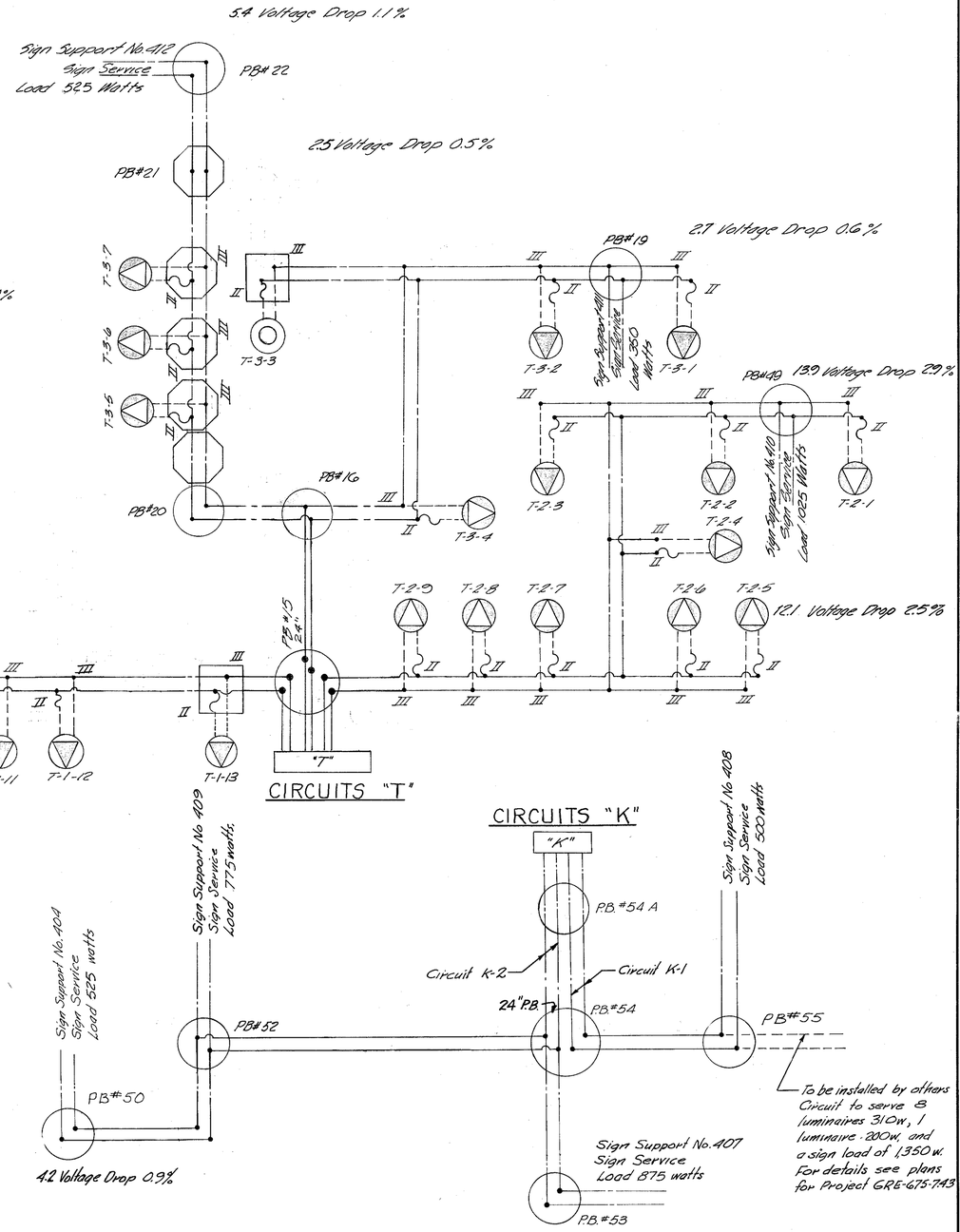
19







LEGEND

- Control Center
- 310 watt High Pressure Sodium Luminaire I.E.S. Medium Cut-off Type III
- 200 watt High Pressure Sodium Luminaire I.E.S. Medium Cut-off Type III
- 200 watt High Pressure Sodium Luminaire I.E.S. Medium Cut-off Type II
- Pull Box, 18" Circ. (Unless marked otherwise)
- Junction Box, 18"x8"x6"
- Junction Box in Barrier Wall
- Connector Kit (Type as shown)
- One 2-1°No. 4 AWG Duct Cable
- One 1° No. 4 AWG 600 volt Distribution Cable
- One 1° No. 10 AWG Pole & Bracket Cable
- One 1° No. 2 AWG 600 volt Distribution Cable
- One 2-1°No. 00 AWG Duct Cable
- D-2-5 Control Center - Circuit - Pole Identification
- Fuse

LIGHTING CIRCUIT DIAGRAM

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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CRE-675-5.37
GREENE COUNTY

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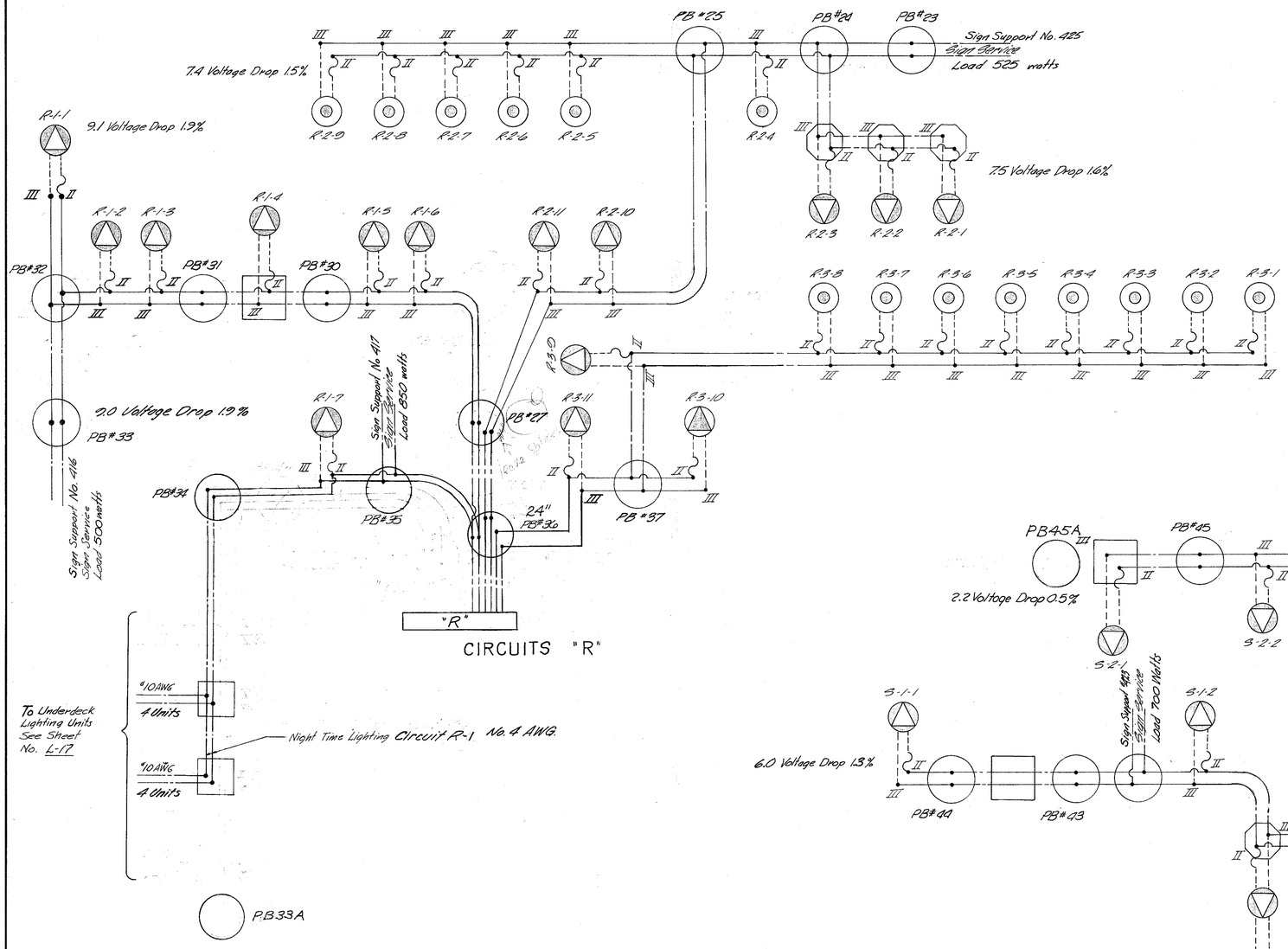
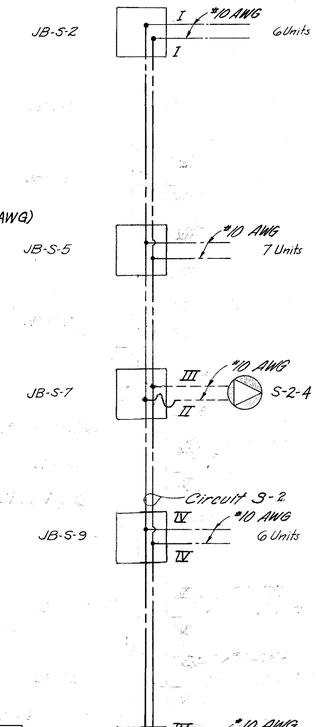
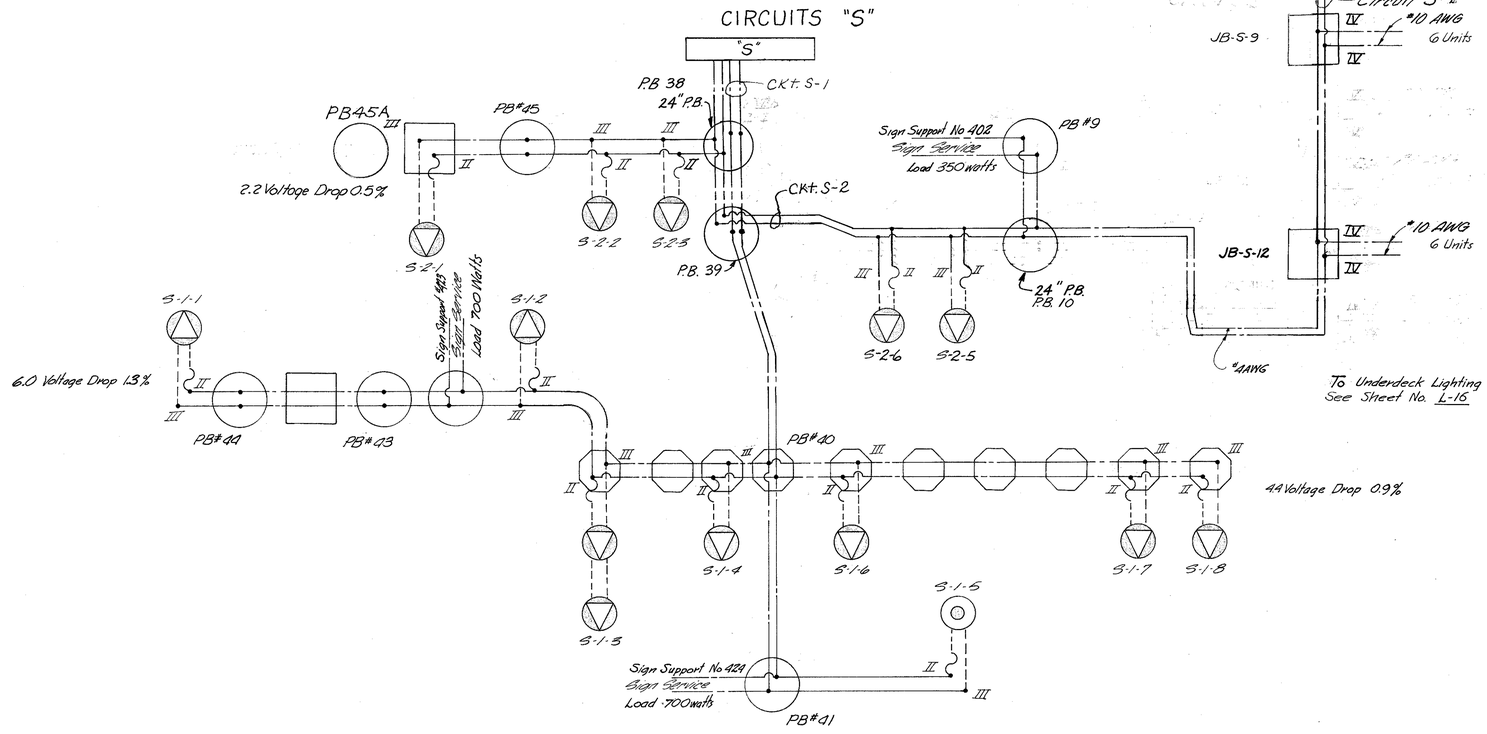


Night Time Lighting Circuit S-2 (#4 AWG)





NOTE: For Legend See Sheet No L-14.

LIGHTING CIRCUIT DIAGRAM

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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GREENE COUNTY

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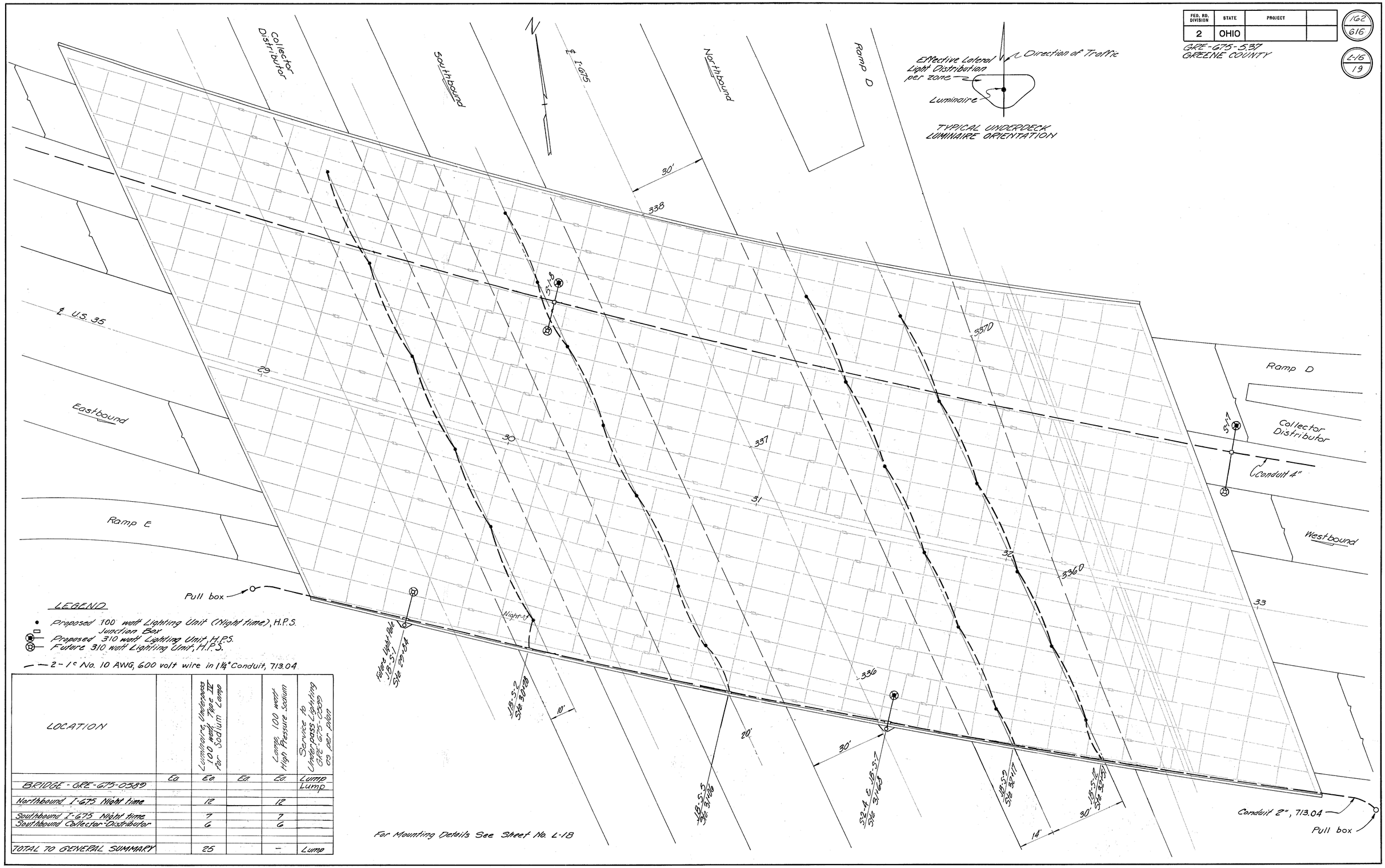

LEGEND

- Proposed 100 watt Lighting Unit (Night time), H.P.S.
- Junction Box
- Proposed 310 watt Lighting Unit, H.P.S.
- Future 310 watt Lighting Unit, H.P.S.
- 2-1c No. 10 AWG, 600 volt wire in 1¼" Conduit, 713.04

LOCATION		Luminaire, Underpass 100 watt, Type IV for Sodium Lamp		Lamp, 100 watt High Pressure Sodium	Service to Underpass Lighting GRE-675-0589 as per plan
	Ea.	Ea.	Ea.	Ea.	Lump
BRIDGE - GRE-675-0589					Lump
Northbound I-675 Night time		12		12	
Southbound I-675 Night time		7		7	
Southbound Collector-Distributor		6		6	
TOTAL TO GENERAL SUMMARY		25		–	Lump

UNDERDECK LIGHTING PLAN - BRIDGE GRE-675-0589

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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616

GRE-675-5.37
GREENE COUNTY

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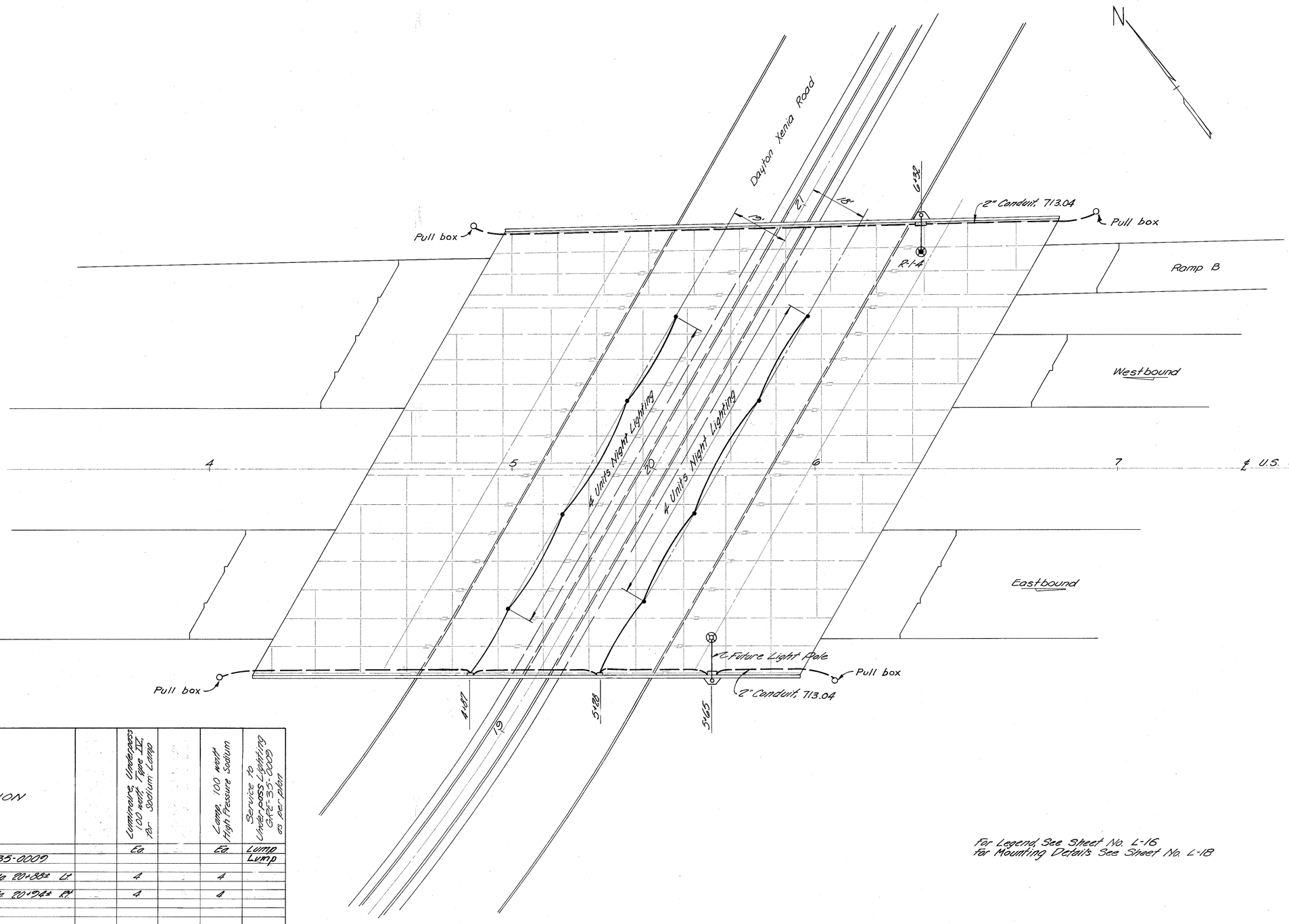

LOCATION		Luminaire, Underpass 100 watt, Type III, Hi-Pressure Sodium Lamp		Lamp, 100 watt High Pressure Sodium	Service to Underpass Lighting GRE-35-0009 as per plan
		Ea.		Ea.	Lump
BRIDGE GRE-35-0009					Lump
Sta. 19+12± to Sta. 20+83± Lt.		4		4	
Sta. 19+37± to Sta. 20+94± Rt.		4		4	
TOTAL TO GENERAL SUMMARY		8		-	Lump

For Legend, See Sheet No. L-16
For Mounting Details See Sheet No. L-18

UNDERDECK LIGHTING PLAN - BRIDGE GRE-35-0009

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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GRE-675-5.37
GREENE COUNTY

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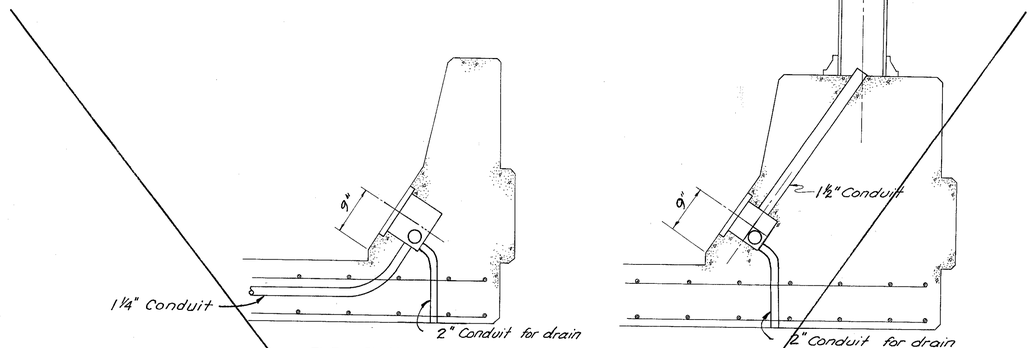
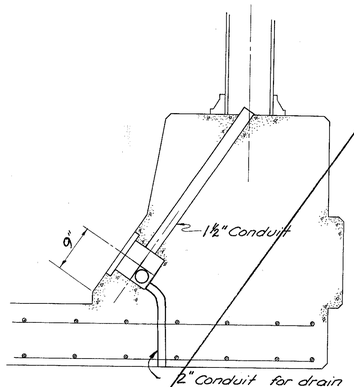
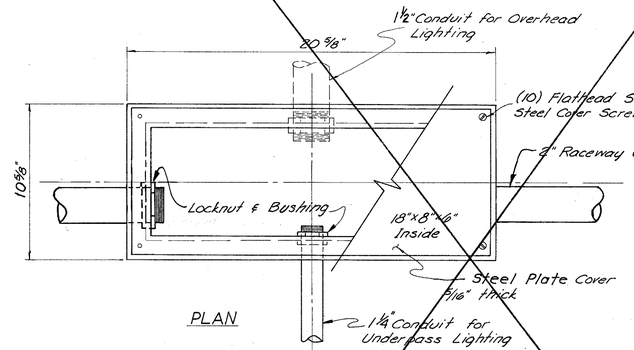


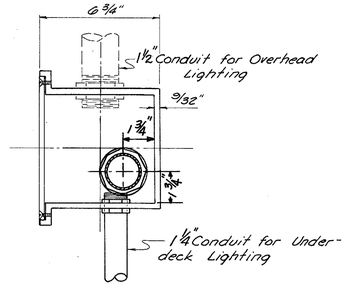
ELEVATION
(For Underdeck Lighting)



ELEVATION
(For Overhead Lighting)

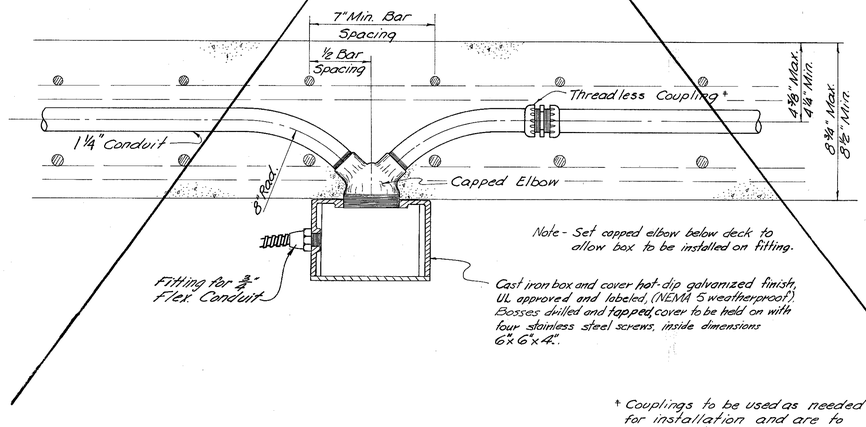


PLAN



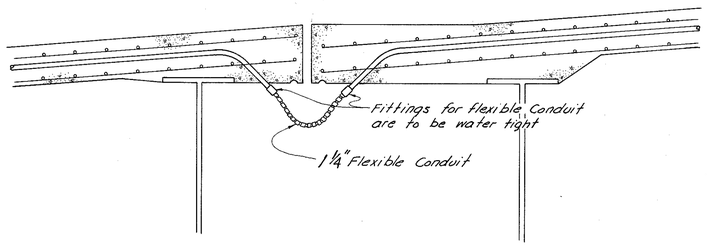
SECTION

JUNCTION BOX
(For Additional Details See Std. Dwg. HL-4)

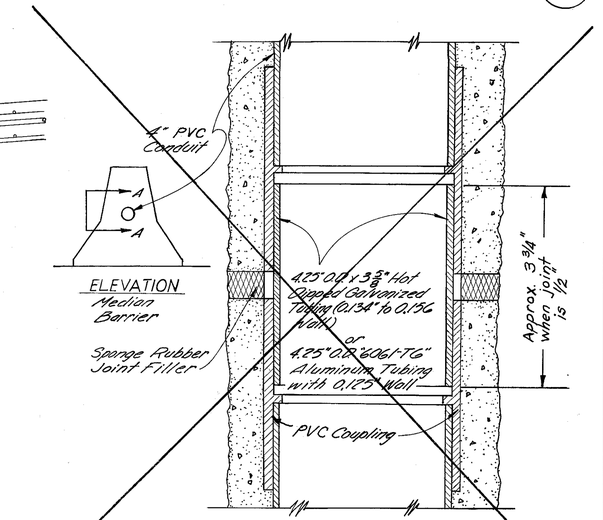


† Couplings to be used as needed for installation and are to be Conc. tight

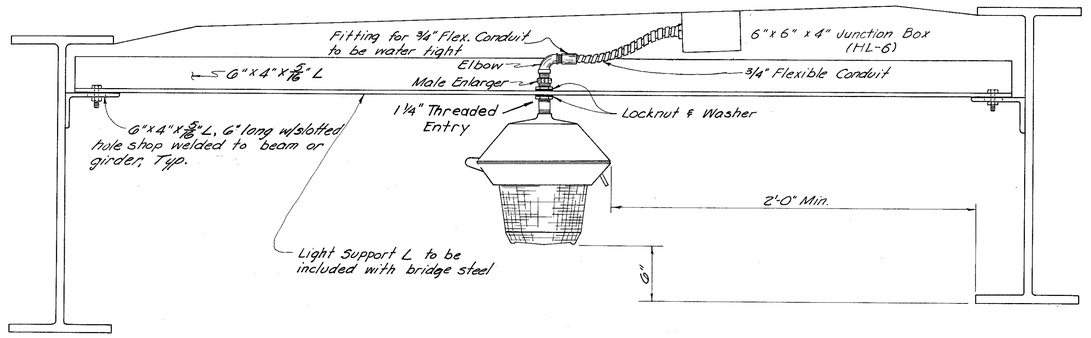
DETAIL "A"



TYPICAL CONDUIT INSTALLATION AT OPEN JOINT



DETAIL OF CONSTRUCTION JOINT - 4" PVC COUPLING IN MEDIAN CONCRETE BARRIER



TYPICAL INSTALLATION
UNDERDECK LUMINAIRE
For Additional Details See Std. Drwg. HL-6 & HL-19

DETA

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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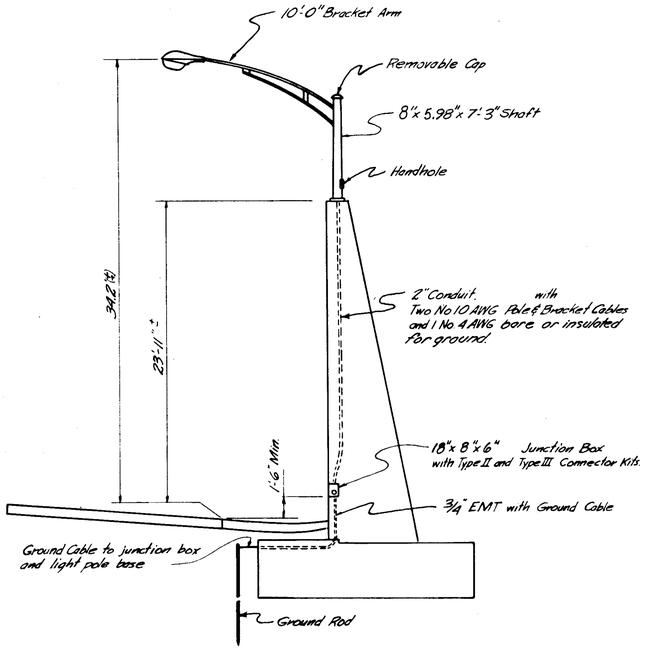
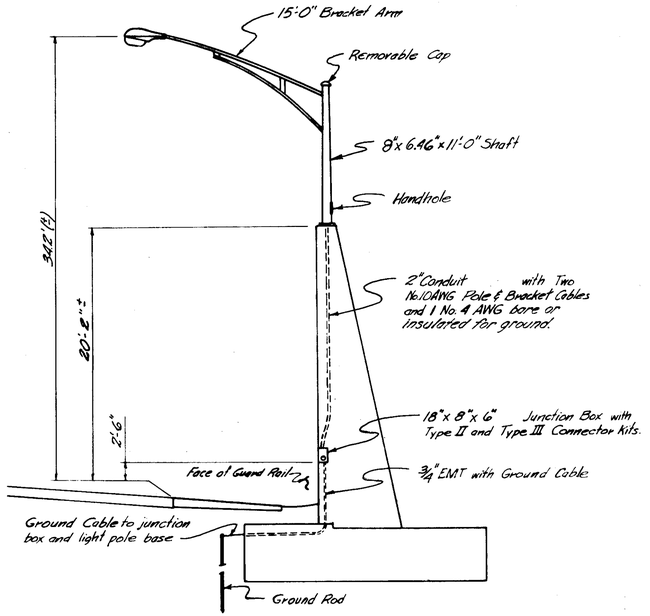


SECTION VIEW POLE T-3-3

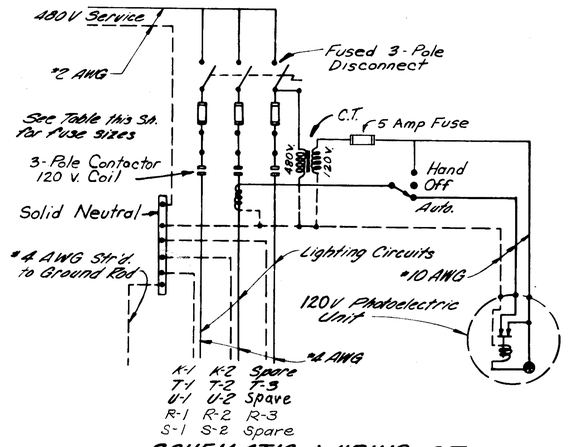


SECTION VIEW POLE T-1-13

CONTROL CENTER DATA:

CONTROL CENTER	CONNECTED LOAD	SERVICE ENTRANCE CONDUCTOR SIZE	ENCLOSURE TYPE *	CONTROL TRANSFORMER RATING	CIRCUIT NO.	CIRCUIT CONDUCTOR SIZE	CIRCUIT LOAD	CIRCUIT FUSE SIZE
K	7.5 KVA	# 2 AWG	SC-30	300 VA	K-1	# 4 AWG	11.2 AMPS	30 AMP
					K-2	# 4 AWG	4.5 AMPS	30 AMP
R	19.0 KVA	# 2 AWG	SC-30	300 VA	R-1	# 4 AWG	11.3 AMPS	30 AMP
					R-2	# 4 AWG	9.0 AMPS	30 AMP
					R-3	# 4 AWG	7.1 AMPS	30 AMP
S	47.8 KVA	# 2/0 AWG	SC-30	300 VA	S-1	# 4 AWG	10.4 AMPS	30 AMP
					S-2	# 4 AWG	13.6 AMPS	30 AMP
T	11.8 KVA	# 2 AWG	SC-30	300 VA	T-1	# 4 AWG	8.1 AMPS	30 AMP
					T-2	# 4 AWG	9.5 AMPS	30 AMP
					T-3	# 4 AWG	7.0 AMPS	30 AMP
U	9.1 KVA	# 2 AWG	SC-30	300 VA	U-1	# 4 AWG	8.8 AMPS	30 AMP
					U-2	# 4 AWG	10.1 AMPS	30 AMP

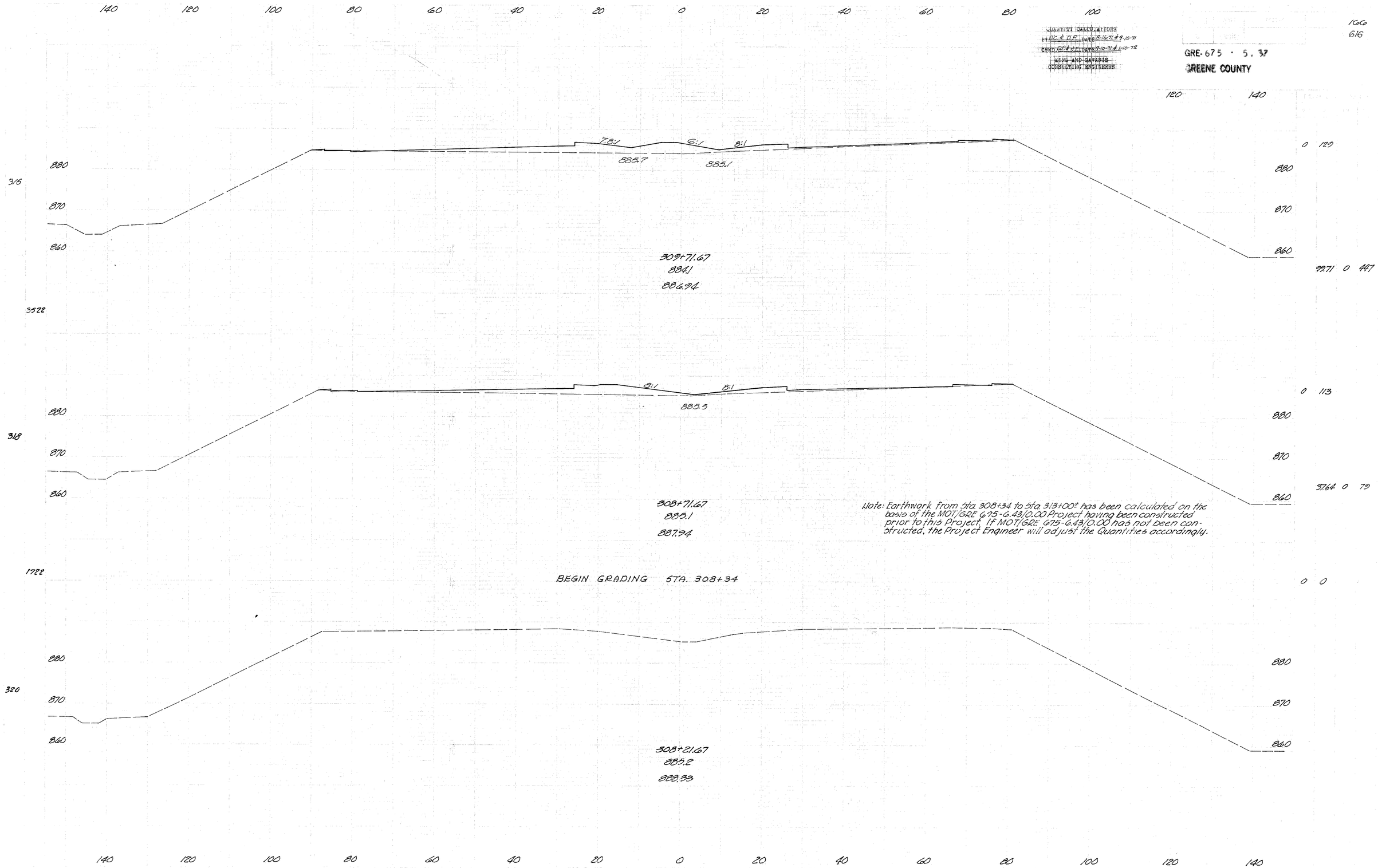
* See Std. Const. Dwg. HL-15 for enclosure dimensions



SCHEMATIC WIRING OF CONTROL CENTERS K, T, R, U, S

QUANTITY CALCULATIONS
BY DC & DP DATE 8-16-71 & 9-10-71
CHKD. OP & HE DATE 9-10-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY



Note: Earthwork from Sta. 308+34 to Sta. 313+00± has been calculated on the basis of the MOT/GRE 675-6.43/0.00 Project having been constructed prior to this Project. If MOT/GRE 675-6.43/0.00 has not been constructed, the Project Engineer will adjust the Quantities accordingly.

STA. 308+21.67 to STA. 309+71.67

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY P.C.& D.P. DATE 8-4-71 & 9-16-71
CHKD. R.E.H.E. DATE 9-27-71 & 10-12-72
KING AND GAVARIS
CONSULTING ENGINEERS

CHD

GRE-675 · 5.37
GREENE COUNTY

167
616

120 140

Match Line B
870
860
2:1
2:1
862.4
180 160

312
880
870
860
Match Line B
8:1
7.4:1
8:1
2:1
Match Line C
880
870
860
151 4280

Sta. 312+25
End Berm Transition Lt.
Begin 58' Berm 2:1 Slopes
G.R.
8:1
2:1
134.8'
3489
24:1
2:1
2:1
862.7
Match Line A
870
860
180 160

312+71.67
862.0
882.49

Match Line C
860
850
24:1
2:1
2:1
48:1
856.4
160 180 200

9737 10011 377 16777

880
870
860
Match Line A
2.5:1
8:1
2:1
24:1
58 4661

314
880
870
860

311+71.67
862.5
884.12

Sta. 310+75
Begin Berm Transition Lt.
End 11' Berm 2:1 Slopes
G.R.
2:1
92.6'
3511

9791 10006 105 13884

318
880
870
860
2:1
7.4:1
8:1
2:1
880
870
860
0 2837

310+71.67
870.1
885.66
3582

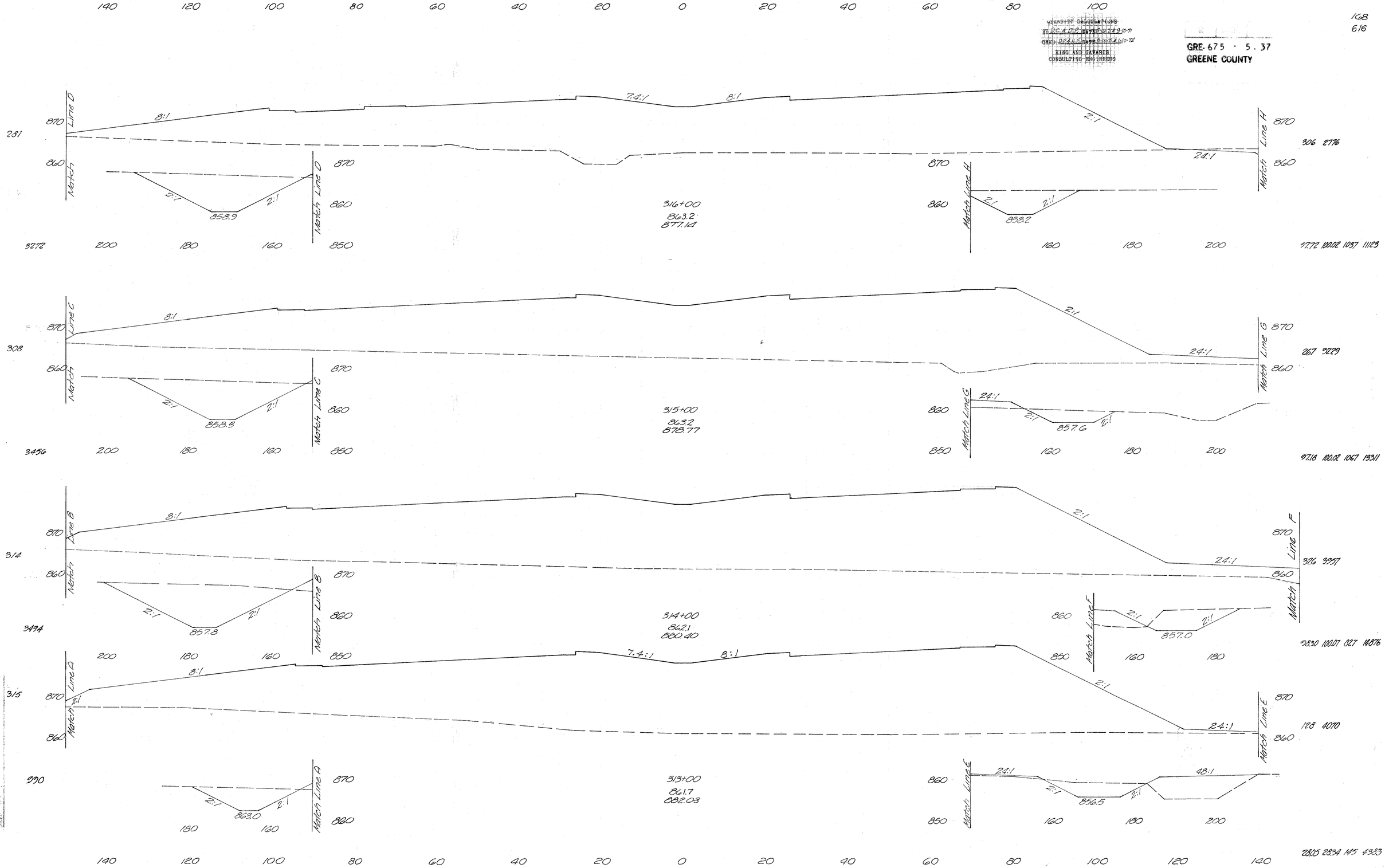
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

99.89 0 5487

STA. 310+71.67 to STA. 312+71.67

QUANTITY CALCULATIONS
BY D.C. & D.P. DATE 8-16-71 & 9-10-71
CHKD. D.P. & H.E. DATE 9-16-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY



STA. 313+00 to STA. 316+00

140 120 100 80 60 40 20 0 20 40 60 80 100

CHECKED BY CALCULATIONS
BY C.E.D.D. DATE 8-10-71
CHKD. BY H.J.H. DATE 8-10-71 1-10-72
KING KIT DAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

169
616

148

870
860
850

Match Line Ramp C

8.275

7:1 8:1 2:1 2:1 2:1 2:1

860.0

Sta. 308+34 to Sta. 320+00
CUT = 7938 C.Y.
FILL = 105180 C.Y.

320+00
866.5
871.15

129 758

860
850

103.29 10040 532 3137

Back
Ahead

1617

870
860

143 Abd
234 Bk.

Match Line C

8:1 48:1 2:1 24:1 2:1 2:1

Abd. 149 929
870
Bk 415 1091
860
850

859.6

2689

870
860

Match Line C

2:1 48:1 2:1

860.2

200 180 160

319+00
866.0
872.31

2833 10009 1449 3066

870
860

Match Line B

230

8:1 2:1 24:1 2:1 2:1

859.2

870
860
850

379 1612

2856

870
860

Match Line B

2:1 2:1

859.7

200 180 160

318+00
865.5
873.08

2824 10006 1266 7353

870
860

Match Line A

264

8:1 7:1 8:1 2:1 24:1 2:1

870
860
850

317 2327

3028

870
860

Match Line A

2:1 2:1

859.2

200 180 160

317+00
864.2
875.51

870
860

Match Line D

860

2:1

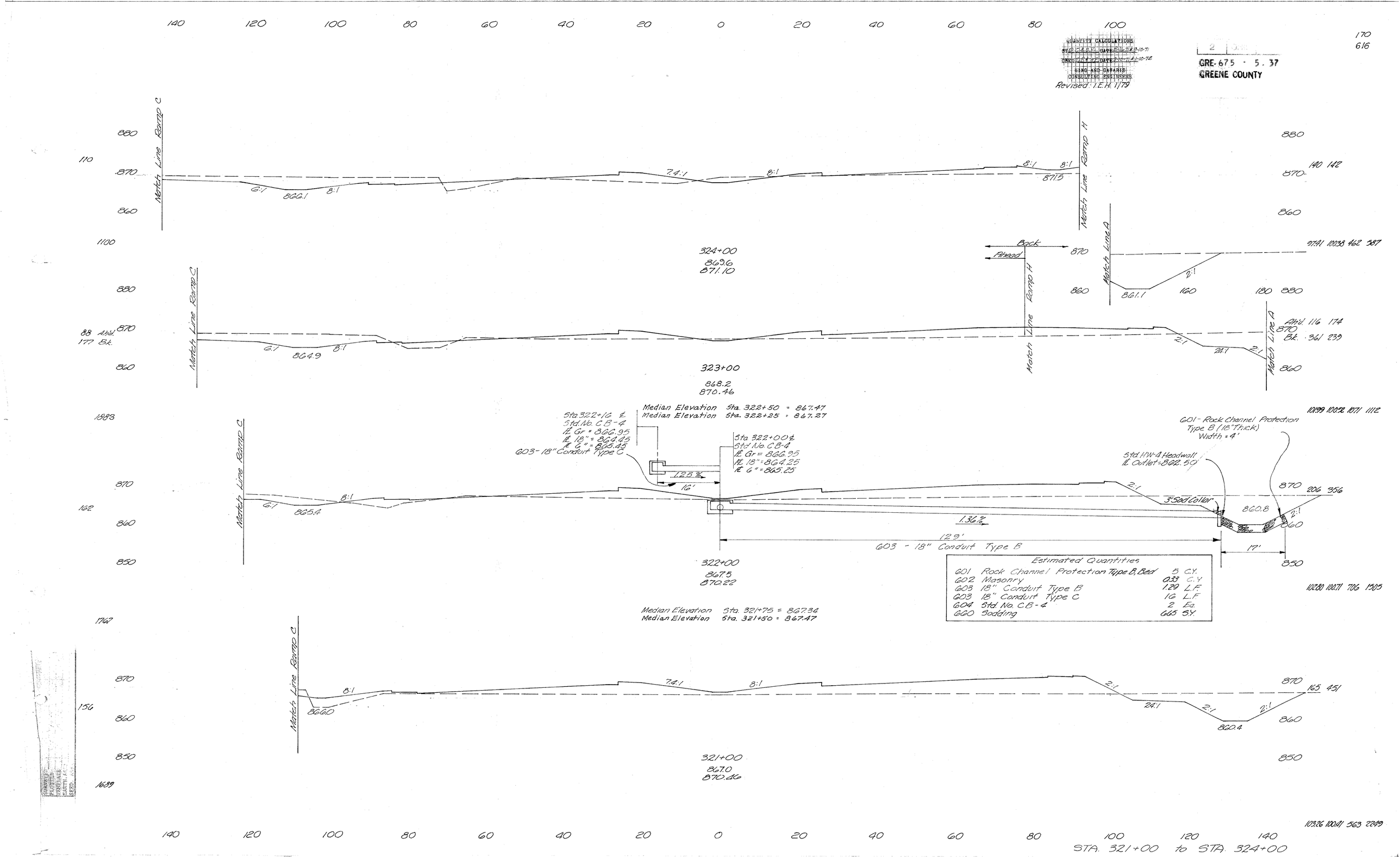
858.8

160

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

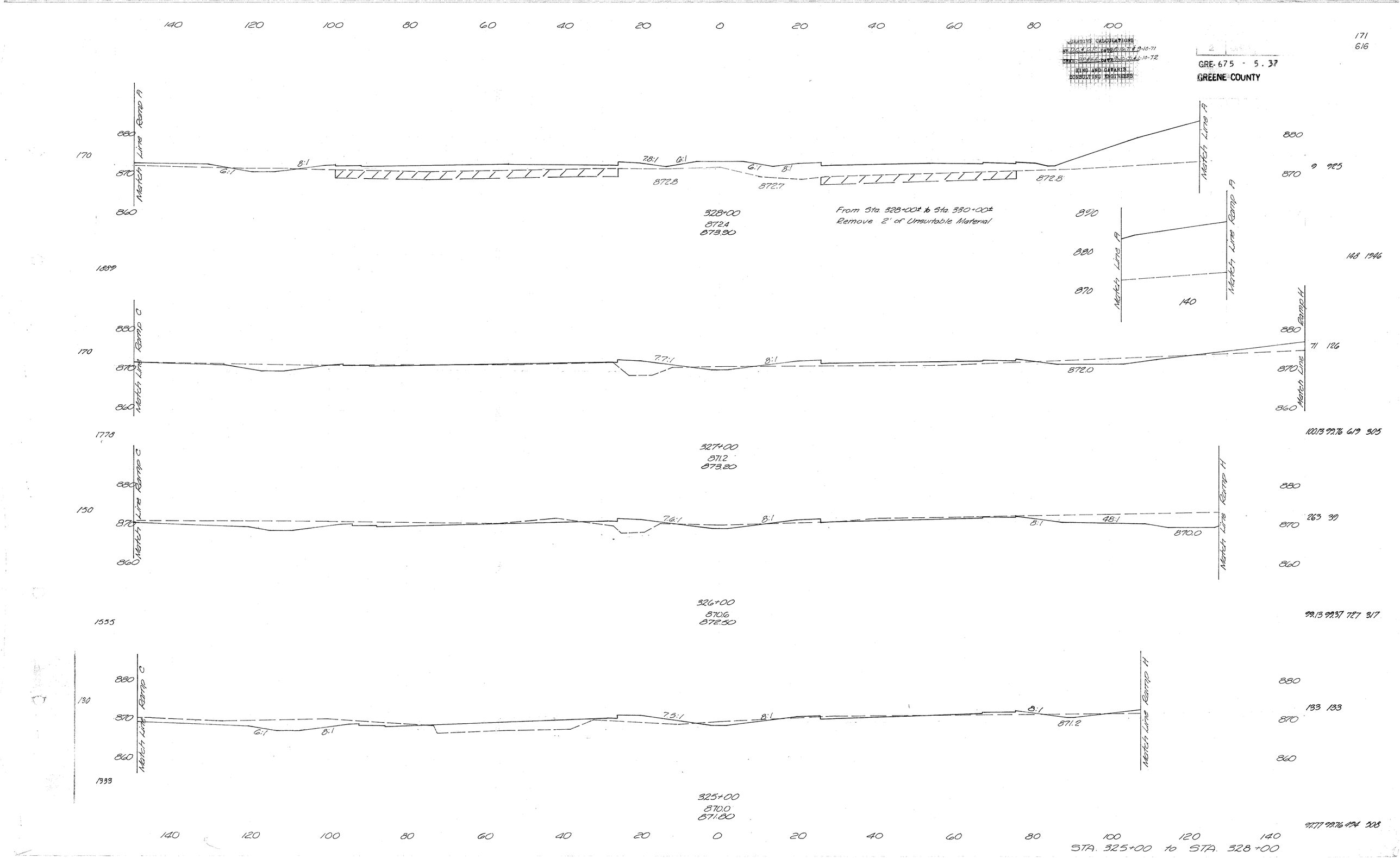
STA 317+00 to STA 320+00

2816 10004 1133 2454

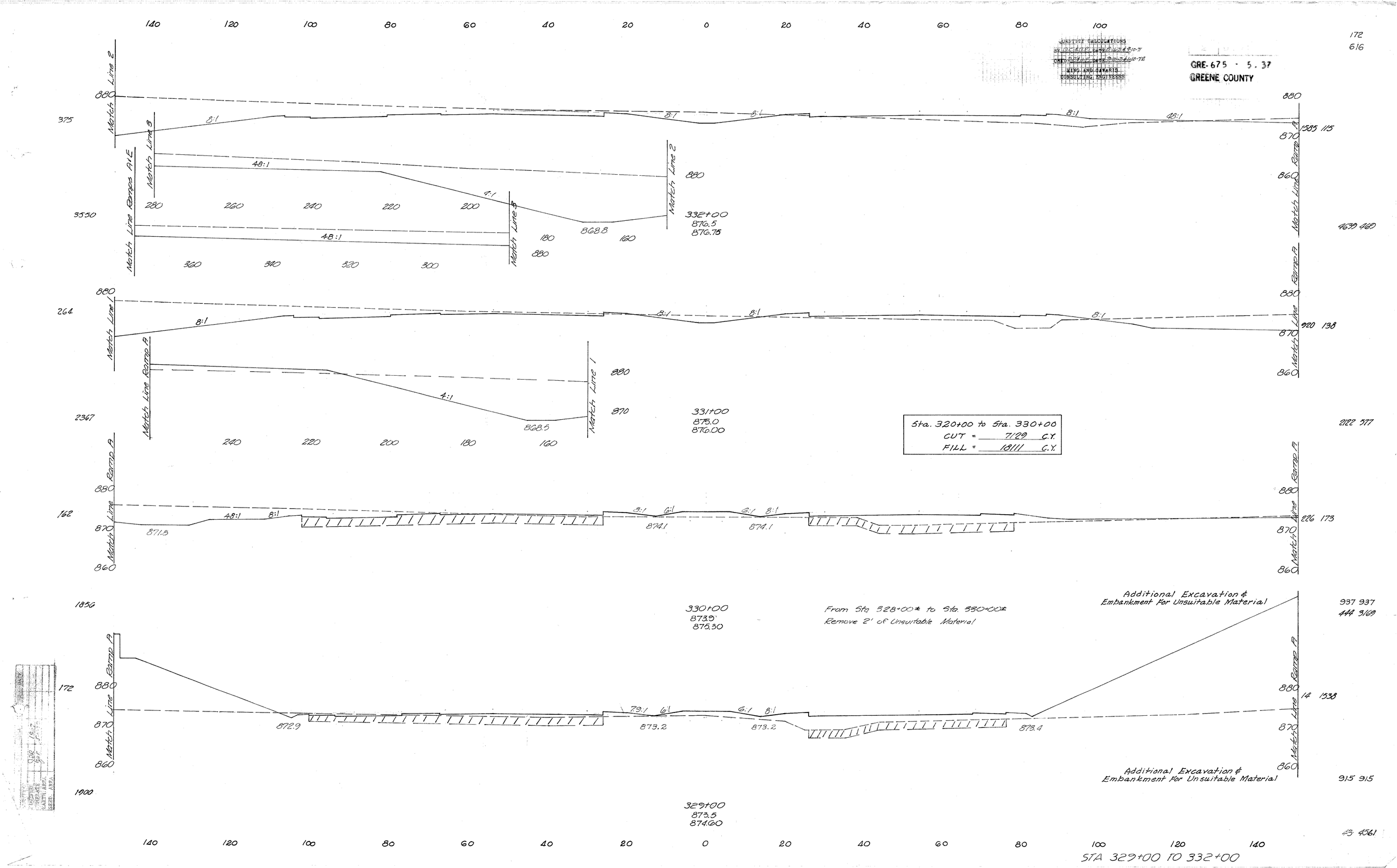


Estimated Quantities

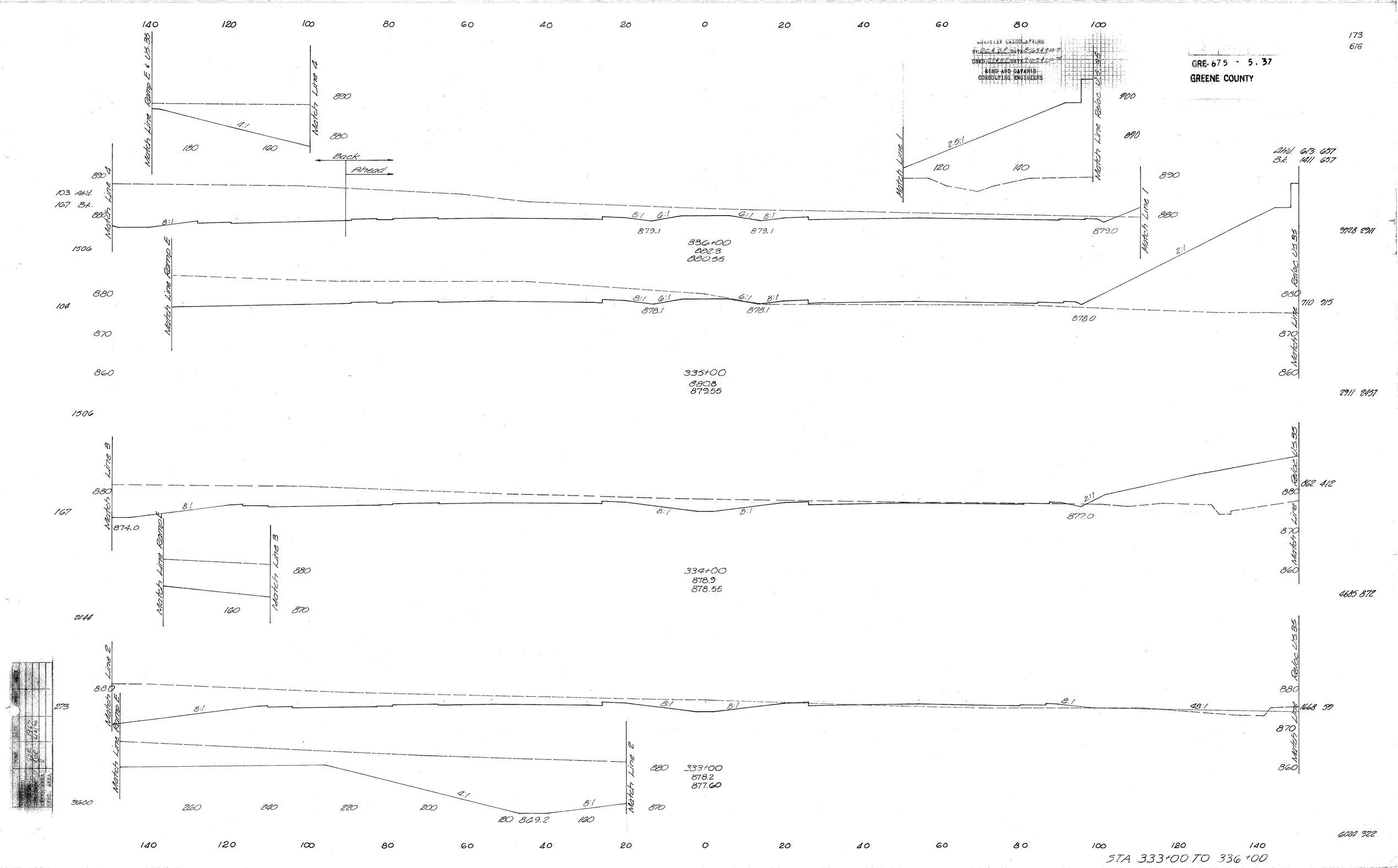
601	Rock Channel Protection Type B, Bed	5	C.Y.
602	Masonry	0.33	C.Y.
603	18" Conduit Type B	1.29	L.F.
603	18" Conduit Type C	16	L.F.
604	Std. No. CB-4	2	Ea.
660	Sodding	665	S.Y.



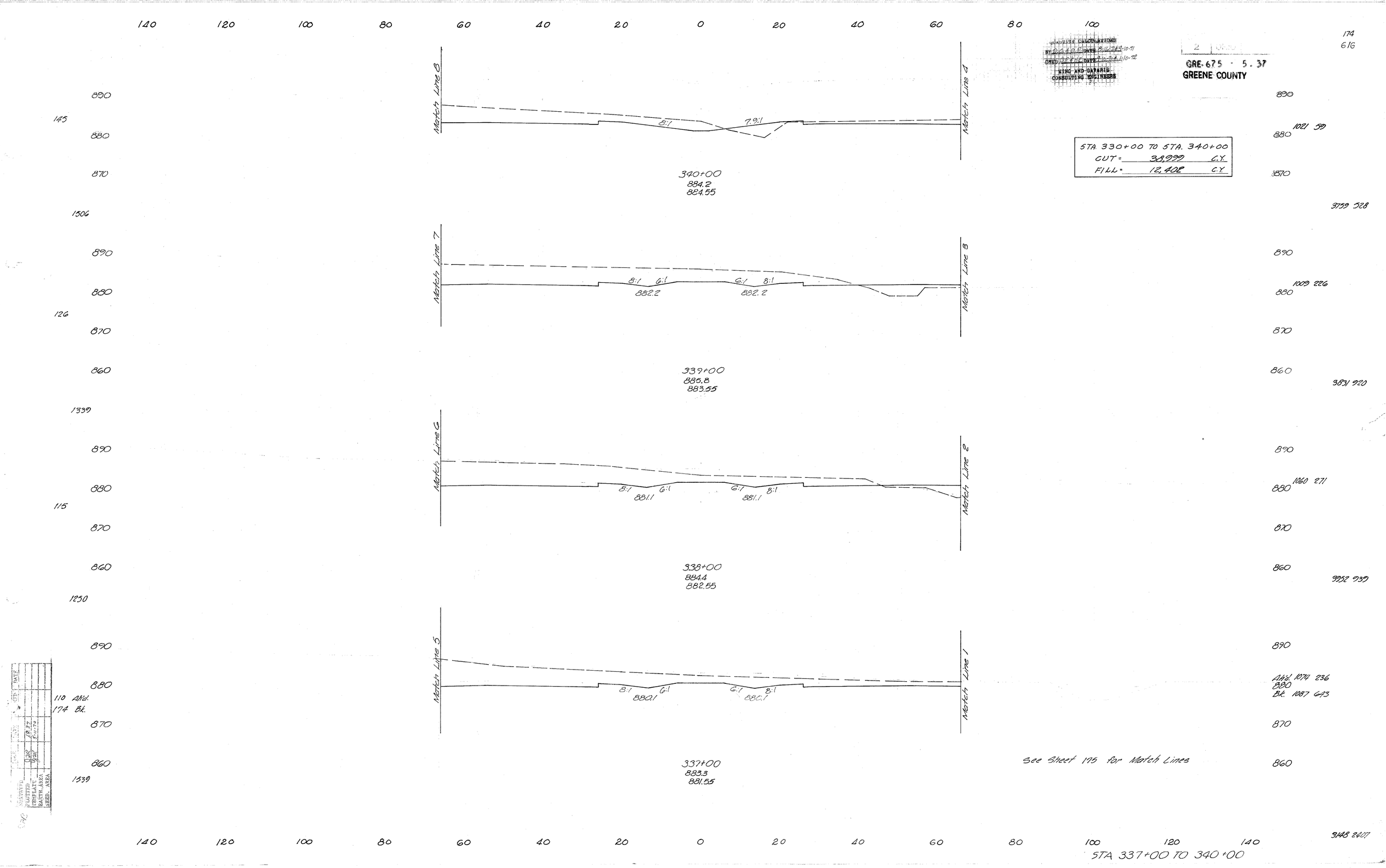
GRE-675 - 5.37
GREENE COUNTY
171
616
Match Line Ramp A
Match Line Ramp C
Match Line Ramp H
From Sta. 328+00± to Sta. 330+00±
Remove 2' of Unsuitable Material
328+00
872.4
873.90
327+00
871.2
873.20
326+00
870.6
872.50
325+00
870.0
871.80
STA. 325+00 to STA. 328+00



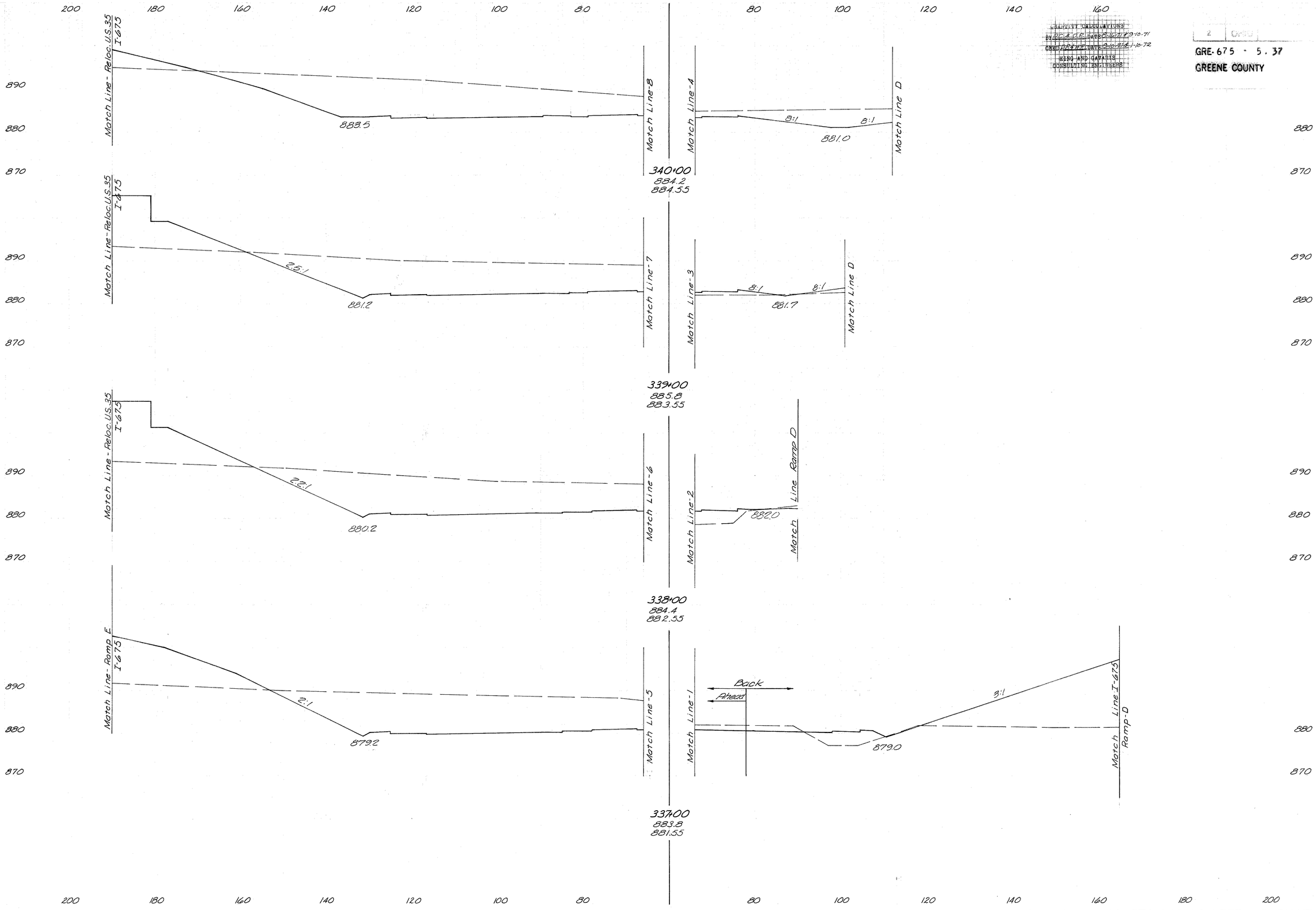
GRE-675 · 5.37
GREENE COUNTY
Sta. 320+00 to Sta. 330+00
CUT = 7129 C.Y.
FILL = 18111 C.Y.
Match Line 2
Match Line 3
Match Line Ramps A & E
Match Line 1
Match Line Ramp A
Match Line Ramp A
Match Line Ramp A
Match Line Ramp A
8:1
48:1
4:1
6:1
7.9:1
332+00
876.5
876.75
868.8
331+00
875.0
876.00
868.5
871.8
874.1
330+00
873.9
875.30
From Sta 328+00± to Sta. 330+00±
Remove 2' of Unsuitable Material
Additional Excavation & Embankment For Unsuitable Material
872.9
873.2
873.4
329+00
873.5
874.60
STA 329+00 TO 332+00



GRE-675 - 5.37
GREENE COUNTY
KING AND GAVARIS
CONSULTING ENGINEERS
Match Line Ramp E & U.S. 35
Match Line 4
Match Line 1
Match Line Reloc. U.S. 35
Match Line 2
Match Line 3
Back
Ahead
336+00
882.3
880.55
335+00
880.8
879.55
334+00
878.9
878.55
333+00
878.2
877.60
STA 333+00 TO 336+00



140 120 100 80 60 40 20 0 20 40 60 80 100
174
616
GRE-675 - 5.37
GREENE COUNTY
STA. 330+00 TO STA. 340+00
CUT = 38,999 C.Y.
FILL = 12,402 C.Y.
Match Line 8
Match Line 4
8:1
7.9:1
340+00
884.2
884.55
145
1506
1021 59
3759 528
Match Line 7
Match Line 3
8:1 6:1
6:1 8:1
882.2
882.2
339+00
885.8
883.55
126
1009 226
3831 920
1339
Match Line 6
Match Line 2
8:1 6:1
6:1 8:1
881.1
881.1
338+00
884.4
882.55
115
1060 271
3952 939
1250
Match Line 5
Match Line 1
8:1 6:1
6:1 8:1
880.1
880.1
337+00
883.3
881.55
110 Ahd.
174 Bk.
1539
Ahd. 1074 236
Bk. 1087 643
See Sheet 175 for Match Lines
3148 2407
890
880
870
860
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
STA 337+00 TO 340+00



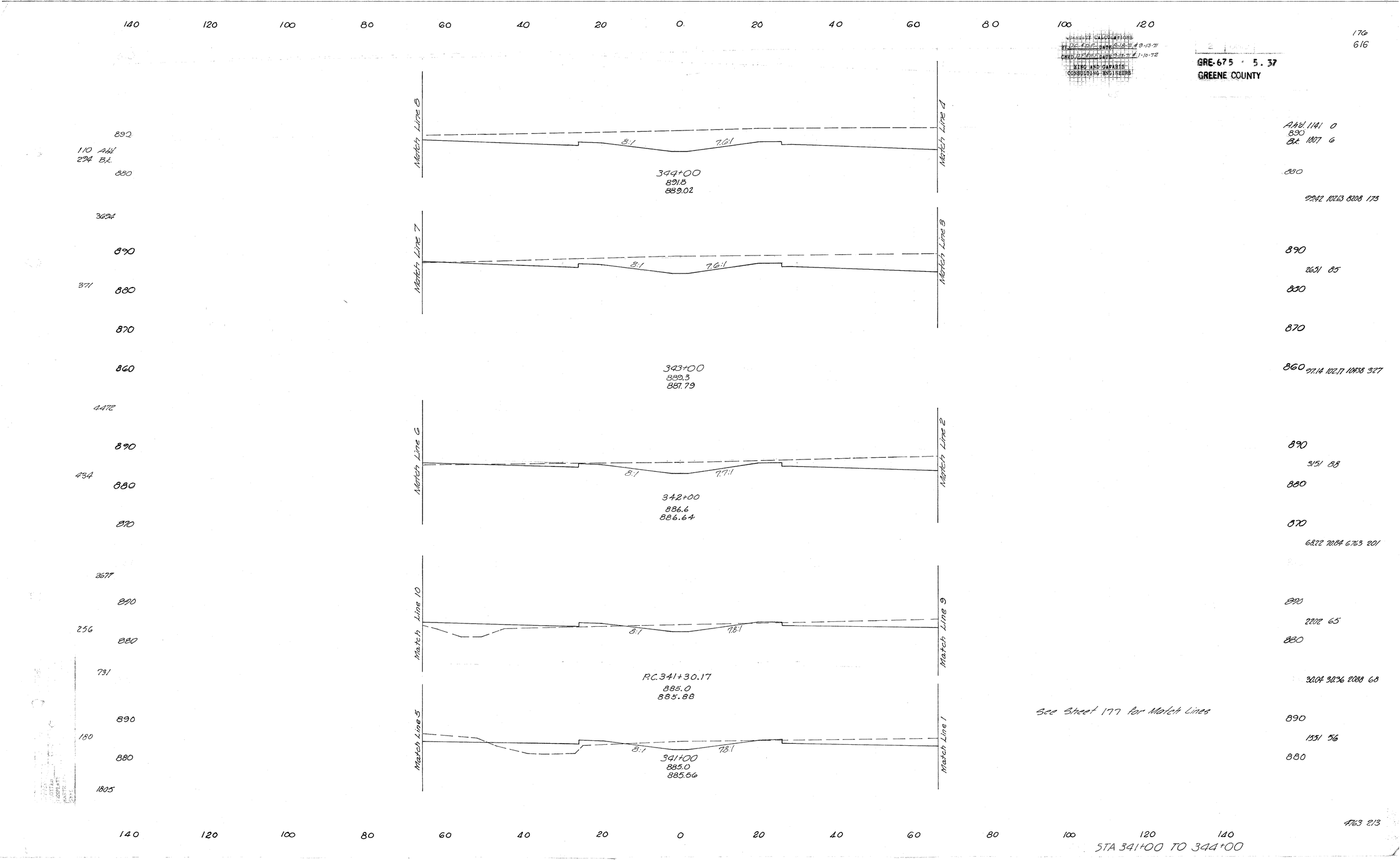
STA. 337+00 TO STA. 340+00-LEFT AND RIGHT

QUANTITY CALCULATIONS
BY R.C. & O.P. DATE 8-16-71 & 9-10-71
CHKD R.R. & H.E. DATE 9-10-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 - 5.37
GREENE COUNTY

175
616



140 120 100 80 60 40 20 0 20 40 60 80 100 120
176
616
QUANTITY CALCULATIONS
BY DC & DP DATE 8-18-71 & 9-13-71
CHKD DP & WF DATE 9-13-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 5.37
GREENE COUNTY
Match Line 8
Match Line 4
8:1
7.6:1
344+00
891.8
889.02
Match Line 7
Match Line 3
8:1
7.6:1
343+00
889.3
887.79
Match Line 6
Match Line 2
8:1
7.7:1
342+00
886.6
886.64
Match Line 10
Match Line 9
8:1
7.8:1
P.C. 341+30.17
885.0
885.88
Match Line 5
Match Line 1
8:1
7.8:1
341+00
885.0
885.56
See Sheet 177 for Match Lines
110 Ahd.
294 Bk.
3694
371
4472
434
2677
256
731
180
1805
Ahd. 1141 0
890
Bk. 1807 6
880
99.42 102.63 8208 173
890
2651 85
880
870
860 97.14 102.17 10438 327
890
3151 88
880
870
68.22 70.84 6763 201
890
2202 65
880
30.04 30.36 2088 68
890
1551 56
880
4763 213
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
STA 341+00 TO 344+00

QUANTITY CALCULATIONS
BY DCG 4 DPK DATE 8/8/74 9-13-74
CHKD DPK DATE 9/5/74 1-10-75
KING AND DAVARIS
CONSULTING ENGINEERS

2 CNRJ

GRE-675 · 5.37
GREENE COUNTY

Ramp G Match Line I-675

Match Line "Z"

Match Line Z

Back Ahead

Match Line-8

344+00
891.8
889.02

Match Line-4

Match Line-Ramp A

Match Line "X"

Match Line-Ramp B

Match Line "Y"

Match Line-7

Match Line-3

Match Line "X"

Match Line Reloc. U.S. 35

Match Line "Y"

343+00
889.3
887.79

Match Line M

Match Line "T"

Match Line Reloc. U.S. 35 I-675

Match Line-6

Match Line-2

Match Line "U"

342+00
886.6
886.64

Match Line "T"

Match Line Ramps A+D

Match Line Reloc. U.S. 35

Match Line 10

Match Line 9

P.C. 341+30.17
885.0
885.88

Match Line "U"

Match Line Reloc. U.S. 35 I-675

Match Line 5

Match Line 1

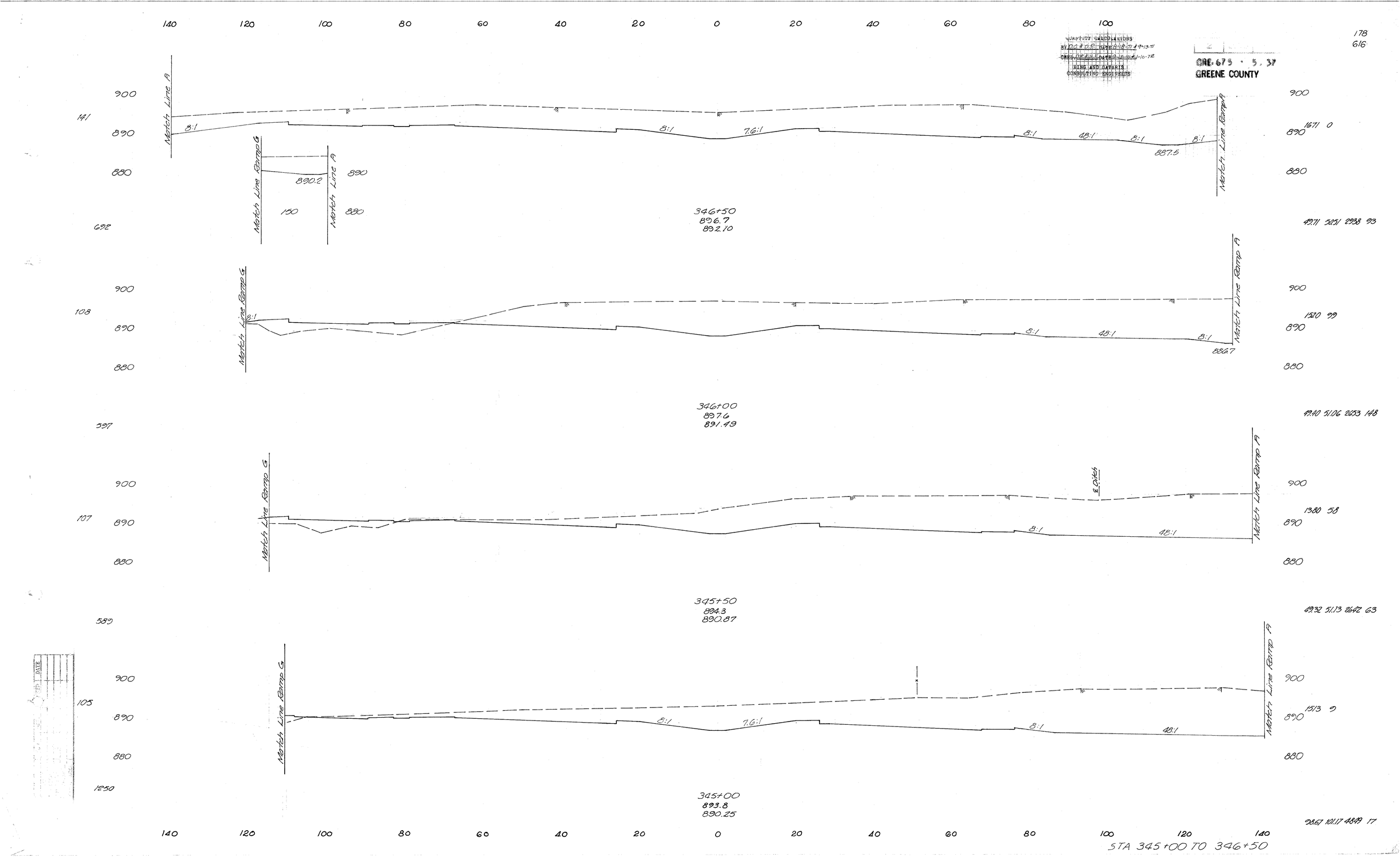
Match Line Ramp D

Match Line "V"

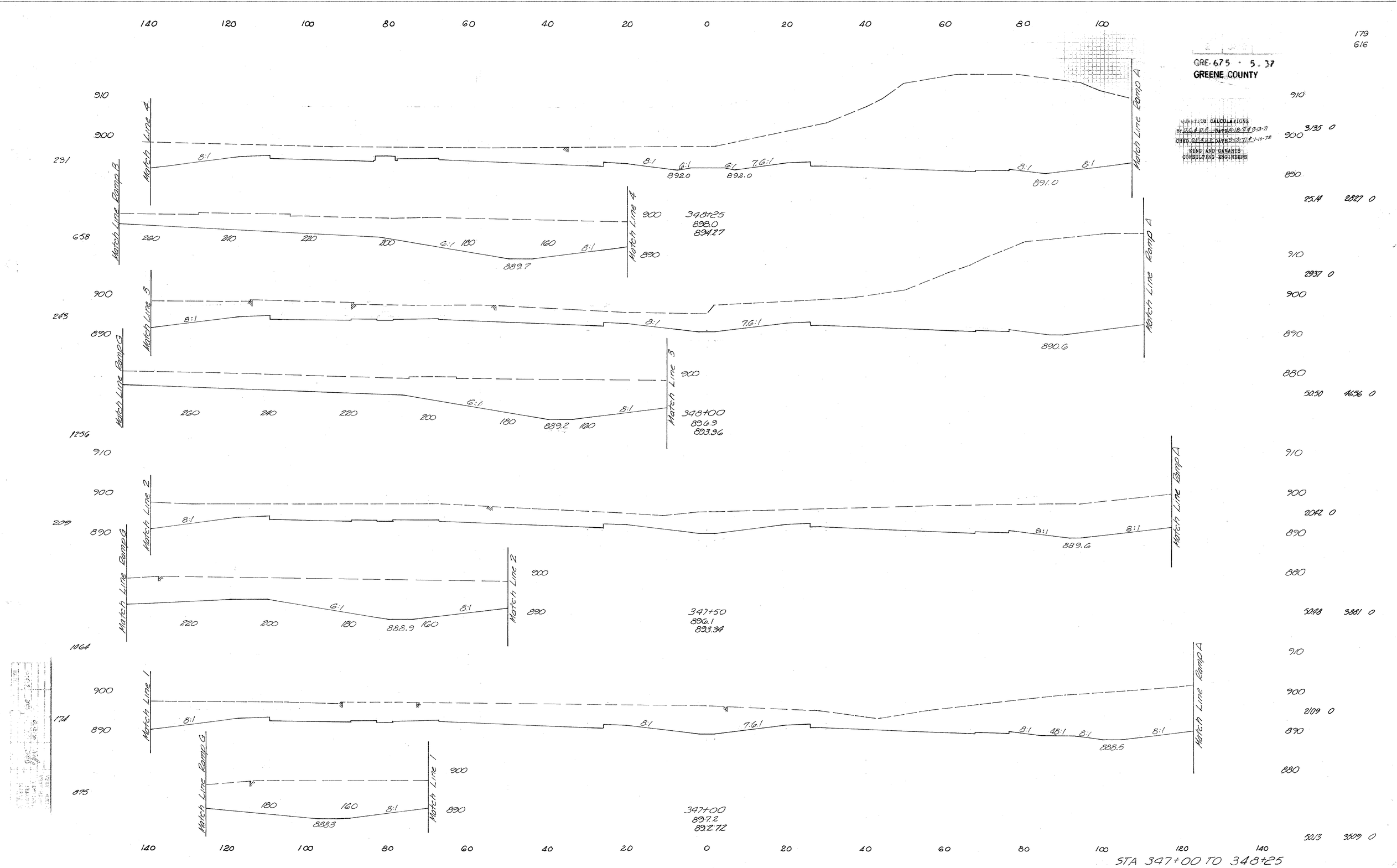
Match Line Ramp C

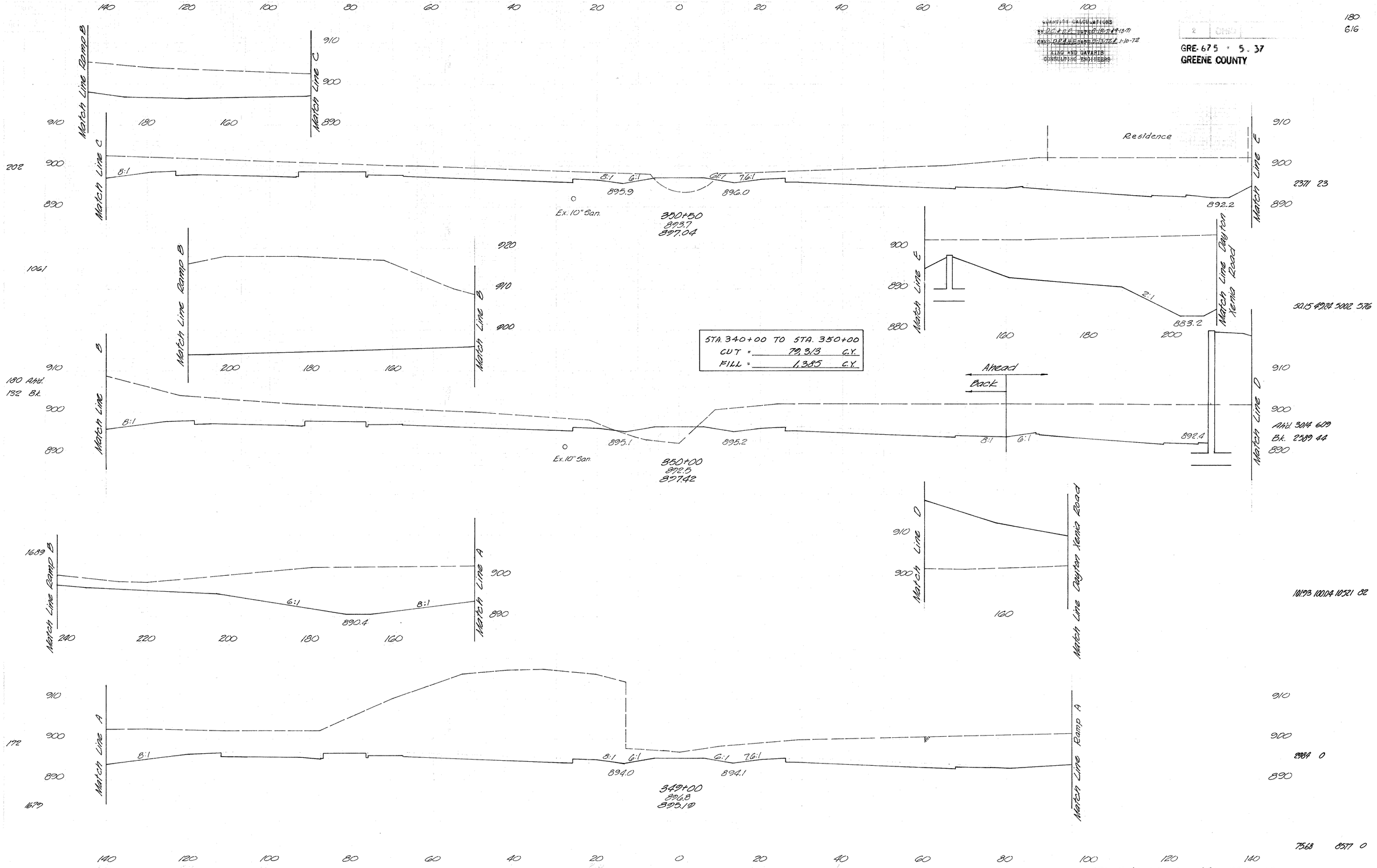
341+00
885.0
885.56

STA. 341+00 TO STA. 344+00 LEFT AND RIGHT



QUANTITY CALCULATIONS
BY D.G. & D.R. DATE 8-18-71 & 9-13-71
CHKD. D.R. & D.R. DATE 8-13-71 & 1-10-72
KING AND CAVARIS
CONSULTING ENGINEERS
ORE. 675 · 5.37
GREENE COUNTY
178
616
140 120 100 80 60 40 20 0 20 40 60 80 100
Match Line A
Match Line Ramp G
Match Line Ramp A
8:1
7.6:1
48:1
887.5
890.2
150
346+50
896.7
892.10
1671 0
49.71 50.51 2938 93
346+00
897.6
891.49
886.7
1520 99
49.40 51.06 2653 148
℄ Ditch
345+50
894.3
890.87
1380 58
49.32 51.13 2642 63
345+00
893.8
890.25
1513 9
98.67 101.17 4849 17
141
692
108
597
107
589
105
1250
900
890
880
STA 345+00 TO 346+50

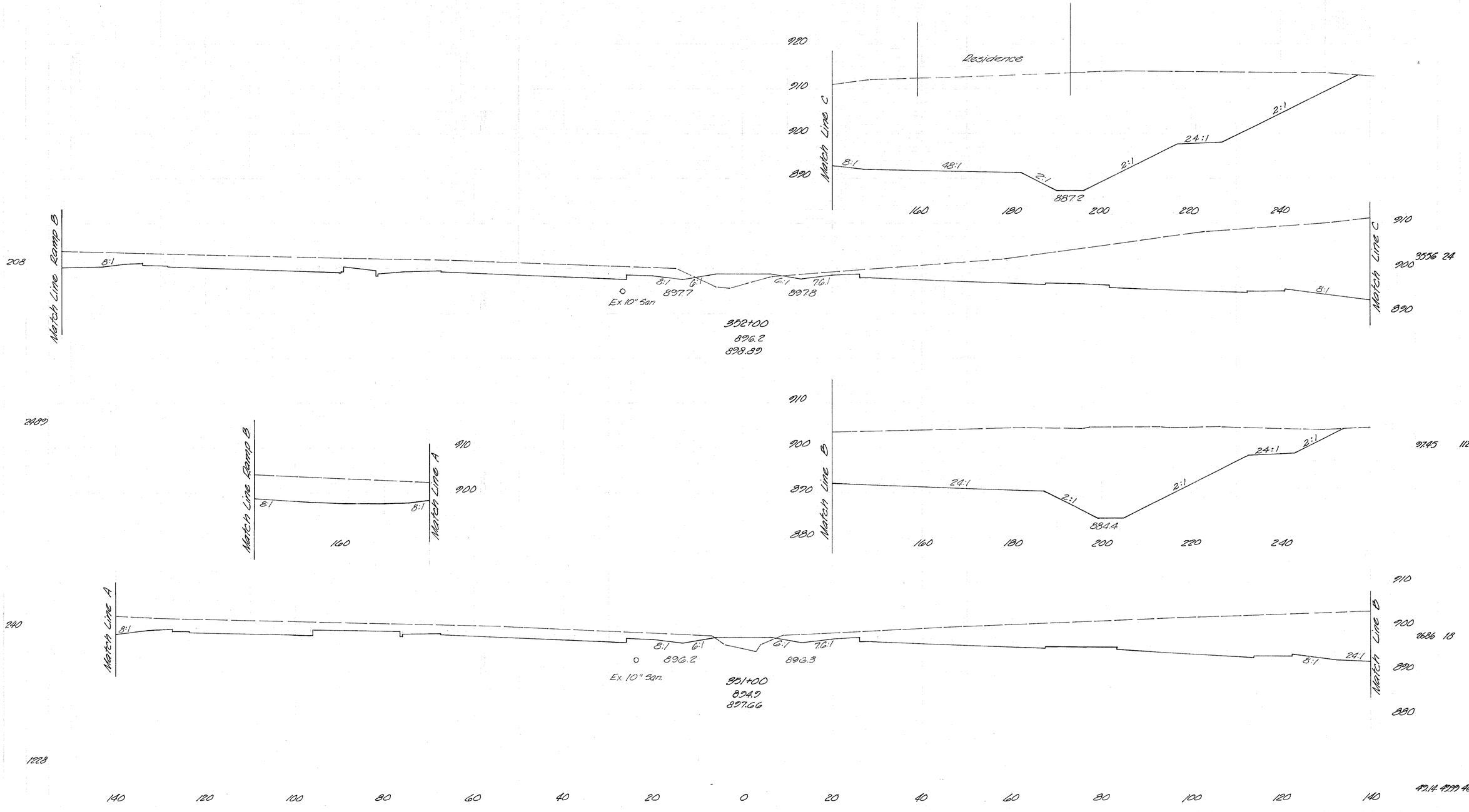

GRE-675 · 5.37
GREENE COUNTY
QUANTITY CALCULATIONS
BY D.C. & D.R. DATE 8-18-71 & 9-13-71
CHKD. D.R. & H.E. DATE 9-13-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
Match Line 4
Match Line Ramp A
Match Line Ramp B
Match Line 3
Match Line Ramp G
Match Line 2
Match Line 1
348+25
898.0
894.27
348+00
896.9
893.96
347+50
896.1
893.34
347+00
897.2
892.72
892.0
891.0
889.7
890.6
889.2
889.6
888.9
888.5
888.3
179
616
3135 0
25.14
2827 0
2937 0
50.50
4656 0
2042 0
50.48
3881 0
2109 0
50.13
3509 0
STA 347+00 TO 348+25



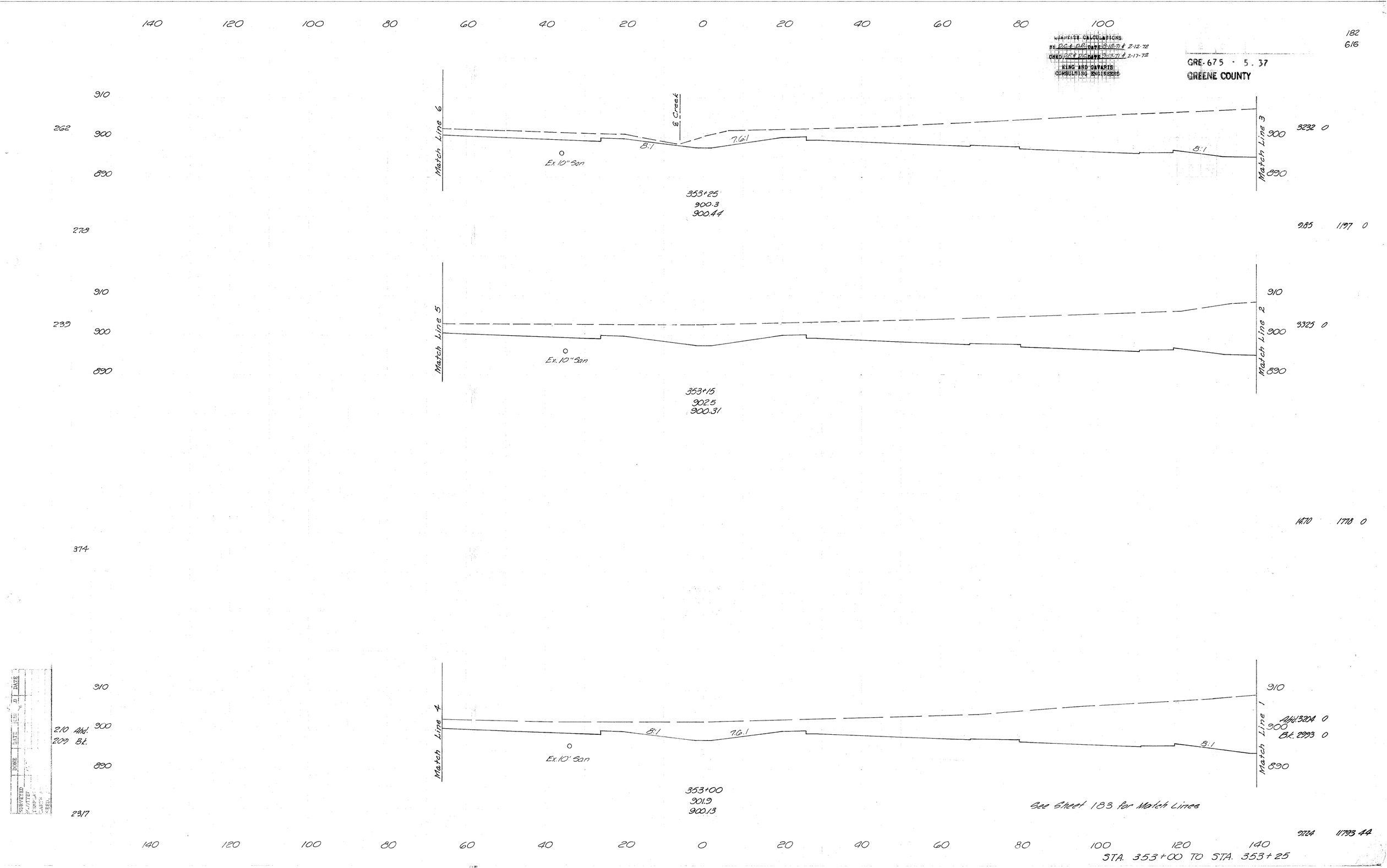
QUANTITY CALCULATIONS
BY DC & DB DATE 8-18-71 & 9-13-71
CHKD DP & HE DATE 9-13-72 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 5.37
GREENE COUNTY
180
616
Match Line Ramp B
Match Line C
Match Line E
Match Line B
Match Line D
Match Line A
Match Line Dayton Xenia Road
Residence
Ex. 10" San.
350+50
893.7
897.04
895.9
896.0
892.2
2371 23
STA. 340+00 TO STA. 350+00
CUT = 79,313 C.Y.
FILL = 1,385 C.Y.
Ahead
Back
350+00
892.5
897.42
895.1
895.2
892.4
883.2
180 Ahd.
132 Bk.
Ahd. 3014 609
Bk. 2589 44
890.4
894.0
894.1
349+00
896.8
895.19
2984 0
7568 8577 0
STA. 349+00 to STA 350+50

QUANTITY CALCULATIONS
BY D.C. & D.R. DATE 8-18-71 & 2-12-72
CHKD. D.R. & D.C. DATE 9-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY



STA. 351+00 to STA. 352+00

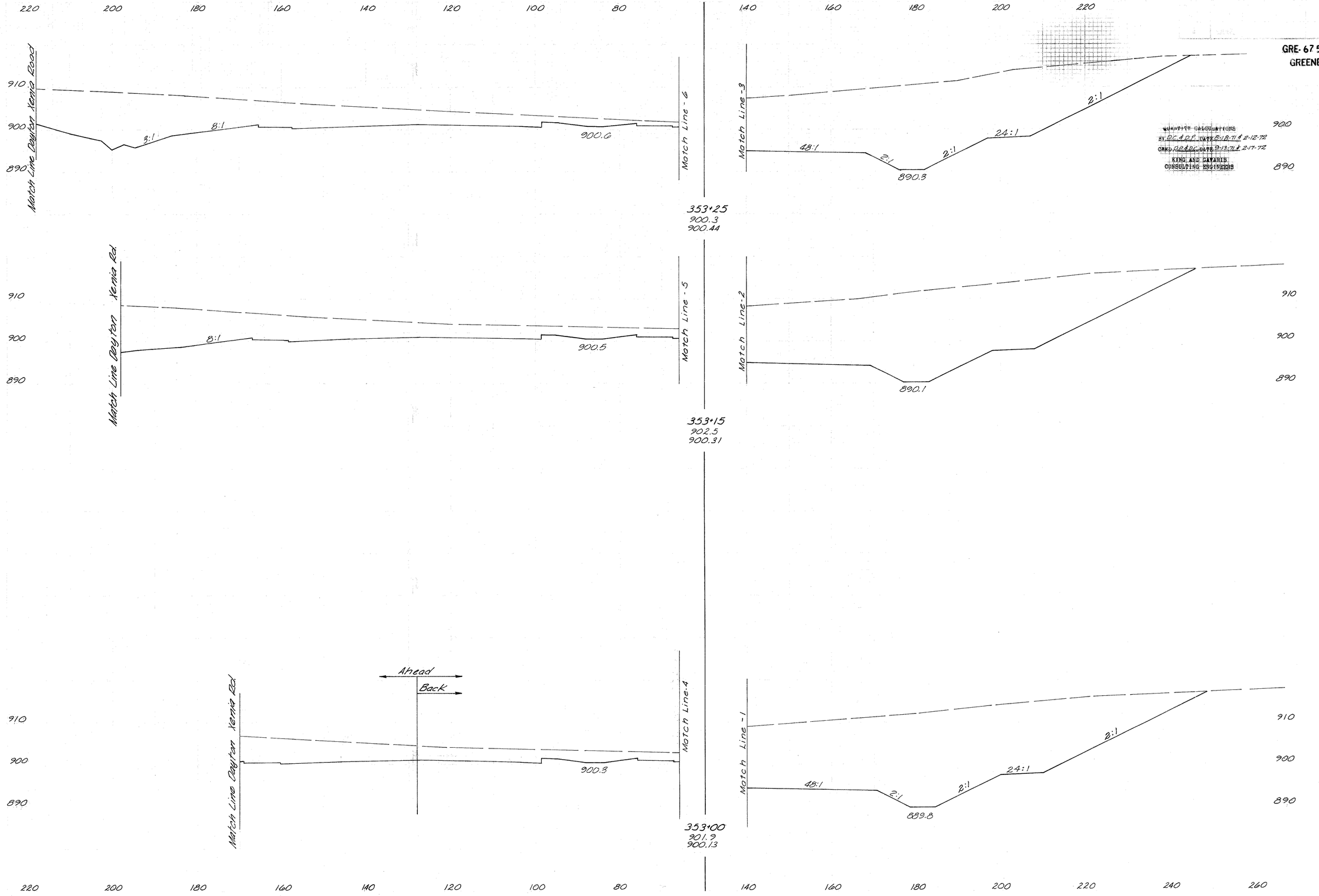


QUANTITY CALCULATIONS
BY D.C.& D.R. DATE 8-18-71 & 2-12-72
CHKD. D.R.& D.C. DATE 9-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 · 5.37
GREENE COUNTY
182
616
140 120 100 80 60 40 20 0 20 40 60 80 100
Match Line 6
℄ Creek
8:1
7.6:1
Ex. 10" San
353+25
900.3
900.44
Match Line 3
3232 0
9.85 1197 0
262
278
Match Line 5
Ex. 10" San
353+15
902.5
900.31
Match Line 2
3325 0
1470 1778 0
239
374
Match Line 4
Ex. 10" San
353+00
901.9
900.13
Match Line 1
Ahd. 3204 0
Bk. 2993 0
210 Ahd.
209 Bk.
2317
See Sheet 183 for Match Lines
9724 11793 44
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
STA. 353+00 TO STA. 353+25

183
6:6

GRE-675 · 5.37
GREENE COUNTY

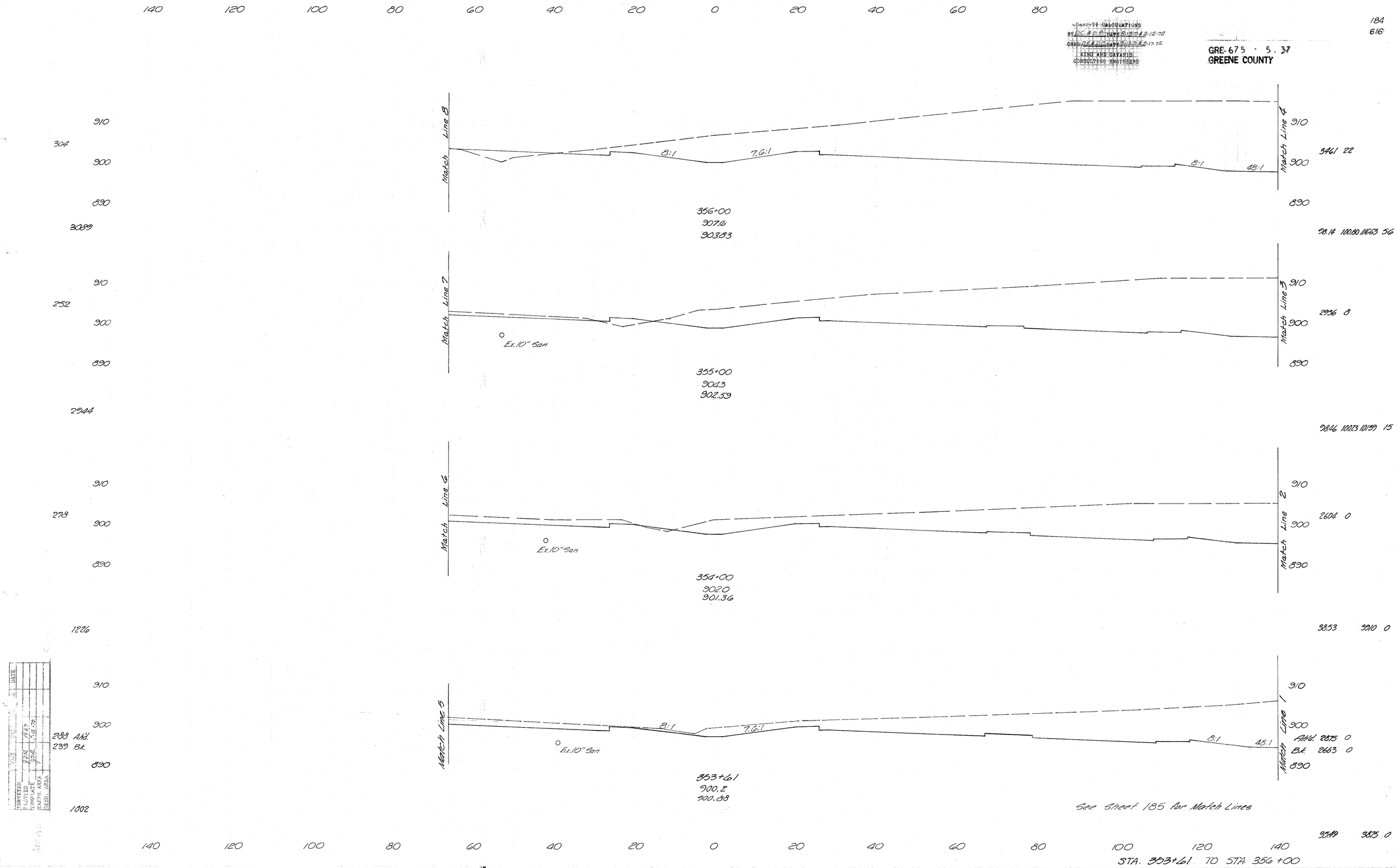
QUANTITY CALCULATIONS
BY D.C.A.D.F. DATE 8-18-71 & 2-12-72
CHKD D.C.A.D.F. DATE 9-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS



STA. 353+00 TO STA. 353+25 LEFT AND RIGHT

PRIMARY CALCULATIONS
BY D.C. & D.P. DATE 8-12-71 & 2-12-72
CHKD. D.P. & D.C. DATE 8-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS

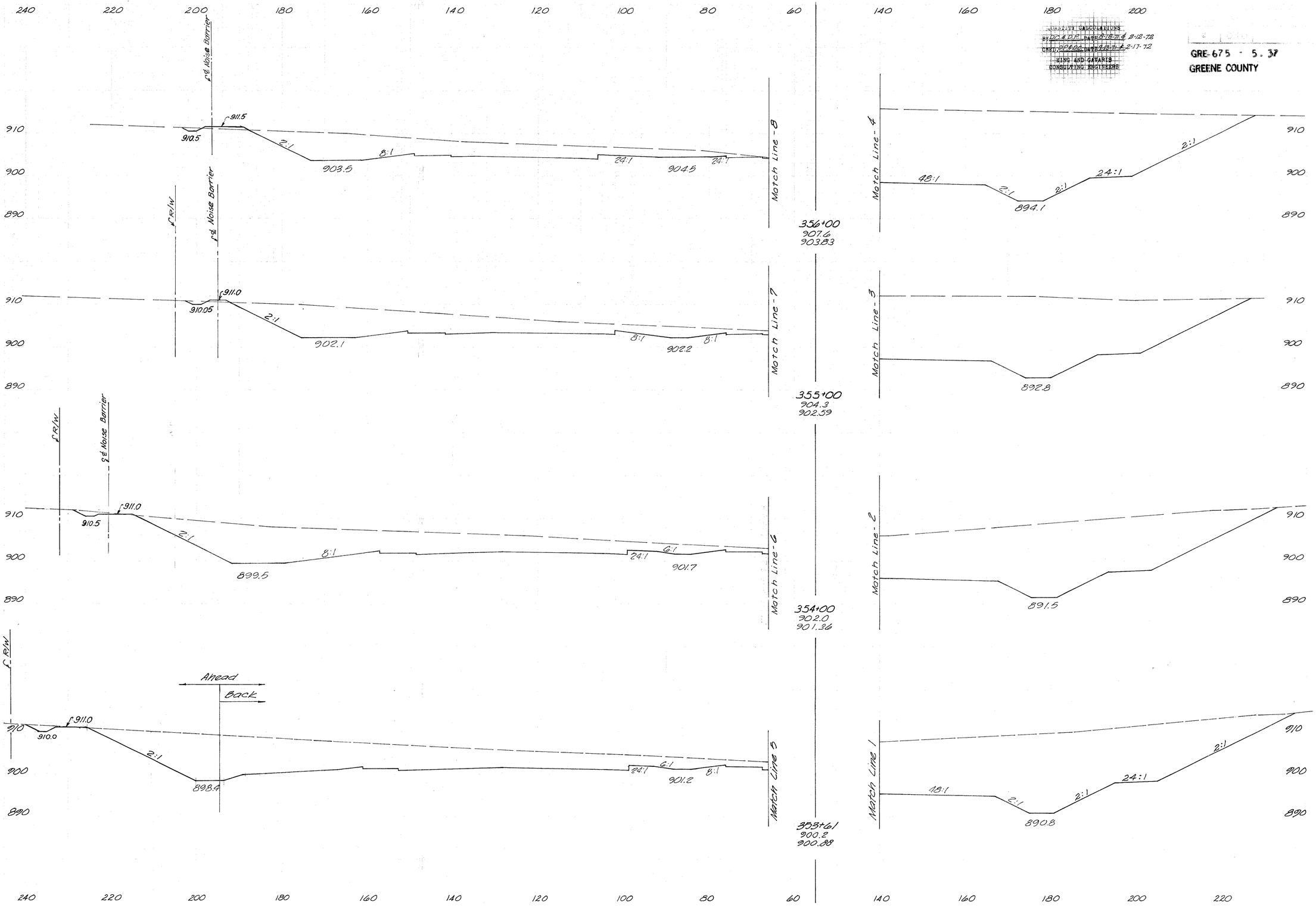
GRE-675 - 5.37
GREENE COUNTY



See Sheet 185 for Match Lines

STA. 353+61 TO STA. 356+00

GRE-675 - 5.37
GREENE COUNTY

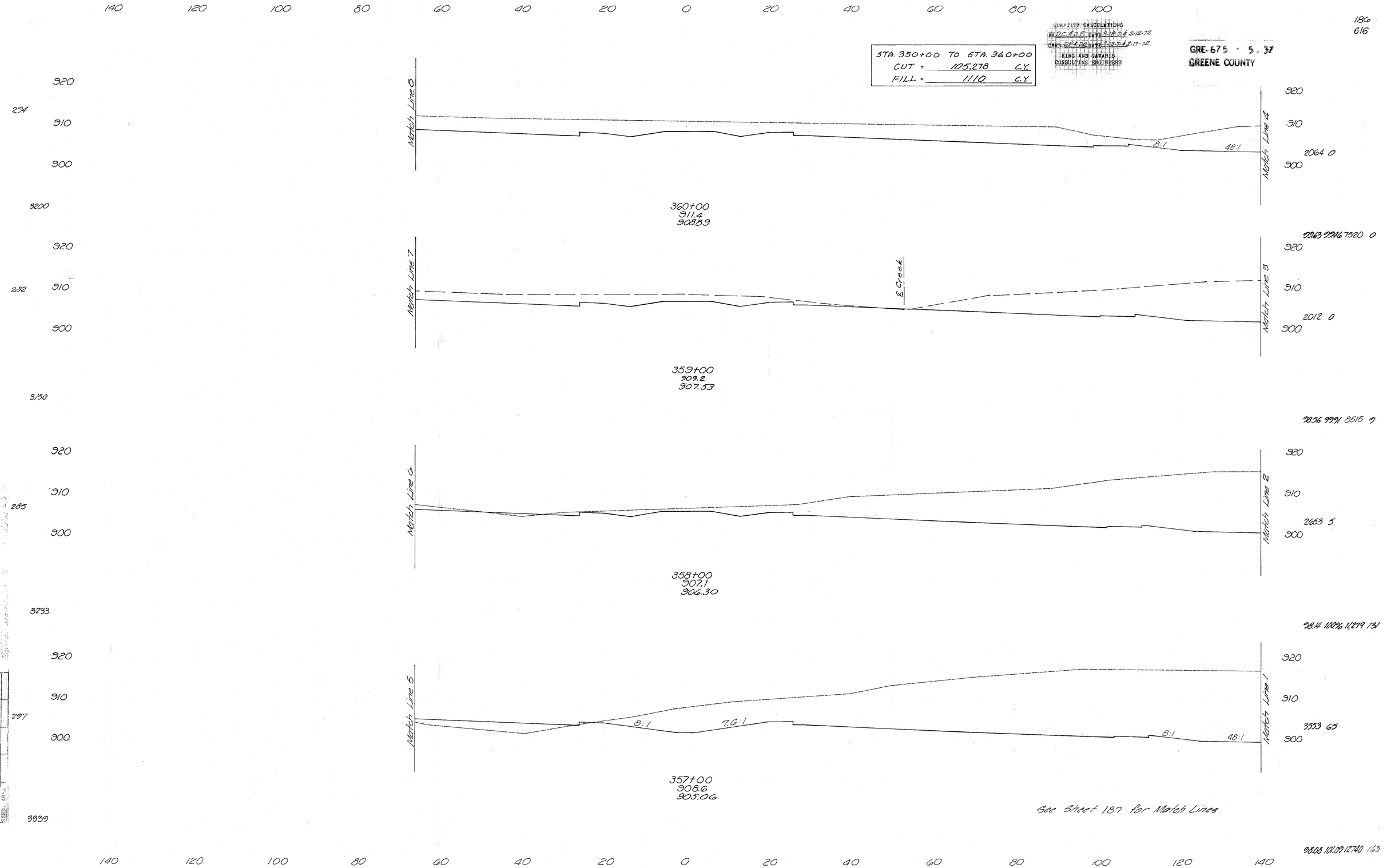


STA. 353+61 TO STA. 356+00 LEFT AND RIGHT

QUANTITY CALCULATIONS
BY D.C. & D.P. DATE 8-18-71 & 2-12-72
CHKD. D.R. & D.C. DATE 9-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS

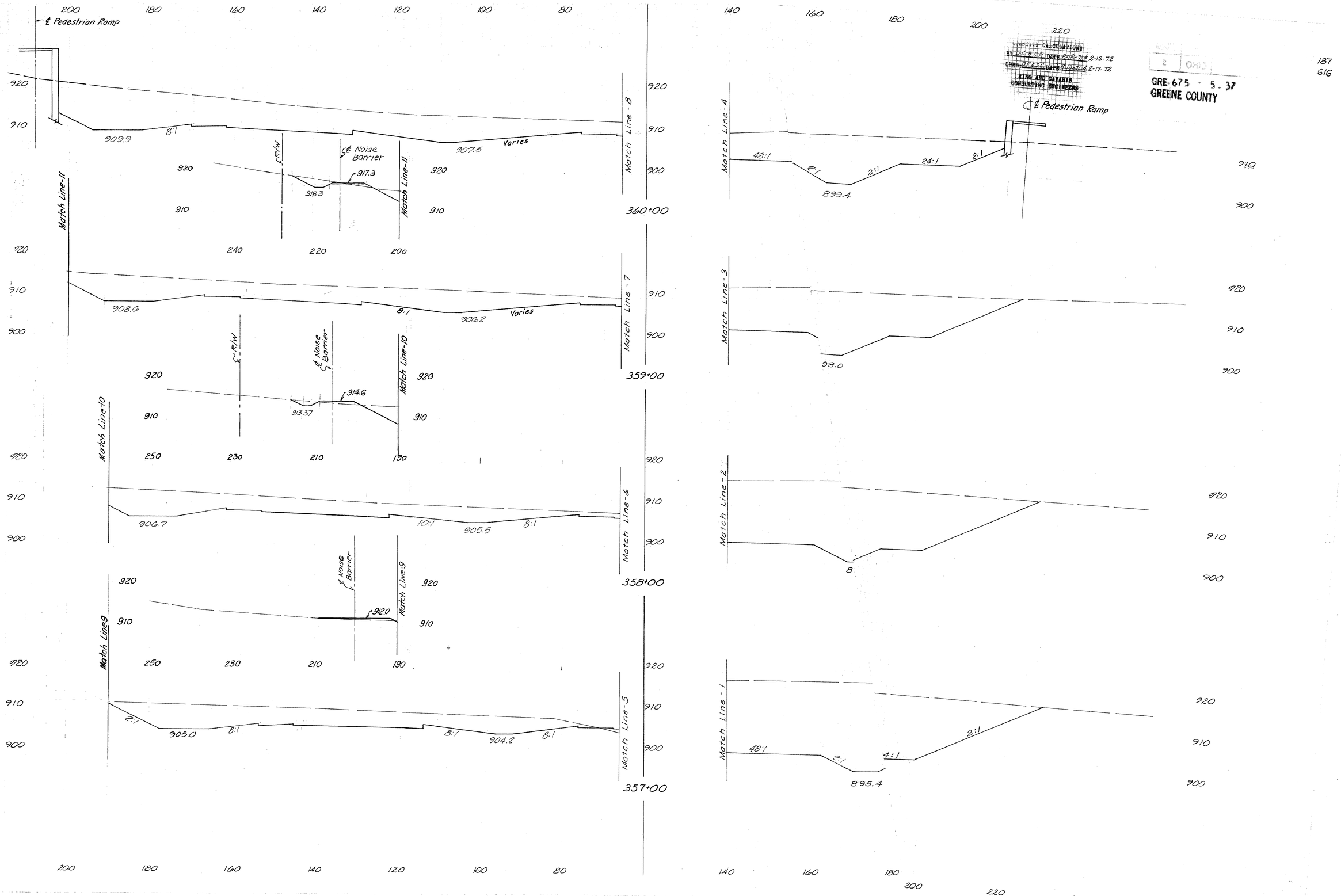
GRE-675 · 5.37
GREENE COUNTY

STA. 350+00 TO STA. 360+00		
CUT =	105,278	C.Y.
FILL =	1110	C.Y.



See Sheet 187 for Match Lines

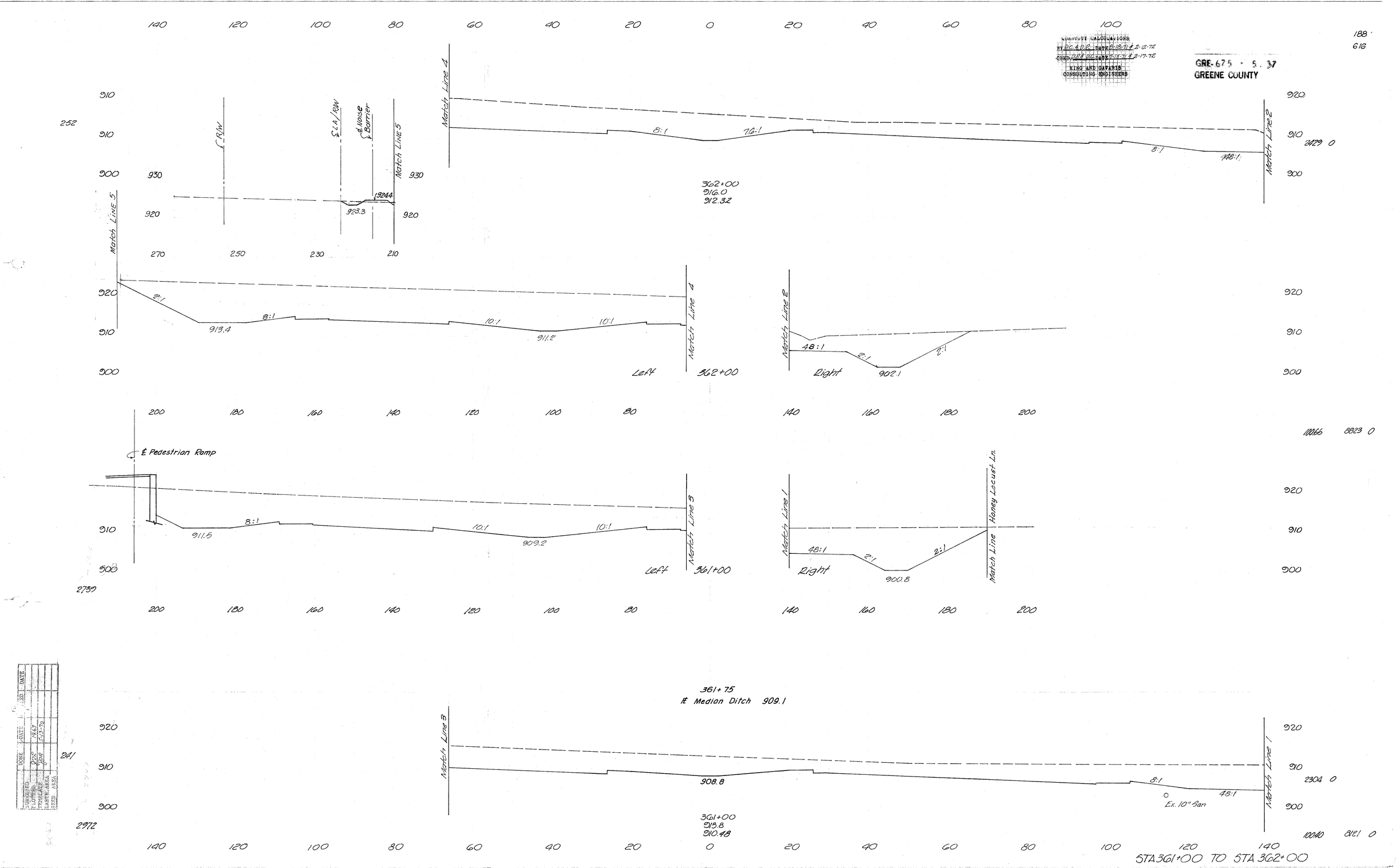
STA. 357+00 to STA. 360+00



QUANTITY CALCULATIONS
BY DC & DR DATE 8-18-71 & 2-12-72
CHKD. DR & DC DATE 9-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

187
616



STA 361+00 TO STA 362+00

QUANTITY CALCULATIONS
BY D.C. & D.P. DATE 8-18-71 & 2-12-72
CHKD. D.P. & D.C. DATE 9-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS

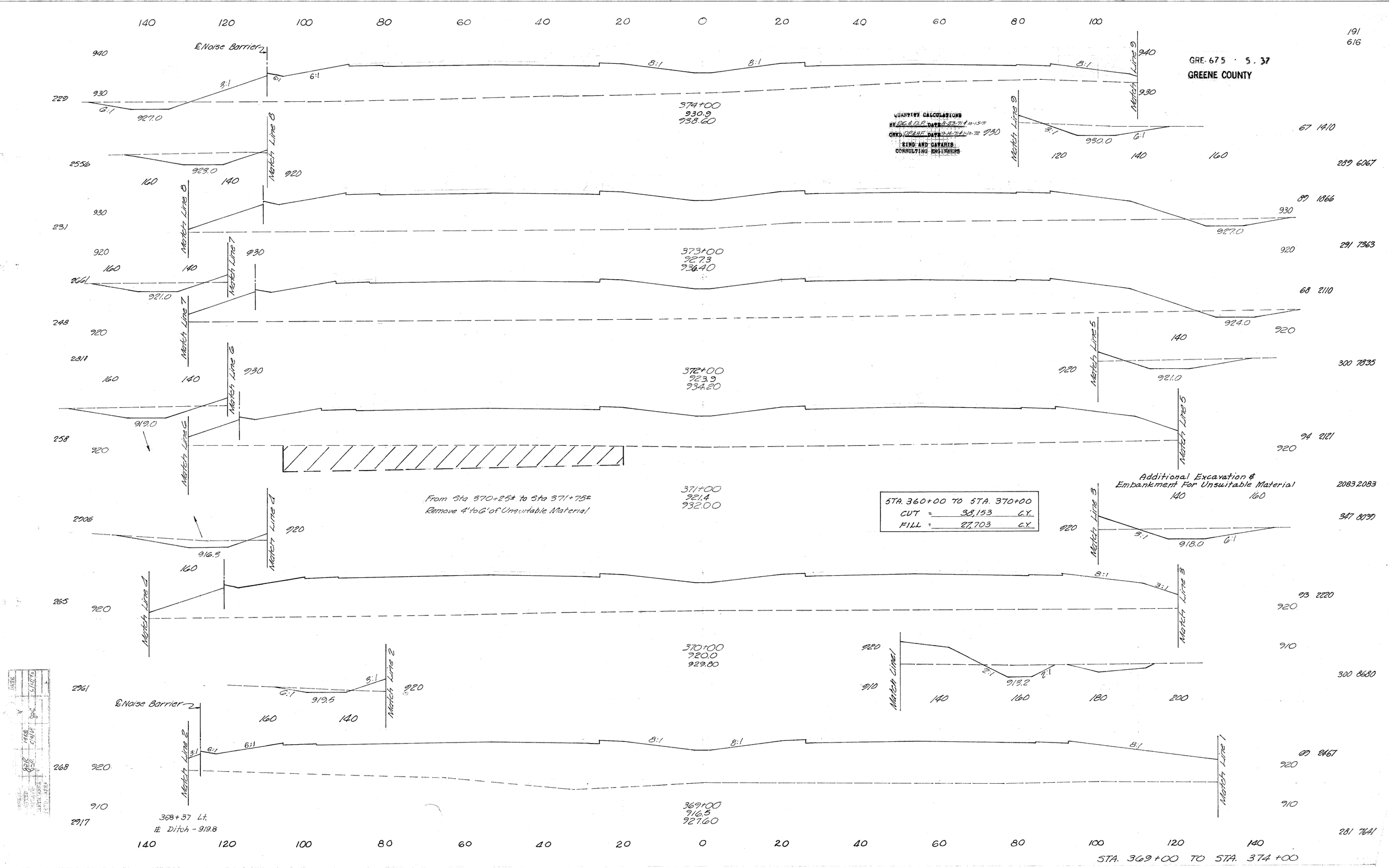
GRE-675-5.37
GREENE COUNTY

STA. 363+00 TO STA. 368+00

GRE-675 - 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY O.C.A.D.R. DATE 8-18-71 & 2-12-72
CHKD. D.D.A.D.C. DATE 9-13-71 & 2-17-72
KING AND GAVARIS
CONSULTING ENGINEERS

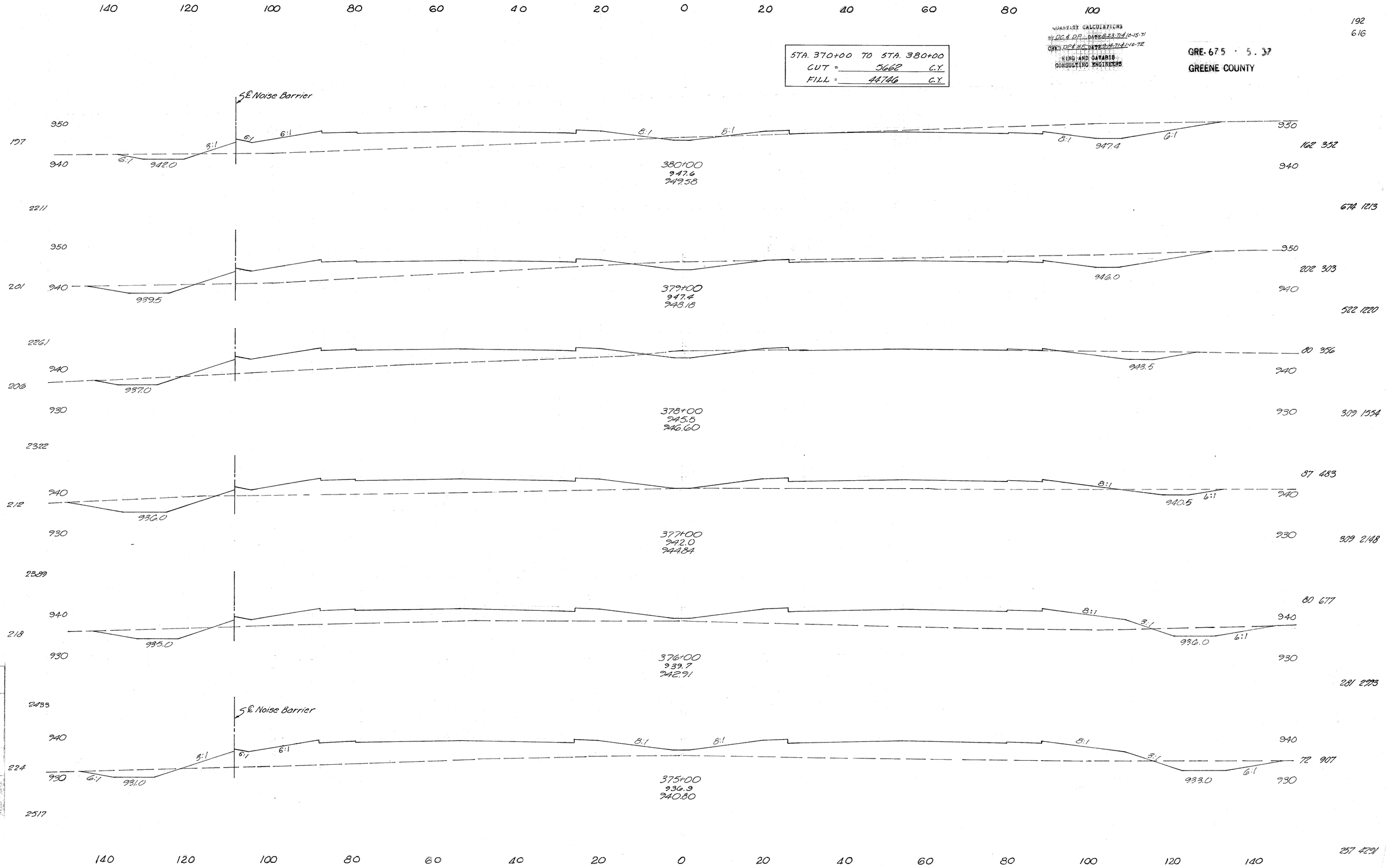
STA. 363+00 TO STA. 368+00 LEFT AND RIGHT


GRE-675 · 5.37
GREENE COUNTY
QUANTITY CALCULATIONS
BY DC & D.P. DATE 8-23-71 & 10-15-71
CHKD. DP & HF DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
℄ Noise Barrier
374+00
930.9
938.60
373+00
927.3
936.40
372+00
923.9
934.20
371+00
921.4
932.00
370+00
920.0
929.80
369+00
916.5
927.60
From Sta 370+25± to Sta 371+75±
Remove 4' to 6' of Unsuitable Material
Additional Excavation &
Embankment For Unsuitable Material
STA. 360+00 TO STA. 370+00
CUT = 38,153 C.Y.
FILL = 27,703 C.Y.
368+37 Lt.
℄ Ditch - 919.8
Match Line 1
Match Line 2
Match Line 3
Match Line 4
Match Line 5
Match Line 6
Match Line 7
Match Line 8
Match Line 9
STA. 369+00 TO STA. 374+00

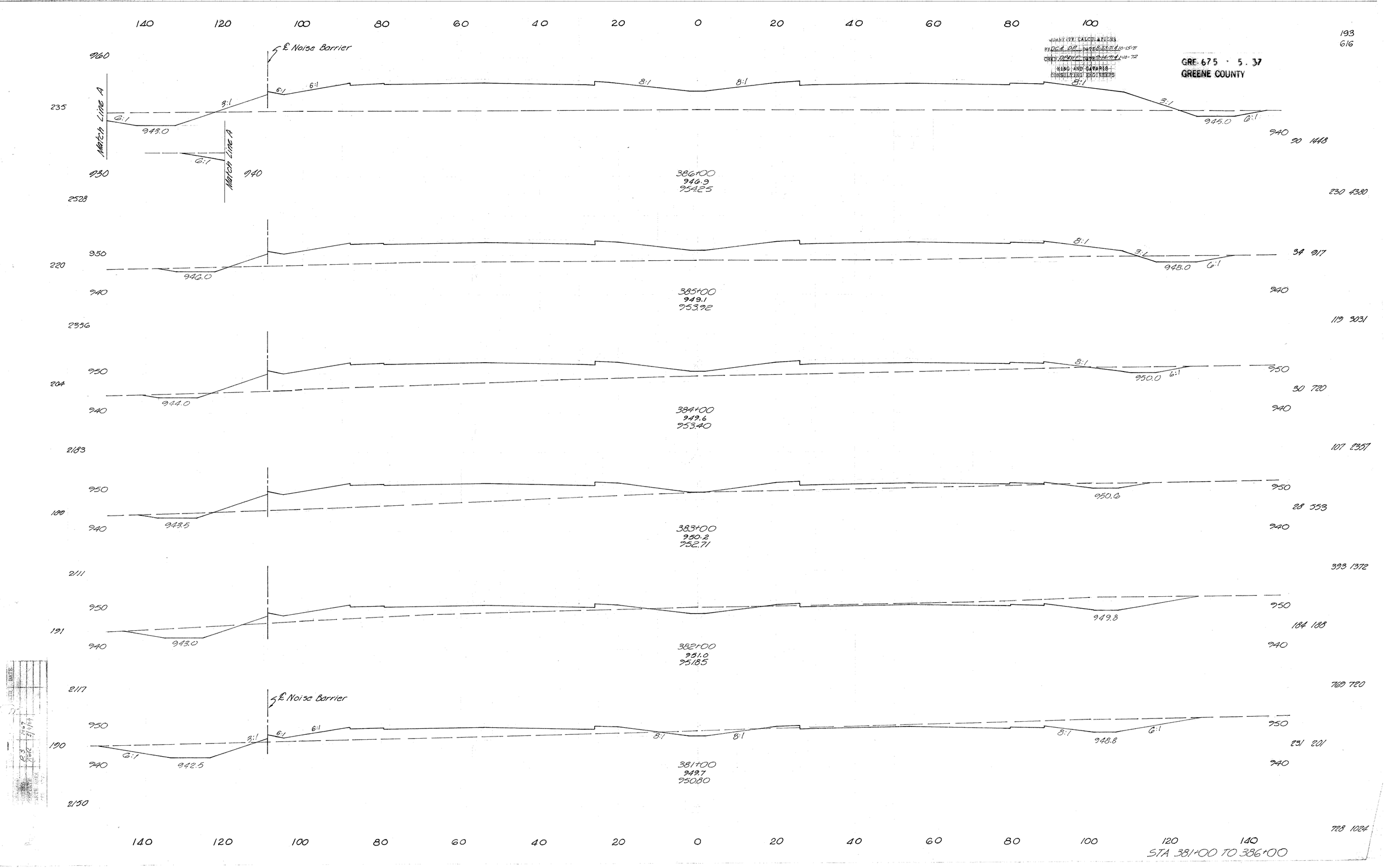
QUANTITY CALCULATIONS
BY DC & DP DATE 8-23-71 & 10-15-71
CHKD DP & HF DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

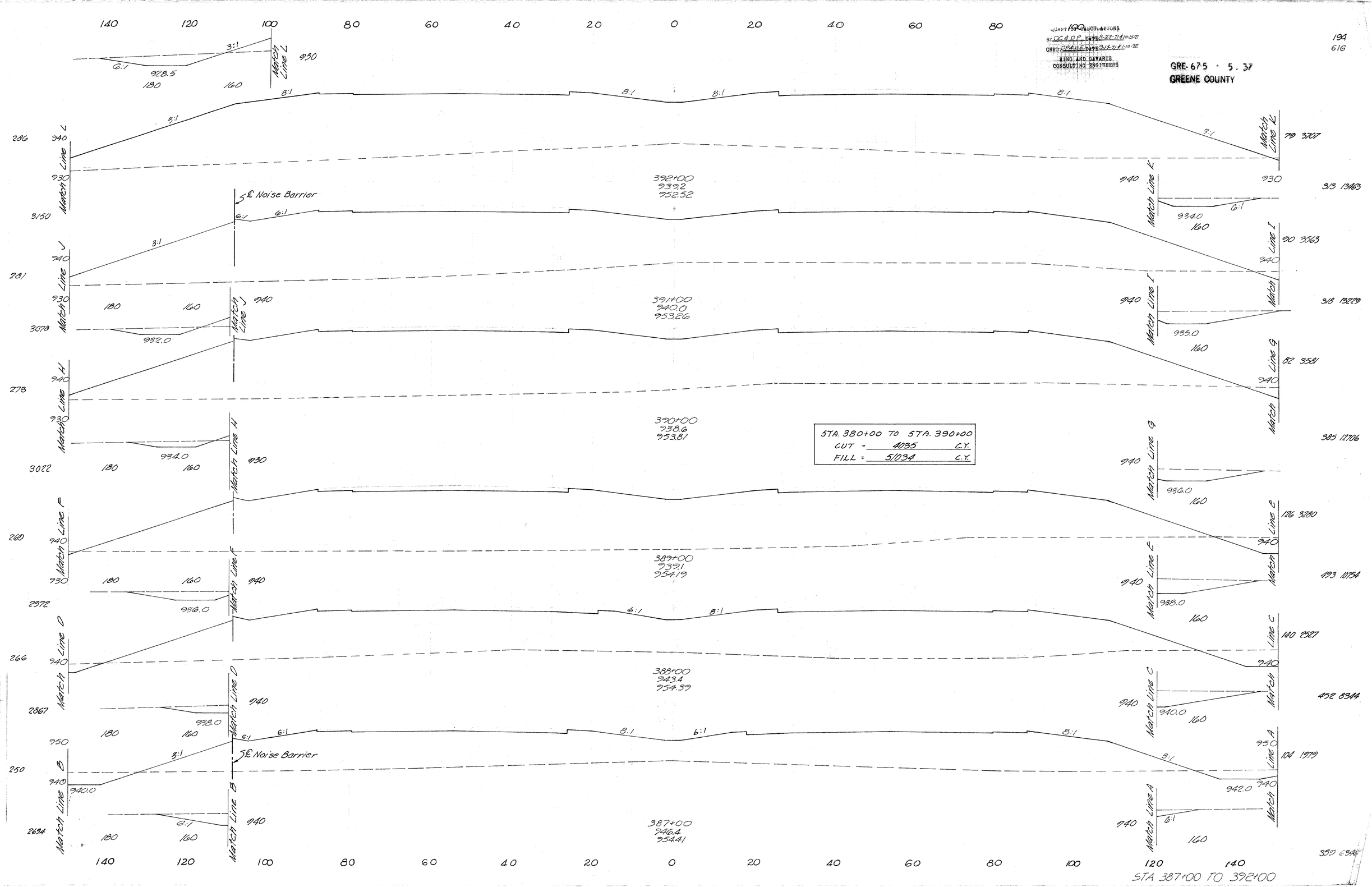
STA. 370+00 TO STA. 380+00		
CUT =	5662	C.Y.
FILL =	44746	C.Y.



STA. 375+00 TO STA. 380+00

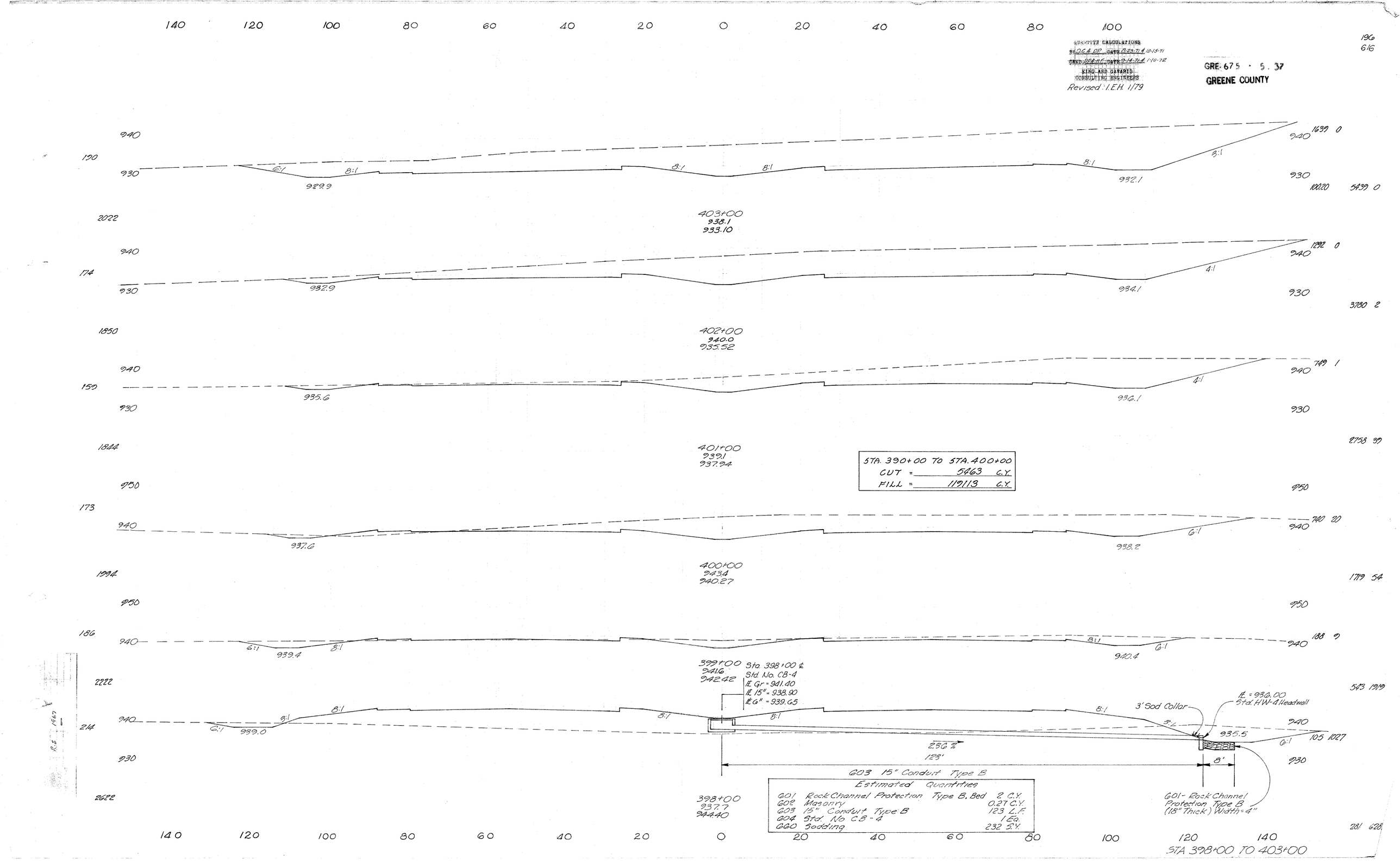


QUANTITY CALCULATIONS
BY DC & DR DATE 8-23-71 & 10-15-71
CHKD DP & HF DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 · 5.37
GREENE COUNTY
193
616
140 120 100 80 60 40 20 0 20 40 60 80 100
℄ Noise Barrier
Match Line A
960
235
930
940
6:1
3:1
8:1
943.0
945.0
90 1448
386+00
946.9
954.25
2528
230 4380
950
220
946.0
948.0
34 917
385+00
949.1
953.92
2356
119 3031
204
944.0
950.0
30 720
384+00
949.6
953.40
2183
107 2357
189
943.5
950.6
28 553
383+00
950.2
952.71
2111
393 1372
191
943.0
949.8
184 188
382+00
951.0
951.85
2117
769 720
190
942.5
948.8
231 201
381+00
949.7
950.80
2150
728 1024
STA 381+00 TO 386+00



QUANTITY CALCULATIONS
BY DC & DP DATE 8-23-71 & 10-15-71
CHKD DP & HE DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 · 5.37
GREENE COUNTY
194
616
STA. 380+00 TO STA. 390+00
CUT = 4035 C.Y.
FILL = 51034 C.Y.
392+00
939.2
952.52
391+00
940.0
953.26
390+00
938.6
953.81
389+00
939.1
954.19
388+00
943.4
954.39
387+00
946.4
954.41
℄ Noise Barrier
Match Line L
Match Line K
Match Line J
Match Line I
Match Line H
Match Line G
Match Line F
Match Line E
Match Line D
Match Line C
Match Line B
Match Line A
STA 387+00 TO 392+00

195
616
GRE-675 · 5.37
GREENE COUNTY
QUANTITY CALCULATIONS
BY DC & DP DATE 8-23-71 & 10-15-71
CHKD. DP & HF DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
397+00
933.7
946.20
396+00
930.8
947.82
395+00
929.6
949.26
394+00
927.6
950.53
393+00
932.0
951.61
258
3094
299
3567
343
3783
338
3617
313
3328
47 2368
531 11131
240 3643
541 15978
52 4985
411 20267
170 5959
487 20478
93 5099
319 16307
Match Line A
Match Line B
Match Line C
Match Line D
Match Line E
Match Line F
Match Line G
Match Line H
Match Line J
STA 393+00 TO 397+00

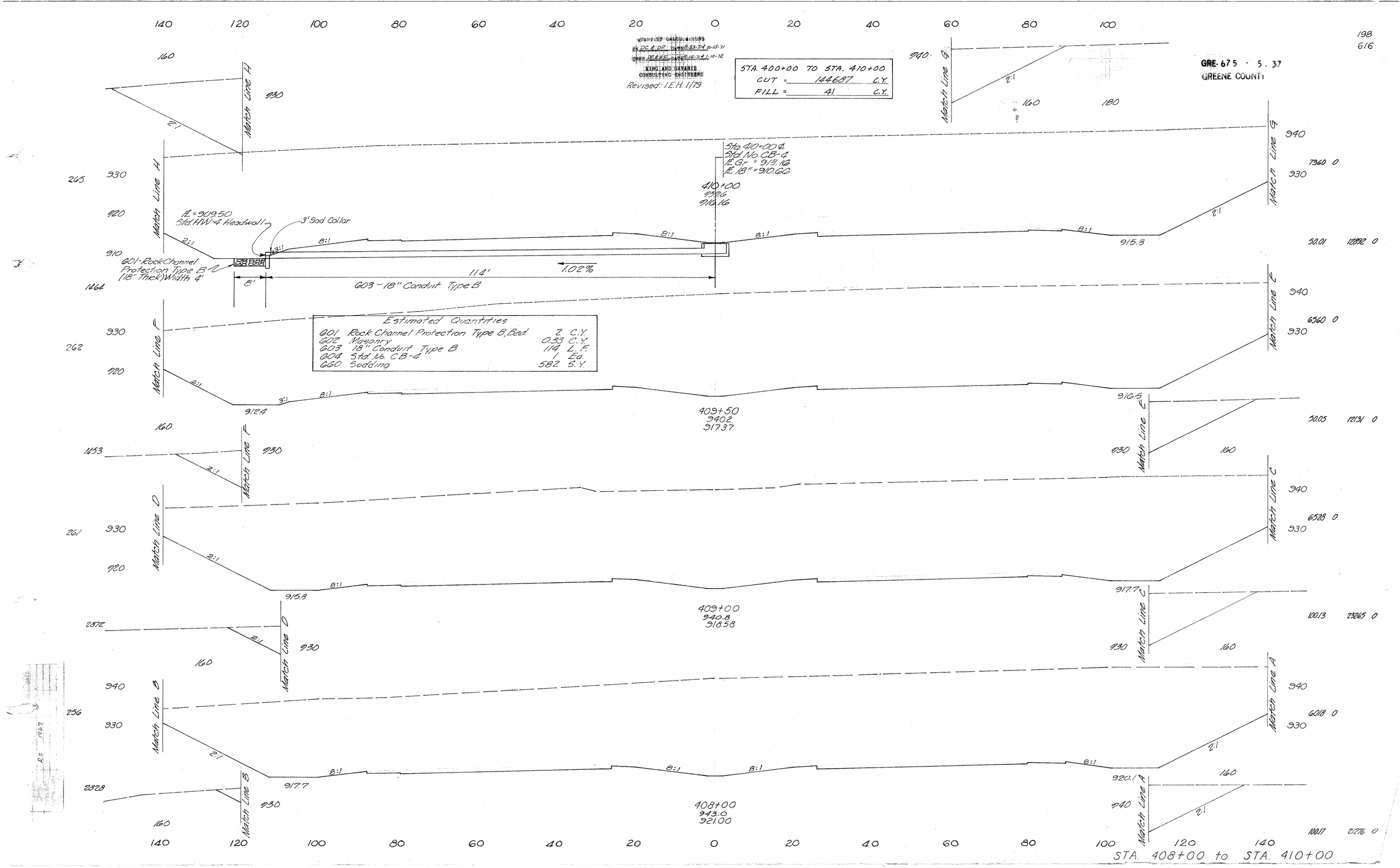


SUBSTITUTE CALCULATIONS
BY QCA DP DATE 8-23-71 & 10-15-71
CHKD. DPA HF DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79
GRE-675 · 5.37
GREENE COUNTY
STA. 390+00 TO STA. 400+00
CUT = 5463 C.Y.
FILL = 119113 C.Y.
403+00
938.1
933.10
402+00
940.0
935.52
401+00
939.1
937.94
400+00
943.4
940.27
399+00
941.6
942.42
Sta. 398+00 ℄
Std. No. CB-4
℄ Gr = 941.40
℄ 15" = 938.90
℄ 6" = 939.65
3' Sod Collar
℄ = 936.00
Std. HW-4 Headwall
2.36 %
123'
8'
603 15" Conduit Type B
Estimated Quantities
601 Rock Channel Protection Type B, Bed 2 C.Y.
602 Masonry 0.27 C.Y.
603 15" Conduit Type B 123 L.F.
604 Std. No CB-4 1 Ea.
660 Sodding 232 S.Y.
601 - Rock Channel Protection Type B (18" Thick) Width = 4"
398+00
937.7
944.40
STA 398+00 TO 403+00

QUANTITY CALCULATIONS
BY DC & DD DATE 8-23-71 & 10-15-71
CHKD. DD & HE DATE 9-14-71 & 10-22-71
KING AND GAVANIS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

197
616



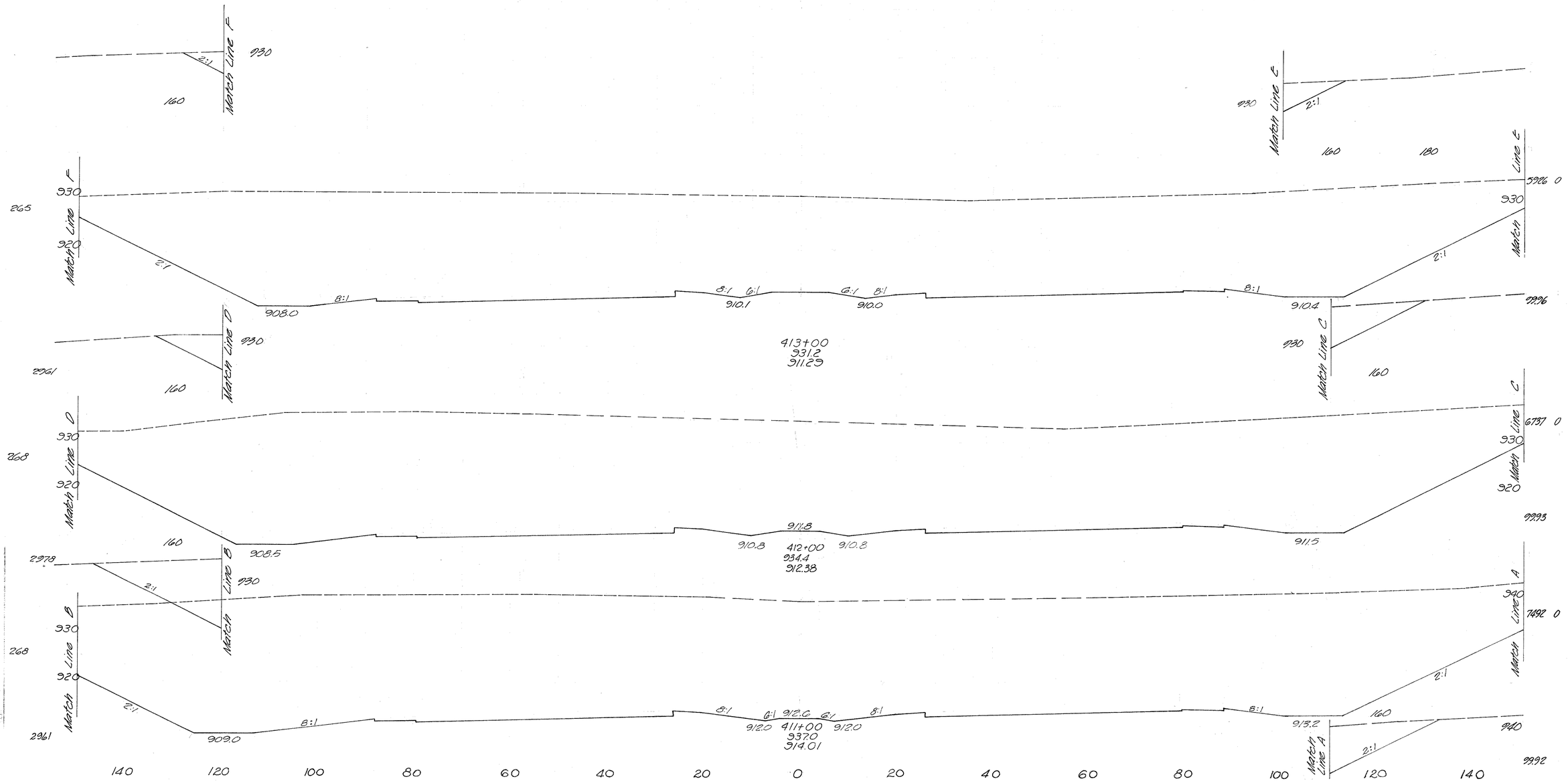
GRE-675 · 5.37
GREENE COUNTY
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79
STA. 400+00 TO STA. 410+00
CUT = 144687 C.Y.
FILL = 41 C.Y.
Sta. 410+00 ℄
Std. No. CB-4
℄ Gr. = 913.16
℄ 18" = 910.66
410+00
939.6
916.16
℄ = 909.50
Std. HW-4 Headwall
3' Sod Collar
601-Rock Channel Protection Type B (18" Thick) Width 4'
8'
114'
1.02%
603 - 18" Conduit Type B
Estimated Quantities
601 Rock Channel Protection Type B, Bed 2 C.Y.
602 Masonry 0.33 C.Y.
603 18" Conduit Type B 114 L.F.
604 Std. No. CB-4 1 Ea.
660 Sodding 582 S.Y.
409+50
940.2
917.37
409+00
940.8
918.58
408+00
943.0
921.00
Match Line H
Match Line G
Match Line F
Match Line E
Match Line D
Match Line C
Match Line B
Match Line A
STA. 408+00 to STA. 410+00

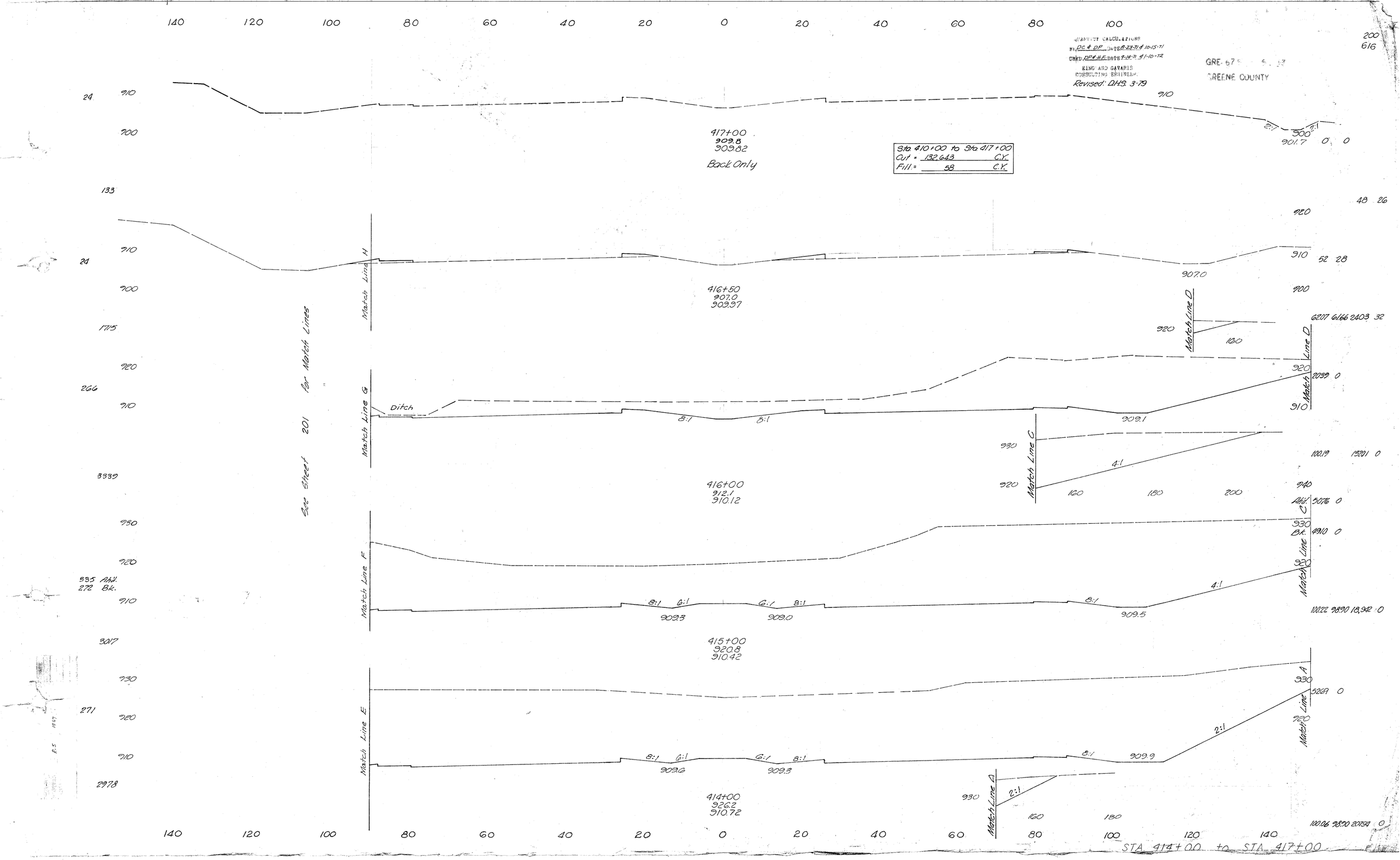
140 120 100 80 60 40 20 0 20 40 60 80 100

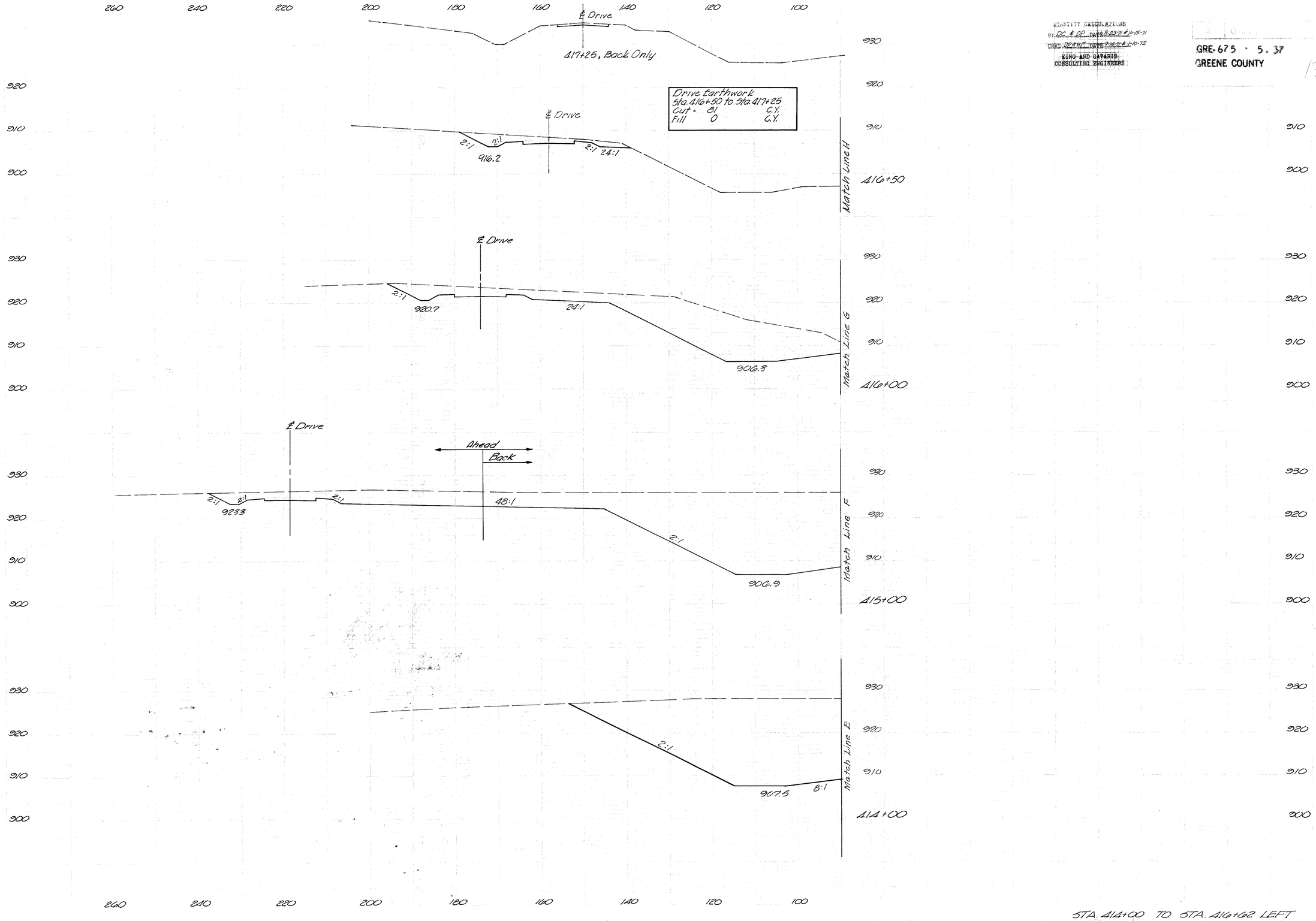
QUANTITY CALCULATIONS
BY DC & DF DATE 8-23-71 10-15-71
CHKD DC & HF DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS

199
616

GRE-67 5 5.37
GREENE COUNTY




QUANTITY CALCULATIONS
BY DC & DP DATE 8-23-71 & 10-15-71
CHKD DP & H.F. DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: DHS 3-79
GREENE COUNTY
Sta. 410+00 to Sta. 417+00
Cut = 132,643 C.Y.
Fill = 58 C.Y.
417+00
909.8
909.82
Back Only
416+50
907.0
909.97
416+00
912.1
910.12
415+00
920.8
910.42
414+00
926.2
910.72
See Sheet 201 for Match Lines
Match Line H
Match Line G
Match Line F
Match Line E
Match Line D
Match Line C
Match Line A
Ditch
8:1
6:1
4:1
2:1
STA 414+00 to STA 417+00



QUANTITY CALCULATIONS
BY DC & DP DATE 8-23-71 & 10-15-71
CHKD DP & HF DATE 9-14-71 & 1-10-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

201
616
1-300
137 Yellow

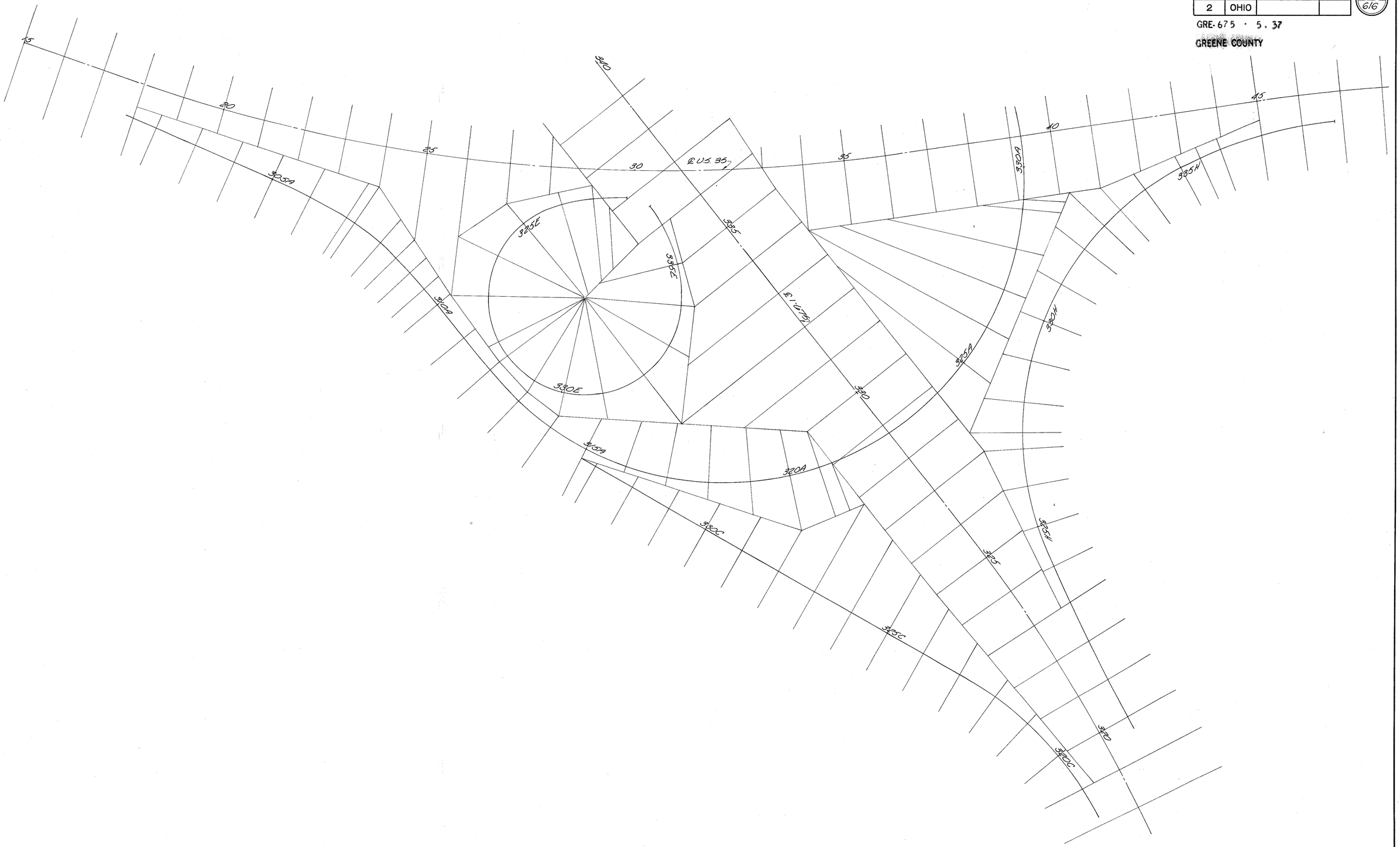
STA. 414+00 TO STA. 416+62 LEFT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

202
616

GRE-675 · 5.37

GREENE COUNTY

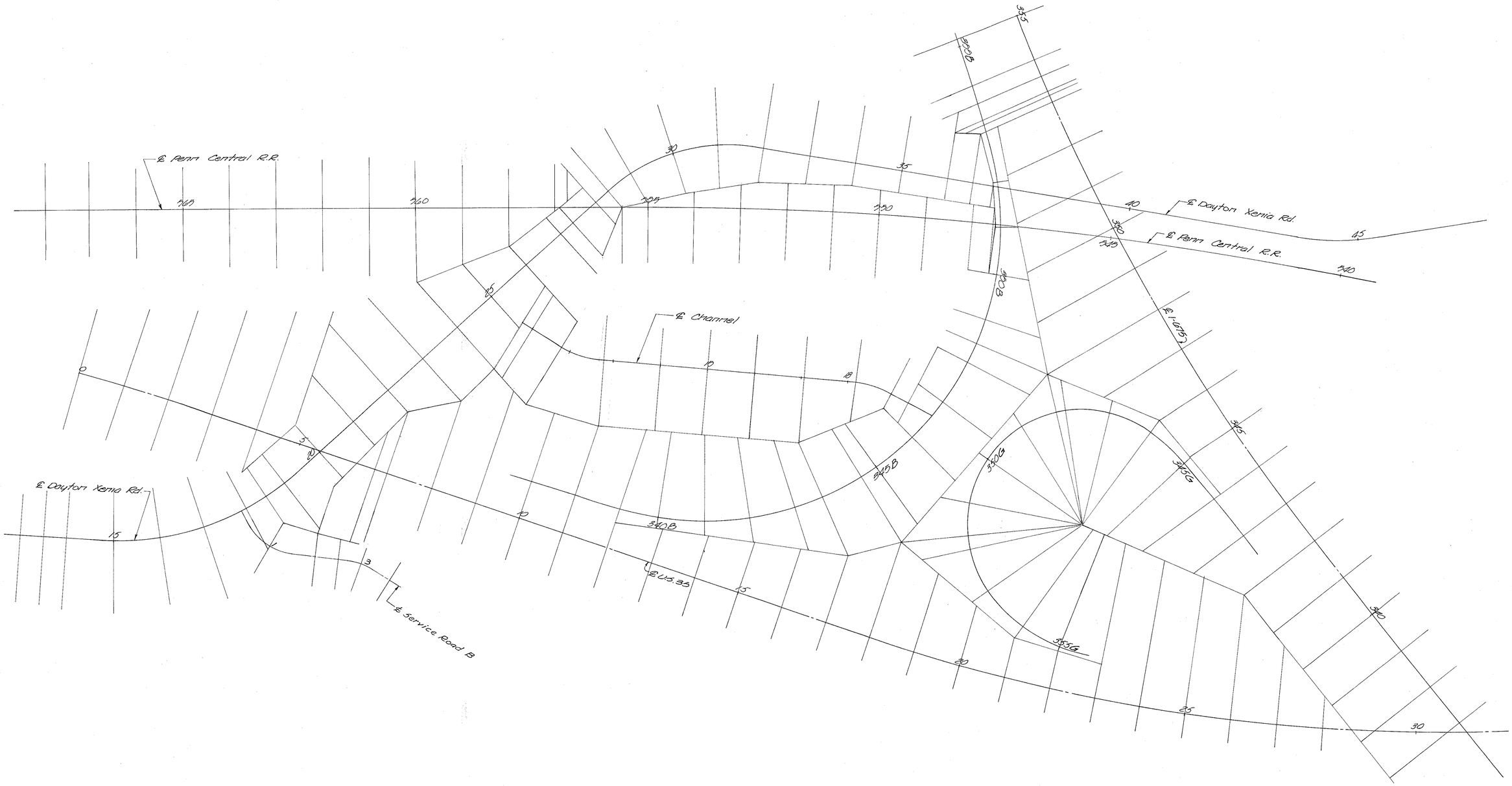


US 35 INTERCHANGE CROSS SECTION LAYOUT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

203
616

GRE-675 - 5.37
GREENE COUNTY

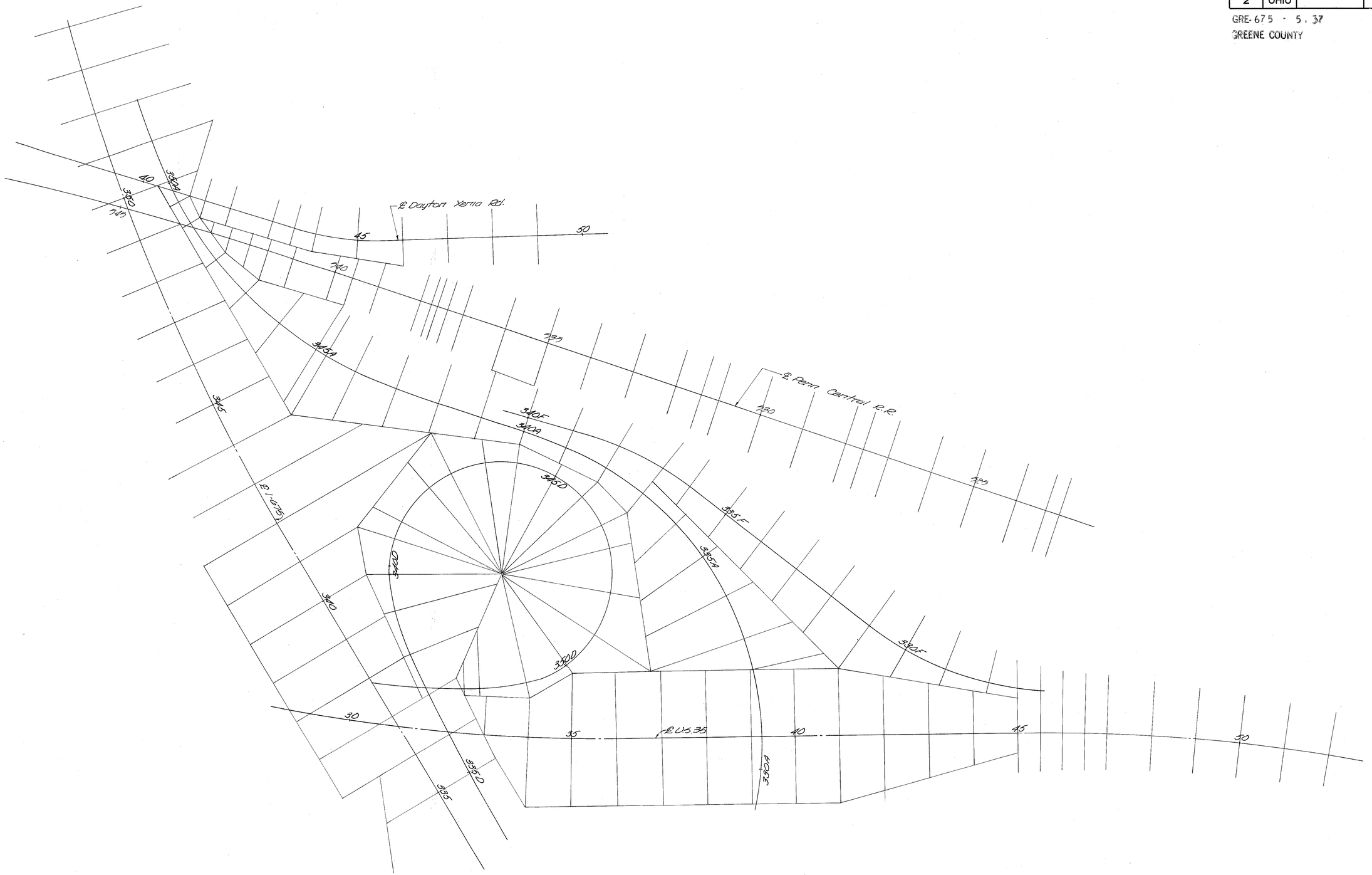


U.S. 35 INTERCHANGE CROSS SECTION LAYOUT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

204
616

GRE-675 - 5.37
GREENE COUNTY



U.S. 35 INTERCHANGE CROSS SECTION LAYOUT

NOMENCLATURE CHANGES
BY DCA-02 DATE 9-27-74 10-18-71
CHKD DRAWN DATE 9-27-74 1-11-72
KING AND GARAPIS
CONSULTING ENGINEERS

2 OHIO
GRE-675 · 5.37
GREENE COUNTY

140 120 100 80 60 40 20 0 20 40 60 80 100

930
920
910

74

133

5:1
4.1
918.8

1088+00 U.S.35
920.2
921.37

Sta. 1087+74.57 Meet Exist. E.B. Part.

20 Sta. 1087+74.57 E.B.

930
920

1087+00 U.S.35
919.3

930
920
910

1086+00 U.S.35
918.7

920
910

1085+00 U.S.35
917.6

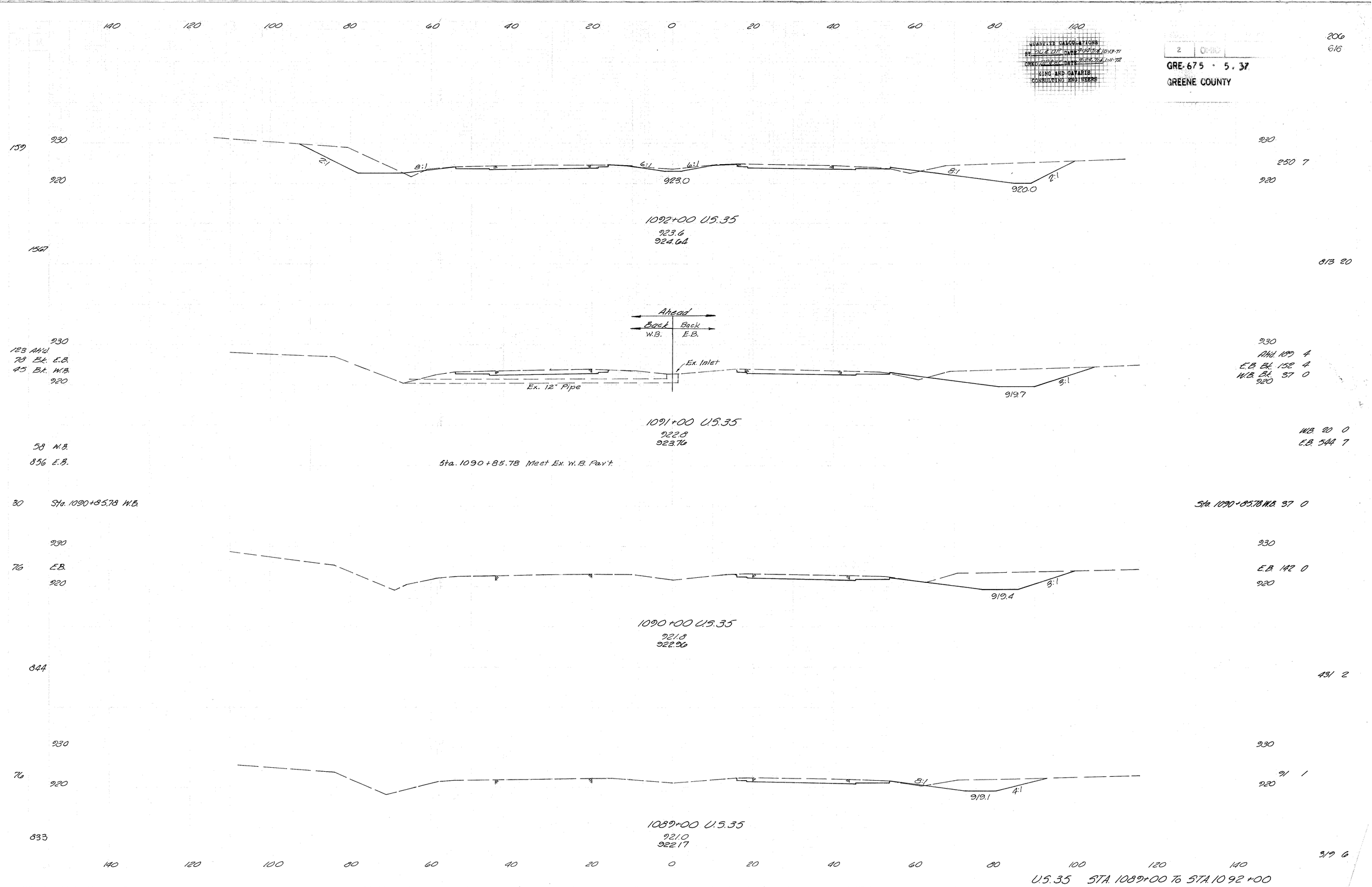
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

U.S.35 STA. 1085+00 To STA. 1088+00

920 81 2
910 59 1

Sta. 1087+74.57 44 0

930
920
910

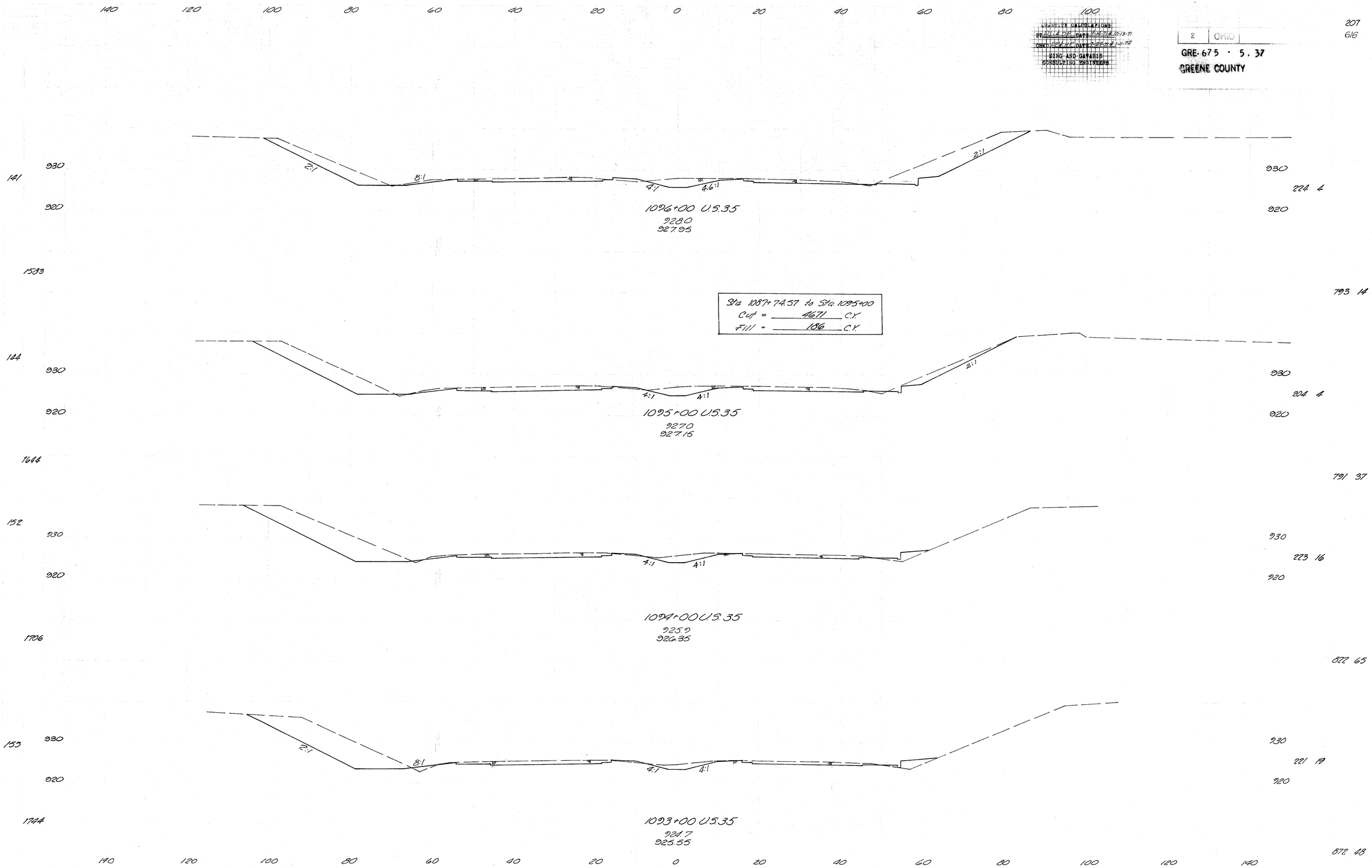


QUANTITY CALCULATIONS
BY OLE OP DATE 9-14-71 & 10-13-71
CHKD. DPHWE DATE 9-24-71 & 1-11-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
206
616
140 120 100 80 60 40 20 0 20 40 60 80 100
159
930
920
2:1
8:1
6:1
6:1
8:1
2:1
923.0
920.0
250 7
1092+00 U.S.35
923.6
924.64
1567
813 20
Ahead
Back W.B.
Back E.B.
Ex. Inlet
Ex. 12" Pipe
123 Ah'd.
78 Bk. E.B.
45 Bk. W.B.
Ah'd. 189 4
E.B. Bk. 152 4
W.B. Bk. 37 0
919.7
3:1
1091+00 U.S.35
922.8
923.76
58 W.B.
856 E.B.
W.B. 20 0
E.B. 544 7
Sta. 1090+85.78 Meet Ex. W.B. Pav't.
30
Sta. 1090+85.78 W.B.
Sta. 1090+85.78 W.B. 37 0
76
E.B.
E.B. 142 0
919.4
3:1
1090+00 U.S.35
921.8
922.96
844
431 2
76
919.1
8:1
4:1
91 1
1089+00 U.S.35
921.0
922.17
833
319 6
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
U.S.35 STA. 1089+00 To STA. 1092+00

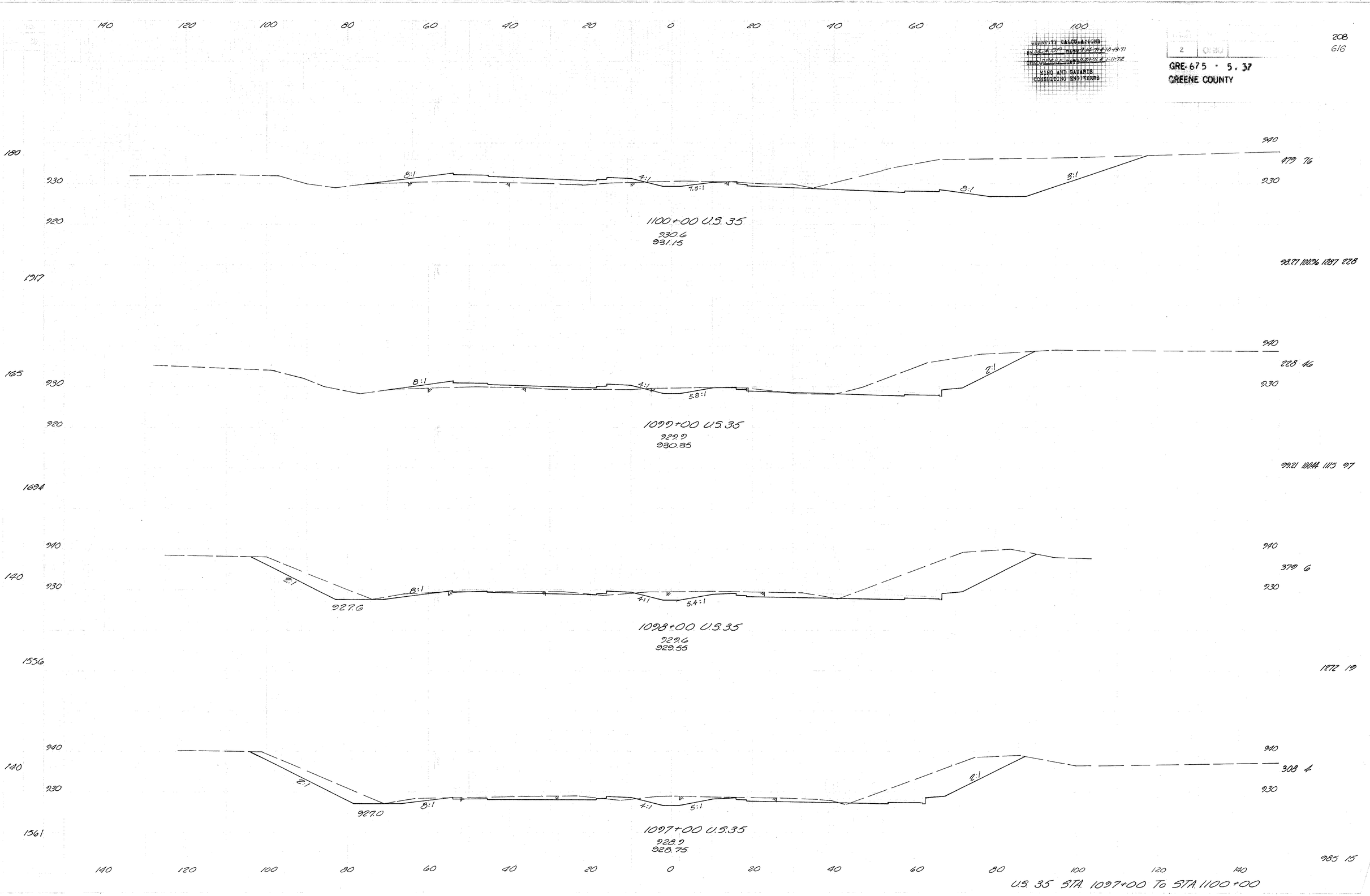
QUANTITY CALCULATIONS
BY DLA & DP DATE 9-14-71 & 10-13-71
CHKD OP & HF DATE 7-29-71 & 1-11-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY



U.S.35 STA. 1093+00 To STA. 1096+00



208
616
GRE-675 · 5.37
GREENE COUNTY
1100+00 U.S. 35
930.6
931.15
1099+00 U.S. 35
929.9
930.35
1098+00 U.S. 35
929.6
929.55
1097+00 U.S. 35
928.9
928.75
U.S. 35 STA. 1097+00 To STA. 1100+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY D.J.D.P. DATE 7/14/71 6-13-71
CHKD. DEGREE DATE 2/27/76 11-11-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised - I.E.H. 1/79

2 OHIO
GRE-675 · 5.37
GREENE COUNTY

209
616

2171
930
920
8:1
4:1
7.5:1
2:1
48:1
2:1
2:1
923.2
930
920
128 848

1104+00 U.S.35
927.1
934.31

2372
10182 9279 494 2858

2101
930
920
8:1
8:1
3:1
2:1
924.5
930
920
134 428

1103+00 U.S.35
930.9
933.55

9981 10015 660 1154

2339
930
920
211
8:1
Sta 1102+00 ℄
Std No. CB-8
Fl. Gr = 930.75
Fl. 15" = 927.75
3' Rod Collar
Std. HW-4 Headwall
E Outlet = 926.00
Rock Channel Protection
Type B (18" Thick)
Width = 4'
90' 1.94 %
925.9
4'
930
920
223 194

1102+00 U.S.35
931.5
932.75
603 - 15" Conduit Type B

Estimated Quantities

601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	90	L.F.
604	Std. No. CB-8	1	Ea.
620	Sedding	.103	S.Y.

9858 10067 845 513

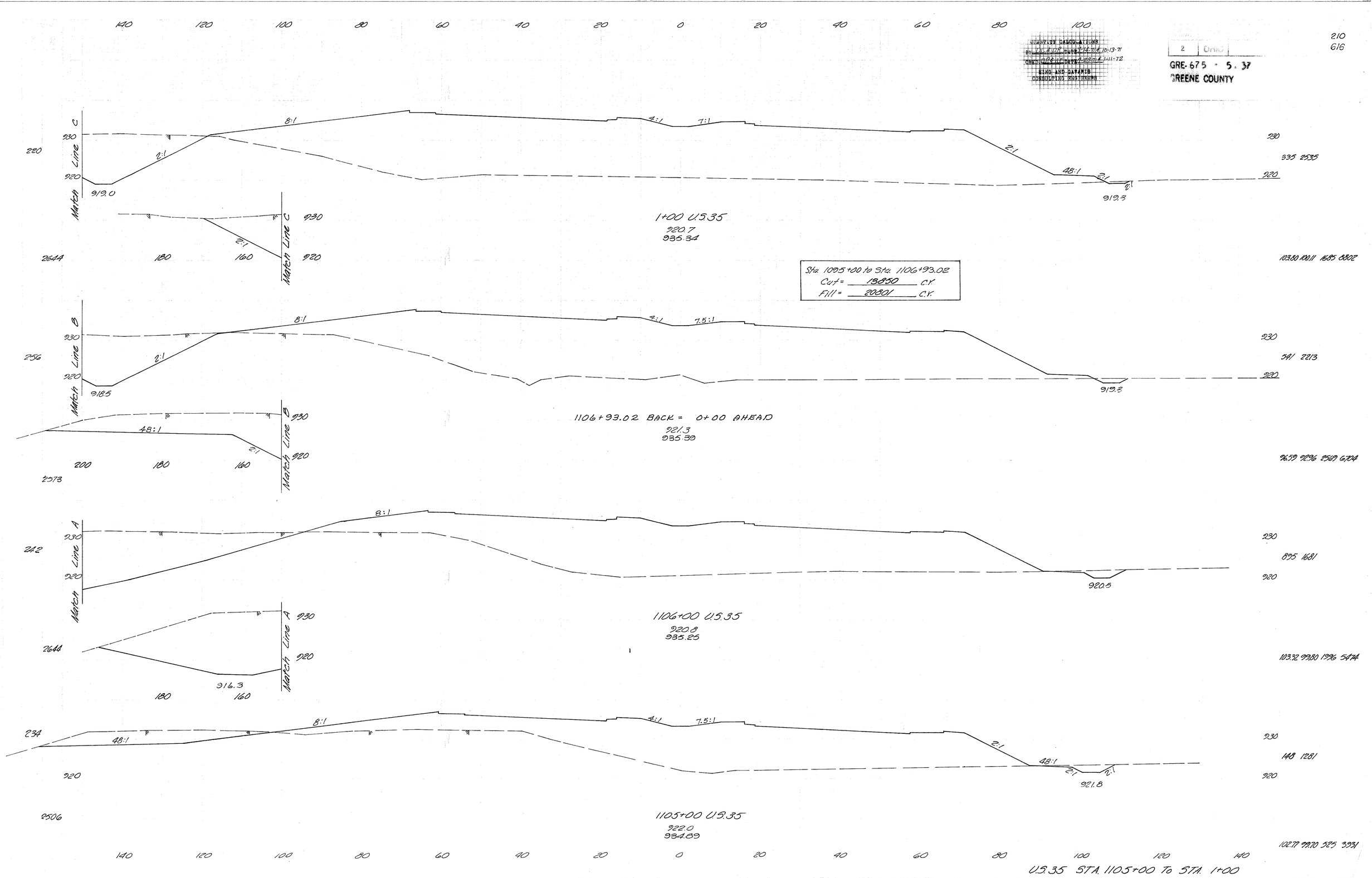
2056
195
930
920
24:1
8:1
7:1
1.5:1
8:1
3:1
930
920
240 81

1101+00 U.S.35
931.3
931.95

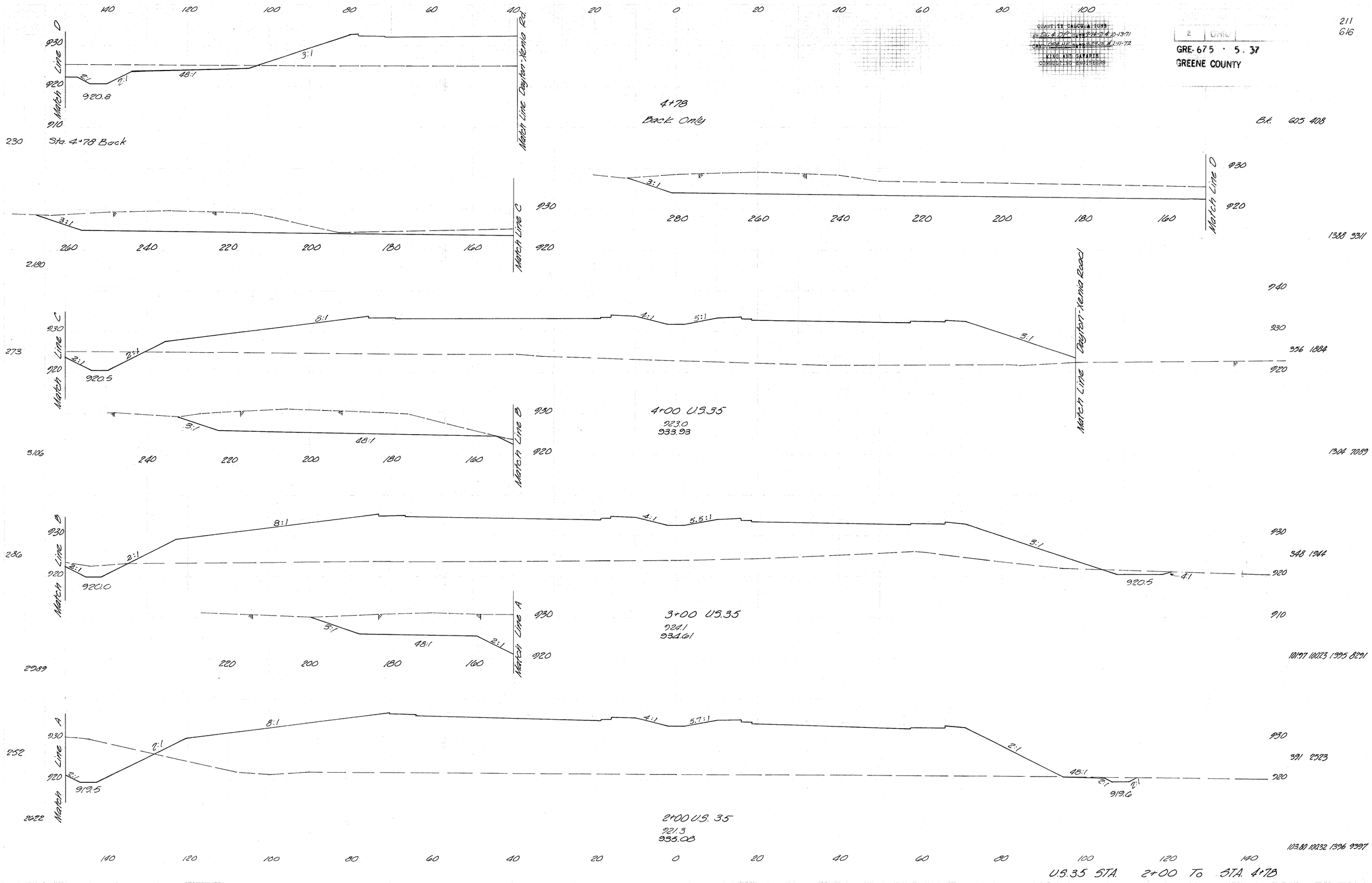
2083
9831 10079 1503 894

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

U.S. 35 STA. 1101+00 To STA. 1104+00



U.S.35 STA. 1105+00 To STA. 1+00



QUANTITY CALCULATIONS
BY DL & DP DATE 9-14-71 & 10-13-71
CHKD DRA HE DATE 9-29-71 & 1-11-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
211
616
Match Line D
Match Line Dayton-Xenia Rd.
Sta. 4+78 Back
920.8
4+78
Back Only
B.K. 605 408
Match Line C
Match Line D
1388 3311
Match Line C
Match Line Dayton-Xenia Road
920.5
4+00 U.S.35
923.0
933.93
356 1884
Match Line B
Match Line B
1304 7089
Match Line B
Match Line A
920.0
3+00 U.S.35
924.1
934.61
348 1944
920.5
101.97 100.23 1395 8291
Match Line A
Match Line A
919.5
2+00 U.S. 35
921.3
935.08
391 2523
919.6
103.80 100.32 1396 9397
U.S.35 STA. 2+00 To STA. 4+78

GAYLORD CALCULATIONS
BY GJ DATE 7-16-71 & 10-13-71
CHKD RPH/WC DATE 7-29-71 & 11-11-72
KING AND GARARDS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

Sta. 8+30
End Berm Transition Lt.
Begin 30' Berm

G.R. 8:1
108'

Match Line ℄
930
920
910
3:1
8:1
4:1
4:1
2:1
293
2817

Match Line Channel
930
920
910
24:1
4:1
909.5
200 180 160

8+00 U.S. 35
925.3
929.07

Match Line ℄
920
910
2:1
1984 879

Match Line ℄
910
2:1
160 180

Sta. 8+00
End Berm Transition Rt.
Begin 60' Berm

920
910
2:1
2:1
903.5
160 180

Match Line Dayton Xenia Road
230
220
210
3:1
2.14
551

7+00 U.S. 35
927.2
930.60

Match Line Dayton Xenia Road
920
910
2:1
48:1
2:1
9039
895 630

Match Line ℄
920
910

Match Line Dayton Xenia Road
930
920
910
140

6+72 U.S. 35

4:1
4:1

Match Line A
920
910
160

Match Line Service Road B

Match Line B
720
910
2:1
160

Match Line Service Road B

Match Line B
920
910
385 653

Sta. 6+50
Begin Berm Transition Rt.
End 15' Berm
71'
Var.
904.0

Match Line Dayton Xenia Rd.
930
920
910
Var.
9123
Ahead Only

Match Line A
930
920
910
Ahd. 239 318
832 1295

96 Sta. 6+00 Ahd.

6+00 U.S. 35

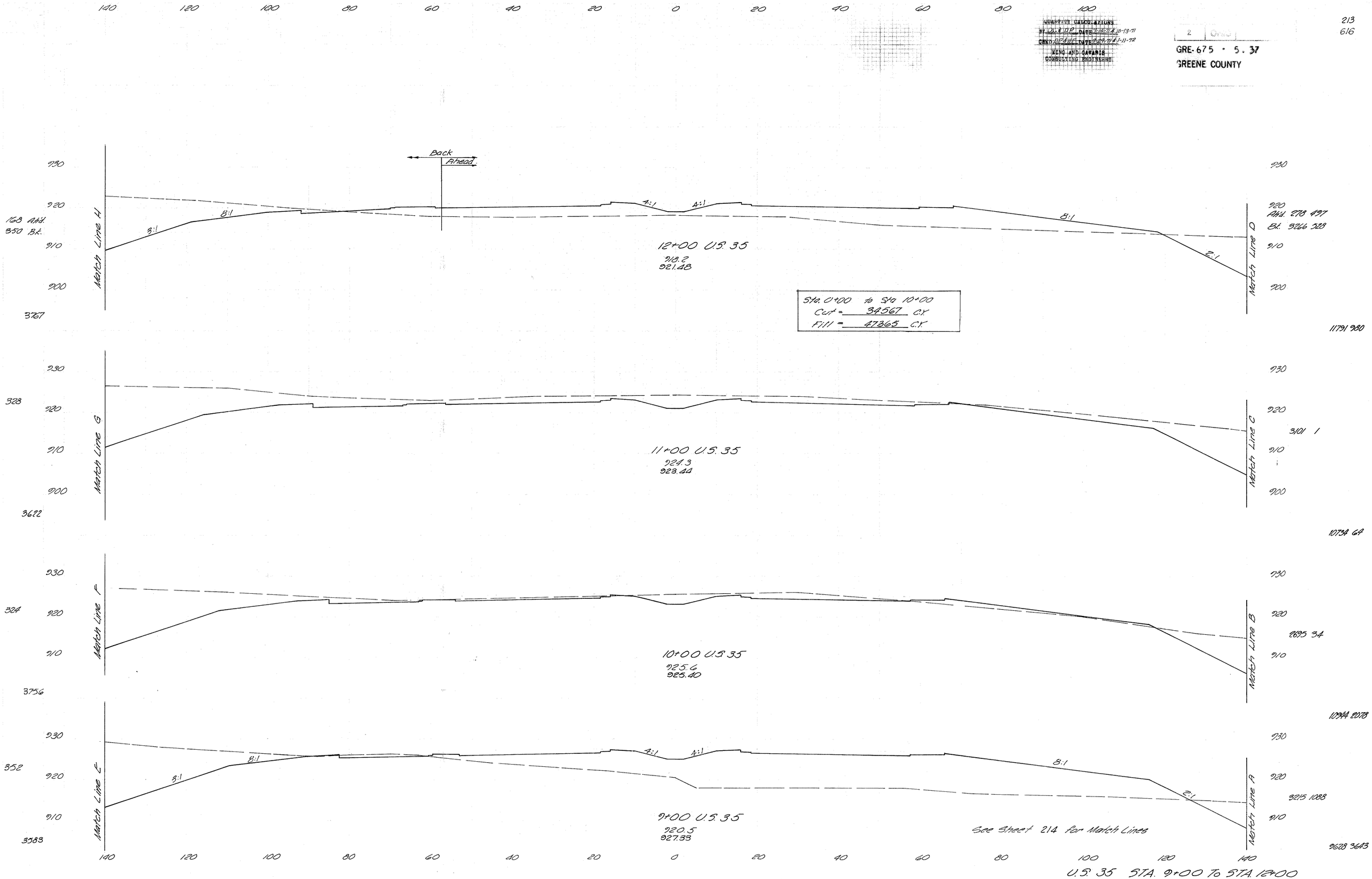
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

U.S. 35 STA. 6+00 To STA. 8+00

QUANTITY CALCULATIONS
BY DL & DP DATE 9-14-71 & 10-13-71
CHKD DP & HE DATE 9-29-71 & 1-11-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 | OHIO

GRE-675 · 5.37
GREENE COUNTY

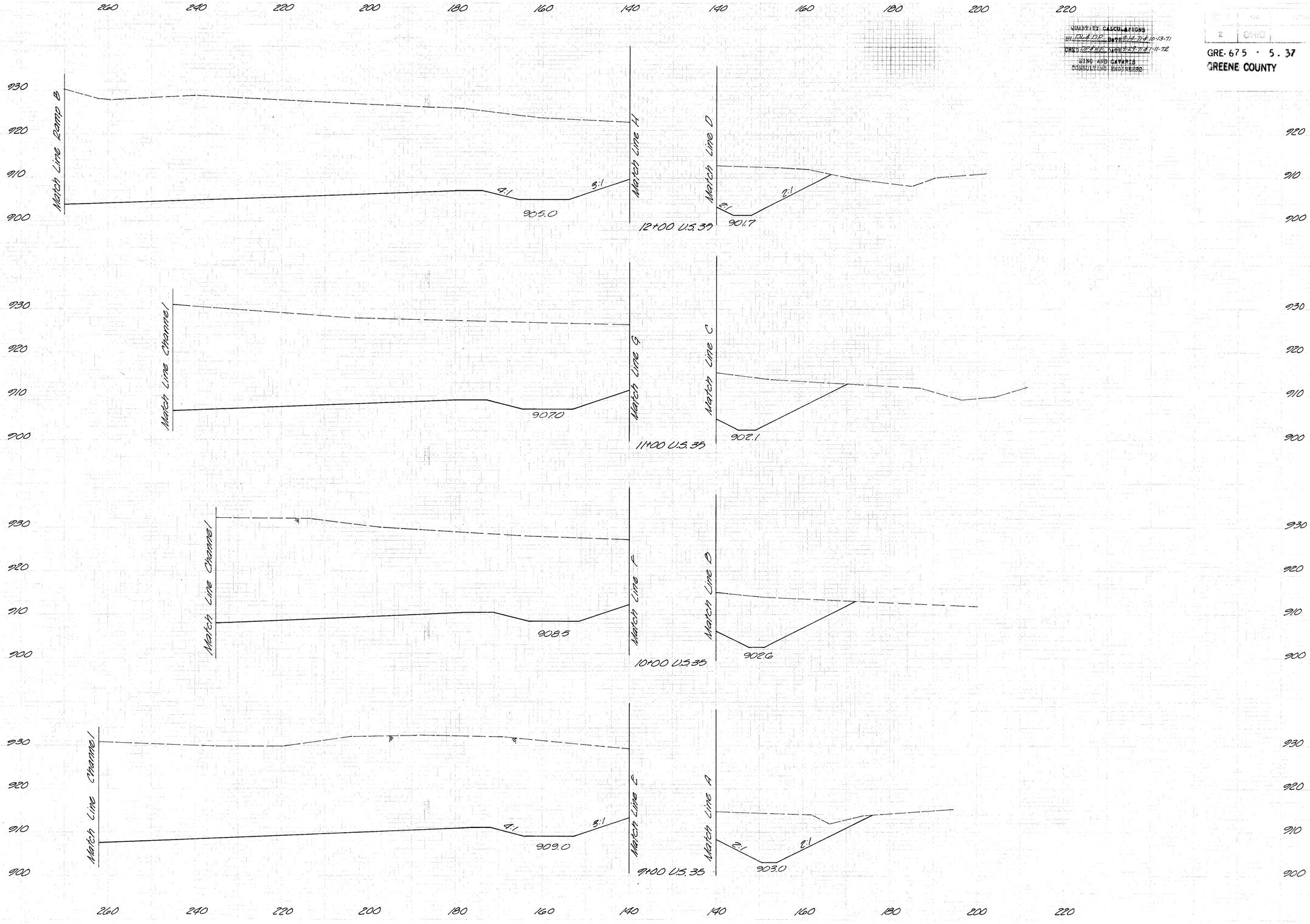


U.S. 35 STA. 9+00 To STA. 12+00

QUANTITY CALCULATIONS
BY DLA/DP DATE 7-14-71 & 10-13-71
CHKD DP/HC DATE 7-27-71 & 11-12-72
MING AND GAVARIS
CONSULTING ENGINEERS

CHKD

GRE-675 - 5.37
GREENE COUNTY



U.S. 35 STA. 9+00 to STA. 12+00 Left & Right

WORK BY CASCO & TENG
BY TDC & DP DATE 7-14-71 & 11-19-71
CHK. DP & HE DATE 8-29-71 & 1-11-72
KING AND DAMARIN
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

140 120 100 80 60 40 20 0 20 40 60 80 100

Match Line D
910
900
2:1
4:1
899.9
160

209
910
900
Match Line Ramp B
4.5:1
4:1
8:1
Match Line D
910
900
198 1271

16+00 U.S.35
906.4
914.49

2256
Match Line C
910
900
900.4
160
928 4402

Match Line Ramp B
6:1
6:1
4.2:1
4:1
Match Line C
910
900
303 1106

197
910
900

15+00 U.S.35
902.0
915.82

Match Line B
920
910
900
900.8
160
1343 3715

2139
920
910
900

Match Line Ramp B
4:1
4:1
915.4
Match Line B
910
900
472 900

188
910

14+00 U.S.35
911.7
915.57

2006

Match Line A
910
900
901.2
160
1050 3117

Match Line Ramp B
4:1
4:1
8:1
2:1
Match Line A
910
900
145 783

173
920
910

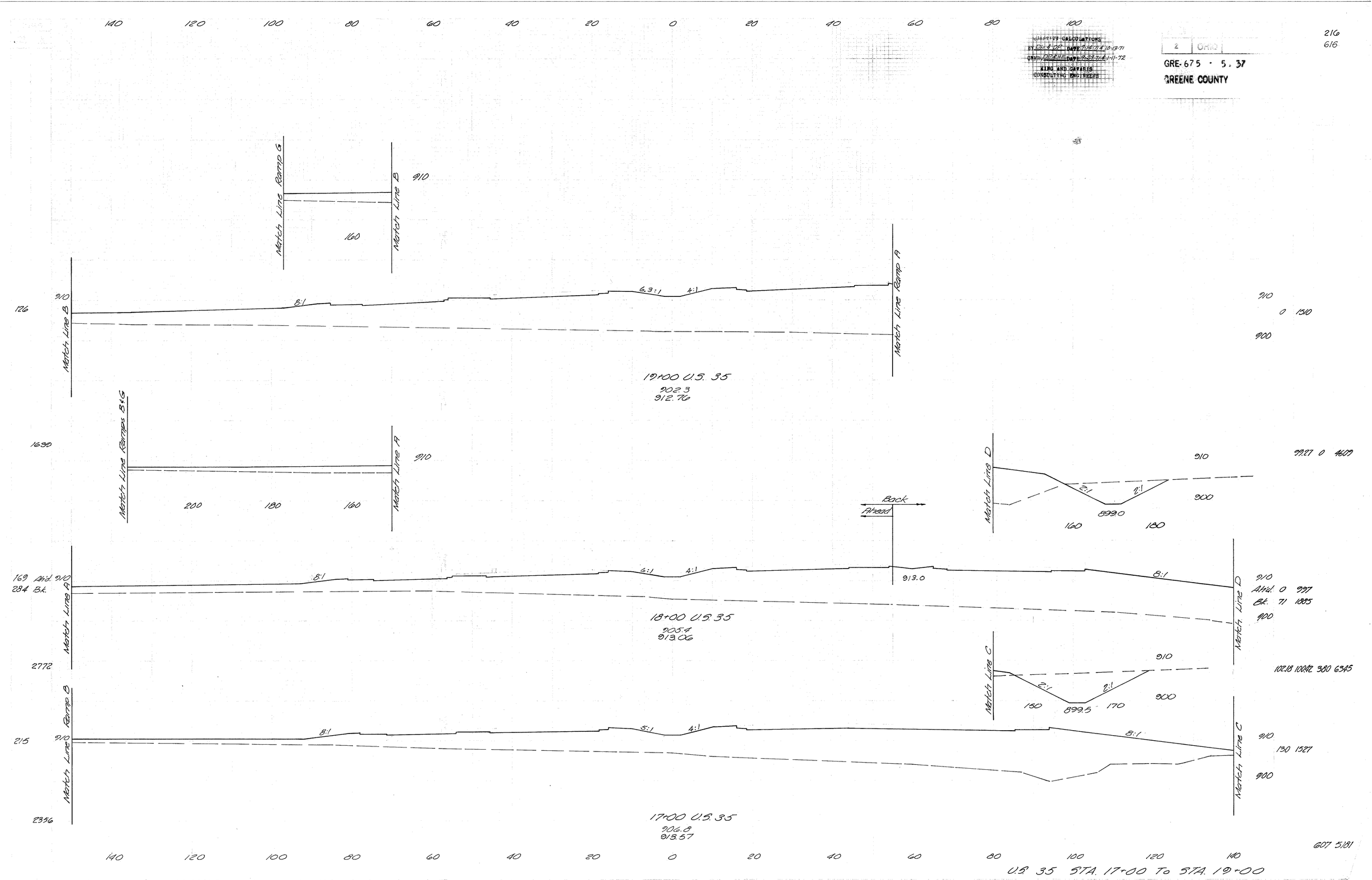
1894
900

13+00 U.S. 35
913.9
919.53

783 2370

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

U.S. 35 STA. 13+00 To STA. 16+00

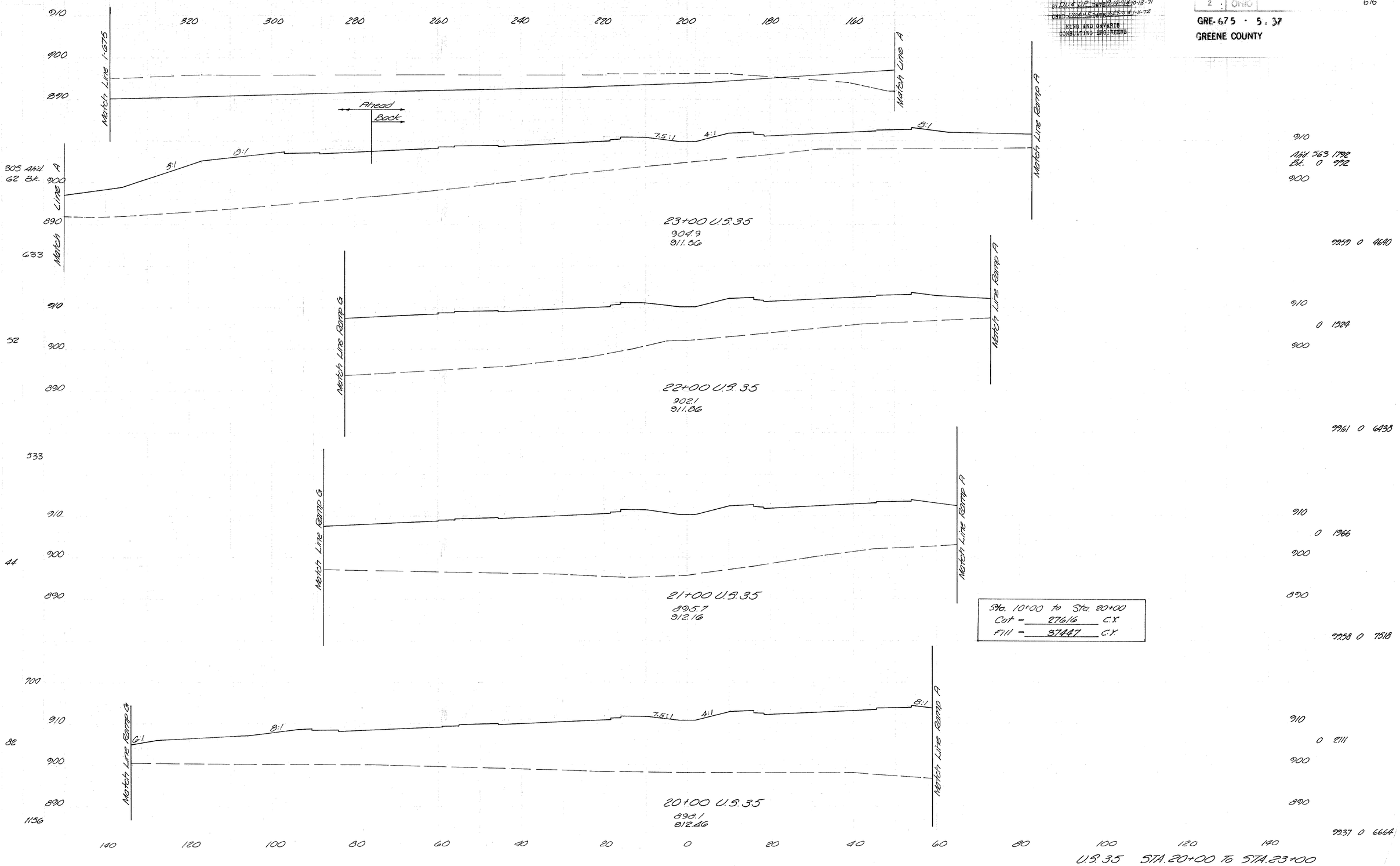


U.S. 35 STA. 17+00 To STA. 19+00

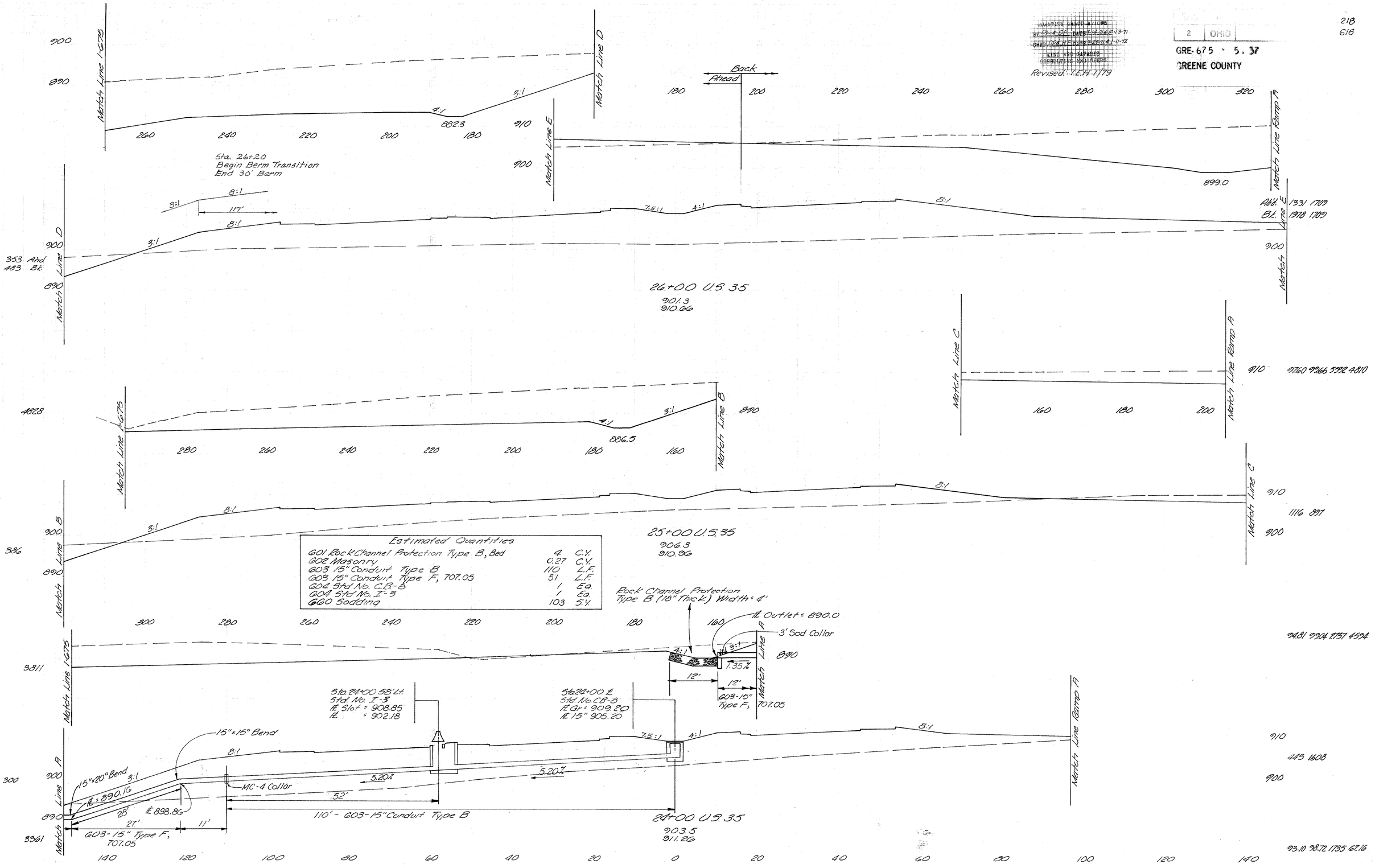
QUANTITY CALCULATIONS
BY DL & DR DATE 9-14-71 & 10-13-71
CHKD. DR & H.E. DATE 9-27-71 & 1-11-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 : OHIO

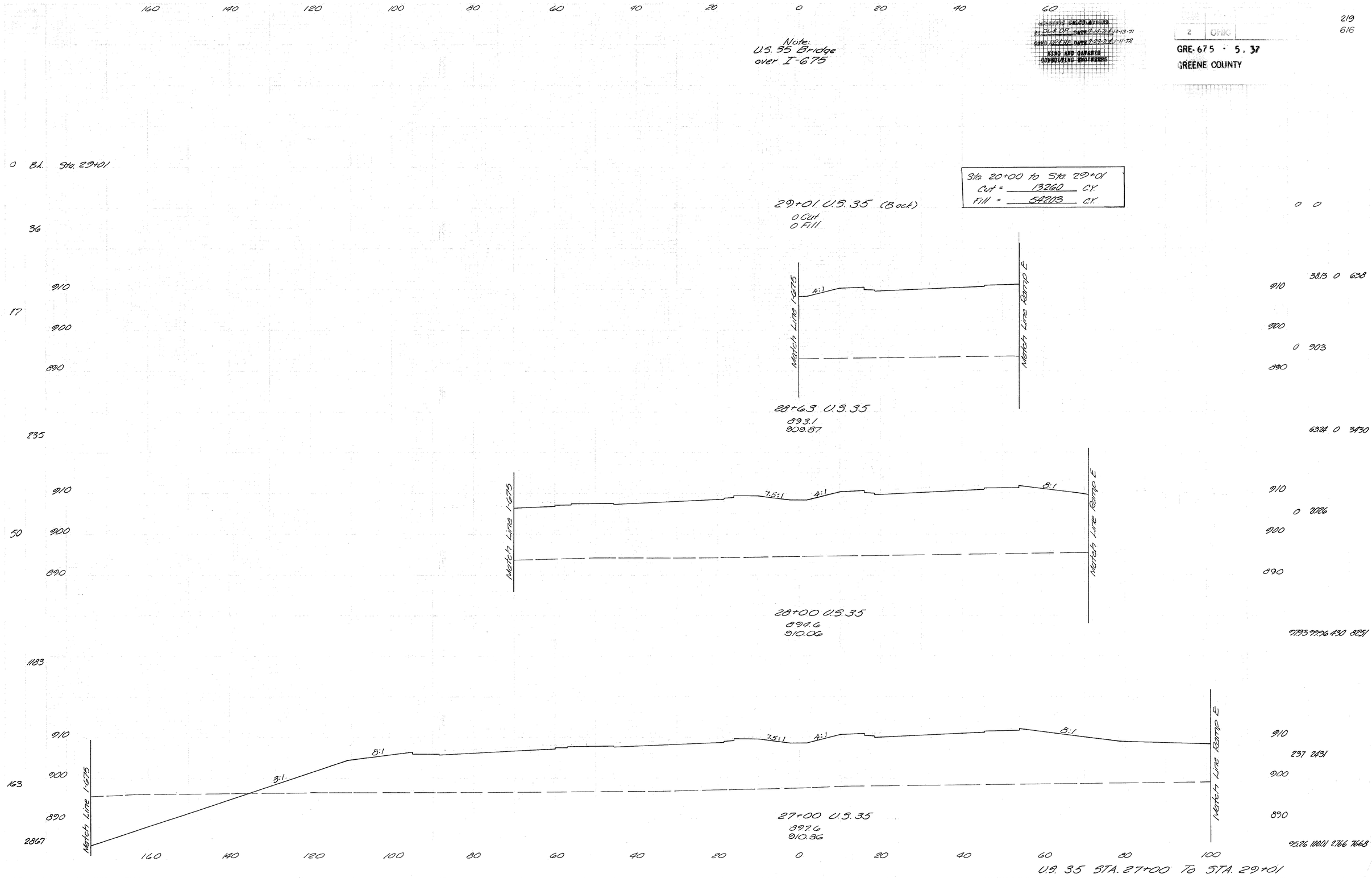
GRE-675 · 5.37
GREENE COUNTY



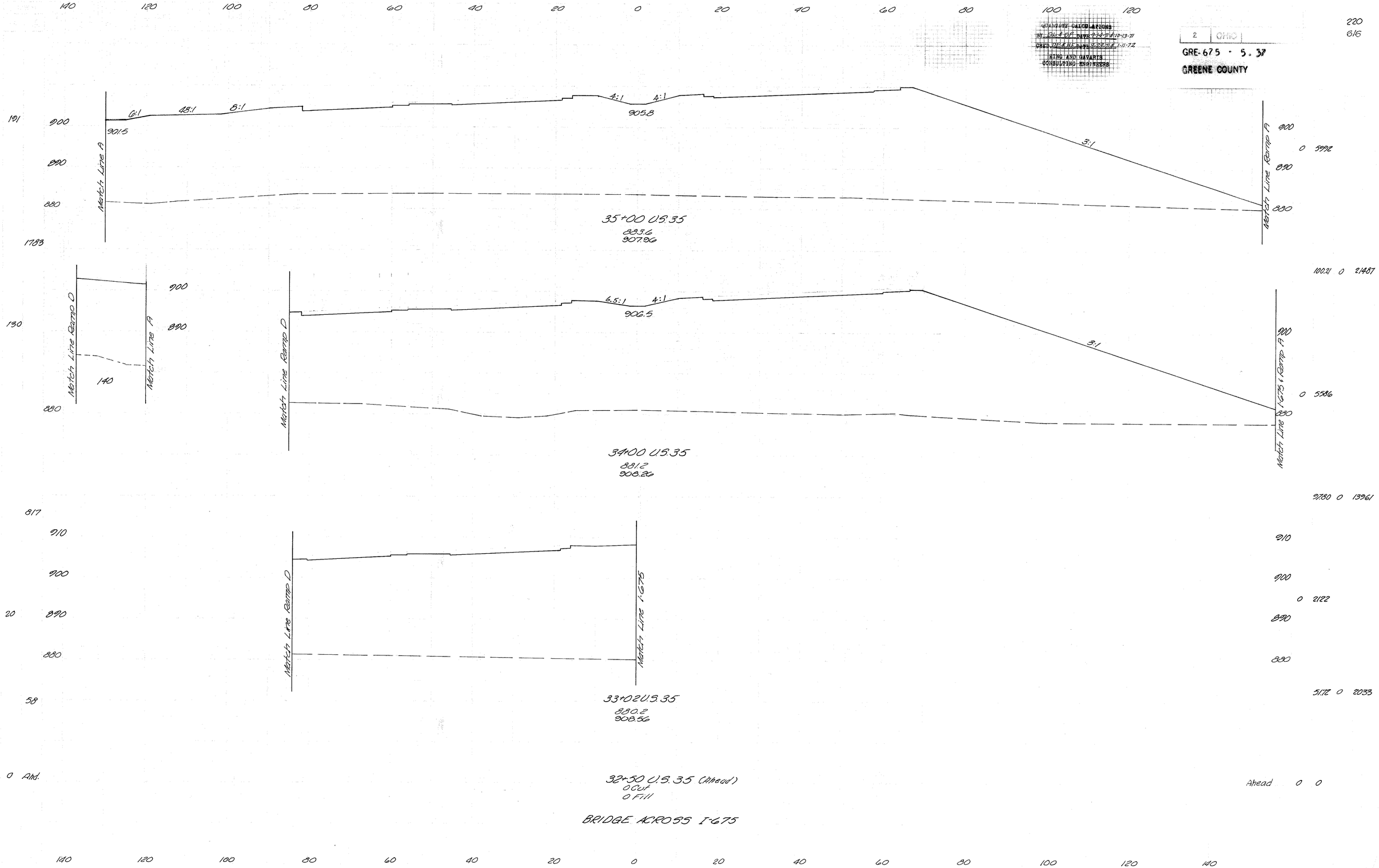
Sta. 10+00 to Sta. 20+00
Cut = 27616 C.Y.
Fill = 37447 C.Y.



Revised: T.E.H. 1/79
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
218
616
Match Line 1-675
Match Line D
Match Line E
Match Line Ramp A
Back
Ahead
Sta. 26+20
Begin Berm Transition
End 30' Berm
882.3
899.0
117'
353 Ahd.
483 Bk.
Ahd. 1331 1709
Bk. 1978 1709
26+00 U.S. 35
901.3
910.66
Match Line C
Match Line B
886.5
25+00 U.S. 35
906.3
910.96
Estimated Quantities
601 Rock Channel Protection Type B, Bed 4 C.Y.
602 Masonry 0.27 C.Y.
603 15" Conduit Type B 110 L.F.
603 15" Conduit Type F, 707.05 51 L.F.
604 Std No. C.B.-8 1 Ea.
604 Std No. I-3 1 Ea.
660 Sodding 103 S.Y.
Rock Channel Protection
Type B (18" Thick) Width = 4'
℄ Outlet = 890.0
3' Sod Collar
1.35%
12'
603-15" Type F, 707.05
Sta. 24+00 58' Lt.
Std. No. I-3
℄ Slot = 908.85
℄ = 902.18
Sta. 24+00 ℄
Std. No. CB-8
℄ Gr = 909.20
℄ 15" 905.20
15"×15° Bend
15"×20° Bend
℄ = 890.16
℄ 898.86
MC-4 Collar
5.20%
52'
110' - 603-15" Conduit Type B
24+00 U.S. 35
903.5
911.26
603-15" Type F, 707.05
U.S. 35 STA. 24+00 To STA. 26+00



Note:
U.S. 35 Bridge
over I-675
GRE-675 · 5.37
GREENE COUNTY
219
616
Sta. 20+00 to Sta. 29+01
Cut = 13260 C.Y.
Fill = 54203 C.Y.
0 BL. Sta. 29+01
29+01 U.S. 35 (Back)
0 Cut
0 Fill
Match Line I-675
Match Line Ramp E
4:1
28+63 U.S. 35
893.1
909.87
7.5:1
8:1
28+00 U.S. 35
894.6
910.06
3:1
27+00 U.S. 35
897.6
910.36
U.S. 35 STA. 27+00 To STA. 29+01



QUANTITY CALCULATIONS
BY DL & DP DATE 9-14-71 & 10-13-71
CHKD DP & HF DATE 9-22-71 & 1-11-72
RING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
220
616
140 120 100 80 60 40 20 0 20 40 60 80 100 120
191
900
890
880
1783
6:1
48:1
8:1
4:1
4:1
901.5
905.8
3:1
Match Line A
Match Line Ramp A
0 5992
35+00 U.S.35
883.6
907.96
100.21 0 21487
130
Match Line Ramp D
Match Line A
140
6.5:1
4:1
906.5
3:1
Match Line Ramp D
Match Line 1-675 & Ramp A
0 5586
34+00 U.S.35
881.2
908.26
97.80 0 13961
817
910
900
890
880
20
58
Match Line Ramp D
Match Line 1-675
0 2122
51.72 0 2033
33+02 U.S.35
880.2
908.56
0 Ahd.
32+50 U.S.35 (Ahead)
0 Cut
0 Fill
Ahead 0 0
BRIDGE ACROSS I-675
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
U.S.35 STA. 32+50 TO STA. 35+00

140 120 100 80 60 40 20 0 20 40 60 80 100

920
910
890

142

Match Line Ramp A

3:1 4:1 4:1 2:1

906.2 906.2

Match Line Ramp A

0 3185

1867

39+00 U.S. 35
895.3
906.76

89 14096

194

Match Line Ramp A

890

8:1 4:1 4:1 3:1

906.5 906.7

8948

Match Line Ramp A

48 2643

2167

38+00 U.S. 35
894.1
907.06

178 11587

196

900 Ramp A
890

8:1 5:1 4:1 3:1

884.5

900 Ramp A
48 3614
890
6:1

2172

37+00 U.S. 35
893.8
907.96

Match Line

101.86 99.80 138 14672

195

900

48:1 8:1 5:1 4:1 3:1

880 Ramp A

2144

Match Line

900
25 4324
Ramp A Line

Match

101.86 99.70 47 19047

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

36+00 U.S. 35
893.6
907.66

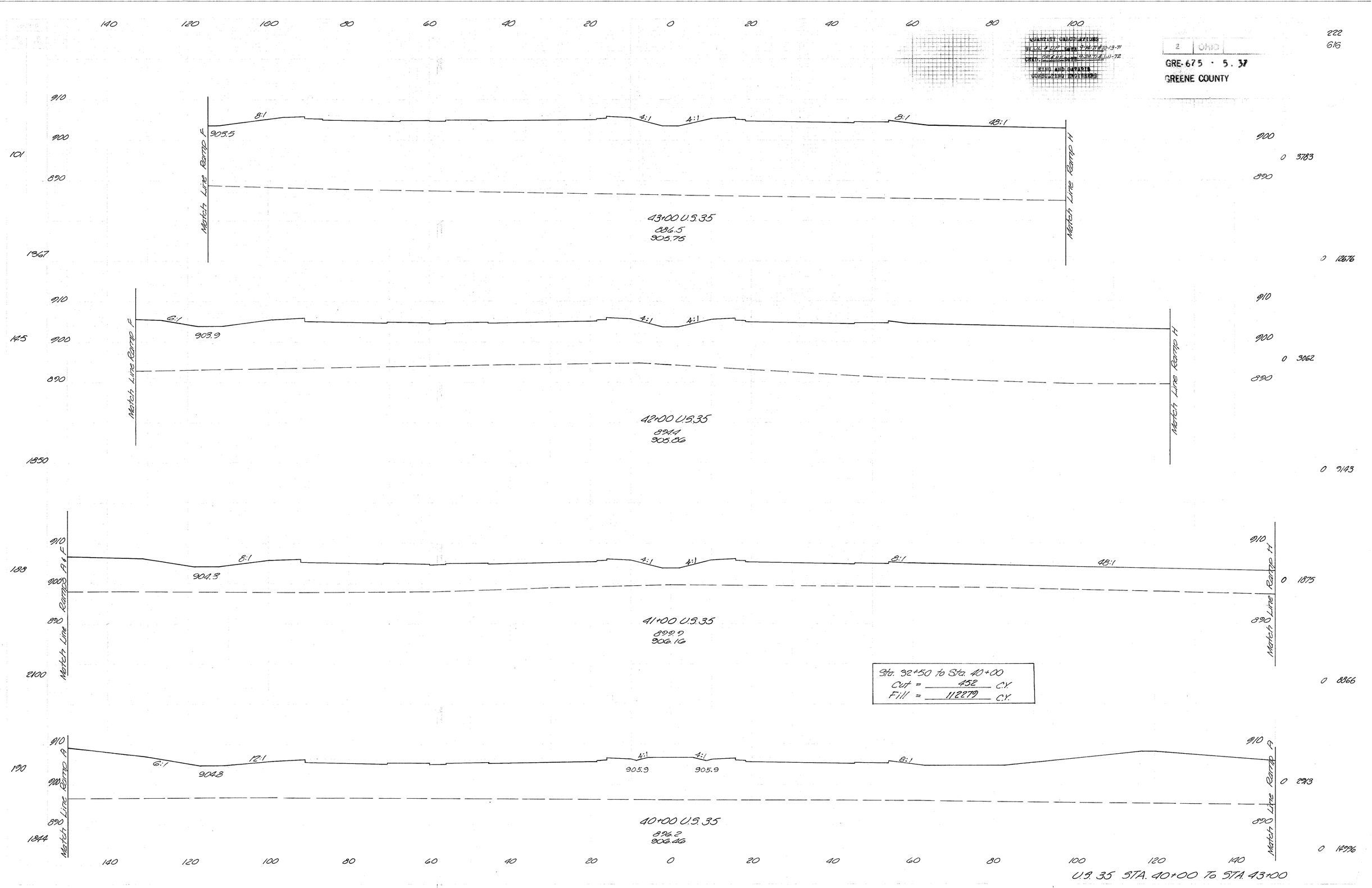
U.S. 35 STA. 36+00 TO STA. 39+00

GRE 675 - 5.37
GREENE COUNTY

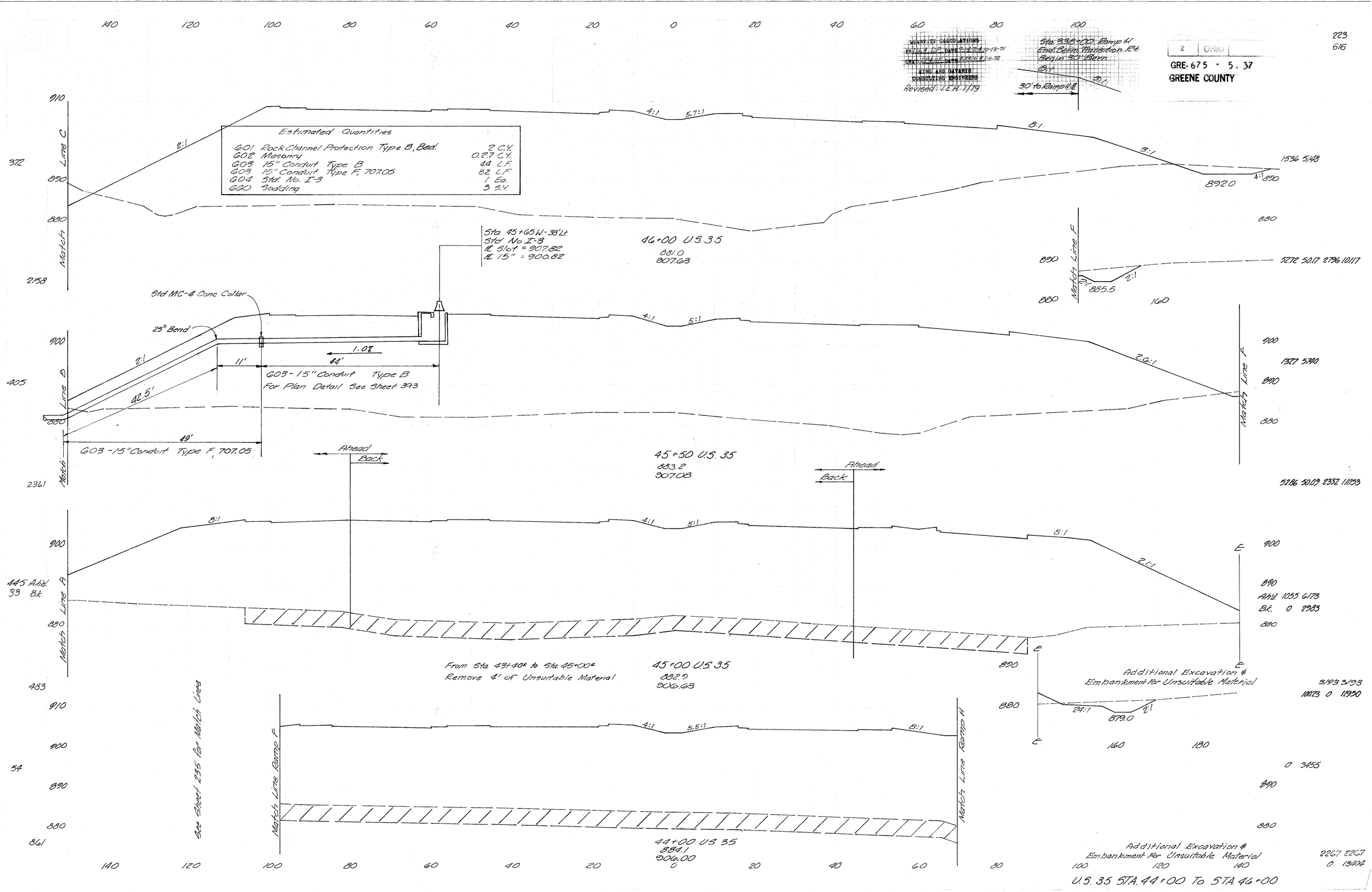
WING AND EVANS
CONSULTING ENGINEERS

DRAWN CHECKED
BY DLA DATE 2-14-72 10-13-71
CHKD DLA DATE 2-22-72 1-11-72

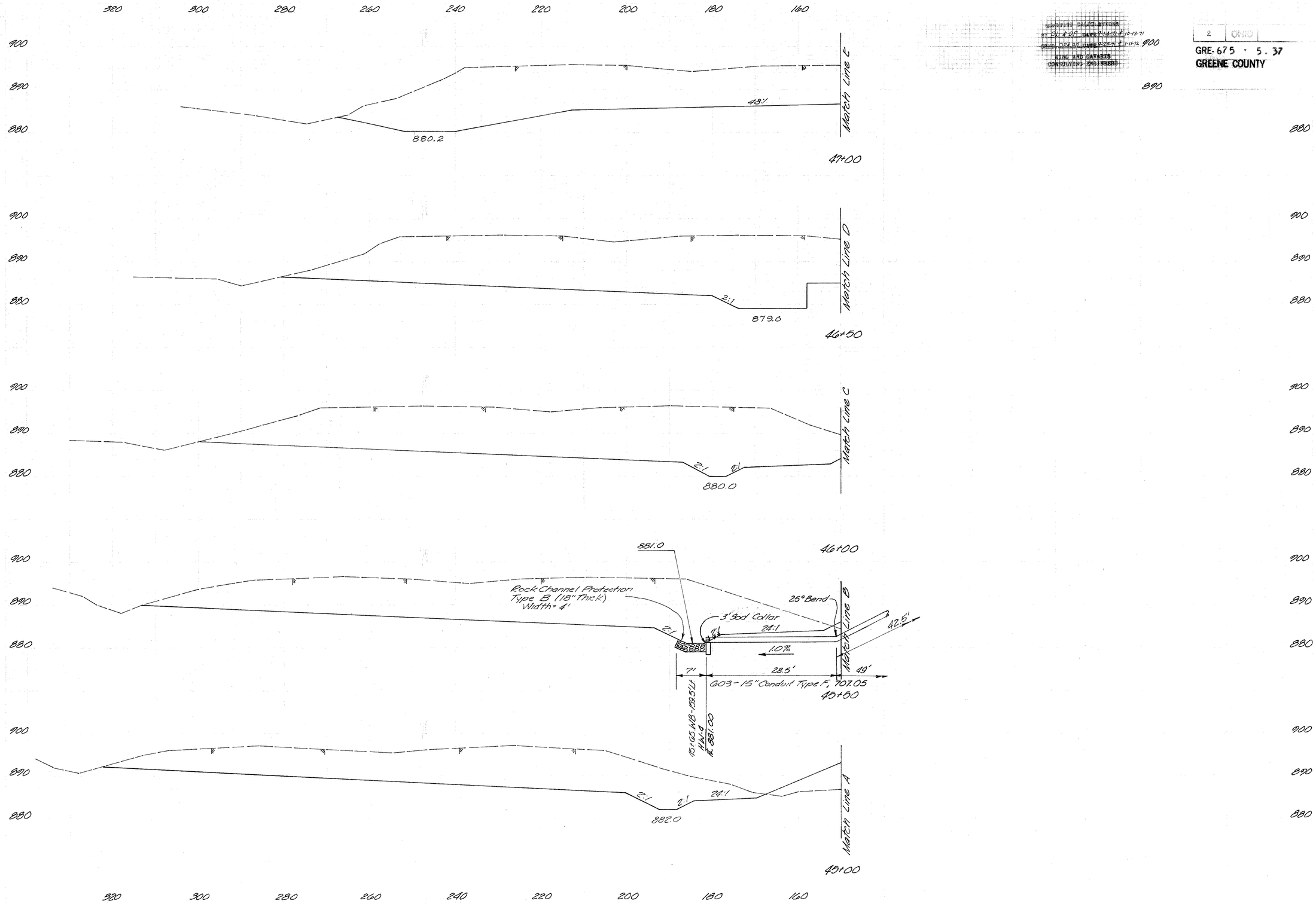
221
616



QUANTITY CALCULATIONS
BY DD & DP DATE 9-14-71 & 10-13-71
CHKD. DP & HE DATE 9-29-71 & 1-11-72
KING AND DAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
222
616
43+00 U.S.35
886.5
905.75
Match Line Ramp F
Match Line Ramp H
903.5
8:1
4:1
4:1
8:1
48:1
42+00 U.S.35
894.4
905.86
903.9
6:1
41+00 U.S.35
899.9
906.16
904.3
8:1
4:1
4:1
8:1
48:1
40+00 U.S.35
896.2
906.46
904.8
6:1
12:1
905.9
905.9
4:1
4:1
8:1
Sta. 32+50 to Sta. 40+00
Cut = 452 C.Y.
Fill = 112279 C.Y.
U.S. 35 STA. 40+00 To STA. 43+00



QUANTITY CALCULATIONS
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79
Sta. 338+00 Ramp H
End Berm Transition Rt.
Begin 30' Berm
30' to Ramp H ℄
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
223
616
Estimated Quantities
601 Rock Channel Protection Type B, Bed. 2 C.Y.
602 Masonry 0.27 C.Y.
603 15" Conduit Type B 44 L.F.
603 15" Conduit Type F, 707.05 82 L.F.
604 Std. No. I-3 1 Ea.
660 Sodding 3 S.Y.
Match Line C
Match Line B
Match Line A
Match Line F
Match Line Ramp F
Match Line Ramp H
Sta. 45+65W-38'Lt.
Std No I-3
℄ Slot = 907.82
℄ 15" = 900.82
46+00 U.S. 35
881.0
907.63
Std MC-4 Conc. Collar
25° Bend
1.0%
11'
44'
603-15" Conduit Type B
For Plan Detail See Sheet 393
42.5'
49'
603-15" Conduit Type F, 707.05
Ahead
Back
45+50 U.S. 35
883.2
907.08
From Sta. 43+40± to Sta. 45+00±
Remove 4' of Unsuitable Material
45+00 U.S. 35
882.9
906.63
See Sheet 235 for Match Lines
44+00 US 35
884.1
906.00
Additional Excavation &
Embankment for Unsuitable Material
U.S. 35 STA. 44+00 To STA. 46+00



CONSULTING CALCULATIONS
BY Ob & OP DATE 9-14-71 & 10-13-71
CHKD DR & NE DATE 9-29-71 & 1-11-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 | OHIO

GRE-675 · 5.37
GREENE COUNTY

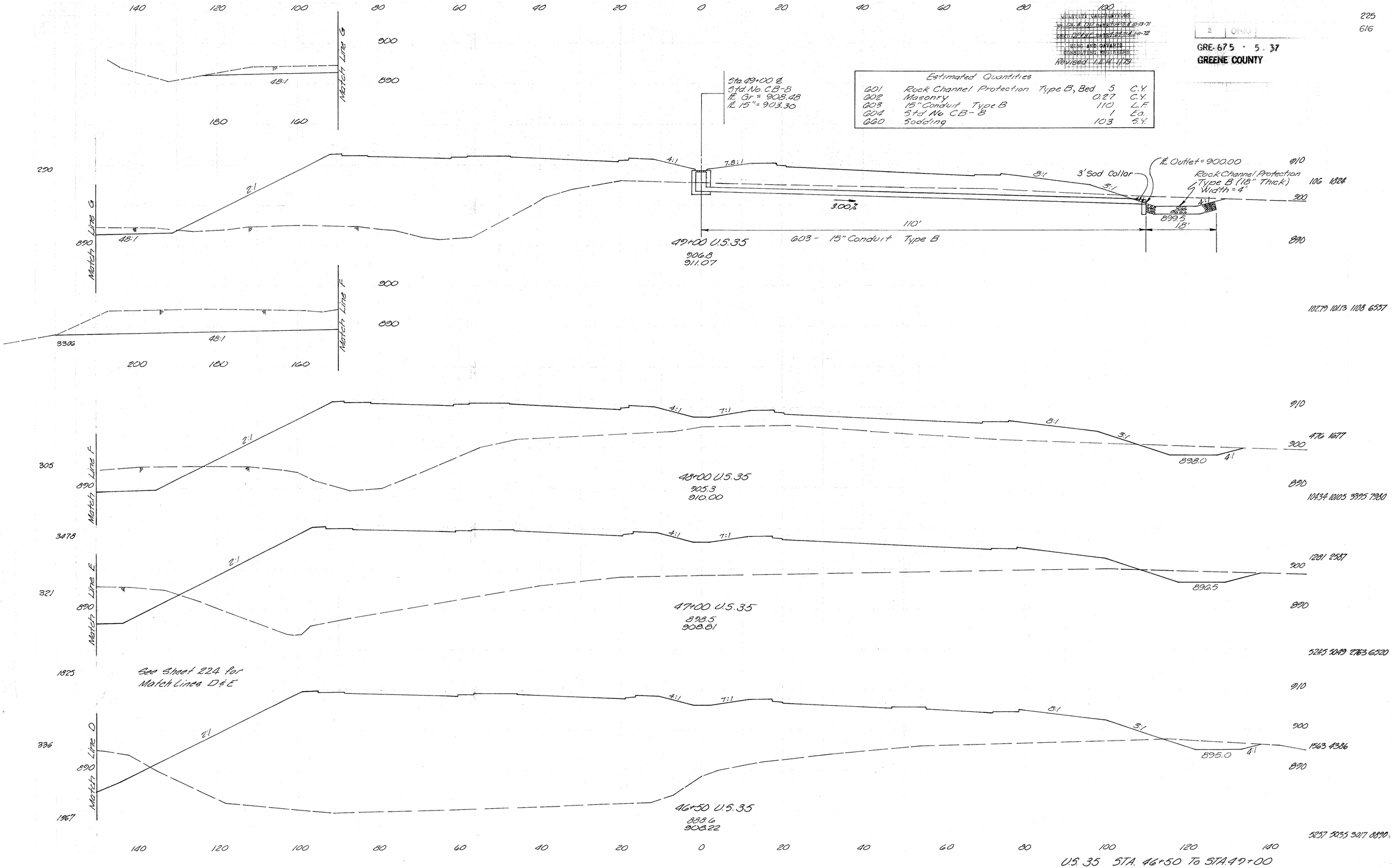
U.S. 35 STA. 45+00 to STA. 47+00 Left

QUANTITY CALCULATIONS
BY DLA DP DATE 7-12-71 & 10-13-71
CHKD DP&HE DATE 7-29-71 & 1-11-72
MING AND GAVARIS
CONSULTING ENGINEERS
Revised I.E.H. 1/79

2 | OHIO

GRE-675 · 5.37
GREENE COUNTY

Estimated Quantities			
601	Rock Channel Protection Type B, Bed	5	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	110	L.F.
604	Std No CB-8	1	Ea.
660	Sodding	103	S.Y.



140 120 100 80 60 40 20 0 20 40 60 80 100

WORKING CALCULATIONS
BY [illegible] DATE 10-13-71
CHKD [illegible] DATE 12-14-71
WING AND GAVARIS
CONSULTING ENGINEERS

2 | CHKD

GRE-675 - 5.37
GREENE COUNTY

226
616

225 900 2:1 2:1 24:1 2:1 6:1 Var. 8:1 3:1 4:1
897.0 911.3 900.0
890 890
13 3639
100.31 100.76 1.15 1.905

53+00 U.S.35
893.0
913.31

2683
258 900 2:1 5:1
897.5 903.0
890 890
49 3277
900

52+00 U.S.35
891.6
913.06

10006 10089 289 11356

2972 Notch Line B 900
180 160
277 Notch Line B 900 48:1 5:1
890 892.0 902.5
107 2795
900
890

51+00 U.S.35
893.3
912.61

10037 10113 302 9325

3078 Notch Line A 900
180 160
277 Notch Line A 900 2:1 4:1 Var. 8:1 3:1
890 48:1 901.0 4:1
3450 910
55 2183
900

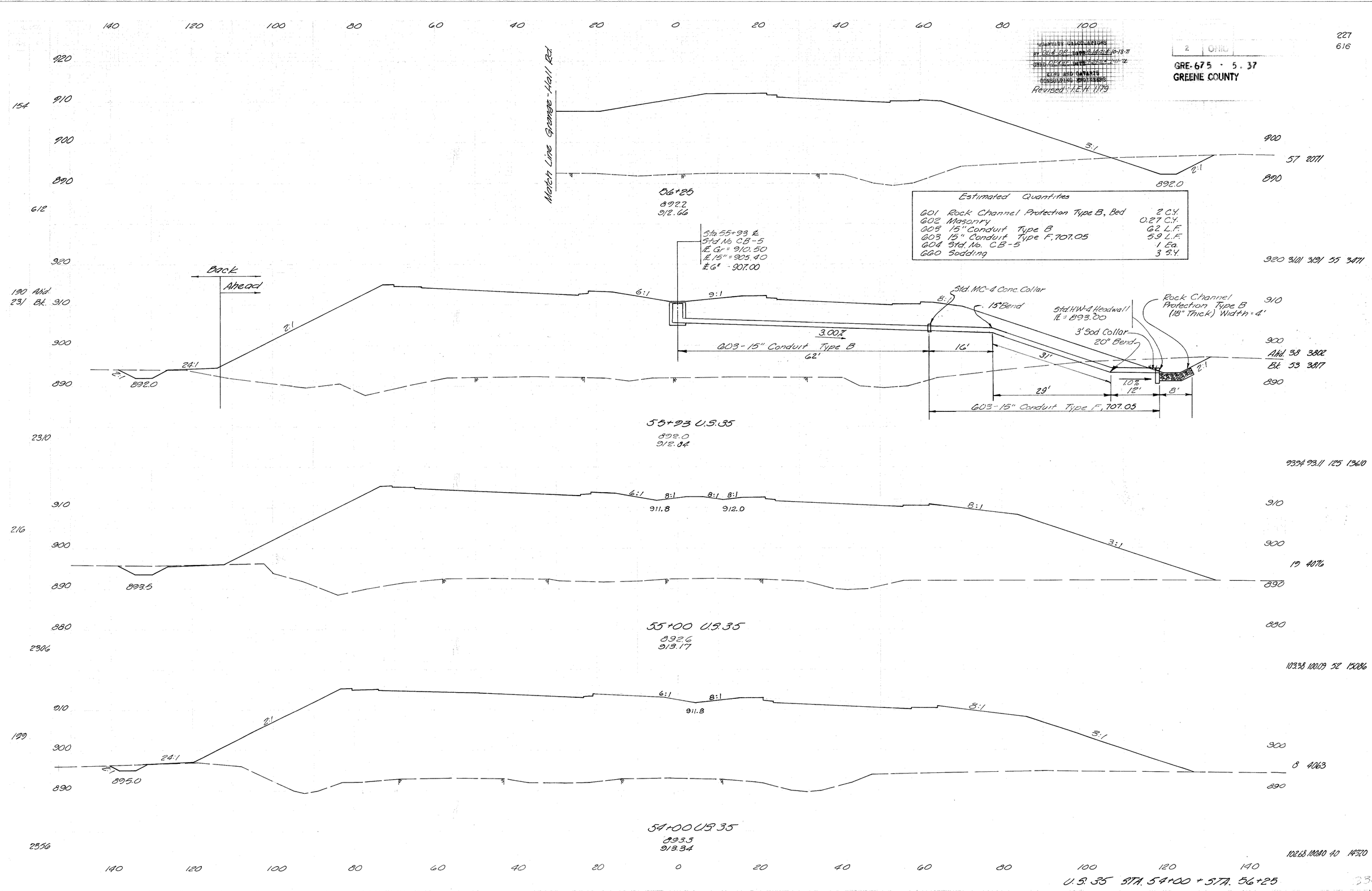
Sta 40+00 to Sta. 50+00	
Cut	21173 C.Y.
Fill	120126 C.Y.

50+00 U.S.35
907.3
911.95

10053 10118 302 7510

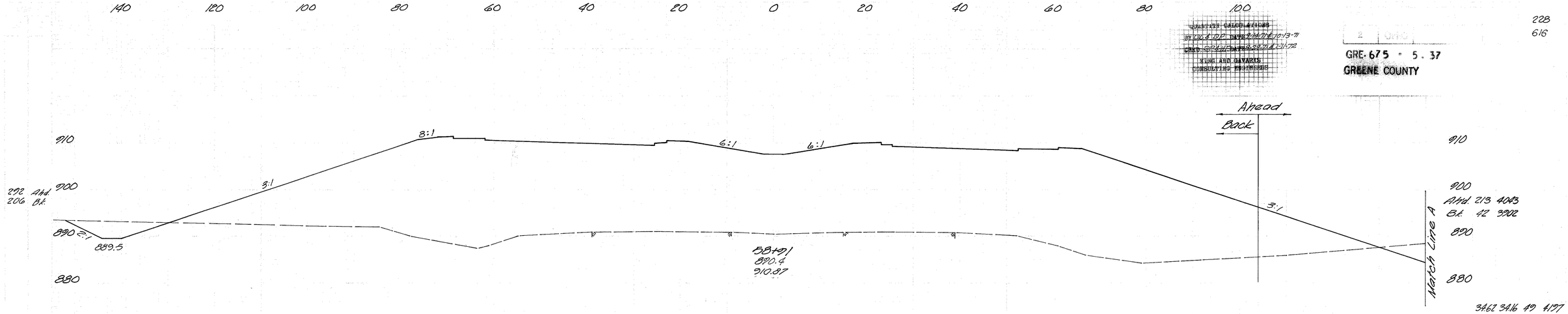
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

U.S. 35 STA. 50+00 To STA. 53+00

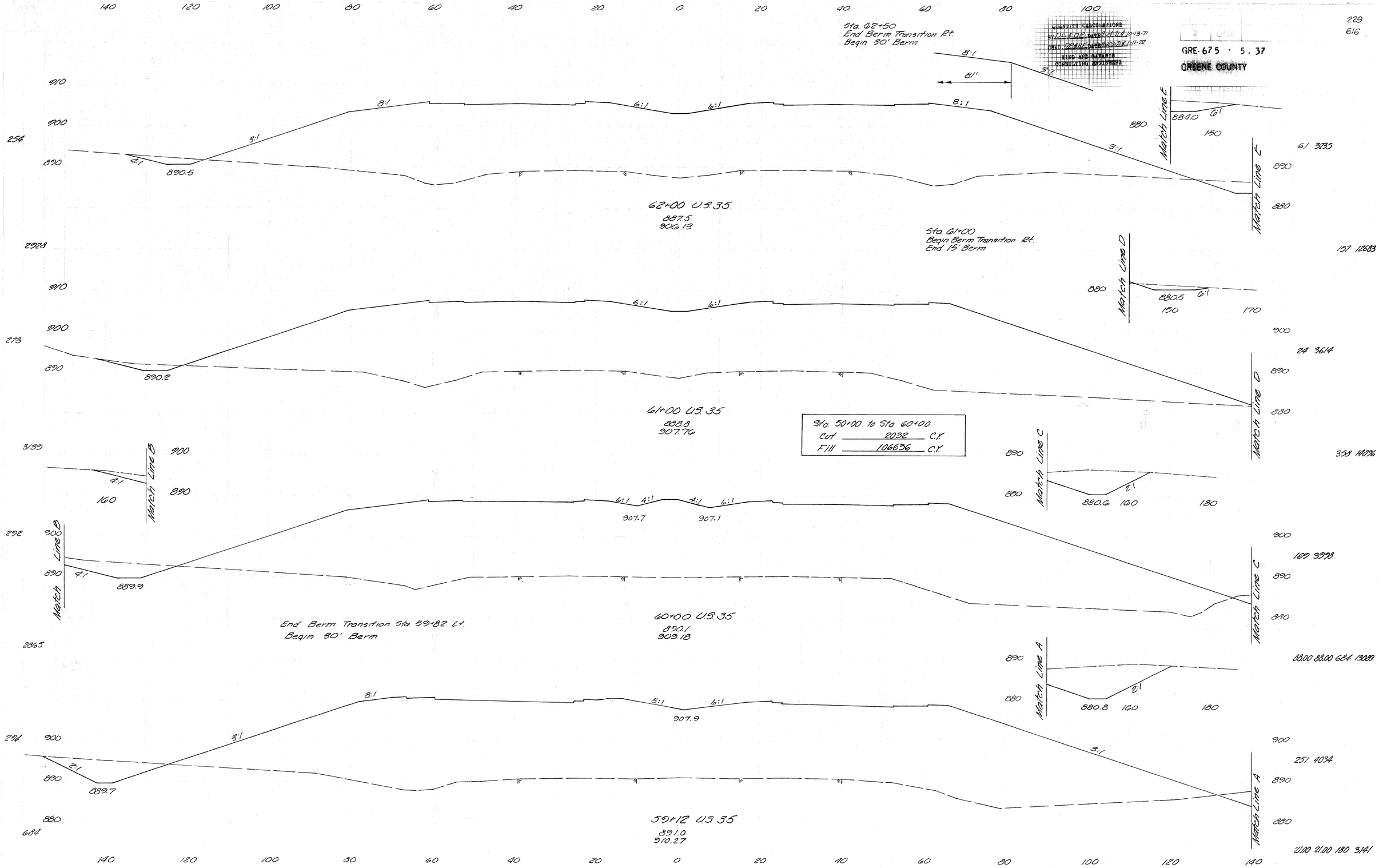


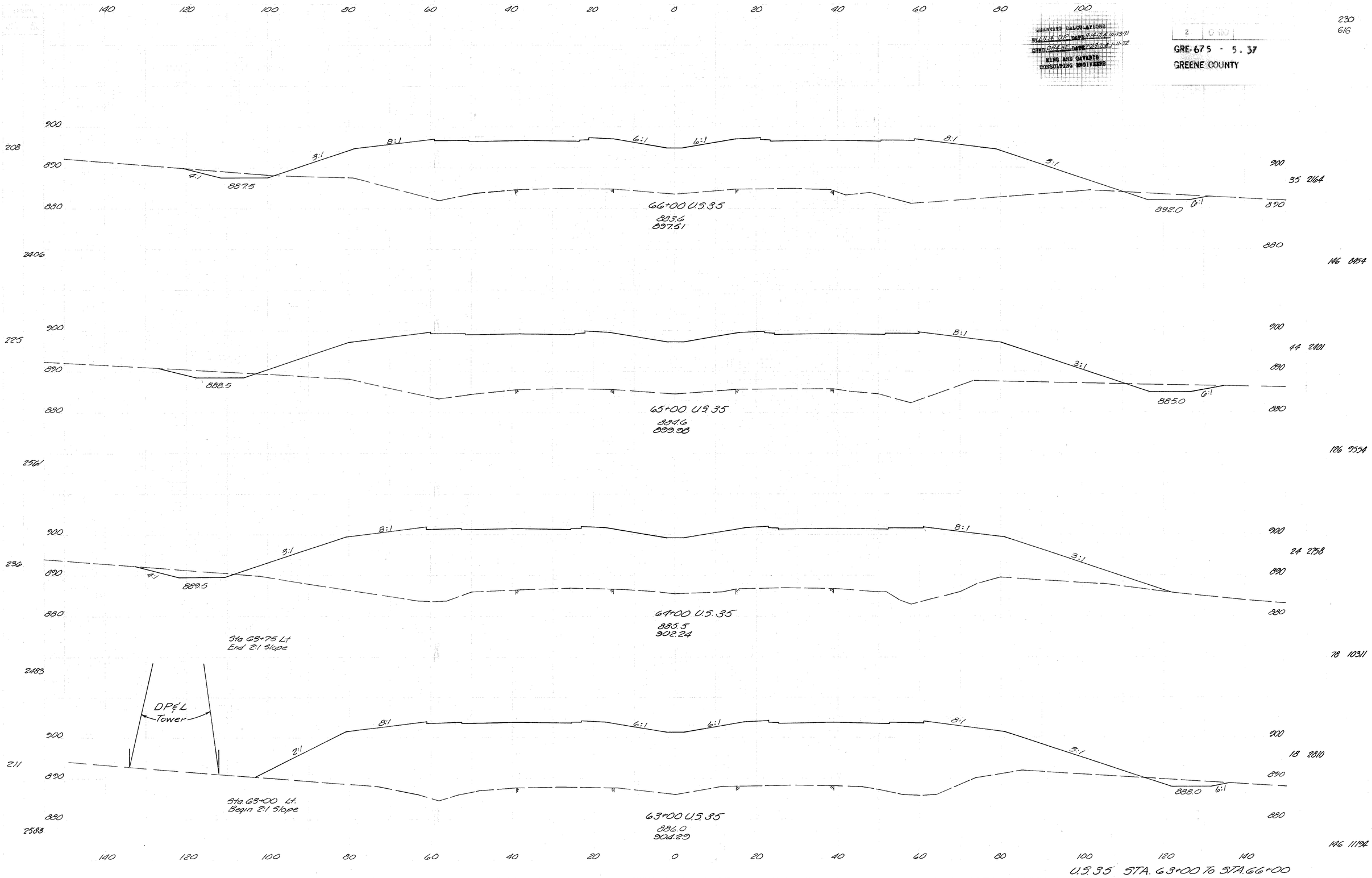
GRE-675 - 5.37
GREENE COUNTY
Revised: 1.E.H. 1/79
Match Line Grange-Hall Rd.
56+25
892.2
912.66
Estimated Quantities
601 Rock Channel Protection Type B, Bed 2 C.Y.
602 Masonry 0.27 C.Y.
603 15" Conduit Type B 62 L.F.
603 15" Conduit Type F, 707.05 59 L.F.
604 Std. No. CB-5 1 Ea.
660 Sodding 3 S.Y.
Sta. 55+93 ℄
Std. No. CB-5
℄ Gr = 910.50
℄ 15" = 905.40
℄ 6" - 907.00
Back
Ahead
Std. MC-4 Conc. Collar
15° Bend
Std. HW-4 Headwall
℄ = 893.00
3' Sod Collar
20° Bend
Rock Channel Protection Type B (18" Thick) Width = 4'
3.00%
603-15" Conduit Type B
62'
16'
31'
29'
12'
8'
1.0%
603-15" Conduit Type F, 707.05
55+93 U.S. 35
892.0
912.84
55+00 U.S. 35
892.6
913.17
54+00 U.S. 35
893.3
913.34
U.S. 35 STA. 54+00 + STA. 56+25

GRE-675 · 5.37
GREENE COUNTY

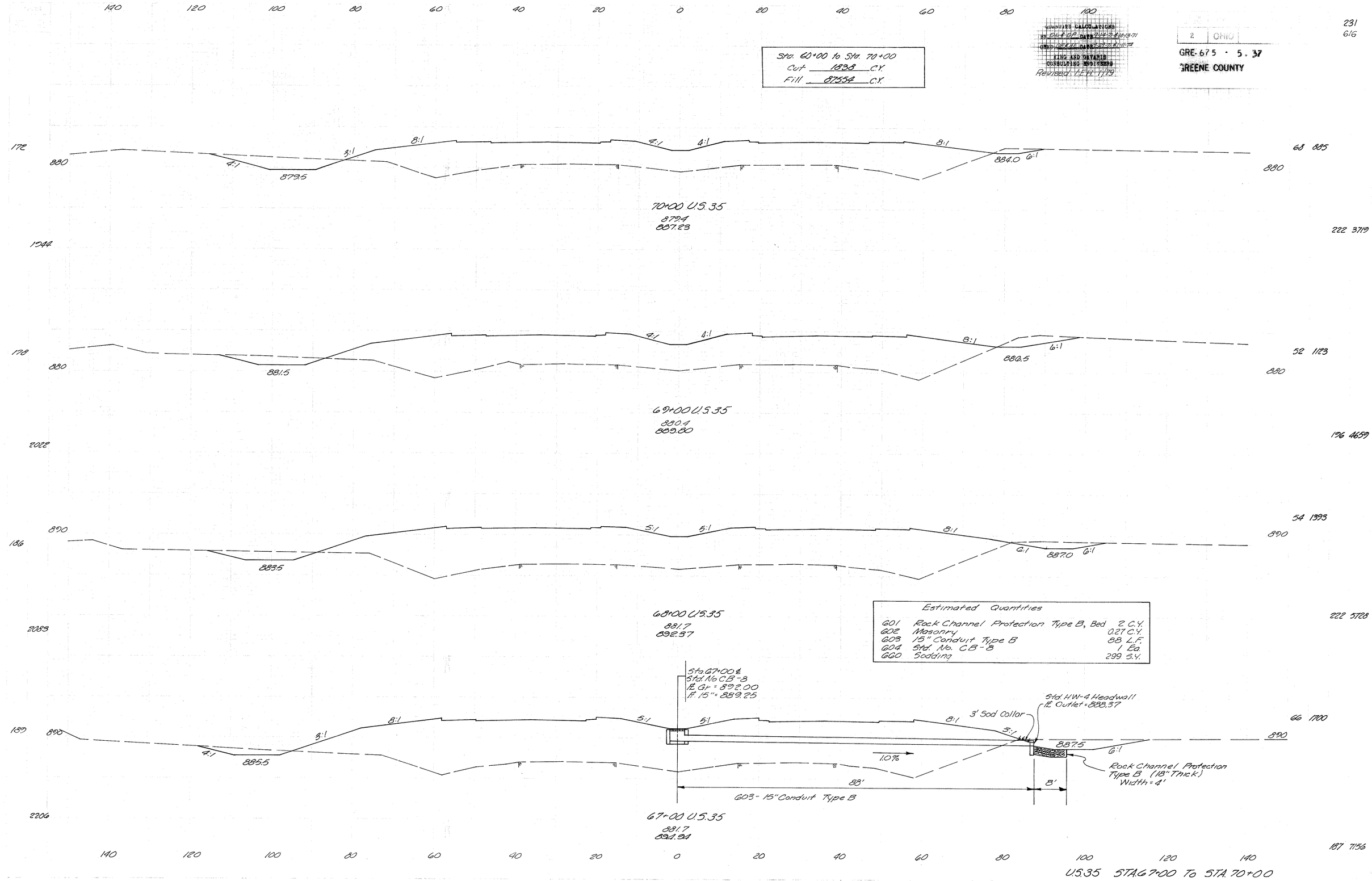


U.S. 35 STA. 56+47 to STA. 58+91

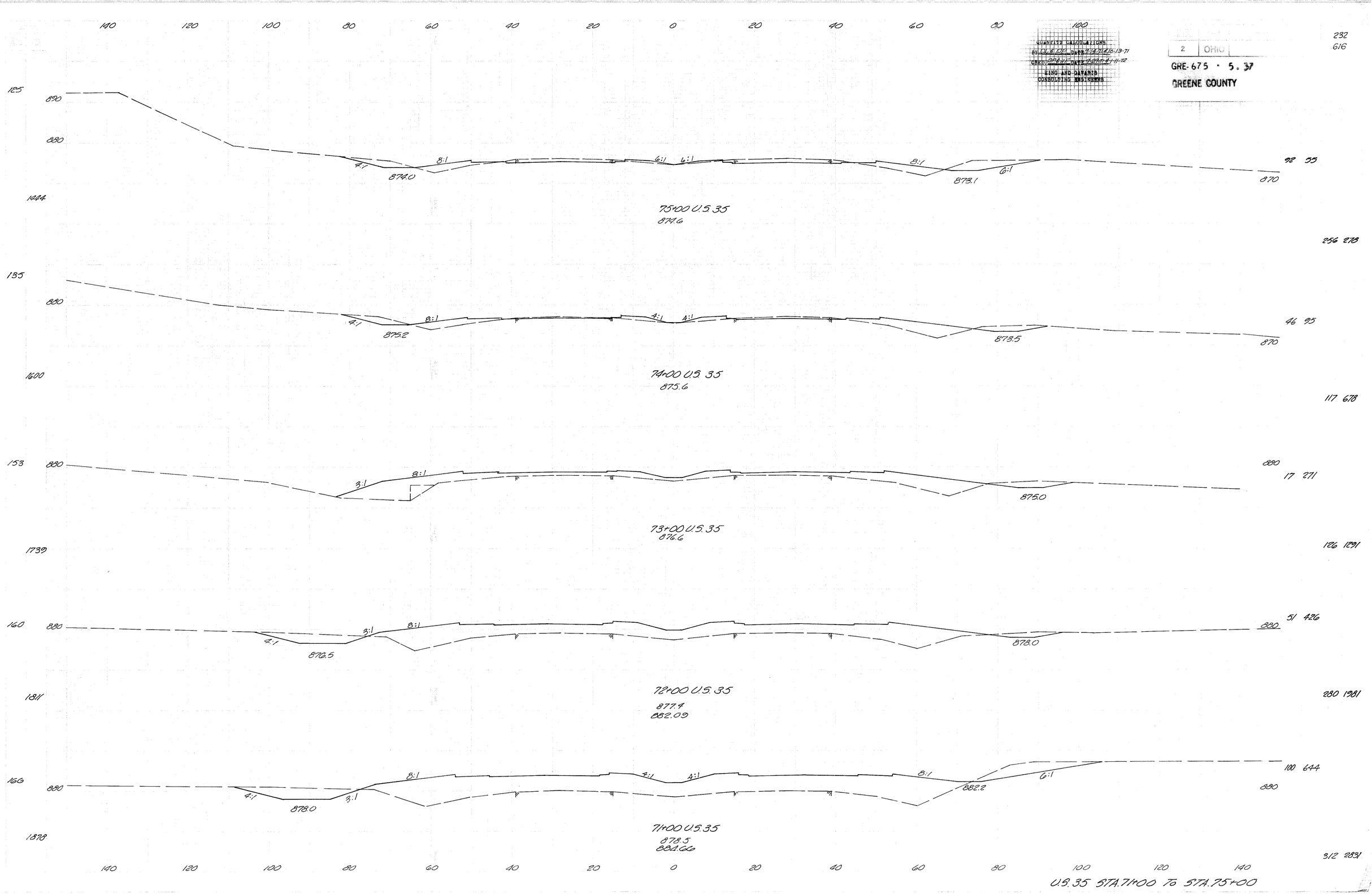

140 120 100 80 60 40 20 0 20 40 60 80 100
Sta. 62+50
End Berm Transition Rt.
Begin 30' Berm
QUANTITY CALCULATIONS
CHKD. DATE
KING AND GALVARIS
CONSULTING ENGINEERS
GRE-675 · 5.37
GREENE COUNTY
229
616
910
900
890
880
254
8:1
3:1
4:1
890.5
6:1
6:1
8:1
3:1
Match Line E
884.0
6:1
150
6/ 3735
62+00 US 35
887.5
906.13
Sta. 61+00
Begin Berm Transition Rt.
End 15' Berm
2928
137 12683
Match Line D
880.5
6:1
150
170
910
900
890
880
273
890.2
6:1
6:1
24 3614
61+00 US 35
888.8
907.76
Sta. 50+00 to Sta 60+00
Cut 2032 C.Y.
Fill 106636 C.Y.
3/89
Match Line B
4:1
160
900
890
Match Line C
880.6
160
180
358 14076
292
6:1 4:1 4:1 6:1
907.7
907.1
160 3978
60+00 US 35
890.1
909.18
End Berm Transition Sta. 59+82 Lt.
Begin 30' Berm
2865
Match Line A
880.8
160
180
8.00 8.00 684 13088
8:1
5:1
6:1
907.9
294
2:1
889.7
3:1
3:1
251 4034
684
889.9
59+12 US 35
891.0
910.27
21.00 21.00 180 3141
U.S. 35 STA. 59+00 to STA. 62+00



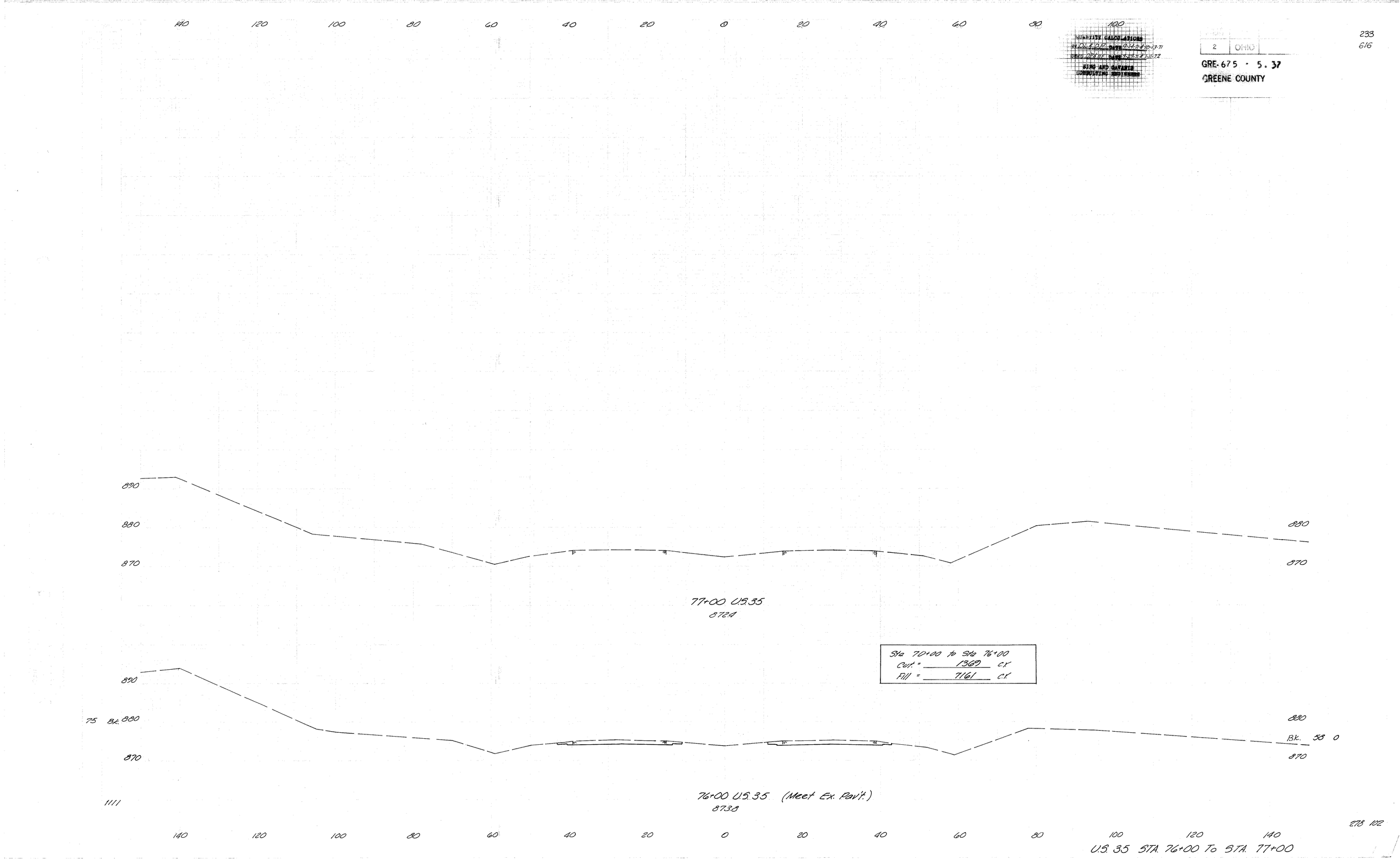
GRE-675 - 5.37
GREENE COUNTY
230
616
140 120 100 80 60 40 20 0 20 40 60 80 100
208
900
890
880
4:1
887.5
3:1
8:1
6:1
6:1
8:1
3:1
892.0
6:1
66+00 U.S. 35
883.6
897.51
35 2164
2406
146 8454
225
888.5
8:1
3:1
885.0
6:1
65+00 U.S. 35
884.6
899.98
44 2401
126 9554
2561
236
889.5
8:1
3:1
8:1
3:1
64+00 U.S. 35
885.5
902.24
24 2758
Sta 63+75 Lt
End 2:1 Slope
78 10311
2483
DP&L
Tower
2:1
8:1
6:1
6:1
8:1
3:1
888.0
6:1
Sta 63+00 Lt.
Begin 2:1 Slope
63+00 U.S. 35
886.0
904.29
18 2810
2588
146 11194
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
U.S. 35 STA. 63+00 To STA. 66+00



Sta. 60+00 to Sta. 70+00
Cut 1838 C.Y.
Fill 87554 C.Y.
QUANTITY CALCULATIONS
KING AND OAVARIS CONSULTING ENGINEERS
Revised 1-EH-1/79
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
70+00 U.S. 35
879.4
887.23
69+00 U.S. 35
880.4
889.80
68+00 U.S. 35
881.7
892.37
67+00 U.S. 35
881.7
894.94
Estimated Quantities
601 Rock Channel Protection Type B, Bed 2 C.Y.
602 Masonry 0.27 C.Y.
603 15" Conduit Type B 88 L.F.
604 Std. No. CB-8 1 Ea.
660 Sodding 299 S.Y.
Sta. 67+00 ℄
Std. No. CB-8
℄ Gr = 892.00
℄ 15" = 889.25
Std. HW-4 Headwall
℄ Outlet = 888.37
3' Sod Collar
1.0%
88'
8'
603 - 15" Conduit Type B
Rock Channel Protection Type B (18" Thick) Width = 4'
U.S. 35 STA. 67+00 To STA. 70+00



QUANTITY CALCULATIONS
BY DLS DP DATE 9-14-71 & 10-13-71
CHKD DP & HF DATE 9-29-71 & 1-11-72
ZING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
232
616
75+00 U.S. 35
874.6
74+00 U.S. 35
875.6
73+00 U.S. 35
876.6
72+00 U.S. 35
877.4
882.09
71+00 U.S. 35
878.5
884.66
U.S. 35 STA. 71+00 TO STA. 75+00



140 120 100 80 60 40 20 0 20 40 60 80 100
QUANTITY CALCULATIONS
BY DL&DP DATE 9-14-71 & 10-13-71
CHKD DP&HF DATE 7-29-71 & 1-11-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
233
616
890
880
870
880
870
77+00 U.S.35
872.4
Sta 70+00 to Sta 76+00
Cut = 1369 C.Y.
Fill = 7161 C.Y.
890
75 Bk. 880
870
880
Bk. 58 0
870
76+00 U.S.35 (Meet Ex. Pav't.)
873.8
1111
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
278 102
U.S. 35 STA. 76+00 To STA. 77+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
STDC & DF DATE 9-27-71 / 10-4-71
CHK. DPRUE DATE 10-27-71 / 12-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY

234
616

910
900
890

138

1456

North Line Reloc. U.S. 35

8:1 8:1 8:1 2:1 1:1

912.0 898.3

303+00 A
897.8
913.24

910 90 1252
900
890

342 1556

910
900
890

124

916

North Line Reloc. U.S. 35

8:1 8:1 8:1 2:1 1:1

912.8 898.8

302+00 A
900.8
913.41

910 94 1046
900
890

61 68 186 2435

115 Sta. 301+31 A (Sta. 18+00 U.S. 35)

Sta. 301+31 A (Sta. 18+00 U.S. 35) 71 883

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

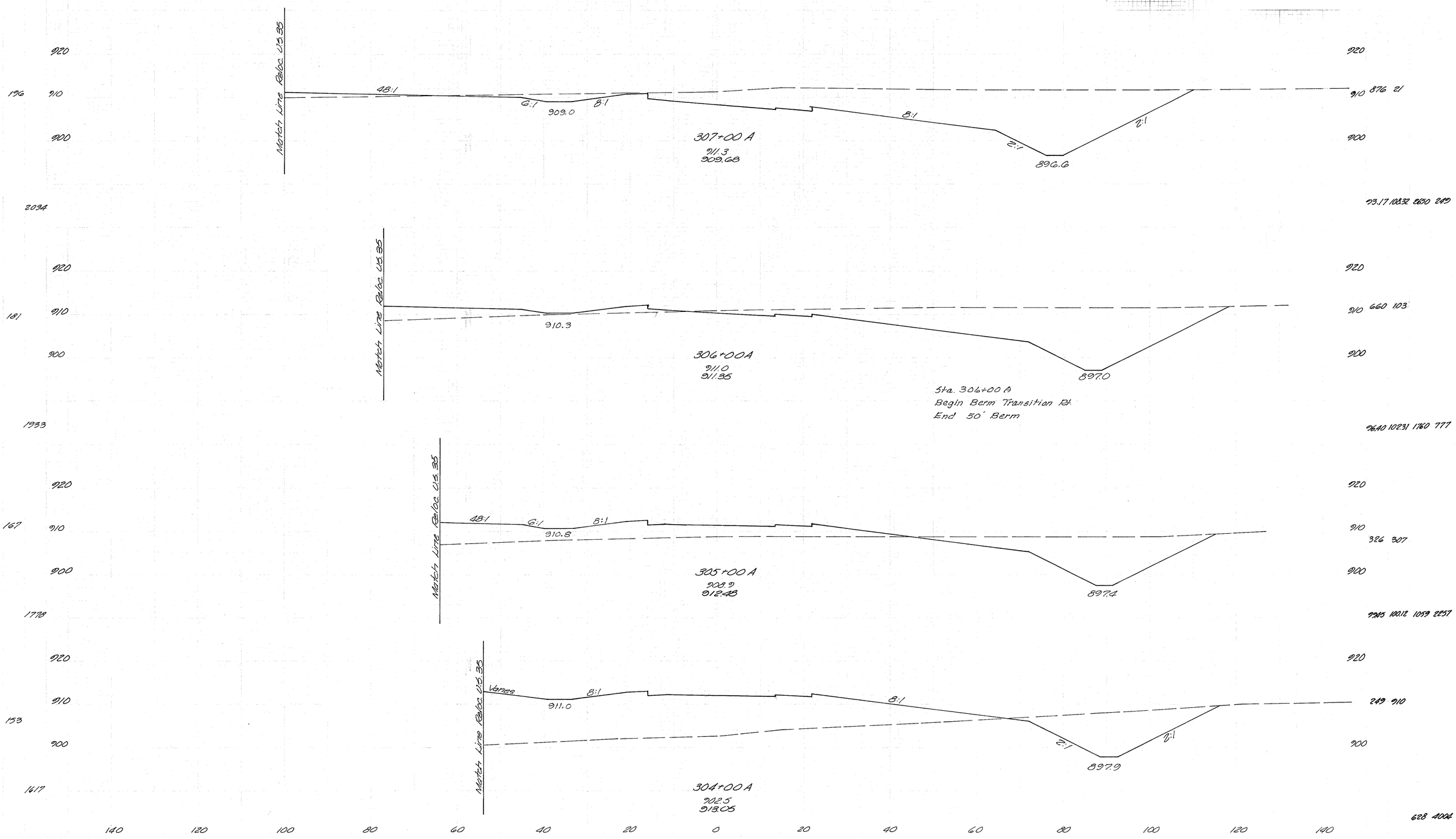
RAMP A STA. 302+00 To STA. 303+00

QUANTITY CALCULATIONS
BY D.L.A.D.R. DATE 4-22-71 & 10-12-71
CHKD B.P.&H.E. DATE 10-12-71 & 1-2-72
MING AND GAVARIS
CONSULTING ENGINEERS

2 | OHIO

GRE-675 - 5.37
GREENE COUNTY

235
616

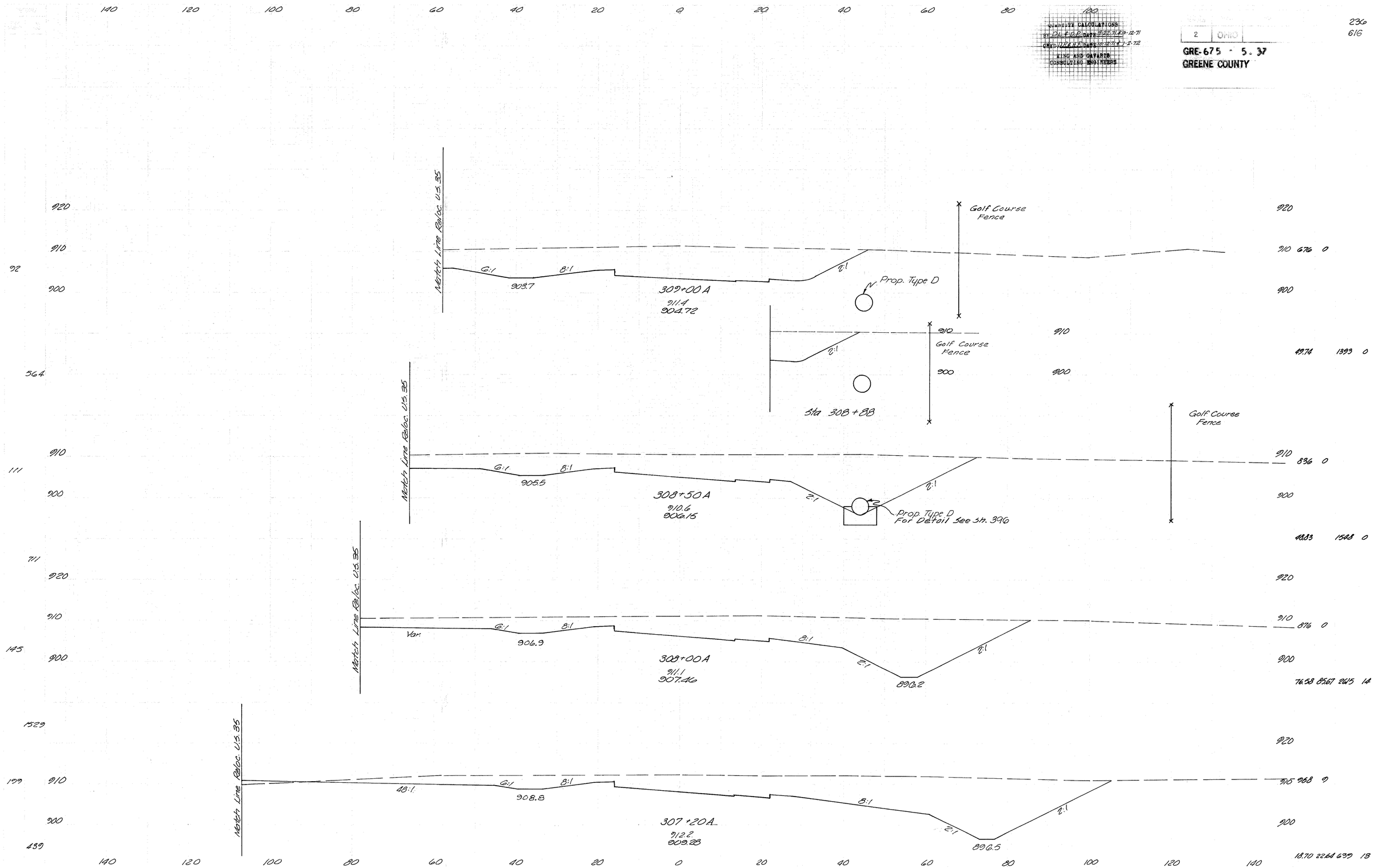


RAMP A STA. 304+00 TO STA. 307+00

QUANTITY CALCULATIONS
BY D.L. & D.R. DATE 4-22-71 & 10-12-71
CHKD. D.R. & H.F. DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 - 5.37
GREENE COUNTY



RAMP A STA. 307+20 To STA. 309+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY: D.L.H.D.C. DATE: 9-27-71 & 10-12-71
CHK: D.F.H.E. DATE: 10-27-71 & 12-72
KING AND GARATTE
CONSULTING ENGINEERS

2 OHIO
GRE-675 · 5.37
GREENE COUNTY

237
616

Sta. 312+00 A End
Berm Transition Rt. Begin 50' Berm

910
900
890
109

Match Line Ramp E

8:1 8:1 8:1 48:1 2:1 2:1
894.6 892.6

312+00 A
911.2
896.21

910
1668 0
900
890
10003 4737 0

1283

910
900
122
890

Match Line Ramp E

Varies 8:1 8:1 48:1 2:1 2:1
897.7 893.8

311+00 A
905.9
898.32

910
866 0
900
890
9995 3716 0

Sta. 301+31 to Sta. 310+00
Cut = 16,374 C.Y.
Fill = 14,005 C.Y.

1406
910
900
131
890

Match Line Relocated 1-75-35

Varies 8:1 2:1 2:1
895.0

310+00 A
905.9
901.82

Golf Course Fence

910
1141 0
900
890
4993 1990 0

661
920
910
107
900
553

Match Line Relocated 1-75-35

6:1 8:1
900.0 902.0

Prop. Type D

309+50 A
912.0
903.27

Golf Course Fence

920
910 1010 0
900
5008 1564 0

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

RAMP A STA. 309+50 TO STA. 312+00

QUANTITY CALCULATIONS
BY [illegible] DATE 10-12-71
CHK'D [illegible] DATE 10-12-71 & 1-2-72
KING AND DAVIDS
CONSULTING ENGINEERS

2 | OHIO

GRE-675 · 5.37
GREENE COUNTY

238
616

140 120 100 80 60 40 20 0 20 40 60 80 100

Back
Ahead

Match Line Ramp E

910
900
890

65 Ahd.
157 Bk.

Varies 8:1 8:1 48:1 2:1 1:1

856.6

315+00A
897.6
892.77

910
900
Ahd. 758 0
Bk. 1235 0
890

10309 5046 0

1328

910
900
890

118

Match Line Ramp E

910
1408 0
900
890

889.9

314+00A
902.2
893.27

10674 5858 0

1239

910
900
890

105

Match Line Ramp E

910
1612 0
900
890

801.5 313+00A 907.2 894.35 801.3

51.74 3082 0

589

910
900
890

107

Match Line Ramp E

910
1605 0
900
890

8:1 8:1 48:1 2:1 1:1

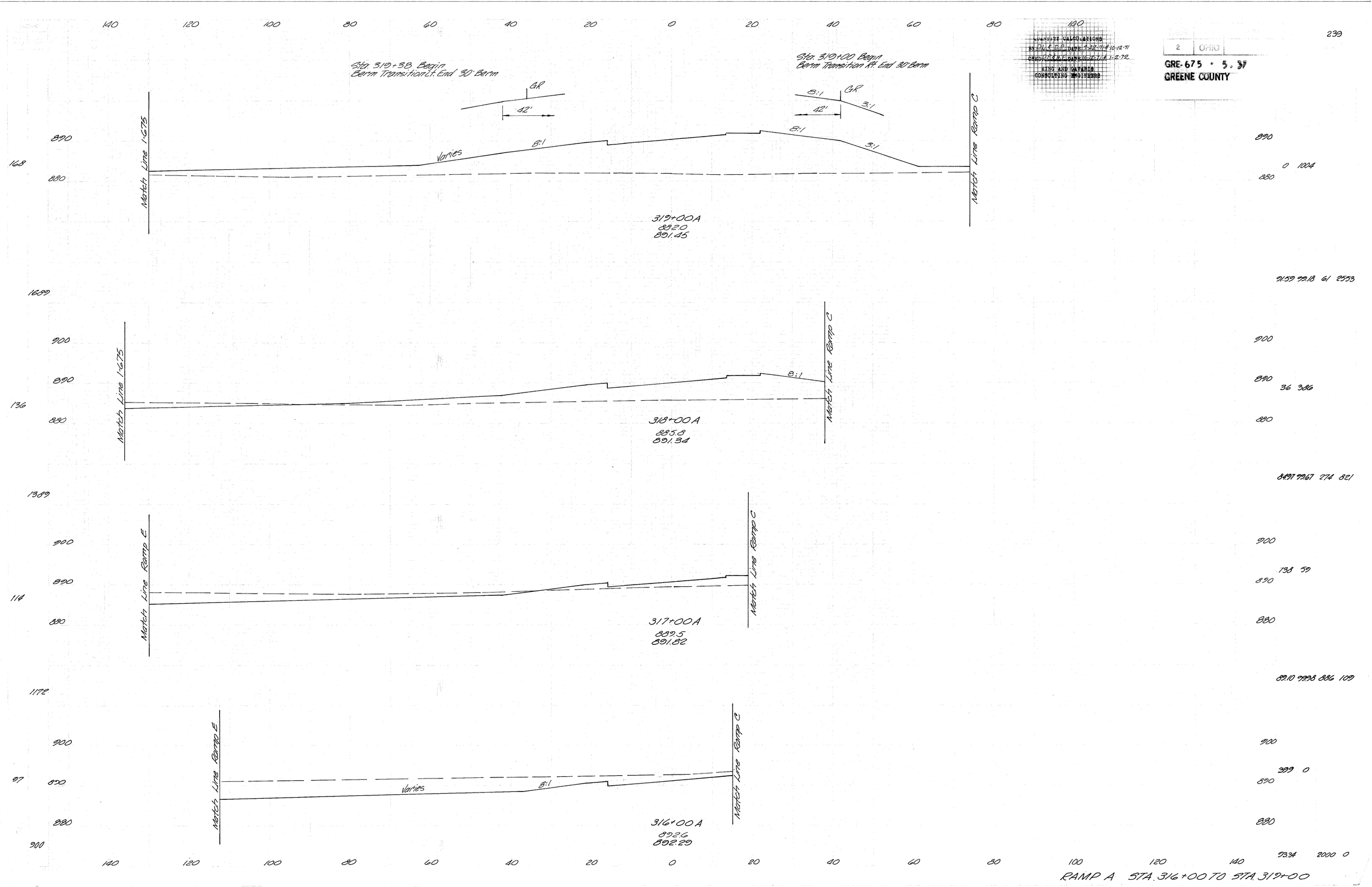
803.0 312+50A 908.9 895.20 801.9

600

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

51.16 3101 0

RAMP A STA. 312+50 TO STA. 315+00



QUANTITY CALCULATIONS
BY D.L.E.D.P. DATE 9-22-71 & 10-12-71
CHKD. D.P.E.D.P. DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
239
Sta. 319+38 Begin
Berm Transition Lt. End 30' Berm
Sta. 319+00 Begin
Berm Transition Rt. End 30' Berm
GR
42'
8:1
3:1
Varies
Match Line 1-675
Match Line Ramp C
Match Line Ramp E
319+00A
882.0
891.45
318+00A
885.8
891.34
317+00A
889.5
891.82
316+00A
892.6
892.29
168
136
114
97
1689
1389
1172
900
890
880
140
120
100
80
60
40
20
0
0 1004
91.59 99.18 61 2553
36 386
84.97 99.67 274 821
138 59
89.10 99.98 886 109
399 0
93.34 2000 0
RAMP A STA. 316+00 TO STA. 319+00

QUANTITY CALCULATIONS
BY D.L. & D.P. DATE 4-22-71 & 10-12-71
CHKD. DP & DP DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS

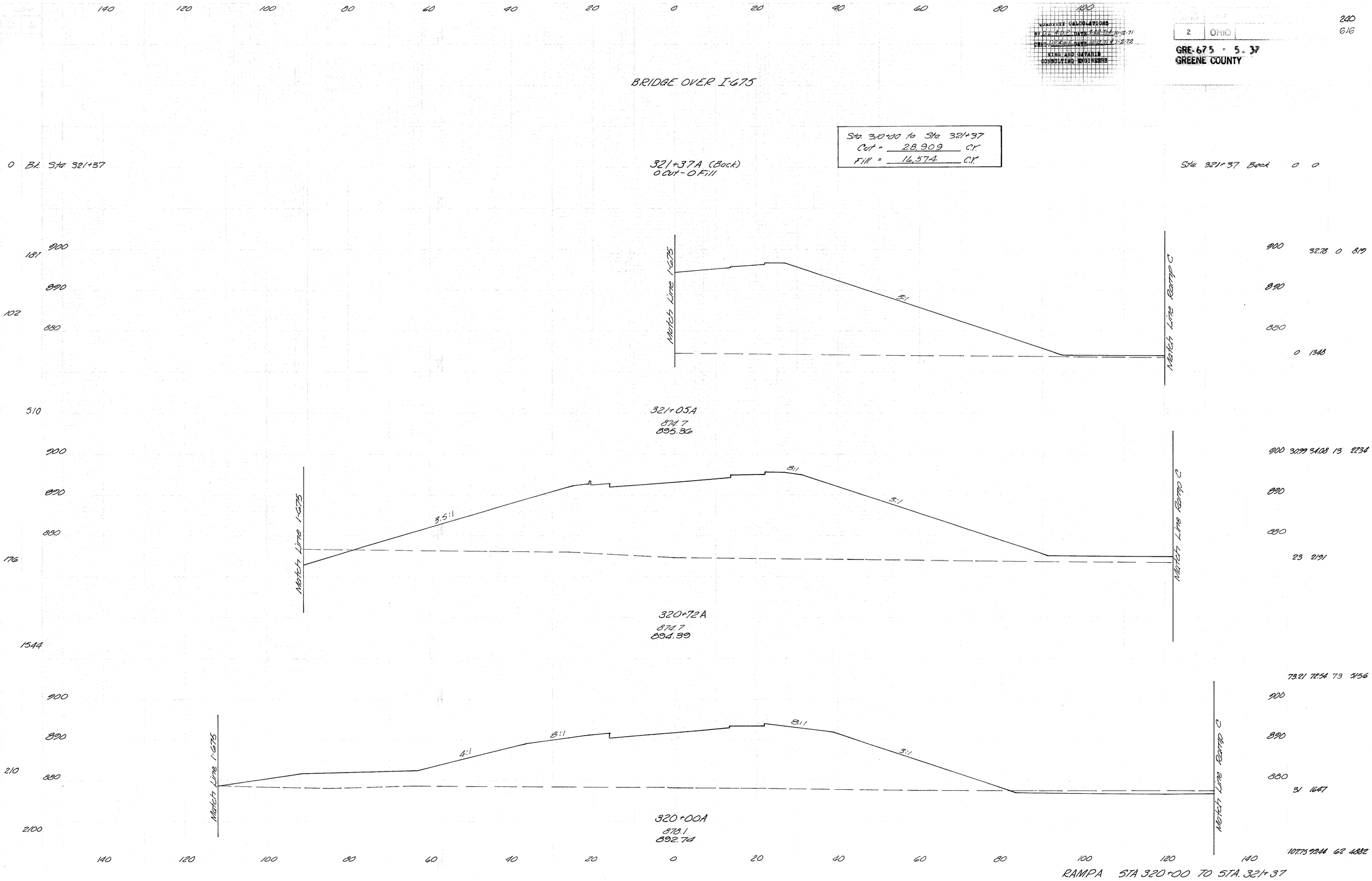
2 OHIO

GRE-675 - 5.37
GREENE COUNTY

240
616

BRIDGE OVER I-675

Sta. 310+00 to Sta. 321+37
Cut = 28,909 C.Y.
Fill = 16,574 C.Y.



RAMP A STA 320+00 TO STA. 321+37

160 140 120 100 80 60 40 20 0 80 40 60 80

QUANTITY CALCULATIONS
DESIGNED 7-22-71 CHECKED 10-12-71
DRAWN 10-28-71 CHECKED 11-2-72
KING AND GAVARIS
CONSULTING ENGINEERS

241
616

2 | OHIO |
GRE-675 · 5.37
GREENE COUNTY

168 3042

890
880
359
North Line B
3:1
3:1
North Line Ramp H
326+00 A
833.6
913.22

890
880
350
See Sheet 242 for North Lines
North Line A
3:1
North Line Ramp H
325+00 A
880.2
900.59

843 3626

2250

890
880
95
870
69
North Line 1675
3:1
North Line Ramp H
324+09 A
875.6
906.28

77.94 93.77 11.74 10.46

890
880
0 39.98
870
13.40 0 5.95

0 Ahd. Sta. 323+96
323+96 A (Ahead)
Ccur O Fill
Sta. 323+96 Ahead 0 0

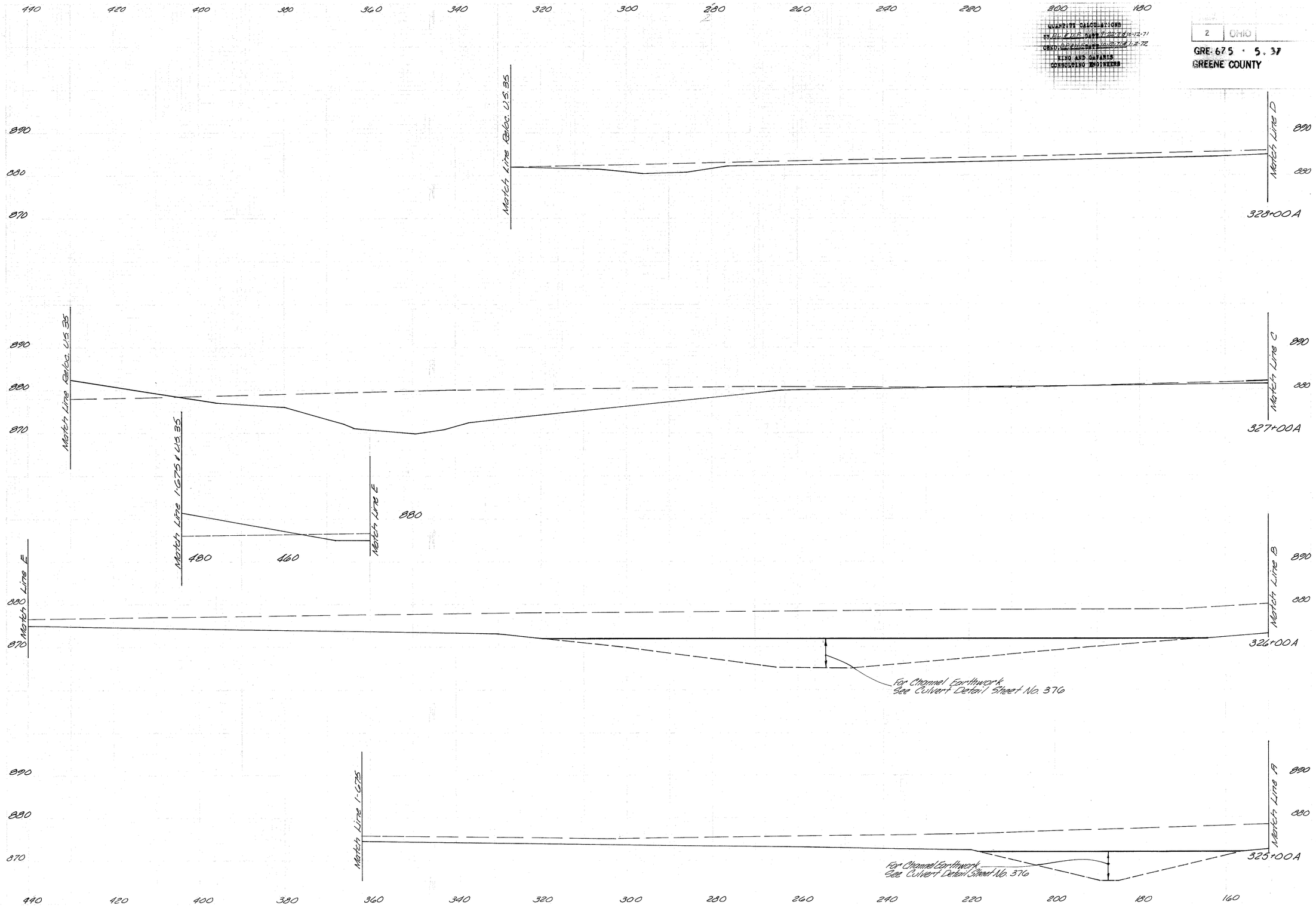
160 140 120 100 80 60 40 20 0 80 40 60 80 100 120

RAMP A STA 323+96 To STA 326+00

QUANTITY CALCULATIONS
BY D.L.&D.R. DATE 7-22-71 & 10-12-71
CHKD. D.R.&D.E. DATE 10-12-71 & 1-2-72
KING AND GAVANIS
CONSULTING ENGINEERS

2 | OHIO

GRE-675 · 5.37
GREENE COUNTY

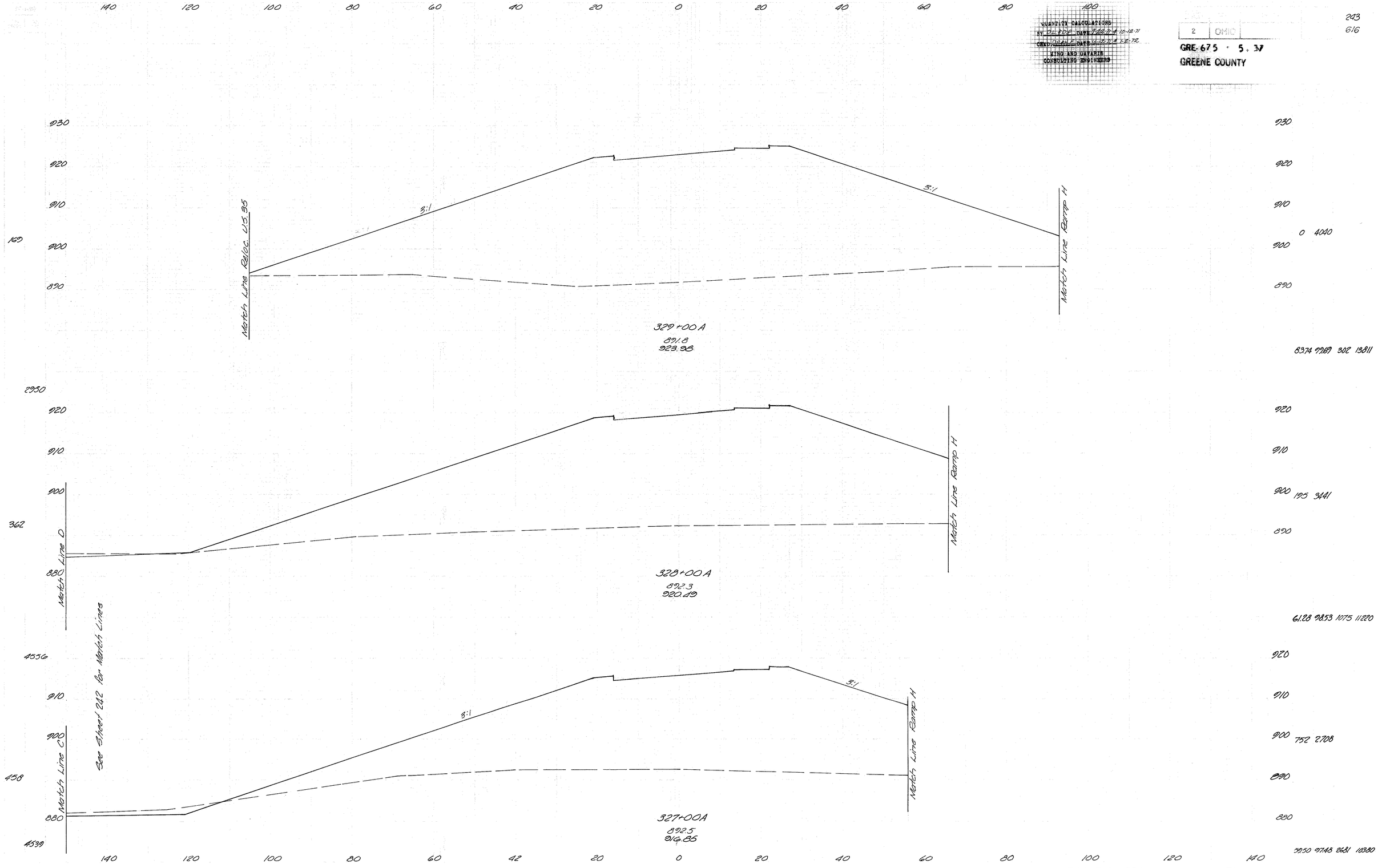


RAMP A STA. 325+00 To STA. 328+00 150' LEFT

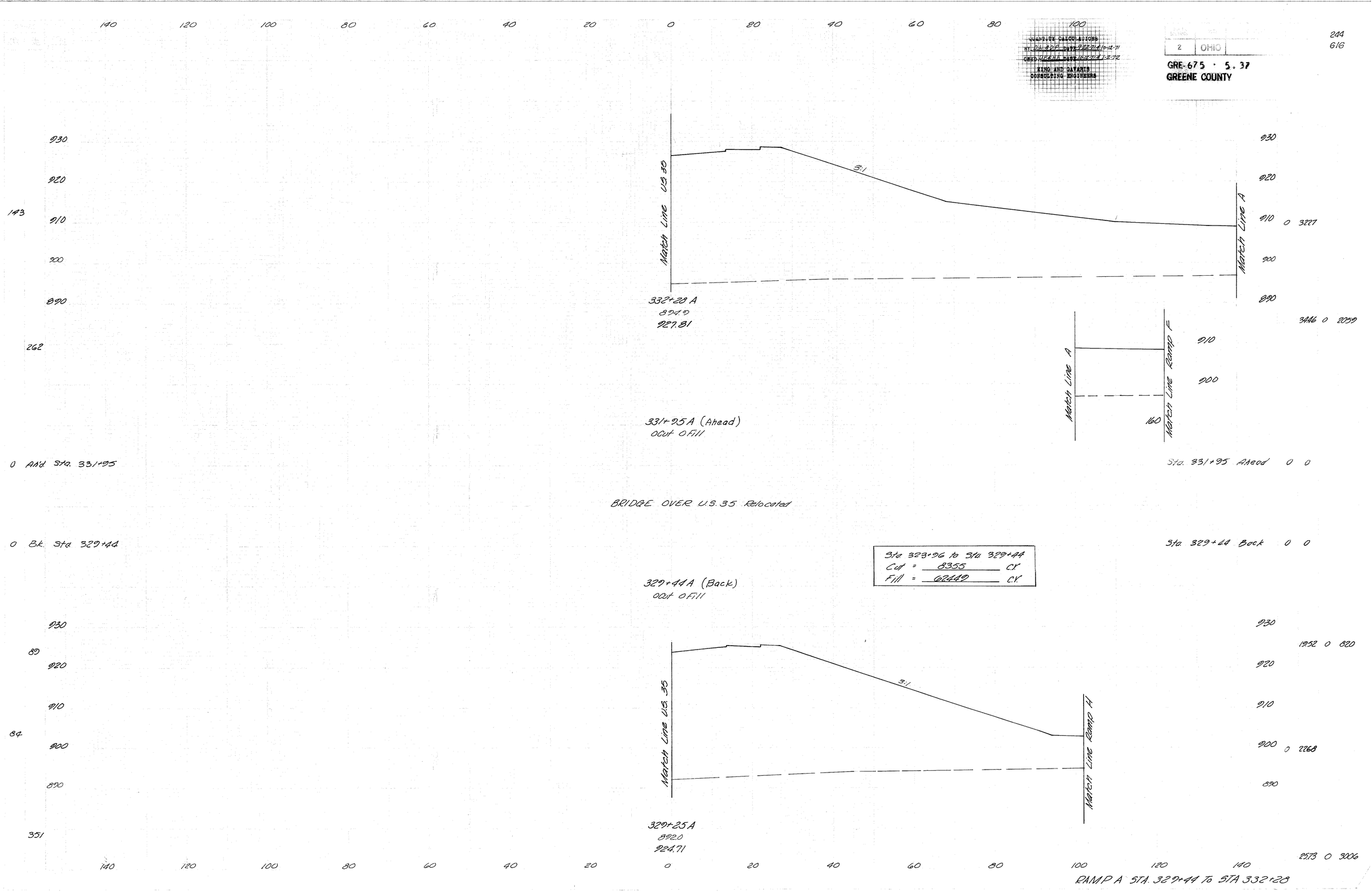
QUANTITY CALCULATIONS
BY DL & DP DATE 9-22-71 & 10-12-71
CHKD. DRAH F DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY



RAMP A STA. 327+00 To STA. 329+00

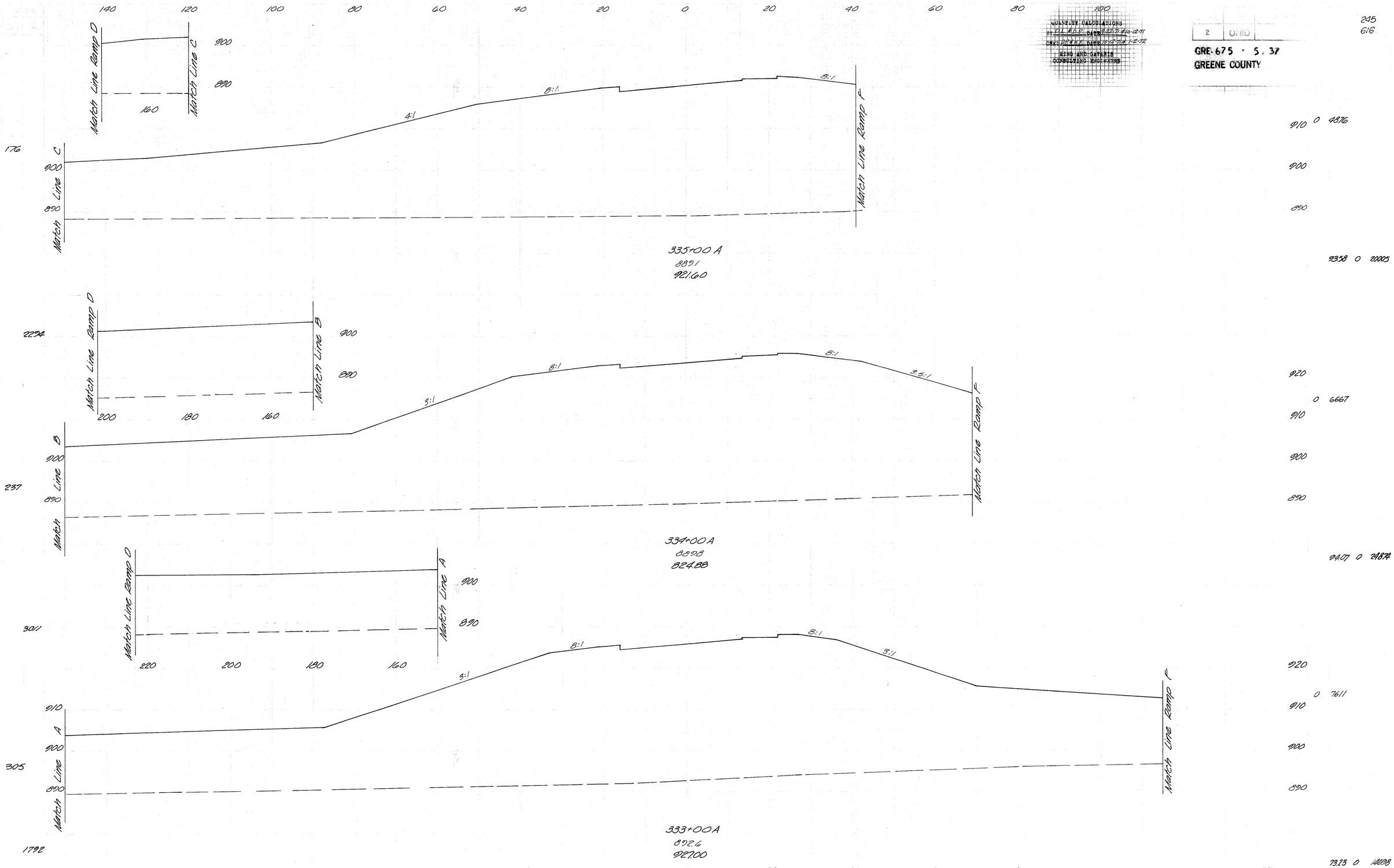


QUANTITY CALCULATIONS
BY DL & DP DATE 9-22-71 & 10-12-71
CHKD RE&HE DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
244
616
140 120 100 80 60 40 20 0 20 40 60 80 100
930
920
910
900
890
143
262
0 Ah'd Sta. 331+95
0 Bk. Sta. 329+44
89
84
351
Match Line US 35
3:1
Match Line A
332+28 A
894.9
927.81
331+95 A (Ahead)
0 Cut 0 Fill
Match Line A
Match Line Ramp F
160
Sta. 331+95 Ahead 0 0
Sta. 329+44 Back 0 0
0 3227
3446 0 2059
BRIDGE OVER U.S. 35 Relocated
Sta. 323+96 to Sta. 329+44
Cut = 8355 C.Y.
Fill = 62449 C.Y.
329+44 A (Back)
0 Cut 0 Fill
Match Line U.S. 35
3:1
Match Line Ramp H
329+25 A
892.0
924.71
1952 0 820
0 2268
2573 0 3006
RAMP A STA. 329+44 To STA 332+28

QUANTITY CALCULATIONS
BY D.L. & D.P. DATE 9-22-71 & 10-12-71
CHKD. D.R. & H.F. DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY

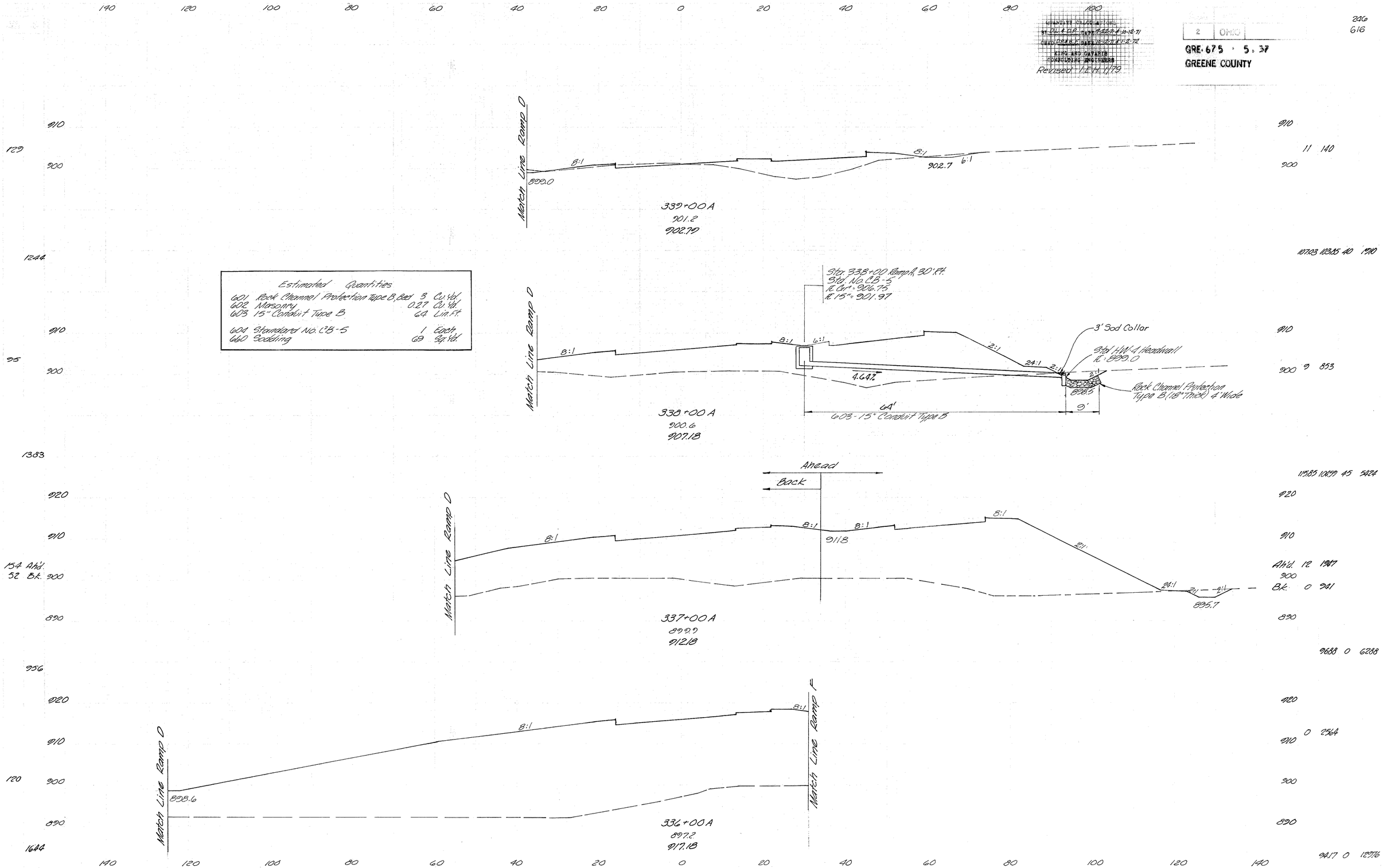


RAMP A STA. 333+00 TO STA. 335+00

QUANTITY CALCULATIONS
BY D.L.& D.R. DATE 9-22-71 & 10-12-71
CHKD D.R.& H.E. DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised I.E.H. 1/79

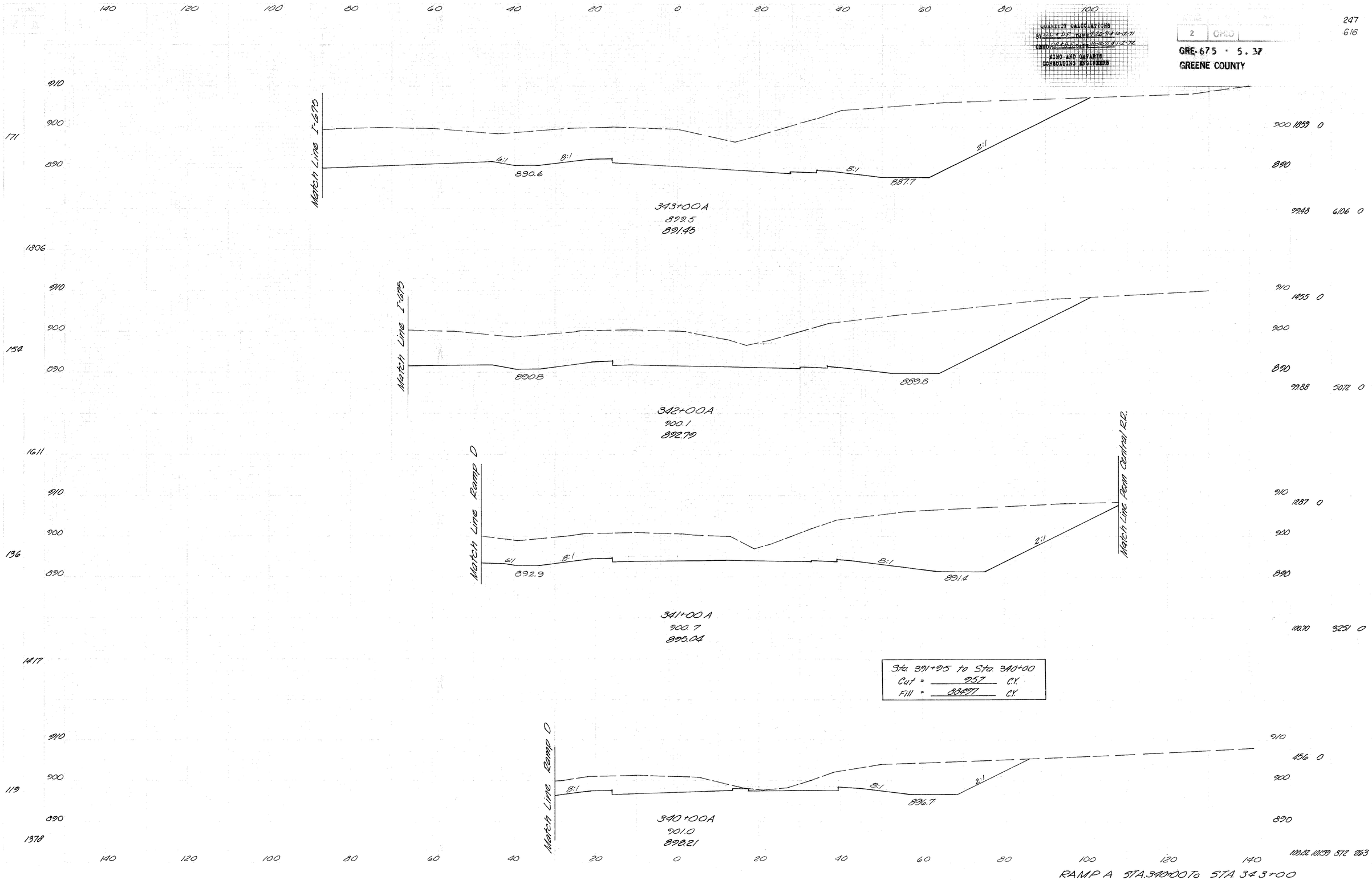
2 OHIO

GRE-675 · 5.37
GREENE COUNTY



Estimated Quantities			
601	Rock Channel Protection Type B, Bed	3	Cu. Yd.
602	Masonry	0.27	Cu. Yd.
603	15" Conduit Type B	64	Lin. Ft.
604	Standard No. CB-5	1	Each
660	Sodding	69	Sq. Yd.

RAMP A STA. 336+00 To STA 339+00



QUANTITY CALCULATIONS
BY D.L. & D.F. DATE 9-22-71 & 10-12-71
CHKD. DR. & H.F. DATE 10-12-71 & 1-2-72
KING AND GAVARTS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
247
616
Match Line I-675
6:1
8:1
890.6
8:1
887.7
2:1
343+00A
899.5
891.45
Match Line I-675
890.8
889.8
342+00A
900.1
892.79
Match Line Ramp D
Match Line Penn Central R.R.
6:1
8:1
892.9
8:1
891.4
2:1
341+00A
900.7
895.04
Sta. 391+95 to Sta. 340+00
Cut = 957 C.Y.
Fill = 88497 C.Y.
Match Line Ramp D
8:1
8:1
896.7
2:1
340+00A
901.0
898.21
RAMP A STA.340+00 To STA. 343+00

COUNTY CALCULATIONS
BY D.L.A. DATE 9-22-71 & 11-12-71
CHKD. BY R.E. DATE 10-27-71 & 12-72
BING AND DAVANIS
CONSULTING ENGINEERS

2 | OHIO

GRE-675 · 5.37
GREENE COUNTY

248
616

140 120 100 80 60 40 20 0 20 40 60 80 100

910
900
890
132
1922

Match Line I-675

8:1 886.3 8:1 8:1 8:1 887.9 2:1

346+00A
900.1
891.91

Match Line Penn Central R.R.

910 1715 0
900
890 10096 7711 0

910
900
890
214
618

Match Line I-675

4:1 4:1 8:1 886.1

345+00A
898.1
891.41

Match Line Penn Central R.R.

910 2409 0
900
890
2591 2482 0

910
900
890
231
880
1771

Match Line I-675

5:1 880.3 3:1 8:1 886.2

344+75A
897.1
891.29

910 2763 0
900
890
880 7757 6905 0

900
890
194
880
2028

Match Line I-675

2:1 6:1 8:1 890.0 8:1 886.5 4:1

344+00A
897.0
891.03

910 2056 0
900
890
880
10060 7294 0

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

RAMP A 344+00 To STA 346+00

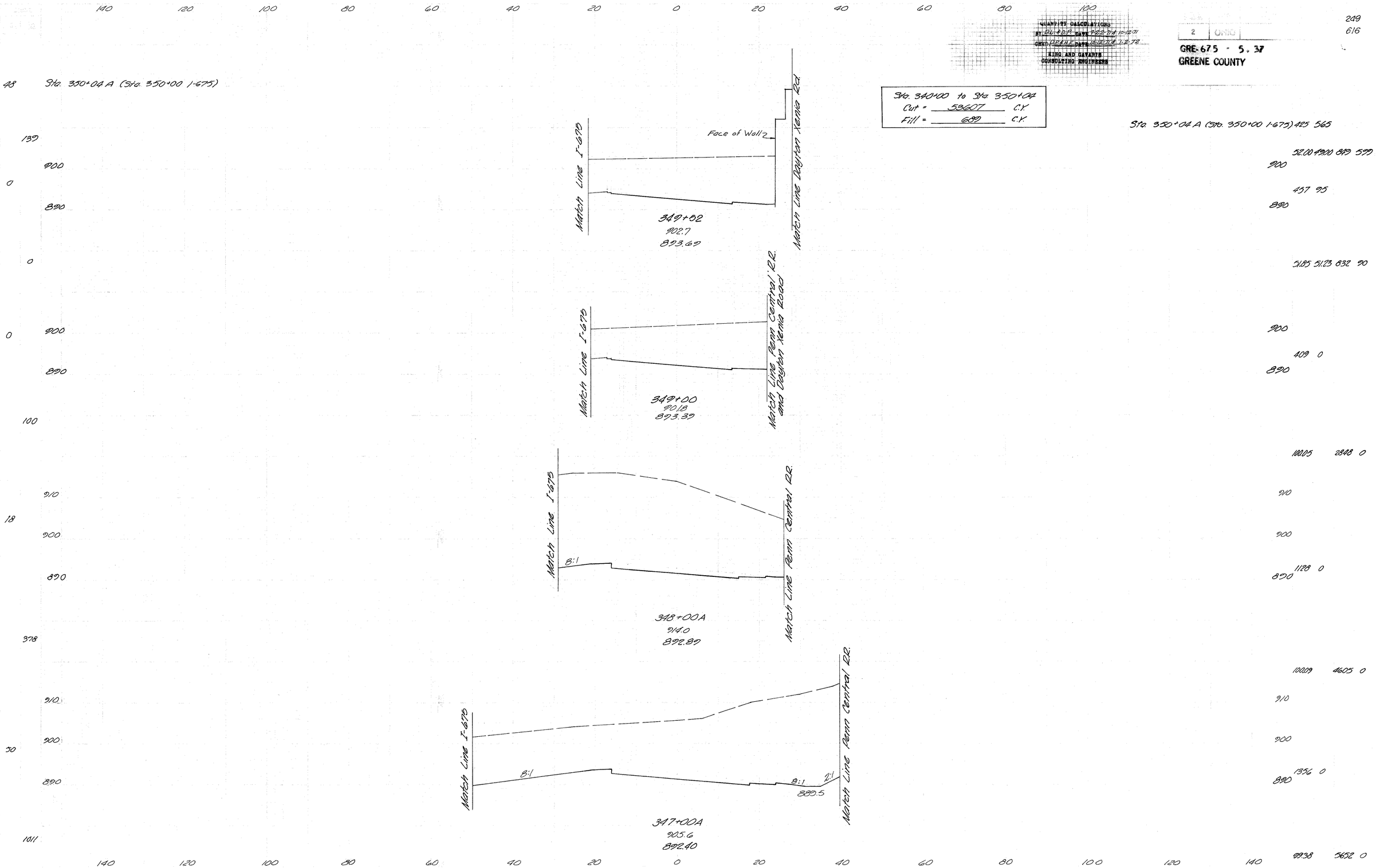
QUANTITY CALCULATIONS
BY DL & D.P. DATE 9-22-71 & 10-12-71
CHKD DP & H.F. DATE 10-12-71 & 1-2-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 | OHIO

GRE-675 - 5.37
GREENE COUNTY

249
616

Sta. 340+00 to Sta. 350+04
Cut = 53607 C.Y.
Fill = 689 C.Y.



RAMP A 347+00 To STA. 349+52

180 160 140 120 100 80 60 40 20 0 20 40 60

QUANTITY CALCULATIONS
BY DLA DATE 2-29-72 / 10-13-71
CHKD OCK/RF DATE 2-13-72 / 1-12-72
KING AND CAVARIS
CONSULTING ENGINEERS

2 | OHIO
GRE-675 · 5.37
GREENE COUNTY

250
616

2211

920
910
900

Match Line Channel

899.9

4:1
3:1
6:1
8:1

913.8

Match Line Reloc. U.S. 35

342+00B
916.3
913.91

920
2978 0
910

2272

8361 10035 0

198

920
910
900

Match Line Channel

901.7

8:1

Match Line Reloc. U.S. 35

341+00B
918.3
915.65

920
3503 0
910

8326 10901 0

2161

930
920
910
900

Match Line Channel

903.5

4:1
3:1
8:1

Match Line Reloc. U.S. 35

340+00B
921.0
917.62

920 3566 0
910

69 90 8375 52

191

1803

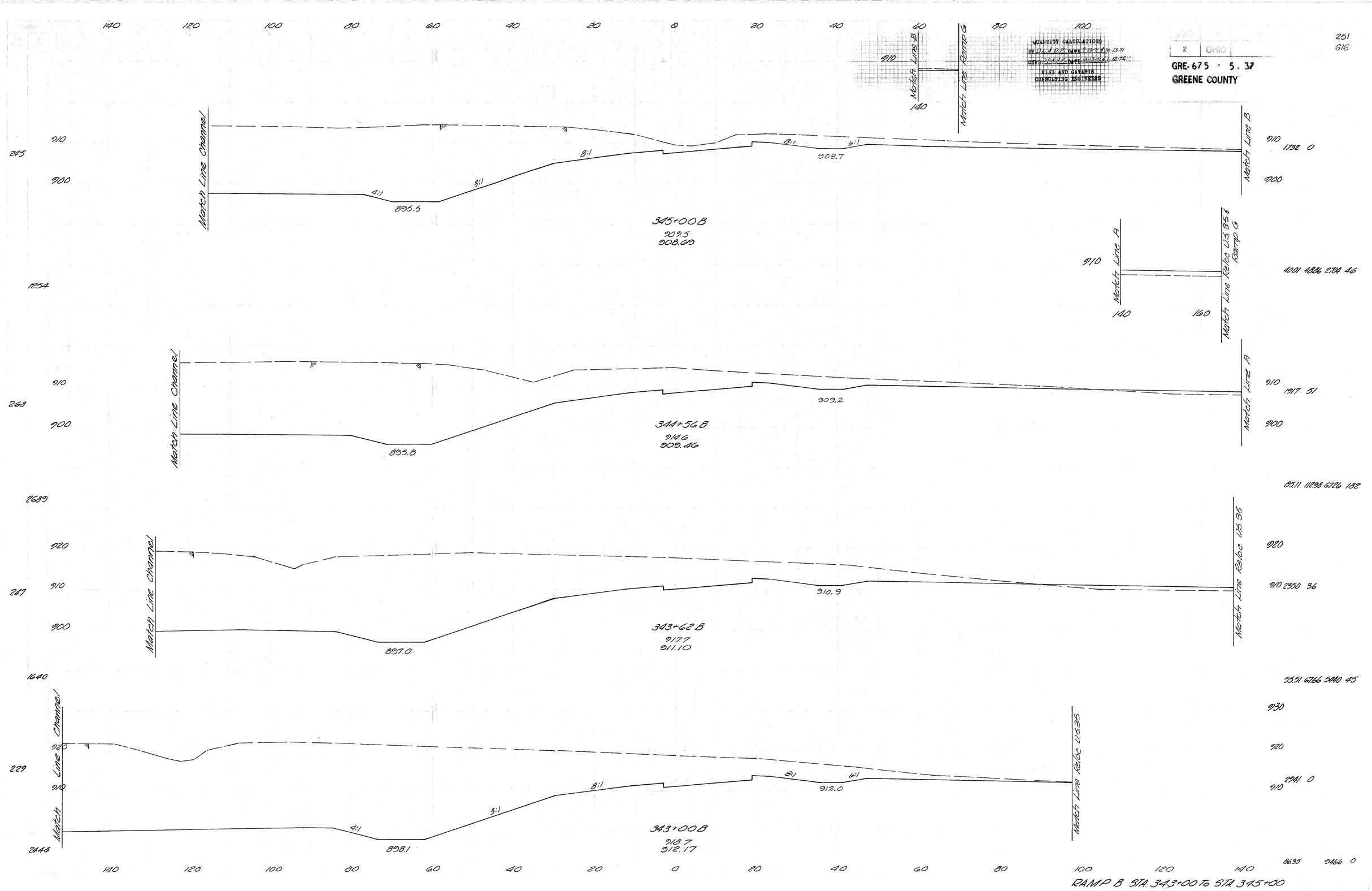
182

Sta. 339+13B (Sta. 12+00 U.S. 35)

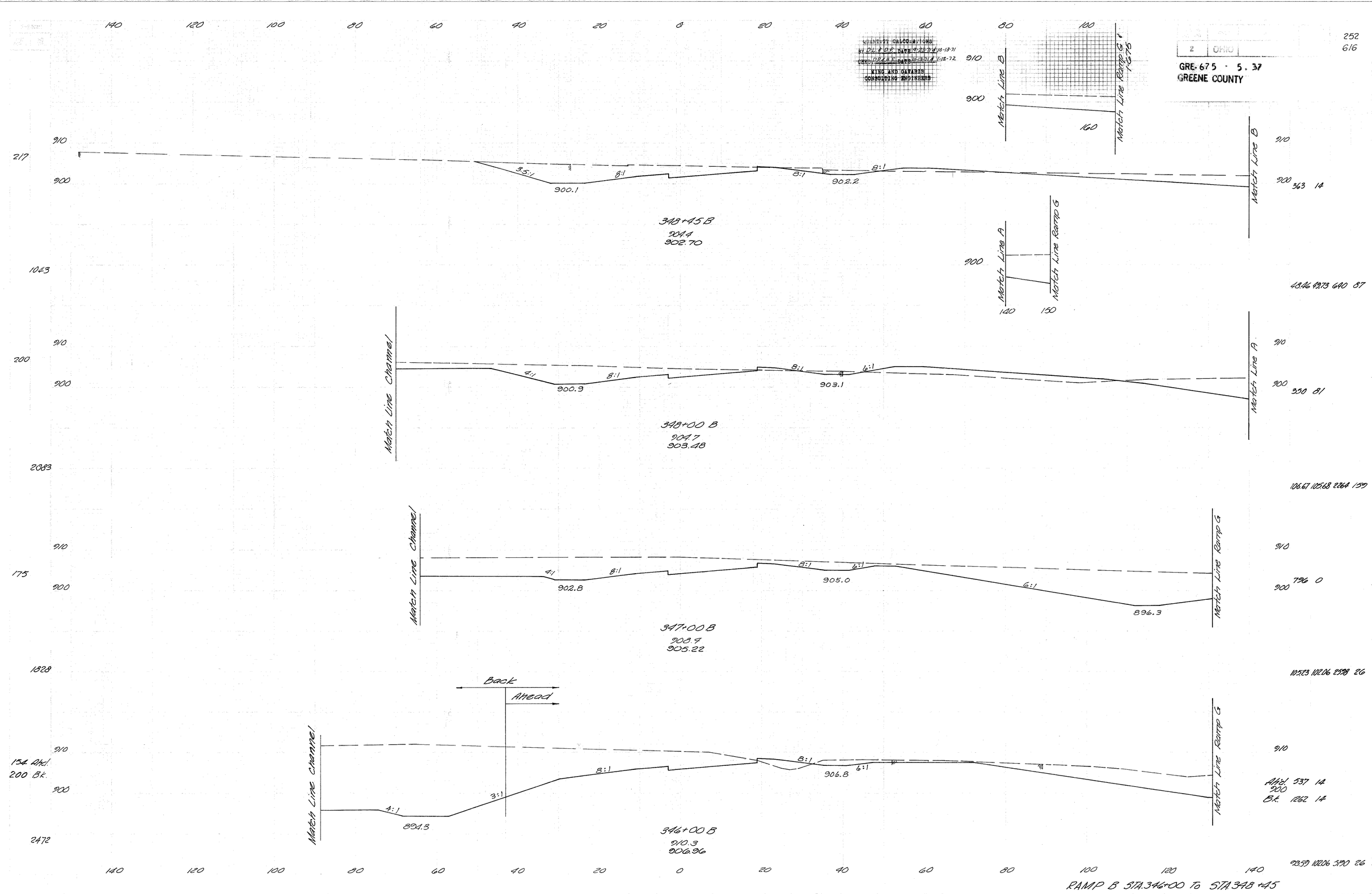
Sta. 339+13B (Sta. 12+00 U.S. 35) 8388 31

180 160 140 120 100 80 60 40 20 0 20 40 60 80 100

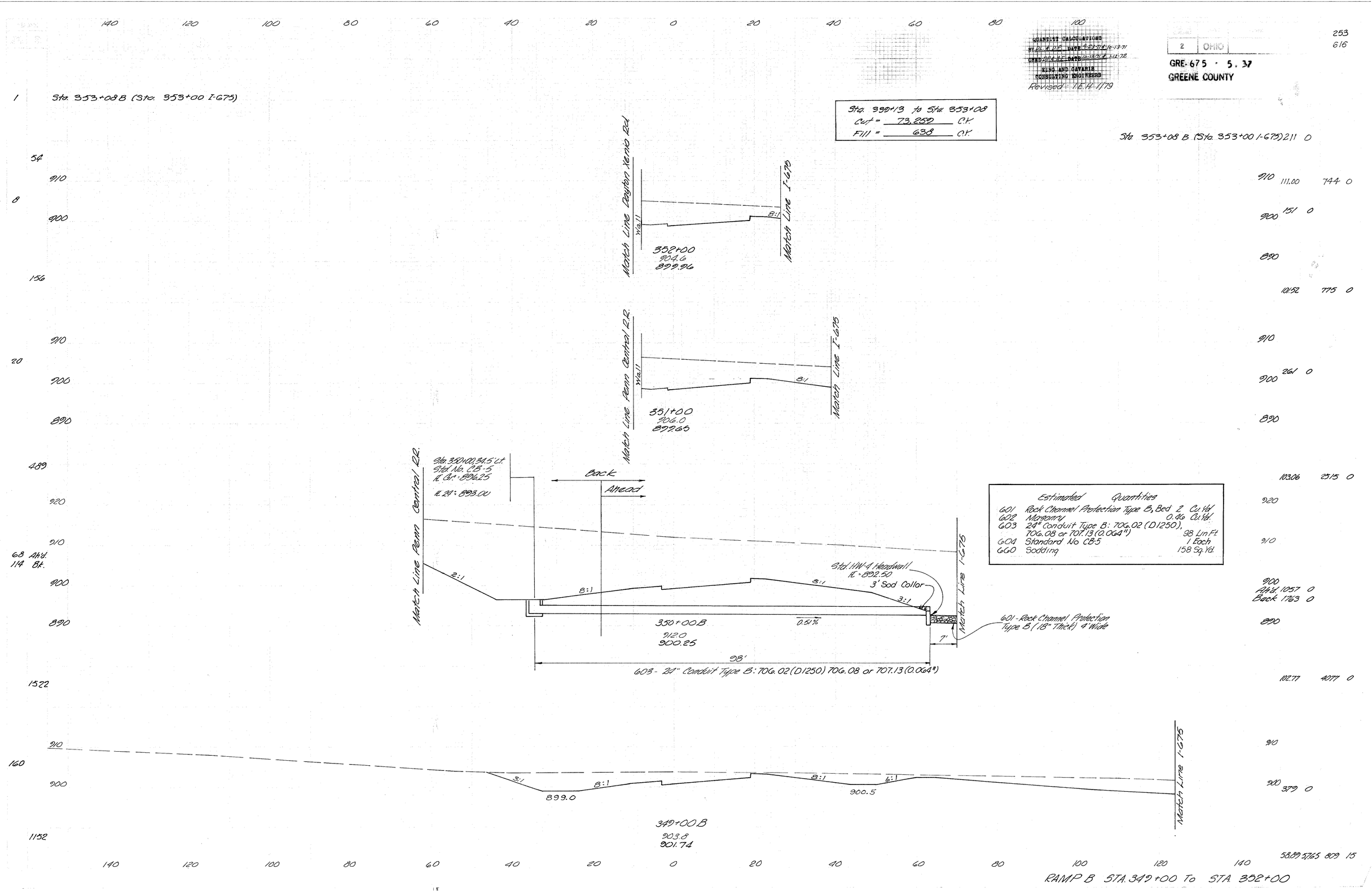
RAMP B STA 340+00 To STA 342+00



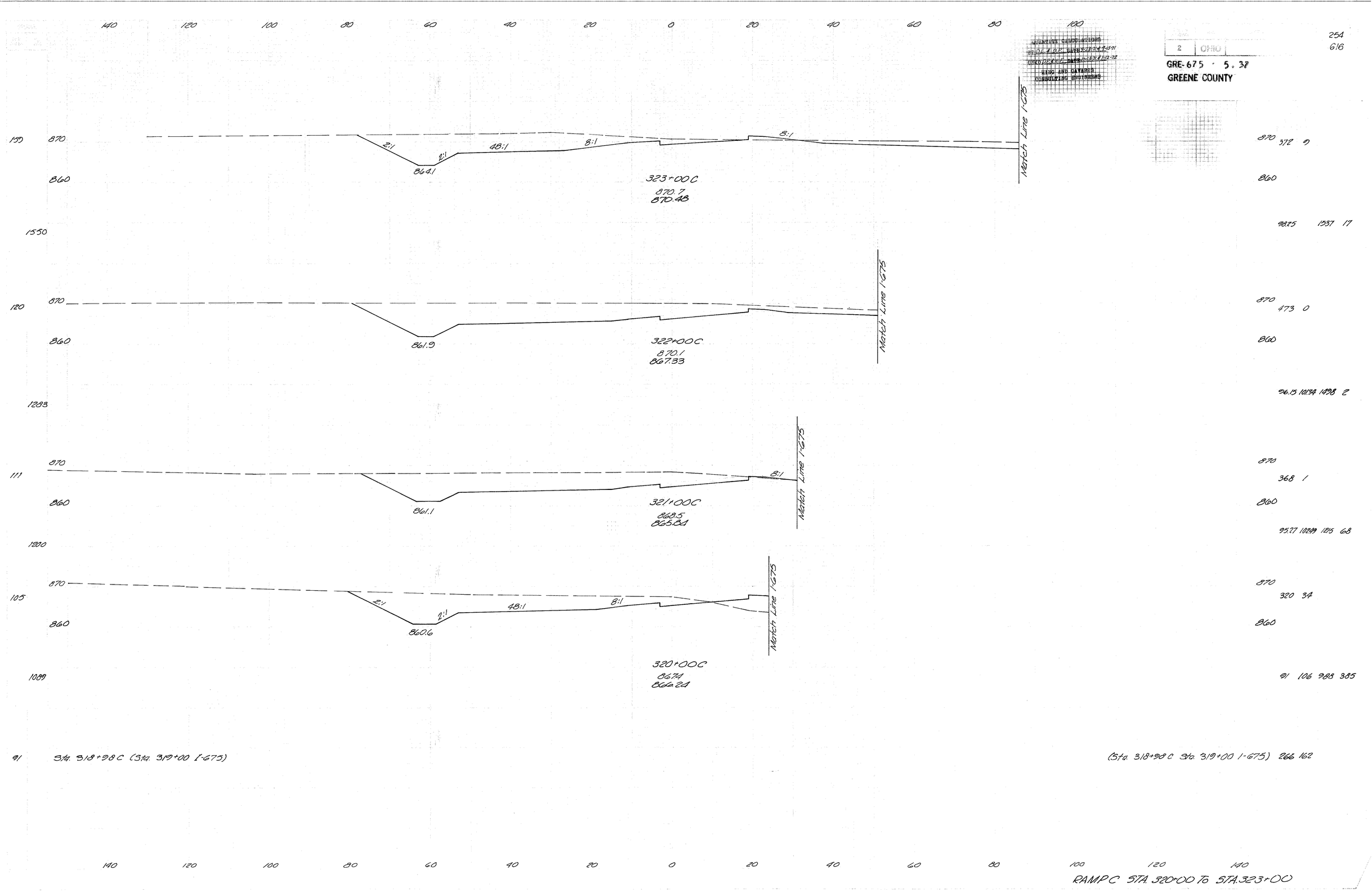
QUANTITY CALCULATIONS
BY D.L.&D.P. DATE 7-23-71 & 10-13-71
CHKD D.P.&H.F. DATE 10-13-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
251
616
Match Line B
Match Line Ramp G
Match Line Channel
Match Line A
Match Line Reloc U.S. 35 & Ramp G
Match Line Reloc U.S. 35
345+00B
909.5
908.69
895.5
908.7
344+56B
914.6
909.46
895.8
909.2
343+62B
917.7
911.10
897.0
910.9
343+00B
918.7
912.17
898.1
912.0
1732 0
1917 51
2350 36
2941 0
RAMP B STA. 343+00 To STA. 345+00



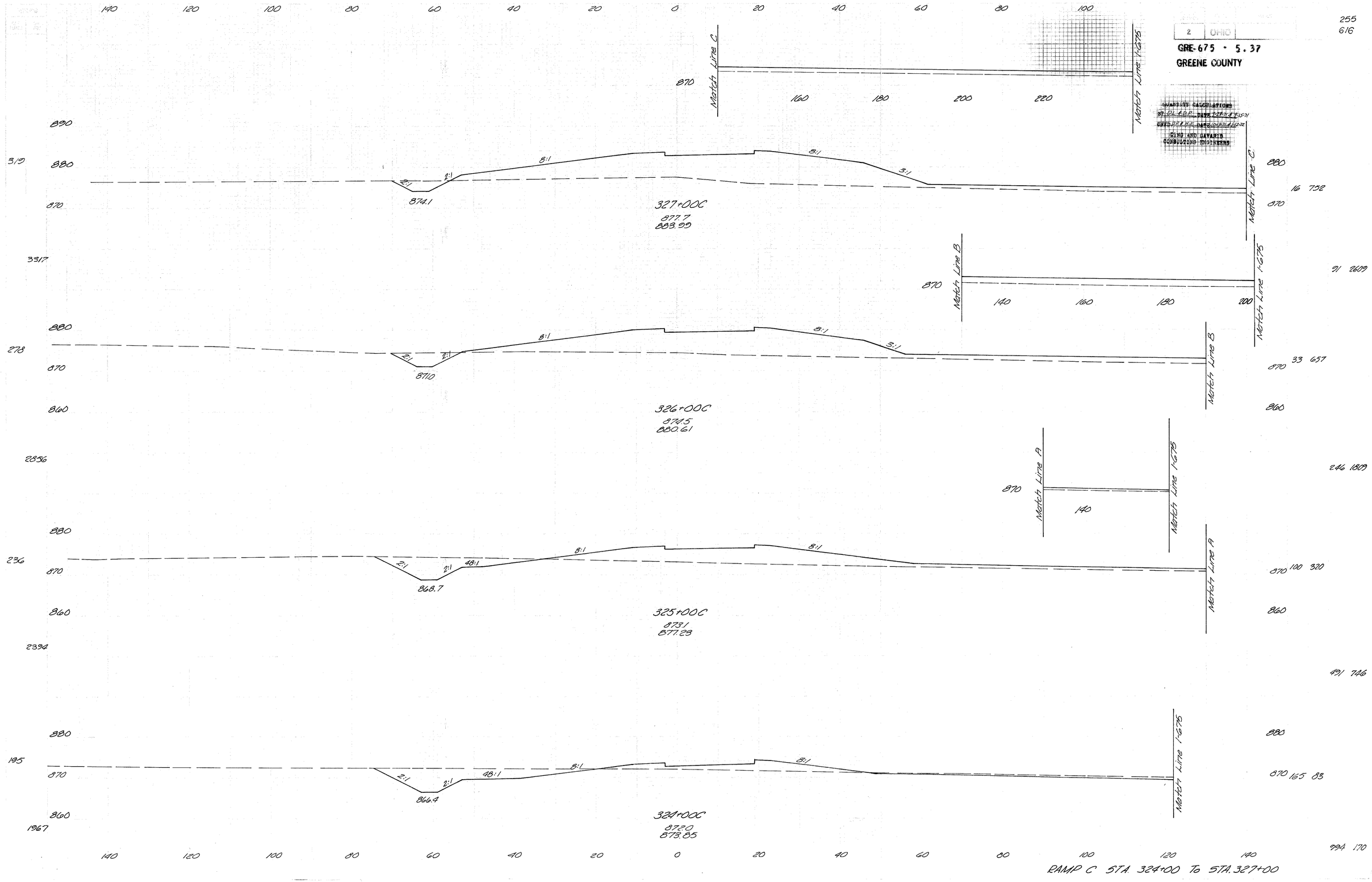
QUANTITY CALCULATIONS
BY D.L. & D.P. DATE 9-23-71 & 10-13-71
CHKD. D.P.& A.F. DATE 10-13-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
252
616
Match Line B
Match Line Ramp G & 1675
160
217
910
900
3.5:1
8:1
900.1
902.2
348+45 B
904.4
902.70
363 14
1043
Match Line A
Match Line Ramp G
140
150
48.46 49.73 640 87
200
4:1
900.9
903.1
6:1
348+00 B
904.7
903.48
350 81
2083
106.67 105.68 2264 159
175
902.8
905.0
896.3
347+00 B
908.4
905.22
796 0
1828
105.23 102.06 2598 26
Back
Ahead
154 Ahd.
200 Bk.
3:1
894.3
906.8
346+00 B
910.3
906.96
Ahd. 537 14
900
Bk. 1262 14
2472
93.59 102.06 5190 26
RAMP B STA.346+00 To STA.348+45



QUANTITY CALCULATIONS
BY DL & DP DATE 9-23-71 & 10-13-71
CHKD PP & HF DATE 10-13-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
253
616
Sta. 339+13 to Sta. 353+08
Cut = 73,259 C.Y.
Fill = 638 C.Y.
Sta. 353+08 B (Sta. 353+00 I-675)
Match Line Dayton Xenia Rd
Wall
8:1
352+00
904.6
899.96
Match Line I-675
Match Line Penn Central R.R.
351+00
906.0
899.65
Sta. 350+00, 34.5' Lt.
Std. No. CB-5
R.C. Gr.: 896.25
R.C. 24: 893.00
Back
Ahead
Match Line Penn Central R.R.
Std. HW-4 Headwall
R.C. = 892.50
3' Sod Collar
2:1
8:1
3:1
0.51%
350+00 B
912.0
900.25
98'
7'
601 - Rock Channel Protection Type B (18" Thick) 4' Wide
603 - 24" Conduit Type B: 706.02 (D1250) 706.08 or 707.13 (0.064")
Match Line I-675
Estimated Quantities
601 Rock Channel Protection Type B, Bed 2 Cu. Yd.
602 Masonry 0.46 Cu. Yd.
603 24" Conduit Type B: 706.02 (D1250), 706.08 or 707.13 (0.064") 98 Lin. Ft.
604 Standard No. CB-5 1 Each
660 Sodding 158 Sq. Yd.
3:1
8:1
899.0
8:1
6:1
900.5
349+00 B
903.8
901.74
Match Line I-675
Sta. 353+08 B (Sta. 353+00 I-675) 211 0
111.00 744 0
151 0
101.52 775 0
261 0
103.06 2515 0
Ah'd. 1057 0
Back 1763 0
102.77 4077 0
379 0
58.89 57.65 809 15
RAMP B STA. 349+00 To STA. 352+00



QUANTITY CALCULATIONS
ZING AND CAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
254
616
140 120 100 80 60 40 20 0 20 40 60 80 100
159 870 860
2:1 2:1 48:1 8:1 8:1
864.1
323+00C
870.7
870.48
Match Line I-675
1550
870 372 9
860
98.25 1537 17
120 870 860
861.9
322+00C
870.1
867.33
Match Line I-675
1283
870 473 0
860
96.15 101.34 1498 2
111 870 860
861.1
321+00C
868.5
865.84
8:1
Match Line I-675
1200
870 368 1
860
95.27 102.49 1215 68
105 870 860
2:1 2:1 48:1 8:1
860.6
320+00C
867.4
866.24
Match Line I-675
1089
870 320 34
860
91 106 988 385
91 Sta. 318+98C (Sta. 319+00 I-675)
(Sta. 318+98C Sta. 319+00 I-675) 266 162
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
RAMP C STA. 320+00 To STA. 323+00

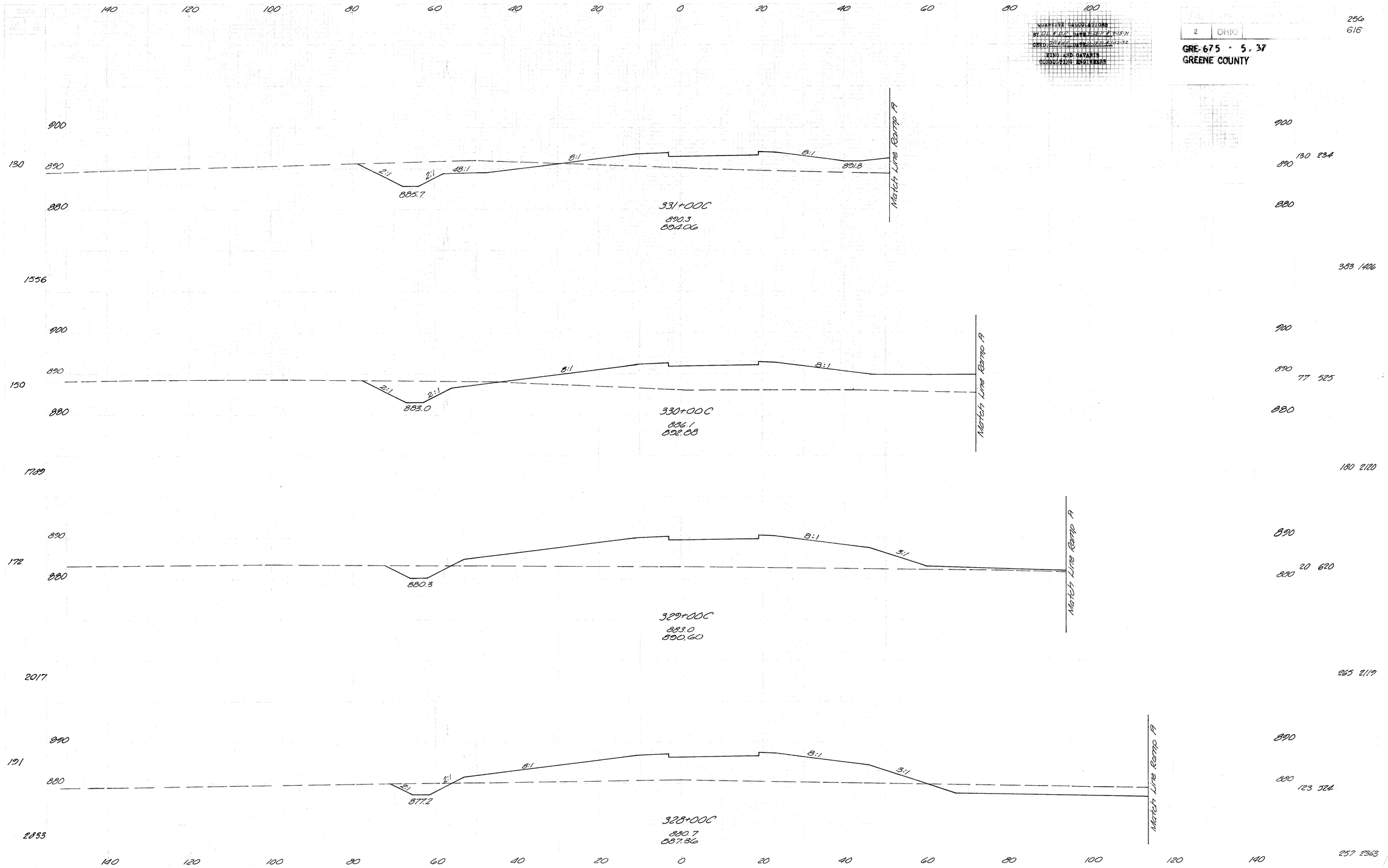


2 OHIO
GRE-675 - 5.37
GREENE COUNTY
QUANTITY CALCULATIONS
BY O.L.&D.P. DATE 9-28-71 & 9-15-71
CHKD DR & H.E. DATE 10-13-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
Match Line C
Match Line 1-675
Match Line B
Match Line A
327+00C
877.7
883.99
874.1
326+00C
874.5
880.61
871.0
325+00C
873.1
877.23
868.7
324+00C
872.0
873.85
866.4
RAMP C STA. 324+00 To STA. 327+00

QUANTITY CALCULATIONS
BY D.L.& D.R. DATE 7-23-71 & 9-15-71
CHKD. DP&HF DATE 10-13-71 & 1-12-72
WING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY



RAMP C STA. 328+00 To STA. 331+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY D.L.H.&P.E. DATE 7-28-71 & 7-15-71
CHKD. W.E.H.E. DATE 10-27-71 & 12-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO
GRE-675 · 5.37
GREENE COUNTY

257
616

Sta. 318+99 to Sta. 333+42
Cut = 11,306 C.Y.
Fill = 14,314 C.Y.

72 Sta. 333+42 C (Sta. 315+00A)

Sta. 333+42 C (Sta. 315+00A) 477 0

40 769 0

434

200
94
890
880

2:1 2:1 48:1 6:1
888.1

Match Line Ramp A

333+00 C
825.9
894.48

900
890
880

507 0

1044

1565 33

200
94
890

2:1 2:1 48:1 6:1
886.9

Match Line Ramp A

332+00C
892.8
894.28

1244

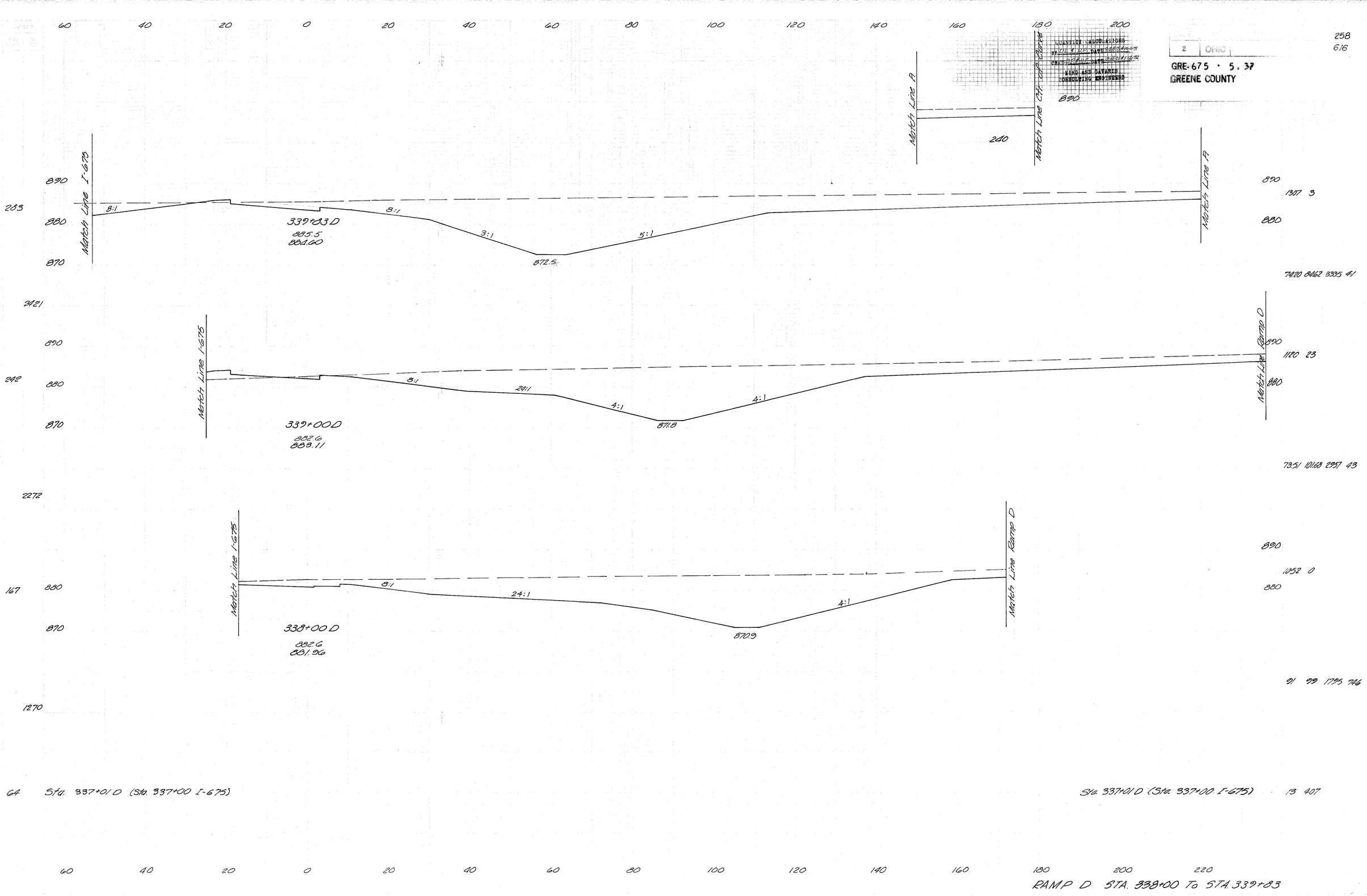
900
890

338 18

867 467

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

RAMP C STA. 332+00 To STA. 333+42



258
616
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
QUANTITY CALCULATIONS
BY DLA DATE 9-25-71 & 10-11-71
CHKD DRH DATE 12-10-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
Match Line A
Match Line Ctr. of Curve
890
240
Match Line I-675
Match Line A
890
880
870
283
8:1
339+83 D
885.5
884.60
8:1
3:1
872.5
5:1
1307 3
74.20 84.62 3335 41
2421
Match Line I-675
Match Line Ramp D
890
880
870
242
8:1
24:1
4:1
871.8
4:1
339+00 D
882.6
883.11
1120 23
73.51 101.68 2957 43
2272
Match Line I-675
Match Line Ramp D
890
880
870
167
8:1
24:1
4:1
870.9
338+00 D
882.6
881.96
1052 0
91 99 1795 746
1270
64 Sta. 337+01 D (Sta. 337+00 I-675)
Sta. 337+01 D (Sta. 337+00 I-675) 13 407
60 40 20 0 20 40 60 80 100 120 140 160 180 200 220
RAMP D STA. 338+00 To STA. 339+83

259
616

100 80 60 40 20 0 20 40 60 80 100 120 140 160

Match Line I-675 & Ramp A
900
890
880
329
8:1
8:1
342+59.0
895.2
892.19

Match Line D
900
890
1152.0

Match Line D
890
200 220 240
Match Line Ctr. of Curve

2068

Match Line I-675
900
890
880
302
342+00.0
892.2
890.47

Match Line C
890
790.0

Match Line C
890
200 220 240
Match Line Ctr. of Curve

4733 1702.0

3361

Match Line I-675
900
890
880
303
341+00.0
891.0
887.55

Match Line B
890
1079.0

Match Line B
890
200 220 240
Match Line Ctr. of Curve

7086 2354.0

1946

Match Line I-675
900
890
880
318
8:1
8:1
340+61.0
887.9
886.45

Match Line A
890
1052.0
880

Match Line A
890
200 220 240
Match Line Ctr. of Curve

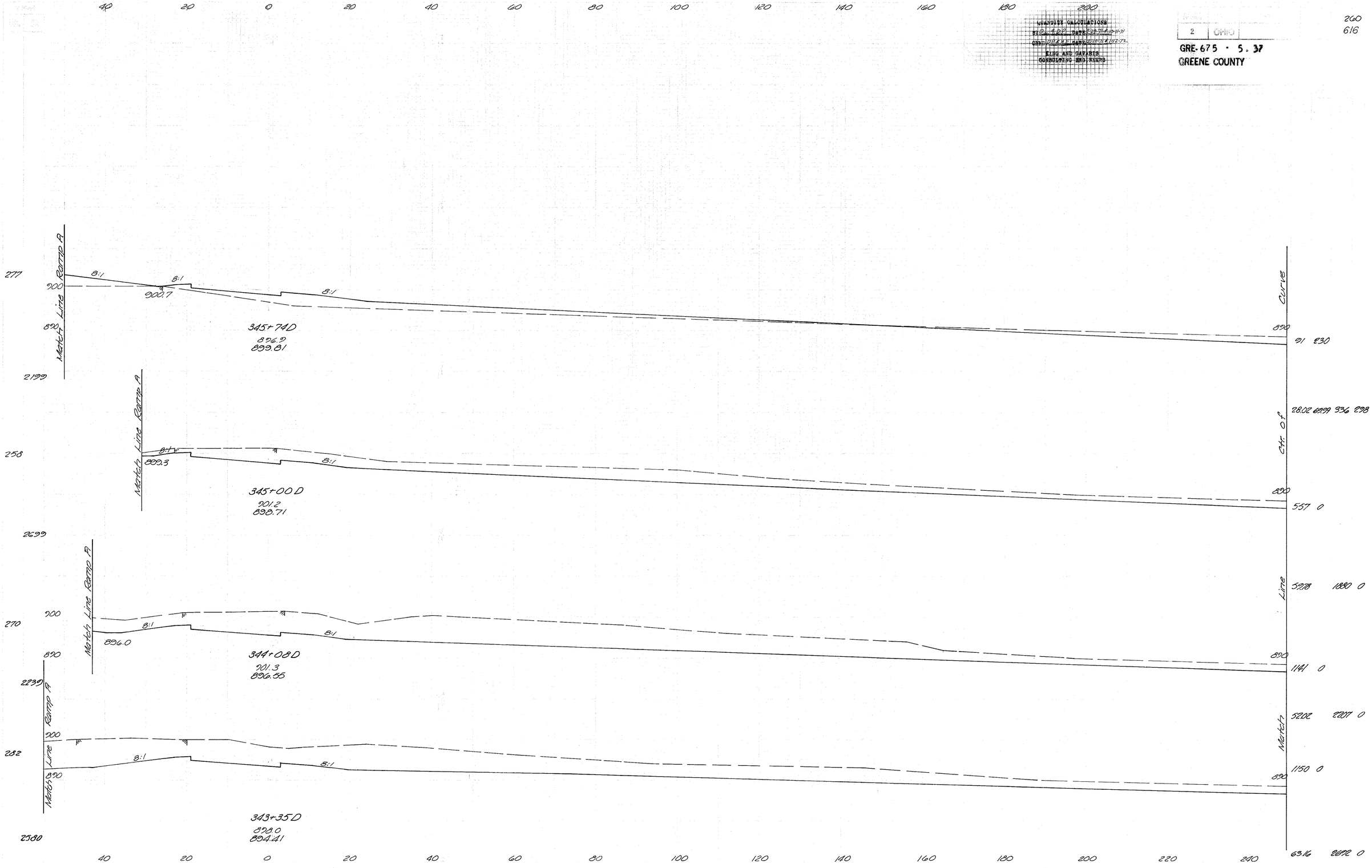
2870 1109.0

2604

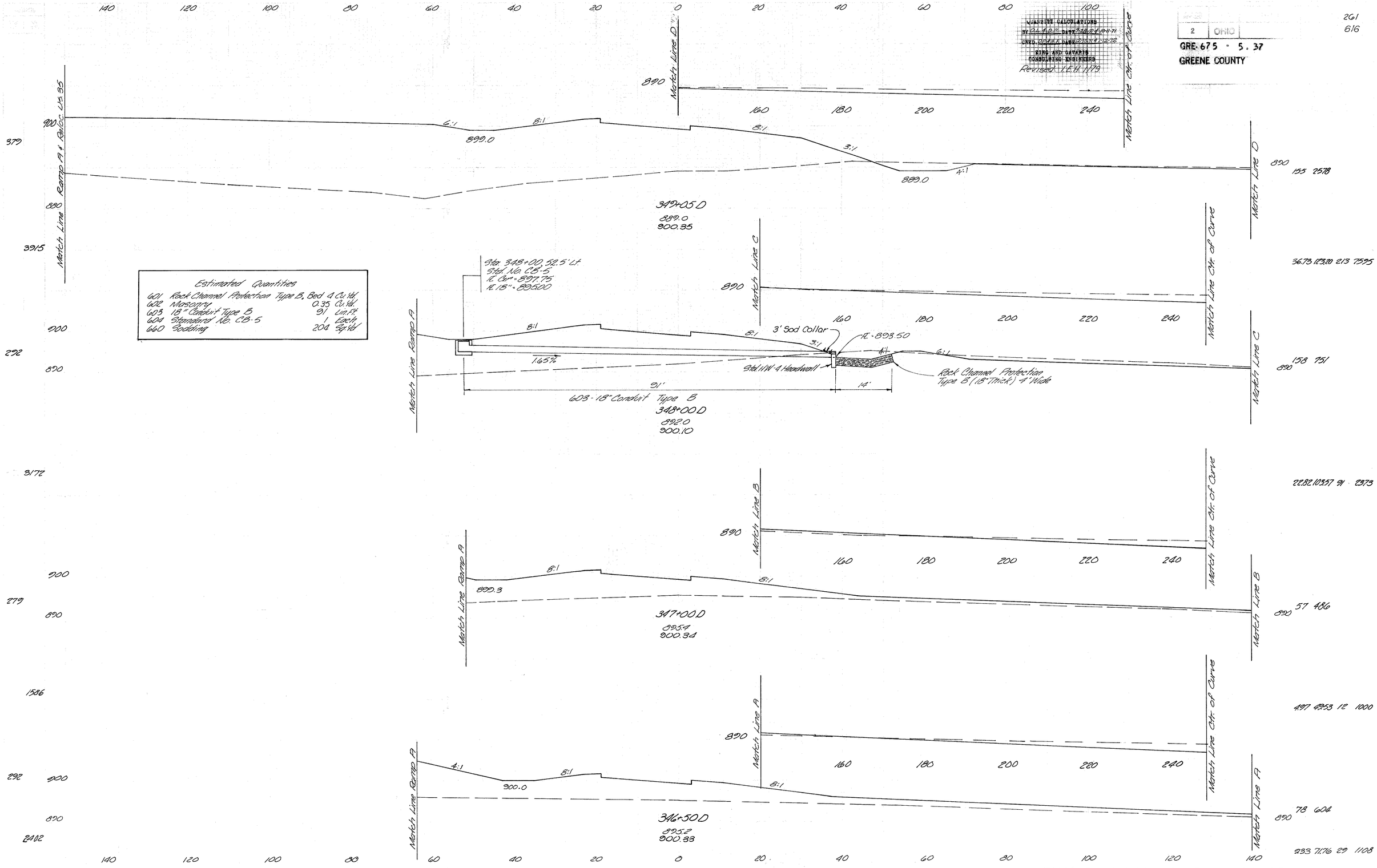
100 80 60 40 20 0 20 40 60 80 100 120 140 160 180

6793 & 37 6868.5

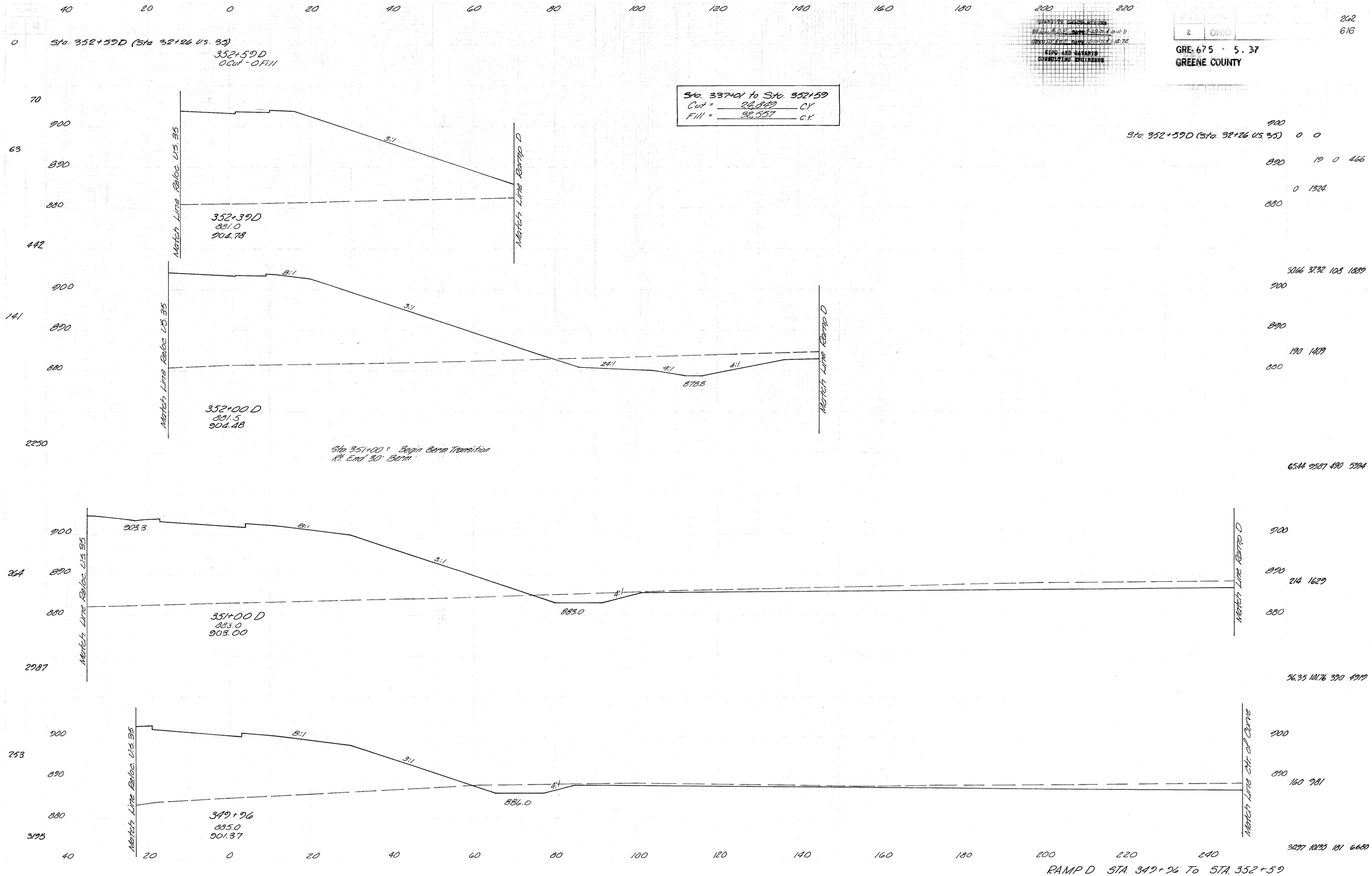
RAMP D STA. 340+61 To STA. 342+59



RAMP D STA. 343+35 To STA. 345+74



QUANTITY CALCULATIONS
BY D.L.A.D.P. DATE 9-28-71 & 10-11-71
CHKD. D.P.H.F. DATE 12-20-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised I.E.H. 1/79
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
261
616
Match Line Ramp A & Reloc. US 35
Match Line D
Match Line Ctr. of Curve
Match Line C
Match Line B
Match Line A
899.0
889.0
349+05 D
889.0
900.35
Sta. 348+00, 52.5' Lt.
Std. No. CB-5
Rt. Gr. = 897.75
Rt. 18" = 895.00
3' Sod Collar
Rt. = 893.50
Std. HW-4 Headwall
Rock Channel Protection Type B (18" Thick) 4' Wide
1.65%
91'
14'
603-18" Conduit Type B
348+00 D
892.0
900.10
899.3
347+00 D
895.4
900.34
900.0
346+50 D
895.2
900.33
Estimated Quantities
601 Rock Channel Protection Type B, Bed 4 Cu. Yd.
602 Masonry 0.35 Cu. Yd.
603 18" Conduit Type B 91 Lin. Ft.
604 Standard No. CB-5 1 Each
660 Sodding 204 Sq. Yd.
RAMP D STA. 346+50 To STA. 349+05



2	OHIO	

GRE-675 · 5.37
GREENE COUNTY

Sta. 337+01 to Sta. 352+59
Cut = 24,849 C.Y.
Fill = 32,557 C.Y.

262
616

900
Sta. 352+59D (Sta. 32+26 US. 35) 0 0
890 19 0 466
0 1304
880

3066 3732 108 1889
900
890
190 1409
880

6544 9587 490 5394

900
890
214 1629
880

5635 10176 390 4917

900
890
160 981
880

3097 10135 181 6680

220 200 180 160 140 120 100 80 60 40 20 0 20

QUANTITY CALCULATIONS
BY D.C.S. DATE 7-27-74 10:41:11
CHKD. D.R.H. DATE 7-27-74 10:12:12
KING AND DAVARIS
CONSULTING ENGINEERS

2	OHIO

GRE-675 · 5.37
GREENE COUNTY

2G3
616

910
900
890
230
Match Line Ramp E
3:1
8:1
8:1
Match Line U.S. 35
324+00 E
894.7
909.60

910
900
890
39 1041

2002
910
900
890
199
Match Line Ramp E
3:1
3:1
890.5
3:1
Match Line I-675 & U.S. 35
323+16 E
892.3
910.78

910
900
890
30 1277

49.75 8.155 64 3301

7385 2232 36 965

601
910
900
890
174
754
0
Sta 322+09 E (Sta. 30+09 U.S. 35)
Match Line Ramp E
3:1
3:1
890.0
3:1
Match Line I-675
322+87 E
911.20
322+09 E
Cut-Fill

910
900
890
5 562
73.00 73.00 69 760

Sta 322+09 E (Sta. 30+09 U.S. 35) 0 0

220 200 180 160 140 120 100 80 60 40 20 0 20 40 60

RAMP E STA. 322+09 TO STA 324+00

QUANTITY CALCULATIONS
BY TLA DATE 7-27-72 CHK'D 8-11-72
CHK'D BY C.W.C. DATE 10-22-72 CHK'D 11-12-72
WING AND CAVARTS
CONSULTING ENGINEERS

2	CHKD	

GRE-675 • 5.37
GREENE COUNTY

180 160 140 120 100 80 60 40 20 0 20 40 60

Match Line Ctr. of Curve — 220 — 200 — Match Line D — 890

900 Match Line D
890 Match Line D
239

6:1 8:1 9:1
894.7

Match Line Ramp A

328+00E
892.8
896.31

200 857 22
890

Match Line Ctr. of Curve — 220 — 200 — Match Line C — 890

3174

200 Match Line C
890 Match Line C
295

6:1 8:1 12:1
898.0

Match Line U.S. 35 E Ramp A

326+93E
901.30
900.61

10757 6817 3410 28

2/10
859 0
900

Match Line Ctr. of Curve — 220 — 200 — Match Line B — 890

3126

900 Match Line B
890 Match Line B
310

8:1 8:1 6:1
903.2

Match Line U.S. 35

326+00E
901.4
904.25

7397 9583 1588 286

2/10
300 161
900

Match Line Ctr. of Curve — 220 — 200 — Match Line A — 890

3228

905 Match Line A
890 Match Line A
271

5:1 8:1 8:1 6:1
907.2

Match Line U.S. 35

325+00E
897.5
907.38

3808 10540 250 2212

2/10
55 972
900

180 160 140 120 100 80 60 40 20 0 20 40 60 80 100

33.62 100.19 59 3735

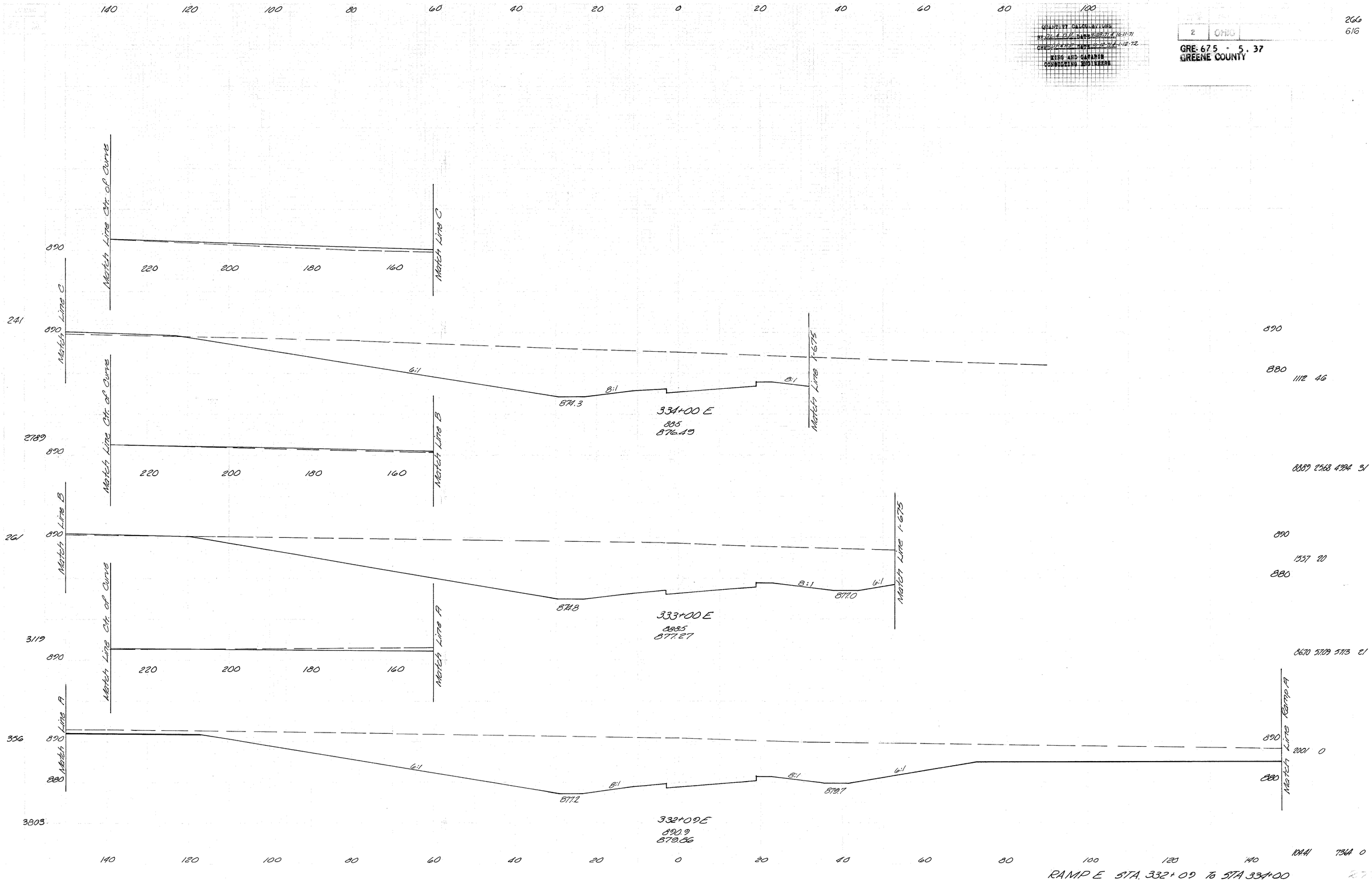
RAMP E STA. 325+00 TO STA 328+00

2 OHIO

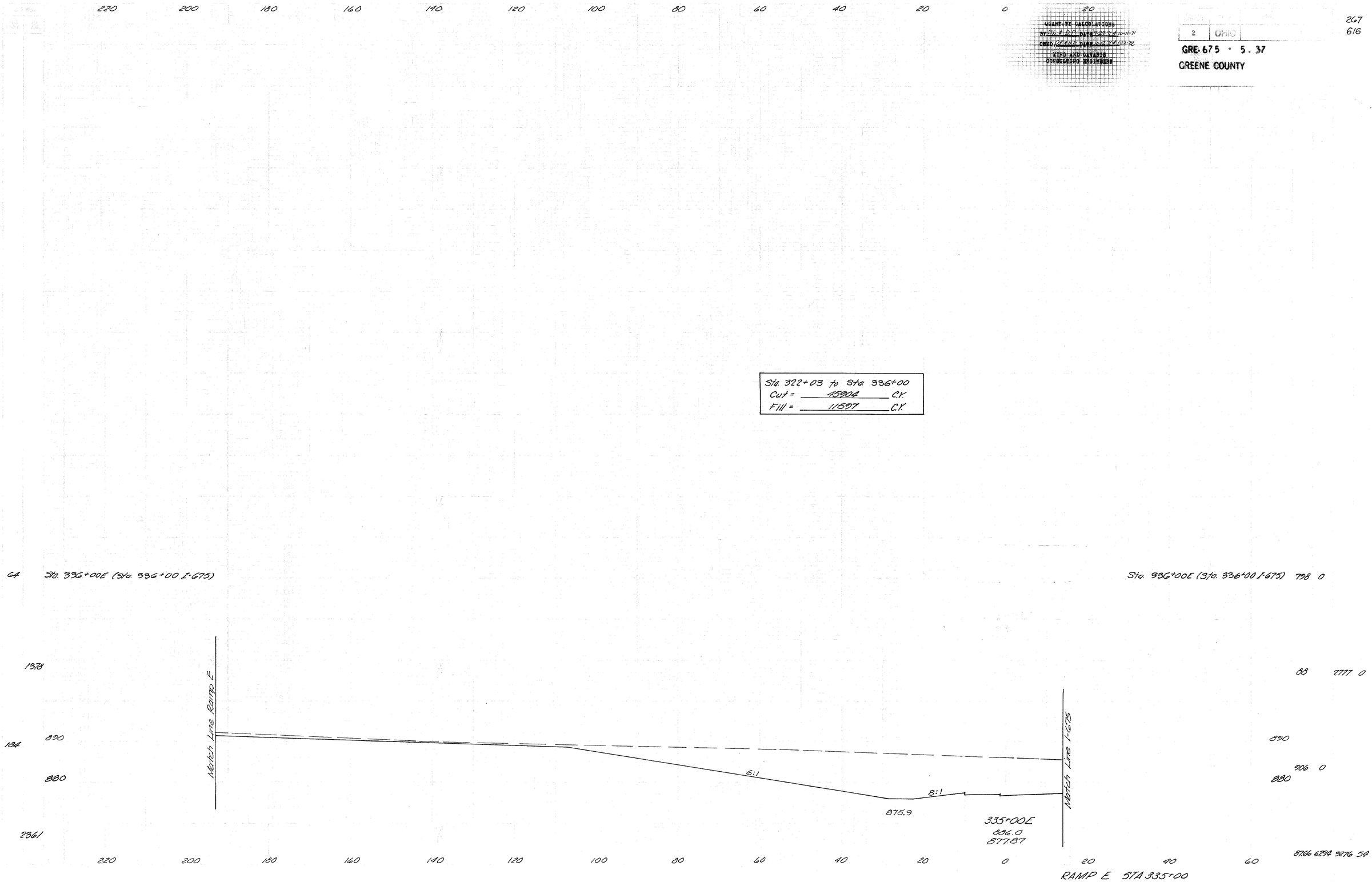
GRE-675 · 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY D.L.4 DP DATE 9-29-71 (4) 10-11-71
CHKD. DPRH F DATE 10-12-71 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS

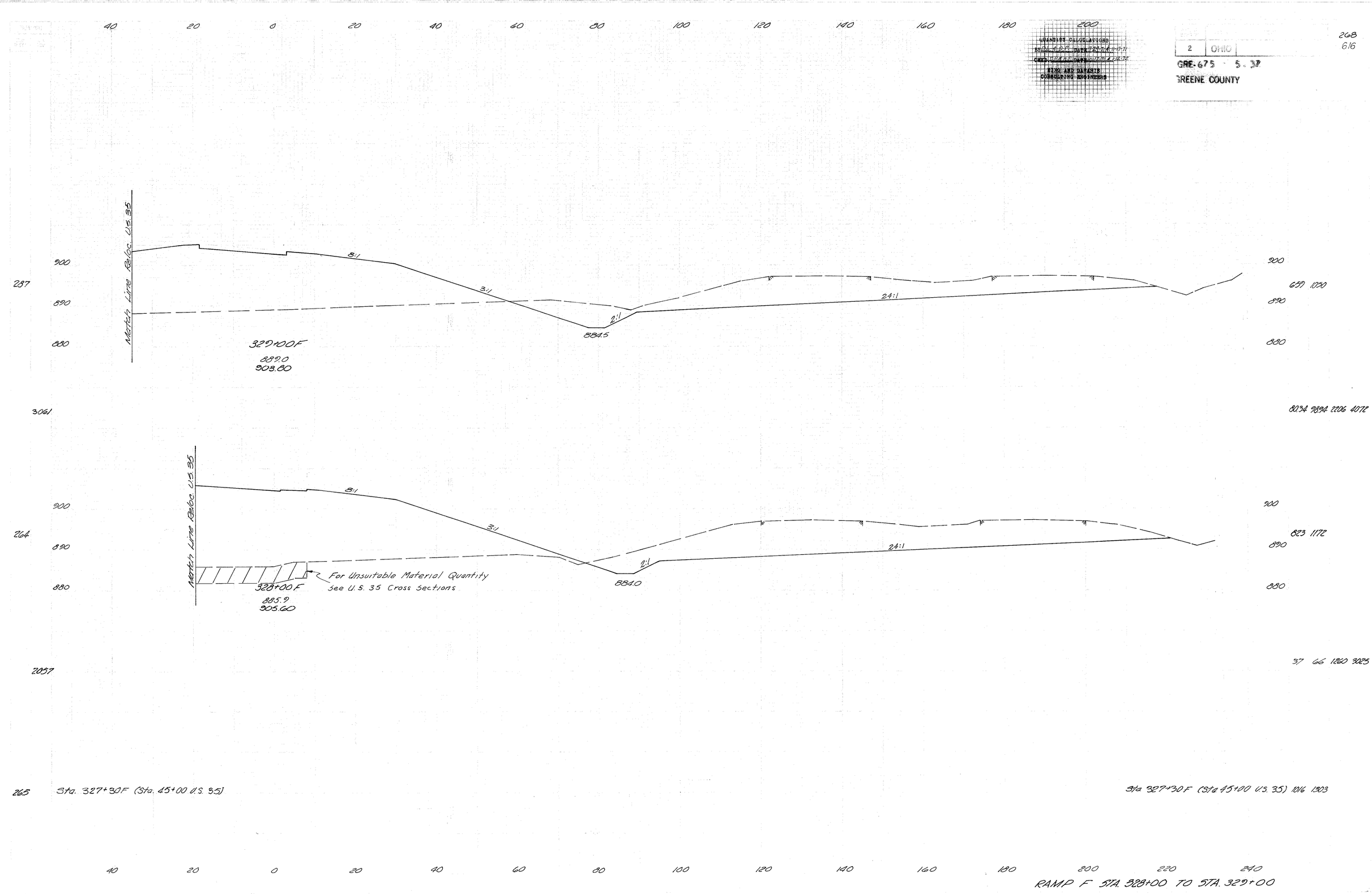
RAMP E STA. 328+44 To STA. 331+00



QUANTITY CALCULATIONS
BY DL & DL DATE 9-29-71 & 10-11-71
CHKD DL & DL DATE 10-12-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
266
616
140 120 100 80 60 40 20 0 20 40 60 80 100
Match Line Ctr. of Curve
Match Line C
Match Line B
Match Line A
Match Line 1-675
Match Line Ramp A
890
880
220 200 180 160
241
2789
261
3119
356
3803
6:1
8:1
874.3
874.8
877.0
877.2
879.7
334+00 E
885
876.49
333+00 E
888.5
877.27
332+09 E
890.9
879.86
1112 46
8889 2568 4394 31
1557 20
8670 5709 5713 21
2001 0
10441 7364 0
RAMP E STA. 332+09 To STA 334+00



220 200 180 160 140 120 100 80 60 40 20 0 20
QUANTITY CALCULATIONS
BY DL & DP DATE 9-29-70 & 10-11-71
CHKD DP & DP DATE 10-12-71 & 11-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
267
616
Sta. 322+03 to Sta. 336+00
Cut = 45904 C.Y.
Fill = 11597 C.Y.
64 Sta. 336+00E (Sta. 336+00 I-675)
Sta. 336+00E (Sta. 336+00 I-675) 798 0
1378
88 2777 0
184 890
890
880
880
906 0
2361
Match Line Ramp E
Match Line I-675
6:1
8:1
875.9
335+00E
886.0
877.87
220 200 180 160 140 120 100 80 60 40 20 0 20 40 60
87.66 62.94 32.76 54
RAMP E STA 335+00



QUANTITY CALCULATIONS
BY
CHKD.
DATE
KING AND DAVAHIS
CONSULTING ENGINEERS
2
OHIO
GRE-675 5.32
GREENE COUNTY
268
616
Match Line Reloc. U.S. 35
8:1
3:1
2:1
24:1
884.5
329+00F
889.0
903.80
900
890
880
287
3061
659 1050
8034 9894 2206 4072
For Unsuitable Material Quantity
See U.S. 35 Cross Sections
328+00F
885.9
905.60
884.0
264
2057
823 1172
37 66 1260 3025
265
Sta. 327+30F (Sta. 45+00 U.S. 35)
Sta. 327+30F (Sta. 45+00 U.S. 35) 1016 1303
RAMP F STA. 328+00 TO STA. 329+00

120 100 80 60 40 20 0 20 40 60 80 100 120 140

QUANTITY CALCULATIONS
STATE OF OHIO DEPARTMENT OF HIGHWAYS
CROSS SECTIONS
MINK AND GARVER
CONSULTING ENGINEERS

2 | OHIO

GRE-675 - 5.37
GREENE COUNTY

269
616

Sta. 332+00 Begin
Berm Transition Pt.
End 30' Berm

Match Line C

900
180

Match Line (Ramp A)

293 900 890

6:1 8:1 8:1 3:1 Varies 2:1

909.1

886.0

332+00F
896.2
909.96

Match Line C

900 890

584 1874

3734

9750 10372 8344 6264

Match Line (Ramp C)

341 900 890

905.9

330+94F
897.8
906.06

Match Line B

900
180 200 220

Match Line B

900 890

714 1371

Varies

885.5

3405

7861 9815 2089 4748

Match Line A

900
24:1
180 200 220 240

Match Line (Ramp F) Reloc. U.S. 35

311 900 890

903.9

330+00F
891.2
903.98

Match Line A

900 890

721 1241

24:1

885.0

3322

82.12 101.39 8099 4298

120 100 80 60 40 20 0 20 40 60 80 100 120 140 160

RAMP F STA 330+00 To STA 332+00

100 80 60 40 20 0 20 40 60 80 100 120 140 160

QUANTITY CALCULATIONS
BY [illegible] DATE 12-10-71
CHKD [illegible] DATE 12-14-72
KING AND GAVARIS
CONSULTING ENGINEERS

	2	OHIO

GRE-675 · 5.37
GREENE COUNTY

270
616

920
910
900
890

156

Match Line Ramp A

8:1 3:1 8:1 2:1 24:1 2:1 4:1

914.7

890.0

335+00 F
897.7
917.62

920
910
900
890

66 1676

1989

813 709

920
910
900
890

202

Match Line Ramp A

6:1 8:1 2:1 24:1 2:1 2:1 Varies

914.3

887.0

334+00 F
899.0
916.62

Sta 333+50 End Berm
Transition RT. Begin 11' Berm

373 2163

2494

1680 7876

910
900
890

247

Match Line Ramp A

6:1 8:1 2:1 24:1 2:1 2:1 Varies

912.0

886.5

333+00 F
894.1
913.75

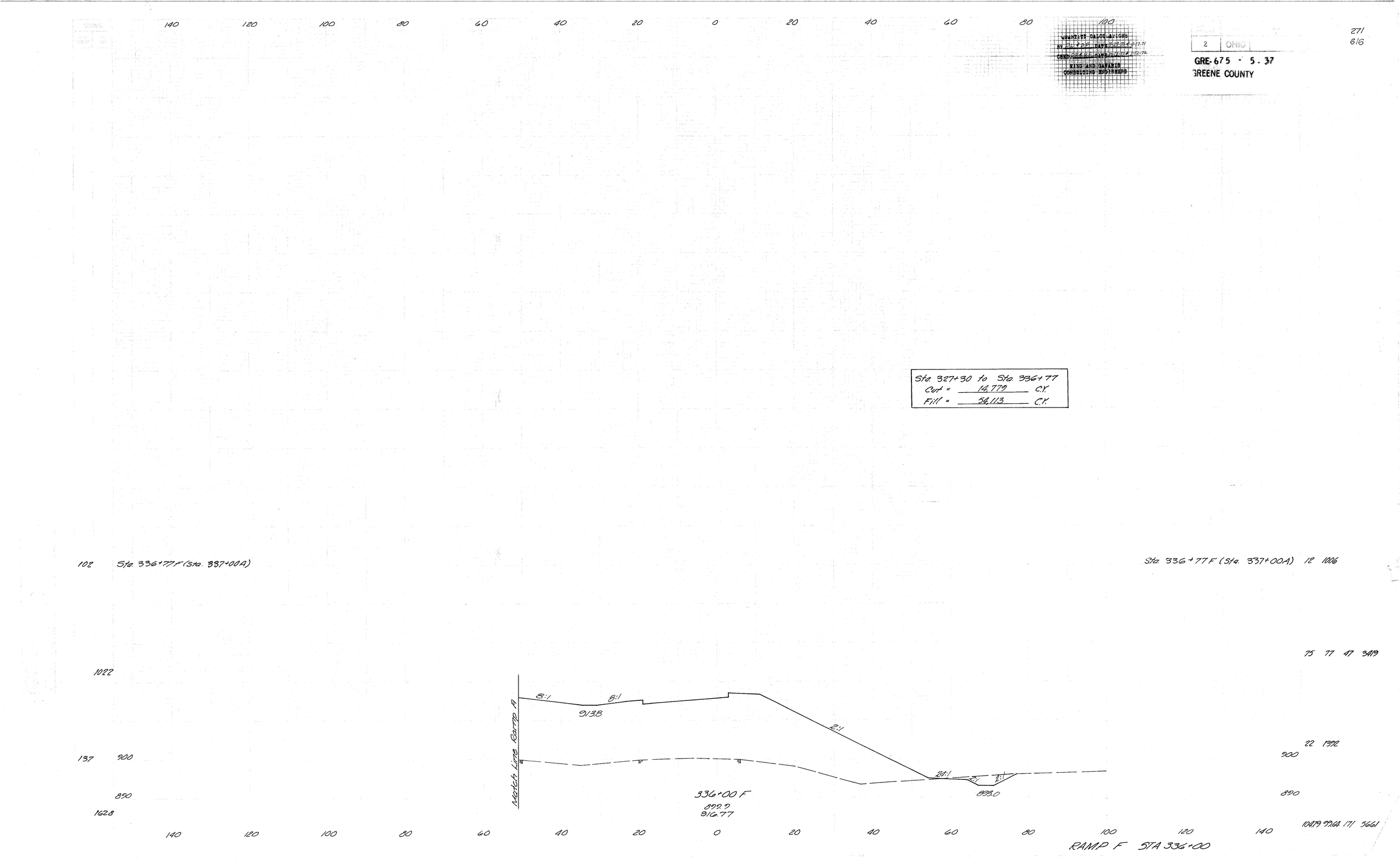
534 2090

3000

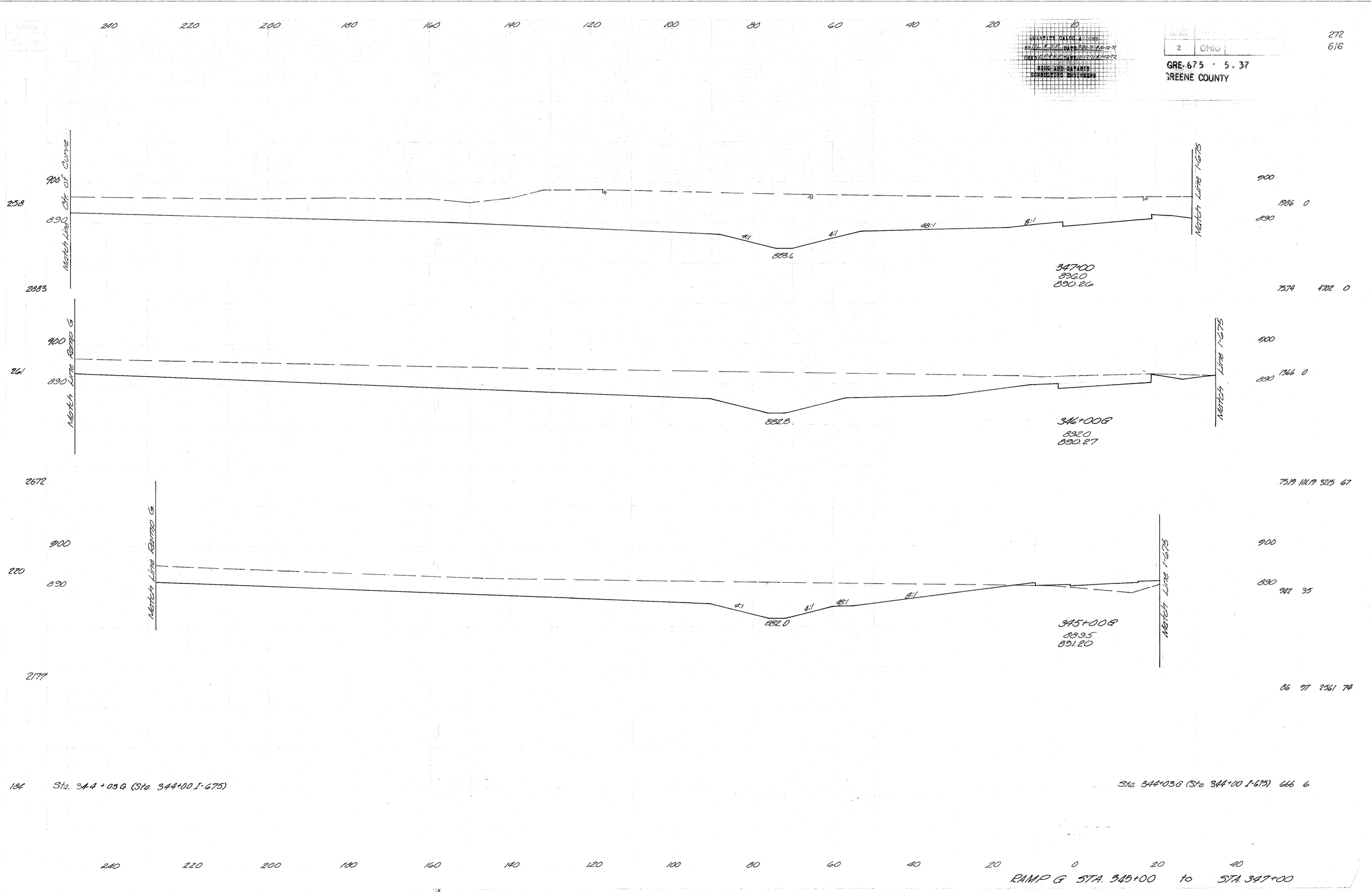
100 80 60 40 20 0 20 40 60 80 100 120 140 160 180

2070 7341

RAMP F STA. 333+00 To STA. 335+00



140 120 100 80 60 40 20 0 20 40 60 80 100
QUANTITY CALCULATIONS
BY DL & DP DATE 7-29-71 & 11-17-71
CHKD. DRA & LF DATE 12-17-71 & 7-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
271
616
Sta. 327+30 to Sta. 336+77
Cut = 14,779 C.Y.
Fill = 54,113 C.Y.
102 Sta. 336+77F (Sta. 337+00A)
Sta. 336+77F (Sta. 337+00A) 12 1006
75 77 47 3419
1022
22 1392
137 900
900
890
890
1628
104.79 99.64 171 5661
Match Line Ramp A
8:1
8:1
913.8
2:1
24:1
2:1
2:1
893.0
336+00 F
899.9
916.77
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
RAMP F STA 336+00



QUANTITY CALCULATIONS
BY Q.L. & D.P. DATE 9-30-71 & 10-12-71
CHKD E.P.&H.R. DATE 10-12-71 & 11-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
272
616
240 220 200 180 160 140 120 100 80 60 40 20 0
Match Line Ctr. of Curve
Match Line 1-675
900
890
258
2883
4:1
4:1
48:1
8:1
883.6
347+00
896.0
890.26
1986 0
75.74 4702 0
Match Line Ramp G
261
882.8
346+00G
892.0
890.27
1366 0
2672
75.19 101.19 3215 67
220
882.0
345+00G
889.5
891.20
942 35
2177
86 97 2561 74
184
Sta. 344+03G (Sta. 344+00 I-675)
Sta. 344+03G (Sta. 344+00 I-675) 666 6
RAMP G STA. 345+00 to STA. 347+00

QUANTITY CALCULATIONS
BY D.L.S. DATE 10-12-71
CHKD C.H.H. DATE 10-12-71 12-72
KING AND GAFFNEY
CONSULTING ENGINEERS

2 | ONE

GRE-675 - 5.37
GREENE COUNTY

273
616

140 120 100 80 60 40 20 0 20 40

North Line O
North Line Ctr. of Curve
North Line Ramp B
North Line B
North Line A
North Line 1-675
North Line 1-675 & Ramp B
North Line Ramp G

900
890
240 220
251
6:1 4:1 8:1
893.6
350+00
9032
897.70
1619 0

2850
262
8880
6.1.89 4289 0

2757
3/5
885.0
348+14
9010
892.31
39.12 4976 0

481
304
3/22
885.6
348+00
9004
891.93
9.94 877 0

349+00
9043
894.79
892.08
2404 0

900
2159 0

900
2357 0
891.70
65.59 5275 0

200 180 160 140 120 100 80 60 40 20 0 20 40 60 80

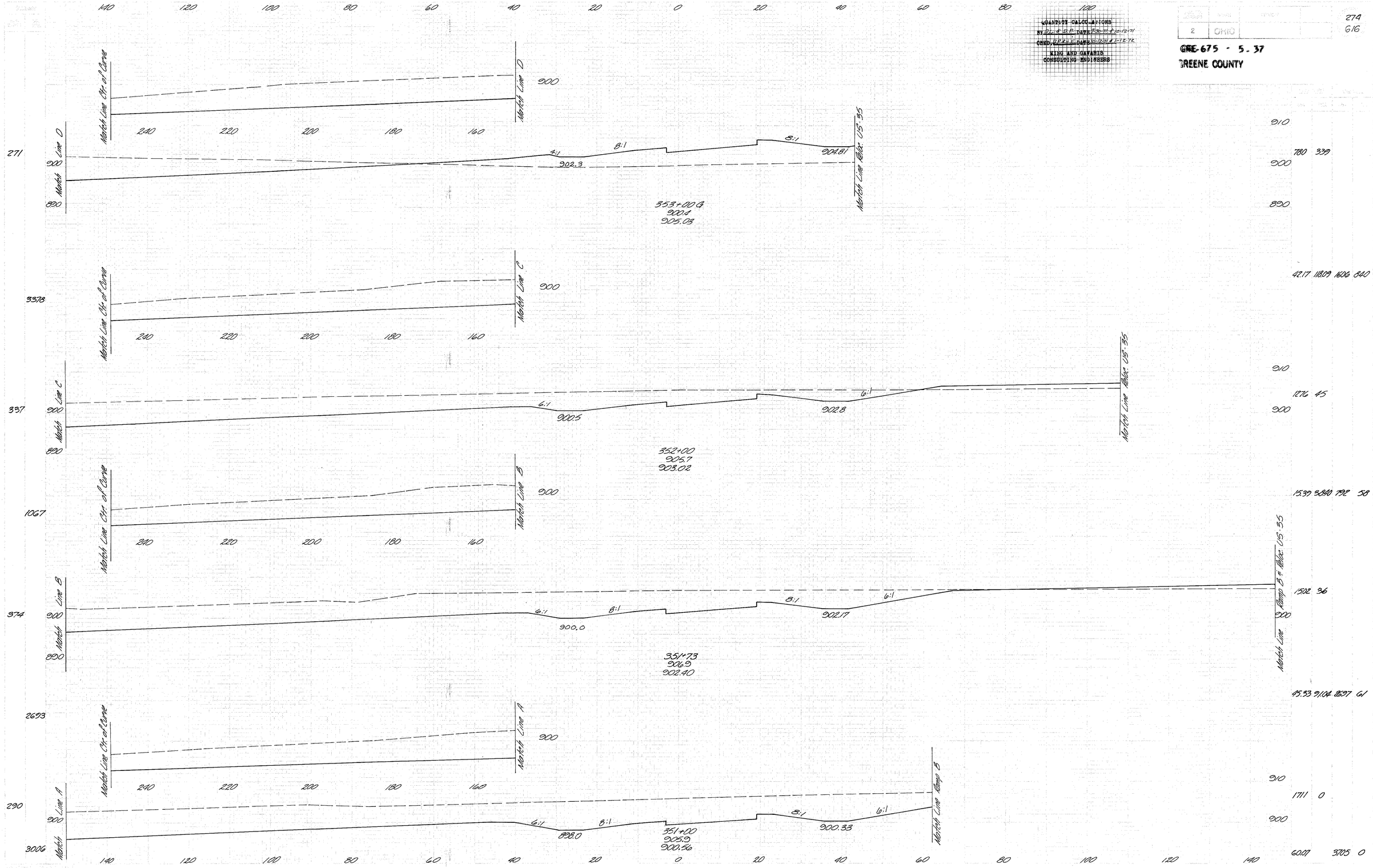
RAMP G STA. 348+00 TO STA. 350+00

QUANTITY CALCULATIONS
BY D.L. & D.P. DATE 7-30-71 & 10-12-71
CHKD. D.P. & H.E. DATE 10-12-71 & 1-12-72
KING AND GAVARIS
CONSULTING ENGINEERS

2	OHIO	

274
616

GRE-675 - 5.37
GREENE COUNTY

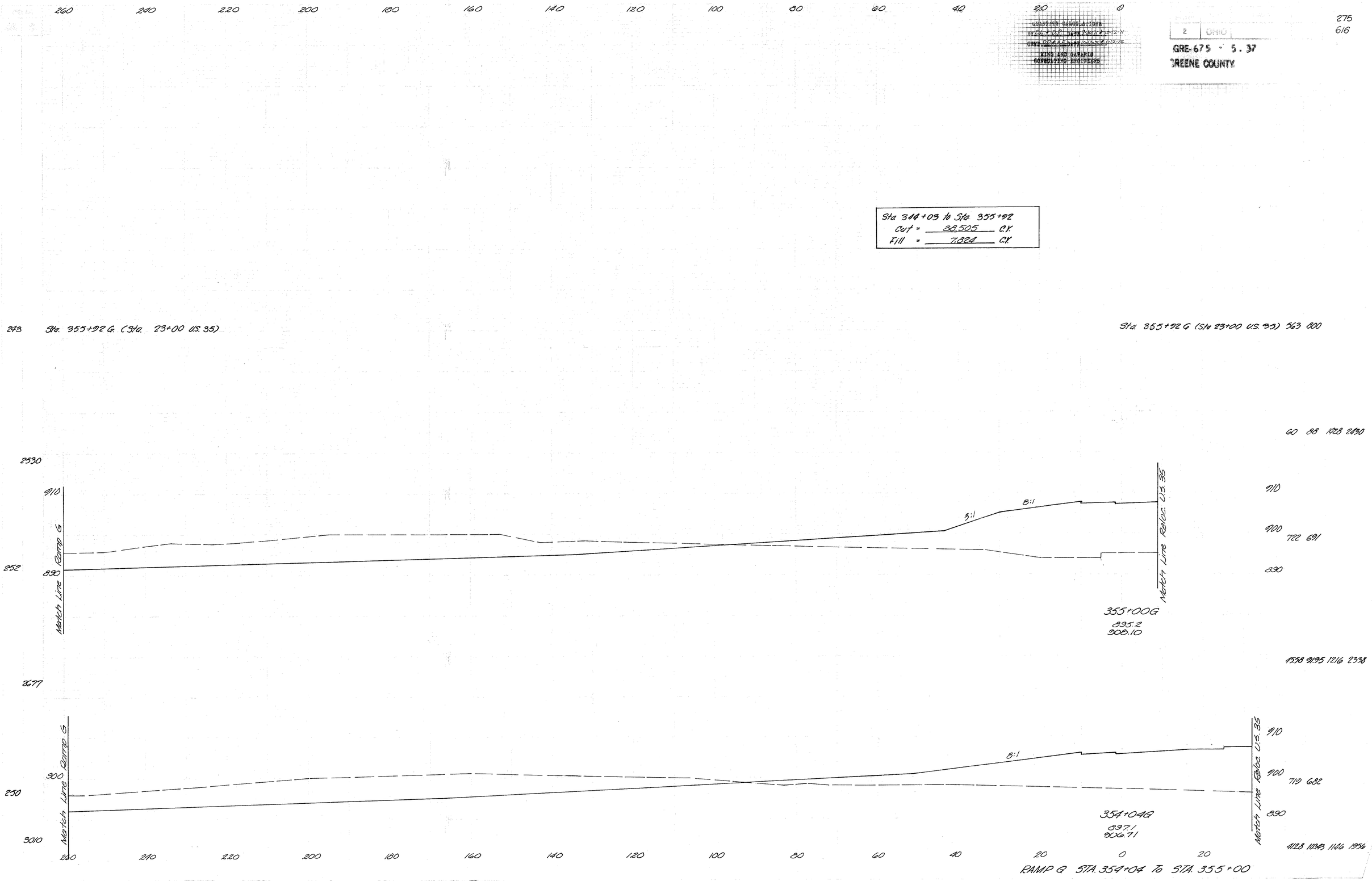


RAMP G STA. 351+00 to STA. 353+00

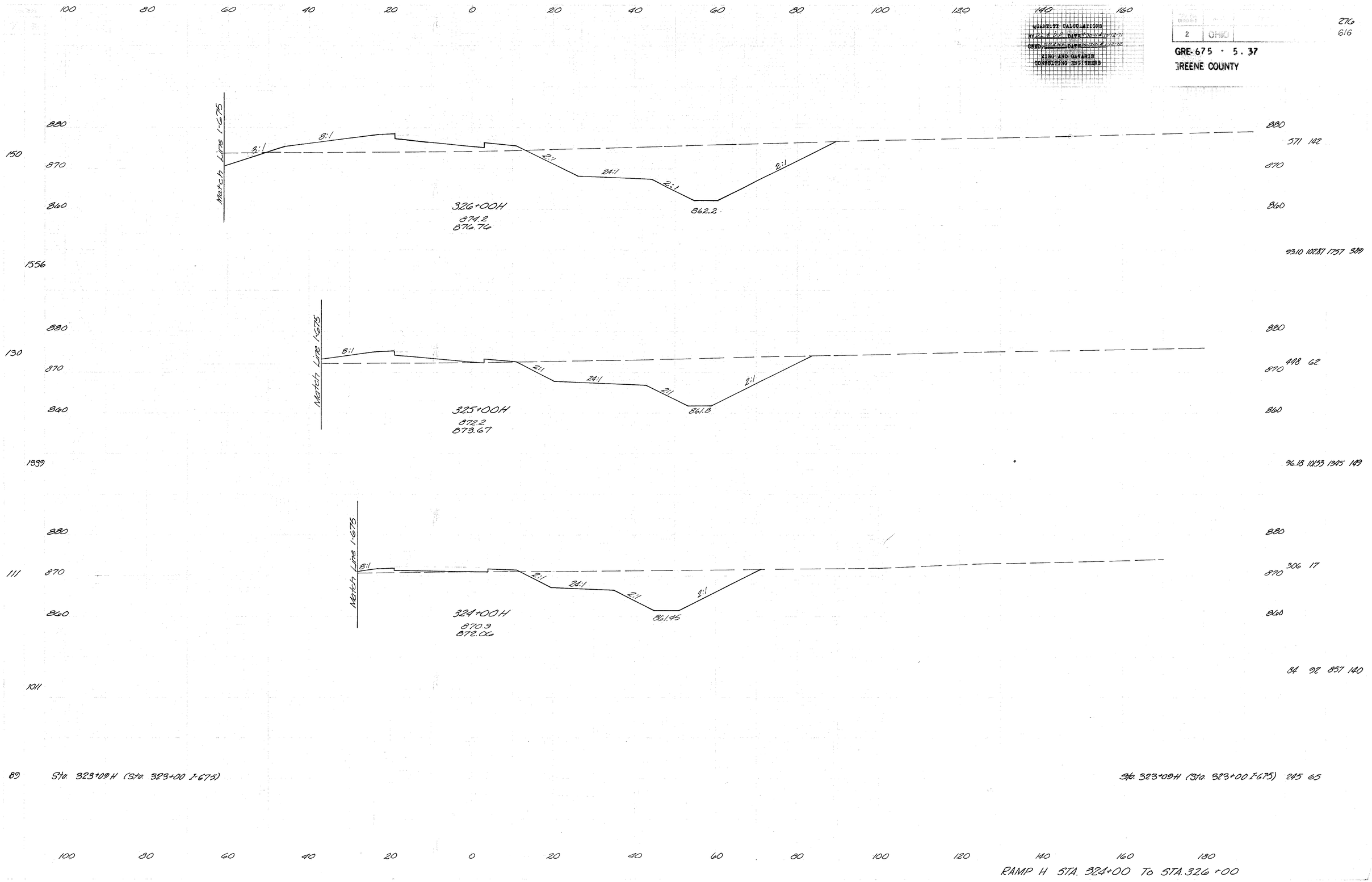
QUANTITY CALCULATIONS
BY [illegible] DATE 9-30-71 & 10-12-71
CHKD. [illegible] DATE 10-12-71 & 1-12-72
KING AND GAMARIS
CONSULTING ENGINEERS

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

Sta. 344+03 to Sta. 355+92
Cut = 38.505 C.Y.
Fill = 7.824 C.Y.



RAMP G STA. 354+04 To STA. 355+00



QUANTITY CALCULATIONS
BY DL & DP DATE 9-30-71 TO 12-71
CHKD. DDXHF DATE 10-12-71 TO 12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
276
616
100 80 60 40 20 0 20 40 60 80 100 120 140 160
Match Line I-675
8:1
2:1
24:1
326+00H
874.2
876.76
862.2
150
880
870
860
571 142
1556
93.10 102.87 1757 389
325+00H
872.2
873.67
861.8
130
448 62
1339
96.18 101.53 1345 149
324+00H
870.9
872.06
861.45
111
306 17
1011
84 92 857 140
89
Sta. 323+09H (Sta. 323+00 I-675)
Sta. 323+09H (Sta. 323+00 I-675) 245 65
100 80 60 40 20 0 20 40 60 80 100 120 140 160 180
RAMP H STA. 324+00 To STA. 326+00

140 120 100 80 60 40 20 0 20 40 60 80 100 120

QUADRANT OF CLOVERLEAF
BY [illegible] DATE 12-12-71 & 12-12-71
CHECKED BY [illegible] DATE 12-12-71 & 12-12-72
KING AND DAVENIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY

277
616

890
880
154

Match Line Ramp A

8:1 8:1 3:1 4:1
888.9
884.0

890
42 539
880

329+00 H
884.9
889.31

1850

94.12 106.51 120 2382

890
880
179

Match Line Ramp A

6:1 8:1 8:1 4:1
884.7
880.3

890
27 618
880

329+00 H
884.4
885.11

1328

890
880
203

Match Line 1-675 & Ramp A

6:1 8:1 8:1 4:1
880.6
876.1

890
60 748
880

327+28 H
878.0
882.09

61.29 77.24 108 1972

777

880
165
870

Match Line 1-675

6:1 8:1 8:1
877.7
870.8

890
209 391
870

326+90 H
877.0
880.91

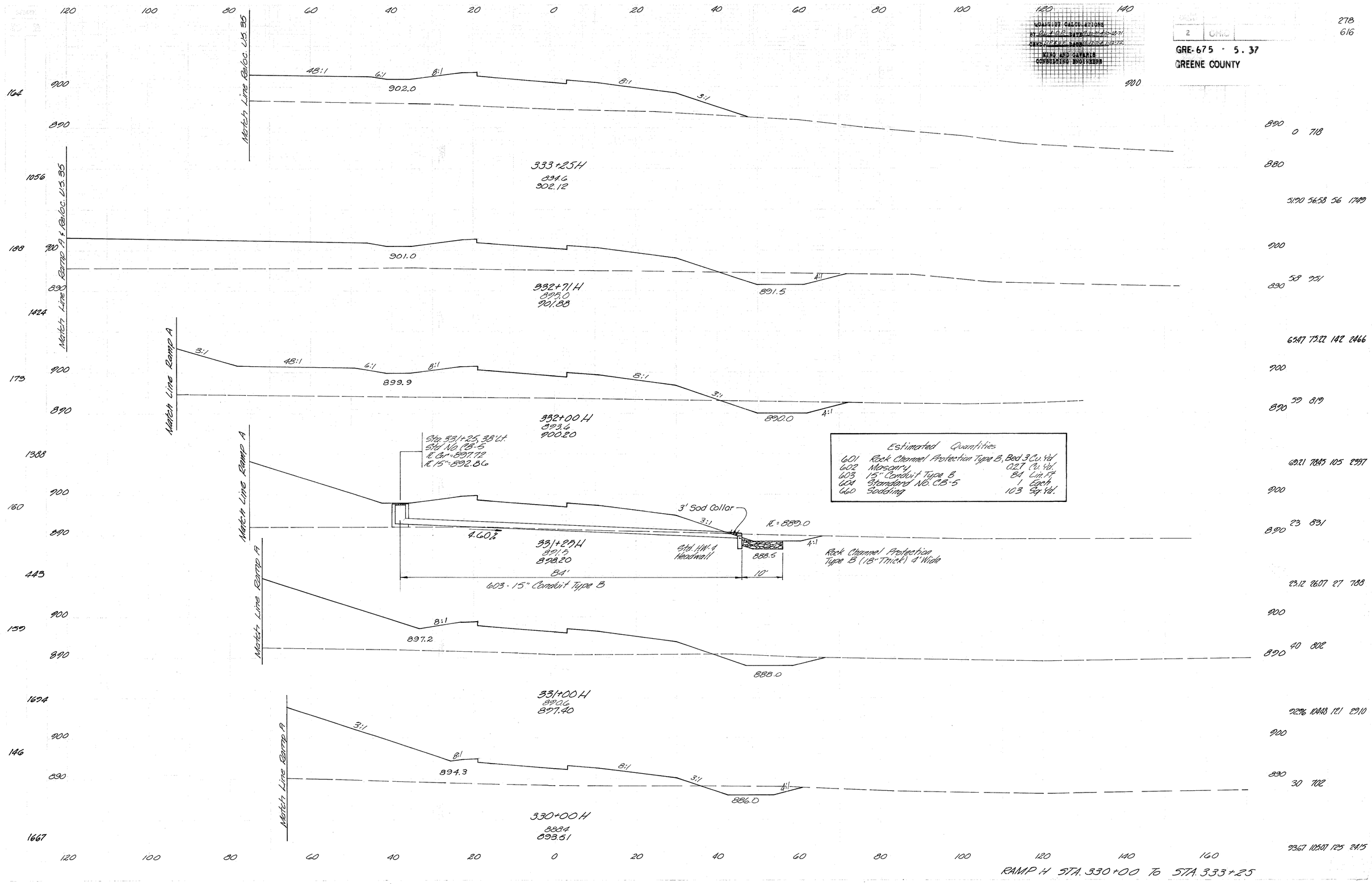
1575

3527 4070 176 859

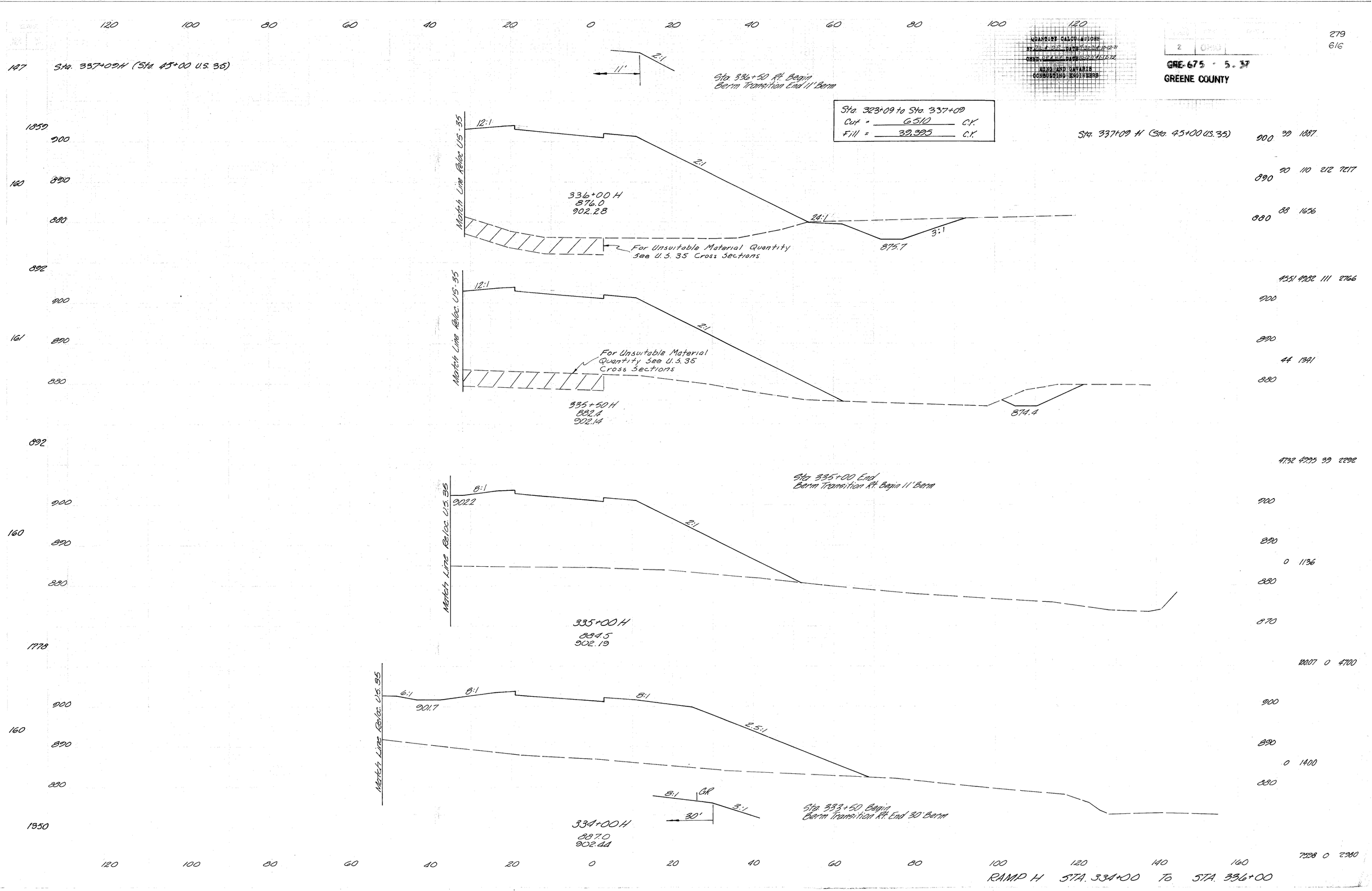
83.69 93.63 120.7 209

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

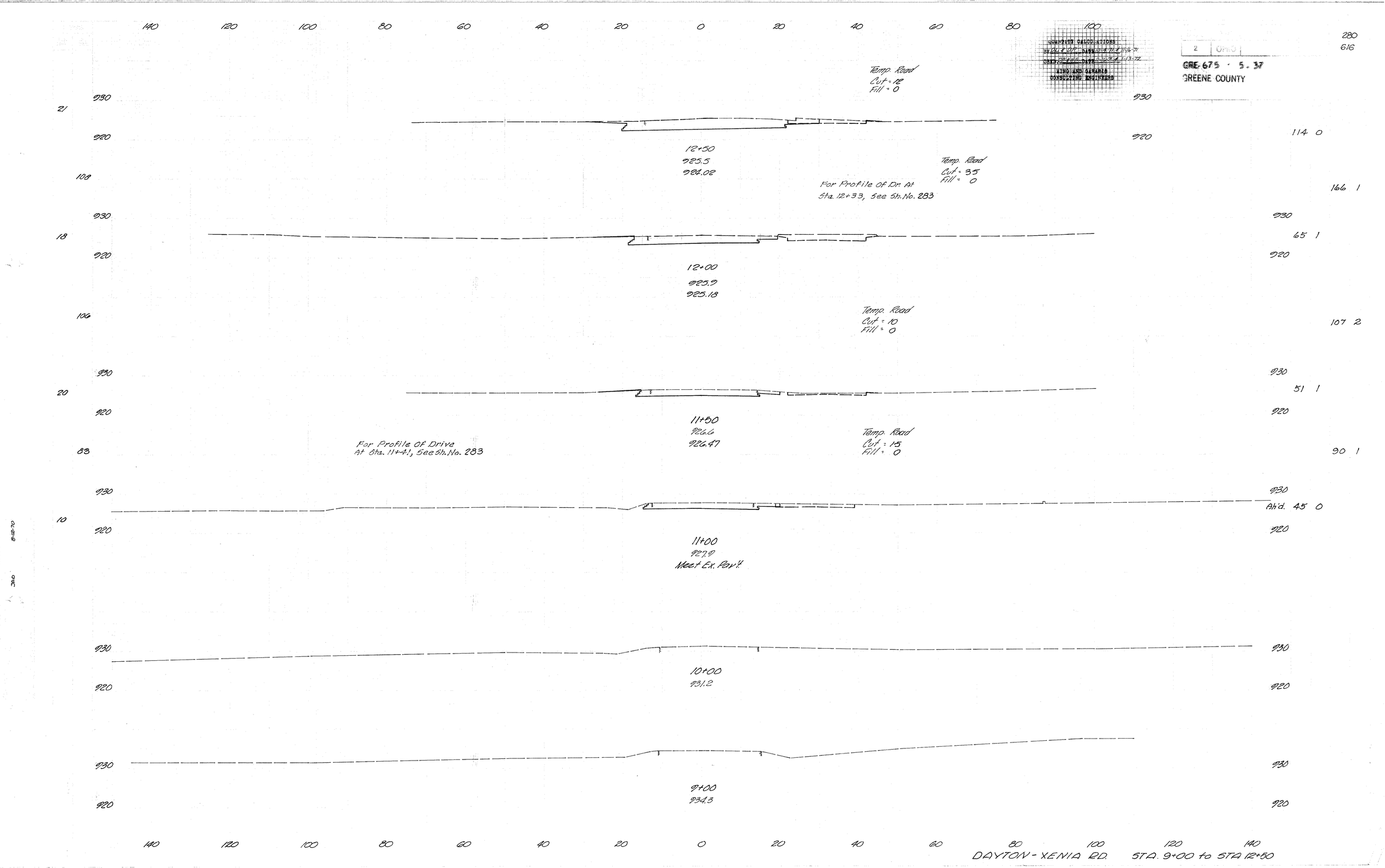
RAMP H STA 326+90 To STA 329+00



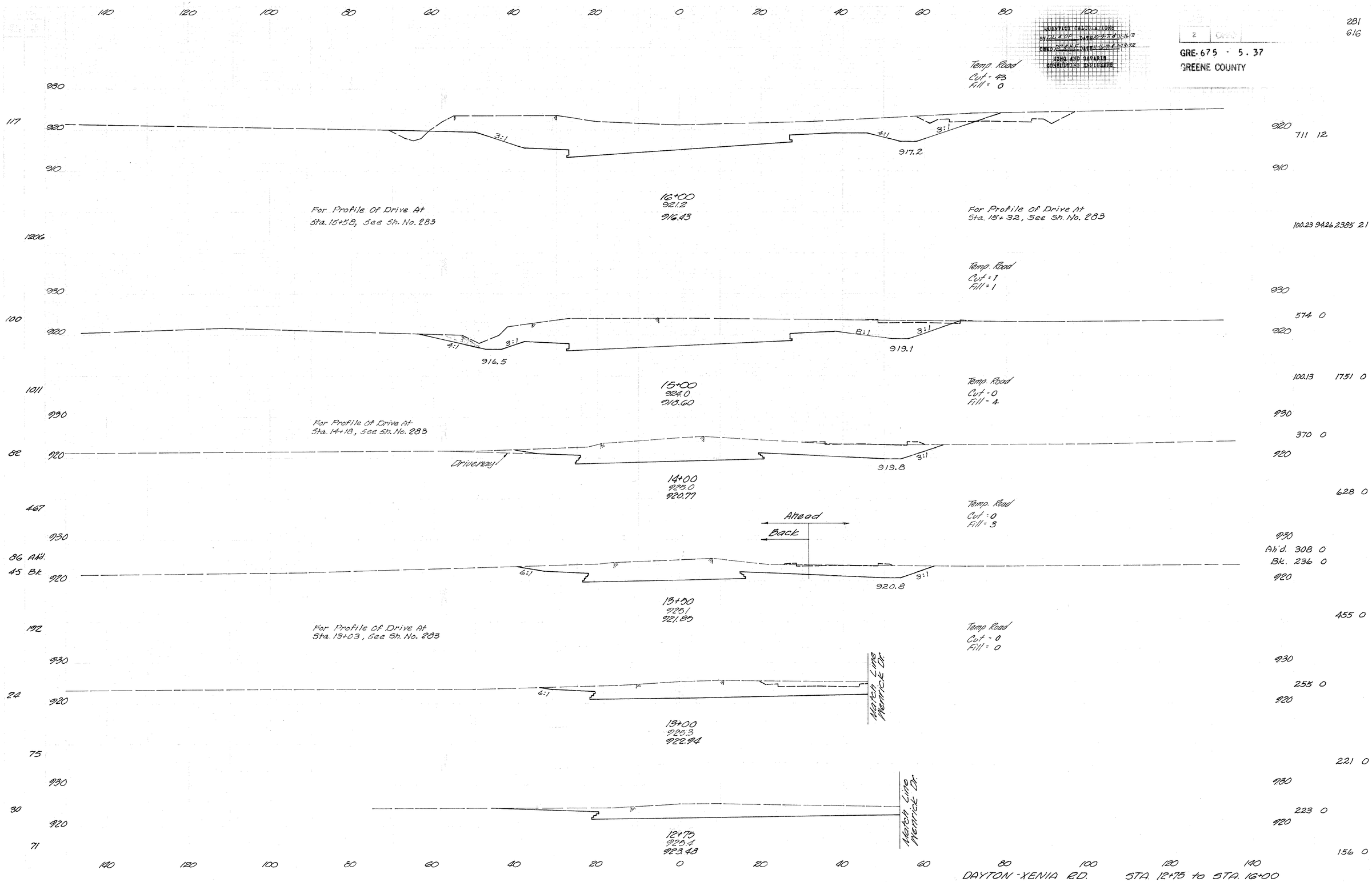
QUANTITY CALCULATIONS
BY B.L. & D.P. DATE 9-30-71 & 10-12-71
CHKD. R.R.S.H.R. DATE 10-31-71 & 11-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
278
616
Match Line Reloc. U.S. 35
48:1
6:1
8:1
902.0
8:1
3:1
333+25H
894.6
902.12
Match Line Ramp A & Reloc. U.S. 35
901.0
4:1
891.5
332+71H
895.0
901.88
Match Line Ramp A
3:1
48:1
6:1
8:1
899.9
8:1
3:1
4:1
890.0
332+00H
893.6
900.20
Sta. 331+25, 38' Lt.
Std No. CB-5
℄ Gr=897.72
℄ 15"=892.86
Estimated Quantities
601 Rock Channel Protection Type B, Bed 3 Cu. Yd.
602 Masonry 0.27 Cu. Yd.
603 15" Conduit Type B 84 Lin. Ft.
604 Standard No. CB-5 1 Each
660 Sodding 103 Sq. Yd.
3' Sod Collar
3:1
℄ = 889.0
4.60%
331+25H
891.5
898.20
Std. HW-4 Headwall
888.5
4:1
Rock Channel Protection Type B (18" Thick) 4' Wide
84'
10'
603 - 15" Conduit Type B
Match Line Ramp A
8:1
897.2
888.0
331+00H
890.6
897.40
3:1
8:1
894.3
8:1
3:1
4:1
886.0
330+00H
888.4
893.51
0 718
51.90 56.58 56 1749
58 951
65.47 75.22 142 2466
59 819
69.21 78.45 105 2397
23 831
23.12 26.07 27 788
40 802
92.96 104.48 121 2910
30 702
93.67 105.07 125 2415
RAMP H STA. 330+00 To STA. 333+25



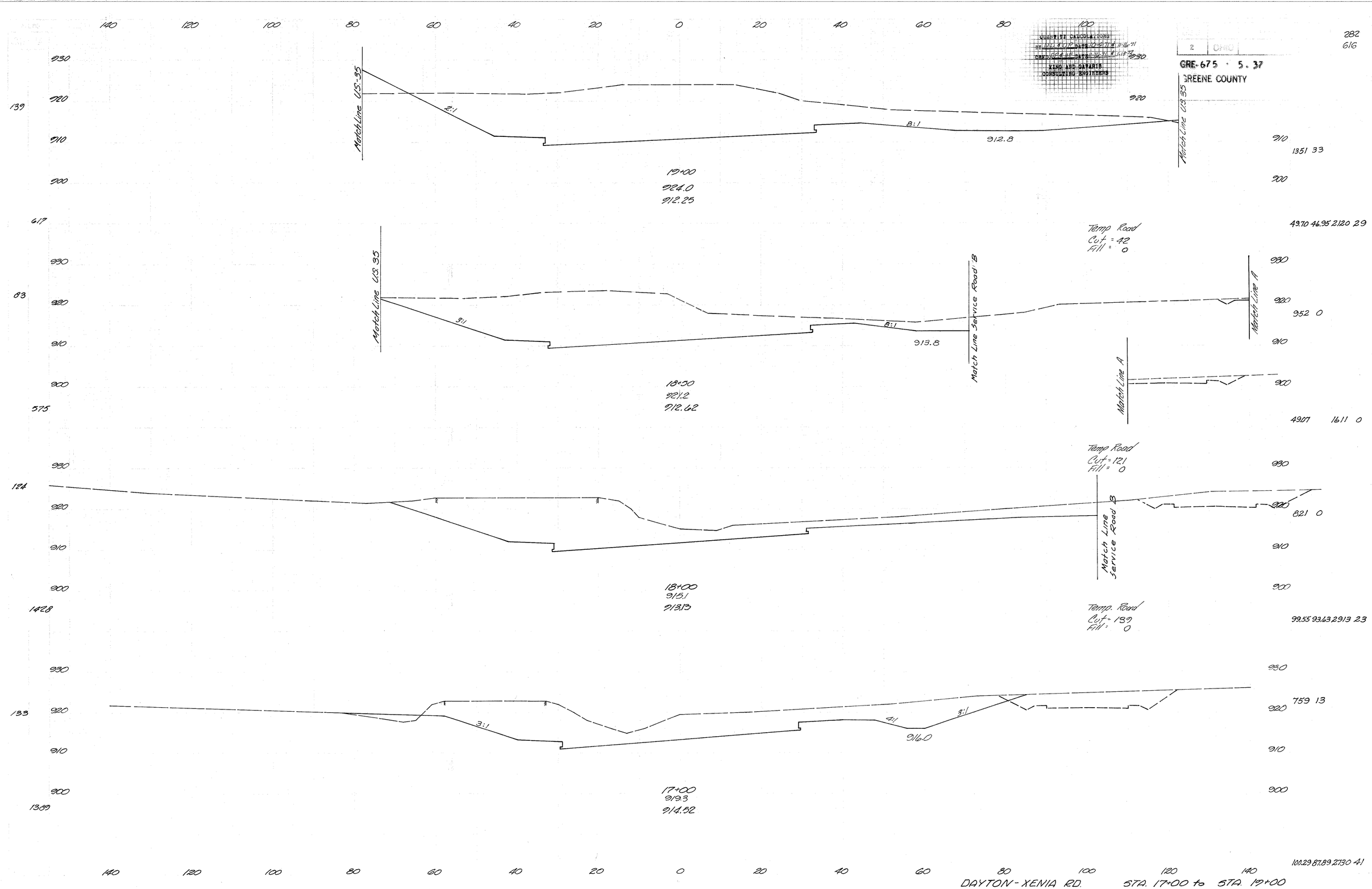
QUANTITY CALCULATIONS
BY DL & DR DATE 9-20-71 & 10-12-71
CHKD. DR & HE DATE 10-12-71 & 11-12-72
KING AND GAVARIS
CONSULTING ENGINEERS
2
GRE-675 - 5.37
GREENE COUNTY
279
616
Sta. 337+09H (Sta. 45+00 U.S. 35)
Sta. 336+50 Rt. Begin
Berm Transition End 11' Berm
Sta. 323+09 to Sta. 337+09
Cut = 6510 C.Y.
Fill = 39,395 C.Y.
Sta. 337+09 H (Sta. 45+00 U.S. 35)
Match Line Reloc. U.S. 35
12:1
2:1
336+00 H
876.0
902.28
24:1
3:1
875.7
For Unsuitable Material Quantity
See U.S. 35 Cross Sections
For Unsuitable Material
Quantity See U.S. 35
Cross Sections
335+50 H
882.4
902.14
874.4
Sta. 335+00 End
Berm Transition Rt. Begin 11' Berm
8:1
902.2
335+00 H
884.5
902.19
6:1
901.7
2.5:1
8:1
GR
3:1
30'
Sta. 333+50 Begin
Berm Transition Rt. End 30' Berm
334+00 H
887.0
902.44
RAMP H STA. 334+00 TO STA. 336+00



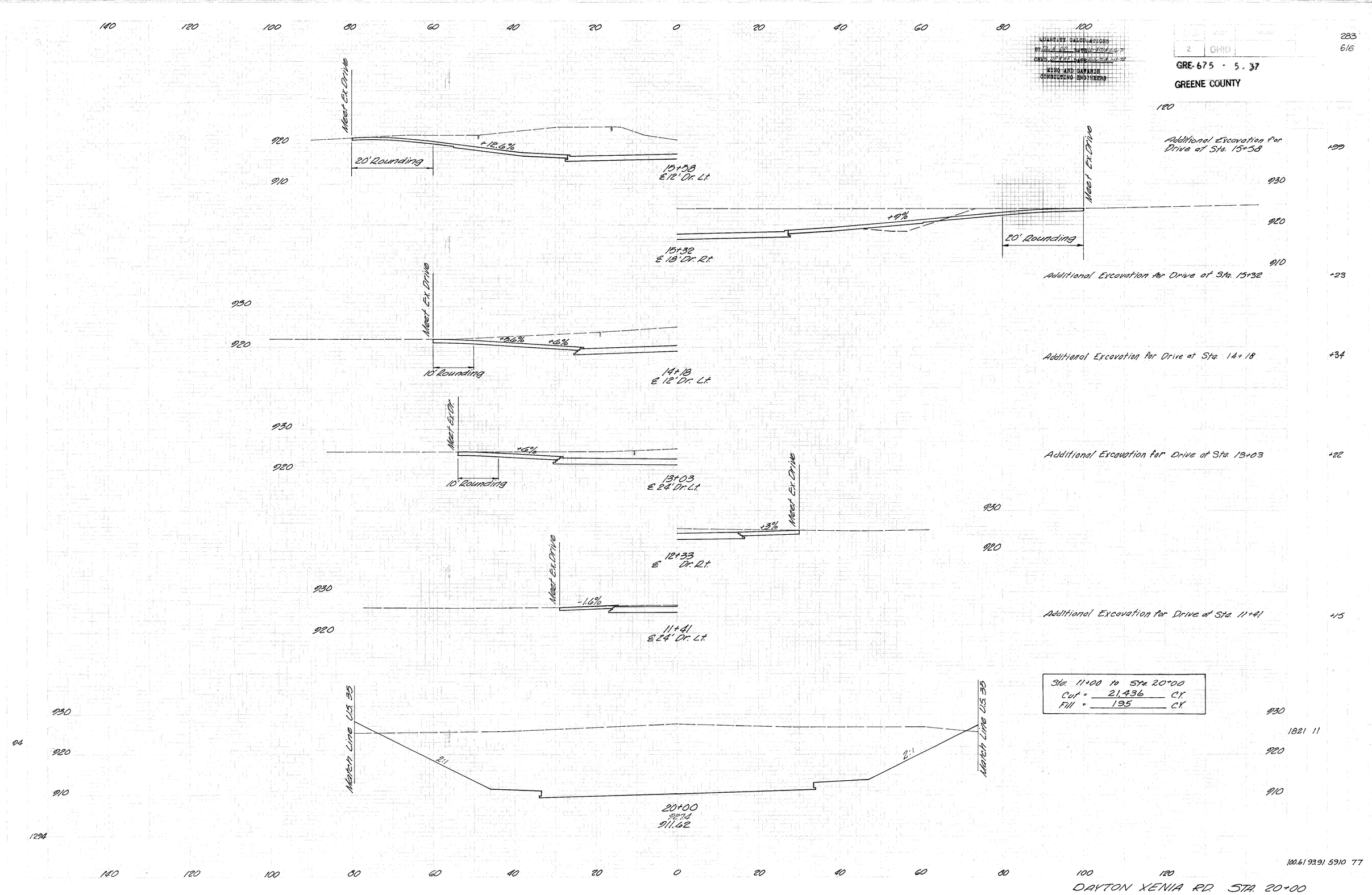
QUANTITY CALCULATIONS
BY DL & DP DATE 10-4-71 & 11-16-71
CHECK DP & HF DATE 11-16-71 & 1-13-72
WING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
280
616
Temp. Road
Cut = 12
Fill = 0
12+50
925.5
924.02
Temp. Road
Cut = 35
Fill = 0
For Profile Of Dr. At
Sta. 12+33, See Sh. No. 283
114 0
166 1
65 1
12+00
925.9
925.18
Temp. Road
Cut = 10
Fill = 0
107 2
51 1
11+50
926.6
926.47
Temp. Road
Cut = 15
Fill = 0
For Profile Of Drive
At Sta. 11+41, See Sh. No. 283
90 1
Ah'd. 45 0
11+00
927.9
Meet Ex. Pav't.
10+00
931.2
9+00
934.3
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
DAYTON - XENIA RD. STA. 9+00 to STA 12+50



QUANTITY CALCULATIONS
BY DL & OP DATE 10-4-71 & 11-16-71
CHKD PP & HF DATE 11-16-71 & 1-13-72
HING AND GAVARIS
CONSULTING ENGINEERS
2
GRE-675 · 5.37
GREENE COUNTY
281
616
Temp. Road
Cut = 43
Fill = 0
3:1
4:1
3:1
917.2
16+00
921.2
916.43
For Profile Of Drive At
Sta. 15+58, See Sh. No. 283
For Profile Of Drive At
Sta. 15+32, See Sh. No. 283
Temp. Road
Cut = 1
Fill = 1
4:1
3:1
8:1
3:1
916.5
919.1
15+00
924.0
918.60
Temp. Road
Cut = 0
Fill = 4
For Profile Of Drive At
Sta. 14+18, See Sh. No. 283
Driveway
3:1
919.8
14+00
925.0
920.77
Temp. Road
Cut = 0
Fill = 3
Ahead
Back
6:1
3:1
920.8
13+50
925.1
921.85
For Profile Of Drive At
Sta. 13+03, See Sh. No. 283
Temp. Road
Cut = 0
Fill = 0
6:1
Match Line
Merrick Dr.
13+00
925.3
922.94
Match Line
Merrick Dr.
12+75
925.4
923.48
117
1206
100
1011
82
467
86 Ah'd.
45 Bk.
192
24
75
30
71
711 12
100.23 94.26 2385 21
574 0
100.13 1751 0
370 0
628 0
Ah'd. 308 0
Bk. 236 0
455 0
255 0
221 0
223 0
156 0
DAYTON-XENIA RD. STA. 12+75 to STA. 16+00



QUANTITY CALCULATIONS
BY DLK & DP DATE 10-4-71 & 11-16-71
CHKD DP & HE DATE 11-16-71 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
282
616
Match Line US-35
2:1
8:1
912.8
19+00
924.0
912.25
139
617
1351 33
49.70 46.95 2120 29
Temp Road
Cut = 42
Fill = 0
Match Line US 35
3:1
8:1
913.8
Match Line Service Road B
Match Line A
18+50
921.2
912.62
83
575
952 0
49.07 1611 0
Temp Road
Cut = 121
Fill = 0
Match Line Service Road B
18+00
915.1
913.13
124
1428
821 0
99.55 93.63 2913 23
Temp. Road
Cut = 139
Fill = 0
3:1
4:1
3:1
916.0
17+00
919.3
914.52
133
1389
759 13
100.29 87.89 2730 41
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
DAYTON-XENIA RD. STA. 17+00 to STA. 19+00



QUANTITY CALCULATIONS
BY DL-S-DP DATE 12-4-71 & 11-16-71
CHKD. DP & JF DATE 11-13-71 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
283
616
Meet Ex. Drive
+12.6%
20' Rounding
15+58
℄ 12' Dr. Lt.
Additional Excavation for Drive at Sta. 15+58
+99
+9%
20' Rounding
15+32
℄ 18' Dr. Rt.
Additional Excavation for Drive at Sta. 15+32
+23
+5.6%
+6%
10' Rounding
14+18
℄ 12' Dr. Lt.
Additional Excavation for Drive at Sta. 14+18
+34
+6%
10' Rounding
13+03
℄ 24' Dr. Lt.
Additional Excavation for Drive at Sta. 13+03
+22
+3%
12+33
℄ Dr. Rt.
-1.6%
11+41
℄ 24' Dr. Lt.
Additional Excavation for Drive at Sta. 11+41
+15
Match Line U.S. 35
2:1
20+00
927.4
911.62
Sta. 11+00 to Sta. 20+00
Cut = 21,436 C.Y.
Fill = 195 C.Y.
1821 11
100.61 93.91 5910 77
DAYTON XENIA RD. STA. 20+00

140 120 100 80 60 40 20 0 20 40 60 80 100

Back Ahead

GRE-675 · 5.37
GREENE COUNTY

284
616

Match Line Penn Central

930
920
910

182 Ahd
282 Bk.

3:1

Match Line A

910
Ah'd. 3413 17
Bk. 4835 17
900

2739

940

180 160

Match Line C

930
920

24+00
925.7
902.13

REVISED CALCULATIONS
BY [illegible] DATE 12-2-71 & 11-16-71
CHKD [illegible] DATE 12-2-71 & 1-13-72
HILL AND BARNARD
CONSULTING ENGINEERS

17609 31

Match Line C

250

12.6% Drive
7.94:1

For Profile of Drive at
Sta. 23+00 See Sheet No. 292

930
920
910

4674 0

Match Line US 35

2456

940

180 160

Match Line US 35

Match Line B

930
920

23+00
923.3
902.75

910
900

14659 0

Match Line B

192

2:1 2:1 24:1

921.5

3:1

Match Line US 35

930
920
910
900

Match Line A

930
920
910

Sta. 24+00
Above

120 140 160

Match Line US 35

930
920
910
900

3242 0

300 8.00

1900

22+00
930.5
910.38

From Sta. 22+00± to Sta. 28+00±
Remove 2' of unsuitable material
See Sh. 28 for quantities

930
920
910
900

10961 0

Match Line US 35

150

2:1 2:1 24:1

921.0

3:1

2:1

930
920
910
900

2677 0

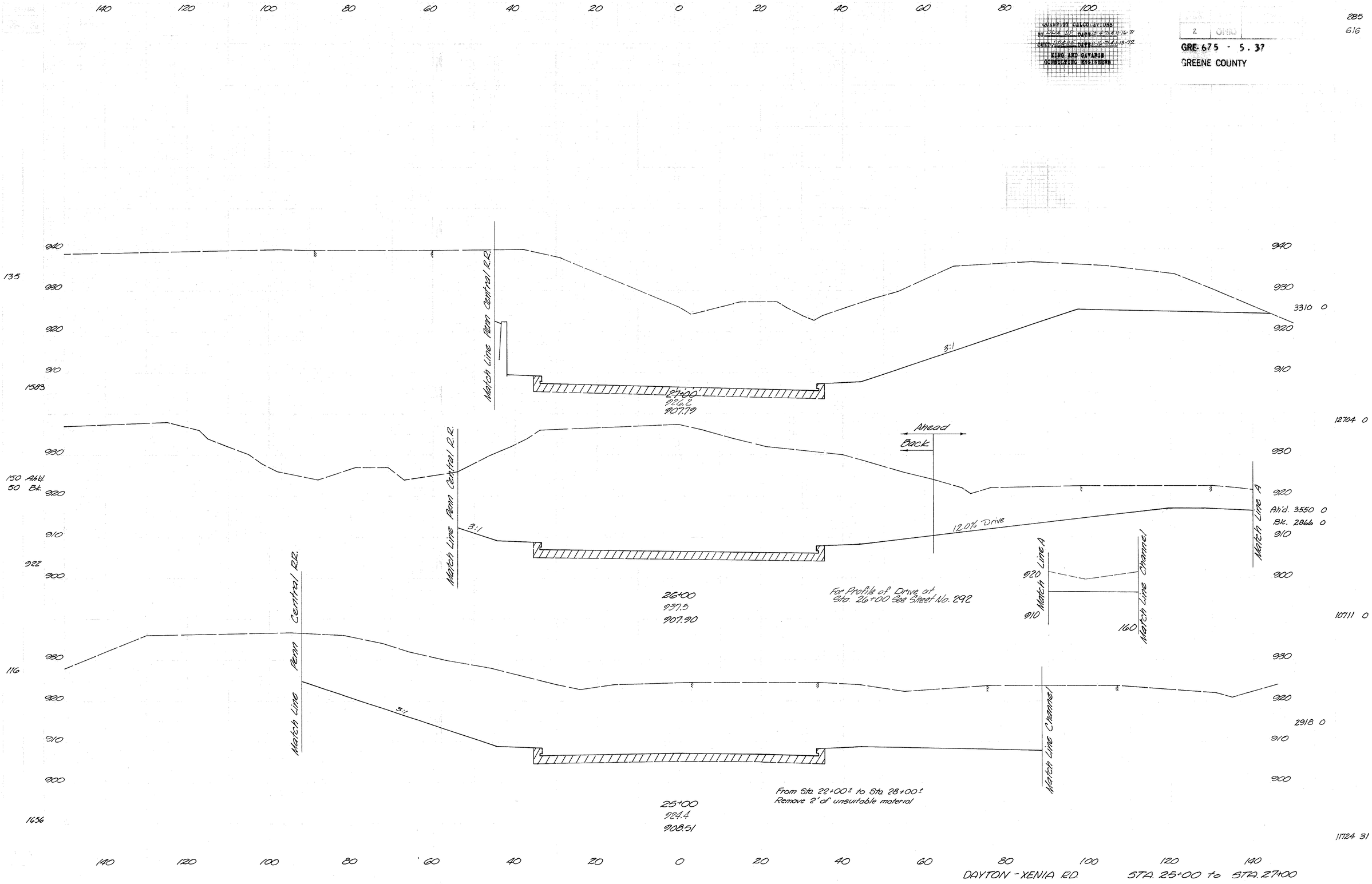
1356

21+00
930.6
911.00

8330 20

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

DAYTON-XENIA RD. STA. 21+00 to STA. 24+00



QUANTITY CALCULATIONS
BY DRA DR DATE 10-4-71 & 11-16-71
CHECKED DRA DATE 11-16-71 & 11-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
285
616
140 120 100 80 60 40 20 0 20 40 60 80 100
940
930
920
910
900
135
1583
Match Line Penn Central R.R.
3:1
27+00
926.2
907.79
3310 0
12704 0
Ahead
Back
150 Ah'd.
50 Bk.
922
Ah'd. 3550 0
Bk. 2866 0
12.0% Drive
Match Line A
Match Line Channel
26+00
937.5
907.90
For Profile of Drive at Sta. 26+00 See Sheet No. 292
160
10711 0
116
2918 0
1656
25+00
924.4
908.51
From Sta. 22+00± to Sta. 28+00±
Remove 2' of unsuitable material
11724 31
DAYTON - XENIA RD.
STA. 25+00 to STA. 27+00

QUANTITY CALCULATIONS
BY O.E.B. DATE 10-27-71 & 11-16-71
CHKD. D.E.K. DATE 11-17-71 & 03-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

140 120 100 80 60 40 20 0 20 40 60 80 100 120

940 936 920 910 900

134 598

3:1

911.0

Match Line Penn Central R.R.

28+37
940.7
908.72

Ahead
Back

940 930 920 910 900

154 Ahd. 39 Bk.

3:1

910.3

Match Line Penn Central R.R.

28+00
941.2
908.34

From Sta. 22+00± to Sta. 28+00±
Remove 2' of unsuitable material

417

940 930 920 910 900

75

Match Line Penn Central R.R.

3:1

Match Line Penn Central R.R.

27+35
939.9
907.90

408

140 120 100 80 60 40 20 0 20 40 60 80 100 120

DAYTON XENIA RD. STA. 27+35 TO STA. 28+37

280
616

120

930 920 910 900

4315 0

6369 0

940 930 920 910 900

Ahd. 4981 0
Bk. 3364 0

Additional Excavation for unsuitable material
Sta. 22+00± to Sta. 28+00±

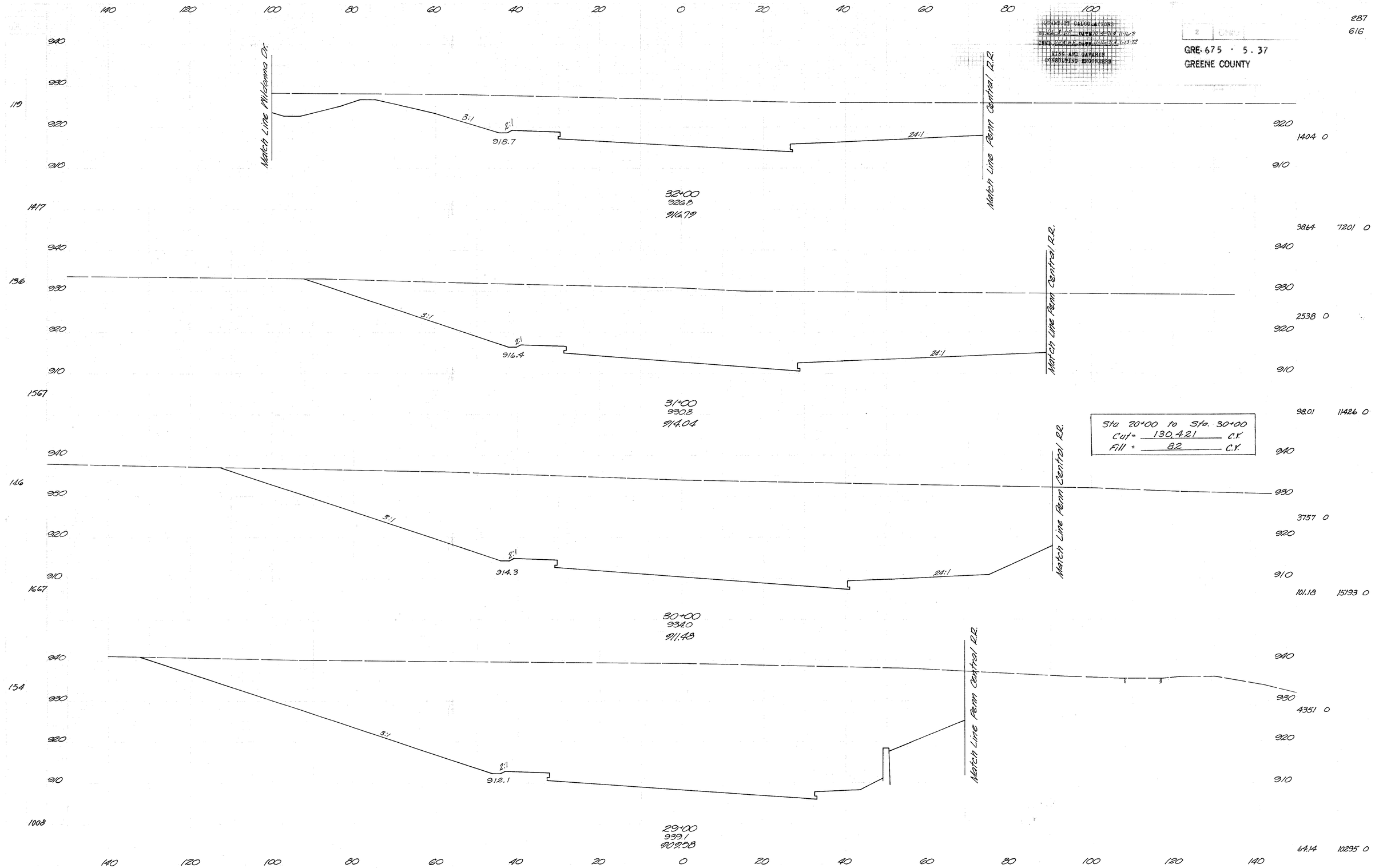
3312

7646 0

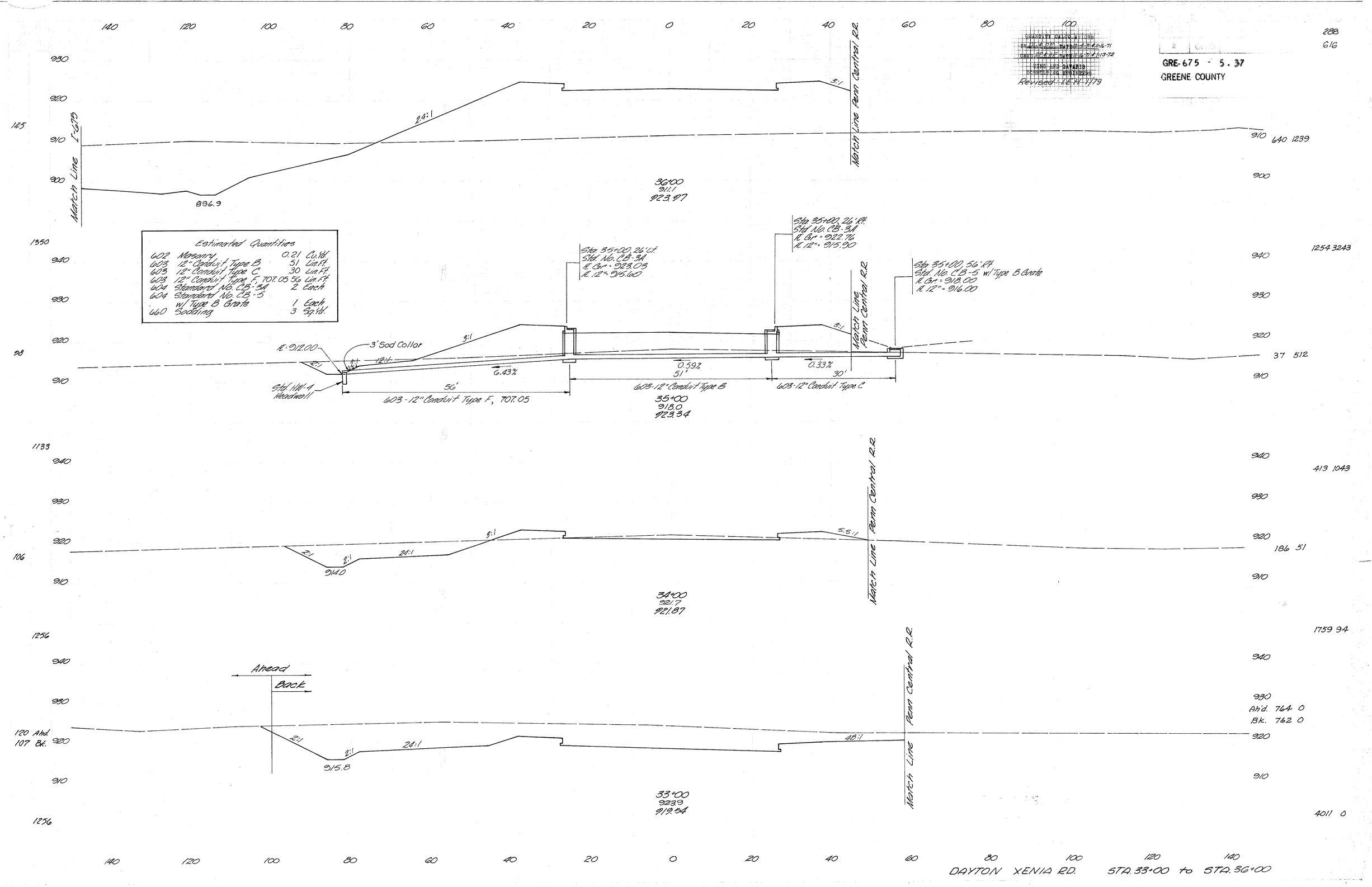
940 930 920 910 900

2988 0

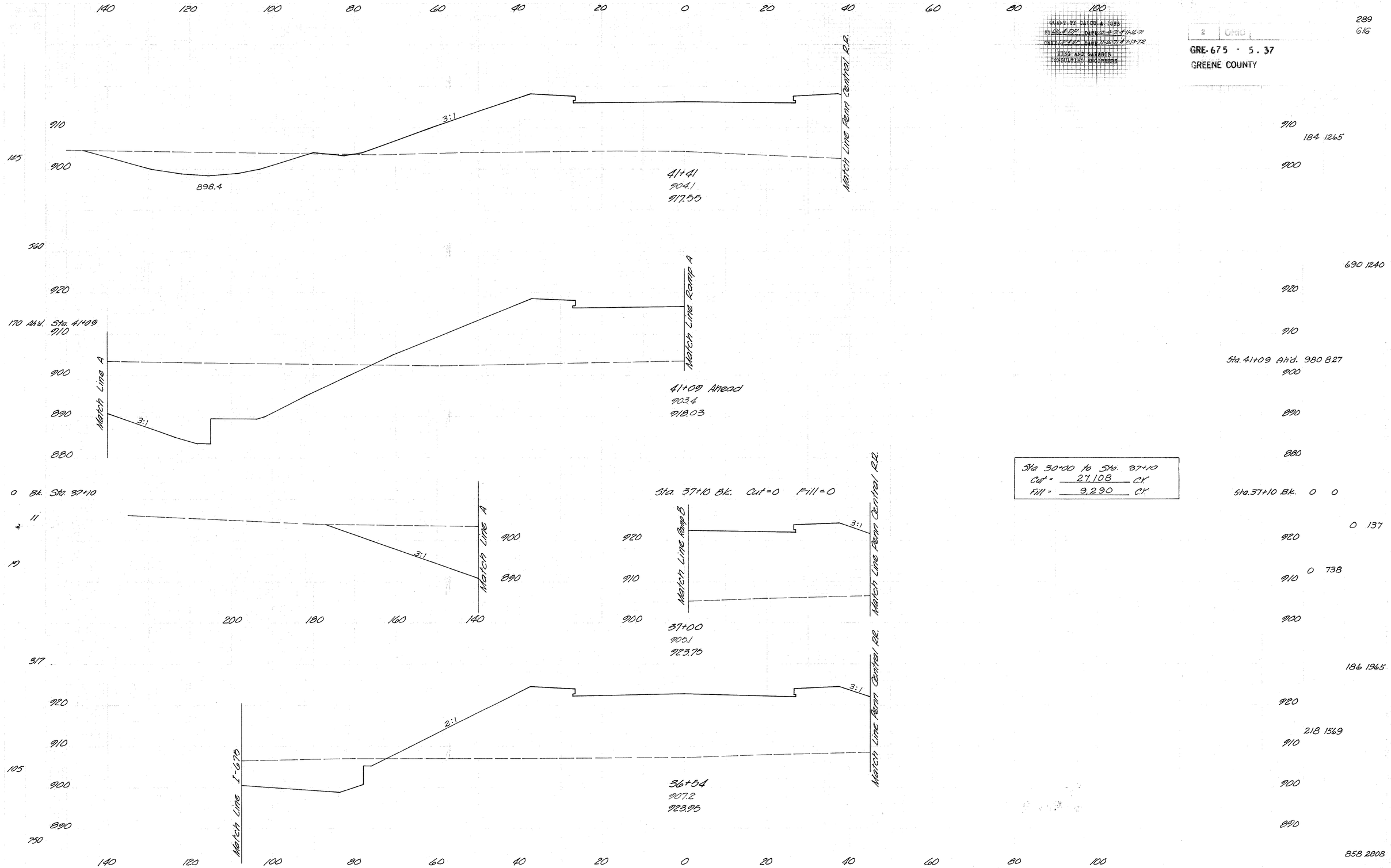
4082 0



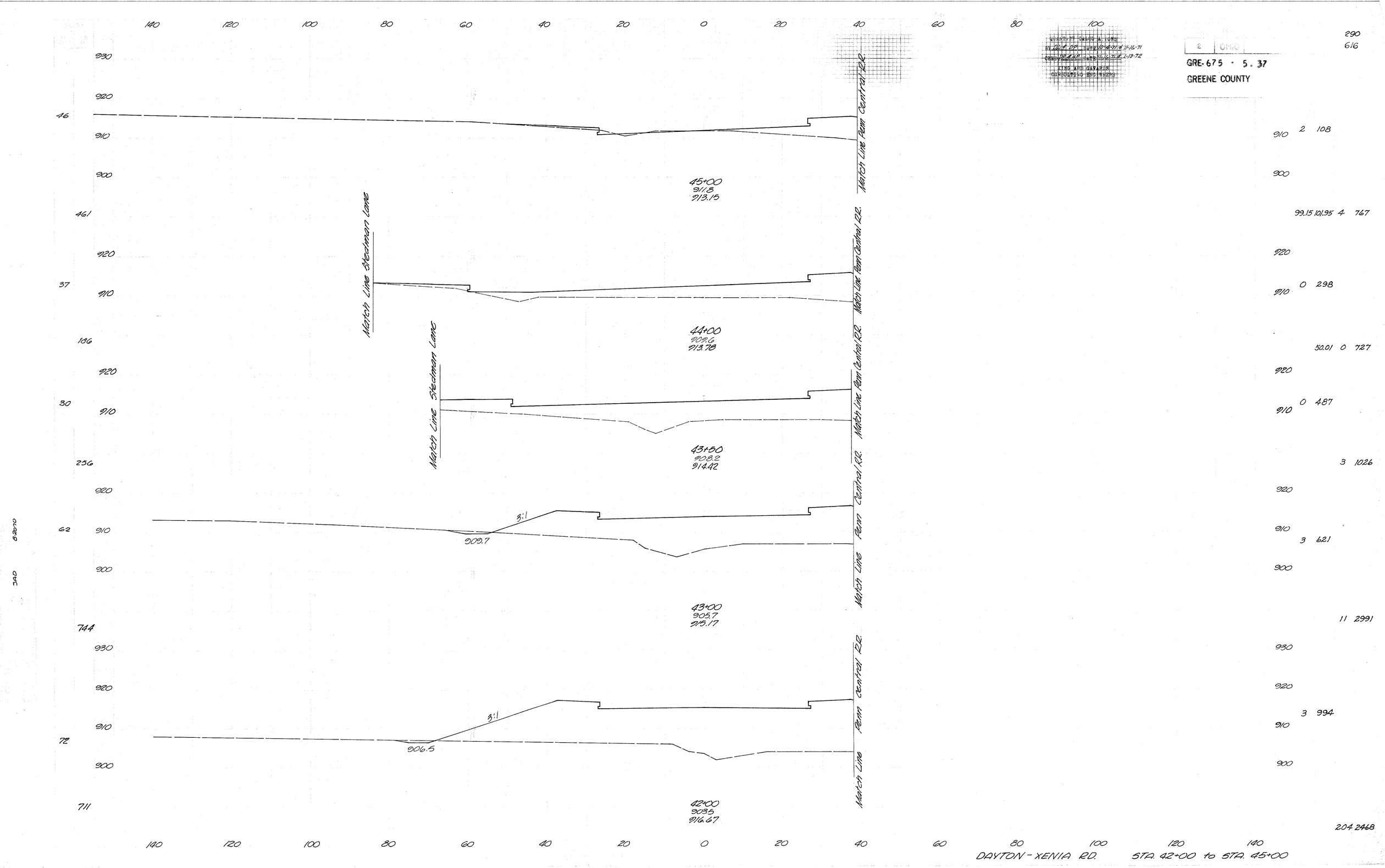
QUANTITY CALCULATIONS
BY DEB DATE 10-4-71 & 11-16-71
CHKD DEB DATE 11-16-71 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 · 5.37
GREENE COUNTY
287
616
Match Line Wildonna Dr.
Match Line Penn Central R.R.
3:1
2:1
24:1
918.7
32+00
926.8
916.79
1404 0
1417
9864 7201 0
916.4
2538 0
1567
31+00
930.8
914.04
98.01 11426 0
Sta 20+00 to Sta. 30+00
Cut = 130,421 C.Y.
Fill = 82 C.Y.
914.3
3757 0
1667
101.18 15193 0
30+00
934.0
911.48
912.1
4351 0
1008
29+00
939.1
909.58
64.14 10295 0
DAYTON-XENIA RD. STA. 29+00 to STA. 32+00



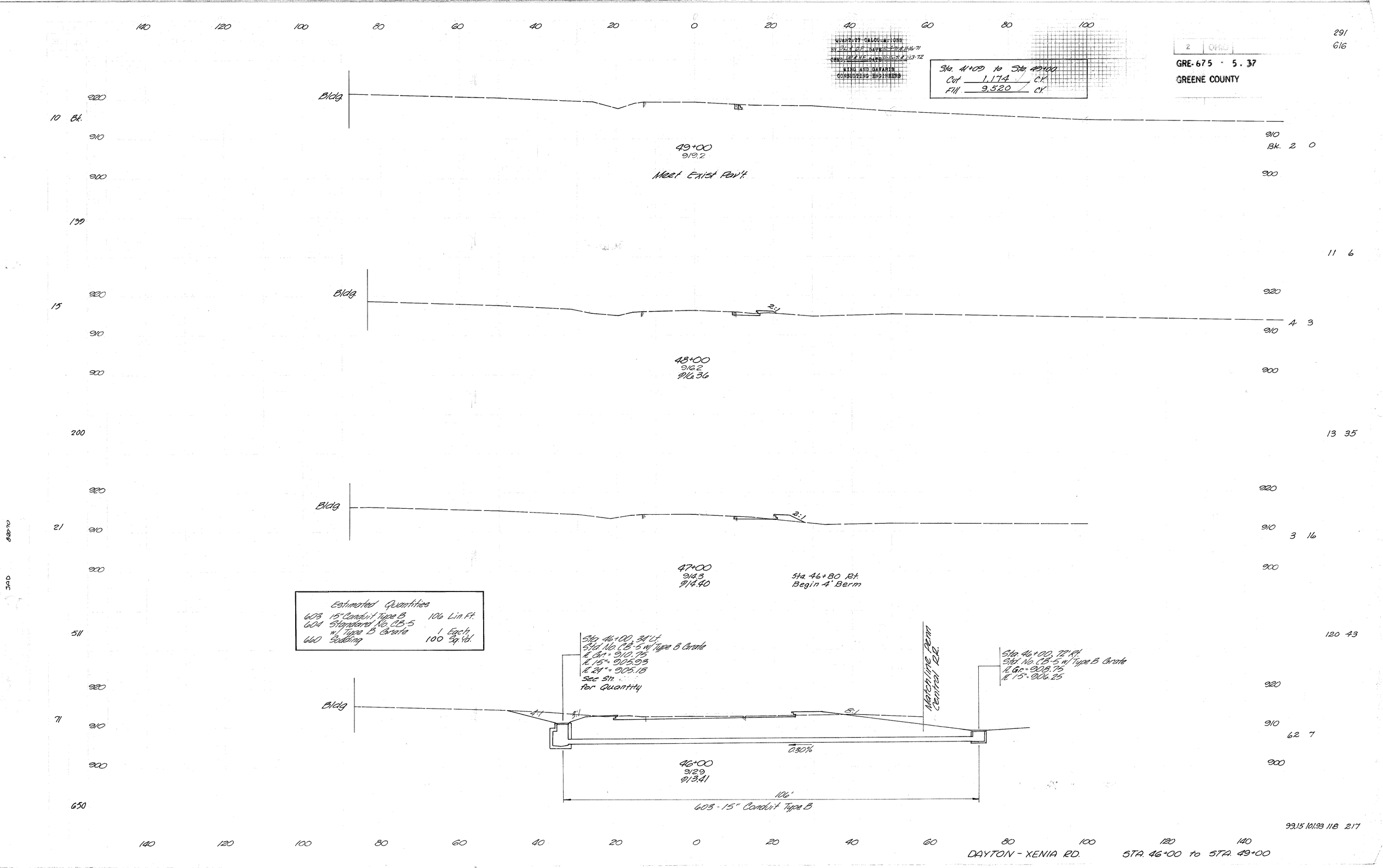
QUANTITY CALCULATIONS
BY DL & DP DATE 10-4-71 & 11-16-71
CHKD BP & HF DATE 11-16-71 & 1-13-72
WING AND DAVARIS
CONSULTING ENGINEERS
Revised 1-E.H. 1/79
GRE-675 - 5.37
GREENE COUNTY
Match Line I-675
Match Line Penn Central R.R.
896.9
24:1
3:1
36+00
911.1
923.97
Estimated Quantities
602 Masonry 0.21 Cu.Yd.
603 12" Conduit Type B 51 Lin.Ft.
603 12" Conduit Type C 30 Lin.Ft.
603 12" Conduit Type F, 707.05 56 Lin.Ft.
604 Standard No. CB-3A 2 Each
604 Standard No. CB-5 w/ Type B Grate 1 Each
660 Sodding 3 Sq.Yd.
Sta. 35+00, 26' Lt.
Std. No. CB-3A
℄ Gr = 923.03
℄ 12" = 915.60
Sta. 35+00, 26' Rt.
Std. No. CB-3A
℄ Gr = 922.76
℄ 12" = 915.90
Sta. 35+00, 56' Rt.
Std. No. CB-5 w/ Type B Grate
℄ Gr = 918.00
℄ 12" = 916.00
℄ = 912.00
3' Sod Collar
Std. HW-4 Headwall
6.43%
0.59%
0.33%
56'
51'
30'
603-12" Conduit Type F, 707.05
603-12" Conduit Type B
603-12" Conduit Type C
35+00
918.0
923.34
914.0
5.5:1
34+00
921.7
921.87
Ahead
Back
915.8
48:1
33+00
923.9
919.54
DAYTON XENIA RD. STA. 33+00 to STA. 36+00



QUANTITY CALCULATIONS
BY DL & DP DATE 10-4-71 & 11-16-71
CHKD DP & HF DATE 11-16-71 & 1-13-72
ZING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
289
616
Match Line Penn Central R.R.
3:1
898.4
41+41
904.1
917.55
184 1265
690 1240
Match Line Ramp A
170 Ah'd. Sta. 41+09
Match Line A
41+09 Ahead
903.4
918.03
Sta. 41+09 Ah'd. 980 827
Sta. 30+00 to Sta. 37+10
Cut = 27,108 C.Y.
Fill = 9,290 C.Y.
0 Bk. Sta. 37+10
Sta. 37+10 Bk. Cut=0 Fill=0
Sta. 37+10 Bk. 0 0
0 137
0 738
Match Line Ramp B
37+00
905.1
923.75
186 1965
218 1569
Match Line I-675
2:1
36+54
907.2
923.95
858 2808
DAYTON XENIA ROAD STA. 36+54 to 41+41



GRE-675 · 5.37
GREENE COUNTY
Match Line Penn Central R.R.
Match Line Stedman Lane
45+00
911.8
913.15
44+00
909.6
913.78
43+50
908.2
914.42
43+00
905.7
915.17
42+00
903.5
916.67
3:1
909.7
906.5
46
461
37
186
30
256
62
744
72
711
2 108
99.15 101.95 4 767
0 298
50.01 0 727
0 487
3 1026
3 621
11 2991
3 994
204 2468
DAYTON - XENIA RD.
STA. 42+00 to STA. 45+00

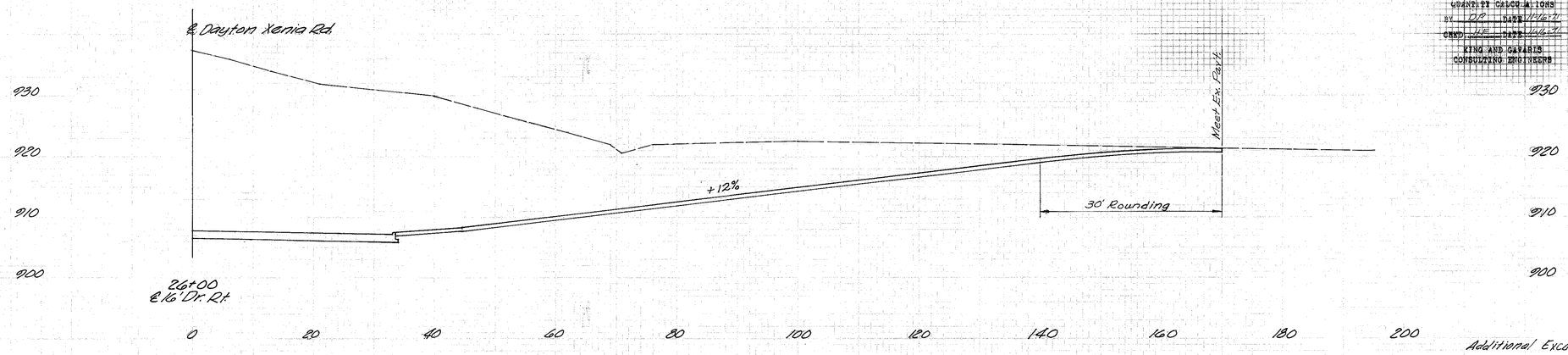


QUANTITY CALCULATIONS
BY DLK OR DATE 10-4-71 & 11-16-71
CHKD. DRA HE DATE 11-16-71 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
Sta. 41+09 to Sta. 49+00
Cut 1,174 C.Y.
Fill 9,520 C.Y.
2 OHIO
GRE-675 - 5.37
GREENE COUNTY
291
616
Bldg.
49+00
919.2
Meet Exist Pav't.
Bk. 2 0
11 6
Bldg.
2:1
48+00
916.2
916.36
4 3
13 35
Bldg.
2:1
47+00
914.3
914.40
Sta. 46+80 Rt.
Begin 4' Berm
3 16
120 43
Estimated Quantities
603 15" Conduit Type B 106 Lin. Ft.
604 Standard No. CB-5 w/ Type B Grate 1 Each
660 Sodding 100 Sq. Yd.
Sta. 46+00, 34' Lt.
Std. No. CB-5 w/ Type B Grate
Pl. Gr. = 910.75
Pl. 15" = 905.93
Pl. 24" = 905.18
See Sh.
for Quantity
Matchline Penn Central R.R.
Sta. 46+00, 72' Rt.
Std. No. CB-5 w/ Type B Grate
Pl. Gr. = 908.75
Pl. 15" = 906.25
Bldg.
4:1
3:1
8:1
0.30%
46+00
912.9
913.41
106'
603 - 15" Conduit Type B
62 7
99.15 101.93 118 217
DAYTON - XENIA RD.
STA. 46+00 to STA. 49+00

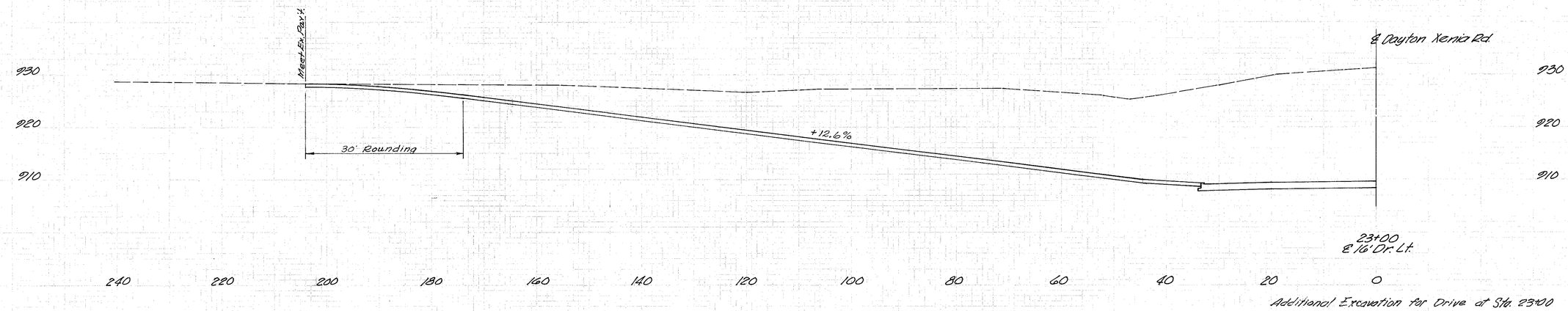
QUANTITY CALCULATIONS
BY DP DATE 11-16-71
CHKD. JLE DATE 11-16-71
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 - 5.37
GREENE COUNTY



Additional Excavation for Drive at Sta. 26+00 +62



Additional Excavation for Drive at Sta. 23+00 +76

DRIVEWAY PROFILES STA. 23+00, and STA. 26+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY DC DATE 11/6/70
CHKD. WE DATE 11/6/70
KING AND GAVARIS
CONSULTING ENGINEERS

293
616

GRE-675 · 5.37
GREENE COUNTY

120 140

930
920
910
900

Exist. Ground
Proposed Grade
26+00

4 4

930
920
910

Proposed Grade
24+00

0 113

930
920
910

½ Proposed Grade
22+00

0 0

930
920
910

Exist. Ground
Prop Grade
20+00

0 50

930
920
910

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

DAYTON XENIA TEMPORARY R.D. No. 1

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY CJC DATE 7/16/71
CHKD. JJC DATE 7/19/71
KING AND GATARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY

294
616

120 140

910
900

39+00

910
900
0 180

910
900

38+00

910
900
1 31

910
900
890

Exist. Ground
Prop. Grade

37+00

910
900
890
0 0

900
890

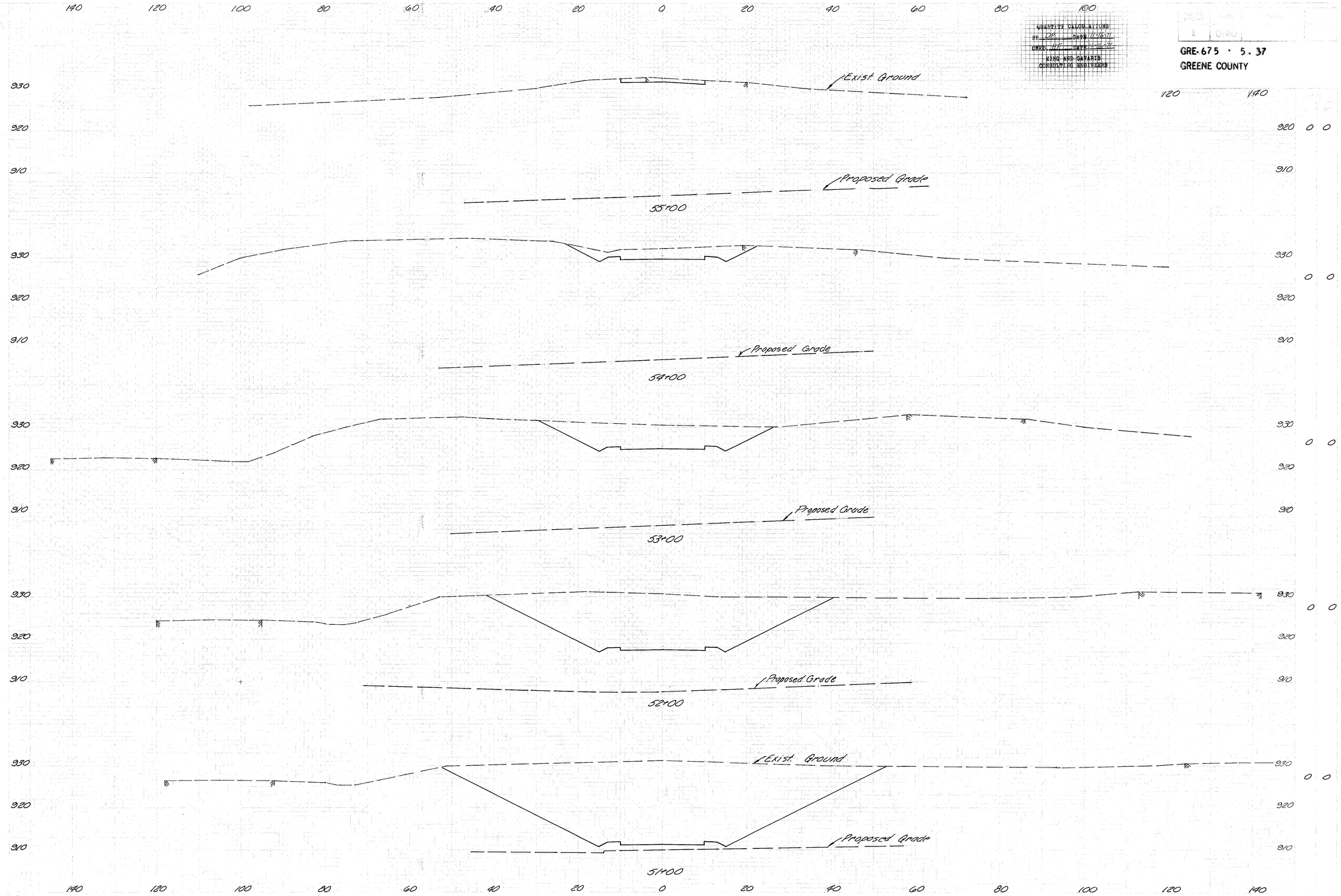
Exist. Ground
Prop. Grade

35+00

900
890
0 0

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

DAYTON - XENIA TEMPORARY ROAD No. 2

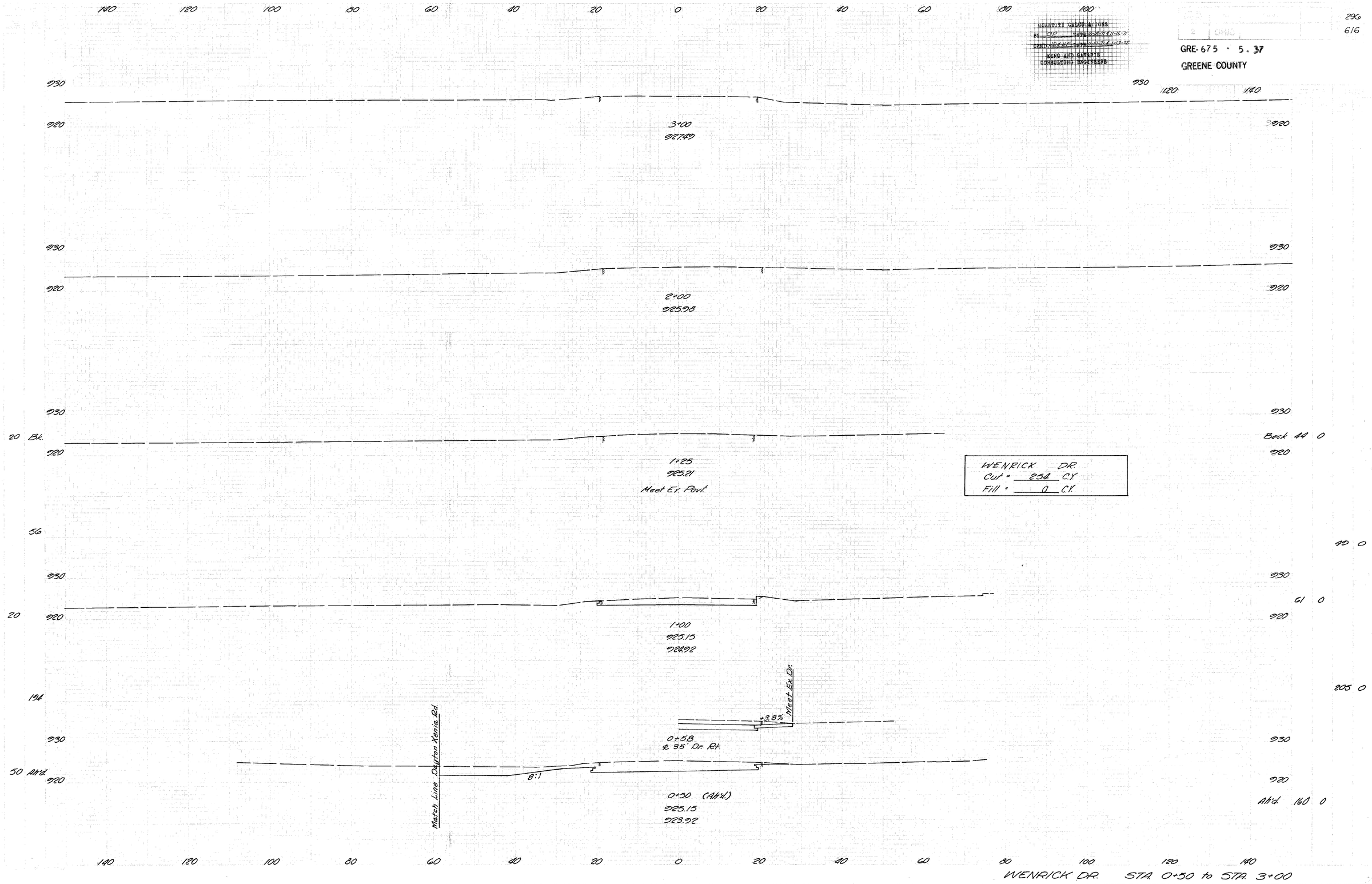


QUANTITY CALCULATIONS
BY DP DATE 11-16-71
CHKD. HF DATE 11-16-71
KING AND GAVARIS
CONSULTING ENGINEERS

295
616

GRE-675 · 5.37
GREENE COUNTY

DAYTON - XENIA TEMPORARY ROAD No. 3



QUANTITY CALCULATIONS
BY OP DATE 10-18-71 & 11-16-71
CHKD. HP & HF DATE 11-17-71 & 12-13-72
KING AND GAMARIS
CONSULTING ENGINEERS
GRE-675 - 5.37
GREENE COUNTY
296
616
140 120 100 80 60 40 20 0 20 40 60 80 100
930
920
3+00
927.49
2+00
925.98
1+25
925.21
Meet Ex. Pavt.
WENRICK DR.
Cut = 254 C.Y.
Fill = 0 C.Y.
20 Bk.
Back 44 0
56
49 0
20
61 0
1+00
925.15
924.92
194
205 0
Meet Ex. Dr.
+3.8%
0+58
℄ 35' Dr. Rt.
Match Line Dayton Xenia Rd.
8:1
50 Ah'd.
0+50 (Ah'd.)
925.15
923.92
Ah'd. 160 0
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
WENRICK DR. STA. 0+50 to STA. 3+00

Estimated Quantities		
601	Rock Channel Protection Type B, Bed	3 C.Y.
602	Masonry	0.54 C.Y.
603	15" Conduit, Type B	52 L.F.
603	15" Conduit. Type F, 707.05	32 L.F.
660	Sodding	6 S.Y.

QUANTITY CALCULATIONS
BY: A.W.C. DATE: 7-24-14-72
CHKD: H.E.H. DATE: 7-24-14-72
KING AND SAVARESE
CONSULTING ENGINEERS
Revised - H.E.H. 1/79

2 OHIO

GRE-675 · 5.37
GREENE COUNTY

Sta. 4+02
Cut = 0
Fill = 0

SERVICE ROAD B
CUT = 1282 C.Y.
FILL = 522 C.Y.

Bk. Sta. 4+02

Std. No. HW-4 Headwall
#15" = 905.00
660 - 3' Sod Collar

Std. MC-4
Concrete Collar

Limit Service Rt. & Centerline

Sta. 3+72, 24' Rt.
Std. No. HW-4 Headwall
#15" = 918.00
660 - 3' Sod Collar

3:1

25° Bend

20° Bend

7.27%

3+72
918.0
921.22

601 - Rock Channel Protection - Type B (18" Thick) Width = 4'

20'

1.0%

9'

18'

3'

52'

11'

603 - 15" Conduit, Type F 707.05

603 - 15" Conduit, Type B

Driveway

Bldg.

2:1

3:1

Prop. 12" Pipe

3+00
920.8
922.56

20' Rounding

Meet Exist. Drive

+5.0%

Limit Service Rt. & Centerline

2+76 ℄ 12' Dr. Rt.

US 35

24:1

3:1

919.5

2+50
919.9
922.75

Match Line

+4.5%

919.8

2+00
921.3
922.13

2+02 ℄ 12' Dr. Rt.

4:1

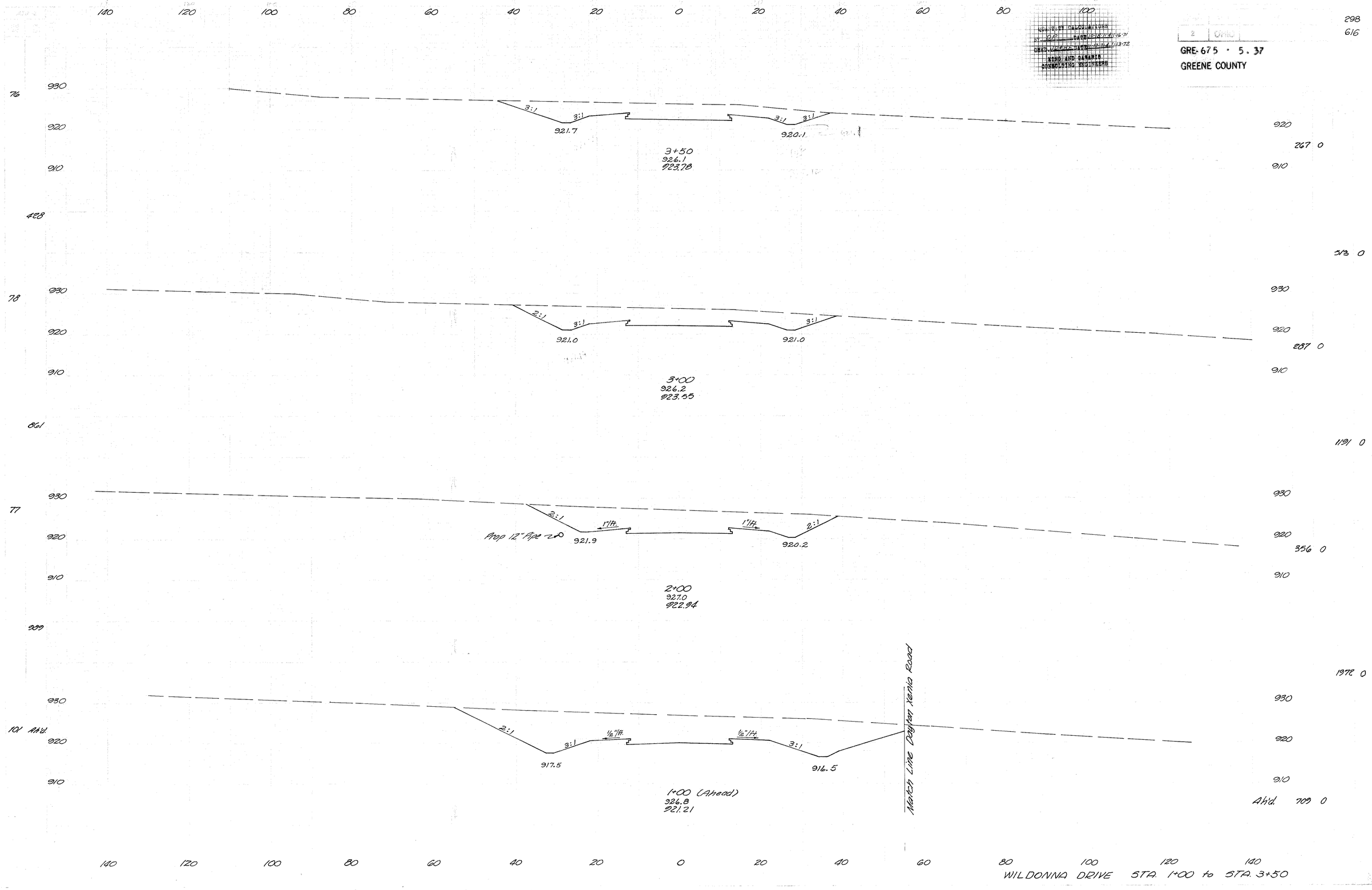
Dayton Xenia Rd.

8:1

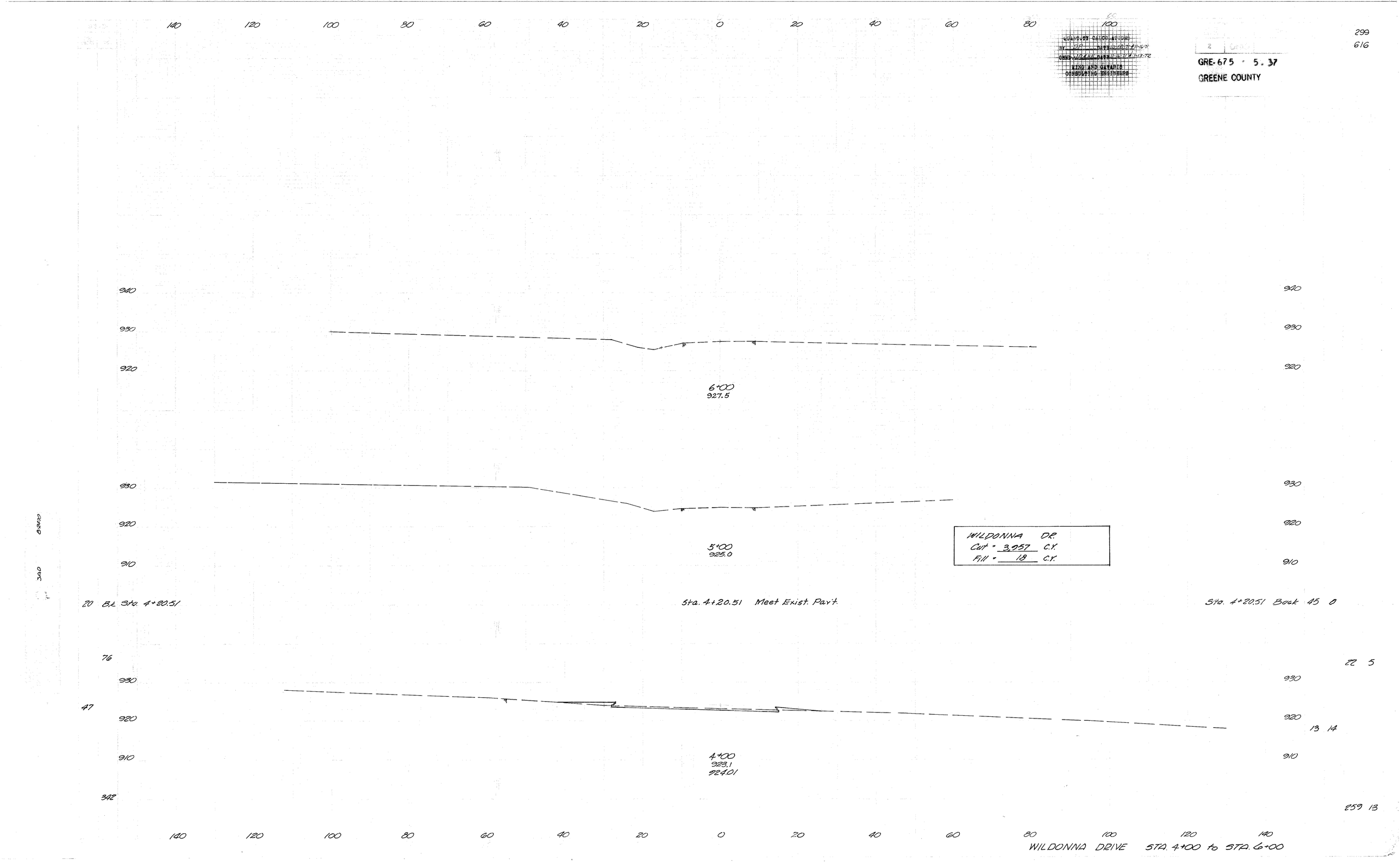
916.0

1+00 (Ahead)
921.1
918.54

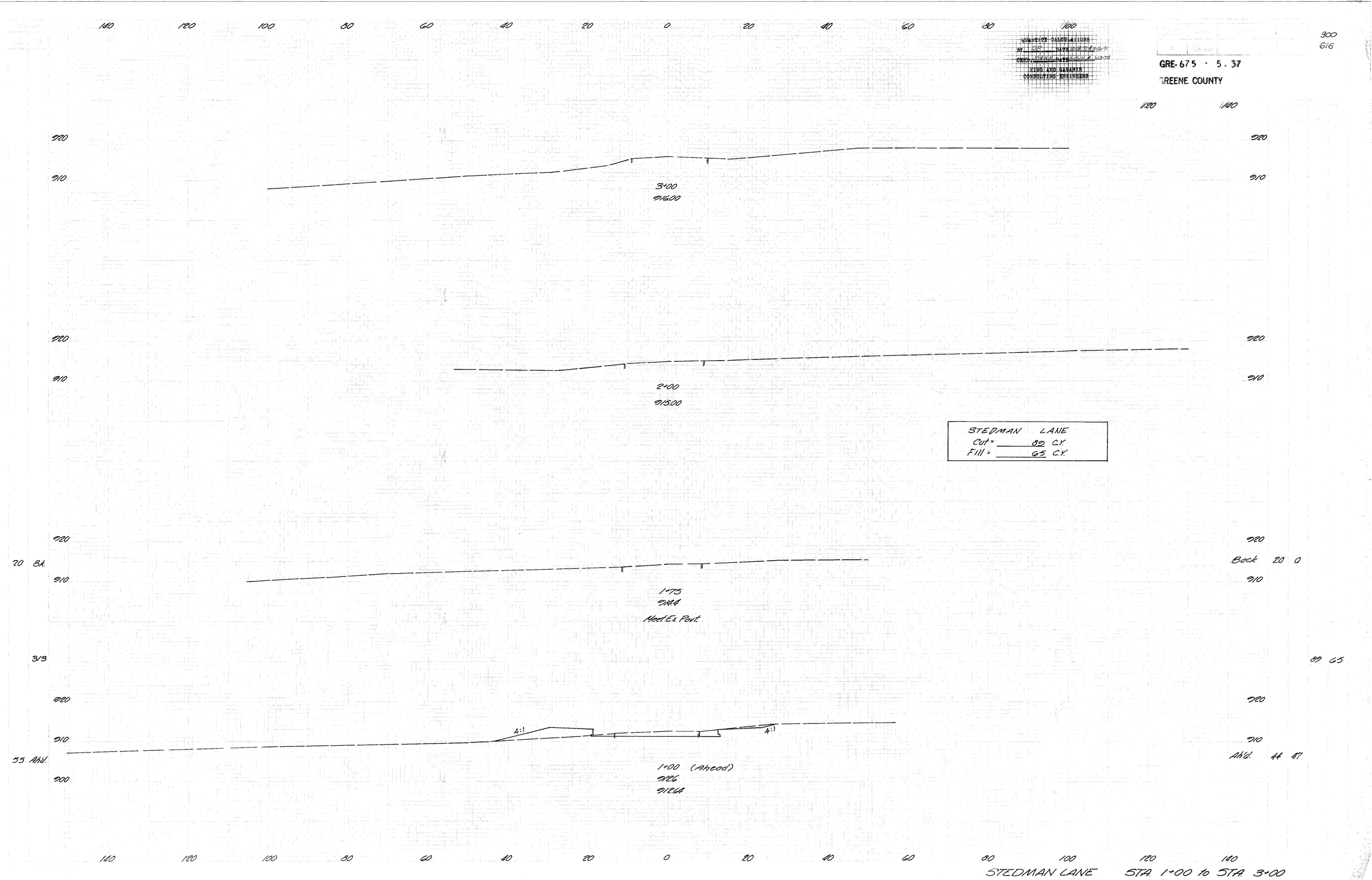
SERVICE ROAD B Sta. 1+00 to Sta. 4+02



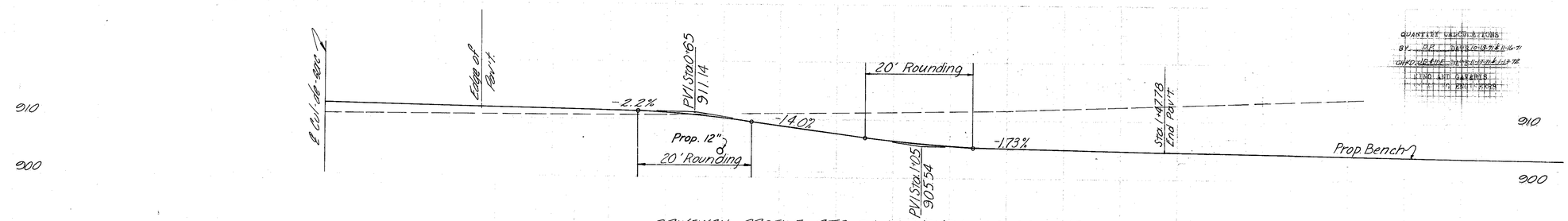
WILDONNA DRIVE STA. 1+00 to STA. 3+50



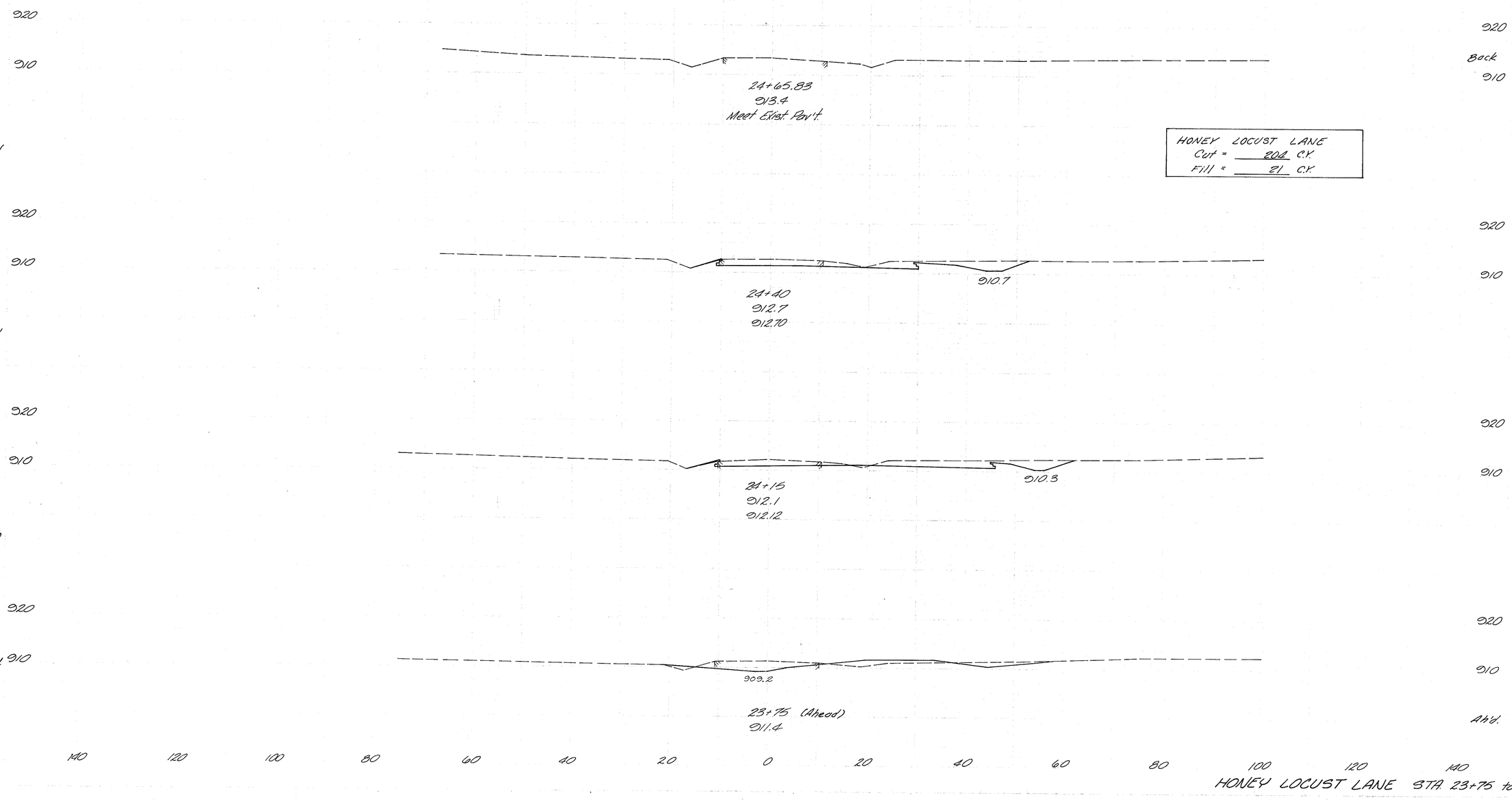
QUANTITY CALCULATIONS
BY DATE 10-18-71 & 11-16-71
CHKD. DATE 11-16-71 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 5.37
GREENE COUNTY
299
616
6+00
927.5
5+00
925.0
WILDONNA DR.
Cut = 3,957 C.Y.
Fill = 18 C.Y.
20 Bk. Sta. 4+20.51
Sta. 4+20.51 Meet Exist. Pav't.
Sta. 4+20.51 Back 45 0
76
22 5
47
13 14
4+00
923.1
924.01
342
259 13
WILDONNA DRIVE STA. 4+00 to STA. 6+00



QUANTITY CALCULATIONS
BY DP DATE 10-18-71 11-16-71
CHKD. JDAHLE DATE 11-17-71 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 · 5.37
GREENE COUNTY
300
616
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
920
910
3+00
916.00
2+00
915.00
STEDMAN LANE
Cut = 89 C.Y.
Fill = 65 C.Y.
20 Bk.
Back 20 0
1+75
914.4
Meet Ex. Pavt.
313
89 65
4:1
4:1
55 Ah'd.
Ah'd. 44 47
1+00 (Ahead)
912.6
912.64
900
STEDMAN LANE STA. 1+00 to STA. 3+00



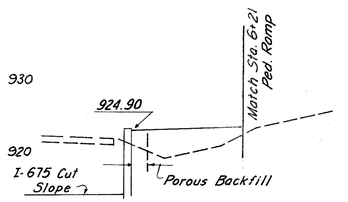
DRIVEWAY PROFILE STA 24+15 HONEY LOCUST LANE



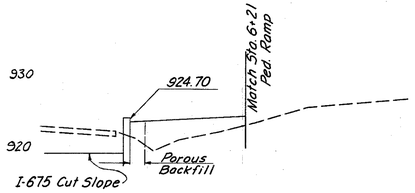
HONEY LOCUST LANE	
Cut =	204 C.Y.
Fill =	21 C.Y.

HONEY LOCUST LANE STA. 23+75 to STA. 24+65.83

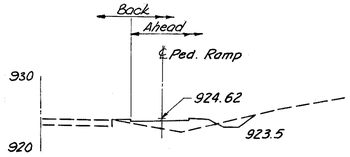
GRE-675 · 5.37
GREENE COUNTY



19 + 58.2 Honey Locust
Back Only

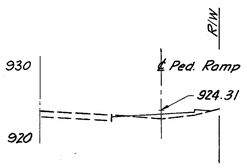


19 + 50 Honey Locust



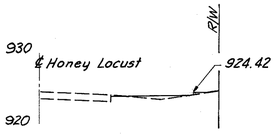
19 + 39.3 Honey Locust

13



19 + 25 Honey Locust

3



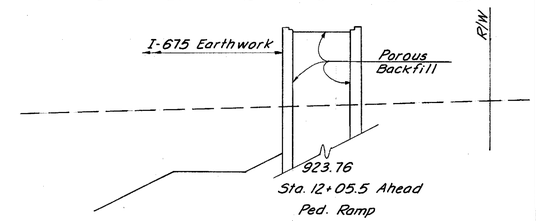
19 + 17 Honey Locust

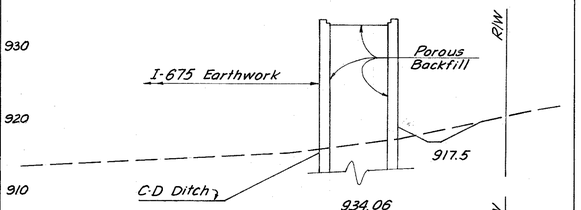
1

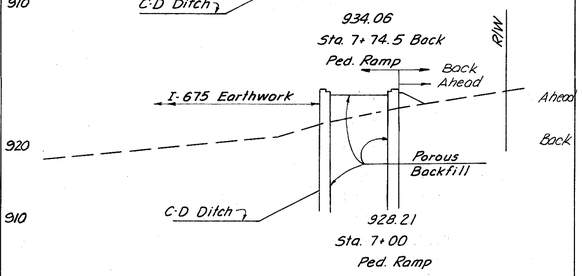
19 + 14 Honey Locust Lone
0 Earthwork

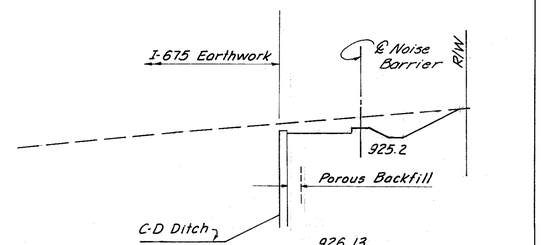
0 10 20 30 40

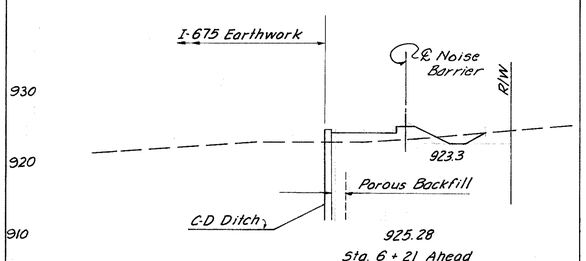
END AREA		VOLUME		SEEDING	
CUT	FILL	CUT	FILL	END WIDTH	SQ. YDS.
	38				
			11		85
	35				
			8		50
Ahead	4				
Back	4	16			
			1	6	
	6				42
			1		
	2				



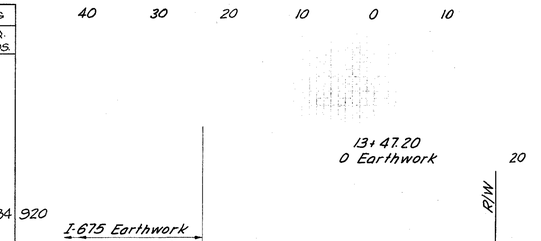




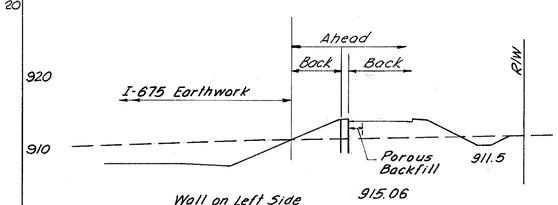




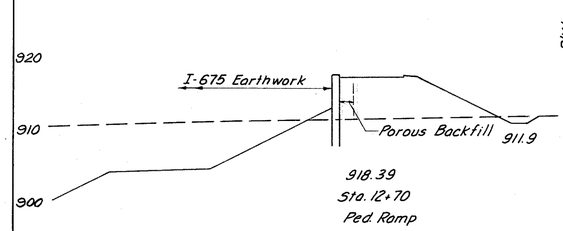
END AREA		VOLUME		SEEDING	
CUT	FILL	CUT	FILL	END WIDTH	SQ. YDS.
9	2				
		12	8		
Ahead	4				
Back	26				
		41	24		
44					
		26	8		
5	15				

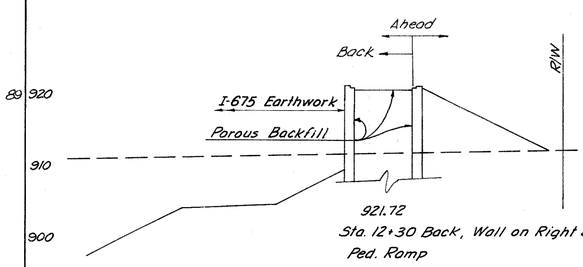


13+47.20
0 Earthwork



Wall on Left Side ends @ 13+10





40 30 20 10 0 10 20 30 40

GRE-675-5.37
GREENE COUNTY

302
616

2 19

3 36

1 12

Ahead 6 44

Back 6 27

7 87

4 91

3 187

73

PEDESTRIAN RAMP

200 180 160 140 120 100 80 60 40 20 0 20 40 60

303
616

GRE-675 - 5.37

GREENE COUNTY

80

900
890
880

522+00
9054

910
900
890
880

521+00
9050

910
900
890
880

520+00
9048

200 180 160 140 120 100 80 60 40 20 0 20 40 60 80

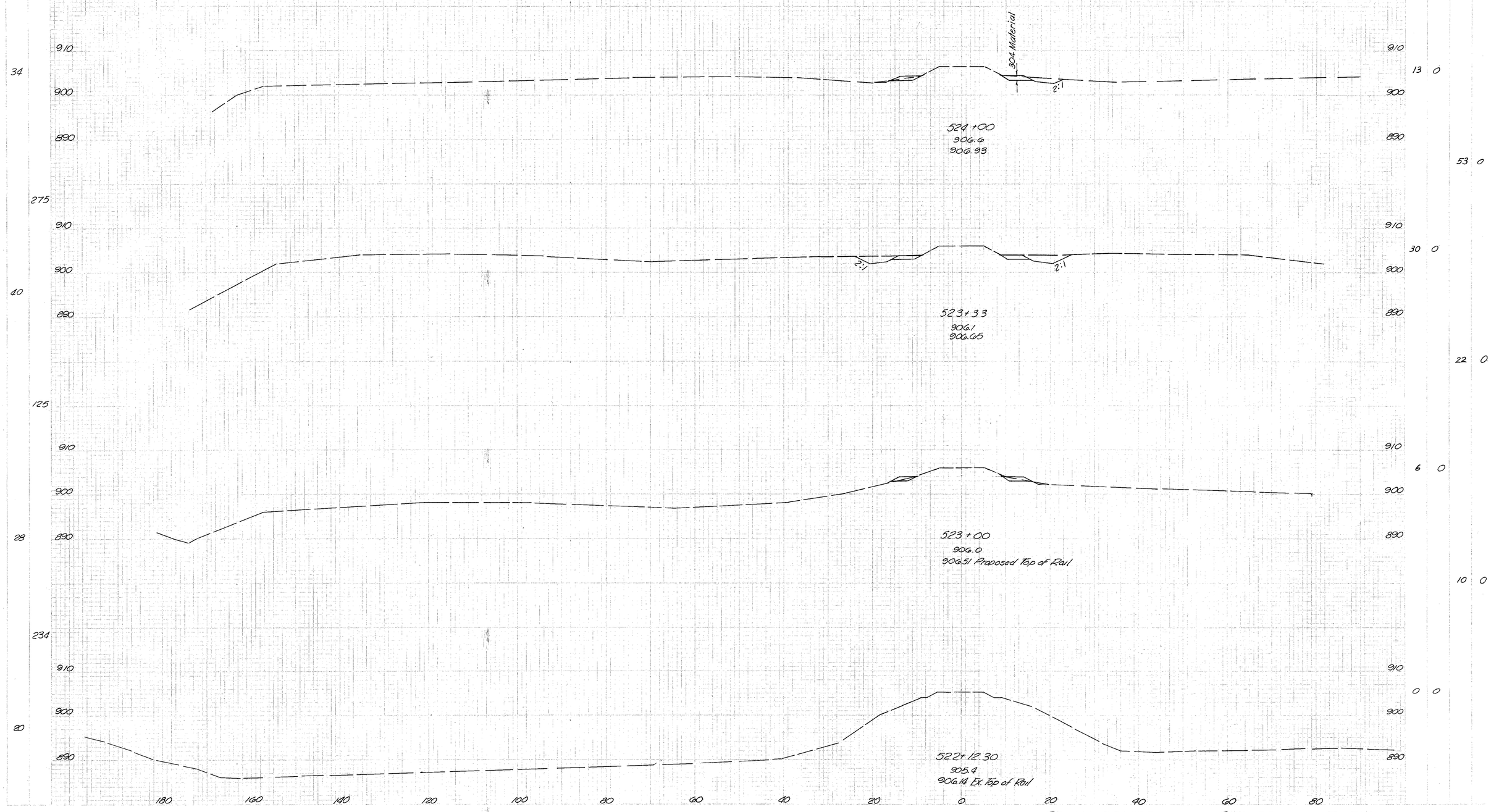
PENN-CENTRAL R.R. STA. 520+00 To STA. 522+00

Quantity Calculations
By D.P. Date 10-15-71 & 11-17-71
Chkd D.P. & H.F. Date 11-16-71 & 1-13-72
KING AND GAVARIS
Consulting Engineers
Revised D.H.S. 5-79

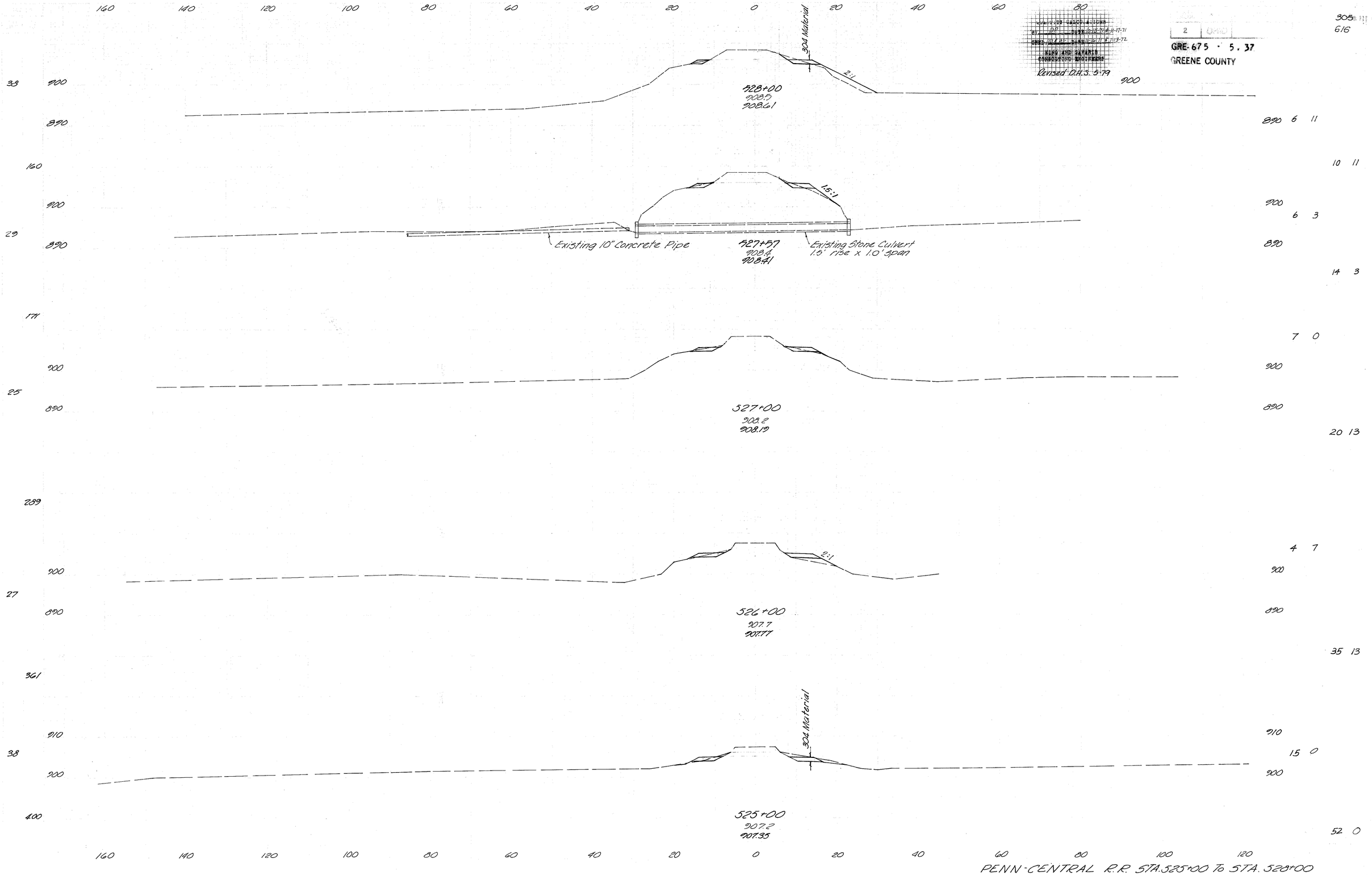
FISCAL SECTION	STATE	PROJECT
5	OHIO	

304
616

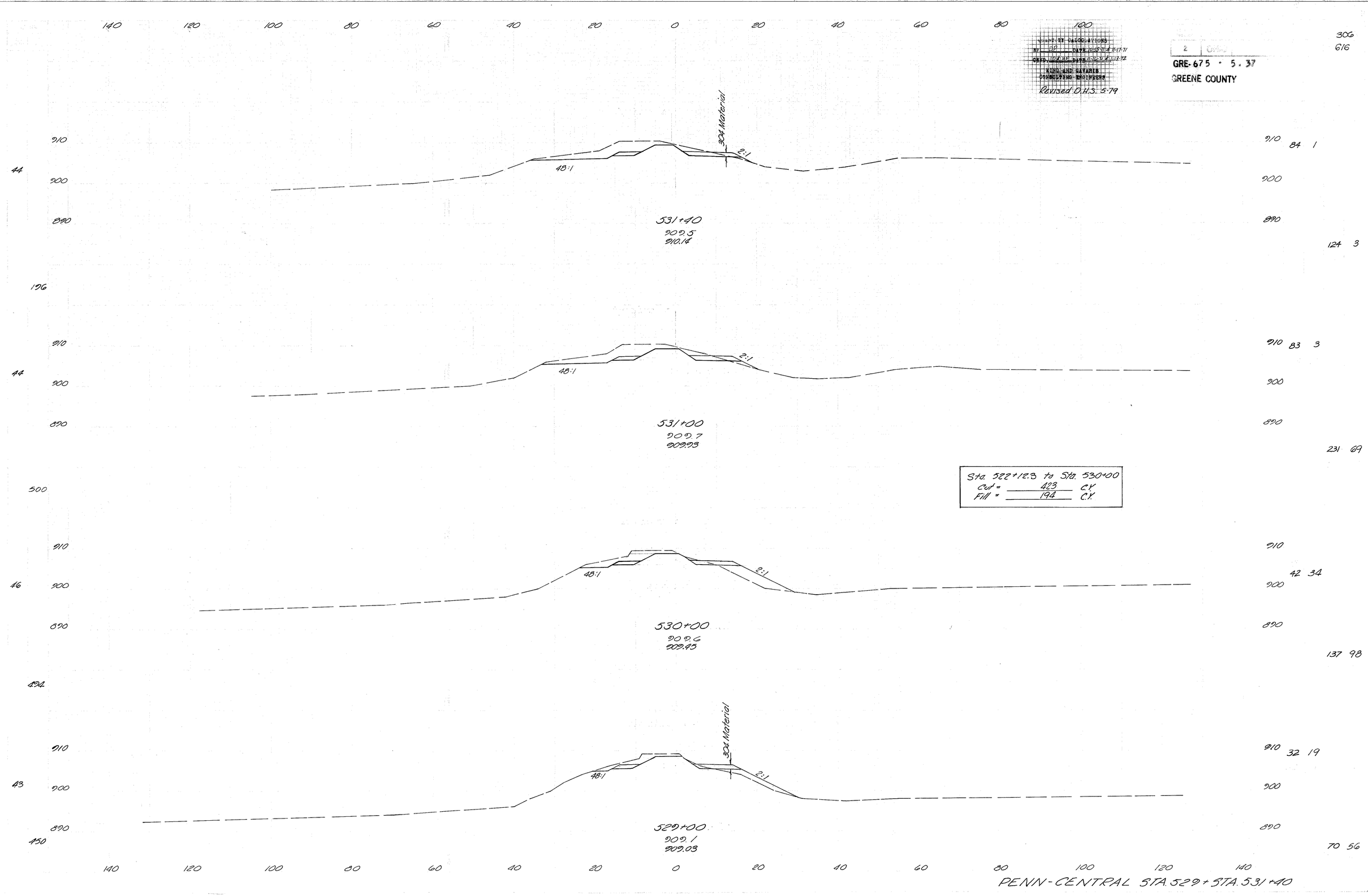
GRE-675-5.37
GREENE COUNTY



PENN CENTRAL R.R. STA. 522+12.3 TO STA. 524+00



PENN-CENTRAL R.R. STA. 525+00 To STA. 528+00



QUANTITY CALCULATIONS
BY SP DATE 10-18-71 & 11-17-71
CHKD. JDR HE DATE 11-16-71 & 11-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
Revised D.H.S. 5-79
GRE-675 · 5.37
GREENE COUNTY
306
616
140 120 100 80 60 40 20 0 20 40 60 80 100
304 Material
2:1
48:1
531+40
909.5
910.14
84 1
124 3
196
531+00
909.7
909.93
83 3
231 69
Sta. 522+12.3 to Sta. 530+00
Cut = 423 C.Y.
Fill = 194 C.Y.
500
530+00
909.6
909.45
42 34
137 98
494
529+00
909.1
909.03
32 19
70 56
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
PENN-CENTRAL STA. 529 + STA. 531+40

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY DP DATE 6-5-71 11-17-71
CHKD. JCF DATE 11-17-71 6-13-72
KIRK AND CALVERT
CONSULTING ENGINEERS
Revised QNS 5-74

2 ORIG.

GRE-675 - 5.37

GREENE COUNTY

307
616

920
910
900

Match Line Ramp A

304 Material

2:1

48:1

535+00
910.0
912.61

155 0

596 0

61

661

920
910
900

920
910
900

167 0

58

480 2

617

920
910
900

334+00
910.0
911.83

920
910
900

92 1

53

Earthwork Limits

333+00
909.2
911.11

307 11

556

920
910
900

304 Material

80 5

47

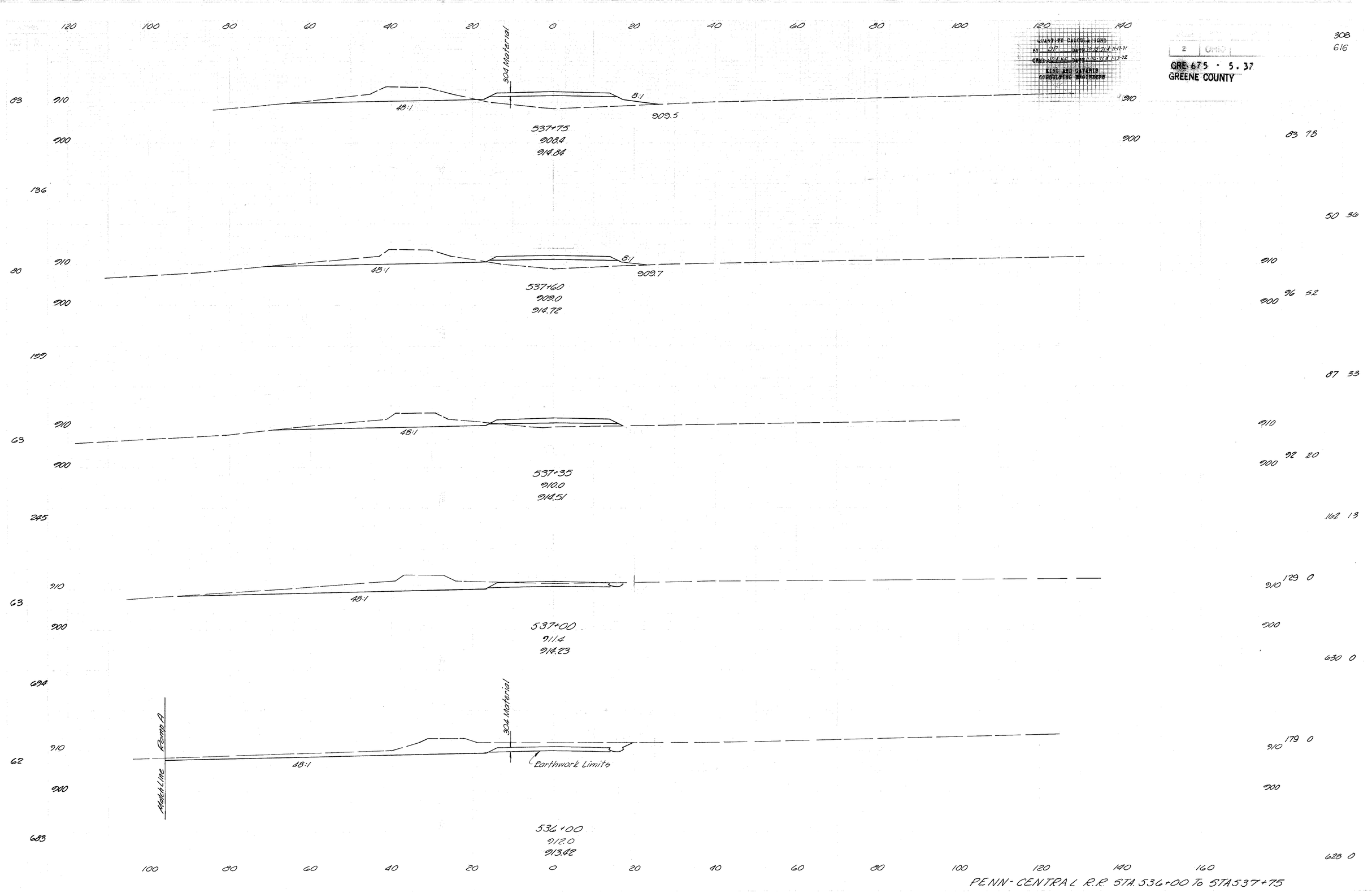
303

332+00
909.0
910.98

176 11

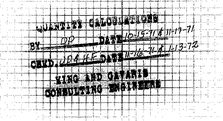
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

PENN CENTRAL R.R STA. 332+00 To STA. 535+00



QUANTITY CALCULATIONS
BY DP DATE 10-15-71 & 11-17-71
CHKD JDEHE DATE 11-16-71 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
2 OHIO
GRE-675 · 5.37
GREENE COUNTY
308
616
304 Material
48:1
8:1
909.5
537+75
908.4
914.84
83 78
136
50 36
909.7
537+60
909.0
914.72
96 52
199
87 33
537+35
910.0
914.51
92 20
245
162 13
537+00
911.4
914.23
129 0
630 0
694
Match Line
Ramp A
Earthwork Limits
179 0
536+00
912.0
913.42
683
628 0
PENN-CENTRAL R.R. STA. 536+00 To STA 537+75

120 100 80 60 40 20 0 20 40 60 80 100 120

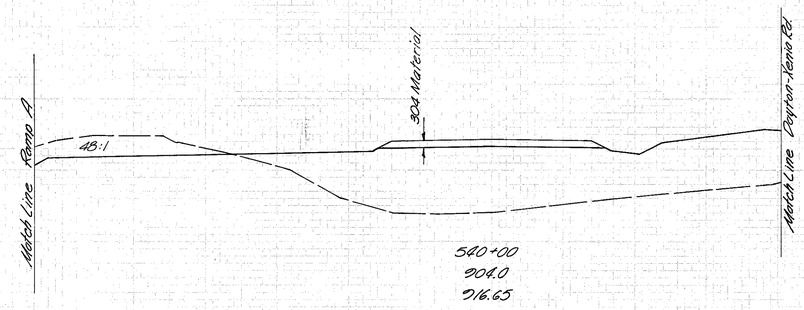


309
616

GRE-675 · 5.37
GREENE COUNTY

Sta. 530+00 to Sta. 540+00
Cut = 4021 C.Y.
Fill = 3916 C.Y.

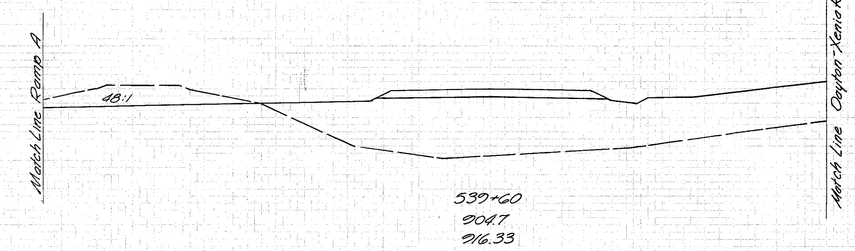
76
910
900



910 58 517
900

84 744

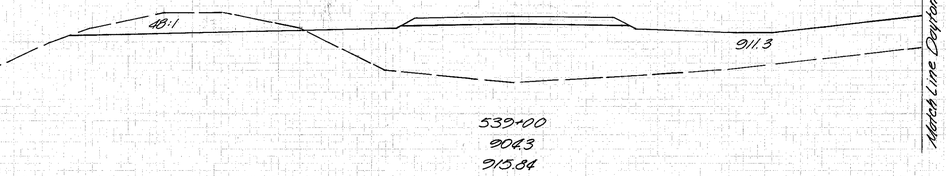
351
910
900



82

910 56 487
900

653
910
900

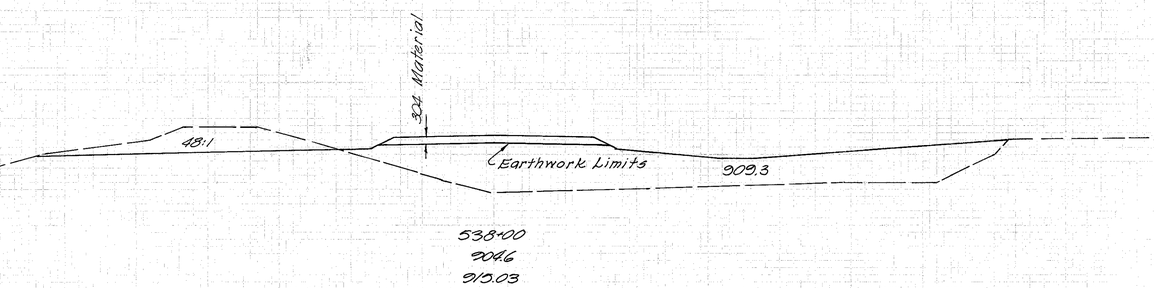


114

910 59 483
900

257 1683

1367
910
900



132

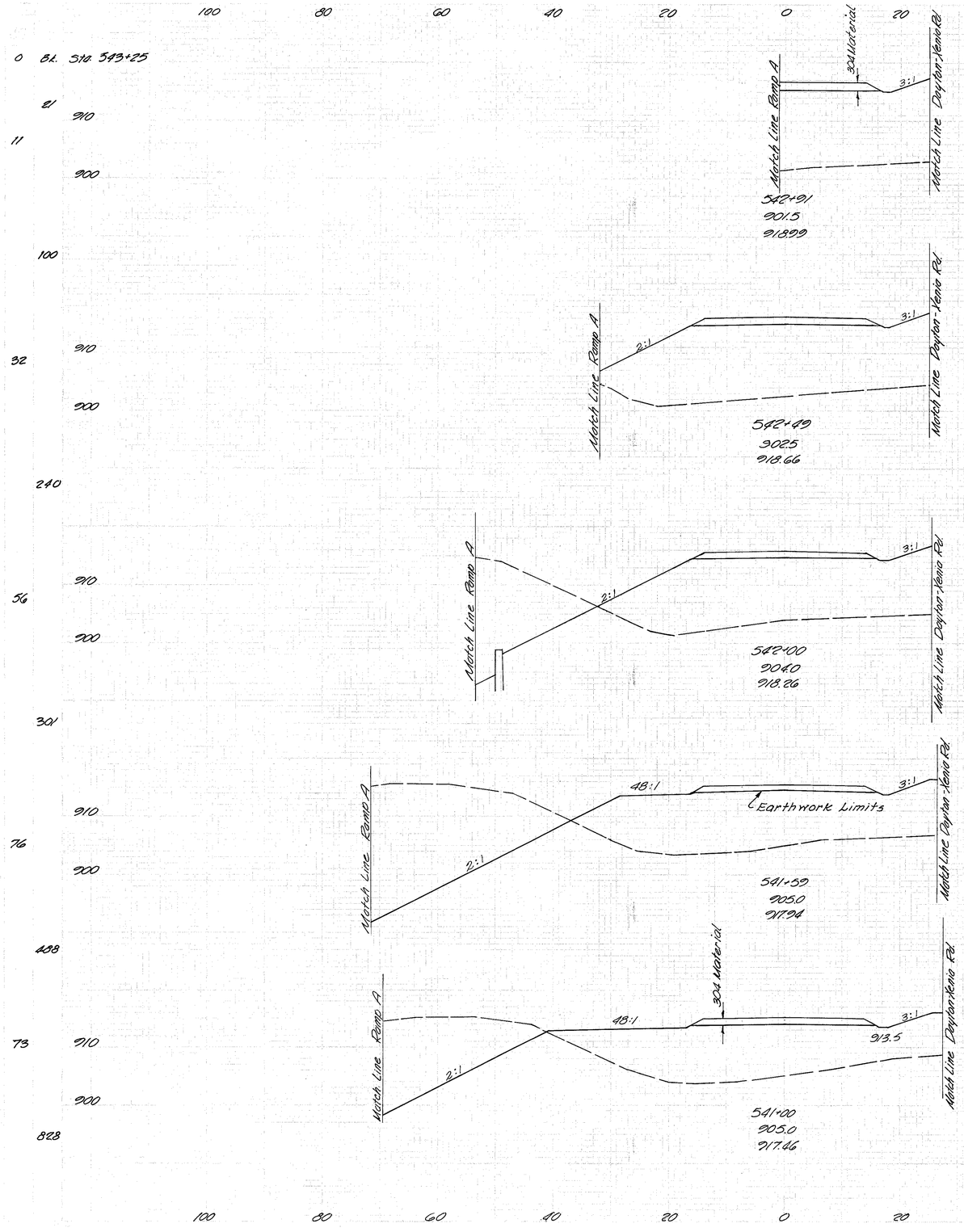
910 80 426
900

299

75 233

120 100 80 60 40 20 0 20 40 60 80 100 120

PENN CENTRAL R.R. STA. 538+00 To STA. 540+00



QUANTITY CALCULATIONS
BY DP DATE 10-15-71 & 11-17-71
CHKD. JDA-HF DATE 11-16-71 & 11-13-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

310
616

GRE-675 · 5.37
GREENE COUNTY

Sta. 543+25	Bk.	0	0		
			34.02	0	221
		0	350		
			42.02	0	757
		0	623		
		48.85	48.99	208	1077
		230	564		
		40.71	40.98	525	837
		466	539		
		58.54	58.96	785	1130
		258	496		
		99.61	99.97	583	1875

PENN CENTRAL R.R. STA. 541+00 to STA. 542+91

WORKING DRAWING
BY DD DATE 12/20/71
CHKD. DATE 1/18/72
STATE HIGHWAY DEPARTMENT
COLUMBUS, OHIO

GRE-675 - 5.37
GREENE COUNTY

180 160 140 120 100 80 60 40 20 0 20 40 60 80 100

930 920 910 900

163 1728 148 1622 144 1633 150 AHd. 115 Bk. 560 114 44

48:1 2:1 2:1 12:1 24:1 4:1 3:1 2:1 2:1 24:1

916.0 912.5 909.5 905.0 904.3 907.8 920.7 918.3 918.5 918.8 919.5

303 Material

Match Line Dayton Xenia Rd.

Match Line A

Match Line C

Match Line Ramp B

Meet Ex. Pav't

20' Rounding

-1.6% +13% +7%

Earthwork Limits

Sta. 540+00 to Sta. 550+00
Cut = 5656 C.Y.
Fill = 10,621 C.Y.

551+00
918.5
925.53

550+00
916.2
924.72

549+00
913.8
923.02

548+00
908.8
923.11

547+56
906.9
922.15

Additional Embankment for Drive at Sta. 550+00

Ahead
Back

High Tension Tower

0 Ahd. Std. 547+49

Sta. 547+49 Ahd
Cut = 0
Fill = 0

Sta. 547+49 Ahead 0 0

99.06 100.11 552 602
166 223
198 464
Ahd. 631 701
Bk. 525 701
1035 753
676 700 133 98
4.4
2838 1008 656 1255
2838 1008 1508 2141
4355 4403 1658 1186

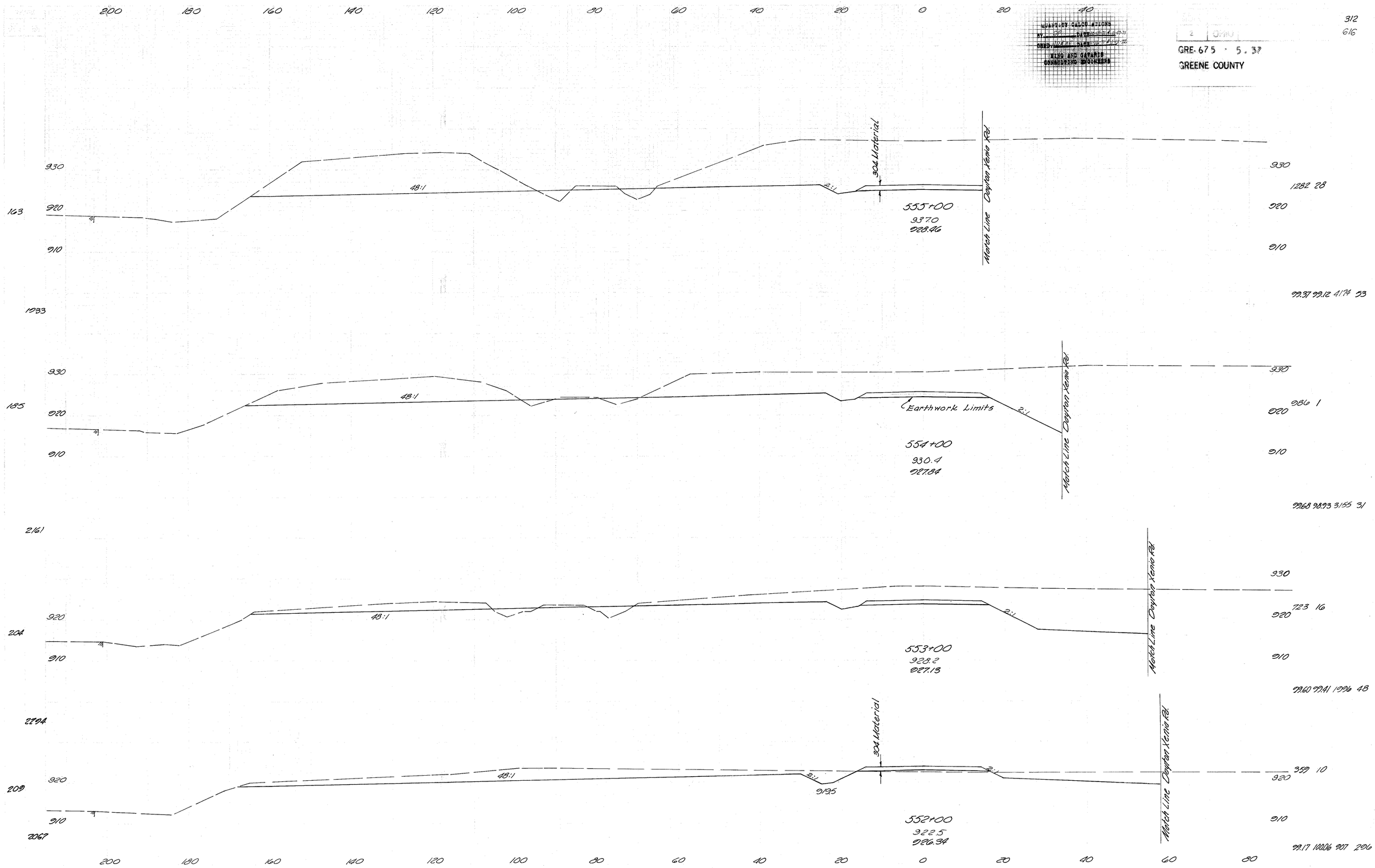
PENN CENTRAL R.R. STA 547+56 TO STA 551+00

312
616

QUANTITY CALCULATIONS
BY DP DATE 10-15-71 & 11-17-71
CHKD. UDAHE DATE 11-16-71 & 11-23-72
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO

GRE-675 · 5.37
GREENE COUNTY



PENN CENTRAL STA. 552+00 To STA. 555+00

180 160 140 120 100 80 60 40 20 0 20 40 60 80 100

GRE-675 · 5.37
GREENE COUNTY

313
616

116
930
920
Match Line Dayton Xenia Rd.
32d Material
558+00
938.6
929.76
925.1
1:1
1340 0

1048
940
930
920
114
Match Line Dayton Xenia Rd.
Earthwork Limits
557+18
940.0
929.66
925.5
3537 0

435
940
930
920
68 Ahd. Sta. 556+75
Match Line Dayton Xenia Rd.
(Ahead) 556+75
940.4
929.30
919.3
Match Line Dayton Xenia Rd.
1972 0
Ahd. 1289 0

940
930
920
53 Bk. Sta. 556+00
48:1
Match Line Dayton Xenia Rd.
Match Line Dayton Xenia Rd.
556+00 (Back)
941.1
928.98
Bk. 690 0

504
930
920
163
1050
48:1
32d Material
Match Line Dayton Xenia Rd.
555+58
939.9
928.76
4.97 41.97 1345 11
1241 14
57.77 37.73 2609 45

PENN CENTRAL RR STA. 555+58 TO STA. 558+00

220 200 180 160 140 120 100 80 60 40 20 0 20 40

QUANTITY CALCULATIONS
BY GD DATE 11-17-71
CHKD DLB/TF DATE 12-21-71
KING AND GATARIS
CONSULTING ENGINEERS

2 CHD

GRE-675 · 5,37
GREENE COUNTY

314
616

940
930
920

204

10'

8:1 8:1 4B:1 4B:1

923.7

923.9

304 Material

2:1

923.9

562+00
937.5
930.05

940
930
920

998 0

2283

3646 6

940
930
920

207

4B:1 4B:1

4:1

924.0

924.2

Earthwork Limits
561+00
934.2
930.11

924.2

940
930
920

971 3

2183

3854 7

Sta. 550+00 to Sta. 560+00
Cut = 29,015 C.Y.
Fill = 1278 C.Y.

940
930
920

186

Dayton-Xenia Rd.

Match Line

4B:1 4B:1

924.5

560+00
935.3
930.08

924.5

940
930
920

1110 1

1856

3976 52

940
930
920

148

Match Line Dayton-Xenia Rd.

4B:1

924.8

304 Material

2:1

559+00
936.8
929.95

924.8

940
930
920

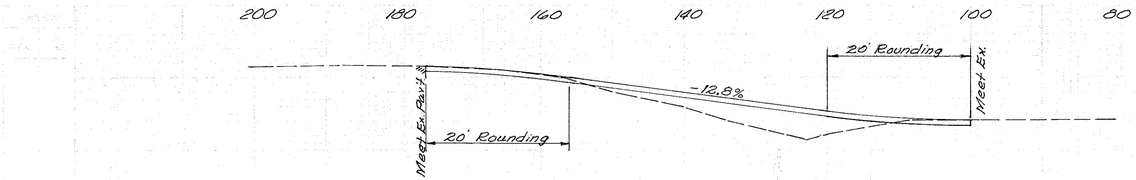
1037 27

1467

4402 50

240 200 180 160 140 120 100 80 60 40 20 0 20 40 60

PENN CENTRAL R.R. STA. 559+00 TO STA. 562+00



566+49
2 16' Dr. Lt.

315
616

GRE-675 • 5.37
GREENE COUNTY

Additional Embankment for Drive at Sta. 566+49

+211

95

930
920

48:1

30% Material

2:1

930
920

177 0

566+00
927.4
929.42

1543

940
930
920

172

922.8

48:1

Earthwork Limits

940
930
920

372 0

1057 0

564+96
932.0
929.59

1877

180

930
920

4:1

923.1

48:1

930
920

357 0

1206 0

564+00
931.00
929.74

2022

184

930
920

VARIES

4:1

48:1

48:1

923.4

30% Material

2:1

930
920

518 0

1620 0

563+00
932.0
929.90

2156

220
200
180
160
140
120
100
80
60
40
20
0
20
40
60

2807 0

PENN CENTRAL R.R STA. 563+00 TO STA. 566+00

240 220 200 180 160 140 120 100 80 60 40 20 0 20

QUANTITY CALCULATIONS
BY DC DATE 12-15-71
CHKD. JEFFREY DATE 12-19-72
KIRK AND CAVARIS
CONSULTING ENGINEERS
Revised DJS 5-79

2 0 2 4 6 8 10

GRE-675 · 5.37
GREENE COUNTY

316
616

31
930
920

304 Material

923.2 922.1

570+00
9230
928.78

930
920

51 0

428

267 0

46
930
920

922.9 921.8

930
920

93 0

569+00
9270
928.94

770

508 78

86
930
920

2:1
918.5

921.5 921.5

930
920

168 40

567+95
923.0
929.11

808

510 70

67
930
920
900

304 Material

48:1
922.4

567+00
927.4
929.26

922.4

930
920

182 0

554 0

240 220 200 180 160 140 120 100 80 60 40 20 0 20 40

PENN-CENTRAL STA 567+00 To STA 570+00

160 140 120 100 80 60 40 20 0 20 40 60 80 100

930
920

575+00
927.1

930
920

574+00
927.3

930
920

572+96.36
Meet Existing Grade
927.6
928.3 Ex. Top of Rail

20 Bk.

222

930
920

923.8 923.8

572+00
927.8
928.86 Prop. Top of Rail

256

26

930
920

923.5 922.4

317

571+00
927.8
928.62

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

QUANTITY CALCULATIONS
BY DP DATE 12/23/71 1/17/72
CHKD DATE 1/24/72

KING AND ZEVARIS
CONSULTING ENGINEERS

Revised DHS 5-79

GRE-675 · 5.37
GREENE COUNTY

317
616

930
920

0 0

930
920

112 0

930
920

63 0

930
920

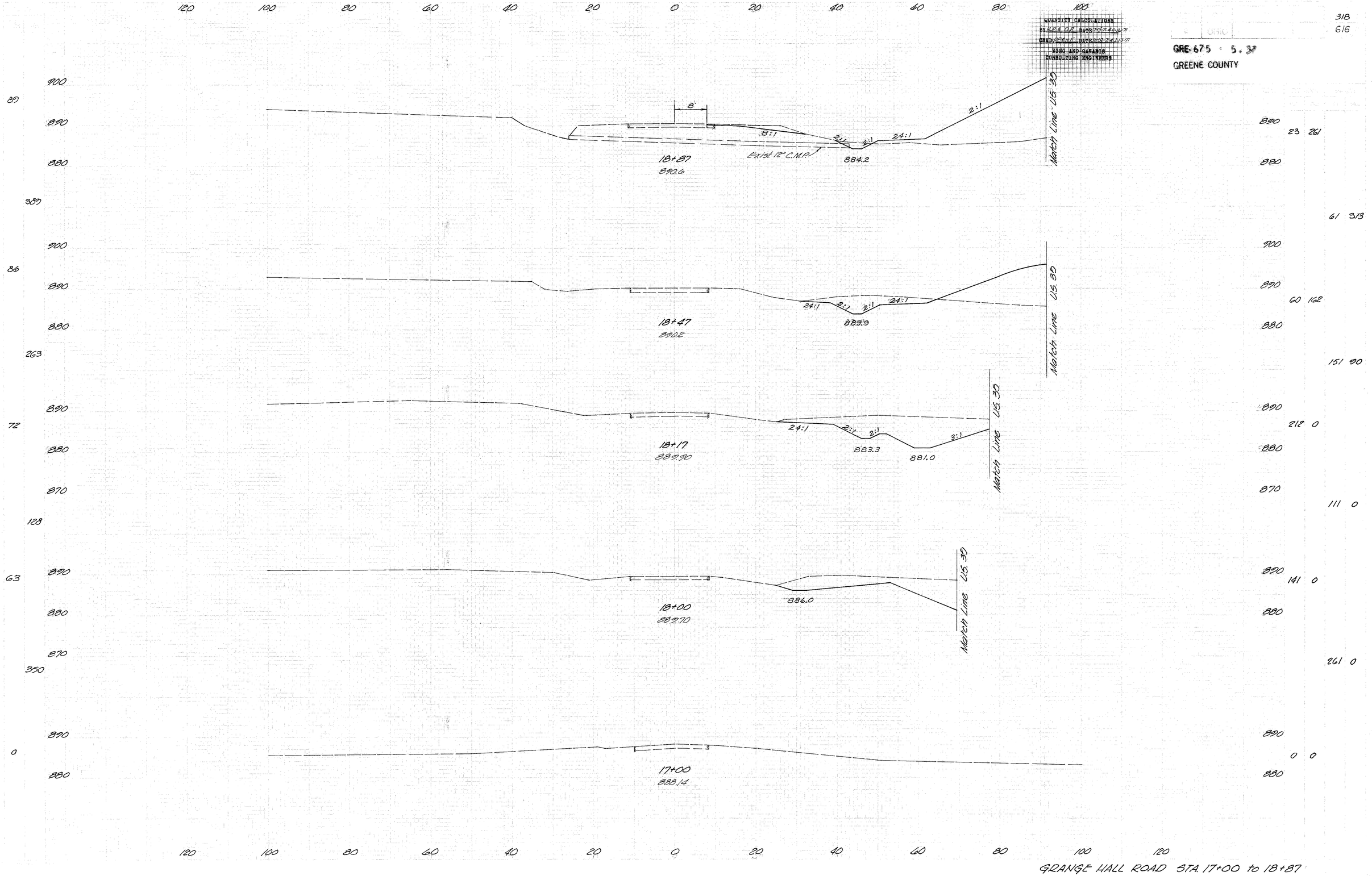
44 0

198 0

176 0

Sta 560+00 to Sta. 572+96
Cut = 16,816 C.Y.
Fill = 161 C.Y.

PENN CENTRAL STA. 571+00 To STA. 575+00



GRANGE HALL ROAD STA. 17+00 to 18+87

120 100 80 60 40 20 0 20 40 60 80 100 120

QUANTITY CALCULATIONS
BY EAD DP DATE 11-15-71 & 11-16-71
CHKD. GEAVC DATE 12-16-71 & 12-17-71
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

3.19
6.16

176

910
900
890
880

472

Match Line US 35

24:1 3:1 8:1

12'

888.4

887.7

20+67
891.6

900
50 554
890
880

43 310

178

910
900
890
880

1444

Match Line US 35

12' 8'
Exist. Pav't. To Remain

24:1 3:1 8:1 2:1

888.8

20+43
891.5

910
900
46 594
890
880

142 1370

178

900
890
880

1378

Match Line US 35

12' 8'
Exist. Pav't. To Remain

24:1 3:1 8:1 24:1 2:1 2:1 24:1 2:1

888.7 888.5

19+70
891.7

900
59 426
890
880

246 792

175

900
890
880

191

Match Line US 35

8'

891.0

8:1 2:1 2:1 24:1 2:1

885.0

19+00
890.70

900
131 185
890
880

37 107

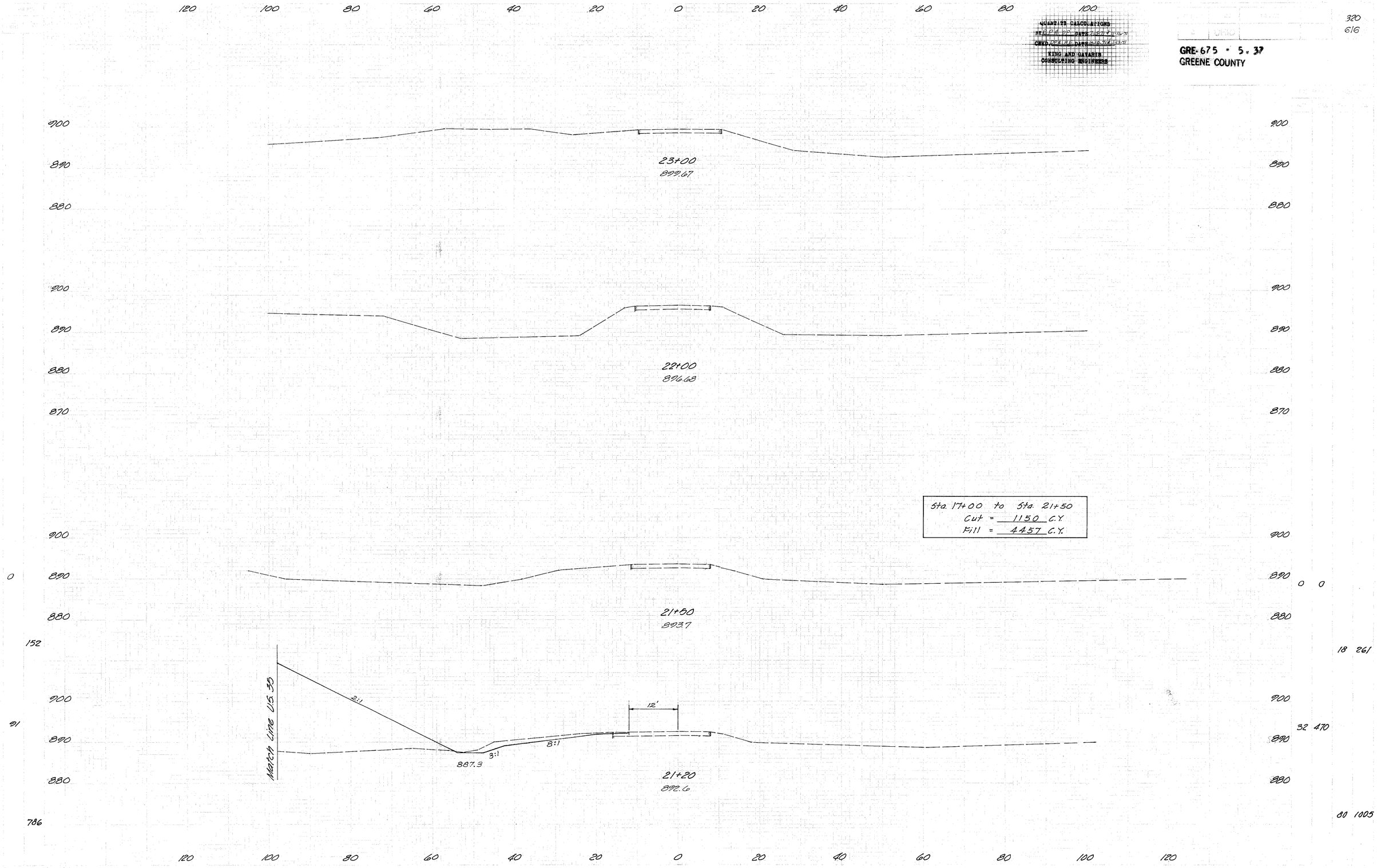
120 100 80 60 40 20 0 20 40 60 80 100 120

GRANGE HALL ROAD STA 19+00 to 20+67

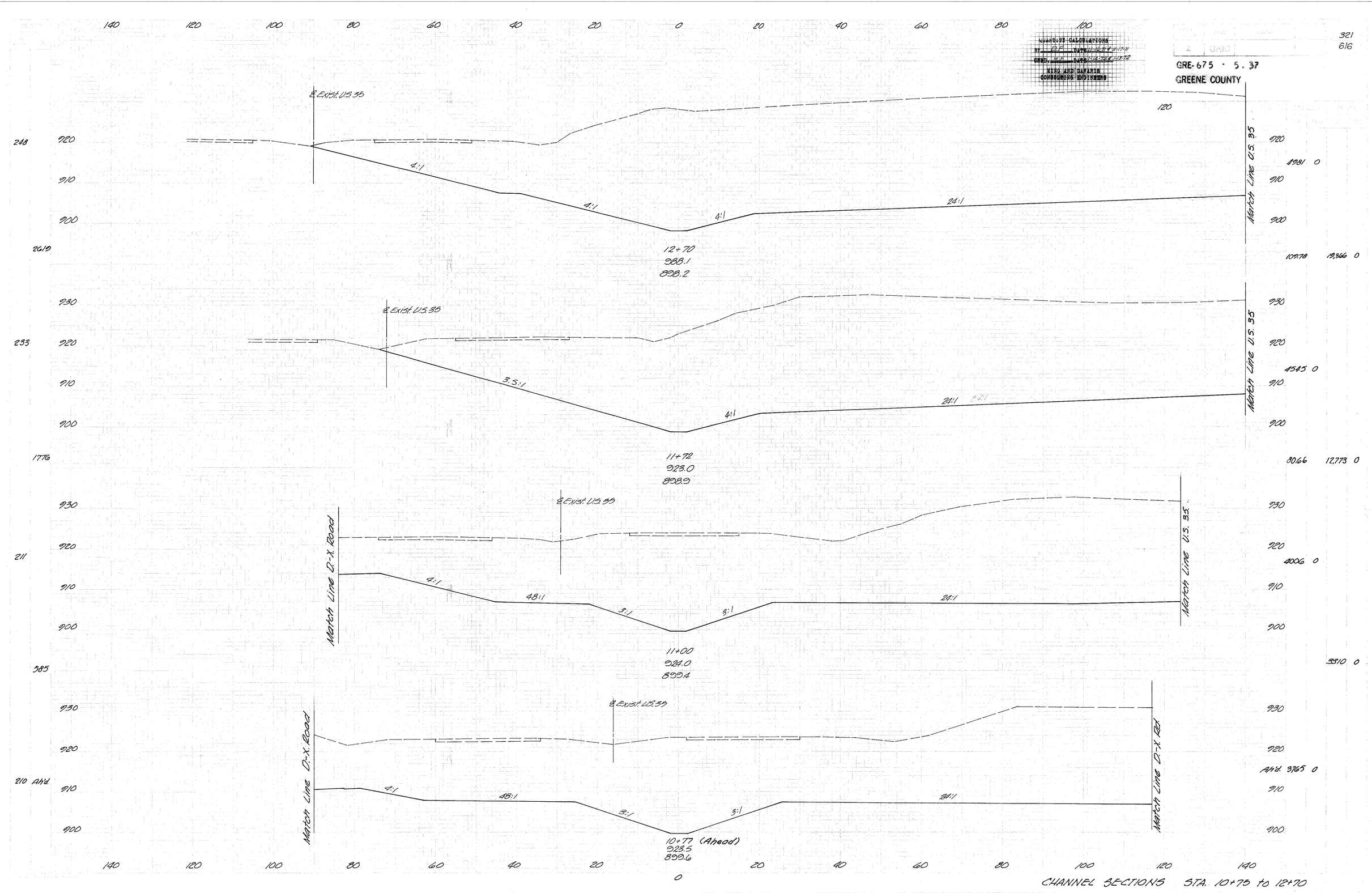
QUANTITY CALCULATIONS
BY BPA DP DATE 7-15-71 & 7-16-71
CHKD. DPA HE DATE 10-18-71 & 7-13-71
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

320
616



GRANGE HALL ROAD STA. 21+20 to 23+00

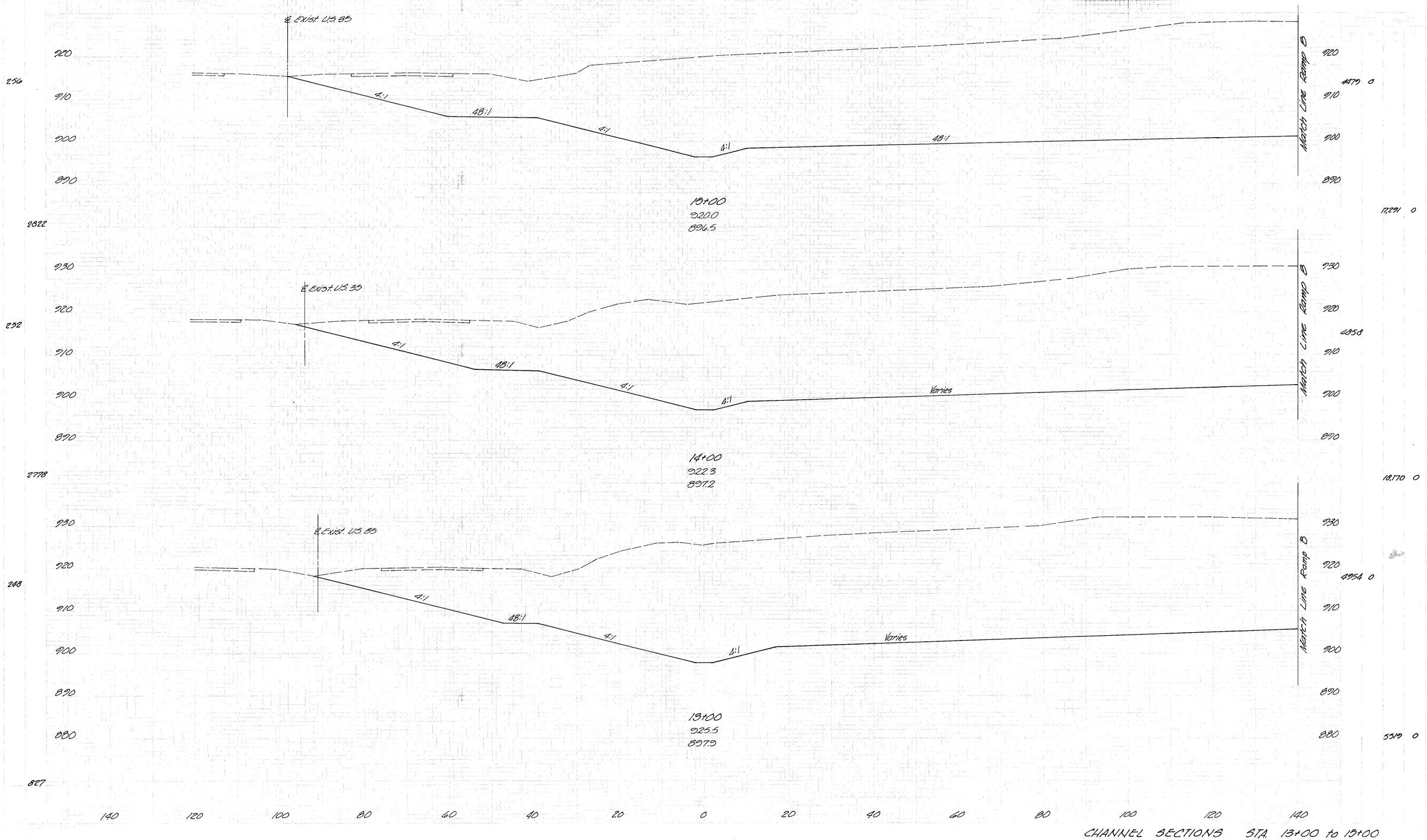


CHANNEL SECTIONS STA. 10+75 to 12+70

QUANTITY CALCULATIONS
BY DP DATE 11-16-71 & 11-17-71
CHKD. HF DATE 11-17-72 & 11-13-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

322
616



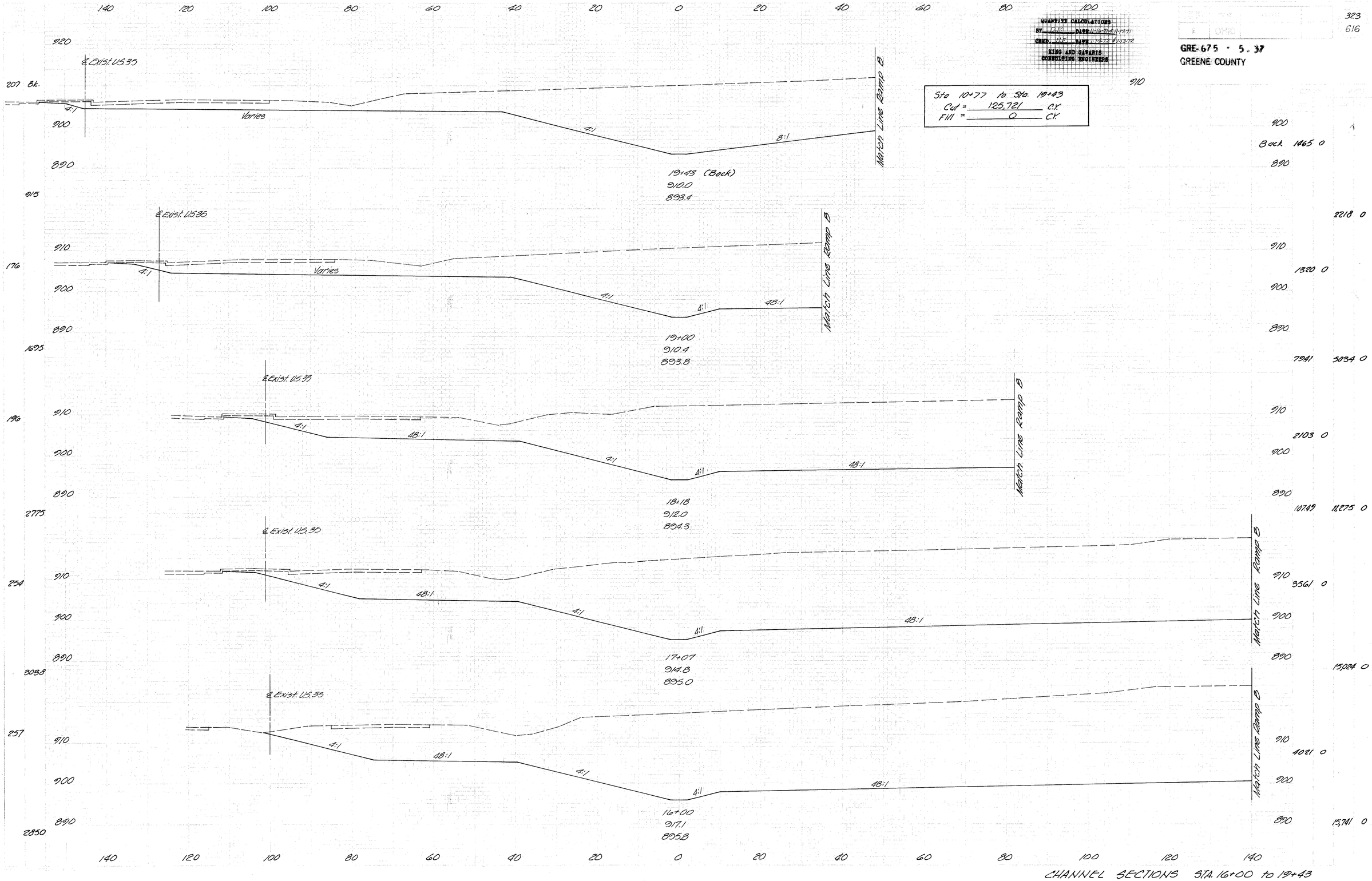
CHANNEL SECTIONS STA. 13+00 to 15+00

QUANTITY CALCULATIONS
BY D.P. DATE 11-16-71 & 11-17-71
CHKD. H.F. DATE 1-14-72 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS

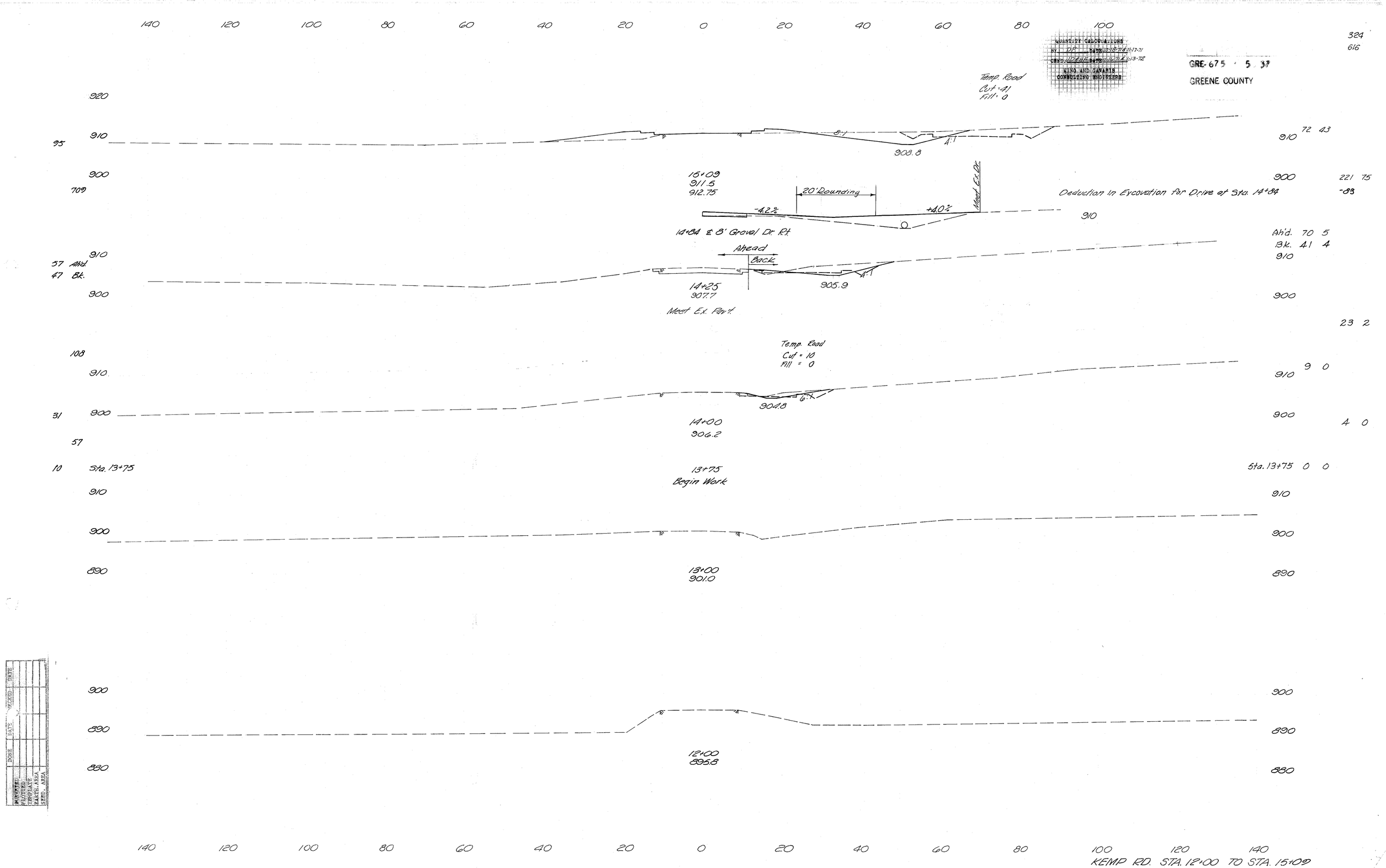
GRE-675 · 5.37
GREENE COUNTY

323
616

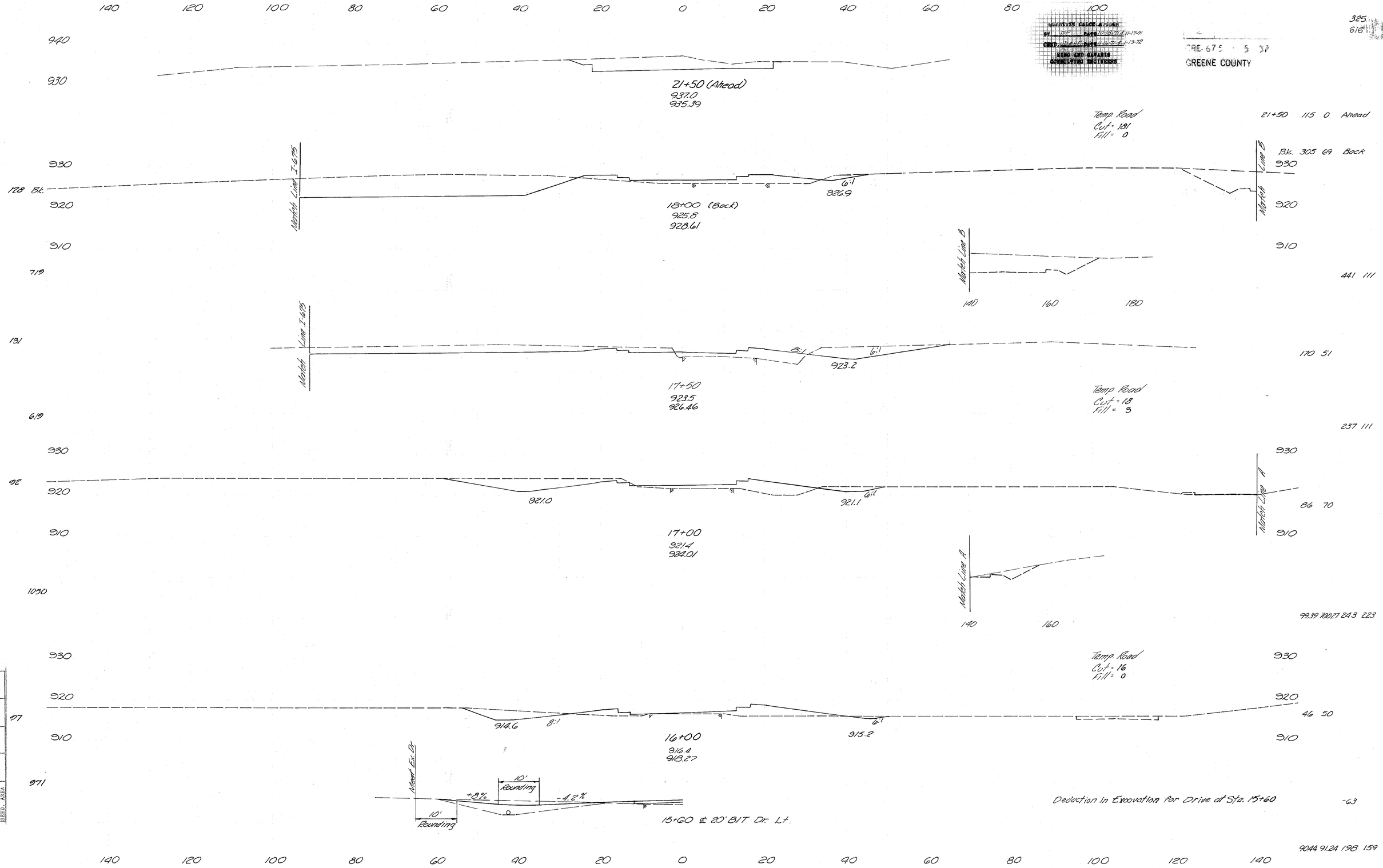
Sta 10+77 to Sta. 19+43
Cut = 125,721 C.Y.
Fill = 0 C.Y.



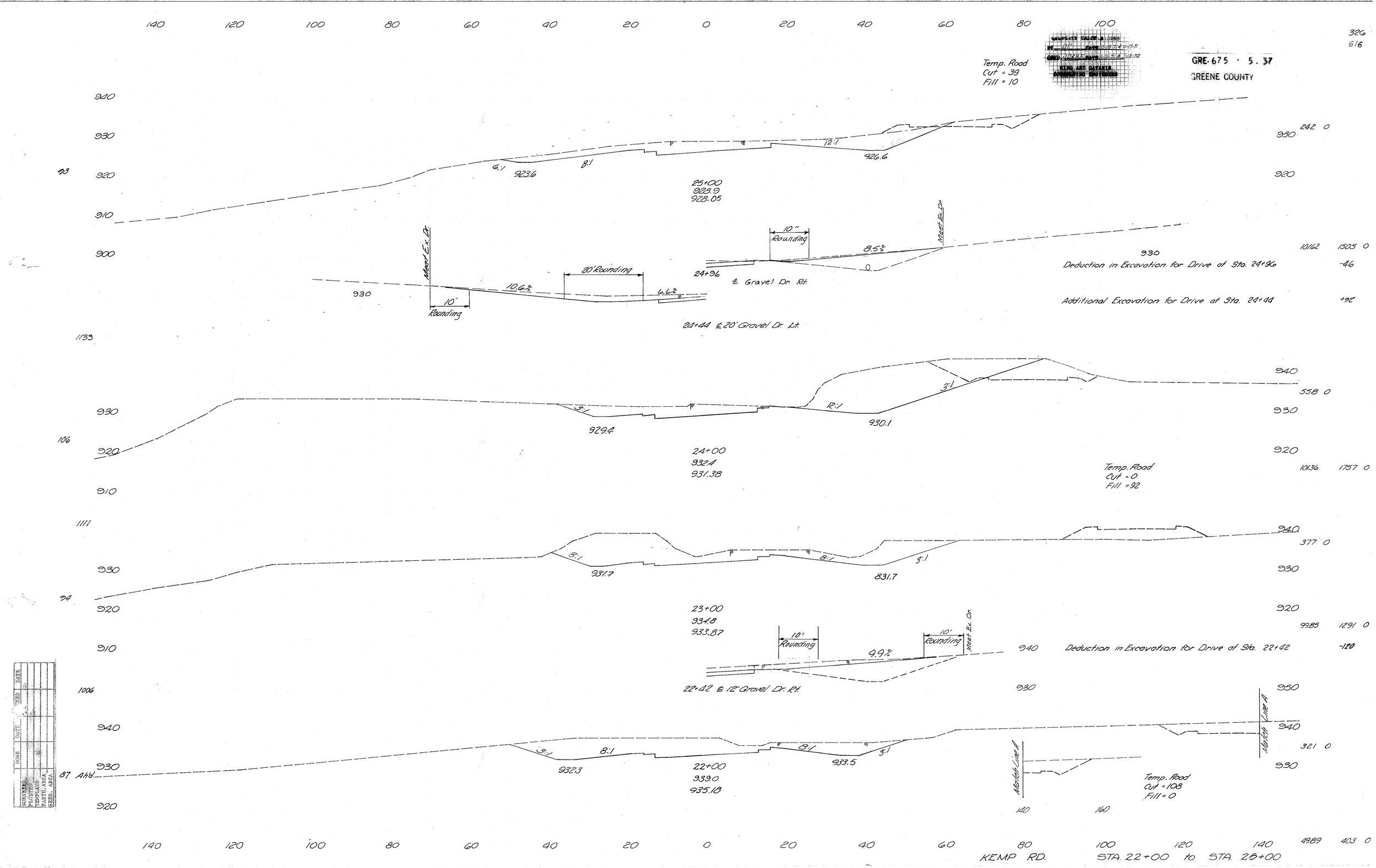
CHANNEL SECTIONS STA. 16+00 to 19+43



QUANTITY CALCULATIONS
BY DP DATE 10-18-71 & 11-17-71
CHKD. JD & JLF DATE 11-16-71 & 1-13-72
KING AND GAVARIS
CONSULTING ENGINEERS
GRE-675 5 37
GREENE COUNTY
Temp. Road
Cut = 41
Fill = 0
908.8
15+09
911.5
912.75
20' Rounding
-4.2%
+4.0%
Meet Ex. Dr.
Deduction in Excavation for Drive at Sta. 14+84
14+84 ℄ 8' Gravel Dr. Rt.
Ahead
Back
14+25
907.7
905.9
Meet Ex. Pavt.
Temp. Road
Cut = 10
Fill = 0
904.8
14+00
906.2
Sta. 13+75
13+75
Begin Work
13+00
901.0
12+00
895.8
Ah'd. 70 5
Bk. 41 4
Sta. 13+75 0 0
KEMP RD. STA. 12+00 TO STA. 15+09



GREENE COUNTY
325
616
21+50 (Ahead)
937.0
935.39
Temp Road
Cut = 181
Fill = 0
21+50 115 0 Ahead
Bk. 305 69 Back
128 Bk.
Match Line I-675
Match Line B
18+00 (Back)
925.8
928.61
6:1
926.9
719
441 111
131
17+50
923.5
926.46
8:1
6:1
923.2
170 51
Temp Road
Cut = 18
Fill = 3
619
237 111
92
921.0
921.1
6:1
17+00
921.4
924.01
Match Line A
86 70
1050
99.39 100.27 243 223
Temp Road
Cut = 16
Fill = 0
97
914.6
8:1
6:1
915.2
16+00
916.4
918.27
46 50
971
Meet Ex. Dr.
10' Rounding
+8%
-4.2%
15+60 ℄ 20' BIT Dr. Lt.
Deduction in Excavation for Drive at Sta. 15+60
-63
90.44 91.24 198 159
KEMP RD. STA. 16+00 to STA. 18+00


GRE-675 · 5.37
GREENE COUNTY
Temp. Road
Cut = 39
Fill = 10
25+00
928.9
928.05
6:1
923.6
8:1
12:1
926.6
Meet Ex. Dr.
10' Rounding
20' Rounding
10.6%
6.6%
24+96
℄ Gravel Dr. Rt.
10" Rounding
8.5%
Deduction in Excavation for Drive at Sta. 24+96
Additional Excavation for Drive at Sta. 24+44
24+44 ℄ 20' Gravel Dr. Lt.
24+00
932.4
931.38
3:1
929.4
12:1
930.1
Temp. Road
Cut = 0
Fill = 92
23+00
934.8
933.87
931.7
8:1
831.7
10' Rounding
9.9%
Deduction in Excavation for Drive at Sta. 22+42
22+42 ℄ 12' Gravel Dr. Rt.
22+00
939.0
935.18
932.3
933.5
Match Line A
Temp. Road
Cut = 108
Fill = 0
KEMP RD.
STA. 22+00 to STA. 25+00

GRE-675 · 5.37
GREENE COUNTY

KING AND GAVARIS
CONSULTING ENGINEERS
DR. D.P. DATE 10-18-71 11-17-71
CHK. D.P.K.C. DATE 11-16-71 1-13-72

140 120 100 80 60 40 20 0 20 40 60 80 100

940 930 920 910

29+00
927.6

930 920 910

28+00
923.8

Temp. Road
Cut: 0
Fill: 93

20 920 910

27+25
923.3
Meet Ex. Pav't.

74 920 910

Temp. Road
Cut: 0
Fill: 57

27+00
923.4
923.45

33 920 910

Sta 13+75 to Sta 27+25
Cut = 7501 C.Y.
Fill = 706 C.Y.

628 930 920

Temp. Road
Cut: 156
Fill: 0

3:1

923.2

80 910 900

26+00
925.4
925.07

989

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

940 930 920 910

28 0

28 3

31 5

920 910

489 15

940 930 920 910 900

232 3

100.33 100.00 881 7

KEMP RD. STA. 26+00 to STA. 29+00

P.C. Sta. 308+71.67
P.T. Sta. 326+18.26

Dc = 1°28'00"
S.E. = 0.048'/Ft.

Station	Profile Grade Elev. 30' Lt. of ℄	Elev. 42' Lt. of ℄	Elev. 54' Lt. of ℄	Elev. 66' Lt. of ℄	Station	Profile Grade Elev. 30' Rt. of ℄	Elev. 42' Rt. of ℄	Elev. 54' Rt. of ℄	Elev. 66' Rt. of ℄
307+00	888.99	888.80	888.62	888.43	307+00	888.99	889.18	889.37	889.55
307+25	888.89	888.70	888.51	888.33	307+25	888.89	889.08	889.26	889.45
307+50	888.77	888.58	888.39	888.21	307+50	888.77	888.96	889.14	889.33
307+75	888.63	888.45	888.26	888.07	307+75	888.63	888.82	889.01	889.20
308+00	888.48	888.29	888.10	887.92	308+00	888.48	888.67	888.85	889.04
308+25	888.31	888.09	887.88	887.67	308+25	888.31	888.52	888.73	888.95
308+50	888.12	887.86	887.61	887.36	308+50	888.12	888.37	888.62	888.88
308+75	887.91	887.62	887.32	887.03	308+75	887.91	888.20	888.49	888.79
309+00	887.68	887.35	887.02	886.69	309+00	887.68	888.01	888.34	888.67
309+25	887.44	887.07	886.71	886.34	309+25	887.44	887.81	888.18	888.54
309+50	887.18	886.78	886.37	885.97	309+50	887.18	887.58	887.99	888.39
309+75	886.90	886.46	886.02	885.58	309+75	886.90	887.34	887.79	888.23
310+00	886.61	886.13	885.65	885.17	310+00	886.61	887.09	887.56	888.04
310+25	886.30	885.78	885.26	884.75	310+25	886.30	886.81	887.33	887.84
310+50	885.96	885.41	884.86	884.31	310+50	885.96	886.52	887.07	887.62
310+75	885.62	885.04	884.46	883.89	310+75	885.62	886.19	886.77	887.34
311+00	885.25	884.68	884.10	883.52	311+00	885.25	885.83	886.40	886.98
311+25	884.87	884.29	883.72	883.14	311+25	884.87	885.44	886.02	886.60
311+50	884.47	883.89	883.32	882.74	311+50	884.47	885.04	885.62	886.20
311+75	884.06	883.48	882.91	882.33	311+75	884.06	884.64	885.21	885.79
312+00	883.65	883.08	882.50	881.93	312+00	883.65	884.23	884.81	885.38
312+25	883.25	882.67	882.09	881.52	312+25	883.25	883.82	884.40	884.97
312+50	882.84	882.26	881.69	881.11	312+50	882.84	883.42	883.99	884.57
312+75	882.43	881.86	881.28	880.70	312+75	882.43	883.01	883.58	884.16
313+00	882.03	881.45	880.87	880.30	313+00	882.03	882.60	883.18	883.75
313+25	881.62	881.04	880.47	879.89	313+25	881.62	882.19	882.77	883.35
313+50	881.21	880.64	880.06	879.48	313+50	881.21	881.79	882.36	882.94
313+75	880.80	880.23	879.65	879.08	313+75	880.80	881.38	881.96	882.53
314+00	880.40	879.82	879.25	878.67	314+00	880.40	880.97	881.55	882.13
314+25	879.99	879.41	878.84	878.26	314+25	879.99	880.57	881.14	881.72
314+50	879.58	879.01	878.43	877.86	314+50	879.58	880.16	880.74	881.31
314+75	879.18	878.60	878.02	877.45	314+75	879.18	879.75	880.33	880.90
315+00	878.77	878.19	877.62	877.04	315+00	878.77	879.35	879.92	880.50
315+25	878.36	877.79	877.21	876.63	315+25	878.36	878.94	879.51	880.09
315+50	877.96	877.38	876.80	876.23	315+50	877.96	878.53	879.11	879.68
315+75	877.55	876.97	876.40	875.82	315+75	877.55	878.12	878.70	879.28
316+00	877.14	876.57	875.99	875.41	316+00	877.14	877.72	878.29	878.87
316+25	876.73	876.16	875.58	875.01	316+25	876.73	877.31	877.89	878.46
316+50	876.33	875.75	875.17	874.60	316+50	876.33	876.90	877.48	878.05
316+75	875.92	875.34	874.77	874.19	316+75	875.92	876.50	877.07	877.65
317+00	875.51	874.94	874.36	873.78	317+00	875.51	876.09	876.66	877.24
317+25	875.11	874.53	873.95	873.38	317+25	875.11	875.68	876.26	876.83
317+50	874.70	874.12	873.55	872.97	317+50	874.70	875.27	875.85	876.43
317+75	874.29	873.72	873.14	872.56	317+75	874.29	874.87	875.44	876.02
318+00	873.88	873.31	872.73	872.16	318+00	873.88	874.46	875.04	875.61
318+25	873.48	872.90	872.33	871.75	318+25	873.48	874.05	874.63	875.21
318+50	873.07	872.49	871.92	871.34	318+50	873.07	873.65	874.22	874.80
318+75	872.68	872.10	871.53	870.95	318+75	872.68	873.25	873.83	874.41
319+00	872.31	871.74	871.16	870.59	319+00	872.31	872.89	873.47	874.04
319+25	871.98	871.40	870.83	870.25	319+25	871.98	872.56	873.13	873.71
319+50	871.68	871.10	870.52	869.95	319+50	871.68	872.25	872.83	873.40
319+75	871.40	870.82	870.25	869.67	319+75	871.40	871.98	872.55	873.13
320+00	871.15	870.58	870.00	869.42	320+00	871.15	871.73	872.30	872.88
320+25	870.93	870.36	869.78	869.21	320+25	870.93	871.51	872.09	872.66
320+50	870.75	870.17	869.59	869.02	320+50	870.75	871.32	871.90	872.47
320+75	870.59	870.01	869.43	868.86	320+75	870.59	871.16	871.74	872.31
321+00	870.46	869.88	869.30	868.73	321+00	870.46	871.03	871.61	872.18
321+25	870.35	869.78	869.20	868.63	321+25	870.35	870.93	871.51	872.08
321+50	870.28	869.71	869.13	868.55	321+50	870.28	870.86	871.43	872.01
321+75	870.24	869.66	869.09	868.51	321+75	870.24	870.81	871.39	871.97
322+00	870.22	869.65	869.07	868.50	322+00	870.22	870.80	871.38	871.95
322+25	870.24	869.66	869.09	868.51	322+25	870.24	870.81	871.39	871.97
322+50	870.28	869.71	869.13	868.55	322+50	870.28	870.86	871.43	872.01
322+75	870.36	869.78	869.20	868.63	322+75	870.36	870.93	871.51	872.08
323+00	870.46	869.88	869.31	868.73	323+00	870.46	871.03	871.61	872.19
323+25	870.59	870.01	869.44	868.86	323+25	870.59	871.17	871.74	872.32
323+50	870.75	870.17	869.60	869.02	323+50	870.75	871.33	871.90	872.48
323+75	870.93	870.35	869.77	869.20	323+75	870.93	871.50	872.08	872.65
324+00	871.10	870.52	869.95	869.37	324+00	871.10	871.68	872.25	872.83
324+25	871.28	870.70	870.13	869.55	324+25	871.28	871.85	872.42	873.00
324+50	871.45	870.91	870.38	869.84	324+50	871.45	871.99	872.52	873.06
324+75	871.63	871.12	870.62	870.12	324+75	871.63	872.13	872.63	873.13
325+00	871.80	871.34	870.87	870.41	325+00	871.80	872.26	872.73	873.19
325+25	871.98	871.55	871.12	870.70	325+25	871.98	872.40	872.83	873.25
325+50	872.15	871.76	871.37	870.98	325+50	872.15	872.54	872.93	873.32
325+75	872.33	871.97	871.62	871.27	325+75	872.33	872.68	873.03	873.38
326+00	872.50	872.18	871.87	871.55	326+00	872.50	872.82	873.13	873.45
326+25	872.68	872.40	872.12	871.84	326+25	872.68	872.95	873.23	873.51
326+50	872.85	872.61	872.37	872.13	326+50	872.85	873.09	873.33	873.57
326+75	873.03	872.82	872.62	872.41	326+75	873.03	873.23	873.43	873.64
327+00	873.20	873.04	872.89	872.70	327+00	873.20	873.39	873.58	873.73
327+25	873.38	873.27	873.17	872.99	327+25	873.38	873.56	873.75	873.85
327+50	873.55	873.50	873.46	873.27	327+50	873.55	873.74	873.93	873.97
327+75	873.73	873.73	873.74	873.55	327+75	873.73	873.91	874.10	874.09
328+00	873.90	873.94	873.97	873.79	328+00	873.90	874.09	874.28	874.24
328+25	874.08	874.14	874.21	874.02	328+25	874.08	874.26	874.45	874.38
328+50	874.25	874.35	874.45	874.26	328+50	874.25	874.44	874.63	874.53
328+75	874.43	874.56	874.69	874.50	328+75	874.43	874.61	874.80	874.67
329+00	874.60	874.76	874.92	874.74	329+00	874.60	874.79	874.98	874.81
329+25	874.78	874.96	875.15	874.96	329+25	874.78	874.96	875.15	874.96

SUPERELEVATION TABLES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37
GREENE COUNTY

919 328

P.C. Sta. 341+30.17
P.T. Sta. 365+35.51

Dc = 1°15'00"
S.E. = 0.040'/ft.

Station	Profile Grade Elev. 30' Lt. of ℄	Elev. 42' Lt. of ℄	Elev. 54' Lt. of ℄	Elev. 66' Lt. of ℄	Station	Profile Grade Elev. 30' Rt. of ℄	Elev. 42' Rt. of ℄	Elev. 54' Rt. of ℄	Elev. 66' Rt. of ℄
338+00	882.55	882.74	882.93	882.74	338+00	882.55	882.74	882.93	882.74
338+25	882.80	882.99	883.18	882.99	338+25	882.80	882.99	883.18	882.99
338+50	883.05	883.24	883.43	883.24	338+50	883.05	883.24	883.43	883.24
338+75	883.30	883.49	883.68	883.51	338+75	883.30	883.47	883.64	883.45
339+00	883.55	883.74	883.93	883.79	339+00	883.55	883.69	883.83	883.64
339+25	883.80	883.99	884.18	884.07	339+25	883.80	883.91	884.01	883.83
339+50	884.05	884.24	884.43	884.35	339+50	884.05	884.13	884.20	884.01
339+75	884.30	884.49	884.68	884.63	339+75	884.30	884.34	884.39	884.20
340+00	884.55	884.74	884.93	884.91	340+00	884.55	884.56	884.58	884.39
340+25	884.80	884.99	885.18	885.21	340+25	884.80	884.77	884.73	884.55
340+50	885.05	885.24	885.43	885.51	340+50	885.05	884.96	884.87	884.69
340+75	885.30	885.49	885.68	885.82	340+75	885.30	885.16	885.02	884.83
341+00	885.56	885.76	885.95	886.15	341+00	885.56	885.36	885.17	884.97
341+25	885.82	886.05	886.29	886.52	341+25	885.82	885.59	885.36	885.12
341+50	886.09	886.36	886.63	886.90	341+50	886.09	885.82	885.55	885.28
341+75	886.36	886.67	886.97	887.28	341+75	886.36	886.05	885.75	885.44
342+00	886.64	886.98	887.32	887.67	342+00	886.64	886.29	885.95	885.61
342+25	886.92	887.30	887.68	888.06	342+25	886.92	886.54	886.16	885.78
342+50	887.21	887.62	888.04	888.46	342+50	887.21	886.79	886.37	885.95
342+75	887.50	887.95	888.41	888.86	342+75	887.50	887.04	886.59	886.13
343+00	887.79	888.27	888.75	889.23	343+00	887.79	887.31	886.83	886.35
343+25	888.10	888.58	889.06	889.54	343+25	888.10	887.62	887.14	886.66
343+50	888.40	888.88	889.36	889.84	343+50	888.40	887.92	887.44	886.96
343+75	888.71	889.19	889.67	890.15	343+75	888.71	888.23	887.75	887.27
344+00	889.02	889.50	889.98	890.46	344+00	889.02	888.54	888.06	887.58
344+25	889.33	889.81	890.29	890.77	344+25	889.33	888.85	888.37	887.89
344+50	889.64	890.12	890.60	891.08	344+50	889.64	889.16	888.68	888.20
344+75	889.94	890.42	890.90	891.38	344+75	889.94	889.46	888.98	888.50
345+00	890.25	890.73	891.21	891.69	345+00	890.25	889.77	889.29	888.81
345+25	890.56	891.04	891.52	892.00	345+25	890.56	890.08	889.60	889.12
345+50	890.87	891.35	891.83	892.31	345+50	890.87	890.39	889.91	889.43
345+75	891.18	891.66	892.14	892.62	345+75	891.18	890.70	890.22	889.74
346+00	891.49	891.97	892.45	892.93	346+00	891.49	891.01	890.53	890.05
346+25	891.80	892.28	892.76	893.24	346+25	891.80	891.32	890.84	890.36
346+50	892.10	892.58	893.06	893.54	346+50	892.10	891.62	891.14	890.66
346+75	892.41	892.89	893.37	893.85	346+75	892.41	891.93	891.45	890.97
347+00	892.72	893.20	893.68	894.16	347+00	892.72	892.24	891.76	891.28
347+25	893.03	893.51	893.99	894.47	347+25	893.03	892.55	892.07	891.59
347+50	893.34	893.82	894.30	894.78	347+50	893.34	892.86	892.38	891.90
347+75	893.65	894.13	894.61	895.09	347+75	893.65	893.17	892.69	892.21
348+00	893.96	894.44	894.92	895.40	348+00	893.96	893.48	893.00	892.52
348+25	894.26	894.74	895.22	895.70	348+25	894.26	893.78	893.30	892.82
348+50	894.57	895.05	895.53	896.01	348+50	894.57	894.09	893.61	893.13
348+75	894.88	895.36	895.84	896.32	348+75	894.88	894.40	893.92	893.44
349+00	895.19	895.67	896.15	896.63	349+00	895.19	894.71	894.23	893.75
349+25	895.50	895.98	896.46	896.94	349+25	895.50	895.02	894.54	894.06
349+50	895.81	896.29	896.77	897.25	349+50	895.81	895.33	894.85	894.37
349+75	896.12	896.60	897.08	897.56	349+75	896.12	895.64	895.16	894.68
350+00	896.42	896.90	897.38	897.86	350+00	896.42	895.94	895.46	894.98
350+25	896.73	897.21	897.69	898.17	350+25	896.73	896.25	895.77	895.29
350+50	897.04	897.52	898.00	898.48	350+50	897.04	896.56	896.08	895.60
350+75	897.35	897.83	898.31	898.79	350+75	897.35	896.87	896.39	895.91
351+00	897.66	898.14	898.62	899.10	351+00	897.66	897.18	896.70	896.22
351+25	897.97	898.45	898.93	899.41	351+25	897.97	897.49	897.01	896.53
351+50	898.28	898.76	899.24	899.72	351+50	898.28	897.80	897.32	896.84
351+75	898.58	899.06	899.54	900.02	351+75	898.58	898.10	897.62	897.14
352+00	898.89	899.37	899.85	900.33	352+00	898.89	898.41	897.93	897.45
352+25	899.20	899.68	900.16	900.64	352+25	899.20	898.72	898.24	897.76
352+50	899.51	899.99	900.47	900.95	352+50	899.51	899.03	898.55	898.07
352+75	899.82	900.30	900.78	901.26	352+75	899.82	899.34	898.86	898.38
353+00	900.13	900.61	901.09	901.57	353+00	900.13	899.65	899.17	898.69
353+25	900.43	900.91	901.39	901.87	353+25	900.43	899.95	899.47	898.99
353+50	900.74	901.22	901.70	902.18	353+50	900.74	900.26	899.78	899.30
353+75	901.05	901.53	902.01	902.49	353+75	901.05	900.57	900.09	899.61
354+00	901.36	901.84	902.32	902.80	354+00	901.36	900.88	900.40	899.92
354+25	901.67	902.15	902.63	903.11	354+25	901.67	901.19	900.71	900.23
354+50	901.98	902.46	902.94	903.42	354+50	901.98	901.50	901.02	900.54
354+75	902.29	902.77	903.25	903.73	354+75	902.29	901.81	901.33	900.85
355+00	902.59	903.07	903.55	904.03	355+00	902.59	902.11	901.63	901.15
355+25	902.90	903.38	903.86	904.34	355+25	902.90	902.42	901.94	901.46
355+50	903.21	903.69	904.17	904.65	355+50	903.21	902.73	902.25	901.77
355+75	903.52	904.00	904.48	904.96	355+75	903.52	903.04	902.56	902.08
356+00	903.83	904.31	904.79	905.27	356+00	903.83	903.35	902.87	902.39
356+25	904.14	904.62	905.10	905.58	356+25	904.14	903.66	903.18	902.70
356+50	904.45	904.93	905.41	905.89	356+50	904.45	903.97	903.49	903.01
356+75	904.75	905.23	905.71	906.19	356+75	904.75	904.27	903.79	903.31
357+00	905.06	905.54	906.02	906.50	357+00	905.06	904.58	904.10	903.62
357+25	905.37	905.85	906.33	906.81	357+25	905.37	904.89	904.41	903.93
357+50	905.68	906.16	906.64	907.12	357+50	905.68	905.20	904.72	904.24
357+75	905.99	906.47	906.95	907.43	357+75	905.99	905.51	905.03	904.55
358+00	906.30	906.78	907.26	907.74	358+00	906.30	905.82	905.34	904.86
358+25	906.61	907.09	907.57	908.05	358+25	906.61	906.13	905.65	905.17
358+50	906.91	907.39	907.87	908.35	358+50	906.91	906.43	905.95	905.47
358+75	907.22	907.70	908.18	908.66	358+75	907.22	906.74	906.26	905.78
359+00	907.53	908.01	908.49	908.97	359+00	907.53	907.05	906.57	906.09
359+25	907.85	908.33	908.81	909.29	359+25	907.85	907.37	906.89	906.41
359+50	908.18	908.66	909.14	909.62	359+50	908.18	907.70	907.22	906.74
359+75	908.53	909.01	909.49	909.97	359+75	908.53	908.05	907.57	907.09
360+00	908.89	909.37	909.85	910.33	360+00	908.89	908.41	907.93	907.45
360+25	909.26	909.74	910.22	910.70	360+25	909.26	908.78	908.30	907.82
360+50	909.65	910.13	910.61	911.09	360+50	909.65	909.17	908.69	908.21
360+75	910.06	910.54	911.02	911.50	360+75	910.06	909.58	909.10	908.62
361+00	910.48	910.96	911.44	911.92	361+00	910.48	910.00	909.52	909.04
361+25	910.92	911.40	911.88	912.36	361+25	910.92	910.44	909.96	909.48
361+50	911.37	911.85	912.33	912.81	361+50	911.37	910.89	910.41	909.93
361+75	911.84	912.32	912.80	913.28	361+75	911.84	911.36	910.88	910.40
362+00	912.32	912.80	913.28	913.76	362+00	912.32	911.84	911.36	910.88
362+25	912.82	913.30	913.78	914.26	362+25	912.82	912.34	911.86	911.38
362+50	913.33	913.81	914.29	914.77	362+50	913.33	912.85	912.37	911.89
362+75	913.86	914.34	914.82	915.30	362+75	913.86	913.38	912.90	912.42
363+00	914.40	914.88	915.36	915.84	363+00	914.40	913.92	913.44	912.96
363+25	914.95	915.43	915.91	916.39	363+25	914.95	914.47	913.99	913.51
363+50	915.50	915.98	916.46	916.94	363+50	915.50	915.02	914.54	914.06
363+75	916.05	916.53	917.01	917.48	363+75	916.05	915.57	915.09	914.62
364+00	916.60	917.04	917.48	917.92	364+00	916.60	916.16	915.72	915.28
364+25	917.15	917.55	917.96	918.36	364+25	917.15	916.75	916.34	915.94
364+50	917.70	918.07	918.43	918.80	364+50	917.70	917.33	916.97	916.60
364+75	918.25	918.58	918.91	919.24	364+75	918.25	917.92	917.59	917.26
365+00	918.80	919.09	919.39	919.68	365+00	918.80	918.51	918.21	917.92
365+25	919.35	919.61	919.86	920.12	365+25	919.35	919.09	918.84	918.58
365+50	919.90	920.12	920.34	920.56	365+50	919.90	919.68	919.46	919.24
365+75	920.45	920.64	920.83	921.00	365+75	920.45	920.27	920.09	919.91
366+00	921.00	921.19	921.38	921.50	366+00	921.00	920.88	920.75	920.57
366+25	921.55	921.74	921.93	921.99	366+25	921.55	921.48	921.42	921.23
366+50	922.10	922.29	922.48	922.49	366+50	922.10	922.09	922.08	921.89
366+75	922.65	922.84	923.03	923.00	366+75	922.65	922.67	922.70	922.51
367+00	923.20	923.39	923.58	923.52	367+00	923.20	923.26	923.31	923.12
367+25	923.75	923.94	924.13	924.04	367+25	923.75	923.84	923.92	923.74
367+50	924.30	924.49	924.68	924.56	367+50	924.30	924.42	924.54	924.35
367+75	924.85	925.04	925.23	925.08	367+75	924.85	925.00	925.15	924.96
368+00	925.40	925.59	925.78	925.59	368+00	925.40	925.58	925.76	925.57
368+25	925.95	926.14	926.33	926.14	368+25	925.95	926.14	926.33	926.14
368+50	926.50	926.69	926.88	926.69	368+50	926.50	926.69	926.88	926.69

SUPERELEVATION TABLES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37 GREENE COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

330
6/6

GRE - 675 - 5.37
GREENE COUNTY

P.C. Sta. 402+31.18
P.T. Sta. 419+80.07

Dc = 0°45'00"
SE = 0.029 ft/ft

Station	Profile Grade Elev. 30' Lt of ℄	Elev. 42' Lt. of ℄	Elev. 54' Lt. of ℄	Elev. 66' Lt of ℄	Elev. 78' Lt. of ℄		Station	Profile Grade Elev 30' Rt. of ℄	Elev. 42' Rt. of ℄	Elev. 54' Rt. of ℄	Elev. 66' Rt. of ℄	Elev. 78' Rt. of ℄
399+75	940.83	941.01	941.20	941.01	940.83		399+75	940.83	941.01	941.20	941.01	940.83
400+00	940.27	940.45	940.64	940.45	940.26		400+00	940.27	940.46	940.65	940.46	940.28
400+25	939.71	939.86	940.01	939.82	939.63		400+25	939.71	939.89	940.08	939.93	939.78
400+50	939.13	939.25	939.37	939.18	938.99		400+50	939.13	939.32	939.50	939.38	939.26
400+75	938.54	938.63	938.72	938.53	938.34		400+75	938.54	938.73	938.91	938.82	938.73
401+00	937.94	938.00	938.06	937.87	937.68		401+00	937.94	938.13	938.32	938.26	938.20
401+25	937.34	937.36	937.39	937.20	937.01		401+25	937.34	937.52	937.71	937.68	937.66
401+50	936.73	936.72	936.72	936.53	936.34		401+50	936.73	936.92	937.11	937.11	937.12
401+75	936.13	936.06	936.00	935.81	935.62		401+75	936.13	936.31	936.50	936.56	936.63
402+00	935.52	935.40	935.28	935.10	934.91		402+00	935.52	935.71	935.90	936.01	936.13
402+25	934.92	934.74	934.57	934.38	934.19		402+25	934.92	935.10	935.29	935.46	935.64
402+50	934.31	934.10	933.89	933.68	933.47		402+50	934.31	934.52	934.73	934.94	935.15
402+75	933.71	933.46	933.22	932.98	932.74		402+75	933.71	933.95	934.19	934.43	934.67
403+00	933.10	932.83	932.55	932.28	932.01		403+00	933.10	933.37	933.65	933.92	934.19
403+25	932.50	932.20	931.90	931.60	931.30		403+25	932.50	932.80	933.10	933.40	933.70
403+50	931.89	931.59	931.29	930.99	930.69		403+50	931.89	932.19	932.49	932.79	933.09
403+75	931.29	930.99	930.69	930.39	930.09		403+75	931.29	931.59	931.89	932.18	932.48
404+00	930.68	930.38	930.08	929.78	929.48		404+00	930.68	930.98	931.28	931.58	931.88
404+25	930.08	929.78	929.48	929.18	928.88		404+25	930.08	930.38	930.68	930.98	931.27
404+50	929.47	929.17	928.87	928.57	928.27		404+50	929.47	929.77	930.07	930.37	930.67
404+75	928.87	928.57	928.27	927.97	927.67		404+75	928.87	929.17	929.47	929.77	930.07
405+00	928.26	927.96	927.66	927.36	927.06		405+00	928.26	928.56	928.86	929.16	929.46
405+25	927.66	927.36	927.06	926.76	926.46		405+25	927.66	927.96	928.26	928.56	928.86
405+50	927.05	926.75	926.45	926.15	925.85		405+50	927.05	927.35	927.65	927.95	928.25
405+75	926.45	926.15	925.85	925.55	925.25		405+75	926.45	926.75	927.05	927.34	927.64
406+00	925.84	925.54	925.24	924.94	924.64		406+00	925.84	926.14	926.44	926.74	927.04
406+25	925.24	924.94	924.64	924.34	924.04		406+25	925.24	925.54	925.84	926.14	926.43
406+50	924.63	924.33	924.03	923.73	923.43		406+50	924.63	924.93	925.23	925.53	925.83
406+75	924.03	923.73	923.43	923.13	922.83		406+75	924.03	924.33	924.63	924.93	925.23
407+00	923.42	923.12	922.82	922.52	922.22		407+00	923.42	923.72	924.02	924.32	924.62
407+25	922.82	922.52	922.22	921.92	921.62		407+25	922.82	923.12	923.42	923.72	924.02
407+50	922.21	921.91	921.61	921.31	921.01		407+50	922.21	922.51	922.81	923.11	923.41
407+75	921.61	921.31	921.01	920.71	920.41		407+75	921.61	921.91	922.21	922.51	922.80
408+00	921.00	920.70	920.40	920.10	919.80		408+00	921.00	921.30	921.60	921.90	922.20
408+25	920.40	920.10	919.80	919.50	919.20		408+25	920.40	920.70	921.00	921.30	921.60
408+50	919.79	919.49	919.19	918.89	918.59		408+50	919.79	920.09	920.39	920.69	920.99
408+75	919.19	918.89	918.59	918.29	917.99		408+75	919.19	919.49	919.79	920.09	920.39
409+00	918.58	918.28	917.98	917.68	917.38		409+00	918.58	918.88	919.18	919.48	919.78
409+25	917.98	917.68	917.38	917.08	916.78		409+25	917.98	918.28	918.58	918.88	919.17
409+50	917.37	917.07	916.77	916.47	916.17		409+50	917.37	917.67	917.97	918.27	918.57
409+75	916.77	916.47	916.17	915.87	915.57		409+75	916.77	917.07	917.37	917.67	917.96
410+00	916.16	915.86	915.56	915.26	914.96		410+00	916.16	916.46	916.76	917.06	917.36
410+25	915.57	915.27	914.97	914.67	914.37		410+25	915.57	915.87	916.17	916.47	916.77
410+50	915.02	914.72	914.42	914.12	913.82		410+50	915.02	915.32	915.62	915.92	916.22
410+75	914.49	914.19	913.89	913.59	913.29		410+75	914.49	914.79	915.09	915.39	915.69
411+00	914.01	913.71	913.41	913.11	912.81		411+00	914.01	914.31	914.61	914.91	915.21
411+25	913.55	913.25	912.95	912.65	912.35		411+25	913.55	913.85	914.15	914.45	914.75
411+50	913.13	912.83	912.53	912.23	911.93		411+50	913.13	913.43	913.73	914.03	914.33
411+75	912.74	912.44	912.14	911.84	911.54		411+75	912.74	913.04	913.34	913.64	913.94
412+00	912.38	912.08	911.78	911.48	911.18		412+00	912.38	912.68	912.98	913.28	913.58
412+25	912.06	911.76	911.46	911.16	910.86		412+25	912.06	912.36	912.66	912.96	913.26
412+50	911.77	911.47	911.17	910.87	910.57		412+50	911.77	912.07	912.37	912.67	912.97
412+75	911.51	911.21	910.91	910.61	910.31		412+75	911.51	911.81	912.11	912.41	912.71
413+00	911.29	910.99	910.69	910.39	910.09		413+00	911.29	911.59	911.89	912.19	912.49
413+25	911.09	910.79	910.49	910.19	909.89		413+25	911.09	911.39	911.69	911.99	912.29
413+50	910.94	910.64	910.34	910.04	909.74		413+50	910.94	911.24	911.54	911.84	912.14
413+75	910.81	910.51	910.21	909.91	909.61		413+75	910.81	911.11	911.41	911.71	912.01
414+00	910.72	910.42	910.12	909.82	909.52		414+00	910.72	911.02	911.32	911.62	911.92
414+25	910.65	910.35	910.05	909.75	909.45		414+25	910.65	910.95	911.25	911.55	911.84
414+50	910.57	910.27	909.97	909.67	909.37		414+50	910.57	910.87	911.17	911.47	911.77
414+75	910.50	910.20	909.90	909.60	909.30		414+75	910.50	910.80	911.10	911.40	911.70
415+00	910.42	910.12	909.82	909.52	909.22		415+00	910.42	910.72	911.02	911.32	911.62
415+25	910.35	910.05	909.75	909.45	909.15		415+25	910.35	910.65	910.95	911.25	911.55
415+50	910.27	909.97	909.67	909.37	909.07		415+50	910.27	910.57	910.87	911.17	911.47
415+75	910.20	909.90	909.60	909.30	909.00		415+75	910.20	910.50	910.80	911.10	911.39
416+00	910.12	909.82	909.52	909.22	908.92		416+00	910.12	910.42	910.72	911.02	911.32
416+25	910.05	909.75	909.45	909.15	908.85		416+25	910.05	910.35	910.65	910.95	911.24
416+50	909.97	909.67	909.37	909.07	908.77		416+50	909.97	910.27	910.57	910.87	911.17
416+75	909.90	909.60	909.30	909.00	908.70		416+75	909.90	910.20	910.50	910.80	911.10
417+00	909.82	909.52	909.22	908.92	908.62		417+00	909.82	910.12	910.42	910.72	911.02

SUPERELEVATION TABELS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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GRE-675-5.37
GREENE COUNTY

RAMP A			
Station	Profile Grade	Elev. 12' Lt.	Elev. 12' Rt.
From 293+31.33 To 301+85	See Pavement Details		
From 301+85 To 304+79	Normal Section		
304+75	912.67	912.86	912.48
305+00	912.48	912.74	912.21
305+25	912.25	912.61	911.88
305+50	911.98	912.44	911.52
305+75	911.68	912.25	911.12
306+00	911.35	912.02	910.68
306+25	910.98	911.75	910.22
306+50	910.58	911.45	909.71
306+75	910.15	911.12	909.18
307+00	909.68	910.68	908.68
307+25	909.18	910.18	908.18
307+50	908.64	909.64	907.64
307+75	908.07	909.07	907.07
308+00	907.46	908.46	906.46
308+25	906.82	907.78	905.86
308+50	906.15	907.01	905.29
308+75	905.44	906.20	904.68
309+00	904.72	905.37	904.06
309+25	903.99	904.54	903.44
309+50	903.27	903.72	902.81
309+75	902.54	902.89	902.19
310+00	901.82	902.06	901.57
310+25	901.09	901.24	900.94
310+50	900.37	900.41	900.32
310+75	899.64	899.58	899.70
311+00	898.92	898.75	899.08
311+25	898.19	897.93	898.45
311+50	897.49	897.13	897.85
311+75	896.84	896.38	897.31
312+00	896.24	895.68	896.81
312+25	895.69	895.03	896.36
312+50	895.20	894.43	895.97
312+75	894.75	893.88	895.62
313+00	894.35	893.38	895.33
313+25	894.01	893.01	895.01
313+50	893.71	892.71	894.71
313+75	893.47	892.47	894.46
314+00	893.27	892.27	894.27
314+25	893.13	892.13	894.13
314+50	893.01	892.01	894.01
314+75	892.89	891.89	893.89
315+00	892.77	891.77	893.77
315+25	892.65	891.65	893.65
315+50	892.53	891.53	893.53
315+75	892.41	891.41	893.41
316+00	892.29	891.29	893.29
316+25	892.18	891.18	893.17
316+50	892.06	891.06	893.06
316+75	891.94	890.94	892.94
317+00	891.82	890.82	892.82
317+25	891.70	890.70	892.70
317+50	891.58	890.58	892.58
317+75	891.46	890.46	892.46
318+00	891.34	890.34	892.34
318+25	891.26	890.26	892.26
318+50	891.25	890.25	892.25
318+75	891.32	890.32	892.32
319+00	891.45	890.45	892.45
319+25	891.67	890.67	892.66

RAMP A			
Station	Profile Grade	Elev. 12' Lt.	Elev. 12' Rt.
319+50	891.95	890.95	892.95
319+75	892.31	891.31	893.31
320+00	892.74	891.74	893.74
320+25	893.24	892.24	894.24
320+50	893.82	892.82	894.82
320+75	894.47	893.47	895.47
321+00	895.20	894.20	896.20
321+25	896.00	895.00	897.00
321+50	896.87	895.87	897.87
321+75	897.78	896.78	898.78
322+00	898.69	897.69	899.69
322+25	899.59	898.59	900.59
322+50	900.50	899.50	901.50
322+75	901.41	900.41	902.41
323+00	902.32	901.32	903.32
323+25	903.23	902.23	904.23
323+50	904.14	903.14	905.14
323+75	905.04	904.04	906.04
324+00	905.95	904.95	906.95
324+25	906.86	905.86	907.86
324+50	907.77	906.77	908.77
324+75	908.68	907.68	909.68
325+00	909.59	908.59	910.59
325+25	910.49	909.50	911.49
325+50	911.40	910.40	912.40
325+75	912.31	911.31	913.31
326+00	913.22	912.22	914.22
326+25	914.13	913.13	915.13
326+50	915.04	914.04	916.04
326+75	915.95	914.95	916.94
327+00	916.85	915.85	917.85
327+25	917.76	916.76	918.76
327+50	918.67	917.67	919.67
327+75	919.58	918.58	920.58
328+00	920.49	919.49	921.49
328+25	921.40	920.40	922.40
328+50	922.30	921.30	923.30
328+75	923.18	922.18	924.18
329+00	923.98	922.98	924.98
329+25	924.71	923.71	925.71
329+50	925.36	924.36	926.36
329+75	925.95	924.95	926.95
330+00	926.46	925.46	927.46
330+25	926.90	925.90	927.90
330+50	927.27	926.27	928.27
330+75	927.57	926.57	928.57
331+00	927.79	926.79	928.79
331+25	927.94	926.94	928.94
331+50	928.02	927.03	929.02
331+75	928.03	927.03	929.03
332+00	927.97	926.97	928.97
332+25	927.84	926.84	928.84
332+50	927.63	926.63	928.63
332+75	927.35	926.35	928.35
333+00	927.00	926.00	928.00
333+25	926.58	925.58	927.58
333+50	926.08	925.08	927.08
333+75	925.52	924.52	926.52
334+00	924.88	923.88	925.88
334+25	924.17	923.17	925.17

Structure No. GRE-675-0094

Structure No. GRE-675-0094

RAMP A			
Station	Profile Grade	Elev. 12' Lt.	Elev. 12' Rt.
334+50	923.38	922.39	924.38
334+75	922.53	921.53	923.53
335+00	921.60	920.60	922.60
335+25	920.61	919.61	921.61
335+50	919.54	918.54	920.54
335+75	918.39	917.39	919.39
336+00	917.18	916.18	918.18
336+25	915.93	914.93	916.93
336+50	914.68	913.68	915.68
336+75	913.43	912.43	914.43
337+00	912.18	911.18	913.18
337+25	910.93	909.93	911.93
337+50	909.68	908.68	910.68
337+75	908.43	907.43	909.43
338+00	907.18	906.18	908.18
338+25	905.93	904.93	906.93
338+50	904.68	903.68	905.68
338+75	903.46	902.53	904.39
339+00	902.29	901.46	903.13
339+25	901.19	900.46	901.92
339+50	900.14	899.51	900.77
339+75	899.15	898.62	899.67
340+00	898.21	897.79	898.64
340+25	897.33	897.01	897.66
340+50	896.51	896.29	896.73
340+75	895.75	895.61	895.88
341+00	895.04	894.98	895.10
341+25	894.39	894.41	894.37
341+50	893.80	893.90	893.70
341+75	893.27	893.44	893.09
342+00	892.79	893.06	892.51
342+25	892.37	892.74	891.99
342+50	892.01	892.48	891.53
342+75	891.70	892.28	891.12
343+00	891.45	892.13	890.77
343+25	891.26	892.04	890.48
343+50	891.13	892.01	890.24
343+75	891.05	892.04	890.06
344+00	891.03	892.03	890.03
344+25	891.07	892.07	890.07
344+50	891.16	892.16	890.16
344+75	891.29	892.29	890.29
345+00	891.41	892.41	890.41
345+25	891.53	892.53	890.53
345+50	891.66	892.66	890.66
345+75	891.78	892.78	890.78
346+00	891.91	892.90	890.91
346+25	892.03	893.03	891.03
346+50	892.15	893.15	891.15
346+75	892.28	893.28	891.28
347+00	892.40	893.40	891.40
347+25	892.52	893.52	891.52
347+50	892.65	893.65	891.65
347+75	892.77	893.77	891.77
348+00	892.89	893.89	891.89
348+25	893.02	894.02	892.02
348+50	893.14	894.14	892.14
348+75	893.26	894.26	892.27
349+00	893.39	894.39	892.39
From 349+00 To 352+00	See Pavement Details		

SUPERELEVATION TABLES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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RAMP B

Station	Profile Grade	Elev. 16' Rt.
From 334+25 To 339+00	See Pavement Details	
339+00	920.03	920.76
339+25	919.38	920.25
339+50	918.77	919.77
339+75	918.18	919.31
340+00	917.62	918.88
340+25	917.08	918.41
340+50	916.58	917.91
340+75	916.10	917.43
341+00	915.65	916.98
341+25	915.22	916.55
341+50	914.78	916.11
341+75	914.35	915.68
342+00	913.91	915.24
342+25	913.48	914.81
342+50	913.04	914.38
342+75	912.61	913.94
343+00	912.17	913.51
343+25	911.74	913.07
343+50	911.30	912.64
343+75	910.87	912.20
344+00	910.43	911.77
344+25	910.00	911.33
344+50	909.56	910.90
344+75	909.13	910.46
345+00	908.69	910.03
345+25	908.26	909.59
345+50	907.83	909.16
345+75	907.39	908.72
346+00	906.96	908.29
346+25	906.52	907.85
346+50	906.09	907.42
346+75	905.65	906.98
347+00	905.22	906.55
347+25	904.78	906.11
347+50	904.35	905.68
347+75	903.91	905.24
348+00	903.48	904.81
348+25	903.04	904.38
348+50	902.61	903.94
348+75	902.17	903.51
349+00	901.74	903.07
349+25	901.30	902.64
349+50	900.90	902.23
349+75	900.55	901.88
350+00	900.25	901.59
350+25	900.02	901.35
350+50	899.84	901.17
350+75	899.72	901.05
351+00	899.65	900.98
351+25	899.64	900.97
351+50	899.69	901.00
351+75	899.79	900.98
352+00	899.96	901.02
From 352+00 To 357+79.48	See Pavement Details	

RAMP C

Station	Profile Grade	Elev. 16' Rt.
From 317+29 To 319+50	See Pavement Details	
319+50	867.14	868.47
319+75	866.63	867.96
320+00	866.24	867.57
320+25	865.96	867.29
320+50	865.80	867.14
320+75	865.76	867.10
321+00	865.84	867.17
321+25	866.04	867.37
321+50	866.35	867.68
321+75	866.78	868.12
322+00	867.33	868.67
322+25	868.00	869.25
322+50	868.79	869.91
322+75	869.63	870.64
323+00	870.48	871.36
323+25	871.32	872.08
323+50	872.16	872.81
323+75	873.01	873.53
324+00	873.85	874.26
324+25	874.70	874.98
324+50	875.54	875.79
From 324+50 To 330+75	Normal Section	
From 330+75 To 333+73.99	See Pavement Details	

RAMP D

Station	Profile Grade	Elev. 16' Lt.
From 333+29.94 To 340+00	See Pavement Details	
340+00	884.98	886.31
340+25	885.55	886.88
340+50	886.17	887.50
340+75	886.84	888.17
341+00	887.55	888.88
341+25	888.28	889.61
341+50	889.01	890.34
341+75	889.74	891.07
342+00	890.47	891.80
342+25	891.20	892.53
342+50	891.93	893.26
342+75	892.66	893.99
343+00	893.39	894.72
343+25	894.12	895.46
343+50	894.85	896.19
343+75	895.58	896.92
344+00	896.32	897.65
344+25	897.01	898.35
344+50	897.64	898.98
344+75	898.21	899.54
345+00	898.71	900.04
345+25	899.15	900.48
345+50	899.51	900.85
345+75	899.82	901.15
346+00	900.05	901.39
346+25	900.22	901.56
346+50	900.33	901.66
346+75	900.37	901.70
347+00	900.34	901.67
347+25	900.28	901.61
347+50	900.22	901.55
347+75	900.16	901.49
348+00	900.10	901.43
348+25	900.07	901.40
348+50	900.09	901.43
348+75	900.17	901.51
349+00	900.31	901.65
349+25	900.51	901.84
349+50	900.76	902.09
349+75	901.07	902.40
350+00	901.43	902.76
From 350+00 To 354+45.31	See Pavement Details	

RAMP E

Station	Profile Grade	Elev. 16' Rt.
From 322+38.17 To 324+50	See Pavement Details	
324+50	908.60	909.93
324+75	908.02	909.35
325+00	907.38	908.71
325+25	906.68	908.01
325+50	905.93	907.26
325+75	905.12	906.45
326+00	904.25	905.58
326+25	903.33	904.66
326+50	902.35	903.68
326+75	901.34	902.68
327+00	900.34	901.67
327+25	899.33	900.66
327+50	898.33	899.66
327+75	897.32	898.65
328+00	896.31	897.65
328+25	895.31	896.64
328+50	894.30	895.63
328+75	893.29	894.63
329+00	892.29	893.62
329+25	891.28	892.61
329+50	890.27	891.61
329+75	889.27	890.60
330+00	888.26	889.59
330+25	887.25	888.59
330+50	886.25	887.58
330+75	885.24	886.57
331+00	884.23	885.57
331+25	883.23	884.56
331+50	882.22	883.55
331+75	881.22	882.55
332+00	880.21	881.54
332+25	879.27	880.60
332+50	878.47	879.80
332+75	877.80	879.13
333+00	877.27	878.60
333+25	876.87	878.20
333+50	876.61	877.94
333+75	876.48	877.78
334+00	876.49	877.66
334+25	876.63	877.68
334+50	876.91	877.83
334+75	877.32	878.12
From 334+75 To 336+93.08	See Pavement Details	

RAMP F

Station	Profile Grade	Elev. 16' Lt.
From 326+70.47 To 329+00	See Pavement Details	
329+00	903.80	905.13
329+25	903.65	904.99
329+50	903.63	904.97
329+75	903.74	905.08
330+00	903.98	905.31
330+25	904.35	905.68
330+50	904.95	906.18
330+75	905.47	906.81
331+00	906.23	907.56
331+25	907.11	908.31
331+50	908.06	909.13
331+75	909.01	909.94
332+00	909.96	910.76
332+25	910.91	911.57
332+50	911.86	912.39
332+75	912.80	913.20
333+00	913.75	914.02
333+25	914.64	914.78
333+50	915.42	915.42
333+75	916.08	915.94
334+00	916.62	916.35
334+25	917.04	916.64
334+50	917.35	916.82
334+75	917.55	916.88
335+00	917.62	916.82
335+25	917.58	916.65
335+50	917.43	916.36
335+75	917.16	915.96
336+00	916.77	915.44
336+25	916.26	914.93
336+50	915.64	914.31
336+75	914.91	913.58
337+00	914.06	912.72
337+25	913.09	911.75
337+50	912.00	910.67
337+75	910.80	909.47
338+00	909.48	908.15
From 338+00 To 340+98.57	See Pavement Details	

SUPERELEVATION TABLES

FED. RD. DIVISION	STATE	PROJECT	
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RAMP G

Station	Profile Grade	Elev. 16' Rt.
From 342+47.88 To 347+00	See Pavement Details	
347+00	890.26	891.60
347+25	890.52	891.85
347+50	890.89	892.22
347+75	891.35	892.69
348+00	891.93	893.26
348+25	892.60	893.94
348+50	893.33	894.66
348+75	894.06	895.39
349+00	894.79	896.12
349+25	895.52	896.85
349+50	896.25	897.58
349+75	896.97	898.31
350+00	897.70	899.03
350+25	898.43	899.76
350+50	899.16	900.49
350+75	899.87	901.21
351+00	900.56	901.89
351+25	901.22	902.55
351+50	901.85	903.18
351+75	902.45	903.78
352+00	903.02	904.36
352+25	903.57	904.90
352+50	904.08	905.42
352+75	904.57	905.91
353+00	905.03	906.37
From 353+00 To 357+40.96	See Pavement Details	

RAMP H

Station	Profile Grade	Elev. 16' Lt.
From 319+67.37 To 324+50	See Pavement Details	
324+50	872.68	874.01
324+75	873.13	874.46
325+00	873.67	875.00
325+25	874.30	875.63
325+50	875.03	876.36
325+75	875.85	877.18
326+00	876.76	878.09
326+25	877.76	879.09
326+50	878.81	880.14
326+75	879.86	881.19
327+00	880.91	882.24
327+25	881.96	883.29
327+50	883.01	884.34
327+75	884.06	885.39
328+00	885.11	886.44
328+25	886.16	887.49
328+50	887.21	888.54
328+75	888.26	889.59
329+00	889.31	890.64
329+25	890.36	891.69
329+50	891.41	892.74
329+75	892.46	893.79
330+00	893.51	894.84
330+25	894.56	895.89
330+50	895.58	896.91
330+75	896.52	897.85
331+00	897.40	898.73
331+25	898.20	899.53
331+50	898.94	900.27
331+75	899.60	900.93
332+00	900.20	901.53
332+25	900.72	902.05
332+50	901.18	902.51
332+75	901.56	902.89
333+00	901.88	903.21
333+25	902.12	903.45
333+50	902.30	903.63
333+75	902.40	903.73
334+00	902.44	903.77
334+25	902.40	903.73
334+50	902.33	903.66
334+75	902.26	903.59
335+00	902.19	903.52
335+25	902.14	903.48
335+50	902.14	903.48
335+75	902.19	903.52
336+00	902.28	903.61
336+25	902.42	903.75
336+50	902.60	903.94
336+75	902.83	904.17
337+00	903.11	904.44
From 337+00 To 338+89.09	See Pavement Details	

KEMP ROAD

P.C. 13+20.32 Dc = 2°00'00"
P.T. 16+80.44 SE = 0.033'/Ft.

Station	Profile Grade	Elev. 12' Lt. of ℄	Elev. 12' Rt. of ℄
From 14+29 To 15+50	See Pavement Details		
15+50	915.24	914.90	915.59
15+75	916.76	916.36	917.15
16+00	918.27	917.87	918.66
16+25	919.79	919.40	920.19
16+50	921.27	920.92	921.62
16+75	922.68	922.45	922.91
17+00	924.01	923.82	924.11
17+25	925.27	925.08	925.26
17+50	926.46	926.27	926.38
17+75	927.57	927.38	927.43
18+00	928.61	928.42	928.42

KEMP ROAD

P.C. 21+71.21 Dc = 4°00'00"
P.T. 29+57.00 SE = 0.066'/Ft.

Station	Profile Grade	Elev. 12' Lt of ℄	Elev. 12' Rt of ℄
20+00	934.25	934.06	934.06
20+25	934.43	934.44	934.46
20+50	934.93	934.74	934.83
20+75	935.15	934.96	935.11
21+00	935.31	935.13	935.35
21+25	935.39	935.20	935.56
21+50	935.39	935.10	935.68
21+75	935.32	934.90	935.77
22+00	935.18	934.64	935.72
22+25	934.96	934.29	935.62
22+50	934.67	933.88	935.46
22+75	934.31	933.51	935.10
23+00	933.87	933.08	934.66
23+25	933.36	932.57	934.15
23+50	932.78	931.99	933.57
23+75	932.12	931.32	932.91
24+00	931.38	930.59	932.17
24+25	930.58	929.79	931.37
24+50	929.71	928.95	930.53
24+75	928.80	928.09	929.68
25+00	928.05	927.37	928.73
25+25	927.21	926.65	927.77
25+50	926.41	925.97	926.84
25+75	925.70	925.39	926.00
From 25+75 To 27+25	See Pavement Details		

FED. RD. DIVISION	STATE	PROJECT	
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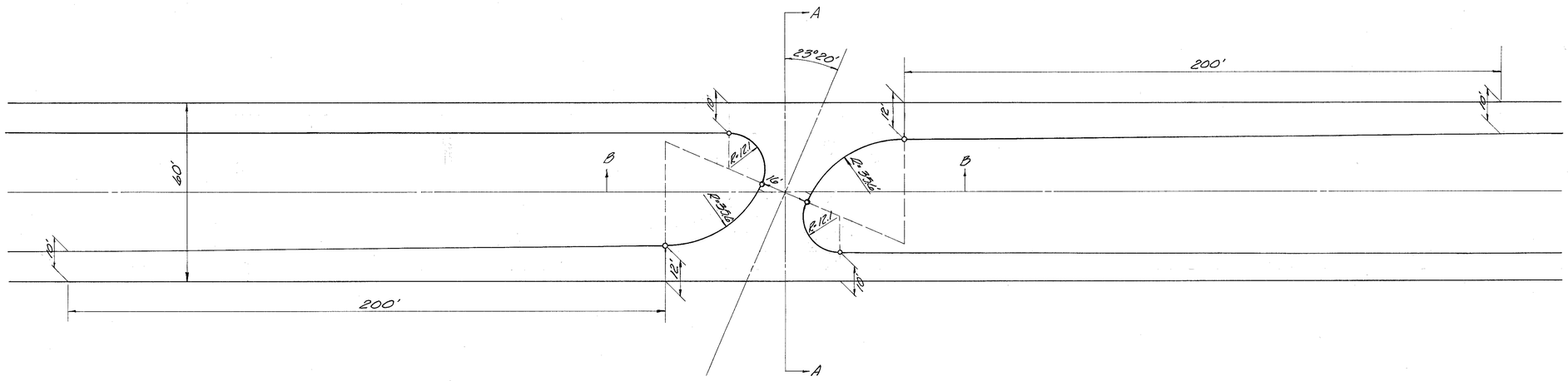
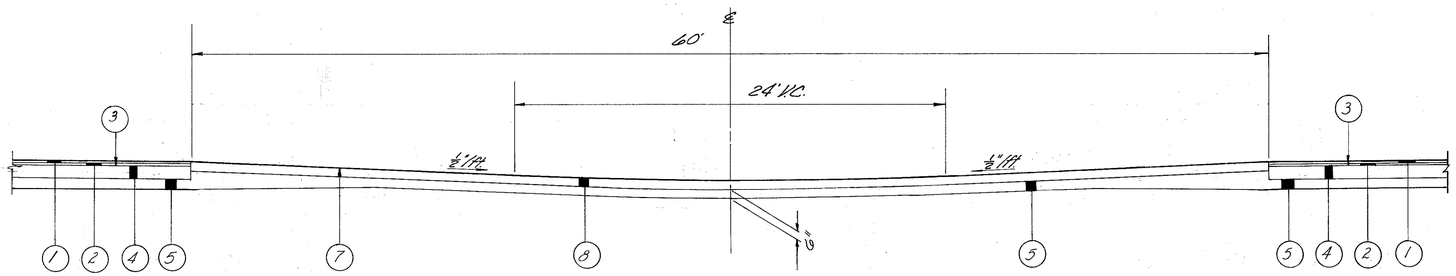
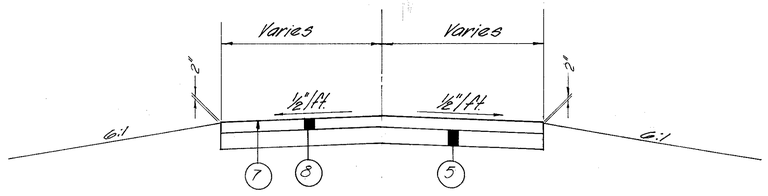


PLAN
Scale = 1" = 20'
Sta 387+50



SECTION A-A
Scale ¼" = 1'-0"



SECTION B-B
No Scale

LEGEND

1	404	1¼" Asphalt Concrete AC-20
2	402	1¾" Asphalt Concrete AC-20
3	407	Tack Coat RC-250, MS-2, RS-1, SS-1, or SS-1h applied at the rate of 0.1 Gal. Per Sq. Yd.
4	801	9" Portland Cement Base
7	310	Subbase Type II, 6" thickness except as noted.
7	409	Seal Coat, Bituminous Material, MC-800, MC-3000; CBAE 800, RS-1, RS-2, CRS-1, CRS-2, RT-9, RT-10. Applied at the rate of 0.3 Gal. Per Sq. Yd. and no. 8 Aggregate applied at the rate of 0.008 Cu. Yd. Per. Sq. Yd.
8	301	6" Bituminous Aggregate Base RT-11 or RT-12

MEDIAN CROSSOVER PAVEMENT DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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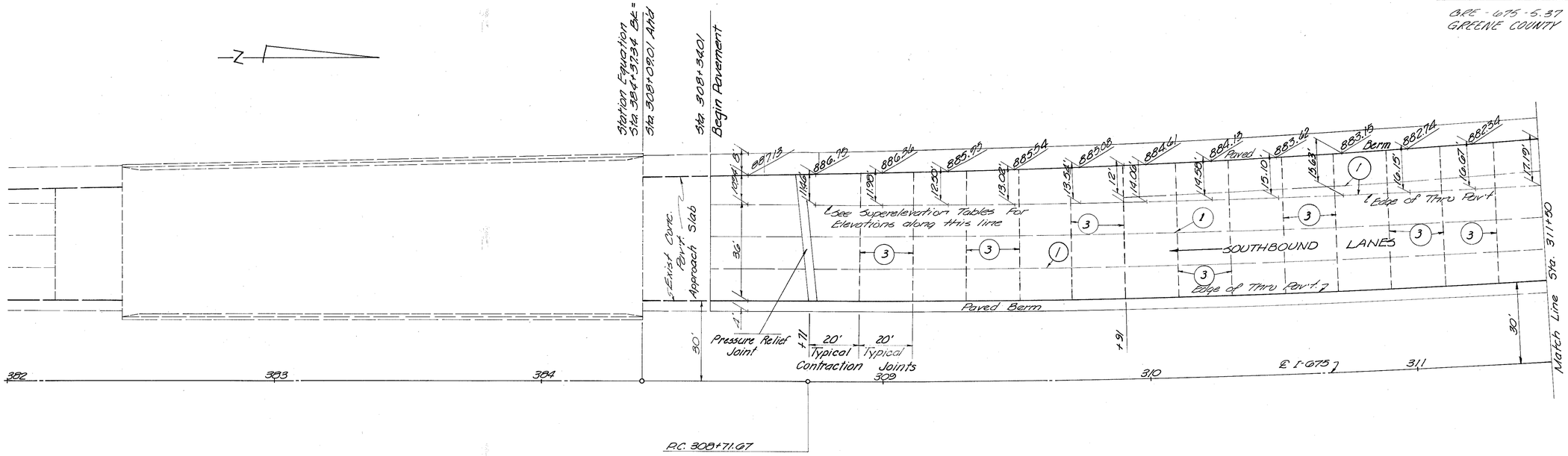
G.R.E. - 675 - 5.37
GREENE COUNTY



RAMP C
COLLECTOR DISTRIBUTOR

PAVEMENT DETAILS - I-675 STA. 308+34.01 to STA. 317+50 Lt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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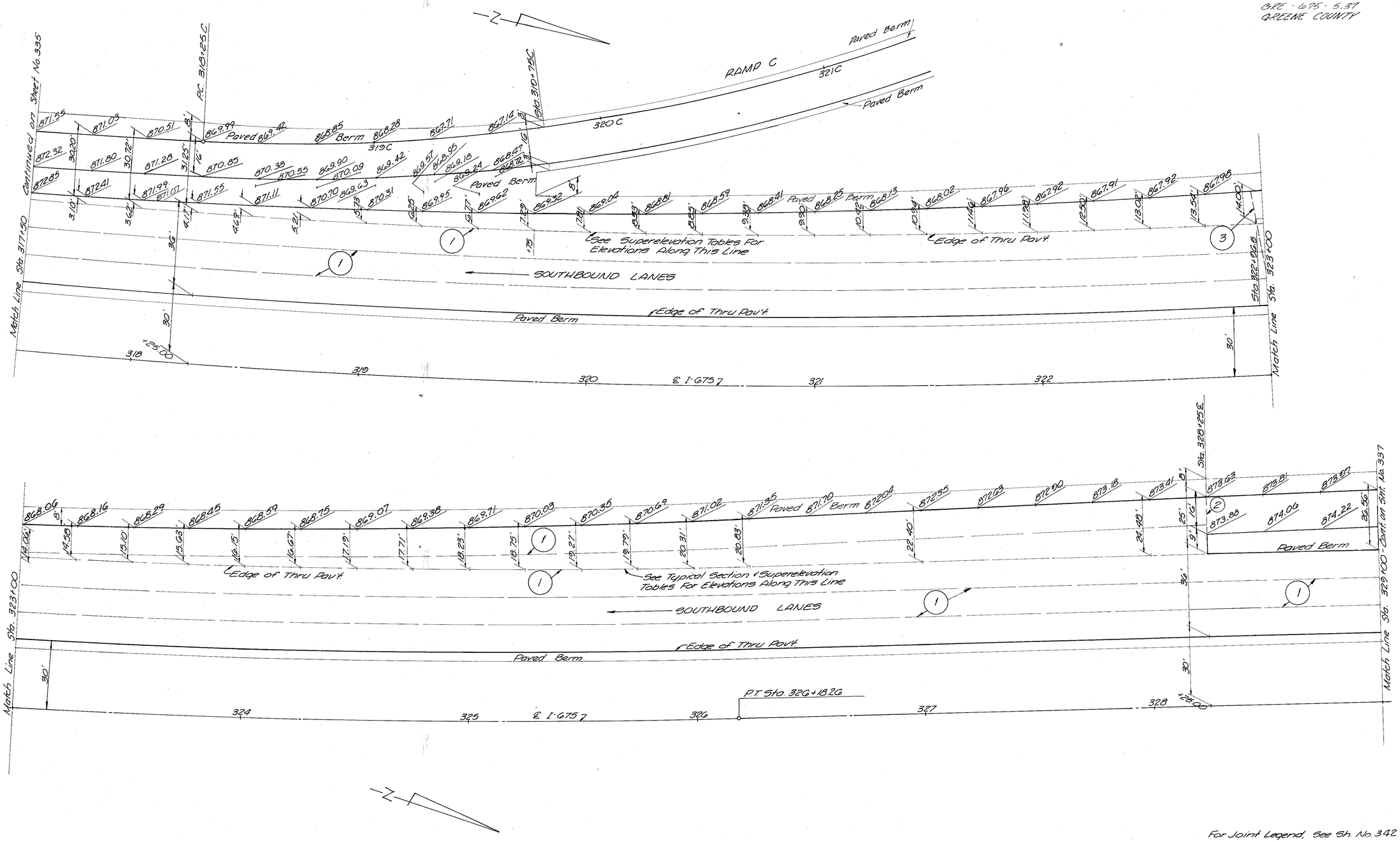
GRE - 675 - 5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

RAMP C
COLLECTOR DISTRIBUTOR

PAVEMENT DETAILS I-675 STA. 317+50 to STA. 329+00 Lt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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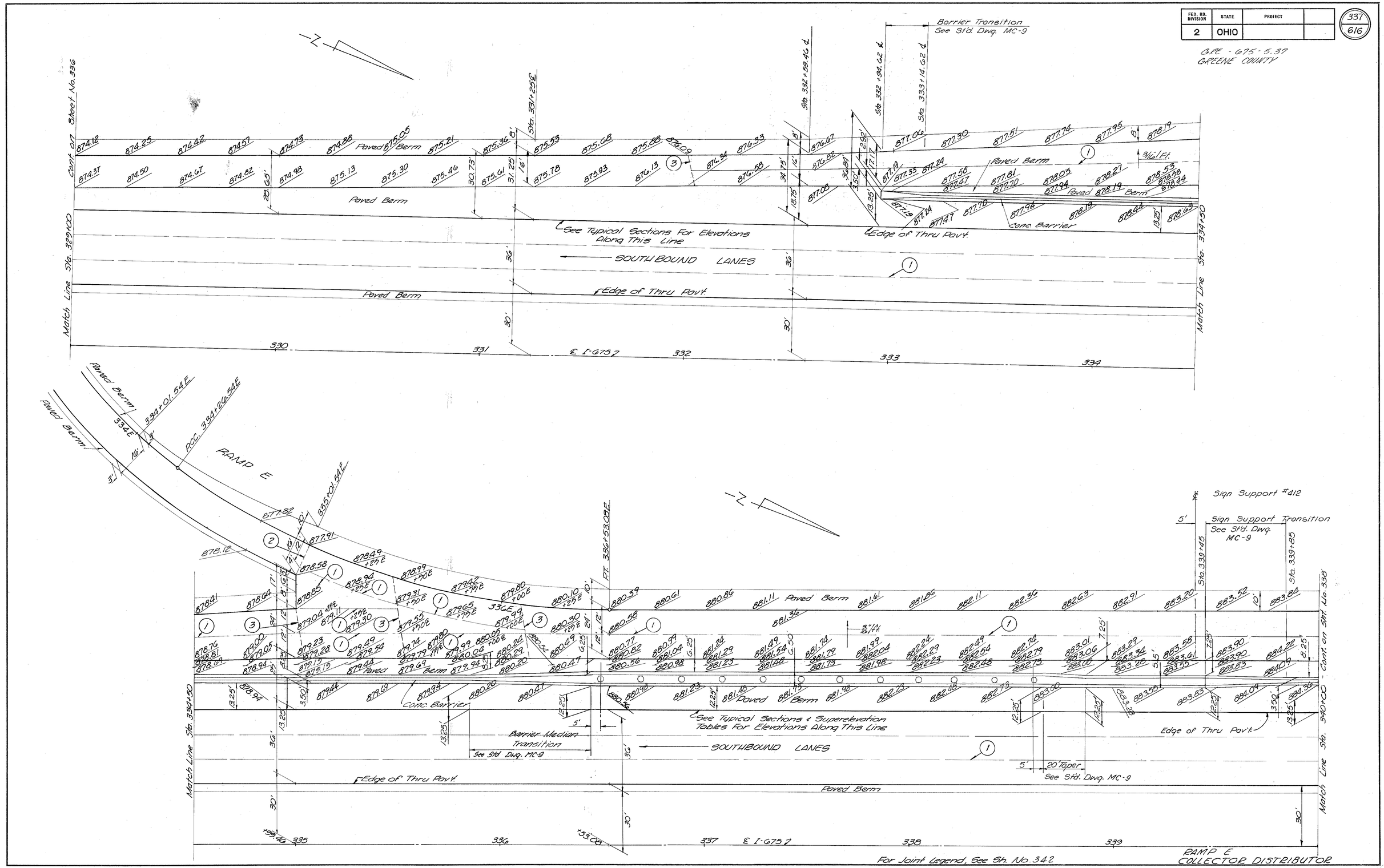
GRE - 675 - 5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

RAMP E
COLLECTOR DISTRIBUTOR

PAVEMENT DETAILS I-675 STA. 329+00 to STA. 340+00 Lt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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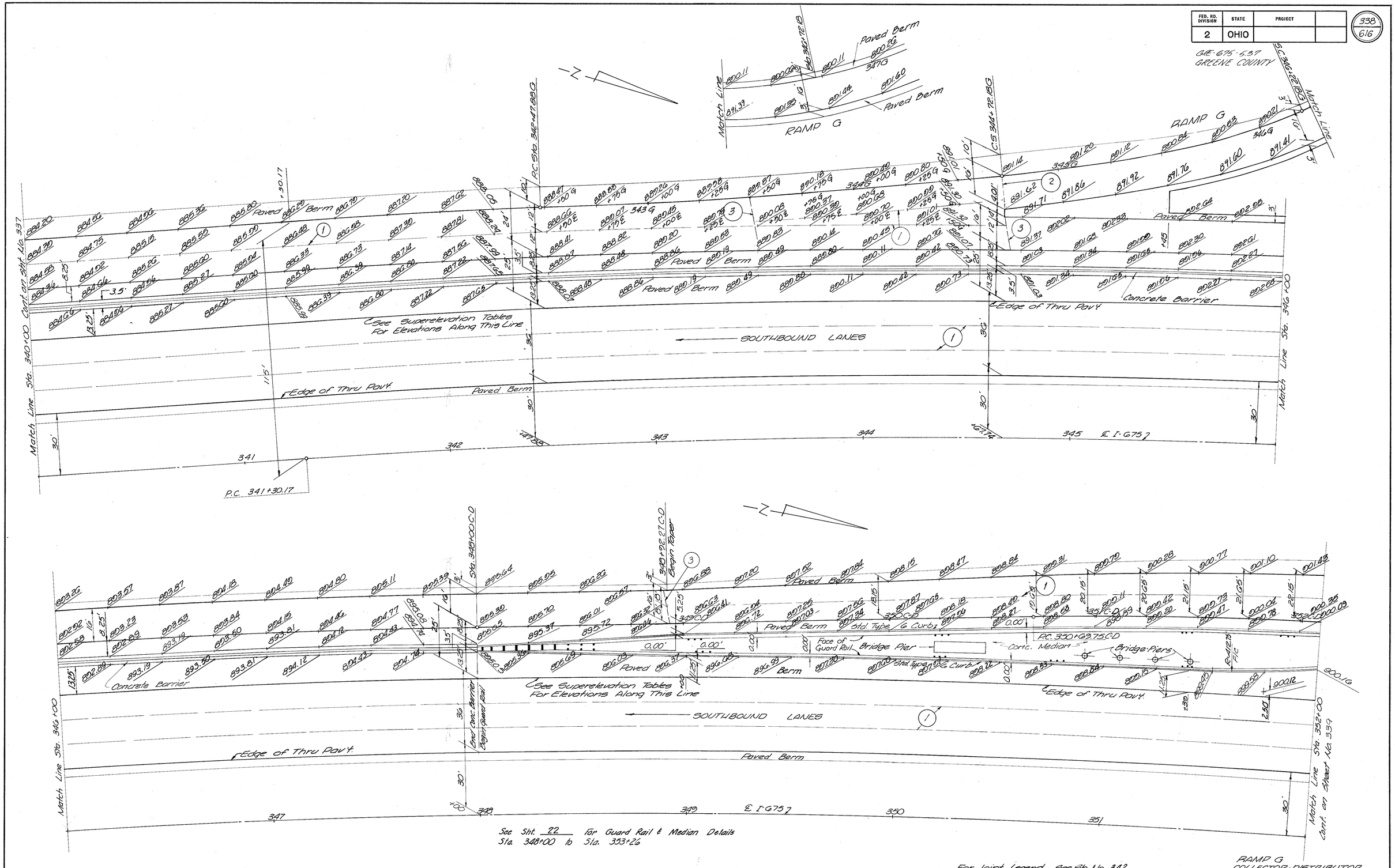
GREENE COUNTY



See Sht. 22 for Guard Rail & Median Details
Sta. 348+00 to Sta. 353+26

For Joint Legend See Sh. No. 342

RAMP G
COLLECTOR-DISTRIBUTOR

PAVEMENT DETAILS I-675 STA. 340+00 to STA. 352+00 Lt.

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GREENE COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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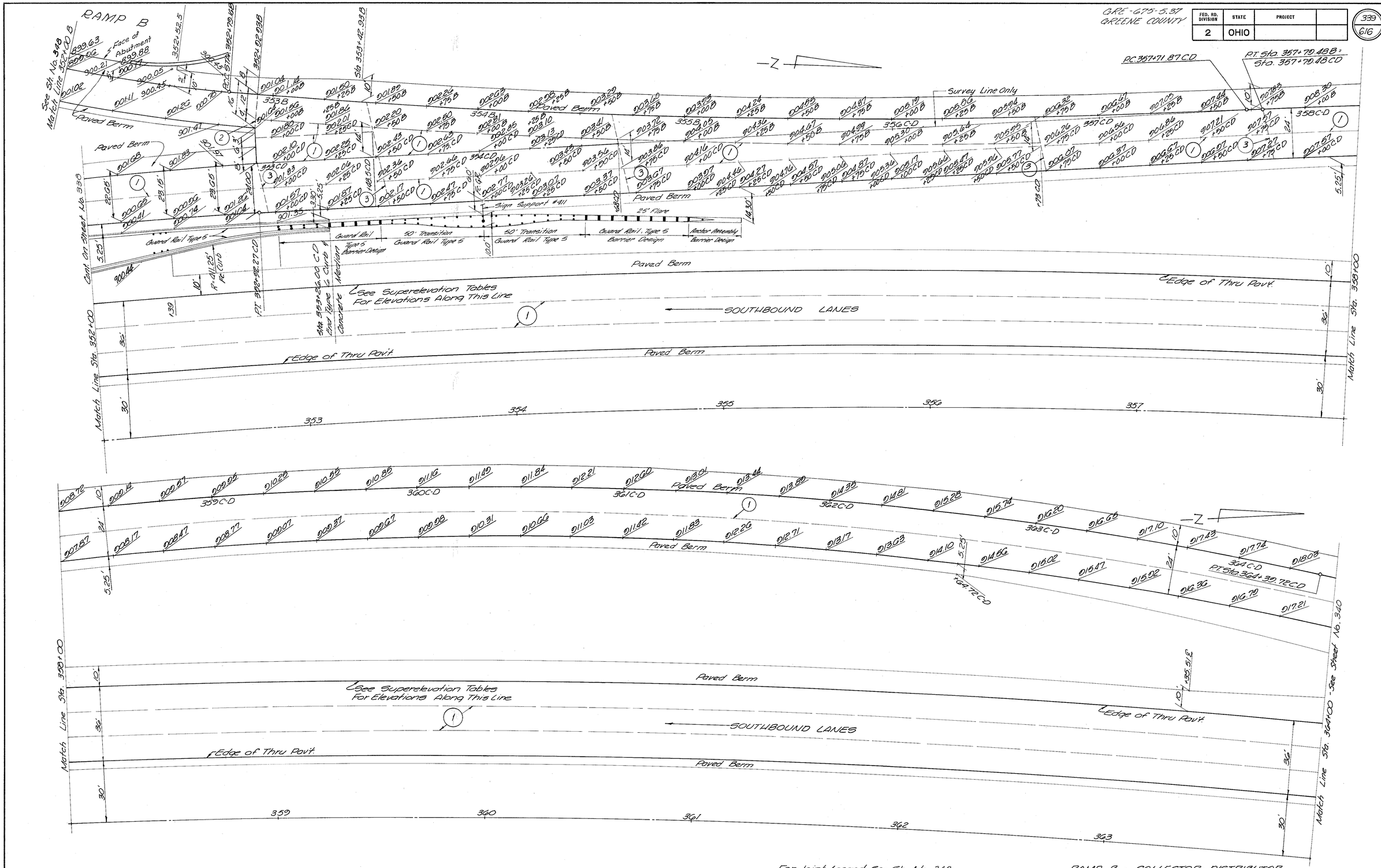

For Joint Legend, See Sh. No. 342

RAMP B - COLLECTOR-DISTRIBUTOR

PAVEMENT DETAILS I-675 STA. 352+00 to STA. 364+00 Lt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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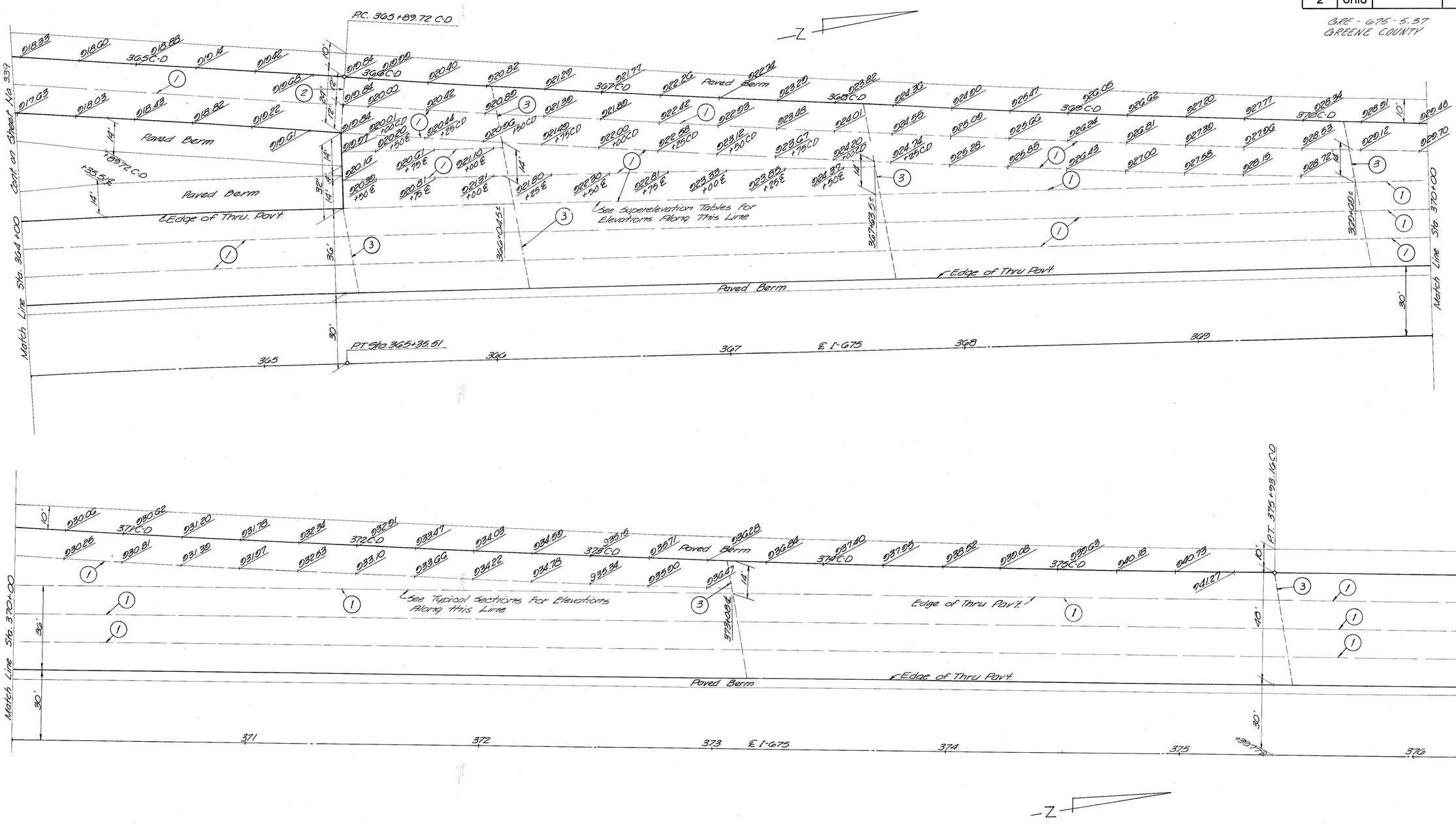
G.R.E - 675 - 5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

COLLECTOR - DISTRIBUTOR

PAVEMENT DETAILS - I-675 STA. 364+00 to STA. 376+00 Lt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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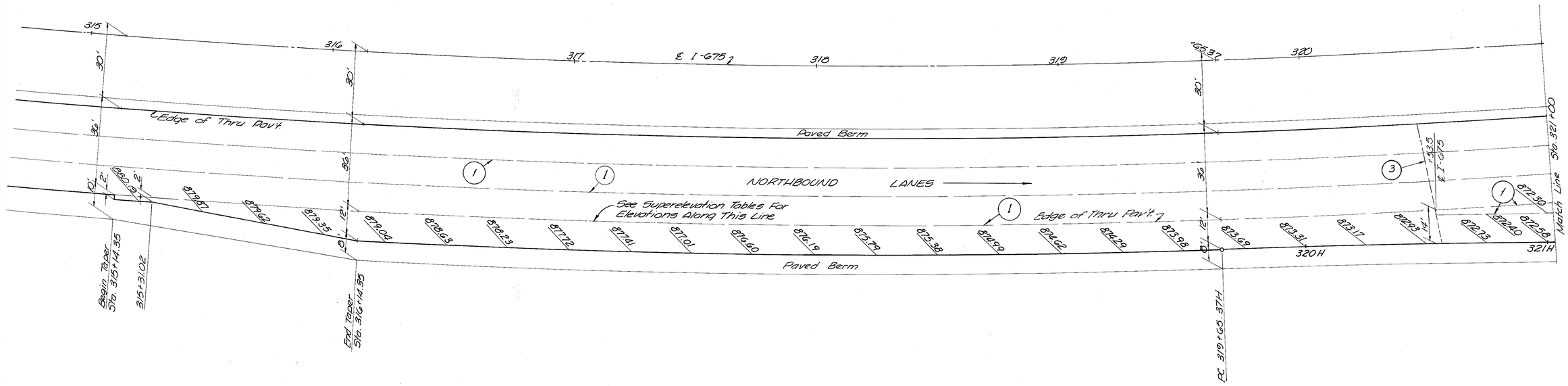

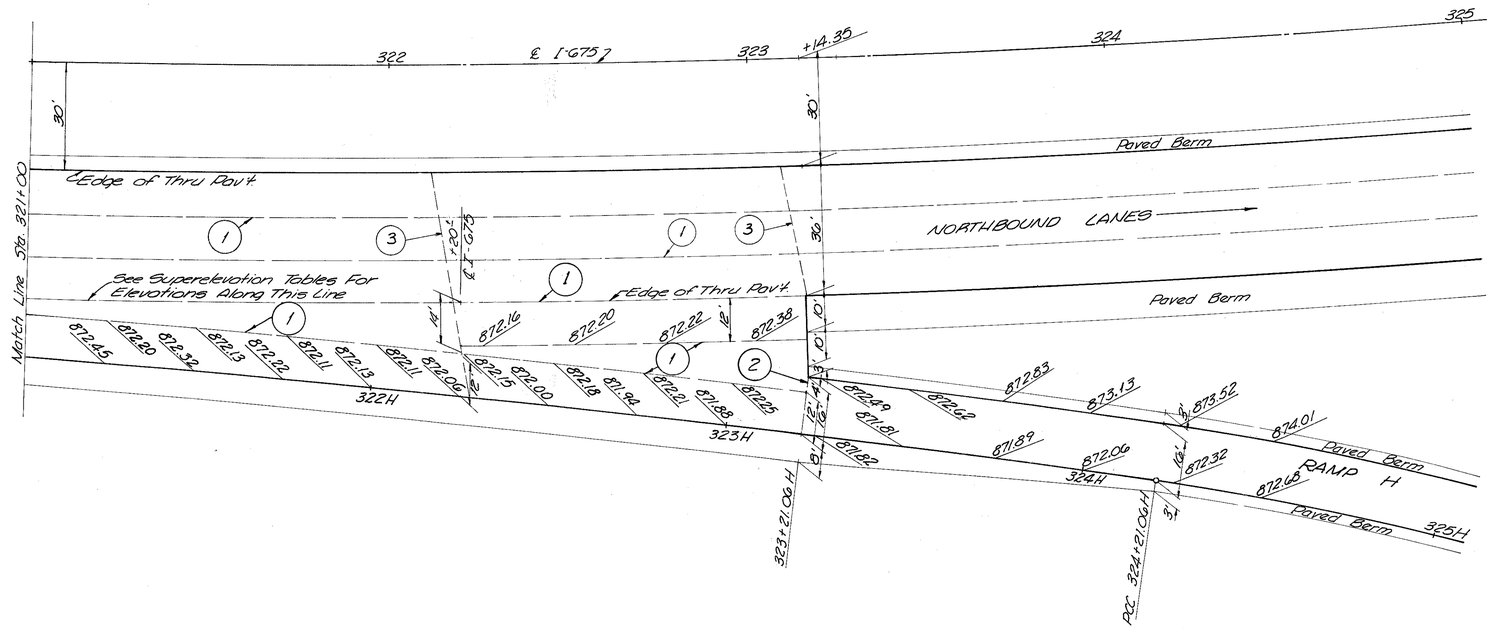

For Joint Legend, See Sh. No. 342

RAMP H

PAVEMENT DETAILS I-675 STA. 315+00 to STA. 325+00 Rt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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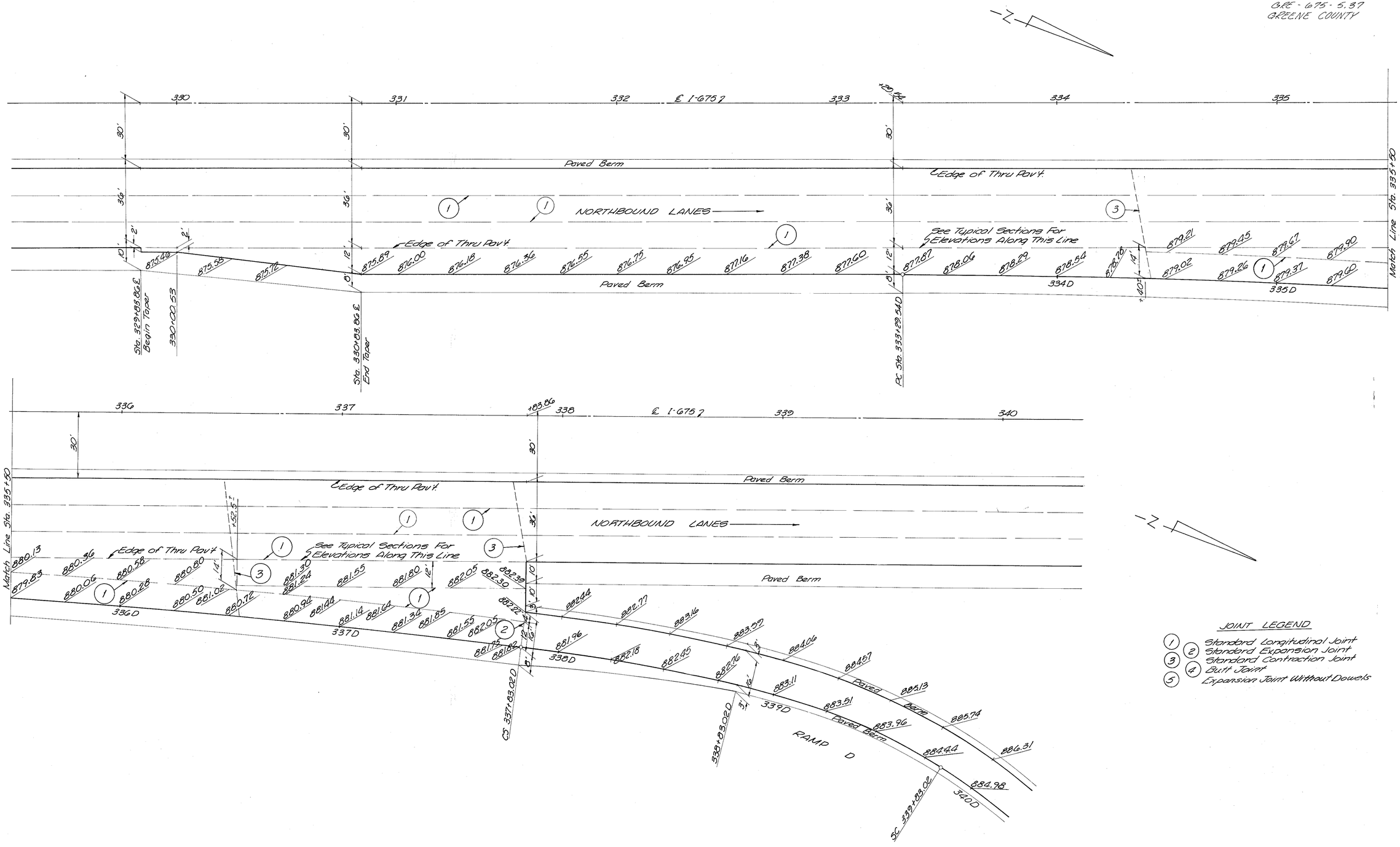
GRE - 675 - 5.37
GREENE COUNTY



For Joint Legend, See Sht. No. 342 RAMP D

PAVEMENT DETAILS I-675 STA. 329+83 to STA. 340+00 Rt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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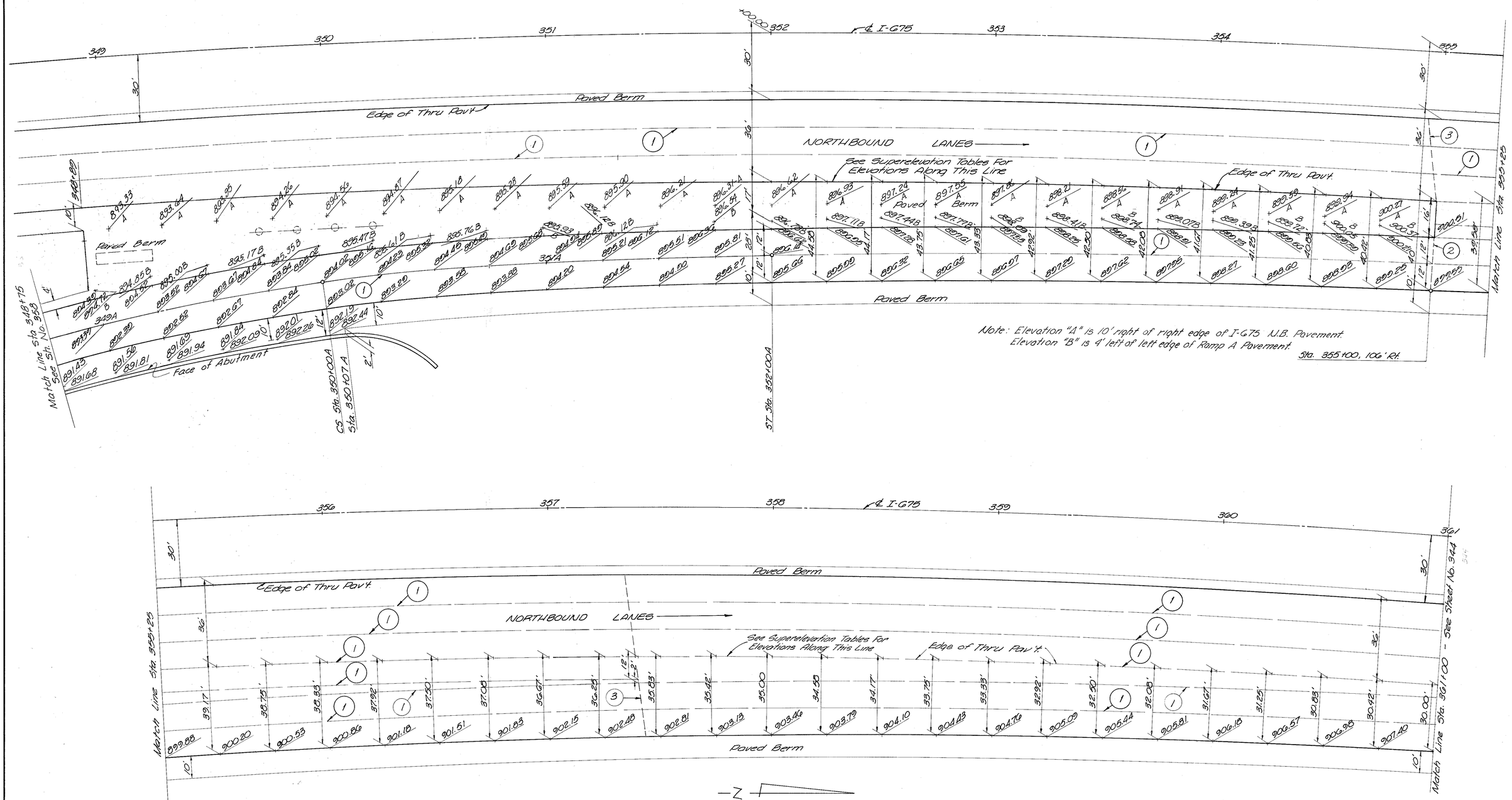
G.P.E. 675-5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

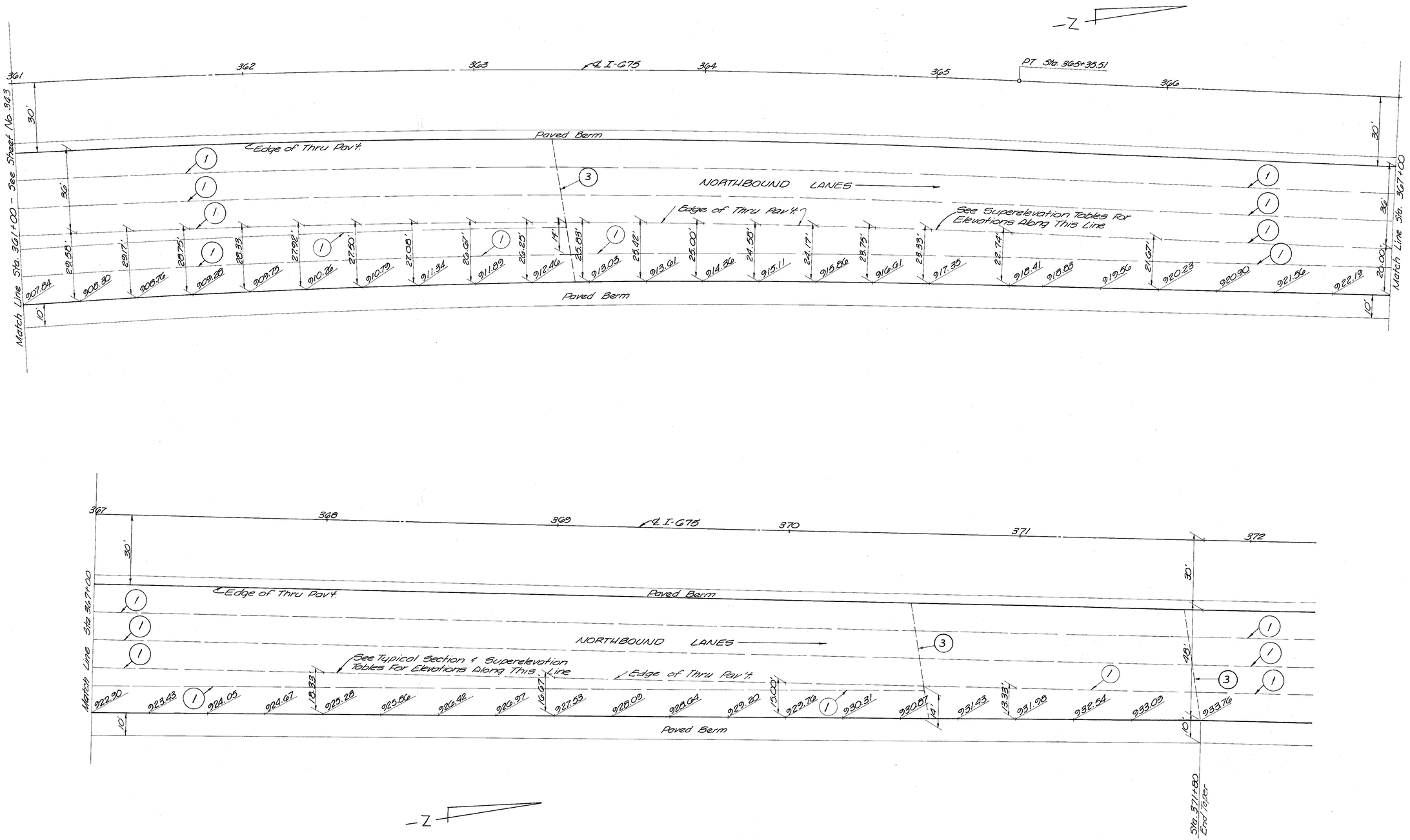
RAMP A

PAVEMENT DETAILS I-675 STA. 348+75 to STA. 361+00 Rt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

344
616

GRE - 675 - 5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

RAMP A

PAVEMENT DETAILS I-675 STA. 361+00 to STA. 371+80 Rt.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

345/616

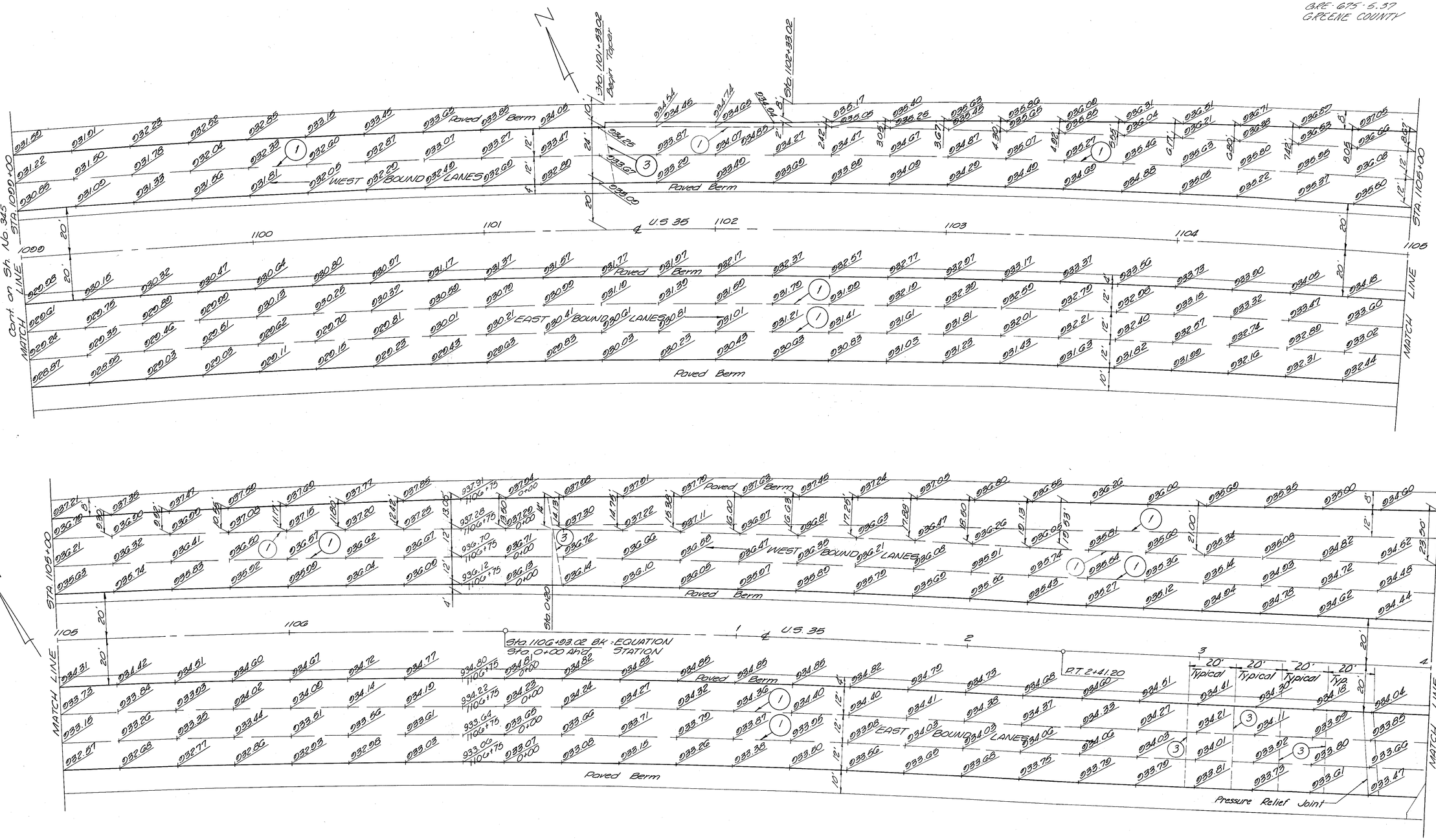
GRE - 675 - 5.37
GREENE COUNTY

U.S. 35 PAVEMENT DETAILS - STA. 1087+00 to STA. 1099+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

346
616

GRE-675-5.37
GREENE COUNTY

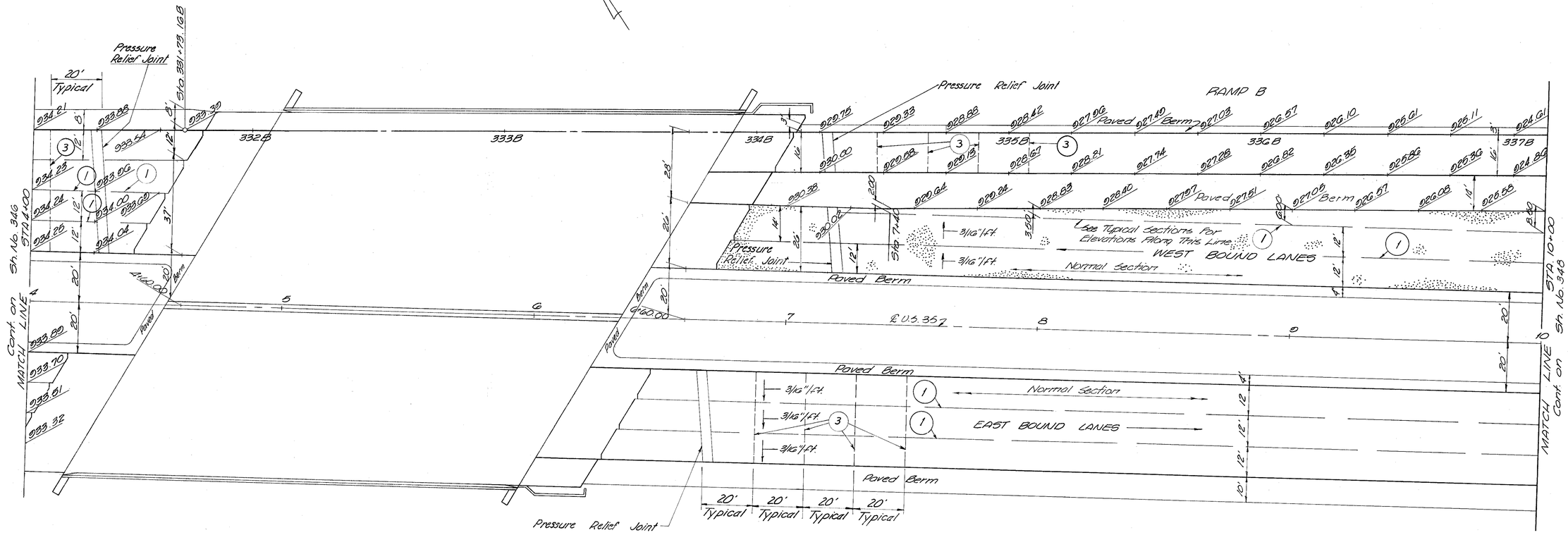


U.S. 35 PAVEMENT DETAILS - STA. 1099+00 to STA. 4+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

347
616

GRE-675-5.37
GREENE COUNTY



For Joint Legend See Sh. No. 342

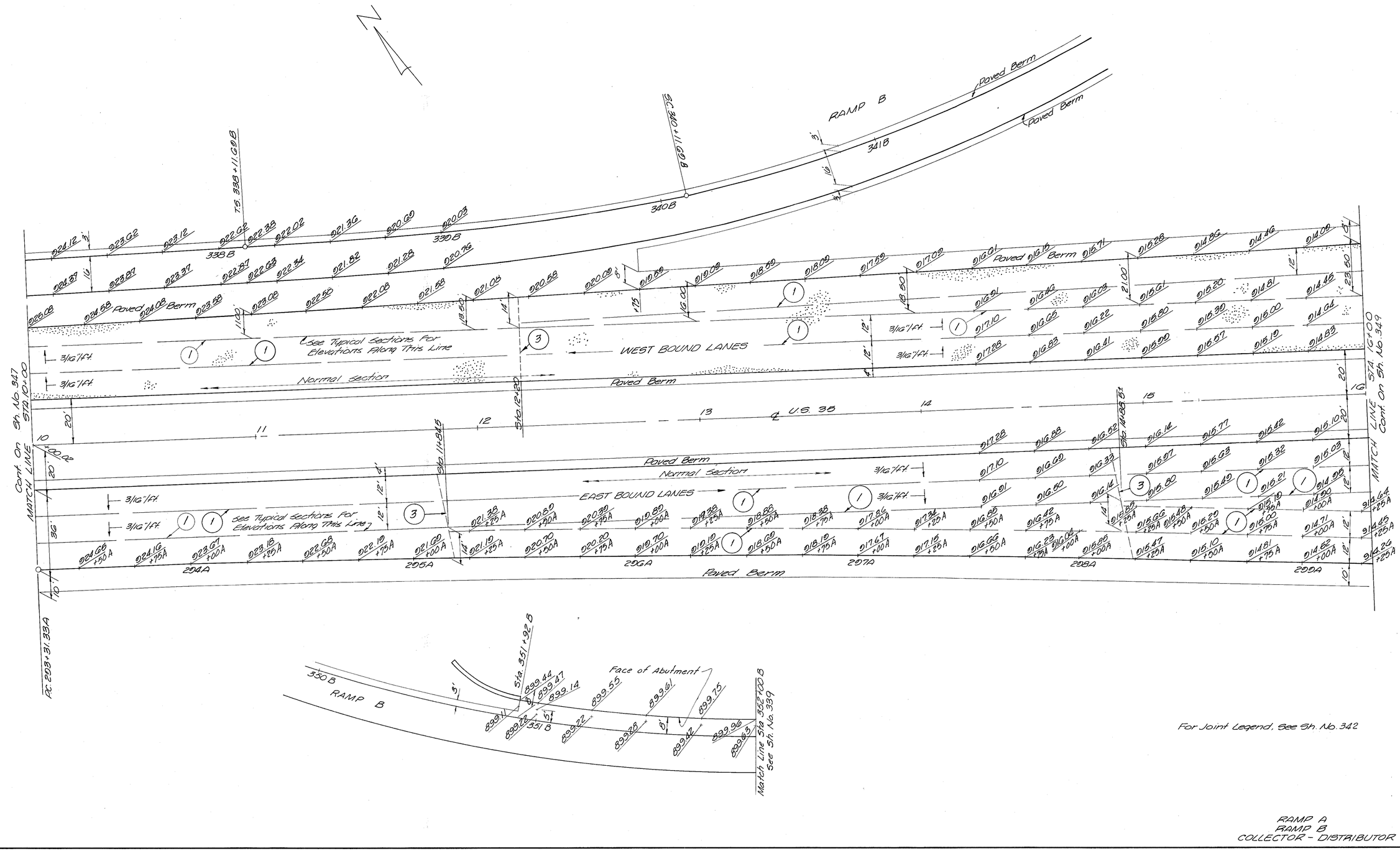
RAMP B
COLLECTOR - DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 4+00 to STA. 10+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

318
616

GRE - 075 - 5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

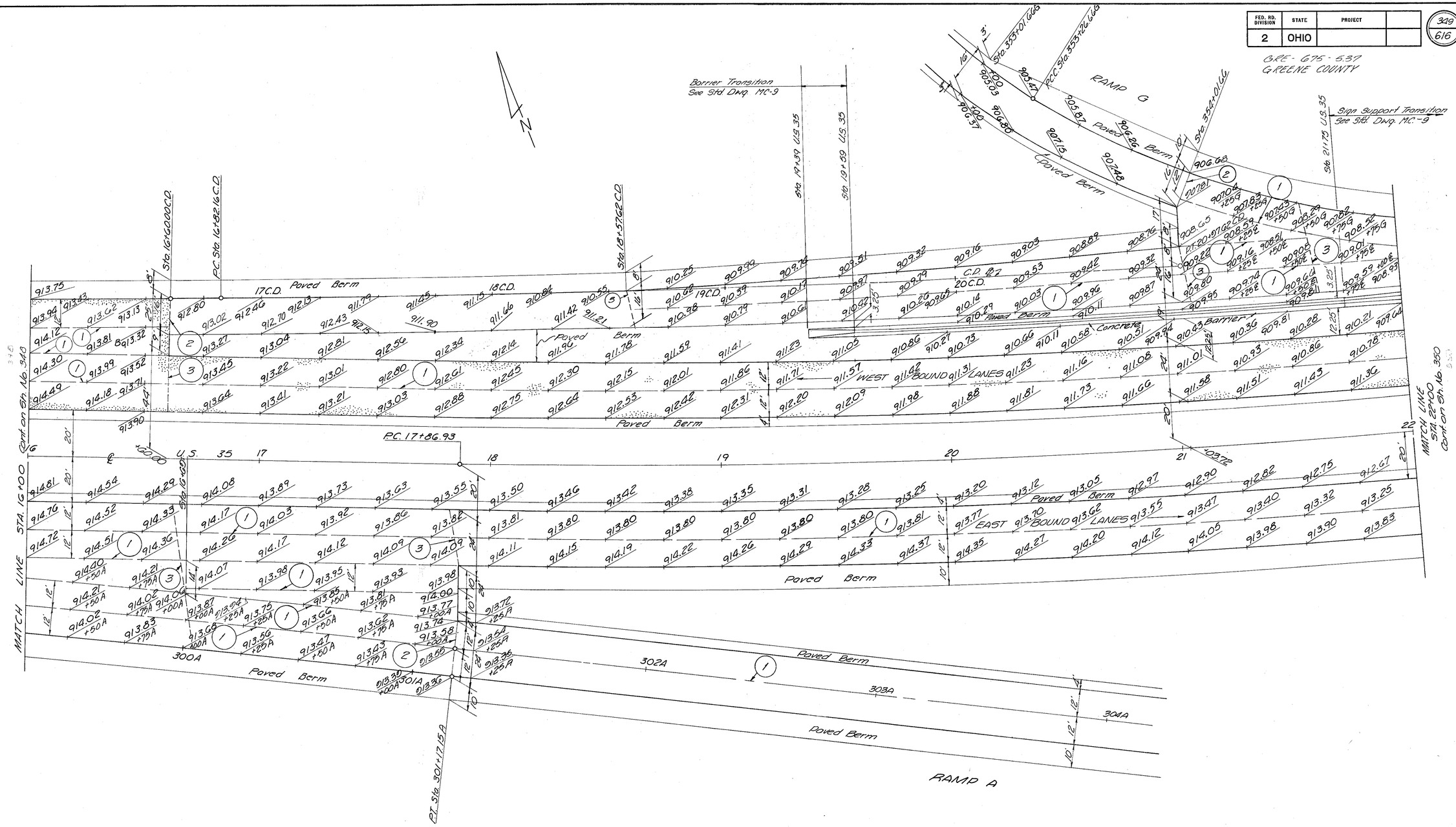
RAMP A
RAMP B
COLLECTOR - DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 10+00 to STA. 16+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

349
616

GRE-675-5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

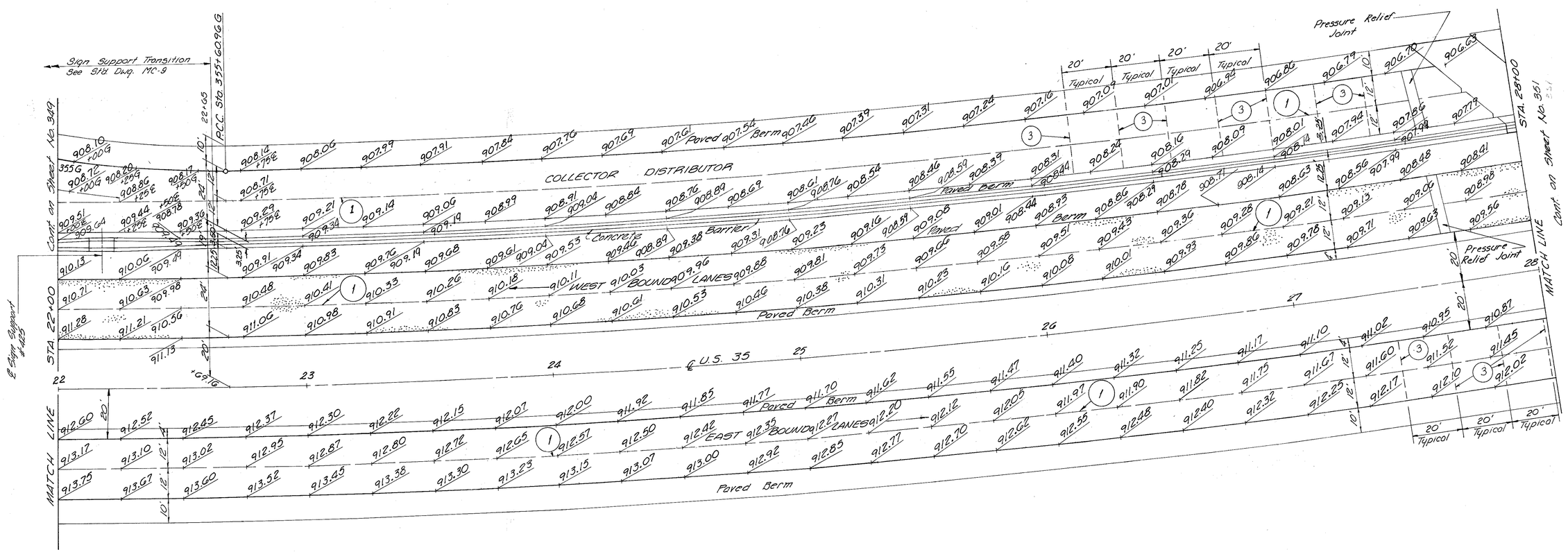
RAMP A
RAMP G
COLLECTOR DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 16+00 to STA. 22+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

350
6/6

GRE - 675 - 5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

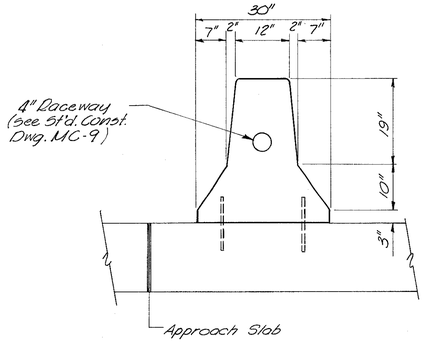
RAMP G
COLLECTOR DISTRIBUTOR

U. S. 35 PAVEMENT DETAILS STA. 22+00 to STA. 28+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

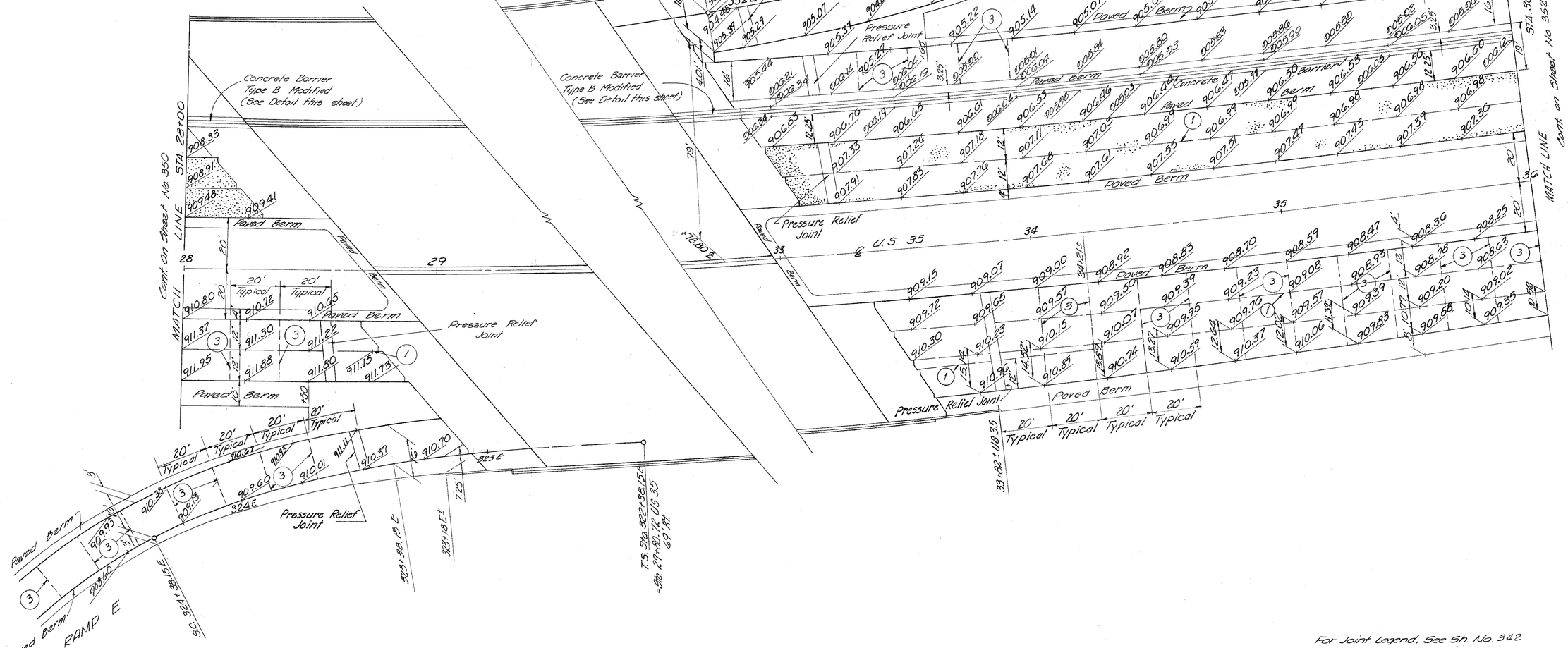
351
616

G.RE-675-5.37
GREENE COUNTY



SECTION THRU CONCRETE BARRIER
Type B Modified
(See Std. Const. Dwg. MC-9)

Price bid per linear foot of Concrete Barrier, Type B Mod. shall include dowels to Approach Slab (per MC-9)



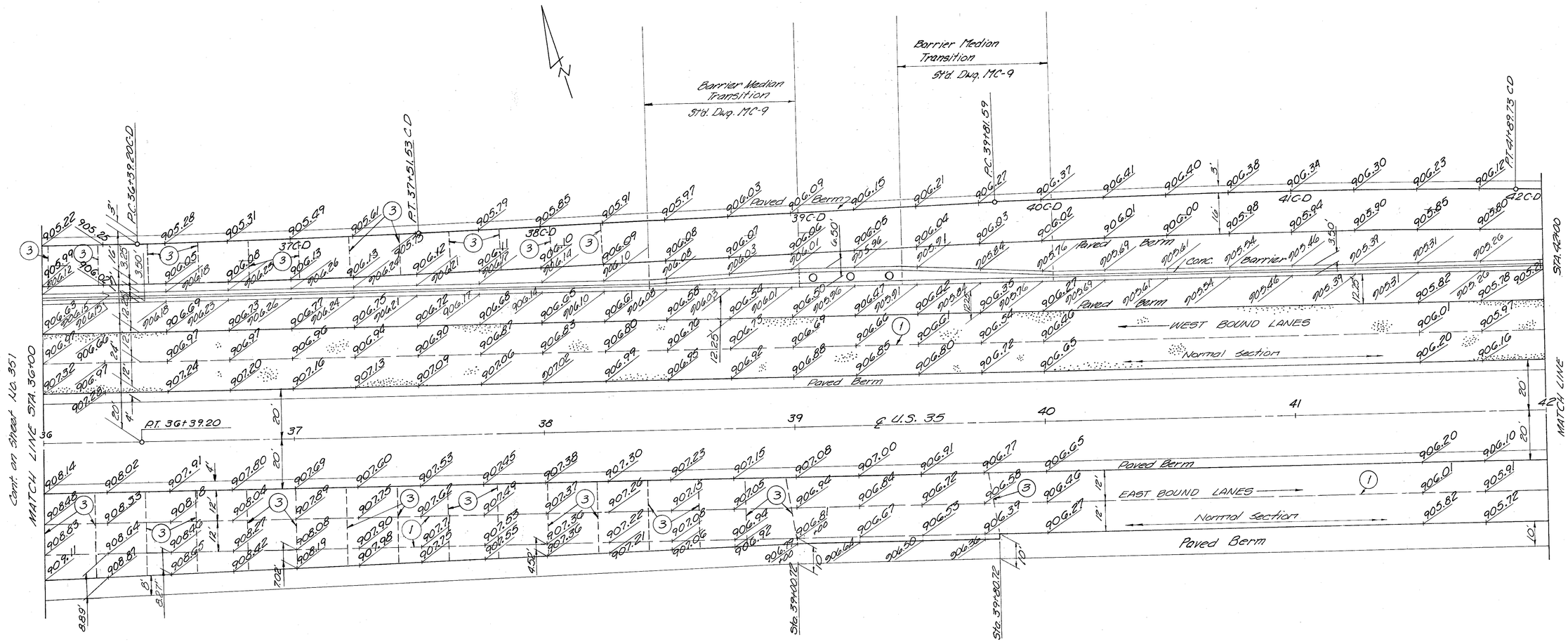
RAMP D
RAMP E
COLLECTOR DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 28+00 to STA. 36+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

352
616

B.R.F. - 675 - 5.87
GREENE COUNTY



For Joint Legend, See Sh. No. 342

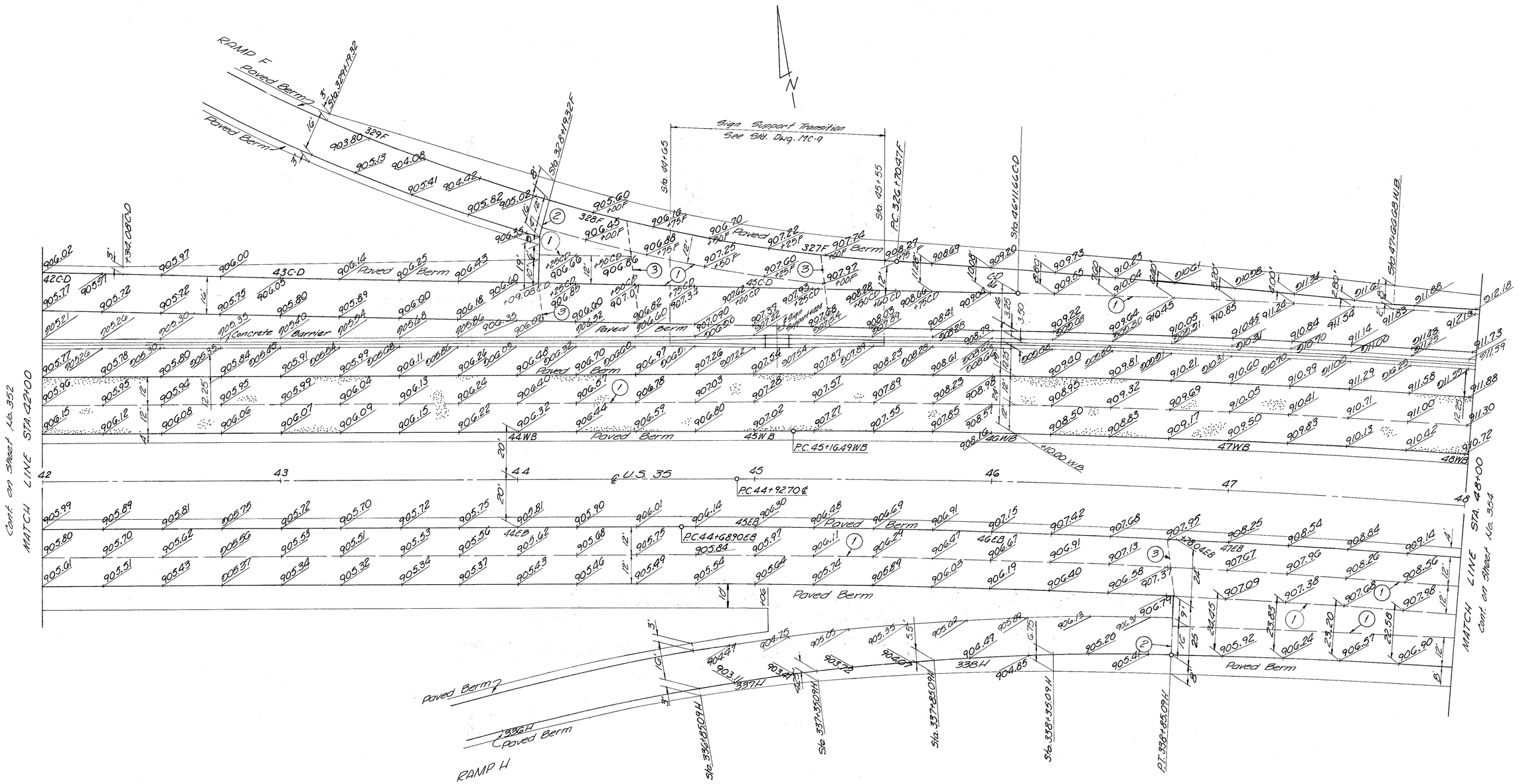
RAMP E
COLLECTOR DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 36+00 to STA. 42+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

353
616

GRE-675-5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

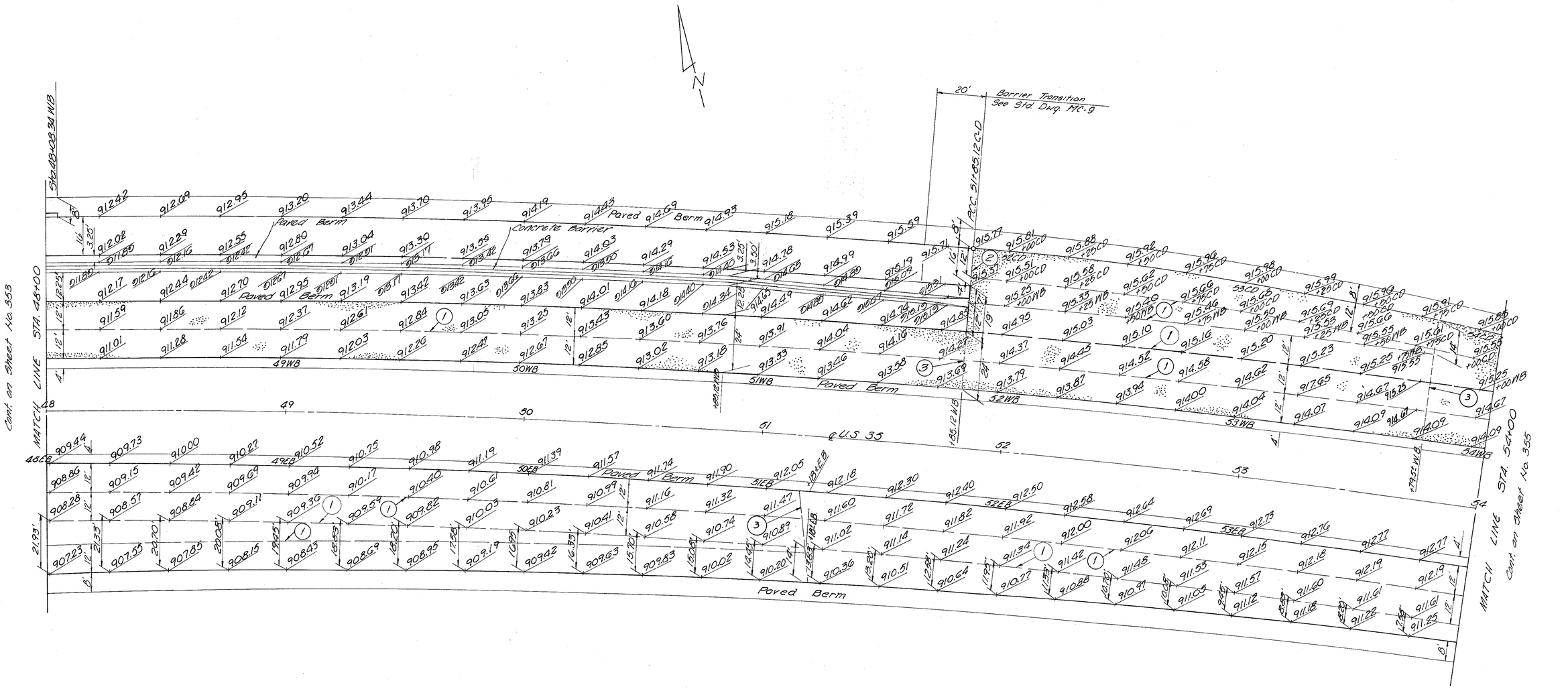
RAMP F
RAMP H
COLLECTOR DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 42+00 to STA. 48+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

354
616

GRE-675-5.37
GREENE COUNTY



For Joint Legend, See Sheet No. 342

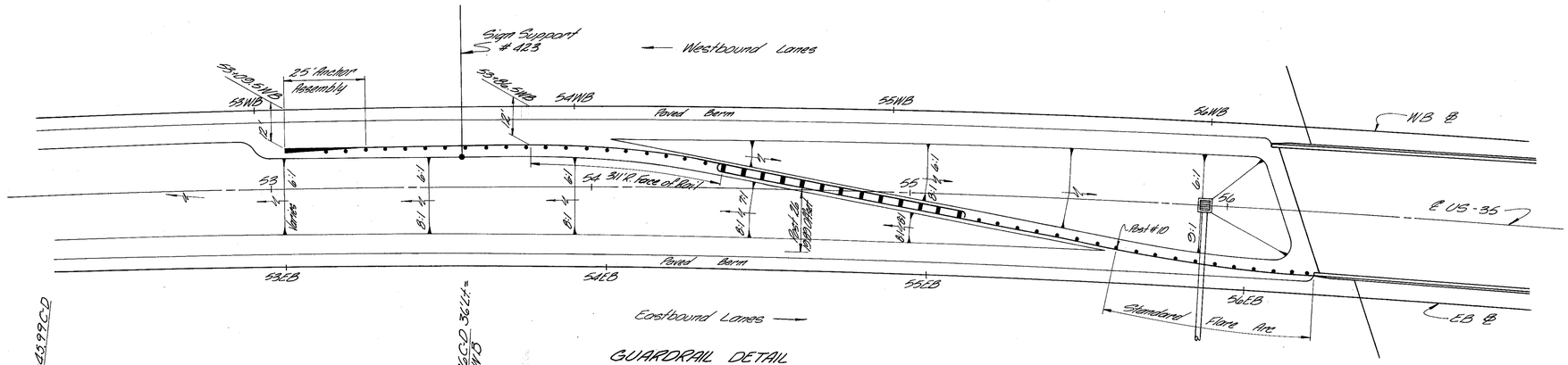
Ramp H
Collector - Distributor

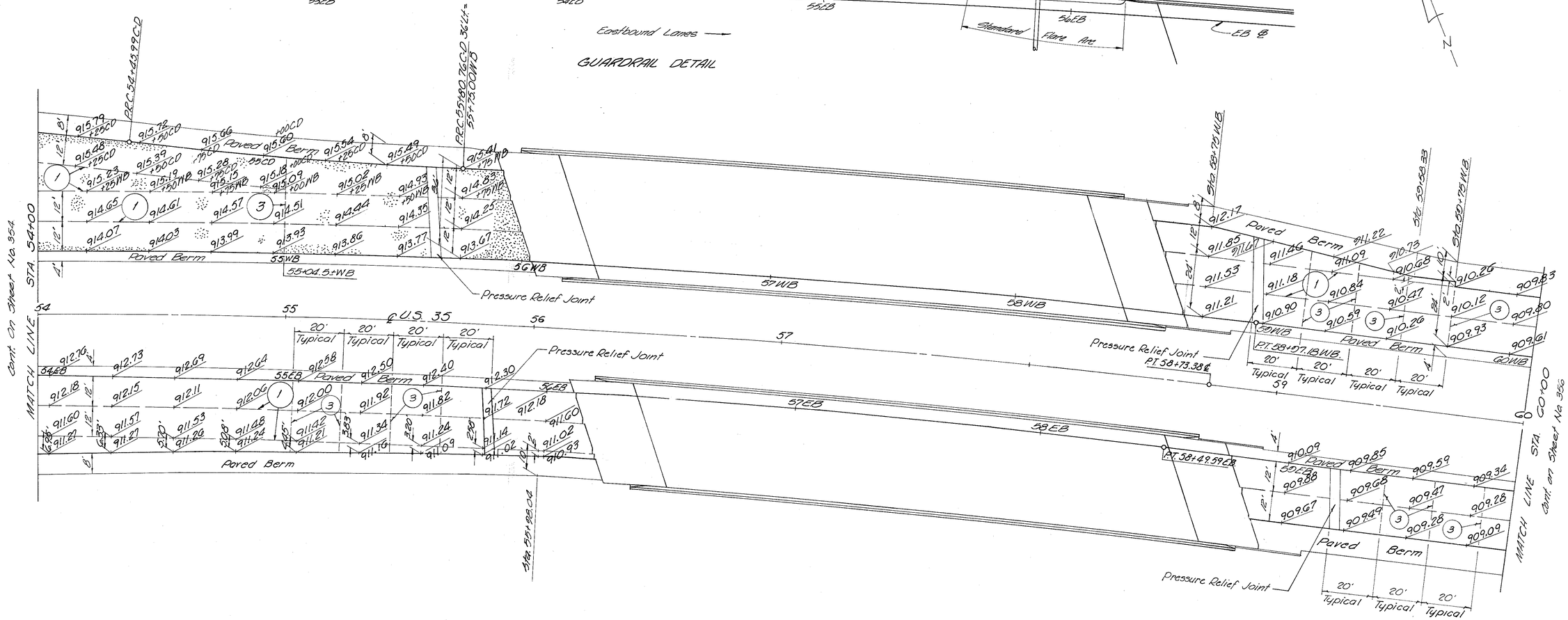
U.S. 35 PAVEMENT DETAILS STA. 48+00 to STA. 54+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

355
616

G.R.E - 675 - 5.37
GREENE COUNTY





For Joint Legend, See Sheet No. 342

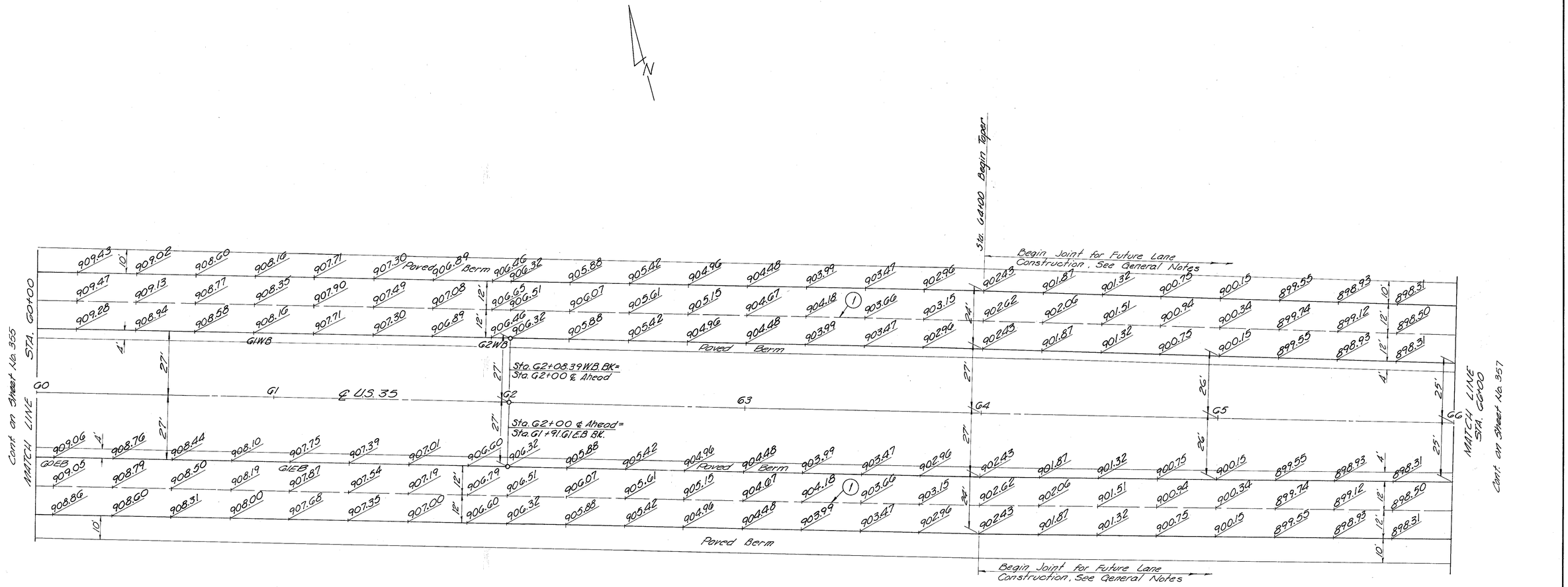
Ramp H
Collector - Distributor

U.S. 35 PAVEMENT DETAILS STA. 54+00 to STA. 60+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

35G
616

GRE - 675 - 5.37
GREENE COUNTY



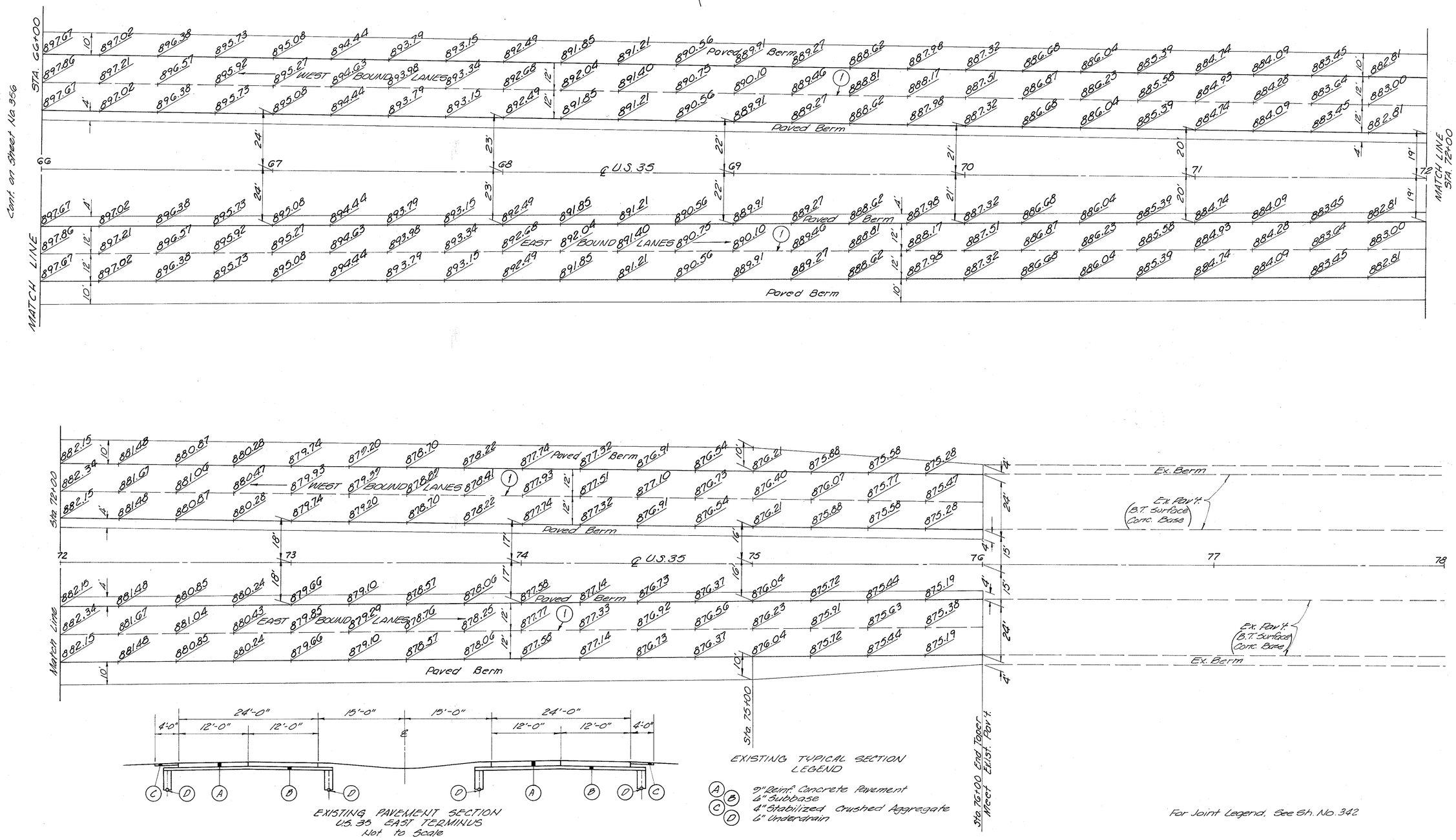
For Joint Legend, See Sh. No. 342

U.S. 35 PAVEMENT DETAILS STA. 60+00 to STA. 66+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

357
616

GRE - 675 - 5.37
GREENE COUNTY



U.S. 35 PAVEMENT DETAILS STA. 66+00 to STA. 78+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

358
616

GRE-675-5.37
GREENE COUNTY

RAMPS A & C

RAMPS A & F

SECTION A-A
no scale

SECTION B-B
no scale

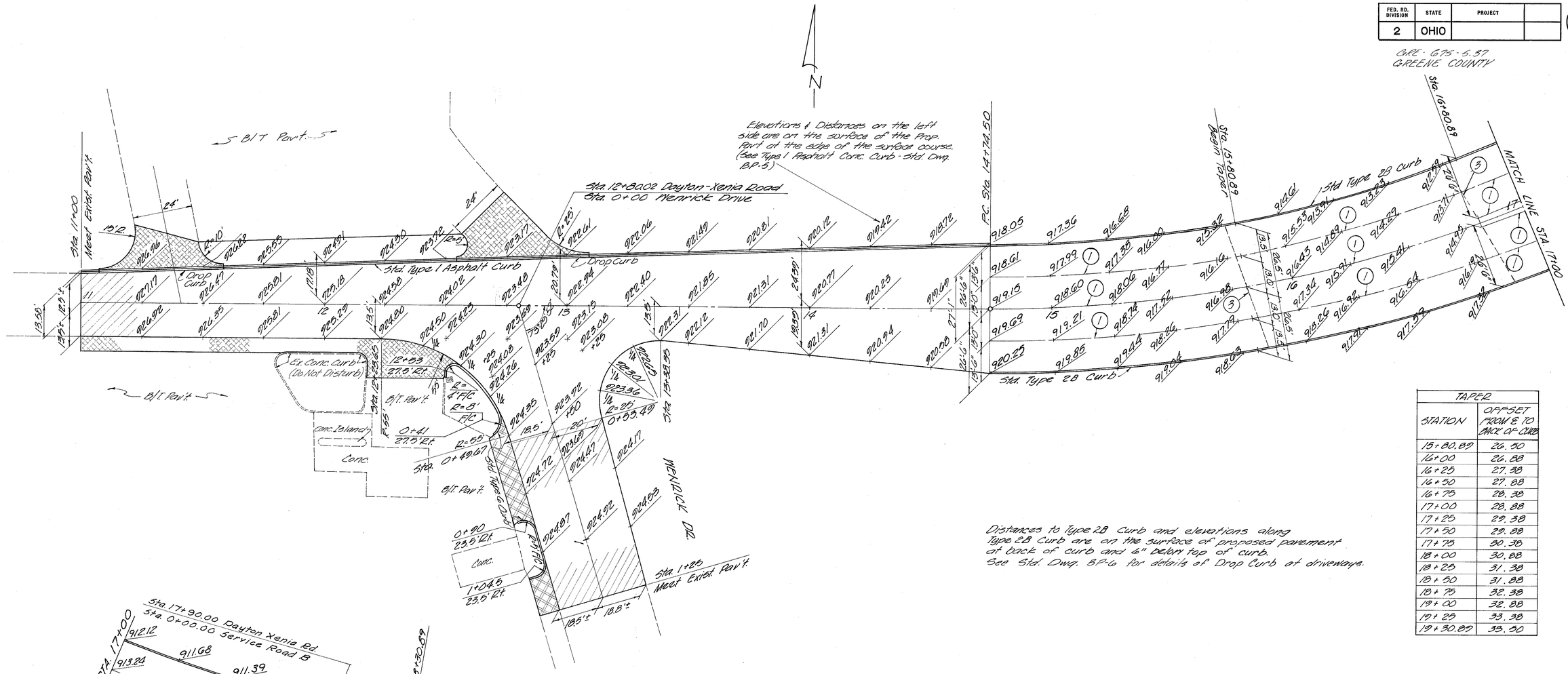
For Joint Legend, See Sh. No. 342

PAVEMENT DETAILS RAMPS A&C, RAMPS A&F

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

359
616

GRE - 675 - 5.57
GREENE COUNTY



TAPER	
STATION	OFFSET FROM ℄ TO BACK OF CURB
15+80.89	26.50
16+00	26.88
16+25	27.38
16+50	27.88
16+75	28.38
17+00	28.88
17+25	29.38
17+50	29.88
17+75	30.38
18+00	30.88
18+25	31.38
18+50	31.88
18+75	32.38
19+00	32.88
19+25	33.38
19+30.89	33.50

Distances to Type 2B Curb and elevations along Type 2B Curb are on the surface of proposed pavement at back of curb and 6" below top of curb. See Std. Dwg. BP-6 for details of Drop Curb at driveways.

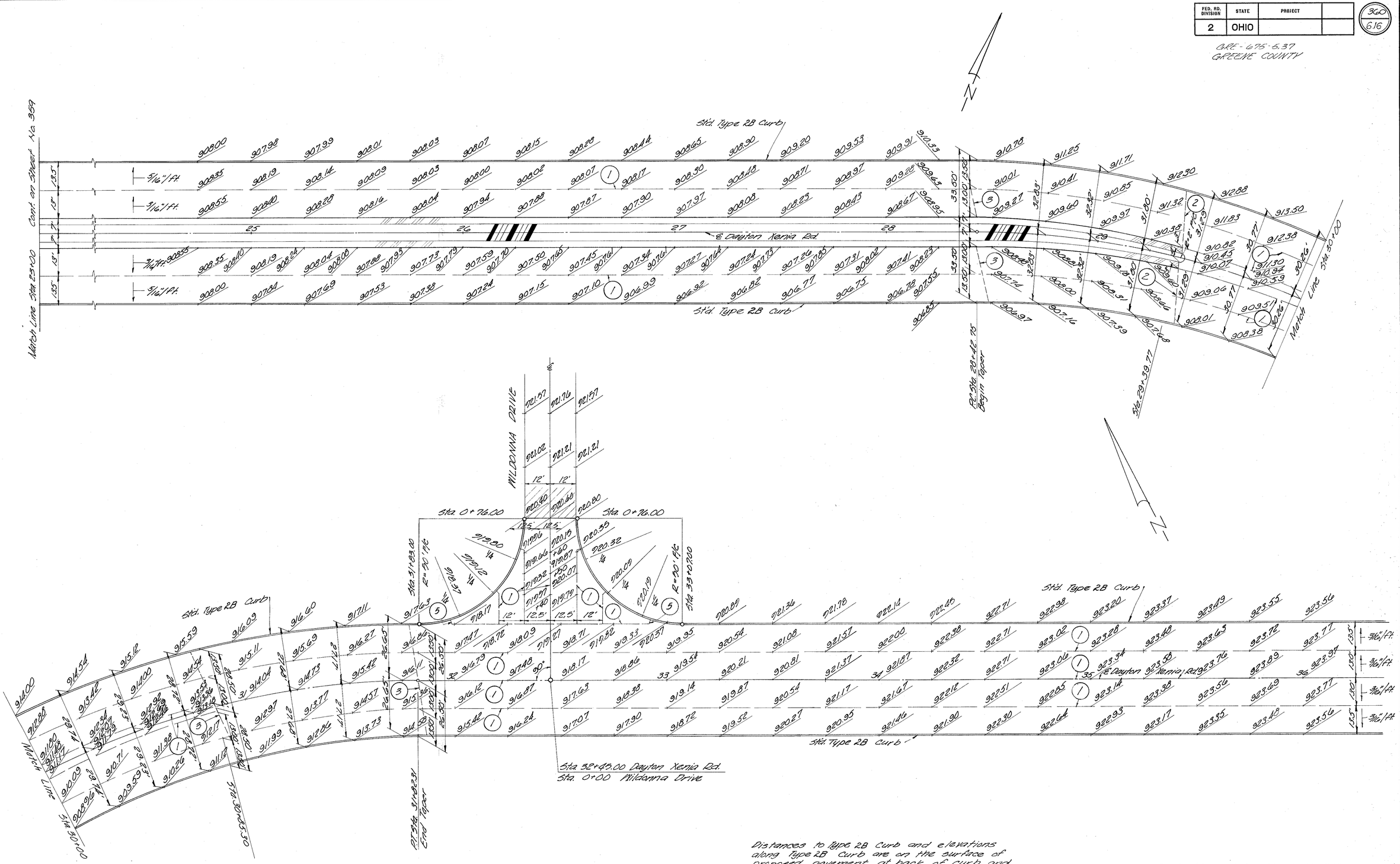
For Joint Legend, See Sheet No. 342
For Pavement Legend, see Sheet No. 67

DAYTON XENIA RD. PAVEMENT DETAILS STA. 11+00 to STA. 23+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

360
616

GRE-675-5.37
GREENE COUNTY



Distances to Type 2B Curb and elevations along Type 2B Curb are on the surface of proposed pavement at back of curb and 6" below top of curb.
See Std. Dwg. BP-6 for details of Drop Curb at driveways.

For Joint Legend, see Sheet No. 342
For Pavement Legend, see Sheet No. 67

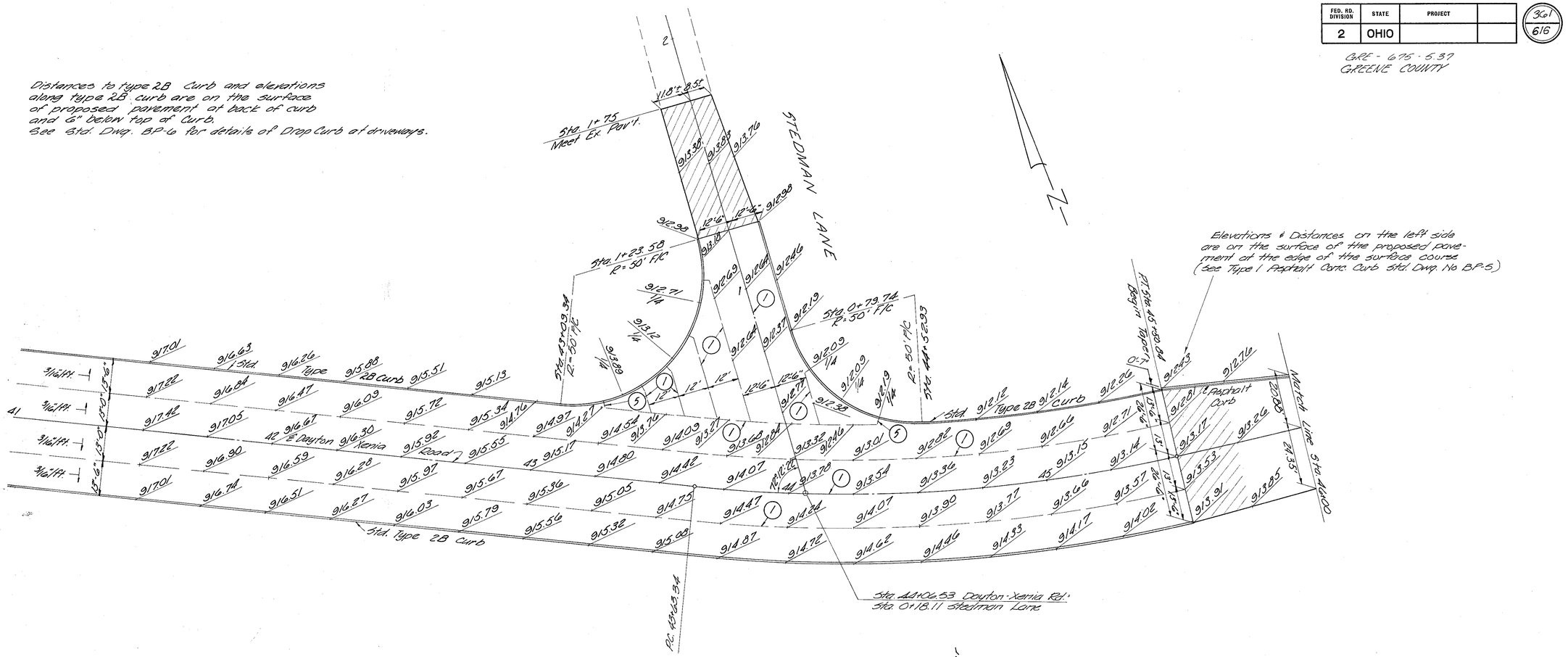
DAYTON-XENIA RD. PAVEMENT DETAIL STA. 23+00 TO STA. 36+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

301
616

GRF - 675 - 5.37
GREENE COUNTY

Distances to type 2B Curb and elevations along type 2B curb are on the surface of proposed pavement at back of curb and 6" below top of Curb.
See Std. Dwg. BP-6 for details of Drop Curb at driveways.



For Joint Legend See Sheet No. 342
For Pavement Legend, see Sheet No. 67

DAYTON XENIA RD. PAVEMENT DETAIL STA. 41+00 TO STA. 50+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

362
616

GRE-675-5.37
GREENE COUNTY

KEMP RD.

PROPOSED CUL-DE-SAC
HONEY LOCUST LANE

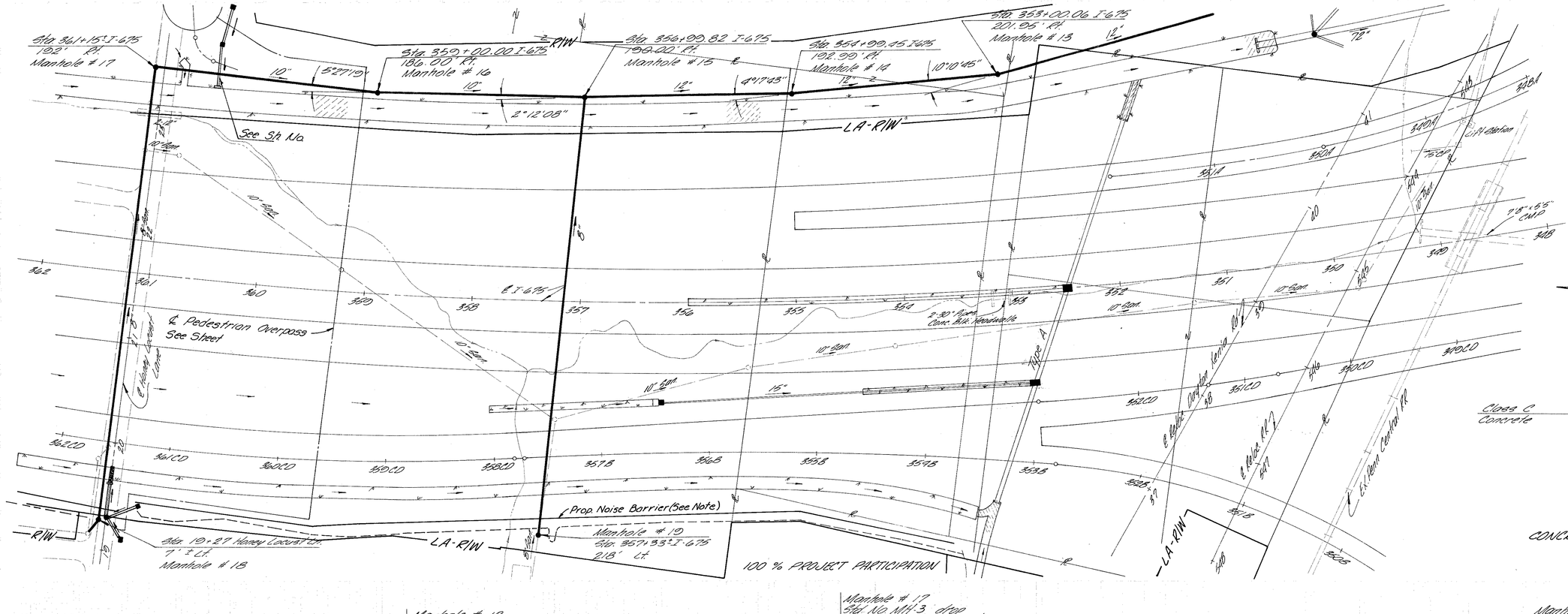
KEMP RD.

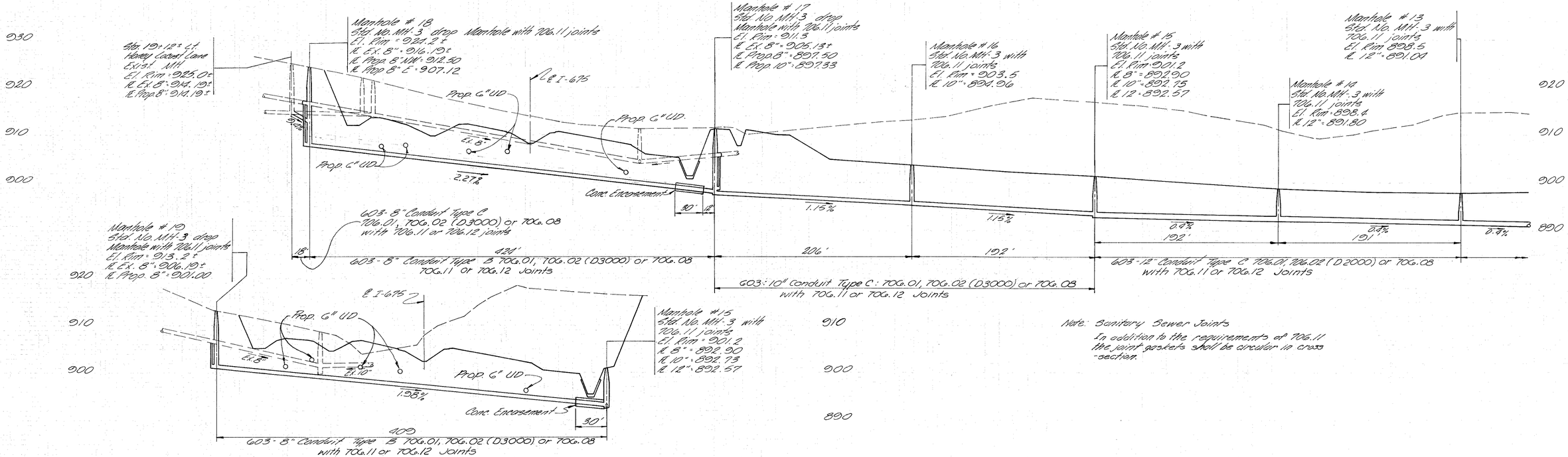
For Pavement Legend, see Sh. No. 67
For Joint Legend See Sh. No. 342

KEMP RD, WILDONNA DR. & HONEY LOCUST LANE PAVEMENT DETAILS

CRE-675-5.37
GREENE COUNTY

Note: Contractor shall locate Prop. Noise Barrier Posts prior to installing sewers to assure that the two installations do not conflict.





Note: Sanitary Sewer Joints

In addition to the requirements of 706.11 the joint gaskets shall be circular in cross-section.

SANITARY SEWER

Sta. 553+00.06 I-675
20.05' Rt.
Manhole #13

Sta. 549+00.33 I-675
25.05' Rt.
Manhole #12

Sta. 544+26.28' D.X Rd.
42.42' Rt.
Manhole #11

Sta. 537+62.17, ℄ Relocated RR
46.36' Rt.
Manhole #10

100% PROJECT PARTICIPATION

PARTICIPATION
18.48% PROJECT
81.52% GREENE COUNTY

Sta. 537+50.13, ℄ Relocated RR
81.15' Lt.
Manhole #9

Sta. 534+61.96, ℄ Relocated RR
Rt. 20' Lt.
Manhole #8

Sta. 533+01.05 ℄ Relocated RR
110.05' Lt.
Manhole #7

Sta. 675-5.37
GREENE COUNTY

Penn Central RR

℄ Relocated Conrail RR

℄ Relocated Conrail RR

No Open Trench within These limits

Exist. Lift Station To be removed

RAMP A

RAMP D

RAMP F

R/W

L.A. R/W

Note: Pavement for MH reconstruction is included in (200) street. 8" Sewer Conn. to prop. 12" San. is included with these quantities.

Manhole #13
Std. No. MH-3 with
706.11 joints
El. Rim = 898.5
℄ 12" = 891.04

Manhole #12
Std. No. MH-3 with
706.11 joints
El. Rim = 905.7 ±
℄ 12" = 889.88

Sta. 547+21.29 ℄ Rd.
Reconstruct MH to Grade
Use Off Road Detail
℄ Ex. 8" E = 891.38 ±
℄ Ex. 8" N = 891.17 ±
℄ Ex. 8" W = 890.63 ±
℄ Prop 8" = 890.63 ±
El. Rim = 915.20
℄ D.X. Rd. ±

Manhole #11
Std. No. MH-3 with
706.11 joints
El. Rim = 915.6
℄ 8" = 891.10
℄ 12" = 888.60

Manhole #10
Std. No. MH-3 with
706.11 joints
El. Rim = 910.0 ±
℄ 12" = 887.33

℄ Prop. RR

℄ Ex. RR

20'

Manhole #9
Std. No. MH-3 with
706.11 joints
El. Rim = 908.8
℄ 12" = 886.60

Manhole #8
Std. No. MH-3 with
706.11 joints
El. Rim = 905.6
℄ 12" = 885.10

Manhole #7
Std. No. MH-3 with
706.11 joints
El. Rim = 902.0
℄ 12" = 884.38

Bore & Jack this Section Under Ex. Penn Central RR

Aggator Location Ex. 8"
Ex. 8" Force Main

Ex. 8" San

603: 18'-8" Conduit Type C
706.01 Class 3, 706.02 (D3000) or 706.08 E.S.
with 706.11 or 706.12 Joints

15'

920
910
900
890
880

0.4%
0.4%
0.5%
0.5%
0.5%

290'
603-12" Conduit Type C 706.01 Class 3, 706.02 (D2000) or 706.08 E.S. with 706.11 or 706.12 Joints

298'
603-12" Conduit Type B 706.02 (D2500) with 706.11 joints

272'
603-12" Conduit Type C 706.02 (D2500) with 706.11 joints

128'
603-12" Conduit Type B 706.02 (D3000) with 706.11 Joints

209'
603-12" Conduit Type C 706.02 (D2250) with 706.11 Joints

141'
603-12" Conduit Type C 706.02 (D2000) with 706.11 Joints

GRE-675-5.37
GREENE COUNTY

Stone headwalls

15'x 11' High Stone Culvert

Revised: I.E.H. - 1/79

No open trench within these limits if O.P.&C. Tower is still in use.

PENN - CENTRAL RR (Abandon)

℄ Reloc. RR

Ex. O.P.&C. Tower

Sta. 533+01.03, ℄ Reloc. RR
110.05' Lt.
Manhole # 7
180°00'00"

Sta. 529+92.17, ℄ Reloc. RR
128.54' Lt.
Manhole # 6

LA-RIW

Sta. 526+82.18, ℄ Reloc. RR
153.33' Lt.
Manhole # 5

Sta. 523+75.21, ℄ Reloc. RR
157.32' Lt.
Manhole # 4

Ex. LA/RW

Sta. 521+61.04, ℄ Reloc. RR
110.20' Lt.
Manhole # 8

EXIST. US ROUTE 35

Sta. 47+48.90, ℄ Reloc. US-35
264.68' Lt.
Manhole # 3

Sta. 47+17.15, ℄ Reloc. US-35
179.13' Lt.
Manhole # 2

Sta. 46+01.18, ℄ Reloc. US-35
161.55' Lt.
Manhole # 1

603-12"Type C 706.02 (D2250)
603-15"Type B 706.02 (D2500)

RAMP A

RAMP E

RAMP H

LA-RW

Inlet

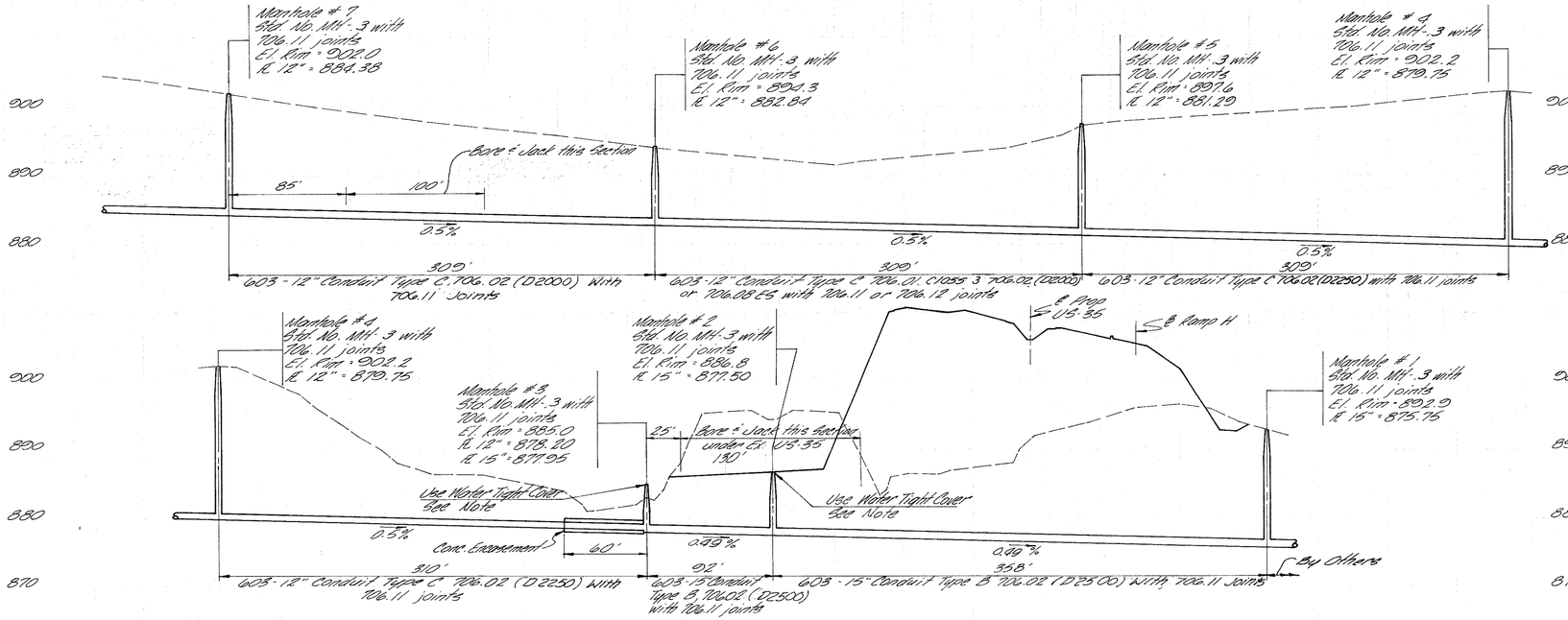
Curb Inlet

Catch Basin

Ditch

Note: Watertight frame and cover shall meet applicable material requirements of Item 604. In addition, bearing surfaces of frame and cover are to be machined and lids sealed with rubber gasket and fastened with bronze or stainless steel cap screws.

PARTICIPATION
18.48% PROJECT
81.52% GREENE COUNTY



ESTIMATED QUANTITIES

Item	Description	Quan.	Unit
603	8" Type B: 706.01, 706.02(D3000) or 706.08	833	L.F.
603	8" Type C: 706.01, 706.02 (D3000) or 706.08	18	L.F.
603	8" Type C: 706.01 Class 3, 706.02(D3000) or 706.08ES	18	L.F.
603	10" Type C: 706.01, 706.02 (D3000) or 706.08	398	L.F.
603	12" Type B: 706.02 (D2500)	298	L.F.
603	12" Type B: 706.02 (D3000)	53	L.F.
603	12" Type B: 706.02 (D3000) Bore & Jack	75	L.F.
603	12" Type C: 706.01, 706.02 (D2000) or 706.08	383	L.F.
603	12" Type C: 706.01 Class 3, 706.02 (D2000) or 706.08 ES	599	L.F.
603	12" Type C: 706.02 (D2000)	370	L.F.
603	12" Type C: 706.02 (D2000) Bore & Jack	100	L.F.
603	12" Type C: 706.02 (D2250)	918	L.F.
603	12" Type C: 706.02 (D2500)	272	L.F.
603	15" Type B: 706.02 (D2500)	320	L.F.
603	15" Type B: 706.02 (D2500) Bore & Jack	130	L.F.
604	MH-3 with 706.11 Joints	14	Ea.
604	MH-3, Manhole with Drop Pipe and 706.11 Joints	3	Ea.
604	MH-3, With 706.11 Joints & Watertight Frame & Cover	2	Ea.
511	Class C Concrete for encasement	159	C.Y.

Note: All conduit listed above shall be installed with 706.11 joints for concrete pipe or 706.12 joints for vitrified clay pipe

SANITARY SEWER

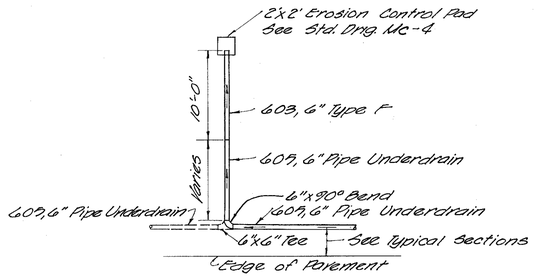
UNDERDRAIN OUTLET DETAILS

QUANTITY CALCULATIONS
BY H.L.F. DATE 12-4-71
CHKD. D.W.P. DATE 12-13-71
KING AND GAVARIS CONSULTING ENGINEERS

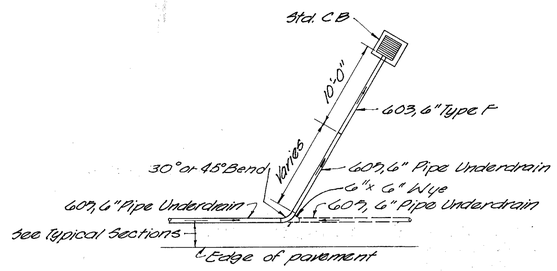
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

372
616

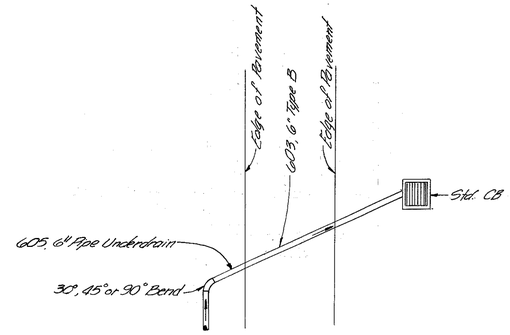
GRE-675-3.37
Revised: H.E.H. 12/78 GREENE COUNTY



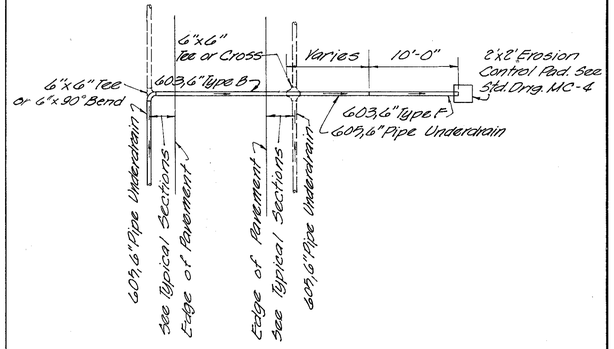
TYPE A



TYPE B



TYPE C



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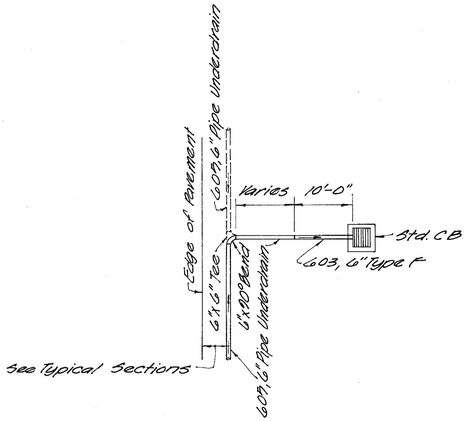
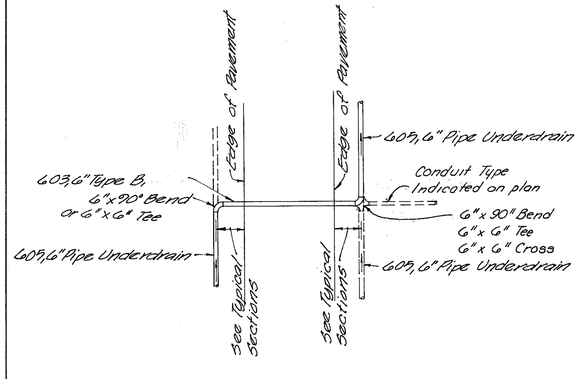


TYPE E



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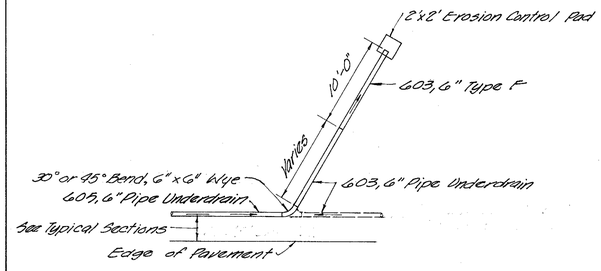
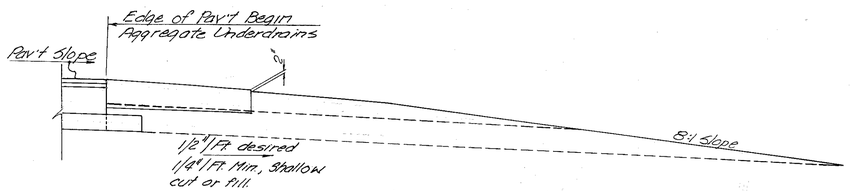


TYPE G

605 AGGREGATE DRAINS				
LOCATION	SIDE & LENGTH			
WILDONNA DRIVE	LEFT		RIGHT	
	14' Ea.		14' Ea.	
Sta. 1+00 - Sta. 2+00	2		3	
Sta. 2+50	1		1	
Sta. 3+00 - Sta. 3+50			2	
Total	3		6	



TYPICAL DETAILS - 605 AGGREGATE DRAINS

Scale ½" = 1'-0"

605 AGGREGATE DRAINS								
LOCATION	SIDE & LENGTH							
Kemp Road	Left				Right			
	4' Ea.	12' Ea.	18' Ea.	22' Ea.	18' Ea.	20' Ea.	22' Ea.
Sta 14+25 - Sta 17+25		1		12		1	1
Sta. 17+75			1		1		
Sta 25+50 - Sta 26+25		1	1	2			
Sta 26+50 - Sta 27+00	1	1			1		1
Total	1	3	2	14	2	1	2

SUMMARY ITEM 605			
Length	Side	No.	Length x No.
4	Lt.	1	4
12	Lt.	3	36
18	Lt.	2	36
18	Rt.	2	36
20	Rt.	1	20
22	Lt.	14	308
22	Rt.	2	44
14	Lt.	3	42
14	Rt.	6	84
Total			610

QUANTITY CALCULATIONS
BY H.L.F. DATE 10-4-71
CHKD. D.W.P. DATE 12-13-71
KING AND GATARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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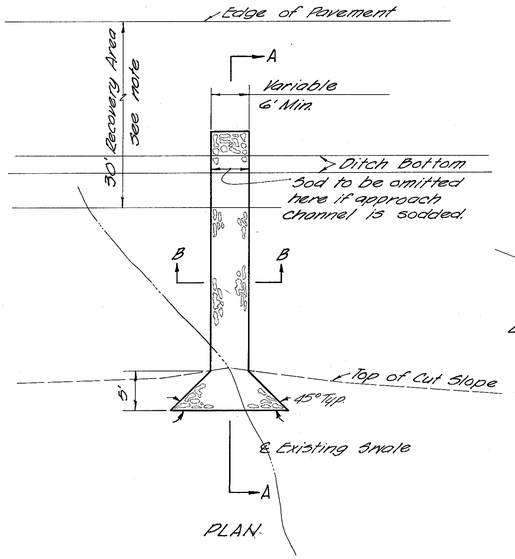
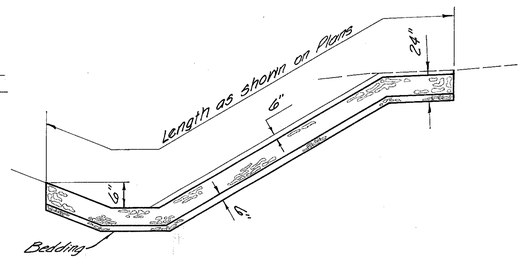
GRE-675-3.37
GREENE COUNTY

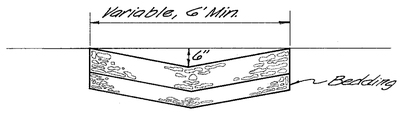


PLAN



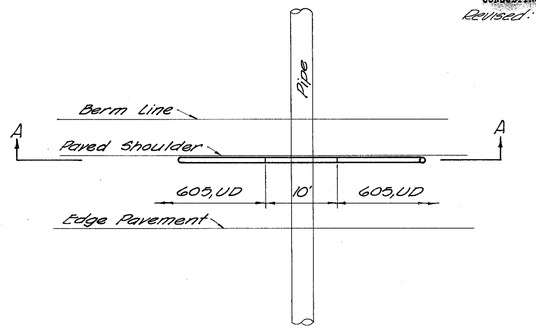
SECTION A-A

Note:
That portion of the Rock Channel Protection falling within the recovery area shall conform to aggregate as per item 601.08 of the specifications. Quantities shall be separated into Rock Channel Protection Type B and Rock Channel Protection as per plan for that portion within the recovery area.

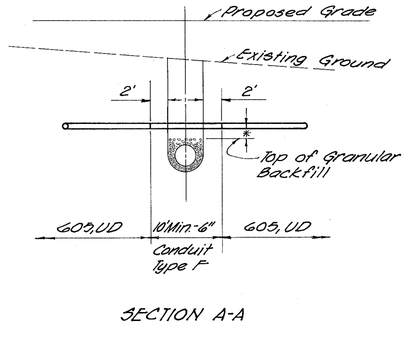


SECTION B-B

TYPICAL SWALE INTERCEPTION DETAIL
no scale



PLAN

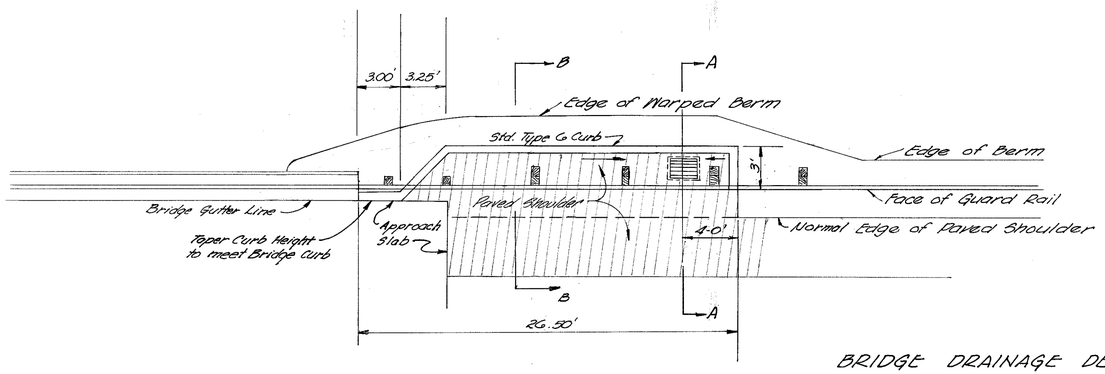


SECTION A-A

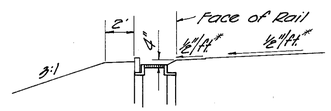
* If underdrain crosses a pipe trench within 2' of the granular backfill provide type "F" conduit of sufficient length to span the trench. Minimum length 10 feet.

TYPICAL UNDERDRAIN CROSSING DETAIL

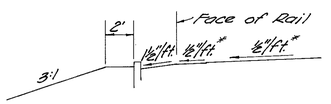
Note:
For Plan Dimensions and Pay Dimensions of Rock Channel Protection See Sheet 14



BRIDGE DRAINAGE DETAIL



SECTION A-A



SECTION B-B

* Same as Superelevation, ½"/Ft. min.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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GREENE COUNTY

Revised: I.E.H. 1/79

Zero Earthwork Back Headwall +35'

Area Cut S.F.	Vol. Cut C.Y.
0	
	6
39	
	48
54	
Total	54

Included in Roadway Earthwork

Headwall +27'

Included in Roadway Earthwork

Section @ Headwall

660 - 18" Sod Strip

660 - 3' Sod Collar

Cut-Off Wall

660 - 3' Sod Collar

601 - 6" Reinf. Concrete Riprop

Outlet Channel Cross-Section

312+70

65°00'

DRAINAGE AREA = 207 Ac.
Q100 = 360 cfs. Q_{50} = 305 cfs.

0' 20' 40'

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprop	61	S.Y.
601	Rock Channel Protection Type A, Bed.	39	C.Y.
602	Masonry	10.56	C.Y.
660	Sodding	34	S.Y.
203	Excavation	54	C.Y.
603	Conduit Type A; 78"-706.02 (0.1750)		
	or 102"-707.07 (0.109")	334	L.F.

℄ I-675

HW100 = 865.69
HW50 = 864.90

Cut-Off Wall
See Std. Dwg. MC-4

Std. HW-4 Headwall
℄ Inlet = 857.45

0.48%

Std. HW-4 Headwall
℄ Outlet = 856.00

601 - Rock Channel Protection Type A (36" Thick)

30' 183' 151' 5' 21'

603: 334' Conduit Type A; 78"-706.02 (0.1750) or 102"-707.07 (0.109")

880
860
840

Sta. 312+70 I-675

DRAINAGE DETAIL

QUANTITY CALCULATIONS
BY H.L.F. DATE 10-15-71
CHKD. D.J.P. DATE 12-15-71
KING AND GAVARIS
CONSULTING ENGINEERS
Rev: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37
GREENE COUNTY

DRAINAGE AREA = 326 Ac.
Q_{100} = 485 cfs. Q_{50} = 410 cfs.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	9	S.Y.
601	Rock Channel Protection Type A, Bed.	50	C.Y.
602	Masonry	14.73	C.Y.
603	15" Conduit Type B	115	L.F.
603	Conduit Type A; 84"-706.02 (D3000)		
	or 114"-707.07 (0.168")	278	L.F.
603	Conduit Type A; 84"-706.02 (D1250)		
	or 114"-707.07 (0.109")	169	
604	Std. No. CB-5	3	Ea.
660	Sodding	211	S.Y.
603	15" Conduit Type C	51	L.F.

DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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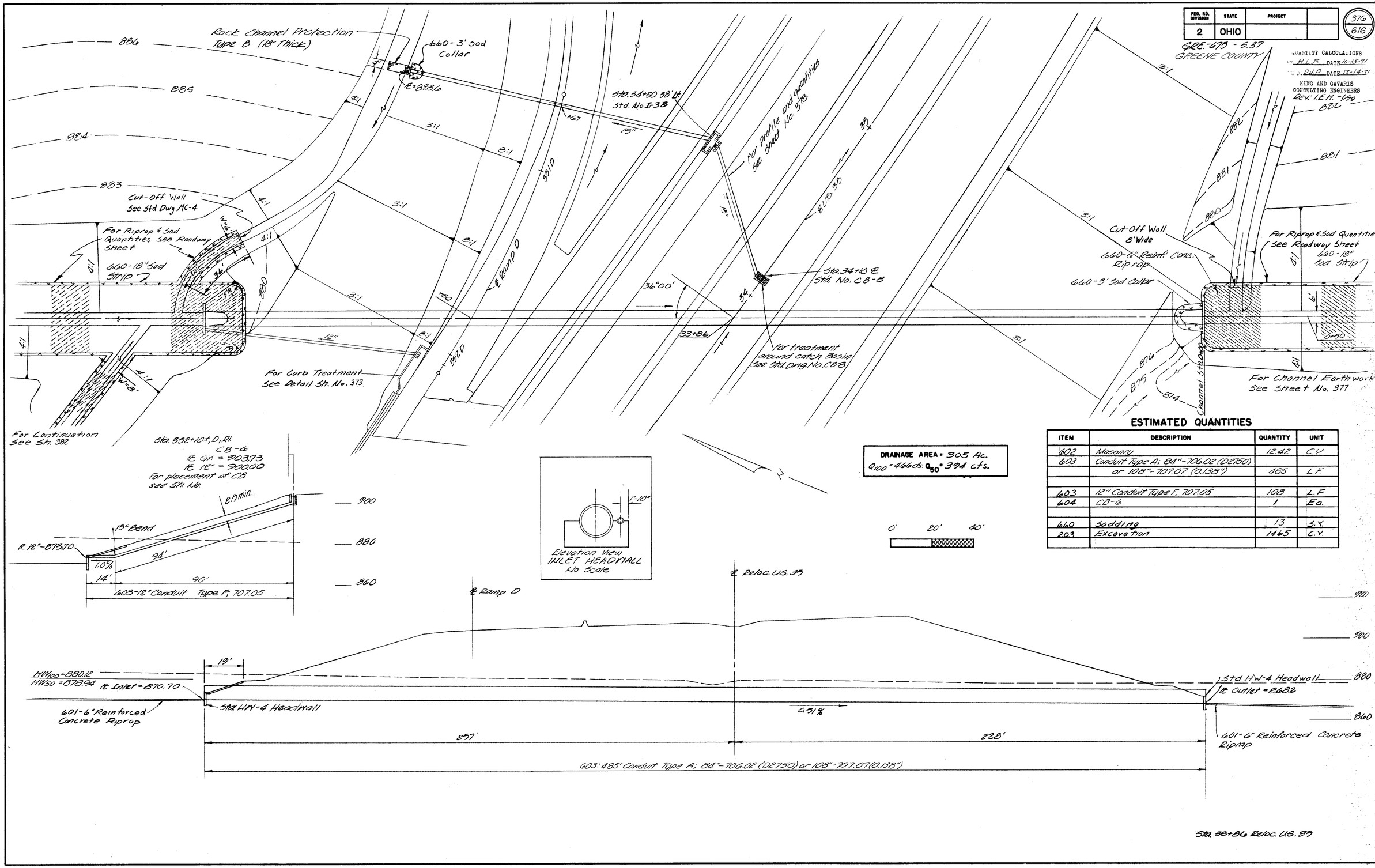
GRE-675 - 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY H.L.F. DATE 10-15-71
CHK. D.J.P. DATE 12-14-71
KING AND GAVARIS
CONSULTING ENGINEERS
Rev: I.E.H. - 1/99

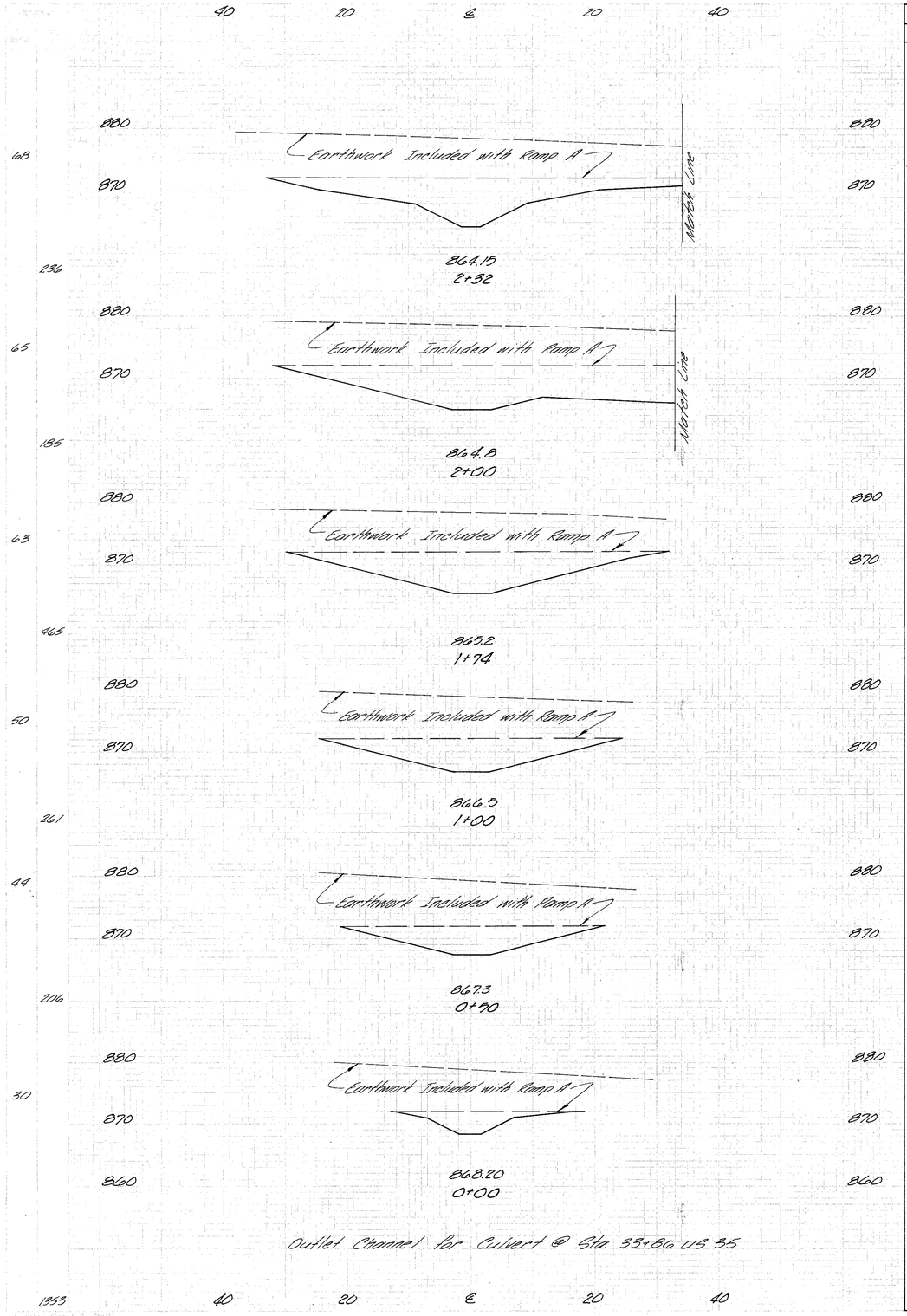


ESTIMATED QUANTITIES

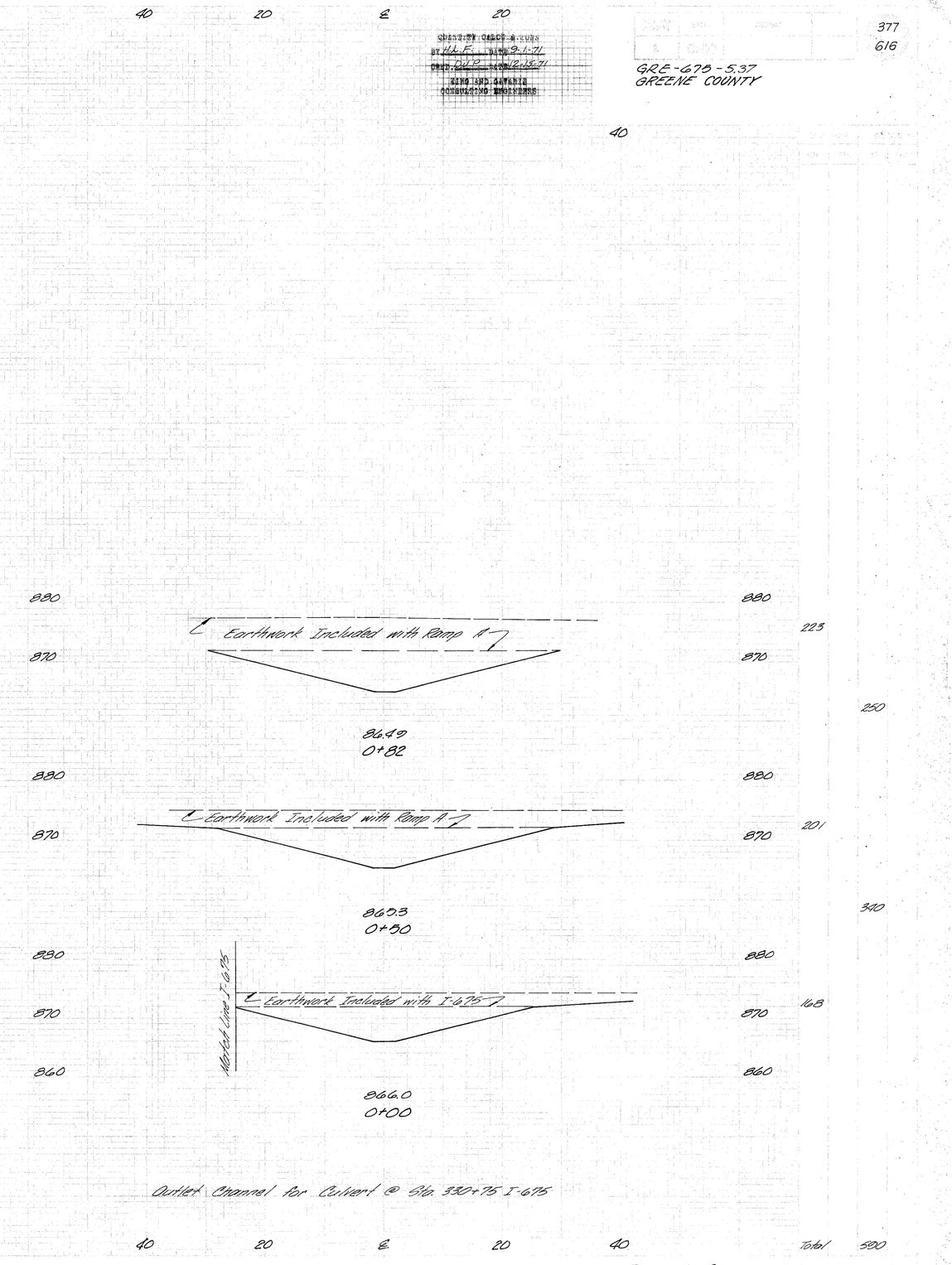
ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	12.42	C.Y.
603	Conduit Type A; 84"-706.02 (D2750)		
	or 108"-707.07 (0.138")	485	L.F.
603	12" Conduit Type F, 707.05	108	L.F.
604	CB-6	1	Ea.
660	Sodding	13	S.Y.
203	Excavation	1465	C.Y.

DRAINAGE DETAIL

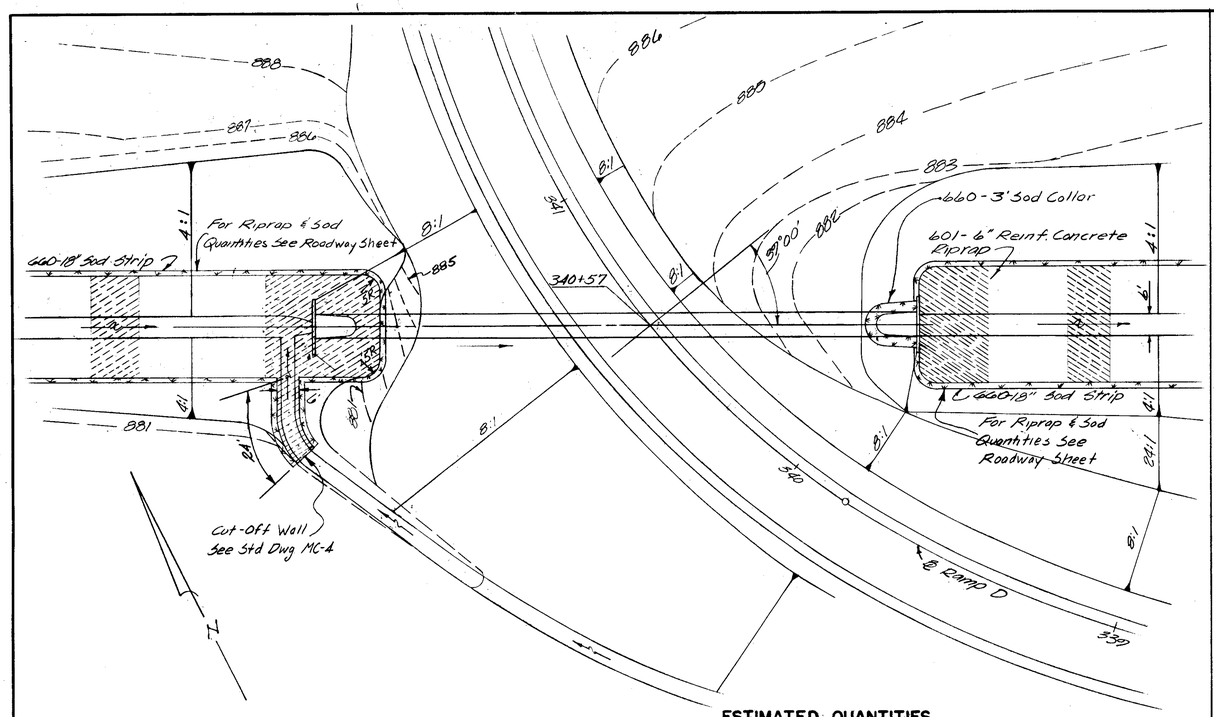
GRE-675-5.37
GREENE COUNTY



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL	SEEDING END WIDTH	SEEDING SQ. YDS.
224					
		319			
314					
		256			
217					
		499			
				62	
147					
		242			213
114				58	
		149			306
47				52	
Total		1465			519



DRAINAGE DETAIL

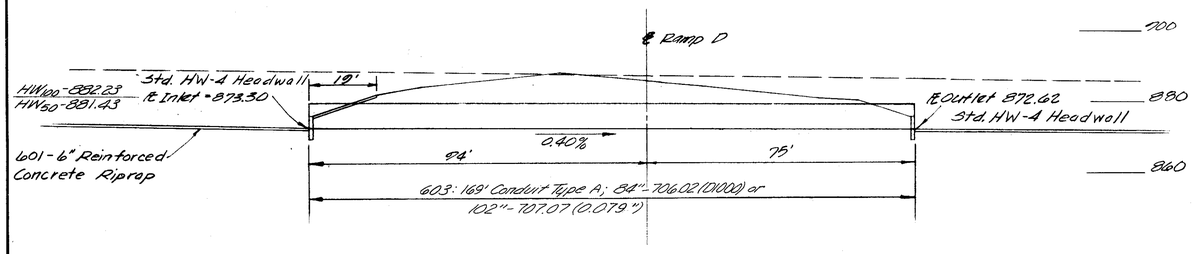


DRAINAGE AREA = 2.52 Ac.
Q_{100} = 4.10 cfs; Q_{50} = 3.47 cfs.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	10.56	C.Y.
603	Conduit Type A: 84"-706.02(.01000)		
	" or 102"-707.07(.0079")	169	L.F.
660	Sodding	10	S.Y.

0' 20' 40'



Sta. 340+97 Ramp D

ESTIMATED QUANTITIES

Sta. 34+10 US-35-Sta. 350+67 D

601	Rock Channel Protection, Type B, Bed.	3 C.Y.
602	Masonry	0.27 C.Y.
603	15" Conduit Type B	166 L.F.
603	15" Conduit Type F, 707.05	59 L.F.
604	Std. No. CB-B	1 Ea.
604	Std. No. I-3	1 Ea.
660	Sodding	69 S.Y.

QUANTITY CALCULATIONS
H.W.F. DATE 10-15-71
R.W.P. DATE 10-14-72
KING AND GAVARIS CONSULTING ENGINEERS
Revised: I.E.H. - 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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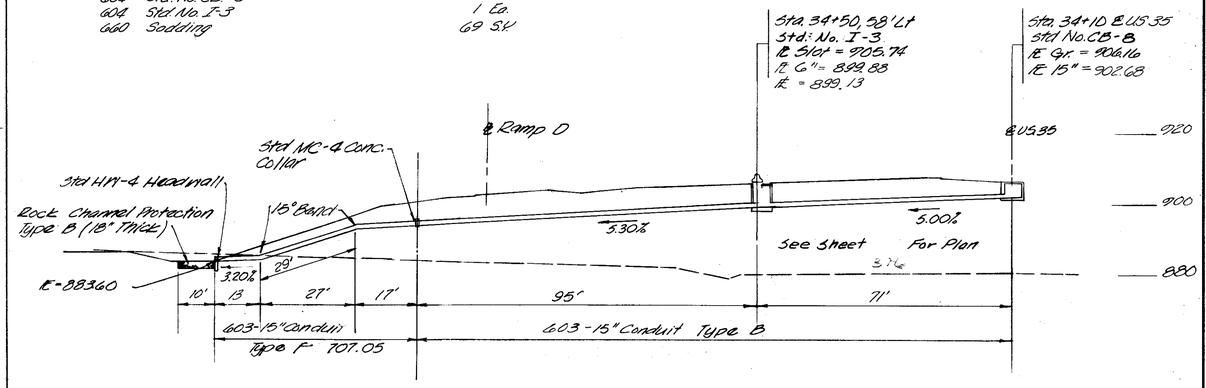
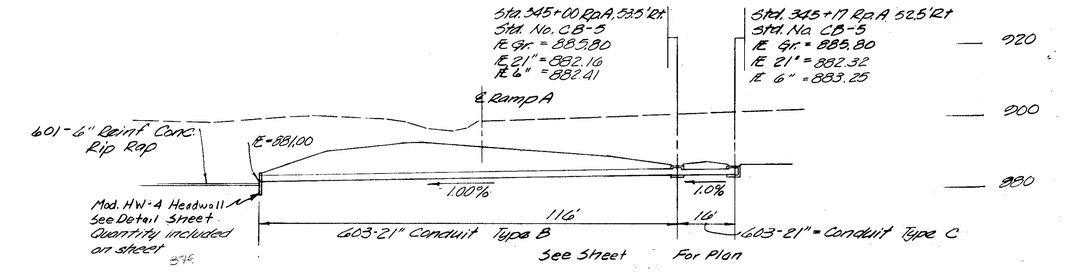
616

GRE-675 - 5.37
GREENE COUNTY

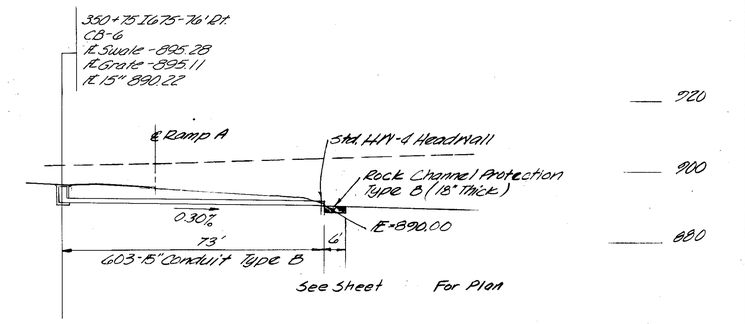




ESTIMATED QUANTITIES

STA. 344+89.5 A-345+17 A

603	21" Conduit Type B	116 L.F.
603	21" Conduit Type C	16 L.F.
604	Std. No. CB-5	2 Ea.
660	Sodding	200 S.Y.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
	STA. 350+75 I-675		
601	Rock Channel Protection Type B, Bed.	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	73	L.F.
604	Std No. CB-6	1	Ea.
660	Sodding	5	S.Y.

0' 20' 40'

Profiles
US-35 Sta. 34+10 to 34+50
Ramp A Sta. 345+00
Ramp A Sta. 350+75

DRAINAGE DETAIL

QUANTITY CALCULATIONS
H.L.F. DATE 10-15-71
D.V.P. DATE 12-14-71
KING AND GAVARIS CONSULTING ENGINEERS
Revised 12-11-79

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GRE-675 - 5 - 37
GREENE COUNTY

For Treatment Around Catch Basins See Std. Dwg. CB-5

Sta. 345+00 Rp. A 53.5' Rt. Std. No. CB-5

Sta. 345+17 Rp. A 52.5' Rt. Std. No. CB-5

For Profile and Quantities See Sheet No. 378

Cut-Off Wall

660-18" Sod Strip

660-3' Sod Collar

Cut-Off Wall See Std Dwg. MC-4

For Riprap & Sod Quantities See Roadway Sheet

Prop. 12" San. See Sh. 303-305

Prop. 12" San.

For Riprap & Sod Quantities See Roadway Sheet

660-18" Sod Strip

Cut-Off Wall 6' Wide

For Profile and Quantities See Sheet No. 403.

Rock Channel Protection Type B (18" Thick)

660-3' Sod Collar

For Profile and Quantities See Sheet No. 378

Sta. 350+75 I-675-76' Rt. CB-6

℄ Dayton Xenia Road

℄ Penn Central R.R.

℄ Ramp A

42+06.5

40°45'

903

904

902

900

901

905

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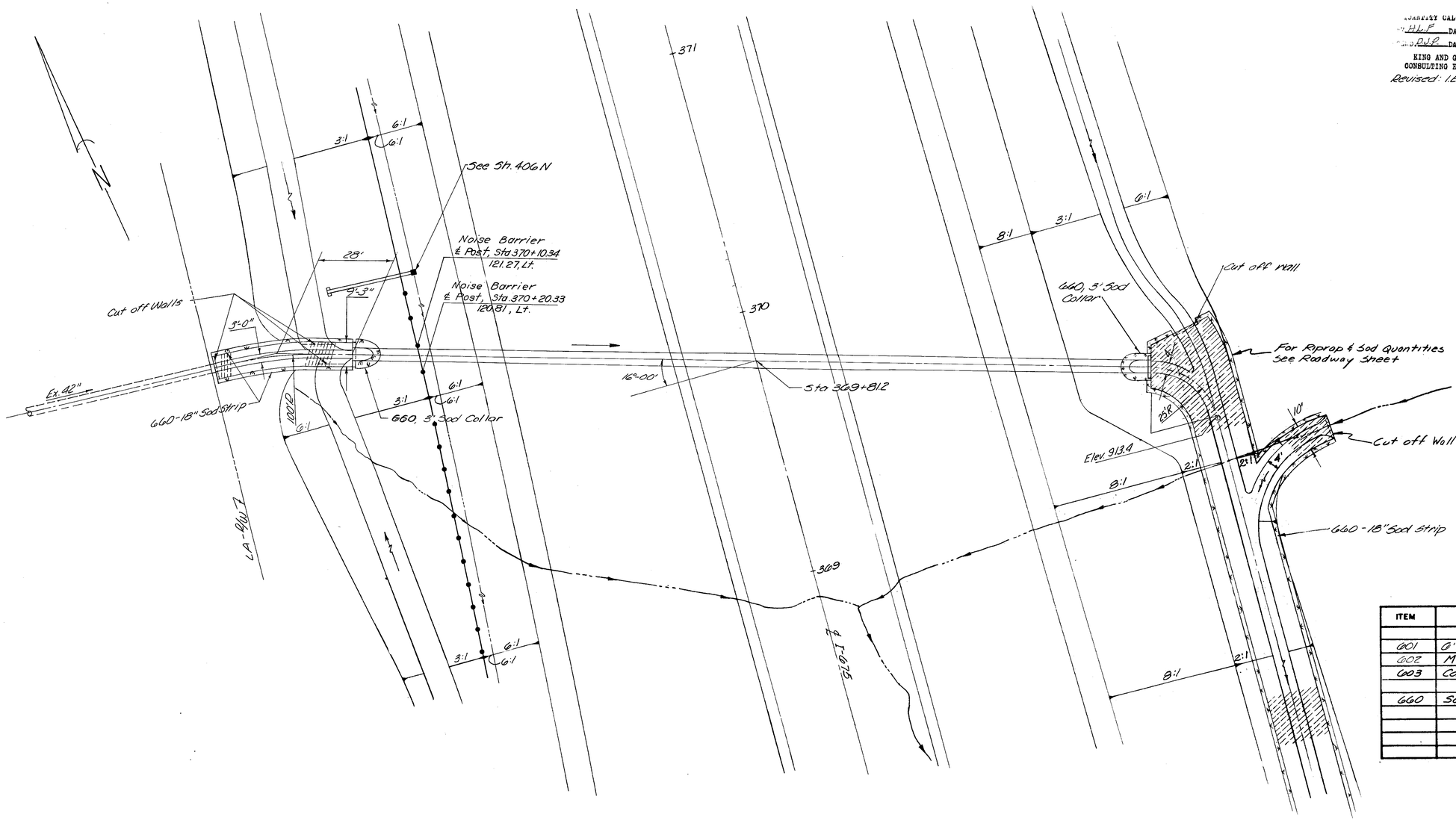
QUANTITY CALCULATIONS
H.L.F. DATE 3-21-71
P.W.P. DATE 11-17-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

380
616

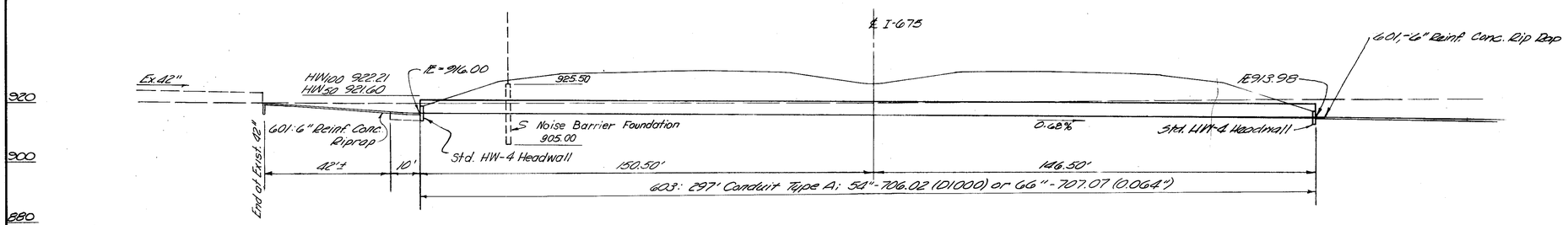
GRE-670 - 5.37
GREENE COUNTY



DRAINAGE AREA = 58 Ac.
Q_{100} = 154 c.f.s. Q_{50} = 130 c.f.s.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	53	S.Y.
602	Masonry	4.12	C.Y.
603	Conduit Type A; 54" 706.02		
	(D1000) or 66"-707.07(0.064")	297	L.F.
660	Sodding	35	S.Y.



0 20' 40'

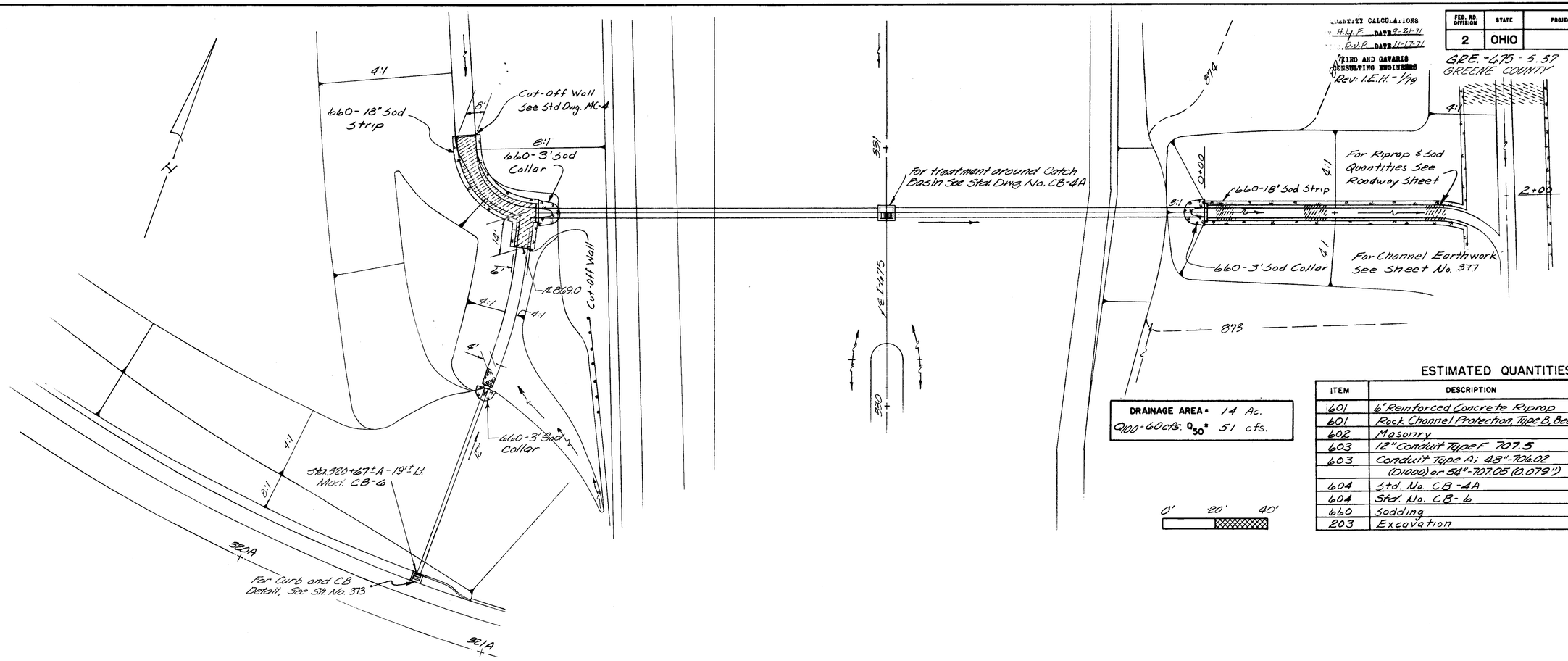
NOTE: The Contractor shall co-ordinate the installation of the pipe with the installation of the Noise Barrier Posts to assure that the two do not conflict.

I-675
STA 369+81.2

DRAINAGE DETAIL

QUANTITY CALCULATIONS
H.L.F. DATE 9-21-71
D.V.P. DATE 11-17-71
KLING AND GAVARIS CONSULTING ENGINEERS
Rev: I.E.H. - 1/79

GRE.-675 - 5.37
GREENE COUNTY

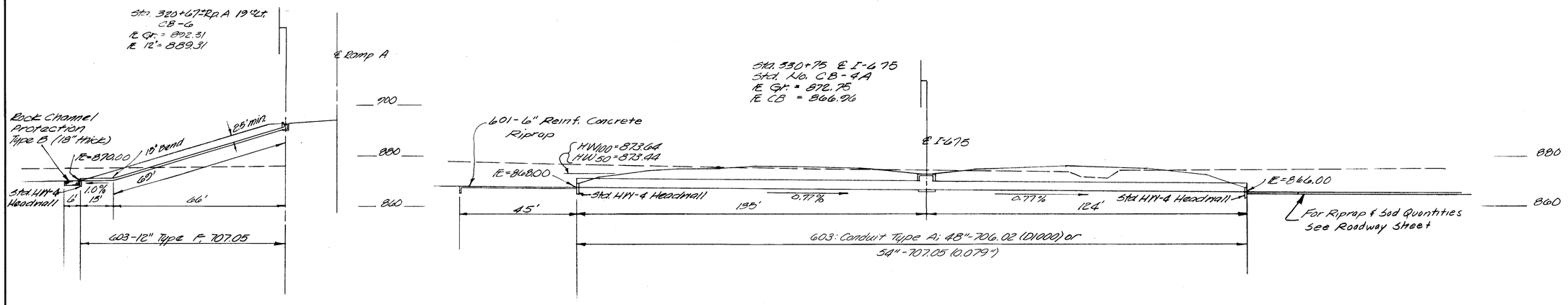


DRAINAGE AREA = 14 Ac.
Q100 = 60 cfs; Q50 = 51 cfs.

0' 20' 40'

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	47	S.Y.
601	Rock Channel Protection, Type B, Bed	2	C.Y.
602	Masonry	2.87	C.Y.
603	12" Conduit Type F 707.5	82	L.F.
603	Conduit Type A; 48"-706.02 (D1000) or 54"-707.05 (0.079")	259	L.F.
604	Std. No. CB-4A	1	Ea.
604	Std. No. CB-6	1	Ea.
660	Sodding	137	S.Y.
203	Excavation	590	C.Y.



Sta 330+75 I-675

DRAINAGE DETAIL

QUANTITY CALCULATIONS
H.L.F. DATE 10-28-71
R.W.P. DATE 12-16-71
KING AND SAVARIS CONSULTING ENGINEERS
Rev. H.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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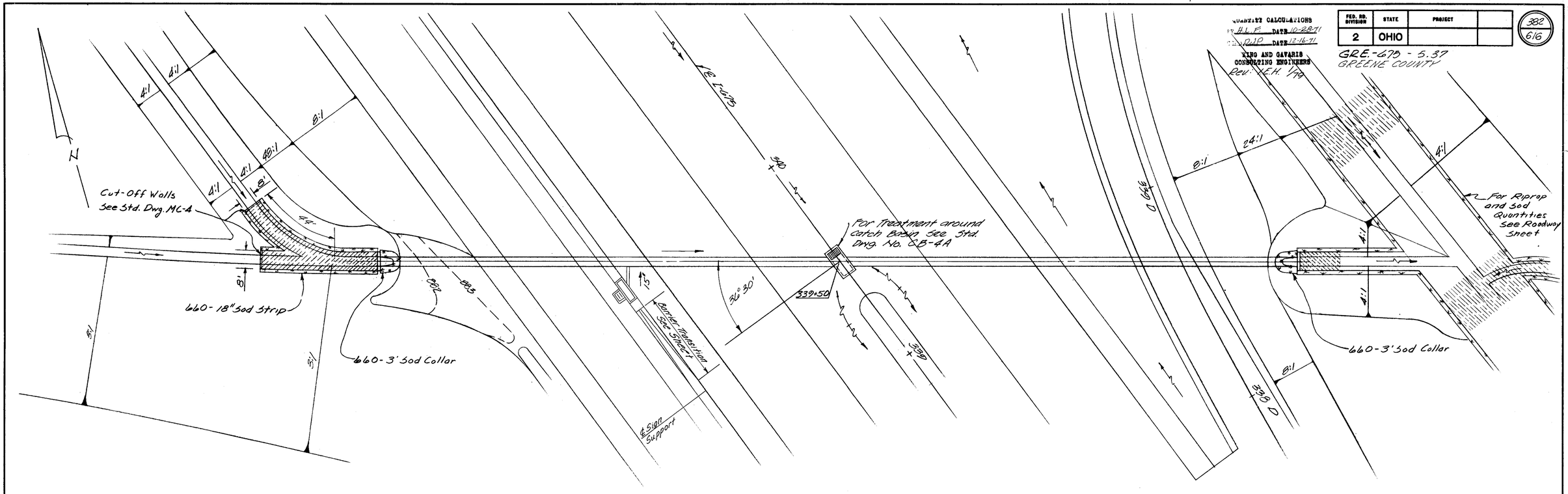
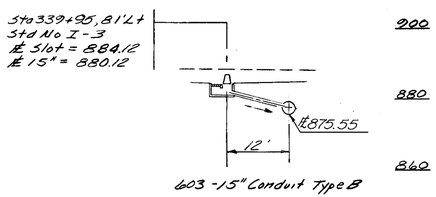
GREENE COUNTY



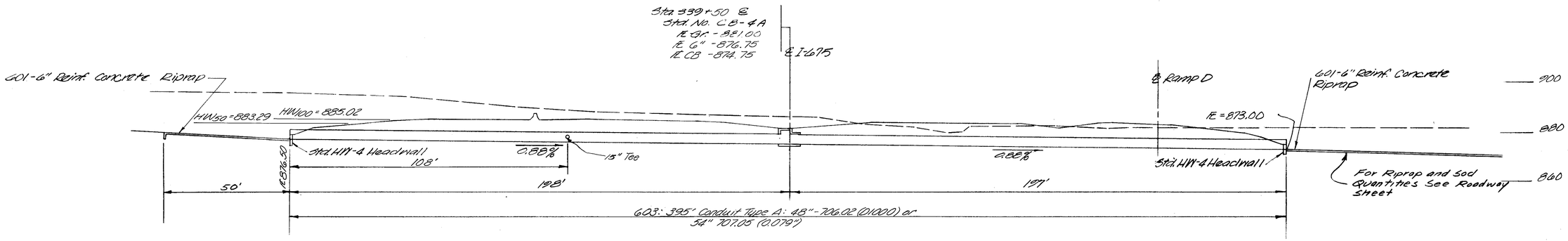


DRAINAGE AREA = 39 Ac.
Q100-119cfs: Q_{50} = 101 cfs

0' 20' 40'

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	71	S.Y.
602	Masonry	2.66	C.Y.
603	15" Conduit Type B	12	L.F.
603	Conduit Type A: 48"-706.02(01000)		
	or 54"-707.05 (0.079")	395	L.F.
604	Std. No. CB-4A	1	Ea.
604	Std. No. I-3	1	Ea.
660	Sodding	331	S.Y.



Sta. 339+50 I-675

DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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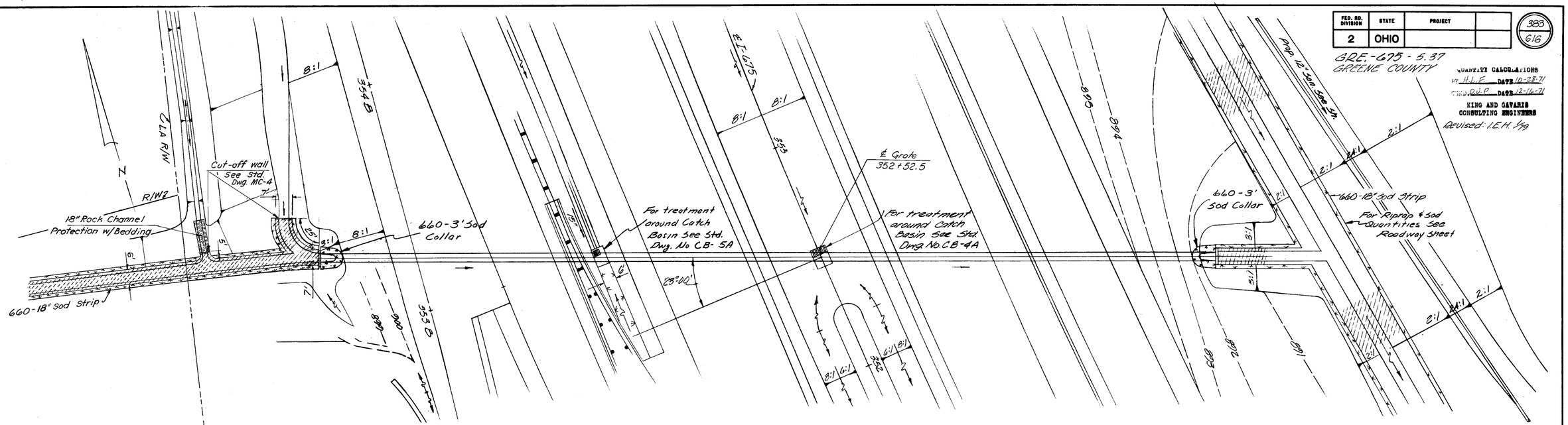
616

GRE-675 - 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY H.L.E. DATE 10-28-71
CHKD. D.W.P. DATE 12-16-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79



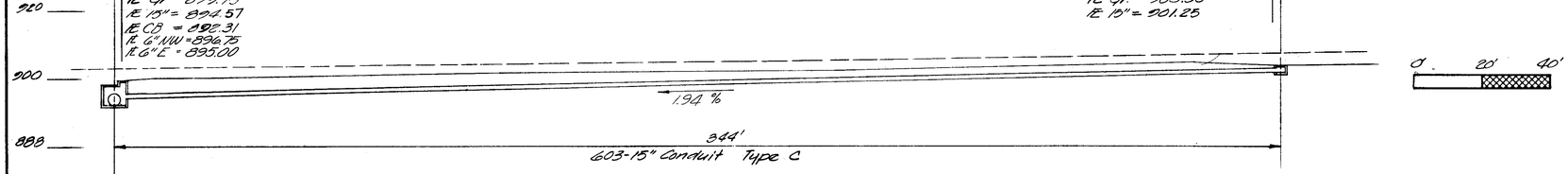
Estimated Quantities
Sta. 352+88± Sta. 356+25

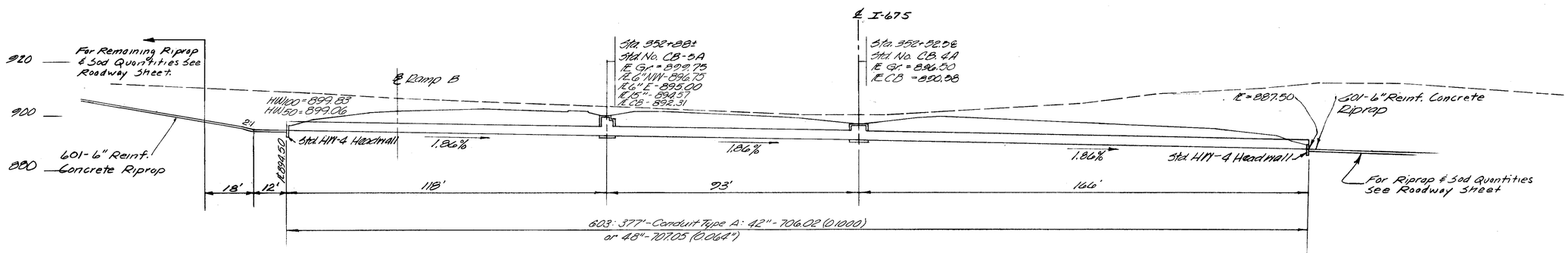
603: 15" Conduit Type C	344	L.F.
604: Std. No. CB-5	1	Eo.
660: Sodding	100	Sq. Yd.

DRAINAGE AREA =	2.5 Ac.
Q100=90 cfs: Q_{50}=	76 cfs.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
	Sta. 352+52.5		
601	6" Reinf. Concrete Riprap	33	S.Y.
602	Masonry	2.20	C.Y.
603	Conduit Type A; 42"-706.02(.01000)		
603	or 48"-707.05 (.0064)	377	L.F.
604	Std. No. CB-4A	1	Eo.
604	Std. No. CB-5A	1	Eo.
660	Sodding	381	S.Y.





Sta. 352+52.5 ℄

DRAINAGE DETAIL

QUANTITY CALCULATIONS
BY H.L.F. DATE 9-16-71
CHKD. D.W.P. DATE 12-8-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: 1.E.H. - 1/19

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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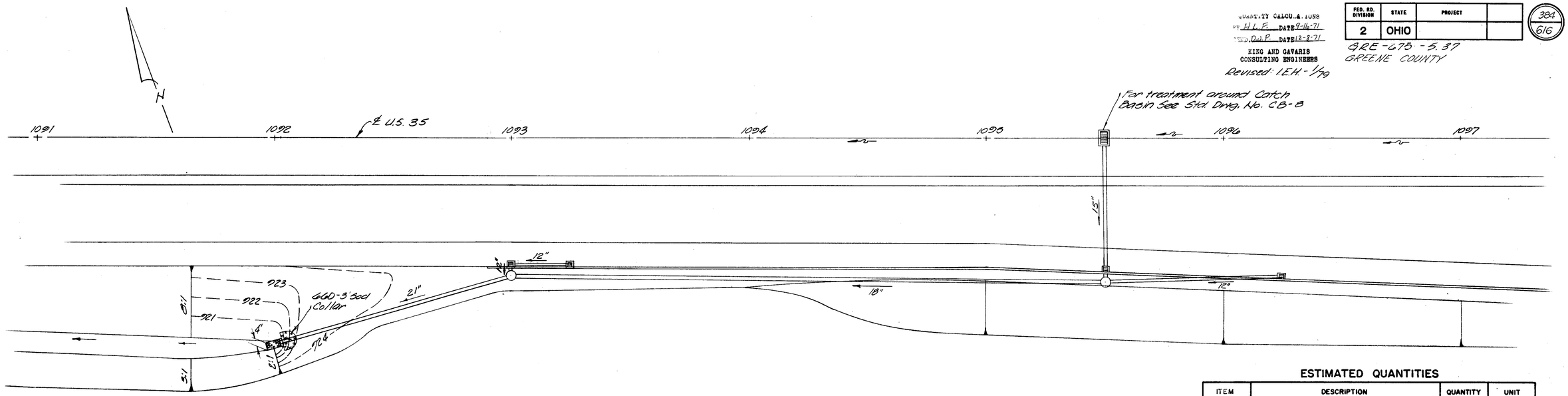
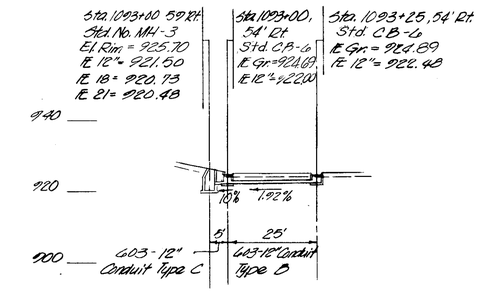
616

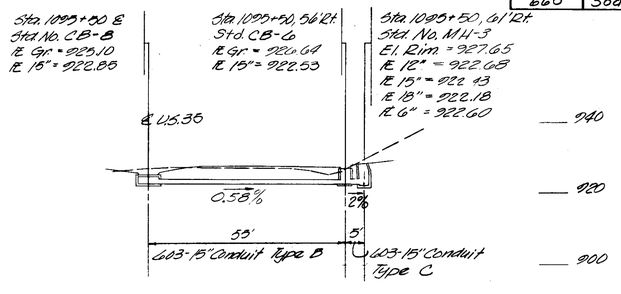
GRE-675-5.37
GREENE COUNTY



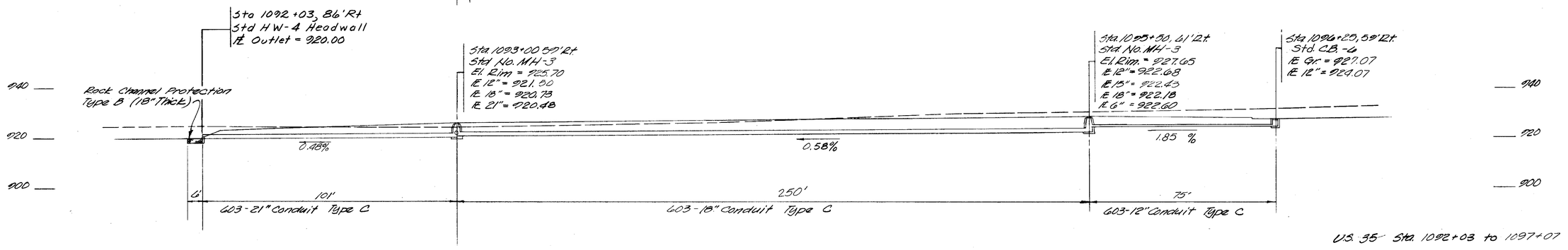
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.39	C.Y.
603	12" Conduit Type B	25	L.F.
603	12" Conduit Type C	80	L.F.
603	15" Conduit Type B	55	L.F.
603	15" Conduit Type C	5	L.F.
603	18" Conduit Type C	250	L.F.
603	21" Conduit Type C	101	L.F.
604	Std No. CB-8	1	Ea.
604	Std. No. CB-6	4	Ea.
604	Std No MH-3	2	Ea.
660	Sodding	103	S.Y.





0' 20' 40'



U.S. 35 Sta. 1092+03 to 1097+07

DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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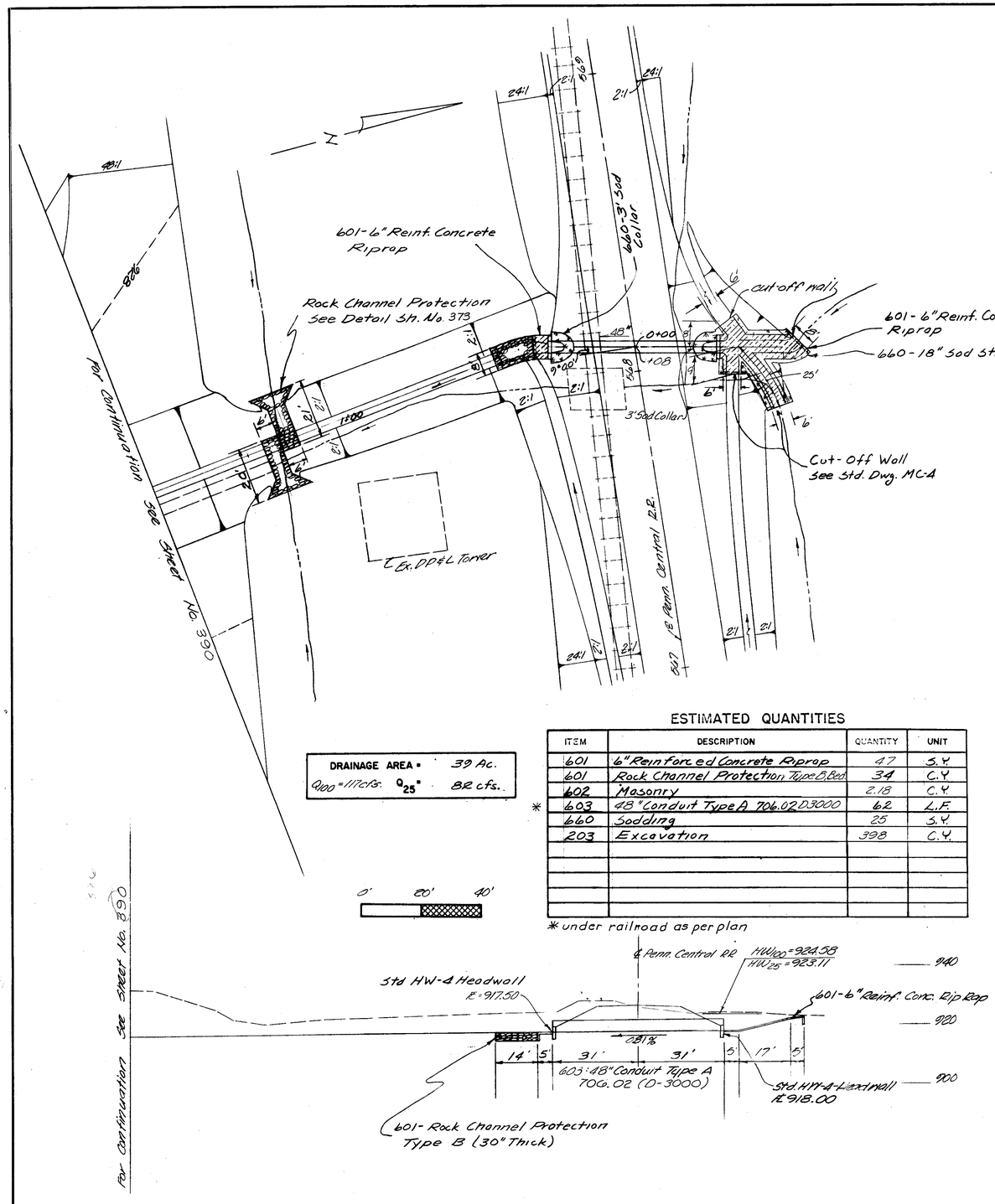
616

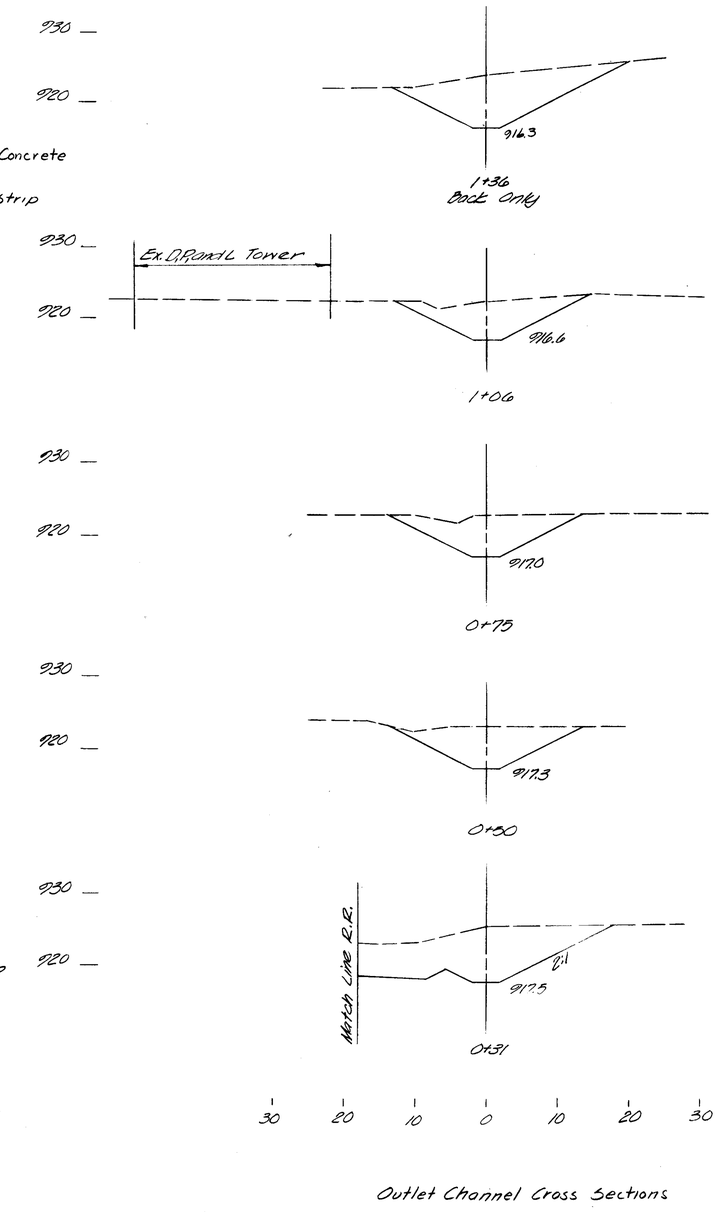
GRE.-675-5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY A.L.P. DATE 9-16-71
CHKD. D.V.P. DATE 12-8-71
KING AND GATARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/19



ESTIMATED QUANTITIES

	ITEM	DESCRIPTION	QUANTITY	UNIT
	601	6" Reinforced Concrete Riprap	47	S.Y.
	601	Rock Channel Protection Type B Bed	34	C.Y.
	602	Masonry	2.18	C.Y.
*	603	48" Conduit Type A 706.02 D3000	62	L.F.
	660	Sodding	25	S.Y.
	203	Excavation	398	C.Y.



Outlet Channel Cross Sections

Area Cut S.F.	Vol. Cut C.Y.
138	
	124
85	
	100
89	
	82
88	
	92
174	
Total	398

Penn Central R.R.
Sta. 568+08

DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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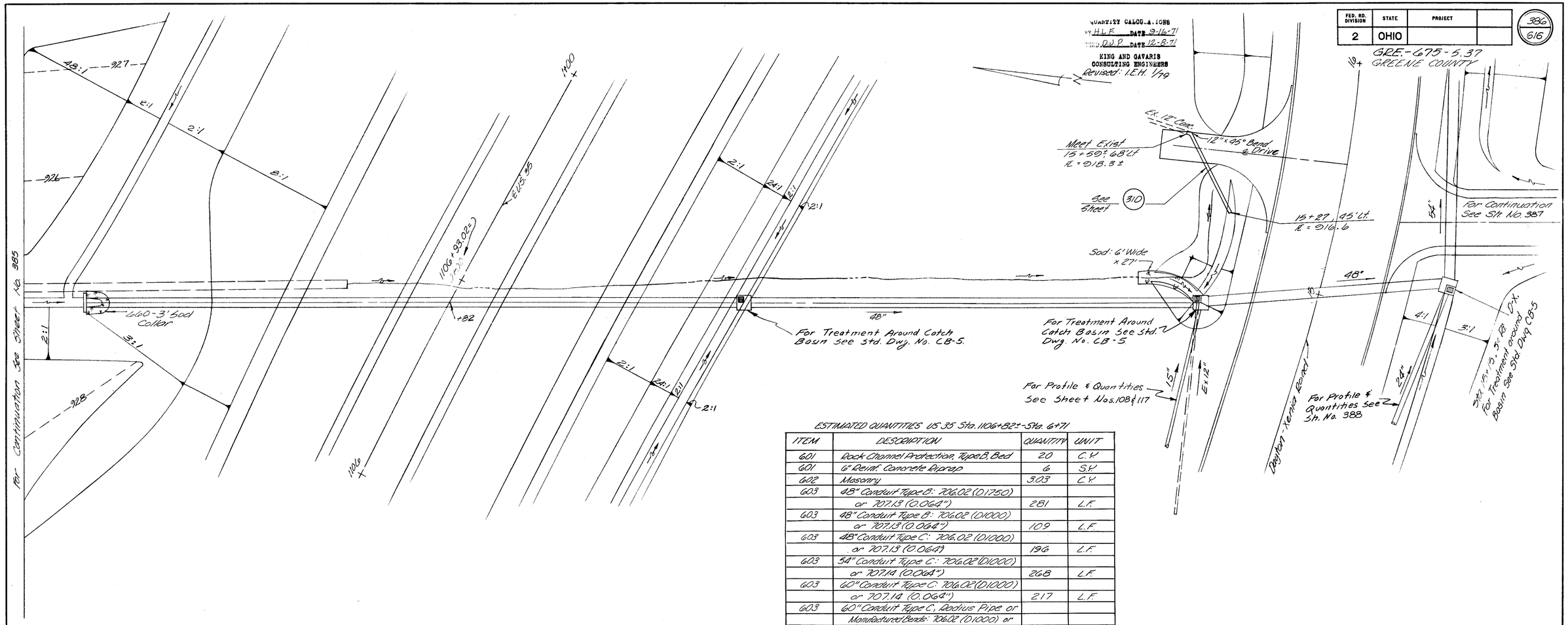
616

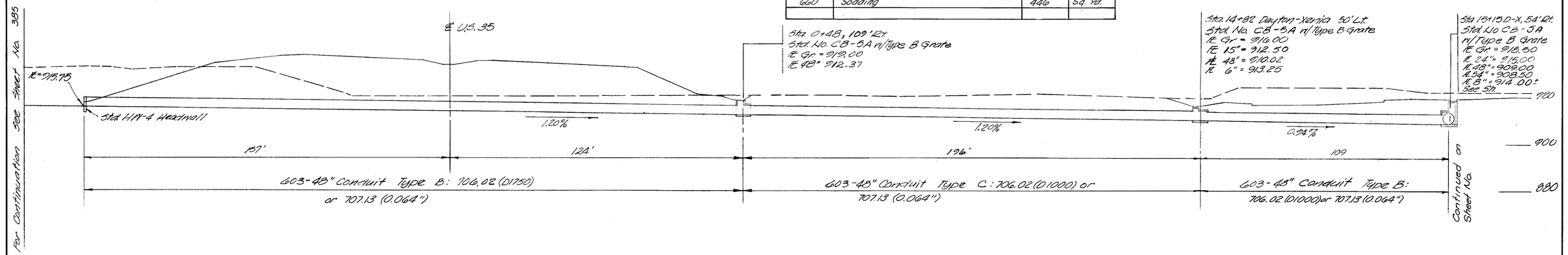
QUANTITY CALCULATIONS
BY H.L.F. DATE 9-16-71
CHKD. D.J.P. DATE 12-8-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79

GRE-675-5.37
GREENE COUNTY



ESTIMATED QUANTITIES US 35 Sta. 1106+82± - Sta. 6+71

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection, Type B, Bed	20	C.Y.
601	6" Reinf. Concrete Riprap	6	S.Y.
602	Masonry	3.03	C.Y.
603	48" Conduit Type B: 706.02 (D1750)		
	or 707.13 (0.064")	281	L.F.
603	48" Conduit Type B: 706.02 (D1000)		
	or 707.13 (0.064")	109	L.F.
603	48" Conduit Type C: 706.02 (D1000)		
	or 707.13 (0.064")	196	L.F.
603	54" Conduit Type C: 706.02 (D1000)		
	or 707.14 (0.064")	268	L.F.
603	60" Conduit Type C: 706.02 (D1000)		
	or 707.14 (0.064")	217	L.F.
603	60" Conduit Type C, Radius Pipe or		
	Manufactured Bends: 706.02 (D1000) or		
	707.14 (0.064")	40	L.F.
604	Std. No. CB-5-A w/B Grate	4	Eq.
660	Sodding	446	Sq. Yd.



US-35 Sta. 1106+82

DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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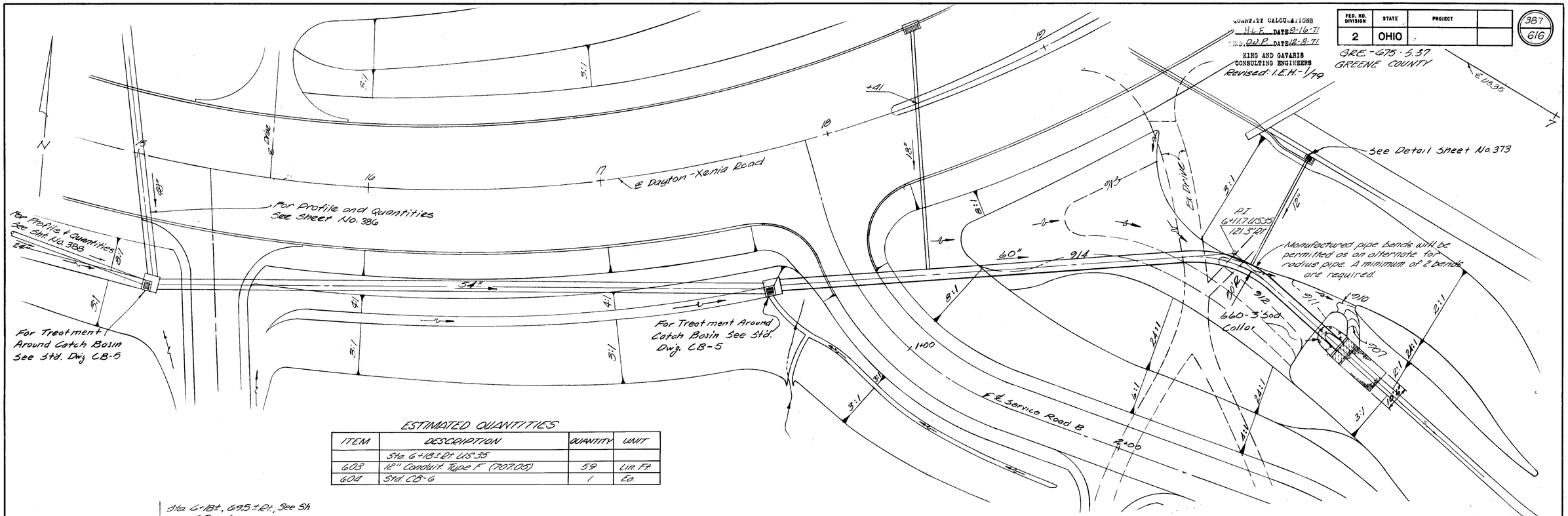
616

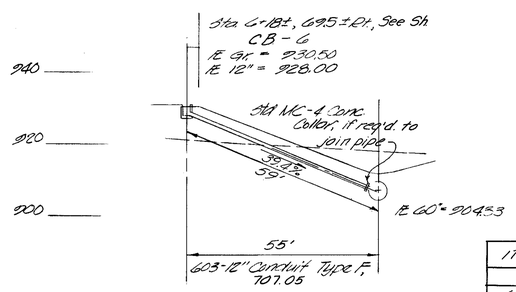
GRE.-675-5.37
GREENE COUNTY

QUANTITY CALCULATIONS
H.W.F. DATE 2-16-71
CHD. D.W.P. DATE 12-8-71
KING AND GAVARIS CONSULTING ENGINEERS
Revised: I.E.H.-1/79



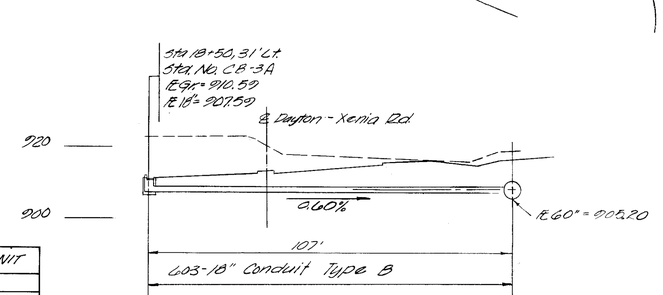
ESTIMATED QUANTITIES

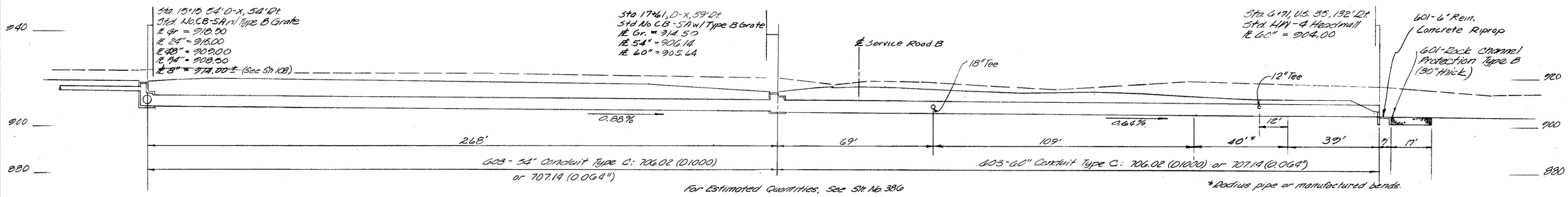
ITEM	DESCRIPTION	QUANTITY	UNIT
	Sta 6+18.3 Rt. US 35		
603	12" Conduit Type F (707.05)	59	Lin. Ft.
604	Std. CB-6	1	Ea.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
	Sta 18+41 D-X Rd.		
603	18" Conduit Type B	107	Lin Ft
604	Std. No. CB-3A	1	Ea



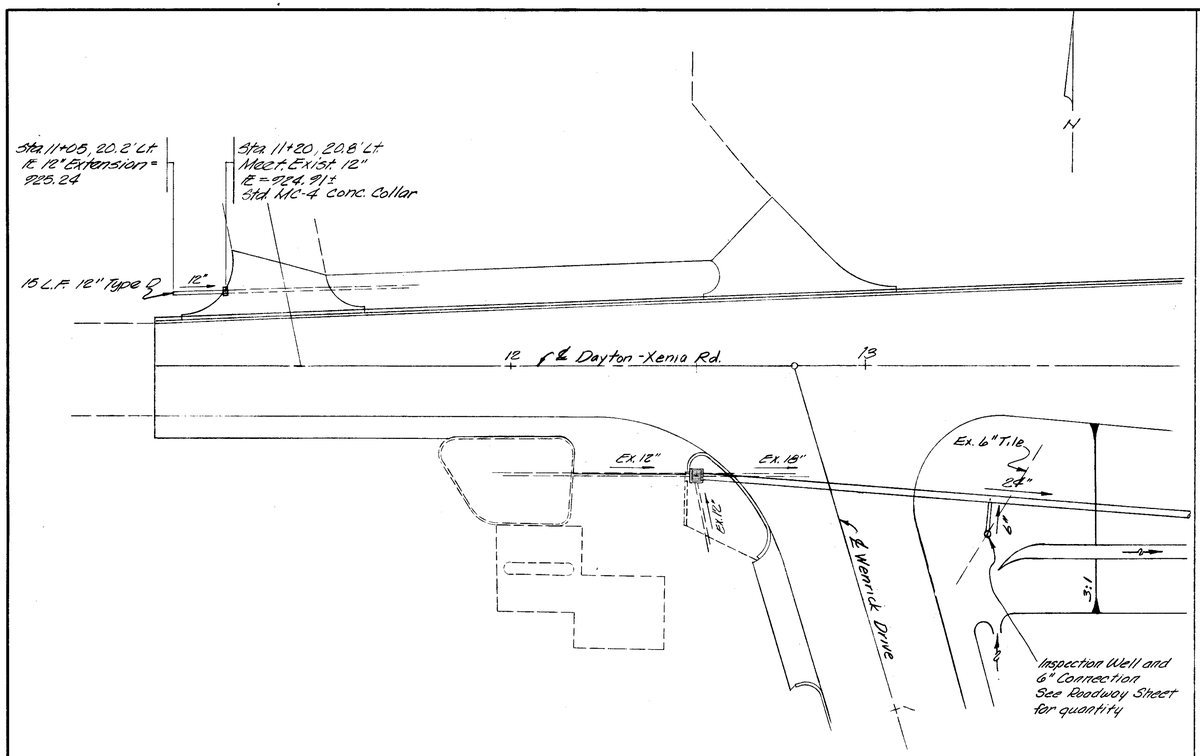


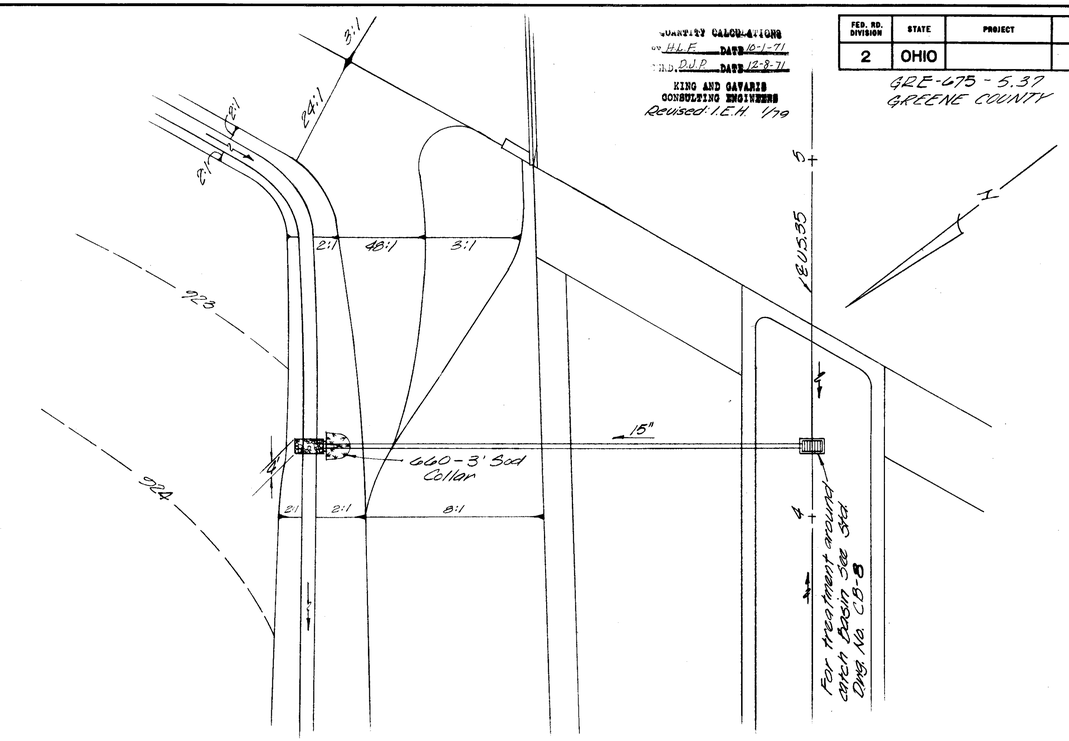
For Estimated Quantities, See Sht. No. 386

*Radius pipe or manufactured bends.

Dayton-Xenia Rd. Sta. 15+15 to US 35 Sta. 6+71

DRAINAGE DETAIL





QUANTITY CALCULATIONS
BY H.L.F. DATE 12-1-71
CHKD. D.W.P. DATE 12-8-71
KING AND GAVARIS CONSULTING ENGINEERS
Revised: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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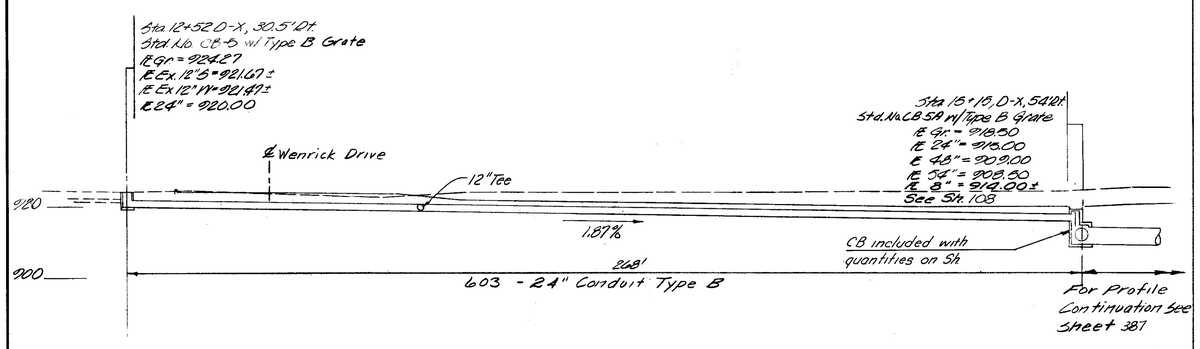
GRE-675-5.37
GREENE COUNTY

ESTIMATED QUANTITIES

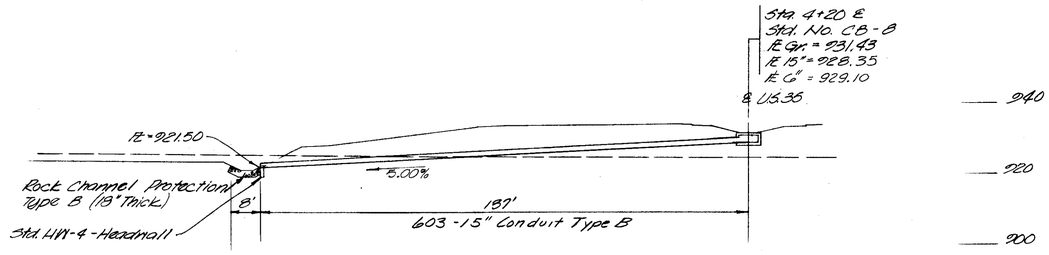
ITEM	DESCRIPTION	QUANTITY	UNIT
603	12" Conduit Type D	15	L.F.
603	24" Conduit Type B	268	L.F.



Dayton Xenia Rd. Sta. 12+52 to 18+18

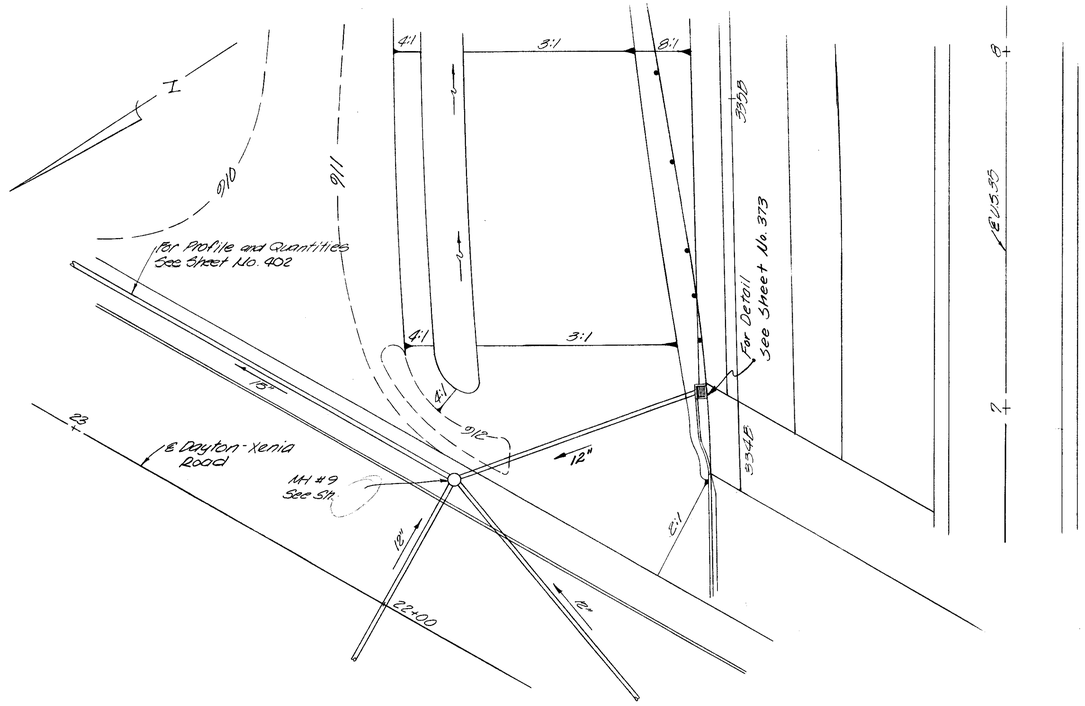
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	137	L.F.
604	Std. No. CB-8	1	Ea.
660	Sodding	103	S.Y.



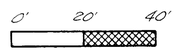
US.35 Sta. 4+20

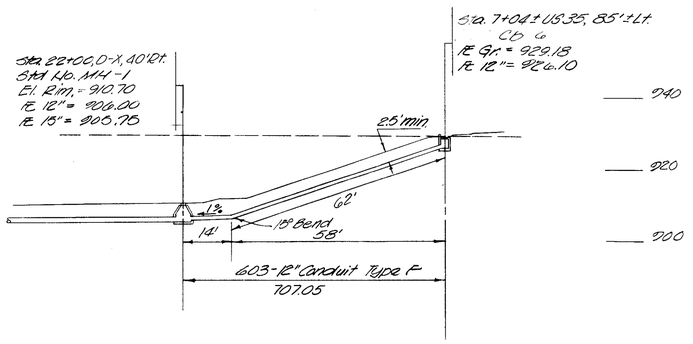
DRAINAGE DETAIL



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
603	12" Conduit Type F 707.05	76	L.F.
604	CB-6	1	Ea.





US-35 Sta. 7+05

QUANTITY CALCULATIONS
BY H.L.F. DATE 10-1-71
CHKD. D.W.P. DATE 12-8-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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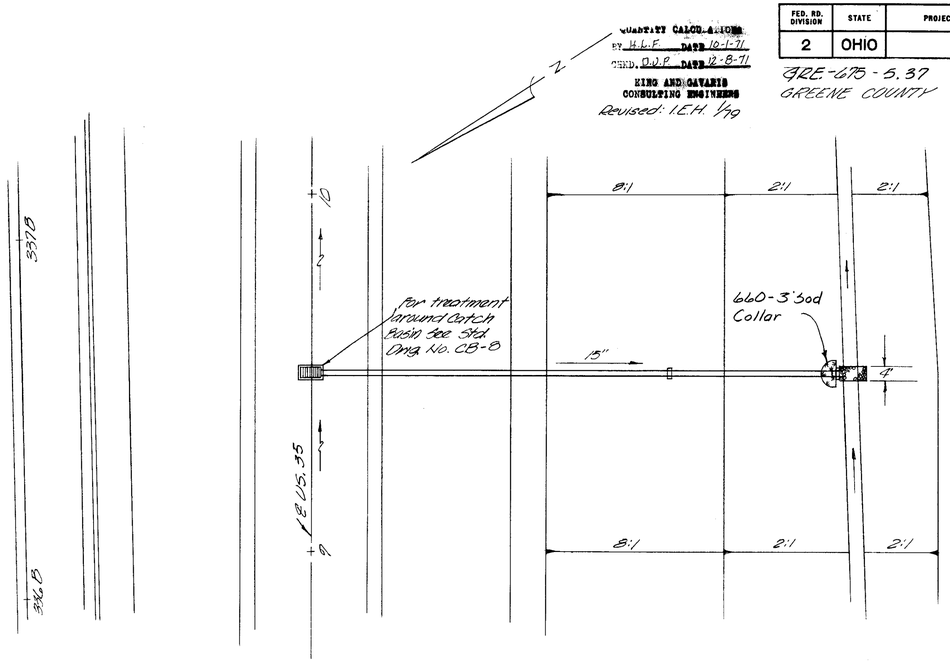
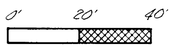
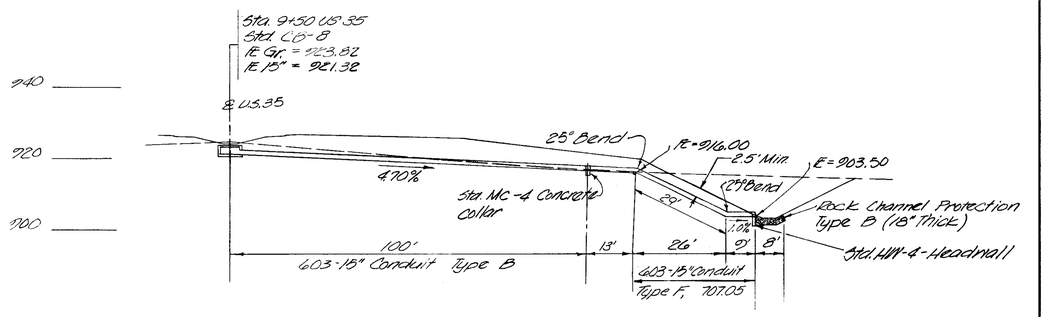
GRE-675-5.37
GREENE COUNTY



ESTIMATED QUANTITIES

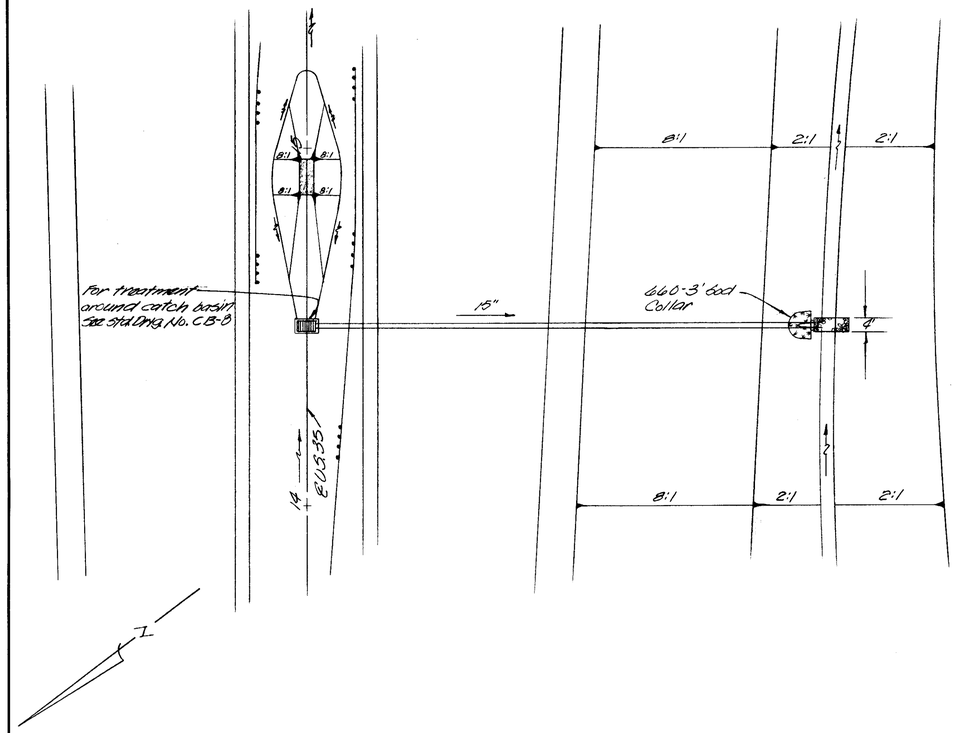
ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	100	L.F.
603	15" Conduit Type F 707.05	51	L.F.
604	Std. No CB-8	1	Ea.
660	Sodding	205	S.Y.





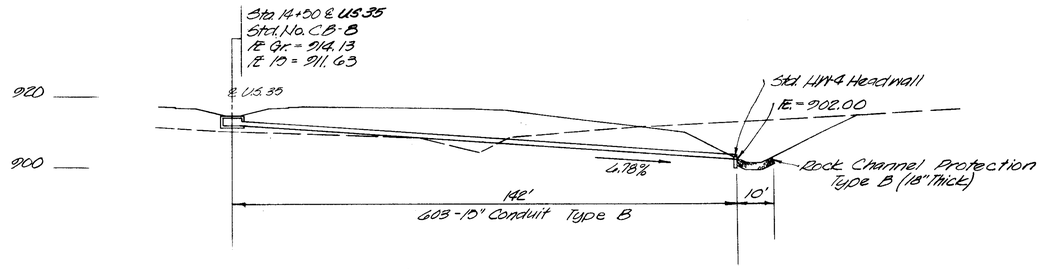
US-35 Sta. 9+50

DRAINAGE DETAIL

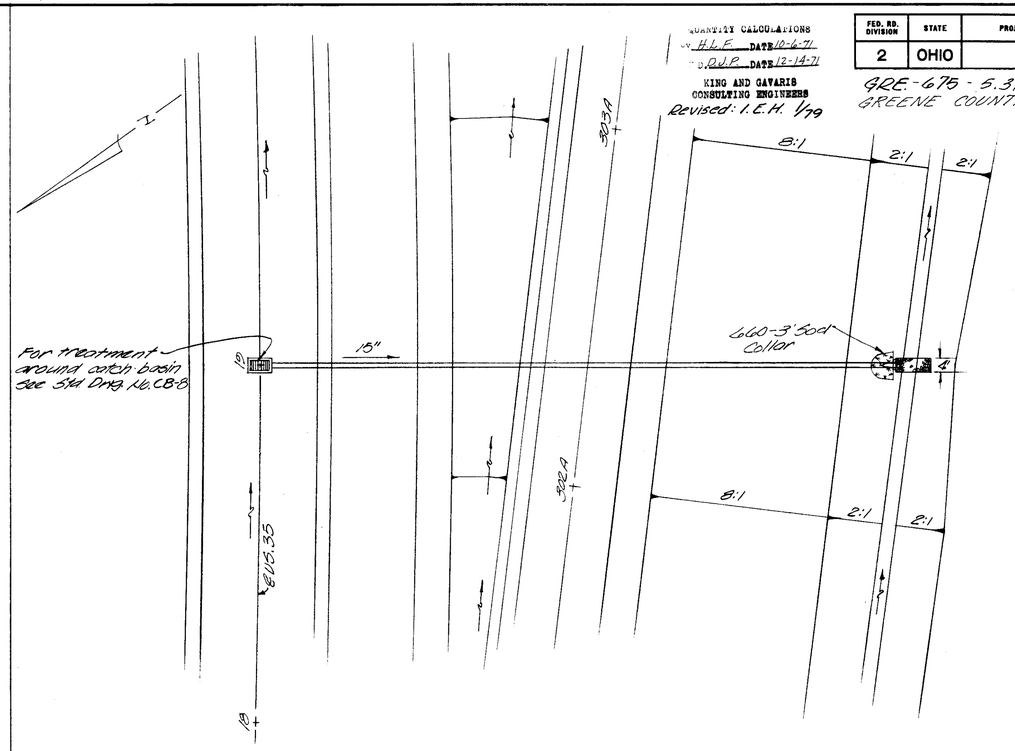


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	142	L.F.
604	Std. No CB-8	1	Ea.
660	Sodding	103	S.Y.



U.S. 35 Sta. 14+50



QUANTITY CALCULATIONS
W. H.L.E. DATE 10-6-71
D. R.J.P. DATE 12-14-71

KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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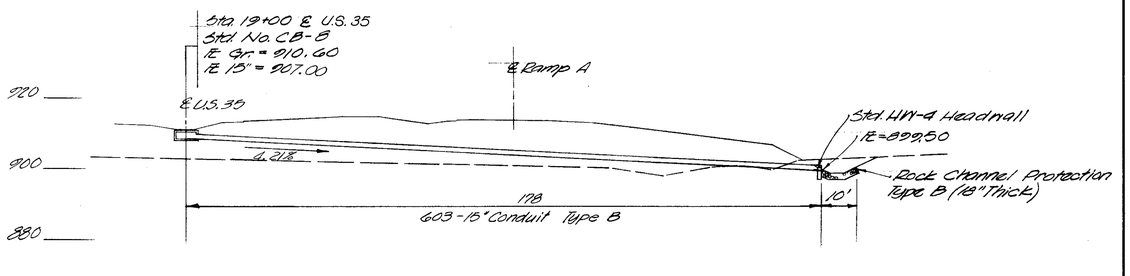
6/6

GRE.-675 - 5.37
GREENE COUNTY

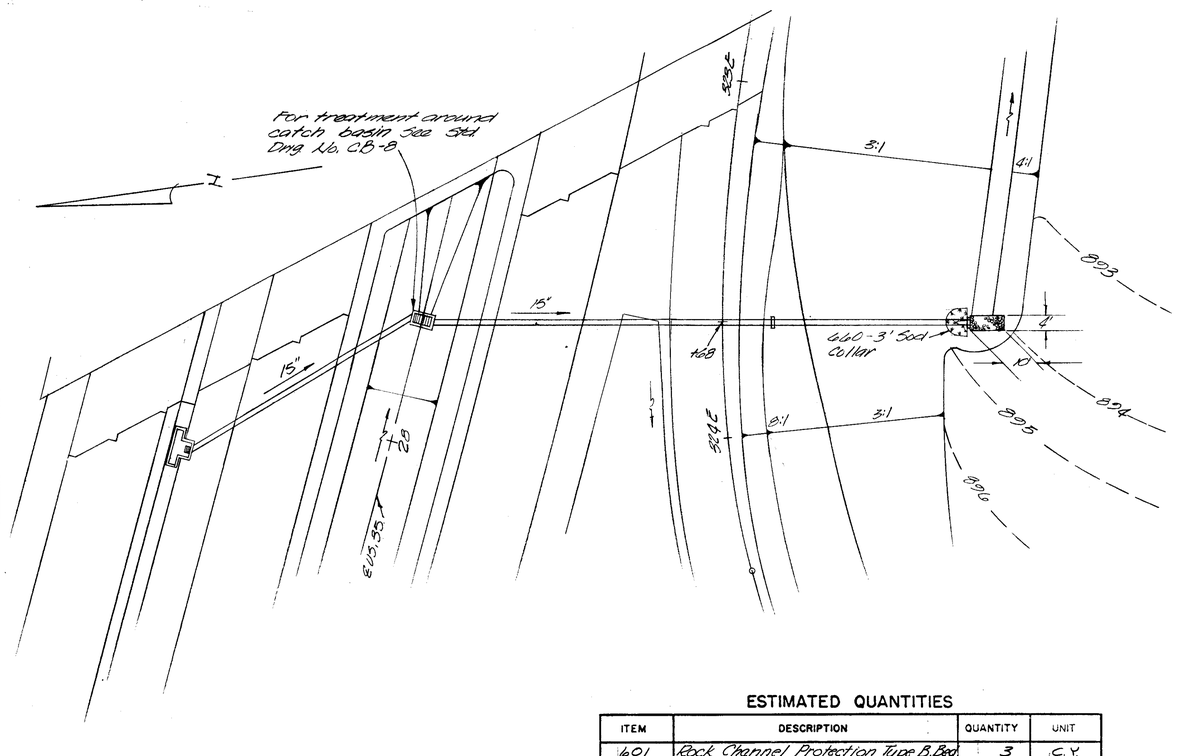
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	178	L.F.
604	Std. No CB-8	1	Ea.
660	Sodding	103	S.Y.



U.S. 35 Sta. 19+00

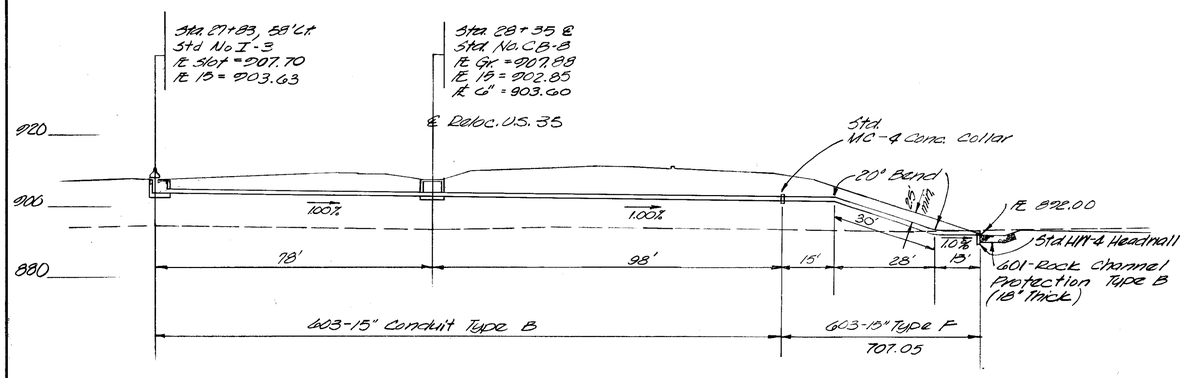
DRAINAGE DETAIL



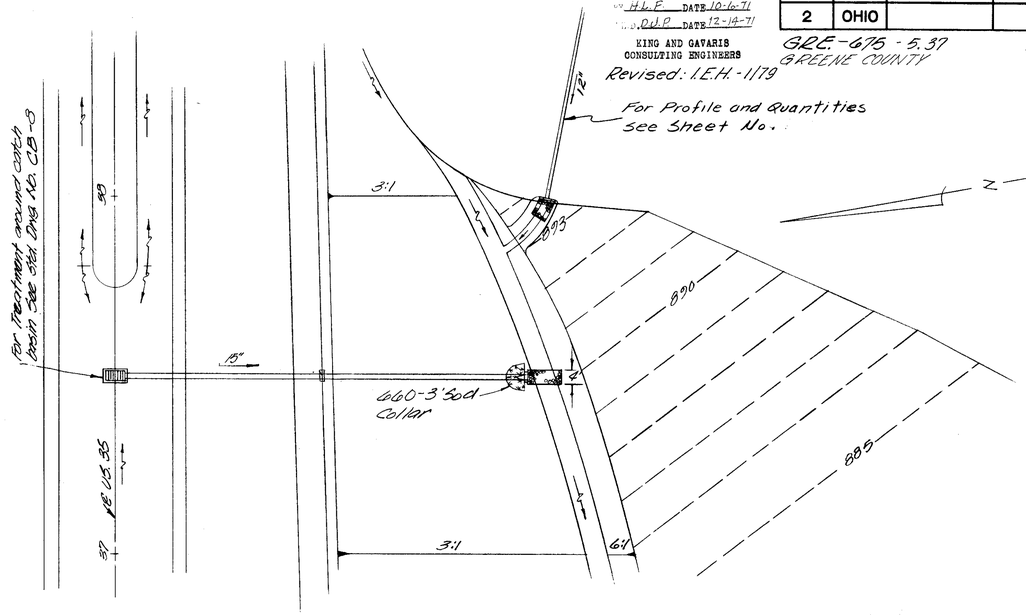
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	176	L.F.
603	15" Conduit Type F, 707.05	58	L.F.
604	Std No. CB-B	1	Ea.
604	Std No I-3	1	Ea.
660	Sodding	103	S.Y.

0' 20' 40'



Sta. 28+35 US. 35



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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QUANTITY CALCULATIONS
BY H.L.P DATE 10-16-71
CHKD. R.W.P DATE 12-14-71

KING AND GAVARIS
CONSULTING ENGINEERS

Revised: I.E.H. -1179

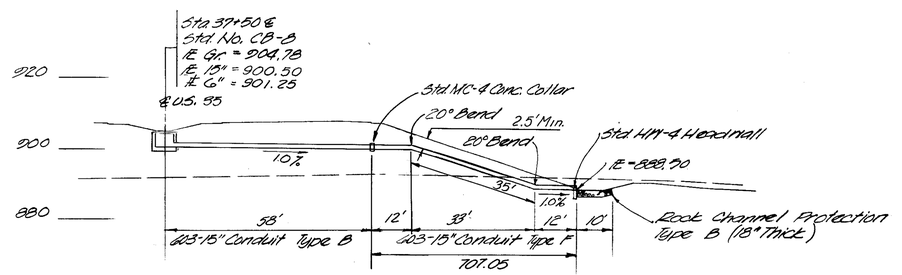
GRE.-675 - 5.37
GREENE COUNTY

For Profile and Quantities see Sheet No.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	58	L.F.
603	15" Conduit Type F, 707.05	39	L.F.
604	Std. No. CB-B	1	Ea.
660	Sodding	103	S.Y.

0' 20' 40'



US-35 Sta. 37+50

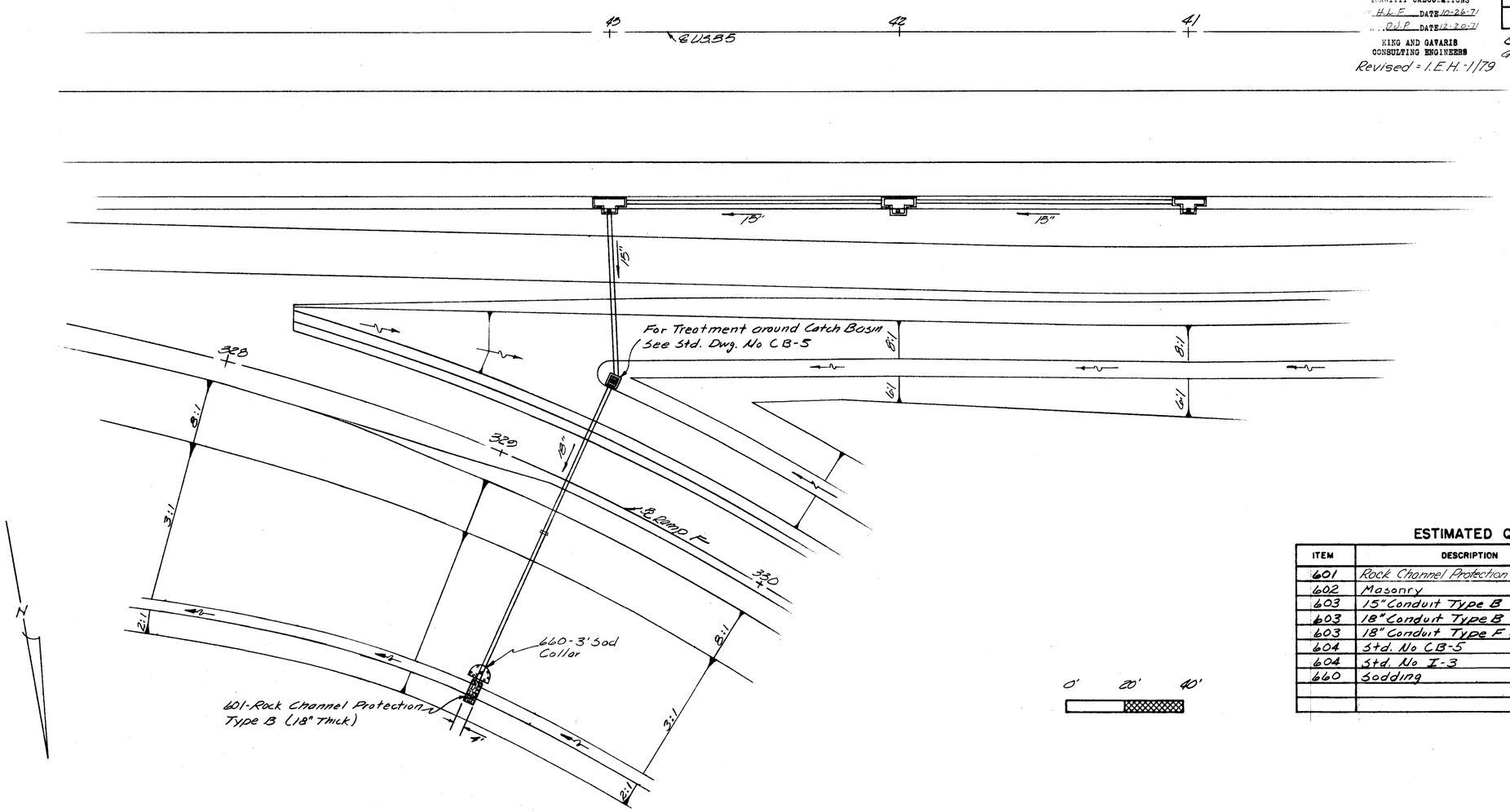
DRAINAGE DETAIL

QUANTITY CALCULATIONS
H.L.E. DATE 10-26-71
O.V.P. DATE 12-20-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised - I.E.H. - 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

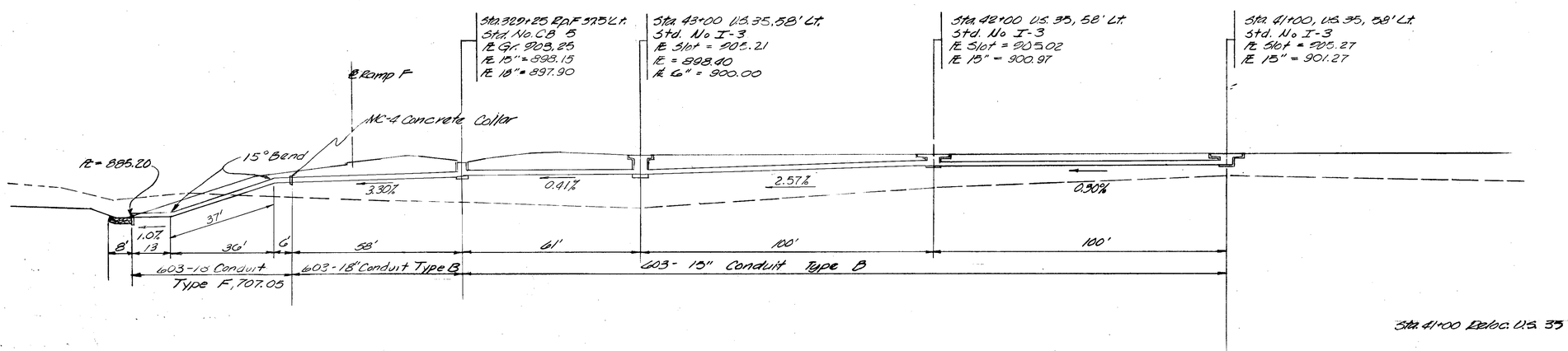
392
616

GRE-675 - 5.37
GREENE COUNTY



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	2	C.Y.
602	Masonry	0.33	C.Y.
603	15" Conduit Type B	261	L.F.
603	18" Conduit Type B	58	L.F.
603	18" Conduit Type F, 707.05	56	L.F.
604	Std. No CB-5	1	Ea.
604	Std. No I-3	3	Ea.
660	Sodding	274	S.Y.



Sta. 41+00 Reloc. U.S. 35 to 329+25 Ramp F

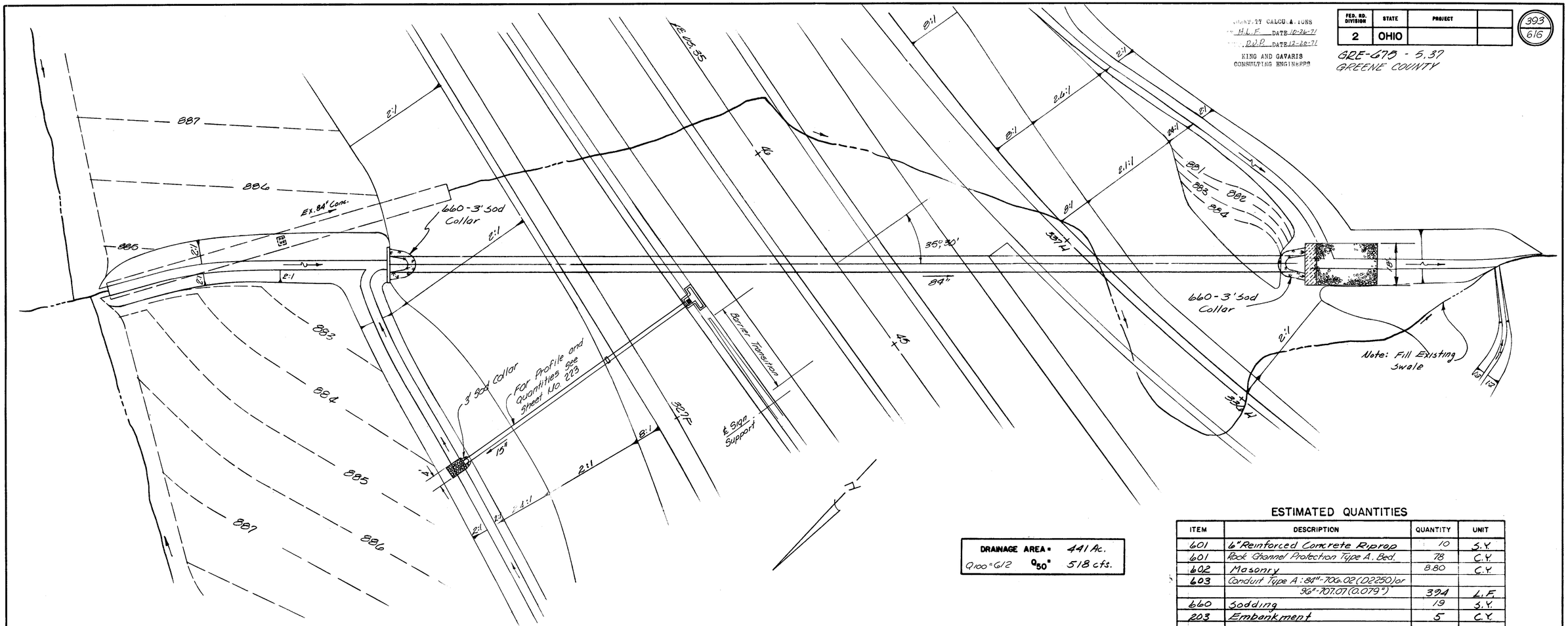
DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

393
616

QUANTITY CALCULATIONS
H.L.F. DATE 10-26-71
D.V.P. DATE 12-20-71
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-670 - 5.37
GREENE COUNTY

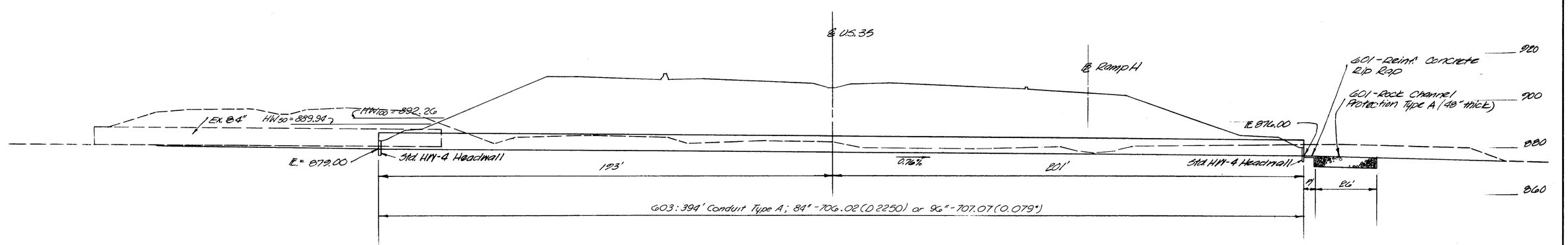


DRAINAGE AREA = 441 Ac.
$Q_{100} = 612$ Q_{50} = 518 cfs.

0' 20' 40'

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	10	S.Y.
601	Rock Channel Protection Type A, Bed.	78	C.Y.
602	Masonry	8.80	C.Y.
603	Conduit Type A: 84"-706.02(0.2250)or 96"-707.07(0.079")	394	L.F.
660	Sodding	19	S.Y.
203	Embankment	5	C.Y.



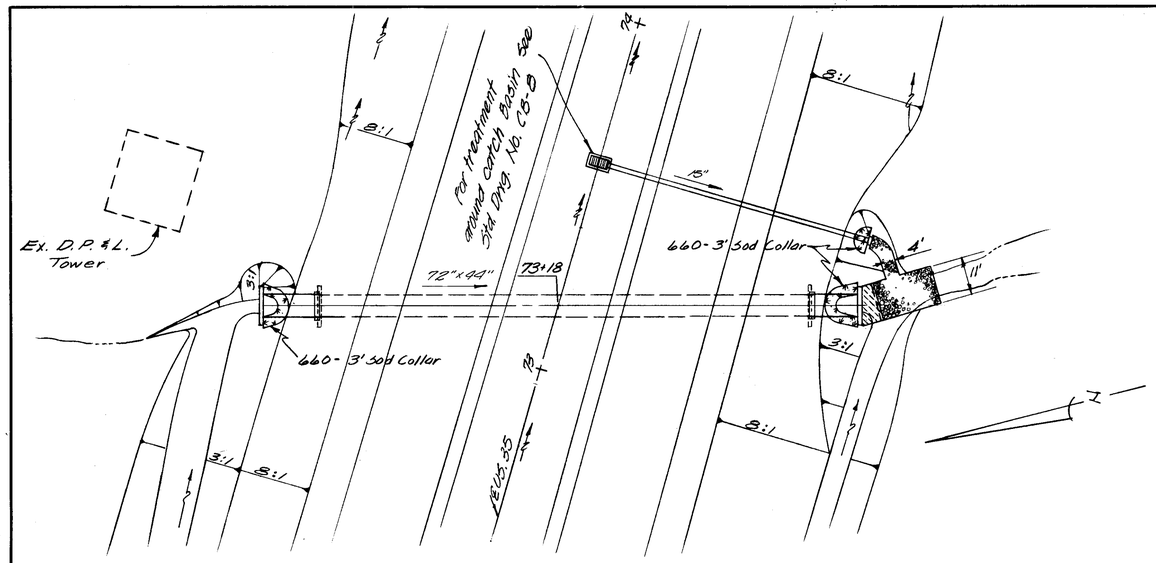
DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

394
616

QUANTITY CALCULATIONS
H.L.F. DATE 10-13-71
D.D.P. DATE 12-22-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 7/79

GRE-675-5.37
GREENE COUNTY

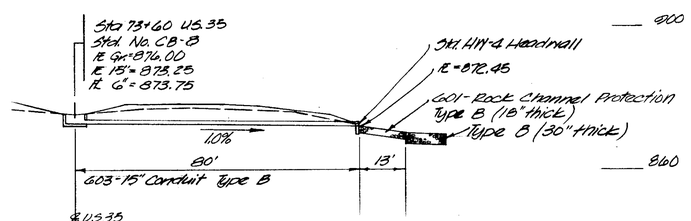


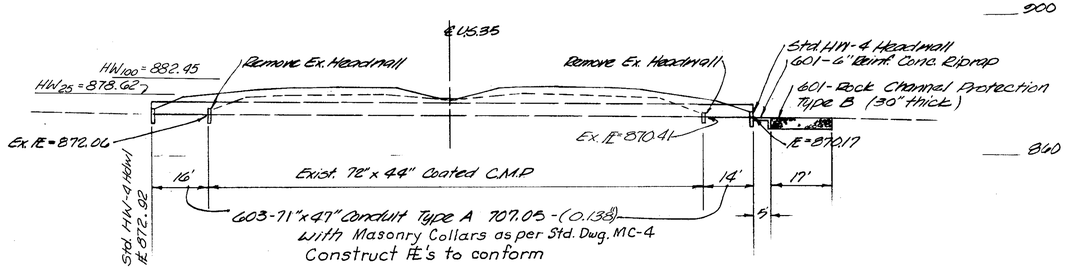
DRAINAGE AREA = 92 Ac.
Q_{100} = 207cfs. Q_{25} = 145 cfs.

0' 20' 40'

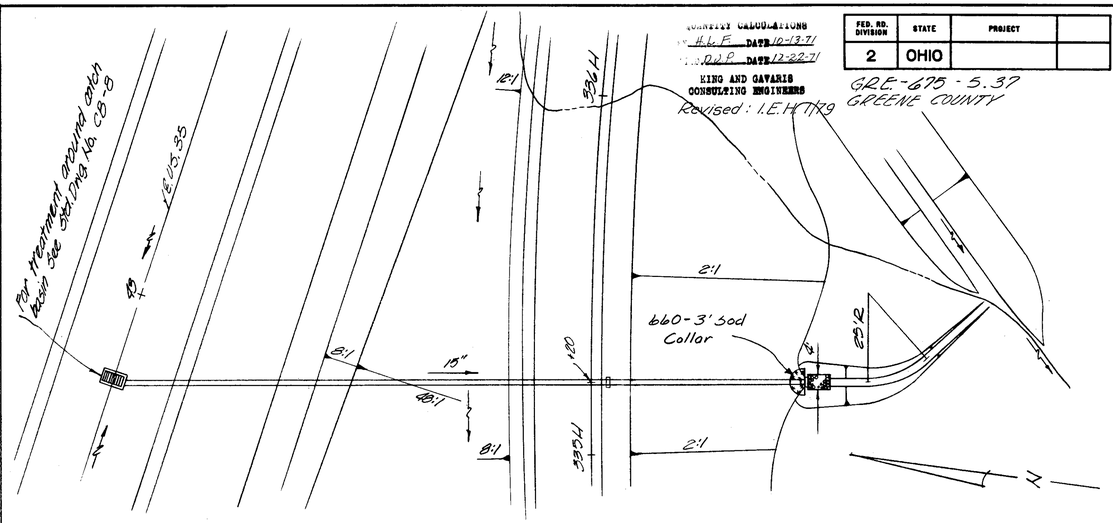
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	6	S.Y.
601	Rock Channel Protection Type B, Bed	25	C.Y.
602	Masonry	3.13	C.Y.
603	15" Conduit Type B	80	L.F.
603	71"x47" Conduit Type A 707.05 (0.138")	30	L.F.
604	Std No CB-8	1	Ea.
660	Sodding	358	S.Y.
202	Portions of Existing Structure Removed	Lump	Lump





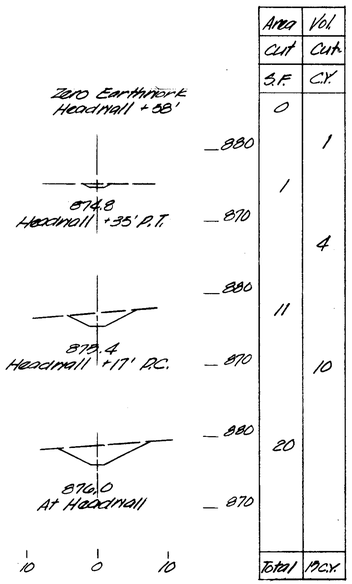
U.S. 35 Sta. 73+18 and Sta. 73+60



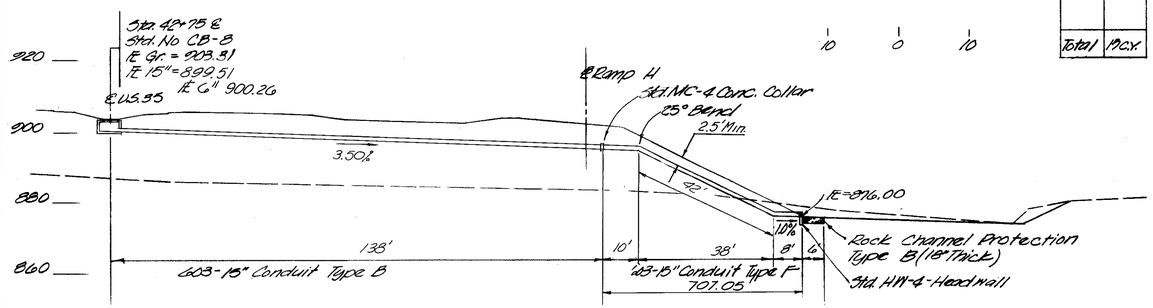
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	138	L.F.
603	15" Conduit Type F 707.05	60	L.F.
604	Std. No CB-8	1	Ea.
660	Sodding	203	S.Y.
203	Excavation	15	C.Y.

0' 20' 40'



Area Cut S.F.	Vol. Cut C.Y.
0	
	1
1	
	4
11	
	10
20	
Total	19 C.Y.



U.S. 35 Sta. 42+75

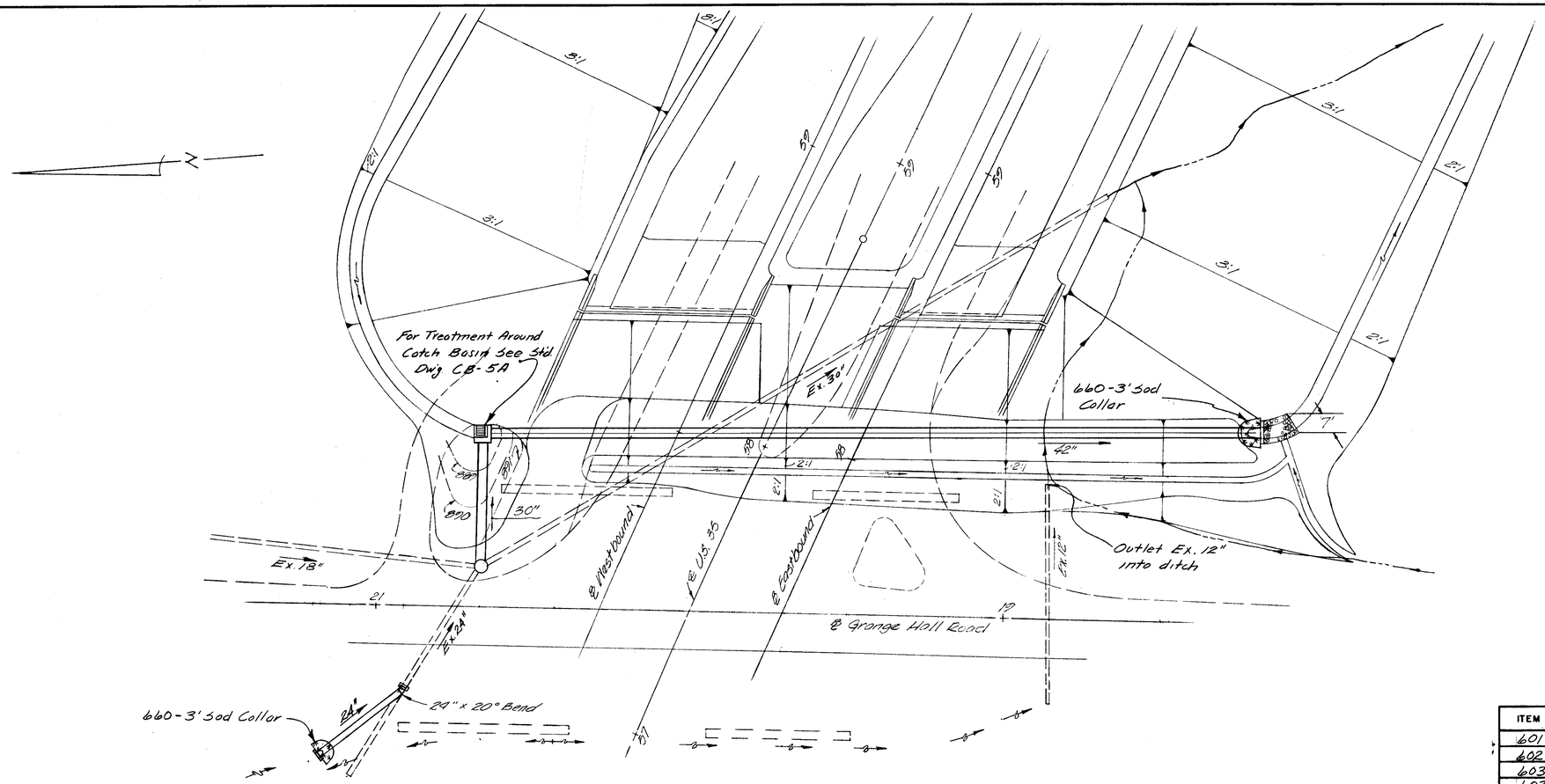
DRAINAGE DETAIL

QUANTITY CALCULATIONS
H.L.E. DATE 10-13-71
R.V.P. DATE 12-20-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. - 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

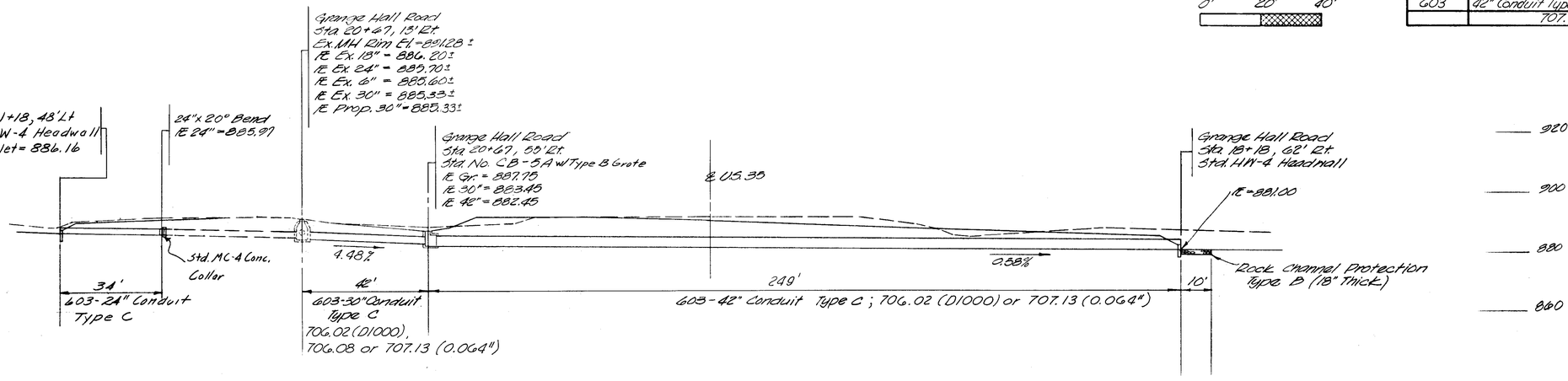
395
616

GRE-675-5.37
GREENE COUNTY



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	5	C.Y.
602	Masonry	1.38	C.Y.
603	24" Conduit Type C	34	L.F.
603	30" Conduit Type C; 706.02 (01000)		
	706.08 or 707.13 (0.064")	42	L.F.
604	Std. No. CB-5A w/Type B Grate	1	Ea.
660	Sodding	111	S.Y.
603	42" Conduit Type C, 706.02 (01000) or		
	707.13 (0.064")	249	L.F.



U.S. 35 Sta. 58+05

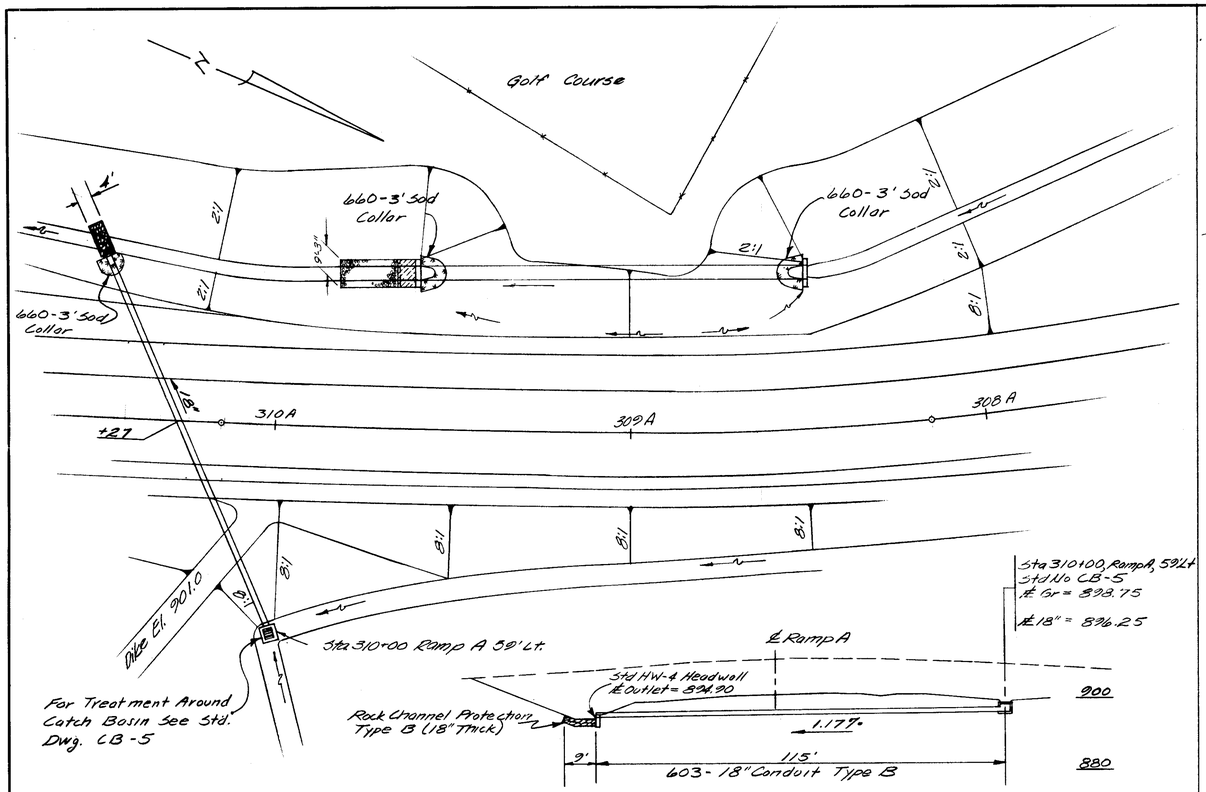
DRAINAGE DETAIL

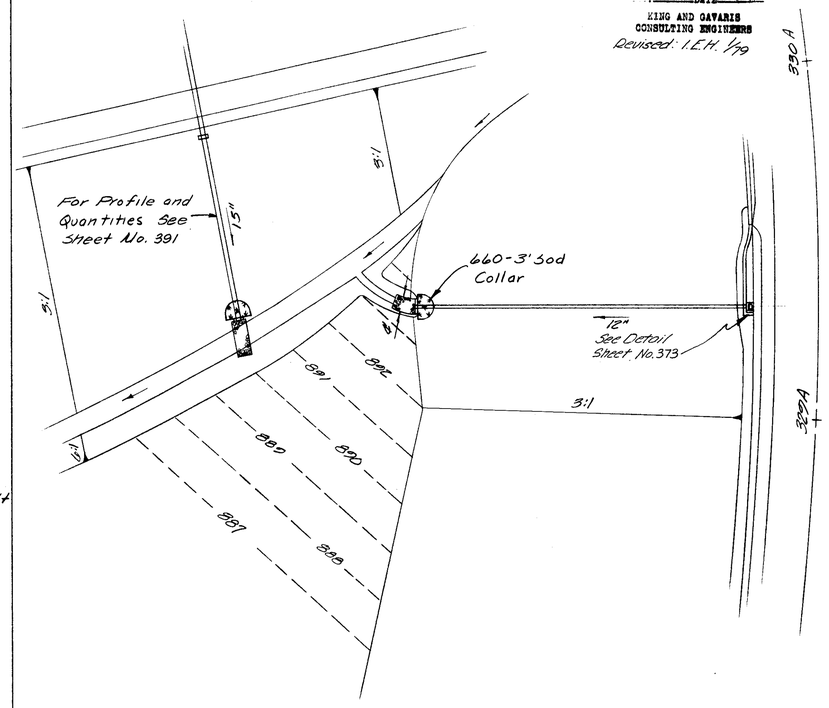
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

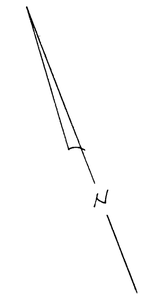
396
616

GRE-675 - 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
H.L.F. DATE 9-28-71
D.V.P. DATE 12-3-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79





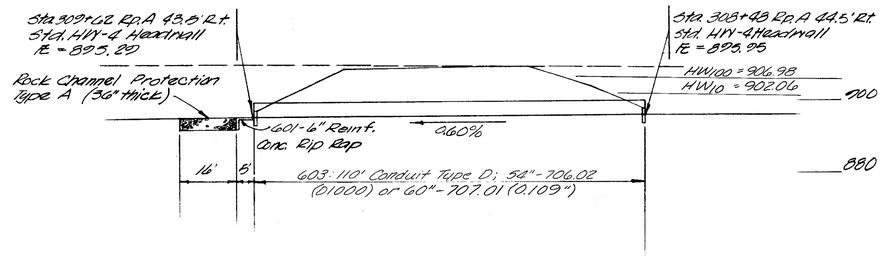


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	5	S.Y.
601	Rock Channel Protection Type A, Bed	19	C.Y.
602	Masonry	3.89	C.Y.
603	18" Conduit Type B	115	L.F.
604	Std. No CB-5	1	Ea.
660	Sodding	217	S.Y.
601	Rock Channel Protection Type B, Bed	3	C.Y.
603	Conduit Type D; 54"-706.02 (D1000)		
	or 60"-707.01 (Q109")	110	L.F.

DRAINAGE AREA = 110 Ac.
Q100 = 235 cfs. Q_{10} = 142 cfs.

0' 20' 40'

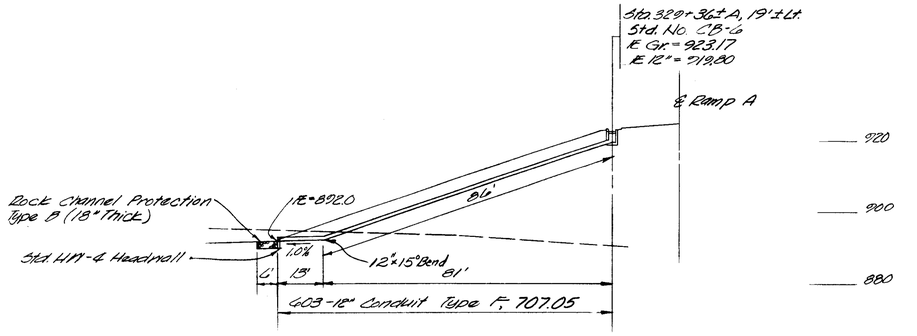


308+50 to 309+62 Rt. of Ramp A

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.21	C.Y.
603	12" Conduit Type F, 707.05	99	L.F.
604	CB-6	1	Ea.
660	Sodding	3	S.Y.

0' 20' 40'



Sta 329+32 Ramp A

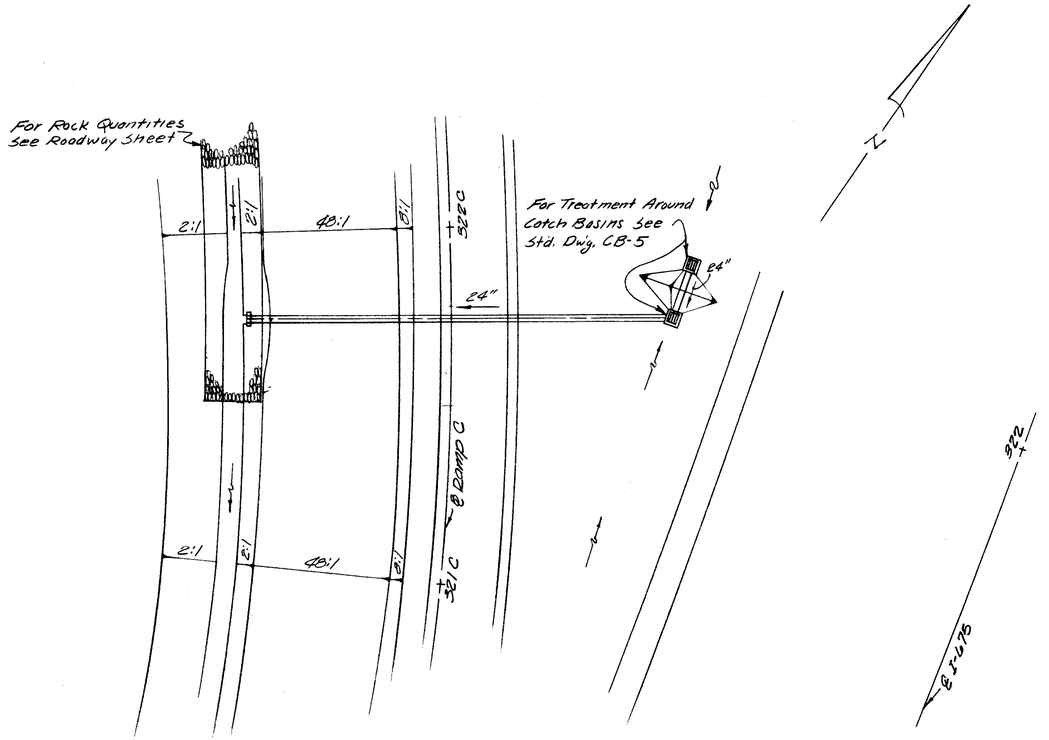
DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

397
616

GRE-675 - 5.37
GREENE COUNTY

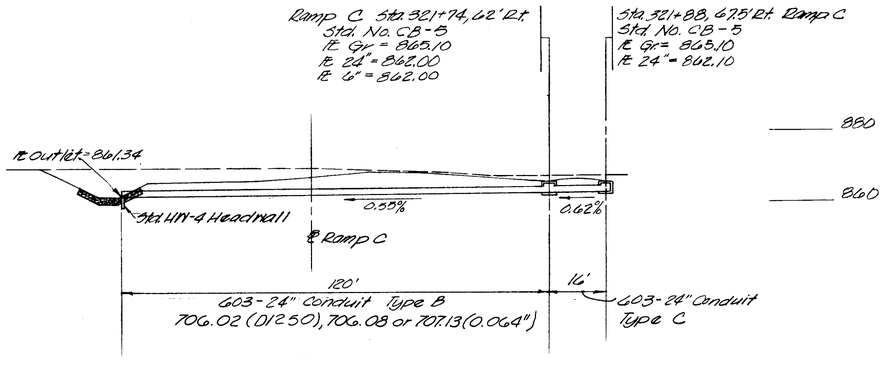
...ITY CALCU & TONS
H.L.F. DATE 9-28-71
D.J.P. DATE 11-29-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H.-1/79



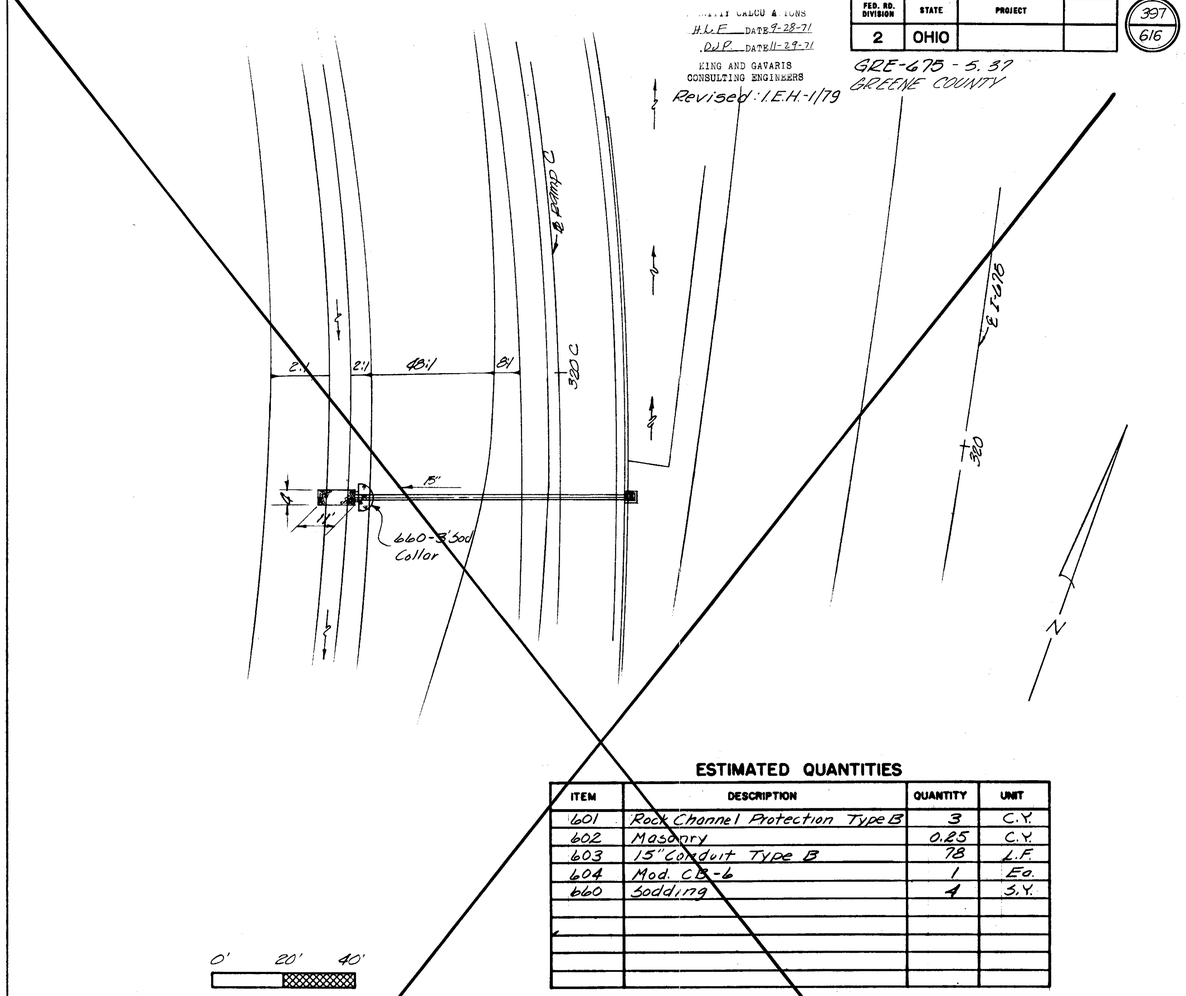
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	0.46	C.Y.
603	24" Conduit Type C	16	L.F.
604	Std. No CB-5	2	Ea.
660	Sodding	241	S.Y.
603	24" Conduit Type B; 706.02 (D1250), 706.08 or 707.13 (0.064")	120	L.F.

0' 20' 40'



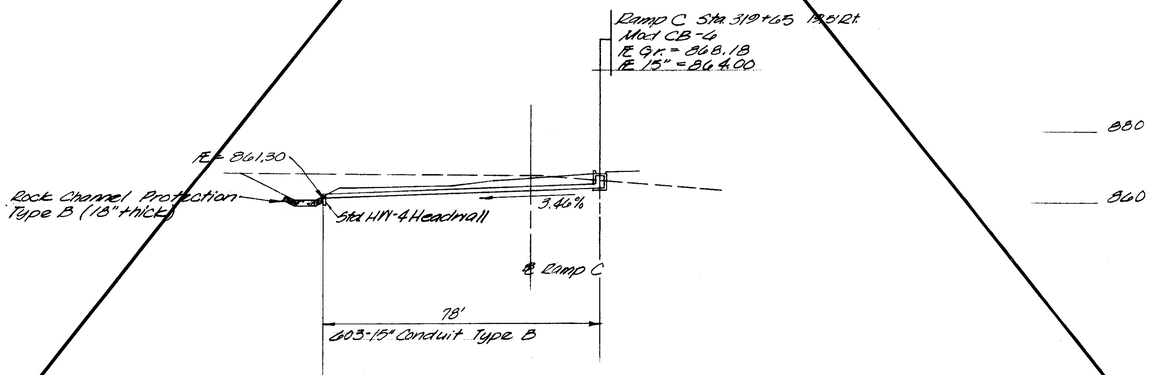
Ramp C Sta. 321+74



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B	3	C.Y.
602	Masonry	0.25	C.Y.
603	15" Conduit Type B	78	L.F.
604	Mod. CB-6	1	Ea.
660	Sodding	4	S.Y.

0' 20' 40'



Ramp C Sta. 319+65

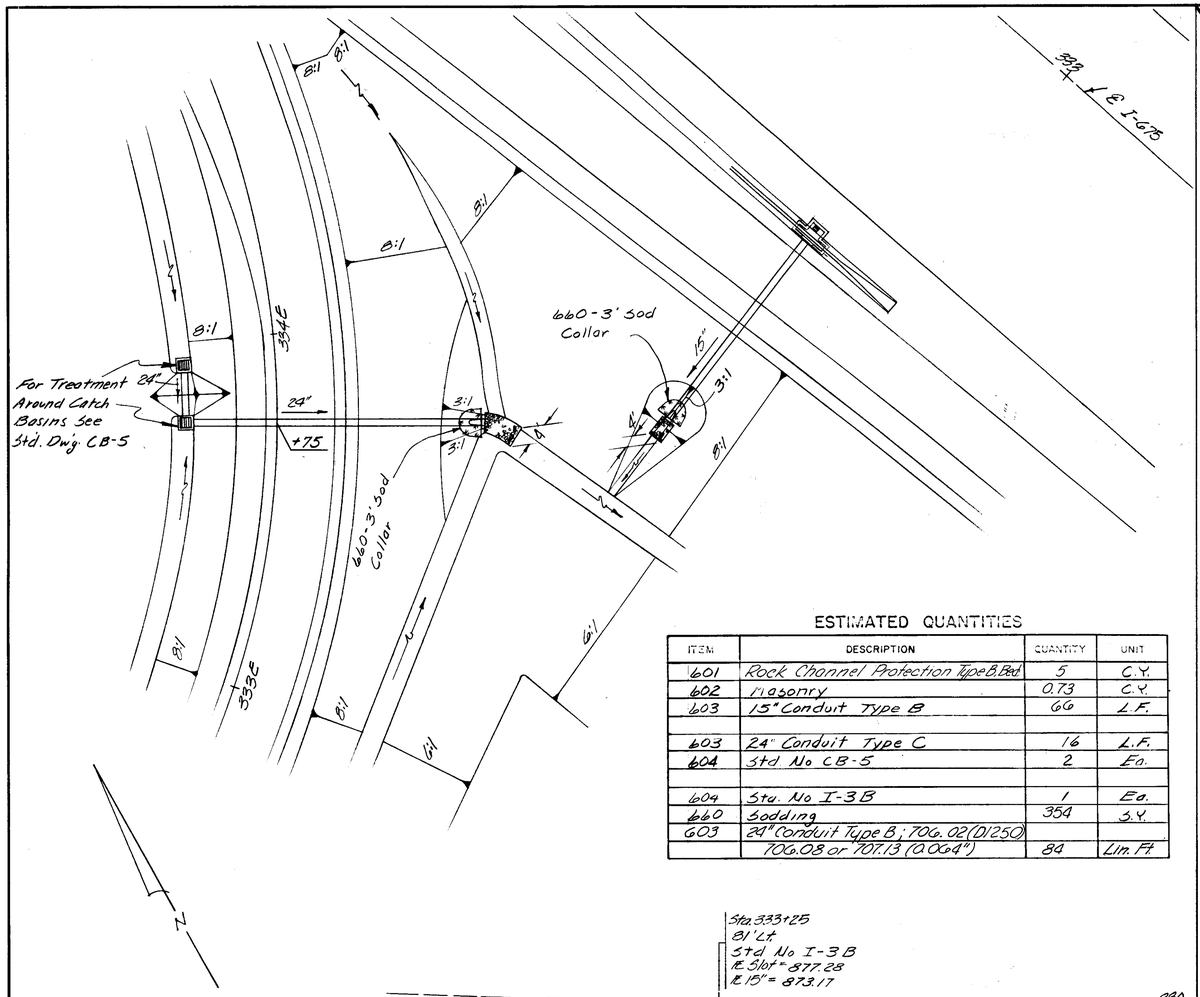
DRAINAGE DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

338
616

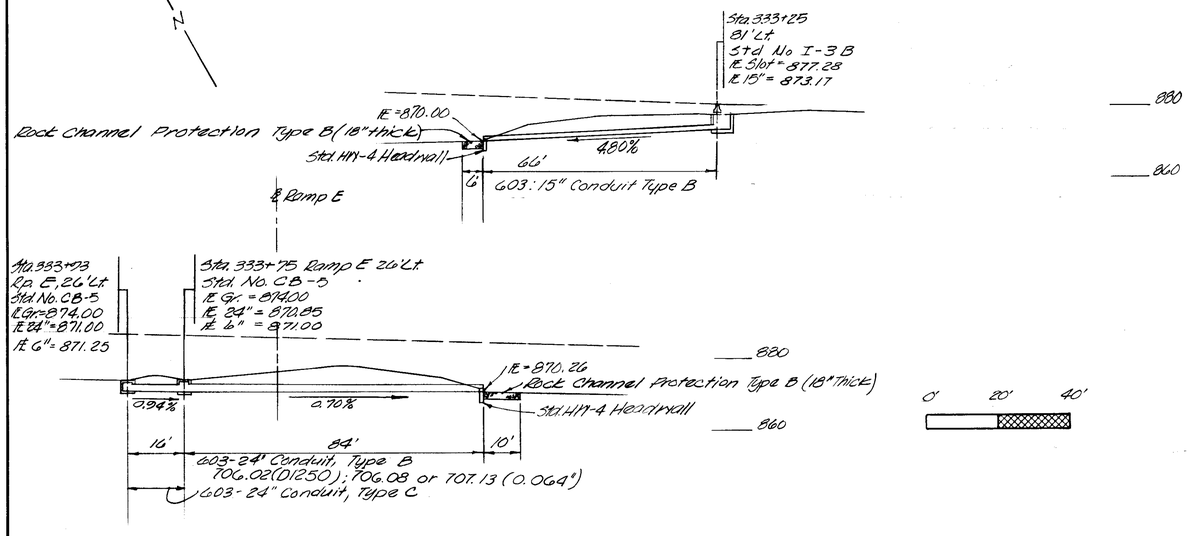
GRE-675-5.37
GREENE COUNTY

QUANTITY CALCULATIONS
H.E.F. DATE 9-28-71
D.J.P. DATE 11-29-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. - 11/79

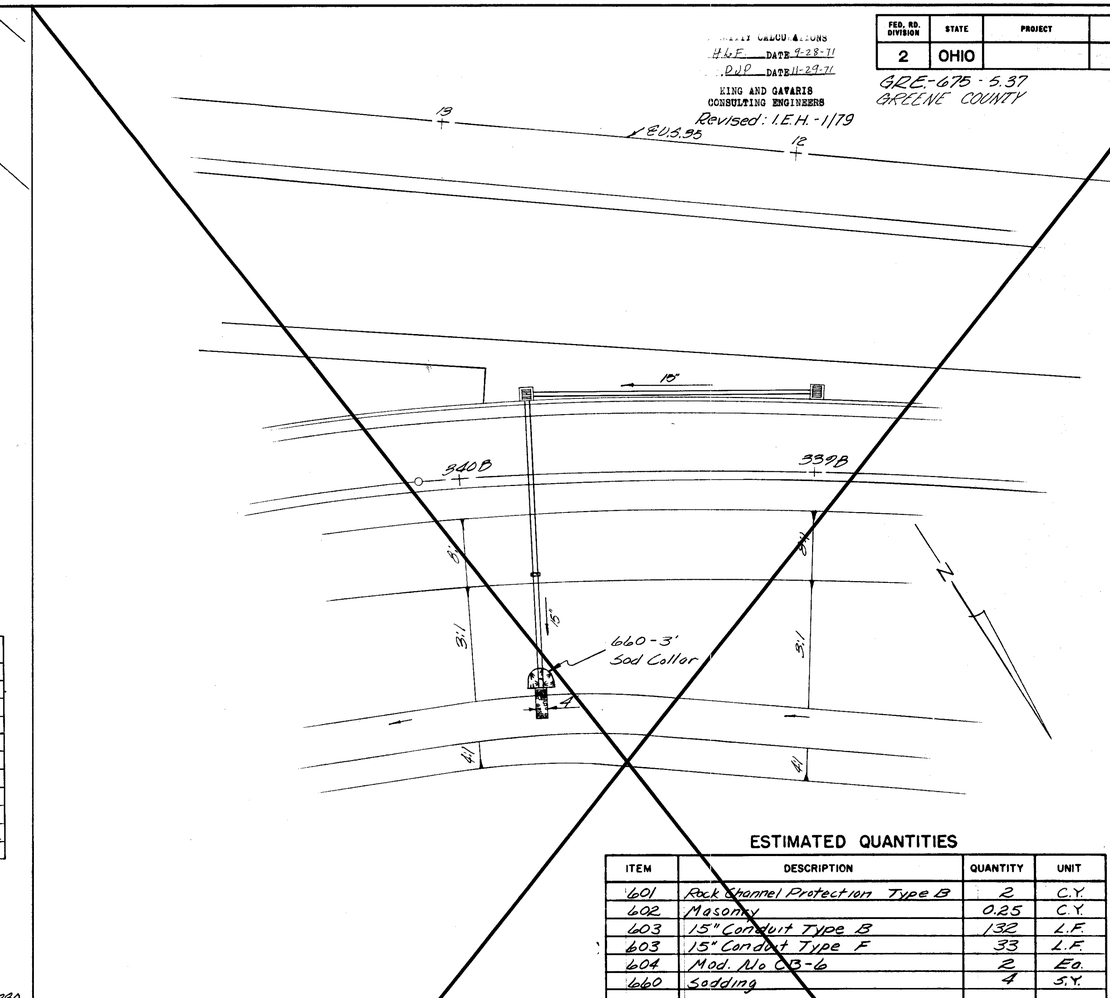


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	5	C.Y.
602	Masonry	0.73	C.Y.
603	15" Conduit Type B	66	L.F.
603	24" Conduit Type C	16	L.F.
604	Std No CB-5	2	Ea.
604	Stu. No I-3B	1	Ea.
660	Sodding	354	S.Y.
603	24" Conduit Type B; 706.02(D1250)		
	706.08 or 707.13 (0.064")	84	Lin. Ft

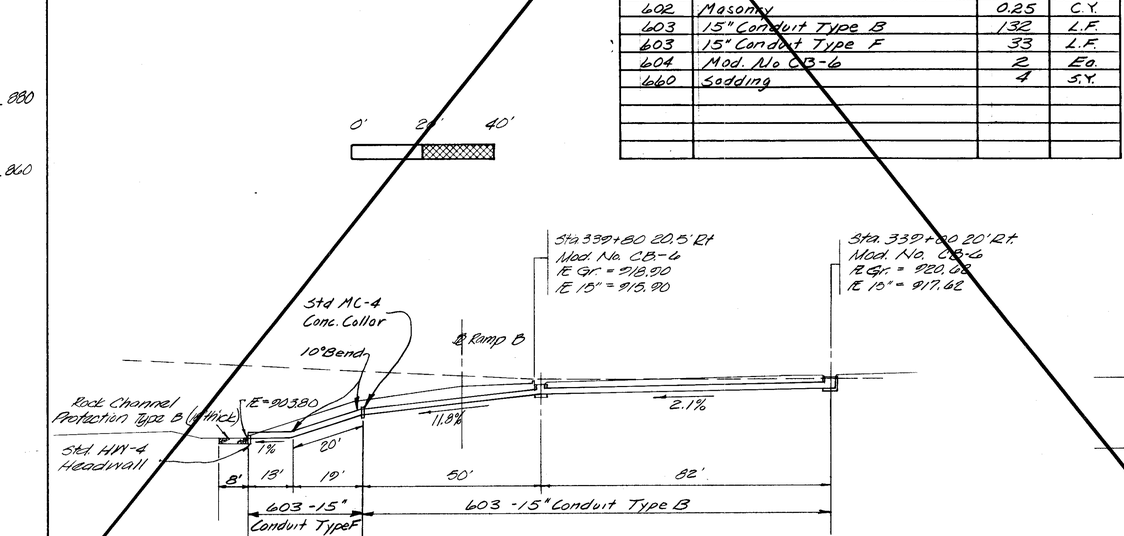


Sta. 333+25 I-675 & Sta 333+75 Ramp E



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B	2	C.Y.
602	Masonry	0.25	C.Y.
603	15" Conduit Type B	132	L.F.
603	15" Conduit Type F	33	L.F.
604	Mod. No CB-6	2	Ea.
660	Sodding	4	S.Y.



Sta. 339+00 to 339+80 ℄p. B

DRAINAGE DETAIL

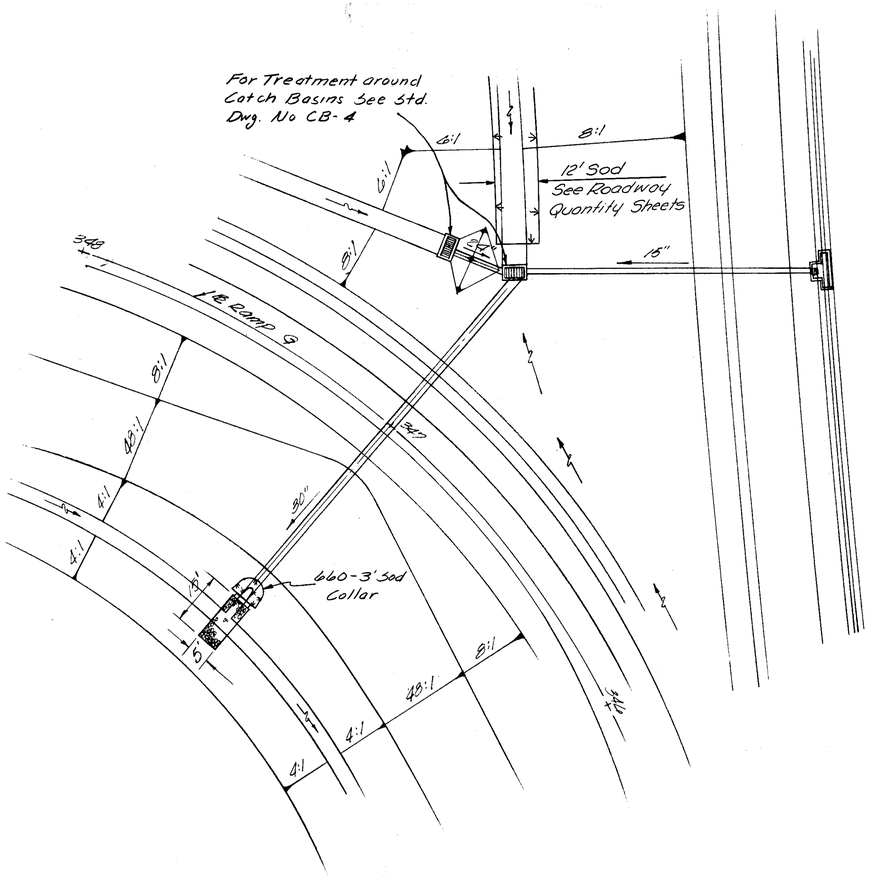
QUANTITY CALCULATIONS
H.L.E. DATE 9-27-71
D.W.P. DATE 11-22-71
KING AND GAVARIS
CONSULTING ENGINEERS

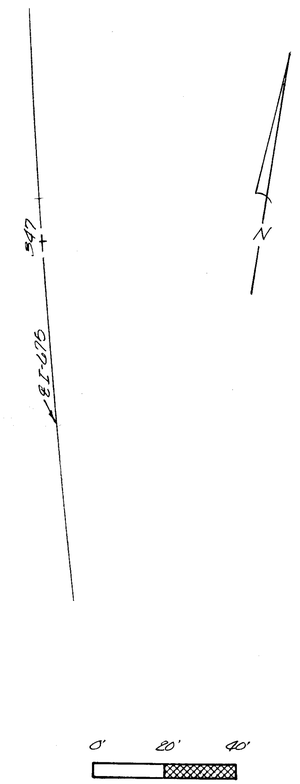
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

399
616

GRE.-675-5.37
GREENE COUNTY

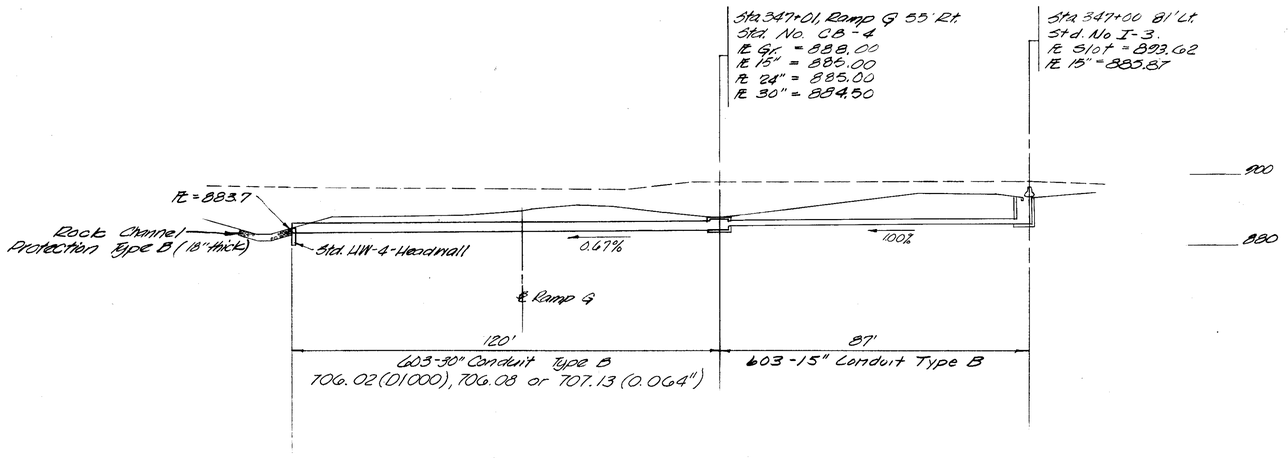
Revised: I.E.H.-1/79

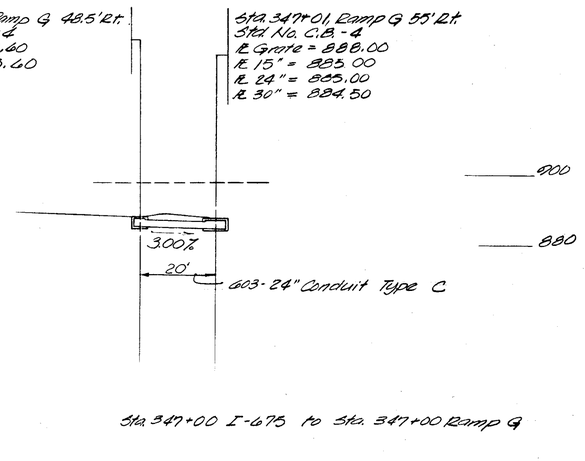




ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	6"	C.Y.
602	Masonry	0.60	C.Y.
603	15" Conduit Type B	87	L.F.
603	24" Conduit Type C	20	L.F.
603	30" Conduit Type B; 706.02 (D1000) 706.08 or 707.13(0.064")	120	L.F.
604	Std. No I-3	1	Ea.
660	Sodding	372	S.Y.
604	Std. No. CB-4	2	Ea.





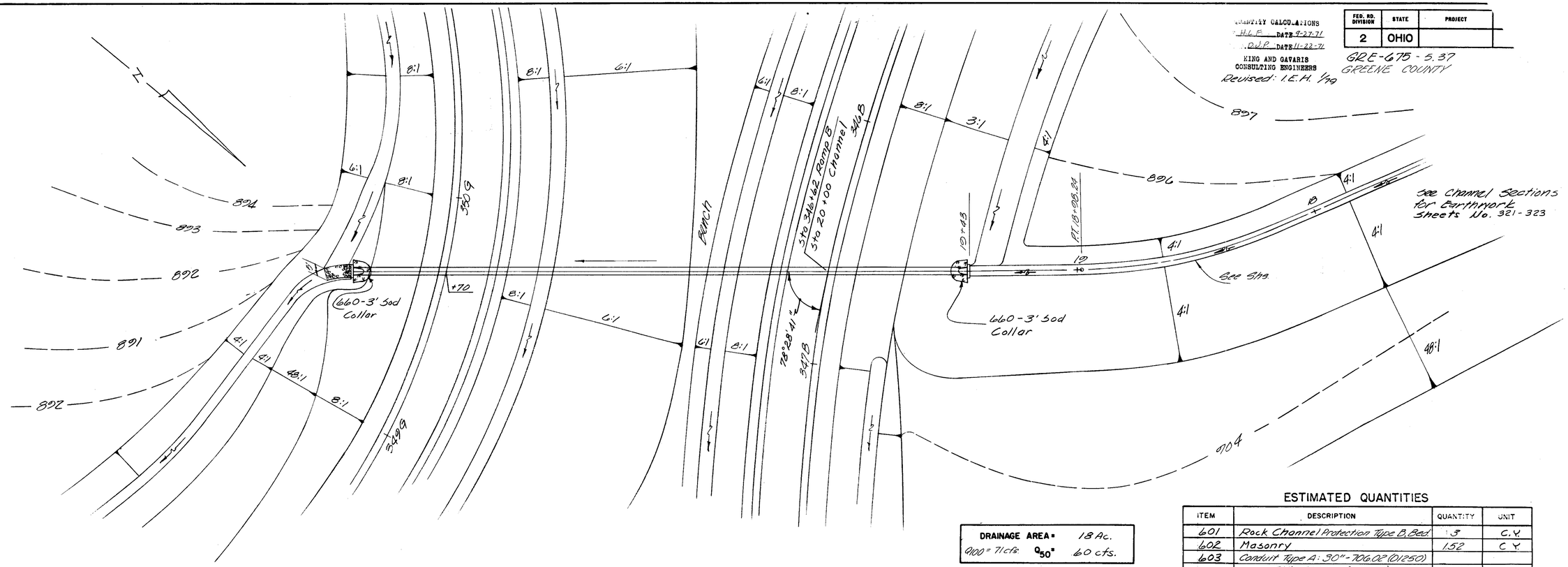
Sta. 347+00 I-675 to Sta. 347+00 Ramp G

DRAINAGE DETAIL

QUANTITY CALCULATIONS
H.L.F. DATE 9-27-71
D.W.P. DATE 11-22-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.A. 1/79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

GRE-675 - 5.37
GREENE COUNTY

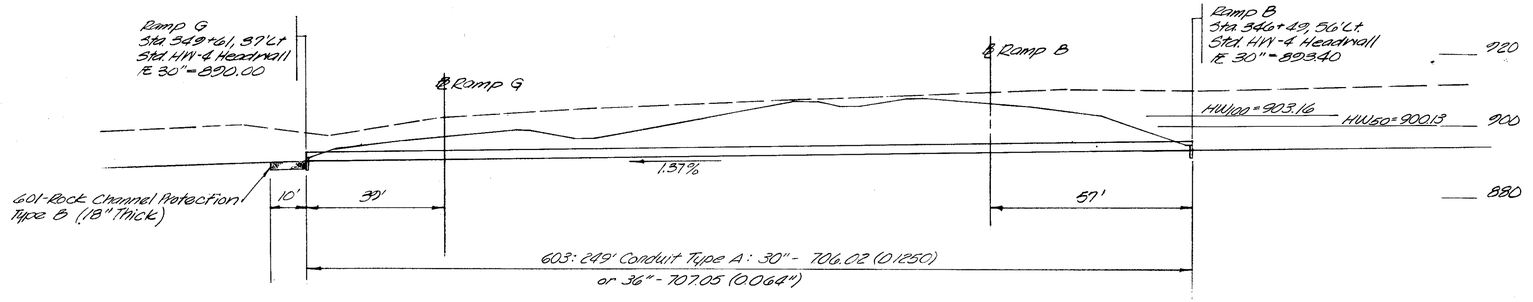


DRAINAGE AREA = 18 Ac.
Q100 = 71 cfs. Q_{50} = 60 cfs.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	13	C.Y.
602	Masonry	152	C.Y.
603	Conduit Type A: 30"-706.02 (0.1250)		
	or 36"-707.05 (0.0064')	249	L.F.
660	Sodding	11	S.Y.

0' 20' 40'



Ramp B Sta 346+62

DRAINAGE DETAIL

401-470

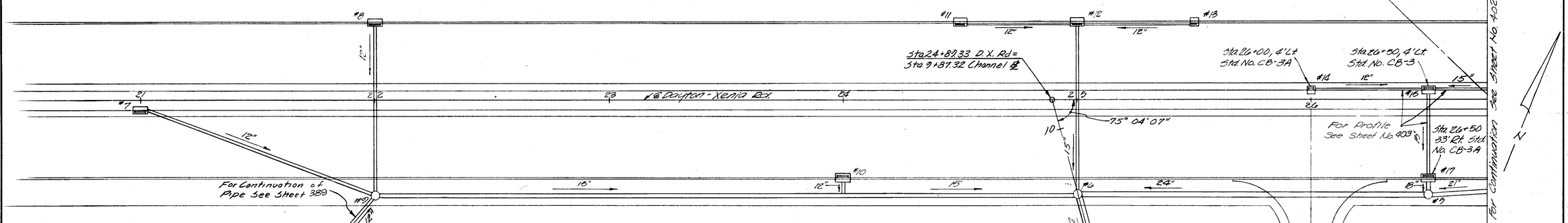
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

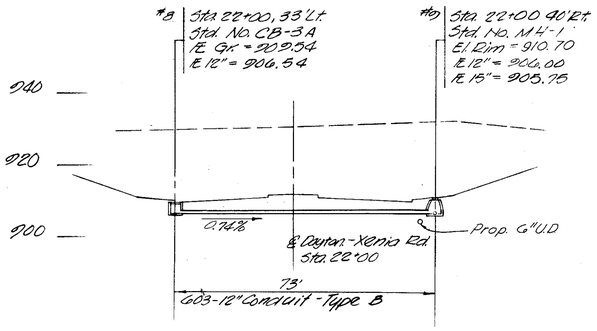
401 / 616

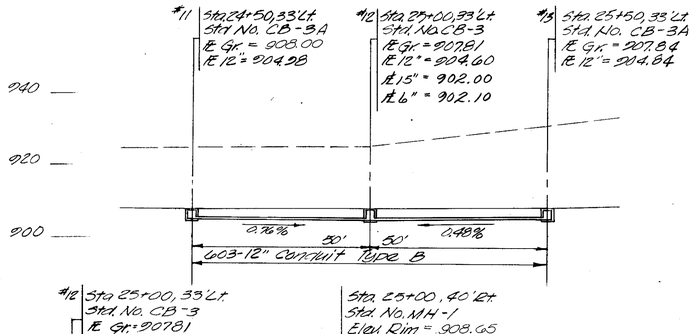
139 Yellow

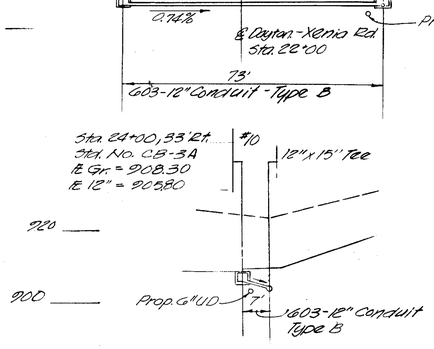
QUANTITY CALCU & TOPS
H.L.E. DATE 9-27-71
D.J.P. DATE 11-22-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 11/79

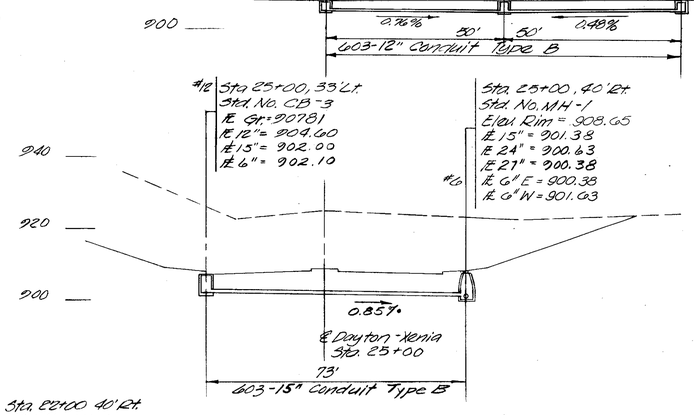
GRE-675 - 5.37
GREENE COUNTY

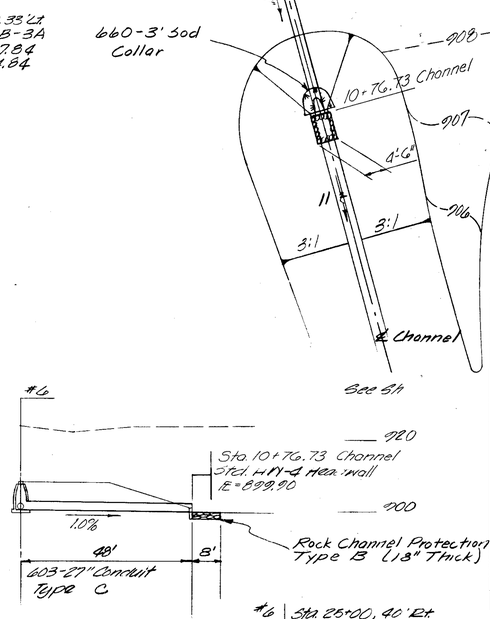






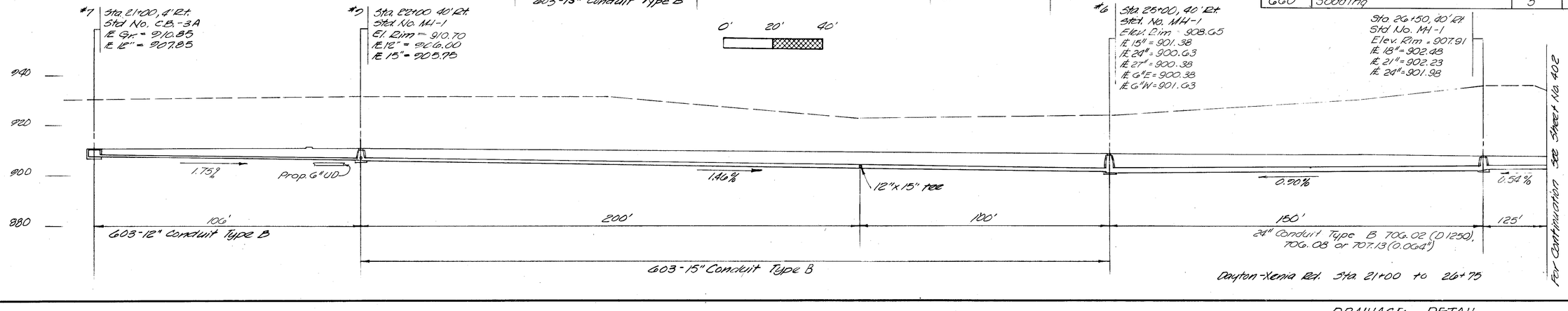






ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protect Type B, Bed	3	C.Y.
602	Masonry	0.53	C.Y.
603	12" Conduit Type B	661	L.F.
603	15" Conduit Type B	667	L.F.
603	18" Conduit Type B	81	L.F.
603	21" Conduit Type B: 706.02		
	(D1250) 706.08 or 707.13(0.064")	125	L.F.
603	24" Conduit Type B: 706.02(D1250)		
	706.08 or 707.13(0.064")	150	L.F.
603	27" Conduit Type C: 706.02		
	(D1000), 706.08 or 707.13(0.064")	48	L.F.
604	Std. No. CB 2-2B	1	Ea.
604	Std. No. CB 3	3	Ea.
604	Std. No. CB 3A	11	Ea.
604	Std. No. MH-1	3	Ea.
660	Sodding	5	S.Y.



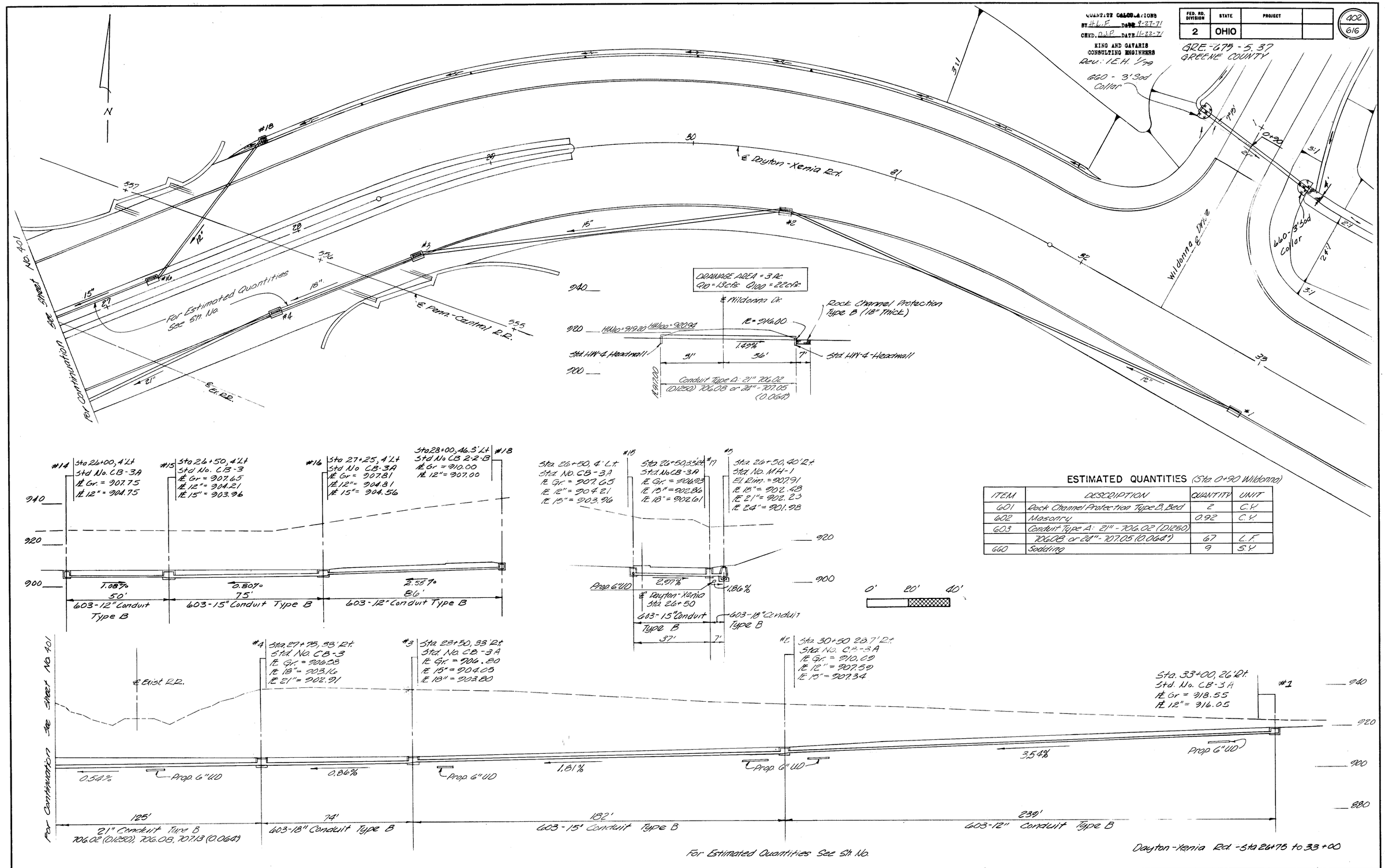
DRAINAGE DETAIL

QUANTITY CALCULATIONS
BY H.L.F. DATE 9-27-71
CHKD. D.J.P. DATE 11-22-71
KING AND GAVARIS
CONSULTING ENGINEERS
Rev.: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

402
616

GRE-675-5.37
GREENE COUNTY



ESTIMATED QUANTITIES (Sta. 0+90 Wildonna)

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.92	C.Y.
603	Conduit Type A: 21" - 706.02 (D1250)		
	706.08 or 24" - 707.05 (0.064")	67	L.F.
660	Sodding	9	S.Y.

For Estimated Quantities See Sh. No.

Dayton-Xenia Rd. - Sta 26+75 to 33+00

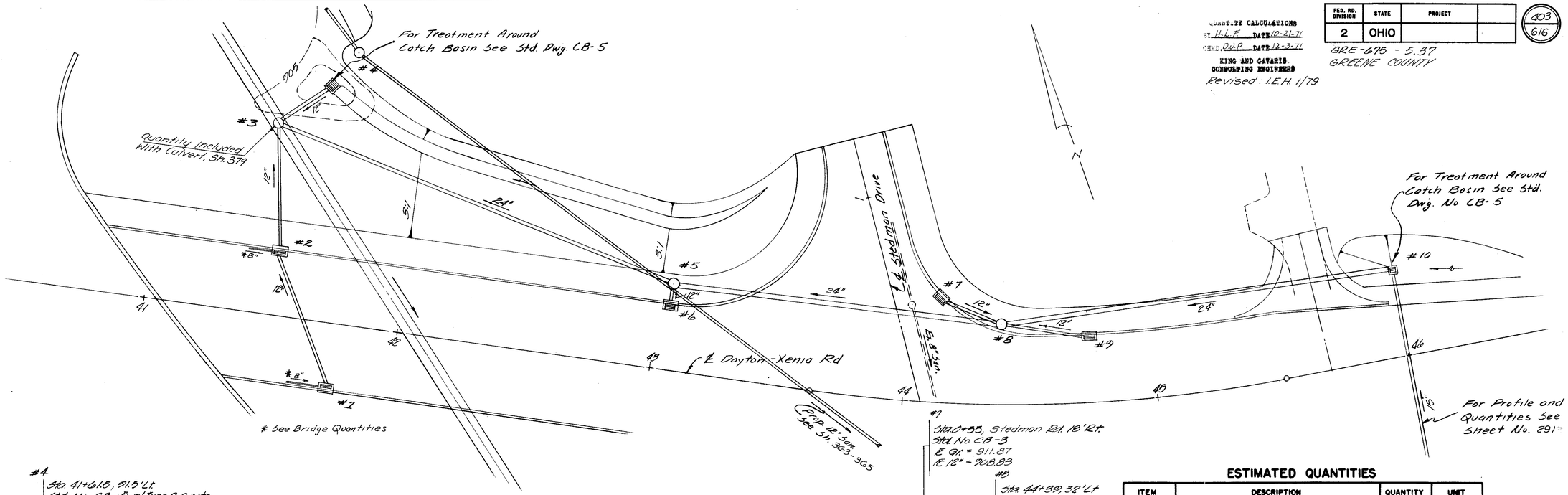
DRAINAGE DETAIL

QUANTITY CALCULATIONS
BY H.L.F. DATE 10-21-71
CHKD. D.W.P. DATE 12-3-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79

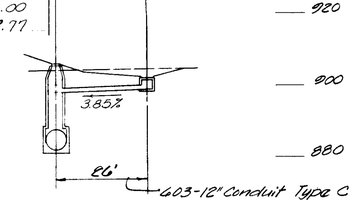
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

603 / 616

GRE-675 - 5.37
GREENE COUNTY



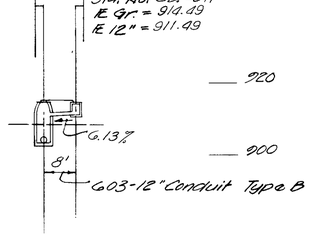
#3
Sta. 41+42.3', 74.5' Lt.
Std. No. MH-5
Rim El. = 906.00
IE 12"S = 900.00
IE 12"E = 898.00
IE 24" = 896.00
IE 72" = 882.77



#4
Sta. 41+61.8, 91.5' Lt.
Std. No. CB-5 w/Type B Grate
IE Gr. = 902.00
IE 12" = 899.00

#5
Sta. 43+05, 34' Lt.
Std. No. MH-1
Rim El. = 915.54
IE 12" = 911.00
IE 24" = 902.71
IE 6" = 910.00

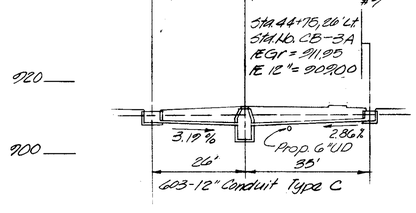
#6
Sta. 43+05, 26' Lt.
Std. No. CB-3A
IE Gr. = 914.49
IE 12" = 911.49



#7
Sta. 44+05, Stedman Rd. 18' Rt.
Std. No. CB-3
E Gr. = 911.87
IE 12" = 908.83

#8
Sta. 44+39, 32' Lt.
Std. No. MH-1
El. Rim = 912.90
IE 12" = 908.00
IE 24" = 903.94
IE 6" = 905.80

#9
Sta. 44+75, 26' Lt.
Std. No. CB-3A
IE Gr. = 911.95
IE 12" = 909.00



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
603	12" Conduit Type B	65	L.F.
603	12" Conduit Type C	87	L.F.
603	12" Conduit Type F, 707.05	50	L.F.
603	24" Conduit Type B, 706.02, (D1250) 706.08 or 707.13 (0.064")	129	L.F.
604	Std No CB-3	1	Ea.
604	Std No CB-3A	4	Ea.
604	Std No CB-5 w/Type B Grate	2	Ea.
603	24" Conduit Type C	322	L.F.
604	Std No MH-1	2	Ea.

0' 20' 40'

#1
Sta. 41+79, 26' Rt.
Sta. No. CB-3A
IE Gr. = 916.57
IE 8" = 912.75
IE 12" = 912.42

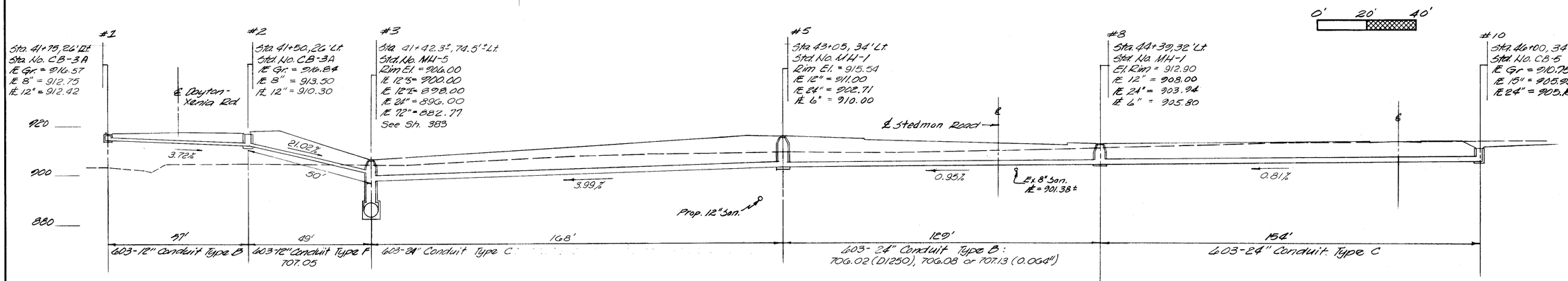
#2
Sta. 41+50, 26' Lt.
Std. No. CB-3A
IE Gr. = 916.84
IE 8" = 913.50
IE 12" = 910.30

#3
Sta. 41+42.3', 74.5' Lt.
Std. No. MH-5
Rim El. = 906.00
IE 12"S = 900.00
IE 12"E = 898.00
IE 24" = 896.00
IE 72" = 882.77
See Sh. 383

#5
Sta. 43+05, 34' Lt.
Std. No. MH-1
Rim El. = 915.54
IE 12" = 911.00
IE 24" = 902.71
IE 6" = 910.00

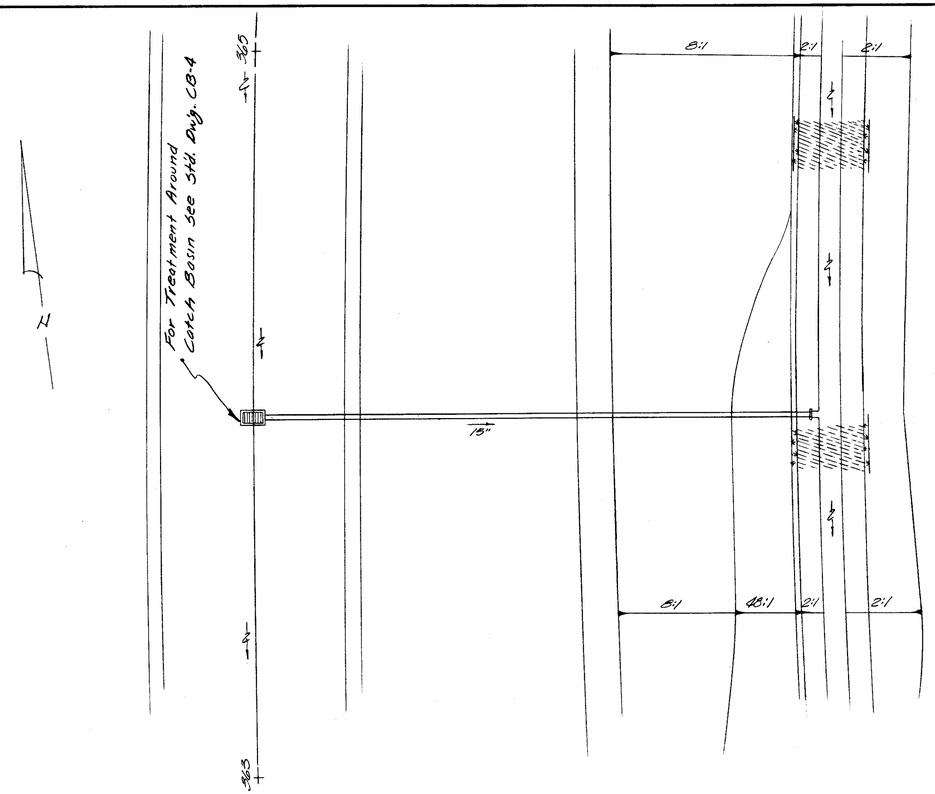
#8
Sta. 44+39.32' Lt.
Std. No. MH-1
El. Rim = 912.90
IE 12" = 908.00
IE 24" = 903.94
IE 6" = 905.80

#10
Sta. 46+00, 34' Lt.
Std. No. CB-5 w/Type B Gr.
E Gr. = 910.75
IE 15" = 905.93
IE 24" = 905.18



Dayton-Xenia Rd.-Sta. 41+42.3 to 46+00

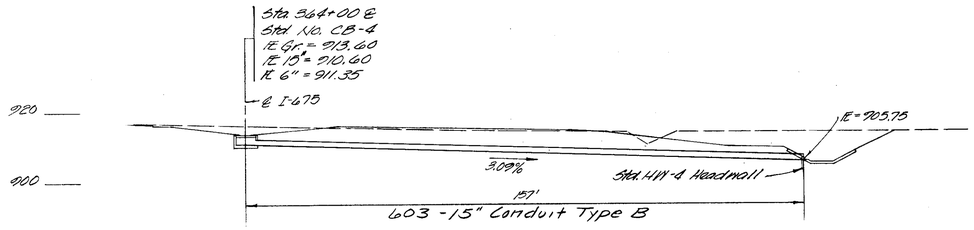
DRAINAGE DETAIL



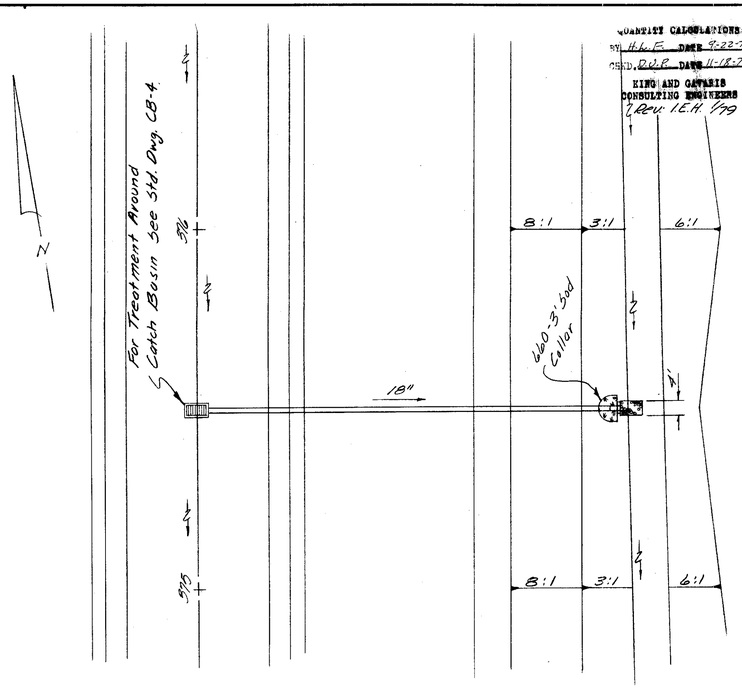
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	157	L.F.
604	Std. No CB-4	1	Eo.
660	Sodding	562	S.Y.

0' 20' 40'



Sta. 364+00 I-675



QUANTITY CALCULATIONS
BY H.L.E. DATE 9-22-71
CHKD. R.V.R. DATE 11-18-71
KING AND GAVARIS CONSULTING ENGINEERS
Rev. I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

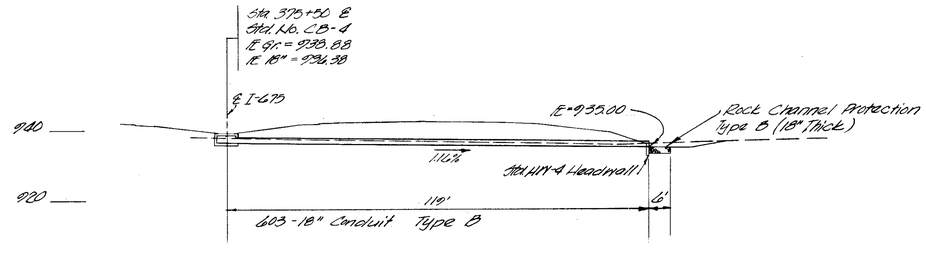
401
616

GRE-675-5.37
GREENE COUNTY

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	2	C.Y.
602	Masonry	0.33	C.Y.
603	18" Conduit Type B	119	L.F.
604	Std. No CB-4	1	Eo
660	Sodding	316	S.Y.

0' 20' 40'



Sta. 375+50 I-675

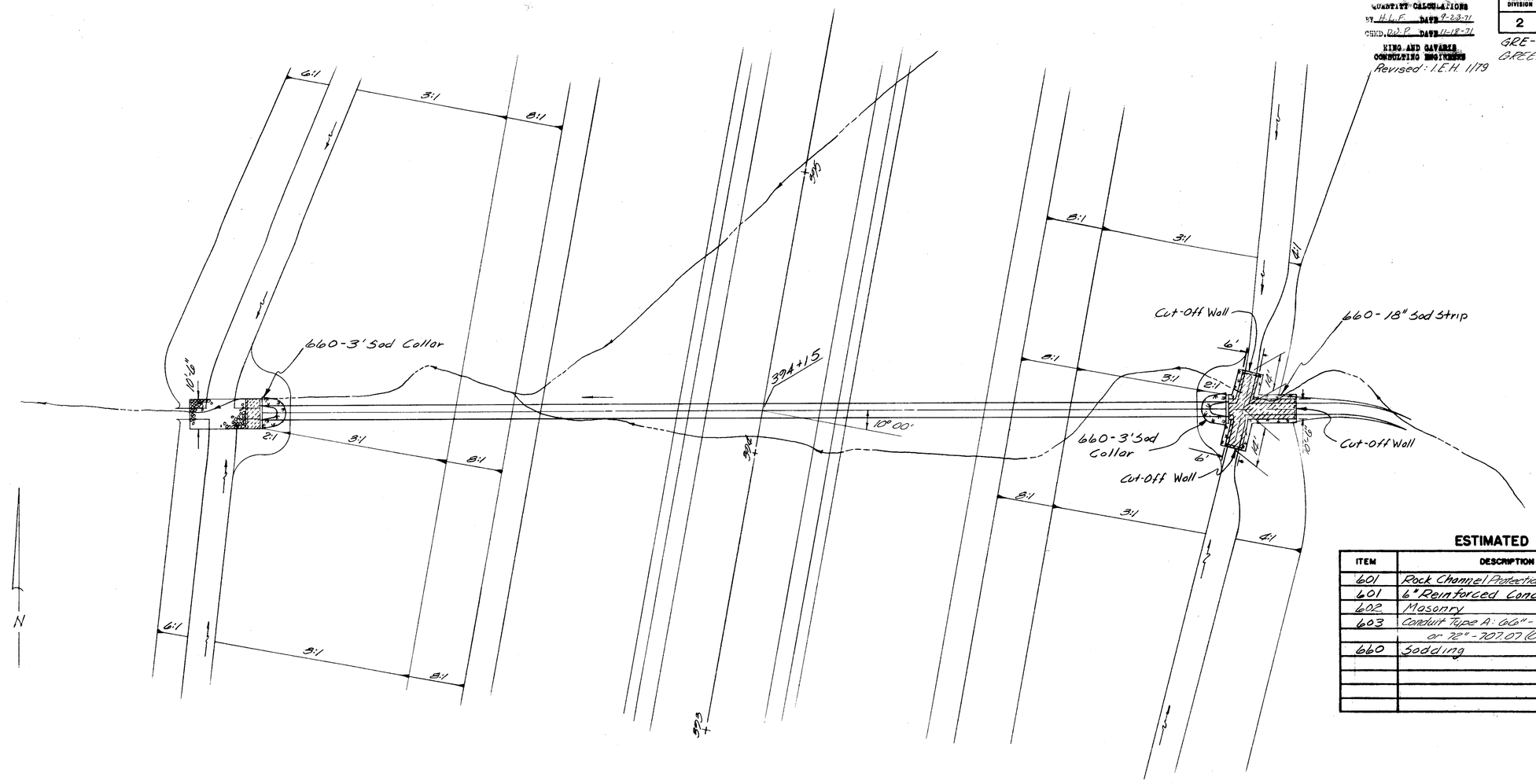
DRAINAGE DETAIL

QUANTITY CALCULATIONS
BY H.L.F. DATE 9-23-71
CHKD. D.V.P. DATE 11-18-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 11-79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

405
616

GRE-675 - 5.37
GREENE COUNTY

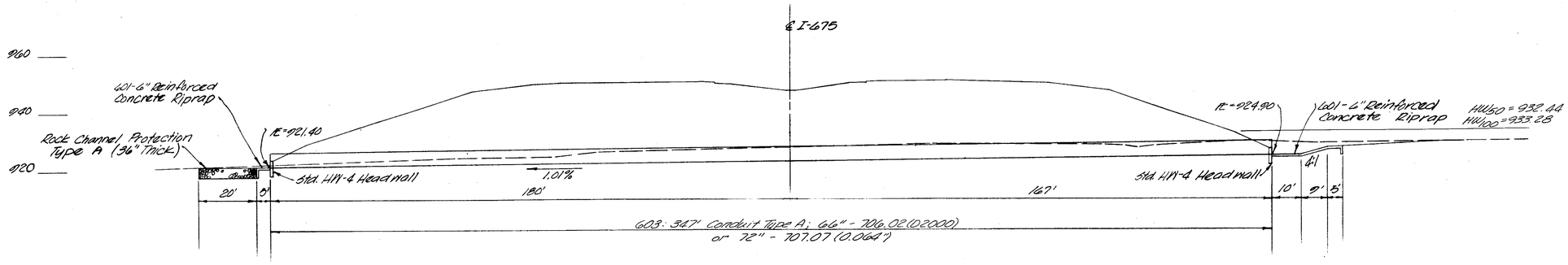


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type A, Bed	27	C.Y.
601	6" Reinforced Concrete Riprap	45	S.Y.
602	Masonry	4.84	C.Y.
603	Conduit Type A: 66" - 706.02(0.2000)		
	or 72" - 707.07(0.064")	347	L.F.
660	Sodding	26	S.Y.

0' 20' 40'

DRAINAGE AREA = 134 Ac.
Q_{100} = 270 cfs Q_{50} = 228 cfs.



Sta. 394+15 I-675

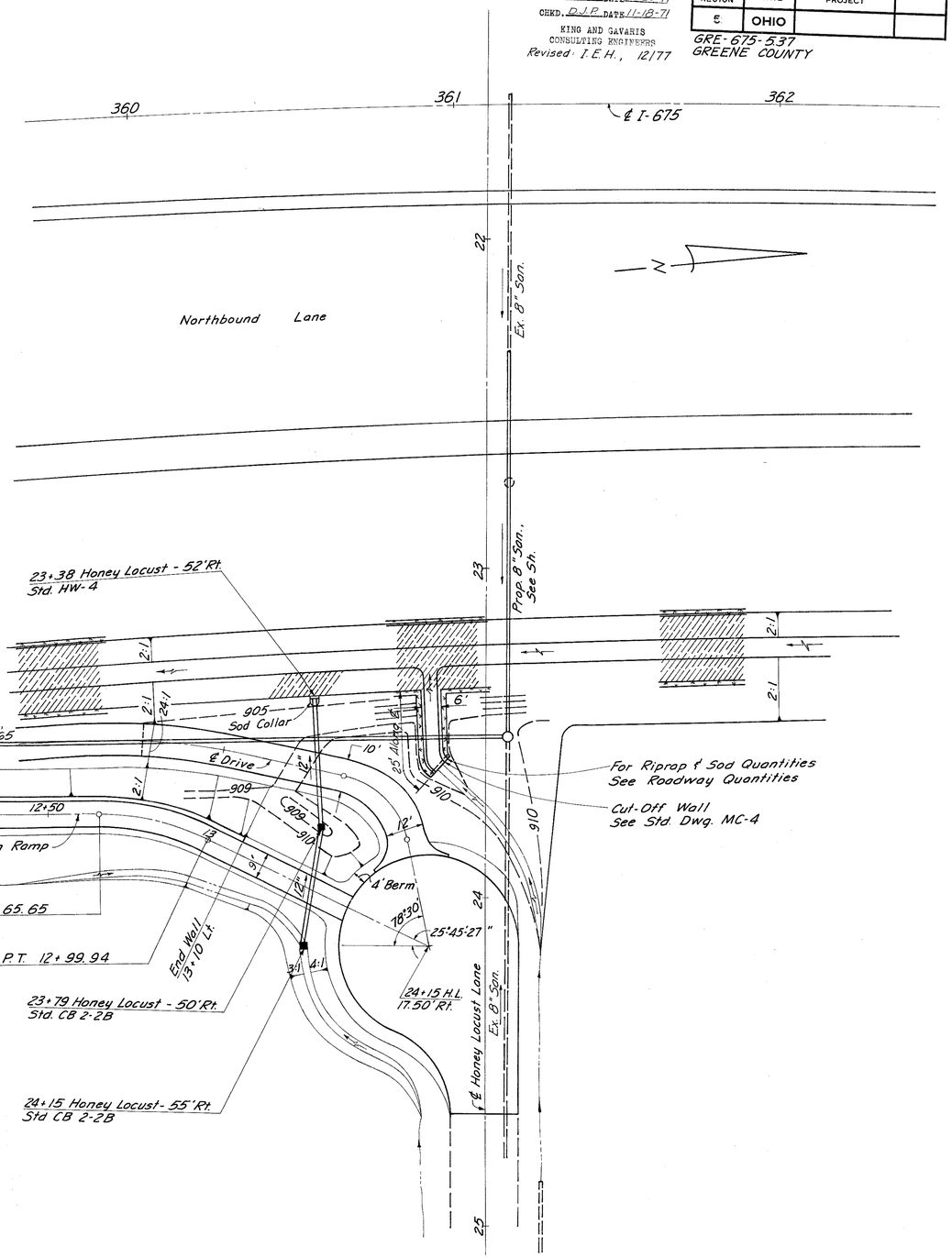
DRAINAGE DETAIL

QUANTITY CALCULATIONS
BY H.L.F DATE 9-23-71
CHKD. D.J.P DATE 11-18-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H., 12/77

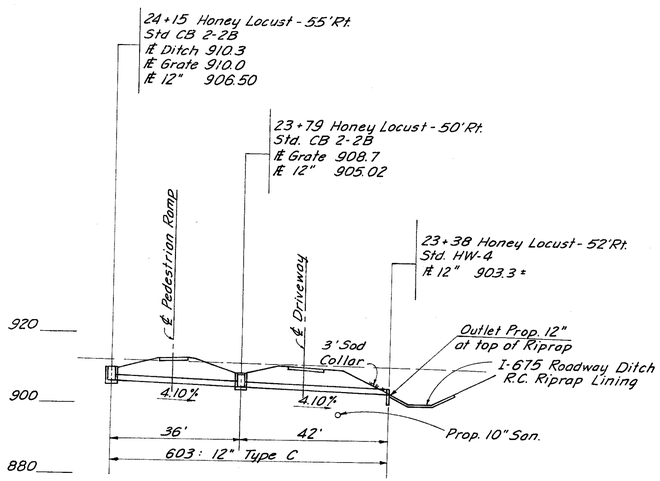
F.H.W.A REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

406/616



Grading Detail
Honey Locust Lane Cul-de-Sac & Pedestrian Ramp



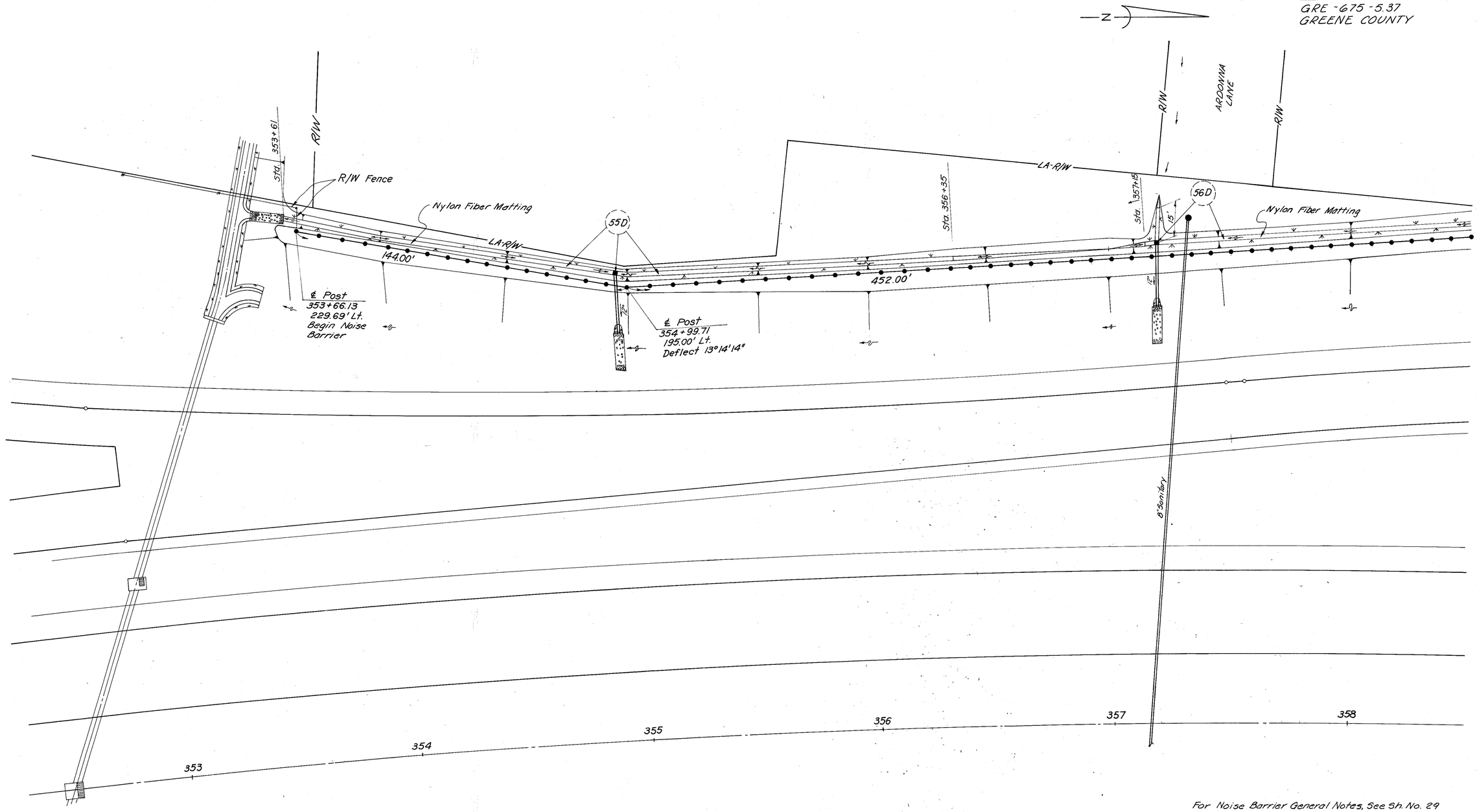
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	0.21	Cu. Yd.
603	12" Conduit Type C	78	Lin. Ft.
604	Std. CB 2-2B	2	Ea.
660	Sodding	3	Sq. Yd.

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406A
616

GRE -675 -5.37
GREENE COUNTY



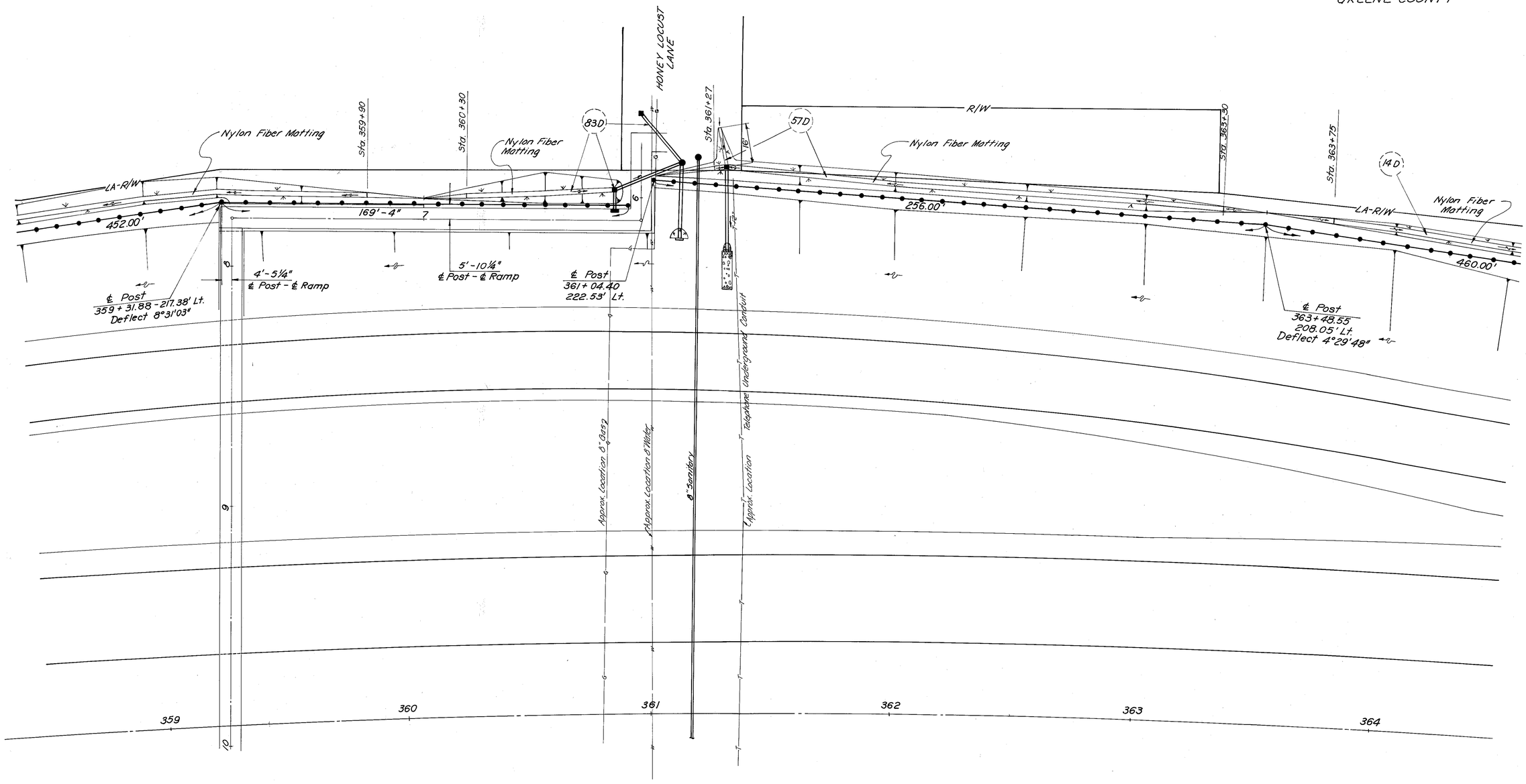
For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile , See Sh. Nos. 406H-406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Barrier Details, See Sh. Nos. 406L, 406M

NOISE BARRIER STA. 352+50 TO STA. 358+50

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406B
6/6

GRE-675-5.37
GREENE COUNTY



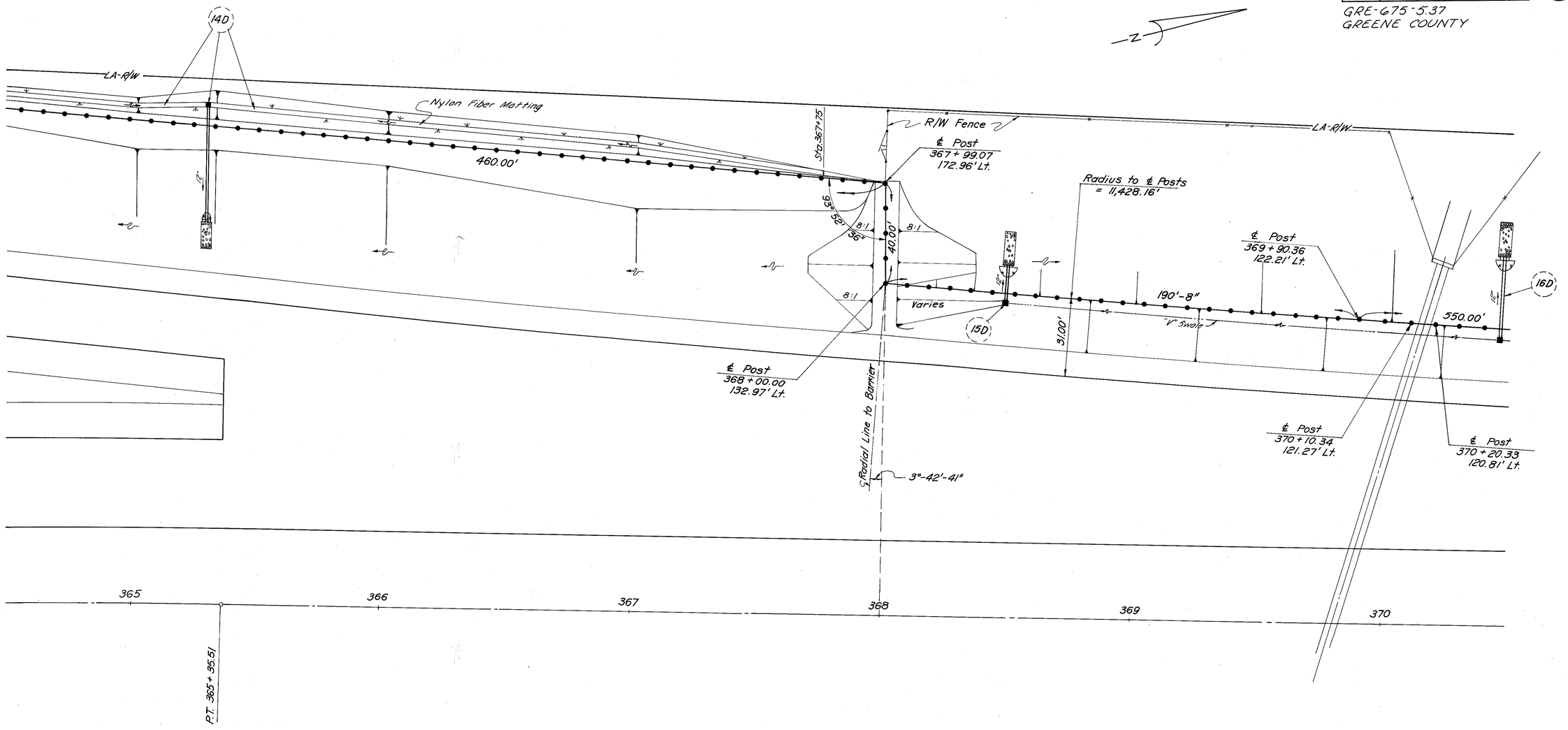
For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile, See Sh. Nos. 406H-406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Noise Barrier Details, See Sh. Nos. 406L, 406M

NOISE BARRIER STA. 358+50 TO STA. 364+50

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406C
616

GRE-675-5.37
GREENE COUNTY



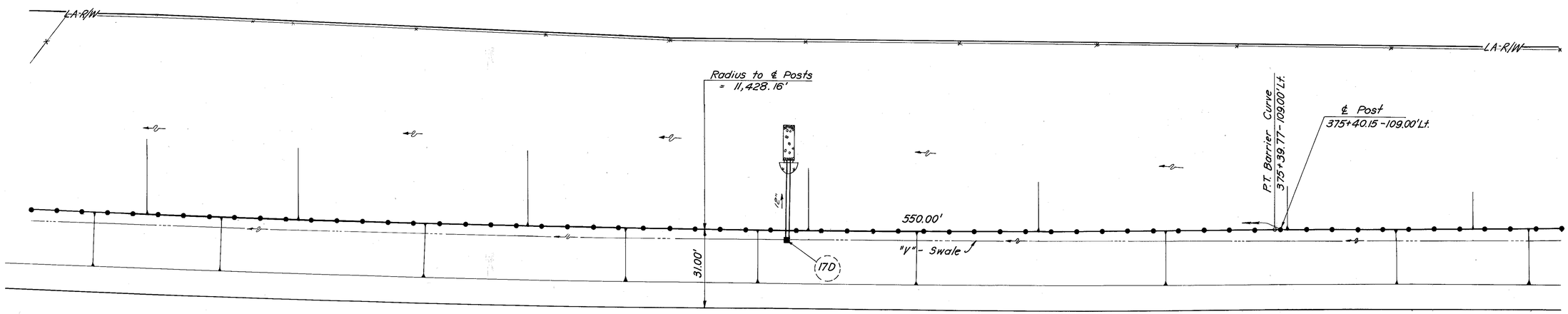
For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile, See Sh. Nos. 406H-406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Noise Barrier Details, See Sh. Nos. 406L, 406M

NOISE BARRIER STA. 364+50 TO STA. 370+50

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406D
6/6

GRE-675-5.37
GREENE COUNTY



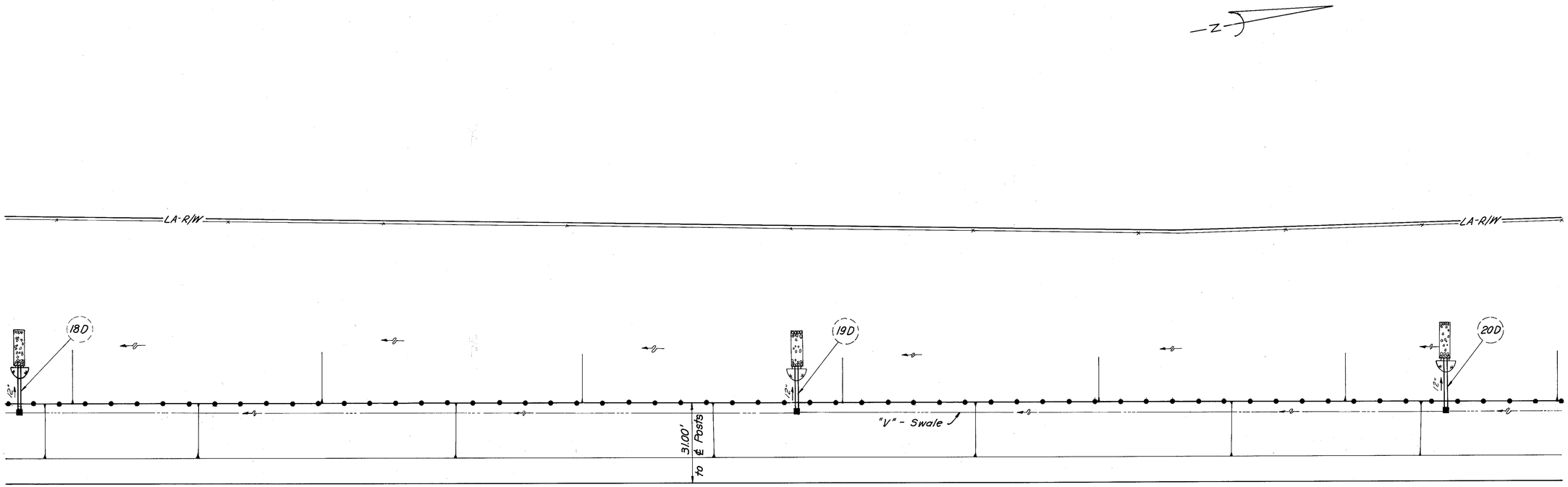
For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile, See Sh. Nos. 406H-406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Noise Barrier Details, See Sh. No. 406L, 406M

NOISE BARRIER STA. 370+50 TO STA. 376+50

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406L
616

GRE-675-5.37
GREENE COUNTY



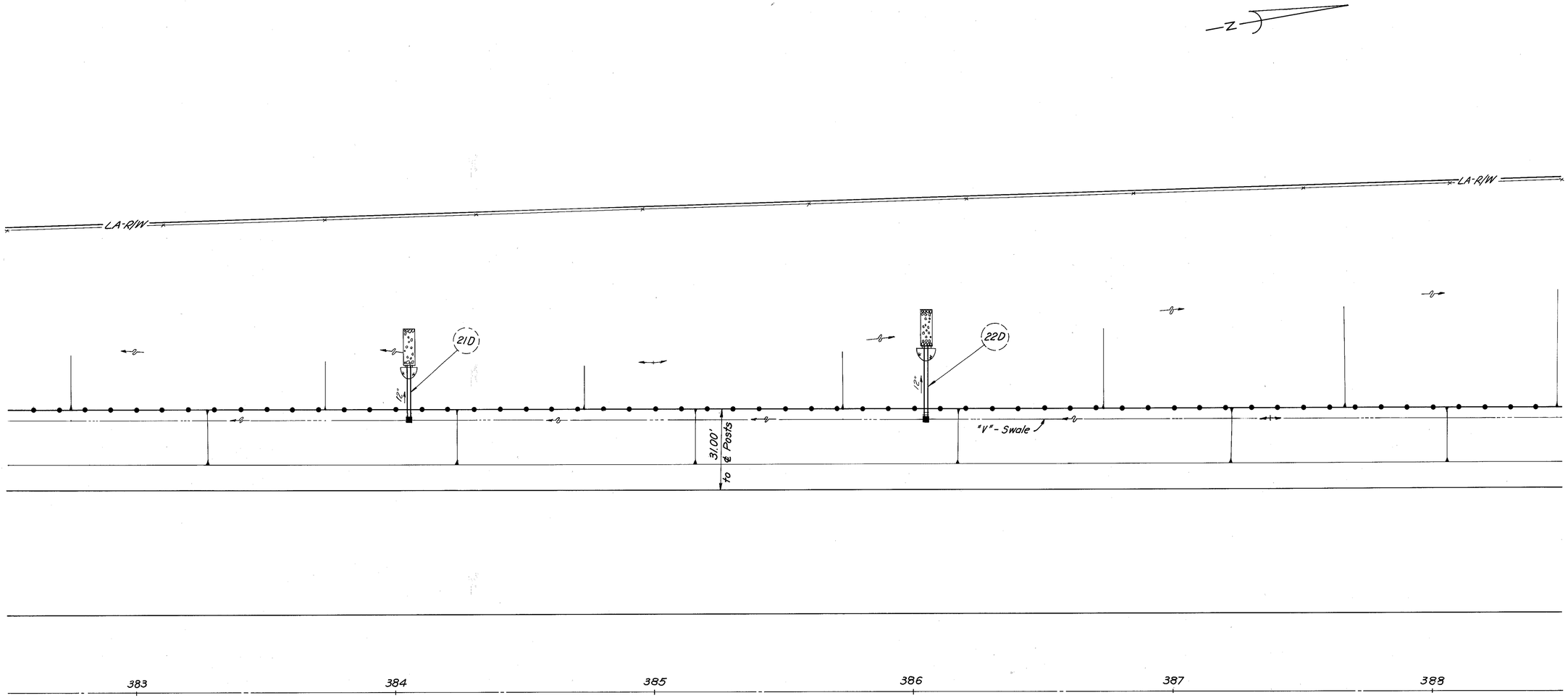
For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile, See Sh. Nos. 406H-406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Noise Barrier Details, See Sh. Nos. 406L, 406M

NOISE BARRIER STA. 376+50 TO STA. 382+50

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406F
616

GRE-675- 5.37
GREENE COUNTY



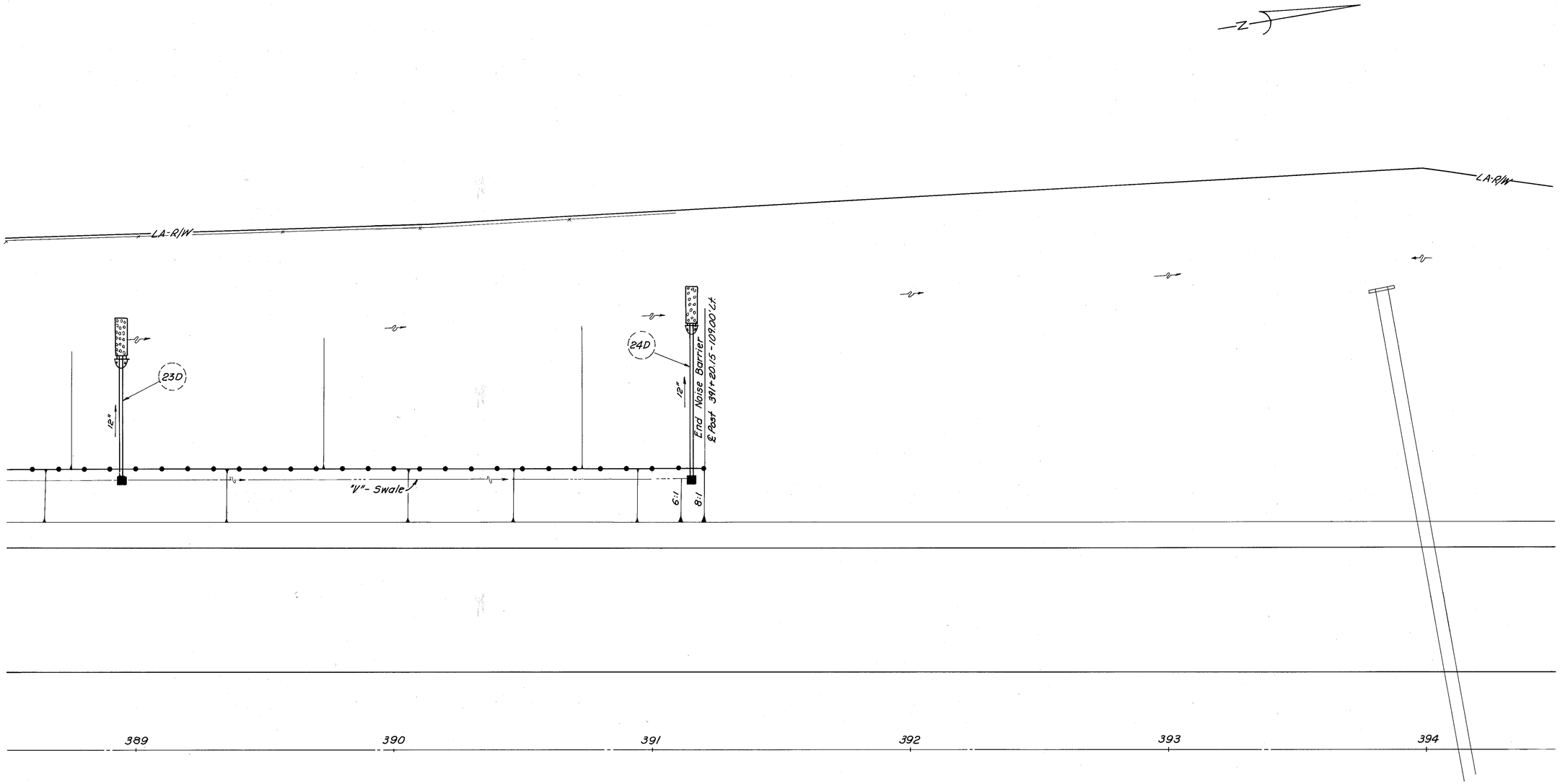
For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile , See Sh. Nos. 406H-406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Noise Barrier Details, See Sh. Nos. 406L, 406M

NOISE BARRIER STA. 382+50 TO STA. 388+50

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406G
616

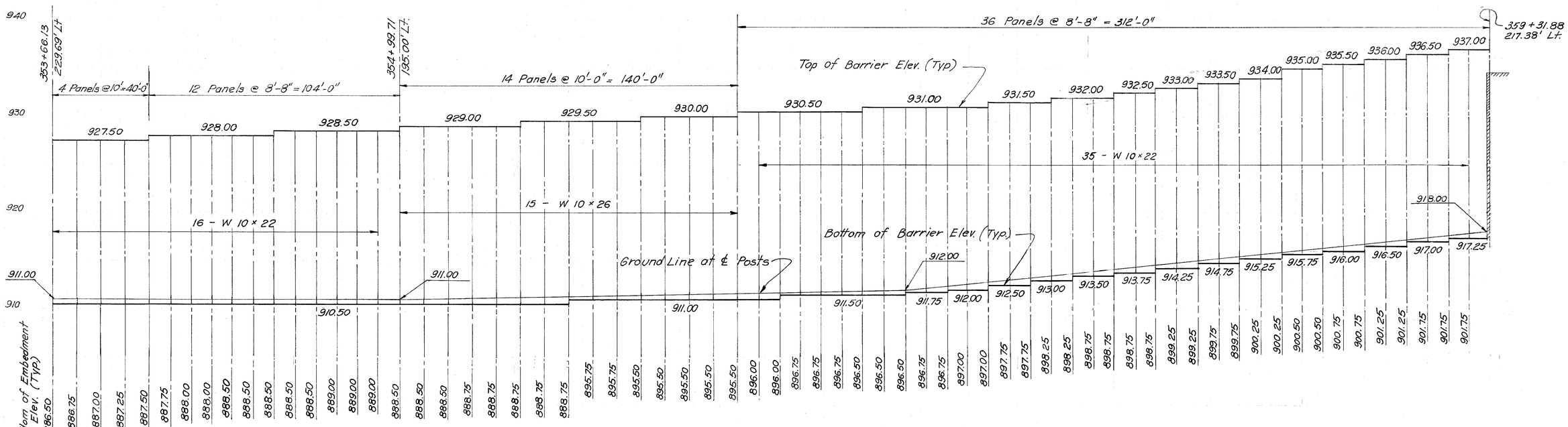
GRE - 675 - 5.37
GREENE COUNTY

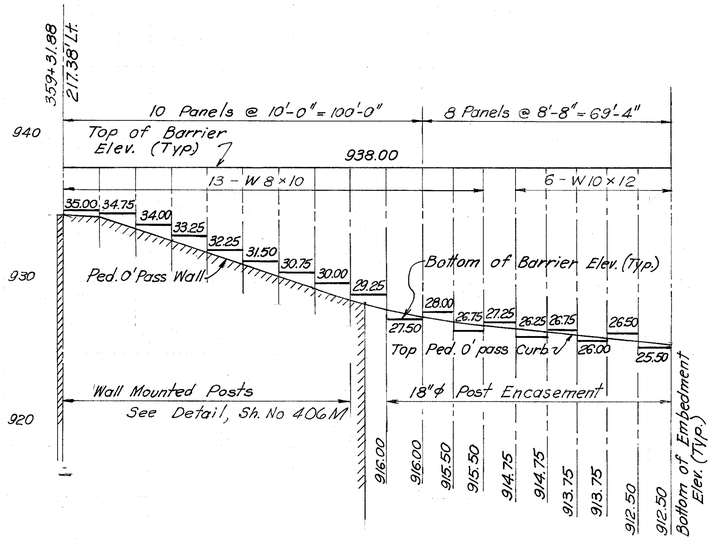


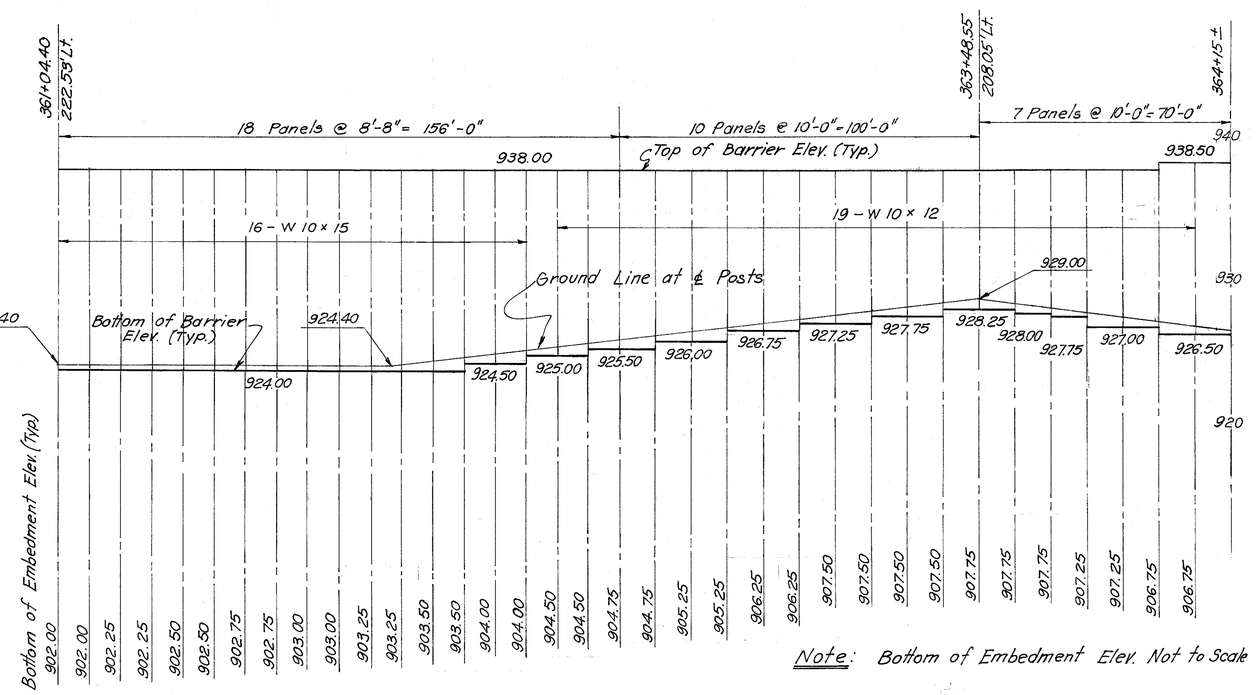
For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile , See Sh. Nos. 406H- 406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Noise Barrier Details, See Sh. Nos. 406L, 406M

NOISE BARRIER STA. 388+50 TO STA. 394+50

GRE-675-5.37
GREENE COUNTY





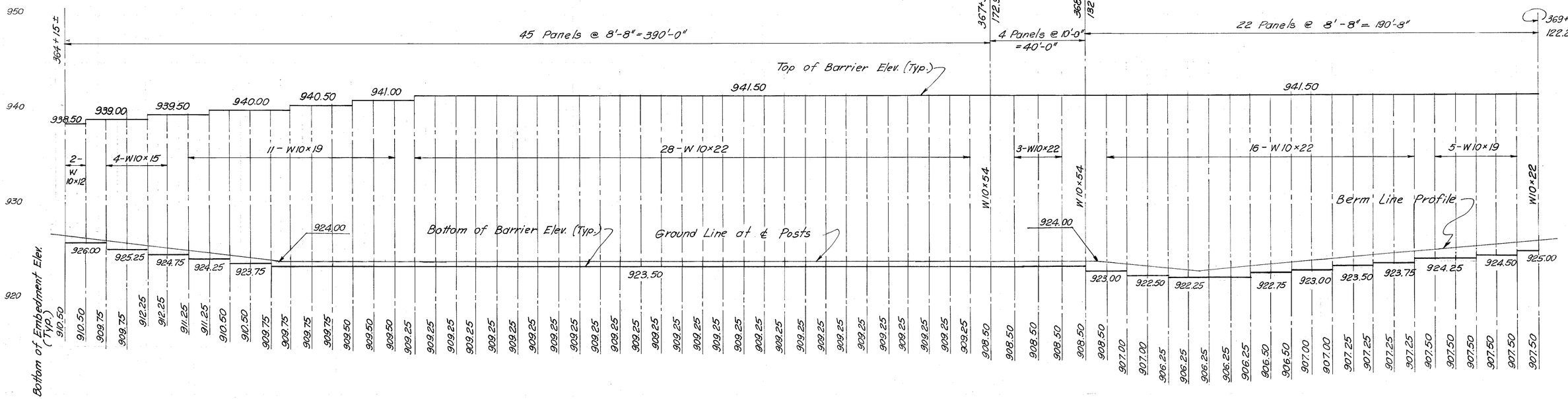


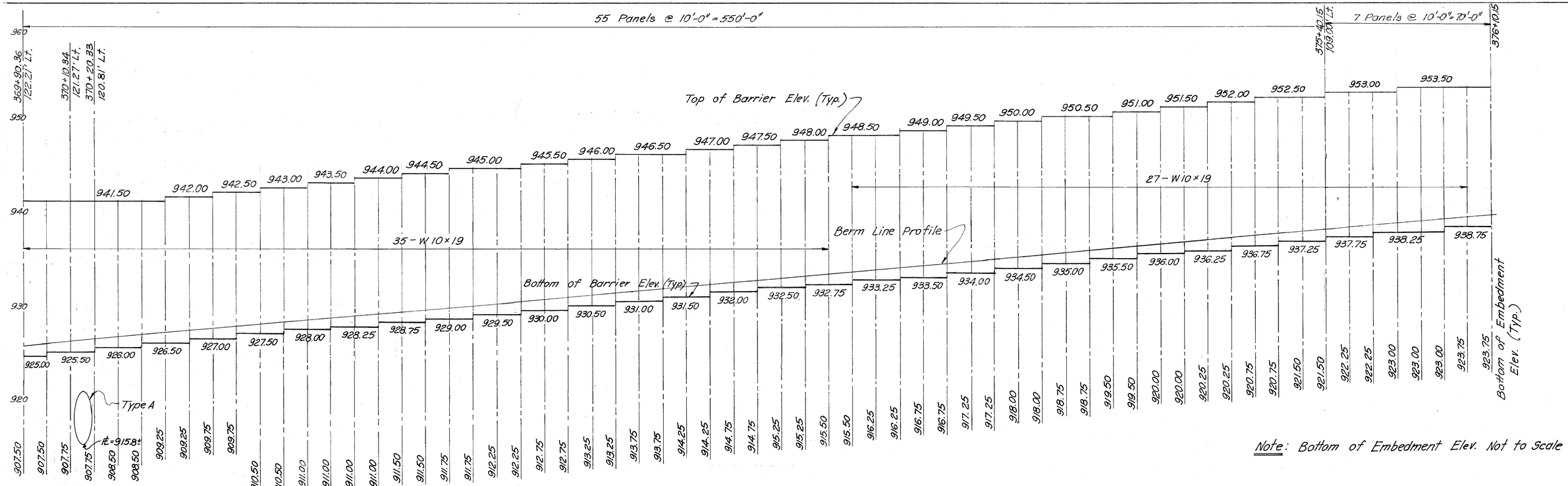
Note: Bottom of Embedment Elev. Not to Scale

NOISE BARRIER PROFILE Sta. 353+66.13 to Sta. 364+15±

406I
616

GRE-675-5.37
GREENE COUNTY



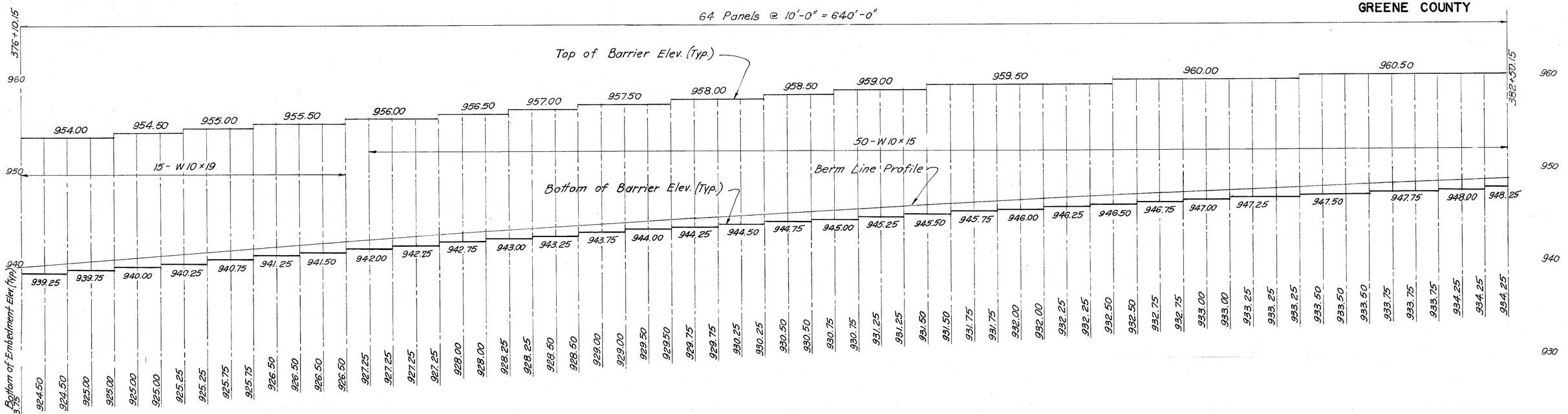


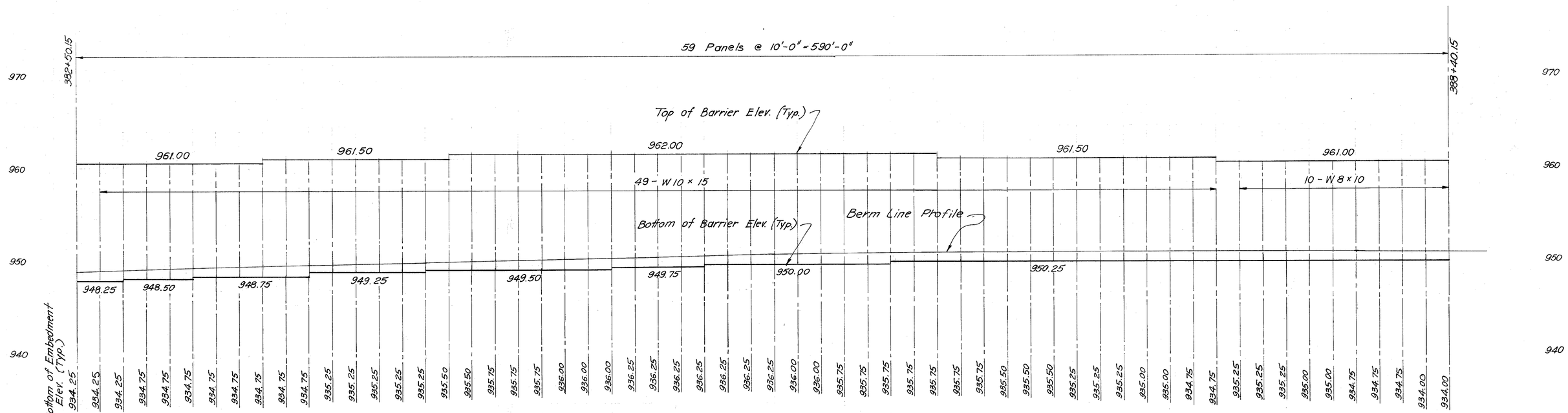
Note: Bottom of Embedment Elev. Not to Scale

NOISE BARRIER PROFILE Sta. 364+15± to Sta. 376+10.15

406J
616

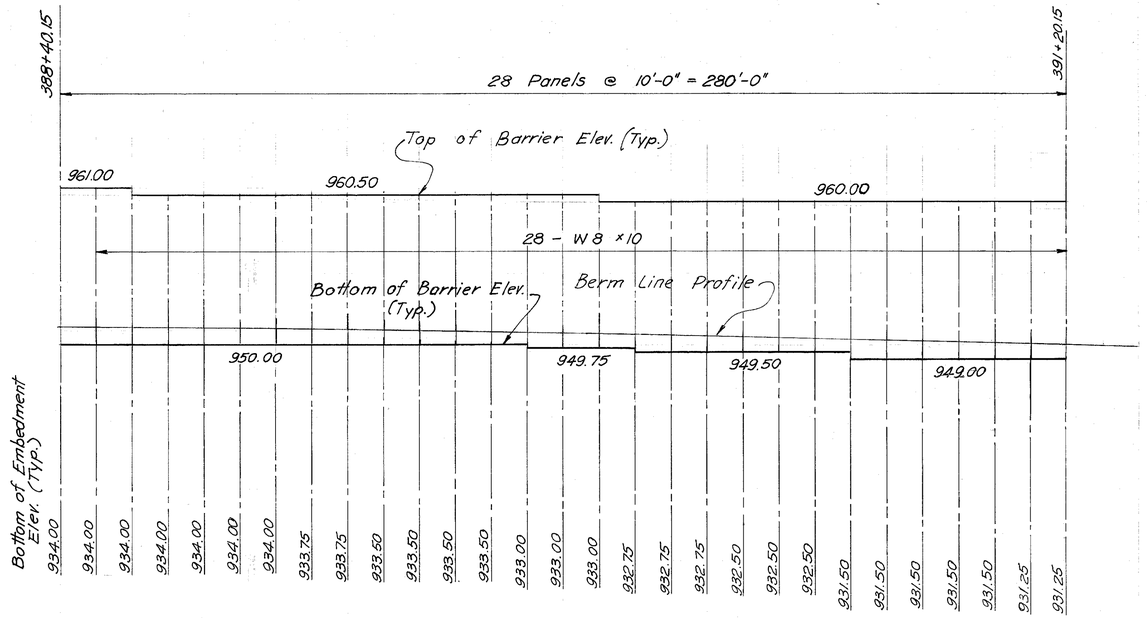
GRE-675-5.37
GREENE COUNTY





Note: Bottom of Embedment Elev. Not to Scale

NOISE BARRIER PROFILE Sta.376+10.15 to Sta.388+40.15



406K
616

GRE - 675 - 5.37
GREENE COUNTY

Note: Bottom of Embedment Elev. Not to Scale

ESTIMATED QUANTITIES

Barrier Face:

2409.75 Vertical Feet at 8'-8" Spacing = 20884.5 Sq. Ft.
3471.25 Vertical Feet at 10'-0" Spacing = 34,712.5 Sq. Ft.

Total Barrier = 55,597 Sq. Ft. Carried to General Summary

POSTS							
Size	W8×10	W10×12	W10×15	W10×19	W10×22	W10×26	W10×54
No. Each	51	27	119	93	98	15	2
Total Length (Ft.)	1186.25	790.25	3286.50	2906.50	3349.75	557.25	65.00
Weight (Lb.)	11863	9483	49,298	55,224	73,694	14,488	3510

Concrete Embedment

18"ϕ 119 Lin. Ft. @ 0.065 C.Y./Ft. = 8 C.Y.
24"ϕ 6235 Lin. Ft. @ 0.116 C.Y./Ft. = 723 C.Y.

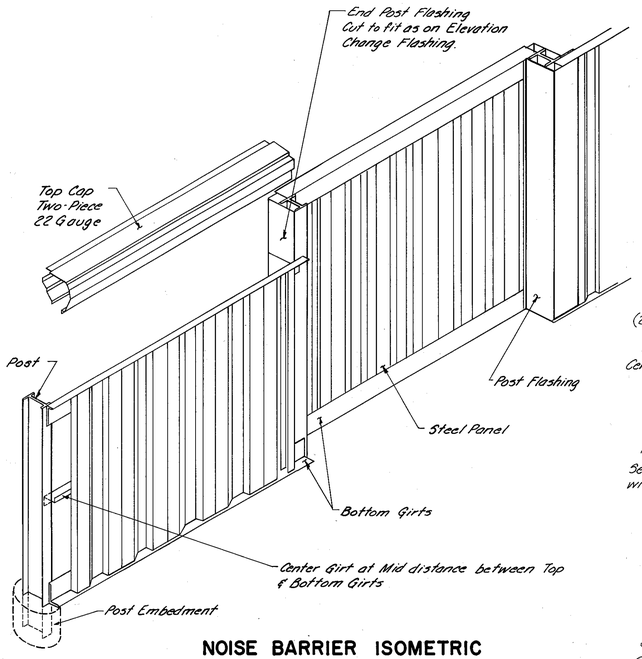
Quantity Calculations
By DHS Date 11/81
Ckd. IEH Date 11/81

NOISE BARRIER PROFILE Sta. 388+40.15 to Sta. 391+20.15

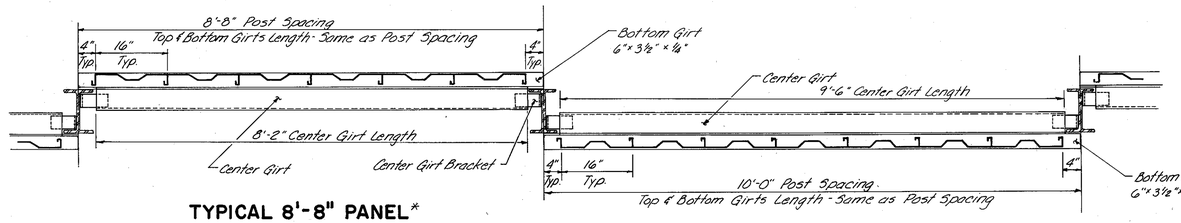
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

406L
616



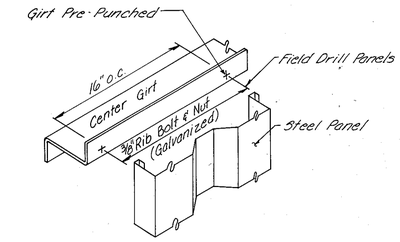
NOISE BARRIER ISOMETRIC



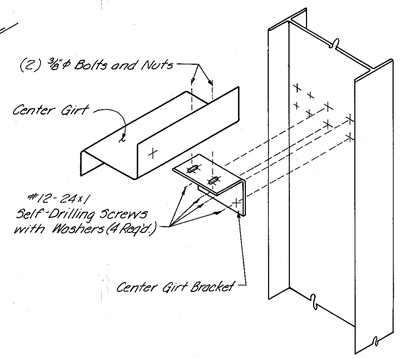
TYPICAL 8'-8" PANEL*

*Post Flashings not shown.

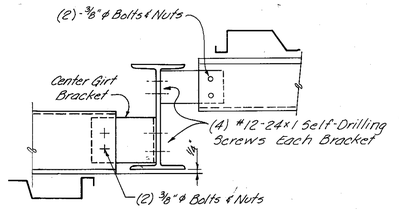
TYPICAL 10'-0" PANEL*



PANEL TO CENTER GIRT ATTACHMENT

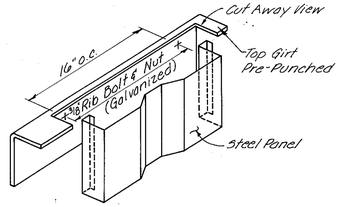


CENTER GIRT TO POST ATTACHMENT

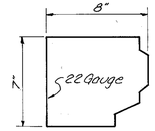


Note: Front Face of Center Girt to extend ¼" Beyond the Front Face of the Post.

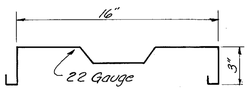
TOP VIEW



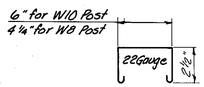
PANEL TO GIRT ATTACHMENT



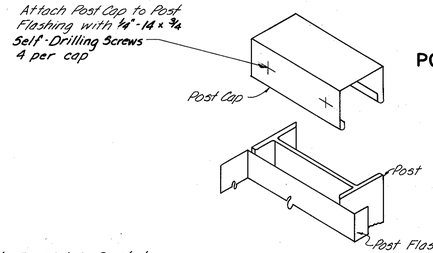
TOP CAP END CLOSURE



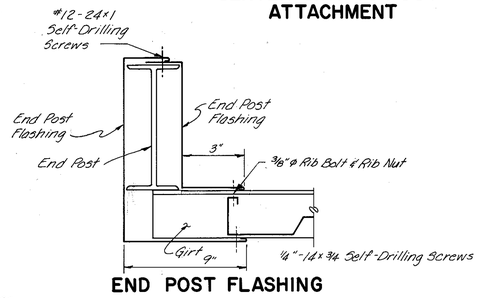
TYPICAL PANEL SECTION



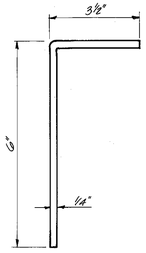
POST CAP



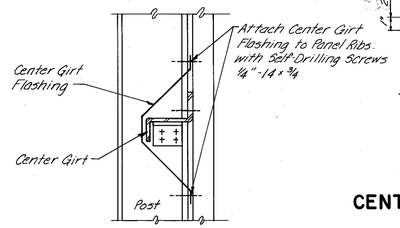
POST CAP TO POST ATTACHMENT



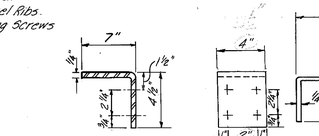
END POST FLASHING



TOP & BOTTOM GIRT

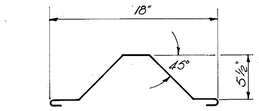


CENTER GIRT FLASHING ATTACHMENT



CENTER GIRT BRACKET

CENTER GIRT



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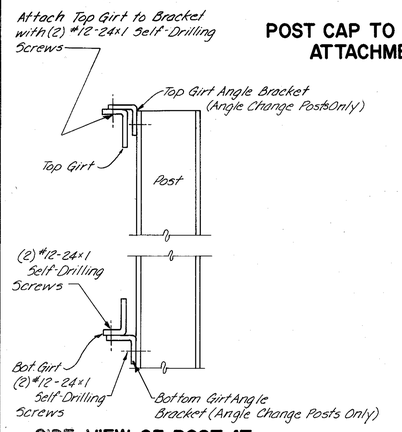
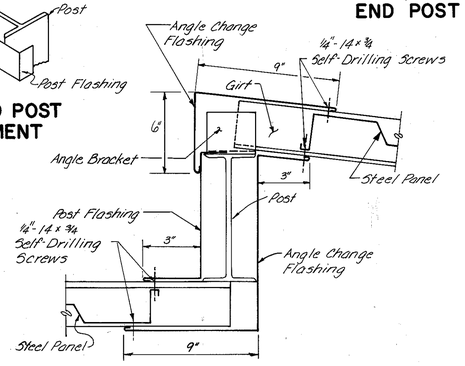
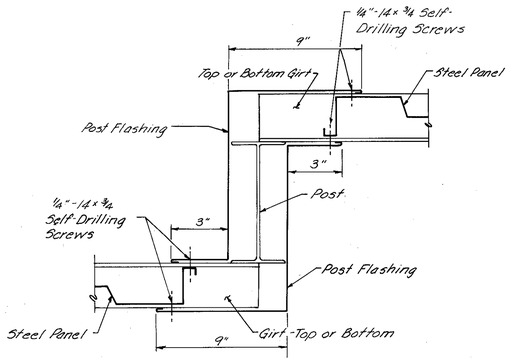


SIDE VIEW OF POST AT ANGLE CHANGE

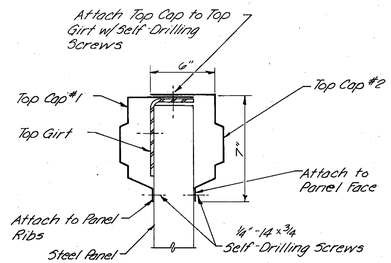


ANGLE CHANGE FLASHING

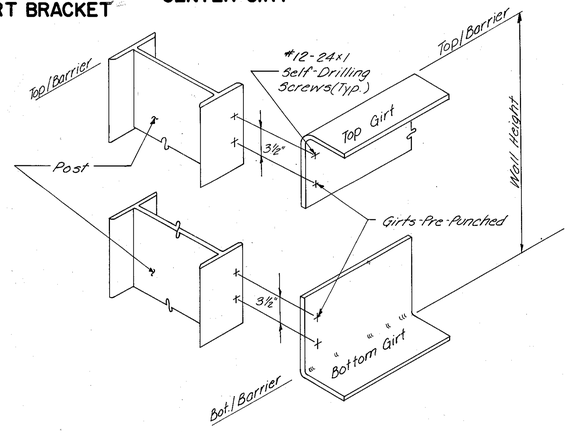
All Flashings - 22 Gauge



LINE POST FLASHING



TOP CAP ATTACHMENT

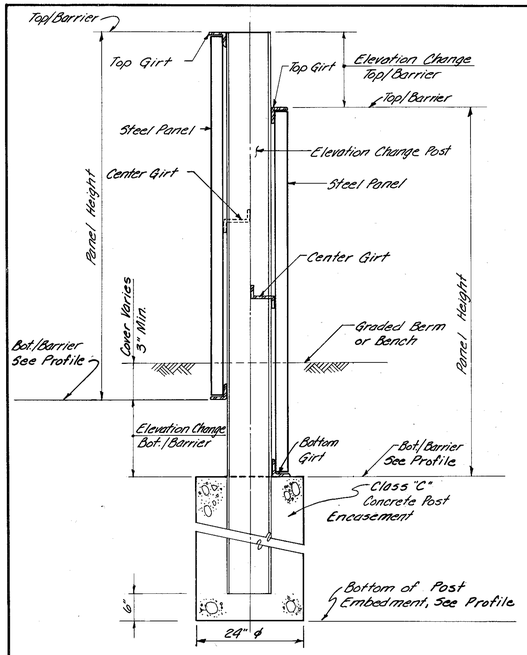


TYPICAL TOP & BOTTOM GIRT ATTACHMENT

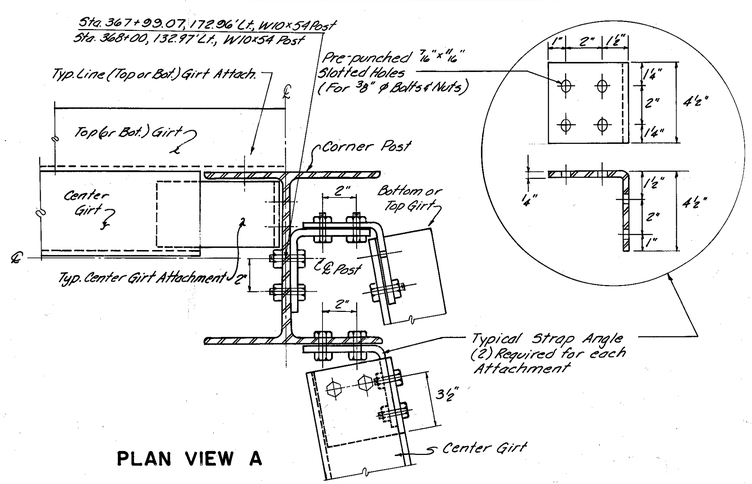
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37
GREENE COUNTY

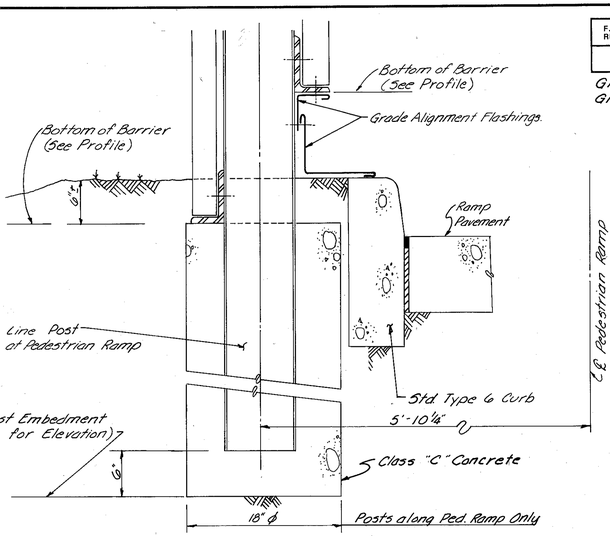
406M
616



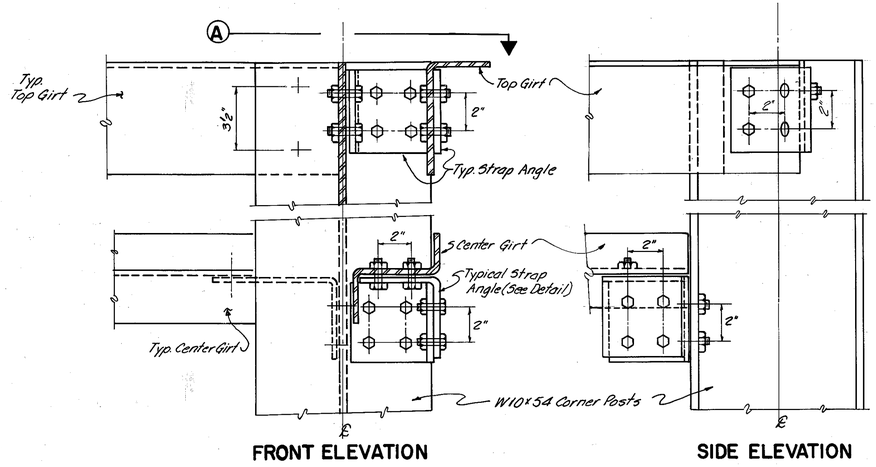
TYPICAL ELEVATION CHANGE POST DETAIL



PLAN VIEW A



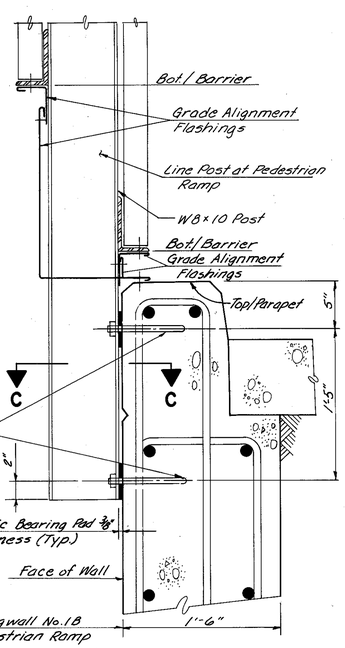
TYPICAL NOISE BARRIER DETAIL AT PEDESTRIAN RAMP



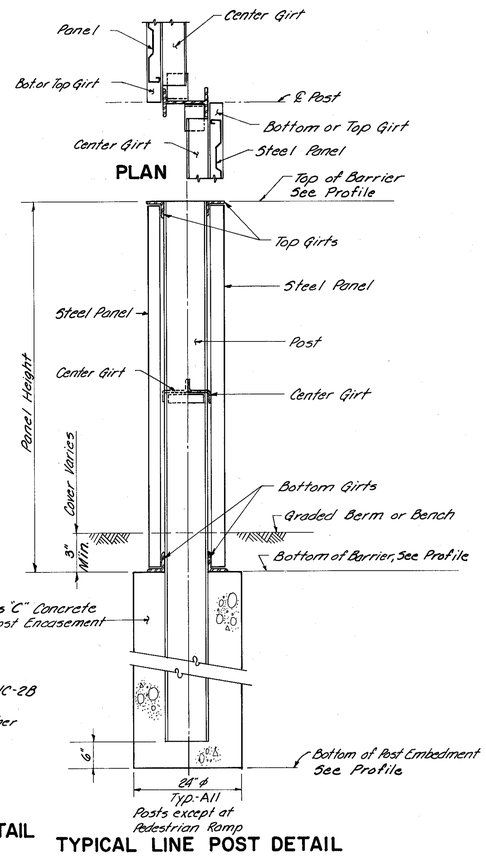
FRONT ELEVATION

SIDE ELEVATION

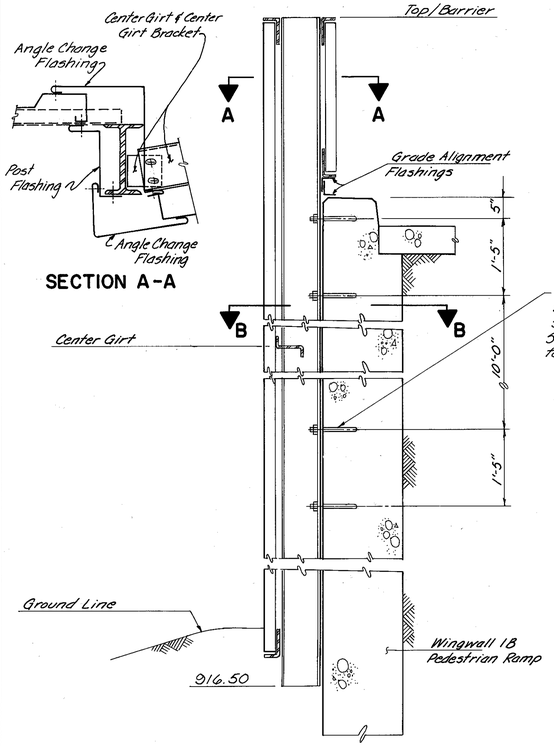
DETAIL FOR 90°± CHANGE IN WALL ALIGNMENT



TYPICAL NOISE BARRIER DETAIL AT PEDESTRIAN RAMP



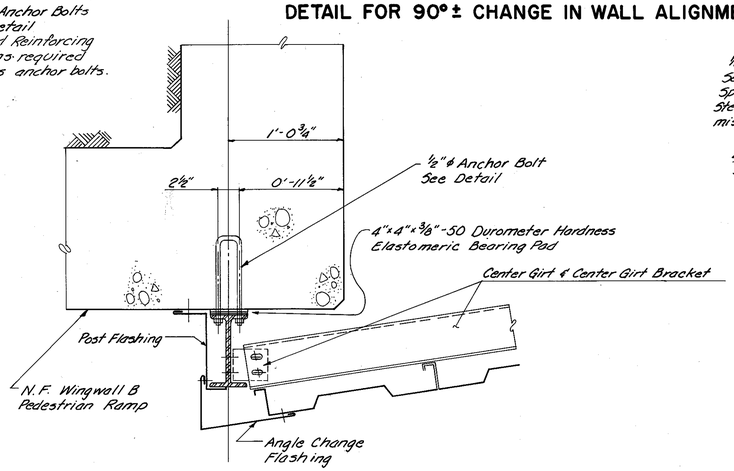
TYPICAL LINE POST DETAIL



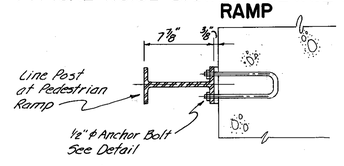
SECTION A-A

POST AT S.W. CORNER OF PEDESTRIAN RAMP

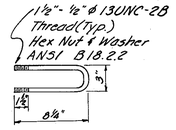
Sta. 359+31.88 - 217.38' Lt.



SECTION B-B



SECTION C-C



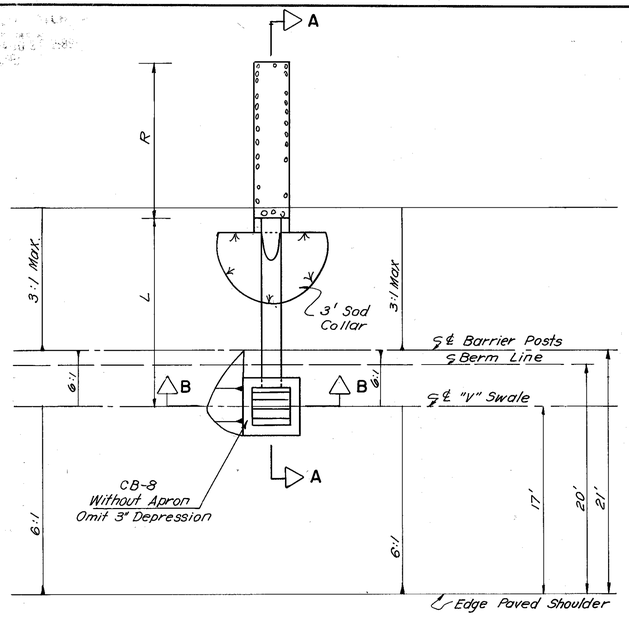
ANCHOR BOLT DETAIL ASTM A-36

NOISE BARRIER DETAILS

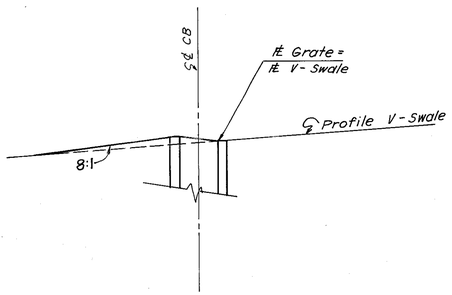
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406N 616

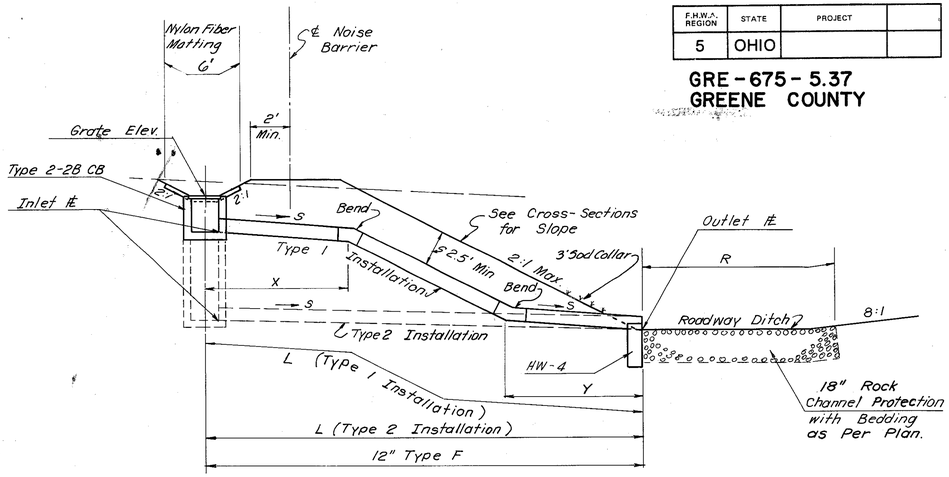
GRE-675-5.37
GREENE COUNTY



PLAN

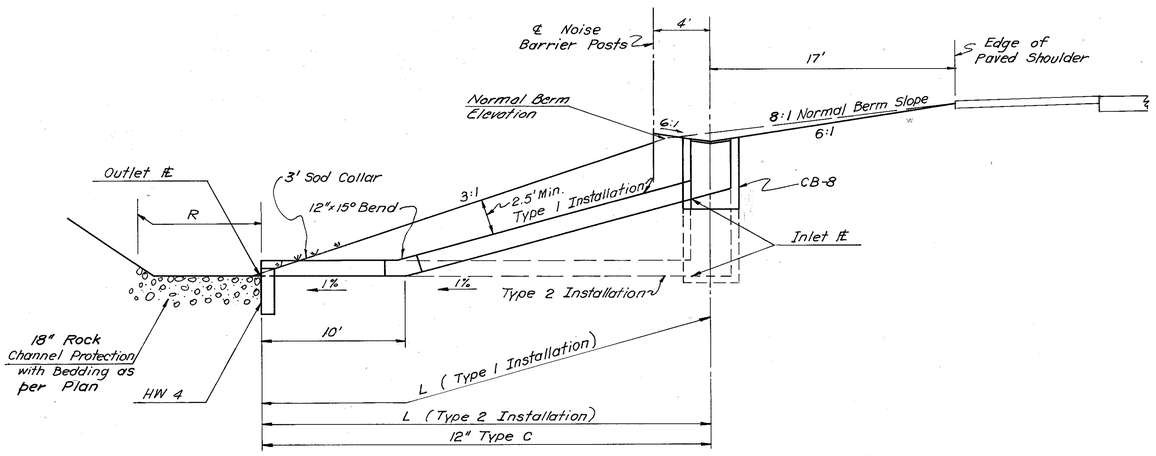


SECTION B-B



	STATION	Type	℄ Grate	Inlet ℄	Outlet ℄	L 12" Type F	R	601 Rock C.P.	602 Concrete Masonry	660 Sodding	12"x20° Bend	12"x26° Bend	S	X	Y
			Elev.	Elev.	Elev.	Lin. Ft.	Lin. Ft.	C.Y.	C.Y.	S.Y.	Ea.	Ea.	%	Lin. Ft.	Lin. Ft.
55D	354+95	1	910.0	907.00	901.97	27	16	4.7	0.21	2.7	—	2	10	8	8
56D	357+20	2	911.0	908.28	905.34	28	16	4.7	0.21	2.7	—	—	10.5		
57D	361+32	1	922.0	919.49	912.11	37	16	4.7	0.21	2.7	2	—	8.0	15	10
14D	365+28	2	921.5	919.11	918.17	4.7	11	3.5	0.21	2.7	—	—	2.0		

NOISE BARRIER DRAINAGE AT TOP OF CUT AREAS



SECTION A-A

	STATION	Type	℄ Grate	Inlet ℄	Outlet ℄	L 12" Type C	R	601 Rock C.P.	602 Concrete Masonry	660 Sodding	12"x15° Bend
			Elev.	Elev.	Elev.	Lin. Ft.	Lin. Ft.	C.Y.	C.Y.	S.Y.	Ea.
15D	368+48	2	922.64	919.51	919.36	15	14	4.1	0.21	3.0	—
16D	370+46	1	927.15	923.52	917.71	33	14	4.1	0.21	3.0	1
17D	373+46	1	933.97	930.40	925.01	31	14	4.1	0.21	3.0	1
18D	376+55	1	940.57	937.70	935.72	18	14	4.1	0.21	3.0	1
19D	379+55	2	945.55	941.22	941.05	17	14	4.1	0.21	3.0	—
20D	382+05	1	948.48	945.53	943.20	20	14	4.1	0.21	3.0	1
21D	384+05	1	950.01	946.99	944.27	21	14	4.1	0.21	3.0	1
22D	386+05	1	950.84	947.47	943.02	28	14	4.1	0.21	3.0	1
23D	388+95	1	950.79	946.30	936.27	48	14	4.1	0.21	3.0	1
24D	391+15	1	949.75	944.56	931.65	60	14	4.1	0.21	3.0	1

BERM DRAINAGE FOR NOISE BARRIER

NOISE BARRIER DRAINAGE DETAILS

FED. RD. DIVISION	STATE	PROJECT		401 / 616
2	OHIO			

GRE-675 - 5.37
GREENE COUNTY

MICROFILMED JUN 1985

GENERAL NOTES

(THESE NOTES APPLY TO ALL BRIDGES EXCEPT GRE-675-0615 AND 0626 SR. SEE SHEETS 499/616 AND 491/616 FOR GENERAL NOTES PERTAINING TO THESE BRIDGES)

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS AND TO SUPPLEMENTAL SPECIFICATIONS AS FOLLOWS:

	BRIDGE NO.						
STANDARD DRAWINGS	GRE-675-0576	GRE-675-0589	GRE-675-0616	GRE-675-0737	GRE-35-0009	GRE-35-0074	GRE-35-0107 R/L
AS-1-72 DATED 6-30-72	X	X	X	X	X	X	X
BR-1-67 REVISED 10-15-71	X	X		X	X	X	X
BR-2-67 REVISED 10-15-71			X				
RB-1-55 REVISED 2-02-59	X	X	X	X		X	X
SD-1-69 DATED 6-12-69	X	X	X	X		X	X
SUPPLEMENTAL SPECS.							
849-DATED 10-19-81				X			
836 DATED 3-12-75	X	X	X	X	X	X	X

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977 (FOR STRUCTURE GRE-675-0737) AND BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1969, (FOR REMAINING STRUCTURES) INCLUDING THE OHIO "SUPPLEMENT" TO BOTH SPECIFICATIONS.

DESIGN DATA:
DESIGN LOADING - HS20-44 AND THE ALTERNATE MILITARY LOADING

CONCRETE CLASS S - F'c = 4500 P.S.I. FC = 1800 P.S.I. FOR SUPERSTRUCTURE. FOR ADDITIONAL CLASS S CONCRETE NOTES, SEE
CONCRETE CLASS C - UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE — SHEET NO. A1/A1
STRUCTURAL STEEL - ASTM A588-UNIT STRESS 27,000 P.S.I. (BRIDGE NO. GRE-675-0737)
ASTM A36-UNIT STRESS 20,000 P.S.I. (ALL OTHER BRIDGES)
REINFORCING STEEL - ASTM A615, A616 OR A617 - UNIT STRESS 20,000 P.S.I. SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A82 OR A615

MAINTENANCE OF TRAFFIC: SEE SHEET 30/616 OF THE ROADWAY GENERAL NOTES.

LIGHTING QUANTITIES: ARE SHOWN ON SHEET 149/616

SCUPPERS: FOR BRIDGES, INCLUDING SUPPORT ANGLES SHALL BE GALVANIZED IN ACCORDANCE WITH 711.02. EXCEPT WHERE CONNECTED TO HORIZONTAL CONDUCTOR PIPES ALL SCUPPER PIPES SHALL EXTEND 8" BELOW THE BOTTOM OF FLANGE INSTEAD OF 2" AS SHOWN ON STANDARD DRAWING SD-1-69.

ELECTRICAL CONDUITS: SHALL HAVE A MINIMUM CLEARANCE OF 2" FROM ALL CONCRETE SURFACES AND SHALL BE PLACED 1" CLEAR ABOVE A HORIZONTAL CONSTRUCTION JOINT.

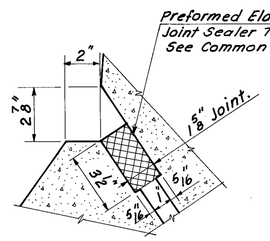
REINFORCING STEEL COVER: SHALL CONFORM TO ITEM 509 EXCEPT THAT IN FOOTINGS THE MINIMUM COVER SHALL BE 3" FROM ANY SURFACE.

END DAM: ANCHOR BARS SHALL BE LOCATED 3-3/8" CLEAR FROM THE TOP OF THE BRIDGE DECK. (STANDARD DRAWING SD-1-69, SHEET 1 OF 3, SECTION A-A) MONOLITHIC WEARING SURFACE THICKNESS IS ASSUMED TO BE 1"

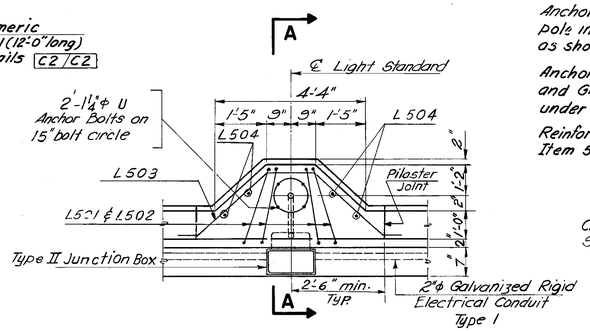
BACKWALL CONCRETE: IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE BRIDGE SEAT OR BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

APPROACH SLAB: CLEARANCE TO TOP REINFORCING STEEL SHALL BE 3" AND JACKING HOLES MAY BY ELIMINATED.

REINFORCING STEEL LAPS: SHALL BE MINIMUM 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.



DETAIL "A"

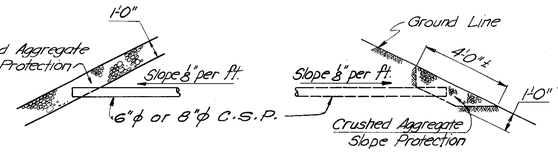


PEDESTAL PLAN

Anchor bolt covers for future pole installation shall be installed as shown on Std. Dwg. HL-4.

Anchor Bolts, Pull Boxes, Conduits and Ground Cables paid for under Item 625

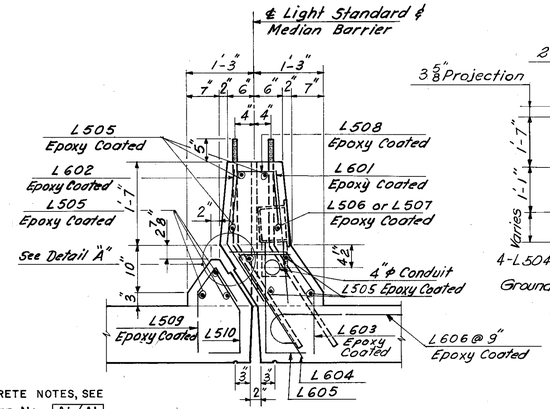
Reinforcing Steel paid for under Item 509.



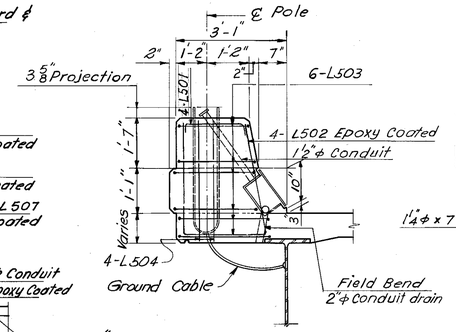
FRONT SLOPE SIDE SLOPE

TERMINATION OF 6" OR 8" C.S.P.

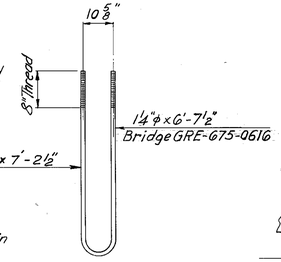
ABUTMENT DRAINS



SECTION B-B



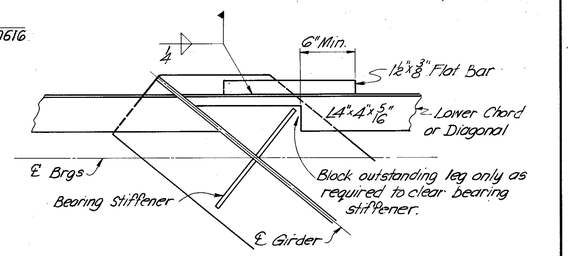
SECTION A-A



ANCHOR BOLT DETAIL

LIGHT STANDARD PEDESTAL

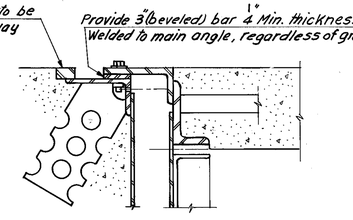
(Bridge No. GRE-675-0616 Similar see Std. Dwg. HL-4)



All End Crossframe Details, Welding Details and End of Girder Details not shown similar to SD-1-69.

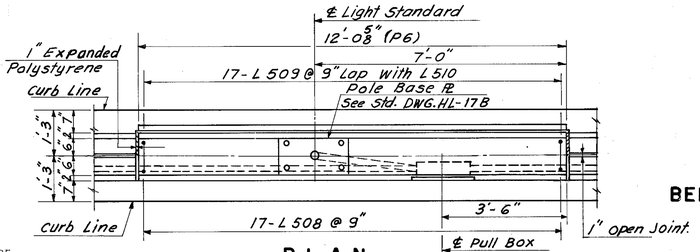
SPECIAL END CROSSFRAME DETAIL

Bridges No. GRE-675-0589 & 0616 only

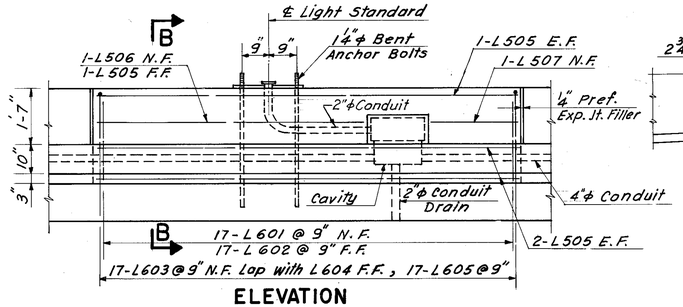


SECTION THRU ROADWAY END DAM

For other details, see Section A-A SD-1-69, Page 1

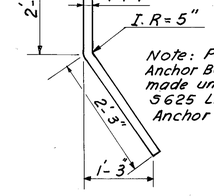


PLAN



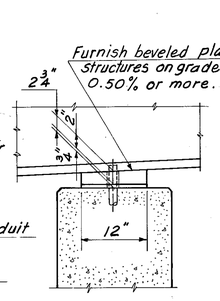
ELEVATION

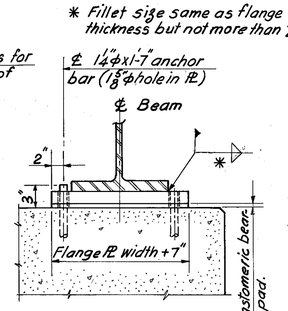
LIGHT STANDARD AT MEDIAN BARRIER



Note: Payment for Anchor Bolts shall be made under Item 5625 Light Pole Anchor Bolts.

BENT ANCHOR BOLT DETAIL



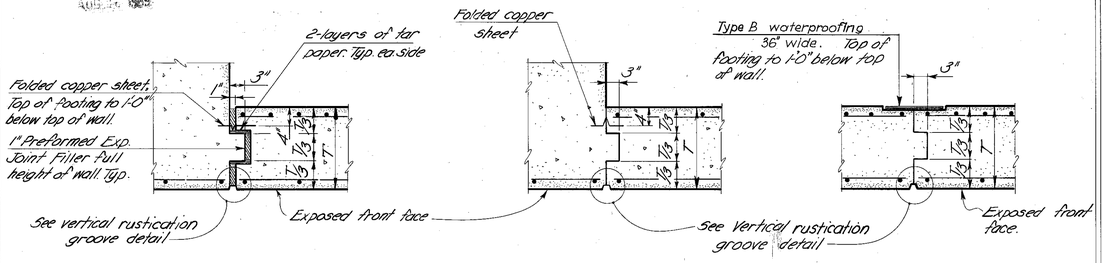


FIXED BEARING DETAIL F-150

KING & GAVARIS CONSULTING ENGINEERS CINCINNATI OHIO	C1/C2
GENERAL NOTES & COMMON DETAILS - 1	
GREENE 675 - 5.37	

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/25/12	

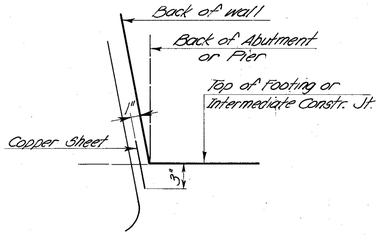
MICROFILMED
AUG 17 1965



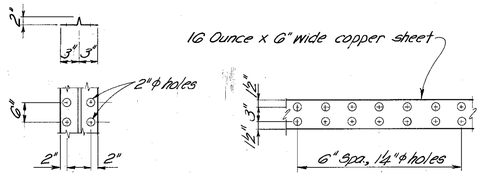
TYPE 1 TYPE 2

EXPANSION JOINT DETAIL

CONTRACTION JOINT DETAILS



DETAIL SHOWING COPPER SHEET LOCATION



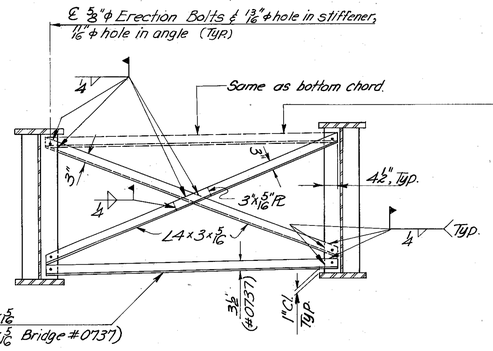
16-oz. FOLDED COPPER SHEET DETAIL

COPPER SHEET DETAIL

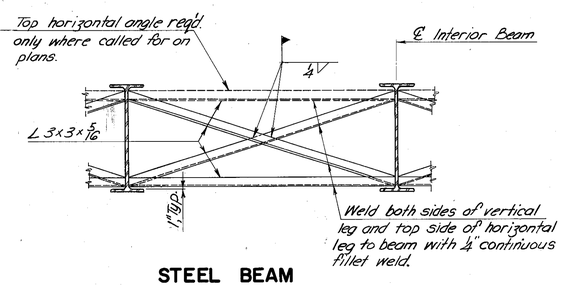
Provide Copper dams in all construction Joints

TYPICAL DETAILS AT BRIDGES NO. 0615 & 0626 ONLY

If erection bolts are left in place they shall be tack welded.



STEEL GIRDER BRIDGE



STEEL BEAM BRIDGE

For Special Frame Details see Bridge #0737

TYPICAL INTERMEDIATE CROSSFRAMES

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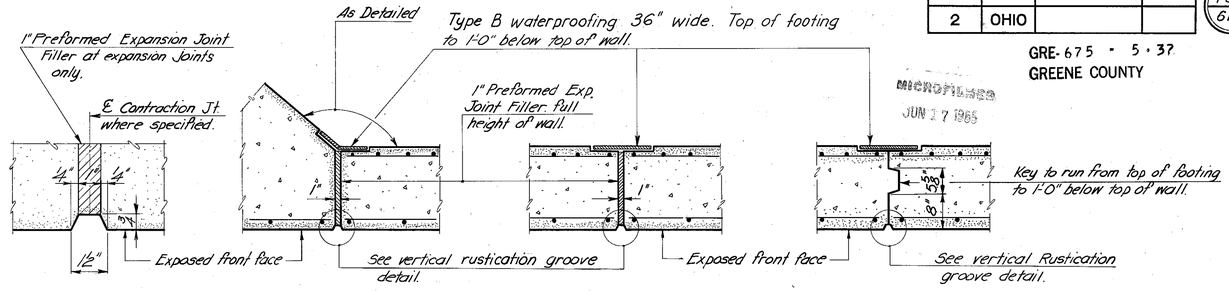
JUN 17 1965

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

408
616

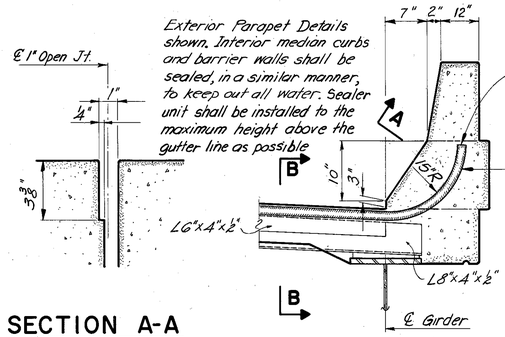
GRE-675 - 5.37
GREENE COUNTY



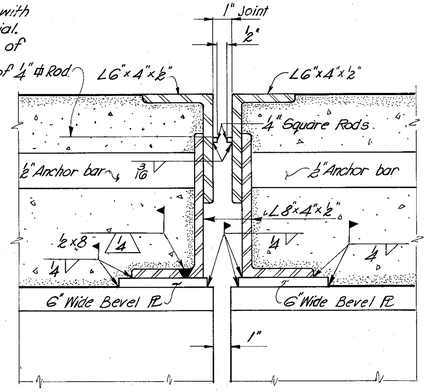
VERTICAL RUSTICATION GROOVE DETAIL

EXPANSION JOINT DETAILS

CONTRACTION JOINT DETAIL



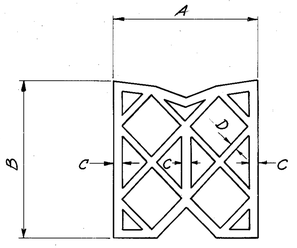
SECTION A-A



INTERMEDIATE SLAB JOINT DETAIL

SECTION B-B

For Anchor Bars, beveled plates and angle welding similar to End Dams shown on Std. Dwg. SD-1-69.



	1" Joint	1 5/8" Joint
A	1¾" + 3/16" - 0"	2 1/2"
B	2" ± ⅛"	2¾"
C	⅛" + 32/64" - 64/64"	—
D	3/32" + 32/64" - 1/64"	—

SCHEMATIC FOR PREFORMED JOINT SEALER

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

C2 C2

COMMON DETAILS-2

GREENE 675 - 5.37

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
	A.W.		S.A.	9/25/72	

FERD WAGNER 200 5-74 MC 2473-

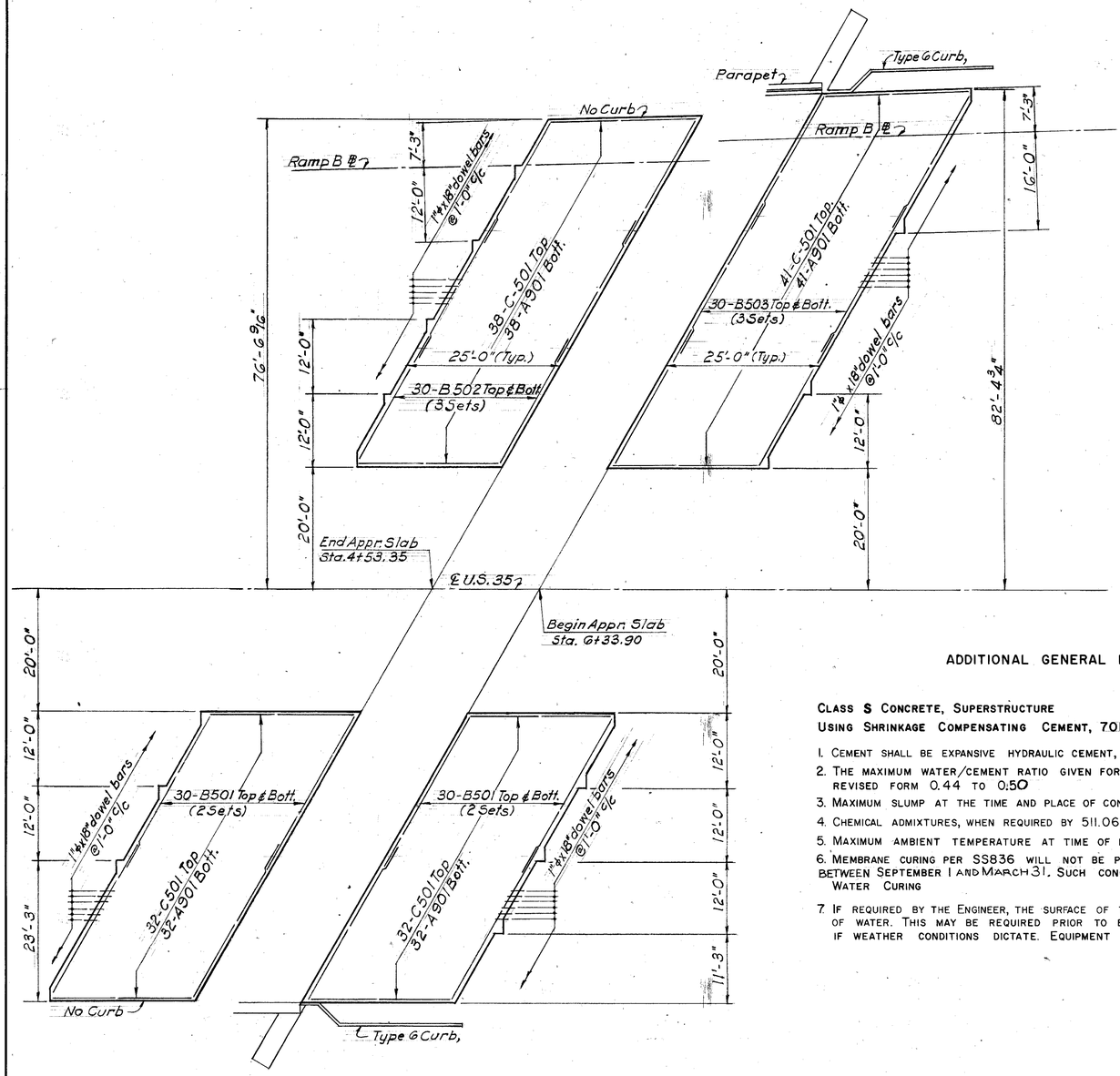
MICROFILMED
AUG 28 1989

MICROFILMED
JUN 17 1965

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

409
616

GRE - 675 - 5.37



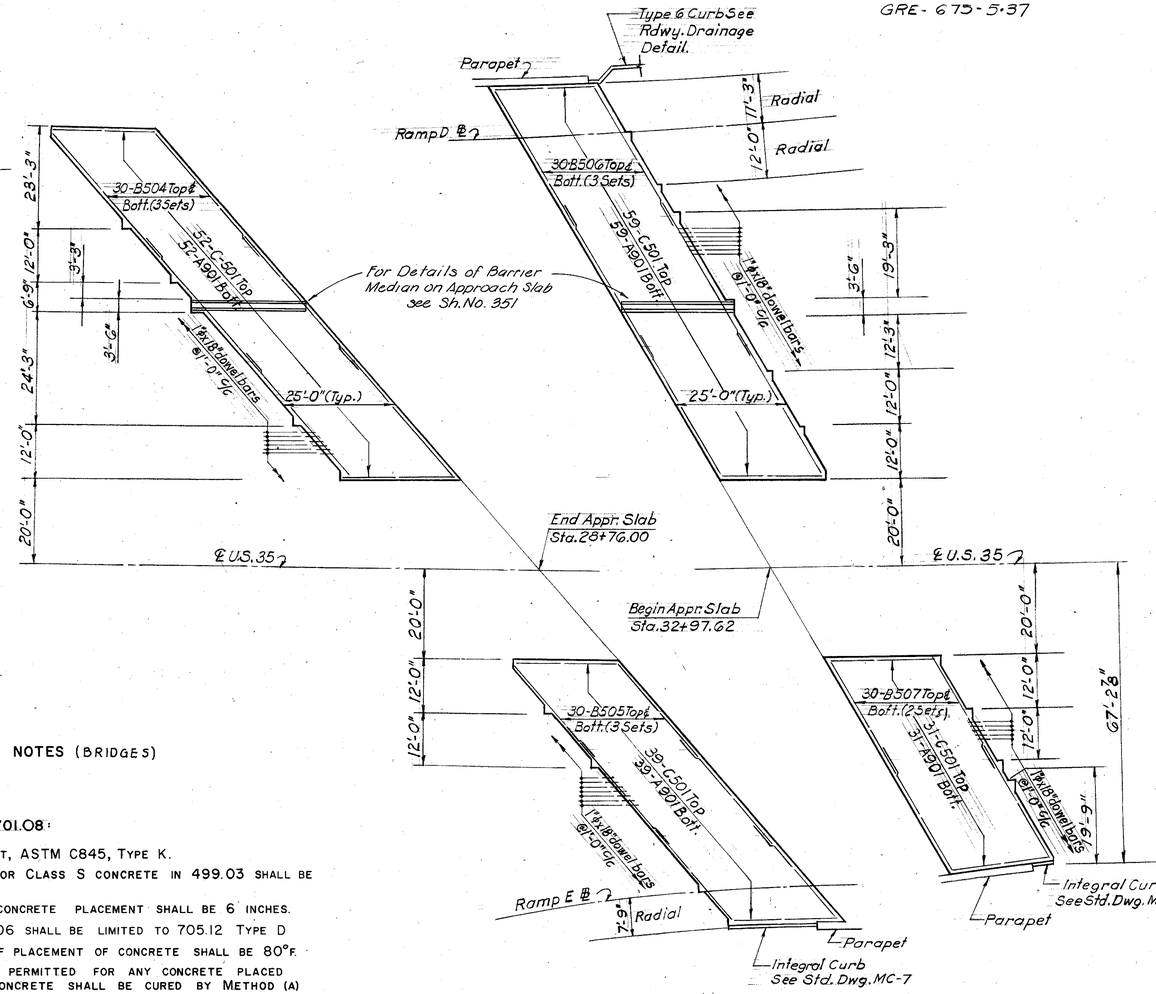
PLAN

BRIDGE NO. GRE. - 35 - 0009

ADDITIONAL GENERAL NOTES (BRIDGES)

CLASS S CONCRETE, SUPERSTRUCTURE
USING SHRINKAGE COMPENSATING CEMENT, 701.08:

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FORM 0.44 TO 0.50
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06 SHALL BE LIMITED TO 705.12 TYPE D
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80°F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.



PLAN

BRIDGE NO. GRE-675-0589

NOTE:
For Details and Notes not shown on this Sheet, see Std. Dwg. AS-1-72.

KING & GAVARIS
CINCINNATI — CONSULTING ENGINEERS, INC. — OHIO

A1 / A1

APPROACH SLABS

BRIDGE NO. GRE-35-0009

BRIDGE NO. GRE-675-0589

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	N.H.					

3

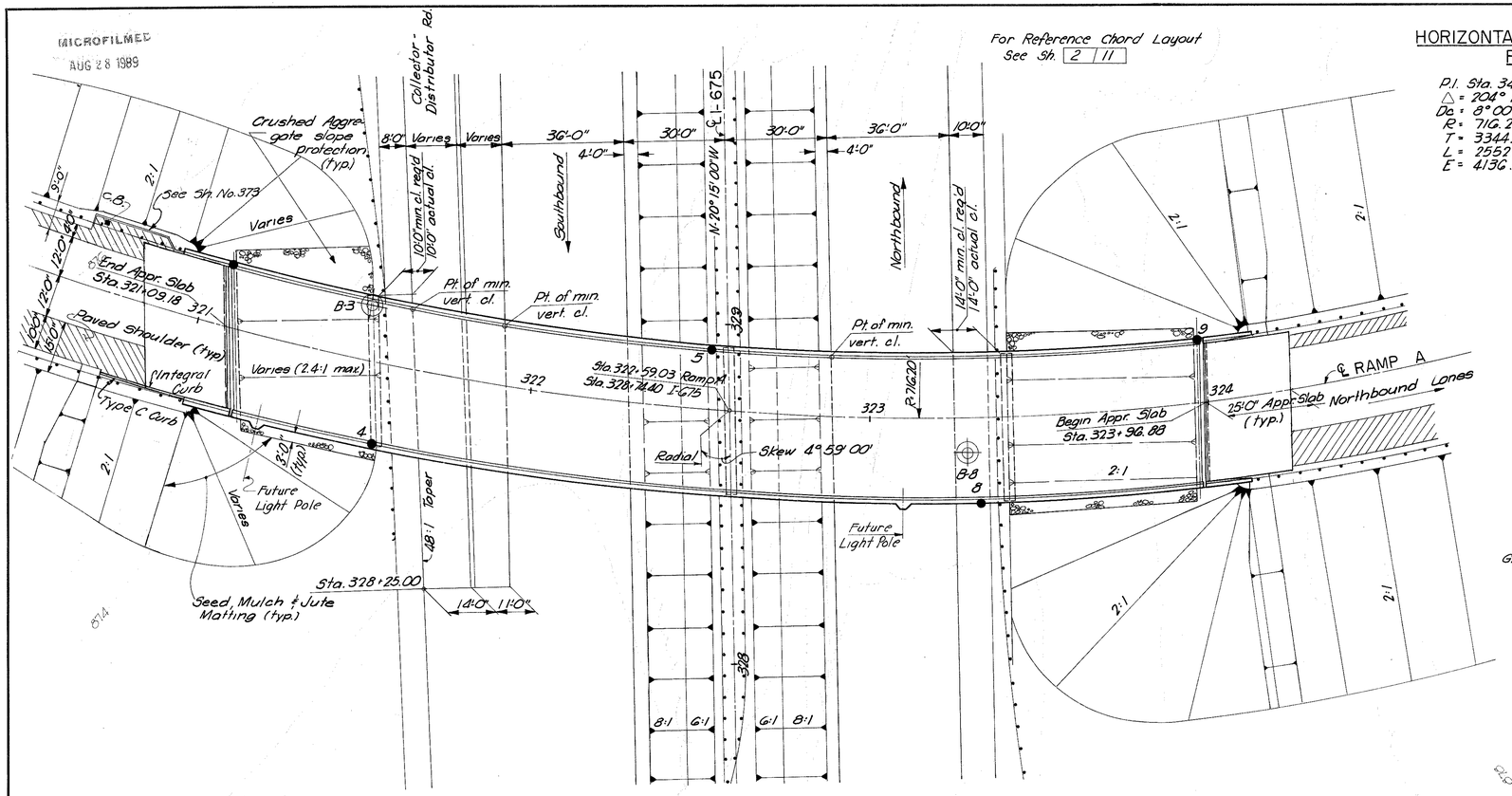
MICROFILMED
AUG 28 1989

MICROFILMED
JUN 18 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

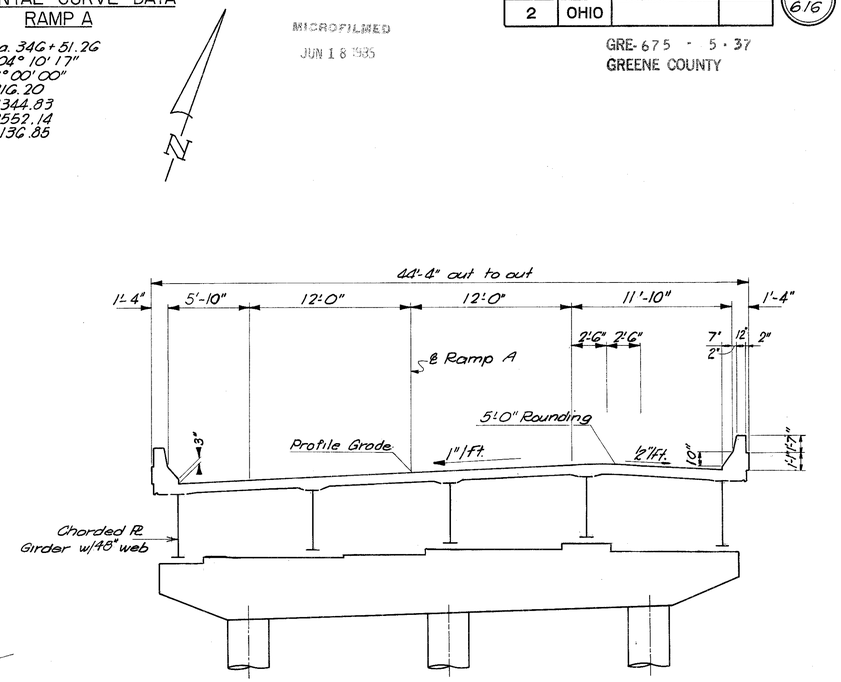
410/616

GRE-675 - 5.37
GREENE COUNTY



HORIZONTAL CURVE DATA
RAMP A

P.I. Sta. 346+51.26
△ = 204° 10' 17"
Da = 8° 00' 00"
R = 716.20
T = 3344.83
L = 2552.14
E = 413G.85



SECTION THRU BRIDGE

LEGEND

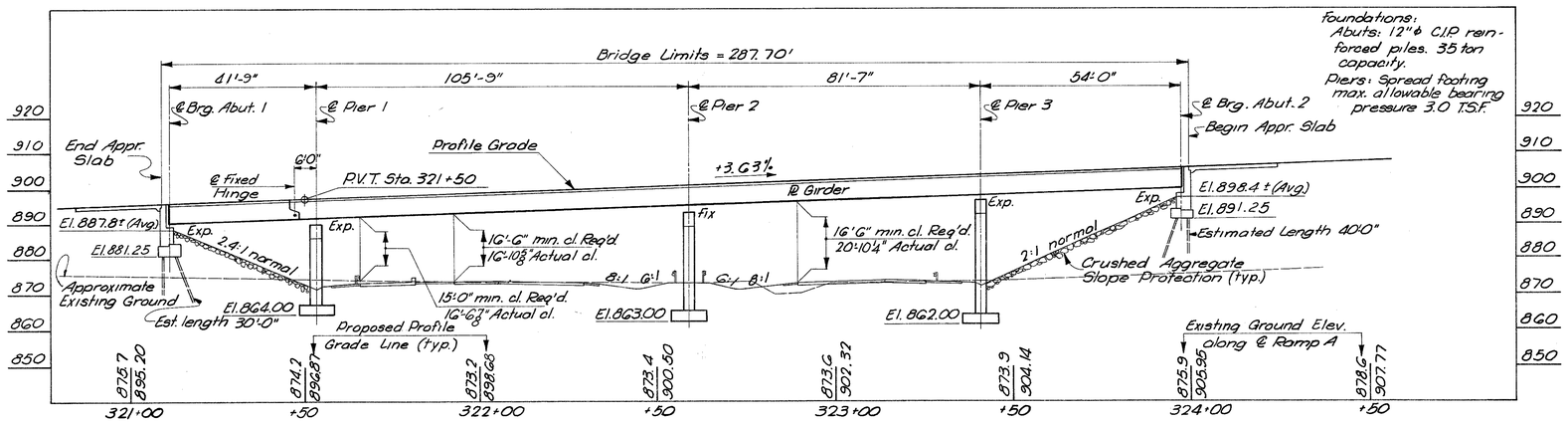
- Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

VERTICAL CURVE DATA
RAMP A

350' V.C.
P.V.I. Sta. 319+75
P.V.I. Elev. 890.51
G_1 = 0.48%
G_2 = +3.63%

DESIGN YEAR TRAFFIC
1989 ADT:
Ramp A 10,110
I-675 49,840
Collector-Dist. 5,040

PLAN



PROFILE ON CENTER LINE RAMP A

Foundations:
Abuts: 12" ϕ C.I.P. reinforced piles. 35 ton capacity.
Piers: Spread footing max. allowable bearing pressure 3.0 T.S.F.

Note:
Earthwork Limits shown are schematic. Actual slopes shall conform to Plan-Cross-Sections.

PROPOSED STRUCTURE

TYPE: Continuous Chorded Plate Girder with reinforced concrete deck and substructure
SPANS: 41'-9", 105'-9", 81'-7", 54'-0"
ROADWAY: 41'-8" face to face of parapet
LOADING: H S 20-44, Alternate Military
SKEW: Varies, 4°-59'-00" Rt. Fwd. at ℄ I-675
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 25'-0" long (Std AS 1-72)
ALIGNMENT: Left Curve - Dc = 8° 00' 00"

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SITE PLAN

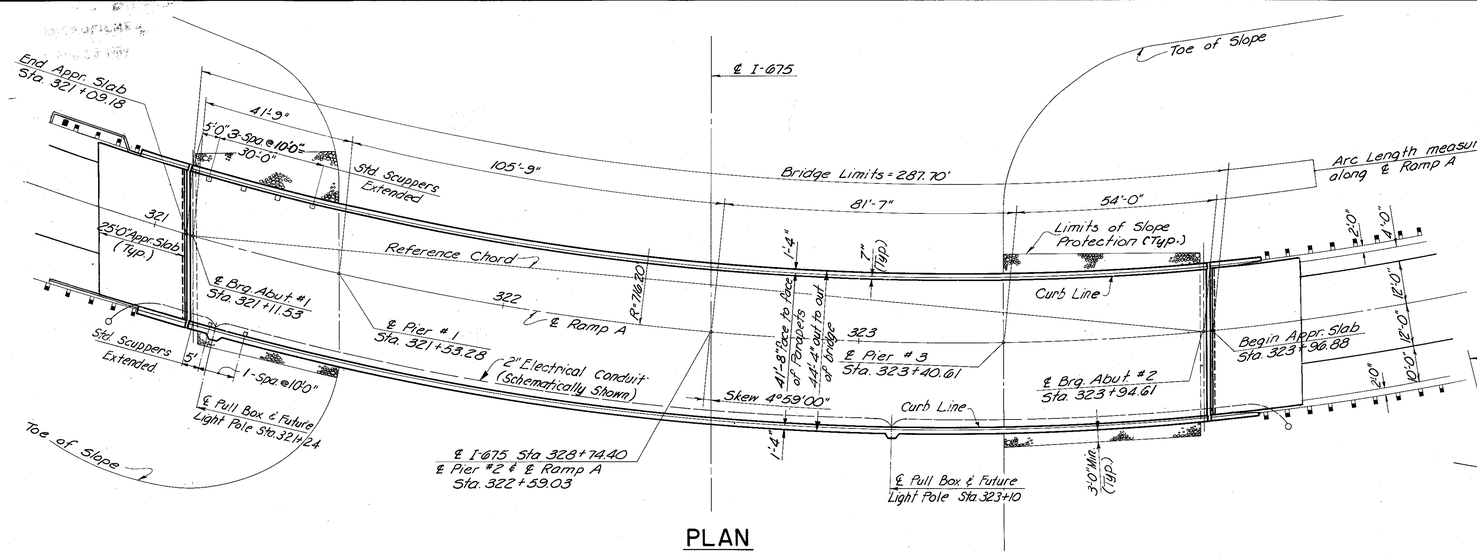
BRIDGE NO. GRE-675-0576
I-675 UNDER RAMP A
GREENE COUNTY
STA: 321+09.18 TO STA: 323+96.88

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	S.A.	

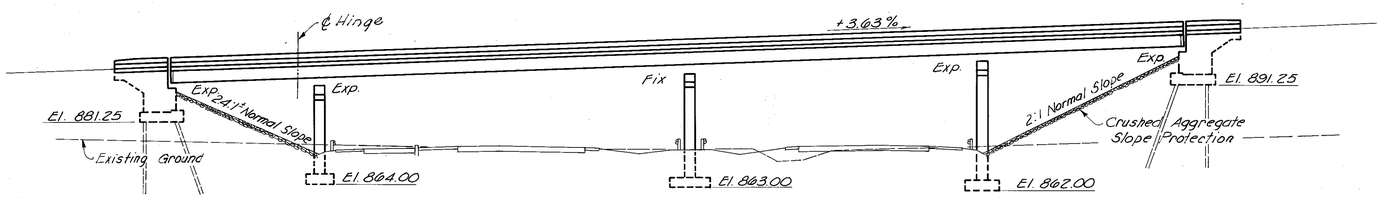
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

411/616

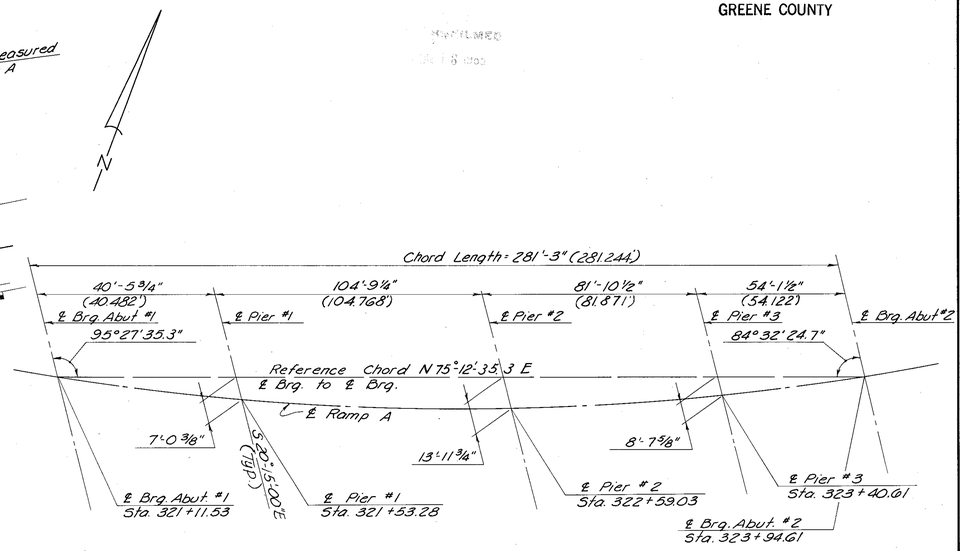
GRE-675 - 5-37
GREENE COUNTY



PLAN

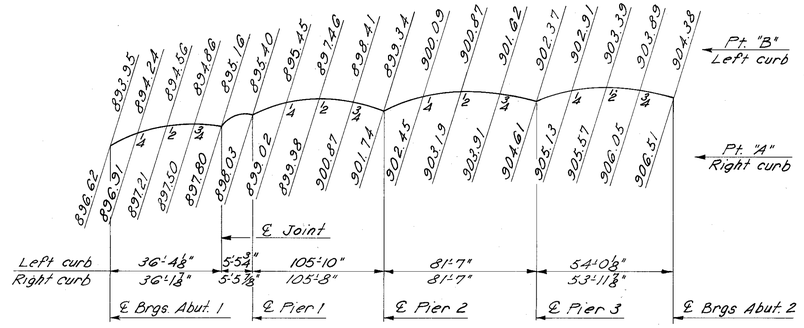


ELEVATION



REFERENCE CHORD LAYOUT

(SCHEMATIC)



DECK ELEVATION DIAGRAM

AT CURBS BEFORE CONCRETE IS PLACED

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
503	Lump	Sum	Cofferdams, Cribs, and Sheeting				Lump
503	803	Cu. Yd.	Unclassified Excavation		268	535	
505	Lump	Sum	Test Pile				Lump
507	1,340	Lin. Ft.	12" Cast-in-place reinforced concrete piles.		1340		
509	140,900	Lb.	Reinforcing steel	72,200	16,100	52,600	
511	132	Cu. Yd.	Class "C" concrete, Abutments above footings.		132		
511	114	Cu. Yd.	Class "C" concrete, Piers above footings			114	
511	448	Cu. Yd.	Class "S" concrete, Superstructure using Shrinkage Compen. Cem. 701.01	448			
511	206	Cu. Yd.	Class "C" concrete, Footings		79	127	
513	377,300	Lb.	Structural steel (AISC Category III)	377,300			
514	377,300	Lb.	Field Painting of new Structural steel, System A	377,300			
516	45	Lin. Ft.	Preformed Elastic Joint Sealer, 705.11	45			
518	70	Cu. Yd.	Porous backfill		70		
518	75	Lin. Ft.	6" Perforated helical C.S.P., 707.01		75		
518	127	Lin. Ft.	6" Non-perforated helical C.S.P., including specials, 707.01		127		
518	6	Each	Scuppers including supports	6			
601	634	Sq. Yd.	Crushed aggregate slope protection				634
625			See Sheet 419 610 for lighting summary.				
523	3	hour	Dynamic 610 Pile Tests				3
Special	44,100	Lb	Epoxy Coated Reinforcing Steel. (See Proposal Note)	43,100	1000		

ESTIMATED QUANTITIES CHECKED BY & DATE J.G./S.A. 3/9/72 REVISED: S.A. 9/14/72

GENERAL NOTES

EMBANKMENT CONSTRUCTION: THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS AND FOR PIERS NO. 1 AND 3.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS.

FOUNDATION BEARING PRESSURE: PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 3.0 TONS PER SQ. FT.

FOR ADDITIONAL NOTES SEE SHEET C1/C2

THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3 3/8 INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

NOTES:

For scupper details see Std. Dwg. SD-1-69 Scuppers to be lengthened as required to clear flanges.

All Abutment & Pier Center lines are parallel.

Scupper spacing measured along face of parapet.

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO

2 / 11

GENERAL PLAN, ELEVATION, GENERAL NOTES, AND ESTIMATED QUANTITIES

BRIDGE NO. GRE.-675-0576

I-675 UNDER RAMP A

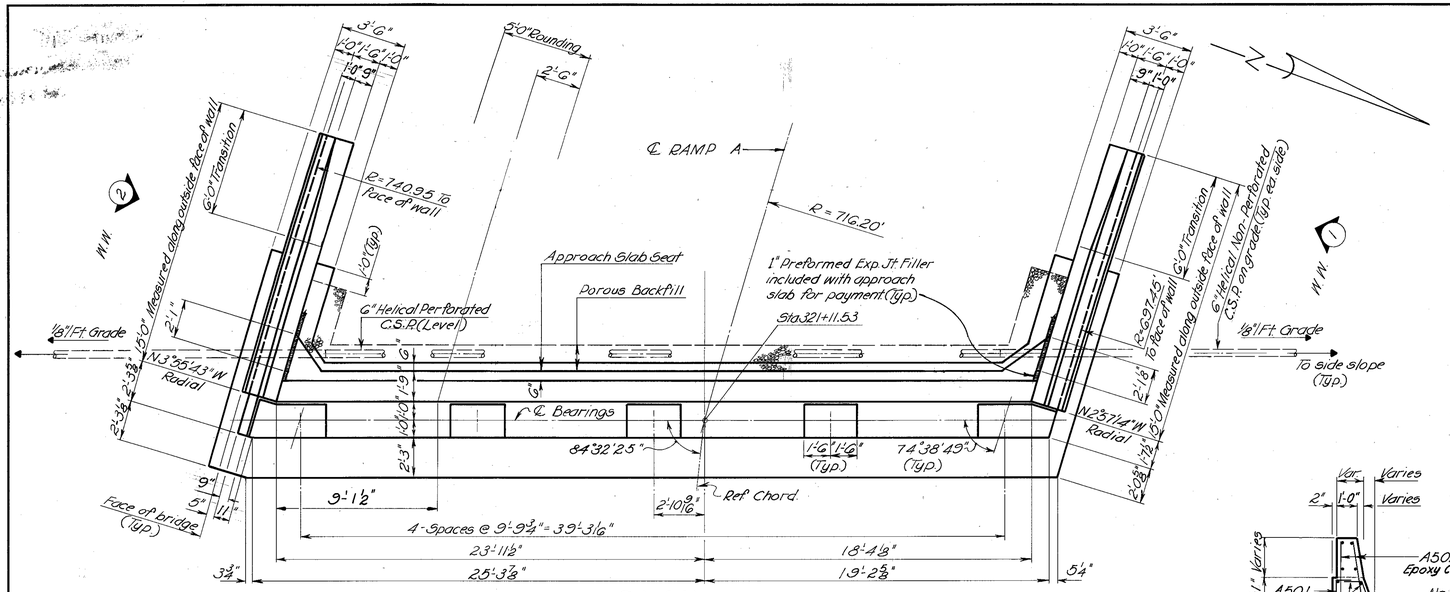
GREENE COUNTY STA 321+09.18 TO STA 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	K.F.		S.A.	SA	9/24/72	

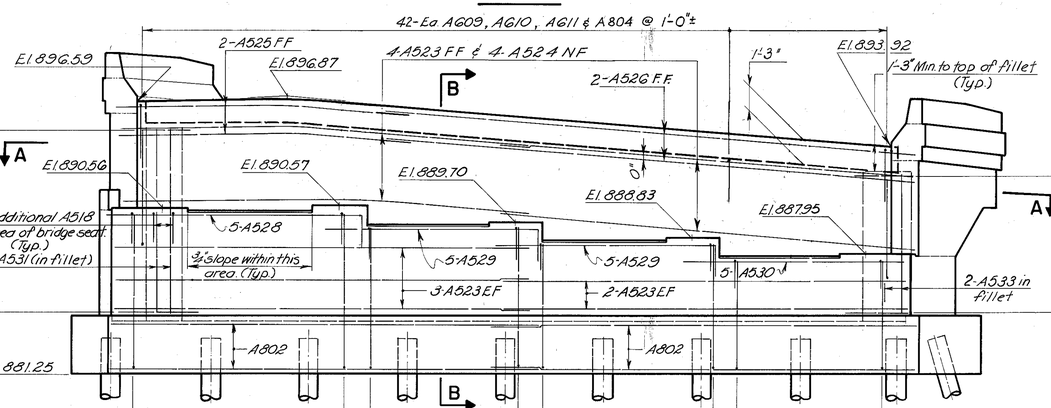
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

412/616

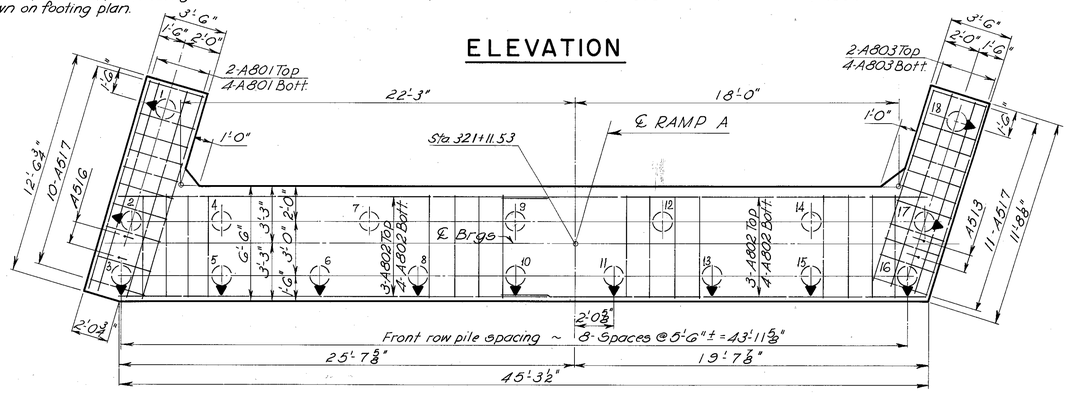
GRE-675 - 5.37
GREENE COUNTY



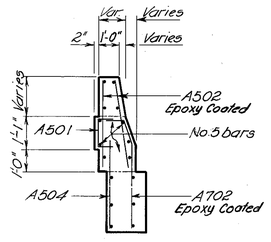
PLAN



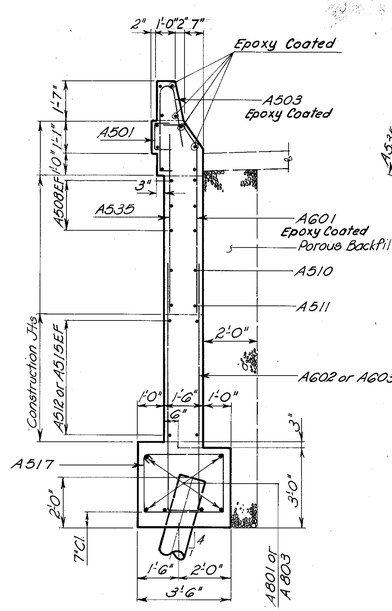
ELEVATION



FOOTING PLAN



SECTION D-D



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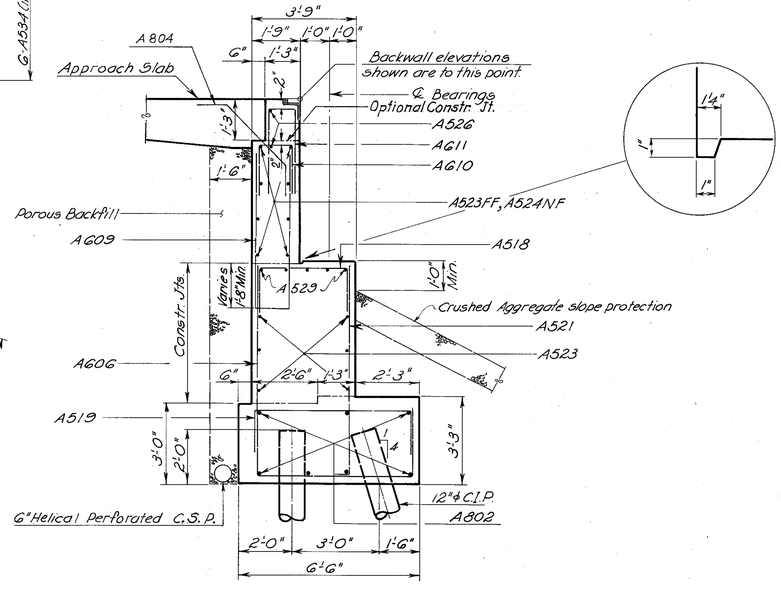
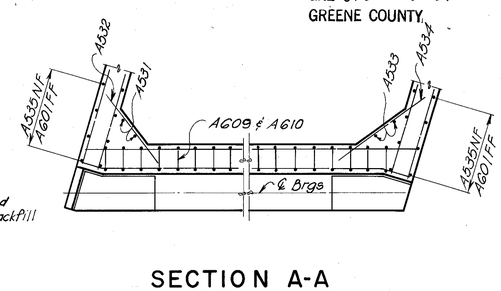


SECTION B-B



SECTION A-A

NOTES:

For reinforcing steel list see shts. 9, 10, 11 / 11
Work this sheet with sh. 4 / 11
Porous Backfill, within the limits shown, shall extend upward to the subgrade within the roadway area and ___ laterally to the wingwalls.
Only that portion of the C.S.P. located in the Porous Backfill shall be perforated.

For termination of C.S.P. at slopes see Common Details, Sheet C1/C2.
Reinforcing steel in Abutments No. 1 & 2 shall have the suffix "A & B" respectively.
All splices and dowels will be lapped Min. 30 bar dia. unless otherwise shown.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

3 / 11

ABUTMENT NO. 1

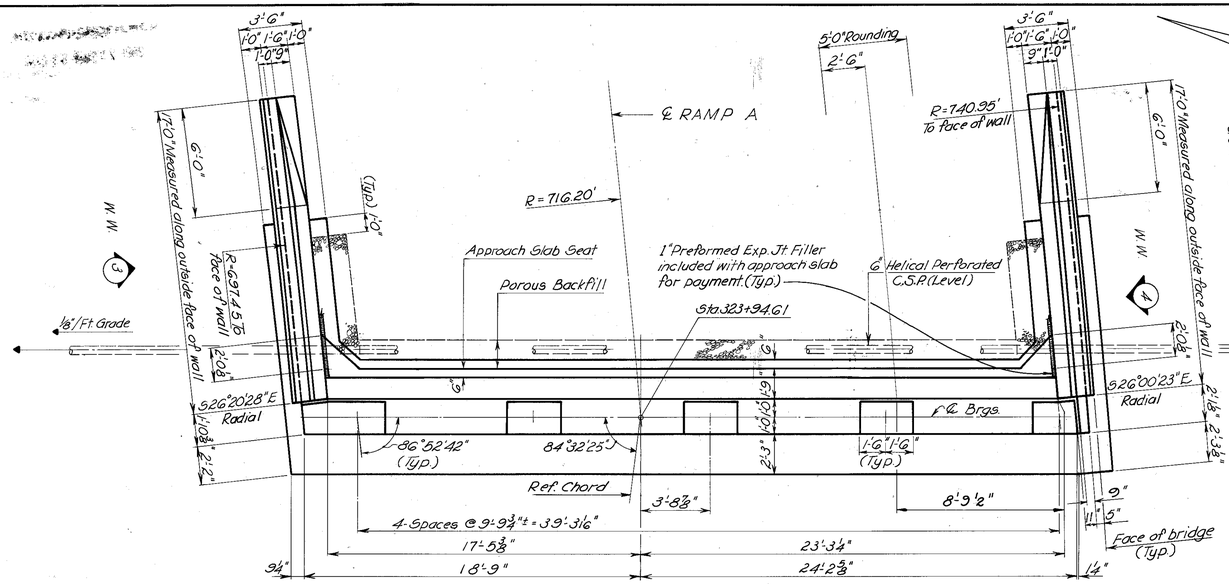
BRIDGE NO. GRE.-675-0576
I-675 UNDER RAMP A
GREENE COUNTY STA: 321+09.18 TO STA: 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
J.C.L.	A.W.		S.A.	9/25/72	

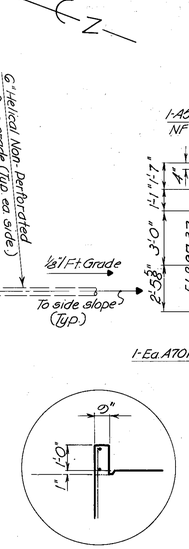
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

413/616

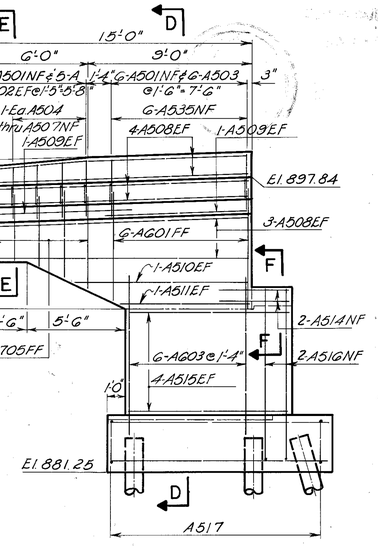
GRE-675 · 5·37
GREENE COUNTY



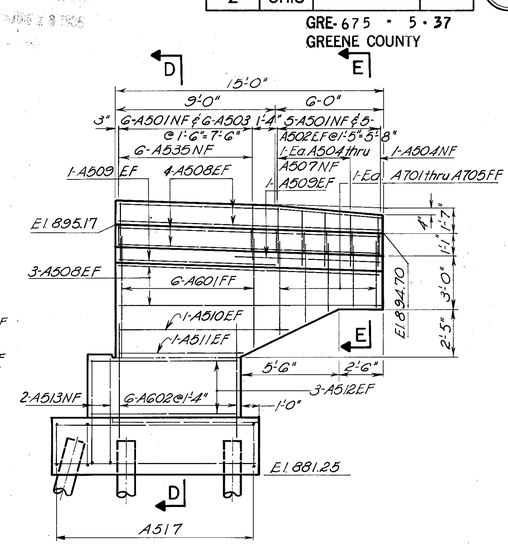
PLAN



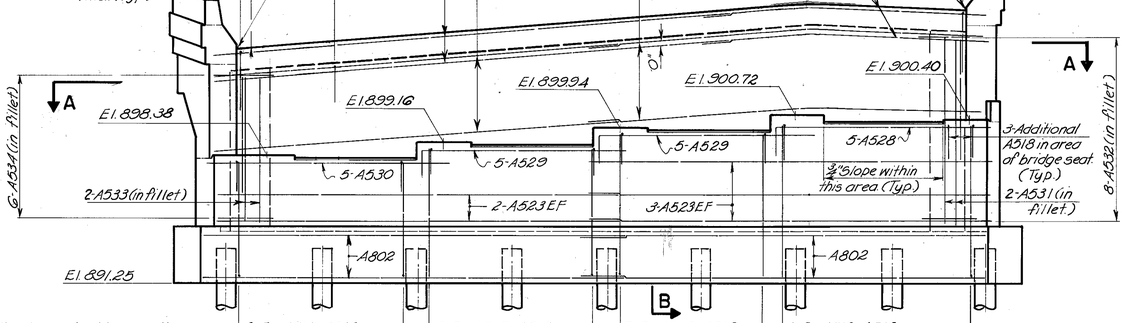
SECTION F-F



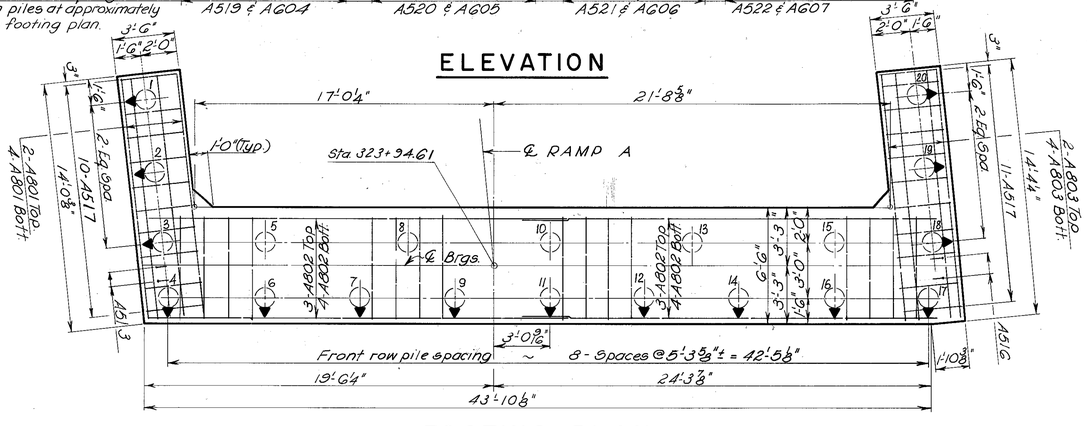
WINGWALL NO. 2



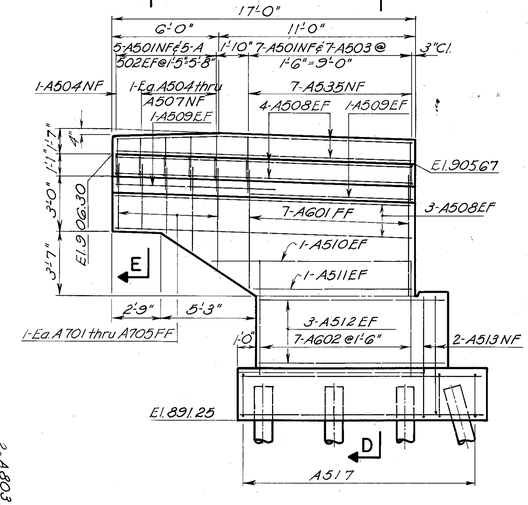
WINGWALL NO. 1



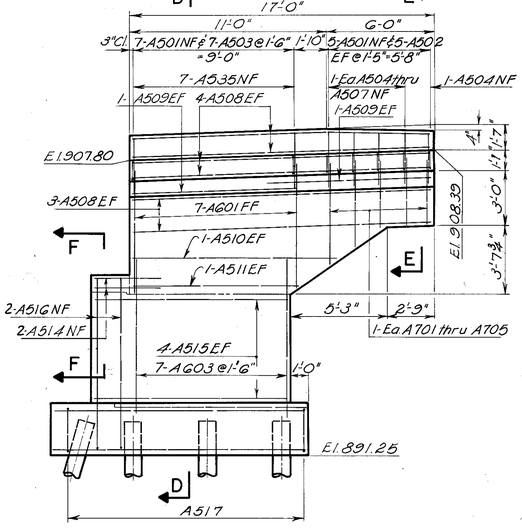
ELEVATION



FOOTING PLAN



WINGWALL NO. 3



WINGWALL NO. 4

WINGWALL ELEVATIONS

NOTES:

Work this sheet with sh. 3 / 11
For Notes see sh. 3 / 11

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

A / 11

ABUTMENT NO. 2

BRIDGE NO. GRE.-675-0576

I-675 UNDER RAMP A

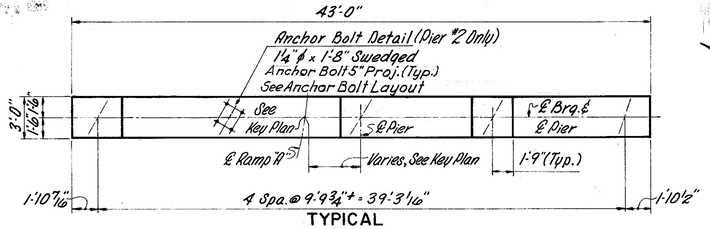
GREENE COUNTY STA: 321+09.18 TO STA: 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.	[illegible]	9/24/72	

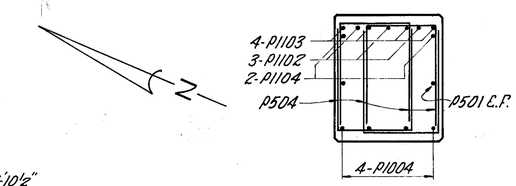
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

414
616

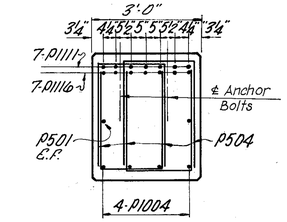
GRE-675 - 5-37
GREENE COUNTY



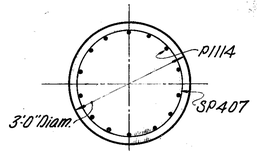
TYPICAL
CAP PLAN



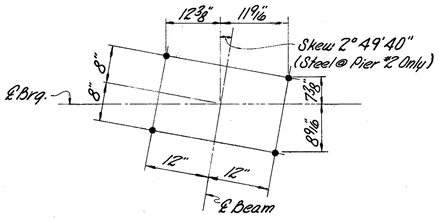
SECTION A A



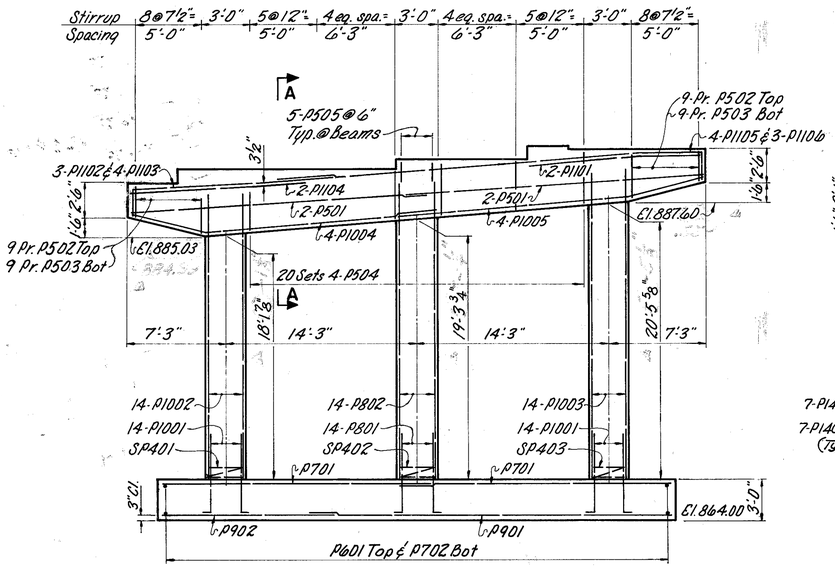
SECTION B B



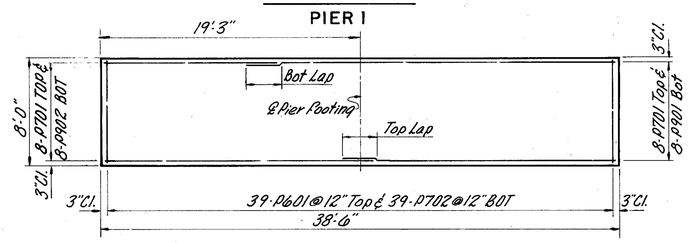
SECTION C C



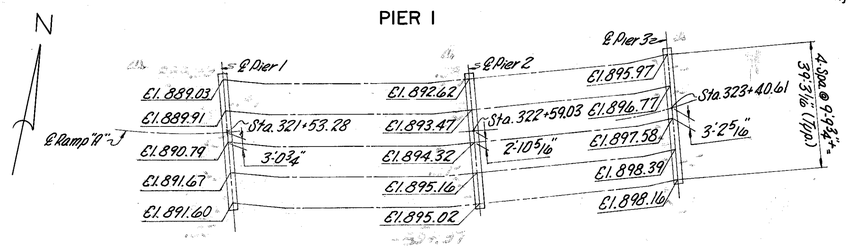
ANCHOR BOLT LAYOUT



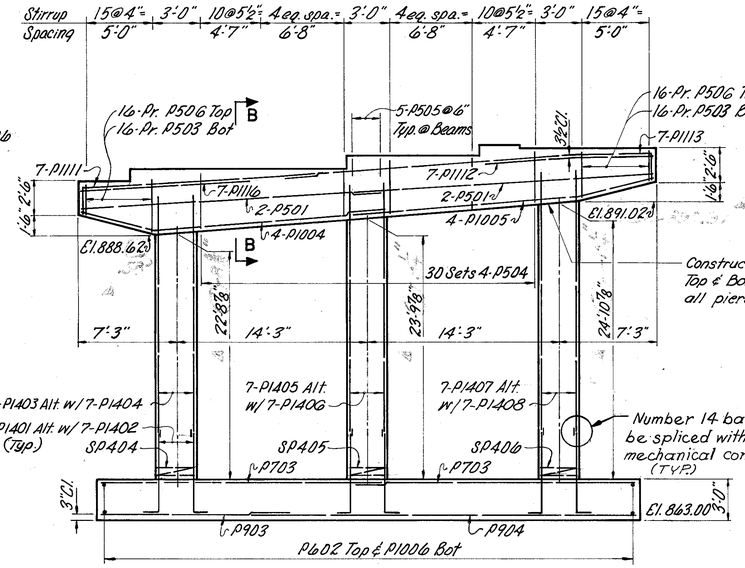
ELEVATION
PIER 1



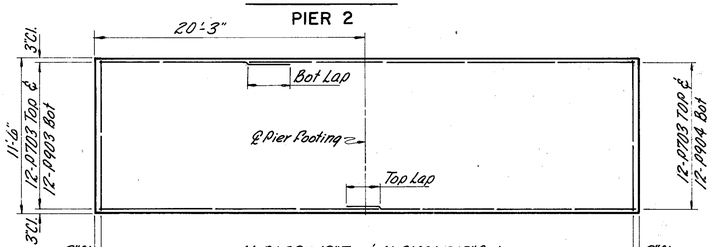
PIER 1



KEY PLAN
Showing Bearing Seat Elevations & Layout dimensions

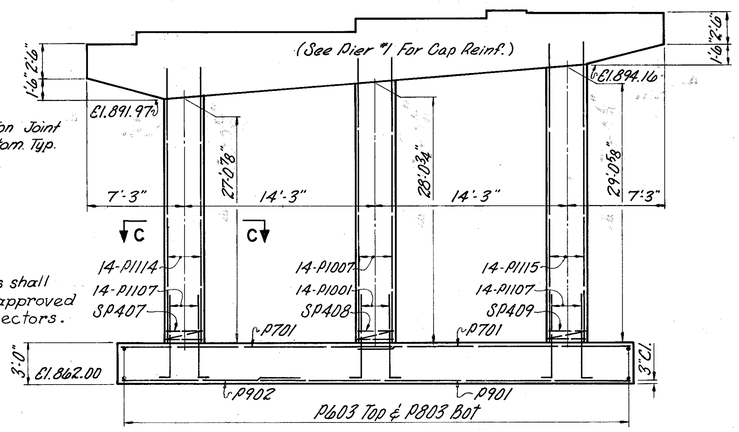


ELEVATION
PIER 2

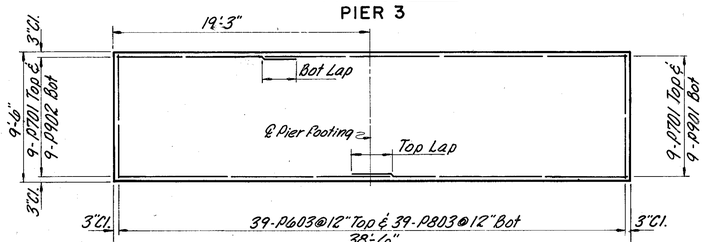


PIER 2

FOOTING PLANS



ELEVATION
PIER 3



PIER 3

All splices and dowels will be lapped min. 30 bar Dia. unless otherwise shown.

NOTES:

Bridge seat reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.

For reinforcing steel list see Sts 3, 10, 11, 11

For Reference Chord Layout & Pier Skew Angles See Sh. 2, 11

Bearing Anchors: At the Option of the Contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

5 / 11

PIERS 1, 2 & 3

BRIDGE NO. GRE 675-0576

I-675 UNDER RAMP A

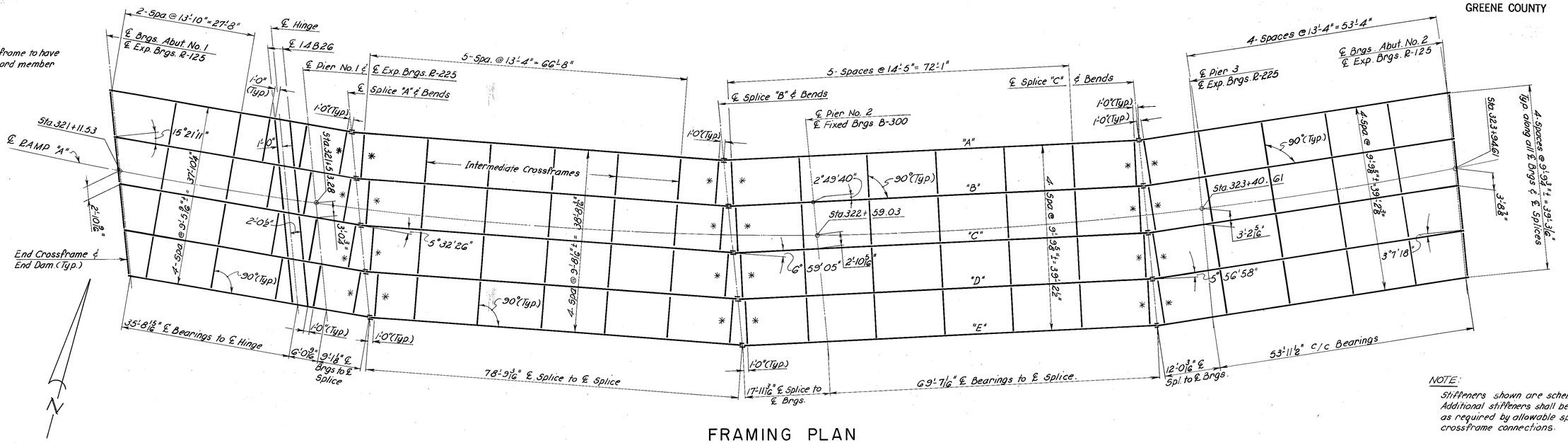
GREENE COUNTY STA: 321+09.18 TO STA: 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	D.M.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

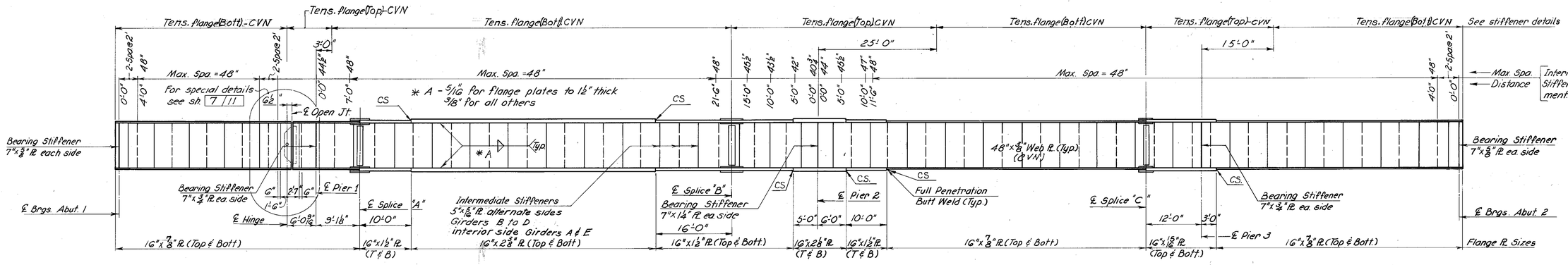
415
616

GRE-675 - 5.37
GREENE COUNTY



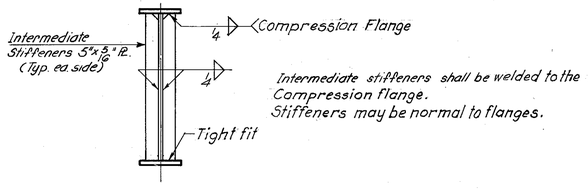
FRAMING PLAN

NOTE:
Stiffeners shown are schematic only. Additional stiffeners shall be provided as required by allowable spacing and crossframe connections.



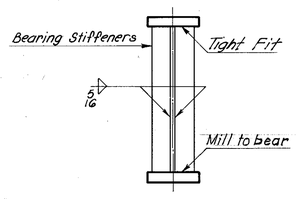
TYPICAL GIRDER ELEVATION

Welded forming attachments shall not be used in the tension areas of the top flange.



Intermediate stiffeners shall be welded to the Compression flange.
Stiffeners may be normal to flanges.

INTERMEDIATE STIFFENERS



Bearing stiffeners to be vertical

BEARING STIFFENERS

NOTES:

Details of end dam and end crossframes (included with structural steel for payment) similar to that shown on Std. Dwg. SD-1-69.

End of girder treatments similar to that shown on SD-1-69.
For Camber Tables and Camber Alignment Diagram see sh. 7/11
For details of fixed bearing B-300 and expansion bearings R-125 and R-225 see Std. Dwg. RB-1-55.
For typical intermediate crossframe see Common Details, Sheet C2/C2
For typical transverse section see Section A-A sh. 8/11
Work this sheet with sheet 7/11.
For details of intermediate slab Joint (included with structural steel for payment) see Common Details, Sheet C2/C2
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

G/11

STEEL FRAMING PLAN

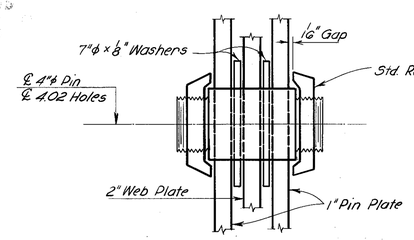
BRIDGE NO. GRE.-675-0576
I-675 UNDER RAMP A
GREENE COUNTY STA: 321+09.18 TO STA: 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.	S.A.	9/28/72	1/27/82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

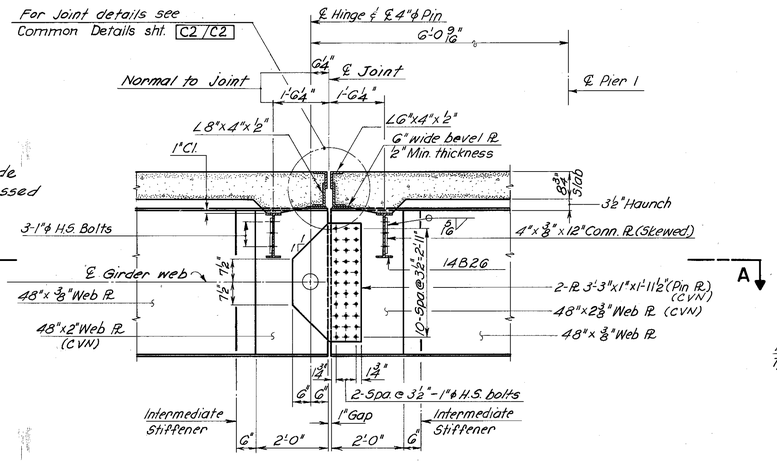
4.16 / 616

GRE-675 · 5·37
GREENE COUNTY

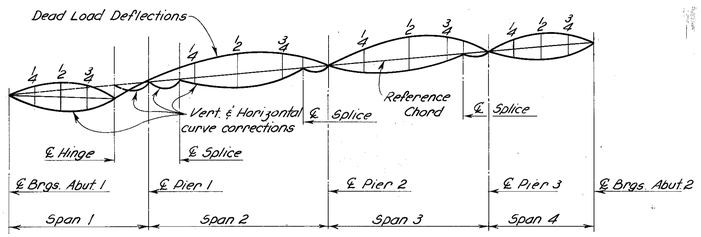


NOTE:
Tack weld both outside threads of pin to recessed nut after assembly.

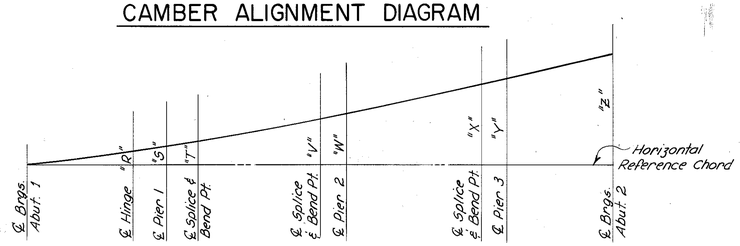
PIN - DETAIL
N.T.S.



HINGE DETAILS

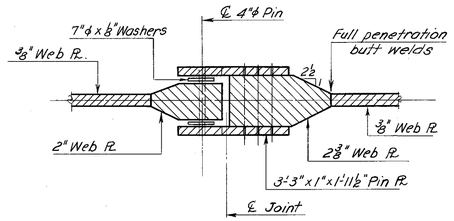


CAMBER ALIGNMENT DIAGRAM



BLOCKING ORDINATES

BLOCKING ORDINATES					
GIRDER	A	B	C	D	E
	ORD.	ORD.	ORD.	ORD.	ORD.
℄ HINGE - R	1'-2 7/16"	1'-2½"	1'-2 9/16"	1'-2⅝"	1'-2⅝"
℄ PIER NO.1 - S	1'-5¼"	1'-5 5/16"	1'-5⅜"	1'-5 7/16"	1'-4 11/16"
℄ SPLICE "A" - T	1'-9 9/16"	1'-9⅝"	1'-9 11/16"	1'-9 13/16"	1'-8 15/16"
℄ SPLICE "B" - V	4'-8¾"	4'-8½"	4'-8¼"	4'-8"	4'-5¼"
℄ PIER NO.2 - W	5'-3 13/16"	5'-3½"	5'-3⅜"	5'-2 13/16"	5'-1¼"
℄ SPLICE "C" - X	7'-11 9/16"	7'-10 13/16"	7'-10 1/16"	7'-9 7/16"	7'-6 3/16"
℄ PIER NO.3 - Y	8'-4½"	8'-3 1/16"	8'-2⅞"	8'-2⅝"	7'-11⅞"
℄ ABUT. NO.2 - Z	10'-5 3/16"	10'-4"	10'-2⅞"	10'-1 11/16"	9'-10 1/16"



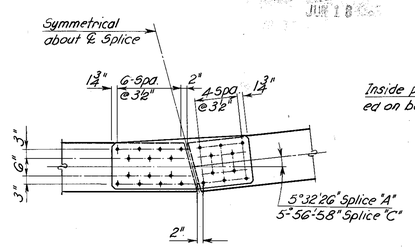
SECTION A-A
N.T.S.

DEFLECTION AND CAMBER

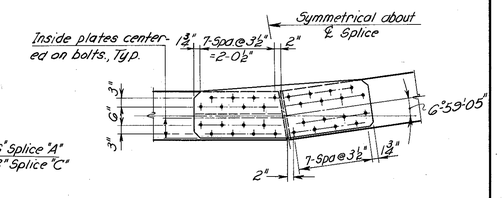
DESCRIPTION	INTERIOR GIRDERS B,C & D																EXTERIOR GIRDERS A & E															
	SPAN 1					SPAN 2				SPAN 3				SPAN 4			SPAN 1					SPAN 2				SPAN 3				SPAN 4		
	*¼ Pt.	*½ Pt.	*¾ Pt.	℄ Hinge	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	*¼ Pt.	*½ Pt.	*¾ Pt.	℄ Hinge	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	-1/16"	1/16"	3/16"	¼"	3/16"	⅛"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	-1/16"	1/16"	3/16"	¼"	3/16"	⅛"	0"	0"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	1/16"	⅛"	1/16"	-1/16"	3/16"	1"	1 1/8"	1 3/16"	9/16"	-1/16"	3/16"	3/16"	1/16"	1/16"	⅛"	⅛"	0"	1/16"	0"	-¼"	5/16"	¾"	1"	9/16"	⅜"	-1/16"	⅛"	⅛"	1/16"	7/16"	⅛"	⅛"
REQUIRED SHOP CAMBER	1/16"	⅛"	1/16"	-½"	7/16"	1 3/16"	1⅛"	1"	11/16"	-1/16"	3/16"	3/16"	1/16"	1/16"	⅛"	⅛"	0"	1/16"	0"	-5/16"	⅜"	15/16"	1¼"	¾"	½"	-1/16"	⅛"	⅛"	1/16"	7/16"	⅛"	⅛"
ADJUSTMENT REQ'D FOR HORIZ. & VERT. CURVE GIRDERS A,B,C & D	-5/16"	-7/16"	-5/16"	0"	0"	-11/16"	-1"	-⅜"	0"	-11/16"	-13/16"	-⅜"	0"	-⅜"	-½"	-⅜"	-⅜"	-7/16"	-⅜"	0"	0"	-11/16"	-1"	-⅜"	0"	-1/16"	-13/16"	-⅜"	0"	-⅜"	-½"	-⅜"
ADJUSTMENT REQD. FOR HORIZ. & VERT. CURVE GIRDER "E"																	-1/16"	-1/16"	-1/16"	0"	0"	7/16"	⅝"	¼"	0"	5/16"	7/16"	3/16"	0"	3/16"	¼"	3/16"

Vertical and Horizontal Curve Corrections shall be made by varying the Slab Haunch.
A negative deflection indicates downward camber required.
A negative curve correction indicates haunch reduction between end points.
A positive curve correction indicates a haunch increase between end points.

** ¼, ½, & ¾ Points of span is between Hinge and Abutment Bearings.*



PLAN



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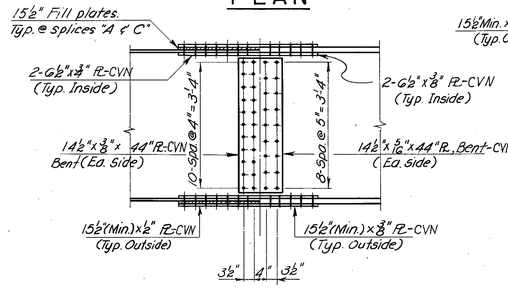
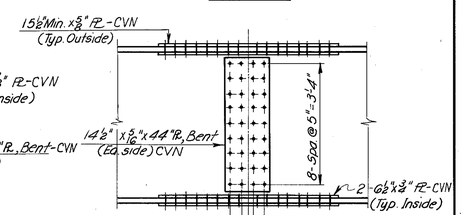


SPLICE "A"

SPLICE "C"



SPLICE "B"

SPLICE DETAILS

All bolts to be 1"ϕ H.S.

Work this sheet with sheet 6 / 11

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7 / 11

SUPERSTRUCTURE DETAILS

BRIDGE NO. GRE.-675-0576
I-675 UNDER RAMP A
GREENE COUNTY STA:321+09.18 TO STA:323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.	SA	9/28/82	4/27/82

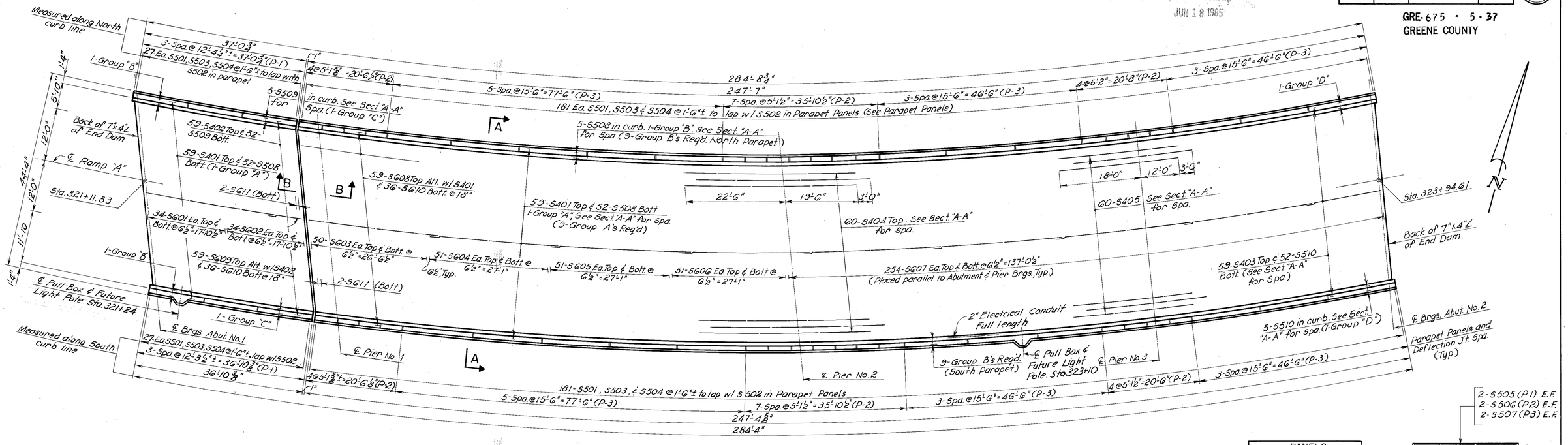
MICROFILMED
JUN 18 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

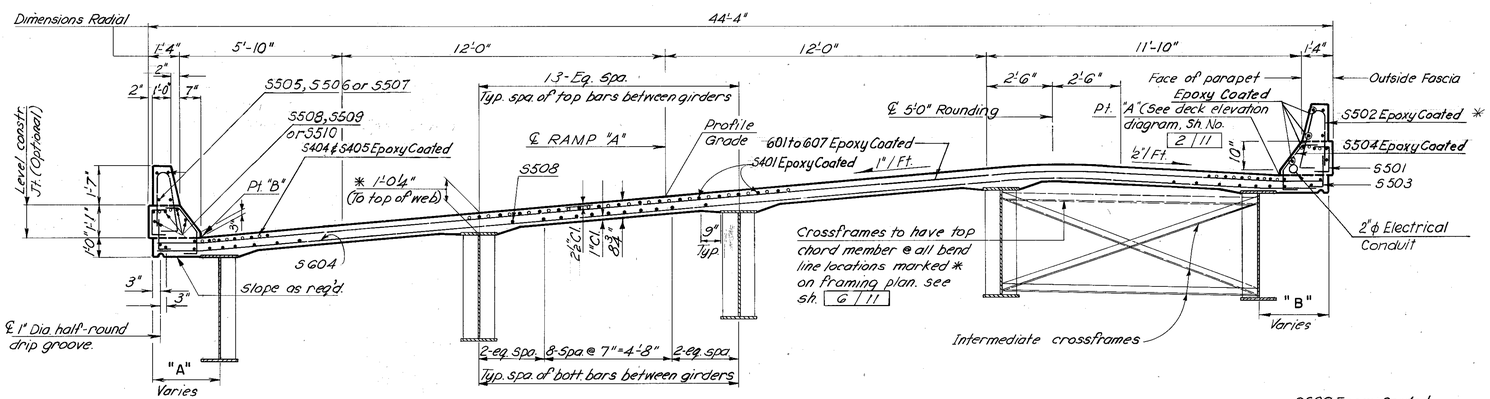
417/616

GRE-675 · 5·37
GREENE COUNTY

PLAN

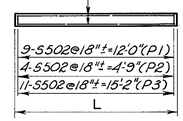


SECTION A-A



This is the nominal dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per Section 511.19 of the Construction and Material Specifications. Haunch will vary to accomodate negative horizontal curve requirements in all spans. The dimension shown applies at the ℄ of bearings only. For horizontal curve corrections see Sh. 7 | 11

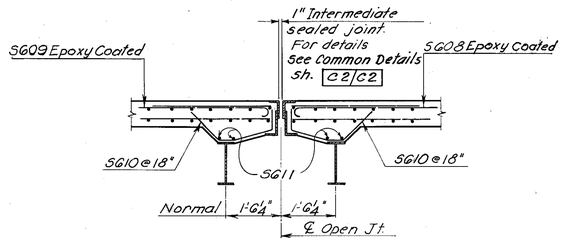
PANELS		
No. Req'd	Mark	L
G	P1	12'-3 1/2" ±
30	P2	5'-1 1/2" ±
22	P3	15'-6"



PARAPET PANELS

TABLE OF OFF-SETS																					
LOCATION	SPAN NO. 1						SPAN NO. 2					SPAN NO. 3					SPAN NO. 4				
	℄ Abut 1	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Hinge	℄ Pier 1	℄ Spl. A	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl. B	℄ Pier 2	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl. C	℄ Pier 3	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Abut 2
DIM. "A"	2'-11 3/4"	2'-9"	2'-7 3/4"	2'-7 3/4"	2'-9 3/8"	2'-10 3/4"	3'-2 1/2"	2'-5 3/8"	2'-1 1/8"	2'-9 3/8"	3'-2 7/8"	2'-3 3/8"	1'-9 3/8"	1'-10 3/8"	2'-6 1/2"	3'-0"	2'-6 7/8"	2'-4"	2'-4 3/8"	2'-7 1/8"	3'-2 3/8"
DIM. "B"	3'-5 1/8"	3'-6 1/8"	3'-6"	3'-4 3/8"	3'-1 3/8"	2'-11"	2'-5 3/8"	3'-0 3/8"	3'-1 3/8"	2'-2 3/4"	1'-9"	2'-7 1/8"	3'-1 0 1/4"	2'-10 3/4"	2'-2 3/8"	1'-9"	2'-2 1/4"	2'-5 3/8"	2'-5 1/2"	2'-2 3/4"	1'-9"

Dimensions measured radial from ℄ of web.



SECTION B-B

NOTES:

For reinforcing steel list see Sh. 9, 10 | 11.
For details of End Dams, included with Item 513 (Structure Steel) for payment, see Std. Dwg. SD-1-69 and Sheet 14-13
Slab thickness shown includes 1" for monolithic wearing surface.
A haunch width of 9" shall be used for computing quantity of concrete. However, the width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
All measurements are given in a horizontal plan.
For details of deflection joint see Std. Dwg. BR-1-67
For Light Standard Pedestal, see Common Details Sh. C1 | C2
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

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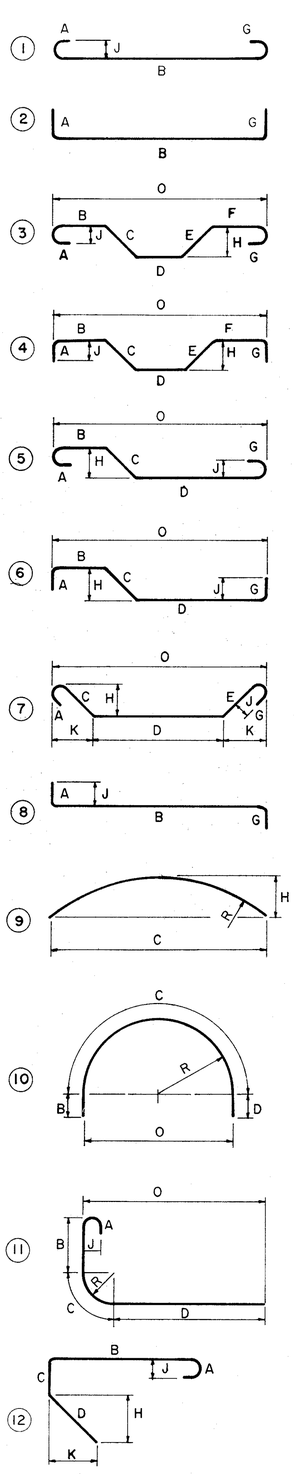
8 | 11

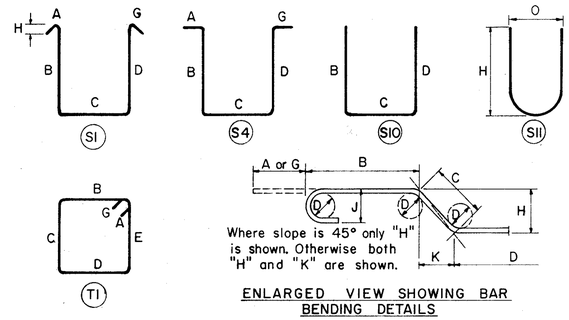
SUPERSTRUCTURE ROADWAY SLAB

BRIDGE NO. GRE.-675-0576
I-675 UNDER RAMP A
GREENE COUNTY
STA: 321+09.18 TO STA: 323+96.88

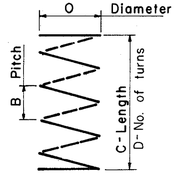
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.		9/26/72	

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 1				Reinforcing steel in Abutment No.1 shall have the suffix "A"												
A501	22	2'-4"	54	2	9"	10"					9"						
A502	20	2'-10"	59	Str													10 Epoxy Coated
A503	12	6'-7"	82	23	2'-10 1/8"	2'-1 1/8"	1'-0"	3 1/2"	2'-1 3/8"		9"			3'-2"	2'-5"	3 3/8"	12 Epoxy Coated
A504	4	3'8"	15	Str													
A505	2	3'-11"	8	Str													
A506	2	4'-7"	10	Str													
A507	2	5'-3"	11	Str													
A508	28	14'-8"	428	Str													8 Epoxy Coated
A509	8	8'-2"	68	Str													
A510	4	9'5"	39	Str													
A511	4	7'-2"	30	Str													
A512	6	8'4"	52	Str													
A513	9	6'-11"	55	2	9"	6'-2"											
A514	2	3'-9"	8	Str													
A515	8	9'0"	75	Str													
A516	2	10'8"	22	2	9"	9'11"											
A517	21	10'9"	235	T1	5"	3'0"	2'-2"	3'0"	2'-2"		5"						
A518	47	6'4"	310	S10		1'-7"	3'5"	1'-7"									
A519	32	8'6"	284	S10		1'-7"	5'-7"	1'-7"									
A520	8	7'9"	65	2	9"	7'0"											
A521	7	8'8"	63	2	9"	7'11"											
A522	10	9'6"	99	2	9"	8'9"											
A523	18	23'6"	441	Str													
A524	8	23'4"	195	19			22'0"	1'4"				4 1/8"		1'-3 1/4"	23'-3 1/4"		
A525	2	16'-8"	35	Str													
A526	2	30'-0"	63	Str													
A528	5	15'-3"	80	20		1'-7"	13'10"										
A529	10	12'-8"	132	20		1'-7"	11'-3"										
A530	5	12'-3"	64	Str													
A531	2	10'10"	23	Str													
A532	8	5'-0"	42	Str													
A533	2	8'-2"	17	Str													
A534	6	7'0"	44	Str													
A535	12	6'8"	83	Str													
A601	12	7'-7"	137	15		9"	5'-10"		11 1/2"	9"		7"					12 Epoxy Coated
A602	6	17'6	158	S10		8'4"	1'-2"	8'4"									
A603	6	22'8"	204	S10		10'11"	1'-2"	10'11"									
A604	7	14'-3"	150	S10		6'-3"	5'-7"	2'-9"									
A605	8	15'-1"	181	S10		7'-1"	5'-7"	2'-9"									
A606	7	16'-0"	168	S10		8'0"	5'-7"	2'9"									
A607	10	16'-10"	253	S10		8'-10"	5'-7"	2'-9"									
A609	42	15'-1"	952	S10		7'-0"	1'-5"	7'-0"									
A610	42	4'-11"	310	S10		1'-11"	1'-5"	1'-11"									
A611	42	7'-1"	447	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"							7"				2 Epoxy Coated
A702	2	4'-8"	19	15		9"	3'-2"		9 1/2"	9"		3"					2 Epoxy Coated
A703	2	5'-0"	20	15		9"	3'-5"		10"	9"		5"					2 Epoxy Coated
A704	2	5'8"	23	15		9"	3'11"		11 1/2"	9"		7"					2 Epoxy Coated
A705	2	6'-3"	26	15		9"	4'-7"		11 1/2"	9"		7"					2 Epoxy Coated
A801	6	12'-1"	194	Str													
A802	14	24'-2"	903	Str													
A803	6	11'2"	179	Str													
A804	42	6'-2"	692	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	8,520														





ENLARGED VIEW SHOWING BAR BENDING DETAILS



NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SPI, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1 1/2 Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 10 11 / 11
14. Reinforcing Steel Samples: Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

418 / 616

GRE-675 - 5 · 37
GREENE COUNTY

RECEIVED JUNE 8 1972

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
9 / 11

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0576
I-675 UNDER RAMP A

GREENE COUNTY STA: 321+09.18 TO STA: 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/24/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

419
616

GRE-675 · 5·37
GREENE COUNTY

ABUTMENT NO. 2

Reinforcing steel in Abutment No. 2 shall have the suffix "B"

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
A501	24	2'-4"	58	2	9"	10"					9"						
A502	20	2'-10"	59	Str													10 Epoxy Coated
A503	14	6'-5"	94	23	2'-10⅛"	2'-1⅛"	1'-0"	3⅝"	2'-1⅜"		9"			3'-2"	2'-5"	3⅜"	14 Epoxy Coated
A504	4	3'-8"	15	Str													
A505	2	3'-11"	8	Str													
A506	2	4'-11"	10	Str													
A507	2	5'-11"	12	Str													
A508	28	16'-8"	487	Str													8 Epoxy Coated
A509	8	9'-2"	76	Str													
A510	4	11'-1"	46	Str													
A511	4	9'-0"	38	Str													
A512	6	10'-6"	66	Str													
A513	10	7'-4"	76	2	9"	6'-7"											
A514	2	3'-8"	8	Str													
A515	8	10'-9"	90	Str													
A516	2	10'-6"	22	2	9"	9'-9"											
A517	21	10'-9"	235	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A518	47	6'-4"	310	S10		1'-7"	3'-5"	1'-7"									
A519	32	8'-6"	284	S10		1'-7"	5'-7"	1'-7"									
A520	8	8'-1"	67	2	9"	7'-4"											
A521	7	8'-11"	65	2	9"	8'-2"											
A522	9	9'-4"	88	2	9"	8'-7"											
A523	18	22'-5"	421	Str													
A524	8	22'-6"	188	19			21'-2"	1'-4"				1⅝"		1'-4"	22'-6"		
A525	2	16'-8"	35	Str													
A526	2	29'-0"	60	Str													
A528	5	13'-8"	71	20		1'-7"	12'-3"										
A529	10	13'-11"	145	20		1'-7"	12'-6"										
A530	5	13'-6"	70	Str													
A531	2	10'-10"	23	Str													
A532	8	6'-0"	50	Str													
A533	2	8'-8"	18	Str													
A534	6	6'-8"	42	Str													
A535	14	6'-10"	100	Str													
A601	14	8'-0"	168	15		9"	6'-3"		1'-0"	9"		7"					14 Epoxy Coated
A602	7	18'-6"	195	S10		8'-10"	1'-2"	8'-10"									
A603	7	22'-6"	237	S10		10'-10"	1'-2"	10'-10"									
A604	8	14'-8"	176	S10		6'-8"	5'-7"	2'-9"									
A605	8	15'-5"	185	S10		7'-5"	5'-7"	2'-9"									
A606	7	16'-3"	171	S10		8'-3"	5'-7"	2'-9"									
A607	9	16'-8"	225	S10		8'-8"	5'-7"	2'-9"									
A609	41	15'-1"	929	S10		7'-0"	1'-5"	7'-0"									
A610	41	4'-11"	303	S10		1'-11"	1'-5"	1'-11"									
A611	41	7'-1"	436	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"							7"				2 Epoxy Coated
A702	2	4'-8"	19	15		9"	3'-2"		9½"	9"		3"					2 Epoxy Coated
A703	2	5'-0"	20	15		9"	3'-5"		10"	9"		5"					2 Epoxy Coated
A704	2	6'-2"	25	15		9"	4'-5"		11½"	9"		7"					2 Epoxy Coated
A705	2	7'-1"	29	15		9"	5'-5"		11½"	9"		7"					2 Epoxy Coated
A801	6	13'-6"	216	Str													
A802	14	23'-5"	875	Str													
A803	6	13'-10"	222	Str													
A804	41	6'-2"	675	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	8,566														
Total	Abutments		17,086														

PIER NO. 1

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SP401	1	18'-0"	339	SP1		4½"	18'-0"	51							2'-8"		
SP402	1	19'-1½"	359	SP1		4½"	19'-1½"	54							2'-8"		
SP403	1	20'-3"	379	SP1		4½"	20'-3"	57							2'-8"		
P501	4	22'-2"	92	Str													
P502	36	Varies 5'-7" to 8'-11" by 5" @ 2	272	S10		Varies 2'-0" to 3'-8" by 2½"	1'-10⅜"	Varies 2'-0" to 3'-8" by 2½"									
P503	36	5'-1"	191	S10		1'-9"	1'-10⅜"	1'-9"									
P504	80	8'-11"	744	S10		3'-8"	1'-10⅜"	3'-8"									
P505	25	5'-7"	146	S10		1'-7"	2'-8"	1'-7"									
P601	39	7'-6"	439	Str													
P701	16	20'-4"	665	Str													
P702	39	7'-6"	598	Str													
P801	14	5'-11"	221	2	11"	5'-3"											
P802	14	21'-10"	816	Str													
P901	8	27'-7"	750	Str													
P902	8	13'-3"	360	Str													
P1001	28	6'-11"	833	11		3½"	1'-10½"	4'-9"								1'-3"	
P1002	14	21'-5"	1,290	Str													
P1003	14	23'-9"	1,431	Str													
P1004	4	23-2"	339	19		5'-9"	17'-5"					1'-11"		5'-7"	23'-0"		
P1005	4	23'-2"	339	19		5'-9"	17'-5"					1'-0"		5'-7"	23'-0"		
P1101	2	13'-1"	139	19		7'-6"	5'-7"					4"		7'-6"			
P1102	3	14'-9"	235	15		1"	13'-1"					2'-0"					
P1103	4	16'-9"	356	15		1"	15'-1"					2'-0"					
P1104	2	13'-1"	139	Str													
P1105	4	33'-7"	714	15		26'-1"	5'-7"	2'-2"	26'-2"			1'-4"					
P1106	3	14'-11"	238	15		7'-6"	5'-7"	2'-2"	7'-6"			4"					
		Total	12,544														

PIER NO. 2

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SP404	1	22'-6"	419	SP1		4½"	22'-6"	63							2'-8"		
SP405	1	23'-7½"	440	SP1		4½"	23'-7½"	66							2'-8"		
SP406	1	24'-9"	460	SP1		4½"	24'-9"	69							2'-8"		
P501	4	22'-2"	92	Str													
P503	64	5'-1"	339	S10		1'-9"	1'-10⅜"	1'-9"									
P504	120	8'-11"	1,116	S10		3'-8"	1'-10⅜"	3'-8"									
P505	25	5'-7"	146	S10		1'-7"	2'-8"	1'-7"									
P506	64	Varies 5'-7" to 8'-11" by 2½"; 4 @	484	S10		Varies 2'-0" to 3'-8" by 1'-4"	1'-10⅜"	Varies 2'-0" to 3'-8" by 1'-4"									
P602	41	11'-0"	677	Str													
P703	24	21'-4"	1,047	Str													

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 9/11
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 9/11

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO
10/11

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0576

I-675 UNDER RAMP A

GREENE COUNTY STA: 321+09.18 TO STA: 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/24/92	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

420/616

GRE-675 · 5·37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		PIER NO. 2 CONTINUED															
P303	12	14'-4"	585	Str													
P304	12	28'-6"	1,163	Str													
P1004	4	23'-2"	399	19		5'-9"	17'-5"					1'-11"		5'-7"	23'-0"		
P1005	4	23'-2"	399	19		5'-9"	17'-5"					1'-0"		5'-7"	23'-0"		
P1006	41	11'-0"	1,941	Str													
P1111	7	19'-0"	707	15		1"	17'-4"		2'-0"			2'-0"					
P1112	7	12'-7"	468	19		7'-0"	5'-7"					4"		7'-0"			
P1113	7	31'-5"	1,168	15		23'-11"	5'-7"	2'-3"	23'-11"			1'-1"					
P1116	7	12'-7"	468	Str													
P1401	21	9'-11"	1,593	11		1'-2"	2'-8"	6'-1"							7'-9"	1'-8"	
P1402	21	11'-11"	1,914	11		1'-2"	2'-8"	8'-1"							9'-9"	1'-8"	
P1403	7	19'-3"	1,031	Str													
P1404	7	21'-3"	1,138	Str													
P1405	7	20'-4"	1,089	Str													
P1406	7	22'-4"	1,196	Str													
P1407	7	21'-5"	1,147	Str													
P1408	7	23'-5"	1,254	Str													
		Total	22,880														
		PIER NO. 3															
SP407	1	27'-0"	500	SP1		4½"	27'-0"	75							2'-8"		
SP408	1	27'-9"	513	SP1		4½"	27'-9"	77							2'-8"		
SP409	1	28'-10½"	534	SP1		4½"	28'-10½"	80							2'-8"		
P501	4	22'-2"	92	Str													
P502	36	Varies 5'-7" to 8'-11" by 5"; 4-eq	272	S10		Varies 2'-0" to 3'-8" by 2½"	1'-10⅜"	Varies 2'-0" to 3'-8" by 2½"									
P503	36	5'-1"	191	S10		1'-9"	1'-10⅜"	1'-9"									
P504	80	8'-11"	744	S10		3'-8"	1'-10⅜"	3'-8"									
P505	25	5'-7"	146	S10		1'-7"	2'-8"	1'-7"									
P603	39	9'0"	527	Str													
P701	18	20'-4"	748	Str													
P803	39	9'0"	937	Str													
P901	9	27'-7"	844	Str													
P902	9	13'-3"	405	Str													
P1001	14	6'-11"	417	11		3½"	1'-10½"	4'-9"								1'-3"	
P1004	4	23'-2"	399	19		5'-9"	17'-5"					1'-11"		5'-7"	23'-0"		
P1005	4	23'-2"	399	19		5'-9"	17'-5"					1'-0"		5'-7"	23'-0"		
P1007	14	31'-4"	1,888	Str													
P1101	2	13'-1	139	19		7'-6"	5'-7"					4"		7'-6"			
P1102	3	14'-9"	235	15		1"	13'-1"		2'-0"			2'-0"					
P1103	4	16'-9"	356	15		1"	15'-1"		2'-0"			2'-0"					
P1104	2	13'-1"	139	Str													
P1105	4	33'-7"	714	15		26'-1"	5'-7"	2'-2"	26'-2"			1'-4"					
P1106	3	14'-11"	238	15		7'-6"	5'-7"	2'-2"	7'-6"			4"					
P1107	28	7'-3"	1,079	11		3"	2'-1"	4'-11"								1'-5"	
P1114	14	30'-8"	2,281	Str													
P1115	14	32'-8"	2,430	Str													
		Total	17,167														
	Total	Piers	52,591														
		SUPERSTRUCTURE															
S401	531	30'-0"	10,641	Str													531 Epoxy Coated
S402	59	7'-10"	309	Str													59 Epoxy Coated
S403	59	17'-2"	677	Str													59 Epoxy Coated
S404	60	42'-0"	1,683	Str													60 Epoxy Coated
S405	60	30'-0"	1,202	Str													60 Epoxy Coated
S501	416	2'-4"	1,012	2	9"	10"					9"						
S502	416	5'-10"	2,531	23	2'-0⅛"	2'-2⅜"	1'-0"	3½"	2'-2⅜"	9"				2'-4"	2'-6"	3⅜"	416 Epoxy Coated
S503	416	2'-5"	1,049	2	9"	1'-8"											
S504	416	3'-0"	1,302	15		9"	11"	9"	11'2"	5"		7"					416 Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		SUPERSTRUCTURE CONTINUED															
S505	24	12'0"	300	Str													12 Epoxy Coated
S506	120	4'-9"	595	Str													60 Epoxy Coated
S507	88	15'-2"	1,392	Str													44 Epoxy Coated
S508	558	30'-0"	17,460	Str													36 Epoxy Coated
S509	62	8'-4"	539	Str													4 Epoxy Coated
S510	62	19'-11"	1,288	Str													4 Epoxy Coated
S601	68	Varies 45'-1" to 45'-6" by 1/8" 2-eq	4,626	Str													34 Epoxy Coated
S602	68	Varies 44'-9" to 45'-1" by 1/8" 2-eq	4,588	Str													34 Epoxy Coated
S603	100	44'-6"	6,684	Str													50 Epoxy Coated
S604	102	44'-3"	6,779	Str													51 Epoxy Coated
S605	102	44'-0"	6,741	Str													51 Epoxy Coated
S606	102	43'-10"	6,715	Str													51 Epoxy Coated
S607	508	43'-8"	33,318	Str													254 Epoxy Coated
S608	53	28'-8"	2,540	1	8"	28'-0"										6"	59 Epoxy Coated
S609	59	6'-0"	532	1	8"	5'-4"										6"	59 Epoxy Coated
S610	72	2'-8"	288	14	7¾"	7¾"	11"	6½"	11⅝"	5¼"		3"		11½"	2'-1½"		
S611	4	44'-11"	270	Str													
L501	8	3'-6"	24	2	9"	2'0"					9"						
L502	8	8'3"	69	2	3'-2"	2'-2"					3'-2"						8 Epoxy Coated
L503	12	7'-6"	94	14		6	2'-7"	1'-4"	2'-7"	6"		1'-10"		1'-10"			
L504	10	3'-2"	33	Str.													
Total	Superstructure 115,281																

NOTES:
1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 9/11
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 9/11

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO
11/11

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0576

I-675 UNDER RAMP A

GREENE COUNTY STA: 321+09.18 TO STA: 323+96.88

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

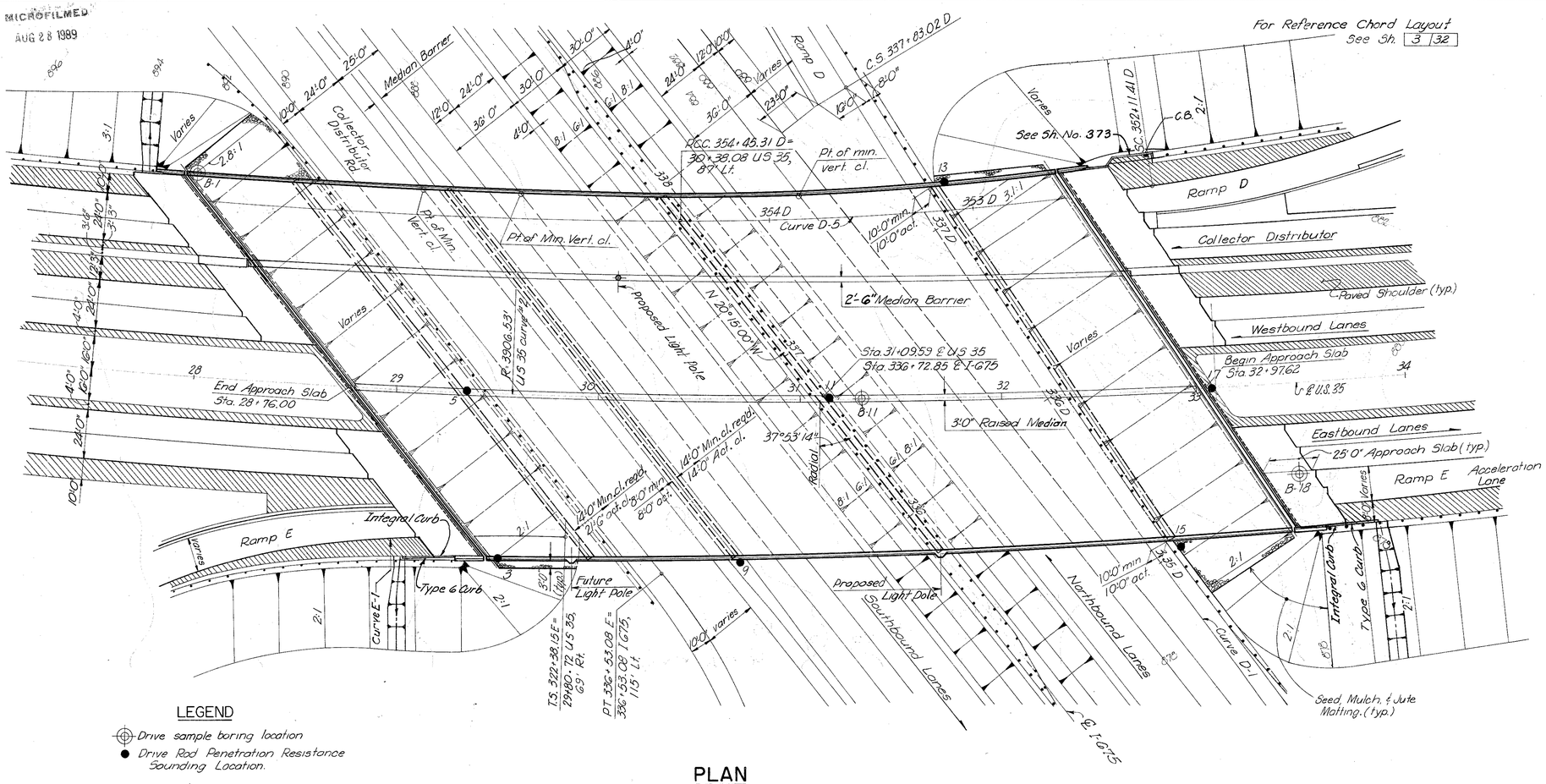
MICROFILMED
AUG 28 1989

MICROFILMED
JUN 19 1995

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

421/616

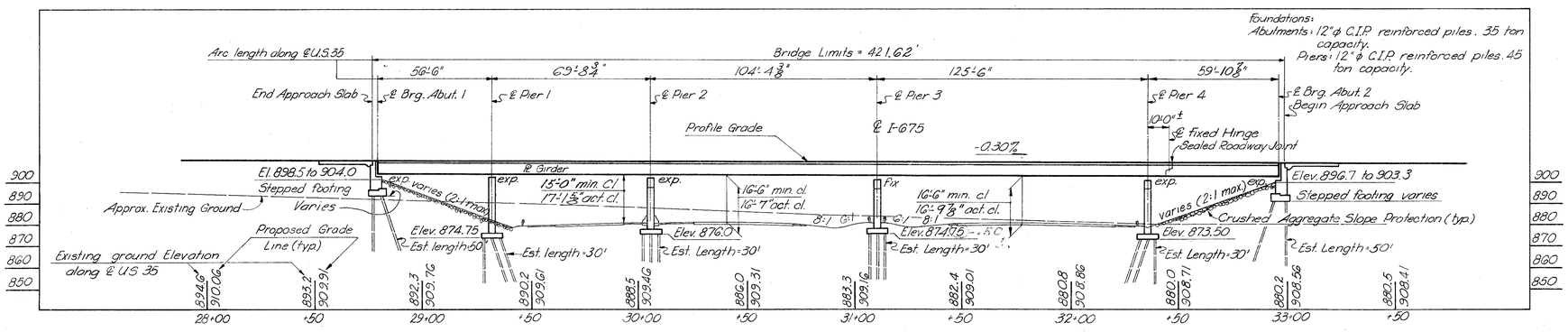
GRE-675 - 5.37
GREENE COUNTY



LEGEND

- Drive sample boring location
- Drive Rod Penetration Resistance Sounding Location.

PLAN



PROFILE ON CENTER LINE U.S. 35

CURVE DATA & U.S. 35 CURVE NO. 2

P.I.=Sta. 27+30.82
Δ = 27°10'00"
Dc = 1°28'00"
R = 3906.53'
T = 943.89
L = 1852.27
E = 112.41

CURVE DATA RAMP D CURVE D-5

P.I.=Sta. 353+28.62
Δ = 9°21'22"
Dc = 4°00'00"
R = 1432.39'
T = 117.21
L = 233.90
E = 4.79

CURVE DATA RAMP D CURVE D-1

P.I.=Sta. 335+56.55
Δ = 6°48'08"
Dc = 1°30'00"
R = 3819.72'
T = 227.01
L = 453.49
E = 6.74

CURVE DATA RAMP E CURVE E-1

P.I.=Sta. 323+72.84
Ds = 25°00'00"
R = 229.18
LT = 134.69
ST = 67.90
Ls = 200.00

Note:
Earthwork limits shown are schematic. Actual slopes shall conform to Plan Cross-Sections.

DESIGN YEAR TRAFFIC

1989 ADT:

I-675	49,840
U.S. 35	65,420
Ramp E	4,900
I-675 Collector Dist.	10,000
U.S. 35 Collector Dist.	11,720

PROPOSED STRUCTURE

TYPE: Continuous steel Plate Girder with reinforced concrete deck & substructure
SPANS: 56'-6", 69'-8¾", 104'-4⅜", 125'-6", 59'-10⅞"
ROADWAY: Variable widths 180'-4" Avg.
LOADING H S 20-44 **and Alternate** Military
SKEW: Varies, 37°53'14" Rt. Fwd. at ℄ I-675
WEARING SURFACE: monolithic Concrete
APPROACH SLABS: 25'0" long (Std A-1-72)
ALIGNMENT: Left curve, Dc 1°28'00"

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SITE PLAN-I

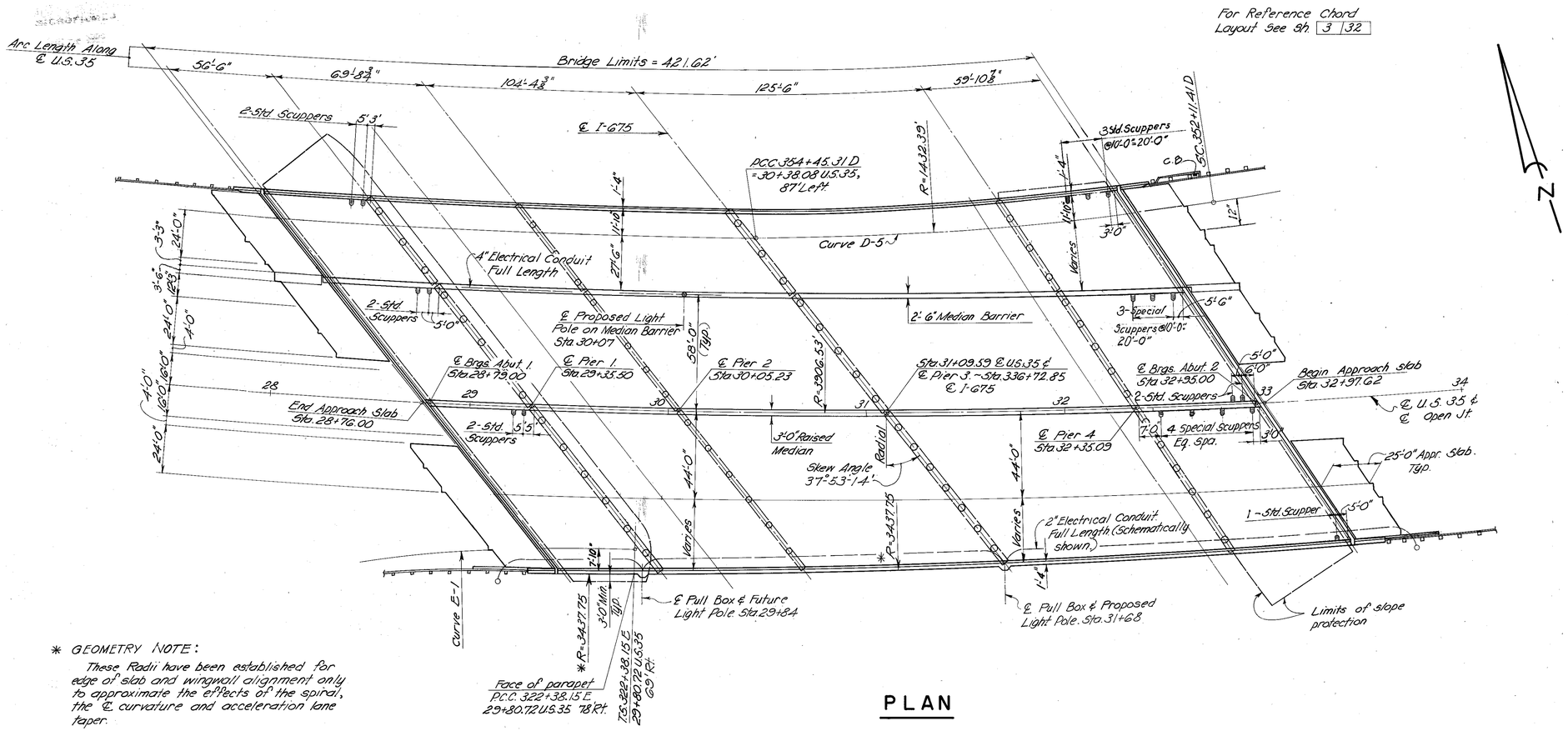
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY — STA 28+76.00 TO STA 32+97.62

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	S.A.	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

422
616

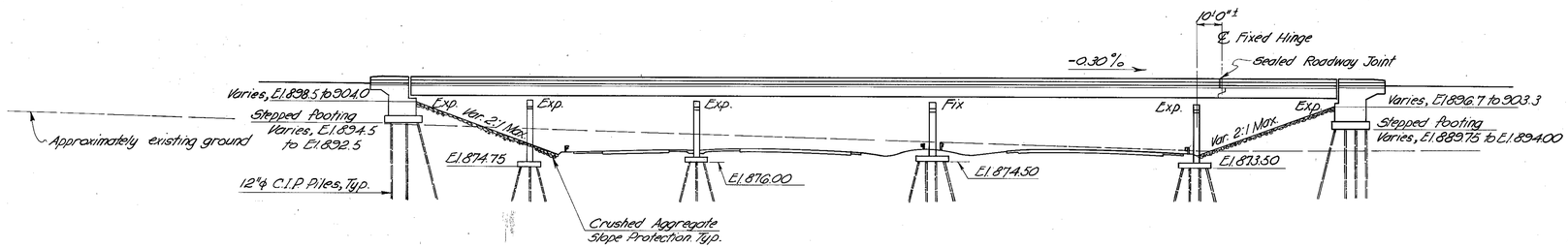
GRE-675 - 5-37.
GREENE COUNTY



* GEOMETRY NOTE:

These Radii have been established for edge of slab and wingwall alignment only to approximate the effects of the spiral, the ℄ curvature and acceleration lane taper.

PLAN



ELEVATION

NOTES:

For Standard Scupper Details see Std. Dwg. SD-1-69.
For Special Scupper Details see Sh. 3 32
For Underbridge Light Locations see Sh. 162 601.
For Sign Attachments on Face of Bridge and Electrical Connections see Shs. 144 601

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CINCINNATI — CONSULTING ENGINEERS — OHIO

2 32

GENERAL PLAN & ELEVATION

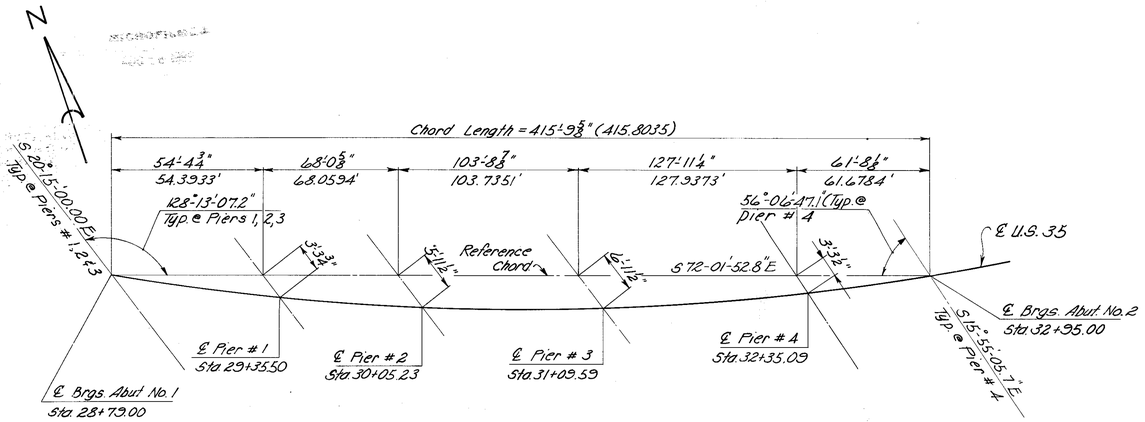
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	SA 9/15/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

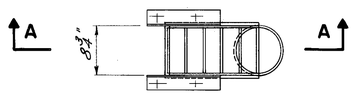
423
616

GRE-675 - 5.37
GREENE COUNTY

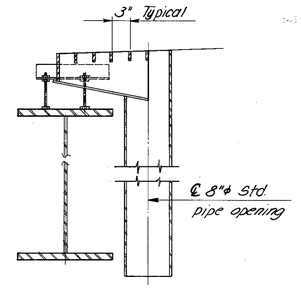


REFERENCE CHORD LAYOUT

(Schematic)



PLAN



SECTION A-A

SPECIAL SCUPPER

For Typical Details and Notes not shown see Std. Dwg. SD-1-69.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT	PIERS	GEN.
503	2,834	Cu.Yd.	Unclassified Excavation		1,257	1,577	
505	Lump	Sum	Test Pile				Lump
507	19,950	Lin.Ft.	12" Cast-in-place reinforced concrete piles		8,850	11,100	
509	620,100	Lb.	Reinforcing Steel	318,700	71,200	230,200	
503	Lump	Sum	Cofferdams, Cribs & Sheeting				Lump
511	2,392	Cu.Yd.	Class "S" concrete, Superstructure using Shrink. Comp. Cem. 701.08	2,392			
511	755	Cu.Yd.	Class "C" concrete, Piers above Footings			755	
511	620	Cu.Yd.	Class "C" concrete, Abutments above Footings		620		
511	856	Cu.Yd.	Class "C" concrete, Footings		390	466	
512	85	Lin.Ft.	Type B Waterproofing		85		
513	2,439,400	Lb.	Structural Steel (AISC Category III)	2,439,400			
514	2,439,400	Lb.	Field Painting of new Structural Steel, System A	2,439,400			
516	201	Lin.Ft.	Preformed Elastic Joint Sealer	201			
516	165	Sq.Ft.	1" Preformed Expansion Joint Filler		165		
518	397	Cu.Yd.	Porous Backfill		397		
518	464	Lin.Ft.	6" Perforated Helical C.S.P. (707.01)		464		
518	143	Lin.Ft.	6" Non-Perforated Helical C.S.P. including specials, (707.01)		143		
518	12	Ea.	Standard Scuppers, including supports	12			
518	7	Ea.	Special Scuppers, including supports	7			
523	3	Hour	Dynamic Pile Tests				3
601	2,875	Sq.Yd.	Crushed Aggregate Slope Protection				2,875
625			See Sheet (149) (616) for lighting summary				
Special	331,400	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	329,600	1,800		

ESTIMATED QUANTITIES CHECKED BY & DATE: J.G./S.A. 5-1-72 REVISED: S.A. 9/14/72

GENERAL NOTES

EMBANKMENT CONSTRUCTION: THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS AND FOR PIERS No. 1 AND 4.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS AND 45 TONS PER PILE FOR THE PIERS.

FOR ADDITIONAL GENERAL NOTES SEE COMMON DETAILS SHEET C1 C2

THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3 3/8" CLEAR FROM THE TOP OF BRIDGE DECK.

FOR SIGN ATTACHMENTS TO FACE OF BRIDGE SEE SH. 144

KING & GAVARIS — CONSULTING ENGINEERS — CINCINNATI OHIO — 3 / 32

GENERAL NOTES, ESTIMATED QUANTITIES & MISCELLANEOUS DETAILS

BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/14/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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616

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GREENE COUNTY

NOTES

For Reinforcing Steel List see shs. 25,26,27/32
Work this sheet with sheets 5,6,7,8,9/32
Porous Backfill, within the limits shall extend upward to the plane of the subgrade within the roadway area extended laterally to the wingwalls.

Only that portion of the C.S.P. located in the Porous Backfill shall be perforated.

For termination of C.S.P. at slopes, see sh. C1/C2

For Expansion and Contraction Joint Details see Sh. C2/C2

All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

CINCINNATI	KING & GAVARIS CONSULTING ENGINEERS	OHIO 4/32

ABUTMENT NO. 1 - 1

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY — STA: 28+76.00 TO STA: 32+97.62

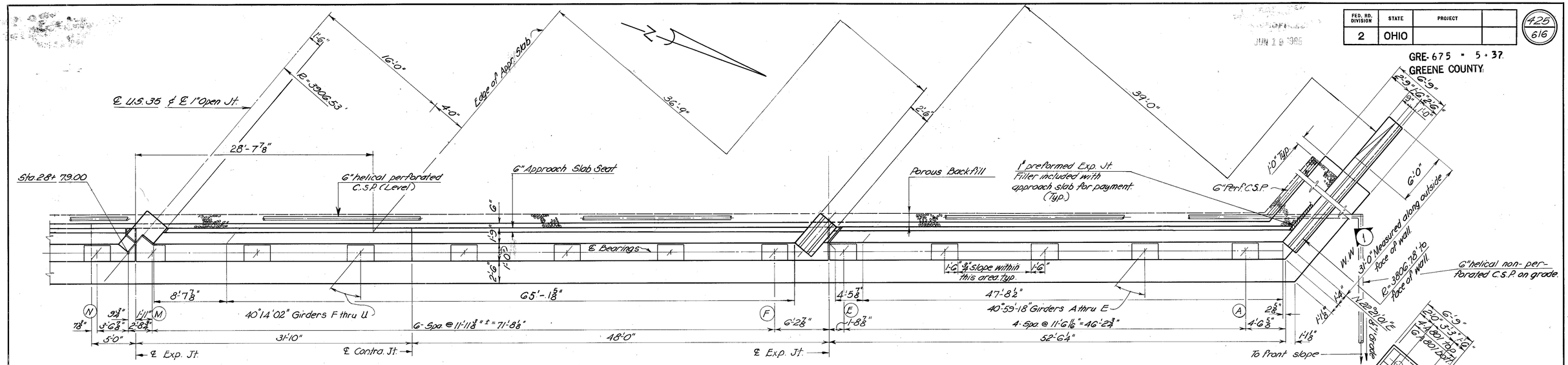
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	84	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

425
616

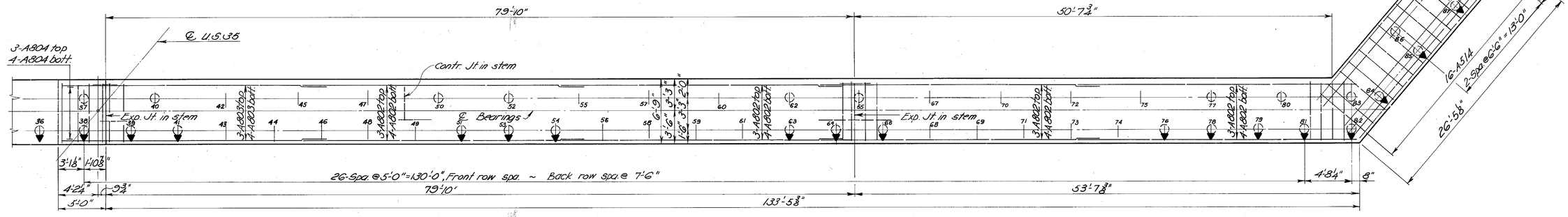
JUN 29 1995

GRE-675 - 5.37
GREENE COUNTY

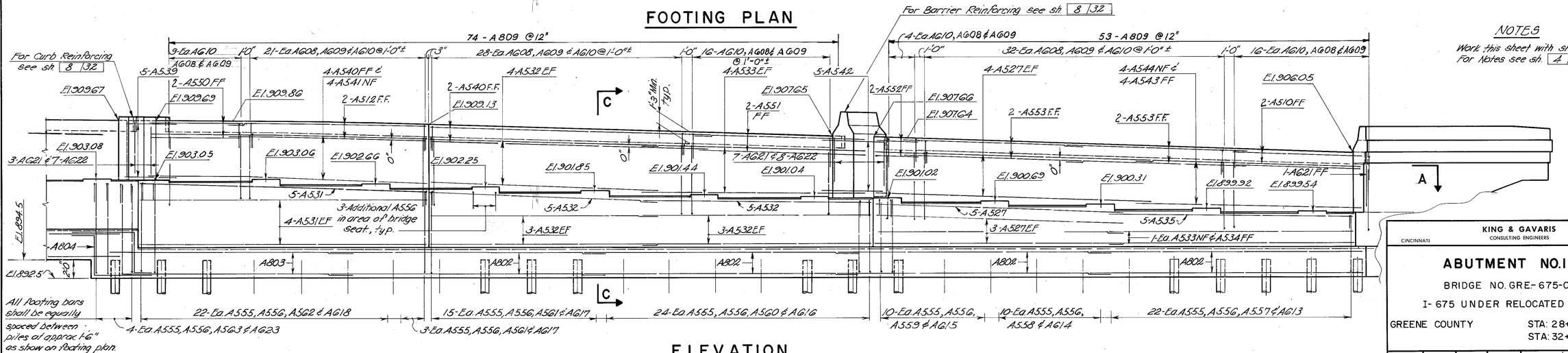


WESTBOUND **COLLECTOR DISTRIBUTOR**

PLAN



FOOTING PLAN



ELEVATION

NOTES

Work this sheet with shs 4, 6, 7, 8, 9 | 32
For Notes see sh. 4 | 32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

5 | 32

ABUTMENT NO. 1 - 2

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	8/25/72	

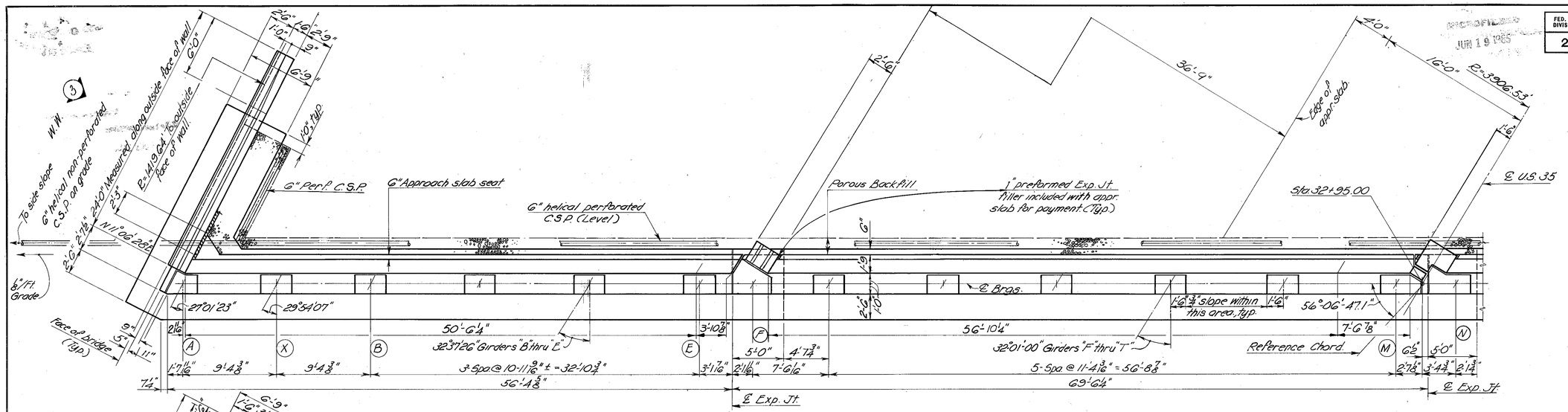
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

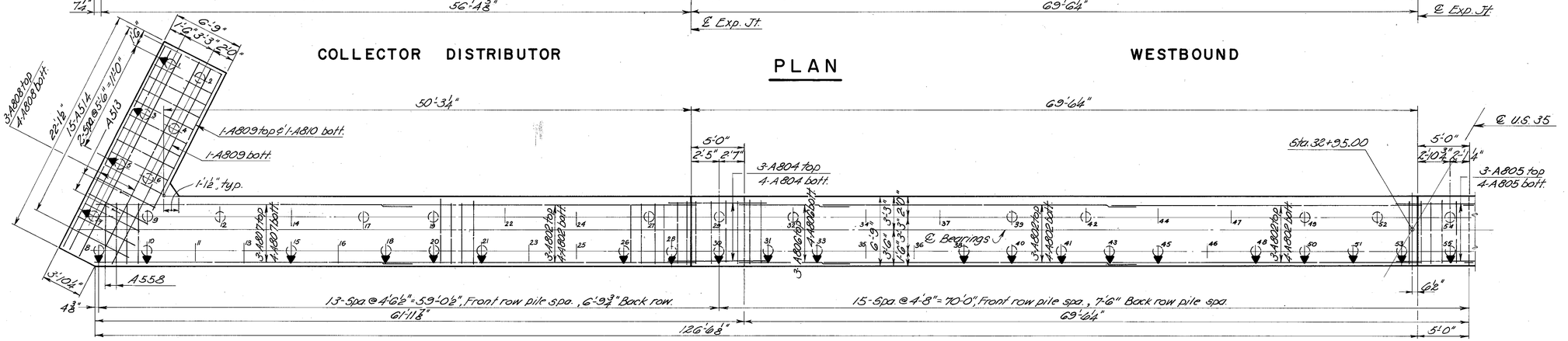
426
616

GRE-675 - 5.37
GREENE COUNTY

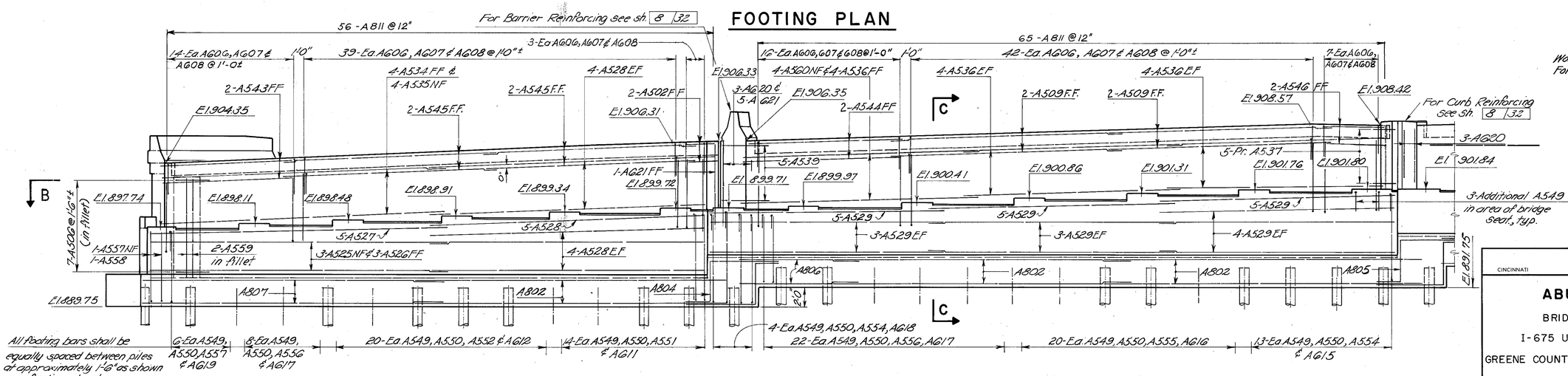
RECEIVED JUN 19 1972

COLLECTOR DISTRIBUTOR — PLAN — WESTBOUND





FOOTING PLAN



ELEVATION

NOTES

Work this sheet with shs 4, 5, 7, 8, 9 | 32
For Notes see sh. 1 | 32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

6 | 32

ABUTMENT NO. 2-3

BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

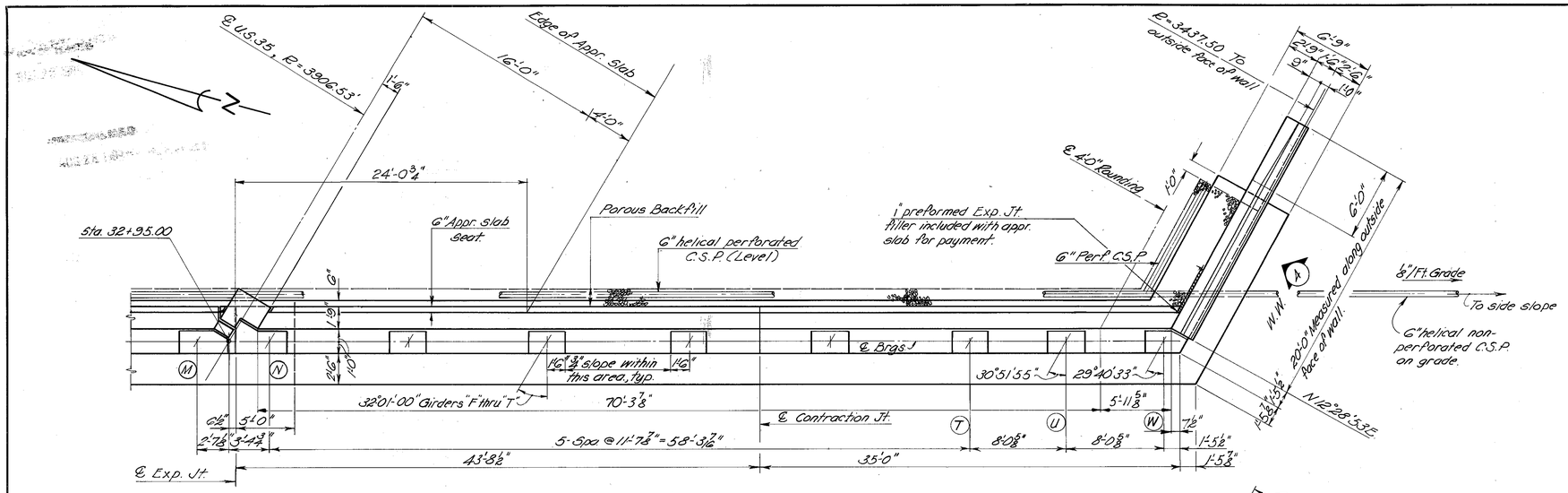
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

MICROFILMED
JUN 26 1985

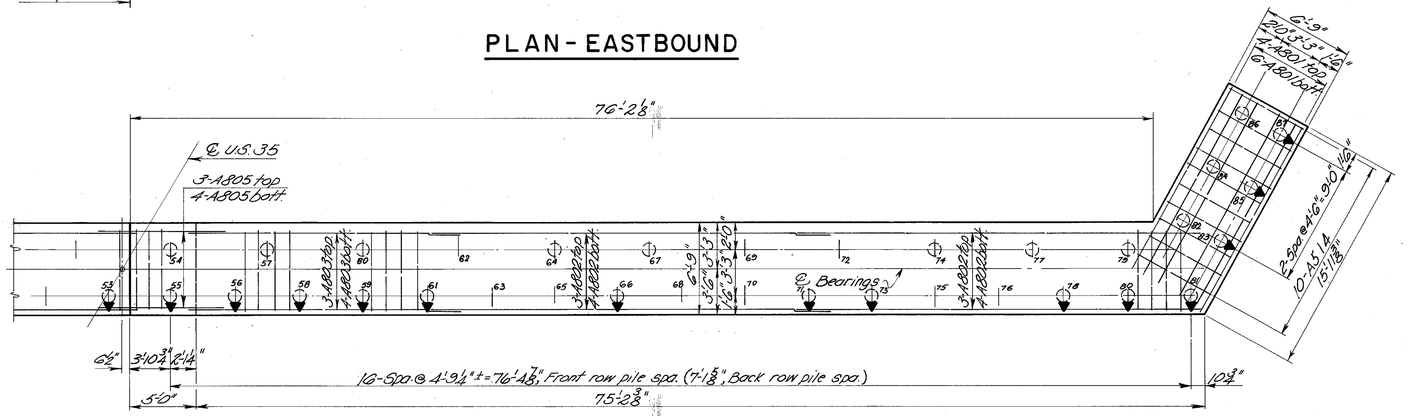
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

427/616

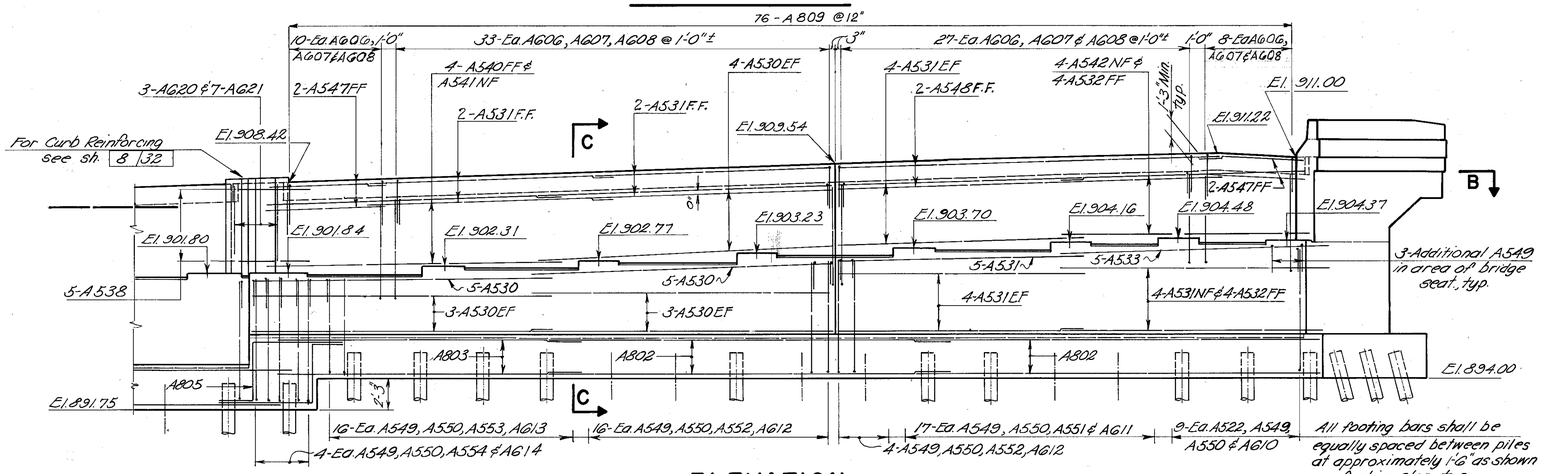
GRE-675 • 5 • 37.
GREENE COUNTY



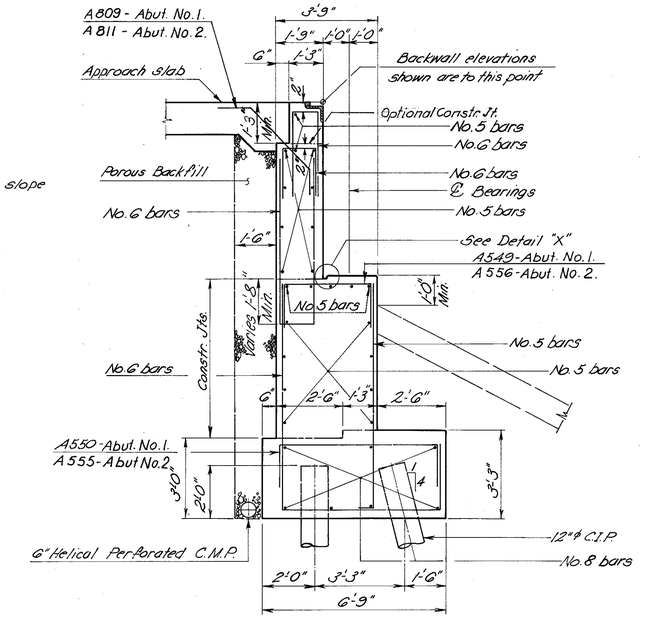
PLAN - EASTBOUND



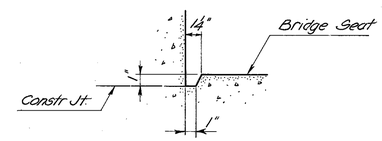
FOOTING PLAN



ELEVATION



SECTION C-C



DETAIL "X"

NOTES
Work this sheet with shs. 4, 5, 6, 8, 9 / 32
For Notes see sh. 4 / 32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
7 / 32

ABUTMENT NO. 2-4

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

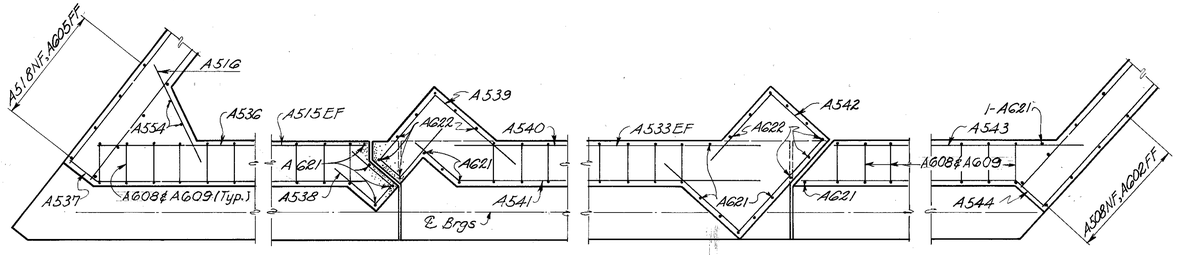
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

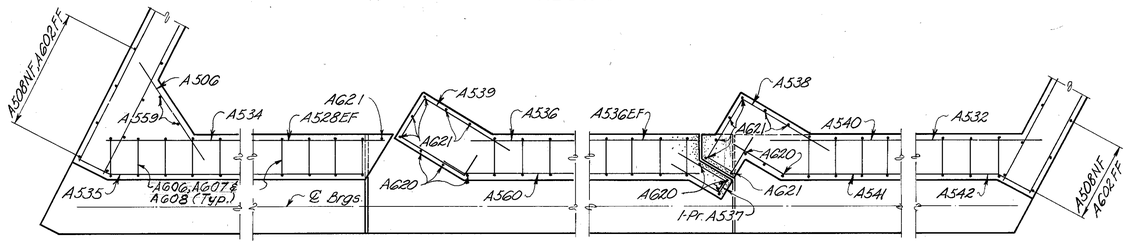
428
616

GRE-675 - 5-37
GREENE COUNTY



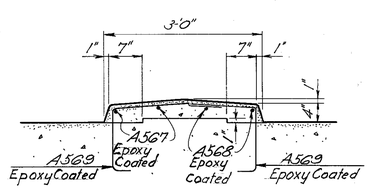
SECTION A-A

ABUT. 1

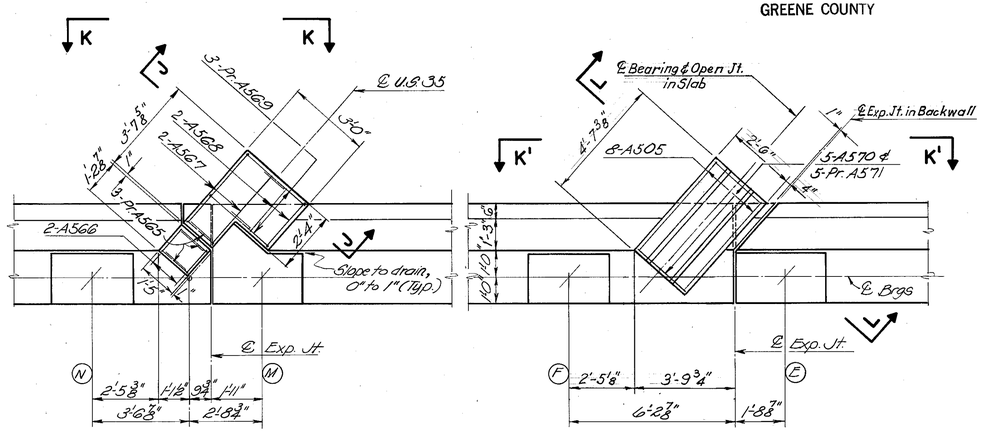


SECTION B-B

ABUT. 2

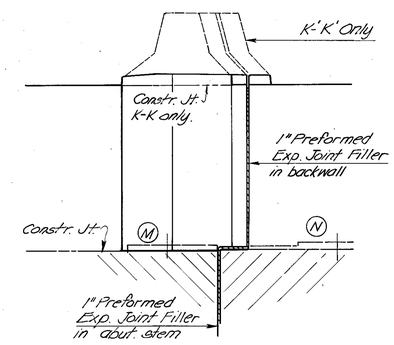


SECTION J-J



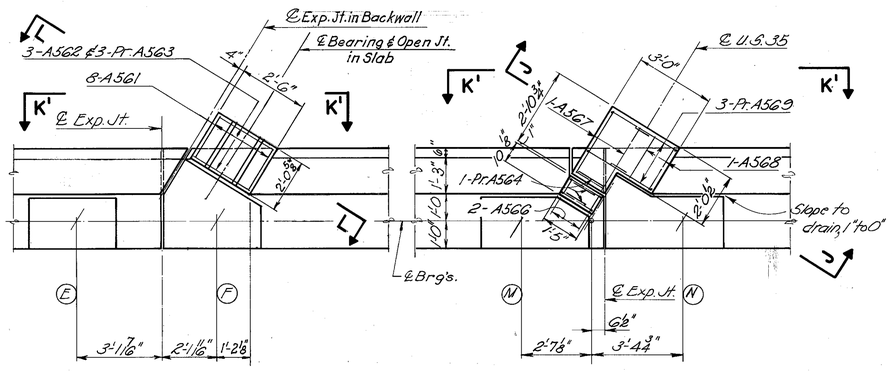
℄ U.S. 35 ℄ OPEN JOINT

PLAN AT MEDIANS - ABUT. 1



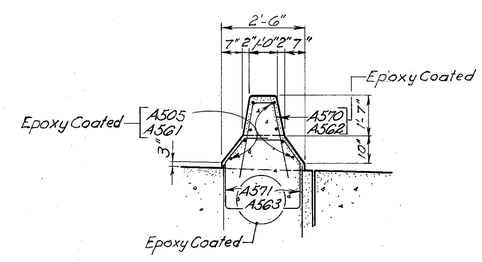
ELEVATION K-K

K'-K' SIMILAR



℄ OPEN JOINT ℄ U.S. 35

PLAN AT MEDIANS - ABUT. 2



SECTION L-L

NOTES

Work this sheet with shs. 4,5,6,7,9 / 32
For Notes see sh. 4 / 32

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CINCINNATI OHIO

8 / 32

ABUTMENT DETAILS - 6

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

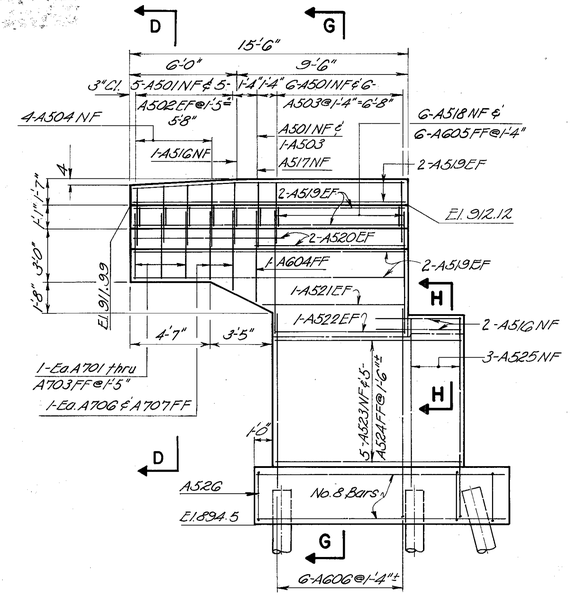
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	[illegible]	9/25/72	

MICROFILMED
JUN 30 1995

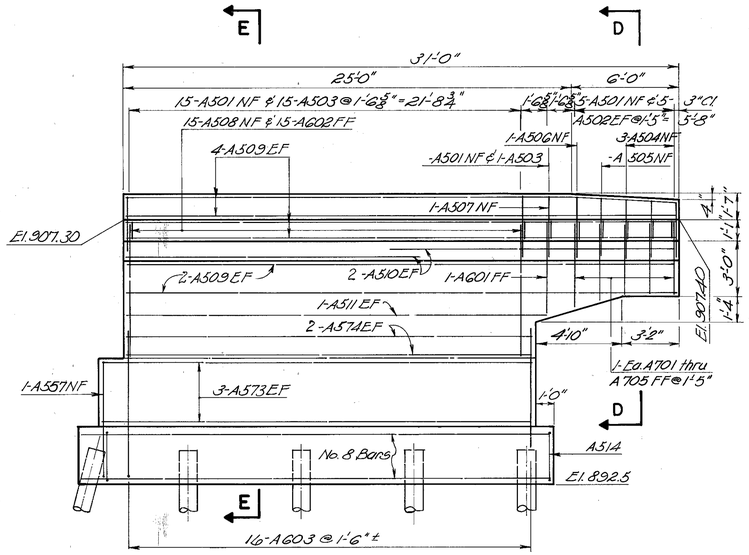
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

429
616

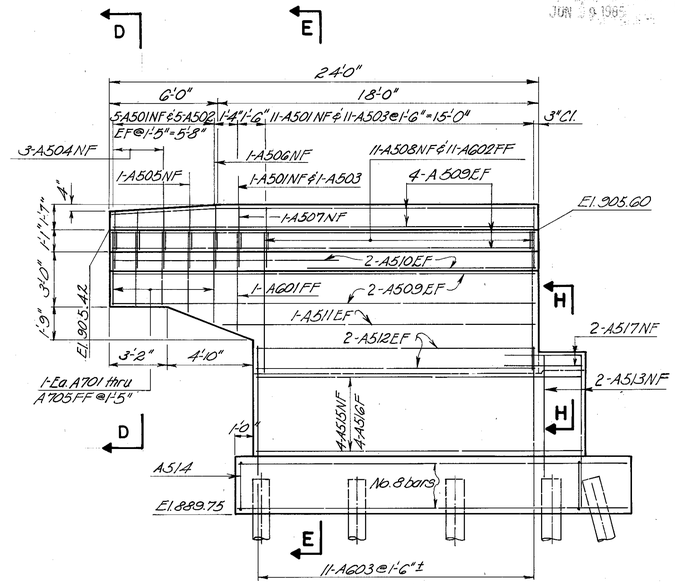
GRE-675 - 5.37
GREENE COUNTY



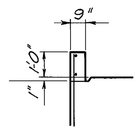
WINGWALL NO. 2



WINGWALL NO. 1

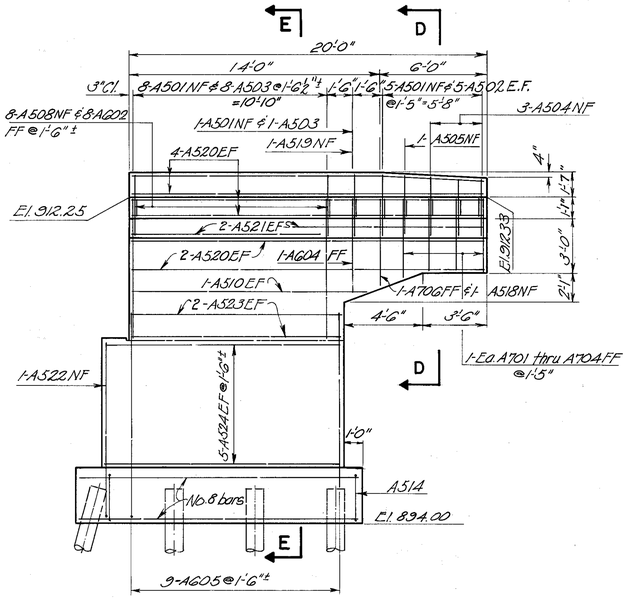


WINGWALL NO. 3

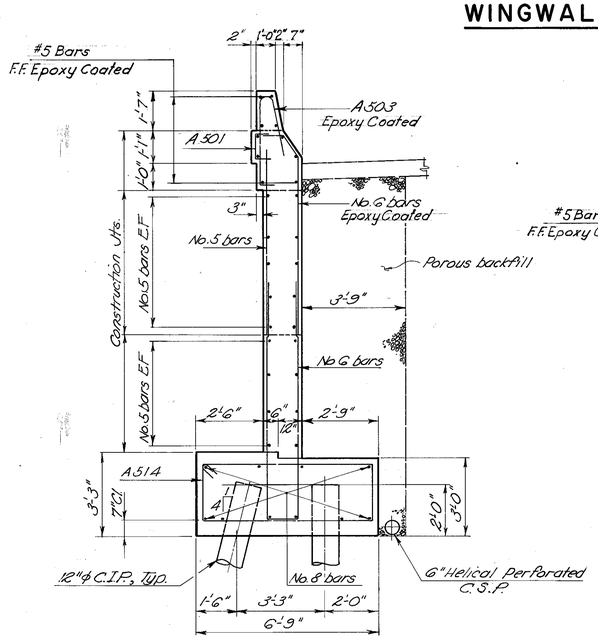


SECTION H-H

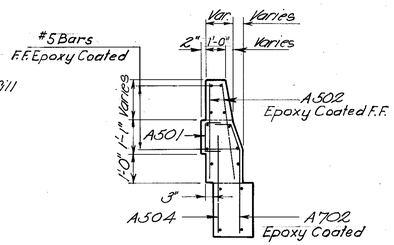
WINGWALL ELEVATIONS



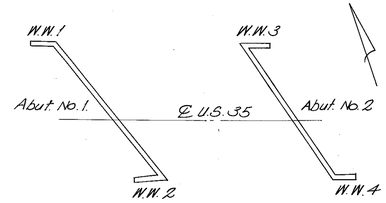
WINGWALL NO. 4



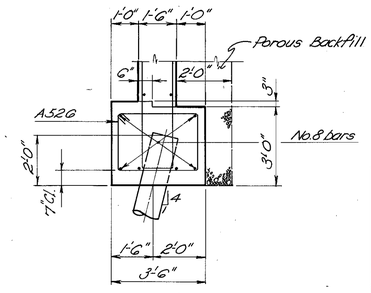
SECTION E-E



SECTION D-D



KEY PLAN



SECTION G-G

NOTES

Work this sheet with shs. 4, 5, 6, 7, 8, 32
For Notes see sh 4, 32

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CINCINNATI — OHIO

3 | 32

ABUTMENT DETAILS - 5

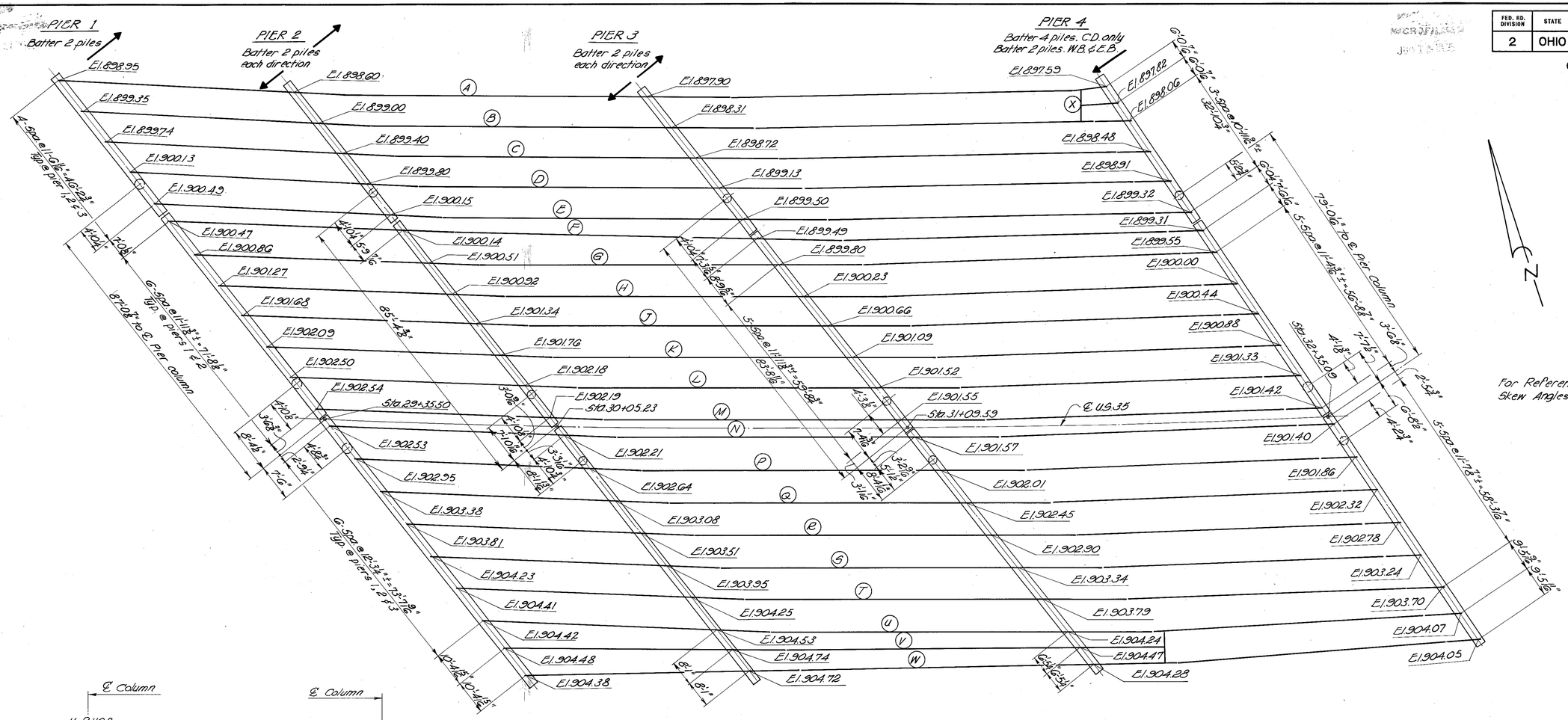
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

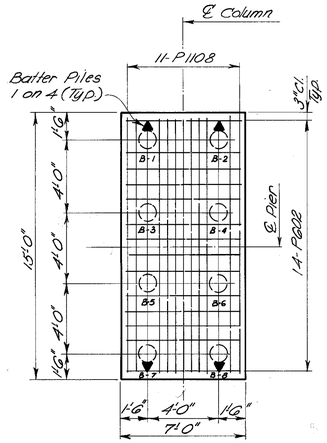
430
616

GRE-675 - 5.37
GREENE COUNTY



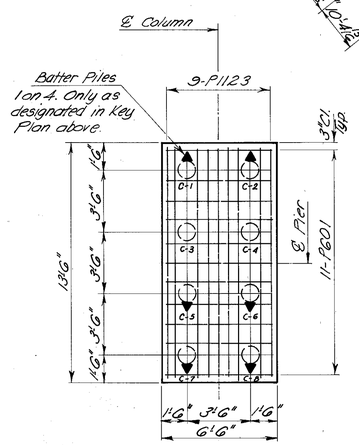
KEY PLAN

Showing Bearing Seat Elevations & Layout Dimensions



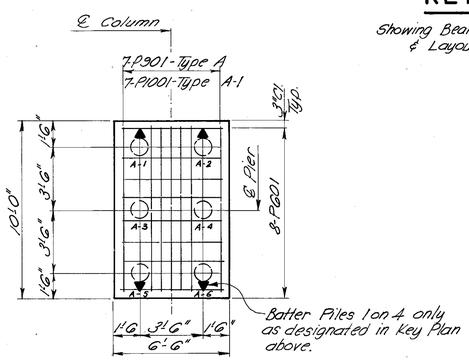
Footing thickness = 3'-6"
3 required

TYPE B



Footing thickness - Type C = 3'-0"
- Type C-1 = 3'-6"
14 required

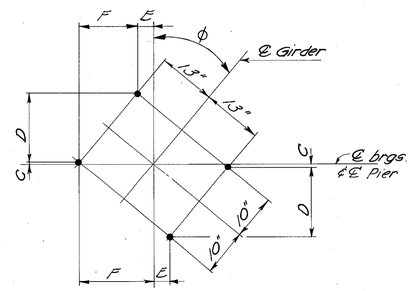
TYPE C, C-1



Footing thickness = 3'-0"
28 required

TYPE A, A-1

FOOTING PLANS



ANCHOR BOLT LAYOUT

FOR PIER 3 ONLY

DIMENSIONS B-375					
GIRDERS:	C	D	E	F	ϕ
A thru E	1 1/16"	1'-3 1/2"	3 13/16"	1'-4 3/8"	39-04-07
F	1 1/16"	1'-3 5/16"	3 13/16"	1'-4 3/8"	39-55-29
G thru U	1/4"	1'-3 11/16"	4"	1'-4 3/8"	38-21-49
V	1/16"	1'-3 1/16"	4 1/8"	1'-4 3/8"	37-47-07
W	-3/8"	1'-3 15/16"	4 5/16"	1'-4 3/8"	37-11-52

Work this sheet with shs. 11, 12, 13, 14, 32

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CINCINNATI OHIO

10 32

PIER DETAILS - 1

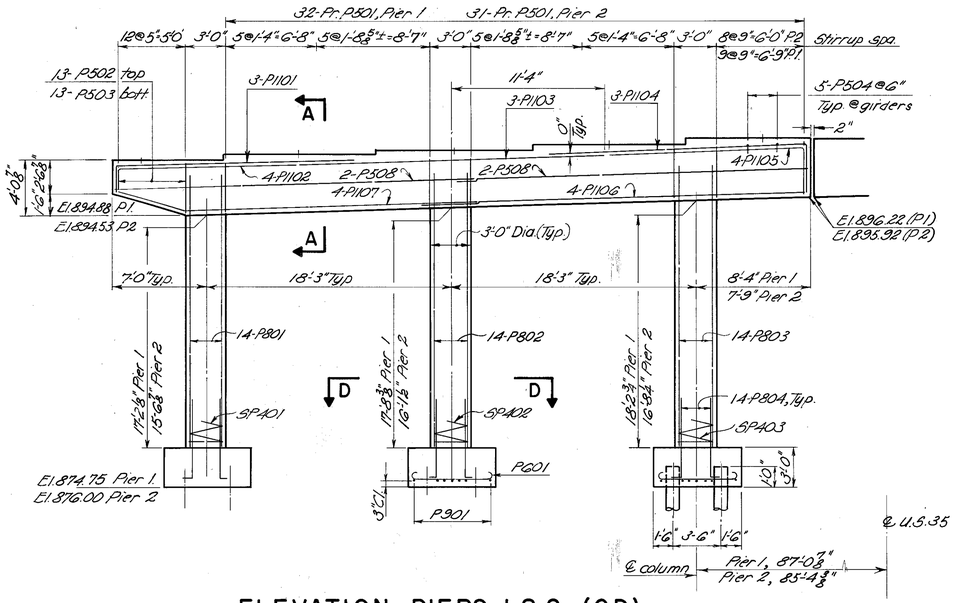
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY
STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

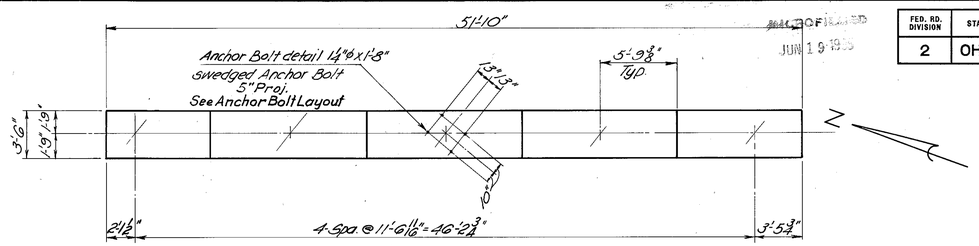
431/616

GRE-675 - 5.37
GREENE COUNTY



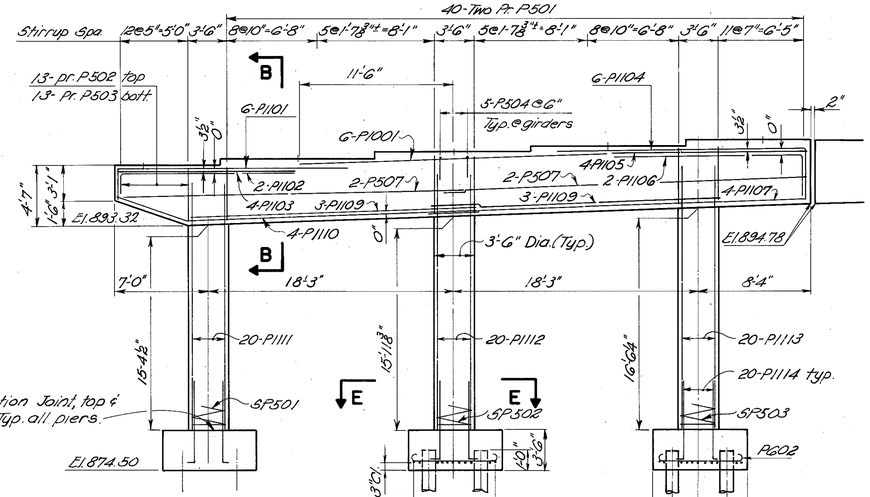
ELEVATION PIERS 1 & 2 (C.D.)

TYPE "A" FTG.



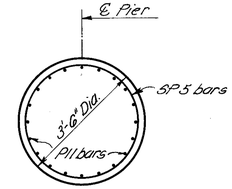
CAP PLAN

Pier 3-C.D. only

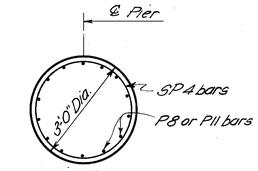


ELEVATION PIER 3 (C.D)

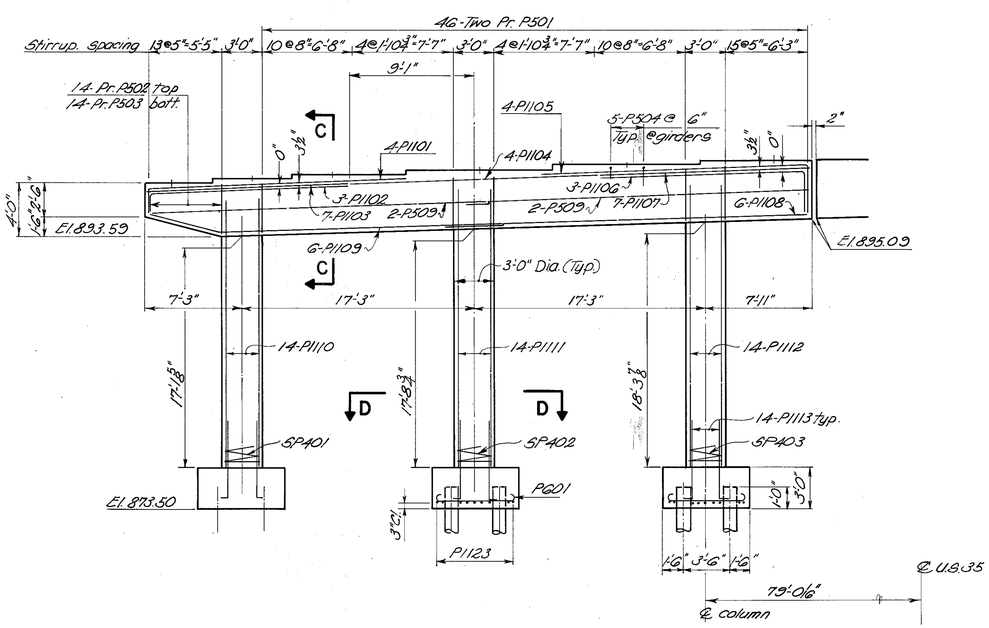
TYPE "B" FTG.



SECTION E-E

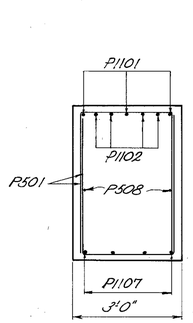


SECTION D-D

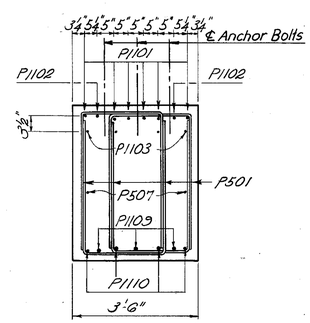


ELEVATION PIER 4 (C.D.)

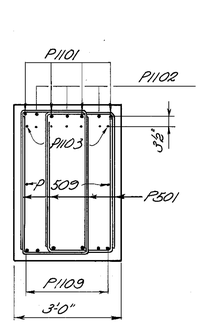
TYPE "C" FTG.



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:

All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

Bearing Anchors: At the option of the Contractor, bearing anchors (or formed holes) located and supported by templates, may be Cast in place.

For Pier Layout and Bearing Seat Elevations see sh. 10, 32

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the BRIDGE SEAT so as to avoid interference with the drilling of anchor bar (bolt) holes.

For Reinforcing Steel List see shs. 27, 28, 29, 32

Reinforcing Steel in piers 1, 2, 3 & 4 to have the suffix A thru D, respectively.

Work this sheet with shs. 10, 12, 13, 14, 32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

11/32

PIERS 1, 2, 3 & 4 C.D.-2

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

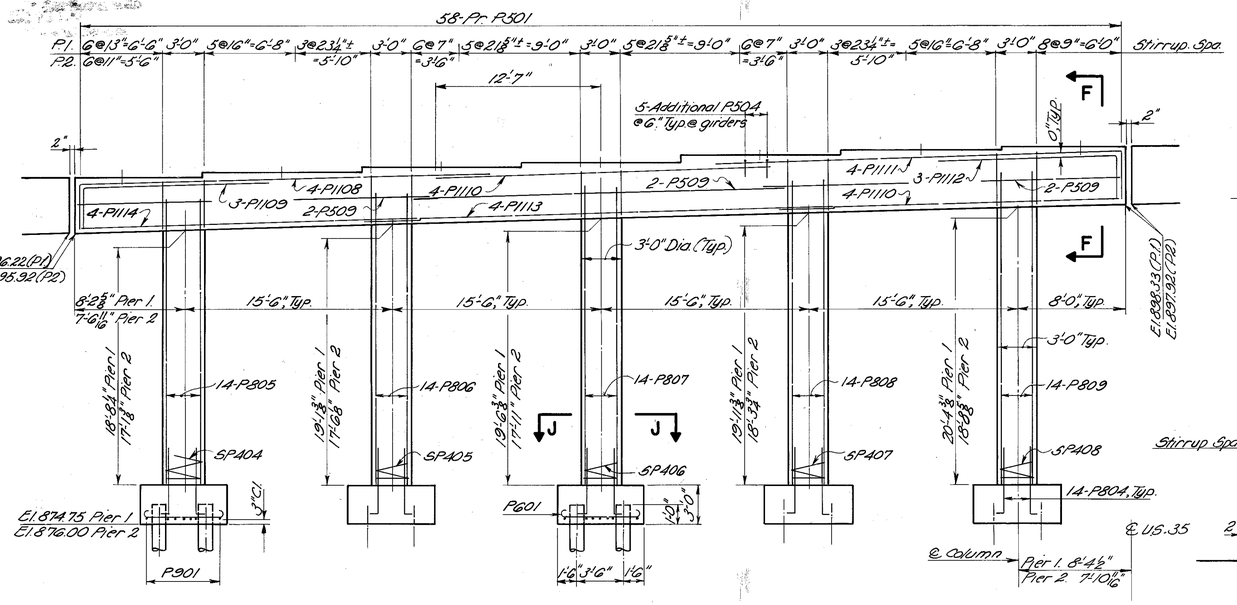
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
J.R.G.	A.W.		S.A.	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

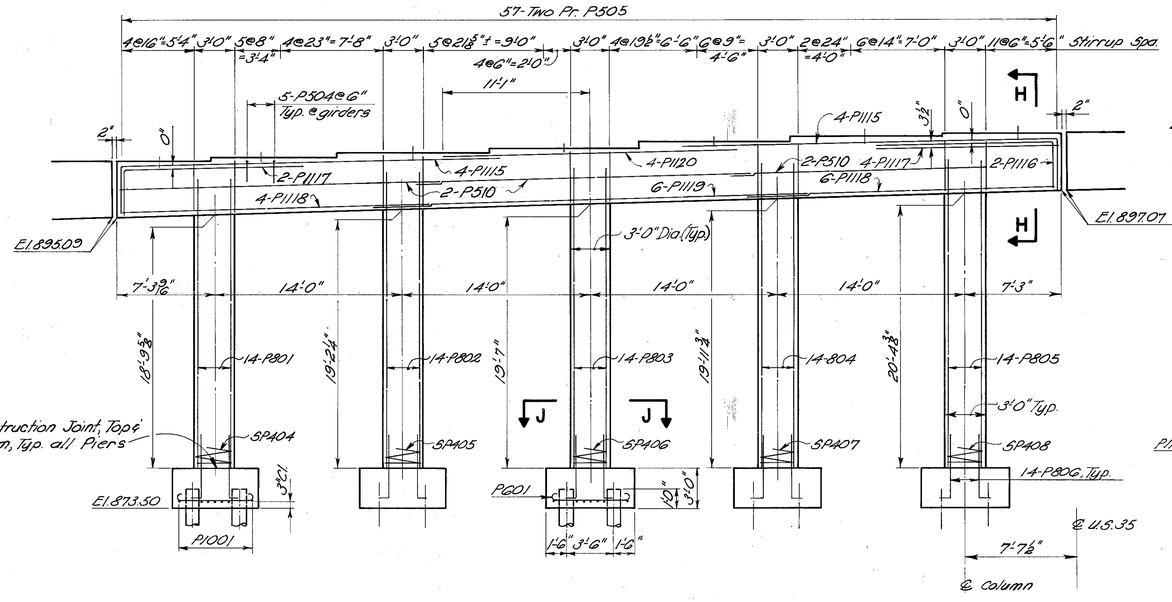
432
616

GRE-675 - 5 - 37.
GREENE COUNTY



ELEVATION PIERS 1 & 2 (W.B.)

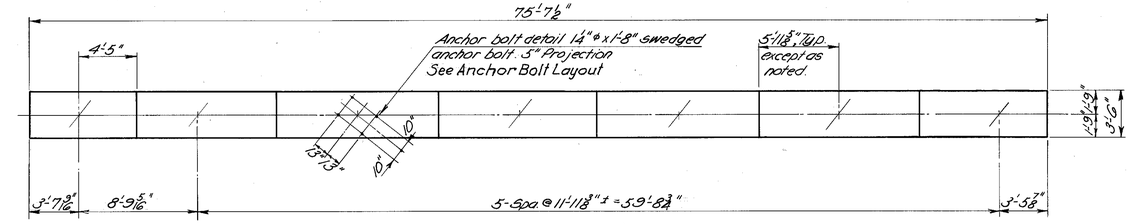
TYPE "A" FTG.



ELEVATION PIER 4 (W.B.)

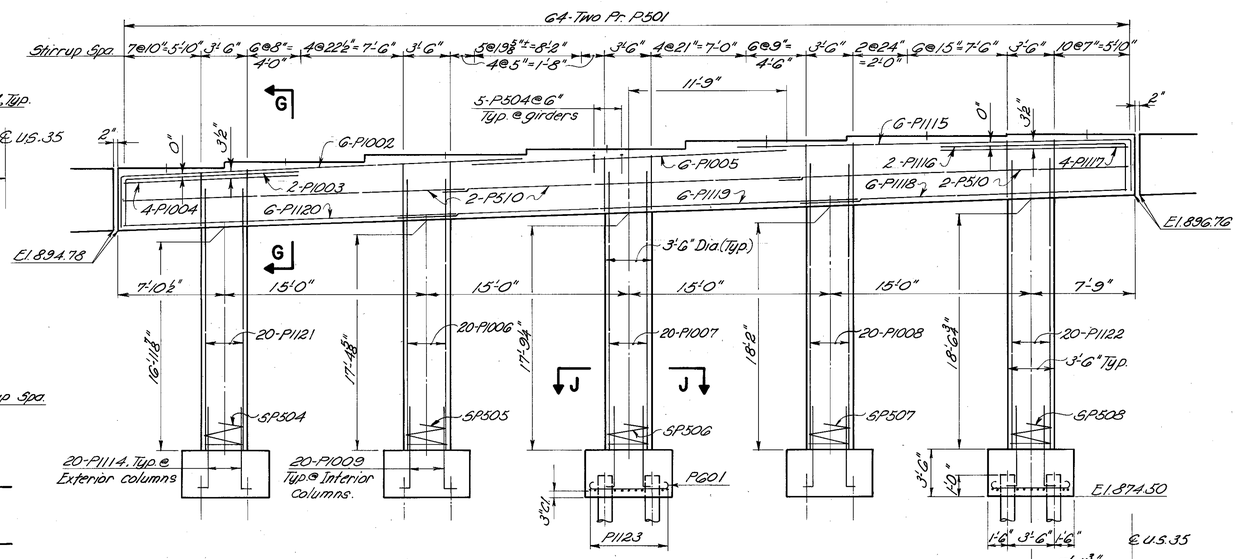
TYPE "A-I" FTG.

NOTE:
Work this sheet with shs. 10, 11, 13, 14, 32



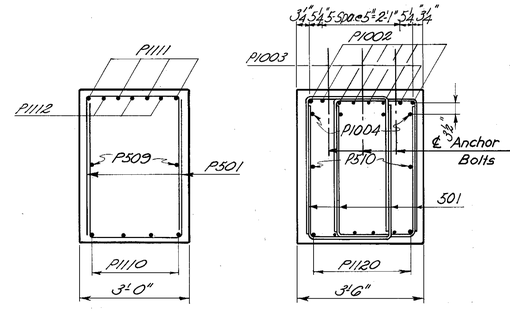
CAP PLAN

Pier No. 3 - W.B. only

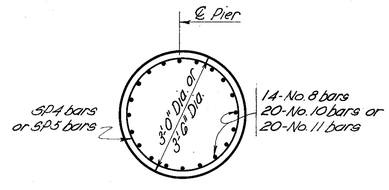


ELEVATION PIER 3 (W.B)

TYPE "C-I" FTG.



SECTION F-F | SECTION G-G | SECTION H-H



SECTION J-J

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CONSULTING ENGINEERS
CINCINNATI OHIO
12/32

PIERS 1, 2, 3 & 4 W.B.-3

BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

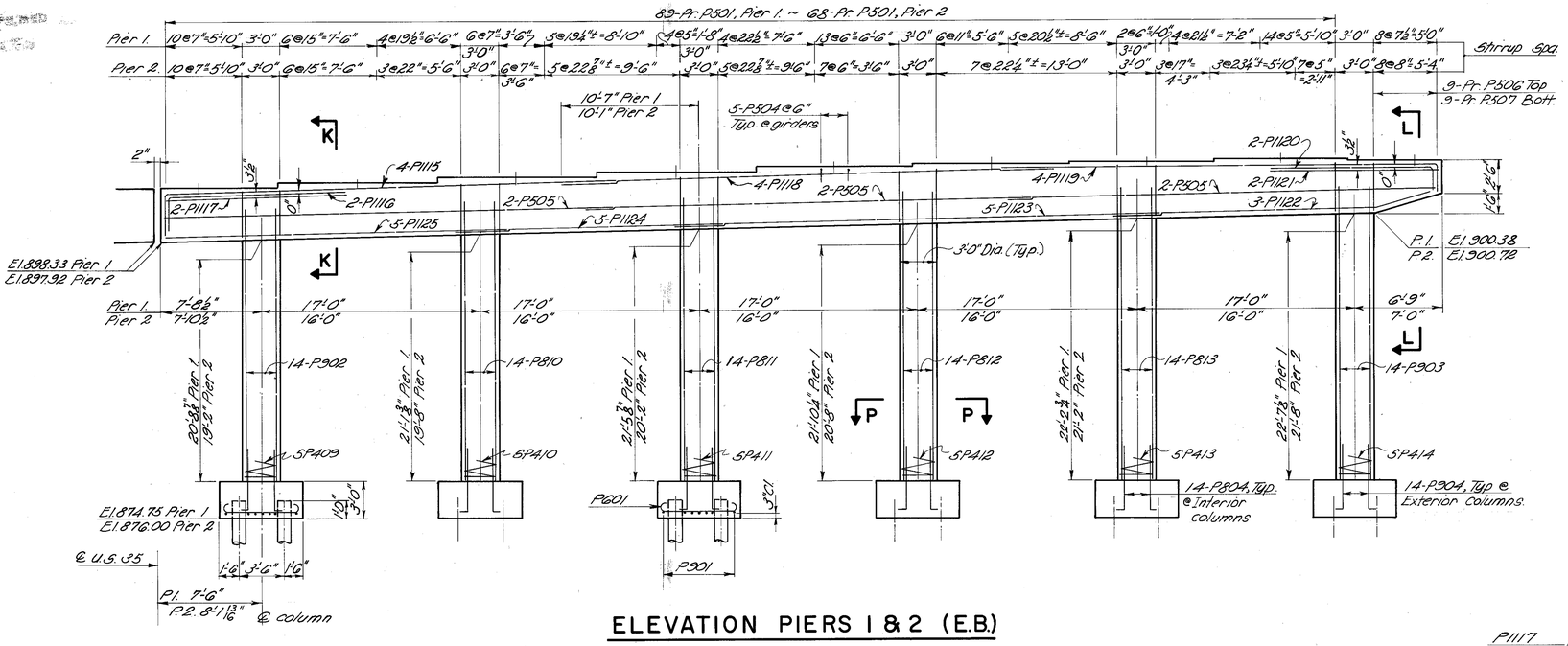
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
J.R.G.	A.W.		S.A.	9/25/72	

MICROFILMED
JUN 19 1995

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

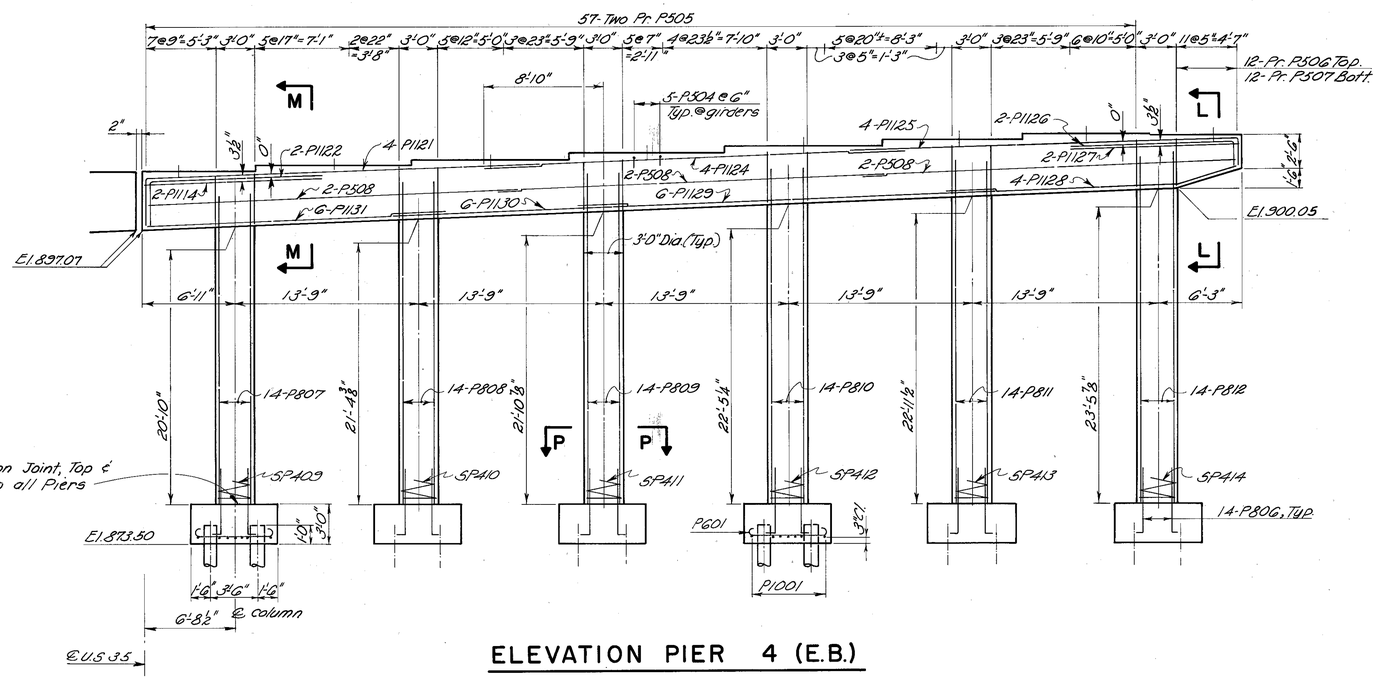
433
616

GRE-675 - 5.37
GREENE COUNTY



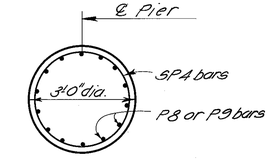
ELEVATION PIERS 1 & 2 (E.B.)

TYPE "A" FTG.

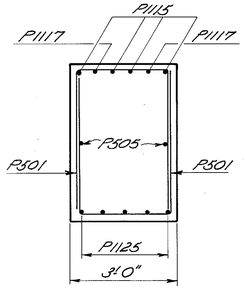


ELEVATION PIER 4 (E.B.)

TYPE "A-1" FTG.



SECTION P-P



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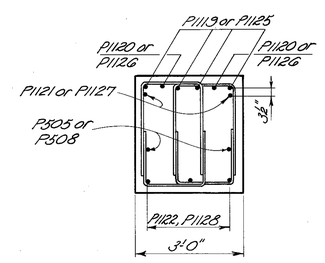

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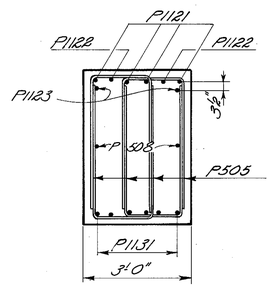

SECTION M-M

Work this sheet with shs. 10, 11, 12, 14, 32

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PIERS 1, 2 & 4 E.B.-4

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

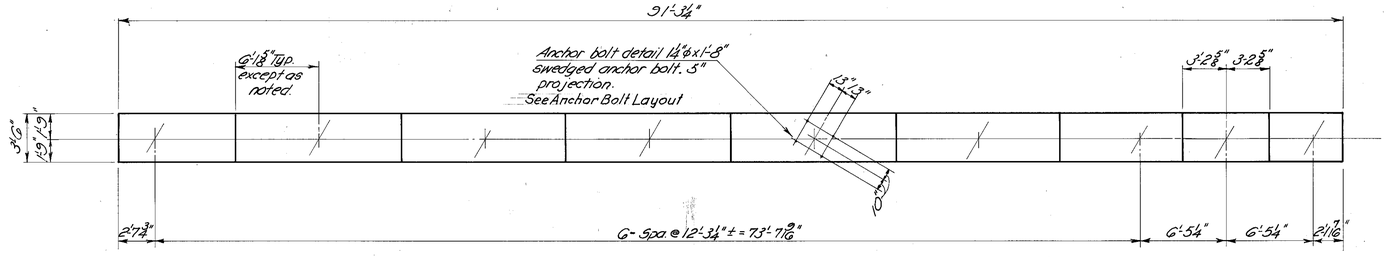
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	A.W.		S.A.		9/25/72	

MICROFILMED
JUN 1

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

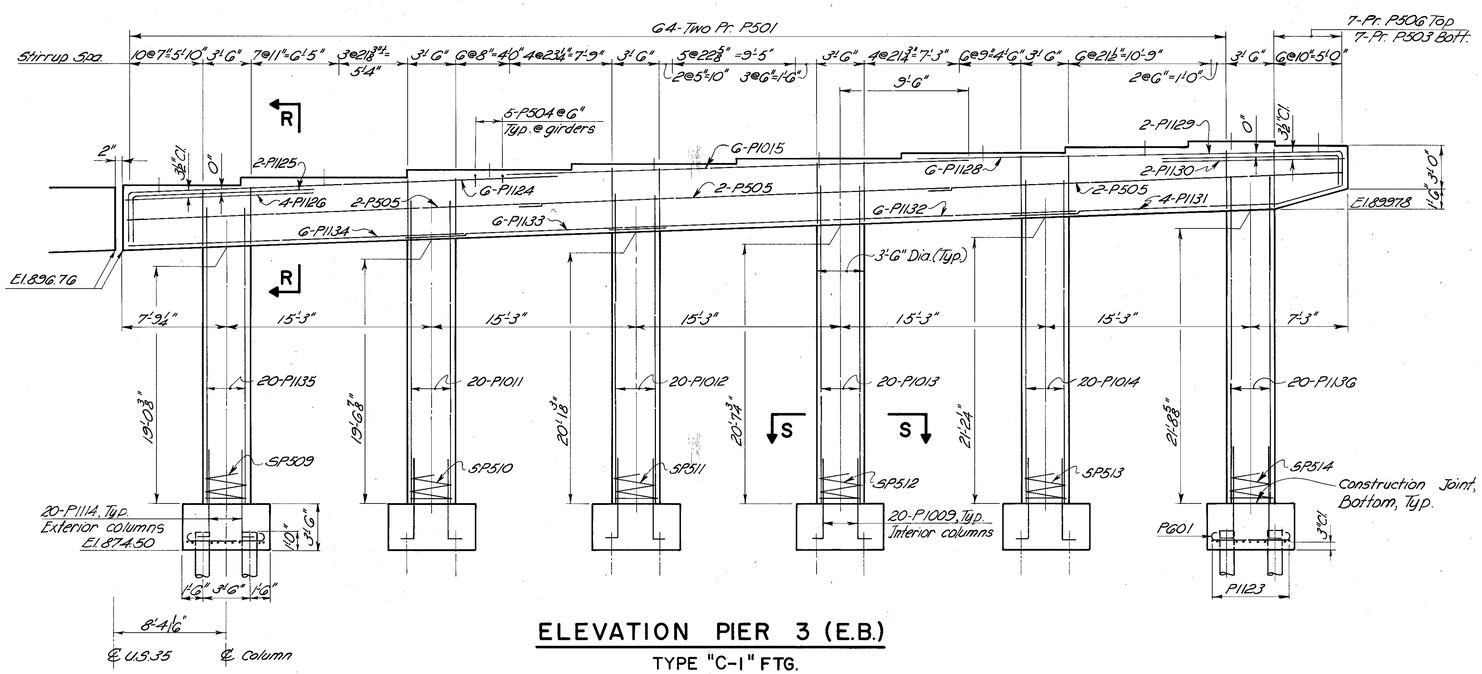
434
616

GRE-675 - 5 - 37.
GREENE COUNTY



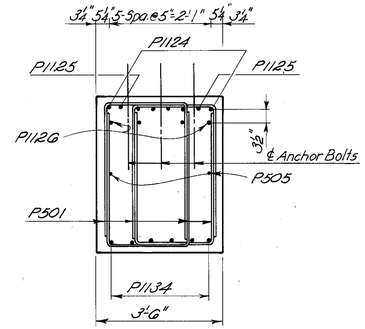
CAP PLAN

Pier No. 3 - E.B.

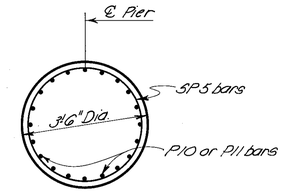


ELEVATION PIER 3 (E.B.)

TYPE "C-I" FTG.



SECTION R-R



SECTION S-S

NOTES:

For location and details of sign illumination conduit in pier 3 see Sh. 144 601

Work this sheet with Shs. 10, 11, 12, 13, 32

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CINCINNATI OHIO

14 32

PIER 3 E.B. - 5

BRIDGE NO. GRE.-675-0589

I-675 UNDER RELOCATED U.S. 35

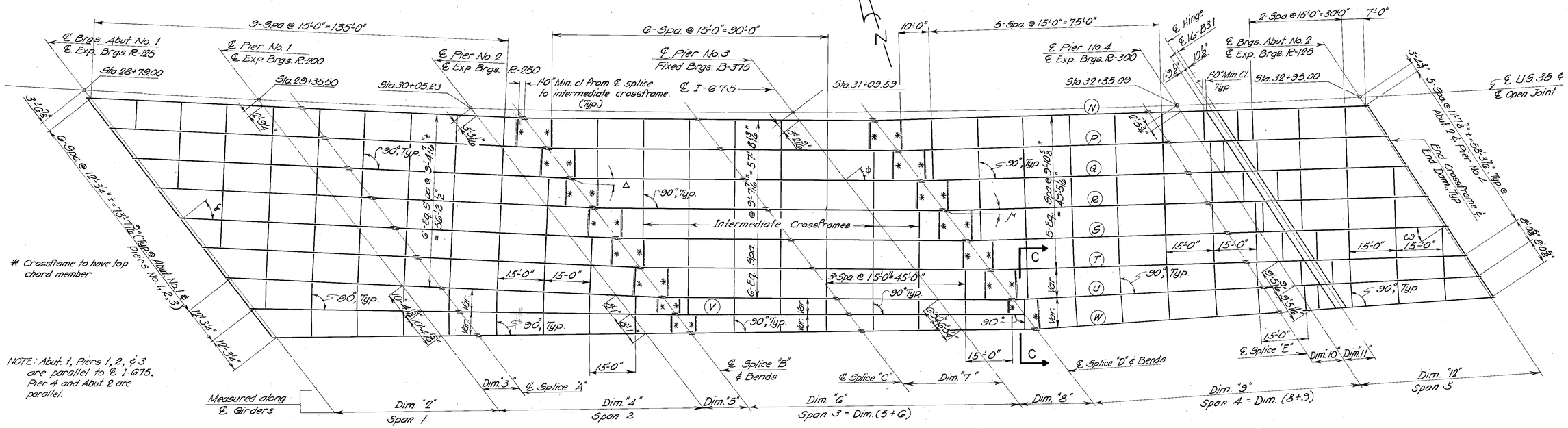
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
J.R.G.	A.W.		S.A.	7/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

435
616

GRE-675 - 5 - 37.
GREENE COUNTY

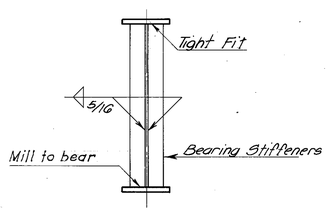


FRAMING PLAN

EASTBOUND LANES

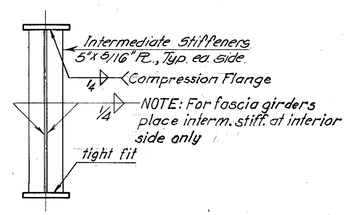
GEOMETRY

	GIRDER	2	3	4	5	6	7	8	9	10	11	12	℄	Δ	ϕ	M	W
C.D.	A	56'-7⅜"	13'-7 5/16"	70'-10⅛"	15'-4¼"	90'-0 9/16"	33'-3 15/16"	24'-10⅜"	111'-10⅛"	9'-6 9/16"	9'-6 9/16"	57'-5¾"	40°59'18"	1°55'10"	39°04'07"	2°06'48"	270°23"
	B	do	do	do	do	do	do	do	111'-4 5/16"	10'-1 13/16"	10'-1 13/16"	60'-9½"	do	do	do	do	323°26"
	C	do	do	do	do	do	do	do	110'-3 5/8"	do	do	do	do	do	do	do	do
	D	do	do	do	do	do	do	do	109'-3 1/16"	do	do	do	do	do	do	do	do
Westbound	E	56'-7⅜"	13'-7 5/16"	70'-10⅛"	15'-4¼"	90'-0 9/16"	33'-3 15/16"	24'-10⅜"	108'-3"	10'-1 1/16"	10'-1 1/16"	60'-9½"	40°59'18"	1°55'10"	39°04'07"	2°06'48"	312°37'26"
	F	55'-11¾"	13'-5½"	70'-0⅛"	15'-2⅛"	91'-1 15/16"	33'-5 13/16"	25'-2 9/16"	106'-10"	10'-0⅜"	10'-0⅜"	60'-4⅝"	40°14'02"	0°18'33"	39°55'29"	3°34'35"	312°01'00"
	G	do	do	do	do	89'-1 15/16"	33'-0"	24'-7 9/16"	106'-1 1/16"	do	do	do	do	1°52'13"	38°21'49"	2°00'55"	do
	H	do	do	do	do	do	do	do	105'-0 1/16"	do	do	do	do	do	do	do	do
	J	do	do	do	do	do	do	do	104'-0 1/16"	do	do	do	do	do	do	do	do
	K	do	do	do	do	do	do	do	102'-11¼"	do	do	do	do	do	do	do	do
	L	do	do	do	do	do	do	do	101'-10½"	do	do	do	do	do	do	do	do
	M	do	do	do	do	do	do	do	100'-9 3/4"	do	do	do	do	do	do	do	do
	N	do	do	do	do	do	do	do	100'-3"	do	do	do	do	do	do	do	do
	P	do	do	do	do	do	do	do	99'-1 7/8"	do	do	do	do	do	do	do	do
	Q	do	do	do	do	do	do	do	98'-0¾"	do	do	do	do	do	do	do	do
	R	do	do	do	do	do	do	do	96'-11⅝"	do	do	do	do	do	do	do	do
	S	do	do	do	do	do	do	do	95'-10½"	do	do	do	do	do	do	do	do
Eastbound	T	do	do	do	do	do	do	do	94'-9 3/8"	10'-0 3/8"	10'-0 3/8"	60'-4⅝"	do	do	do	2°00'55"	312°01'00"
	U	55'-11¾"	13'-5½"	70'-0⅛"	15'-2⅛"	89'-1 15/16"	33'-0"	24'-7 9/16"	92'-6 9/16"	9'-10 15/16"	9'-10 15/16"	59'-7 13/16"	40°14'02"	1°52'13"	38°21'49"	3°10'00"	305°55"
	V	54'-9 15/16"	13'-2 1/16"	68'-6 3/4"	14'-10 5/16"	88'-5 5/16"	32'-8 3/4"	24'-5 3/16"	—	—	—	—	38°44'53"	0°57'46"	37°47'07"	—	—
	W	53'-7 1/16"	12'-10 3/4"	67'-1 1/16"	14'-6 1/16"	87'-9¼"	32'-5 1/16"	24'-3 1/16"	90'-4⅜"	9'-9½"	9'-9½"	58'-11 3/16"	37°11'52"	0°	37°11'52"	3°11'25"	295°40'33"
CD	X	—	—	—	—	—	—	—	—	9'-9¾"	9'-9¾"	59'-0¾"	—	—	—	—	295°40'7"



Bearing stiffeners to be vertical

BEARING STIFFENERS



Intermediate stiffeners shall be welded to the compression flange. Stiffeners may be normal to flanges.

INTERMEDIATE STIFFENERS

NOTES:

Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

Details of end dam and end crossframes (included with structural steel for payment) similar to that shown on Std. Dwg. SD-1-69 & Sh C1 C2 except the outstanding leg of the 4"x4"x½" angle of the end dam shall be cut as necessary to clear the bearing stiffeners. See special End Crossframe Detail sh. C1 C2

End of girder treatment similar to that shown on SD-1-69.

For camber tables and camber alignment diagram see sh. 18, 19, 32.

For details of Special Fixed Bearing B-375 see sh. 18, 32

For details of Expansion Bearings R-125, R-200, R-250 & R-300 see Std. Dwg. 2B-1-55.

For typical intermediate crossframe see sh. C2 C2

For typical transverse section, see Section A-A sh. 23, 32

Work this sheet with shs. 16, 17, 18, 19, 32.

For Details of intermediate slab joint (included with structural steel for payment) see sh. C2 C2

For Underbridge Luminaire Supporting Brackets see Sh. Gd-201, included with Item 513 for payment.

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15/32

STEEL FRAMING PLAN EASTBOUND LANES

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

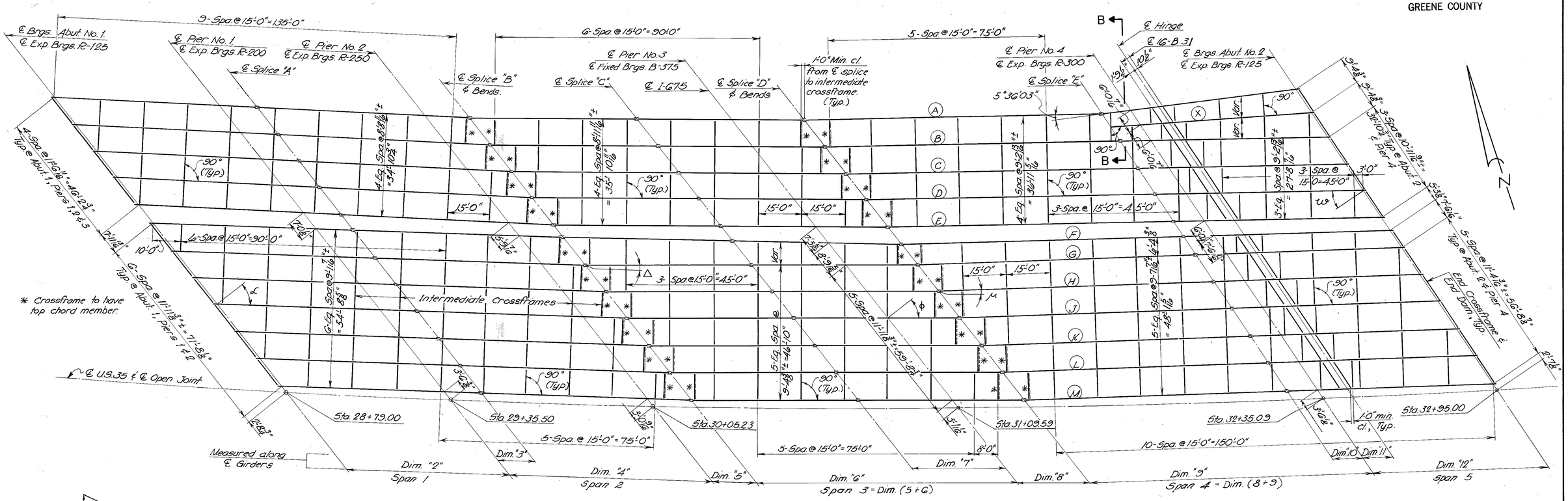
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

436
616

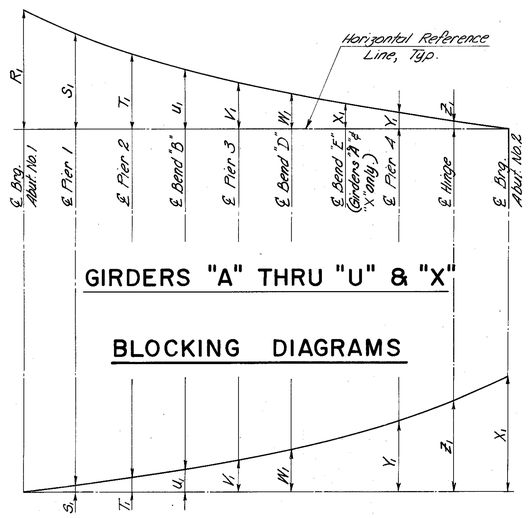
GRE-675 • 5.37
GREENE COUNTY

JUN 19 1972



FRAMING PLAN

Westbound Lanes and C.D.



GIRDERS "A" THRU "U" & "X"

BLOCKING DIAGRAMS

GIRDER "V" & "W"

BLOCKING TABLE

GIRDER / DIMENSION	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
R_1	1'-9 1/2"	1'-5 5/16"	1'-4 3/4"	1'-4 1/4"	1'-3 5/8"	1'-4 1/16"	1'-5 3/4"	1'-5 3/16"	1'-4 11/16"	1'-4 1/8"	1'-3 5/8"	1'-2 15/16"	1'-2 13/16"	1'-2 15/16"	1'-1 13/16"	1'-1 1/4"	1'-0 3/4"	7 15/16"	1 5/8"			
S_1	1'-6 3/4"	1'-2 5/8"	1'-2 1/8"	1'-1 3/8"	1'-1 1/2"	1'-1 1/2"	1'-3"	1'-2 1/2"	1'-2 1/16"	1'-1 1/2"	1'-1 1/8"	1'-1 1/8"	1'-1 1/2"	1'-0 11/16"	1'-0"	11 1/2"	1 1/8"	10 11/16"	7 1/4"	3 1/2"	4 5/16"	3 5/8"	
T_1	1'-4"	1'-0"	11 5/8"	11 1/4"	10 15/16"	10 15/16"	10 1/4"	11 1/8"	11 1/2"	11 1/8"	10 3/4"	10 5/8"	10 1/16"	9 13/16"	9 7/16"	9 1/8"	8 3/4"	6 13/16"	6 1/4"	9"	11 7/16"	
U_1	1'-3 3/16"	11 1/2"	11 1/8"	10 13/16"	10 3/8"	10 3/8"	11 3/4"	11 3/8"	11"	10 11/16"	10 5/16"	10 1/16"	9 5/8"	9 3/4"	9 1/16"	9 1/8"	8 3/4"	8 1/16"	6 5/8"	7"	10"	1'-0 1/16"	
V_1	11 3/8"	7 11/16"	7 7/16"	7 1/4"	7 1/16"	7 1/16"	7 1/16"	7 1/16"	7 1/16"	7 1/16"	6 15/16"	6 3/4"	6 7/16"	6 7/16"	6"	5 3/4"	5 1/2"	5 1/4"	6 1/4"	9 3/4"	10 1/8"	
W_1	10 3/4"	6 3/8"	6 11/16"	6 1/16"	6 3/16"	6 5/8"	6 15/16"	6 11/16"	6 1/16"	6 1/4"	6 1/16"	5 13/16"	5 3/4"	5 1/2"	5 5/16"	5 1/8"	4 15/16"	4 11/16"	6 1/4"		8 9/16"	
Y_1	5 1/8"	1 15/16"	1 3/8"	1 13/16"	2 1/16"	2 1/16"	2"	1 15/16"	1 15/16"	1 7/8"	1 13/16"	2 3/8"	1 1/16"	1 5/8"	1 5/8"	1 9/16"	1 1/2"	1 7/16"	2 1/16"		4 5/8"	3 1/2"
Z_1	4 1/4"	1 3/16"	1 1/2"	1 1/16"	1 1/16"	1 7/8"	1 1/16"	1 5/8"	1 7/16"	1 1/2"	1 1/16"	2"	1 3/8"	1 5/16"	1 5/16"	1 1/4"	1 1/16"	1 3/8"	1 1/16"		4 3/8"	2 15/16"
X_1	6"																				1 1/2"	4 3/8"

Work this sheet with sheets 15, 17, 18, 19, 32

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CINCINNATI OHIO

16 | 32

STEEL FRAMING PLAN
WESTBOUND LANES & C.D.

BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

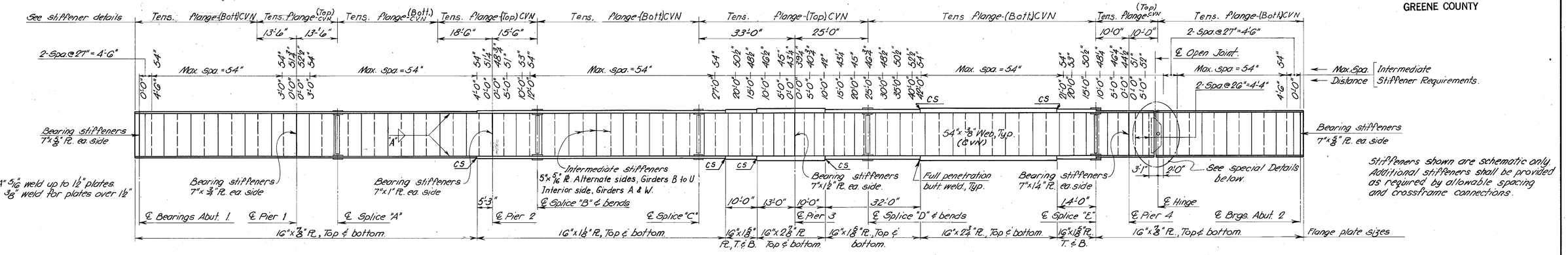
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

RECEIVED
JUN 19 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

437
616

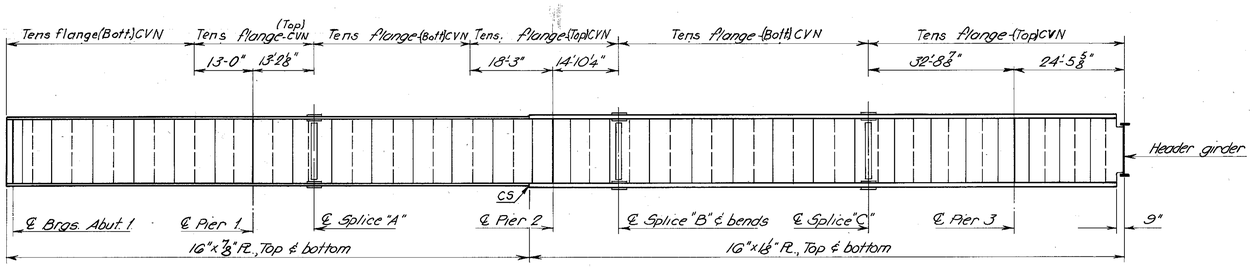
GRE-675 - 5.37
GREENE COUNTY



Stiffeners shown are schematic only. Additional stiffeners shall be provided as required by allowable spacing and crossframe connections.

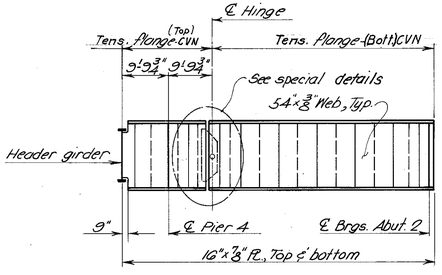
Welded forming attachments shall not be used in the tension areas of the top flange.

TYPICAL GIRDER ELEVATION



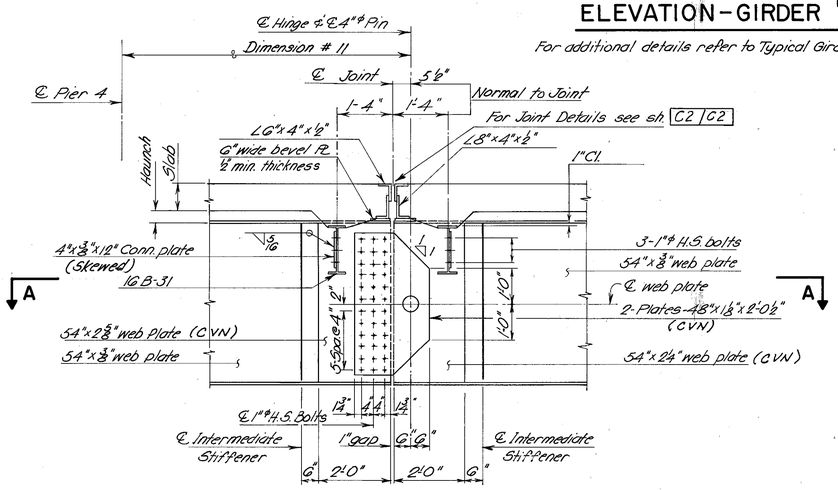
ELEVATION - GIRDER "V"

For additional details refer to Typical Girder Elevation

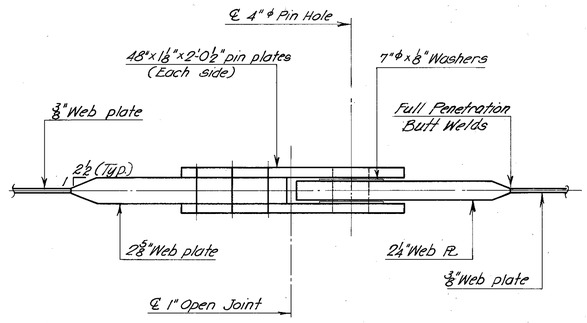


ELEVATION - GIRDER "X"

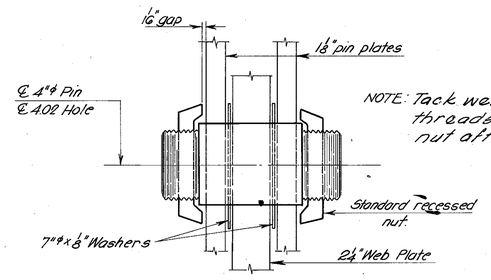
For additional details refer to Typical Girder Elevation



JOINT DETAIL AT HINGE



SECTION A-A



PIN - DETAIL

Work this sheet with sheets 15, 16, 18, 19 / 32

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SUPERSTRUCTURE DETAILS - I

BRIDGE NO. GRE.-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/12	4/27/32

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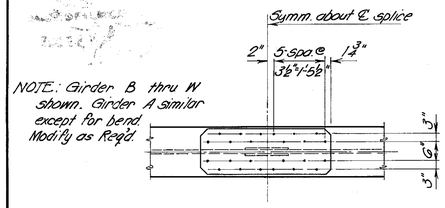
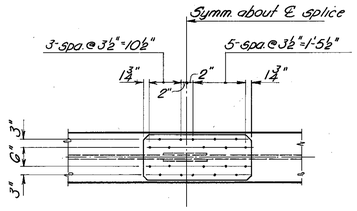
GRE-675 - 5.37
GREENE COUNTY

NOTE: For additional details refer to Standard Bridge Drawings RB-1-55



PLAN



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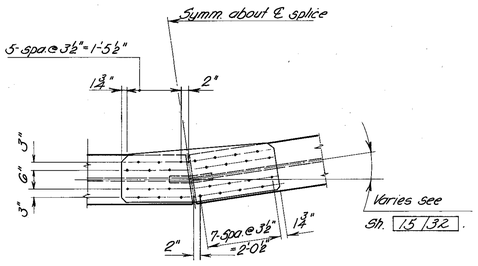

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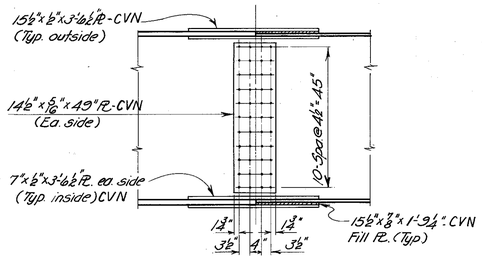
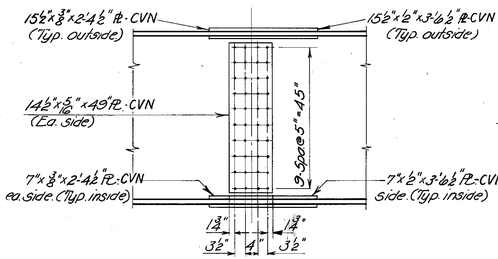
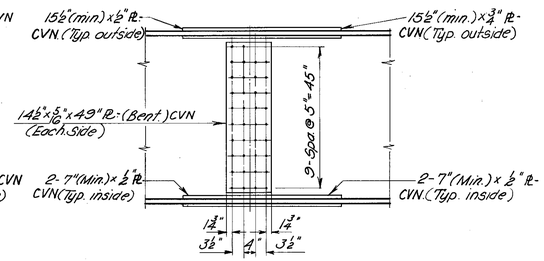


SPLICE - E

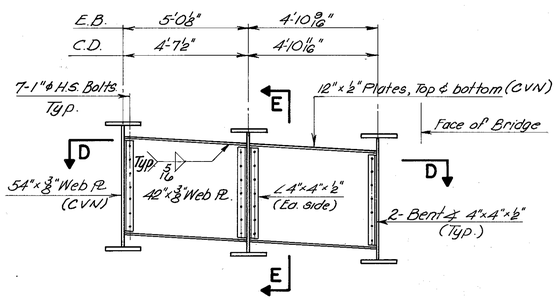


SPLICE - A SPLICE - C

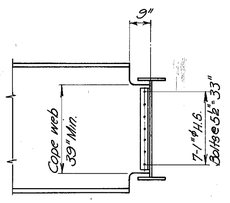


SPLICE - B SPLICE - D

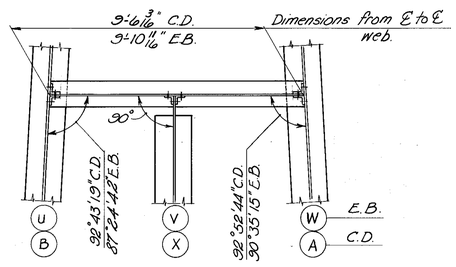
All Splice Bolts to be 1"ϕ H.S.
Inside Plates to be centered on gage line.



SECTIONS B-B & C-C
Girders "V & X"



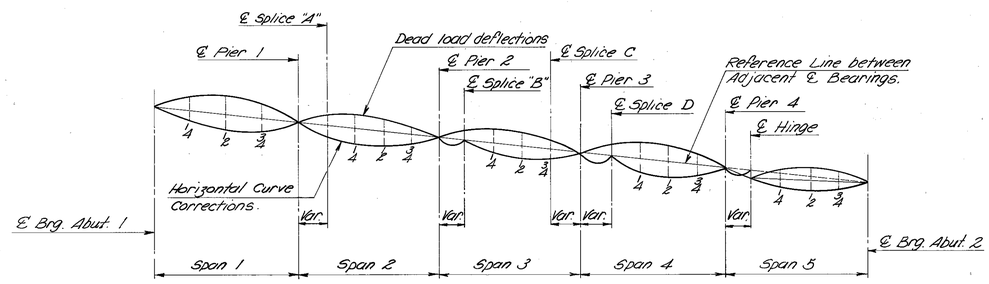
SECTION E-E



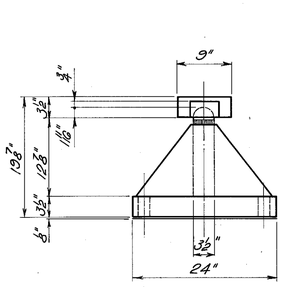
SECTION D-D

NOTE:

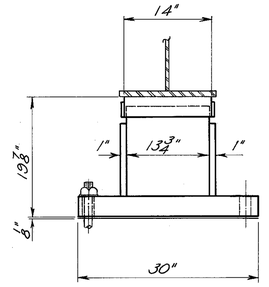
An uplift condition normally exists at these connections. The contractor shall review his erection procedure to insure that adequate stability and strength of connections exist at all times until all Dead Load is in place.



CAMBER ALIGNMENT DIAGRAM



SIDE VIEW



END ELEVATION

SPECIAL BLOSTER DETAIL B-375

For Deflection & Camber Tables see Sh. 19 32
Work this sheet with sheets 15,16,17,19,32.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
18 32

SUPERSTRUCTURE DETAILS - 2

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/72	4-27-82

MICROFILMED JUN 19 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

439/616

GRE-675 - 5 - 37
GREENE COUNTY

DEFLECTION & CAMBER TABLE (INCHES)

			SPAN 1			SPAN 2				SPAN 3					SPAN 4					SPAN 5			
			1/4 Pt	1/2 Pt	3/4 Pt	℄ SPL1	1/4 Pt	1/2 Pt	3/4 Pt	℄ SPL2	1/4 Pt	1/2 Pt	℄ SPL3	3/4 Pt	℄ SPL4	1/4 Pt	1/2 Pt	3/4 Pt	℄ SPL5	℄ Hinge	1/4 Pt	1/2 Pt	3/4 Pt
C. D.	GIRDERS A & E	DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	0"	0"	1/4"	3/8"	11/16"	9/16"	3/16"	1/16"	0	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	1/8"	1/16"	1/16"	1/16"	1/8"	1/16"	1/8"	3/16"	3/16"	-1/16"	-1/8"	13/16"	1 1/8"	2"	1 5/8"	9/16"	-5/16"	1/8"	3/16"	1/8"
		ADJUSTMENT REQUIRED FOR HORIZONTAL CURVE G-"A"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	-5/16"	-5/16"	-3/16"	-3/16"	0"	-1/16"	-3/16"	-1/8"	0"	0"	0"	0"	0"
		ADJUSTMENT REQUIRED FOR HORIZONTAL CURVE G-"E"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	-1/16"	-1/16"	-1/16"	0"	0"	0"	0"	0"
		REQ'D SHOP CAMBER	1/8"	1/8"	1/16"	1/16"	1/16"	1/8"	1/16"	1/8"	1/4"	1/4"	-1/16"	-1/8"	1 1/16"	1 1/2"	2 11/16"	2 3/16"	3/4"	-1/4"	1/8"	1/4"	1/8"
	GIRDERS B, C, D	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	0"	0"	1/4"	3/8"	11/16"	9/16"	3/16"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	1/16"	1/16"	3/16"	1/16"	1/8"	3/16"	3/16"	-1/8"	-1/8"	1"	1 3/8"	2 1/2"	2"	11/16"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D. FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	-5/16"	-5/16"	-3/16"	0"	0"	-7/16"	-1/2"	-5/16"	-1/16"	0"	-1/16"	0"	0"
		REQ'D SHOP CAMBER	1/8"	3/16"	1/16"	1/16"	1/16"	3/16"	1/16"	1/8"	1/4"	1/4"	-1/8"	-1/8"	1 1/4"	1 3/4"	3 3/16"	2 9/16"	7/8"	-5/16"	3/16"	5/16"	3/16"
W. B.	GIRDER F	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	0"	0"	1/4"	5/16"	9/16"	7/16"	3/16"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	1/16"	1/16"	3/16"	1/16"	1/8"	1/4"	1/4"	-1/16"	-1/16"	9/16"	3/4"	1 5/16"	1 1/16"	3/8"	-5/16"	1/8"	3/16"	1/8"
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/8"	-3/16"	-1/8"	0"	0"	0"	0"	0"	0"	-1/16"	-1/8"	-1/8"	0"	-1/8"	-5/16"	-3/16"	-1/16"	0"	0"	0"	0"
		REQ'D SHOP CAMBER	1/8"	3/16"	1/16"	1/16"	1/16"	3/16"	1/16"	1/8"	5/16"	5/16"	-1/16"	-1/16"	13/16"	1 1/16"	1 7/8"	1 1/2"	9/16"	-1/4"	1/8"	1/4"	1/8"
	GIRDERS G,H,J,K,L	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	0"	0"	SEE TABLE "B"					1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	1/16"	1/16"	1/8"	1/16"	3/16"	5/16"	3/8"	1/16"	0"						-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	0"	-1/4"	-1/4"	-3/16"	-1/8"	0"	-7/16"	-7/16"	-5/16"	-1/16"	0"	0"	0"	0"
		REQ'D SHOP CAMBER	1/8"	3/16"	1/16"	1/16"	1/16"	1/8"	1/16"	3/16"	3/8"	7/16"	1/16"	0"	SEE TABLE "B"					-5/16"	3/16"	5/16"	3/16"
	GIRDER M	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	0"	0"	3/16"	1/4"	7/16"	3/8"	1/8"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	1/16"	1/16"	1/8"	1/16"	3/16"	5/16"	3/8"	1/16"	1/16"	5/8"	13/16"	1 1/2"	1 1/4"	7/16"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	0"	0"	0"	0"	0"	0"	0"	0"	1/8"	1/8"	1/16"	1/16"	0"	1/4"	1/4"	1/8"	0"	0"	0"	0"	0"
		REQ'D SHOP CAMBER	1/8"	3/16"	1/16"	1/16"	1/16"	1/8"	1/16"	3/16"	1/2"	9/16"	1/8"	1/8"	13/16"	1 5/16"	2 3/16"	1 3/4"	9/16"	-5/16"	3/16"	5/16"	3/16"
E. B.	GIRDER N	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	1/16"	0"	3/16"	3/16"	3/8"	5/16"	1/8"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	1/8"	5/16"	3/8"	1/8"	1/16"	1/2"	5/8"	1 1/8"	15/16"	3/8"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D. FOR HORIZONTAL CURVE	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	-1/16"	0"	-1/4"	-5/16"	-1/4"	-3/16"	0"	-7/16"	-7/16"	-5/16"	-1/16"	0"	0"	1/16"	0"
		REQ'D. SHOP CAMBER	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	1/8"	3/8"	7/16"	3/16"	1/16"	11/16"	13/16"	1 1/2"	1 1/4"	1/2"	-5/16"	3/16"	5/16"	3/16"
	GIRDERS P, Q, R	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	1/16"	0"	SEE TABLE "B"					1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	3/8"	7/16"	3/16"	1/16"						-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	-1/16"	0"	-1/4"	-5/16"	-1/4"	-3/16"	0"	-7/16"	-7/16"	-5/16"	-1/16"	0"	0"	1/16"	0"
		REQ'D. SHOP CAMBER	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	7/16"	1/2"	1/4"	1/16"	SEE TABLE "B"					-5/16"	3/16"	5/16"	3/16"
	GIRDER S	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	1/16"	0"	1/8"	3/16"	3/8"	1/4"	1/8"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	3/8"	1/2"	1/4"	1/8"	1/2"	11/16"	1 1/4"	1"	3/8"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D. FOR HORIZONTAL CURVE	0"	0"	0"	-1/16"	-1/16"	-1/8"	-1/16"	0"	-1/4"	-5/16"	-1/4"	-3/16"	0"	-7/16"	-7/16"	-5/16"	-1/16"	0"	0"	-1/16"	0"
		REQ'D. SHOP CAMBER	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	7/16"	9/16"	5/16"	1/8"	5/8"	7/8"	1 5/8"	1 1/4"	1/2"	-5/16"	3/16"	5/16"	3/16"
	GIRDER T	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	1/16"	0"	1/8"	3/16"	3/8"	1/4"	1/8"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	3/8"	1/2"	1/4"	1/8"	1/2"	5/8"	1 3/16"	15/16"	3/8"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	0"	0"	0"	-1/16"	-1/16"	-1/8"	-1/16"	0"	0"	3/8"	1/4"	3/16"	0"	-3/8"	-3/8"	-1/4"	-1/16"	0"	0"	0"	0"
		REQ'D SHOP CAMBER	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	7/16"	15/16"	9/16"	5/16"	5/8"	13/16"	1 9/16"	1 3/16"	1/2"	-5/16"	3/16"	5/16"	3/16"

DEFLECTION & CAMBER TABLE CONTINUES

			SPAN 1			SPAN 2				SPAN 3					SPAN 4					SPAN 5			
			1/4 Pt	1/2 Pt	3/4 Pt	℄ SPL1	1/4 Pt	1/2 Pt	3/4 Pt	℄ SPL2	1/4 Pt	1/2 Pt	℄ SPL3	3/4 Pt	℄ SPL4	1/4 Pt	1/2 Pt	3/4 Pt	℄ SPL5	℄ Hinge	1/4 Pt	1/2 Pt	3/4 Pt
E. B.	GIRDER U	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	1/16"	0"	1/8"	1/8"	1/4"	1/4"	1/8"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	3/8"	1/2"	1/4"	3/16"	5/16"	7/16"	7/8"	11/16"	1/4"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D. FOR HORIZONTAL CURVE	0"	0"	0"	-1/16"	-1/16"	-1/8"	-1/8"	0"	5/16"	1 3/16"	3/4"	1/2"	0"	-5/8"	-9/16"	-5/16"	-1/16"	0"	0"	0"	0"
		REQ'D SHOP CAMBER	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	3/16"	3/4"	1 3/4"	1 1/16"	11/16"	7/16"	9/16"	1 1/8"	15/16"	3/8"	-5/16"	3/16"	5/16"	3/16"
	GIRDER V	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	1/16"	1/8"	1/8"	1/8"	1/16"	1/8"								
		DEFLECTION DUE TO REMAINING D.L.	1/8"	1/8"	1/16"	0"	0"	0"	0"	3/16"	3/8"	9/16"	7/16"	3/8"	5/16"								
		ADJ. REQ'D. FOR HORIZONTAL CURVE	0"	1/16"	1/16"	0"	0"	0"	0"	0"	5/8"	1 7/16"	7/8"	11/16"	0"								
		REQ'D SHOP CAMBER	1/8"	3/16"	1/8"	0"	0"	0"	0"	1/4"	1 1/8"	2 1/8"	1 7/16"	1 1/8"	7/16"								
	GIRDER W	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	1/16"	1/16"	0"	1/8"	1/8"	1/4"	1/4"	1/8"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.	1/8"	3/16"	1/16"	0"	1/16"	1/8"	0"	1/8"	5/16"	7/16"	1/4"	1/8"	5/16"	3/8"	13/16"	5/8"	1/4"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D. FOR HORIZONTAL CURVE	1/16"	1/8"	1/8"	1/8"	1/8"	3/16"	1/8"	0"	1"	1 11/16"	1 1/8"	7/8"	0"	1/2"	7/16"	1/4"	1/16"	0"	0"	-1/8"	0"
		REQ'D. SHOP CAMBER	3/16"	5/16"	3/16"	1/8"	3/16"	5/16"	1/8"	1/8"	1 3/8"	2 3/16"	1 7/16"	1"	7/16"	1"	1 1/2"	1 1/8"	7/16"	-5/16"	3/16"	5/16"	3/16"
C. D.	GIRDER X	DEFLECTION DUE TO WT. OF STEEL																	3/16"	1/16"	0"	1/16"	0"
		DEFLECTION DUE TO REMAINING D.L.																	5/8"	-3/8"	3/16"	1/4"	3/16"
		ADJ. REQ'D FOR HORIZONTAL CURVE																	0"	0"	0"	0"	0"
		REQ'D. SHOP CAMBER																	13/16"	-5/16"	3/16"	5/16"	3/16"

TABLE "B"

		SPAN 4				
		℄ Spl No. 4	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl No. 5
GIRDER G	DEFL. DUE TO STEEL	1/4"	5/16"	9/16"	7/16"	3/16"
	DEFL. DUE. TO D.L.	11/16"	7/8"	1 5/8"	1 5/16"	1/2"
	REQ'D SHOP CAMBER	15/16"	1 3/16"	2 3/16"	1 3/4"	11/16"
GIRDER H	DEFL. DUE TO STEEL	3/16"	1/4"	1/2"	7/16"	3/16"
	DEFL. DUE TO D.L.	13/16"	1 1/8"	2"	1 5/8"	5/8"
	REQ'D. SHOP CAMBER	1"	1 3/8"	2 1/2"	2 1/16"	13/16"
GIRDERS J & K	DEFL. DUE TO STEEL	3/16"	1/4"	1/2"	7/16"	3/16"
	DEFL. DUE TO D. L.	3/4"	1"	1 7/8"	1 1/2"	9/16"
	REQ'D. SHOP CAMBER	15/16"	1 1/4"	2 3/8"	1 15/16"	3/4"
GIRDER L	DEFL. DUE TO STEEL	3/16"	1/4"	7/16"	3/8"	1/8"
	DEFL. DUE TO D.L.	11/16"	15/16"	1 11/16"	1 3/8"	1/2"
	REQ'D. SHOP CAMBER	7/8"	1 3/16"	2 1/8"	1 3/4"	5/8"
GIRDER P	DEFL. DUE TO STEEL	3/16"	3/16"	3/8"	5/16"	1/8"
	DEFL. DUE TO D.L.	5/8"	13/16"	1 9/16"	1 1/4"	1/2"
	REQ'D. SHOP CAMBER	13/16"	1"	1 15/16"	1 9/16"	5/8"
GIRDER Q	DEFL. DUE TO STEEL	1/8"	3/16"	5/16"	5/16"	1/8"
	DEFL. DUE TO D.L.	9/16"	3/4"	1 3/8"	1 1/8"	7/16"
	REQ'D. SHOP CAMBER	11/16"	15/16"	1 11/16"	1 7/16"	9/16"
GIRDER R	DEFL. DUE TO STEEL	1/8"	3/16"	5/16"	5/16"	1/8"
	DEFL. DUE TO D. L.	9/16"	3/4"	1 3/8"	1 1/8"	7/16"
	REQ'D. SHOP CAMBER	11/16"	15/16"	1 11/16"	1 7/16"	9/16"

* .048'/Ft. at Sta. 31+00 and forward.

TYPICAL SUPERELEVATED SECTION

NOTES:

Negative Horizontal curve corrections shall be made by varying the slab haunch. A negative curve correction indicates a haunch reduction between end points.
A negative deflection indicates downward camber required.
For Camber Alignment Diagram, see sh. 18/32

TRANSITION ELEVATIONS

STATION	DIMENSION "L"	ELEV. "G"	ELEV. "H"
29+25	29.8450	911.58	910.91
29+50	27.7950	911.50	911.15
29+80.72	27.000	911.41	911.41
30+00	26.50	911.35	911.56
30+25	25.875	911.28	911.74
30+50	25.250	911.20	911.90
30+75	24.625	911.13	912.06
31+00	24.000	911.05	912.20

For Camber Alignment Diagram see sh. 18/32
Work this sheet with shs. 15,16,17,18/32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
19/32

SUPERSTRUCTURE DETAILS - 3

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

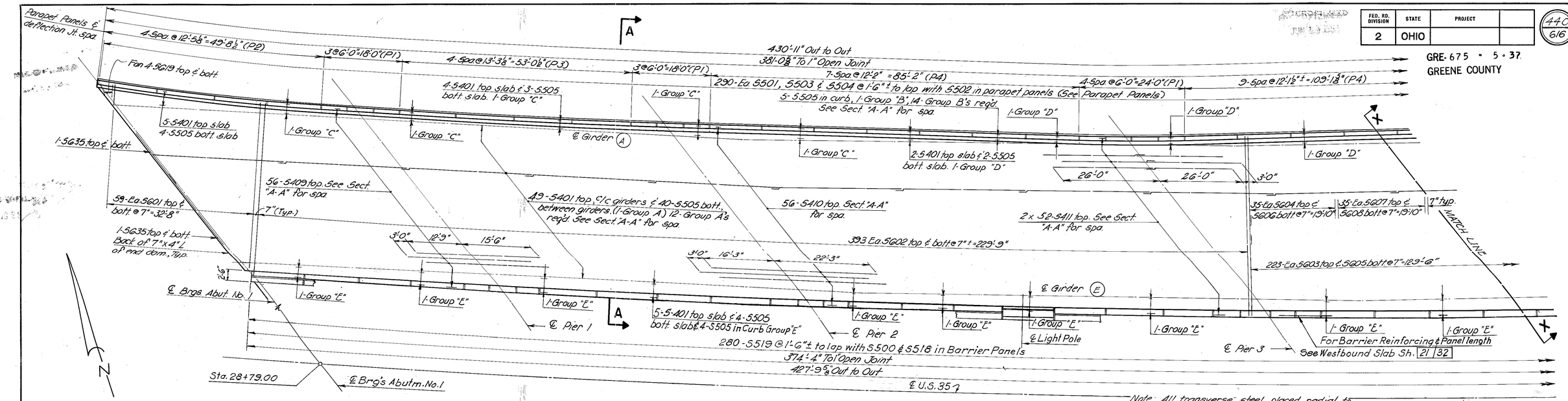
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

440
616

GRE-675 • 5.37
GREENE COUNTY



PLAN

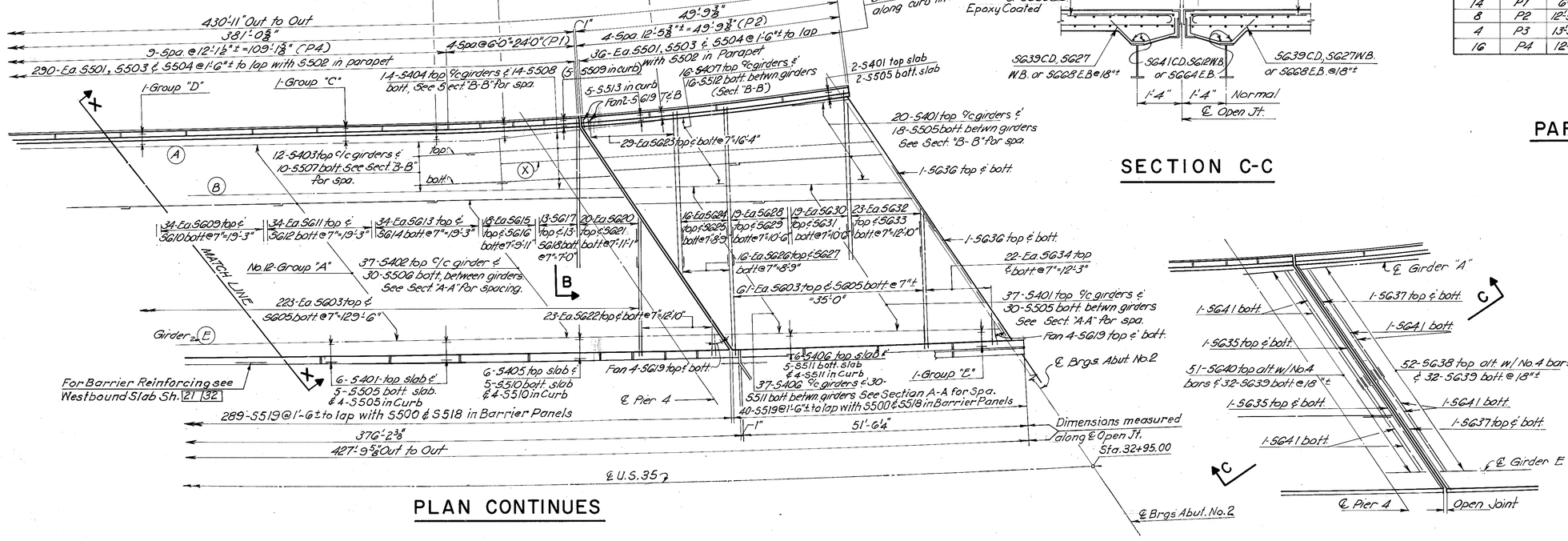
Note: All transverse steel placed radial to ℄ U.S. 35 and measured along South edge of slab.

Epoxy Coated F.F.: 2-S514 (P1), 2-S515 (P2), 2-S516 (P3), 2-S517 (P4) — E.F.

PANELS		
No. Req'd	Mark	L
14	P1	6'-0"
8	P2	12'-5⅜" ±
4	P3	13'-3⅜"
16	P4	12'-2" ±

5-S502 @ 18" ± = 5'-8" (P1)
9-S502 @ 18" ± = 12'-1" (P2)
10-S502 @ 18" ± = 12'-11" (P3)
9-S502 @ 18" ± = 11'-10" (P4)
"L"

PARAPET PANELS



PLAN CONTINUES

SECTION C-C

PARTIAL PLAN AT INTERMEDIATE JT.

Work this sheet with sheets 21, 22, 23, 24, 32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

20 32

SUPERSTRUCTURE ROADWAY SLAB C.D.-1

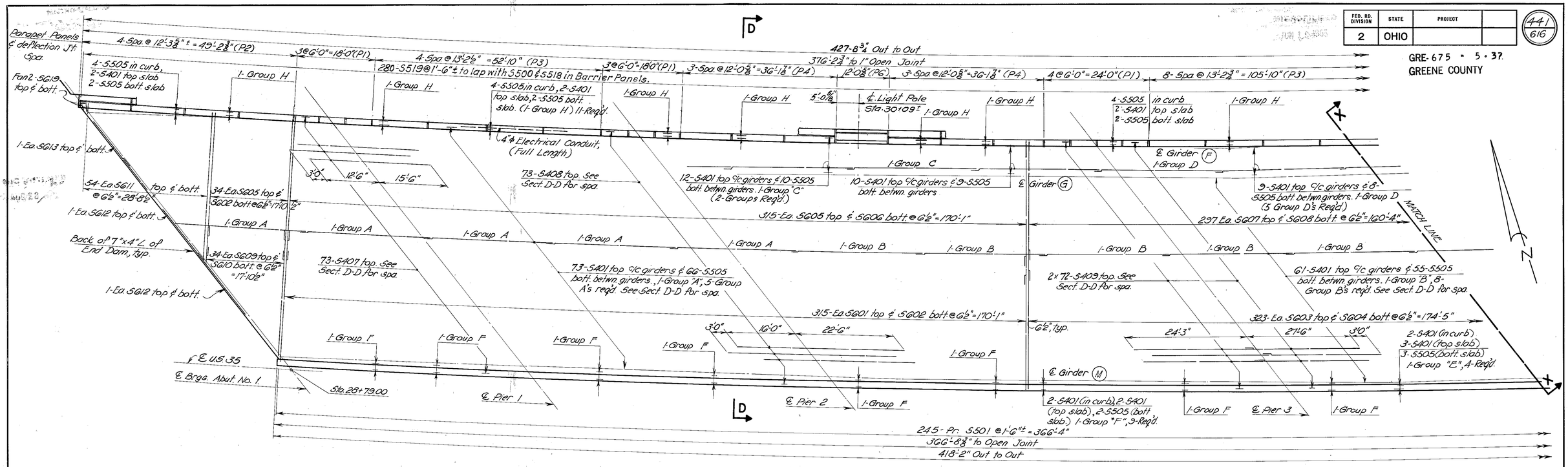
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/21/72	

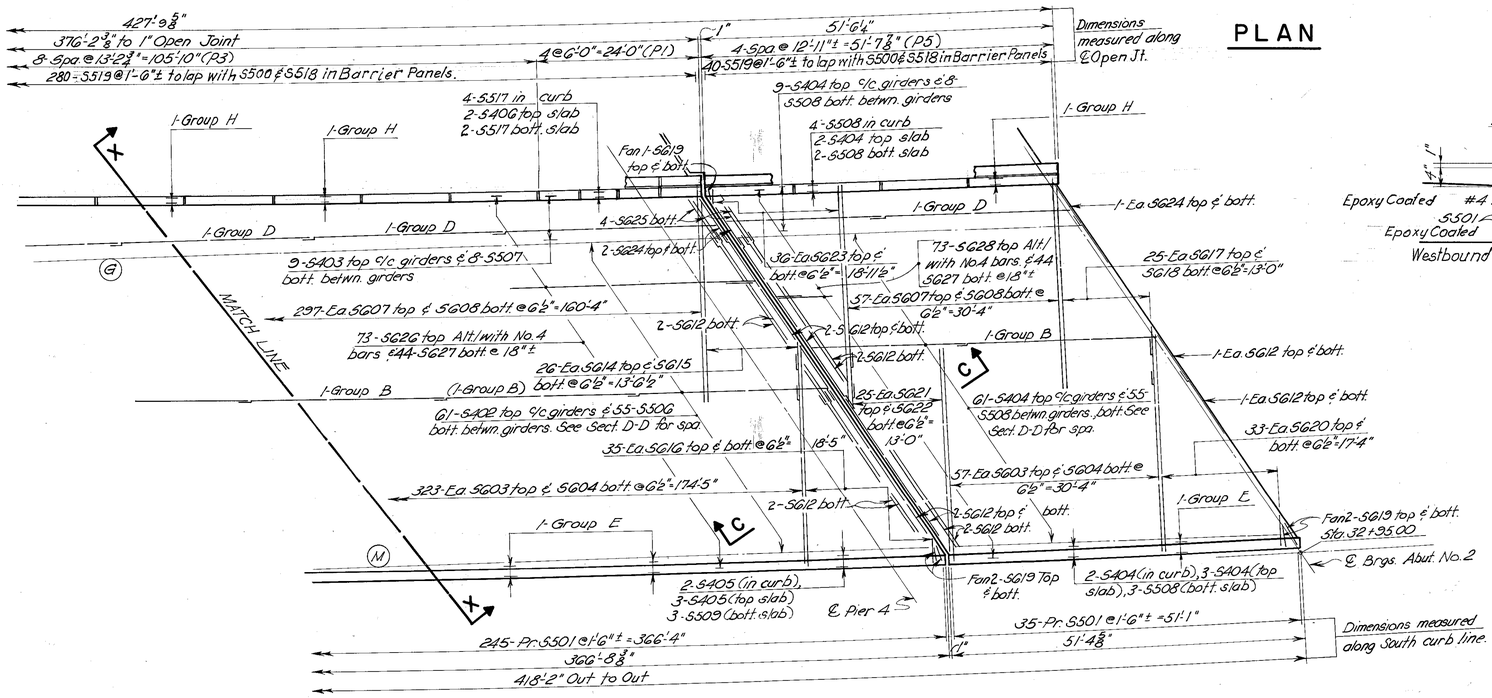
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

441
616

GRE-675 - 5.37
GREENE COUNTY

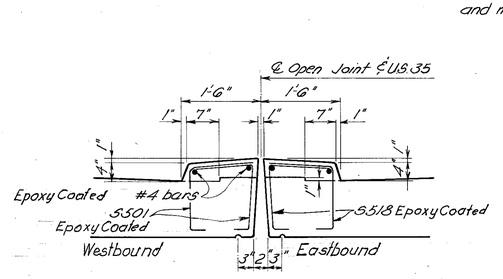


PLAN



PLAN CONTINUES

Note: All transverse steel placed radial to and measured along ℄ U.S. 35



MEDIAN DETAIL

(TEMPORARY)

Epoxy Coated N.F. — 2-5512 (P1), 2-5513 (P2), 2-5514 (P3), 2-5515 (P4), 2-5516 (P5) — E.F.

PANELS		
No. Req'd	Mark	L
14	P1	6'-0"
4	P2	12'-3⅜" ±
12	P3	13'-2⅝"
6	P4	12'-0⅝"
4	P5	12'-11" ±
1	P6	12'-0⅜"

5-5500 & 5518 @ 18" ± (P1)
9-5500 & 5518 @ 18" ± (P2)
10-5500 & 5518 @ 18" ± (P3)
9-5500 & 5618 @ 18" ± (P4)
10-5500 & 5518 @ 18" ± (P5)
(P6) See Common Details, Sht. C1 C2

"L"

BARRIER PANELS

2 Sets Required

Notes:
For Reinforcing at Light Standard in Median Barrier (P6) see Common Details, Sht. C1 C2.

Work this sheet with sheets 20, 22, 23, 24, 32.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

21 / 32

SUPERSTRUCTURE
ROADWAY SLAB W.B. - 2

BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY
STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. P.	A.W.		S.A.	S.A.	9/25/72	

MICROFILMED
JUN 13 1972

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

442/616

GRE-675 - 5-37
GREENE COUNTY

All transverse steel placed radial to and measured along ℄ U.S. 35

Dimensions measured along North curb line

417'-7¾" Out to Out
396'-2⅜" to open Jt.
245-Pr. S518 @ 1'-6" ± = 365'-10"

℄ Brgs. Abut. No. 1
Sta. 28+79.00

Fan 2-Ea. SG19 top & bott. slab

℄ Pier 1

℄ Pier 2

℄ U.S. 35

℄ Girder (N)

2-S401 in curb, 2-S401 top slab & 2-S505 bott. slab. 1-Group G. 13-Group G's req'd.

℄ Pier 3

E

N

3' 12'-3" 15'-3"

3' 15'-6" 22'-3"

3' 22'-6" 25-3

47-Ea. SG38 @ 6½" = 24'-11"

top & bott.

2-SG64 top & bott.

106-S410 top. See Sect. E-E for spa.

172-Ea. SG34 top & SG35 bott. @ 6½" = 92'-7½"

61-Ea. SG43 top & SG44 bott. @ 6½" = 32'-6"

240-Ea. SG47 top & SG48 bott. @ 6½" = 132'-8½"

146-Ea. SG47 top & SG49 bott. @ 6½" = 78'-6½"

MATCH LINE

Back of 7"x4'-1" of End Dam. Typ.

1-Group A

102-S411 top. See Sect. E-E for spa.

98-S412 top. See Sect. E-E for spa.

98-S412 top. See Sect. E-E for spa.

45-Ea. SG36 bot. SG37 bott. @ 6½" = 23'-10"

127-Ea. SG33 top & bott. @ 6½" = 68'-3"

61-Ea. SG33 top & bott. @ 6½" = 32'-6"

240-Ea. SG14 top & bott. @ 6½" = 132'-8½"

146-Ea. SG50 top & SG14 bott. @ 6½" = 78'-6½"

79-S401 top ℄ girders & SG6-S505 bott. betwn. girders. 1-Group A (10-Group A's req'd.) See Sect. E-E for spa.

(1-SG64 top & bott.)

T

2-S401 top slab 2-S505 bott. slab

26-Ea. SG31 top & SG32 bott. @ 6½" = 13'-6"

50-Ea. SG39 top & SG40 bott. @ 6½" = 26'-6½"

51-Ea. SG41 top & SG42 bott. @ 6½" = 27'-1"

℄ Girder (U)

61-Ea. SG45 top & SG46 bott. @ 6½" = 32'-6"

℄ Girder (V)

1-Group C

G2-Ea. SG51 top & SG52 bott. @ 6½" = 30'-0½"

41-Ea. SG42 top & SG53 bott. @ 6½" = 21'-8"

82-Ea. SG54 top & SG55 bott. @ 6½" = 27'-7½"

91-Ea. SG56 top & SG57 bott. @ 6½" = 48'-9"

50-Ea. SG58 top & SG59 bott. @ 6½" = 26'-6½"

53-Ea. SG60 top & SG61 bott. @ 6½" = 28'-2"

U

W

1-SG52 top & bott.

2-S401 top slab 2-S505 bott. slab

3-Ea. S401 top slab & S505 bott. Slab.

1-Group C

℄ Girder (W)

2"ϕ Electrical Conduit (Full Length)

1-Group E

1-Group D

1-Group D

3-S401 top slab 3-S505 bott. slab

3-S401 top slab 2-S505 bott. slab

2x14-S401 top ℄ girders & 2x14 S505 bott. betwn. girders

13-S401 top ℄ girders @ 11-S505 bott. betwn. girders

Epoxy Coated F.F.

2-S514 (P1)
2-S515 (P2)
2-S516 (P3)
2-S517 (P4)
E.F.

5-S502 @ 18"± = 5'-8" (P1)
9-S502 @ 18"± = 11'-4" (P2)
9-S502 @ 18"± = 12'-2" (P3)
9-S502 @ 18"± = 11'-2" (P4)
"L"

PANELS		
No. Req'd	Mark	L
14	P1	6'-0"
4	P2	11'-7⅞"
15	P3	12'-6"±
7	P4	11'-5¾"

PARAPET PANELS

2-S505 in curb 1-Group F. 12-Group F's req'd. See Sect. E-E for spa.

1-Group E

1-Group E

3-S505 bott. slab 1-Group E, 4-Req'd.

2-S505 bott. slab

2-S505 bott. slab

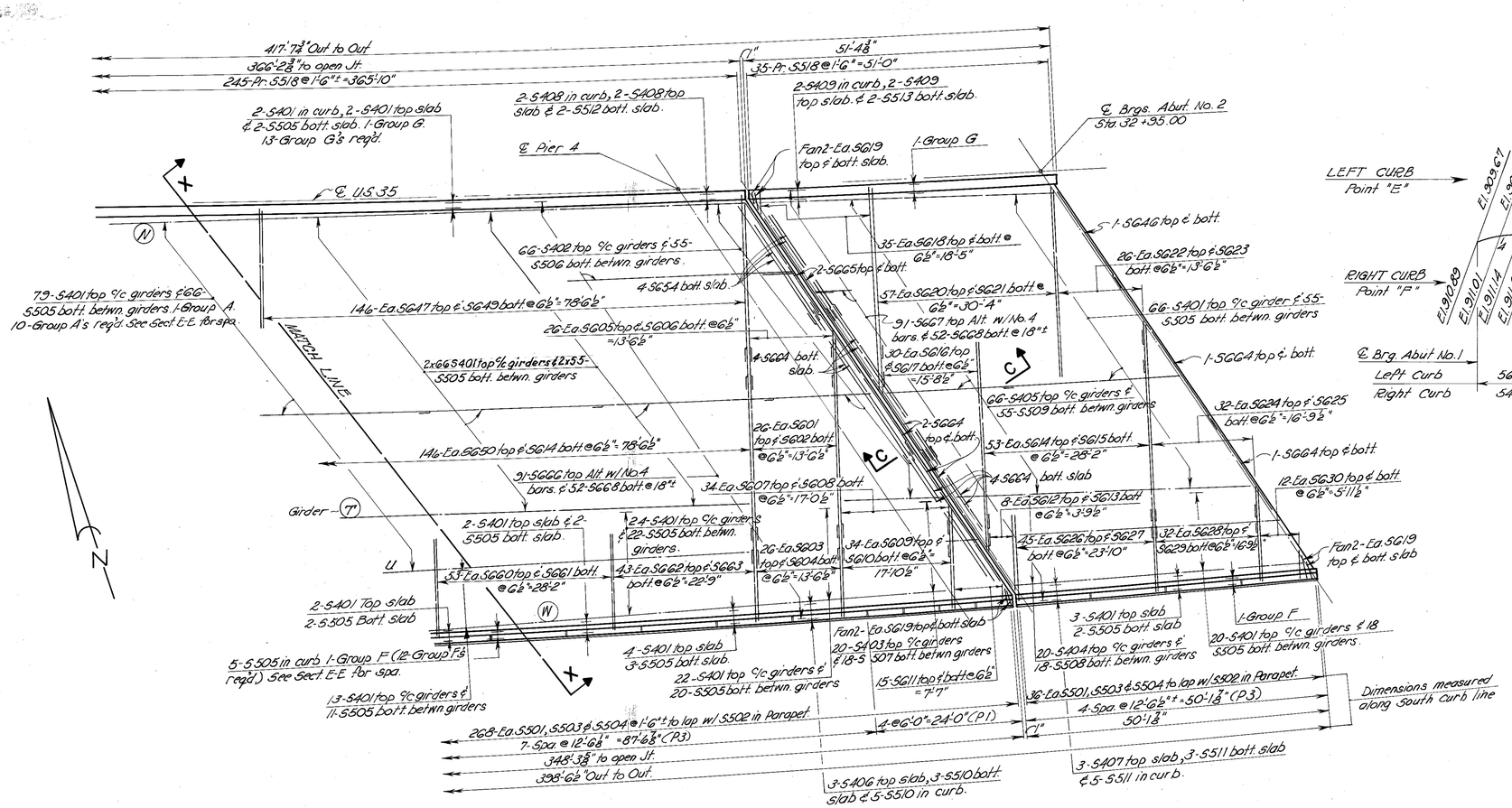
2-S505 bott. slab

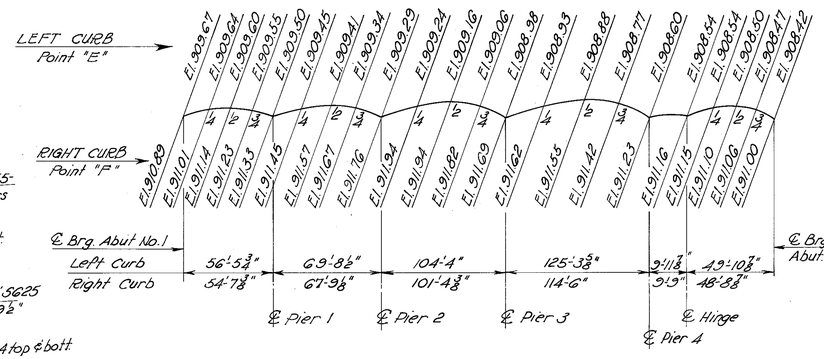
MICROFILMED
JUN 19 1972

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

443
616

GRE-675 - 5-37.
GREENE COUNTY





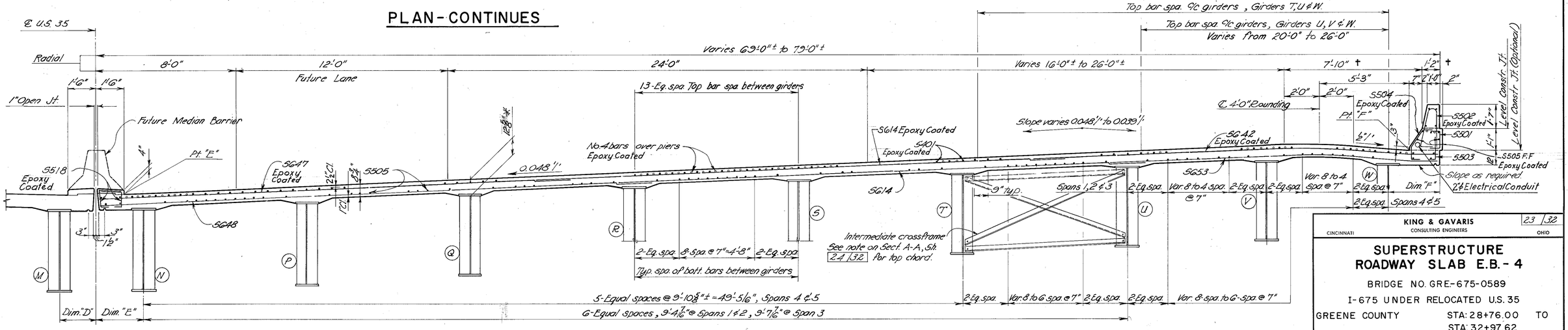
DECK ELEVATION DIAGRAM (E.B.)

AT CURB PT'S E & F
BEFORE CONCRETE IS PLACED

NOTE:
Work this sheet with sheets 20, 21, 22, 24 | 32

† Radial to Ramp "E"

PLAN - CONTINUES



SECTION E-E (E.B.)

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CONSULTING ENGINEERS
CINCINNATI OHIO
23 | 32

SUPERSTRUCTURE
ROADWAY SLAB E.B. - 4

BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

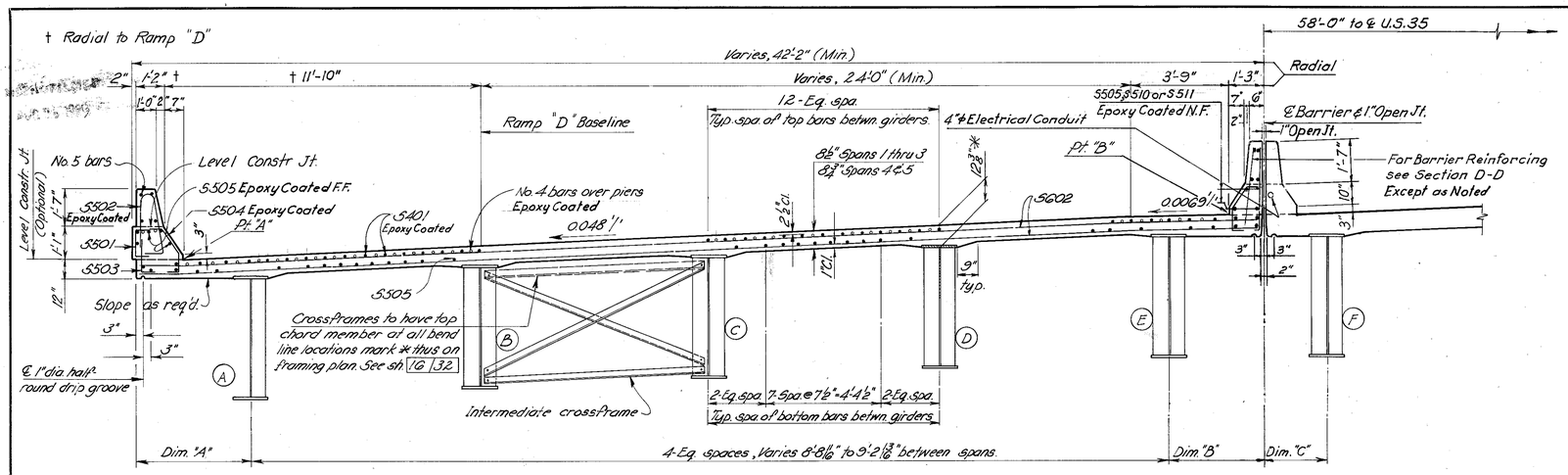
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/72	

MICROFILMED JUN 12 1995

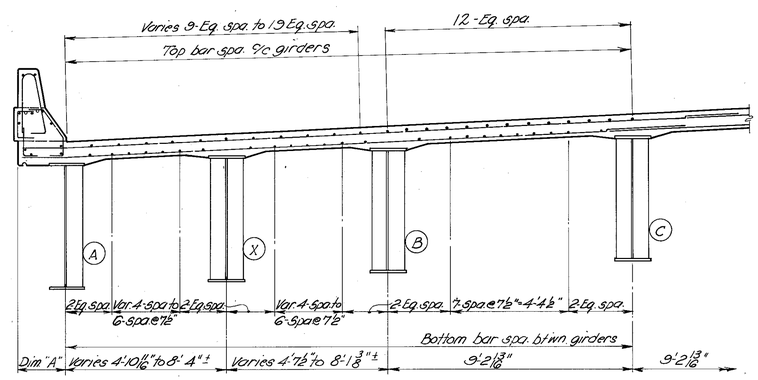
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

444 / 616

GRE-675 - 5.37
GREENE COUNTY

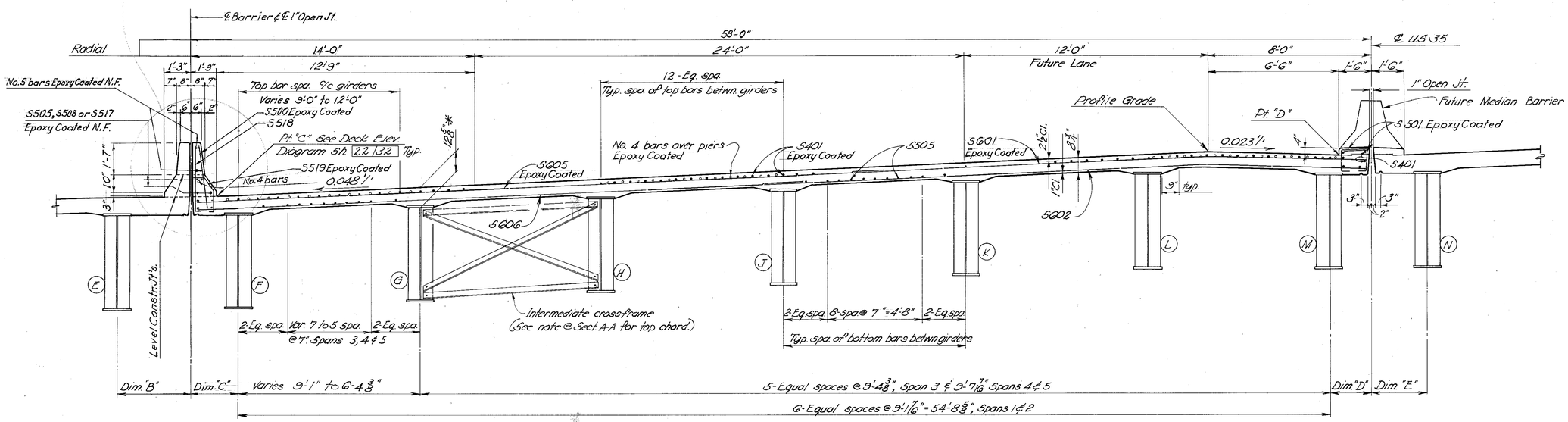


SECTION A-A (C.D.)



SECTION B-B (C.D.)

See Sheet 444A for changes resulting from relocation of joint.



SECTION D-D (W.B.)

TABLE OF OFF-SETS

Location	℄ Abut. 1	½ Pt.	℄ Pier 1	½ Pt.	℄ Pier 2	½ Pt.	℄ Pier 3	½ Pt.	℄ Pier 4	℄ Hinge	½ Pt.	℄ Abut 2
Dim. "A"	4'-3 4"	3'-7 5/8"	3'-1 8"	2'-10 5/8"	2'-11 1/4"	2'-1 1/2"	2'-0 1/2"	1'-10 3/8"	3'-2 1/2"	2'-10 1/8"	2'-3 3/4"	2'-0"
Dim. "B"	3'-7 1/2"	4'-0 3/4"	4'-3 1/2"	4'-3 3/8"	3'-11 1/4"	4'-4 1/8"	4'-0 3/8"	4'-11"	4'-7 3/4"	4'-6 7/8"	4'-4 1/4"	3'-9 3/4"
Dim. "C"	2'-3 5/8"	1'-6 1/2"	0'-11 7/8"	0'-6 7/8"	0'-5 7/8"	0'-8 1/2"	1'-8"	1'-3 1/4"	0'-5 3/8"	0'-5"	0'-5 3/8"	0'-8 1/8"
Dim. "D"	2'-0 5/8"	2'-5 3/8"	2'-8 1/4"	2'-8"	2'-4 1/4"	2'-9"	2'-5 1/4"	3'-2 5/8"	2'-11 3/8"	2'-11 1/8"	2'-8 5/8"	2'-2 3/4"
Dim. "E"	2'-8 1/4"	2'-3 3/8"	2'-1 1/4"	2'-1 7/8"	2'-6 1/4"	2'-2 1/4"	2'-6 1/2"	1'-9 7/8"	2'-1 8"	2'-2 8"	2'-4 3/4"	2'-11"
Dim. "F"	1'-11 5/8"	2'-6 4"	3'-2 3/8"	3'-9 3/8"	4'-0 1/2"	3'-9 1/2"	2'-9 1/2"	3'-3 3/8"	2'-9 3/4"	2'-9"	2'-6 1/2"	2'-0 1/4"

Dimensions measured radial from ℄ web.

NOTES

For reinforcing steel list see shs. 30, 31, 32 | 32.
For details of End Dams, included with Item 513 (Structure Steel) for payment, see Std. Dwg. SD-1-69.
Slab thickness shown includes 1" for monolithic wearing surface.
A haunch width of 3" shall be used for computing of concrete. However, the width may vary between 6" & 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
For details of deflection joints see Std. Dwg. BR-1-67
Work this sheet with sheets. 20, 21, 22, 23 | 32
For details of light pole pedestals, see Common Detail Sh. C1 | C2
All Splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

* This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18. The haunch will vary to accomodate horizontal curve and transition requirements. the dimension shown applies at the ℄ of bearings only.

For horizontal curve corrections see sh. 19 | 32
For additional Junction box and conduit locations for underbridge lighting, see sh. 162 | 601

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

24 | 32

SUPERSTRUCTURE ROADWAY SLAB - 5

BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/26/72	

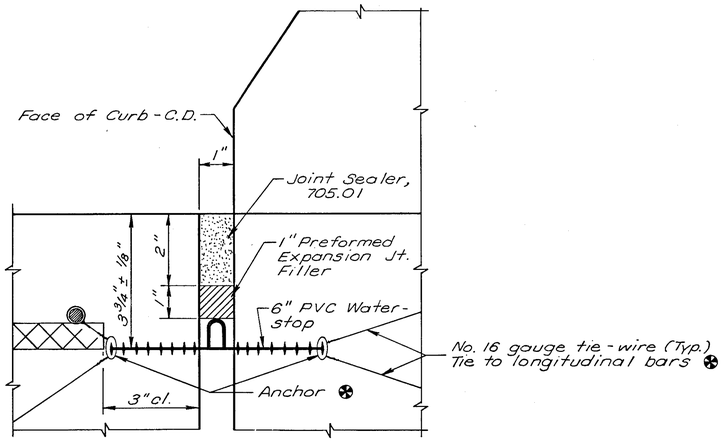
Revised 4-15-83

MICROFILMED
JUN 29 1983

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

444A
616

GREENE COUNTY
GRE-675-5.37



DETAIL "A"

A 6" PVC Waterstop is centered on the joint. The waterstop shall be W.R. Meadows Sealtight DUO-PVC No. 6180-ND or approved alternate. The Waterstop shall be capable of accomodating 1½" of joint movement.

ESTIMATED ADDITIONAL QUANTITIES DUE TO PLAN REVISION				
ITEM	TOTAL	UNIT	DESCRIPTION	SUPERST.
516	430	Lin. Ft.	2"x1" Joint Sealer, 705.01	430
516	4	Sq. Ft.	Preformed Expansion Joint Filler	4
516	430	Lin. Ft.	6" PVC Waterstop; as per plan	430
511	4	Cu. Yd.	Class S Concrete, Superstructure	4
			(See Proposal Note)	

✠ For the first pour, the Waterstop should be held securely in place by the use of split forms and tie-wires. For the second pour, secure the free end of waterstop in proper position with tie-wires. Alternate methods, as approved by the Engineer, may be used to ensure the correct positioning of the waterstop.

NOTES

✳ SECTION A-A AND SECTION D-D OF THIS SHEET SHOW THE REVISION TO THE MEDIAN BARRIER DETAILS OF SECTION A-A AND SECTION D-D OF SHT. 444/616. FACE OF CURB LOCATIONS ARE NOT AFFECTED WITH THIS CHANGE.

ALSO REFER TO SHT. 440/616 FOR ORIGINAL C.D. SLAB AND MEDIAN REINFORCEMENT DETAILS AND SHT. 441/616 FOR ORIGINAL W.B. SLAB AND MEDIAN REINFORCEMENT DETAILS.

✳✳ SECTION B-B OF THIS SHEET SHOWS THE REVISION TO THE MEDIAN BARRIER DETAILS OF SECTION B-B OF SHT. 407/616.

(+) BARS MARKED (+) THUS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED C.D., SHT. 450/616.

(++) 320 OF S518 BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED C.D., SHT. 450/616.

320 OF S518 BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED WESTBOUND, SHT. 451/616.

(+++) S602, S622, S634 AND S619 BARS LISTED UNDER THE REINFORCING BAR LIST TITLED C.D., SHT. 450/616 AND SHOWN IN THE C.D. SLAB PLAN, SHT. 440/616 SHALL BE CUT AS NECESSARY TO FIT.

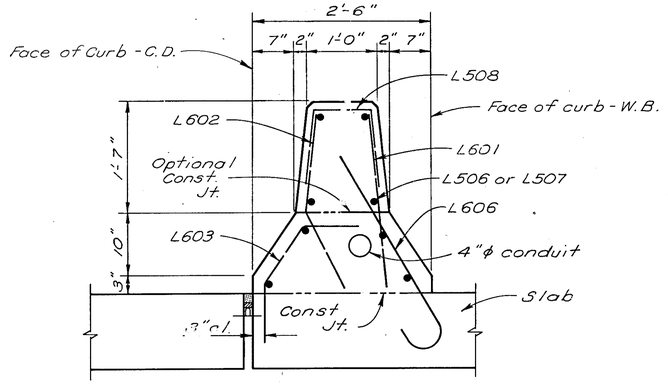
(▲) #5 BAR 3' LONG, 52 S505 CURB BARS NO LONGER NEEDED AS PER THIS REVISION SHALL BE CUT IN 3' LONG SECTIONS. THESE 520 PIECES SHALL BE PLACED @ 10" (-) SPACES.

EXTRA REINFORCING BARS:

DUE TO THE REVISION OF THE MEDIAN DETAILS, THE FOLLOWING LISTED REINFORCING BARS SHALL NO LONGER BE REQUIRED.

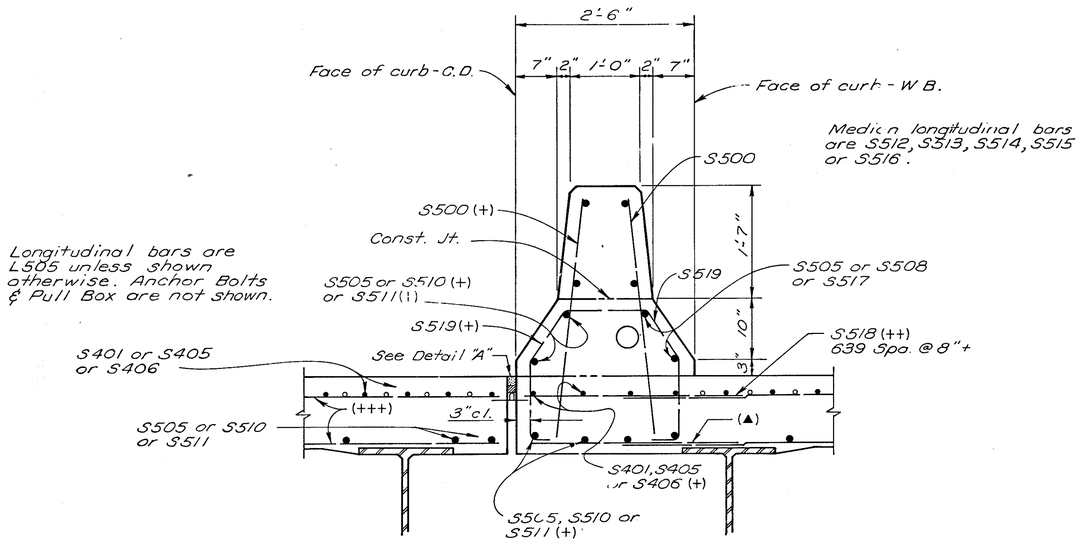
BAR DESIGNATION	NUMBER	COMMENT
S510	2	THESE BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED "C.D", SHT. 450/616.
S511	2	
S508	2	
S517	2	
S512	56	THESE BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED "WESTBOUND", SHT. 451/616.
S513	16	
S514	48	
S515	24	
S516	16	
L505	3	THESE BARS ARE LISTED UNDER NO TITLE ON SHT. 452/616
L509	17	
L510	17	
L604	17	
L605	17	

THESE BARS SHALL BE CONSIDERED AS THE PROPERTY OF THE STATE OF OHIO, AND SHALL BE STORED AS PER 202.02 FOR DISPOSAL BY THE STATE'S FORCES.



SECTION B-B ✳✳

(Not all details shown)



SECTION A-A ✳

(Not all details shown)

SECTION D-D ✳

(Not all details shown)

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

24A 32

REVISED SUPERSTRUCTURE DETAILS
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S.35
GREENE COUNTY
STA. 28+76.00 TO STA. 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GSB	TGC	—		WJJ	4-18-83	

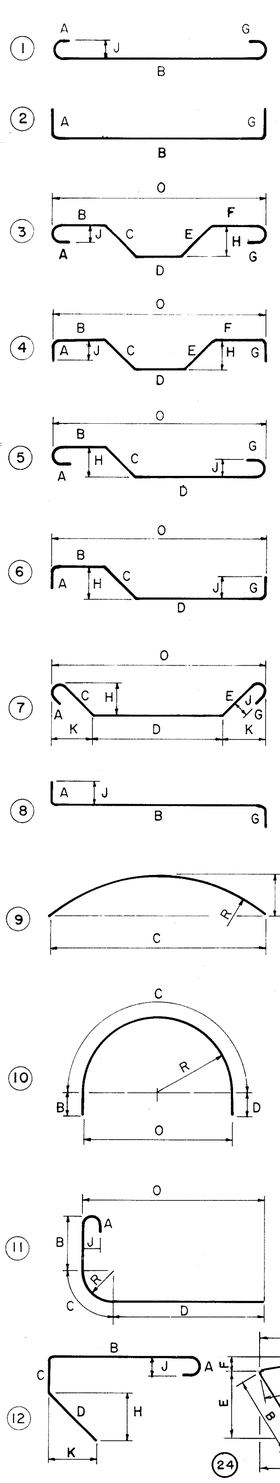
This sheet added 4-18-83

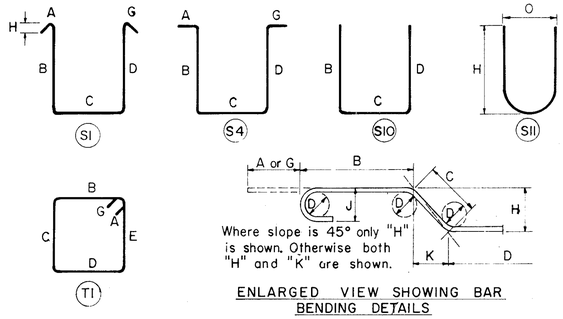
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

445/616

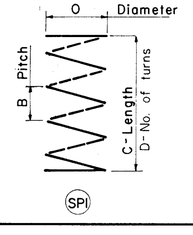
GRE-675 • 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 1				Reinforcing steel in Abutment No. 1 shall have the suffix "A"												
A501	33	2'-4"	80	2	9"	10"					9"						
A502	20	3'-0"	63	Str													10 Epoxy Coated
A503	23	6'-7"	158	23	2'-10⅛"	2'-1⅛"	1'-0"	3½"	2'-1⅜"		9"			3'-2"	2'-5"	3⅜"	23 Epoxy Coated
A504	7	3'-11"	29	Str													
A505	9	4'-3"	40	Str													8 Epoxy Coated
A506	1	4'-8"	5	Str													
A507	1	5'-1"	5	Str													
A508	15	7'-7"	119	Str													
A509	12	30'-8"	384	Str													4 Epoxy Coated
A510	6	16'-3"	102	Str													
A511	2	23'-10"	50	Str													
A512	2	22'-0"	46	Str													
A513	1	13'-5"	14	T1	5"	4'-0"	2'-6"	4'-0"	2'-6"		5"						
A514	16	17'-3"	288	T1	5"	6'-3"	2'-2"	6'-3"	2'-2"		5"						
A515	8	23'-0"	192	Str													
A516	12	4'-7"	57	Str													
A517	1	5'-3"	5	Str													
A518	6	6'-11"	43	Str													
A519	12	15'-2"	190	Str													4 Epoxy Coated
A520	4	8'-5"	35	Str													
A521	2	8'-2"	17	Str													
A522	2	7'-2"	15	Str													
A523	5	10'-4"	54	Str													
A524	7	10'-6"	77	Str													
A525	3	11'-6"	36	2	9"	10'-9"											
A526	10	10'-9"	112	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A527	40	30'-0"	1,252	Str													
A528	4	28'-10"	120	Str													
A529	5	29'-2"	152	Str													
A530	32	24'-2"	807	Str													
A531	13	31'-6"	427	Str													
A532	30	24'-8"	772	Str													
A533	10	23'-11"	249	Str													
A534	2	27'-4"	57	Str													
A535	5	Var. 23'-11" to 27'-4" by 10½'s	134	Str													
A536	8	27'-0"	225	Str													
A537	4	28'-0"	117	19		1'-4"	26'-8"					10"		1'-0"	27'-8"		
A538	5	5'-2"	27	S10		2'-4"	9"	2'-4"									
A539	5	10'-5"	54	17		4'-3"	3'-2"	11"	2'-6"								
A540	6	29'-5"	184	Str													
A541	4	31'-11"	133	19		2'-6"	29'-5"					1'-8"		1'-11"	31'-4"		
A542	5	13'-4"	70	17		3'-9"	4'-3"	2'-2"	3'-6"								
A543	4	25'-10"	108	Str													
A544	4	25'-3"	105	19		1'-5"	23'-10"					11½"		12½"	24'-10½"		
A545	2	22'-5"	47	Str													
A546	2	15'-4"	32	Str													
A547	2	11'-4"	24	Str													
A548	4	21'-0"	88	Str													
A549	2	7'-10"	16	Str													
A550	2	9'-5"	20	Str													
A551	2	19'-0"	40	Str													
A552	2	5'-6"	11	Str													
A553	4	18'-7"	78	Str													
A554	2	11'-9"	25	Str													
A555	190	8'-9"	1,734	S10		1'-7"	5'-10"	1'-7"									
A556	253	7'-4"	1,935	S10		2'-1"	3'-5"	2-1									
A557	23	7'-3"	174	2	9"	6'-6"											
A558	10	8'-0"	83	2	9"	7'-3"											
A559	10	8'-5"	88	2	9"	7'-8"											
A560	43	8'-8"	389	2	9"	7'-11"											
A561	18	9'-6"	178	2	9"	8'-9"											
A562	52	10'-4"	560	2	9"	9'-7"											
A563	15	10'-8"	167	2	9"	9'-11"											
A564	20	9'-7"	200	2	9"	8'-10"											
A565	6	2'-10"	18	S10		6"	1'-6"	1'-1"									6 Epoxy Coated
A566	2	11"	2	Str													2 Epoxy Coated
A567	2	3'-4"	7	Str													2 Epoxy Coated
A568	2	2'-0"	4	Str													2 Epoxy Coated
A569	6	3'-11"	25	S10		6"	1'-6"	2'-2"									6 Epoxy Coated
A570	5	5'-5"	28	S12	2'-6"	2'-6"	8"					2'-5½"		3½"			5 Epoxy Coated
A571	10	3'-10"	40	15		8"	1'-7"	9"	10⅝"	9"		7"					10 Epoxy Coated
A573	6	24'-0"	150	Str													
A574	4	22'-8"	95	Str													





ENLARGED VIEW SHOWING BAR BENDING DETAILS



NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SP1, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1½ Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SP1 and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each no.4 spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. Four Steel Angles weighting approximately 1.01 lb. per lin ft. of spacer, shall be provided for each no. 5 spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 1.01 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
14. For additional bars see sheets 26, 27, 28, 29, 30, 31, 32/32
15. Reinforcing Steel Samples: Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

25/32

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

AUG 28 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

446/616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT		NO. 1	CONTINUED													
A601	1	5'-9"	9	15		9"	4'-2"		11½"	9"		7"					1 Epoxy Coated
A602	15	8'-1"	182	15		9"	6'-6"		11½"	9"		7"					15 Epoxy Coated
A603	16	17'-8"	425	S10		8'-5"	1'-2"	8'-5"									
A604	1	5'-11"	9	15		9"	4'-4"		11½"	9"		7"					1 Epoxy Coated
A605	6	7'-6"	68	15		9"	5'-11"		11½"	9"		7"					6 Epoxy Coated
A606	6	24'-11"	225	S10		12'-0"	1'-2"	12'-0"									
A607	30	13'-11"	627	S10		6'-5"	1'-5"	6'-5"									
A608	227	7'-1"	2,415	S10		3'-3"	11"	3'-3"									
A609	227	4'-11"	1,676	S10		1'-11"	1'-5"	1'-11"									
A610	159	14'-9"	3,523	S10		6'-10"	1'-5"	6'-10"									
A612	38	15'-5"	880	S10		7'-2"	1'-5"	7'-2"									
A613	22	14'-8"	485	S10		6'-7"	5'-10"	2'-7"									
A614	10	15'-5"	232	S10		7'-4"	5'-10"	2'-7"									
A615	10	15'-10"	238	S10		7'-9"	5'-10"	2'-7"									
A616	43	16'-1"	1,039	S10		8'-0"	5'-10"	2'-7"									
A617	18	16'-11"	457	S10		8'-10"	5'-10"	2'-7"									
A618	52	17'-9"	1,386	S10		9'-8"	5'-10"	2'-7"									
A619	11	18'-1"	293	S10		10'-0"	5'-10"	2'-7"									
A620	20	17'-1"	513	S10		9'-0"	5'-10"	2'-7"									
A621	14	8'-5"	177	Str													
A622	15	6'-7"	148	Str													
A623	4	20'-1"	121	S10		10'-0"	5'-10"	4'-7"									
A701	2	4'-4"	18	1	10"	3'-6"							7				2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		9½"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		10½"	9"		5"					2 Epoxy Coated
A704	1	4'-11"	10	15		9"	3'-4"		11½"	9"		7"					1 Epoxy Coated
A705	1	5'-4"	11	15		9"	3'-9"		11½"	9"		7"					1 Epoxy Coated
A706	1	4'-7"	9	15		9"	3'-0"		11½"	9"		7"					1 Epoxy Coated
A707	1	5'-3"	11	15		9"	3'-8"		11½"	9"		7"					1 Epoxy Coated
A801	10	26'-0"	694	Str													
A802	49	30'-0"	3,925	Str													
A803	7	26'-0"	486	Str													
A804	7	13'-9"	257	20		7'-2"	4'-7"	2'-6"									
A805	7	20'-6"	383	Str													
A806	3	13'-8"	109	Str													
A807	2	11'-9"	63	Str													
A808	2	12'-9"	68	Str													
A809	228	6'-2"	3,754	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	38,435														
	ABUTMENT		NO. 2	Reinforcing steel in Abutment No2 shall have the suffix "B"													
A501	31	2'-4"	75	2	9"	10"					9"						
A502	22	3'-0"	69	Str													10 Epoxy Coated
A503	21	6'-7"	144	23	2'-10⅝"	2'-1⅛"	1'-0"	3½"	2'-1¾"		9"		3'-2"	2'-5"	3⅞"		21 Epoxy Coated
A504	6	3'-11"	25	Str													
A505	2	4'-5"	9	Str													
A506	8	4'-11"	41	Str													
A507	1	5'-5"	6	Str													
A508	19	7'-8"	152	Str													
A509	16	23'-8"	395	Str													4 Epoxy Coated
A510	6	12'-8"	79	Str													
A511	2	17'-10"	37	Str													
A512	4	15'-8"	65	Str													
A513	2	9'-5"	20	2	9"	8'-8"											
A514	25	17'-3"	450	T1	5"	6'-3"	2'-2"	6'-3"	2'-2"		5"						
A515	4	18'-4"	76	Str													
A516	4	17'-11"	75	Str													
A517	2	4'-1"	9	Str													
A518	1	5'-1"	5	Str													
A519	1	5'-9"	6	Str													
A520	12	19'-8"	246	Str													4 Epoxy Coated
A521	4	10'-8"	45	Str													
A522	10	10'-6"	110	2	9"	9'-9"											
A523	4	11'-8"	49	Str													

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT		NO. 2	CONTINUED													
A524	10	13'-2"	137	Str													
A525	3	27'-9"	87	Str													
A526	3	26'-8"	83	Str													
A527	5	Var. 26'8" to 27'9" by 3/4", 1-@.	142	Str													
A528	21	30'-0"	657	Str													
A529	35	24'-1"	879	Str													
A530	30	22'-6"	704	Str													
A531	29	18'-2"	549	Str													
A532	8	19'-7"	163	Str													
A533	5	Var. 18'2" to 19'7" by 4¼", 1-@.	98	Str													
A534	4	27'-5"	114	Str													
A535	4	27'-4"	114	19		1'-3"	26'-1"					7"		1'-1½"	27'-2½"		
A536	20	22'-7"	471	Str													
A537	10	2'-9"	29	2	9	2'-0"											
A538	5	9'-2"	48	17		3'-9"	3'-5"	11"	1'-6"								
A539	5	8'-2"	43	17		3'-9"	1'-7"	2'-2"	1'-0"								
A540	4	21'-1"	88	Str													
A541	4	23'-0"	96	19		2'-3"	20'-9"					1'-2"		1'-11"	22'-8"		
A542	4	19'-1"	80	19		1'-6"	17'-7"					8"		1'-4"	18'-11"		
A543	2	13'-9"	29	Str													
A544	2	16'-0"	33	Str													
A545	4	22'-0"	92	Str													
A546	2	7'-3"	15	Str													
A547	4	9'-6"	40	Str													
A548	2	28'-6"	59	Str													
A549	236	7'-4"	1,805	S10		2'-1"	3'-5"	2'-1"									
A550	173	8'-9"	1,579	S10		1'-7"	5'-10"	1'-7"									
A551	31	9'-9"	315	2	9"	9'-0"											
A552	40	8'-11"	372	2	9"	8'-2"											
A553	16	8'-0"	134	2	9"	7'-3"											
A554	21	10'-2"	223	2	9"	9'-5"											
A555	20	9'-4"	195	2	9"	8'-7"											
A556	30	8'-0"	266	2	9"	7'-9"											
A557	8	8'-2"	68	2	9"	7'-5"											
A558	2	17'-11"	37	T1	5"	6'-3"	2'-6"	6'-3"	2'-6"			5"					
A559	2	10'-0"	21	Str													
A560	4	24'-2"	101	19		1'-7"	22'-7"					9½"		1'-4½"	23'-11½"		
A562	3	5'-5"	17	S12	2'-6"	2'-6"	8"					2'-5½"		3½°			3 Epoxy Coated
A563	6	3'-10"	24	15		8"	1'-7"	9"	10⅝°	9"		7"					6 Epoxy Coated
A564	6	2'-10"	18	S10		6"	1'-6"	1'-1"									6 Epoxy Coated
A566	2	6"	1	Str													2 Epoxy Coated
A567	2	2'-8"	6	Str													2 Epoxy Coated
A568	2	1'-9"	4	Str													2 Epoxy Coated
A569	6	3'-11"	25	S10		6"	1'-6"	2'-2"									6 Epoxy Coated
A561	8	1'-8"	14	Str.													8 Epoxy Coated
A601	1	6'-1"	9	15		9"	4'-6"			11½°	9"	7"					1 Epoxy Coated
A602	19	8'-5"	240	15		9"	6'-10"			11½"	9"	7"					19 Epoxy Coated
A603	11	19'-4"	319	S10		9'-3"	1'-2"	9'-3"									
A604	1	6'-5"	10	15		9"	4'-10"			11½"	9"	7"					1 Epoxy Coated
A605	9	24'-2"	327	S10		11'-8"	1'-2"	11'-8"									
A606	199	7'-1"	2,117	S10		3'-3"	11"	3'-3"									
A607	199	4'-11"	1,470	S10		1'-11"	1'-5"	1'-11"									

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 25/32
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 25/32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

26/32

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/28/22	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

447/616

GRE-675-5-37.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 2 CONTINUED																
A608	199	14'-5"	4,309	S10		6'-8"	1'-5"	6'-8"									
A610	3	17'-11"	242	S10		3'-10"	5'-10"	2'-7"									
A611	31	17'-2"	799	S10		3'-1"	5'-10"	2'-7"									
A612	40	16'-4"	981	S10		8'-3"	5'-10"	2'-7"									
A613	16	15'-7"	374	S10		7'-6"	5'-10"	2'-7"									
A614	4	13'-10"	113	S10		9'-6"	5'-10"	4'-10"									
A615	13	17'-7"	343	S10		9'-6"	5'-10"	2'-7"									
A616	20	16'-9"	503	S10		8'-8"	5'-10"	2'-7"									
A617	30	15'-11"	717	S10		7'-10"	5'-10"	2'-7"									
A618	4	13'-7"	118	S10		9'-6"	5'-10"	4'-7"									
A619	6	15'-7"	140	S10		7'-6"	5'-10"	2'-7"									
A620	9	8'-1"	109	Str													
A621	13	6'-5"	125	Str													
A701	2	4'-4"	18	1	10"	3'-6"							7				2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		9½"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		10½"	9"		5"					2 Epoxy Coated
A704	2	5'-1"	21	15		9"	3'-6"		11½"	9"		7"					2 Epoxy Coated
A705	1	5'-7"	12	15		9"	4'-0"		11½"	9"		7"					1 Epoxy Coated
A706	1	5'-9"	12	15		9"	4'-2"		11½"	9"		7"					1 Epoxy Coated
A801	10	15'-6"	414	Str													
A802	35	30'-0"	2,804	Str													
A803	7	22'-6"	421	Str													
A804	7	13'-9"	257	20		7'-2"	4'-7"	2'-6"									
A805	7	14'-0"	262	20		7'-2"	4'-10"	2'-6"									
A806	7	14'-6"	271	Str													
A807	7	32'-0"	598	Str													
A808	7	21'-8"	405	Str													
A809	2	20'-0"	107	Str													
A810	1	14'-6"	39	Str													
A811	197	6'-2"	3,244	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	34,569														
	Total Abutments		73,004														
	PIER NO. 1				Reinforcing steel in Pier No.1 shall have the suffix "A"												
SP401	1	16'-10½"	319	SP1		4½"	16'-10½"	48							2'-8"		
SP402	1	17'-7½"	332	SP1		4½"	17'-7½"	50							2'-8"		
SP403	1	18'-0"	339	SP1		4½"	18'-0"	51							2'-8"		
SP404	1	18'-4½"	346	SP1		4½"	18'-4½"	52							2'-8"		
SP405	1	19'-1½"	359	SP1		4½"	19'-1½"	54							2'-8"		
SP406	1	19'-6"	366	SP1		4½"	19'-6"	55							2'-8"		
SP407	1	19'-10½"	372	SP1		4½"	19'-10½"	56							2'-8"		
SP408	1	20'-3"	379	SP1		4½"	20'-3"	57							2'-8"		
SP409	1	20'-7½"	386	SP1		4½"	20'-7½"	58							2'-8"		
SP410	1	21'-0"	393	SP1		4½"	21'-0"	59							2'-8"		
SP411	1	21'-4½"	399	SP1		4½"	21'-4½"	60							2'-8"		
SP412	1	21'-9"	406	SP1		4½"	21'-9"	61							2'-8"		
SP413	1	22'-1½"	413	SP1		4½"	22'-1½"	62							2'-8"		
SP414	1	22'-6"	419	SP1		4½"	22'-6"	63							2'-8"		
P501	356	9'-9"	3,620	S10		3'-8"	2'-8"	3'-8"									
P502	13	Var. 6'-9" to 9'-9" by 3", 1-ea.	112	S10		Var. 2'-2" to 3'-8" by 1½"	2'-8"	Var. 2'-2" to 3'-8" by 1½"									
P503	13	5'-7"	76	S10		1'-7"	2'-8"	1'-7"									
P504	105	4'-5"	484	S10		1'-0"	2'-8"	1'-0"									
P505	6	34'-2"	214	Str													
P506	18	Var. 5'-9" to 8'-9" by 4½", 2-ea.	136	S10		Var. 2'-2" to 3'-8" by 2¼"	1'-8"	Var. 2'-2" to 3'-8" by 2½"									
P507	18	4'-7"	86	S10		1'-7"	1'-8"	1'-7"									
P508	4	26'-7"	111	Str													
P509	6	27'-1"	169	Str													
PC01	112	7'-4"	1,234	1	8"	6'-0"					8"		6"				

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER NO. 1 CONTINUED																
P801	14	19'-3"	738	Str													
P802	14	20'-3"	757	Str													
P803	14	20'-9"	776	Str													
P804	168	6'-5"	2,878	2	1'-2"	5'-3"											
P805	14	21'-2"	791	Str													
P806	14	21'-8"	810	Str													
P807	14	22'-1"	825	Str													
P808	14	22'-6"	841	Str													
P809	14	22'-11"	857	Str													
P810	14	23'-8"	885	Str													
P811	14	24'-0"	897	Str													
P812	14	24'-4"	910	Str													
P813	14	24'-9"	925	Str													
P901	98	12'-0"	3,998	1	1'-3"	9'-6"					1'-3"		9"				
P902	14	23'-7"	1,123	Str													
P903	14	25'-5"	1,210	Str													
P904	28	6'-11"	658	2	1'-4"	5'-7"											
P1101	3	19'-8"	313	20		2'-2"	17'-10"										
P1102	4	15'-5"	328	20		2'-2"	13'-7"										
P1103	3	22'-8"	361	Str													
P1104	3	22'-8"	361	20		3'-10"	19'-2"										
P1105	4	18'-5"	391	20		3'-10"	14'-11"										
P1106	4	28'-3"	600	Str													
P1107	4	27'-0"	574	19		5'-5⅜"	21'-7"					1'-7"		5'-3"	26'-10"		
P1108	4	33'-11"	721	20		3'-9"	30'-6"										
P1109	3	17'-5"	278	20		3'-9"	14'-0"										
P1110	8	25'-2"	1,070	Str													
P1111	4	33'-9"	717	20		3'-9"	30'-4"										
P1112	3	17'-3"	275	20		3'-9"	13'-10"										
P1113	4	34'-7"	735	Str													
P1114	4	25'-4"	538	Str													
P1115	4	38'-7"	820	20		3'-10"	35'-1"										
P1116	2	17'-7"	187	20		3'-10"	14'-1"										
P1117	2	14'-1"	150	Str													
P1118	4	38'-2"	811	Str													
P1119	4	35'-11"	763	20		2'-2"	34'-1"										
P1120	2	14'-11"	159	20		2'-2"	13'-1"										
P1121	2	13'-1"	139	Str													
P1122	3	25'-6"	406	19		5'-3"	20'-4"					1'-4"		5'-1"	25'-5"		
P1123	5	37'-7"	998	Str													
P1124	5	20'-7"	547	Str													
P1125	5	26'-4"	700	Str													
		Total	44,291														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 25/32
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 25/32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO
27/32

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S.35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

MICROFILMED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

448/616

GRE-675 - 5-37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		PIER NO. 2		Reinforcing steel in Pier No.2 shall have the suffix "B"													
SP401	1	15'-4½"	292	SPI		4½"	15'-4½"	44							2'-8"		
SP402	1	16'-1½"	305	SPI		4½"	16'-1½"	46							2'-8"		
SP403	1	16'-6"	312	SPI		4½"	16'-6"	47							2'-8"		
SP404	1	16'-10½"	319	SPI		4½"	16'-10½"	48							2'-8"		
SP405	1	17'-3"	325	SPI		4½"	17'-3"	49							2'-8"		
SP406	1	17'-7½"	332	SPI		4½"	17'-7½"	50							2'-8"		
SP407	1	18'-0"	339	SPI		4½"	18'-0"	51							2'-8"		
SP408	1	18'-4½"	346	SPI		4½"	18'-4½"	52							2'-8"		
SP409	1	19'-1½"	359	SPI		4½"	19'-1½"	54							2'-8"		
SP410	1	19'-6"	366	SPI		4½"	19'-6"	55							2'-8"		
SP411	1	19'-10½"	372	SPI		4½"	19'-10½"	56							2'-8"		
SP412	1	20'-7½"	386	SPI		4½"	20'-7½"	58							2'-8"		
SP413	1	21'-0"	393	SPI		4½"	21'-0"	59							2'-8"		
SP414	1	21'-4½"	399	SPI		4½"	21'-4½"	60							2'-8"		
P501	314	9'-9"	3193	S10		3'-8"	2'-8"	3'-8"									
P502	13	Var. 6'-9" to 9'-9" by 3", 1-00.	112	S10		Var. 2'-2" to 3'-8" by 1½"	2'-8"	Var. 2'-2" to 3'-8" by 1½"									
P503	13	5'-7"	76	S10		1'-7"	2'-8"	1'-7"									
P504	105	4'-5"	484	S10		1'-0"	2'-8"	1'-0"									
P505	6	32'-7"	204	Str													
P506	18	Var. 5'-3" to 9'-9" by 4½", 2-00	136	S10		Var. 2'-2" to 3'-8" by 2¼"	1'-8"	Var. 2'-2" to 3'-8" by 2¼"									
P507	18	4'-7"	86	S10		1'-7"	1'-8"	1'-7"									
P508	4	26'-3"	110	Str													
P509	6	26'-11"	168	Str													
P601	112	7'-4"	1,234	1	8"	6'-0"					8"		6"				
P801	14	18'-1"	676	Str													
P802	14	18'-8"	698	Str													
P803	14	19'-2"	716	Str													
P804	168	6'-5"	2,878	2	1'-2"	5'-3"											
P805	14	19'-7"	732	Str													
P806	14	20'-0"	748	Str													
P807	14	20'-5"	763	Str													
P808	14	20'-10"	779	Str													
P809	14	21'-4"	797	Str													
P810	14	22'-2"	829	Str													
P811	14	22'-8"	847	Str													
P812	14	23'-2"	866	Str													
P813	14	23'-8"	885	Str													
P901	98	12'-0"	3,938	1	1'-3"	9'-6"					1'-3"		11¼"				
P902	14	22'-0"	1,047	Str													
P903	14	24'-6"	1,166	Str													
P904	28	6'-11"	658	2	1'-4"	5'-7"											
P1101	3	19'-8"	313	20		2'-2"	17'-10"										
P1102	4	15'-5"	328	20		2'-2"	13'-7"										
P1103	3	22'-8"	361	Str													
P1104	3	22'-1"	352	20		3'-10"	18'-7"										
P1105	4	17'-10"	379	20		3'-10"	14'-4"										
P1106	4	27'-8"	588	Str													
P1107	4	27'-0"	574	19		5'-5¾"	21'-7"					1'-7"		5'-3"	26'-10"		
P1108	4	33'-4"	708	20		3'-9"	29'-11"										
P1109	3	16'-10"	268	20		3'-9"	13'-5"										
P1110	8	25'-2"	1,070	Str													
P1111	4	33'-9"	717	20		3'-9"	30'-4"										
P1112	3	17'-3"	275	20		3'-9"	13'-10"										
P1113	4	34'-7"	735	Str													
P1114	4	24'-9"	526	Str													
P1115	4	37'-2"	790	20		3'-10"	33'-8"										
P1116	2	17'-8"	188	20		3'-10"	14'-2"										
P1117	2	14'-2"	151	Str													
P1118	4	36'-2"	769	Str													
P1119	4	34'-8"	737	20		2'-2"	32'-10"										
P1120	2	15'-2"	161	20		2'-2"	13'-4"										

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		PIER NO. 2 CONTINUED															
P1121	2	13'-4"	142	Str													
P1122	3	24'-9"	394	19		5'-5¾"	19'-4"					1'-3"		5'-4"	24'-8"		
P1123	5	35'-7"	945	Str													
P1124	5	19'-7"	520	Str													
P1125	5	25'-7"	680	Str													
		Total	42,402														
		PIER NO. 3		Reinforcing steel in Pier No. 3 shall have the suffix "C"													
SP501	1	15'-3¾"	593	SPI		3¾"	15'-3¾"	52							3'-2"		
SP502	1	15'-11¼"	616	SPI		3¾"	15'-11¼"	54							3'-2"		
SP503	1	16'-3"	627	SPI		3¾"	16'-3"	55							3'-2"		
SP504	1	16'-10½"	650	SPI		3¾"	16'-10½"	57							3'-2"		
SP505	1	17'-2¼"	662	SPI		3¾"	17'-2¼"	58							3'-2"		
SP506	1	17'-6"	673	SPI		3¾"	17'-6"	59							3'-2"		
SP507	1	18'-1½"	696	SPI		3¾"	18'-1½"	61							3'-2"		
SP508	1	18'-5¼"	708	SPI		3¾"	18'-5¼"	62							3'-2"		
SP509	1	18'-9"	719	SPI		3¾"	18'-9"	63							3'-2"		
SP510	1	19'-4½"	742	SPI		3¾"	19'-4½"	65							3'-2"		
SP511	1	20'-0"	765	SPI		3¾"	20'-0"	67							3'-2"		
SP512	1	20'-7½"	788	SPI		3¾"	20'-7½"	69							3'-2"		
SP513	1	20'-11¼"	799	SPI		3¾"	20'-11¼"	70							3'-2"		
SP514	1	21'-6¾"	822	SPI		3¾"	21'-6¾"	72							3'-2"		
P501	672	10'-7"	7,418	S10		4'-3"	2'-4"	4'-3"									
P502	26	Var. 7'-7" to 10'-7" by 3", 2-00	246	S10		Var. 2'-9" to 4'-3" by 1½"	2'-4"	Var. 2'-9" to 4'-3" by 1½"									
P503	40	5'-3"	219	S10		1'-7"	2'-4"	1'-7"									
P504	105	4'-11"	538	S10		1'-0"	3'-2"	1'-0"									
P505	6	31'-6"	197	Str													
P506	14	Var. 7'-5" to 10'-5" by 6", 2-00	130	20		Var. 2'-5" to 4'-2" by 3"	2'-4"	Var. 2'-8" to 4'-2" by 3"									
P507	4	26'-7"	111	Str													
P510	6	26'-3"	164	Str													
P601	121	7'-4"	1,333	1	8"	6'-0"						8"		6"			
P602	42	7'-10"	494	1	8"	6'-6"						8"		6"			
P1001	6	23'-0"	594	Str													
P1002	6	33'-9"	871	20		4'-4"	29'-9"										
P1003	2	17'-3"	148	20		4'-4"	13'-3"										
P1004	4	13'-3"	228	Str													
P1005	6	23'-6"	607	Str													
P1006	20	20'-8"	1,779	Str													
P1007	20	21'-0"	1,807	Str													
P1008	20	21'-5"	1,843	Str													
P1009	140	7'-5"	4,468	11		3"	1'-11"	5'-3"							6'-0"	1'-3"	
P1011	20	22'-10"	1,965	Str													
P1012	20	23'-4"	2,008	Str													
P1013	20	23'-11"	2,058	Str													
P1014	20	24'-5"	2,101	Str													

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 25/32
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 25/32

CINCINNATI — KING & GAVARIS CONSULTING ENGINEERS — OHIO — 28/32

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

449/616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER NO. 3 CONTINUED																
P1015	6	34'-3"	884	Str													
P1101	6	19'-9"	630	20		2'-9"	17'-4"										
P1102	2	15'-9"	167	20		2'-9"	13'-4"										
P1103	4	13'-4"	283	Str													
P1104	6	22'-4"	712	20		4'-0"	18'-8"										
P1105	4	14'-8"	312	Str													
P1106	2	18'-4"	195	20		4'-0"	14'-8"										
P1107	4	28'-3"	600	Str													
P1108	33	17'-8"	3,097	1	1'-7"	14'-6"					1'-7"		1'-5"				
P1109	6	21'-7"	688	Str													
P1110	4	26'-11"	572	19		5'-4"	21'-7"					1'-7½"		5'-0⅜"	26'-7⅞"		
P1111	20	19'-0"	2,019	Str													
P1112	20	19'-6"	2,072	Str													
P1113	20	20'-1"	2,134	Str													
P1114	140	7'-9"	5765	11		3"	2'-1"	5'-5"							6'-4"	1'-5"	
P1115	6	33'-7"	1,071	20		4'-4"	29'-7"										
P1116	2	18'-1"	192	20		4'-4"	14'-1"										
P1117	2	14'-1"	150	Str													
P1118	6	24'-5"	778	Str													
P1119	6	33'-7"	1071	Str													
P1120	6	24'-7"	784	Str													
P1121	20	20'-7"	2,187	Str													
P1122	20	22'-2"	2355	Str													
P1123	99	16'-2"	8503	1	1'-7"	13'-0"					1'-7"		1'-5"				
P1124	6	36'-4"	1,158	20		4'-4"	32'-4"										
P1125	2	18'-1"	192	20		4'-4"	14'-1"										
P1126	4	14'-1"	299	Str													
P1128	6	34'-2"	1089	20		2'-8"	31'-10"										
P1129	2	15'-11"	169	20		2'-8"	13'-7"										
P1130	2	13'-7"	144	Str													
P1131	4	24'-3"	515	19		5'-6"	18'-10"					1'-3½"		5'-4½"	24'-2½"		
P1132	6	34'-1"	1,087	Str													
P1133	6	18'-10"	600	Str													
P1134	6	24'-8"	786	Str													
P1135	20	22'-8"	2,409	Str													
P1136	20	25'-4"	2,692	Str													
		Total	89,548														
		PIER NO. 4		Reinforcing steel in Pier No. 4 shall have the suffix "D"													
SP401	1	16'-10½"	319	SPI		4½"	16'-10½"	48							2'-8"		
SP402	1	17'-7½"	332	SPI		4½"	17'-7½"	50							2'-8"		
SP403	1	18'-0"	339	SPI		4½"	18'-0"	51							2'-8"		
SP404	1	18'-9"	352	SPI		4½"	18'-9"	53							2'-8"		
SP405	1	19'-1½"	359	SPI		4½"	19'-1½"	54							2'-8"		
SP406	1	19'-6"	366	SPI		4½"	19'-6"	55							2'-8"		
SP407	1	19'-10½"	372	SPI		4½"	19'-10½"	56							2'-8"		
SP408	1	20'-3"	379	SPI		4½"	20'-3"	57							2'-8"		
SP409	1	20'-7½"	386	SPI		4½"	20'-7½"	58							2'-8"		
SP410	1	21'-4½"	399	SPI		4½"	21'-4½"	60							2'-8"		
SP411	1	21'-9"	406	SPI		4½"	21'-9"	61							2'-8"		
SP412	1	22'-1½"	413	SPI		4½"	22'-1½"	62							2'-8"		
SP413	1	22'-10½"	426	SPI		4½"	22'-10½"	64							2'-8"		
SP414	1	23'-3"	433	SPI		4½"	23'-3"	65							2'-8"		
P501	184	8'-11"	1,711	S10		3'-8"	1'-10"	3'-8"									
P502	28	Var. 5'-11" to 8'-11" by 2'-3" x 2'-8"	217	S10		Var. 2'-2" to 3'-8" by 1'-3"	1'-10"	Var. 2'-2" to 3'-8" by 1'-3"									
P503	28	4'-9"	139	S10		1'-7"	1'-10"	1'-7"									
P504	105	4'-5"	484	S10		1'-0"	2'-8"	1'-0"									
P505	456	8'-9"	4,162	S10		3'-8"	1'-8"	3'-8"									
P506	24	Var. 5'-9" to 8'-9" by 3'-3" x 2'-8"	181	S10		Var. 2'-2" to 3'-8" by 1'-3"	1'-8"	Var. 2'-2" to 3'-8" by 1'-3"									
P507	24	4'-7"	115	S10		1'-7"	1'-8"	1'-7"									
P508	6	28'-5"	178	Str													

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER NO. 4 CONTINUED																
P509	4	25'-6"	106	Str													
P510	6	24'-5"	153	Str													
P601	121	7'-4"	1,333	1	8"	6'-0"					8"		6"				
P801	14	21'-4"	737	Str													
P802	14	21'-8"	810	Str													
P803	14	22'-1"	825	Str													
P804	14	22'-6"	841	Str													
P805	14	22'-11"	857	Str													
P806	154	6'-5"	2,536	2	1'-2"	5'-3"											
P807	14	23'-4"	872	Str													
P808	14	23'-11"	894	Str													
P809	14	24'-5"	913	Str													
P810	14	24'-11"	931	Str													
P811	14	25'-6"	953	Str													
P812	14	26'-0"	972	Str													
P1001	77	12'-4"	4,086	1	1'-5"	9'-6"					1'-5"		1'-3¼"				
P1101	4	21'-1"	448	20		2'-1"	19'-4"										
P1102	3	16'-10"	268	20		2'-1"	15'-1"										
P1103	7	15'-1"	561	Str													
P1104	4	18'-2"	386	Str													
P1105	4	23'-2"	492	20		3'-6"	20'-0"										
P1106	3	18'-11"	302	20		3'-6"	15'-9"										
P1107	7	15'-9"	586	Str													
P1108	6	26'-10"	855	Str													
P1109	6	26'-4"	839	19		5'-9"	20'-7"					1'-7"		5'-5"	26'-0"		
P1110	14	20'-9"	1,543	Str													
P1111	14	21'-4"	1,587	Str													
P1112	14	21'-11"	1,630	Str													
P1113	42	7'-3"	1,618	11		3"	2'-1"	4'-11"							6'-4"	1'-5"	
P1114	2	13'-3"	141	Str													
P1115	8	31'-6"	1,339	20		3'-9"	28'-1"										
P1116	4	17'-0"	361	20		3'-9"	13'-7"										
P1117	6	13'-7"	433	Str													
P1118	10	22'-11"	1,218	Str													
P1119	6	31'-7"	1,007	Str													
P1120	4	22'-2"	471	Str													
P1121	4	33'-1"	703	20		3'-11"	29'-6"										
P1122	2	16'-10"	179	20		3'-11"	13'-3"										
P1123	27	16'-2"	2,319	1	1'-7"	13'-0"					1'-7"		1'-5"				
P1124	4	31'-5"	668	Str													
P1125	4	30'-8"	652	20		2'-2"	28'-10"										
P1126	2	14'-5"	153	20		2'-2"	12'-7"										
P1127	2	12'-7"	134	Str													
P1128	4	21'-11"	466	19		4'-10¼"	17'-1"					1'-4"		4'-8"	21'-9"		
P1129	6	31'-1"	991	Str													
P1130	6	17'-4"	553	Str													
P1131	6	22'-4"	712	Str													
		Total	53,962														
	Total	Piers	230,203														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 25/32
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 25/32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

29/32

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY

STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/28/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

450/616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	SUPERSTRUCTURE - C.D.				Reinforcing steel in Collector Distributor shall have the suffix "A"												
S401	747	30'-0"	14,970	Str													747 Epoxy Coated
S402	37	Var. 31'-6" to 35'-0" by 1'-8"; 1-ea.	822	Str													37 Epoxy Coated
S403	16	13'-0"	139	Str													16 Epoxy Coated
S404	18	23'-6"	283	Str													18 Epoxy Coated
S405	6	31'-6"	126	Str													6 Epoxy Coated
S406	43	22'-5"	644	Str													43 Epoxy Coated
S407	16	Var. 20'-9" to 23'-0" by 2'-4"; 1-ea.	231	Str													16 Epoxy Coated
S408	3	20'-8"	41	Str													3 Epoxy Coated
S409	56	28'-6"	1,066	Str													56 Epoxy Coated
S410	56	38'-6"	1,440	Str													56 Epoxy Coated
S411	104	26'-8"	1,853	Str													104 Epoxy Coated
S500	320	3'-2"	1,057	Str													320 Epoxy Coated
S501	326	2'-4"	793	2	9"	10"					9"						
S502	326	5'-10"	1,983	23	2'-0⅛"	2'-2⅛"	1'-0"	3½"	2'-2⅜"	9"				2'-4"	2'-6"	3⅜"	326 Epoxy Coated
S503	326	2'-7"	878	2	9"	1'-10"											
S504	326	3'-0"	1,020	15		8"	10"	9"	10⅝"	8"		7"					326 Epoxy Coated
S505	729	30'-10"	22,810	Str													52 Epoxy Coated
S506	30	Var. 35'-6" to 38'-6" by 1'-4"; 1-ea.	1,158	Str													
S507	13	18'-0"	244	Str													
S508	17	22'-0"	390	Str													
S509	5	11'-4"	59	Str													2 Epoxy Coated
S510	9	35'-6"	333	Str													
S511	39	22'-9"	925	Str													
S512	16	Var. 21'-0" to 23'-3" by 1'-4"; 1-ea.	369	Str													
S513	7	21'-0"	153	Str													2 Epoxy Coated
S514	56	5'-8"	331	Str													28 Epoxy Coated
S515	32	12'-1"	403	Str													16 Epoxy Coated
S516	16	12'-11"	216	Str													8 Epoxy Coated
S517	64	11'-10"	790	Str													32 Epoxy Coated
S518	320	3'-10"	1,270	20		9"	3'-2"										
S519	320	2'-5"	807	15		9"	8"	9"	10"	4"		5"					320 Epoxy Coated
S601	118	Var. 4'-0" to 40'-0" by 7½"; 2-ea.	3,899	Str													59 Epoxy Coated
S602	786	41'-9"	49,289	Str													393 Epoxy Coated
S603	284	19'-7"	8,354	Str													284 Epoxy Coated
S604	35	24'-6"	1,288	Str													35 Epoxy Coated
S605	284	24'-3"	10,344	Str													
S606	35	19'-10"	1,043	Str													
S607	35	25'-0"	1,314	Str													35 Epoxy Coated
S608	35	20'-4"	1,069	Str													
S609	34	25'-7"	1,306	Str													34 Epoxy Coated
S610	34	20'-11"	1,068	Str													
S611	34	26'-5"	1,349	Str													34 Epoxy Coated
S612	34	21'-9"	1,111	Str													
S613	34	Var. 26'-5" to 27'-4" by 3/8"; 1-ea.	1,372	Str													34 Epoxy Coated
S614	34	Var. 21'-9" to 22'-8" by 3/8"; 1-ea.	1,134	Str													
S615	18	Var. 27'-4" to 27'-11" by 3/8"; 1-ea.	747	Str													18 Epoxy Coated
S616	18	Var. 22'-8" to 23'-3" by 3/8"; 1-ea.	621	Str													
S617	13	Var. 27'-11" to 28'-6" by 3/8"; 1-ea.	551	Str													13 Epoxy Coated
S618	13	Var. 23'-3" to 23'-10" by 3/8"; 1-ea.	460	Str													
S619	28	5'-9"	242	Str													14 Epoxy Coated
S620	20	Var. 9'-7" to 27'-0" by 11"; 1-ea.	549	Str													20 Epoxy Coated
S621	20	Var. 5'-0" to 22'-4" by 1'-6"; 1-ea.	411	Str													
S622	46	Var. 5'-9" to 25'-5" by 11¼"; 2-ea.	1,111	Str													23 Epoxy Coated
S623	58	Var. 4'-0" to 31'-1" by 11⅜"; 2-ea.	1,528	Str													29 Epoxy Coated
S624	16	Var. 32'-0" to 39'-6" by 3⅜"; 1-ea.	727	Str													16 Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	C.D. CONTINUED																
S625	16	Var. 25'-2" to 25'-9" by 1/2"; 1-ea.	612	Str													
S626	16	Var. 4'-0" to 18'-0" by 11¼"; 1-ea.	264	Str													16 Epoxy Coated
S627	16	Var. 20'-0" to 22'-7" by 11"; 1-ea.	378	Str													
S628	19	Var. 30'-5" to 31'-2" by 1/2"; 1-ea.	879	Str													19 Epoxy Coated
S629	19	Var. 25'-9" to 26'-6" by 1/2"; 1-ea.	746	Str													
S630	19	Var. 31'-2" to 32'-0" by 1/2"; 1-ea.	901	Str													19 Epoxy Coated
S631	19	Var. 26'-6" to 27'-4" by 1/2"; 1-ea.	768	Str													
S632	23	Var. 29'-0" to 29'-10" by 11⅜"; 1-ea.	671	Str													23 Epoxy Coated
S633	23	Var. 4'-5" to 25'-3" by 11¼"; 1-ea.	512	Str													
S634	44	Var. 6'-0" to 28'-10" by 11⅜"; 2-ea.	1,052	Str													22 Epoxy Coated
S635	8	29'-0"	348	Str													4 Epoxy Coated
S636	4	29'-0"	174	Str													2 Epoxy Coated
S637	4	28'-3"	170	Str													2 Epoxy Coated
S638	52	6'-0"	469	1	8"	5'-4"							6				52 Epoxy Coated
S639	64	2'-8"	257	14	7¾"	7¼"	11"	6⅛"	11⅝"	5"		3"		11½"	2'-1¾"		
S640	51	38'-7"	2,956	1	8"	37'-11"							6				51 Epoxy Coated
S641	8	25'-0"	300	Str													
		Total	159,957														
	SUPERSTRUCTURE - WESTBOUND				Reinforcing steel in Westbound shall have the suffix "B"												
S401	1014	30'-0"	20,320	Str													104 Epoxy Coated
S402	61	Var. 22'-0" to 31'-0" by 1⅛"; 1-ea.	1,080	Str													61 Epoxy Coated
S403	9	31'-3	188	Str													9 Epoxy Coated
S404	77	22'-11"	1,179	Str													77 Epoxy Coated
S405	5	21'-11"	73	Str													5 Epoxy Coated
S406	2	31'-3"	42	Str													2 Epoxy Coated
S407	73	28'-0"	1,365	Str													73 Epoxy Coated
S408	73	38'-6"	1,877	Str													73 Epoxy Coated
S409	144	26'-6"	2,549	Str													144 Epoxy Coated
S500	320	3'-2"	1,057	Str													320 Epoxy Coated
S501	560	2'-5"	1,412	510		1'-1"	1'-0"	7⅞"									560 Epoxy Coated
S505	347	30'-0"	29,632	Str													
S506	55	Var. 27'-0" to 34'-0" by 1⅜"; 1-ea.	1,750	Str													
S507	8	34'-9"	290	Str													
S508	72	23'-3"	1,746	Str													2 Epoxy Coated

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 25/32
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 25/32

KING & GAVARIS
CINCINNATI — CONSULTING ENGINEERS — OHIO

30/32

REINFORCING STEEL LIST

BRIDGE NO. GRE.-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/24/74	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

451/616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	WESTBOUND CONTINUED																
S509	3	27'-3"	85	Str													
S512	112	5'-8"	662	Str													56 Epoxy Coated
S513	32	12'-0"	400	Str													16 Epoxy Coated
S514	96	12'-11"	1,293	Str													48 Epoxy Coated
S515	48	11'-9"	588	Str													24 Epoxy Coated
S516	32	12'-7"	420	Str													16 Epoxy Coated
S517	6	35'-0"	219	Str													2 Epoxy Coated
S518	320	3'-10"	1,279	20		9"	3'-2"										
S519	320	2'-5"	807	15		9"	8"	9"	10"	4"		5"					320 Epoxy Coated
S601	315	26'-2"	12,380	Str													315 Epoxy Coated
S602	349	31'-0"	16,250	Str													
S603	380	27'-2"	15,506	Str													380 Epoxy Coated
S604	380	32'-0"	18,264	Str													
S605	349	33'-9"	17,692	Str													349 Epoxy Coated
S606	315	28'-11"	13,682	Str													
S607	354	32'-9"	17,413	Str													354 Epoxy Coated
S608	354	27'-11"	14,844	Str													
S609	34	Var. 4'-7" to 25'-0" by 7 3/8", 1-eq.	755	Str													34 Epoxy Coated
S610	34	Var. 8'-9" to 29'-0" by 7 3/8", 1-eq.	964	Str													
S611	108	Var. 2'-9" to 35'-9" by 12", 2-eq.	3,123	Str													54 Epoxy Coated
S612	24	30'-0"	1081	Str													8 Epoxy Coated
S613	2	19'-4"	58	Str													1 Epoxy Coated
S614	26	Var. 9'-4" to 31'-3" by 10 1/2", 1-eq.	792	Str													26 Epoxy Coated
S615	26	Var. 4'-4" to 26'-3" by 10 1/2", 1-eq.	597	Str													
S616	70	Var. 4'-0" to 33'-4" by 5/8", 1-eq.	1,963	Str													35 Epoxy Coated
S617	25	Var. 9'-6" to 31'-0" by 10 3/4", 1-eq.	760	Str													25 Epoxy Coated
S618	25	Var. 4'-7" to 26'-0" by 10 3/4", 1-eq.	574	Str													
S619	14	4'-0"	84	Str													7 Epoxy Coated
S620	66	Var. 4'-10" to 33'-5" by 10 3/4", 2-eq.	1,896	Str													33 Epoxy Coated
S621	25	Var. 4'-5" to 25'-6" by 10 1/2", 1-eq.	562	Str													25 Epoxy Coated
S622	25	Var. 9'-7" to 30'-6" by 10 3/8", 1-eq.	753	Str													
S623	72	Var. 3'-8" to 34'-4" by 10 1/2", 2-eq.	2,055	Str													36 Epoxy Coated
S624	6	11'-6"	104	Str													3 Epoxy Coated
S625	4	8'-0"	48	Str													
S626	73	37'-1"	4066	1		8"	36'-5"						6				73 Epoxy Coated
S627	88	2'-8"	352	14		7 3/4"	7 3/4"	11"	6 1/2"	11 5/8"	5"	3"		11 1/2"	2'-1 3/4"		
S628	73	6'-0"	658	1		8"	5'-4"						6				73 Epoxy Coated
		Total	217,589														
	SUPERSTRUCTURE - EASTBOUND																
S401	1333	30'-0"	26,713	Str													1320 Epoxy Coated
S402	66	Var. 15'-6" to 21'-0" by 1", 1-eq.	805	Str													66 Epoxy Coated
S403	20	Var. 3'-0" to 15'-4" by 7 3/4", 1-eq.	122	Str													20 Epoxy Coated
S404	20	Var. 21'-4" to 22'-8" by 7/8", 1-eq.	294	Str													20 Epoxy Coated
S405	66	22'-8"	999	Str													66 Epoxy Coated
S406	3	31'-9"	64	Str													3 Epoxy Coated
S407	3	21'-1"	42	Str													3 Epoxy Coated
S408	4	20'-10"	56	Str													2 Epoxy Coated
S409	4	22'-8"	61	Str													2 Epoxy Coated
S410	106	27'-6"	1,947	Str													106 Epoxy Coated
S411	102	37'-9"	2572	Str													102 Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	EASTBOUND CONTINUED																
S412	196	24'-6"	3,208	Str													196 Epoxy Coated
S501	304	2'-4"	740	2	9"	10"						9"					
S502	304	5'-10"	1,850	23	2'-0 1/8"	2'-2 5/8"	1'-0"	3 1/2"	2'-2 3/8"	9"				2'-4"	2'-6"	3 1/2"	304 Epoxy Coated
S503	304	2'-7"	819	2	9"	1'-10"											
S504	304	3'-0"	951	15		8"	10"	9"	10 3/8"	8"		7"					304 Epoxy Coated
S505	1178	30'-0"	36,860	Str													24 Epoxy Coated
S506	55	Var. 19'-6" to 25'-0" by 1 1/2", 1-eq.	1,276	Str													
S507	18	Var. 7'-0" to 19'-4" by 8 3/8", 1-eq.	247	Str													
S508	18	Var. 21'-8" to 23'-0" by 1", 1-eq.	419	Str													
S509	55	23'-0"	1,319	Str													
S510	8	35'-5"	296	Str													2 Epoxy Coated
S511	8	21'-5"	179	Str													2 Epoxy Coated
S512	2	24'-10"	52	Str													
S513	2	23'-0"	48	Str													
S514	56	5'-8"	331	Str													28 Epoxy Coated
S515	16	11'-4"	189	Str													8 Epoxy Coated
S516	60	12'-2"	761	Str													30 Epoxy Coated
S517	28	11'-2"	326	Str													14 Epoxy Coated
S518	560	2'-5"	1,412	510		1'-1"	1'-0"	6"									560 Epoxy Coated
S601	26	31'-1"	1,214	Str													26 Epoxy Coated
S602	26	30'-6"	1,191	Str													
S603	26	16'-10"	657	Str													26 Epoxy Coated
S604	26	12'-8"	495	Str													
S605	26	Var. 4'-5" to 26'-1" by 10 3/8", 1-eq.	596	Str													26 Epoxy Coated
S606	26	Var. 9'-7" to 31'-5" by 10 1/2", 1-eq.	801	Str													
S607	34	Var. 4'-0" to 32'-9" by 10 1/2", 1-eq.	938	Str													34 Epoxy Coated
S608	34	Var. 8'-2" to 36'-10" by 10 3/8", 1-eq.	1150	Str													
S609	34	16'-3"	830	Str													34 Epoxy Coated
S610	34	12'-3"	626	Str													
S611	30	Var. 4'-0" to 16'-8" by 10 7/8", 2-eq.	466	Str													15 Epoxy Coated
S612	8	Var. 7'-4" to 13'-7" by 10 3/4", 1-eq.	126	Str													8 Epoxy Coated
S613	8	Var. 4'-10" to 10'-0" by 10 3/4", 1-eq.	84	Str													
S614	691	30'-10"	32,001	Str													299 Epoxy Coated
S615	53	29'-3"	2,328	Str													
S616	30	Var. 9'-0" to 34'-10" by 10 3/4", 1-eq.	988	Str													30 Epoxy Coated
S617	30	Var. 4'-2" to 30'-0" by 10 3/4", 1-eq.	770	Str													
S618	70	Var. 4'-0" to 34'-5" by 10 3/4", 2-eq.	2,020	Str													35 Epoxy Coated

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 25/32
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 25/32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
31/32

REINFORCING STEEL LIST

BRIDGE NO. GRE.-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/28/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

452
616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	EASTBOUND CONTINUED																
S619	16	4'-0"	96	Str													8 Epoxy Coated
S620	57	28'-6"	2,440	Str													57 Epoxy Coated
S621	57	33'-5"	2,847	Str													
S622	26	Var. 4'-7" to 27'-0" by 10 3/4"; 1-ea.	617	Str													26 Epoxy Coated
S623	26	Var. 7'-7" to 32'-0" by 10 3/4"; 1-ea.	812	Str													
S624	32	Var. 4'-10" to 32'-0" by 10 3/4"; 1-ea.	865	Str													32 Epoxy Coated
S625	32	Var. 7'-7" to 35'-7" by 10 1/4"; 1-ea.	1037	Str													
S626	45	15'-3"	1,031	Str													45 Epoxy Coated
S627	45	11'-7"	783	Str													
S628	32	14'-4"	689	Str													32 Epoxy Coated
S629	32	10'-7"	509	Str													
S630	24	Var. 4'-9" to 14'-6" by 10 3/4"; 2-ea.	350	Str													12 Epoxy Coated
S631	26	Var. 5'-10" to 24'-4" by 7 1/2"; 1-ea.	648	Str													26 Epoxy Coated
S632	26	Var. 4'-1" to 19'-7" by 7 1/2"; 1-ea.	462	Str													
S633	376	30'-1"	16,990	Str													188 Epoxy Coated
S634	172	26'-5"	6,825	Str													172 Epoxy Coated
S635	172	31'-1"	8030	Str													
S636	45	Var. 9'-0" to 36'-2" by 7 7/8"; 1-ea.	1,526	Str													45 Epoxy Coated
S637	45	Var. 4'-1" to 31'-6" by 7 7/8"; 1-ea.	1,203	Str													
S638	94	Var. 3'-8" to 32'-7" by 7 1/2"; 2-ea.	2,559	Str													47 Epoxy Coated
S639	50	26'-4"	1,978	Str													50 Epoxy Coated
S640	50	21'-8"	1,627	Str													
S641	51	25'-9"	1,973	Str													51 Epoxy Coated
S642	92	21'-1"	2,913	Str													41 Epoxy Coated
S643	61	27'-0"	2474	Str													61 Epoxy Coated
S644	61	31'-8"	2,901	Str													
S645	61	24'-7"	2252	Str													61 Epoxy Coated
S646	63	13'-11"	1885	Str													1 Epoxy Coated
S647	392	27'-9"	16,339	Str													392 Epoxy Coated
S648	246	32'-6"	12,008	Str													
S649	146	32'-8"	7164	Str													146 Epoxy Coated
S650	146	31'-7"	6,926	Str													62 Epoxy Coated
S651	64	22'-0"	2,115	Str													1 Epoxy Coated
S652	64	17'-6"	1,682	Str													
S653	41	16'-6"	1,016	Str													52 Epoxy Coated
S654	56	20'-0"	1,753	Str													
S655	62	16'-0"	1,250	Str													91 Epoxy Coated
S656	91	20'-3"	2,768	Str													
S657	91	15'-6"	2119	Str													50 Epoxy Coated
S658	50	18'-2"	1364	Str													
S659	50	14'-0"	1051	Str													53 Epoxy Coated
S660	53	17'-4"	1380	Str													
S661	53	13'-2"	1,048	Str													43 Epoxy Coated
S662	43	16'-10"	1,087	Str													
S663	43	12'-8"	818	Str													3 Epoxy Coated
S664	26	30'-0"	1172	Str													2 Epoxy Coated
S665	4	24'-6"	147	Str													91 Epoxy Coated
S666	91	35'-2"	4807	1	8"	34'-6"								6"			91 Epoxy Coated
S667	91	6'-0"	820	1	8"	5'-4"								6"			
S668	104	2'-8"	417	14	7 3/4"	7 3/4"	11"	6 1/2"	11 5/8"	5"		3"			11 1/2"	2'-1 3/4"	
		Total	269,812														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
L501	8	3'-6"	30	2	9"	2'-0"					9"						
L502	8	8'-3"	68	17			3'-2"	2'-2"	3'-2"								8 Epoxy Coated
L503	12	7'-6"	94	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L504	8	3'-2"	26	Str.													10 Epoxy Coated
L505	10	11'-8"	122	Str.													1 Epoxy Coated
L506	1	7'-6"	8	Str.													1 Epoxy Coated
L507	1	2'-5"	3	Str.													17 Epoxy Coated
L508	17	2'-10"	50	512	1'-2"	1'-2"	8"					1'-2"		1"			17 Epoxy Coated
L509	17	2'-1"	37	24	1'-0"	7"	8"	6"	4"	5½"	8"						
L510	17	2'-1"	37	15		7"	10"	8"	9"			5"					
L601	17	2'-6"	64	Str.													17 Epoxy Coated
L602	17	2'-8"	68	19		1'-3"	1'-5"					7"		1'-0"			17 Epoxy Coated
L603	17	2'-11"	75	15		6"	1'-0"		11"	1'-0"		9"					17 Epoxy Coated
L604	17	2'-11"	75	22		2'-1"	1'-0"					10"		7"			
L605	17	2'-6"	64	2	9"	1'-11"											
L606	17	3'-8"	94	1	8"	3'-0"							6"				17 Epoxy Coated
		Total	915														
	Total Superstruc		G48,273														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 25/32
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 25/32

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO
32/32

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0589

I-675 UNDER RELOCATED U.S. 35

GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/26/22	

MICROFILMED
AUG 28 1989

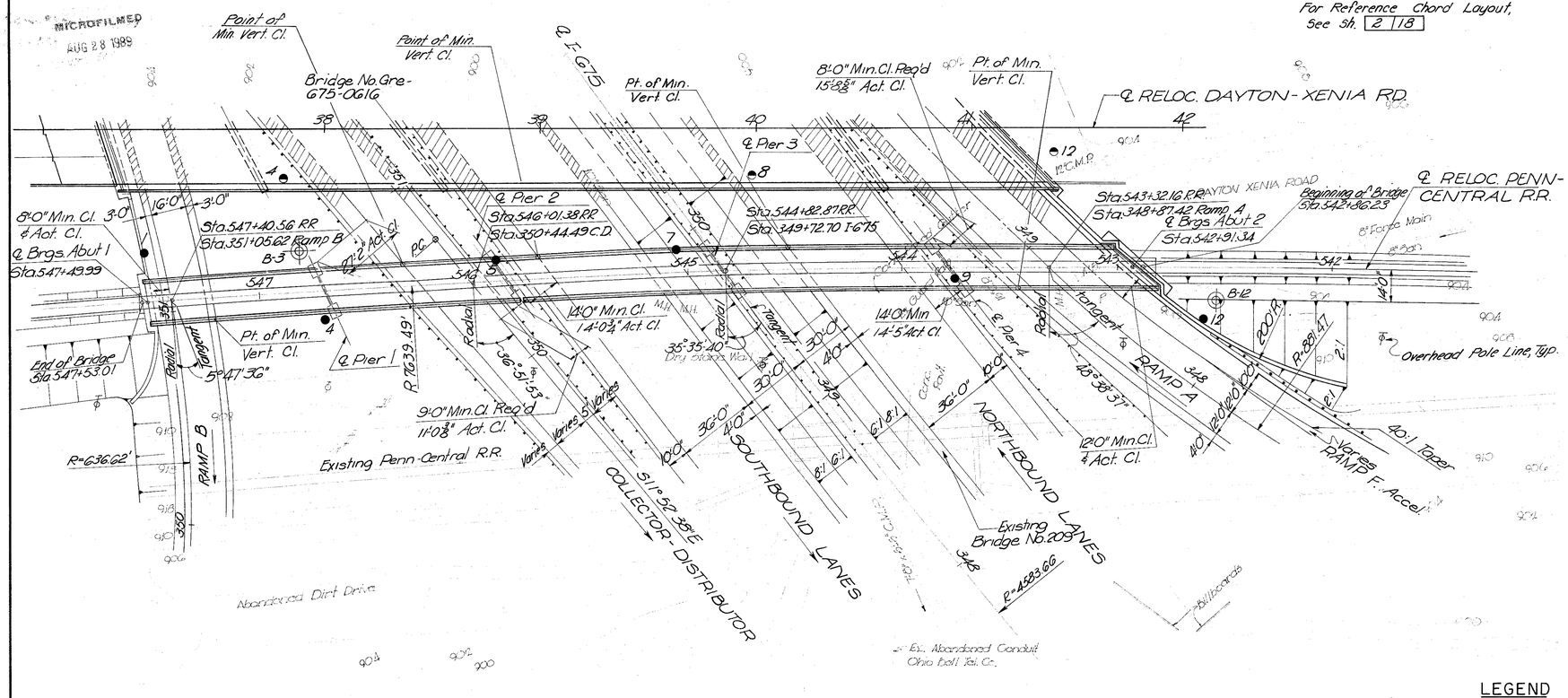
MICROFILMED
JUN 13 1995

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

4.53
616

GRE-675 - 5 - 37
GREENE COUNTY

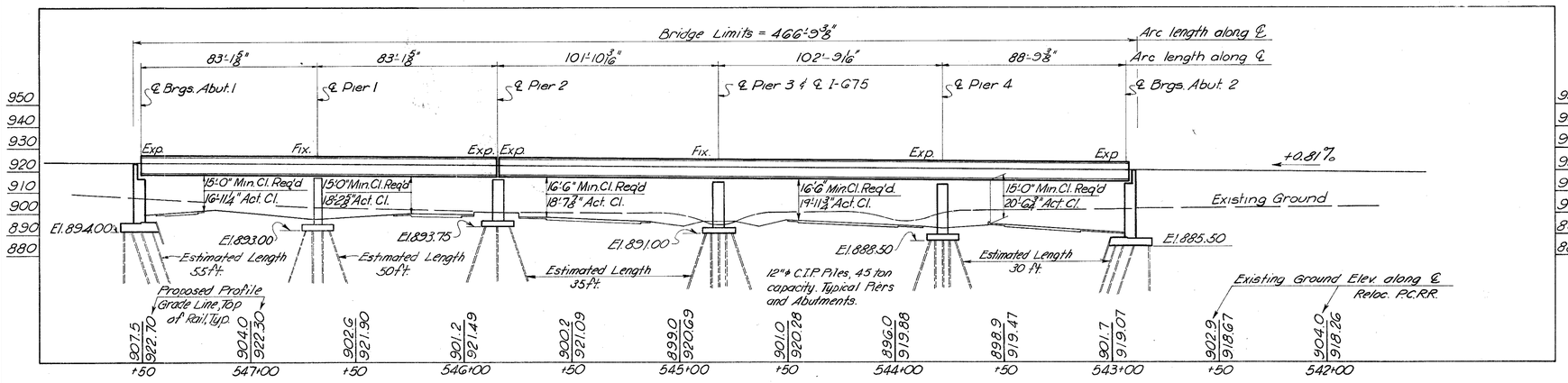
For Reference Chord Layout, See Sh. 2 18



PLAN

LEGEND

- Drive sample boring location.
- Drive Rod Penetration Resistance Sounding Location.
- Drive Rod Penetration Resistance Sounding Location Bridge No. GRE G75-0616



PROFILE ON CENTER LINE RELOCATED PENN-CENTRAL RAILROAD OVER I-675

TRACK MOVEMENTS

Freight: 10 @ 50 mph

BRIDGE TO BE REMOVED

Existing R.R. Bridge No. 209
Single span through girder
on masonry abutments
84'-2" c to c bearings

R R CURVE DATA

PI Sta. 547+87.80
Dc = 0° 45'
Δ = 11° 05' 44"
R = 7639.49'
T = 784.53'
Lc = 1394.41
Ls = 85.00
E = 35.99

Design speed 70 mph.
superelevation = 1"

Dayton-Xenia Rd. traffic to be maintained during construction.

For Typical Section thru bridge see sh. 12 18

DESIGN YEAR TRAFFIC

1989 ADT:

Ramp B	10,110
Coll.-Dist.	4,960
I-675	43,160
Ramp A	15,070

PROPOSED STRUCTURE

TYPE: Superstructure Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure
SPANS: 83'1 5/8" 83'1 5/8" 101'10 11/16" 102'9 1/16" 88'9 3/8"
LOADING: Cooper E-80, Diesel Impact
SKEW: Varies, 35°35'40" Rt. Fwd @ ℄ I-675
WEARING SURFACE: ———
APPROACH SLABS: ———
ALIGNMENT: Left Curve

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1 / 18

SITE PLAN-I

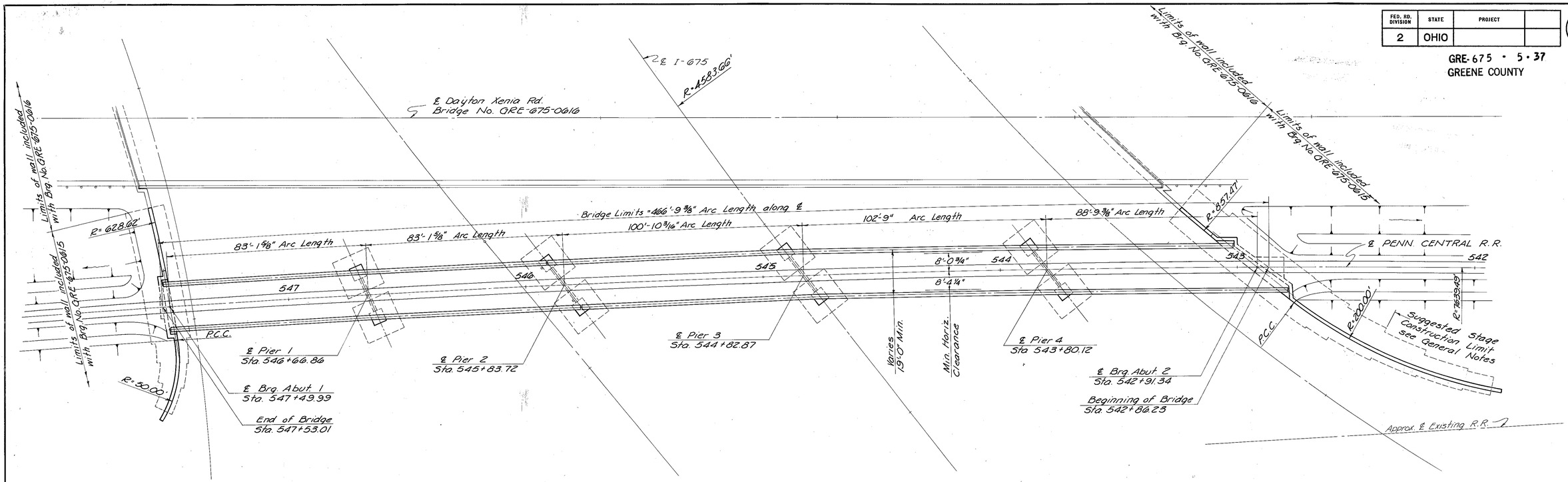
BRIDGE NO. GRE-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	J.C.L.	A.W.	S.A.	4-16-82

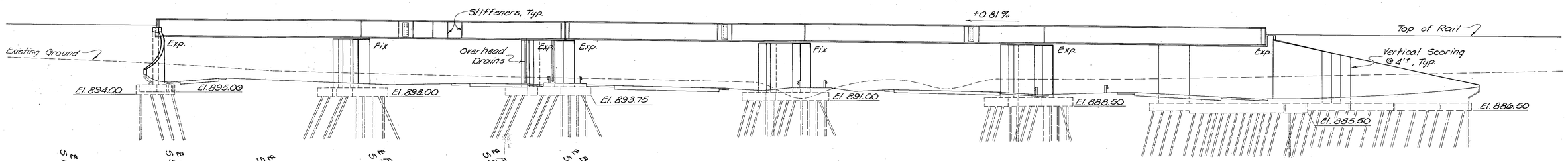
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

454
616

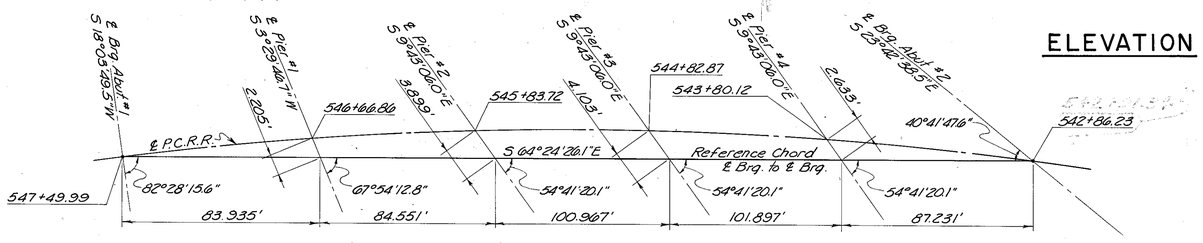
GRE-675 • 5•37
GREENE COUNTY



PLAN



ELEVATION



REFERENCE CHORD LAYOUT
(SCHEMATIC)

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CINCINNATI OHIO

2/18

GENERAL PLAN & ELEVATION

BRIDGE NO. GRE-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY STA. 542+86.23 TO STA. 547+53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	K.F.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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GRE-675 · 5·37
GREENE COUNTY

GENERAL NOTES

GENERAL

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE NECESSITY OF MAINTAINING RAILROAD TRAFFIC ON THE EXISTING TRACKS AT ALL TIMES DURING CONSTRUCTION OF THIS STRUCTURE, UNTIL SUCH TIME AS THE NEW RELOCATION IS ABLE TO RECEIVE THIS TRAFFIC. SIMILARLY, HIS ATTENTION IS DIRECTED TO THE MAINTENANCE OF TRAFFIC REQUIREMENTS REGARDING VEHICULAR TRAFFIC DURING THE CONSTRUCTION PERIOD.

IT IS PROBABLE THAT THE SOUTHERLY WINGWALL OF ABUTMENT #2 WILL NEED TO BE CONSTRUCTED IN STAGES. THE PLANS SHOW SUGGESTED LOCATIONS FOR FOOTING AND WALL STEM CONSTRUCTION JOINTS. THE SECTION OF WALL ADJACENT TO THE ABUTMENT SHALL BE CONSTRUCTED WITH THE ABUTMENT. THE REMAINING SEGMENT OF THE WALL MAY BE CONSTRUCTED ONLY AFTER RAILROAD TRAFFIC HAS BEEN PLACED ON THE NEW TRACK. THE USE OF SHEETING WILL BE REQUIRED DURING BOTH STAGES TO PROTECT BOTH THE TRACK AND THE EXCAVATION, AS IT MAY ALSO BE REQUIRED AT OTHER TIGHT CLEARANCE LOCATIONS.

TO REDUCE THE HEIGHTS OF SHEETING REQUIRED DURING THE VARIOUS STAGES OF CONSTRUCTION, THE EXISTING TRACK EMBANKMENT MAY BE TRIMMED WHERE REQUIRED TO A SLOPE NOT EXCEEDING 1-1/2 ON 1. NEW EMBANKMENTS MAY ALSO BE TEMPORARILY CONSTRUCTED TO SLOPES NOT STEEPER THAN 1-1/2 ON 1. THE TOPS OF THESE SLOPES SHALL NOT BE CLOSER THAN 14 FT. TO THE CENTERLINE OF EXISTING OR RELOCATED TRACK.

REFERENCE SHALL BE MADE TO SUPPLEMENTAL SPECIFICATIONS:

809 DATED JANUARY 1, 1971
810 DATED JANUARY 1, 1971

927 DATED JANUARY 1, 1971

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STEEL RAILWAY BRIDGE" OF THE AMERICAN RAILWAY ENGINEERING ASSOCIATIONS, 1971 EDITION.

CONSTRUCTION AND MATERIAL SPECIFICATIONS: STATE OF OHIO, DEPARTMENT OF HIGHWAYS, DATED JANUARY 1, 1979.

DESIGN DATA:

DESIGN LOADING - COOPER E-80 WITH DIESEL IMPACT.

CLASS C CONCRETE - UNIT STRESS 1333 PSI FOR SUBSTRUCTURE.
METAL BRIDGE DECK - ASTM A 588. UNIT STRESS 27,000 PSI
STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 (SEE ADDITIONAL REQUIREMENTS) PSI
REINFORCING STEEL - ASTM A 615 - UNIT STRESS 20,000 PSI

REMOVAL OF EXISTING STRUCTURE: WHEN NO LONGER NEEDED TO MAINTAIN RAILROAD TRAFFIC THE EXISTING STRUCTURE SHALL BE REMOVED.

EMBANKMENT CONSTRUCTION: BEFORE THE BACKWALL IS CONSTRUCTED THE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL SUB-BALLAST WITH A 1:1 SLOPE FROM THE BRIDGE SEAT TO THE SUB-BALLAST LINE, FOR A MINIMUM DISTANCE OF 200 FEET BACK OF EACH ABUTMENT.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 45 TONS PER PILE FOR ABUTMENTS AND PIERS.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING AFFECTED UTILITY LINES, EXCEPT THOSE BEING INSTALLED OR RELOCATED AS PART OF THIS PROJECT, SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

RAILROAD AERIAL LINES WILL BE RELOCATED BY THE RAILROAD. THE CONTRACTOR SHALL USE ALL PRECAUTIONS NECESSARY TO SEE THAT THE LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE AND SHALL COOPERATE WITH THE RAILROAD IN THE RELOCATION OF THESE LINES. THE COST OF THE RELOCATIONS SHALL BE INCLUDED IN THE RAILROAD FORCE ACCOUNT WORK.

STRUCTURAL STEEL:

1. STEEL FOR FLANGES, WEB PLATES AND STIFFENERS SHALL BE FULLY KILLED FINE GRAIN PRACTICE.
2. FLANGE PLATES WITH FLAME CUT EDGES SHALL BE FREE OF NICKS AND NOTCHES AND SHALL HAVE ALL EDGES GROUND TO A 1/16 INCH RADIUS.
3. ALL WELDS CONNECTING FLANGE PLATE TO WEB PLATE MUST BE MADE BY AUTOMATIC SUBMERGED ARC WELDING.

STRUCTURAL STEEL: CONTINUED

4. MILL SCALE TO BE GROUND OFF FLANGE PLATES AT WEB TO FLANGE WELD.
5. ALL SPLICES IN FLANGE PLATES AND WEBS TO BE RADIOGRAPHED.
6. 50% OF WEB TO FLANGE WELDS TO BE SUBJECT TO ULTRASONIC TESTING IN ACCORDANCE WITH AWS SPECIFICATIONS.
7. BOTTOM FLANGE PLATE MUST BE PERPENDICULAR TO WEB PLATE AT BEARINGS. MAXIMUM TOLERANCE ±0.03 INCHES.
8. PINS IN BEARINGS TO BE COLD FINISHED CARBON STEEL SHAFTING CONFORMING TO THE REQUIREMENTS FOR GRADE 1020 STEEL IN ASTM SPECIFICATION A 108.
9. BRONZE PLATE SHALL BE AS PER ASTM SPECIFICATION B-22, CLASS B, WITH TREPANNED GRAPHITE INSERTS.

DAMPPROOFING: BACKS OF ALL ABUTMENTS AND WALLS WHICH SHALL BE IN PERMANENT CONTACT WITH EARTH SHALL BE DAMPPROOFED WITH TYPE "A" WATERPROOFING FROM THE TOP OF THE FOOTING TO THE TOP OF THE POROUS BACKFILL.

ITEM SPECIAL - ASPHALT PORTLAND CEMENT CONCRETE

USE:

THIS CONCRETE IS TO BE USED AS A PROTECTION COURSE OVER METAL DECKS OF RAILROAD BRIDGES.

MATERIALS:

1. EMULSIFIED ASPHALT SHALL BE IN ACCORDANCE WITH FEDERAL SPECIFICATIONS SS-A-674B.
2. FINE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE.
3. COARSE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE WITH THE FOLLOWING GRADATION:

SIEVE SIZE (INCHES)	PERCENT PASSING BY WEIGHT
3/4"	100
1/2"	90 - 100
3/8"	40 - 70
No. 4	0 - 15

MIX:

THE ASPHALT CONCRETE SHALL BE PROPORTIONED BY VOLUME, 1 PART PORTLAND CEMENT, 2 PARTS FINE AGGREGATE, 3 PARTS COARSE AGGREGATE, 1-1/2 PARTS EMULSIFIED ASPHALT TYPE SS-1 AND MINIMUM AMOUNT OF WATER REQUIRED TO MAKE A WORKABLE MIX. THE DRY MATERIALS SHALL FIRST BE THOROUGHLY MIXED THEN THE WATER ADDED TO PRODUCE A UNIFORM MIXTURE AFTER WHICH THE EMULSIFIED ASPHALT IS ADDED AND MIXING CONTINUED UNTIL OF UNIFORM COLOR.

APPLICATION:

WORK SHALL BE DONE ONLY WHEN THE TEMPERATURE WILL BE ABOVE 40° F. FOR A PERIOD OF AT LEAST 24 HOURS AFTER STARTING APPLICATION.

SURFACE TO BE COVERED SHALL BE THOROUGHLY CLEANED AND GIVEN A UNIFORM PRIMER OR BOND COATING OF EMULSIFIED ASPHALT TYPE RS-1, USING NOT LESS THAN 1 GALLON PER 80 SQ. FT.

THE ASPHALT CONCRETE SHALL THEN BE SCREEDED OVER THE PRIMED AREA TO THE THICKNESS INDICATED ON THE DRAWINGS. AFTER THE ASPHALT CONCRETE HAS SET SUFFICIENTLY TO ALLOW A MAN TO WALK UPON IT WITHOUT INDENTATION BUT PRIOR TO FINAL SET, IT SHALL BE GIVEN A UNIFORM COATING OF EMULSIFIED ASPHALT TYPE RS-2 APPLIED AT THE RATE OF ONE GALLON PER 50 SQ. FT. THIS FINAL COATING SHALL BE COVERED WITH CLEAN SAND.

METHOD OF MEASUREMENT:

THE YARDAGE TO BE PAID FOR SHALL BE THE NUMBER OF CUBIC YARDS AS DETERMINED BY CALCULATIONS FROM PLAN DIMENSION, IN PLACE, COMPLETED AND ACCEPTED.

BASIS OF PAYMENT:

THE YARDAGE MEASURED AS PROVIDED ABOVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD BID FOR "ITEM SPECIAL ASPHALT PORTLAND CEMENT CONCRETE" WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, PLACING, FINISHING AND CURING, AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

REFERENCE
JAN 19 1973

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
202	Lump	Sum	Existing Structure Removed				Lump
503	Lump	Sum	Cofferdams, Cribs and Sheeting				Lump
503	2,280	Cu. Yd.	Unclassified Excavation		1,825	455	
504	2,450	Sq. Ft.	Steel Sheet Piling left in place (Minimum section modulus of 30.2 in³ per foot of wall)		2,450		
505	Lump	Sum	Test Pile				Lump
506	Lump	Sum	Pile test load				Lump
506	1	Ea.	Subsequent Pile test load.				1
507	11,405	Lin. Ft	12"ϕ Cast-in-Place Reinforced Concrete Piles		6,625	4,780	
509	137,502	Lb.	Reinforcing Steel.		69,664	67,838	
511	235	Cu. Yd.	Class "C" Concrete, Piers above Footings.			235	
511	853	Cu. Yd.	Class "C" Concrete, Abutments and Walls above Footings.		853		
511	784	Cu. Yd.	Class "C" Concrete, Footings		532	252	
512	530	Sq. Yd.	Type "A" Waterproofing		530		
512	31	Lin. Ft.	Type "B" Waterproofing		31		
514	1,115,000	Lb.	Field Painting of new Structural Steel System A	1,115,000			
516	23	Lin. Ft.	Preformed Elastic Joint Sealer (705.11)	23			
516	23	Lin. Ft.	Joint Sealer (705.01, 705.02)	23			
516	336	Sq. Ft.	1" Preformed Expansion Joint Filler		336		
516	487	Lin. Ft.	Sheet Copper* (16 02, 6" wide)		326	161	
516	152	Lin. Ft.	Folded Sheet Copper* (16 02, 10" wide)		152		
518	347	Cu. Yd.	Porous Backfill		347		
518	236	Lin. Ft.	8"ϕ Perforated C.S.P. (707.01)		236		
518	128	Lin. Ft.	8"ϕ Non-Perforated C.S.P. including specials. (707.01)		128		
518	332	Lin. Ft.	8"ϕ Half-Round, Perforated C.S.P. Bituminous Coated Including Specials (707.01, 707.04)	332			
518	38	Lin. Ft.	8"ϕ Standard Pipe Downspout Including specials. (707.11)			38	
523	3	Hours	Dynamic Pile Tests				3
809	151	Sq. Yds.	Asphalt Plank Protection Cover, 1½" thick.	151			
810	916,500	Lb	Fracture Critical Structural Steel (AISC Category III) for structures carrying railroad traffic. (A36 Steel) See Proposal Note	916,500			
810	201,000		Structural Steel (AISC Category III) for structures carrying railroad traffic (A588 steel)	201,000			
Special	43	Cu. Yds.	Asphalt Portland Cement Concrete	43			

ESTIMATED QUANTITIES CHECKED BY & DATE: J.R.G. / S.A. 2/10/72 REVISED S.A. 9/20/72

* As an alternate to copper, neoprene water stops may be used.

NOTE:
Rails, Ties and Ballast on Bridge Structure included in "Item Special - Construction of Railroad Tracks." See Sheet 24 (601)

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CINCINNATI OHIO

3/18

GENERAL NOTES & ESTIMATED QUANTITIES

BRIDGE NO. GRE.-675-0615
I-675 UNDER RELOCATED PENN.-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

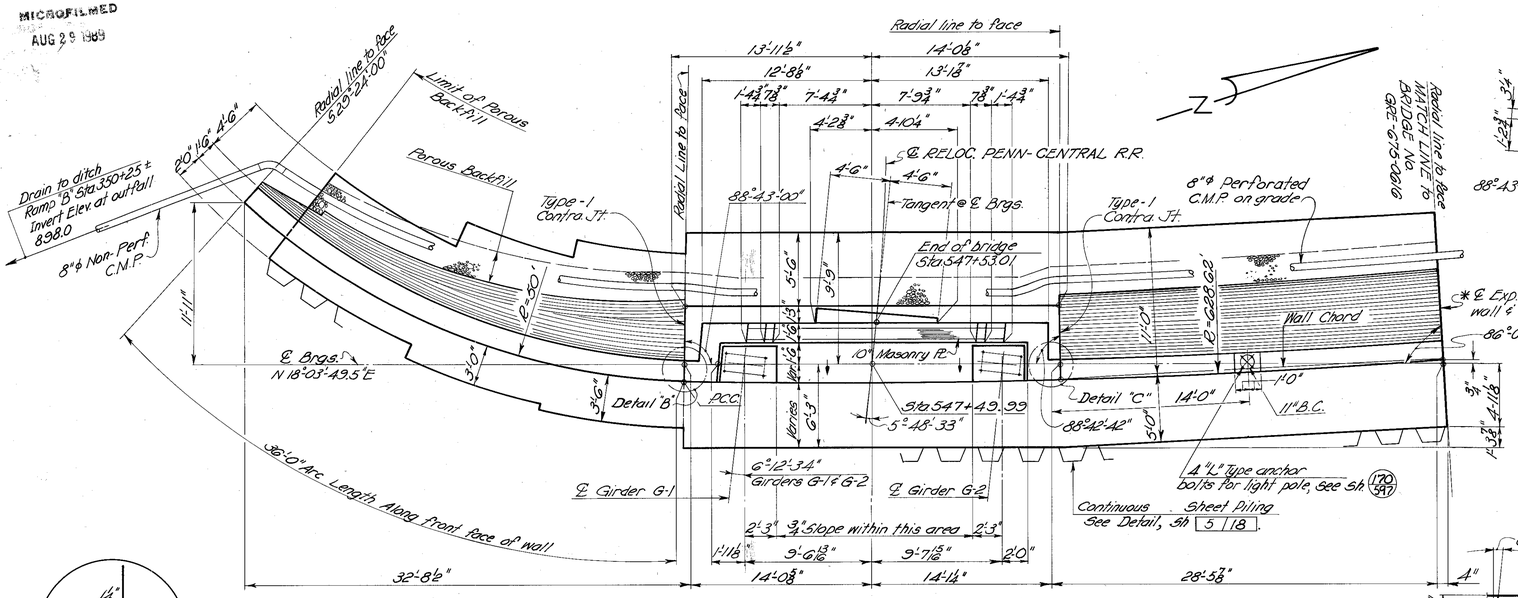
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.A.	A.W.		S.A.		9/25/72	4-16-82

MICROFILMED
AUG 29 1989

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

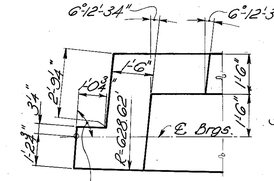
456/616

GRE-675 · 5·37
GREENE COUNTY



PLAN

DETAIL "A"



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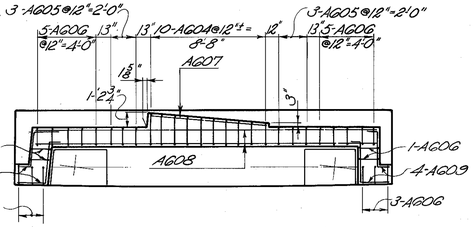
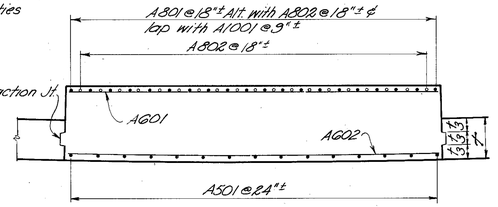


SECTION B-B



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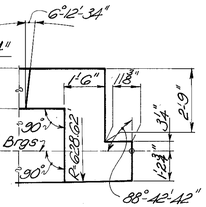

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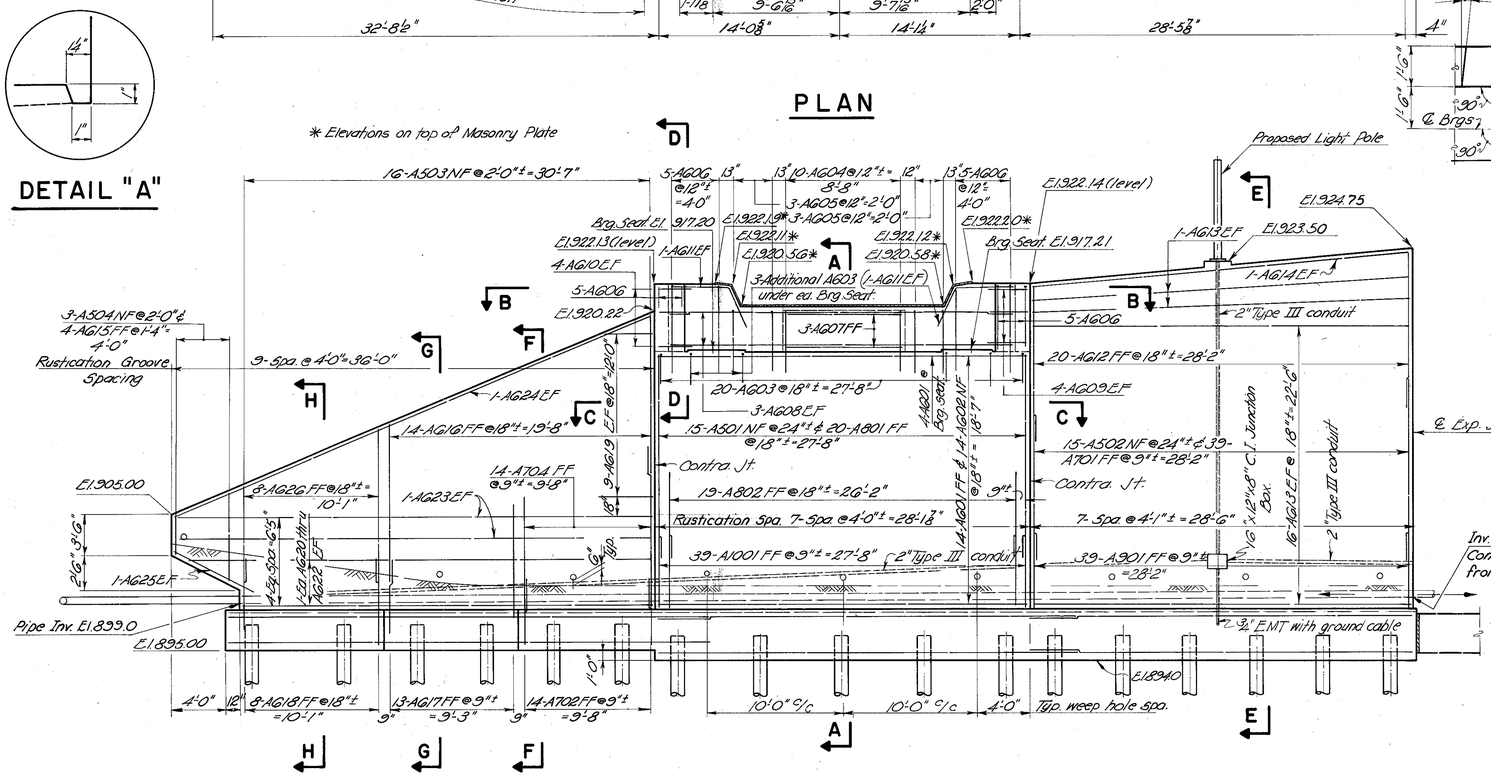
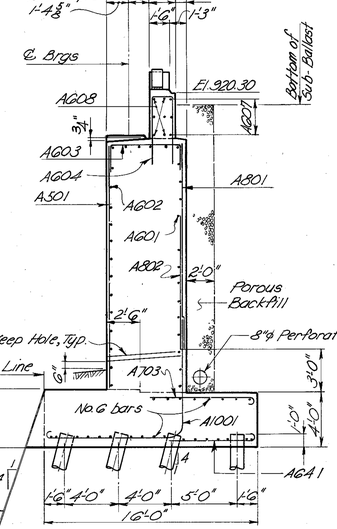
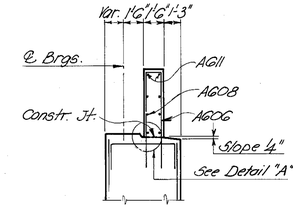


DEVELOPED ELEVATION



SECTION A-A



SECTION D-D

For Notes see Sh. 8/18.

Work this sheet with shs. 5,6,7&8/18

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4/18

ABUTMENT NO. 1 - 1

BRIDGE NO. GRE.- 675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/72	

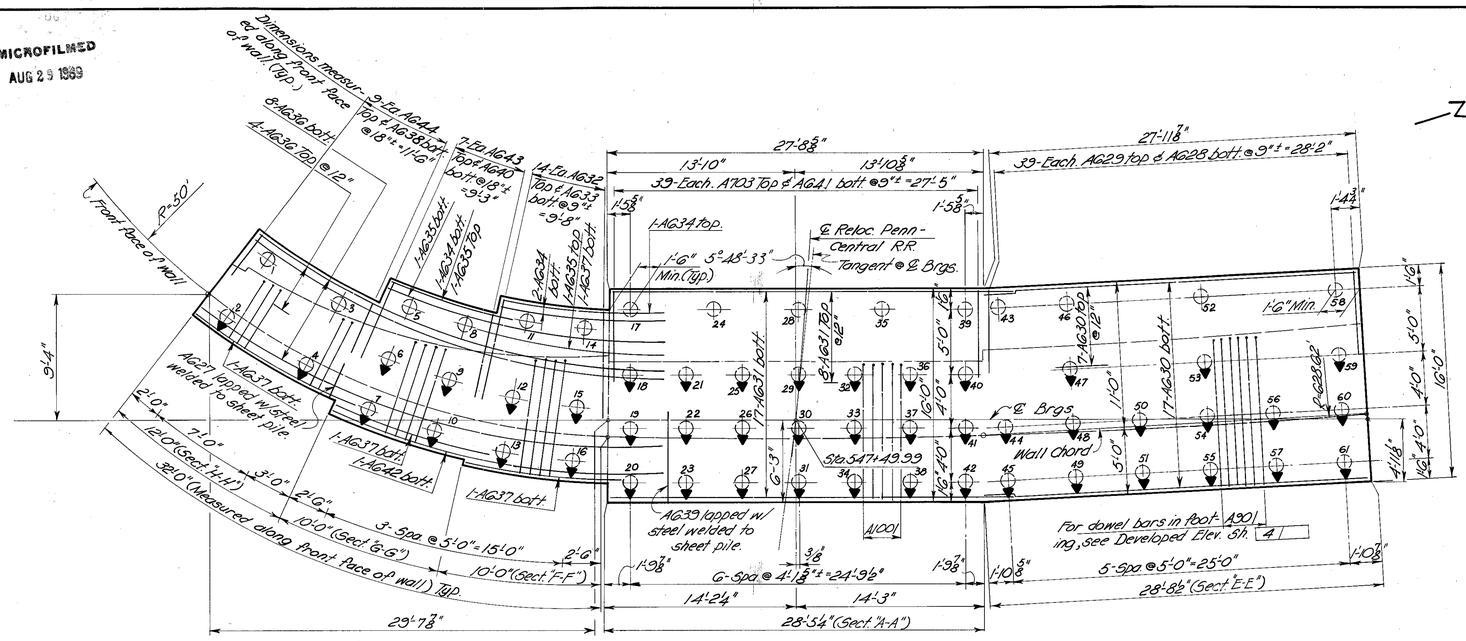
MICROFILMED
AUG 29 1969

MICROFILMED
AUG 29 1969

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

457
616

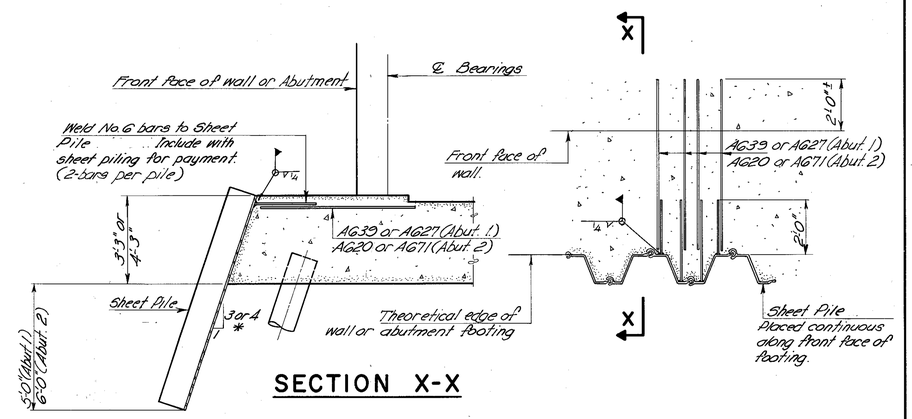
GRE-675 • 5 • 37
GREENE COUNTY



FOOTING PLAN

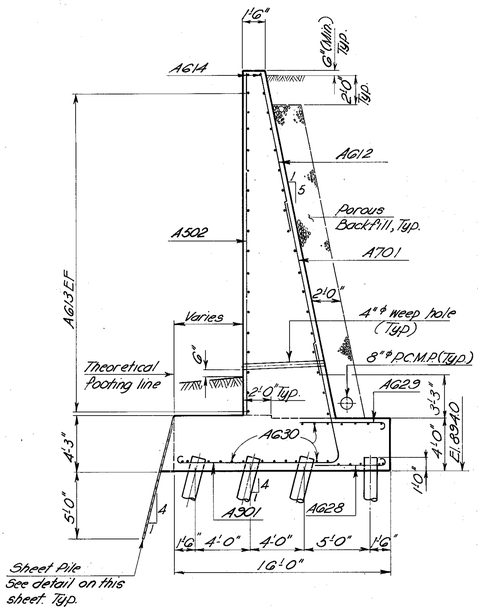
* Batter 1 on 4 (Abut. 1)
Batter 1 on 3 (Abut. 2)

Steel Sheet Piling left in place shall a minimum Section Modulus of 30.2 in^3 per foot of wall. Used piling in good condition may be used.

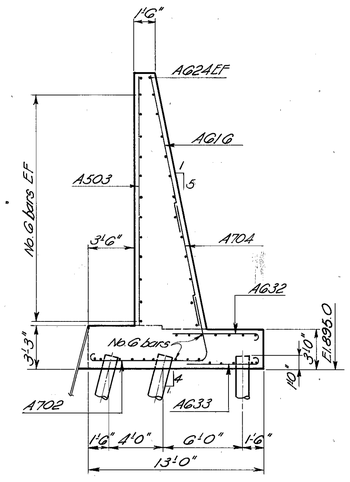


SECTION X-X

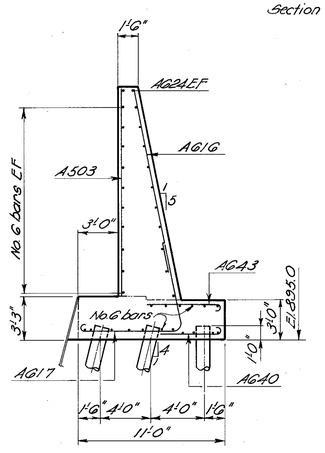
DETAIL - MZ-27



SECTION E-E

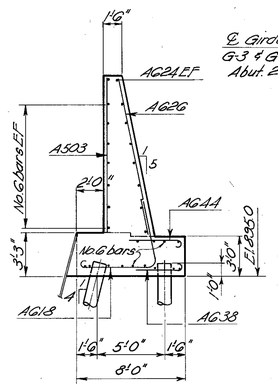


SECTION F-F

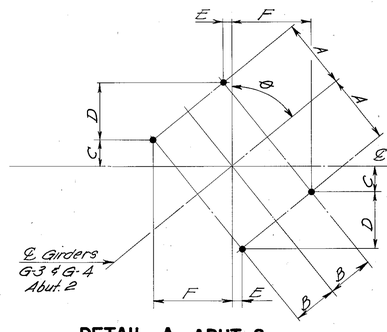


SECTION G-G

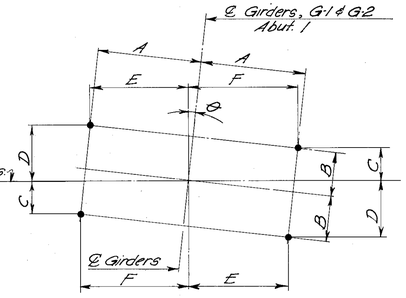
DETAILS not shown similar to Section "E-E"



SECTION H-H



DETAIL A - ABUT. 2



DETAIL B - ABUT. 1

ANCHOR BOLT PLANS

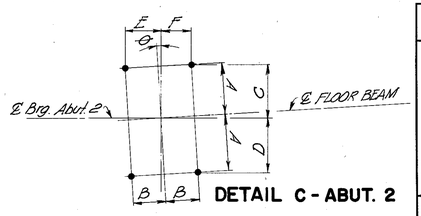
1¼" ϕ Anchor Bolts embeded 12"

BEARING GEOMETRY

		ϕ	Brg. TYPE	A	B	C	D	E	F
Detail "B"	Abut 1, G1 & G2	6°-12'-34"	"A"	1'-5½"	7'-5"	5 3/16"	9 3/8"	1'-4 9/16"	1'-6 7/16"
Detail "A"	Abut 2, G3 & G4	30°-38'-48"	"A"	1'-5½"	7'-5"	8 3/8"	9 5/8"	1'-4 3/8"	1'-6 3/8"
Detail "C"	Abut 2 @ Fl. Beam	3°-05'-05"	"F"	11 1/2"	7'-5"	11 3/8"	11 13/16"	8 7/8"	6 7/8"

For Notes see Sh 8 / 18.

Work this sheet with Shs. 4 & 7 & 18.



DETAIL C - ABUT. 2

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

5 / 18

ABUTMENT NO. 1 - 2

BRIDGE NO. GRE.- 675 - 0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542 + 86.23 TO STA: 547 + 53.01

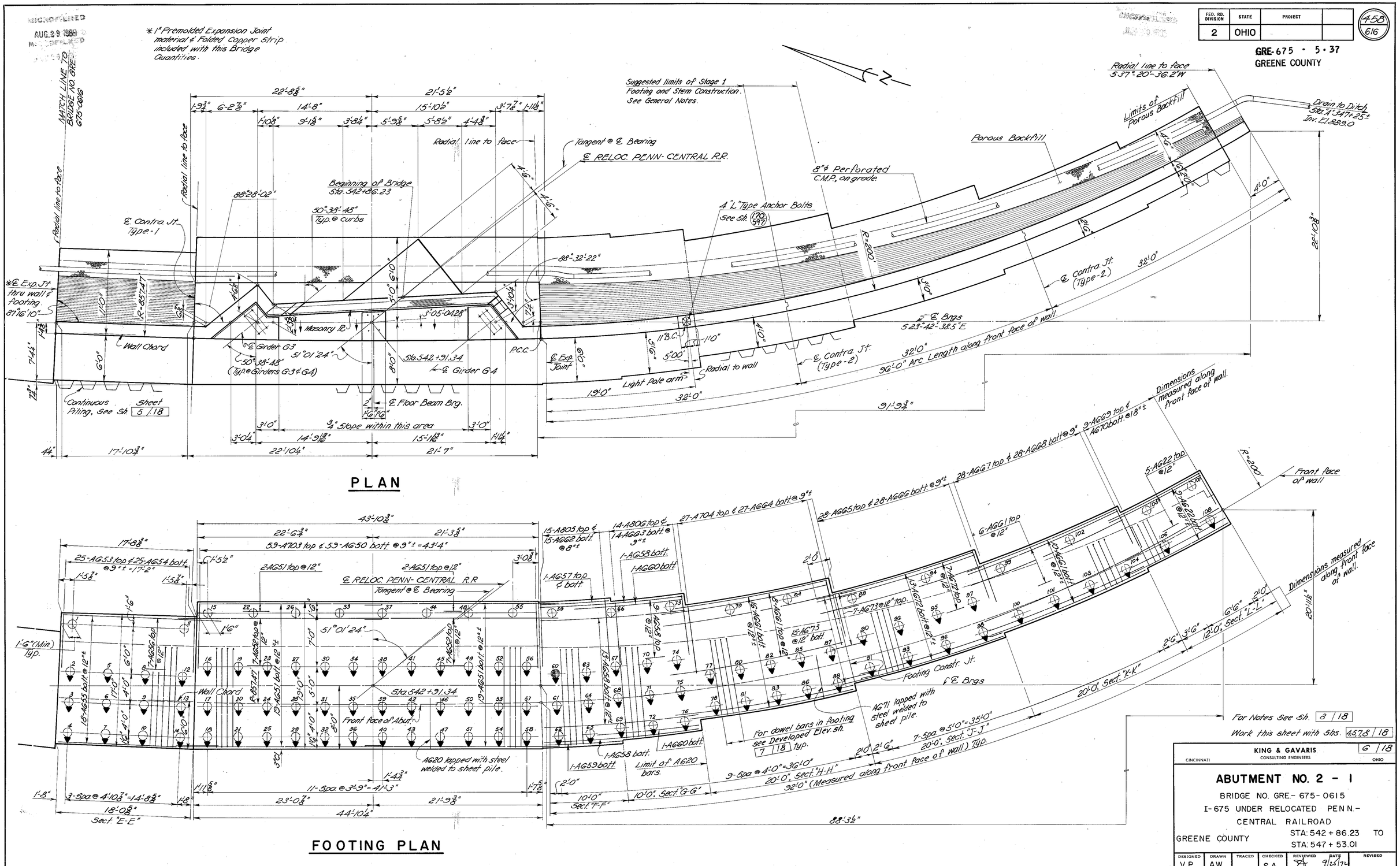
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

MICROFILMED
AUG 29 1989
MICROFILMED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

458
616

GRE-675 - 5-37
GREENE COUNTY



PLAN

FOOTING PLAN

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

ABUTMENT NO. 2 - 1

BRIDGE NO. GRE.- 675-0615
I-675 UNDER RELOCATED PENN.-CENTRAL RAILROAD
GREENE COUNTY
STA: 542 + 86.23 TO STA: 547 + 53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	[illegible]	9/25/72	

FILMED
MICROFILMED
AUG 23 1972

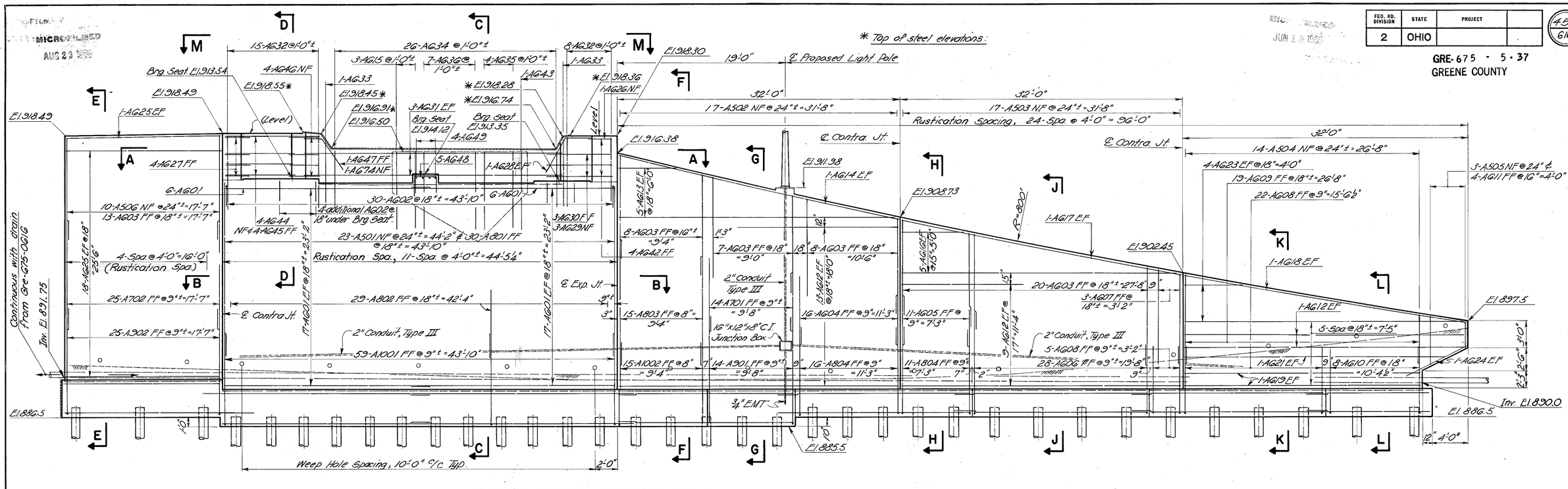
RECEIVED
JUN 19 1972

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

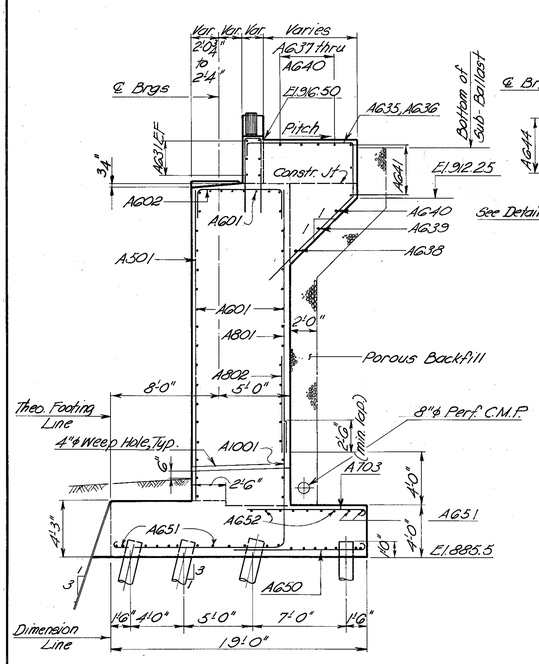
459
616

GRE-675 · 5 · 37
GREENE COUNTY

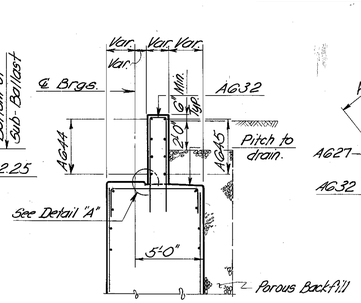
* Top of steel elevations.



DEVELOPED ELEVATION



SECTION C-C



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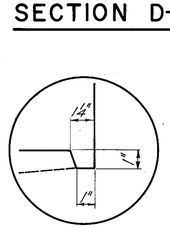
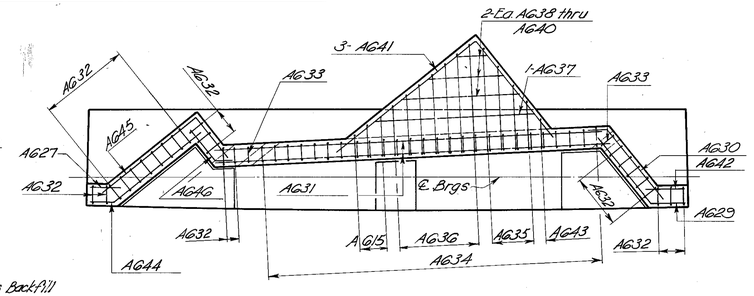
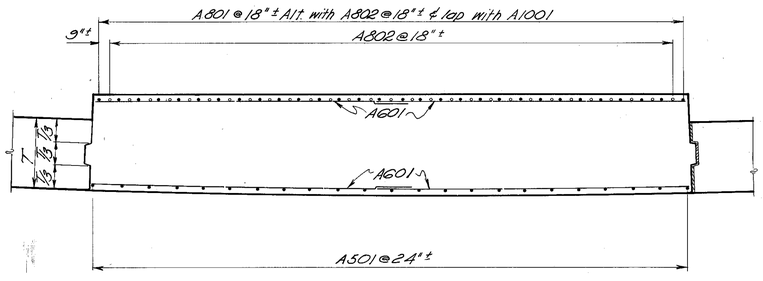


DETAIL "A"

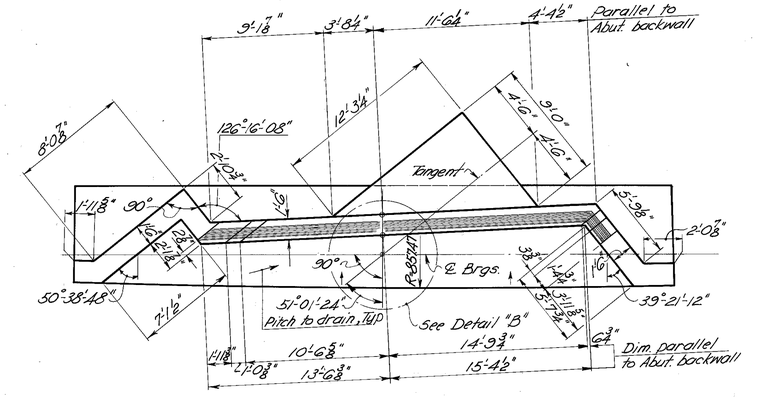


SECTION A-A

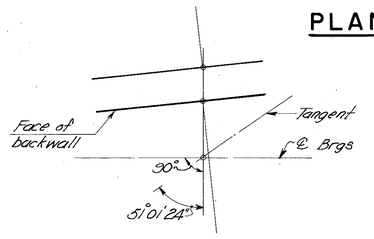
Work this Sect. with Abutment Backwall Plan.



SECTION B-B



PLAN M-M



DETAIL "B"

For Notes, See Sh. 8 | 18

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

7 | 18

ABUTMENT NO. 2 - 2

BRIDGE NO. GRE.- 675- 0615
I-675 UNDER RELOCATED PENN.-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	SA	9/25/72	

MICROFILMED
AUG 29 1990

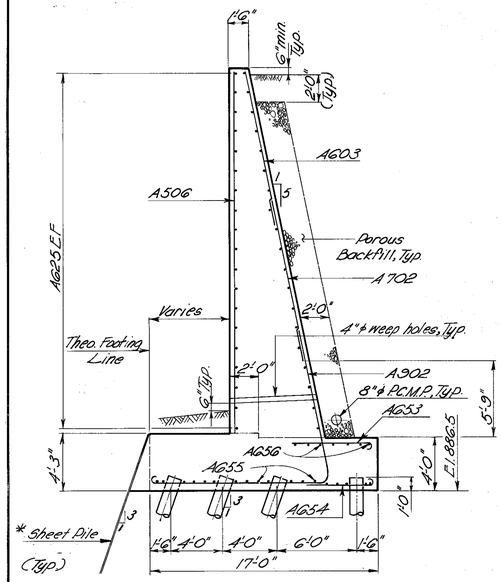
MICROFILMED
JUN 16 1995

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

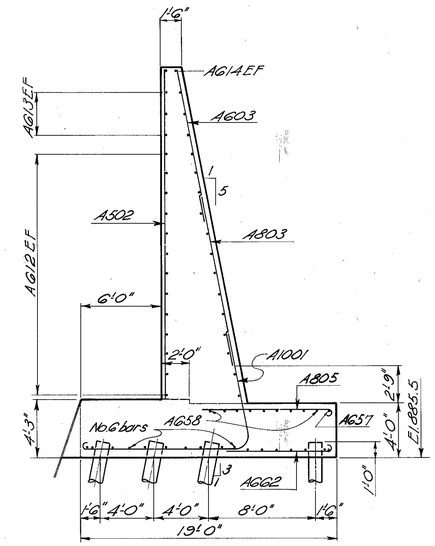
460/616

GRE-675 · 5·37
GREENE COUNTY

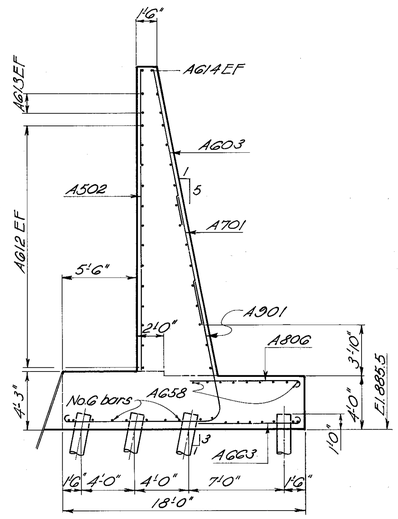
NOTE: Details not shown similar to Section "E-E"



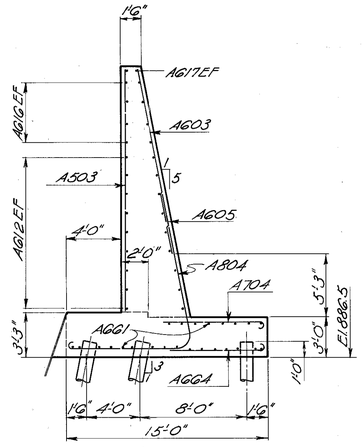
SECTION E-E



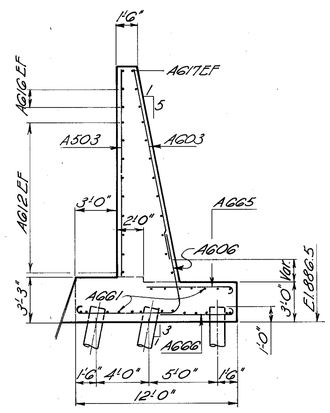
SECTION F-F



SECTION G-G

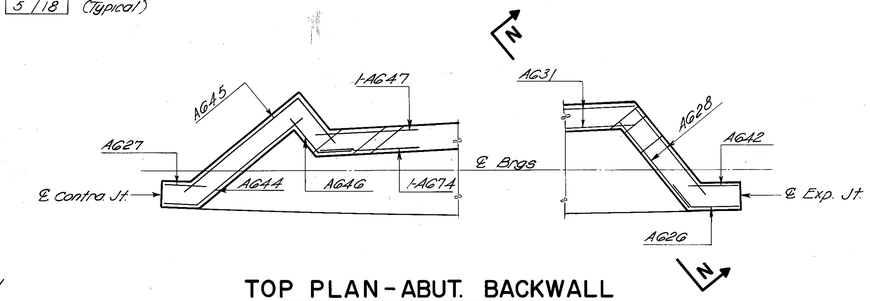


SECTION H-H

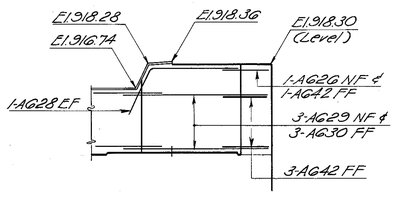


SECTION J-J

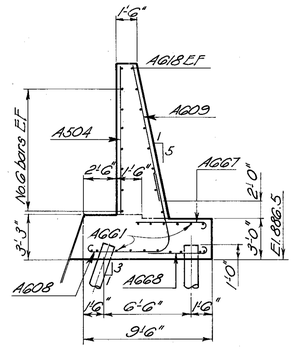
* Sheet Pile . . . . Placed continuous along front face of footing. See detail on Sh. 5/18 (Typical)



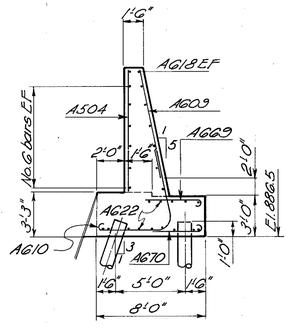
TOP PLAN - ABUT. BACKWALL



ELEVATION N-N



SECTION K-K



SECTION L-L

NOTES:

For Reinforcing Steel List See Sh. 16,17/18
Reinforcing Steel in Abutments 1 & 2 shall have the Suffix 'A' & 'B' respectively.
Only that portion of the C.M.P. located in the Porous Backfill shall be perforated.
For details of the backwall Masonry Plate, included with structural steel for payment, See Sh. 14/18

For termination of C.M.P. at slopes see sh. C1/C2
Porous Backfill 2 feet thick shall extend up to the plane of the sub-ballast in the abutment proper and laterally to the heights and limits shown.
Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.
Sheet Copper Water Seals to be provided in all construction Joints at top of footing and of bearing seat level.
Work this sheet with shs. 4,5,6,7/18

For details of Expansion Joints, Contraction Joints, Type I & Type 2, Vertical Rustication Groove and Copper Sheet, See Sh. C2/C2

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CONSULTING ENGINEERS
CINCINNATI OHIO

8/18

ABUTMENT NO. 2 DETAILS - 3

BRIDGE NO. GRE.- 675- 0615
I-675 UNDER RELOCATED PENN.-CENTRAL RAILROAD
GREENE COUNTY
STA: 542 + 86.23 TO STA: 547 + 53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

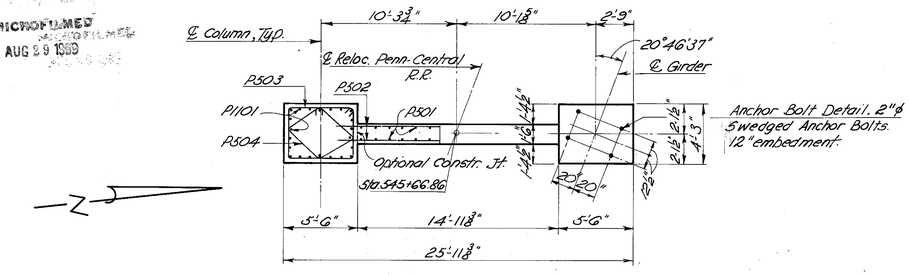
MICROFILMED
AUG 2 9 1989

MICROFILMED
JUN 2 9 1989

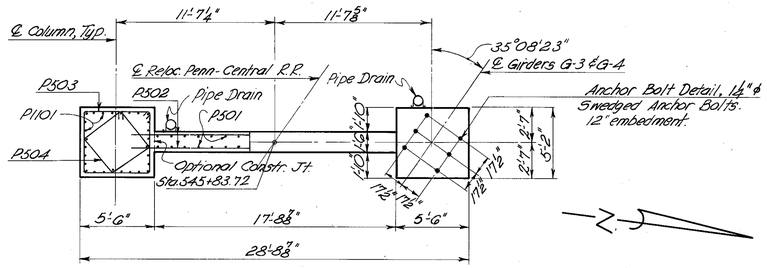
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

461/616

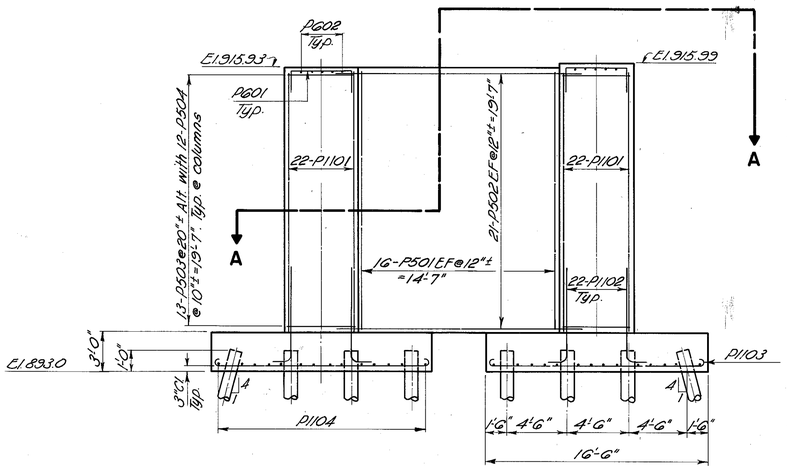
GRE-675 · 5·37
GREENE COUNTY



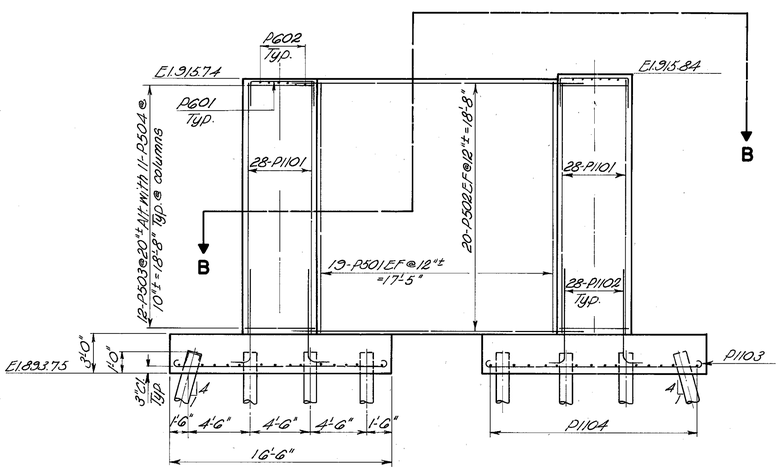
SECTION A-A



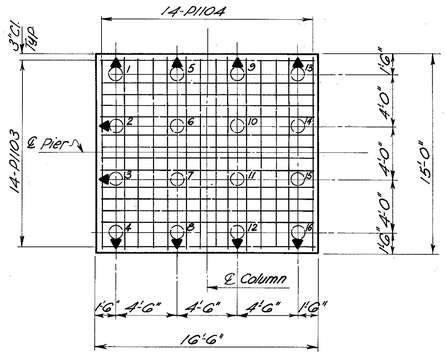
SECTION B-B



ELEVATION
PIER 1

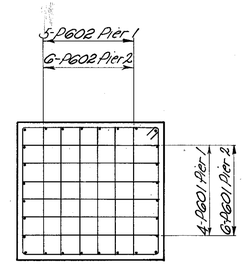


ELEVATION
PIER 2

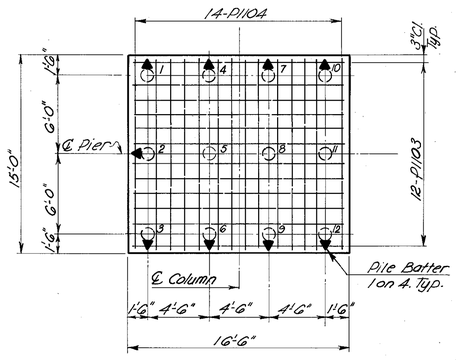


2 required

FOOTING PLAN



PLAN-TOP OF PIER COLUMNS, TYP.



2 required

FOOTING PLAN

NOTES:

For drainage attachments, to Pier No. 2, see Sh. 10 | 18.
All reinforcing steel in piers No. 1 thru 4 shall have the suffixes "A" thru "D" respectively.
For reinforcing steel list see Sh. 18 | 18.
Bridge seat reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.
Sheet Copper Water Seals to be provided in all construction joints at top of footings.
For Reference Chord Layout and Pier Skew angles, see Sh. 2 | 18.

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CONSULTING ENGINEERS
CINCINNATI OHIO

9 | 18

PIERS 1 AND 2

BRIDGE NO. GRE.- 675 - 0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542 + 86.23 TO STA: 547 + 53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/72	

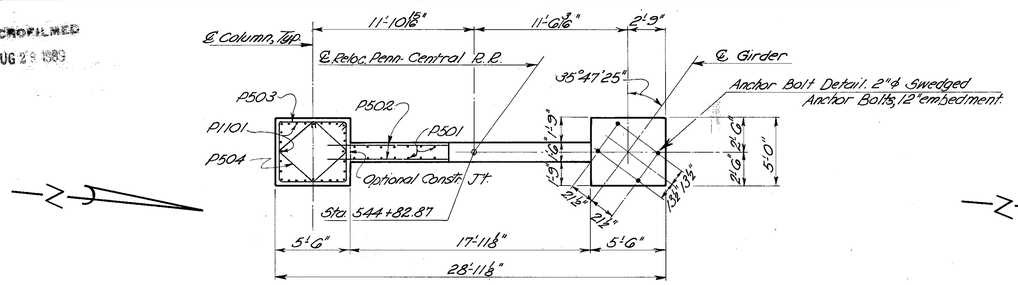
MICROFILMED
AUG 2 9 1989

MICROFILMED
JUL 19 [illegible]

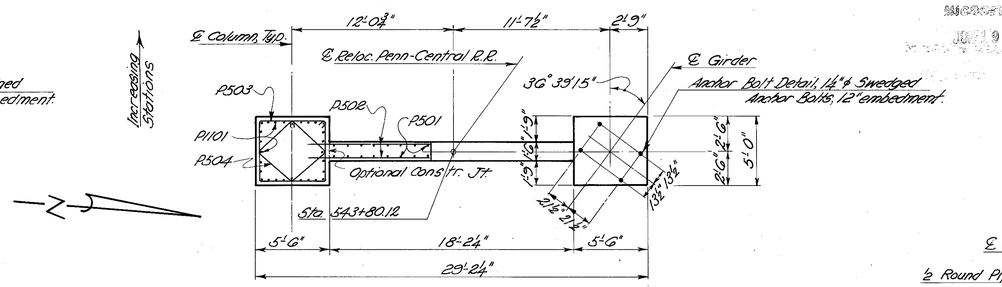
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

462/616

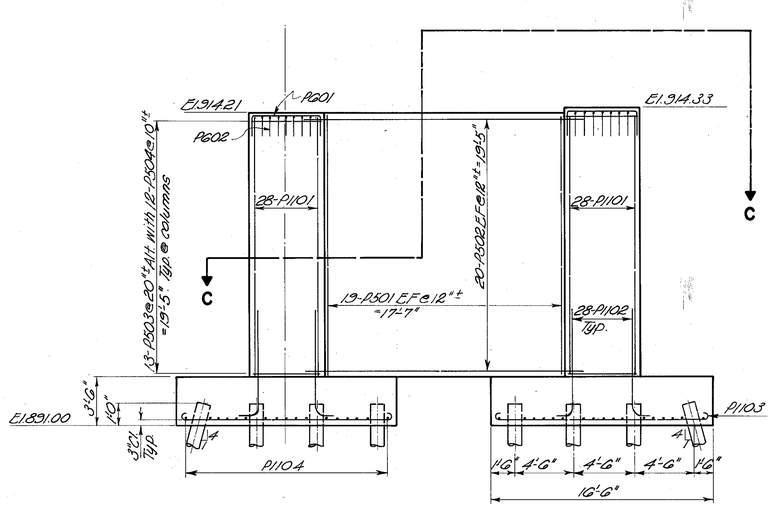
GRE-675 · 5·37
GREENE COUNTY



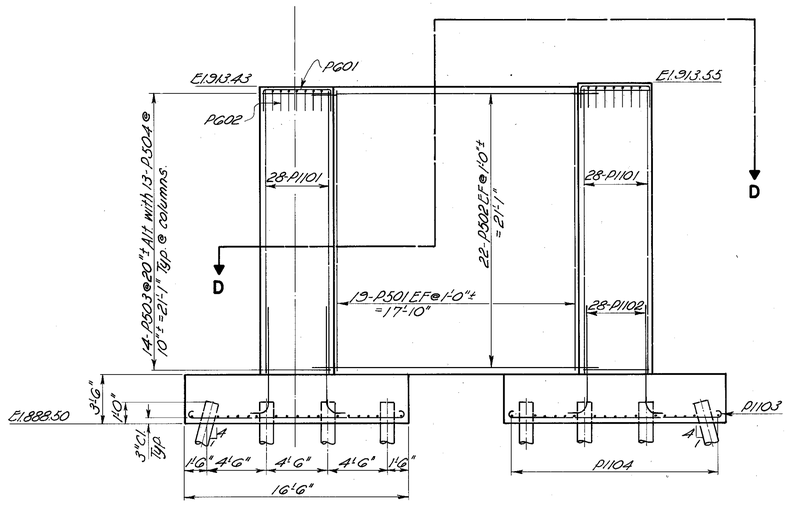
SECTION C-C



SECTION D-D



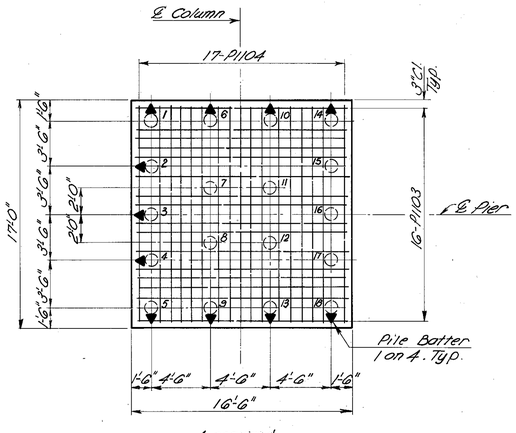
PIER 3



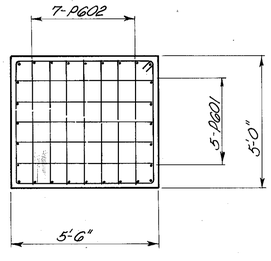
PIER 4

See Sheet #52A for additional details.

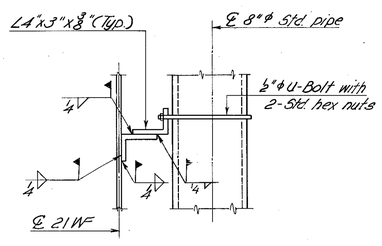
ELEVATIONS



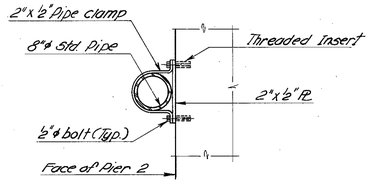
TYPICAL FOOTING PLAN



PLAN - TOP OF PIER COLUMNS, TYP.

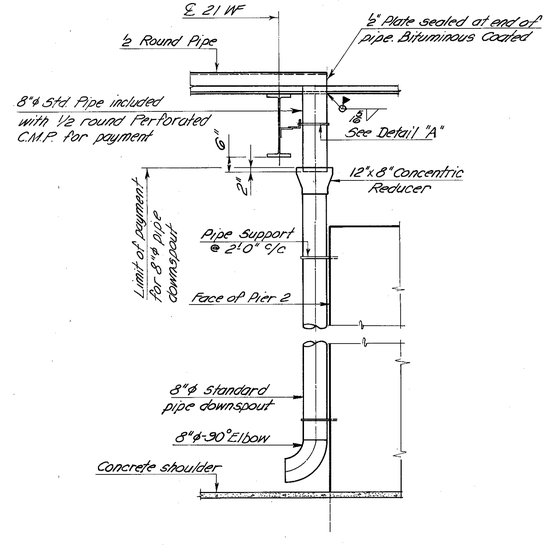


DETAIL "A"



TYPICAL PIPE SUPPORT

DRAINAGE DETAILS
AT PIER 2



ELEVATION

NOTES: For typical notes see sh. 3 | 18
For Reference Chord Layout and Pier Skew Angles, See Sh. 2 | 18

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
10 | 18

PIERS 3 AND 4

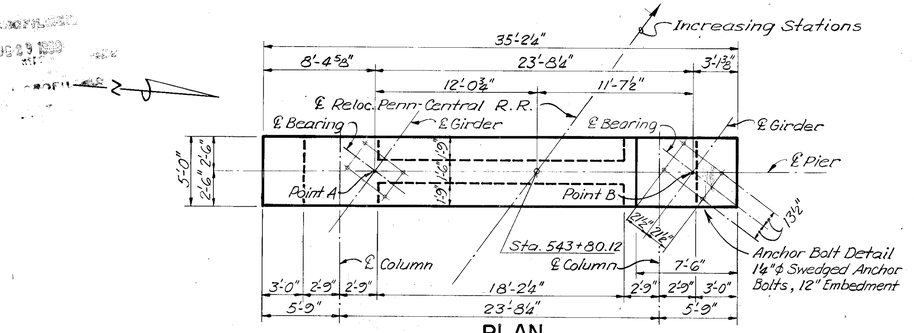
BRIDGE NO. GRE.-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	SA	9/25/72	

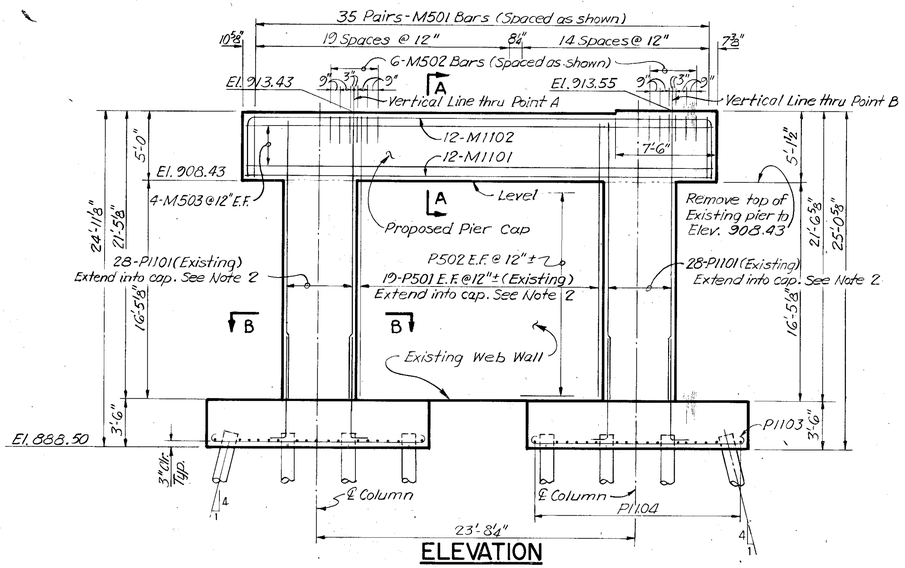
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

462A
616

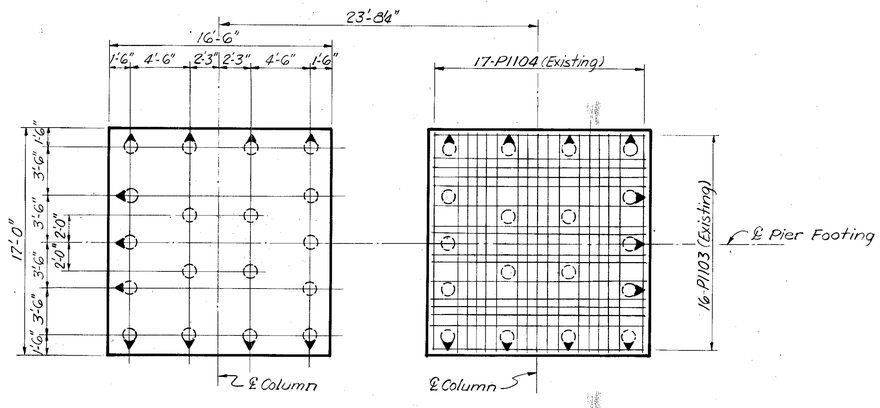
GRE-675-5.37
GREENE COUNTY



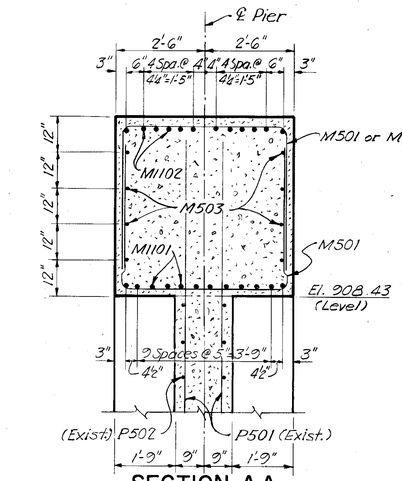
PLAN



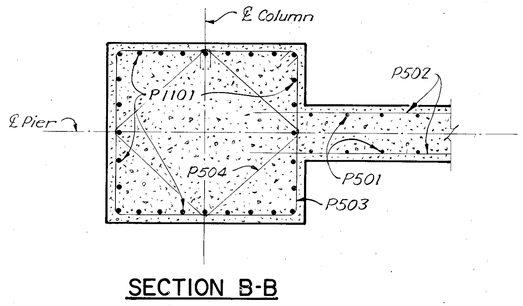
ELEVATION



FOOTING PLAN



SECTION A-A



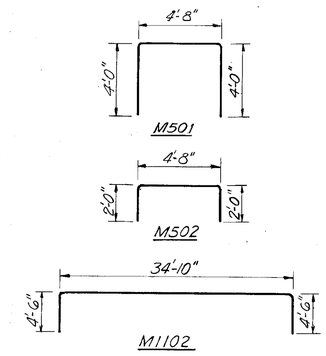
SECTION B-B

REINFORCING STEEL LIST

MARK	NO REQ'D.	LENGTH	WEIGHT	TYPE
M501	70	12'-5"	907	Bent
M502	12	8'-5"	105	Bent
M503	8	34'-10"	291	Str.
M1101	12	34'-10"	2221	Str.
M1102	12	43'-2"	2752	Bent

NOTES:
1. All dimensions are out to out of bar.

BENDING DIAGRAM



NOTES

1. For original details of Pier 4, see Sh. 10/18.
2. Top of existing pier columns and web wall shall be removed to Elev. 908.43. Special care shall be taken not to damage existing vertical steel in columns and web wall. The existing vertical steel shall extend into the proposed pier cap.

LOCKWOOD, JONES & BEALS
CONSULTING ENGINEERS
DAYTON, OHIO

10A/18

PIER 4 (Modified)

BRIDGE NO. GRE-675-0615
1-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY STA. 542 + 86.23 TO STA. 547 + 53.01

DESIGNED	CHECKED	DRAWN	CHECKED	REVIEWED DATE	REVISED
HDJ	EPA	JCH	HDJ	EPA 7/83	

BRUNING 4 131 47052

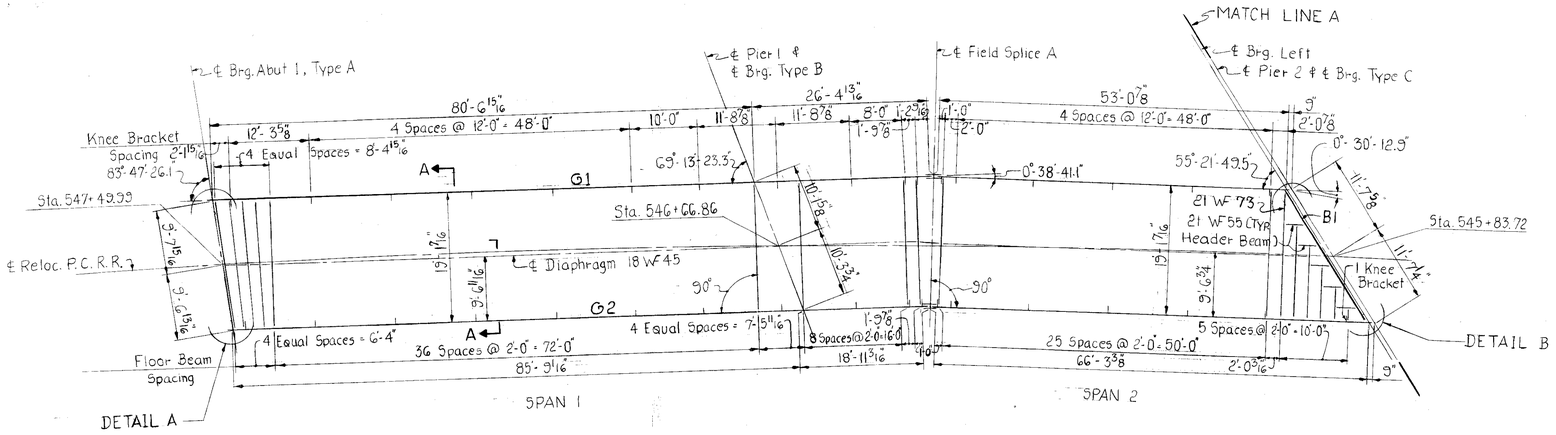
MICROFILMED
AUG 29 1989

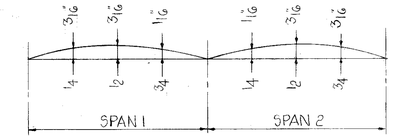
MICROFILMED
JUN 19 1995

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

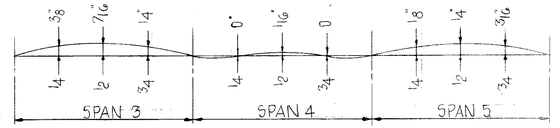
463
616

GRE-675 - 5-37
GREENE COUNTY

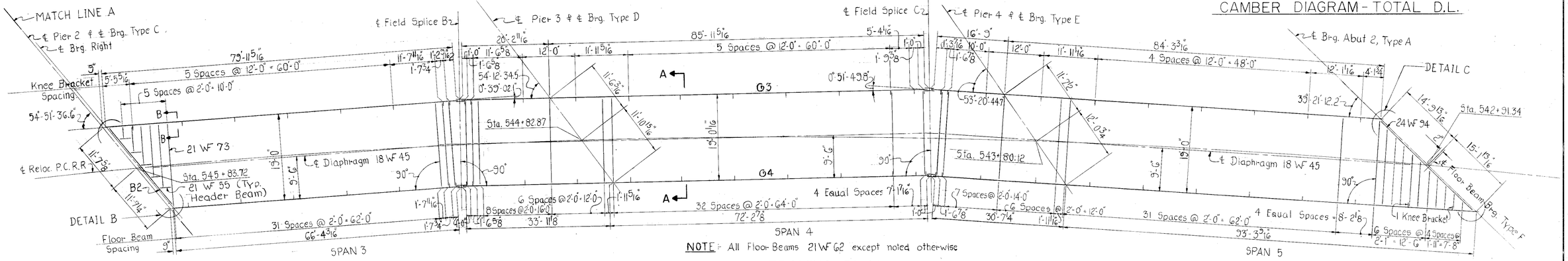




GIRDERS G1 and G2



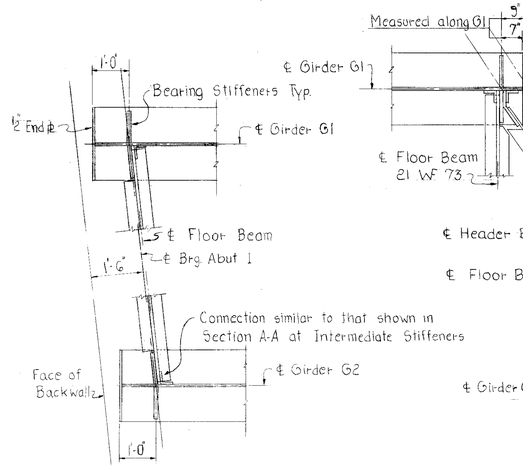
GIRDERS G3 and G4



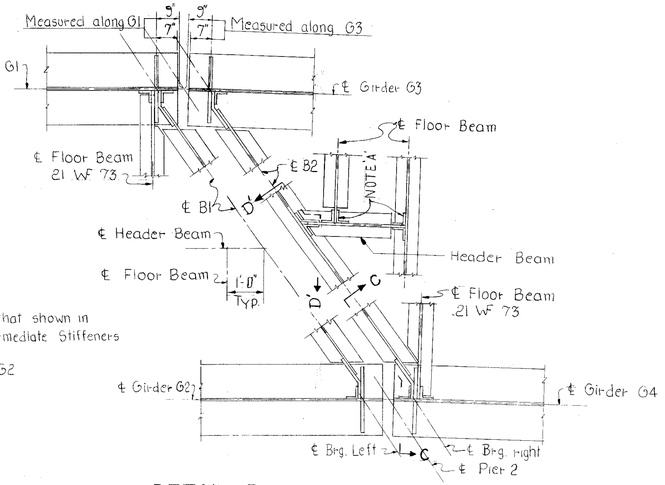
CAMBER DIAGRAM - TOTAL D.L.

NOTE - All Floor Beams 21WF62 except noted otherwise

FRAMING PLAN

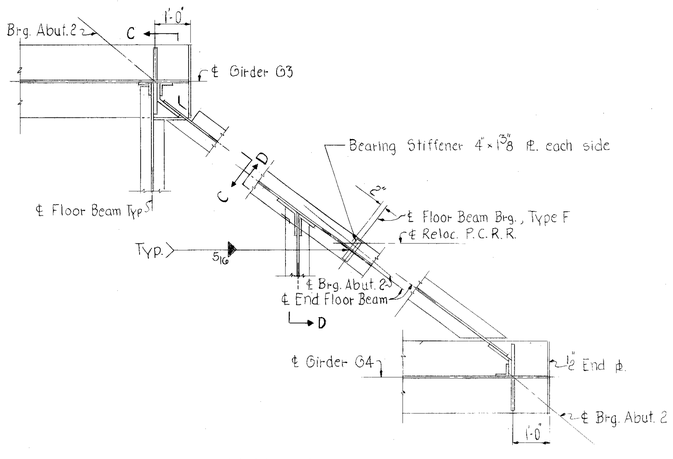


DETAIL A



DETAIL B

NOTE 'A': These connections similar to Typical Intermediate Floor Beam Connection (Section B-B)



DETAIL C

NOTES: Girder dimensions are given from ℄ Brg. to ℄ Brg. or ℄ Splice.
Floor beam spacing is given from ℄ Floor beam web to ℄ Floor beam web.
Knee bracket spacing is given from ℄ Floor beam web to ℄ Floor beam web to which they are attached.
All dimensions are given in horizontal plane.
For Sections A-A, B-B, C-C, D-D and D'-D' see sh. 12 / 18
For Bearings Type A, B, C, D, E and F see Sh. 15 / 18
Work with Sheets 12, 13, 14, 15 / 18

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO

11 / 18

FRAMING PLAN

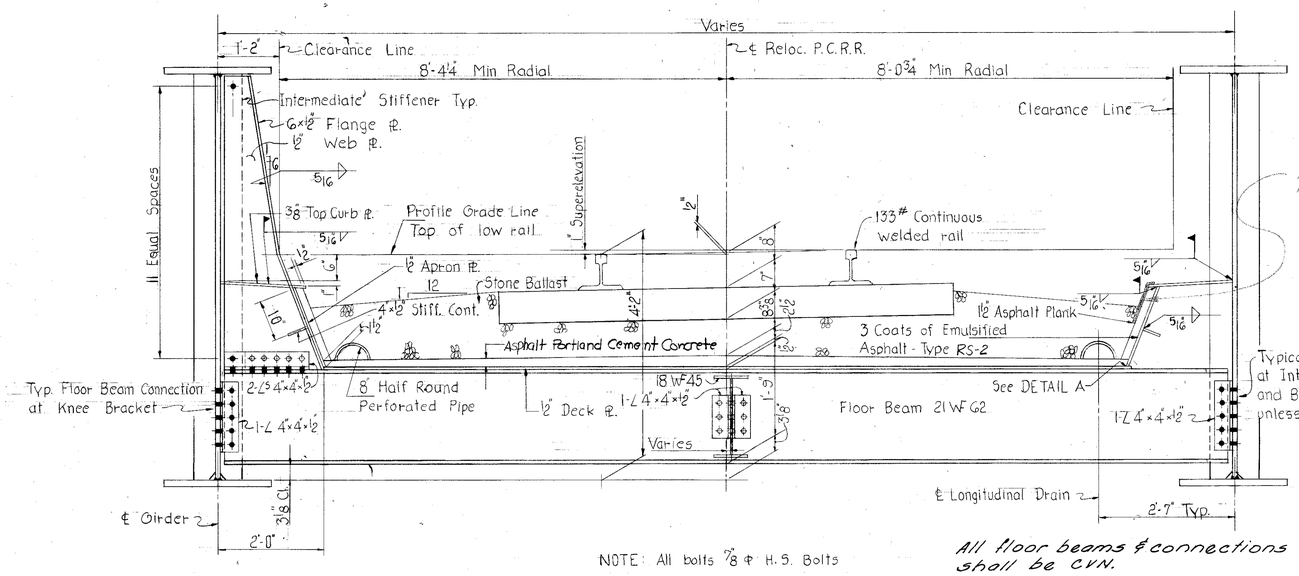
BRIDGE NO. GRE.- 675 - 0615
I-675 UNDER RELOCATED PENN. - CENTRAL RAILROAD
GREENE COUNTY
STA: 542 + 86.23 TO STA: 547 + 53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	J.R.G.		S.A.	84	9/25/92	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

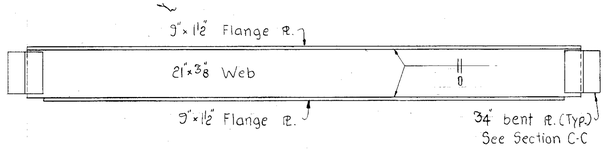
464
616

GRE-675 · 5-37
GREENE COUNTY

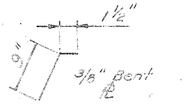


NOTE: All bolts ⅞ ϕ H.S. Bolts

SECTION A-A
TYPICAL SECTION

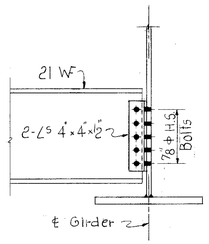


ELEVATION B1 & B2

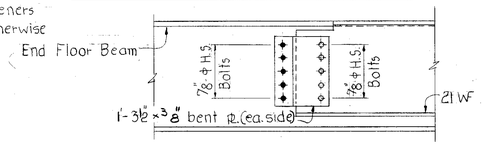


Add a bent ⅜" PL to retain Asphalt Plank (Full Length)

All floor beams & connections shall be CVN.

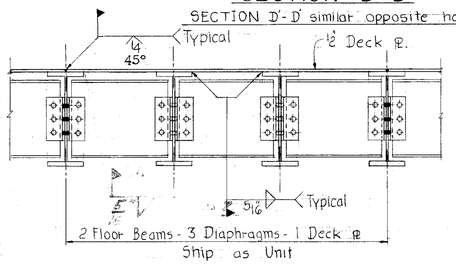


SECTION B-B
TYPICAL INTERMEDIATE FLOOR BEAM CONNECTION



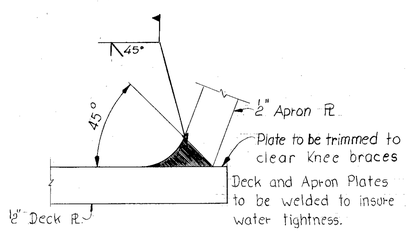
SECTION D-D

SECTION D'-D' similar opposite hand.



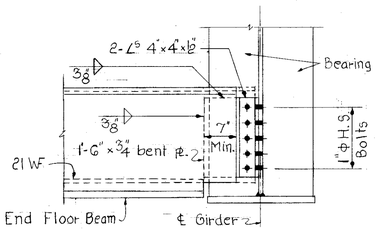
FLOOR BEAM UNITS DETAIL

Skewed End Panels and Special areas to be similarly assembled and welded.

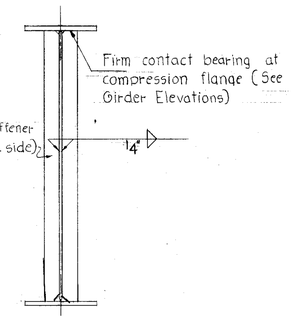


DETAIL A

Weld at junction of Deck and Apron Plates



SECTION C-C



Intermediate stiffeners may be normal to flanges and at 90° to web unless required otherwise for Floor Beam connections.

INTERMEDIATE STIFFENER TYP.

LOAD TABLE

LOADING	MOMENTS; kip-inches								SHEARS; kips										REACTIONS; kips						
	GIRDERS G1-G2			GIRDERS G3-G4					GIRDERS G1-G2				GIRDERS G3-G4						GIRDERS G1-G2			GIRDERS G3-G4			
	Span 1	Pier 1	Span 2	Span 3	Pier 3	Span 4	Pier 4	Span 5	Abut. 1	Pier 1 Left	Pier 1 Right	Pier 2	Pier 2	Pier 3 Left	Pier 3 Right	Pier 4 Left	Pier 4 Right	Abut. 2	Abut. 1	Pier 1	Pier 2	Pier 2	Pier 3	Pier 4	Abut. 2
DEAD LOAD	+14,095	-30,486	+14,095	+29,660	-38,840	+8,560	-29,880	+18,720	79	141	141	79	109	172	148	133	149	93	79	282	79	109	320	282	93
LIVE LOAD	+41,647	-57,125	+41,647	+60,217	-74,329	+39,956	-68,330	+52,554	227	312	312	227	263	356	331	327	331	252	227	498	227	263	562	529	252
IMPACT + CENT. FORCE	+13,293	-18,234	+13,293	+17,639	-21,773	+11,704	-20,016	+15,335	72	100	100	72	77	104	97	96	97	74	72	159	72	77	165	155	74

NOTES: Deck, Apron and Curb Plates to be ASTM A-588, Included with Item 810 for payment.
Longitudinal Deck Drain Pipes to be Bituminous coated, corrugated metal pipes.
Work with Sheets 11, 13, 14, 15/18

A. R. V. S. 6-1-82

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
12/18

SUPERSTRUCTURE DETAILS-1

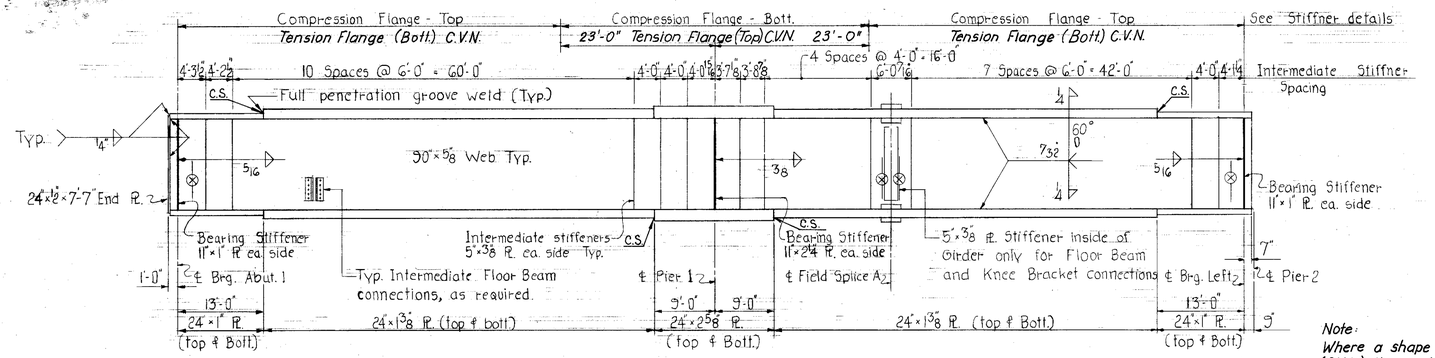
BRIDGE NO. GRE.-675-0615
I-675 UNDER RELOCATED PENN.-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G	J.R.G.		S.A.	SA	9/25/72	4/27/82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

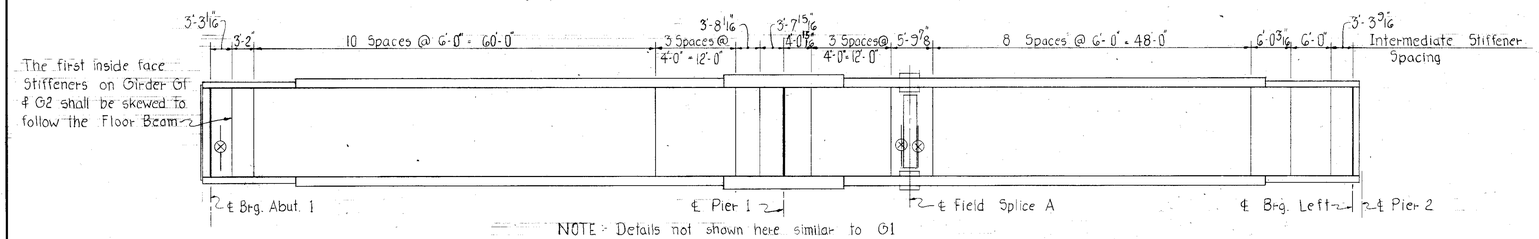
465
616

GRE-675 - 5 - 37
GREENE COUNTY



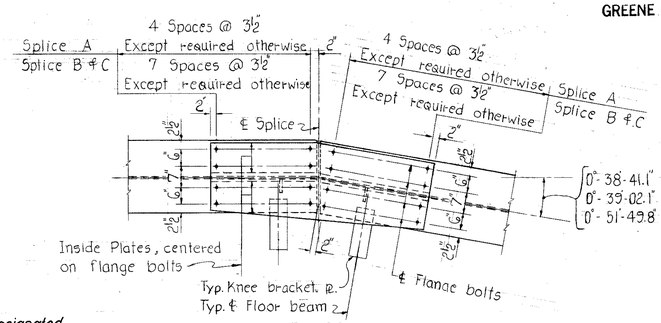
GIRDER ELEVATION G1

Note:
Where a shape or plate is designated (C.V.N.) the material shall meet specified minimum notch toughness requirements.

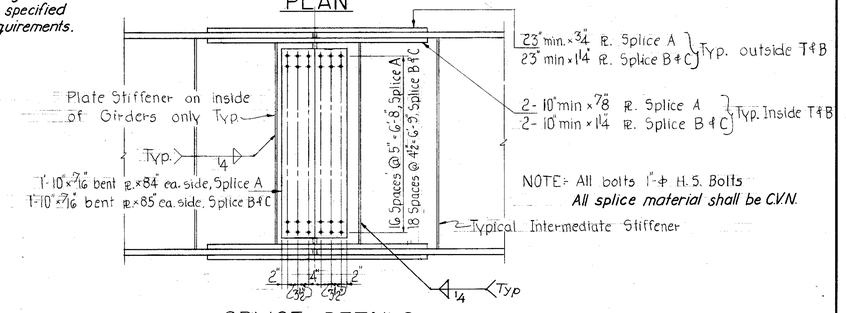


NOTE: Details not shown here similar to G1

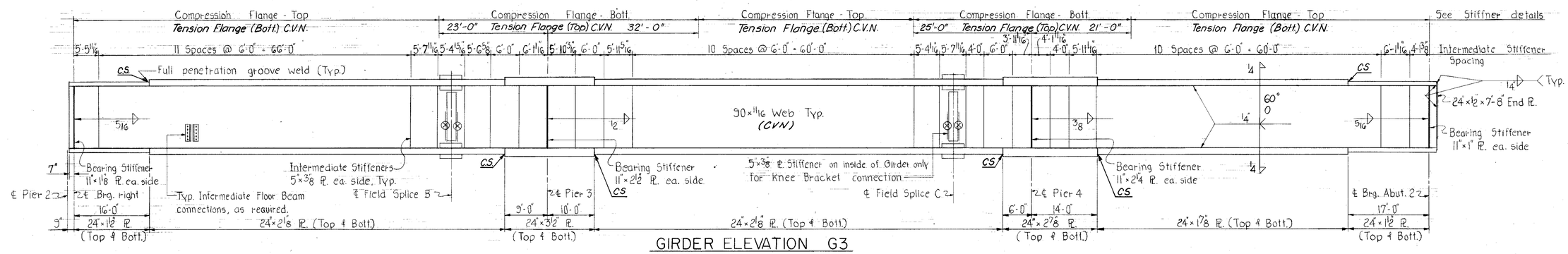
GIRDER ELEVATION G2



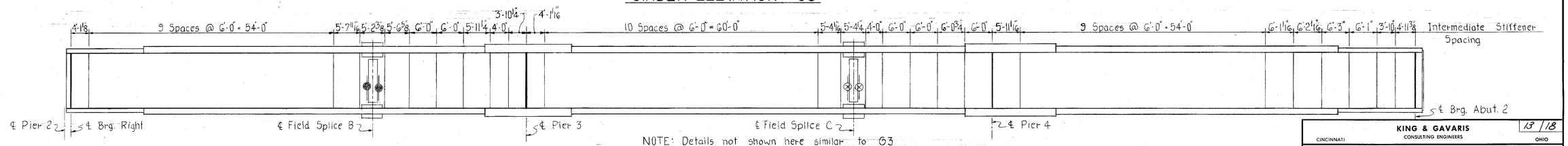
PLAN



SPLICE DETAILS



GIRDER ELEVATION G3



NOTE: Details not shown here similar to G3

GIRDER ELEVATION G4

NOTES: All Bearing Stiffeners shall be milled to bear at *the bottom flanges & tight fit at the top flanges.*
Work with Sheets 11, 12, 14, 15/18
Bearing Stiffeners and Ends of Girders to be vertical.

Note:
Material shall be fabricated in accordance with the Fracture Control Plan. (See Proposal Note).

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

13/18

SUPERSTRUCTURE DETAILS-2

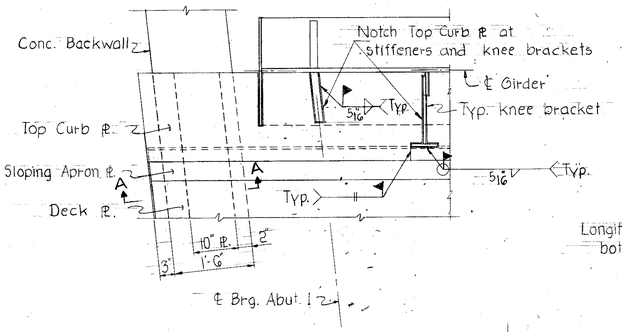
BRIDGE NO. GRE-675-0615
I-675 UNDER RELOCATED PEN N.-CENTRAL RAILROAD
GREENE COUNTY STA: 542+86.23 TO STA: 547+53.01

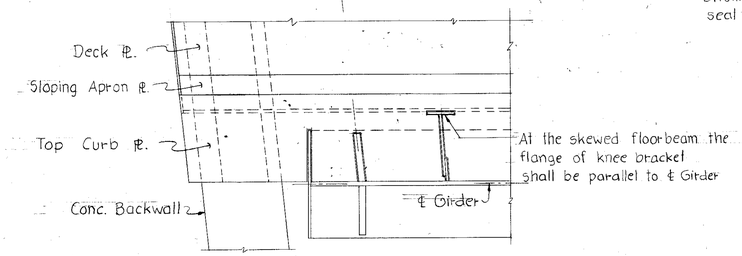
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	J.R.G.		S.A.	SA	9/25/72	4/27/82

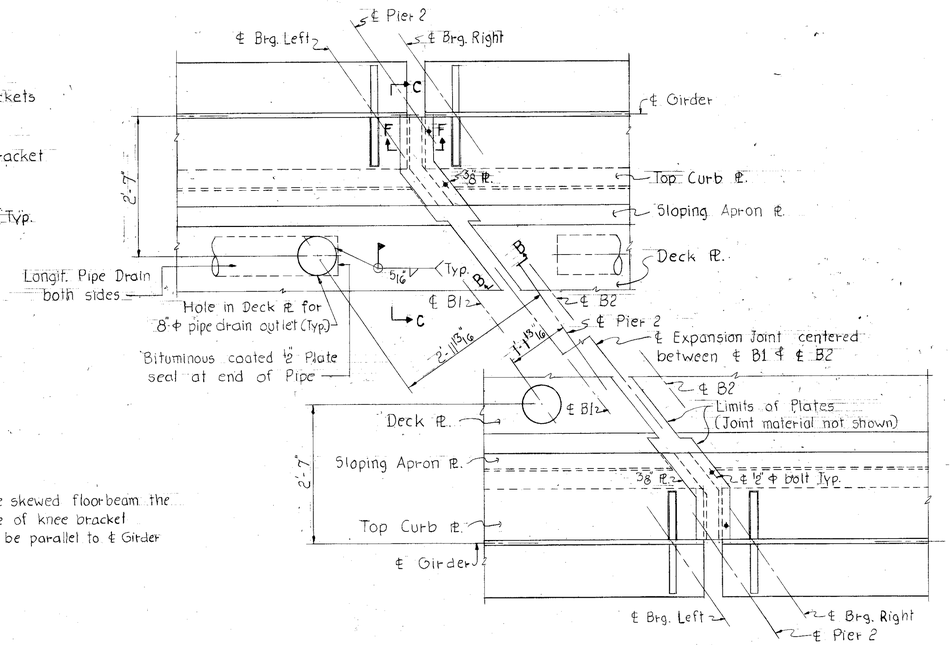
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

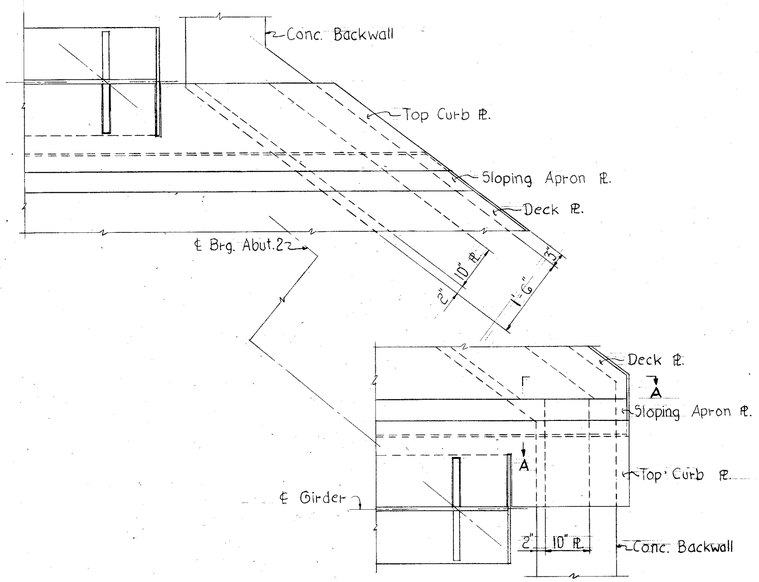
466
616

GRE-675 • 5.37
GREENE COUNTY



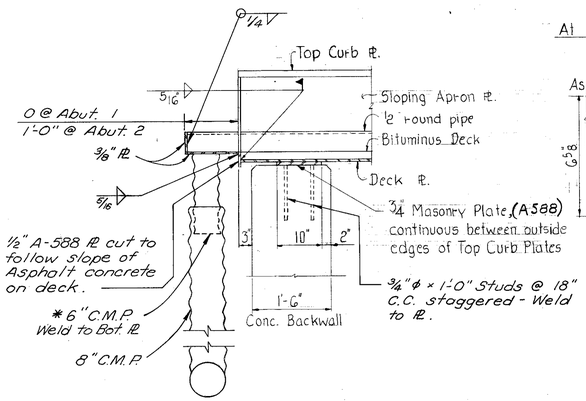




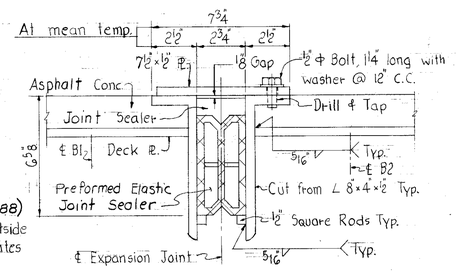


DETAILS OF DECK, APRON, CURB PLATES & EXPANSION JOINT

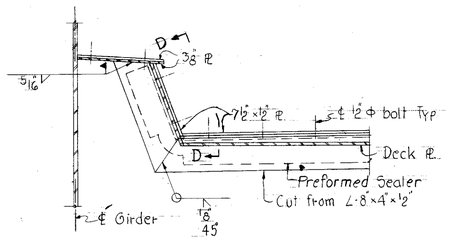
Deck, Apron, Curb plates and all Expansion Joint material to be ASTM A-588



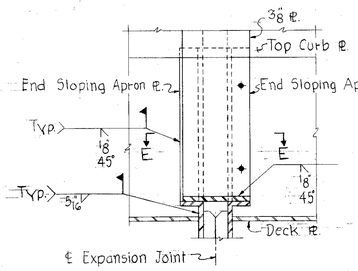
SECTION A-A



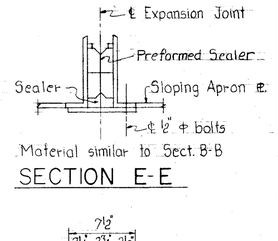
SECTION B-B
TYP. EXP. JOINT SECTION



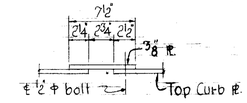
SECTION C-C



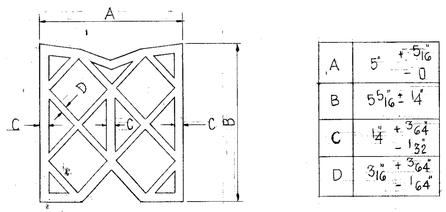
SECTION D-D



SECTION E-E



SECTION F-F



A	5" + 5/16" − 0
B	5 5/16" ± 1/4"
C	1 1/4" + 3/64" − 1/32"
D	3/16" + 3/64" − 1/64"

SCHEMATIC FOR PREFORMED JOINT SEALER

* Include with deck drain pipe for payment.

NOTES: Work with Sheets 11, 12, 13, 15/18
Abutment masonry plate and pier expansion joint material, except sealers, included with Item 810 for payment.

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO
14/18

SUPERSTRUCTURE DETAILS-3

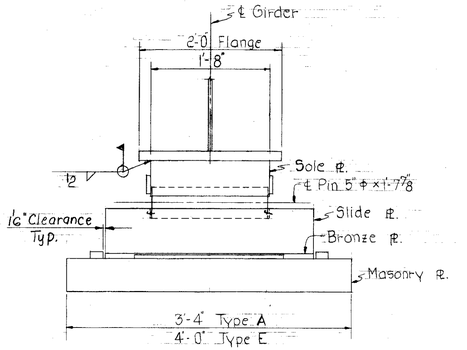
BRIDGE NO. GRE-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

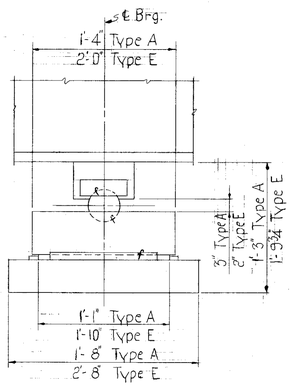
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	J.R.G.		S.A.	SA	9/25/72	4-16-82

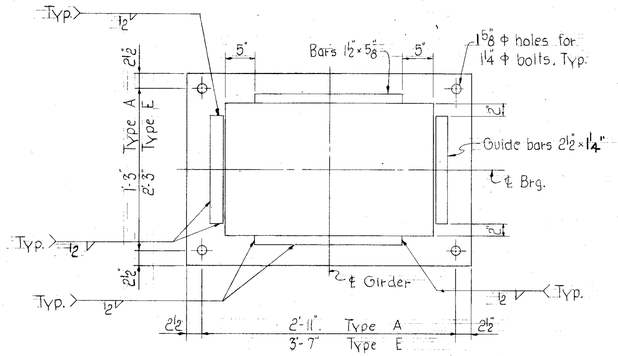
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

767/616

GRE-675 - 5 - 37
GREENE COUNTY

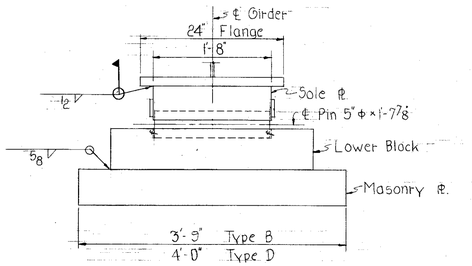


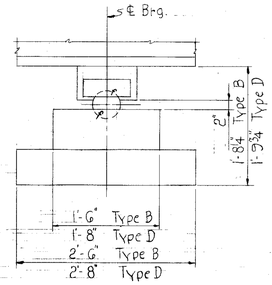


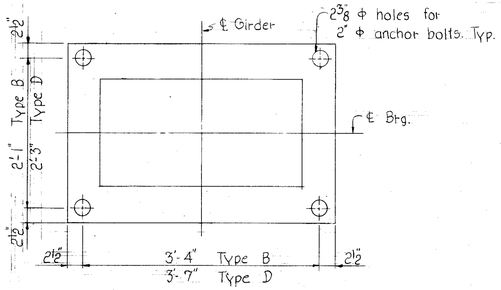


	Type A	Type E
Sole Pl.	8"x3½"x1'-8"	10"x6"x1'-8"
Slide Pl.	1'-4"x3½"x2'-6"	2'-0"x7½"x2'-11"
Bronze Pl.	1'-1"x¾"x2'-6"	1'-10"x¾"x2'-11"
Masonry Pl.	1'-8"x4¼"x3'-4"	2'-8"x5½"x4'-0"
Anchor Bolts	1¼" Φ x 1'-6"	1¼" Φ x 1'-7½"

TYPE A & TYPE E BEARING

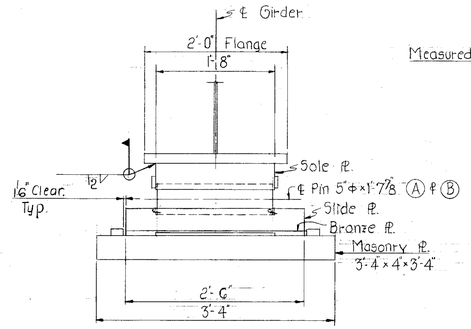


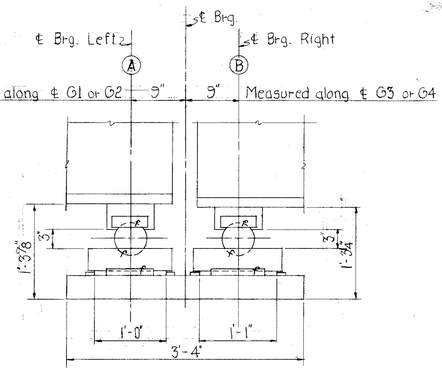


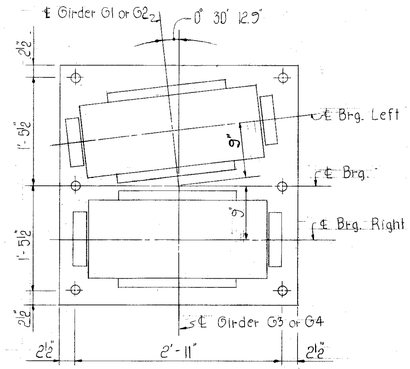


	Type B	Type D
Sole Pl.	10"x5½"x1'-8"	10"x6"x1'-8"
Lower Block	1'-6"x6¾"x2'-10"	1'-8"x7¾"x3'-0"
Masonry Pl.	2'-6"x6"x3'-5"	2'-8"x6"x4'-0"
Anchor Bolts	2" Φ x 1'-8½"	2" Φ x 1'-8½"

TYPE B & TYPE D BEARING



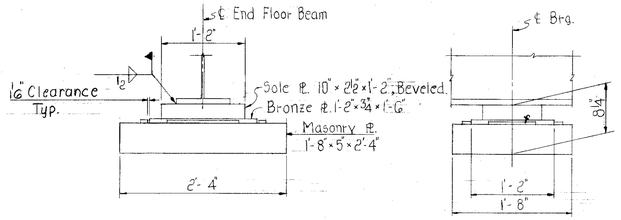


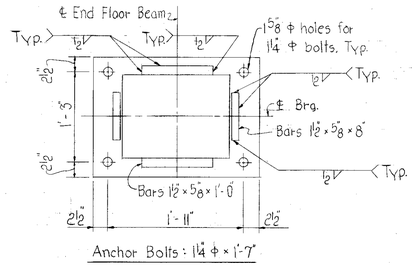


Details not shown here similar to Brg. Type A

	Brg. Left Ⓐ	Brg. Right Ⓑ
Sole Pl.	8"x4'-3⅜"x1'-8"	8"x3'-3¾"x1'-8"
Slide Pl.	1'-2"x3¾"x2'-6"	1'-3"x3¾"x2'-6"
Bronze Pl.	1'-0"x¾"x2'-6"	1'-1"x¾"x2'-6"
Anchor Bolts	1¼" Φ x 1'-6"	1¼" Φ x 1'-6"

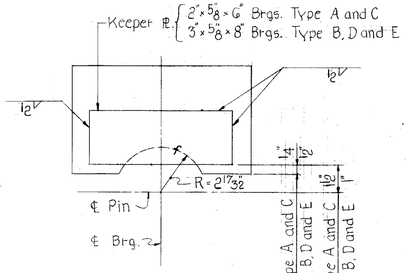
TYPE C BEARING



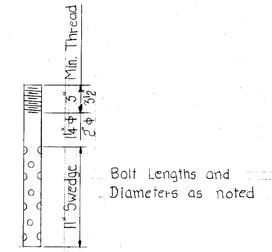


Anchor Bolts : 1¼" Φ x 1'-7"

TYPE F BEARING



SOLE PLATE DETAIL



Anchor Bolts to be furnished with Standard hex nuts and ¼ plate washers.

ANCHOR BOLT DETAILS

NOTES: End of Pins, contact surfaces on Guide Bars and Keeper Plates to be finished.
Masonry Plates to be set on three layers of Red-Lead and 20 ounce canvas.
Work with Sheets 11, 12, 13, 14, 18
All surfaces indicated to be finished shall be to A.S.A 125 Scale.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

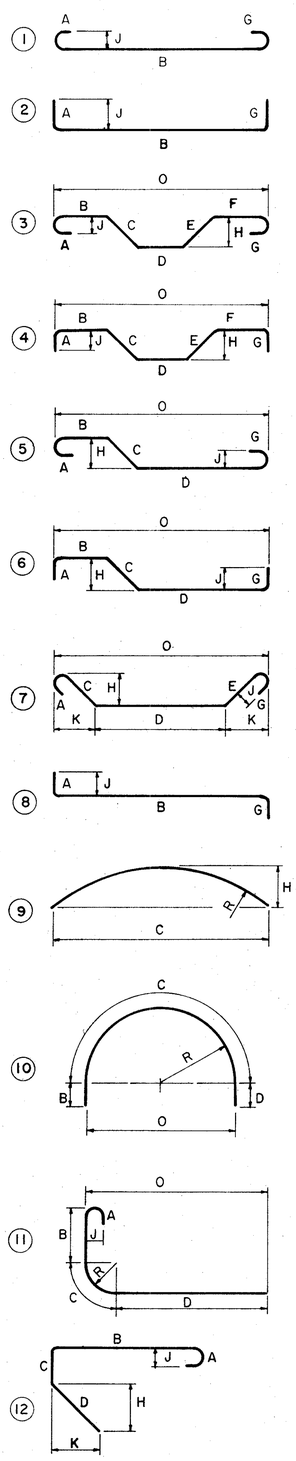
15/18

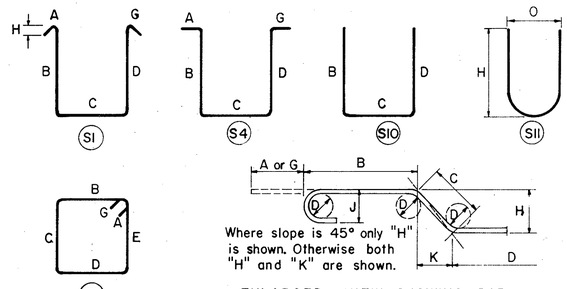
SUPERSTRUCTURE DETAILS - 4

BRIDGE NO. GRE.- 675- 0615
I-675 UNDER RELOCATED PENN.- CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

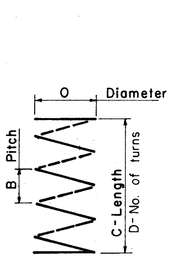
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
J.R.G.	J.R.G.		S.A.	9/26/72	

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		ABUTMENT No. 1			Reinforcing steel in Abutment No. 1 shall have the suffix "A"												
A501	15	18'-8"	292	Str.													
A502	15	Varies 23'-9" to 26'-6" by 2'8"; 1-@	393	Str.													
A503	16	Varies 8'-8" to 21'-10" by 1'0⅛"; 1-@	254	Str.													
A504	3	Varies 2'-9" to 6'-6" by 1'0⅛"; 1-@	14	Str.													
AG01	18	27'-8"	748	Str.													
AG02	14	28'-0"	589	Str.													
AG03	26	8'-8"	338	510		1'-11"	5'-2"	1'-11"									
AG04	10	Varies 11'-3" to 12'-3" by 1'3⅜"; 1-@	176	510		5'-1"	Varies 1'-5" to 2'-5" by 1'3⅜"; 1-@	5'-1"									
AG05	6	11'-0"	99	510		5'-1"	1'-2"	5'-1"									
AG06	20	14'-0"	421	510		6'-7"	1'-2"	6'-7"									
AG07	3	8'-8"	39	Str.													
AG08	6	25'-6"	230	Str.													
AG09	8	5'-5"	65	20		2'-2"	2'-9"	10"									
AG10	8	5'-11"	71	24	11"	2'-9"					2'-3"	2'-8¾" 3'-3"		3½" 1'-3¼"	5'-9¼"		
AG11	4	7'-10"	47	19		3'-6"	4'-6"	—									
AG12	20	11'-9"	353	Str.													
AG13	36	28'-2"	1523	Str.													
AG14	2	28'-4"	85	Str.													
AG15	4	Varies 21'-9" to 29'-6" by 2'-9"; 1-@	28	Str.													
AG16	14	11'-9"	247	Str.													
AG17	13	Varies 14'-11" to 20'-2" by 5¼"; 1-@	343	22		Varies 7'-6" to 8'-2" by 4⅜"; 1-@	Varies 6'-11" to 7'-6" by 4½"; 1-@	—			8"	Varies 6'-3" to 11'-3" by 4½"; 1-@		Varies 1'-9⅞" to 2'-3" by ⅞"; 1-@			
AG18	8	Varies 13'-0" to 13'-10" by 1'2"; 1-@	161	22		Varies 5'-7" to 6'-5" by 1'1⅝"; 1-@	6'-11"	—			8"						
AG19	18	Varies 4'-0" to 22'-1" by 3'6⅛"; 2-@	491	Str.													
AG20	2	30'-8"	92	Str.													
AG21	2	31'-9"	95	Str.													
AG22	2	34'-11"	105	Str.													
AG23	4	35'-8"	214	Str.													
AG24	2	38'-9"	116	Str.													
AG25	2	8'-0"	24	Str.													
AG26	8	Varies 7'-1" to 11'-9" by 2'-3"; 1-@	113	Str.													
AG27	44	5'-6"	363	Str.													
AG28	39	6'-8"	391	1	8"	6'-0"					—						
AG29	39	7'-8"	449	1	8"	7'-0"					—						
AG30	24	28'-6"	1027	Str.													
AG31	25	30'-1"	1130	Str.													
AG32	14	7'-2"	151	1	8"	6'-6"					—						
AG33	14	5'-8"	119	1	8"	5'-0"					—						
AG34	4	12'-0"	72	Str.													
AG35	3	21'-0"	95	Str.													
AG36	12	36'-6"	658	Str.													
AG37	4	14'-0"	84	Str.													
AG38	9	4'-9"	64	1	8"	4'-1"					—						
AG39	76	7'-3"	828	Str.													
AG40	7	5'-11"	62	1	8	5'-3"					—						
AG41	39	9'-5"	552	1	8	8'-9"					—						
AG42	1	24'-0"	36	Str.													
AG43	7	6'-8"	70	1	8"	6'-0"					—						
AG44	9	5'-6"	74	1	8	4'-0"					—						
A701	39	Varies 11'-6" to 14'-3" by 7⅛"; 1-@	1026	Str.													
A702	14	15'-4"	439	22		9'-7"	5'-1"				10"	5'-0"		1'-0"			
A703	39	8'-10"	704	1	10"	8'-0"											
A704	14	Varies 8'-9" to 12'-10" by 4⅛"; 1-@	303	Str.													
A801	20	15'-11"	850	Str.													
A802	19	7'-0"	355	Str.													
A901	39	Varies 22'-1" to 22'-8" by 9⅛"; 1-@	2967	22		Varies 11'-8" to 12'-3" by 9⅛"; 1-@	9'-5"				1'-3"	9'-3"		1'-10¼"			
A1001	39	20'-2"	3384	11	1'-5"	8'-10"	1'-11"	8'-0"							9'-3"	1'-3"	
		Total	24,019														





ENLARGED VIEW SHOWING BAR BENDING DETAILS



NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SPI, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1½ Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 17/18/18

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675 · 5·37
GREENE COUNTY

468
616

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

16/18

REINFORCING STEEL LIST

BRIDGE NO. GRE.-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

DESIGNED	DRAWN:	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/26/72	

AUG 29 1972

JUL 18 1972

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675 - 5.37
GREENE COUNTY

469
616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT No 2				Reinforcing steel in Abutment No. 2 shall have the suffix "B"												
A501	23	23'-4"	560	Str.													
A502	17	Varies 18'10" to 26'6" by 5'4", 1-ea.	402	Str.													
A503	17	Varies 12'7" to 15'0" by 4'8", 1-ea.	279	Str.													
A504	14	Varies 8'6" to 12'10 by 4¼, 1-ea.	156	Str.													
A505	3	Varies 2'10 to 3'-0" by 1'-3", 1-ea.	13	Str.													
A506	10	Varies 27'3" to 27'7" by 1'4", 1-ea.	286	Str.													
A601	80	23'-1"	2774	Str.													
A602	38	10'-3"	585	S10		1'-11"	6'-9"	1'-11"									
A603	56	11'-7"	974	Str.													
A604	16	Varies 4'-3 to 7'-2" by 2'8", 1-ea.	137	Str.													
A605	11	Varies 2'-8 to 3'-3" by 1'8", 1-ea.	57	Str.													
A606	28	Varies 15'-11" to 19'-11" by 1'8", 1-ea.	754	22		8'-6"	Varies 6'-11" to 10'-11" by 1'3", 1-ea.	—			8"	Varies 6'-9" to 10'-8" by 1'4", 1-ea.		Varies 1'-4½" to 2'-1'8" by 3'8", 1-ea.			
A607	3	Varies 11'-10" to 11'-9" by 1'2", 1-ea.	51	Str.													
A608	27	14'-8"	595	22		7'-3"	6'-11"	—			8"	6'-9"		1'-4½"			
A609	19	Varies 6'-8" to 10'-0" by 2'8", 1-ea.	252	Str.													
A610	8	13'-5"	161	22		6'-0"	6'-11"	—			8"	6'-9"		1'-4¼"			
A611	4	Varies 2'-1" to 5'-6" by 10'3", 1-ea.	25	Str.													
A612	48	31'-8"	2283	Str.													
A613	10	Varies 6'-7" to 31'8" by 6'-3¼, 2-ea.	287	Str.													
A614	2	32'-7"	98	Str.													
A615	3	Varies 8'5" to 9'8" by 7½", 1-ea.	41	S10		10"	Varies 1'-11" to 3'-2" by 7½", 1-ea.	6'-0"									
A616	10	Varies 6'0" to 31'8" by 6'5", 2-ea.	283	Str.													
A617	2	32'-3"	97	Str.													
A618	2	32'-0"	96	Str.													
A619	4	26'-8"	160	Str.													
A620	110	8'0"	1322	Str.													
A621	2	28'8"	86	Str.													
A622	14	14'-0"	294	Str.													
A623	8	Varies 5'10 to 31'8" by 8'-7¼ 2-ea.	225	Str.													
A624	2	7'-4"	22	Str.													
A625	38	17'-7"	1004	Str.													
A626	1	4'-6"	7	19		2'-8"	1'-11"	—				2'-1"		1'-8"	3'-7"		
A627	4	2'-9"	17	Str.													
A628	2	8'-10"	27	19		3'-7"	5'-4"	—				3'-4"		1'-5"	6'-9"		
A629	3	9'-1"	41	19		2'-8"	6'-6"	—				2'-1"		1'-8"	8'2"		
A630	3	8'-8"	39	19		1'-11"	6'-10"	—				1'-6"		1'-3"	8'-4"		
A631	6	90'0"	270	Str.													
A632	23	14'-4"	495	S10		6'-3"	1'-4"	6'-8"									
A633	2	13'-4"	40	S10		6'-2"	1'-4"	6'-2"									
A634	26	11'-4"	443	S10		5'-2"	1'-4"	5'-2"									
A635	4	Varies 17'3" to 21'-4" by 1'-4¼, 1-ea.	116	15		6'-6"	3'11"	Varies 3'8" to 7'9" by 1'-4¼, 1-ea.	9'-3"		10"	6'-6"					
A636	7	Varies 17'-7" to 22'0" by 8'-4", 1-ea.	208	15		6'-6"	3'11"	Varies 4'0" to 8'-5" by 8'4", 1-ea.	9'-3"		10"	6'-6"					
A637	1	12'-7"	19	Str.													
A638	2	9'-2"	28	Str.													
A639	2	6'-2"	19	Str.													
A640	2	3'0"	9	Str.													
A641	3	23'-7"	106	20		10'-0"	13'-9"	—									
A642	4	3'-6"	21	Str.													
A643	1	8'-8"	13	S10		10"	2'-2"	6'-0"									
A644	4	10'0"	60	19		2'-4"	7'-9"	—				1'-5⅞"		1'10"	9'7"		
A645	4	121'10"	77	20		3'6"	9'-6"	—									
A646	4	5'-3"	32	19		2'0"	3'4"	—				1'-7½"		1'-2⅛"	4'-6⅛"		
A647	1	7'5"	11	19		3'9"	3'9"	—				3'1⅝"		2'-1"	5'10"		
A648	5	7'10"	59	S10		2'9"	2'8"	2'9"									
A649	4	3'0"	18	Str.													

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
A650	59	9'11"	879	1	8"	9'3"					—						
A651	42	24'-3"	1530	Str.													
A652	14	25'-2"	529	Str.													
A653	25	6'-2"	232	1	8"	5'10"					—						
A654	25	5'11"	222	1	8"	5'-3"					—						
A655	18	22'0"	595	Str.													
A656	7	17'-3"	181	Str.													
A657	2	9'2"	28	Str.													
A658	24	19'6"	703	Str.													
A659	1	9'10"	15	Str.													
A660	2	14'-0"	42	Str.													
A661	60	22'6"	2028	Str.													
A662	15	9'8"	218	1	8"	9'0"					—						
A663	14	8'5"	177	1	8"	7'-9"					—						
A664	27	7'-8"	311	1	8"	7'0"					—						
A665	28	7'-1"	298	1	8"	6'5"					—						
A666	28	6'10"	287	1	8"	6'-2"					—						
A667	28	6'1"	256	1	8"	5'5"					—						
A668	28	5'6"	231	1	8"	4'10"					—						
A669	9	5'7"	75	1	8"	4'11"					—						
A670	9	4'10"	65	1	8"	4'2"					—						
A671	96	6'0"	865	Str.													
A672	20	19'0"	571	Str.													
A673	22	5'0"	165	Str.													
A674	1	5'3"	8	19		3'3"	1'7"	—				3'1½"		2'1"	3'8"		
A701	14	Varies 9'10" to 11'0" by 1'2⅜, 1-ea.	287	Str.													
A702	25	12'9"	652	Str.													
A703	59	9'4"	1126	1	10"	8'6"					—						
A704	27	9'1"	501	1	10"	8'3"					—						
A801	30	19'9"	1582	Str.													
A802	29	7'3"	561	Str.													
A803	15	Varies 12'0 to 14'6" by 2'6", 1-ea.	531	Str.													
A804	27	21'3"	1532	22		10'3"	10'2"	—			1'1"	10'0"		2'0"			
A805	15	10'6"	421	1	1'1"	9'5"					—						
A806	14	10'8"	393	1	1'1"	9'7"					—						
A901	14	24'6"	1166	22		12'6"	11'0"	—			1'3"	10'3"		2'1¾"			
A902	25	26'6"	2253	22		13'6"	12'0"	—			1'3"	11'3"		2'4⅝"			
A1001	59	23'11"	6072	11	1'5"	11'7"	1'11"	9'0"							10'3"	1'3"	
A1002	15	23'6"	1517	13		7'8"	2'2½"	12'2"			1'5"			1'6"	13'5"	1'3"	
		Total	45645														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 16/18
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 16/18

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

17/18

REINFORCING STEEL LIST

BRIDGE NO. GRE.-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542 + 86.23 TO STA: 547 + 53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675 - 5.37
GREENE COUNTY

470
616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER No. 1			Reinforcing steel in Pier No. 1 shall have the suffix "A"													
P501	32	19'-7"	654	Str													
P502	42	18'-1"	792	Str													
P503	26	18'-7"	504	T1	5"	5'-2"	3'-11"	5'-2"	3'-11"		5"						
P504	24	13'-5"	336	T2	5"	3'-0 3/8"	2'-7"	2'-7"	3'-5 3/4"	2'-4"	5"	1'-7"					
P601	8	8'-10"	106	S10		2'-0"	5'-2"	2'-0"									
P602	10	7'-7"	114	S10		2'-0"	3'-11"	2'-0"									
P1101	44	19'-9"	4617	Str													
P1102	44	8'-10"	2065	11	—	7"	2'-1"	6'-2"					—		7'-7"	1'-5"	
P1103	28	19'-2"	2851	1	1'-7"	16'-0"					1'-7"						
P1104	28	17'-8"	2628	1	1'-7"	14'-6"					1'-7"						
		Total =	14,667														
	PIER No. 2			Reinforcing steel in Pier No. 2 shall have the suffix "B"													
P501	38	18'-8"	740	Str													
P502	40	20'-11"	873	Str													
P503	24	20'-5"	511	T1	5"	5'-2"	4'-10"	5'-2"	4'-10"		5"						
P504	22	14'-9"	338	T2	5"	3'-7 1/4"	2'-3"	2'-11"	3'-6 1/2"	2'-9"	5"	2'-1"					
P601	12	8'-10"	159	S10		2'-0"	5'-2"	2'-0"									
P602	12	8'-6"	153	S10		2'-0"	4'-10"	2'-0"									
P1101	56	18'-10"	5603	Str													
P1102	56	8'-10"	2628	11	—	7"	2'-1"	6'-2"					—		7'-7"	1'-5"	
P1103	24	19'-2"	2444	1	1'-7"	16'-0"					1'-7"						
P1104	28	17'-8"	2628	1	1'-7"	14'-6"					1'-7"						
		Total =	16,077														
	PIER No. 3			Reinforcing steel in Pier No. 3 shall have the suffix "C"													
P501	38	19'-5"	770	Str													
P502	40	21'-1"	880	Str													
P503	26	20'-1"	545	T1	5"	5'-2"	4'-8"	5'-2"	4'-8"		5"						
P504	24	14'-5"	361	T2	5"	3'-5 3/4"	2'-7"	2'-7"	3'-5 3/4"	2'-4"	5"	2'-4"					
A601	10	8'-10"	133	S10		2'-0"	5'-2"	2'-0"									
A602	14	8'-4"	175	S10		2'-0"	4'-8"	2'-0"									
P1101	56	19'-7"	5827	Str													
P1102	56	9'-0"	2678	11	—	3"	2'-1"	6'-8"					—		8'-1"	1'-5"	
P1103	32	19'-2"	3259	1	1'-7"	16'-0"					1'-7"						
P1104	34	19'-8"	3553	1	1'-7"	16'-6"					1'-7"						
		Total =	18,181														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER No. 4			Reinforcing steel in Pier No. 4 shall have the suffix "D"													
P501	38	21'-1"	836	Str													
P502	44	21'-4"	979	Str													
P503	28	20'-1"	587	T1	5"	5'-2"	4'-8"	5'-2"	4'-8"		5"						
P504	26	14'-5"	391	T2	5"	3'-5 3/4"	2'-7"	2'-7"	3'-5 3/4"	2'-4"	5"	2'-4"					
P601	10	8'-10"	133	S10		2'-0"	5'-2"	2'-0"									
P602	14	8'-4"	175	S10		2'-0"	4'-8"	2'-0"									
P1101	56	21'-3"	6322	Str													
P1102	56	9'-0"	2678	11	—	3"	2'-1"	6'-8"						—	8'-1"	1'-5"	
P1103	32	19'-2"	3259	1	1'-7"	16'-0"					1'-7"						
P1104	34	19'-8"	3553	1	1'-7"	16'-6"					1'-7"						
		Total =	18,913														
Total Substructure = 137,502																	

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 16/18
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 16/18

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

18/18

REINFORCING STEEL LIST

BRIDGE NO. GRE.-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY
STA: 542+86.23 TO STA: 547+53.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

MICROFILMED
AUG 29 1989

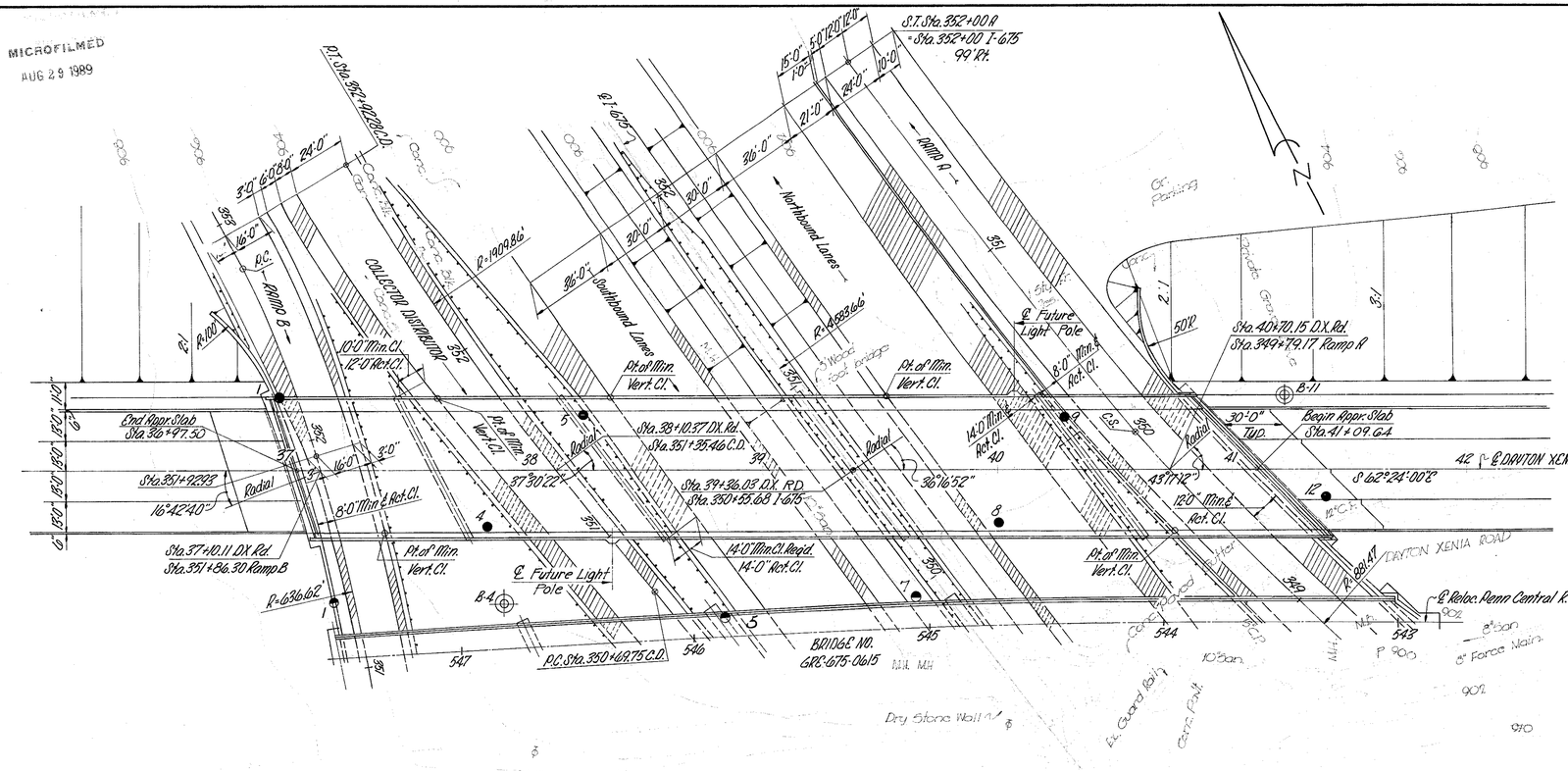
MICROFILMED
JUN 19 1990

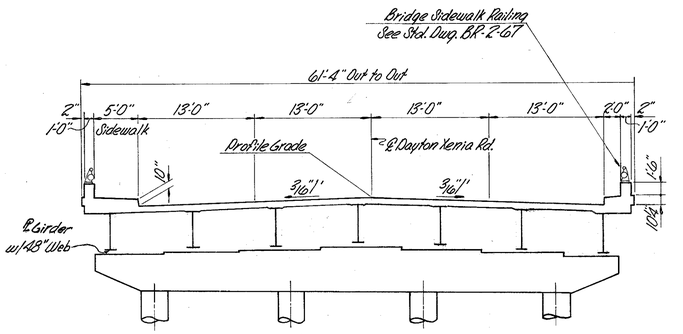
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

471
6.16

GRE-675 - 5.37
GREENE COUNTY

471-564
140 Yellow





SECTION THRU BRIDGE

VERTICAL CURVE DATA

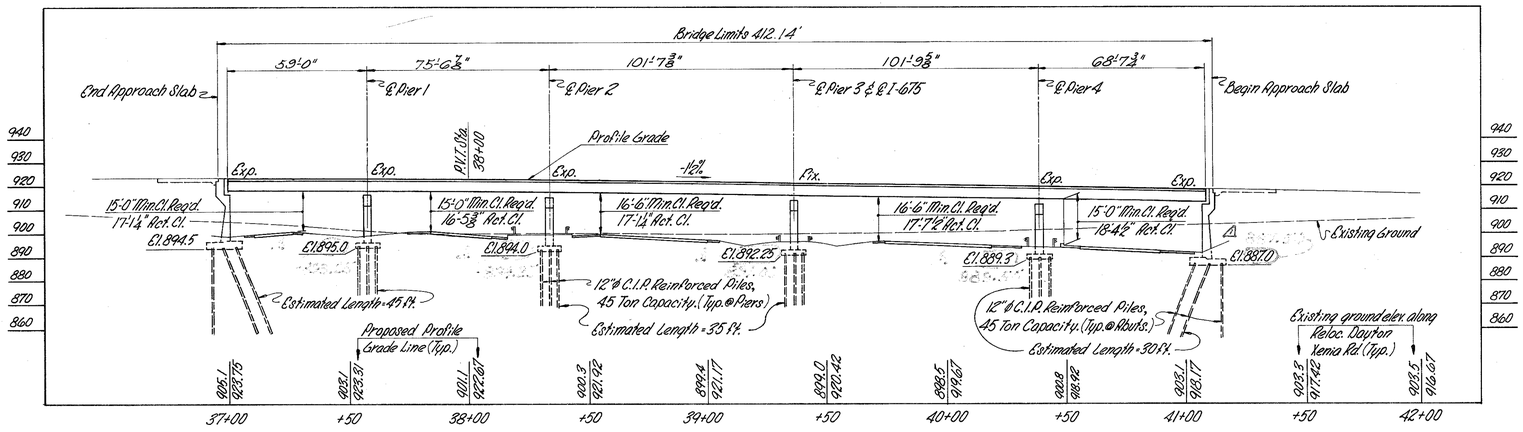
DAYTON XENIA RD.

Length = 500'
P.V.I. Sta. = 35+50
P.V.I. Elev. = 926.42
G_1 = +2.75%
G_2 = -1.50%

PLAN

LEGEND

- Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location.
- Drive Rod Penetration Resistance Sounding Location for Bridge No. GRE-675-0615



PROFILE ON CENTER LINE RELOCATED DAYTON XENIA RD

NOTE

Earthwork limits shown are schematic. Actual slopes shall conform to plan cross-sections.

DESIGN YEAR TRAFFIC

1989 ADT:

RAMP B:	10,110
COLLECTOR DIST:	4,960
I 675:	43,160
RAMP A:	15,070

PROPOSED STRUCTURE

TYPE: Continuous welded Plate Girder with reinforced concrete deck and substructure.
SPANS: 59'-0", 75'-6 7/8", 101'-7 3/8", 101'-9 3/8", 68'-7 1/4"
ROADWAY: 52'-0" Face to Face curbs.
LOADING: HS 20-44 & Alternate Military
SKEW: Varies, 36°15'52" Rt. Fwd. at ℄ I-675
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 30'-0" long (HS-1-72)
ALIGNMENT: Tangent

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CINCINNATI — OHIO
1/18

SITE PLAN

BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA. 36+97.50
STA. 41+09.64

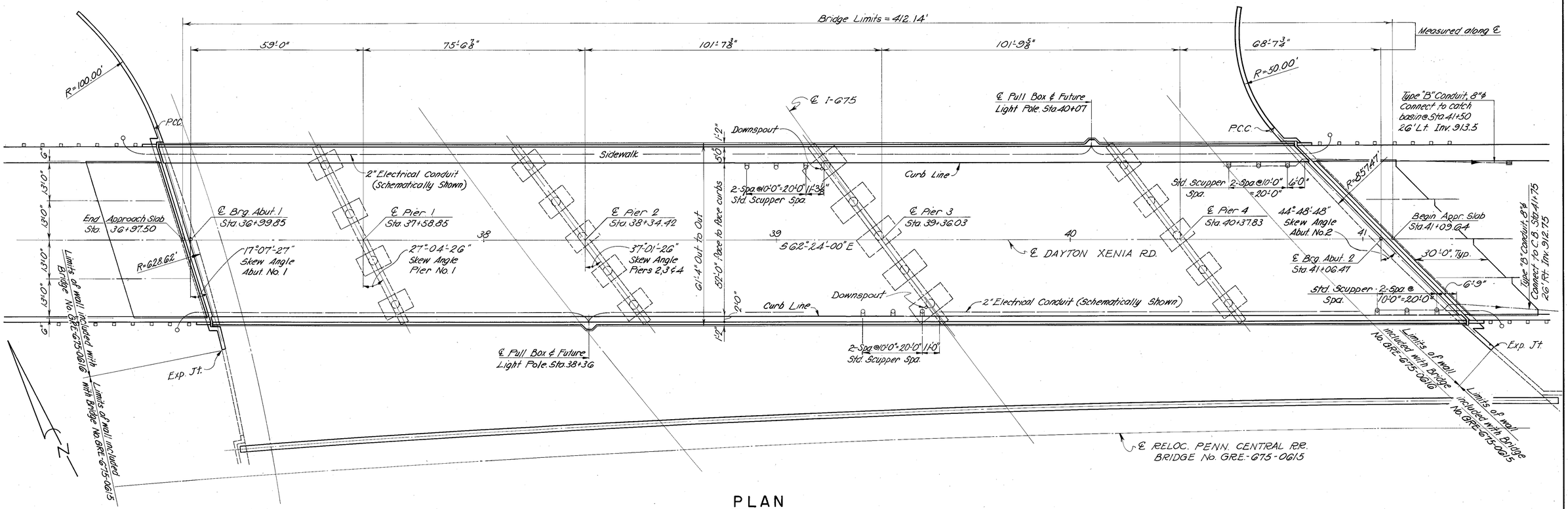
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	S.A.	

Revised 10-12-82

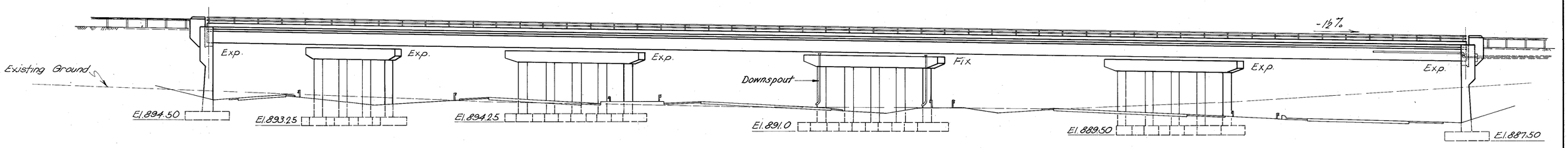
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

472/816

GRE-675 - 5.37
GREENE COUNTY



PLAN



ELEVATION

GENERAL NOTES

EMBANKMENT CONSTRUCTION: BEFORE THE BACKWALL IS CONSTRUCTED THE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE WITH A 1:1 SLOPE FROM THE BRIDGE SEAT TO THE SUBGRADE LINE, FOR A MINIMUM DISTANCE OF 200 FEET BACK OF EACH ABUTMENT.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 45 TONS PER PILE FOR ABUTMENTS AND PIERS.

FOR ADDITIONAL NOTES SEE COMMON DETAILS, SHEET C1/C2.

THE SCUPPER PIPES SHALL EXTEND TO THE HORIZONTAL CONDUCTOR PIPES INSTEAD OF 2" BELOW THE BOTTOM FLANGE.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3⅜ INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

Work this sheet with Sht. 3/18

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO

2/18

GENERAL NOTES, GENERAL PLAN AND ELEVATION

BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

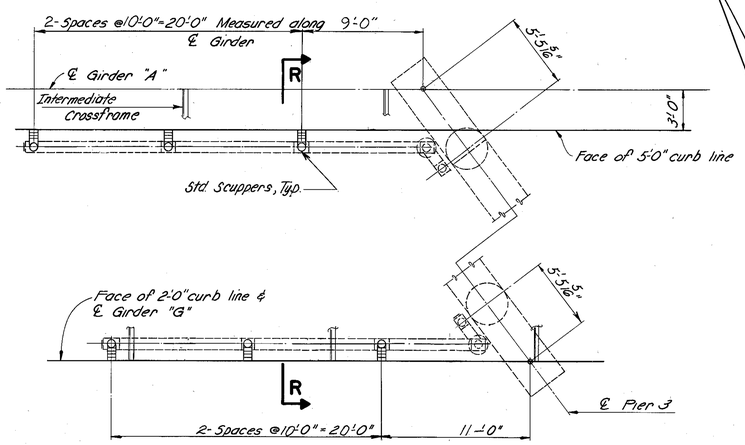
MICROFILMED
AUG 2 9 1989

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

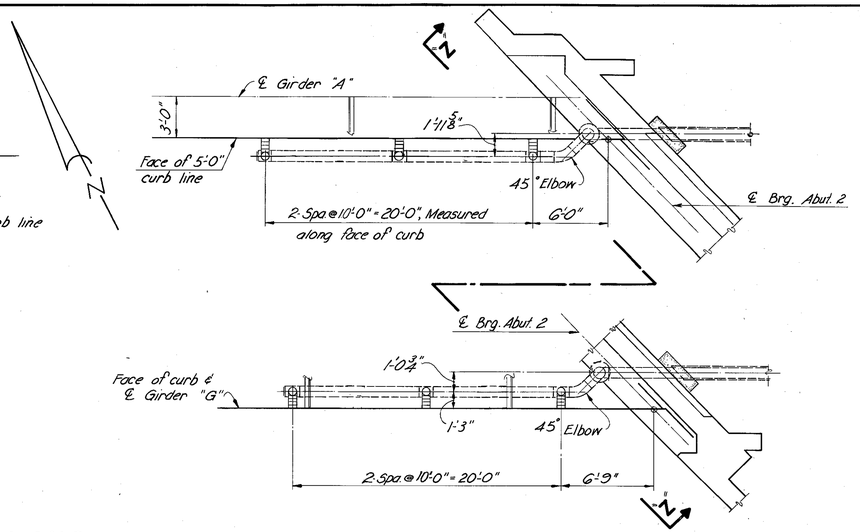
473/616

MICROFILMED
JUN 1 9 1985

GRE-675 • 5.37
GREENE COUNTY

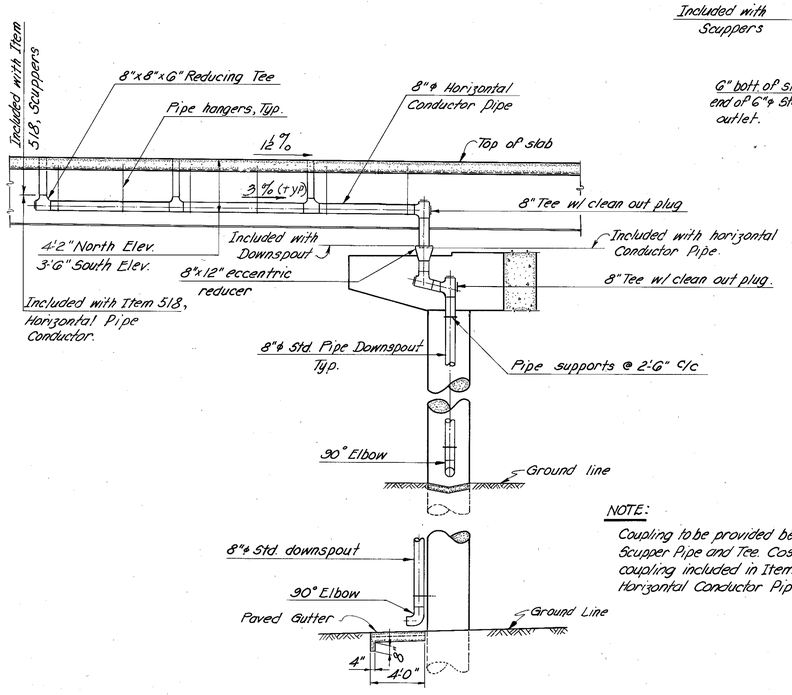


PIER NO. 3



ABUT. NO. 2

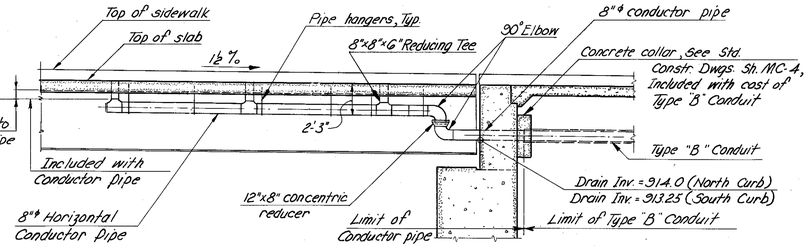
PLANS



NOTE:
Coupling to be provided between Scupper Pipe and Tee. Cost of coupling included in Item 518, Horizontal Conductor Pipe.

ELEVATION

North Elevation shown, South Elevation similar opposite hand



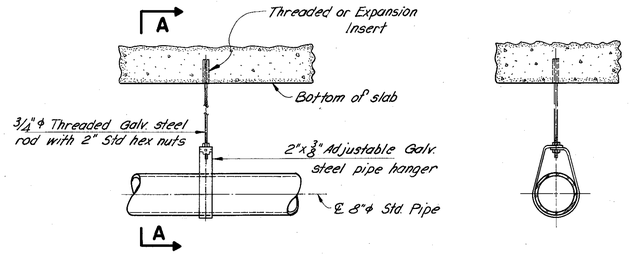
ELEVATION

North Elevation shown, South Elevation similar

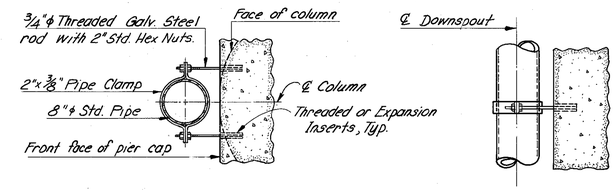
ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
503	Lump	Sum	Cofferdams, Cribs and Sheeting				Lump
503	2,055	Cu. Yd.	Unclassified Excavation		1639	416	
504	2,420	Sq. Ft.	Steel Sheet Piling left in place (Min. Sect. Modulus of 30.2 in³ per Ft. of wall)		2420		
505	Lump	Sum	Test Pile				Lump
507	10,100	Lin. Ft.	12" Cast-in-place reinforced concrete piles.		5670	4430	
509	291,600	Lbs.	Reinforcing Steel	100,900	124,900	65,800	
511	824	Cu. Yd.	Class "S" Concrete, Superstructure using Shrink. Comp. Cem. 701.08	824			
511	205	Cu. Yd.	Class "C" Concrete, Piers above footings			205	
511	627	Cu. Yd.	Class "C" Concrete, Abutments and Walls above Footings.		627		
511	605	Cu. Yd.	Class "C" Concrete, Footings		459	146	
512	87	Lin. Ft.	Type B, Waterproofing		87		
513	680,900	Lbs.	Structural Steel (AISC Category III)	680,900			
514	680,900	Lbs.	Field Painting of new Structural Steel, System A	680,900			
516	105	Sq. Ft.	1" Preformed Expansion Joint Filler		105		
517	814.64	Lin. Ft.	Railing (Concrete Parapet with Double Pipe Railing)	814.64			
518	442	Cu. Yd.	Porous Backfill		442		
518	360	Lin. Ft.	8" Perforated C.S.P. (707.01)		360		
518	105	Lin. Ft.	8" Non-Perforated C.S.P., including specials, (707.01)		105		
518	12	Ea.	Scuppers including supports	12			
518	129	Lin. Ft.	8" Pipe Horizontal Conductor, Including Specials	129			
518	38	Lin. Ft.	8" Std Pipe downspout, hot-dip galv. steel, including specials				38
603	114	Lin. Ft.	8" Conduit, Type B				114
625			See Sheet 149/618 for Lighting Summary				
Special	106,300	Lb	Epoxy Coated Reinforcing Steel (See Proposal Note)	105,400	900		
523	3	Hour	Dynamic Pile Tests				3

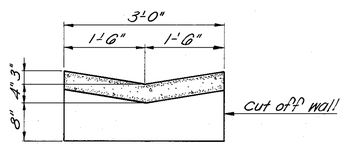
ESTIMATED QUANTITIES CHECKED BY & DATE S.A. 4/19/72 REVISED: S.A. 9/14/72



TYPICAL PIPE HANGER



TYPICAL PIPE SUPPORT



PAVED GUTTER DETAIL

NOTES:
For Scupper Details see Std. Dwg. SD-1-69.
Scupper outlet pipes shall be modified as required to fit these details.
Paved Gutter shall be included with the unit prices bid for Item 518, Pipe Downspout.
For Sections R-R & 2-2 see Sh. 8/18

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CINCINNATI OHIO
3/18

DRAINAGE DETAILS & ESTIMATED QUANTITIES

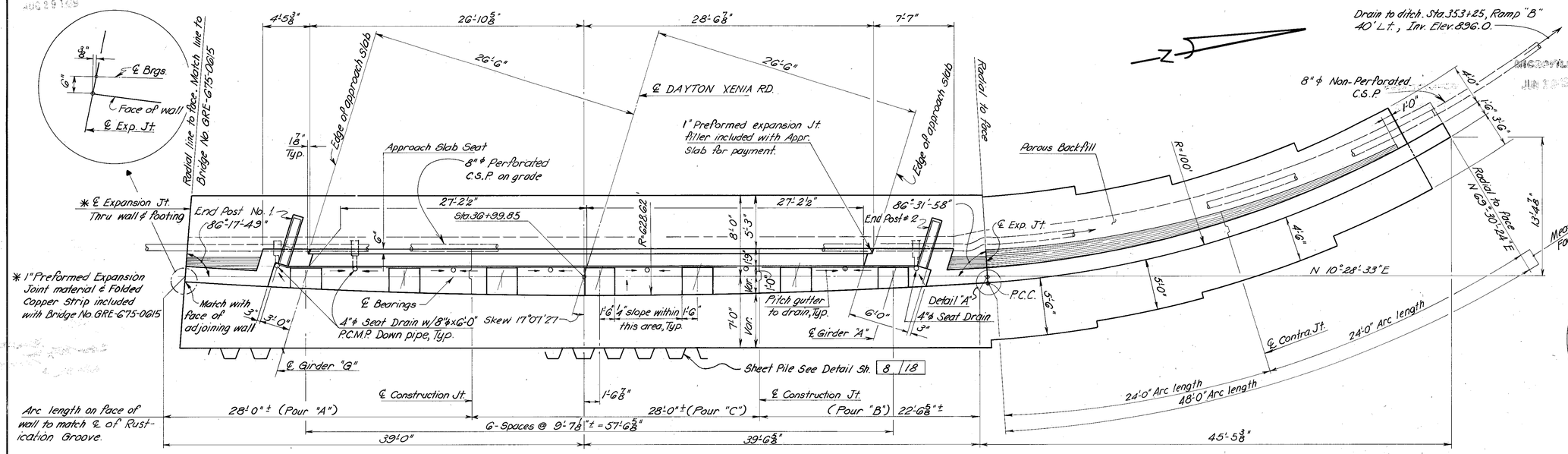
BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		7/25/72	4/27/82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

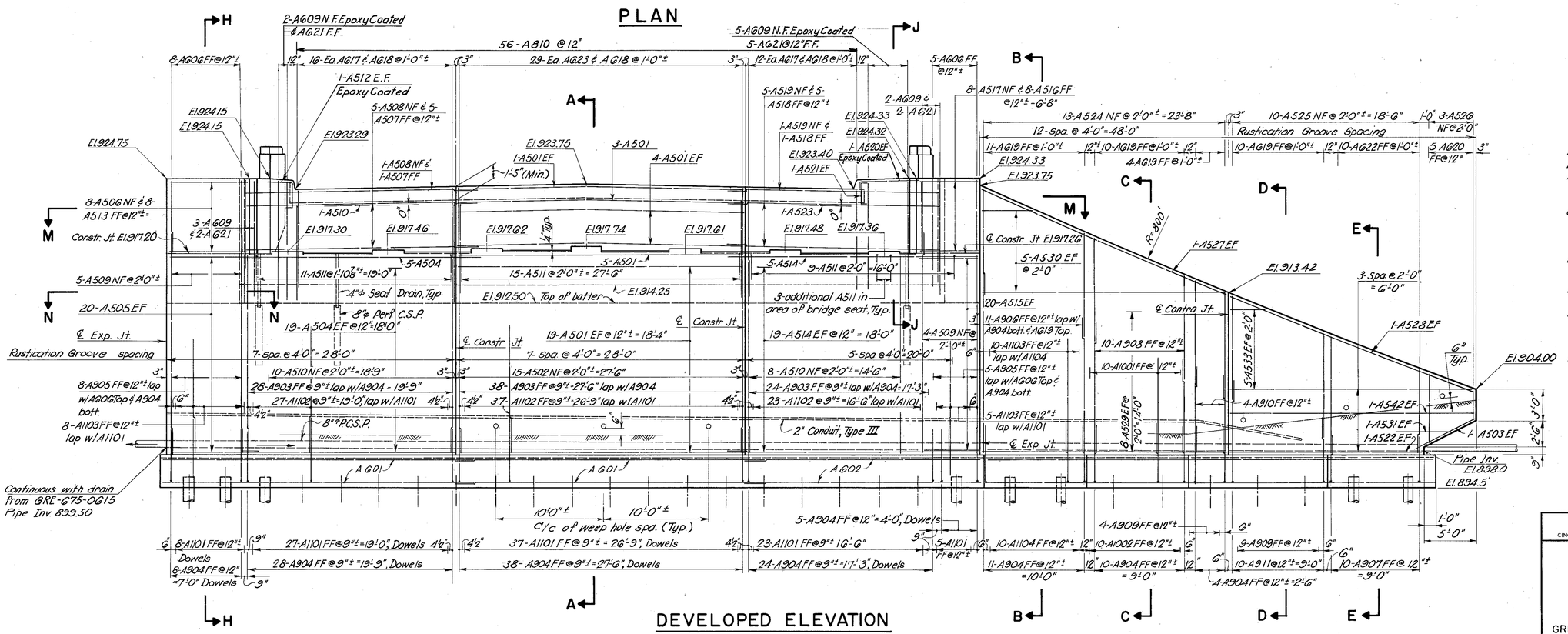
474
616

GRE-675 - 5.37
GREENE COUNTY



DETAIL "A"

PLAN



DEVELOPED ELEVATION

NOTES:

Reinforcing Steel List see shs. 15|16|17|18|18
Work this sheet with shs. 5|6|7|8|18
Porous Backfill, 2'0" thick shall extend up to the subgrade line and to within 2'0" of finished ground surface outside limits of shoulder. Only that portion of C.S.P. located in porous backfill shall be perforated.

For termination of C.S.P. at slopes, See Common Details Sht. C1|C2
For additional details end posts 1, 2, 3 & 4, See Std. Dwg. BR-2-67.
For Contraction Joint, Expansion Joint and Rustication Groove Details, See Common Details Sht. C2|C2

Reinforcing Steel in Abutments No. 1 & 2 shall have the suffix "A & B" respectively. All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

4|18

ABUTMENT NO. 1

BRIDGE NO. GRE.- 675 - 0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

475/616

GRE-675 - 5.37
GREENE COUNTY

8"ϕ Non-Perforated C.S.P. on grade
Drain to Ditch, Ramp A Sta 350+70, 60' Rt. Inv. Elev. 890.0
Porous Backfill
8"ϕ Perforated C.S.P., on grade.
Radial to face S52°-18'-23"E
R=50'
25'-0" Arc length
45'-0" Arc length - Measured along face of wall
20'-0" Arc length
S17°-18'-48"E
℄ Contra. Jt.
℄ Exp. Jt.
℄ Brgs.
Face of wall
Radial to face
7/16"
7½"
10'-2⅝"
34'-7½"
40'-1"
4'-24"
℄ DAYTON XENIA RD.
RECEIVED JUN 19 1967
Radial line to face. Match line to Bridge No. GRE-675-0615
* 1" Preformed Expansion Jt. materail ℄ Folded Copper Strip included with Bridge No. GRE-675-0615
2" Preformed Exp. Jt. filler included with appr. slab for payment, Typ.
Edge of approach slab
Approach Slab Seat.
4"ϕ Seat Drain with 8"ϕ x 6'-0" P.C.S.P Down Pipe, Typ.
Edge of approach slab
R=857.47'
End Post #3
End Post #4
86°-39'-34"
86°-13'-59.5"
* ℄ Exp. Jt. thru wall and Footing
Sta. 41+06.47
3G'-7¾"
3G'-7¾"
8'-0"
5'-3"
7'-0" Var.
1'-0"
P.C.C.
℄ Girder "A"
Pitch gutter to drain
1'-6" ½" Slope within this area., Typ.
Skew 44°-48'-48"
Pitch gutter to drain (Typ.)
℄ Bearings
℄ Girder "G"
4"ϕ Seat Drain Match with face of adjoining wall
Sheet Pile See Detail Sh. 8 | 18
℄ Constr. Jt.
30'-3"± (Pour "D")
28'-0"± (Pour "B")
24'-0"± (Pour "C")
24'-0"± (Pour "A")
6-Spa @ 12'-11⅛"± = 77'-6⅜"
52'-0½"
54'-2½"
38'-0½"
Arc Length on face of wall to match ℄ of Rustication Groove.

PLAN

3-AG29NF @ 1'-8" = 3'-4"
11-A528NF @ 2'-0"± = 19'-7"
21-AG23FF @ 1'-0"± = 19'-7"
10-Spaces @ 4'-0" = 40'-0"
11-A526NF @ 2'-0"± = 19'-7"
21-AG23FF @ 1'-0"± = 19'-7"
Rustication Groove Spacing
5-AG24FF @ 1'-0½" = 4'-0"
℄ Contra. Jt.
5-AG28FF & 3-AG10NF
6-AG21FF @ 12"± =50" lap w/ A907
6-AG10N.F Epoxy Coated
6-AG27 F.F.
12-15-Ea. AG19 & AG20 @ 1'-0"±
29-Ea. AG19 & AG20 @ 1'-0"±
75-A811 @ 12"
25-Ea. AG25 & AG20 @ 1'-0"±
10-Ea. AG26 & AG20 @ 1'-0"±
2-AG22FF
11-AG06FF @ 12"± lap w/ A905
1-A521 E.F. Epoxy Coated
5-A520NF & 5-A519FF
1-A520NF & 1-A519FF
1-A501 EF
5-A514 EF
1-A514 EF
5-A506NF & 5-A507FF
1-A506NF & 1-A507FF
1-A508EF Epoxy Coated
1-A509EF
1-A524
2-A610 Epoxy Coated
1-AG22FF & 1-AG10NF
7-A504FF
7-A505NF
Constr. Jt. El. 911.18
21-A504EF @ 1'-0"± = 20'-0"
Sleeve for 8"ϕ pipe downspout drain. Drain Inv. = 914.0
Sleeve for 8"ϕ pipe downspout drain. Drain Inv. = 913.25
1-A527EF
1-A525EF
1-A533EF @ 2'-0" = 10'-0"
1-A534EF @ 2'-0" = 8'-0"
1-A516EF
1-A533EF
1-A532EF
1-A531EF
13-A909FF @ 12"±
4 Spa @ 2'-0"
2'-0" 3'-0"
4'-0" 12
Bott. Pipe El. 891.0
El. 898.75
El. 910.35
El. 912.07
El. 911.84
El. 911.56
El. 911.28
El. 908.25
El. 906.50 Top of batter
El. 912.05
El. 912.06
El. 911.95
El. 919.08
El. 919.02
El. 918.03
El. 918.05
El. 918.10
El. 918.14
El. 917.26
El. 918.43
El. 891.75
El. 887.50
1'-5" (Min.)
1'-0"
3-A534EF @ 2'-0" = 8'-0"
3-A515NF & 3-A534FF @ 12"±
7-A516NF & 7-A517FF
3-A510 13-A511 @ 2'-0" = 24'-0"
15-A511 @ 2'-0"± = 27'-6"
13-A511 @ 2'-0"± = 23'-6"
5-A501
3 additional A511 in area of bridge seat Typ.
4" Typ.
5-A514
5-A503
4"ϕ Seat Drain
10-A906FF @ 12"±
16-A515EF @ 1'-0"± = 15'-0"
6-A907FF @ 12" lap w/ A902
4-A522NF @ 2'-0"± = 5'-6"
13-A523NF @ 2'-0"± = 24'-0"
9-A1103FF @ 12"±
6-A1103FF @ 12"± lap w/ A1101
11-A908FF @ 12"±
11-A1001FF @ 12"±
10-A530EF @ 2'-0" = 18'-0"
6" Typ.
6-A514NF & 6-A516FF @ 12"±
16-A514EF @ 12"± = 15'-0"
8"ϕ P.C.S.P
21-A501 EF @ 12" = 20'-0"
15-A502NF @ 2'-0"± = 27'-6"
38-A903FF @ 9"± = 27'-6" lap w/ A904
37-A1102FF @ 9"± = 26'-9" lap w/ A1101
7-Spa. @ 4'-0" = 28'-0"
0.5%
20-A514EF @ 12" = 19'-0"
13-A513NF @ 2'-0"± = 23'-6"
32-A903FF @ 9"± = 23'-6" lap w/ A904
31-A1102FF @ 9"± = 22'-9" lap w/ A1101
6-Spa. @ 4'-0" = 24'-0"
8"ϕ P.C.S.P
5-A512NF @ 2'-0"± = 8'-6"
19-A903FF @ 9"± = 13'-6" lap w/ A904
18-A1102FF @ 9"± = 12'-9" lap w/ A1101
8-A510NF @ 2'-0"± = 13'-2"
16-A503EF @ 12"± = 19'-0"
11-A1103FF @ 12"± = 9'-0" lap w/ A1101
11-A905FF @ 12"± = 10'-0" lap w/ A906 Top ℄ A904, bott.
2" Conduit, Type III Rustication Groove Spacing
Continuous with drain from GRE-675-0615
℄ Exp. Jt.
AG03, AG02
AG01
10'-0"± 10'-0"± Weep hole spacing, Typ.
8-A911FF @ 12"± = 7'-0"
13-A910FF @ 12"± = 11'-6"
11-A1002FF @ 12"± 11-A904FF @ 12"± = 9'-6"
9-A1104FF @ 12"± 10-A904FF @ 12" = 9'-0"
6-A1101FF @ 12" 6-A904FF @ 12" = 5'-0"
32-A1101FF @ 9"± = 23'-5" 33-A904FF @ 9"± = 24'-2"
37-A1101FF @ 9"± = 26'-9" 38-A904FF @ 9"± = 27'-6"
31-A1101FF @ 9"± = 22'-9" 32-A904FF @ 9"± = 23'-6"
18-A1101FF @ 9"± = 12'-9" 19-A904FF @ 9"± = 13'-6"
11-A1101FF @ 12"± 11-A904FF @ 12"±
3" 6" 12" 4½" 9"

DEVELOPED ELEVATION

NOTES:
Work this sheet with sheets 4, 6, 7, 8 | 18
For additional notes see sheet 4 | 18

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5 | 18

ABUTMENT NO. 2

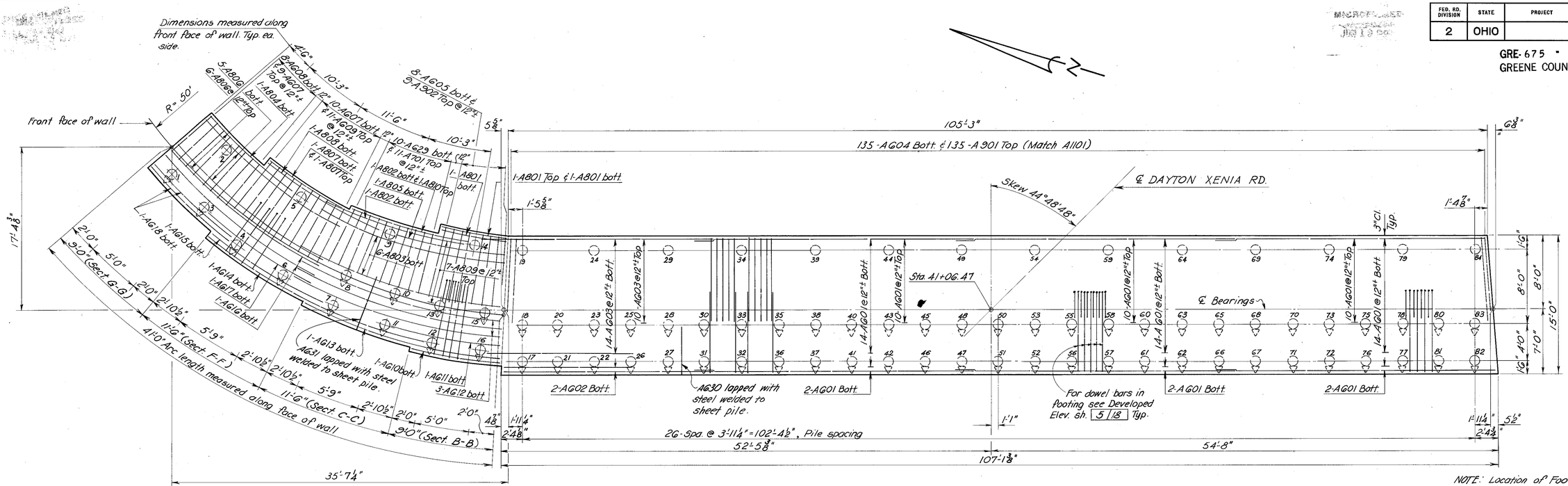
BRIDGE NO. GRE.-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

476/616

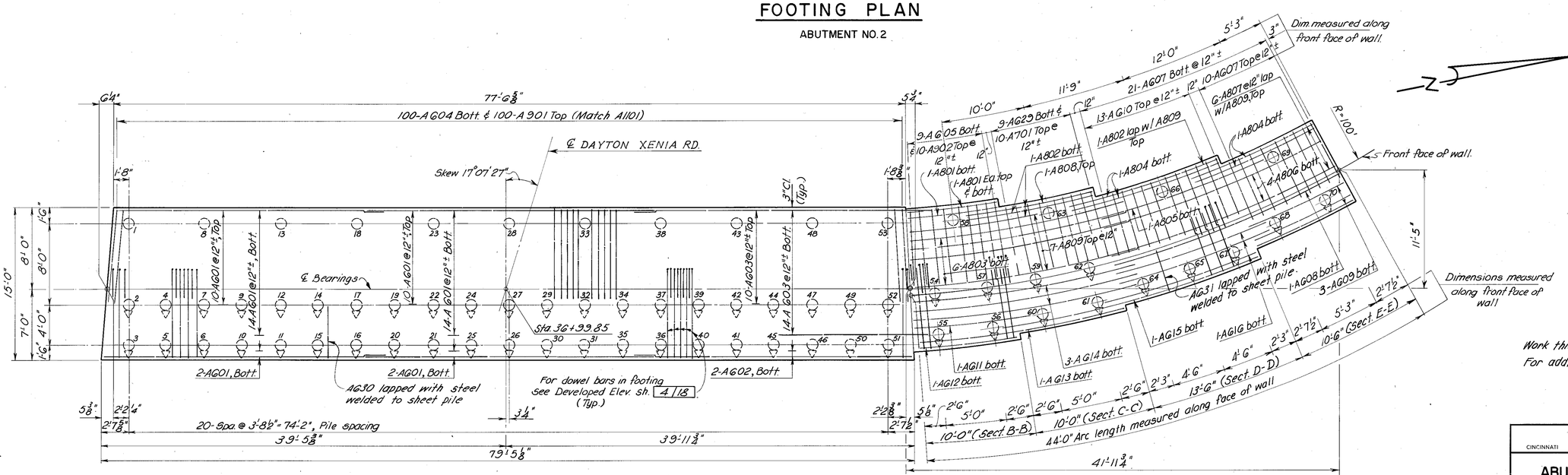
GRE-675 - 5.37
GREENE COUNTY



NOTE: Location of Footing bars interfering with pile locations may be adjusted, providing that in every 5' of wall length the correct number of bars is provided.

FOOTING PLAN

ABUTMENT NO. 2



FOOTING PLAN

ABUTMENT NO. 1

NOTES:

Work this sheet with shs 4, 5, 7, 8 / 18
For additional notes see sh 4 / 18

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ABUTMENT FOOTING PLANS

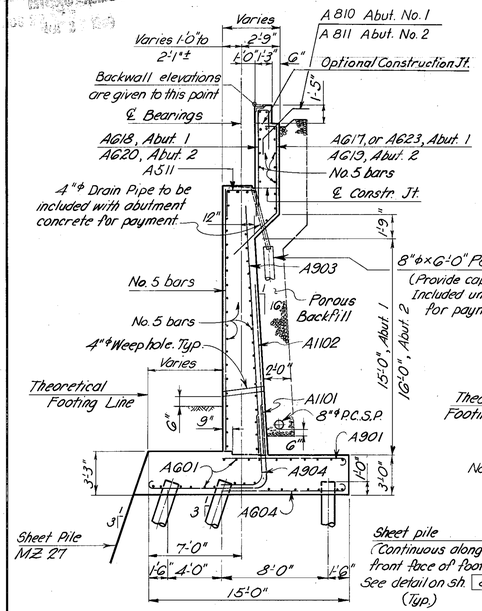
BRIDGE NO. GRE.-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/28/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

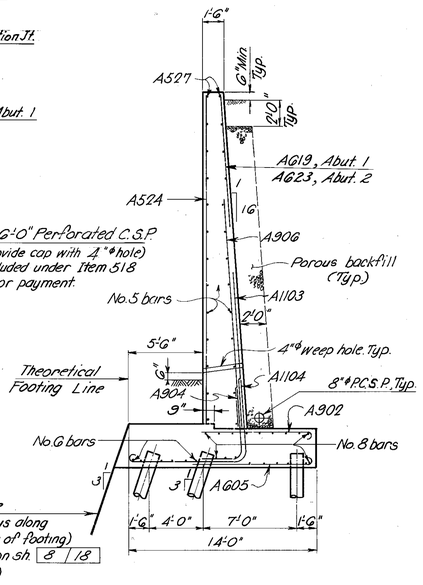
477

GRE-675 • 5.37
GREENE COUNTY



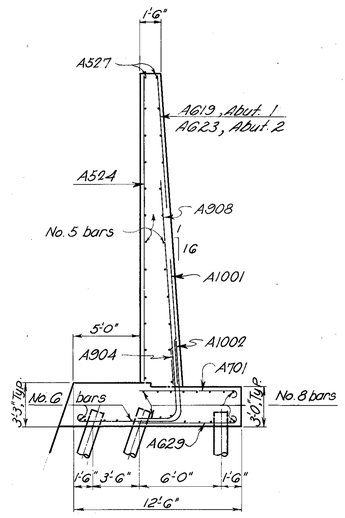
SECTION A-A

ABUT. 1 & 2



SECTION B-B

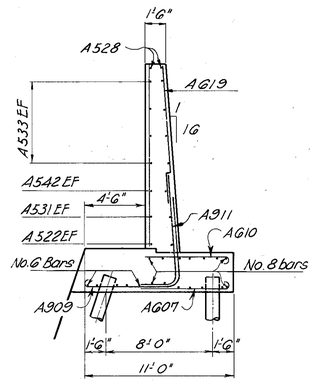
ABUT. 1 & 2



SECTION C-C

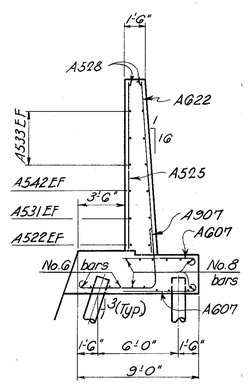
ABUT. 1 & 2

NOTE: Details not shown similar to Section "B-B"



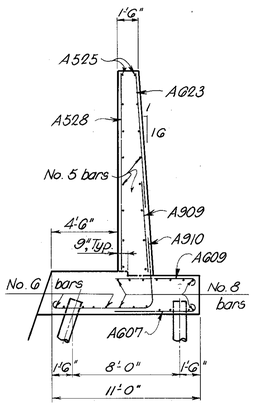
SECTION D-D

ABUT. 1



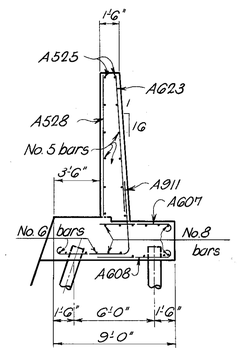
SECTION E-E

ABUT. 1



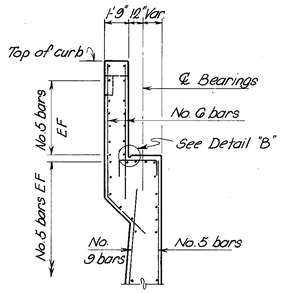
SECTION F-F

ABUT. 2



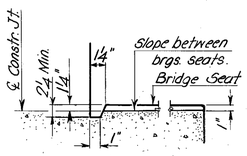
SECTION G-G

ABUT. 2

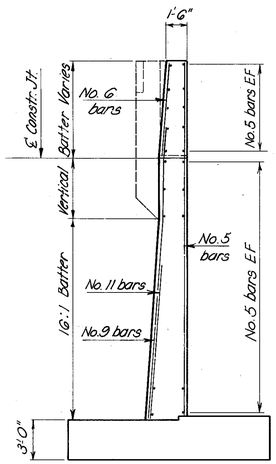


SECTION J-J

ABUT. 1 & 2

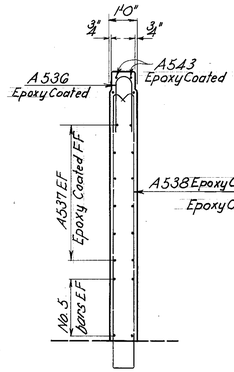


DETAIL "B"

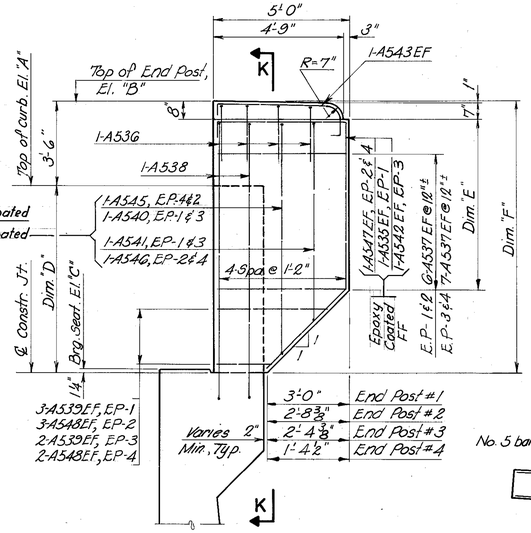


SECTION H-H

ABUT. 1 & 2



SECTION K-K



SECTION L-L

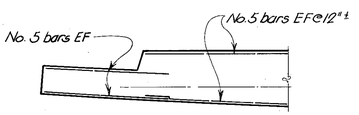
TYP. AT END POSTS NO. 1, 2, 3 & 4

	EL. A	EL. B	EL. C	DIM. D	DIM. E	DIM. F
END POST NO. 1	924.15	927.32	917.30	6'-11½"	6'-9½"	10'-5½"
END POST NO. 2	924.32	927.49	917.36	7'-0¾"	7'-2 3/32"	10'-6¼"
END POST NO. 3	919.02	922.19	912.05	7'-0⅜"	7'-6¼"	10'-6 5/32"
END POST NO. 4	918.10	921.27	911.28	6'-11⅛"	8'-4⅜"	10'-5⅛"

All Concrete included with Item 511
All Reinforcing Steel included with Item 509

NOTES:

Work this sheet with sheets 4,5,6,8 | 18
For additional notes see sh. 4 | 18



SECTION N-N

TYP. ARRANGEMENT OF STEEL
ABUT. 1 & 2

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ABUTMENT DETAILS

BRIDGE NO. GRE.-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO STA: 41+09.64

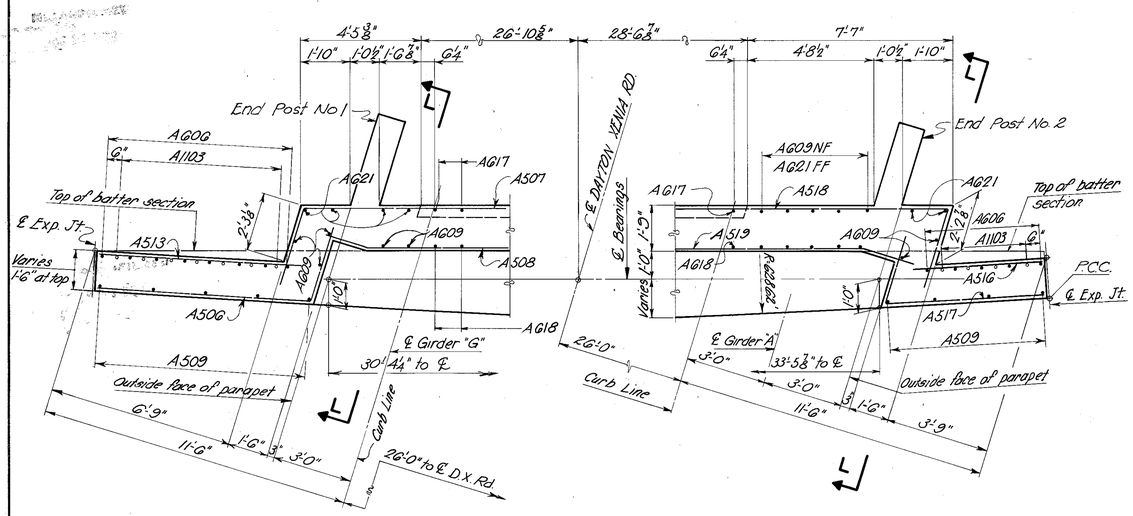
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

478
616

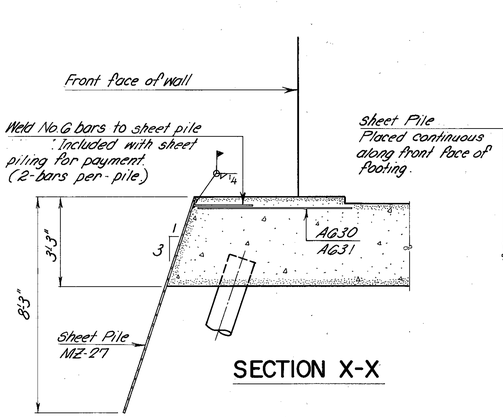
GRE-675 • 5.37
GREENE COUNTY

MICROFILMED
JUN 19 1985

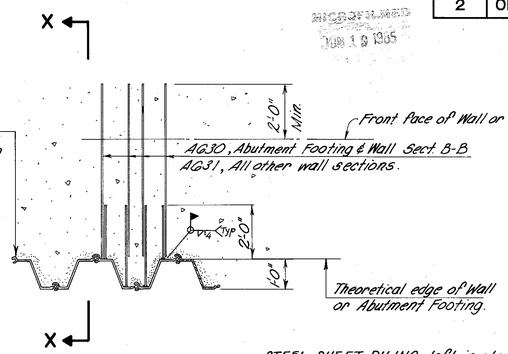


SECTION M-M

ABUT. NO. 1

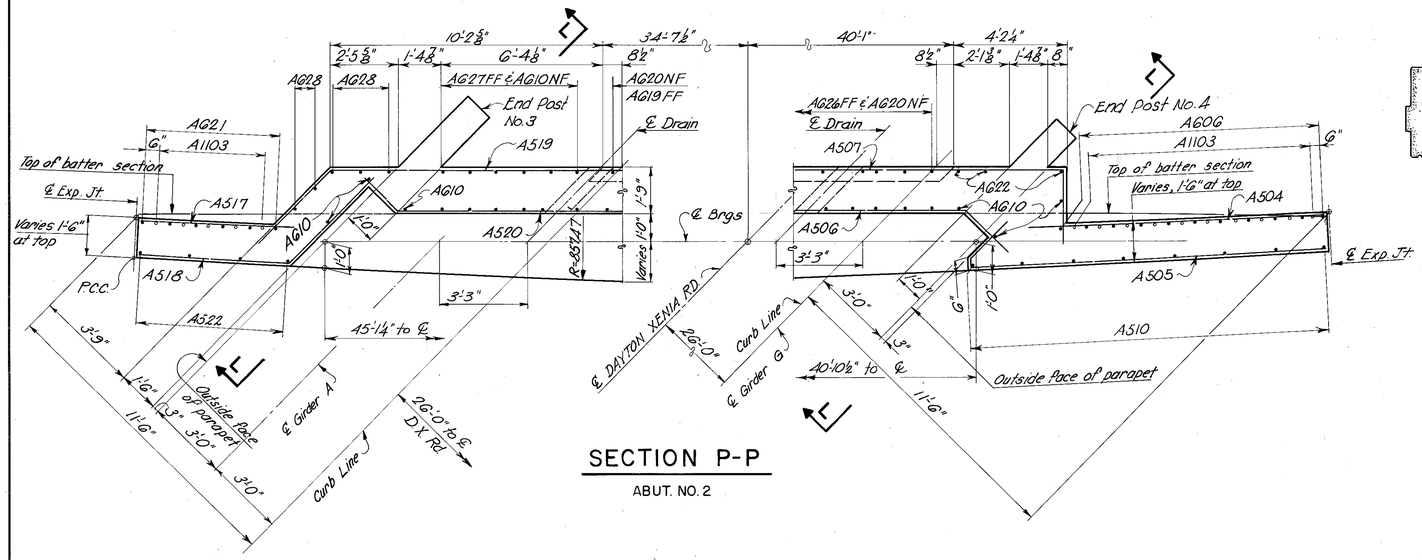


SECTION X-X



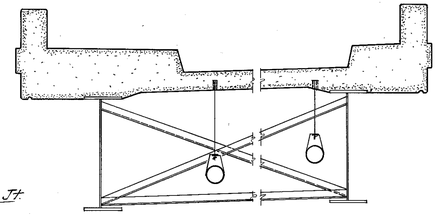
STEEL SHEET PILING left in place shall a minimum Section Modulus of 30.2 in³ per foot of wall. Used piling in good condition may be used.

SHEET PILE DETAIL



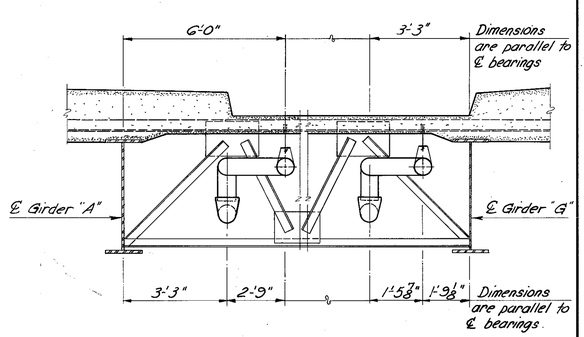
SECTION P-P

ABUT. NO. 2



SECTION R-R

Normal to ℄ girder



SECTION Z-Z

Along ℄ Abut. bearings

NOTES:

Work this sheet with sheets 1,5,6,7/18
For additional notes see sh. 4/18
For location of Sections R-R & Z-Z see sh. 3/18

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8/18

ABUTMENT DETAILS

BRIDGE NO. GRE.-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO STA: 41+09.64

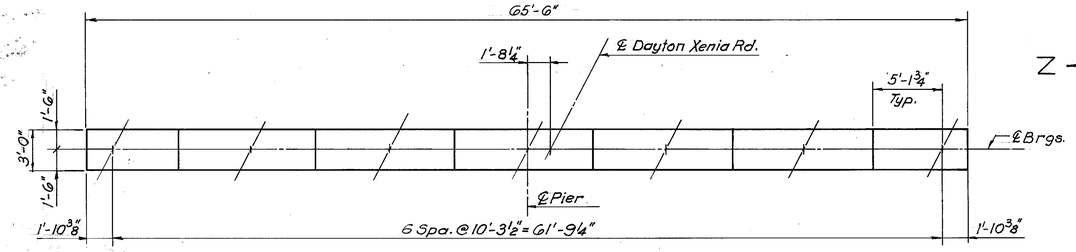
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		7/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

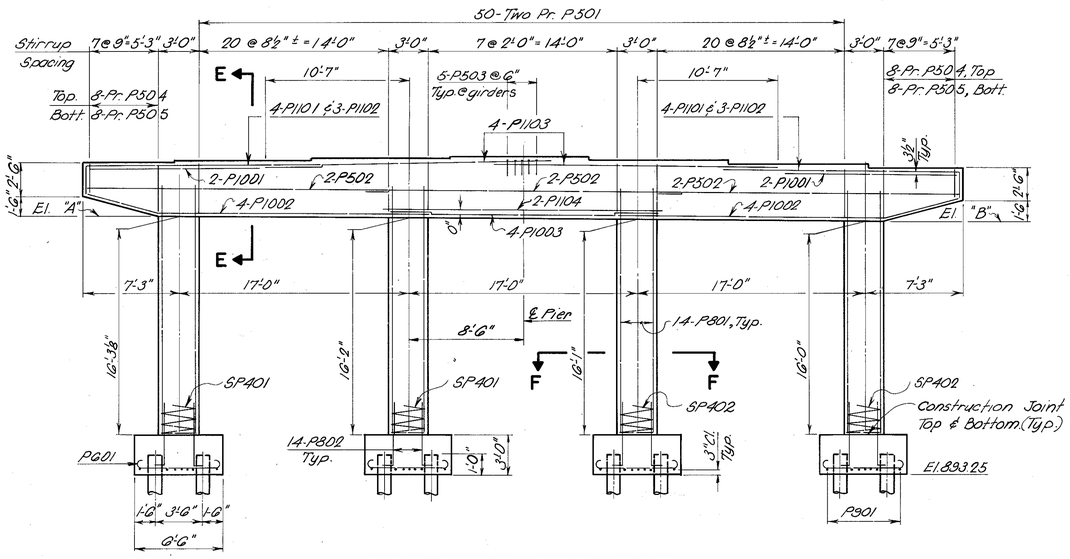
479
616

GRE-675 - 5.37
GREENE COUNTY

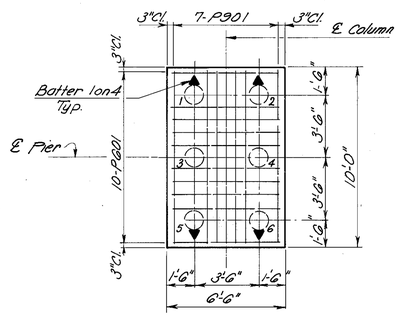
MICROFILMED
AUG 29 1989



CAP PLAN - PIER NO. 1

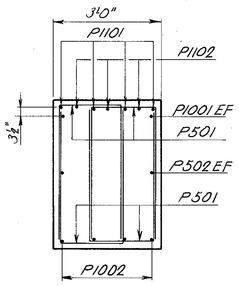


ELEVATION PIER NO. 1

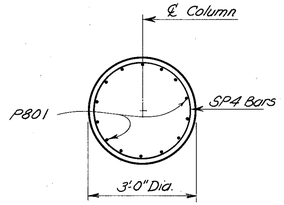


4 required
PIER NO. 1

TYPICAL FOOTING PLAN

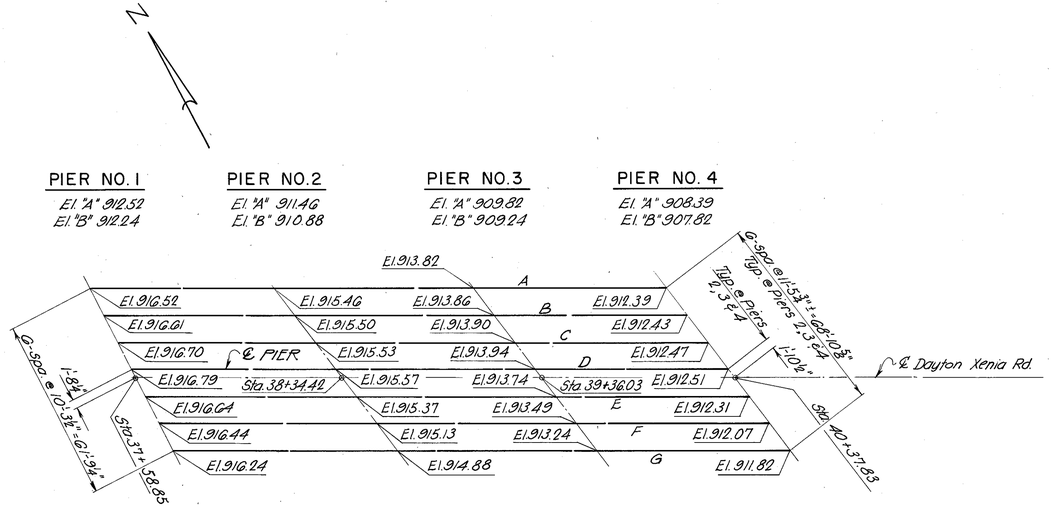


SECTION E-E



SECTION F-F

Z



KEY PLAN

Showing Bearing Seat Elevations

NOTES:

Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.
For reinforcing steel list see shs. 17, 18 / 18.
Bott. denotes bottom face.
EF denotes each face.
Work this sheet with sh. 10 / 18.
Bearing Anchors: At the option of the Contractor, bearing anchors (or formed holes) located and supported by templates, may be cast in Place.
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

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CINCINNATI OHIO

9 / 18

PIER NO. 1

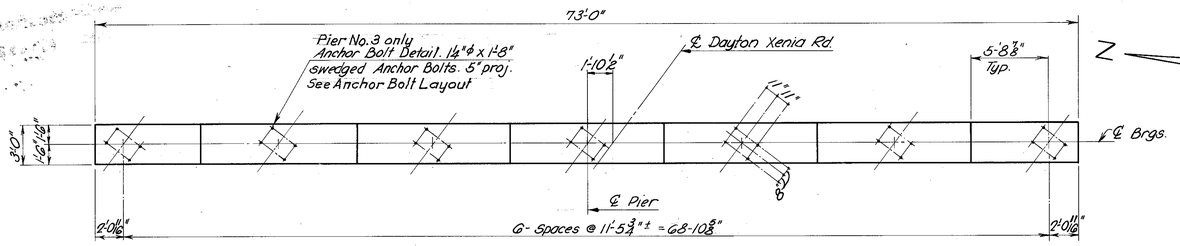
BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/72	

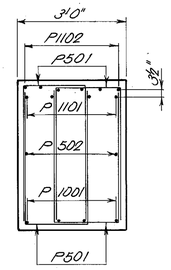
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

480
616

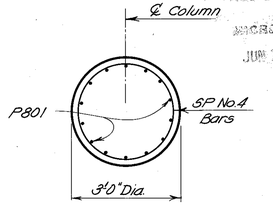
GRE-675 • 5.37
GREENE COUNTY



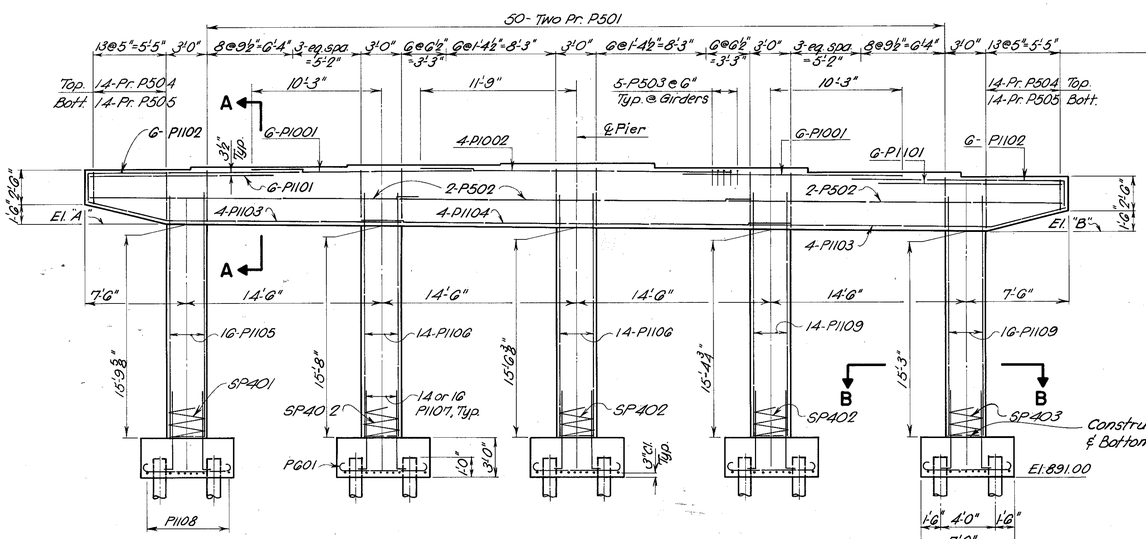
CAP PLAN



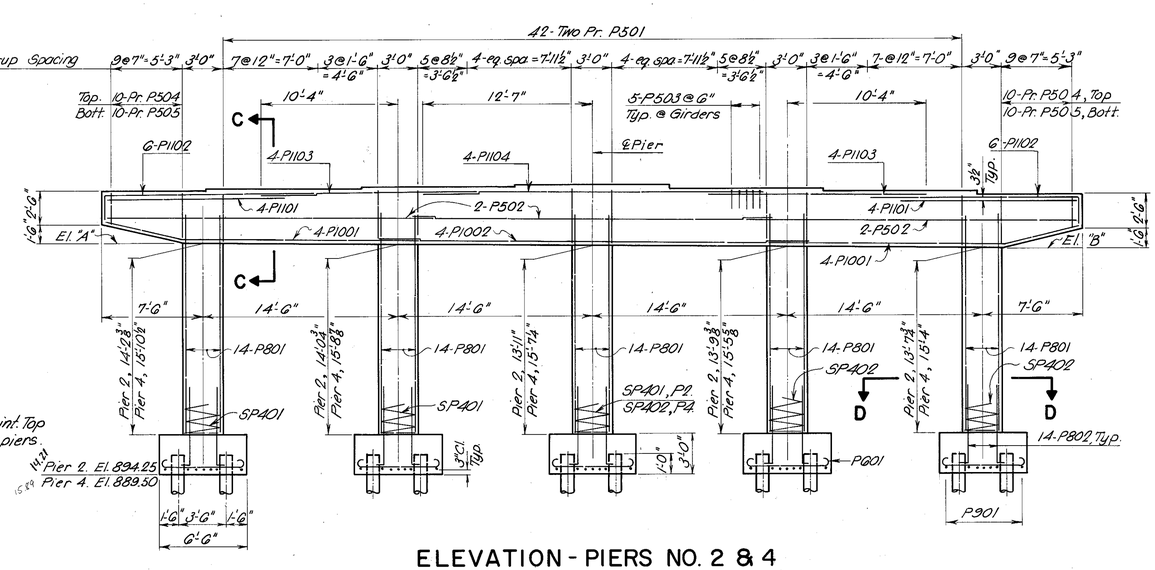
SECTION C-C



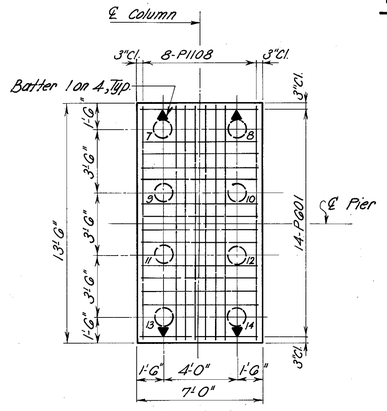
SECTION D-D



ELEVATION - PIER NO. 3



ELEVATION - PIERS NO. 2 & 4



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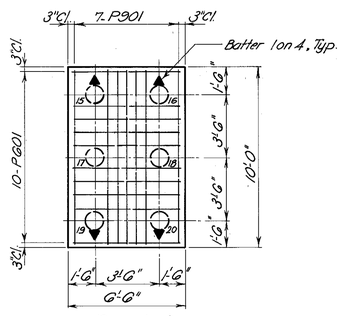
PIER NO. 3



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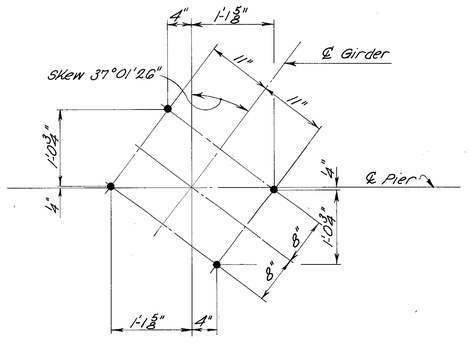
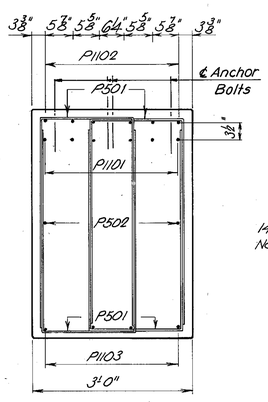
PIERS NO. 2&4

TYPICAL
FOOTING PLANS

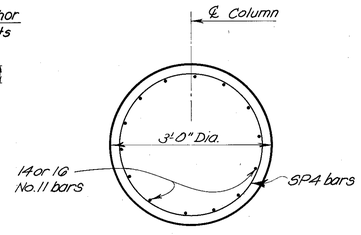


B-300 - MODIFIED - PIER NO. 3

ANCHOR BOLT LAYOUT



SECTION A-A



SECTION B-B

NOTE:

Work this sheet with sh. 9 / 18.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

10 / 18

PIERS NO. 2, 3 & 4

BRIDGE NO. GRE-675-0616

I-675 UNDER DAYTON XENIA RD.

GREENE COUNTY

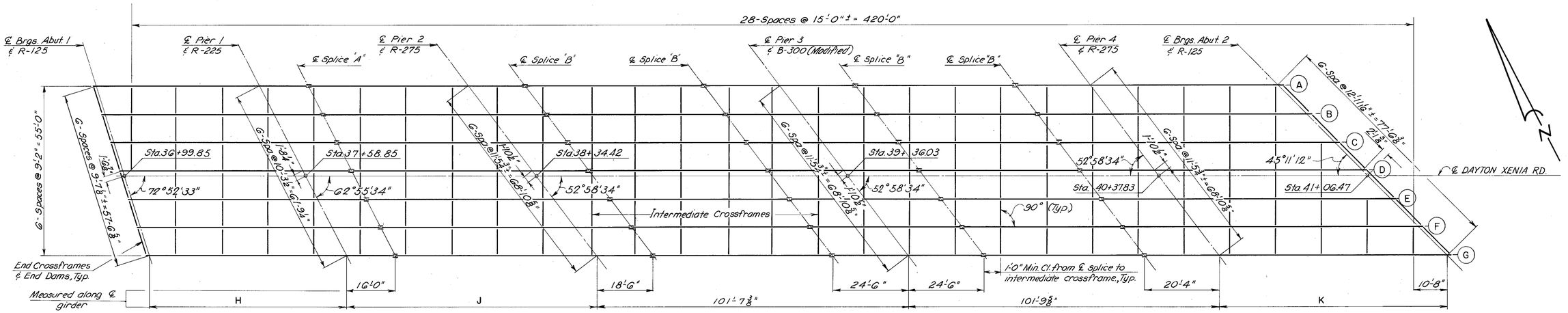
STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	SA	9/25/72	

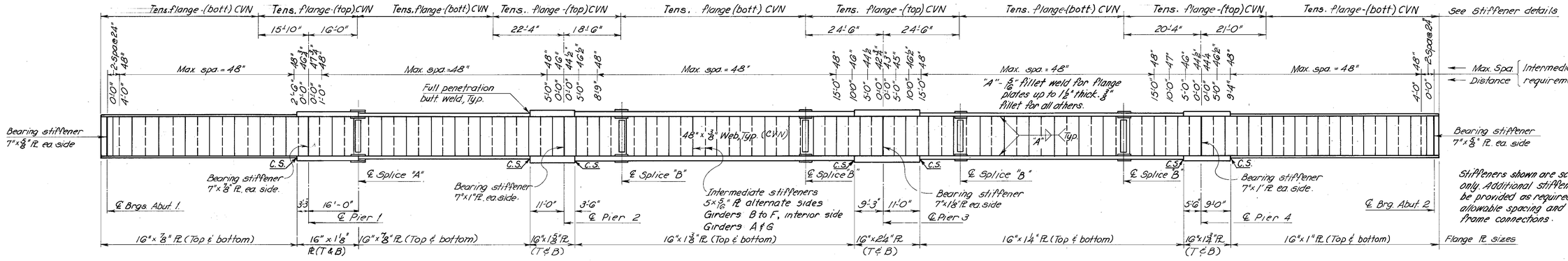
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

481
616

GRE-675 - 5 - 37
GREENE COUNTY



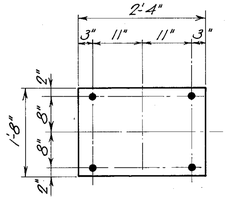
FRAMING PLAN



TYPICAL GIRDER ELEVATION

Welded forming attachments shall not be used in the tension areas of the top flange.

GEOMETRY			
GIRDER	H	J	K
A	53'-1¼"	68'-6¼"	61'-8⅜"
B	54'-11⅜"	70'-9⅛"	63'-10⅝"
C	56'-9⅞"	72'-11⅞"	66'-1"
D	58'-8⅛"	75'-2½"	68'-3⅜"
E	60'-6⅜"	77'-5¼"	70'-5⅝"
F	62'-4⅝"	79'-8"	72'-8"
G	64'-3¼"	81'-10⅜"	74'-10¼"



B-300 - MODIFIED

Base plate as shown above. All other details same as Standard Bearing B-300

NOTES

For intermediate crossframe details, see Common Details Sht. C2 | C2
For location of scuppers, see sh. 2 | 18
For details of expansion bearings, R-125, R-225 & R-275, see Std Dwg. RB-1-55.
For typical transverse section, see Section "A-A" sh. 13 | 18.
Work this sheet with sh. 12 | 18
Details of end dam and end crossframes (Included with Structural Steel for payment) similar to that shown on Std Dwg. SD-1-69, except that outstanding leg of 4"x4"x⅜" angle of end dam shall be cut as necessary to clear the bearing stiffeners. See Special End Crossframe detail, Common Details Sht. C1 | C2
End of Girder treatments similar to that shown on SD-1-69.
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.
For details of fixed bearing B-300, see Std.-Dwg. RB-1-55 and adjacent detail B-300-Modified.

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11 | 18

STEEL FRAMING PLAN

BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/27/72	4/27/82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

482/616

GRE-675 - 5.37
GREENE COUNTY

MICROFILMED AUG 19 1979

MICROFILMED JUN 19 1985

TYPICAL INTERMEDIATE CROSSFRAME

PLAN

SPLICE DETAILS

All bolts to be 1"⌀ H.S.

Intermediate stiffeners shall be welded to the Compression Flange. Stiffeners may be normal to Flanges.

INTERMEDIATE STIFFENERS

Bearing stiffeners to be vertical

BEARING STIFFENERS

BLOCKING DIAGRAM

DIMENSION	BEAMS						
	A	B	C	D	E	F	G
U	3 9/16"	3 11/16"	3 9/16"	3 7/16"	3 7/16"	3 3/8"	3 1/4"
X	4 3/16"	3 15/16"	3 11/16"	3 7/16"	3 1/4"	3"	2 3/4"
Y	2 1/2"	2 3/8"	2 1/4"	2 1/8"	2"	1 15/16"	1 13/16"
Z	1"	15/16"	7/8"	15/16"	7/8"	13/16"	11/16"

CAMBER ALIGNMENT DIAGRAM

DEFLECTION AND CAMBER

EXTERIOR GIRDER A

DESCRIPTION	SPAN 1			SPAN 2				SPAN 3				SPAN 4				SPAN 5		
	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	℄ Spl.	℄ Spl.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/16"	0"	0"	0"	0"	0"	1/16"	1/8"	1/8"	1/16"	1/16"	1/8"	1/16"	1/16"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	3/16"	3/16"	1/8"	0"	0"	0"	-1/16"	3/8"	9/16"	13/16"	3/8"	1/4"	5/8"	7/16"	5/16"	0"	1/16"	1/16"
ADJUSTMENT REQ'D. FOR VERTICAL CURVE	1/4"	3/8"	1/4"	7/16"	7/16"	9/16"	3/8"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
REQ'D. SHOP CAMBER	7/16"	5/8"	3/8"	7/16"	7/16"	9/16"	5/16"	7/16"	11/16"	15/16"	7/16"	5/16"	3/4"	1/2"	3/8"	0"	1/16"	1/16"

INTERIOR GIRDERS B THRU F

DESCRIPTION	SPAN 1			SPAN 2				SPAN 3				SPAN 4				SPAN 5		
	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	℄ Spl.	℄ Spl.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.
DEFLECTION DUE TO WEIGHT OF STEEL	1/16"	1/16"	0"	0"	0"	0"	0"	1/16"	1/16"	1/8"	1/16"	0"	1/8"	1/16"	1/16"	0"	1/16"	1/16"
DEFLECTION DUE TO REMAINING DEAD LOAD	1/4"	5/16"	3/16"	1/16"	1/16"	1/16"	1/16"	7/16"	9/16"	7/8"	7/16"	5/16"	11/16"	7/16"	5/16"	1/16"	5/16"	5/16"
ADJUSTMENT REQ'D. FOR VERTICAL CURVE	5/16"	5/16"	5/16"	3/8"	3/8"	7/16"	1/4"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
REQ'D. SHOP CAMBER	5/8"	11/16"	1/2"	7/16"	7/16"	1/2"	5/16"	1/2"	5/8"	1"	1/2"	5/16"	13/16"	1/2"	3/8"	1/16"	3/8"	3/8"

EXTERIOR GIRDER G

DESCRIPTION	SPAN 1			SPAN 2				SPAN 3				SPAN 4				SPAN 5		
	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	℄ Spl.	℄ Spl.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.
DEFLECTION DUE TO WEIGHT OF STEEL	1/16"	1/16"	0"	0"	0"	0"	0"	1/16"	1/16"	1/8"	1/16"	1/16"	1/8"	1/16"	1/16"	0"	1/16"	1/16"
DEFLECTION DUE TO REMAINING DEAD LOAD	1/4"	5/16"	3/16"	1/8"	1/8"	1/4"	1/16"	5/16"	7/16"	3/4"	3/8"	1/4"	9/16"	5/16"	1/4"	3/16"	7/16"	3/8"
ADJUSTMENT REQ'D. FOR VERTICAL CURVE	3/8"	1/2"	3/8"	1/4"	1/4"	3/16"	1/8"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
REQ'D. SHOP CAMBER	11/16"	7/8"	9/16"	3/8"	3/8"	7/16"	3/16"	3/8"	1/2"	7/8"	7/16"	5/16"	11/16"	3/8"	5/16"	3/16"	1/2"	7/16"

Work this sheet with sheet 11/18.

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CINCINNATI OHIO

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SUPERSTRUCTURE DETAILS

BRIDGE NO. GRE-675-0616

I-675 UNDER DAYTON XENIA RD.

GREENE COUNTY

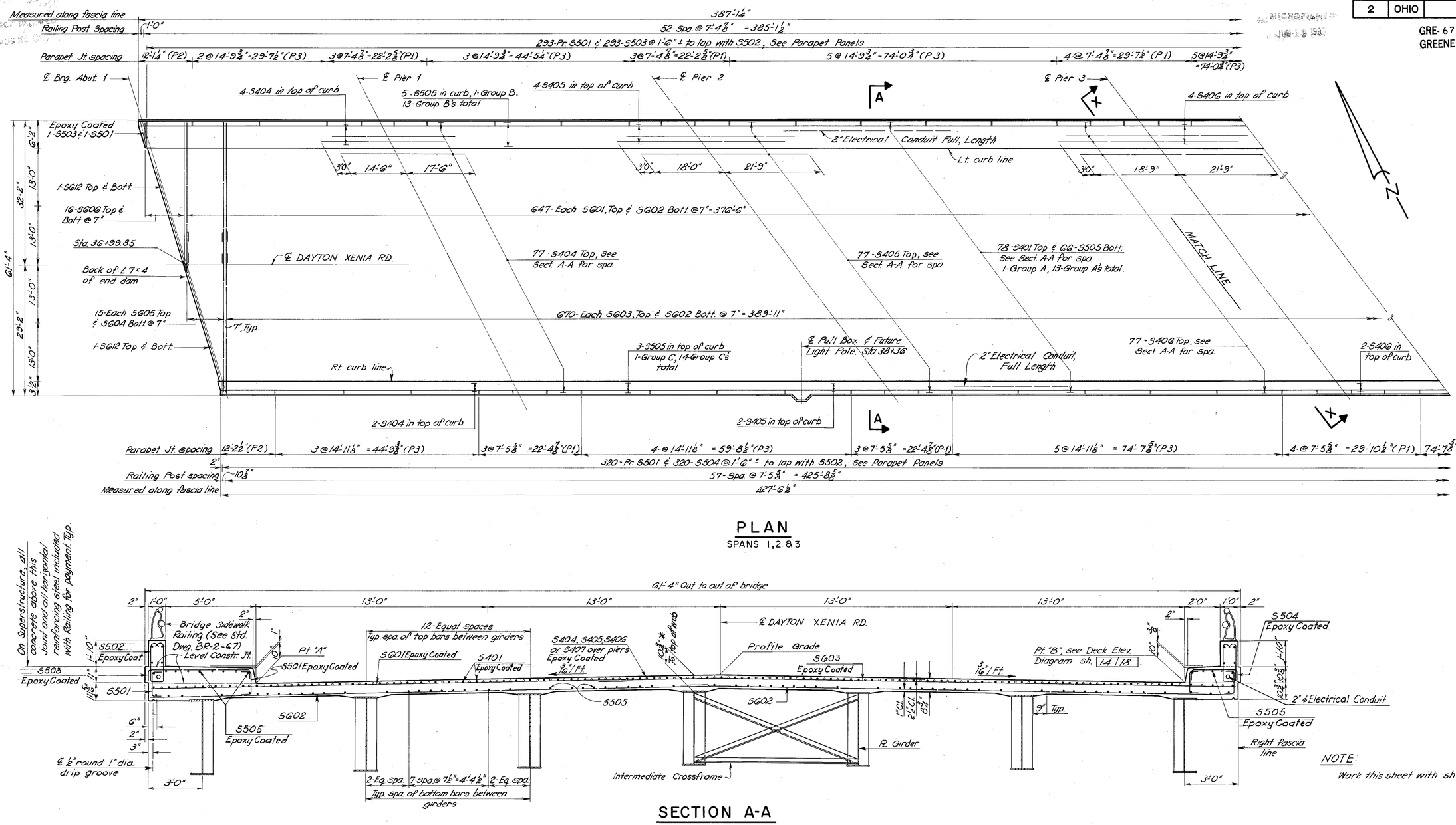
STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

483
616

GRE-675 - 5.37
GREENE COUNTY



PLAN
SPANS 1, 2 & 3

SECTION A-A

NOTE:
Work this sheet with sh 14 18.

* This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.

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CINCINNATI — OHIO

13 18

SUPERSTRUCTURE ROADWAY SLAB-1

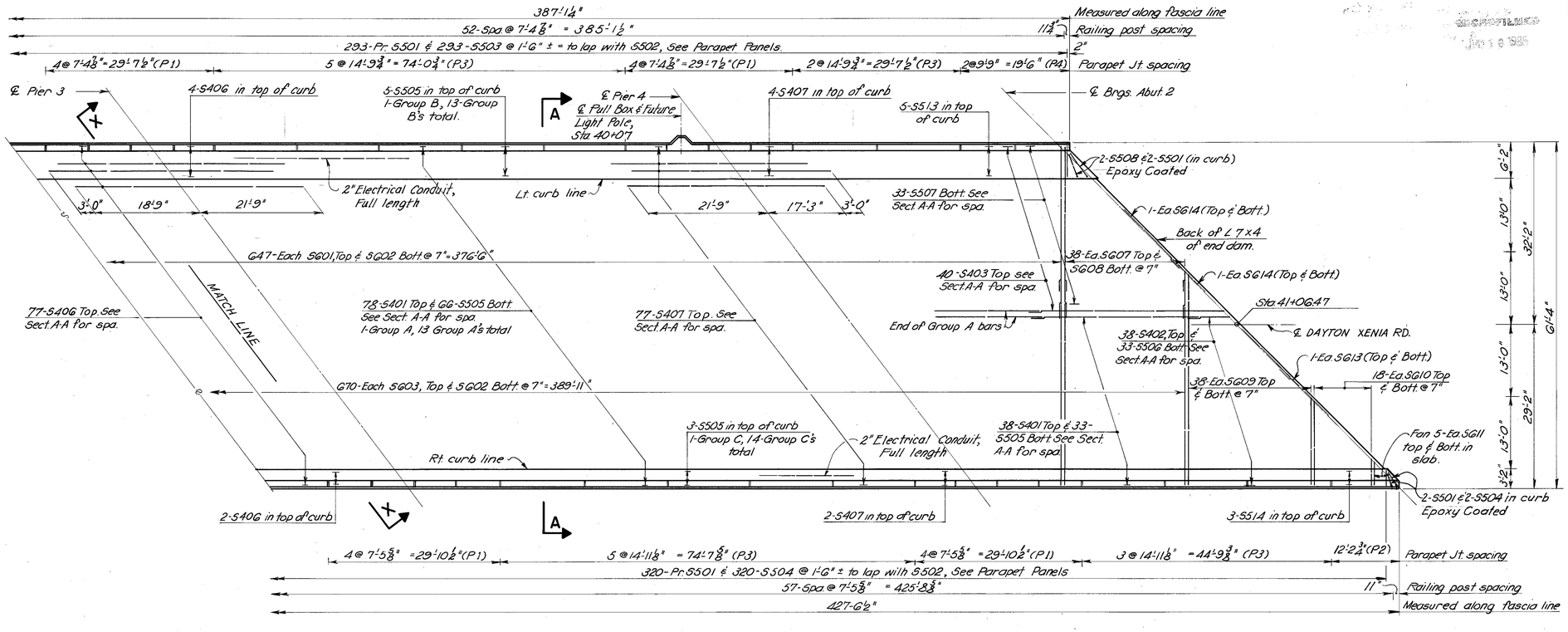
BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA. 36+97.50 TO STA 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/72	

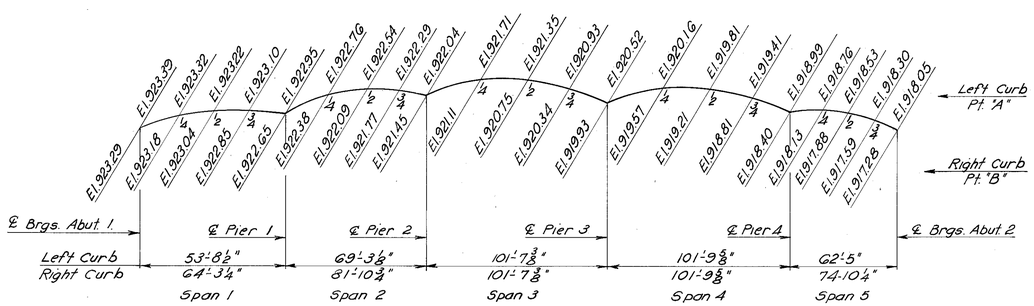
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

484
616

GRE-675 - 5.37
GREENE COUNTY



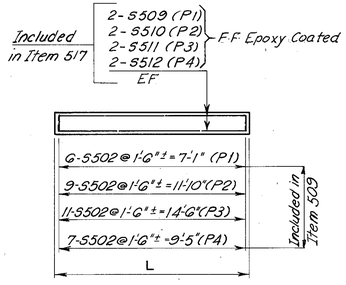
PLAN
SPANS 4 & 5



DECK ELEVATION DIAGRAM

AT CURB POINTS A & B
BEFORE CONCRETE IS PLACED

PANELS		
NO. REQ'D.	MARK	L
28	P1	7'-4⅞"
3	P2	12'-1⅛" ±
37	P3	14'-9¾" ±
2	P4	9'-9"



PARAPET PANELS

NOTES:

Slab thickness shown includes 1" for monolithic wearing surface.
Work this sheet with sh. 13 / 18.
A haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more 1:4 for a haunch less than 9" in width.
For deflection Joint details see Std. Dwg. BR-2-G7
For reinforcing steel list see sh. 18 / 18.
For End Dam details, included with Item 513 (Structure Steel) for payment, see Std. Dwg. SD-1-G9 & Sh. C1 / C2
For scupper locations, not shown, see sh. 2 / 18.
For Light Pole Pedestal Details, see Std. Construction Dwg. HL-4.
All Splices and Dowels to be lapped min. 30 bar dia. unless otherwise shown.

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CINCINNATI OHIO

14 / 18

SUPERSTRUCTURE
ROADWAY SLAB-2

BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY
STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	VISED
V.P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

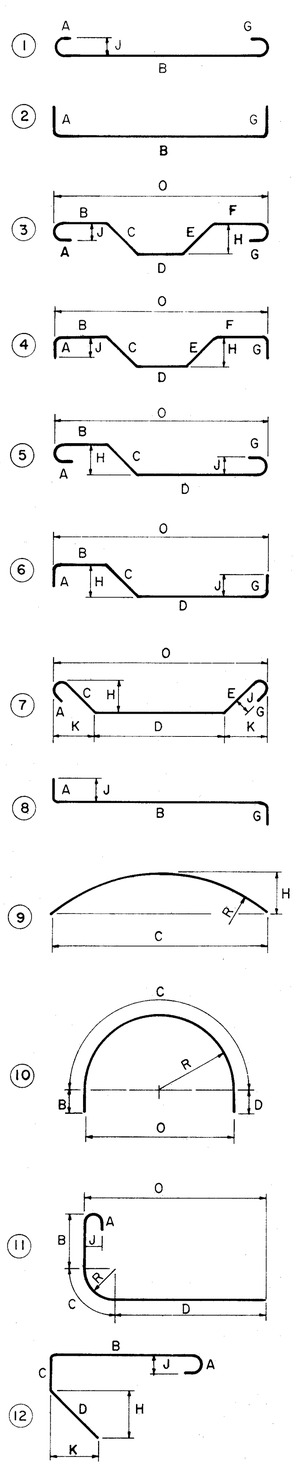
485/616

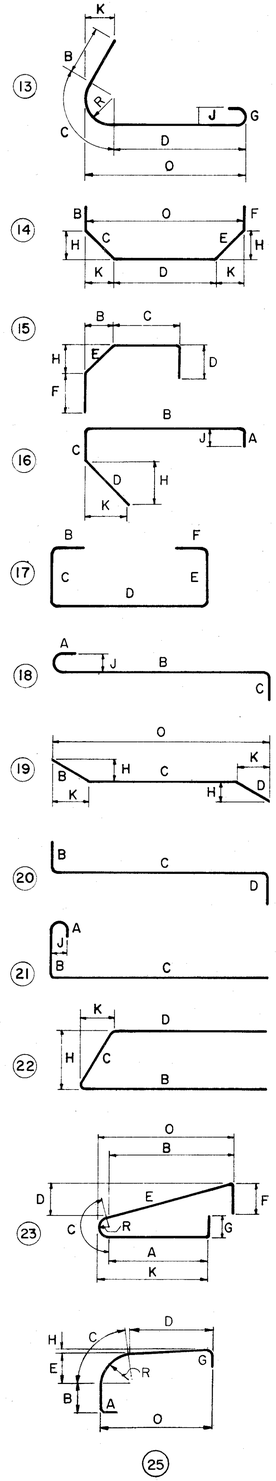
GRE-675 · 5·37
GREENE COUNTY

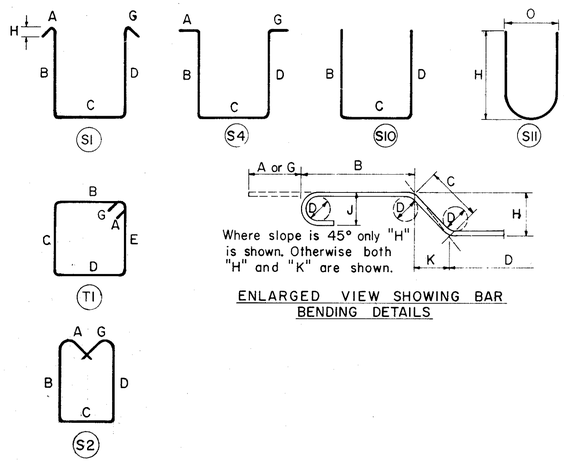
ABUTMENT NO.1

Reinforcing steel in Abutment No.1 shall have the suffix "A"

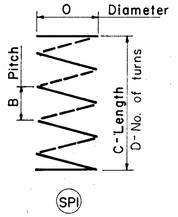
MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
A501	54	27'-8"	1,558	Str													
A502	15	19'-6"	305	Str													
A503	2	6'-9"	14	Str													
A504	43	22'-0"	987	Str													
A505	40	9'-6"	396	Str													
A506	8	10'-10"	90	22			3'-0"	8'-0"				2'-10⅜"		10⅜"			
A507	6	24'-10"	155	22			3'-0"	22'-0"				2-10⅜"		10⅜"			
A508	6	21'-4"	134	19		2'-0"	19'-5"					7⅞"		1'-10⅞"	21'-3⅞"		
A509	9	26'-3"	246	Str													
A510	19	19'-3"	381	Str													
A511	56	6'-7"	385	S10		2'-0"	2'-10"	2'-0"									
A512	2	3'-7"	7	S10		2'-0"	1'-3"	6"									2 Epoxy Coated
A513	8	8'-0"	67	Str													
A514	43	21'-0"	342	Str													
A515	40	6'-0"	250	Str													
A516	8	4'-9"	40	Str													
A517	8	8'-7"	72	22		5'-9"	3'-0"					2'-10⅜"		10⅜"			
A518	6	23'-3"	145	22		20'-5"	3'-0"					2'-10⅜"		10⅜"			
A519	6	19'-3"	120	19		2'-0"	17'-4"					7⅞"		1'-10⅞"	19'-2⅞"		
A520	2	6'-3"	13	2	9"	5'-6"											2 Epoxy Coated
A521	2	2'-9"	6	2	9"	1'-3"					9"						
A522	2	18'-8"	39	Str													
A523	1	15'-0"	16	Str													
A524	13	Varies 15'-5" to 25'-9" by 10'-8", 1-ea.	279	Str													
A525	10	Varies, 8'-2" to 15'-5" by 9'-8", 1-ea.	123	Str													
A526	3	Varies, 2'-10" to 9'-4" by 1'-9", 1-ea.	14	Str													
A527	2	25'-11"	54	Str													
A528	2	25'-2"	52	Str													
A529	16	23'-6"	392	Str													
A530	10	Varies 4'-10" to 23'-6" by 4'-8", 2-ea.	148	Str													
A531	2	21'-6"	45	Str													
A533	10	Varies 3'-6" to 23'-8" by 5'-0½", 2-ea.	142	Str													
A535	2	15'-3"	32	16	6"	4'-8"	6'-3"	4'-2⅞"				3'-0"		3'-0"			1 Epoxy Coated
A536	8	3'-3"	27	S11								1'-6"			6½"		8 Epoxy Coated
A537	24	4'-8"	117	Str													12 Epoxy Coated
A538	4	23'-3"	97	S2	5"	11'-0"	8"	11'-0"			5"						4 Epoxy Coated
A539	6	Varies 1'-11" to 3'-11" by 1'-0", 2-ea.	18	Str													
A540	1	18'-5"	19	S-2	5"	8'-7"	8"	8'-7"			5"						1 Epoxy Coated
A541	1	16'-1"	17	S-2	5"	7'-5"	8"	7'-5"			5"						1 Epoxy Coated
A542	2	23'-8"	49	Str													
A543	4	6'-10"	29	25	9"	1'-0"	7⅞"	4'-0"	5"		6"	1"			4'-6"	5"	4 Epoxy Coated
A545	1	18'-11"	20	S-2	5"	8'-10"	8"	8'-10"			5"						1 Epoxy Coated
A546	1	16'-9"	17	S-2	5"	7'-9"	8"	7'-9"			5"						1 Epoxy Coated
A547	2	15'-7"	33	16	6"	4'-8"	6'-9"	3'-10¾"				2'-9"		2'-9"			1 Epoxy Coated
A548	6	Varies 2'-2" to 4'-2" by 1'-0", 2-ea.	20	Str													
A601	52	30'-0"	2,343	Str													
A602	2	22'-9"	68	Str													
A603	24	24'-8"	889	Str													
A604	100	8'-10"	1,327	1	8"	8'-2"							6"				
A605	9	8'-5"	114	1	8"	7'-9"							6"				
A606	13	6'-9"	132	Str													
A607	31	7'-0"	326	1	8"	6'-4"							6"				
A608	1	23'-9"	36	Str													
A609	12	9'-6"	171	Str													7 Epoxy Coated
A610	13	6'-11"	135	1	8	6'-3"							6"				
A611	1	11'-8"	18	Str													
A612	1	10'-3"	15	Str													
A613	1	20'-9"	31	Str													
A614	3	22'-4"	101	Str													
A615	1	26'-1"	39	Str													
A616	3	15'-5"	69	Str													
A617	28	12'-3"	515	16		1'-3"	7'-5"	3'-9"				2'-7¾"		2'-7¾"			
A618	57	11'-10"	1,013	17		3'-3"	11"	8'-0"									
A619	35	10'-0"	526	Str													
A620	5	Varies 2'-10" to 6'-4" by 10½", 1-ea.	34	Str													
A621	11	13'-1"	216	16			9'-6"	3'-9"				2'-7¾"		2'-7¾"			







ENLARGED VIEW SHOWING BAR BENDING DETAILS



NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SP1, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1½ Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SP1 and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 16, 17, 18 / 18
14. **Reinforcing Steel Samples: Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.**

KING & GAVARIS
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15/18

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0616

I-675 UNDER DAYTON XENIA RD.

GREENE COUNTY

STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/5/72	

FED. RD. DIVISION	STATE	PROJECT	
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GRE-675 - 5-37
GREENE COUNTY

486
616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 1 CONTINUED																
A622	10	Var. 6'-9" to 10'-0" by 4⅛", 1-ea.	126	Str													
A623	29	12'-6"	544	16		1'-3"	7'-8"	3'-9"				2'-7¾"		2'-7¾"			
A629	9	7'-8"	104	1	8"	7'-0"							6"				
A630	120	8'-0"	1,442	Str													
A631	46	7'-0"	484	Str													
A701	10	8'-1"	165	1	10"	7'-3"							7"				
A801	3	8'-9"	70	Str													
A802	4	12'-6	134	Str													
A803	6	22'-9"	364	Str													
A804	4	15'-1"	161	Str													
A805	1	16'-10"	45	Str													
A806	4	23'-9"	254	Str													
A807	6	26'-3"	421	Str													
A808	1	18'-5"	49	Str													
A809	7	22'-6"	421	Str													
A810	56	6'-2"	922	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
A901	100	10'-4"	3,513	1	1'-3"	9'-1"							11¼"				
A902	10	10'-0"	340	1	1'-3"	8'-9"							11¼"				
A903	90	17'-10"	5,457	Str													
A904	128	6'-7"	2865	22		1'-3"	5'-7⅞"					5'-7"		4⅛"			
A905	13	21'-9"	961	Str													
A906	11	Var. 13'-6" to 18'-0" by 5¼", 1-ea.	592	Str													
A907	10	13'-0"	442	12	1'-3"	5'-6"		6'-6"				6'-6"		5"			
A908	10	Var. 9'-4" to 13'-2" by 5⅛", 1-ea.	383	Str													
A909	13	14'-3"	630	12	1'-3"	6'-6"		6'-9⅛"				6'-9"		5"			
A910	4	Var. 7'-7" to 8'-11" by 5⅛", 1-ea.	112	Str													
A911	10	Var. 7'-10" to 11'-4" by 4⅜", 1-ea.	326	22		1'-3"	Var. 6'-10" to 10'-4" by 4⅝"					Var. 6'-9⅞" to 10'-3¾" by 4⅜"		Var. 5⅛" to 7¾" by ¼"			
A1001	10	3'-6"	409	Str													
A1002	10	14'-7"	628	13		4'-8"	2'-0"	6'-6"			1'-5"			3½"	7'-9"	1'-3"	
A1101	100	16'-0"	8,501	13		4'-10"	2'-1"	7'-6"			1'-7"			3"	8'-11"	1'-5"	
A1102	87	12'-6"	5,778	Str													
A1103	23	11'-6"	1,405	Str													
A1104	10	15'-7"	828	13		4'-10"	2'-1"	7'-1"			1'-7"			3"	8'-6"	1'-5"	
		Total	55,106														
	ABUTMENT NO. 2				Reinforcing steel in Abutment No. 2 shall have the suffix "B"												
A501	90	31'-6"	1,971	Str													
A502	15	21'-0"	329	Str													
A503	38	15'-9"	624	Str													
A504	49	11'-5"	583	Str													
A505	7	16'-1"	117	16		13'-2"	4"	2'-9"				1'-11¼"		1'-11¼"			
A506	6	14'-3"	89	19			12'-0"	2'-3"				1'-7/16"		1'-7/16"	13'-7/16"		
A507	6	18'-7"	116	20		3'-0"	15'-9"										
A508	2	4'-9"	10	2	9"	4'-0"											2 Epoxy Coated
A509	4	2'-9"	11	2	9"	1'-3"					9"						
A510	8	27'-3"	227	Str													
A511	68	7'-8"	544	S10		2'-5"	3'-1"	2'-5"									
A512	5	20'-2"	105	Str													
A513	13	20'-6"	278	Str													
A514	96	23'-8"	2,370	Str													
A515	22	9'-0"	207	Str													
A516	10	22'-9"	237	Str													
A517	7	6'-6"	47	Str													
A518	7	9'-10"	72	19			5'-4"	4'-6"				3'-2"		3'-2"	8'-6"		
A519	6	26'-9"	167	19			22'-9"	4'-0"				2'-10"		2'-10"	25'-7"		
A520	6	22'-0"	138	19			20'-3"	1'-9"				1'-2⅞"		1'-2⅞"	21'-5⅞"		
A521	2	8'-2"	17	2	9"	7'-5"											2 Epoxy Coated
A522	4	28'-1"	117	Str													
A523	13	20'-11"	284	Str													

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 2 CONTINUED																
A524	1	12'-9"	13	Str													
A525	2	27'-0"	56	Str													
A526	11	Var. 19'-8" to 28'-4" by 10⅛", 1-ea.	275	Str													
A527	2	21'-5"	45	19			20'-9"	8"				3⅜"		7¼"	21'-4"		
A528	11	Var. 10'-6" to 19'-5" by 10¼", 1-ea.	172	Str													
A529	3	Var. 2'-8" to 6'-2" by 1'-9", 1-ea.	14	Str													
A530	20	19'-8"	410	Str													
A531	4	19'-8"	82	Str													
A532	2	7'-0"	15	Str													
A533	2	24'-8"	51	Str													
A534	10	Var. 3'-0" to 19'-8" by 4¼", 2-ea.	118	Str													
A535	12	Var. 3'-3" to 24'-8" by 4 3/8", 2-ea.	175	Str													
A536	8	3'-3"	27	S-11								1'-6"			6½"		8 Epoxy Coated
A537	28	4'-8"	136	Str													14 Epoxy Coated
A538	4	23'-3"	97	S-2	5"	11'-0"	8"	11'-0"			5"						4 Epoxy Coated
A539	4	Var. 2'-5" to 3'-8" by 1'-5", 2-ea.	13	Str													
A540	1	19'-11"	21	S-2	5"	9'-3"	8"	9'-3"			5"						1 Epoxy Coated
A541	1	17'-5"	18	S-2	5"	8'-1"	8"	8'-1"			5"						1 Epoxy Coated
A542	2	15'-4"	32	16	8"	4'-8"	6'-10"	3'-5"				2'-5"		2'-5"			1 Epoxy Coated
A543	4	6'-10"	29	25	9"	1'-0"	7⅝"	4'-0"	5"		6"	1"			4'-6"	5"	4 Epoxy Coated
A544	6	9'-0"	56	Str													
A545	1	23'-3"	24	S-2	5"	11'-0"	8"	11'-0"			5"						1 Epoxy Coated
A546	1	21'-5"	22	S-2	5"	10'-1"	8"	10'-1"			5"						1 Epoxy Coated
A547	2	14'-8"	31	16	8"	4'-8"	7'-9"	1'-10"				1'-3½"		1'-3½"			1 Epoxy Coated
A548	2	Var. 3'-6" to 4'-6" by 10", 2-ea.	8	Str													
A601	78	30'-0"	3515	Str													
A602	2	22'-7"	68	Str													
A603	24	24'-6"	883	Str													
A604	135	8'-10"	1,791	1	8"	8'-2"											
A605	8	8'-5"	101	1	8"	7'-9"											
A606	11	6'-9"	112	Str													
A607	19	7'-0"	200	1	8"	6'-4"											
A608	8	6'-5"	77	1	8"	5'-9"											
A609	11	6'-11"	114	1	8"	6'-3"											
A610	12	9'-6"	171	Str													
A611	1	12'-0"	18	Str													
A612	3	23'-3"	105	Str													
A613	1	22'-1"	33	Str													
A614	1	26'-0"	39	Str													
A615	1	14'-3"	21	Str													
A616	2	20'-3"	61	Str													
A617	1	13'-0"	20	Str													
A618	2	11'-3"	34	Str													
A619	44	13'-0"	859	16		1'-3"	8'-2"	3'-9"				2'-7¾"		2'-7¾"			
A620	79	11'-10"	1,404	17		3'-3"	11"	8'-0"									
A621	6	6'-11"	62	Str													

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 15/18
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 15/18

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO
16/18

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0616

I-675 UNDER DAYTON XENIA RD.

GREENE COUNTY

STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675 • 5.37
GREENE COUNTY

487/616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		ABUTMENT NO. 2 CONTINUED															
A622	3	13'-2"	59	16			9'-6"	3'-9"				2'-7¾"		2'-7¾"			
A623	42	10'-0"	631	Str													
A624	5	Var. 2'-8" to 6'-11" by 1-0 341. Rad.	36	Str													
A625	25	12'-6"	469	16		1'-3"	7'-8"	3'-9"				2'-7¾"		2'-7¾"			
A626	10	12'-3"	184	16		1'-3"	7'-5"	3'-9"				2'-7¾"		2'-7¾"			
A627	6	14'-0"	126	16			10'-3"	3'-9"				2'-7¾"		2'-7¾"			
A628	5	14'-3"	107	16			10'-6"	3'-9"				2'-7¾"		2'-7¾"			
A629	10	8'-8"	130	1	8"	8'-0"							6"				
A630	156	8'-0"	1,874	Str													
A631	44	7'-0"	463	Str													
A701	11	8'-1"	182	1	10"	7'-3"							7"				
A801	3	7'-3"	58	Str													
A802	2	15'-6"	83	Str													
A803	6	22'-9"	364	Str													
A804	1	12'-0"	32	Str													
A805	1	14'-9"	39	Str													
A806	11	20'-0"	587	Str													
A807	2	9'-6"	51	Str													
A808	1	14'-0"	37	Str													
A809	7	23'-3"	435	Str													
A810	1	17'-6"	47	Str													
A811	75	6'-2"	1,235	14		1'-3"	3'-8"	1'-3"				2'-7"	11¼"	2'-7"			
A901	135	10'-4"	4,743	1	1'-3"	9'-1"							11¼"				
A902	9	10'-0"	306	1	1'-3"	8'-9"							11¼"				
A903	122	18'-10"	7,812	Str													
A904	160	6'-7"	3,581	22		1'-3"	5'-7⅞"					5'-7"		4⅛"			
A905	11	22'-7"	845	Str													
A906	10	Var. 16'-10" to 20'-0" by 5½"; 1-20	643	Str													
A907	6	23'-4"	476	Str													
A908	11	Var. 16'-5" to 11'-10" by 5½"; 1-20	528	Str													
A909	13	Var. 6'-2" to 11'-7" by 5½"; 1-20	392	Str													
A910	13	13'-7"	600	12	1'-3"	7'-0"		5'-7⅛"				5'-7"		4⅛"			
A911	8	Var. 11'-11" to 15'-5" by 5⅜"; 1-20	367	12	1'-3"	5'-9"		Var. 5'-2" to 8'-4" by 5⅜"				Var. 5'-2" to 8'-4" by 5⅜"		Var. 3⅜" to 6'-1¼" by 3⅜"			
A1001	11	9'-6"	450	Str													
A1002	11	14'-7"	690	13		4'-8"	2'-0"	6'-6"				1'-5"		3½"	7'-9"	1'-3"	
A1101	135	16'-1"	11,536	13		4'-10"	2'-1"	7'-7"				1'-7"		3"	9'-0"	1'-5"	
A1102	118	12'-6"	7,837	Str													
A1103	26	11'-6"	1,589	Str													
A1104	9	15'-7"	745	13		4'-10"	2'-1"	7'-1"				1'-7		3"	8'-6"	1'-5"	
		Total	70,675														
		Total Abutments	125,763														
		PIER NO. 1		Reinforcing steel in Pier No. 1 shall have the suffix "A"													
SP401	2	16'-1½"	610	SP1		4½	16'-1½"	46							2'-8"		
SP402	2	15'-9"	597	SP1		4½	15'-9"	45							2'-8"		
P501	200	8'-10"	1,843	S10		3'-8"	1'-9"	3'-8"									
P502	6	22'-10"	143	Str													
P503	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P504	32	Var. 5'-10" to 8'-10" by 2⅝"; 4-20	245	S10		Var. 2'-2" to 3'-8" by 2⅝"	1'-9"	Var. 2'-2" to 3'-8" by 2⅝"									
P505	32	4'-8"	156	S10		1'-7"	1'-9"	1'-7"									
P601	40	7'-4"	441	1	8"	6'-0"						8"	6"				
P801	56	18'-9"	2,804	Str													
P802	56	6'-2"	922	2	11"	5'-3"											
P901	28	12'-0"	1,142	1	1'-3"	9'-6"						1'-3"	11¼"				

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		PIER NO. 1 CONTINUED															
P1001	4	13'-1"	225	Str													
P1002	8	25'-11"	892	19		5'-9"	20'-2"					1'-6"		5'-7"	25'-9"		
P1003	4	20'-3"	349	Str													
P1101	8	19'-5"	825	20		2'-2"	17'-7"										
P1102	6	14'-11"	476	20		2'-2"	13'-1"										
P1103	8	21'-2"	900	Str													
P1104	2	20'-7"	219	Str													
		Total	12,993														
		PIER NO. 2		Reinforcing steel in Pier No. 2 shall have the suffix "B"													
SP401	3	13'-10½"	795	SP1		4½"	13'-10½"	40							2'-8"		
SP402	2	13'-6"	516	SP1		4½"	13'-6"	39							2'-8"		
P501	168	8'-10"	1,548	S10		3'-8"	1'-9"	3'-8"									
P502	6	25'-4"	159	Str													
P503	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P504	40	Var. 5'-10" to 8'-10" by 2⅝"; 4-20	306	S10		Var. 2'-2" to 3'-8" by 2⅝"	1'-9"	Var. 2'-2" to 3'-8" by 2⅝"									
P505	40	4'-8"	195	S10		1'-7"	1'-9"	1'-7"									
P601	50	7'-4"	551	1	8"	6'-0"					8"			6"			
P801	70	16'-8"	3,115	Str													
P802	70	6'-2"	1,153	2	11"	5'-3"											
P901	35	12'-0"	1,428	1	1'-3"	9'-6"					1'-3"			11¼"			
P1001	8	24'-9"	852	19		6'-0"	18'-9"					1'-6"		5'-10"	24'-7"		
P1002	4	30'-0"	516	Str													
P1101	8	13'-4"	567	Str													
P1102	12	17'-5"	1,110	20		2'-2"	15'-7"										
P1103	8	16'-4"	694	Str													
P1104	4	25'-2"	535	Str													
		Total	14,244														
		PIER NO. 3		Reinforcing steel in Pier No. 3 shall have the suffix "C"													
SP401	1	15'-9"	299	SP1		4½"	15'-9"	45							2'-8"		
SP402	3	15'-4½"	875	SP1		4½"	15'-4½"	44							2'-8"		
SP403	1	15'-0"	285	SP1		4½"	15'-0"	43							2'-8"		
P501	200	8'-9"	1,825	S10		3'-8"	1'-8"	3'-8"									
P502	6	25'-4"	159	Str													
P503	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P504	56	Var. 5'-3" to 8'-9" by 2⅝"; 4-20	423	S10		Var. 2'-2" to 3'-8" by 1⅞"	1'-8"	Var. 2'-2" to 3'-8" by 1⅞"									
P505	56	4'-7"	268	S10		1'-7"	1'-8"	1'-7"									

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 15/18
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 15/18

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

17/18

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0616

I-675 UNDER DAYTON XENIA RD.

GREENE COUNTY STA: 36+97.50 TO STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

488
616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		PIER NO. 3 CONTINUED				1											
P601	70	7'-10"	824	1	8"	6'-6"					8"		6"				
P1001	12	16'-9"	865	Str													
P1002	4	23'-6"	404	Str													
P1101	12	13'-4"	850	Str													
P1102	12	17'-2"	1,094	20		2'-2"	15'-4"										
P1103	8	25'-1"	1,066	19		6'-0"	19'-1"					1'-6"		5'-9"	24'-10"		
P1104	4	30'-0"	638	Str													
P1105	16	19'-4"	1,643	Str													
P1106	28	19'-2"	2,851	Str													
P1107	74	7'-3"	2,850	11		3"	2'-1"	4'-11"							6'-4"	1'-5"	
P1108	40	16'-2"	3,436	1	1'-7"	13'-0"					1'-7"		1'-5"				
P1109	30	18'-11"	3,015	Str													
		Total	23,874														
		PIER NO. 4	Reinforcing steel in Pier No. 4 shall have the suffix "D"														
SP401	2	15'-9"	597	SP1		4k"	15'-9"	45							2'-8"		
SP402	3	15'-4k"	875	SP1		4k"	15'-4k"	44							2'-8"		
P501	168	8'-10"	1,548	S10		3'-8"	1'-9"	3'-8"									
P502	6	25'-4"	159	Str													
P503	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P504	40	Var. 5'-10" to 8'-10" by 4" 4-@.	306	S10		Var. 2'-2" to 3'-8" by 2"	1'-9"	Var. 2'-2" to 3'-8" by 2"									
P505	40	4'-8"	195	S10		1'-7"	1'-9"	1'-7"									
P601	50	7'-4"	551	1	8"	6'-0"					8"		6"				
P801	70	18'-4"	3,426	Str													
P802	70	6'-2"	1,153	2	11"	5'-3"											
P901	35	12'-0"	1,428	1	1'-3"	9'-6"					1'-3"		11¼"				
P1001	8	24'-9"	852	19		6'-0"	18'-9"					1'-6"		5'-10"	24'-7"		
P1002	4	30'-0"	516	Str													
P1101	8	13'-4"	567	Str													
P1102	12	17'-5"	1,110	20		2'-2"	15'-7"										
P1103	8	16'-4"	694	Str													
P1104	4	25'-2"	535	Str													
		Total	14,716														
	Total	Piers	65,827														
		SUPERSTRUCTURE															
S401	1052	30'-0"	21,082	Str													913 Epoxy Coated
S402	38	Var. 5'-3" to 24'-9" by 6¼" 1-@.	381	Str													38 Epoxy Coated
S403	40	Var. 3'-10" to 33'-3" by 6¼" 1-@.	618	Str													40 Epoxy Coated
S404	83	32'-0"	1,774	Str													74 Epoxy Coated
S405	83	39'-9"	2,204	Str													74 Epoxy Coated
S406	83	40'-6"	2,245	Str													74 Epoxy Coated
S407	83	39'-0"	2,162	Str													74 Epoxy Coated
S501	1,231	2'-9"	353 1	2	9"	1'-3"					9"						615 Epoxy Coated
S502	616	6'-5"	3,694	S-2	5"	2'-7"	8"	2'-7"			5"						616 Epoxy Coated
S503	294	7'-2"	2,198	2	9"	5'-8"					9"						294 Epoxy Coated
S504	322	4'-2"	1,400	2	9"	2'-8"					9"						322 Epoxy Coated
S505	998	30'-0"	31,227	Str													107 Epoxy Coated
S506	33	Var. 9'-6" to 29'-0" by 7¼" 1-@.	663	Str													
S507	33	Var. 17'-4" to 36'-9" by 7¼" 1-@.	931	Str													
S508	2	5'-11"	12	2	9"	4'-5"					9"						2 Epoxy Coated
S509	112	7'-1"	*	Str													56 Epoxy Coated
S510	12	11'-10"	*	Str													6 Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		SUPERSTRUCTURE CONTINUED															
S511	148	14'-6"	*	Str													74 Epoxy Coated
S512	8	9'-5"	*	Str													4 Epoxy Coated
S513	5	17'-4"	90	Str													5 Epoxy Coated
S514	3	29'-5"	92	Str													3 Epoxy Coated
S601	647	26'-9"	25,995	Str													647 Epoxy Coated
S602	1,317	31'-4"	61,982	Str													
S603	670	35'-11"	36,144	Str													670 Epoxy Coated
S604	15	Var. 4'-0" to 30'-0" by 1-10¼"; 1-@.	383	Str													
S605	15	Var. 8'-6" to 34'-6" by 1-10¼"; 1-@.	484	Str													15 Epoxy Coated
S606	32	Var. 3'-0" to 31'-0" by 1-10¼"; 2-@.	817	Str													16 Epoxy Coated
S607	38	Var. 4'-0" to 25'-9" by 7"; 1-@.	849	Str													38 Epoxy Coated
S608	38	Var. 8'-7" to 30'-0" by 7" 1-@.	1101	Str													
S609	76	Var. 15'-6" to 37'-0" by 7", 2-@.	2,996	Str													38 Epoxy Coated
S610	36	Var. 5'-0" to 14'-11" by 7" 2-@.	538	Str													18 Epoxy Coated
S611	10	4'-0"	60	Str													5 Epoxy Coated
S612	4	32'-4"	194	Str													2 Epoxy Coated
S613	2	28'-1"	84	Str													1 Epoxy Coated
S614	4	30'-0"	180	Str													2 Epoxy Coated
L 501	8	3'-1"	26	17			7"	2'-1"	7"								
L 502	8	7'-8	62	17			2'-1"	2'-1"	2'-11"								8 Epoxy Coated
L 503	12	8'-0"	100	14		6"	2'-11½"	1'-4"	2'-11½"	6"		2'-1"		2'-1"			
L 504	8	2'-11"	24	Str.													
		Total	206,323														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 15/18
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 15/18

* Bars included with Item 517

KING & GAVARIS
CINCINNATI — CONSULTING ENGINEERS — OHIO
18/18

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0616

I-675 UNDER DAYTON XENIA RD.

GREENE COUNTY

STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

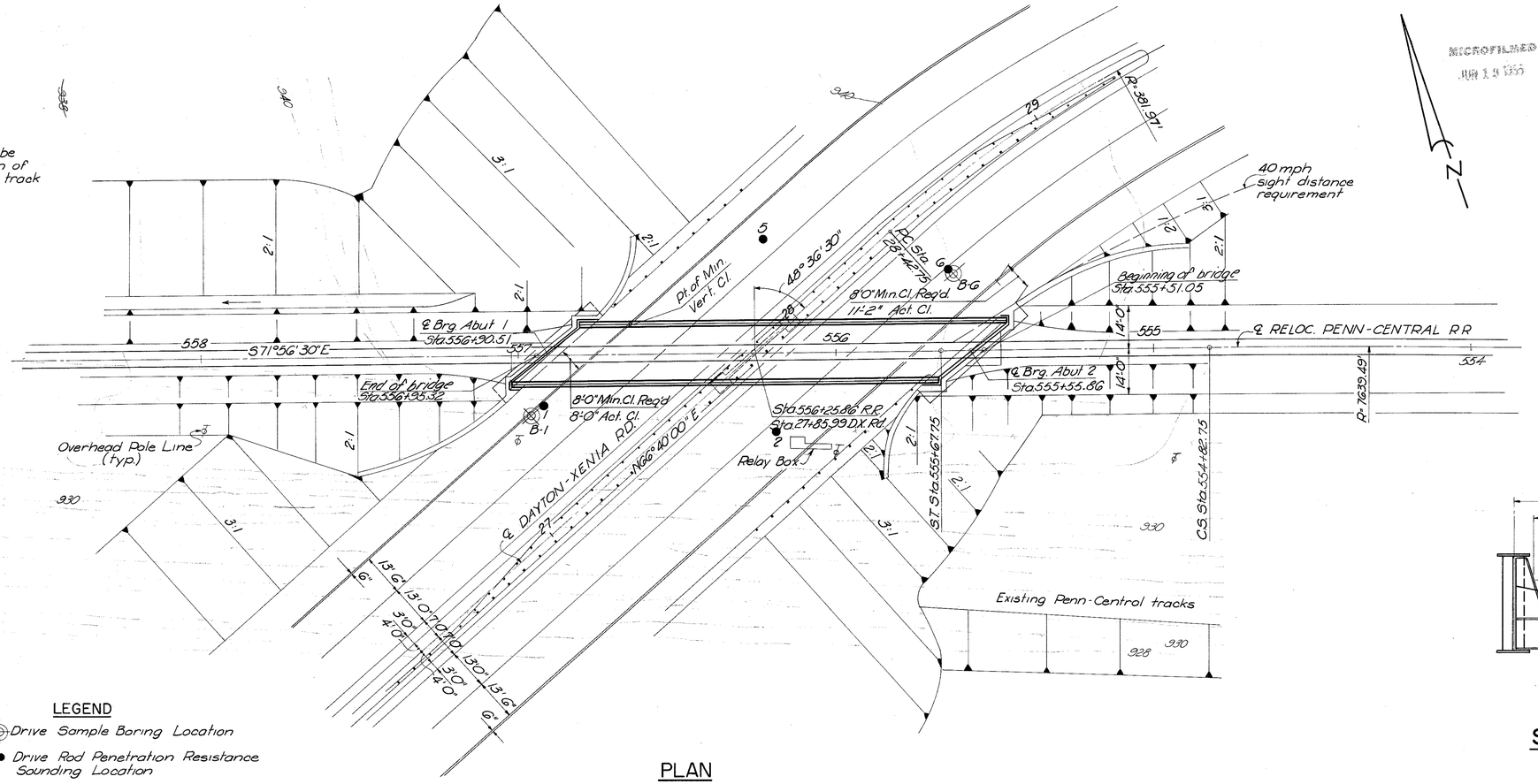
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

489/616

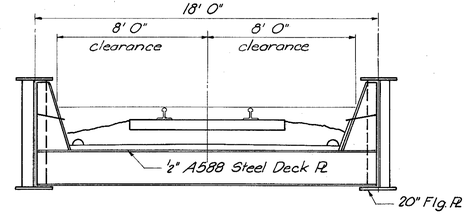
GRE-675 - 5.37
GREENE COUNTY

MICROFILMED
JUN 19 1985

Temporary sheeting will be required for construction of wingwalls near existing track



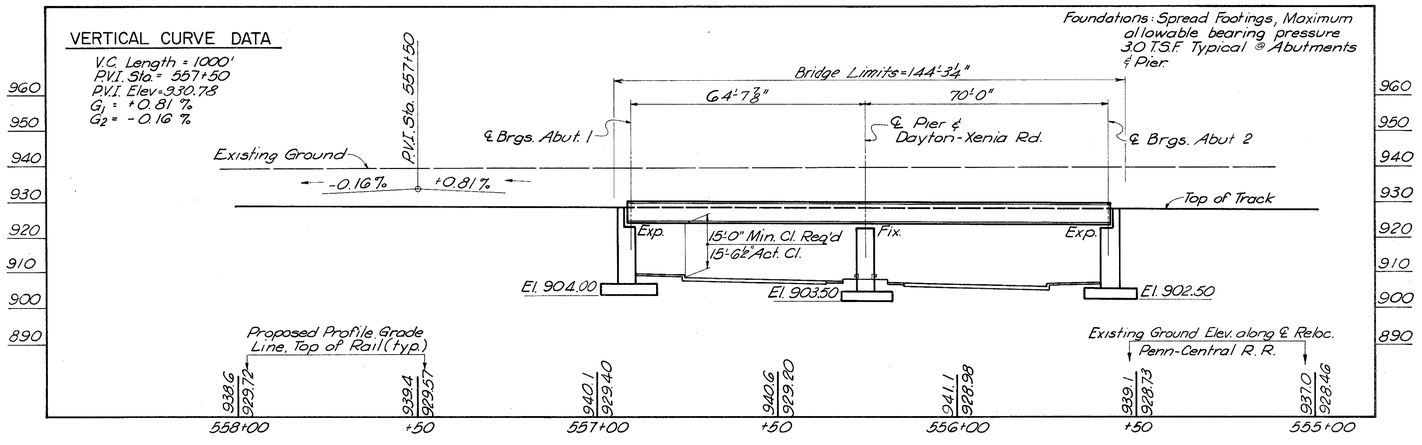
PLAN



SECTION THRU BRIDGE

LEGEND

- Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location



PROFILE ON CENTER LINE RELOCATED PENN-CENTRAL R.R.

Note:
Earthwork limits shown are schematic. Actual slopes shall conform to Plan Cross-Sections.

TRACK MOVEMENTS

FREIGHT —— 10 @ 50 mph

PROPOSED STRUCTURE

TYPE: Superstructure-Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure.
SPANS: 64'-7⅞", 70'-0"
LOADING: Cooper E-80 Diesel Impact
SKEW: 48°36'30" Lt. Fwd.
WEARING SURFACE: ——
APPROACH SLABS: ——
ALIGNMENT: Tangent

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SITE PLAN

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL RR OVER
DAYTON XENIA RD.

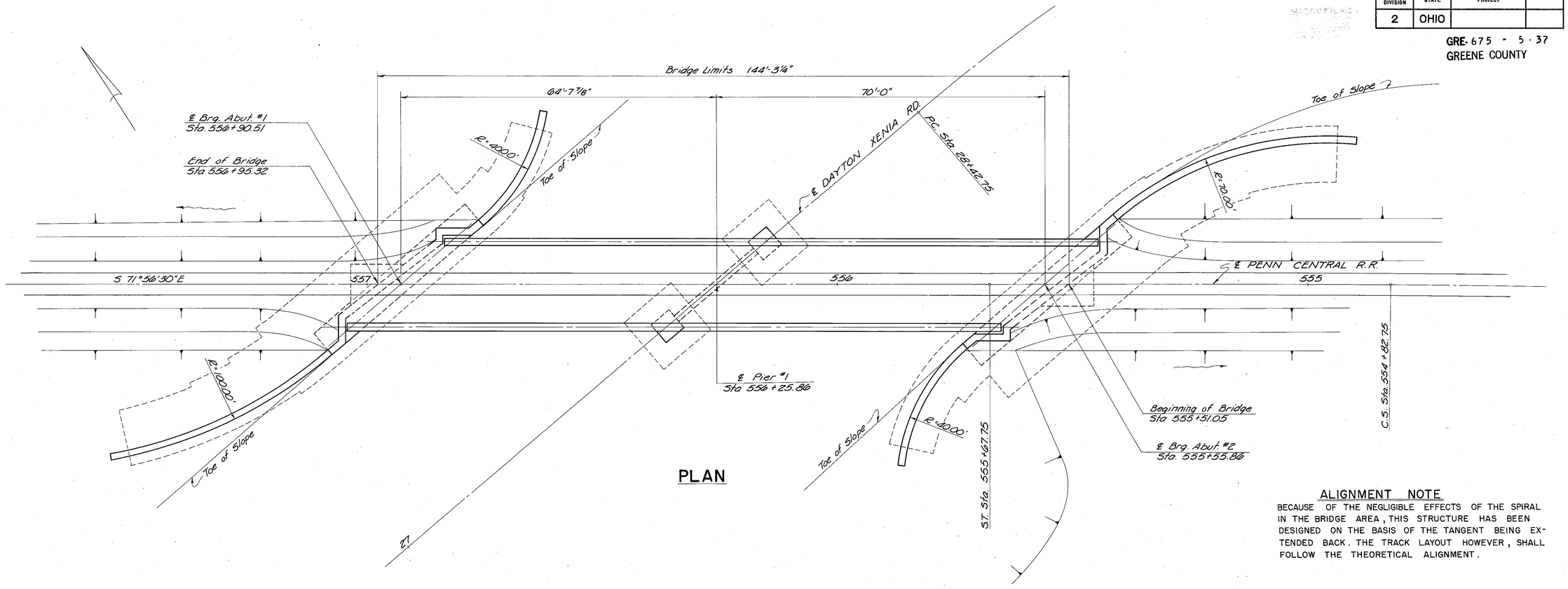
GREENE COUNTY — STA: 555+51.05 TO STA: 556+95.32

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	J.C.L.	A.W.	S.A.	4-16-82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

490
616

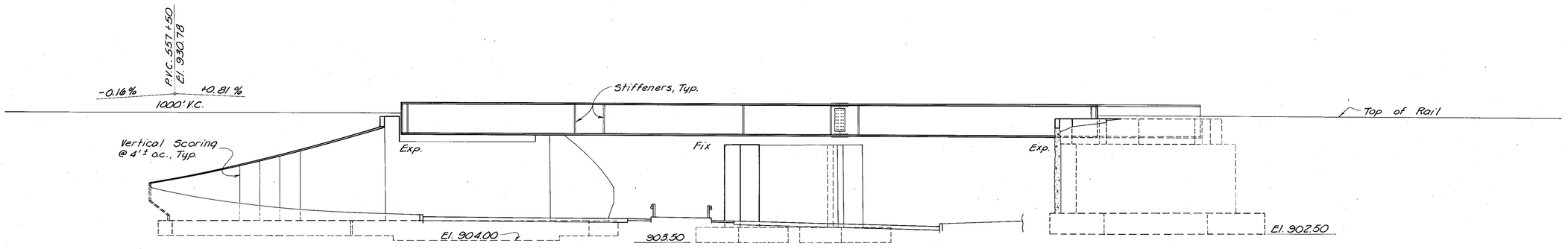
GRE-675 - 5.37
GREENE COUNTY



PLAN

ALIGNMENT NOTE

BECAUSE OF THE NEGLIGIBLE EFFECTS OF THE SPIRAL IN THE BRIDGE AREA, THIS STRUCTURE HAS BEEN DESIGNED ON THE BASIS OF THE TANGENT BEING EXTENDED BACK. THE TRACK LAYOUT HOWEVER, SHALL FOLLOW THE THEORETICAL ALIGNMENT.



ELEVATION

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CINCINNATI OHIO

2/13

GENERAL PLAN & ELEVATION

BRIDGE NO. GRE-675-0626 SR.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.

GREENE COUNTY STA. 555+51.05 TO STA. 556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	K.F.		S.A.		9/25/72	

MICROFILMED
JUN 1 0 1982

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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GRE-675 - 5.37
GREENE COUNTY.

GENERAL NOTES

REFERENCE SHALL BE MADE TO SUPPLEMENTAL SPECIFICATIONS:

809 DATED JANUARY 1, 1971
810 DATED JANUARY 1, 1971

927 DATED JANUARY 1, 1971

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STEEL RAILWAY BRIDGE" OF THE AMERICAN RAILWAY ENGINEERING ASSOCIATIONS, 1971 EDITION.

CONSTRUCTION AND MATERIAL SPECIFICATIONS: STATE OF OHIO, DEPARTMENT OF HIGHWAYS, DATED JANUARY 1, 1979.

DESIGN DATA:

DESIGN LOADING - COOPER E-80 WITH DIESEL IMPACT.

CLASS C CONCRETE - UNIT STRESS 1333 PSI FOR SUBSTRUCTURE.
METAL BRIDGE DECK - ASTM A 588. UNIT STRESS 27,000 PSI
STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 (SEE ADDITIONAL REQUIREMENTS) PSI
REINFORCING STEEL - ASTM A 615 - UNIT STRESS 20,000 PSI

FOUNDATION BEARING PRESSURE: ABUTMENT AND PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 3 TONS PER SQ. FT.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING AFFECTED UTILITY LINES, EXCEPT THOSE BEING INSTALLED OR RELOCATED AS PART OF THIS PROJECT, SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

RAILROAD AERIAL LINES WILL BE RELOCATED BY THE RAILROAD. THE CONTRACTOR SHALL USE ALL PRECAUTIONS NECESSARY TO SEE THAT THE LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE AND SHALL COOPERATE WITH THE RAILROAD IN THE RELOCATION OF THESE LINES. THE COST OF THE RELOCATIONS SHALL BE INCLUDED IN THE RAILROAD FORCE ACCOUNT WORK.

STRUCTURAL STEEL:

1. STEEL FOR FLANGES, WEB PLATES AND STIFFENERS SHALL BE FULLY KILLED FINE GRAIN PRACTICE.
2. FLANGE PLATES WITH FLAME CUT EDGES SHALL BE FREE OF NICKS AND NOTCHES AND SHALL HAVE ALL EDGES GROUND TO A 1/16 INCH RADIUS.
3. ALL WELDS CONNECTING FLANGE PLATE TO WEB PLATE MUST BE MADE BY AUTOMATIC SUBMERGED ARC WELDING.
4. MILL SCALE TO BE GROUND OFF FLANGE PLATES AT WEB TO FLANGE WELD.
5. ALL SPLICES IN FLANGE PLATES AND WEBS TO BE RADIOGRAPHED.
6. 50% OF WEB TO FLANGE WELDS TO BE SUBJECT TO ULTRASONIC TESTING IN ACCORDANCE WITH AWS SPECIFICATIONS.
7. BOTTOM FLANGE PLATE MUST BE PERPENDICULAR TO WEB PLATE AT BEARINGS. MAXIMUM TOLERANCE ±0.03 INCHES.
8. PINS IN BEARINGS TO BE COLD FINISHED CARBON STEEL SHAFTING CONFORMING TO THE REQUIREMENTS FOR GRADE 1020 STEEL IN ASTM SPECIFICATION A 108.
9. BRONZE PLATE SHALL BE AS PER ASTM SPECIFICATION B-22, CLASS B, WITH TREPANNED GRAPHITE INSERTS.

DAMPPROOFING: BACKS OF ALL ABUTMENTS AND WALLS WHICH SHALL BE IN PERMANENT CONTACT WITH EARTH SHALL BE DAMPPROOFED WITH TYPE "A" WATERPROOFING FROM THE TOP OF THE FOOTING TO THE TOP OF THE POROUS BACKFILL.

ITEM SPECIAL - ASPHALT PORTLAND CEMENT CONCRETE

USE:

THIS CONCRETE IS TO BE USED AS A PROTECTION COURSE OVER METAL DECKS OF RAILROAD BRIDGES.

MATERIALS:

1. EMULSIFIED ASPHALT SHALL BE IN ACCORDANCE WITH FEDERAL SPECIFICATIONS SS-A-674B.
2. FINE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE.
3. COARSE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE WITH THE FOLLOWING GRADATION:

SIEVE SIZE (INCHES)	PERCENT PASSING BY WEIGHT
3/4"	100
1/2"	90 - 100
3/8"	40 - 70
No. 4	0 - 15

MIX:

THE ASPHALT CONCRETE SHALL BE PROPORTIONED BY VOLUME, 1 PART PORTLAND CEMENT, 2 PARTS FINE AGGREGATE, 3 PARTS COARSE AGGREGATE, 1-1/2 PARTS EMULSIFIED ASPHALT TYPE SS-1 AND MINIMUM AMOUNT OF WATER REQUIRED TO MAKE A WORKABLE MIX. THE DRY MATERIALS SHALL FIRST BE THOROUGHLY MIXED THEN THE WATER ADDED TO PRODUCE A UNIFORM MIXTURE AFTER WHICH THE EMULSIFIED ASPHALT IS ADDED AND MIXING CONTINUED UNTIL OF UNIFORM COLOR.

APPLICATION:

WORK SHALL BE DONE ONLY WHEN THE TEMPERATURE WILL BE ABOVE 40° F. FOR A PERIOD OF AT LEAST 24 HOURS AFTER STARTING APPLICATION.

SURFACE TO BE COVERED SHALL BE THOROUGHLY CLEANED AND GIVEN A UNIFORM PRIMER OR BOND COATING OF EMULSIFIED ASPHALT TYPE RS-1, USING NOT LESS THAN 1 GALLON PER 80 SQ. FT.

THE ASPHALT CONCRETE SHALL THEN BE SCREEDED OVER THE PRIMED AREA TO THE THICKNESS INDICATED ON THE DRAWINGS. AFTER THE ASPHALT CONCRETE HAS SET SUFFICIENTLY TO ALLOW A MAN TO WALK UPON IT WITHOUT INDENTATION BUT PRIOR TO FINAL SET, IT SHALL BE GIVEN A UNIFORM COATING OF EMULSIFIED ASPHALT TYPE RS-2 APPLIED AT THE RATE OF ONE GALLON PER 50 SQ. FT. THIS FINAL COATING SHALL BE COVERED WITH CLEAN SAND.

METHOD OF MEASUREMENT:

THE YARDAGE TO BE PAID FOR SHALL BE THE NUMBER OF CUBIC YARDS AS DETERMINED BY CALCULATIONS FROM PLAN DIMENSION, IN PLACE, COMPLETED AND ACCEPTED.

BASIS OF PAYMENT:

THE YARDAGE MEASURED AS PROVIDED ABOVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD BID FOR "ITEM SPECIAL ASPHALT PORTLAND CEMENT CONCRETE" WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, PLACING, FINISHING AND CURING, AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
503	Lump	Sum	Cofferdams, Cribs and sheeting				Lump
503	2,360	Cu.Yd.	Unclassified Excavation		2,300	60	
509	56,300	Lb.	Reinforcing Steel		46,064	10,236	
511	48	Cu.Yd.	Class "C" Concrete, Piers above footings			48	
511	560	Cu.Yd.	Class "C" Concrete, Abutments and Walls above footings		560		
511	470	Cu.Yd.	Class "C" Concrete, Footings		435	35	
512	360	Sq.Yd.	Type "A" Waterproofing		360		
512	26	Lin.Ft.	Type "B" Waterproofing		26		
514	277,500	Lb.	Field Painting of new Structural Steel System A	277,500			
516	132	Sq.Ft.	1" Preformed Expansion Joint Filler		132		
516	363	Lin.Ft.	Sheet Copper* (16 02, 6" Wide)		326	37	
516	75	Lin.Ft.	Folded Sheet Copper* (16 02, 10" Wide)		75		
518	241	Cu.Yd.	Porous Backfill		241		
518	223	Lin.Ft.	8"ϕ Perforated C.S.P. (707.01)		223		
518	92	Lin.Ft.	8"ϕ Non-Perforated C.S.P. including specials. (707.01)		92		
518	291	Lin.Ft.	8"ϕ Half-Round, Perforated C.S.P., Bituminous coated including Specials. (707.01, 707.04)	291			
809	50	Sq.Yd.	Asphalt Plank Protective Cover, 1½" thick.	50			
810	218,000	Lb.	Fracture Critical Structural Steel (AISC Category III) for structures carrying railroad traffic. (A36 Steel) See proposal note.	218,000			
810	60,000	Lb.	Structural steel (AISC Category III) for structures carrying railroad traffic (A588 Steel)	60,000			
Special	16	Cu.Yds.	Asphalt Portland Cement Concrete	16			

ESTIMATED QUANTITIES CHECKED BY & DATE: J.R.G./S.A. 2/10/72 REVISED: S.A. 9/20/72

NOTE:
Rails, Ties and Ballast on Bridge Structure included in "Item Special - Construction of Railroad Tracks." See Sheet (29/601)

* As an alternate to copper, neoprene water stops may be used.

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CONSULTING ENGINEERS
CINCINNATI OHIO

3/13

GENERAL NOTES & ESTIMATED QUANTITIES

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY STA:555+51.05 TO STA:556+95.32

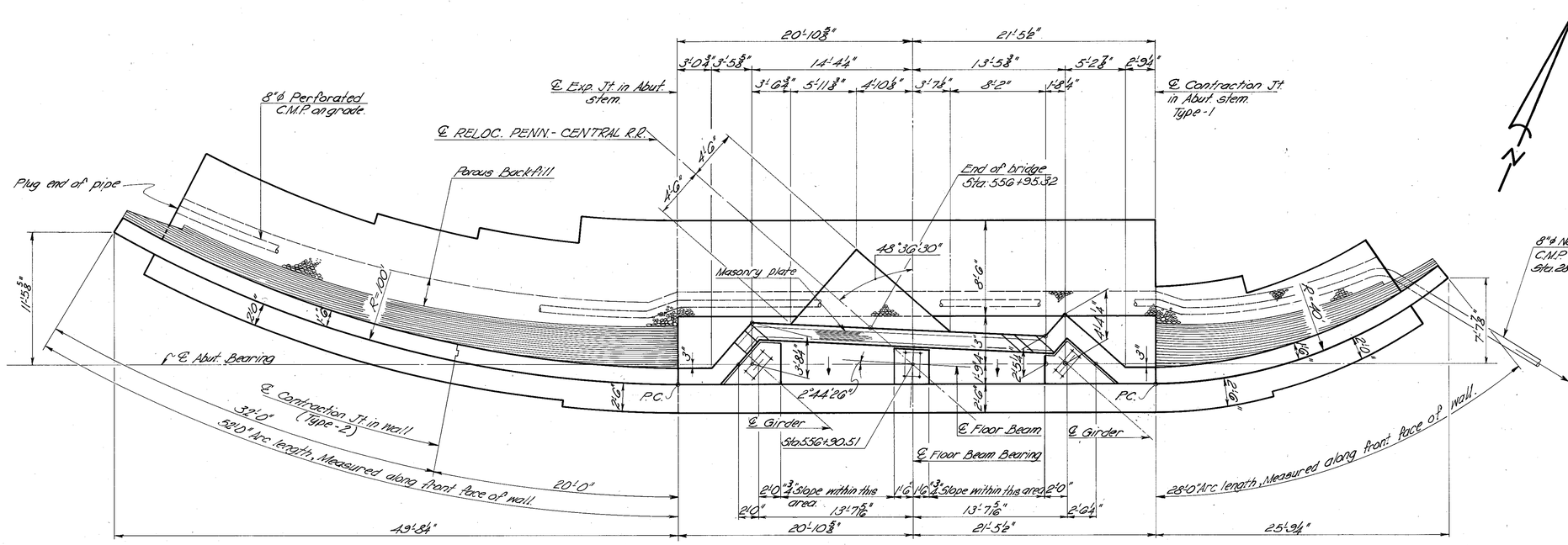
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.A.	A.W.		S.A.	S.A.	9/21/72	4-16-82

MICROFILMED
JAN 19 '83

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

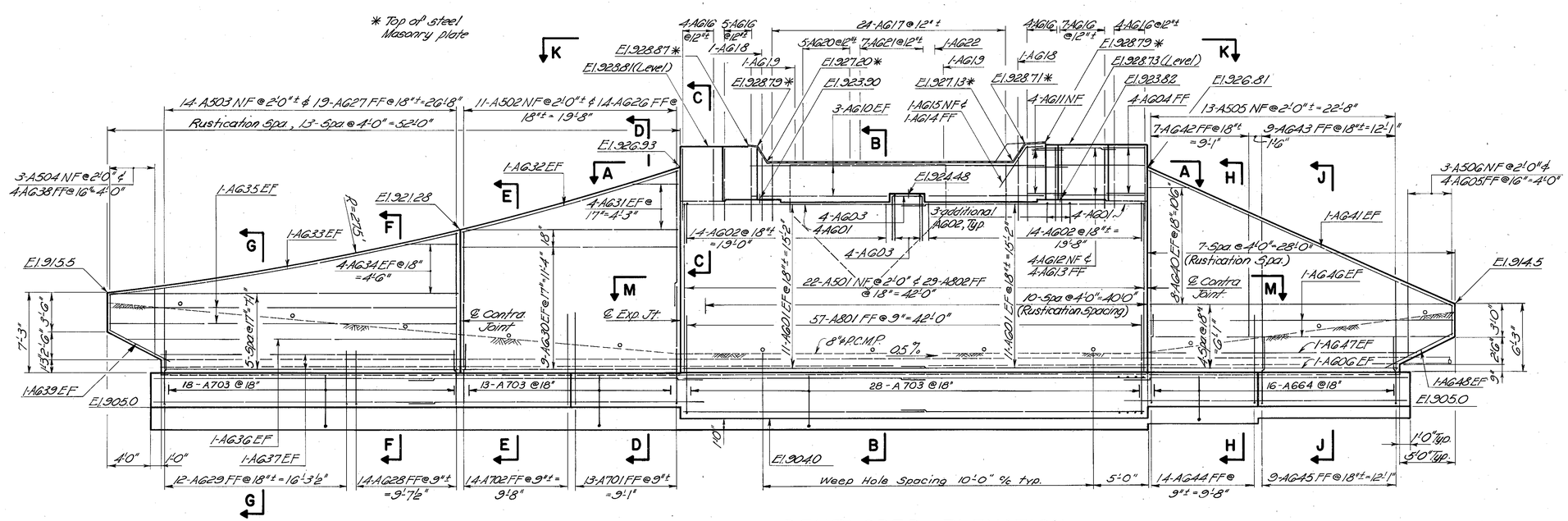
492/616

GRE-675 - 5.37
GREENE COUNTY



PLAN

DETAIL "A"



DEVELOPED ELEVATION

NOTES:

For Reinforcing Steel List see Shs 11,12,13/13
Reinforcing Steel in Abutments 1 & 2 shall have the suffix "A" & "B" respectively.
Only that portion of the C.M.P. located in porous backfill shall be perforated.
For details of the backwall Masonry Plate, included with structural steel for payment, see sh. 10/13

For location of Detail "A" see Sh. 5/13
Porous Backfill 2 feet thick shall extend up to the plane of the sub-ballast in the abutment proper and laterally to the heights and limits shown.
Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.
Sheet Copper Water Seals to be provided in all construction Joints at top of footing and at bearing seat level.
Work this sheet with shs. 5, 6, 7/13

For details of Expansion Joint, Contraction Joints, Vertical Rustication Groove & Copper sheet, see Sh. C2/C2

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4/13

ABUTMENT No. 1 - 1

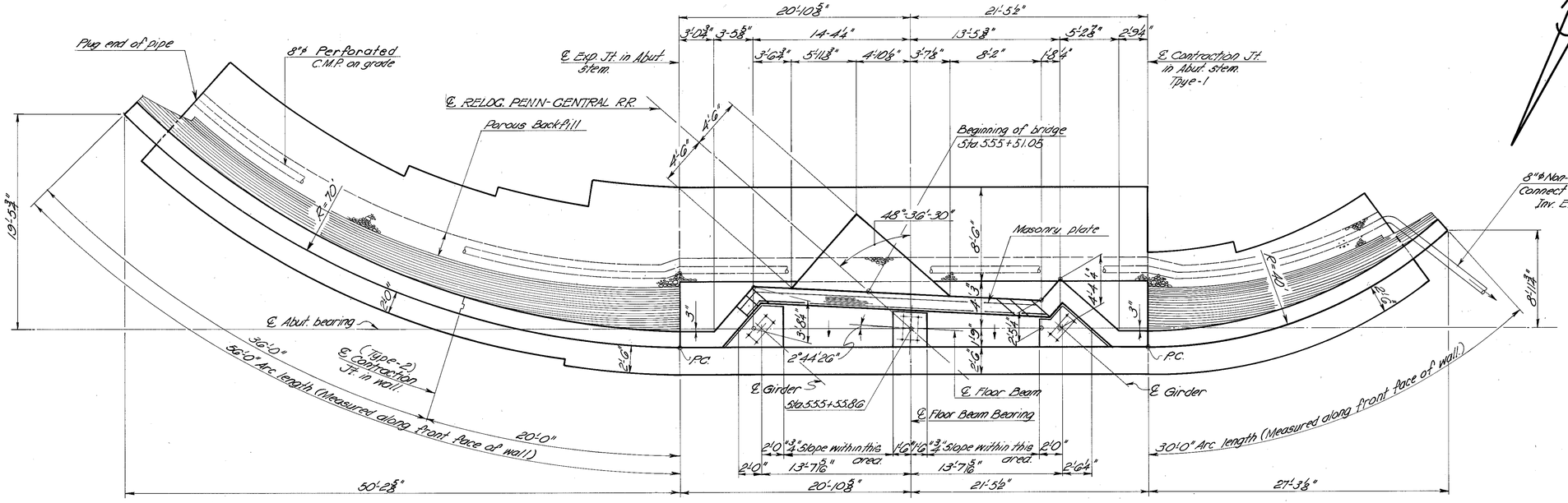
BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA: 555+51.05 TO STA: 556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/25/72	4-16-82

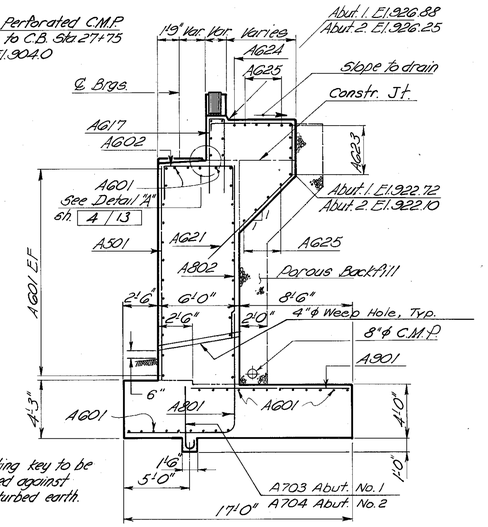
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	-	

493
616

GRE-675 · 5 · 37
GREENE COUNTY

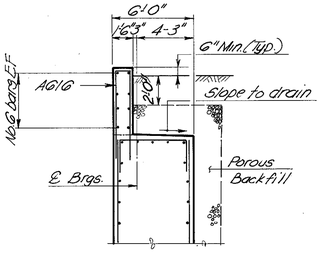


PLAN



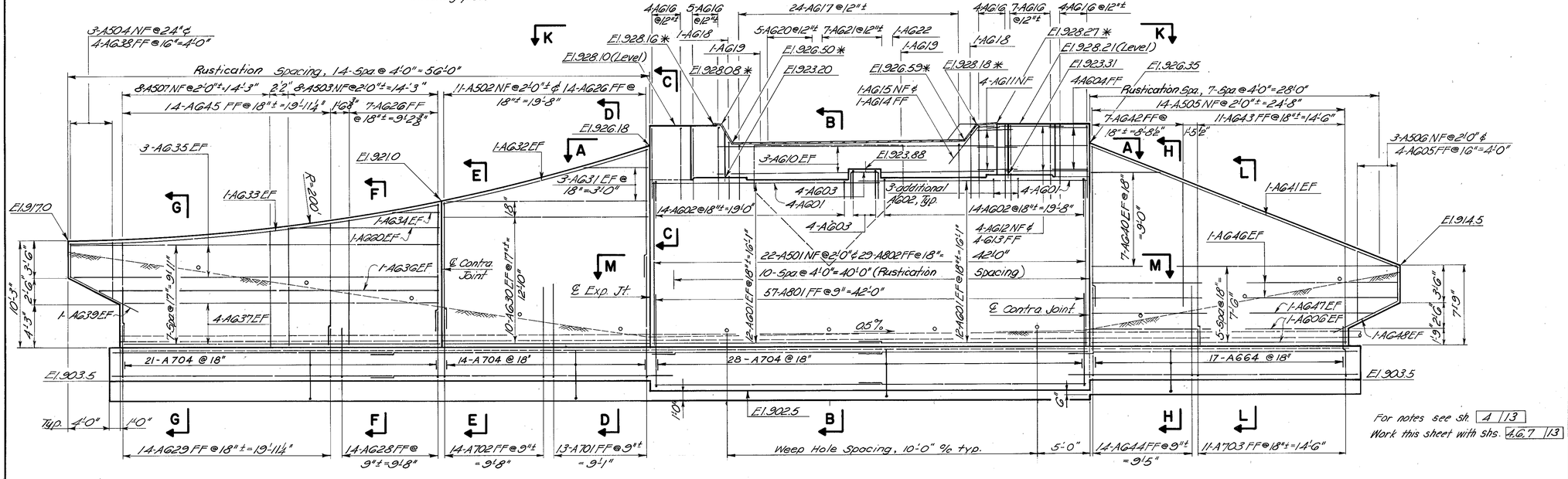
NOTE: Footing key to be poured against undisturbed earth.

SECTION B-B



SECTION C-C

* Top of steel Masonry plate



DEVELOPED ELEVATION

For notes see sh. 4 / 13
Work this sheet with shs. 4,6,7 / 13

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CINCINNATI OHIO

5 / 13

ABUTMENT No. 2 - 2

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA: 555+51.05 TO STA: 556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED / DATE	REVISED
V.P.	A.W.		S.A.	9/23/72	4-16-82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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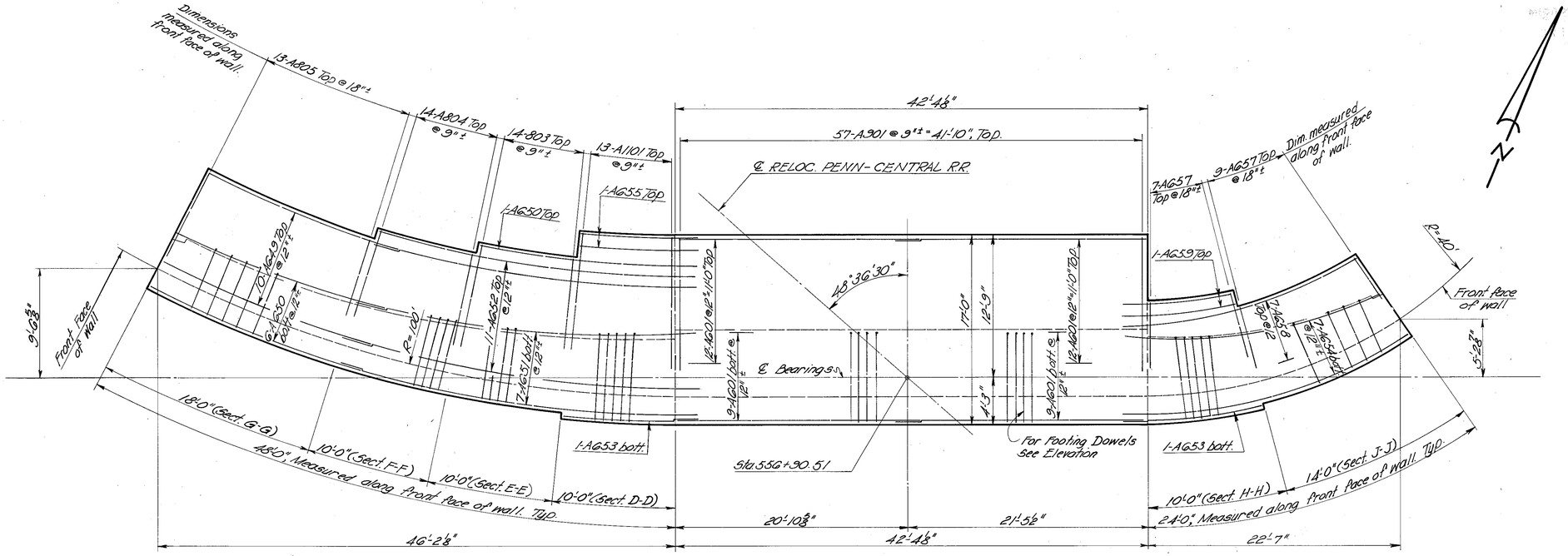
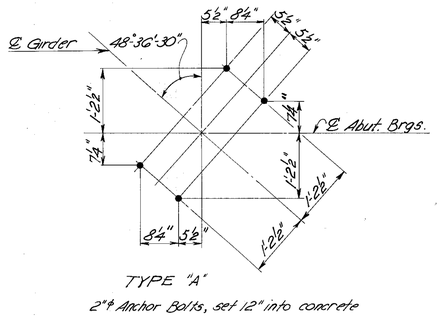
616

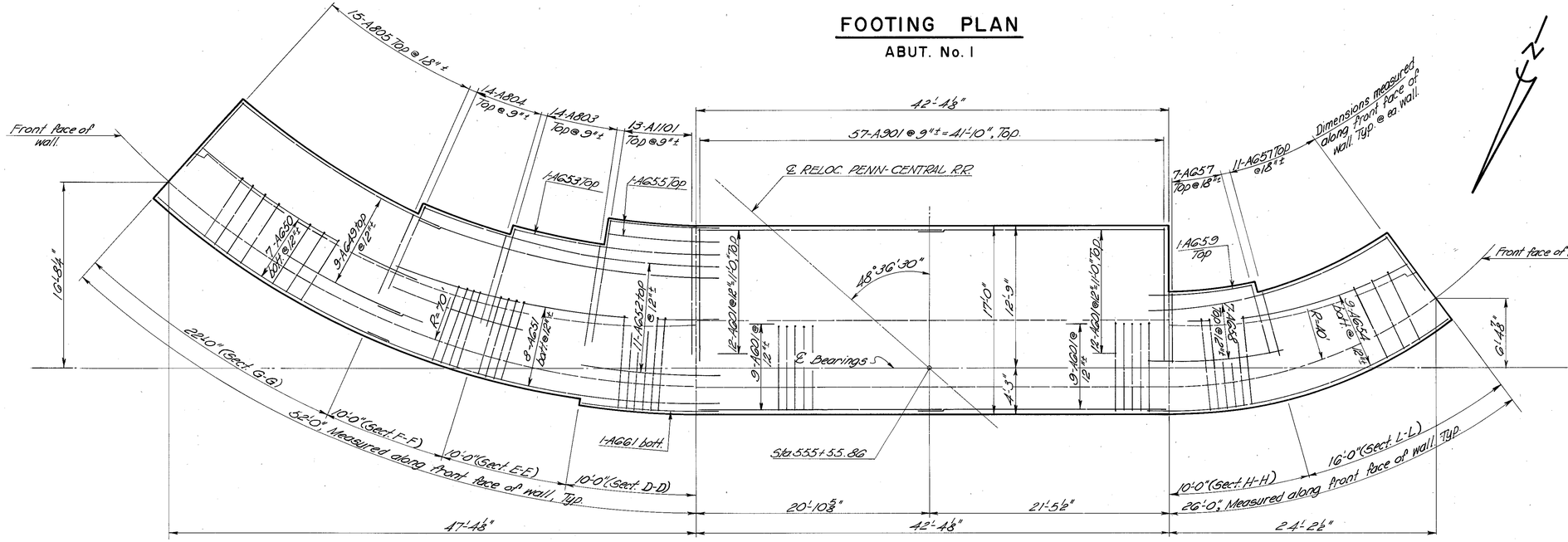
GRE-675 - 5 - 37
GREENE COUNTY



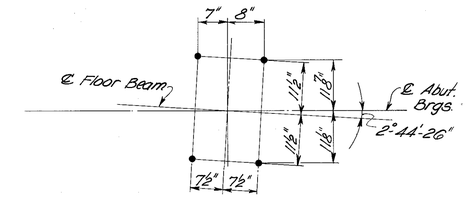


TYPE "A"
2" ϕ Anchor Bolts, set 12" into concrete

FOOTING PLAN
ABUT. No. 1



FOOTING PLAN
ABUT. No. 2



TYPE "C"
1¼" ϕ Anchor Bolts, set 12" into concrete

ANCHOR BOLT PLANS

For notes see sh. 4 | 13
Work this sheet with shs. 4, 5, 7 | 13

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6 | 13

ABUTMENT FOOTING PLANS-3

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA: 555+51.05 TO STA: 556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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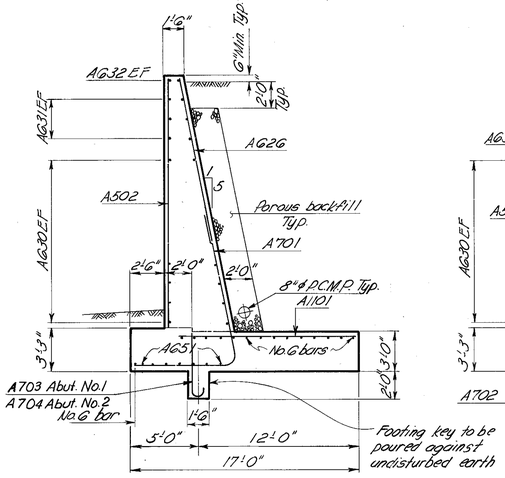
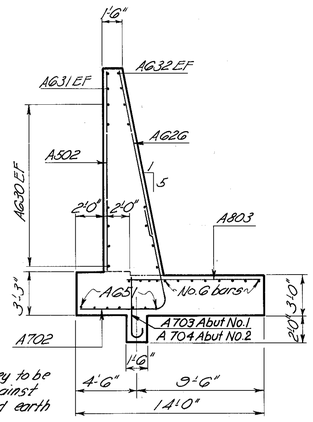
GRE-675 - 5-37
GREENE COUNTY

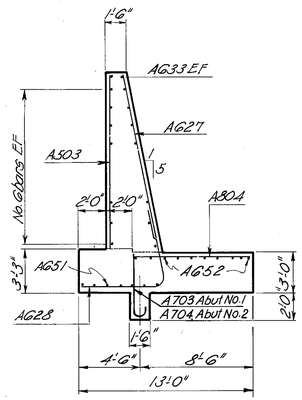
DETAILS not shown similar to Section D-D



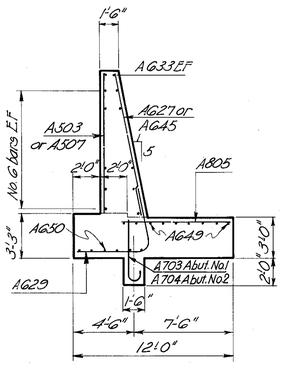
SECTION D-D



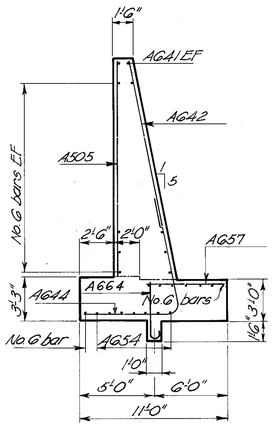
SECTION E-E



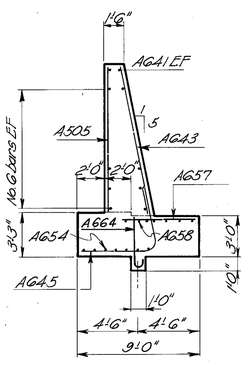
SECTION F-F



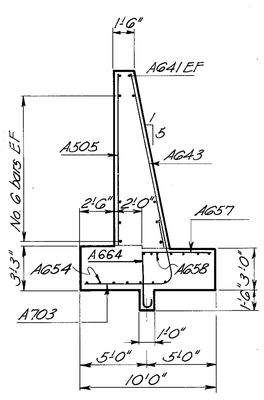
SECTION G-G



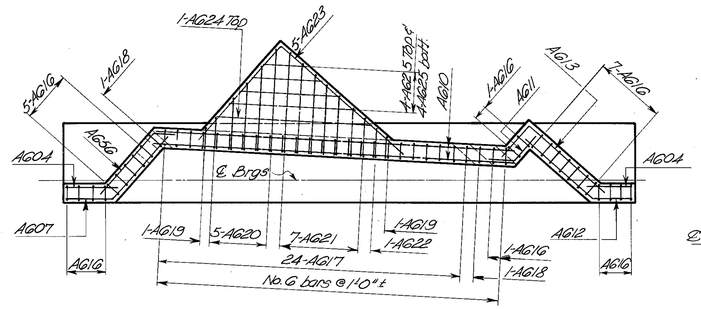
SECTION H-H



SECTION J-J

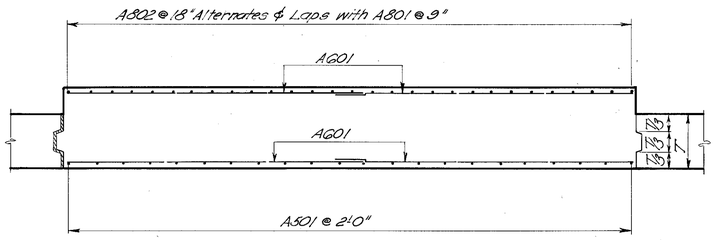


SECTION L-L

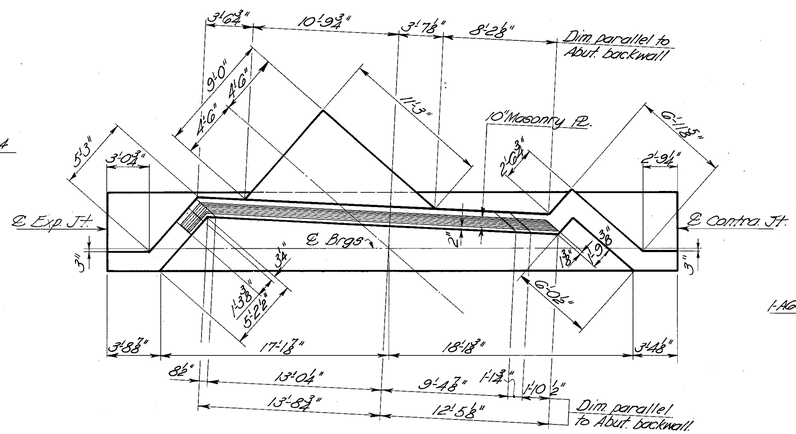


SECTION A-A

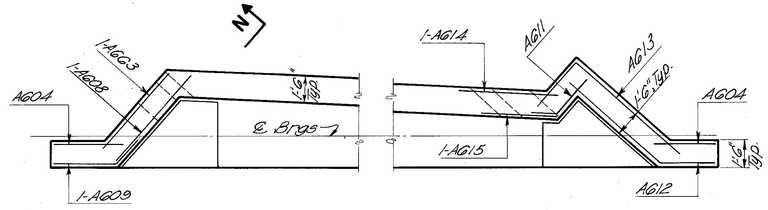
Work this section with, PLAN-ABUT. BACKWALL DETAIL on this sheet



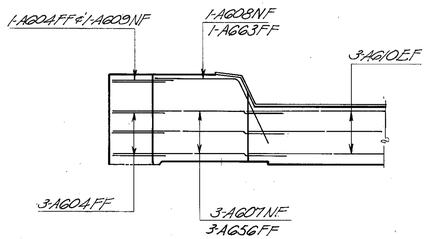
SECTION M-M



PLAN K-K



PLAN - ABUT. BACKWALL DETAIL



ELEVATION N-N

For notes see sh 4/13
Work this sheet with shs. 4, 5, 6/13

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7/13

ABUTMENT DETAILS - 4

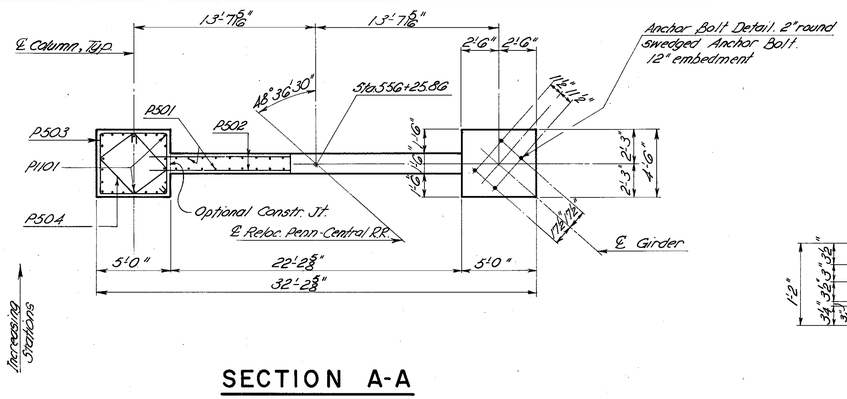
BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA:555+51.05 TO STA:556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
V.P.	A.W.		S.A.		7/21/72	

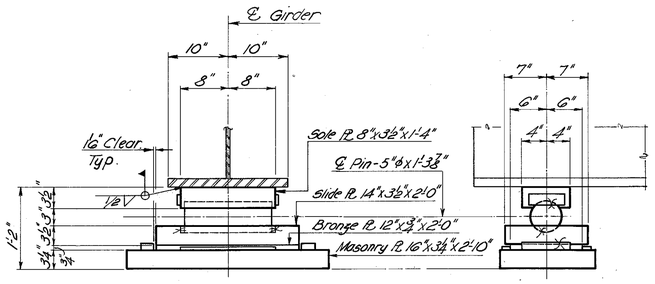
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

496/616

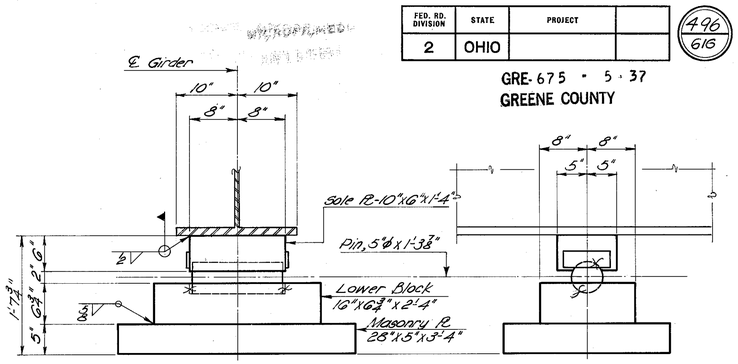
GRE-675 · 5·37
GREENE COUNTY



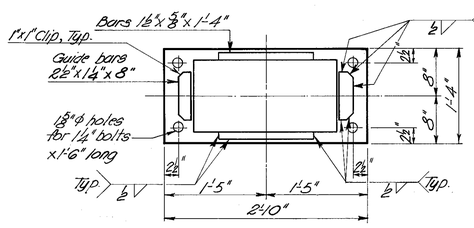
SECTION A-A



END ELEVATION SIDE VIEW



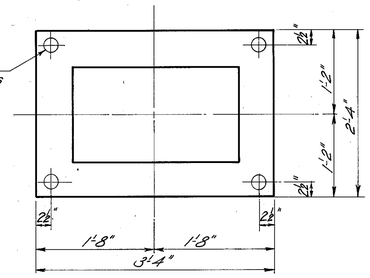
END ELEVATION SIDE VIEW



BASE PLATE DETAIL

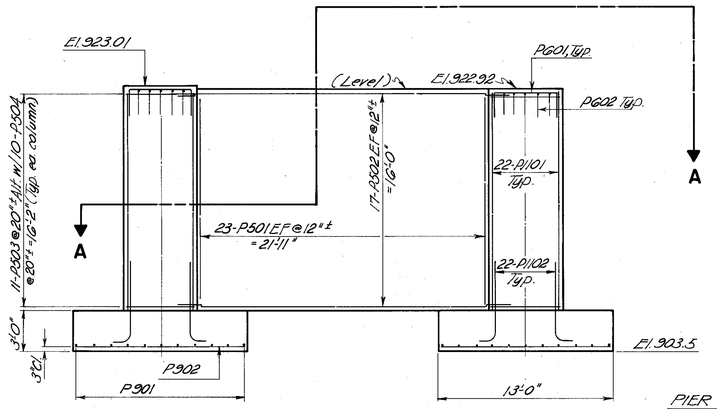
BEARING NOTES:

End of pins, contact surface on Guide Bars and keeper Plates to be finished.
Masonry Plates to be set on three layers of Red-Lead and 20 ounce canvas.
All surfaces indicated to be finished shall be to A.S.A. 125 scale.



BASE PLATE DETAIL

TYPE "A" BEARING

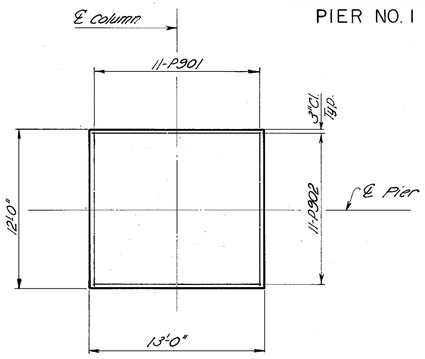


ELEVATION
PIER NO. 1

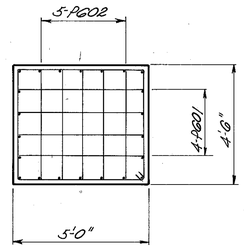
PIER NOTES:

For Reinforcing Steel List See Sh 13/13

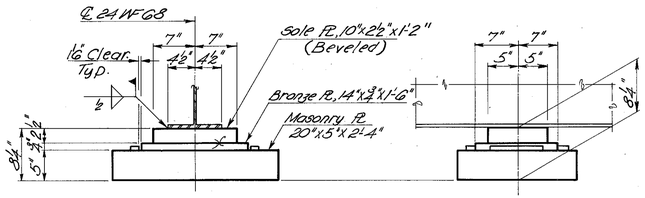
BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.
Sheet Copper Water Seals to be provided in all construction joints at top of footing.



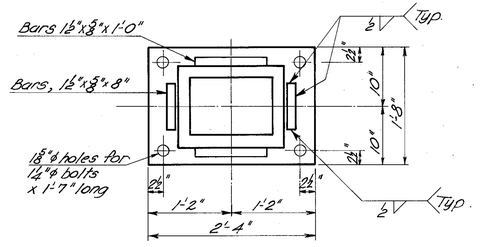
TYPICAL FOOTING PLAN



PLAN-TOP OF PIER COLUMNS, TYP.

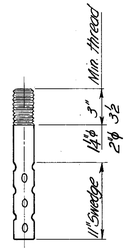


END ELEVATION SIDE VIEW



BASE PLATE DETAIL

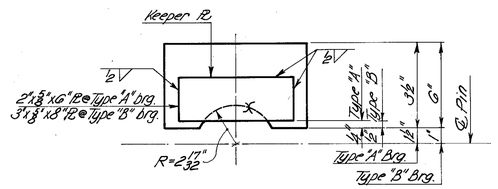
TYPE "C" BEARING



Anchor bolts to be furnished with standard hex nuts and ¼" plate washers.

Bolt lengths and diameter as noted.

ANCHOR BOLT DETAIL



SOLE PLATE DETAIL

TYPE "B" BEARING

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CINCINNATI OHIO

8/13

PIER No.1 & BEARING DETAILS

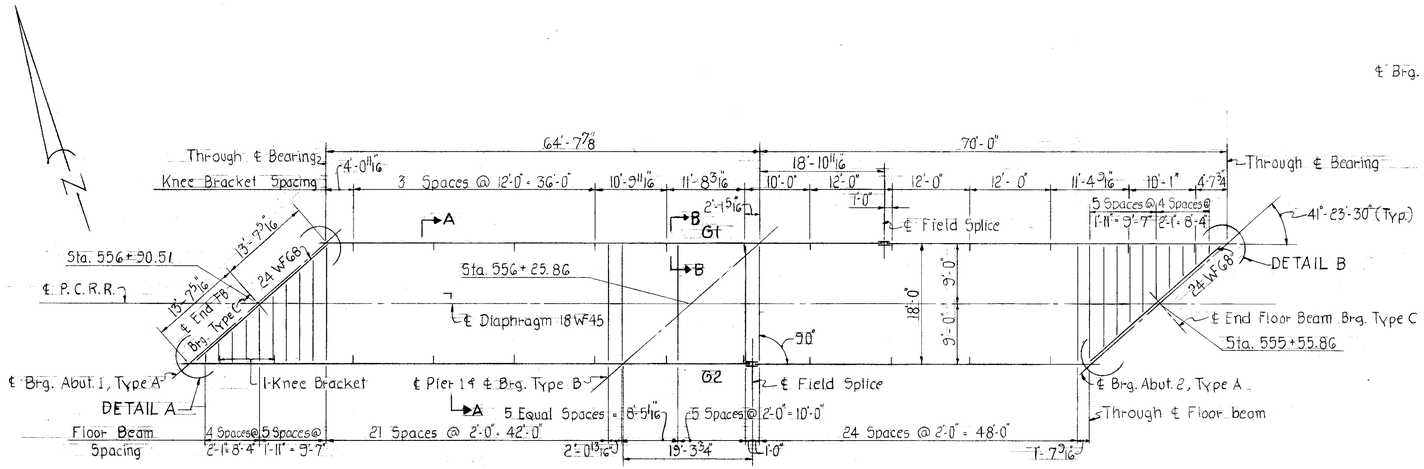
BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA:555+51.05 TO STA:556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/74	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

497/616

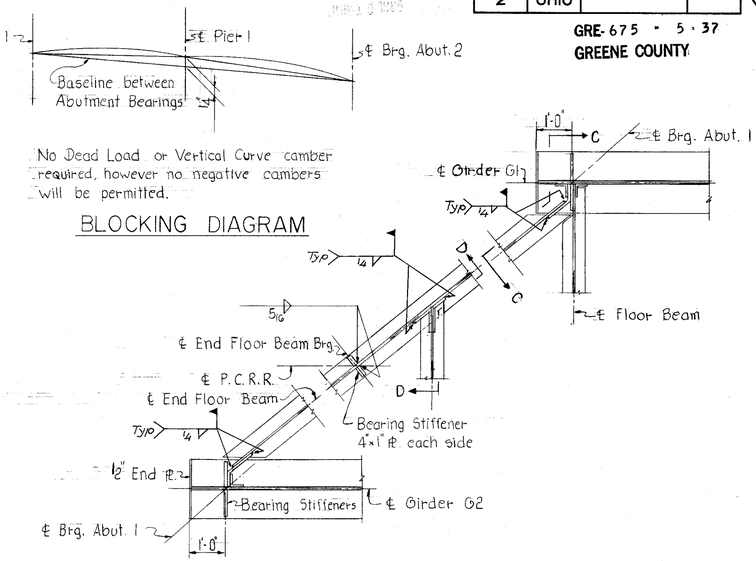
GRE-675 - 5 - 37
GREENE COUNTY



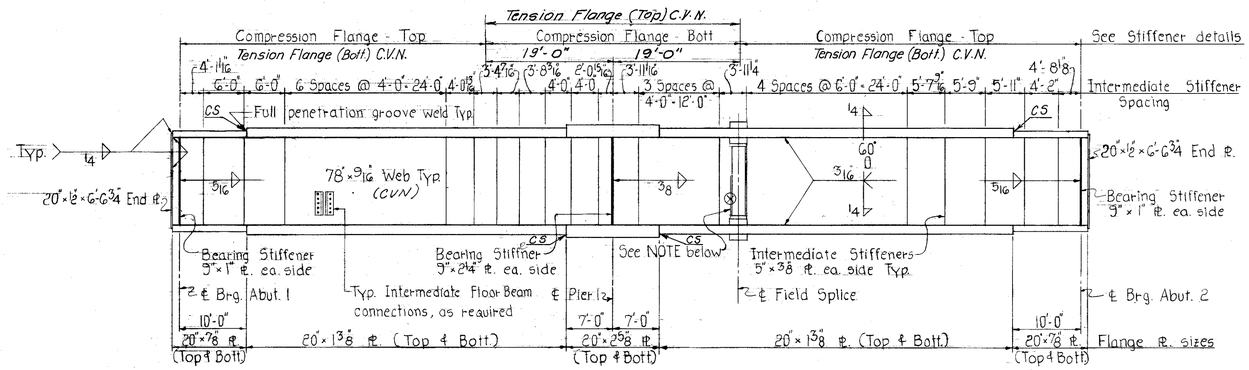
NOTE All Floor Beams 21WF62 except noted otherwise

FRAMING PLAN

Note:
Where a shape or plate is designated (C.V.N) the material shall meet specified minimum notch toughness requirements.

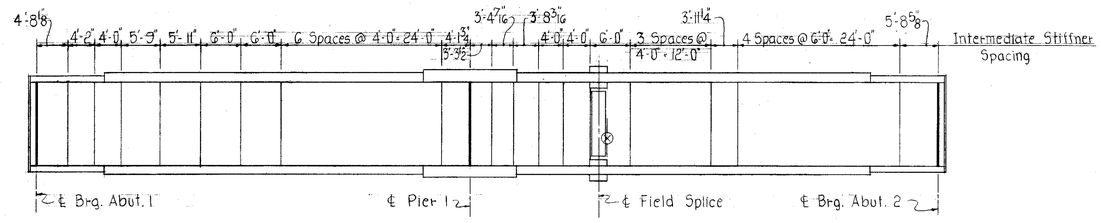


DETAIL A shown DETAIL B similar opposite hand



GIRDER ELEVATION G1

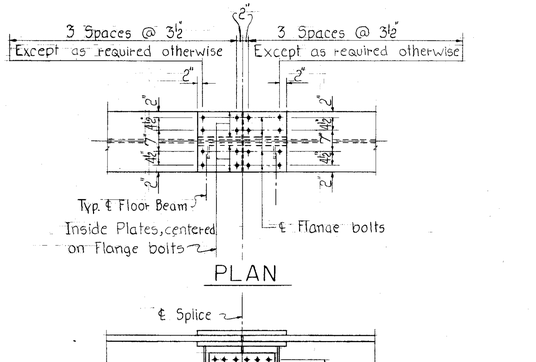
NOTE: 5"x 3/8" ft. Stiffener on inside of Girder only for Floor Beam Connection ⊗



NOTE: Details not shown here similar to G1

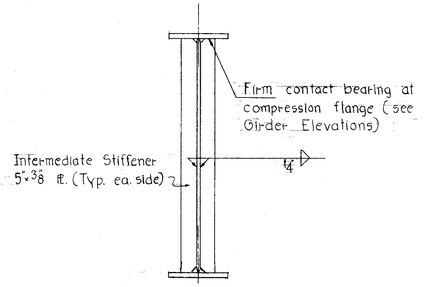
GIRDER ELEVATION G2

NOTE:
Material shall be fabricated in Accordance with the Fracture Control Plan (See Proposal Note)



NOTE: All bolts 1"ϕ H.S. Bolts
All splice material shall be C.V.N.

SPLICE DETAILS



Intermediate stiffeners may be normal to flanges and at 90° to web.

INTERMEDIATE STIFFENER TYP.

NOTES:
For Details of Bearings Type A, B and C see Sh. 8/13
Girder dimensions are given from ℄ Brg. to ℄ Brg.
Floor beam spacing is given from ℄ Floor beam web to ℄ Floor beam web.
Knee bracket spacing is given from ℄ Floor beam web to ℄ Floor beam web to which they are attached.
All dimensions are given in horizontal plane.
For Sections A-A, B-B, C-C and D-D see sh. 10/13
All Bearing Stiffeners shall be milled to bear at the bottom flgs. & tight fit at the top flgs. Bearing Stiff. & ends of girders to be vertical
Work with Sheets 8, 10 / 13

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO
9/13

FRAMING PLAN & SUPERSTRUCTURE DETAILS - I

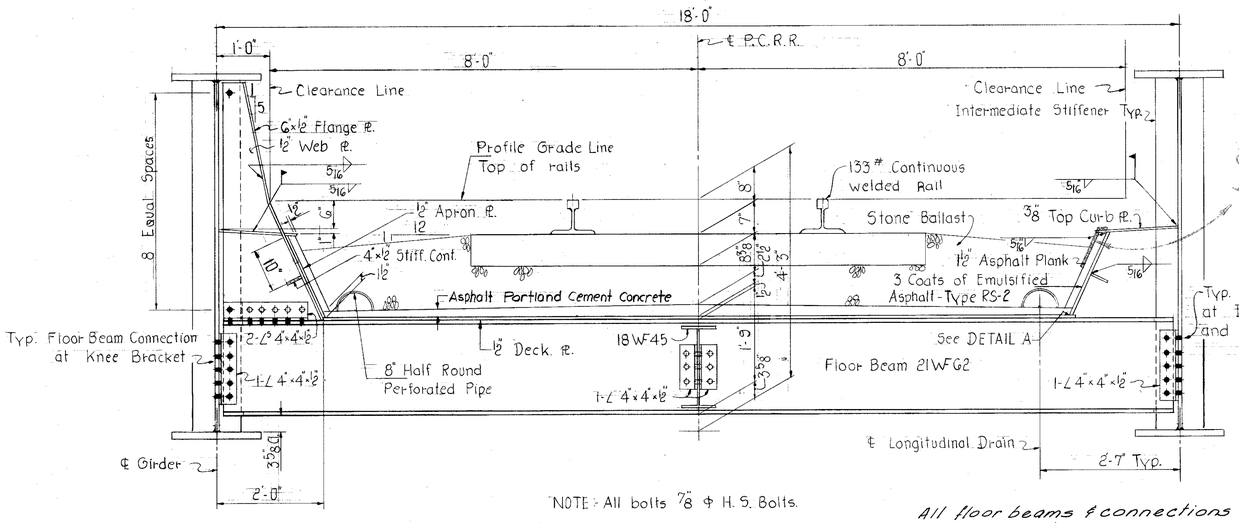
BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA: 555+51.05 TO STA: 556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	J.R.G.		S.A.	[illegible]	9/25/72	4/27/82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

498/616

GRE-675 - 5.37
GREENE COUNTY

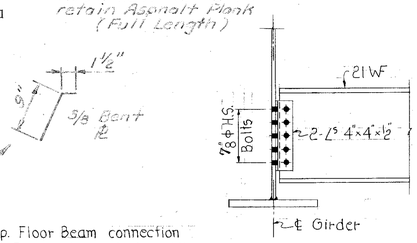


NOTE - All bolts ⅞ ϕ H.S. Bolts.

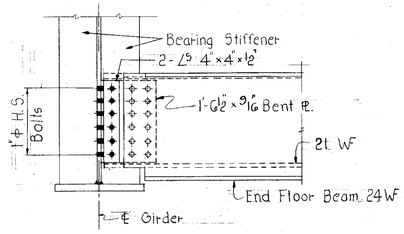
SECTION A-A
TYPICAL SECTION

All floor beams & connections shall be CVN.

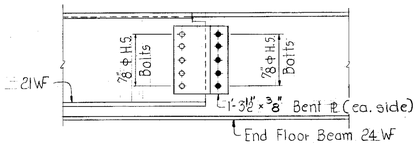
Add a bent ⅜" Pl. to retain Asphalt Plank (Full Length)



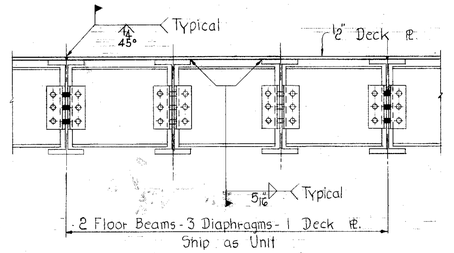
SECTION B-B
TYPICAL INTERMEDIATE FLOOR BEAM CONNECTION



SECTION C-C

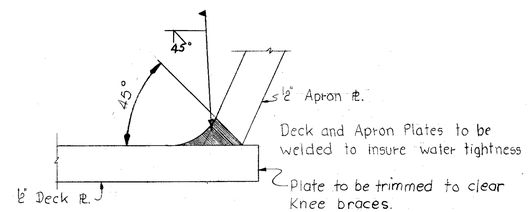


SECTION D-D



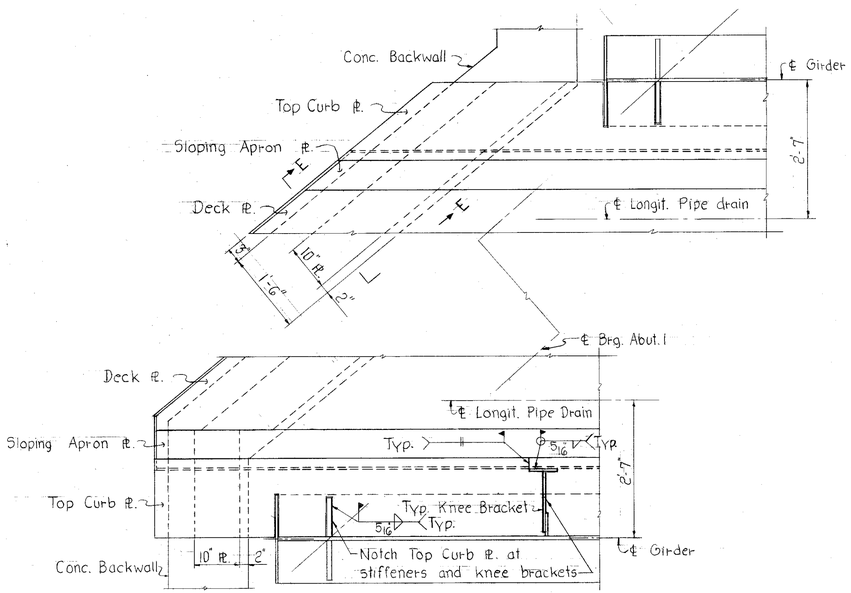
Skewed End Panels and Special areas to be similarly assembled and welded

FLOOR BEAM UNITS DETAIL

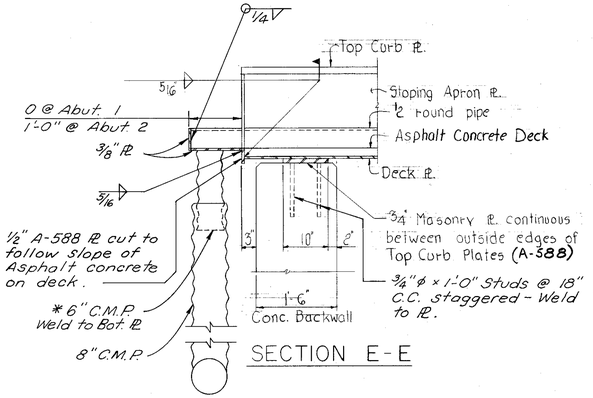


Weld at Juction of Deck and Apron Plates

DETAIL A



DETAILS OF DECK, APRON AND CURB PLATES



SECTION E-E

* Include with deck drain pipe for payment

LOAD TABLE

LOADING	MOMENTS; kip-inches			SHEARS; kips				REACTIONS; kips		
	GIRDERS G1-G2			GIRDERS G1-G2				GIRDERS G1-G2		
	Span 1	Pier 1	Span 2	Abut. 1	Pier 1 Left	Pier 1 Right	Abut. 2	Abut. 1	Pier 1	Abut. 2
DEAD LOAD	+8,290	-18,050	+8,290	58	103	103	58	58	206	58
LIVE LOAD	+29,318	-41,739	+29,318	196	265	265	196	196	415	196
IMPACT	+9,792	-13,941	+9,792	66	88	88	66	66	138	66

NOTES: Deck, Apron and Curb Plates to be ASTM A-588, included with Item 810 for payment
Longitudinal Deck Drain pipes to be bituminous coated corrugated metal pipes
Work this sheet with Shs. 8, 9 / 13
Abutment Masonry Plate included with Item 810 for payment.

Revised 6-16-83

KING & GAVARIS
CINCINNATI — CONSULTING ENGINEERS — OHIO
10/13

SUPERSTRUCTURE DETAILS-2

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
STA:555+51.05 TO STA:556+95.32
GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	J.R.G.		S.A.	SO	9/28/82	4-16-83 4-27-83

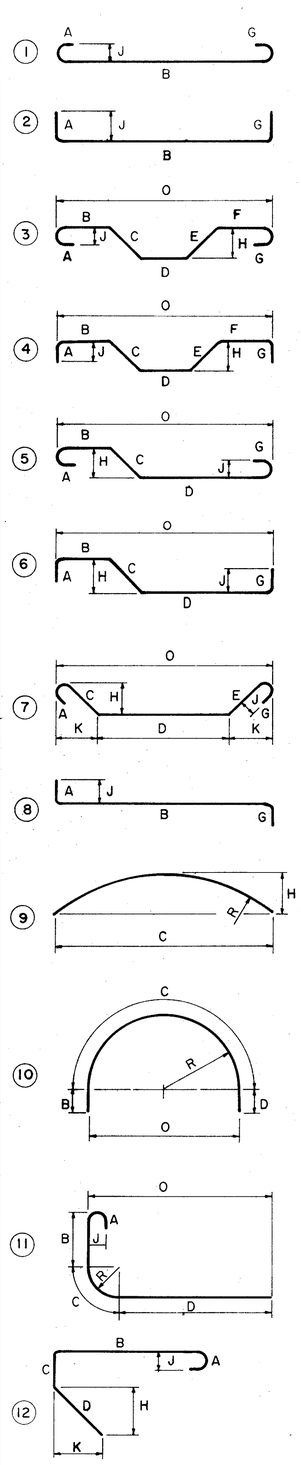
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

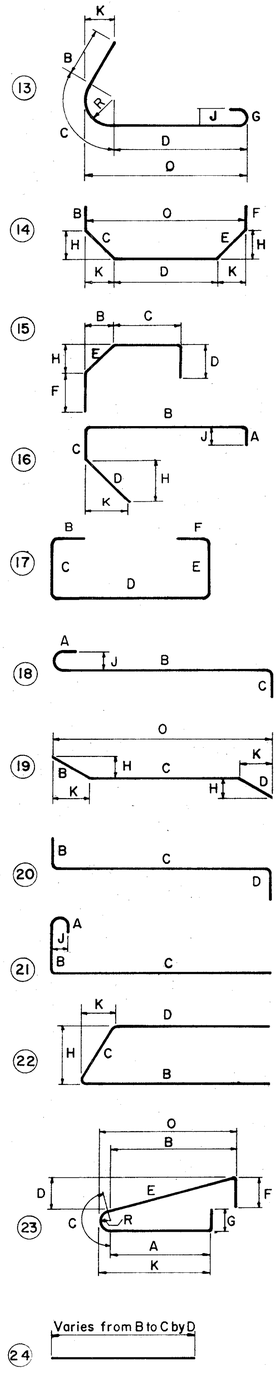
499/616

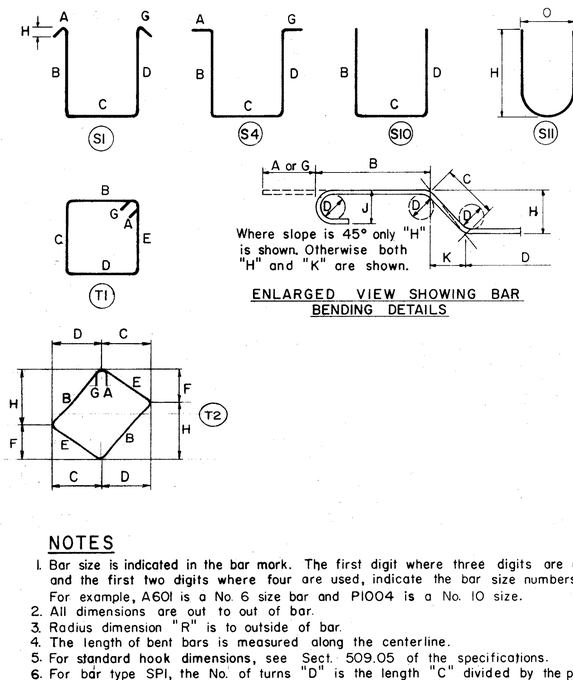
GRE-675 - 5-37
GREENE COUNTY

MICROFILMED JUN 19 1985

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT No. 1				Reinforcing steel in Abutment No. 1 shall the suffix "A"												
A501	22	15'-4"	352	Str.													
A502	11	Varies 12'10" to 18'6" by 6.34, 1-eq.	180	Str.													
A503	14	Varies 7'-6" to 12'-4 by .42, 1-eq.	145	Str.													
A504	3	Varies 5'-2" to 6'-1" by .25½, 1-eq.	14	Str													
A505	13	Varies 8'-3" to 18'-5" by 10¼, 1-eq.	181	Str													
A506	3	Varies 2'-2" to 6'-5" by 201, 1-eq.	15	Str													
A601	94	22'0"	3106	Str													
A602	34	9'-4"	477	510		2'-0"	5'-8"	2'-0"									
A603	8	7'-6"	90	510		2'-7"	2'-8"	2'-7"									
A604	8	4'-3"	51	Str													
A605	4	Varies 2'-9" to 6'-9" by 1.48, 1-eq.	29	Str													
A606	2	22'-8"	68	Str													
A607	3	10'-0"	45	19		3'-7"	6'-6"					2'-7½"		2'-4"	8'-10"		
A608	1	8'-4"	13	19		3'-8"	4'-9"					3'-4½"		1'-4½"	6'-1½"		
A609	1	5'-3"	8	19		1'-11"	3'-5"					1'-5¼"		1'-3¼"	4'-8½"		
A610	6	27'-6"	248	Str													
A611	4	4'-5"	27	19		1'-9"	2'-9"					1'-4⅜"		1'-1⅞"	3'-10⅜"		
A612	4	3'-10"	59	19		3'-0"	6'-11"					2'-0"		2'-3"	9'-2"		
A613	4	11'-1"	67	20		3'-5"	7'-10"										
A614	1	6'-11"	10	19		3'-11"	3'-1"					3'-2"		2'-4"	5'-5"		
A615	1	5'-5"	8	19		3'-11"	1'-7"					3'-2"		2'-4"	3'-11"		
A616	24	14'-4"	517	510		6'-9"	1'-2"	6'-9"									
A617	24	11'-0"	397	510		5'-1"	1'-2"	5'-1"									
A618	2	12'10"	39	510		6'-0"	1'-2"	6'-0"									
A619	2	7'-9"	23	510		8"	1'-8"	5'-9"									
A620	5	Varies 3'-7" to 2'-7" by 3'0", 1-eq.	117	16	6"	Varies 2'-7" to 7'-8" by 1.34,	3'-10"	Varies 2'-11" to 9'-10" by 1'-8¾				Varies 2'-1" to 7'-0" by 1'-2¾		Varies 2'-1" to 7'-0" by 1'-2¾			
A621	7	Varies 2'-0" to 2'-9" by 1'-10¼, 1-eq.	162	16		Varies 2'-11" to 7'-5" by 9",	3'-10"	Varies 2'-10" to 9'-6" by 1'-7¼				Varies 2'-0" to 6'-9" by 9½		Varies 2'-0" to 6'-9" by 9½			
A622	1	8'-3"	12	510		8"	2'-2"	5'-9"									
A623	5	21'-9"	163	510		9'-10"	12'-1"										
A624	1	11'-8"	18	Str													
A625	8	Varies 3'-5" to 9'-5" by 2'0", 2-eq.	77	Str													
A626	14	12'-7"	265	Str													
A627	19	Varies 7'-11" to 12'-10" by 9¼, 1-eq.	296	Str													
A628	14	Varies 1'10" to 11'-5" by ⅜", 1-eq.	236	22		Varies 5'-11" to 6'-4" by ⅜",	5'-3"					5'-2"		1'-0⅜"			
A629	12	Varies 10'5" to 11'-0" by 5/8", 1-eq.	193	22		Varies 5'-4" to 5'-11" by ⅜"	5'-3"					5'-2"		1'-0⅜"			
A630	18	19'-8"	532	Str													
A631	8	Varies 4'-7" to 13'-8" by 3'-0 8", 2-eq.	146	Str													
A632	2	20'-7"	62	Str													
A633	2	32'-4"	97	Str													
A634	8	Varies 5'-7" to 31'-8" by 8'-10 ⅜", 2-eq.	221	Str													
A635	4	31'-8"	190	Str													
A636	2	30'-0"	90	Str													
A637	4	26'-8"	160	Str													
A638	4	Varies 3'-3" to 6'-3" by 1'0", 1-eq.	29	Str													
A639	2	7'-0"	21	Str													
A640	16	Varies 4'-1" to 27'-6" by 3'-4½, 2-eq.	382	Str													
A641	2	30'-5"	91	Str													
A642	7	Varies 11'-2" to 15'-8" by 3', 1-eq.	141	Str.													
A643	9	Varies 8'-6" to 12'-3" by 3'-½, 1-eq.	154	Str													
A644	14	Varies 14'11" to 15'-10" by 3'-½, 1-eq.	323	22		Varies 7'-0" to 7'-11" by ⅜",	8'-1"					7'-11⅜"		1'-7"			
A645	9	Varies 9'-11" to 11'11" by 1'-¾, 1-eq.	142	22		Varies 5'-4" to 5'-6" by 1'-¾"	4'-9"					4'-8"		1'1¼"			
A646	4	27'-8"	166	Str													
A647	2	24'-5"	73	Str													
A648	2	6'-8"	20	Str													
A649	10	Varies 17'-11" to 20'-0" by 2'-¼, 1-eq.	285	Str													



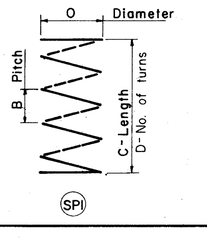




ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SPI, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1|2 Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SP1 and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 1213/13



KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

11/13

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA:555+51.05 TO STA:556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675 · 5·37
GREENE COUNTY

500/616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT No.1 CONTINUED																
A650	7	20'-0"	210	Str													
A651	7	32'-6"	342	Str													
A652	11	Varies 28'-11" to 32'-6" by 1½"; 1-eq.	507	Str													
A653	2	12'-6"	98	Str													
A654	7	Varies 23'-6" to 26'-11" by 6⅜"; 1-eq.	265	Str													
A655	2	11'-0"	33	Str													
A656	3	8'-8"	39	19		2'-6"	6'-3"					1'-11"		1'-7"	7'-10"		
A657	16	6'-3"	150	Str													
A658	7	Varies 24'-6" to 25'-11" by 2½"; 1-eq.	249	Str													
A659	2	10'-0"	30	Str													
A663	1	6'-5"	10	19		1'-9"	4'-9"					1'-7"		8"	5'-5"		
A664	16	4'-5"	106	1	8"	3'-7"							6"				
A701	13	Varies 15'-7" to 19'-0" by 3⅜"; 1-eq.	459	22		Varies 7'-4" to 7'-11" by ⅜"	Varies 8'-5" to 11'-3" by 2¾"					Varies 8'-3" to 11'-03" by 2¾"		Varies 1'-7⅞" to 2'-2⅛" by ⅛"			
A702	14	Varies 11'-8" to 15'-1" by 3½"; 1-eq.	383	22		Varies 6'-4" to 6'-10" by ½"	Varies 5'-6" to 8'-5" by 2⅜"					Varies 5'-4¾" to 8'-3" by 2⅜"		Varies 1'-1" to 1'-7⅞" by ½"			
A703	59	5'-5"	654	1	10"	4'-7"							7"				
A801	57	16'-10"	2562	20		9'-0"	8'-1"										
A802	29	12'-10"	994	Str													
A803	14	10'-9"	402	Str													
A804	14	10'-2"	380	Str													
A805	13	9'-9"	338	Str													
A901	57	11'-8"	2261	Str													
A1101	13	13'-9"	950	Str													
		Total =	22,395														
	ABUTMENT No. 2 Reinforcing steel in Abutment No. 2 shall have the suffix "B"																
A501	22	16'-3"	373	Str													
A502	11	Varies 13'-9" to 18'-11" by 6¼"; 1-eq.	187	Str													
A503	8	Varies 11'-8" to 14'-9" by 4½"; 1-eq.	107	Str													
A504	3	Varies 3'-2" to 5'-5" by 1⅛"; 1-eq.	13	Str													
A505	14	Varies 9'-7" to 19'-5" by 9½"; 1-eq.	212	Str													
A506	3	Varies 3'-2" to 6'-1" by 1½"; 1-eq.	16	Str													
A507	8	Varies 10'-4" to 11'-4" by 1¾"; 1-eq.	90	Str													
A601	98	22'-0"	3238	Str													
A602	34	9'-4"	477	510		2'-0"	5'-8"	2'-0"									
A603	8	7'-6"	90	510		2'-7"	2'-8"	2'-7"									
A604	8	4'-3"	51	Str													
A605	4	Varies 3'-2" to 7'-1" by 1'-3½"; 1-eq.	31	Str													
A606	4	24'-8"	148	Str													
A607	3	10'-0"	45	19		3'-7"	6'-6"					2'-7½"		2'-4"	8'-10"		
A608	1	8'-4"	13	19		3'-8"	4'-9"					3'-4½"		1'-4½"	6'-1⅛"		
A609	1	5'-3"	8	19		1'-11"	3'-5"					1'-5¼"		1'-3¼"	4'-8¼"		
A610	6	27'-6"	248	Str													
A611	4	4'-5"	27	19		1'-9"	2'-9"					1'-4⅜"		1'-1⅛"	3'-10⅛"		
A612	4	9'-10"	59	19		3'-0"	6'-11"					2'-0"		2'-3"	9'-2"		
A613	4	11'-1"	67	20		3'-5"	7'-10"										
A614	1	6'-11"	10	19		3'-11"	3'-1"					3'-2"		2'-4"	5'-5"		
A615	1	5'-5"	8	19		3'-11"	1'-7"					3'-2"		2'-4"	3'-11"		
A616	24	14'-4"	517	510		6'-9"	1'-2"	6'-9"									
A617	24	11'-0"	397	510		5'-1"	1'-2"	5'-1"									
A618	2	12'-10"	39	510		6'-0"	1'-2"	6'-0"									
A619	2	7'-9"	23	510		8"	1'-8"	5'-9"									
A620	5	Varies 9'-7" to 21'-7" by 3'-0"; 1-eq.	117	16	6"	Varies 2'-7" to 7'-8" by 1'-3¼"	3'-10"	Varies 2'-11" to 9'-10" by 1'-8¾"				Varies 2'-1" to 7'-0" by 1'-2¾"		Varies 2'-1" to 7'-0" by 1'-2¾"			

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT No. 2 CONTINUED																
A621	7	Varies 9'-10" to 21'-0" by 1'-10½"; 1-eq.	162	16	6"	Varies 2'-11" to 7'-5" by 9"	3'-10"	Varies 2'-10" to 9'-6" by 1'-1¼"				Varies 2'-10" to 9'-6" by 3½"		Varies 2'-10" to 9'-6" by 3½"			
A622	1	8'-3"	12	510		8"	2'-2"	5'-9"									
A623	5	21'-9"	163	510		9'-10"	12'-1"										
A624	1	11'-8"	18	Str													
A625	8	Varies 3'-5" to 21'-5" by 2'-0"; 2-eq.	77	Str													
A626	21	12'-7"	397	Str													
A628	14	Varies 10'-0" to 13'-1" by 2⅛"; 1-eq.	251	22		Varies 6'-3" to 6'-6" by ¼"	Varies 4'-9" to 6'-9" by 1⅞"					Varies 4'-8" to 6'-7⅜" by 1¼"		Varies 1'-1⅛" to 1'-3⅜" by ⅜"			
A629	14	Varies 5'-11" to 11'-4" by 5⅛"; 1-eq.	234	22		Varies 3'-10" to 6'-3" by ⅜"	5'-3"					5'-1¾"		1'-0⅜"			
A630	20	19'-8"	591	Str													
A631	6	Varies 7'-0" to 19'-8" by 6'-4"; 2-eq.	120	Str													
A632	2	20'-4"	61	Str													
A633	2	35'-11"	108	Str													
A634	2	5'-4"	16	Str													
A635	6	35'-8"	321	Str													
A636	2	33'-10"	102	Str													
A637	8	30'-8"	368	Str													
A638	4	Varies 3'-2" to 9'-8" by 10'-1"; 1-eq.	27	Str													
A639	2	7'-5"	22	Str													
A640	14	Varies 6'-8" to 29'-0" by 3'-10"; 2-eq.	382	Str													
A641	2	31'-11"	96	Str													
A642	7	Varies 11'-7" to 15'-8" by 8⅛"; 1-eq.	143	Str													
A643	11	Varies 10'-0" to 16'-1" by 1'-4"; 1-eq.	215	Str													
A644	14	Varies 6'-4" to 17'-1" by 3'-4"; 1-eq.	351	22		Varies 7'-4" to 8'-1" by ¾"	9'-2"					8'-11⅞"		1'-9⅜"			
A645	14	Varies 10'-0" to 12'-2" by 2'-1"; 1-eq.	233	Str													
A646	4	29'-8"	178	Str													
A647	2	27'-4"	82	Str													
A648	2	7'-6"	23	Str													
A649	9	Varies 20'-6" to 23'-2" by 8'-1"; 1-eq.	295	Str													
A650	7	Varies 22'-3" to 24'-4" by 5⅛"; 1-eq.	248	Str													
A651	8	Varies 30'-0" to 32'-9" by 4½"; 1-eq.	377	Str													
A652	11	Varies 27'-8" to 31'-6" by 4⅝"; 1-eq.	489	Str													
A653	1	18'-10"	28	Str													
A654	9	Varies 25'-0" to 29'-6" by 6¾"; 1-eq.	368	Str													
A655	2	10'-0"	30	Str													
A656	3	8'-8"	39	19		2'-6"	6'-3"					1'-11"		1'-7"	7'-10"		
A657	18	6'-0"	162	Str													
A658	7	Varies 23'-0" to 27'-0" by 8'-1"; 1-eq.	263	Str													
A659	1	9'-9"	15	Str													
A660	2	14'-6"	44	Str													

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 11/13
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 11/13

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI — OHIO — 12/13

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA:555+51.05 TO STA:556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

501/616

GRE-675 5-37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		ABUTMENT No. 2 CONTINUED															
A661	1	12'-3"	18	5H													
A663	1	6'-5"	10	19		1'-9"	4'-3"					1'-7"		8"	5'-5"		
A664	17	4'-5"	113	1	8"	3'-7"							6"				
A701	13	Varies 16'-10" to 19'-11" by 3.52' l.=80	488	22		Varies 7'-7" to 8'-1" by 12"	Varies 9'-5" to 12'-0" by 2.82'					Varies 9'-2 3/8" to 11'-3 1/4" by 2 1/2"		Varies 1'-10 5/8" to 2'-4 1/4" by 12"			
A702	14	Varies 13'-1" to 16'-4" by 3" l.=80	421	22		Varies 6'-6" to 7'-1" by 1/2"	Varies 6'-9" to 9'-5" by 2 1/2"					Varies 6'-7 3/8" to 9'-0 1/4" by 2.38'		Varies 1'-3 7/8" to 1'-10 1/8" by 1/2"			
A703	11	Varies 10'-8" to 11'-11" by 10 1/2" l.=80	254	22		Varies 6'-1" to 7'-4" by 12"	4'-9"					4'-8"		1'-4"			
A704	63	5'-5"	698	1	10"	4'-7"							7"				
A801	57	16'-10"	2562	20		9'-0"	8'-1"										
A802	29	13'-8"	1058	5H													
A803	14	10'-6"	392	5H													
A804	14	9'-9"	364	5H													
A805	15	9'-3"	370	5H													
A901	57	11'-8"	2261	5H													
A1101	13	13'-7"	938	5H													
		Total =	23,669														
		PIER No. 1															
P501	46	16'-1"	772	5H													
P502	34	25'-5"	901	5H													
P503	22	18'-1"	415	71	5"	4'-8"	4'-2"	4'-8"	4'-2"		5"						
P504	20	13'-0"	271	T2	5"	3'-5"	2'-4"	2'-4"	2'-10 3/8"	1'-8"	5"	2'-6"					
P601	8	8'-4"	100	510		2'-0"	4'-8"	2'-0"									
P602	10	7'-10"	118	510		2'-0"	4'-2"	2'-0"									
P901	22	11'-6"	860	5H													
P902	22	12'-6"	935	5H													
P1101	44	16'-3"	3793	5H													
P1102	44	8'-10"	2065	11		7"	2'-1"	6'-2"							7'-7"	1'-5"	
		Total =	10,236														
Total	Substructure =		54,729														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 11/13
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 11/13

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

13/13

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY
STA 555+51.05 TO STA 556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/25/72	

FERD WAGNER 200 5-74 MC 2470+

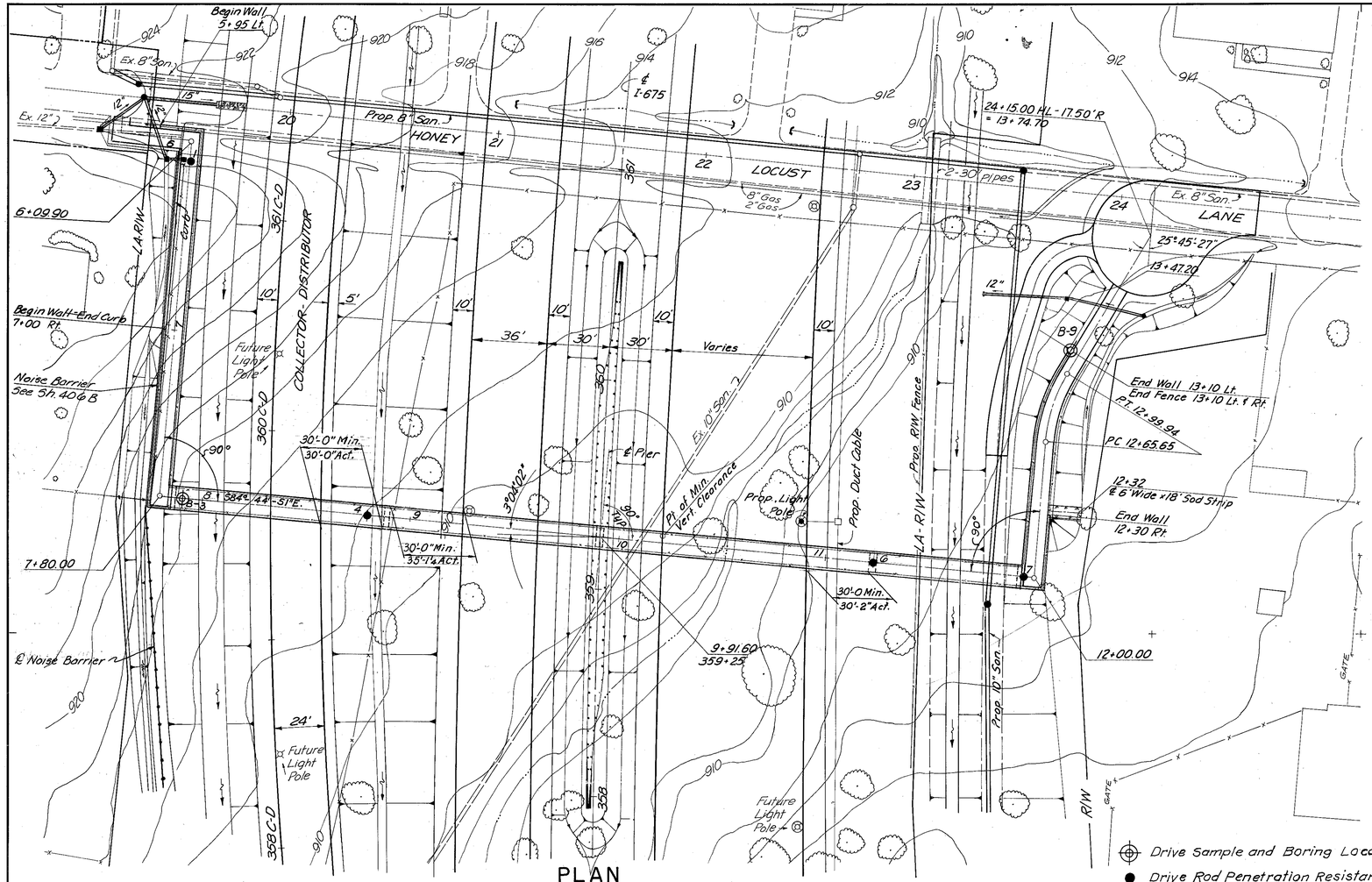
MICROFILMED JUN 5 5 1989

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

502
616

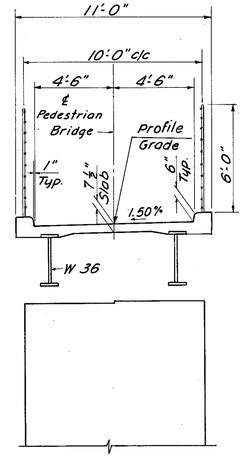
GRE-675-5.37
GREENE COUNTY

MICROFILMED JUN 5 5 1989



PLAN

PEDESTRIAN RAMP CURVE DATA
P.I. Sta. 12+83.10
Δ = 26°11'32"
R = 75.00'
L = 34.29'
T = 17.45'
E = 2.00'



SECTION THRU BRIDGE

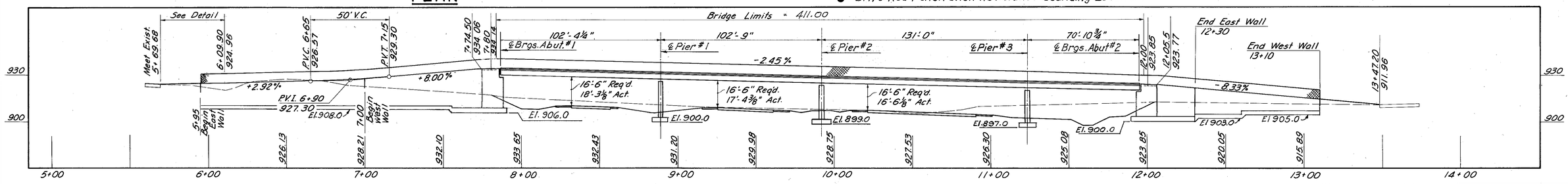
Note: Earth limits shown are schematic. Actual slopes shall conform to Plan-Cross Sections. See Sheet 25 & 406 for grading & drainage details.

Drive Sample and Boring Location.

Drive Rod Penetration Resistance Sounding Location.

PROPOSED STRUCTURE

TYPE: 4 Span steel beam with reinforced concrete deck & substructure.
SPANS: 102'-4¼", 102'-9", 131'-0", 70'-10¾"
ROADWAY: 11'-0" out to out
LOADING: AASHO Pedestrian Loading (60 psf)
SKEW: 0°
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: None
ALIGNMENT: Tangent



PROFILE ON CENTERLINE PEDESTRIAN RAMP

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

1 / 11

SITE PLAN

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	IEH	JAG	M.D.	

FERD WAGNER 200 5-74 MC 2479-

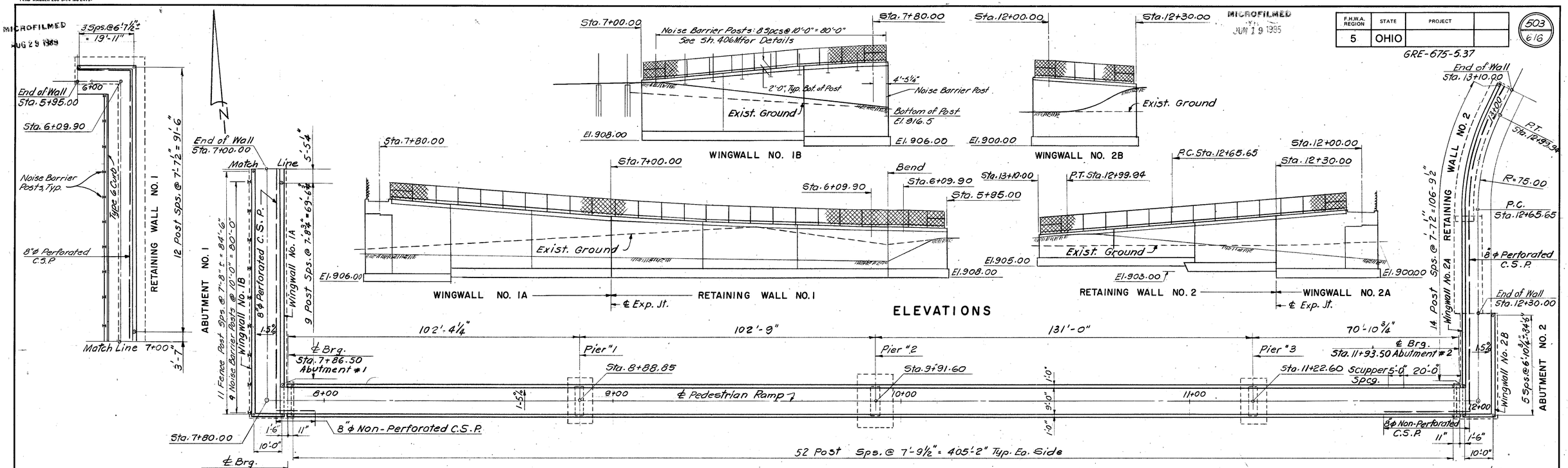
MICROFILMED AUG 29 1989

MICROFILMED JUN 19 1995

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

503 / 616

GRE-675-5.37



ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	RET. WALL	PIERS	GEN.	
503	1,594	Cu. Yd.	Unclassified Excavation		704	724	166		
503	Lump	Sum	Cofferdams, cribs & sheeting					Lump	
509	98,900	Lb.	Reinforcing Steel	9,600	54,300	23,700	11,300		
				132					
511	350	Cu. Yd.	Class "C" Concrete, Abutments above Footing		350				
511	66	Cu. Yd.	Class "C" Concrete, Piers above Footing				66		
511	175	Cu. Yd.	Class "C" Concrete, Retaining Walls above Footing			175			
511	408	Cu. Yd.	Class "C" Concrete, Footings		143	208	57		
512	174	Lin. Ft.	Type B, Waterproofing		121	53			
513	150,800	Lb.	Structural Steel (AISC Category I) ASTM A588	150,800					
513	1088	Each	Welded Stud Shear Connectors (See Proposal Note)	1088					
518	907	Cu. Yd.	Porous Backfill		715	192			
518	306	Lin. Ft.	8"ϕ Perforated Corrugated Steel Pipe, 707.01		116	190			
518	35	Lin. Ft.	8"ϕ Non-Perforated Corrugated Steel Pipe, Inc. Spcs. 707.01		35				
518	2	each	Scuppers, including Supports	2					
511	132	Cu. Yd.	Class S Concrete, Superstructure using Shrinkage Compensating Cement 701.08	132					
607	1,253	Lin. Ft.	Type CL Fence 6' High (Modified)	814	240	197			
Special	7,345	Lb.	Epoxy Coated Reinforcing Steel (See Proposal note)	7,345					

ESTIMATED QUANTITIES CHECKED BY & DATE: REVISED

ELEVATION

GENERAL NOTES:

DESIGN SPECIFICATIONS: This Structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway officials, 1973 including the 1974, 1975, 1976 and 1977 interim specifications and the Ohio Supplement" to these Specifications.

DESIGN DATA: Design Loading - Live Load 60 P.S.F.
Concrete class S - E_c=4,500psi, f_c=1800psi for Superstructure. For additional Class S Concrete
Concrete class C - Unit Stress 1333 P.S.I. for Substructure Notes, see Sht. A1/A1
Structural Steel - ASTM A588, Unit Stress 27,000 P.S.I.
Reinforcing Steel - ASTM A615, A616 or A617 Unit Stress 20,000 P.S.I.

MONOLITHIC WEARING SURFACE: Thickness is Assumed to be 1".

REINFORCING STEEL COVER: Shall conform to Item 509 except that in footings the minimum cover shall be 3" from any surface

EMBANKMENT CONSTRUCTION: Before the Backwall is Constructed the embankment shall be placed up to the level of the subgrade with 1:1 slope from the bridge seat, Payment for backfill and new embankment, 503.10, required in excess of 503, 518 and 203 quantities shall be included in the price bid for Item 203 Embankment.

FOUNDATION BEARING Pressure: Abutment, wingwall, pier footings are designed for a maximum bearing pressure of 2½ tons per sq. ft. Retaining Wall footings are designed for a maximum bearing pressure of 1½ tons per sq. ft.

Reference shall be made to Standard Drawing(S):
RB-1-55 (revised) 2-02-59
SD-1-69 Dated 6-12-69
and to supplemental specification (S):
836 Dated 3-12-75

For Noise Barrier Details, See Shts. 406B, 406L, 406M

KING & GAVARIS — CONSULTING ENGINEERS, INC. — CINCINNATI — OHIO — 2 / 11

GENERAL PLAN, ELEVATIONS AND ESTIMATED QUANTITIES

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP
GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.V.		L.T.W.			

FEDD WAGNER 200 5-74 MC 2479-

MICROFILMED
AUG 29 1989

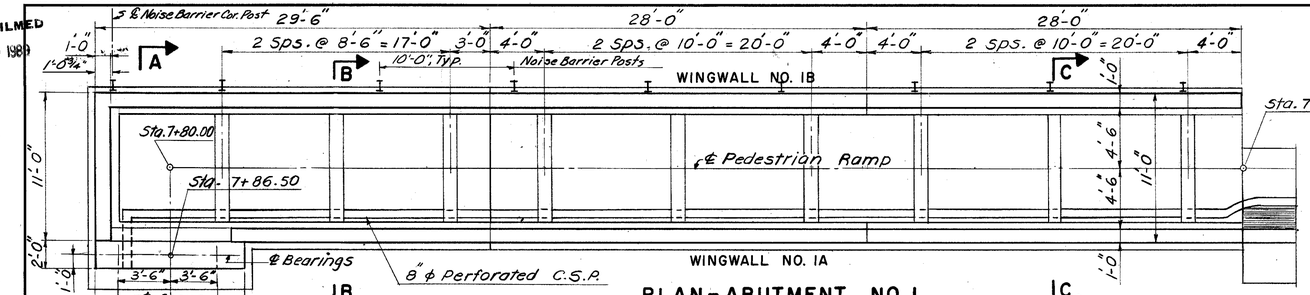
MICROFILMED
JUN 19 1985

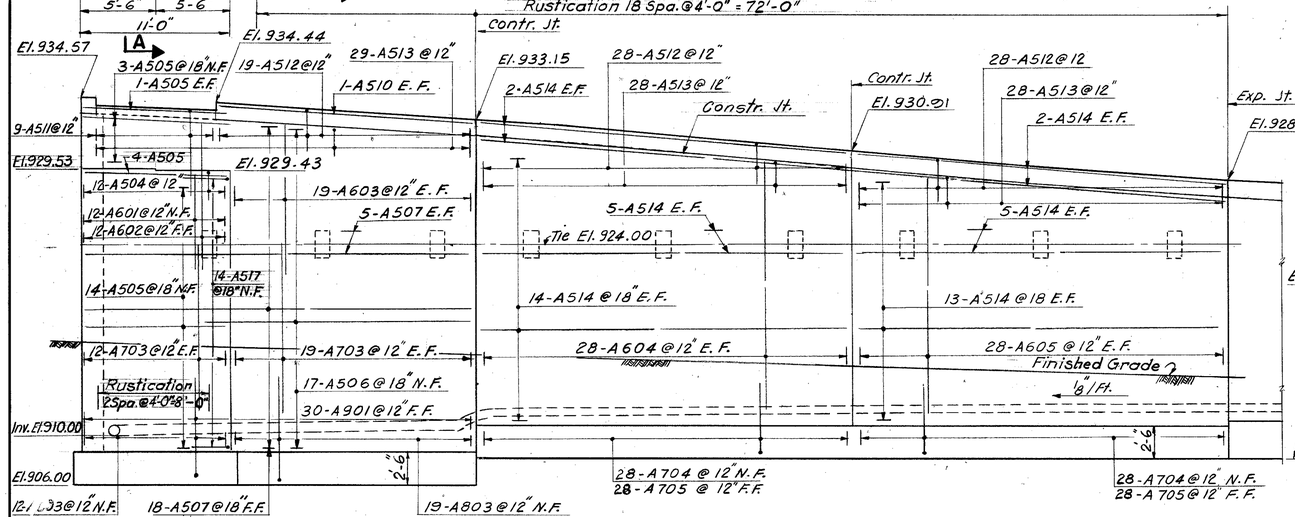
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37

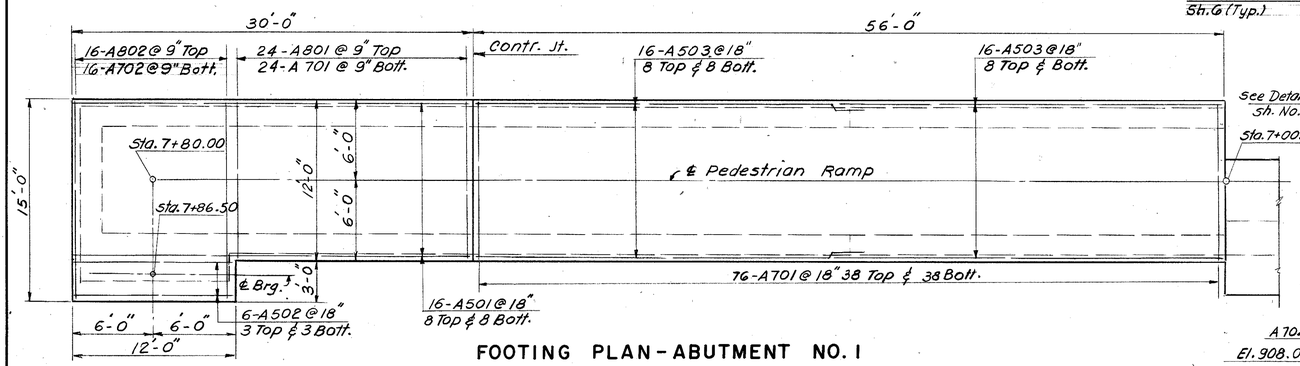
504/616

PLAN - ABUTMENT NO. I

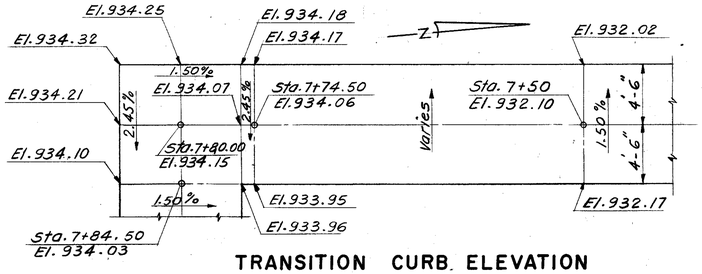




ELEVATION - WINGWALL NO. IA

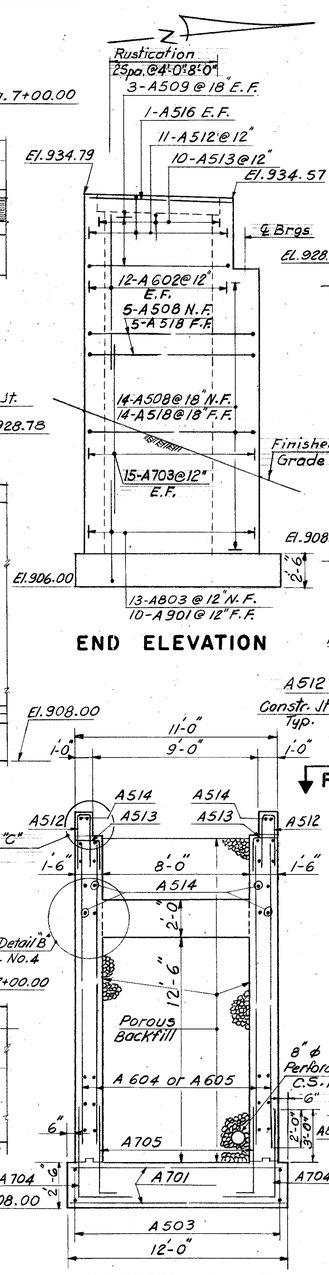


FOOTING PLAN - ABUTMENT NO. I

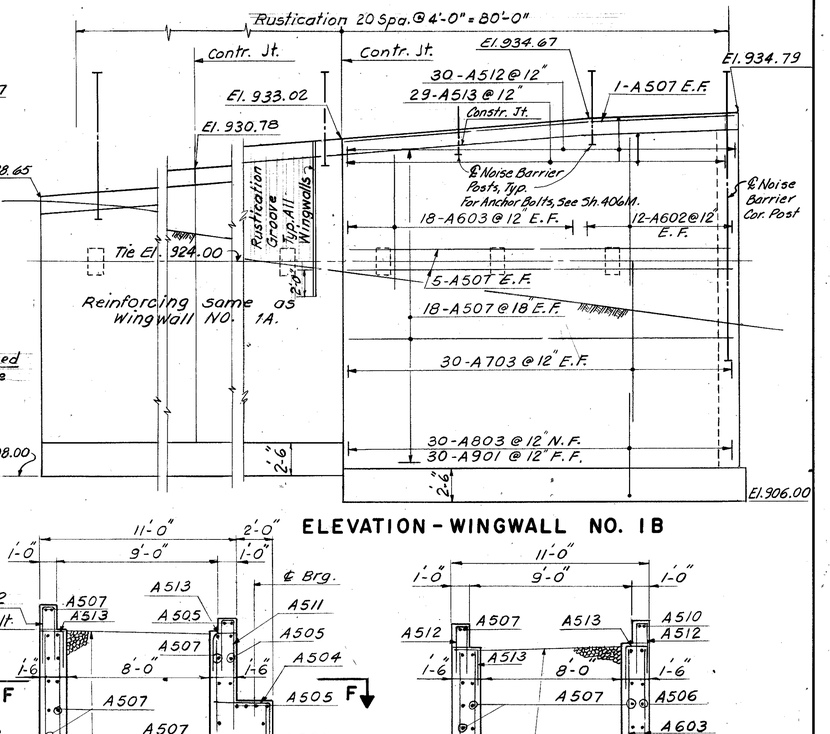


TRANSITION CURB ELEVATION

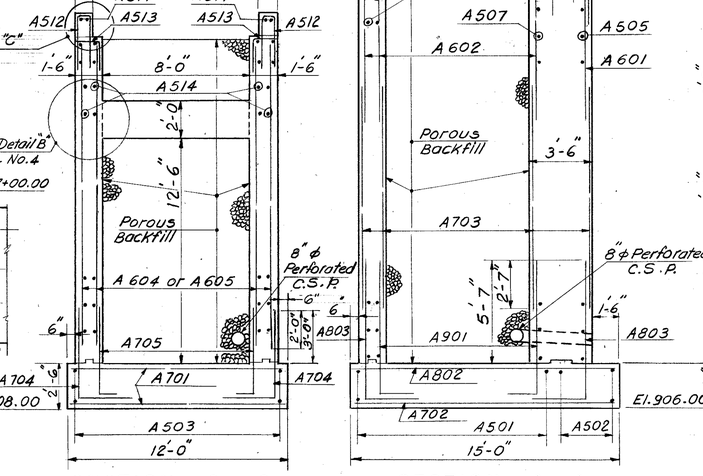
Noise Barrier:
For Installation of Noise Barrier on Wing wall 1B, See Sh. 406M.
Cost for furnishing and installing Noise Barrier Anchor Bolts & Bearing Pads shall be included in the Unit Price Bid for Item Special, Noise Barrier.



END ELEVATION

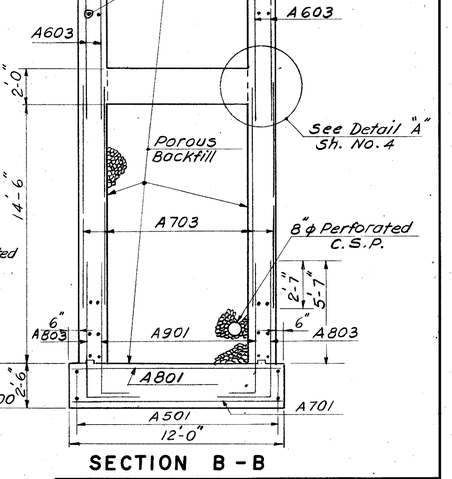


ELEVATION - WINGWALL NO. IB



SECTION C - C

SECTION A - A



SECTION B - B

Notes:
Work this Sheet with Sh. 4/11
For Reinforcing Steel List, see Sh. 10/11
For Construction & Contraction Joints and for Rustication Groove, see Sh. 6/11
All Splices and Dowels will be lapped min. 30 bar dia. unless otherwise shown.
Porous Backfill within the limits shown shall extend up to the plane of the subgrade and laterally to the ends of the wing (or retaining) walls.

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

3/11

ABUTMENT NO. I

BRIDGE NO. GRE - 675 - 0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	A.A.		L.T.W.			

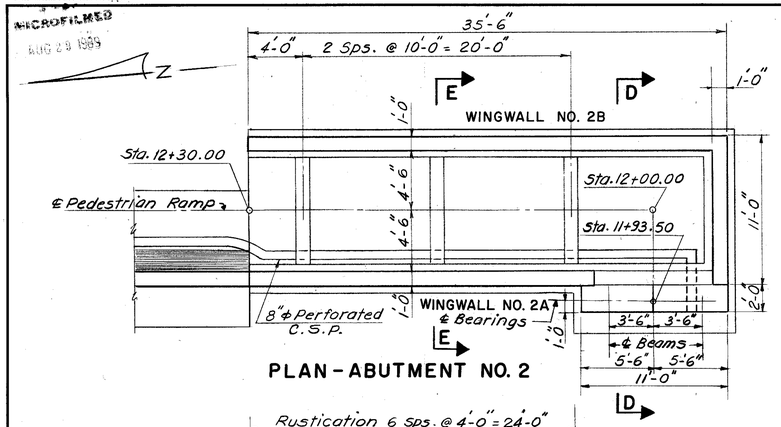
FEDD WAGNER 200 5-74 MC 2479+
MICROFILMED
AUG 29 1989

MICROFILMED
JUN 3 0 1989

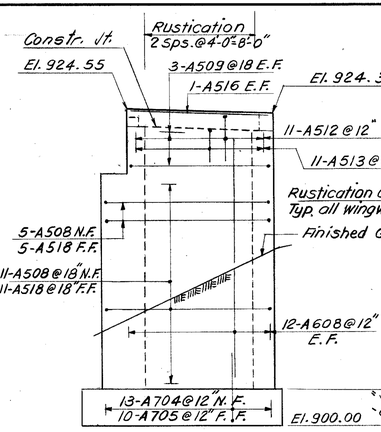
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

505
616

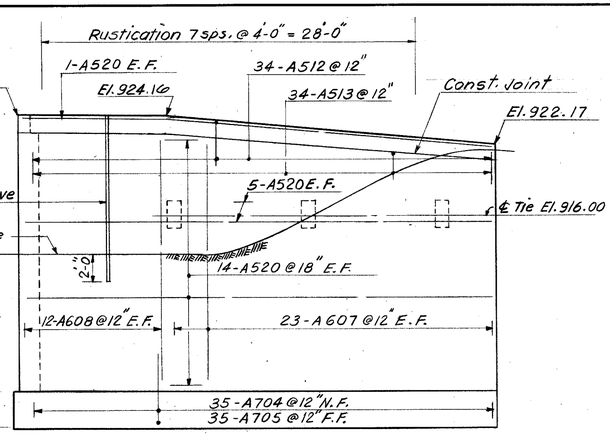
GRE-675-5.37



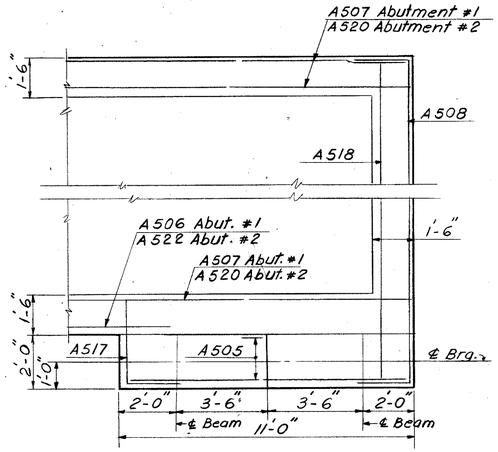
PLAN - ABUTMENT NO. 2



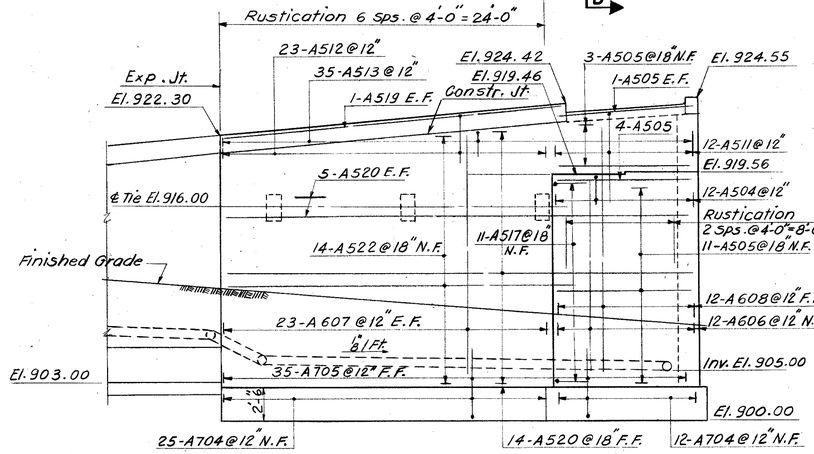
END ELEVATION



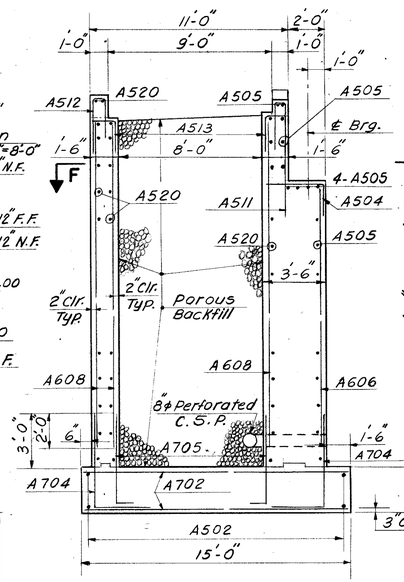
ELEVATION - WINGWALL NO. 2B



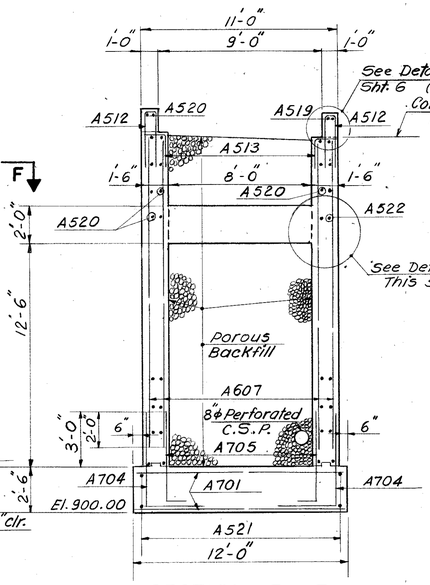
SECTION F - F



ELEVATION - WINGWALL NO. 2A



SECTION D - D



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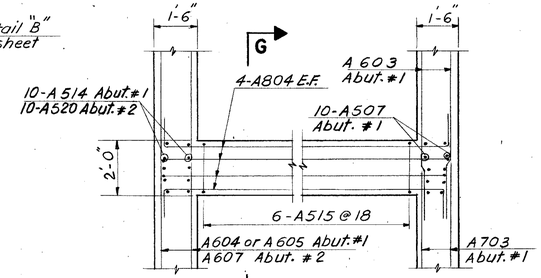
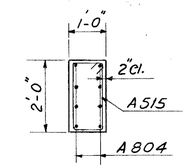
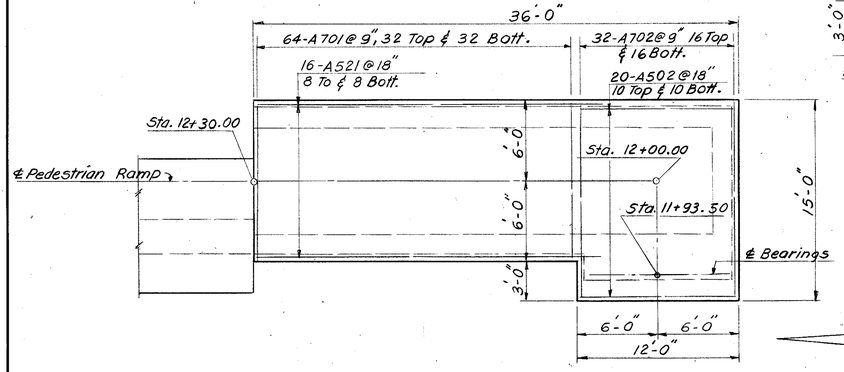


DETAIL "B"

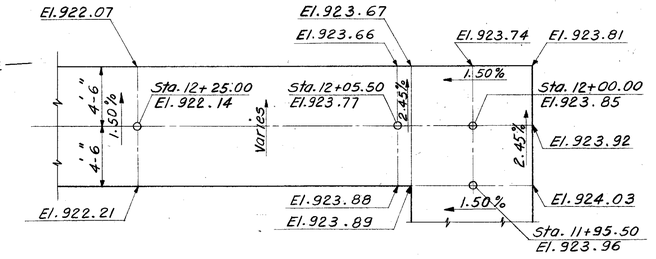


SECTION G-G

DETAIL "A"



FOOTING PLAN - ABUTMENT NO. 2



TRANSITION CURB ELEVATIONS

Note:
Work this Sheet with Sh. 3/11.
For Reinforcing Steel List, see Sh. 10/11.

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

4/11

ABUTMENT NO. 2

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	A.A.		L.T.W.			

FERD WAGNER 200 5-74 MC 2479-

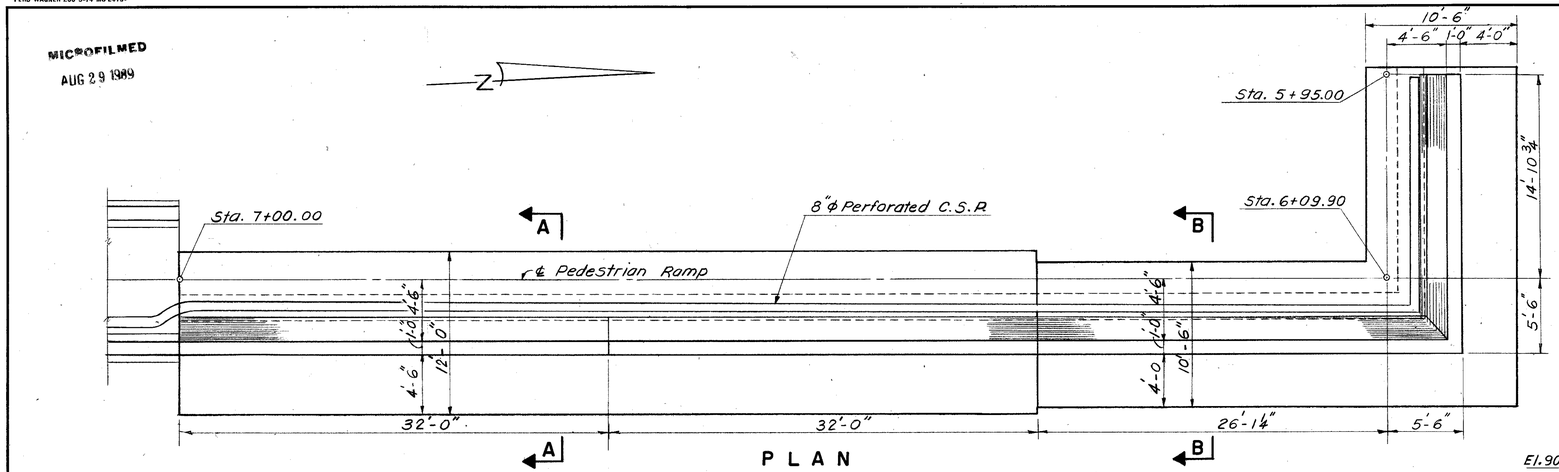
MICROFILMED
AUG 29 1989

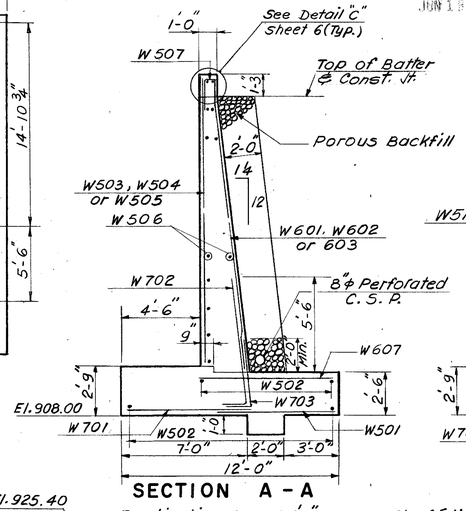
MICROFILMED
JUN 18 1985

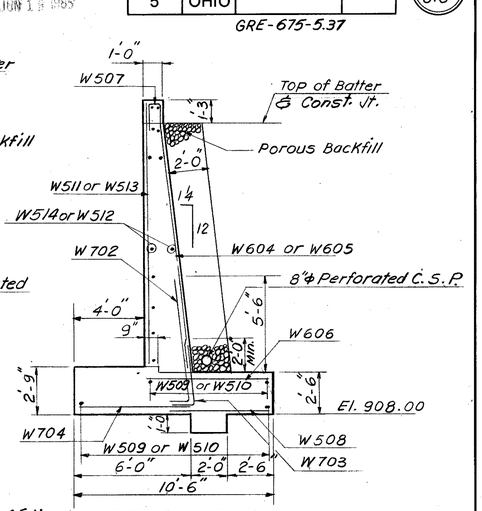
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

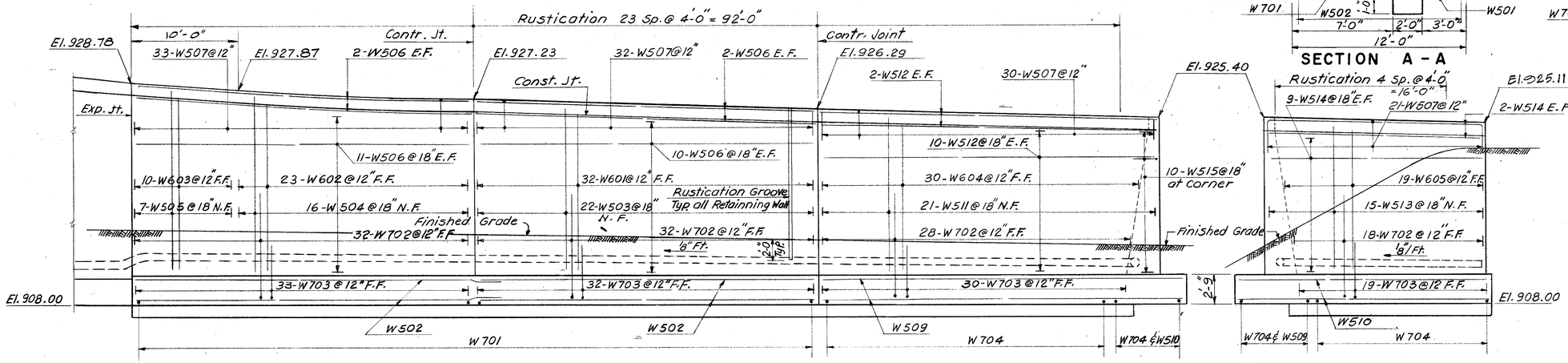
GRE-675-5.37

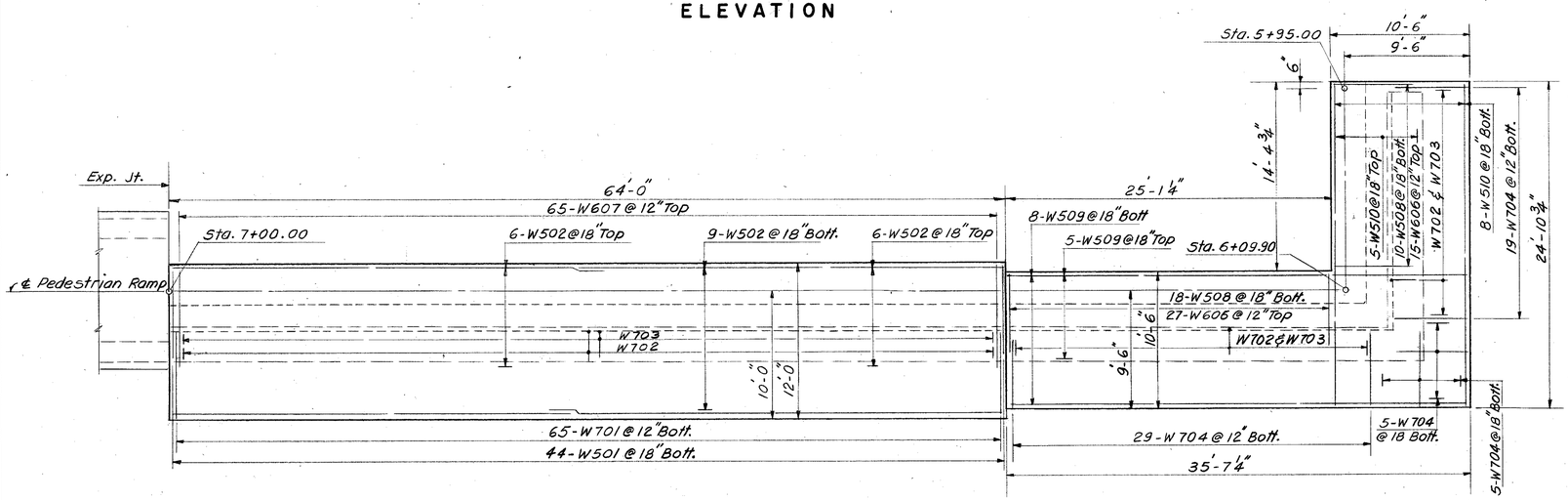
506/616











NOTES:

Work this sheet with 6 / 11

For Reinforcing Steel list, see sh. 11 / 11

For additional Notes, see sh. 3 / 11

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

5 / 11

RETAINING WALL NO. 1

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	A.A.		L.T.W.			

FERD WAGNER 200 5-74 MC 2479-

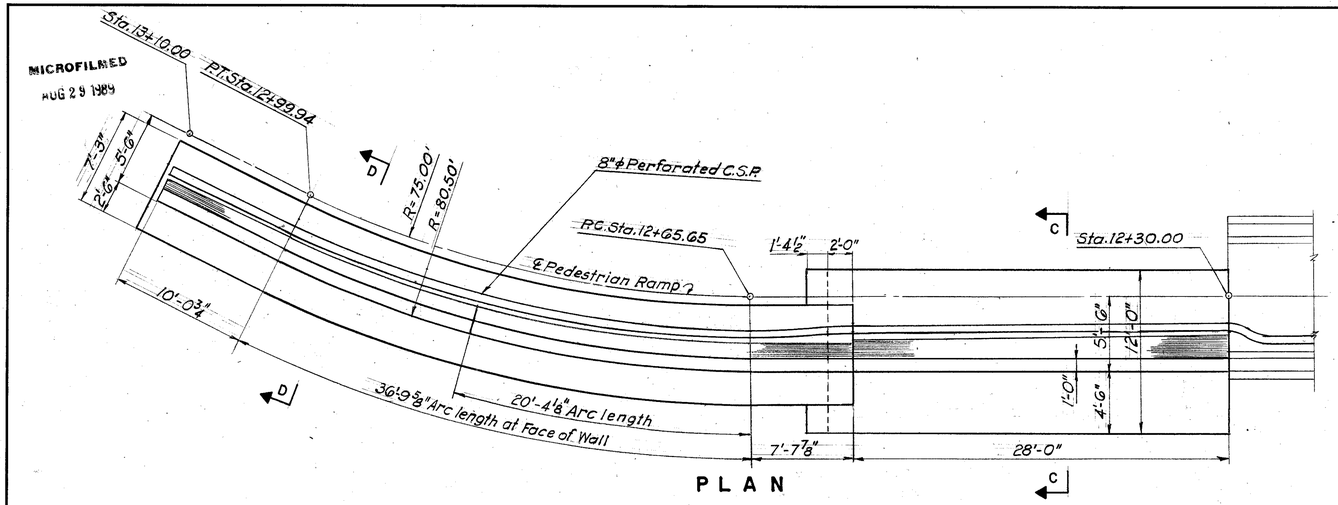
MICROFILMED
AUG 29 1989

MICROFILMED
JUN 19 1985

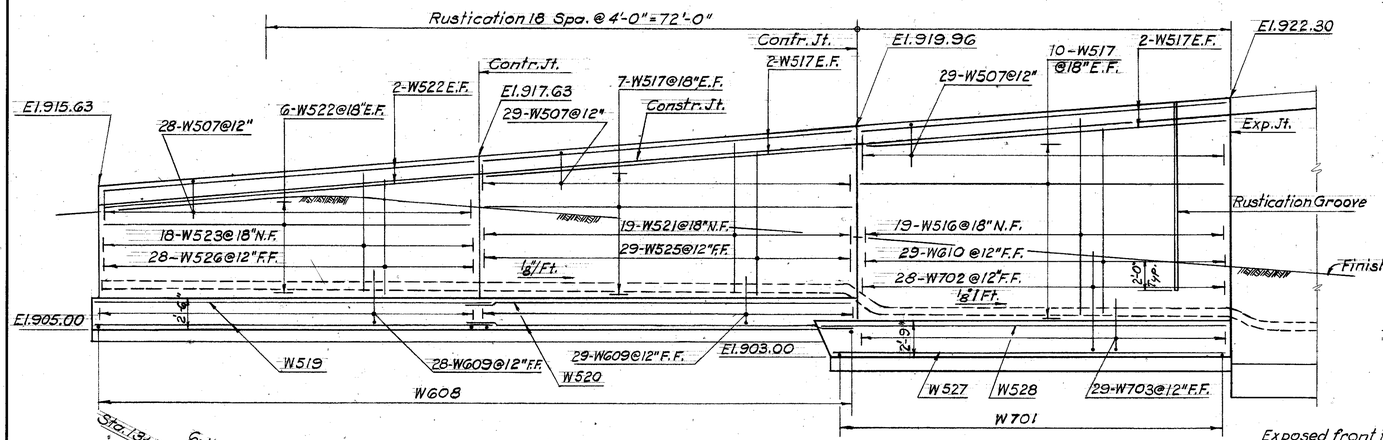
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37

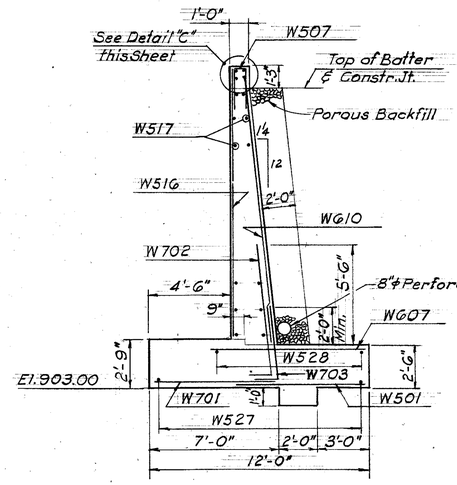
507
616



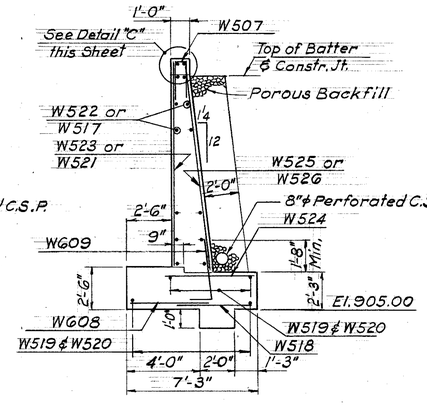
PLAN



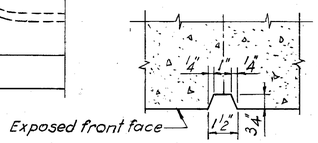
ELEVATION



SECTION C-C

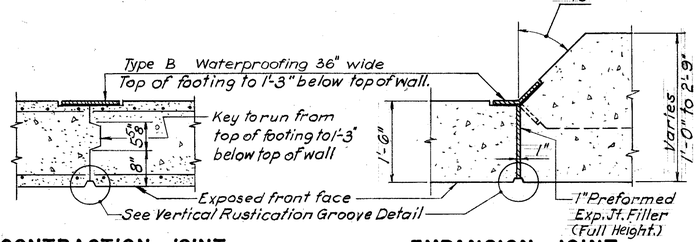


SECTION D-D



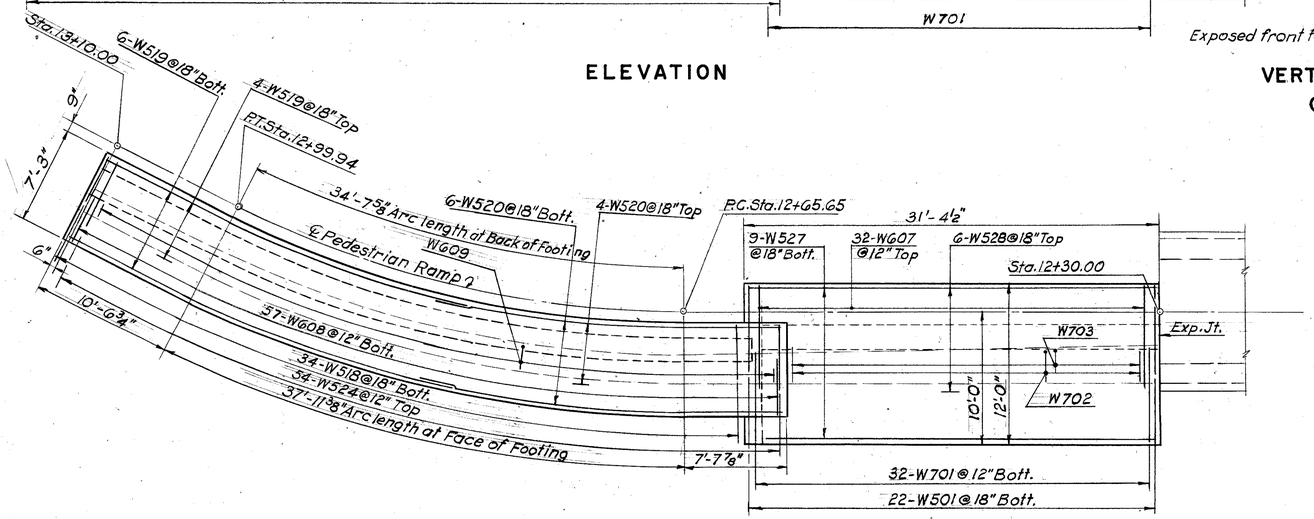
Exposed front face

VERTICAL RUSTICATION GROOVE DETAIL

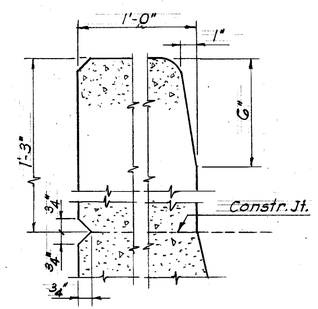


CONTRACTION JOINT DETAIL

EXPANSION JOINT DETAIL



FOOTING PLAN



DETAIL "C"

NOTES:
Work this Sheet with 5/11
For Reinforcing Steel List, see Sh. 11/11

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

6/11

RETAINING WALL No. 2

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.H.		L.T.W.			

FERD WAGNER 200 5-74 MC 2479-

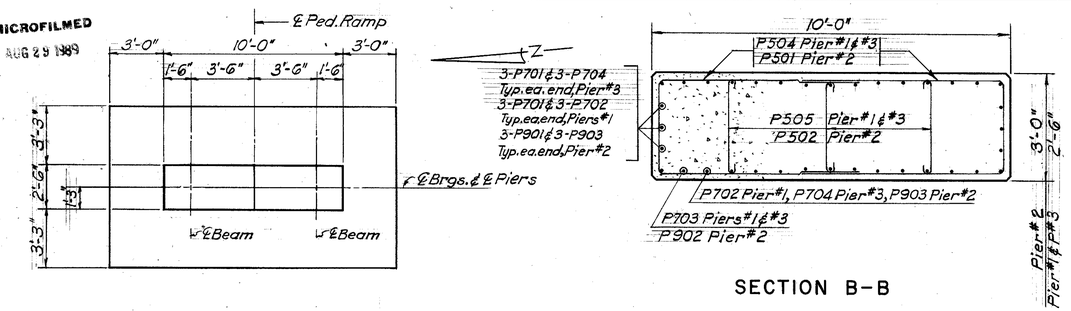
MICROFILMED
AUG 29 1989

MICROFILMED
JUN 13 19

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

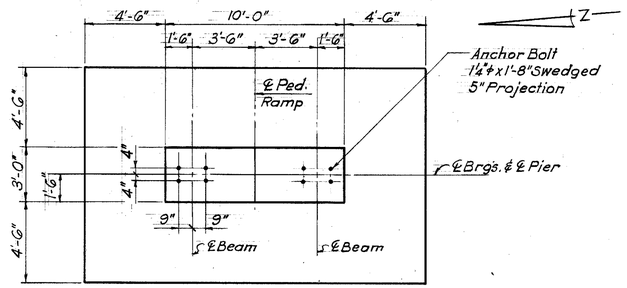
GRE-675-5.37

508
6.16

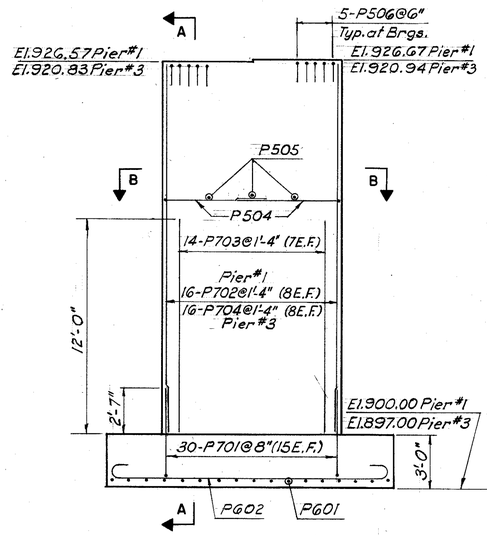


PLAN - PIER 1 & PIER 3

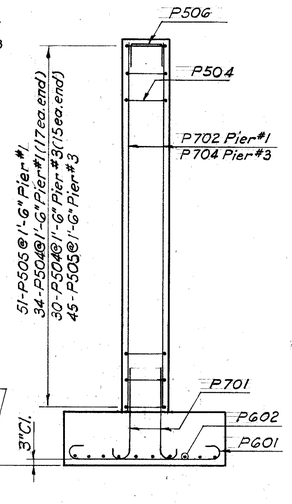
SECTION B-B



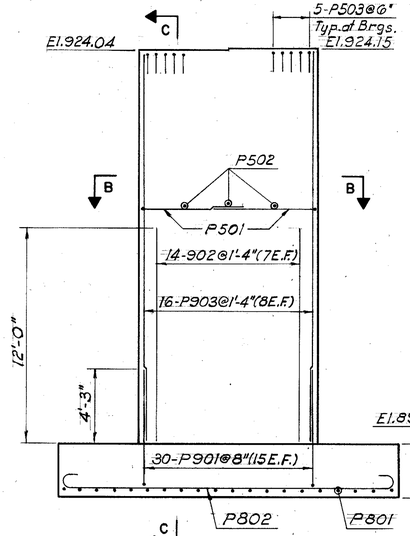
PLAN - PIER 2



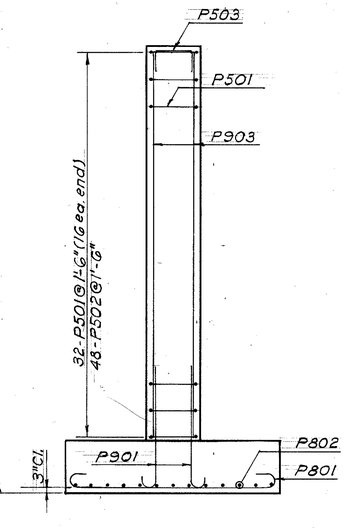
ELEVATION - PIER 1 & PIER 3



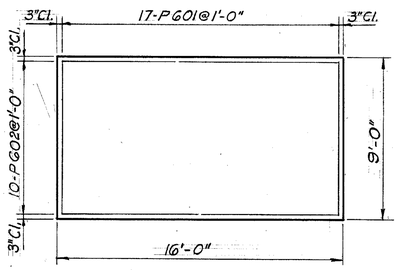
SECTION A-A



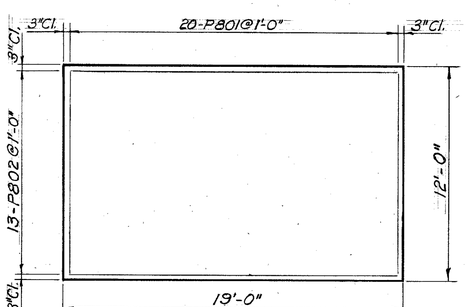
ELEVATION - PIER 2



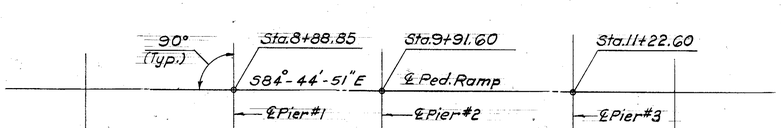
SECTION C-C



FOOTING PLAN - PIER 1 & PIER 3



FOOTING PLAN - PIER 2



KEY PLAN

NOTES:

1. Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.
2. For Reinforcing Steel List, see Sh. 11 / 11
3. All splices and dowels will be lapped minimum 30 bar dia. unless otherwise shown.

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI — OHIO

7 / 11

PIERS

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP
STA. 7+84.50 to
STA. 11+95.50
GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M. D.	N. H.		L. T. W.			

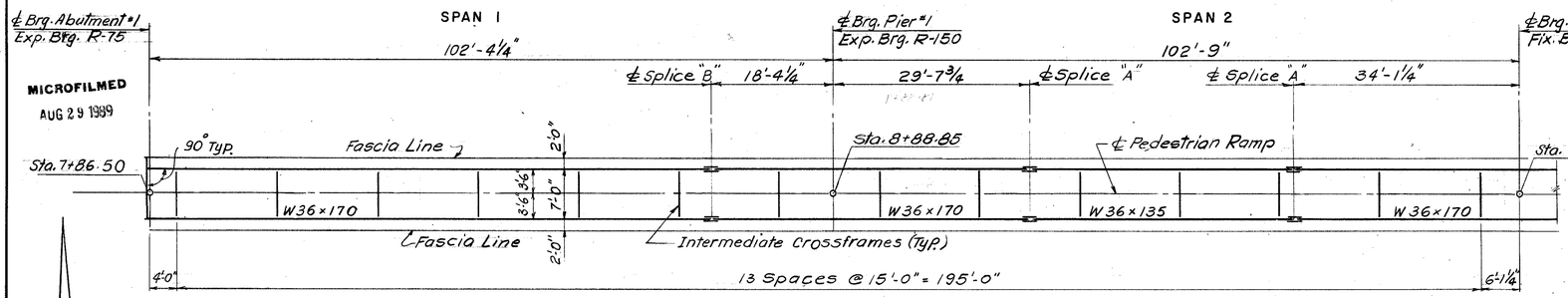
FERD WAGNER 200 5-74 MC 2470•

MICROFILMED
AUG 29 1999

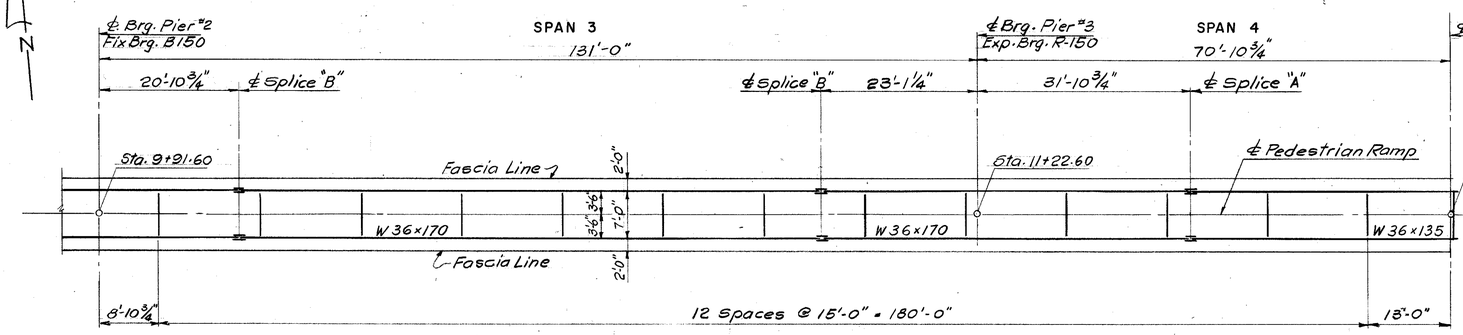
MICROFILMED
JUN 19 1985

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

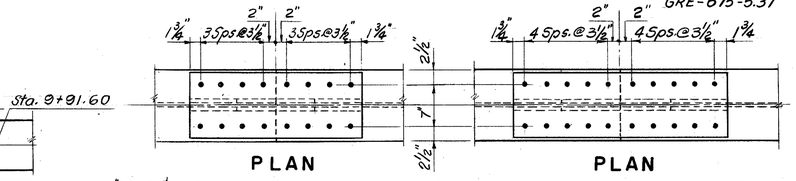
509
616

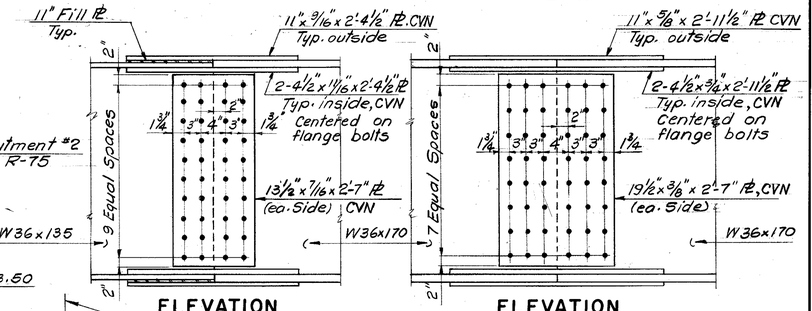


FRAMING PLAN - SPAN 1 & 2

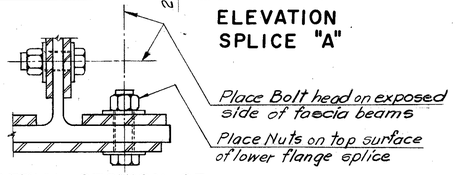


FRAMING PLAN - SPAN 3 & 4

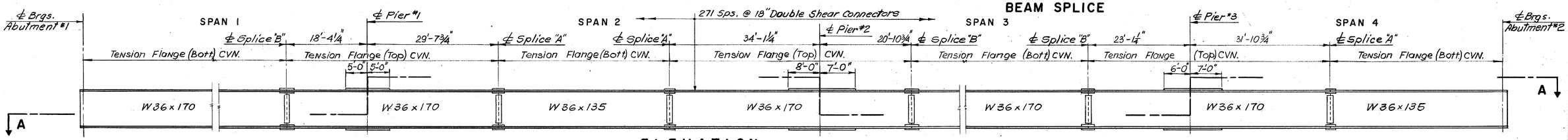




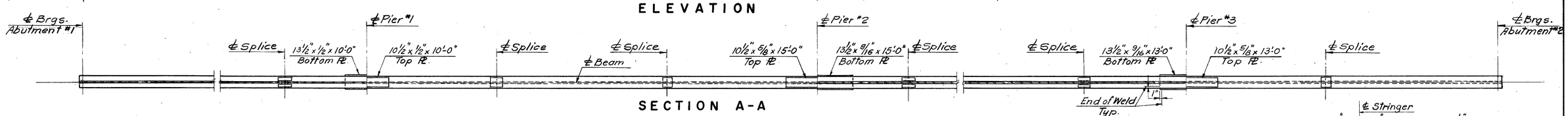
NOTE: All bolts 1" ϕ A-490 High Strength.



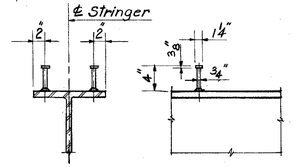
PARTIAL SECTION OF BEAM SPLICE



ELEVATION



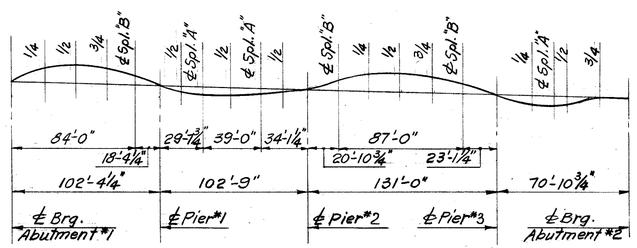
SECTION A-A



STUD SHEAR CONNECTOR DETAIL

DEFLECTION AND CAMBER

DESCRIPTION	SPAN 1				SPAN 2					SPAN 3					SPAN 4			
	¼ Pt.	½ Pt.	¾ Pt.	℄ Spl.	½ Pt.	℄ Spl.	½ Pt.	℄ Spl.	½ Pt.	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	℄ Spl.	¼ Pt.	℄ Spl.	½ Pt.	¾ Pt.
Deflection due to weight of Beam	9/16"	13/16"	11/16"	5/16"	-1/16"	-1/16"	-1/16"	-1/8"	-1/8"	1/2"	1"	1¼"	1 1/16"	1/2"	-1/16"	-1/16"	-1/16"	0
Deflection due to remaining Dead Load	1¾"	2 5/16"	2¼"	1"	-1/4"	-3/16"	-1/8"	-1/4"	-3/16"	1½"	3¼"	4"	3 5/16"	1 1/16"	-1/4"	-1/4"	-3/16"	0
Required Shop Camber	2 5/16"	3 7/16"	2 15/16"	1 5/16"	-5/16"	-1/4"	-3/16"	-3/16"	-1/2"	2"	4¼"	5¼"	4 3/16"	2 3/16"	-5/16"	-5/16"	-1/4"	0



CAMBER ALIGNMENT DIAGRAM

NOTES:

For details of Fixed & Expansion Bearings see Std. Dwg. RB-1-55

Details of End Crossframes & End Dams (included with Structural Steel for payment) similar to that shown on Std. Dwg. SD-1-69

End Dams and Bearings: In lieu of A588 Steel, A-36 Steel galvanized, shall be furnished for bearings, except for upper plate element of bearings.

This A-36 Steel shall be included with A-588 Steel quantity for payment. Work this sheet with Sh. 9/11

Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

All beams and top moment plates shall be CVN.

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

8 / 11

STEEL FRAMING PLAN

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.V.		L.T.W.			4-27-82

FEDD WAGNER 200 5-74 MC 2479-

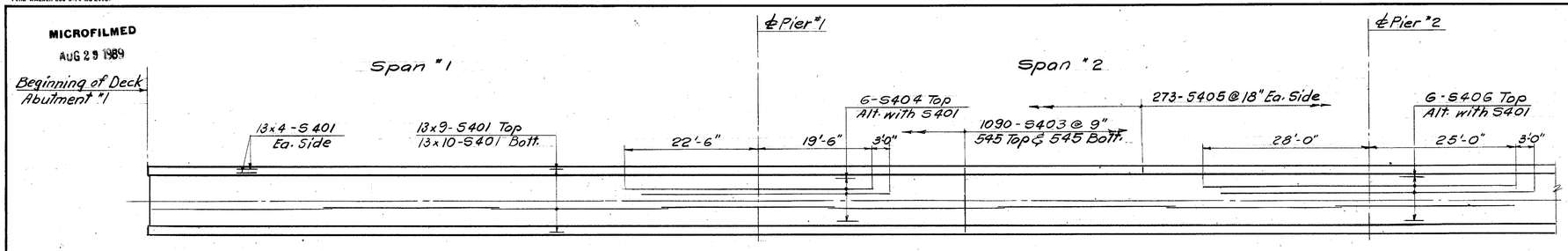
MICROFILMED
AUG 29 1989

MICROFILMED
JUN 19 1985

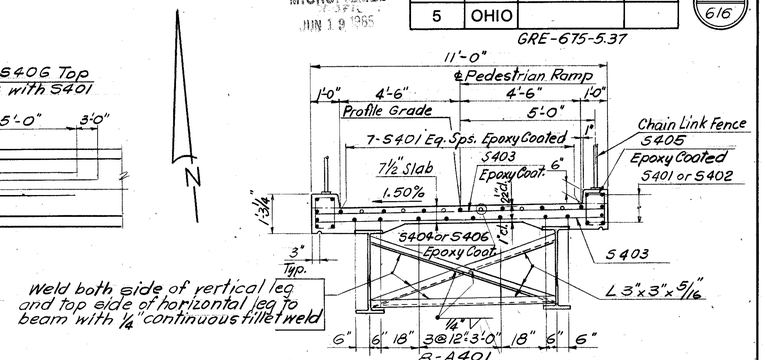
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37

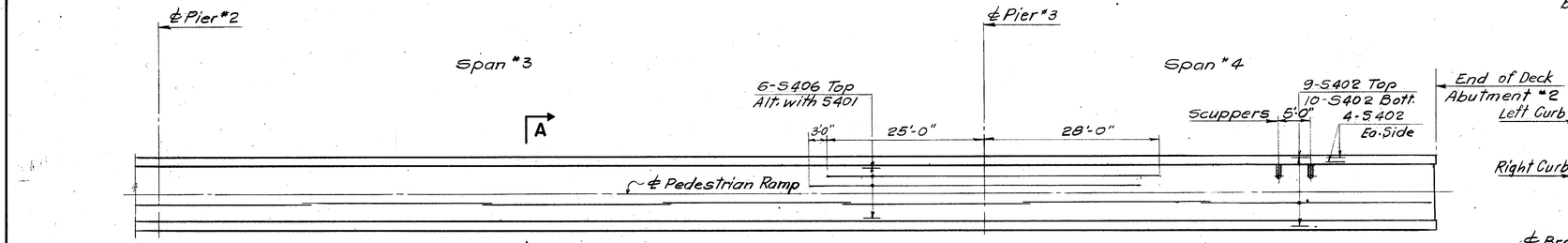
510/616



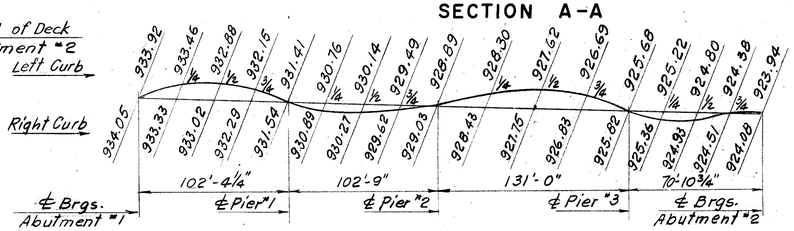
PLAN
SPAN 1 & 2



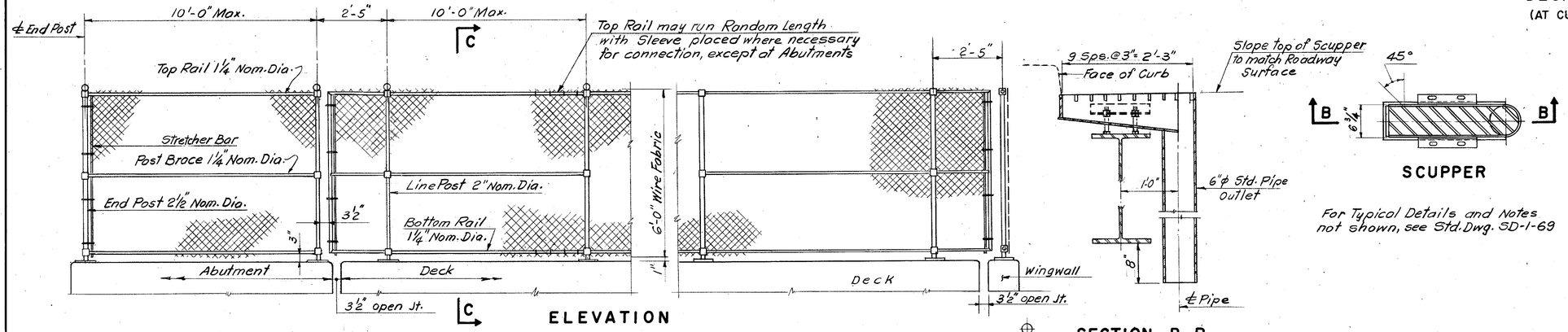
SECTION A-A



PLAN
SPAN 1 & 2



DECK ELEVATION DIAGRAM
(AT CURB POINTS BEFORE CONCRETE)
IS POURED

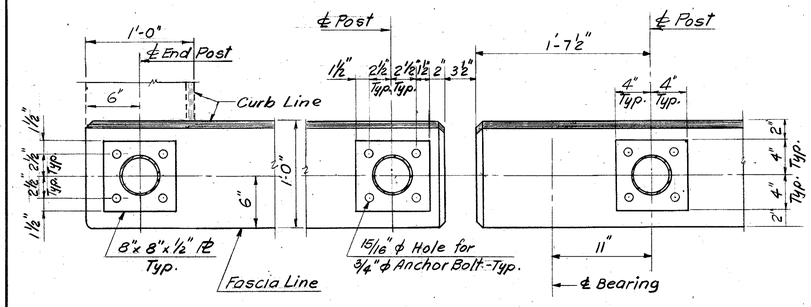


ELEVATION

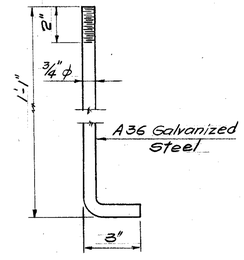
SECTION B-B

SCUPPER

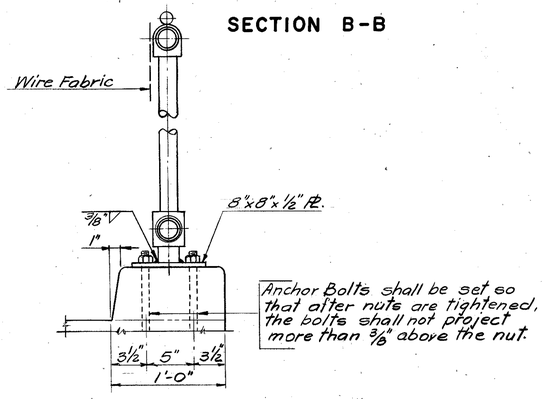
For Typical Details and Notes not shown, see Std. Dwg. SD-1-69



PARTIAL PLAN



ANCHOR BOLT DETAIL



SECTION C-C

CHAIN LINK FENCE 6 FT. HIGH

Notes:

For Reinforcing Steel List, see Sheet 11/11

All splices and dowels to be lapped min. 30 bar dia. unless otherwise shown.

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

9/11

SUPERSTRUCTURE SLAB PLAN AND DETAILS

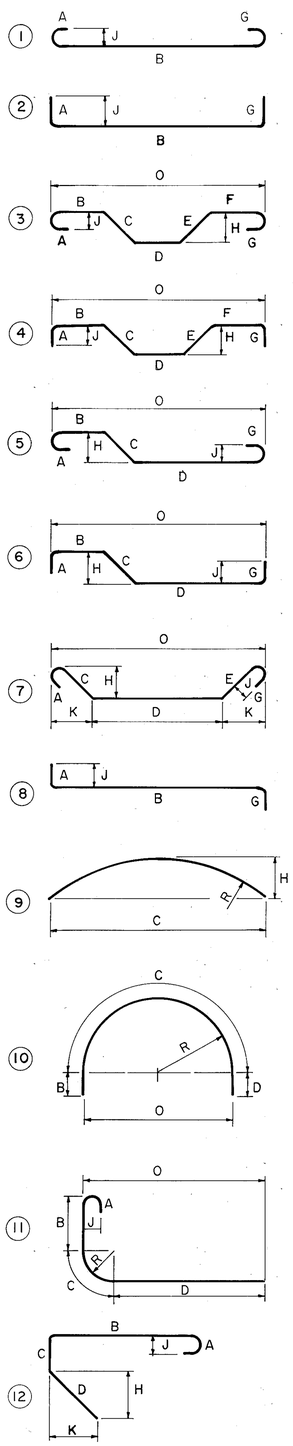
BRIDGE NO. GRE - 675 - 0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.V.		L.T.W.			

MICROFILMED
AUG 29 1989

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		ABUTMENT NO. 1															
A501	16	29'-6"	492	Str.													
A502	6	11'-6"	72	Str.													
A503	32	28'-7"	954	Str.													
A504	12	5'-1"	64	20			3'-2"	2'-0"									
A505	23	11'-8"	280	Str.													
A506	17	19'-8"	349	Str.													
A507	76	29'-2"	2,312	Str.													
A508	19	18'-5"	365	2	2'-0"	14'-8"					2'-0"						
A509	6	14'-5"	90	2	2'-0"	10'-8"					2'-0"						
A510	2	19'-4"	40	Str.													
A511	9	9'-11"	93	17		3'-0"	8"	6'-6"									
A512	172	6'-5"	1,151	17		3'-0"	8"	3'-0"									
A513	180	3'-1"	579	20		1'-2"	2'-0"										
A514	164	27'-8"	4,732	Str.													
A515	54	5'-0"	282	T1	5"	8"	1'-8"	8"	1'-8"		5"						
A516	2	10'-8"	22	Str.													
A517	14	5'-0"	73	2	2'-0"	3'-2"											
A518	19	14'-8"	291	Str.													
A601	12	6'-6"	117	Str.													
A602	60	11'-4"	1,021	Str.													
A603	74	11'-0"	1,223	Str.													
A604	112	varies 11'-0" to 20'-4" by 1 1/8 ea. L.	3,210	Str.													
A605	112	varies 5'-11" to 17'-9" by 3/4 ea. L.	2,832	Str.													
A701	100	11'-6"	2,351	Str.													
A702	16	14'-6"	474	Str.													
A703	152	12'-6"	3,884	Str.													
A704	112	8'-1"	1,851	2	3'-0"	5'-3"											
A705	112	6'-1"	1,393	2	1'-0"	5'-3"											
A801	24	11'-6"	737	Str.													
A802	16	14'-6"	619	Str.													
A803	74	10'-8"	2,108	2	3'-0"	7'-10"											
A804	72	12'-8"	2,435	2	1'-2"	10'-8"					1'-2"						
A901	70	8'-11"	2,122	2	1'-4"	7'-10"											
		Total:	38,618														
		ABUTMENT NO. 2															
A502	20	11'-6"	240	Str.			3'-2"	2'-0"									
A504	12	5'-1"	64	20													
A505	20	11'-8"	243	Str.													
A508	16	18'-5"	307	2	2'-0"	14'-8"	2'-0"										
A509	6	14'-5"	90	2	2'-0"	10'-8"	2'-0"										
A511	12	9'-11"	124	17		3'-0"	8"	6'-6"									
A512	68	6'-5"	455	17		3'-0"	8"	3'-0"									
A513	80	3'-1"	257	20		1'-2"	2'-0"										
A515	18	5'-0"	94	T1	5"	8"	1'-8"	8"	1'-8"		5"						
A516	2	10'-8"	22	Str.													
A517	11	5'-0"	57	2	2'-0"	3'-2"											
A518	16	14'-8"	245	Str.													
A519	2	25'-2"	52	Str.													
A520	64	35'-2"	2,347	Str.													
A521	16	25'-7"	427	Str.													
A522	14	26'-0"	380	Str.													
A606	12	16'-1"	290	Str.													
A607	92	varies 17'-6" to 19'-7" by 1/8 + 2 ea. L.	2,562	Str.													
A608	60	19'-8"	1,772	Str.													
A701	64	11'-6"	1,504	Str.													
A702	32	14'-6"	948	Str.													
A704	85	8'-1"	1,404	2	3'-0"	5'-3"											
A705	80	6'-1"	995	2	1'-0"	5'-3"											
A804	24	12'-8"	812	2	1'-2"	10'-8"					1'-2"						

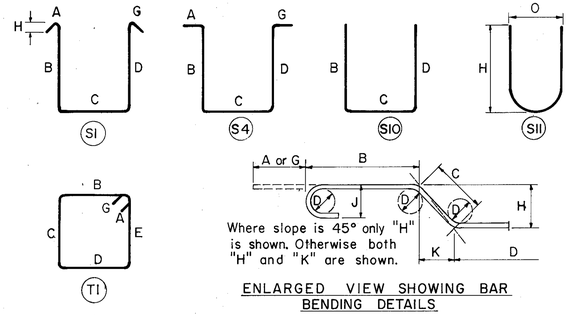


MICROFILMED
JUN 19 1985

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37

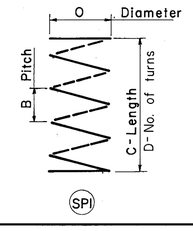
511/616



ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SPI, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1|2 Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SP1 and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 11/11
14. REINFORCING STEEL SAMPLES: Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be repiaced in the structures by the additional steel, spliced in accordance with 509.08.



KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

10/11

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

STA. 7 +84.50 TO STA. 11 +95.50

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
N.V.	A.A.		L.T.W.			

MICROFILMED
AUG 29 1989

MICROFILMED
AUG 29 1989

MICROFILMED
JUN 19 1985

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

GRE-675-5.37

512
616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		Total:	15,691														
Total Abutments			54,309														
		RETAINING WALL NO. 1															
W501	44	7'-2"	329	Str.													
W502	30	32'-7"	1,020	Str.													
W503	22	15'-4"	352	Str.													
W504	16	Varies 16'-3 7/16" to 16'-5" by 2" ± 1 ea.	277	Str.													
W505	7	Varies 16'-11" to 17'-10" by 2" ± 1 ea.	127	Str.													
W506	50	31'-6"	1643	Str.													
W507	116	4'-11"	594	510		2'-3"	8"	2'-3"									
W508	28	6'-0"	175	Str.													
W509	13	35'-1"	476	Str.													
W510	13	24'-4"	330	Str.													
W511	21	14'-5"	316	Str.													
W512	24	31'-3"	782	Str.													
W513	15	14'-0"	219	Str.													
W514	22	20'-0"	460	Str.													
W515	10	3'-11"	41	20		2'-0"	2'-0"										
W601	32	15'-0"	721	Str.													
W602	23	Var. 15'-9 7/16" to 15'-11" by 1/2" ± 1 ea.	556	Str.													
W603	10	Varies 16'-5" to 17'-4" by 3" ± 1 ea.	254	Str.													
W604	30	14'-3"	642	Str.													
W605	19	13'-6"	385	Str.													
W606	42	6'-6"	410	Str.													
W607	65	7'-6"	732	Str.													
W701	65	7'-0"	930	Str.													
W702	112	8'-7"	1965	22		7'-9"	1'-0"										
W703	114	5'-1"	1184	22		4'-3"	1'-0"										
W704	58	6'-6"	771	Str.													
		Total:	15,691														
		RETAINING WALL NO. 2															
W501	22	7'-2"	164	Str.													
W507	86	4'-11"	441	510		2'-3"	8"	2'-3"									
W516	19	Varies 14'-0 to 16'-3" by 1" ± 1 ea.	300	Str.													
W517	42	27'-8"	1,212	Str.													
W518	34	4'-8"	166	Str.													
W519	10	30'-0"	313	Str.													
W520	10	27'-3"	284	Str.													
W521	19	Varies 9'-11" to 12'-2" by 1" ± 1 ea.	219	Str.													
W522	16	26'-2"	437	Str.													
W523	18	Varies 7'-11" to 9'-11" by 1" ± 1 ea.	167	Str.													
W524	54	4'-9"	268	Str.													
W525	29	Varies 9'-3" to 11'-3" by 1" ± 1 ea.	315	Str.													
W526	28	Varies 7'-3" to 9'-3" by 1" ± 1 ea.	241	Str.													
W527	9	29'-6"	277	Str.													
W528	6	30'-10"	193	Str.													
W607	32	7'-6"	360	Str.													
W608	57	4'-6"	385	Str.													
W609	57	4'-6"	385	22		1'-0"	3'-8"										
W610	29	Varies 13'-0" to 16'-2" by 1" ± 1 ea.	617	Str.													
W701	32	7'-0"	458	Str.													
W702	28	8'-7"	491	22		7'-9"	1'-0"										
W703	29	5'-1"	301	22		4'-3"	1'-0"										
		Total:	7,994														
Total Retaining Walls:			23,685														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		PIER NO. 1															
P504	34	13'-3"	470	510		5'-8"	2'-2"	5'-8"									
P505	51	3'-4"	177	1	7"	2'-2"					7"		4"				
P506	10	3'-11"	41	510		1'-0"	2'-2"	1'-0"									
P601	17	9'-10"	251	1	8"	8'-6"					8"		4½"				
P602	10	16'-10"	253	1	8"	15'-6"					8"		4½"				
P701	36	6'-2"	454	1	10"	5'-4"							5"				
P702	22	23'-5"	1,053	Str.													
P703	14	12'-0"	343	Str.													
		Total:	3,042														
		PIER NO. 2															
P501	32	13'-9"	459	510		5'-8"	2'-8"	5'-8"									
P502	48	3'-10"	192	1	7"	2'-8"					7"		4"				
P503	10	4'-5"	46	510		1'-0"	2'-8"	1'-0"									
P801	20	13'-4"	712	1	11"	11'-6"					11"		6"				
P802	13	20'-4"	706	1	11"	18'-6"					11"		6"				
P901	36	8'-3"	1,010	1	1'-3"	7'-0"							9"				
P902	14	12'-0"	571	Str.													
P903	22	21'-10"	1,633	Str.													
		Total:	5,329														
		PIER NO. 3															
P504	30	13'-3"	415	510		5'-8"	2'-2"	5'-8"									
P505	45	3'-4"	156	1	7"	2'-2"					7"		4"				
P506	10	3'-11"	41	510		1'-0"	2'-2"	1'-0"									
P601	17	9'-10"	251	1	8"	8'-6"					8"		4½"				
P602	10	16'-10"	253	1	8"	15'-6"					8"		4½"				
P701	36	6'-2"	454	1	10"	5'-4"							5"				
P703	14	12'-0"	343	Str.													
P704	22	20'-7"	926	Str.													
		Total:	2,839														
	Total Piers:		11,210														
		SUPERSTRUCTURE															
S401	351	30'-0"	7,034	Str.													91 Epoxy Coated
S402	27	34'-9"	627	Str.													7 Epoxy Coated
S403	1090	10'-8"	7,767	Str.													545 Epoxy Coated
S404	6	42'-0"	168	Str.													6 Epoxy Coated
S405	546	2'-5"	881	17		3"	11"	7"	11"	3"							546 Epoxy Coated
S406	12	53'-0"	425	Str.													12 Epoxy Coated
		Total:	16,902														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 10/11
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 10/11

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11/11

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY — STA. 7 +84.50 TO STA. 11 +95.50

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.V.	A.A.		L.T.W.			

FEDD WAGNER 200 5-74 MC 2479-

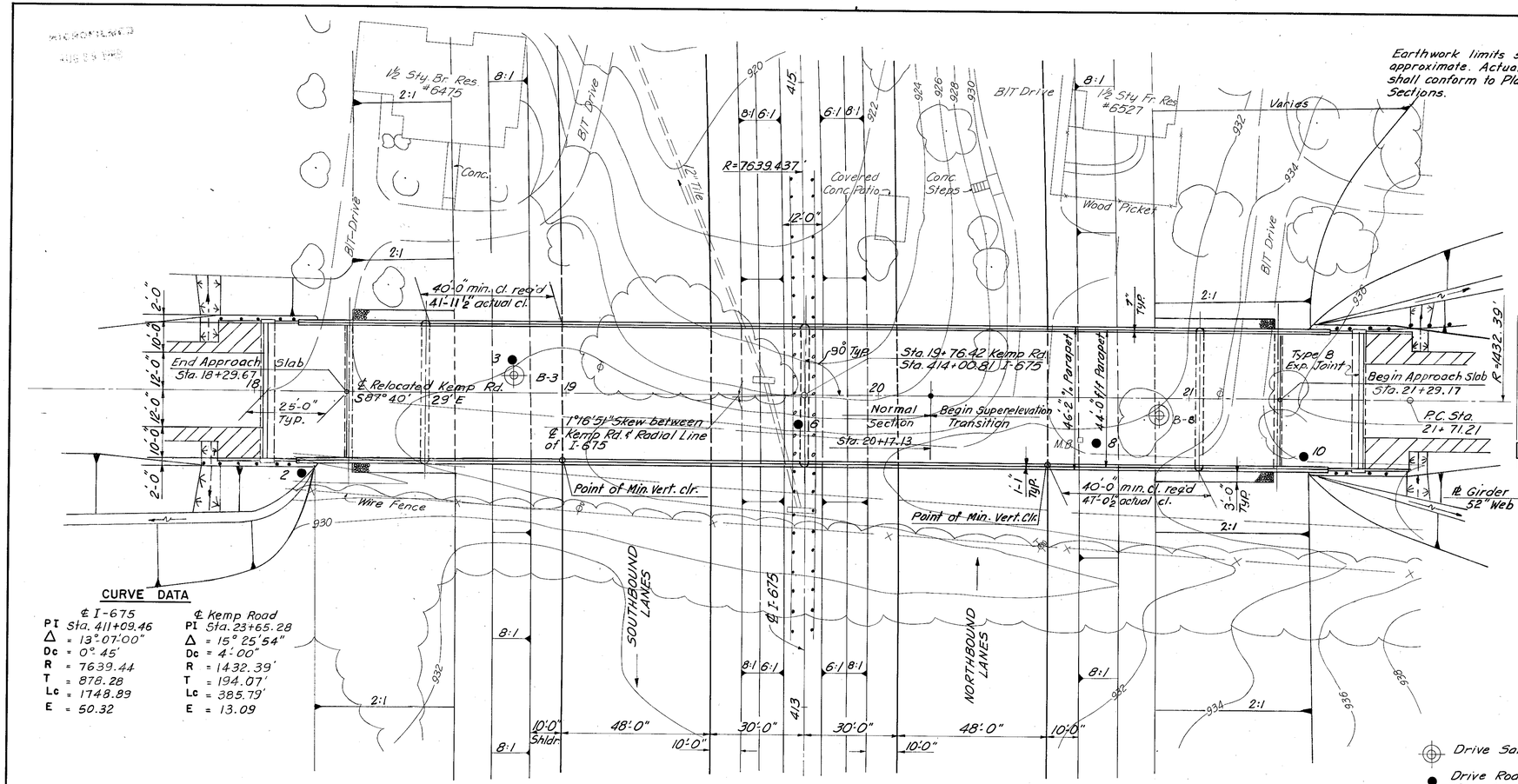
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

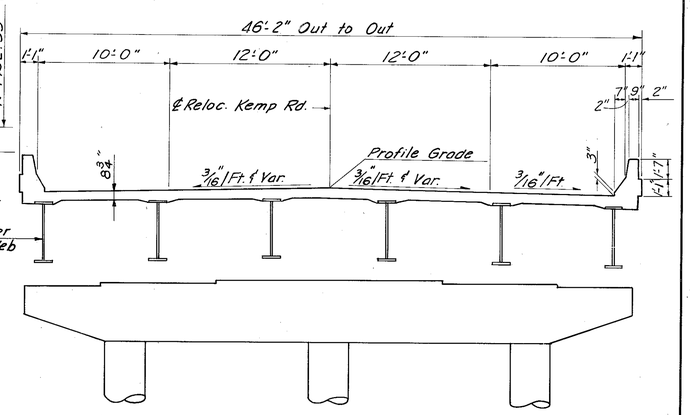
513/616

GRE 675 - 5.37
GREENE COUNTY

Earthwork limits shown are approximate. Actual slopes shall conform to Plan Cross-Sections.

N





SECTION THRU BRIDGE

CURVE DATA

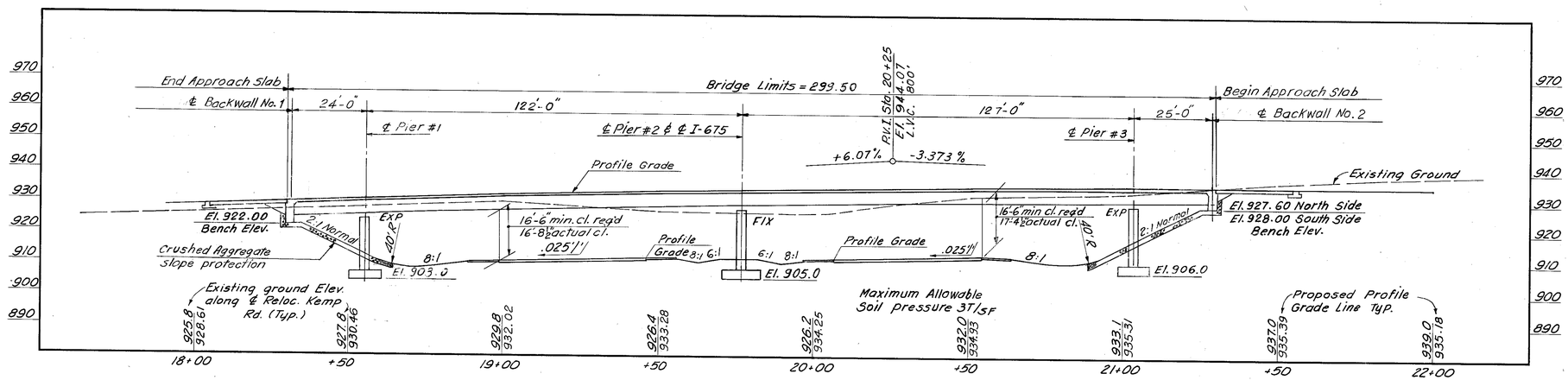
℄ I-675	℄ Kemp Road
PI Sta. 411+09.46	PI Sta. 23+65.28
Δ = 13° 07' 00"	Δ = 15° 25' 54"
Dc = 0° 45'	Dc = 4° 00"
R = 7639.44	R = 1432.39'
T = 878.28	T = 194.07'
Lc = 1748.89	Lc = 385.79'
E = 50.32	E = 13.09

PLAN

LEGEND

- Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

DESIGN YEAR TRAFFIC
1989 ADT:
I-675 = 73,300
Kemp Rd. = 9,200



PROFILE ON CENTER LINE RELOCATED KEMP ROAD

PROPOSED STRUCTURE

TYPE: Continuous plate girder with cantilevered ends & reinforced concrete deck and substructure
SPANS: 24-0, 122'-0", 127'-0", 25'-0"
ROADWAY: 44'-0" face to face of parapet
LOADING: HS 20-44 Case II & Alternate Military
SKEW: None
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 25'-0" Long (std. AS-1-72)
ALIGNMENT: Tangent

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1 / 11

SITE PLAN

BRIDGE NO. GRE – 675 – 0737
I-675 UNDER KEMP RD.
GREENE COUNTY
STA. 18+29.67 TO STA. 21+29.17

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	M.D.	A.A.	V.J.L.	

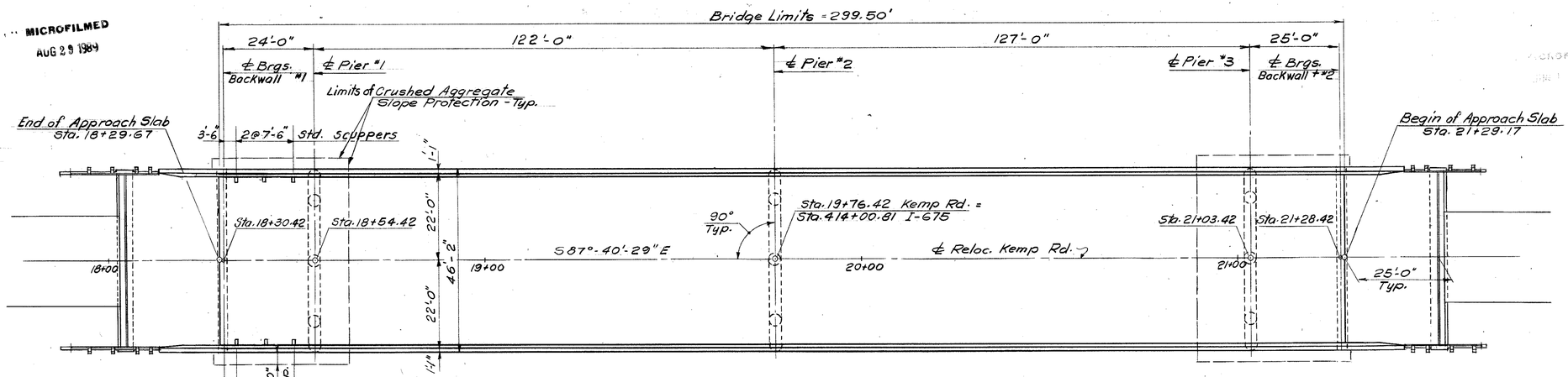
FERD WAGNER 200 5-74 MC 2479-

MICROFILMED
AUG 29 1984

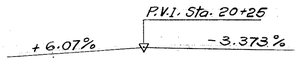
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

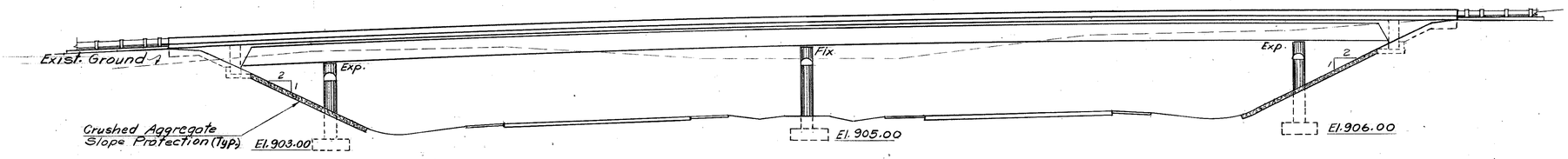
514
616

MICROFILMED
JUN 19 1985



PLAN





ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	BACK-WALL	PIERS	GEN.
503	570	Cu. Yd.	Unclassified Excavation		80	490	
503	Lump	Sum	Cofferdams, cribs & sheeting				Lump
509	125,000	Lb.	Reinforcing Steel	57,700	9,500	57,800	
511	100	Cu. Yd.	Class "C" Concrete Piers above footing			100	
511	142	Cu. Yd.	Class "C" Concrete Pier footings.			142	
511	80	Cu. Yd.	Class "C" Concrete Integral Backwall		80		
512	58	Sq. Yd.	Type A Waterproofing		58		
513	487,000	Lb.	Structural Steel (AISC Category III) ASTM A588	487,000			
518	6	Each	Scuppers, including supports	6			
601	610	Sq. Yd.	Crushed Aggregate Slope protection				610
511	445	Cu. Yd.	Class S Concrete, Superstructure using Shrinkage Compensating Cement, 701.08	445			
Special	61,500	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	60,000	1,500		
Special	92	Lin. Ft.	Approach Slab Expansion Joint				92

ESTIMATED QUANTITIES CHECKED BY & DATE: N.W./LIU 12/19/78 REVISED

GENERAL NOTES

FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing Pressure of 3.0 tons per sq. ft.

For additional GENERAL NOTES See Sh. C1/C2

For SIGN ATTACHMENT to face of Bridge, see Sh. ⊖

NOTES:

Scupper spacing measured along face of curb.

All Backwall and Pier Centerlines are parallel.

For Scupper details, See Std. Dwg. SD-1-69.

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CINCINNATI — CONSULTING ENGINEERS, INC. — OHIO

2 / 11

GENERAL PLAN, GENERAL NOTES, ELEVATION AND ESTIMATED QUANTITIES

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP ROAD
GREENE COUNTY STA. 18+29.67 TO STA. 21+29.17

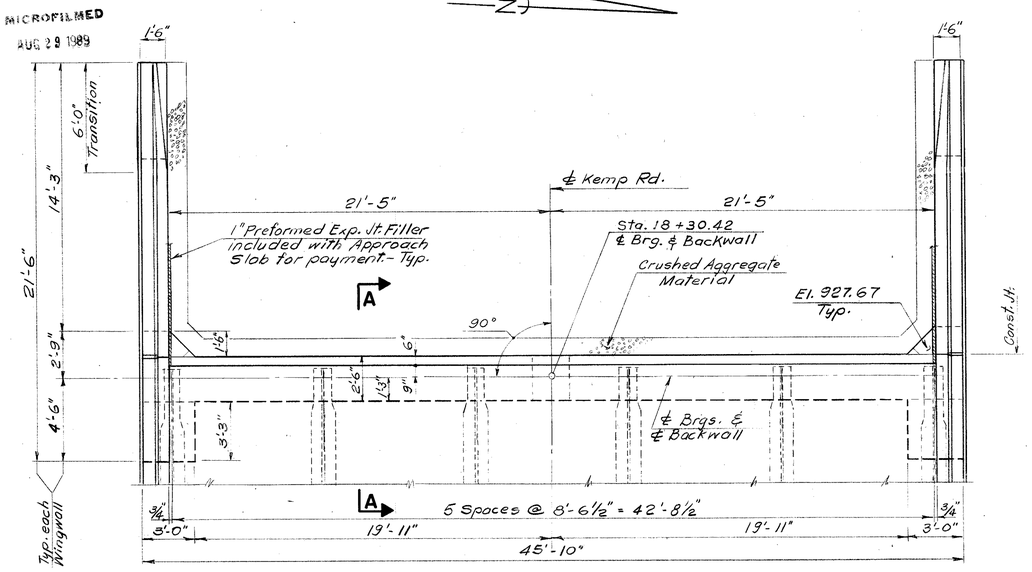
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D	N.V.		M.D.			

FERD WAGNER 200 5-74 MC 2479-

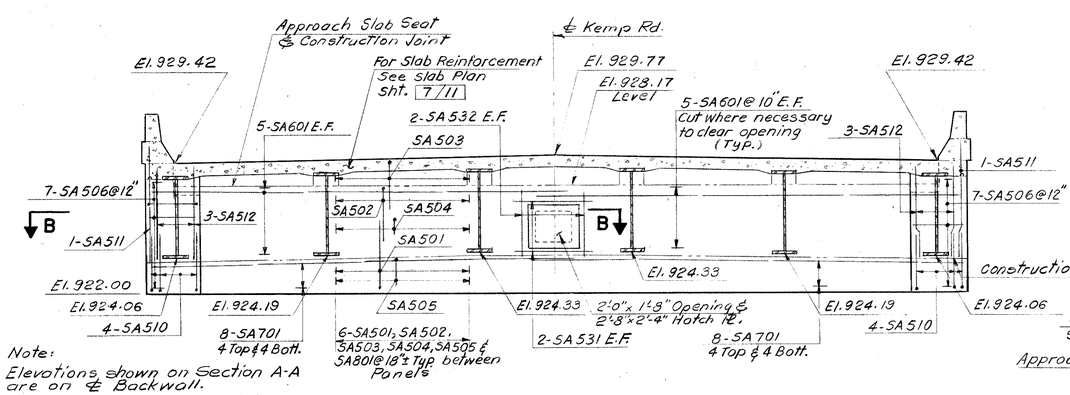
MICROFILMED
AUG 29 1989

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

515/616

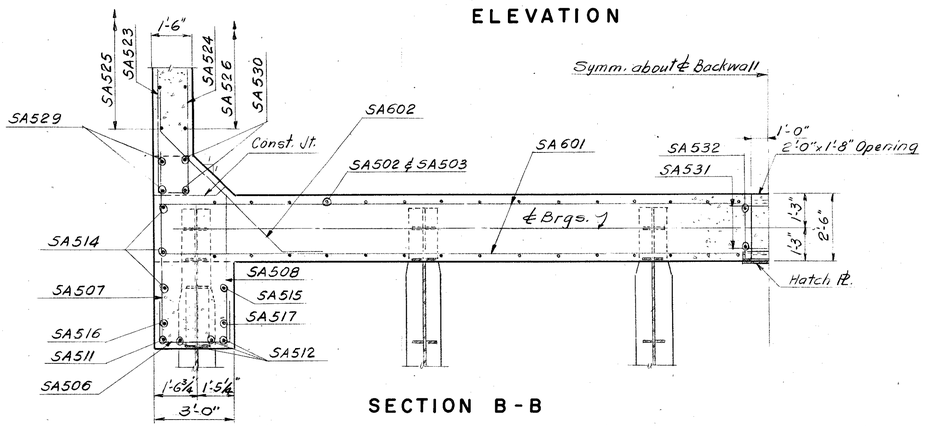


PLAN

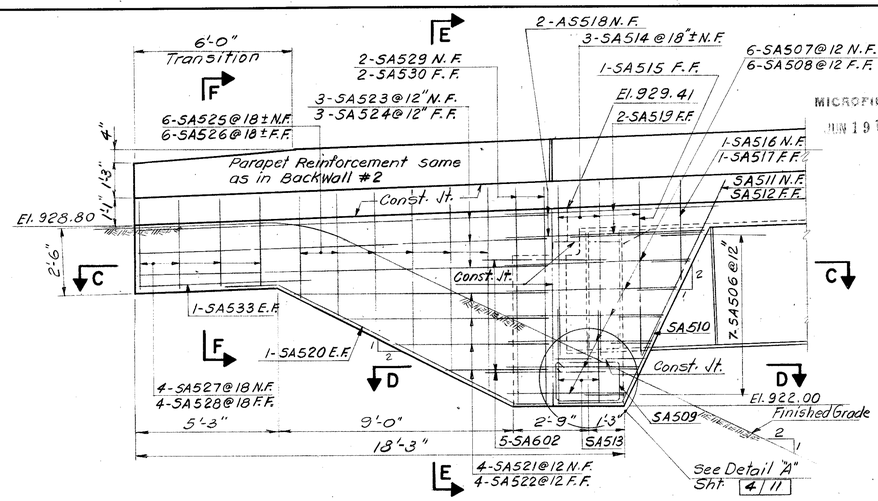


Note:
Elevations shown on Section A-A are on ℄ Backwall.

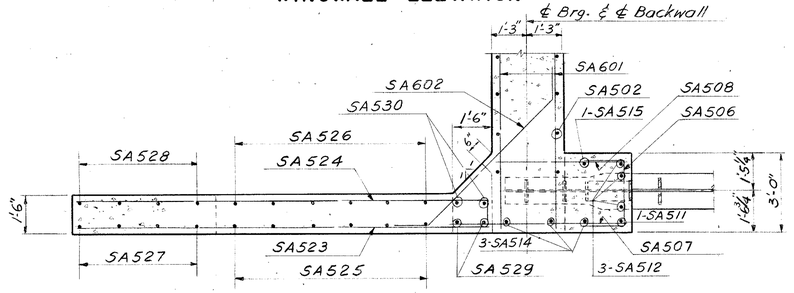
ELEVATION



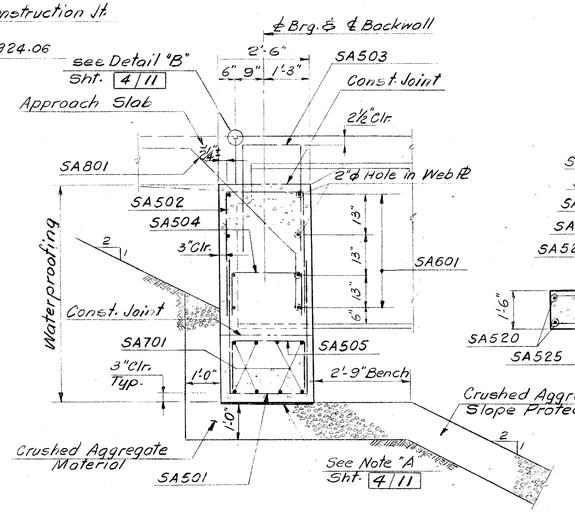
SECTION B-B



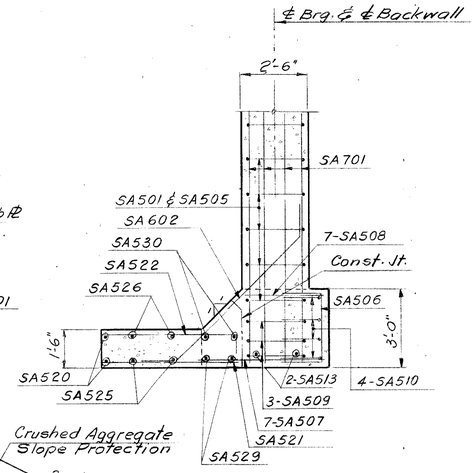
WINGWALL ELEVATION



SECTION C-C



SECTION A-A



SECTION D-D

NOTES:

INTEGRAL BACKWALL CONSTRUCTION:

1. Erect deck stringers.
2. Set stringer anchor bolts:
   A. Place bolts in center of flange holes.
   B. Set nuts finger tight immediately prior to placement of initial backwall concrete.
   C. Place backwall concrete up to the anchor-bolt construction joint.
   D. When concrete begins to set, loosen nuts.
   E. After concrete has been in place for at least twelve hours and during moderate ambient temperatures (about 60°F) tighten nuts.
3. Fill space under flange with non-shrinking epoxy mortar.
4. Resume placement of backwall concrete.

WING WALLS: Place wing wall concrete during stable or rising ambient temperatures. Conclude placement at least four hours prior to the days peak ambient temperature.

CONSTRUCTION JOINTS: Construction Joint surfaces shall be scrubbed with cement grout (equal volumes of sand and cement with only enough water to make a thin paste) immediately prior to concrete placement.

WATERPROOFING: The designated surfaces of the backwall shall be waterproofed with Type A Waterproofing (702.11 or AASHTO M115 Type A).

NON-SHRINKING EPOXY MORTAR: shall be a pourable mortar equal to Fel-Pro F.P. No. 132 or an approved equal. The mortar is included with superstructure concrete for payment.

Note:
Work this Sheet with Sh. 4/11

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CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

3/11

INTEGRAL BACKWALL NO. 1

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP RD.

GREENE COUNTY

STA. 18+29.67 TO STA. 21+29.17

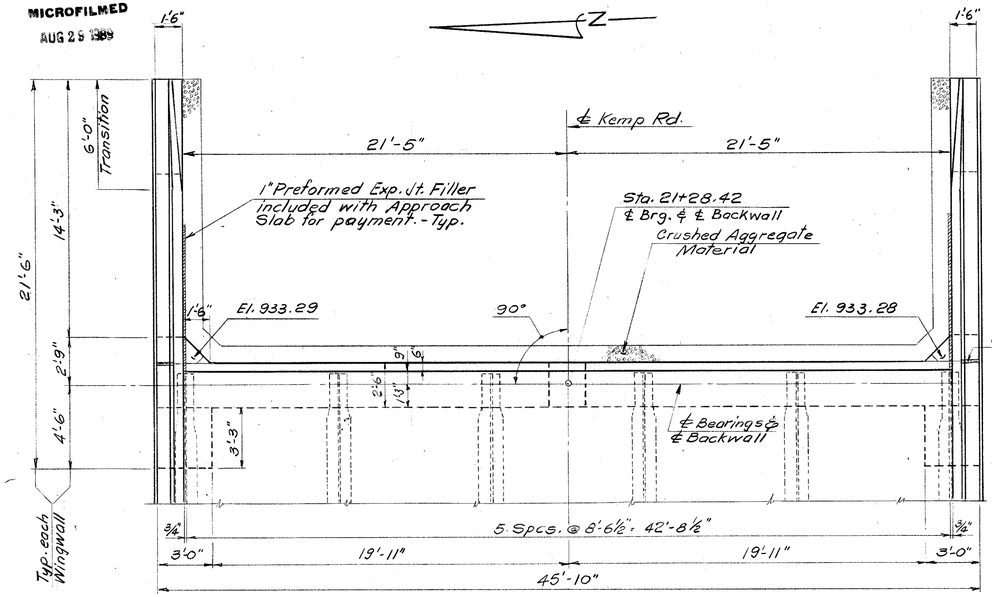
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.V.		M.D.			

FERD WAGNER 200 5-74 MC 2470+

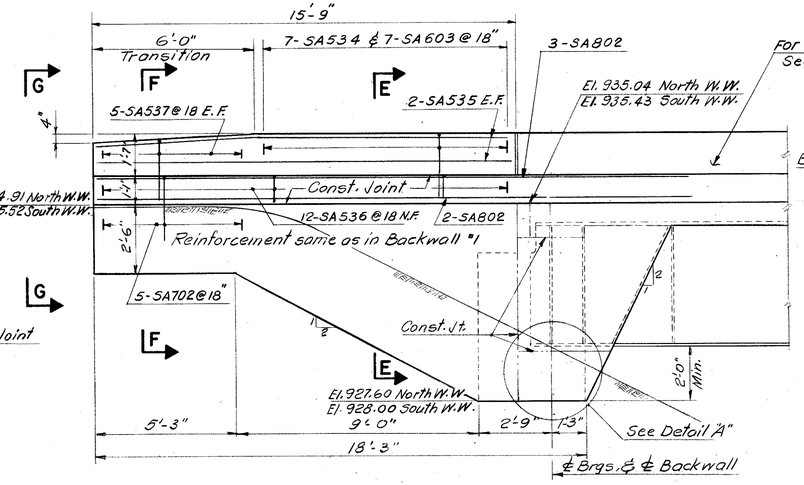
MICROFILMED
AUG 25 1989

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

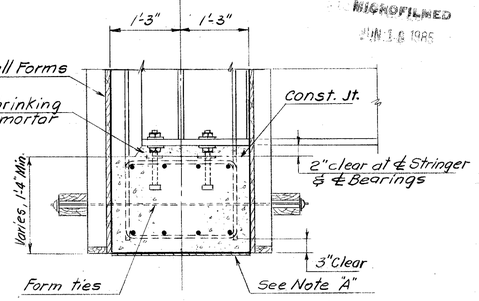
516/616



P L A N



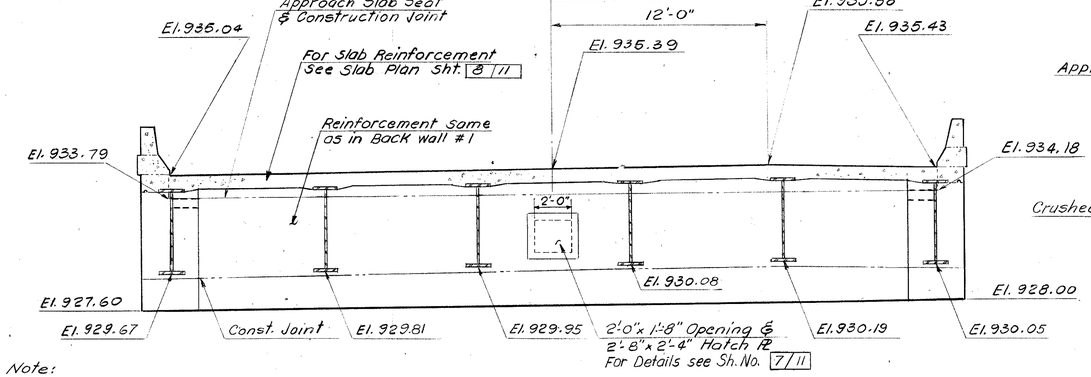
WINGWALL ELEVATION



DETAIL "A"

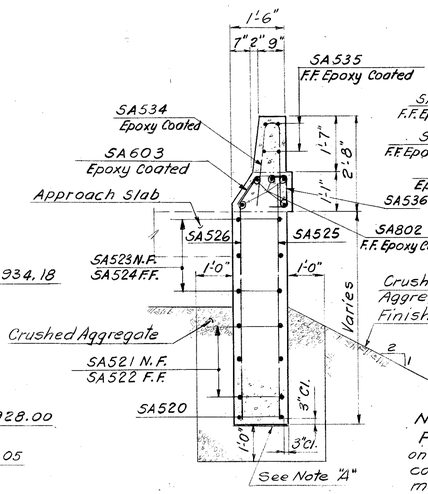
Note:
For Anchor Bolts details see Sh. No. 7/11

MICROFILMED
JUN 16 1989

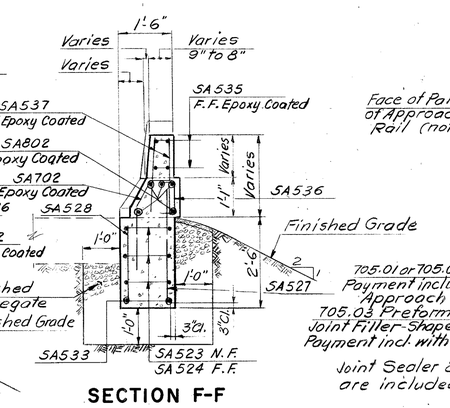


ELEVATION

Note:
Elevations shown on Section are on ℄ Backwall.

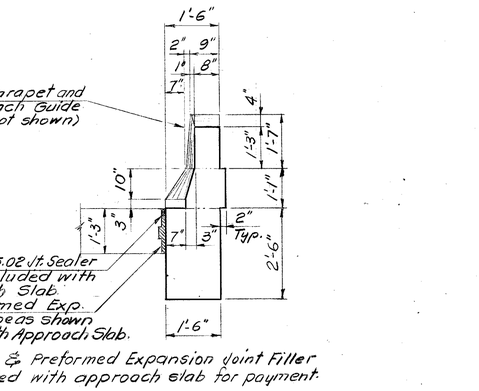


SECTION E-E



SECTION F-F

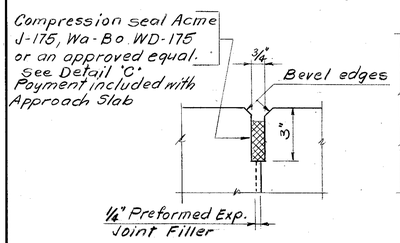
Note "A":
Place backwall and wingwall side forms on a polyethylene sheet covering thoroughly coinpacted aggregate. After concrete placement and form removal, trim and remove exposed sheet and place the remainder of the aggregate to the proposed surface.

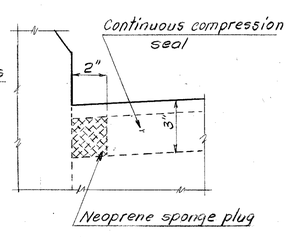


END VIEW G-G

Joint Sealer & Preformed Expansion Joint Filler are included with approach slab for payment.

Note:
Work this Sheet with Sht. 3/11





Furnish 1/4" Preformed Expansion Joint Filler for backwalls without abutment support.

DETAIL "B" DETAIL "C"

APPROACH SLAB CONSTRUCTION JOINT

KING & GAVARIS
CINCINNATI CONSULTING ENGINEERS, INC. OHIO

4/11

INTEGRAL BACKWALL NO. 2

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP RD.

GREENE COUNTY

STA. 18+29.67 TO STA. 21+29.17

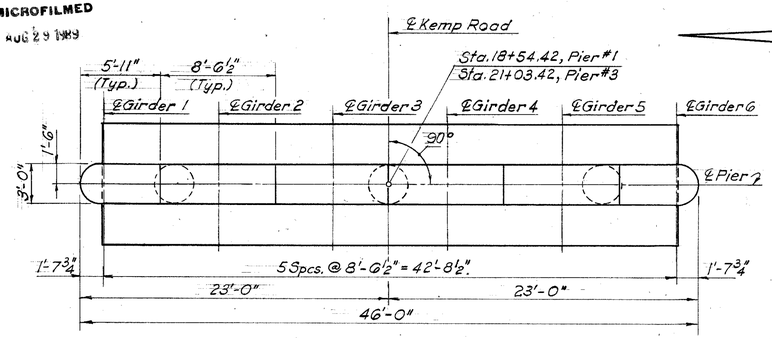
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.V.		M.D.			

FEDD WAGNER 200 5-74 MC 2470-

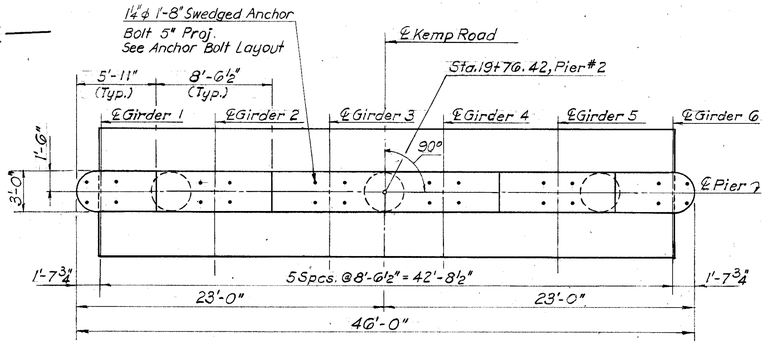
MICROFILMED
AUG 29 1989

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

517
616



PLAN NO. 1 & NO. 3



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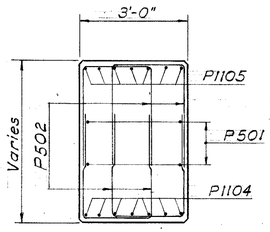
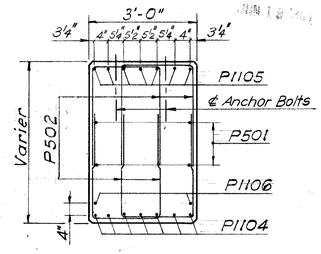
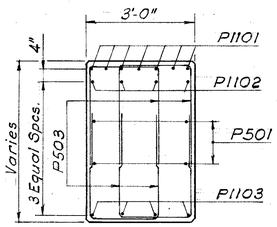


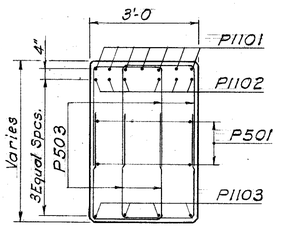
SECTION A-A



SECTION D-D



SECTION B-B



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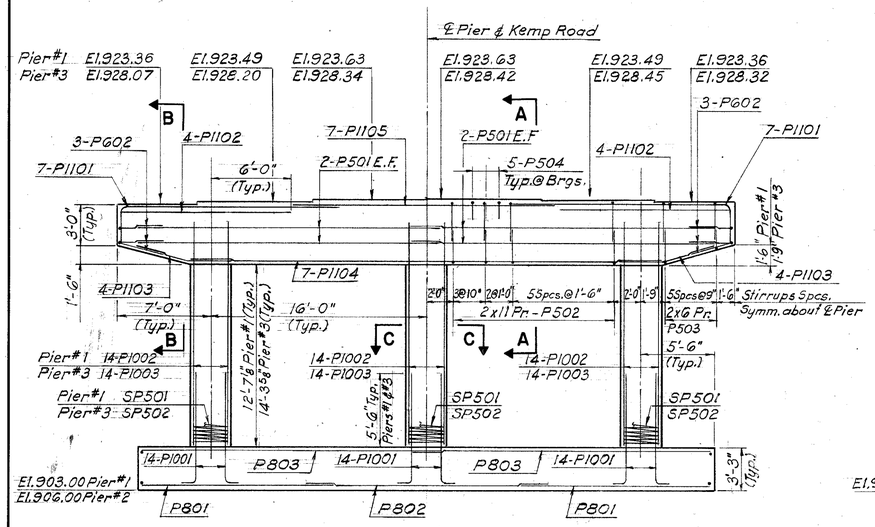
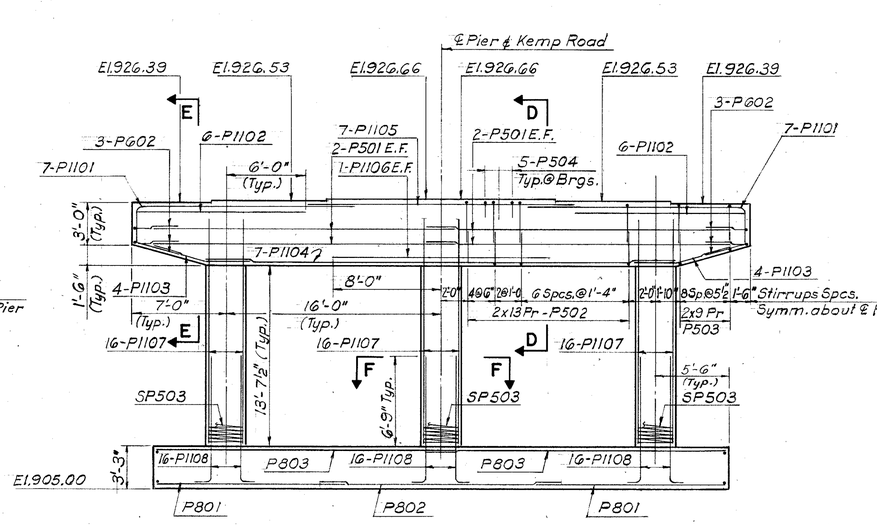


ELEVATION NO. 1 & NO. 3



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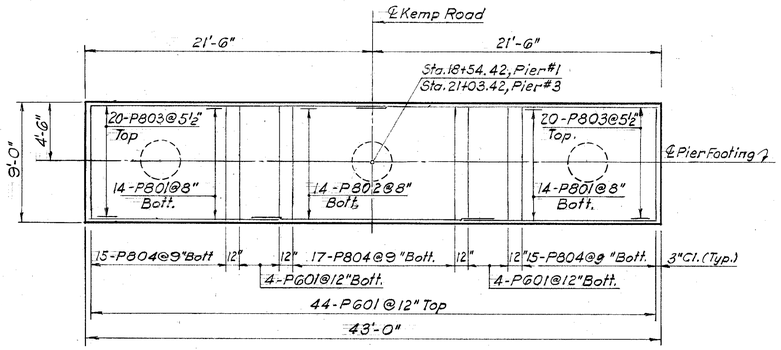
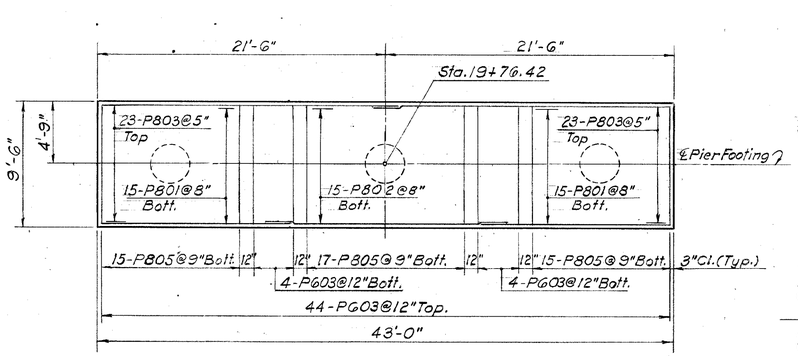


FOOTING PLAN NO. 1 & NO. 3



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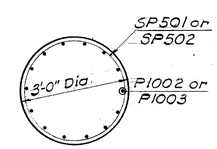
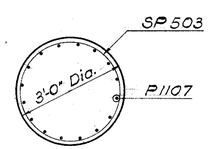
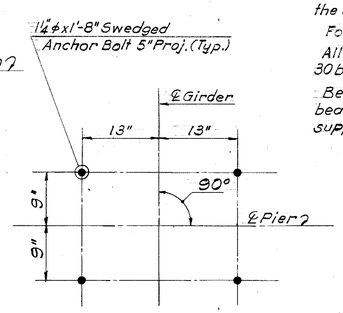


SECTION C-C



SECTION F-F



ANCHOR BOLT LAYOUT

NOTES:

Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

For Reinforcing Steel List see Sh. 11 / 11

All Splices and Dowels to be lapped min. 30 bar dia. unless otherwise shown.

Bearing Anchors: At the option of the Contractor, bearing anchors (or formed holes) located and supported by templates, may be cast in place.

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PIERS

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP RD.

GREENE COUNTY

STA. 18+29.67 TO
STA. 21+29.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.H.		M.D.			

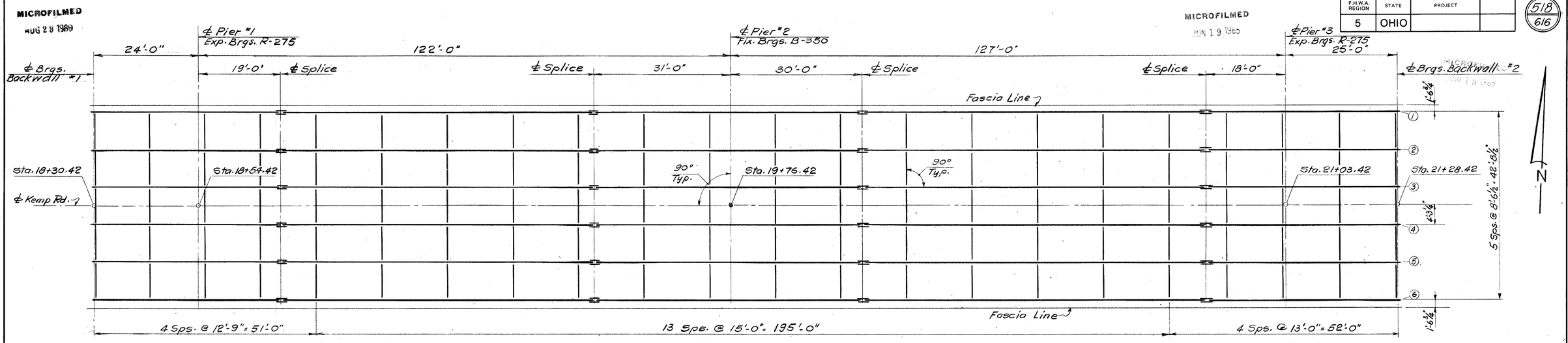
FEDD WAGNER 200 5-74 MC 2479-

MICROFILMED
AUG 29 1989

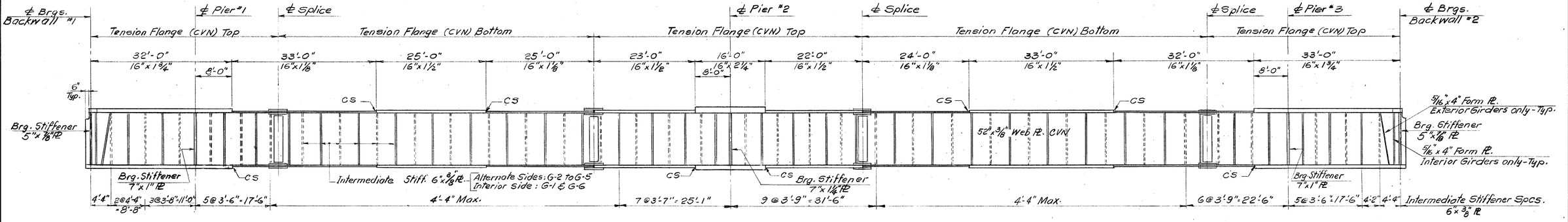
MICROFILMED
JUN 19 1985

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

518
616



FRAMING PLAN



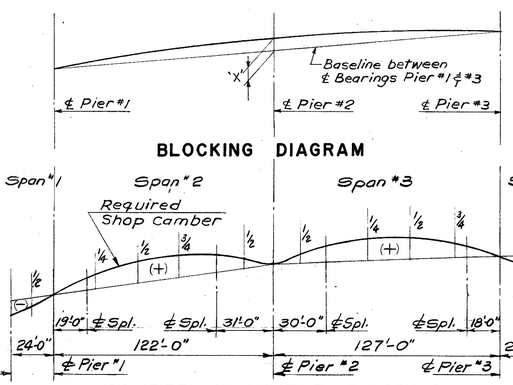
ELEVATION

DEFLECTION AND CAMBER

Description	Span 1		Span 2						Span 3						Span 4		Girder
	End	½	¼	½	¾	℄Spl.	½	½	℄Spl.	¼	½	¾	℄Spl.	½	End		No.
Deflection Weight of Steel	-1/16"	0"	1/8"	1/8"	5/16"	5/16"	1/8"	1/16"	1/16"	3/16"	3/8"	3/8"	1/4"	3/16"	-1/16"	-1/16"	All
Deflection	-1/16"	-1/8"	3/8"	1/2"	7/8"	7/8"	1/16"	1/16"	1/4"	11/16"	1 5/16"	1 5/16"	11/16"	1/2"	-3/16"	-1/4"	1,6
Remaining Dead Load	-1/8"	-1/8"	9/16"	3/4"	1 1/4"	1 1/4"	1 1/16"	1/8"	5/16"	15/16"	1 13/16"	1 13/16"	1"	11/16"	-1/4"	-3/8"	2-5
Vertical Curve & Transition Adjustment	-2½"	-1⅛"	1⅜"	1 5/8"	2 1/16"	2 5/8"	2"	1 3/16"	1 3/16"	2 1/16"	2 13/16"	2 11/16"	1¾"	1⅜"	-1¼"	-2 3/8"	1,2,3
									1 1/16"	1 1/8"	2½"	2½"	1 5/8"	1¼"	-1 1/16"	-2 3/8"	4
									13/16"	1⅜"	1 15/16"	2 1/16"	1 5/16"	1 1/16"	-¾"	-1 3/4"	5,6
Required Shop Camber	-2 9/16"	-1¼"	1 7/8"	2¼"	3 5/8"	3 3/16"	2 9/16"	1 5/16"	1½"	2 17/16"	4½"	4 3/8"	2 11/16"	2 1/16"	-1½"	-3 3/16"	1
									1 3/16"	3 3/16"	5"	4 7/8"	3"	2¼"	-1 3/16"	-3 5/16"	2,3
	-2 5/8"	-1¼"	2 1/16"	2½"	4"	4 3/16"	2 13/16"	1⅜"	1 7/16"	2 1/16"	4 1/16"	4 1/16"	2 1/8"	2 1/8"	-1 3/8"	-2 3/16"	4
									1 3/16"	2½"	4 1/8"	3¼"	2 9/16"	1 15/16"	-1 1/16"	-2 3/16"	5
	-2 9/16"	-1¼"	1 7/8"	2¼"	3 5/8"	3 3/16"	2 9/16"	1 5/16"	1 1/8"	2¼"	3 5/8"	3¾"	2¼"	1¾"	-1"	-2 1/16"	6

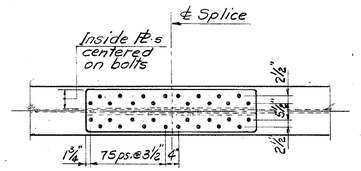
BLOCKING ORDINATES

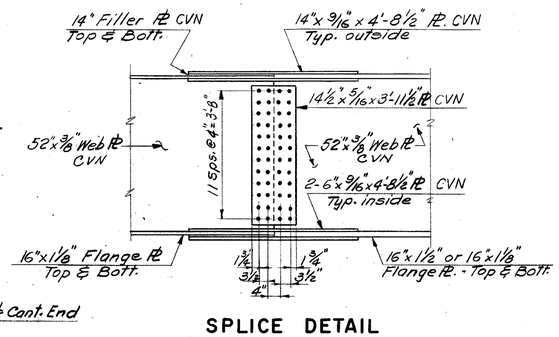
Dimension	Girders 1,2 & 3	Girder 4	Girder 5 & 6
℄ Pier #2 Dim. 'X'	+11"	+10 7/16"	+9½"



BLOCKING DIAGRAM

CAMBER ALIGNMENT DIAGRAM





SPLICE DETAIL

All bolts - 1" ℄ A325 F High Strength

NOTES:

For details of Expansion Bearing R-275, see Std. Dwg. RB-1-55.

For Typical Transverse Section, see Sht. 8 / 11.

Work this Sheet with Sht. 7 / 11

Structural steel - ASTM A588 - Unit stress 27,000 Psi.

Where a Shape or Plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

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STEEL FRAMING PLAN

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP ROAD
GREENE COUNTY
STA. 18+29.67 TO STA. 21+29.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.V.		M.D.			

FERD WAGNER 200 5-74 MC 2479-

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AUG 29 1989

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

519
616

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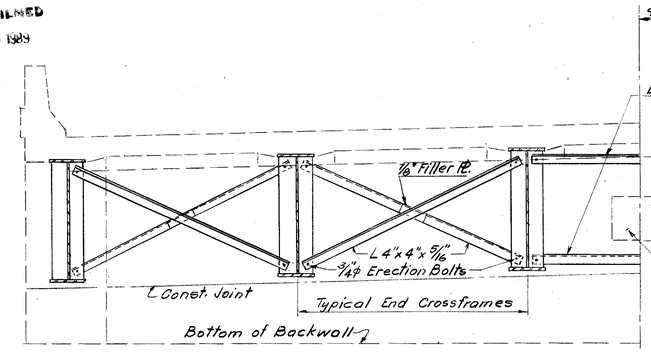
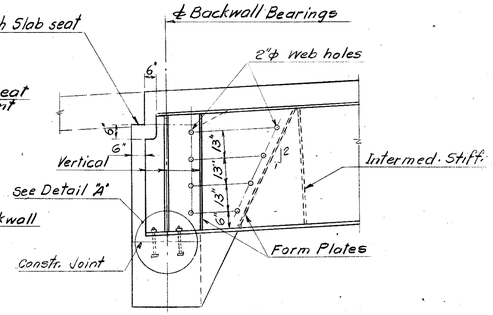
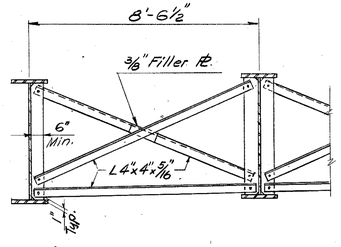


TYPICAL END CROSSFRAMES

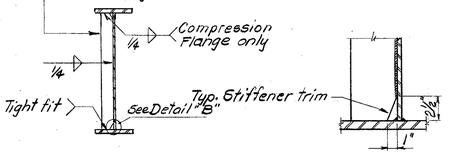


PART ELEVATION
SUPERSTRUCTURES AT INTEGRAL BACKWALL



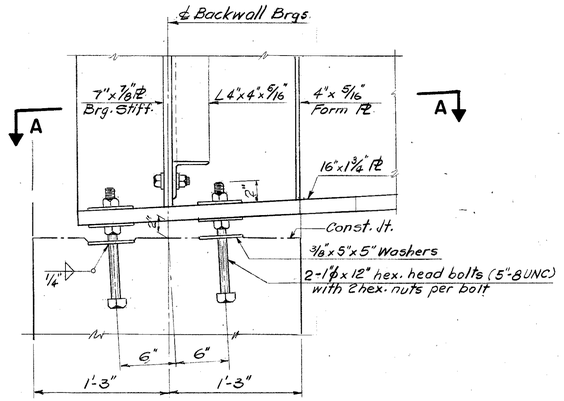
INTERMEDIATE CROSSFRAME

Intermediat Stiffeners placed on alternate side (For fascia girders, place stiffeners at interior side only).

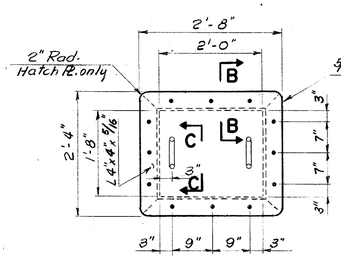


INTERMEDIATE STIFFENER

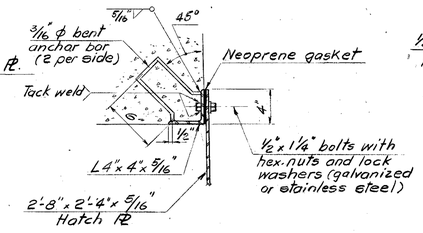
DETAIL "B"



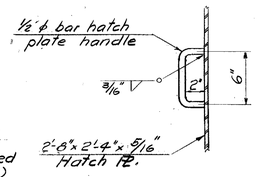
DETAIL "A"



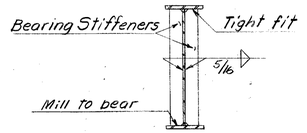
ACCESS HATCH



SECTION B-B

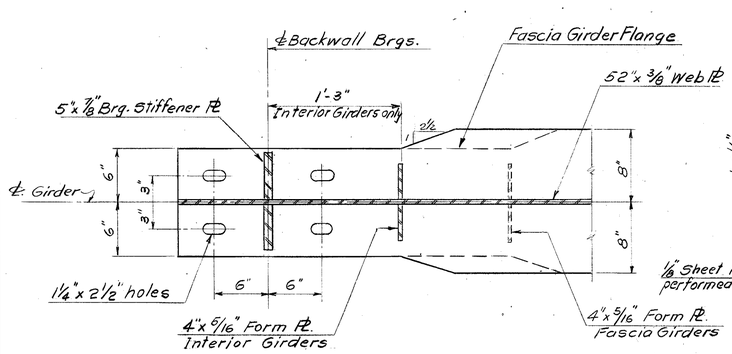


SECTION C-C

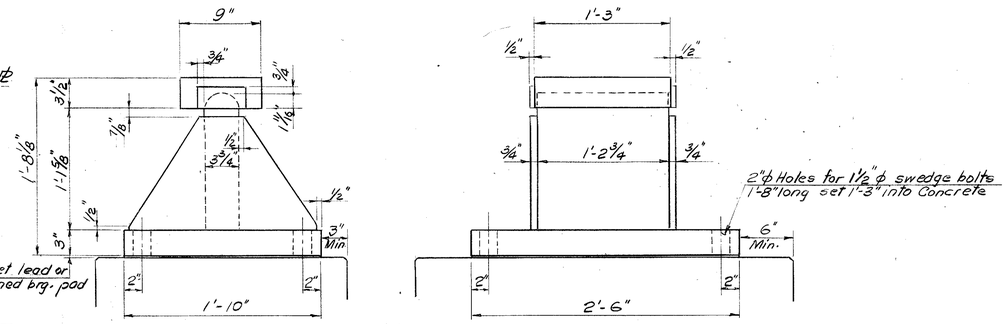


Bearing Stiffeners to be vertical

BEARING STIFFENER



SECTION A-A



SPECIAL BOLSTER DETAIL B-350

Note: For additional details, see Std. Dwg. RB-1-55

Note:
Work this Sheet with Sht. 6/11

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CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

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SUPERSTRUCTURE DETAILS

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP ROAD
GREENE COUNTY
STA. 18+29.67 TO STA. 21+29.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.V.		M.D.			

FERD WAGNER 200 5-74 MC 2470

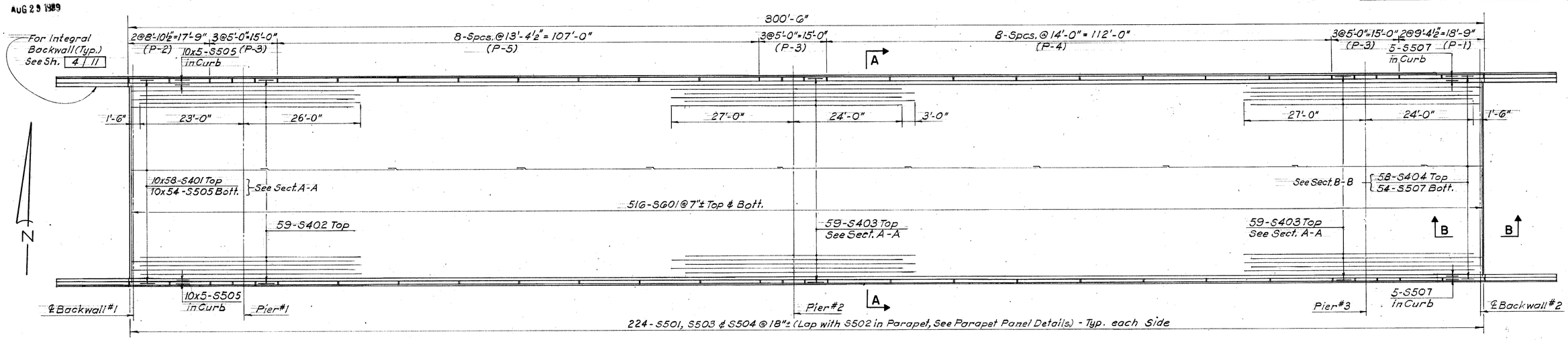
MICROFILMED
AUG 29 1989

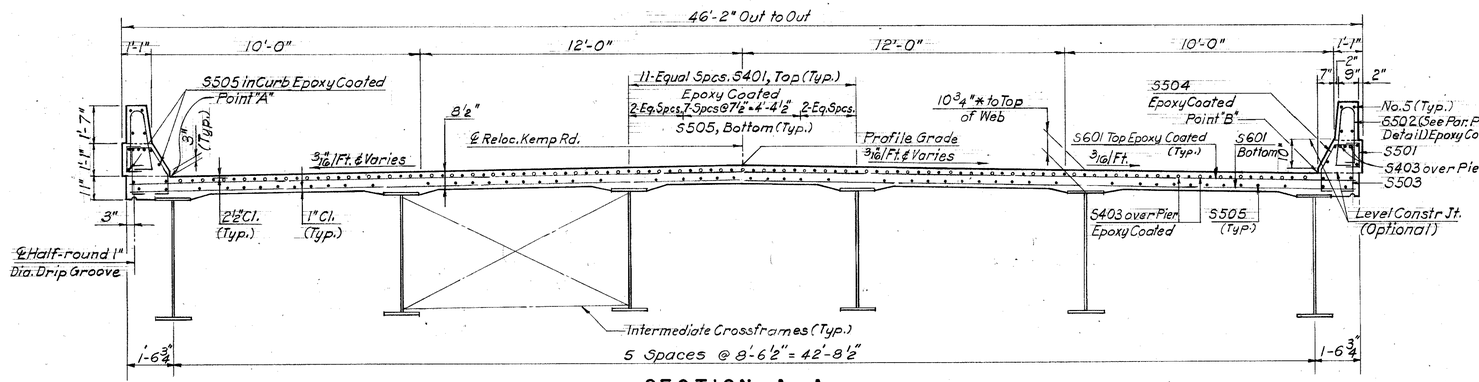
MICROFILMED
JUN 19 1995

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

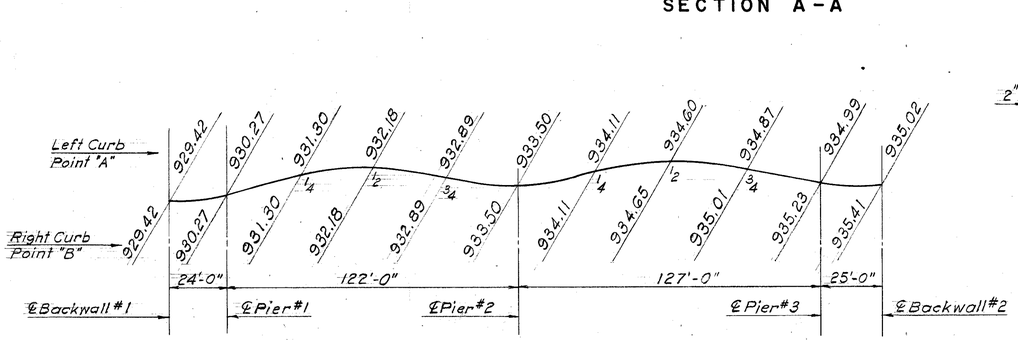
520
616

PLAN



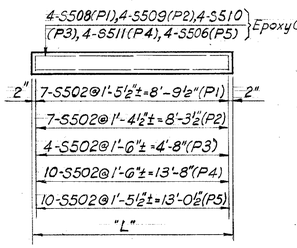


SECTION A-A



DECK ELEVATION DIAGRAM

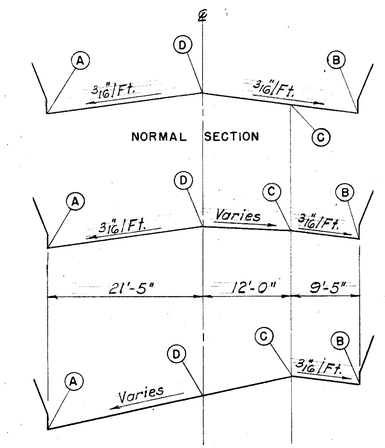
AT CURB POINTS BEFORE CONCRETE IS POURED



PANELS		
NO. REQD.	MARK	L
4	P1	9'-4½"
4	P2	8'-10½"
18	P3	5'-0"
16	P4	14'-0"
16	P5	13'-4½"

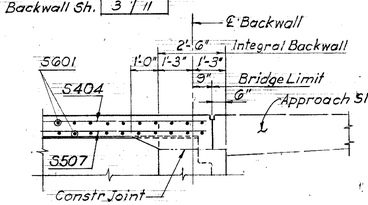
PARAPET PANELS

TRANSITION ELEVATIONS				
STATION	PT. D	PT. A	PT. C	PT. B
20+17.13	934.52	934.19	934.33	934.18
20+25.00	934.63	934.29	934.46	934.31
20+50.00	934.93	934.60	934.83	934.68
20+75.00	935.15	934.82	935.11	934.96
21+00.00	935.31	934.97	935.35	935.20
21+25.00	935.39	935.06	935.56	935.41
21+29.17	935.39	935.04	935.58	935.43
21+50.00	935.39	934.86	935.68	935.53



TRANSITION SECTION

For Reinforcement below Constr. Joint see Integral Backwall Sh. 3 / 11



SECTION B-B

NOTES:

- Slab thickness shown includes 1" for monolithic wearing surface.
- A haunch width of 9" shall be used for computing the quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
- For deflection joint details see Std. Dwg. BR-1-67.
- For reinforcing steel list see Sh. 11 / 11
- Scuppers not shown. For scupper location see Sh. 2 / 11
- All Splices and Dowels will be lapped min. 30 bar dia. unless otherwise shown.

* *This is the nominal dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per Sec. 511.19 of the Construction and Material Specifications.*

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CINCINNATI — CONSULTING ENGINEERS, INC. — OHIO

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SUPERSTRUCTURE ROADWAY SLAB

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP RD.

GREENE COUNTY

STA. 18+29.67 TO STA. 21+29.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.H.		L.I.U.			

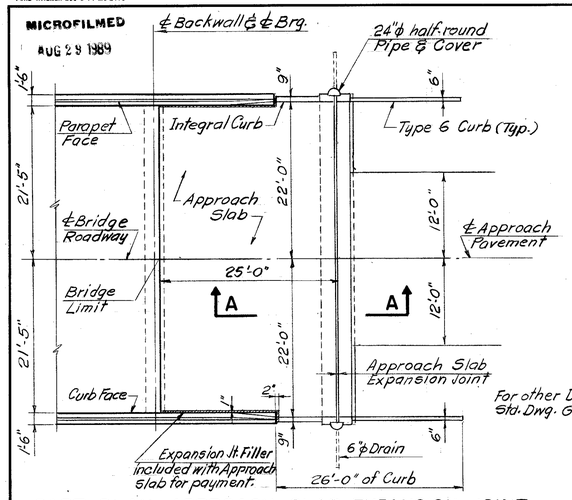
FERD WAGNER 200 5-74 MC 2470•

MICROFILMED
AUG 29 1989

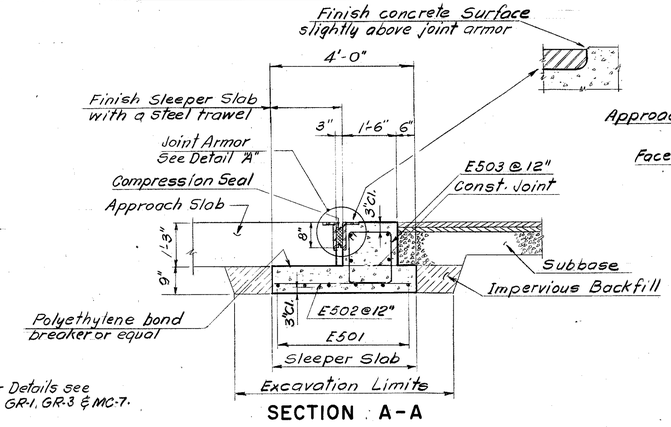
MICROFILMED
JUN 19 1985

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

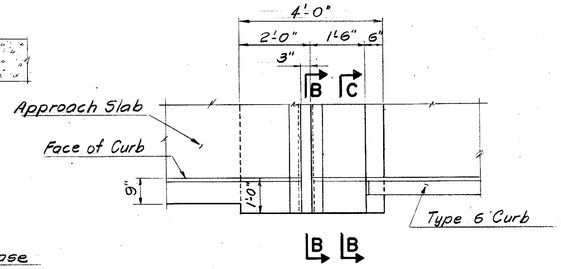
521
616



PART PLAN - APPROACH SLAB EXPANSION JOINT



SECTION A-A



PART PLAN AT CURB

GENERAL NOTES:

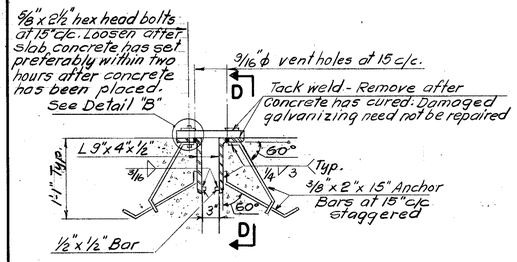
MEASUREMENT of joint for pay purposes shall be along the centerline of the joint back to back of curbs. Payment per lineal foot for Item Special, Approach Slab Expansion Joint, includes all labor, materials and equipment necessary to complete the joint as shown hereon including but not limited to excavation backfill, concrete, reinforcement etc. Except for joint armor it does not include portions of the approach slab.

BACKFILL: Thoroughly compact backfill. Under the Approach Slab finish it flush with or slightly above the adjacent concrete surface.

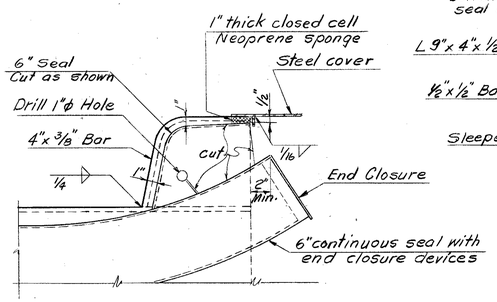
STEEL: Joint end covers and cover drains shall be galvanized steel. Joint armor angles and ½"x½" support bars shall be ASTM A588 or the entire armor assembly may be galvanized steel. Covers and cover drains shall be bituminous coated (AASHTO M190) inside and outside. Exposed joint armor shall be painted (514).

APPROACH SLABS shall conform to Std. AS-1-72 Modified except that they shall be furnished with 10"x9" integral curbs between the wingwalls and the expansion joint.

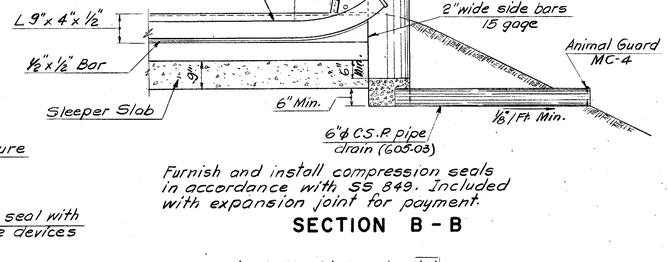
PROCEDURE: The approach slab side of expansion joint shall be placed last. Set joint width at 3". Use the ambient temperature that is anticipated four hours after completion of approach slab placement.



DETAIL "A"

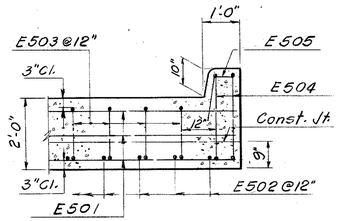


SEAL DETAILS

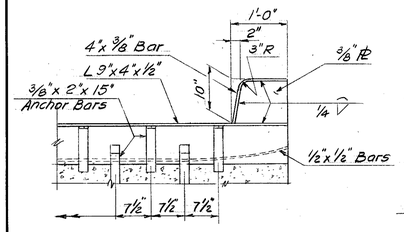


Furnish and install compression seals in accordance with SS 849. Included with expansion joint for payment.

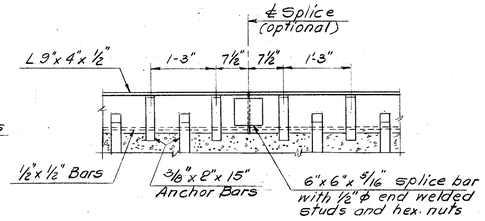
SECTION B-B



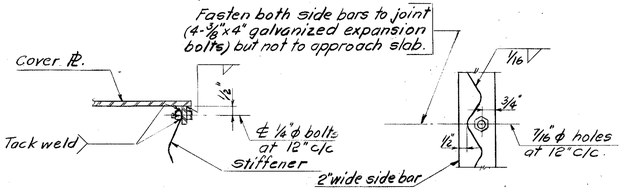
SECTION C-C



SECTION D-D
AT CURB



SECTION D-D
AT ARMOR SPLICES

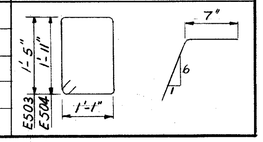


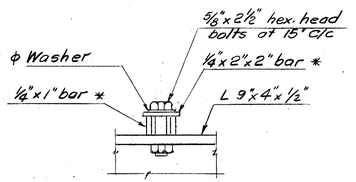
COVER PLAT SIDE BARS

24" HALF-ROUND PIPE AND COVER DETAILS

REINFORCING STEE LIST
(FOR ONE EXPANSION JOINT)

MARK	NO.	LENGTH	SHAPE	BENDING DIAGRAMS
E501	10	45'-8"	St.	
E502	45	3'-8"	St.	
E503	43	5'-6"	Bt.	
E504	4	6'-6"	Bt.	
E505	4	1'-3"	Bt.	





* Alternate parts may be used subject to the approval of the Director.

DETAIL "B"

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

9 / 11

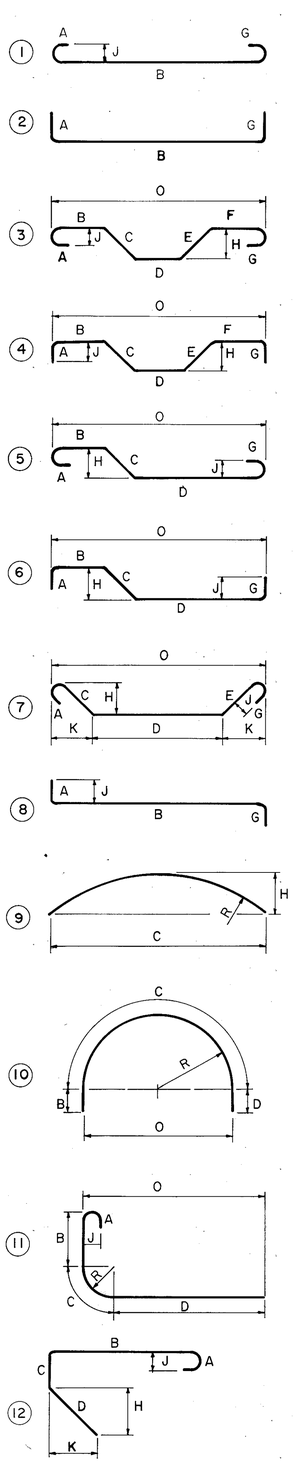
APPROACH SLAB EXPANSION JOINT

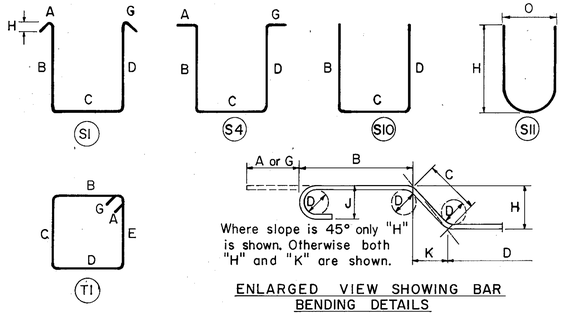
BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP ROAD
GREENE COUNTY
STA. 18+29.67 TO STA. 21+29.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	N.V.		M.D.			

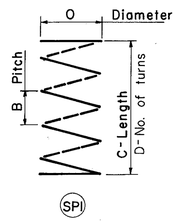
MICROFILMED
AUG 29 1989

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
INTEGRAL BACKWALL NO. 1																	
SA501	30	9'-5"	295	17			3'-10"	2'-0"	3'-10"								
SA502	30	8'-9"	274	17			3'-6"	2'-0"	3'-6"								
SA503	30	7'-5"	232	17			3'-0"	1'-8"	3'-0"								
SA504	30	4'-11"	154	17			1'-7"	2'-0"	1'-7"								
SA505	30	4'-7"	143	17			1'-5"	2'-0"	1'-5"								
SA506	14	5'-5"	79	17			1'-7"	2'-6"	1'-7"								
SA507	12	Varies 4'-2" to 5'-8" by 6" ea.	68	Str.													
SA508	12	Varies 2'-8" to 5'-2" by 6" ea	49	Str.													
SA509	6	7'-4"	46	T1	5"	2'-0"	1'-5"	2'-0"	1'-5"		5"						
SA510	8	5'-3"	44	19		3'-8"	1'-7"										
SA511	2	7'-3"	15	Str.													
SA512	6	6'-0"	38	Str.													
SA513	4	3'-6"	15	Str.													
SA514	6	6'-2"	39	Str.													
SA515	2	6'-3"	13	19		1'-0"	5'-3"										
SA516	2	3'-3"	7	Str.													
SA517	2	3'-4"	7	19		1'-0"	2'-4"										
SA518	4	Varies 7'-2" to 7'-8" by 6" ea	31	Str.													
SA519	4	Varies 5'-8" to 6'-2" by 6" ea	25	Str.													
SA520	4	13'-0"	54	19		1'-7"	10'-1"	1'-4"									
SA521	8	Varies 3'-9" to 9'-9" by 2'-0" ea	56	Str.													
SA522	8	Varies 4'-7" to 10'-7" by 2'-0" ea	63	20		1'-0"	Varies 3'-9" to 9'-9" by 2'-0" ea										
SA523	6	15'-4"	96	Str.													
SA524	6	16'-2"	101	20		1'-0"	15'-4"										
SA525	12	Varies 3'-8" to 7'-5" by 9" ea	69	Str.													
SA526	12	Varies 3'-9" to 8'-0" by 10" ea	74	19		1'-0"	Varies 2'-9" to 7'-0" by 10"										
SA527	8	3'-3"	27	Str.													
SA528	8	2'-2"	18	Str.													
SA529	4	8'-0"	33	Str.													
SA530	4	9'-2"	38	19		1'-0"	8'-2"										
SA531	4	5'-0	21	Str													
SA532	4	4'-8"	20	Str.													
SA533	2	6'-0"	13	Str.													
SA534	14	5'-3"	80	23	2'-3"	2'-3"	9"	2"	2'-3"						2'-6"	2'-6"	2 3/8	14 Epoxy Coated
SA535	8	15'-5"	129	Str.													4 Epoxy Coated
SA536	24	1'-6"	38	17		6"	9"	6"									
SA537	20	Varies 2'-0" to 2'-4" by 1" 4 ea	45	Str.													10 Epoxy Coated
SA601	20	23'-8"	711	Str.													
SA602	10	9'-3"	139	14			1'-3"	6'-9"	1'-3"			10"		10"			
SA603	14	1'-8"	35	16			9"	11"				7"		10"			14 Epoxy Coated
SA701	16	23'-9"	777	Str.													
SA702	10	4'-1"	83	14		8	1'-0"	2'-3"				6"		10"			10 Epoxy Coated
SA801	30	7'-3"	581	14		1'-6"	4'-3"	1'-6"				3'-0"		3'-0"			
SA802	10	23'-0"	614	Str.													4 Epoxy Coated
		TOTAL:	5,489														
INTEGRAL BACKWALL NO. 2																	
SAME REINFORCING AS FOR INTEGRAL BACKWALL NO. 1																	
		TOTAL:	5,489														
Total Integral Backwalls:		10,978															





ENLARGED VIEW SHOWING BAR BENDING DETAILS



NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SP1, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1 1/2 Closed coils shall be provided at the ends of each spiral unit.
7. Figure's in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SP1 and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 11 / 11
14. **REINFORCING STEEL SAMPLES: Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples sall be replaced in the structures by the additional steel, spliced in accordance with 509.08.**

MICROFILMED
JUN 19 1985

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

522 / 616

KING & GAVARIS CONSULTING ENGINEERS, INC.
CINCINNATI — OHIO — 10 / 11

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP RD.

GREENE COUNTY — STA. 18+29.67 TO STA. 21+29.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
N.V.	N.H.		W.U.			

MICROFILMED
AUG 29 1989

MICROFILMED
JUN 19 1989

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

523
6/6

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 1																	
P 501	8	22'-4"	186	Str.													
P 502	88	7'-2"	658	S10		2'-10"	1'-9"	2'-10"									
P 503	48	Varies 5'-10"to 7'-2" by 3" lea	325	S10		Varies 2'-2"to 2'-10" by 1½"	1'-9"	Varies 2'-2"to 2'-10" by 1½"									
P 504	30	5'-5"	170	S10		1'-6"	2'-8"	1'-6"									
P 601	52	8'-6"	604	Str.													
P 602	6	9'-5"	85	10		2'-7"	4'-3"	2'-7"							2'-8"	1'-4"	
P 801	28	14'-3"	1065	Str.													
P 802	14	19'-0"	710	Str.													
P 803	40	22'-6"	2403	Str.													
P 804	47	8'-6"	1067	Str.													
P 1001	42	10'-3"	1,852	2	2'-0"	8'-6"							2'-0"				
P 1002	42	16'-1"	2,906	Str.													
P 1101	14	18'-5"	1,370	20			16'-0"	2'-8"									
P 1102	8	12'-10"	545	Str.													
P 1103	8	8'-6"	361	19		5'-0"	3'-6"					11"		4'-11"			
P 1104	7	35'-0"	1,302	Str.													
P 1105	7	20'-6"	762	Str.													
SP 501	3	12'-7"	1,301	SP1		3⅝"	12'-7"	45							2'-8"		
		TOTAL:	17,732														
PIER NO. 2																	
P 501	8	22'-4"	186	Str.													
P 502	104	7'-2"	778	S10		2'-10"	1'-9"	2'-10"									
P 503	72	Varies 5'-10"to 7'-2" by 2" lea	488	S10		Varies 2'-2"to 2'-10" by 1"	1'-9"	Varies 2'-2"to 2'-10" by 1"									
P 504	30	5'-5"	170	S10		1'-6"	2'-8"	1'-6"									
P 602	6	9'-5"	85	10		2'-7"	4'-3"	2'-7"							2'-8"	1'-4"	
P 603	52	9'-0"	703	Str.													
P 801	30	14'-3"	1,141	Str.													
P 802	15	19'-0"	761	Str.													
P 803	46	22'-6"	2,763	Str.													
P 805	47	9'-0"	1,129	Str.													
P 1101	14	18'-5"	1,370	20			16'-0"	2'-8"									
P 1102	12	12'-10"	818	Str.													
P 1103	8	8'-6"	361	19		5'-0"	3'-6					11"		4'-11"			
P 1104	7	35'-0"	1,302	Str.													
P 1105	7	20'-6"	762	Str.													
P 1106	2	16'-0"	170	Str.													
P 1107	48	17'-2"	4,379	Str.													
P 1108	48	12'-0"	3,060	2	2'-6"	9'-9"							2'-6"				
SP 503	3	13'-8"	1,390	SP1		3⅝"	13'-8"	48							2'-8"		
		TOTAL:	21,816														
PIER NO. 3																	
P 501	8	22'-4"	186	Str.													
P 502	88	7'-2"	658	S10		2'-10"	1'-9"	2'-10"									
P 503	48	Varies 5'-10"to 7'-2" by 3" lea	325	S10	Varies 2'-2"to 2'-10" by 1½"		1'-9"	Varies 2'-2"to 2'-10" by 1½"									
P 504	30	5'-5"	170	S10		1'-6"	2'-8"	1'-6"									
P 601	52	8'-6"	664	Str.													
P 602	6	9'-5"	85	10		2'-7"	4'-3"	2'-7"							2'-8"	1'-4"	

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 3 CONT.																	
P 801	28	14'-3"	1,065	Str.													
P 802	14	19'-0"	710	Str.													
P 803	40	22'-6"	2,403	Str.													
P 804	47	8'-6"	1,067	Str.													
P 1001	42	10'-3"	1,852	2	2'-0"	8'-6"							2'-0"				
P 1003	42	17'-9"	3,208	Str.													
P 1101	14	18'-5"	1,370	20			16'-0"	2'-8"									
P 1102	8	12'-10"	545	Str.													
P 1103	8	8'-6"	361	19		5'-0"	3'-6"					1'-6"		4'-9"			
P 1104	7	35'-0"	1302	Str.													
P 1105	7	20'-6"	762	Str.													
SP 502	3	14'-3"	1,449	SP1		3⅝"	14'-3"	50							2'-8"		
		TOTAL:	18,182														
TOTAL PIERS:			57,730														
SUPERSTRUCTURE																	
S 401	580	30'-0"	11,623	Str.													580 Epoxy Coated
S 402	59	49'-0"	1,931	Str.													59 Epoxy Coated
S 403	118	51'-0"	4,020	Str.													118 Epoxy Coated
S 404	58	11'-9"	455	Str.													58 Epoxy Coated
S 501	448	1'-6"	701	2	6"	9"						6"					
S 502	448	6'-3"	2,920	23	2'-11⅛"	2'-4⅛"	9"	3"	2'-4½"	7½"	7½"			2'-4"	2'-7"	2⅞"	448 Epoxy Coated
S 503	448	1'-11"	890	2	6"	1'-6"											
S 504	448	3'-0"	1,402	15		7"	10"	8"	11"	8"		8"					448 Epoxy Coated
S 505	640	30'-0"	20,026	Str.													40 Epoxy Coated
S 506	64	13'-0"	868	Str.													32 Epoxy Coated
S 507	64	15'-2"	1,013	Str.													4 Epoxy Coated
S 508	16	9'-0"	150	Str.													8 Epoxy Coated
S 509	16	8'-6"	142	Str.													8 Epoxy Coated
S 510	72	4'-8"	350	Str.													36 Epoxy Coated
S 511	64	13'-8"	912	Str.													32 Epoxy Coated
S 601	1032	45'-4"	70,264	Str.													516 Epoxy Coated
		TOTAL:	117,675														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 10 / 11
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 10 / 11

CINCINNATI — KING & GAVARIS CONSULTING ENGINEERS, INC. — OHIO — 11 / 11

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0737
I-675 UNDER KEMP RD.

GREENE COUNTY

STA. 18+29.67 TO STA. 21+29.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
N.V.	N.H.		L.I.U.			

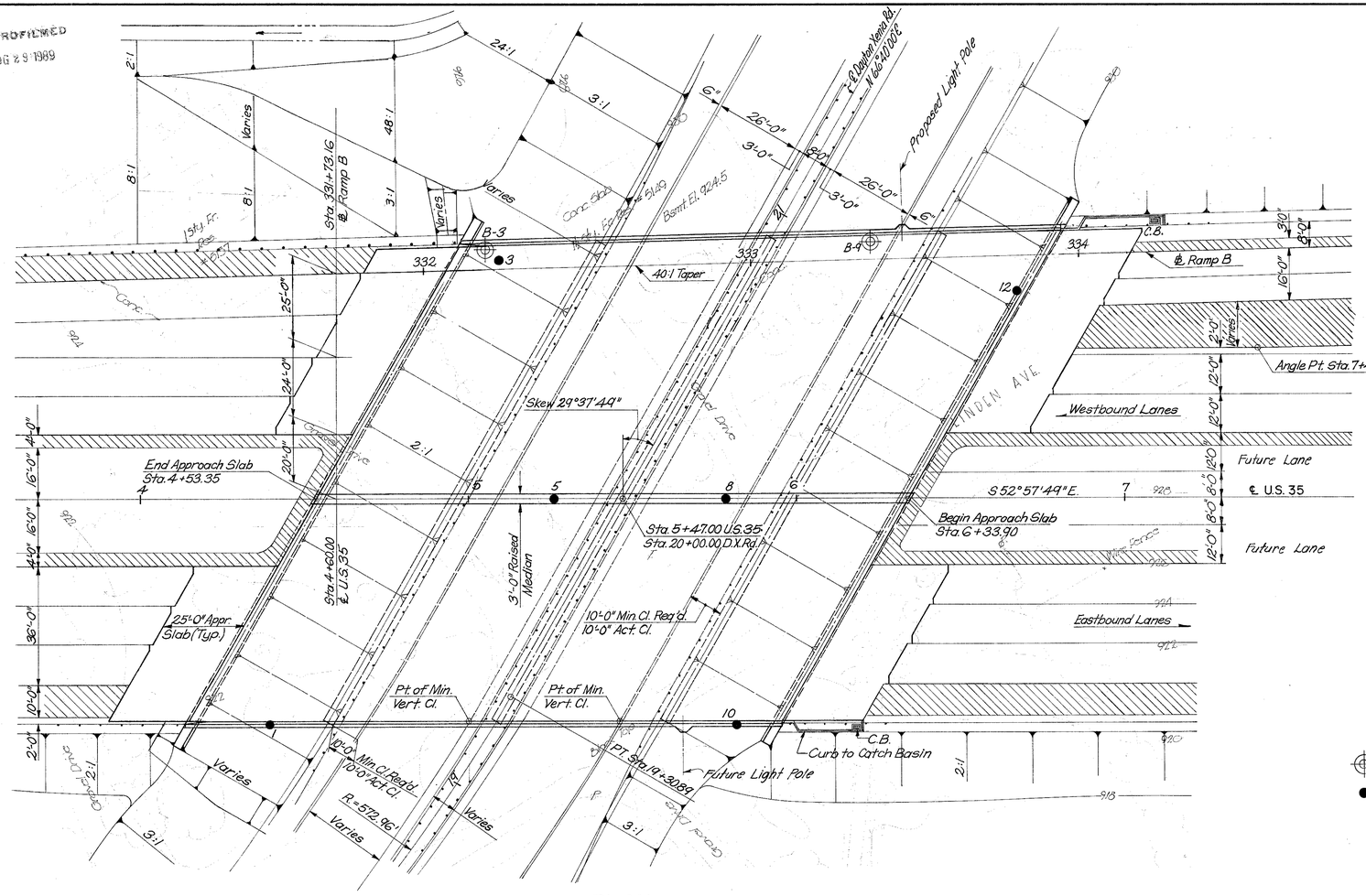
MICROFILMED
AUG 2 9 1989

MICROFILMED
JUN 1 9 1989

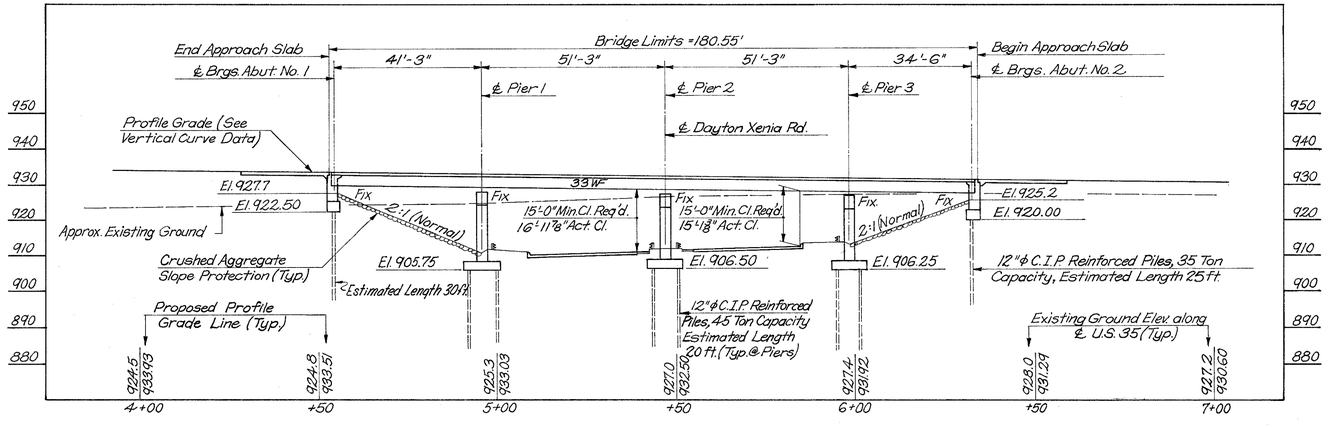
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

524
616

GRE-675 - 5 - 37
GREENE COUNTY



PLAN



PROFILE ON CENTER LINE RELOCATED U.S. 35

HORIZONTAL CURVE DATA

CURVE NO. 1 DAYTON XENIA RD.

PI Sta. 17+15.58
Δ = 45°38'20"
Dc = 10°00'00"
R = 572.96'
T = 241.08'
L = 456.39'
E = 48.65

VERTICAL CURVE DATA

U.S. 35

PVI Sta. 3+00.00
PVI Elev. 939.09
L = 1300'
G_1 = +0.80 %
G_2 = -1.96 %

LEGEND

⊕ Drive Sample Boring Location
● Drive Rod Penetration Resistance Sounding Location

NOTES

Earthwork limits shown are schematic. Actual slopes shall conform to Plan Cross-Sections.

For typical sections through bridge see sheet. 3 | 10 | 14

DESIGN YEAR TRAFFIC
1989 ADT:
U.S. 35 - 87,890
Ramp B - 10,110

PROPOSED STRUCTURE

TYPE: Continuous steel beam with reinforced concrete deck and substructure
SPANS: 41'-3", 51'-3", 51'-3", 34'-6"
ROADWAY: Varies 144'-8" to 148'-8" face to face of parapet
LOADING: HS-20-44 & Alternate Military
SKEW: 29°37'44" Lt. Fwd.
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 25'-0" long (Std. AS-1-72)
ALIGNMENT: Tangent

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
1 | 14

SITE PLAN

BRIDGE NO. GRE-35-0009
US. 35 OVER DAYTON XENIA RD.

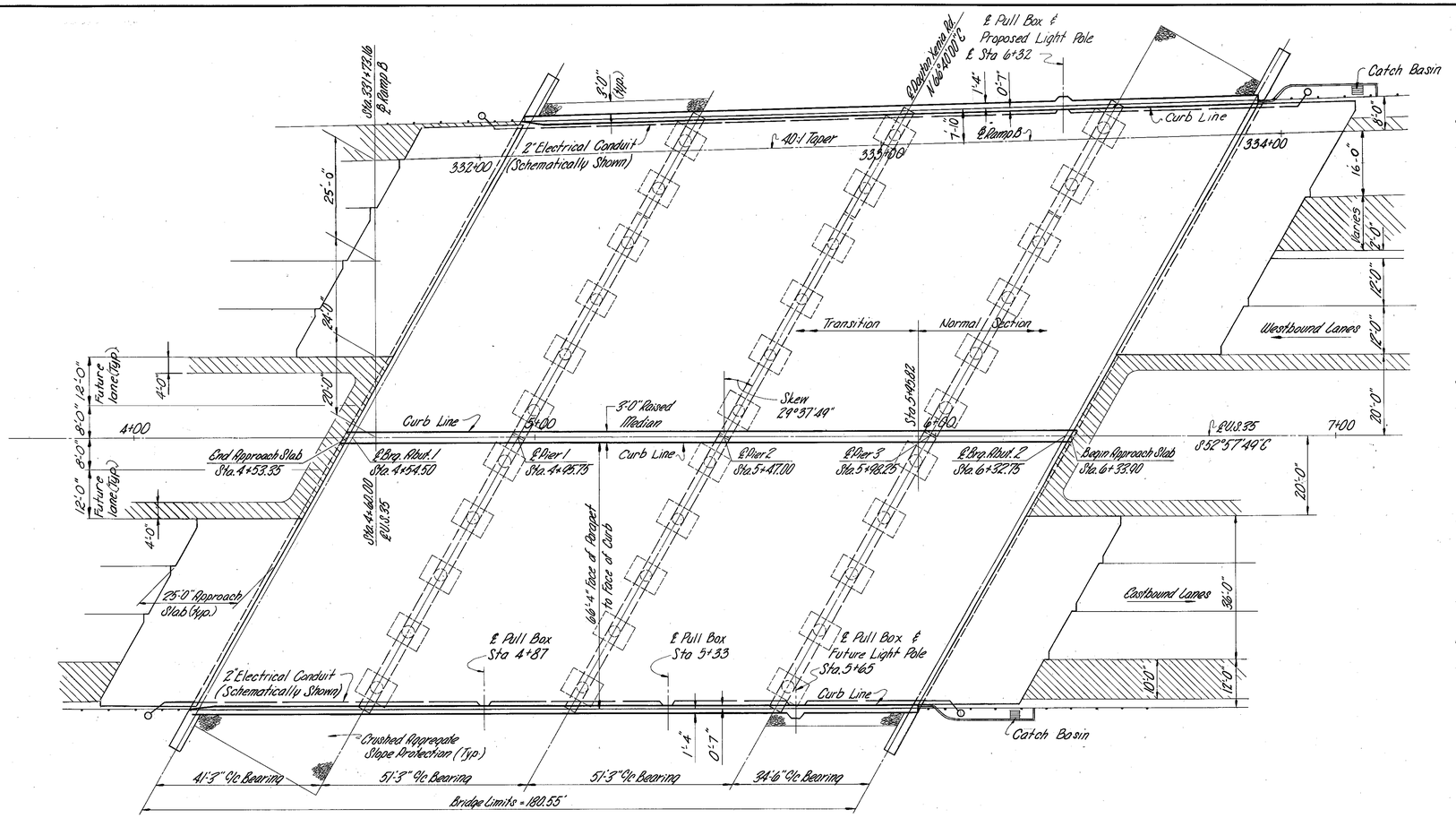
GREENE COUNTY
STA. 4+53.35 TO STA. 6+33.90

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	S.A.	

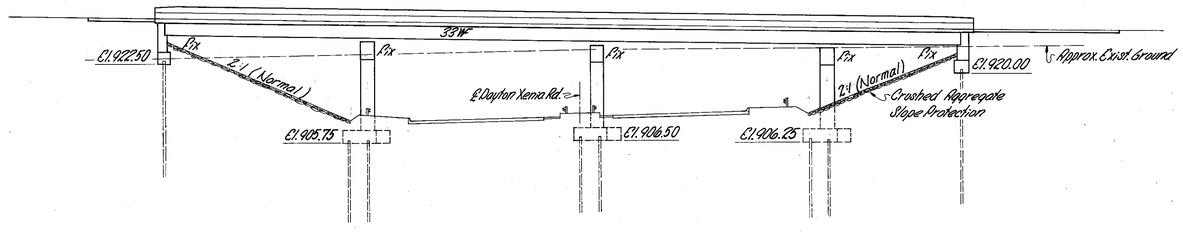
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

525/616

GRE-675 - 5.37
GREENE COUNTY



PLAN



ELEVATION

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

2/14

GENERAL PLAN AND ELEVATION

BRIDGE NO. GRE-35-0009

U.S. 35 OVER DAYTON XENIA RD.

GREENE COUNTY

STA. 4+53.35 TO STA. 6+33.90

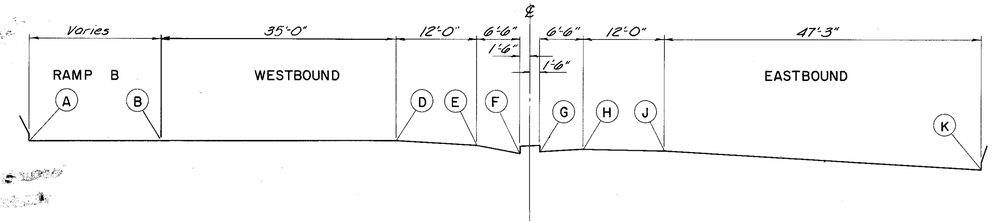
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.		9/25/72	

MICROFILMED
JUN 19 1973

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

526/616

GRE-675 - 5.37
GREENE COUNTY



TRANSITION ELEVATIONS

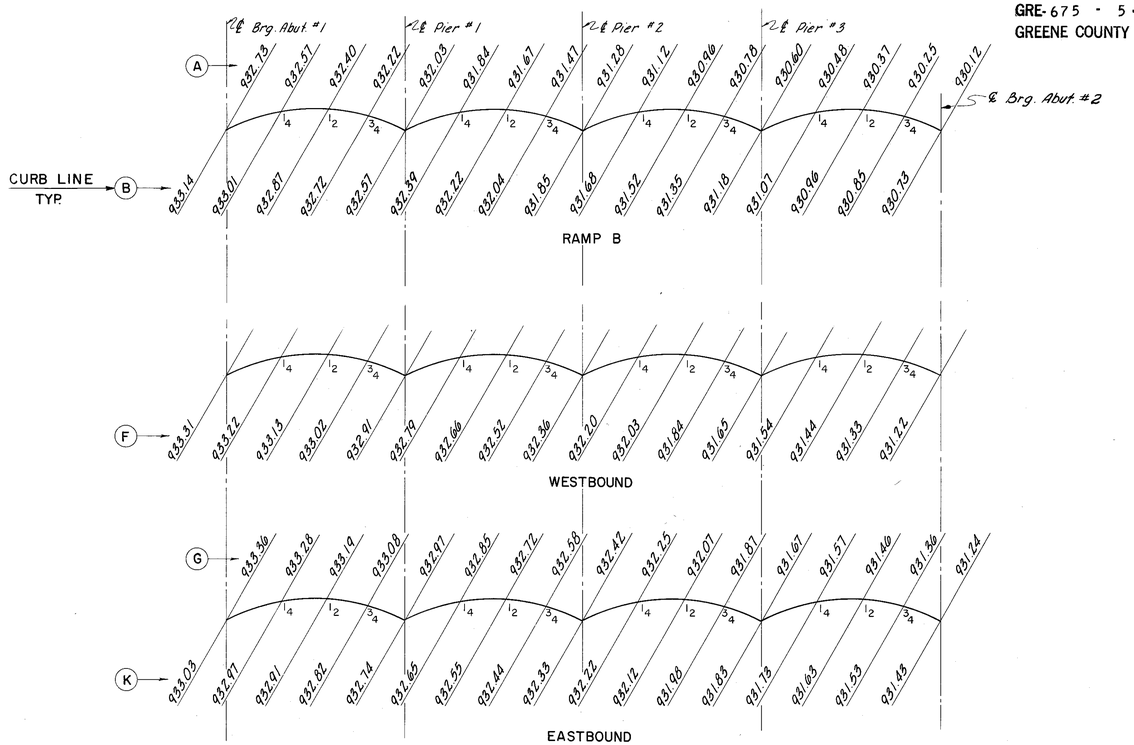
STATION	A	B	C	D	E	F	G	H	J	K
4+00	934.21	934.22	934.22	934.25	934.06	933.79	933.83	933.93	933.89	933.15
4+25	933.86	933.92	933.93	934.04	933.85	933.58	933.62	933.72	933.72	932.98
4+50	933.50	933.62	933.63	933.83	933.64	933.37	933.41	933.51	933.55	932.81
4+75	933.12	933.30	933.31	933.60	933.41	933.14	933.18	933.28	933.36	932.62
5+00	932.71	932.96	932.97	933.35	933.16	932.89	932.93	933.03	933.15	932.41
5+25	932.30	932.61	932.62	933.09	932.90	932.63	932.67	932.77	932.93	932.19
5+50	931.89	932.26	932.27	932.80	932.61	932.34	932.38	932.50	932.69	931.95
5+75	931.54	931.91	931.93	932.46	932.27	932.00	932.02	932.22	932.41	931.67
5+95.82	931.22	931.60	931.62	932.15	931.96	931.69	931.69	931.96	932.15	931.41
		Normal	Section	Beyond						

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT	PIERS	GEN
503	Lump	Sum	Cofferdams, cribs and Sheeting				Lump
503	946	Cu. Yd.	Unclassified Excavation		376	570	
505	Lump	Sum	Test Pile				Lump
507	4350	Lin. Ft.	12" Cast-in-place reinforced concrete piles		1750	2640	
509	227,800	Lbs.	Reinforcing steel	123,300	26,700	77,800	
511	369	Cu. Yd.	Class "C" concrete, piers above footings			369	
511	163	Cu. Yd.	Class "C" concrete, abutments above footings		163		
511	894	Cu. Yd.	Class "S" concrete, superstructure using shrink. comp. cem. Total 894				
511	325	Cu. Yd.	Class "C" concrete footings		126	199	
512	370	Lin. Ft.	Type B Waterproofing		370		
513	491,170	Lb.	Structural steel (AISC Category I)	491,170			
514	491,170	Lb.	Field painting of new Structural Steel, System A	491,170			
516	791	Sq. Ft.	1" Preformed expansion joint filler	83	708		
516	237	Sq. Ft.	1/4" Preformed expansion joint filler		237		
518	209	Cu. Yd.	Porous backfill		209		
518	390	Cu. Yd.	6" Perforated helical C.S.P. (10701)		390		
518	54	Cu. Yd.	6" Non-perforated helical C.S.P. including specials (10701)		54		
601	1515	Sq. Yd.	Crushed aggregate slope protection				1515
625			See sheet (189/616) for lighting summary				
523	3	Hour	Dynamic Pile Tests				3
516	88	Sq. Ft.	3/4" elastomeric bearing pad	88			
Special	123,200	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	123,200			

ESTIMATED QUANTITIES BY: J.R.G. CHECKED BY: S.A. 2/24/72 REVISED: S.A. 9/14/72

TEST PILE: Payment will be made for only one test pile



DECK ELEVATION DIAGRAM

AT CURB POINTS BEFORE CONCRETE IS PLACED

GENERAL NOTES

EMBANKMENT CONSTRUCTION: THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS AND 45 TONS PER PILE FOR THE PIERS.

FOR ADDITIONAL GENERAL NOTES SEE COMMON DETAILS, SHEET C1/C2

In lieu of the Premolded Sealing Strip and the 13"x 3/4" recess shown on the plan, use Type B Waterproofing centered on the joint.

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3/14

GENERAL NOTES, ESTIMATED QUANTITIES & MISCELLANEOUS DETAILS

BRIDGE NO. GRE-35-0009

U.S. 35 OVER DAYTON XENIA RD.

GREENE COUNTY

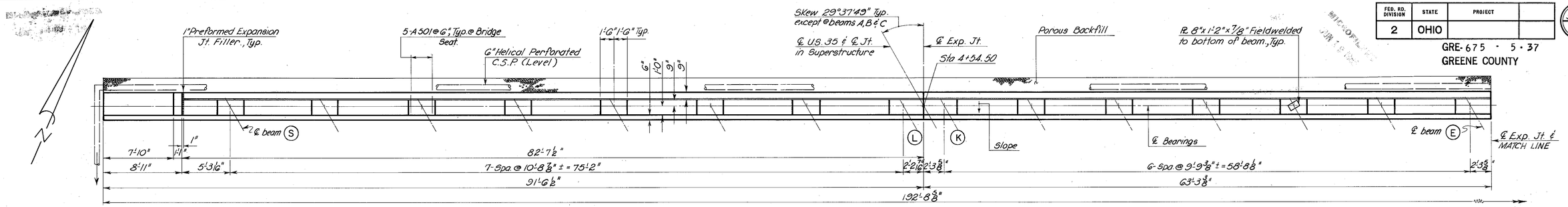
STA. 4+53.35 TO STA. 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	K.F.		S.A.	[illegible]	9/25/72	

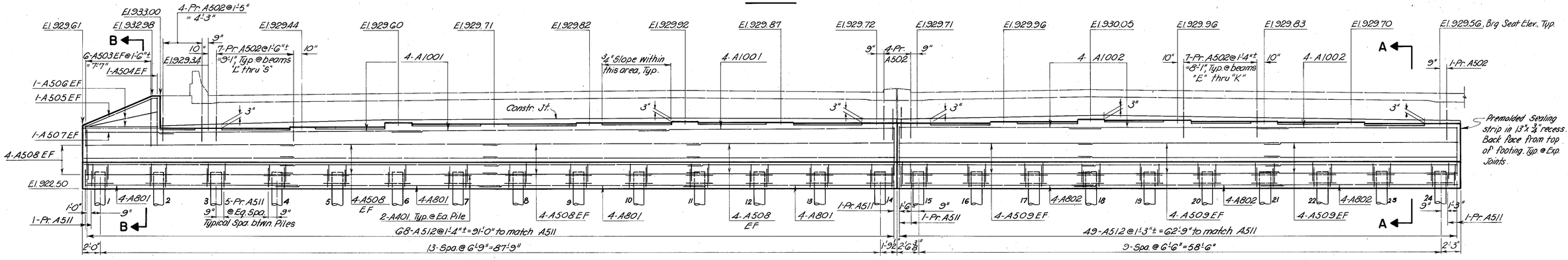
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

527
6/6

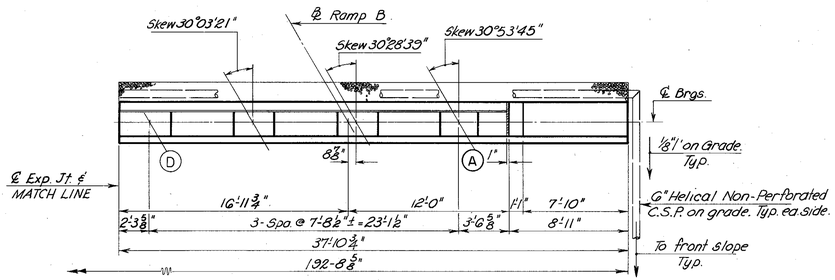
GRE-675 · 5·37
GREENE COUNTY



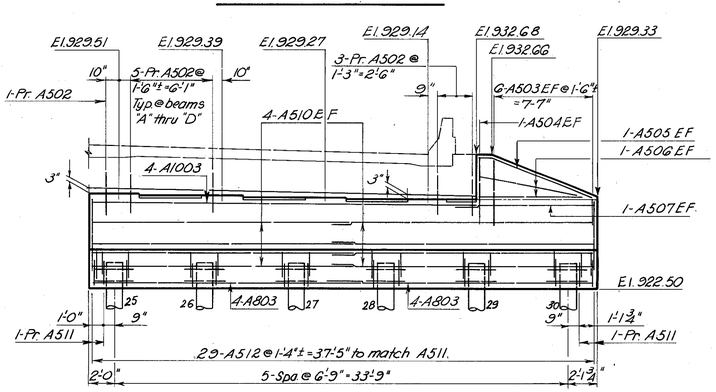
PLAN



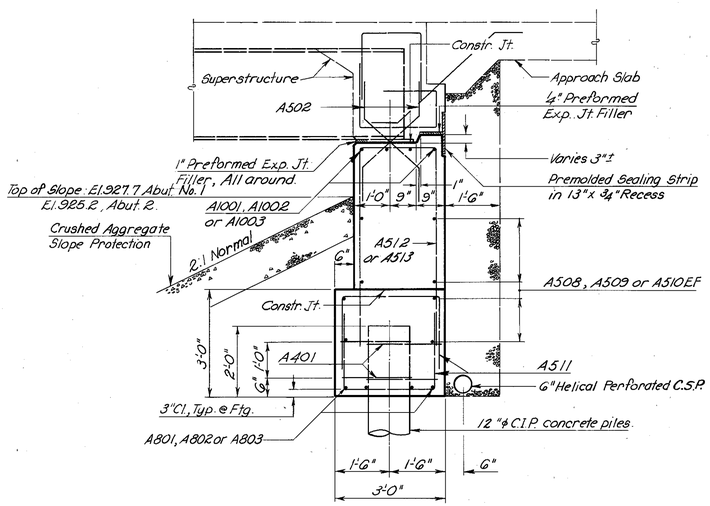
ELEVATION



PLAN CONTINUES



ELEVATION CONTINUES



SECTION A-A

NOTES:

Work this sheet with sh. 5/14
For Reinforcing Steel List see Sh. 11/14

Porous Backfill, within the limits shown, shall extend upward to the plane of the subgrade within the roadway area and outward to the earth slopes.
Only that portion of the C.S.P. located in the Porous Backfill shall be perforated.
For termination of C.S.P. at slopes see Common Details, Sht. C1/C2.
E.F denotes Each Face.
Reinforcing Steel in Abutments 1 & 2 shall have the suffix A & B respectively.
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.
For Expansion Joint Detail, see Common Details, Sht. C2/C2.

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CINCINNATI OHIO

4/14

ABUTMENT NO. 1

BRIDGE NO. GRE-35-0009

U.S. 35 OVER DAYTON XENIA RD.

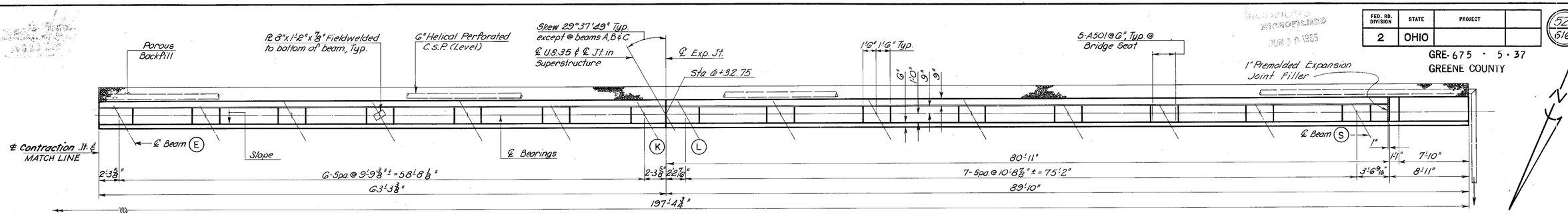
GREENE COUNTY STA. 4+53.35 TO STA. 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	[illegible]	9/25/72	

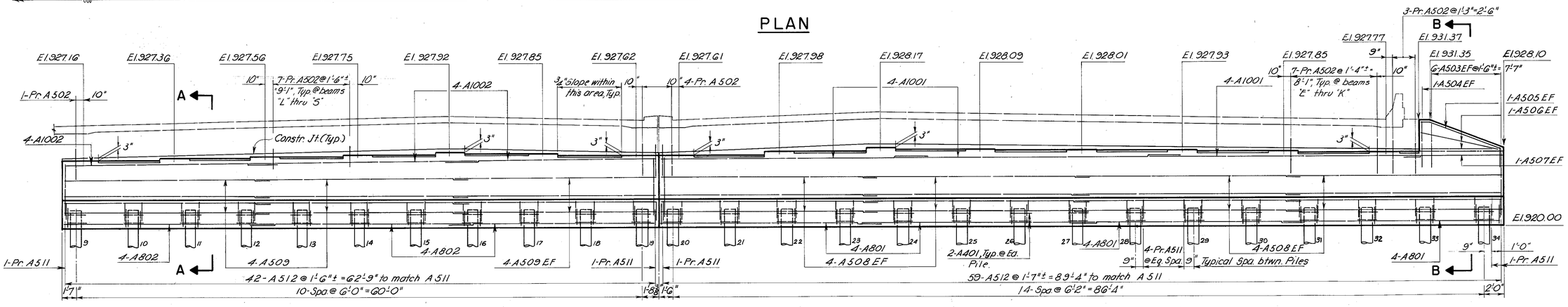
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

528
616

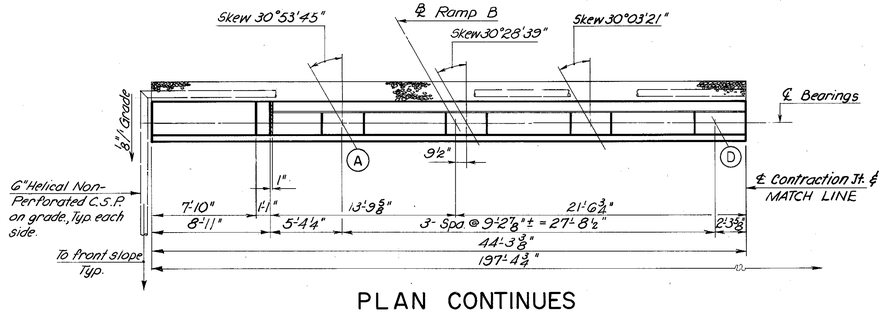
GRE-675 · 5·37
GREENE COUNTY



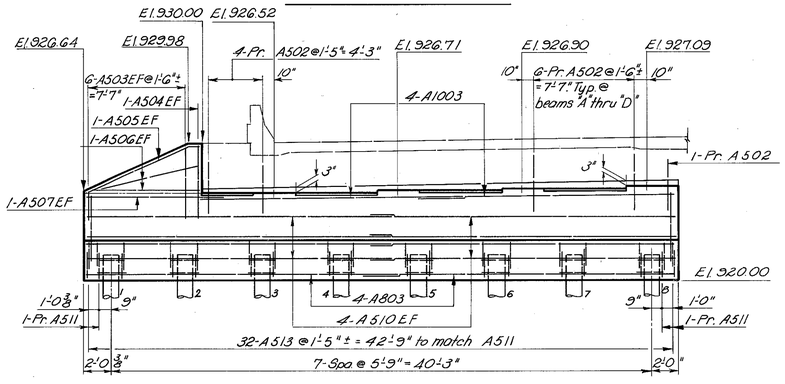
PLAN



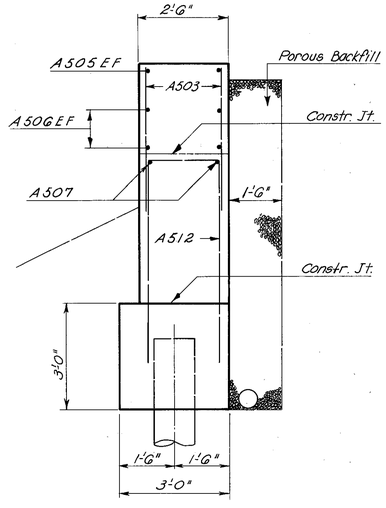
ELEVATION



PLAN CONTINUES



ELEVATION CONTINUES



SECTION B-B

NOTES:

Work this sheet with sh. 4 | 14
For Detail Notes see sh. 4 | 14

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5 | 14

ABUTMENT NO. 2

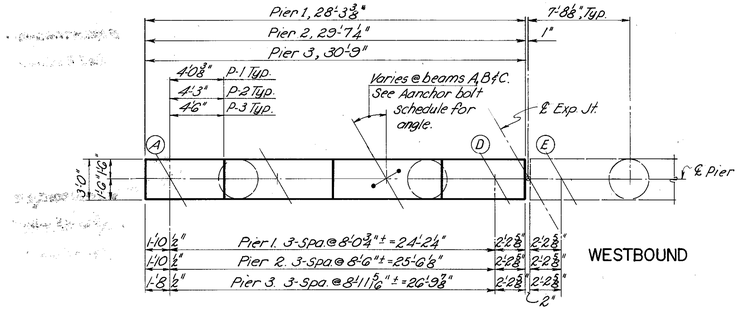
BRIDGE NO. GRE-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY
STA: 4+53.35 TO STA: 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. P.	A.W.		S.A.		9/25/72	

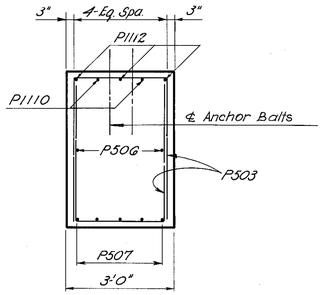
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

529
616

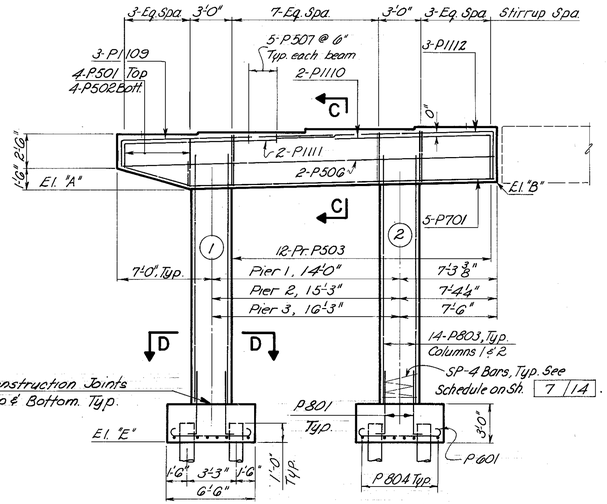
GRE-675 · 5·37
GREENE COUNTY



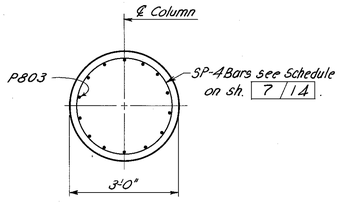
PLAN
RAMP B



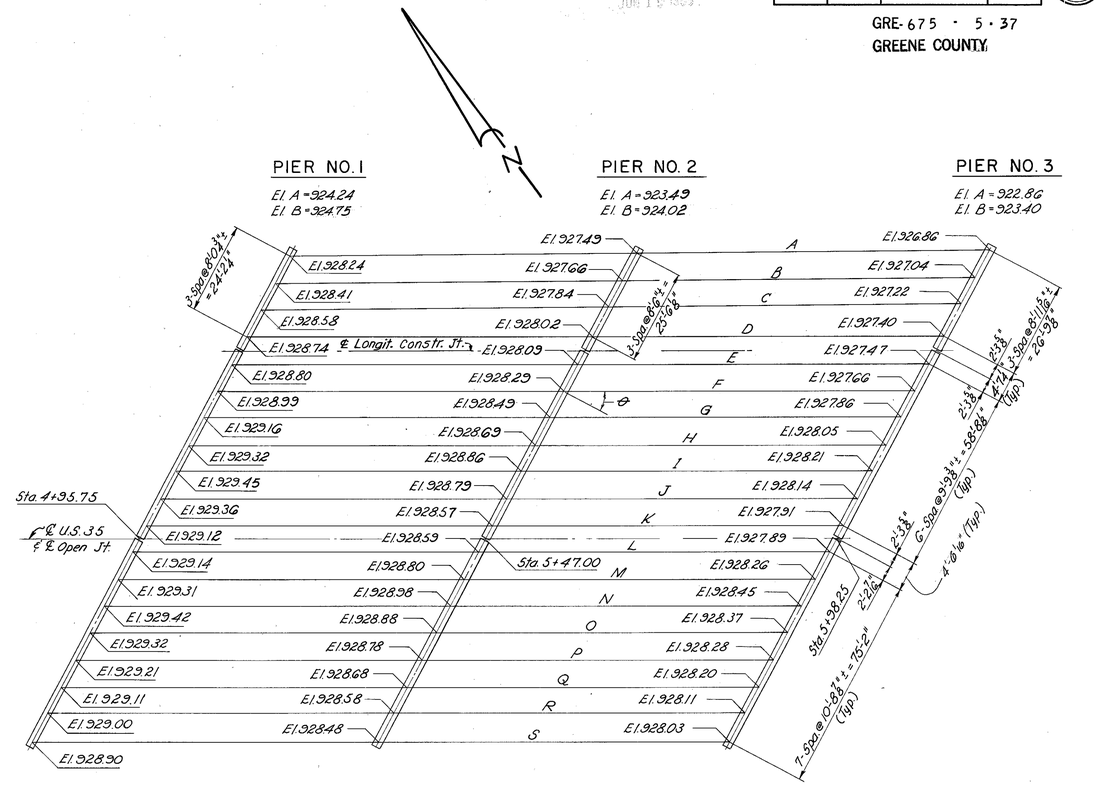
SECTION C-C



ELEVATION
PIERS 1, 2, & 3



SECTION D-D

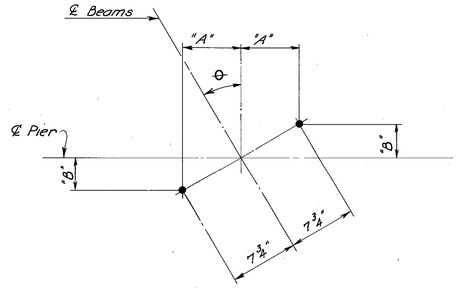


E.I. C = 925.16
E.I. D = 924.90
E.I. E = 905.75

E.I. C = 924.59
E.I. D = 924.48
E.I. E = 906.50

E.I. C = 923.88
E.I. D = 924.03
E.I. E = 906.25

KEY PLAN
Showing Bearing Seat Elevations & Layout Dimensions



ANCHOR BOLT LAYOUT
TYPICAL ALL PIERS

BEAMS	BRGS.	DIM. "A"	DIM. "B"	θ
A	F-150	6⅝"	4"	30°53'45"
B	F-150	6⅝"	3⅞"	30°28'39"
C	F-150	6¾"	3⅞"	30°03'21"
D thru S	F-150	6¾"	3⅞"	29°37'49"

NOTE:
Work this sheet with Sh. 7/14.

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PIERS-1

BRIDGE NO. GRE.-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY
STA: 4+53.35 TO
STA: 6+33.90

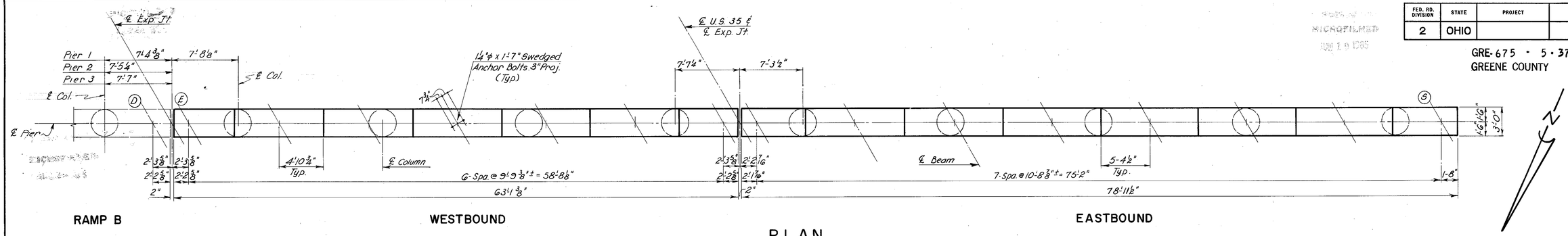
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

530/616

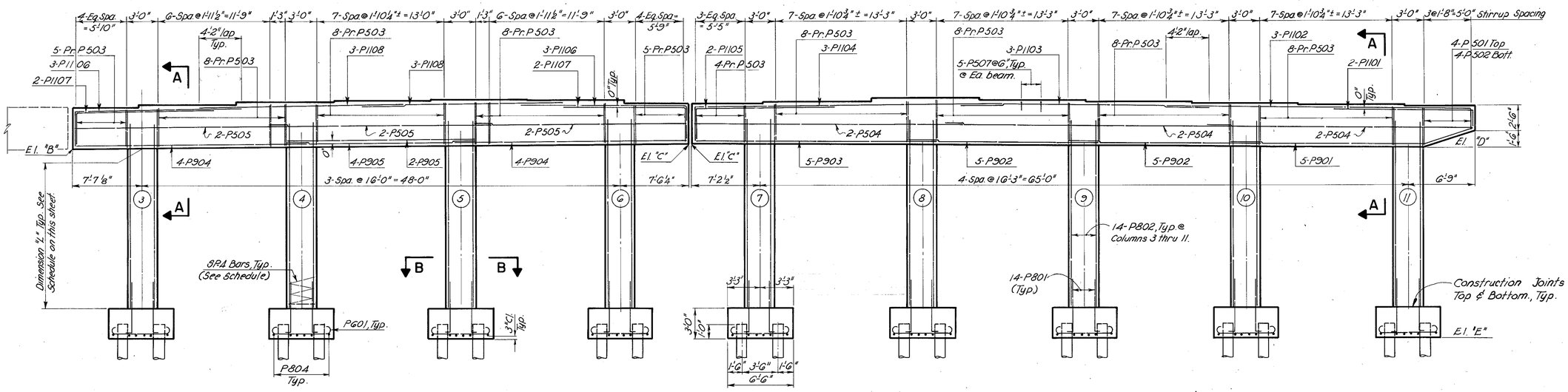
GRE-675 · 5 · 37
GREENE COUNTY

MICROFILMED
JUN 19 1972



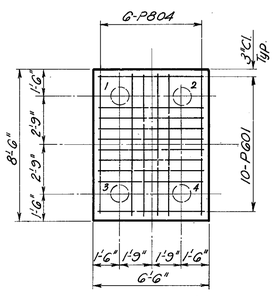
RAMP B WESTBOUND EASTBOUND

PLAN



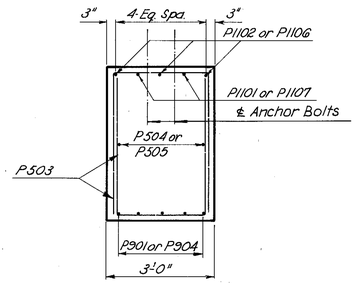
ELEVATION

PIERS 1, 2, & 3

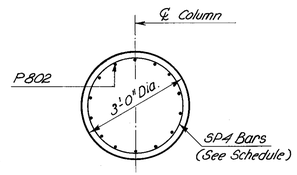


33 required

TYPICAL FOOTING PLAN



SECTION A-A



SECTION B-B

COLUMN HEIGHTS	DIMENSION "L"									
COLUMN NO.	1	2	3	4	5	6	7	8	9	10	11
PIER NO. 1	15'-6 1/4"	15'-10"	16'-0 5/8"	16'-1 7/8"	16'-3 1/8"	16'-4 3/8"	16'-4 5/8"	16'-3 7/8"	16'-3 1/4"	16'-2 5/8"	16'-1 7/8"
PIER NO. 2	14'-10 1/4"	14'-4 1/4"	14'-7"	14'-8 3/4"	14'-10 1/2"	15'-0 1/4"	15'-0 7/8"	15'-0 5/8"	15'-0 3/8"	15'-0 1/8"	14'-11 3/4"
PIER NO. 3	13'-7 3/4"	13'-11 3/4"	14'-2 1/2"	14'-4"	14'-5 3/8"	14'-6 7/8"	14'-7 1/4"	14'-8 5/8"	14'-8 1/2"	14'-8 3/8"	14'-9 1/4"

SPIRAL BARS											
COLUMN NO.	1	2	3	4	5	6	7	8	9	10	11
PIER NO. 1	SP401	SP402	SP402	SP403	SP403	SP403	SP403	SP403	SP403	SP403	SP403
PIER NO. 2	SP408	SP404	SP405	SP405	SP405	SP406	SP406	SP406	SP406	SP406	SP406
PIER NO. 3	SP407	SP408	SP408	SP404	SP404	SP404	SP405	SP405	SP405	SP405	SP405

NOTES:

For Reinforcing Steel List See Shs. 11, 12, 14
Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seats so as to avoid interference with the drilling of anchor bar (bolts) holes.
Work this sheet with Sh. 6 | 14.
Reinforcing Steel in Piers 1, 2 & 3 shall have the suffix A, B & C respectively
Bearing Anchors: At the option of the Contractor, bearing anchors (or formed holes) located and supported by templates, may be cast-in place.
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

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CINCINNATI OHIO
7/14

PIERS-2

BRIDGE NO. GRE-35-0009

U.S. 35 OVER DAYTON XENIA RD.

GREENE COUNTY

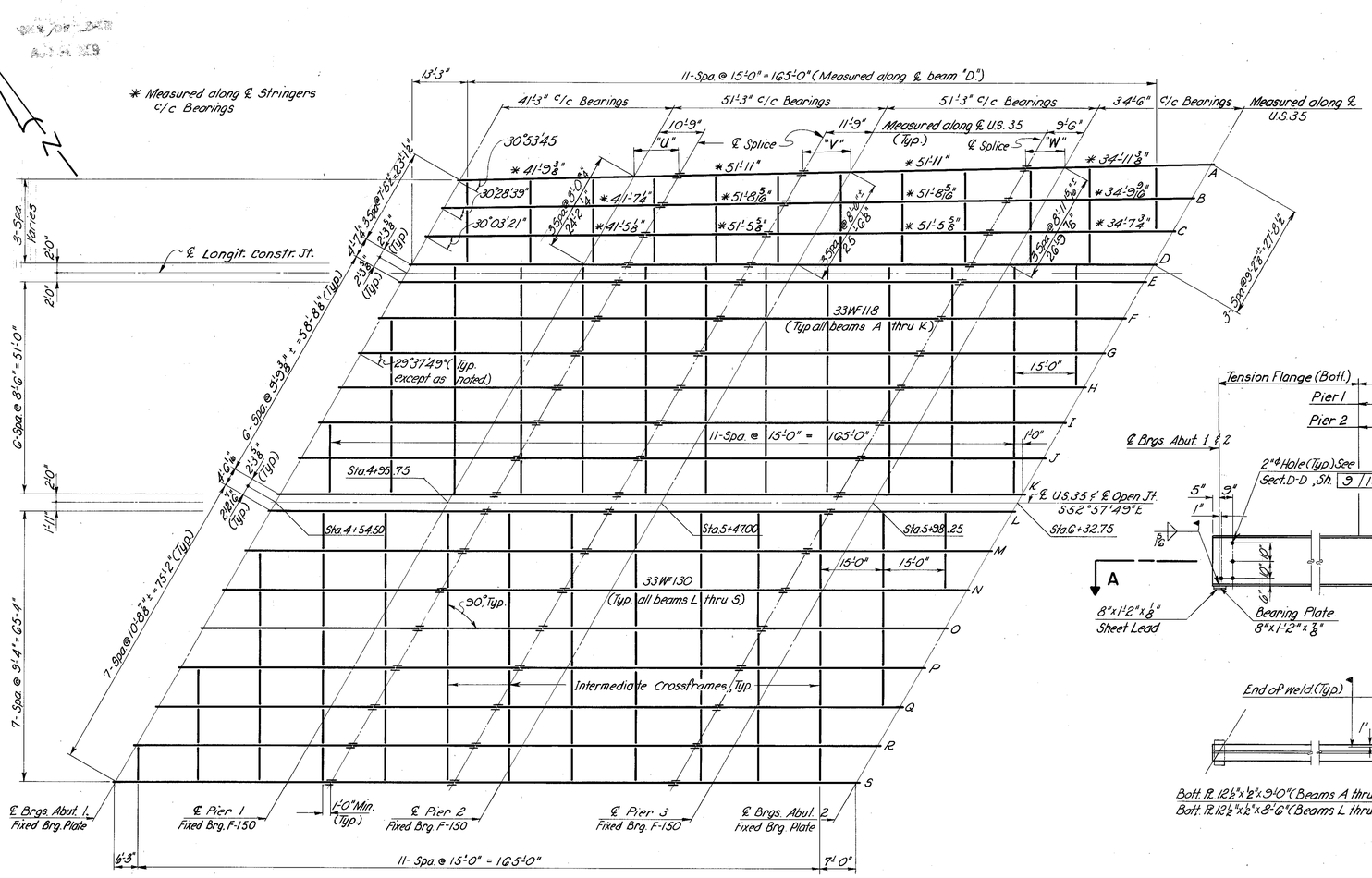
STA: 4+53.35 TO
STA: 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. P.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

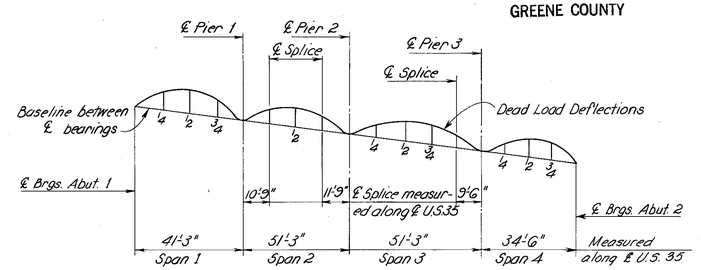
531/616

GRE-675 · 5·37
GREENE COUNTY

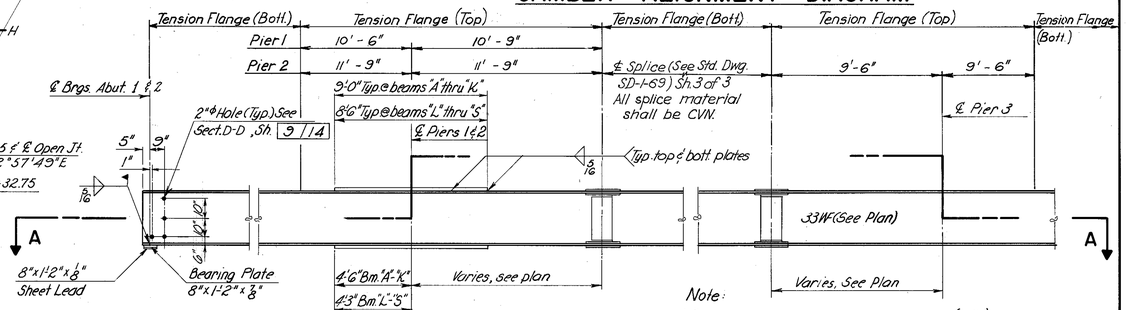


FRAMING PLAN

BEAM	DIMENSION		
	U	V	W
A	10'-10 3/8"	11'-10 3/8"	9'-7 1/2"
B	10'-10 1/8"	11'-10 1/4"	9'-7"
C	10'-9 1/2"	11'-9 5/8"	9'-6 1/2"

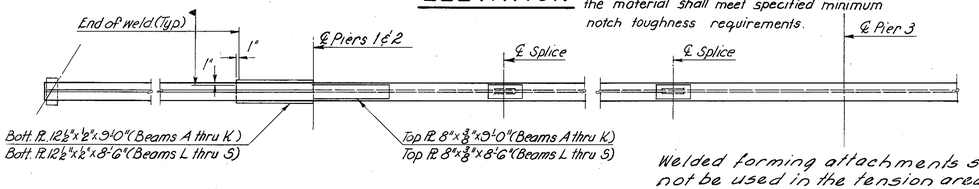


CAMBER ALIGNMENT DIAGRAM



ELEVATION

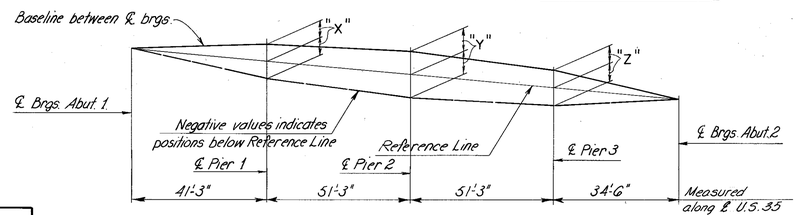
Note:
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.



Welded forming attachments shall not be used in the tension areas of the top flange.

All beams and top moment plates shall be CVN.

SECTION A-A



BLOCKING DIAGRAM

DIMENSION	BEAMS																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
X	-1 1/8"	-1 3/16"	-1 1/4"	-1 1/4"	-0"	1/4"	1 9/16"	1 7/8"	1 11/16"	1 11/16"	1 11/16"	1 13/16"	1 13/16"	1 11/16"	1 11/16"	1"	1"	1 5/16"	1 5/16"
Y	-1 3/16"	-1 5/16"	-1 3/4"	-1 1/2"	-1 3/8"	1/4"	1 7/16"	1 5/16"	1 3/8"	1 9/16"	1 11/16"	1 7/8"	1 1/4"	1 13/16"	1 13/16"	1 11/16"	1 5/8"	1 9/16"	1 1/2"
Z	-1/4"	-1/4"	-5/16"	-3/16"	-1 1/8"	-5/16"	1/16"	3/16"	5/16"	5/16"	5/16"	5/16"	1/4"	3/4"	1"	1 1/16"	1 1/16"	1 1/16"	1 1/8"

NOTES:

For Intermediate Crossframe Details, see Common Detail sh. C2/C2.

For Typical Transverse Section, see sh. 9, 10/14

For Fixed Bearings F-150 Details, see Common Detail sh. C1/C2.

For Underbridge Luminaire Supporting brackets, see sh. (16A 20D), included with Item 513 for payment.

DEFLECTION AND CAMBER

	BEAMS A THRU D												BEAMS E THRU K												BEAMS L THRU S											
	SPAN 1			SPAN 2			SPAN 3			SPAN 4			SPAN 1			SPAN 2			SPAN 3			SPAN 4			SPAN 1			SPAN 2			SPAN 3			SPAN 4		
	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/2 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/2 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/2 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.	℄ Spl.	1/4 Pt.	1/2 Pt.	3/4 Pt.
Deflection due to weight of steel	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
Deflection due to remaining dead load	1/8"	1/8"	1/16"	1/16"	1/8"	1/16"	1/8"	3/16"	1/8"	1/16"	0"	1/16"	1/16"	1/8"	3/16"	1/16"	1/16"	1/8"	1/16"	1/8"	1/4"	1/8"	1/8"	0"	1/16"	1/16"	1/8"	3/16"	1/16"	1/16"	1/8"	3/16"	1/8"	0"	1/16"	1/16"
Required shop camber	1/8"	1/8"	1/16"	1/16"	1/8"	1/16"	1/8"	3/16"	1/8"	1/16"	0"	1/16"	1/16"	1/8"	3/16"	1/16"	1/16"	1/8"	1/16"	1/8"	1/4"	1/8"	1/8"	0"	1/16"	1/16"	1/8"	3/16"	1/16"	1/16"	1/8"	3/16"	1/8"	0"	1/16"	1/16"

NOTE: Vertical Curve and Transition Corrections will be made by varying the slab haunch.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

8/14

STEEL FRAMING PLAN

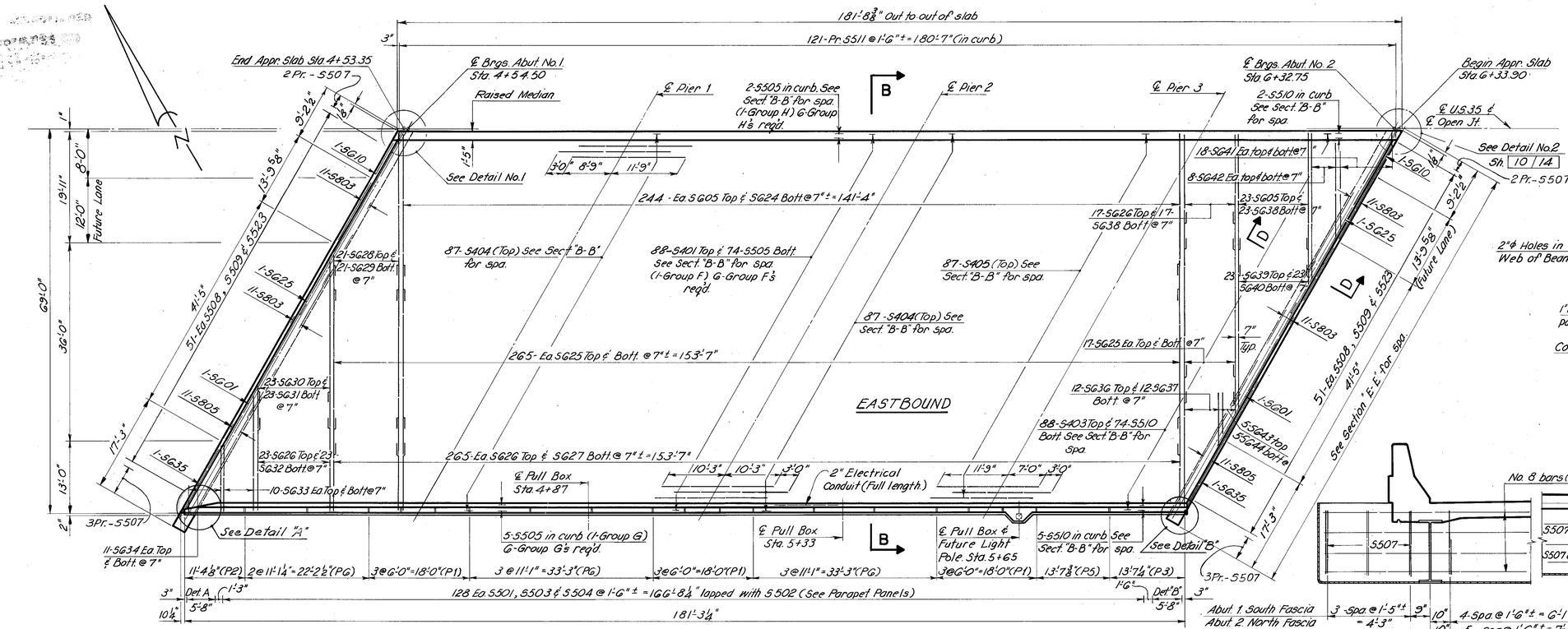
BRIDGE NO. GRE.-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY
STA: 4+53.35 TO STA: 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. P.	A.W.		S.A.		9/25/72	4-27-82

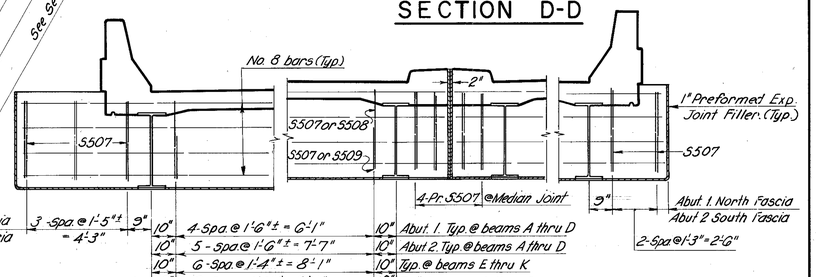
FED. RD. DIVISION	STATE	PROJECT		532/616
2	OHIO			

GRE-675 · 5 · 37
GREENE COUNTY

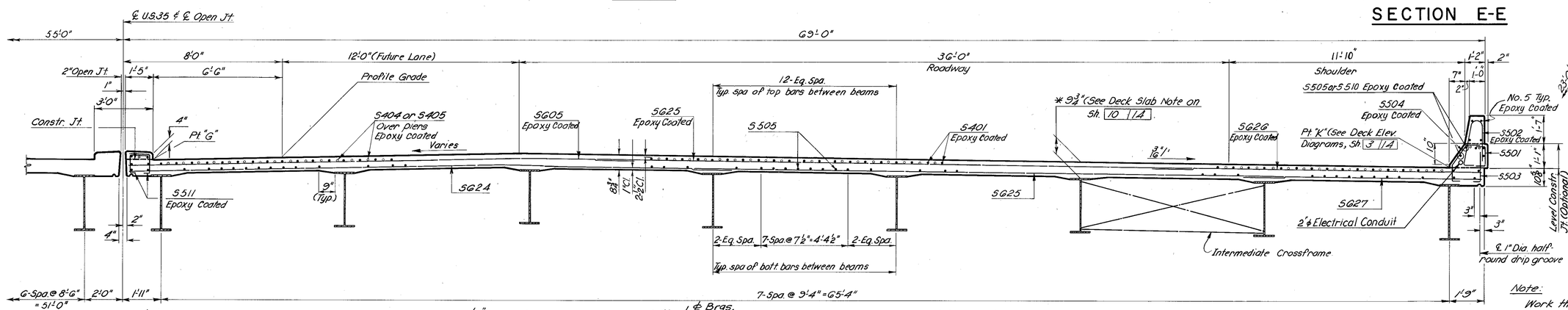
PLAN



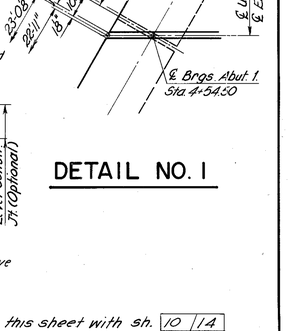
SECTION D-D



SECTION E-E

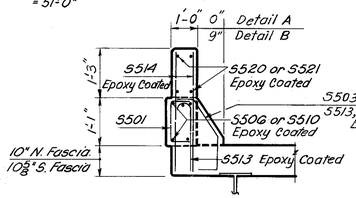


DETAIL NO. 1

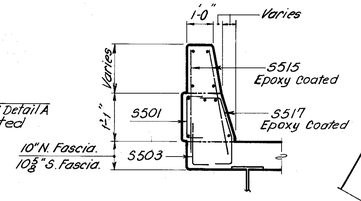


Note: Work this sheet with sh. 10 14

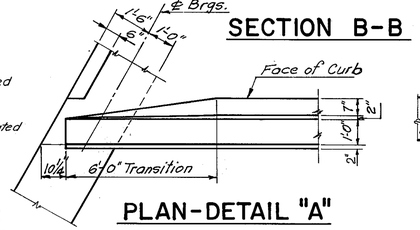
END VIEW



SECTION C-C

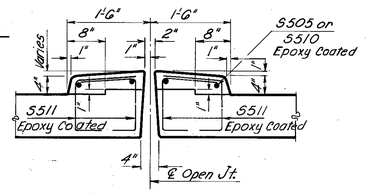


SECTION B-B

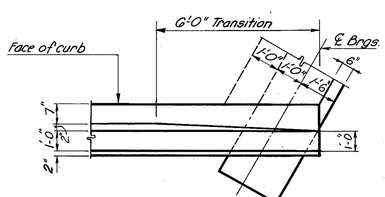


PLAN-DETAIL "A"

MEDIAN DETAIL



PLAN-DETAIL "B"



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CINCINNATI OHIO

3 14

SUPERSTRUCTURE ROADWAY SLAB-1

BRIDGE NO. GRE.-35-0009

U.S. 35 OVER DAYTON XENIA RD.

GREENE COUNTY STA: 4+53.35 TO STA: 6+33.90

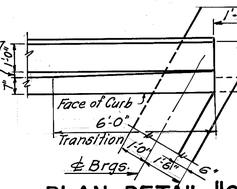
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

MICROFILMED
JUN 19 1995

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

533
516

GRE-675 - 5 - 37
GREENE COUNTY
Type 6 Curb
Highway Item



PLAN-DETAIL "C"

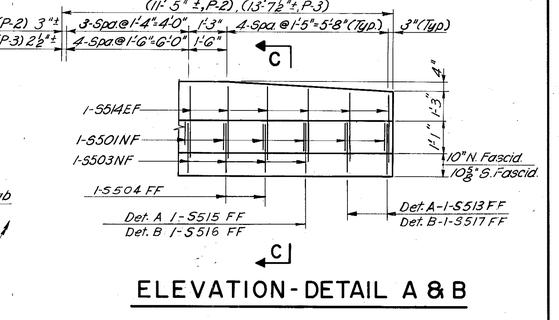
PANELS		
No. Req'd	Mark	L
18	P-1	6'-0"
2,8	P-2, P-4	11'-5" ±
2,1	P-3, P-5	13'-7½" ±
8	P-6	11'-1"
1	P-7	12'-5¼"

Epoxy Coated F.F.

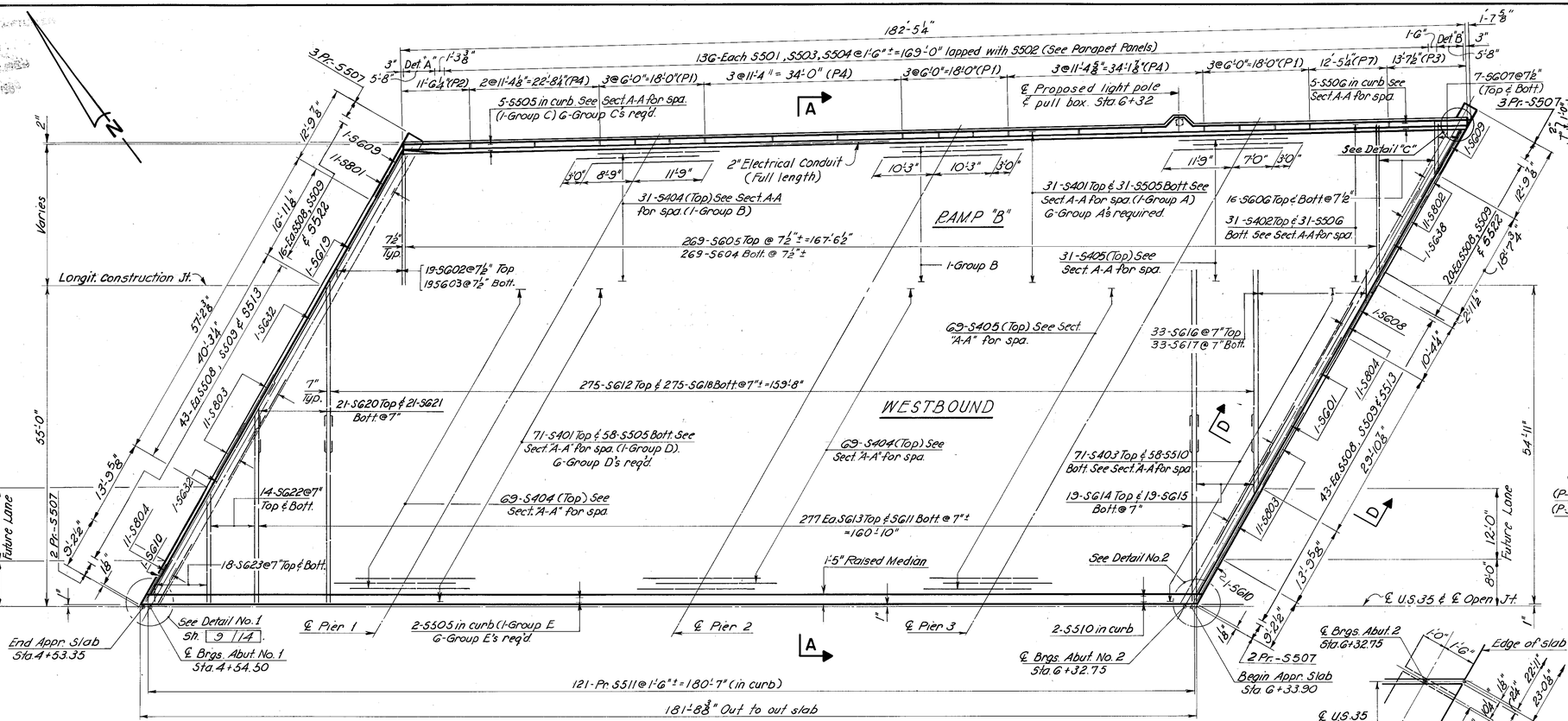
2 - S519 (P-1) E.F.
2 - S520 (P-2 & P-4) E.F.
2 - S521 (P-3, P-5) E.F.
2 - S522 (P-6) E.F.
2 - S500 (P-7) E.F.

5 - S502 @ 18"± = 5'-8" (P-1)
9 - S502 @ 18"± = 11'-0" (P-4)
10 - S502 @ 18"± = 13'-4" (P-5)
8 - S502 @ 18"± = 10'-9" (P-6)
For P-2 & P-3 See Elev. Det "B"
9 - S502 @ 18"± = 12'-0" (P-7)
"L"

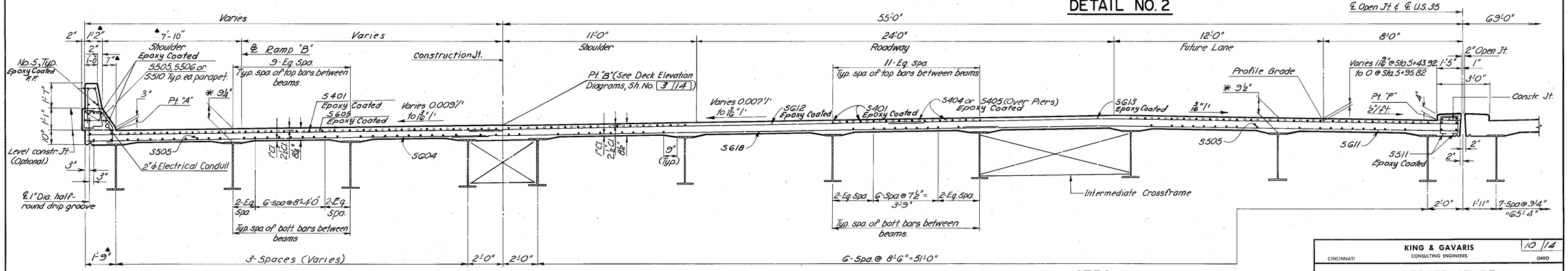
PARAPET PANELS



ELEVATION-DETAIL A & B



DETAIL NO. 2



PLAN

* DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade. The haunch depth will vary to accomodate irregular corrections resulting from vertical curve and transition effects. The dimensions shown apply only at the ℄ of bearings.

SECTION A-A

For location of additional Pull Boxes for under bridge lighting see Sht. 163 | 601
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown
For details of light pole pedestal, see Common Details, Sh. C1 | C2

NOTES

Slab thickness shown includes 1" for monolithic wearing surface.
A haunch width of 9" shall be used for computing quantity of concrete. However, the the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.
For deflection joint details, see Std. Dwg. BR-1-67.
For reinforcing steel list, see shs. 13 | 14 | 14
EF denotes Each Face, NF denotes Near Face, FF denotes Far Face & Bott., bottom.
Work this sheet with sh. 9 | 14
For deck pouring elevations & transition elevations see sh. 3 | 14

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CINCINNATI OHIO

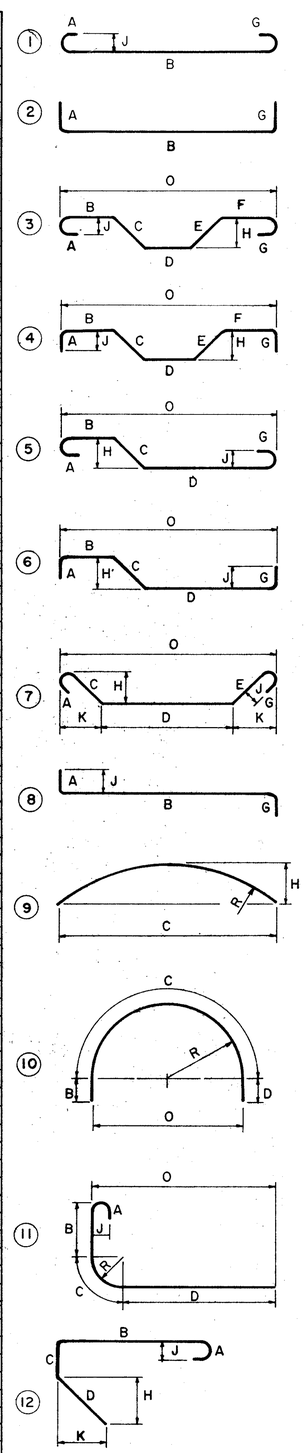
10 | 14

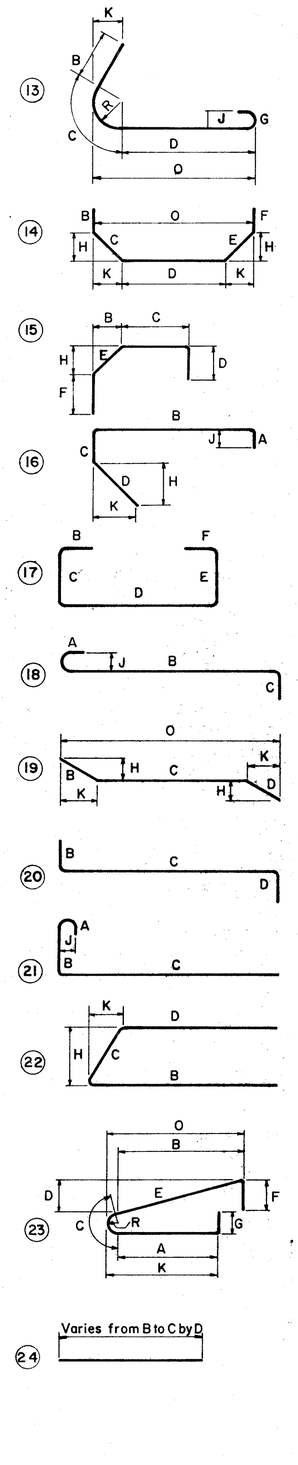
SUPERSTRUCTURE ROADWAY SLAB-2

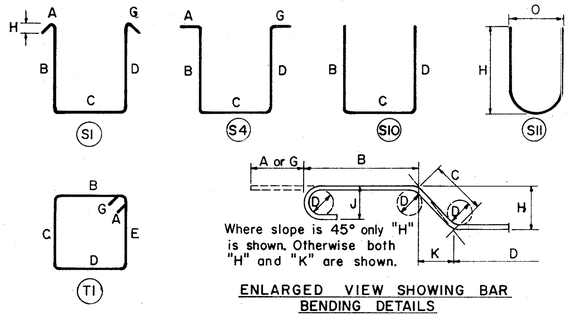
BRIDGE NO. GRE.-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY
STA: 4+53.35 TO STA: 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

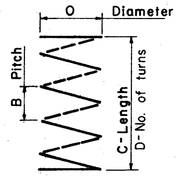
MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 1				Reinforcing Steel in Abutment No. 1 shall have the suffix "A"												
A401	120	5'-5"	434	S10		1'-11"	1'-9"	1'-11"									
A501	95	3'-8"	363	2	9"	2'-2"					9"						
A502	238	4'-2"	1035	19		1'-0"	2'-2"	1'-0"				8½"		8½"	3'-7"		
A503	24	Varies 2'-0" to 5'-2" by 7 @ 3'-4" ea.	89	Str													
A504	4	5'-1"	21	Str													
A505	4	9'-3"	39	19		8'-4"	11"					3'-3"		7'-8"	8'-7"		
A506	8	8'-6"	71	Str													
A507	4	10'-4"	43	Str													
A508	32	24'-0"	801	Str													
A509	24	22'-1"	553	Str													
A510	16	19'-7"	327	Str													
A511	292	6'-5"	1954	S10		2'-1"	2'-6"	2'-1"									
A512	146	14'-1"	2145	S10		6'-1"	2'-2"	6'-1"									
A801	16	24'-8"	1054	Str													
A802	12	22'-7"	724	Str													
A803	8	20'-0"	427	Str													
A1001	12	30'-0"	1549	Str													
A1002	12	23'-6"	1213	Str													
A1003	4	29'-1"	501	Str													
		Total	13,343														
	ABUTMENT NO. 2				Reinforcing Steel in Abutment No. 2 shall have the suffix "B"												
A401	136	5'-5"	492	S10		1'-11"	1'-9"	1'-11"									
A501	95	3'-8"	363	2	9"	2'-2"					9"						
A502	244	4'-2"	1060	19		1'-0"	2'-2"	1'-0"				8½"		8½"	3'-7"		
A503	24	Varies 2'-0" to 5'-2" by 7 @ 3'-4" ea.	90	Str													
A504	4	5'-2"	22	Str													
A505	4	9'-3"	39	19		8'-4"	11"					3'-3"		7'-8"	8'-7"		
A506	8	8'-6"	71	Str													
A507	4	10'-4"	43	Str													
A508	32	23'-7"	787	Str													
A509	24	22'-0"	551	Str													
A510	16	22'-9"	380	Str													
A511	266	6'-5"	1780	S10		2'-1"	2'-6"	2'-1"									
A512	101	14'-11"	1571	S10		6'-6"	2'-2"	6'-6"									
A513	32	12'-11"	431	S10		5'-6"	2'-2"	5'-6"									
A801	16	24'-3"	1036	Str													
A802	12	22'-8"	726	Str													
A803	8	23'-2"	495	Str													
A1001	12	29'-6"	1523	Str													
A1002	12	23'-6"	1213	Str													
A1003	8	19'-6"	671	Str													
		Total	13,344														
	Total	Abutments	26,687														
	PIER NO. 1				Reinforcing Steel in Pier No. 1 shall have the suffix "A"												
SP401	1	15'-4½"	232	SPI		4½"	15'-4½"	44							2'-8"		
SP402	2	15'-9"	597	SPI		4½"	15'-9"	45							2'-8"		
SP403	8	16'-1½"	2442	SPI		4½"	16'-1½"	46							2'-8"		
P501	8	Varies 6'-9" to 3'-9" by 10 @ 2'-8"	69	S10		Varies 2'-2" to 3'-8" by 6 @ 2'-2"	2'-8"	Varies 2'-2" to 3'-8" by 6 @ 2'-2"									
P502	8	5'-7"	47	S10		1'-7"	2'-8"	1'-7"									
P503	164	9'-3"	1668	S10		3'-8"	2'-8"	3'-8"									
P504	6	27'-3"	171	Str													
P505	6	22'-0"	138	Str													
P506	2	27'-11"	58	Str													
P507	95	4'-5"	438	S10		1'-0"	2'-8"	1'-0"									
P601	110	7'-4"	1212	1	8"	6'-0"					8"						
P701	5	28'-1"	287	19		5'-6"	22'-7"					1'-4"		5'-4"	27'-11"		







ENLARGED VIEW SHOWING BAR BENDING DETAILS



NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SPI, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1½ Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 12,13,14 / 14
14. REINFORCING STEEL SAMPLES: Refer to C.M.S. Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

RECEIVED
AUG 27 1965

MICROFILMED
JUN 19 1967

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

534
616

GRE-675 • 5•37
GREENE COUNTY

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

11/14

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0009

U.S. 35 OVER DAYTON XENIA RD.

GREENE COUNTY STA: 4+53.35 TO STA: 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/23/72	

RECEIVED
AUG 29 1969

RECEIVED
JUN 2 8 1972

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

535
616

GRE-675 · 5·37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER	NO. 1.	CONTINUED														
P801	154	6'-5"	2,639	2	1'-2"	5'-3"											
P802	126	18'-11"	6,364	Str													
P803	28	18'-4"	1,371	Str													
P804	66	9'-10"	1,733	1	11"	8'-0"					11"		10"				
P901	5	24'-5"	415	19		5'-3½"	19'-2"					1'-6"		5'-1"	24'-3"		
P902	10	19'-1"	649	Str													
P903	5	24'-9"	421	Str													
P904	8	24'-10"	675	Str													
P905	6	18'-10"	384	Str													
P1101	2	15'-11"	169	20		2'-2"	14'-1"										
P1102	3	32'-8"	521	20		2'-2"	30'-10"										
P1103	3	24'-10"	396	Str													
P1104	3	34'-8"	553	20		3'-8"	31'-4"										
P1105	2	17'-10"	189	20		3'-8"	14'-6"										
P1106	6	20'-9"	661	20		3'-8"	17'-5"										
P1107	4	18'-0"	383	20		3'-8"	14'-8"										
P1108	6	20'-3"	646	Str													
P1109	3	17'-9"	283	20		2'-2"	15'-11"										
P1110	2	16'-11"	180	20		3'-8"	13'-7"										
P1111	2	15'-2"	161	20		2'-2"	13'-4"										
P1112	3	19'-6"	311	20		3'-8"	16'-2"										
		Total	26,523														
		PIER	NO. 2		Reinforcing steel in Pier No.2 shall have the suffix "B"												
SP404	1	14'-3"	272	SP1		4½"	14'-3"	41							2'-8"		
SP405	3	14'-7½"	835	SP1		4½"	14'-7½"	42							2'-8"		
SP406	6	15'-0"	1,711	SP1		4½"	15'-0"	43							2'-8"		
SP408	1	13'-10½"	265	SP1		4½"	13'-10½"	40							2'-8"		
P501	8	Varies 6'-9" to 9'-9" by 1'-0" 2 eq.	69	S10		Varies 2'-2" to 3'-8" by 6" 2 eq.	2'-8"	Varies 2'-2" to 3'-8" by 6" 2 eq.									
P502	8	5'-7"	47	S10		1'-7"	2'-8"	1'-7"									
P503	164	9'-9"	1,668	S10		3'-8"	2'-8"	3'-8"									
P504	6	27'-3"	171	Str													
P505	6	22'-0"	138	Str													
P506	2	29'-3"	61	Str													
P507	95	4'-5"	438	S10		1'-0"	2'-8"	1'-0"									
P601	110	7'-4"	1,212	1	8"	6'-0"					8"						
P701	5	29'-6"	301	19		5'-7"	23'-11"					1'-4"		5'-4"	29'-3"		
P801	154	6'-5"	2,639	2	1'-2"	5'-3"											
P802	126	17'-7"	5,915	Str													
P803	28	16'-10"	1,258	Str													
P804	66	9'-10"	1,733	1	11"	8'-0"					11"		10"				
P901	5	24'-5"	415	19	5'-3½"	19'-2"						1'-6"		5'-1"	24'-3"		
P902	10	19'-1"	649	Str													
P903	5	24'-9"	421	Str													
P904	8	24'-10"	675	Str													
P905	6	18'-10"	384	Str													
P1101	2	15'-11"	169	20		2'-2"	14'-1"										
P1102	3	32'-8"	521	20		2'-2"	30'-10"										
P1103	3	24'-10"	396	Str													
P1104	3	34'-8"	553	20		3'-8"	31'-4"										
P1105	2	17'-10"	189	20		3'-8"	14'-6"										
P1106	6	20'-9"	661	20		3'-8"	17'-5"										
P1107	4	18'-0"	383	20		3'-8"	14'-8"										
P1108	6	20'-3"	646	Str													
P1109	3	18'-5"	294	20		2'-2"	16'-7"										
P1110	2	16'-11"	180	20		3'-8"	13'-7"										
P1111	2	15'-2"	161	20		2'-2"	13'-4"										
P1112	3	20'-3"	323	20		3'-8"	16'-11"										
	Total		25,753														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		PIER	NO. 3	Reinforcing steel in Pier No.3 shall have the suffix "C"													
SP404	3	14'-3"	815	SP1		4½"	14'-3"	41							2'-8"		
SP405	5	14'-7½"	1,392	SP1		4½"	14'-7½"	42							2'-8"		
SP407	1	13'-6"	258	SP1		4½"	13'-6"	39							2'-8"		
SP408	2	13'-10½"	530	SP1		4½"	13'-10½"	40							2'-8"		
P501	8	Varies 6'-9" to 9'-9" by 1'-0" 2 eq.	69	S10		Varies 2'-2" to 3'-8" by 6" 2 eq.	2'-8"	Varies 2'-2" to 3'-8" by 6" 2 eq.									
P502	8	5'-7"	47	S10		1'-7"	2'-8"	1'-7"									
P503	164	9'-9"	1,668	S10		3'-8"	2'-8"	3'-8"									
P504	6	27'-3"	171	Str													
P505	6	22'-0"	138	Str													
P506	2	30'-5"	63	Str													
P507	95	4'-5"	438	S10		1'-0"	2'-8"	1'-0"									
P601	110	7'-4"	1,212	1	8"	6'-10"					8"		6"				
P701	5	30'-8"	313	19		5'-7"	25'-1"					1'-7½"		5'-4"	30'-5"		
P801	154	6'-5"	2,639	2	1'-2"	5'-3"											
P802	126	17'-3"	5,803	Str													
P803	28	16'-6"	1,234	Str													
P804	66	9'-10"	1,733	1	11"	8'-0"					11"		10"				
P901	5	24'-5"	415	19		5'-3½"	19'-2"					1'-6"		5'-1"	24'-3"		
P902	10	19'-1"	649	Str													
P903	5	24'-9"	421	Str													
P904	8	24'-10"	675	Str													
P905	6	18'-10"	384	Str													
P1101	2	15'-11"	169	20		2'-2"	14'-1"										
P1102	3	32'-8"	521	20		2'-2"	30'-10"										
P1103	3	24'-10"	396	Str													
P1104	3	34'-8"	553	20		3'-8"	31'-4"										
P1105	2	17'-10"	189	20		3'-8"	14'-6"										
P1106	6	20'-9"	661	20		3'-8"	17'-5"										
P1107	4	18'-0"	383	20		3'-8"	14'-8"										
P1108	6	20'-3"	646	Str													
P1109	3	18'-11"	302	20		2'-2"	17'-1"										
P1110	2	16'-11"	180	20		3'-8"	13'-7"										
P1111	2	15'-2"	161	20		2'-2"	13'-4"										
P1112	3	20'-11"	333	20		3'-8"	17'-7"										
		Total	25,527														
	Total	Piers	77,803														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 11/14
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 11/14

KING & GAVARIS
CINCINNATI — CONSULTING ENGINEERS — OHIO
12/14

REINFORCING STEEL LIST

BRIDGE NO. GRE.-35-0009

U.S. 35 OVER DAYTON XENIA RD.

GREENE COUNTY

STA: 4+53.35 TO
STA: 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

536/616

GRE-675 · 5·37
GREENE COUNTY

EASTBOUND - SUPERSTRUCTURE

Reinforcing steel in Eastbound Lanes shall have the suffix "A"

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
S401	528	30'0"	10,581	Str													528 Epoxy Coated
S403	88	8'11"	524	Str													88 Epoxy Coated
S404	174	20'6"	2,383	Str													174 Epoxy Coated
S405	87	18'9"	1,090	Str													87 Epoxy Coated
S501	138	2'4"	336	2	9"	10"					9"						
S502	128	5'10"	779	23	2-0 1/8"	2'-2 5/8"	1'-0"	3 1/2"	2'-2 3/8"	9"				2'4"	2'6"	3 7/8"	128 Epoxy Coated
S503	134	2'3"	314	2	9"	1'-6"											
S504	132	3'10"	413	15		8"	10"	9"	10 5/8"	8"		7"					132 Epoxy Coated
S505	480	30'0"	15,207	Str													24 Epoxy Coated
S507	20	6'10"	143	S10		2'6"	2'-1"	2'6"									
S508	102	6'5"	682	S10		2'6"	1'-8"	2'6"									102 Epoxy Coated
S509	102	7'9"	824	17			2'6"	2'-1"	1'-7"	2'0"							
S510	81	10'11"	922	Str													4 Epoxy Coated
S511	242	2'0"	505	S10		1'0"	9"	6"									242 Epoxy Coated
S513	2	2'4"	5	1	7"	1'-9"							5"				2 Epoxy Coated
S514	20	2'10"	59	Str													10 Epoxy Coated
S515	1	2-10	3	15		8"	10"	9"	8 1/2"	8"		2 3/4"					1 Epoxy Coated
S516	1	3'-0"	3	15		8"	10"	9"	11 1/2"	7"		8 1/4"					1 Epoxy Coated
S517	2	3'-0"	6	15		8"	10"	9"	1'-0 1/2"	6"		9 1/2"					2 Epoxy Coated
S519	36	5'-8"	213	Str													18 Epoxy Coated
S520	4	11'-0"	46	Str													2 Epoxy Coated
S521	8	13'4"	111	Str													4 Epoxy Coated
S522	32	10'-9"	359	Str													16 Epoxy Coated
S523	102	5'-5"	576	19		10"	3'-11"	10"				7"		7"	5'-1"		
S601	2	31'-0"	93	Str													2 Epoxy Coated
S605	267	26'-0"	10,427	Str													267 Epoxy Coated
S610	2	8'-10"	27	Str													2 Epoxy Coated
S624	244	30'-8"	11,239	Str													
S625	566	30'-0"	25,504	Str													284 Epoxy Coated
S626	305	16'-7"	7,597	Str													305 Epoxy Coated
S627	265	11'-11"	4743	Str													
S628	21	Varies 5'4" to 26'0" by 1'0"; 1-ea.	494	Str.													21 Epoxy Coated
S629	21	Varies 1'0" to 30'8" by 1'0"; 1-ea.	641	Str													
S630	23	Varies 6'6" to 31'6" by 1'0½"; 1-ea.	691	Str													23 Epoxy Coated
S631	23	Varies 4'0" to 27'0" by 1'0½"; 1-ea.	535	Str													
S632	23	21'3"	734	Str													
S633	20	Varies 12'8" to 21'8" by 1'0"; 2-ea.	519	Str													10 Epoxy Coated
S634	22	Varies 1'9" to 18'2" by 1'0½"; 2-ea.	230	Str													11 Epoxy Coated
S635	2	17'0"	51	Str													2 Epoxy Coated
S636	12	Varies 14'9" to 26'0" by 1'0½"; 1-ea.	367	Str													12 Epoxy Coated
S637	12	Varies 10'0" to 21'-3" by 1'0½"; 1-ea.	282	Str													
S638	40	21'5"	1,287	Str													
S639	23	Varies 4'0" to 26'4" by 1'0½"; 1-ea.	524	Str													23 Epoxy Coated
S640	23	Varies 8'7" to 31'2" by 1'0½"; 1-ea.	684	Str													
S641	36	Varies 1'-9" to 19'4" by 1'0½"; 2-ea.	568	Str													18 Epoxy Coated
S642	16	Varies 19'6" to 26'9" by 1'0½"; 2-ea.	556	Str													8 Epoxy Coated
S643	5	Varies 8'5" to 12'10" by 1'0½"; 1-ea.	81	Str													5 Epoxy Coated
S644	5	Varies 8'10" to 9'8" by 1'0½"; 1-ea.	45	Str													
S803	44	30'-0"	3,524	Str													12 Epoxy Coated
S805	22	27'1"	1,591	Str													6 Epoxy Coated
L 501	4	3'-6"	15	2	9"	2'0"					9"						
L 502	4	8'-3"	34	17			3'-2"	2'-2"	3'-2"								4 Epoxy Coated
L 503	6	7'-6"	47	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L 504	4	3'-2"	13	Str.													
		Total	109,137														

WESTBOUND - SUPERSTRUCTURE

Reinforcing steel in Westbound Lanes shall have the suffix "B"

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
S401	426	30'-0"	8,537	Str.													426 Epoxy Coated
S403	71	8'11"	423	Str.													71 Epoxy Coated
S404	138	20'6"	1,890	Str.													138 Epoxy Coated
S405	69	18'9"	864	Str.													69 Epoxy Coated
S505	360	30'0"	11,264	Str.													12 Epoxy Coated
S507	8	6'10"	57	S10		2'6"	2'-1"	2'6"									
S508	86	6'5"	576	S10		2'6"	1'-8"	2'6"									86 Epoxy Coated
S509	86	7'9"	695	17			2'6"	2'-1"	1'-7"	2'0"							
S510	60	10'11"	683	Str.													2 Epoxy Coated
S511	242	2'0"	505	S10		1'0"	9"	6"									242 Epoxy Coated
S513	86	5'-5"	486	19		10"	3'-11"	10"				7"		7"	5'-1"		
S601	2	24'-9"	74	Str.													
S608	1	15'-0"	23	Str.													2 Epoxy Coated
S610	2	9'-9"	30	Str.													1 Epoxy Coated
S611	552	28'-3"	23,422	Str.													
S612	275	26'-3"	10,843	Str.													275 Epoxy Coated
S613	277	32'6"	13,522	Str.													277 Epoxy Coated
S614	19	Varies 13'10" to 32'6" by 1'0½"; 1-ea.	661	Str.													19 Epoxy Coated
S615	19	Varies 3'6" to 28'3" by 1'0½"; 1-ea.	539	Str.													
S616	33	Varies 3'3" to 35'3" by 1'0"; 1-ea.	954	Str.													33 Epoxy Coated
S617	33	Varies 5'-3" to 37'3" by 1'0"; 1-ea.	1,053	Str.													
S618	275	31'-6"	13,011	Str.													
S620	21	Varies 3'6" to 24'0" by 1'0½"; 1-ea.	438	Str.													21 Epoxy Coated
S621	21	Varies 2'0" to 22'3" by 1'0½"; 1-ea.	572	Str.													
S622	28	Varies 13'8" to 33'0" by 1'0½"; 2-ea.	1,107	Str.													14 Epoxy Coated
S623	36	Varies 1'-9" to 18'9" by 1'0"; 2-ea.	554	Str.													18 Epoxy Coated
S632	2	28'-11"	87	Str.													2 Epoxy Coated
S803	44	30'0"	3,524	Str.													2 Epoxy Coated
S804	22	8'9"	514	Str.													12 Epoxy Coated
		Total	96,908														6 Epoxy Coated

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 11/14
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 11/14

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

13/14

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0009

U.S. 35 OVER DAYTON XENIA RD.

GREENE COUNTY STA: 4+53.35 TO STA: 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

MICROFILMED
AUG 29 1972

MICROFILMED
JUN 3 0 1995

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

537
616

GRE-675 - 5-37
GREENE COUNTY

RAMP "B" - SUPERSTRUCTURE

Reinforcing steel in Ramp "B" shall have the suffix "C"

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
S401	186	30'-0"	3,727	Str.													186 Epoxy Coated
S402	31	11'-2"	231	Str.													31 Epoxy Coated
S404	62	20'-6"	849	Str.													62 Epoxy Coated
S405	31	18'-9"	388	Str.													31 Epoxy Coated
S500	4	12'-0"	50	Str.													2 Epoxy Coated
S501	146	2'-4"	355	2	9"	10"					9"						
S502	136	5'-10"	827	23	2'-0⅛"	2'-2⅛"	1'-0"	3½"	2'-2⅜"	9"				2'-4"	2'-6"	3⅜"	136 Epoxy Coated
S503	142	2'-3"	333	2	9"	1'-6"											
S504	140	3'-0"	438	15		8"	10"	9"	10⅝"	8"		7"					140 Epoxy Coated
S505	216	30'-0"	6,759	Str.													12 Epoxy Coated
S506	36	13'-2"	494	Str.													2 Epoxy Coated
S507	12	6'-10"	86	S10		2'-6"	2'-1"	2'-6"									
S508	36	6'-5"	241	S10		2'-6"	1'-8"	2'-6"									36 Epoxy Coated
S509	36	7'-9"	291	17			2'-6"	2'-1"	1'-7"	2'-0"							
S513	2	2'-4"	5	1	7"	1'-9"							5"				
S514	20	2'-10"	59	Str.													10 Epoxi Coated
S515	1	2'-10"	3	15		8"	10"	9"	8½"	8"		2¾"					1 Epoxy Coated
S516	1	3'-0"	3	15		8"	10"	9"	11⅝"	7"		8¼"					1 Epoxy Coated
S517	2	3'-0"	6	15		8"	10"	9"	12½"	6"		9½"					2 Epoxy Coated
S519	36	5'-8"	213	Str.													18 Epoxy Coated
S520	36	11'-0"	413	Str													18 Epoxy Coated
S521	4	13'-4"	56	Str.													2 Epoxy Coated
S522	36	5'-5"	203	19		10"	3'-11"	10"				7"		7"	5'-1"		
S602	19	Varies 3'-9" to 23'-9" by 1'-3", 1-eq.	892	Str.													19 Epoxy Coated
S603	19	Varies 2'-9" to 22'-9" by 1'-3", 1-eq.	364	Str.													
S604	269	Varies 22'-9" to 26'-6" by 3", 1-eq.	9,949	Str.													
S605	269	Varies 23'-9" to 27'-0" by 3", 1-eq.	10,252	Str.													269 Epoxy Coated
S606	32	Varies 8'-10" to 20'-0" by 1'-3", 2-eq.	693	Str.													16 Epoxy Coated
S607	14	Varies 1'-9" to 8'-0" by 1'-0", 2-eq.	103	Str.													7 Epoxy Coated
S609	2	12'-6"	38	Str.													2 Epoxy Coated
S619	1	18'-7"	28	Str.													1 Epoxy Coated
S638	1	21'-5"	32	Str.													1 Epoxy Coated
S801	11	28'-5"	835	Str.													3 Epoxy Coated
S802	22	18'-9"	1,101	Str.													6 Epoxy Coated
L501	4	3'-6"	15	2	9"	2'-0"					9"						
L502	4	8'-3"	34	17			3'-2"	2'-2"	3'-2"								4 Epoxy Coated
L503	6	7'-6"	47	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L504	4	3'-2"	13	Str.													
		Total	40,426														
Total Superstructure			246,471														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 11/14
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 11/14

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

14/14

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY
STA: 4+53.35 TO STA: 6+33.90

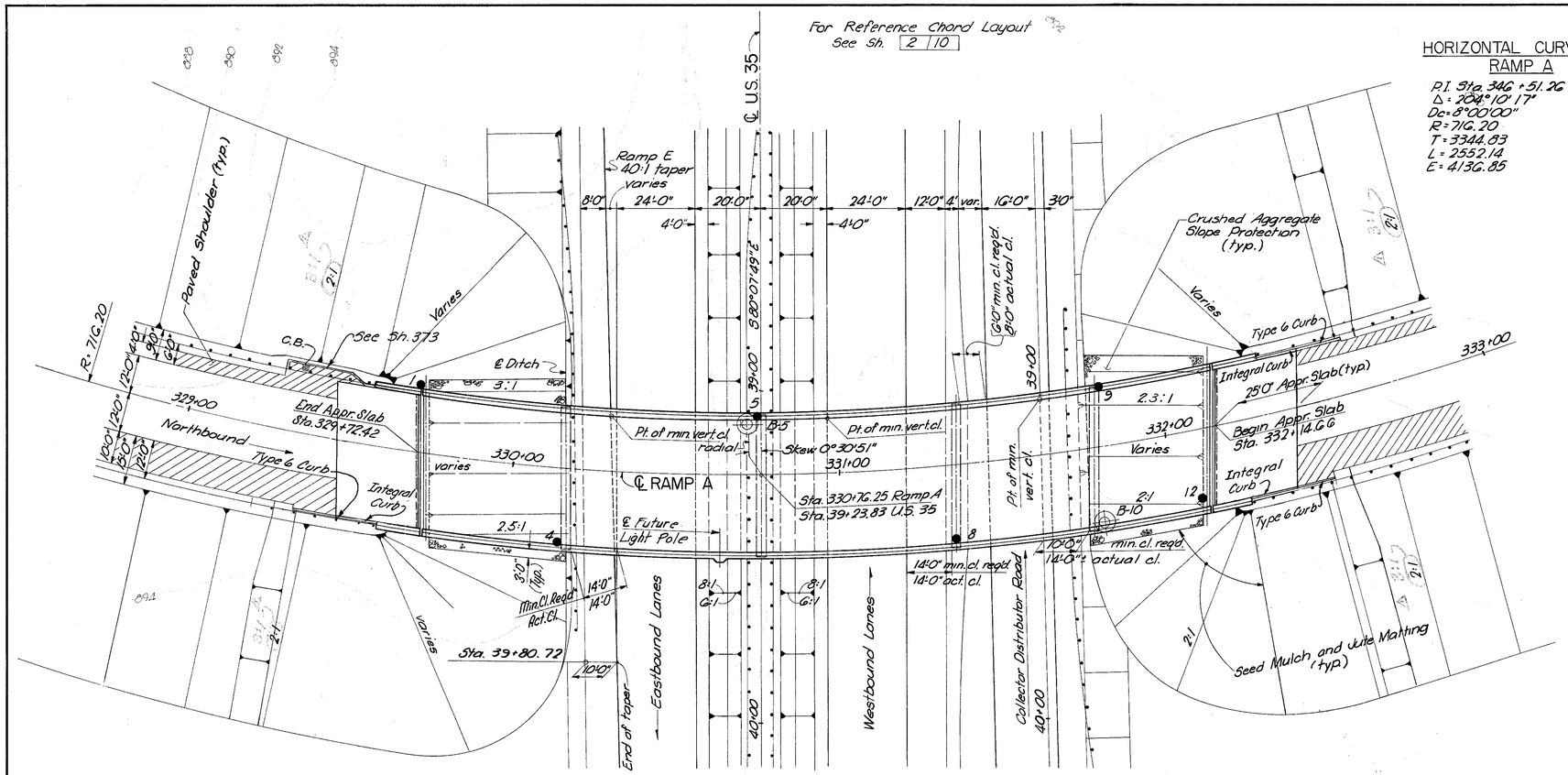
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/28/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

538
616

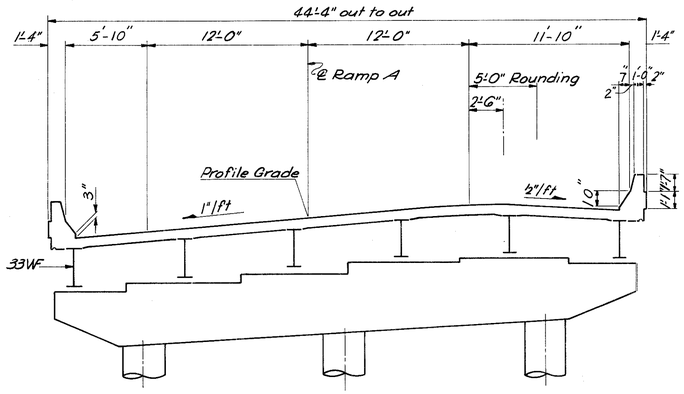
GRE-675 - 5 - 37
GREENE COUNTY

MICROFILMED
JUN 19 1985



HORIZONTAL CURVE DATA
RAMP A

P.I. Sta. 346+51.26
Δ = 20°40'17"
Dc = 8°00'00"
R = 716.20
T = 3344.83
L = 2552.14
E = 413G.85

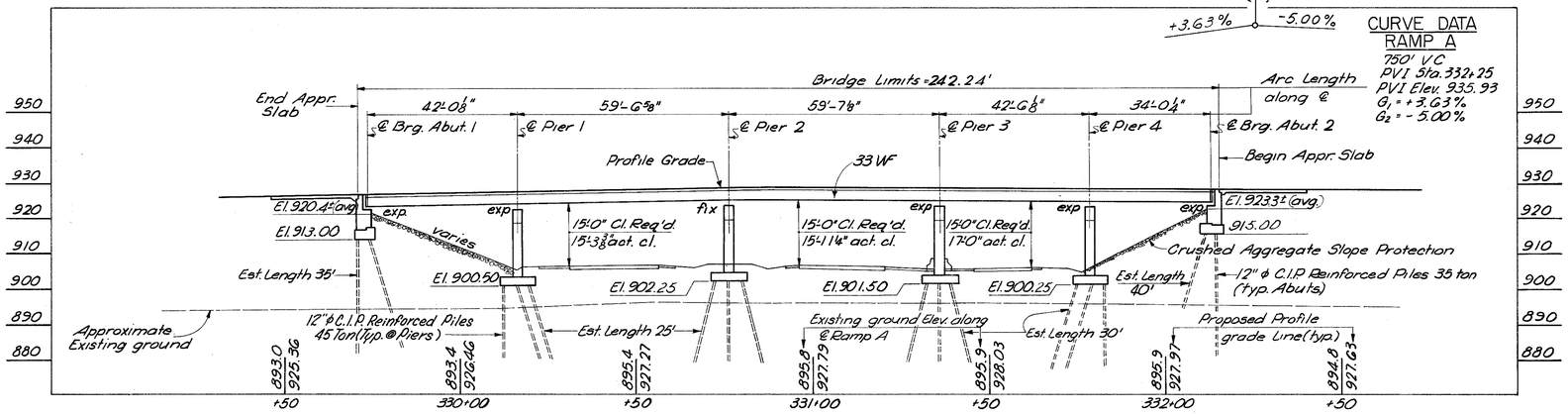


SECTION THRU BRIDGE

LEGEND

- Drive sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

PLAN



PROFILE ON CENTER LINE RAMP A

DESIGN YEAR TRAFFIC
1989 ADT:

U.S. 35	69,380
Ramp A	10,110
Coll.-Dist.	5,040

Note:
Earthwork limits shown are schematic
Actual slopes shall conform to Plan
Cross-Sections.

PROPOSED STRUCTURE

TYPE: Continuous steel beam with reinforced concrete deck and substructure.
SPANS: 42'-0⅛", 59'-6⅝", 59'-7⅛", 42'-6⅛", 34'-0¼"
ROADWAY: 41'-8" face to face of parapet
LOADING: H S 20-44 & Alternate Military
SKEW: Varies 0°30'-51" Lt. Fwd. at ℄ U.S. 35
WEARING SURFACE: monolithic concrete
APPROACH SLABS: 250" Long (Std. AS-1-72)
ALIGNMENT: Left Curve, Dc = 8°00'00"

KING & GAVARIS — CONSULTING ENGINEERS
CINCINNATI — OHIO
1 / 10

SITE PLAN

BRIDGE NO. GRE-35-0074
RELOCATED U.S. 35 UNDER RAMP A
GREENE COUNTY
STA. 329+72.42 TO STA. 332+14.66

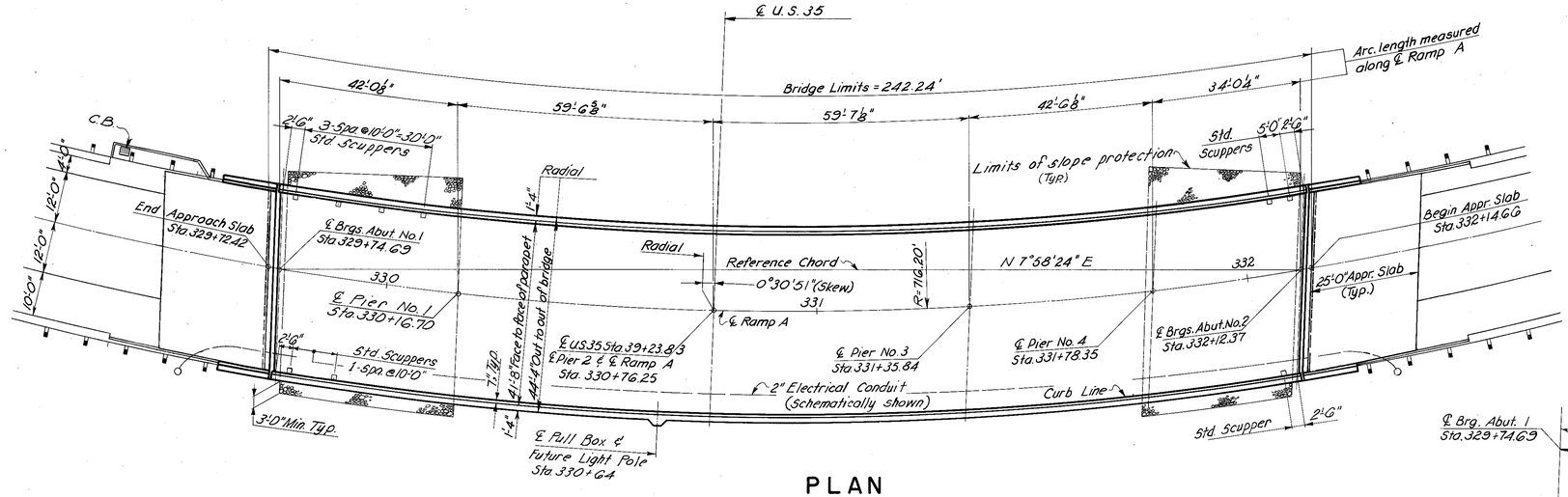
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	J.C.L.	A.W.	S.A.	

Δ Revised 10-12-82

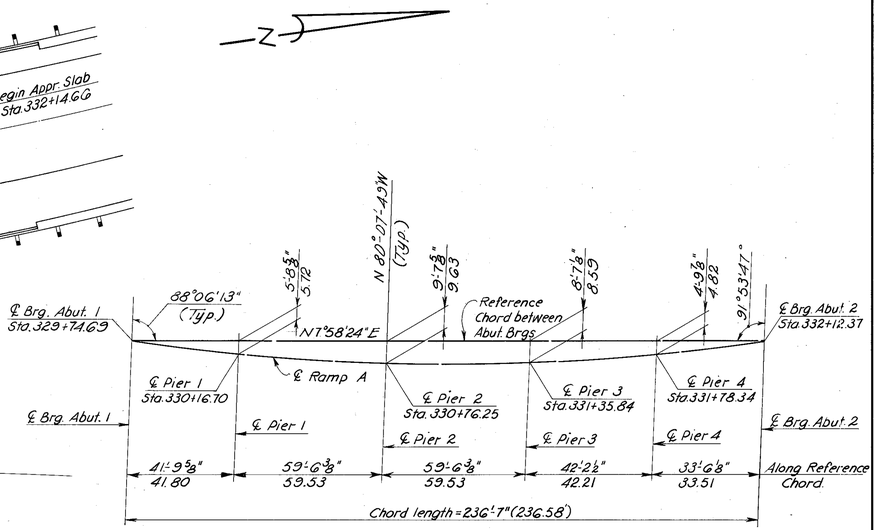
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

539
616

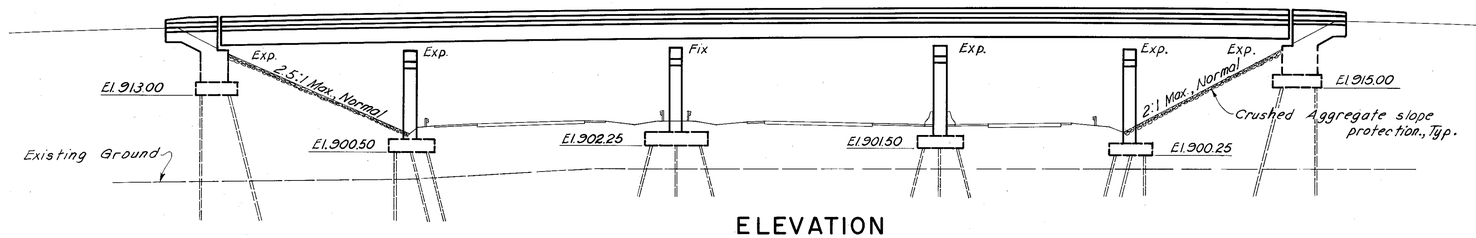
GRE-675 - 5.37
GREENE COUNTY



PLAN



REFERENCE CHORD LAYOUT



ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
503	429	Cu. Yd.	Unclassified Excavation		258	171	
505	Lump	Sum	Test Pile				Lump
507	3,180	Lin. Ft.	12" Cast-in-place reinforced concrete piles.		1200	1,980	
509	91,500	Lb.	Reinforcing Steel	45,900	14,100	31,500	
511	116	Cu. Yd.	Class "C" Concrete, Abutments above Footings		116		
511	123	Cu. Yd.	Class "C" Concrete, Piers above Footings			123	
511	345	Cu. Yd.	Class "S" Concrete, Superstructure using shrink. comp. cem. 701.08	345			
511	167	Cu. Yd.	Class "C" Concrete, Footings		74	93	
513	229,500	Lb.	Structural Steel (AISC Category I)	229,500			
514	229,500	Lb.	Field Painting of new Structural Steel, System A	229,500			
503	Lump	Sum	Cofferdams, Cribs and Sheeting				Lump
518	57	Cu. Yd.	Porous Backfill		57		
518	82	Lin. Ft.	6" Perforated Helical C.S.P. (707.01)		82		
518	104	Lin. Ft.	6" Non-Perforated Helical C.S.P. including specials (707.01)		104		
518	9	Each	Scuppers including supports	9			
523	3	Hour	Dynamic Pile Tests				3
601	500	Sq. Yd.	Crushed Aggregate slope protection				500
625			See sheet 149 (616) For Lighting Summary				
Special	44,200	Lb.	Epoxy coated Reinforcing Steel (See Proposal Note)	43,400	800		

ESTIMATED QUANTITIES CHECKED BY & DATE J.R.G./S.A. 3/10/72 REVISED: S.A. 9/14/72

GENERAL NOTES

EMBANKMENT CONSTRUCTION: THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS AND FOR PIERS NO. 1 AND 4.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS AND 45 TONS PER PILE FOR THE PIERS.

FOR ADDITIONAL NOTES SEE COMMON DETAILS SHEET C1/C2

THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED $3\frac{3}{8}$ INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

NOTE:

For Scupper Details, see Std. Dwg. SD-1-69
Scuppers shall be lengthened as required to clear beam flanges.
All centerline bearings are parallel
Scupper spacing measured along face of parapet.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

2/10

GENERAL PLAN, ELEVATION, GENERAL NOTES, AND ESTIMATED QUANTITIES

BRIDGE NO. GRE.-35-0074

RELOCATED U.S. 35 UNDER RAMP A

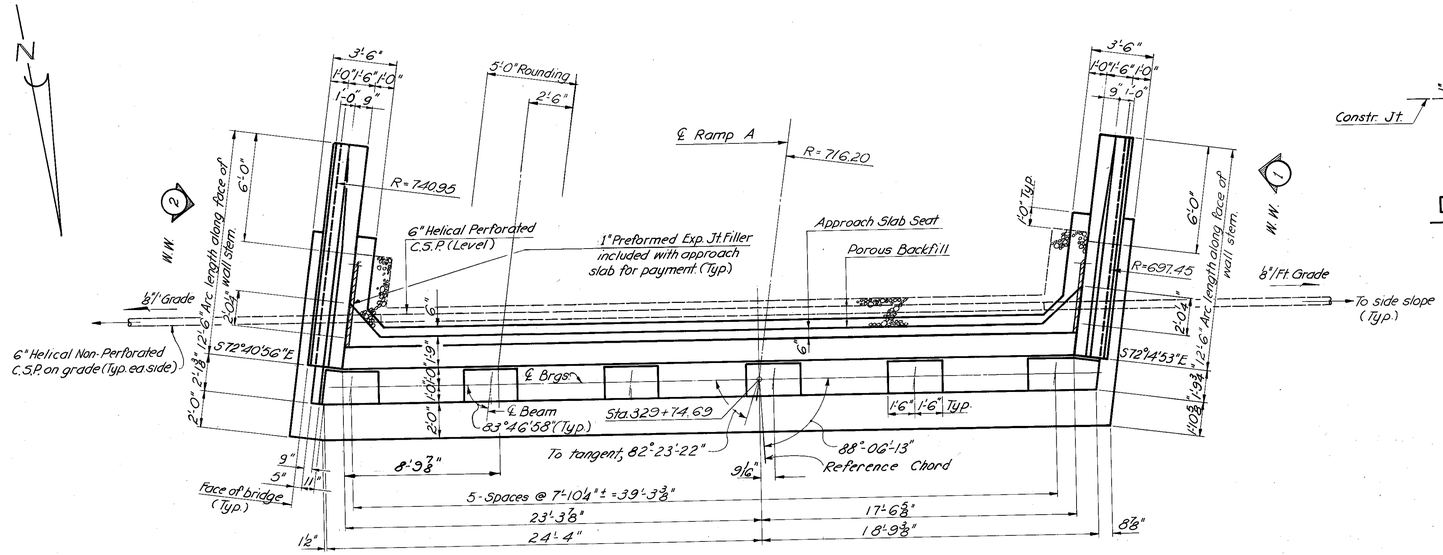
GREENE COUNTY STA. 329+72.42 TO STA. 332+14.66

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

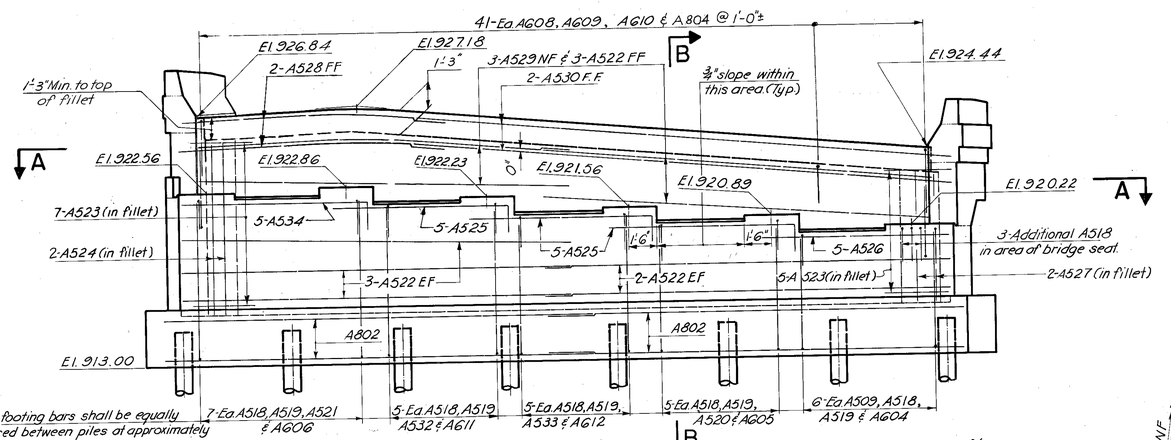
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

540 / 616

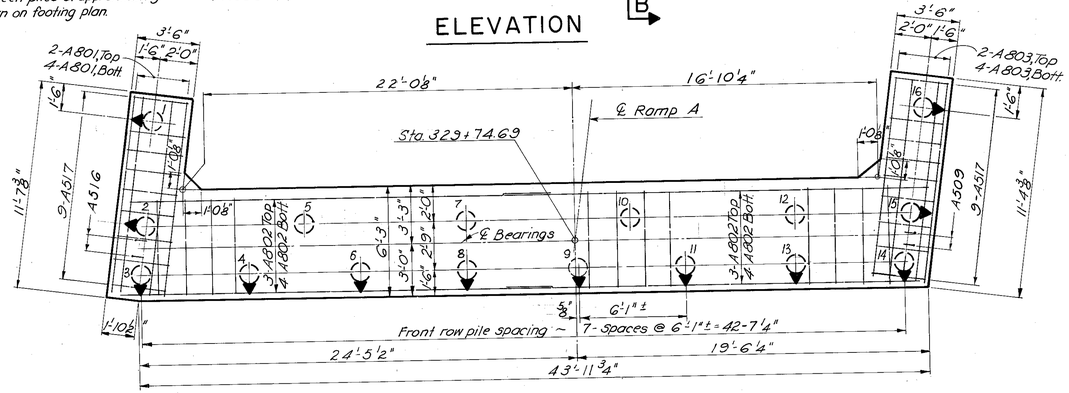
GRE-675 - 5-37
GREENE COUNTY.



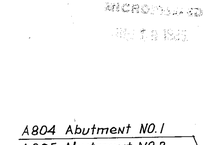
PLAN



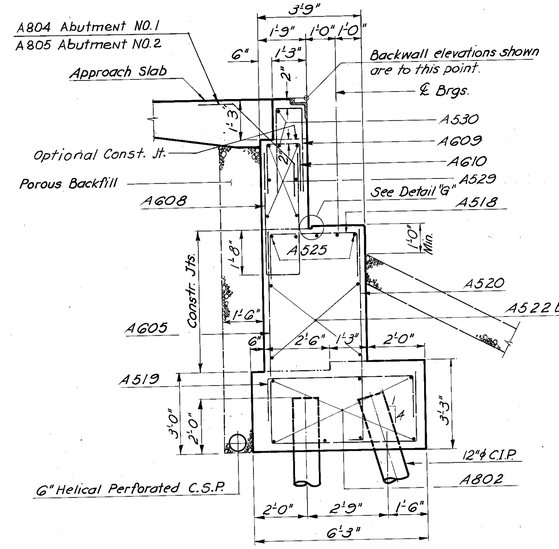
ELEVATION



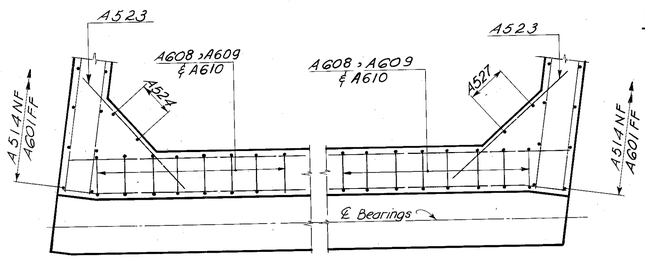
FOOTING PLAN



DETAIL "G"



SECTION B-B



SECTION A-A

NOTES

For reinforcing steel list see shs. 8, 9 / 10
Work this sheet with sh. 4 / 10.
Porous Backfill, within the limits shown shall extend upward to the plane of the subgrade within the roadway area and laterally to the wingwalls.
Only that portion of the C.S.P. located in the Porous Backfill shall be perforated.
For termination of C.S.P. at slopes, see Common Details Sht. C1 / C2

Reinforcing steel in Abutments No. 1 & 2 shall have the suffix A & B respectively.

All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

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CONSULTING ENGINEERS
CINCINNATI OHIO

3 / 10

ABUTMENT NO. 1

BRIDGE NO. GRE.-35-0074
RELOCATED U.S. 35 UNDER RAMP A
GREENE COUNTY STA. 329+72.42 TO STA. 332+14.66

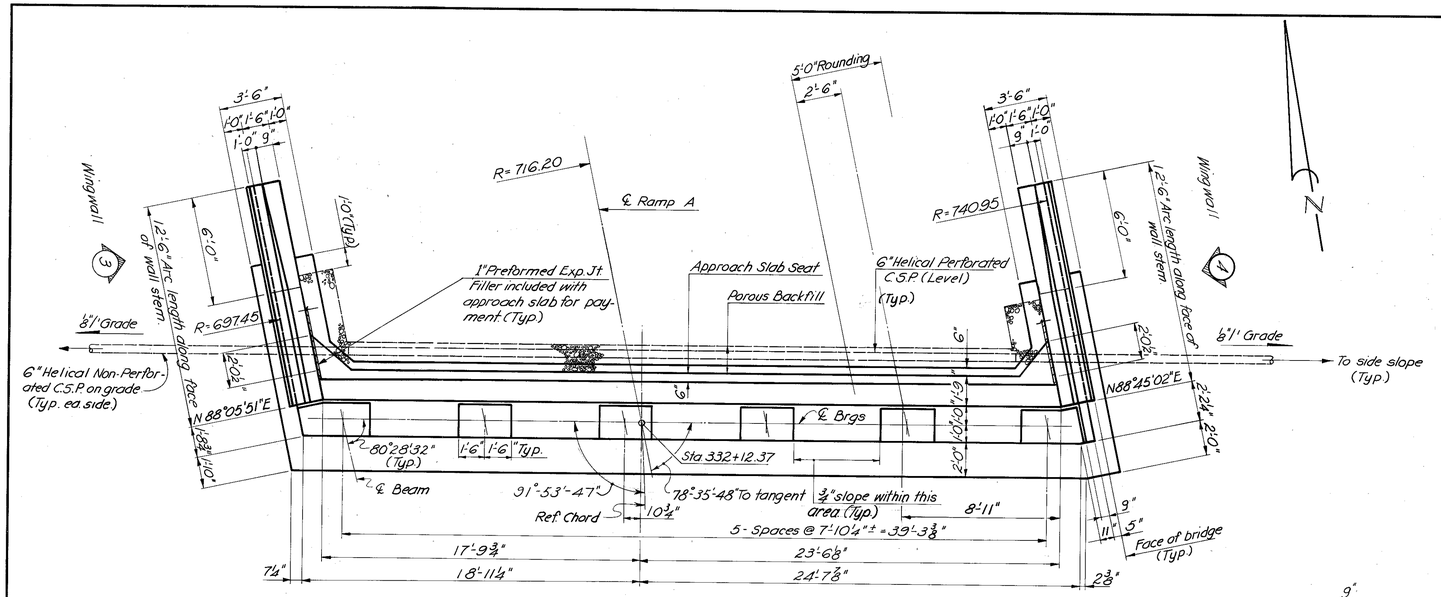
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.	SA	9/24/72	

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

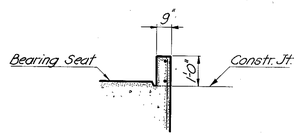
541
616

GRE-675 · 5·37

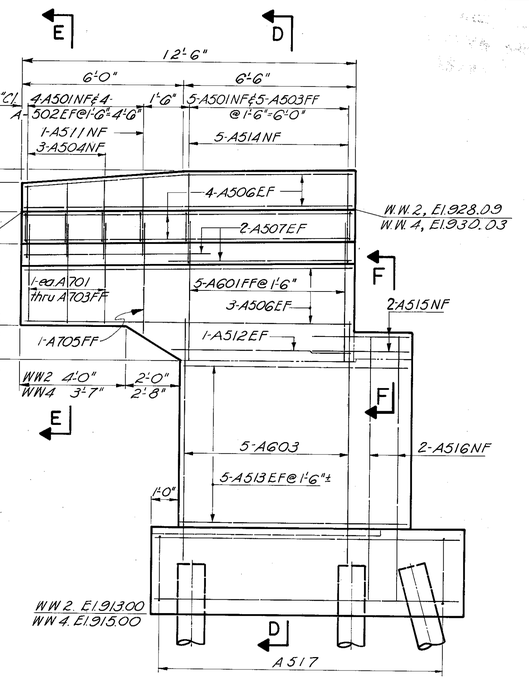
GREENE COUNTY



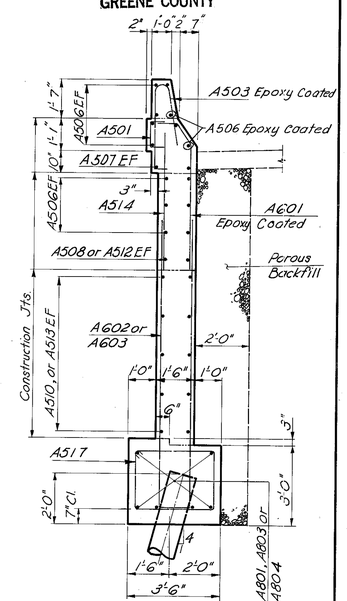
PLAN



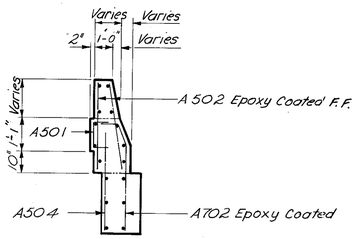
SECTION F-F



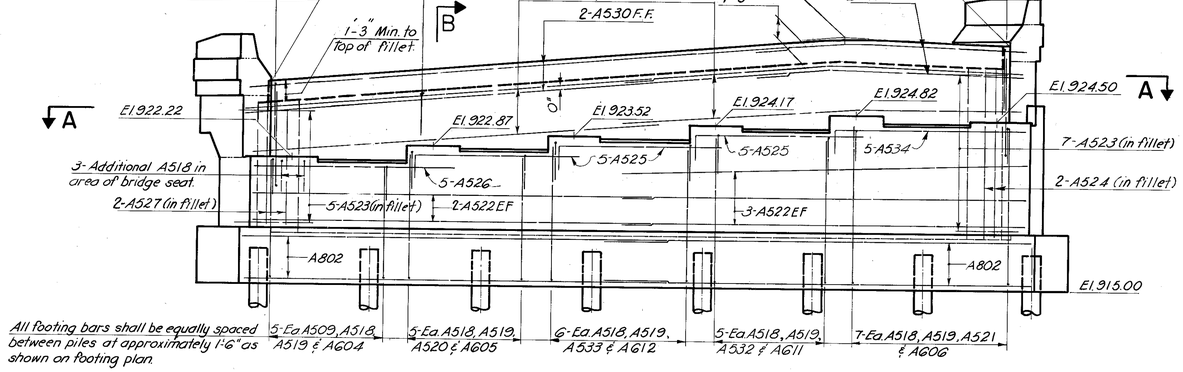
WINGWALL NO. 2 SHOWN
WINGWALL NO. 4 OPPOSITE HAND



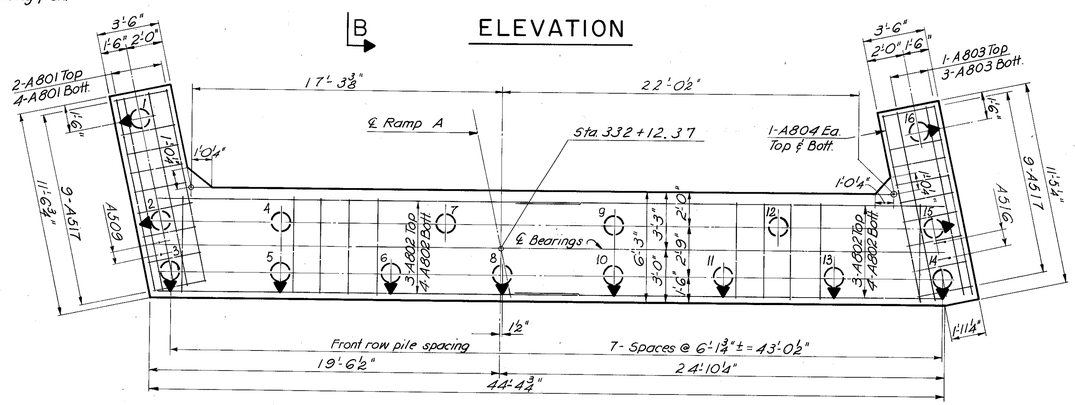
SECTION D-D



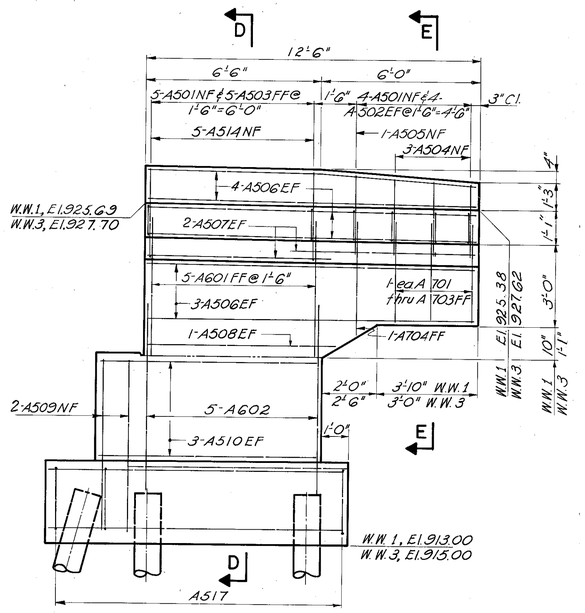
SECTION E-E



ELEVATION



FOOTING PLAN



WINGWALL NO 1 SHOWN
WINGWALL NO.3 OPPOSITE HAND

WINGWALL ELEVATIONS

NOTES:

Work this sheet with sh. 3 / 10
For Notes see sh. 3 / 10

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CINCINNATI OHIO

4 / 10

ABUTMENT NO. 2

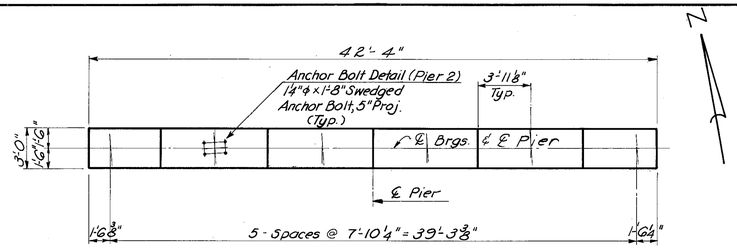
BRIDGE NO. GRE.- 35-0074
RELOCATED U.S. 35 UNDER RAMP A
GREENE COUNTY STA. 329+72.42 TO STA. 332+14.66

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.	S.A.	9/25/72	

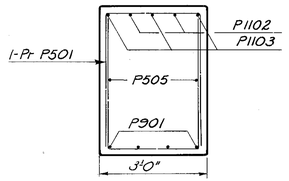
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

542
6/6

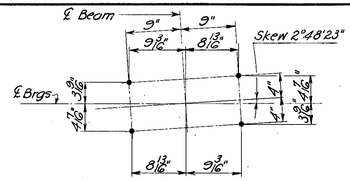
GRE-675 • 5•37
GREENE COUNTY



CAP PLAN

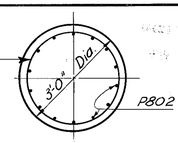


SECTION B-B

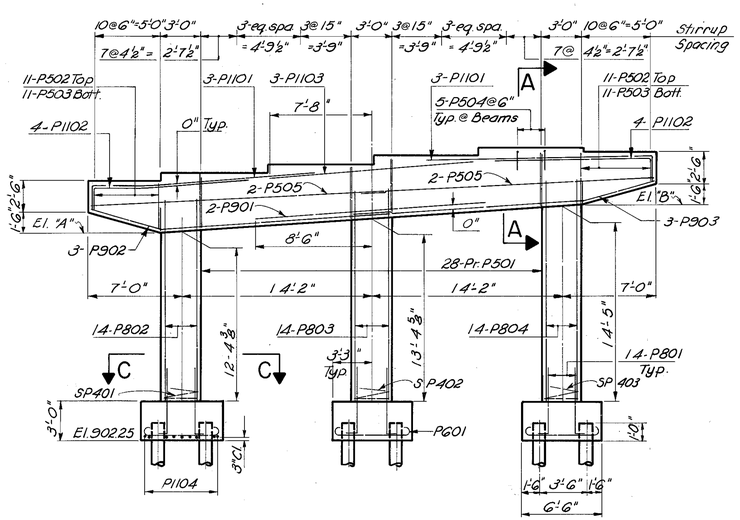


ANCHOR BOLT LAYOUT

PIER 2

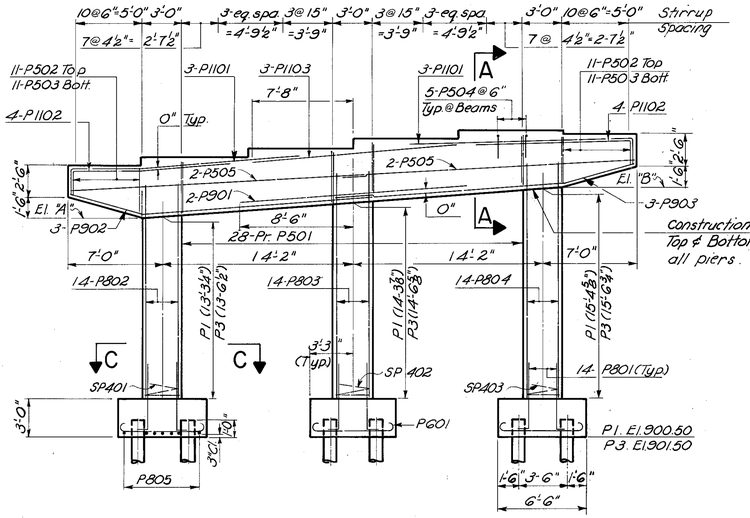


SECTION C-C



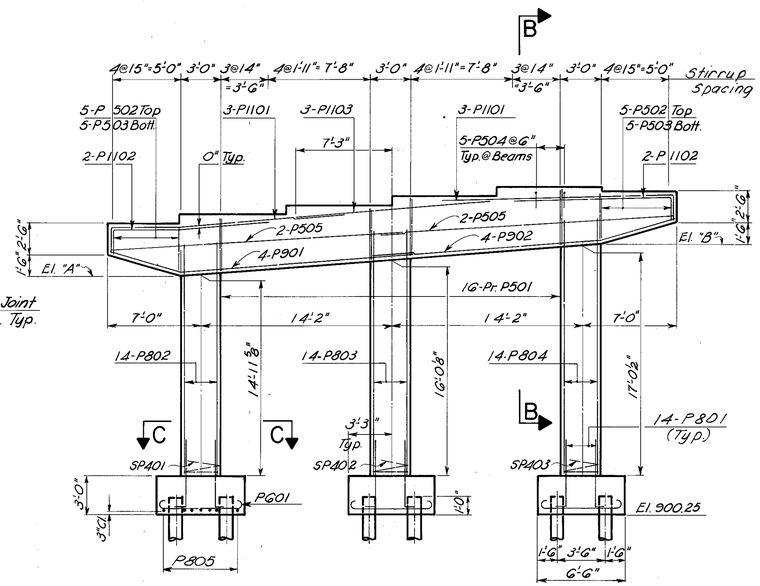
ELEVATION

PIER 2



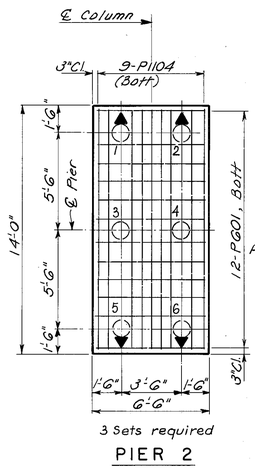
ELEVATION

PIERS 1 & 3



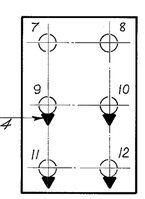
ELEVATION

PIER 4



3 Sets required

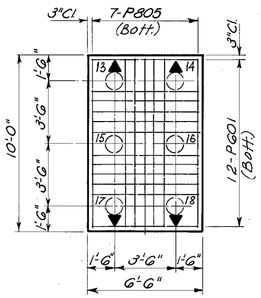
PIER 2



6 Sets required

PIERS 1 & 4

SEE PIER 3 FOR REINFORCING STEEL & DIMENSIONS

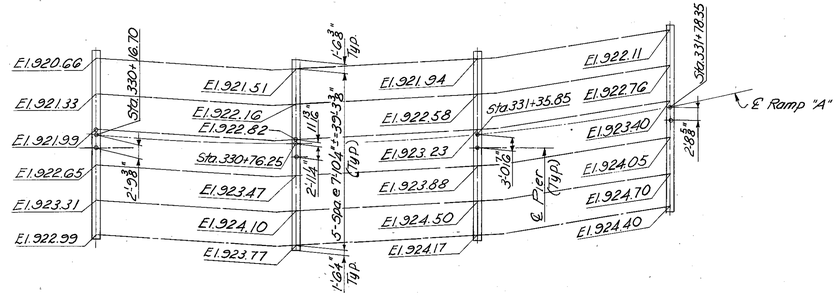


3 Sets required

PIER 3

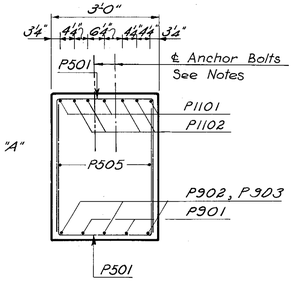
FOOTING PLANS

PIER NO. 1	PIER NO. 2	PIER NO. 3	PIER NO. 4
El. "A" 916.66	El. "A" 917.51	El. "A" 917.94	El. "A" 918.11
El. "B" 918.99	El. "B" 919.77	El. "B" 920.17	El. "B" 920.40
Batter 4 Piles →			← Batter 4 Piles



KEY PLAN

Showing Bearing Seat Elevations & Layout Dimensions



SECTION A-A

NOTES:

Bridge seat reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.

For reinforcing steel list see shs. 9 | 10.

Bott. denotes bottom face.

For Reference Chord Layout & Pier Skew Angles see Sh. 2 | 10

Bearing Anchors: At the option of the contractor, bearing anchors (or formed holes) located and supported by templates, may be cast in place.

All splices and dowels will be lapped min. 30 bar dia. Unless otherwise shown.

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CINCINNATI — OHIO

5 | 10

PIERS 1, 2, 3 & 4

BRIDGE NO. GRE.- 35-0074

RELOCATED U.S. 35 UNDER RAMP A

GREENE COUNTY

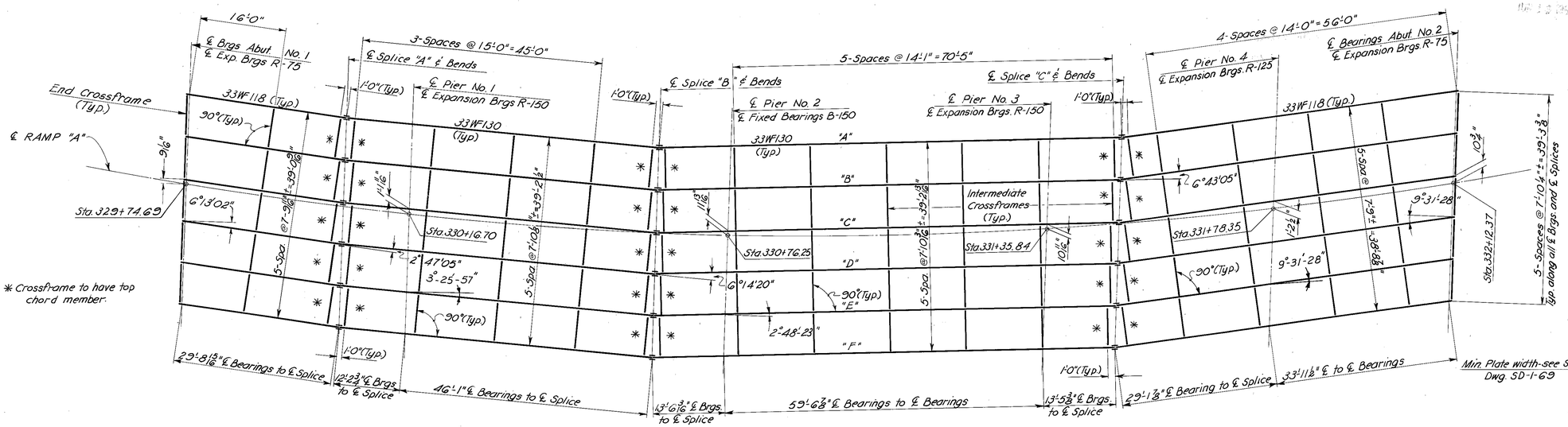
STA. 329+72.42 TO STA. 332+14.66

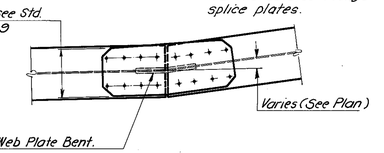
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

543
616

GRE-675 • 5•37
GREENE COUNTY





NOTE: All splice material shall be CVN.

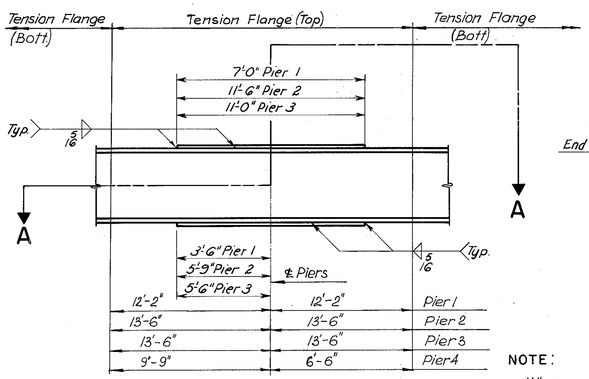
PLAN AT SPLICE

See Std. Dwg. SD-1-69 for Splice Dimensions ℄ Bolt hole spa.

Welded forming attachments shall not be used in the tension areas of the top flange.

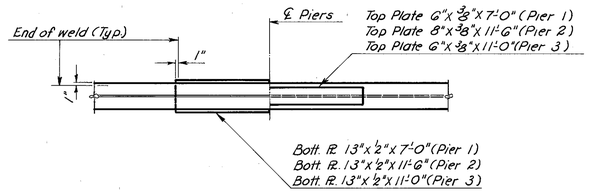
All beams, top moment plates and splice plates shall be CVN.

FRAMING PLAN



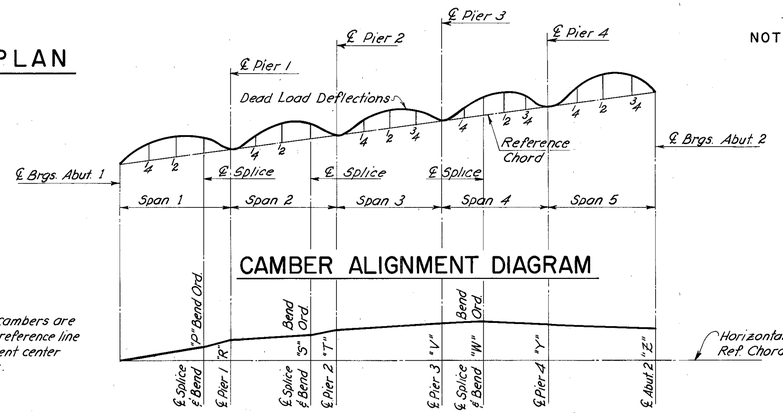
TYPICAL ELEVATION

(OVER PIERS)



SECTION A-A

NOTE: Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.



NOTE: Dead load cambers are measured from reference line connecting adjacent center lines of bearings.

BLOCKING ORDINATES

BEAMS	A ORD.	B ORD.	C ORD.	D ORD.	E ORD.	F ORD.
SPLICE "A" - P	7 5/16"	7 1/4"	7 1/16"	7 1/8"	7 1/16"	6 15/16"
PIER NO.1 - R	9 1/16"	9 9/16"	9 1/16"	9 3/8"	9 1/16"	9 9/16"
SPLICE B - S	1'-6 1/16"	1'-6 1/2"	1'-6 1/4"	1'-6"	1'-5 1/16"	1'-4 13/16"
PIER NO.2 - T	1'-7 3/8"	1'-7 5/8"	1'-7 7/16"	1'-7 1/16"	1'-7 1/16"	1'-6 7/8"
PIER NO.3 - V	2'-1"	2'-0 11/16"	2'-0 7/16"	2'-0 1/8"	2'-0 1/8"	1'-11 7/8"
SPLICE C - W	2'-2 5/8"	2'-1 3/8"	2'-1 9/16"	2'-1 5/16"	2'-0 5/8"	1'-11 13/16"
PIER NO.4 - Y	2'-1 1/8"	2'-0 5/8"	2'-0 7/16"	2'-0 3/16"	2'-0 9/16"	2'-0 7/16"
ABUT NO.2 - Z	2'-0"	1'-11 3/4"	1'-11 1/2"	1'-11 1/4"	1'-11 1/16"	1'-11 5/16"

NOTE: Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

BLOCKING ORDINATES

DEFLECTION AND CAMBER (INCHES)

DESCRIPTION	INTERIOR BEAMS B THRU E																EXTERIOR BEAMS A & F														
	SPAN 1			SPAN 2			SPAN 3			SPAN 4			SPAN 5				SPAN 1			SPAN 2			SPAN 3			SPAN 4			SPAN 5		
	¼ Pt.	½ Pt.	℄ Spl.	¼ Pt.	½ Pt.	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	¼ Pt.	℄ Spl.	½ Pt.	¾ Pt.	¼ Pt.	½ Pt.	¾ Pt.	¼ Pt.	½ Pt.	℄ Spl.	¼ Pt.	½ Pt.	℄ Spl.	¼ Pt.	½ Pt.	¾ Pt.	¼ Pt.	℄ Spl.	½ Pt.	¾ Pt.	¼ Pt.	½ Pt.	¾ Pt.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	1/16"	0"	0"	1/16"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	1/16"	0"	0"	1/16"	0"	0"	0"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	1/8"	1/8"	1/16"	3/16"	5/16"	1/8"	3/16"	5/16"	3/16"	0"	0"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/8"	3/16"	1/16"	1/8"	1/4"	3/16"	0"	0"	0"	0"	1/16"	1/16"	1/16"
ADJUSTMENT REQ'D FOR HORIZ. & VERT. CURVE BEAMS "E" & "F" ONLY	1/16"	1/16"	0"	1/16"	1/16"	0"	1/16"	3/16"	3/16"	0"	0"	1/4"	3/8"	0"	0	0	3/16"	3/16"	0"	1/16"	1/2"	0"	3/8"	3/8"	1/16"	0"	0"	1/8"	3/16"	3/16"	5/16"	3/16"
REQUIRED SHOP CAMBER BEAMS "A", "B", "C" & "D"	1/8"	1/8"	1/16"	3/16"	3/8"	1/8"	3/16"	3/8"	3/16"	0"	0"	0"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/8"	1/4"	1/16"	1/8"	5/16"	3/16"	0"	0"	0"	0"	1/16"	1/16"	1/16"
REQUIRED SHOP CAMBER BEAMS "E" & "F"	5/16"	5/16"	1/16"	5/8"	7/8"	1/8"	1/2"	3/4"	9/16"	0	0	1/4"	3/8"	1/16"	1/16"	1/16"	1/4"	1/4"	1/16"	9/16"	3/4"	1/16"	3/4"	1 1/16"	3/8"	0"	0"	1/8"	1/8"	1/4"	3/8"	1/4"

NOTES:

For intermediate crossframe details see Common Details Sht 2 of 2
For location of scuppers see Shs. 2 / 10
End dams to be included with Item 513, Structural Steel, for payment.
For details of fixed bearing B-150 and expansion bearings R-75, R-125 and R-150, see Std. Dwg. RB-1-55.
For typical Transverse Section, see Section A-A, Sh. 7 / 10
For End Crossframe details see Std. Dwg. SD-1-69

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
6 / 10

STEEL FRAMING PLAN

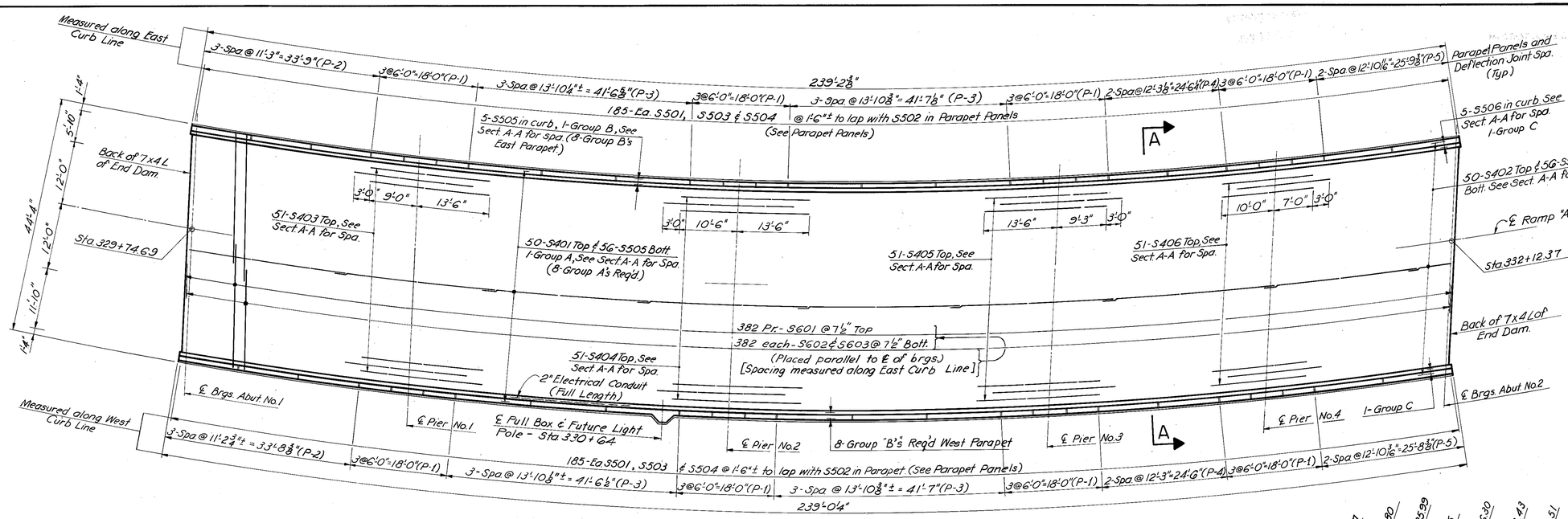
BRIDGE NO. GRE.-35-0074
RELOCATED U.S. 35 UNDER RAMP A
GREENE COUNTY
STA. 329+72.42 TO STA. 332+14.66

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	[illegible]	9/21/82	4-27-82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

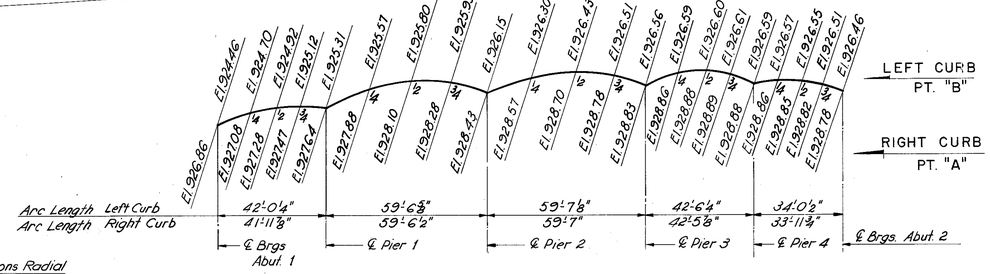
544
616

GRE-675 • 5•37
GREENE COUNTY



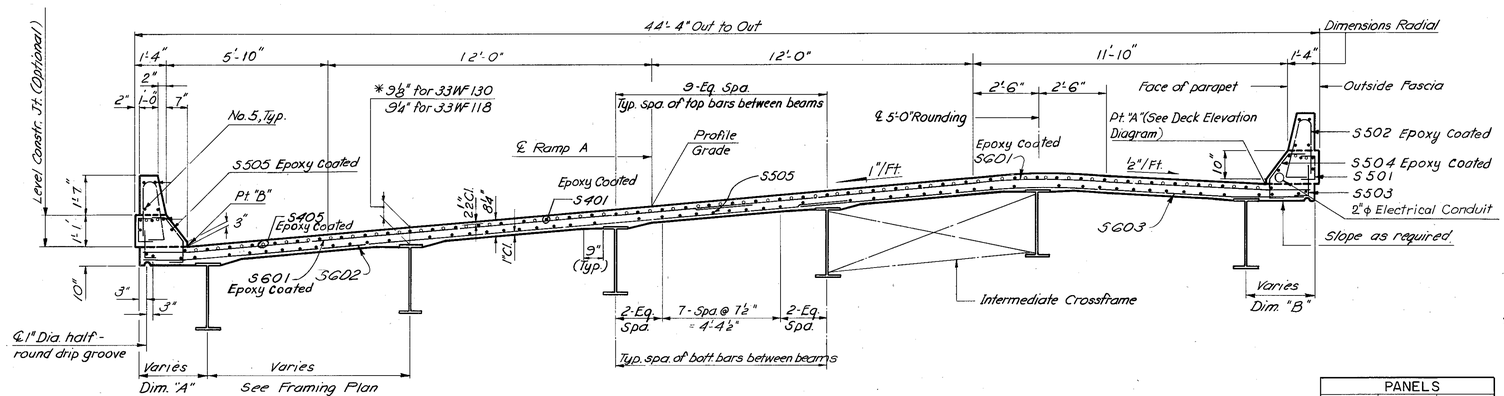
* Deck Slab Depth:
The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per Sect. 511.19 of the Construction and Material Specifications. This dimension will vary to accomodate horizontal & vertical curve requirements. The dimensions shown apply at the ℄ of bearings only.

PLAN



DECK ELEVATION DIAGRAM

AT CURB PT'S A & B
BEFORE CONCRETE IS PLACED



SECTION A-A

PANELS		
No. Req'd	Mark	L
24	P1	6'-0"
6	P2	11'-3" ±
12	P3	13'-10 1/2" ±
4	P4	12'-3"
4	P5	12'-10 3/8"

Epoxy Coated F.F.

2-S507 (P1)
2-S508 (P2)
2-S509 (P3)
2-S510 (P4)
2-S511 (P5)

E.F.

5-S502 @ 18" ± = 5'-8" (P1)
9-S502 @ 18" ± = 10'-11" (P2)
10-S502 @ 18" = 13'-6" (P3)
9-S502 @ 18" ± = 11'-11" (P4)
10-S502 @ 18" ± = 12'-6" (P5)
"L"

PARAPET PANELS

† SLAB OVERHANG DIMENSIONS

	℄ Brg. Abut. No. 1	℄ Span No. 1	℄ Brg. Pier No. 1	℄ Span No. 2	℄ Brg. Pier No. 2	℄ Span No. 3	℄ Brg. Pier No. 3	℄ Span No. 4	℄ Brg. Pier No. 4	℄ Span No. 5	℄ Brg. Abut. No. 2
Dimension "A"	2'-8 3/16"	2'-5 1/16"	2'-2 3/16"	2'-4 1/4"	2'-3 5/8"	1'-9 1/16"	2'-5 5/8"	2'-10 5/8"	2'-3 3/8"	2'-3 5/8"	2'-8 3/4"
Dimension "B"	2'-4 9/16"	2'-6 1/8"	2'-7 5/8"	2'-4 11/16"	2'-5"	3'-0 3/16"	2'-5"	2'-2"	2'-10 5/8"	3'-0 1/4"	2'-9 1/8"

† Dimensions measured radially from ℄ stringer web to edge of slab

NOTES:

For reinforcing steel list see shs. 10 | 10
For details of end dams, included with Item 513 (Structure Steel) for payment, see Std. Dwg. SD-1-69 & Sh. 413.
Slab thickness shown includes 1" for monolithic wearing surface.
A haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
For details of deflection joint, see Std. Dwg. BR-1-67.
For Light Standard Pedestal, see common Details sh. C1 | C2
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO
7 | 10

SUPERSTRUCTURE
ROADWAY SLAB
BRIDGE NO. GRE-35-0074
RELOCATED U.S.35 UNDER RAMP A
GREENE COUNTY
STA. 329+72.42 TO
STA. 332+14.66

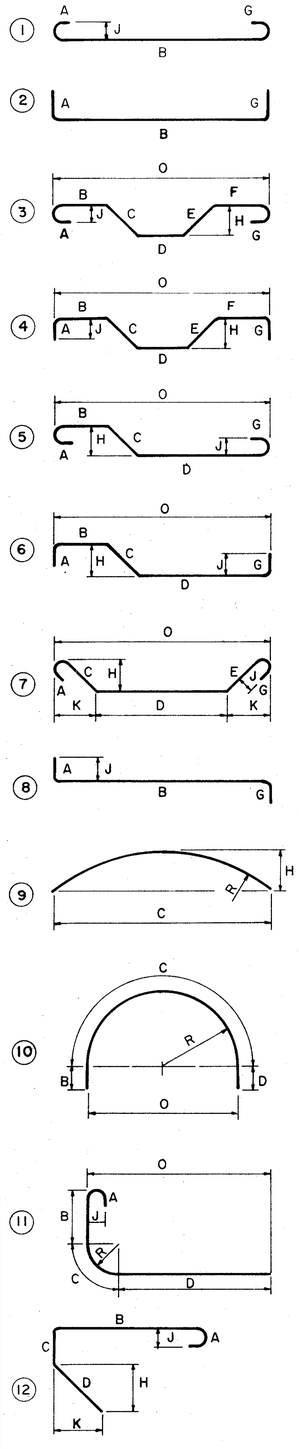
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.	S.A.	9/21/72	

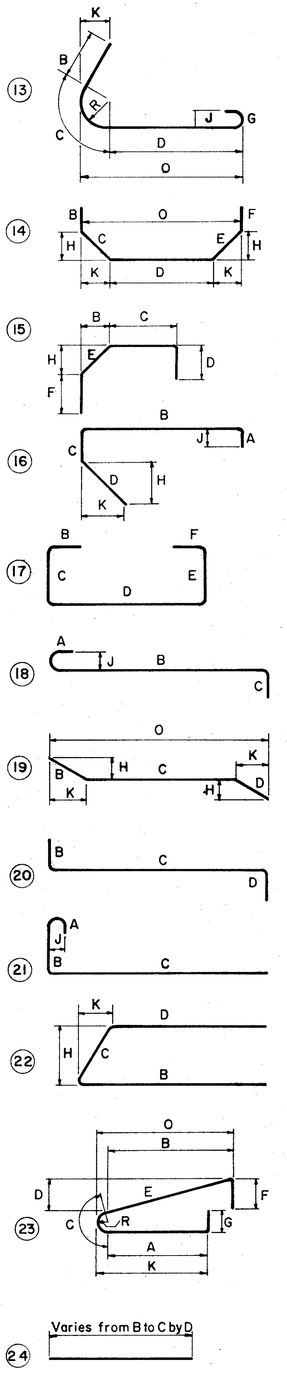
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

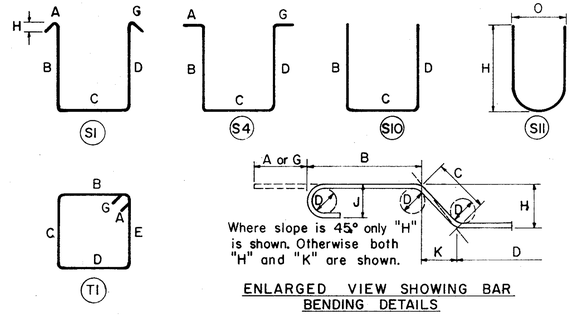
GRE-675 · 5·37
GREENE COUNTY

545/616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 1					Reinforcing steel in Abutment No. 1 shall have the suffix "A"												
A501	18	2'-4"	44	2	9"	10"					9"						
A502	16	2'-10"	47	Str													8 Epoxy Coated
A503	10	6'-7"	69	23	2'-10⅛"	2'-1⅛"	1'-0"	3½"	2'-1⅜"		9"			3'-2"	2'-5"	3⅜"	10 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-0"	4	Str													8 Epoxy Coated
A506	28	12'-2"	355	Str													
A507	8	6'-11"	58	Str													
A508	2	6'-10"	14	Str													
A509	8	7'-5"	62	2	9"	6'-8"											
A510	6	8'-2"	51	Str													
A511	1	3'-11"	4	Str													
A512	2	6'-8"	14	Str													
A513	10	8'-3"	86	Str													
A514	10	5'-1"	53	Str													
A515	2	3'-6"	7	Str													
A516	2	10'-10"	23	2	9"	10'-1"											
A517	18	10'-9"	202	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A518	46	6'-4"	304	S10		1'-7"	3'-5"	1'-7"									
A519	28	8'-3"	241	S10		1'-7"	5'-4"	1'-7"									
A520	5	8'-1"	42	2	9"	7'-4"											
A521	7	9'-9"	71	2	9"	9'-0"											
A522	16	22'-6"	375	Str													
A523	12	6'-0"	75	Str													
A524	2	9'-4"	19	Str													
A525	15	10'-7"	166	20		1'-7"	9'-3"										
A526	5	10'-2"	53	Str													
A527	2	6'-11"	14	Str													
A528	2	14'-10"	31	Str													
A529	6	22'-7"	141	19		1'-4"	21'-3"					2"		1'-4"	22'-7"		
A530	2	30'-0"	63	Str													
A532	5	9'-5"	49	2	9"	8'-8"											
A533	5	8'-9"	46	2	9"	8'-0"											
A534	5	12'-2"	63	20		1'-7"	10'-9"										
A601	10	5'-11"	89	15		9"	4'-4"		11½"	9"		7"					10 Epoxy Coated
A602	5	17'-10"	134	S10		8'-6"	1'-2"	8'-6"									
A603	5	22'-6	169	S10		10'-10"	1'-2"	10'-10"									
A604	6	14'-6"	131	S10		6'-9"	5'-4"	2'-9"									
A605	5	15'-2"	114	S10		7'-5"	5'-4"	2'-9"									
A606	7	16'-10"	177	S10		9'-1"	5'-4"	2'-9"									
A608	41	10'-1"	621	S10		4'-6"	1'-5"	4'-6"									
A609	41	8'-1"	498	S10		3'-9"	11"	3'-9"									
A610	41	6'-7"	405	S10		2'-9"	1'-5"	2'-9"									
A611	5	16'-6"	124	S10		8'-9"	5'-4"	2'-9"									
A612	5	15'-10"	119	S10		8'-1"	5'-4"	2'-9"									
A701	2	4'-9"	19	1	10"	3'-11"							7"				2 Epoxy Coated
A702	2	4'-6"	18	15		9"	3'-1"		9½"	9"		3"					2 Epoxy Coated
A703	2	4'-8"	19	15		9"	3'-2"		10½"	9"		5"					2 Epoxy Coated
A704	1	5'-2"	11	15		9"	3'-7"		11½"	9"		7"					1 Epoxy Coated
A705	1	5'-1"	10	15		9"	3'-6"		11½"	9"		7"					1 Epoxy Coated
A801	6	11'-1"	178	Str													
A802	14	23'-6"	878	Str													
A803	6	10'-10"	174	Str													
A804	41	6'-2"	675	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	7,432														



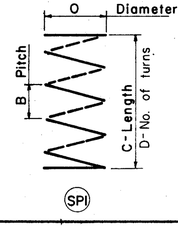




ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SPI, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1½ Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SP1 and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 9/10/10
14. REINFORCING STEEL SAMPLES: Refer to C.M.S. Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.



SP1

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

8/10

REINFORCING STEEL LIST

BRIDGE NO. GRE - 35 - 0074

RELOCATED U.S. 35 UNDER RAMP A

GREENE COUNTY STA: 329+72.42 TO STA: 332+14.66

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	RE-ISSUED
	A.W.		S.A.		7/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

546/616

GRE-675 • 5.37
GREENE COUNTY

ABUTMENT NO. 2

Reinforcing steel in Abutment No. 2 shall have the suffix "B"

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
A501	18	2'-4"	44	2	9"	10"					9"						
A502	16	2'-10"	47	Str													8 Epoxy Coated
A503	10	6'-7"	69	23	2'-10⅛"	2'-1⅛"	1'-0"	3½"	2'-1⅜"		9"			3'-2"	2'-5"	3'-7"	10 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-5"	5	Str													
A506	28	12'-2"	355	Str													8 Epoxy Coated
A507	8	6'-11"	58	Str													
A508	2	7'-2"	15	Str													
A509	7	7'-5"	54	2	9"	6'-8"											
A510	6	8'-5"	53	Str													
A511	1	4'-2"	4	Str													
A512	2	6'-5"	13	Str													
A513	10	8'-1"	84	Str													
A514	10	5'-1"	53	Str													
A515	2	3'-7"	7	Str													
A516	2	10'-9"	23	2	9"	10'-0"											
A517	18	10'-9"	202	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A518	46	6'-4"	304	S10		1'-7"	3'-5"	1'-7"									
A519	28	8'-3"	241	S10		1'-7"	5'-4"	1'-7"									
A520	5	8'-0"	42	2	9"	7'-3"											
A521	7	9'-9"	71	2	9"	9'-0"											
A522	16	22'-10"	381	Str													
A523	12	5'-6"	69	Str													
A524	2	9'-3"	19	Str													
A525	15	10'-7"	166	20		1'-7"	9'-3"										
A526	5	10'-1"	53	Str													
A527	2	6'-11"	14	Str													
A528	2	14'-10"	31	Str													
A529	6	22'-10"	143	19		1'-4"	21'-6"					3¼"		1'-3½"	22'-9½"		
A530	2	30'-0"	63	Str													
A532	5	9'-5"	49	2	9"	8'-8"											
A533	6	8'-8"	54	2	9"	7'-11"											
A534	5	11'-1"	58	20		1'-7"	9'-8"										
A601	10	5'-11"	89	15		9"	4'-4"		11½"	9"		7"					10 Epoxy Coated
A602	5	17'-10"	134	S10		8'-6"	1'-2"	8'-6"									
A603	5	22'-4"	168	S10		10'-9"	1'-2"	10'-9"									
A604	5	14'-6"	109	S10		6'-9"	5'-4"	2'-9"									
A605	5	15'-1"	113	S10		7'-4"	5'-4"	2'-9"									
A606	7	16'-9"	176	S10		9'-0"	5'-4"	2'-9"									
A608	41	10'-1"	621	S10		4'-6"	1'-5"	4'-6"									
A609	41	8'-1"	498	S10		3'-9"	11"	3'-9"									
A610	41	6'-7"	405	S10		2'-9"	1'-5"	2'-9"									
A611	5	16'-5"	123	S10		8'-8"	5'-4"	2'-9"									
A612	6	15'-9"	142	S10		8'-0"	5'-4"	2'-9"									
A701	2	4'-9"	19	1	10"	3'-11"							7"				2 Epoxy Coated
A702	2	4'-7"	18	15		9"	3'-1"		9½"	9"		3"					2 Epoxy Coated
A703	2	4'-9"	19	15		9"	3'-2"		10½"	9"		5"					2 Epoxy Coated
A704	1	5'-8"	11	15		9"	4'-0"		11½"	9"		7"					1 Epoxy Coated
A705	1	5'-5"	11	15		9"	3'-9"		11½"	9"		7"					1 Epoxy Coated
A801	6	11'-1"	178	Str													
A802	14	24'-0"	897	Str													
A803	4	10'-11"	117	Str													
A804	2	10'-7"	57	Str													
A805	41	6'-2"	675	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	7,447														
Total Abutments			14,879														

PIER NO. 1

Reinforcing steel in Pier No. 1 shall have the suffix "A"

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SP401	1	13'-1½"	252	SP1		4½"	13'-1½"	38							2'-8"		
SP402	1	14'-3"	272	SP1		4½"	14'-3"	41							2'-8"		
SP403	1	15'-0"	285	SP1		4½"	15'-0"	43							2'-8"		
P501	56	9'-9"	569	S10		3'-8"	2'-8"	3'-8"									
P502	22	Varies 6'-9" to 9'-9" by 338; 2-60.	189	S10		Varies 2'-2" to 3'-8" by 1/4"	2'-8"	Varies 2'-2" to 3'-8" by 1/4"									
P503	22	5'-7"	128	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	Str													
P601	36	7'-4"	397	1	8"	6'-0"						8"		6"			
P801	42	6'-2"	692	2	11"	5'-3"											
P802	14	15'-11"	595	Str													
P803	14	16'-11"	632	Str													
P804	14	18'-0"	673	Str													
P805	21	11'-4"	654	1	11"	9'-6"						11"		10"			
P901	2	17'-0"	116	Str													
P902	3	22'-7"	230	19		5'-6"	17'-1½"					1'-10"		5'-2"	22'-3½"		
P903	3	22'-7"	230	19		5'-6"	17'-1½"					1'-0⅝"		5'-5"	22'-6½"		
P1101	6	18'-8"	595	20		2'-2"	16'-10"										
P1102	8	13'-8"	581	20		2'-2"	11'-10"										
P1103	3	15'-4"	244	Str													
		Total	7,563														

PIER NO. 2

Reinforcing steel in Pier No. 2 shall have the suffix "B"

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SP401	1	12'-4½"	238	SP1		4½"	12'-4½"	36							2'-8"		
SP402	1	13'-1½"	252	SP1		4½"	13'-1½"	38							2'-8"		
SP403	1	14'-3"	272	SP1		4½"	14'-3"	41							2'-8"		
P501	56	9'-9"	569	S10		3'-8"	2'-8"	3'-8"									
P502	22	Varies 6'-9" to 9'-9" by 338; 2-60.	189	S10		Varies 2'-2" to 3'-8" by 1/4"	2'-8"	Varies 2'-2" to 3'-8" by 1/4"									
P503	22	5'-7"	128	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	Str													
P601	36	7'-4"	397	1	8"	6'-0"						8"		6"			
P801	42	6'-2"	692	2	11"	5'-3"											
P802	14	15'-10"	561	Str													
P803	14	16'-0"	598	Str													
P804	14	17'-0"	635	Str													
P901	2	17'-0"	116	Str													
P902	3	22'-7"	230	19		5'-6"	17'-1½"					1'-10"		5'-2"	22'-3½"		
P903	3	22'-7"	230	19		5'-6"	17'-1½"					1'-0⅝"		5'-5"	22'-6½"		

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 8/10
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 8/10

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO

9/10

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0074

RELOCATED U.S. 35 UNDER RAMP A

GREENE COUNTY

STA: 329+72.42 TO STA: 332+14.66

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

547
616

GRE-675 • 5•37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER NO. 2 CONTINUED																
P1101	6	18'-8"	595	20		2'-2"	16'-10"										
P1102	8	13'-8"	581	20		2'-2"	11'-10"										
P1103	3	15'-4"	244	Str													
P1104	27	16'-8"	2,391	1	1'-7"	13'-6"					1'-7"		1'-5"				
		Total	9,147														
	PIER NO. 3				Reinforcing steel in Pier No.3 shall have the suffix "C"												
SP401	1	13'-6"	258	SP1		4½"	13'-6"	39							2'-8"		
SP402	1	14'-3"	272	SP1		4½"	14'-3"	41							2'-8"		
SP403	1	15'-4½"	292	SP1		4½"	15'-4½"	44							2'-8"		
P501	56	9'-9"	569	S10		3'-8"	2'-8"	3'-8"									
P502	22	Varies 6'-9" to 9'-9" by 3'-8" 2 eq.	189	S10		Varies 2'-2" to 3'-8" by 1'-4½"	2'-8"	Varies 2'-2" to 3'-8" by 1'-4½"									
P503	22	5'-7"	128	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	Str													
P601	36	7'-4"	397	1	8"	6'-0"					8"		6"				
P801	42	6'-5"	692	2	1'-2"	5'-3"											
P802	14	16'-2"	604	Str													
P803	14	17'-2"	642	Str													
P804	14	18'-2"	679	Str													
P805	21	11'-4"	654	1	11"	9'-6"					11"		10"				
P901	2	17'-0"	116	Str													
P902	3	22'-7"	230	19		5'-6"	17'-1½"					1'-10"		5'-2"	22'-3½"		
P903	3	22'-7"	230	19		5'-6"	17'-1½"					1'-0½"		5'-5"	22'-6½"		
P1101	6	18'-8"	595	20		2'-2"	16'-10"										
P1102	8	13'-8"	581	20		2'-2"	11'-10"										
P1103	3	15'-4"	244	Str													
		Total	7,601														
	PIER NO. 4				Reinforcing steel in Pier No. 4 shall have the suffix "D"												
SP401	1	14'-7½"	278	SP1		4½"	14'-7½"	42							2'-8"		
SP402	1	15'-9"	299	SP1		4½"	15'-9"	45							2'-8"		
SP403	1	16'-10½"	319	SP1		4½"	16'-10½"	48							2'-8"		
P501	32	9'-9"	325	S10		3'-8"	2'-8"	3'-8"									
P502	10	Varies 6'-9" to 9'-9" by 9" 2 eq.	86	S10		Varies 2'-2" to 3'-8" by 4½"	2'-8"	Varies 2'-2" to 3'-8" by 4½"									
P503	10	5'-7"	58	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	Str													
P601	36	7'-4"	397	1	8"	6'-0"					8"		6"				
P801	42	6'-2"	692	2	11"	5'-3"											
P802	14	17'-7"	657	Str													
P803	14	18'-8"	698	Str													
P804	14	19'-8"	735	Str													
P805	21	11'-4"	654	1	11"	9'-6"					11"		10"				
P301	4	22'-7"	307	19		5'-6"	17'-1½"					1'-10"		5'-2"	22'-3½"		
P902	4	22'-7"	307	19		5'-6"	17'-1½"					1'-0½"		5'-5"	22'-6½"		
P1101	6	19'-1"	608	20		2'-2"	17'-3"										
P1102	4	13'-8"	290	20		2'-2"	11'-10"										
P1103	3	14'-6"	231	Str													
		Total	7,170														
	Total	Piers	31,481														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	SUPERSTRUCTURE																
S401	400	30'-0"	8,016	Str													400 Epoxy Coated
S402	50	8'-6"	284	Str													50 Epoxy Coated
S403	51	22'-6"	767	Str													51 Epoxy Coated
S404	51	24'-0"	818	Str													51 Epoxy Coated
S405	51	22'-9"	775	Str													51 Epoxy Coated
S406	51	17'-0"	579	Str													51 Epoxy Coated
S501	370	2'-4"	903	2	9"	10"										9"	
S502	370	5'-10"	2,251	23	2'-0⅛"	2'-2⅛"	1'-0"	3½"	2'-2⅜"	9"				2'-4"	2'-6"	3⅞"	370 Epoxy Coated
S503	370	2'-5"	933	2	9"	1'-8"											
S504	370	3'-0"	1,158	15		9"	9"	9"	11½"	9"		7"					370 Epoxy Coated
S505	528	30'-0"	16,521	Str													32 Epoxy Coated
S506	66	11'-6"	792	Str													4 Epoxy Coated
S507	96	5'-8"	567	Str													48 Epoxy Coated
S508	24	10'-11"	273	Str													12 Epoxy Coated
S509	48	13'-6"	676	Str													24 Epoxy Coated
S510	16	11'-11"	199	Str													8 Epoxy Coated
S511	16	12'-6"	209	Str													8 Epoxy Coated
S601	764	23'-3"	26,680	Str													764 Epoxy Coated
S602	382	27'-4"	15,683	Str													
S603	382	19'-2"	10,997	Str													
L501	4	3'-6"	15	2	9"	2'-0"										9"	
L502	4	8'-3"	35	S10		3'-2"	2'-2"	3'-2"									4 Epoxy Coated
L503	6	7'-6"	47	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L504	4	3'-2"	13	Str													
		Total:	89,191														

NOTES:
1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 8/10
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 8/10

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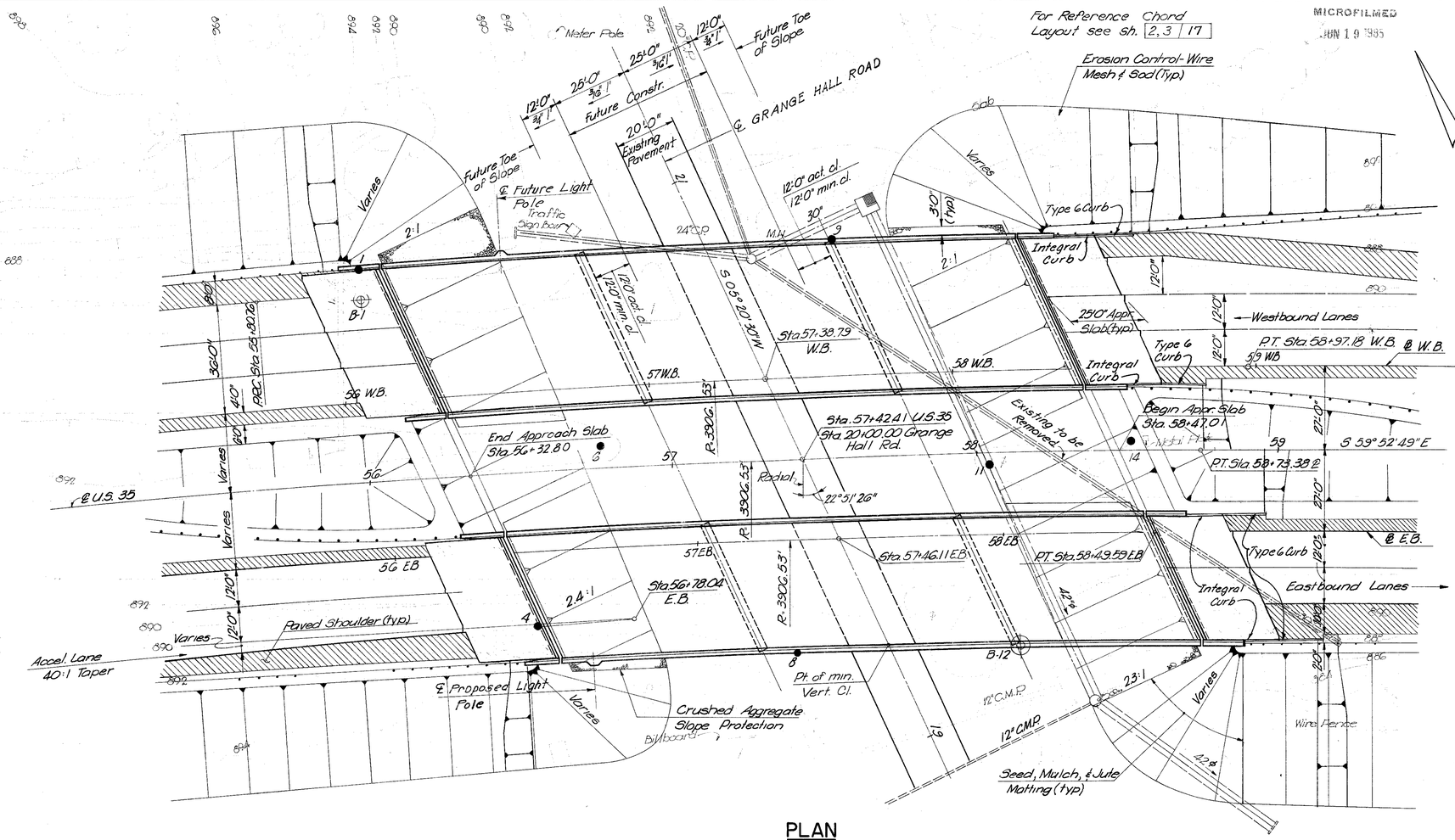
10/10

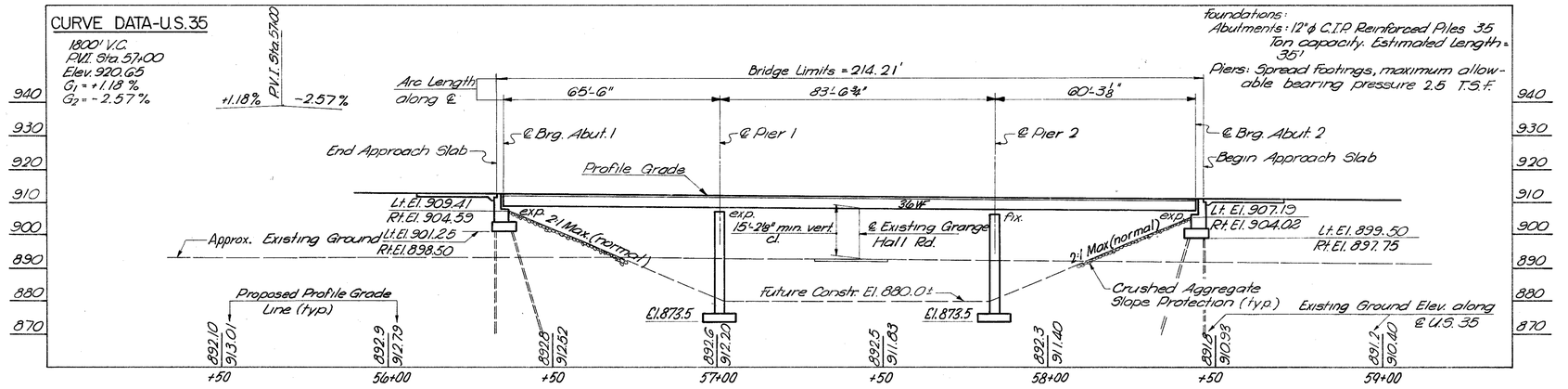
REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0074
RELOCATED U.S. 35 UNDER RAMP A
GREENE COUNTY
STA: 329+72.42 TO STA: 332+14.66

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/28/72	



PLAN



PROFILE ON CENTER LINE US 35

CURVE DATA US 35

℄ US 35
P.I. Sta. 51+90.32
Δ=20°15'00"
Dc=1°28'00"
R=3906.53'
T=697.62
L=1380.68
E=61.80

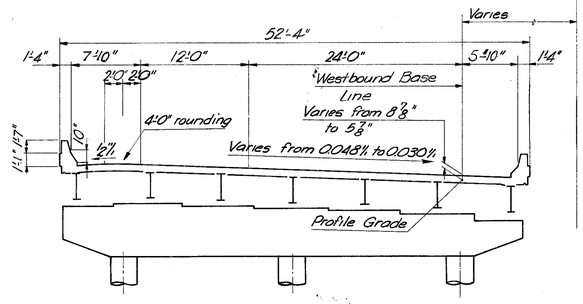
℄ E.B.
P.I. Sta. 51+66.52
Δ=20°15'00"
Dc=1°28'00"
R=3906.53'
T=697.62
L=1380.68
E=61.80

℄ W.B.
P.I. Sta. 52+14.11
Δ=20°15'00"
Dc=1°28'00"
R=3906.53'
T=697.62
L=1380.68
E=61.80

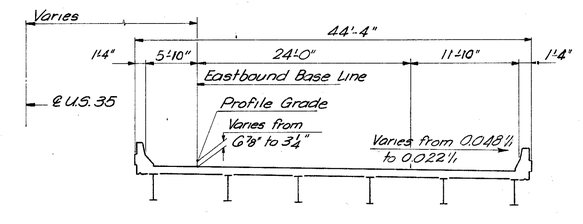
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

548 616

GRE 675 · 5 · 37
GREENE COUNTY



SECTION THRU LEFT BRIDGE



SECTION THRU RIGHT BRIDGE

NOTE: *See Roadway Typical Sections for location of Profile Grade Line.*

LEGEND
- Drive sample boring location
- Drive rod penetration resistance sounding location.

DESIGN YEAR TRAFFIC
1989 ADT: 84,420 – US 35

NOTE
Earthwork Limits shown are schematic. Actual slopes shall conform to Plan Cross-Sections

PROPOSED STRUCTURE
TYPE: Continuous steel beam with reinforced concrete deck and substructure
SPANS: 65'-6", 83'-6¾", 60'-3⅛"
ROADWAY: Lt. 49'-8" Rt. 41'-8" F to F of parapet
LOADING: HS-20-44 & Alternate Military
SKEW: Varies, 22°51'26" Rt. Fwd. of ℄ Grange Hall Rd.
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 25'0" long (Std. AS-1-72)
ALIGNMENT: Right Curve ~ Dc = 1°28'00"

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CINCINNATI OHIO
1 / 17

SITE PLAN

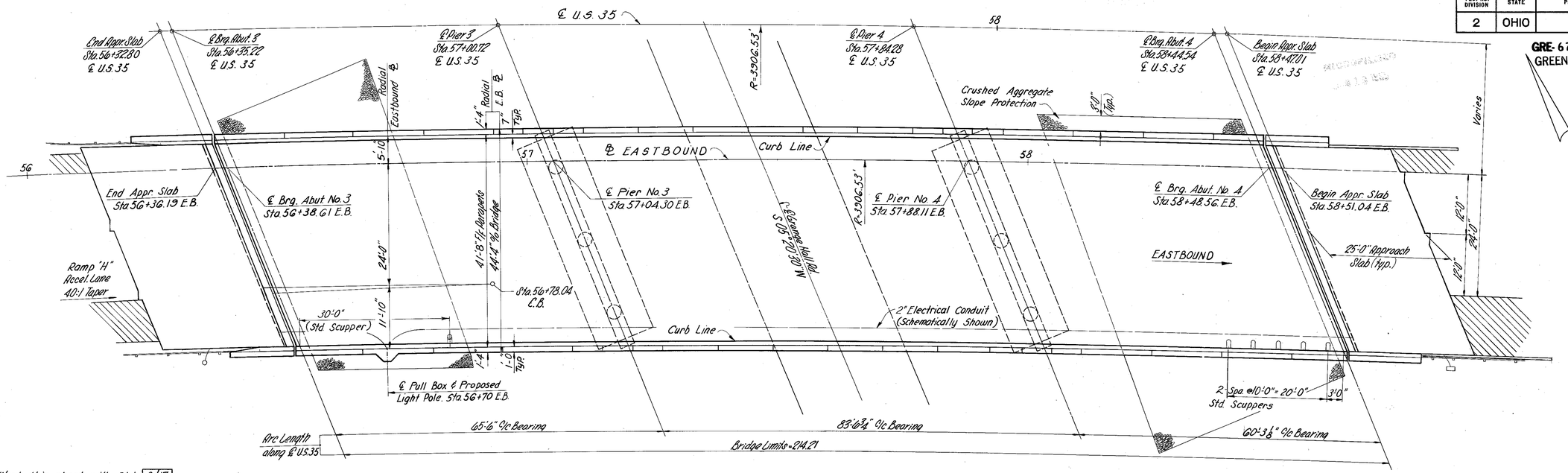
BRIDGE NO. GRE – 35–0107 R/L
US 35 OVER GRANGE HALL RD.
GREENE COUNTY STA. 56+32.80 TO STA. 58+47.01

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	S.A.	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

549/616

GRE-675 • 5•37
GREENE COUNTY



NOTE: Work this sheet with Sht 3/17

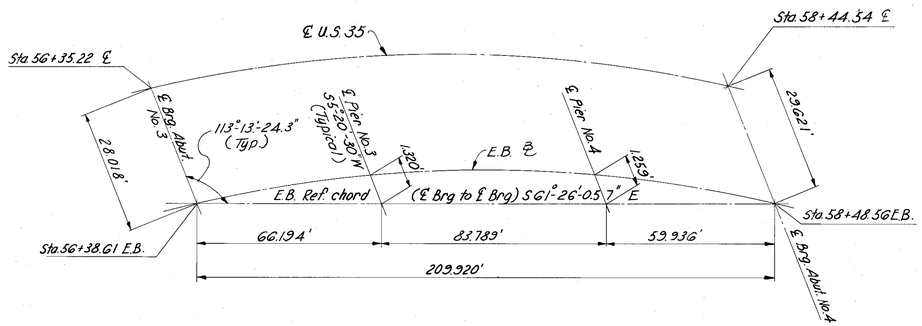
PLAN – RIGHT BRIDGE

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE SUPER	LEFT BRIDGE ABUT	LEFT BRIDGE PIERS	LEFT BRIDGE GEN	RIGHT BRIDGE SUPER	RIGHT BRIDGE ABUT	RIGHT BRIDGE PIERS	RIGHT BRIDGE GEN
503	Lump	Sum	Cofferdams, cribs and sheeting				Lump				Lump
503	2,326	Cu. Yd.	Unclassified Excavation		231	371			255	849	
505	Lump	Sum	Test Pile				Lump				
507	2765	Lin. Ft.	12" Cast-in-place reinforced concrete piles		1470				1295		
509	208,500	Lb.	Reinforcing steel	45,900	17,200	49,100		39000	14,900	42400	
511	654	Cu. Yd.	Class "S" concrete, superstructure using shrink. comp. cem., 701.08	348				306			
511	183	Cu. Yd.	Class "C" concrete, piers above footings			104				79	
511	254	Cu. Yd.	Class "C" concrete, abutments above footings		137				117		
511	419	Cu. Yd.	Class "C" concrete, footings		91	133			79	116	
513	618000	Lb.	Structural Steel (AISC Category 1)	332,000				286,000			
514	618000	Lb.	Field painting of new Structural steel, System A	332,000				286,000			
518	130	Cu. Yd.	Porous backfill		70				60		
518	177	Lin. Ft.	6" perforated, helical C.S.P., 707.01		97				80		
518	231	Lin. Ft.	6" non perforated helical C.S.P. including specials, 707.01		111				120		
518	9	Each	Scuppers including supports.	5				4			
523	6	Hour	Dynamic Pile Tests				3				3
G01	1135	Sq. Yd.	Crushed aggregate slope protection				600				535
625			See sh. no. 149 (C1G) for lighting summary								
Special	84,200	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	44,500	800			38,000	900		

ESTIMATED QUANTITIES BY: J.G. CHECKED BY: S.A. 4/17/72 REVISED: S.A. 9/14/27

TEST PILE: Payment will be made for only one test pile. It may be driven for either the Right or Left bridge.



EASTBOUND REFERENCE CHORD LAYOUT

GENERAL NOTES

EMBANKMENT CONSTRUCTION: THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS, EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS AND FOR THE PIERS,

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS,

FOUNDATION BEARING PRESSURE: PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 2.5 TONS PER SQ. FT,

FOR ADDITIONAL NOTES SEE COMMON DETAILS, SHEET C1/C2.

THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3⅜ INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

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CINCINNATI CONSULTING ENGINEERS OHIO

2/17

GENERAL PLAN-R, GENERAL NOTES AND ESTIMATED QUANTITIES

BRIDGE NO. GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

GREENE COUNTY

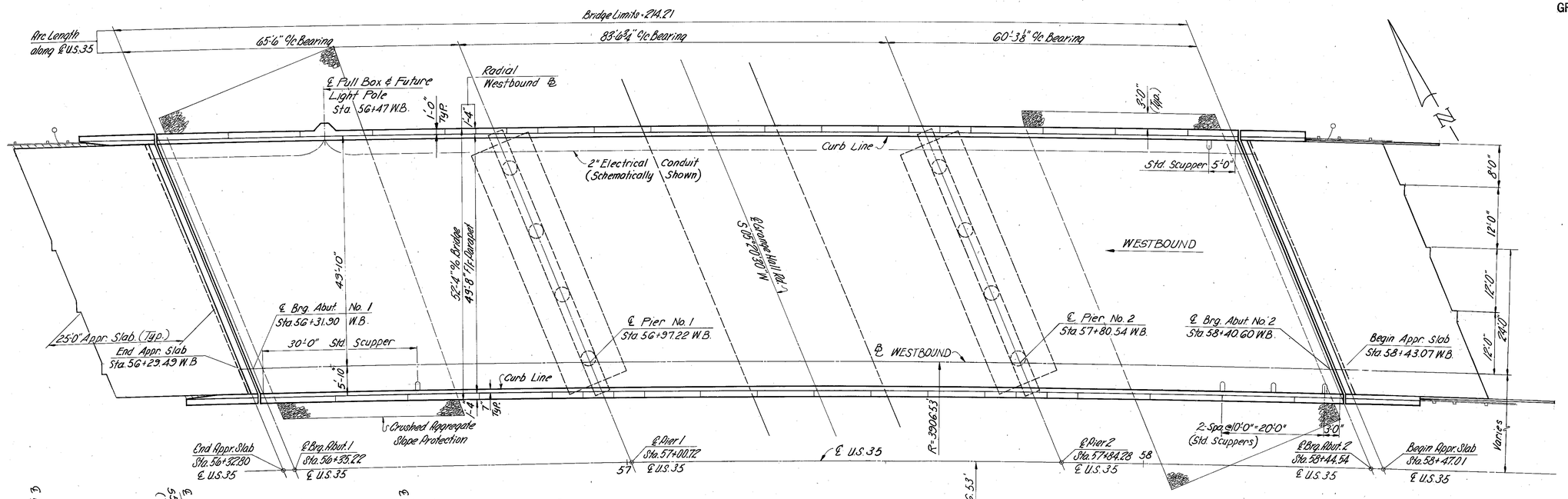
STA. 56+32.80 TO STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.		9/25/72	

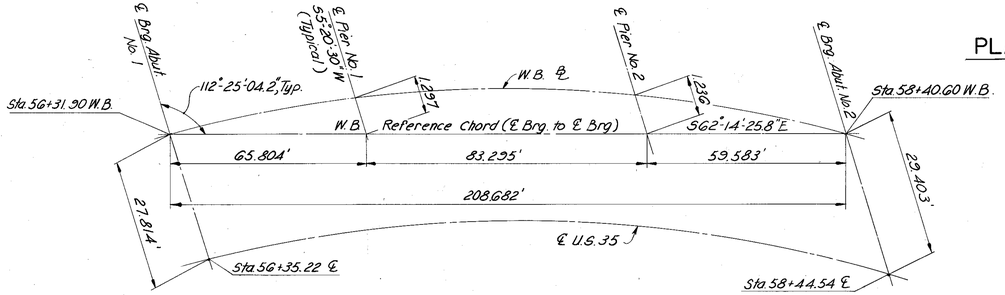
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

550
616

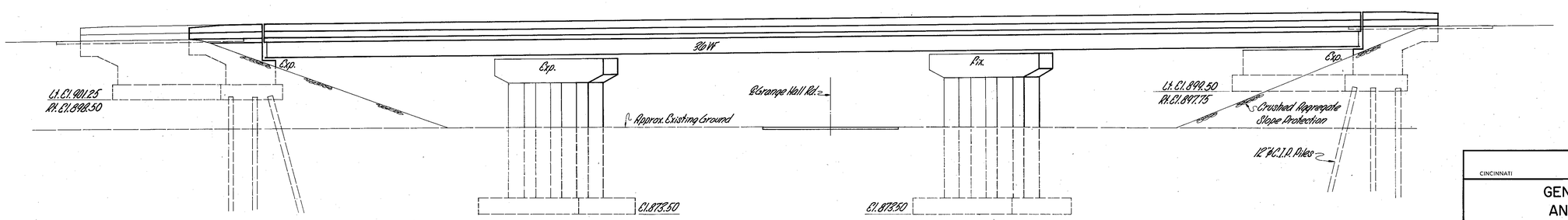
GRE-675 · 5·37
GREENE COUNTY.



PLAN - LEFT BRIDGE



WESTBOUND REFERENCE CHORD LAYOUT



ELEVATION

NOTES:

For Standard Scuppers see Std. Dwg. SD-1-69
Scuppers to be lengthened as required.
For General Notes & Estimated Quantities see Sh. 2 / 17
Scupper spacing measured along face of parapet
All Abutment & Pier centerlines are parallel

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CINCINNATI OHIO

3 / 17

GENERAL PLAN-L AND ELEVATION

BRIDGE NO. GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

STA. 56+32.80 TO STA. 58+47.01

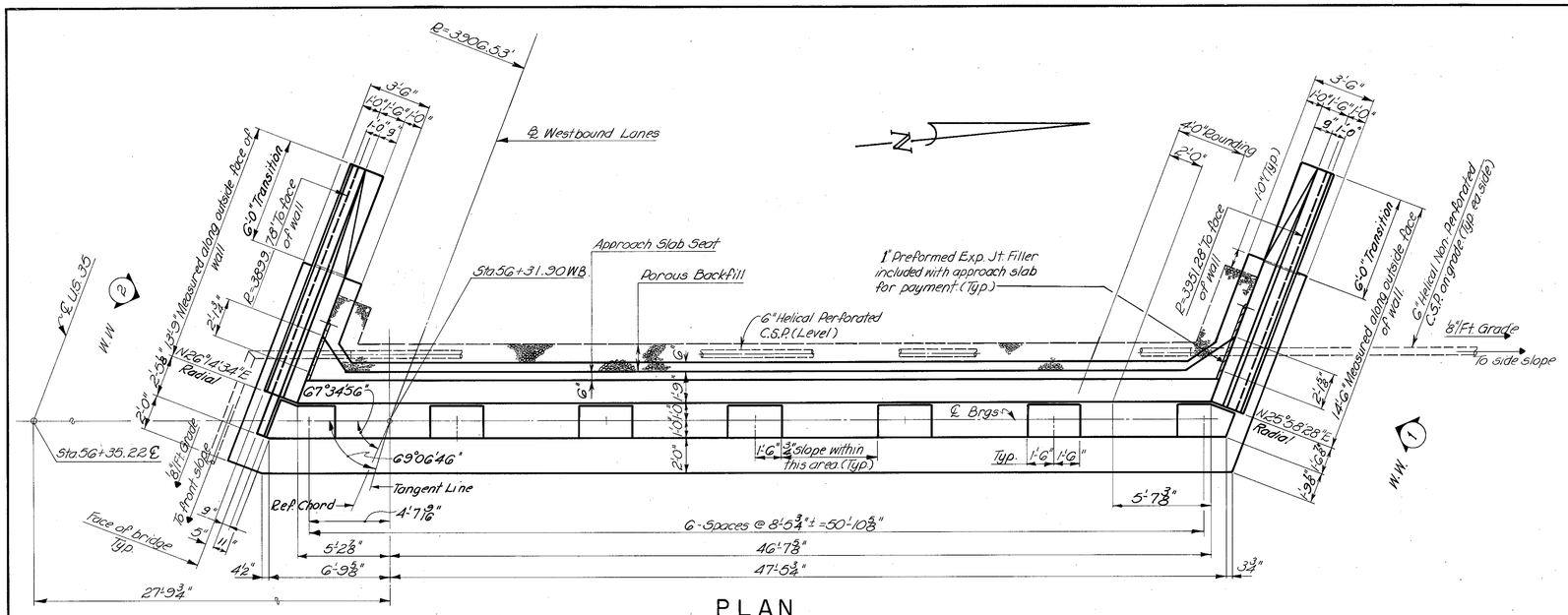
GREENE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.		9/25/72	

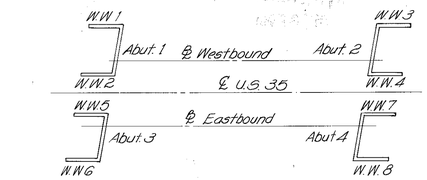
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

551
616

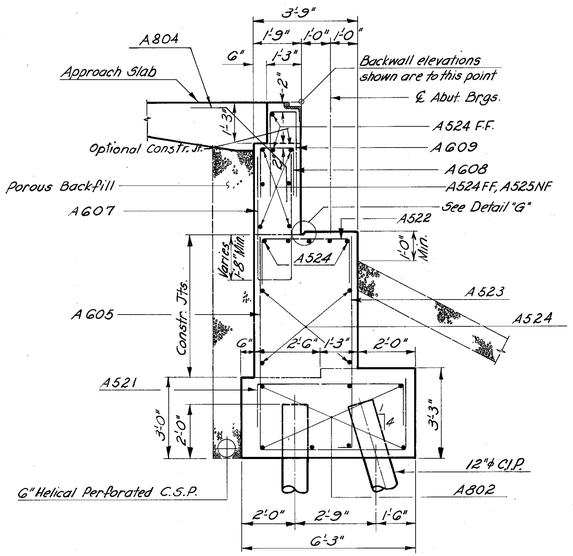
GRE-675 · 5·37
GREENE COUNTY



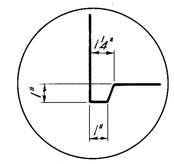
PLAN



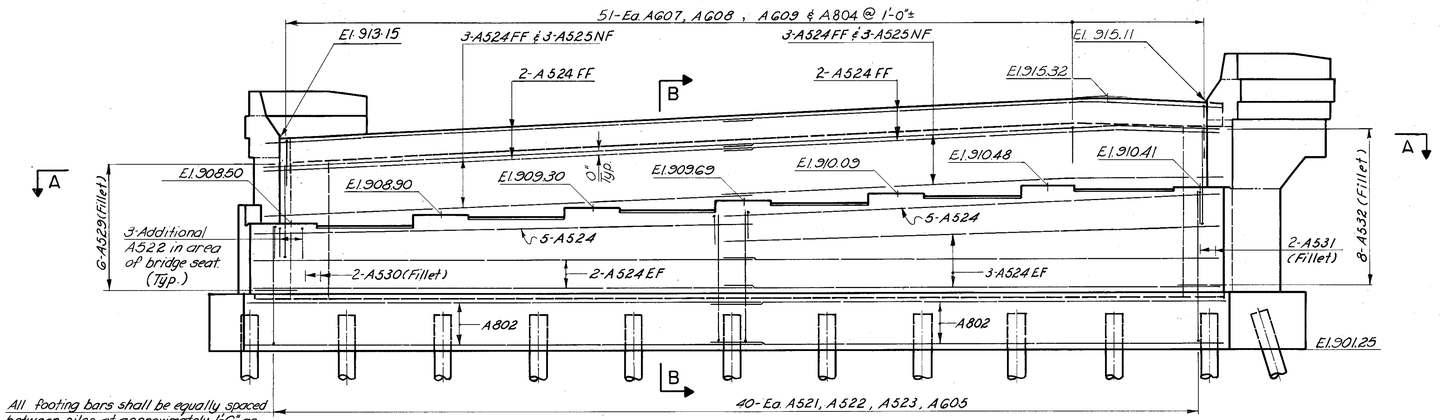
KEY PLAN



SECTION B-B

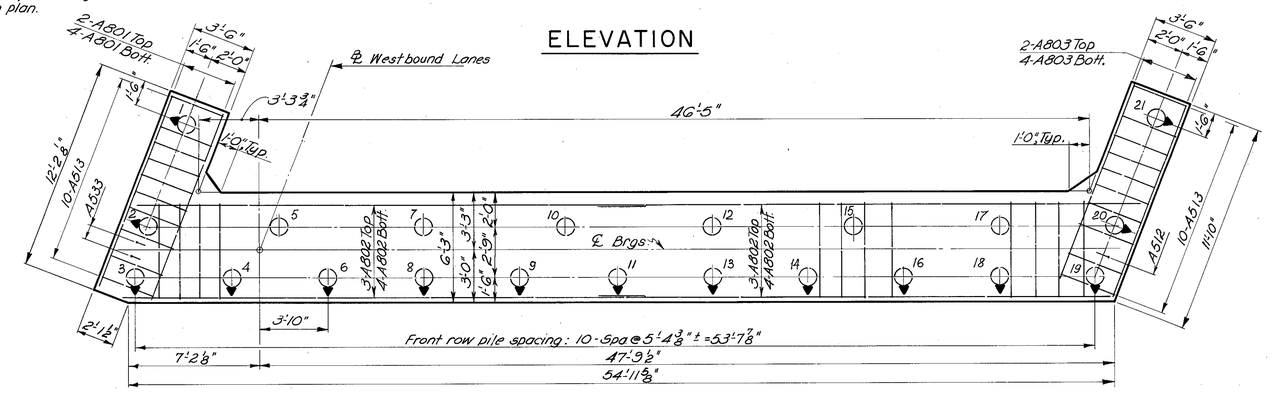


DETAIL "G"



ELEVATION

All footing bars shall be equally spaced between piles at approximately 1'-6" as shown on footing plan.



FOOTING PLAN

NOTES:

For Reinforcing Steel List see shs. 13, 14, 15, 17
Work this sheet with shs. 5, 6, 7, 17
Porous Backfill, within the limits shown, shall extend upward to the sub-grade within the roadway area extended laterally to the wingwalls.
Only that portion of the C.S.P. located in the porous backfill shall be perforated.
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown

All reinforcing steel in Abutments 1 thru 4 shall have the suffix "A" thru "D" respectively.
For termination of C.S.P. at slopes, see Common Details Sht. C1, C2

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CONSULTING ENGINEERS
CINCINNATI — OHIO
4/17

ABUTMENT NO. 1

BRIDGE NO. GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

GREENE COUNTY

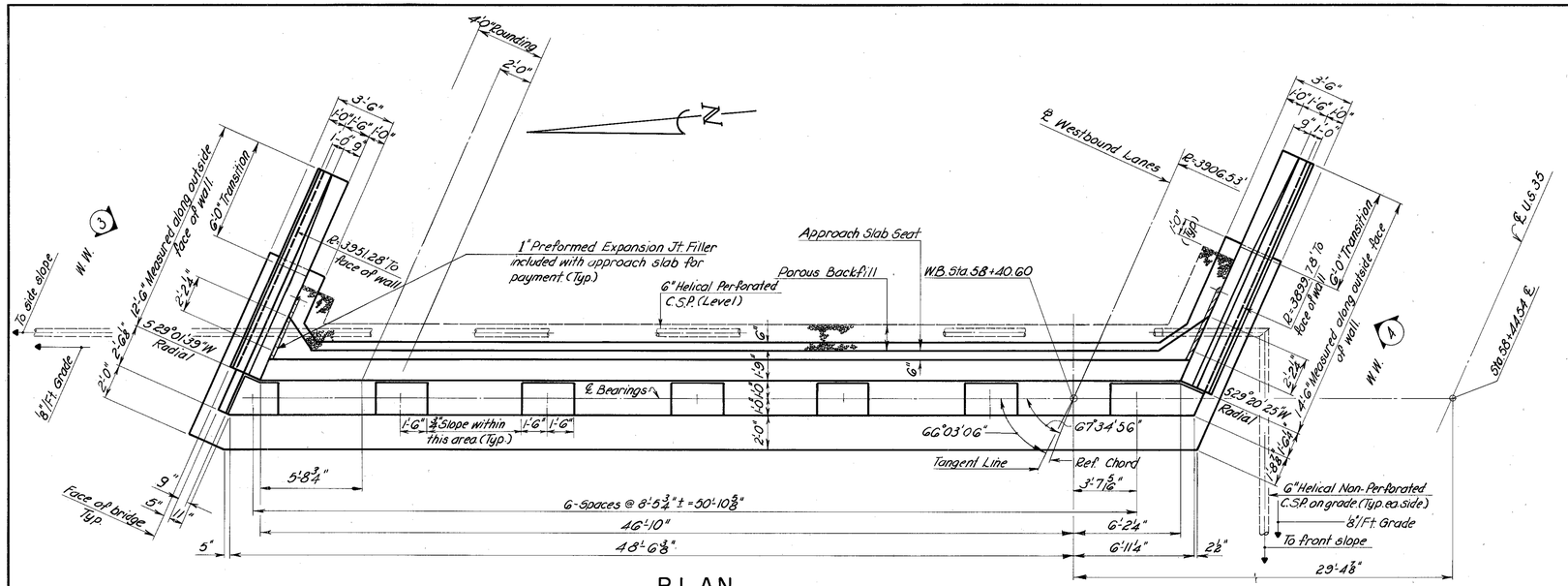
STA. 56+32.80 TO STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JCL	AW		S.A.		9/28/72	

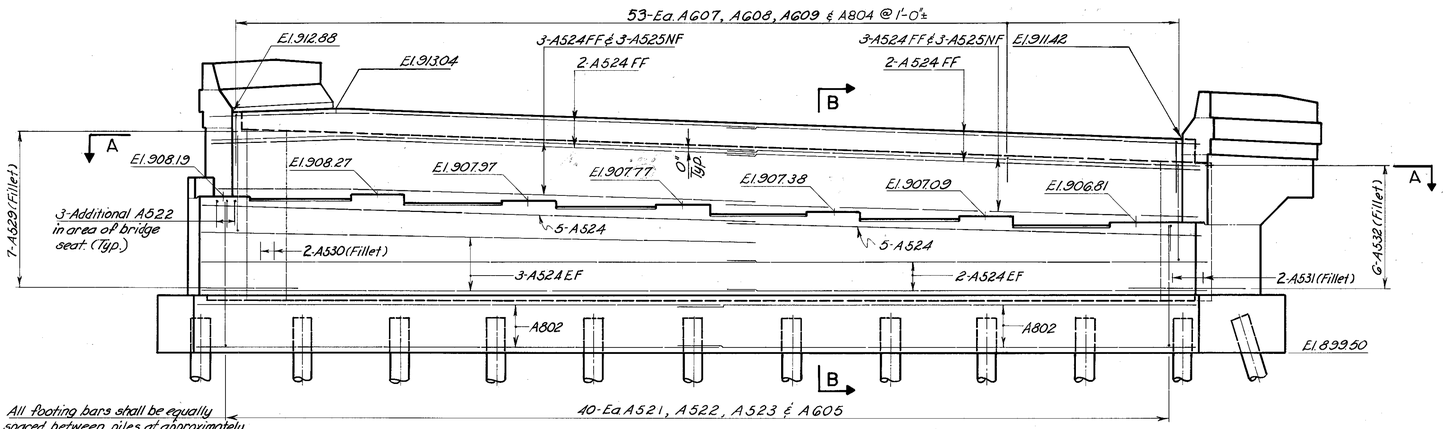
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

562
6/6

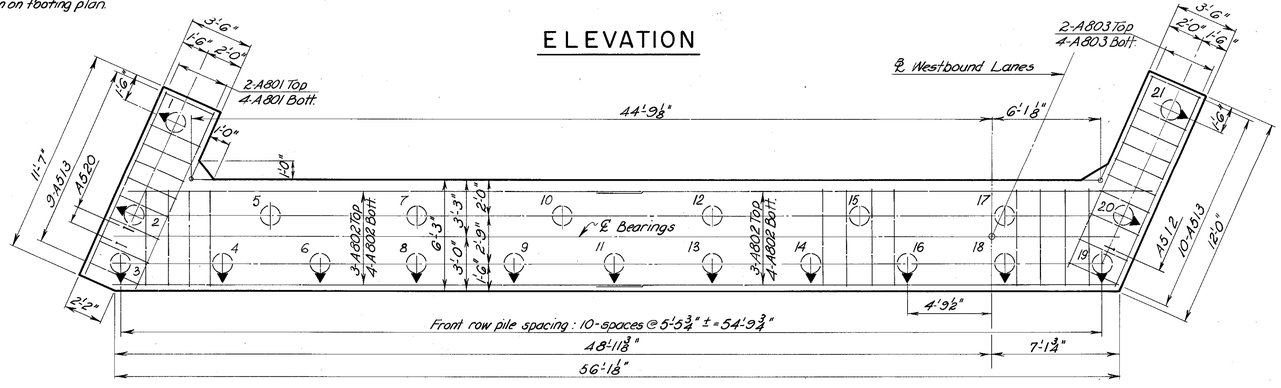
GRE-675 · 5·37
GREENE COUNTY



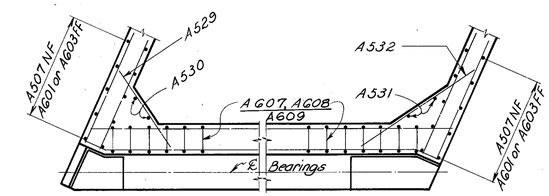
PLAN



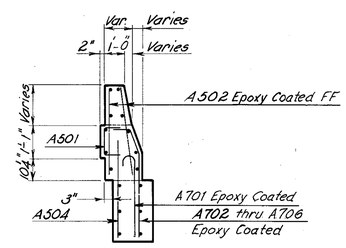
ELEVATION



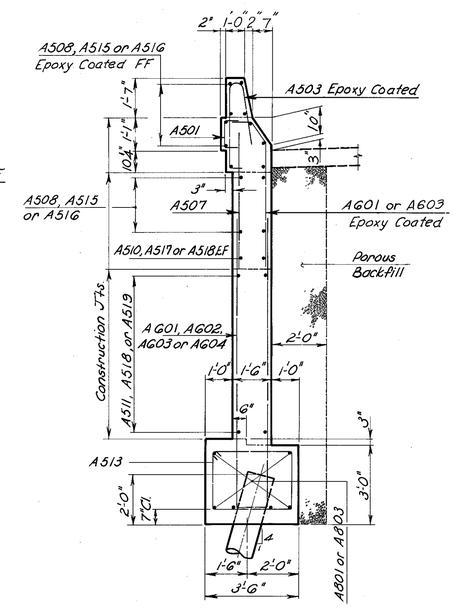
FOOTING PLAN



SECTION A-A



SECTION E-E



SECTION D-D

WINGWALL ELEVATIONS				
ABUT. NO.	W.W. NO.	EL. "A"	EL. "B"	EL. "C"
1	1	916.36	916.43	901.25
	2	914.40	914.48	
2	3	914.13	913.75	899.50
	4	912.67	912.50	
3	5	913.50	913.59	898.50
	6	911.48	911.54	
4	7	911.97	911.84	897.75
	8	910.89	910.82	

NOTES:

Work this sheet with sheets 4 & 7 / 17

For NOTES see sheet 4 / 17

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5 / 17

ABUTMENT NO. 2

BRIDGE NO. GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

GREENE COUNTY

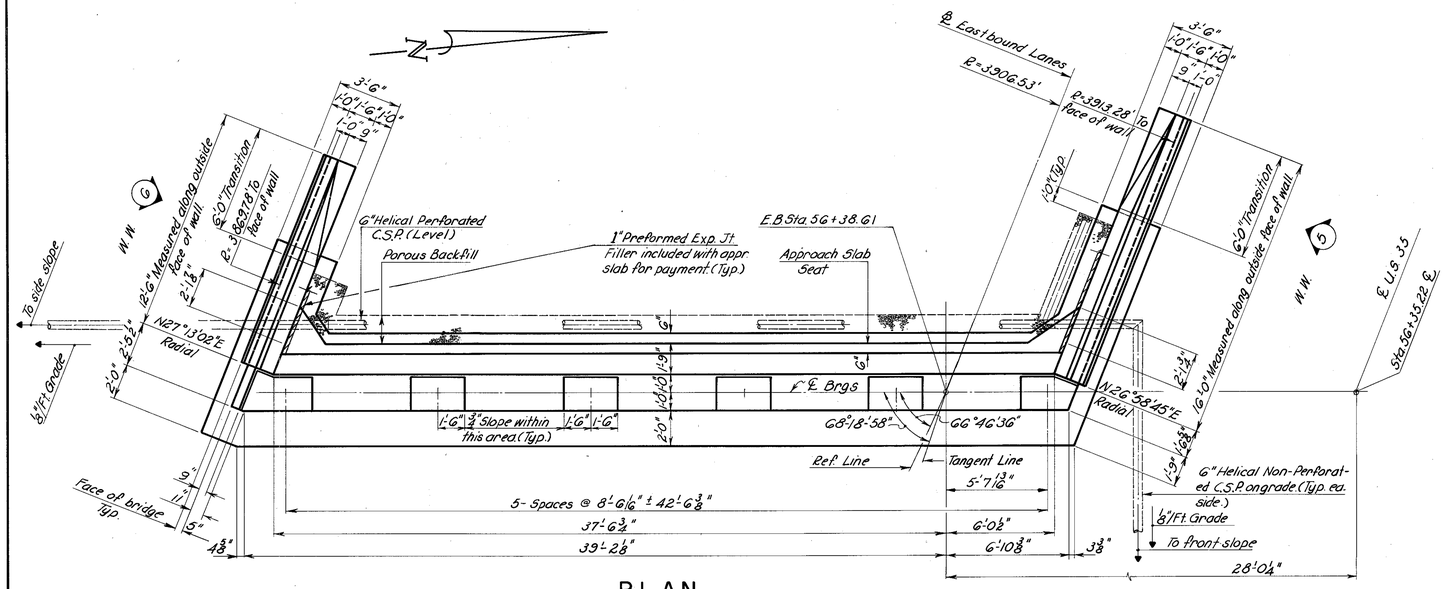
STA. 56+32.80 TO STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JCL	AW		S.A.		9/25/72	

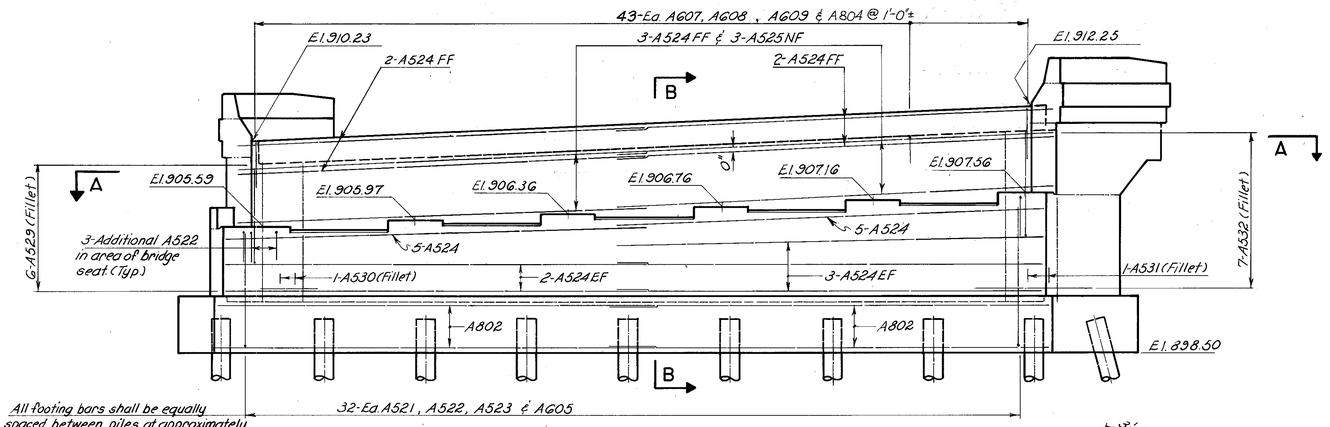
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

553
616

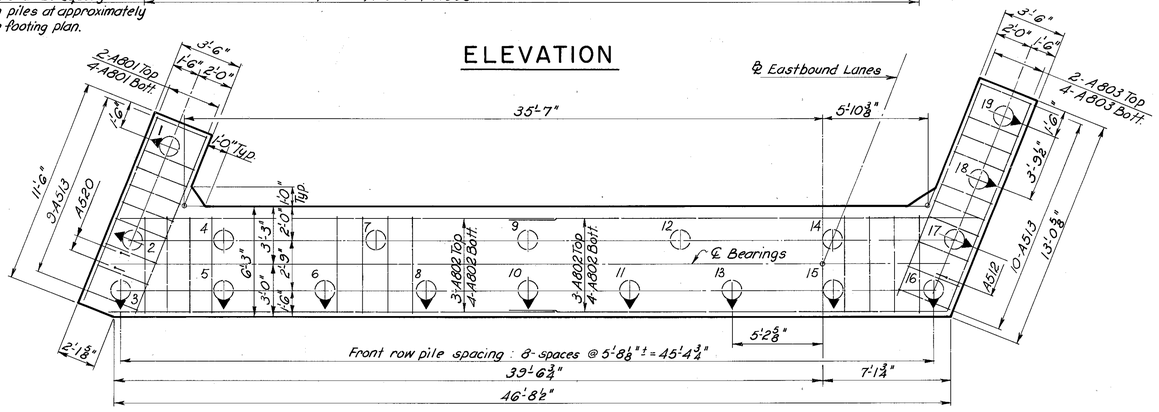
GRE-675 · 5·37
GREENE COUNTY



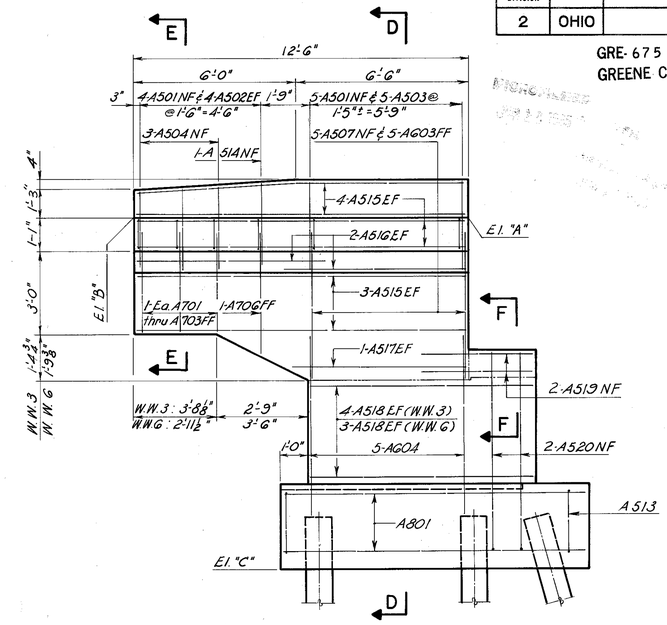
PLAN



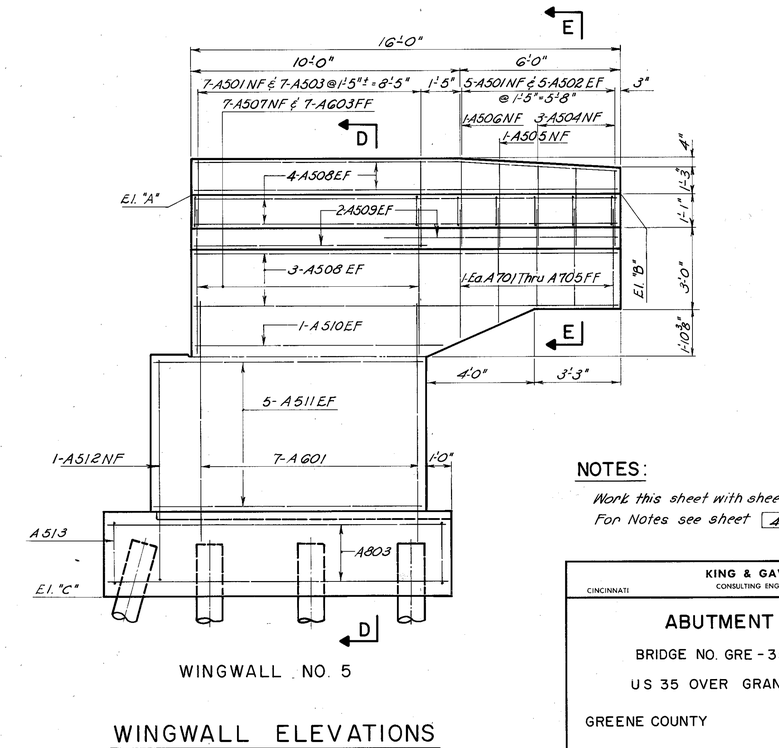
ELEVATION



FOOTING PLAN



WINGWALLS NO. 3 & 6



WINGWALL NO. 5

WINGWALL ELEVATIONS

NOTES:

Work this sheet with sheets 4 5 7 17
For Notes see sheet 4 17

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ABUTMENT NO. 3

BRIDGE NO. GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA. 56+32.80 TO
STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JCL	A.W.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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616

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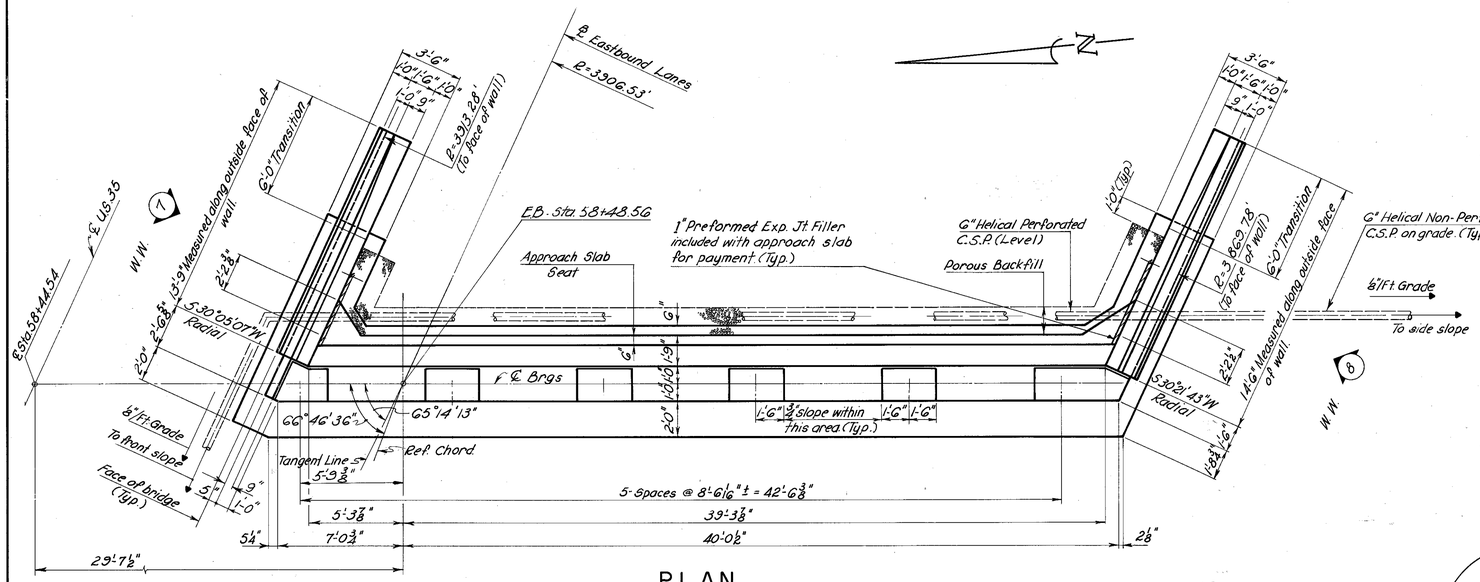
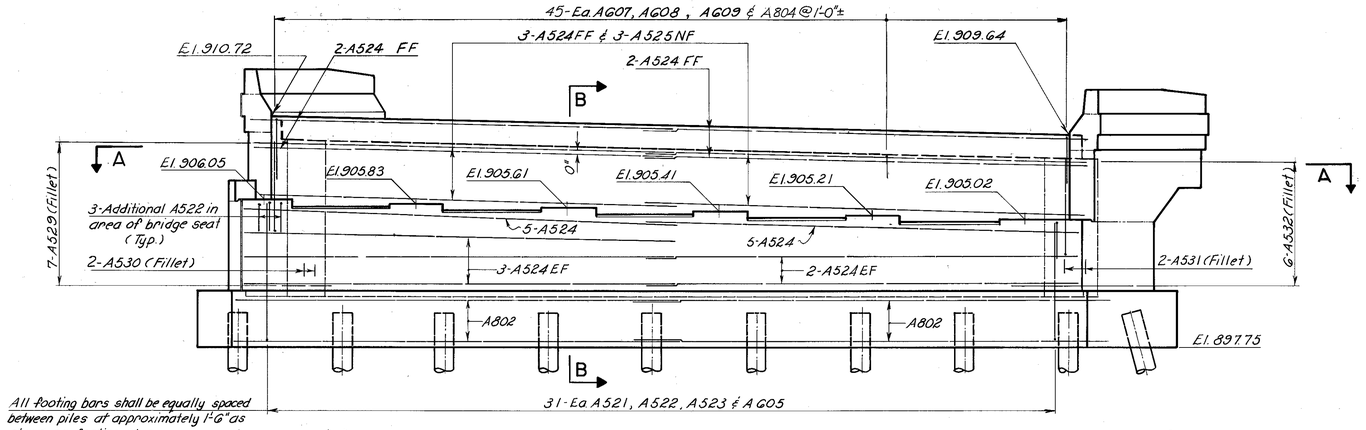
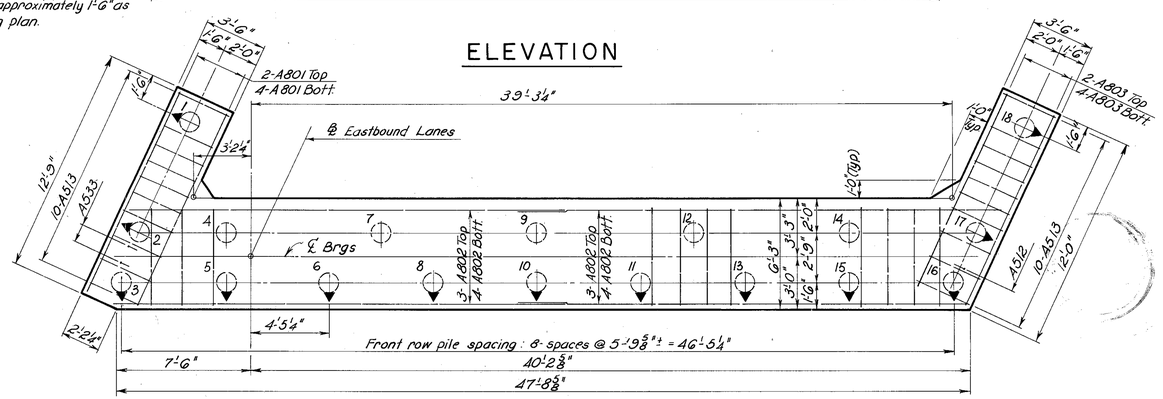
GREENE COUNTY



PLAN

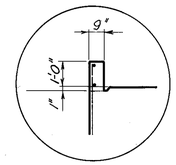


All footing bars shall be equally spaced between piles at approximately 1'-6" as shown on footing plan.

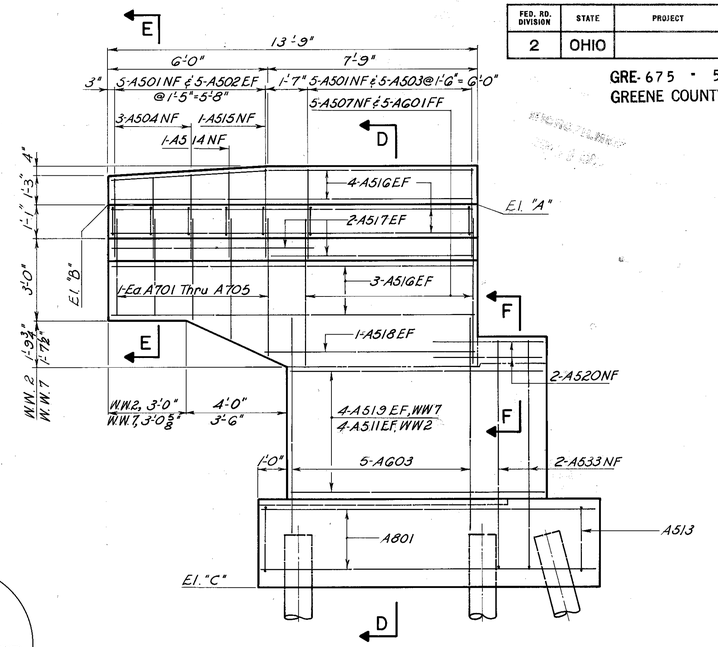


ELEVATION

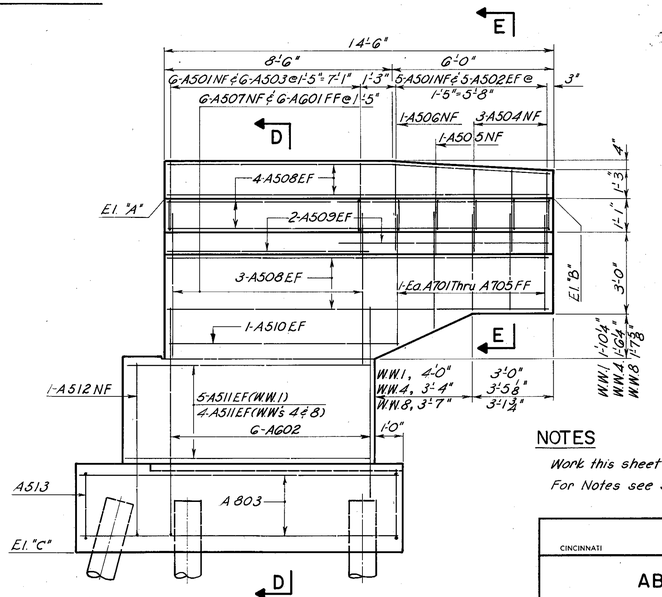
FOOTING PLAN



SECTION F-F



WINGWALLS NO. 2 & 7



WINGWALLS NO. 1, 4 & 8

WINGWALL ELEVATIONS

NOTES

Work this sheet with sheets 4, 5, 6 / 17

For Notes see sheet 4 / 17

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ABUTMENT NO. 4

BRIDGE NO. GRE-35-0107 R/L

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STA. 58+47.01

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2	OHIO		

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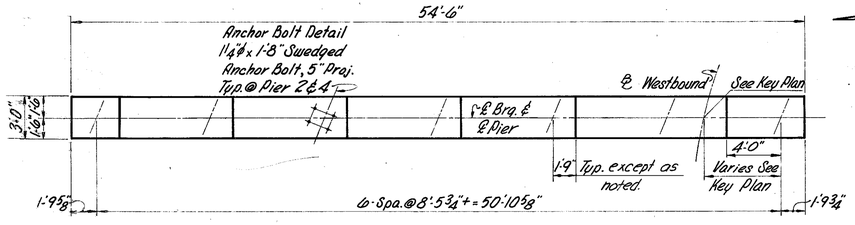
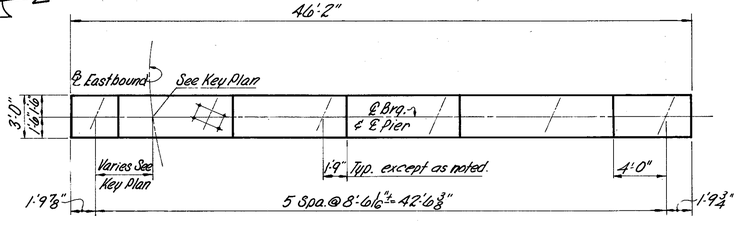
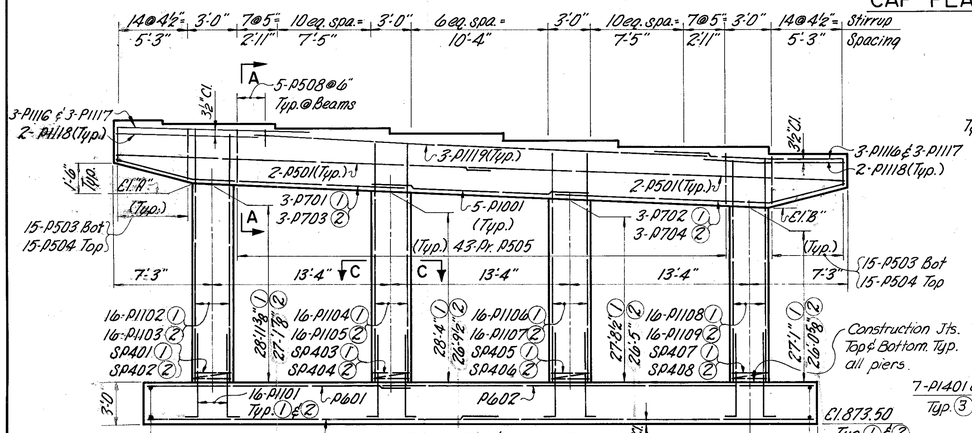


PIER 1 & 2

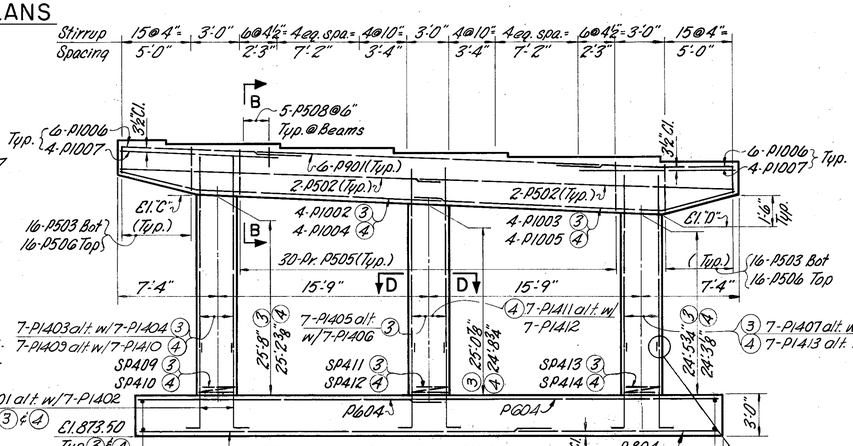


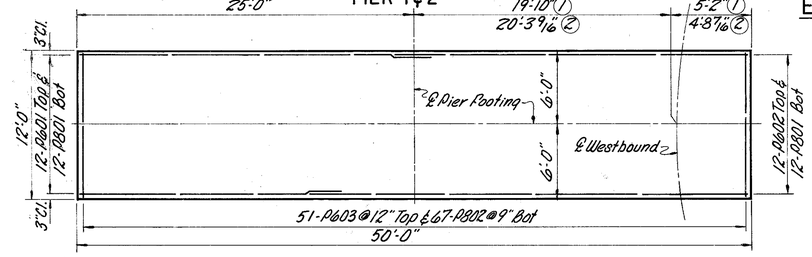
PIER 3 & 4

CAP PLANS

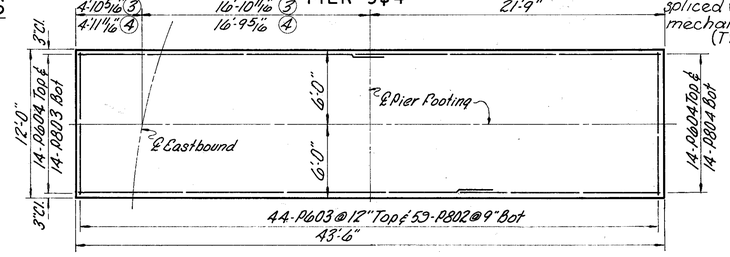


ELEVATIONS



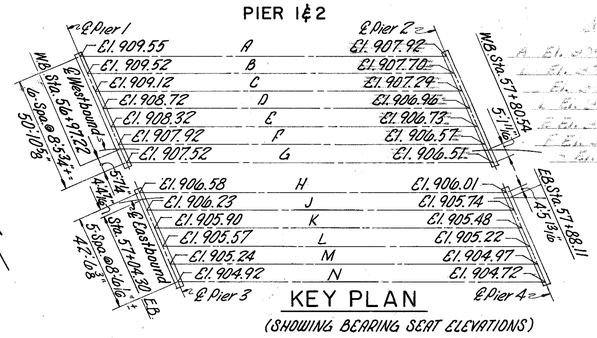


PIER 1 & 2

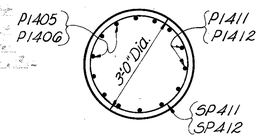


PIER 3 & 4

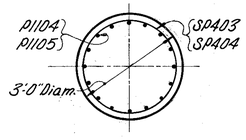
FOOTING PLANS



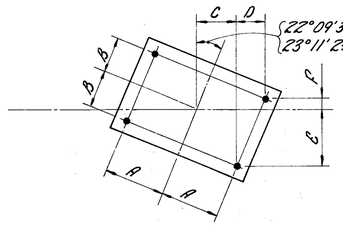
KEY PLAN
(SHOWING BEARING SEAT ELEVATIONS)



SECTION D-D

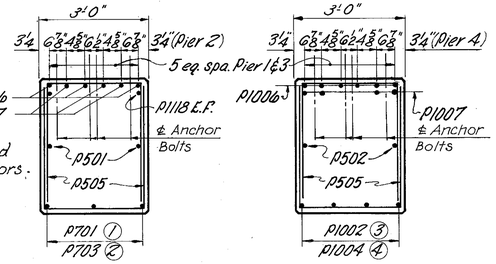


SECTION C-C



ANCHOR BOLT LAYOUT
FOR PIER 2 & 4 ONLY

DIMENSIONS						
BEAMS	A	B	C	D	E	F
A Thru G	10"	6"	7"	4½"	9 5/16"	1 13/16"
H Thru N	10"	6"	6 13/16"	4 5/8"	9 7/16"	1 12"



SECTION A-A

SECTION B-B

NOTES:

Bridge seat reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.
For reinforcing steel list see Sts 15, 16 / 17
For Reference Chord Layout see Sh 2, 3 / 17
Bearing Anchors: At the option of the contractor bearing anchors (or formed holes) located & supported by templates, may be cast in place.

All splices and dowels will be lapped min. 30 bar dia unless otherwise shown.

LEGEND
① = Pier 1
② = Pier 2
③ = Pier 3
④ = Pier 4

E.1. "A"	E.1. "B"	Pier
905.52	903.52	①
903.70	902.51	②
E.1. "C"	E.1. "D"	
902.23	900.92	③
901.74	900.72	④

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PIERS 1,2,3 & 4

BRIDGE NO GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA. 56+32.80 TO STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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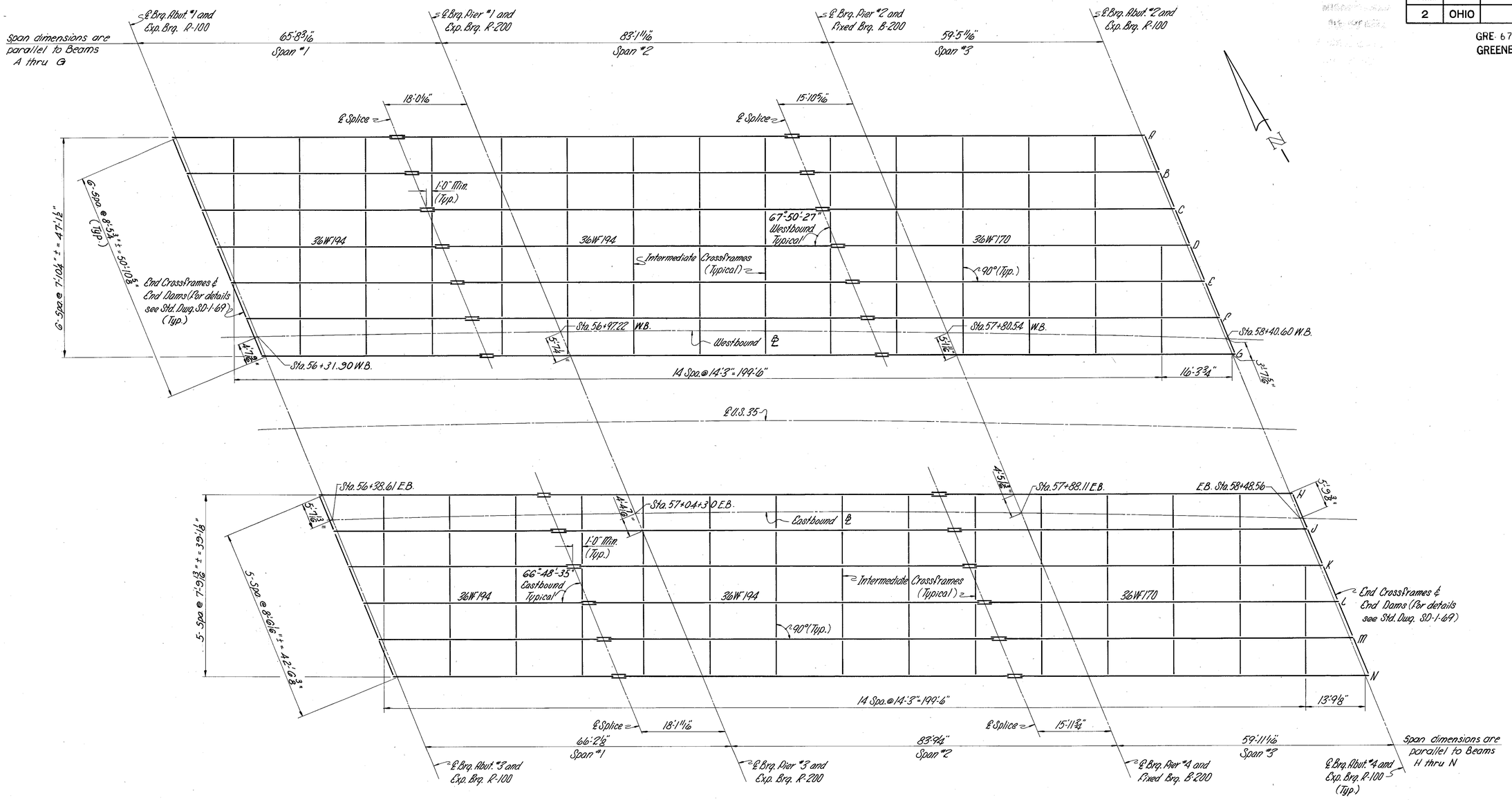

FRAMING PLAN

NOTES

For intermediate crossframe details, see common detail sht. C2 | C2
For location of scuppers, see shts. 2 3 | 17
End dams to be included with Item 513, Structural Steel, for payment.
For fixed bearings B-200, and expansion bearings R-100 & R-200 see Std. Dwg. RB-1-55
For typical transverse section see sht. 11, 12 | 17
Work with sheet 10 | 17

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STEEL FRAMING PLAN

BRIDGE NO. GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA. 56+32.80 TO
STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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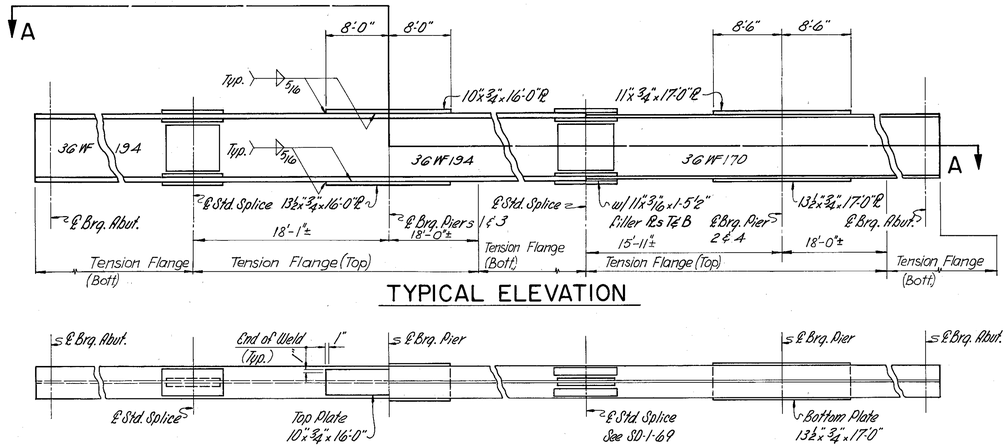


TYPICAL ELEVATION

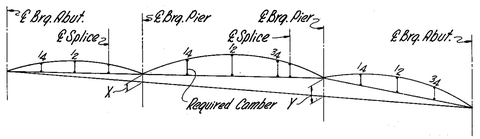
SECTION A-A

NOTE:

Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

Welded forming attachments shall not be used in the tension areas of the top flange.

All beams, top moment plates & splice plates shall be CVN.



CAMBER AND BLOCKING DIAGRAMS

BLOCKING ORDINATES		
Stringer	X	Y
A	4 9/16"	3 5/16"
B	3 3/16"	2 1/16"
C	2 13/16"	1 3/4"
D	2 7/16"	1 7/16"
E	2"	1 3/16"
F	1 9/16"	15/16"
G	1 1/16"	11/16"
H	1/2"	5/8"
J	7/16"	5/8"
K	1/2"	11/16"
L	9/16"	11/16"
M	11/16"	3/4"
N	11/16"	3/4"

DEFLECTION & CAMBER TABLE A

Description	STRINGERS R,G,H,N									STRINGERS B thru F, J thru M									
	SPAN 1			SPAN 2				SPAN 3			SPAN 1			SPAN 2				SPAN 3	
	1/4 PT.	1/2 PT.	SPL.	1/4 PT.	1/2 PT.	3/4 PT.	SPL.	1/2 PT.	3/4 PT.		1/4 PT.	1/2 PT.	SPL.	1/4 PT.	1/2 PT.	3/4 PT.	SPL.	1/4 PT.	1/2 PT.	3/4 PT.
Deflection due to weight of steel	1/16"	1/16"	1/16"	1/16"	1/8"	1/16"	1/16"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/8"	1/16"	1/16"	0"	1/16"	1/16"
Deflection due to remaining dead load	1/4"	5/16"	1/8"	1/4"	1/2"	5/16"	3/16"	1/16"	3/16"	3/16"	3/8"	3/8"	3/16"	3/8"	11/16"	3/8"	1/4"	1/16"	5/16"	1/4"
Adjustment for Vertical Curve Beams N thru N only	0"	0"	0"	1/8"	1/8"	1/8"	1/16"	1/16"	1/8"	1/8"	0"	0"	0"	1/8"	1/8"	1/8"	1/16"	1/16"	1/8"	1/8"
Required Shop Camber Beams N thru N only	5/16"	3/8"	3/16"	7/16"	3/4"	1/2"	5/16"	1/8"	3/8"	3/8"	7/16"	7/16"	1/4"	9/16"	15/16"	9/16"	3/8"	1/8"	1/2"	7/16"
Adjustment for Vertical Curve Beams A and B thru F only	1/8"	3/16"	1/8"	1 1/16"	7/8"	1/2"	7/16"	1/8"	3/16"	1/8"	1/16"	1/16"	1/16"	See Table B				1/16"	1/16"	1/16"
Required Shop Camber Beams A and B thru F only	7/16"	9/16"	5/16"	1 3/8"	1 1/2"	7/8"	1 1/16"	3/16"	7/16"	3/8"	1/2"	1/2"	5/16"	See Table B				1/8"	7/16"	3/8"
Adjustment for Vertical Curve Beam G only	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"	1/16"	1/16"	1/16"										
Required Shop Camber Beam G only	3/8"	7/16"	1/4"	3/8"	11/16"	3/8"	1/4"	1/8"	5/16"	5/16"										

TABLE B

Description	Stringer	SPAN "Z"			
		1/4 PT.	1/2 PT.	3/4 PT.	SPL.
Deflection due to total dead load from Table A	B thru F	7/16"	13/16"	7/16"	5/16"
Adjustments for Vertical Curve	B	11/16"	1/2"	5/16"	3/16"
	C	7/16"	3/8"	3/16"	1/8"
	D	1/4"	1/4"	1/8"	1/8"
	E	1/8"	1/8"	1/16"	1/16"
	F	1/16"	1/16"	0"	0"
Total Shop Camber	B	1 1/8"	1 5/16"	3/4"	1/2"
	C	7/8"	1 3/16"	5/8"	7/16"
	D	11/16"	1 1/16"	9/16"	7/16"
	E	9/16"	15/16"	1/2"	3/8"
	F	1/2"	7/8"	7/16"	5/16"

TRANSITION ELEVATIONS

W. BD. STATION	ELEV. A	ELEV. B	ELEV. C	E. BD. STATION	ELEV. D	ELEV. E
56+00	915.17	915.38	913.31	56+25	912.31	910.36
56+25	915.05	915.26	913.19	56+50	912.16	910.22
56+50	914.91	915.12	913.05	56+75	912.02	910.20
56+75	914.76	914.97	912.90	57+00	911.87	910.17
57+00	914.57	914.79	912.73	57+25	911.71	910.14
57+25	914.25	914.47	912.53	57+50	911.53	910.07
57+50	913.91	914.13	912.31	57+75	911.34	910.01
57+75	913.56	913.78	912.08	58+00	911.13	909.92
58+00	913.18	913.40	911.84	58+25	910.91	909.82
58+25	912.81	913.03	911.60	58+50	910.68	909.71
58+50	912.41	912.63	911.34	58+75	910.44	909.59

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STEEL FRAMING DETAILS

BRIDGE NO. GRE-35-0107 R/L

US 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA. 56+32.80 TO STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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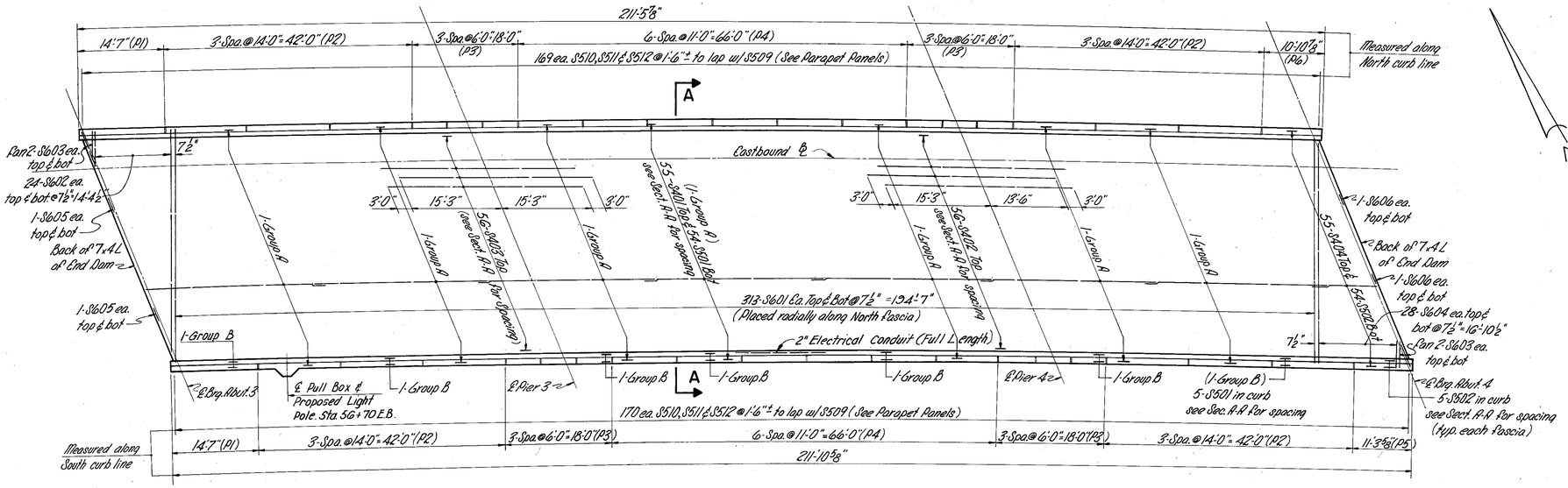
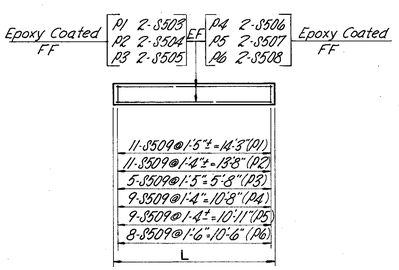


* Deck Slab Depth: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade. This dimension will vary to accomodate horizontal and vertical curve requirements and transitions. The dimensions shown apply at the center line of bearings only.

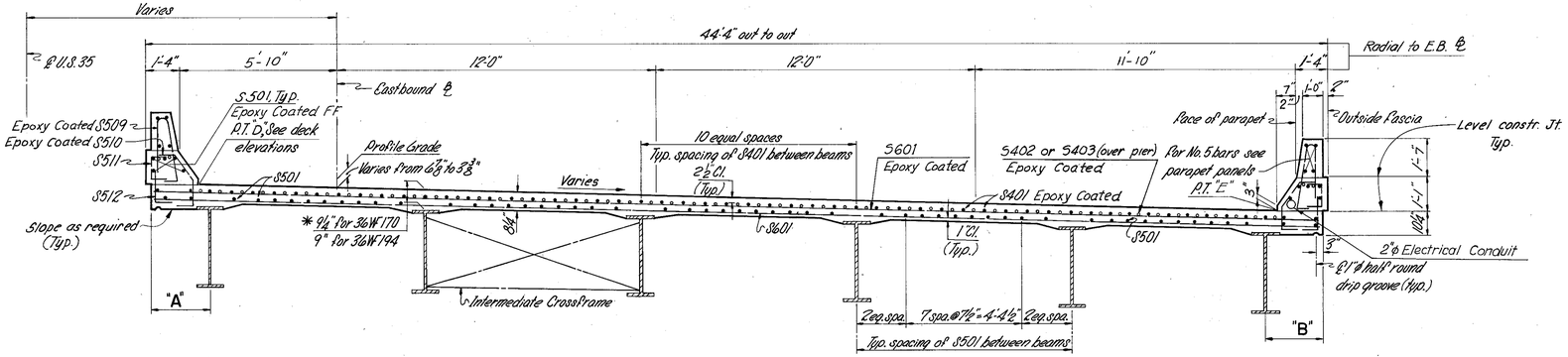
PLAN - RIGHT BRIDGE

EASTBOUND

PANELS		
Mark	No Reqd	L
P1	2	14'-7"
P2	12	14'-0"
P3	12	6'-0"
P4	12	11'-0"
P5	1	11'-3⅝"
P6	1	10'-10⅞"



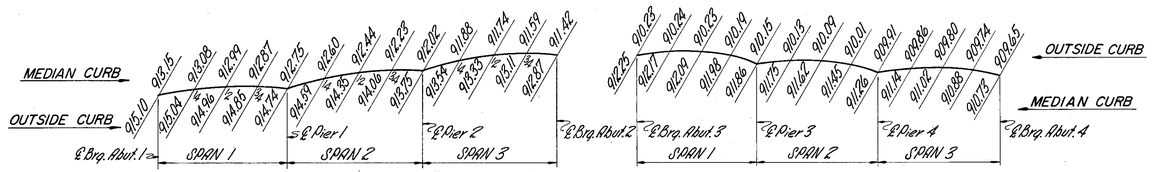
PARAPET PANELS



SECTION A-A

TABLE OF OFF-SETS						
LOCATION	SPAN 1		SPAN 2		SPAN 3	
	℄ Abut. 3	½ P.T.	℄ Pier 3	½ P.T.	℄ Pier 4	½ P.T.	℄ Abut. 4
DIM "A"	1'-9"	2'-6"	2'-11⅝"	3'-1⅞"	2'-10¾"	2'-5¼"	1'-9"
DIM "B"	2'-9"	2'-1¾"	1'-9¾"	1'-9¾"	2'-3"	2'-10"	2'-7⅝"

Dimensions radial to ℄ Web



LEFT BRIDGE (W. BD.) RIGHT BRIDGE (E. BD.)

DECK ELEVATION DIAGRAM

AT CURB (PTS) BEFORE CONCRETE IS PLACED

NOTES:

For reinforcing steel list see Shts. 16, 17 / 17
For details of end dams, included with Item 513 Structural Steel for payment, see Std. Dwg. SD-1-69 & Sheet 4.13.
Slab thickness shown includes 1" for monolithic wearing surface
A haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
For transition elevations see sh. 10 / 17
All reinforcing bars in Right and Left Slabs to have the suffix "A & B" respectively
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown

For details of deflection joints, see Std. Dwg. BR-1-67
For details of light pole pedestal see Common Details Sht. C1 / C2

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SUPERSTRUCTURE ROADWAY SLAB-R

BRIDGE NO. GRE-35-0107 R/L
US 35 OVER GRANGE HALL RD.
GREENE COUNTY
STA 56+32.80 TO STA 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.		9/26/17	

FED. RD. DIVISION	STATE	PROJECT	
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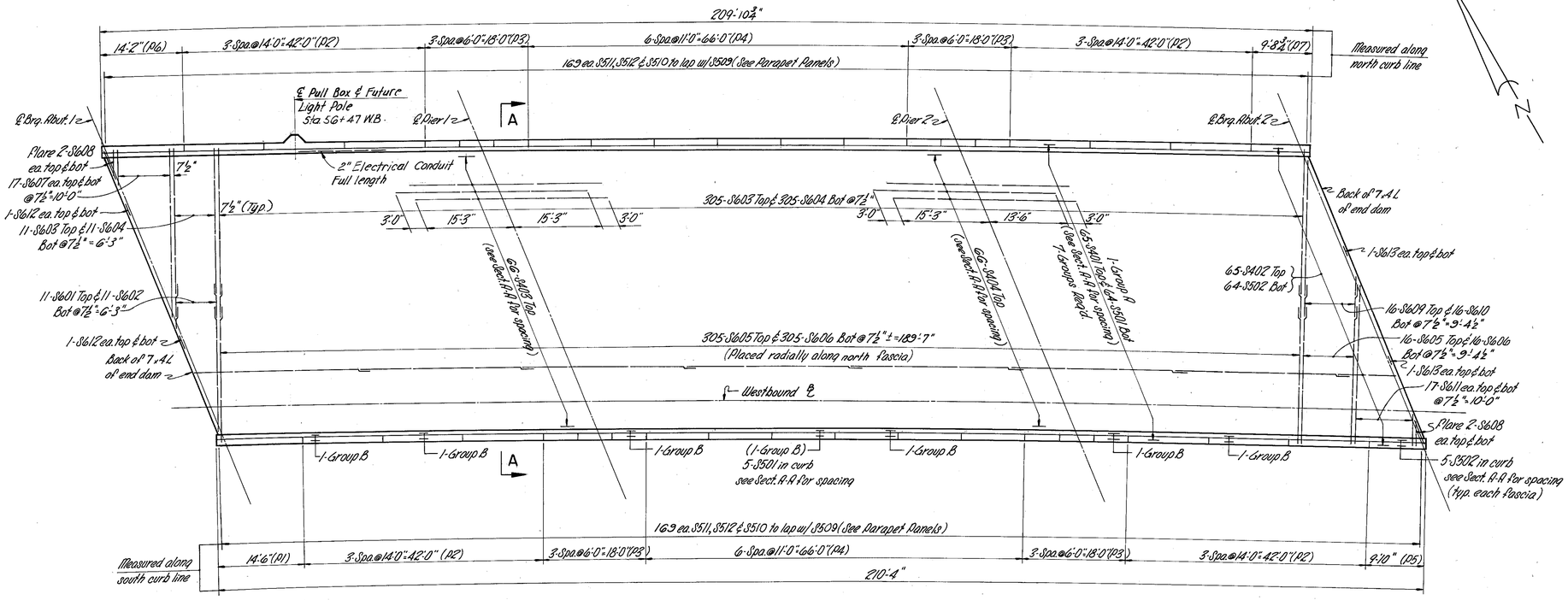
GRE-675 - 5.37
GREENE COUNTY



PANELS		
Mark	No Req'd	L
P1	1	14'-6"
P2	12	14'-0"
P3	12	6'-0"
P4	12	11'-0"
P5	1	9'-10"
P6	1	14'-2"
P7	1	9'-3¾"

Epoxy Coated FF

P1	2-S503	P5	2-S507
P2	2-S504	P6	2-S508
P3	2-S505	P7	2-S513
P4	2-S506		

EF

Epoxy Coated FF

11-S509 @ 1'-5" = 14'-2"	(P1)
11-S509 @ 1'-4" ± = 13'-8"	(P2)
5-S509 @ 1'-5" = 5'-8"	(P3)
9-S509 @ 1'-4" ± = 10'-8"	(P4)
8-S509 @ 1'-5" ± = 9'-6"	(P5)
11-S509 @ 1'-5½" = 13'-10"	(P6)
8-S509 @ 1'-4½" = 9'-5"	(P7)

L

PARAPET PANELS

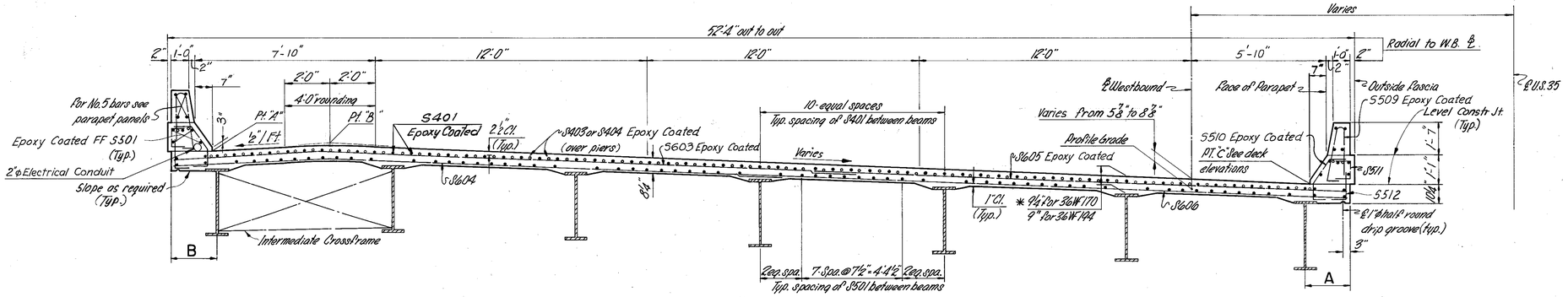
* Deck Slab Depth: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade. This dimension will vary to accomodate horizontal and vertical curve requirements and transitions. The dimensions shown apply at the center line of bearings only.

PLAN - LEFT BRIDGE

WESTBOUND

TABLE OF OFF-SETS						
LOCATION	SPAN 1		SPAN 2		SPAN 3	
	℄ Abut. 1	½ P.T.	℄ Pier 1	½ P.T.	℄ Pier 2	½ P.T.	℄ Abut. 2
DIM "A"	2'-8⅜"	2'-1¼"	1'-9⅝"	1'-9¾"	2'-3¼"	2'-10½"	3'-8⅜"
DIM "B"	1'-9"	2'-5¾"	2'-11¼"	3'-1½"	2'-10½"	2'-5"	1'-9"

Dimensions radial to ℄ Web



SECTION A-A

For Notes see Sh. 11 / 17
For Transition Elevations see Sh. 10 / 17
For Deck Elevation Diagram see Sh. 11 / 17

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO
12 / 17

SUPERSTRUCTURE ROADWAY SLAB - L

BRIDGE NO. GRE-35-0107 R/L
US 35 OVER GRANGE HALL RD.
GREENE COUNTY
STA 56+32.80 TO STA 58+47.01

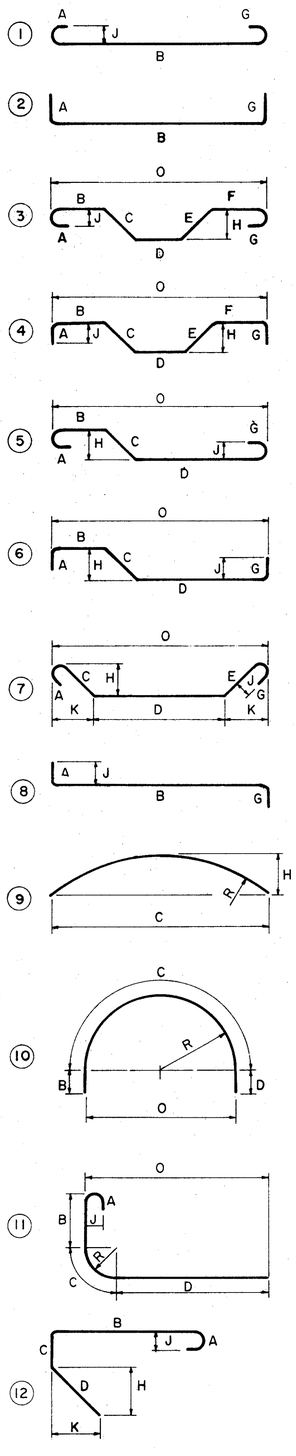
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.		9/25/72	

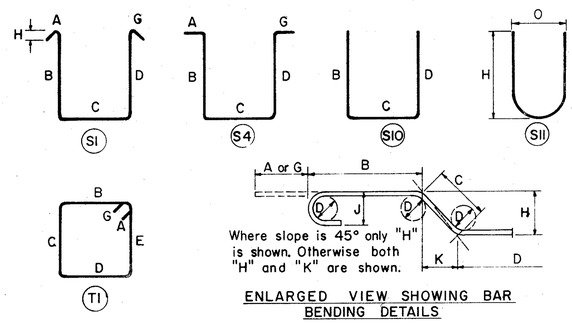
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

560 / 616

GRE-675 · 5·37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 1					Reinforcing steel in Abutment No. 1 shall have the suffix "A"												
A501	21	2'-4"	51	2	9"	10"					9"						
A502	20	2'-10"	59	Str													10 Epoxy Coated
A503	11	6'-7"	76	23	2'-10⅛"	2'-1⅛"	1'-0"	3½"	2'-1⅜"		9"			3'-2"	2'-5"	3⅞"	11 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-4"	5	Str													
A506	1	5'-0"	5	Str													
A507	11	5'-8"	65	Str													
A508	14	14'-2"	207	Str													4 Epoxy Coated
A509	4	7'-11"	33	Str													
A510	2	8'-3"	17	Str													
A511	18	8'-9"	164	Str													
A512	1	9'-2"	10	2	9"	8'-5"											
A513	20	10'-9"	224	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A514	1	4'-3"	4	Str													
A515	1	4'-11"	5	Str													
A516	14	13'-5"	196	Str													4 Epoxy Coated
A517	4	7'-6"	31	Str													
A518	2	7'-4"	15	Str													
A520	2	3'-10"	8	Str													
A521	40	8'-3"	344	S10		1'-7"	5'-4"	1'-7"									
A522	61	7'-8"	488	S10		2'-3"	3'-5"	2'-3"									
A523	40	Varies 6'-10" to 9'-5" by 3/4" I-ea.	339	2	9"	Varies 6'-11" to 8'-8" by 3/4"											
A524	30	28'-4"	887	Str													
A525	6	28'-4"	177	19			27'-0"	1'-4"				5⅝"		1'-3"	28'-3"		
A529	6	5'-0"	31	Str													
A530	2	7'-10"	16	Str													
A531	2	9'-10"	21	Str													
A532	8	7'-9"	65	Str													
A533	2	8'-3"	17	2	9"	7'-6"											
A601	11	6'-5"	107	15		9"	4'-10"		11½"	9"		7"					11 Epoxy Coated
A602	6	21'-6"	194	S10		10'-4"	1'-2"	10'-4"									
A603	5	17'-8"	133	S10		8'-5"	1'-2"	8'-5"									
A605	40	Varies 13'-11" to 16'-6" by 3/4" I-ea.	914	S10		Varies 6'-2" to 8'-9" by 3/4"	5'-4"	2'-9"									
A607	51	10'-11"	836	S10		4'-11"	1'-5"	4'-11"									
A608	51	4'-11"	377	S10		1'-11"	1'-5"	1'-11"									
A609	51	6'-11"	530	S10		3'-2"	11"	3'-2"									
A701	2	4'-8"	19	1	10"	3'-10"							7"				2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		9½"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		10½"	9"		5"					2 Epoxy Coated
A704	2	5'-3"	22	15		9"	3'-7½"		11½"	9"		7"					2 Epoxy Coated
A705	2	5'-11"	25	15		9"	4'-3½"		11½"	9"		7"					2 Epoxy Coated
A801	6	11'-6"	184	Str													
A802	14	29'-6"	1,103	Str													
A803	6	11'-4"	182	Str													
A804	51	6'-2"	745	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	8,990														
ABUTMENT NO. 2					Reinforcing steel in Abutment No. 2 shall have the suffix "B"												
A501	20	2'-4"	49	2	9"	10"					9"						
A502	18	2'-10"	53	Str													9 Epoxy Coated
A503	11	6'-7"	76	23	2'-10⅛"	2'-1⅛"	1'-0"	3½"	2'-1⅜"		9"			3'-2"	2'-5"	3⅞"	11 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-2"	4	Str													
A506	1	4'-10"	5	Str													
A507	11	5'-4"	61	Str													
A508	14	14'-2"	207	Str													4 Epoxy Coated
A509	4	7'-11"	33	Str													
A510	2	7'-9"	16	Str													
A511	8	8'-11"	74	Str													
A512	1	7'-4"	8	2	9"	6'-7"											
A513	19	10'-9"	213	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A514	1	4'-1"	4	Str													
A515	14	12'-2"	178	Str													4 Epoxy Coated
A516	4	6'-11"	29	Str													
A517	2	6'-3"	13	Str													

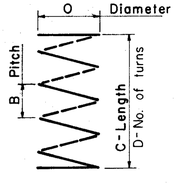




ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. All dimensions are out to out of bar.
3. Radius dimension "R" is to outside of bar.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see Sect. 509.05 of the specifications.
6. For bar type SPI, the No. of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. 1½ Closed coils shall be provided at the ends of each spiral unit.
7. Figures in circles show bar types.
8. "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
9. Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
10. "H" Dimension on stirrups will be shown where necessary to restrict hooks.
11. All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
12. Four steel channel, tee or angle spacers, weighing approximately 0.80 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
13. For additional bars see sheet 14,15,16,17 / 17
14. REINFORCING STEEL SAMPLES: Refer to C.M.S. Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.



KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

13 / 17

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0107 R/L

U.S. 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA: 56+32.80 TO
STA: 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/28/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

561
616

GRE-675 · 5·37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 2 CONTINUED																
A518	8	8'-3"	69	Str													
A519	2	2'-11"	6	Str													
A520	2	9'-8"	20	2	9"	8'-11"											
A521	40	8'-3"	344	S10		1'-7"	5'-4"	1'-7"									
A522	61	7'-8"	488	S10		2'-3"	3'-5"	2'-3"									
A523	40	Varies 7'-0" to 8'-11" by 9/8", 1-eq.	332	2	9"	Varies 6'-3" to 8'-2" by 7/8"											
A524	30	28'-11"	905	Str													
A525	6	28'-10"	180	19			27'-6"	1'-4"				62"		1'-2"	28'-8"		
A529	7	5'-0"	37	Str													
A530	2	9'-4"	19	Str													
A531	2	7'-10"	16	Str													
A532	6	7'-0"	44	Str													
A601	6	6'-3"	56	15		9"	4'-8"		11½"	9"		7"					6 Epoxy Coated
A602	6	18'-0"	162	S10		8'-7"	1'-2"	8'-7"									
A603	5	6'-3"	47	15		9"	4'-8"		11½"	9"		7"					5 Epoxy Coated
A604	5	20'-10"	156	S10		10'-0"	1'-2"	10'-0"									
A605	40	Varies 14'-1" to 16'-0" by 5/8", 1-eq.	304	S10		Varies 6'-4" to 8'-3" by 5/8"	5'-4"	2'-9"									
A607	53	10'-11"	869	S10		4'-11"	1'-5"	4'-11"									
A608	53	4'-11"	391	S10		1'-11"	1'-5"	1'-11"									
A609	53	7'-1"	564	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"							7"				2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-10"		9½"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-10"		10½"	9"		5"					2 Epoxy Coated
A704	1	5'-1"	10	15		9"	3'-6"		11½"	9"		7"					1 Epoxy Coated
A705	1	5'-9"	12	15		9"	4'-2"		11½"	9"		7"					1 Epoxy Coated
A706	1	6'-0"	10	15		9"	3'-5"		11½"	9"		7"					1 Epoxy Coated
A801	6	11'-0"	176	Str													
A802	14	30'-3"	1,131	Str													
A803	6	11'-6"	184	Str													
A804	53	6'-2"	775	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
		Total	8,998														
	ABUTMENT NO. 3				Reinforcing steel in Abutment No. 3 shall have the suffix "C"												
A501	21	2'-4"	51	2	9"	10"											
A502	18	2'-10"	53	Str													9 Epoxy Coated
A503	12	6'-7"	82	23	2'-10⅛"	2'-1⅛"	1'-0"	3½"	2'-1⅜"			9"		3'-2"	2'-5"	3⅞"	12 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-3"	4	Str													
A506	1	4'-11"	5	Str													
A507	12	5'-8"	71	Str													
A508	14	15'-8"	229	Str													4 Epoxy Coated
A509	4	8'-8"	36	Str													
A510	2	9'-7"	20	Str													
A511	10	10'-0"	104	Str													
A512	1	9'-1"	10	2	9"	8'-4"											
A513	19	10'-9"	213	71	5"	3'-0"	2'-2"	3'-0"	2'-2"			5"					
A514	1	4'-4"	5	Str													
A515	14	12'-2"	178	Str													4 Epoxy Coated
A516	4	7'-0"	29	Str													
A517	2	6'-5"	13	Str													
A518	6	8'-2"	51	Str													
A519	2	3'-11"	8	Str													
A520	2	8'-1"	17	2	9"	7'-4"											
A521	32	8'-3"	275	S10		1'-7"	5'-4"	1'-7"									
A522	50	7'-2"	374	S10		2'-0"	3'-5"	2'-0"									
A523	32	Varies 7'-0" to 8'-9" by 9/8", 1-eq.	263	2	9"	Varies 6'-3" to 8'-0" by 3/4"											
A524	30	24'-1"	754	Str													
A525	6	23'-11"	150	19			22'-7"	1'-4"				5⅞"		1'-2⅞"	23'-10"		

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 3 CONTINUED																
A529	6	5'-3"	33	Str													
A530	2	7'-8"	16	Str													
A531	2	9'-9"	20	Str													
A532	7	7'-0"	51	Str													
A601	7	21'-6"	226	S10		10'-4"	1'-2"	10'-4"									
A603	12	6'-6"	117	15		9"	4'-11"					11½"		9"		7"	12 Epoxy Coated
A604	5	17'-8"	133	S10		8'-5"	1'-2"	8'-5"									
A605	32	Varies 14'-1" to 15'10" by 3/4", 1-eq.	719	S10		Varies 6'-4" to 8'-1" by 3/4"	5'-4"	2'-9"									
A607	43	12'-1"	780	S10		5'-6"	1'-5"	5'-6"									
A608	43	4'-11"	318	S10		1'-11"	1'-5"	1'-11"									
A609	43	7'-1"	458	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"							7"				2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"			9½"	9"	3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"			10½"	9"	5"					2 Epoxy Coated
A704	1	5'-2"	11	15		9"	3'-7"			11½"	9"	7"					1 Epoxy Coated
A705	1	5'-10"	12	15		9"	4'-3"			11½"	9"	7"					1 Epoxy Coated
A706	1	5'-3"	11	15		9"	3'-8"			11½"	9"	7"					1 Epoxy Coated
A801	6	11'-1"	178	Str													
A802	14	25'-9"	963	Str													
A803	6	12'-7"	202	Str													
A804	43	6'-2"	629	14		1'-3"	3'-8"	1'-8"				2'-7"		2'-7"			
		Total	7,950														
	ABUTMENT NO. 4				Reinforcing steel in Abutment No. 4 shall have the suffix "D"												
A501	21	2'-4"	51	2	9"	10"											
A502	20	2'-10"	59	Str													10 Epoxy Coated
A503	11	6'-7"	76	23	2'-10⅛"	2'-1⅛"	1'-0"	3½"	2'-1⅜"			9"		3'-2"	2'-5"	3⅞"	11 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-4"	5	Str													
A506	1	5'-0"	5	Str													
A507	11	5'-6"	63	Str													
A508	14	14'-2"	207	Str													4 Epoxy Coated
A509	4	7'-11"	33	Str													
A510	2	8'-2"	17	Str													
A511	8	8'-11"	74	Str													
A512	1	7'-4"	8	2	9"	6'-7"											
A513	20	10'-9"	224	71	5"	3'-0"	2'-2"	3'-0"	2'-2"			5"					
A514	1	4'-4"	5	Str													
A515	1	5'-0"	5	Str													
A516	14	13'-5"	196	Str													4 Epoxy Coated
A517	4	7'-6"	31	Str													
A518	2	7'-7"	16	Str													
A519	8	9'-5"	79	Str													
A520	2	4'-0"	8	Str													
A521	31	8'-3"	267	S10		1'-7"	5'-4"	1'-7"									
A522	49	6'-10"	349	S10		1'-10"	3'-5"	1'-10"									
A523	31	Varies 7'-3" to 8'-3" by 3/8", 1-eq.	251	2	9"	Varies 6'-6" to 7'-6" by 3/8"											

NOTES:
1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 13/17
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 13/17

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO
14/17

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0107 R/L

U.S. 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA: 56+32.80 TO STA: 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

562
616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	ABUTMENT NO. 4 CONTINUED																
A524	30	24'-10"	777	Str													
A525	6	24'-6"	153	19			23'-2"	1'-4"				6¾"		1'-2½"	24'-5"		
A529	7	5'-0"	37	Str													
A530	2	8'-11"	19	Str													
A531	2	7'-10"	16	Str													
A532	6	7'-6"	47	Str													
A533	2	9'-4"	19	2	9"	8'-7"											
A601	11	6'-4"	105	15		9"	4'-9"		11½"	9"		7"					11 Epoxy Coated
A602	6	17'-10"	161	S10		8'-6"	1'-2"	8'-6"									
A603	5	19'-10"	149	S10		9'-6"	1'-2"	9'-6"									
A605	31	Varies 14'-4" to 15'-4" by 3/8", 1-ea.	691	S10		Varies 6'-7" to 7'-7" by 3/8"	5'-4"	2'-9"									
A607	45	11'-1"	749	S10		5'-0"	1'-5"	5'-0"									
A608	45	4'-11"	332	S10		1'-11"	1'-5"	1'-11"									
A609	45	7'-1"	479	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"							7"				2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		9½"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		10½"	9"		5"					2 Epoxy Coated
A704	2	5'-3"	22	15		9"	3'-8"		11½"	9"		7"					2 Epoxy Coated
A705	2	6'-1"	25	15		9"	4'-4"		11½"	9"		7"					2 Epoxy Coated
A801	6	12'-3"	196	Str													
A802	14	26'-2"	378	Str													
A803	6	11'-7"	186	Str													
A804	45	6'-2"	688	14		1'-3"	3'-8"	1'-8"				2'-7"		2'-7"			
		Total	7,806														
	Total Abutments		33,744														
	PIER NO. 1																
SP401	1	28'-10½"	534	SPI		4½"	28'-10½"	80							2'-8"		
SP403	1	28'-1½"	520	SPI		4½"	28'-1½"	78							2'-8"		
SP405	1	27'-4½"	507	SPI		4½"	27'-4½"	76							2'-8"		
SP407	1	27'-0"	500	SPI		4½"	27'-0"	75							2'-8"		
P501	4	28'-0"	117	Str													
P503	30	5'-11"	185	S10		1'-9"	2'-8"	1'-9"									
P504	30	Varies 6'-9" to 9'-8" by 2½", 2-ea.	257	S10		Varies 2'-2" to 3'-7½" by 1/4"	2'-8"	Varies 2'-2" to 3'-7½" by 1/4"									
P505	86	9'-9"	875	S10		3'-8"	2'-8"	3'-8"									
P508	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P601	12	19'-1"	344	Str													
P602	12	32'-5"	584	Str													
P603	51	11'-6"	881	Str													
P701	3	22'-2"	136	19		5'-9"	16'-5"					1'-3"		5'-7"	22'-0"		
P702	3	22'-2"	136	19		5'-9"	16'-5"					1'-8⅜"		5'-5⅜"	21'-10⅞"		
P801	24	26'-0"	1,666	Str													
P802	67	11'-6"	2,057	Str													
P1001	5	16'-6"	355	Str													
P1101	64	7'-3"	2,465	11		3"	2'-1"	4'-11"							6'-4"	1'-5"	
P1102	16	32'-7"	2,770	Str													
P1104	16	31'-11"	2,713	Str													
P1106	16	31'-4"	2,664	Str													
P1108	16	30'-8"	2,607	Str													
P1116	6	16'-8"	531	20		2'-2"	14'-10"										
P1117	6	14'-5"	460	20		2'-2"	12'-7"										
P1118	4	12'-7"	267	Str													
P1119	3	32'-9"	522	Str													
		Total	24,857														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER NO. 2																
SP402	1	27'-0"	500	SPI		4½"	27'-0"	75							2'-8"		
SP404	1	26'-7½"	493	SPI		4½"	26'-7½"	74							2'-8"		
SP406	1	26'-3"	487	SPI		4½"	26'-3"	73							2'-8"		
SP408	1	25'-10½"	480	SPI		4½"	25'-10½"	72							2'-8"		
P501	4	28'-0"	117	Str													
P503	30	5'-11"	185	S10		1'-9"	2'-8"	1'-9"									
P504	30	Varies 6'-9" to 9'-8" by 2½", 2-ea.	257	S10		Varies 2'-2" to 3'-7½" by 1/4"	2'-8"	Varies 2'-2" to 3'-7½" by 1/4"									
P505	86	9'-9"	875	S10		3'-8"	2'-8"	3'-8"									
P508	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P601	12	19'-1"	344	Str													
P602	12	32'-5"	584	Str													
P603	51	11'-6"	881	Str													
P703	3	22'-2"	136	19		5'-9"	16'-5"					1'-4½"		5'-7"	22'-0"		
P704	3	22'-2"	136	19		5'-9"	16'-5"					1'-7¼"		5'-6¼"	21'-11¼"		
P801	24	26'-0"	1,666	Str													
P802	67	11'-6"	2,057	Str													
P1001	5	16'-6"	355	Str													
P1101	64	7'-3"	2,465	11		3"	2'-1"	4'-11"							6'-4"	1'-5"	
P1103	16	30'-9"	2,614	Str													
P1105	16	30'-5"	2,586	Str													
P1107	16	30'-0"	2,550	Str													
P1109	16	29'-8"	2,522	Str													
P1116	6	16'-8"	531	20		2'-2"	14'-10"										
P1117	6	14'-5"	460	20		2'-2"	12'-7"										
P1118	4	12'-7"	267	Str													
P1119	3	32'-9"	522	Str													
		Total	24,274														
	PIER NO. 3																
SP409	1	25'-6"	473	SPI		4½"	25'-6"	71								2'-8"	
SP411	1	24'-9"	460	SPI		4½"	24'-9"	69								2'-8"	
SP413	1	24'-4½"	453	SPI		4½"	24'-4½"	68								2'-8"	
P502	4	23'-10"	99	Str													
P503	32	5'-11"	197	S10		1'-9"	2'-8"	1'-9"									
P505	60	9'-9"	610	S10		3'-8"	2'-8"	3'-8"									
P506	32	Varies 6'-9" to 9'-9" by 2", 2-ea.	275	S10		Varies 2'-2" to 3'-8" by 1"	2'-8"	Varies 2'-2" to 3'-8" by 1"									
P508	30	5'-7"	175	S10		1'-7"	2'-8"	1'-7"									
P603	44	11'-6"	760	Str													
P604	28	22'-6"	946	Str													
P802	59	11'-6"	1,812	Str													

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 13/17
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 13/17

CINCINNATI — KING & GAVARIS CONSULTING ENGINEERS — OHIO — 15/17

REINFORCING STEEL LIST

BRIDGE NO. GRE.-35-0107 R/L

U.S. 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA: 56+32.80 TO STA: 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

563/616

GRE-675 : 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	PIER NO. 3 CONTINUED																
P803	14	30'-9"	1,149	Str													
P804	14	15'-0"	561	Str													
P901	6	25'-6"	520	Str													
P1002	4	24'-8"	425	19		5'-10"	18'-10"					1'-3½"		5'-8"	24'-6"		
P1003	4	24'-8"	425	19		5'-10"	18'-10"					1'-8½"		5'-7"	24'-5"		
P1006	12	15'-3"	787	20		2'-2"	13'-5"										
P1007	8	11'-8"	402	Str													
P1401	21	9'-11	1,593	11		1'-2"	2'-8"	6'-1"							7'-9"	1'-8"	
P1402	21	11'-11"	1,914	11		1'-2"	2'-8"	8'-1"							9'-9"	1'-8"	
P1403	7	24'-2"	1,294	Str													
P1404	7	22'-2"	1,187	Str													
P1405	7	23'-7"	1,263	Str													
P1406	7	21'-7"	1,156	Str													
P1407	7	23'-0"	1,232	Str													
P1408	7	21'-0"	1125	Str													
		Total	21,293														
	PIER NO. 4																
SP410	1	25'-1½"	466	SP1		4½"	25'-1½"	70							2'-8"		
SP412	1	24'-4½"	453	SP1		4½"	24'-4½"	68							2'-8"		
SP414	1	24'-0"	446	SP1		4½"	24'-0"	67							2'-8"		
P502	4	23'-10"	99	Str													
P503	32	5'-11"	197	S10		1'-9"	2'-8"	1'-9"									
P505	60	9'-9"	610	S10		3'-8"	2'-8"	3'-8"									
P506	32	Varies 6'-9" to 9'-9" by 2", 2-ea.	275	S10		Varies 2'-2" to 3'-8" by 1"	2'-8"	Varies 2'-2" to 3'-8" by 1"									
P508	30	5'-7"	175	S10		1'-7"	2'-8"	1'-7"									
P603	44	11'-6"	760	Str													
P604	28	22'-6"	946	Str													
P802	59	11'-6"	1,812	Str													
P803	14	30'-9"	1,149	Str													
P804	14	15'-0"	561	Str													
P901	6	25'-6"	520	Str													
P1004	4	24'-8"	425	19		5'-10"	18'-10"	-				1'-4"		5'-8"	24'-6"		
P1005	4	24'-8"	425	19		5'-10"	18'-10"					1'-8"		5'-7"	24'-5"		
P1006	12	15'-3"	787	20		2'-2"	13'-5"										
P1007	8	11'-8"	402	Str													
P1401	21	9'-11"	1,593	11		1'-2"	2'-8"	6'-1"							7'-9"	1'-8"	
P1402	21	11'-11"	1,914	11		1'-2"	2'-8"	8'-1"							9'-9"	1'-8"	
P1409	7	23'-8"	1,267	Str													
P1410	7	21'-8"	1,160	Str													
P1411	7	23'-3"	1,245	Str													
P1412	7	21'-3"	1138	Str													
P1413	7	22'-9"	1,218	Str													
P1414	7	20'-9"	1111	Str													
		Total	21,154														
	Total	Piers	91,578														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	EASTBOUND SLAB	Reinforcing steel in Eastbound slab shall have the suffix "A"															
S401	385	30'-0"	7,715	Str													385 Epoxy Coated
S402	56	31'-9"	1,188	Str													56 Epoxy Coated
S403	56	33'-6"	1,253	Str													56 Epoxy Coated
S404	55	10'-0"	367	Str													55 Epoxy Coated
S501	448	30'-0"	14,018	Str													28 Epoxy Coated
S502	64	12'-4"	823	Str													4 Epoxy Coated
S503	8	14'-3"	119	Str													4 Epoxy Coated
S504	48	13'-8"	684	Str													24 Epoxy Coated
S505	48	5'-8"	284	Str													24 Epoxy Coated
S506	48	10'-8"	534	Str													24 Epoxy Coated
S507	4	10'-11"	46	Str													2 Epoxy Coated
S508	4	10'-7"	44	Str													2 Epoxy Coated
S509	339	5'-10"	2,063	23	2'-0⅛"	2'-2⅛"	1'-0"	3½"	2'-2⅜"	9"				2'-4"	2'-6"	3⅛"	339 Epoxy Coated
S510	339	3'-1"	1,090	15		9"	9"	9"	11½"	9"		7"					339 Epoxy Coated
S511	339	2'-4"	825	2	9"	10"					9"						
S512	339	2'-5"	855	2	9"	1'-8"											
S601	626	43'-8"	41,058	Str													313 Epoxy Coated
S602	48	Varies 4'-6" to 40'-3" by 1'-6", 25-ea.	1,613	Str													24 Epoxy Coated
S603	8	4'-0"	48	Str													4 Epoxy Coated
S604	56	Varies 4'-3" to 40'-6" by 1'-6", 28-ea.	1,882	Str													28 Epoxy Coated
S605	4	24'-6"	147	Str													2 Epoxy Coated
S606	4	25'-0"	150	Str													2 Epoxy Coated
L501	4	3'-6"	15	2	9"	2'-0"					9"						
L502	4	8'-3"	34	S10			3'-2"	2'-2"	3'-2"								4 Epoxy Coated
L503	6	7'-6"	47	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L504	4	3'-2"	13	Str													
		Total	76,915														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 13/17
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 13/17

CINCINNATI — KING & GAVARIS CONSULTING ENGINEERS — OHIO — 16/17

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0107 R/L

U.S. 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA: 56+32.80 TO STA: 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	SA	9/22/72	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

564
616

GRE-675 - 5.37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
	WESTBOUND SLAB				Reinforcing steel in Westbound Slab shall have the suffix "B"												
S401	455	30'-0"	3,118	Str													455 Epoxy Coated
S402	65	8'-9"	380	Str													65 Epoxy Coated
S403	66	3'-6"	1,477	Str													66 Epoxy Coated
S404	66	31'-9"	1,400	Str													66 Epoxy Coated
S501	518	30'-0"	16,208	Str													28 Epoxy Coated
S502	74	11'-0"	849	Str													4 Epoxy Coated
S503	4	14'-2"	59	Str													2 Epoxy Coated
S504	48	13'-8"	684	Str													24 Epoxy Coated
S505	48	5'-8"	284	Str													24 Epoxy Coated
S506	48	10'-8"	534	Str													24 Epoxy Coated
S507	4	9'-6"	40	Str													2 Epoxy Coated
S508	4	13'-10"	58	Str													2 Epoxy Coated
S509	338	5'-10"	2,057	23	2'-0 1/8"	2'-2 5/8"	1'-0"	3 1/2"	2'-2 3/8"	9"				2'-4"	2'-6"	3 1/8"	338 Epoxy Coated
S510	338	3'-1"	1,087	15		9"	9"	9"	11 1/2"	9"		7"					338 Epoxy Coated
S511	338	2'-4"	823	2	9"	10"					9"						
S512	338	2'-5"	852	2	9"	1'-8"											
S513	4	9'-5"	39	Str													2 Epoxy Coated
S601	11	Varies 3'-0" to 12'-9 1/2" by 1'-7 3/4"; 1-eq.	186	Str													11 Epoxy Coated
S602	11	Varies 6'-9" to 23'-3" by 1'-7 3/4"; 1-eq.	248	Str													
S603	316	31'-0"	14,714	Str													316 Epoxy Coated
S604	316	27'-0"	12,815	Str													
S605	321	22'-7"	10,888	Str													321 Epoxy Coated
S606	321	26'-7"	12,817	Str													
S607	34	Varies 3'-6" to 30'-0" by 1'-7 3/8"; 2-eq.	855	Str													17 Epoxy Coated
S608	8	3'-6"	42	Str													4 Epoxy Coated
S609	16	Varies 6'-4" to 28'-0" by 1'-5"; 1-eq.	415	Str													16 Epoxy Coated
S610	16	Varies 3'-0" to 24'-0" by 1'-5"; 1-eq.	324	Str													
S611	34	Varies 3'-6" to 26'-0" by 1'-5"; 2-eq.	753	Str													17 Epoxy Coated
S612	4	28'-7"	172	Str													2 Epoxy Coated
S613	4	29'-3"	176	Str													2 Epoxy Coated
L501	4	3'-6"	15	2	9"	2'-0"					9"						
L502	4	8'-3"	34	S10			3'-2"	2'-2"	3'-2"								4 Epoxy Coated
L503	6	7'-6"	47	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L504	4	3'-2"	13	Str.													
		Total	30,463														
Total	Superstructure		167,378														

NOTES:

1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 13/17
3. All dimensions are out to out of bar.
4. Radius dimension "R". is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 13/17

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI — OHIO
17/17

REINFORCING STEEL LIST

BRIDGE NO. GRE-35-0107 R/L

U.S. 35 OVER GRANGE HALL RD.

GREENE COUNTY

STA: 56+32.80 TO
STA: 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	RE-ISSUED
	A.W.		S.A.	SA	9/28/72	

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF HIGHWAYS IN 1967 BY C.W. Miller
DATE Jan. 31, 1972

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STATION 308+09.01 TO STATION 417+00.00 BY ACTION OF THE DIRECTOR OF HIGHWAYS ON APRIL 19, 1965 AS RECORDED IN VOL. 50, P. 317 OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

CENTER LINE SURVEY PLAT

INTERSTATE ROUTE - 675

GRE-675-5.37

MONTGOMERY COUNTY

MAD RIVER TOWNSHIP - SECTION 15

GREENE COUNTY

BEAVERCREEK TOWNSHIP - SECTIONS 2,3,8 & 9

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-675-8(15)54	

565/616

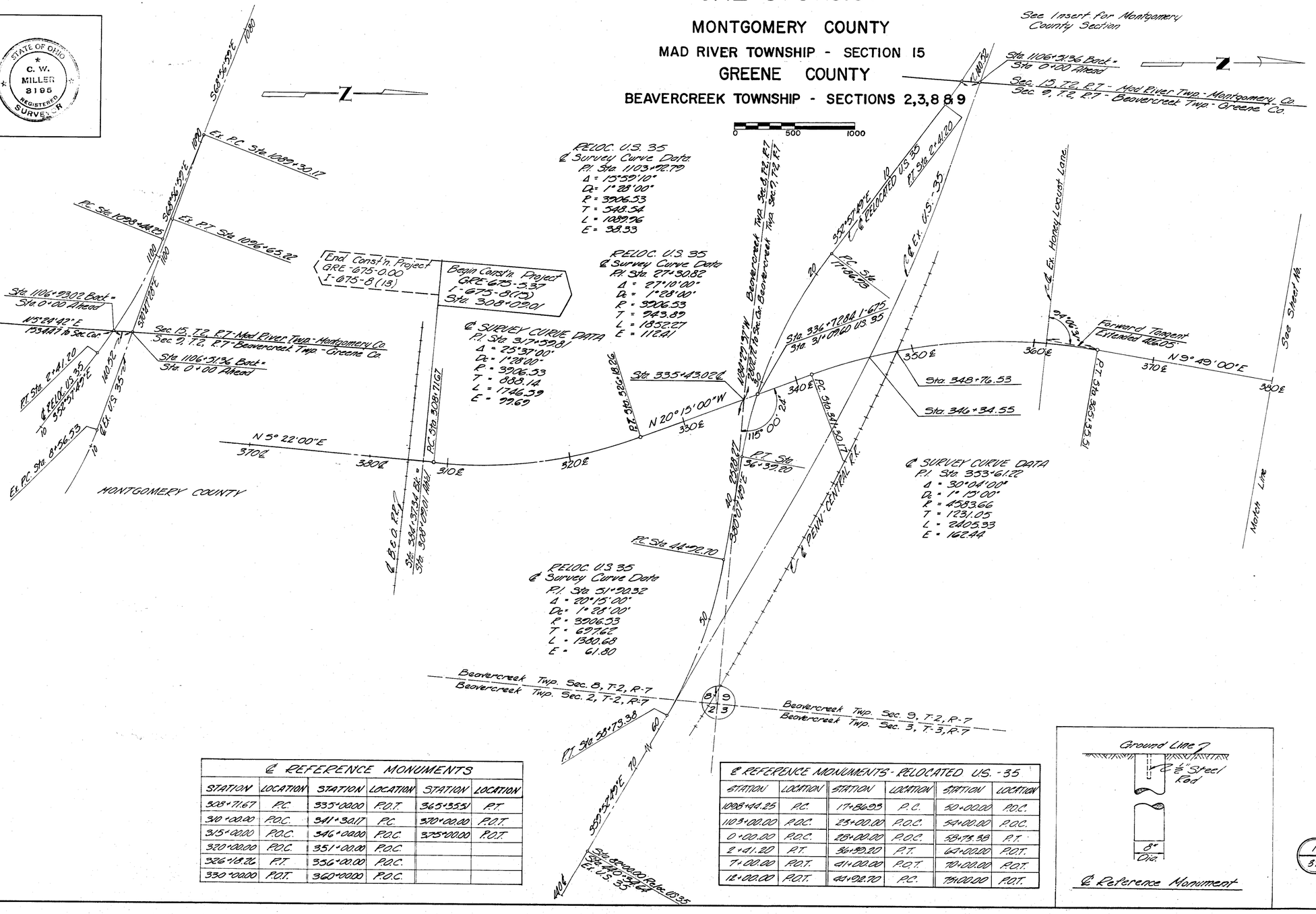
1414/1102

1/37

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

565-610
Plus Soil Profile

STATE OF OHIO
C. W. MILLER
8195
REGISTERED SURVEYOR



℄ REFERENCE MONUMENTS					
STATION	LOCATION	STATION	LOCATION	STATION	LOCATION
308+71.67	P.C.	335+00.00	P.O.T.	365+35.51	P.T.
310+00.00	P.O.C.	341+30.17	P.C.	370+00.00	P.O.T.
315+00.00	P.O.C.	346+00.00	P.O.C.	375+00.00	P.O.T.
320+00.00	P.O.C.	351+00.00	P.O.C.		
326+18.26	P.T.	356+00.00	P.O.C.		
330+00.00	P.O.T.	360+00.00	P.O.C.		

℄ REFERENCE MONUMENTS - RELOCATED U.S. - 35					
STATION	LOCATION	STATION	LOCATION	STATION	LOCATION
1008+44.25	P.C.	17+86.95	P.C.	50+00.00	P.O.C.
1013+00.00	P.O.C.	23+00.00	P.O.C.	54+00.00	P.O.C.
0+00.00	P.O.C.	28+00.00	P.O.C.	55+79.38	P.T.
2+41.20	P.T.	36+30.20	P.T.	62+00.00	P.O.T.
7+00.00	P.O.T.	41+00.00	P.O.T.	70+00.00	P.O.T.
12+00.00	P.O.T.	44+92.70	P.C.	73+00.00	P.O.T.

℄ Reference Monument

SIGNED R. F. Berris
DATE 12/18/72 DIVISION DEPUTY DIRECTOR

SHEET NO. 1 OF 3

RECEIVED ____ AT ____
RECORDED ____
PLAT BOOK ____ PAGE ____
SIGNED ____ MONTGOMERY CO., OHIO

FILE NO. 721
RECEIVED JAN. 24, 1973 AT 1:41 P.M.
RECORDED JANUARY 24, 1973
PLAT BOOK 14 PAGES 48, 49, 50
SIGNED Albert T. Moore GREENE CO., OHIO
RECORDER
FEE 16.80

1/37

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-675-8(15)54	

566/616

2/37

CENTER LINE SURVEY PLAT

INTERSTATE ROUTE - 675

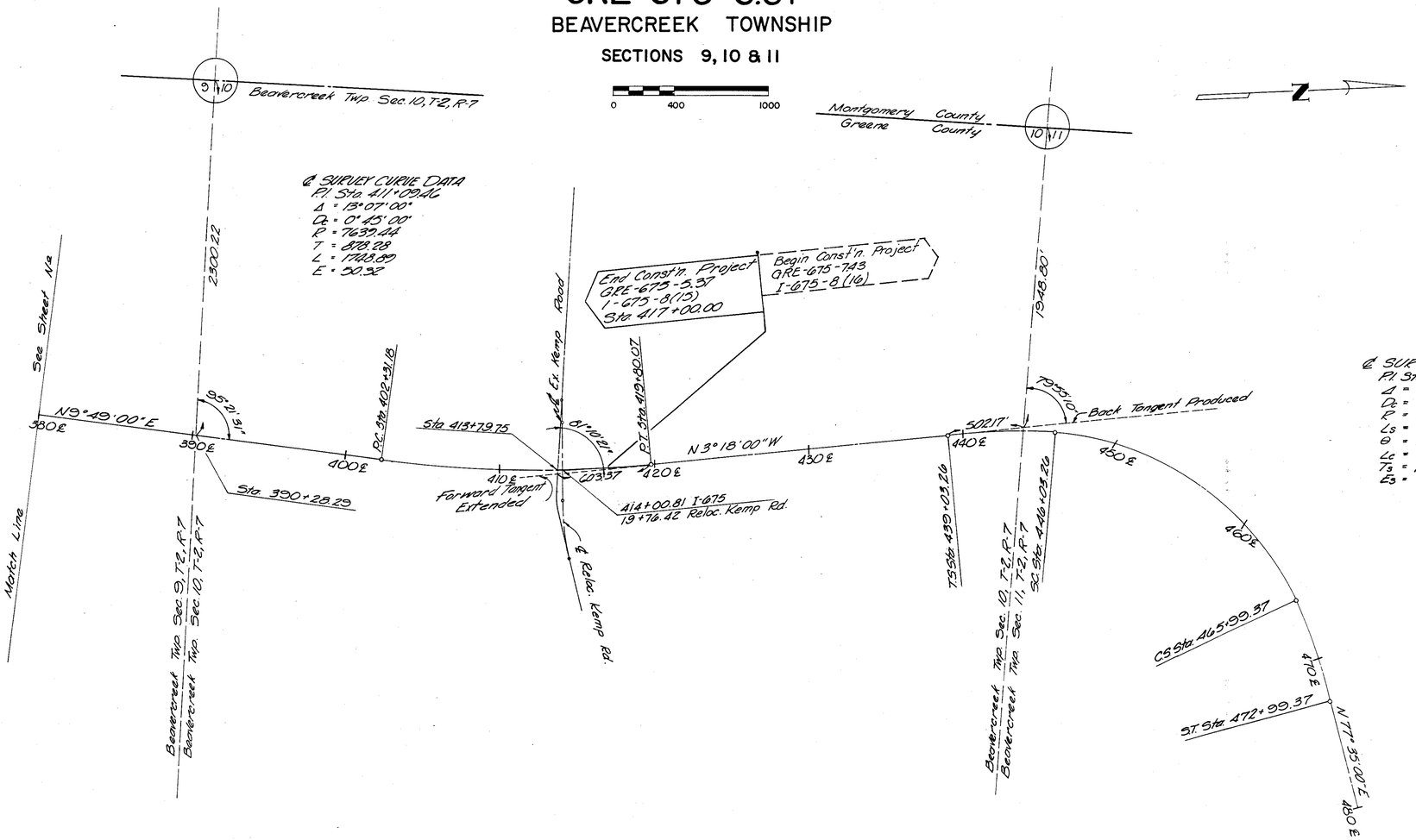
GRE-675-5.37

BEAVERCREEK TOWNSHIP

SECTIONS 9, 10 & 11

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

0 400 1000



℄ REFERENCE MONUMENTS			
STATION	LOCATION	STATION	LOCATION
380+00.00	P.O.T.	406+00.00	P.O.C.
385+00.00	P.O.T.	411+00.00	P.O.C.
390+00.00	P.O.T.	415+00.00	P.O.C.
395+00.00	P.O.T.		
399+00.00	P.O.T.		
402+31.18	P.C.		

2/37

CURVE DATA

Co-ordinates based on Ohio State Co-ordinate System, South Zone.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37

547 / 516

3 / 37

US 35 INTERCHANGE

CURVE NO.	Δ	Dc	R	Ls	θs	T or Ts	L	E or Es	P.I. Station	P.I. Co-ordinates North	P.I. Co-ordinates East	P.C. or T.S. Station	P.C. or T.S. Co-ordinates North	P.C. or T.S. Co-ordinates East	S.C. Station	S.C. Co-ordinates North	S.C. Co-ordinates East	C.S. Station	C.S. Co-ordinates North	C.S. Co-ordinates East	P.T. or S.T. Station	P.T. or S.T. Co-ordinates North	P.T. or S.T. Co-ordinates East			Remarks
1 ℄	25°37'00"	1°20'00"	3906.53			888.14	1746.59	99.60	317+59.81	638333.38	1552746.47	308+71.67	633449.13	1552663.40							326+18.26	635166.62	1552439.07			
2 ℄	30°04'00"	1°15'00"	4583.66			1231.05	2405.33	162.44	353+61.22	637410.04	1551489.60	341+30.17	636585.10	1551915.77							346+35.51	638953.07	1551690.57			
3 ℄	13°07'00"	0°45'00"	7639.44			878.28	1748.89	50.32	411+09.46	643460.05	1552479.42	402+31.18	642594.63	1552329.67							410+80.07	644336.88	1552428.86			
35-1 ℄	15°59'10"	1°28'00"	3906.53			548.54	1089.96	38.33	1103+92.79	638021.96	1549232.95	1098+44.25	638218.99	1548721.01							2+41.20	637691.56	1549670.82			
35-2 ℄	27°10'00"	1°28'00"	3906.53			943.89	1852.27	112.41	27+30.82	636192.00	1551658.17	17+86.93	636740.53	1550904.71							36+39.20	636030.21	1552588.08			
35-3 ℄	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+30.32	635764.34	1554116.25	44+32.70	635883.92	1553428.95							58+73.38	635414.27	1554719.67			
35-3 E.B.	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+66.52	635748.71	1554089.37	44+68.90	635868.29	1553402.08							58+49.50	635398.64	1554692.80			
35-3 W.B.	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	52+14.11	635779.96	1554143.12	45+16.49	635890.54	1553455.82							58+07.18	635429.89	1554746.54			
A-1	5°12'19"	0°40'00"	8594.37			393.18	785.81	8.99	297+21.51	636952.98	1550556.60	293+31.33	637189.80	1550242.83							301+17.15	636688.49	1550847.61			
A-2	26°39'59"	8°00'00"	716.20	200.00	8°00'00"	270.23	333.33	22.23	307+82.13	636270.21	1551325.52	304+81.91	636445.99	1551125.58	306+81.91	636310.84	1551267.02	308+15.24	636200.98	1551342.22	310+15.24	636018.02	1551422.62			
A-3	8°00'00"			200.00	8°00'00"							311+06.43	635932.04	1551455.30	313+06.43	635749.99	1551535.79									
A-4	204°10'17"	8°00'00"	716.20			3344.83	2552.14	4136.86	——	638673.79	1549911.20	313+06.43	635749.99	1551535.79							338+58.57	636671.54	1552590.55			
A-5	8°00'00"			200.00	8°00'00"													338+58.57	636671.54	1552590.55	340+58.57	636776.78	1552720.05			
A-6	53°28'52"	6°30'00"	881.47	200.00	6°30'00"	544.22	821.50	107.31	347+22.72	637095.43	1551537.89	341+78.50	636833.50	1552314.93	343+78.50	636936.26	1552143.48	350+00.00	637457.72	1551798.43	352+00.00	637634.57	1551763.73			
B-1	0°00'00"			200.00	0°00'00"							338+11.60	637243.10	1550406.21	340+11.60	637135.45	1550574.50									
B-2	114°04'22"	9°00'00"	636.62			981.68	1267.48	533.41	349+03.36	636605.83	1551452.24				340+11.60	637135.45	1550574.50				352+79.16	637676.55	1551495.60			
B-3	7°30'17"	1°30'00"	3819.72			250.52	500.32	8.21	355+29.68	637926.82	1551506.66	352+79.16	637676.55	1551495.60							357+79.48	638176.39	1551484.94			
C-1	32°15'24"	7°00'00"	818.51			236.69	460.81	33.54	320+61.69	634618.38	1552499.97	318+25.00	634386.15	1552540.29							322+85.81	634794.09	1552341.39			
D-1	6°48'08"	1°30'00"	3819.72			227.01	453.40	6.74	335+56.55	639073.01	1552187.40	333+20.54	638860.94	1552266.06							337+83.02	639204.70	1552134.70			
D-2	24°30'00"			200.00	24°30'00"										330+83.02	639402.41	1552118.12	337+83.02	639204.70	1552134.70						
D-3	248°01'41"	23°00'00"	249.11			369.13	1078.38	604.44	——	639130.13	1552047.36	339+83.02	639402.41	1552118.12							350+61.41	639200.05	1552400.80			
D-4	20°15'00"			150.00	20°15'00"										352+11.41	639204.18	1552260.67	350+61.41	639200.05	1552400.80						
D-5	9°21'22"	4°00'00"	1432.39			117.21	233.90	4.70	353+28.62	639223.18	1552145.01	352+11.41	639204.18	1552260.67							354+45.31	639260.73	1552033.98			
E-1	25°00'00"			200.00	25°00'00"							322+38.15	639192.06	1551029.85	324+38.15	639165.73	1551733.41									
E-2	247°05'56"	25°00'00"	229.18			345.61	988.40	643.88	——	639207.28	1552076.82	324+38.15	639165.73	1551733.41							334+26.54	639875.06	1551081.27			
E-3	36°14'47"	16°00'00"	358.10			117.21	226.54	18.60	335+43.75	639287.72	1552013.57	334+26.54	639875.06	1551081.27							336+69.08	639207.68	1551073.01			
F-1	34°22'16"	8°00'00"	716.20			221.50	420.64	33.47	328+01.07	639016.67	1553205.08	326+70.47	639052.12	1552510.01							331+00.11	639181.20	1553148.81			
F-2	21°01'19"	8°00'00"	716.20			132.88	262.77	12.22	337+28.68	639250.95	1552731.16	335+95.80	639251.65	1552810.46							338+58.57	639211.98	1552613.12			
G-1	37°29'17"	16°00'00"	358.10			121.52	234.30	20.06	354+48.17	639239.60	1551244.76	353+26.66	639242.83	1551108.16							355+60.96	639260.91	1551380.03			
G-2	162°01'40"	23°00'00"	249.11			1575.51	704.48	1345.98	361+37.63	638107.90	1550504.01	346+22.18	637000.20	1551617.61							353+26.66	639242.83	1551198.16			
G-3	18°22'30"			150.00	18°22'30"										346+22.18	637000.20	1551617.61	344+72.18	639260.13	1551680.18						
G-4	3°21'52"	1°30'00"	3819.72			112.18	224.30	1.65	343+60.06	639265.22	1551731.46	342+47.88	639266.00	1551767.57							344+72.18	639260.13	1551680.18			
H-1	4°33'25"	1°00'00"	5720.58			227.07	455.70	4.53	321+03.33	634776.56	1552647.35	319+65.37	634552.64	1552589.58							324+21.06	635003.23	1552623.06			
H-2	86°43'10"	8°00'00"	716.20			676.35	1084.03	268.80	330+97.41	635675.73	1552650.90	328+21.06	635003.23	1552623.06							335+05.00	635783.15	1553218.26			
H-3	20°34'00"	5°30'00"	1041.74			102.14	380.00	17.57	336+97.22	635817.61	1553407.82	335+05.09	635783.15	1553218.26							338+85.00	635770.19	1553506.10			
W-1	6°40'33"	3°00'00"	1909.86			111.39	222.53	3.25	361+81.14	637582.44	1551583.10	360+60.75	637473.44	1551586.02							362+92.27	637603.37	1551553.00			
W-2	20°22'07"	3°00'00"	1909.86			337.37	667.84	29.57	364+08.24	638504.80	1551456.03	357+71.87	638168.82	1551485.62							364+39.72	638830.02	1551541.41			
W-3	5°01'02"	0°30'00"	11460.16			502.04	1003.46	10.99	370+01.76	639461.23	1551708.34	365+80.72	638978.02	1551670.21							375+03.16	639855.02	1551703.94			
X-1	3°12'52"	0°46'25"	7405.68			207.70	415.46	2.91	18+80.95	639768.10	1551031.91	16+92.16	639879.16	1550862.97							20+97.62	639646.83	1551207.37			
X-2	1°40'53"	1°20'00"	3827.53			56.17	112.33	0.41	36+95.37	639098.42	1552656.07	36+39.20	639108.04	1552601.63							37+51.53	639050.42	1552712.86			
X-3	3°08'10"	1°28'00"	3906.53			104.10	208.15	1.39	40+88.60	639042.82	1553043.31	39+81.60	639057.65	1552940.27							41+89.73	639022.53	1553146.41			
X-4	10°26'06"	4°00'00"	1432.39			130.80	260.88	5.96	53+15.92	639576.77	1554244.58	51+85.12	639784.81	1554121.42							54+46.00	639675.15	1554357.73			
X-5	4°49'00"	3°30'00"	1637.02			67.42	134.76	1.39	55+13.41	639541.33	1554416.06	54+46.00	639576.15	1554357.73							55+80.76	639618.42	1554476.96			
PC-1	11°05'44"	0°45'00"	7639.49	85.00	0°19'07"	784.53	1304.41	36.90	547+87.88	637557.47	1551437.73	540+03.34	637178.28	1552122.92	540+88.34	637216.55	1552048.61	554+82.75	637774.17	1550772.65	555+67.75	637800.67	1550691.89	See Sh. No 36 for R/W Bdy. Curve Data		
PC-2	3°00'00"	1°00'00"	5729.65	170.00	0°51'00"	235.04	130.00	2.17	570+61.40	638269.68	1549271.81	568+26.36	638190.82	1549405.27	569+96.36	638244.31	1549333.91	571+26.36	638287.83	1549211.41	572+96.36	638348.13	1549052.47			
DX-1	45°38'20"	10°00'00"	572.96			241.08	456.39	48.65	17+15.58	637984.51	1549630.12	14+74.50	637947.01	1549407.08							19+30.89	637479.00	1549855.48			
DX-2	50°56'00"	15°00'00"	381.97			181.92	339.56	41.11	30+24.67	637013.21	1550855.80	28+42.75	637841.16	1550838.76							31+82.31	637828.93	1551017.02			
DX-3	18°45'00"	10°00'00"	572.96			94.60	187.50	7.76	44+57.94	637237.04	1552147.49	43+69.34	637281.76	1552023.66							45+50.84	637223.38	1552240.96			
Y-1	22°22'16"	8°00'00"	716.20			141.62	279.64	13.87	3+92.79	638147.98	1551294.56	2+51.17	638022.47	1551188.94							3+30.81	638282.01	1551267.46			
Z-1	3°12'08"	2°00'00"	2864.79			80.08	160.12	1.12	16+00.40	643773.13	1552064.51	15+20.32	643780.86	1551984.80							16+80.44	643760.88	1552144.52			
Z-2	15°25'54"	4°00'00"	1432.39			194.07	385.70	13.09	23+65.28	643742.10	1552828.80	21+71.21	643740.97	1552634.80							25+57.00	643786.11	1553017.81			

W = I-675 Southbound Collector Distributor X = U.S. 35 Westbound Collector Distributor PC = Penn Central Transportation Co. DX = Dayton Xenia Rd. Y = Wildonna Dr. Z = Hemp Rd.

SHEET NO. 3 OF 3

3 / 37

CURVE DATA

PROPERTY MAP

SCALE 1" = 200'

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

568/616

GRE-675-5.37

GREENE COUNTY
LIMITED ACCESS

4/37

PENN-CENTRAL TRANSPORTATION CO.

Residue = 4.22 Ac. (LL)(307)

Frank L. Morgan, Robert E. Morgan (Trustee), Donald F. Morgan, Marjory V. Morgan

D.P.&L. Co. Ease.

DAYTON - XENIA (LINDEN AVE.) RD.

Ex. LA-RW 2

Ex. U.S. 35

Point of Access Sta. 19+00.00, 60.00 Rt. 16.0' Wide

Point of Access Sta. 23+00.00, 60.00 Rt. 16.0' Wide

Service Rd.

Sec. 15, T2, R7

Match Line - See Sheet 5

35' Easement to Par. 311 for ingress and egress

METROPOLITAN CONSTRUCTION CO.

Beavercreek Twp. / Beavercreek Twp.

SEC. 9 T-2 R-7 / SEC. 8 T-2 R-7

SEC. 15 T-2 R-7

L.I. Henkle Inc.

Ramp H

Ramp C

LA-RW

Ex. LA-RW

Ex. RW

Walnut Grove Country Club, Inc.

Match Line - See Sheet 5

Beavercreek Twp.

SEC. 2 T-2 R-7

SEC. 3 T-2 R-7

GRANGE HALL ROAD

Ex. U.S. 35

Point of Underpass Access Sta. 383+63.59 Lt. 53.00' wide

Point of Underpass Access Sta. 383+63.47 Rt. 53.00' Wide

Begin R/W Acquisition GRE-675-5.37 GRE-675-8.05 I-675-3(20) Sta. 308+39.01

End Acquisition GRE-675-5.37 GRE-675-8.05 I-675-3(20) Sta. 308+39.01 Rt.

Begin Const'n. Project GRE-675-5.37 GRE-675-8.05 I-675-3(20) Sta. 308+39.01 Rt.

End Const'n. Project GRE-675-5.37 GRE-675-8.05 I-675-3(20) Sta. 308+39.01 Rt.

Sta. 384+57.34 Rt.

B & O R.R.

2008.00' to S.W. Cor.

MONTGOMERY COUNTY / GREENE COUNTY

Sec. 14 T2 R7 - 2008.0' to S.W. Cor.

2008.00' to B.&O. R.R.

LEGEND

- (WL) Warranty Deed w/ Limitation of Access
- (WD) Warranty Deed w/ Reservation of Full Access Rights
- (WR) Warranty Deed w/ Special Reservation
- (SD) Standard Highway Easement (Parcel No. only)
- (S) Sewer Easement
- (Y) Channel Easement
- (SL) Slope Easement
- (T) Temporary Easement
- (EL) Excess Land
- (WD) Warranty Deed for Utility purposes
- (AR) Aerial Easement

UTILITY OWNERSHIP

Telephone:
Ohio Bell Telephone Co.
3233 Woodman Dr., Dayton, O.

Electric & Gas:
Dayton Power & Light Co.
25 North Main St., Dayton, Ohio

Sanitary Sewers:
Greene County Sanitary Engineers
P.O. Box 116, Alpha, Ohio

No.	OWNER
301	Bendix Corp.
302	Albert A. Pettenwitz & Caroline L. Pettenwitz
300	Earl A. & Annie Elizabeth Vanderheid
308	John E. & Leona Kostle (NOT TO BE ACQUIRED)
309	Irven M. & Grace B. Coy (" " ")
310	Velma E. Harvey W. Miller
312	Albert A. Pettenwitz
313	Garnett N. & Helen A. Reeves
314	Gilbert C. & Magdalene Carter
315	Paul C. & Iva M. Lovely
316	Homer L. & Eileen O. Neal
317	Orthella Abernathy
334	Norman B. & Evelyn L. Coy
328	The Dayton Power & Light Co.
330	Concord Storage & Warehouse Co.
331	Herbert R. & Margery A. Stitzel
332	Lloyd H. & Lela A. Landen (NOT TO BE ACQUIRED)

GREENE CO. BEAVERCREEK TWP.
SEC. 2, 3, 8 & 9, T2, R7

4/37

12-8-72	E.H.	Name chg. Par 317
4-23-73	E.H.	Chg 328TI to 328AT, 328T2 to 328BT, 328WL-1 to 328BWL, 328WL-2 to 328AWL
7-10-73	E.H.	Delete Par 325WL-2 & 325WD-2, Add Par 334 WL & 334WD
7-17-73	S.E.W.	Added "Not Acquired" to Parcels 308, 309, 332
3-26-74	S.E.W.	Added Par. 317E
10-11-74	S.E.W.	Chg. Par. 317E to ER
2-5-75	A.A.B.	Rev. Owner, Par. 307
12-8-78	A.A.B.	Rev. 300T, Add 300S & 310T-2; Rev. 310T to 310T-1.

Date of Revision — Description of Revision

DATE OF COMPLETION May 11, 1972

PROPERTY MAP

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

569
6-6

GRE-675-5.37

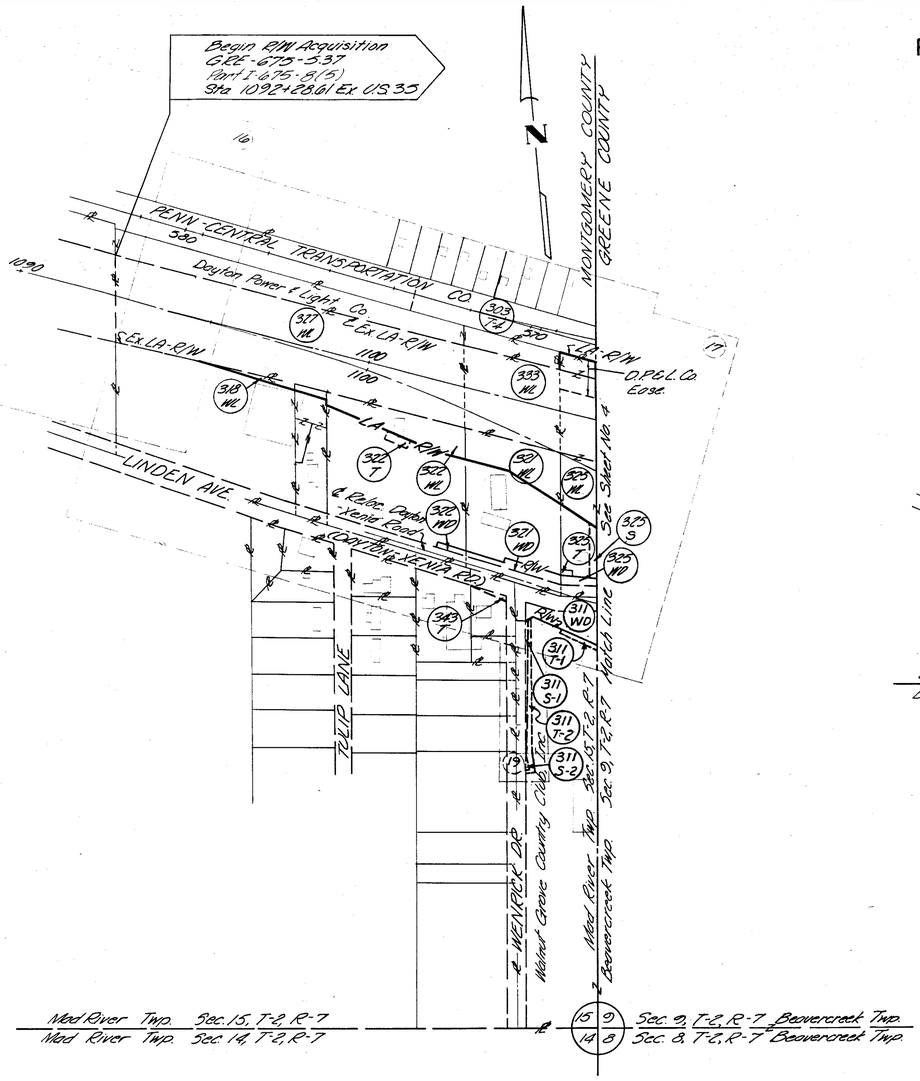
GREENE COUNTY
LIMITED ACCESS

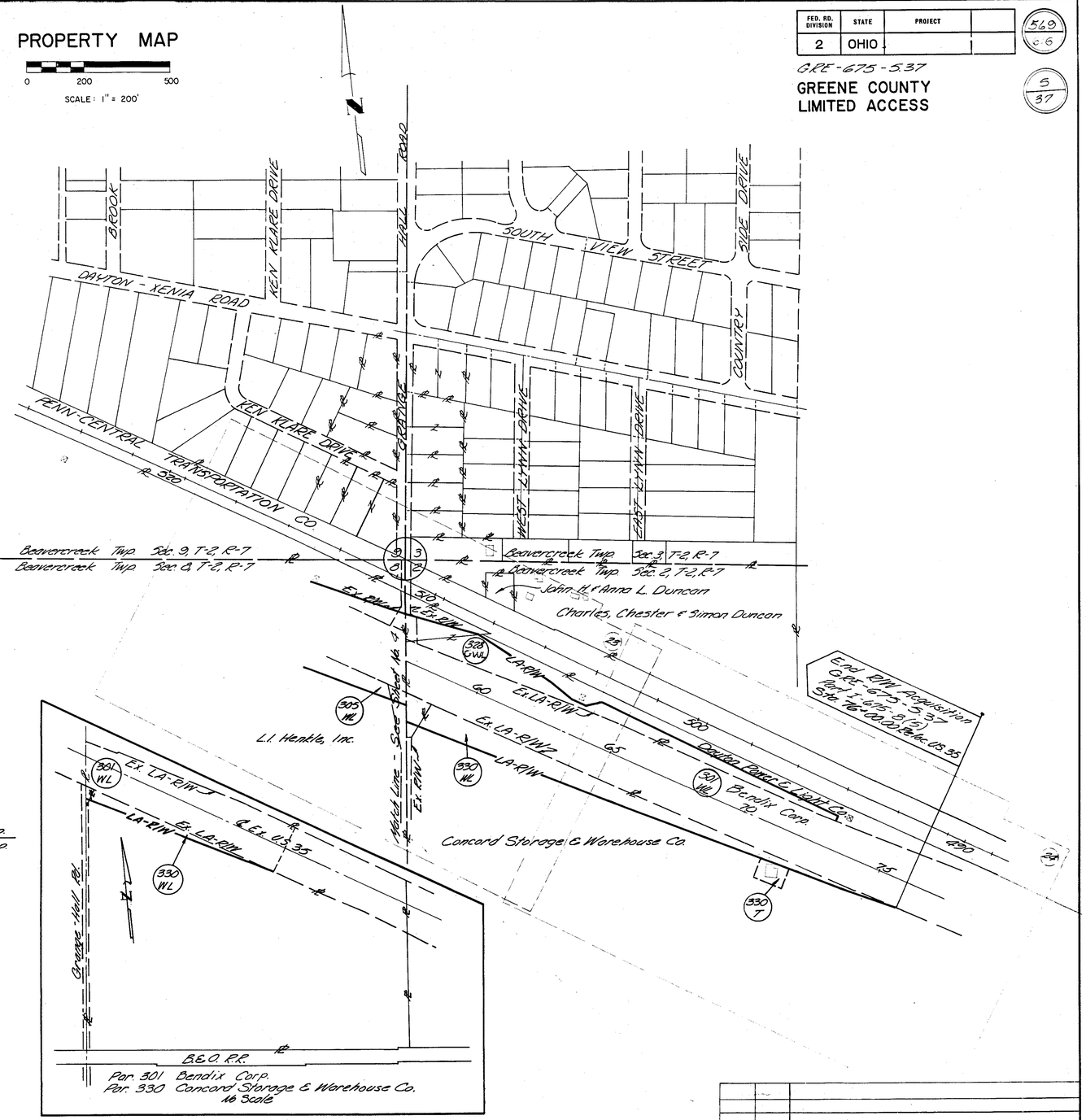
5
37

PROPERTY MAP

0 200 500

SCALE: 1" = 200'





No.	OWNER
318	Eugene A. & John F. Brockman
321	Alvin F. & Carl H. Wellimer
322	Elizabeth E. Short
325	Norman B. & Evelyn L. Coy
327	Elizabeth Short, et al.
333	Charles W. & Edna De Porter (NOT TO BE ACQUIRED)
343	Katherine K. Brown

MONTGOMERY CO. MAD RIVER TWP.
SEC. 15, T2, R7
GREENE CO. BEAVERCREEK TWP.
SEC. 2,3,8 & 9, T2, R7

A.A.B.	12-4-78	Add Pars. 311S-1, 311S-2, 311T-1 & 311T-2.
NM	2 May 75	Rev Par 325X to 325S
P.W.F.	12-12-73	PARCEL 301 WL - Not to be Acquired
S.E.W.	7-17-73	ADDED "NOT ACQUIRED" TO PAR. 333
E.H.	7-10-73	Chg. Par 325WL-1 to 325WL & 325WD-1 to 325WD

5
37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

PROPERTY MAP

SCALE 1"= 200'

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37

GREENE COUNTY
LIMITED ACCESS

570
6/6

6
37

SECTION LINE — COUNTY LINE — 9 — 10 — GREENE COUNTY

Ex. I-71 Exist. U.S. 35 — Ex. I-71 R/W — Ex. I-71 R/W

FAIRLYNN DR.

WALGROVE ACRES SUB.

WALGROVE CT.

Board of Education

SEC. 2

SEC. 1.

CROSS POINT DR.

WILLOWGREEN DRIVE

PLAIN TREE DRIVE

WILENE DRIVE

LANE

ARDONNA

LOCUST

WILDONNA DR.

SAVILLE FARM ESTATES

Plat 9/1/71

SEC. 3

CASTLE GATE DRIVE

NEWBERRY CT.

ROUND TREE DRIVE

HICKORY RIDGE DR.

FRANKLIN RIDGE DR.

POWDER HORN DR.

BEAVERCREEK TWP

BEAVERCREEK TWP

Third National Bank & Trust Co., "Trustee"

Edward Rose of Ohio Inc. & Edward Rose Homes, Inc. SEC. 4 (Proposed)

Park

Paul G. Moyer

SCOTCH PINE DRIVE

Ramp B

Ramp A

LA-R/W

R/W

SAVILLE SUB.

HONEY

STEDMAN LN.

Cecil G. Boatright

Harold H. Wagner

354

Match Line - See Sheet 7

BEAVERBROOK SUB.

MAPLEVIEW DRIVE

OAK DRIVE

LYNDELL DRIVE

KENIA ROAD

CEMETERY

ROSEMEADE AVE.

DAYTON

PENN-CENTRAL TRANSPORTATION CO. LA-R/W

Third National Bank & Trust Co. "Trustee"

Little Miami Railroad Co. Track

Little Miami Railroad Co. Station Line Sub-Short No. 4

No.	OWNER	No.	OWNER
319	Cameron W. & Akiko Albright	342	Grace Sease
320	Myrtle Annie Chidester	344	Roger L. & Virian R. McFarland
323	Joseph R. Jr. & Aletha V. Goolart	345	Roger S. & Jill V. Rapp
324	Donald O. & Doris A. Livesay	346	David P. & Betty L. Pelphrey
326	Marvin Eugene & Jane Elizabeth Rice	347	Donna A. Jackson
329	William H. & Mildred L. Camden	348	Henrietta P. Shampton
334	Norman B. & Evelyn L. Coy	349	Thomas C. Brown
335	Donald E. & F.M. Morgan	350	Donna A. Jackson
336	Chester Sanders & Ruby Sanders	351	Pauline L. Freauf
337	Ronald Eugene & Carolyn Lee Gallihar		
338	Edith Helfinstine		
339	Earl, Jr. & Betty Parson		
340	Howard E. & Wodelle Douglas		

Note
Parcels 306 WL-2, 329 WL, 338 WL, 340 WL, 341 WL-2, & 341 WD-1 subject to Aerial Easements to the Little Miami Railroad Co.

GREENE CO., BEAVERCREEK TWP.
SEC. 9 & 10, T2, R7

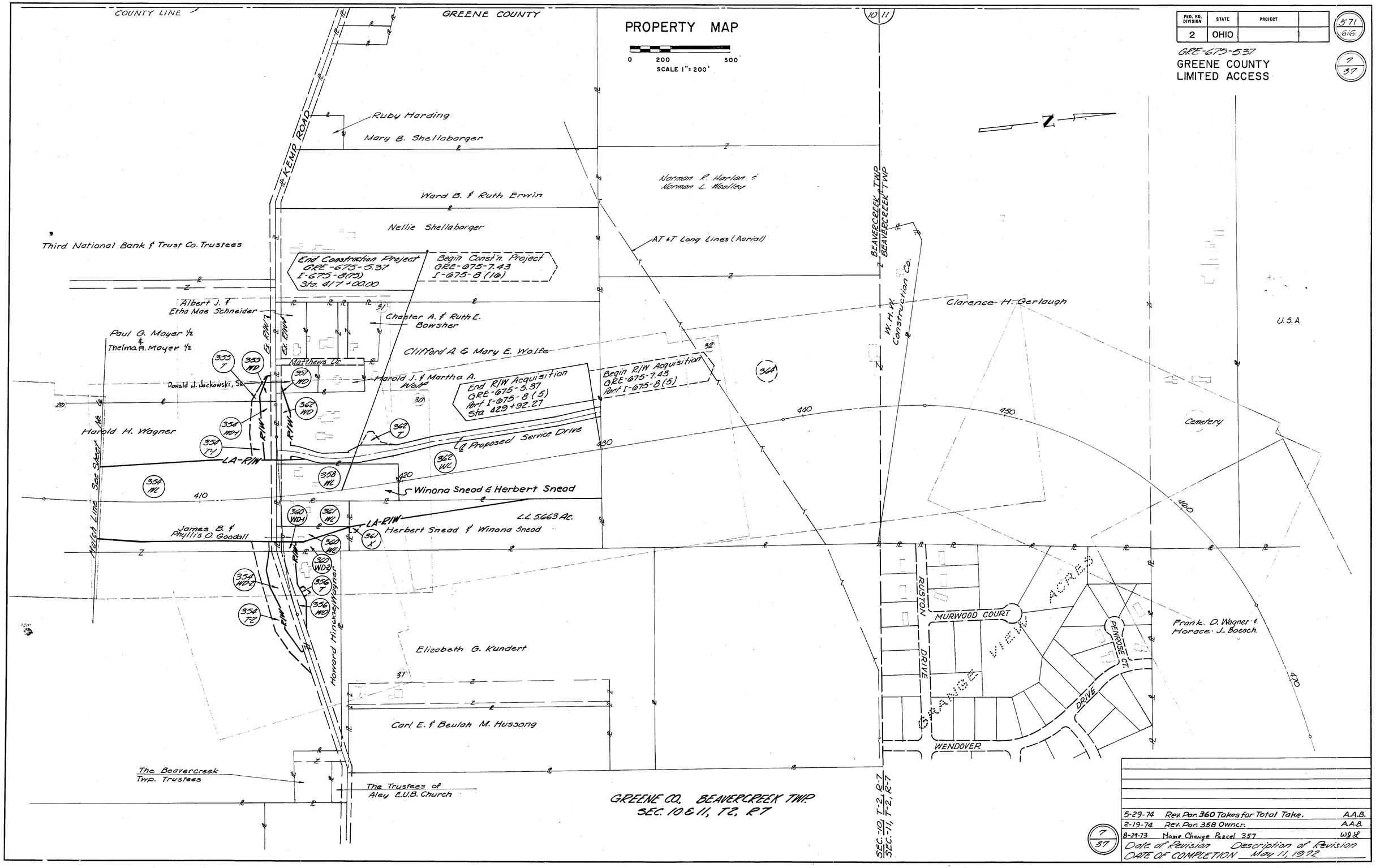
35C-9, T-2, R-7
35C-10, T-2, R-7

S.W.	1-23-75	Added 351E
A.A.B.	10-30-74	Rev. Owner & D.B. & P., Parcel 351.
A.J.B.	8-8-74	Rev. ER-1 & ER-2 to EL-1 & EL-2, Par 341
A.J.B.	8-1-74	Add Par's: 341 ER-1 & 341 ER-2
A.A.B.	5-13-74	Rev. Owner, Par. 342
A.A.B.	2-6-74	Rev. Owner, Par. 338.
W.J.S.	8-21-73	Name Change Parcel 326
E.H.	8-17-73	Delete Par. 352 WL & Added it to 353 WL
E.H.	7-10-73	Add Par: 334 Same Owner as Par 325
E.H.	3-28-73	Name Chg Par: 337
E.H.	1-30-73	name chg. par. 336

Date of Revision — Description of Revision

DATE OF COMPLETION May 11, 1972

6
37



PROPERTY MAP
0 200 500
SCALE 1" = 200'
FED. RD. DIVISION 2
STATE OHIO
PROJECT
571/616
GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS
7/37
COUNTY LINE
GREENE COUNTY
KEMP ROAD
Ruby Harding
Mary B. Shellabarger
Ward B. & Ruth Erwin
Nellie Shellabarger
Norman R. Harlan & Norman L. Woolley
AT&T Long Lines (Aerial)
BEAVERCREEK TWP
BEAVERCREEK TWP
W. H. W. Construction Co.
Third National Bank & Trust Co. Trustees
End Construction Project GRE-675-5.37 I-675-8(75) Sta. 417+00.00
Begin Const'n. Project GRE-675-7.43 I-675-8(16)
Albert J. & Etha Mae Schneider
Chester A. & Ruth E. Bowsher
Clarence H. Gerlaugh
U.S.A.
Paul G. Moyer ½ & Thelma A. Moyer ½
Clifford A. & Mary E. Wolfe
Matthews Dr.
Donald J. Jackowski, Sr.
Harold J. & Martha A. Wolf
End R/W Acquisition GRE-675-5.37 Part I-675-8(5) Sta 429+92.27
Begin R/W Acquisition GRE-675-7.43 Part I-675-8(5)
Harold H. Wagner
Proposed Service Drive
Cemetery
LA-R/W
Winona Snead & Herbert Snead
L.L. 5.663 Ac.
James B. & Phyllis O. Goodall
Herbert Snead & Winona Snead
Match Line See Sheet No. 6
Howard Hinckley Wagner
Elizabeth G. Kundert
Carl E. & Beulah M. Hussong
RUSTON DRIVE
MURWOOD COURT
GRANGE VIEW ACRES
PENROSE CT.
DRIVE
WENDOVER
Frank D. Wagner & Horace J. Boesch
The Beavercreek Twp. Trustees
The Trustees of Aley E.U.B. Church
GREENE CO. BEAVERCREEK TWP.
SEC. 10 & 11, T2, R7
SEC. 10, T-2, R-7
SEC. 11, T-2, R-7
5-29-74 Rev. Par. 360 Takes for Total Take. A.A.B.
2-19-74 Rev. Par. 358 Owner. A.A.B.
8-29-73 Name Change Parcel 357 WJL
Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972
7/37

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

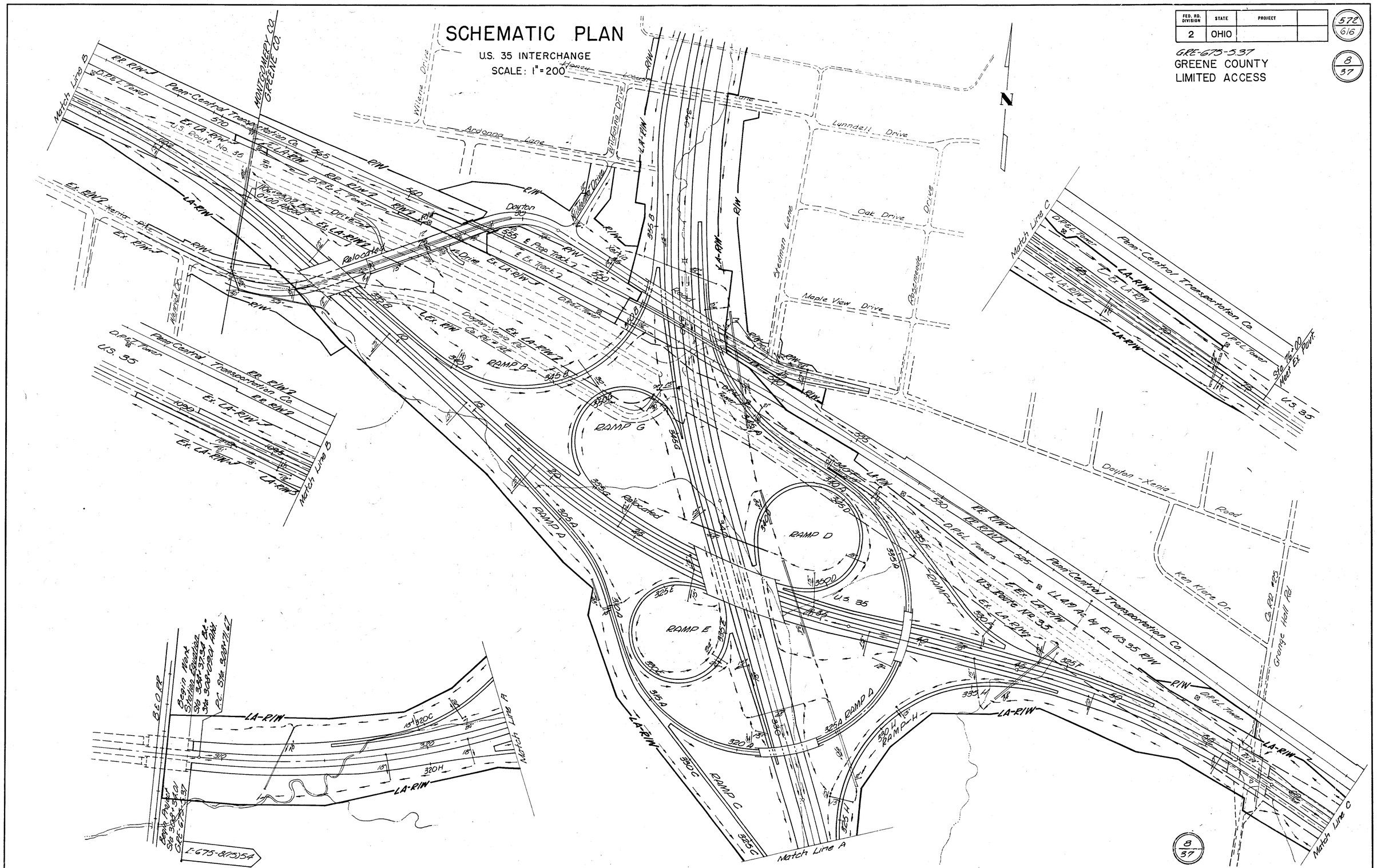
572/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

8/37

SCHEMATIC PLAN

U.S. 35 INTERCHANGE
SCALE: 1" = 200'



8/37

SCHEMATIC PLAN

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT	
(08694121)	2	OHIO		

573/616

GRE-675-5.37

9/37

SUMMARY OF ADDITIONAL R/W

TOTAL NUMBER OF ___
57 OWNERS
17 TOTAL TAKES 2 OWNERS WITH PERSONALTY ITEMS INVOLVED
19 OWNERS WITH STRUCTURES INVOLVED

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED BOOK	RECORDED PAGE	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE LAND	NET TAKE BLDGS.	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	TYPE FUND	REMARKS
301 WL	Bendix Corporation		291 427	49 279	11.395	11.395	8.111	8.111	0		0	3.284	23	I	Ex. U.S. 35 R/W Not to be Acquired
302 WL 302 WD	Albert A. & Caroline L. Petkewitz	1.23	210	557	1.20	0.79	1.19 0.04	0.79 0.00	0.40 0.04	Yes	0	0	19 18		Total Take R/W & Ease. to D.P.&L. Co. (D.B. 387, P. 39)
303 WL 303 WD	Little Miami Railroad Co. (Owner) Penn-Central Transportation Co. (Lessee)					0.029	1.653 0.603	0.029 0	1.624 0.603				35 36		
300 WL 300 WD 300 T 300 S	Earl A. & Annie Elizabeth Vonderheid		252	90	3.634	0.241	0.017 1.176	0.017 0.224	0 0.952 0.183 0.036		2.441	0	18 18 18 18		 To Const. Drive, Temp. Rd. & San. Service Line. Includes all of Par. 300S. To Construct Sanitary Sewer.
305 WL	L. I. Henkle	233.517	311 331 350 353 359 363 400 400 424	549 257 491 604 163 348 126 268 79	233.552	4.841	75.379	3.732	71.647		59.742	97.287	13 14 15 21		Acquired by State of Ohio (D.B. 426, P. 485) R/W & Ease. to D.P.&L. Co. (D.B. 257, P. 347)
306 WL-1 306 WL-2 306 WD-1 306 WD-2 306 WU 306 A.R	Metropolitan Construction Co.	58.600	480	580	59.35	12.108	41.802 0.002 0.058 0.027 0.128 0.001	11.985 0.002 0 0.027 0.094 0.001	29.617 0.0 0.058 0 0.034 0	Yes	16.783	0	19 18 25 20 19 21 25 25 25		R/W & Ease. to D.P.&L. Co. (D.B. 395, P. 596) To be Acquired in the name of the Little Miami Railroad Co. To Little Miami Railroad Co.
307 WL 307 T	Frank L. Morgan, Donald F. Morgan, Marjory V. Morgan and Robert E. Morgan, Trustee of the Estate of Mary E. Morgan, deceased	15.02	216 500	430 585		9.28	10.80.	9.28	1.52 0.17	P	0	4.22	21 22 23		R/W & Ease to D.P.&L. Co (D.B. 257, P. 600) 5.74 Ac. L.L. by Ex. U.S. 35 R/W Par. 307 T - To grade slopes
308 WL	John & Leona Kostle		233	609	2.41	2.41	2.41	2.41	0		0	0	19 20		Total Take NOT TO BE ACQUIRED
309 WL	Irven M. & Grace B. Coy		156	339	1.66	1.66	1.66	1.66	0		0	0	19		Total Take NOT TO BE ACQUIRED R/W & Ease to D.P.&L. Co. (D.B. 290, P. 285)
310 WL 310 WD 310 T-1 310 T-2	Velma & Harvey W. Miller		184 446	649 468	2.10	0.14	0.58 0.57	0.14 0	0.44 0.57 0.006 0.004		0.95	0	18 18 18 18		 To construct Drive To Const. San. Service Line, Grade & Seed.
311 WD 311 S-1 311 S-2 311 T-1 311 T-2	Walnut Grove Country Club, Inc.		237 1550 1803	37 47 88	139.307	0.847	0.500	0.268	0.232 0.010 0.003 0.026 0.112		138.228	0	18 19 19 18 19		Deed Ref. Greene Co. Deed Ref. Montgomery Co. To Construct Sanitary Sewer. Deed Ref. Montgomery Co. To Construct Sanitary Sewer. To Restore Parking Area. Deed Ref., Montgomery Co. To Restore Parking Area. Includes All of Parcels 311S-1 & 311S-2.
312 WL	Albert A. Petkewitz		319	183	1.00	0.75	1.00	0.75	0.25		0	0	19		Total Take
313 WL	Garnett M. & Helen A. Reeves	1.32	220 282	216 106	1.33	0.80	1.32	0.80	0.52	Yes	0	0	18		Total Take
314 WL	Gilbert C. & Magdalene Carter		288	189	1.434	0.806	1.434	0.806	0.628	Yes	0	0	18		Total Take Acquired by State of Ohio (D.B. 405, P. 246)
315 WL	Paul C. & Iva Lovely	1.569	405	37	1.549	0.816	1.549	0.816	0.733	Yes	0	0	18		Total Take Acquired by State of Ohio (D.B. 444, P. 145)
316 WL 316 WD	Homer L. & Eileen O. Neal	0.830	374	282	0.828	0.082	0.767 0.063	0.019 0.063	0.748 0.0	Yes	0	0	18 18		Total Take
317 WL 317 WD 317 T 317 ER	Orthella L. Abernathy	0.948	468	661	0.924	0.085	0.027 0.128 0.193	0 0.085 0	0.627 0.043 0.055 ~~0.193~~	Yes	0.193	0	18 18 18		 To remove Building
318 WL	Eugene A. & John F. Brockman		1987 2009 2519	112 609 241	4.502	0.427	0.070	0	0.070		4.005	0	17		
319 WU	Cameron W. & Akiko Albright		407	505	21.399 s.f.	0	3407 s.f.	0	3407 s.f.	✓	17.992 s.f.	0	18	I	Lot 17 To be Acquired in the name of the Little Miami Railroad Co.

Note:
Under no circumstances are the Temporary Easements for purposes of removal of buildings to be used for storage of material and equipment. Upon completion of work in this area, the Temporary Easements shall be immediately vacated.

REV. DATE	DESCRIPTION
A.A.B. 12-4-78	Rev. & Add T's & S's, Pars. 300, 310 & 311.
N.M. 10 Feb 76	Rev. Remarks Par 307
A.A.B. 2-10-75	Rev. Owners & Add C.T. Vol. & P., Par. 307
S.E.W. 10/11/74	Chg Par 317E to ER
P.R.D. 9/6/74	Added Col. A & Rev. 'E' Par. - Par. 317
A.A.B. 6-11-74	Rev. "Total No. of Owners---" Tally
E.H. 8/4/72	Par 317 Name Chg.
E.H. 12/6/72	Par 306 WD-1 Sheet ref. from 25 to 19
W.J.L. 12/19/72	Added note on all WU parcels
E.H. 1-26-73	Name Chg. Par. 301
W.J.L. 2-21-73	Added Par. 305PR and note to summary
R.W.K. 5/31/73	Deleted Parcel 305 PR and note to Summary
E.H. 6-29-73	Name Chg. Par. 306, D.B. & P.
S.E.W. 7-17-73	ADDED "NOT ACQUIRED" TO PARCELS 308 & 309
D.W.F. 12-12-73	Added 'Not to be Acquired' to P.R. 301 WL
S.E.W. 3-26-74	Added Par 317 E

9/37

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT	
(108694(21))	2	OHIO		

574/616

10/37

GRE-675-5.37

SUMMARY OF ADDITIONAL R/W

TOTAL NUMBER OF ___
_____ OWNERS
_____ TOTAL TAKES
_____ OWNERS WITH STRUCTURES INVOLVED

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED BOOK	RECORDED PAGE	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE LAND	NET TAKE BLDGS.	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	TYPE FUND	REMARKS
320 WU	Myrtle Annie Chidester		390	542	21,399 s.f.	0	3554 s.f.	0	3554 s.f.		17,845 s.f.	0	18	I	Lot 16 To be Acquired in the name of the Little Miami Railroad Co.
321 WL	Alvin F. & Carl H. Wellmeier		1918	102	2.368	0.191	0.640	0	0.640	P	1.455	0	17		Montgomery Co.
321 WD							0.273	0.191	0.082				17		
													18		
322 WL	Elizabeth E. Short		1973	574	3.349	0.279	0.624	0	0.624	Yes	2.443	0	17		Montgomery Co.
322 WD			1096	403			0.026	0.023	0.003				17		
322 T									0.032				17		To remove Fr. Barn
323 WU	Joseph R., Jr. & Oletha V. Goulart		361	548	21,355 s.f.	0	3865 s.f.	0	3865 s.f.		17490 s.f.	0	18		Lot 15 To be Acquired in the name of the Little Miami Railroad Co.
324 WU	Donald O. & Doris A. Livesay		414	286	22809 s.f.	0	3959 s.f.	0	3959 s.f.		18850 s.f.	0	18		Lot 14 To be Acquired in the name of the Little Miami Railroad Co.
325 WL	Norman B. & Evelyn M. Coy A.K.A. Evelyn L. Coy		1547	519	1.51	0.59	0.98	0.52	0.46		0.420	0	17		Mont. Co. (Ease. to D.P. & L. Co. (D.B. 387, P. 39) included in take
			944	578											
325 WD							0.11	0.07	0.04				18		
			158	604											Total residue 0.558 Ac.
325 S									0.09				18		
325 T									0.01				18		To construct Drive
326 WU	Marvin Eugene & Jane Elizabeth Rue		483	822	23837 s.f.	0	3951 s.f.	0	3951 s.f.		19886 s.f.	0	18		Lot 13 To be Acquired in the name of the Little Miami Railroad Co.
327 WL	Elizabeth & Leroy Short, Feberta & Harry R. Stedman, William S. & Edith Mae Engle, Paul M. & Myrtle A. Angle	4.98	1096	403	5.01	4.98	4.98	4.98	0		0	0	17		Total Take - Ex. U.S. 35 R/W
													16		
328B-WL	The Dayton Power & Light Co.	0.336			0.346	0	0.137	0	0.137		0.199	0	20		
328C-WL			278	70	4.735	0.076	1.699	0.052	1.647		0	3.012	23		
			386	146									24		
328 AT		0.378	311	253	0.378	0	0.378	0	0.378		0.378		18		To grade slopes
			311	254											
			311	368											
			316	695											
328 B-T			326	78			0.188	0	0.188				19		To grade slope
			316	353											
329 WL	William H & Mildred L. Camden		414	464	2.30	0.39	0.113	0.113	0.0		0	1.31	25		
329 WD							0.91	0.31	0.60				25		
329 WU							0.06	0.06	0.0				25		To be Acquired in the name of the Little Miami Railroad Co.
329 T									0.24				25		To construct temporary road
329 AR									0.012 - NO				25		To Little Miami Railroad Co.
330 WL	Concord Storage & Warehouse Co.		427	221	121.195	0.723	1.948	0	1.948		0	118,524	23		
330 T			442	268					0.083				24		To remove building foundation
331 WL	Herbert R. & Margery A. Stitzel		162	297	0.64	0.64	0.64	0.64	0.0		0	0	18		Total Take
332 WL	Lloyd H. & Lela A. Landen		207	247	0.62	0.62	0.62	0.62	0.0		0	0	18		Total Take (NOT TO BE ACQUIRED)
333 WL	Charles W. & Edna DePorter		1712	292	1.36	1.36	1.36	1.36	0		0	0	17	I	Mont. Co. - Total Take - Ex. U.S. 35 R/W (NOT TO BE ACQUIRED)

10/37

N.M. 5 Jan 76 Rev Record Area & Residue Par 330 WL
R.W.F. 7/10/75 Revised Par 321 WL
N.M. 2 May 75 Rev Par 325 X to 325 S
W.J.K. 8-21-73 Name Change Parcel 326
S.E.W. 7-17-73 ADDED "NOT ACQUIRED" TO PARCELS 332 & 333
E.H. 7-10-73 Deleted 325 WL-2 & 325 WD-2 - See Par 334 WL & 334 WD
E.H. 4-23-73 Rev 328 WL-1 TO B-WL, 328 WL-2 TO C-WL, 328 T-1 TO AT & 328 T-2 TO BT
W.J.K. 12-19-72 Added note to all WU parcels

REV. DATE DESCRIPTION

SUMMARY OF ADDITIONAL R/W

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT	
08604(2)	2	OHIO		

GRE-675-5.37

575/616

11/37

TOTAL NUMBER OF ___
___ OWNERS
___ TOTAL TAKES
___ OWNERS WITH STRUCTURES INVOLVED

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED BOOK	RECORDED PAGE	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE LAND	NET TAKE BLDGS	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	TYPE FUND	REMARKS
334 WL 334 WD	Norman B & Evelyn M. Coy A.K.A. Evelyn L. Coy		235 258 156 156	451 604 269 294	0.82 AC	0.35AC	0.62 AC. 0.062	0.310 0.041	0.31AC. 0.021		0.139 AC.	0	18	I	Green Co (Ease to D.P.&L Co. (D.B. 387 P. 39) included in take
335 WD 335 WU	Donald E. & F.M. Morgan William F. & Ada May Crawford		445	617	15246 s.f.	0	12815 s.f. 2431	0 0	12815 s.f. 2431	Yes	0 0	0 0	25 25		Total Take; Pt. Lot 33 Pt. Lot 33 To be Acquired in the name of the Little Miami Railroad Co.
336 WD	Chester Sanders & Ruby Sanders		463	625	20048 s.f.	0	2248 s.f.	0	2248 s.f.		0	17800 s.f.	25		Pt. Lot 35
337 WD	Ronald Eugene & Carolyn Lee Gallihar		481	846	20603 s.f.	580 s.f.	4588 s.f.	580 s.f.	4008 s.f.		0	16015 s.f.	25		Pt. Lot 34
338 WL 338 AR	Edith Helfinstine, Executrix of the Estate of Kenneth M. Helfinstine, and Edith Helfinstine		172	358	1.0	0.16	1.00	0.16	0.84 0.179 NO	Yes	0	0	25		Total Take; Lot 1 To Little Miami Railroad Co. R/W & Easement to Greene Co. Comm. (D.B. 370, P. 115)
339 WL	Earl, Jr. & Betty J. Paxson		174	505	0.848	0	0.848	0	0.848	Yes	0	0	25		Total Take; Lot 2 - Acquired by State of Ohio (D.B. 447, P. 695)
340 WL 340 WU 340 AR	Howard & Ivadelle Douglas	1.796	208	191	1.77	0	1.674 0.122	0 0	1.674 0.122 0.165	Yes	0	0	25		Total Take; Lot 3 & 5 To be Acquired in the name of the Little Miami Railroad Co. To Little Miami Railroad Co. R/W & Easement to Greene Co. Comm. D.B. 370 P. 119
341 WL-1 341 WL-2 341 WD-1 341 WD-2 341 WU-1 341 WU-2 341 AR-1 341 AR-2 341 EL-1	The Third National Bank & Trust Co "Trustee"	9.680	333	356	9.45	0.056	0.38 0.042 4.122 0.243 1.314 0.83 1.865	0 0.042 0 0.014 0 0 0	0.38 0.0 4.122 0.229 1.314 0.83 0.020 0.086 1.865		0	0	25 26 25 25 25 19,25,35,36 19 25 19 18,19,26		Pt. Lot 4 Pt. Lot 4 To be Acquired in the name of the Little Miami Railroad Co. To be Acquired in the name of the Little Miami Railroad Co. To Little Miami Railroad Co. To Little Miami Railroad Co.
342 WL 342 WD	Grace Sease		377 468	310 215	4.44	0	1.67 0.48	0 0	1.67 0.48	Yes	0	2.29	25 25		R/W & Easement to Greene Co. Comm. D.B. 471, P. 656
343 T	Katherine K. Brown		1914	441	0.484	0.196	0.011	0	0.011				17		Mont. Co. - To construct Temporary Rd.
344 WD	Roger L. & Vivian R. McFarland		408	162	20038 s.f.	0	20038 s.f.	0	20038 s.f.	Yes	0	0	26		Total Take; Lot 54
345 WL	Roger S. & Jill V. Roop		453	316	19992 s.f.	0	2488 s.f.	0	2488 s.f.		17504 s.f.	0	27		Pt. Lot 24
346 WL	David P. Pelphrey & Betty L. Pelphrey		420	692	20612 s.f.	0	567 s.f.	0	567 s.f.		20045 s.f.	0	25 27		Pt. Lot 57
347 WL 347 WD	Donna A. Jackson		399 447 447	548 503 653	8.402	0	4.842 1.068	0 0	4.842 1.068		0	2.492	25 27		Incl. Lot 25 - Cont. 20040 s.f. (0.460 Ac.) R/W & Easement to Greene Co. Comm. D.B. 471, P. 656
348 WL	Henrietta R. Shampton		454	452	20000 s.f.	0	20000 s.f.	0	20000 s.f.	Yes	0	0	27		Total Take; Lot 10 - Acquired by State of Ohio (D.B. 458, P. 49)
349 T	Thomas C. Brown		448	455	20026 s.f.	0	0	0	325 s.f.			0	26		Pt. Lot 55 - To grade slope
350 WL 350 WD	Donna A. Jackson		447	503	60000 s.f.	0 0	53834 s.f. 6166 s.f.	0 0	53834 s.f. 6166 s.f.	Yes	0	0	27 27		Total Take; Lots 11, 12 & Pt. 13 Total Take; Pt. Lot 13
351 WL 351 E	Pauline L. Freauf		493	113	20000 s.f.	0 0	10262 s.f. 9738 s.f.	0 0	10262 s.f. 9738 s.f.		0	9738 s.f.	27		Pt. Lot 9
352 WL	Edward Rose of Ohio, Inc. & Edward Rose Homes, Inc.		397 401 464 477	656 318 55 345	0.050	0	0.050	0	0.050		0	0	27		TOTAL TAKE Not Required
353 WL	Cecil G. Boatright		379 421 490 397	640 528 784 592	117.634	0	23.010	0	23.010		0	94.624	27 28	I	
341 EL-2							0.884	0	0.884				25,26	I	

19

REV.	DATE	DESCRIPTION
A.A.B.	6-13-75	Rev. WU-1 Take & Calc. Area, Par. 341.
S.E.W	1-23-75	Added 351 E
A.A.B.	10-30-74	Rev. Par. 351 per Update
A.A.B.	8-8-74	Rev. ER-1 & ER-2 to EL-1 & EL-2, Par. 341
A.A.B	8-1-74	Add Par. 341 ER-1 & Par. 341 ER-2
A.A.B.	5-13-74	Rev. Owner, Par. 342.
A.A.B.	2-6-74	Rev. Owner, Par. 338.
P.W.F.	10/25/73	Deleted Structure - Par. 341-WU-1
E.H.	8-17-73	Delete Par. 352WL, add Par 352WL to 353WL, chg Record area & Take on Par. 353WL, add D.B. & P to 353WL
E.H.	7-10-73	Add Par. 334 (was 325 WL-2 & 325 WU-2) in different Co.
E.H.	3-28-73	Name Chg. Par. 337
E.H.	1-30-73	Name chg. Par. 336
W.J.L	12-19-72	Added note to all WU parcels

11/37

SUMMARY OF ADDITIONAL RIGHT OF WAY

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT	
(08694(21))	2	OHIO		

576/616

GRE - 675 - 5.37

12/37

SUMMARY OF ADDITIONAL R/W

TOTAL NUMBER OF ___
_____ OWNERS
_____ TOTAL TAKES
_____ OWNERS WITH STRUCTURES INVOLVED

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED BOOK	RECORDED PAGE	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE LAND	NET TAKE BLDGS.	NET RESIDUE LEFT	NET RESIDUE RIGHT	SHEET NO.	TYPE FUND	REMARKS
354 WL 354 WD-1 354 WD-2 354 T-1 354 T-2	Harold H. Wagner		169	602	110.62	0.81	20.27 0.48 0.80	0.18 0.14 0.26	20.09 0.34 0.54 0.51 0.55		14.60	74.24	29 30 30 30 30 31	I	 To construct Temporary Rd. To construct Temporary Rd.
355 WD 355 T	Paul O. Moyer ½ & Thelma M. Moyer ½		333 420	167 516	32.0	0.27	0.16	0.06	0.10 0.02		31.63	0	31 31		To construct Temporary Rd.
356 WD 356 T	Howard Hinckley Wagner		329	689	3.58	0.45	0.60	0.23	0.37 0.02		0	2.76	30 30 31		To construct Drive
357 WD	Donald J. Jackowski, Sr.		491	369	0.65	0.07	0.03	0.02	0.01		0.57	0	31		
358 WL	Winona Matthews Snead and Herbert Snead	2.556	495	324	2.561	0.085	2.556	0.085	2.471	Yes	0	0	30		Total Take
359															Not Used
360 WL 360 WD-1 360 WD-2	James B. & Phyllis O. Goodall		238	17	1.0	0.055	0.426 0.102 0.472	0.033 0.022 —	0.393 0.080 0.472	Yes	0	0	30 30 30		Total Take
361 WL 361 X	Herbert Snead & Winona Snead	7.907	157 189	465 151	7.80	0.057	2.244	0.057	2.187 0.027	Yes	0	5.663	30 30 32		L.L. area = 5.663 Ac.
362 WL 362 WD 362 T	Clifford A. & Mary E. Wolfe		326 190	361 138	28.20	0.16	7.30 2.36	0 0.16	7.30 2.20 0.11		18.54	0	30 30 30 31 32	I	To regrade channel

8

12/37

A.A.B. 5-29-74 Rev. Par. 360 Takes & Res. for Total Take.
A.A.B. 2-20-74 Rev. Owner and D.B. & P., Par. 358
W.J.L. 8-29-73 Name Change Parcel 357

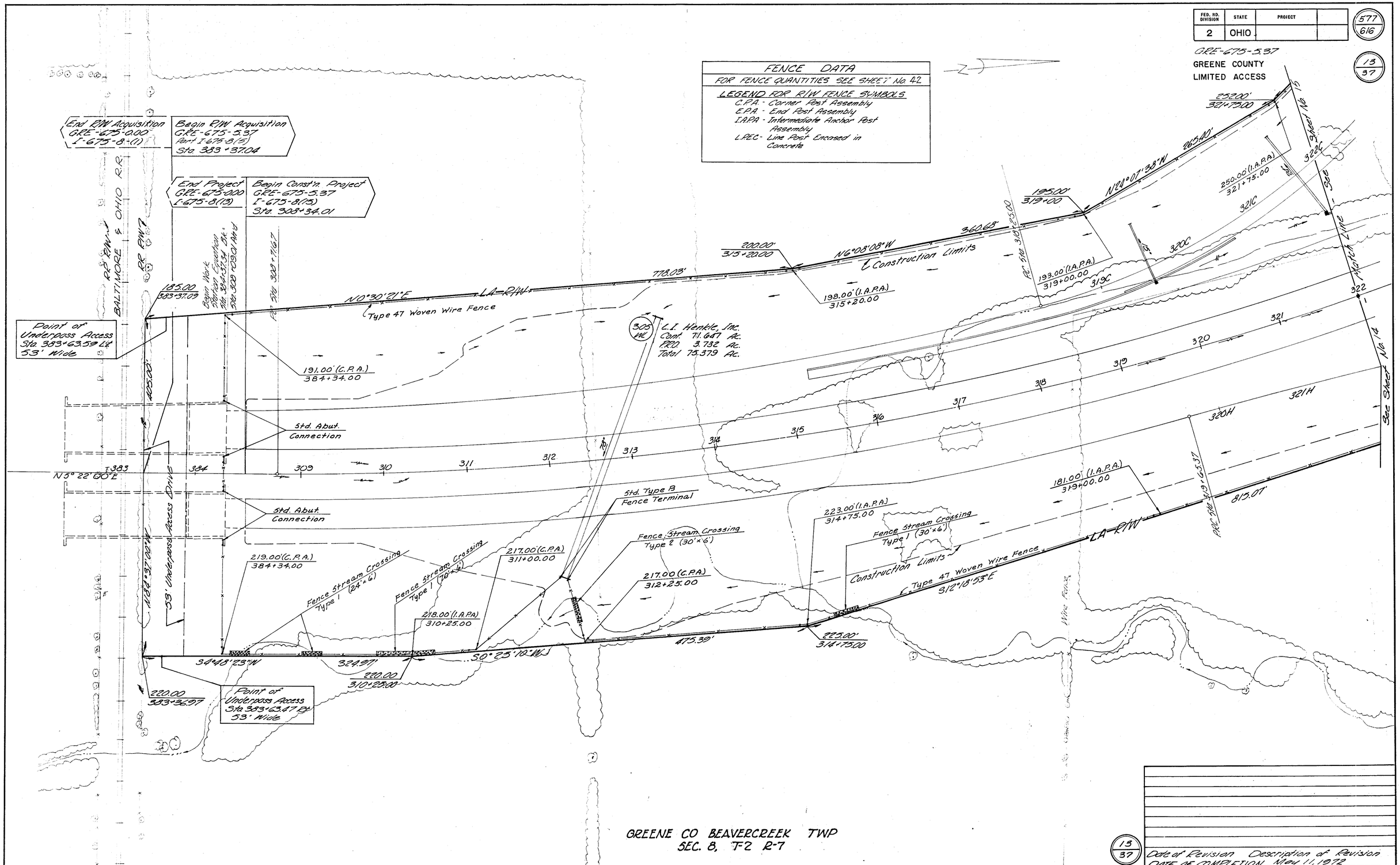
REV.	DATE	DESCRIPTION

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

577/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

13/37



GREENE CO BEAVERCREEK TWP
SEC. 8, T-2 R-7

13/37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

U.S. 35 INTERCHANGE R/W PLAN STA. 383+00 TO STA. 322+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

578
616

14
37

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

Match Line

See Sheet 15

Wire Fence

N 29° 28' 40" W

PT 326+18.26

320C 321C 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335

℄ I-675

N 20° 15' 00" W

N 1° 01' 00" E

Sheet No. 18

320H 321H 322H 323H 324H 325H 326H 327H 328H 329H 330H 331H 332H 333H 334D

Match Line

178.00' (I.A.P.A.)
322+50.00

R/C 326+21.06

299.08' (I.A.P.A.)
326+00.00

S 17° 18' 53" E
815.07'

180.00'
322+50.00

S 30° 37' 20" W
320.65'

Construction Limits

301.08'
326+00

S 27° 53' 14" W

Type #7 Weave Wire Fence

S 86° 09' 40" E

468.90' (I.A.P.A.)
327+50.00

470.00'
327+50.00

S 17° 52' 15" W
228.26'

720.00'
328+50.00
℄ I-675

S 14° 27' 35" W
312.60 (C.P.A.)
41+46.91
℄ Reloc. US 35

314.60
41+46.91
℄ Reloc. US 35

305 WL
L.I. Henkle, Inc.
Cont. 71.647 Ac.
PRO 3.732 Ac.
Total 75.379 Ac.

Match Line

See Sheet 23

Beavercreek Twp. Sec. 8 T-2 R-7
Beavercreek Twp. Sec. 9 T-2 R-7
℄ Reloc. U.S. 35

PRC 326+39.20 CD

PT 326+38.39 CD

PRC 326+39.20 CD

PT 326+57.53 CD

336 CD 337 CD 338 CD 339 CD 340 CD 341 CD

R/C 342+21.50 CD

GREENE CO BEAVERCREEK TWP
SEC. 8 T-2 R-7
SEC. 9 T-2 R-7

14
37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

I-75 & 35 INTERCHANGE R/W PLAN STA. 322+00 to STA 333+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

579/616

15/37

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

N 33° 41' 10" E

N 39° 28' 40" W

N 18° 45' 01" W

℄ Construction Limits

℄ LA-R/W

Fence Stream Crossing Type 1 (24'x6')

139.89

520.00 (I.A.P.A.)
328+00.00

Type 47 Woven Wire Fence

750.00'
333+50.00

N 24° 51' 39" W

416.28'

748.00 (I.A.P.A.)
333+50.00

783.56'
337+46.63

781.56' (C.P.A.)
337+65.63

Walnut Grove Country Club, Inc.

N 35° 12' 18" E

14.00°

See Sheet No. 20

18°

310A 311A 312A 313A 314A 315A 316A 317A 318A 319A 320A 321A 322A 323A 324A 325A 326A 327A 328A 329A 330A 331A 332A 333A

5C 5Ya 313+06.43A

329E 330E 331E 332E 333E 334E 335E 336E 337E 338E

Match Line 666.10

S 38° 29' 37" E

32 5Ya 324+38.15E

15"

32 5Ya 336+53.00E

32 5Ya 327+38.15

Beavercreek TWP Sec. 8, T. 2, R. 7
Beavercreek TWP Sec. 9, T. 2, R. 7

See Sheet No. 21

Stone 33.0E

S 27° 38' E

RPC 5Ya 334+26.54E

305 WL
C. I. Henkle, Inc.
Cont. 71.647 Ac.
R.R.O. 3.732 Ac.
Total 75.379 Ac.

See Sheet No. 13

PT 5Ya 322+85.81C

Match Line

See Sheet No. 14

PT 5Ya 319+13.28

Wire Fence

322 323 324 325 326 327 328 329 330 331 ℄ I-675 ℄ 332 333 334 335

N 7° 01' 00" E

N 20° 18' 00" W

GREENE CO BEAVERCREEK TWP.
SEC. 8, T-2 R-7
SEC. 9, T-2 R-7

15/37

Date of Revision Description of Revision
DATE OF COMPLETION NOV 11, 1972

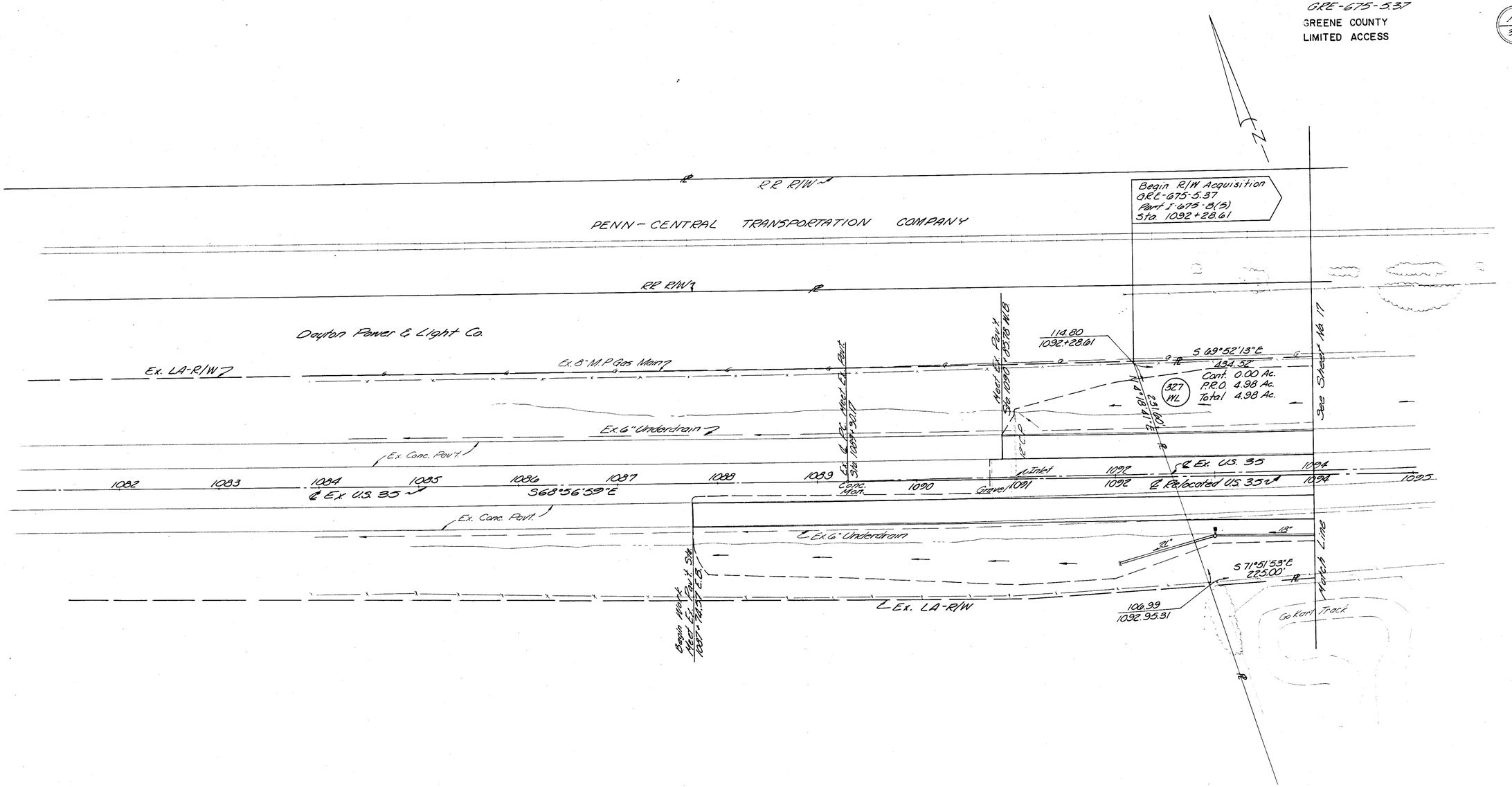
U.S. 35 INTERCHANGE R/W PLAN STA. 322+00 TO STA. 335+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

5180
6116

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

16
37



MONTGOMERY CO. MAD RIVER TWP.
SEC. 15 T-2. R-7

16
37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

U.S. 35 INTERCHANGE R/W PLAN US 35 STA. 1082+00 TO STA. 1094+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

581 / 616

17 / 37

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

PENN ~ CENTRAL TRANSPORTATION CO.

The Dayton Power & Light Co.

Elizabeth Short, et. al.

Charles W. & Edna De Porter

Elizabeth E. Short

Eugene A. & John F. Brockman

Alvin F. & Carl H. Wellmeier

Katherine A. Brown

Beaver Creek TWP
Mad River TWP
Greene County
Montgomery County

E. Ex. U.S. ROUTE 35

Relocated U.S. 35

LINDEN AVE. (DAYTON-XENIA RD.)

TULIP LA.

WENRICK DR.

Temp. Rd.

Dirt Dr.

B/T Drive

B/T Parking Area

Go Cart Race Track

1 Sty. Br. Play-Mor Bowling Lanes #4901

1 Sty. Br. #5031 Superior Lumber

1 Sty. Sheet Metal Shed Storage

Gravel Storage Area Building Material

1 Sty. Fr. Res. #4909

2 Sty. Br. Res. #4917

1 Sty. Fr. Res. #4910

2 Sty. Fr. Res. #5010

1 Sty. Br. Res.

1 Sty. Metal Gas Station

Green House

Fr. Office

Fr. Shed

Fr. Gar.

Dog Pen

Billboard

Frame Barn

Meet existing fence corner

Ex. Guard Rail

Ex. 8" I.P. Gas Main

Ex. 8" M.P. Gas Main

Ex. 6" Underdrain

Ex. L.A. R/W

R.R. R/W

Ex. Track

Relocated Track

Wire Fence

Chain Link Fence

Type 47 Woven Wire Fence

Fence Stream Crossing Type 4

Fence Stream Crossing Type 1 (16'x6')

Std. Type A Fence Terminal

Guard Dog

Limits of gravel area

Ease. to D.P.&L. Co. R.B. 1069-P. 209

Begin Fence 214.00 (C.P.A.) 1105+50.00

Sta. 1106+51.36 MOT-35-1234 = Sta. 0+00 GRE-35-0.00

Sec. 9, T2, R7

Sec. 15, T2, R7

See Sheet No. 16

See Sheet No. 18

Cont. 0.0 Ac. PRO. - 1.98 Ac. Total - 1.98 Ac. (327 WL)

Cont. 0.0 Ac. PRO. - 1.36 Ac. Total - 1.36 Ac. (333 WL)

Cont. 0.024 Ac. (322 WL)

Cont. 0.007 Ac. (318 WL)

Cont. 0.032 Ac. (322 TL)

Cont. 0.003 Ac. PRO. - 0.023 Ac. Total - 0.026 Ac. (322 WD)

Cont. 0.082 Ac. PRO. 0.191 Ac. Total 0.273 Ac. (321 WD)

Cont. 0.640 Ac. (321 WL)

Cont. 0.011 Ac. (348 T)

(325 WL)

Begin Fence 94.55' (E.P.A.) 1095+20.02

Meter Pole

w/ Transformer

Inlet

Conc. Curb

Conc. Walk

Pipe Car Stop

Sign

Ex. R/W

Ex. L.A. R/W

Ex. C.L. Dog Pen Ditch

Ex. Track Relocation Agmt. Sta. 572+05.04 Ahead = Sta. 572+05.04 Back

Conc. Pavt.

Conc. Walk

Conc. Curb

B/T Rolled Curb

Chain Link Fence

Type C.L. - Chain Link Fence

Ex. 6" Underdrain

Ex. 6" Underdrain 2

Ex. 6" Underdrain 3

Ex. 6" Underdrain 4

Ex. 6" Underdrain 5

Ex. 6" Underdrain 6

Ex. 6" Underdrain 7

Ex. 6" Underdrain 8

Ex. 6" Underdrain 9

Ex. 6" Underdrain 10

Ex. 6" Underdrain 11

Ex. 6" Underdrain

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

582/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

18/37

302 Albert A. Petkewitz & Caroline L. Petkewitz
313 Garnett M. & Helen A. Reeves
314 Gilbert C. & Magdalene Carter
315 Paul C. & Iva Lovely
316 Homer L. & Eileen O. Neal
317 Orthella L. Abernathy
325 Norman B & Evelyn M. Coy
328 The Dayton Power & Light Co.
331 Herbert R. & Margery A. Stitzel
332 Lloyd H. & Lela A Landen

MONTGOMERY CO MAD RIVER TWP.
SEC. 15. T-2. R-7

GREENE CO. BEAVERCREEK TWP
SEC 9 T-2, R-7

NOTE: Wenrick Drive Continued on Sheet 19.

A.A.B./8-7-79 - Add Picnic Canopy Pars. 317 & 334
A.A.B./6-16-80 - Add Exist. Sign, Par. 328 AT.
A.A.B./11-21-78 - Add Easem'ts per Lift Sta. San. Sewer Lines
S.E.W. Chg Par 317E to ER 10/11/74
NM 2 May 75 Rev Par 325X to 325S
P.R.D./9-6-74 - Rev. A - Par. 317E
P.R.D./8-26-74 - Added Gas Line, Par 310
A.A.B./8-8-74 - Rev. ER-1 to EL-1, Par. 341

	Date of Revision	Description of Revision
A.A.B.	7-30-74	Add Par. 341 ER-1
P.W.F.	7/9/74	Added 'Do not Disturb' Note Par. 310
NM	20 May 74	Add 4" Drain Par 310
H.J.	5-15-74	Added Septic Tank & Leaching Field to Par 300.
S.E.W.	4-22-74	Added Fish Pond, Septic Tank, Birdbath, to Par. 310
S.E.W.	3-26-74	ADDED 317-E
NN	23 Jan 73	Add Leaching Bed & Septic Tank Par 334
W.J.L.	8/21/73	Name Change Parcel 326
E.H.	12/6/72	Par. 325X chg. Sta. offset, front & side distances
E.H.	12/6/72	Par 310WD add dist. to E. Line-99.20
E.H.	12/6/72	Par. 310WL correct bearing on E. line
E.H.	12/8/72	Par 310T correct bearings on E & W. Lines
E.H.	6-29-73	Name Chg. Par. 306
E.H.	7-10-73	Chg. 325WD-2 to 334WD, 325WD-1 to 325WD, 325WL-1 to 325WL & 325WL-2 to 334WL
S.E.W	7-17-73	PARCEL 332 NOT TO BE ACQUIRED
E.H	4-23-73	Chg. Par. 328 T1 to 328-AT

DATE OF COMPLETION May 11, 1972

18/37

US 35 INTERCHANGE R/W PLAN U.S. 35 STA. 1106+00 TO STA. 1106+93.02
STA. 0+00 TO STA. 7+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

583/616

10/37

GRE-675-3.37

GREENE COUNTY

LIMITED ACCESS

Match Line — See Sheet No. 20

See Sheet No. 16

Type CL-Chain Link Fence on R/W Line — From 2R R/W — Cont. 1.314 Ac.

341 WU-1

Cont. 0.188 Ac.

Abandoned Crossing

Conc. Headwall with 8" V.C.P.

Wire Fence

Ex. R/W

Ex. Track

TRANSPORTATION CO

Conc. Median

Ex. LA-2

DAYTON-XENIA RD.

Ex. B/W

Billboard

Wire Fence

Ex. 12" Gas Line

John & Deana Hostle

Cont. 0.00 Ac. / R/O 0.41 Ac. / Total 0.41 Ac.

308 WC

Cont. 0.0 Ac. / R/O 1.66 Ac. / Total 1.66 Ac.

307 WC

Cont. 0.33 Ac. / R/O 0.75 Ac. / Total 1.00 Ac.

306 WC

Cont. 0.40 Ac. / R/O 0.79 Ac. / Total 1.19 Ac.

305 WC

Cont. 0.0 Ac. / R/O 0.79 Ac. / Total 0.79 Ac.

304 WC

Cont. 0.0 Ac. / R/O 1.19 Ac. / Total 1.19 Ac.

302 WC

Cont. 0.0 Ac. / R/O 1.19 Ac. / Total 1.19 Ac.

301 WC

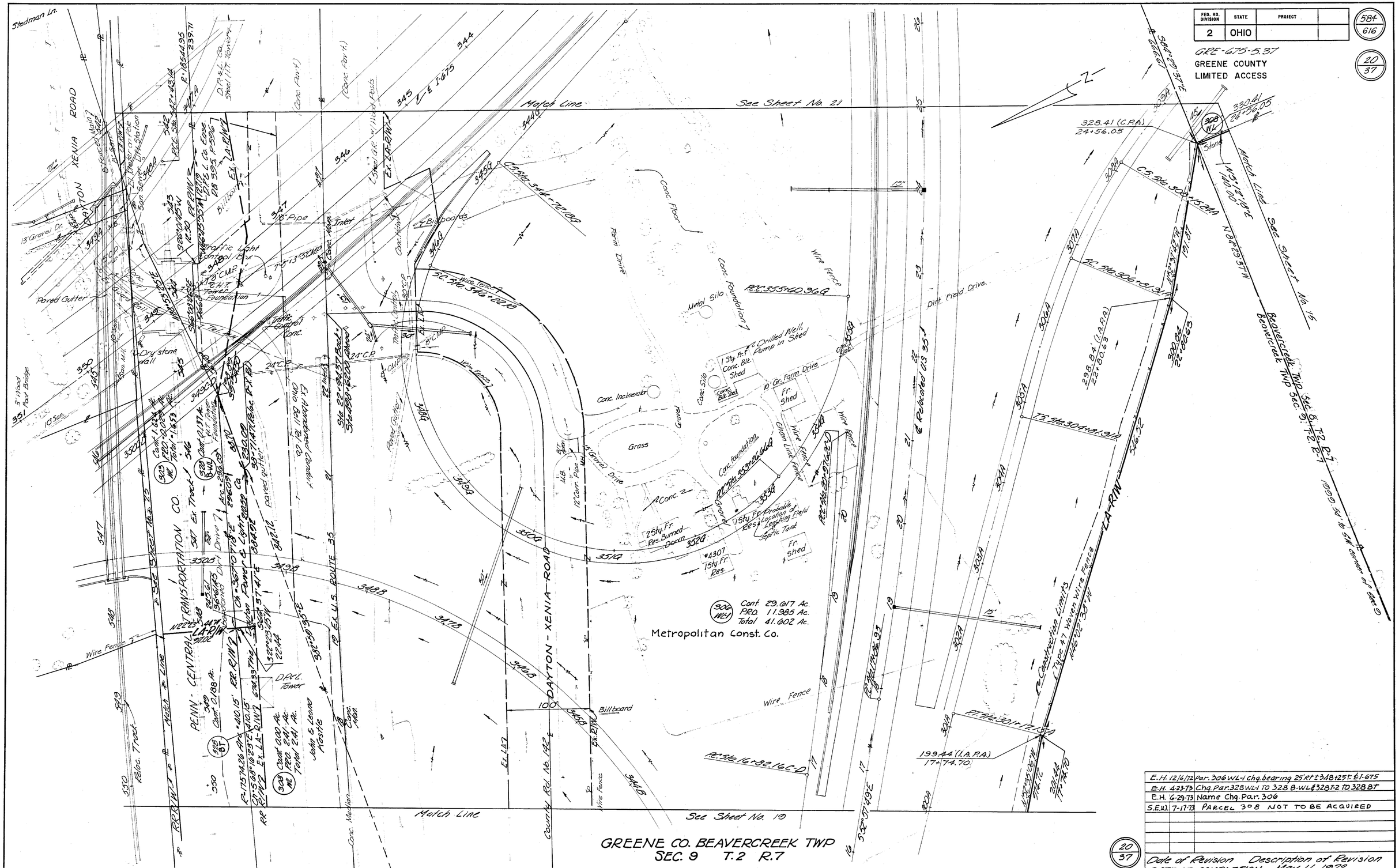
Cont. 0.0 Ac. / R/O 1.19 Ac. / Total 1.19 Ac.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

584/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

20/37



GREENE CO. BEAVERCREEK TWP
SEC. 9 T.2 R.7

E.H.	12/6/72	Par. 306 WL-1 Chg. bearing 25' Rt ± 348+25 ± ℄ I-675
E.H.	4-23-73	Chg. Par. 328 WL-1 TO 328 B-WL & 328 T-2 TO 328 BT
E.H.	6-29-73	Name Chg. Par. 306
S.E.W.	7-17-73	PARCEL 308 NOT TO BE ACQUIRED

20/37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

US. 35 INTERCHANGE
R/W PLAN - STA. 345+00 TO STA. 349+25
US. 35 STA. 16+50 TO STA. 25+00

U.S. 35 INTERCHANGE R/W PLAN - STA. 333+00 TO STA. 345+00
U.S. 35 STA. 25+00 TO STA. 34+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

586/616

22/37

P GRE-675-5.37

GREENE COUNTY

LIMITED ACCESS

CEMETERY

Beavercreek Township Trustees

Fr. Sheds

Wire Fence

R.R. R/W

Ex. Culvert to Remain in Service

Relocated Track

PENN-CENTRAL TRANSPORTATION CO

Construction Limits

R.R. R/W

Residue = 4.22 Ac. (LL)

Stone Headwall

15'x11' Stone Arch

Stone Headwall

307

Frank L. Morgan, et al

Ex. D.P.&L. Tower

LA-R/W

559°07'21"E 465.80'

125.00'(C.P.A.) 532+90.00 P.C. R.R.

561°42'23"E 602.56

115.00'(C.P.A.) 532+90.00 P.C. R.R.

122.50'(C.P.A.) 530+00.00 P.C. R.R.

132.50'(C.P.A.) 530+00.00 P.C. R.R.

115.36 529+91.54 (R&P)

546°12'20"E 342.01'

Cone. Hdwl.

Type 47 Woven Wire Fence

Fence Stream Crossing Type 1 (12'x6')

Ex. Conc. Pav't.

Cone. Hdwl.

Ex. D.P.&L. Tower

Ex. LA-R/W 201.16'

Demolished Billboard

559°25'05"E 650.38

162.50'(L.P.E.C.) 523+75.21 P.C. R.R.

158.50'(L.P.E.C.) 526+84.18 P.C. R.R.

Const. 12.42 Ac.

PRO 9.28 Ac.

Total 10.80 Ac.

307 WL

Fence Stream Crossing Type 1 (32'x6')

N59°52'49"W

Ex. Guard Rail

275.00'(C.P.A.) 46+60.00 U.S. 35

Fence Stream Crossing Type 2 (16'x6')

Ex. Guard Rail

Std. Type B Fence Terminal

749.38'

248.00'(C.P.A.) 47+53.00

Type 47 Woven Wire Fence

Fence Stream Crossing Type 1 (12'x6')

161.00'(C.P.A.) 47+20.00

559°58'45"E 1189.17'

PC Sta 326+70.47 F

PT Sta 331+00.11 E

PT Sta 322+12.50 Ramp Track Relocation

See Sheet No. 23

See Sheet No. 16

EX. U.S. ROUTE 35

RAMP F

RAMP D

RAMP A

RAMP H

360°43'50"E 933.07'

Ex. LA-R/W

Match Line

Match Line

Beavercreek Twp

Beavercreek Twp

Sec. 9 T.2 R.7

Sec. 8, T.2, R.7

See Sheet No.

305 WL

L.I. Henkle, Inc.

Cont. 71.647 Ac.

PRO 3.732 Ac.

Total 75.379 Ac.

S85°14'56"E

380°07'49"E

Relocated US. 35

Wire Fence

Fence Stream Crossing Type 2 (16'x6')

Fence Stream Crossing Type 1 (16'x6')

Type 47 Woven Wire Fence

Construction Limits

195.00'(C.P.A.) 44+35.00 U.S. 35

Std. Type B Fence Terminal

150.34'(L.A.P.A.) 46+56.52

155.00'(L.A.P.A.) 46+00.00

132.34 46+56.52

N69°25'00"W 535.28'

238.12'

L/A-R/W

S70°50'54"W 240.00 44+09.44

S85°20'27"W 270.60

117.00'(L.A.P.A.) 333+74.00 H

PC Sta 326+70.47 F

PC Sta 45+76.49 WB

PC Sta 44+92.70 E

PC Sta 44+28.90 EB

PT Sta 41+09.73 C-D

PT Sta 39+81.55 C-D

PC Sta 38+39.20 C-D

PT Sta 37+51.53 C-D

PC Sta 36+39.20 C-D

PT Sta 36+39.20

PC Sta 332+11.41 D

PC Sta 335+95.80 F

PT Sta 336+33.57 A

C5 Sta 336+33.57 A

C5 Sta 350+41.41 D

C5 Sta 352+11.41 D

PC Sta 334+11.72 H

PT Sta 333+74.00 H

GREENE CO. BEAVERCREEK TWP.
SEC. 9 T.2 R.7
SEC. 8 T.2 R.7

22/37

Date of Revision Description of Revision

DATE OF COMPLETION May 11, 1972

U.S. 35 INTERCHANGE R/W PLAN U.S. 35 STA. 34+00 to STA. 48+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

587/616

ARE-675-5.37

GREENE COUNTY

LIMITED ACCESS

23/37

GREENE CO BEAVERCREEK TWP

SEC 2	T-2	R-7
SEC 3	T-2	R-7
SEC 8	T-2	R-7
SEC 9	T-2	R-7

E.H.A.2.3-73	Chg. 328 W-L-2 TO 328C-W-L
P.F. 12-12-73	Plat: 34 Not to be Acquired

23/37

Date of Revision — Description of Revision

DATE OF COMPLETION May 11, 1972

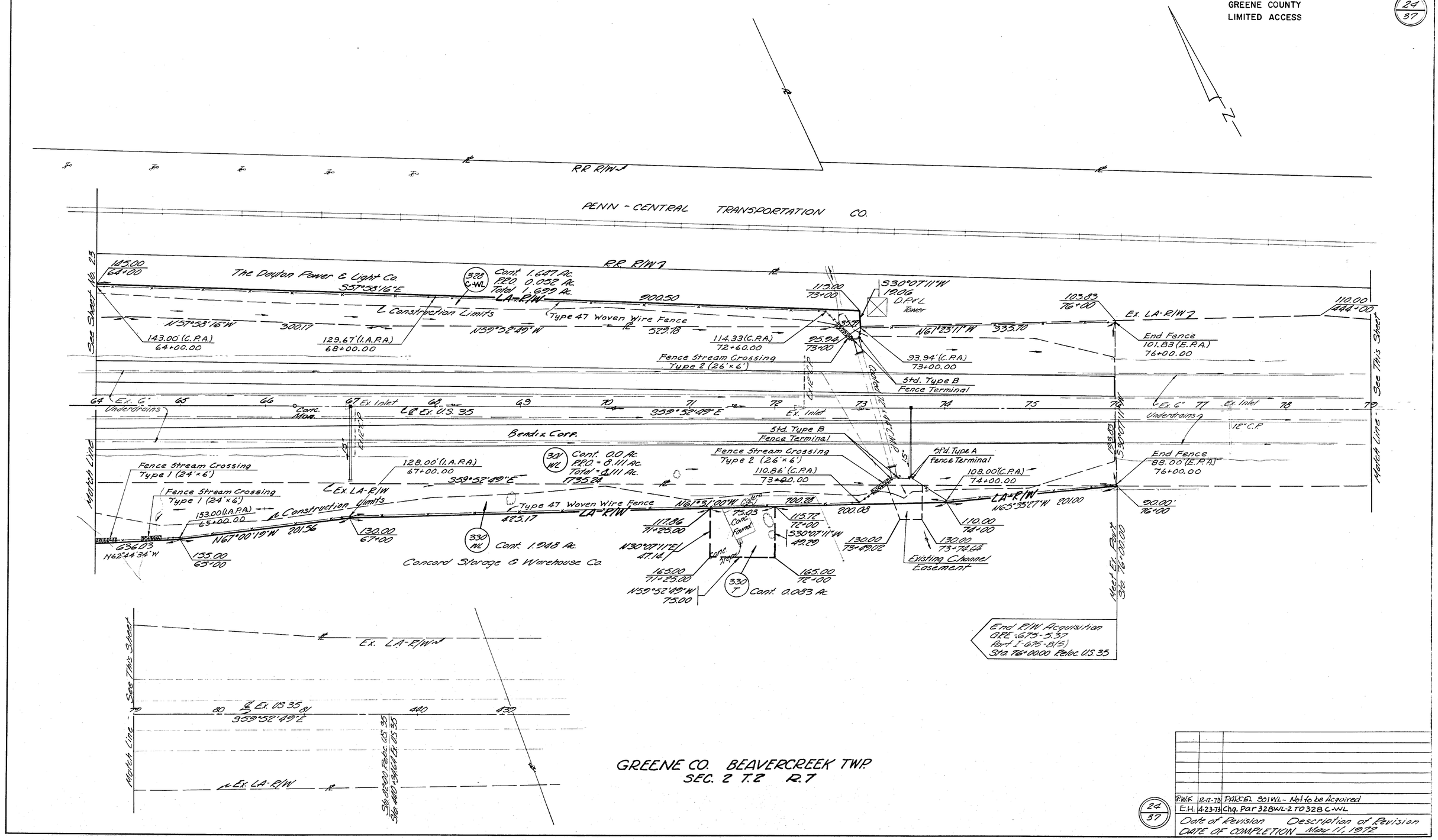
U.S. 35 INTERCHANGE R/W PLAN U.S. 35 STA. 48+50 TO STA. 64+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

588/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

24/37



GREENE CO. BEAVERCREEK TWP.
SEC. 2 T.2 R.7

24/37

P.W.F.	12-12-73	PARCEL 301WL - Not to be Acquired
E.H.	4-23-73	Chg. Par 328WL-2 TO 328 C-WL

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

U.S. 35 INTERCHANGE R/W PLAN U.S. 35 STA. 64+00 TO STA 78+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

A.A.B.	6-16-74	Rev. Par. 341 WU-1 Take.
A.A.B.	8-8-74	Rev. ER-2 to EL-2, Par. 341
A.A.B.	7-31-74	Rev. Par. 341 ER-2
N.M.	21 Nov. 74	Rev. Size & Locat. Par. 342

E.H.	12/6/72	Par. 341 WL added dist. 171.59 @ W. Line 340 WL
E.H.	12/6/72	Par. 341 WL deleted dist. 396.80 along W. line 342 Mov.
E.H.	12/6/72	Par. 306 WU chg. location dist. 73.11
E.H.	12/6/72	Par. 341 WL-1 chg. bear. W. LA-line 65.66-N 3°49'
E.H.	3-28-73	Name Chg. Par. 337
A.A.B.	2-6-74	Rev. Owner, Par. 338
A.A.B.	5-13-74	Rev. Owner, Par. 342
Date of Revision		Description of Revision

DATE OF COMPLETION May 11, 1972

GREENE CO. BEAVERCREEK TWP.
SEC. 9, T-2 R-7

25/37

R/W PLAN STA. 349+25 TO STA. 359+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

590/616

GRE-675-537

GREENE COUNTY
LIMITED ACCESS

26/37

GREENE CO. BEAVERCREEK TWP.
SEC. 9 T. 2 R. 7

10-23-73	Deleted Structure - 341-WU-1	
8-1-74	Add Par. 341 ER-1 & Par. 341 ER-2	A.A.B.
8-8-74	Rev. ER-1 & ER-2 to EL-1 & EL-2, Par. 341.	A.A.B.

26/37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

R/W PLAN DAYTON-XENIA RD. WILDONNA DRIVE

R/W PLAN STA 359+00 TO STA 375+00

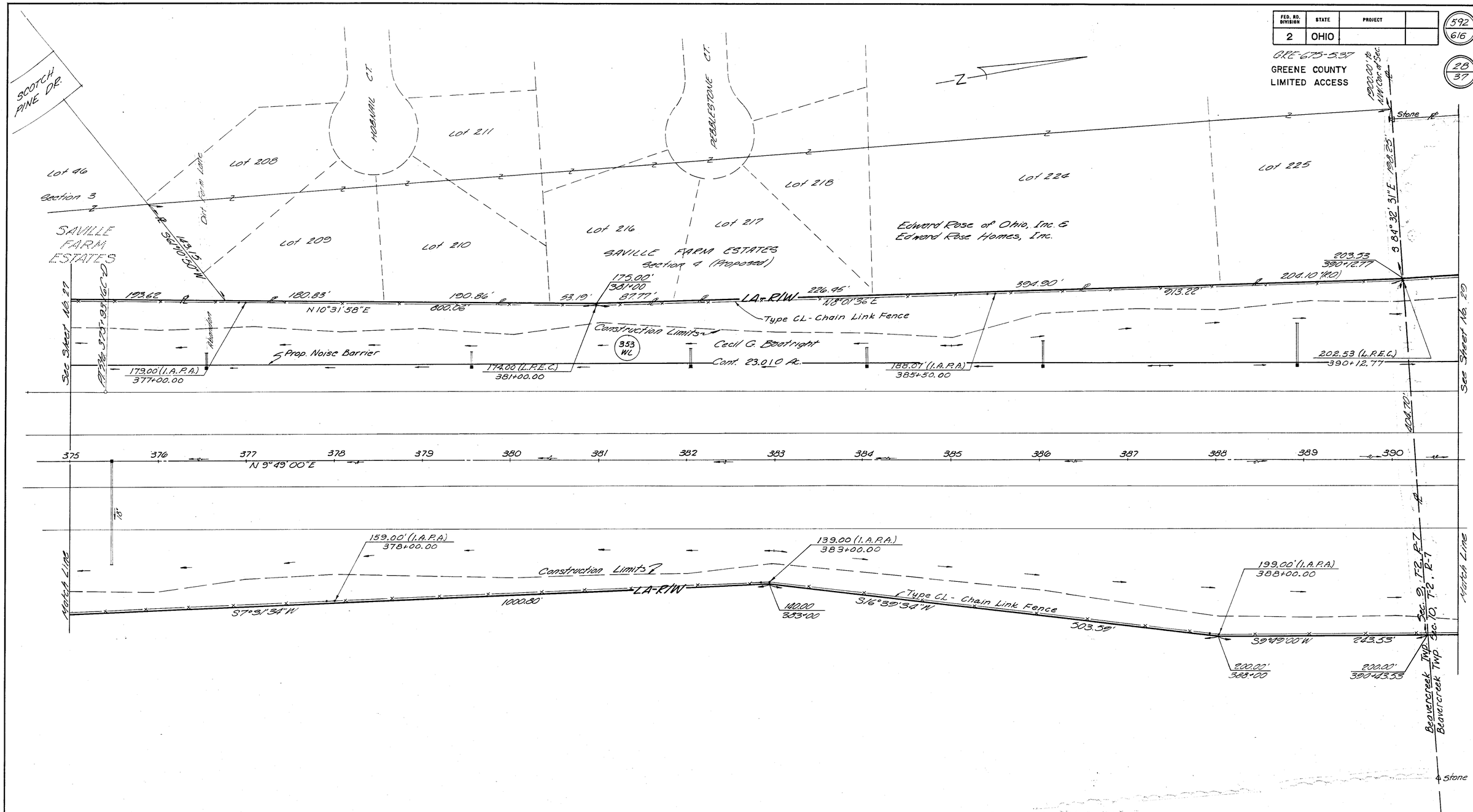
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

592/616

GRE-675-5.37

GREENE COUNTY
LIMITED ACCESS

28/37



GREENE CO BEAVERCREEK TWP
SEC. 10 T.2 R.7
SEC. 9 T.2 R.7

28/37

Date of Revision	Description of Revision
DATE OF COMPLETION	May 11, 1972

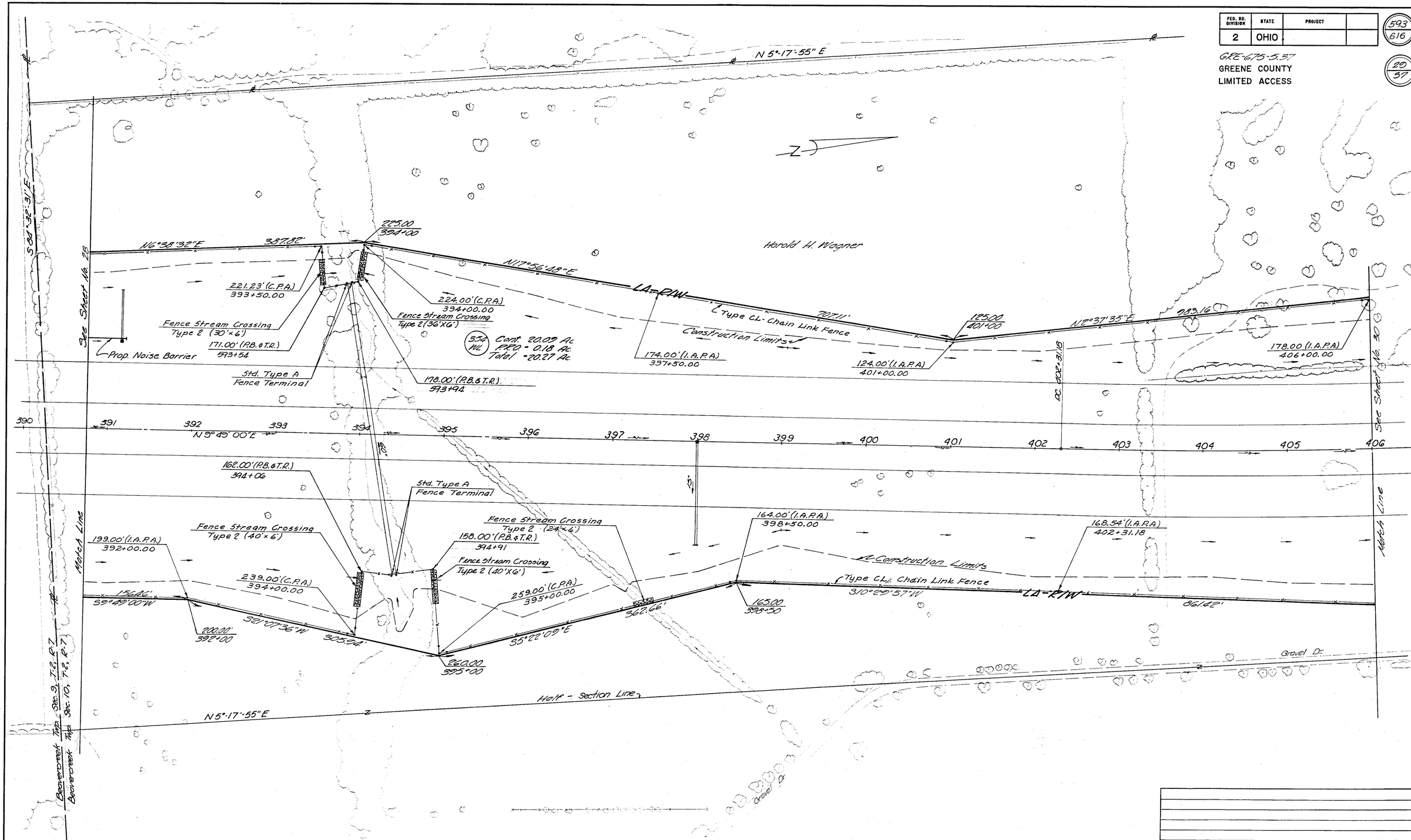
R/W PLAN STA. 375+00 TO STA. 390+75

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

593/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

29/37



GREENE CO. BEAVERCREEK TWP
SEC. 10 T.2 R.7
SEC. 9 T.2 R.7

29/37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

R/W PLAN STA. 390+75 TO STA. 406+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

594/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

30/37

End Project GRE-675-5.37 I-675-8(12) Sta 417+00.00

Begin Project GRE-675-7.43 I-675-8(16)

N 5°-17'-55" E

Match Line

See Sheet No. 31

See Sheet No. 29

See Sheet No. 32

Clifford A. & Mary E. Wolfe

362 T — Cont. 0.11 Ac.

N 2°-37'-28" W 19.29'

270.00 418+80

270.00 419+00

205.00 419+25.00

182.00' 419+97.03

200.73'

N 8°-26'-34" W

(Future) Const. Limits

200.81'

132.00' 420+00.00

N 15°-10'-39" E 165.60

75.02'

Cont. 2.00 Ac.
PRO. 0.16 Ac.
Total 2.36 Ac.

362 WD — Cont. 7.90 Ac.

600.00'(Deed)

N 3°-18'-00" W

421

420

419

418

417

416

415

414

405 406 407 408 409 410 411 412 413

N 2°-37'-35" E — L A - R/W — 883.16'

Type CL - Chain Link Fence

Construction Limits

178.00'(L.A.P.A.) 406+00.00 Wire Fence

199.00'(L.A.P.A.) 411+00.00

200.00 411+00

180.71 17+80.93

N 0°-02'-35" E

R=23753

71.26'(L.A.P.A.) 18+00.89

R=45°53'48"

354 WL — Cont. 20.09 Ac. PRO. 0.18 Ac. Total 20.27 Ac.

354 WD-1 — Cont. 0.34 Ac. PRO. 0.14 Ac. Total 0.48 Ac.

354 T-1 — Cont. 0.51 Ac.

N 0°-30'-13" W 2014.61'

L=1170.35' Ch=N17°33'07"E 1166.91' R=7200.00' Δ=9°-18'-42"

L=221.04' 415+74.60

L=1950.1' C=78.54 Ch=N11°18'10"E 78.01'

N 14°-43'-03" W 136.24'

N 15°-28'-35" E 148.70'

N 14°-43'-03" W 136.24'

N 15°-10'-39" E 165.60'

73.38'

205.00 418+90.00

205.00 419+25.00

N 14°-43'-12" E

N 3°-08'-27" W 196.78'

334.22'

600.00'(Deed)

End Fence 144.00'(E.P.A.) 417+00.00

Match Line

Std. Abut. Connection PI 18+55.89

Wire Fence

Gr. Dr.

Cont. 0.55 Ac.

354 T-2

354 WD-2

354 WD

Cont. 0.000 PRO. 0.002 Total 0.002 Ac.

Cont. 0.472 Ac. PRO. 0 Total 0.472 Ac.

Cont. 2.471 Ac. PRO. 0.085 Ac. Total 2.536 Ac.

358 WL

Winona Snead & Herbert Snead

Covered Conc. Patio

Conc. Steps

Conc. Walks

Gr.

Fr. Barn

Fr. Shed

Wood Fence

Fr. Shed

Conc. Walks Steps

Dog Well

Fr. Gar.

1½ Sty. Fr. Res. #4282

Leaching Field

Septic Tank

Abandoned

Fence Sheaved Crossing

Type 1 (2 x 6)

End Fence

Fence Terminal

Type B

Cont. 1.21 Ac.
PRO. 0.05 Ac.
Total 2.214 Ac.

361 WL

Herbert Snead & Winona Snead LL 5.663 Ac.

James B. & Willis O. Goodall

Cont. 0.067 Ac.

361 K

S 2°-51'-00" E 30.00

198.18 417+20.66

S 2°-51'-00" E — L A - R/W — 857.21

N 5°-17'-55" E 268.00

363.00' Half Section Line

N 5°-17'-55" E

Cont. 0.393 Ac. PRO. 0.033 Ac. Total 0.426 Ac.

363.00'

224.00(L.A.P.A.) 415+00.00

N 5°-17'-55" E

218.12'(C.P.A.) 414+52.68

68.00'(C.P.A.) 21+83.51

189.00'(L.P.E.C.) 411+00.00

189.00'(L.A.P.A.) 407+00.00

S 10°-29'-57" W 190.00 407+00

S 4°-48'-02" W

Type CL - Chain Link Fence

Construction Limits

L A - R/W 409.70'

S 6°-40'-06" W

271.95' 110.00 411+00

177.47 21+76.19

N 0°-28'-31" W 429.99'

Wire Fence

Gr. Dr.

71.87 22+31.58

Match Line

See Sheet No. 31

Ex. R/W

Ex. R/W

GREENE CO. BEAVERCREEK TWP
SEC. 10 T. 2 R. 7

E.H.	12/6/72	Par. 358 WL chg. bearing along E. line to N 5°-27'-57" E
A.A.B.	12-20-74	Rev. Owner, Add Deed Distances, Par. 358.
A.A.B.	5-29-74	Rev. Par. 360 for Total Take.

30/37

Date of Revision — Description of Revision

DATE OF COMPLETION Nov. 11, 1972

R/W PLAN STA. 406+00 to STA. 421+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

595/616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

31/37

GREENE CO. BEAVERCREEK TWP.
SEC. 10 T.2 R.7

31/37

8-29-73 Name Change Parcel 357
Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

KEMP ROAD R/W PLAN STA. 12+00 TO STA. 16+00
STA. 23+00 TO STA. 29+00

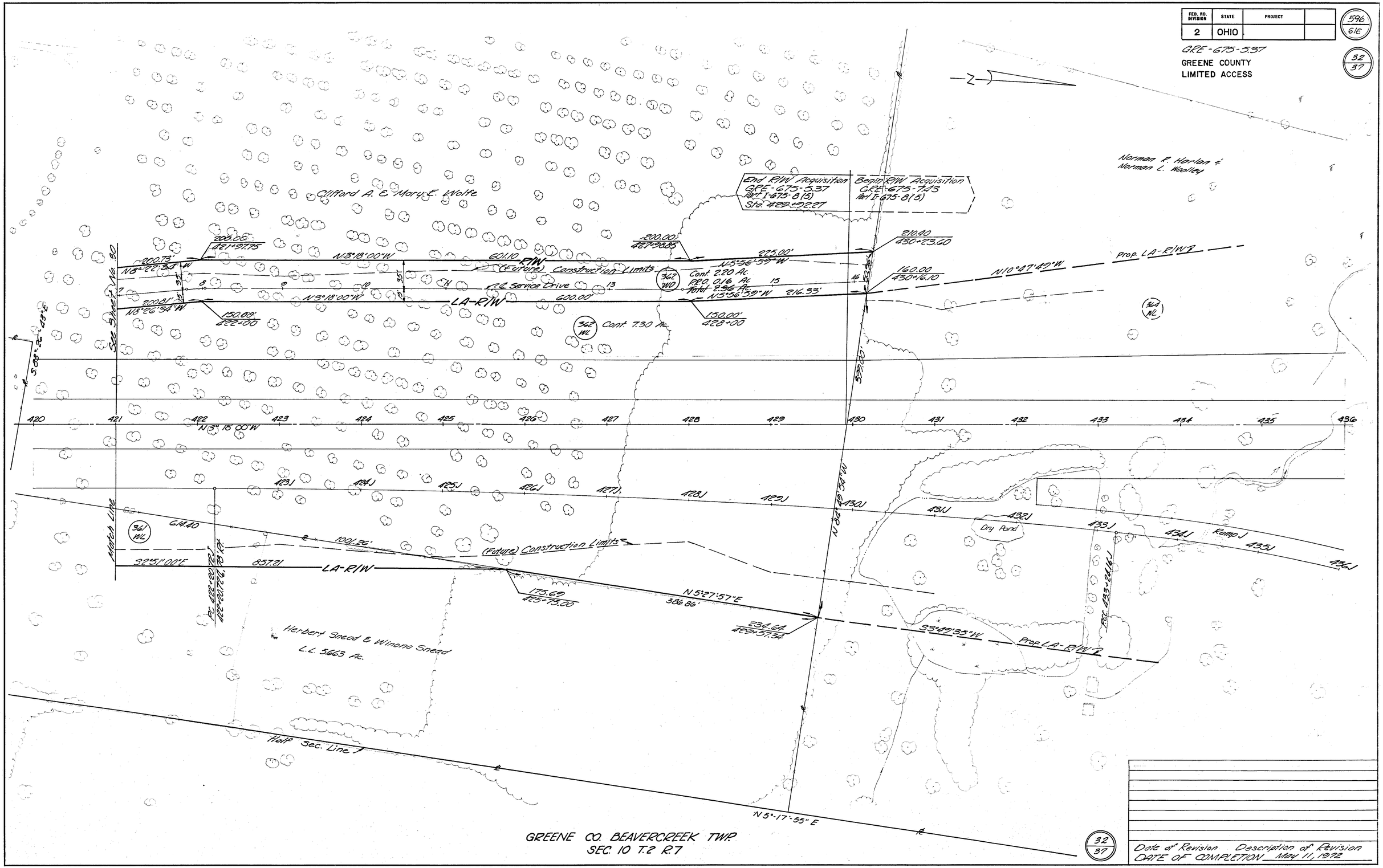
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

596/616

GRE-675-5.37

GREENE COUNTY
LIMITED ACCESS

32/37



GREENE CO. BEAVERCREEK TWP.
SEC. 10 T.2 R.7

32/37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

R/W PLAN STA. 421+00 TO STA 436+00

THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)
AERIAL AND HIGHWAY EASEMENTS

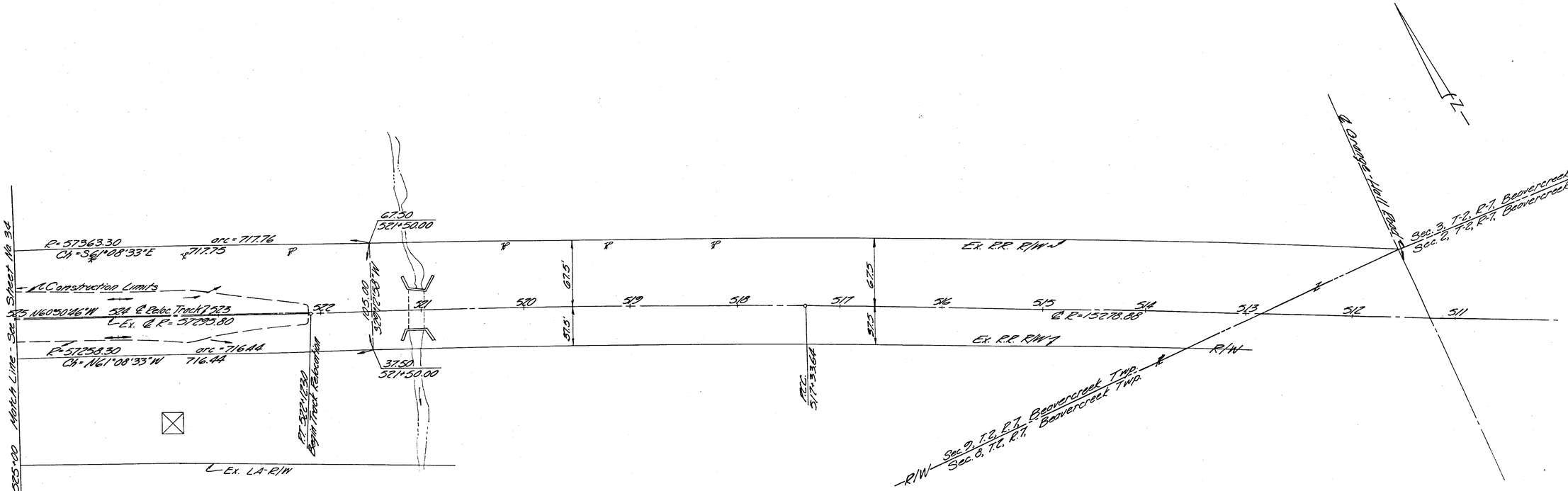
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

597 / 616

GRE-675-5.37

33 / 37

R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'



GREENE CO. BEAVERCREEK TWP
SEC. 8 & 9, T-2, R-7

The center line survey stations shown are referred to those valuation stations shown on the Little Miami Railroad Right-of-Way and Track Map, Ohio, Vol. 76 Dwgs. 10 and 11.

33 / 37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

R/W PLAN - PENN CENTRAL R.R. Sta. 511+00 to 525+00

THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)
AERIAL AND HIGHWAY EASEMENTS

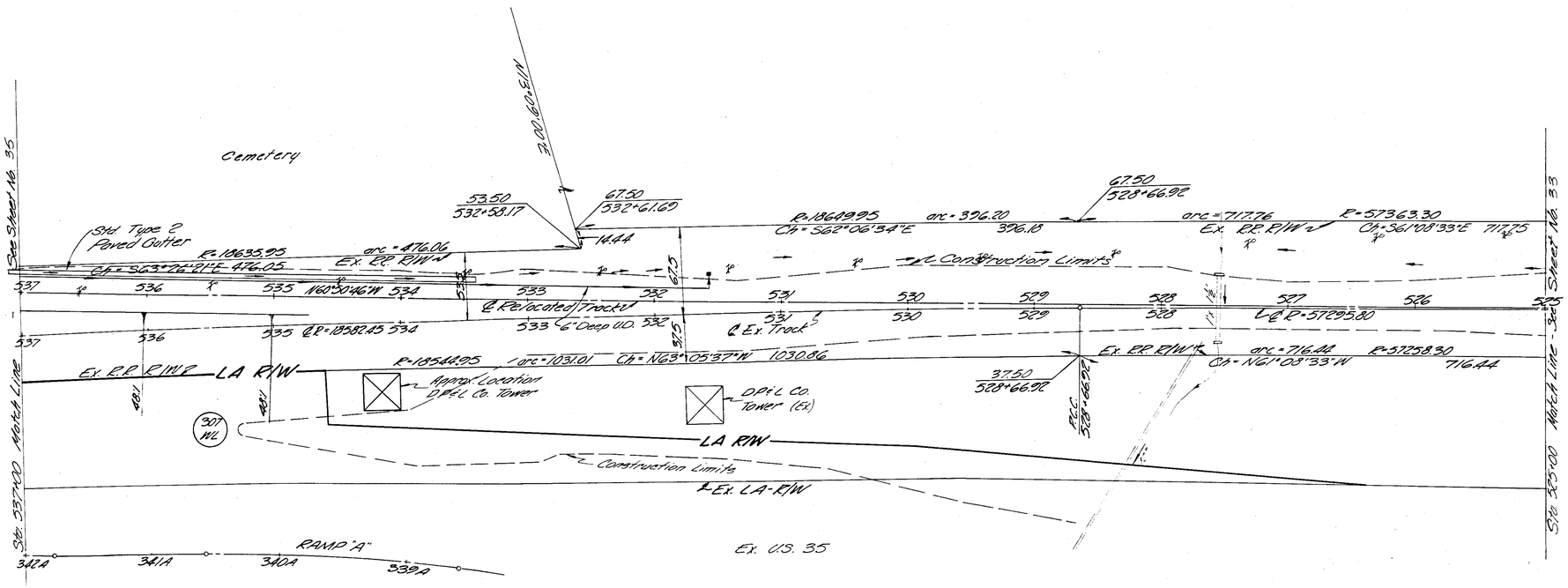
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

598/616

GRE-675-537

34/37

R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'



GREENE CO. BEAVERCREEK TWP.
SEC. 9, T-2, R-7

34/37

Date of Revision	Description of Revision
DATE OF COMPLETION	Nov 11, 1972

R/W PLAN - PENN CENTRAL R.R. Sta. 525+00 to Sta. 537+00

PARCEL No.	EASEMENT REQUIRED	GRANTOR	GRANTEE	TOTAL AREA	AREA OF OVERLAP HIGHWAY	AERIAL	UTILITY
303WL		Little Miami Railroad Co.	State of Ohio	71,541 S.F.	71,541 S.F.	—	—
306WU		Southard Production Co.	State of Ohio	5577 S.F.	—	26	5577 S.F.
329WU		William H. & Mildred L. Camden	State of Ohio	2760	—	—	2760
329AR	Aerial	State of Ohio	Little Miami Railroad Co.	523 S.F.	523 S.F.	523 S.F.	—
335WU		Donald E. & F.M. Morgan	State of Ohio	2431 S.F.	—	—	2431 S.F.
338AR	Aerial	State of Ohio	Little Miami Railroad Co.	7361 S.F.	7361 S.F.	7361 S.F.	—
340WU		Howard & Ivadelle Douglas	State of Ohio	5334 S.F.	—	—	5334 S.F.
340AR	Aerial	State of Ohio	Little Miami Railroad Co.	7100 S.F.	7100 S.F.	7100 S.F.	—
341WU-1		Third National Bank & Trust Co. "TR"	State of Ohio	57,248 S.F.	—	—	57,248 S.F.
341AR-1	Aerial	State of Ohio	Little Miami Railroad Co.	856 S.F.	856 S.F.	856 S.F.	—
306AR	Aerial	State of Ohio	Little Miami Railroad Co.	26 S.F.	26 S.F.	26 S.F.	—

THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)

AERIAL AND HIGHWAY EASEMENTS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

599/616

GRE-675-5.37

R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'

35/37

GREENE CO. BEAVERCREEK TWP.
SEC. 9, T-2, R-7

35/37

A.A.B.	6-16-75	Rev. Par. 341WU-1 Take.
P.R.D	4/3/74	PAR. 340 WL - DETAIL - CHANGED DIST. 17.96' TO 18.96'
Date of Revision		Description of Revision

DATE OF COMPLETION May 11, 1972

R/W PLAN - PENN CENTRAL R.R. Sta. 537+00 to Sta. 550+85

PARCEL NO.	EASEMENT REQUIRED	GRANTOR	GRANTEE	TOTAL AREA	AREA OF OVERLAP		
					HIGHWAY	AERIAL	UTILITY
303WD		Little Miami Railroad Co.	State of Ohio	24,245 S.F.	24,245 S.F.	—	—
341WU1		Third National Bank & Trust Co. "TR"	State of Ohio	57,248 S.F.	—	—	57,248 S.F.
341WU2		Third National Bank & Trust Co. "TR"	State of Ohio	35,963 S.F.	—	—	35,963 S.F.
341AR2	Aerial	State of Ohio	Little Miami Railroad Co.	3747 S.F.	3747 S.F.	3747 S.F.	—

THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)
AERIAL AND HIGHWAY EASEMENTS

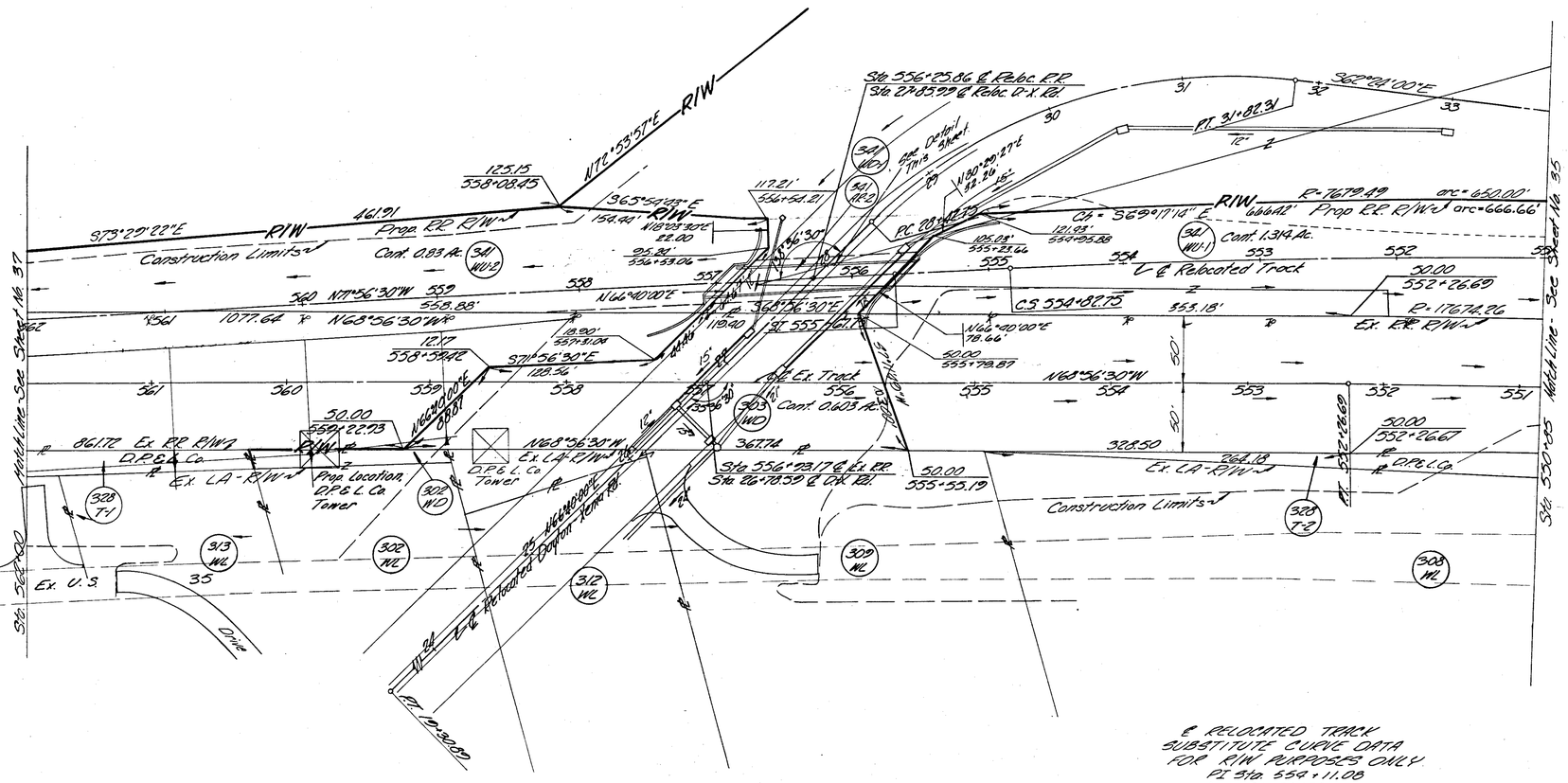
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

600 / 6/16

GRE-675-5.37

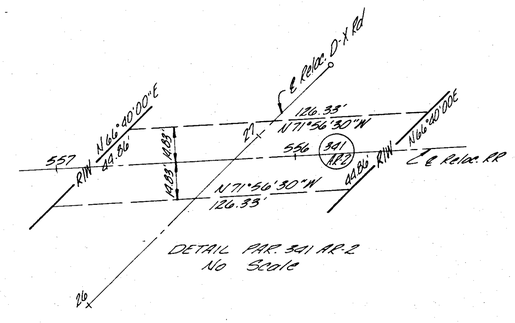
R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'

36 / 37



℄ RELOCATED TRACK
SUBSTITUTE CURVE DATA
FOR R/W PURPOSES ONLY

PI Sta 554+11.08
Δ = 0°19'07"
Dc = 0°33'44"
R = 10190.22'
L = 56.67'
T = 28.33'
PCC = 554+82.75
PT = 555+39.42



DETAIL PAR. 341 AR-2
No Scale

GREENE CO. BEAVERCREEK TWP.
SEC. 9, T-2, R-7

Date	Rev.	Description of Revision
6-13-75	A.A.B.	Rev. Par. 341 WU-1 Take

DATE OF COMPLETION May 11, 1972

R/W PLAN - PENN CENTRAL R.R. Sta. 550+85 to Sta. 562+00

PARCEL NO.	EASEMENT REQUIRED	GRANTOR	GRANTEE	TOTAL AREA	AREA OF OVERLAP HIGHWAY	AERIAL	UTILITY
319WU	Warr. Utility	Cameron W. & Akiko Albright	State of Ohio	3407 S.F.	—	—	3407 S.F.
320WU	Warr. Utility	Myrtle Annie Chidester	State of Ohio	3554 S.F.	—	—	3554 S.F.
323WU	Warr. Utility	Joseph R. Jr. & Oletha V. Goulart	State of Ohio	3865 S.F.	—	—	3865 S.F.
324WU	Warr. Utility	Donald O. & Doris A. Livesay	State of Ohio	3959 S.F.	—	—	3959 S.F.
326WU	Warr. Utility	Maurice C. & Norma L. Williams	State of Ohio	3951 S.F.	—	—	3951 S.F.
341WU-2	Warr. Utility	Third National Bank & Trust Co. "TR"	State of Ohio	35,963 S.F.	—	—	35,963 S.F.

THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)

AERIAL AND HIGHWAY EASEMENTS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

601/616

GRE-675-5.37

R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'

37/37

GREENE CO. BEAVERCREEK TWP
SEC. 9, T-2, R-7
MONTGOMERY CO. MAD RIVER TWP
SEC. 15, T-2, R-7

37/37

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

R/W PLAN - PENN CENTRAL R.R. Sta. 562+00 to Sta. 575+00

TE-95
500-7-68

MICROFILMED
AUG 29 1989

GENERAL INFORMATION

INTRODUCTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 2.0 MILES OF IR 675, BEGINNING APPROXIMATELY 0.6 MILES SOUTH OF USR 35 AND 0.36 MILE WEST OF GRANGE HALL ROAD, EXTENDING NORTHWARD AND TERMINATING 300 FEET NORTH OF EXISTING KEMP ROAD. INCLUDED IN THIS REPORT ARE SOIL PROFILES OF RELOCATED USR 35, RELOCATED USR 35 INTERCHANGE RAMPS A, B, C, D, E, F, G, AND H, RELOCATED DAYTON-XENIA ROAD, RELOCATED WILDONNA DRIVE, RELOCATED KEMP ROAD AND RELOCATED GRANGE HALL ROAD.

FOR MAXIMUM PROPOSED CUTS AND FILL EMBANKMENTS, SEE THE PROJECT INDEX ON THIS SHEET.

GEOLOGY AND OBSERVATIONS OF THE PROJECT

THE PROJECT IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, WITH THE ALIGNMENT TRAVERSING THE DISSECTED UPLANDS AND OUTWASH PLAINS EAST OF THE BROAD FLOODPLAIN OF THE MAD RIVER, IN AN AREA WHERE MODERATELY DEEP TO DEEP GLACIAL DRIFT AND OUTWASH DEPOSITS OVERLIE SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE. A LOW WET AREA IS LOCATED BETWEEN IR 675 STATIONS 364+00 AND 373+00. A WATER SATURATED ZONE IS LOCATED IN THE VICINITY OF IR 675 STATION 476+00. A MAN-MADE FARM POND IS LOCATED BETWEEN IR 675 STATIONS 528+00 AND 531+00.

EXPLORATION

EXPLORATORY BORINGS WERE MADE BY MEANS OF TRUCK-MOUNTED MECHANICAL SOIL AUGER AND HAND AUGER (IN DIFFICULT ACCESS AREAS), BETWEEN FEBRUARY 19 AND MARCH 1, 1968 AND APRIL 25 AND MAY 7, 1968. INCLUDED WITH THIS REPORT ARE LOGS OF BORINGS MADE FOR THE STRUCTURE FOUNDATION INVESTIGATIONS FOR THE PROJECT.

INVESTIGATIONAL FINDINGS

MATERIALS ENCOUNTERED ON THE PROJECT WERE PREDOMINANTLY COMPRISED OF SANDY SILTS (A-4a), WITH SOME GRAVELS (A-1-b), SANDY GRAVELS (A-1-b AND A-2-4), SANDS (A-3a), SILT CLAYS (A-6a) AND CLAYS (A-7-6), GENERALLY HAVING LOW MOISTURE CONTENTS AND MOISTURE CONTENTS IN THE LOWER PORTION OF THE PLASTIC RANGE.

FROST SUSCEPTIBLE SILTS WERE ENCOUNTERED WITHIN THREE FEET BELOW PROPOSED GRADE AT RELOCATED DAYTON-XENIA ROAD STATION 23+60.

WET AND/OR ORGANIC OR PEAT MATERIALS WERE ENCOUNTERED AT IR 675 STATIONS 312+75, 322+00, 328+50, 335+50, 358+15, 364+00, 366+00, 371+00, 373+00 AND 395+00; RELOCATED USR 35 STATIONS 21+00, 25+00, 39+50 AND 44+20; RELOCATED USR 35 INTERCHANGE RAMP A STATIONS 334+50 AND RAMP D STATION 349+50; RELOCATED DAYTON-XENIA ROAD STATION 15+00, AND RELOCATED GRANGE HALL ROAD STATION 17+00.

AN ARTESIAN CONDITION WAS ENCOUNTERED AT IR 675 STATION 325+00.

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS— 267 SAMPLES TESTED

DESCRIPTION	H.R.B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
GRAVEL	A-1-a(0)	A-1-a	62	17	12	5	4	NP	NP	12	16
GRAVEL WITH SAND	A-1-b(0)	A-1-b	44	23	19	8	6	NP	NP	12	19
FINE SAND	A-3(0)	A-3	22	25	44	5	4	NP	NP	18	2
COARSE AND FINE SAND	-----	A-3a	12	21	47	11	9	NP	NP	10	10
GRAVEL OR STONE FRAGMENTS WITH SAND AND SILT	A-2-4(0)	A-2-4	31	20	13	14	17	21	4	13	9
GRAVEL WITH SAND, SILT AND CLAY	A-2-6(0)	A-2-6	46	9	12	14	19	33	14	18	2
STONE FRAGMENTS WITH SAND, SILT, AND CLAY	A-2-7(1)	A-2-7	35	22	12	6	25	46	21	23	1
SANDY SILT	A-4(4)	A-4a	16	10	18	30	26	21	5	13	153
SILT	A-4(8)	A-4b	3	2	5	61	29	24	2	20	11
SILT AND CLAY	A-6(7)	A-6a	11	7	13	34	35	29	11	21	17
SILTY CLAY	A-6(9)	A-6b	18	6	10	27	39	39	18	29	4
ELASTIC CLAY	A-7-5(20)	A-7-5	0	2	6	43	49	71	35	38	4
CLAY	A-7-6(16)	A-7-6	7	5	12	31	45	48	25	26	18
FIBROUS PEAT	COBBLY ZONE										1

TOPSOIL=X"=APPROXIMATE DEPTH.

AUGER BORING-PLAN VIEW.

AUGER BORING PLOTTED TO VERTICAL SCALE ONLY.

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT. E.G. 15

● WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT.

⊖ INDICATES A NON-PLASTIC MATERIAL WITH A HIGH WATER CONTENT.

—W— FREE WATER.

ADDITIONAL SOILS INFORMATION ~ All available soil and bedrock information which can be conveniently shown on the soils profile and structure foundation investigation sheets has been so reported. Additional subsurface investigations may have been made to study some special aspect of the project. Copies of this data, if any, may be inspected in the District Deputy Director's Office, the Bureau of Tests at 1600 West Broad Street, Col.O., the Pavement and Soils Section of the Bureau of Location and Design or in the Bridge Bureau at 25 South Front Street, Col.O.

REVISED 2/10/71

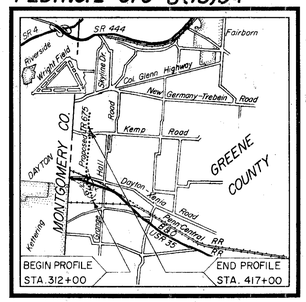
SOIL PROFILE
GREENE COUNTY
GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

1/49
1/13

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

FED. NO. I-675-8(15)54



LOCATION MAP

Recon-J.S.M.-1/12/68
Drilling-W.S.B., J.W.P., T.R.S.-2/19/68 to 3/1/68, 4/25/68 to 5/7/68
Drafting-C.L.I.-10/22/68

REVISION

Drafting-R.A.W., D.E.N., C.L.I.- 2/10/71

PROJECT INDEX

STATIONS FROM		STATIONS TO	PLAN VIEW SHEET	PROFILE SHEET	CUT MAX.	FILL EMB. MAX.
IR 675						
312+00	-	344+00	4	5	5'	11'
344+00	-	376+00	4	5	9'	13'
376+00	-	408+00	6	6	21'	22'
408+00	-	440+00	7	7	23'	23'
USR 35 INTERCHANGE						
USR 35						
0+00	-	61+00	4	8	2'	32'
1100+00	-	1106+93.02	4	8	0'	15'
GRANGE HALL ROAD						
10+00	-	29+00	4	10	-	-
RAMP A			4	9	28'	35'
RAMP C			4	10	-	14'
RAMP E			4	10	13'	24'
RAMP H			4	11	-	29'
RAMP B			4	11	25'	-
RAMP G			4	11	0'	10'
RAMP D			4	11	5'	29'
RAMP F			4	12	-	24'
RELOCATED DAYTON-XENIA ROAD						
11+00	-	47+00	4	12	38'	23'
RELOCATED WILDONNA DRIVE						
0+00	-	7+00	4	12	8'	2'
RELOCATED KEMP ROAD						
12+00	-	26+00	13	13	5'	7'

MICROFILMED

REVISED 2/10/71

SOIL PROFILE
GREENE COUNTY
GRE-675-5.37

2
49

2
13

SUMMARY OF SOIL TEST DATA

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC.
*DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

STATION & OFFSET	DEPTH FROM - TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.
					MAINLINE					
312+75 50'Rt	0.0-4.0	0	4	21	36	39	51	26	21	A-7-6
	4.0-10.0	15	12	17	26	30	28	11	13	A-6a
	10.0-15.0	64	14	13	5	4	NP	NP	11	A-1-a
	15.0-20.0	62	20	11	4	3	NP	NP	11	A-1-a
318+50 CL	0.0-3.0	8	11	13	35	33	44	22	27	A-7-6
	3.0-5.0	49	7	11	15	18	36	17	25	A-2-6
	5.0-11.0	16	11	17	27	29	21	5	15	A-4a
	11.0-16.0	70	15	5	5	5	NP	NP	11	A-1-a
	16.0-20.0	64	20	9	4	3	NP	NP	11	A-1-a
322+00 CL	0.0-2.5	7	4	11	31	47	60	38	31	A-7-6
	2.5-7.0	15	10	19	29	27	22	7	14	A-4a
	7.0-12.0	15	10	18	29	28	20	4	10	A-4a
	12.0-15.0	40	22	14	13	11	18	5	13	A-1-b
325+00 CL	0.0-4.0	43	6	10	22	19	27	10	23	A-4a
	4.0-8.0	17	10	18	29	26	21	6	12	A-4a
	8.0-14.0	59	21	10	5	5	NP	NP	11	A-1-a
	14.0-19.0	24	12	17	32	15	24	10	11	A-4a
	19.0-25.0	8	5	11	41	35	24	7	14	A-4a
328+50 CL	0.0-2.5	0	2	8	41	49	72	33	50	A-7-5
	2.5-7.0	27	13	16	22	22	17	3	12	A-4a
	7.0-10.0	22	11	19	25	23	20	5	11	A-4a
	10.0-15.0	52	15	12	11	10	18	3	12	A-1-b
	15.0-20.0	42	38	15		5	NP	NP	13	A-3a
332+00 CL	1.0-5.0	11	3	5	38	43	51	26	34	A-7-6
	5.0-9.0	15	10	18	29	28	20	5	13	A-4a
	9.0-10.0	64	18	13	3	2	NP	NP	12	A-1-a
335+50 CL	1.0-7.0	12	9	18	30	31	22	7	14	A-4a *
	7.0-12.0	15	11	20	27	27	22	8	11	A-4a
	12.0-16.0	36	22	35	4	3	NP	NP	12	A-1-b
	16.0-18.0	15	4	4	63	14	NP	NP	20	A-4b
	18.0-23.0	18	9	19	29	25	19	6	15	A-4a
	23.0-27.0	12	9	19	35	25	20	7	11	A-4a
340+00 CL	0.0-3.0	13	6	14	31	36	48	22	28	A-7-6 *
	3.0-4.0	18	11	20	26	25	27	10	14	A-4a
	4.0-10.0	14	11	21	29	25	21	7	9	A-4a
	10.0-15.0	59	12	15	7	7	NP	NP	12	A-1-a
	15.0-20.0	64	6	11	5	4	NP	NP	11	A-1-a
344+00 CL	0.0-5.0	34	8	14	23	21	21	6	10	A-4a *
	5.0-9.0	17	10	20	27	26	18	4	11	A-4a *
	9.0-15.0	21	11	20	23	25	17	4	9	A-4a
349+20 145'Rt	0.0-5.0	16	9	19	29	27	21	6	9	A-4a
	5.0-8.0	15	11	19	25	30	19	4	11	A-4a
	8.0-11.0	21	10	20	28	21	17	2	12	A-4a
	11.0-14.0	46	14	14	13	13	NP	NP	13	A-2-4
	14.0-19.0	12	10	16	31	31	20	6	8	A-4a *
	19.0-24.0	17	11	17	27	28	17	3	10	A-4a
	24.0-27.0	17	8	15	28	32	21	7	8	A-4a
358+15 30'Rt	0.0-2.0	0	2	9	50	39	50	16	32	A-7-5
	2.0-5.0	10	11	15	30	34	26	8	16	A-4a *
	5.0-8.0	28	28	18	13	13	20	3	18	A-2-4*
	8.0-14.0	9	5	21	39	26	19	5	14	A-4a
364+00 CL	0.0-3.0	5	2	5	46	42	50	31	27	A-7-6*
	3.0-7.0	28	10	18	16	28	39	19	29	A-6b *
	7.0-11.0	27	13	17	25	18	19	5	13	A-4a
	11.0-15.0	17	10	14	33	26	19	5	14	A-4a
366+00 35'Rt	0.0-2.0	0	1	4	43	52	69	39	34	A-7-5
	2.0-4.0	6	1	1	48	44	51	27	33	A-7-6
	4.0-9.0	73	13	7	4	3	NP	NP	12	A-1-a
	9.0-15.0	12	8	14	35	31	21	8	12	A-4a
369+00 CL	0.8-4.0	17	9	6	32	26	22	7	13	A-4a
	4.0-10.0	18	12	20	29	21	16	4	12	A-4a
	10.0-15.0	21	8	13	33	25	19	5	11	A-4a
371+00 75'Lt	0.0-3.0	BROWN FIBROUS PEAT					NP	NP	139	VISUAL
	3.0-6.0	0	3	7	48	42	39	12	50	A-6a
	6.0-9.0	14	10	17	28	31	21	8	13	A-4a
	9.0-13.0	52	19	21	4	4	NP	NP	13	A-1-a
	13.0-15.0	21	12	16	27	24	19	6	13	A-4a
371+00 CL	1.0-4.0	15	5	10	42	28	40	17	42	A-6b
	4.0-10.0	26	8	14	27	25	21	7	14	A-4a
	10.0-13.0	32	30	29	5	4	NP	NP	15	A-1-b
	13.0-15.0	17	11	18	29	25	19	5	10	A-4a

STATION & OFFSET	DEPTH FROM - TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.
371+00 75'Rt	0.8-6.0	14	[illegible]	15	34	29	23	8	13	A-4a
	6.0-12.0	48	15	22	6	[illegible]	NP	NP	12	A-1-a
	12.0-15.0	10	[illegible]	27	[illegible]	32	19	7	13	A-4a
372+00 CL	1.0-3.0	0	1	5	39	55	59	33	34	A-7-6
	3.0-6.0	15	8	17	28	32	22	9	15	A-4a
	6.0-11.0	14	9	16	31	30	21	6	14	A-4a
372+00 75'Lt	1.0-6.0	13	6	17	28	34	17	2	14	A-4a
	6.0-11.0	22	9	15	29	25	19	6	17	A-4a
373+00 CL	1.0-4.0	0	1	5	63	31	[illegible]	11	29	A-6a
	4.0-10.0	49	20	22	5	4	NP	NP	15	A-1-b
	10.0-15.0	24	24	[illegible]	[illegible]	[illegible]	NP	NP	16	A-3
373+00 75'Rt	0.0-6.0	14	10	17	29	30	23	7	14	A-4a
	6.0-11.0	39	6	10	26	19	NP	NP	11	A-4a
376+00 CL	0.0-5.0	14	27	33	5	21	25	8	14	A-2-4
	5.0-8.0	13	9	17	28	33	25	9	13	A-4a
	8.0-11.0	39	21	27	8	5	NP	NP	5	A-1-b
380+00 CL	0.0-5.0	9	5	17	21	48	42	17	23	A-7-6*
	5.0-10.0	15	8	15	29	33	26	11	17	A-6a
385+00 CL	0.0-5.0	13	9	19	30	29	23	7	12	A-4a
	5.0-10.0	20	12	17	27	24	20	6	13	A-4a
390+00 CL	0.0-5.0	9	5	17	36	33	26	11	19	A-6a
	5.0-9.0	16	9	17	28	30	25	9	12	A-4a
	9.0-11.0	29	14	23	20	14	NP	NP	11	A-2-4
	11.0-16.0	16	5	14	40	25	21	7	13	A-4a
395+00 CL	0.0-5.0	11	4	17	24	44	50	25	21	A-7-6
	5.0-11.0	18	9	17	34	22	19	5	9	A-4a
	11.0-16.0	22	15	18	24	21	16	4	7	A-4a
	16.0-20.0	10	9	17	32	32	19	5	8	A-4a
400+00 CL	0.0-6.0	7	6	13	35	39	27	11	12	A-6a *
	6.0-8.0	35	19	33	8	5	NP	NP	10	A-1-b*
	8.0-13.0	19	11	19	25	26	17	2	11	A-4a
	13.0-15.0	14	9	17	29	31	20	6	10	A-4a
405+00 CL	0.0-5.0	13	4	15	21	47	45	25	19	A-7-6
	5.0-10.0	3	3	54	25	15	NP	NP	13	A-4a
	10.0-14.0	3	2	51	26	18	NP	NP	13	A-4a
410+00 CL	0.0-5.0	21	11	16	22	30	30	12	12	A-6a
	5.0-10.0	23	13	20	20	24	26	10	13	A-4a
	10.0-15.0	19	9	15	25	32	30	9	17	A-4a
	15.0-20.0	34	9	13	19	25	32	15	14	A-6a
	20.0-21.0	72	17	3	4	4	NP	NP	4	A-1-a
	21.0-24.0	33	11	14	19	23	24	7	8	A-4a *
	24.0-30.0	24	9	15	26	26	23	8	8	A-4a *
413+25 CL	0.0-4.0	0	3	10	50	37	27	6	25	A-4b
	4.0-10.0	17	8	17	27	31	24	8	11	A-4a
	10.0-15.0	23	8	15	28	26	23	6	12	A-4a
	15.0-20.0	15	11	18	29	27	21	7	7	A-4a *
	20.0-25.0	7	5	25	40	23	NP	NP	13	A-4a *
	25.0-29.0	22	15	21	27	15	NP	NP	8	A-4a
416+00 CL	0.0-3.0	43	11	12	14	20	29	11	10	A-2-6 *
					USR 35 INTERCHANGE					
					RELOCATED USR 35					
5+50 CL	0.0-5.0	11	10	17	32	30	20	5	12	A-4a
	5.0-10.0	12	9	16	29	34	19	4	12	A-4a
	10.0-14.0	7	10	19	31	33	18	4	10	A-4a
	14.0-16.0	3	6	21	37	33	20	6	13	A-4a
	16.0-20.0	12	11	15	35	27	18	4	9	A-4a
	20.0-26.0	45	20	10	10	15	18	4	14	A-1-b
9+00 CL	0.0-6.0	27	10	20	22	21	21	11	17	A-6a
	6.0-10.0	67	11	6	10	6	22	6	12	A-1-b
12+00 CL	0.0-3.0	0	4	13	31	46	43	16	24	A-7-6 *
	3.0-5.0	29	9	12	23	27	38	17	22	A-6b *
	5.0-10.0	12	6	16	39	28	22	6	10	A-4a
16+00 CL	0.0-6.0	11	5	19	40	25	25	9	17	A-4a
	6.0-10.0	[illegible]	13	49	16	13	NP	NP	14	A-3a
21+00 CL	0.0-5.0	16	15	19	10	40	46	24	24	A-7-6
	5.0-9.0	24	26	15	9	26	25	7	22	A-2-4 *
	9.0-15.0	45	19	27	5	5	NP	NP	9	A-1-b *
25+00 CL	0.0-6.0	21	7	14	27	31	17	4	9	A-4a
	6.0-8.0	4	15	22	32	27	23	3	21	A-4a
	8.0-11.0	35	2	4	47	12	17	2	7	A-4a

STATION & OFFSET	DEPTH FROM - TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.
34+00 CL	1.0-7.0	20	10	18	28	24	20	5	11	A-4a
	7.0-12.0	57	22	13	4	4	NP	NP	11	A-1-a
	12.0-14.0	52	22	12	7	7	NP	NP	12	A-1-a
	14.0-16.0	18	13	18	29	22	18	4	11	A-4a
	16.0-21.0	28	26	35	6	5	NP	NP	14	A-1-b
39+50 CL	0.0-6.0	14	8	18	28	32	28	11	18	A-6a
	6.0-12.0	11	10	19	35	25	19	5	11	A-4a
	12.0-17.0	15	13	22	33	17	16	3	11	A-4a
	17.0-20.0	20	14	21	27	18	17	3	12	A-4a
	20.0-27.0	19	27	45	5	4	NP	NP	20	A-3
44+20 30'Lt	1.0-4.0	0	1	4	40	55	85	52	36	A-7-5
	4.0-9.0	48	16	16	11	9	NP	NP	15	A-1-b
	9.0-15.0	60	18	13	5	4	NP	NP	6	A-1-a
49+50 50'Rt	0.0-6.0	13	8	14	34	31	23	6	12	A-4a
	6.0-12.0	16	8	13	33	30	22	7	13	A-4a *
	12.0-18.0	18	7	13	36	26	19	5	13	A-4a *
	18.0-22.0	14	8	17	36	25	19	5	10	A-4a
54+00 15'Rt	0.0-[illegible]	12	10	18	30	30	25	9	12	A-4a *
	5.0-[illegible]	11	13	26	23	27	NP	NP	15	A-4a
	[illegible]-10.0	[illegible]	[illegible]	9	26	38	30	11	16	A-6a
					PROPOSED ORANGE HALL ROAD					
					(VICINITY OF RELOCATED USR 35, STA. 57+50)					
11+00 12'Lt	0.0-5.0	6	3	15	21	55	41	22	22	A-7-6 *
	5.0-10.0	14	11	17	22	30	23	6	13	A-4a
14+50 15'Lt	0.0-5.0	11	11	13	27	33	22	5	12	A-4a
	5.0-9.0	13	8	16	34	29	20	4	12	A-4a
	9.0-13.0	15	18	29	20	18	NP	NP	14	A-4a *
	13.0-18.0	10	9	15	37	30	19	3	10	A-4a
	18.0-20.0	20	17	26	4	33	NP	NP	12	A-4a
19+25 30'Lt	0.0-5.0	11	11	20	28	30	20	5	12	A-4a
	5.0-12.0	10	11	18	31	30	20	7	11	A-4a
	12.0-17.0	57	20	17	8	8	NP	NP	10	A-1-b
	17.0-22.0	39	36	16	5	4	NP	NP	14	A-1-b *
23+10 35'Rt	0.8-5.0	0	0	1	51	46	32	6	29	A-4b
	5.0-10.0	0	1	6	52	41	35	11	21	A-6a
	10.0-16.0	35	22	12	6	25	46	21	23	A-2-7 *
	16.0-17.0	57	19	8	6	10	26	6	13	A-1-b *
	17.0-21.0	17	9	25	24	26	19	3	13	A-4a
	21.0-25.0	6	7	23	33	29	20	4	13	A-4a
	25.0-[illegible]	6	8	21	35	30	21	6	13	A-4a
28+00 30'Lt	0.0-6.0	13	8	14	38	27	23	7	14	A-4a *
	6.0-11.0	8	3	13	31	34	19	6	13	A-4a
					RAMP A					
306+00 BL	0.0-5.0	15	10	19	29	27	23	3	11	A-4a *
	5.0-11.0	10	10	23	33	24	19	4	15	A-4a
309+00 BL	0.0-5.0	10	2	16	31	29	24	5	16	A-4a
	5.0-12.0	14	9	16	34	27	21	6	13	A-4a *
	12.0-15.0	22	8	15	30	25	17	4	10	A-4a
315+50 BL	0.0-4.0	10	7	16	35	26	22	7	12	A-4a *
	4.0-10.0	40	22	15	7	7	NP	NP	4	A-1-b
327+00 50'Rt	0.0-5.0	14	8	17	30	27	25	9	17	A-4a
	5.0-11.0	20	6	14	27	23	26	8	17	A-4a
	11.0-17.0	13	12	18	34	23	20	5	11	A-4a
	17.0-23.0	13	38	20	15	14	NP	NP	15	A-3a
	23.0-26.0	15	15	19	32	19	20	6	13	A-4a
334+50 BL	1.0-6.0	8	2	4	44	42	23	11	28	A-6a
	6.0-11.0	20	9	17	28	26	23	7	13	A-4a
	11.0-14.0	19	9	13	29	25	20	6	11	A-4a
	14.0-18.0	6	14	38	32	10	NP	NP	13	A-4a
	18.0-20.0	3	2	12	70	13	NP	NP	22	A-4b
	20.0-25.0	5	9	61	15	10	NP	NP	20	A-3a
	25.0-28.0	10	9	49	16	16	NP	NP	15	A-3a
	28.0-30.0	0	1	1	87	11	NP	NP	21	A-4b
341+00 BL	0.8-5.0	11	10	19	29	32	20	6	11	A-4a
	5.0-10.0	16	8	15	31	30	19	7	13	A-4a *
	10.0-12.0	9	9	12	35	32	19	5	9	A-4a
	12.0-15.0	12	9	15	32	32	22	8	12	A-4a
346+75 BL	0.8-5.0	20	10	16	28	26	21	6	13	A-4a
	5.0-9.0	13	13	18	26	30	20	5	12	A-4a
	9.0-13.0	16	11	18	28	27	19	7	12	A-4a
	13.0-15.0	40	16	14	14	16	18	5	14	A-2-4
	15.0-18.0	22	17	21	22	18	17	5	12	A-4a *
	18.0-23.0	11	10	18	32	29	18	5	13	A-4a *
	23.0-28.0	11	10	1	29	31	18	8	11	A-4a

STATION & OFFSET	DEPTH FROM - TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.
					RAMP C					
325+00 BL	1.0-4.0	8	2	5	39	46	47	26	29	A-7-6
	4.0-5.0	14	8	20	39	19	31	11	27	A-6a
	5.0-10.0	16	9	17	28	30	18	5	12	A-4a
	10.0-14.0	17	9	15	32	27	19	5	11	A-4a
330+00 BL	0.0-6.0	16	8	15	30	31	22	7	12	A-4a
	6.0-10.0	25	9	21	26	19	23	7	17	A-4a
					RAMP B					
345+[illegible]0 50'Rt	0.0-5.0	10	9	16	37	28	23	6	11	A-4a
	5.0-9.0	11	8	17	33	31	20	4	12	A-4a *
	9.0-12.0	11	12	22	35	20	NP	NP	15	A-4a *
	12.0-15.0	7	6	18	46	23	NP	NP	15	A-4a
	15.0-17.0	0	[illegible]	17	47	31	17	4	14	A-4a
352+00 BL	1.0-5.0	14	6	17	31	29	28	8	21	A-4a
	5.0-10.0	[illegible]	18	21	18	12	NP	NP	17	A-2-4 *
	10.0-15.0	[illegible]	19	12	[illegible]	4	NP	NP	10	A-1-[illegible] *
	15.0-18.0	21	[illegible]	39	10	8	NP	NP	14	A-3[illegible]
	18.0-21.0	7	[illegible]	4	[illegible]	28	22	5	17	A-4[illegible]
	21.0-25.0	11	[illegible]	30	40	10	NP	NP	17	A-4[illegible]
					RAMP D					
340+00 BL	0.0-6.0	26	8	16	27	23	22	8	11	A-4a *
	6.0-10.0	20	10	19	28	23	18	3	14	A-4a
344+00 15'Rt	0.8-6.0	11	12	18	29	30	22	7	12	A-4a *
	6.0-11.0	13	12	21	28	26	NP	NP	7	A-4a *
	11.0-14.0	10	12	17	31	30	23	8	12	A-4a
	14.0-16.0	26	19	20	17	18	NP	NP	13	A-2-4
349+50 BL	0.0-5.0	20	10	18	28	24	20	6	12	A-4a
	5.0-11.0	22	9	18	26	24	19	6	13	A-4a
	11.0-15.0	[illegible]	16	15	7	7	[illegible]		30	A-1-[illegible]
					RAMP F					
326+40 BL	0.0-2.0	5	5	17	30	43	51	23	23	A-7-6
	2.0-7.5	19	12	17	26	26	27	8	15	A-4a
	7.5-14.0	32	47	13	4	4	NP	NP	14	A-1-b
	14.0-20.0	19	11	20	27	23	17	5	12	A-4a
332+00 BL	0.0-6.0	17	10	17	27	29	22	6	12	A-4a
	6.0-10.0	20	12	22	29	17	16	5	10	A-4a
338+00 BL	0.0-5.0	13	10	18	28	31	23	7	13	A-4a
	5.0-10.0	15	11	20	27	27	22	8	12	A-4a
					RELOCATED DAYTON-XENIA ROAD					
15+00 10'Rt	0.0-5.0	5	3	5	45	42	28	11	25	A-6a *
	5.0-10.0	11	9	17	29	34	21	5	14	A-4a *
	10.0-14.0	14	13	17	27	29	22	7	12	A-4a
18+00 CL	0.8-3.0	4	4	11	27	54	46	19	27	A-7-6 *
	3.0-5.0	3	6	18	22	51	41	18	26	A-7-6
	5.0-8.0	7	8	20	31	34	25	8	21	A-4a
23+60 CL	0.0-5.0	13	9	17	27	34	22	4	11	A-4a
	5.0-10.0	25	13	18	26	18	NP	NP	11	A-4a
	10.0-13.0	4	2	13	51	30	18	1	15	A-4b
	13.0-18.0	0	1	8	59	32	NP	NP	10	A-4b *
	18.0-24.0	2	1	4	53	35	20	2	18	A-4b *
	24.0-30.0	2	1	1	55	41	23	8	16	A-4b
29+00 CL	0.8-5.0	23	7	16	30	24	19	3	10	A-4a
	5.0-7.0	10	9	20	32	29	21	3	12	A-4a
	7.0-12.0	5	40	40	8	7	NP	NP	4	A-3a
	12.0-17.0	24	13	52	6	5	NP	NP	3	A-3a
34+00 CL	0.8-5.0	13	9	17	31	30	23	5	12	A-4a
	5.0-10.0	10	13	22	28	27	21	4	11	A-4a *
	10.0-15.0	33	11	19	20	17	NP	NP	13	A-4a
46+00 30'Rt	0.0-3.5	26	12	16	20	26	27	9	18	A-4a *
					RELOCATED WILDONNA DRIVE					
4+70 CL	0.0-3.0	42	15	12	14	17	20	5	7	A-2-4 *
	3.0-6.0	19	8	18	26	29	21	5	12	A-4a
	6.0-10.0	11	9	18	39	23	19	4	11	A-4a
					RELOCATED KEMP ROAD					
16+00 10'Lt	0.0-5.0	44	15	13	15	13	18	4	5	A-2-4 *
	5.0-10.0	47	17	14	11	11	NP	NP	10	A-1-b
25+10 20'Rt	0.8-5.0	5	8	19	33	40	30	12	21	A-6a *
	5.0-10.0	10	10	19	31	30	23	7	13	A-4a
	10.0-12.0	24	10	17	24	25	21	4	11	A-4a

SOIL PROFILE
GREENE COUNTY
GRE-675-5.37
OHIO STATE HIGHWAY TESTING LABORATORY
1826 W. BROAD ST. COLUMBUS 23, OHIO

3/49
3/13

SUPPLEMENT - 2/10/71

SUMMARY OF DRIVE SAMPLE SOIL TEST DATA

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC.

STATION & OFFSET	DEPTH FROM	TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
				PROPOSED I- 675							
329+12 102'Lt	5.0	6.0	46	7	11	16	20	20	6	11	A-4a
	10.0	11.0	44	11	14	14	17	17	5	11	A-3a
	15.0	16.0	48	27	12	7	6	21	6	10	A-1-b
	20.0	21.0	24	27	37	-	12 -	NP	NP	13	A-1-b
	25.0	26.0	42	40	11	-	7 -	NP	NP	14	A-1-b
	30.0	31.0	41	5	6	22	24	20	3	13	A-4a
	35.0	35.5	11	2	3	40	44	21	4	18	A-4a
	40.0	40.5	5	3	2	50	40	21	5	17	A-4b
336+63 13'Rt	5.0	6.0	23	10	17	27	23	19	7	13	A-4a
	10.0	11.0	18	11	20	29	22	17	6	10	A-4a
	15.0	16.0	63	10	7	12	8	NP	NP	10	A-1-b
	20.0	21.0	0	0	1	72	27	NP	NP	20	A-4b
	25.0	26.0	12	11	21	34	22	17	4	10	A-4a
	30.0	31.0	69	14	10	-	7 -	NP	NP	12	A-1-b
	35.0	35.6	15	11	16	34	24	18	4	10	A-4a
	40.0	41.0	37	7	10	28	18	NP	NP	11	A-4a
	45.0	46.0	16	5	13	41	25	NP	NP	12	A-4a
				RELOCATED USR 35							
5+05 76'Lt	5.0	6.0	25	8	16	29	22	22	6	12	A-4a
	10.0	11.0	40	8	12	19	21	19	7	11	A-4a
	15.0	16.0	47	11	23	10	9	NP	NP	15	A-1-b
	20.0	21.0	26	11	46	6	11	NP	NP	22	A-3a
	22.5	23.5	41	20	19	8	12	NP	NP	13	A-1-b
	25.0	26.0	59	23	12	-	6 -	NP	NP	10	A-1-b
	27.5	28.5	42	48	8	-	2 -	NP	NP	12	A-1-b
	30.0	31.0	16	2	3	49	28	22	6	18	A-4a
	32.5	33.5	15	3	4	50	23	22	6	17	A-4b
	35.0	36.0	6	1	1	68	24	NP	NP	19	A-4b
	37.5	38.5	22	2	0	49	27	23	6	17	A-4a
	40.0	41.0	0	0	0	62	38	23	5	18	A-4a
	45.0	46.0	0	0	0	64	36	23	6	15	A-4b
	50.0	51.0	8	7	70	13	2	NP	NP	20	A-3a
	55.0	56.0	5	2	70	12	11	NP	NP	19	A-3a
27+94 101'Lt	5.0	6.0	22	9	15	28	26	20	5	14	A-4a
	10.0	11.0	21	9	16	30	24	18	5	11	A-4a
	15.0	16.0	23	9	22	27	19	18	6	12	A-4a
	20.0	21.0	30	48	12	5	5	NP	NP	12	A-1-b
	25.0	26.0	67	14	6	4	9	NP	NP	7	A-1-a
	30.0	31.0	19	4	11	44	22	18	2	12	A-4a
	32.5	33.5	17	7	14	35	27	19	4	13	A-4a
	35.0	36.0	0	6	16	46	32	18	2	14	A-4a
	45.0	46.0	0	2	4	46	48	27	12	16	A-6a
	50.0	51.0	0	0	1	55	46	24	7	16	A-4b
	55.0	56.0	0	1	1	38	60	29	13	17	A-6a
	60.0	61.0	0	7	3	44	46	27	12	23	A-6a
33+45 4E'Rt	5.0	6.0	BROWN SANDY GRAVEL WITH COBBLES						25		VISUAL
	10.0	11.0	51	23	16	-	10 -	NP	NP	9	A-1-a
	15.0	16.0	60	18	13	-	9 -	NP	NP	10	A-1-a
	20.0	21.0	22	7	17	24	30	18	8	11	A-4a
	25.0	26.0	30	6	19	30	15	NP	NP	15	A-4a
	30.0	31.0	0	1	1	37	43	13	NP	NP	17	A-4a
	35.0	36.0	0	2	3	73	22	NP	NP	20	A-4a
	40.0	40.5	49	17	11	12	11	16	4	10	A-4b

STATION & OFFSET	DEPTH FROM	TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
39+13 4'Rt	5.0	6.0	(-	-	-	-	-	24	11	22)	
			BROWN GRAVELLY SANDY SILT WITH COBBLES								VISUAL
	7.5	8.5	15	9	18	34	24	18	6	11	A-4a
	10.0	11.0	21	15	17	22	25	17	5	15	A-4a
	15.0	16.0	16	14	22	26	22	NP	NP	11	A-4a
	20.0	21.0	45	20	19	-	16 -	NP	NP	12	A-1-b
	25.0	26.0	0	2	42	34	22	NP	NP	20	A-4a
	30.0	31.0	9	33	24	-	34 -	NP	NP	19	A-3a
58+13 63'Rt	5.0	6.0	14	2	4	43	37	34	14	28	A-6a
	10.0	11.0	35	9	14	17	25	22	9	15	A-4a
	12.5	13.5	19	11	19	29	22	19	7	13	A-4a
	15.0	16.0	(53	4	8	21	14	-	-	11)	
			BROWN SILTY GRAVEL								VISUAL
	17.5	18.5	55	27	9	-	11 -	NP	NP	9	A-1-a
	20.0	20.4	37	36	13	-	14 -	NP	NP	13	A-1-b
	25.0	26.0	24	38	16	8	14	21	8	12	A-2-4
	30.0	30.5	12	2	46	31	9	NP	NP	16	A-4a
	35.0	36.0	14	7	15	37	27	21	7	13	A-4a
	40.0	41.0	0	2	5	42	51	25	11	16	A-6a
	45.0	46.0	5	3	2	42	48	28	11	17	A-6a
	50.0	51.0	28	0	0	30	42	30	11	27	A-6a
	55.0	56.0	0	1	8	21	70	38	14	24	A-6a
	60.0	61.0	19	8	16	34	23	20	5	18	A-4a
				PROPOSED GRANGE HALL ROAD							
21+07 110'Lt	5.0	6.0	20	8	17	25	30	23	9	16	A-4a
	10.0	11.0	33	9	18	20	20	26	7	10	A-4a
	12.5	13.5	28	19	22	14	17	NP	NP	11	A-2-4
	15.0	16.0	54	20	9	-	17 -	NP	NP	8	A-1-b
	20.0	21.0	50	24	11	-	15 -	NP	NP	8	A-1-b
	25.0	26.0	38	8	15	18	20	18	4	15	A-4a
	30.0	31.0	6	5	12	35	42	21	6	16	A-4a
	35.0	36.0	0	1	3	37	59	23	7	17	A-4a
	40.0	41.0	8	6	9	37	44	21	7	19	A-4a
	45.0	46.0	0	0	1	26	73	30	12	20	A-6a
	50.0	51.0	0	0	1	19	79	33	13	24	A-6a
	55.0	56.0	0	0	0	60	40	NP	NP	22	A-4a
	60.0	61.0	0	0	1	42	56	NP	NP	19	A-4a
	65.0	66.0	0	1	2	41	56	23	7	20	A-4a
	70.0	71.0	0.	0	1	50	49	23	9	13	A-4b
				RAMP A							
323+29 10'Rt	5.0	6.0	24	7	12	31	26	18	5	11	A-4a
	10.0	11.0	59	19	12	-	10 -	NP	NP	10	A-1-a
	15.0	16.0	42	45	11	-	2 -	NP	NP	15	A-1-b
	20.0	21.0	25	10	33	17	15	NP	NP	15	A-2-4
	25.0	26.0	27	16	45	13	9	NP	NP	14	A-2a
	30.0	31.0	0	0	46	42	12	NP	NP	23	A-4a
	35.0	35.5	0	2	2	37	59	26	11	19	A-6a
	40.0	40.5	0	1	5	45	49	24	9	13	A-4a
331+75 24'Rt	5.0	6.0	19	11	20	22	28	25	11	26	A-6a
	7.5	8.5	11	12	16	24	37	21	7	14	A-6a
	10.0	11.0	9	20	23	21	18	NP	NP	11	A-4a
	15.0	16.0	18	13	21	28	20	NP	NP	11	A-4a
	20.0	21.0	0	44	36	-	20 -	NP	NP	22	A-3a
	25.0	26.0	7	27	49	-	17 -	NP	NP	17	A-3a
	30.0	31.0	0	17	73	-	10 -	NP	NP	14	A-3
	35.0	36.0	17	9	19	23	32	18	5	14	A-4a
	40.0	40.4	56	31	11	-	2 -	NP	NP	7	A-1-a
	45.0	46.0	0	3	7	45	45	21	7	15	A-4a
	50.0	50.7	14	2	6	42	36	21	7	20	A-4a
	55.0	56.0	0	2	7	48	46	23	9	15	A-4a

STATION & OFFSET	DEPTH FROM	TO	% AGG.	% C.S.	% F.S	% SILT	% CLAY	L L	P I.	% W.C.	SHTL CLASS.
348+05 15'Rt	5.0	6.0	11	17	23	27	22	19	7	10	A-4a
	10.0	11.0	GRAY GRAVELLY SANDY SILT							10	VISUAL
	15.0	16.0	13	26	22	25	14	20	7	12	A-4a
	20.0	21.0	8	9	18	38	27	20	9	11	A-4a
	25.0	26.0	GRAY GRAVELLY SILT					20	8	12	VISUAL
	30.0	30.6	59	21	9	-	11 -	NP	NP	7	A-1-a
	35.0	36.0	5	6	11	56	20	NP	NP	11	A-4b
	40.0	41.0	(-	-	-	-	-	21	8	11)	
			GRAY GRAVELLY SILT WITH COBBLES								VISUAL
	45.0	46.0	9	7	18	42	24	19	5	13	A-4a
	50.0	51.0	13	7	17	41	22	22	7	12	A-4a
				RAMP B							
351+10 18'Rt	5.0	6.0	19	11	23	26	21	NP	NP	11	A-4a
	10.0	11.0	0	16	35	30	19	NP	NP	14	A-4a
	15.0	16.0	0	3	18	58	21	NP	NP	18	A-4b
	20.0	21.0	0	0	5	78	17	NP	NP	20	A-4b
	25.0	26.0	0	0	15	52	33	NP	NP	15	A-4b
	30.0	31.0	14	7	18	36	23	NP	NP	15	A-4a
	35.0	36.0	0	8	15	46	31	NP	NP	14	A-4a
	40.0	41.0	0	1	2	51	46	NP	NP	19	A-4b
	45.0	46.0	12	2	7	46	33	NP	NP	14	A-4a
	50.0	51.0	0	3	13	53	31	NP	NP	11	A-4b
	55.0	56.0	0	1	5	52	42	28	14	16	A-4b
	60.0	61.0	0	0	3	64	33	NP	NP	19	A-4b
	65.0	66.0	0	2	9	57	32	22	8	16	A-4b
	70.0	71.0	0	0	2	61	37	22	6	19	A-4b
	75.0	76.0	0	0	1	62	37	45	24	32	A-7-6
	80.0	81.0	0	2	14	31	53	42	21	22	A-7-6
				RELOCATED DAYTON-XENIA ROAD							
21+05 27'Rt	5.0	6.0	23	9	16	26	26	19	7	13	A-4a
	10.0	11.0	15	7	16	32	30	18	5	14	A-4a
	15.0	16.0	20	8	15	31	26	18	6	12	A-4a
	20.0	21.0	33	19	18	20	10	NP	NP	10	A-3a
	22.5	23.5	0	74	13	-	13 -	NP	NP	24	A-1-a
	25.0	26.0	44	22	17	-	17 -	NP	NP	11	A-1-a
	27.5	28.5	0	52	35	-	13 -	NP	NP	25	A-1-b
	30.0	31.0	86	13	1	0	0	NP	NP	9	A-1-a
	32.5	33.5	22	70	7	-	1 -	NP	NP	9	A-1-a
	35.0	36.0	0	1	3	60	36	NP	NP	18	A-4b
	37.5	38.5	0	2	3	70	25	NP	NP	15	A-4b
	40.0	41.0	0	1	2	62	35	22	8	17	A-4a
	45.0	46.0	0	0	1	59	40	21	6	17	A-4a
	50.0	51.0	0	0	3	47	50	26	10	21	A-4a
	55.0	56.0	10	0	3	62	25	NP	NP	17	A-4a
27+20 32'Lt	5.0	6.0	0	0	86	-	14 -	NP	NP	15	A-3a
	10.0	11.0	0	1	71	-	28 -	NP	NP	11	A-3a
	15.0	15.5	0	1	66	-	33 -	NP	NP	16	A-3a
	20.0	20.5	0	0	74	-	26 -	NP	NP	18	A-3a
	25.0	25.5	0	9	15	73	12	NP	NP	21	A-4b
	30.0	31.0	0	0	7	62	31	20	4	20	A-4b
	35.0	36.0	0	0	1	58	41	24	7	15	A-4b
	40.0	41.0	0	0	1	50	49	25	7	14	A-4b
	42.5	43.5	0	0	1	45	53	30	11	18	A-6a
	45.0	46.0	0	0	0	51	49	26	7	17	A-4b
	50.0	50.5	0	0	2	73	25	NP	NP	18	A-4b
	55.0	55.7	0	0	54	23	23	NP	NP	23	A-4a
	60.0	60.5	0	0	59	29	12	NP	NP	20	A-4a
	65.0	66.0	0	0	6	74	20	NP	NP	19	A-4b
	70.0	71.0	0	0	1	42	57	31	12	19	A-6a

STATION & OFFSET	DEPTH FROM	TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
28+46 23'Rt	5.0	6.0	.4	46	34	-	16 -	NP	NP	11	A-1-b
	10.0	11.0	0	1	73	-	26 -	NP	NP	14	A-3a
	15.0	15.7	6	2	72	-	20 -	NP	NP	19	A-3a
	20.0	21.0	3	6	81	-	10 -	NP	NP	21	A-3
	25.0	25.8	1	12	80	-	7 -	NP	NP	22	A-3
	30.0	30.5	0	4	90	-	6 -	NP	NP	22	A-3
	35.0	35.5	0	2	88	-	10 -	NP	NP	22	A-3
	40.0	40.5	0	4	87	-	9 -	NP	NP	23	A-3
	45.0	45.5	0	38	38	-	24 -	NP	NP	22	A-3a
	50.0	50.7	0	43	25	-	32 -	NP	NP	19	A-3a
	55.0	55.5	0	0	81	-	19 -	NP	NP	23	A-3a
	60.0	60.5	0	7	69	-	24 -	NP	NP	22	A-3a
	65.0	65.5	0	2	94	-	4 -	NP	NP	22	A-3
41+20 34'Lt	5.0	6.0	12	14	21	26	27	19	7	12	A-4a
	10.0	11.0	17	12	22	28	21	NP	NP	11	A-4a
	15.0	16.0	20	9	16	28	27	18	8	11	A-4a
	20.0	21.0	7	11	18	34	30	18	6	11	A-4a
	22.5	23.5	7	10	18	35	30	16	6	10	A-4a
	25.0	26.0	11	10	19	31	29	18	7	10	A-4a
	27.5	28.5	7	12	20	33	28	18	8	10	A-4a
	30.0	31.0	52	16	16	-	16 -	17	4	6	A-1-b
	35.0	36.0	7	5	15	45	28	15	5	15	A-4a
	40.0	41.0	16	4	12	43	25	23	11	12	A-6a
	45.0	45.7	0	1	2	53	44	NP	NP	15	A-4b
	50.0	50.7	7	4	14	57	18	NP	NP	16	A-4b
	55.0	55.7	0	5	14	62	19	NP	NP	20	A-4a
				RELOCATED KEMP ROAD							
18+84 5'Lt	5.0	6.0	17	7	11	28	37	22	7	18	A-4a
	10.0	10.7	38	36	13	-	13 -	NP	NP	9	A-1-b
	15.0	16.0	16	7	20	20	37	30	16	13	A-6b
	20.0	21.0	21	9	15	23	32	22	8	10	A-4a
	25.0	26.0	18	12	18	28	24	17	6	10	A-4a
	30.0	30.7	22	16	59	-	3 -	NP	NP	11	A-3
	35.0	35.8	29	24	31	-	16 -	NP	NP	11	A-1-b
	40.0	40.5	28	35	24	-	13 -	NP	NP	9	A-1-b
	45.0	46.0	25	43	21	-	11 -	NP	NP	11	A-1-b
	50.0	51.0	8	50	23	-	19 -	NP	NP	13	A-1-b
	55.0	56.0	6	25	49	-	20 -	NP	NP	17	A-3a
20+91 6'Rt	10.0	11.0	(33	29	15	13	10	NP	NP	10)	
			BROWN SILTY GRAVELLY SAND								VISUAL
	15.0	16.0	12	12	20	31	25	16	4	10	A-4a
	20.0	21.0	16	13	18	31	22	17	5	10	A-4a
	25.0	26.0	27	10	15	26	22	18	6	11	A-4a
	30.0	30.5	(17	14	20	31	18	NP	NP	11)	
			BROWN GRAVELLY SANDY SILT								VISUAL
	35.0	36.5	48	22	8	-	22 -	NP	NP	11	A-1-b
	40.0	40.5	33	45	9	-	13 -	NP	NP	12	A-1-b
	45.0	45.5	44	32	18	-	6 -	NP	NP	10	A-1-b
	50.0	50.5	20	41	19	-	20 -	NP	NP	9	A-1-b
	55.0	55.5	13	49	23	-	15 -	NP	NP	11	A-1-b

USR 35 INTERCHANGE
REVISED 2/10/71

SOIL PROFILE
GREENE COUNTY
GRE-675-5.37
OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

4/49
4/13

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REVISED 2/10/71

SOIL PROFILE

GREENE COUNTY
GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

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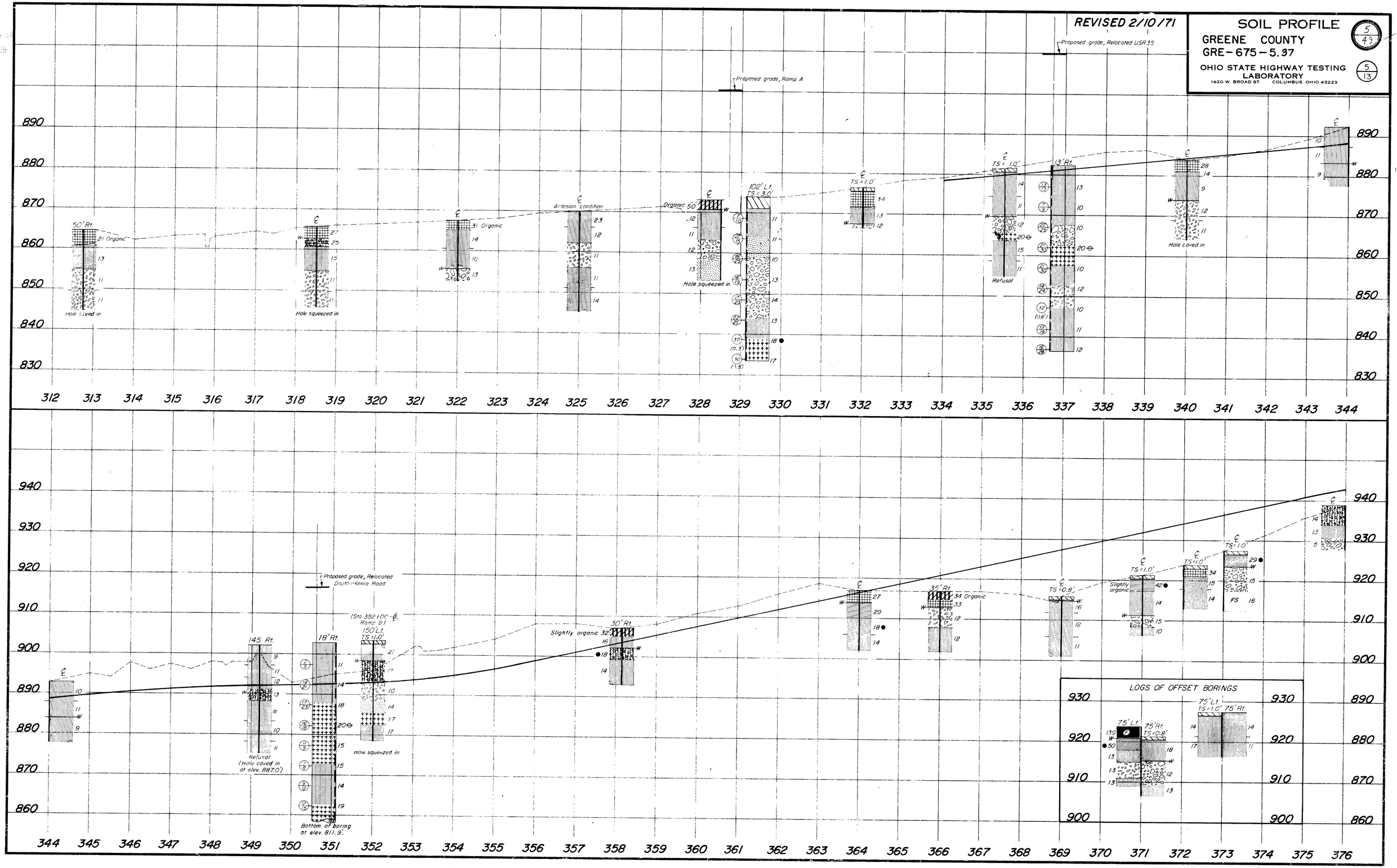

TE - 127
1500-12-68

REVISED 2/10/71

SOIL PROFILE

GREENE COUNTY
GRE - 675 - 5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

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Cultivated — Open field — Wooded

℄, Proposed IR 675

Cultivated — Open field

376 380 385 390 395 400 405 408

960 950 940 930 920 910 900

℄ 14 13 5

℄ 23 17

℄ 12 13

℄ 19 12 W 11 13

℄ 21 Organic W 9 7 8

℄ 12 W 10 11 10

℄ 19 13 13

(Hole squeezed in)

376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408

REVISED 2/10/71

SOIL PROFILE

GREENE COUNTY
GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST COLUMBUS, OHIO 43223

7/49

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GRE-675-5.45 | GRE-675-7.43

Wooded | Pasture | Orchard | Wooded | Open field

Open field | Pasture | Orchard | Wooded | Open field

Dry Pond

Woods

Existing Kemp Rd.

Sta. 414+04 - ℄, Proposed IR 70 = Sta. 20+20 - ℄, Relocated Kemp Rd.

℄, Proposed IR 675

℄, Relocated Kemp Rd.

℄, Ramp J

NOTE: For profile and complete plan view of Relocated Kemp Rd., see sheet 13.

Proposed grade, Relocated Kemp Rd. (Sta. 18+84 - 5' Lt., Relocated Kemp Road)

145' Lt.

Refusal (Boulders)

Refusal (Cobbles) (Hand auger)

Refusal (Cobbles) (Hand auger)

Hole caved in

TS=0.8'

100' Rt

940 930 920 910 900 890 880 870 860 850 840

408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440

SOIL PROFILE

GREENE COUNTY
GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

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REVISED 2/10/71

USR 35 INTERCHANGE

Relocated USR 35

℄ Relocated Dayton-Xenia Road

Proposed grade, Relocated Dayton-Xenia Road

76' Lt. TS = 0.5'

Refusal (Hole caved in at elev. 920.4')

STATION EQUATION

Sta. 0+00 ℄ Relocated USR 35 (Greene County)

Sta. 1106+93.02 ℄ Relocated USR 35 (Montgomery County)

Relocated USR 35 (Cont'd.)

Proposed grade, Ramp A

15' Rt. TS = 0.9'

50' Rt

(Sta. 326+40 - ℄ Ramp F) 82' Rt

30' Lt TS = 1.0'

36 Organic

Hole caved in

4' Rt

Brown gravelly, sandy silt with cobbles.

Hole caved in

℄ TS = 1.0'

45' Rt

Brown sandy gravel with cobbles.

Hole caved in

Bottom of boring at elev. 836.3.

Proposed grade, IR 675

101' Lt

Gray sandy silty clay (driller's description)

Bottom of boring at elev. 830.6.

Relocated USR 35 (Cont'd.)

℄ Proposed Grange Hall Road (Sta. 19+25 - 20' Lt., Proposed Grange Hall Road)

63' Rt

79' Rt

Bottom of boring at elev. 829.8.

Hole caved in

SOIL PROFILE

GREENE COUNTY
GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

9/49

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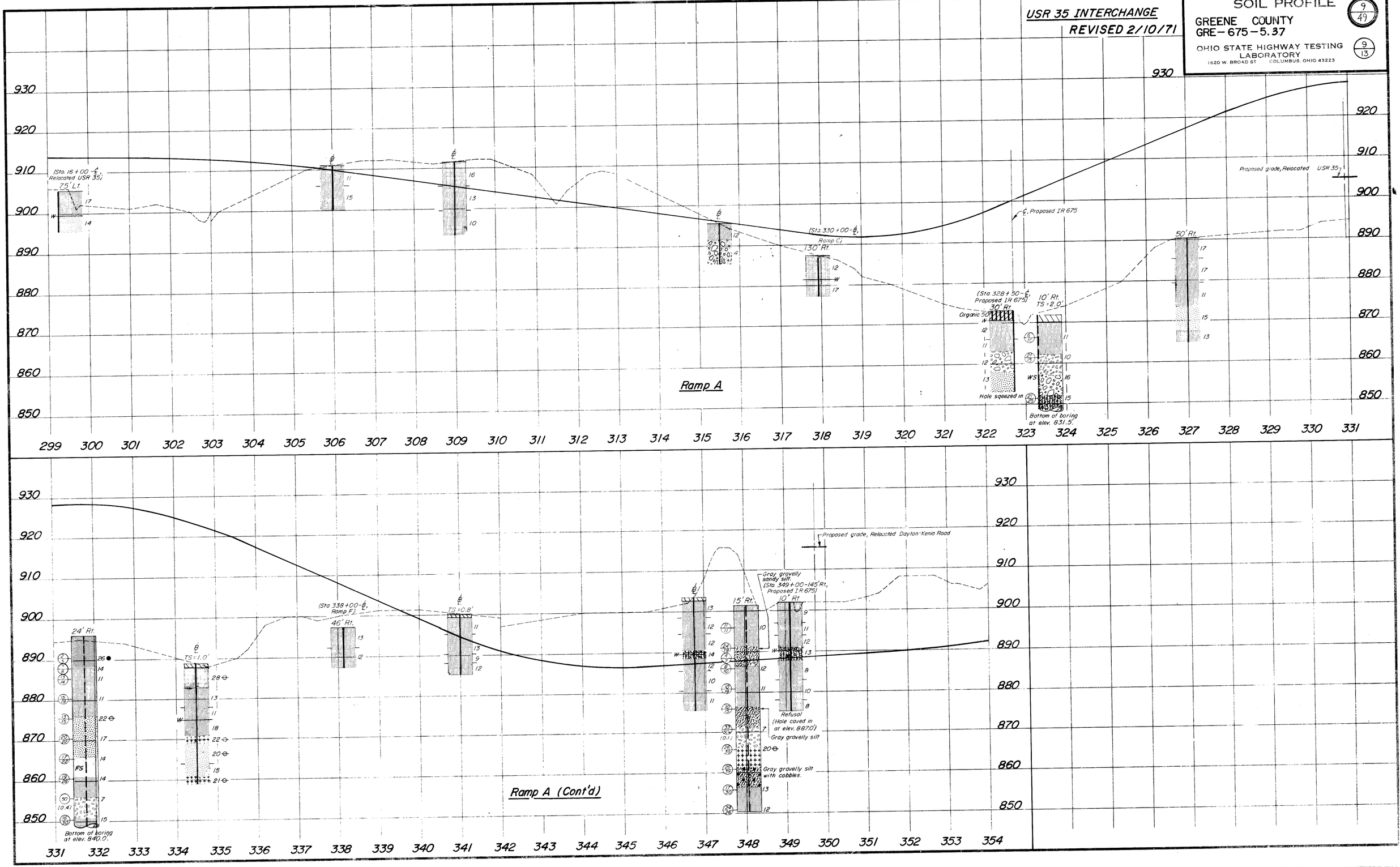
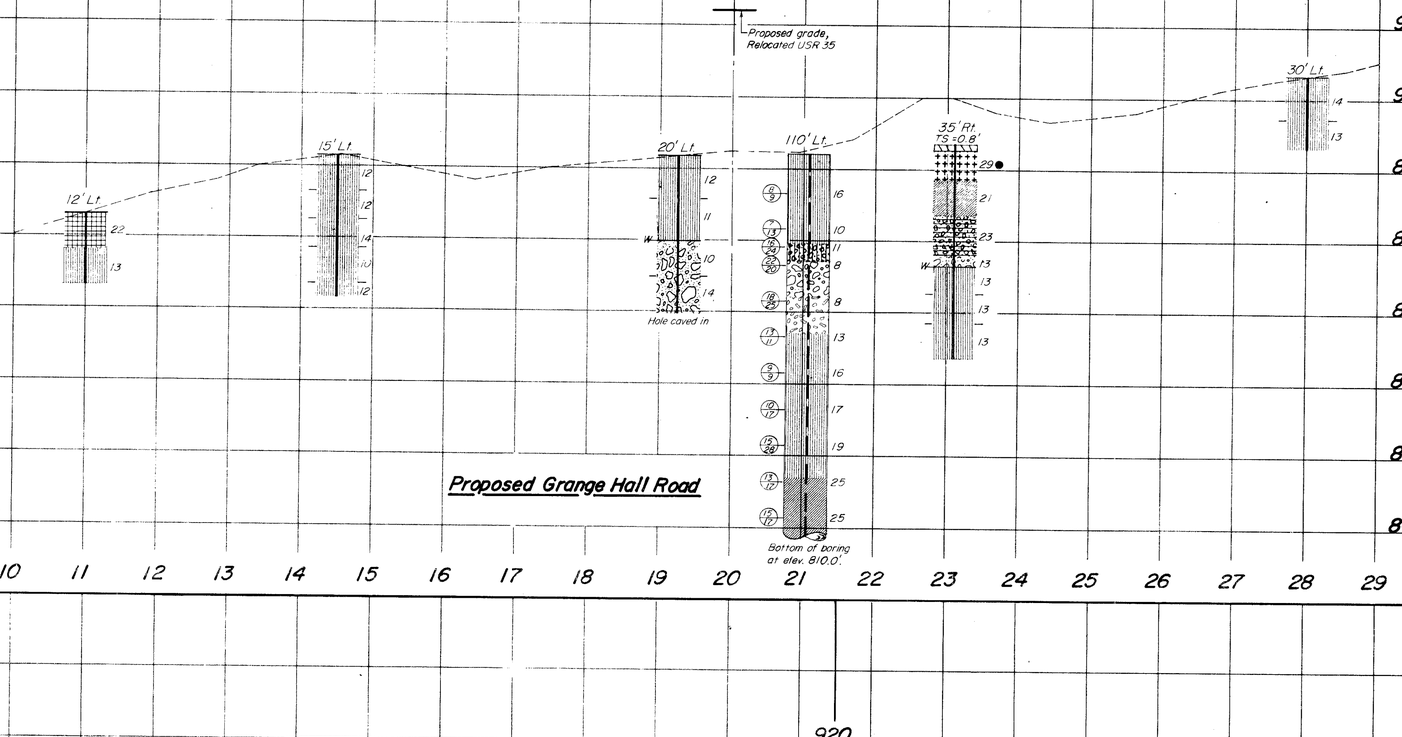
USR 35 INTERCHANGE
REVISED 2/10/71

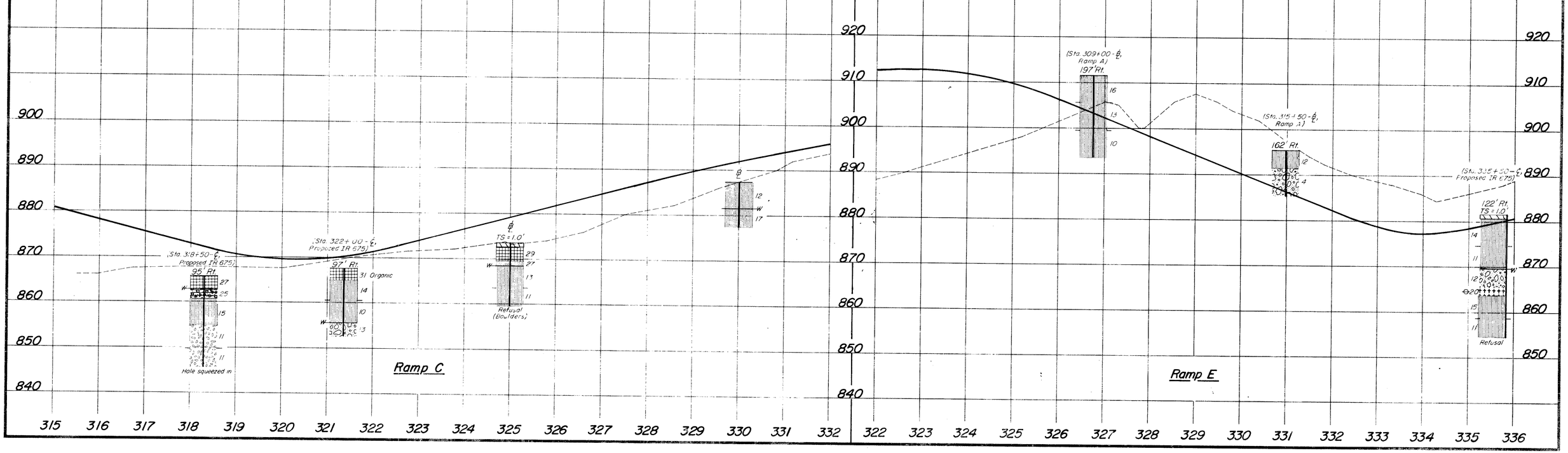


REVISED
2/10/71

SOIL PROFILE (10/49)
GREENE COUNTY
GRE-675-5.37
OHIO STATE HIGHWAY TESTING LABORATORY (10/13)
1620 W. BROAD ST. COLUMBUS, OHIO 43223

USR 35 INTERCHANGE





TR - 96
1500-12-66

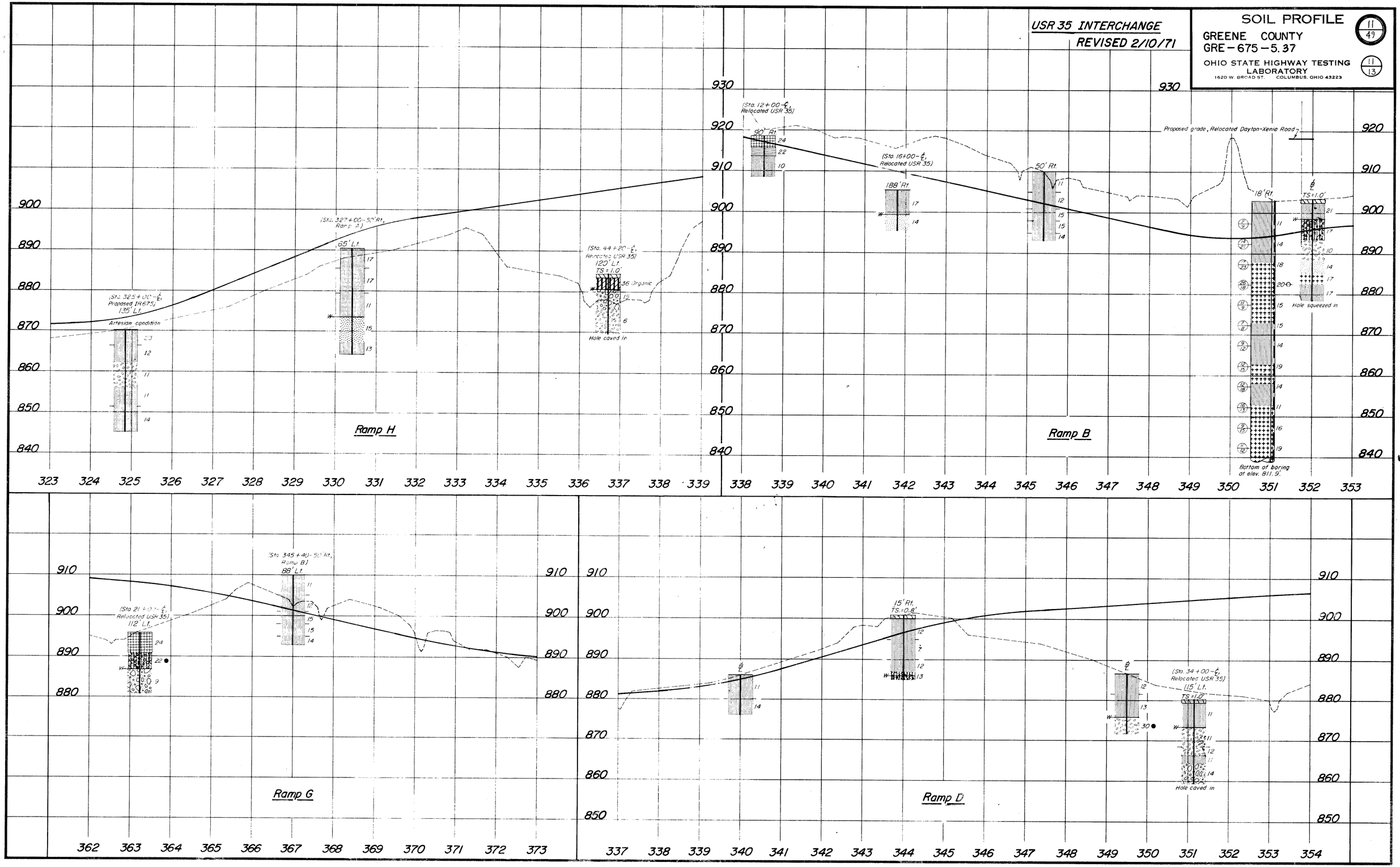
SOIL PROFILE

GREENE COUNTY
GRE - 675 - 5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

11/49
11/13

USR 35 INTERCHANGE
REVISED 2/10/71



TE - 96
1500-12-66

REVISED 2/10/71

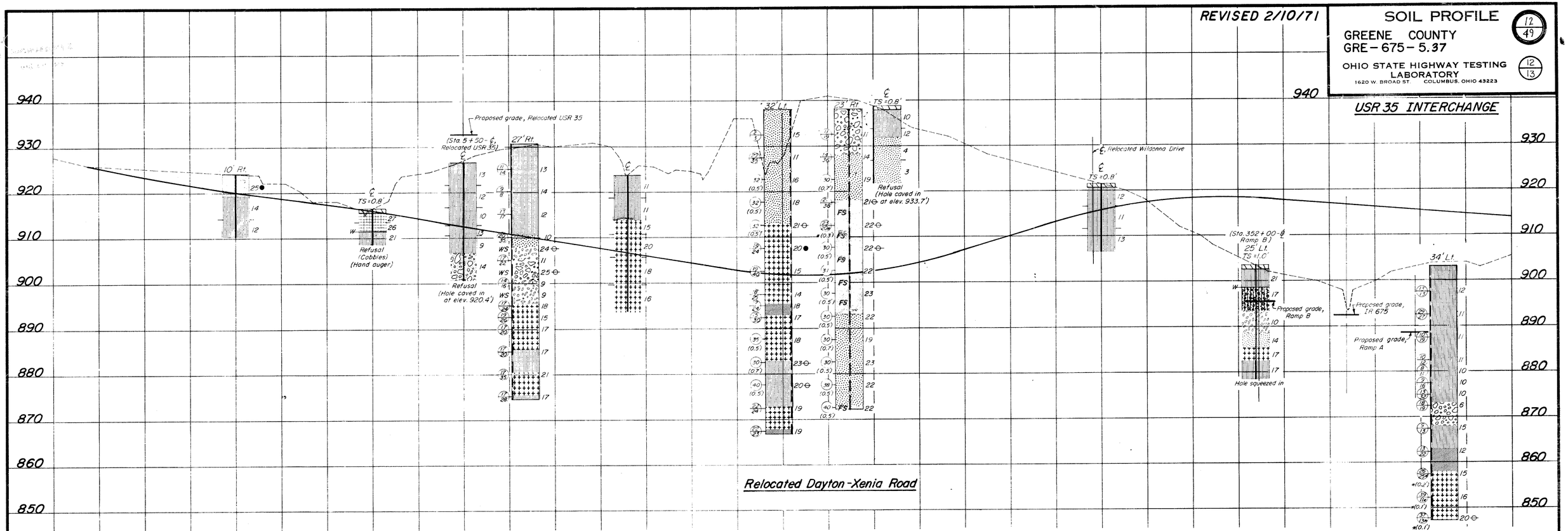
SOIL PROFILE

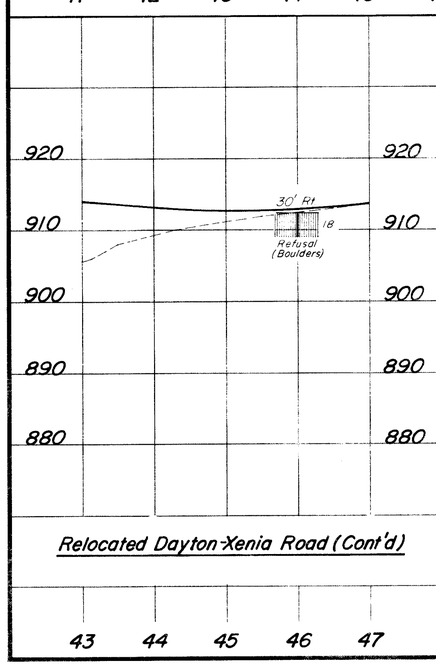
GREENE COUNTY
GRE - 675 - 5.37

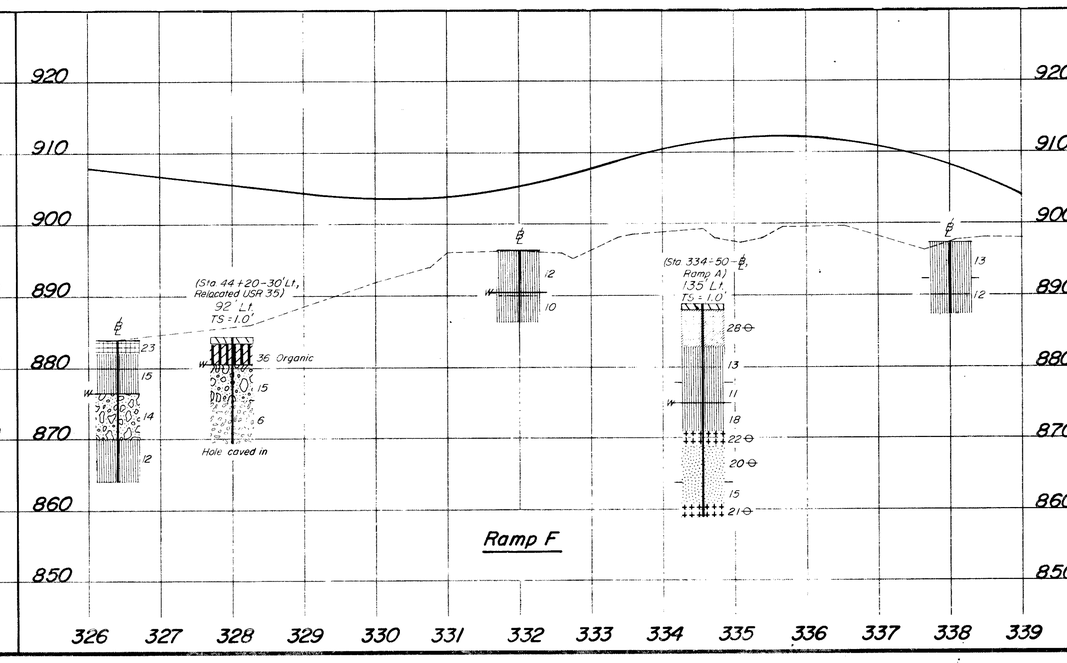
OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

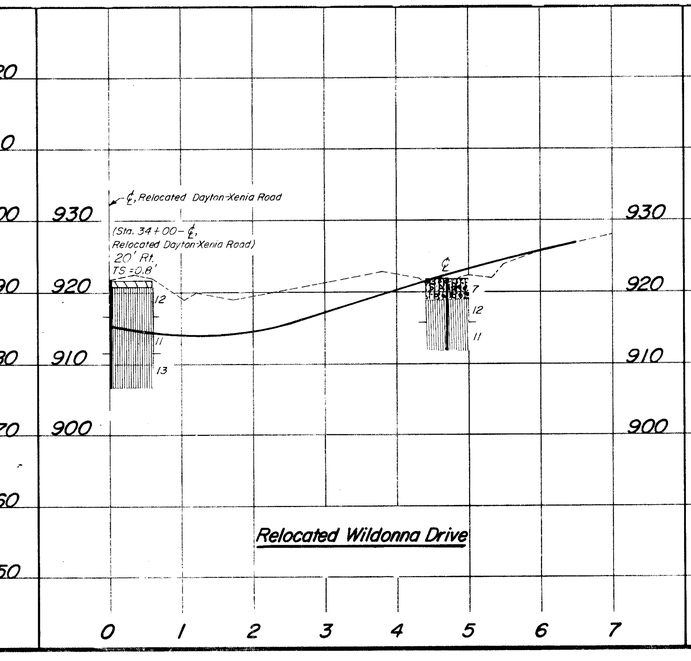
12/49
12/13

USR 35 INTERCHANGE









REVISED 2/10/71

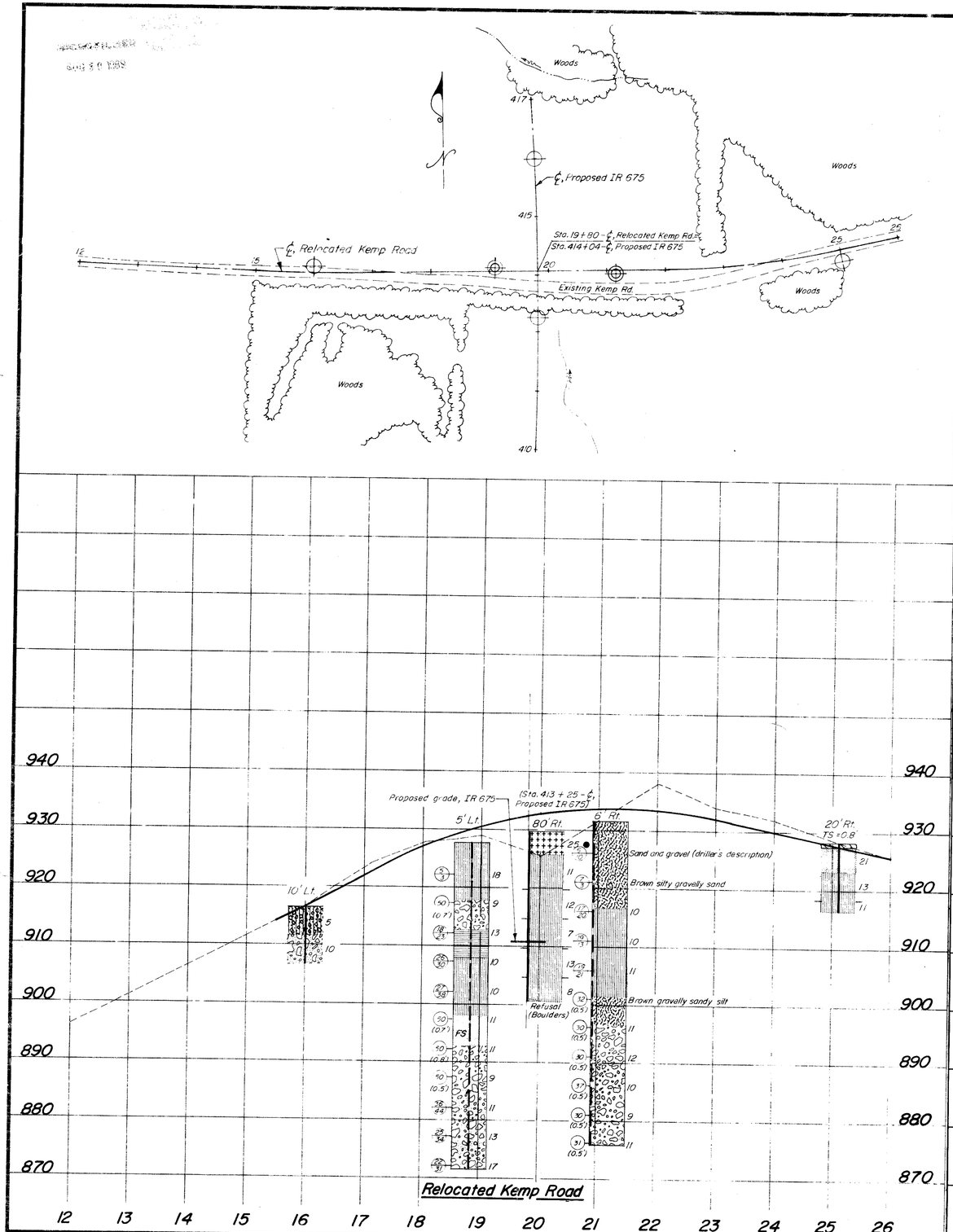
SOIL PROFILE
GREENE COUNTY

GRE – 675 – 5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

13/49

13/13



TE - 1 1 8
600 - 12 - 68

GREENE COUNTY
GRE-675-5.37

14
49
1
3

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND FIVE DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 23 AND 28, 1969.

INVESTIGATIONAL FINDINGS

BORINGS DISCLOSED MEDIUM-DENSE TO VERY DENSE SANDS, SILTS, AND GRAVELS AND AN INTERVAL OF HARD CLAY TO 41-FOOT DEPTHS, ELEVATIONS 834 AND 832 FEET, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING RESISTANCE TO PENETRATION WITH INCREASING DEPTH AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 36 TO 42-FOOT DEPTHS, ELEVATIONS 838 TO 830 FEET, CONSIDERED TO BE IN DENSE SANDS, SILTS, AND GRAVELS, AS REVEALED BY THE BORINGS.

FREE WATER WAS NOT OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  X = Number of Blows for First 6 inches.
  Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

LOG OF BORING

Date Started 7-25-69 — Sampler Type SS — Dia 1 3/8"
Date Completed 7-28-69 — Casing Length 28' — Dia 3 1/2"
Boring No B-3 — Station & Offset 321+45, 16' Lt. (Rear Pier)

Artesian Condition encountered at elev. 861.5'
Surface Elev 874.0'

Elev	Depth	Std Pen (N)	Rec (ft)	Loss (ft)	Description	Sample No	Physical Characteristics: % Gvl	% C.S	% F.S	% Slt	% Clay	L.L	P.I	W.C.	SHTL Class.
874.0	0														
	2				Topsoil										
871.0	4														
869.0	6	7/10			Brown Silty Sandy Gravel	1	46	7	11	16	20	20	6	11	A-4a
	8														
864.0	10	22/15			Brown Silty Sandy Gravel	2	44	11	14	14	17	17	5	11	A-3a
	12														
859.0	14														
	16	18/25			Brown Silty Sandy Gravel	3	48	27	12	7	6	21	6	10	A-1-b
	18														
854.0	20	16/19			Brown Silty Gravelly Sand	4	24	27	37	12	-	NP	NP	13	A-1-b
	22														
849.0	24														
	26	17/23			Brown Gravelly Sand	5	42	40	11	7	-	NP	NP	14	A-1-b
	28														
844.0	30	22/25			Brown Gravelly Silt	6	41	5	8	22	24	20	3	13	A-4a
	32														
	34														
839.0	36	30/*			Gray Silt	7	11	2	3	40	44	21	4	18	A-4a
	38														
834.0	40				BOTTOM OF BORING										
833.5		30/*			Gray Silt	8	5	3	2	50	40	21	5	17	A-4b

*Refusal

LOG OF BORING

Date Started 7-23-69 — Sampler Type SS — Dia 1 3/8"
Date Completed 7-24-69 — Casing Length 30' — Dia 3 1/2"
Boring No B-8 — Station & Offset 323+29, 10' Rt. (Forward Pier)

Artesian Condition encountered at elev. 857.5'
Surface Elev 872.0'

Elev	Depth	Std Pen (N)	Rec (ft)	Loss (ft)	Description	Sample No	Physical Characteristics: % Gvl	% C.S	% F.S	% Slt	% Clay	L.L	P.I	W.C.	SHTL Class.
872.0	0														
870.0	2				Topsoil										
	4														
867.0	6	6/10			Brown Sandy Gravelly Silt	1	24	7	12	31	26	18	5	11	A-4a
	8														
862.0	10	21/15			Gray Silty Sandy Gravel	2	59	19	12	10		NP	NP	10	A-1-a
	12														
857.0	14														
	16				Gray Gravelly Sand (Wash Sample)	3	42	45	11	2		NP	NP	16	A-1-b
	18														
852.0	20	21/25			Gray Silty Gravelly Sand	4	25	10	33	17	15	NP	NP	15	A-2-4
	22														
	24														
847.0	26	18/21			Gray Silty Gravelly Sand	5	27	16	45	3	9	NP	NP	14	A-3a
	28														
842.0	30	15/25			Gray Sandy Silt	6	0	0	46	42	12	NP	NP	23	A-4a
	32														
	34														
837.0	36	15/22			Gray Silt and Clay	7	0	2	2	37	59	26	11	19	A-6a
	38														
832.0	40				BOTTOM OF BORING										
831.5		30/*			Gray Clayey Silt	8	0	1	5	45	49	24	9	13	A-4a

*Refusal

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
	12"	3"	2.0mm	0.42mm	0.074mm	0.005mm
		No. 10 sieve	No. 40 sieve	No. 200 sieve		

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

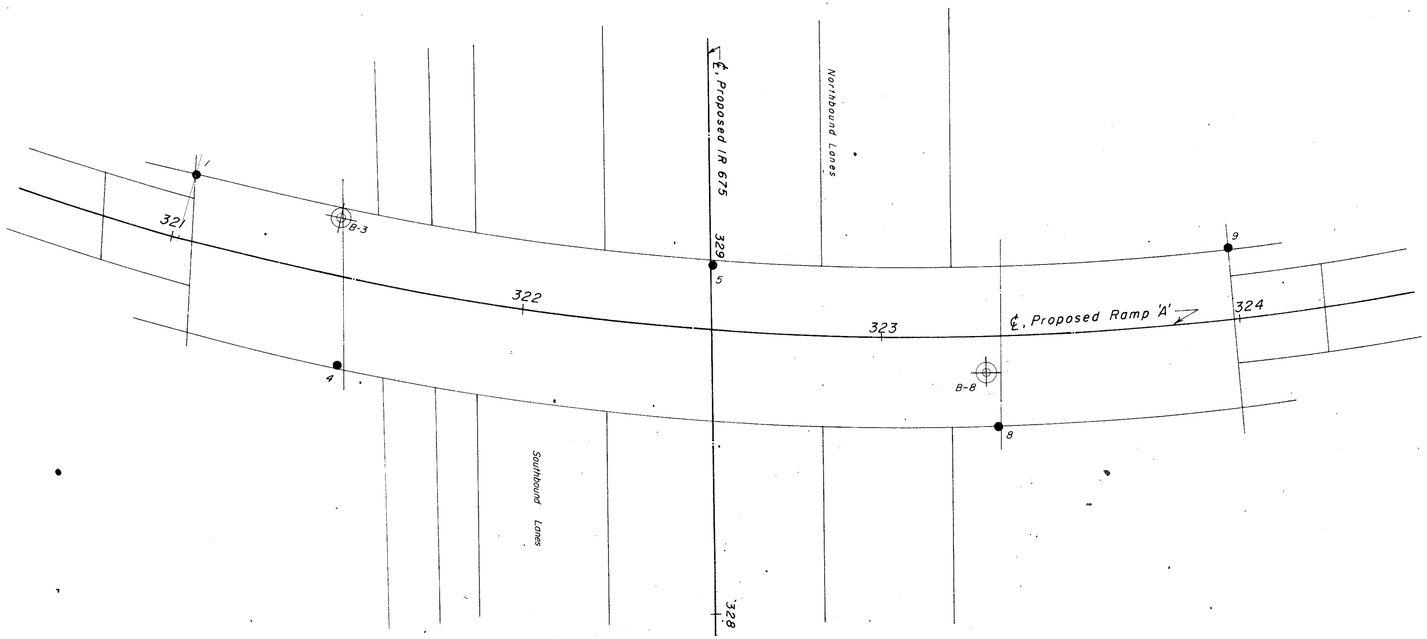
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0576
UNDER RAMP 'A'
SEC. GRE-675-5.37

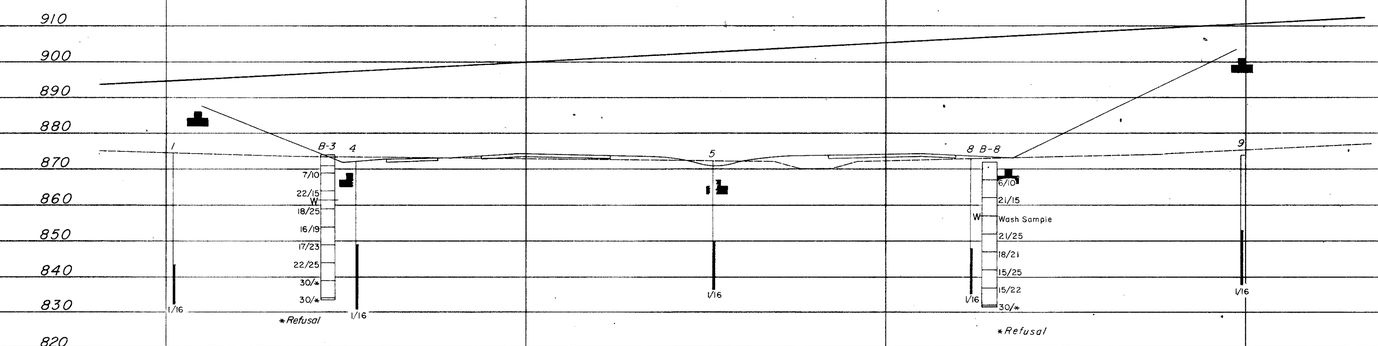
CHECKED BY	REVIEWED BY	DATE
L.N.L.	R.D.R.	8/27/69

TE - 119
1000 - 4 - 66

15
49
2/3

GRE-675-5.37





SCALE: 1" = 20'

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0576
UNDER RAMP 'A'

SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
J.E.C.	L.N.L.	R.D.R.	8/27/69

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

879 875 871 867 863 859 855 851 847 843 839 835 831 827

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

Test Location No. 1
Station & Offset 321+02 18' LT REAR ABUTMENT
Surface Elev. 874.4' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

Test Location No. 4
Station & Offset 321+53 24' RT REAR PIER
Surface Elev. 872.4' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

871 867 863 859 855 851 847 843 839 835 831 827

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

Test Location No. 5
Station & Offset 322+52 18' LT CENTER PIER
Surface Elev. 872.1' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

Test Location No. 8
Station & Offset 323+32 25' RT FORWARD PIER
Surface Elev. 873.1' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition LOST 32'

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

Test Location No. 9
Station & Offset 323+99 20' LT FORWARD ABUTMENT
Surface Elev. 873.9' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

871 867 863 859 855 851 847 843 839 835 831 827

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

16/49

GRE-675-5.37 3/3

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0576 UNDER RAMP 'A'
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	L.N.L.	R.D.R.	8/27/69

TE - 1 1 8
600 - 12 - 68

GREENE COUNTY
GRE - 675 - 5.37

17
49
1
4

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE DEEP TO MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF THREE DRIVE SAMPLE BORINGS AND SEVEN DRIVE ROD PENETRATION TESTS, MADE BETWEEN JUNE 18 AND JULY 17, 1969.

INVESTIGATIONAL FINDINGS

THE BORINGS ENCOUNTERED LOOSE TO VERY DENSE SANDY SILTS AND GRAVELS WITH SOME SANDS AND STIFF CLAYS. THE BORINGS WERE TERMINATED AT 41 AND 61-FOOT DEPTHS, ELEVATIONS 836 AND 831 FEET, AFTER PENETRATING IN EXCESS OF 20 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE TO PENETRATION AT 35 TO 53-FOOT DEPTHS, ELEVATIONS 847 TO 827 FEET, CONSIDERED TO BE IN VERY DENSE SANDY SILTS, AS REVEALED BY THE BORINGS.

NO FREE WATER WAS OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  X = Number of Blows for First 6 inches.
  Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)	0.074mm (No. 200 sieve)		0.005mm

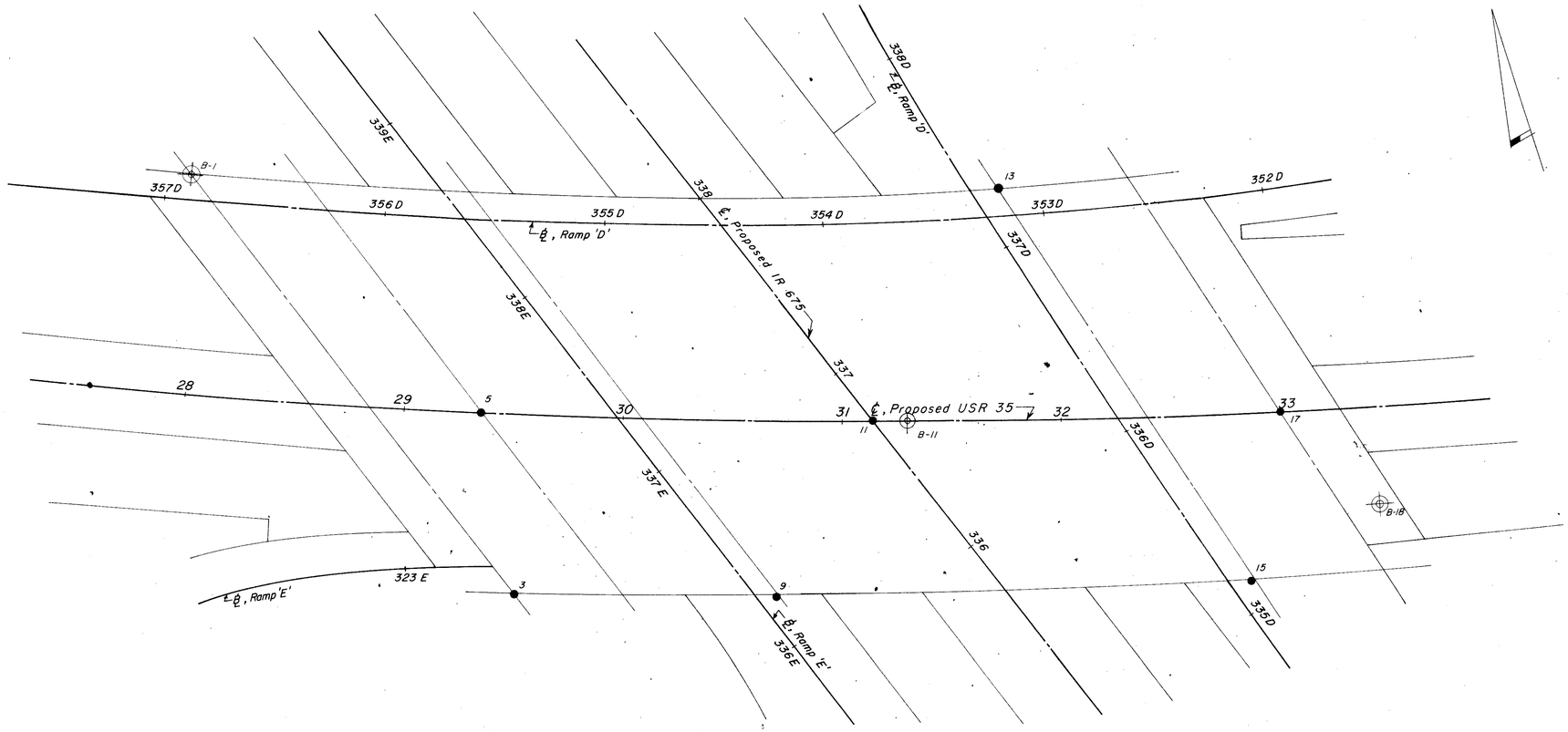
NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

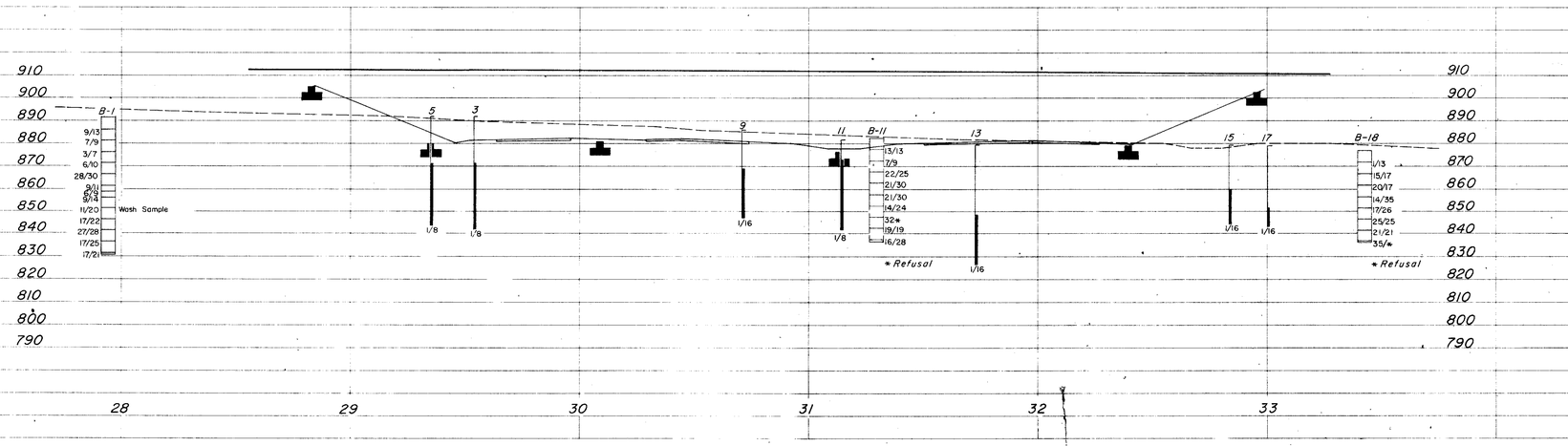
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0589
UNDER USR 35
SEC. GRE-675-5.37

CHECKED BY	REVIEWED BY	DATE
R.D.R.	G.P.H.	7/31/69

TE - 120
200 - 11 - 64





SCALE: 1" = 30'

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0589
UNDER USR 35
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
J.E.C.	R.D.R.	G.P.H.	7/31/69

TE - 122
600 - 4 - 66

19
49

GRE-675-5.37 (3/4)

LOG OF BORING

Date Started 6-18-69 | Sampler Type SS | Dia 1 3/8" | Water Elev ——
Date Completed 6-20-69 | Casing Length 30' | Dia 3 1/2"
Boring No B-1 | Station & Offset 27+94, 101' Lt. (Rear Abutment) | Surface Elev 891.6'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
891.6	0														
	2														
886.6	4														
	6	9/13			Brown Gravelly Sandy Silt	1	22	9	15	28	26	20	5	14	A-4a
	8														
881.6	10	7/9			Gray Gravelly Sandy Silt	2	21	9	16	30	24	18	5	11	A-4a
	12														
876.6	14														
	16	3/7			Gray Gravelly Sandy Silt	3	23	9	22	27	19	18	6	12	A-4a
	18														
871.6	20														
	22	6/10			Gray Silty Gravelly Sand	4	30	48	12	5	5	NP	NP	12	A-1-b
	24														
866.6	26	28/30			Gray Silty Sandy Gravel	5	67	14	6	4	9	NP	NP	7	A-1-a
	28														
861.6	30	9/11			Gray Sandy Gravelly Silt	6	19	4	11	44	22	18	2	12	A-4a
859.1	32														
	34	6/9			Gray Gravelly Sandy Silt	7	17	7	14	35	27	19	4	13	A-4a
856.6	36	9/14			Gray Silt	8	0	6	16	46	32	18	2	14	A-4a
	38														
851.6	40	11/20			No Sample Recovered - Gray Sandy Silty Clay (Wash Sample) (Driller's Description)		V	I	S	U	A	L			
	42														
	44														
846.6	46	17/22			Gray Silt and Clay	9	0	2	4	46	48	27	12	16	A-6a
	48														
841.6	50	27/28			Gray Silt	10	0	0	1	53	46	24	7	16	A-4b
	52														
	54														
836.6	56	17/25			Gray Silt and Clay	11	0	1	1	38	60	29	13	17	A-6a
	58														
831.6	60														
830.6		17/21			Gray Silt and Clay	12	0	7	3	44	46	27	12	23	A-6a

BOTTOM OF BORING

LOG OF BORING

Date Started 7-16-69 | Sampler Type SS | Dia 1 3/8" | Water Elev ——
Date Completed 7-16-69 | Casing Length 33.5' | Dia 3 1/2"
Boring No B-11 | Station & Offset 31+30, CL. (Third Pier) | Surface Elev 882.5'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
882.5	0														
	2														
877.5	4														
	6	13/13			Brown Gravelly Sandy Silt	1	23	10	17	27	23	19	7	13	A-4a
	8														
872.5	10														
	12	7/9			Brown Gravelly Sandy Silt	2	18	11	20	29	22	17	6	10	A-4a
	14														
867.5	16	22/25			Gray Silty Sandy Gravel	3	63	10	7	12	8	NP	NP	10	A-1-b
	18														
862.5	20														
	22	21/30			Gray Silt	4	0	0	1	72	27	NP	NP	20	A-4b
	24														
857.5	26	21/30			Gray Sandy Silt	5	12	11	21	34	22	17	4	10	A-4a
	28														
852.5	30														
	32	14/24			Brown Sandy Gravel	6	69	14	10	-7-		NP	NP	12	A-1-a
	34														
847.5	36	32* (0.6')			Gray Gravelly Sandy Silt	7	15	11	16	34	24	18	4	10	A-4a
	38														
842.5	40	19/19			Gray Sandy Gravelly Silt	8	37	7	10	28	18	NP	NP	11	A-4a
	42														
	44														
837.5	46	16/28			Gray Gravelly Sandy Silt	9	16	5	13	41	25	NP	NP	12	A-4a
836.5															

*Refusal

BOTTOM OF BORING

LOG OF BORING

Date Started 7-17-69 | Sampler Type SS | Dia 1 3/8" | Water Elev ——
Date Completed 7-17-69 | Casing Length 26' | Dia 3 1/2"
Boring No B-18 | Station & Offset 33+43, 45' Rt. (Forward Abutment) | Surface Elev 876.8'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
876.8	0														
	2														
871.8	4														
	6	1/13			Brown Sandy Gravel with Cobbles	1	-	-	-	-	-	-	-	25	Visual
	8														
866.8	10														
	12	15/17			Gray Sandy Gravel	2	51	23	16	-10-		NP	NP	9	A-1-a
861.8	14														
	16	20/17			Gray Sandy Gravel	3	60	18	13	-9-		NP	NP	10	A-1-a
	18														
856.8	20	14/35			Gray Gravelly Sandy Silt	4	22	7	17	24	30	18	8	11	A-4a
	22														
851.8	24														
	26	17/26			Gray Sandy Gravelly Silt	5	30	6	19	30	15	NP	NP	15	A-4a
	28														
846.8	30														
	32	25/25			Gray Sandy Silt	6	0	1	37	49	13	NP	NP	17	A-4a
841.8	34														
	36	21/21			Gray Silt	7	0	2	3	73	22	NP	NP	20	A-4b
	38														
836.8	40	35/*			Gray Silty Sandy Gravel	8	49	17	11	12	11	16	4	10	A-4b
836.3					BOTTOM OF BORING										

*Refusal

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE No. GRE-675-0589
UNDER USR 35
SEC. GRE-675-5.37

BORING DATA

TYPED BY	CHECKED BY	REVIEWED BY	DATE
S.A.J.	R.D.R.	G.P.H.	7/31/69

FE-114
1000-F-67

RECEIVED
AUG 6 1969

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. 3
Station & Offset 29+54.83' RT
REAR ABUTMENT
Surface Elev. 891.9 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 5
Station & Offset 29+35 CL
FIRST PIER
Surface Elev. 891.6 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 9
Station & Offset 30+71.81' RT
SECOND PIER
Surface Elev. 886.0' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 11
Station & Offset 31+14 CL
THIRD PIER
Surface Elev. 881.7' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 13
Station & Offset 31+73.106' LT
FOURTH PIER
Surface Elev. 879.7' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 15
Station & Offset 32+84.77' RT
FOURTH PIER
Surface Elev. 879.5' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 17
Station & Offset 33+00 CL
FORWARD ABUTMENT
Surface Elev. 879.1' Water Elev. ____
GRE-675-5.37 (4/4)
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

20/49

896 892 888 884 880 876 872 868 864 860 856 852 848 844 840 836 832 828 824

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0589 UNDER USR 35
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	R.D.R.	G.P.H.	7/31/69

H. COLE CO.-BDM-10-67-1000

TE - 1 1 8
600 - 12 - 68

GREENE COUNTY
GRE-675-5.37

21/49
1/4

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF ONE DRIVE SAMPLE BORING AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 23 AND AUGUST 12, 1969. INCLUDED WITH THIS REPORT IS THE LOG OF A BORING MADE FOR THE FOUNDATION INVESTIGATION FOR THE ADJACENT STRUCTURE.

INVESTIGATIONAL FINDINGS

BORINGS DISCLOSED MEDIUM-DENSE TO VERY DENSE SILTS AND VERY STIFF TO HARD CLAYS TO 51 AND 91-FOOT DEPTHS, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING AT LEAST 20 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING AND UNIFORMLY MEDIUM-HIGH RESISTANCE TO PENETRATION WITH INCREASING DEPTH AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 37 TO 88-FOOT DEPTHS, ELEVATIONS 863 TO 818 FEET, CONSIDERED TO BE IN DENSE SILTS OR HARD CLAYS, AS REVEALED BY THE BORINGS.

FREE WATER WAS NOT OBSERVED IN THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  X = Number of Blows for First 6 inches.
  Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
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- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system-and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)	0.074mm (No. 200 sieve)	0.005mm	

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0615
UNDER PENN-CENTRAL R.R.
SEC. GRE-675-5.37

CHECKED BY	REVIEWED BY	DATE
L.N.L.	R.D.R.	8/27/69

TE - 122
600 - 4 - 66

LOG OF BORING

Date Started 7-29-69 | Sampler Type SS | Dia 1 3/8" | Water Elev
Date Completed 7-31-69 | Casing Length 45' | Dia 3 1/2"
Boring No B-3 | Station & Offset 351+04, 158' Lt. (First Pier) | Surface Elev 902.9'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No	% Agg	% C	% F S	% Silt	% Clay	L L	P I	W C	SHTL Class.
902.9	0														
	4														
897.9	6	2/9			Brown Gravelly Sandy Silt	1	19	11	23	26	21	NP	NP	11	A-4a
892.9	10	14/21			Gray Sandy Silt	2	0	16	35	30	19	NP	NP	14	A-4a
887.9	16	17/23			Gray Sandy Silt	3	0	3	18	58	21	NP	NP	18	A-4b
882.9	20	16/18			Gray Silt	4	0	0	5	78	17	NP	NP	20	A-4b
877.9	26	11/9			Gray Silt	5	0	0	15	52	33	NP	NP	15	A-4b
872.9	30	7/8			Gray Sandy Silt	6	14	7	18	38	23	NP	NP	15	A-4a
867.9	36	9/12			Gray Sandy Silt	7	0	8	15	46	31	NP	NP	14	A-4a
862.9	40	12/15			Gray Silt	8	0	1	2	51	46	NP	NP	19	A-4b
857.9	46	12/18			Gray Gravelly Silt	9	12	2	7	46	33	NP	NP	14	A-4a
852.9	50	16/13			Gray Silt	10	0	3	13	53	31	NP	NP	11	A-4b
847.9	56	9/15			Gray Silt and Clay	11	0	1	5	52	42	28	14	16	A-4b
842.9	60	11/12			Gray Silt	12	0	0	3	64	33	NP	NP	19	A-4b
837.9	66	11/12			Gray Clayey Silt	13	0	2	9	57	32	22	8	16	A-4b
832.9	70	10/16			Gray Silt	14	0	0	2	61	37	22	6	19	A-4b
827.9	76	13/18			Gray Clay	15	0	0	1	62	37	45	24	32	A-7-6
822.9	80	15/28			Gray Clay	16	0	2	14	31	53	42	21	22	A-7-6
817.9	86	22/36			Brown Gravelly Sandy Silt	17	19	9	19	28	25	20	7	11	A-4a
812.9	90														
811.9		30/42			Gray Sandy Gravelly Silt	18	34	7	14	22	23	21	8	12	A-4a

BOTTOM OF BORING

LOG OF BORING

Date Started 7-23-69 | Sampler Type SS | Dia 1 3/8" | Water Elev
Date Completed 7-24-69 | Casing Length 40' | Dia 3 1/2"
Boring No B-12 | Station & Offset 348+18, 171' Rt. (Forward Abutment) | Surface Elev 901.4'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No	% Agg	% C	% F S	% Silt	% Clay	L L	P I	W C	SHTL Class.
901.4	0														
	2														
	4														
896.4	6	11/11			Brown Sandy Silt	1	11	17	23	27	22	19	7	10	A-4a
	8														
891.4	10	24/19			Gray Gravelly Sandy Silt	2	-	-	-	-	-	-	-	10	Visual
888.9	12	4/7			No Sample Recovered - Hole caved in										
	14														
886.4	16	8/10			Gray Silty Sand	3	13	26	22	25	14	20	7	12	A-4a
883.9	18				No Sample Recovered - Hole caved in										
881.4	20	10/19			Gray Sandy Silt	4	8	9	18	38	27	20	9	11	A-4a
	22														
876.4	26	10/15			Gray Gravelly Silt	5	-	-	-	-	-	20	8	12	Visual
	28														
871.4	30	33/50* (0.1')			Gray Silty Sandy Gravel Heaved 2' in casing	6	59	21	9	11	-	NP	NP	7	A-1-a
	32														
	34														
866.4	36	26/39			Gray Sandy Silt	7	5	6	11	58	20	NP	NP	11	A-4b
	38														
861.4	40	26/39			Gray Gravelly Silt with Cobbles	8	-	-	-	-	-	21	8	11	Visual
	42														
	44														
856.4	46	17/30			Gray Sandy Silt	9	9	7	18	42	24	19	5	13	A-4a
	48														
851.4	50														
850.4		24/26			Gray Sandy Silt	10	13	7	17	41	22	22	7	12	A-4a

*Refusal

BOTTOM OF BORING

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE - 675 - 0615
UNDER PENN-CENTRAL RR.
SEC. GRE - 675 - 5.37

BORING DATA

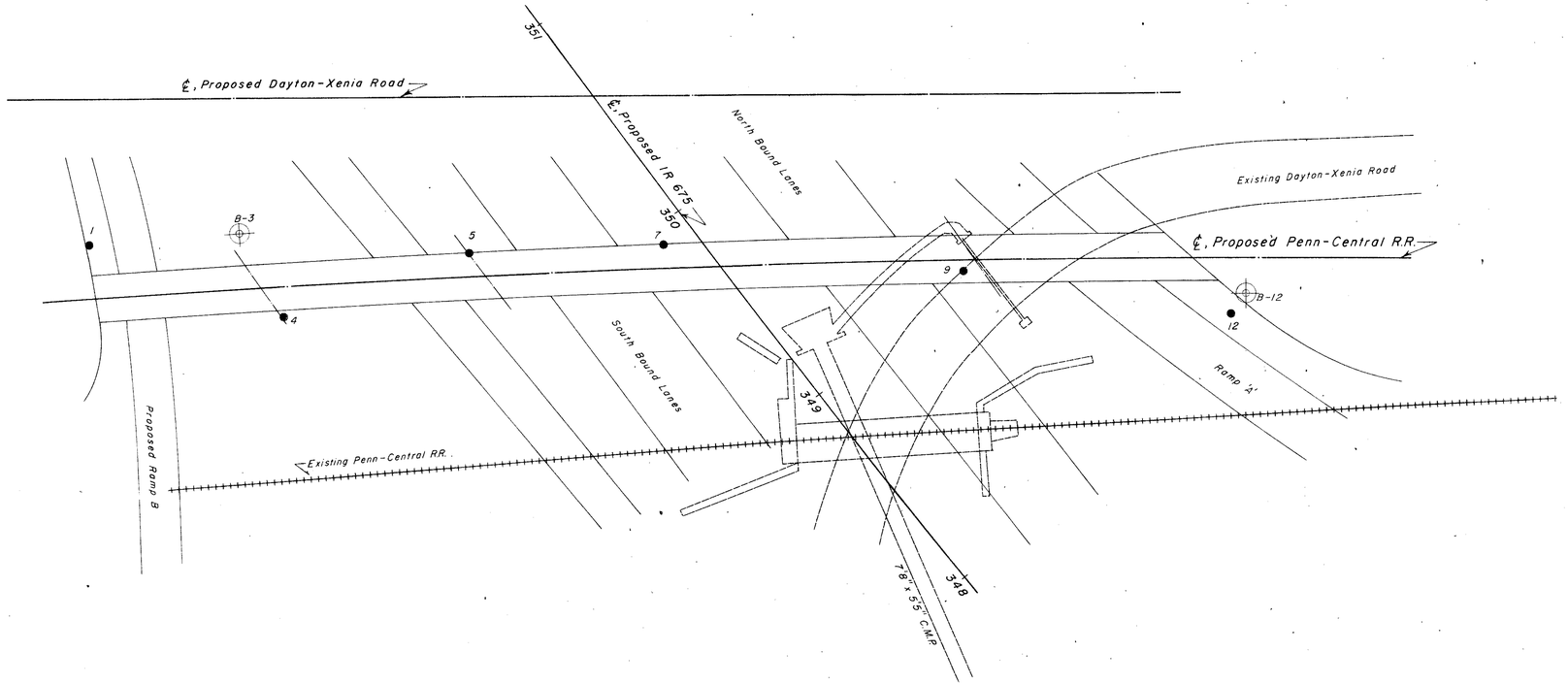
TYPED BY	CHECKED BY	REVIEWED BY	DATE
S.A.J.	L.N.L.	R.D.R.	8/27/69

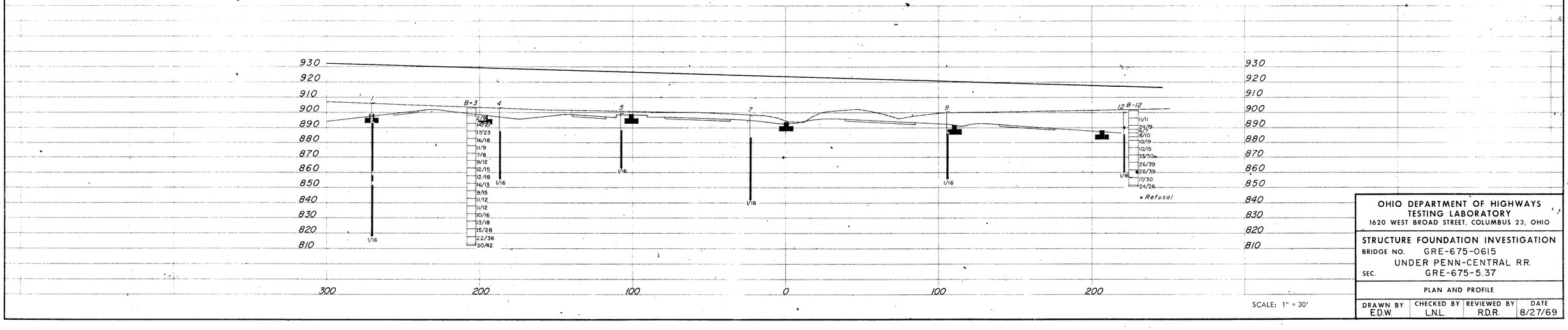
TE - 120
200 - 11 - 64

23/49

3/4

GRE-675-5.37





OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0615
UNDER PENN-CENTRAL RR.

SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
E.D.W.	L.N.L.	R.D.R.	8/27/69

TC-114
1000-8-67

GRE-675-5.37

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. 1
Station & Offset 351+40.213'LT REAR ABUTMENT
Surface Elev. 906.1' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition LOST ROD POINT 20'

Test Location No. 4
Station & Offset 350+66.164'LT FIRST PIER
Surface Elev. 903.3' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 5
Station & Offset 350+39.83'LT SECOND PIER
Surface Elev. 898.8' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 7
Station & Offset 349+92.14'LT THIRD PIER
Surface Elev. 897.8' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 9
Station & Offset 349+04.82'RT FOURTH PIER
Surface Elev. 906.7 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 12
Station & Offset 348+15.160'RT FORWARD ABUTMENT
Surface Elev. 906.2 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

910 907 903 899 895 891 887 883 879 875 871 867 863 859 855 851 847 843 839 835 831 827 823 819 815

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0615
UNDER PENN-CENTRAL R.R.
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	L.N.L.	R.D.R.	8/27/69

H. COLE CO. -BSM-12-67-1000

TE - 1 1 8
600 - 12 - 68

GREENE COUNTY
GRE-675-5.37

25
49
1
4

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 24 AND AUGUST 12, 1969.

INVESTIGATIONAL FINDINGS

BORINGS DISCLOSED UNSTRATIFIED INTERVALS OF MEDIUM-DENSE TO VERY DENSE SILTS AND VERY STIFF CLAYS TO 56 AND 91-FOOT DEPTHS, ELEVATIONS 848 AND 812 FEET, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING AT LEAST 15 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING AND UNIFORMLY MEDIUM-HIGH RESISTANCE TO PENETRATION WITH INCREASING DEPTH AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 38 TO 60-FOOT DEPTHS, ELEVATIONS 862 TO 841 FEET, CONSIDERED TO BE IN DENSE SILTS OR STIFF CLAYS, AS REVEALED BY THE BORINGS.

FREE WATER WAS NOT OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  X = Number of Blows for First 6 inches.
  Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)	0.074mm (No. 200 sieve)	0.005mm	

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0616
UNDER DAYTON-XENIA RD.
SEC. GRE-675-5.37

CHECKED BY	REVIEWED BY	DATE
L.N.L.	R.D.R.	8/27/69

TE - 122
600 - 4 - 66

26/49

GRE-675-5.37

2/4

LOG OF BORING

Date Started 7-29-69 | Sampler Type SS | Dia 1 3/8"
Date Completed 7-31-69 | Casing Length 45' | Dia 3 1/2"
Boring No. B-4 | Station & Offset 37+87, 57' Rt. (First Pier)
Water Elev. ———
Surface Elev. 902.9'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
902.9	0														
	2														
	4														
897.9	6	2/9			Brown Gravelly Sandy Silt	1	19	11	23	26	21	NP	NP	11	A-4a
	8														
892.9	10	14/21			Gray Sandy Silt	2	0	16	35	30	19	NP	NP	14	A-4a
	12														
	14														
887.9	16	17/23			Gray Sandy Silt	3	0	3	18	58	21	NP	NP	18	A-4b
	18														
882.9	20	16/18			Gray Silt	4	0	0	5	78	17	NP	NP	20	A-4b
	22														
	24														
877.9	26	11/9			Gray Silt	5	0	0	15	52	33	NP	NP	15	A-4b
	28														
872.9	30	7/8			Gray Sandy Silt	6	14	7	18	38	23	NP	NP	15	A-4a
	32														
	34														
867.9	36	9/12			Gray Sandy Silt	7	0	8	15	46	31	NP	NP	14	A-4a
	38														
862.9	40	12/15			Gray Silt	8	0	1	2	51	46	NP	NP	19	A-4b
	42														
	44														
857.9	46	12/18			Gray Gravelly Silt	9	12	2	7	46	33	NP	NP	14	A-4a
	48														
852.9	50	16/13			Gray Silt	10	0	3	13	53	31	NP	NP	11	A-4b
	52														
	54														
847.9	56	9/15			Gray Silt and Clay	11	0	1	5	52	42	28	14	16	A-4b
	58														
842.9	60	11/12			Gray Silt	12	0	0	3	64	33	NP	NP	19	A-4b
	62														
	64														
837.9	66	11/12			Gray Clayey Silt	13	0	2	9	57	32	22	8	16	A-4b
	68														
832.9	70	10/16			Gray Silt	14	0	0	2	61	37	22	6	19	A-4b
	72														
	74														
827.9	76	13/18			Gray Clay	15	0	0	1	62	37	45	24	32	A-7-6
	78														
822.9	80	15/28			Gray Silt and Clay	16	0	2	14	31	53	42	21	22	A-7-6
	82														
	84														
817.9	86	22/36			Brown Gravelly Sandy Silt	17	19	9	19	28	25	20	7	11	A-4a
	88														
812.9	90														
811.9		30/42			Gray Sandy Gravelly Silt	18	34	7	14	22	23	21	8	12	A-4a

BOTTOM OF BORING

LOG OF BORING

Date Started 7-24-69 | Sampler Type SS | Dia 1 3/8"
Date Completed 7-29-69 | Casing Length 40' | Dia 3 1/2"
Boring No. B-11 | Station & Offset 41+20, 34' Lt. (Forward Abutment)
Water Elev. ———
Surface Elev. 903.2'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
903.2	0														
	2														
	4														
898.2	6	13/13			Brown Sandy Silt	1	12	14	21	26	27	19	7	12	A-4a
	8														
893.2	10	29/27			Brown Gravelly Sandy Silt with Cobbles	2	17	12	22	28	21	NP	NP	11	A-4a
	12														
	14														
888.2	16	10/19			Gray Gravelly Sandy Silt	3	20	9	16	28	27	18	8	11	A-4a
	18														
883.2	20														
	22	10/12			Gray Sandy Silt	4	7	11	18	34	30	18	6	11	A-4a
880.7	24	8/11			Gray Sandy Silt	5	7	10	18	35	30	16	6	10	A-4a
878.2	26	9/16			Gray Sandy Silt	6	11	10	19	31	29	18	7	10	A-4a
875.7	28	13/22			Gray Sandy Silt	7	7	12	20	33	28	18	8	10	A-4a
873.2	30	18/19			Gray Silty Sandy Gravel	8	52	16	16	16	—	17	4	6	A-1-b
	32														
	34														
868.2	36	9/13			Gray Sandy Silt	9	7	5	15	45	28	15	5	15	A-4a
	38														
863.2	40	13/22			Gray Gravelly Sandy Clay	10	16	4	12	43	25	23	11	12	A-6a
	42														
	44														
858.2	46	26/25* (0.2')			Gray Silt	11	0	1	2	53	44	NP	NP	15	A-4b
	48														
853.2	50	39/11* (0.1')			Gray Sandy Silt	12	7	4	14	57	18	NP	NP	16	A-4b
	52														
	54														
848.2	55	37/13*			Gray Silt	13	0	5	14	62	19	NP	NP	20	A-4b
847.6		(0.1')			*Refusal										

BOTTOM OF BORING

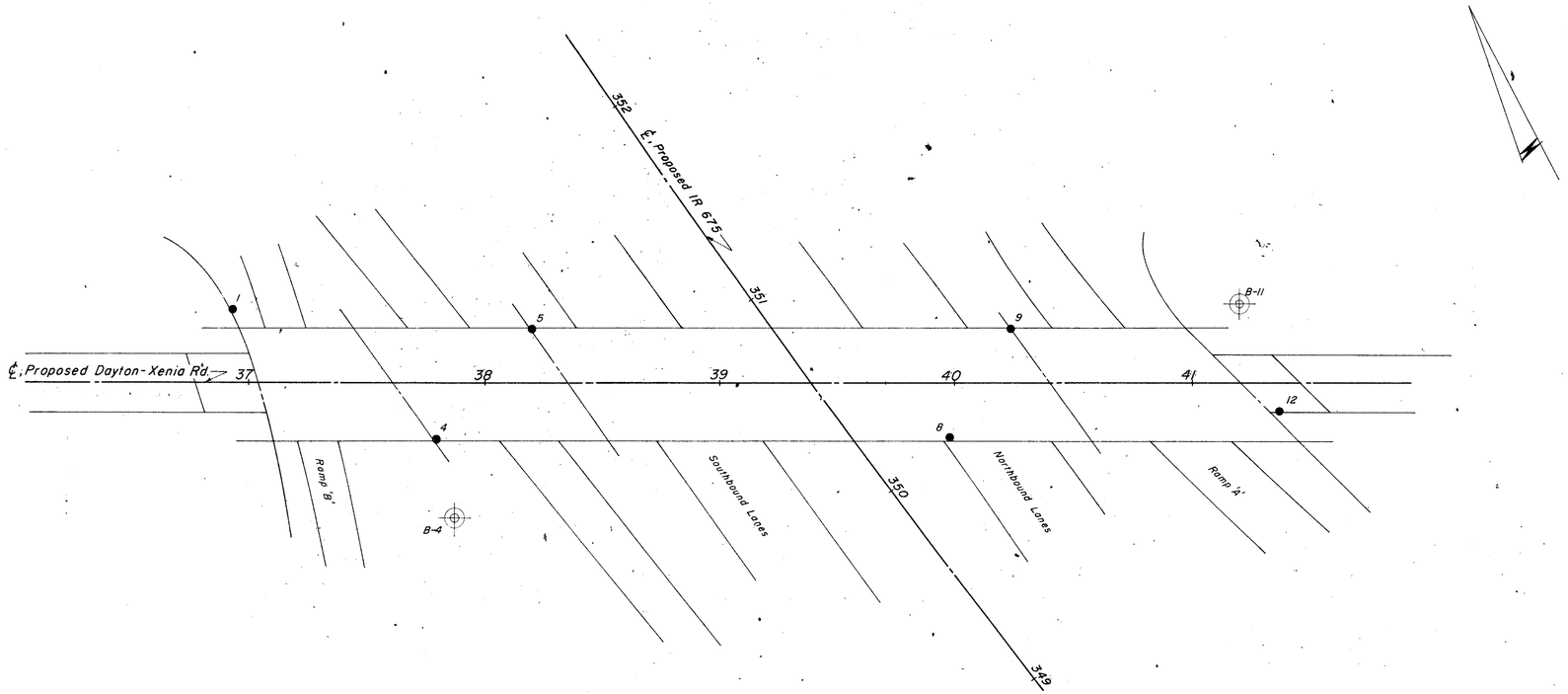
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

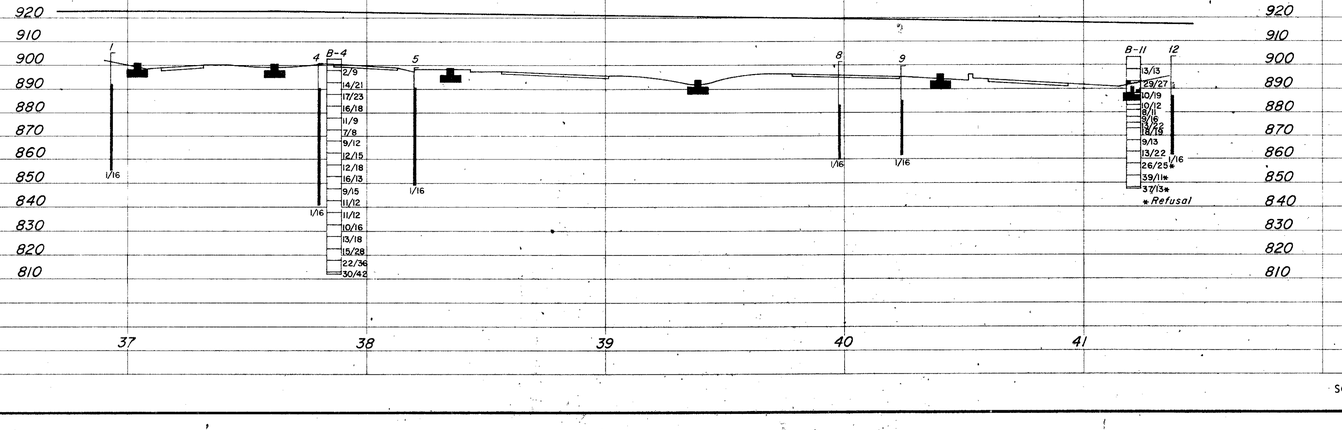
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0616
UNDER DAYTON-XENIA RD.
SEC. GRE-675-5.37

BORING DATA

TYPED BY	CHECKED BY	REVIEWED BY	DATE
S.A.J.	L.N.L.	R.D.R.	8/27/69

TE - 120
200 - 11 - 64





SCALE: 1" = 30'

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0616
UNDER DAYTON-XENIA RD.
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
J.E.C.	L.N.L.	R.D.R.	8/27/69

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. 1
Station & Offset 36+93, 32'LT REAR ABUTMENT
Surface Elev. 905.3 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 4
Station & Offset 37+80, 24'RT FIRST PIER
Surface Elev. 900.9 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 5
Station & Offset 38+20, 23'LT SECOND PIER
Surface Elev. 899.4 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 8
Station & Offset 39+98, 23'RT THIRD PIER
Surface Elev. 901.8 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 9
Station & Offset 40+24, 23'LT FOURTH PIER
Surface Elev. 899.9 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 12
Station & Offset 41+37, 12'RT FORWARD ABUTMENT
Surface Elev. 903.6 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

28
49
4
4

GRE-675-5.37

910 906 902 898 894 890 886 882 878 874 870 866 862 858 854 850 846 842 838

TEST ROD

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0616
UNDER DAYTON-XENIA RD.
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	L.N.L.	R.D.R.	8/27/69

H. COLE CO. -BDM-10-67-1000

TE - 1 1 8
600 - 12 - 68

MICROFILMED
JUN 1970

GREENE COUNTY
GRE - 675 - 5.37

29/49 1/4

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND FOUR DRIVE ROD PENETRATION TESTS, MADE BETWEEN AUGUST 1 AND 13, 1969.

INVESTIGATIONAL FINDINGS

BORINGS DISCLOSED LOOSE TO VERY DENSE SANDS AND SILTS TO 66 AND 71-FOOT DEPTHS, ELEVATIONS 875 AND 867 FEET, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING 50 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED INCREASING RESISTANCE TO PENETRATION WITH INCREASING DEPTH, AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 16 TO 27-FOOT DEPTHS, ELEVATIONS 924 TO 913 FEET, CONSIDERED TO BE IN DENSE SANDS, AS REVEALED BY THE BORINGS.

NO FREE WATER OBSERVATIONS WERE MADE IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  X = Number of Blows for First 6 inches.
  Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)	0.074mm (No. 200 sieve)	0.005mm	

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0626
PENN-CENTRAL RR. OVER DAYTON XENIA RD.
SEC. GRE-675-5.37

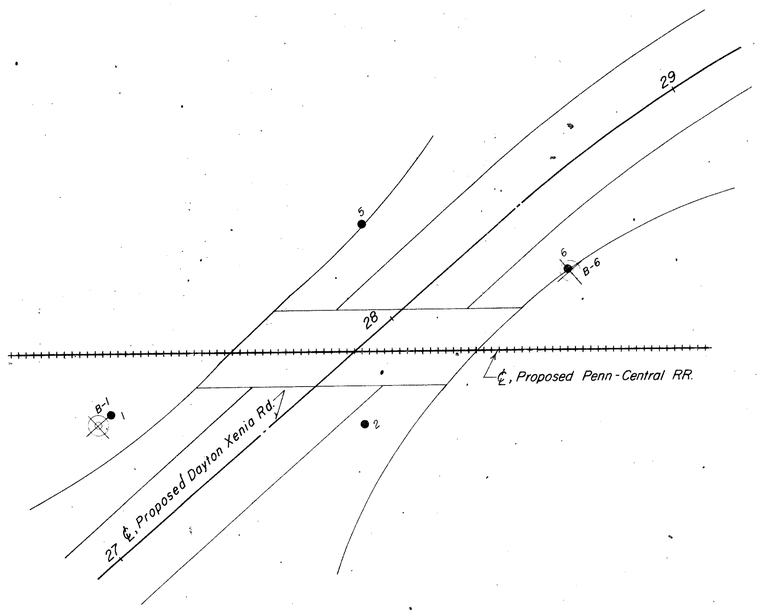
CHECKED BY	REVIEWED BY	DATE
L.N.L.	R.D.R.	9/2/69

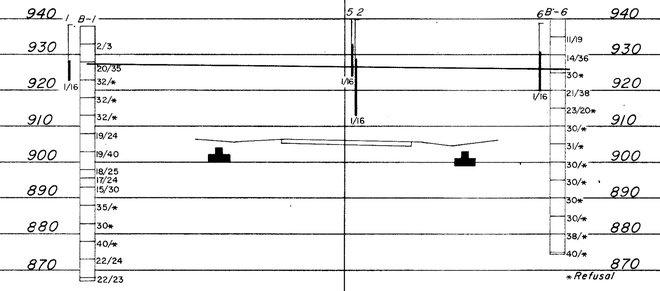
TE - 119
1000 - 4 - 66

GRE-675-5.37

30/49

2/4





100' 0 100'

SCALE: 1" = 20'

OHIO DEPARTMENT OF HIGHWAYS TESTING LABORATORY 1620 WEST BROAD STREET, COLUMBUS 23, OHIO			
STRUCTURE FOUNDATION INVESTIGATION BRIDGE NO. GRE-675-0626 PENN-CENTRAL RR. OVER DAYTON XENIA RD. SEC. GRE-675-5.37			
PLAN AND PROFILE			
DRAWN BY J.E.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 9/2/69

TE - 122
600 - 4 - 66

LOG OF BORING

Date Started 8-1-69 | Sampler Type SS | Dia 1 3/8" | Water Elev ———
Date Completed 8-5-69 | Casing Length 25' | Dia 3 1/2"
Boring No. B-1 | Station & Offset 27+20, 32' Lt. (Rear Abutment) | Surface Elev 938.0'

Elev	Depth	Std Pen (N)	Rec Ft	Loss Ft	Description	Sample No	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
938.0	0														
	2														
	4														
933.0	6	2/3			Brown Silty Sand	1	0	0	86	-14	-	NP	NP	15	A-3a
	8														
928.0	10	20/35			Brown Silty Sand	2	0	1	71	-28	-	NP	NP	11	A-3a
	12														
923.0	14														
	16	32/*			Brown Silty Sand	3	0	1	66	-33	-	NP	NP	16	A-3a
	18														
918.0	20	32/*			Brown Silty Sand	4	0	0	74	-26	-	NP	NP	18	A-3a
	22														
913.0	24														
	26	32/*			Brown Silt	5	0	0	15	73	12	NP	NP	21	A-4b
	28														
908.0	30	19/24			Gray Silt	6	0	0	7	62	31	20	4	20	A-4b
	32														
903.0	34														
	36	19/40			Gray Clayey Silt	7	0	0	1	58	41	24	7	15	A-4b
	38														
898.0	40	18/25			Gray Clayey Silt	8	0	0	1	50	49	25	7	14	A-4b
895.5	42	17/24			Gray Silt and Clay	9	0	1	1	45	53	30	11	18	A-6a
893.0	44	15/30			Gray Clayey Silt	10	0	0	0	51	49	26	7	17	A-4b
	46														
888.0	48														
	50	35/*			Gray Silt	11	0	0	2	73	25	NP	NP	18	A-4b
	52														
883.0	54	30* (0.7')			Gray Sandy Silt	12	0	0	54	23	23	NP	NP	23	A-4a
	56														
878.0	58														
	60	40/*			Gray Sandy Silt	13	0	0	59	29	12	NP	NP	20	A-4a
	62														
873.0	64														
	66	22/24			Gray Silt	14	0	0	6	74	20	NP	NP	19	A-4b
	68														
868.0	70														
867.0		22/23			Gray Silt and Clay	15	0	0	1	42	57	31	12	19	A-6a

BOTTOM OF BORING

*Refusal

LOG OF BORING

Date Started 8-5-69 | Sampler Type SS | Dia 1 3/8" | Water Elev ———
Date Completed 8-6-69 | Casing Length 60' | Dia 3 1/2"
Boring No. B-6 | Station & Offset 28+46, 23' Rt. (Forward Abutment) | Surface Elev 940.0'

Elev	Depth	Std Pen (N)	Rec Ft	Loss Ft	Description	Sample No	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
940.0	0														
	2														
	4														
935.0	6	11/19			Brown Silty Sand	1	4	46	34	-16	-	NP	NP	11	A-1-b
	8														
930.0	10	14/36			Brown Silty Sand	2	0	1	73	-26	-	NP	NP	14	A-3a
	12														
925.0	14														
	16	30* (0.7')			Brown Silty Sand	3	6	2	72	-20	-	NP	NP	19	A-3a
	18														
920.0	20	21/38			Brown Silty Sand	4	3	6	81	-10	-	NP	NP	21	A-3
	22														
915.0	24														
	26	23/20* (0.3')			Brown Sand	5	1	12	80	- 7	-	NP	NP	22	A-3
	28														
910.0	30	30/*			Brown Sand	6	0	4	90	- 6	-	NP	NP	22	A-3
	32														
905.0	34														
	36	31/*			Brown Sand	7	0	2	88	-10	-	NP	NP	22	A-3
	38														
900.0	40	30/*			Brown Sand	8	0	4	87	- 9	-	NP	NP	23	A-3
	42														
895.0	44	30/*			Brown Silty Sand	9	0	38	38	-24	-	NP	NP	22	A-3a
	46														
890.0	48														
	50	30* (0.7')			Brown Silty Sand	10	0	43	25	-32	-	NP	NP	19	A-3a
	52														
885.0	54														
	56	30/*			Brown Silty Sand	11	0	0	81	-19	-	NP	NP	23	A-3a
	58														
880.0	60														
	62	38/*			Brown Silty Sand	12	0	7	69	-24	-	NP	NP	22	A-3a
	64														
875.0	66														
874.5		40/*			Gray Sand	13	0	2	94	- 4	-	NP	NP	22	A-3

BOTTOM OF BORING

*Refusal

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0626
PENN-CENTRAL RR. OVER DAYTON XENIA RD.
SEC. GRE-675-5.37

BORING DATA

TYPED BY	CHECKED BY	REVIEWED BY	DATE
S.A.J.	L.N.L.	R.D.R.	9/2/69

GRE-675-5.37

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

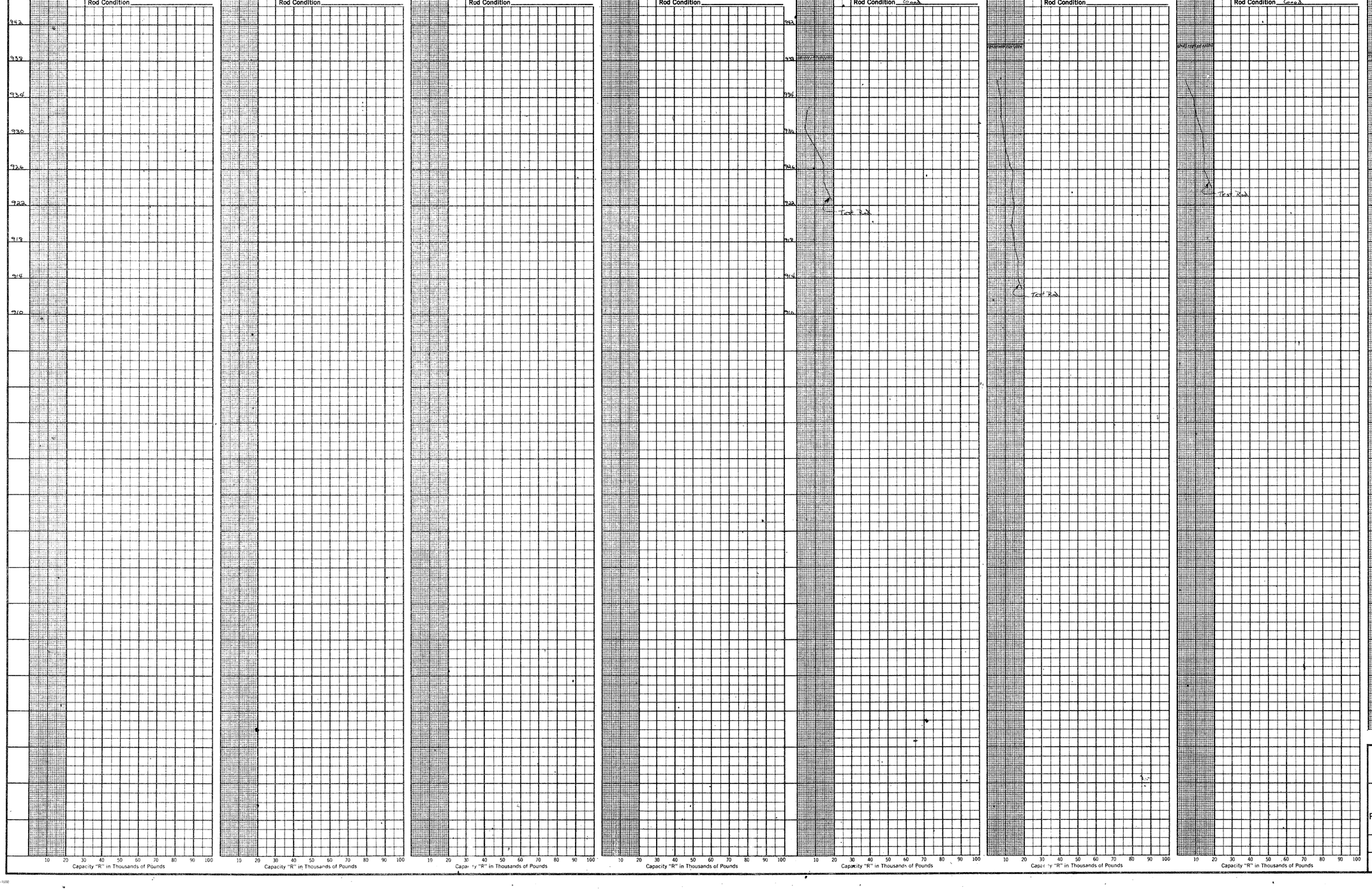
Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. 1
Station & Offset 27+25 32' Lt.
Rear Abutment
Surface Elev. 938.6' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition Good

Test Location No. 2
Station & Offset 27+76 17' Rt.
Rear Abutment
Surface Elev. 939.9' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. 5
Station & Offset 28+11 25' Lt.
Forward Abutment
Surface Elev. 940.0' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition Good

Test Location No. 6
Station & Offset 28+46 22' Rt.
Forward Abutment
Surface Elev. 998.9' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition Good



OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0626
PENN-CENTRAL RR. OVER DAYTON XENIA RD.
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
J.E.C.	L.N.L.	R.D.R.	9/2/69

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GENTLY ROLLING, GLACIATED PORTION OF THE MISSISSIPPI VALLEY PLAIN REGION, IN AN AREA WHERE DEEP GLACIAL-DERIVED MATERIAL OVERLIES BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM AUGER, MOUNTED ON A MOBILE PLATFORM AND FOUR MECHANICALLY-DRIVEN ROD PENETRATION TESTS PERFORMED BETWEEN MARCH 29 AND APRIL 7, 1978.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

THE BORINGS ENCOUNTERED INTERVALS OF LOOSE TO EXTREMELY DENSE STRATIFIED SILTS, SAND AND GRAVEL MODIFIED WITH CLAY THAT INCREASE IN DENSITY WITH INCREASE IN DEPTH AND ALSO ALTERNATE. THE BORINGS WERE TERMINATED AT 41-FOOT DEPTH, ELEVATION 874 TO 872 FEET, AFTER PENETRATING IN EXCESS OF 19 FEET OF MATERIAL, REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

THE ROD SOUNDINGS ENCOUNTERED GRADUAL, OCCASIONALLY ERRATIC INCREASE IN RESISTANCE TO PENETRATION WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH NEAR-REFUSAL TO PENETRATION BETWEEN 30 AND 42-FOOT DEPTH, ELEVATION 893 TO 871 FEET, CONSIDERED TO BE IN EXTREMELY DENSE MATERIAL AS REVEALED BY THE BORINGS.

BEDROCK SURFACE WAS NOT ENCOUNTERED IN ANY OF THE TESTS PERFORMED.

FREE WATER WAS OBSERVED AND MEASURED IN BORING B-3 AT 2- FOOT DEPTH, ELEVATION 913 FEET AND IN BORING B-9 AT 5-FOOT DEPTH, ELEVATION 908 FEET.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y/Z — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  - X = Number of Blows for First 6 inches.
  - Y = Number of Blows for Second 6 inches.
  - Z = Number of Blows for Third 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Mudstone or Claystone
- Mudstone or Claystone
- Weathered Shale
- Shale
- Weathered Siltstone
- Siltstone
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Boulders or Cobbles

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 18 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in three 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
	12" / 3"	2.0mm / No. 10 sieve	0.42mm / No. 40 sieve	0.074mm / No. 200 sieve	0.005mm	

HOLLOW STEM LOG OF BORING

Date Started 3/29/78 — Sampler Type AUGER — Dia. —
Date Completed 3/29/78 — Casing: Length — Dia. —
Boring No. B-3 — Station & Offset 7+90, CL (REAR ABUTMENT)

Water Elev 913.4'
Surface Elev 915.4'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
915.4	0														
	2														
910.4	4														
	6	6/7/9			BROWN SANDY GRAVELLY SILT	1	25	10	8	27	30	23	8	11	A-4a
907.9	8	5/5/6			BROWN-GRAY SANDY GRAVELLY SILT	2	21	5	14	36	24	18	4	11	A-4a
905.4	10														
	12	8/14/16			BROWN SANDY SILT	3	0	14	43	19	24	NP	NP	15	A-4a
902.9	14	10/10/13			BROWN SILTY SANDY GRAVEL	4	50	13	13	15	9	NP	NP	10	A-1-b
900.4	16	9/18/31			BROWN-GRAY SANDY GRAVELLY SILT	5	23	5	12	50	10	NP	NP	16	A-4b
897.9	18	14/24/24			BROWN GRAVELLY SANDY SILT	6	15	5	12	57	11	16	2	14	A-4b
895.4	20	17/28/27			BROWN GRAVELLY SANDY SILT	7	18	6	22	31	23	NP	NP	14	A-4a
892.9	22	20/27/41			BROWN-GRAY SILT	8	0	8	8	62	22	NP	NP	22	A-4b
890.4	24	9/24/39			BROWN-GRAY SILT	9	0	1	1	84	14	NP	NP	21	A-4b
885.4	26														
	28														
	30														
	32	10/18/21			BROWN-GRAY SILT	10	0	0	1	68	31	NP	NP	19	A-4b
	34														
880.4	36	12/15/20			BROWN-GRAY SILT	11	0	0	0	61	29	NP	NP	18	A-4b
875.4	38														
873.9	40	8/24/40			BROWN-GRAY SANDY SILT	12	0	1	25	64	10	NP	NP	20	A-4b

E.BOTTOM OF BORING

HOLLOW STEM LOG OF BORING

Date Started 3/29/78 — Sampler Type AUGER — Dia. —
Date Completed 4/7/78 — Casing: Length — Dia. —
Boring No. B-9 — Station & Offset 13+10, 5' LT.

Water Elev. 908.0'
Surface Elev 913.0'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
913.0	0														
	2														
	4														
908.0	6														
	8	8/12/10			BROWN SILTY SANDY GRAVEL	1	64	12	8	11	5	NP	NP	11	A-1-B
905.5	8	5/8/6			BROWN-GRAY SILTY SANDY GRAVEL	2	46	13	11	19	11	19	6	10	A-2-4
903.0	10														
	12	7/18/16			BROWN SANDY GRAVEL	3	65	17	8	7	3	15	1	11	A-1-A
900.5	12														
	14	24/14/16			BROWN-GRAY SILTY SANDY GRAVEL	4	52	22	12	9	5	15	4	9	A-1-A
898.0	16	7/13/20			BROWN-GRAY GRAVELLY SANDY SILT	5	19	9	15	33	24	21	8	10	A-4B
895.5	16	8/12/11			NO SAMPLE RECOVERED - BROWN SAND (DRILLER'S DESCRIPTION)										
893.0	20														
	22	8/8/2			BROWN-GRAY GRAVELLY SAND	6	41	36	11	8	4	NP	NP	10	A-1-B
890.5	24	22/33/40			BROWN-GRAY SILTY SANDY GRAVEL	7	40	23	14	13	10	15	1	6	A-1-B
888.0	26	24/18/27			BROWN-GRAY SILTY SANDY GRAVEL	8	38	16	14	19	13	16	3	7	A-2-4
	28														
883.0	30														
	32	12/10/20			BROWN-GRAY SILTY SANDY GRAVEL	9	51	8	10	18	13	18	5	8	A-2-4
	34														
878.0	36	62(0.5')			BROWN-GRAY SILTY SANDY GRAVEL	10	32	16	14	27	11	NP	NP	9	A-4a
	38				BOTTOM OF BORING AT ELEV. 871.5										
873.0	40														
871.5		5/14/20			BROWN-GRAY SILT	11	13	1	1	56	29	20	3	20	A-4B

NOTE - ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN ON THE STRUCTURE FOUNDATION INVESTIGATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL SUBSURFACE INVESTIGATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE BUREAU OF TESTS AT 1600 WEST BROAD STREET, THE PAVEMENT AND SOILS SECTION OF THE BUREAU OF LOCATION AND DESIGN OR IN THE BRIDGE BUREAU AT 25 SOUTH FRONT STREET.

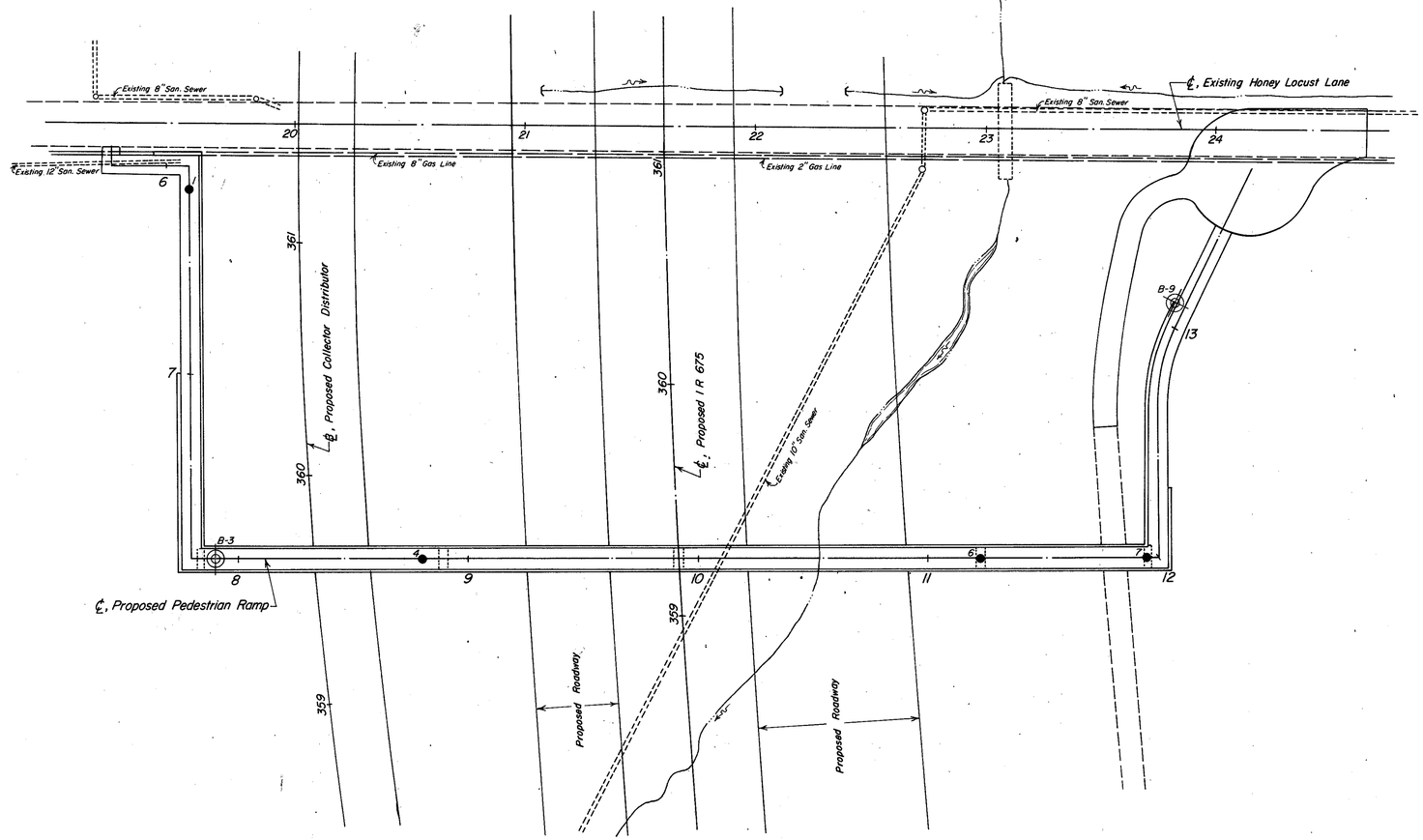
NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

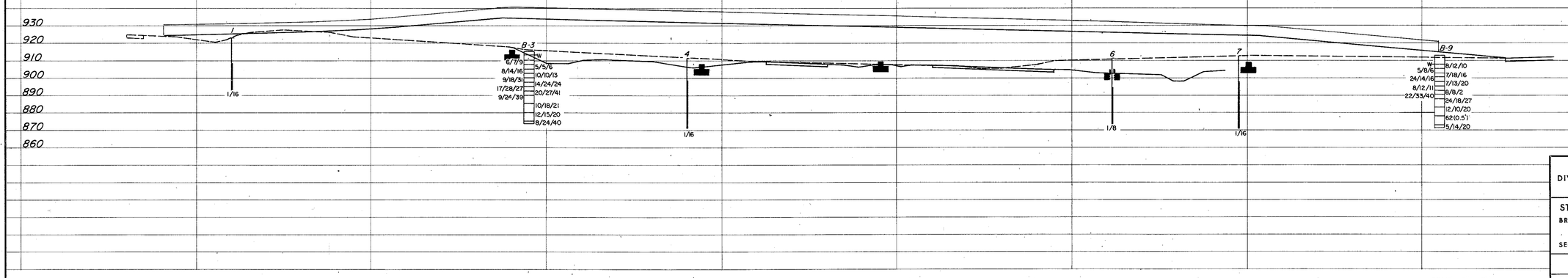
OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS — TESTING LABORATORY
1600 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0632
UNDER PEDESTRIAN RAMP
SEC. GRE-675-5.37

CHECKED BY	REVIEWED BY	DATE
L. N. L.	R. D. R.	5/1/78





SCALE: 1" = 30'

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - TESTING LABORATORY
1600 WEST BROAD STREET COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0632
UNDER PEDESTRIAN RAMP
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
L. N. L.	L. N. L.	R. D. R.	5/1/78

GRE-675-5.37 3/3

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. 1
Station & Offset 6+20 - CL
Date Performed 4/5/78
Surface Elev. 923.0 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____
TEST ROD

Test Location No. 4
Station & Offset 8+80 - CL (REAR PIER)
Date Performed 3/30 to 4/5/78
Surface Elev. 911.4 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____
TEST ROD

Test Location No. 6
Station & Offset 11+23 - CL (FWD. PIER)
Date Performed 4/6 & 4/7/78
Surface Elev. 911.1 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____
TEST ROD

Test Location No. 7
Station & Offset 11+95 - CL (FWD. ABUT.)
Date Performed 4/5 & 4/6/78
Surface Elev. 912.8 Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____
TEST ROD

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

920 916 912 908 904 900 896 892 888 884 880 876 872 868

10 20 30 40 50 60 70 80 90 100
Capacity "R" in Thousands of Pounds

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - TESTING LABORATORY
1600 WEST BROAD ST. COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0632
UNDER PEDESTRIAN RAMP
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
L. N. L.	L. N. L.	R. D. R.	5/1/78

SCOTT GRAPHICS I M 4-72 50527

TE - 1 1 8
600 - 12 - 68

GREENE COUNTY
GRE-675-5.37

36
49
1
3

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERVIED SOILS OVERLIE INTERBEDDED SHALE AND LIME-STONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS, MADE BETWEEN JULY 10 AND 15, 1969, AND FIVE DRIVE ROD PENETRATION TESTS, MADE ON SEPTEMBER 9 AND 10, 1969.

INVESTIGATIONAL FINDINGS

THE BORINGS ENCOUNTERED UNSTRATIFIED INTERVALS OF VERY DENSE GRAVELS, SANDS AND SILTS. THE BORINGS WERE TERMINATED AT 51 AND 56-FOOT DEPTHS, ELEVATIONS 876 AND 872 FEET, AFTER PENETRATING IN EXCESS OF 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS GENERALLY ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE TO PENETRATION AT 22 TO 30-FOOT DEPTHS, ELEVATIONS 904 TO 890 FEET, CONSIDERED TO BE IN VERY DENSE GRAVELS, SANDS AND SILTS, AS REVEALED BY THE BORINGS.

NO FREE WATER OBSERVATIONS WERE MADE IN ANY OF THE ROD SOUNDING HOLES.

LOG OF BORING

Date Started 7-10-69 — Sampler Type SS — Dia 1 3/8" — Water Elev ———
Date Completed 7-15-69 — Casing Length 55' — Dia 3 1/2"
Boring No B-3 — Station & Offset 18+84, 5' Lt. (Rear Pier) — Surface Elev 927.8'

Elev	Depth	Std. Pen. (ft)	Rec. ft.	Loss ft.	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
927.8	0														
	2														
	4														
922.8	6	5/3			Brown Gravelly Sandy Silt	1	17	7	11	28	37	22	7	18	A-4a
	8														
917.8	10	50* (0.7')			Brown Silty Gravelly Sand	2	38	36	13	-13-		NP	NP	9	A-1-b
	12														
	14														
912.8	16	18/23			Brownish-Gray Gravelly Sandy Clay	3	16	7	20	20	37	30	16	13	A-6b
	18														
907.8	20	26/30			Gray Gravelly Sandy Silt	4	21	9	15	23	32	22	8	10	A-4a
	22														
	24														
902.8	26	27/38			Gray Gravelly Sandy Silt with Boulders	5	18	12	18	28	24	17	6	10	A-4a
	28														
897.8	30	50* (0.7')			Brown Gravelly Sand	6	22	16	59	-3-		NP	NP	11	A-3
	32														
892.8	34	50* (0.8')			Brown Silty Gravelly Sand	7	29	24	31	-16-		NP	NP	11	A-1-b
	36														
887.8	38														
	40	50/*			Brown Silty Gravelly Sand	8	28	35	24	-13-		NP	NP	9	A-1-b
	42														
882.8	44														
	46	36/44			Brown Silty Gravelly Sand	9	25	43	21	-11-		NP	NP	11	A-1-b
	48														
877.8	50														
	52	25/34			Brown Silty Sand	10	8	50	23	-19-		NP	NP	13	A-1-b
	54														
872.8	56														
871.8		22/31			Brown Silty Sand	11	6	25	49	-20-		NP	NP	17	A-3a

*Refusal

BOTTOM OF BORING

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  X = Number of Blows for First 6 inches.
  Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Weathered Shale
- Siltstone, Mudstone, or Shale
- Boulders or Cobbles
- Weathered Sandstone

LOG OF BORING

Date Started 7-10-69 — Sampler Type SS — Dia 1 3/8" — Water Elev ———
Date Completed 7-15-69 — Casing Length 55' — Dia 3 1/2"
Boring No B-8 — Station & Offset 20+91, 6' Rt. (Forward Pier) — Surface Elev 931.7'

Elev	Depth	Std. Pen. (ft)	Rec. ft.	Loss ft.	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
931.7	0														
	2														
	4														
926.7	6	6/10			No Sample Recovered-Sand and Gravel (Driller's Description)		V	I	S	U	A	L			
	8														
921.7	10	7/3			Brown Silty Gravelly Sand	1	33	29	15	13	10	NP	NP	10	Visual
	12														
	14														
916.7	16	17/20			Gray Sandy Silt	2	12	12	20	31	25	16	4	10	A-4a
	18														
911.7	20	19/13			Gray Gravelly Sandy Silt	3	16	13	18	31	22	17	5	10	A-4a
	22														
	24														
906.7	26	19/21			Grey Sandy Gravelly Silt	4	27	10	15	26	22	18	6	11	A-4a
	28														
901.7	30	32/*			Brown Gravelly Sandy Silt	5	17	14	20	31	18	NP	NP	11	Visual
	32														
896.7	34	30/*			Brown Silty Sandy Gravel	6	48	22	8	-22-		NP	NP	11	A-1-b
	36														
891.7	38														
	40	30/*			Brown Silty Gravelly Sand	7	33	45	9	-13-		NP	NP	12	A-1-b
	42														
886.7	44														
	46	37/*			Brown Gravelly Silt	8	44	32	18	-6-		NP	NP	10	A-1-b
	48														
881.7	50														
	52	30/*			Brown Silty Gravelly Sand	9	20	41	19	-20-		NP	NP	9	A-1-b
	54														
876.7	56														
876.2		33/*			Brown Silty Sand	10	13	49	23	-15-		NP	NP	11	A-1-b

*Refusal

BOTTOM OF BORING

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of High-ways, Bureau of Bridges, on the basis of correlation study of rod penetration with past perform-ance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is ad-vanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on lab-oratory tests and the Casagrande AC classification system-and gradation, plasticity, and moist-ure content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
		2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)	0.074mm (No. 200 sieve)		
12"	3"				0.005mm	

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

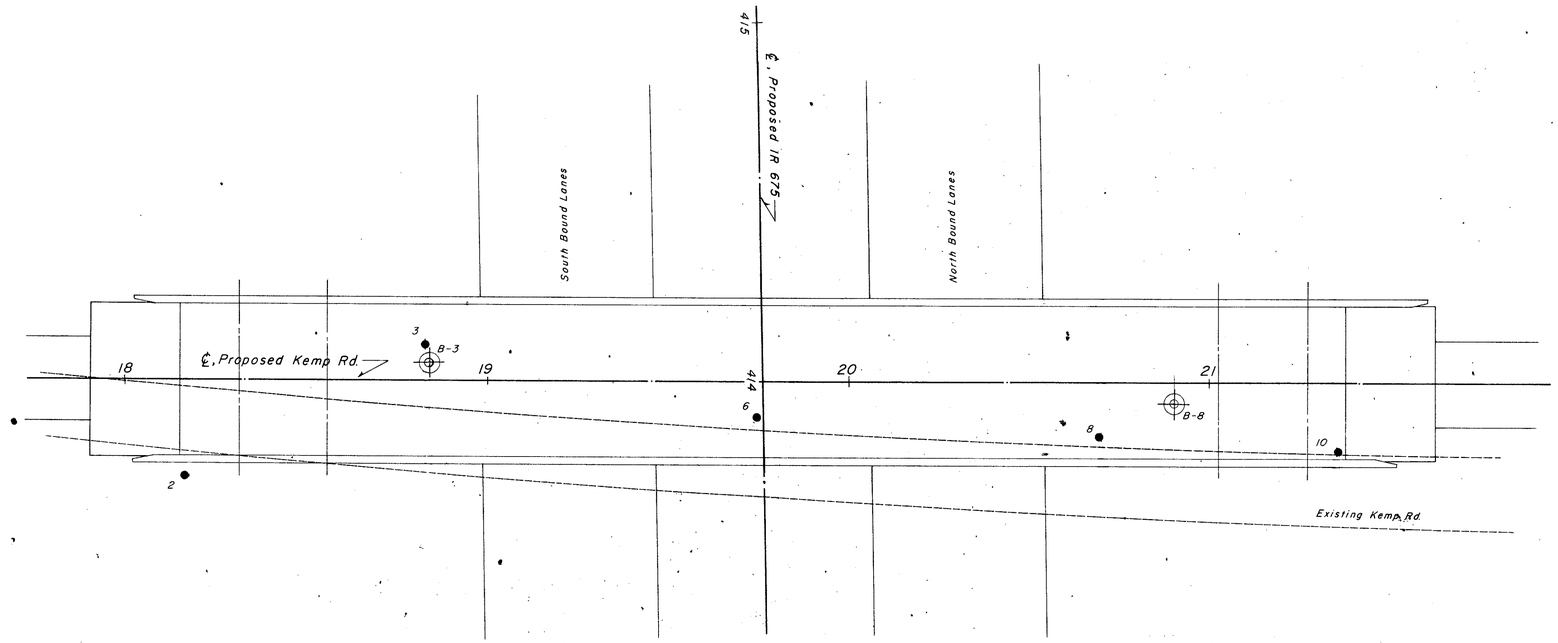
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0737
UNDER KEMP ROAD
SEC. GRE-675-5.37

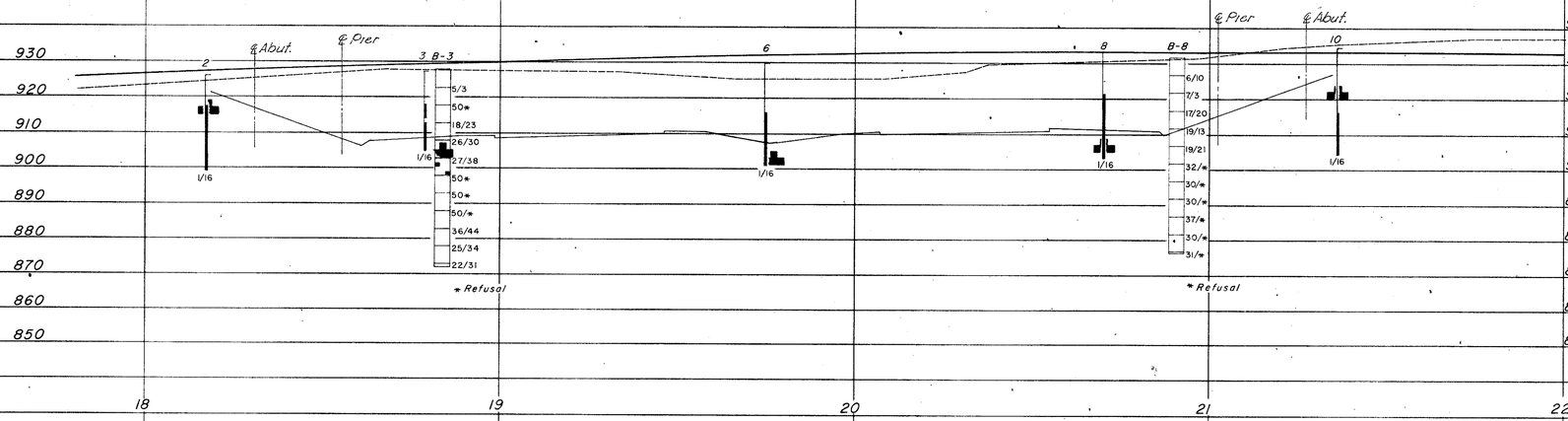
CHECKED BY	REVIEWED BY	DATE
R.C.	R.D.R.	9/18/69

IE - 119
1000 - 4 - 66

37
49
2
3

GRE-675-5.37





SCALE: 1" = 20'

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

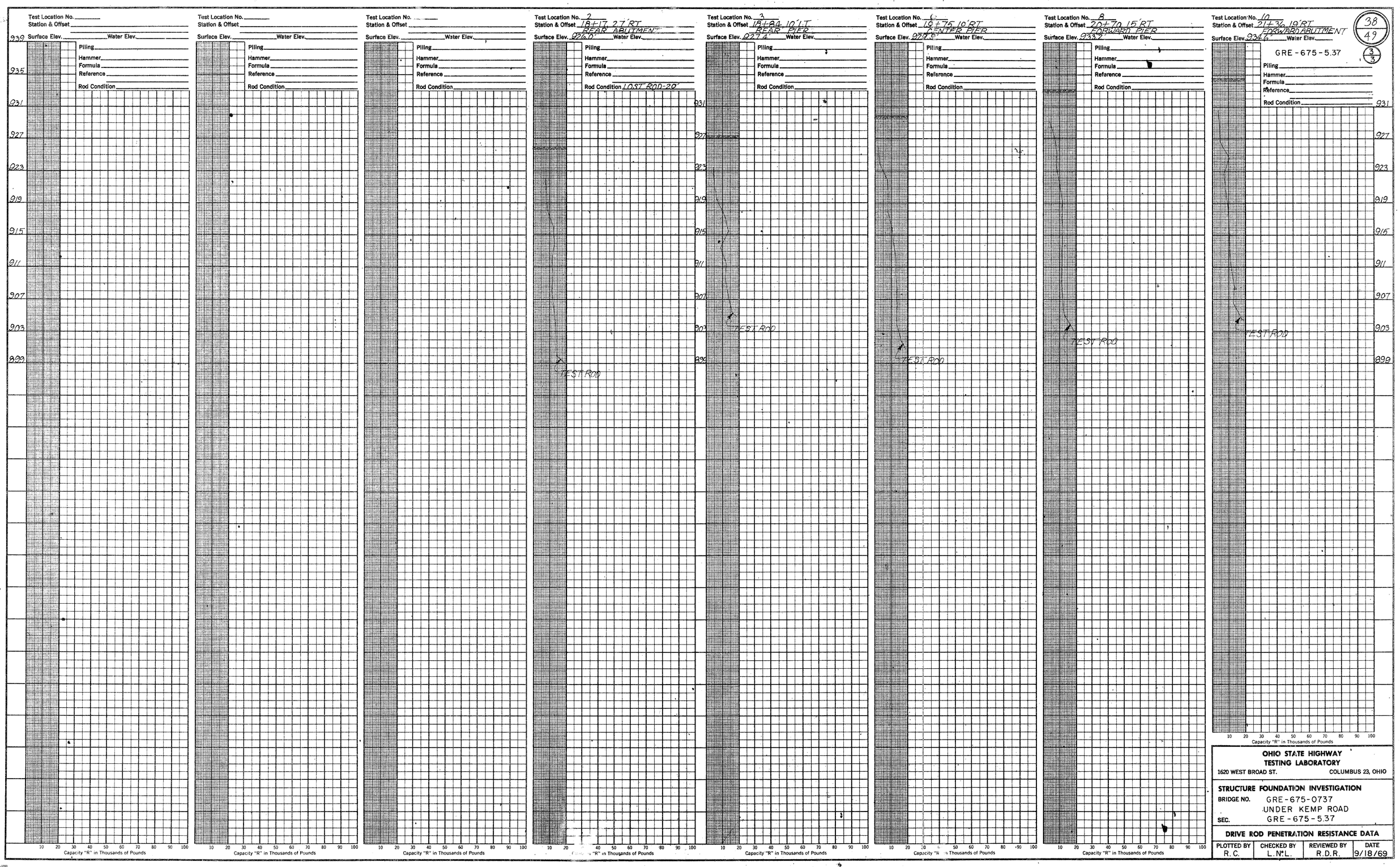
STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0737
UNDER KEMP ROAD

SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
L.L.L.	L.N.L.	R.D.R.	9/18/69



OHIO STATE HIGHWAY TESTING LABORATORY

1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-675-0737
UNDER KEMP ROAD
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	L.N.L.	R.D.R.	9/18/69

TE - 1 1 8
600 - 12 - 68

GREENE COUNTY
GRE - 675 - 5.37

39
49
1
4

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 24 AND AUGUST 5, 1969.

INVESTIGATIONAL FINDINGS

BORINGS DISCLOSED LOOSE TO VERY DENSE SILTS, SANDS AND GRAVELS TO 56-FOOT DEPTHS, ELEVATIONS 875 AND 870 FEET, WHERE THE BORING WAS TERMINATED AFTER PENETRATING AT LEAST 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING (OCCASIONALLY ERRATIC) RESISTANCE WITH INCREASING DEPTH, AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 32 TO 45-FOOT DEPTHS, ELEVATIONS 897 TO 877 FEET, CONSIDERED TO BE IN DENSE SANDS, SILTS AND GRAVELS, AS REVEALED BY THE BORINGS.

FREE WATER WAS NOT OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test. X = Number of Blows for First 6 inches. Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

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		No. 10 sieve	No. 40 sieve	No. 200 sieve		

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OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0009
OVER DAYTON-XENIA ROAD
SEC. GRE-675-5.37

CHECKED BY	REVIEWED BY	DATE
L.N.L.	R.D.R.	8/27/69

TE - 122
600 - 4 - 66

GRE - 675 - 5.37

40/49

2/4

LOG OF BORING

Date Started 7-24-69 | Sampler Type SS | Dia 1 3/8"
Date Completed 7-28-69 | Casing Length 35' | Dia 3 1/2"
Boring No B-9 | Station & Offset 6+22, 78' Lt. (Forward Pier)

Water Elev —
Surface Elev 930.7'

Elev	Depth	Std Pen (N)	Rec ft.	Loss ft.	Description	Sample No	% Agg	% G	% S	% Silt	% Clay	L L	P I	W C	SHTL Class.
930.7	0				Topsoil										
930.2	2														
	4														
925.7	6	11/14			Brown Gravelly Sandy Silt	1	23	9	16	26	26	19	7	13	A-4a
	8														
920.7	10	9/8			Brown Gravelly Sandy Silt	2	15	7	16	32	30	18	5	14	A-4a
	12														
	14														
915.7	16	13/17			Gray Gravelly Sandy Silt	3	20	8	15	31	26	18	6	12	A-4a
	18														
910.7	20	20/35			Brown Silty Gravelly Sand	4	33	19	18	20	10	NP	NP	10	A-3a
908.2	22				Brown Silty Sand, Wash Sample (Heaved in Casing 2')	5	0	74	13	-13	-	NP	NP	24	A-1-a
905.7	24	17/22			Brown Silty Sandy Gravel	6	44	22	17	-17	-	NP	NP	11	A-1-b
903.2	26				Brown Silty Sand, Wash Sample (Heaved in Casing 2')	7	0	52	35	-13	-	NP	NP	25	A-1-b
900.7	28	14/16			Gray Gravel	8	86	13	1	0	0	NP	NP	9	A-1-a
898.2	30				Brown Gravelly Sand, Wash Sample (Heaved in Casing 2')	9	22	70	7	- 1	-	NP	NP	9	A-1-a
895.7	32	17/24			Gray Silt	10	0	1	3	60	36	NP	NP	18	A-4b
893.2	34	19/26			Gray Silt	11	0	2	3	70	25	NP	NP	15	A-4b
890.7	36	17/20			Gray Clayey Silt	12	0	1	2	62	35	22	8	17	A-4b
	38														
885.7	40	17/20			Gray Silt	13	0	0	1	59	40	21	6	17	A-4a
	42														
880.7	44	17/35			Gray Clayey Silt	14	0	0	3	47	50	26	10	21	A-4b
875.7	46														
874.7	48	17/28			Gray Silt	15	10	0	3	62	25	NP	NP	17	A-4a

BOTTOM OF BORING

LOG OF BORING

Date Started 7-29-69 | Sampler Type SS | Dia 1 3/8"
Date Completed 7-30-69 | Casing Length 30' | Dia 3 1/2"
Boring No B-3 | Station & Offset 5+05, 76' Lt. (Rear Abutment)

Water Elev —
Surface Elev 926.0'

Elev	Depth	Std Pen (N)	Rec ft.	Loss ft.	Description	Sample No	% Agg	% G	% S	% Silt	% Clay	L L	P I	W C	SHTL Class.
926.0	0				Topsoil										
925.5	2														
	4														
921.0	6	11/12			Brown Sandy Gravelly Silt	1	25	8	16	29	22	22	6	12	A-4a
	8														
916.0	10	12/15			Brown Sandy Gravelly Silt	2	40	8	12	19	21	19	7	11	A-4a
	12														
	14														
911.0	16	2/4			Brown Silty Sandy Gravel	3	47	11	23	10	9	NP	NP	15	A-1-b
	18														
906.0	20	8/4			Brown Silty Gravelly Sand	4	26	11	46	6	11	NP	NP	22	A-3a
903.5	22	6/6			Brown Silty Sandy Gravel	5	41	20	19	8	12	NP	NP	13	A-1-b
901.0	24	19/21			Brown Sandy Gravel	6	59	23	12	- 6	-	NP	NP	10	A-1-a
898.5	26	17/18			Brown Gravelly Sand	7	42	48	8	- 2	-	NP	NP	12	A-1-b
896.0	28	15/16			Gray Gravelly Silt	8	18	2	3	49	28	22	6	18	A-4a
893.5	30	17/19			Gray Gravelly Silt	9	15	3	4	50	28	22	6	17	A-4b
891.0	32	15/17			Gray Silt	10	6	1	1	68	24	NP	NP	19	A-4b
888.5	34	15/17			Gray Gravelly Silt	11	22	2	0	49	27	23	6	17	A-4a
886.0	36	24/25			Gray Silt	12	0	0	0	62	38	23	5	18	A-4b
	38														
881.0	40	21/22			Gray Silt	13	0	0	0	64	36	23	6	15	A-4b
	42														
876.0	44	19/22			Gray Silty Sand	14	8	7	70	13	2	NP	NP	20	A-3a
871.0	46														
870.0	48	20/26			Gray Silty Sand	15	5	2	70	12	11	NP	NP	19	A-3a

BOTTOM OF BORING

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0009
OVER DAYTON-XENIA RD.
SEC. GRE-675-5.37

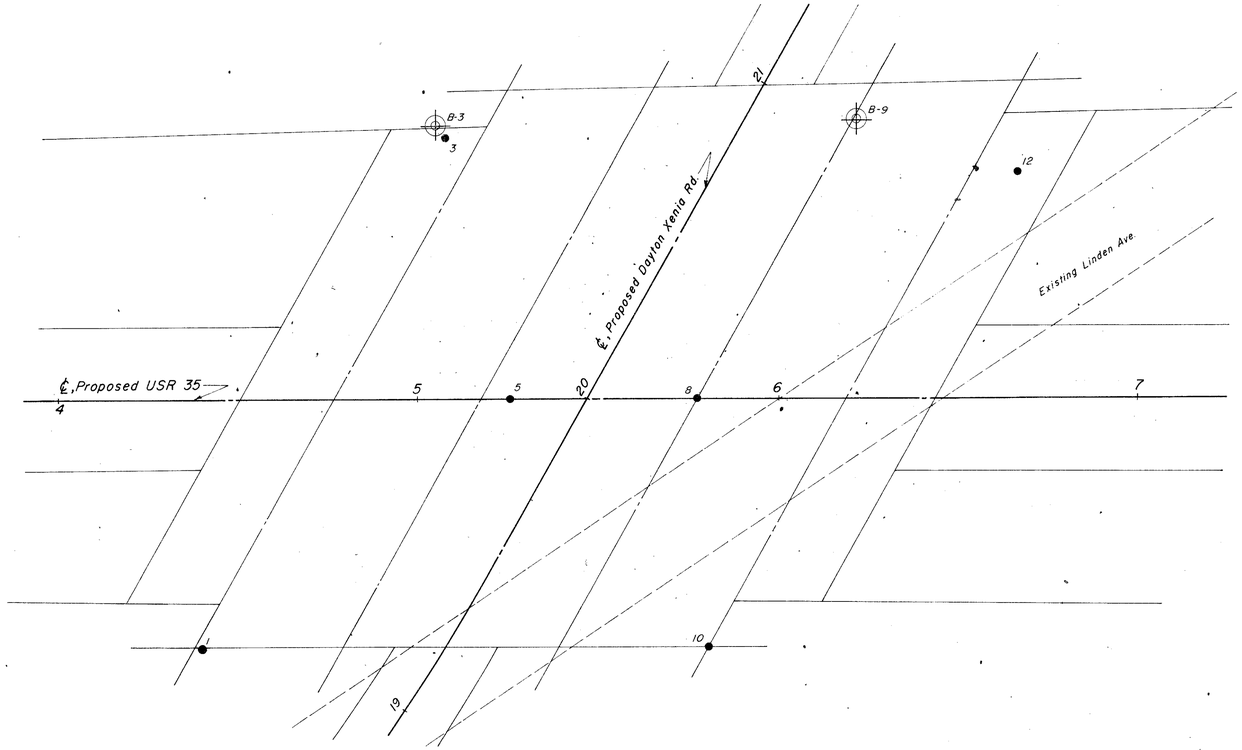
BORING DATA

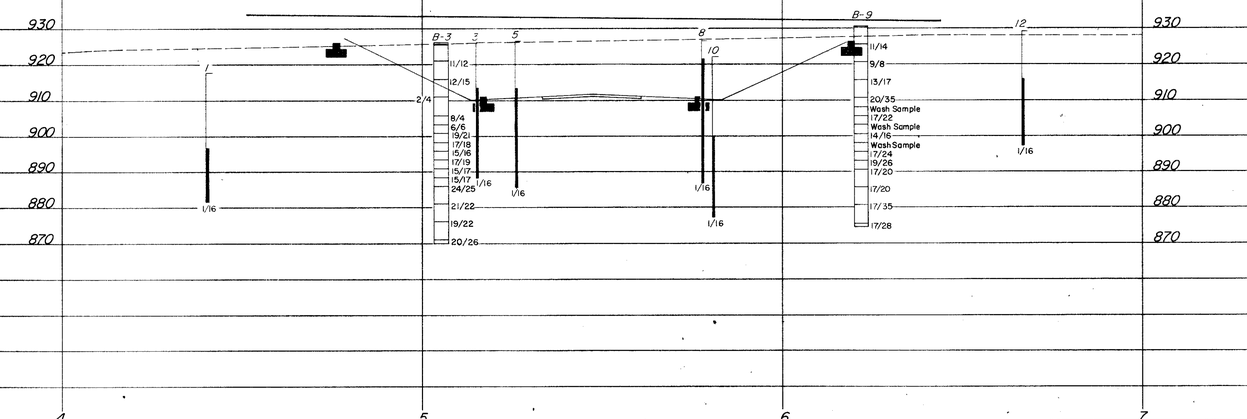
TYPED BY	CHECKED BY	REVIEWED BY	DATE
S.A.J.	L.N.L.	R.D.R.	8/27/69

TE - 119
1000 - 4 - 66

41
49

GRE-675-5.37 3/4





SCALE: 1" = 20'

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0009
OVER DAYTON-XENIA ROAD
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
J.E.C.	L.N.L.	R.D.R.	8/27/69

GRE-35-5.37

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. ____
Station & Offset ____
Surface Elev. ____ Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition ____

Test Location No. 1
Station & Offset 4+40, 69' RT. REAR ABUTMENT
Surface Elev. 917.7' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

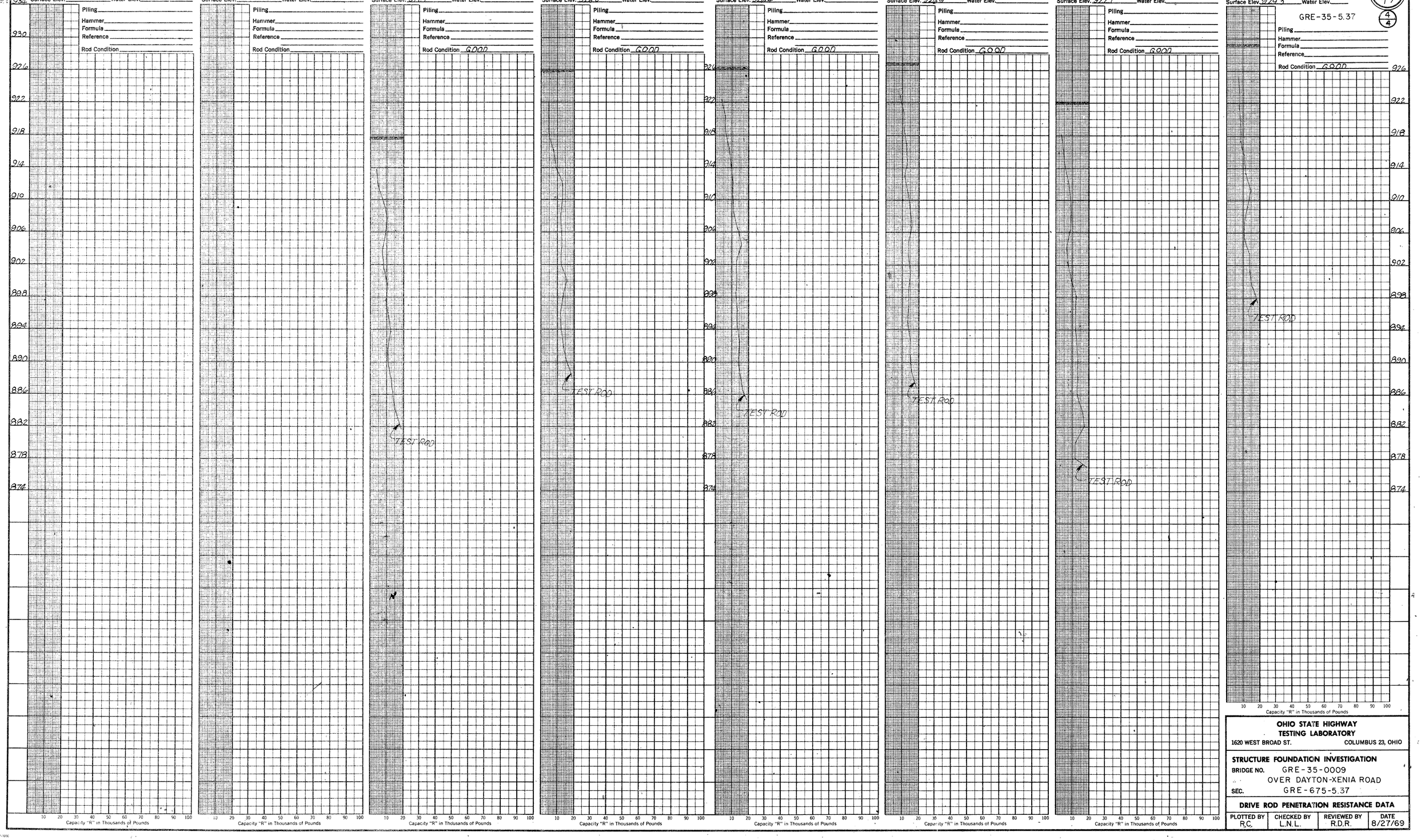
Test Location No. 3
Station & Offset 5+08, 73' LT. REAR ABUTMENT
Surface Elev. 926.0' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 5
Station & Offset 5+26, C.L. REAR PIER
Surface Elev. 926.4' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 8
Station & Offset 5+78, C.L. FORWARD PIER
Surface Elev. 926.9' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 10
Station & Offset 5+81, 69' RT. FORWARD ABUTMENT
Surface Elev. 922.1' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD

Test Location No. 12
Station & Offset 6+67, 63' LT. FORWARD ABUTMENT
Surface Elev. 929.3' Water Elev. ____
Piling ____
Hammer ____
Formula ____
Reference ____
Rod Condition GOOD



OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0009
OVER DAYTON-XENIA ROAD
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	L.N.L.	R.D.R.	8/27/69

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS, MADE BETWEEN JULY 15 AND 17, 1969, AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN SEPTEMBER 3 AND 9, 1969.

INVESTIGATIONAL FINDINGS

THE BORINGS ENCOUNTERED UNSTRATIFIED INTERVALS OF VERY DENSE GRAVELS, SANDS AND SILTS WITH SOME COBBLES. THE BORINGS WERE TERMINATED AT 31 AND 56-FOOT DEPTHS, ELEVATIONS 864 AND 840 FEET, AFTER PENETRATING IN EXCESS OF 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE TO PENETRATION AT 45 TO 53-FOOT DEPTHS, ELEVATIONS 849 TO 841 FEET, CONSIDERED TO BE IN VERY DENSE GRAVELS, SANDS AND SILTS, AS REVEALED BY BORING B-10.

NO FREE WATER OBSERVATIONS WERE MADE IN ANY OF THE ROD SOUNDING HOLES.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test. X = Number of Blows for First 6 inches. Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone

LOG OF BORING

Date Started 7-17-69 | Sampler Type SS | Dia 1 3/8" | Water Elev —
Date Completed 7-17-69 | Casing Length 30' | Dia 3 1/2"
Boring No B-5 | Station & Offset 330+70, 35' Lt. (2nd Pier) | Surface Elev 895.5'

Elev.	Depth	Std. Pen. (N)	Rec ft.	Loss ft.	Description	Sample No	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
895.5	0														
	2														
	4														
890.5	6	23/33			Brown Gravelly Sandy Silt with Cobbles	1	-	-	-	-	-	24	11	22	Visual
888.0	8	17/17			Brown Gravelly Sandy Silt	2	15	9	18	34	24	18	6	11	A-4a
885.5	10	10/29			Brown Gravelly Sandy Silt	3	21	15	17	22	25	17	5	15	A-4a
	12														
	14														
880.5	16	22/30			Brown Gravelly Sandy Silt	4	16	14	22	26	22	NP	NP	11	A-4a
	18														
875.5	20	18/23			Brown Silty Sandy Gravel	5	45	20	19	-16-		NP	NP	12	A-1-b
	22														
	24														
870.5	26	18/17			Gray Sandy Silt	6	0	2	42	34	22	NP	NP	20	A-4a
	28														
865.5	30														
864.5		14/17			Gray Silty Sand	7	9	33	24	-34-		NP	NP	19	A-3a

BOTTOM OF BORING

LOG OF BORING

Date Started 7-15-69 | Sampler Type SS | Dia 1 3/8" | Water Elev —
Date Completed 7-17-69 | Casing Length 50' | Dia 3 1/2"
Boring No B-10 | Station & Offset 331+75, 24' Rt. (Fourth Pier) | Surface Elev 896.0'

Elev	Depth	Std. Pen. (N)	Rec ft.	Loss ft.	Description	Sample No	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
896.0	0														
	2														
	4														
891.0	6	2/5			Gray Gravelly Sandy Clay	1	19	11	20	22	28	25	11	26	A-6a
888.5	8	7/8			Brown Sandy Silt	2	11	12	16	24	37	21	7	14	A-4a
886.0	10	13/14			Brown Sandy Silt	3	9	20	23	21	18	NP	NP	11	A-4a
	12														
	14														
881.0	16	15/19			Brown Gravelly Sandy Silt	4	18	13	21	28	20	NP	NP	11	A-4a
	18														
876.0	20	13/15			Brown Silty Sand	5	0	44	36	-20-		NP	NP	22	A-3a
	22														
	24														
871.0	26	20/22			Gray Silty Sand	6	7	27	49	-17-		NP	NP	17	A-3a
	28														
866.0	30	17/22			Gray Silty Sand	7	0	17	73	-10-		NP	NP	14	A-3
	32														
	34														
861.0	36	19/28			Gray Gravelly Sandy Silt	8	17	9	19	23	32	18	5	14	A-4a
	38														
856.0	40														
	42	50* (0.4')			Gray Sandy Gravel with Cobbles	9	56	31	11	-2-		NP	NP	7	A-1-a
	44														
851.0	46	16/30			Gray Clayey Silt	10	0	3	7	45	45	21	7	15	A-4a
	48														
846.0	50	50* (0.7')			Gray Gravelly Silt	11	14	2	6	40	38	21	7	20	A-4a
	52														
	54														
841.0															
840.0	56	17/19			Gray Clayey Silt	12	0	2	7	45	46	23	9	15	A-4a

*Refusal

BOTTOM OF BORING

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler; at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system-and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0mm (No. 10 sieve)	0.42mm (No. 40 sieve)	0.074mm (No. 200 sieve)	0.005mm	

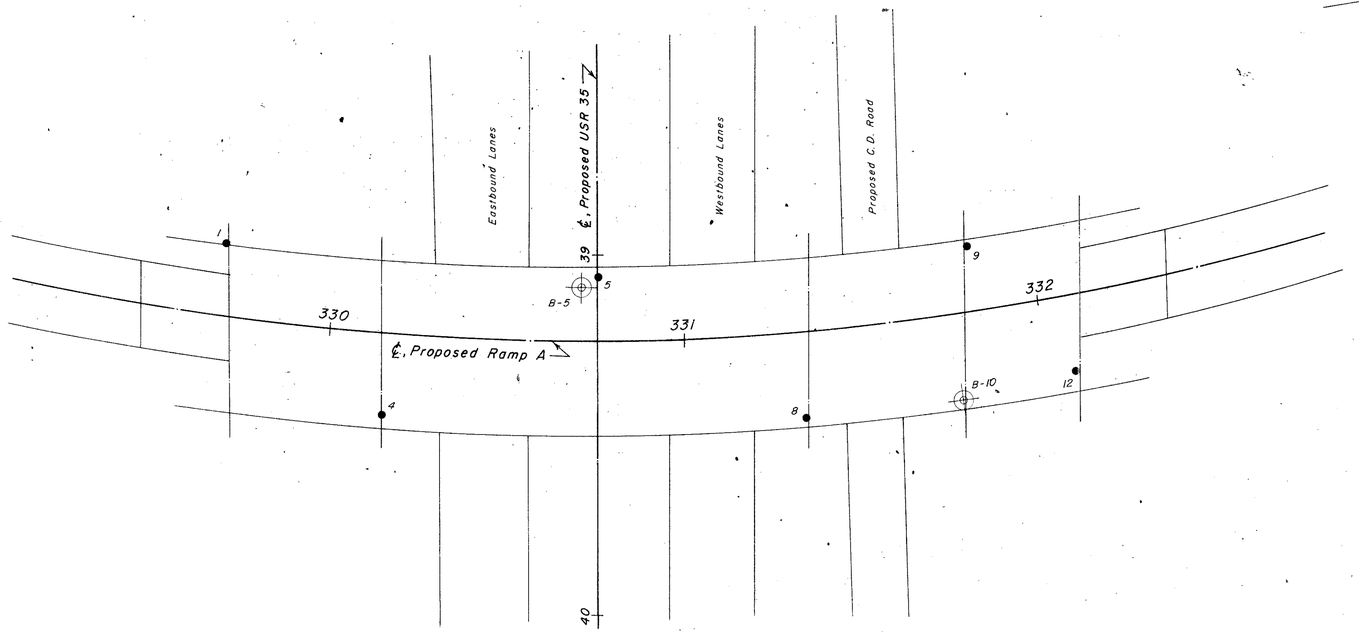
NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

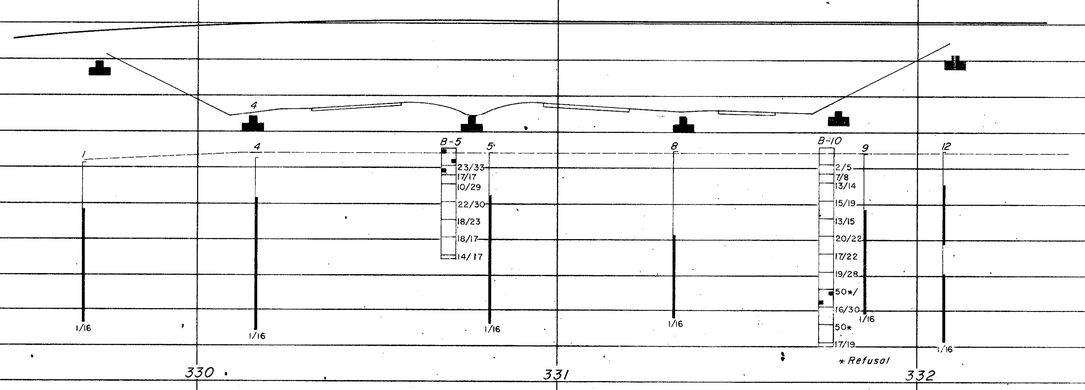
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0074
UNDER RAMP 'A'
SEC. GRE-675- 5.37

CHECKED BY	REVIEWED BY	DATE
R. C.	R. D. R.	9/18/69

TE - 119
1000 - 4 - 66





SCALE: 1" = 20'

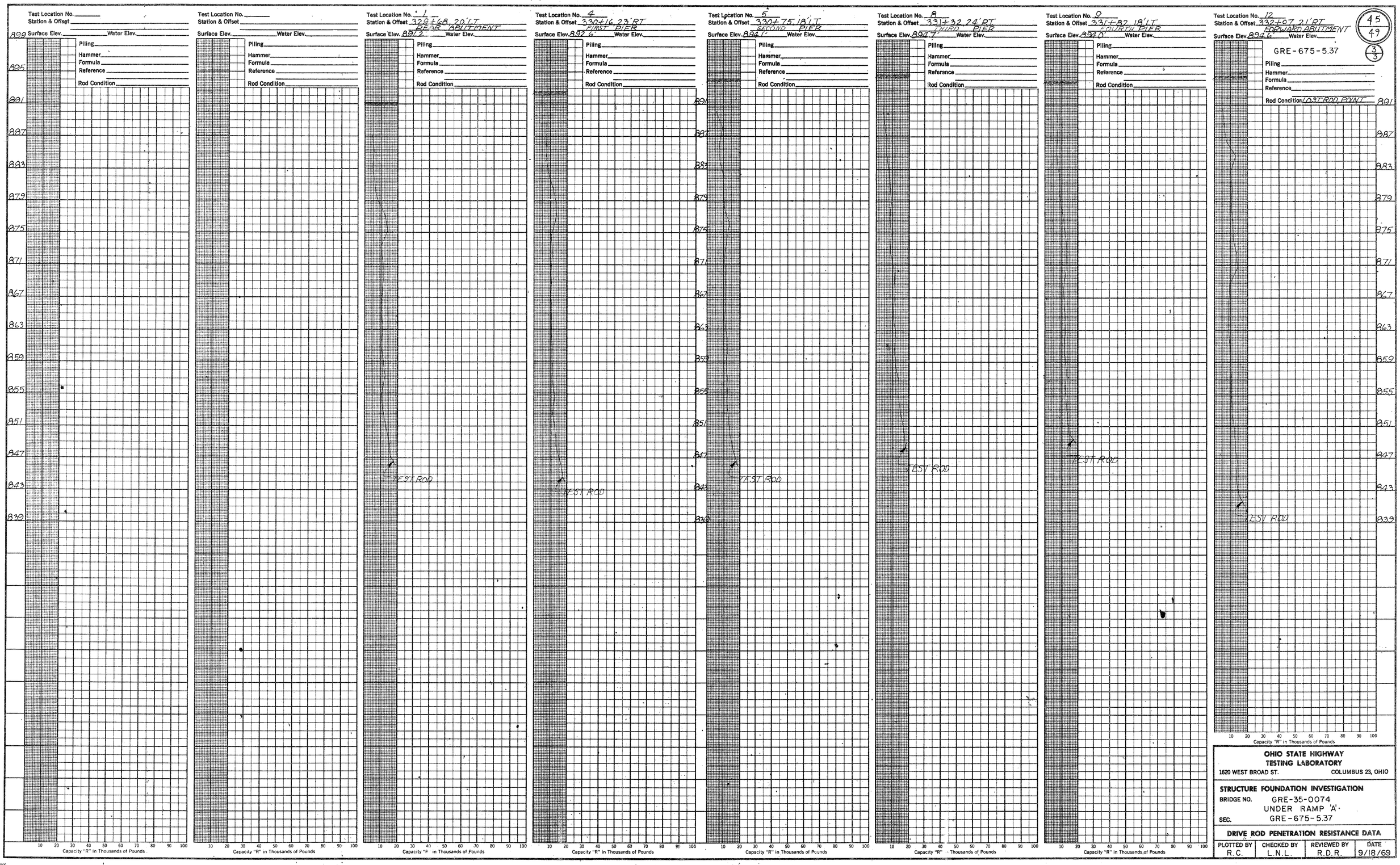
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-35-0074
UNDER RAMP 'A'
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
L.L.L.	L.N.L.	R.D.R.	9/18/69



OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0074
UNDER RAMP 'A'
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	L.N.L.	R.D.R.	9/18/69

TE - 1 1 8
600 - 12 - 68

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE DISSECTED WISCONSIN TILL PLAINS, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND SEVEN DRIVE ROD PENETRATION TESTS, MADE BETWEEN MAY 8 AND 23, 1969.

INVESTIGATIONAL FINDINGS

BORINGS ENCOUNTERED UNSTRATIFIED INTERVALS OF DENSE AND VERY DENSE SANDY SILTS AND GRAVELS WITH SOME COBBLES TO APPROXIMATELY 26-FOOT DEPTH, ELEVATION 867 FEET; BELOW THIS, VERY DENSE SILTS AND STIFF CLAYS. THE BORINGS WERE TERMINATED AT 61 AND 71-FOOT DEPTHS, ELEVATIONS 830 AND 821 FEET, AFTER PENETRATING IN EXCESS OF 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH, AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE AND REFUSAL TO PENETRATION AT 29 TO 52-FOOT DEPTHS, ELEVATIONS 860 TO 838 FEET, CONSIDERED TO BE IN VERY DENSE SILTS OR STIFF CLAYS, AS REVEALED BY THE BORINGS.

NO FREE WATER WAS OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- TR — Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y — Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
  X = Number of Blows for First 6 inches.
  Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z — Indicates Final Measurement of Penetration, in Inches.
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

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The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

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OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

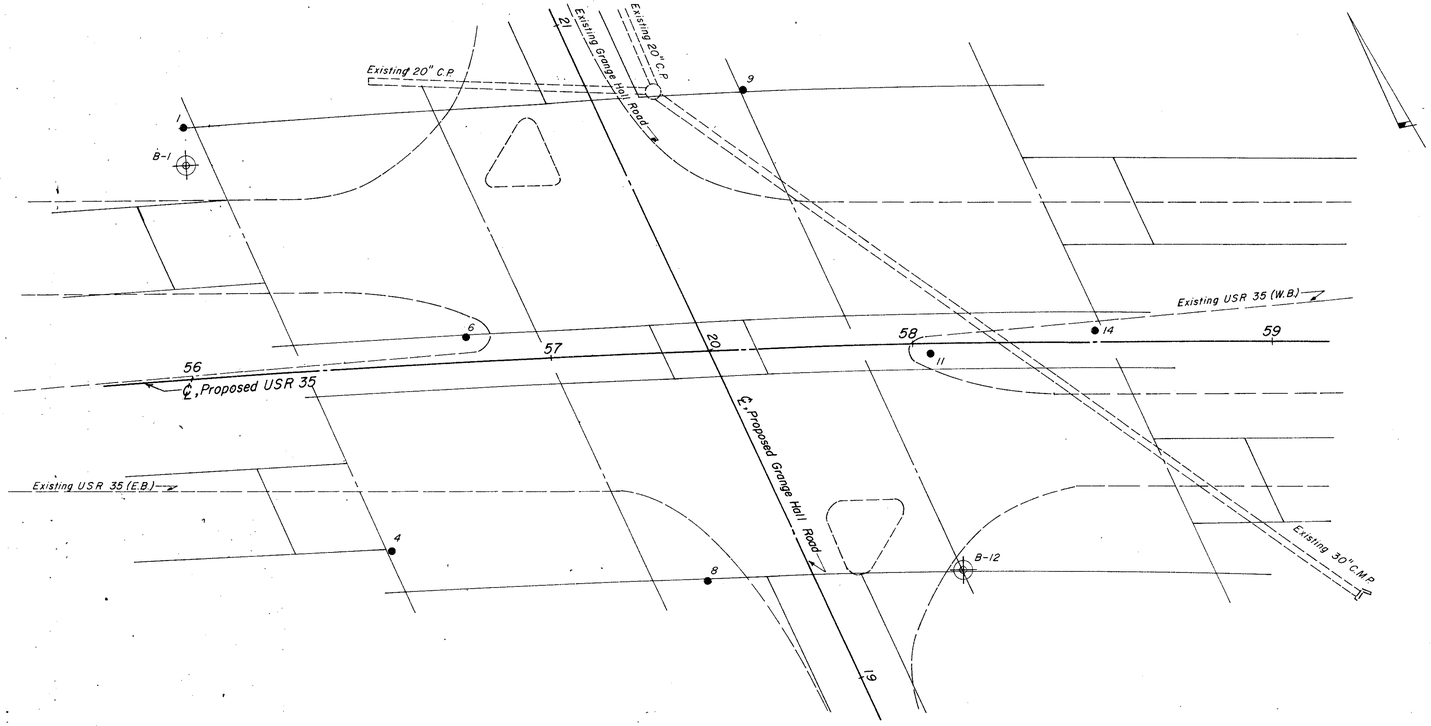
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0107 L/R
OVER GRANGE HALL ROAD
SEC. GRE-675-5.37

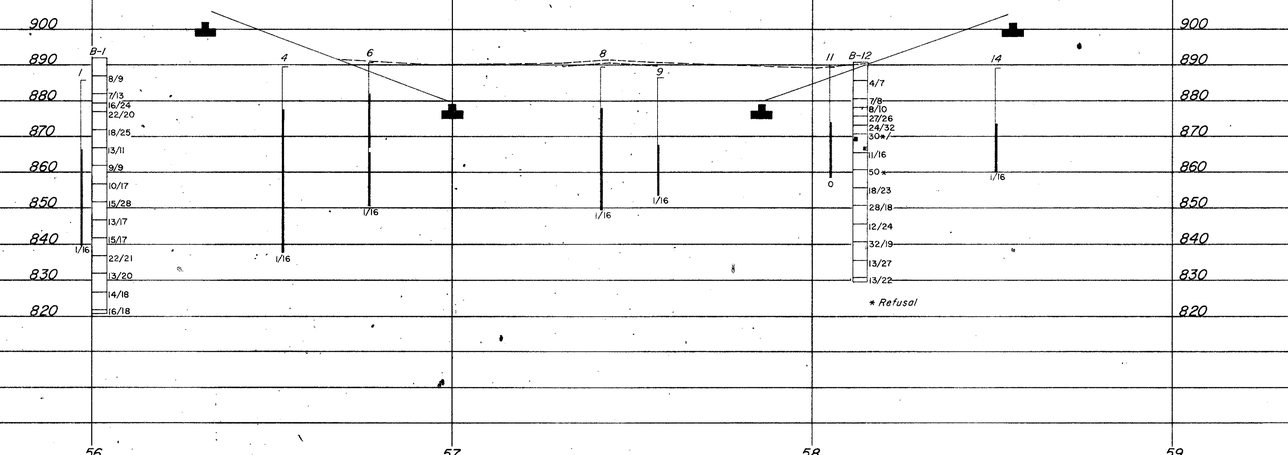
CHECKED BY	REVIEWED BY	DATE
R.D.R.	G.P.H.	6/5/69

TE - 119
00 - 4 - 66

47/49

GRE-675-5.37 2/4





SCALE: 1" = 20'

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0107 L/R
OVER GRANGE HALL ROAD
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
J.E.C.	R.D.R.	G.P.H.	6/5/69

TE - 122
600 - 4 - 66

LOG OF BORING

Date Started 5-13-69 | Sampler Type SS | Dia 1 3/8" | Water Elev
Date Completed 5-14-69 | Casing, Length | Dia
Boring No B-1 | Station & Offset 56+02, 60' Lt. (Rear Abutment) | Surface Elev 892.0'

Elev.	Depth	Std. Pen. (ft)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics: % Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
892.0	0														
	2														
	4														
887.0	6	8/9			Brown Gravelly Sandy Silt	1	20	8	17	25	30	23	9	16	A-4a
	8														
882.0	10	7/13			Brown Sandy Gravelly Silt	2	33	9	18	20	20	26	7	10	A-4a
879.5	12	16/24			Brown Silty Gravelly Sand	3	28	19	22	14	17	NP	NP	11	A-2-4
877.0	14	22/20			Brown Silty Sandy Gravel	4	54	20	9	17	-	NP	NP	8	A-1-b
	16														
872.0	18	18/25			Brown Silty Sandy Gravel	5	50	24	11	15	-	NP	NP	8	A-1-a
	20														
867.0	22	13/11			Gray Silty Sandy Gravel	6	38	8	16	18	20	18	4	13	A-4a
	24														
862.0	26	9/9			Gray Sandy Silt	7	6	5	12	35	42	21	6	16	A-4a
	28														
857.0	30	10/17			Gray Clayey Silt	8	0	1	3	37	59	23	7	17	A-4a
	32														
852.0	34	15/28			Gray Sandy Silt	9	8	6	9	33	44	21	7	19	A-4a
	36														
847.0	38	13/17			Gray Silt and Clay	10	0	0	1	26	73	30	12	25	A-6a
	40														
842.0	42	15/17			Gray Silt and Clay	11	0	1	1	19	79	33	13	24	A-6a
	44														
837.0	46	22/21			Gray Silt	12	0	0	0	60	40	NP	NP	22	A-4b
	48														
832.0	50	13/20			Gray Silt	13	0	0	1	43	56	NP	NP	19	A-4a
	52														
827.0	54	14/18			Gray Clayey Silt	14	0	1	2	41	56	23	7	20	A-4a
	56														
822.0	58	16/18			Gray Clayey Silt	15	0	0	1	50	49	23	9	19	A-4b
821.0	60				BOTTOM OF BORING										

LOG OF BORING

Date Started 5-8-69 | Sampler Type SS | Dia 1 3/8" | Water Elev
Date Completed 5-13-69 | Casing, Length 35' | Dia 3 1/2"
Boring No B-12 | Station & Offset 58+13, 63' Rt. (Forward Pier) | Surface Elev 890.8'

Elev.	Depth	Std. Pen. (ft)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics: % Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	SHTL Class.
890.8	0														
	2														
	4														
885.8	6	4/7			Brown Gravelly Silt	1	14	2	4	43	37	34	14	28	A-6a
	8														
880.8	10	7/8			Brown Sandy Gravelly Silt	2	35	9	14	17	25	22	9	15	A-4a
878.3	12	8/10			Brown Gravelly Sandy Silt	3	19	11	19	29	22	19	7	13	A-4a
875.8	14	27/26			Brown Silty Gravel	4	53	4	8	21	14	-	-	11	-
873.3	16	24/32			Brown Silty Sandy Gravel	5	53	27	9	11	-	NP	NP	9	A-1-a
870.8	20	30"/(0.4')			Brown Silty Gravelly Sand with Cobbles	6	37	36	13	14	-	NP	NP	13	A-1-b
	22														
	24														
865.8	26	11/16			Gray Silty Gravelly Sand	7	24	38	16	8	14	21	8	12	A-2-4
	28														
860.8	30	50*/(0.6')			Gray Sandy Silt	8	12	2	46	31	9	NP	NP	16	A-4a
	32														
855.8	34														
	36	18/23			Gray Sandy Silt	9	14	7	15	37	27	21	7	13	A-4a
	38														
850.8	40														
	42	28/18			Gray Silt and Clay	10	0	2	5	42	51	25	11	16	A-6a
	44														
845.8	46	12/24			Gray Silt and Clay	11	5	3	2	42	48	28	11	17	A-6a
	48														
840.8	50	32/19			Gray Gravelly Clay	12	28	0	0	30	42	30	11	27	A-6a
	52														
	54														
835.8	56	13/27			Gray Silt and Clay	13	0	1	8	21	70	38	14	24	A-6a
	58														
830.8	60														
829.8		13/22			Brownish-Gray Gravelly Sandy Silt	14	19	8	16	34	23	20	5	18	A-4a
					BOTTOM OF BORING										

*Refusal

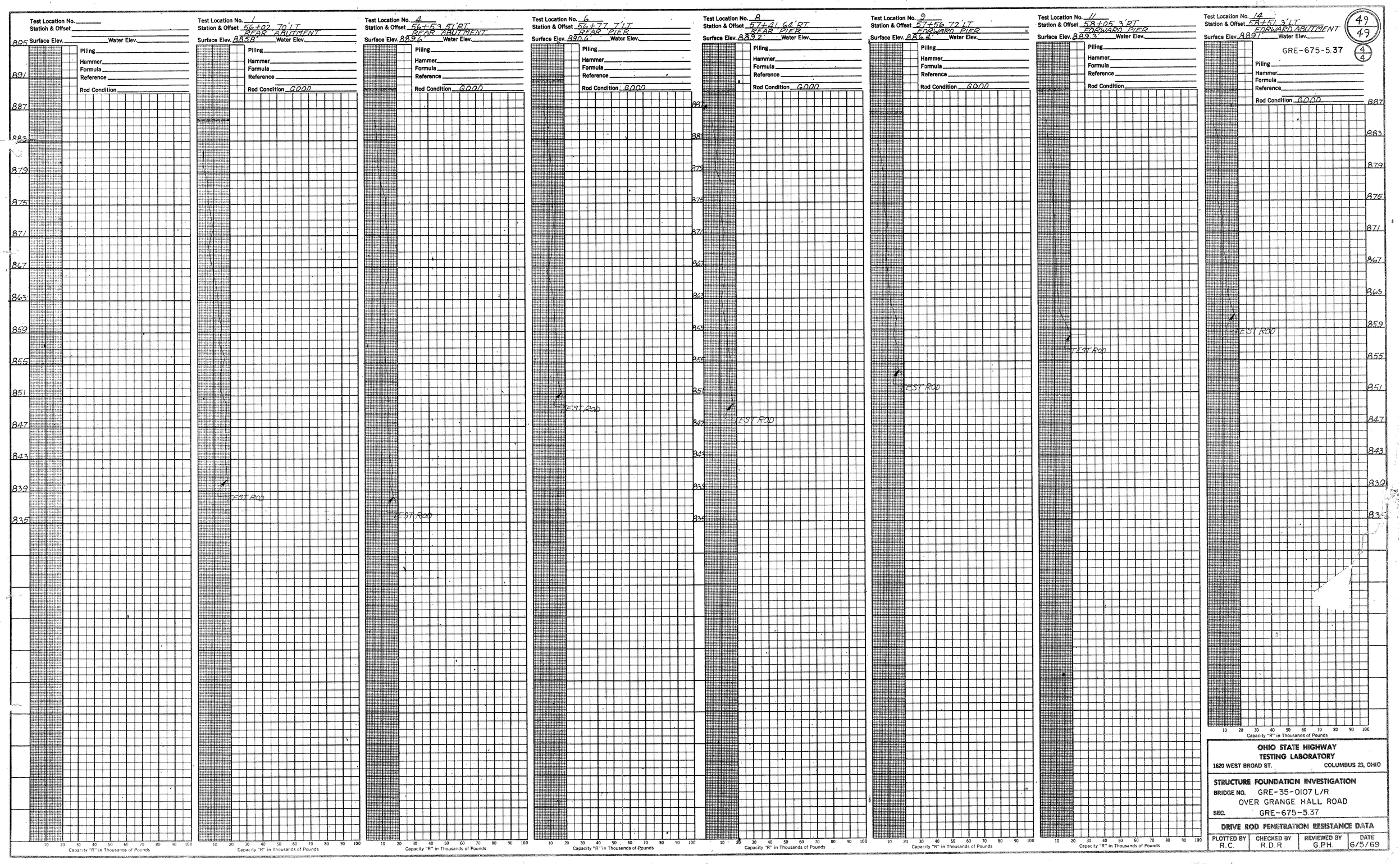
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0107 L/R
OVER GRANGE HALL ROAD
SEC. GRE-675-5.37

BORING DATA

TYPED BY	CHECKED BY	REVIEWED BY	DATE
S.A.J.	R.D.R.	G.P.H.	6/5/67

GRE-675-5.37 (4/4)



OHIO STATE HIGHWAY TESTING LABORATORY

1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. GRE-35-0107 L/R
OVER GRANGE HALL ROAD

SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY	CHECKED BY	REVIEWED BY	DATE
R.C.	R.D.R.	G.P.H.	6/5/69