

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
COLUMBUS EXPRESSWAY SYSTEM
FRA-62- 12.56 FRA-3- 13.70
CITY OF COLUMBUS & FRANKLIN TOWNSHIP
FRANKLIN COUNTY
MOUND - SANDUSKY EXPRESSWAY
AND A PORTION OF THE
SOUTHWEST FREEWAY

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS	251
2	OHIO	I-609		

I-609 (9)

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND - SANDUSKY EXPRESSWAY
FRA-62-(12.56) FRA-3-(13.70)

"LIMITED ACCESS"

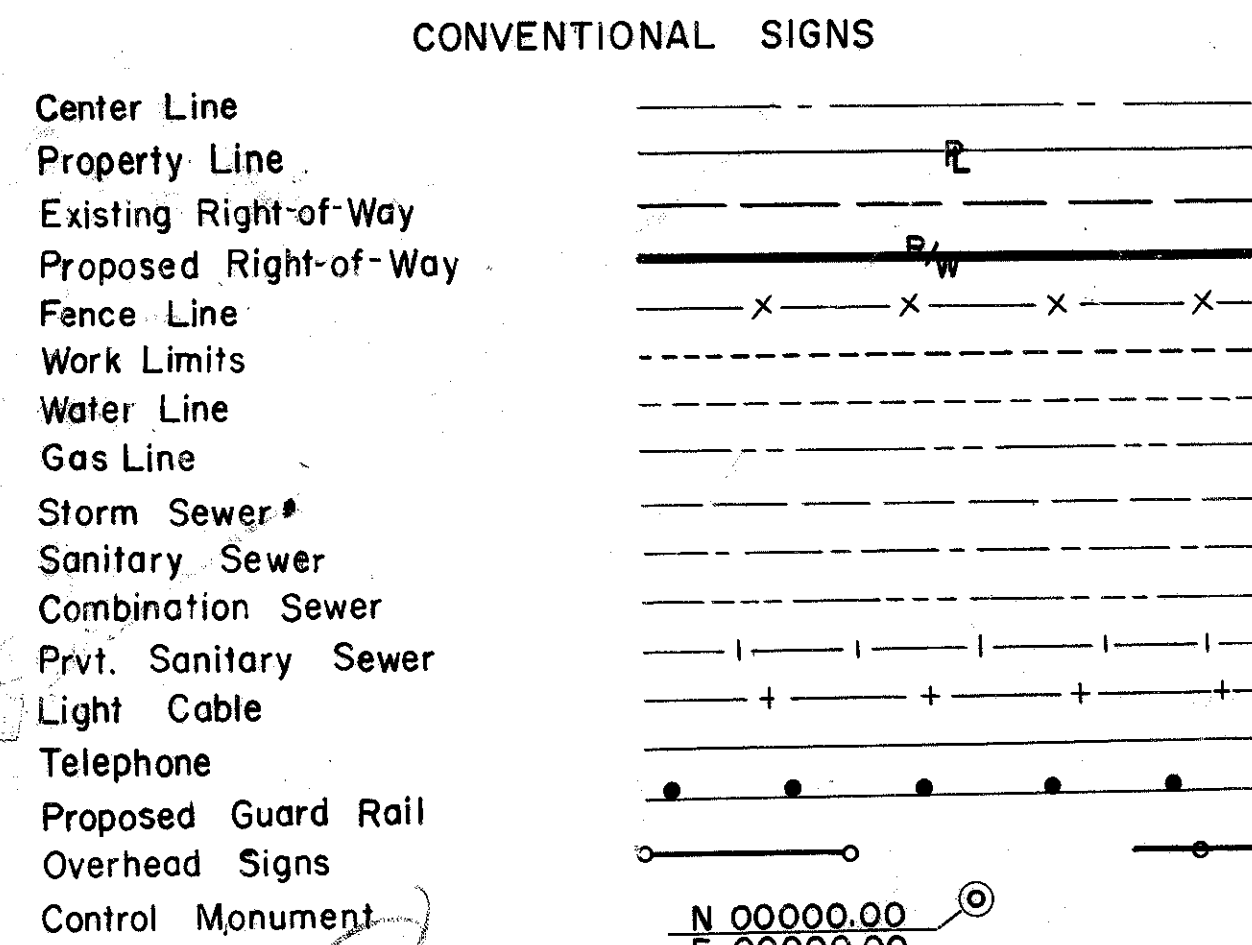
"This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director of Highways in accordance with provisions of Section 5511.02 of the Revised Code of Ohio."

The Standard Specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal, shall govern this improvement.

The Right of Way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic, except as noted on sheet 6, and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

APPROVED DATE 10-11-57 FRANKLIN COUNTY COMMISSIONER
APPROVED DATE 10-11-57 FRANKLIN COUNTY COMMISSIONER
APPROVED DATE 10-11-57 FRANKLIN COUNTY COMMISSIONER
APPROVED DATE 10-11-57 FRANKLIN COUNTY DEPUTY ENGINEER
APPROVED DATE 10-11-57 FRANKLIN COUNTY ENGINEER
APPROVED DATE 10-15-57 SUPT. DIVISION OF ELECTRICITY, CITY OF COLUMBUS
APPROVED DATE 10-15-57 CHIEF ENGINEER, DIVISION OF ENGR. & CONSTR., CITY OF COLUMBUS
APPROVED DATE 10-15-57 SUPT. DIVISION OF WATER, CITY OF COLUMBUS
APPROVED DATE 10-15-57 CHIEF ENGINEER DIVISION OF SEWERAGE & DRAINAGE, CITY OF COLUMBUS
APPROVED DATE 10-15-57 DIRECTOR OF PUBLIC SERVICE, CITY OF COLUMBUS
APPROVED DATE 10-16-57 DIVISION DEPUTY DIRECTOR
APPROVED DATE 10-29-57 DEPUTY DIRECTOR OF PLANNING & PROGRAMMING
APPROVED DATE 10-22-57 ENGINEER OF BRIDGES
APPROVED DATE 10-23-57 ENGINEER OF LOCATION & DESIGN
APPROVED DATE 10-23-57 DEPUTY DIRECTOR OF DESIGN & CONSTRUCTION
APPROVED DATE 10-23-57 FIRST ASSISTANT DIRECTOR
APPROVED DATE 10-23-57 ACTING DIRECTOR OF HIGHWAYS



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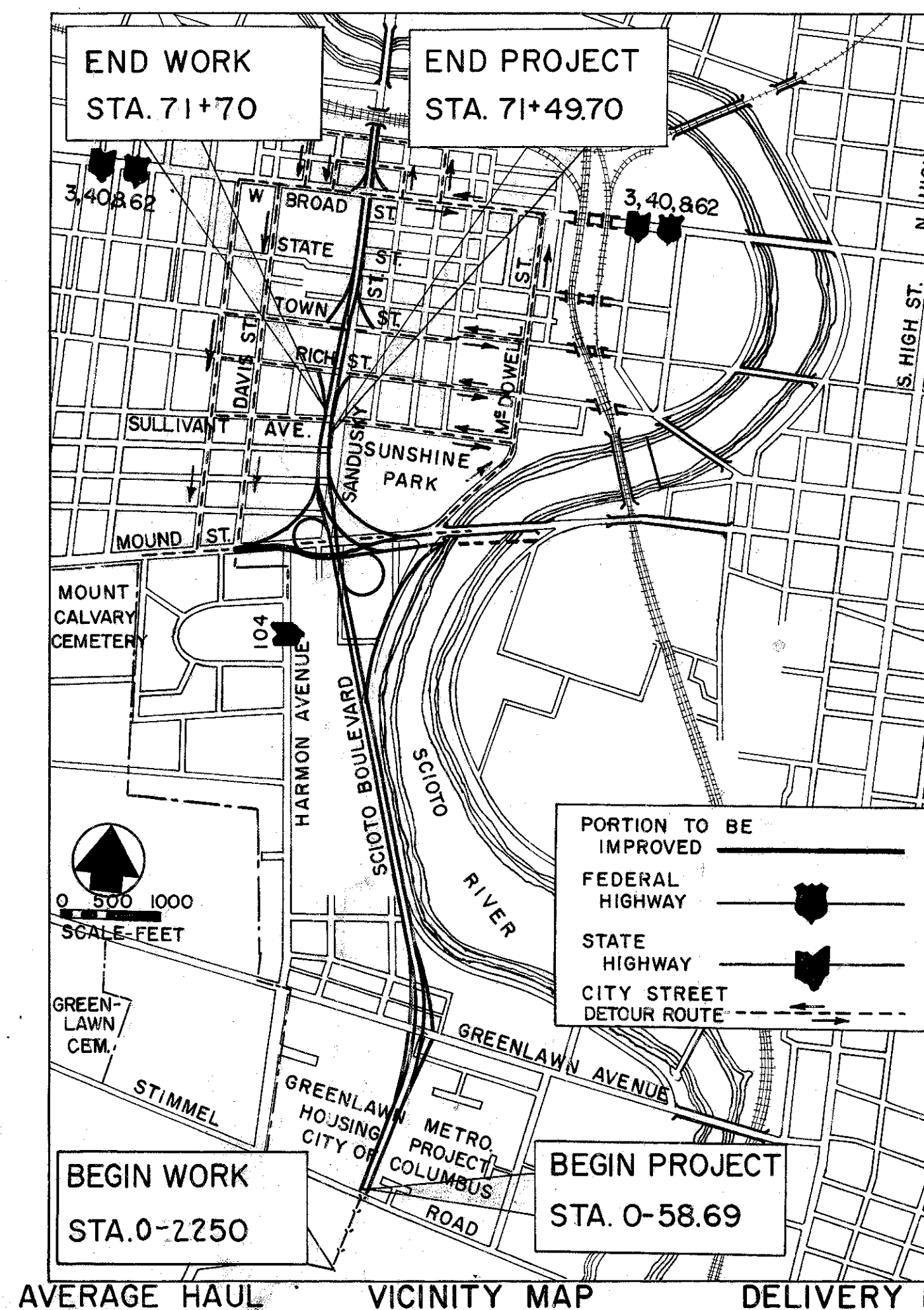
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LINE DATA

BEGIN PROJECT	STA. 0+58.69
END PROJECT	STA. 71+49.70
NET LENGTH OF PROJECT	7208.39 ft. 1.365 mi.
ADD FOR STORM SEWER	2191.31 ft. (see sheet 11)
ADDED WORK FOR MOUND STREET	2339.00 ft.
ADD FOR WORK STA. 71+49.70 TO STA. 71+70	20.30 ft.
NET LENGTH OF WORK	11,759.00 ft. 2.227 mi.

BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO

RECOMMENDED FOR APPROVAL Ben K. Bare



AVERAGE HAUL 1.7 miles
2.0 miles
VICINITY MAP
SCALES AS SHOWN
DELIVERY POINT
B & O. RR Glenwood Ave.
C. & O. RR Whittier St.

File FRA-62-(12.56) FRA-3-13.70
No. Date of Letting 195
Contract No.

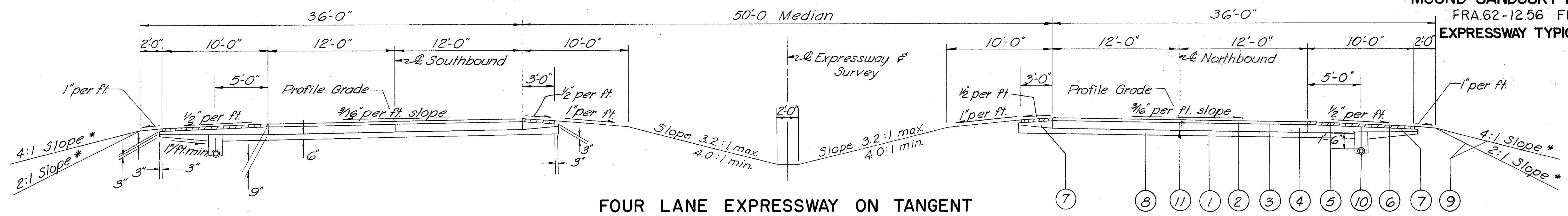
STANDARD DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		
AR-1-57	4-9-57	B-T-50-70-71E	10-1-47	1-8 MH No. 1A	1-3-55	L-3A	4-1-50	18	Rev.	2-6-57
RB-1-55	3-1-55	G-7.07	6-1-56	1-8 MH No. 2	5-1-52	LJ-No. 1	7-1-55	E-101		1-1-57
		1-1,2,3,4,8,5	2-20-45	1-12	7-1-54	OS-1	12-17-56	5		6-8-55
		1-8, CB 2-2A&B	8-1-56	1-14G	1-22-52	OS-2	12-17-56	S-114	Rev.	8-1-57
		1-8, CB 2-3 & 2-4	5-1-52	1-15, No. 1	8-1-55	RI-1	1-3-55			
		1-8, CB No. 3	5-1-52	1-15 No. 2A	6-1-57	T-35	1-2-56			
		1-8, CB No. 9A	5-1-52	1-21-23	8-1-56	T. J.	5-1-56			
		1-8, MH No. 1	5-1-52	L-3	4-1-50	1-8, CB No. 3A	5-1-52			
		1-8, 1 No. 1	5-1-52	1-15 No. 2B	6-1-57	L-1	4-1-50			

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

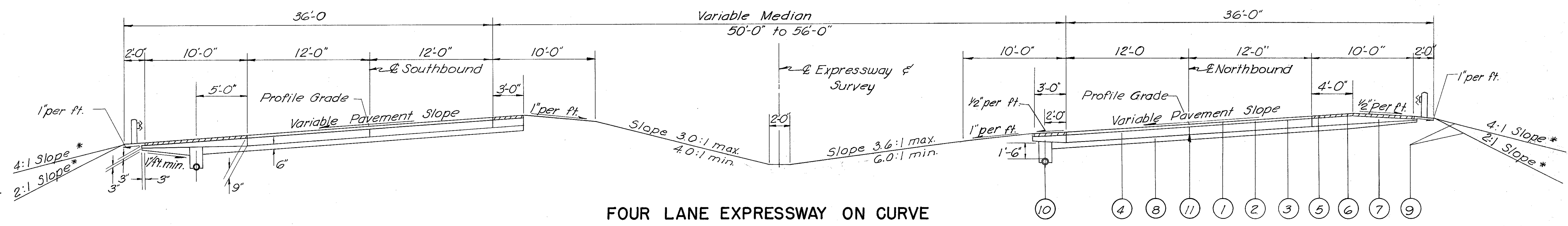
APPROVED _____
DIVISION ENGINEER DATE

TYPICAL SECTIONS TYPE T-35 ON B-70

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND SANDUSKY EXPRESSWAY
FRA.62-12.56 FRA.3-13.70
EXPRESSWAY TYPICAL SECTIONS

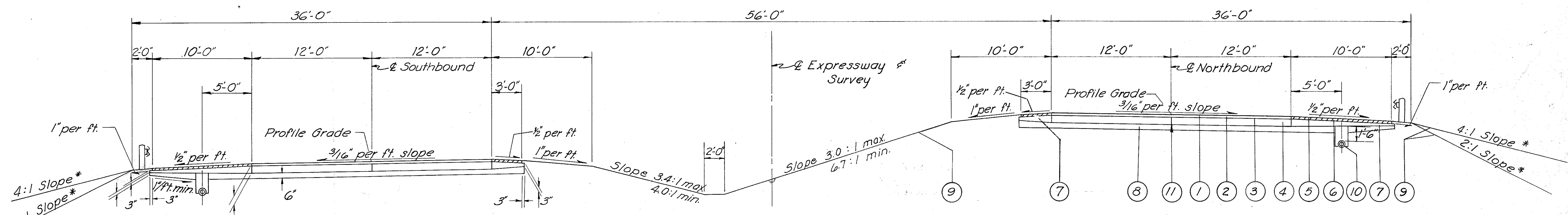


FOUR LANE EXPRESSWAY ON TANGENT
STA. 0+58.69 TO STA. 4+94.52= 553.21 LIN.FT.



FOUR LANE EXPRESSWAY ON CURVE

STA. 4+94.52 TO STA. 14+63.74= 969.22 LIN.FT.
STA. 14+63.74 TO STA. 16+74.18 = 210.44 LIN.FT. BRIDGE & APPR. SLABS
STA. 16+74.18 TO STA. 19+31.12= 256.94 LIN.FT.



FOUR LANE EXPRESSWAY ON TANGENT

STA. 19+31.12 TO STA. 41+00.00= 2168.88 LIN.FT.

Note: The rounded corners shown on Sta. Drawing RI-1 apply to all cross sections even though otherwise shown on the plans.

* Slopes indicated to be used unless otherwise shown on cross sections.

For details not shown see standard drawing RI-1.

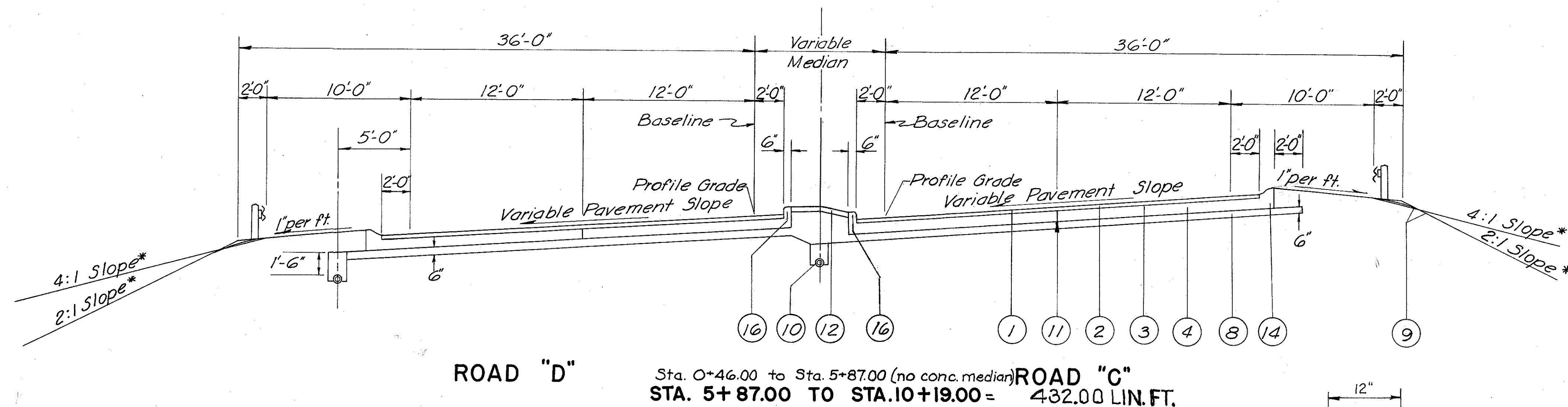
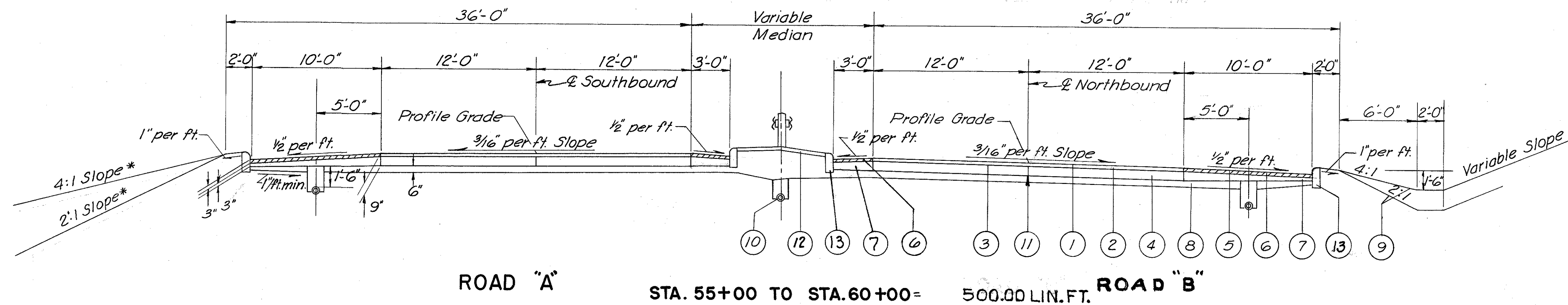
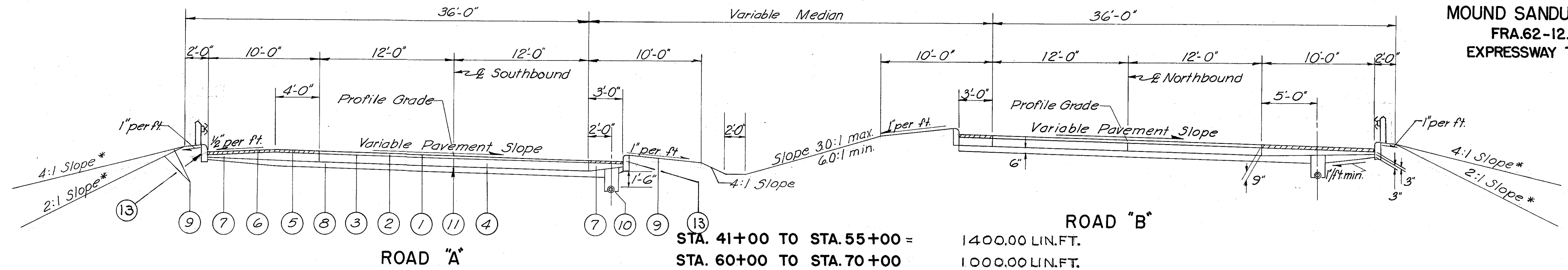
ITEM	DESCRIPTION	ITEM	DESCRIPTION
① T-35	1 1/2" Asphaltic Concrete Surface Course, Type C (60-70).	⑥ B-33	3" Bituminous Macadam Base Course
② B-35	1 1/2" Asphaltic Concrete Leveling Course, (60-70).	⑦ I-18	Stabilized Crushed Aggregate Shoulders
③ T-30	Bituminous Tack Coat Sec.M-5.5 (MS-2 or RS-1) or Sec.M-5.2(RC1 or RC2) 0.19 gal/sq. yd.	⑧ I-22	Subbase, Grading A or B, Modified
④ B-70	9" Portland Cement Concrete Base Course.	⑨ L-9	Seeding & Protecting
⑤ T-31	Bituminous Surface Treatment (See note in proposal)	⑩ I-4	6" Pipe Underdrains
		⑪	Standard Longitudinal Joint.

TYPICAL SECTIONS TYPE T-35 ON B-70

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND SANDUSKY EXPRESSWAY
FRA.62-12.56 FRA. 3-13.70
EXPRESSWAY TYPICAL SECTIONS



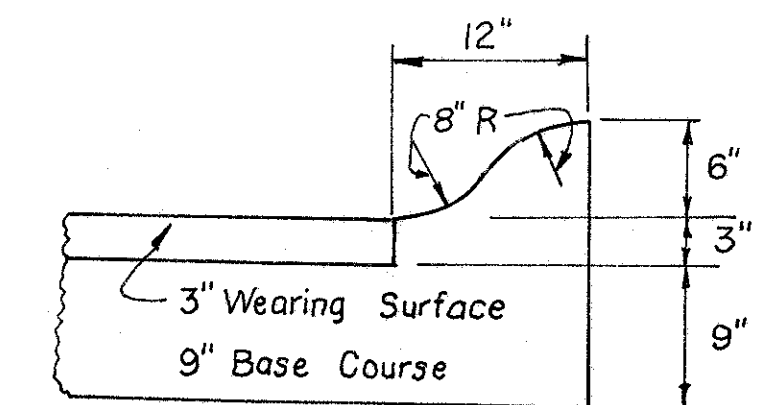
Note: The rounded corners shown on Std. Drawing RI-1 apply to all cross sections even though otherwise shown on the plans.

* Slopes indicated to be used unless otherwise shown on cross sections.

For details not shown see standard drawing RI-1.

Road "D"
Sta. 10+19.00 to Sta. 12+92.69
(see ramp superelevated section)
Sta. 12+92.69 to Sta. 15+33.69
(bridge & approach slabs)
Sta. 15+33.69 to Sta. 20+63.50
(see ramp superelevated section)

Road "C"
Sta. 10+19.00 to Sta. 12+93.96
(see section above)
Sta. 12+93.96 to Sta. 15+34.43
(bridge & approach slabs)
Sta. 15+34.43 to Sta. 20+09+50
(see section above)
(Variable pavement)



ITEM	DESCRIPTION
① T-35	1/2" Asphaltic Concrete Surface Course, Type C (60-70).
② B-35	1/2" Asphaltic Asphaltic Leveling Course (60-70)
③ T-30	Bituminous Tack Coat, Sec. M-5.5 (MS-20 or RS-1) or Sec. M-5.2 (RC-1 or RC-2) 0.1 gal/sq. yd.
④ B-70	9" Portland Cement Concrete Base Course. (see note in proposal)
⑤ T-31	Bituminous Surface Treatment
⑥ B-33	3" Bituminous Macadam Base Course.
⑦ I-18	Stabilized Crushed Aggregate Shoulders
⑧ I-22	Subbase, Grading A or B, Modified
⑨ L-9	Seeding & Protecting
⑩ I-4	6" Pipe Underdrains.
⑪	Standard Longitudinal Joint.
⑫ I-21	4" Portland Cement Conc. Median Pavt.
⑬ I-12	Type 6 Concrete Curb.
⑭ I-12	Type 3B Concrete Curb, Modified
⑮ I-12	Type 2B Concrete Curb.

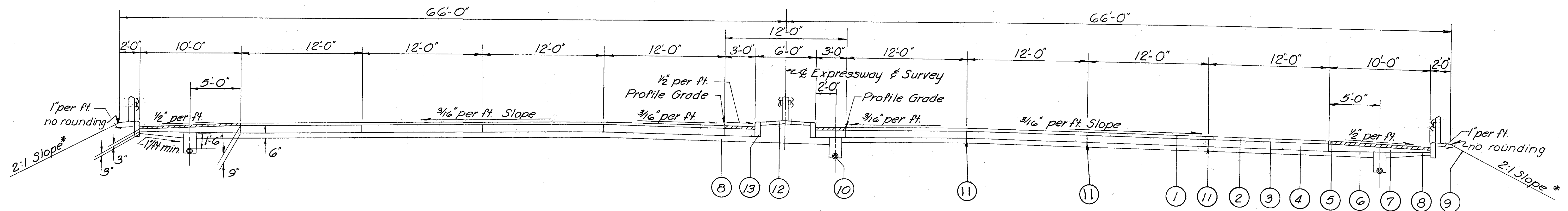
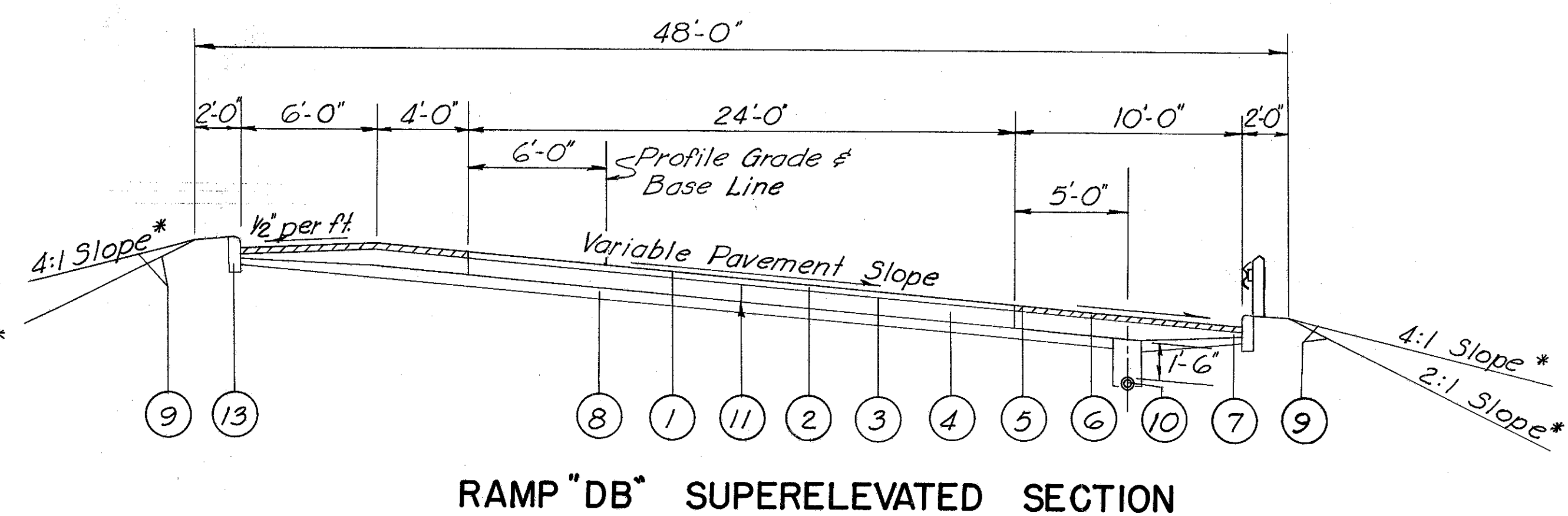
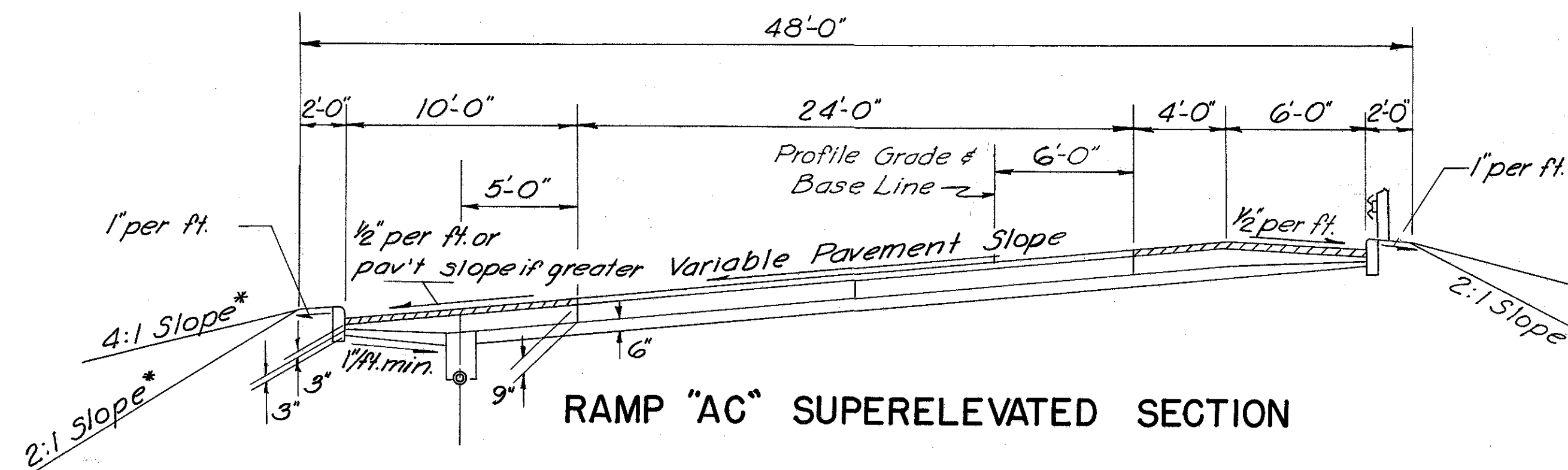
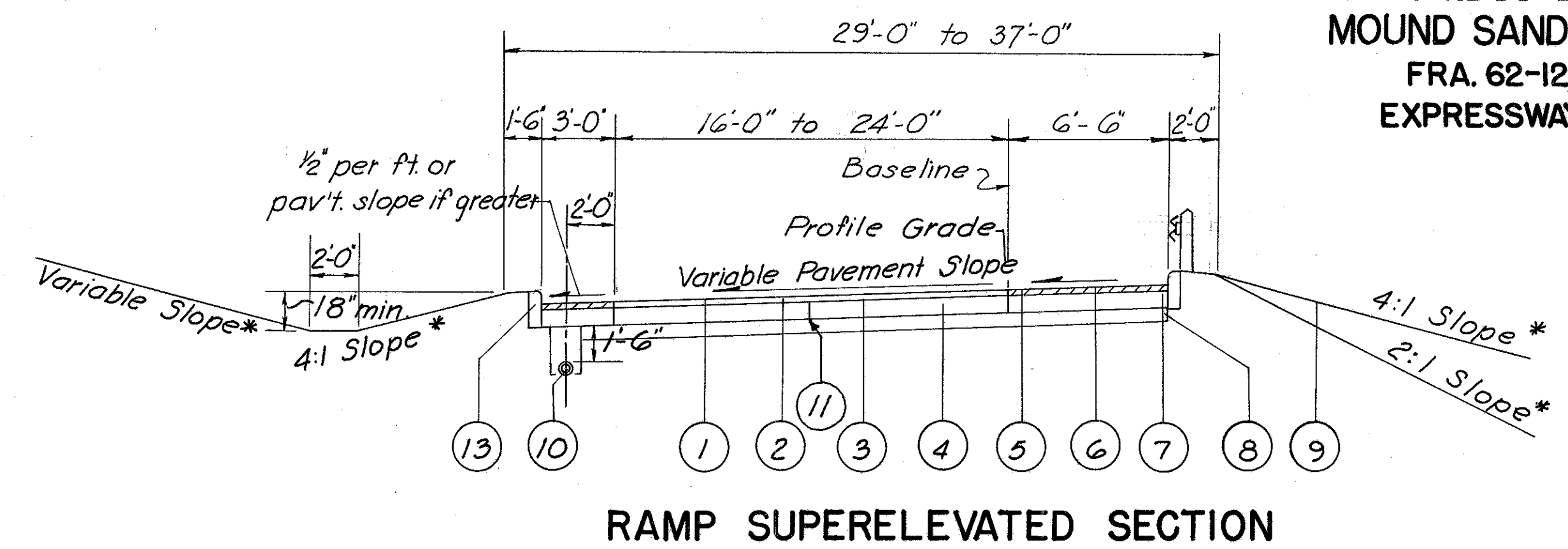
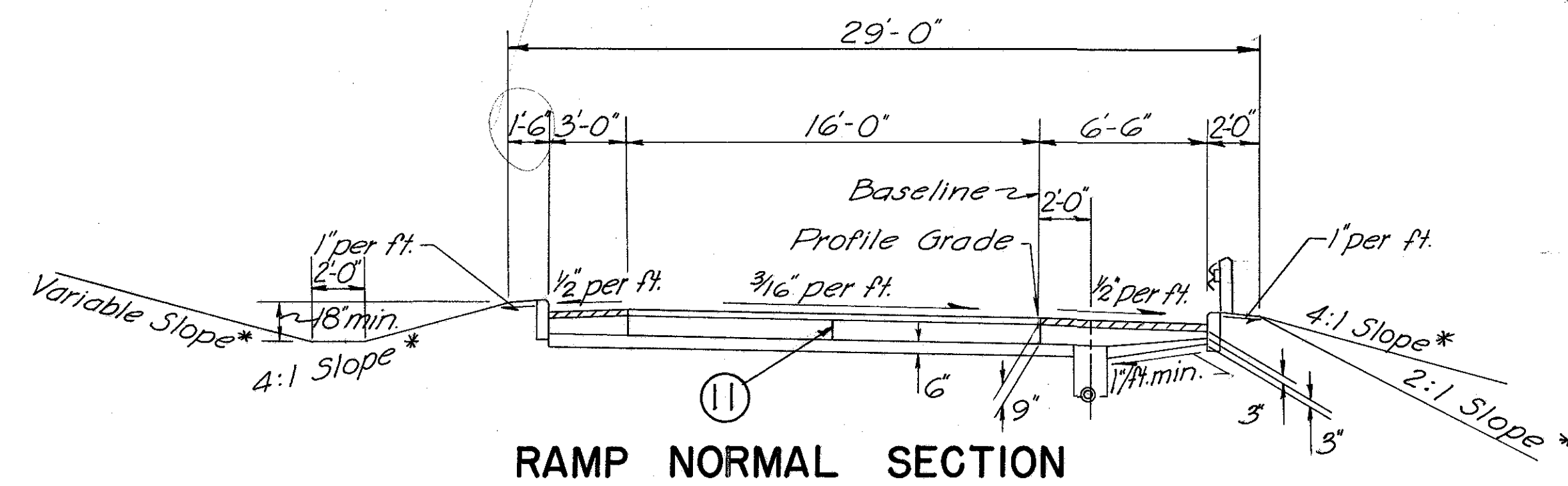
TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE 1" = 5'
NO.		DATE

TYPICAL SECTIONS TYPE T-35 ON B-70

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND SANDUSKY EXPRESSWAY
FRA. 62-12.56 FRA. 3-13.70
EXPRESSWAY TYPICAL SECTIONS



STA. 70+00.00 TO STA. 71+49.70 = 149.70 LIN. FT.

NOTE: The rounded corners shown on std. Drawing RI-1 apply to all cross sections even though otherwise shown on the plans.

*Slopes indicated to be used unless otherwise shown on cross-sections.

For details not shown see standard drawing RI-1.

NOTE:
TYPICAL SECTION FOR RESURFACING
OF GREENLAWN AVE. IS SHOWN ON SHEET 107.

ITEM	DESCRIPTION	ITEM	DESCRIPTION
① T-35	1 1/2" Asphaltic Concrete Surface Course, Type C (60-70).	⑥ B-33	3" Bituminous Macadam Base Course.
② B-35	1 1/2" Asphaltic Asphaltic Leveling Course (60-70)	⑦ I-18	Stabilized Crushed Aggregate Shoulders.
③ T-30	Bituminous Tack Coat, Sec. M-5.5 (MS-2 or RS-1) or Sec. M-52 (RC-1 or RC-2) 0.1 gal/sq. yd.	⑧ I-22	Subbase, Grading A or B, Modified
④ B-70	9" Portland Cement Concrete Base Course.	⑨ L-9	Seeding & Protecting.
⑤ T-31	Bituminous Surface Treatment (see note in proposal)	⑩ I-4	6" Pipe Underdrains
		⑪	Standard Longitudinal Joint.
		⑫ I-21	4" Portland Cement Concrete Median Pav't.
		⑬ I-12	Type G Concrete Curb.
		⑭ I-12	Type 3B Concrete Curb, Modified.

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE 1" = 5'
NO.		DATE

GENERAL

GENERAL NOTES

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDUS
2	OHIO		

5

FRANKLIN COUNTY
CITY OF COLUMBUS

**COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70**

DESIGN SPEED

50 Miles Per Hour.

UTILITY OWNERSHIP

Columbus Transit Company, Columbus, Ohio
The Ohio Bell Telephone Company, Columbus, Ohio
The Ohio Fuel Gas Company, Columbus, Ohio
Columbus and Southern Ohio Electric Company
Columbus, Ohio
City of Columbus Department of Water, Columbus, Ohio
City of Columbus Department of Sewerage,
Columbus, Ohio
State of Ohio Department of Public Works,
Columbus, Ohio
Columbus Municipal Power Company, Columbus, Ohio
FRANKLIN COUNTY SANITARY ENGINEER
WESTERN UNION TELEGRAPH COLUMBUS, OHIO

STREET MARKER AND LIGHT STANDARD REMOVAL

The City of Columbus shall remove all street marker standards, street light standards and other traffic control devices not the property of the State of Ohio within the work limits. Barricades, signs and so forth necessary to perform the prescribed traffic maintenance shall be included in the lump sum bid for maintaining traffic.

REPLACEMENT

The contractor shall replace at his own expense any item not specifically listed for removal that is damaged or destroyed by his operations.

ROADWAY

REMOVAL OF TREES AND STUMPS

All trees and stumps within the limits of the right of way shall be disposed of as specified in Section E-101.03 of the construction and material specifications. Trees shall not be removed until specifically and conspicuously marked by the Engineer. Payment for the removal of trees and stumps shall be paid for at the contract lump sum price bid for Item E-9 Removal of Trees and Stumps (see Tree Schedule).

REMOVAL OF REFUSE AND DEBRIS

Any existing refuse, debris or other unsuitable material shall be removed and disposed of by the contractor outside of the limits of the right of way. The quantity of refuse or debris or other unsuitable material removed and disposed of will be determined by the final cross sections and the yardage so determined will be paid for at the contract unit price bid for roadway excavation, Item E-101.

PAVEMENT REMOVAL

Removal and disposal of existing non-rigid pavement shall be measured and paid for as item E-101 Roadway Excavation, unless otherwise indicated on the plans.

In areas of Item E-8, Pavement Removal, outside of the construction limits, the old roadway shall be plowed, harrowed and dragged to a smooth grade, the old ditches filled and the entire area left in a neat condition. Cost of this work shall be included in the price bid for pavement removal, Item E-8. Areas shall then be seeded and mulched, Item L-9.

BASEMENTS

Before backfilling all basements within the right of way limits, all floors shall be broken up in accordance with Sec. E-101.03(c) and all drains plugged in accordance with the fourth paragraph of Sec. I-16.03. Payment for the same is to be included in the unit price bid for E-101, Roadway Excavation.

SIDEWALKS

Where new sidewalk is to meet existing sidewalk the new sidewalk shall be built to an existing joint.

Removal of existing sidewalks shall be classified as Roadway Excavation.

DISPOSAL OF PAVEMENT

Pavement removed under Item E-8 shall be placed in embankment in accordance with Section E-101.08 and will be considered random material except where used in the part of the embankment more than three feet below the new pavement in which case it will be considered rock. Any steel protruding from the removed pavement shall be cut off so that it will not project more than one inch from any side.

SEEDING AND PROTECTING

Quantities for seeding Item L-9 are calculated for the soil areas ten feet outside the work limits as shown on the cross sections or to the right of way line if such line is less than 10 feet from the work limits. All areas outside these limits where the vegetative growth has been injured, disturbed or destroyed by the contractor shall be restored and seeded in conformance with the provisions of Item L-9 by the contractor at his own expense. All disturbed areas resulting from building removal shall be seeded. The limits for seeding for all disturbed areas resulting from building removal shall be 10 feet outside the original building lines. Mixture specified (L-9.11) "for in front of residences" will be used on all of this project.

FERTILIZER, SEEDING AND SODDING

Commercial fertilizer (10-6-4) is to be used on all seeded and sodded areas. Sod is to be used around catch basins, structures, and ditches where necessary to prevent erosion as indicated in the plans and where and as directed by the Engineer.

FIELD OFFICE

The contractor shall provide a suitable field office in accordance with Section S-0.01 (b) having a minimum of 500 square feet of floor space. The contractor shall have a telephone installed and maintained during construction of this project. This office is to be for the exclusive use of the Engineer and his assistants.

UTILITY ADJUSTMENT

Any or all work required for public or private utilities will be done by and at the expense of their respective owners unless otherwise stated in these plans. The contractor shall notify at least 15 days before breaking ground all public service corporations having wires, poles, conduits, manholes or other structures that may be affected by his operations including all structures which are affected and not shown in these plans. It is the contractor's public obligation to cooperate with the public service corporations or their agencies in carrying on their respective operations during the construction of this project so as not to interfere with their normal practice.

EXISTING UNDERGROUND APPURTENANCES

The location of existing pipe and underground utility appurtenances shown on these plans represents the best information available but the State of Ohio will not guarantee the correctness or completeness thereof.

PERMITS, LAWS AND REGULATIONS

The contractor shall secure at his own expense all necessary permits from the municipal or other public authorities, shall give all notices required by law or municipal ordinances and shall pay all fees and charges incident to the due and lawful prosecution of the work covered by this contract.

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO		DATE

EXISTING SEWERS

The location, type, depth and size of all existing pipes are shown as accurately as the available information will permit. The State of Ohio will not be responsible for any variations found during construction.

The contractor shall so conduct his operations that the flow of all existing sewers will be maintained at all times and any additional labor or cost involved in the maintaining of this flow by pumping or by any other approved method which is necessary for the completion of this project shall be included in the price bid for linear feet of sewers Item I-2.

PAVEMENT

PLACING AND FINISHING PAVEMENT

Pavement in superelevated curves shall be placed without crown. The crown shall transition to a plane surface indicated on the pavement plans.

Particular care shall be exercised by the contractor in obtaining in a uniform manner the curb transitions called for on the plans.

ITEM T-31, AGGREGATE

The N^o 6 and N^o 46 aggregate used for this item shall be white limestone meeting the requirements of Sec. M-3.1.

PAVEMENT JOINT LEGEND See Sheet 45.

ITEM I-22, SUBBASE, GRADING A OR B MODIFIED

I-22 Subbase material, Grading A or B shall meet all the specification requirements of Sec. I-22.02 except that not more than 10 percent of the material shall pass the N^o 200 sieve.

GUARD RAIL AND CURB FOR DEAD END ROADS

A quantity of guard rail and curb has been included in the summary for use as needed at the end of streets that terminate on the Right-of-Way of this project. This guard rail and curb is to be placed at the direction of the Engineer. The quantities include the following;

I-15 Guard Rail, Steel Beam Standard Type (deep)
as per standard drawing I-15 No. 2A 125 lin. ft.

I-12 Type 2, Combination Curb & Gutter 90 lin. ft.

For Guard Rail location see sheets 38, 39, 43, & 44.

The Contractor shall maintain traffic at all times in accordance with the following provisions:

1. SANDUSKY STREET
Traffic on Sandusky Street will be detoured via city streets as shown on Sheet 1.
2. STIMMEL ROAD
The cul-de-sacs shall be one of the last items of construction on this project. Stimmel Road shall be kept open to two-way traffic until such time as work starts on the cul-de-sacs.
3. GREENLAWN AVE
Two-way traffic shall be maintained at all times. The contractor shall safeguard the traveling public on Greenlawn Ave. by providing platforms, nets or other suitable protection above the traveled lanes.
4. MOUND STREET (S.R. 104)
Four (4) lanes of traffic (two lanes each way) shall be maintained at all times on Mound Street (S.R. 104) by use of the existing pavement, completed Roads "C" & "D" and/or temporary T-70 pavements. Each lane of temporary T-70 concrete pavement shall have a width of 12 ft. and curves on temporary lanes shall not have a radius of less than 300 ft. The alignment and grade of each temporary T-70 pavement shall be approved by the Engineer prior to beginning of construction thereof.
5. HARMON AVE. (S.R. 104)
Two-way traffic shall be maintained on Harmon Ave. (S.R. 104) south of Mound St. by use of the existing pavement or relocated Harmon Ave.
6. Quantities of T-10, Traffic Compacted Surface Course and M-10, Calcium Chloride have been provided for maintaining through traffic in areas, other than Mound St., where specifically directed by the Engineer, generally where the period of use by through traffic would be less than 21 consecutive calendar days, and in maintenance of access
7. A quantity of 9" T-70, Portland Cement Concrete Pavement has been provided for maintaining traffic in the Mound St. interchange area as described in traffic procedure for Mound St. (S.R. 104). The modification for materials, mixing, placing, etc. as stated in the last three paragraphs of Sec. S-15.06 of the Construction and Materials Specifications shall apply to Item T-70, 9" Portland Cement Concrete Pavement for Maintaining Traffic, As Per Plan. Removal of the T-70 temporary concrete pavement, when no longer needed to maintain traffic, will be measured and paid for as Item E-8.
8. Payment for construction, maintenance, and subsequent removal, where required, of temporary roadways not paved with T-70 shall be included in the lump sum bid for "Maintaining Traffic."
9. A quantity of T-35, Asphaltic Concrete Surface Course for Maintaining Traffic has been provided for use, as directed by the Engineer, on existing city streets within the limits of the project.
10. The quantities added to the Summary for Maintaining Traffic are:

T-35

For Maintaining Traffic

300 cu yds.

T-70

9" Portland Cement Concrete Pavement

3844 Sq. Yds.

E-8

Removal of Existing Pavement

3844 Sq. Yds.

M-10

Calcium Chloride

26 Tons

T-10

Traffic Compacted Surface Course

1300 Cu. Yds.

ITEM E-9 Tree Schedule
estimated number of Trees and Stumps

SIZE	QUANTITY
12"-18"	326
18"-24"	45
24"-30"	4
30"-36"	1
36"-up	1

For Drainage Notes see Sheet 115.

CODE NO. 6707✓

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

TRACED	BURGESS & NIPLÉ CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE	
CHECKED		DATE	
NO.			

\$ 100% City Participation

GENERAL SUMMARY

CODE NO. 6707

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND SANDUSKY EXPRESSWAY
FRA.62-12.56 FRA.3-13.70

ITEM	SHEET NUMBER																		ITEM	QUANTITY	UNIT	DESCRIPTION	TOTAL NON-PARTI- CIPATING	TOTAL PARTICI- PATING
	116	118	119	120	130	136	138	140	141	142	143	144	145	106	110	111	112							
E-2						35	50												E-2	85	cu yds	DRAINAGE Excavation for Structures		85
E-12										500									E-12	500	lin. ft.	Pipe Removed 24" and Under		500
E-12										299	1,544								E-12	1,843	lin. ft.	Pipe Removed over 24"		1,843
I-2			785									908							I-2	1,693	lin. ft.	8" Class "B" S.S. Sewers	728	965
I-2			20																I-2	20	lin. ft.	12" Class "B" S.S. Sewers		20
I-2			3,092																I-2	3,098	lin. ft.	15" Class "B" S.S. Sewers		3,098
I-2			13																I-2	13	lin. ft.	18" Class "B" S.S. Sewers		13
I-2			240																I-2	240	lin. ft.	21" Class "B" S.S. Sewers		240
I-2			264																I-2	264	lin. ft.	24" Class "B" S.S. Sewers		264
I-2			1,101																I-2	1,101	lin. ft.	27" Class "B" S.S. Sewers		1,101
I-2			465																I-2	465	lin. ft.	36" Class "B" S.S. Sewers		465
I-2			2,083																I-2	2,083	lin. ft.	42" Class "B" S.S. Sewers		2,083
I-2												388							I-2	388	lin. ft.	8" Storm Sewers, Sec. M-6.5(b) or Sec. M-6.8(b)	388	
I-2				175															I-2	175	lin. ft.	12" Class "B" Sewers Under Pavement or Approaches		175
I-2				4,845															I-2	4,845	lin. ft.	15" Class "B" Sewers Under Pavement or Approaches		4,845
I-2				1,806															I-2	1,806	lin. ft.	18" Class "B" Sewers Under Pavement or Approaches		1,806
I-2				326															I-2	326	lin. ft.	21" Class "B" Sewers Under Pavement or Approaches		326
I-2				735															I-2	735	lin. ft.	24" Class "B" Sewers Under Pavement or Approaches		735
I-2				896															I-2	896	lin. ft.	27" Class "B" Sewers Under Pavement or Approaches		896
I-2				513															I-2	513	lin. ft.	30" Class "B" Sewers Under Pavement or Approaches		513
I-2												70							I-2	70	lin. ft.	36" Class "B" Sewers Under Pavement or Approaches	70	
I-2			500																I-2	500	lin. ft.	6" Storm Sewers, Class "B"		500
I-2												205							I-2	205	lin. ft.	72" Storm Sewers M-6.6(a), under Pavement or Approaches.		205
I-2												745							I-2	745	lin. ft.	72" Storm Sewers M-6.6(a), as per plan.		745
I-2												73							I-2	73	lin. ft.	72" Storm Sawks M-6.6(c).		73
I-2			215																I-2	215	lin. ft.	15" Storm Sewers M-6.6(b), under Pavement or Approaches.		215
I-2			260																I-2	260	lin. ft.	18" Storm Sewers M-6.6(b), under Pavement or Approaches.		260
I-2			50																I-2	50	lin. ft.	21" storm Sewers M-6.6(b).		50
I-2			177																I-2	177	lin. ft.	24" Storm Sewers M-6.6(b) or M-6.8(b)		177
I-2			569																I-2	569	lin. ft.	24" Storm Sewers M-6.6(b)		569
I-2			159																I-2	159	lin. ft.	27" Storm Sewers M-6.6(b), under Pavement or Approaches		159
I-2			181																I-2	181	lin. ft.	27" Storm Sewers M-6.6(b)		181
I-2			112																I-2	112	lin. ft.	30" Storm Sewers M-6.6(b) or M-6.8(b)		112
I-2			135																I-2	135	lin. ft.	30" Storm Sewers M-6.6(c)		135
I-2												100							I-2	100	lin. ft.	72" Storm Sewers M-6.6(b), under Pavament or Approaches.		100
I-2			77																I-2	77	lin. ft.	24" Storm Sawks M-6.6(b), under Pavement or Approaches.		77
I-2			209																I-2	209	lin. ft.	18" Storm Sewers M-6.6(c), under Pavement or Approaches.		209
I-2			509																I-2	509	lin. ft.	21" Storm Sewers M-6.6(c), As Per Plan		509
I-2			200																I-2	200	lin. ft.	24" Storm Sewers M-6.6(c), under Pavement or Approaches.		200
I-2			403																I-2	403	lin. ft.	27" Storm Sewers M-6.6(c)		403
I-2			147																I-2	147	lin. ft.	36" Storm Sewers M-6.6(c)		147
I-2			27																I-2	27	lin. ft.	42" Storm Sewers M-6.6(c), under Pavement or Approaches.		27
I-2												159							I-2	159	lin. ft.	48" Storm Sewers M-6.6(c), under Pavement or Approaches		159
I-2												534							I-2	534	lin. ft.	72" Storm Sewers M-6.6(c), under Pavement or Approaches		534
I-2			86																I-2	86	lin. ft.	24" Storm sewers M-6.6(c).		86
I-2			314																I-2	314	lin. ft.	18" Storm Sewers M-6.6(d), under Pavement or Approaches.		314
I-2			40																I-2	40	lin. ft.	21" Storm Sewers M-6.6(d), under Pavement or Approaches		40
I-2												220							I-2	220	lin. ft.	48" Storm Sewers M-6.6(d).		220
I-2												288							I-2	288	lin. ft.	72" Storm Sewers M-6.6(d).		288
I-2												240							I-2	240	lin. ft.	48" Storm Sawks M-6.6(d), under Pavtor Apprs. including Concrete Curb, as per plan.		240
I-2					452														I-2	452	lin. ft.	42" Pipe for Force Main (AWWA C302-53), as per plan.		452
I-2												323							I-2	323	lin. ft.	36" Storm Sewers M-6.6(c), under Pavement or Approaches.	323	
I-4	26,754														763	2491	1015	1180	I-4	26,754	lin. ft.	6" Underdrains		26,754
I-4																			I-4	5,449	lin. ft.	4" Underdrains, As Per Plan		5,449
I-5																			I-5	4	Each	15" Flapgate Armco Model 102 or Approved Equal, as per plan.		
I-5																			I-5	2	Each	18" Flapgate Armco Model 102 or Approved Equal, as per plan.		

† 100 % City Participation.

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO.		DATE

GENERAL SUMMARY

CODE NO. 6707

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM

MOUND SANDUSKY EXPRESSWAY

FRA.62-12.56 FRA.3-13.70

ITEM	SHEET NUMBER																												ITEM	QUANTITY	UNIT	DESCRIPTION	TOTAL NON-PARTI- CIPATING	TOTAL PARTICI- PATING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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* Note: All manholes to be adjusted to grade are on storm or combination type sewers.

GENERAL SUMMARY

CODE NO. 6707

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM

MOUND SANDUSKY EXPRESSWAY

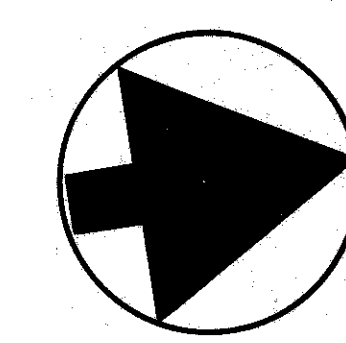
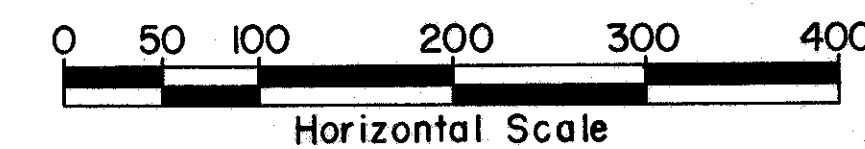
FRA. 62-12.56 FRA. 3-13.70

ITEM	SHEET NUMBER																														ITEM	QUANTITY	UNIT	DESCRIPTION	TOTAL NON-PARTI- CIPATING	TOTAL PARTICI- PATING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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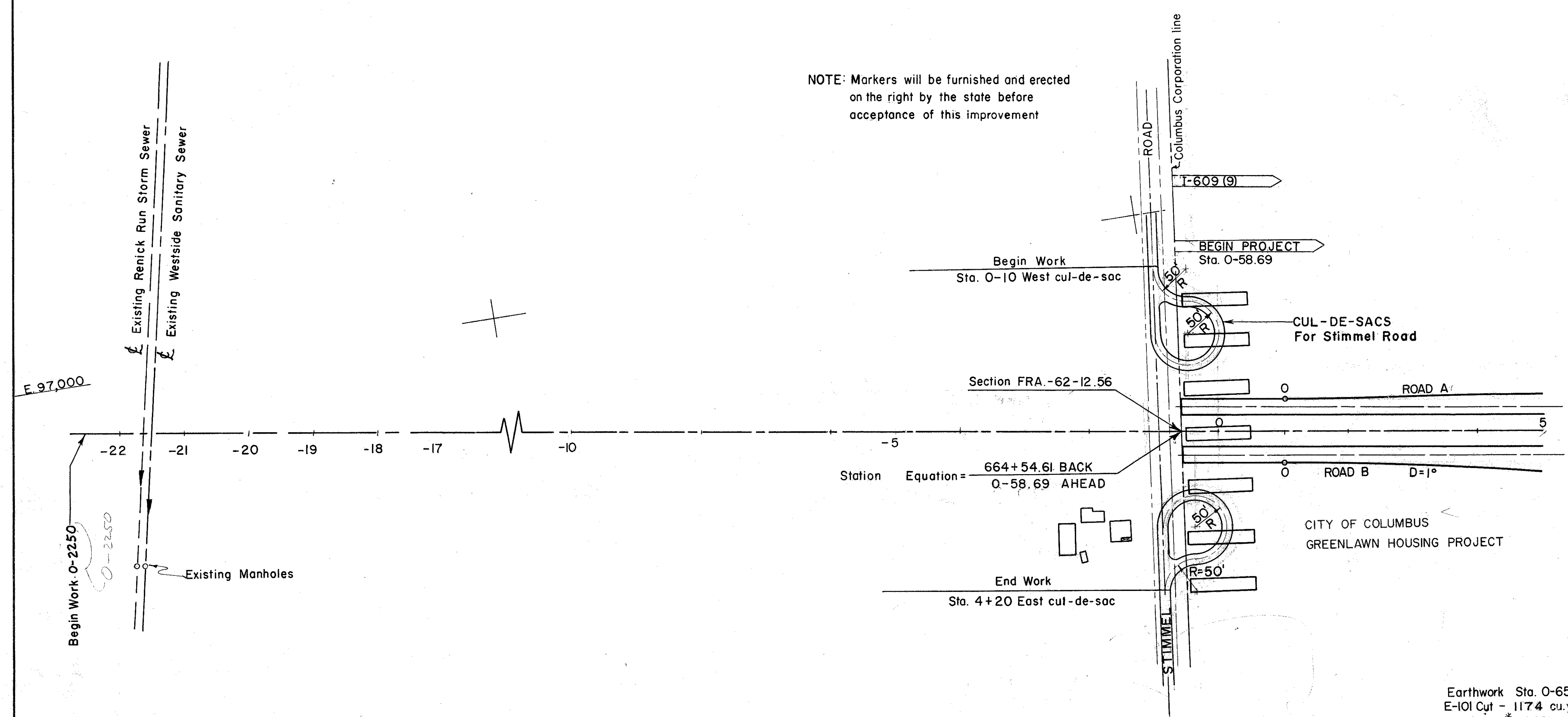
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUS

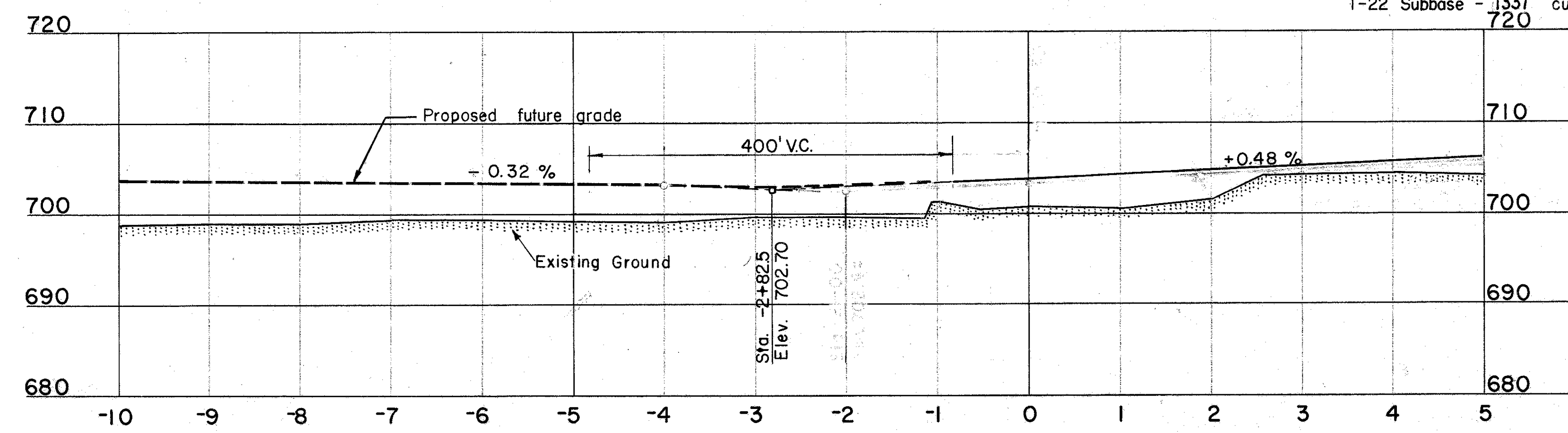
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
SCHEMATIC PLAN AND PROFILE



NOTE: Markers will be furnished and erected on the right by the state before acceptance of this improvement



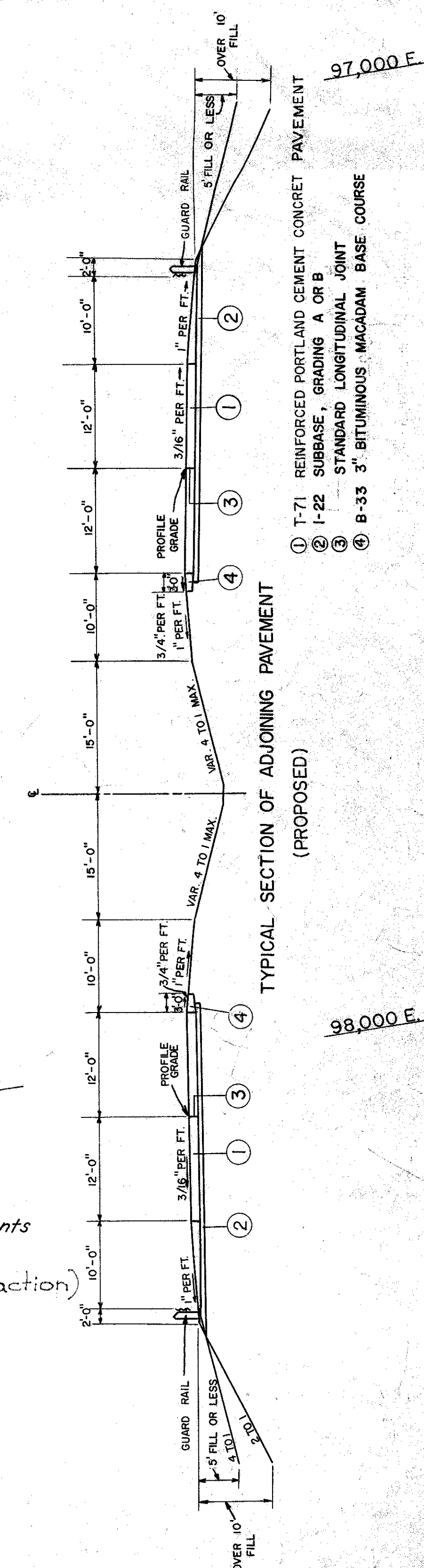
Earthwork Sta. 0-65 to 5+00
E-101 Cut - 1174 cu.yds.
(Fill - *5445 cu.yds.)
E-101 Compacted Subgrade* - 5309 sq. yds.
L-9 Seeding - 8004 sq. yds.
I-22 Subbase - 1331 cu.yds.



* for Expressway, Ramp, and Service Road Pavements and Paved Shoulder

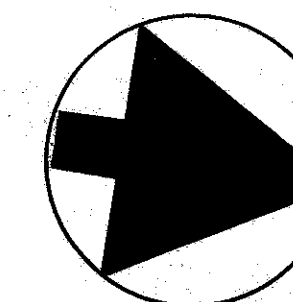
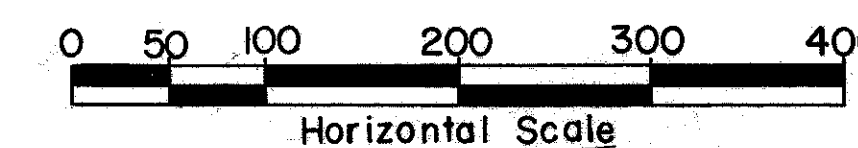
* (Includes 15% for Compaction)

Profiles of Cul-de-Sacs, page 106

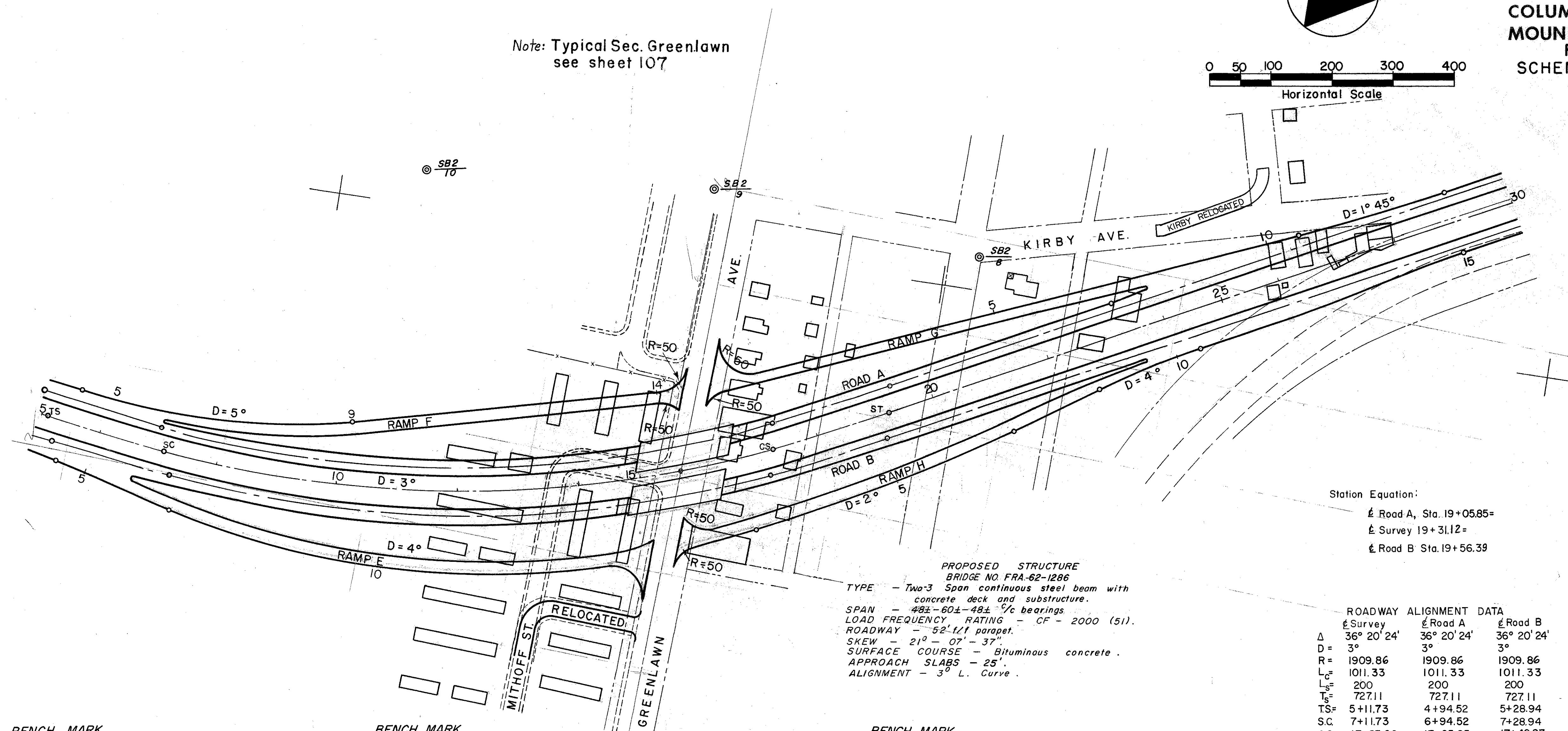


FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
SCHEMATIC PLAN AND PROFILE



Note: Typical Sec. Greenlawn see sheet 107



PROPOSED STRUCTURE
BRIDGE NO. FRA-62-1286
TYPE - Two-3 Span continuous steel beam with concrete deck and substructure.
SPAN - 48±-60±-48± c/b bearings
LOAD FREQUENCY RATING - CF - 2000 (51).
ROADWAY - 52' 1/2' parapet.
SKEW - 21° - 07' - 37"
SURFACE COURSE - Bituminous concrete.
APPROACH SLABS - 25'.
ALIGNMENT - 3° L. Curve.

Station Equation:
± Road A, Sta. 19+05.85=
± Survey 19+31.12=
± Road B Sta. 19+56.39

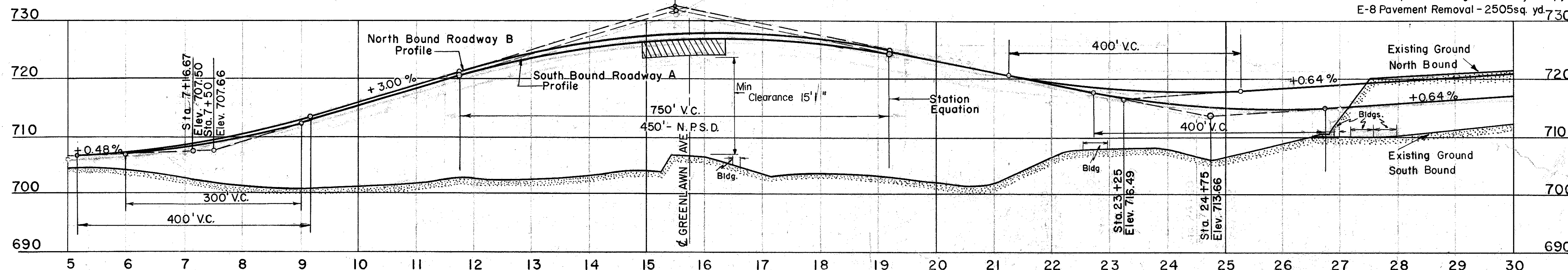
	± Survey	± Road A	± Road B
Δ	36° 20' 24"	36° 20' 24"	36° 20' 24"
D	3°	3°	3°
R	1909.86	1909.86	1909.86
L _c	1011.33	1011.33	1011.33
L _s	200	200	200
T _s	727.11	727.11	727.11
TS	5+11.73	4+94.52	5+28.94
SC	7+11.73	6+94.52	7+28.94
CS	17+23.06	17+05.85	17+40.27
ST	19+23.06	19+05.85	19+40.27

Earthwork Sta. 5+00 to 30+00
E-101 Cut - 3286 cu. yds. L-9 Seeding - 42,680 sq. yd.
(Fill - 225,322 cu. yds.) 1-22 Subbase - 4962 cu. yds.
E-101 Compacted Subgrade* - 32,117 sq. yds.
E-8 Pavement Removal - 2505 sq. yd.

BENCH MARK
702.43 ^{SB2}/₁₀ Concrete monument in City Park, 0.2 ft. below ground, 6.9 ft. of e. curb Liberty St. 285 ft. s.e. of conc. stop at end of paved street (plotted above)

BENCH MARK
705.87 ^{SB2}/₉ Concrete monument in grass south side Greenlawn Ave. near Kirby Ave. 275 ft. n.e. of n.e. corner of Bldg. No. 555 9.1 ft. s. of Greenlawn Ave. 3.0 ft. s.e. of utility pole. (plotted above)

BENCH MARK
705.37 ^{SB2}/₈ Concrete monument in grass east side Kirby Avenue, 412± ft. north of Greenlawn E., 8.5 ft. s. of 27" elm tree 9.6 ft. s.w. corner of iron fence, 481 ft. s.w. of s.w. corner brick porch at No. 960 Kirby (plotted above)

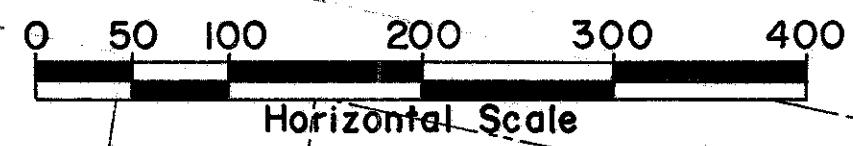
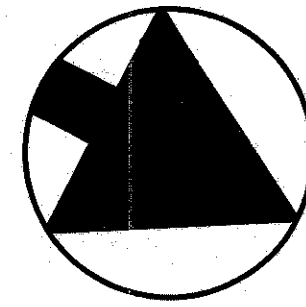


* See note on Page 11
* (Includes 15% for compaction)

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

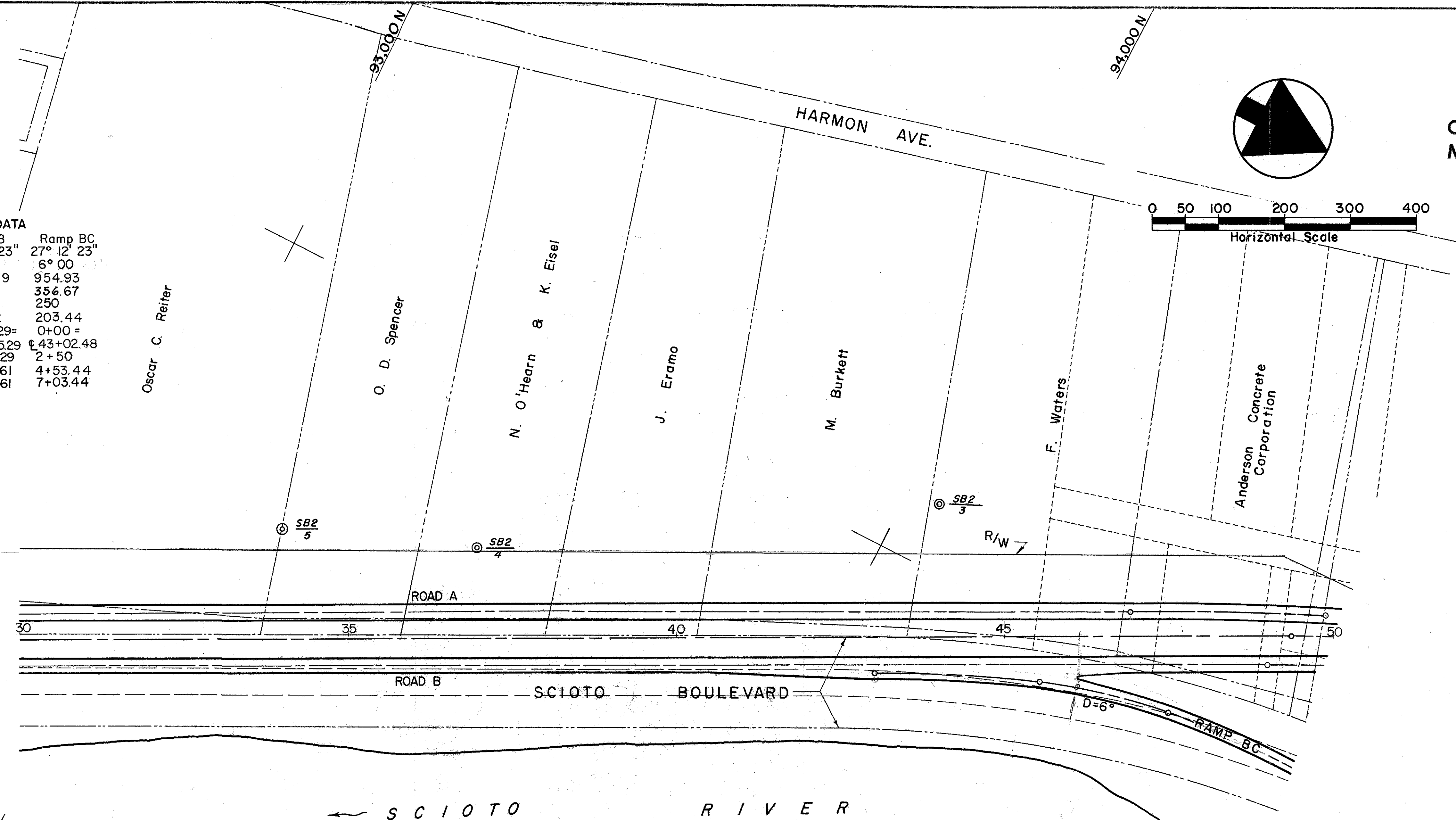
13

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
SCHEMATIC PLAN AND PROFILE



ROAD ALIGNMENT DATA

	Survey	Road A	Road B	Ramp BC
Δ	12° 49' 42"	11° 12' 23"	11° 12' 23"	27° 12' 23"
D	3° 00'	2° 00'	2° 00'	6° 00'
R	1909.86	2864.79	2864.79	954.93
S	314.79	431.17	431.17	356.67
L	200	300	300	250
C	227.61	260.32	260.32	203.44
T.S.	49+37.85	46+86.65	49+05.29	0+00
S.C.	51+37.85	49+86.65	52+05.29	2+50
C.S.	53+65.46	52+46.97	54+65.61	4+53.44
S.T.	55+65.46	55+46.97	57+65.61	7+03.44



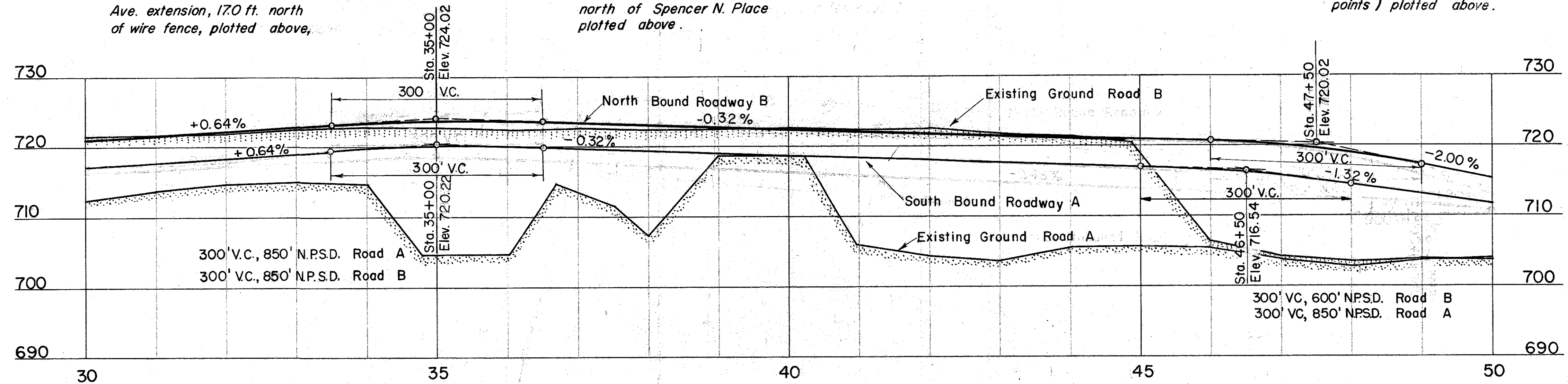
Earthwork Sta. 30+00 to 50+00
E-101 Cut - 6,605 cu.yds.
(Fill - 63,705 cu.yds.)
E-101 Compacted Subgrade* - 19036 sq.yds.
L-9 Seeding - 26,411 sq.yds.
I-22 Subbase - 3563 cu.yds.
E-8 Pavement Removal - 8814 sq.yd.

* See note on page 11
* (Includes 15% for Compaction)

BENCH MARK
716.89 $\frac{SB2}{5}$ Concrete monument
flush on north side lane, Kirby
Ave. extension, 170 ft. north
of wire fence, plotted above,

BENCH MARK
716.63 $\frac{SB2}{4}$ Concrete monument flush
with ground on high ground, 85 ft.
north of Spencer N. Place
plotted above.

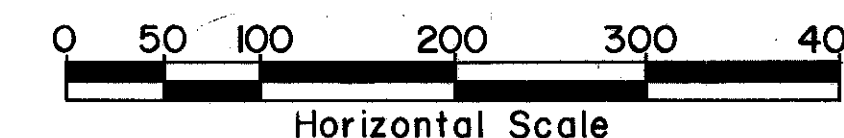
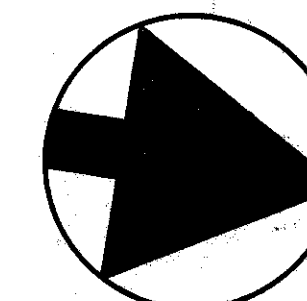
BENCH MARK
707.20 $\frac{SB2}{3}$ Concrete monument
flush with ground (no referenceable
points) plotted above.



Profiles of ramps, page 18

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE 1" = 100'
NO.		DATE

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA. 62-1256 FRA. 3-13.70
SCHEMATIC PLAN



RAMP ALIGNMENT DATA			
AC	DB	AD	BC
$\Delta = 107^{\circ}21'12''$	$102^{\circ}58'57''$	$\Delta = 42^{\circ}00'$	$37^{\circ}45'13''$
$D = 9^{\circ}00'$	$8^{\circ}00'$	$D = 12^{\circ}00'$	$12^{\circ}00'$
$R = 636.62'$	$716.20'$	$R = 477.46'$	$477.46'$
$T_s = 1023.63'$	$1056.46'$	$T_s = 310.09'$	$264.31'$
$L_s = 300'$	$300'$	$L_s = 250'$	$200'$
$L_c = 892.81'$	$987.28'$	$L_c = 100.00'$	$114.61'$
$TS = 0+00.00'$	$0+00.00'$	$TS = 0+00.00'$	$14+30.98'$
(E. Survey 69+39.72) (Road D 23+41.72) (E. Survey 68+76.55)			
$SC = 3+00.00'$	$3+00.00'$	$SC = 2+50.00'$	$8+44.47'$
$CS = 11+92.81'$	$12+87.28'$	$CS = 3+50.00'$	$9+59.08'$
$ST = 14+92.81'$	$15+87.28'$	$ST = 6+00.00'$	$11+59.08'$
(Road C 21+85.97) (E. Survey 71+86.26)			
$13+16.16 = (Road D 23+05.96)$ (Road D 3+22.19)			

Ramp DA
PCC 0+00 = (Road D 11+68.57)
 $\Delta = 55^{\circ}19'38''$ $R = 260.00'$
 $T = 136.29'$ $L_c = 251.07'$
PCC 2+51.07
 $\Delta = 124^{\circ}53'$ $R = 160.00'$
 $T = 306.59'$ $L_c = 348.74'$
PCC 5+99.81
 $\Delta = 65^{\circ}12'34''$ $R = 210.00'$
 $T = 197.32'$ $L_c = 239.01'$
 $PT = 8+38.82 = (Road A 62+19.94)$

Ramp CB
PC 0+00 = (Road C 15+35.30)
 $\Delta = 81^{\circ}35'08''$ $R = 260.00'$
 $T = 224.37'$ $L_c = 370.22'$
PCC 3+70.22
 $\Delta = 106^{\circ}40'07''$ $R = 160.00'$
 $T = 214.92'$ $L_c = 297.87'$
PCC 6+68.09
 $\Delta = 90^{\circ}00'00''$ $R = 220.26'$
 $T = 220.26'$ $L_c = 345.98'$
 $PT = 10+14.07 = (Road B 57+76.31)$

PROPOSED STRUCTURE
RAMP AC OVER B
BRIDGE NO. FRA. 3-1375
TYPE - Simple steel beam with reinforced concrete deck and substructure.
SPAN - 69.45' % bearings along base line
LOAD FREQUENCY RATING - CF - 2000 (51)
ROADWAY - 44.0' ft of parapet safety curbs.
SKEW - Varies
SURFACE COURSE - Bituminous concrete
APPROACH SLABS - 25'
ALIGNMENT - 9° left curve.

PROPOSED STRUCTURE
RAMP AC OVER D
BRIDGE NO. FRA. 40-1219
TYPE - Simple steel beam with reinforced concrete deck and substructure.
SPAN - 71.09' % bearing along base line
LOAD FREQUENCY RATING - CF 2000 (51)
ROADWAY - 44' ft of parapets
SKEW - Varies
SURFACE COURSE - Bituminous concrete
APPROACH SLAB - 25'
ALIGNMENT - 9° L. Curve

ROAD ALIGNMENT DATA											
Station	Road A	Road A	Road B	Road B	Road C	Road C	Road D	Road D	Road D	Road D	Road D
Station	$\Delta = 14^{\circ}51'16''$	$\Delta = 14^{\circ}44'58''$	$21^{\circ}30'00''$	$13^{\circ}30'00''$	$20^{\circ}15'02''$	$20^{\circ}55'07''$	$28^{\circ}01'32''$	$20^{\circ}55'07''$	$40^{\circ}00'00''$	$16^{\circ}20'43''$	
PI	$61+41.52$	$6^{\circ}00'$	$6^{\circ}00'$	$6^{\circ}00'$	$6^{\circ}00'$	$6^{\circ}00'$	$6^{\circ}00'$	$6^{\circ}00'$	$7^{\circ}00'$	$6^{\circ}00'$	
R	954.93	954.93	954.93	954.93	954.93	954.93	818.51	954.93	818.51	954.93	
T_s	$223.79'$	$306.75'$	$213.19'$	$270.81'$	$276.57'$	$329.97'$	$423.97'$	$237.36'$	$237.36'$	$200'$	
L_s	$200'$	$250'$	$200'$	$200'$	$200'$	$250'$	$200'$	$200'$	$250'$	$200'$	
L_c	$45.82'$	$108.33'$	$25.00'$	$137.51'$	$148.64'$	$150.37'$	$148.64'$	$321.43'$	$72.42'$	$72.42'$	
TS	$57+36.66$	$63+16.62$	$61+56.04$	$65+93.86$	$TS = 3+22.19$	$9+35.02$	$3+22.19$	$9+18.57$	$17+92.78$	$17+92.78$	
SC	$59+36.66$	$63+56.04$	$67+93.86$	$67+93.86$	$SC = 5+22.19$	$11+85.02$	$5+22.19$	$11+85.02$	$19+92.78$	$19+92.78$	
CS	$59+82.48$	$66+74.95$	$63+81.04$	$69+31.37$	$CS = 6+70.83$	$13+35.39$	$6+70.83$	$14+90.00$	$20+65.20$	$20+65.20$	
ST	$61+82.48$	$69+24.95$	$65+81.04$	$71+31.37$	$ST = 8+70.83$	$15+85.39$	$8+70.83$	$17+40.00$	$22+65.20$	$22+65.20$	
\pm Survey 69+16.46											
\pm Survey 71+49.70											
(21+85.97 = AC 14+92.81) (23+05.96 = BC 20+33.19)											

BENCH MARK
708.05 $\frac{85}{2}$ Brass plug in concrete monument in Sunshine Park west of Scioto Blvd. & northeast of David Davies Packing Co. 303.2 ft. w. of Scioto Blvd. 225.2 ft. northeast of David Davies Bldg.

Profiles for roads and ramps in interchange shown on pages 16 through 19.

Earthwork in Interchange
Sta. 49+66.20 to 70+08.75
E-101 Cut - 66,517 cu. yds.
(Fill - 232,676 cu. yds.)
E-101 Compacted Subgrade - 60,194 sq. yds.
L-9 Seeding - 108,490 sq. yds.
I-22 Subbase - 8/22 cu. yds.
E-8 Pavement Removal - 12800 sq. yd.

*(Includes 15% for Compaction) * See note on page 11

PROPOSED STRUCTURE
RAMPS C & D OVER A & B
BRIDGE NO. FRA. 3-1369
TYPE - 4 Span continuous concrete slab with capped pile abutment and reinforced concrete piers.
SPAN - 44 - 55 - 55 - 44 % bearing
LOAD FREQUENCY RATING - CF 2000 (51)
ROADWAY - Variable with 2'-3" safety curbs.
SKEW - Varies
SURFACE COURSE - Bituminous concrete.
APPROACH SLABS - 20'
ALIGNMENT - AS SHOWN.

BENCH MARK
705.98 $\frac{83}{13}$ Brass plug in concrete monument west side Harmon Ave. at Reiter St., 13.7 ft. w. of w. edge of pav't 15.7 ft. e. of e. edge of sidewalk 76.8 ft. s.e. of n.e. corner bldg. foundation

BENCH MARK
720.97 $\frac{83}{11}$ Brass plug in concrete monument approx. 400' NE of NE corner Anderson Concrete Garage, approx. 400' SE of SE corner Anderson Haulage Garage (plotted above)

BENCH MARK
74 $\frac{84}{7}$ Brass plug in concrete monument in ground, SW corner of W. Mound St. & Scioto Boulevard, 7.9 ft. s. of s. curb, 72.7 ft. w. of w. curb of Scioto Boulevard.
Elev. 721.05 (project FRA. 40-1230 Elev. 721.10)

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-1370
SCHEMATIC PLAN AND PROFILE

PROPOSED STRUCTURE OVER SULLIVANT AVE.
BRIDGE NO. FRA-3-1394
TYPE - 3 Span continuous concrete slab with capped pile abutment and reinforced concrete piers.
SPAN - 44 - 55 - 44
LOAD FREQUENCY RATING - CF 2000 (51)
ROADWAY - Variable
SKEW - 28' ± R.F.
SURFACE COURSE - Bituminous concrete
APPROACH SLAB - 25'
ALIGNMENT - Tangent

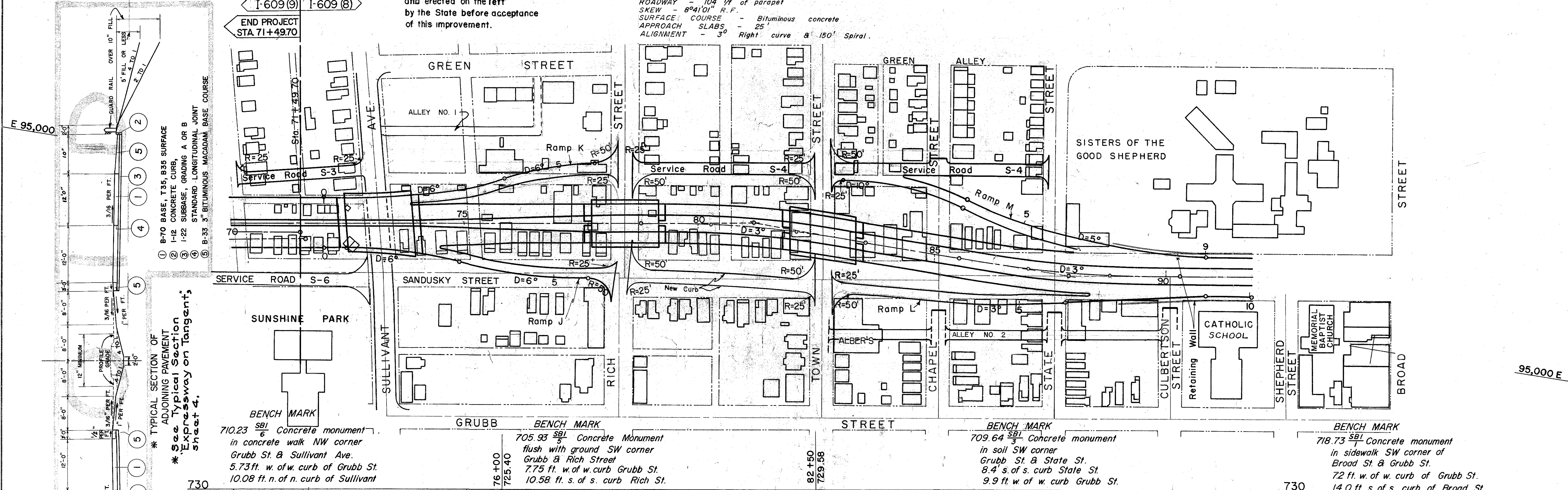
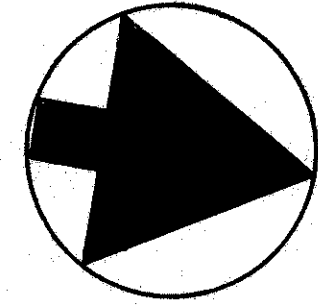
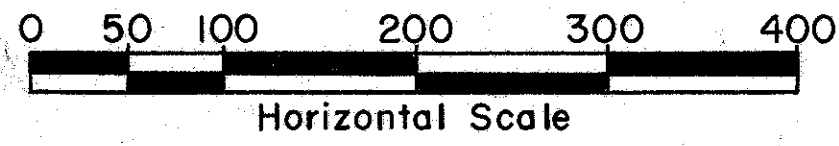
EXPRESSWAY CURVE DATA

Δ = 10°	Δ = 9° 50' 40"
D _C = 3°	D _C = 3°
T _S = 1909.86'	T _S = 1909.86'
L _S = 242.13'	L _S = 239.52'
L _C = 150'	L _C = 150'
L _C = 183.33'	L _C = 178.13'
T _S = Sta. 78 + 80.28	T _S = Sta. 85 + 65.88
S.C. = Sta. 80 + 30.28	S.C. = Sta. 87 + 15.88
C.S. = Sta. 82 + 13.61	C.S. = Sta. 88 + 94.01
S.T. = Sta. 83 + 63.61	S.T. = Sta. 90 + 44.01

Note:
Marker will be furnished and erected on the left by the State before acceptance of this improvement.

PROPOSED STRUCTURE OVER RICH STREET
BRIDGE NO. FRA-3-1404
TYPE - 3 Span continuous concrete slab with capped pile abutment and reinforced concrete piers.
SPAN - 44 - 55 - 44
LOAD FREQUENCY RATING - CF 2000 (51)
ROADWAY - 104' 1/4 of parapet
SKEW - As shown
SURFACE COURSE - Bituminous concrete
APPROACH SLABS - 25'
ALIGNMENT - Tangent and spiral

PROPOSED STRUCTURE OVER TOWN STREET
BRIDGE NO. FRA-3-1412
TYPE - 3 Span continuous concrete slab with capped pile abutment and reinforced concrete piers.
SPAN - 44 - 55 - 44
LOAD FREQUENCY RATING - CF 2000 (51)
ROADWAY - 104' 1/4 of parapet
SKEW - 89° 01' R.F.
SURFACE COURSE - Bituminous concrete
APPROACH SLABS - 25'
ALIGNMENT - 3° Right curve & 150' Spiral.



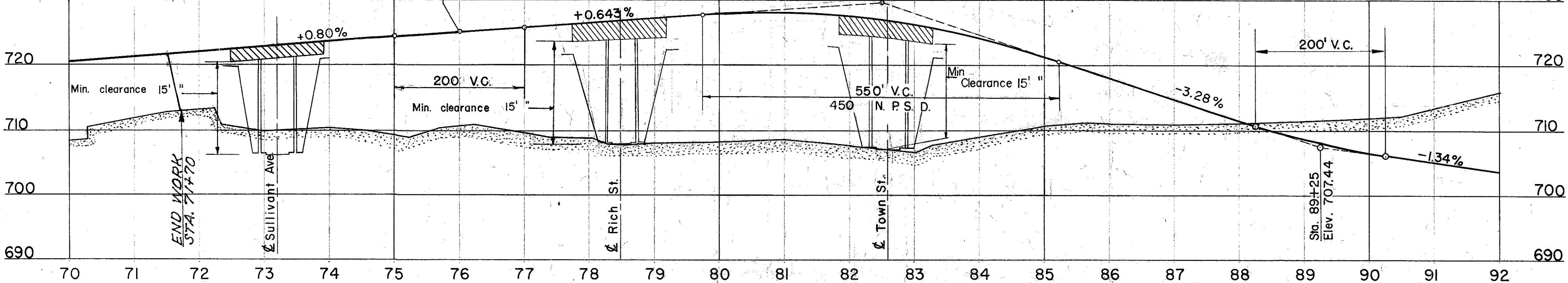
* TYPICAL SECTION OF ADJOINING PAVEMENT
* See Typical Section of Expressway on tangent, sheet 4.

BENCH MARK
710.23 SBL Concrete monument in concrete walk NW corner Grubb St. & Sullivan Ave. 5.73 ft. w. of w. curb of Grubb St. 10.08 ft. n. of n. curb of Sullivan

BENCH MARK
705.93 SBL Concrete Monument flush with ground SW corner Grubb & Rich Street 7.75 ft. w. of w. curb Grubb St. 10.58 ft. s. of s. curb Rich St.

BENCH MARK
709.64 SBL Concrete monument in soil SW corner Grubb St. & State St. 8.4 ft. s. of s. curb State St. 9.9 ft. w. of w. curb Grubb St.

BENCH MARK
718.73 SBL Concrete monument in sidewalk SW corner of Broad St & Grubb St. 7.2 ft. w. of w. curb of Grubb St. 14.0 ft. s. of s. curb of Broad St.

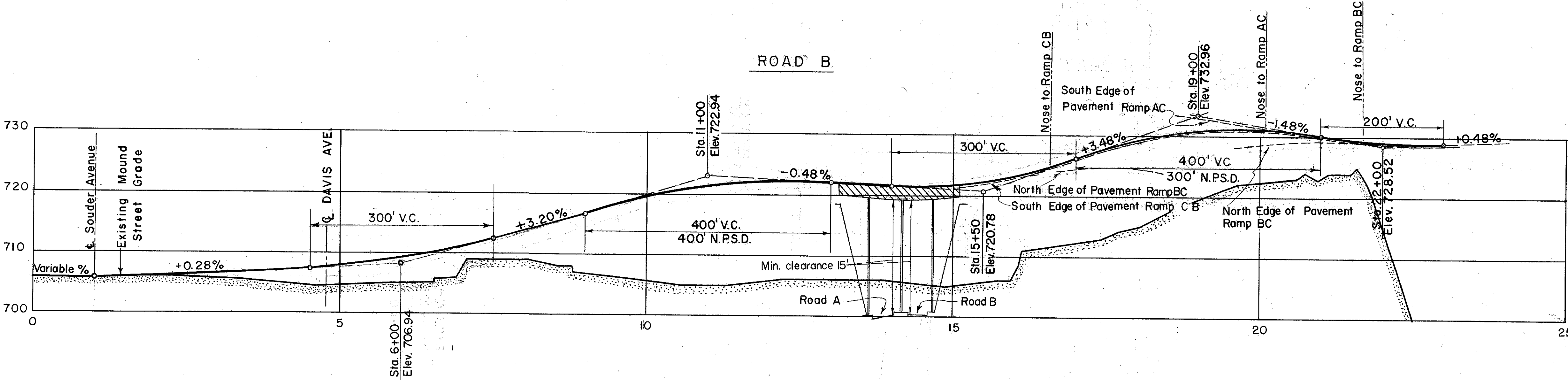
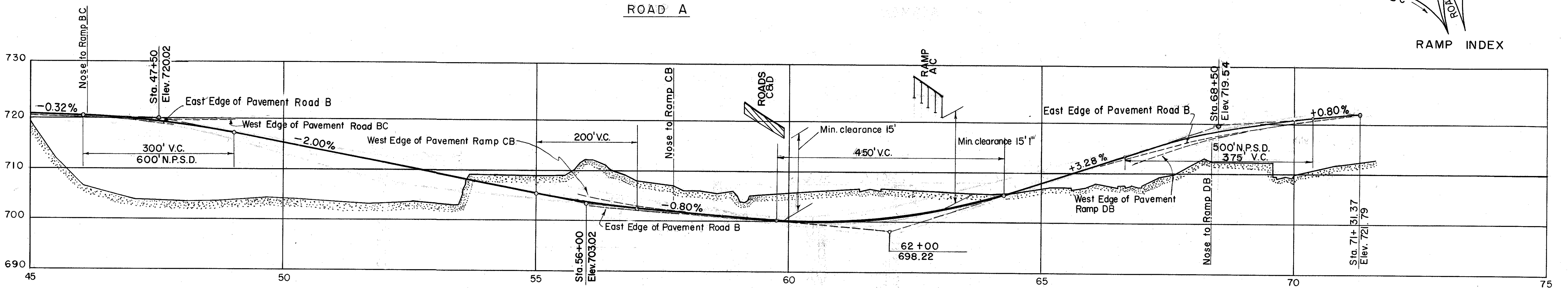
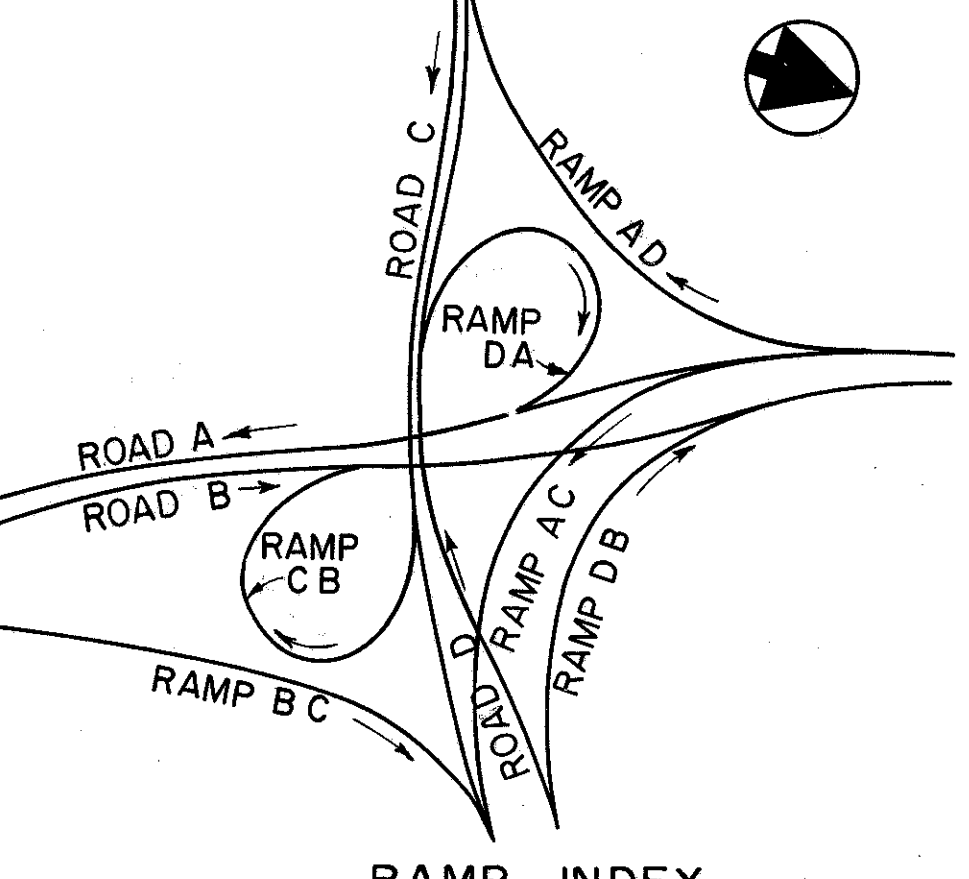
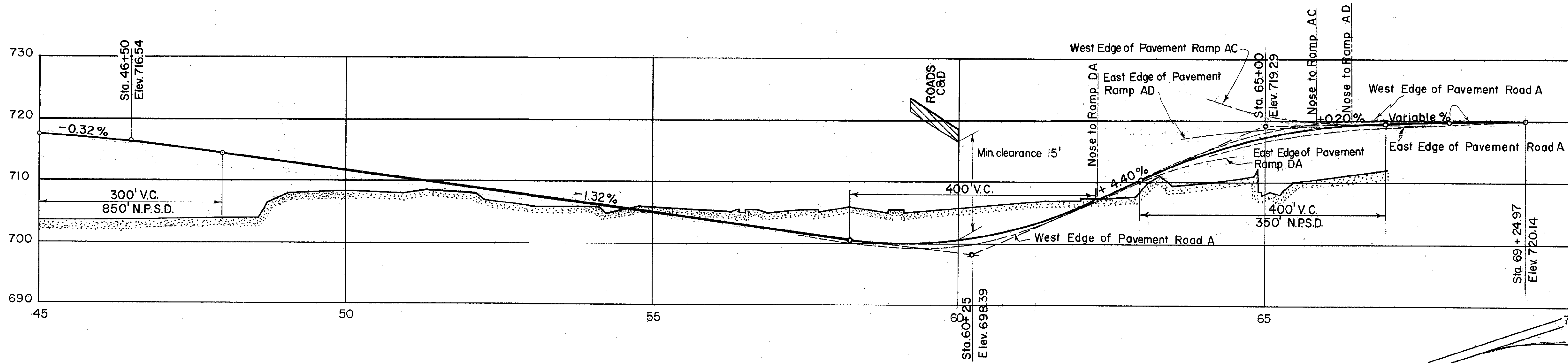


Earthwork
Sta. 70 + 08.75 to 71 + 49.70
E-101 Cut - 2590 cu. yds.
(Fill - 7135 cu. yds.)
E-101 Compacted Subgrade - 2319 sq. yds.
L-9 Seeding - 386 sq. yds.
I-22 Subbase - 313 cu. yd.
E-8 Pavement Removal - 617 sq. yd.
* See note on page 11

Total Embankment 464,594 cu. yds.
Total Embankment + 15% 534,283 cu. yds.
Total Excavation - 82,172 cu. yds.
Est. Pav't Removal to Reduce Borrow 6,911 cu. yds.
E-4 Borrow 243,200 cu. yds.
E-11 Water = (464,594 + 5978 + 18291) x 7/1000 = 2445 M.Gals.

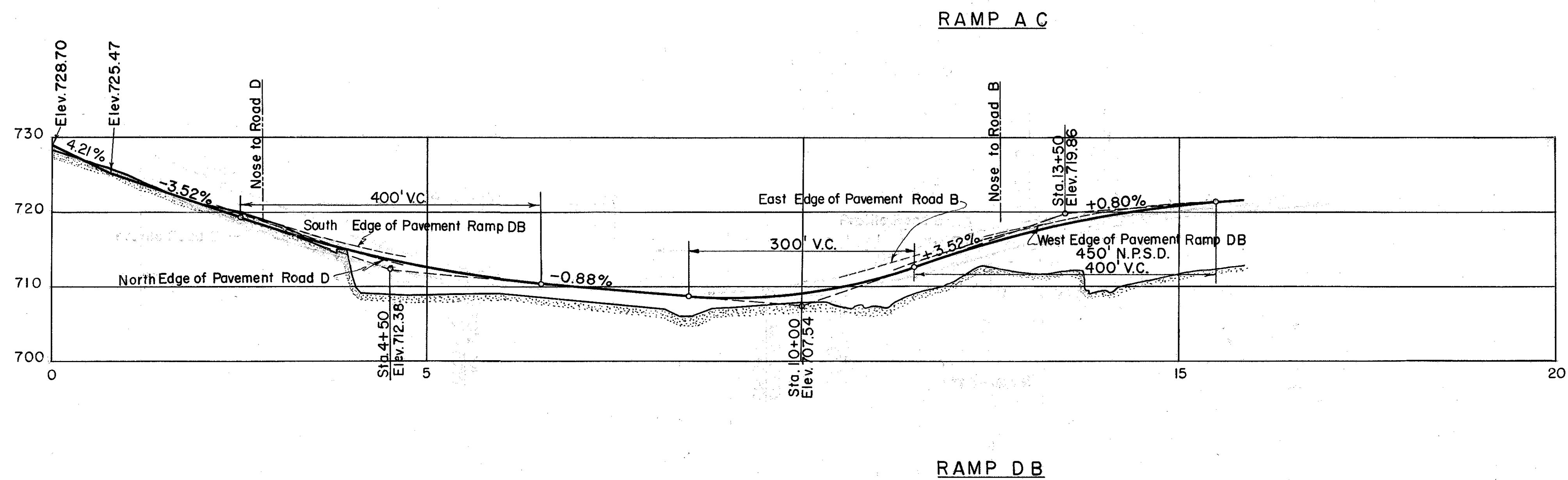
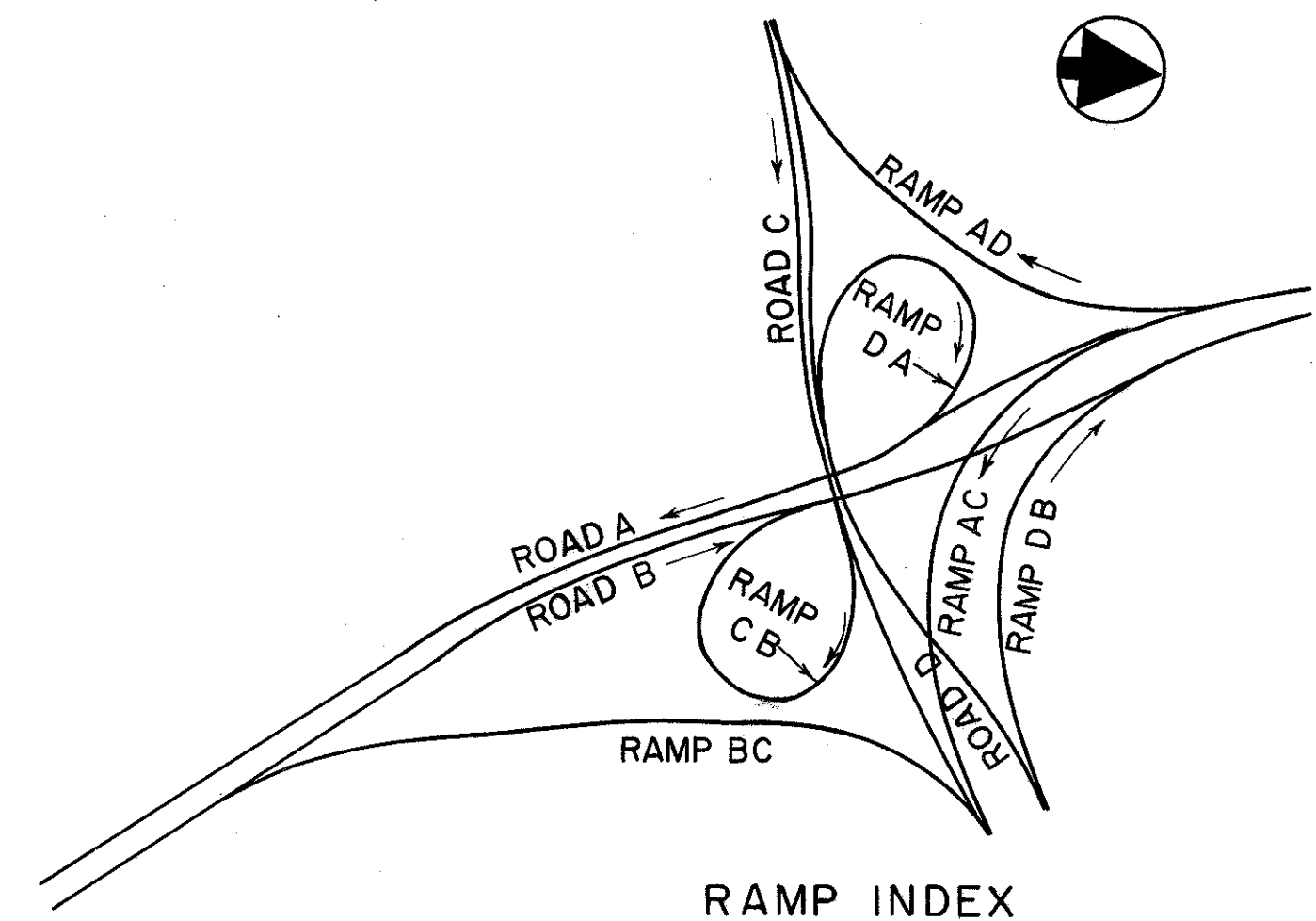
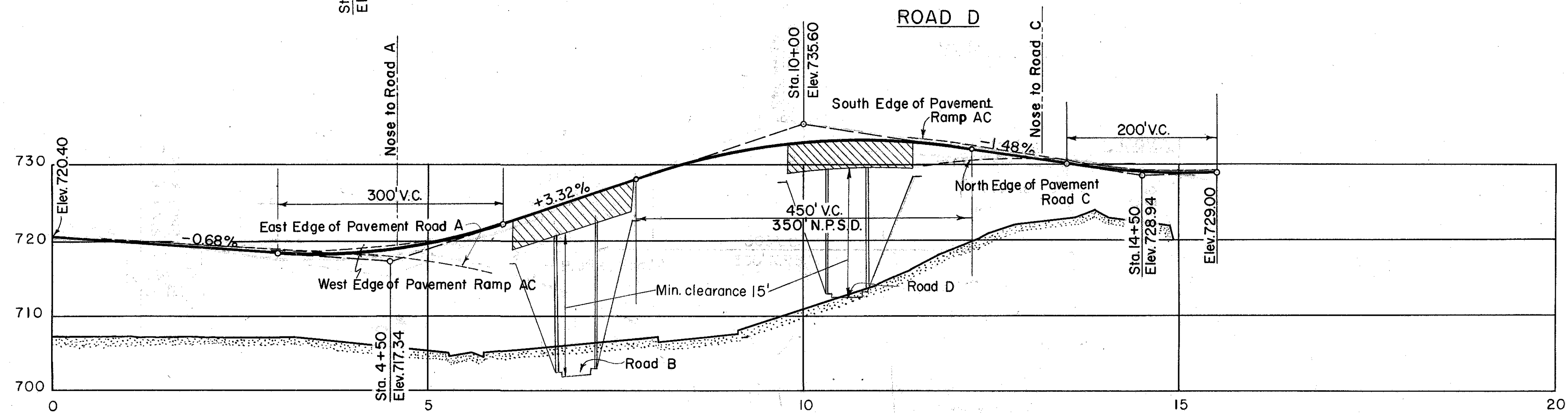
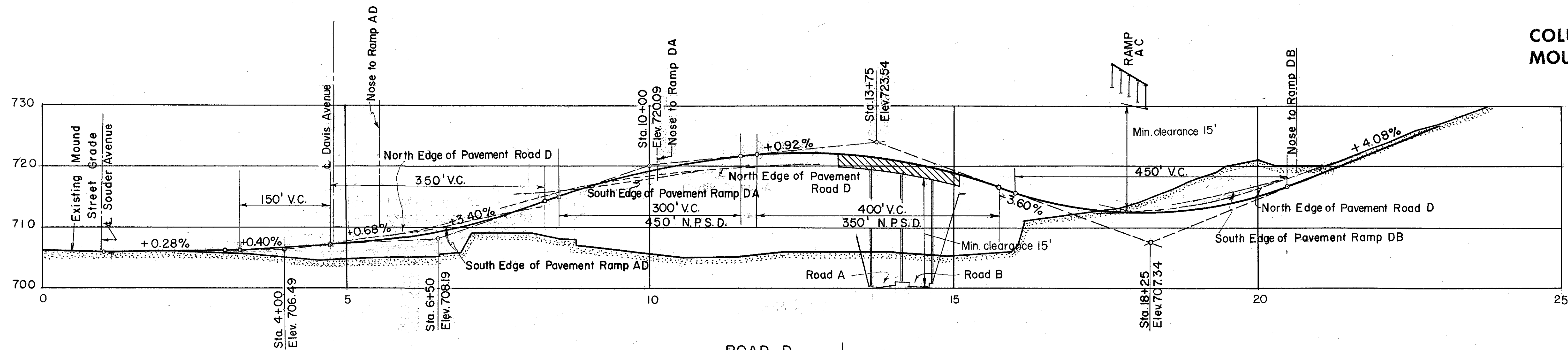
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

RAMP PROFILES
FRA 62-1256 FRA 3-13.70



Road Profiles A, B, C

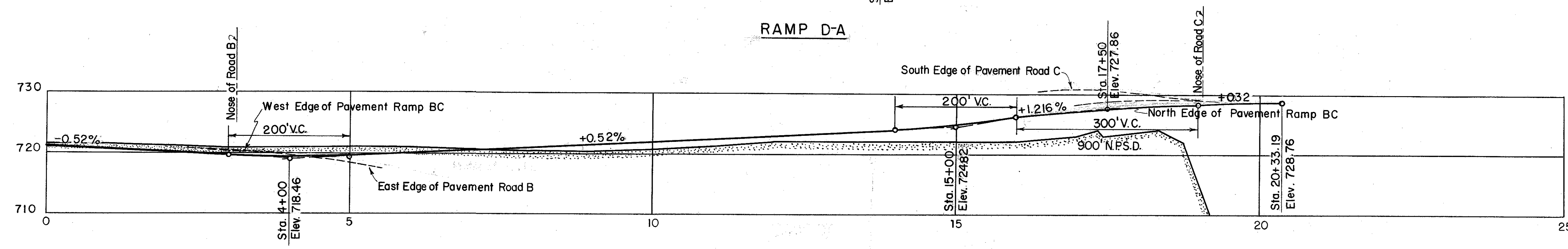
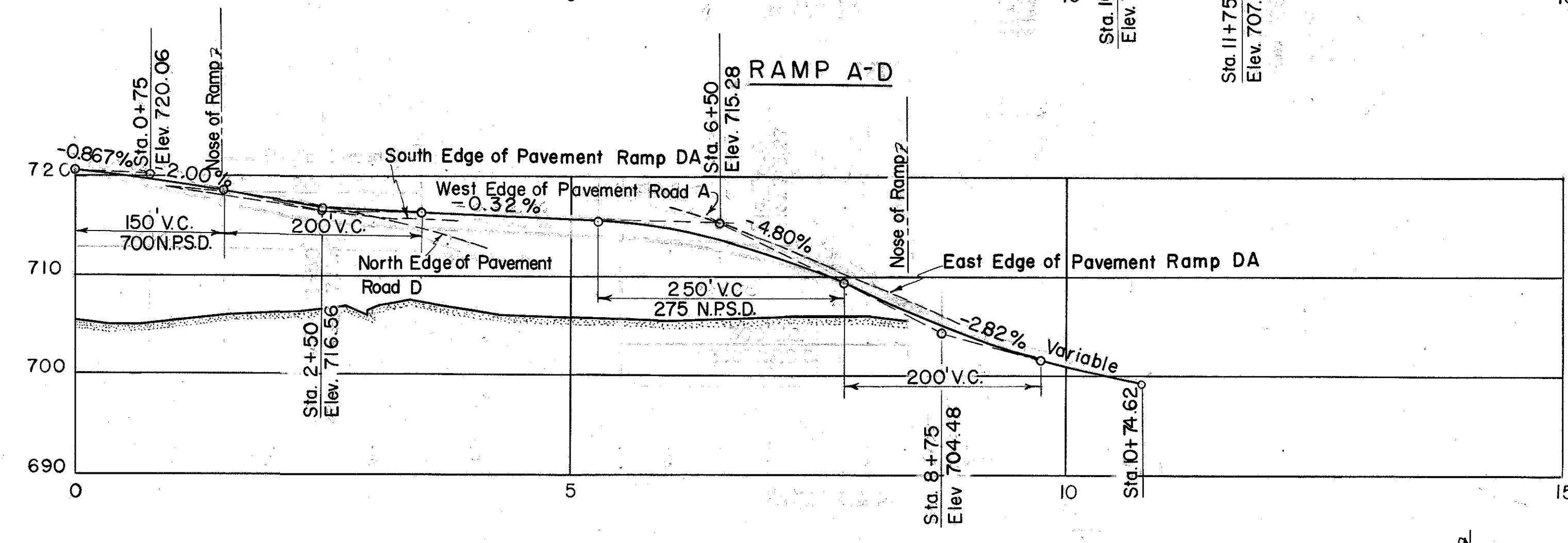
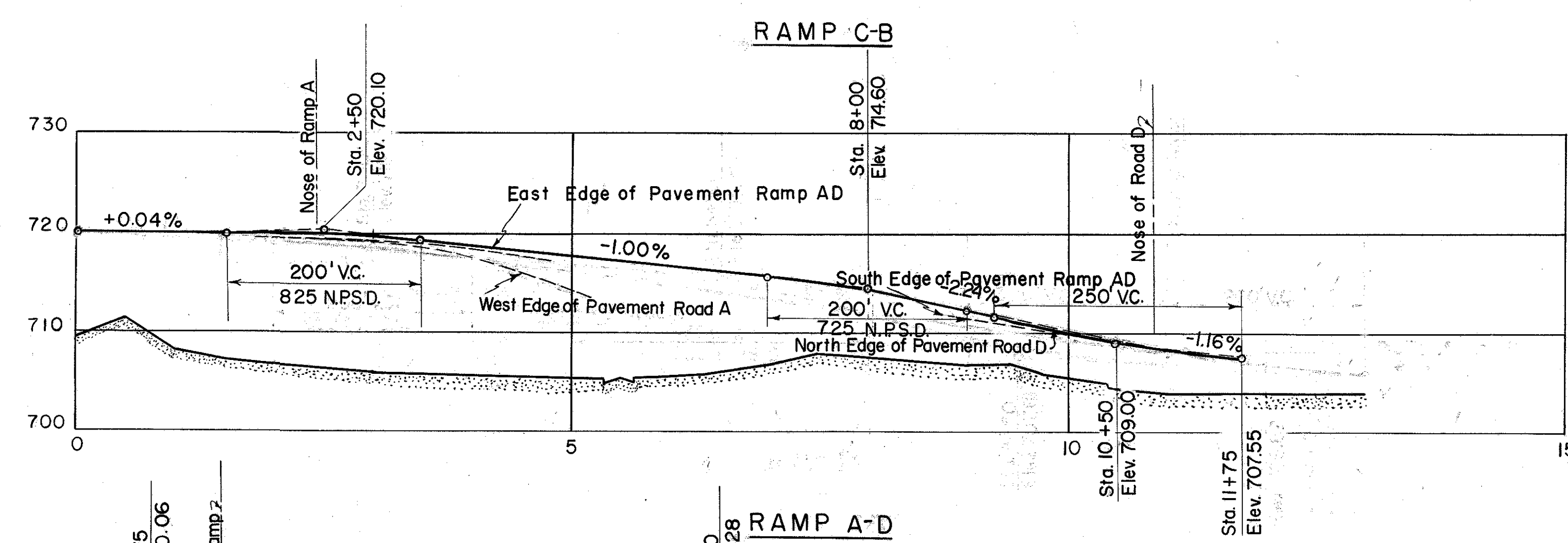
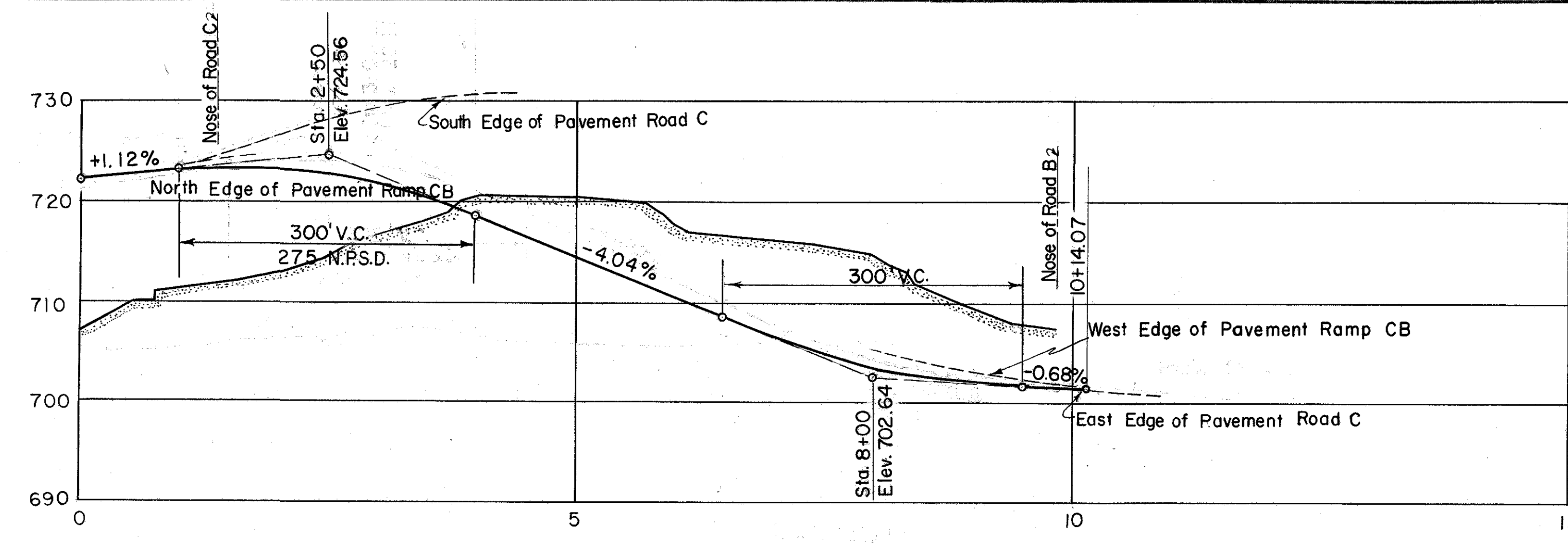
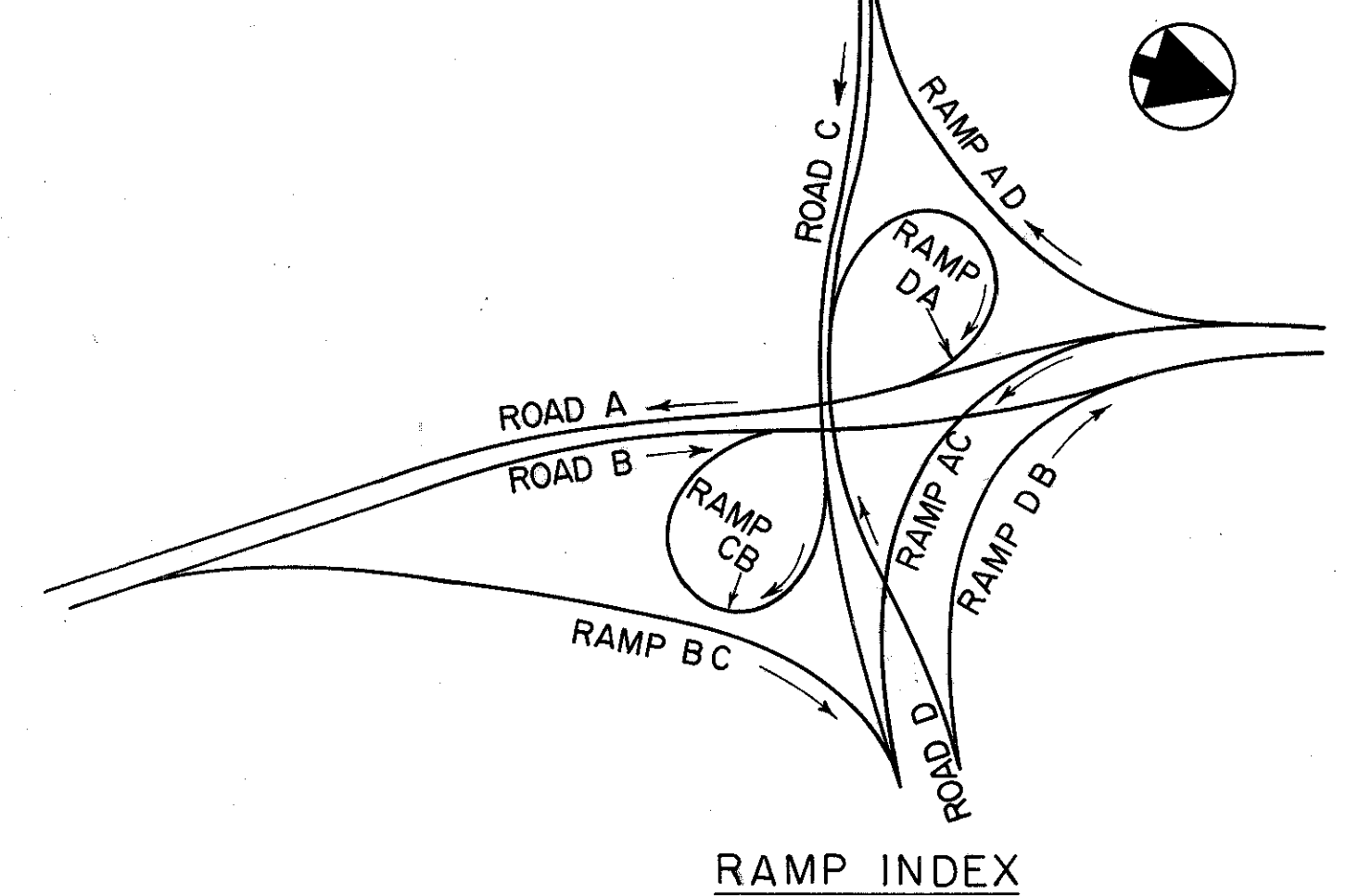
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
RAMP PROFILES



FRANKLIN COUNTY
CITY OF COLUMBUS

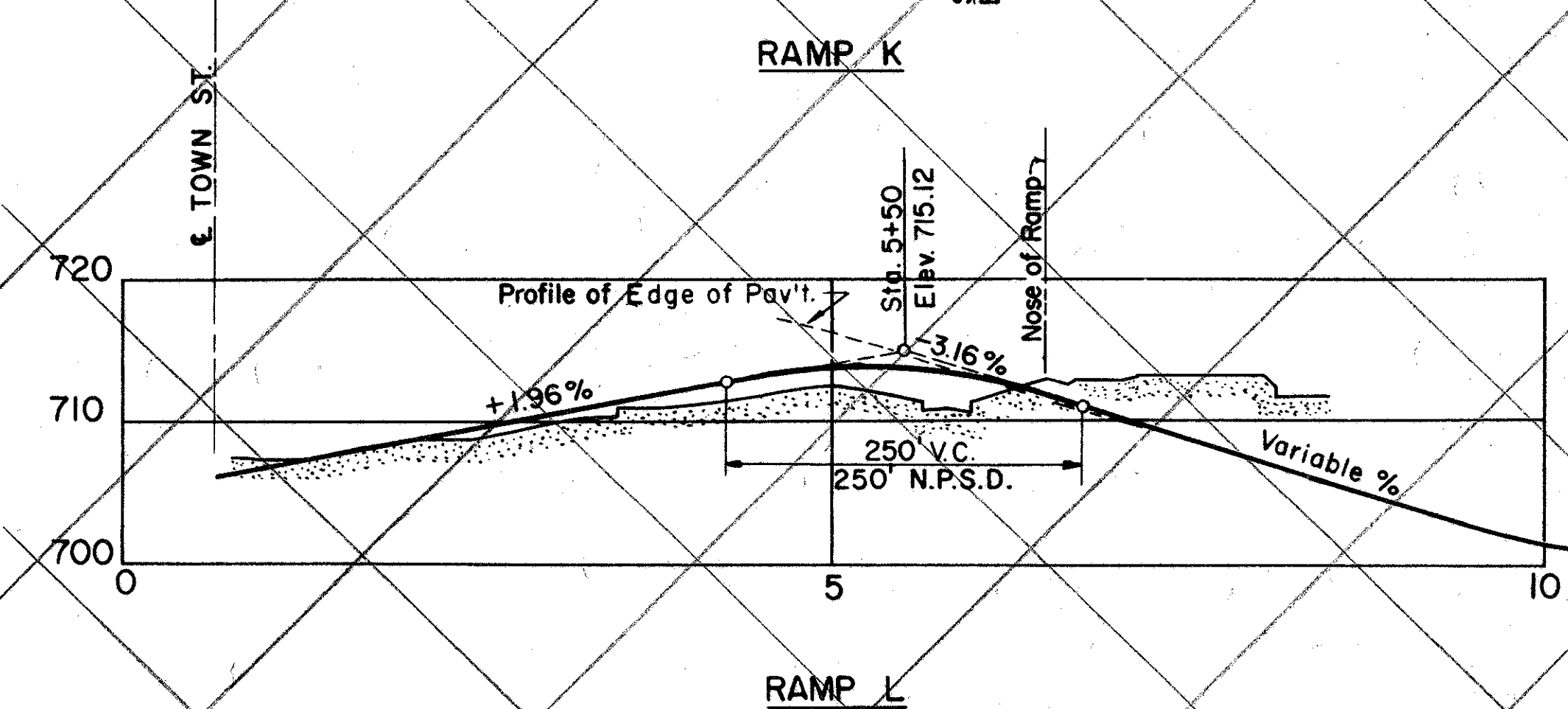
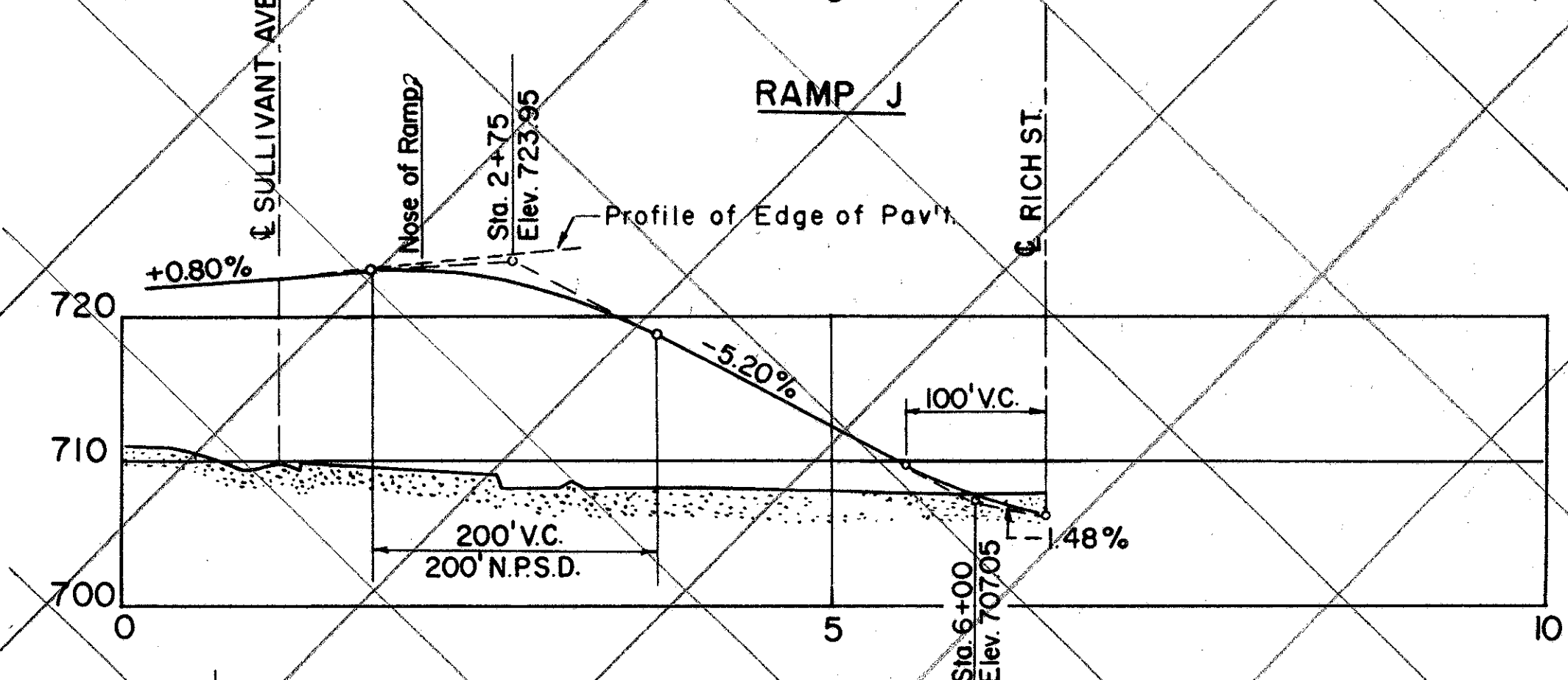
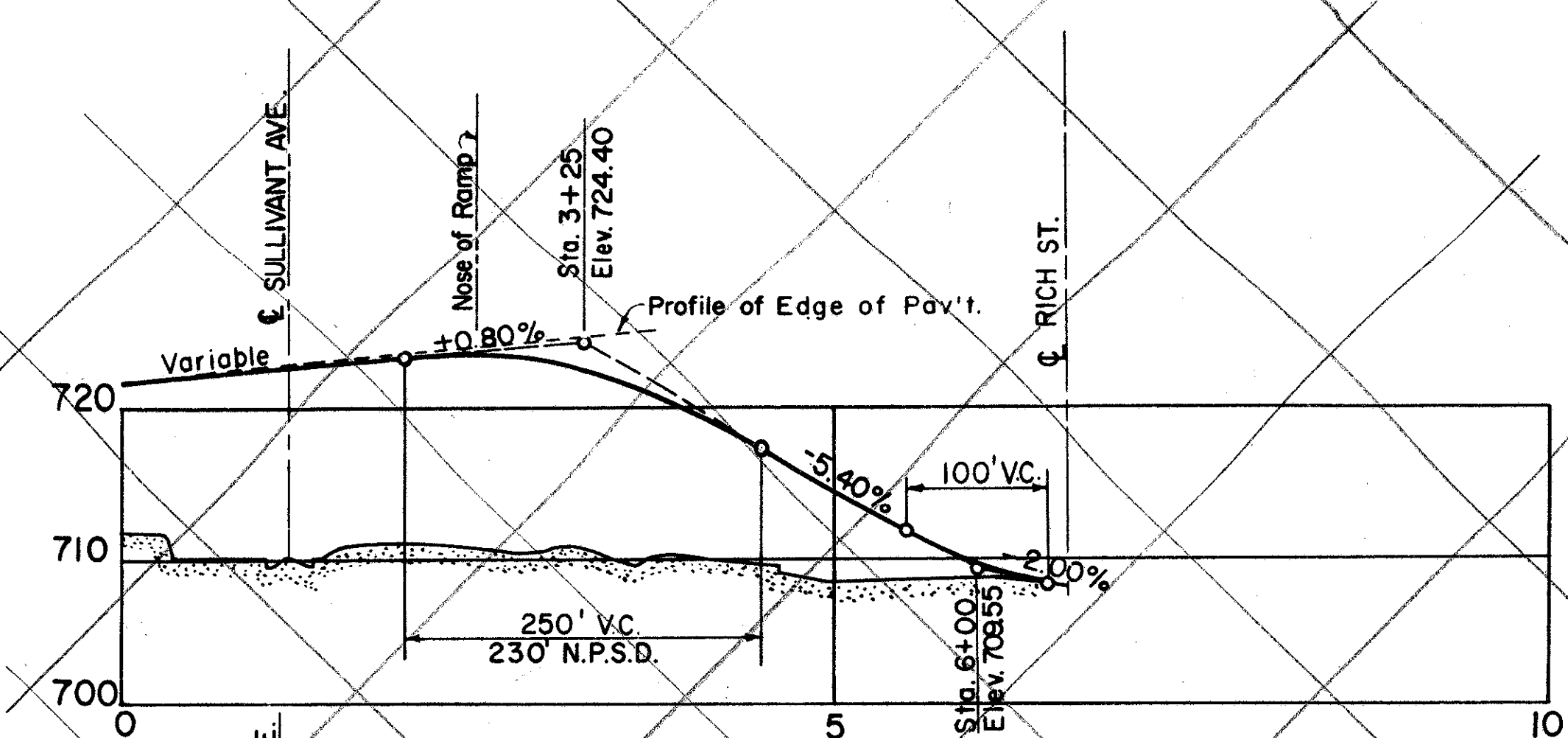
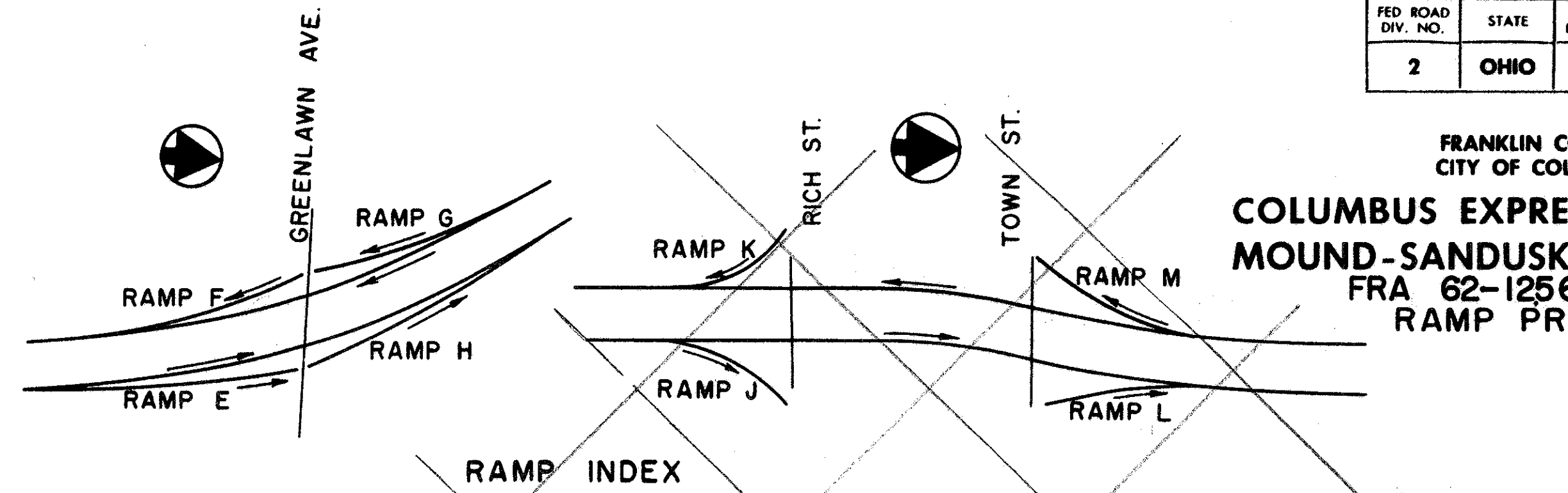
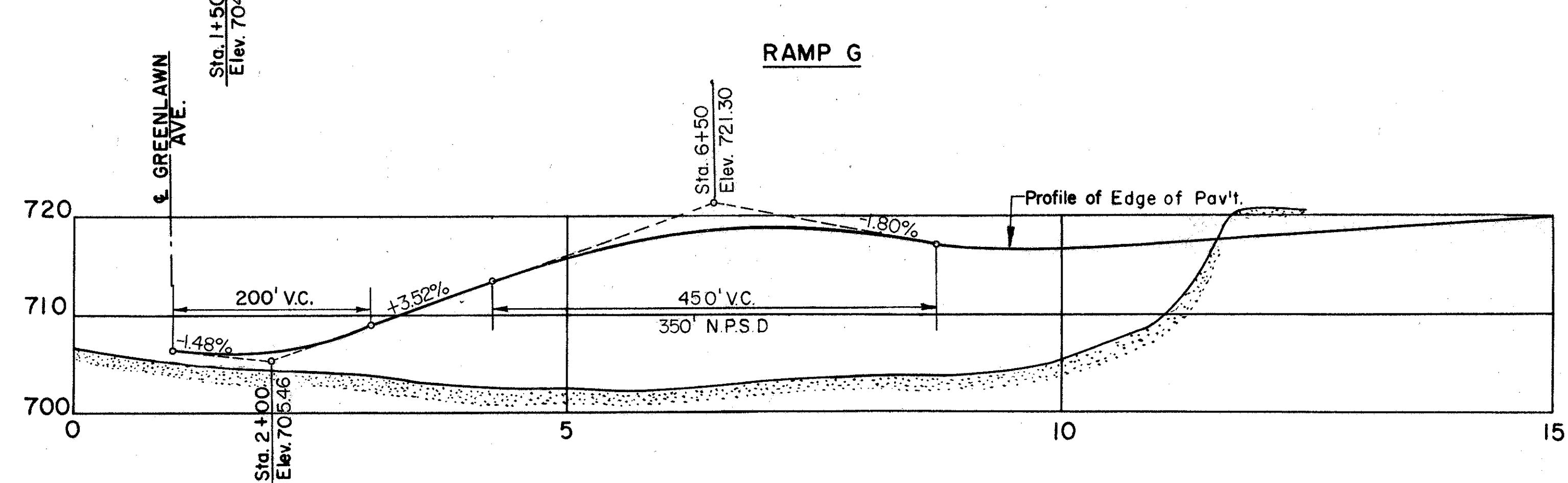
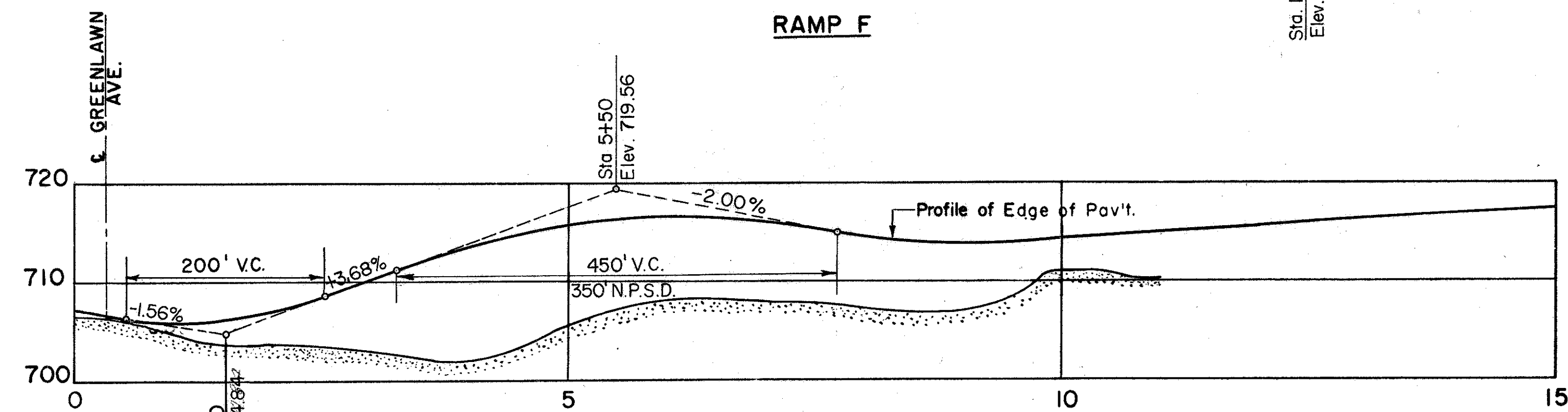
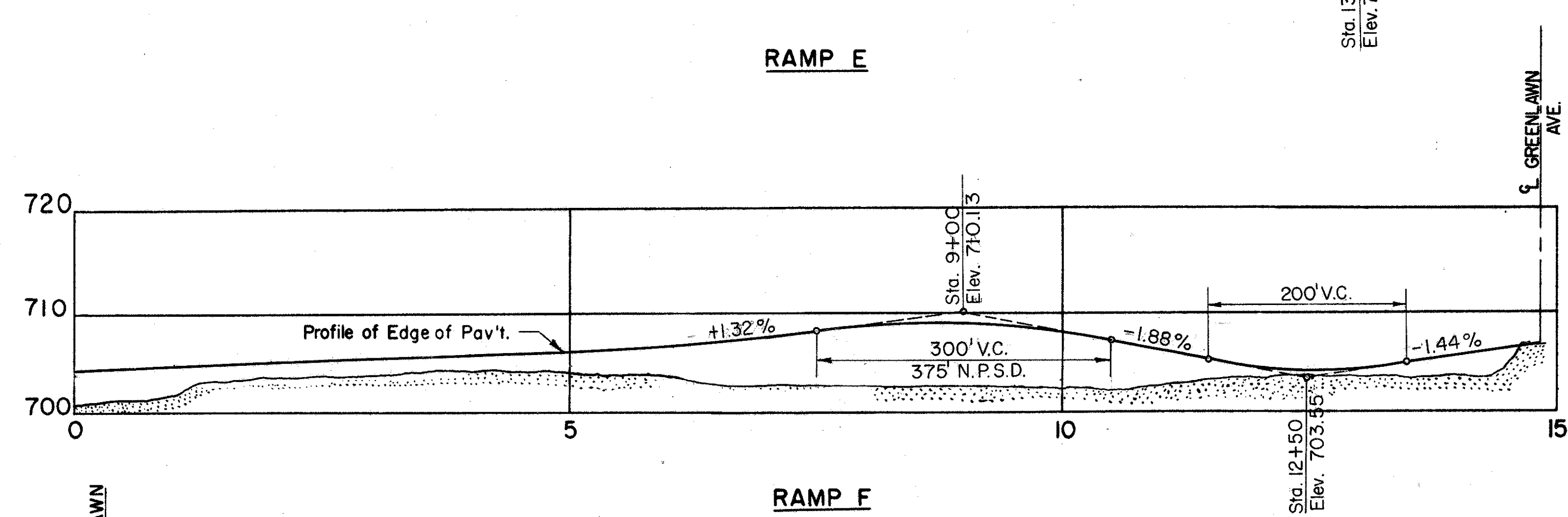
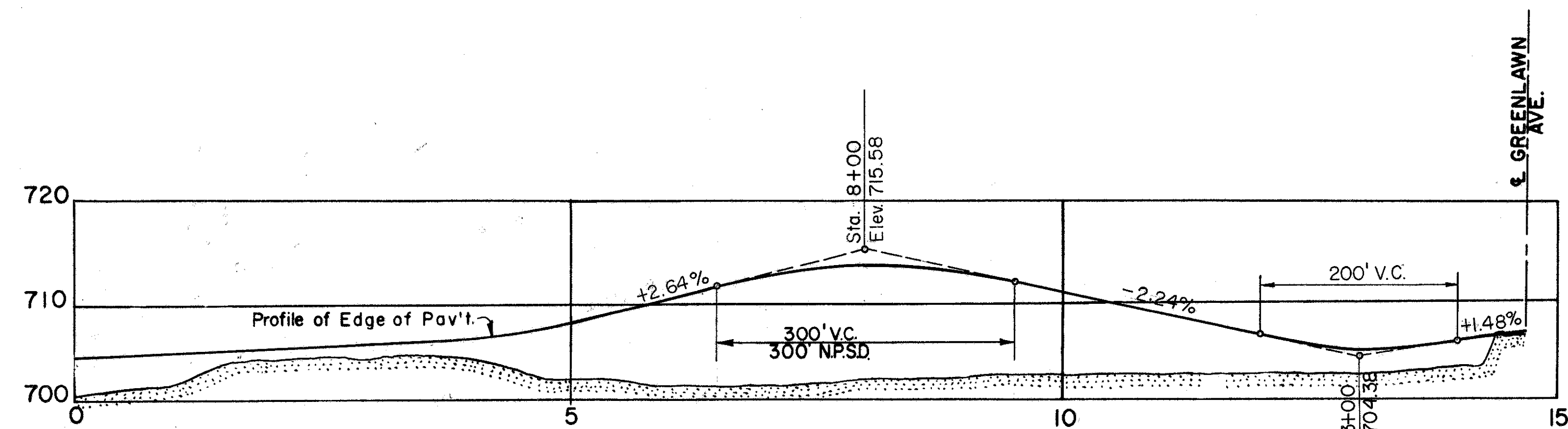
COLUMBUS EXPRESSWAY SYSTEM MOUND-SANDUSKY EXPRESSWAY

RAMP PROFILES
FRA 62-1256 FRA 3-13.70

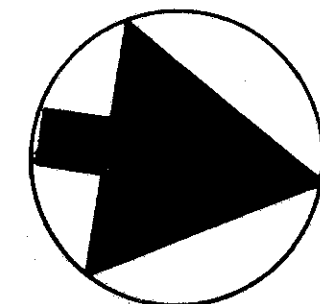
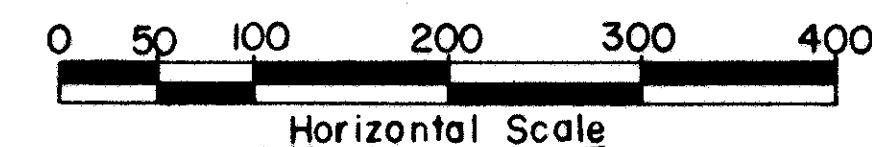


RAMP B-C

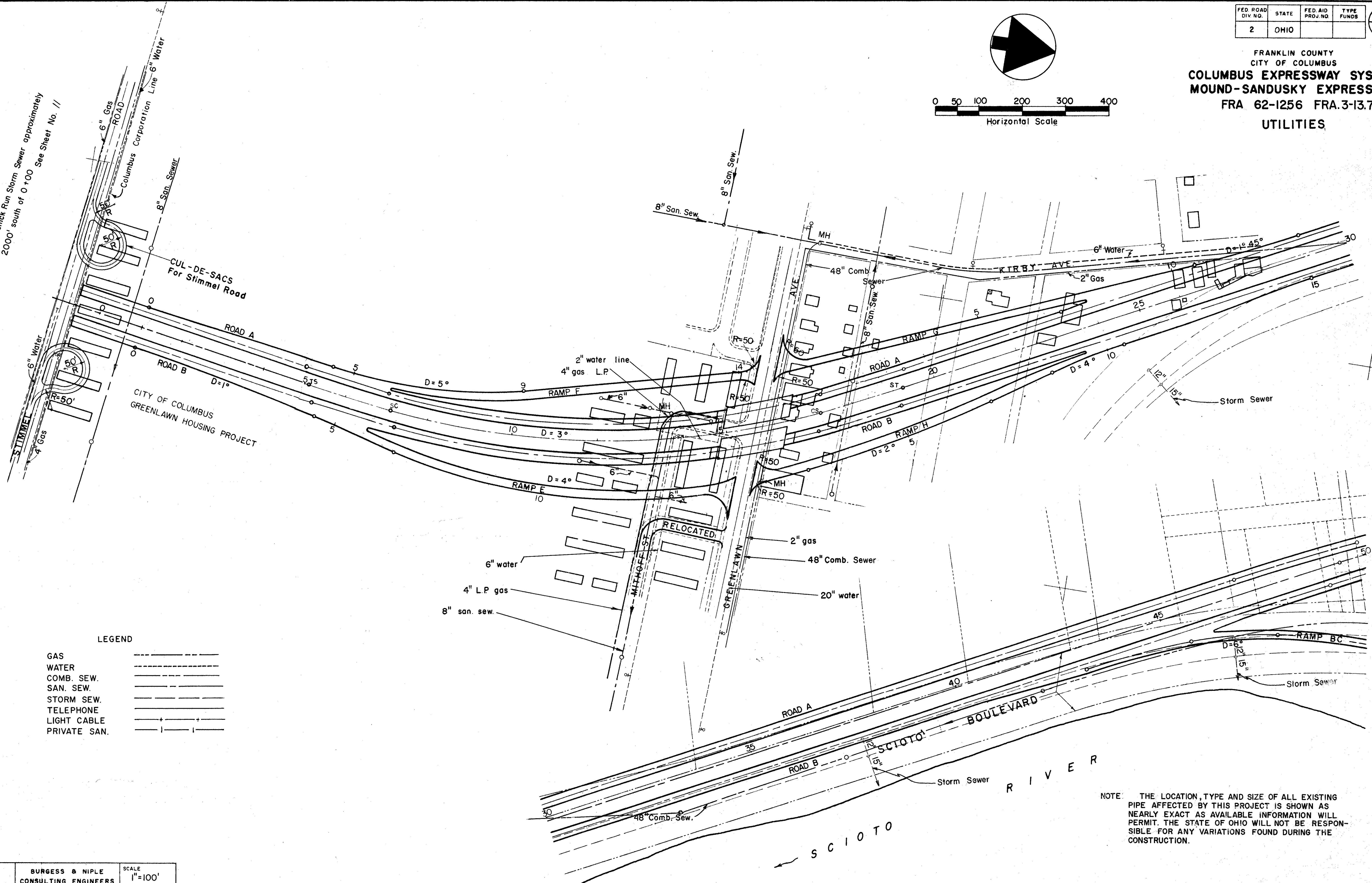
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
RAMP PROFILES



FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA.3-13.70
UTILITIES



See Renick Run Storm Sewer approximately
2000' south of 0+00 See Sheet No. //



LEGEND

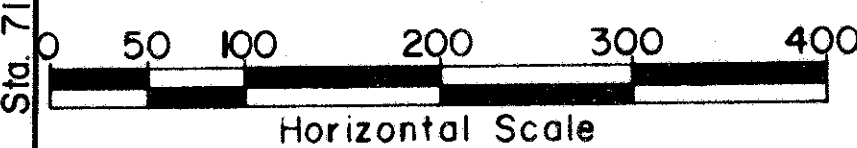
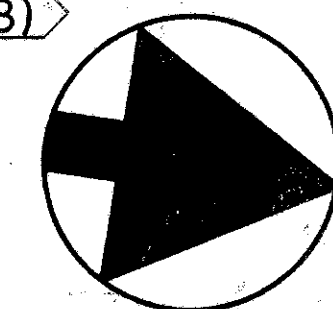
GAS	---
WATER	---
COMB. SEW.	---
SAN. SEW.	---
STORM SEW.	---
TELEPHONE	---
LIGHT CABLE	---
PRIVATE SAN.	---

NOTE: THE LOCATION, TYPE AND SIZE OF ALL EXISTING PIPE AFFECTED BY THIS PROJECT IS SHOWN AS NEARLY EXACT AS AVAILABLE INFORMATION WILL PERMIT. THE STATE OF OHIO WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS FOUND DURING THE CONSTRUCTION.

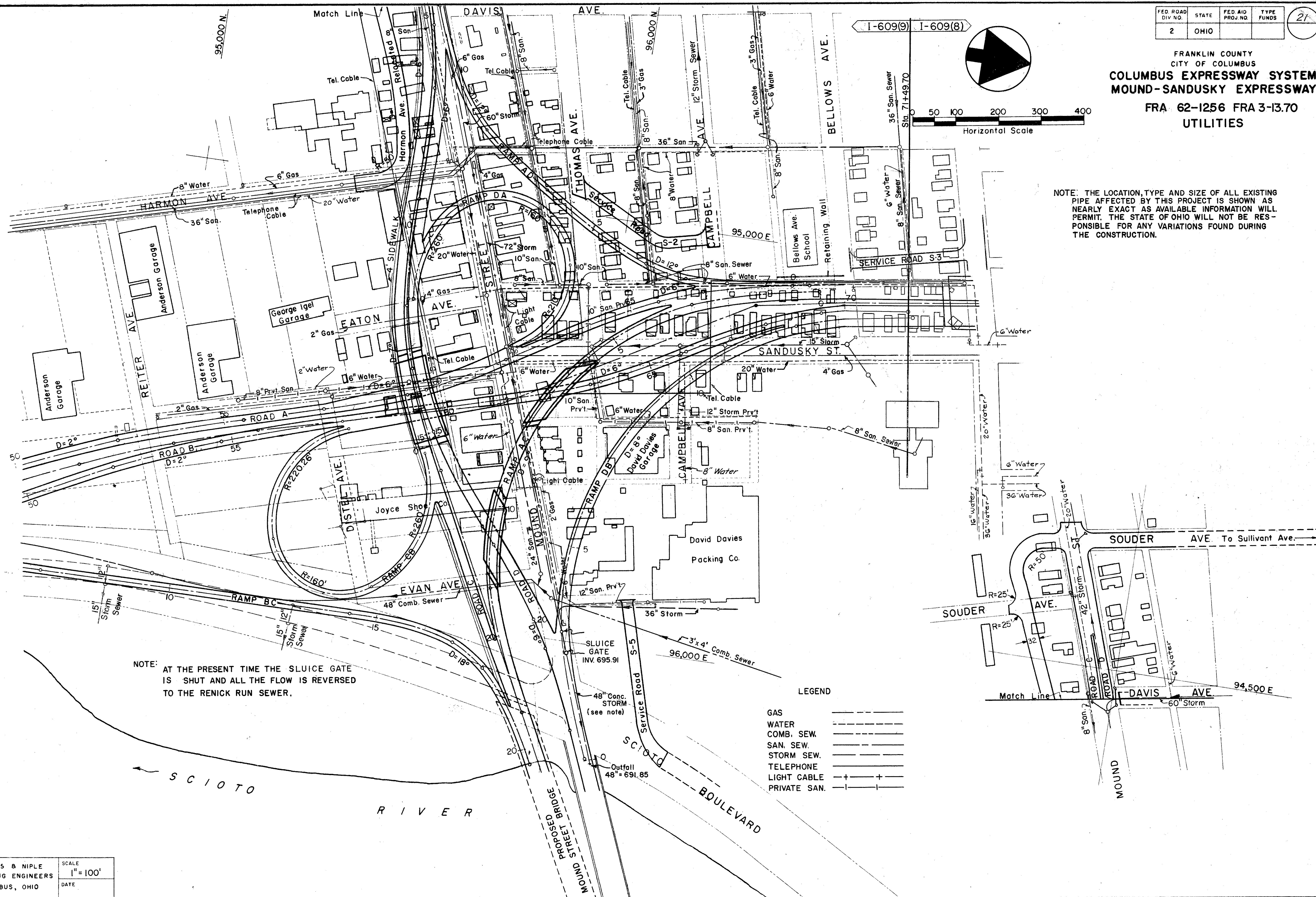
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
UTILITIES



NOTE: THE LOCATION, TYPE AND SIZE OF ALL EXISTING PIPE AFFECTED BY THIS PROJECT IS SHOWN AS NEARLY EXACT AS AVAILABLE INFORMATION WILL PERMIT. THE STATE OF OHIO WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS FOUND DURING THE CONSTRUCTION.



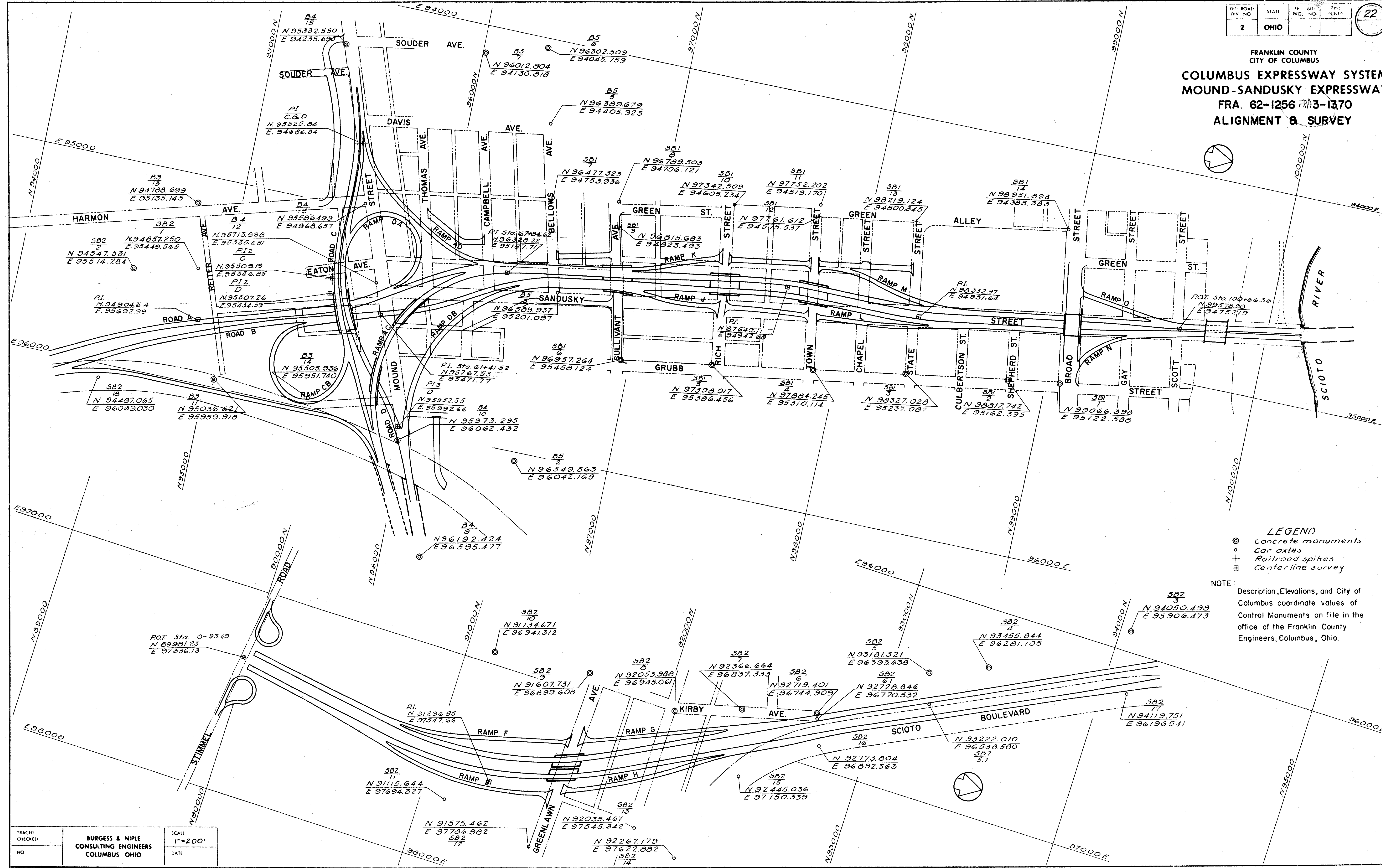
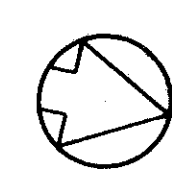
NOTE: AT THE PRESENT TIME THE SLUDGE GATE IS SHUT AND ALL THE FLOW IS REVERSED TO THE RENICK RUN SEWER.

LEGEND

- GAS
- WATER
- COMB. SEW.
- SAN. SEW.
- STORM SEW.
- TELEPHONE
- LIGHT CABLE
- PRIVATE SAN.

TRACED	BURGESS & NIPLE	SCALE
CHECKED	CONSULTING ENGINEERS	1"=100'
NO.	COLUMBUS, OHIO	DATE

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-1370
ALIGNMENT & SURVEY

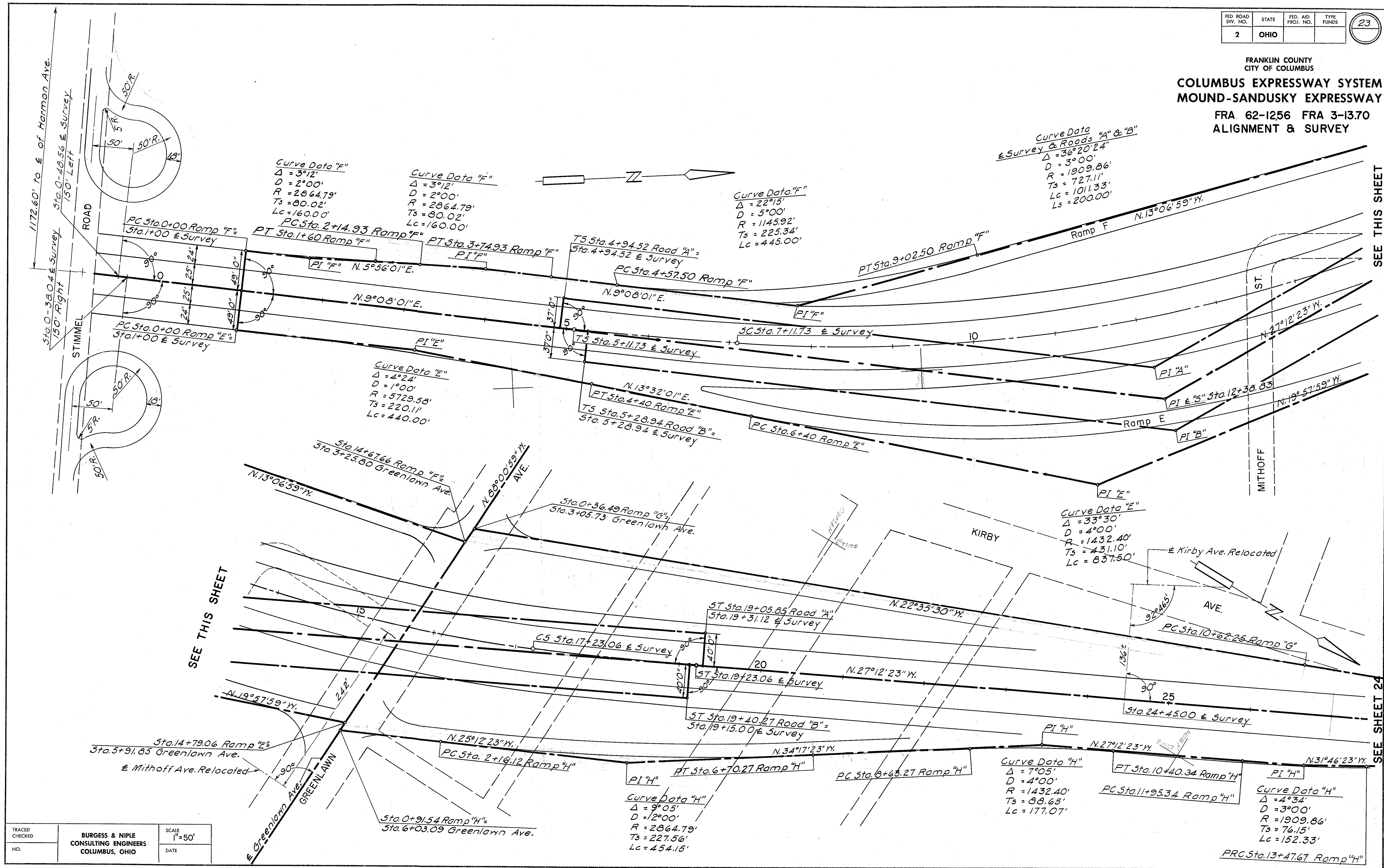


Reduce to 8"

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-1256 FRA 3-13.70
ALIGNMENT & SURVEY

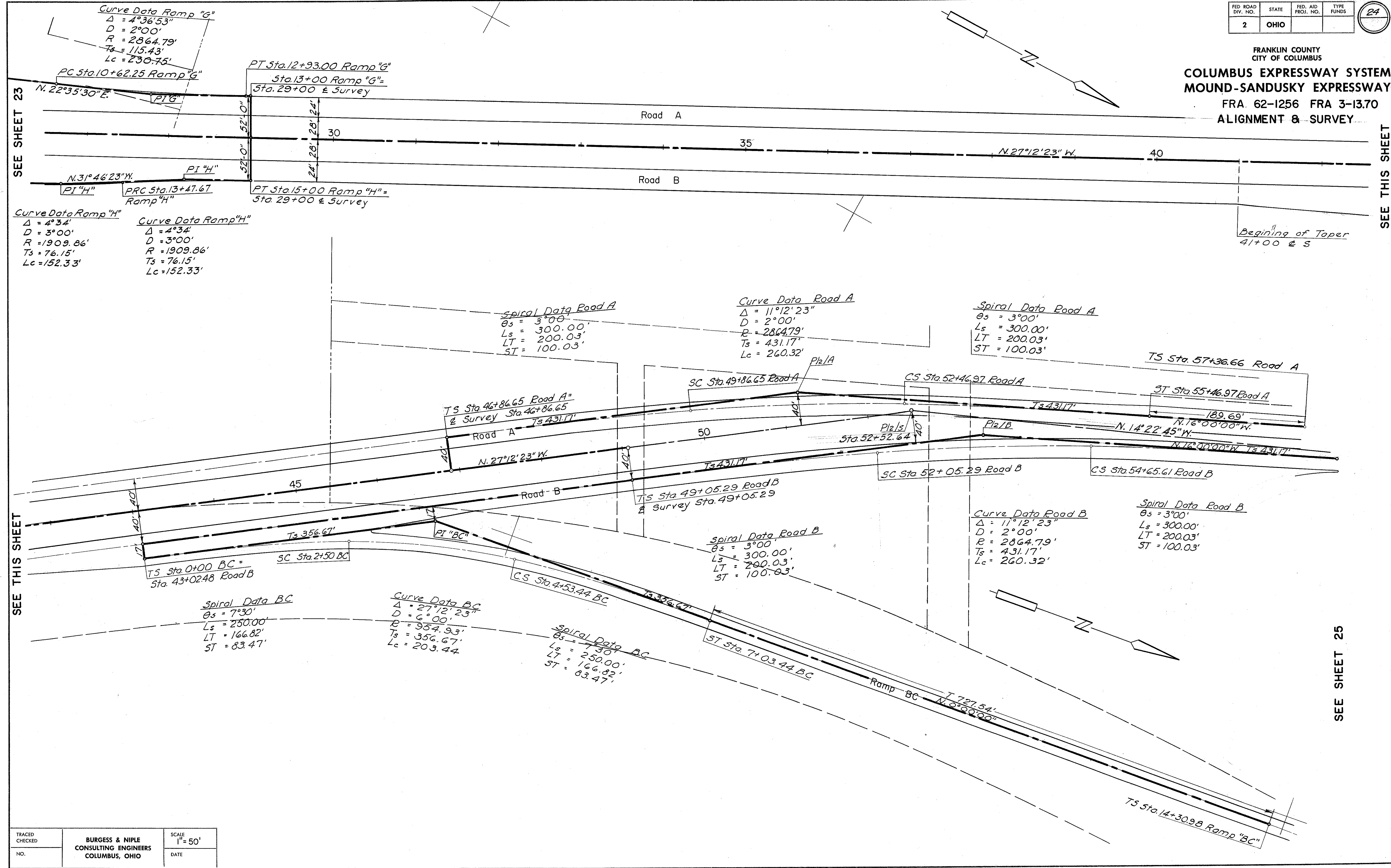


SEE THIS SHEET

SEE THIS SHEET

SEE SHEET 24

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-1370
ALIGNMENT & SURVEY



**COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA. 62-1256 FRA 3-13.70
ALIGNMENT & SURVEY**



SEE SHEET 24

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE 1" = 50'
NO.		DATE

Curve Data

<u>P₂</u>	<u>P₃</u>
$\Delta = 106^{\circ}40'07''$	$\Delta = 81^{\circ}35'08''$
$D = 35^{\circ}48'36''$	$D = 20^{\circ}02'12''$
$R = 160.00'$	$R = 260.00'$
$L_c = 297.87$	$L_c = 370.22$

Curve		Data	
<i>PI</i> DB	<i>PI</i> AC	<i>PI</i> 3D	
$\Delta = 102^{\circ}58'57''$	$\Delta = 107^{\circ}21'12''$	$\Delta = 16^{\circ}20'43''$	
$P = 716.20'$	$P = 636.62'$	$P = 954.93'$	
$L_c = 987.28'$	$L_c = 892.81'$	$L_c = 72.42'$	
$T_s = 1056.46'$	$T_s = 1023.63'$	$T_s = 237.36'$	
$D = 8^{\circ}00'$	$D = 9^{\circ}00'$	$D = 6^{\circ}00'$	
$\theta_s = 12^{\circ}00'$	$\theta_s = 13^{\circ}30'$	$\theta_s = 6^{\circ}00'$	
$L_s = 300.00'$	$L_s = 300.00'$	$L_s = 200.00'$	
$LT = 200.46'$	$LT = 200.58'$	$LT = 133.41'$	
$ST = 100.42'$	$ST = 100.53'$	$ST = 66.74'$	

$P1_2 D$	$P1_2 C$	$P1_2 BC$
$\Delta = 40^{\circ}00'00''$	$\Delta = 28^{\circ}01'32''$	$\Delta = 63^{\circ}23'50''$
$R = 818.51'$	$R = 818.51'$	$R = 318.31'$
$L_c = 321.43'$	$L_c = 150.37'$	$L_c = 102.21'$
$T_s = 423.97'$	$T_s = 329.97'$	$T_s = 325.98'$
$D = 7^{\circ}00'$	$D = 7^{\circ}00'$	$D = 18^{\circ}00'$
$\theta_s = 8^{\circ}45'$	$\theta_s = 8^{\circ}45'$	$\theta_s = 22^{\circ}30'$
$L_s = 250.00'$	$L_s = 250.00'$	$L_s = 250.00'$
$LT = 166.87'$	$LT = 166.87'$	$LT = 168.03'$
$ST = 83.52'$	$ST = 83.52'$	$ST = 84.58'$

$PI_3 B$	$PI_4 B$	$PI_3 A$
$\Delta = 13^{\circ}30'$	$\Delta = 20^{\circ}15'02''$	$\Delta = 14^{\circ}44'58''$
$R = 954.93'$	$R = 954.93$	$R = 954.93'$
$L_c = 25.00'$	$L_c = 137.51'$	$L_c = 45.82'$
$T_s = 213.19'$	$T_s = 270.81'$	$T_s = 223.79$
$D = 6^{\circ}00'$	$D = 6^{\circ}00'$	$D = 6^{\circ}00'$
$\theta_s = 6^{\circ}00'$	$\theta_s = 6^{\circ}00'$	$\theta_s = 6^{\circ}00'$
$L_s = 200.00'$	$L_s = 200.00'$	$L_s = 200.00'$
$LT = 133.41'$	$LT = 133.41'$	$LT = 133.41'$
$ST = 66.74'$	$ST = 66.74'$	$ST = 66.74'$

$PI4A$	$PI4D$
$\Delta = 21^{\circ}30'00''$	$\Delta = 42^{\circ}00'00''$
$R = 954.93$	$R = 477.46'$
$L_c = 108.33$	$L_c = 100.00'$
$T_s = 306.75$	$T_s = 310.09'$
$D = 6^{\circ}00'$	$D = 12^{\circ}00'$
$\theta_s = 7^{\circ}30'$	$\theta_s = 15^{\circ}00$
$L_s = 250.00'$	$L_s = 250.00'$
$LT = 166.82'$	$LT = 167.27'$
$ST = 83.47'$	$ST = 83.88'$

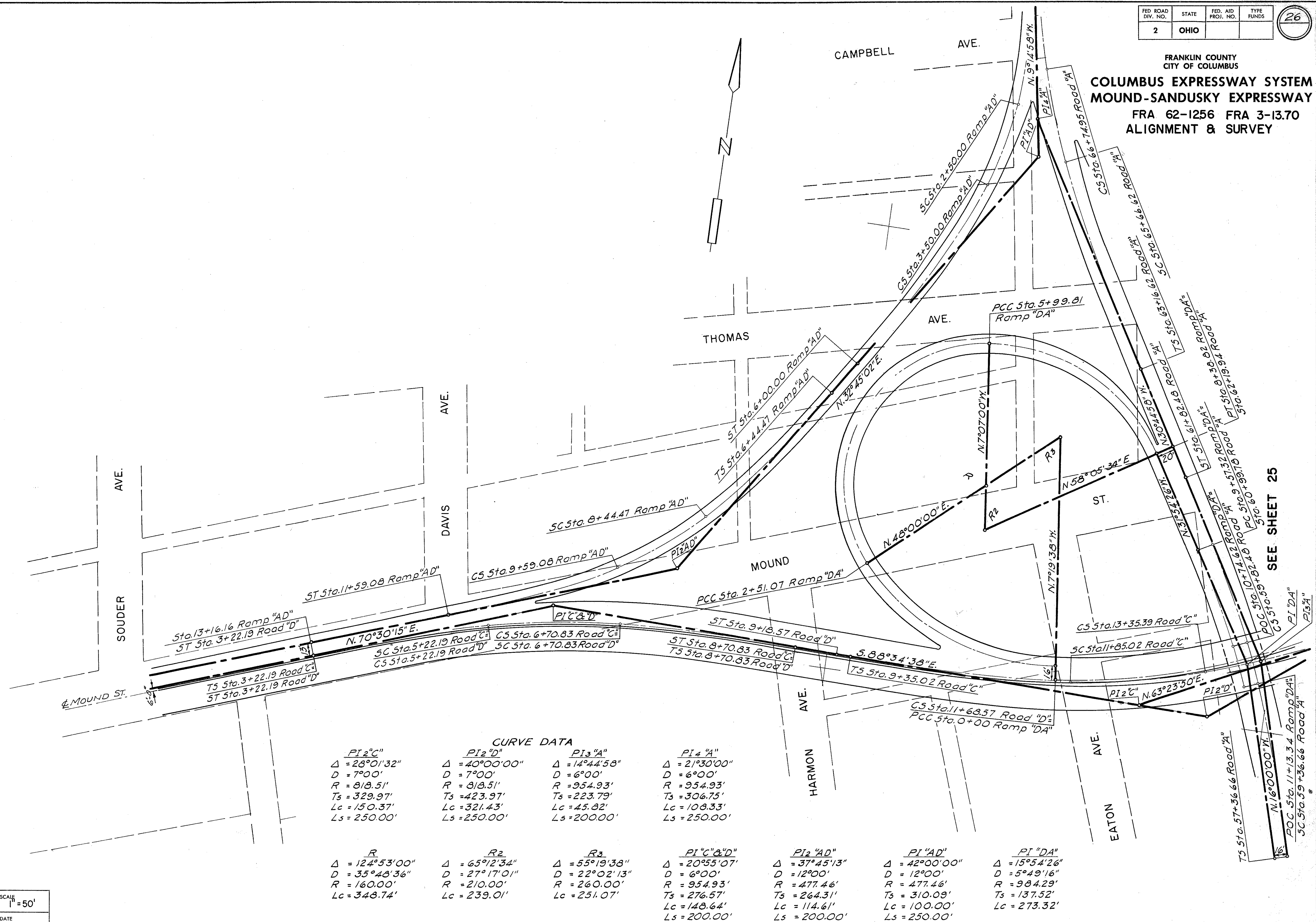
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUSCOLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-1256 FRA 3-13.70

ALIGNMENT & SURVEY



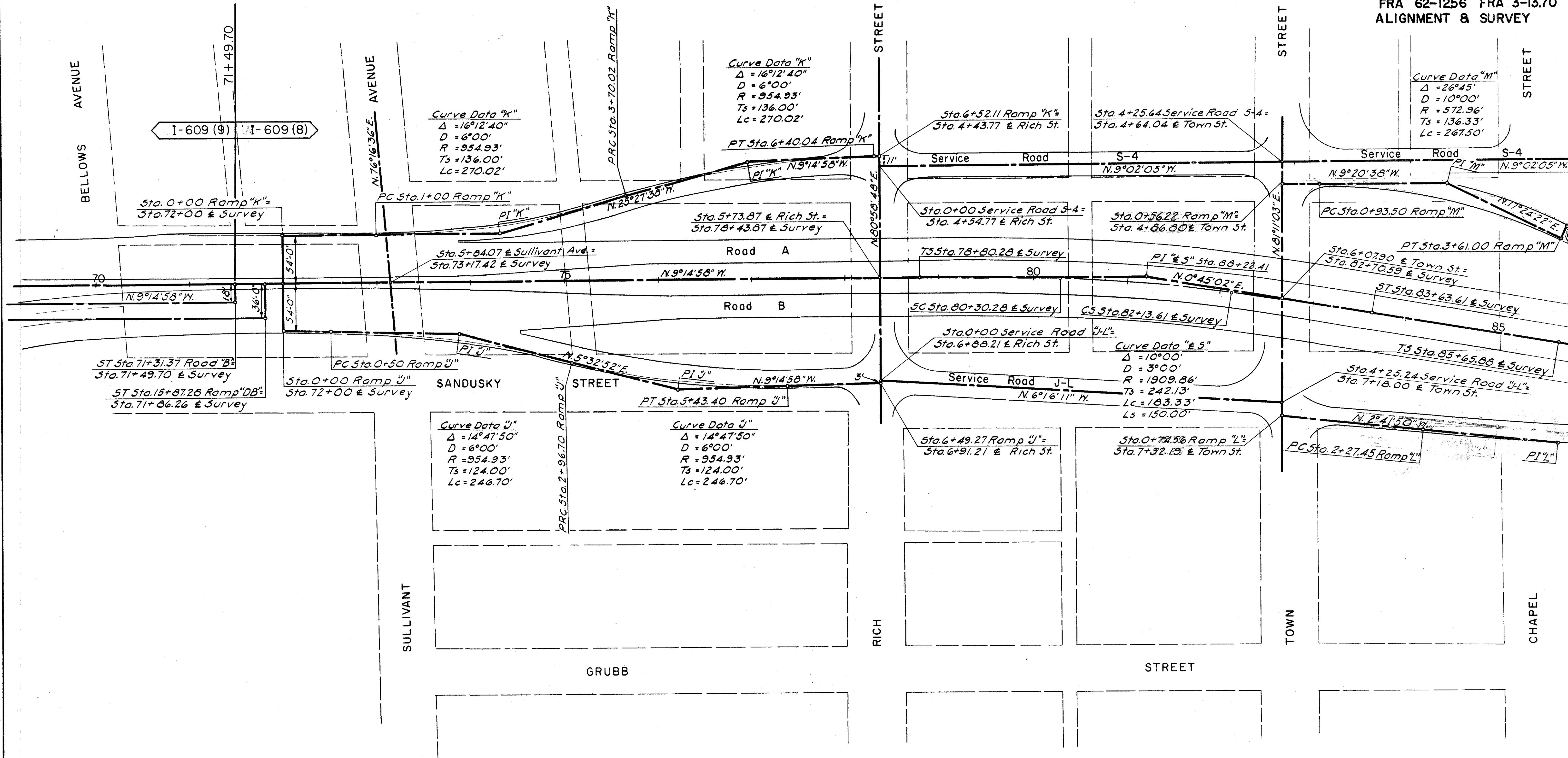
SEE SHEET 25

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-1256 FRA 3-13.70
ALIGNMENT & SURVEY

SEE SHEETS 25 & 26



FRANKLIN COUNTY
CITY OF COLUMBUS

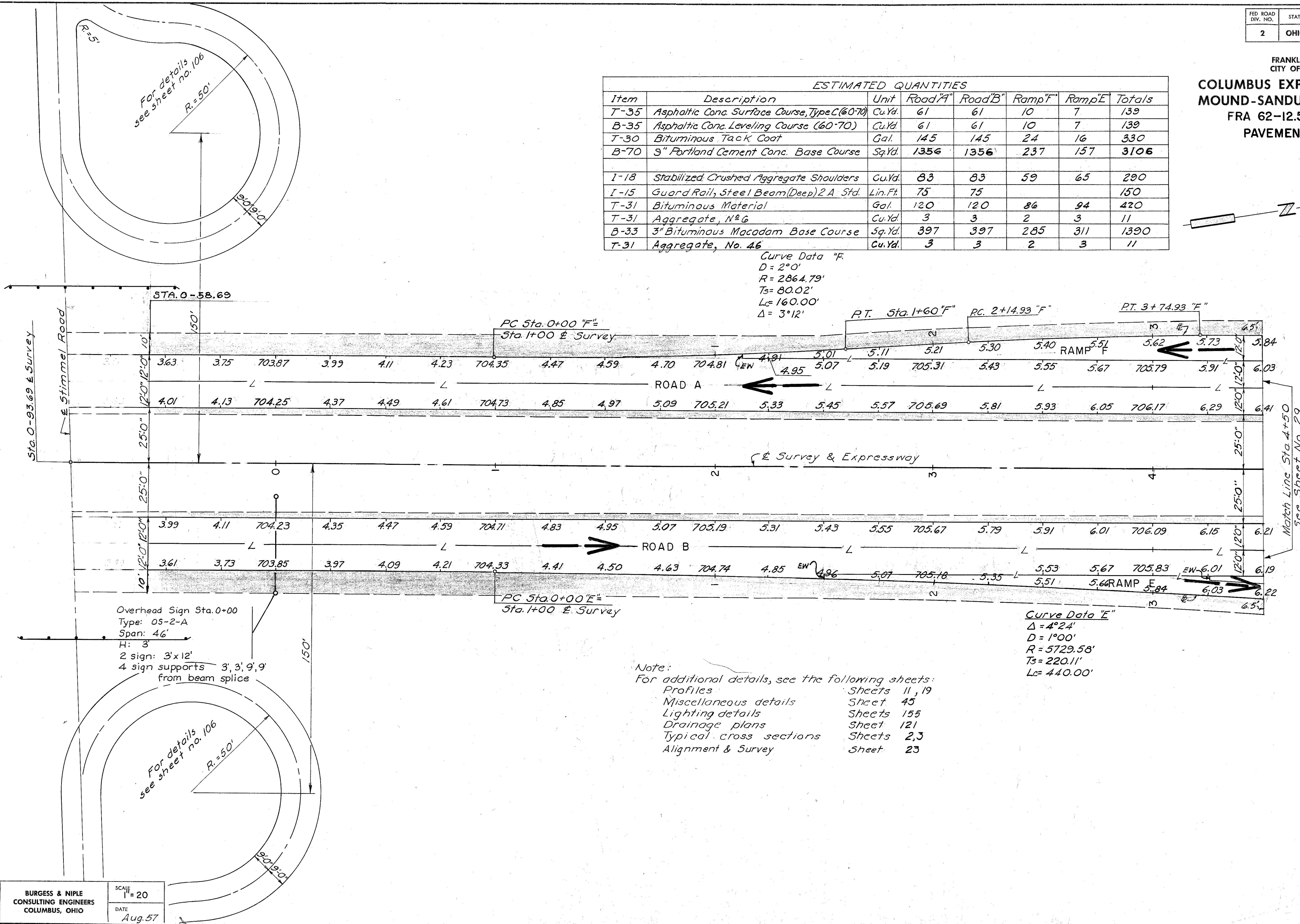
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

ESTIMATED QUANTITIES							
Item	Description	Unit	Road "A"	Road "B"	Ramp "F"	Ramp "E"	Totals
T-35	Asphaltic Conc. Surface Course, Type C (60-70)	Cu. Yd.	61	61	10	7	139
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	61	61	10	7	139
T-30	Bituminous Tack Coat	Gal.	145	145	24	16	330
B-70	9" Portland Cement Conc. Base Course	Sq. Yd.	1356	1356	237	157	3106
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.	83	83	59	65	290
I-15	Guard Rail, Steel Beam (Deep) 2 A Std.	Lin. Ft.	75	75			150
T-31	Bituminous Material	Gal.	120	120	86	94	420
T-31	Aggregate, No. 6	Cu. Yd.	3	3	2	3	11
B-33	3" Bituminous Macadam Base Course	Sq. Yd.	397	397	285	311	1390
T-31	Aggregate, No. 46	Cu. Yd.	3	3	2	3	11

Curve Data "F"
D = 2° 0'
R = 2864.79'
Ts = 80.02'
Lc = 160.00'
Δ = 3° 12'

Curve Data "E"
Δ = 4° 24'
D = 1° 00'
R = 5729.58'
Ts = 220.11'
Lc = 440.00'

Note:
For additional details, see the following sheets:
Profiles Sheets 11, 19
Miscellaneous details Sheet 45
Lighting details Sheets 155
Drainage plans Sheet 121
Typical cross sections Sheets 2, 3
Alignment & Survey Sheet 23

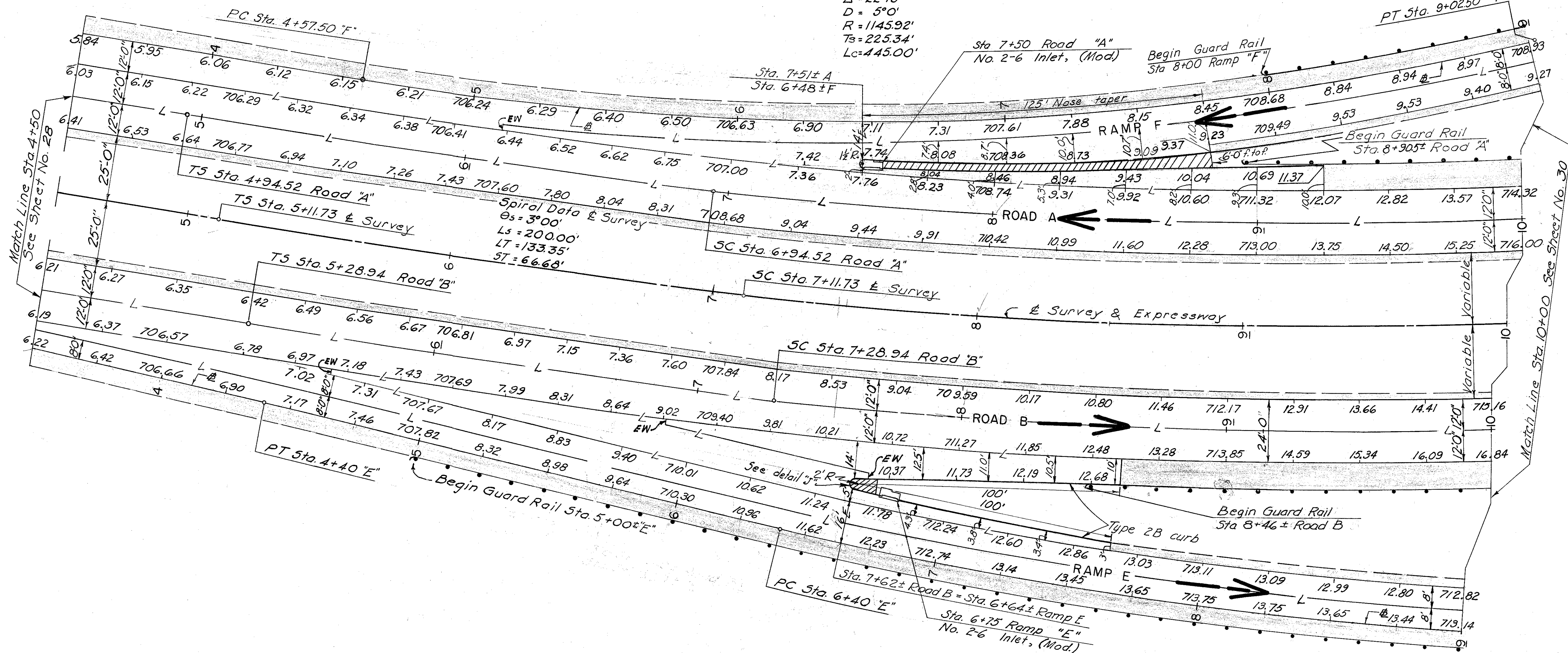


FRANKLIN COUNTY
CITY OF COLUMBUSCOLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

Notes:
For additional details, see the following sheets:
Profiles Sheets 12, 19
Miscellaneous details Sheet 45
Lighting details Sheets 155
Drainage plans Sheet 121
Typical cross sections Sheets 2, 3
Alignment & Survey Sheet 23

ESTIMATED QUANTITIES								
Item	Description	Unit	Road "A"	Road "B"	Ramp "F"	Ramp "E"	Totals	
T-35	Asphaltic Conc. Surface Course, Type C (60-70)	Cu.Yd.	66	78	28	42	214	
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu.Yd.	66	78	28	42	214	
T-30	Bituminous Tack Coat	Gal.	158	188	67	100	513	
B-70	9" Portland Cement Conc. Base Course	Sq.Yd.	1581	1874	669	999	5123	
I-12	Type 2B, Concrete Curb	Lin.Ft.	172	103	136	97	508	
I-18	Stabilized Crushed Aggregate Shoulders	Cu.Yd.	56	71	93	92	312	
I-15	Guard Rail, Steel Beam (Deep) 2B Std.	Lin.Ft.	109.5	154	100	400	763.5	
T-31	Bituminous Material	Gal.	80	102	134	132	448	
T-31	Aggregate, No. 6	Cu.Yd.	2	3	4	4	13	
B-33	3" Bituminous Macadam Base Course	Sq.Yd.	269	339	449	442	1499	
I-21	4" Concrete Median	Sq.Yd.	68	5			73	
T-31	Aggregate, No. 46	Cu.Yd.	2	3	4	4	13	

Curve Data "F"
 $\Delta = 22^\circ 15'$
 $D = 5^\circ 0'$
 $R = 1145.92'$
 $Ts = 225.34'$
 $Lc = 445.00'$



Notes:
For additional details, see the following sheets:
Profiles Sheets 12, 19
Miscellaneous details Sheet 45
Lighting details Sheets 155
Drainage plans Sheet 121
Typical cross sections Sheets 2, 3 & 107
Approach Slabs Sheets 207
Alignment & Survey Sheet 23

ESTIMATED QUANTITIES								
Item	Description	Unit	Road "A"	Road "B"	Ramp "E"	Ramp "F"	Totals	
T-35	Asphaltic Conc. Surface Course, Type C (6070)	Cu. Yd.	52	53	60	44	209	
B-35	Asphaltic Conc. Leveling Course (6070)	Cu. Yd.	52	53	60	44	209	
T-30	Bituminous Tack Coat	Gal.	124	126	144	105	499	
B-70	9" Portland Cement Conc. Base Course	Sq. Yd.	1240	1261	1440	1047	4988	
I-12	Type 2B, Concrete Curb	Lin. Ft.			166	126	292	
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.	145	145	105	109	504	
I-15	Guard Rail, Steel Beam (Deep) 2B Std.	Lin. Ft.	478	546	200	100	1324	
T-31	Bituminous Material	Gal.	210	210	152	156	728	
T-31	Aggregate, No. 6	Cu. Yd.	5	5	4	4	18	
B-33	3" Bituminous Macadam Base Course	Sq. Yd.	697	697	507	523	2424	
T-31	Aggregate, No. 46	Cu. Yd.	5	5	4	4	18	

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

PAVEMENT DETAILS

Curve Data "F"
 $\Delta = 74^\circ 54'$
 $R = 50.00'$
 $T = 38.30'$
 $L = 65.36'$

Curve Data "A"
 $\Delta = 105^\circ 06'$
 $R = 50.00'$
 $T = 26.11'$
 $L = 91.72'$

Sta. 14+07 Ramp "F"
No. 2-6 Inlet, (Mod.)

End Guard Rail
Sta. 14+78 ± "F"

Begin Approach Slab
Sta. 14+59.73 Road "B"

Begin Approach Slab
Sta. 14+67.75 Road "B"

End Guard Rail
Sta. 14+71 ± "B"

Curve Data "E"
 $\Delta = 68^\circ 03'$
 $R = 50.00'$
 $T = 33.76'$
 $L = 59.38'$

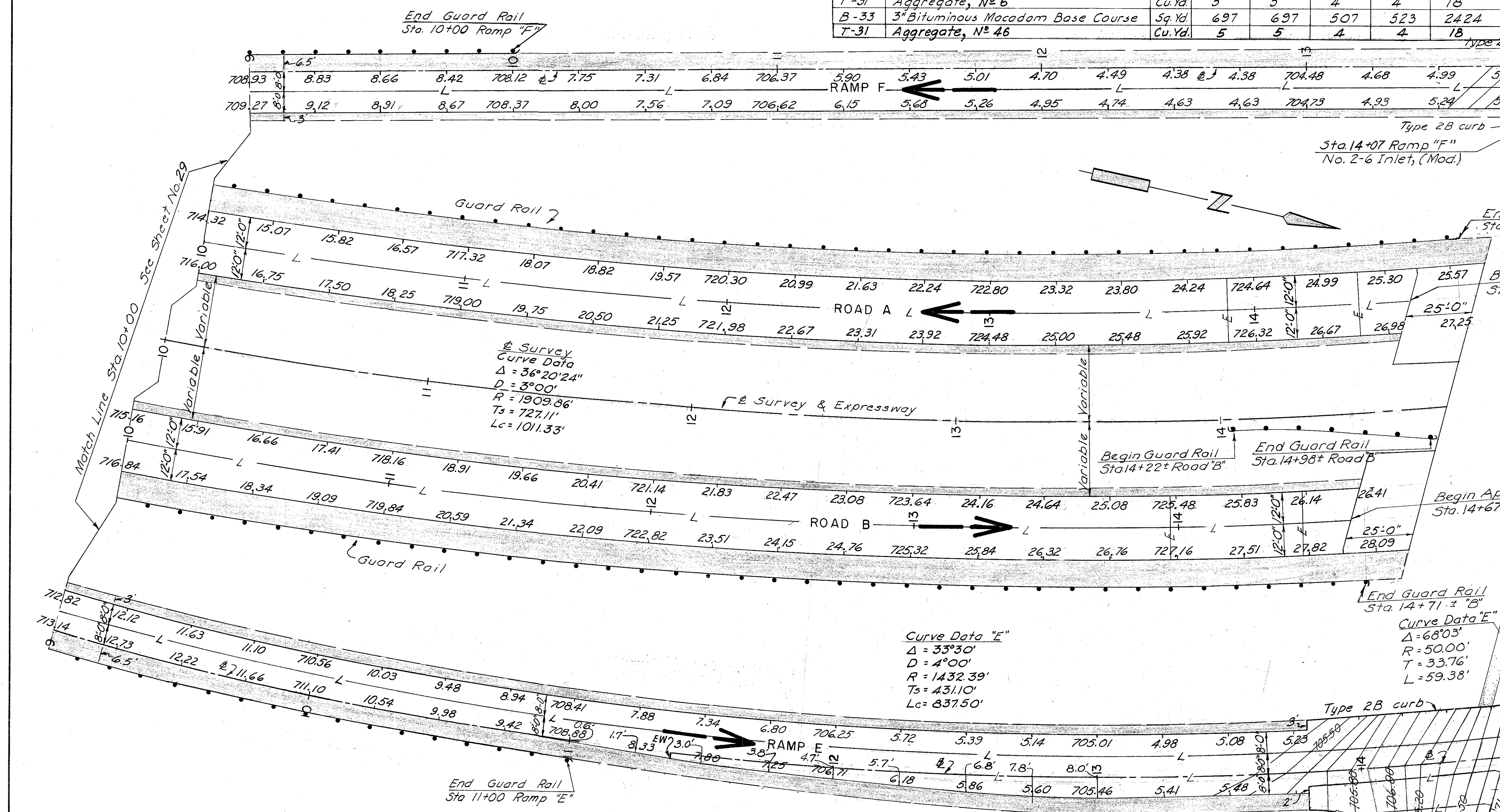
Curve Data "E"
 $\Delta = 33^\circ 30'$
 $D = 4^\circ 00'$
 $R = 1432.39'$
 $Ts = 431.10'$
 $Lc = 837.50'$

Sta. 13+92 Ramp "E"
No. 2-6 Inlet, (Mod.)

Curve Data "E"
 $\Delta = 111^\circ 57'$
 $R = 50.00'$
 $T = 24.06'$
 $L = 97.69'$

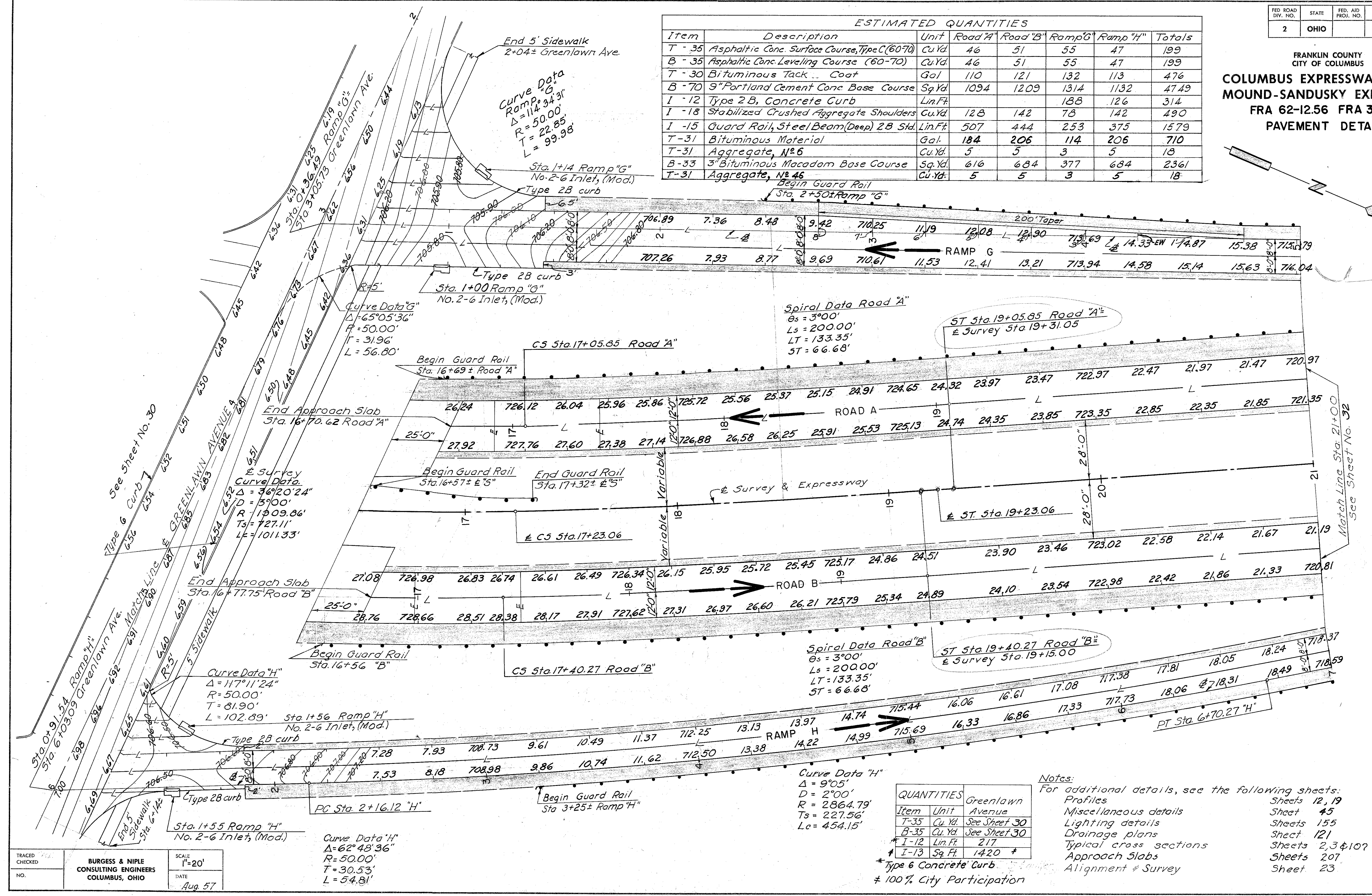
* Type G Concrete Curb

Item	Unit	Greenlawn Avenue
T-35	Cu. Yd.	74
B-35	Cu. Yd.	74
I-13	Sq. Ft.	1115
I-12	Lin. Ft.	206



FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

ESTIMATED QUANTITIES						
Item	Description	Unit	Road "A"	Road "B"	Ramp "G"	Ramp "H"
T-35	Asphaltic Conc. Surface Course, Type C (60-70)	Cu. Yd.	46	51	55	47
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	46	51	55	47
T-30	Bituminous Tack Coat	Gal.	110	121	132	113
B-70	9" Portland Cement Conc. Base Course	Sq. Yd.	1094	1209	1314	1132
I-12	Type 2 B, Concrete Curb	Lin. Ft.			188	126
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.	128	142	78	142
I-15	Guard Rail, Steel Beam (Deep) 2 B Std.	Lin. Ft.	507	444	253	375
T-31	Bituminous Material	Gal.	184	206	114	206
T-31	Aggregate, No. 6	Cu. Yd.	5	5	3	5
B-33	3" Bituminous Macadam Base Course	Sq. Yd.	616	684	377	684
T-31	Aggregate, No. 46	Cu. Yd.	5	5	3	5



TRACED
NO.
BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO
SCALE
1"=20'
DATE
Aug. 57

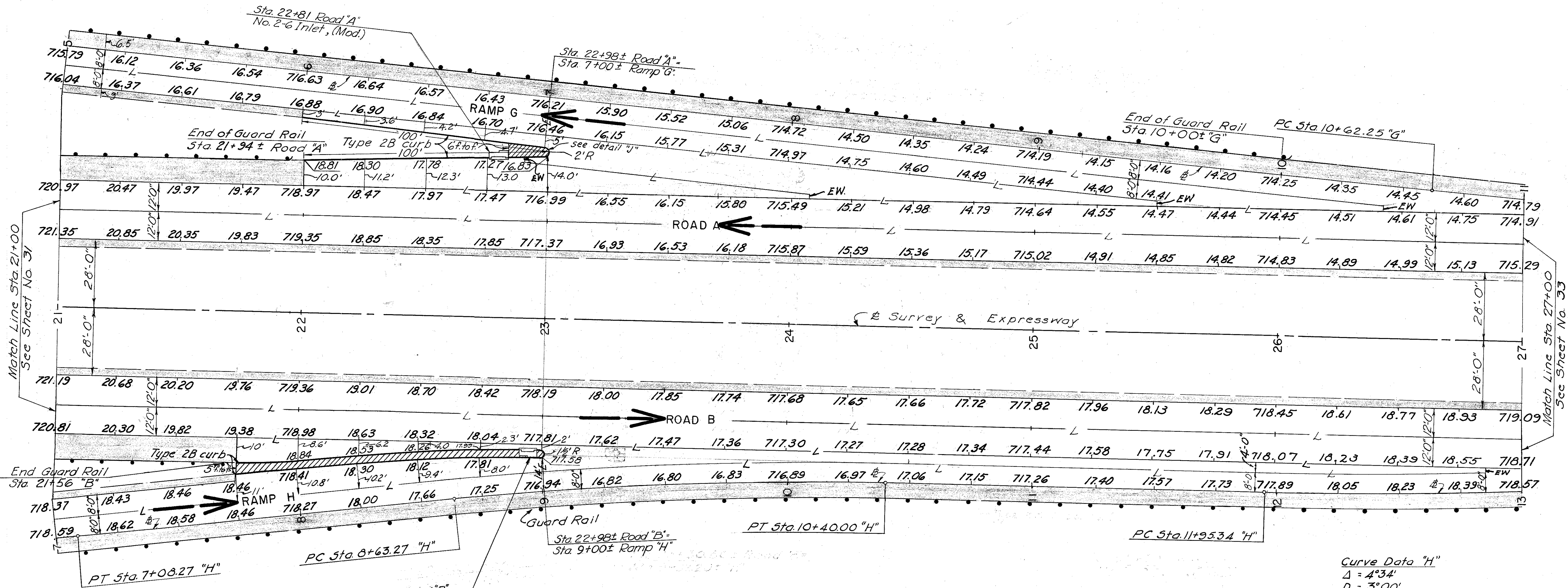
QUANTITIES		Greenlawn Avenue
T-35	Cu. Yd.	See Sheet 30
B-35	Cu. Yd.	See Sheet 30
I-12	Lin. Ft.	217
I-13	Sq. Ft.	1420

Notes:
For additional details, see the following sheets:
Profiles Sheets 12, 19
Miscellaneous details Sheet 45
Lighting details Sheets 155
Drainage plans Sheet 121
Typical cross sections Sheets 2, 3 & 10?
Approach Slabs Sheets 207
Alignment & Survey Sheet 23

*Type 6 Concrete Curb
100% City Participation

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

ESTIMATED QUANTITIES						
Item	Description	Unit	Road "A"	Road "B"	Ramp "G"	Ramp "H"
T-35	Asphaltic Conc. Surface Course, Type C (60-70)	Cu. Yd.	101	70	42	42
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	101	70	42	42
T-30	Bituminous Tack Coat	Gal.	241	168	100	100
B-70	3" Portland Cement Conc. Base Course	Sq. Yd.	2409	1674	1000	995
I-12	Type 2B, Concrete Curb	Lin. Ft.	103	112	103	112
I-18	Stabilized Crushed Aggregate Shoulder	Cu. Yd.	65	63	97	97
I-15	Guard Rail, Steel Beam (Deep) 2B Std	Lin. Ft.	93	56	497	600
T-31	Bituminous Material	Gal.	94	90	140	140
T-31	Aggregate, No. 6	Cu. Yd.	3	3	4	4
B-33	3" Bituminous Macadam Base Course	Sq. Yd.	311	301	467	465
T-31	Aggregate, No. 46	Cu. Yd.	3	3	4	4
I-21	4" Median Concrete	Sq. Ft.	9	37		



Curve Data "H"
 $\Delta = 7^{\circ}05'$
 $D = 4^{\circ}00'$
 $R = 1432.40'$
 $T_s = 88.65'$
 $L_c = 177.07'$

Note:
 For additional details, see the following sheets:
 Profiles Sheets 12, 19
 Miscellaneous details Sheet 45
 Lighting details Sheets 155
 Drainage plans Sheet 121
 Typical cross sections Sheets 2, 3
 Alignment & Survey Sheet 23

Curve Data "H"
 $\Delta = 4^{\circ}34'$
 $D = 3^{\circ}00'$
 $R = 1909.86'$
 $T_s = 76.15'$
 $L_c = 152.33'$

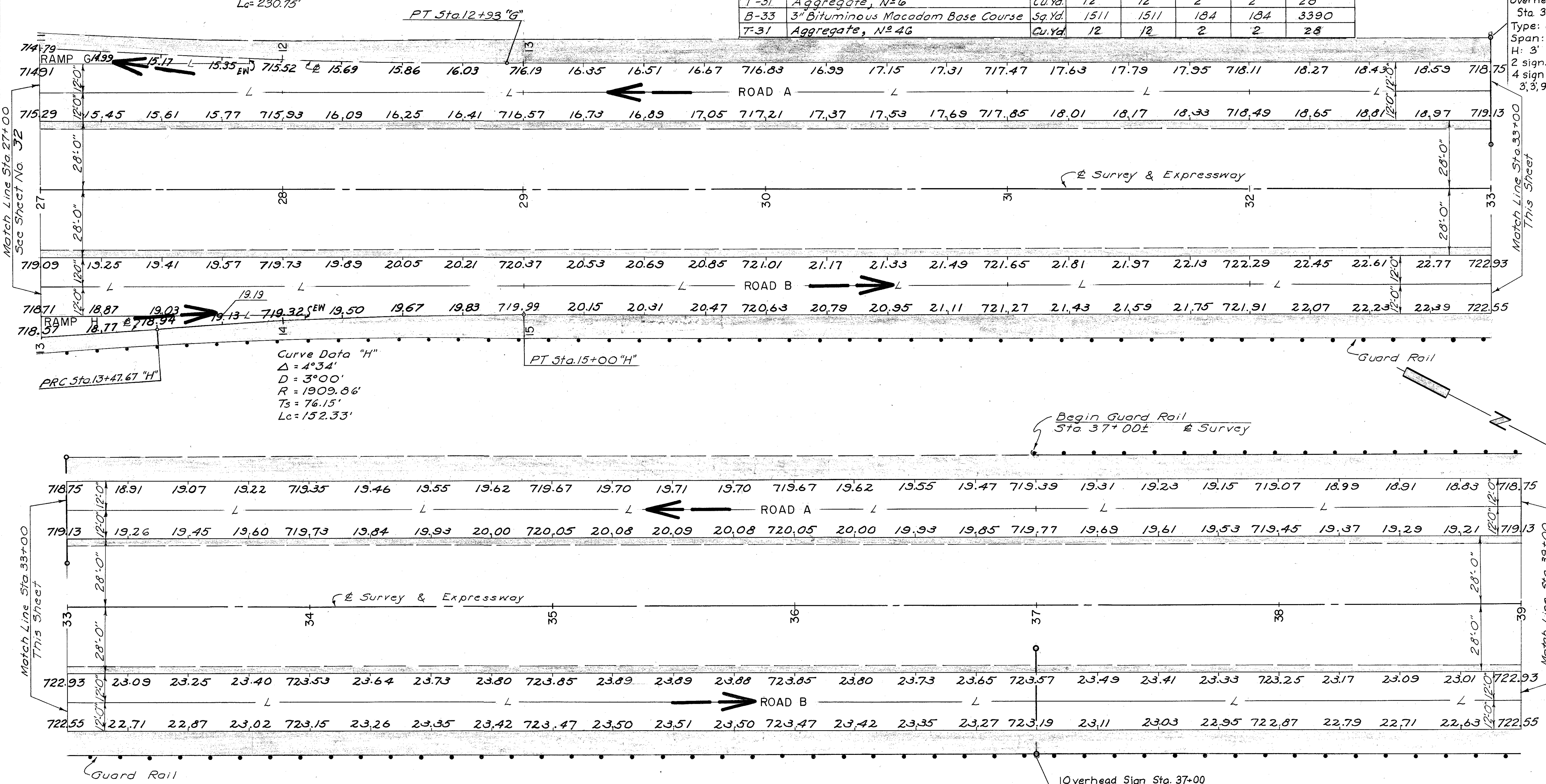
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

Notes:
For additional details, see the following sheets:
 Profiles Sheets 12, 13, 19
 Miscellaneous details Sheet 45
 Lighting details Sheets 155
 Drainage plans Sheet 121
 Typical cross-sections Sheets 2, 3
 Alignment & Survey Sheet 24

Curve Data "G"
 $\Delta = 4^\circ 36' 53''$
 $D = 2^\circ 0'$
 $R = 2864.79'$
 $T_s = 115.43'$
 $L_c = 230.75'$

ESTIMATED QUANTITIES								
Item	Description	Unit	Road "A"	Road "B"	Ramp "G"	Ramp "H"	Totals	
T-35	Asphaltic Conc. Surface Course, Type C (60-70)	Cu. Yd.	134	134	2	3	273	
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	134	134	2	3	273	
T-30	Bituminous Tack Coat	Gal.	321	321	4	7	653	
B-70	9" Portland Cement Conc. Base Course	Sq. Yd.	3213	3210	38	67	6528	
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.	314	314	38	38	704	
I-15	Guard Rail, Steel Beam (Deep) 28 Std.	Lin. Ft.	200	1000		200	1400	
T-31	Bituminous Material	Gal.	454	454	56	56	1020	
T-31	Aggregate, No. 6	Cu. Yd.	12	12	2	2	28	
B-33	3" Bituminous Macadam Base Course	Sq. Yd.	1511	1511	184	184	3390	
T-31	Aggregate, No. 46	Cu. Yd.	12	12	2	2	28	

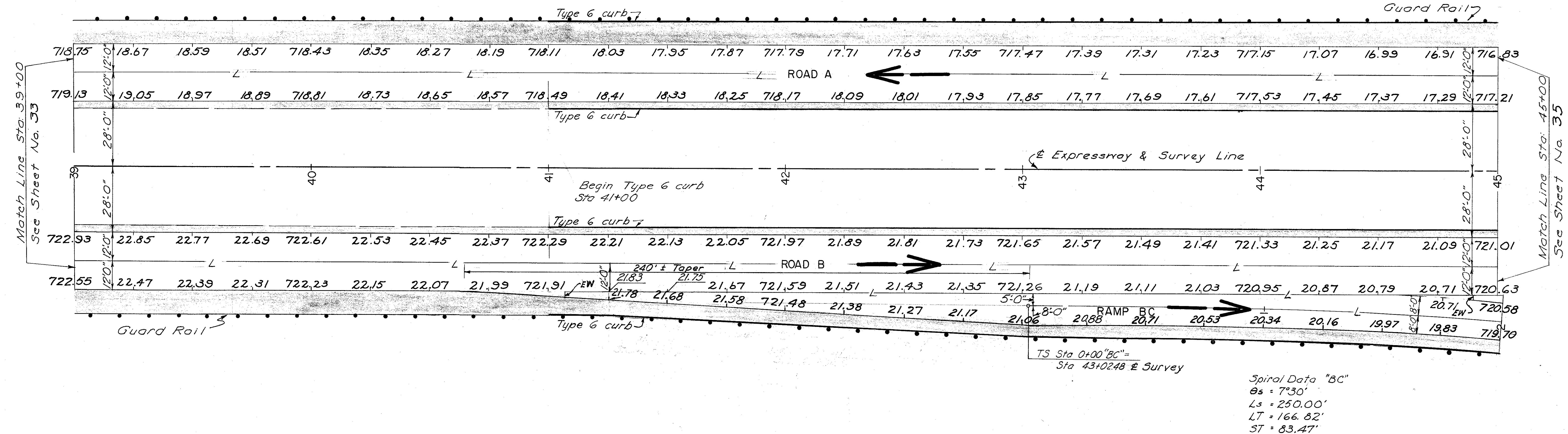


Overhead Sign
 Sta. 33+00
 Type: OS-2-A
 Span: 46'
 H: 3'
 2 signs: 3' x 12'
 4 sign supports:
 3, 3, 9, 9 from beam
 splice

Begin Guard Rail
 Sta. 37+00 ± Survey

Overhead Sign Sta. 37+00
 Type: OS-2-A
 Span: 46'
 H: 3'
 2 Signs: 3' x 6', 3' x 10'
 4 sign supports: 3, 3, 3, 9 from beam splice

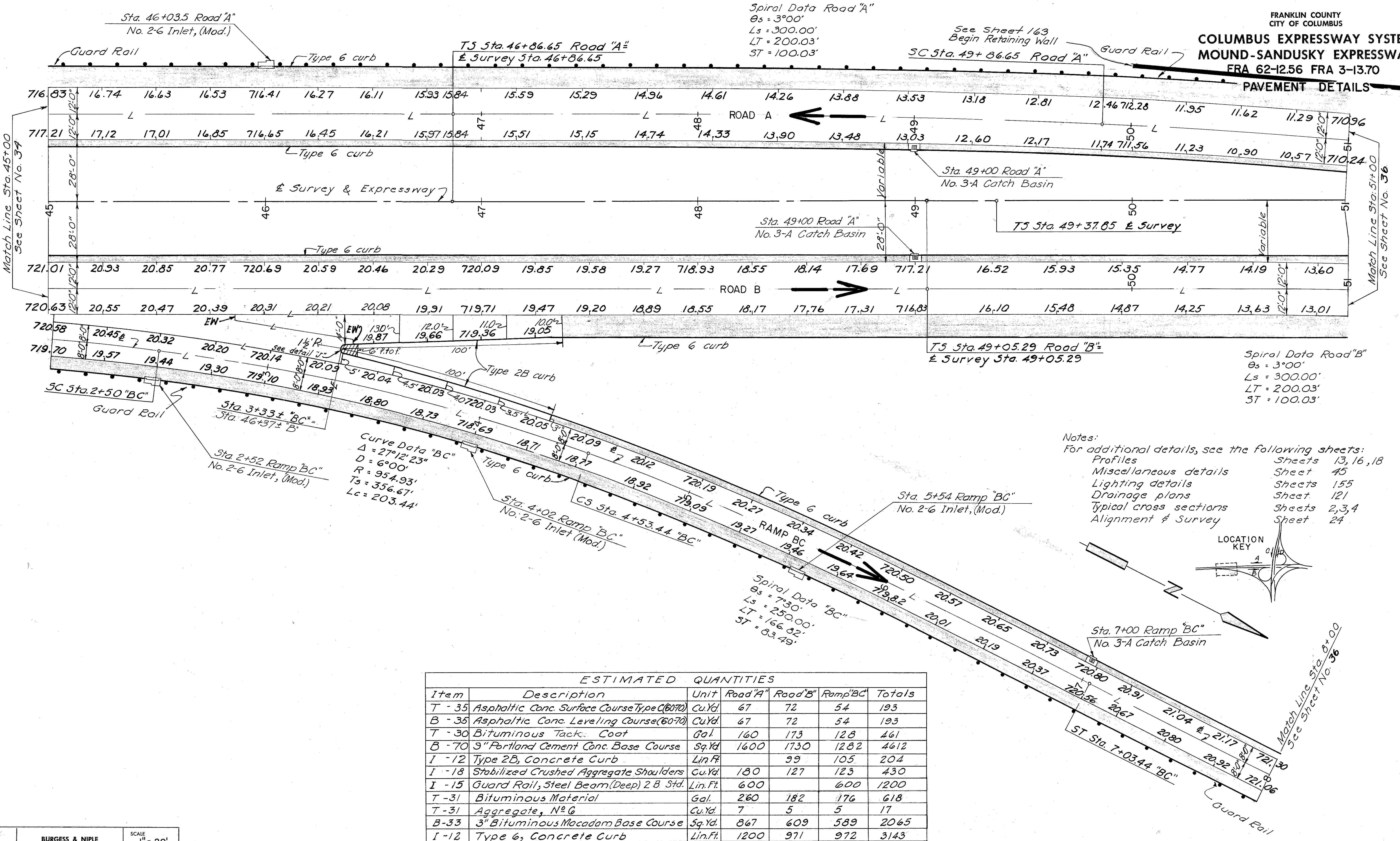
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS



Notes:
For additional details, see the following sheets:
Profiles Sheets 13, 18
Miscellaneous details Sheet 45
Lighting details Sheets 155
Drainage plans Sheet 121
Typical cross sections Sheets 2, 3
Alignment & Survey Sheet 24

ESTIMATED QUANTITIES						
Item	Description	Unit	Road "A"	Road "B"	Ramp "BC"	Totals
T - 35	Asphaltic Conc. Surface Course Type C (60-70)	Cu. Yd.	67	67	23	157
B - 35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	67	67	23	157
T - 30	Bituminous Tack Coat	Gal.	160	160	55	375
B - 70	9" Portland Cement Conc. Base Course	Sq. Yd.	1600	1600	548	3748
T - 31	Aggregate, No. 6	Cu. Yd.	7	3	2	12
I - 18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.	180	81	57	318
I - 15	Guard Rail, Steel Beam (Deep) 2 B Std.	Lin. Ft.	600	400	200	1200
T - 31	Bituminous Material	Gal.	260	116	82	458
T - 31	Aggregate, No. 46	Cu. Yd.	7	3	2	12
B - 33	3" Bituminous Macadam Base Course	Sq. Yd.	867	389	273	1529
I - 12	Type 6, Concrete Curb	Lin. Ft.	810	405	405	1620

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS



Spiral Data Road "A"
 $\theta_s = 3^\circ 00'$
 $L_s = 300.00'$
 $LT = 200.03'$
 $ST = 100.03'$

See Sheet 163
Begin Retaining Wall

SC Sta. 49+86.65 Road "A"

Sta. 49+00 Road "A"
No. 3-A Catch Basin

TS Sta. 49+37.85 E Survey

Sta. 49+00 Road "A"
No. 3-A Catch Basin

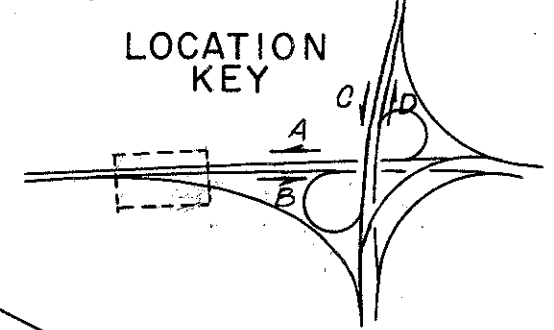
Spiral Data Road "B"
 $\theta_s = 3^\circ 00'$
 $L_s = 300.00'$
 $LT = 200.03'$
 $ST = 100.03'$

TS Sta. 49+05.29 Road "B"
E Survey Sta. 49+05.29

Curve Data "BC"
 $\Delta = 27^\circ 12' 23''$
 $D = 6^\circ 00'$
 $R = 954.93'$
 $T_s = 356.67'$
 $L_c = 203.44'$

Spiral Data "BC"
 $\theta_s = 7^\circ 30'$
 $L_s = 250.00'$
 $LT = 166.82'$
 $ST = 83.49'$

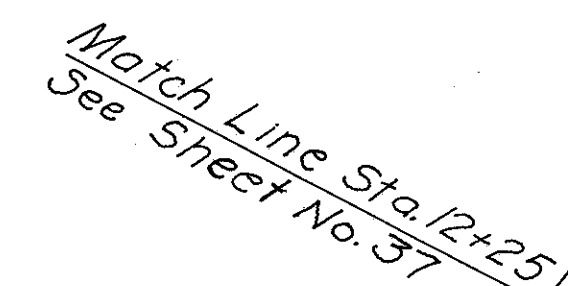
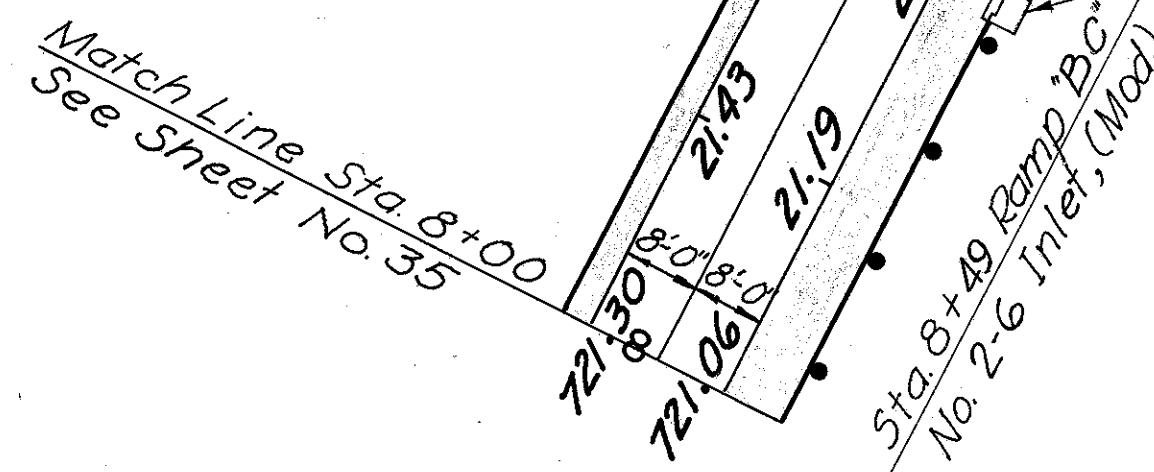
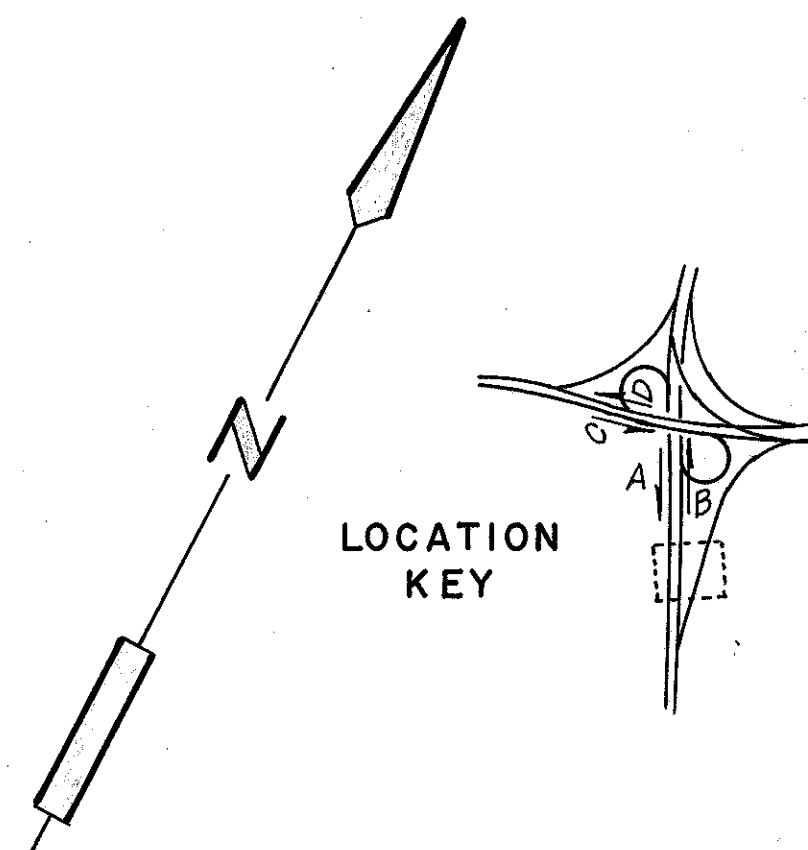
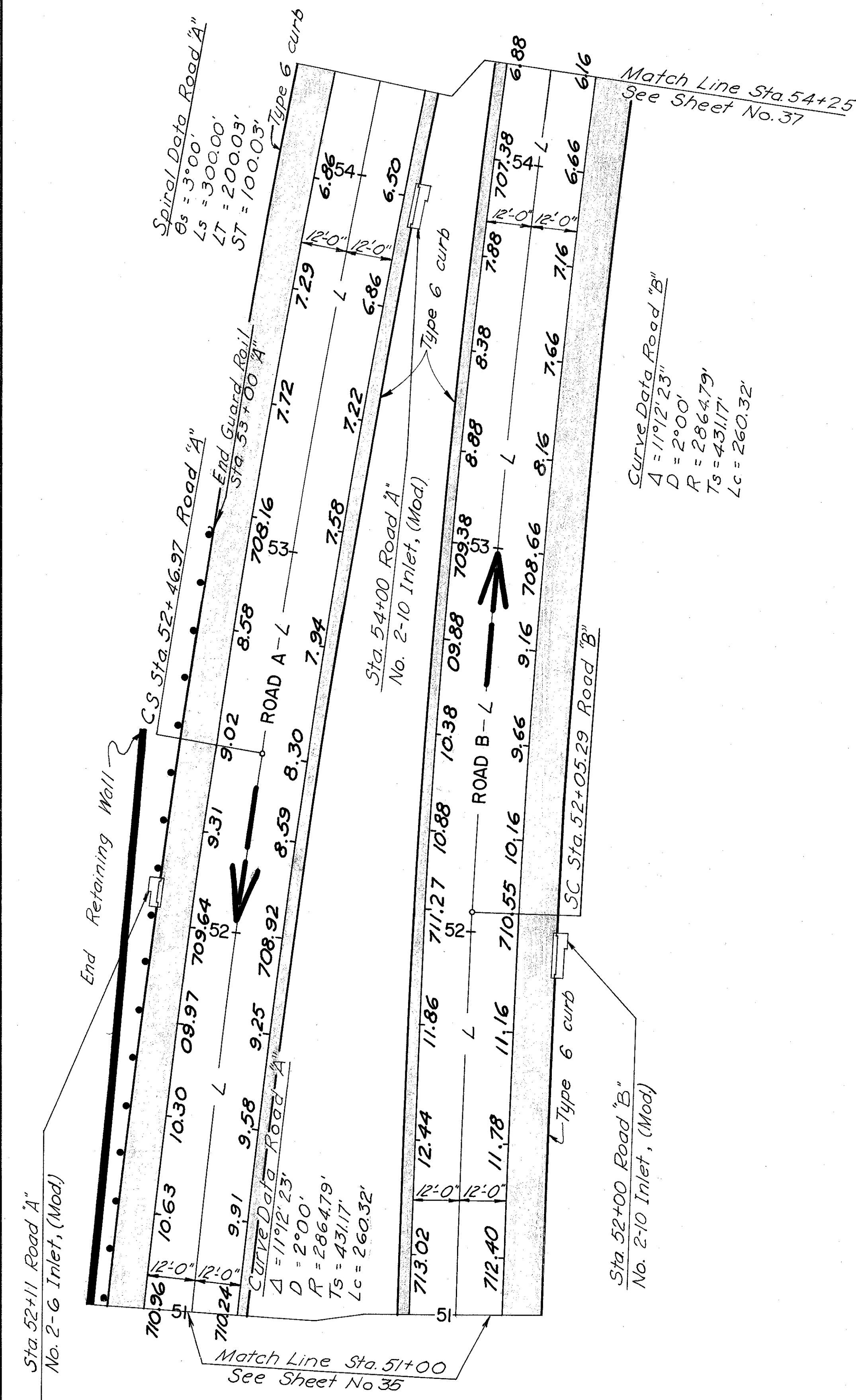
- Notes:
For additional details, see the following sheets:
- | | |
|------------------------|-------------------|
| Profiles | Sheets 13, 16, 18 |
| Miscellaneous details | Sheet 45 |
| Lighting details | Sheets 155 |
| Drainage plans | Sheet 121 |
| Typical cross sections | Sheets 2, 3, 4 |
| Alignment & Survey | Sheet 24 |



ESTIMATED QUANTITIES						
Item	Description	Unit	Road "A"	Road "B"	Ramp "BC"	Totals
T-35	Asphaltic Conc. Surface Course Type C (60/70)	Cu.Yd.	67	72	54	193
B-35	Asphaltic Conc. Leveling Course (60/70)	Cu.Yd.	67	72	54	193
T-30	Bituminous Tack Coat	Gal.	160	173	128	461
B-70	3" Portland Cement Conc. Base Course	Sq.Yd.	1600	1730	1282	4612
I-12	Type 2B, Concrete Curb	Lin.Ft.		99	105	204
I-18	Stabilized Crushed Aggregate Shoulders	Cu.Yd.	180	127	123	430
I-15	Guard Rail, Steel Beam (Deep) 2 B Std.	Lin.Ft.	600		600	1200
T-31	Bituminous Material	Gal.	260	182	176	618
T-31	Aggregate, No. 6	Cu.Yd.	7	5	5	17
B-33	3" Bituminous Macadam Base Course	Sq.Yd.	867	609	589	2065
I-12	Type 6, Concrete Curb	Lin.Ft.	1200	971	972	3143
I-21	4" Median Concrete	Sq.Yd.		4		4
T-31	Aggregate, No. 46	Cu.Yd.	7	5	5	17

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

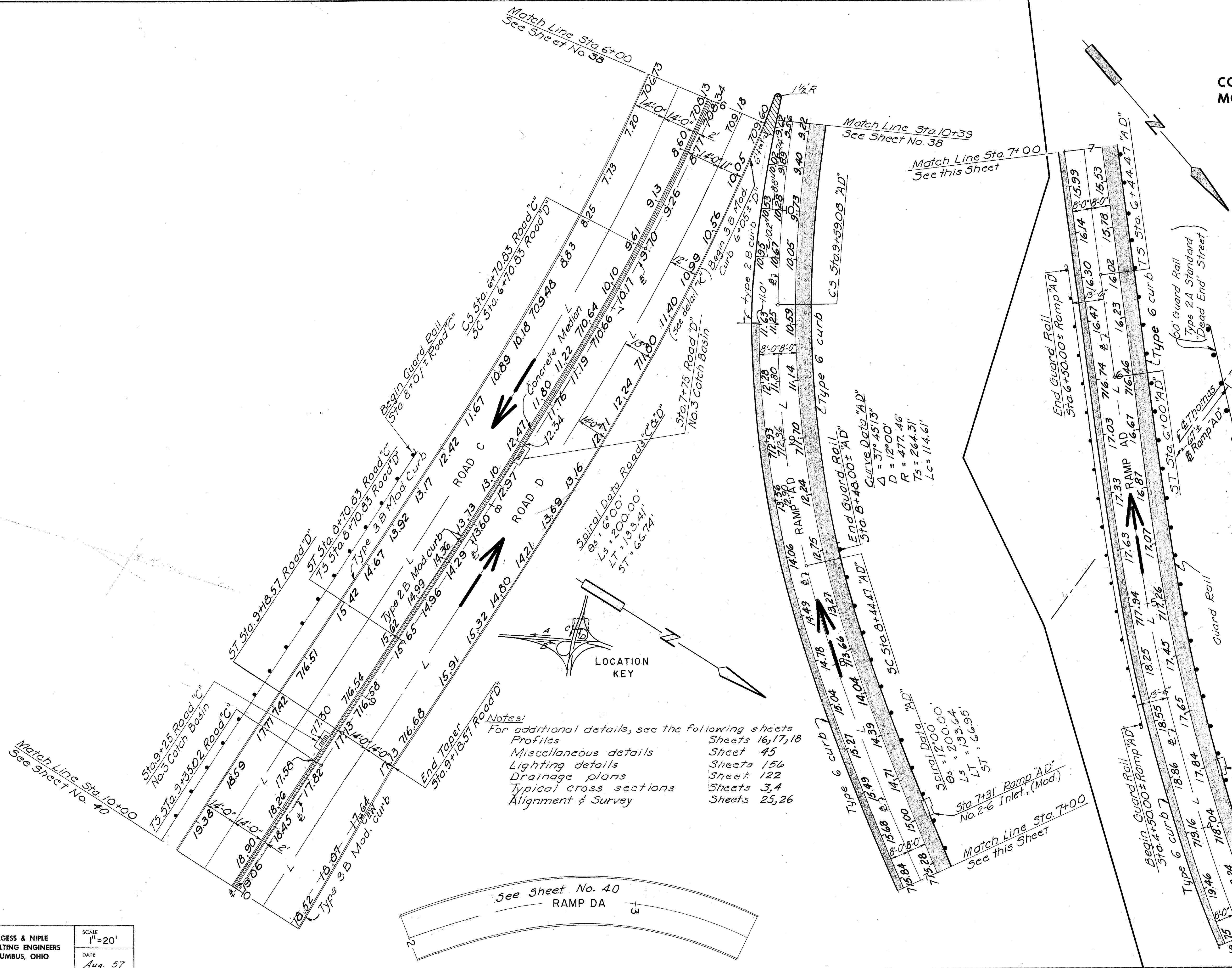


NOTE:
For additional details, see the following sheets:
Profile Sheets 16, 18
Miscellaneous Details Sheet 45
Lighting Details Sheets 155
Drainage Plans Sheet 121
Typical cross sections Sheets 3, 4
Alignment & Survey Sheet 24
Retaining Wall Sheet 163

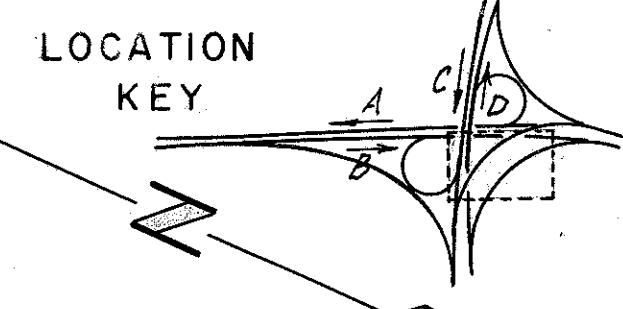
ESTIMATED QUANTITIES					
Item	Description	Unit	Road "A"	Road "B"	Ramp "BC"
T-35	Asphaltic Conc. Surface Course, Type C (60-70)	Cu. Yd.	36	36	32
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	36	36	32
T-30	Bituminous Tack Coat	Gal.	87	87	76
B-70	9" Portland Cement Conc. Base Course	Sq. Yd.	867	867	756
I-12	Type 6 Conc. Curb	Lin. Ft.	650	650	850
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.	98	98	93
I-15	Guard Rail, Steel Beam (Deep) 2B Std.	Lin. Ft.	200		425
T-31	Bituminous Material	Gal.	142	142	134
T-31	Aggregate, No. 6	Cu. Yd.	4	4	4
B-33	3" Bituminous Macadam Base Course	Sq. Yd.	470	470	449
T-31	Aggregate, No. 46	Cu. Yd.	4	4	4

FRANKLIN COUNTY
 CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

Item	Description	ESTIMATED QUANTITIES					Totals
		Unit	Road "C"	Road "D"	Ramp "AD"		
I-12	Type 6, Concrete Curb	Lin. Ft.			1204		1204
T-35	Asphaltic Conc. Surface Course, Type (60-70)	Cu. Yd.	52	52	52		156
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	52	52	52		156
T-30	Bituminous Tack Coat	Gal.	125	124	124		373
B-70	9" Portland Cement Conc. Base Course	Sq. Yd.	1245	1242	1233		3720
I-12	Type 2B, Concrete Curb	Lin. Ft.	392	411	121		924
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.			143		143
I-15	Guard Rail, Steel Beam (Deep), 2 B. Std.	Lin. Ft.	200		689		889
T-31	Bituminous Material	Gal.			206		206
T-31	Asphaltic Conc. Base Course	Cu. Yd.			5		5
B-33	3" Bituminous Macadam Base Course	Sq. Yd.			689		689
I-12	Type 3-B, Modified Conc. Curb	Lin. Ft.	400	381			781
I-21	4" Median Concrete	Sq. Yd.	45	9			54



**COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS**



Item	Description	Unit	ESTIMATED QUANTITIES
T-35	Asphaltic Conc Surface Course Type C (60-70)	Cu.Yd.	Road "B" Road "C"
B-35	Asphaltic Conc Leveling Course (60-70)	Cu.Yd.	70
T-30	Bituminous Tack Coat	Sq.Yd.	167
B-30	9" Portland Cement Conc Base Course	Gal.	~1667
I-12	Type 2 B. Concrete Aggregate Shoulders	Lin.Ft.	84
I-18	Stabilized Crushed Aggregate	Cu.Yd.	100
T-31	Guard Rail, Steel Beam (Deep) 2 B Std.	Lin.Ft.	122
T-31	Aggregate, R246	Gal.	3
B-33	3" Bituminous Macadam Base Course	Sq.Yd.	404
I-12	Type 3 B. Modified Conc. Curb.	Lin.Ft.	909
I-21	4" Median Concrete	Sq.Yd.	153

30.4'

729'

D.O.R. = 10°

Ts = 89.2'

Match Line Sta. 8+25

Match Line Sta. 5+75
See Sheet No. 42

FRANKLIN COUNTY
CITY OF COLUMBUS

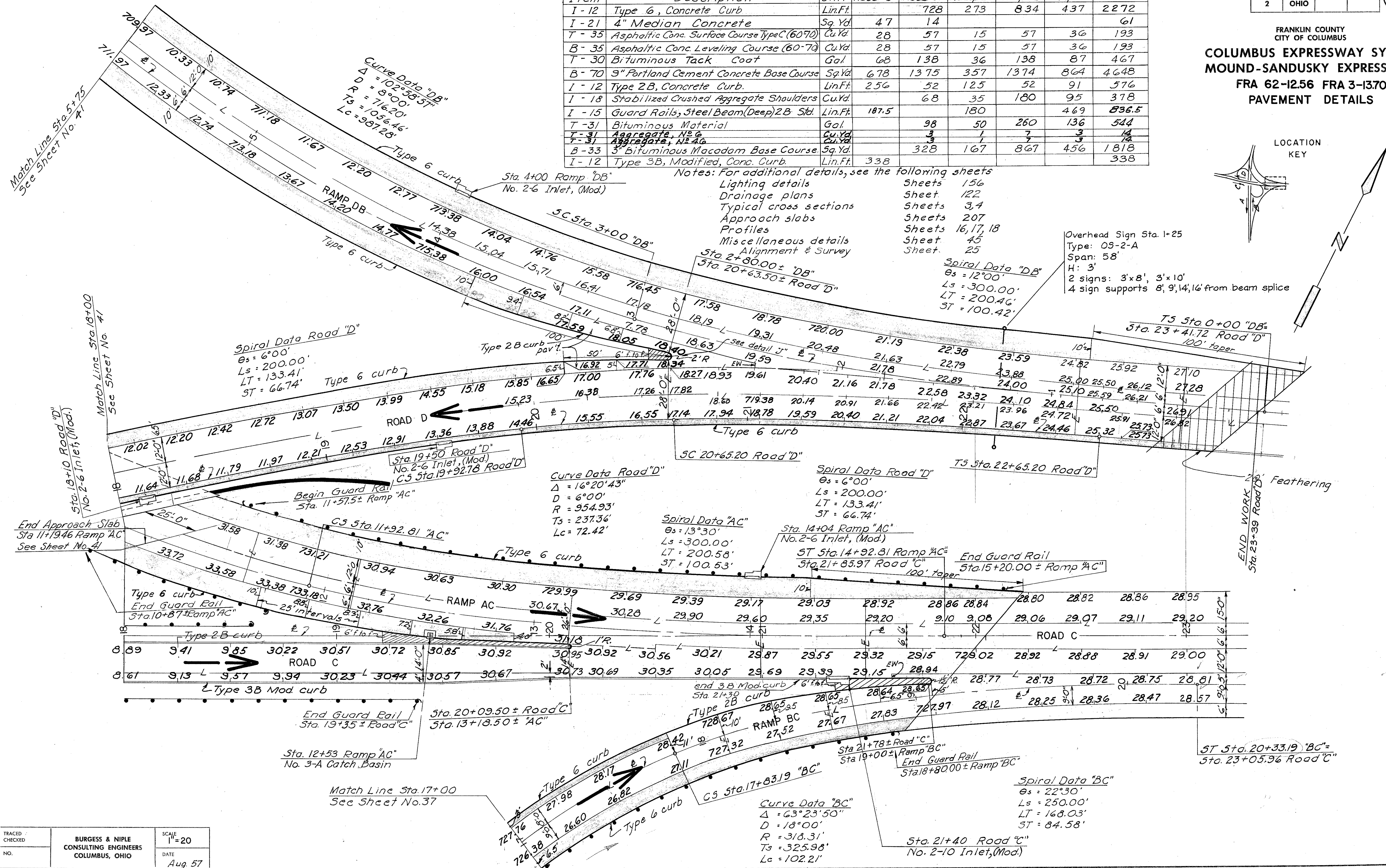
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

ESTIMATED QUANTITIES							
Item	Description	Unit	Road "C"	Road "D"	Ramp "BC"	Ramp "DB"	Ramp "AC"
I-12	Type 6, Concrete Curb	Lin. Ft.		728	273	834	437
I-21	4" Median Concrete	Sq. Yd.	47	14			
T-35	Asphaltic Conc. Surface Course Type C (60-70)	Cu. Yd.	28	57	15	57	36
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	28	57	15	57	36
T-30	Bituminous Tack Coat	Gal.	68	138	36	138	87
B-70	3" Portland Cement Concrete Base Course	Sq. Yd.	678	1375	357	1374	864
I-12	Type 2B, Concrete Curb	Lin. Ft.	256	52	125	52	91
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.		68	35	180	95
I-15	Guard Rails, Steel Beam (Deep) 2B Std.	Lin. Ft.	187.5		180		469
T-31	Bituminous Material	Gal.		98	50	260	136
T-31	Aggregate, No. 6	Cu. Yd.		3	1	7	3
T-31	Aggregate, No. 40	Cu. Yd.		3	1	7	3
B-33	3" Bituminous Macadam Base Course	Sq. Yd.		328	167	867	456
I-12	Type 3B, Modified, Conc. Curb	Lin. Ft.	338				338

Notes: For additional details, see the following sheets

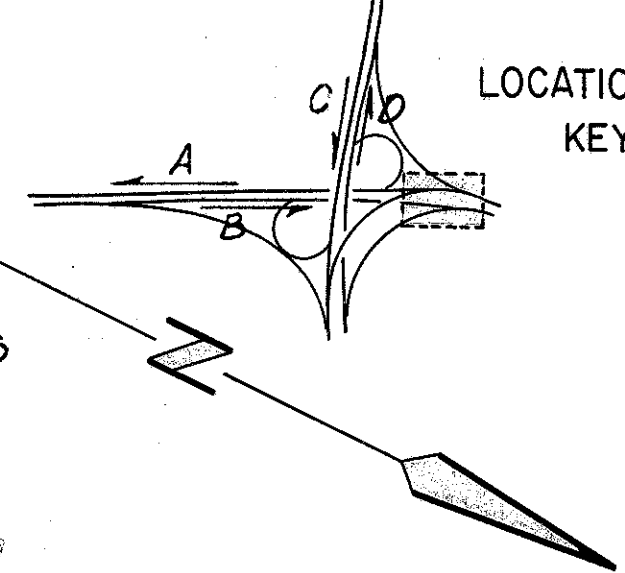
Lighting details	Sheets 156
Drainage plans	Sheet 122
Typical cross sections	Sheets 3, 4
Approach slabs	Sheets 207
Profiles	Sheets 16, 17, 18
Miscellaneous details	Sheet 45
Alignment & Survey	Sheet 25

LOCATION KEY



FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS



Note:
Overhead sign Sta. 4+00 "AC" & Sta. 2+50 "AD"
Type: OS-1-A
Pole A: 19'-6" (3ga.)
B: 18'
H: 4'
4 Sign supports

Overhead sign Sta. 4+00 "AC" & Sta. 2+50 "AD"
Type: OS-1-B
Pole A: 19'-6" (3ga.)
B: 18'
H: 4'
4 Sign supports

Curve Data "AD"
 $\Delta = 42^{\circ}00'00''$
 $D = 12^{\circ}00'$
 $R = 477.46'$
 $T_s = 310.09'$
 $L_c = 100.00'$

Spiral Data Road "A"
 $\theta_s = 7^{\circ}30'$
 $L_s = 250.00'$
 $ST = 83.47'$

Spiral Data "AC"
 $\theta_s = 13^{\circ}30'$
 $L_s = 300.00'$
 $LT = 200.58'$
 $ST = 100.53'$

Spiral Data "AD"
 $\theta_s = 15^{\circ}00'$
 $L_s = 250.00'$
 $LT = 167.27'$
 $ST = 83.88'$

Curve Data Road "A"
 $\Delta = 21^{\circ}30'00''$
 $D = 6^{\circ}00'$
 $R = 954.93'$
 $T_s = 306.75'$
 $L_c = 108.33'$

Spiral Data Road "B"
 $\theta_s = 6^{\circ}00'$
 $L_s = 200.00'$
 $LT = 133.41'$
 $ST = 66.74'$

Curve Data "AC"
 $\Delta = 107^{\circ}21'12''$
 $D = 9^{\circ}00'$
 $R = 636.62'$
 $T_s = 1023.63'$
 $L_c = 892.81'$

Curve Data "DB"
 $D = 8^{\circ}00'$
 $R = 716.20'$
 $T_s = 1056.46'$
 $L_c = 987.28'$
 $\Delta = 102^{\circ}58'57''$

Curve Data Road "B"
 $\Delta = 20^{\circ}15'02''$
 $D = 6^{\circ}00'$
 $R = 954.93'$
 $T_s = 270.81'$
 $L_c = 137.51'$

Spiral Data Road "A" Match Line Sta. 3+50
 $\theta_s = 7^{\circ}30'$
 $L_s = 250.00'$
 $ST = 83.47'$
 $LT = 166.82'$

Sta. 4+50 Ramp "AC"
No. 3-A Catch Basin

Sta. 65+84.20 Road "A"
Sta. 3+58.60 "AC"

Sta. 3+71 Ramp "AC"
No. 2-6 Inlet, (Mod.)

ST Sta. 65+81.04 Road "B"

TS Sta. 65+93.86 Road "B"
Sta. 66+14 Road "B"
No. 2-6 Inlet, (Mod.)

Sta. 9+13 Ramp "DB"
No. 2-6 Inlet, (Mod.)

Sta. 10+50 Ramp "DB"
No. 2-6 Inlet, (Mod.)

Sta. 13+59 Ramp "DB"
No. 2-6 Inlet, (Mod.)

For additional details, see the following sheets:

- Miscellaneous details Sheets 16, 17, 18
- Lighting details Sheet 45
- Drainage plans Sheet 156
- Typical cross-sections Sheet 122
- Approach slabs Sheets 3, 4
- Retaining walls Sheet 207
- Alignment & Survey Sheet 164

ESTIMATED QUANTITIES							
Item	Description	Unit	Road "A"	Road "B"	Ramp "AC"	Ramp "DB"	Totals
T-35	Asphaltic Conc. Surface Course, Type C (60-70)	Cu. Yd.	64	69	78	75	307
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu. Yd.	64	69	78	75	307
T-30	Bituminous Tack Coat	Gal.	154	167	186	180	738
B-70	3" Portland Cement Conc. Base Course	Sq. Yd.	1539	1663	1860	1793	7363
I-12	Type 2B, Modified, Conc. Curb	Lin. Ft.	105	214	54	215	639
I-18	Stabilized Crushed Aggregate Shoulders	Cu. Yd.	81	87	126	188	543
I-15	Guard Rail, Steel Beam (Deep) 2B Std.	Lin. Ft.	125	75	7375	160	14405
T-31	Bituminous Material	Gal.	116	126	182	272	784
T-31	Aggregate, No. 40	Cu. Yd.	3	3	3	7	26
B-33	3" Bituminous Macadam Base Course	Sq. Yd.	388	420	607	905	2612
I-12	Type 6 Concrete Curb	Lin. Ft.	484	785	836	823	3331
I-21	4" Median Concrete	Sq. Yd.	42	89			131

ESTIMATED QUANTITIES						
Item	Description	Unit	Road "A"	Road "B"	Roads A+B	Totals
T-35	Asphaltic Conc. Surface Course Type C (60-70)	Cu.Yd.	32	30		62
B-35	Asphaltic Conc. Leveling Course (60-70)	Cu.Yd.	32	30		62
T-30	Bituminous Tack Coat	Gal.	76	72		148
B-70	9" Portland Cement Conc. Base Course	Sq.Yd.	753	719		1472
I-12	Type 2B Concrete Curb	Lin.Ft.	149	133		282
I-18	Stabilized Crushed Aggregate Shoulders	Cu.Yd.	45	40		85
I-15	Guard Rail, Steel Beam (Deep) 2 B Std.	Lin.Ft.	143	1275	*175	270.5
T-31	Bituminous Material	Gal.	66	56		122
T-31	Aggregate, No. 6	Cu.Yd.	2	2		4
B-33	3" Bituminous Macadam Base Course	Sq.Yd.	217	189		406
I-12	Type 6 Concrete Curb	Lin.Ft.	150	129		279
I-21	4" Concrete Median	Sq.Yd.	63	63		126

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

44

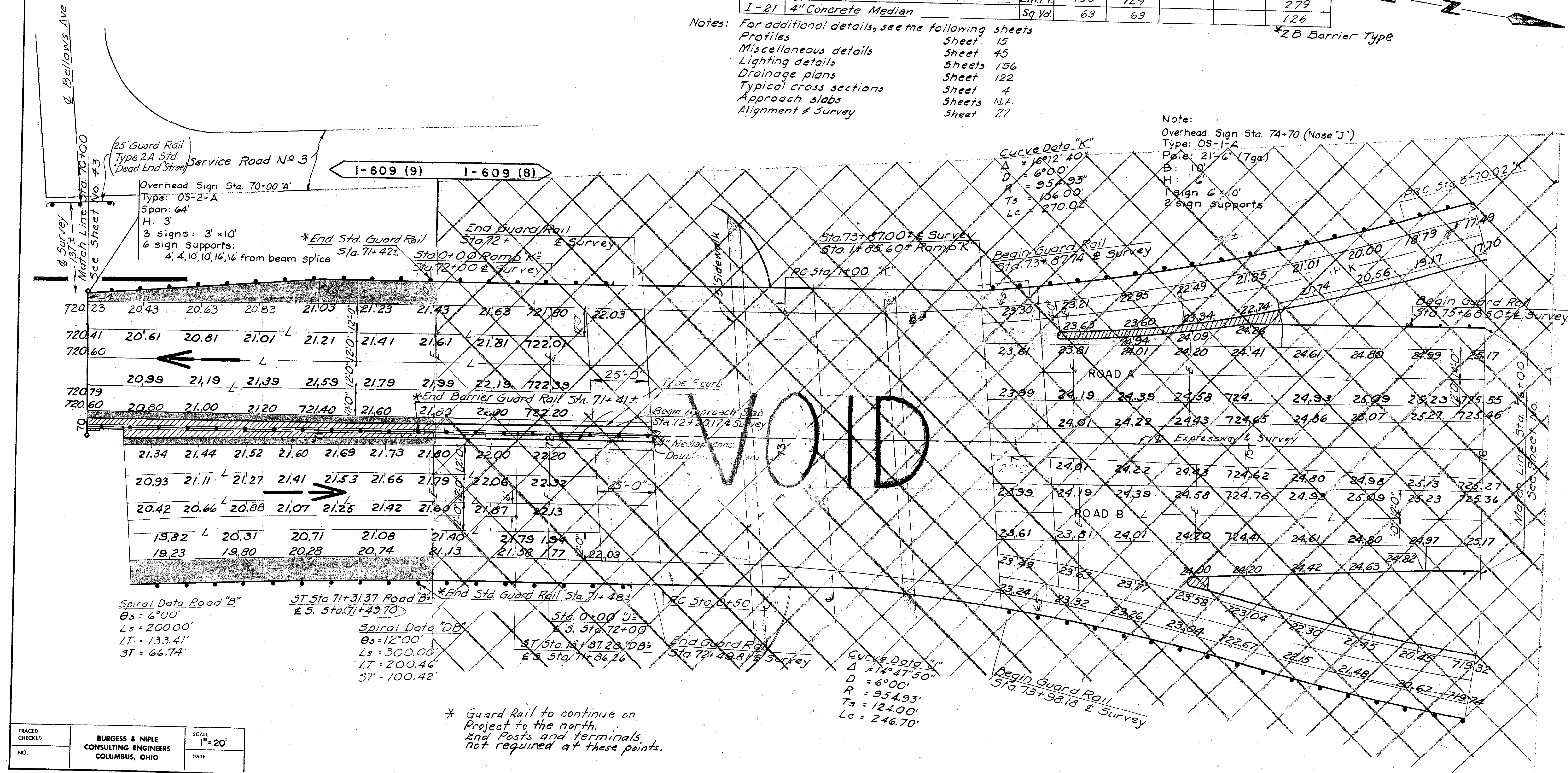
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
PAVEMENT DETAILS

Notes: For additional details, see the following sheets
 Profiles Sheet 15
 Miscellaneous details Sheet 45
 Lighting details Sheets 156
 Drainage plans Sheet 122
 Typical cross sections Sheet 4
 Approach slabs Sheets N.A.
 Alignment & Survey Sheet 27

*2 B Barrier Type

Note:
 Overhead Sign Sta. 74+70 (Nose "J")
 Type: OS-1-A
 Pole: 21'-6" (T99)
 B: 10'
 H: 6'
 1 sign 6'x10'
 2 sign supports

Curve Data "K"
 $\Delta = 16^\circ 12' 40"$
 $D = 6^\circ 00'$
 $R = 954.93'$
 $T_s = 136.00'$
 $L_c = 270.02'$

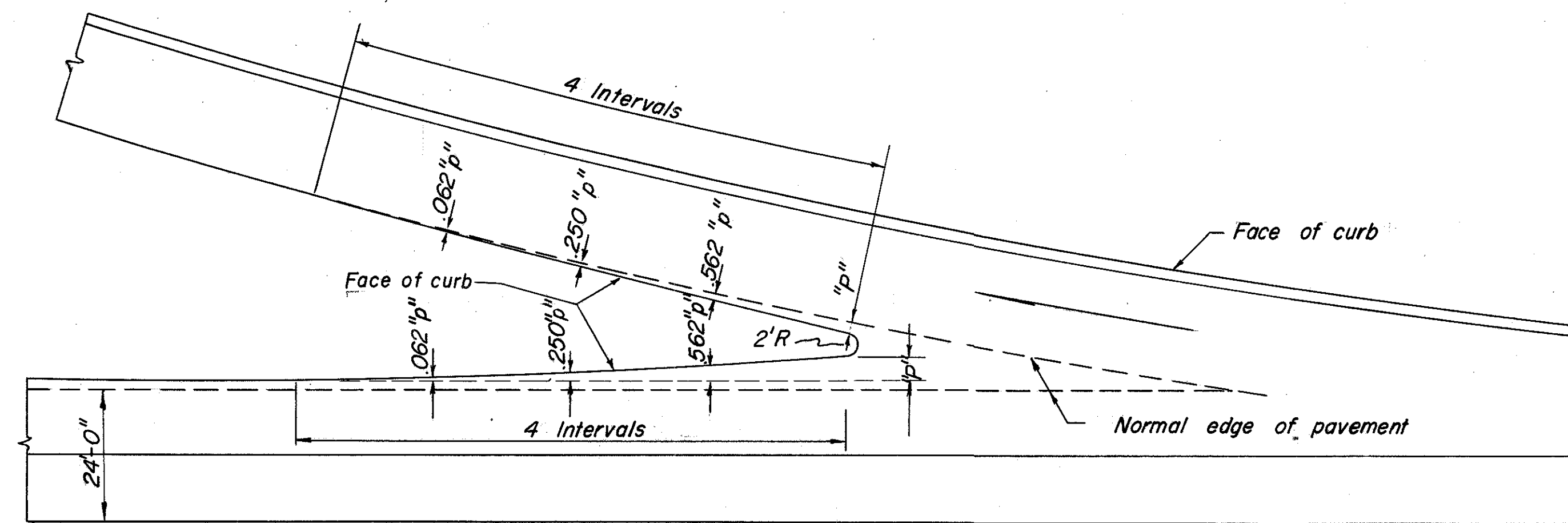


TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE 1"=20'
NO.		DATE

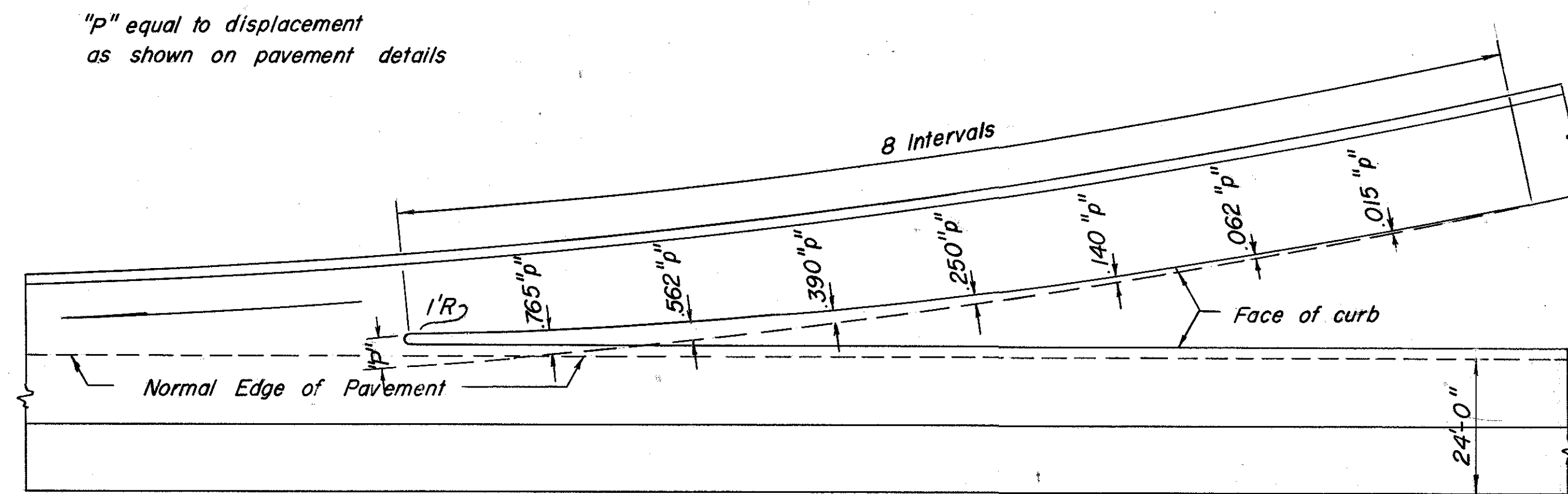
* Guard Rail to continue on
 Project to the north.
 End Posts and terminals
 not required at these points.

FRANKLIN COUNTY
CITY OF COLUMBUS

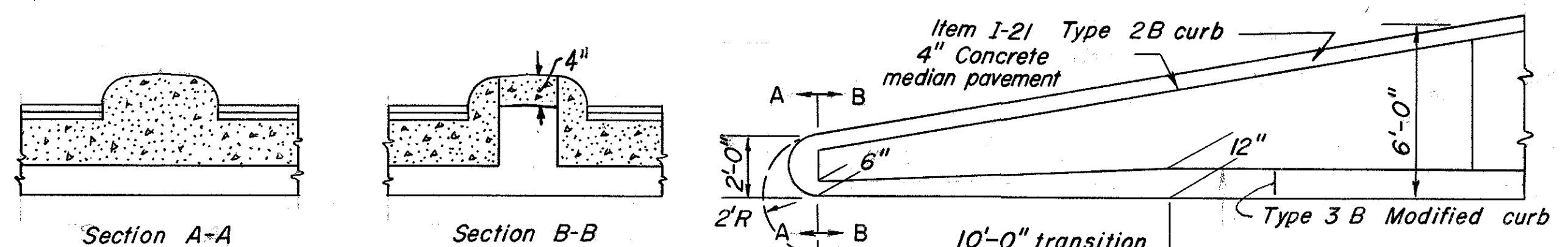
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 3-1370
MISCELLANEOUS DETAILS



Detail "A"
Typical Ramp Entrance
No Scale (see detail "J")

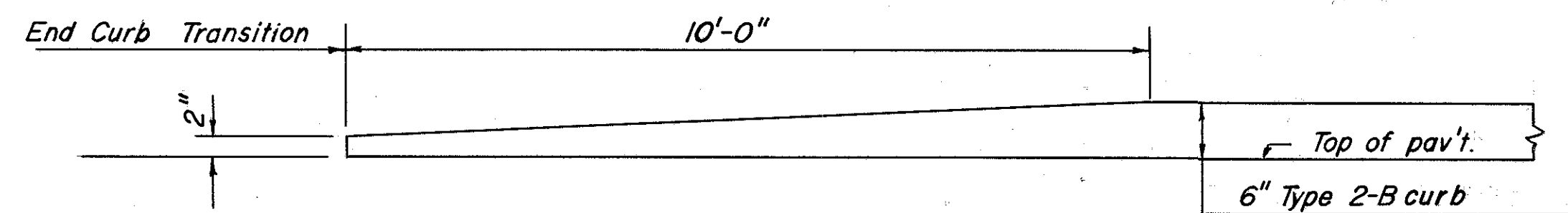


Detail "B"
Typical Ramp Exit
No Scale (see detail "C")



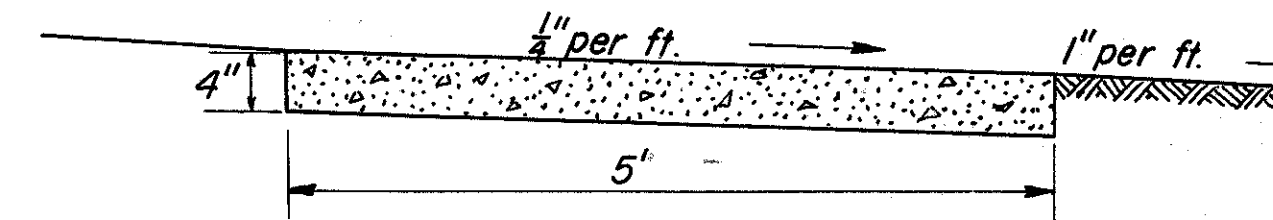
Detail "C"
Nose - Typical Ramp Exit
No Scale

Note: Transition curb section, as shown, shall be measured and paid for as Type 3-B modified curb.

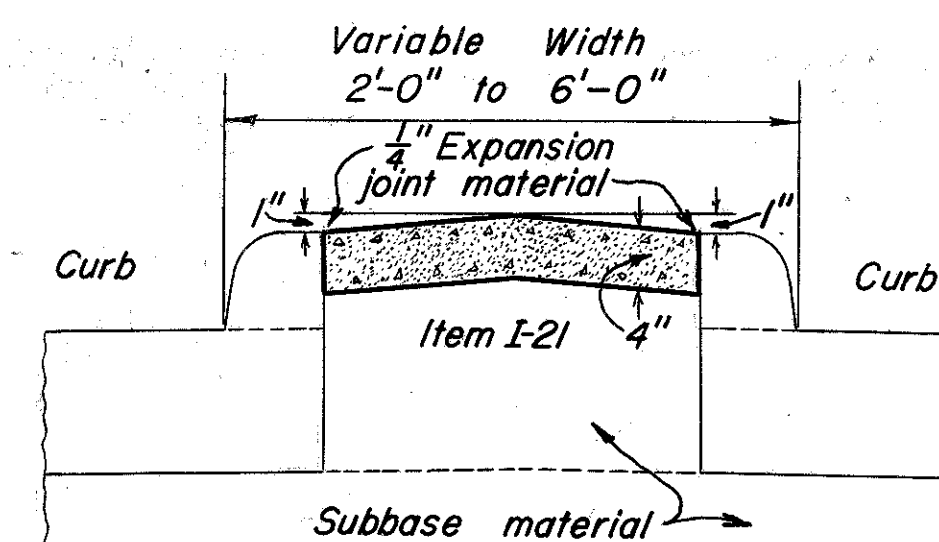


Detail "D"
Curb Transition
No Scale

Note: Portland Cement Concrete to be 4" thick



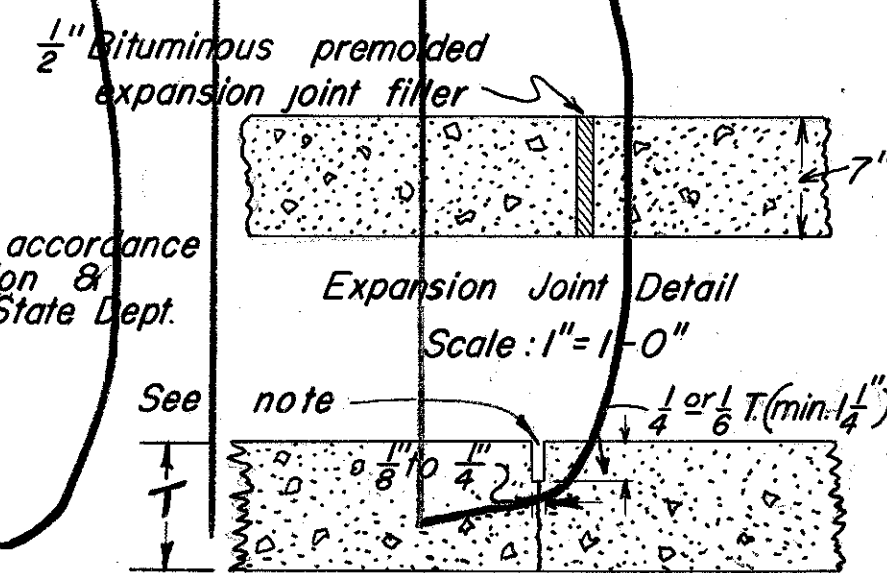
Item I-13 Sidewalk
Detail "E"



Concrete Median
Type I
Detail "F"

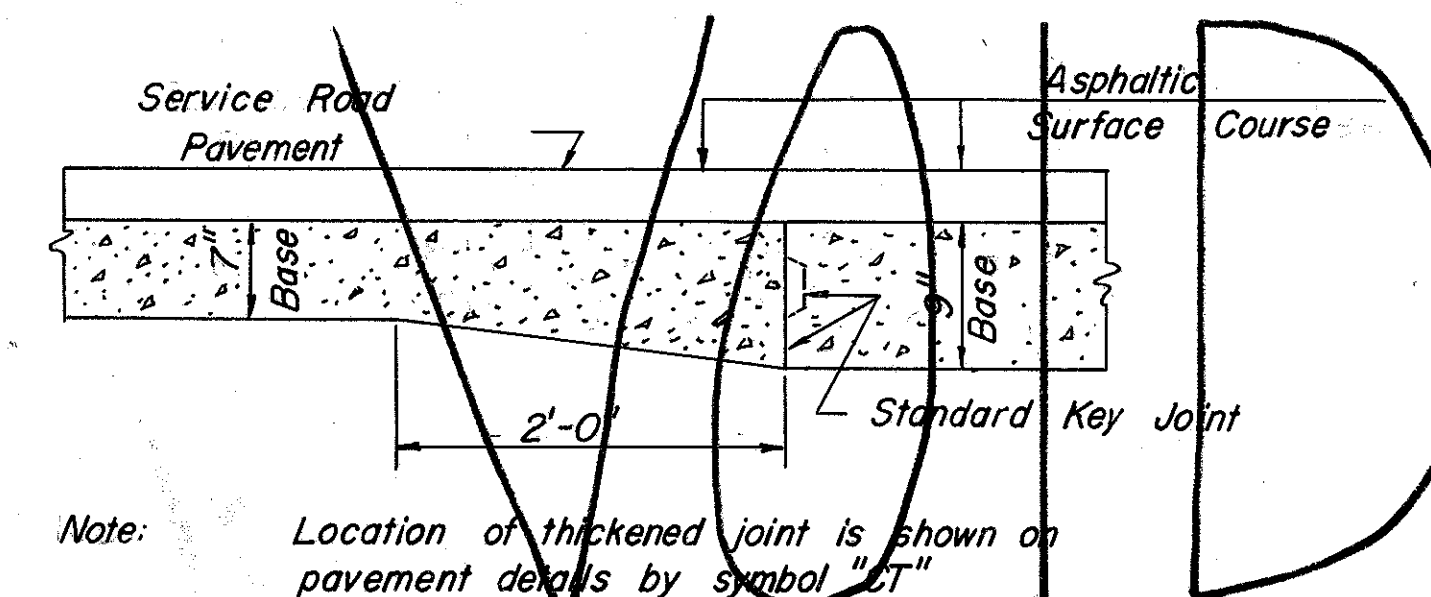
Note: Expansion joints to be spaced at 600' intervals or at "T" intersections.

Note: Fill with plastic material in accordance with Sec. M-10, 23, Construction & Material Specifications, Ohio State Dept. of Highways.



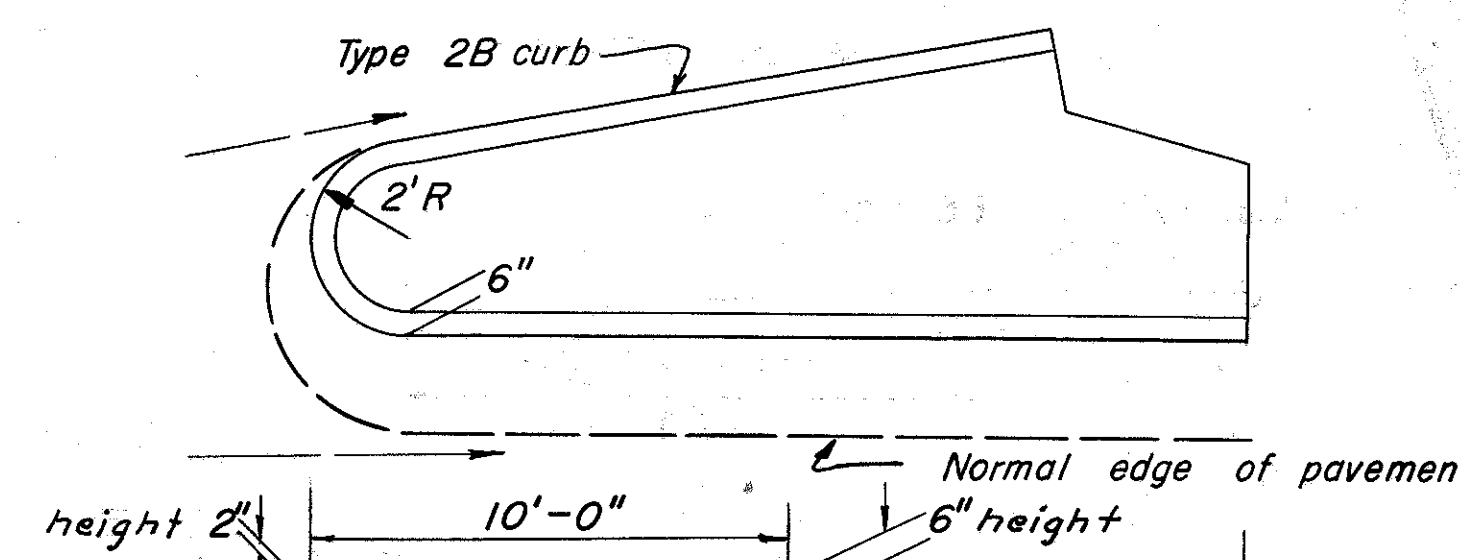
Sawed Contraction Joint Detail
JOINT SPACING = 20'

Detail "G"

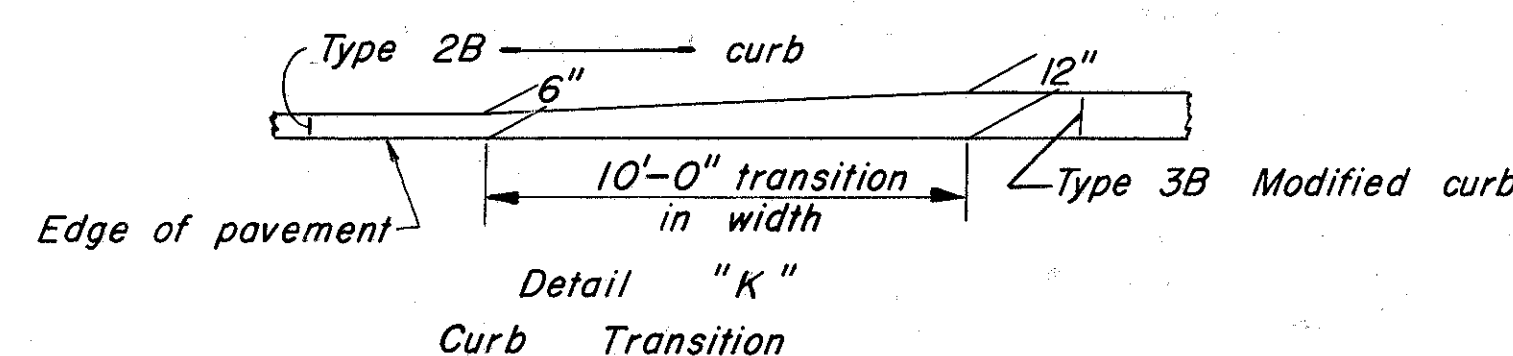


Note: Location of thickened joint is shown on pavement details by symbol "CT"

Detail "H"
Thickened Joint Details
Scale: 1" = 1'-0"



Detail "J"
Nose - Typical Exit Ramp



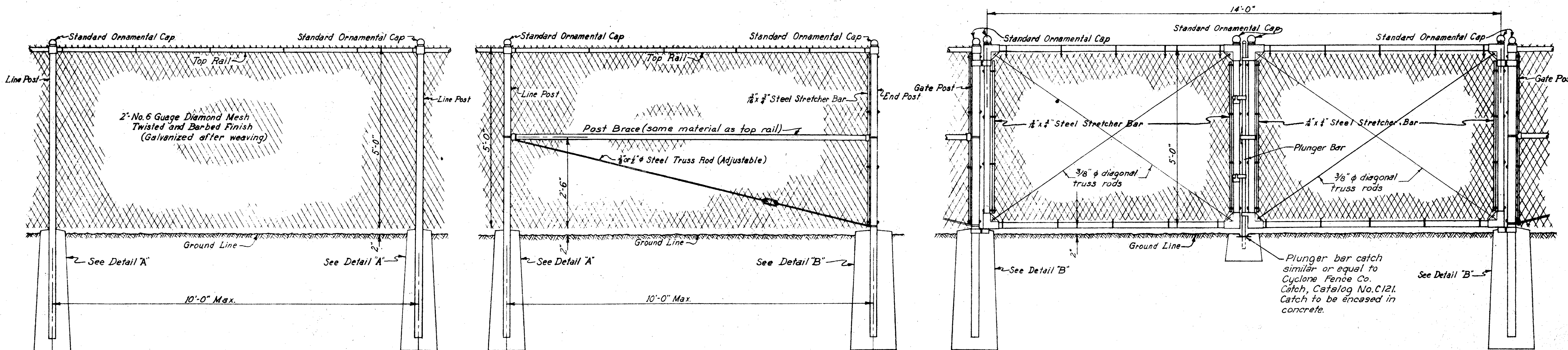
Detail "K"
Curb Transition

PAVEMENT JOINT LEGEND

Standard longitudinal joint	L
St'd longitudinal key joint without tie bars	LW
Standard expansion joint	E
Standard expansion joint without tie bars - 2' min. length	EW

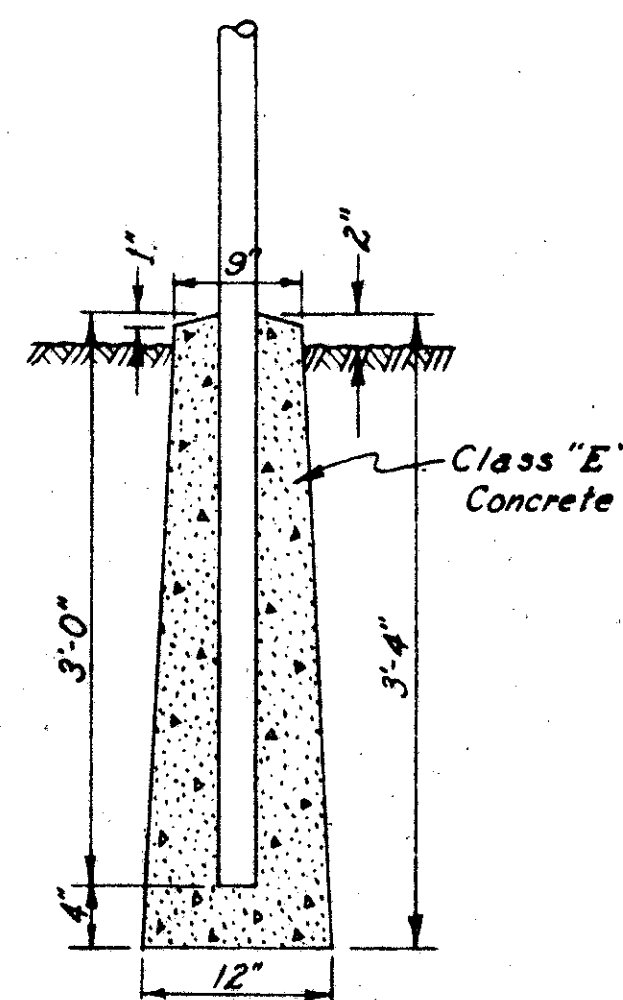
COLUMBUS EXPRESSWAY SYSTEM
FRA 62-1256 FRA 3-1370
MOUND-SANDUSKY EXPRESSWAY

FENCE DETAILS

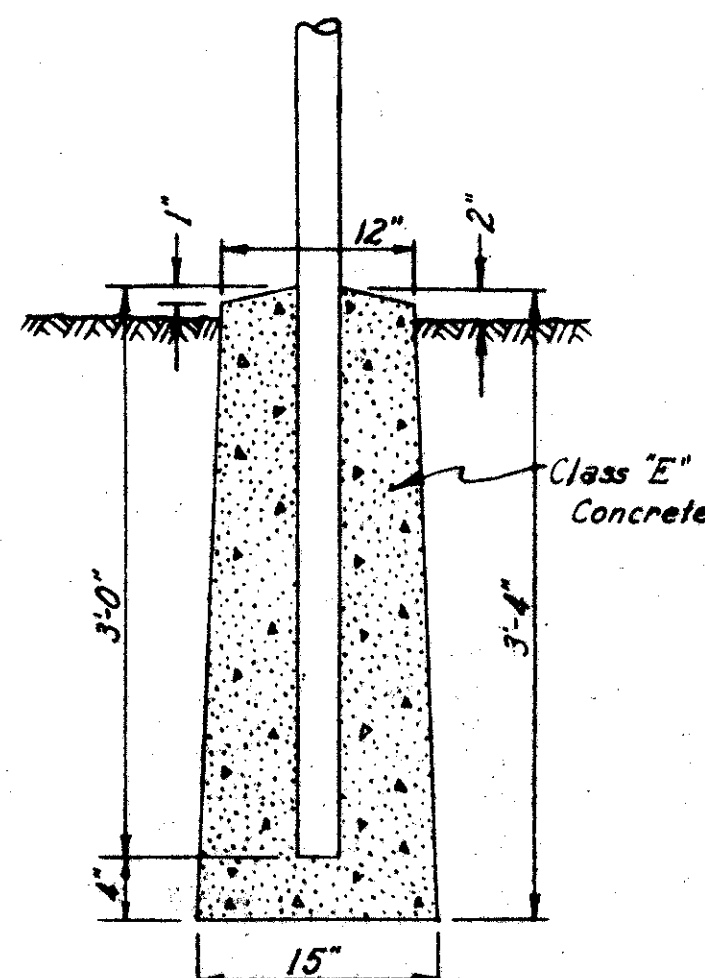


QUANTITIES			
ITEM	DISCRIPTION	UNIT	TOTAL
SS-18	Fence Type "C" as per plan	Lin. ft.	14,737

Note
Right of Way fence to be located as shown on Right of Way Sheets.



DETAIL "A"
SCALE: 1" = 1'-0"

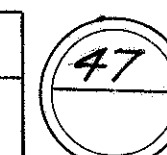


DETAIL "B"
SCALE: 1" = 1'-0"

- Notes:
- All gates shall be provided with an approved lock.
 - For dimensions and weights of posts and rails, See Supplemental Specification No. 18.
 - For additional information regarding hinges, latches, stretcher bars, truss rods, etc., See Supplemental Specification No. 18.
 - The fence shall not be erected until after five (5) days from the time of setting the posts in concrete if cement meeting the requirements of Sec. M-11 is used or until after three (3) days if cement meeting the requirements of Sec. M-12 is used.
 - A pull panel shall be placed on each side of all corner or angle posts where the change in alignment of the fence exceeds five (5) degrees.
 - The footing for all angle or corner posts where the change in alignment of the fence exceeds five degrees shall be constructed as shown in Detail "B".

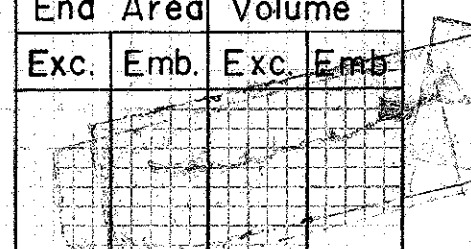
Seeding		Subbase	
Width	Area	Area	Vol.
L.F.	Sq. Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO .		

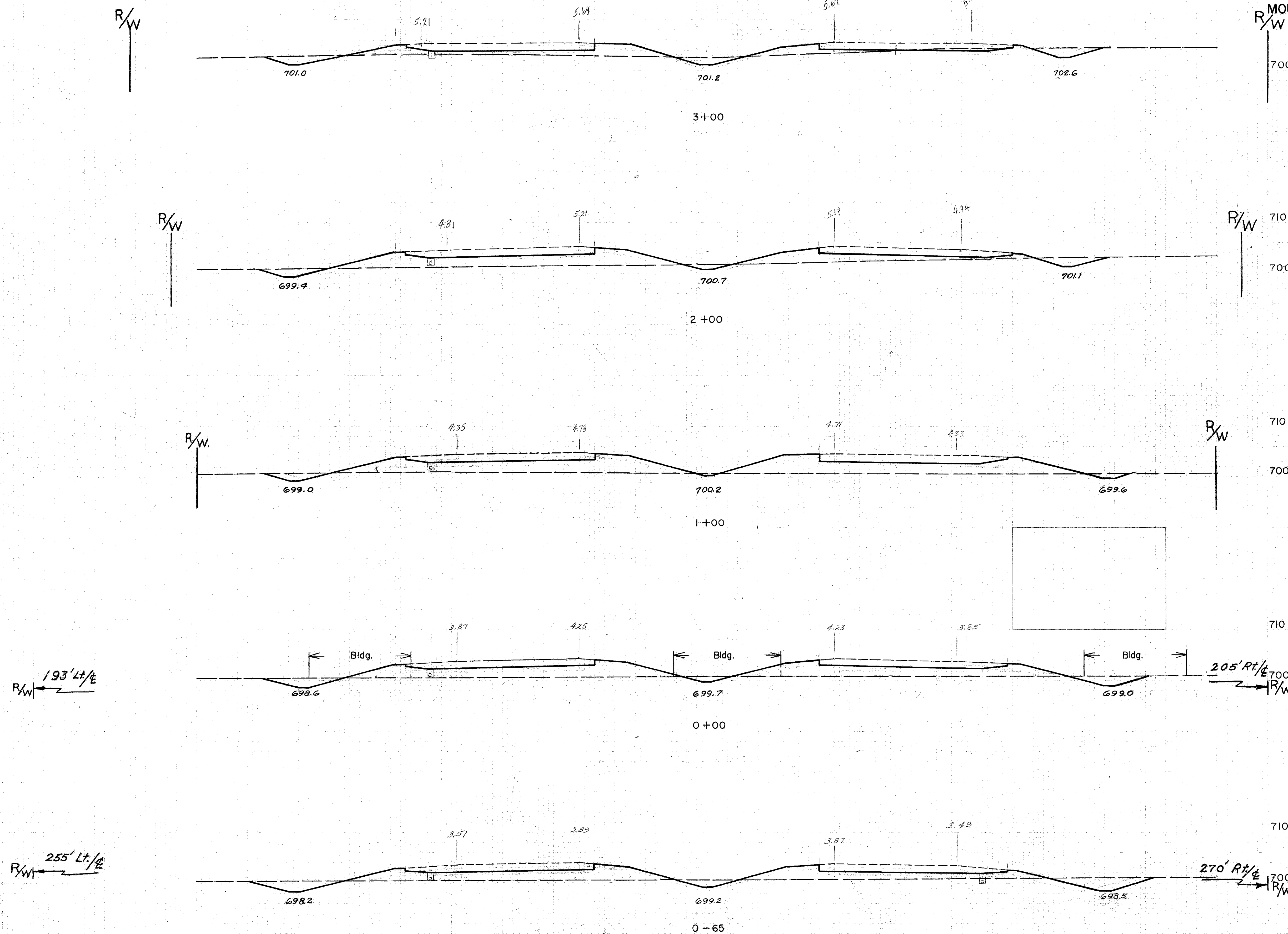


COLUMBUS EXPRESSWAY SYSTEM
FRA 62-1256 3-13.70
D MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.



54	112		
		178	634
42	230		
		148	1008
38	314		
		148	1066
42	262		
		132	563
68	206		

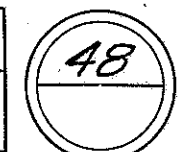


J J Adams 2/29/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

Seeding		Subbase	
Width	Area	Area	Vol.
L.F.	Sq.Yd	S.F.	C.Y.

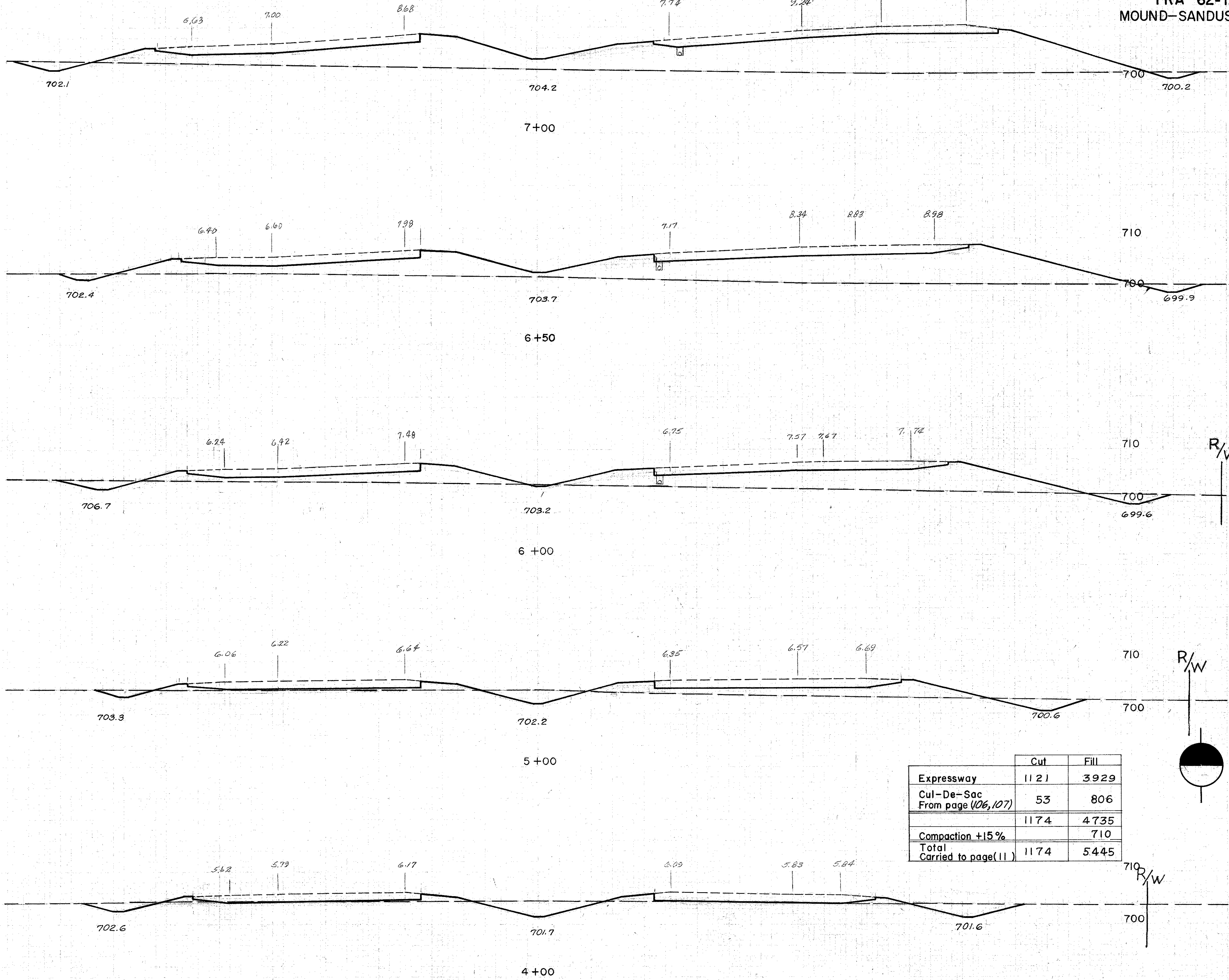
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-1256 3-1370
MOUND-SANDUSKY EXPRESSWAY

Earthwork

End Area		Volume	
Exc.	Emb.	Exc.	Emb.



	Cut	Fill
Expressway	1121	3929
Cul-De-Sac	53	806
From page (106,107)		
	1174	4735
Compaction +15%		710
Total	1174	5445
Carried to page(11)		

24 892

43 1448

22 672

48 1007

30 416

166 1096

60 176

262 388

82 34

252 270

Sta 4+00 to Sta 7+00

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		No.
CHECKED DATE		

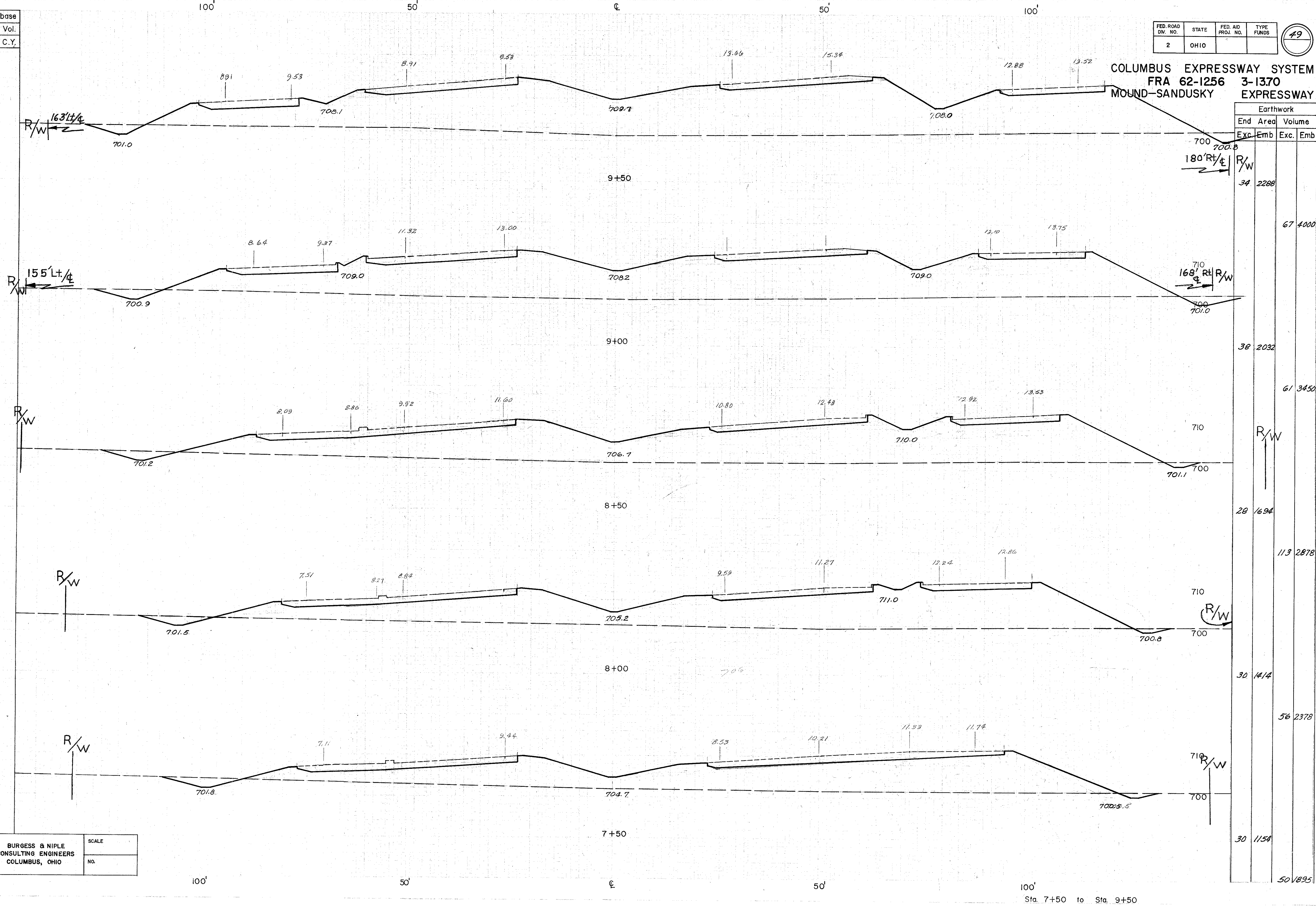
J J Adams 4/2/58

Seeding	Subbase
Width	Area
L.F.	Sq.Yd.
	S.F.
	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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COLUMBUS EXPRESSWAY SYSTEM
FRA 62-1256 3-1370
MOUND-SANDUSKY EXPRESSWAY




MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

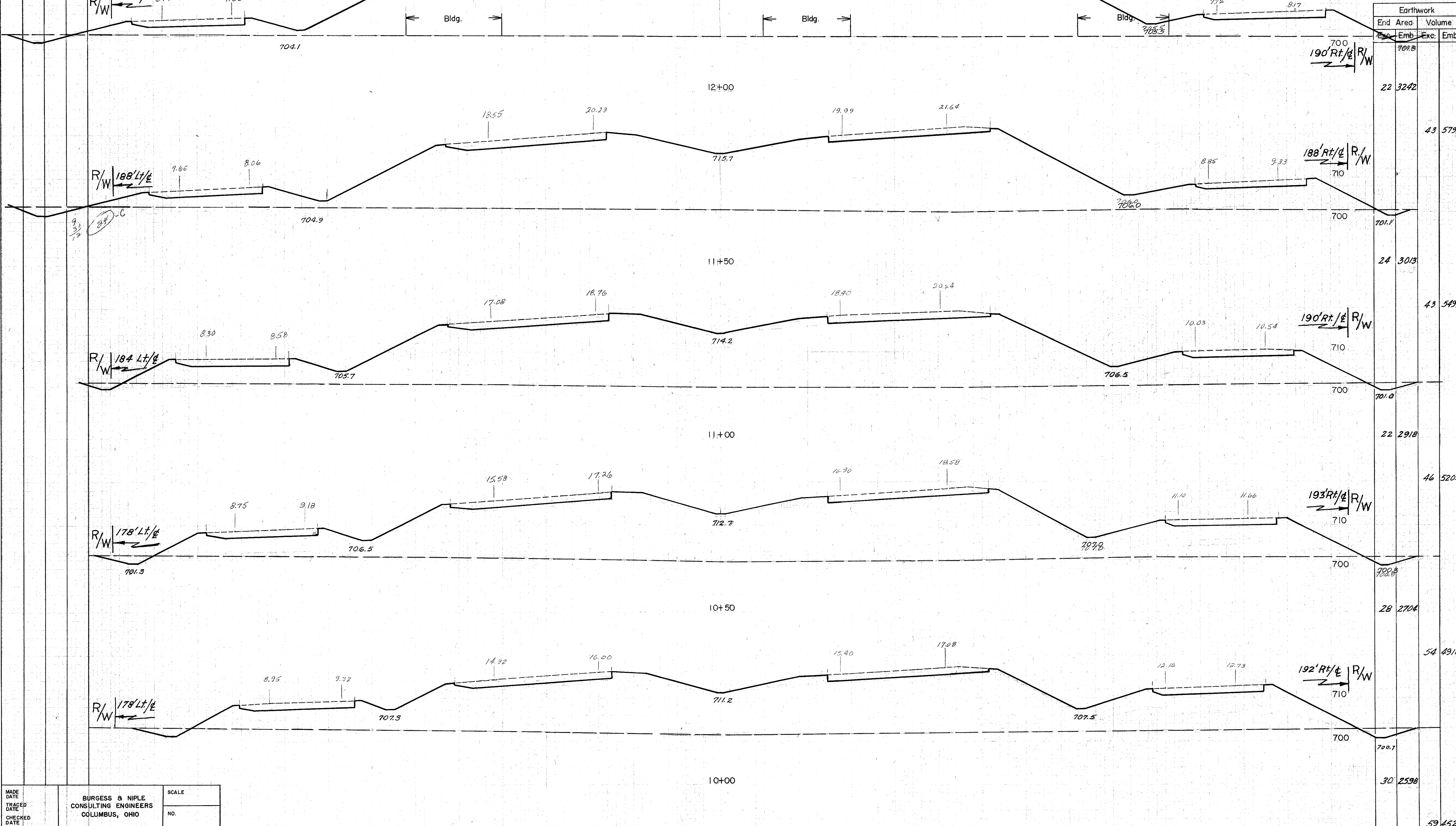
J. J. Adams 4/5/62

Sta. 7+50 to Sta. 9+50

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

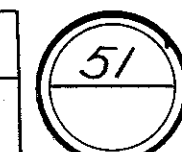


J. L. Adams 4/3/56

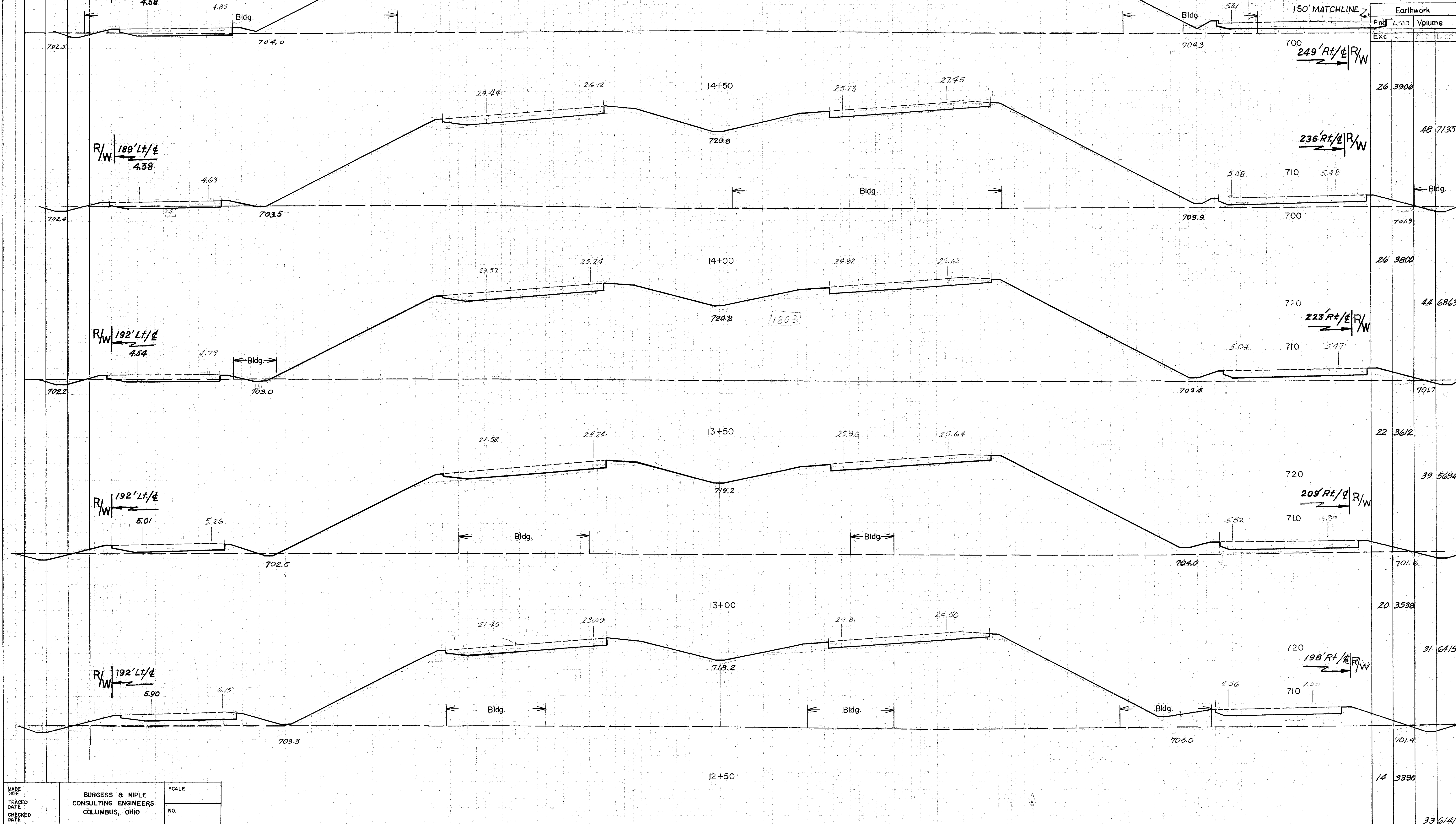
Sta. 10+00 to Sta. 12+00

Seeding	Subbase
Width Area	Area Vol.
L.F. Sq.Yd.	S.F. C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-1256 3-1370
MOUND-SANDUSKY EXPRESSWAY



Exc.	Area	Volume
26	3906	48 7135
26	3800	44 6863
22	3612	39 5694
20	3538	31 6415
14	3390	33 6141

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

J.J. Adams 4/4/56

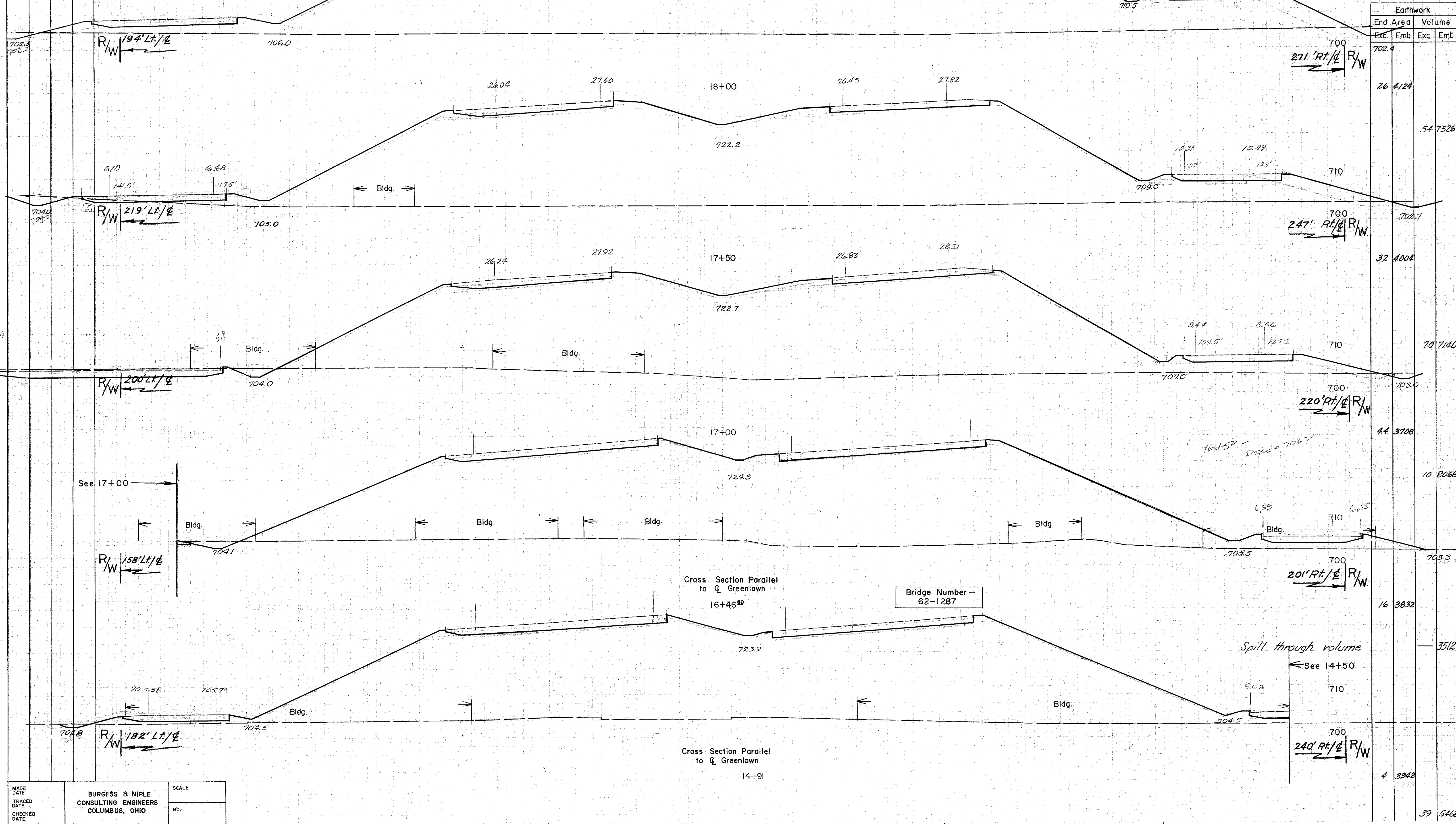
Sta 12+50 to Sta. 14+50

[illegible]

FED ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

52

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
~~MOUND-SANDUSKY~~ EXPRESSWAY



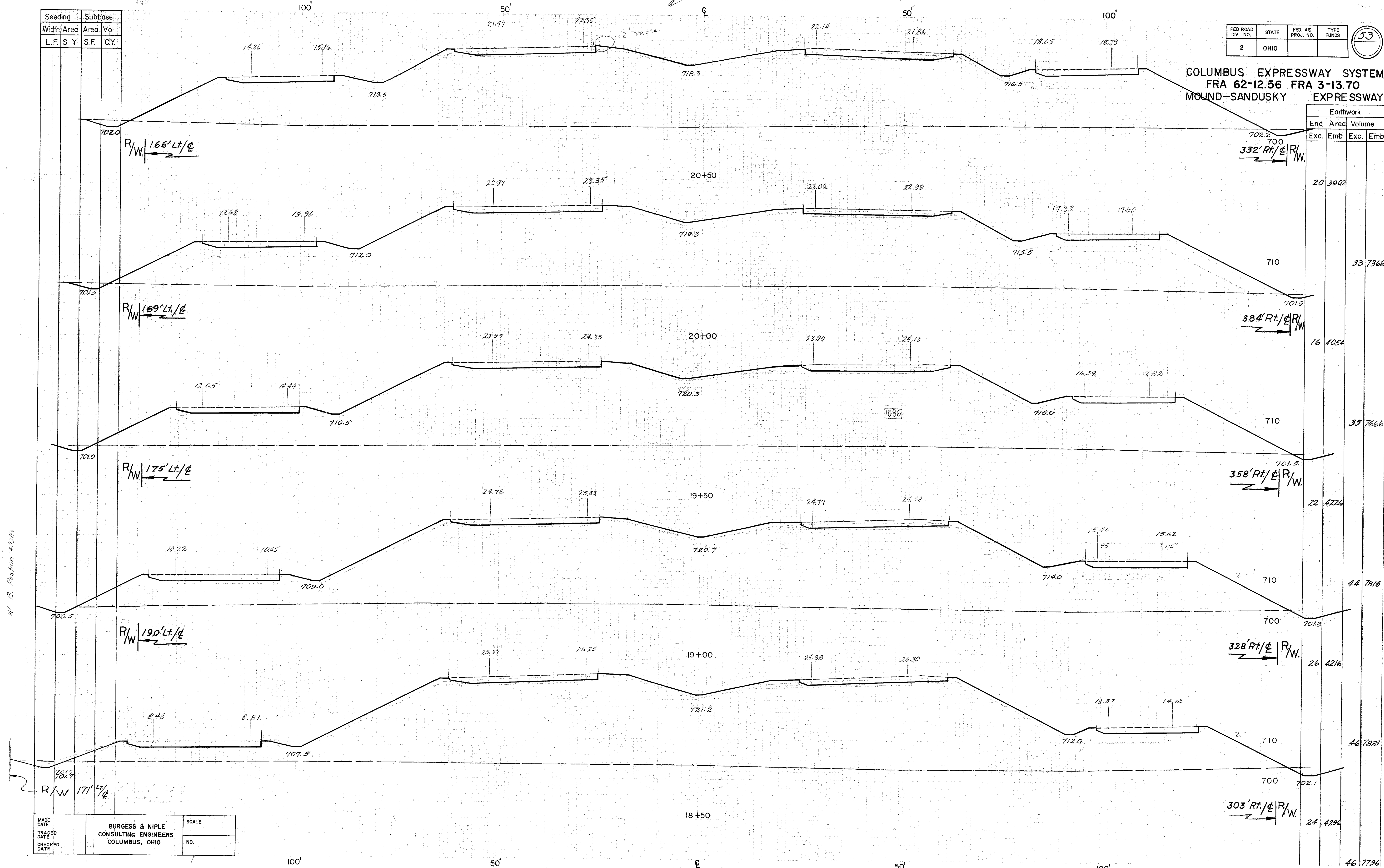
Sta. 16+00 to Sta. 18+00

Seeding	Subbase
Width Area	Area Vol.
L.F. S.Y.	S.F. C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

53

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY



Seeding	Subbase
Width	Area
Area	Vol.
L.F.	Sq.Yd.
S.F.	C.Y.

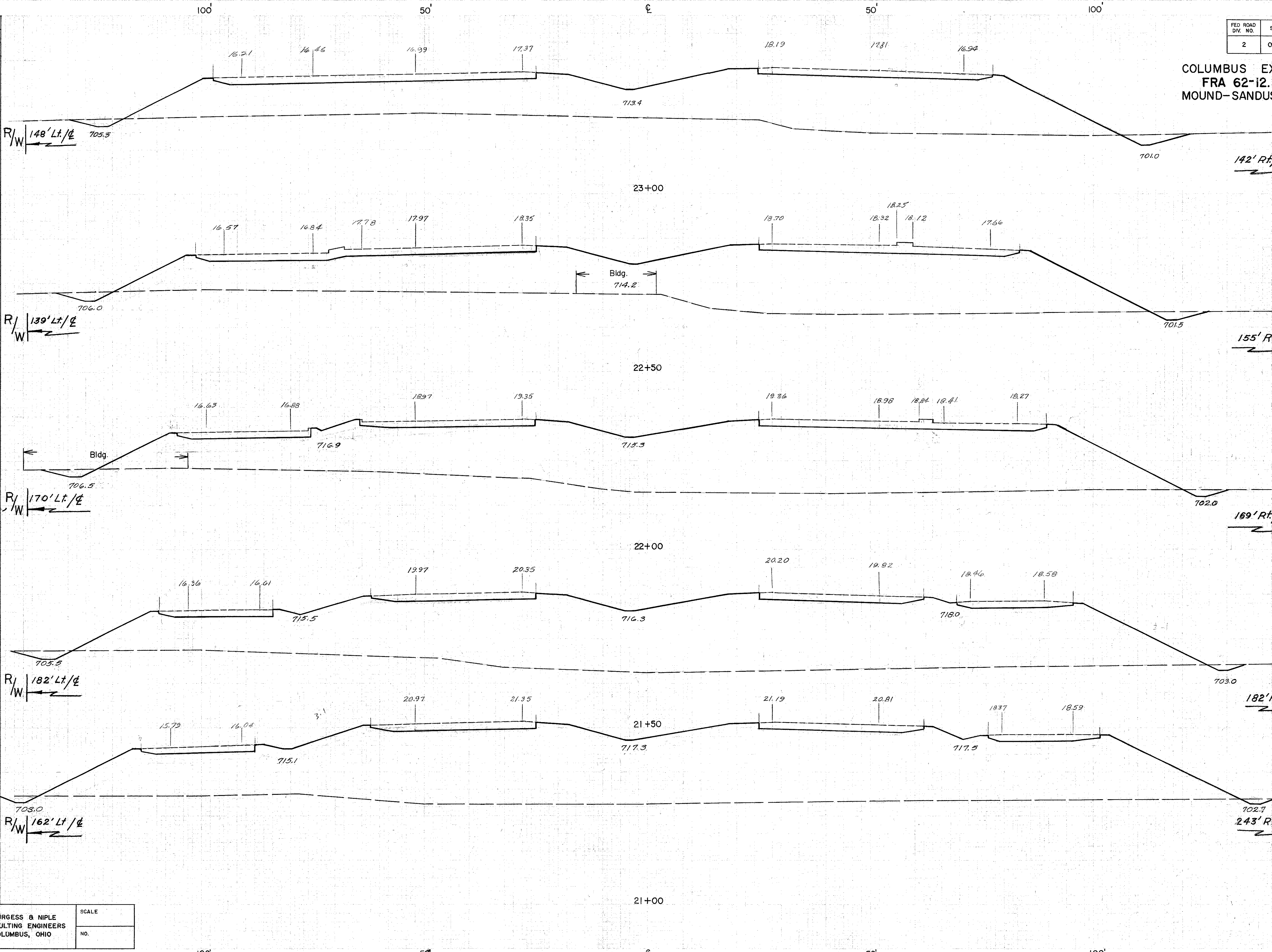
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

54

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb

28	1894		
56	3846		
32	2260		
50	4622		
22	2732		
42	5389		
24	3088		
39	6126		
18	3528		
35	6879		



MADE DATE	BURGESS & NIPLE	SCALE
TRACED DATE	CONSULTING ENGINEERS	
CHECKED DATE	COLUMBUS, OHIO	NO.

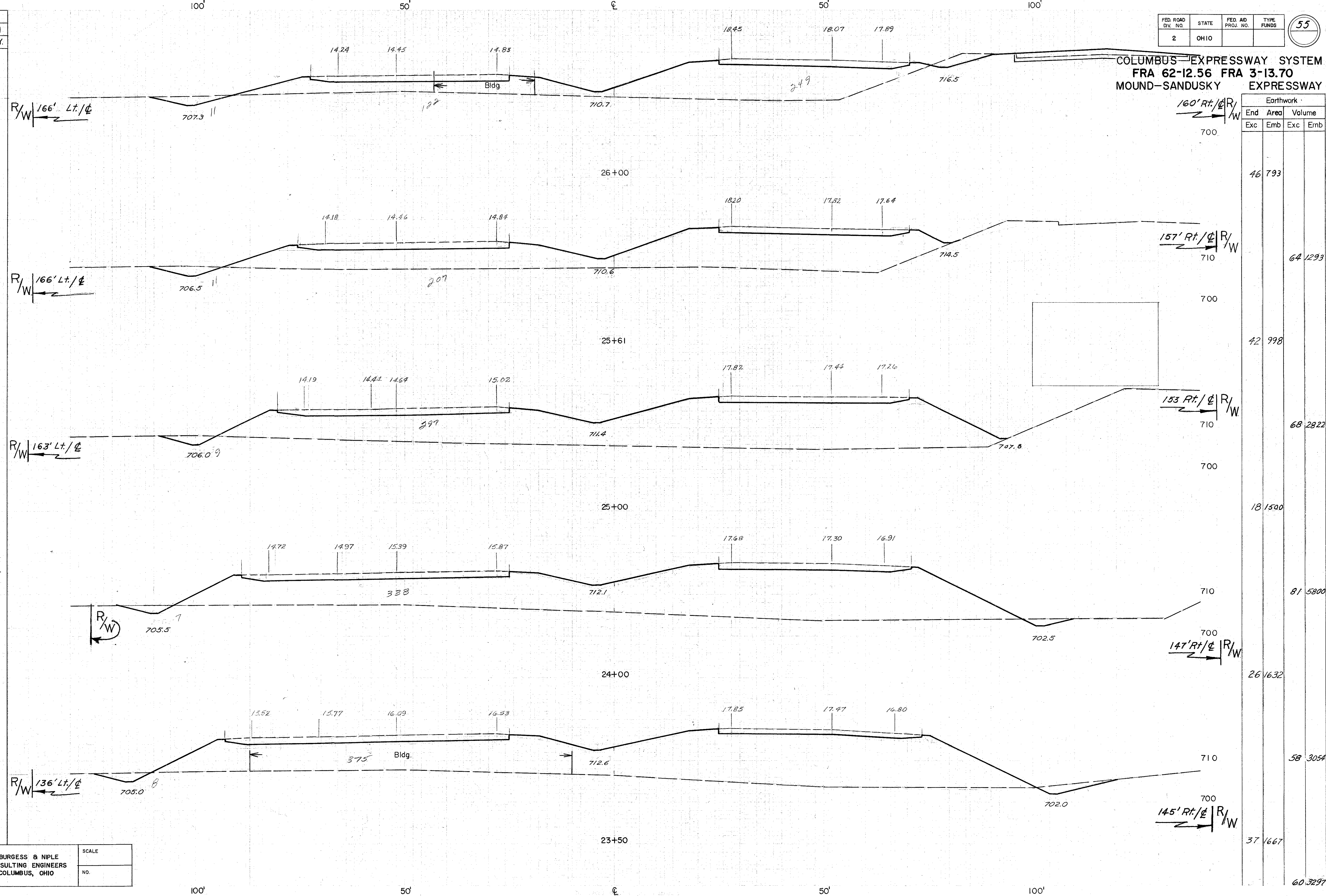
L. E. Lingg 4/10/68

Seeding		Subbase	
Width	Area	Area	Vol
L.F.	Sq.Yd.	S. F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

55

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY



L. E. Lingg 4/17/56

MADE DATE	BURGESS & NIPLÉ CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

Sta. 23+50 to Sta 26+00

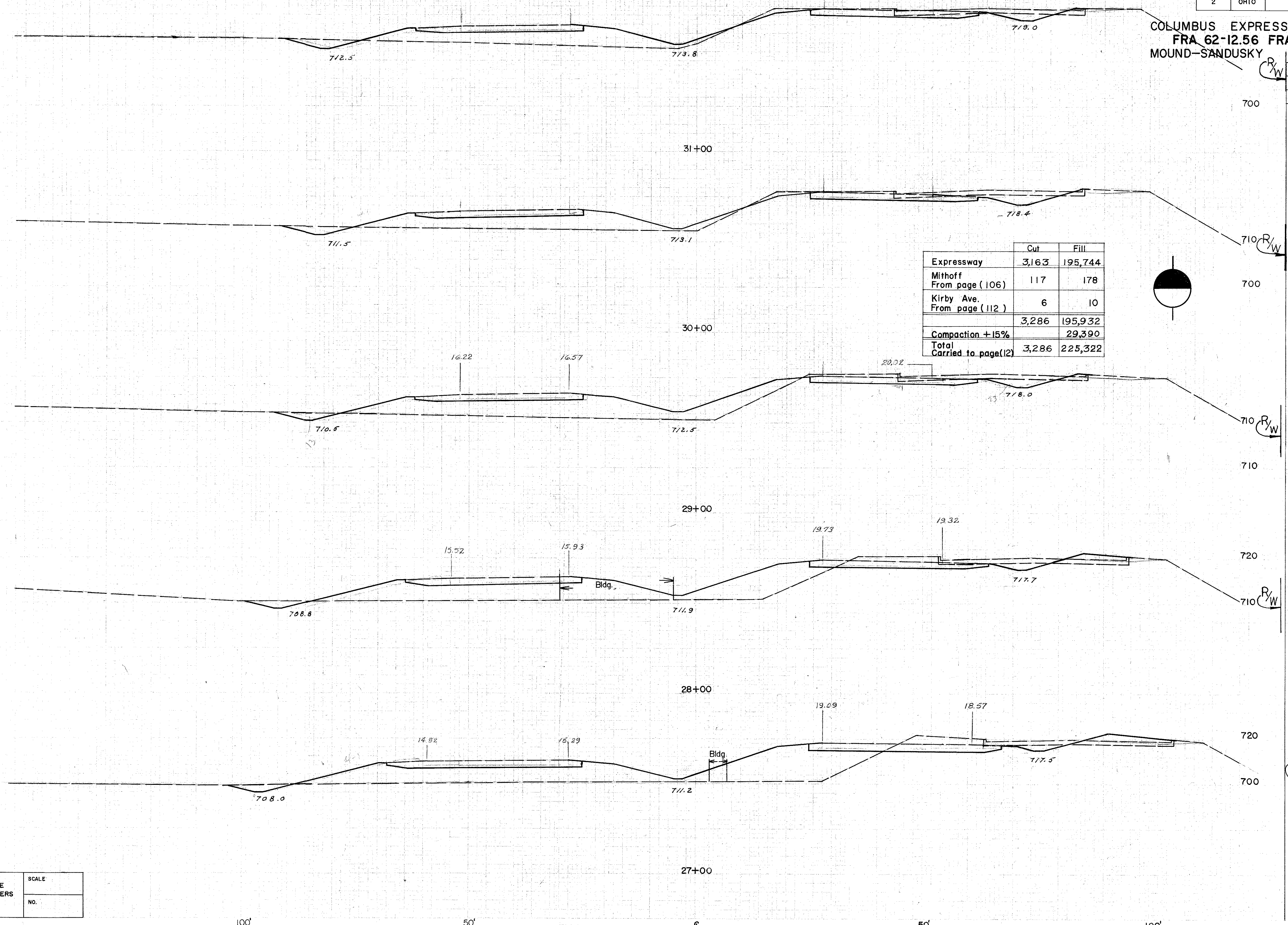
Seeding		Subbase	
Width	Area	Area	Vol
L.F.	Sq Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

56

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb



	Cut	Fill
Expressway	3,163	195,744
Mithoff From page (106)	117	178
Kirby Ave. From page (112)	6	10
	3,286	195,932
Compaction +15%		29,390
Total Carried to page(12)	3,286	225,322

88	194		
		333	552
92	104		
		333	737
88	294		
		304	1285
76	400		
$R_{Y/W}$		304	1652
.88	492		
		248	2380

J. J. Adams 4/14/82

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

Sta 27+00 to Sta 31+00

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

150

100

50

④

50'

100'

57

R_y
 W
70

72
R/W
710

720
R/W
710

72
R/W
710

72
R/W
710

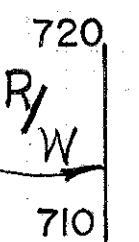
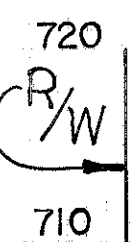
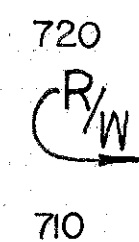
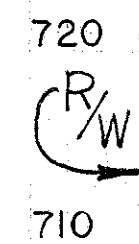
Earthwork			
End	Area	Volume	
Exc	Emb	Exc	Emb
42	268		
		219	989
76	266		
		252	896
60	218		
		248	752
74	188		
		230	707
50	194		
		256	718

Sta. 32+00 to Sta 36+00

[illegible]

58

710



Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb
156	222		
		470	1055
98	348		
		287	1122
148	614		
		75	873
62	660		
		192	1241
42	334		
		156	1115

Sta 37+00 to Sta. 40+00

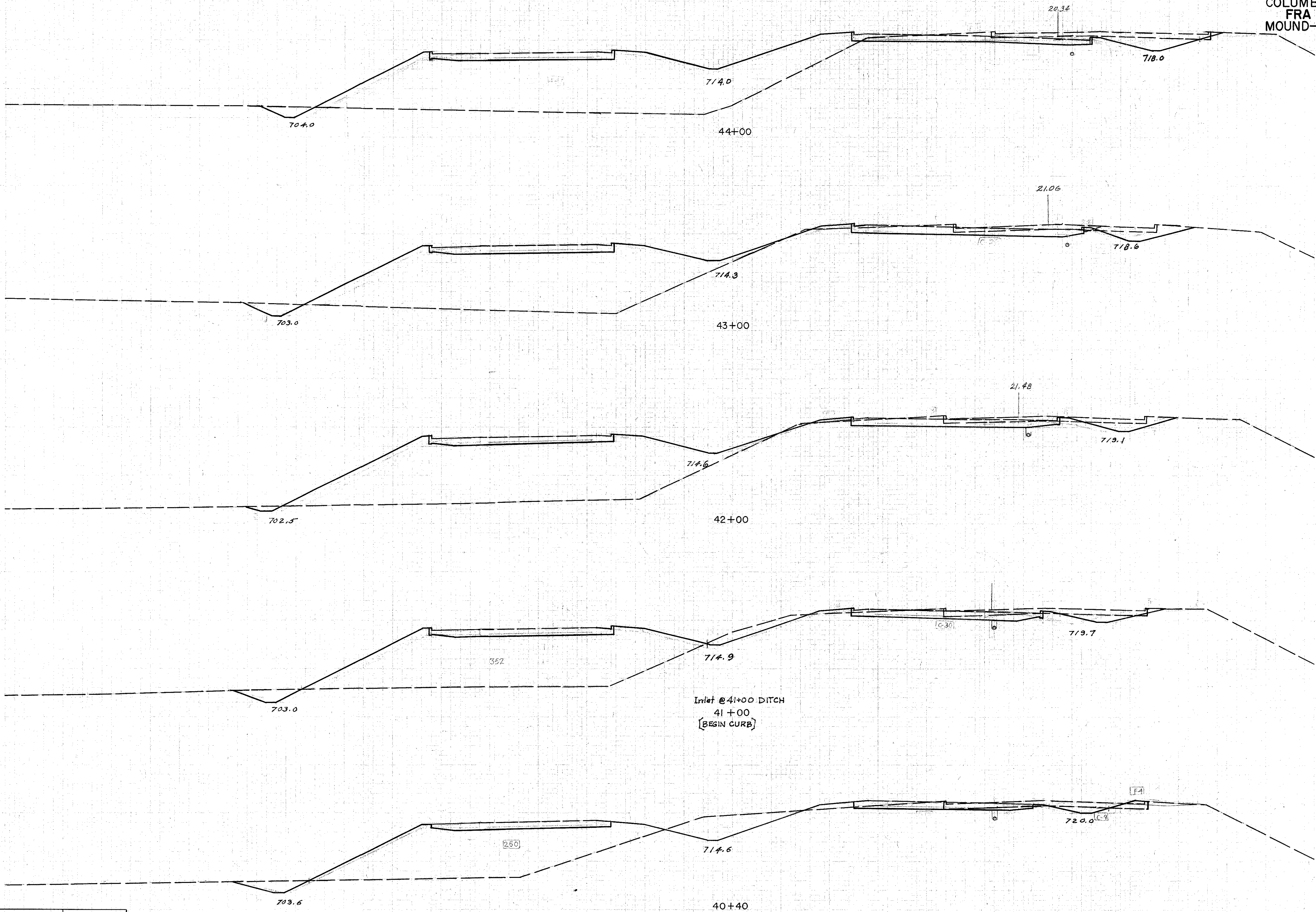
MADE DATE TRACED DATE CHECKED DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
		NO.

Seeding	Subbase
Width Area	Area Vol.
L.F. Sq.Yd.	S.F. C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

59

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY



End	Earthwork		Volume
	Exc.	Emb.	
710	118	986	
720			370
710	82	834	
720			281
710	70	894	
720			337
710	112	716	
720			284
710	144	524	
			222

MADE DATE	BURGESS & NIPLE	SCALE
TRACED DATE	CONSULTING ENGINEERS	
CHECKED DATE	COLUMBUS, OHIO	NO.

Sta. 40+40 to Sta. 44+00

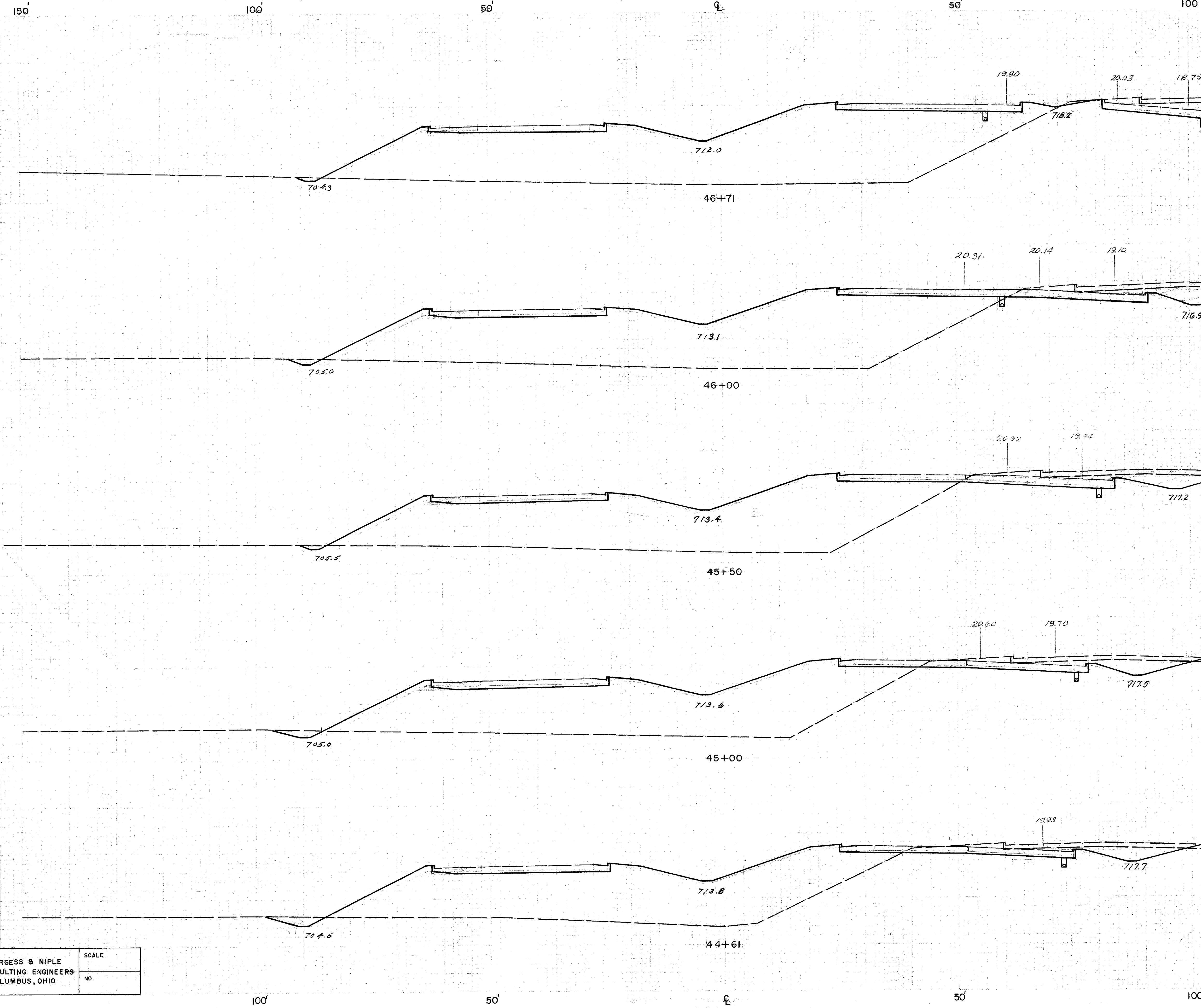
Seeding		Subbase	
Wide	Area	Area	Vol.
L.F.	Sq.Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

60

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

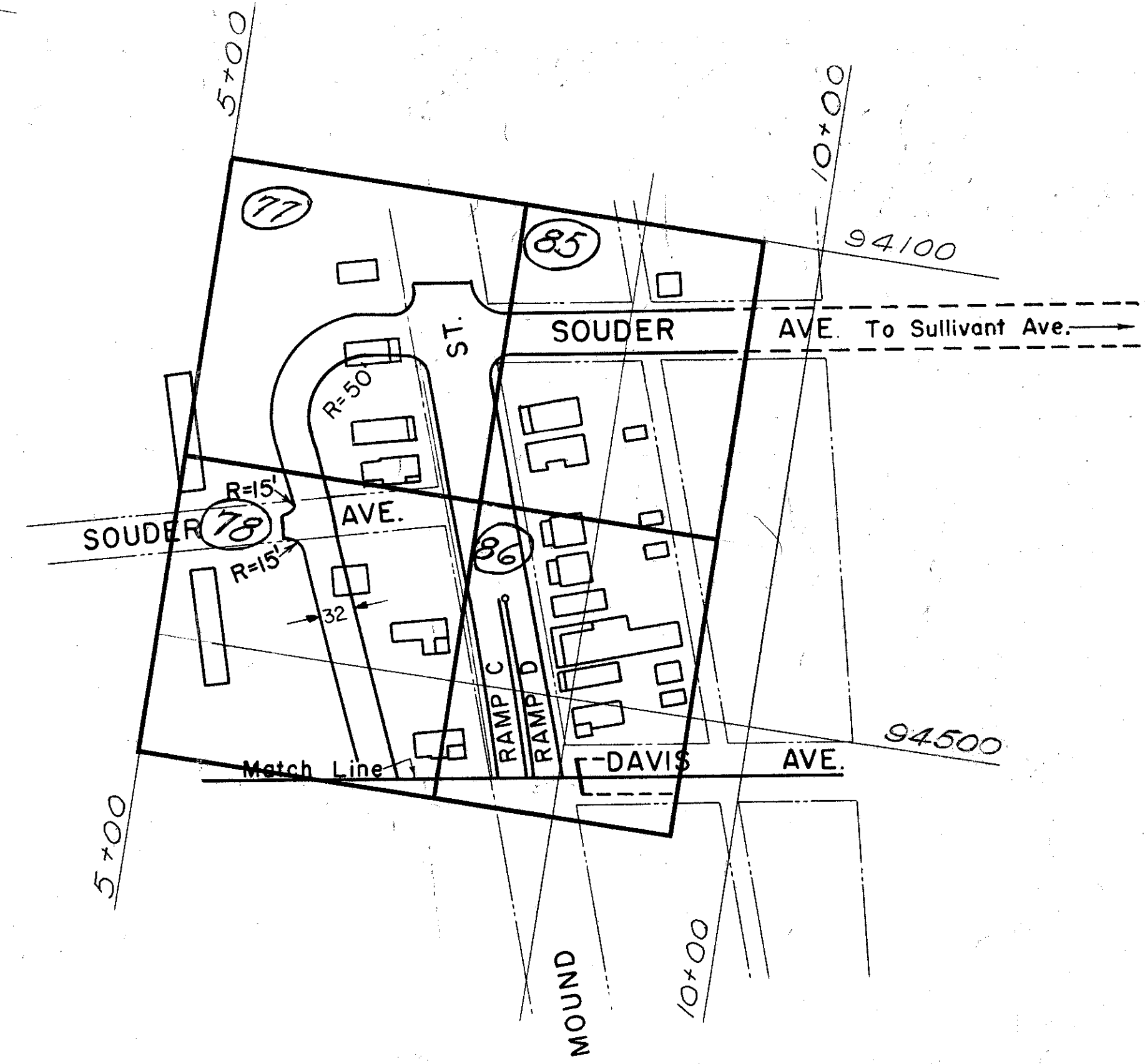
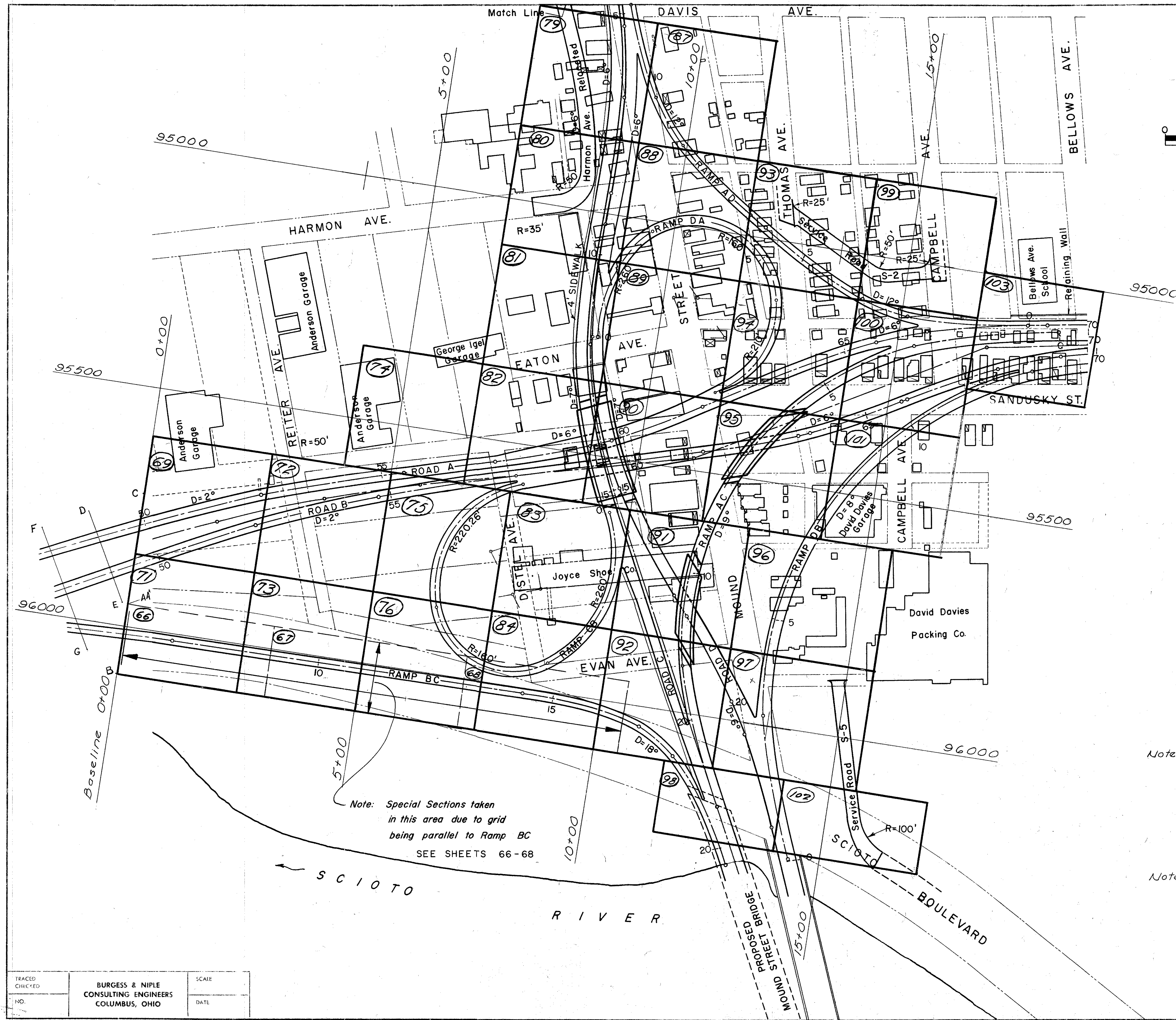
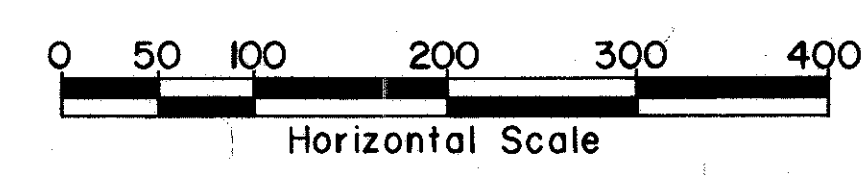
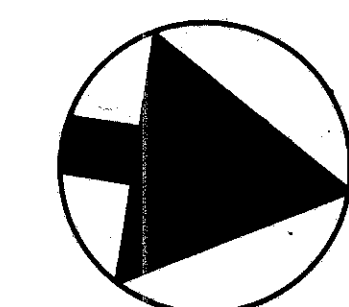
Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.
130	1676		
		318	4184
112	1506		
		217	2607
122	1310		
		222	2291
118	1164		
		162	1651
106	1122		
		253	2380



MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
INTERCHANGE
CROSS SECTION SHEET
INDEX



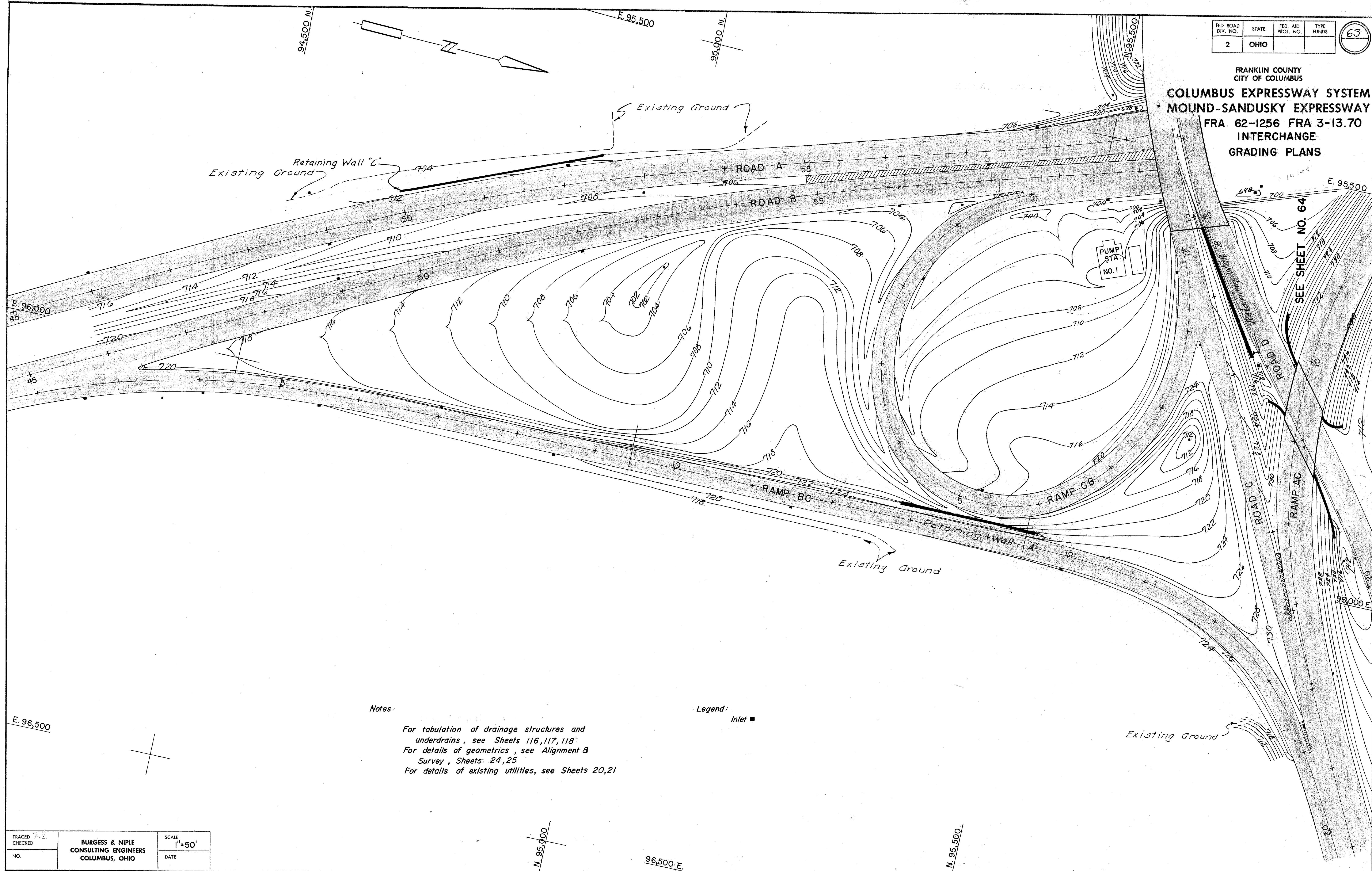
Note: Special Sections taken
in this area due to grid
being parallel to Ramp BC
SEE SHEETS 66-68

Note:
The cross sections shown on sheets
69 to 103 are taken on the coordinate
system given on this drawing. This
coordinate system is the Columbus
Coordinate System and the field survey
lines are tied to permanent monuments
which have been established outside
the construction limits.

Note:
Cross sections are drawn looking west
(coordinate numbers decreasing on
the coordinate system.) The northerly
coordinates are replaced by a stationing
system which uses 94650 as 0+00
and proceeds north at 50 ft intervals.
For limits of seeding areas, see general
notes. All seeding areas have been
plotted.

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
 FRA 62-1256 FRA 3-13.70
 INTERCHANGE
 GRADING PLANS



Notes:

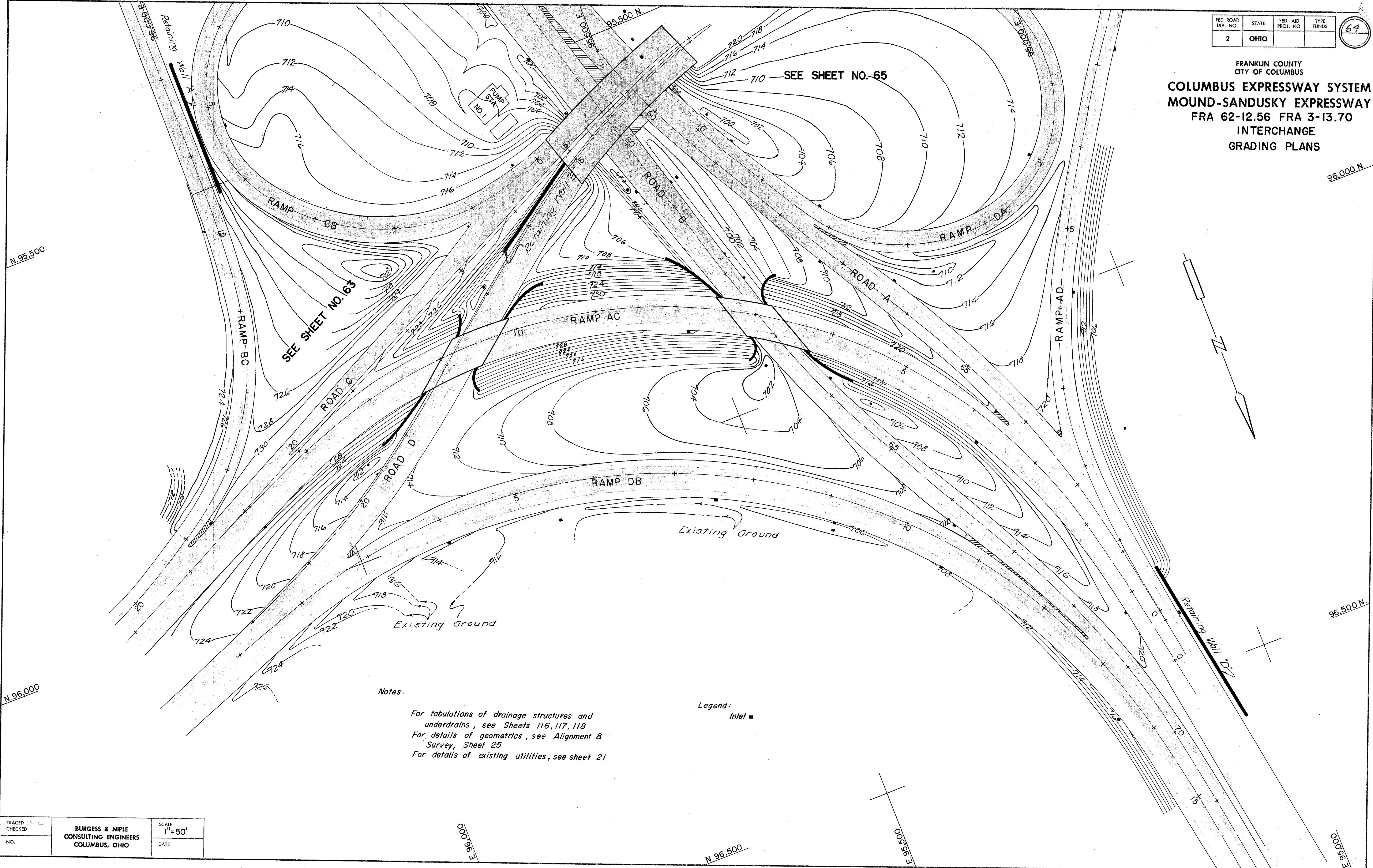
For tabulation of drainage structures and underdrains, see Sheets 116, 117, 118
 For details of geometrics, see Alignment & Survey, Sheets 24, 25
 For details of existing utilities, see Sheets 20, 21

Legend:

Inlet ■

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
INTERCHANGE
GRADING PLANS



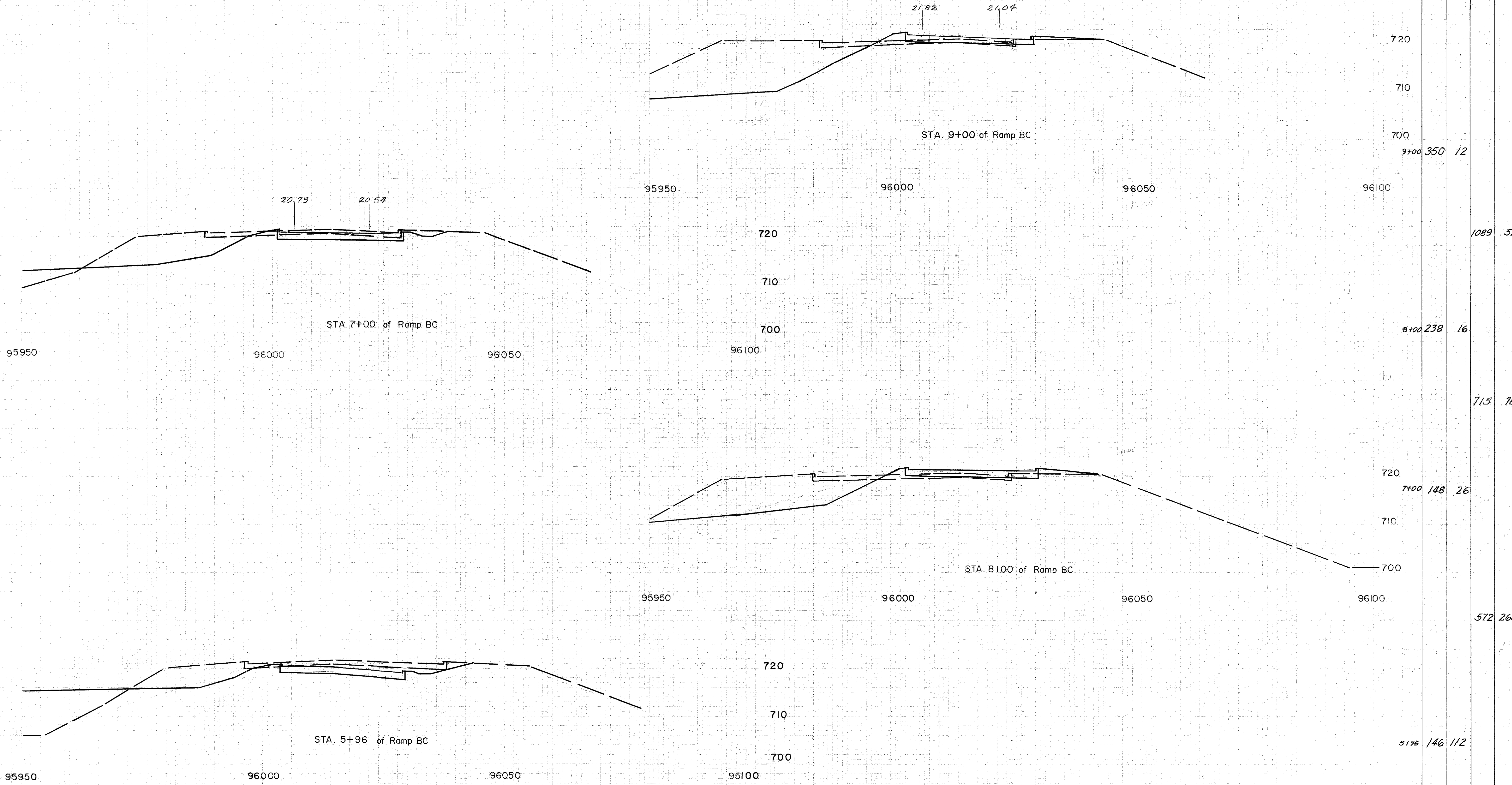
Seeding		Subbase	
Width	Area	Area	Vol
L.F.	Sq.Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		




COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

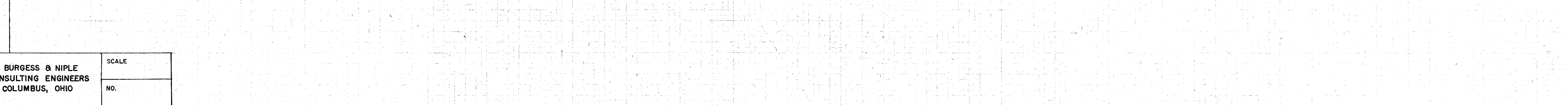
Earthwork			
End	Area	Volume	
Exc.	Emb.	Exc.	Emb.



MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		
CHECKED DATE		NO.

[illegible]

Earthwork

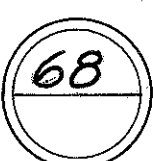
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MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

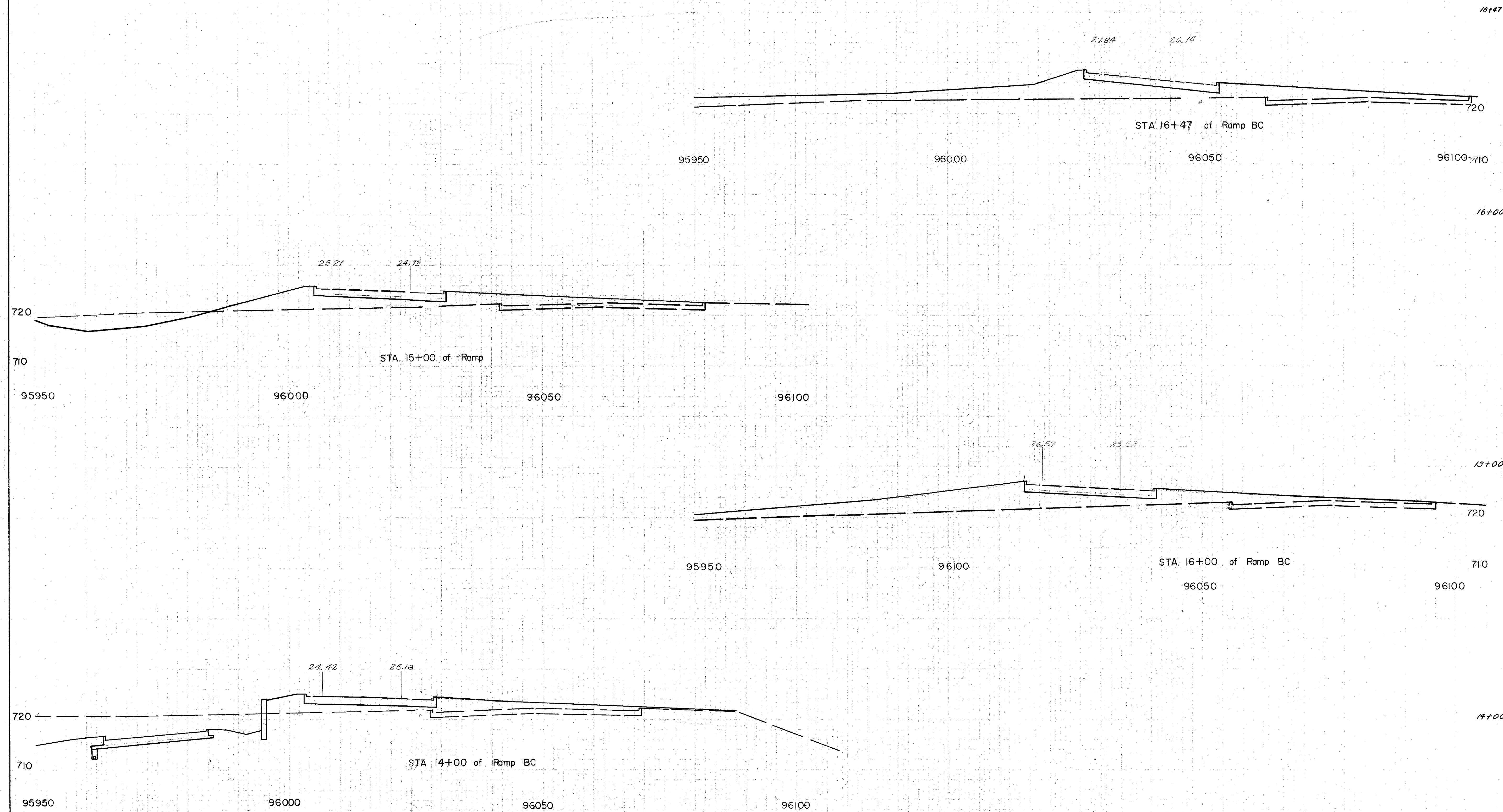
Special Interchange Cross Sections

Seeding		Subbase	
Width	Area	Area	Vol
L.F.	SqYd	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY



Earthwork			
End	Area	Volume	
Exc.	Emb.	Exc.	Emb.
0	314	0	1174
0	320	133	907
72	170	526	544
212	124	848	540

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

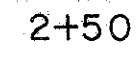
Special Interchange Cross Sections

姓名	性别	年龄	民族	籍贯	职业	文化程度	政治面貌	婚姻状况	健康状况	特长	备注
王德胜	男	45	汉族	山东烟台	教师	大学	中共党员	已婚	良好	擅长书法	
李秀英	女	38	汉族	河南郑州	护士	中专	中共党员	已婚	良好	擅长舞蹈	
张国强	男	52	汉族	江苏苏州	工程师	硕士	中共党员	已婚	良好	擅长编程	
刘小红	女	28	汉族	四川成都	会计	大专	中共党员	未婚	良好	擅长写作	
陈为民	男	60	汉族	广东广州	退休	小学	中共党员	已婚	良好	擅长园艺	
赵子龙	男	35	汉族	湖南长沙	程序员	本科	中共党员	已婚	良好	擅长摄影	
周美兰	女	42	汉族	浙江杭州	医生	大学	中共党员	已婚	良好	擅长声乐	
吴大伟	男	55	汉族	湖北武汉	记者	本科	中共党员	已婚	良好	擅长演讲	
孙丽娟	女	30	汉族	福建厦门	设计师	大专	中共党员	未婚	良好	擅长绘画	
郑为民	男	48	汉族	广西桂林	公务员	本科	中共党员	已婚	良好	擅长围棋	
黄小芳	女	33	汉族	江西九江	教师	大学	中共党员	已婚	良好	擅长钢琴	
徐国强	男	50	汉族	安徽合肥	工程师	硕士	中共党员	已婚	良好	擅长数学	
马小红	女	25	汉族	山西太原	会计	大专	中共党员	未婚	良好	擅长写作	
周为民	男	58	汉族	陕西西安	退休	小学	中共党员	已婚	良好	擅长园艺	
吴子龙	男	32	汉族	四川成都	程序员	本科	中共党员	已婚	良好	擅长摄影	
周美兰	女	40	汉族	浙江杭州	医生	大学	中共党员	已婚	良好	擅长声乐	
吴大伟	男	53	汉族	湖北武汉	记者	本科	中共党员	已婚	良好	擅长演讲	
孙丽娟	女	29	汉族	福建厦门	设计师	大专	中共党员	未婚	良好	擅长绘画	
郑为民	男	47	汉族	广西桂林	公务员	本科	中共党员	已婚	良好	擅长围棋	
黄小芳	女	31	汉族	江西九江	教师	大学	中共党员	已婚	良好	擅长钢琴	
徐国强	男	49	汉族	安徽合肥	工程师	硕士	中共党员	已婚	良好	擅长数学	
马小红	女	24	汉族	山西太原	会计	大专	中共党员	未婚	良好	擅长写作	
周为民	男	57	汉族	陕西西安	退休	小学	中共党员	已婚	良好	擅长园艺	
吴子龙	男	31	汉族	四川成都	程序员	本科	中共党员	已婚	良好	擅长摄影	
周美兰	女	39	汉族	浙江杭州	医生	大学					

 $2+50$

69

Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.
0	0		
		20	7
22	8		
		20	548
0	584		
		0	2148
0	1736		
		0	3785
0	2352		
		0	5357

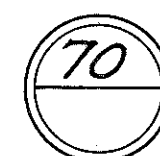


Interchange Cross Sections

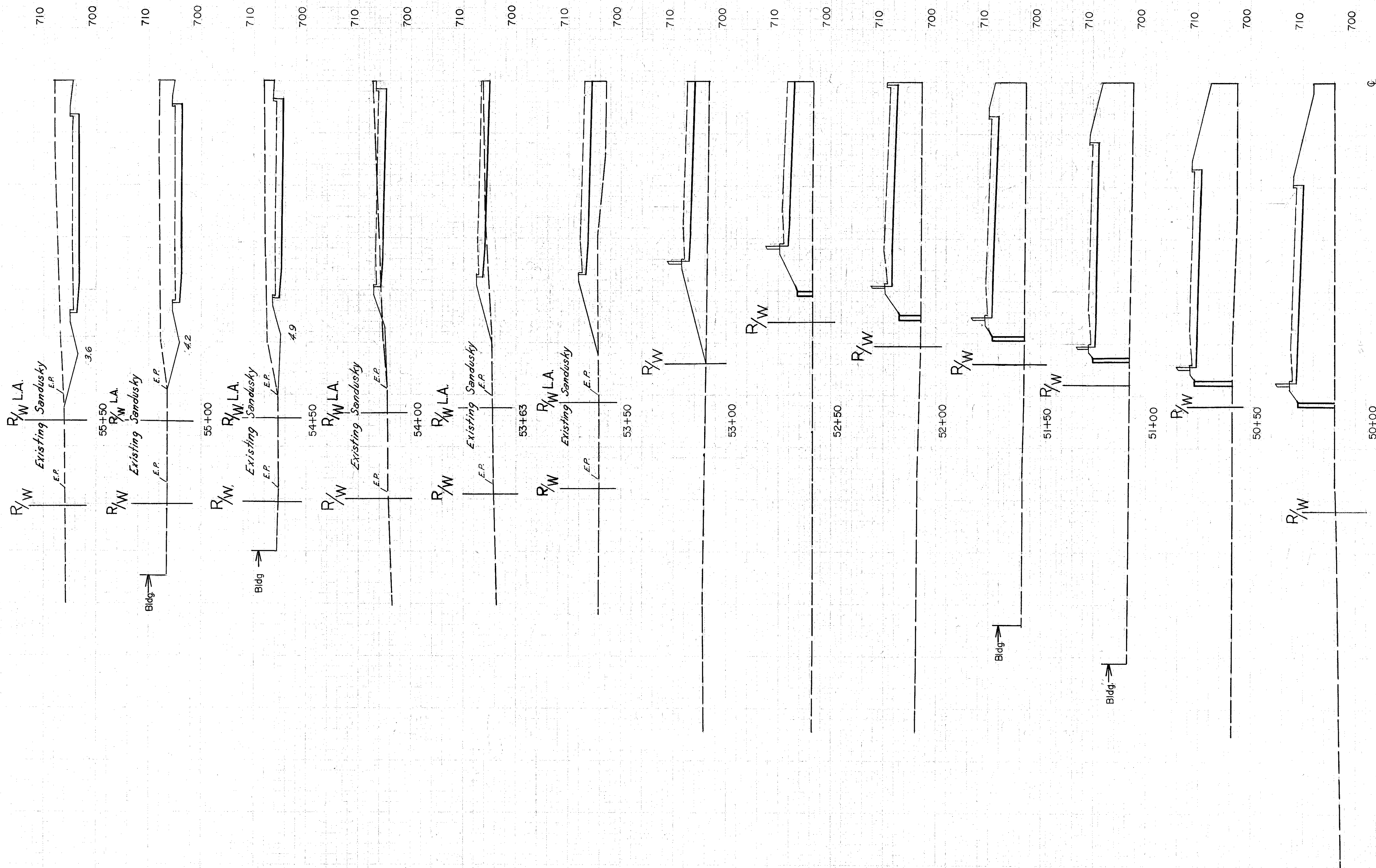
W. B. Roshon - 6/1/56:

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY




701.00 @ 404.00

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

Supplemental Cross Sections
(Not used in quantity calculations)
Sta. 50+00 to 55+50

姓名	性别	年龄	籍贯	民族	文化程度	职业	婚姻状况	健康状况	宗教信仰	政治面貌	社会关系	其他
王德胜	男	45	山东	汉族	高中	工人	已婚	良好	无	中共党员	无	
李秀英	女	38	河南	汉族	初中	农民	已婚	良好	无	群众	无	
张国强	男	52	江苏	汉族	大学	教师	已婚	良好	无	中共党员	无	
刘小红	女	28	四川	汉族	高中	护士	已婚	良好	无	群众	无	
陈为民	男	60	广东	汉族	小学	退休	已婚	良好	无	群众	无	
赵子龙	男	35	湖南	汉族	大学	工程师	已婚	良好	无	中共党员	无	
周大伟	男	42	浙江	汉族	高中	工人	已婚	良好	无	群众	无	
吴小芳	女	30	湖北	汉族	初中	售货员	已婚	良好	无	群众	无	
孙建国	男	55	安徽	汉族	小学	农民	已婚	良好	无	群众	无	
郑晓梅	女	25	江西	汉族	高中	学生	未婚	良好	无	群众	无	
冯大刚	男	48	广西	汉族	初中	工人	已婚	良好	无	群众	无	
马丽娟	女	33	福建	汉族	大学	教师	已婚	良好	无	中共党员	无	
徐长贵	男	58	山西	汉族	小学	退休	已婚	良好	无	群众	无	
郭小华	女	22	陕西	汉族	高中	学生	未婚	良好	无	群众	无	
黄永强	男	40	河北	汉族	初中	工人	已婚	良好	无	群众	无	
宋红梅	女	36	辽宁	汉族	大学	医生	已婚	良好	无	中共党员	无	
周大伟	男	50	吉林	汉族	小学	农民	已婚	良好	无	群众	无	
吴小芳	女	27	黑龙江	汉族	高中	售货员	已婚	良好	无	群众	无	
孙建国	男	53	内蒙古	汉族	初中	工人	已婚	良好	无	群众	无	
郑晓梅	女	24	新疆	汉族	大学	学生	未婚	良好	无	群众	无	
冯大刚	男	46	甘肃	汉族	小学	农民	已婚	良好	无	群众	无	
马丽娟	女	31	宁夏	汉族	高中	售货员	已婚	良好	无	群众	无	
徐长贵	男	56	青海	汉族	初中	工人	已婚	良好	无	群众	无	
郭小华	女	21	四川	汉族	高中	学生	未婚	良好	无	群众	无	
黄永强	男	41	重庆	汉族	初中	工人	已婚	良好	无	群众	无	
宋红梅	女	37	贵州	汉族	大学	教师	已婚	良好	无	中共党员	无	
周大伟	男	51	云南	汉族	小学	退休	已婚	良好	无	群众	无	
吴小芳	女	26	广西	汉族	高中	售货员	已婚	良好	无	群众	无	
孙建国	男	54	广东	汉族	初中	工人	已婚	良好	无	群众	无	
郑晓梅	女	23	福建	汉族	大学	学生	未婚	良好	无	群众	无	
冯大刚	男	4										

0+00 0+50 1+00 1+50 2+00 2+50



Earthwork

Earthwork			
End	Area	Volume	
Exc.	Emb.	Exc.	Emb.
	0 3434		
		0 5548	
	0 2568		
		104 3339	
112	1038		

W. B. Roston 6/1/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

SCALE

BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO

SCALE

NO.

Interchange Cross Sections

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

W. B. Roshan 6/1/56



72

Earthwork

4521296

Interchange Cross Sections

2+50

3+00

3+50

4+00

See Sheet 72

4+50

5+00

Seeding		Subbase	
Width	Area	Area	Vol
L. F.	Sq.Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End	Area	Volume	
Exc.	Emb.	Exc.	Emb.
122	954	217	1106
112	240	105	1483
0	1362		

See Sheet 71

W. B. Roshon 6/1/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

2+50

3+00

 $3 + 50$

4 + 00

 $4 + 50$

5 + 00

Interchange Cross Sections

[illegible]

6+00

74

Earthwork

	End Area		Volume	
	Exc.	Emb	Exc	Emb
0	0	0		
			0	0
0	0	0		
			0	0
0	0	0		
			139	0
204	0			
			1246	0
370 885 1142	0		1919	0

W. B. Roshon 6/1/56

R/W

189	0
-----	---

1246	0
------	---

270

1919 0

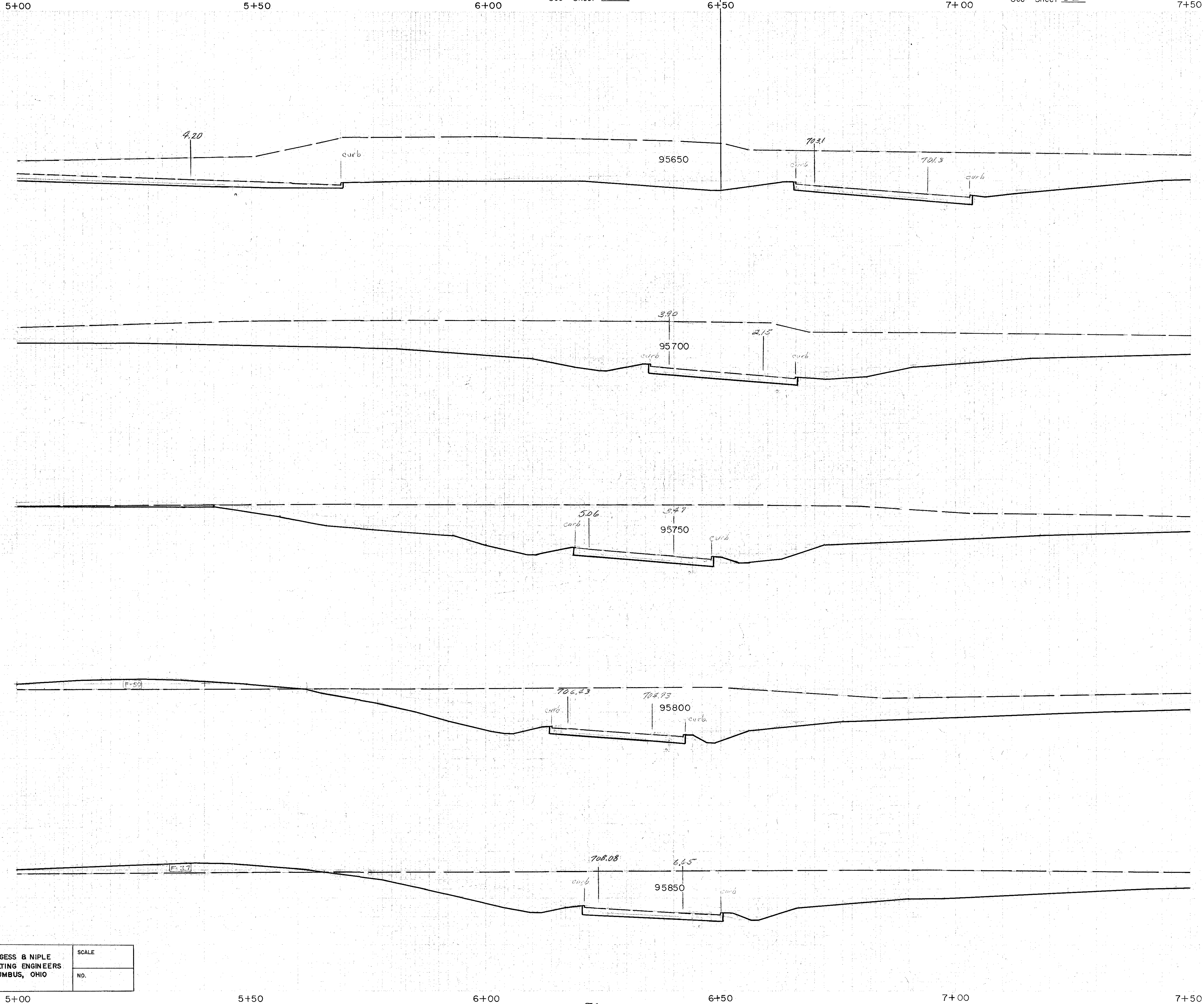
Interchange Cross Sections

See Sheet 72

See Sheet 75

Seeding	Subbase
Width	Area
L.F.	Sq.Yd.
Area	Vol
S.F.	C.Y.

MADE	BURGESS & NIPLE	SCALE
DATE	CONSULTING ENGINEERS	
TRACED	COLUMBUS, OHIO	NO.
DATE		
CHECKED		
DATE		



FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



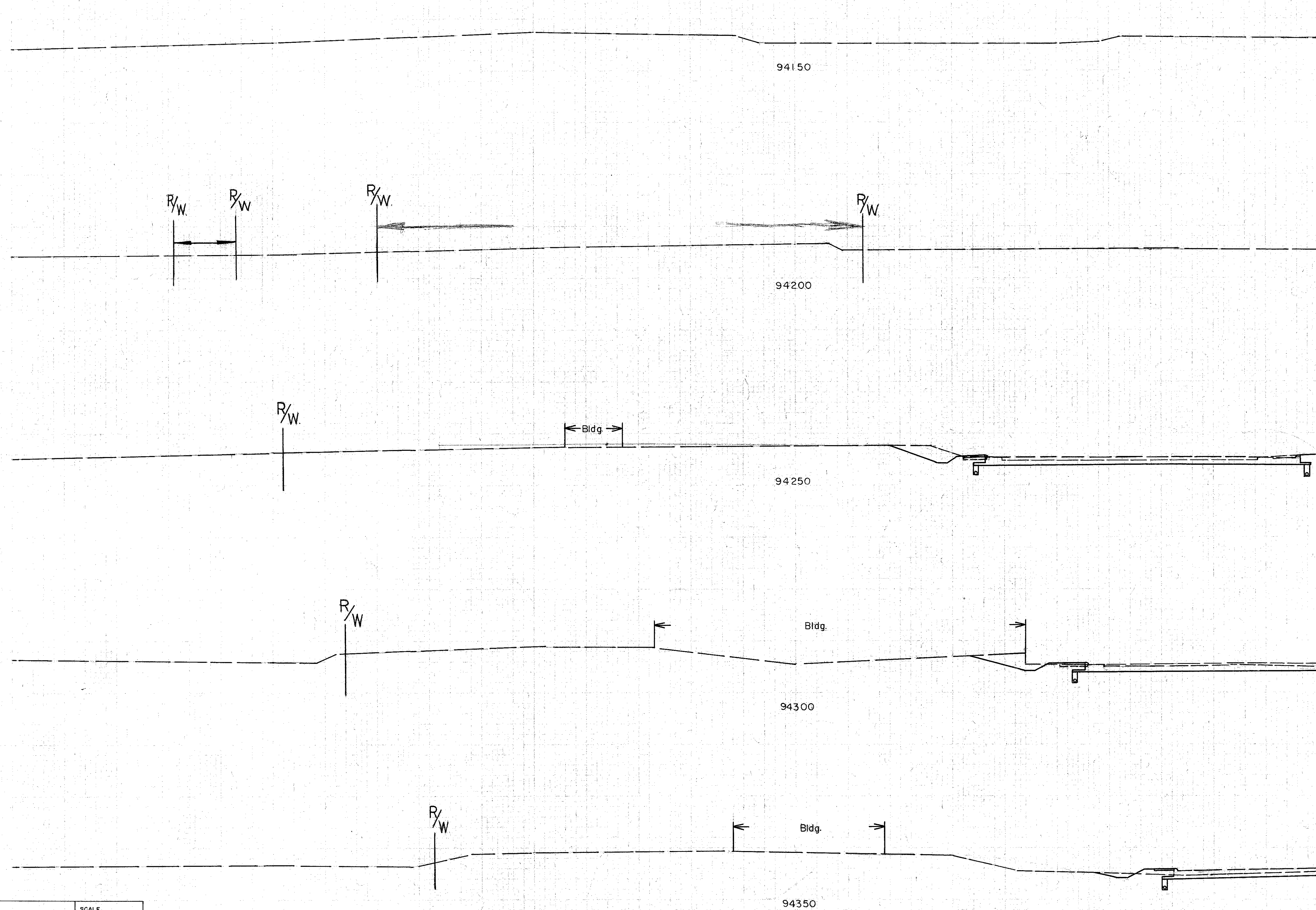
COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End	Area	Volume	
Exc.	Emb.	Exc.	Emb.
1209	0	1546	0
2048			
		3520	0
		2985	0
		2474	93
		2118	161
		2146	204

[illegible] $7+50$

77

Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.
0	0		
		0	0
0	0		
		63	4
68	4		
		124	9
66	6		
		89	15
30	10		
		56	17



W. B. Roshon 6/1/56

85

See Sheet 78

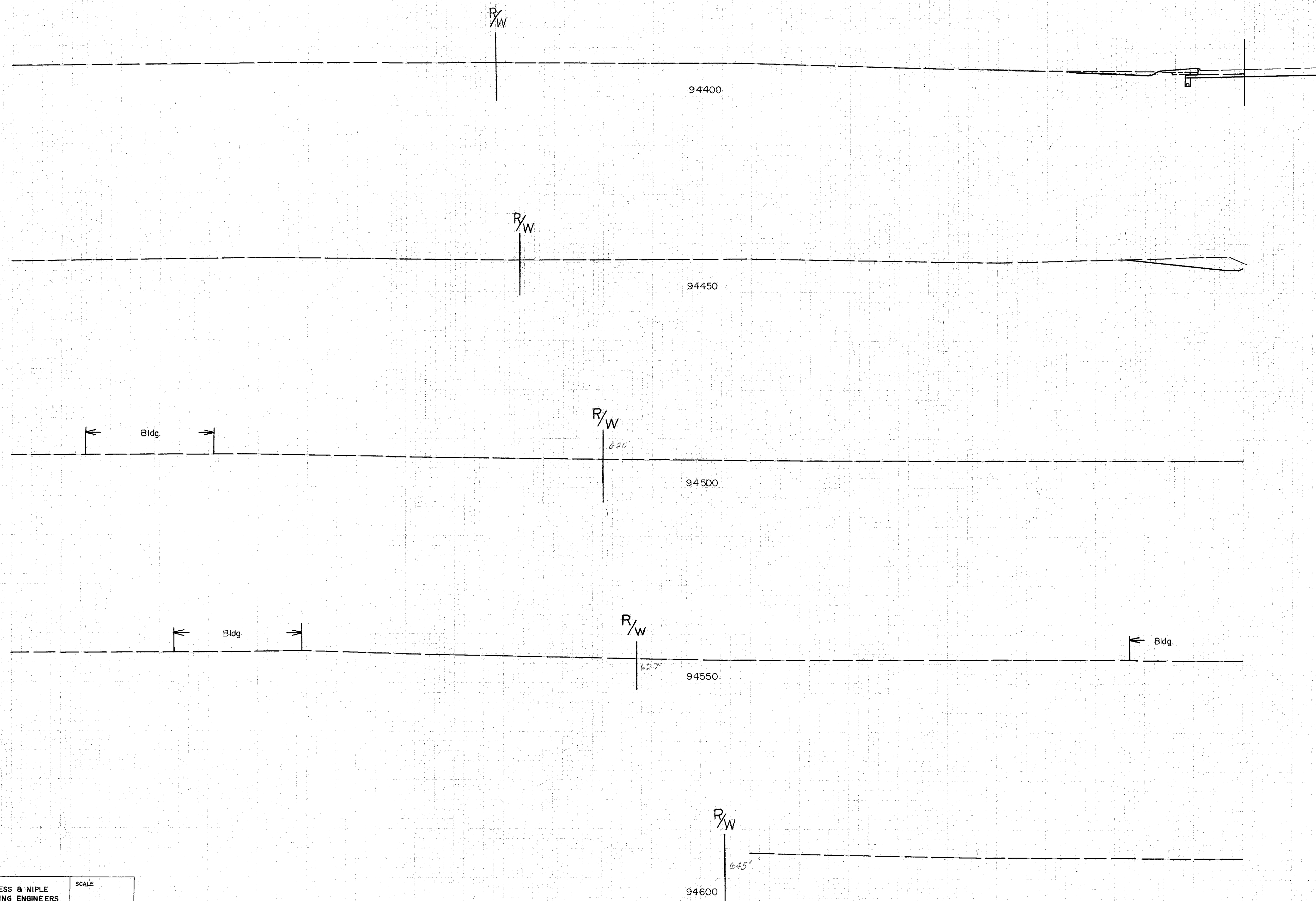
Interchange Cross Sections

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

 $7+50$ 78

Earthwork

Exc	Emb	Exc	Emb
30	8		
		63	7
38	0		
		35	0
0	0		
		0	0
0	0		
		0	0
0	0		
		11	117



W. B. Roshon 6/4/56

[illegible]

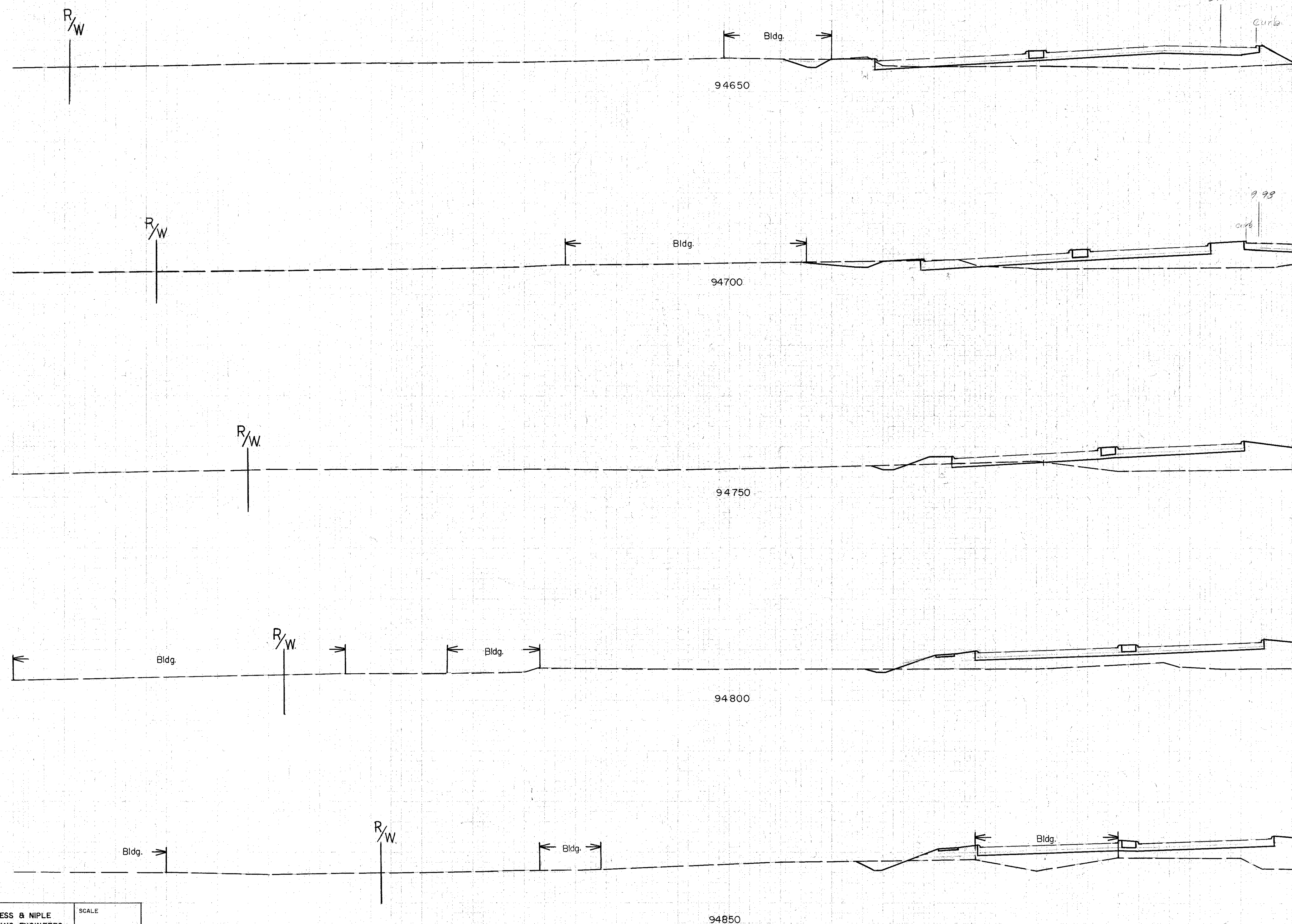
姓名	性别	年龄	民族	籍贯	职业	文化程度	政治面貌	宗教信仰	婚姻状况	子女情况	健康状况	其他情况
王德胜	男	45	汉族	山东烟台	教师	大学	中共党员	无	已婚	2子1女	良好	无
李秀英	女	38	汉族	河南郑州	护士	中专	中共党员	无	已婚	1子1女	良好	无
张国强	男	52	汉族	江苏苏州	工程师	硕士	中共党员	无	已婚	2子1女	良好	无
刘小红	女	41	汉族	四川成都	医生	大学	中共党员	无	已婚	1子1女	良好	无
陈伟明	男	35	汉族	广东广州	程序员	本科	中共党员	无	已婚	2子1女	良好	无
赵子龙	男	28	汉族	湖南长沙	记者	本科	中共党员	无	已婚	1子1女	良好	无
周美兰	女	55	汉族	浙江杭州	退休	高中	中共党员	无	已婚	3子2女	良好	无
吴大刚	男	48	汉族	安徽合肥	公务员	大学	中共党员	无	已婚	2子1女	良好	无
孙丽娟	女	32	汉族	湖北武汉	会计	大专	中共党员	无	已婚	1子1女	良好	无
郑为民	男	58	汉族	福建厦门	教授	博士	中共党员	无	已婚	2子1女	良好	无
马小芳	女	25	汉族	广西桂林	教师	本科	中共党员	无	未婚	0子0女	良好	无
徐建国	男	60	汉族	江西九江	退休	高中	中共党员	无	已婚	3子2女	良好	无
黄晓燕	女	43	汉族	山西太原	医生	大学	中共党员	无	已婚	2子1女	良好	无
郭永强	男	37	汉族	陕西西安	程序员	本科	中共党员	无	已婚	1子1女	良好	无
林小梅	女	50	汉族	云南昆明	护士	中专	中共党员	无	已婚	2子1女	良好	无
罗大为	男	46	汉族	贵州贵阳	工程师	硕士	中共党员	无	已婚	2子1女	良好	无
宋小红	女	33	汉族	海南三亚	教师	本科	中共党员	无	已婚	1子1女	良好	无
曹国强	男	53	汉族	宁夏银川	公务员	大学	中共党员	无	已婚	2子1女	良好	无
周美娟	女	44	汉族	青海西宁	会计	大专	中共党员	无	已婚	1子1女	良好	无
吴大刚	男	36	汉族	新疆乌鲁木齐	程序员	本科	中共党员	无	已婚	2子1女	良好	无
孙丽娟	女	27	汉族	内蒙古呼和浩特	教师	本科	中共党员	无	未婚	0子0女	良好	无
郑为民	男	57	汉族	吉林长春	退休	高中	中共党员	无	已婚	3子2女	良好	无
马小芳	女	42	汉族	辽宁沈阳	医生	大学	中共党员	无	已婚	2子1女	良好	无
徐建国	男	31	汉族	黑龙江哈尔滨	公务员	大专	中共党员	无	已婚	1子1女	良好	无
黄晓燕	女	51	汉族	河北石家庄	教授	博士	中共党员	无	已婚	2子1女	良好	无
郭永强	男	47	汉族	山西太原	护士	中专	中共党员	无	已婚	2子1女	良好	无
林小梅	女	34	汉族	陕西西安	工程师	硕士	中共党员	无	已婚	2子1女	良好	无
罗大为	男	29	汉族	云南昆明	教师	本科	中共党员	无	未婚	0子0女	良好	无
宋小红	女	54	汉族	海南三亚	公务员	大学	中共党员	无	已婚	3子2女	良好	无
曹国强	男	43	汉族	宁夏银川	医生	大专	中共党员	无	已婚	2子1女	良好	无
周美娟	女	35	汉族	青海西宁	程序员	本科	中共党员	无	已婚	1子1女	良好	无
吴大刚	男	56	汉族	新疆乌鲁木齐	教师	高中	中共党员	无	已婚	3子2女	良好	无
孙丽娟	女	26	汉族	内蒙古呼和浩特	护士	大专	中共党员	无	未婚	0子0女	良好	无
郑为民	男	59	汉族	吉林长春	退休	高中	中共党员	无	已婚	3子2女	良好	无
马小芳	女	41	汉族	辽宁沈阳	医生	大学	中共党员	无	已婚	2子1女	良好	无
徐建国	男	30	汉族	黑龙江哈尔滨	公务员	大专	中共党员	无	已婚	1子1女	良好	无
黄晓燕	女	52	汉族	河北石家庄	教授	博士	中共党员	无	已婚	2子1女	良好	无
郭永强	男	48	汉族	山西太原	护士	中专	中共党员	无	已婚	2子1女	良好	无

9+00

79

Earthwork

12	126				
			44	246	
36	140				
			44	276	
12	158				
			13	344	
2	214				
			9	357	
8	172				
			11	520	



W. B. Roshon 6/14/56

SCALE
NO.


9+00

See Sheet 80

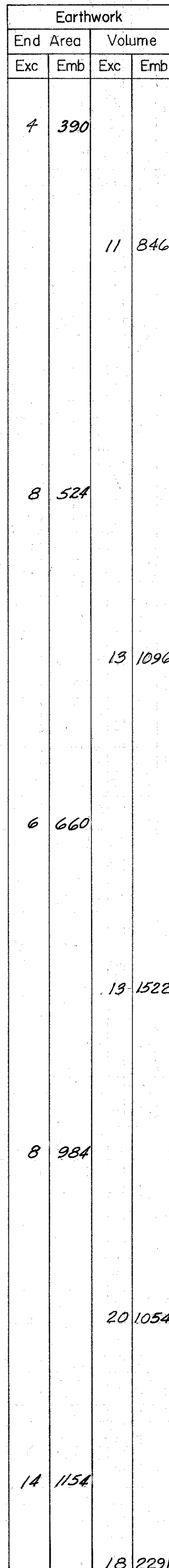
Interchange Cross Sections

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9+00



Earthwork



W. B. Roshon 6/4/58

SCALE
NO.

9+00

Interchange Cross Sections

6+50

7+00

 $7+50$

See Sheet 80

8+00

8+50

9+00

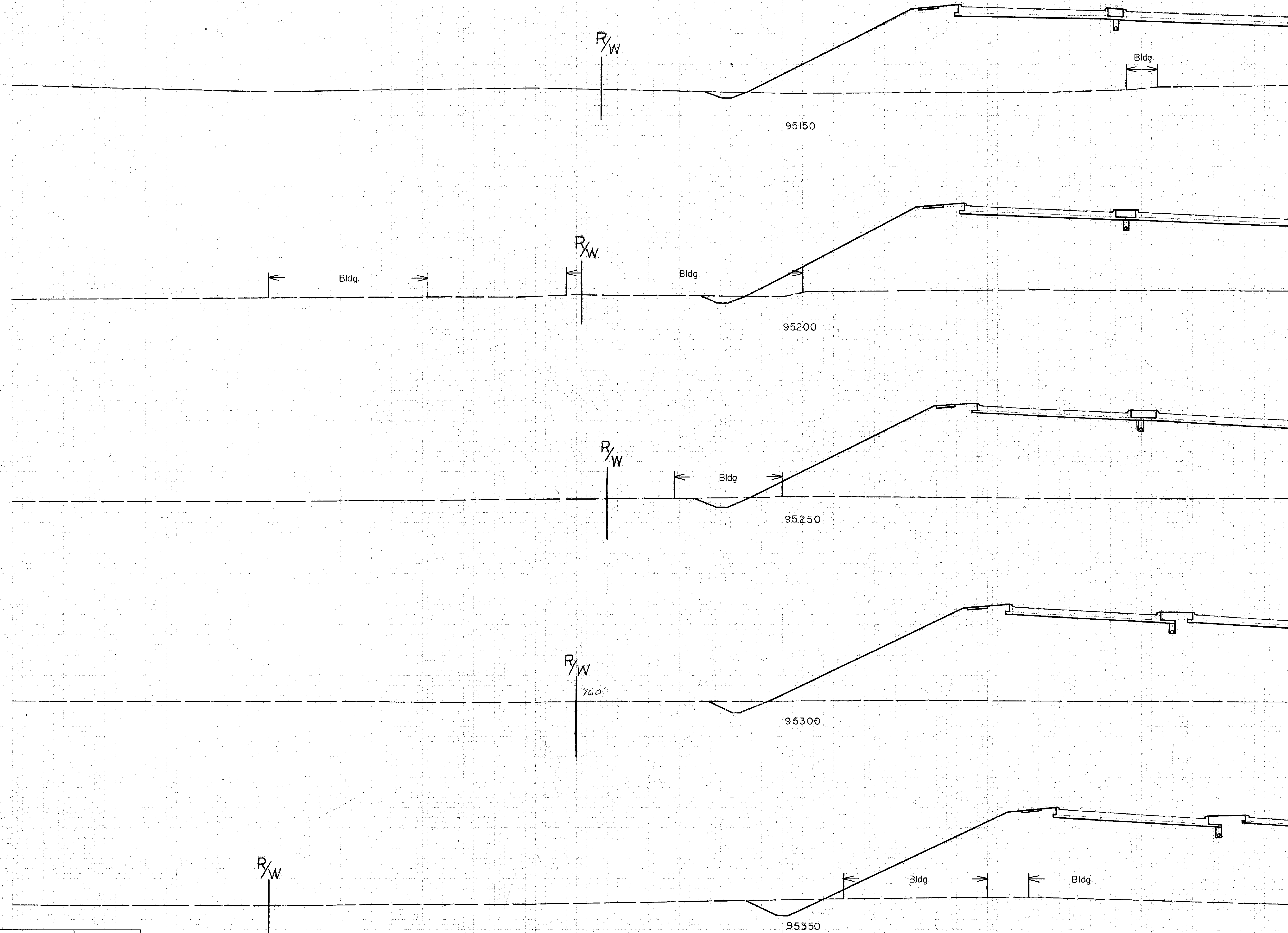
Seeding		Subbase	
Width	Area	Area	Vol
L.F.	Sq.Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.



6	1320		
		13	2435
8	1310		
		20	2522
14	1414		
		22	2604
10	1398		
		33	2415
26	1210		
		24	2030

W. B. Roshon 6/9/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

6450

7+00

7+50

See Sheet 82

8+00

$$8+50$$

9+00

Interchange Cross Sections

MADE DATE	E CON C
TRACED DATE	
CHECKED DATE	

9+00

82

Earthwork

Earthwork			
End	Area	Volume	
Exc.	Emb.	Exc.	Emb.
0	982		
		204	925
220	0		
		1217	0
1094	0		
		2568	0
1680	0		
		2944	18
$\begin{array}{r} 910 \\ 910 \\ \hline 1820 \end{array}$	$\begin{array}{r} 0120 \\ \hline 20 \end{array}$	1228	18

Interchange Cross Sections

See Sheet 74

W. B. Roshon 6/4/56

MADE DATE	
TRACED DATE	
CHECKED DATE	

BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO

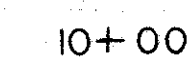
SCALE
NO.

姓名	性别	年龄	籍贯	职业	文化程度	政治面貌	健康状况	婚姻状况	子女情况	其他
王德胜	男	45	山东	教师	高中	党员	良好	已婚	2子1女	
李秀英	女	38	河南	护士	初中	团员	良好	已婚	1子1女	
张国强	男	52	江苏	工人	小学	党员	一般	已婚	3子2女	
刘小红	女	28	四川	医生	大学	党员	良好	未婚	0	
陈为民	男	60	广东	农民	小学	党员	一般	已婚	4子3女	
赵大刚	男	35	湖南	工程师	大学	党员	良好	已婚	2子1女	
孙丽娟	女	42	浙江	会计	高中	团员	良好	已婚	1子1女	
周建民	男	55	湖北	干部	大学	党员	良好	已婚	2子2女	
吴小芳	女	30	安徽	教师	初中	团员	良好	已婚	1子1女	
郑为民	男	48	江西	工人	小学	党员	一般	已婚	3子2女	
冯大刚	男	58	广西	农民	小学	党员	一般	已婚	4子3女	
李秀英	女	32	福建	护士	高中	团员	良好	已婚	1子1女	
张国强	男	40	山西	工人	小学	党员	一般	已婚	2子2女	
刘小红	女	25	云南	医生	大学	党员	良好	未婚	0	
陈为民	男	50	贵州	农民	小学	党员	一般	已婚	3子2女	
赵大刚	男	38	陕西	工程师	大学	党员	良好	已婚	2子1女	
孙丽娟	女	40	甘肃	会计	高中	团员	良好	已婚	1子1女	
周建民	男	53	宁夏	干部	大学	党员	良好	已婚	2子2女	
吴小芳	女	28	青海	教师	初中	团员	良好	已婚	1子1女	
郑为民	男	45	内蒙古	工人	小学	党员	一般	已婚	3子2女	
冯大刚	男	55	新疆	农民	小学	党员	一般	已婚	4子3女	
李秀英	女	35	西藏	护士	高中	团员	良好	已婚	1子1女	
张国强	男	42	海南	工人	小学	党员	一般	已婚	2子2女	
刘小红	女	22	重庆	医生	大学	党员	良好	未婚	0	
陈为民	男	48	四川	农民	小学	党员	一般	已婚	3子2女	
赵大刚	男	35	湖南	工程师	大学	党员	良好	已婚	2子1女	
孙丽娟	女	38	浙江	会计	高中	团员	良好	已婚	1子1女	
周建民	男	50	湖北	干部	大学	党员	良好	已婚	2子2女	
吴小芳	女	25	安徽	教师	初中	团员	良好	已婚	1子1女	
郑为民	男	45	江西	工人	小学	党员	一般	已婚	3子2女	
冯大刚	男	55	广西	农民	小学	党员	一般	已婚	4子3女	
李秀英	女	32	福建	护士	高中	团员	良好	已婚	1子1女	
张国强	男	40	山西	工人	小学	党员	一般	已婚	2子2女	
刘小红	女	25	云南	医生	大学	党员	良好	未婚	0	
陈为民	男	50	贵州	农民	小学	党员	一般	已婚	3子2女	
赵大刚	男	38	陕西	工程师	大学	党员	良好	已婚	2子1女	
孙丽娟	女	40	甘肃	会计	高中	团员	良好	已婚	1子1女	
周建民	男	53	宁夏	干部	大学	党员	良好	已婚	2子2女	
吴小芳	女	28	青海	教师	初中	团员	良好	已婚	1子1女	
郑为民	男	45	内蒙古	工人	小学	党员	一般	已婚	3子2女	
冯大刚	男	55	新疆	农民	小学	党员	一般	已婚	4子3女	
李秀英	女	35	西藏	护士	高中	团员	良好	已婚	1子1女	
张国强	男	42	海南	工人	小学	党员	一般	已婚	2子2女	
刘小红	女	22	重庆	医生	大学	党员	良好	未婚	0	
陈为民	男	48	四川	农民	小学	党员	一般	已婚	3子2女	
赵大刚	男	35	湖南	工程师	大学	党员	良好	已婚	2子1女	
孙丽娟	女	38	浙江	会计	高中	团员	良好	已婚	1子1女	
周建民	男	50	湖北	干部	大学	党员	良好	已婚	2子2女	
吴小芳	女	25	安徽	教师	初中	团员	良好	已婚	1子1女	
郑为民	男	45	江西	工人	小学	党员	一般	已婚	3子2女	
冯大刚	男	55	广西	农民	小学	党员	一般	已婚	4子3女	
李秀英	女	32	福建	护士	高中	团员	良好	已婚	1子1女	
张国强	男	40	山西	工人	小学	党员	一般	已婚	2子2女	
刘小红										

10+00

83

Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb
1313	746	45	1781
	704		
		1083	1096
424	480		
		587	918
210	512		
		292	1040
106	618		
		220	1078
132	546		
		357	780



Interchange Cross Sections

W. B. Roshon 6/4/56

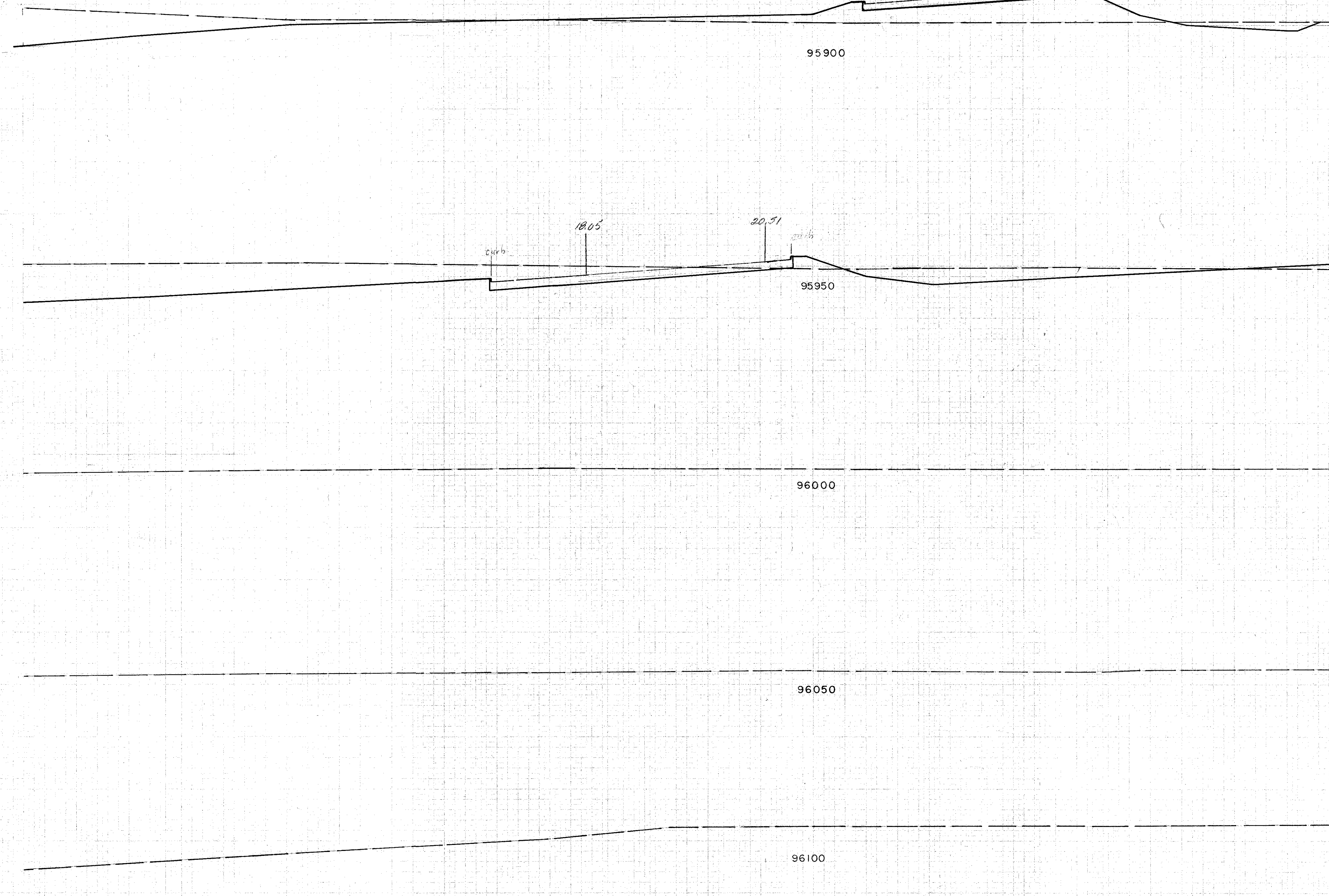
NO.

Seeding		Subbase	
Width	Area	Area	Vol
L.F.	Sq.Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ NO.	TYPE FUNDS
2	OHIO		

84

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY.



Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.
254	296		
		915	298
734	26		

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

Seeding		Subbase	
Width	Area	Area	Vol
L.F.	SqYd.	S.F.	C.Y.

7+50

8+00

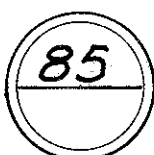
8+50

9+00

9+50

10+00

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb
710			
700	0	0	
			0
710			
700	0	0	
			18
710			
700	19	0	
			62
710			
700	20	0	
			108
710			
700	24	4	
			94

See Sheet 77

W.B. 2 on 6/5/84

MADE DATE	BURGOSS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

7+50

8+00

8+50

9+00

9+50

10+00

See Sheet 86

Interchange Cross Sections

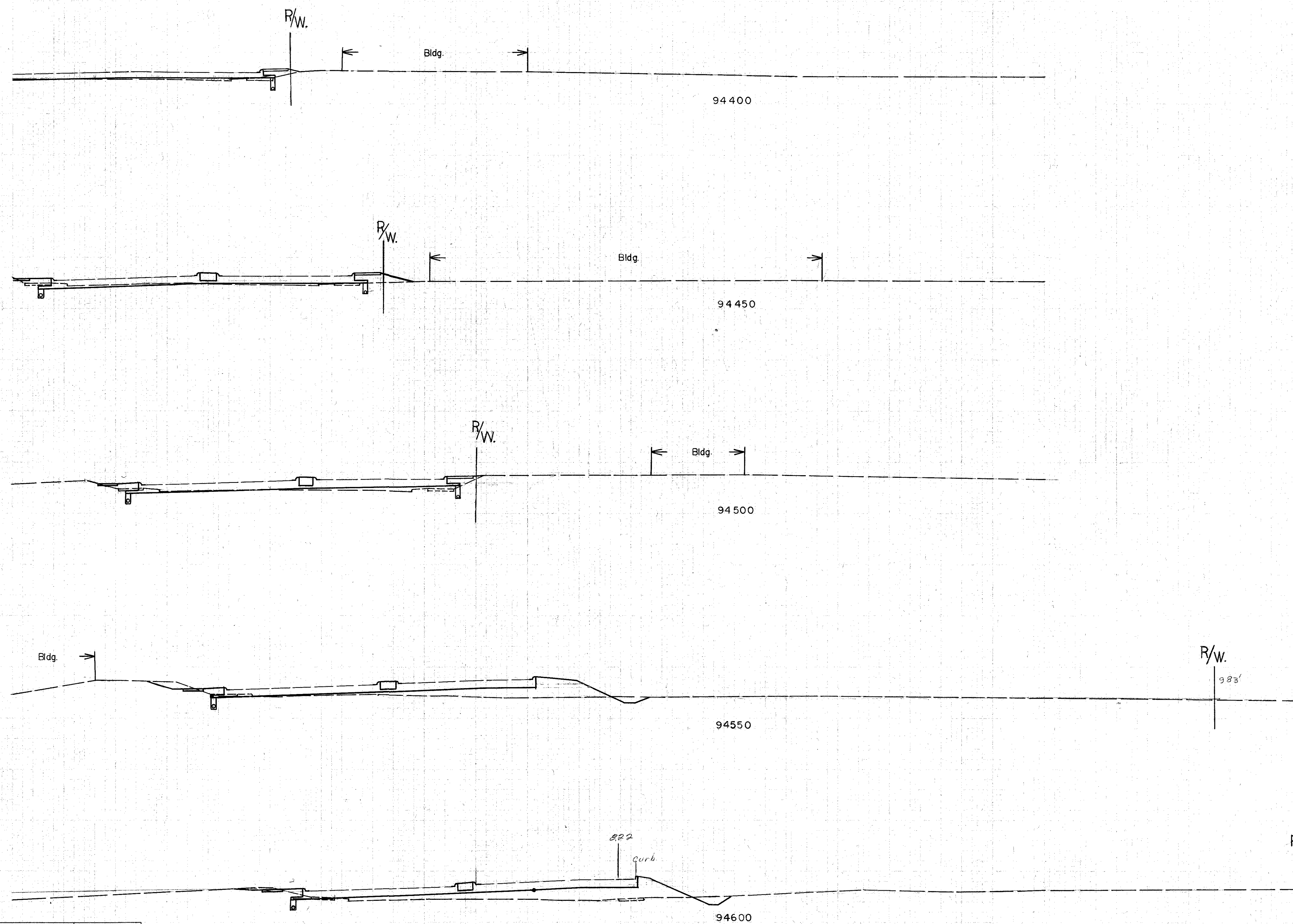
[illegible]

10+ 00

86

Earthwork

End Area		Volume	
Exc.	Emb.	Exc.	Emb.
0	22		
		57	47
14	30		
		56	80
4	36		
		42	144
12	96		
		12	236
8	114		
		27	250



W. B. Roshon 6/5/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

10700

Interchange Cross Sections

[illegible]

11+50

87

Earthwork			
End	Area	Volume	
Exc	Emb	Exc	Emb
8	0	16	45
9	38	14	228
6	186	10	534
5	370	8	1045
4	740	10	1874



W. B. Roshon 6/5/56

Interchange Cross Sections

Seeding		Subbase	
Width	Area	Area	Vol
L. F.	Sq.Yd.	S. F.	C.Y.

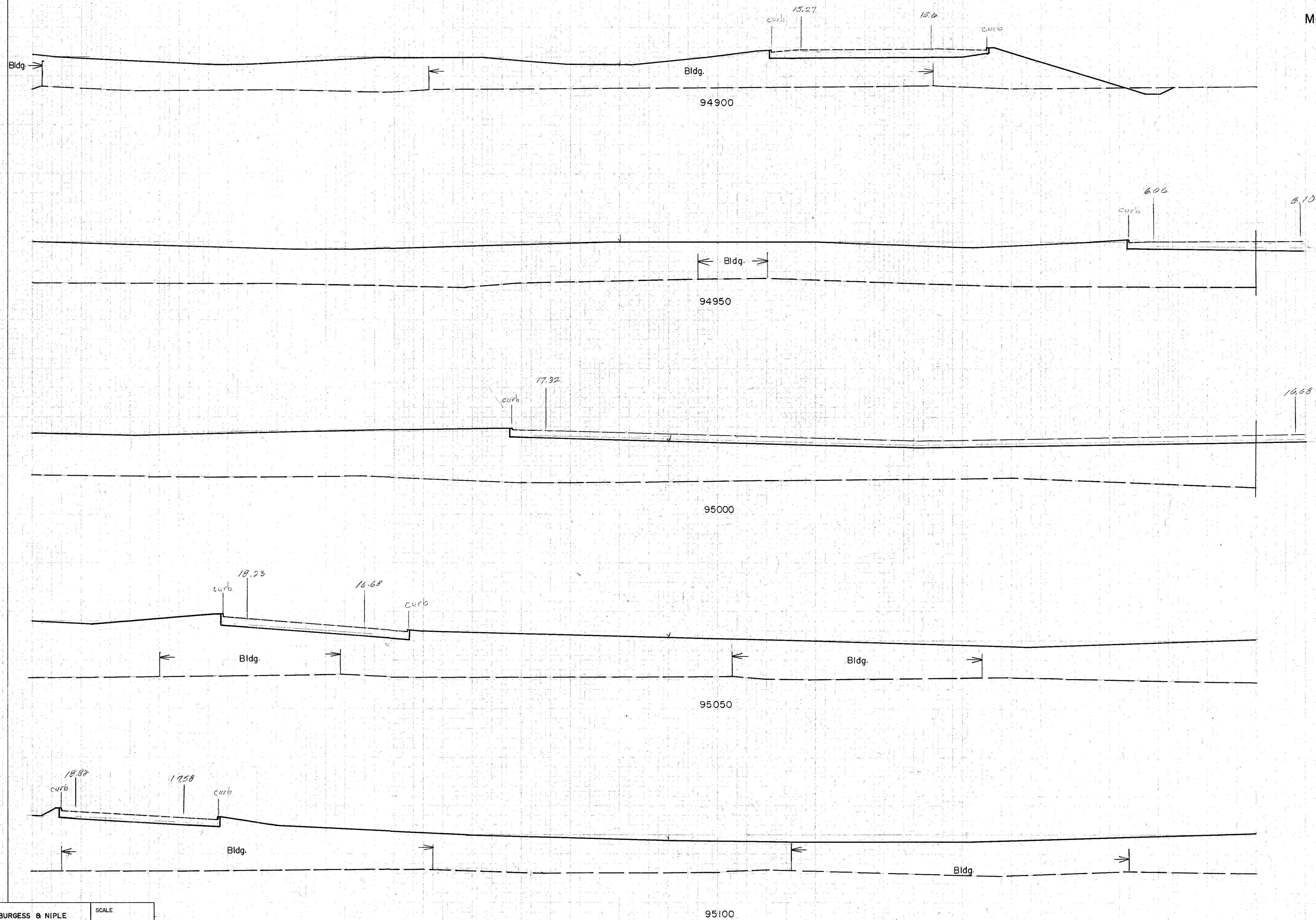
11+50

FED. ROAD DIV. NO.	STATE	FED. AID PROJ NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb
	7 1300		
		6	3064
	0 1974		
		0	3846
	0 2086		
		0	4026
	0 2160		
		0	3922
	0 1924		
		0	3200



See Sheet 80

W. B. Roskom 6/5/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

11+50

See Sheet 89

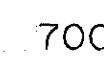
Interchange Cross Sections

[illegible]

11.50



Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb



796	518		
		2207	498
1672	0		
		2804	20
1157	0		
		1600	678
384	684		
		346	3143
2436			
		0	963

J Bodenheimer 6/6/56

11+50

Interchange Cross Sections

MADE DATE	
TRACED DATE	
CHECKED DATE	

12+50

See Sheet 93

91

Earthwork

Earthwork			
End	Area	Volume	
Exc.	Emb.	Exc.	Emb.
3	2932		
		6	4792
3	2304		
		34	3280
51	1706		
		219	2412
204	1624		
		463	2528
318	1768		
		472	2890

J. Bodenheimer 6/6/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

 $12 + 50$ See Sheet 92

Interchange Cross Sections

[illegible]
$$10 + 00$$
 $12 + 50$

12+50

92

Interchange Cross Sections

Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.
210	1652		
		341	2800
184	1408		
		156	2315
13	1274		
		12	2247
0	984		
		6	1454
710	39123		
7	440		
		17	664

[illegible]

14+00

93

Earthwork

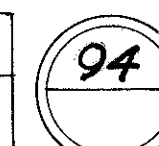
End Exc	Area Emb	Volume	
		Exc.	Emb
0	0		
		4	396
4	428		
		7	1578
3	1276		
		9	3178
7	2166		
		7	4154
0	2320		
		0	3850

T. Bodenheimer 6/17/56

See Sheet 94

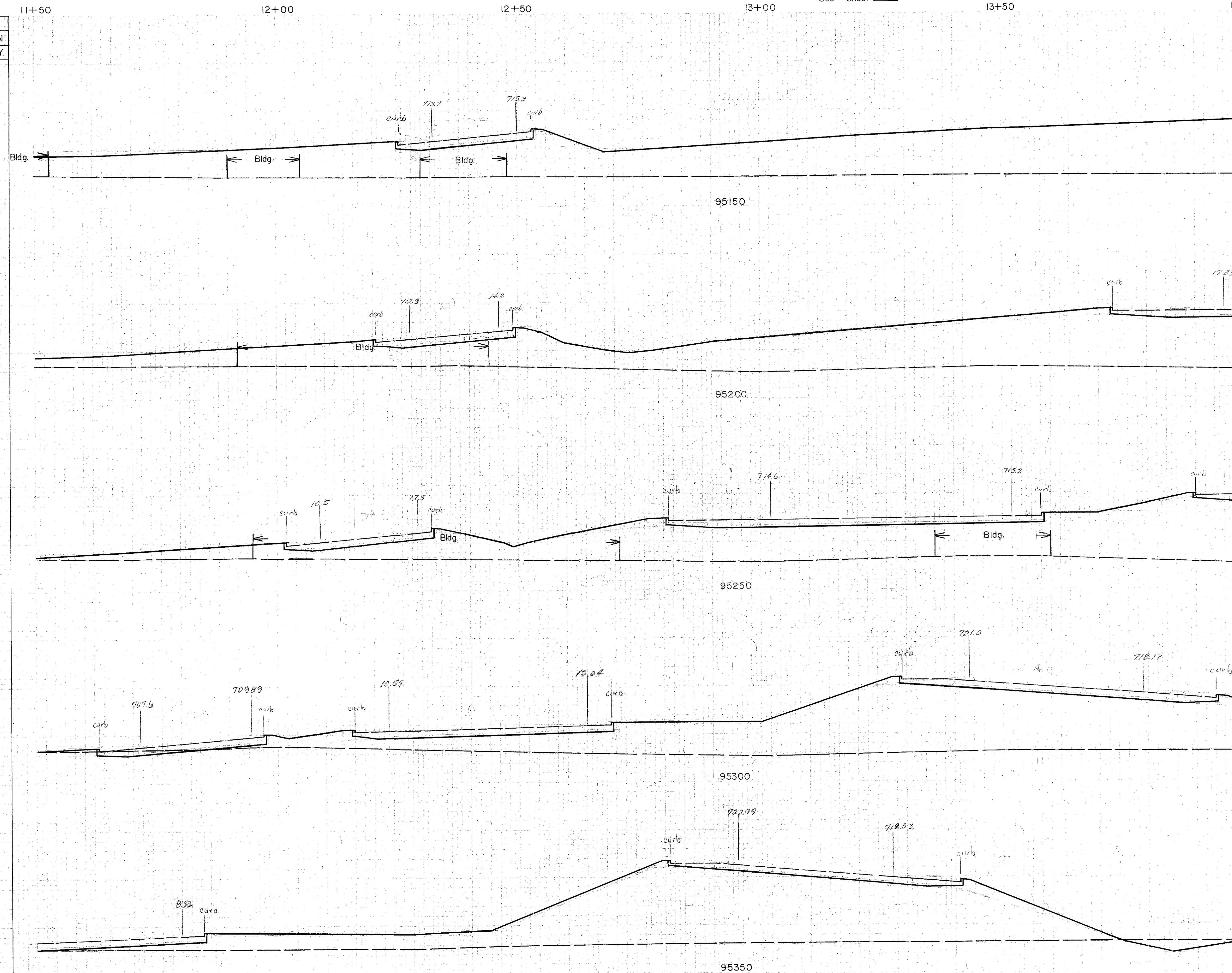
Interchange Cross Sections

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
Area		Volume	
Exc.	Emb.	Exc.	Emb.
0	1838		
		0	3233
0	1656		
		0	2936
0	1534		
		7	2919
8	1614		
		35	3031
30	1658		
			624/55.



Seeding		Subbase	
Width	Area	Area	Vol
L. F.	Sq.Yd.	S. F.	C.Y.

See Sheet 89 20

J. Bodenheimer 6/7/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED		

姓名	性别	年龄	籍贯	民族	文化程度	职业	工作单位	住址	联系电话	电子邮箱	备注
张三	男	35	汉族	汉族	高中	教师	XX中学	XX市XX区XX路XX号	138XXXXXX	zhangsan@xx.com	
李四	女	28	汉族	汉族	大学	医生	XX医院	XX市XX区XX路XX号	139XXXXXX	lisi@xx.com	
王五	男	42	汉族	汉族	初中	工人	XX工厂	XX市XX区XX路XX号	137XXXXXX	wangwu@xx.com	
赵六	女	55	汉族	汉族	小学	退休	XX社区	XX市XX区XX路XX号	136XXXXXX	zhaoliu@xx.com	
孙七	男	60	汉族	汉族	小学	农民	XX村	XX市XX区XX路XX号	135XXXXXX	sunqi@xx.com	
周八	女	30	汉族	汉族	大学	工程师	XX公司	XX市XX区XX路XX号	134XXXXXX	zhouba@xx.com	
吴九	男	25	汉族	汉族	高中	学生	XX大学	XX市XX区XX路XX号	133XXXXXX	wujiu@xx.com	
郑十	女	40	汉族	汉族	大学	公务员	XX局	XX市XX区XX路XX号	132XXXXXX	zhengshi@xx.com	
冯十一	男	38	汉族	汉族	高中	司机	XX公司	XX市XX区XX路XX号	131XXXXXX	fengshi@xx.com	
陈十二	女	50	汉族	汉族	小学	退休	XX社区	XX市XX区XX路XX号	130XXXXXX	chenshi@xx.com	
林十三	男	65	汉族	汉族	小学	农民	XX村	XX市XX区XX路XX号	129XXXXXX	linshi@xx.com	
徐十四	女	32	汉族	汉族	大学	教师	XX中学	XX市XX区XX路XX号	128XXXXXX	xushi@xx.com	
马十五	男	27	汉族	汉族	高中	学生	XX大学	XX市XX区XX路XX号	127XXXXXX	maishi@xx.com	
朱十六	女	45	汉族	汉族	大学	公务员	XX局	XX市XX区XX路XX号	126XXXXXX	zhushi@xx.com	
李十七	男	33	汉族	汉族	高中	工人	XX工厂	XX市XX区XX路XX号	125XXXXXX	liushi@xx.com	
王十八	女	58	汉族	汉族	小学	退休	XX社区	XX市XX区XX路XX号	124XXXXXX	wangshi@xx.com	
张十九	男	62	汉族	汉族	小学	农民	XX村	XX市XX区XX路XX号	123XXXXXX	zhangshi@xx.com	
周二十	女	37	汉族	汉族	大学	教师	XX中学	XX市XX区XX路XX号	122XXXXXX	zhoushi@xx.com	
吴二十一	男	29	汉族	汉族	高中	学生	XX大学	XX市XX区XX路XX号	121XXXXXX	wushi@xx.com	
郑二十二	女	48	汉族	汉族	大学	公务员	XX局	XX市XX区XX路XX号	120XXXXXX	zhengshi@xx.com	
冯二十三	男	39	汉族	汉族	高中	司机	XX公司	XX市XX区XX路XX号	119XXXXXX	fengshi@xx.com	
陈二十四	女	51	汉族	汉族	小学	退休	XX社区	XX市XX区XX路XX号	118XXXXXX	chenshi@xx.com	
林二十五	男	66	汉族	汉族	小学	农民	XX村	XX市XX区XX路XX号	117XXXXXX	linshi@xx.com	
徐二十六	女	31	汉族	汉族	大学	教师	XX中学	XX市XX区XX路XX号	116XXXXXX	xushi@xx.com	
马二十七	男	26	汉族	汉族	高中	学生	XX大学	XX市XX区XX路XX号	115XXXXXX	maishi@xx.com	
朱二十八	女	46	汉族	汉族	大学	公务员	XX局	XX市XX区XX路XX号	114XXXXXX	zhushi@xx.com	
李二十九	男	34	汉族	汉族	高中	工人	XX工厂	XX市XX区XX路XX号	113XXXXXX	liushi@xx.com	
王三十	女	59	汉族	汉族	小学	退休	XX社区	XX市XX区XX路XX号	112XXXXXX	wangshi@xx.com	
张三十一	男	63	汉族	汉族	小学	农民	XX村	XX市XX区XX路XX号	111XXXXXX	zhangshi@xx.com	
周三十二	女	36	汉族	汉族	大学	教师	XX中学	XX市XX区XX路XX号	110XXXXXX	zhoushi@xx.com	
吴三十三	男	28	汉族	汉族							

14+00

95

Earthwork			
End Area		Volume	
Exc	Emb	Exc	Emb
392	1092		
		1733	17
1170	0		
		1396	1591
260	1990		
		433	3508
188	2100		
		352	3491
01	192	1670	
		326	57



J. Bodenheimer 6/17/52

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

See Sheet 91

See Sheet 96

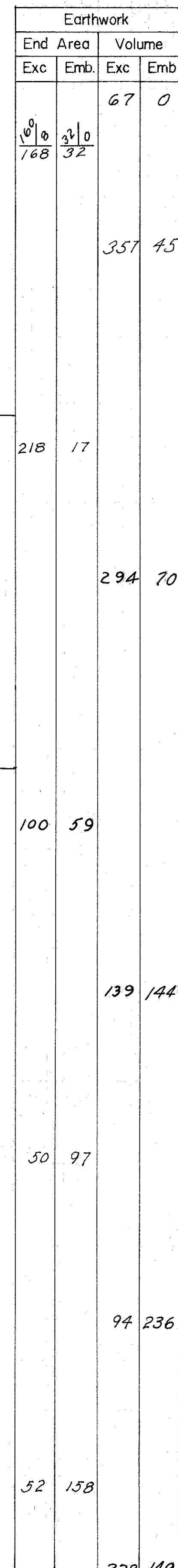
Inter change Cross Sections

MADE DATE	BU CONSR CO
TRACED DATE	
CHECKED DATE	

15150

96

Earthwork	
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J. Bodenheimer (17/56)

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		No.
CHECKED DATE		

15+50

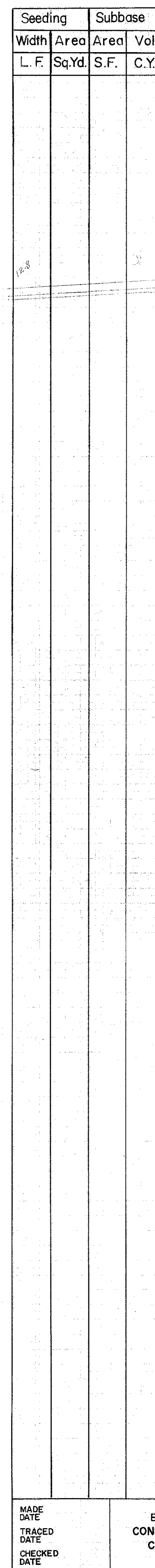
Interchange Cross Sections

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

97

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End	Area	Volume	
Exc	Emb.	Exc	Emb.
182	3		
	Sta 15+64		
		553	5
415	2		
		906	4
564	2		
		954	2
466			
		697	25
26 1/2 287	3 1/2 103		
		69	



See Sheet 98

14+50
See Sheet 102

Interchange Cross Sections

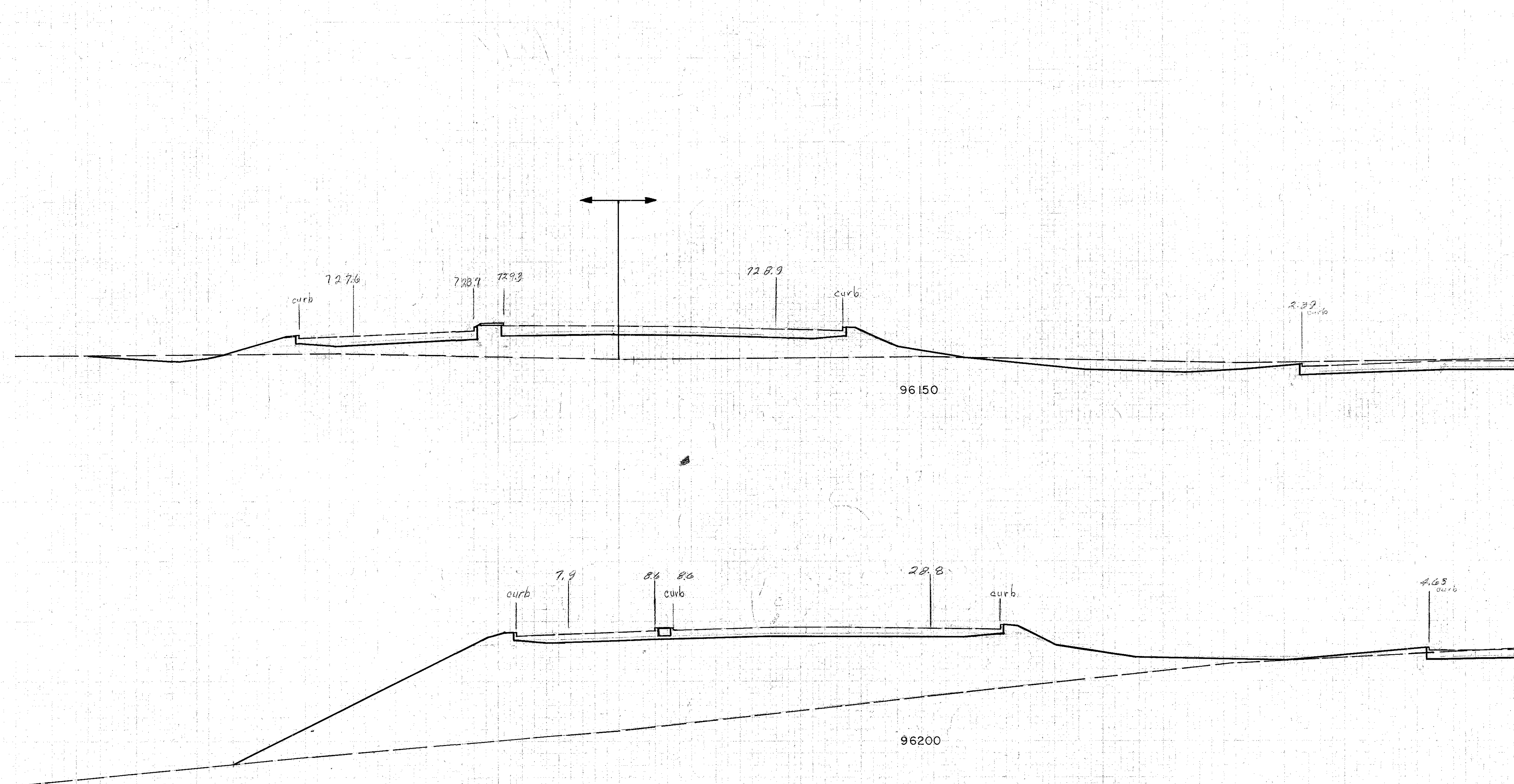
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J. Bodenheimer 6/2/58

14+00

98

Earthwork

[illegible]


MADE DATE	BURGESS & NIPLÉ CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

14+00

Interchange Cross Sections

[illegible]Interchange Cross Sections

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 $16 + 50$ 

Earthwork

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		0	481
0	2187		
		0	346
0	1555		
		9	2036
10	638		
		54	792
48	217		
		135	310


K. Coffield 6/12/56

MADE DATE	BURGESS & NIPL CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

16+50

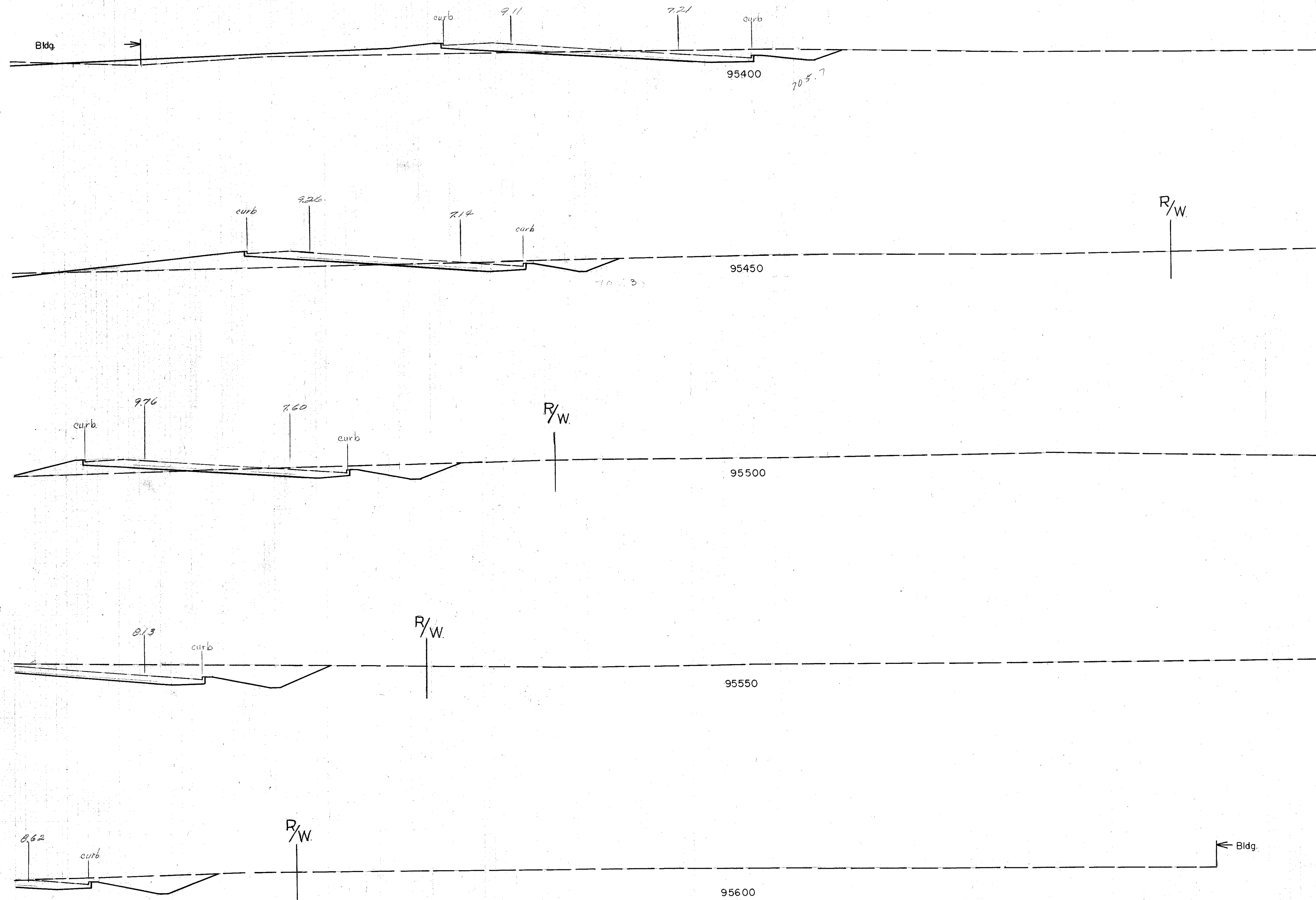
Interchange Cross Sections

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

 $16+50$ 

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End	Area	Volume	
Exc	Emb	Exc	Emb
98	118		
		139	201
52	106		
		98	161
54	68		
		117	63
172			
		218	
64	0		



10:50

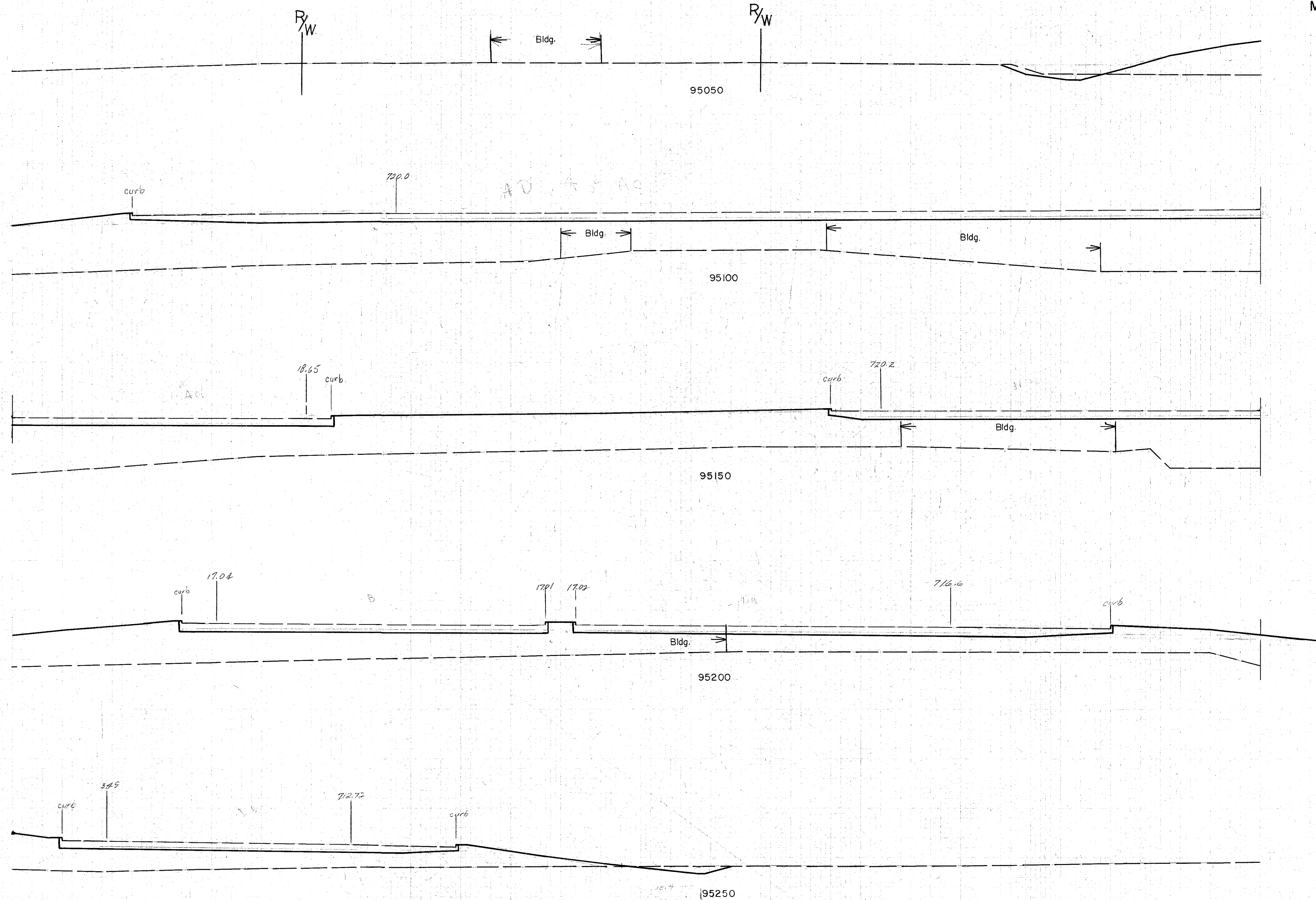
Seeding		Subbase	
Width	Area	Area	Vol
L.F.	Sq.Yd.	S.F.	C.Y.

19+00

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

103

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-1256 FRA 3-1370
MOUND-SANDUSKY EXPRESSWAY



Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.
		15	107
16	104 1/2 7 1/6		
		15	2131
0	2186		
		0	3701
0	1818		
		0	2820
0	1228		
		11	1665
12	570		
		11	528

See Sheet 99

See Sheet 100

K. Coffield 6/11/56

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

19+00

Interchange Cross Sections

Seeding		Subbase	
Width	Area	Area	Vol.
L.F.	Sq.Yd.	S.F.	C.Y.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

Earthwork			
End	Area	Volume	
Exc	Emb	Exc	Emb

	Cut	Fill
Expressway & S-3	1456	6204
S-6	1134	0
From page (112)		
Compaction + 15%	2590	6204
Total	2590	931
Carried to page (15)	2590	7135

* Not included in expressway quantity
See S-6 Page 114

	Cut	Fill
Expressway	62,734	202,295
Harmon Ave.	2289	0
From page (110)	483	0
S-2		
From page (111)	1624	28
S-6	1387	4
From page (112)		
Compaction + 15%	68,517	202,327
Total	68,517	30,349
Carried to page (14)	68,517	232,676

MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		

95000

95050

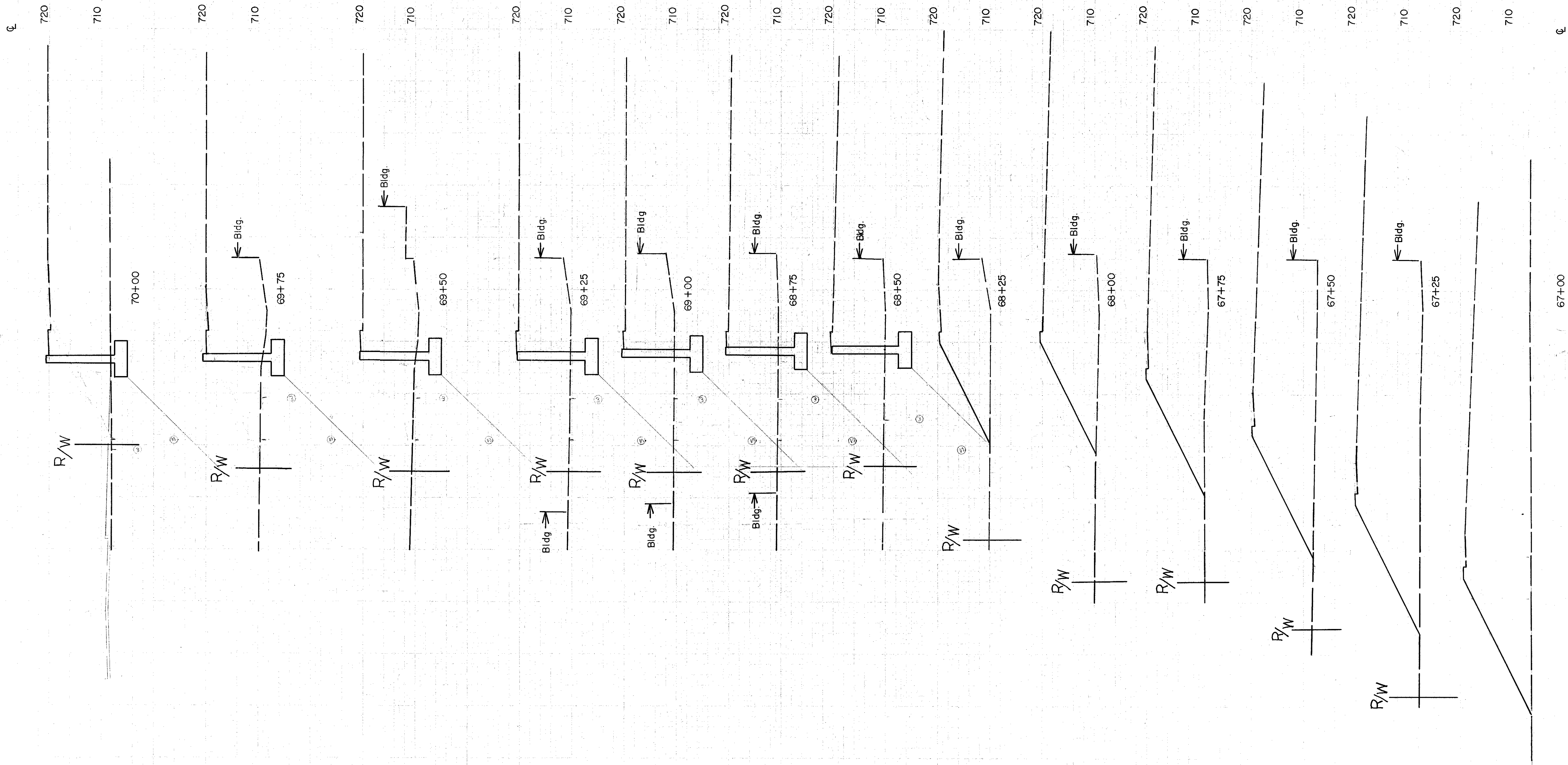
95100

95150

95200

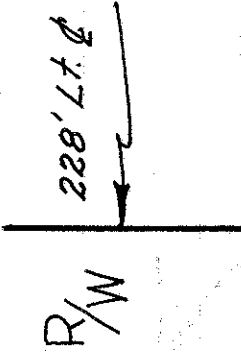
Interchange Sta. 19+00 to Sta. 72+00

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY



MADE DATE TRACED DATE CHECKED DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
		NO.

Supplemental Cross Sections
(Not used in quantity calculations)
Sta. 66+00 to 70+00

228' L x 4' W


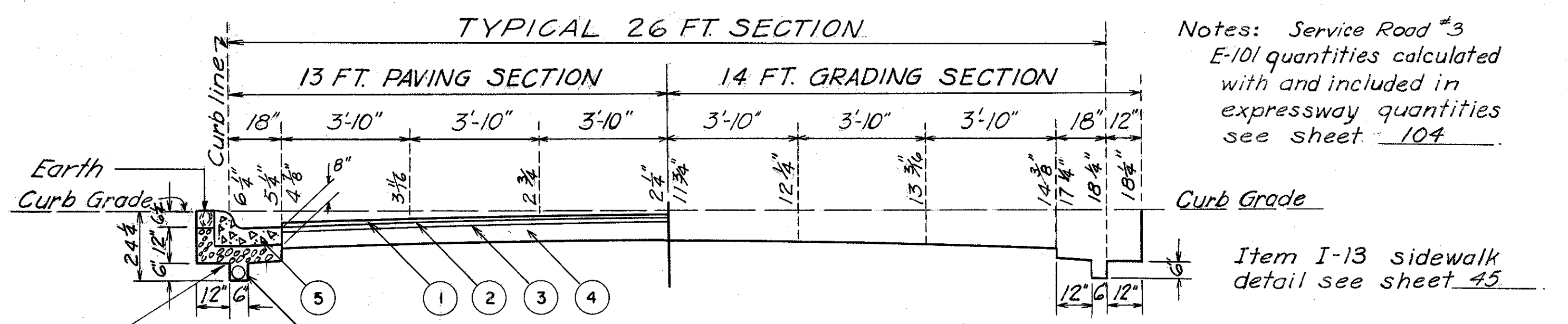
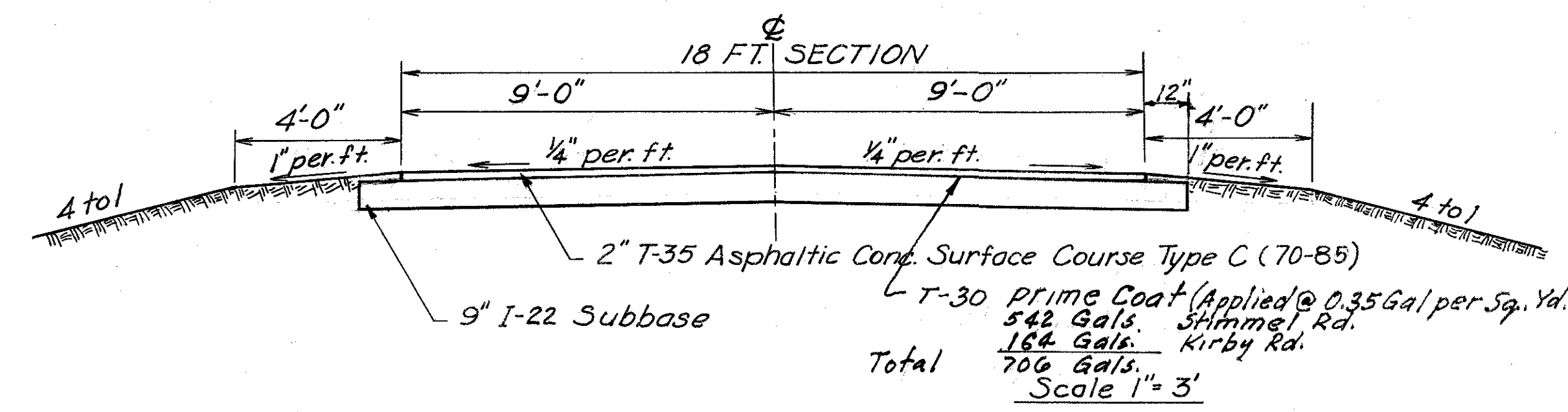
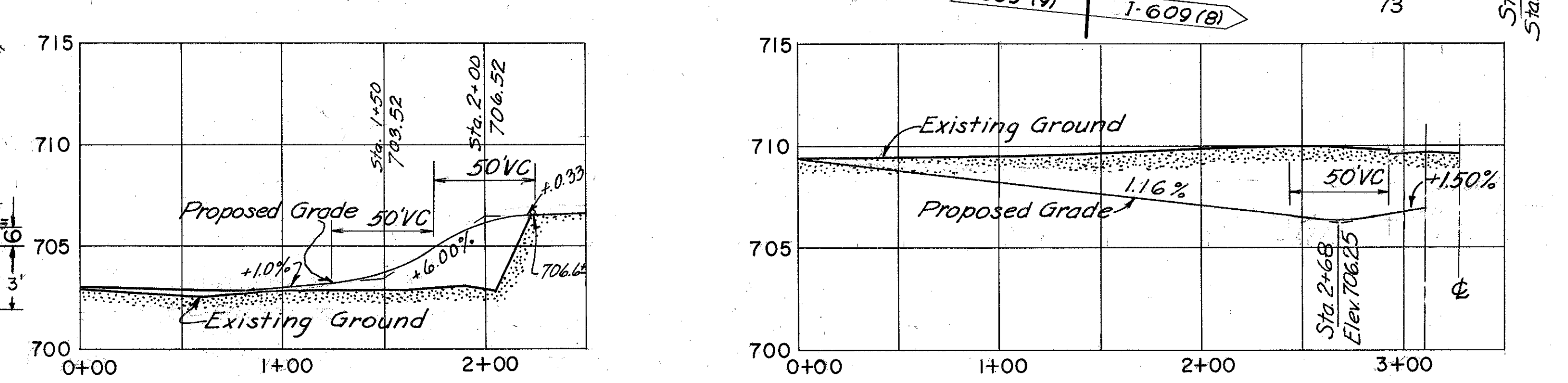
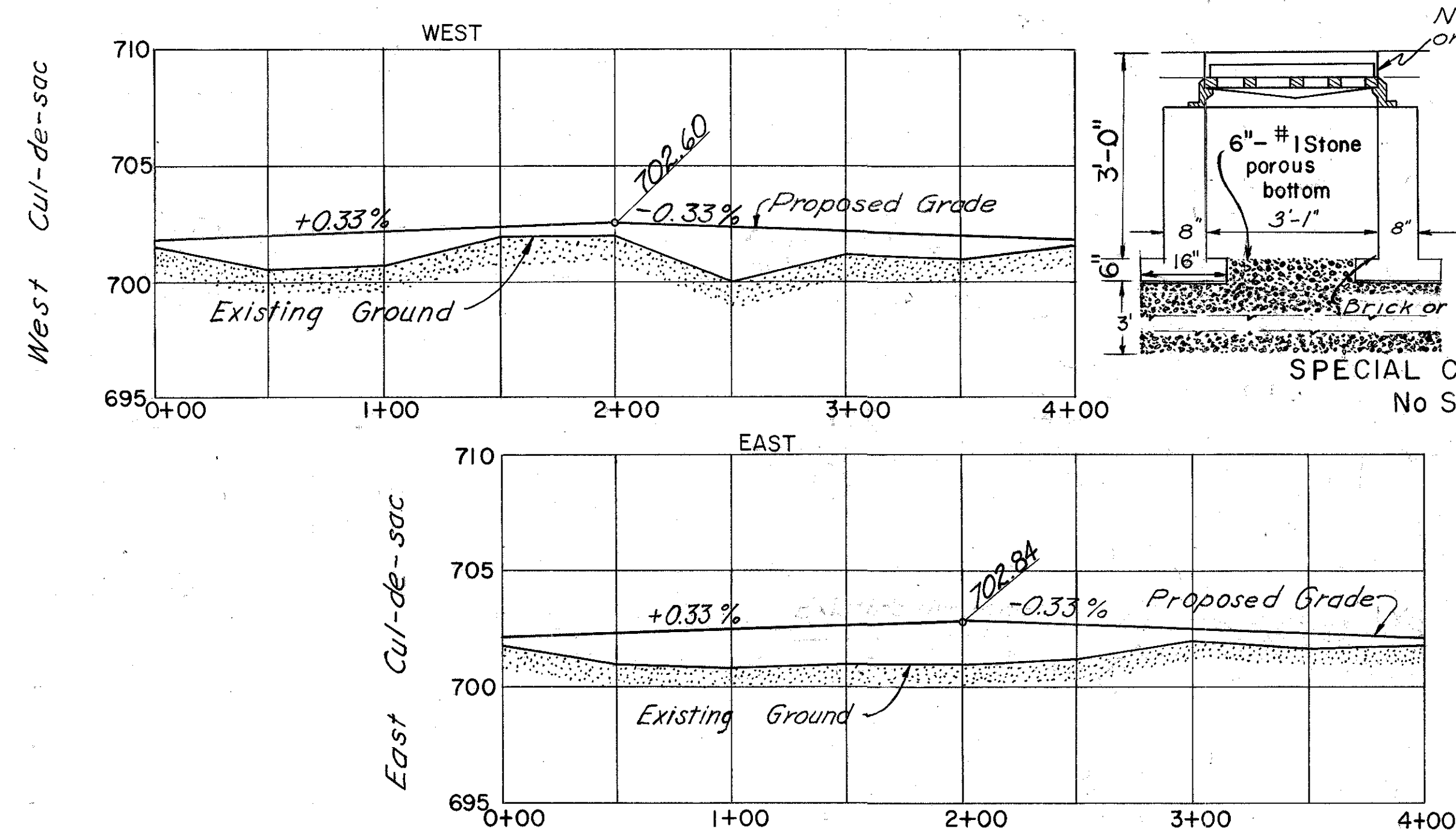
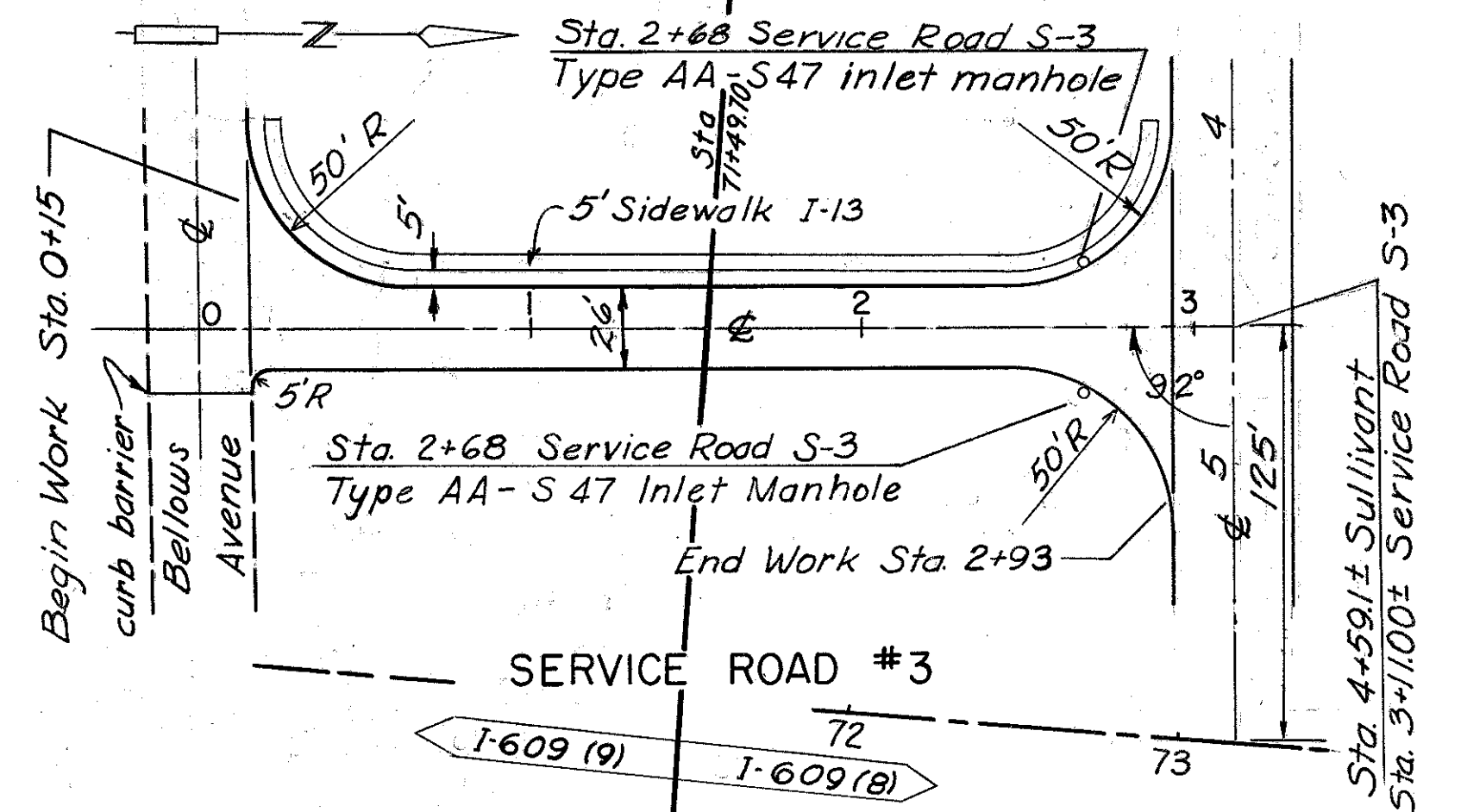
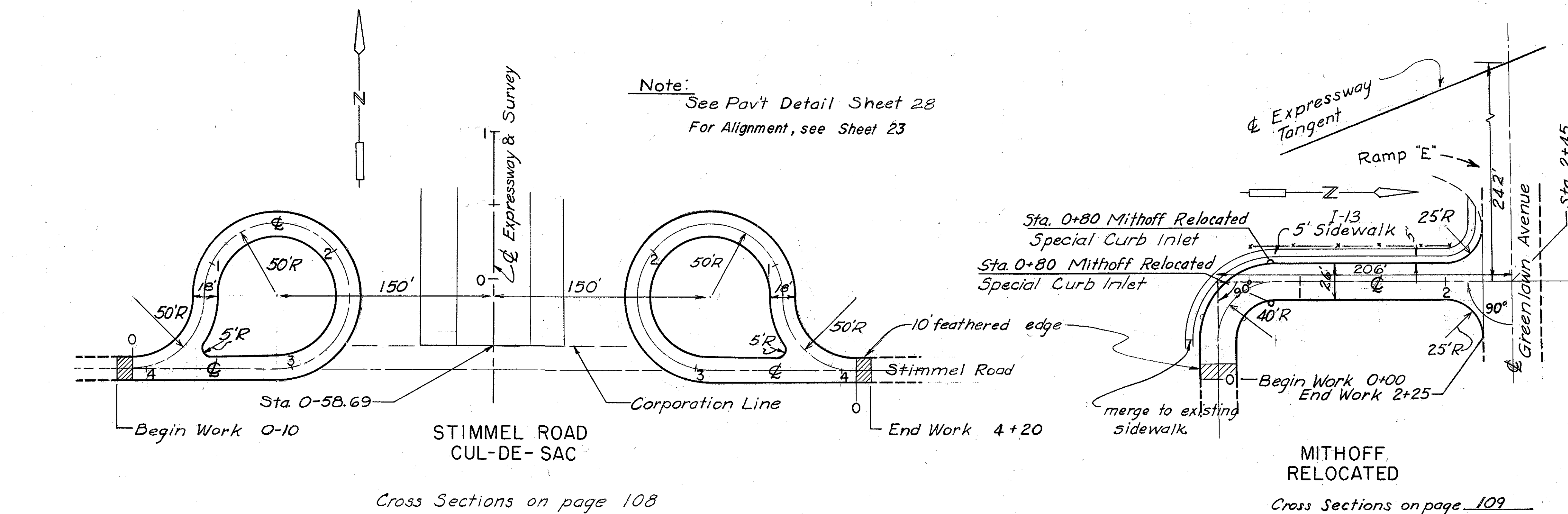
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM

MOUND-SANDUSKY EXPRESSWAY


FRA. 62-12.56 FRA. 3-13.70

SERVICE ROADS



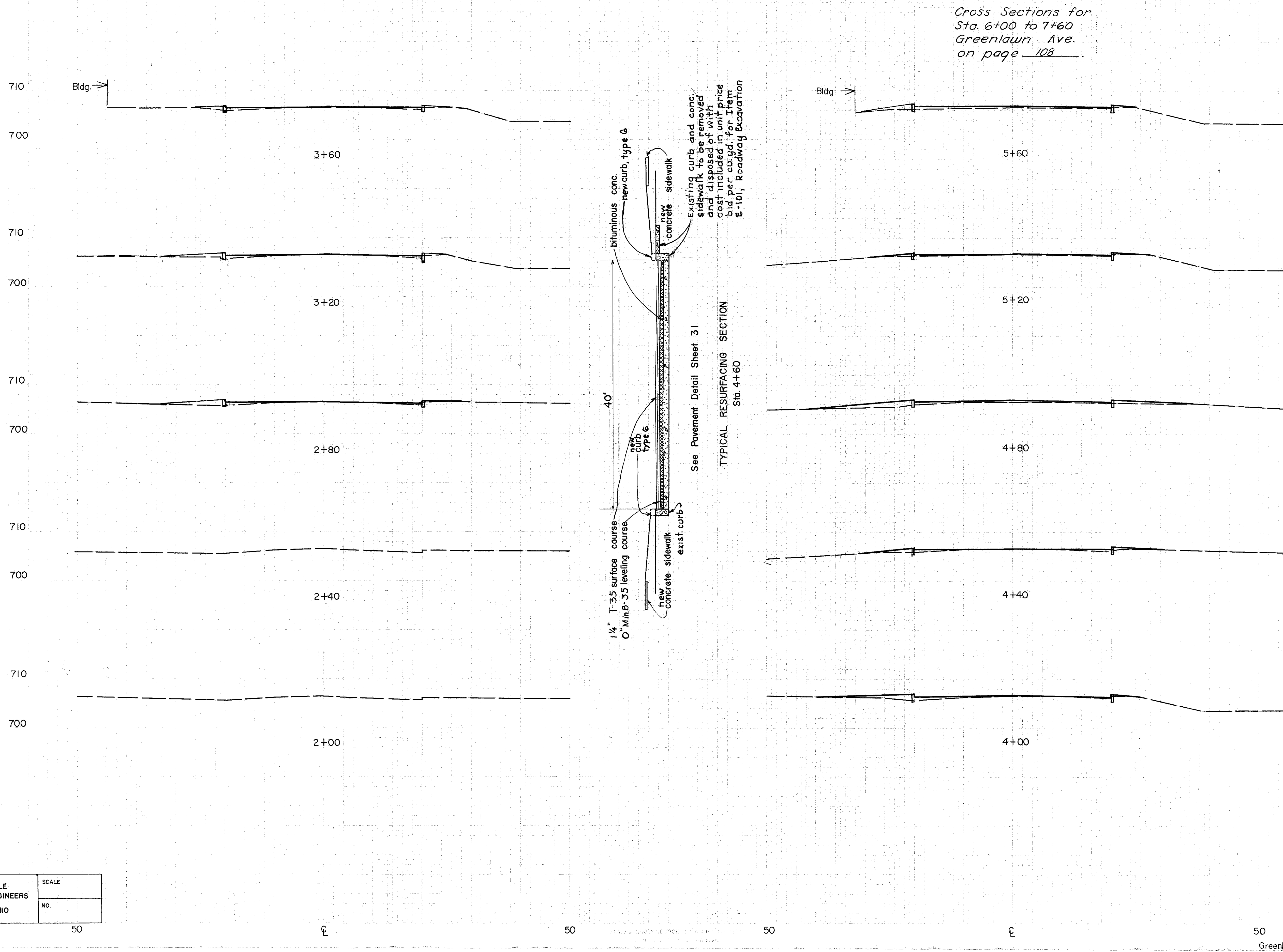
LEGEND	
1	T-35 1 1/2" Asphaltic Concrete Surface Course, Type C, (60-70)
2	B-35 1 1/2" Asphaltic Concrete Leveling Course, (60-70)
3	T-30 Bituminous Tack Coat
4	B-70 7" Portland Cement Concrete Base Course
5	I-12 Combination Curb and Gutter, Type 2
6	I-4 4" Underdrain as per plan

QUANTITY	UNIT	MITHOFF RELOCATED	CUL-DE-SAC	SERVICE ROAD #3	TOTAL
I-4	lin. ft.	472		291	763
T-35	cu. yd.	21	86	15	122
B-35	cu. yd.	21		15	36
T-30	gal.	61		44	105
B-70	sq. yd.	611		441	1052
I-12	l.f.	472		291	763
* E-101	cu. yd.	117c	178f	735f 23c	
I-13	sq. ft.	1250		784	2034
I-22	cu. yd.		550		550
I-8 Special Inlets		2			2

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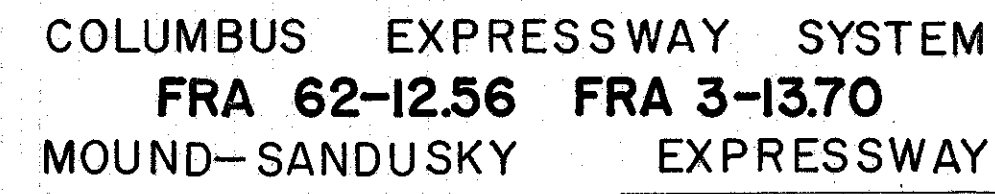
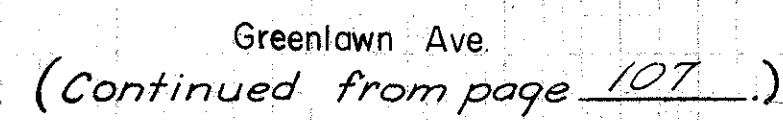
Earthwork			
End Area		Volume	
Exc.	Emb.	Exc.	Emb.

					2	3
	3	4				
				4	4	
	3	2				
				5	12	
	4	14				
				5	14	
	3	5				
				4	9	
	2	7				
				3	7	
	2	3				
				3	7	
	2	6				
				3	10	
	2	7				
				1	5	



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COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

MAPE
DATE
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BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO

SCALE
NO.

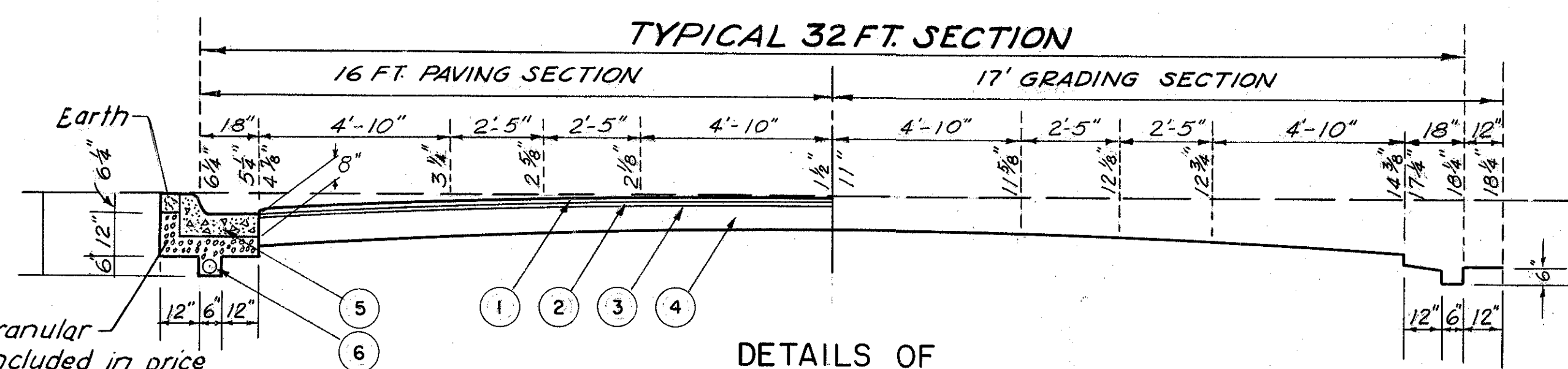
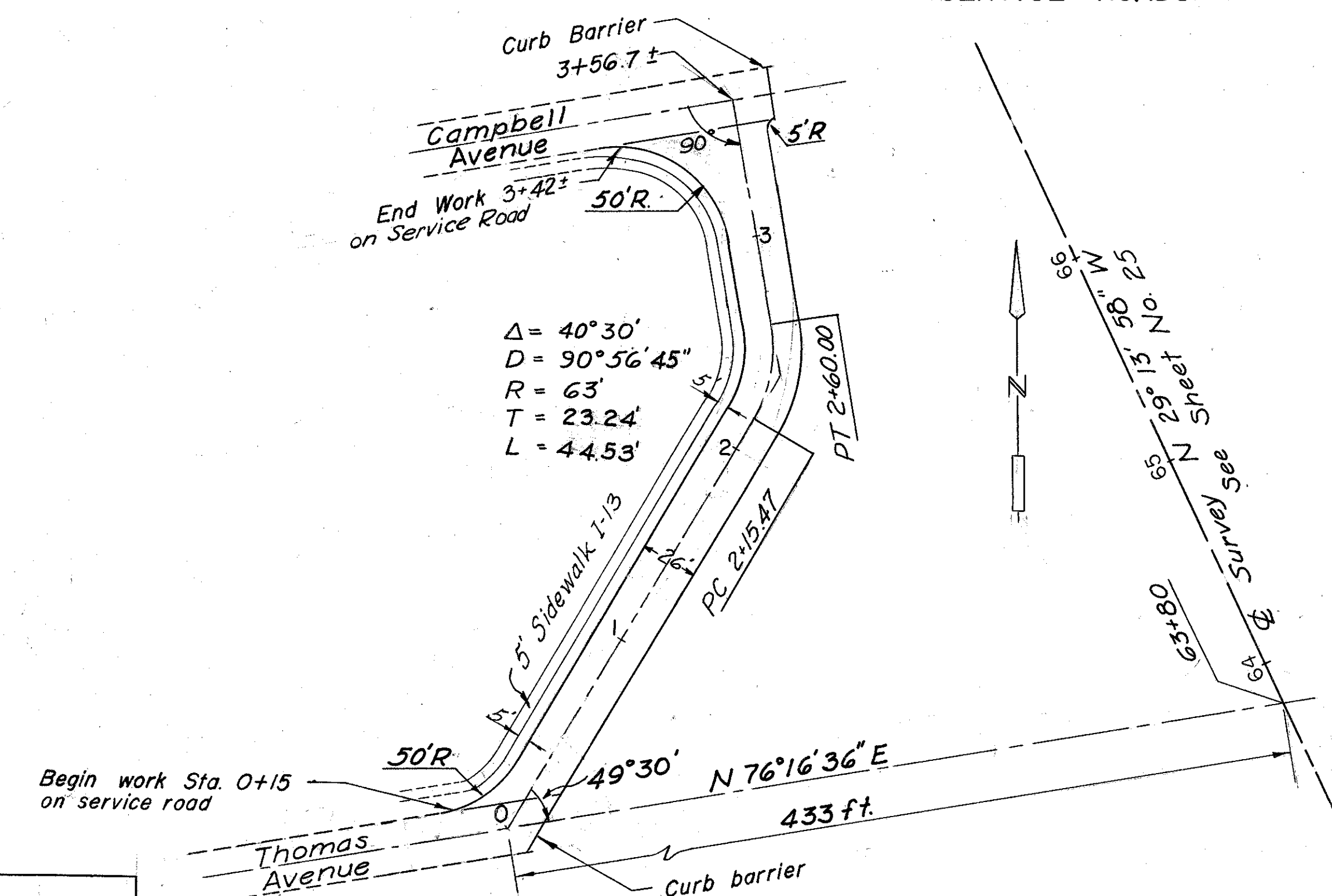
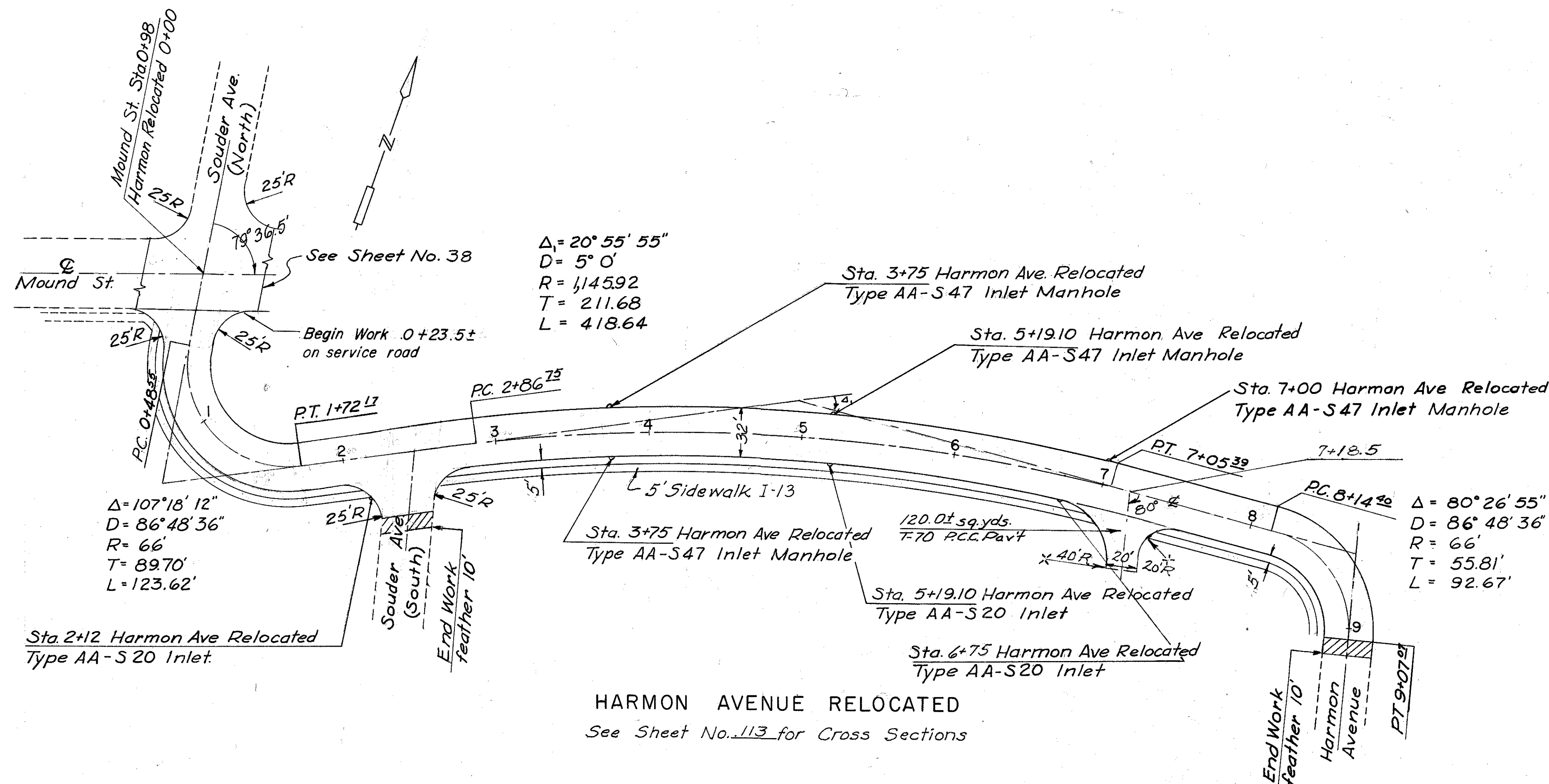


FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

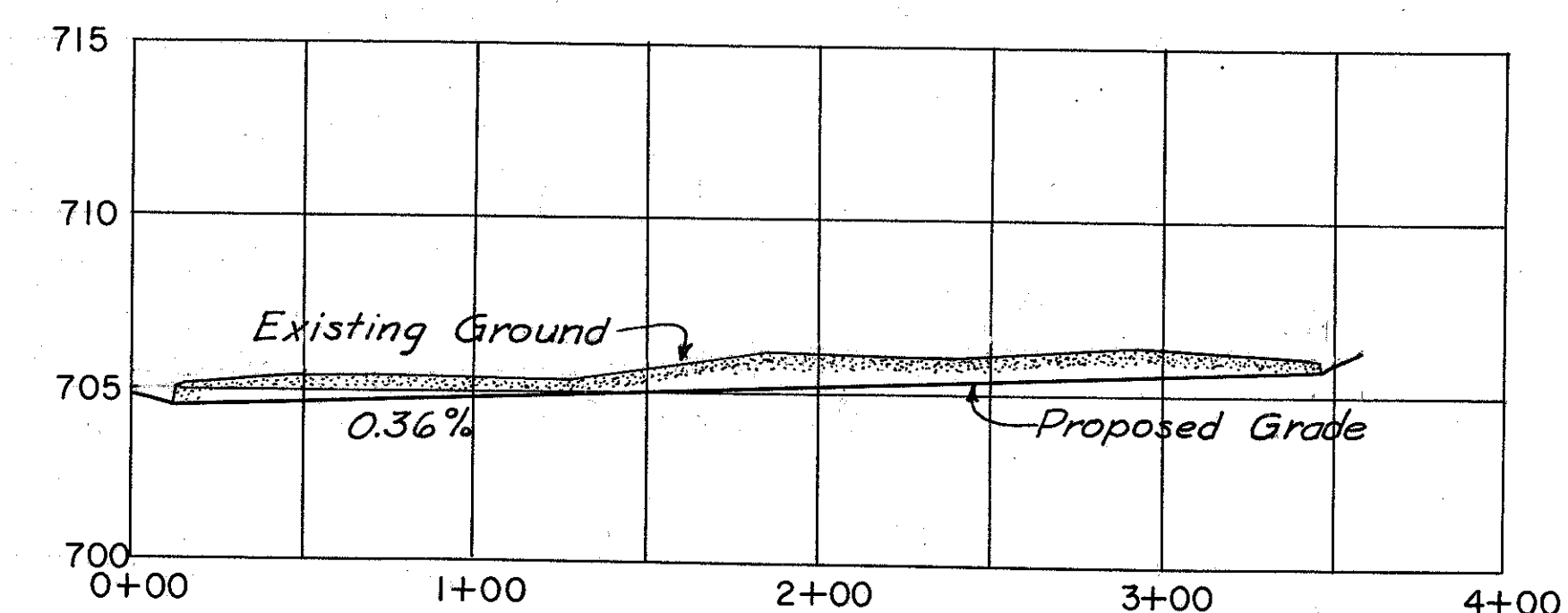
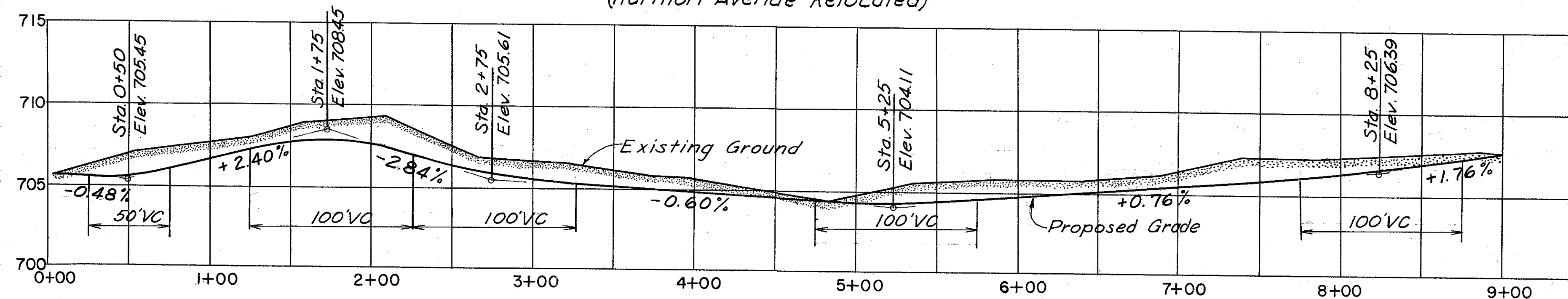
FRA. 62-12.56 FRA. 3-13.70

SERVICE ROADS



Payment for granular backfill to be included in price bid for "Item I-4, 4" underdrains as per plan."

DETAILS OF
TYPICAL 32 FT. SECTION
(Harmon Avenue Relocated)



QUANTITY		Harmon Relocated		Service Road No. 2	Total
		Participate Federal	Non-Par- ticipate		
Item	Unit				
I-4	lin.ft.	1750	—	741	2491
T-35	Cu.Yd.	91	14	31	136
B-35	Cu.Yd.	90	14	31	135
T-30	Gal.	260	39	93	392
B-70	Sq.Yd.	2600	393	926	3919
I-12	Lin.Ft.	1750	—	741	2491
E-101	Cu.Yd.	2289c	—	483c	
I-13	Sa.Ft.	4005	—	1720	5725

Note: Federal participation on relocated Harmon Avenue is limited to a 28 ft. par't width.

Harmon Ave. Relocated turnout
at Sta 7+18.5
120± sq.yd. 7" Portland Concrete Cement Pavt.

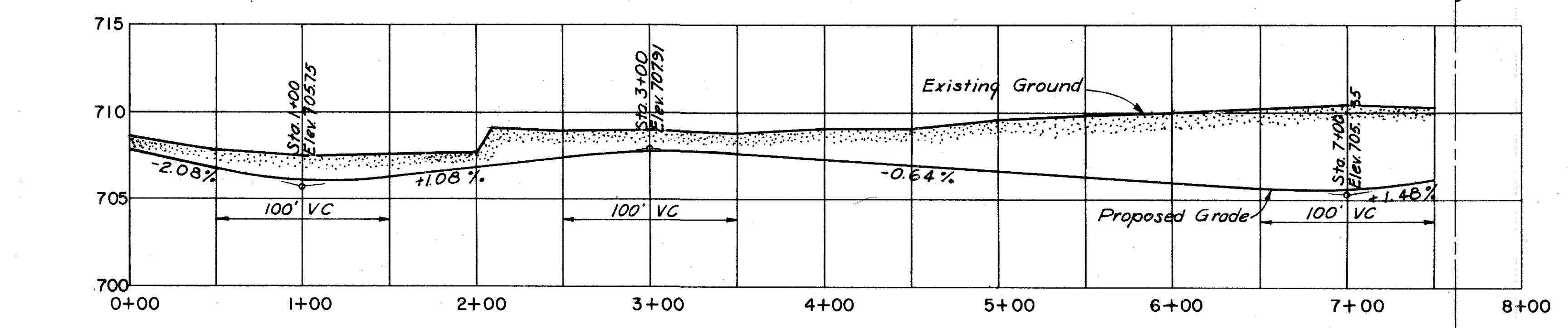
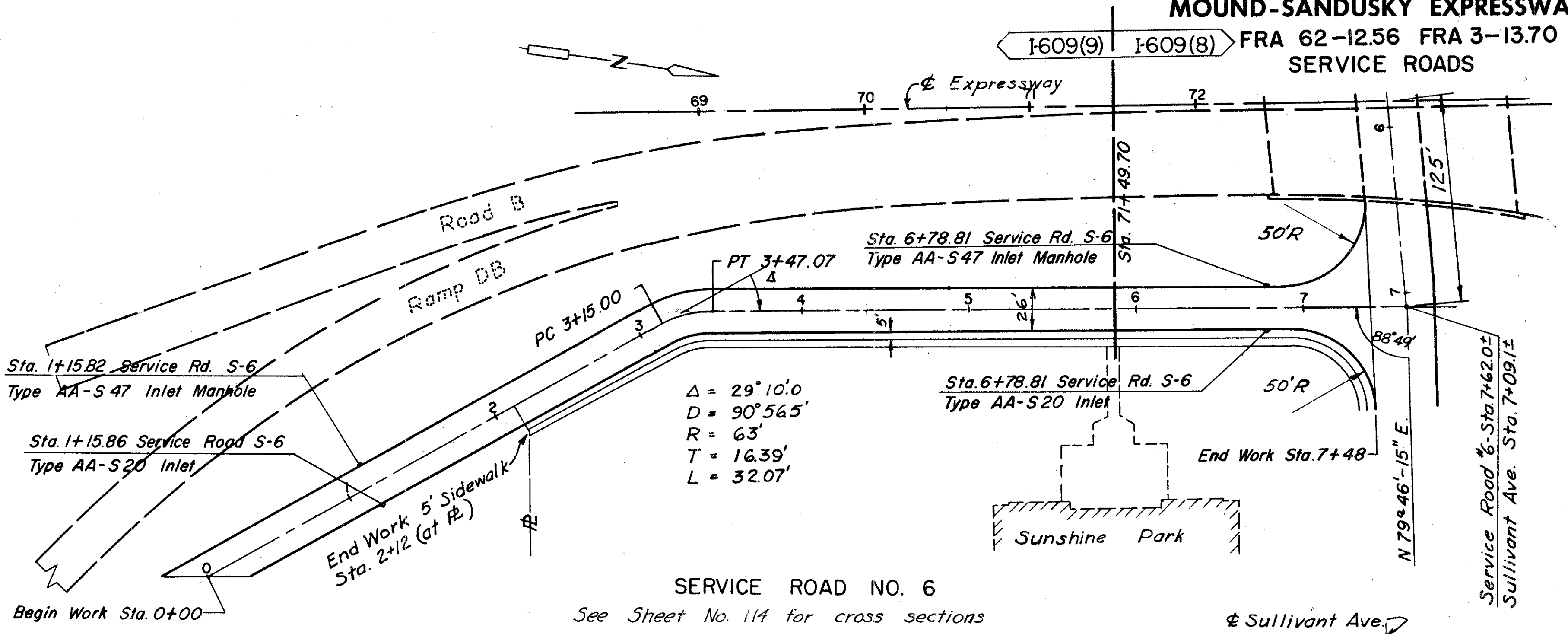
* Carried to page 104

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE 1" = 5' V 1" = 50' H
NO.		DATE

FRANKLIN COUNTY
CITY OF COLUMBUS

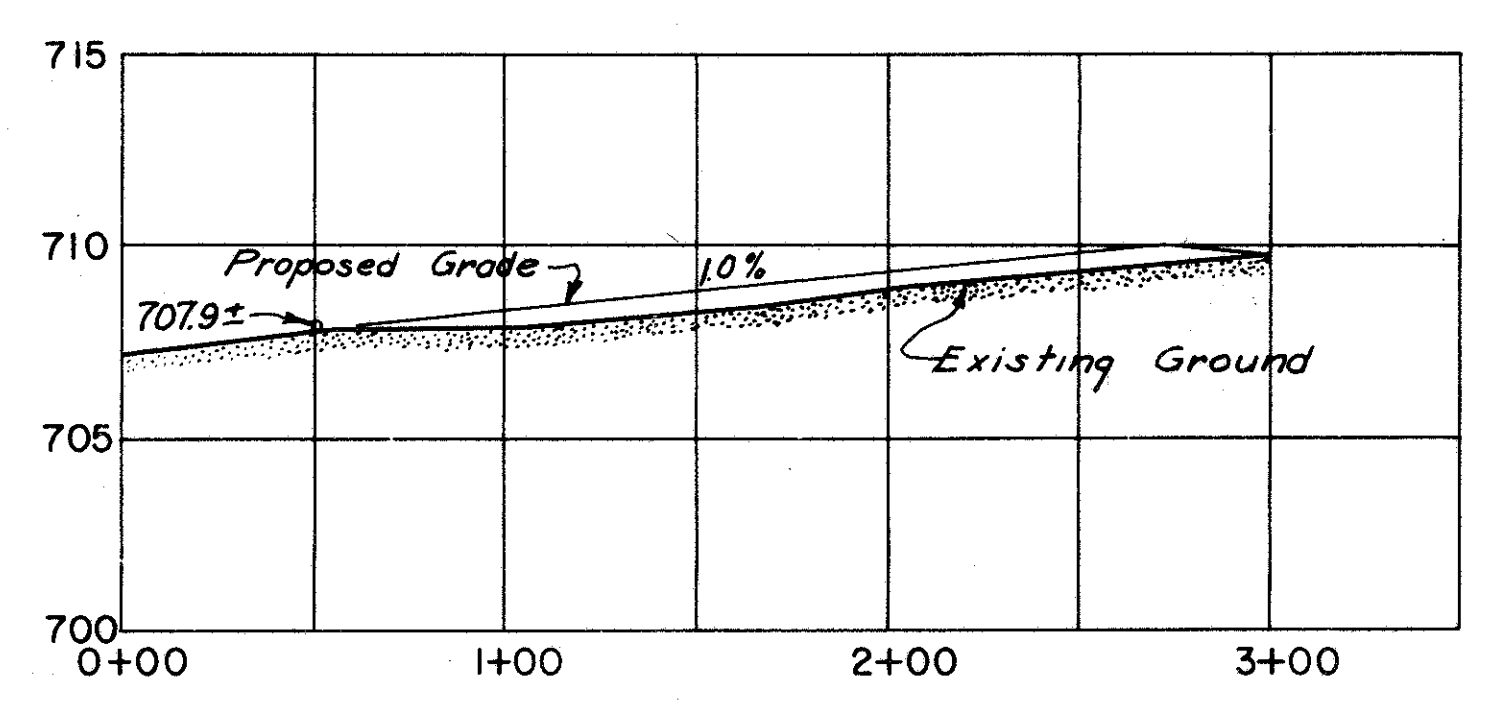
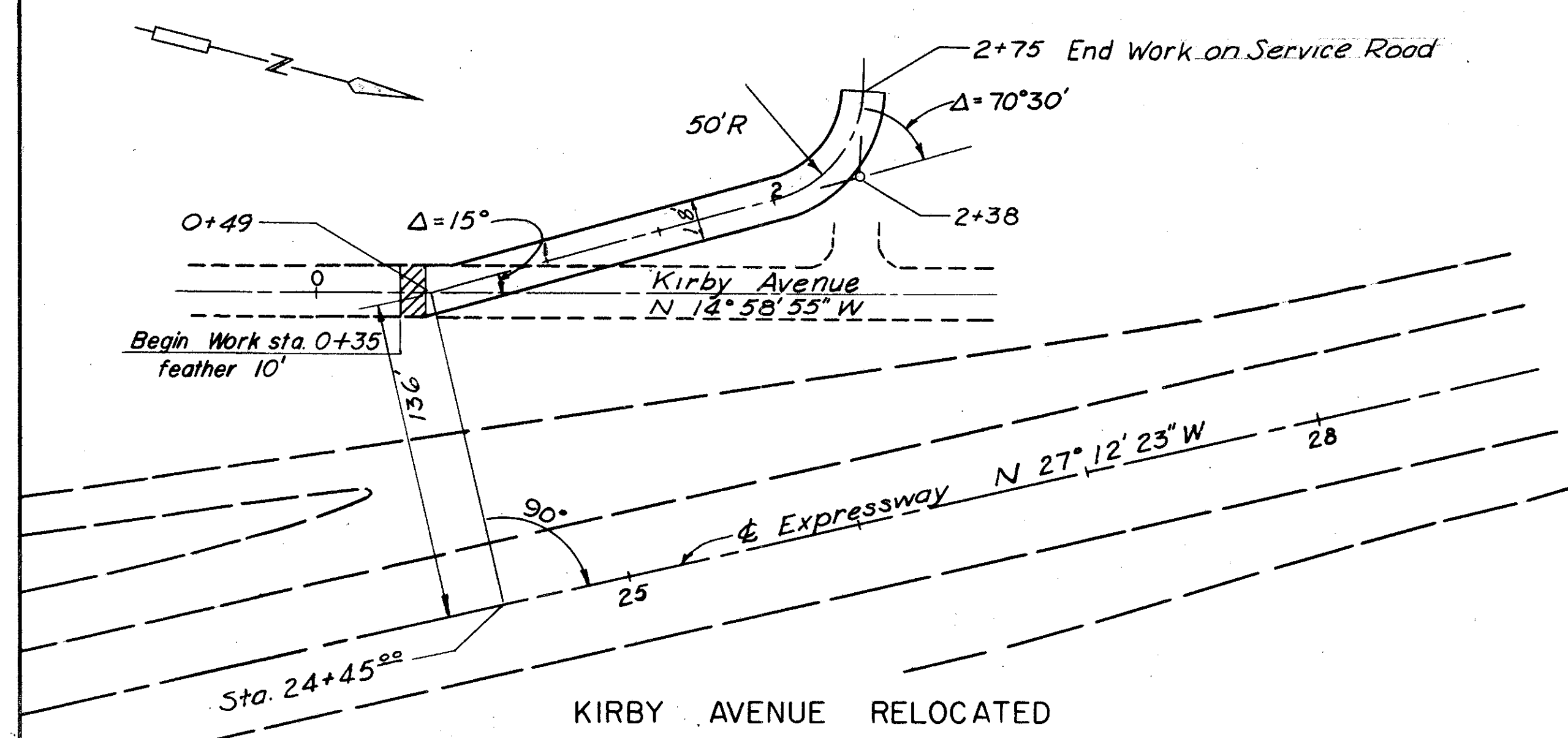
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

I609(9) I609(8) FRA 62-12.56 FRA 3-13.70
SERVICE ROADS



NOTE:
Item 1-13 sidewalk detail
see sheet 45

NOTE:
For Alignment See Sheet 23



Cross Sections on page 113

SEE 18' TYPICAL SECTION
SHEET NO. 106

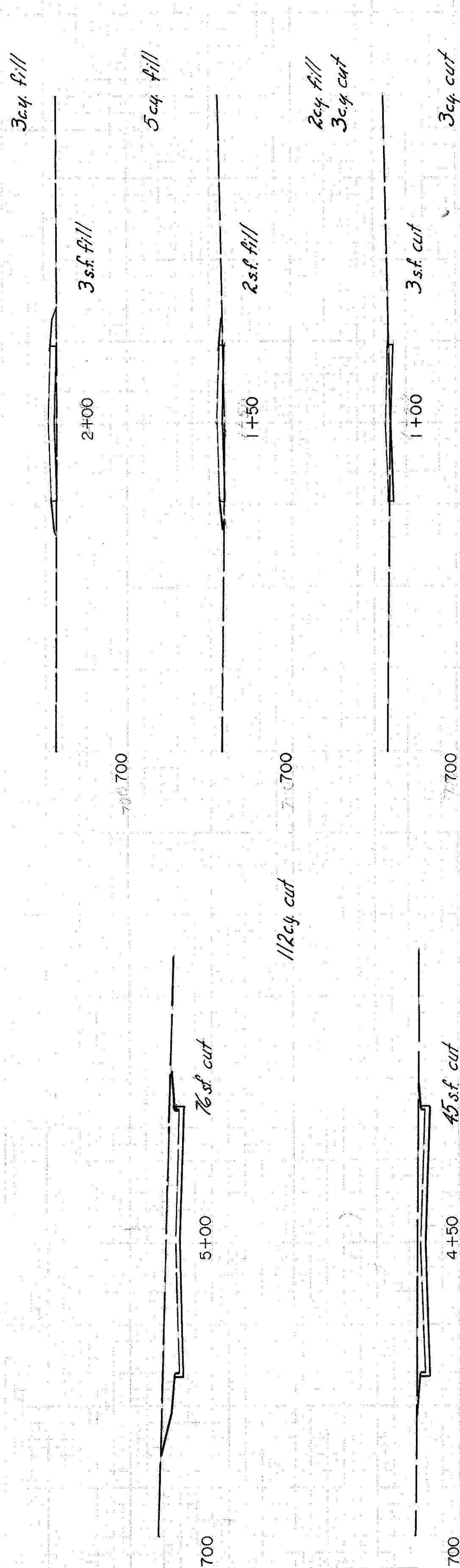
SEE 26' TYPICAL SECTION
SHEET NO. 111

Project I-609(9)

QUANTITY		KIRBY RELOCATED	SERVICE ROAD #6	TOTAL
ITEM	UNIT			
I-4	Lin. Ft.		1180	1180
T-35	Cu. Yd.	26	53	79
B-35	Cu. Yd.		53	53
T-30	Gal.		151	151
B-70	Sq. Yd.		1510	1510
I-12	Lin. Ft.		1180	1180
E-101	Cu. Yd.	6c. 10f.	2521 c. 4 f.	
I-13	Sq. Ft.		1890	1890
I-22	Cu. Yd.	167		167

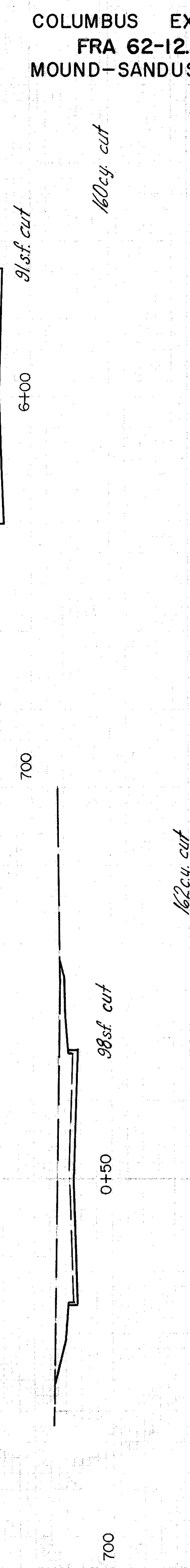
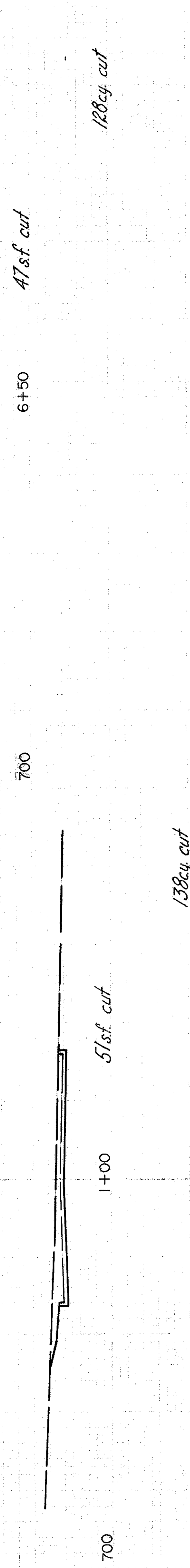
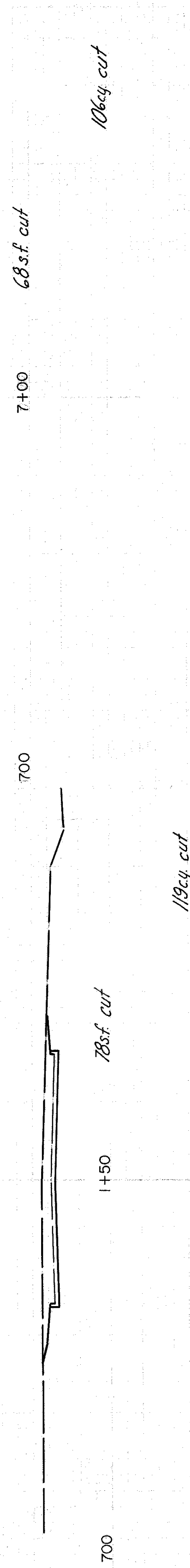
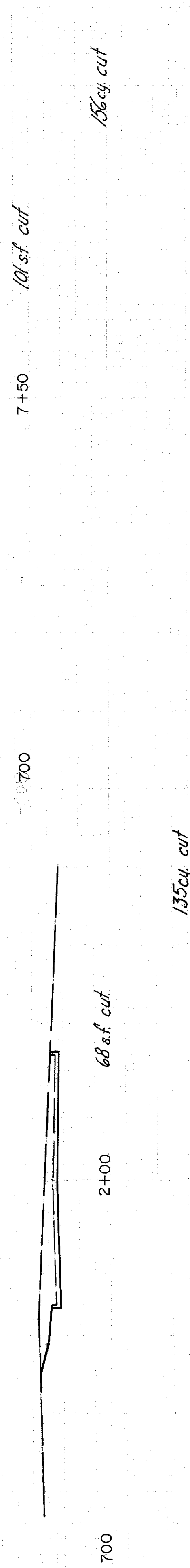
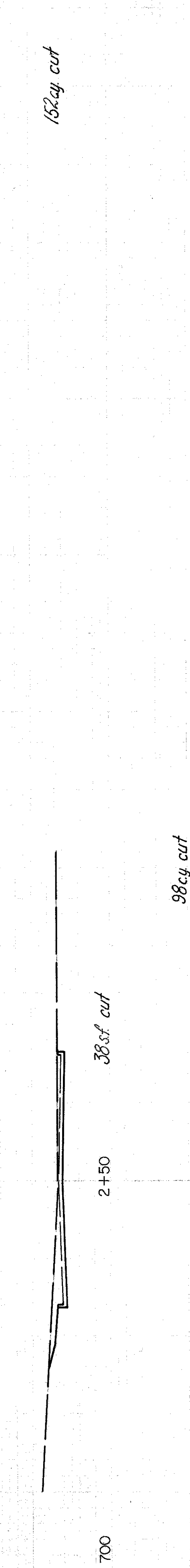
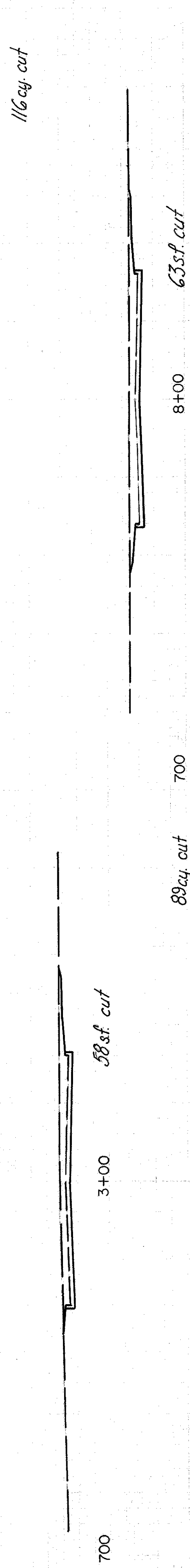
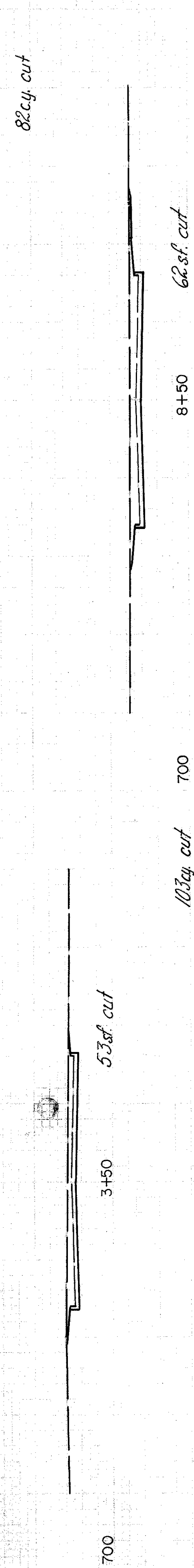
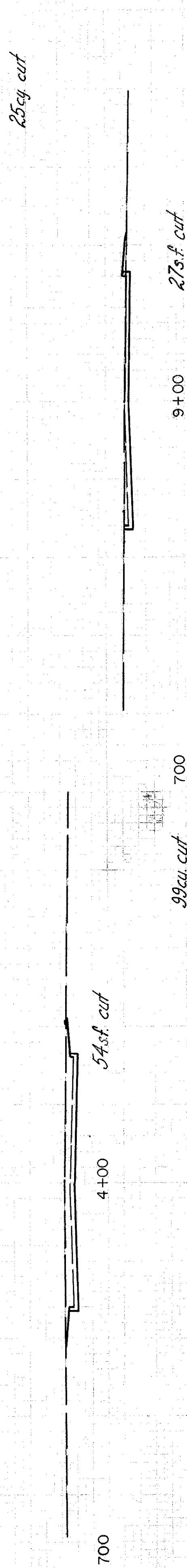
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MADE DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
TRACED DATE		NO.
CHECKED DATE		



KIRBY RELOCATED

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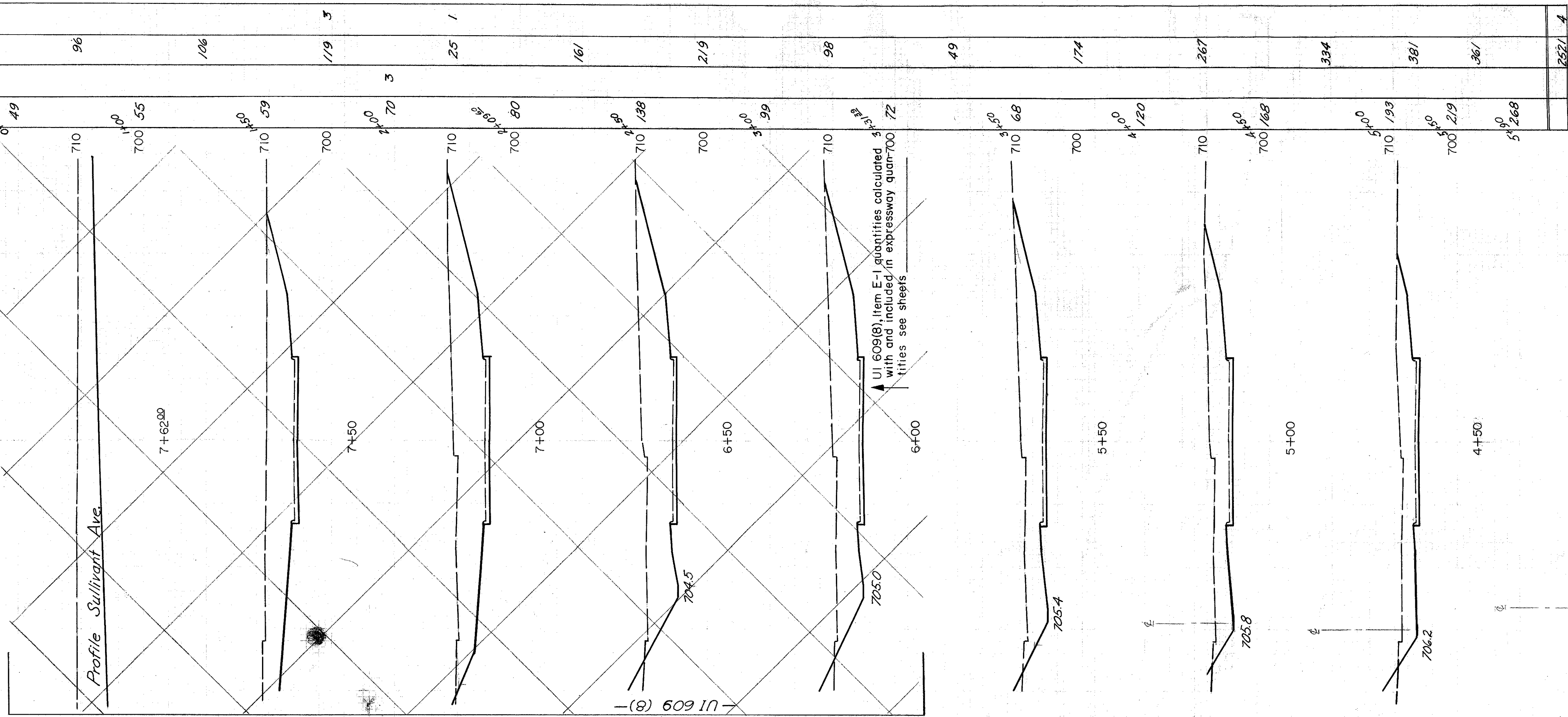
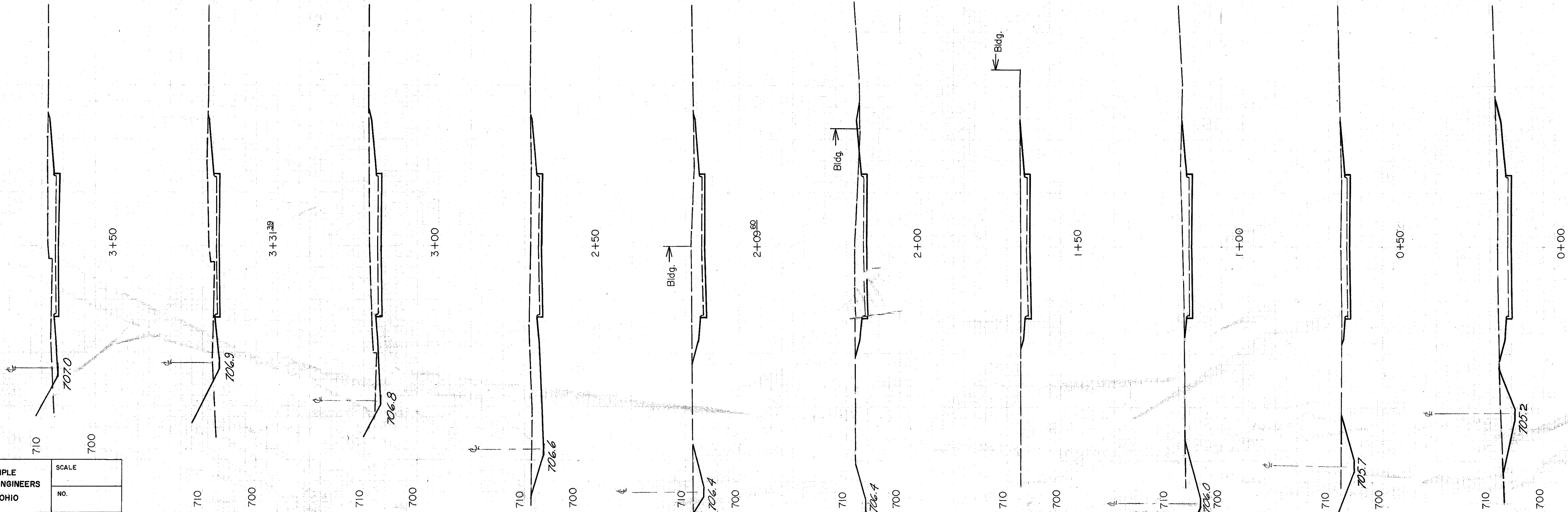


COLUMBUS EXPRESSWAY SYSTEM
FRA 62-12.56 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

113

DATE TRACED DATE CHECKED DATE	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE NO.
-------------------------------------------	-----------------------------------------------------------	--------------



Earthwork		Volume	Exc.	Emb.	Exc.	Emb.
End Area	Exc.					
0+00	0.93				131	
1+00	0.49				96	
2+00	0.55				106	
3+00	0.59				119	3
4+00	0.70				125	1
5+00	0.80				161	
6+00	0.99				219	
7+00	1.38				98	
8+00	1.72				49	
9+00	2.00				174	
10+00	2.29				267	
11+00	2.68				334	
12+00	3.00				381	
13+00	3.34				361	
14+00	3.61				252	4

COLUMBUS EXPRESSWAY SYSTEM
FRA 62-1256 FRA 3-13.70
MOUND-SANDUSKY EXPRESSWAY

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



Service Road 6

ROADWAY DRAINAGE, STORM AND SANITARY SEWERS

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

EXISTING HOUSE DRAINS

All existing house drains which include sanitary, yard, roof, basement or other similar drain pipes now in use which are disturbed because of highway improvement shall be replaced by the contractor. If the sewer is to be abandoned satisfactory house connections shall be provided to another sewer. Where an existing house is to be removed the upgrade end of the existing house connections shall be sealed and accurately referenced. Cost of the above, except sealing shall be included with and paid for at the unit price bid for the items listed therein. An estimated amount of 6" vitrified sewer pipe (Sec.M 6.8 (a)) and an estimated number of pipe specials have been added to make house connections that may be required. See "House Drains", Pages 119 and 120.

SEALING OF PIPE

Sealing of pipes shall be accomplished by the proper installation of a suitable precast concrete plug or the construction of a bulkhead of brick or concrete masonry with a minimum thickness of twelve inches.

Payment for this work shall be included in the contract unit price bid for Item E-101 where not covered by another item of proposed work.

DISPOSAL OF CASTINGS

Castings of inlets which are to be abandoned or removed shall be removed in accordance with the provisions of Item I-16 and stored on the right of way at the disposal of the city maintenance forces. Castings of manholes which are to be abandoned, removed, adjusted or reconstructed to grade shall be stored and accounted for by the contractor

SEWAGE

The contractor shall conduct his operations in the manner designed to maintain uninterrupted sewage flow throughout the construction period.

LOCATION AND SIZE OF EXISTING PIPE

The location, type and size of all existing pipe affected by this project is shown as nearly exact as available information will permit. The State of Ohio will not be responsible for any variations found during the construction.

MANHOLES, INLETS AND CATCH BASINS

It shall be the contractor's responsibility to construct the inlets and catch basins so that they are oriented correctly and conform in elevation with the ditches and gutters that they are intended to serve. Manhole castings in paved areas shall conform with the pavement grade.

Manhole steps will be omitted from all manholes or inlets less than five feet in depth.

The proposed elevations and locations of inlets, manholes and pipes and the estimated length of pipes may be adjusted by the Engineer during construction.

CURING CEMENT, MORTAR AND PLASTER

In all brick work where plastering is required, the following construction and curing methods shall apply. The plaster where called for on the construction details shall be continuous with the laying of the brick work. Immediately after the plastering is completed it shall be covered with two or more thicknesses of damp burlap which is to be maintained thoroughly saturated for a period of 48 hours or curing may be accomplished as set forth under Item T-71.24 (c).

MANHOLES RECONSTRUCTED TO GRADE

This item shall consist of the careful removal of the existing manhole down to the spring line, rebuilding the manhole to the new grade, conforming as nearly as practicable to the existing manhole section, using the salvaged frame and cover castings.

UNRECORDED CONNECTIONS

Any unrecorded active connections to the sewer through existing catch basins or manholes to be removed or abandoned encountered in construction shall be reconnected to the existing sewer as directed by the Engineer. Payment for this work shall be at the contract unit price bid per linear foot for the respective Item I-2 Sewers required.

CONNECTIONS TO EXISTING SEWERS

At all places where the plans provide for proposed sewers to be connected to the existing sewers it shall be the responsibility of the contractor to locate the existing sewers both as to line and grade before he starts to lay the proposed sewer. The cost of this operation shall be included in the price bid for the pertinent Item I-2 Sewers.

SEALING HOUSE CONNECTIONS OF WRECKED BUILDINGS

Payment for sealing house connections of wrecked buildings shall be included in the price bid for Item E-101 Roadway Excavation.

A-18

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO		DATE

ITEM I-4 - 6" UNDERDRAINS

LOCATION	FROM STATION	TO STATION	INVERT ELEV.		LENGTH L.F.	REMARKS
			UPPER	LOWER		
East Road "B"	3+75					
East Road "B"	Ramp "E"	0-65	703.34	700.40	540	
East Road "B"	0-65	0-65 (X-2)	700.40	695.50	22	Pipe to inlet X-2
West Road "B"	14+72	7+25	723.33	705.09	747	
West Road "B"	7+25	7+00 (M-2)	705.09		32	Pipe to inlet M-2
West Road "B"	7+25	4+75	705.09	703.19	250	
West Road "B"	4+75	4+00 (M-6)	703.19		80	Pipe to inlet MH 6
West Road "A"	8+75					
West Road "A"	Ramp "F"	0-65	705.89	700.42	1040	
West Road "A"	0-65	0-65 (X-1)	700.42	695.20	26	Pipe to inlet X-1
West Road "A"	14+91	7+50 (A-1)	722.49	704.86	741	Inlet A-1
West Ramp "E"	9+00	6+75 (RE-2)	709.79	708.70	225	
West Ramp "E"	9+00	12+97	709.79	701.93	397	
West Ramp "E"	14+50	12+97	703.50	701.93	153	
West Ramp "E"	12+97	12+97 (X-5A)	701.93		8	Pipe to inlet X-5A
West Ramp "F"	8+75	11+75	705.89	701.00	300	
West Ramp "F"	14+00	11+75	702.63	701.00	225	
West Ramp "F"	11+75	11+75 (X-4A)	702.63		32	Pipe to inlet X-4A
West Road "B"	16+75	19+75	724.00	720.38	300	
West Road "B"	19+75	20+00	720.38	719.90	40	Cross Road "B"
East Road "B"	20+00	22+89 (B-1)	719.90	714.73	289	Inlet B-1
West Road "A"	16+70	22+00	723.03	715.76	530	
West Road "A"	22+00	22+75 (A-2)	715.76	714.26	75	Inlet A-2
West Ramp "G"	6+25	1+15 (RG-5)	713.56	702.80	510	Inlet RG-5
West Ramp "G"	6+25	9+61	713.56	711.10	336	
West Ramp "G"	13+50	9+61	713.43	711.10	389	
West Ramp "G"	9+61	9+61 (M-3)	711.10		66	Cross Road "A" pipe to inlet M-3
West Ramp "H"	7+64	1+60 (RH-5)	715.38	703.50	604	Inlet RH-5
East Ramp "H"	7+64	9+00	715.36	713.86	136	
East Ramp "H"	15+00	9+00	716.81	713.86	600	
East Ramp "H"	9+00	9+00 (X-9)	713.86		38	Inlet X-9
West Road "A"	35+50	29+50	716.60	713.20	600	
West Road "A"	29+50	29+50 (X-10)	713.20		28	Pipe to inlet X-10
East Road "B"	35+50	29+00	720.30	716.81	650	
East Road "B"	29+00	29+00 (X-11)	716.81		13	Pipe to inlet X-11
West Road "A"	35+50	39+00	716.60	715.54	350	
West Road "A"	39+00	39+00 (X-12)	715.54		37	Pipe to inlet X-12
West Road "A"	39+00	42+00	715.74	714.58	300	
West Road "A"	42+00	42+00 (X-13)	714.58		38	Pipe to inlet X-13
West Road "A"	42+00	46+00 (A-3A)	714.78	713.10	400	Inlet A-3A
East Road "B"	35+50	40+40	720.30	719.05	490	
East Road "B"	40+40	40+40 (MH 35)	719.05		12	Pipe to manhole 35
East Road "B"	40+40	45+50 (RBC-6)	719.05	716.23	510	Inlet RBC-6
East Road "B"	46+33	51+93 (B-1B)	717.00	707.85	560	Inlet B-1B
East Ramp "BC"	2+50	4+00 (RBC-5)	716.18	715.83	150	Inlet RBC-5
East Ramp "BC"	5+50	4+00 (RBC-5)	716.46	715.83	150	Inlet RBC-5
East Ramp "BC"	8+50	5+50 (RBC-4)	718.32	716.15	300	Inlet RBC-4
East Ramp "BC"	11+50	8+50 (RBC-3)	719.80	718.01	300	Inlet RBC-3
East Ramp "BC"	15+00	11+50 (RBC-2)	721.69	719.57	350	Inlet RBC-2
West Road "A"	46+86	46+00 (A-3A)	712.63	712.00	86	Inlet A-3A
East Road "A"	46+86	49+00 (A-2A)	712.76	709.95	214	Inlet A-2A
East Road "A"	49+00	54+00 (A-2B)	710.03	703.37	500	Inlet A-2B
East Road "A"	54+00	57+25 (A-2C)	703.50	699.33	325	Inlet A-2C
East Road "B"	52+00	56+00 (B-1C)	707.34	699.92	400	Inlet B-1C

TRACED CHECKED	BURGESS & NIPIE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO		DATE

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUSCOLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAYFRA 62-12.56 FRA 3-13.70
DRAINAGE TABLES

ITEM I-4 - 6" UNDERDRAINS

LOCATION	FROM STATION	TO STATION	INVERT ELEV.		LENGTH L.F.	REMARKS
			UPPER	LOWER		
East Road "B"	56+00	57+25 (B-2)	700.02	698.70	125	Inlet B-2
East Ramp "BC"	19+90	15+00 (RBC-1)	724.76	721.46	490	Inlet RBC-1
Right Ramp "CB"	0+00	0+25 (RCB-1)	719.58	719.13	25	Inlet RCB-1
Right Ramp "CB"	1+35	0+25 (RCB-1)	719.70	719.13	110	Inlet RCB-1
Right Ramp "CB"	1+35	4+75 (RCB-2)	719.69	711.63	340	Inlet RCB-2
Right Ramp "CB"	4+75	8+25 (RCB-3)	711.94	699.21	350	Inlet RCB-3
Right Ramp "CB"	8+25	58+50 (B-3)	699.44	697.06	257	58+50=10+82 Ramp "CB" inlet B-3
West Road "A"	55+50	58+00 (A-3)	701.65	697.33	290	Inlet A-3
West Road "A"	58+00	59+36 (A-4)	697.66	695.45	136	Inlet A-4
West Road "A"	61+00	59+36 (A-4)	698.96	695.45	164	Inlet A-4
West Road "A"	62+33	61+00 (A-5)	703.38	698.83	133	Inlet A-5
East Road "A"	65+66	62+75 (A-6)	714.84	706.27	291	Inlet A-6
East Road "B"	57+50	60+50 (B-4)	697.15	696.19	300	Inlet B-4
East Road "B"	61+25	60+50 (B-4)	696.69	696.19	75	Inlet B-4
West Road "B"	61+25	62+17 (B-6)	696.76	696.48	92	Inlet B-6
West Road "B"	66+00	62+17 (B-6)	708.06	697.27	383	Inlet B-6
East Road "B"	67+00	66+14 (B-7)	711.44	708.52	86	Inlet B-7
Right Ramp "DA"	12+92	5+00 (RDA-1)	717.40	711.72	621	12+92 Road "D"=-1+21 "DA" inlet RDA-1
Right Ramp "DA"	5+00	8+25 (RDA-2)	711.85	703.25	325	Inlet RDA-2
Right Ramp "DB"	0+12	4+00 (RDB-1)	723.99	710.00	388	Inlet RDB-1
Right Ramp "DB"	4+00	7+50 (RDB-2)	710.13	704.86	350	Inlet RDB-2
Right Ramp "DB"	7+50	9+13 (RDB-5)	704.99	703.76	163	Inlet RDB-5
Right Ramp "DB"	10+50	9+13 (RDB-5)	705.28	703.76	137	Inlet RDB-5
Right Ramp "DB"	13+59	10+50 (RDB-4)	713.96	705.61	309	Inlet RDB-4
Left Ramp "AC"	0+90	3+71 (RAC-4)	715.99	713.50	281	Inlet RAC-4
Left Ramp "AC"	5+65	3+71 (RAC-4)	716.44	713.50	194	Inlet RAC-4
Left Ramp "AC"	7+59	7+88 (RAC-3)	723.43	723.22	29	Inlet RAC-3
Left Ramp "AC"	9+92	7+88 (RAC-3)	727.45	723.22	204	Inlet RAC-3
Left Ramp "AC"	11+92	14+40 (RAC-1)	727.80	725.50	248	Inlet RAC-1
Left Ramp "AC"	22+00	14+40 (RAC-1)	725.74	725.50	62	22+00 Road "C"=15+02 "AC" Inlet RAC-1
Right Ramp "AD"	1+25	4+27 (RAD-1)	716.97	714.57	302	Inlet RAD-1
Right Ramp "AD"	4+27	7+31 (RAD-2)	714.70	712.79	304	Inlet RAD-2
Right Ramp "AD"	7+31	11+00 (RAD-3)	712.88	705.36	369	Inlet RAD-3
North Road "D"	5+40	1+45 (D-7)	705.52	702.33	395	Inlet D-7
North Road "D"	10+18	9+25	715.90	714.64	93	
North Road "D"	9+25	9+25 (C-3)	714.64	714.13	33	Cross Road "D" Inlet C-3
North Road "D"	15+23	17+15 (D-3)	713.28	709.08	192	Inlet D-3
South Road "D"	17+40	18+10 (D-1)	709.00	708.64	70	Inlet D-1
South Road "D"	19+50	18+10 (D-1)	710.50	708.64	104	Inlet D-1
South Road "D"	22+90	19+50 (D-2)	722.70	710.36	340	Inlet D-2
South Road "C"	4+57	1+35 (C-5)	702.52	701.27	322	Inlet C-5
South Road "C"	9+00	4+57 (C-4)	713.51	702.42	443	Inlet C-4
South Road "C"	19+90	16+58 (C-2)	727.65	721.14	332	Inlet C-2
South Road "C"	19+90	21+40 (C-1)	727.65	726.24	150	Inlet C-1
West Road "A"	67+60	69+25 (A-7)	716.96	716.83	165	Inlet A-7
West Road "A"	71+50	69+25 (A-7)	718.32	716.83	225	Inlet A-7
East Road "A"	72+50	68+60 (RAC-5)	718.72	715.93	290	Inlet RAC-5
East Road "B"	71+50	69+37 (RDB-3)	717.92	713.87	213	Inlet RDB-3

TOTAL

26,754

DRAINAGE STRUCTURES

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
 FRA 62-12.56 FRA 3-13.70
DRAINAGE TABLES

ITEM I-8

DRAINAGE STRUCTURES

STRUCTURE NO.	LOCATION	TYPE	REMARKS
MH 1	-20+65 C/L Survey	Std. No. 1 MH	
MH 2	-15+65 C/L Survey	Std. No. 1 MH	
MH 3	-10+65 C/L Survey	Std. No. 1 MH	
MH 4	- 5+65 C/L Survey	Std. No. 1 MH	
MH 5	0+64.31 C/L Survey	Std. No. 1 MH	Mod. as per Plan
MH 6	4+00 C/L Survey	Std. No. 1 MH	
MH 7	6+00, 70' West C/L Survey	Std. No. 1 MH	
MH 10	5+61.6 [±] , 24.5 North C/L Green- lawn Avenue	Exist. MH	Adjust to Grade
MH 11	9+57, 51' South B/L Road C	Std. No. 2 MH	Drop Pipe
MH 12	3+50, 36' Right B/L Ramp AD	Std. No. 2 MH	Drop Pipe
MH 13	68+65, 79' West C/L Survey	Std. No. 2 MH	No Drop Pipe
MH 15	58+80, 58' East B/L Road B	Std. No. 2 MH	Drop Pipe
MH 16	60+25, 47' East B/L Road B	Std. No. 2 MH	Drop Pipe
MH 17	65+94, 28' East B/L Road B	Std. No. 2 MH	Drop Pipe
MH 18	69+38, 61' East B/L Road B	Std. No. 2 MH	Drop Pipe
MH 29	0+13 [±] , 22' South C/L S-5	Std. No. 2 MH	Drop Pipe
MH 35	40+40, 69' East C/L Survey	Std. No. 2 MH	Drop Pipe
MH 36	6+66, 28' North B/L Ramp DA	Std. No. 2 MH	Drop Pipe
MH 38	15+00, 26' East C/L Ramp BC	Std. No. 2 MH	Drop Pipe
MH 39	71+00, 78.5' West C/L Survey	Std. No. 2 MH	No Drop Pipe
MH 41	17+92.78, 18' North B/L Road "D"	Std. No. 1 MH	No Drop Pipe
MH 42	62+00, 6' East B/L Road "B"	Std. No. 2 MH	Drop Pipe
MH 43	61+35, 78' East B/L Road "B"	Std. No. 2 MH	Drop Pipe
M-1	- 0+65 C/L Survey	No. 2-4 C.B. Mod.	1 Opening
M-2	7+00 C/L Survey	No. 2-2-A.C.B.	1 Opening
M-3	25+61, 4' West C/L Survey	No. 2-2-A C.B.	2 Openings
M-4	41+00, 4' West C/L Survey	No. 2-2-A C.B.	1 Opening
M-5	47+00, 4' West C/L Survey	No. 2-2-A C.B.	1 Opening
M-6	53+00, 24' East B/L Road A	No. 9-A C.B. Mod.	1 Ditch
A-1	7+50 Road A	Lt.	No. 2-6 Inlet Mod.
A-2	22+81 Road A	Lt.	No. 2-6 Inlet Mod.
A-2A	49+00 Road A	Rt.	No. 3-A C.B.
A-2B	54+00 Road A	Rt.	No. 2-10 Inlet Mod.
A-2C	57+25 Road A	Rt.	No. 3-A C.B.
A-3	58+00 Road A	Lt.	No. 2-6 Inlet Mod.
A-3A	46+03.5 Road A	Lt.	No. 2-6 Inlet Mod.
A-3B	52+11 Road A	Lt.	No. 2-6 Inlet Mod.
A-4	59+43 Road A	Lt.	No. 2-6 Inlet Mod.
A-5	61+00 Road A	Lt.	No. 2-6 Inlet Mod.
A-6	62+75 Road A	Rt.	No. 2-10 Inlet Mod.
A-6A	63+67 Road A	Lt.	No. 3-A C.B.
A-7	69+23 Road A	Lt.	No. 2-6 Inlet Mod.
B-1	22+95 Road B	Rt.	No. 2-6 Inlet Mod.
B-1A	49+00 Road B	Lt.	No. 3-A C.B.
B-1B	52+00 Road B	Rt.	No. 2-10 Inlet Mod.
B-1C	56+00 Road B	Rt.	No. 2-6 Inlet Mod.
B-2	57+27 Road B	Rt.	No. 2-6 Inlet Mod.
B-3	58+50 Road B	Rt.	No. 2-6 Inlet Mod.

STRUCTURE NO.	LOCATION	TYPE	REMARKS
B-4	60+50 Road B	Rt.	No. 2-6 Inlet Mod.
B-5	60+72 Road B	Lt.	No. 2-6 Inlet Mod.
B-6	62+17 Road B	Lt.	No. 2-6 Inlet Mod.
B-7	66+14 Road B	Rt.	No. 2-6 Inlet Mod.
C-1	21+40 Road C	Rt.	No. 2-10 Inlet Mod.
C-2	16+58 Road C	Rt.	No. 2-10 Inlet Mod.
C-3	9+25 Road C	Lt.	No. 3 C.B.
C-4	4+57 Road C	Rt.	No. 2-10 Inlet Mod.
C-5	1+35 Road C	Rt.	No. 2-10 Inlet Mod.
D-1	18+10 Road D	Rt.	No. 2-6 Inlet Mod.
D-2	19+50 Road D	Rt.	No. 2-6 Inlet Mod.
D-3	17+15 Road D	Lt.	No. 2-6 Inlet Mod.
D-4	7+75 Road D	Rt.	No. 3 C.B.
D-5	4+75 Road D	Rt.	No. 3 C.B.
D-6	3+40 Road D	Rt.	No. 3 C.B.
D-7	1+45 Road D	Lt.	No. 2-6 Inlet Mod.
RE-2	6+75 Ramp E	Lt.	No. 2-6 Inlet Mod.
RE-5	13+92 Ramp E	Rt.	No. 2-6 Inlet Mod.
RF-5	14+07 Ramp F	Rt.	No. 2-6 Inlet Mod.
RG-5	1+14 Ramp G	Lt.	No. 2-6 Inlet Mod.
RG-6	1+00 Ramp G	Rt.	No. 2-6 Inlet Mod.
RH-5	1+56 Ramp H	Lt.	No. 2-6 Inlet Mod.
RH-6	1+55 Ramp H	Rt.	No. 2-6 Inlet Mod.
RBC-1	14+99 Ramp BC	Rt.	No. 2-6 Inlet Mod.
RBC-2	11+48 Ramp BC	Rt.	No. 2-6 Inlet Mod.
RBC-3	8+49 Ramp BC	Rt.	No. 2-6 Inlet Mod.
RBC-4	5+54 Ramp BC	Rt.	No. 2-6 Inlet Mod.
RBC-5	4+02 Ramp BC	Rt.	No. 2-6 Inlet Mod.
RBC-6	2+52 Ramp BC	Rt.	No. 2-6 Inlet Mod.
RBC-7	7+00 Ramp BC	Lt.	No. 3-A C.B.
RAD-1	4+27 Ramp AD	Rt.	No. 2-6 Inlet Mod.
RAD-2	7+31 Ramp AD	Rt.	No. 2-6 Inlet Mod.
RAD-3	11+00 Ramp AD	Rt.	No. 2-6 Inlet Mod.
RDA-1	5+00 Ramp DA	Rt.	No. 2-6 Inlet Mod.
RDA-2	8+25 Ramp DA	Rt.	No. 2-6 Inlet Mod.
RAC-1	14+04 Ramp AC	Lt.	No. 2-6 Inlet Mod.
RAC-2	12+53 Ramp AC	Rt.	No. 3-A C.B.
RAC-3	7+88 Ramp AC	Lt.	No. 2-6 Inlet Mod.

ITEM I-8
DRAINAGE STRUCTURES

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE TABLES

ITEM I-8
DRAINAGE STRUCTURES

STRUCTURE NO	LOCATION	TYPE	REMARKS
RAC-4	3+71 Ramp AC	Lt.	No. 2-6 Inlet Mod.
RAC-5	0+90 Ramp AC	Lt.	No. 2-6 Inlet Mod.
RAC-6	8+00 Ramp AC	Rt.	No. 3-A C.B.
RAC-7	4+50 Ramp AC	Rt.	No. 3-A C.B.
RDB-1	4+00 Ramp DB	Rt.	No. 2-6 Inlet Mod.
RDB-2	7+50 Ramp DB	Rt.	No. 2-6 Inlet Mod.
RDB-3	13+59 Ramp DB	Rt.	No. 2-6 Inlet Mod.
RDB-4	10+50 Ramp DB	Rt.	No. 2-6 Inlet Mod.
RDB-5	9+13 Ramp DB	Rt.	No. 2-6 Inlet Mod.
RDB-6	9+13 Ramp DB	Lt.	No. 2-6 Inlet Mod.
RCB-1	0+25 Ramp CB	Rt.	No. 2-10 Inlet Mod.
RCB-2	4+75 Ramp CB	Rt.	No. 2-6 Inlet Mod.
RCB-3	8+25 Ramp CB	Rt.	No. 2-6 Inlet Mod.
S-5-1	0+02 Service Road S-5	Rt.	AA-S47 Inlet MH
S-5-2	0+25 Service Road S-5	Lt.	AA-S20 Inlet
S-6-3	1+15.82 Service Road S-6	Rt.	AA-S20 Inlet
S-6-4	1+15.82 Service Road S-6	Lt.	AA-S47 Inlet MH
H-1	5+19.10 Harmon Ave. Relocated	Rt.	AA-S20 Inlet
H-2	5+19.10 Harmon Ave. Relocated	Lt.	AA-S47 Inlet MH
H-3	3+75 Harmon Ave. Relocated	Rt.	AA-S47 Inlet MH
H-4	6+75 Harmon Ave. Relocated	Rt.	AA-S20 Inlet
H-5	3+75 Harmon Ave. Relocated	Lt.	AA-S47 Inlet MH
H-6	7+00 Harmon Ave. Relocated	Lt.	AA-S47 Inlet MH
H-7	2+12 Harmon Ave. Relocated	Rt.	AA-S20 Inlet
M-S-1	0+82 Mound St.	Lt.	AA-S20 Inlet
X-1	0-65, 80.5' West C/L Survey	No. 2-2-A C.B.	1 Opening
X-2	0-65, 78' East C/L Survey	No. 2-2-A C.B.	1 Opening
X-3	6+00, 112' East C/L Survey	No. 2-3 C. B. Mod.	2 Openings
X-4	10+00, 151' East C/L Survey	No. 2-3 C. B. Mod.	2 Openings
X-4A	13+00, 104' West C/L Survey	No. 2-3 C. B. Mod.	2 Openings
X-5	9+00, 117' West C/L Survey	No. 2-3 C. B. Mod.	2 Openings
X-5A	13+50, 109' East C/L Survey	No. 2-3 C. B. Mod.	2 Openings
X-6	19+00, 159' West C/L Survey	No. 2-2-A C.B.	2 Openings
X-6A	17+00, 108' West C/L Survey	No. 2-2-A C.B.	2 Openings
X-7	19+50, 151' East C/L Survey	No. 2-4 C. B. Mod.	2 Openings with odor trap
X-7A	16+01, 108' East C/L Survey	No. 2-2 A C.B.	2 Openings
X-8	23+50, 116' West C/L Survey	No. 2-3 C.B. Mod.	2 Openings
X-9	23+00, 112' East C/L Survey	No. 2-3 C.B. Mod.	2 Openings
X-10	29+50, 84.5' West C/L Survey	No. 2-2-A C.B.	1 Opening
X-11	29+00, 70' East C/L Survey	No. 2-3 C.B. Mod.	1 Opening
X-12	39+00, 93.5' West C/L Survey	No. 2-2-A C.B.	2 Openings
X-13	42+00, 96' West C/L Survey	No. 2-2-A C.B.	2 Openings
X-14	40+00, 74' East C/L Survey	No. 2-2-A C.B.	2 Openings
X-15	46+71, 117' East C/L Survey	No. 2-3 C. B. Mod.	2 Openings
X-16	49+00, 88' West C/L Survey	No. 2-2-A C.B.	2 Openings

STRUCTURE NO	LOCATION	TYPE	REMARKS
X-17	53+00, 58' East B/L Road B	No. 2-3 C.B. Mod.	2 Openings
X-19	1+22, 47.5' South B/L Road C	No. 2-2-A C.B.	1 Opening
X-20	3+80, 34' North B.L Road D	No. 1 Inlet	
X-21	4+75, 42' North B/L Road D	No. 2-2-A C.B.	1 Opening
X-22	4+62, 47.5' South B/L Road C	No. 2-3 C.B. Mod.	2 Openings
X-23	59+18, 39.5' West B/L Road A	No. 2-2-A C.B.	1 Opening
X-23A	60+44, 40.5' West B/L Road A	No. 2-3 C.B. Mod.	2 Openings
X-24	59+16, 38' East B/L Road B	No. 2-2-A C.B.	1 Opening
X-24A	60+50, 32' East B/L Road B	No. 2-2-A C.B.	2 Openings
X-25	58+89, 58.5' West B/L Road A	No. 2-3 C.B. Mod	1 Opening
X-26	56+75, 25' East B/L Road B	No. 2-2-A C.B.	2 Openings
X-29	2+16, 50' Lt. B/L Ramp CB	No. 2-2-A C.B.	2 Openings
X-30	60+75, 24' West B/L Road B	No. 2-2-A C.B.	2 Openings
X-30A	63+17, 31' East B/L Road B	No. 2-2-A C.B.	2 Openings
X-31	9+12, 36.5' East B/L Ramp DB	No. 2-2-A C.B.	2 Openings
X-32	5+50, 41' Rt. B/L Ramp AD	No. 2-2-A C.B.	2 Openings
X-33	66+50, 86' West B/L Road A	No. 2-3 C.B. Mod.	2 Openings
V-5	6+97, 42' North B/L Road D	No. 9-A C.B. Mod.	2 Ditches
V-7	16+91, 12' South B/L Road D	No. 9-A C.B. Mod.	2 Ditches
V-8	6+75, 35' North B/L Ramp DA	No. 9-A C.B. Mod.	2 Ditches
V-10	64+40, 28' West B/L Road B	No. 9-A C.B. Mod.	2 Ditches
V-23	19+70, 15' South B/L Road D	No. 9-A C.B. Mod.	2 Ditches

DRAINAGE STRUCTURE TOTALS
ITEM I-8

Type	Quantity Each
Standard No. 1 Manhole (Modified as Per Plan)	1
Standard No. 1 Manhole	7
Standard No. 2 Manhole - No Drop Pipe	2
Standard No. 2 Manhole - Drop Pipe	12
No. 2-2-A Catch Basin	25
No. 2-3 Catch Basin (Modified as Per Plan)	14
No. 2-4 Catch Basin (Modified as Per Plan)	1
No. 2-4 Catch Basin (Modified as Per Plan with Odor Trap)	1
No. 3 Catch Basin	4
No. 3-A Catch Basin	8
No. 9-A Catch Basin (Modified as Per Plan)	6
No. 2-6 Inlet (Modified as Per Plan)	50
No. 2-10 Inlet (Modified as Per Plan)	8
Type AA-S20 Inlet (As Per Plan)	6
Type AA-S47 Inlet Manhole (As Per Plan)	6
No. 1 Inlet	1

CLASS "B" STORM SEWERS
ITEM I-2

Pipe No.	Page No.	12" l.f.	15" l.f.	18" l.f.	21" l.f.	24" l.f.	27" l.f.	36" l.f.	42" l.f.
P-1	123								83
P-2	123								500
P-3	123								500
P-4	123								500
P-5	123								500
P-6	123							129	
P-7	123							336	
P-9	123						293		
P-10	123					140			
P-12	123			240					
P-17	123						429		
P-23	123		28						
P-30	124		300						
P-39	124		11						
P-60A	124		40						
P-63	125		25						
P-63A	125		126						
P-64	125		39						
P-65	125		16						
P-67A	125		50						
P-68B	125		99						
P-69B	125		105						
P-71	125		29						
P-72A	125	10							
P-78	125		54						
P-78A	125		75						
P-82	126	10							
P-84	126		19						
P-85	126		227						
P-86	126		100						
P-87	126						79		
P-88	126		115						
P-89	126						161		
P-90	126						139		
P-96	126		110						
P-98	126		229						
P-101	126		37						
P-102	126								13
P-104	126		15						

CLASS "B" STORM SEWERS
ITEM I-2

Pipe No.	Page No.	12" l.f.	15" l.f.	18" l.f.	21" l.f.	24" l.f.	27" l.f.	36" l.f.	42" l.f.
P-105	126		151						
P-108	127		33						
P-109	127		18						
P-113	128		22						
P-120	128		116						
P-123	128		42						
P-130	127					124			
P-147	128		11						
P-148	128		23						
P-150A	128		7						
P-150B	128		117						
P-152	128		145						
P-155A	128		8						
P-156	128		113						
P-156B	128		47						
P-158	128		8						
P-159	128		29						
P-178	129		190						
P-179	129		77						
P-181A	130		12						
P-184	130		58						
P-255	130		16						
TOTAL		20	3092	13	240	264	1101	465	2083

PIPE FOR STORM SEWERS
ITEM I-2

Pipe No.	Page No.	M-6.6(a) 18"U.P. l.f.	M-6.6(d) 21"U.P. l.f.	M-6.6(b) or M-6.8(b) 24" l.f.	Class "B" 30" l.f.	6" l.f.	8" l.f.
P-41	124	314					
P-55	131						198
P-56	131						170
P-69	125						
P-125	127						26
P-127	127						40
P-127A	127						46
P-161	129						
P-163	129		40	177			
P-262	132						115
P-264	133						40
P-265	133						58
P-266	133						129
P-267	133						75
House Drains	115						500
TOTAL		314	40	177	112	500	785

U.P.= Under Pavement.

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE TABLES

PIPE FOR STORM SEWERS
ITEM I-2

Pipe No.	Page No.	M-6.6 (b) 15"U.P. l.f.	18"U.P. l.f.	21"U.P. l.f.	24"U.P. l.f.	27"U.P. l.f.	30"U.P. l.f.	M-6.6(c)
P-42	124				189			
P-42A	124				44			
P-57	124	215						
P-59	124		150					
P-69	125					181	159	
P-117	128		110					
P-128	127							135
P-129	127			336				
P-162	129				77			
P-165A	129		50					
TOTAL		215	260	50	569	77	181	159

U.P.= Under Pavement.

PIPE FOR STORM SEWERS
ITEM I-2

M-6.6(c)

Pipe No.	Page No.	18"U.P. l.f.	21"U.P. l.f.	24"U.P. l.f.	27"U.P. l.f.	36"U.P. l.f.	42"U.P. l.f.
P-58	124						
P-43	124			100	86		
P-59	124	82					
P-91	126				403		
P-116	128	127					
P-121	127						27
P-124	127					147	
P-162	129			100			
P-163	129		173				
P-164	129		100				
P-165	129		236				
TOTAL		209	509	200	86	403	27

U.P.= Under Pavement.

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE TABLES

CLASS "B" STORM SEWERS UNDER PAVEMENT OR APPROACHES ITEM I-2								
Pipe No.	Page No.	12" l.f.	15" l.f.	18" l.f.	21" l.f.	24" l.f.	27" l.f.	30" l.f.
P-8	123						213	
P-10	123					240		
P-13	123			128				
P-14	123		51					
P-16	123						232	
P-18	123					380		
P-20	123				106			
P-21	123			141				
P-22	123		32					
P-25	124		78					
P-26	124		80					
P-31	124	75						
P-32	124	100						
P-40	124			415				
P-43	124					55		
P-45	124		24					
P-48	124		123					
P-52	124		285					
P-53	124			162				
P-54	124			52				
P-60	124		96					
P-61	125		124					
P-61A	125		115					
P-62	125			62				
P-64A	125		146					
P-67	125			412				
P-67B	125		64					
P-68	125			88				
P-68A	125		104					
P-69A	125		40					
P-70	125						205	
P-72	125		149					
P-74	125		110					
P-76	125		50					
P-77	125		66					
P-77A	125		158					
P-79	125			138				
P-80	125		85					
P-80A	125		40					
P-81	126		24					
P-83	126		50					
P-90	126						100	
P-92	126							142
P-93	126							36
P-94	126		160					
P-95	126		33					
P-97	126		49					
P-99	126							33
P-100	126		33					

CLASS "B" STORM SEWERS UNDER PAVEMENT OR APPROACHES ITEM I-2								
Pipe No.	Page No.	12" l.f.	15" l.f.	18" l.f.	21" l.f.	24" l.f.	27" l.f.	30" l.f.
P-103	126		33					
P-106	126		56					
P-107	129		110					
P-110	126		168					
P-111	126		74					
P-112	128		123					
P-114	128		162					
P-114A	128		106					
P-115	128		29					
P-117	128			175				
P-118	128		50					
P-119	128		101					
P-125	127							155
P-126	127							100
P-127	127							80
P-130	127					60		
P-145	128		87					
P-146	128		134					
P-149	128		58					
P-150	128		111					
P-150C	128		28					
P-150D	128		53					
P-151	128		178					
P-151A	128		36					
P-153	128		40					
P-154	128		90					
P-155	128		29					
P-156A	128		92					
P-157	128		48					
P-160	129						77	
P-160A	129						69	
P-164	129				143			
P-177	129				77			
P-180	130		177					
P-181	130		170					
P-182	130		70					
P-182A	130		97					
P-183	130		23					
P-254	130		39					
TOTAL		175	4845	1806	326	735	896	513

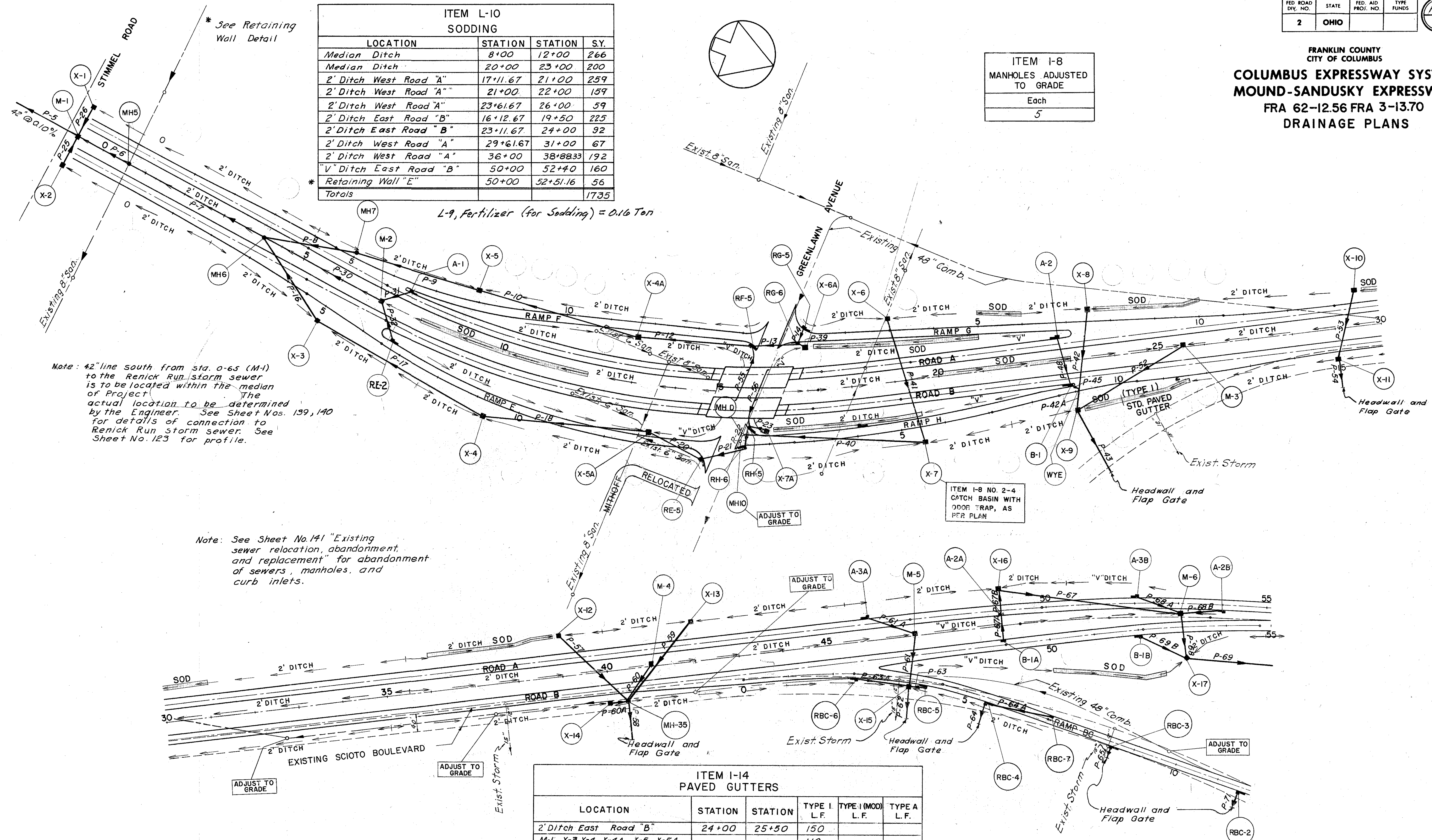
PIPE SPECIALS ITEM I-5				DRAINAGE TABLES			
Location Page		For I-2, Class "B"					
		6" x 8" Increaser	8"x90° Short Elbow	8"x6" Wye	8"x8" Wye	10"x6" Wye	12"x6" Wye
		Each	Each	Each	Each	Each	Each
P-55	131	3	6		2		
P-56	131	3	6		2		
P-262	132	2	4				
P-264	133	1	2				
P-265	133	1	2				
P-266	133	2	4		1		
P-267	133	2	4		1		
House Drains	115			30		15	20
TOTAL		14	28	30	6	15	20
Page	Special	Location				Total	
<u>CLASS "B"</u>							
126	27" x 15" Wye	East End P-87					
126	27" x 15" Wye	East End P-89				2	
126	15" x 15" Wye	East End P-85				1	
126	15"x12" Wye	West End P-88				1	
<u>CLASS "B" (Pav't.)</u>							
126	30" x 15" Wye	East End P-92					
127	30" x 15" Wye	South End P-127				2	
125	27" x 15" Wye	North End P-69					
129	27" x 15" Wye	South End P-160				2	
<u>M - 6.6 (b)</u>							
124	24" x 15" Wye	East End P-42					
129	24" x 15" Wye	South End P-162				2	
<u>M - 6.8 (b) or M-6.6 (b)</u>							
127	30" x 15" Wye	South End P-127 A					
127	30" x 15" Wye	South End P-128				2	

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE PLANS

ITEM L-10 SODDING			
LOCATION	STATION	STATION	S.Y.
Median Ditch	8+00	12+00	266
Median Ditch	20+00	23+00	200
2' Ditch West Road "A"	17+11.67	21+00	259
2' Ditch West Road "A"	21+00	22+00	159
2' Ditch West Road "A"	23+61.67	26+00	59
2' Ditch East Road "B"	16+12.67	19+50	225
2' Ditch East Road "B"	23+11.67	24+00	92
2' Ditch West Road "A"	29+61.67	31+00	67
2' Ditch West Road "A"	36+00	38+88.33	192
2' Ditch East Road "B"	50+00	52+40	160
* Retaining Wall "E"	50+00	52+51.16	56
Totals			1735

L-9, Fertilizer (for Sodding) = 0.16 Ton

ITEM I-8 MANHOLES ADJUSTED TO GRADE	
Each	5

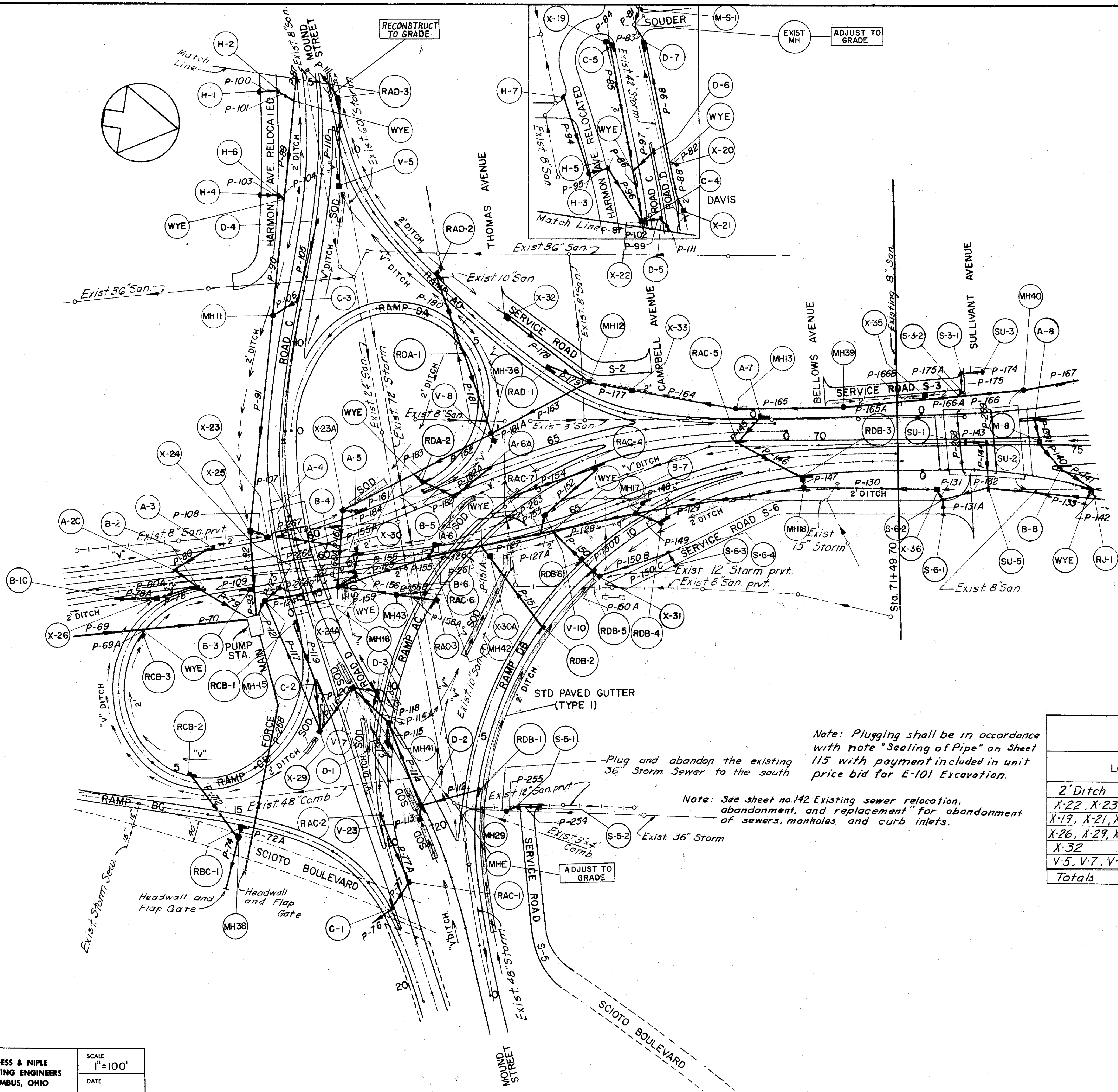


Note: 42" line south from sta. 0-65 (M-1) to the Renick Run storm sewer is to be located within the median of Project. The actual location to be determined by the Engineer. See Sheet Nos. 139, 140 for details of connection to Renick Run storm sewer. See Sheet No. 123 for profile.

Note: See Sheet No. 141 "Existing sewer relocation, abandonment, and replacement" for abandonment of sewers, manholes, and curb inlets.

ITEM I-14 PAVED GUTTERS					
LOCATION	STATION	STATION	TYPE I L.F.	TYPE I (MOD) L.F.	TYPE A L.F.
2' Ditch East Road "B"	24+00	25+50	150		
M-1, X-3, X-4, X-4A, X-5, X-5A			110		
X-7, X-8, X-9, X-11, X-15, X-17			110		
M-2, M-3, M-4, M-5, X-1, X-2				70	
X-6, X-6A, X-7A, X-10, X-12				90	
X-13, X-14, X-16				60	
M-6					9
Totals			370	220	9

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
DRAINAGE PLANS



ITEM L-10
SODDING

LOCATION	STATION	STATION	S.Y.
2' Ditch North Ramp CB	2+66	2+27.67	26
2' Ditch North Ramp CB	1+66	2+04.33	26
"V" Ditch South Road D	20+50	19+81.40	46
2' Ditch East Road B	35' Upstream from Junction 15' S. of inlet	60+38.33	26
2' Ditch Right Ramp DA	100' Upstream	X-23A	67
"V" Ditch North Road D	50' Upstream from Junction 20' E. of inlet	V-5	26
"V" Ditch North Ramp AC	250' Upstream	X-30A	167
"V" Ditch West Road B	106' Upstream from Sta. 62+30	62+30	71
"V" Ditch South Road D	16+46	17+02.40	37
"V" Ditch South Road D	17+50	18+00	33
"V" Ditch South Road D	19+19	19+58.60	27
* Retaining Wall "B"	15+15	16+46	29
Totals			581

L-9, fertilizer (for Sodding) = 0.05 ton

* See Retaining Wall Detail

ITEM I-14
PAVED GUTTERS

LOCATION	STATION	STATION	TYPE I L.F.	TYPE I (Mod) L.F.	TYPE A L.F.
2' Ditch North Ramp DB	1+20	9+00.33	780		
X-22, X-23A, X-25, X-33			70		
X-19, X-21, X-23, X-24, X-24A				60	
X-26, X-29, X-30, X-30A, X-31				100	
X-32				20	
V-5, V-7, V-8, V-10, V-23					88
Totals			850	180	88

ITEM I-8 MANHOLES ADJUSTED TO GRADE	ITEM I-8 MANHOLES RECONSTRUCTED TO GRADE
Each	Each
2	1

Note: Plugging shall be in accordance with note "Sealing of Pipe" on Sheet 115 with payment included in unit price bid for E-101 Excavation.

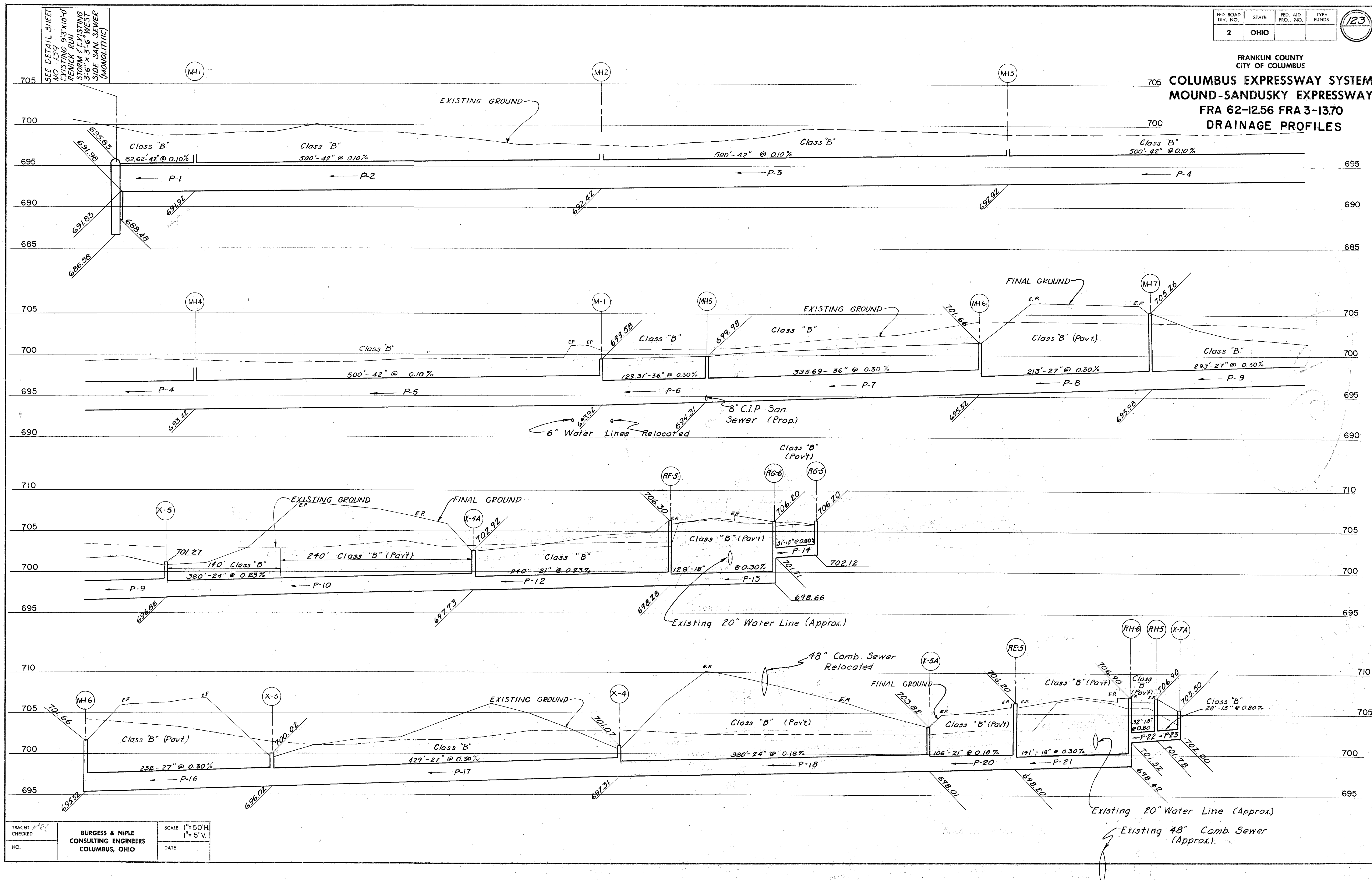
Plug and abandon the existing 36" Storm Sewer to the south

Note: See sheet no. 142 Existing sewer relocation, abandonment, and replacement for abandonment of sewers, manholes and curb inlets.

Exist 36" Storm

ADJUST TO GRADE

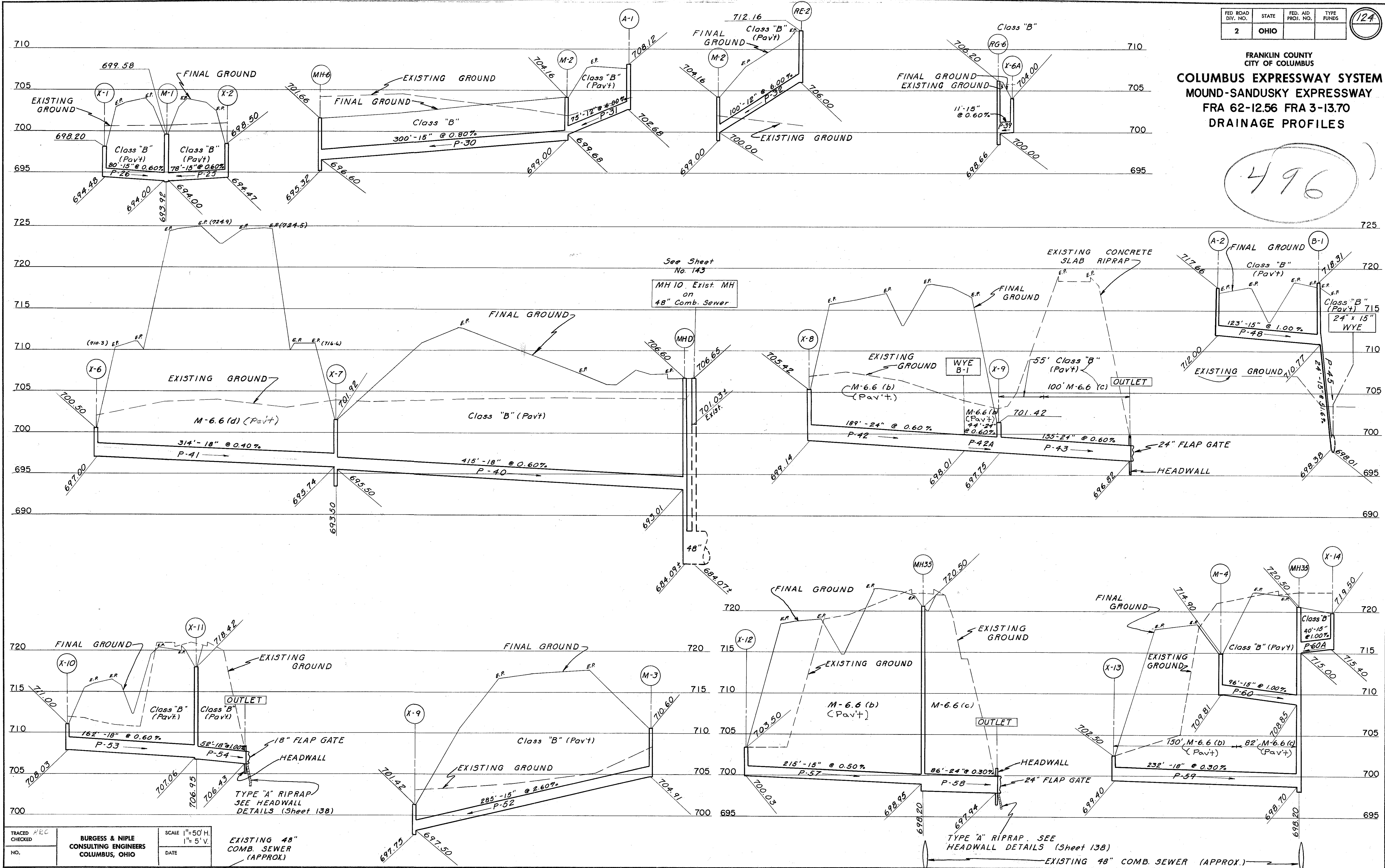
**COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE PROFILES**



FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE PROFILES

496



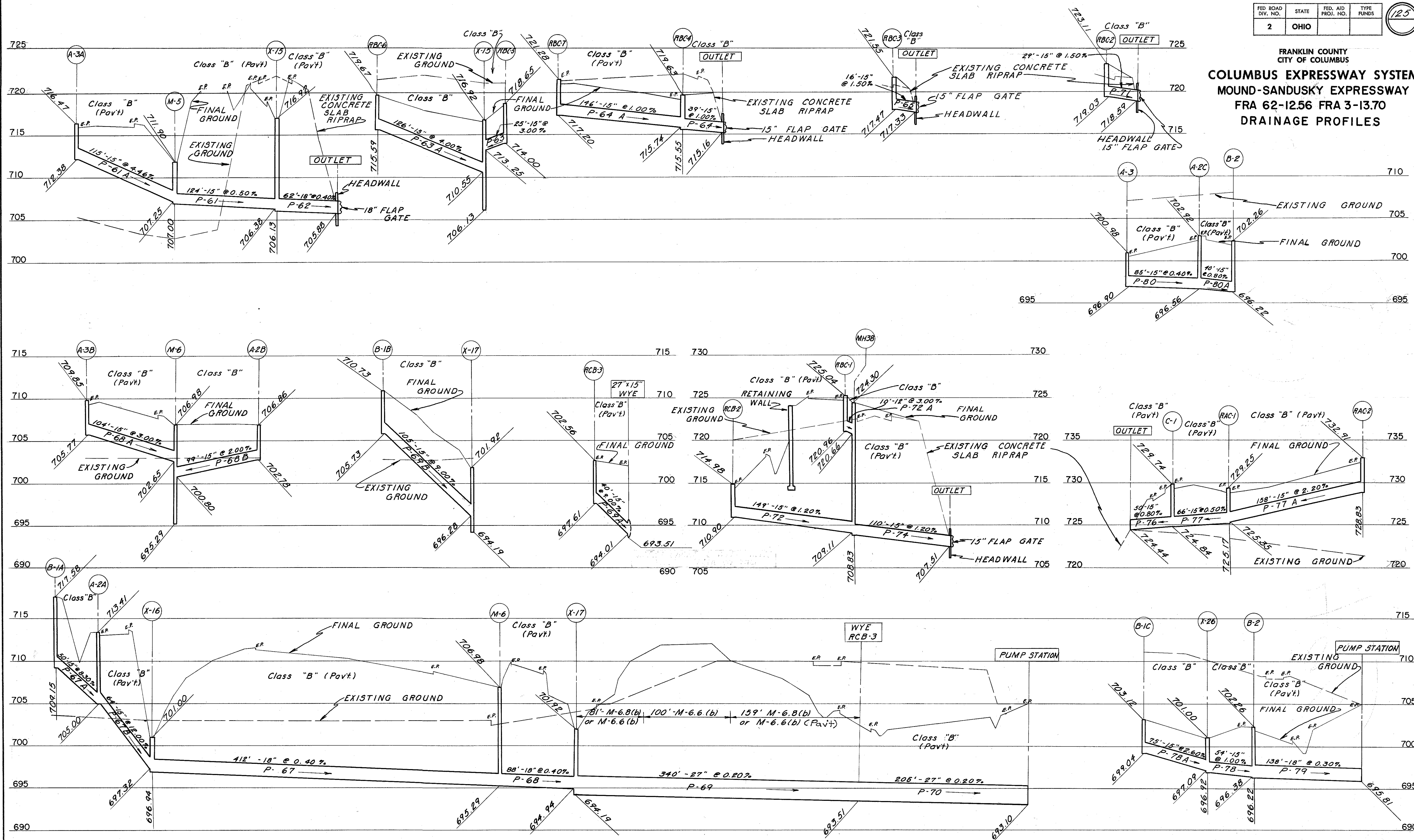
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM

MOUND-SANDUSKY EXPRESSWAY

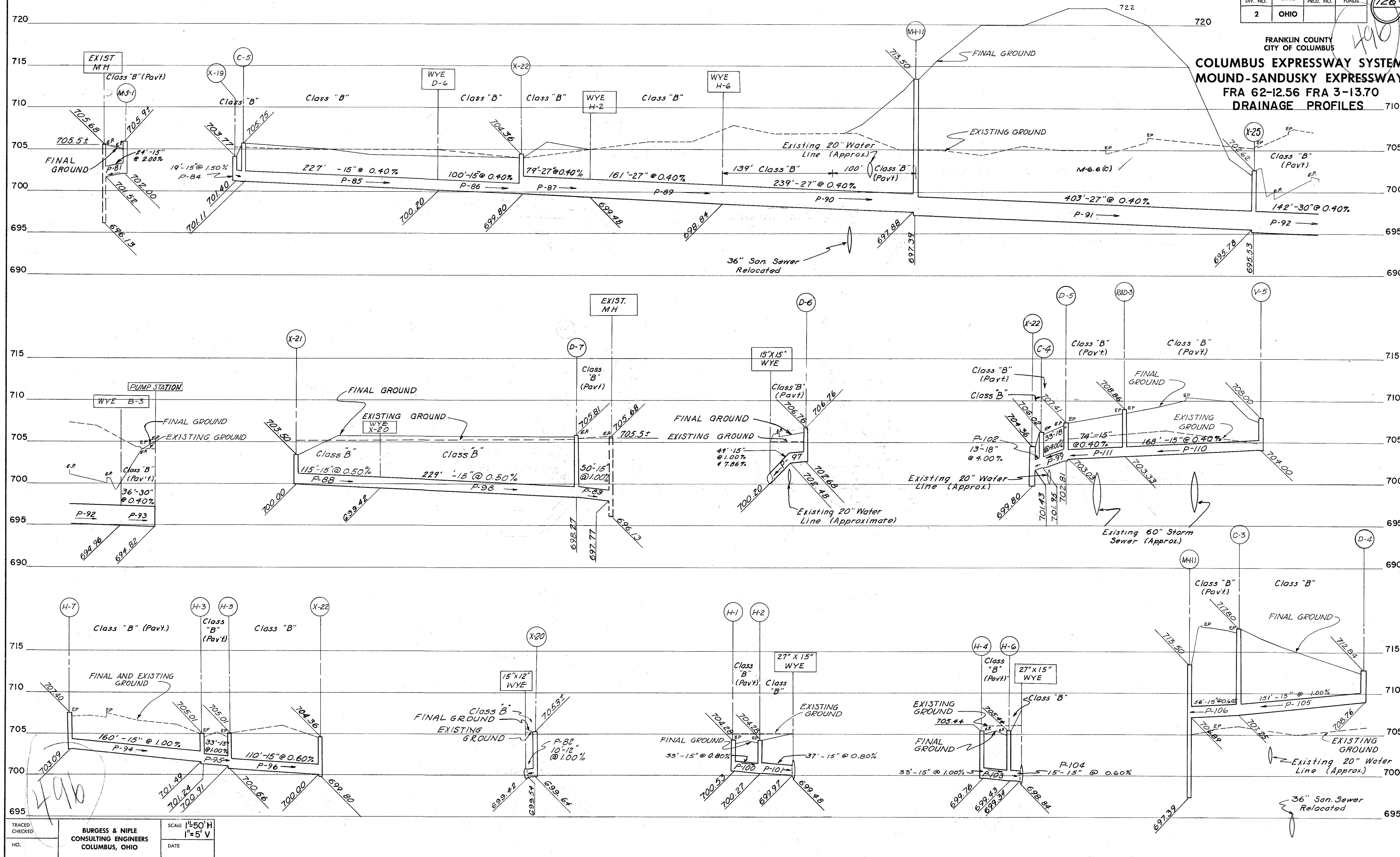
FRA 62-12.56 FRA 3-13.70

DRAINAGE PROFILES



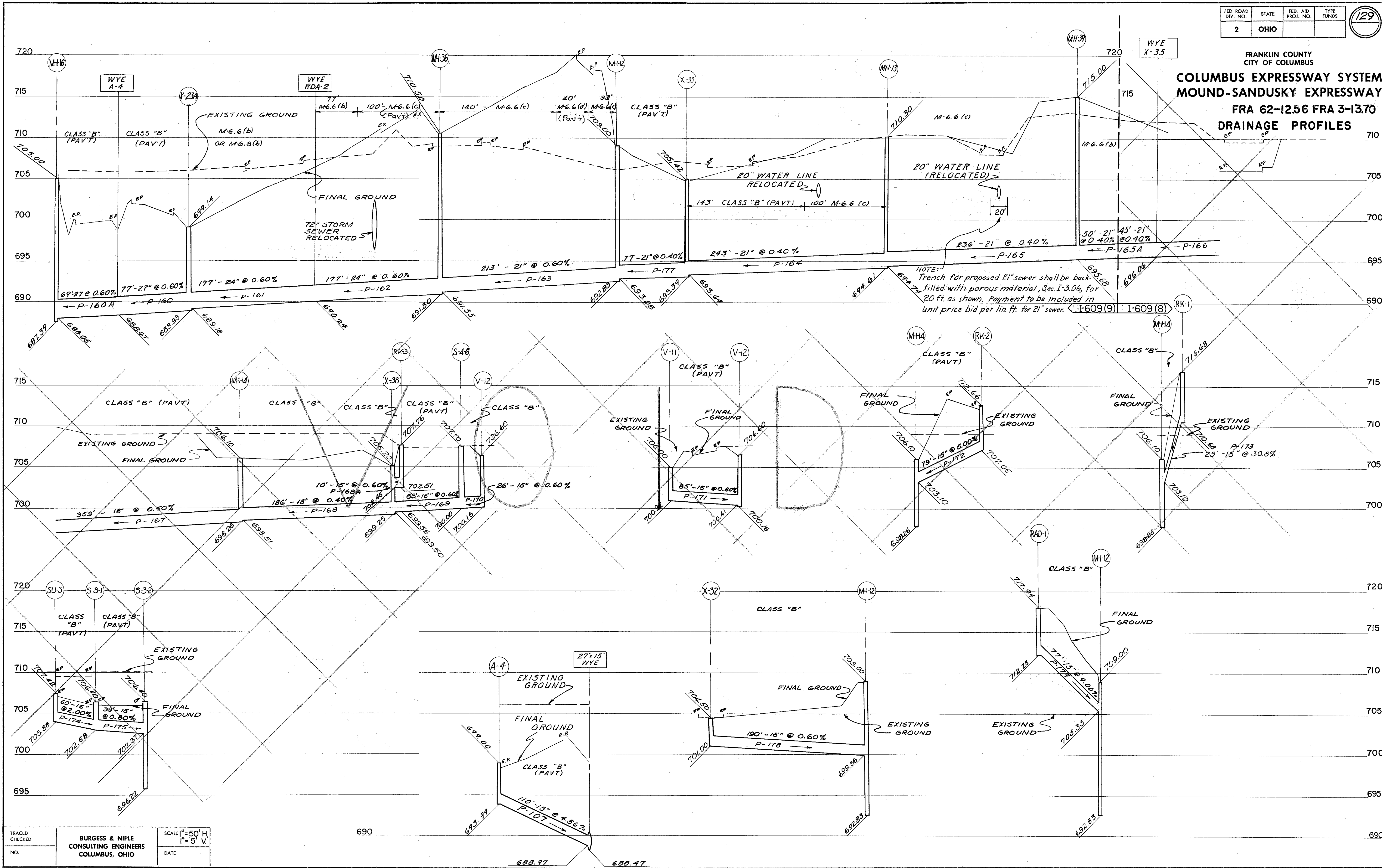
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE PROFILES



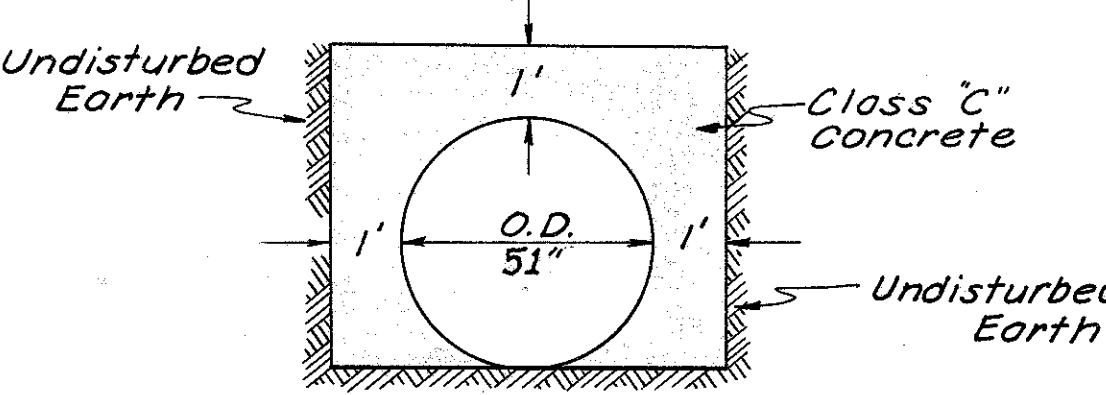
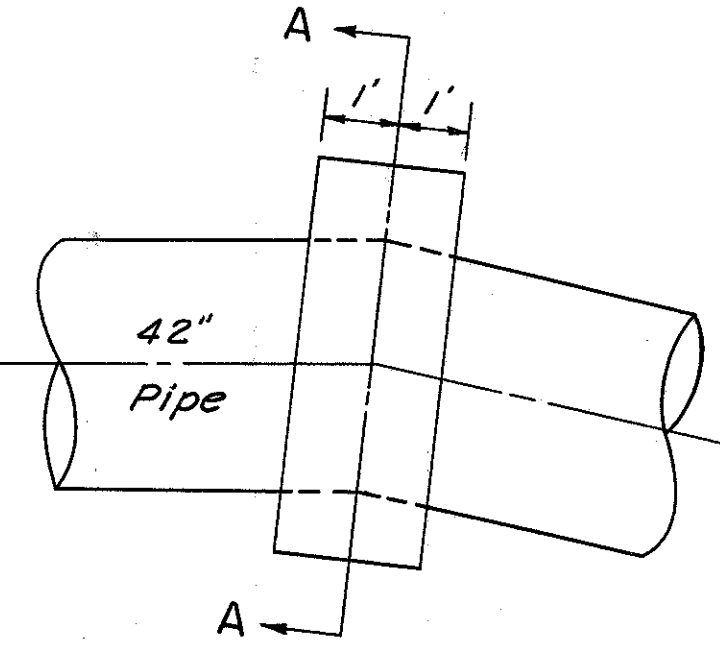
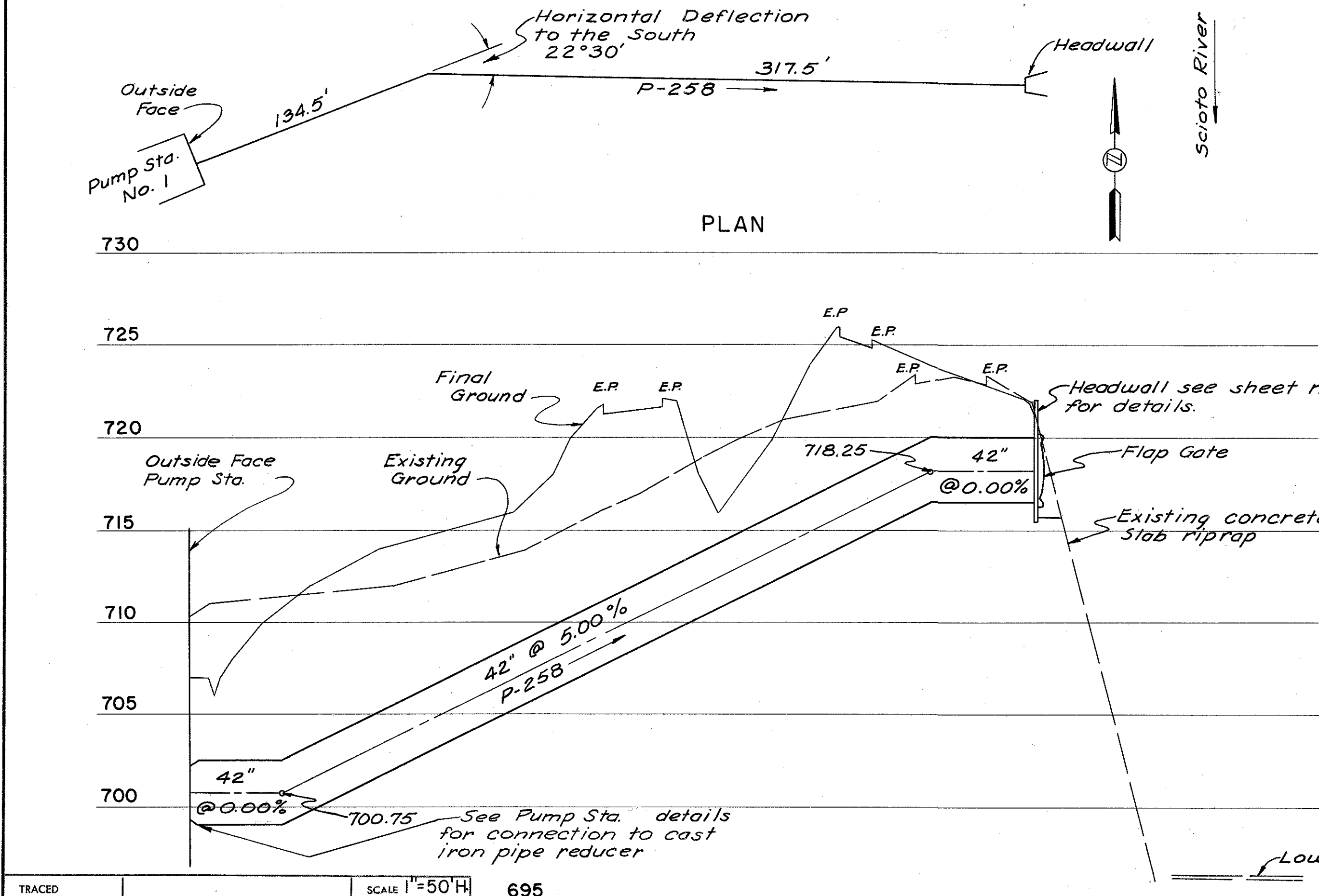
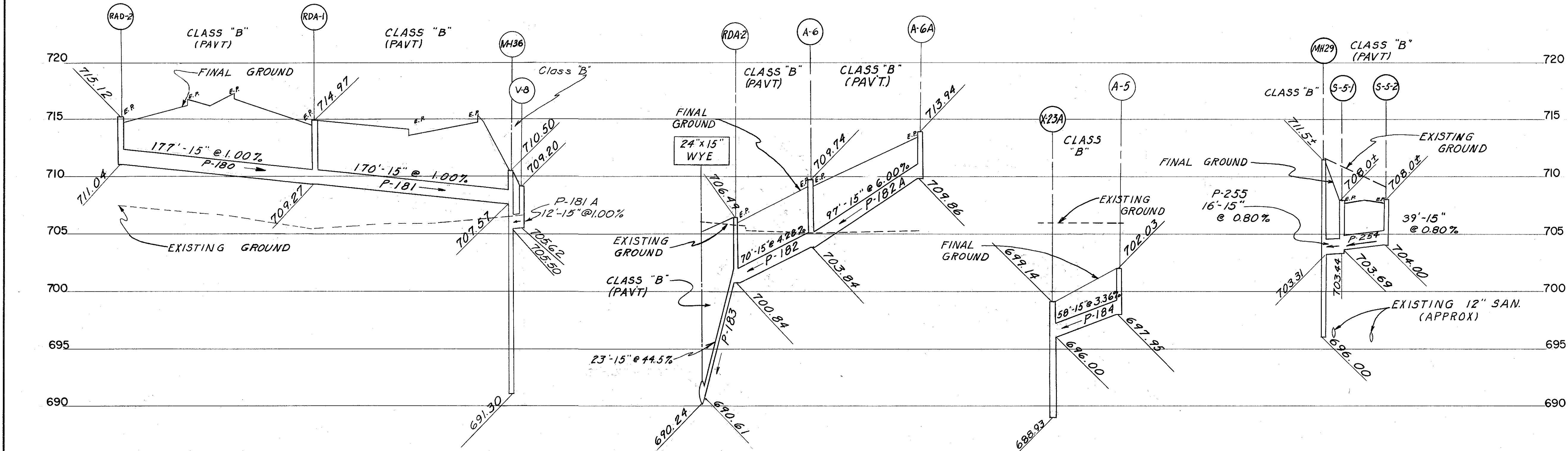
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE PROFILES



FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE PROFILES



PLAN

SECTION A-A

DETAIL OF BLOCKING
AT 22°30' BEND
NOT TO SCALE

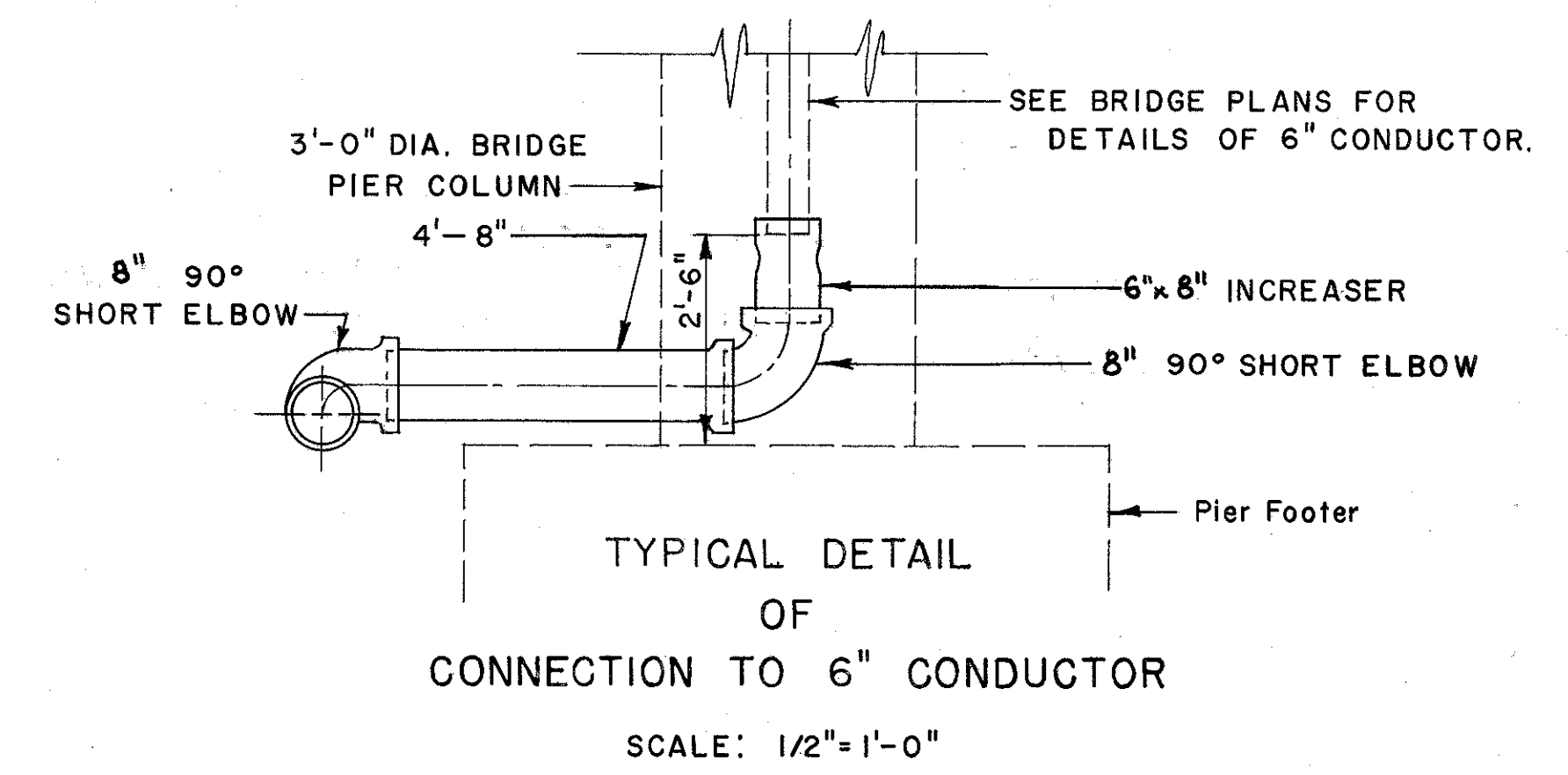
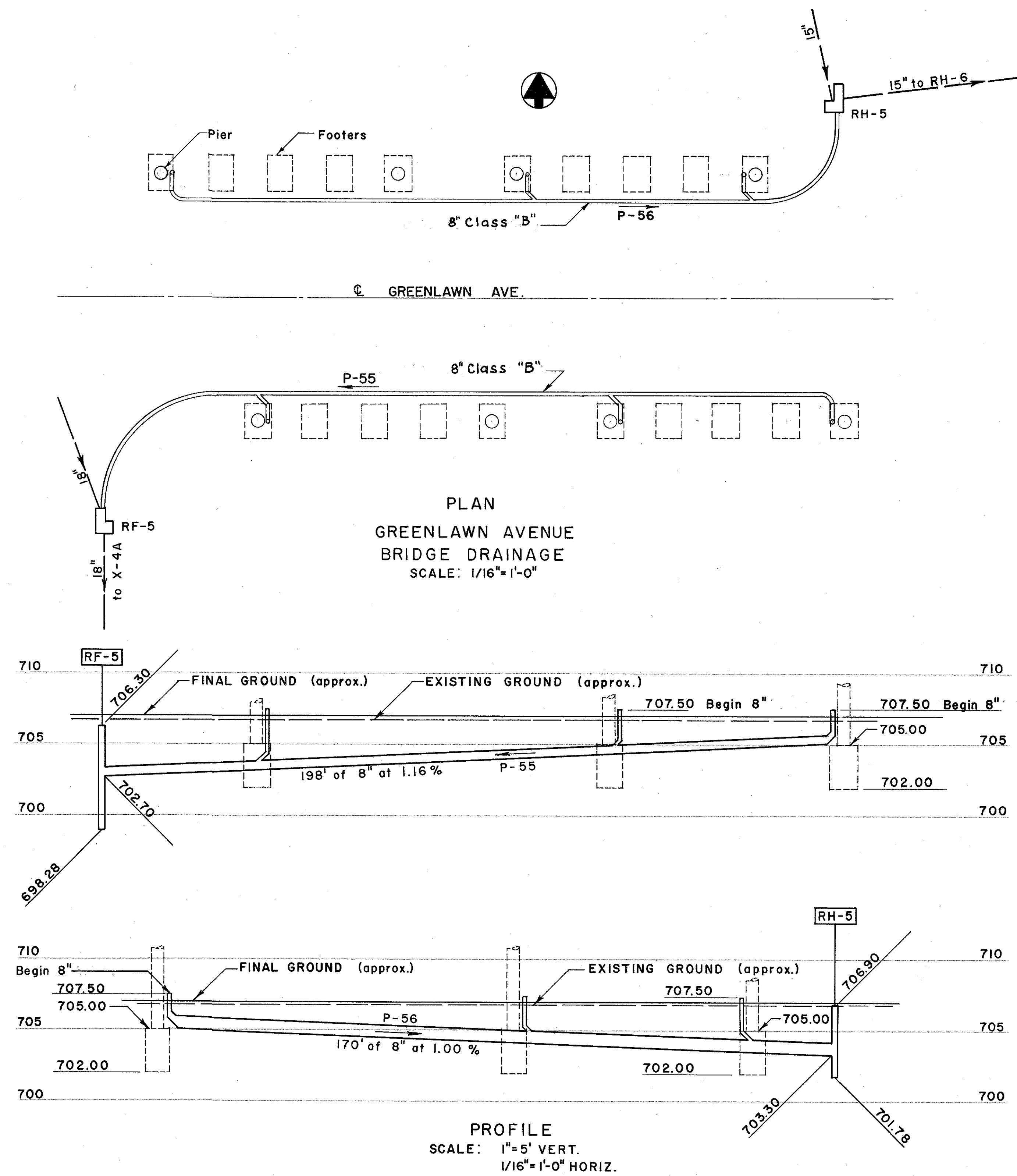
DESIGN DATA
Type of pipe : Reinforced concrete
water pipe - noncylinder
type, not prestressed.
Spec. AWWA C302-53.
Design Head : 94 Feet.

PIPE NO.	ITEM I-2	
	42" Pipe for force main (AWWA C302-53)	
P-258	L.F. 452	

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
BRIDGE DRAINS

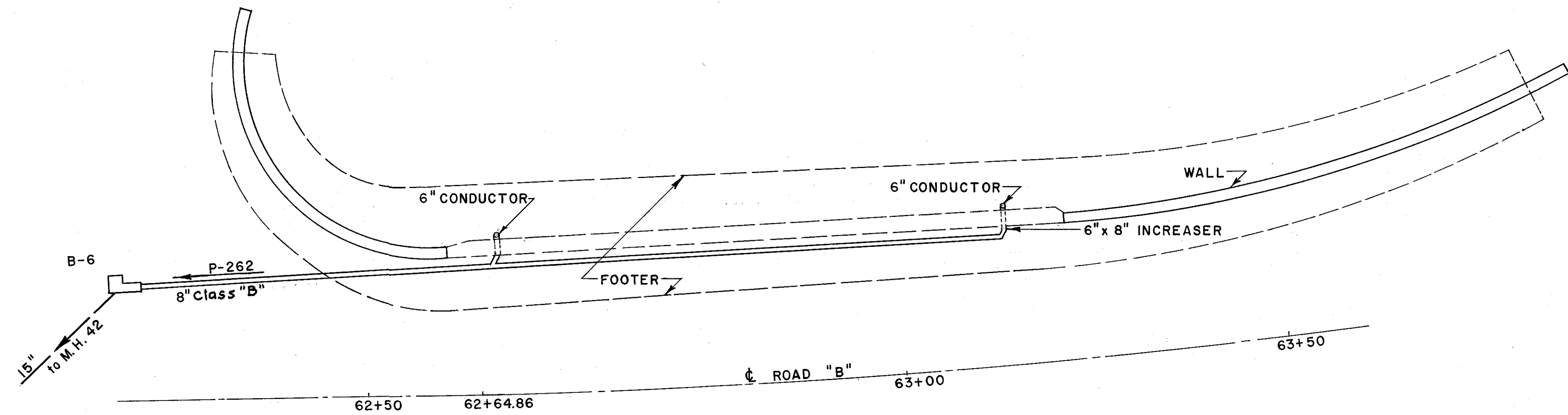


TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE AS SHOWN
NO.		DATE

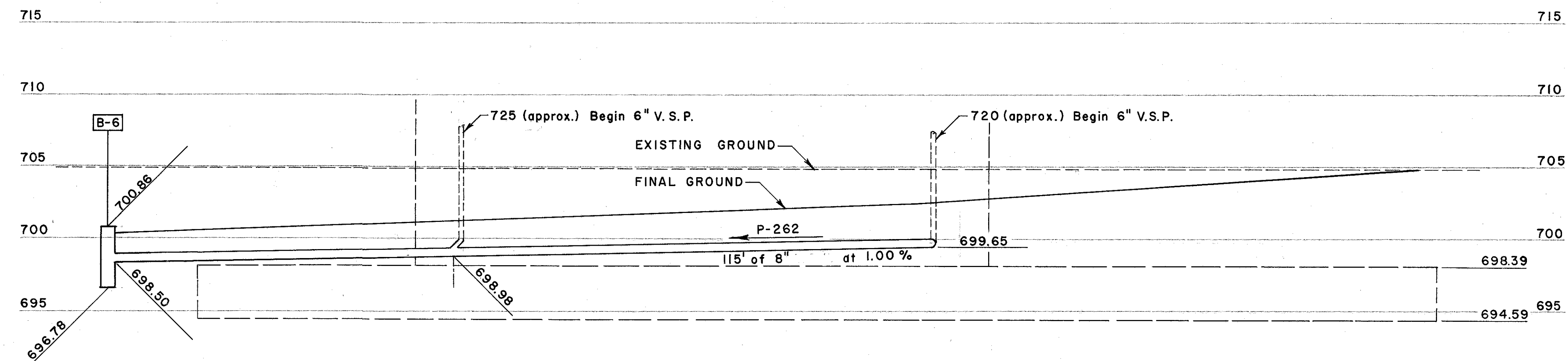
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

132

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
BRIDGE DRAINS



PLAN
RAMP AC OVER ROAD B
BRIDGE DRAINAGE
Scale 1/10" = 1'-0"



PROFILE
Scale: Horizontal 1/10" = 1'
Vertical 1" = 5'

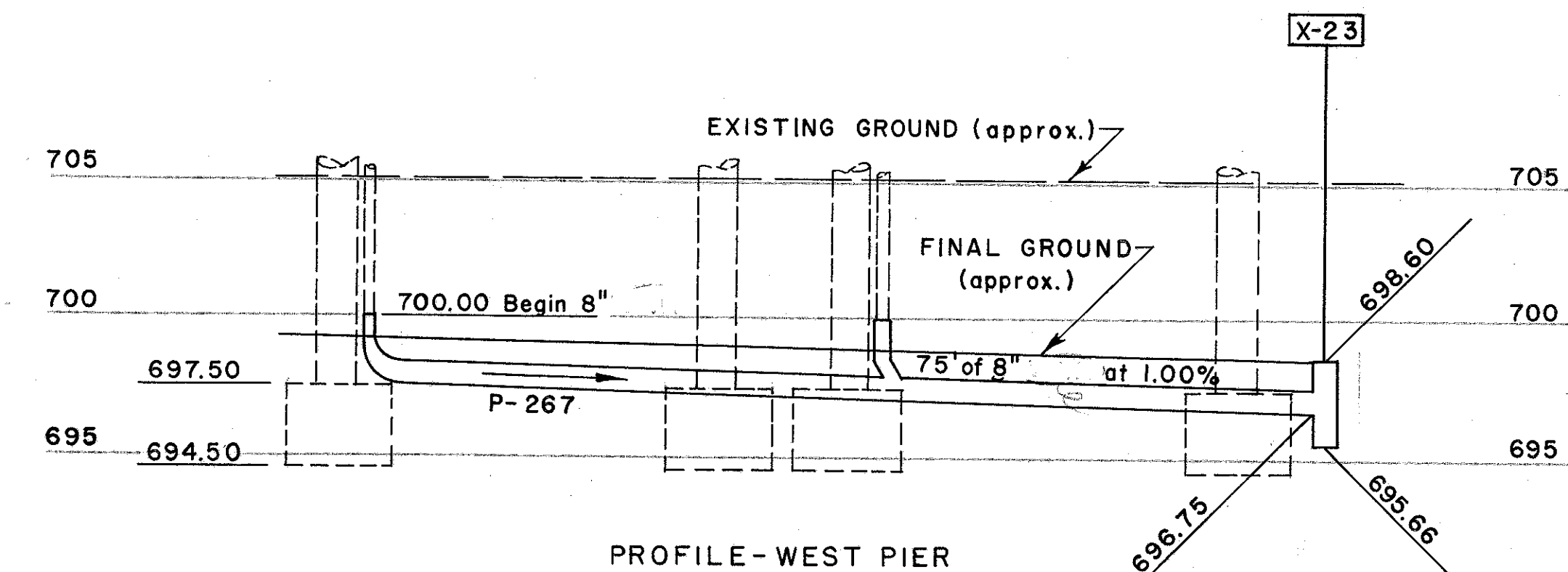
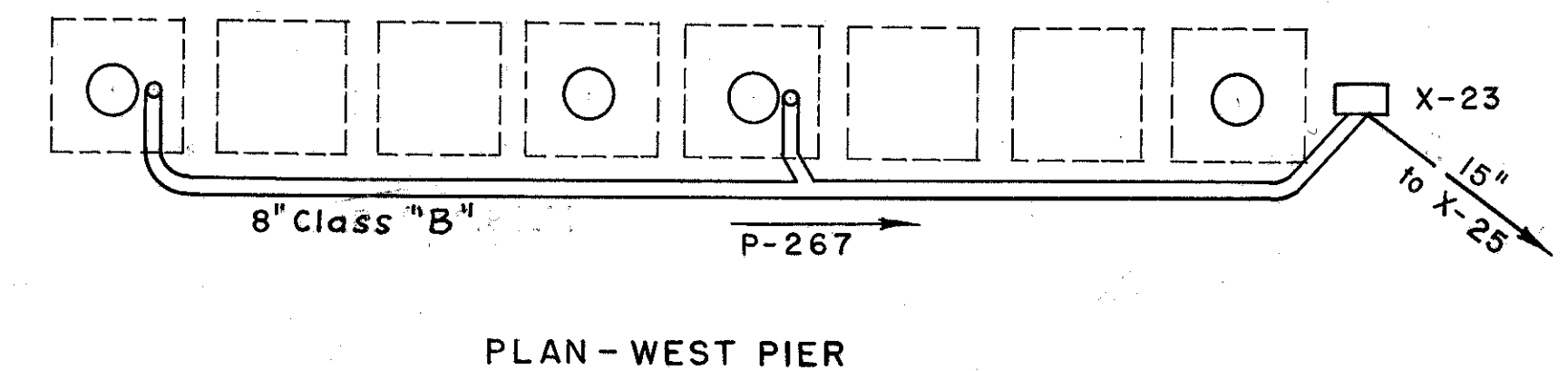
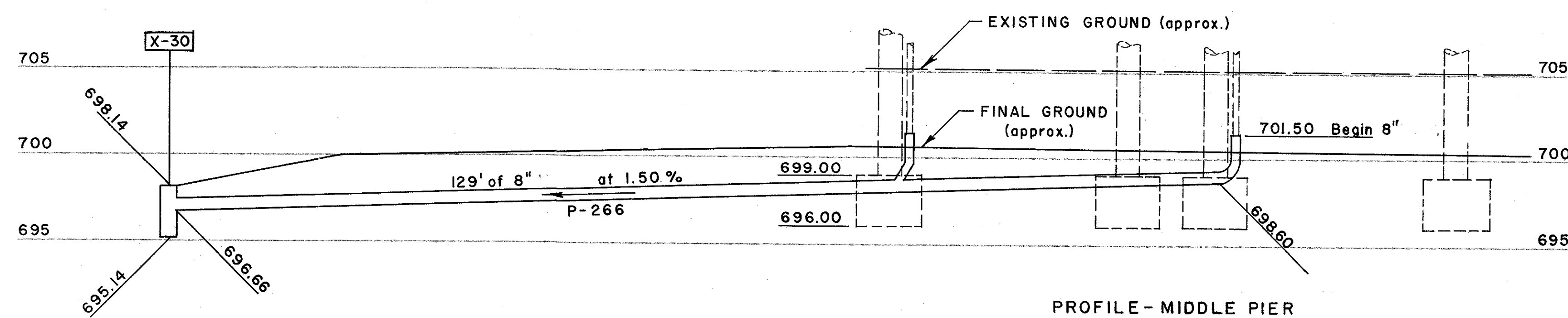
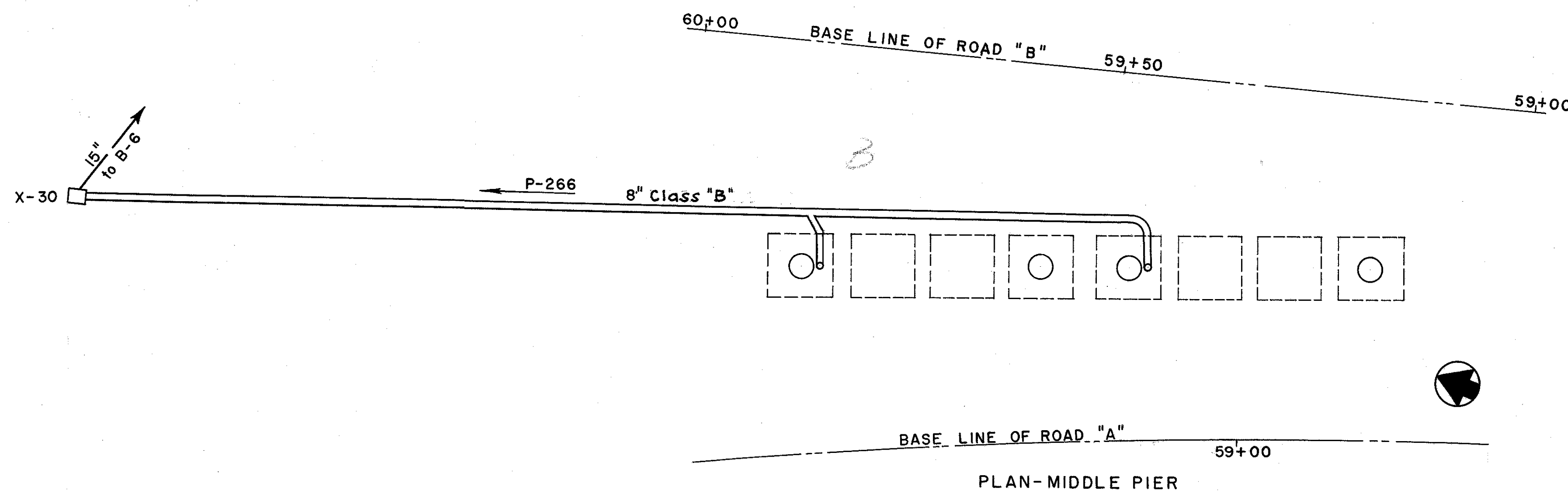
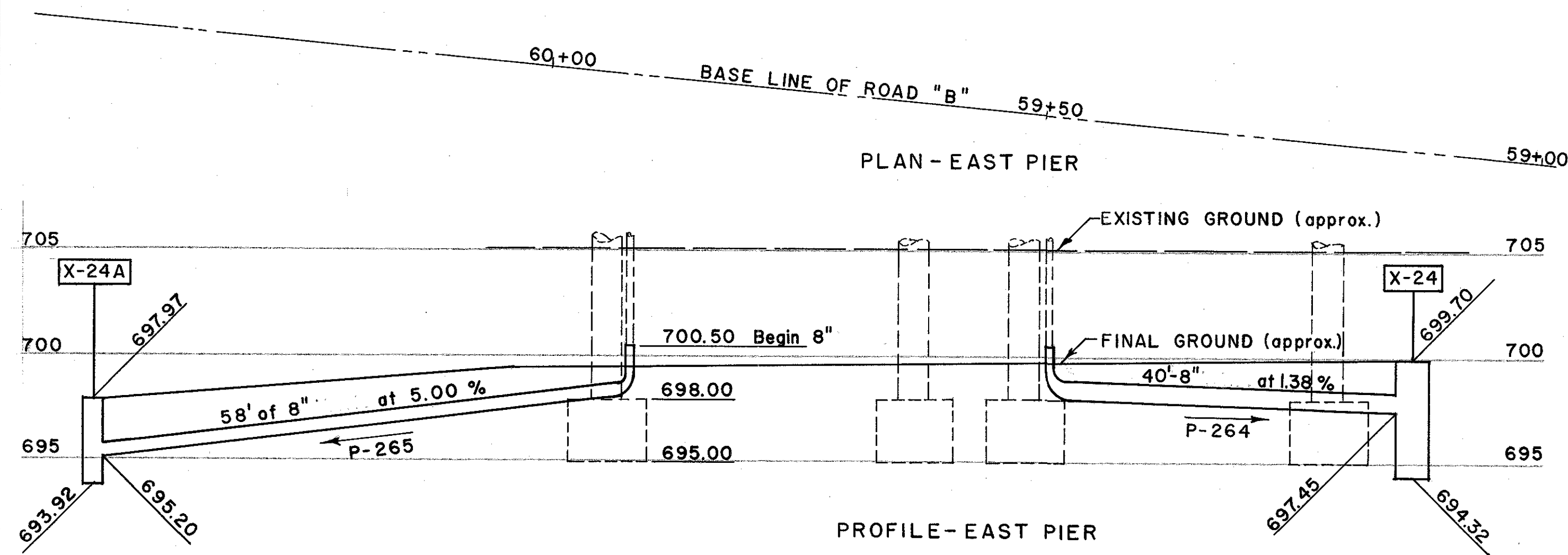
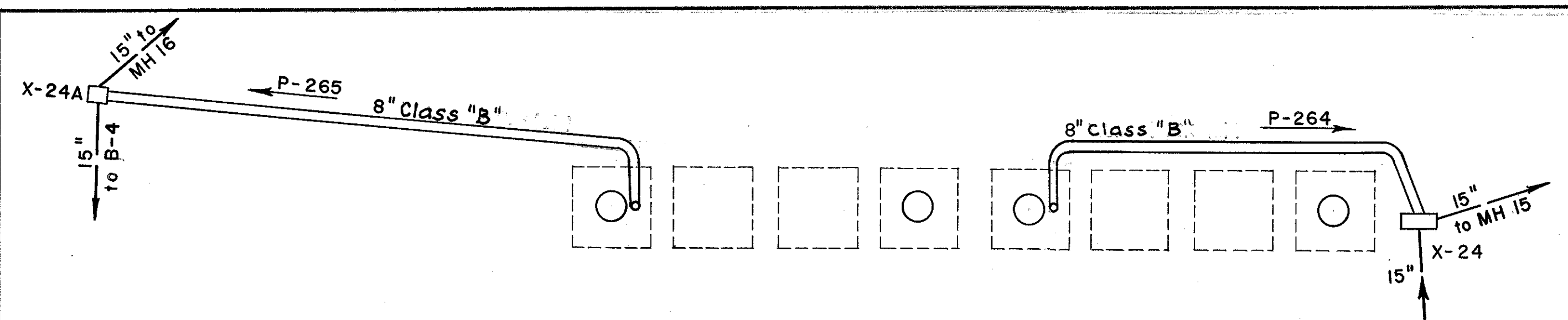
TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE AS SHOWN
NO.		DATE

Revised Shd. Road 9/6/59

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
BRIDGE DRAINS



ROADS C&D OVER A&B
BRIDGE DRAINAGE

SCALES
Plans:- 3/32" = 1'-0"
Profiles:- Horiz. 3/32" = 1'
Vertical 1" = 5'

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE AS SHOWN
NO.		DATE

Revised Sta. 62.12.56

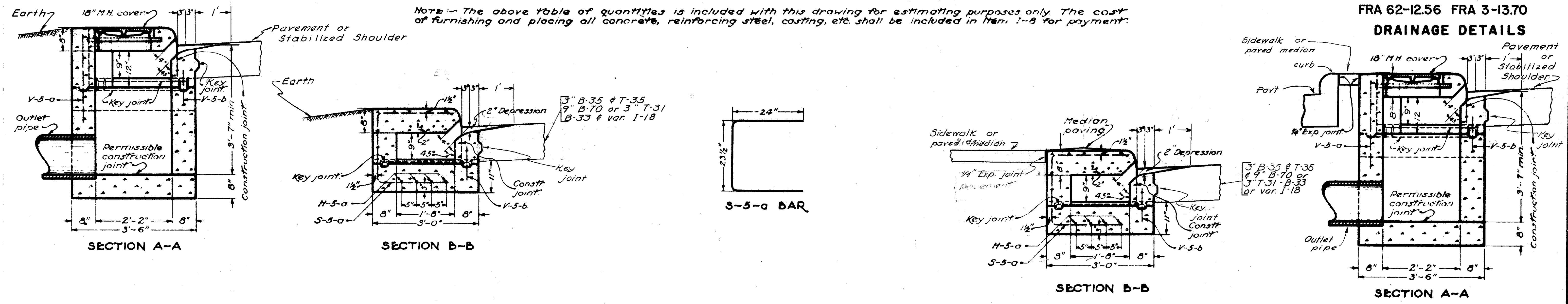
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

CONCRETE AND REINFORCING STEEL QUANTITIES												
LENGTH FT.	CONCRETE CU. YDS.	S-5-a		S-5-b		S-5-c		S-5-d		H-5-a		WEIGHT LBS.
		NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.	
6	2.3	5	5'-11 1/4"	4	2'-7"	3	4'-4"	2	7'-0"	4	3'-8"	101
10	3.0	13	5'-11 1/4"	4	2'-7"	3	8'-4"	2	11'-0"	4	7'-8"	193
14	3.7	21	5'-11 1/4"	4	2'-7"	3	12'-4"	2	15'-0"	4	11'-8"	284
20	4.9	33	5'-11 1/4"	4	2'-7"	3	18'-4"	2	21'-0"	4	17'-8"	421

Note: The above table of quantities is included with this drawing for estimating purposes only. The cost of furnishing and placing all concrete, reinforcing steel, casting, etc. shall be included in Item 1-8 for payment.

DRAINAGE DETAILS



NOTES

CASTINGS shall be of cast iron in accordance with Material Details. The design shall be essentially the same and equally as strong as those shown hereon and shall be given one coat of asphaltum paint as per specifications.

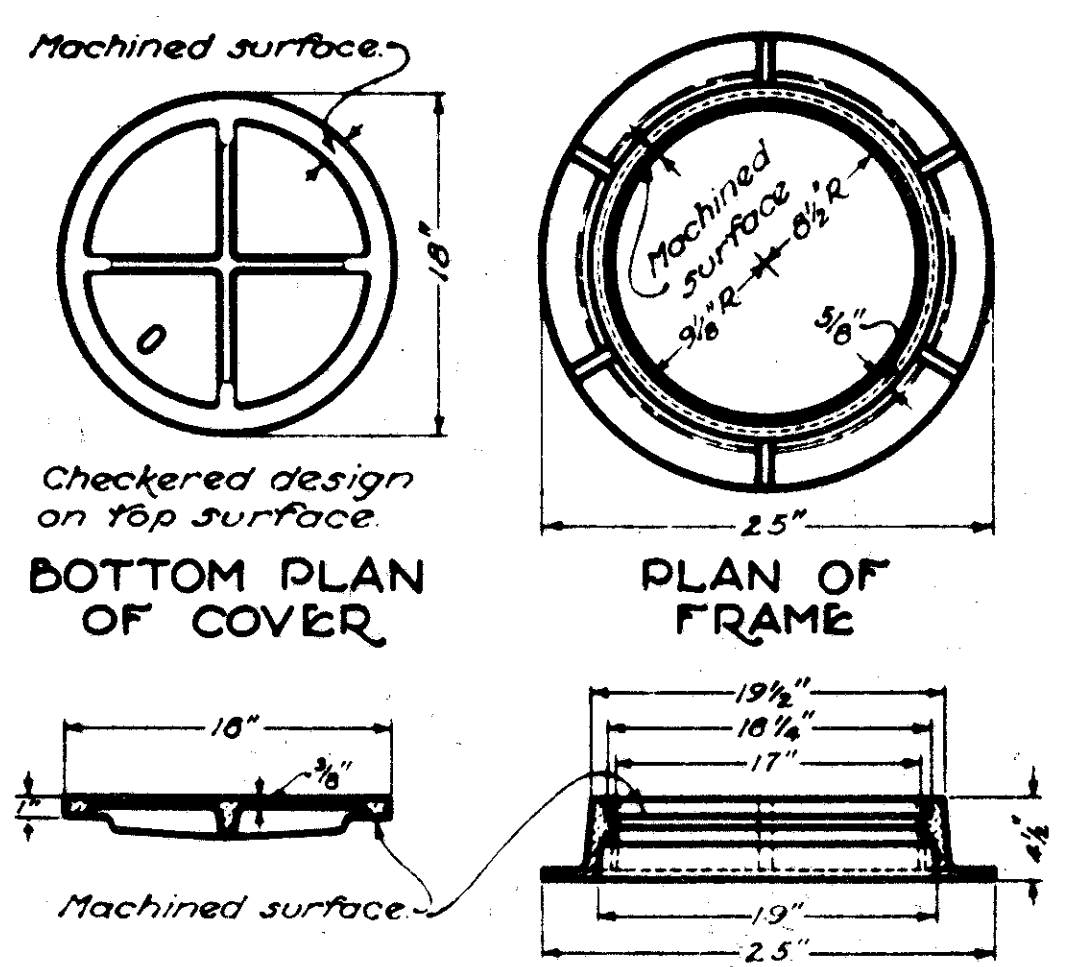
Bearing areas of frame and cover shall be so fitted and finished as to provide a firm and even seat for the entire cover in the frame. No projections shall exist on bearing areas of either casting and the cover shall seat in its frame without rocking.

Minimum weight of frame and cover 130 lbs.

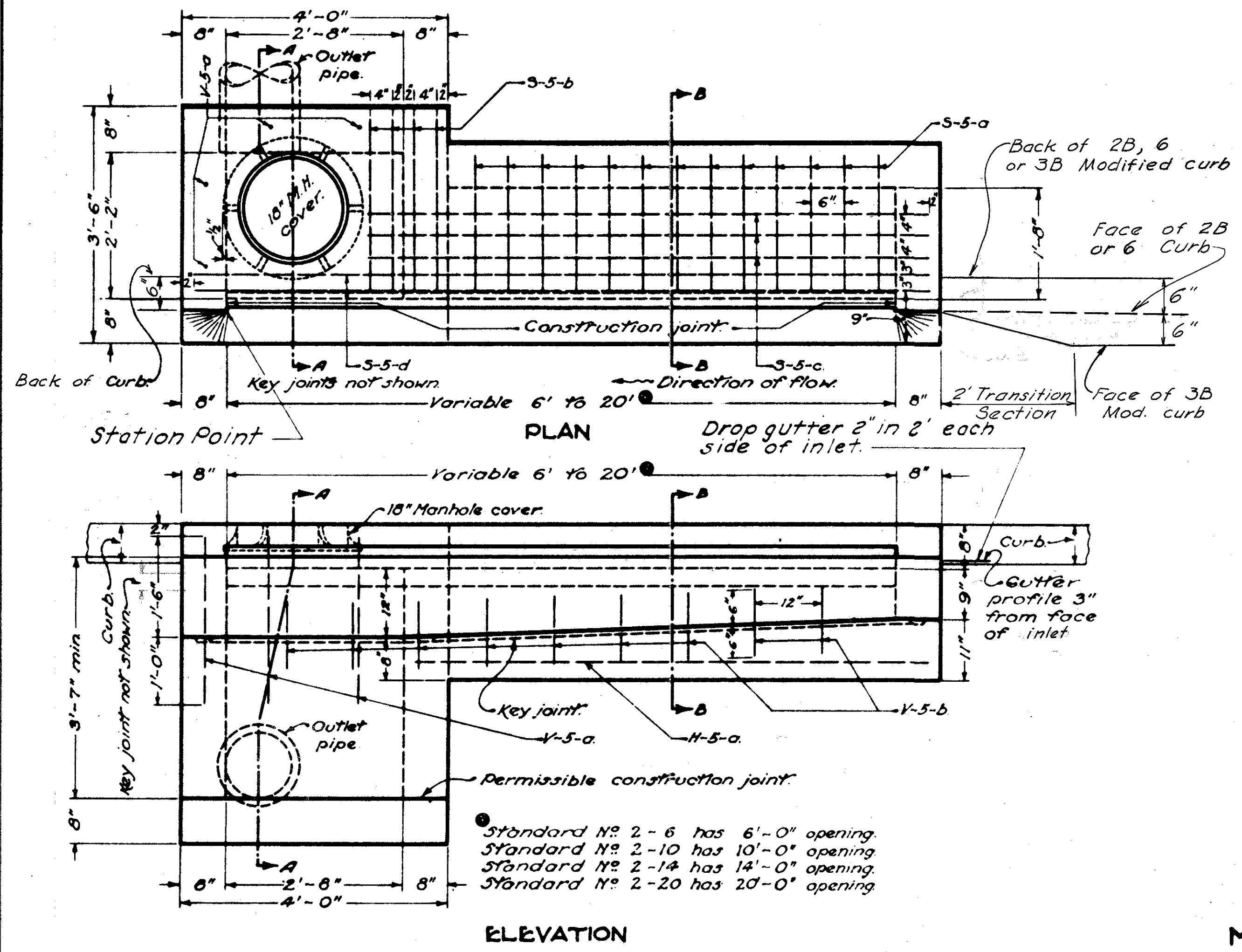
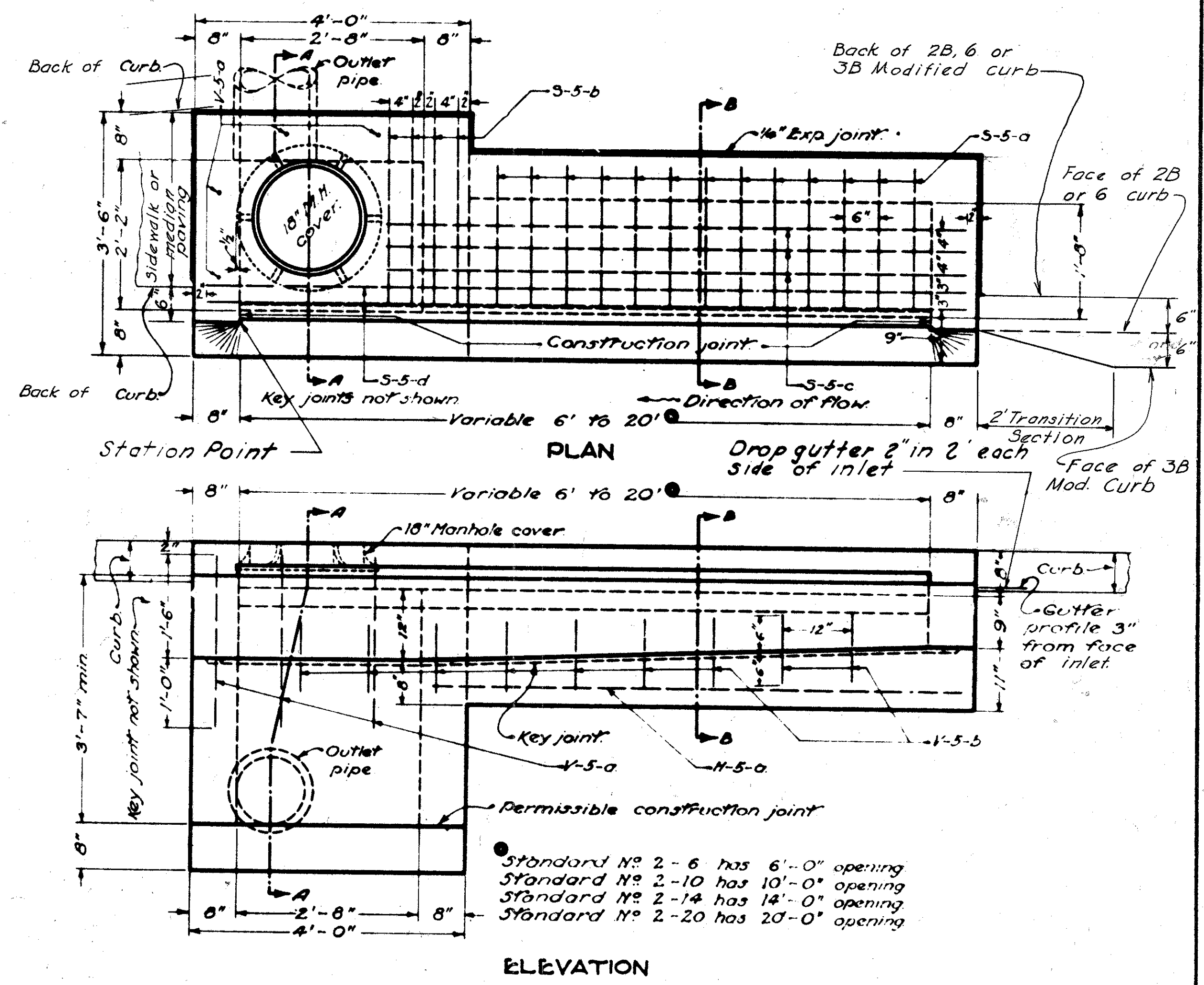
REINFORCING STEEL shall be 3/8" round bars in accordance with steel details shown hereon and conforming to Item 5.4 of the Construction Materials Specifications. Cost of furnishing and placing reinforcing steel shall be included in Item 1-8 for payment.

CONCRETE shall be class "C".

QUANTITIES of curb, pavement and median pavement within the limits of the inlet shall be deducted from the project quantities.



COVER SECTION FRAME SECTION
MANHOLE FRAME AND COVER



DETAIL FOR USE WITH EARTH

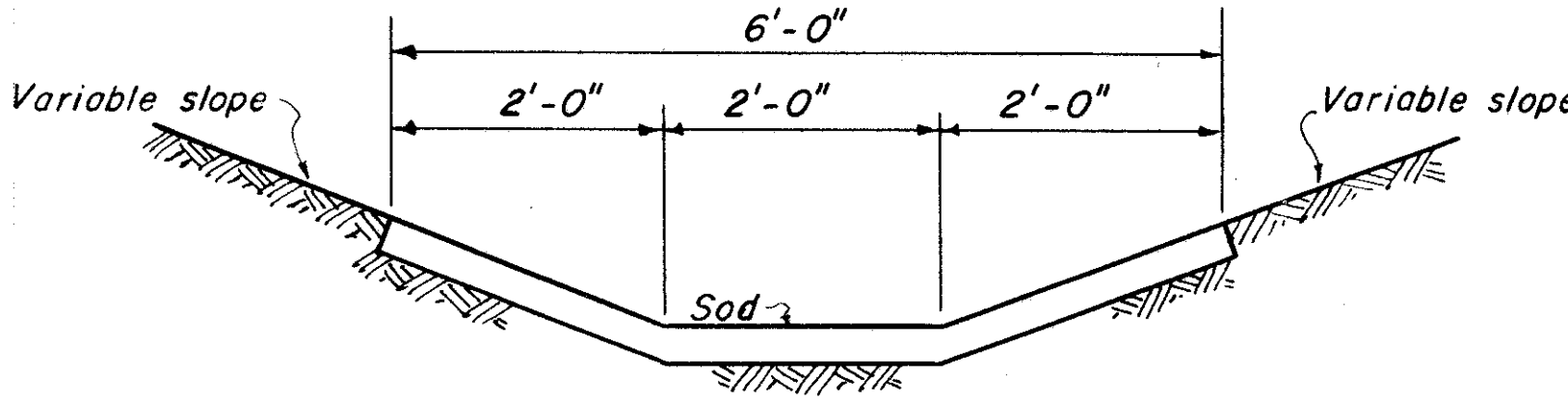
STANDARD NO. 2-6, 2-10, 2-14 AND 2-20 INLETS
MODIFIED

DETAIL FOR USE WITH
SIDEWALK OR PAVED MEDIAN.

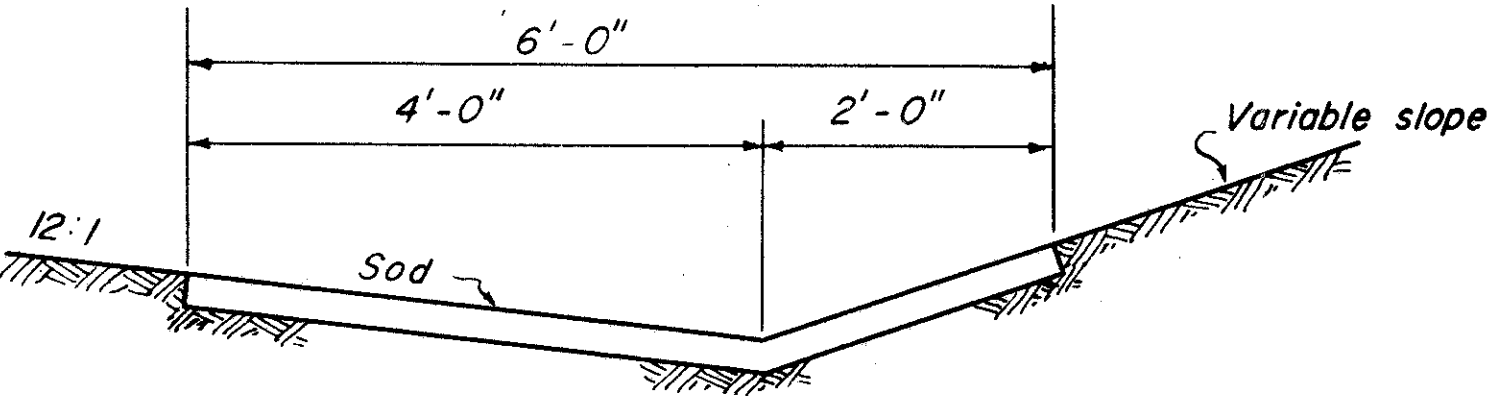
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE DETAILS

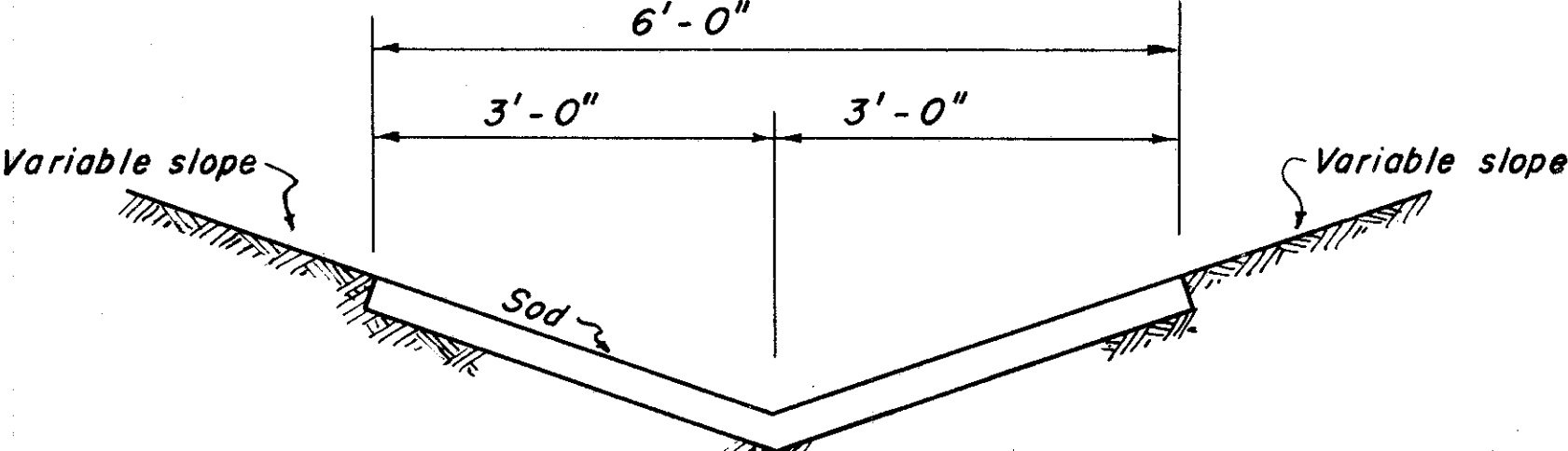
NOTE: When using a std. NO.2-2-A catch basin in a "V" ditch make a transition to a 2' bottom ditch prior to entering the paved gutter.



2' BOTTOM DITCH



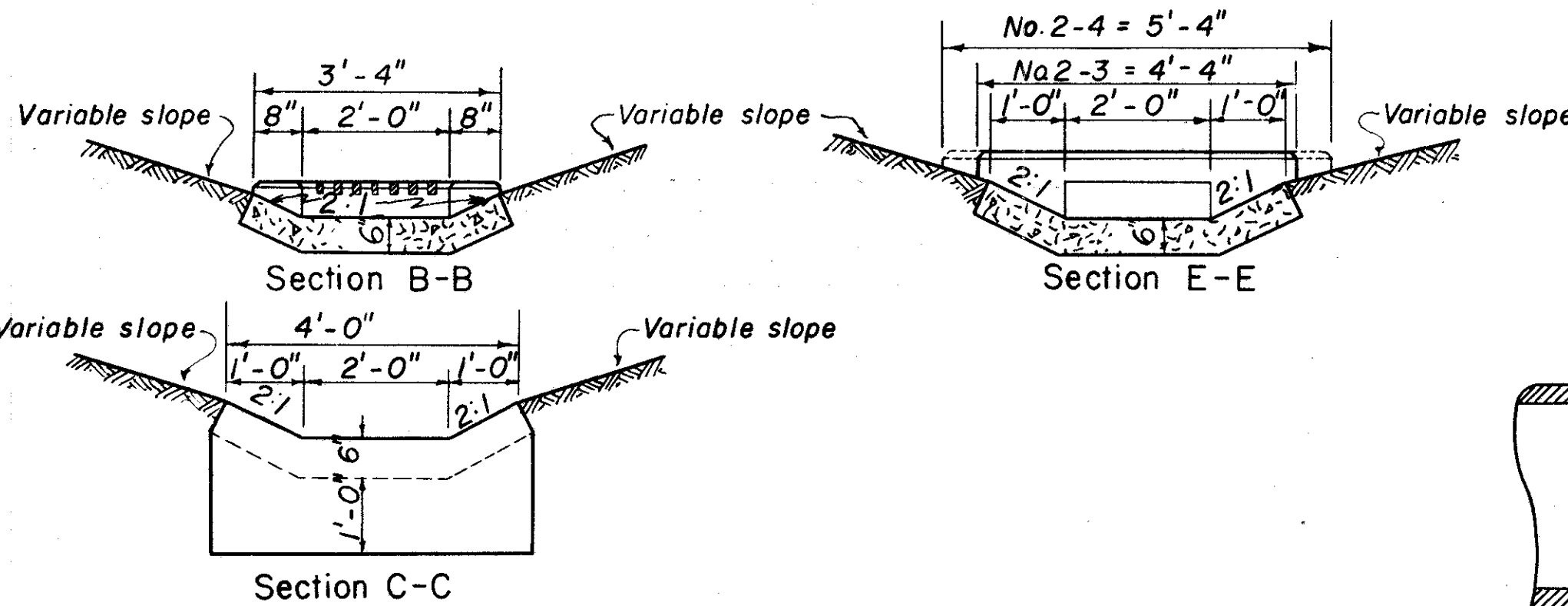
"V" DITCH BACK OF CURB



"V" DITCH

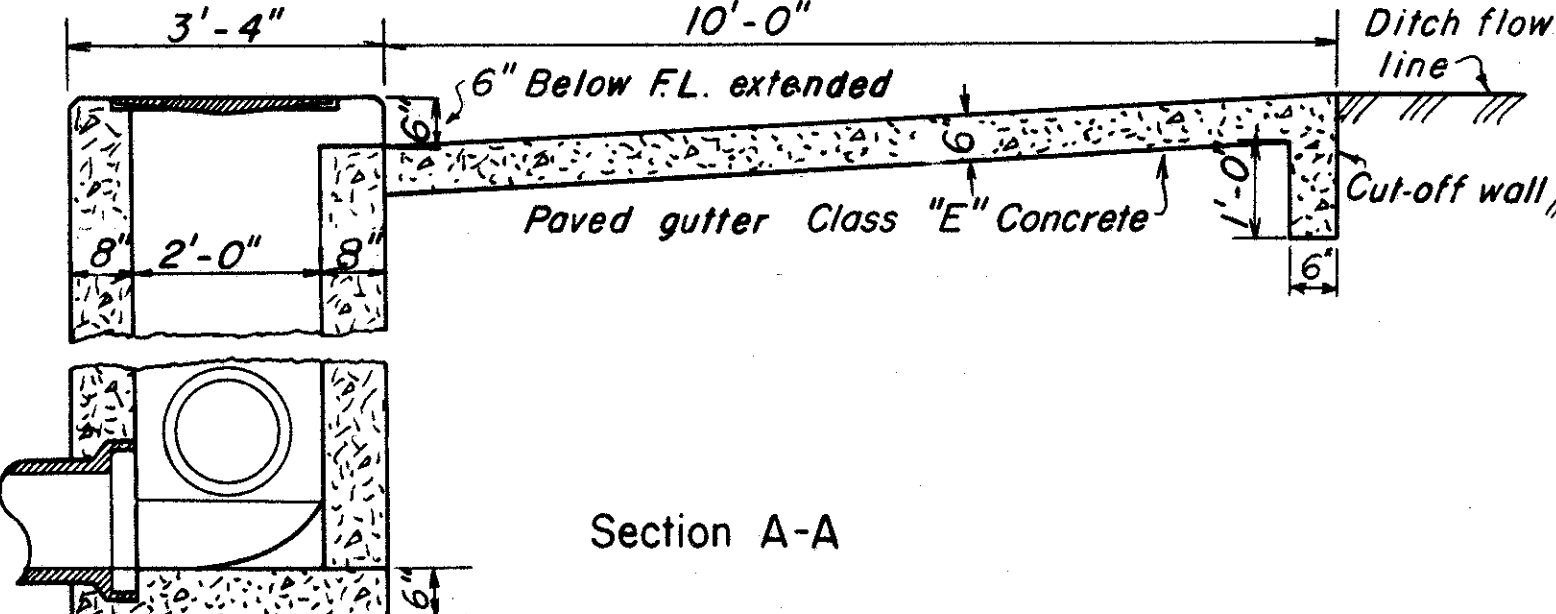
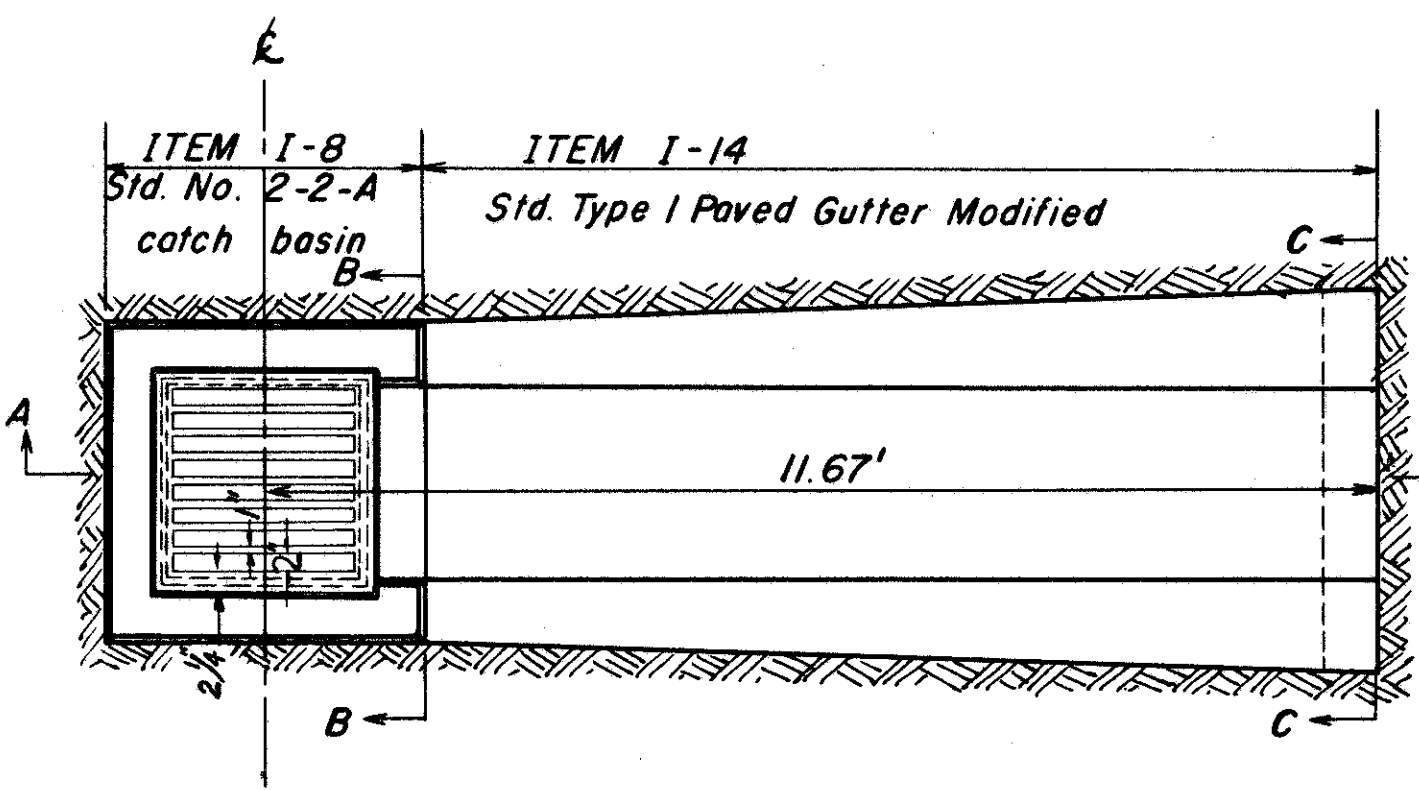
SOD DETAILS
SCALE: 3/4" = 1'-0"

Note: See Retaining Wall Details for Sod Details Behind Retaining Walls



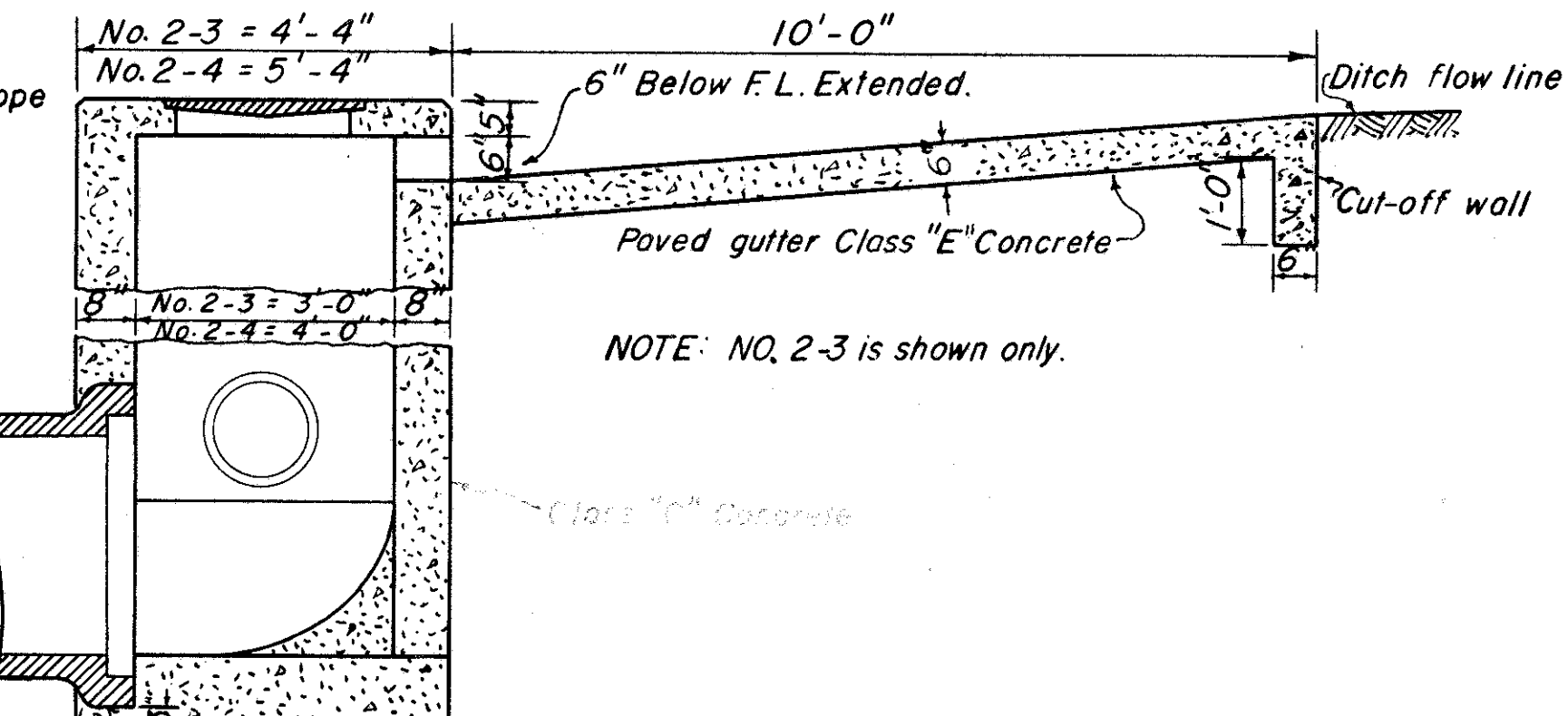
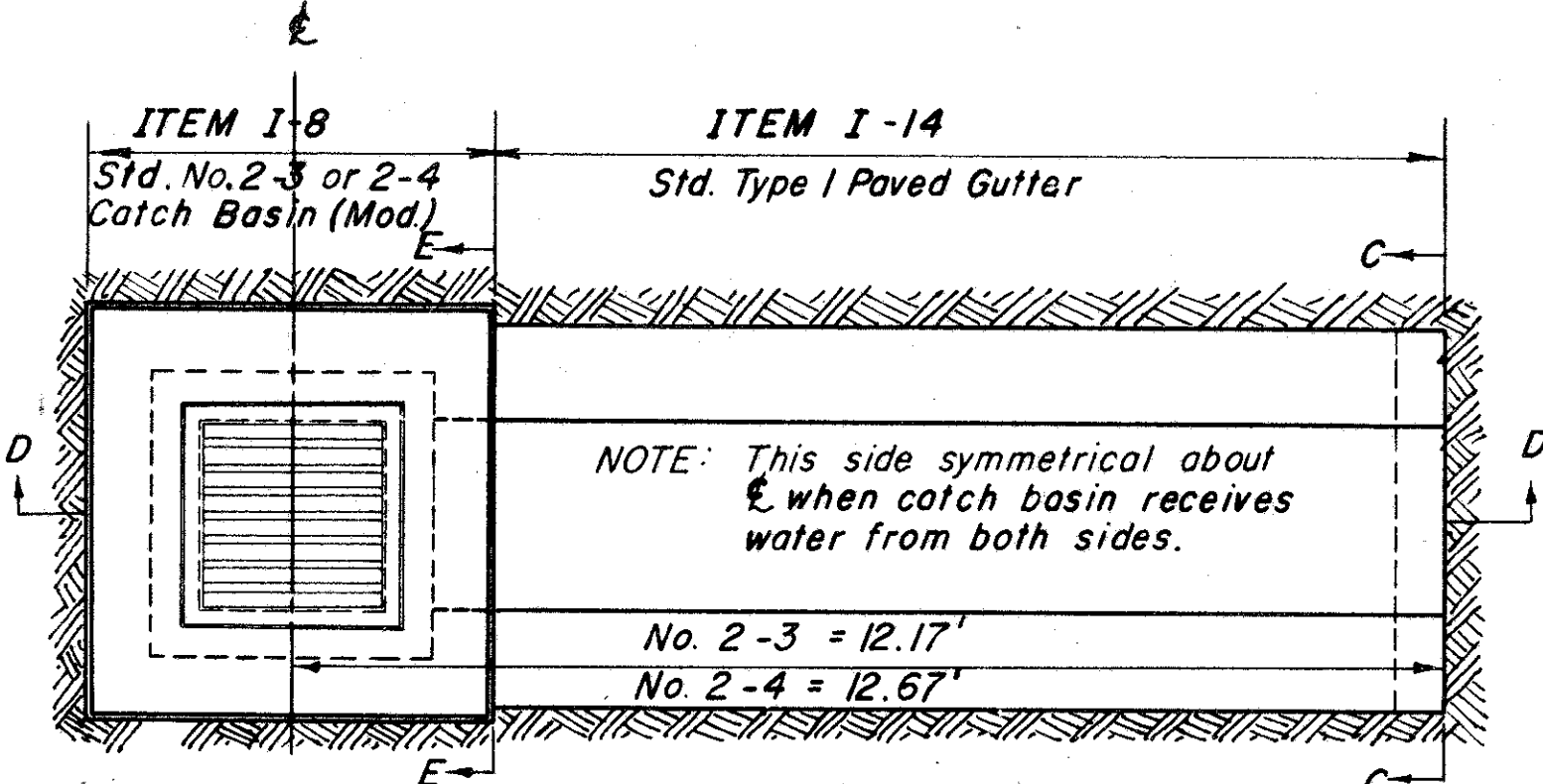
Section C-C

NOTE: This side symmetrical about ϵ when catch basin receives water from both sides.



Section A-A

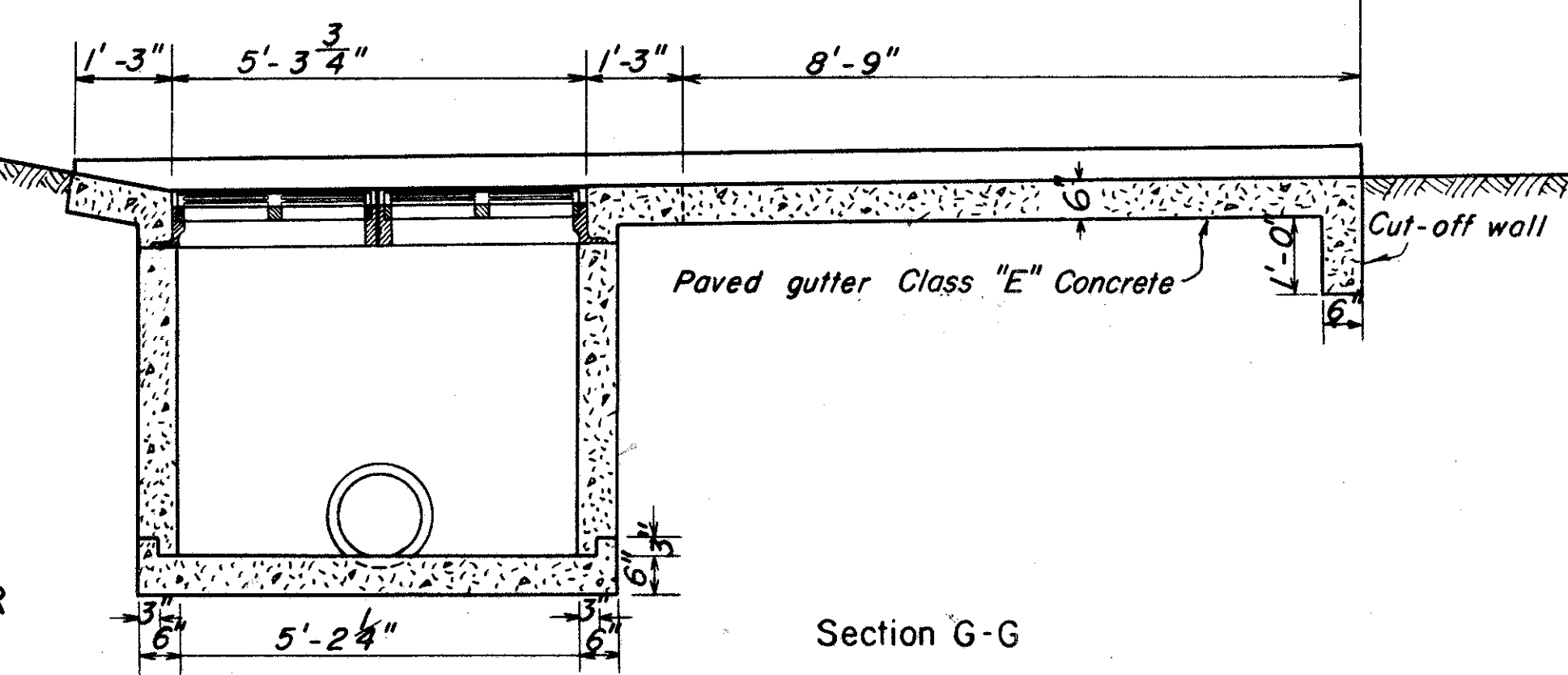
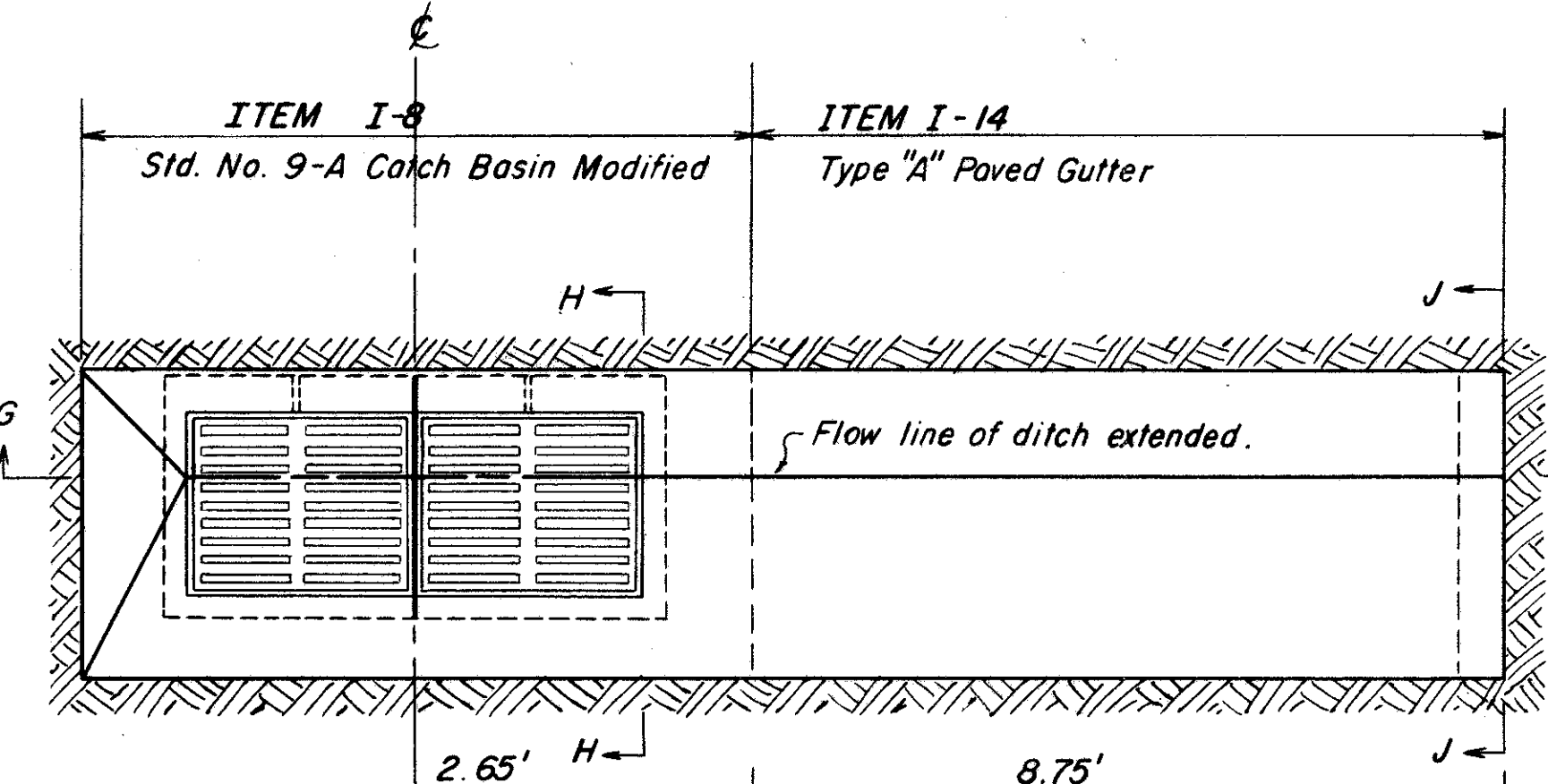
STANDARD NO.2-2-A CATCH BASIN WITH PAVED GUTTER
SCALE: 1/2" = 1'-0"



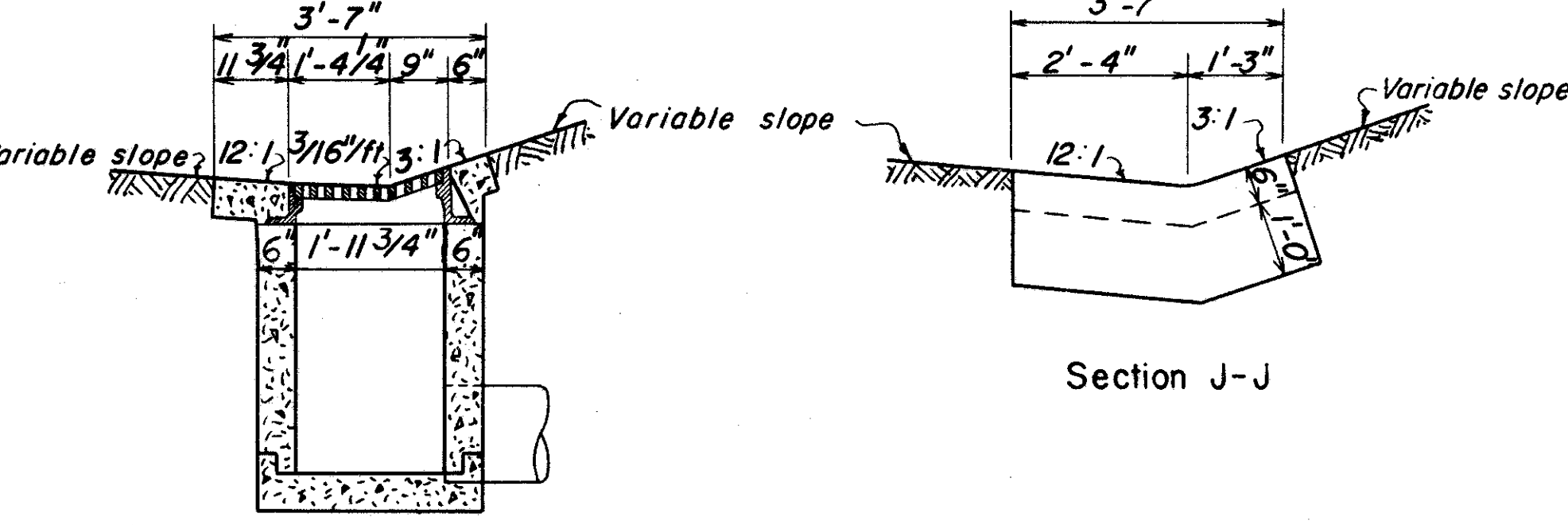
Section D-D

STANDARD NO. 2-3 & NO. 2-4 CATCH BASINS
MODIFIED
SCALE: 1/2" = 1'-0"

NOTE: This side symmetrical about ϵ when catch basin receives water from both sides.

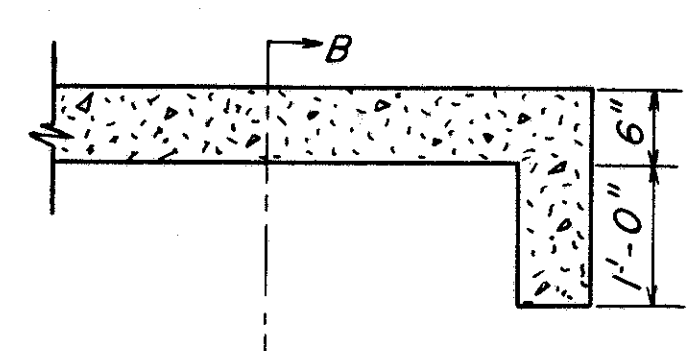


Section G-G

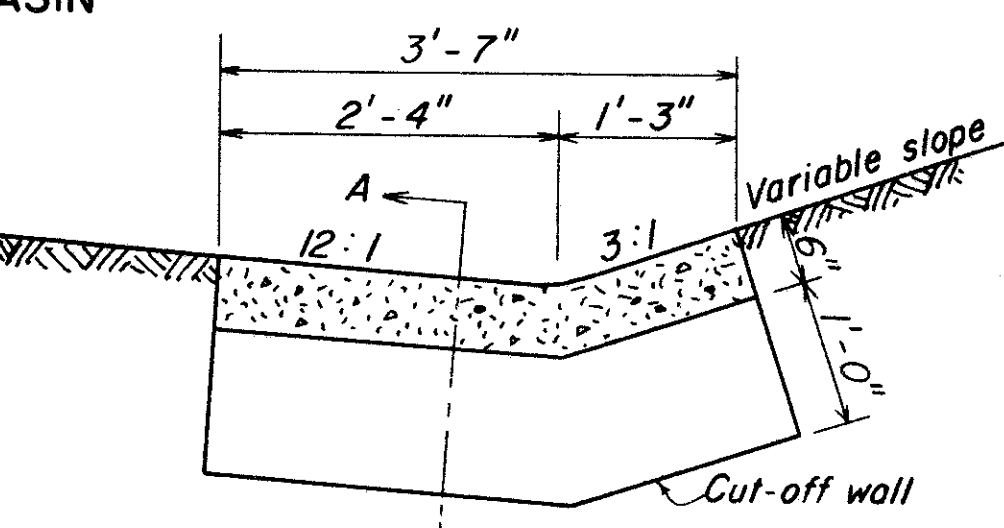


Section H-H

STANDARD NO. 9-A CATCH BASIN
MODIFIED
SCALE: 1/2" = 1'-0"



Section A-A



Section B-B

TYPE "A" PAVED GUTTER*
SCALE: 3/4" = 1'-0"

* REFER TO I-14 NOTES FOR PAVED GUTTERS

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
DRAINAGE DETAILS

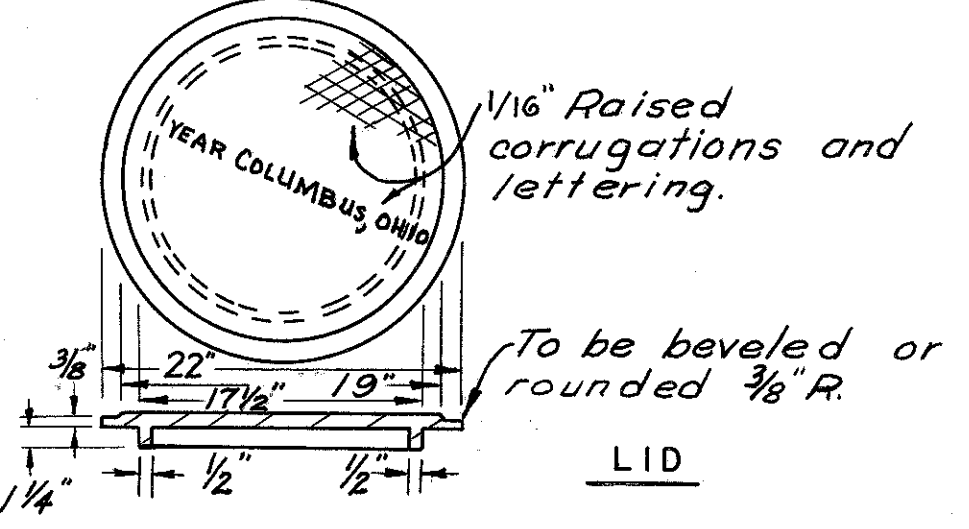
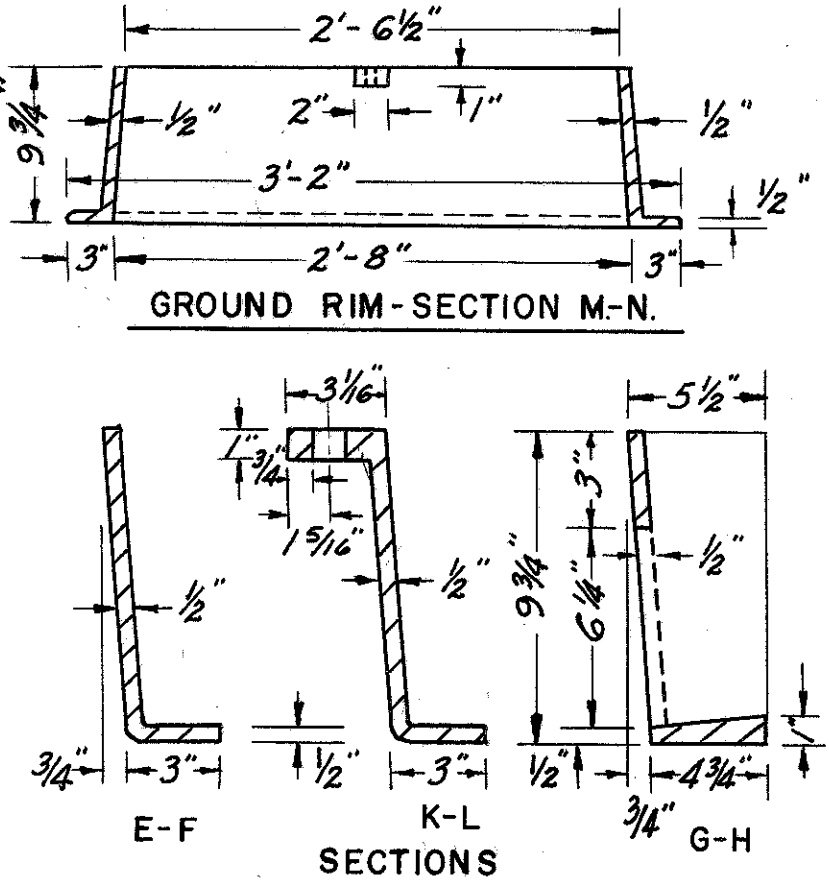
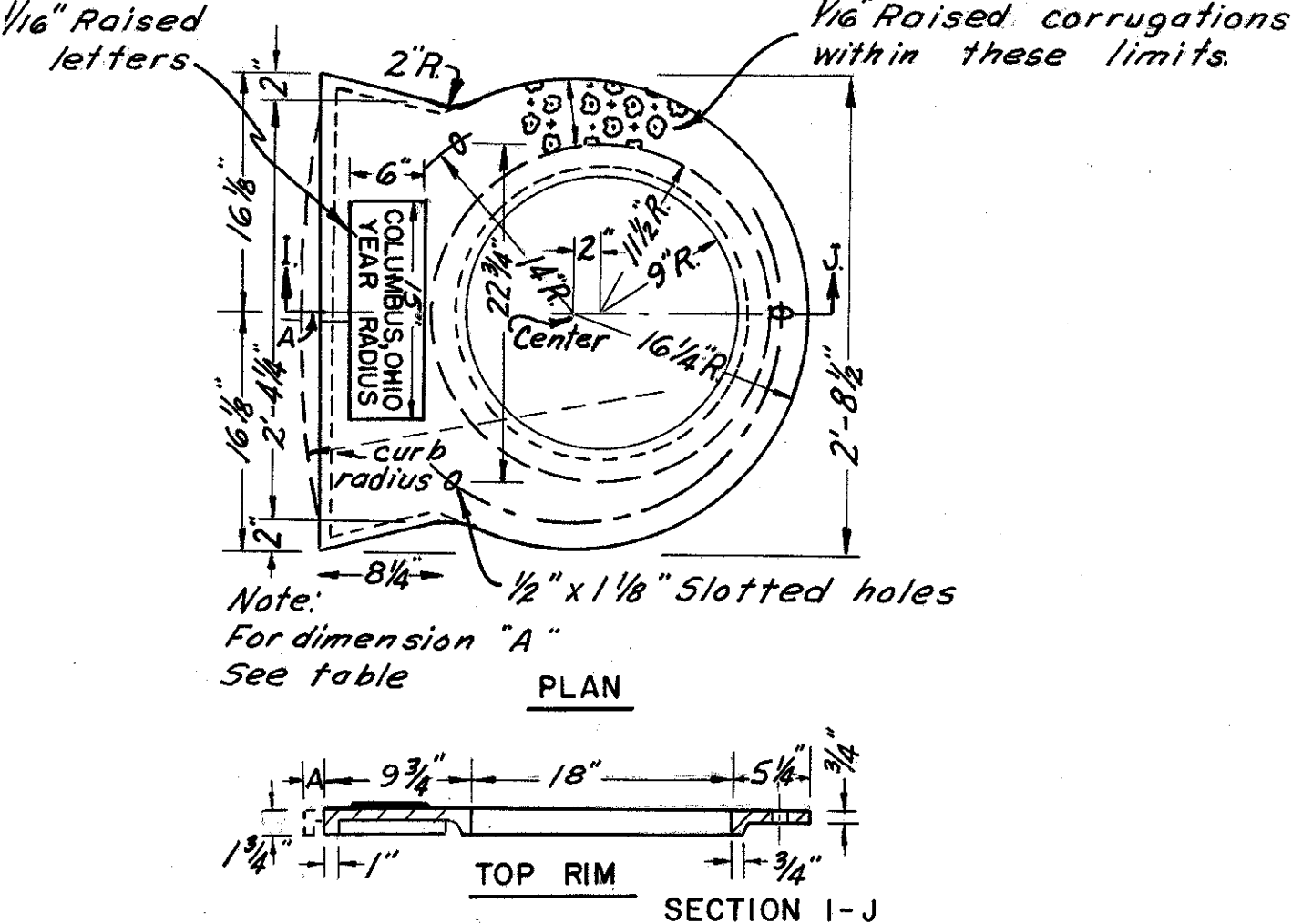
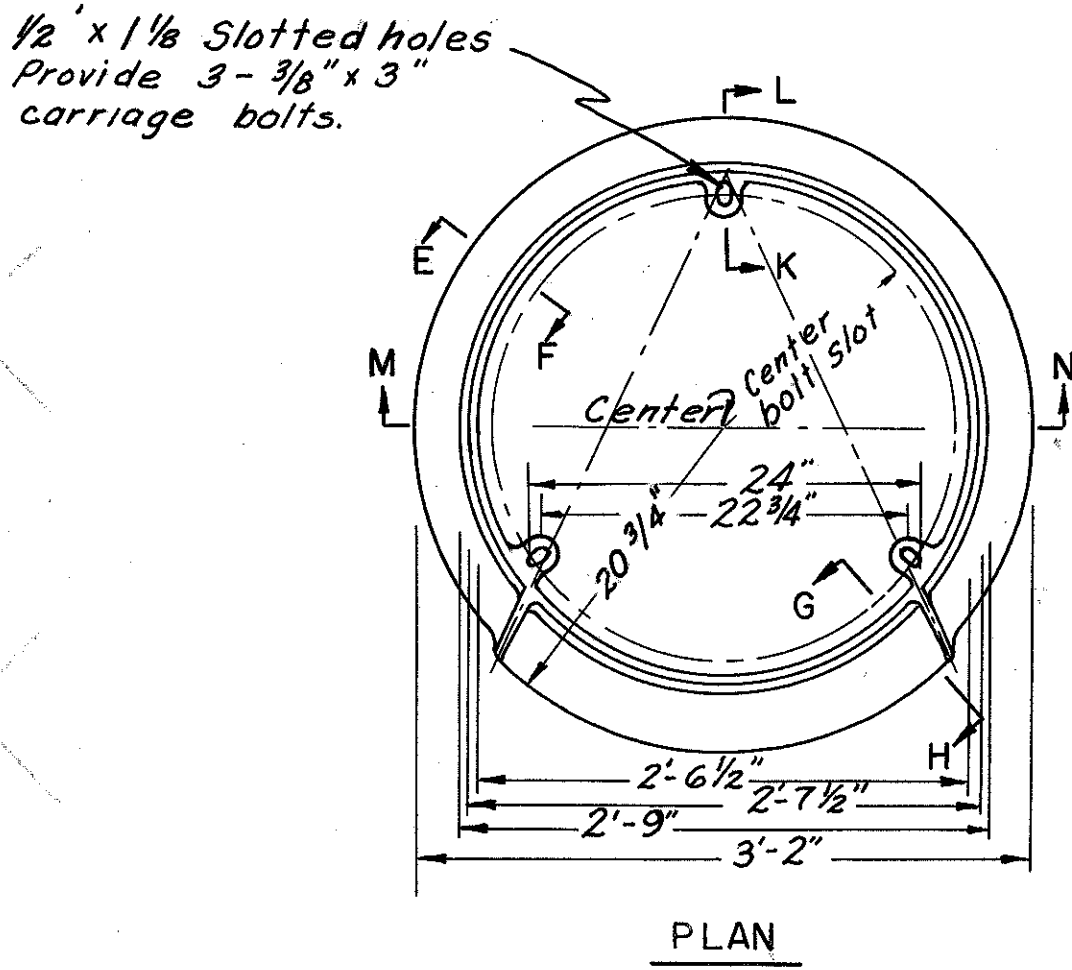
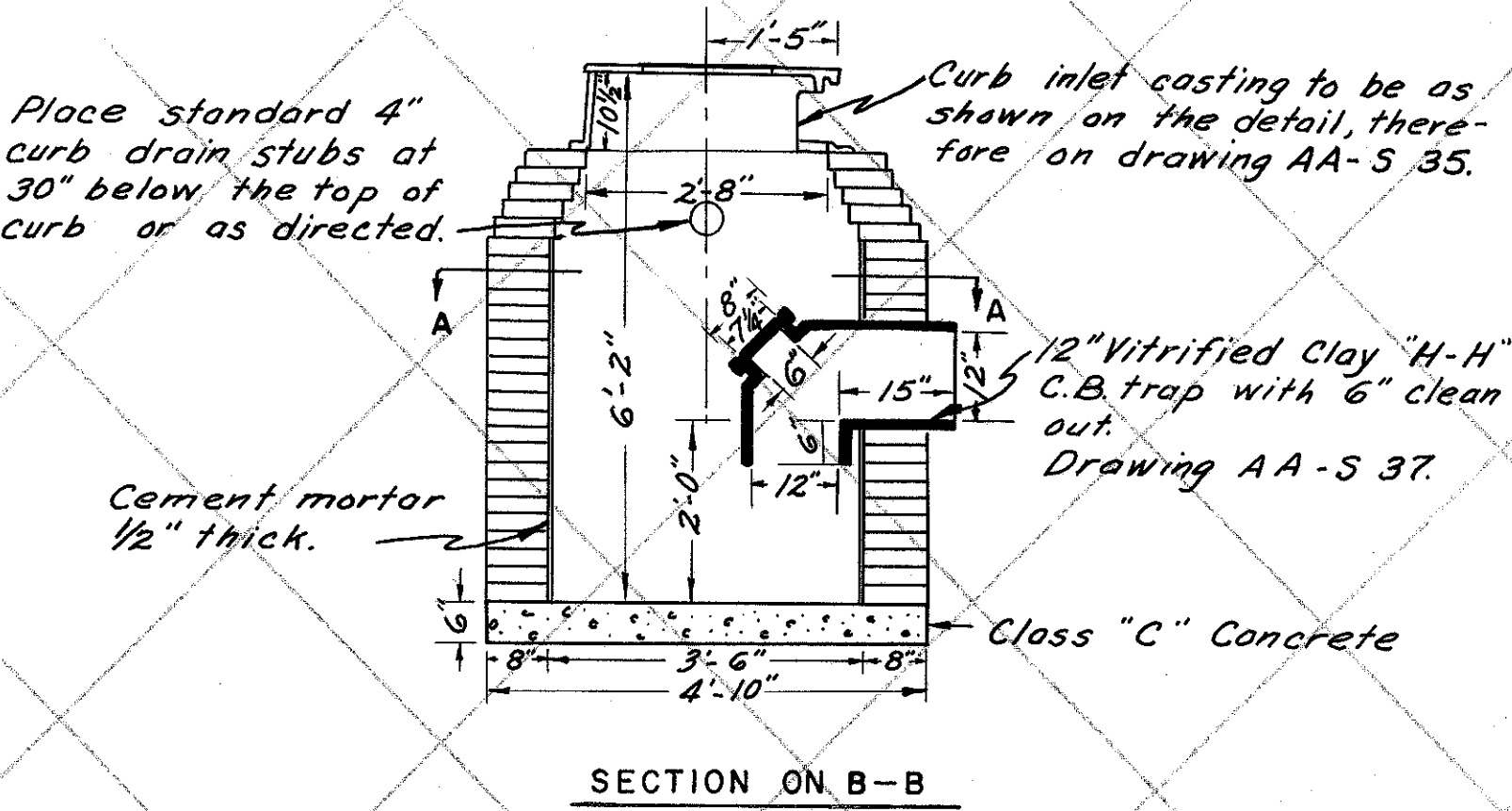
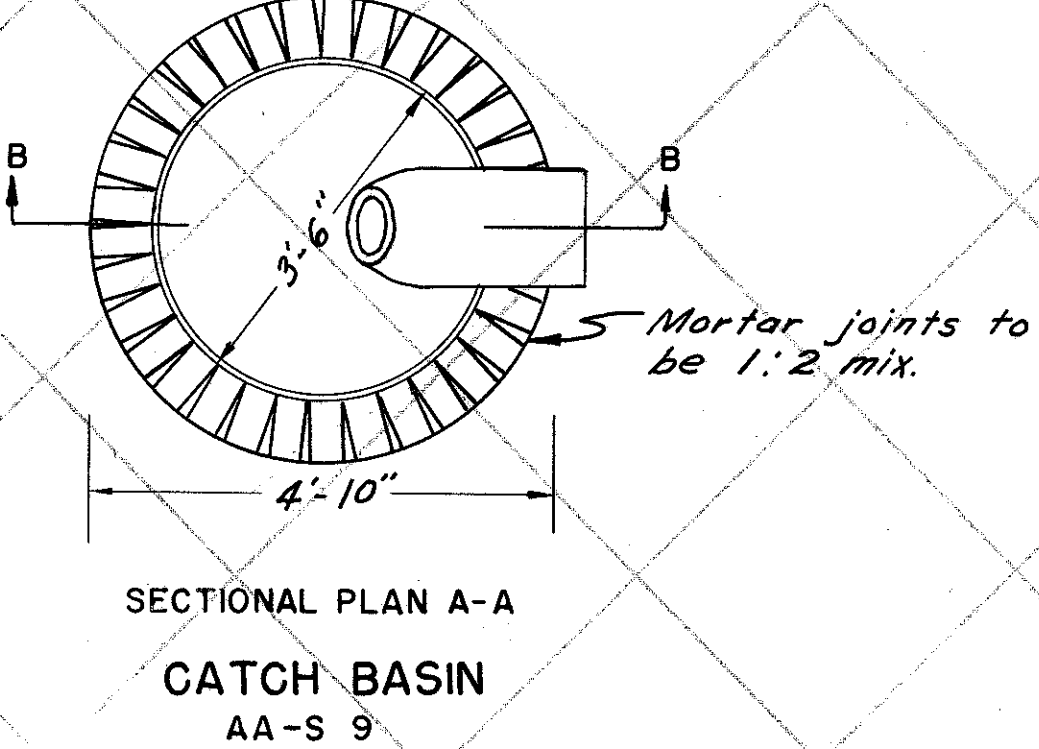


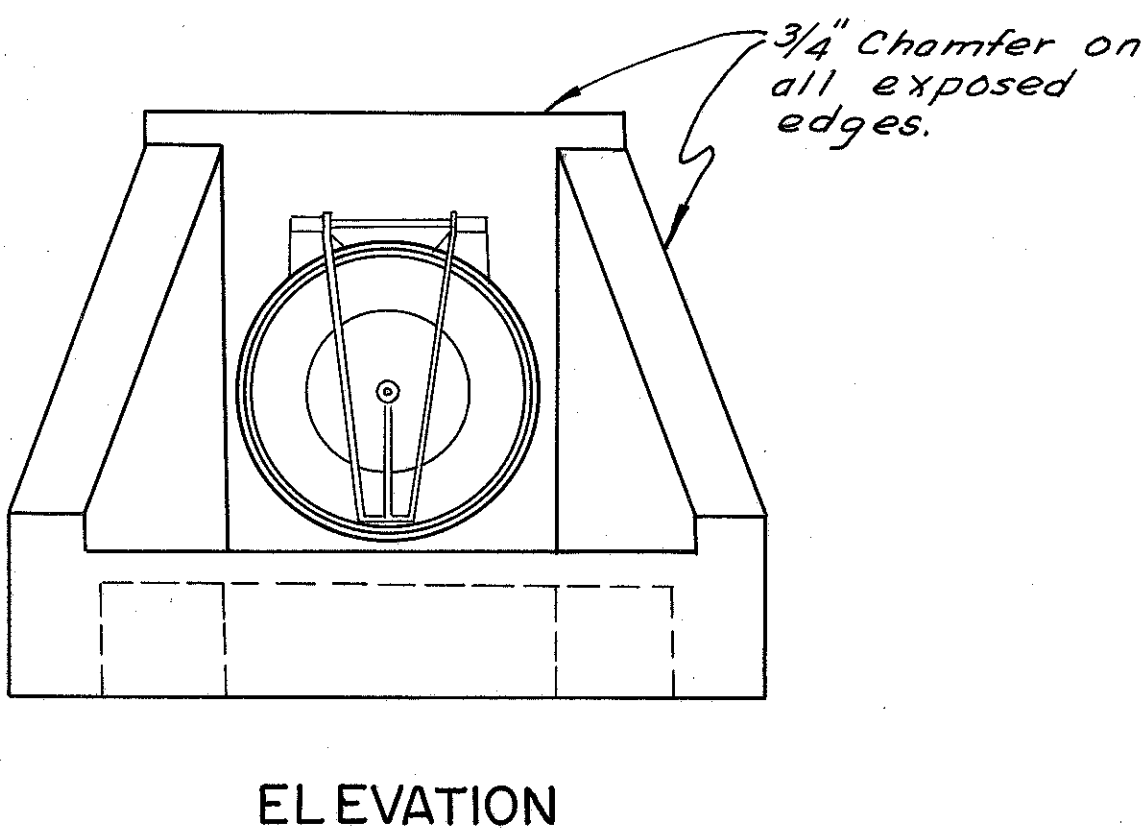
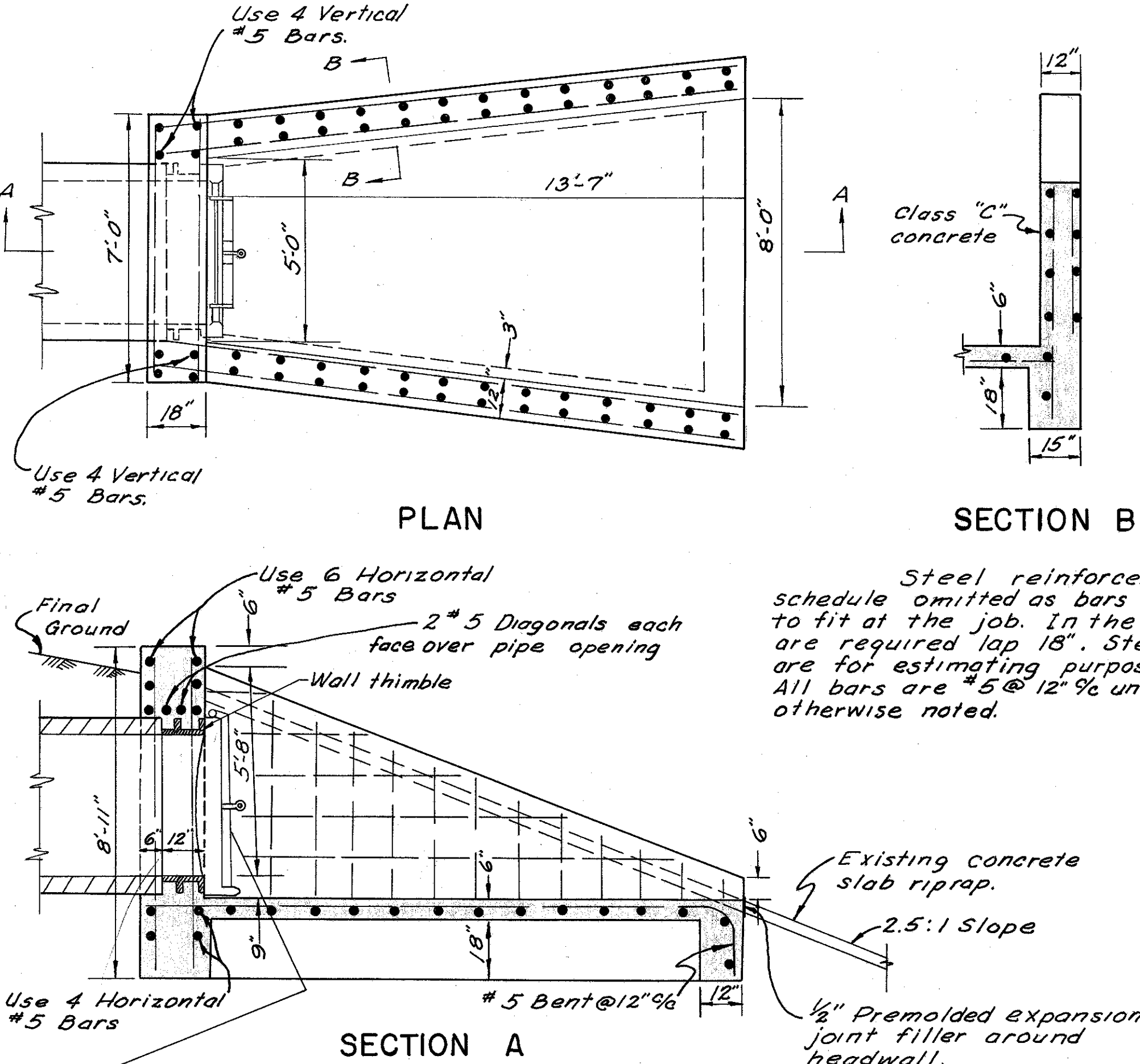
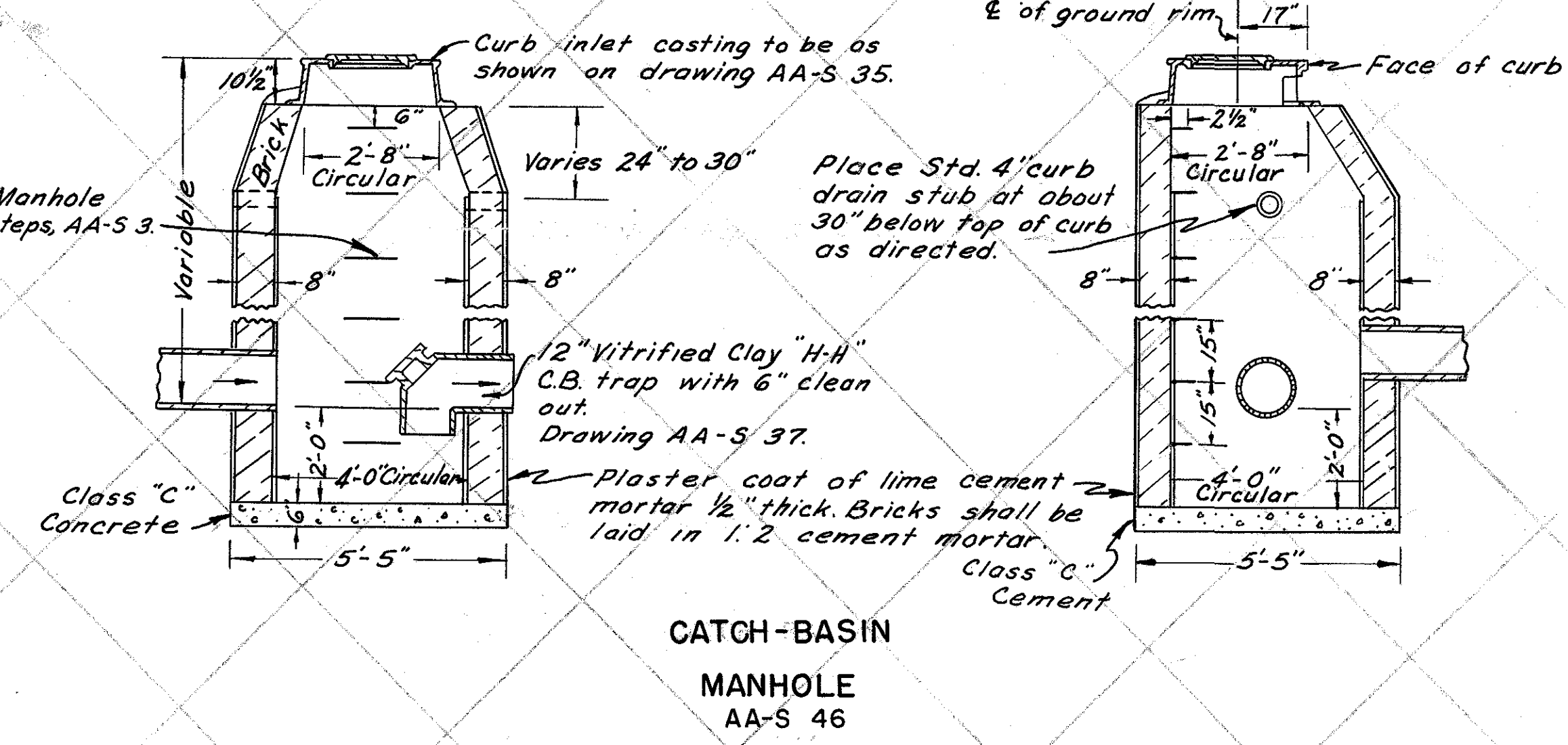
TABLE	
Curb	"A"
Straight	0.00"
20 foot radius	0.54"
15 foot radius	0.72"
12 foot radius	0.91"
8 foot radius	1.36"
6 foot radius	1.83"



CASTINGS FOR CURB INLETS
AA-S 35
APPROXIMATE WEIGHT 477 LB.

HEADWALL						
LOCATION	PIPE SIZE	APRON ELEV.	ITEM E-2 STRUC. EXCAV. C.Y.	ITEM S-1 STRUC. CONC. C.Y.	ITEM S-4 REINF. STEEL LBS.	ITEM I-5 PIPE SPECIAL 42" ARMCO GATE MODEL 139 OR EQUAL
The east end, P258	42"	715.75	35	9.5	1000	1

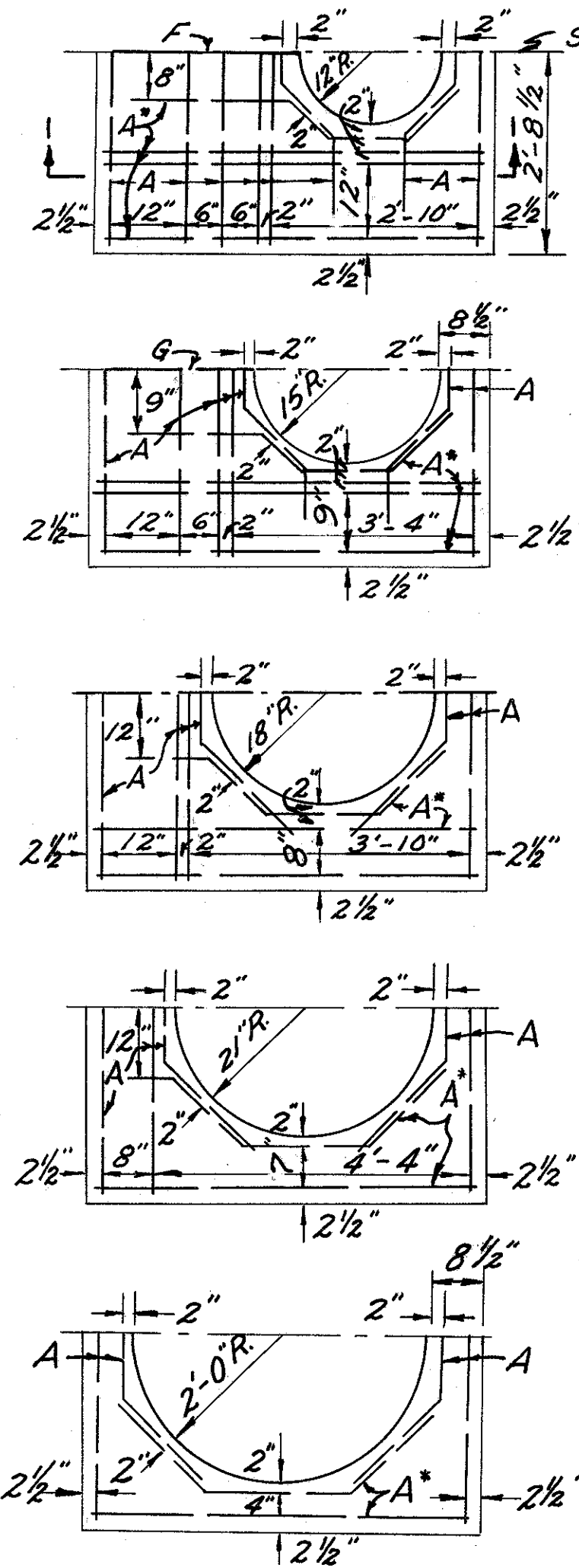
Note: Payment for concrete slab riprap removal to be included in the price bid per cubic yard for Item E-2 structure excavation. Payment for concrete slab riprap replacement and 1/2 inch premolded expansion joint filler to be included in the price bid per cubic yard for Item S-1 structure concrete. Payment for 42 inch wall thimble to be included in the price bid for Item I-5 pipe special 42 inch Armco Gate Model 139 or equal.



HEADWALL DETAILS FOR 42" PIPE

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE NO SCALE
NO.		DATE

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-1370
DRAINAGE DETAILS



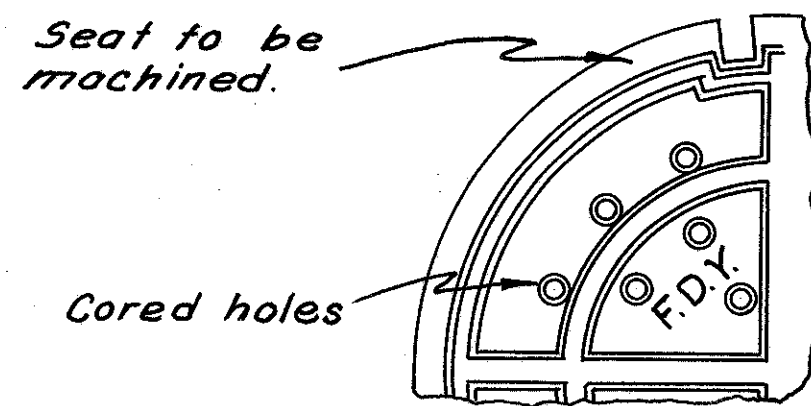
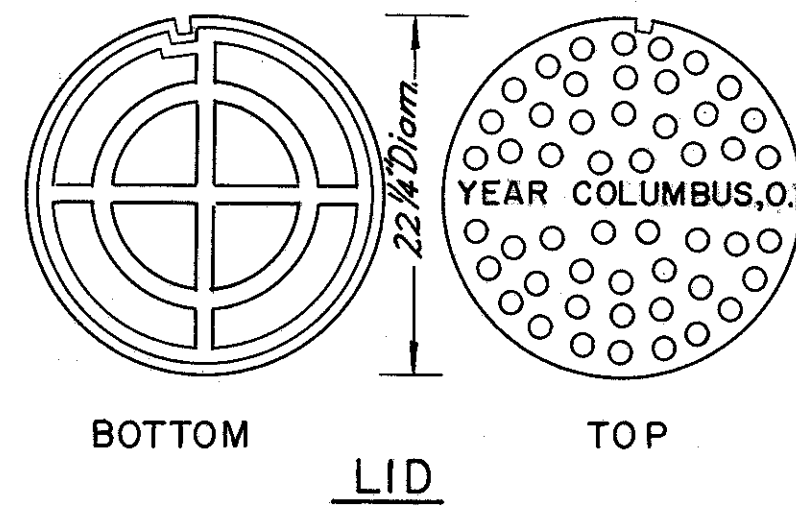
Symmetrical about ϵ
Varies 6'-5" for S3
and 5'-5" for S1, S11 for S2
Class "C" Concrete 2'-0" to 4'-0" 8"
Diam. opening
12" A bars, 5'-1" long
Number varies with
width of slab and opening.
SECTION I-I
Slab designations S1-24 to S1-48 are 5'-5"x5'-5"x8"
S2-24 to S2-48 are 5'-11"x5'-5"x8"
S3-24 to S3-48 are 6'-5"x5'-5"x8"
The latter number in the slab designation
indicates the diameter of opening in inches.

SLAB DESIGNATION	NUMBER OF 1/2" Ø REINFORCEMENT BARS							
	A 5'-1"	B 5'-7"	C 6'-1"	D 3'-4"	E 2'-11"	F 2'-4"	G 1'-10"	
S1-24	16							
S1-30	15							
S1-36	12							
S1-42	9							
S1-48	8							
S2-24	9	8						
S2-30	8	8						
S2-36	7	6						
S2-42	6	4						
S2-48	5	4						
S3-24	10		8					
S3-30	9		8					
S3-36	8		6					
S3-42	7		4					
S3-48	6		4					

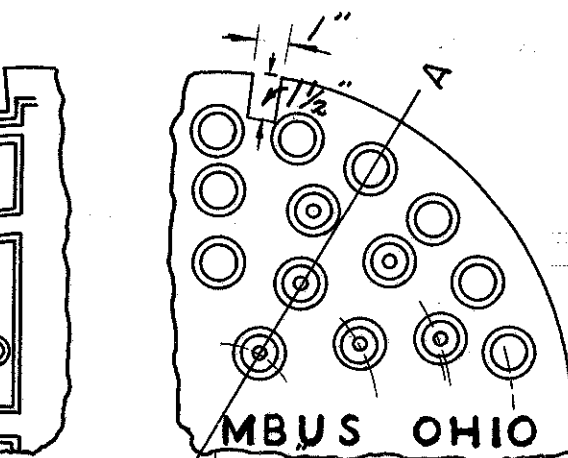
Half plans shown are for S1 slabs (5'-5"x5'-5"),
S2 slabs (5'-11"x5'-5") and S3 slabs (6'-5"x5'-5") are
similar, bar designations and number of bars
are shown in accompanying schedule.
Reinforcement bars adjacent to opening are to
be bent as indicated in plan.
Bars marked A* in slab S1 change to B bars in
slab S2 and to C bars in slab S3.

CONCRETE SLAB FOR TYPE B MANHOLE

AA-S 7



BOTTOM



TOP

* Open type lid shown. In
closed type lid omit cored
holes.

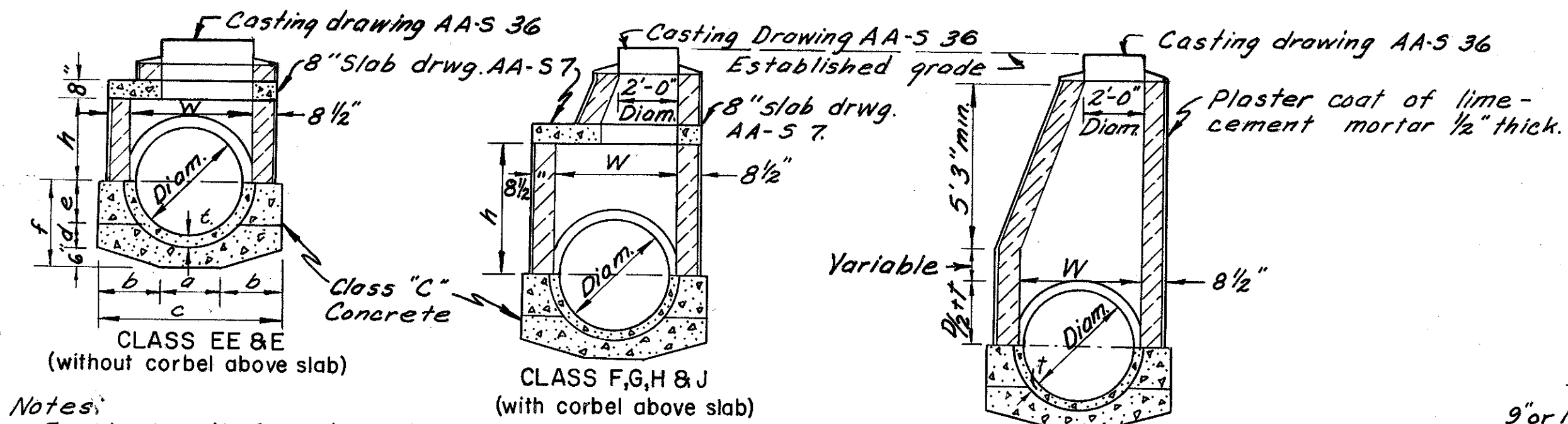
Foundry name shall be
cast on the underneath
or unexposed surface
of both lid and ground
rim.

* NOTE:
Closed type lids to
be furnished on this project.

CAST IRON TOP FOR MANHOLE

AA-S 36

APPROXIMATE WEIGHT = 355 LBS.



Notes:
Inside length for all manholes shall be 4'-0".
Use 4' length of half pipe thru manhole and remove bell
portion above springing line. Corbel brick walls not more
than 1" per course. Below 15' depth, walls shall be 12" thick.
Manhole steps, Drwg. AA-S 3, shall be spaced at 15" but are
not shown. Brick shall be laid in 1:2 mortar. Plain Class "C"
concrete may be substituted for brickwork below slab.
Note:
Double letter in schedule indicates 36" top casting
Single letter in schedule indicates 24" top casting
Number indicates Diam. of slab opening in inches.

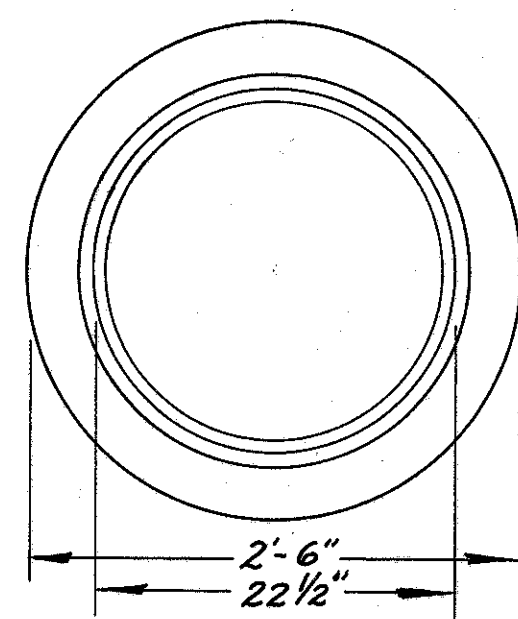
DEPTH RANGE (TOP OF CASTING TO INVERT)						
Diameter	30"	36"	42"	48"	54"	60"
Class EE 36	5.0' to 7.5'	5.5' to 7.5'	6.0' to 7.5'	6.5' to 7.5'		
" E 24	7.5' to 8.8'	7.5' to 8.8'	7.5' to 8.8'	7.5' to 8.8'	7.5' to 8.8'	7.5' to 8.8'
" F 30		8.8' to 10.8'	8.8' to 10.8'	8.8' to 10.8'	8.8' to 10.8'	8.8' to 10.8'
" G 36				10.2' to 12.1'	10.2' to 12.1'	10.2' to 12.1'
" H 42					11.4' to 13.4'	11.4' to 13.4'
" J 48						12.8' to 14.8'
" K	8.8' & up	9.4' & up	10.0' & up	10.5' & up		

COMMON DIMENSIONS FOR ALL CLASSES												
DIAM.	t	a	b	c	d	e	f	DIMENSIONS FOR MANHOLES WITH SLABS				
								FOR CLASS				
30"	3 1/2"	12"	2'-6"	6"	5 1/2"	13"	2'-0 1/2"	4'	2'-3"	4'-9"		
36"	4"	15"	2'-4 1/2"	6"	6 1/2"	15 1/2"	2'-4"	4'	2'-6"	4'-6"	4'-6"	
42"	4 1/2"	2'-0"	2'-0"	6"	7 1/2"	18"	2'-7 1/2"	4'	2'-9"	4'-3"	4'-3"	
48"	5"	2'-0"	2'-0"	6"	8 1/2"	20 1/2"	2'-11"	4'	3'-0"	4'-0"	4'-0"	
54"	5 1/2"	2'-3"	2'-1 1/2"	6 1/2"	9 1/2"	23"	3'-2 1/2"	4 1/2"		3'-3"	3'-9"	3'-9"
60"	6"	2'-6"	2'-3"	7"	10 1/2"	2'-1 1/2"	3'-6"	5"		3'-6"	3'-6"	3'-6"

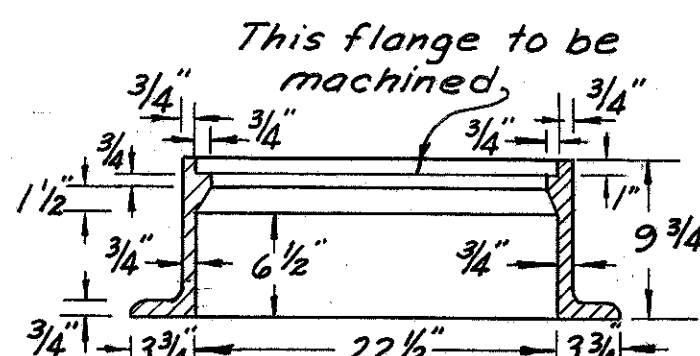
TYPE B MANHOLES

AA-S 6

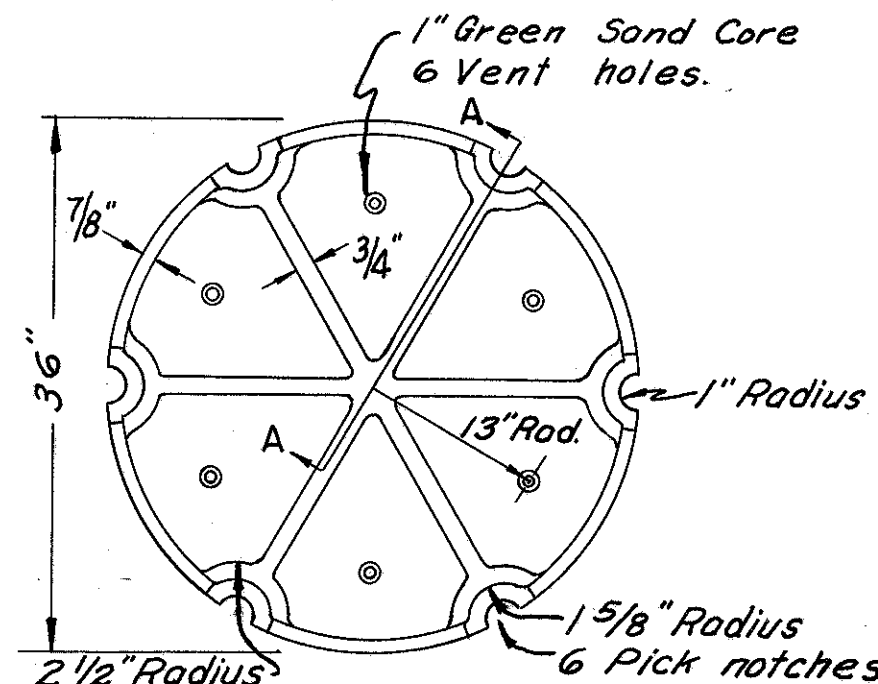
Note: For 72" see
AA-S 59.



PLAN

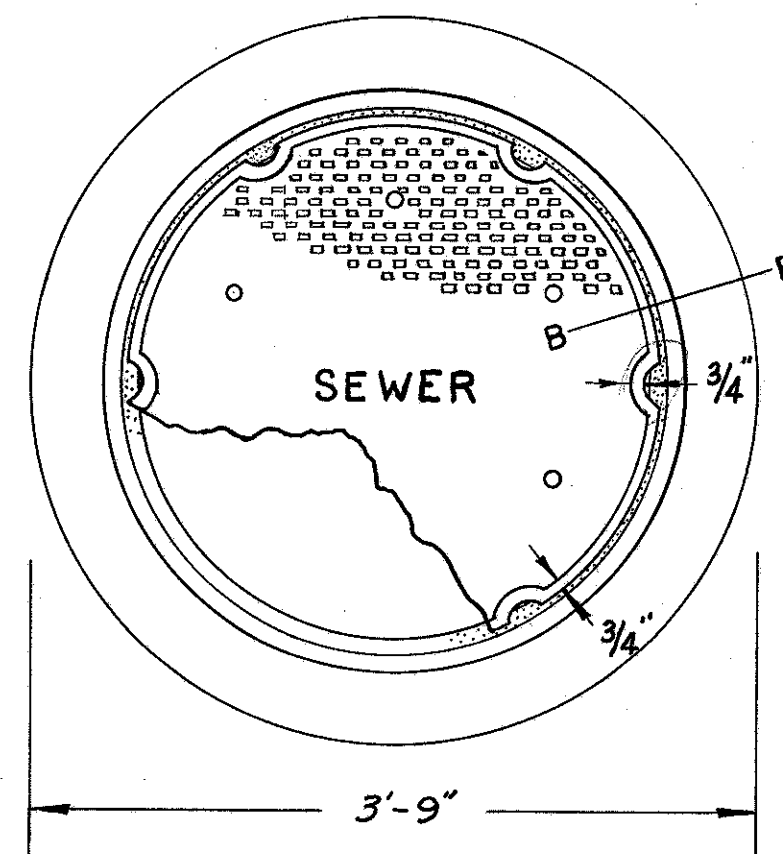


SECTION
GROUND RIM



BOTTOM VIEW OF COVER

Notes:
Material shall be first quality soft
grey-cast iron.
The top surface of the cover shall have
an approved type of non-skid tread.



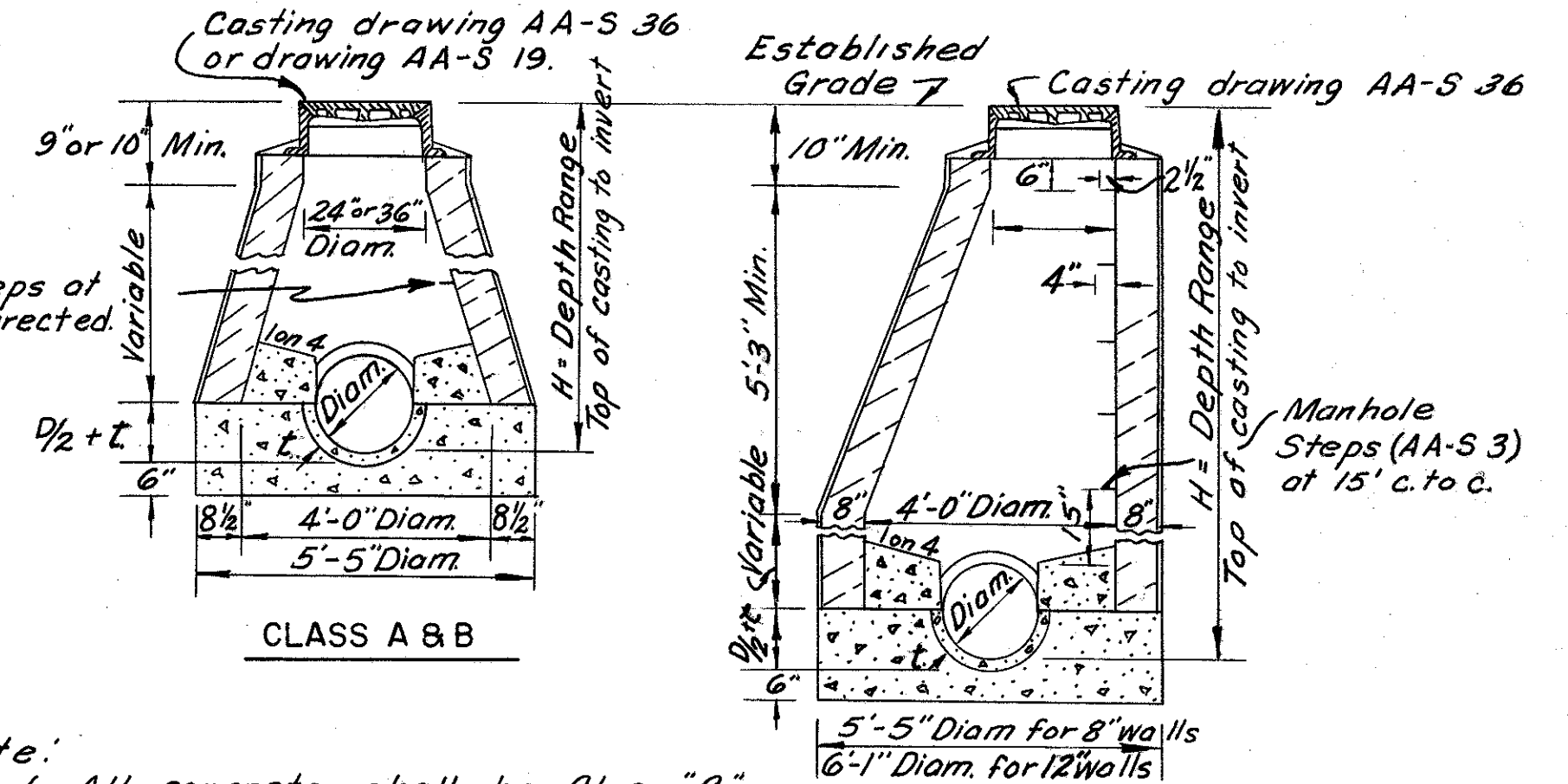
TOP VIEW OF ASSEMBLY

36" MANHOLE FRAME & COVER CASTINGS

AA-S 19

COVER WEIGHT
APPROX. - 315 LBS.

FRAME WEIGHT
APPROX. - 485 LBS.

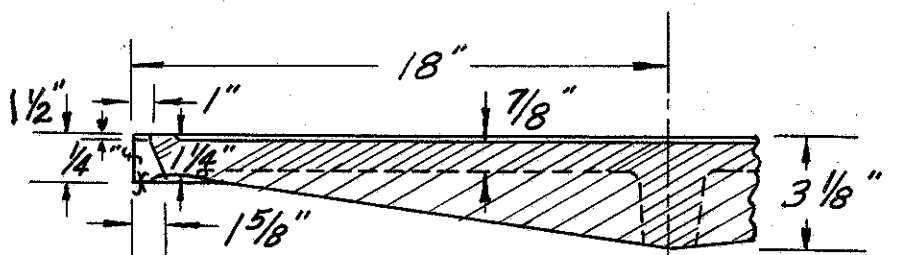


Note:
1. All concrete shall be Class "C"
2. Below 15' depth, walls shall be 12" thick.
3. Brick shall be laid in 1:2 cement mortar.
4. Outside of brickwork shall be plastered with 1/2" coat of lime-cement mortar.
5. Class A manholes shall have 36" top castings (AA-S 19) and shall
be beehived.
6. Class B manholes shall have 24" top castings (AA-S 36) and shall
be beehived.
7. Class C manholes shall have 24" top casting (AA-S 36) and shall
have one edge vertical.

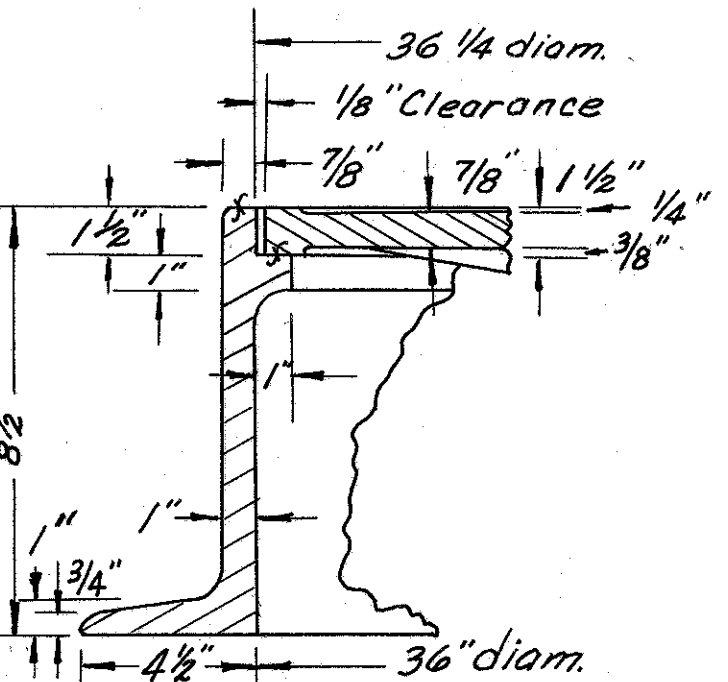
DEPTH RANGE (H) - TOP OF CASTING TO INVERT								
Diameter	8"	10"	12"	15"	18"	21"	24"	27"
Class A	2.4' to 3.8'	2.5' to 3.8'	2.6' to 3.9'	2.8' to 4.0'	2.8' to 4.2'	3.0' to 4.3'	3.1' to 4.4'	3.3' to 4.5'
" B	3.8' to 5.7'	3.8' to 5.8'	3.9' to 6.0'	4.2' to 6.3'	4.2' to 6.5'	4.3' to 6.8'	4.4' to 7.0'	4.5' to 7.3'
" C	5.7' & up	5.8' & up	6.0' & up	6.3' & up	6.5' & up	6.8' & up	7.0' & up	7.3' & up

TYPE A MANHOLE

AA-S 5



SECTION A-A

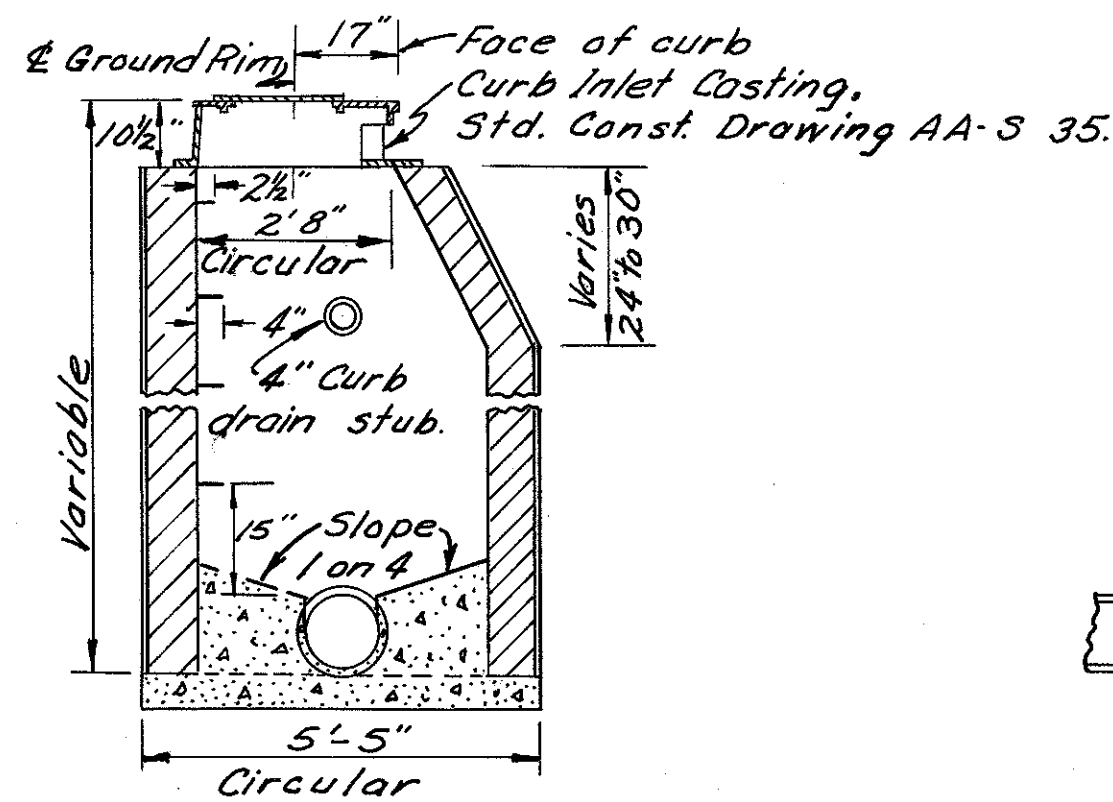


SECTION B-B

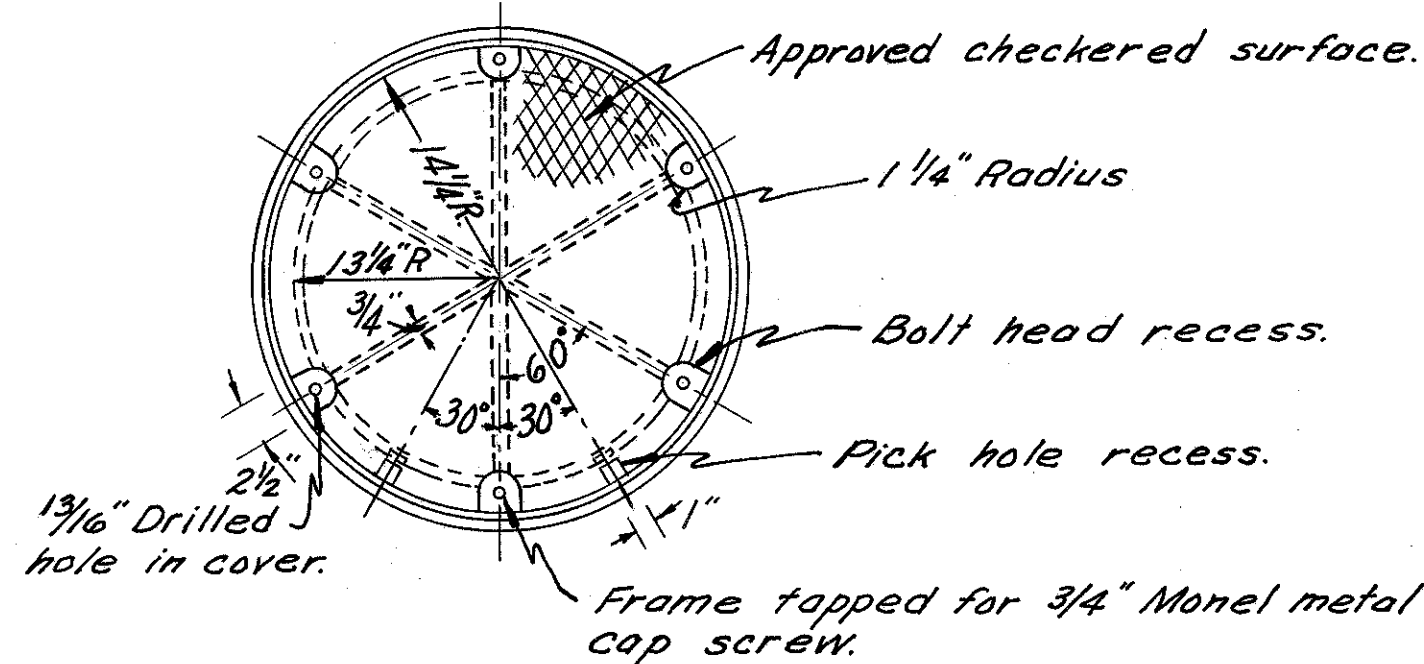
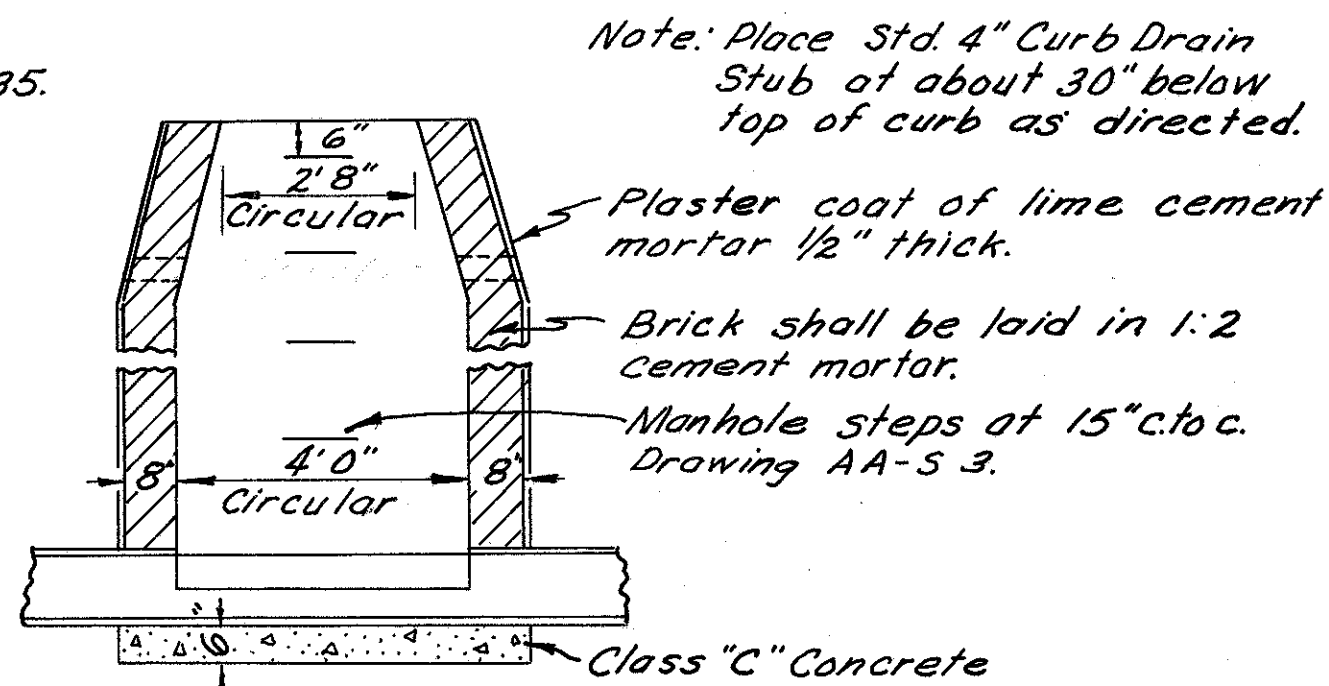
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

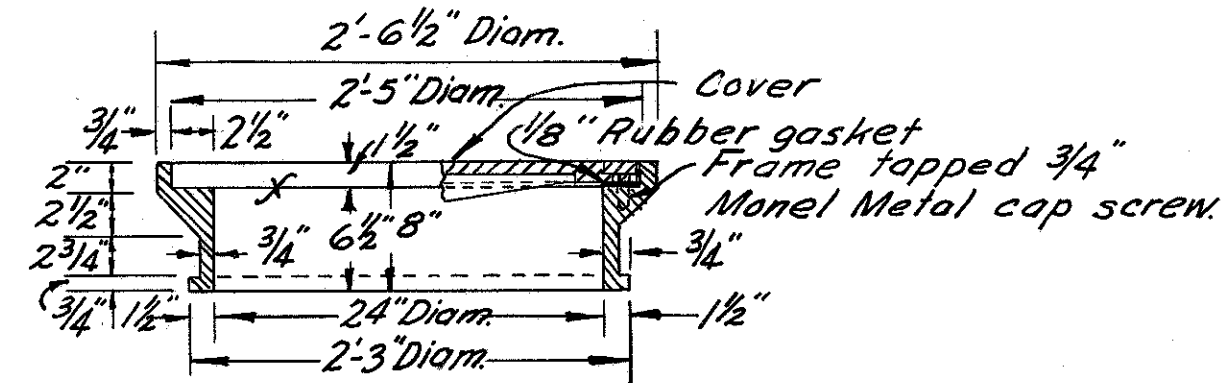
DRAINAGE DETAILS



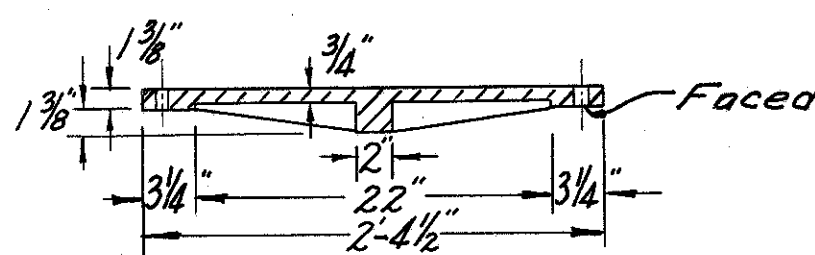
CURB INLET
MANHOLE
AA-S 47



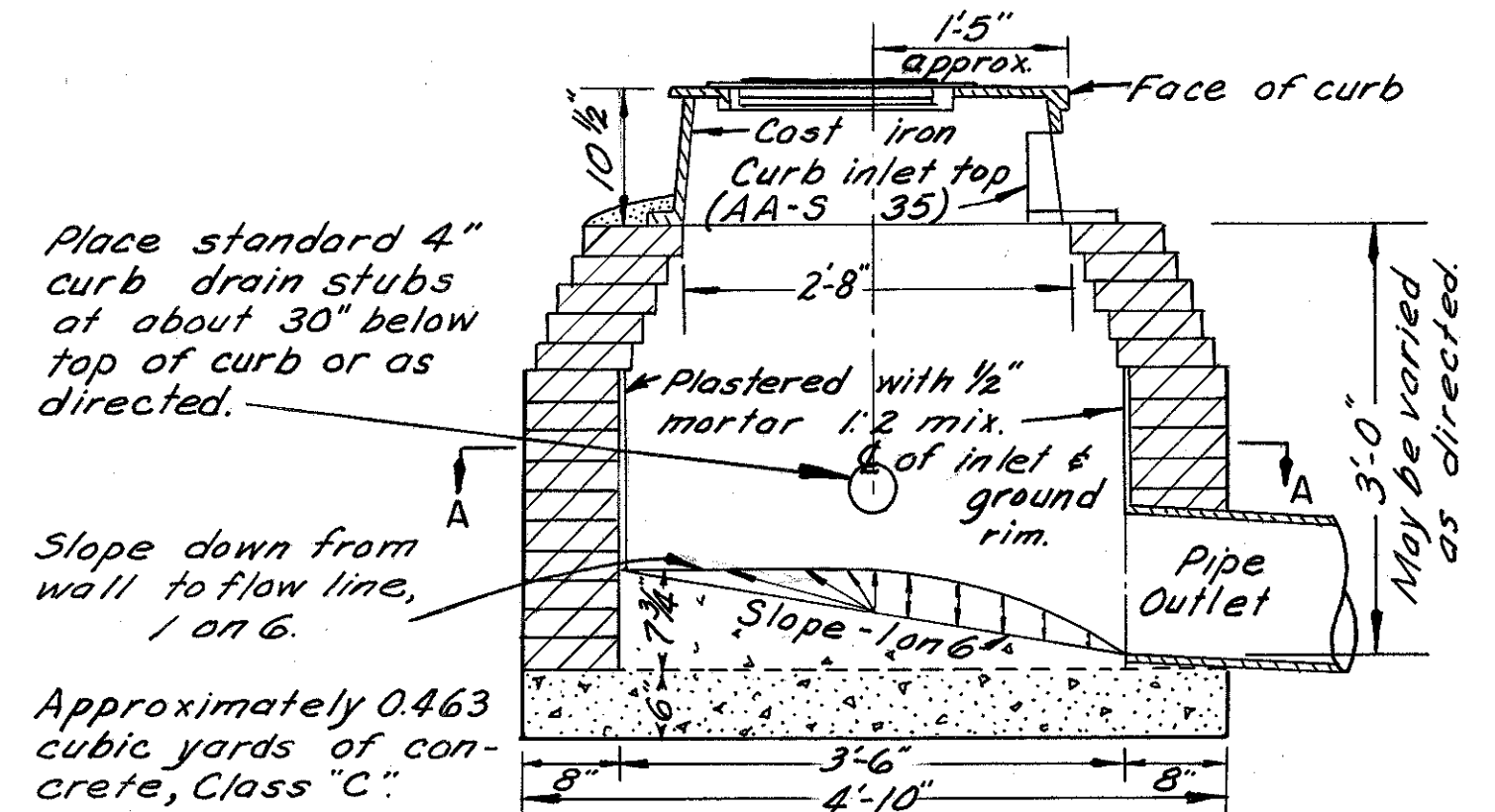
PLAN OF FRAME AND COVER



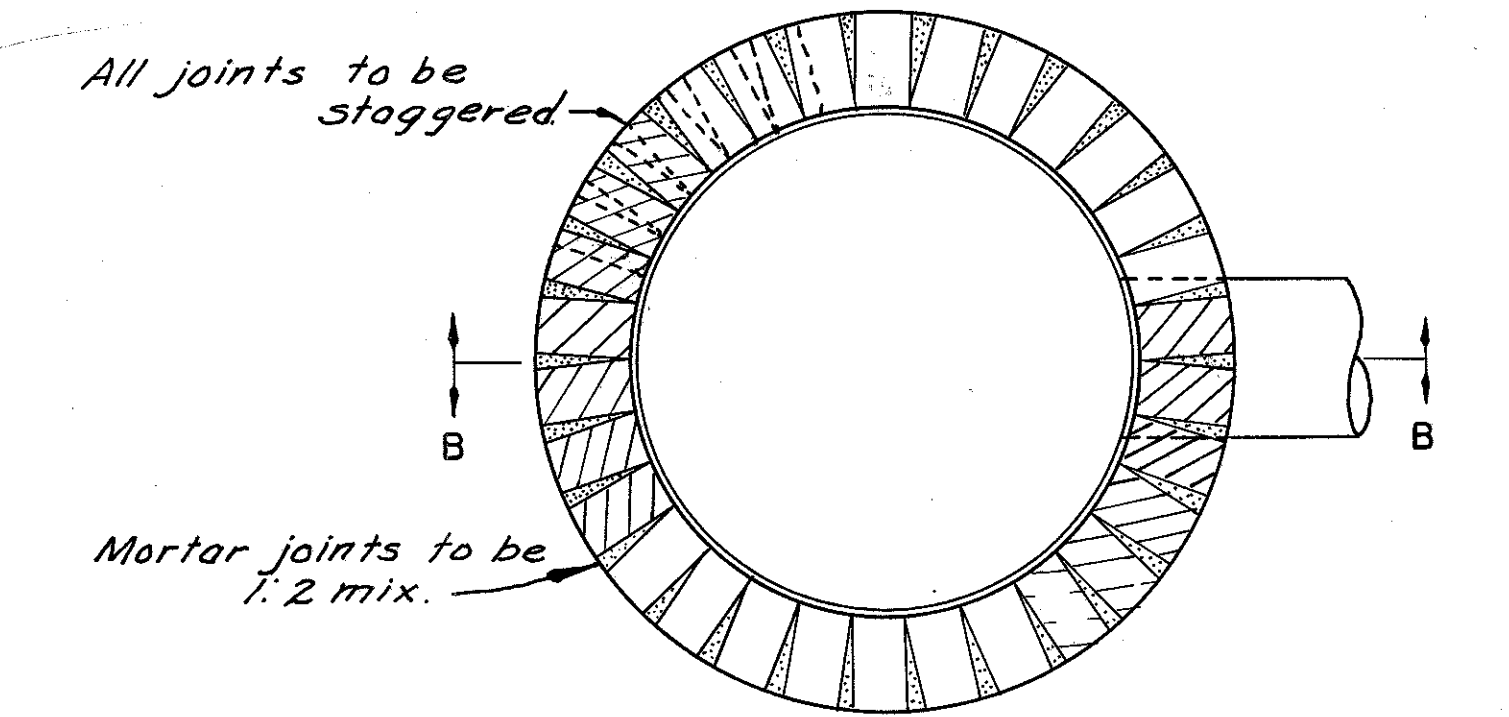
SECTION OF FRAME



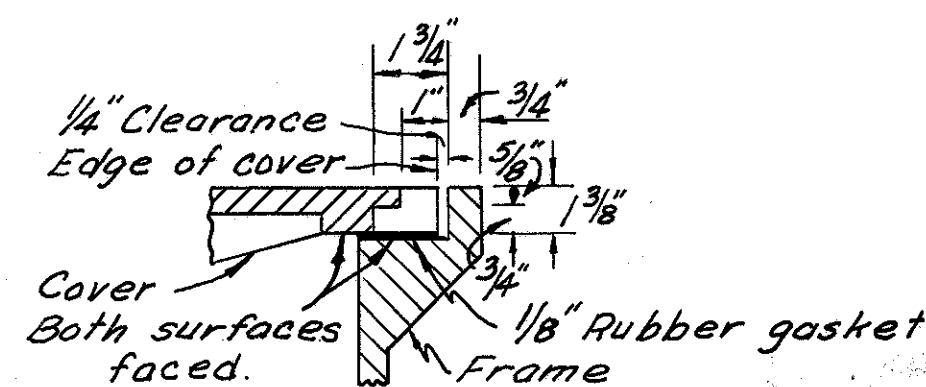
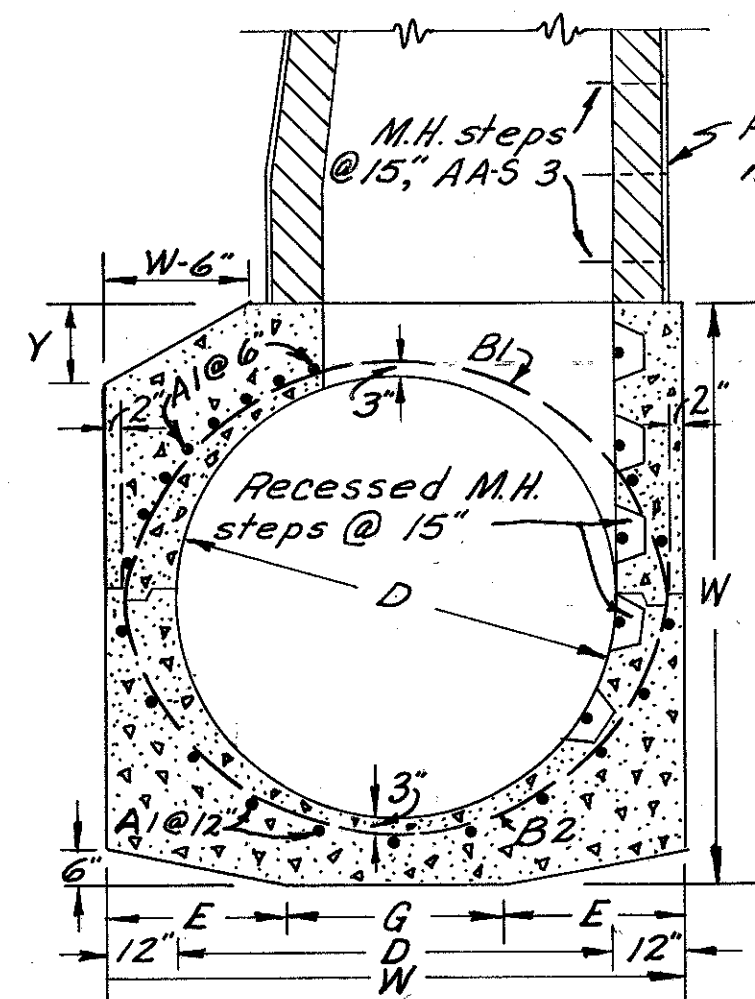
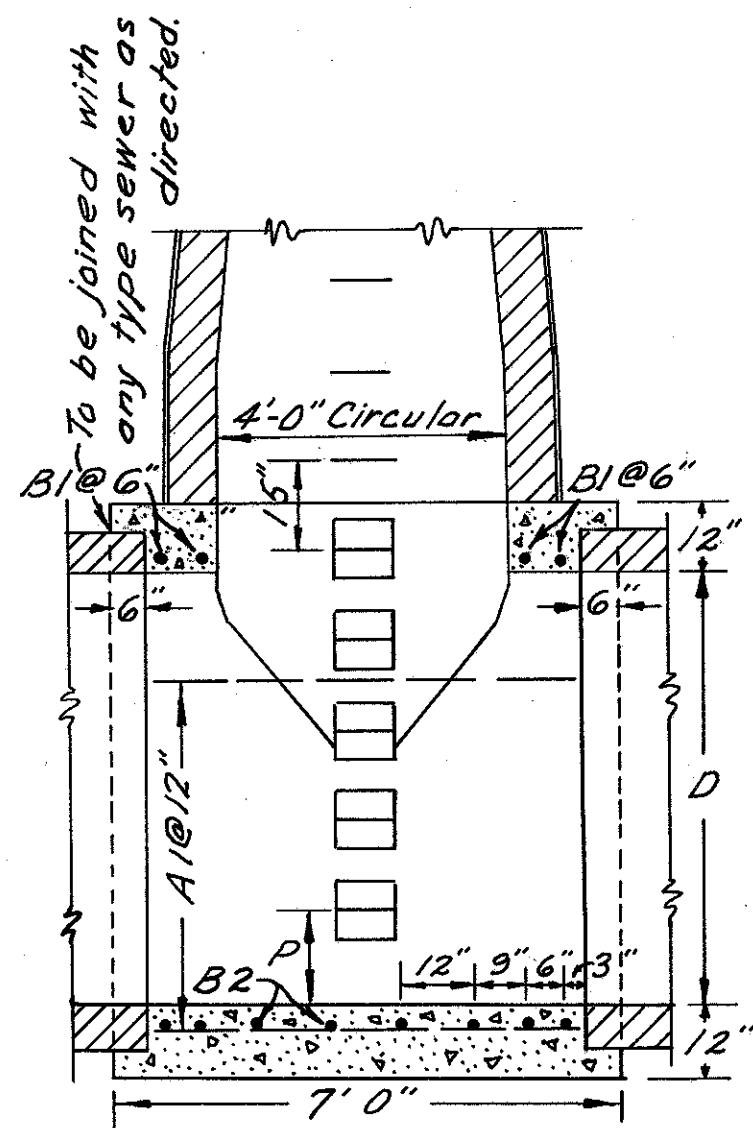
SECTION OF COVER



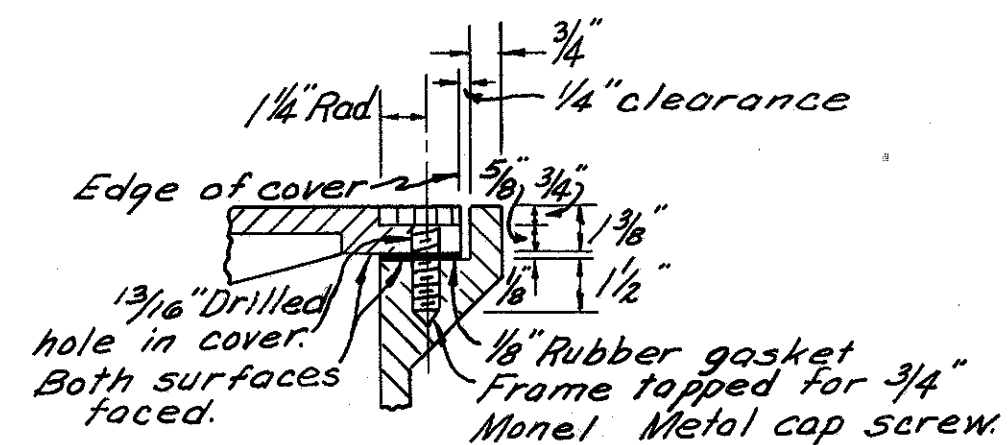
SECTION B-B



SECTIONAL PLAN A-A
CURB INLET
AA-S 20



SECTION AT PICK HOLE



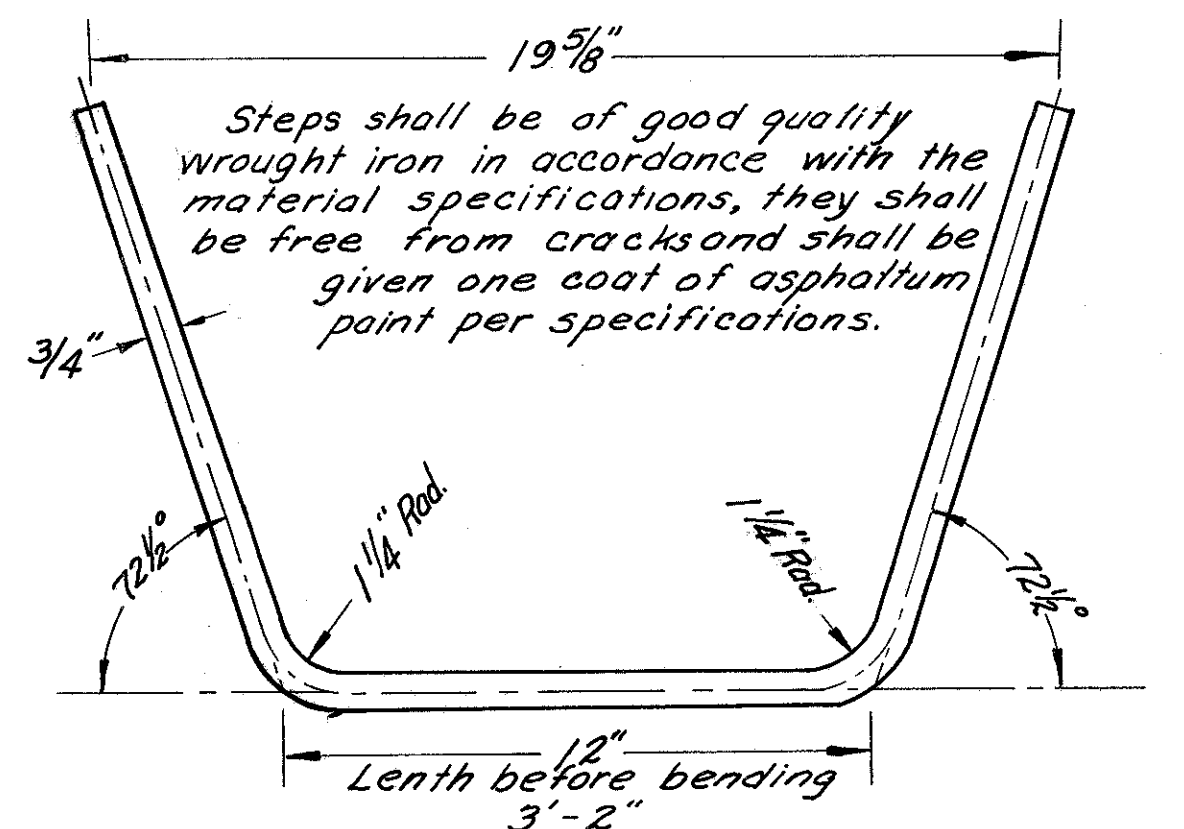
SECTION AT BOLT

DIMENSIONS AND QUANTITIES FOR MANHOLE BASE															
Diam. D Inches	E	G	W	Y	Recessed step data		Steel Reinforcement Bars								Class Conc. Appx.
					A1-1/2"	B1-3/4"	C1-3/4"	D2-3/4"	E Rad.	Total B1/B2	Wbs.				
												No.	Len.	No.	
54"	2'-1"	2'-4"	6'-6"	4"	3	21"	13	5'-6"	4	8'-4"	8	13'-4"	3'-1"	260	5.8
60"	2'-3"	2'-6"	7'-0"	7"	4	20"	15	5'-6"	4	9'-3"	8	14'-3"	3'-4"	284	6.5
66"	2'-4"	2'-10"	7'-6"	10"	4	23"	20	5'-6"	4	10'-1"	8	15'-7"	3'-7"	323	7.4
72"	2'-6"	3'-0"	8'-0"	12"	5	15"	21	5'-6"	4	10'-10"	8	16'-6"	3'-10"	343	8.1
78"	2'-7"	3'-4"	8'-6"	14"	5	18"	22	5'-6"	4	11'-8"	8	17'-6"	4'-1"	363	8.8
84"	2'-9"	3'-6"	9'-0"	16"	5	21"	22	5'-6"	4	12'-5"	8	18'-5"	4'-4"	379	9.5
90"	2'-10"	3'-10"	9'-6"	18"	6	20"	23	5'-6"	4	13'-3"	8	19'-5"	4'-7"	400	10.2
96"	3'-0"	4'-0"	10'-0"	20"	6	24"	24	5'-6"	4	14'-0"	8	20'-4"	4'-10"	419	11.0

MANHOLE BASE
FOR
54 INCH TO 96 INCH SEWERS
AA-S 59

24" PRESSURE TYPE MANHOLE FRAME & COVER CASTINGS

AA-S 32
APPROXIMATE WEIGHT = 395 LBS.

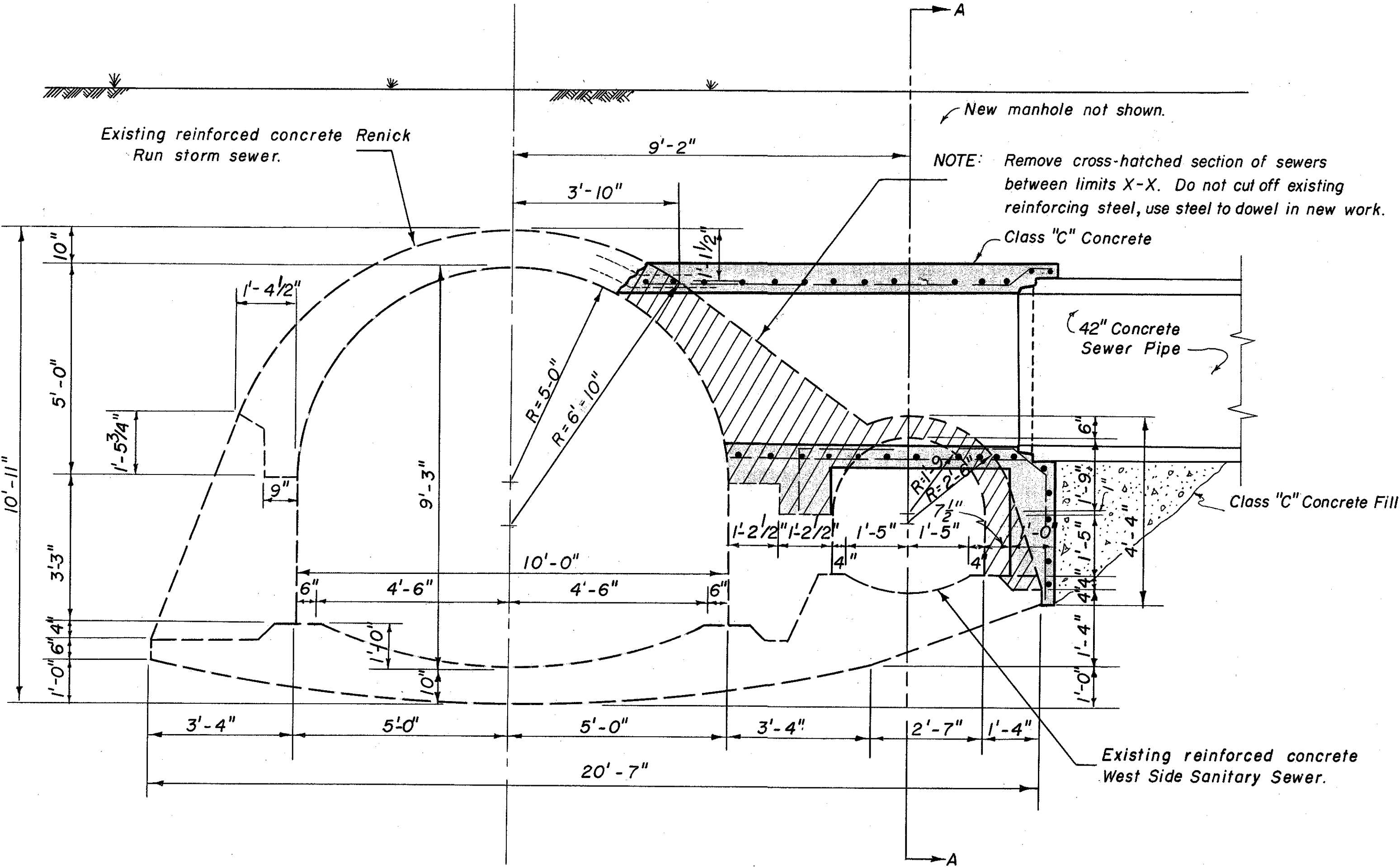


MANHOLE STEP
AA-S 3

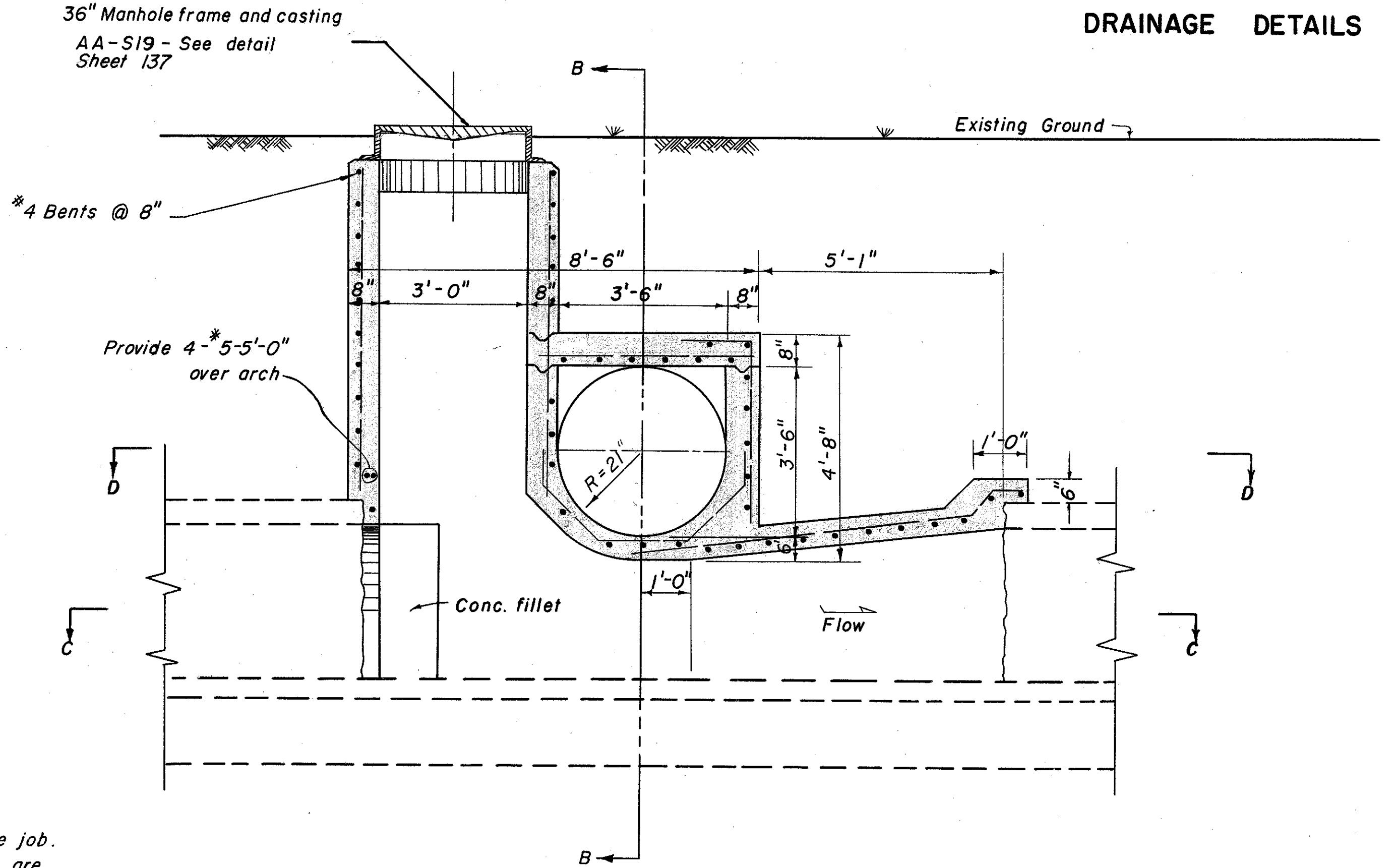
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

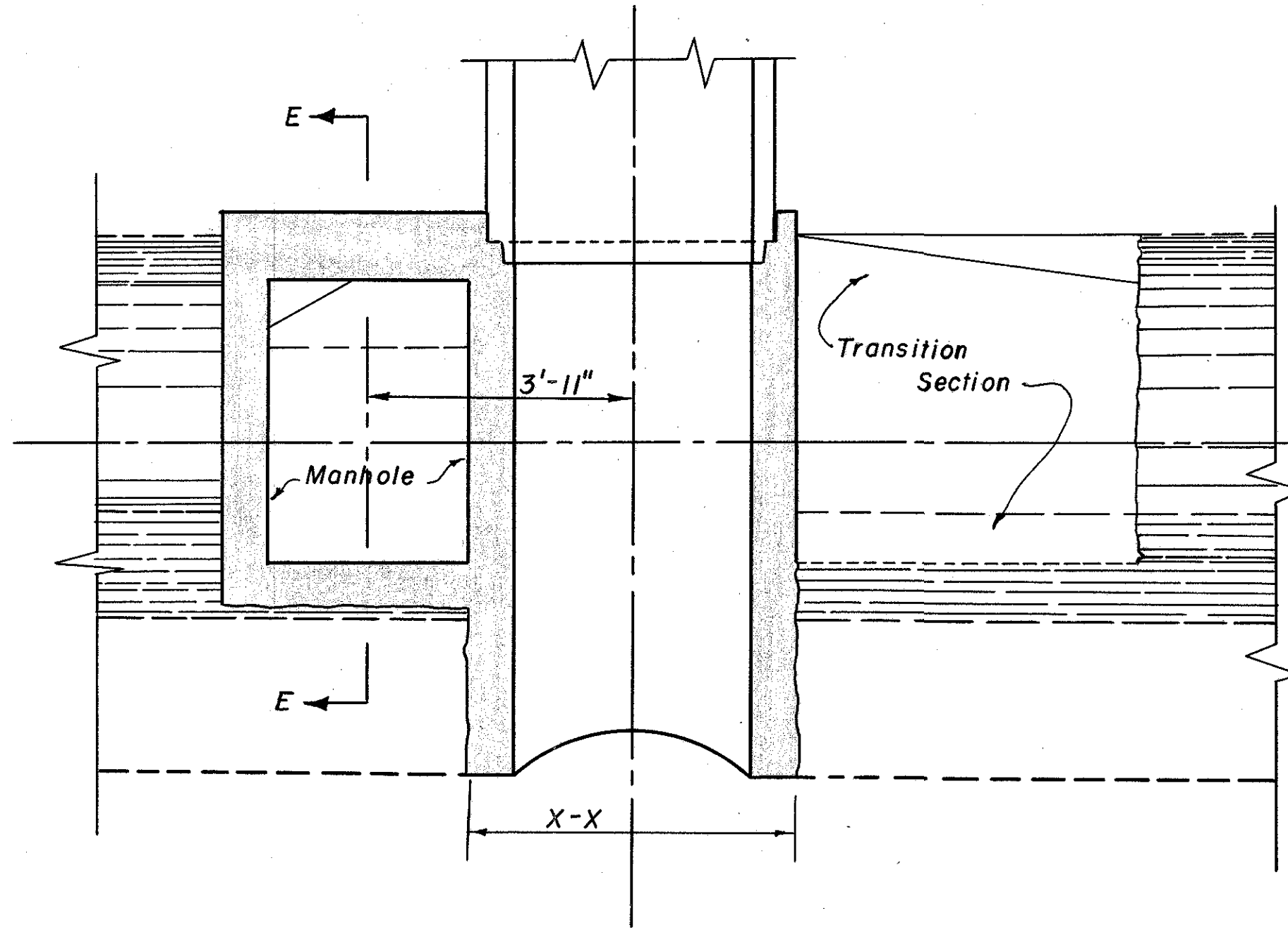
DRAINAGE DETAILS



SECTION B-B
SECTION OF THE EXISTING RENICK RUN STORM SEWER AND
THE WEST SIDE SANITARY SEWER.



SECTION A-A



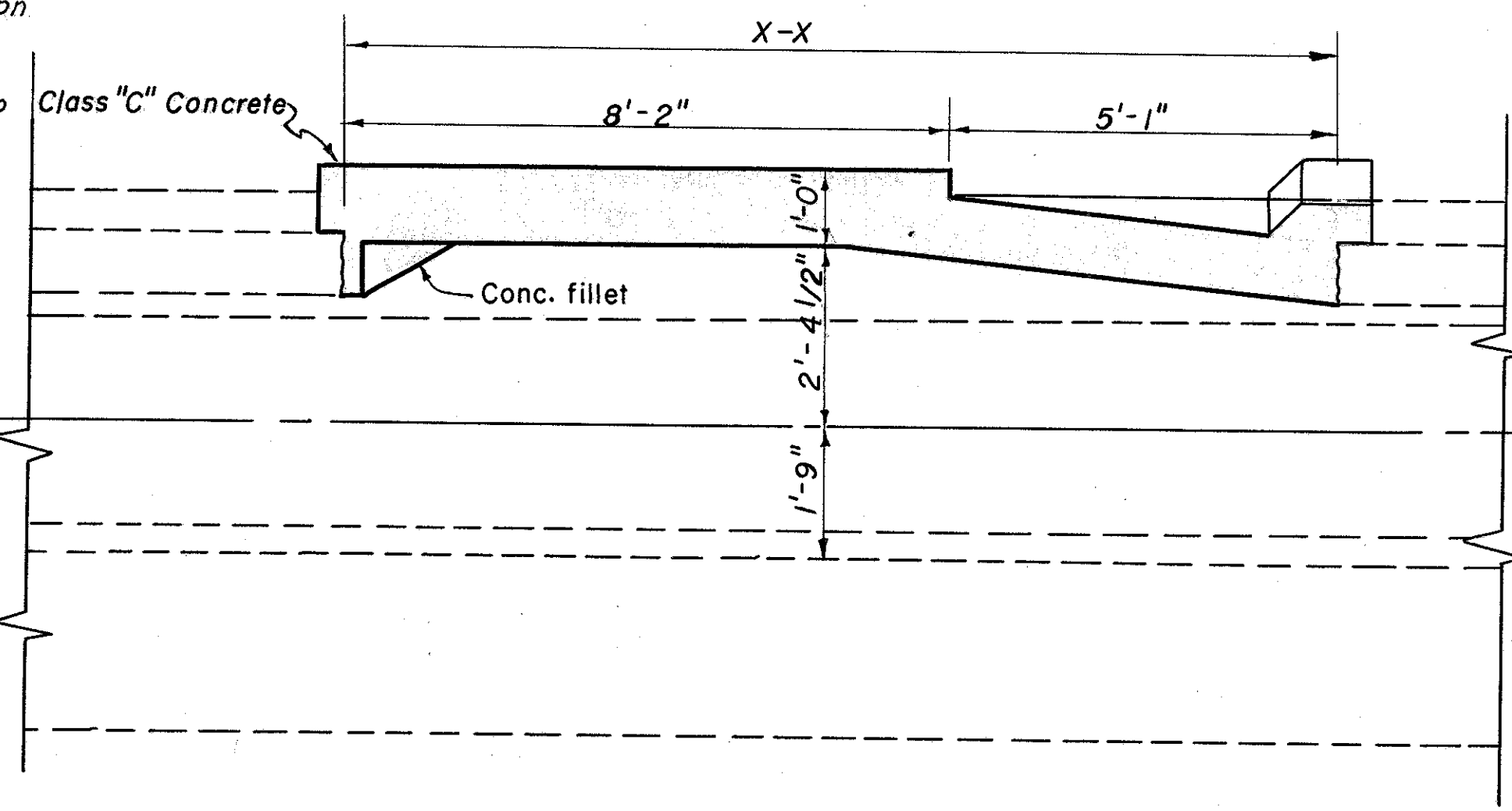
SECTION D-D

STEEL REINFORCEMENT

Schedule omitted as bars may be cut to fit at the job. In the event laps are required lap 15". Steel weights are for estimating purposes only. All bars are #4 @ 8" c/c unless otherwise noted. Bents to be continuous around manhole using a minimum 9" lap.

MANHOLE AND JUNCTION CHAMBER

The work included in this item shall consist of furnishing all materials for manhole and junction chamber and constructing same at the location and to the lines and grades as shown on these plans. Materials, construction methods and workmanship shall be in accordance with Item I-B of the Construction and Material Specifications. The work included in this item shall be paid for at the contract unit price for each manhole and junction chamber, as per plan, completed and accepted, which price and payment shall constitute full compensation for all excavation and backfill, and for furnishing, hauling and placing all castings, reinforcing steel, brick and concrete masonry and other material, etc., and for all labor, equipment, tools and incidentals necessary to complete this item.



SECTION C-C

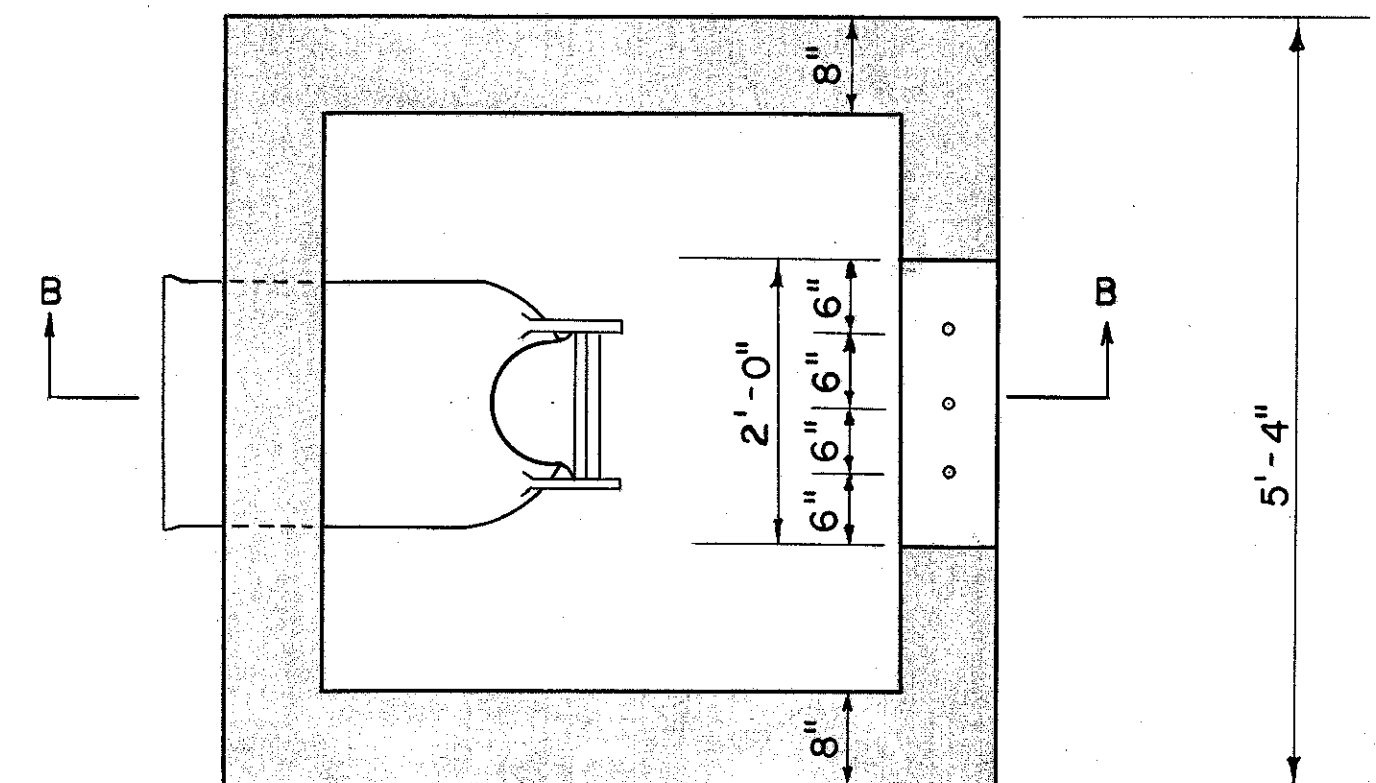
DETAILS OF RENICK RUN MANHOLE AND JUNCTION CHAMBER
AND PROPOSED 42" STORM SEWER
(SEE SHEET NO.140)

SCALE: 1/2"=1'-0"
(SEE SHEET NO.139)

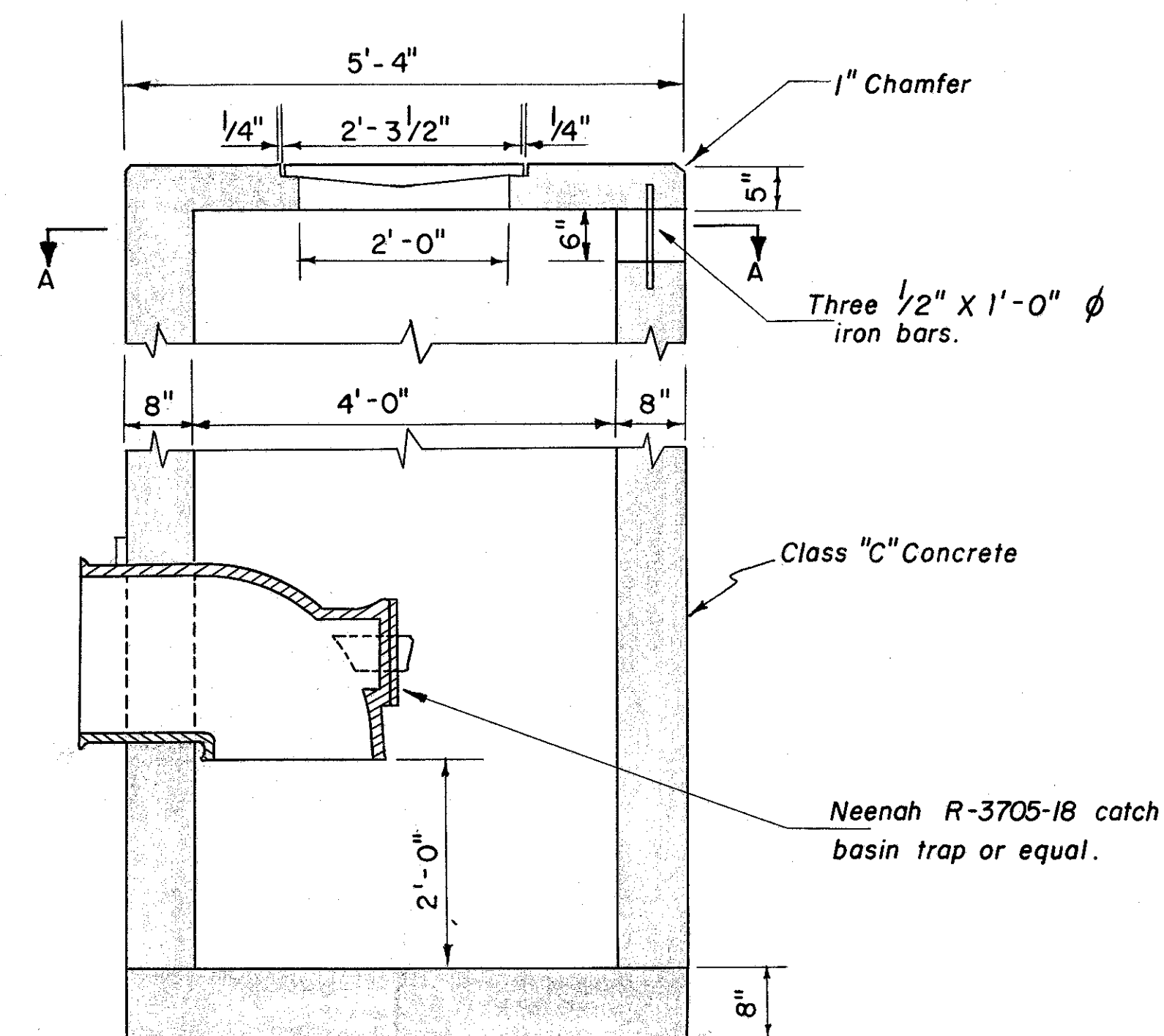


	ITEM 1-8	ITEM 3-22
LOCATION	MANHOLE AND JUNCTION CHAMBER EACH	REM. of P&T EXIST. STRUCT. CULYDS
RENICK RUN	1	6

TRACED HDD CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE AS SHOWN
NO.		DATE




SECTION ArA



SECTION B-B

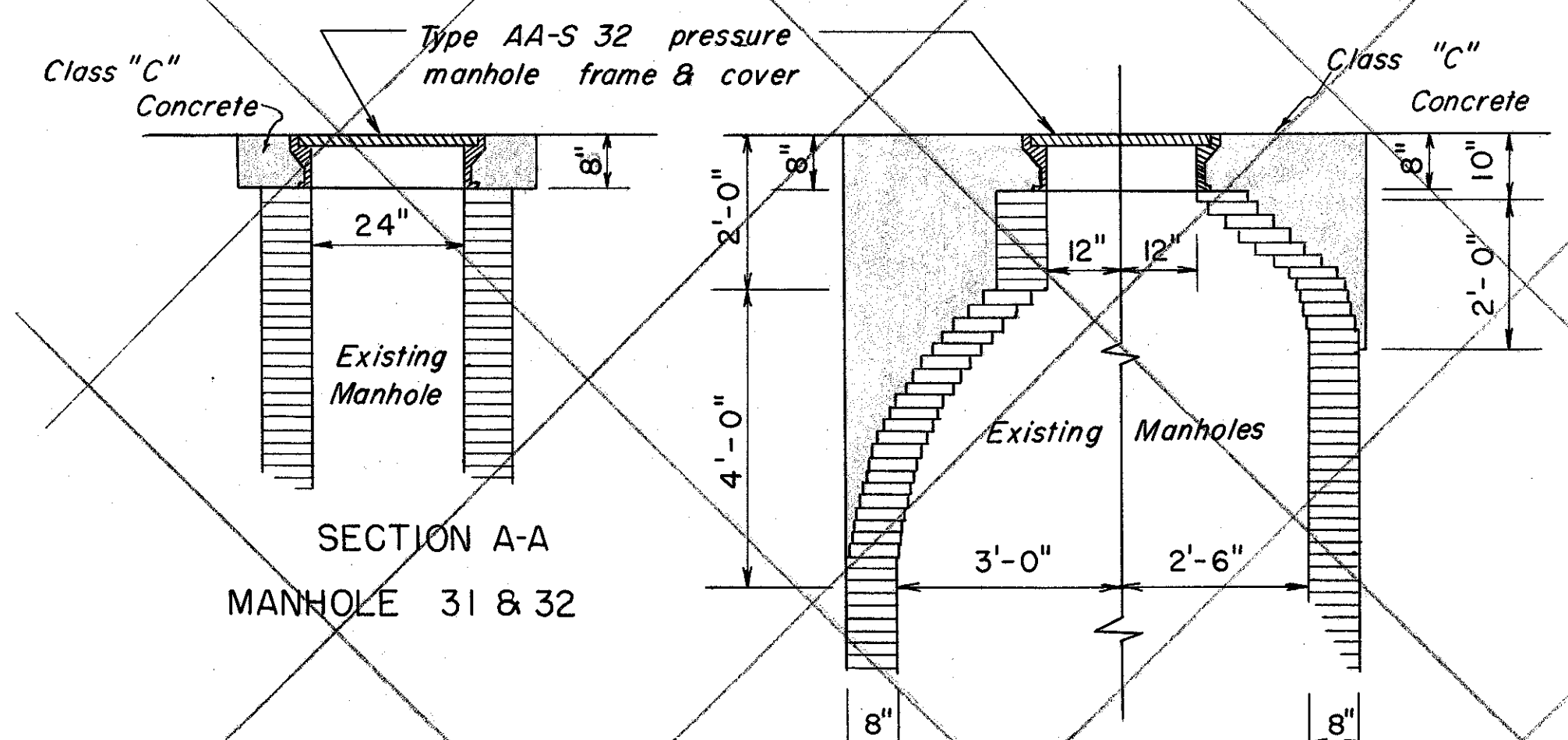
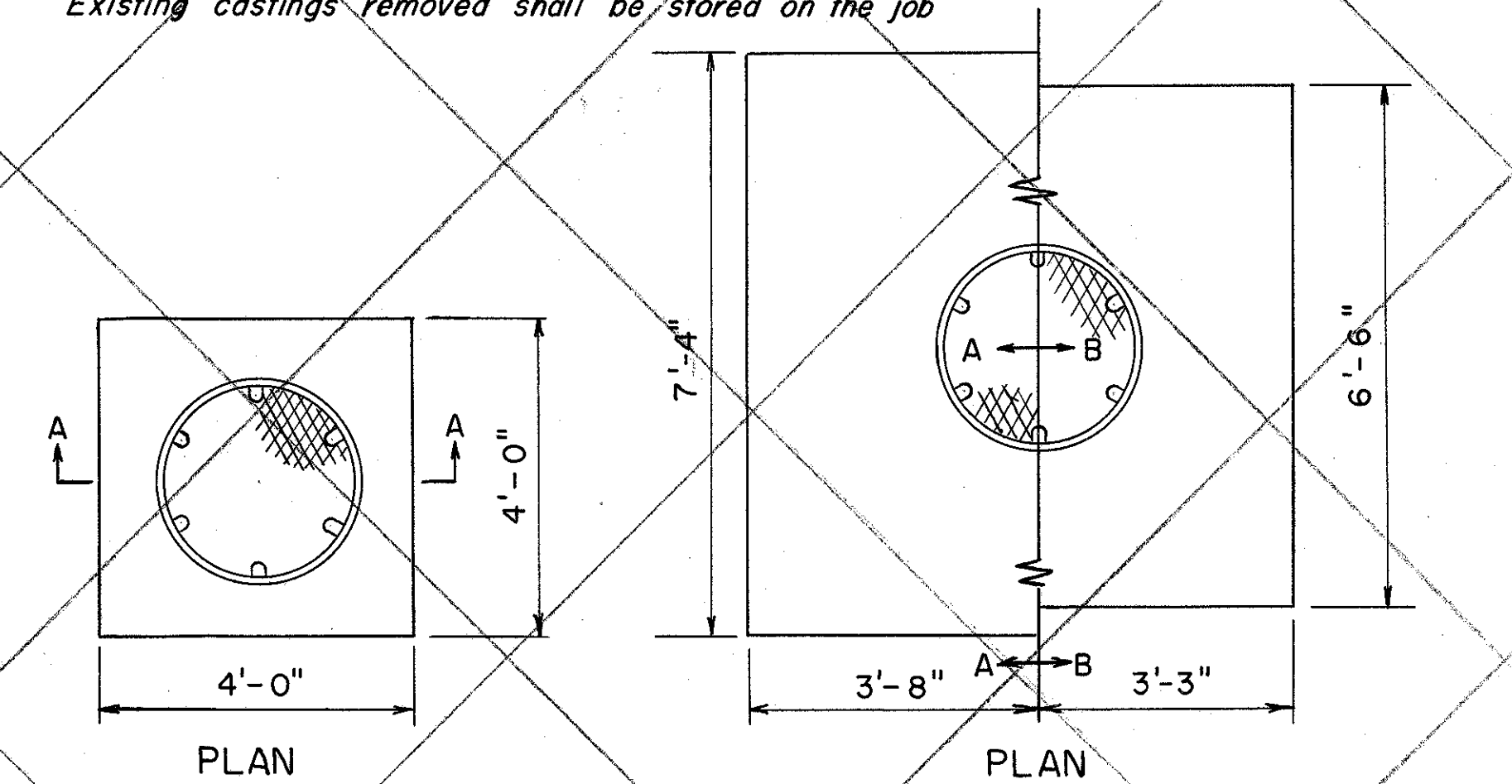
SCALE $\frac{3}{4} = 1'-0''$

FED ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



LOCATION	ITEM E-2 STRUCTURE EXCAVATION C.Y.	ITEM E-8 PAVT REMOVAL S.Y.	ITEM S-1 STRUCTURE CONCRETE C.Y.	ITEM I-8 MANHOLE FR. & COVER (AA-S32)EA.
MH 30-2+40 TOWN ST.35' S.C.	14.5	9.3	7.52	1
MH31- 2+65 TOWN ST. 5' S. C.	-	4.0	0.32	1
MH32- 6+93.5 TOWN ST. ON C.	-	4.0	0.32	1
MH33- 7+18.5 TOWN ST. 4.55 C.	5.34	7.7	2.69	1
Total	19.84	25.0	10.85	4

~~Existing castings removed shall be stored on the job~~



SECTION A-A SECTION B-B
MANHOLE 30 MANHOLE 33

SCALE: 1/2" = 1'-0"

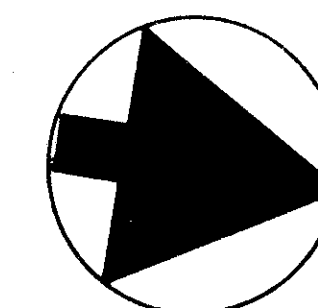
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

EXISTING SEWER RELOCATION,
ABANDONMENT, AND REPLACEMENT

ITEM E-12	ITEM I-8	ITEM I-8	ITEM I-16	ITEM I-16
PIPE REMOVED OVER 24"	MANHOLE (AA-S5)	MANHOLE (AA-S6)	MANHOLES ABANDONED	CURB INLETS ABANDONED
L.F.	EACH	EACH	EACH	EACH
299	2	4	7	4

‡ Non-Participating

STRUCTURE NO.	LOCATION	TYPE	REMARKS
MH A	2+52, 24.5' N. of Greenlawn	AA-S6	on existing 48" sewer
MH B	3+00, 54' N. of "	AA-S6	
MH C	5+20, 54' N. of "	AA-S6	
MH D	5+51, 24.5' N. of "	AA-S6	on existing 48" sewer



Note: Construct new manhole (AA-S5) on 8" San. Sewer 150' east of the east R/W line of Kirby Ave. Abandon all existing San. Sewers to the east of the new manhole.

Relocation of 48" Comb. Sewer
See sheet No. 143 For Profile

Remove existing line from MHA
to MHD

5 Manholes abandoned

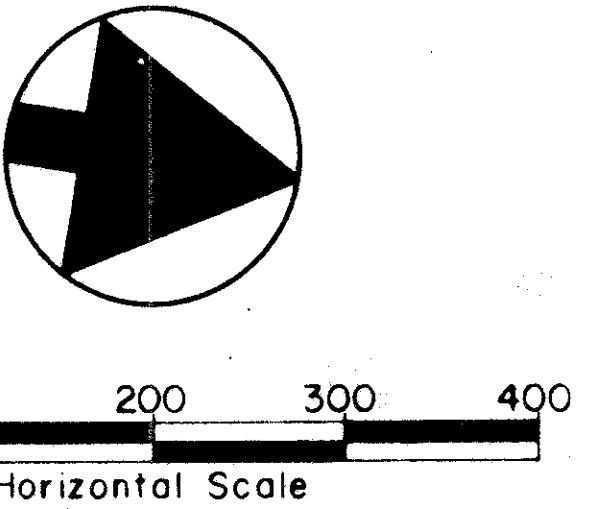
Carry the 8" San. Sewer
through MH5 with 8" C.I.P.
See MH Detail Sheet No. 143

Note: Construct new manhole (AA-S5) on
8" San. Sewer 300' ± east of
existing manhole. Abandon all
existing San. Sewers to the
west of the new manhole

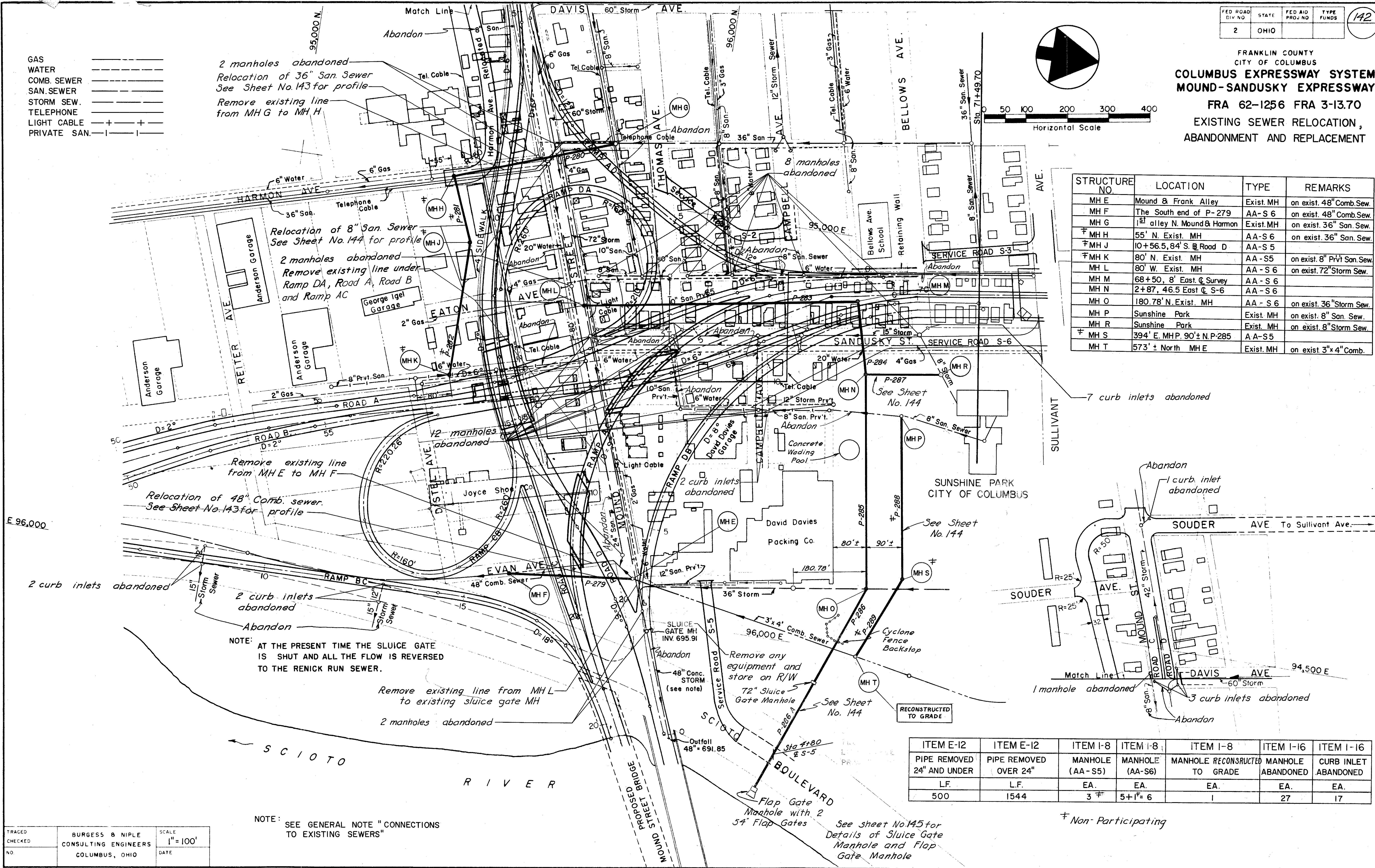
LEGEND

GAS	----
WATER	----
COMB. SEW.	----
SAN. SEW.	----
STORM SEW.	----
TELEPHONE	----
LIGHT CABLE	----
PRIVATE SAN.	----

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 FRA 3-13.70
EXISTING SEWER RELOCATION,
ABANDONMENT AND REPLACEMENT



STRUCTURE NO.	LOCATION	TYPE	REMARKS
MH E	Mound & Frank Alley	Exist. MH	on exist. 48" Comb. Sew.
MH F	The South end of P-279	AA-S 6	on exist. 48" Comb. Sew.
MH G	1st alley N. Mound & Harmon	Exist. MH	on exist. 36" San. Sew.
MH H	55' N. Exist. MH	AA-S 6	on exist. 36" San. Sew.
MH J	10+56.5, 84' S. Road D	AA-S 5	
MH K	80' N. Exist. MH	AA-S 5	on exist. 8" Priv. San. Sew.
MH L	80' W. Exist. MH	AA-S 6	on exist. 72" Storm Sew.
MH M	68+50, 8' East of Survey	AA-S 6	
MH N	2+87, 46.5 East of S-6	AA-S 6	
MH O	180.78' N. Exist. MH	AA-S 6	on exist. 36" Storm Sew.
MH P	Sunshine Park	Exist. MH	on exist. 8" San. Sew.
MH R	Sunshine Park	Exist. MH	on exist. 8" Storm Sew.
MH S	394' E. MHP, 90± N. P-285	AA-S 5	
MH T	573' ± North MHE	Exist. MH	on exist. 3"x4" Comb.



NOTE: AT THE PRESENT TIME THE SLUICE GATE IS SHUT AND ALL THE FLOW IS REVERSED TO THE RENICK RUN SEWER.

NOTE: SEE GENERAL NOTE "CONNECTIONS TO EXISTING SEWERS"

ITEM E-12	ITEM E-12	ITEM I-8	ITEM I-8	ITEM I-8	ITEM I-16	ITEM I-16
PIPE REMOVED 24" AND UNDER	PIPE REMOVED OVER 24"	MANHOLE (AA-S5)	MANHOLE (AA-S6)	MANHOLE RECONSTRUCTED TO GRADE	MANHOLE ABANDONED	CURB INLET ABANDONED
L.F.	L.F.	EA.	EA.	EA.	EA.	EA.
500	1544	3	5+1=6	1	27	17

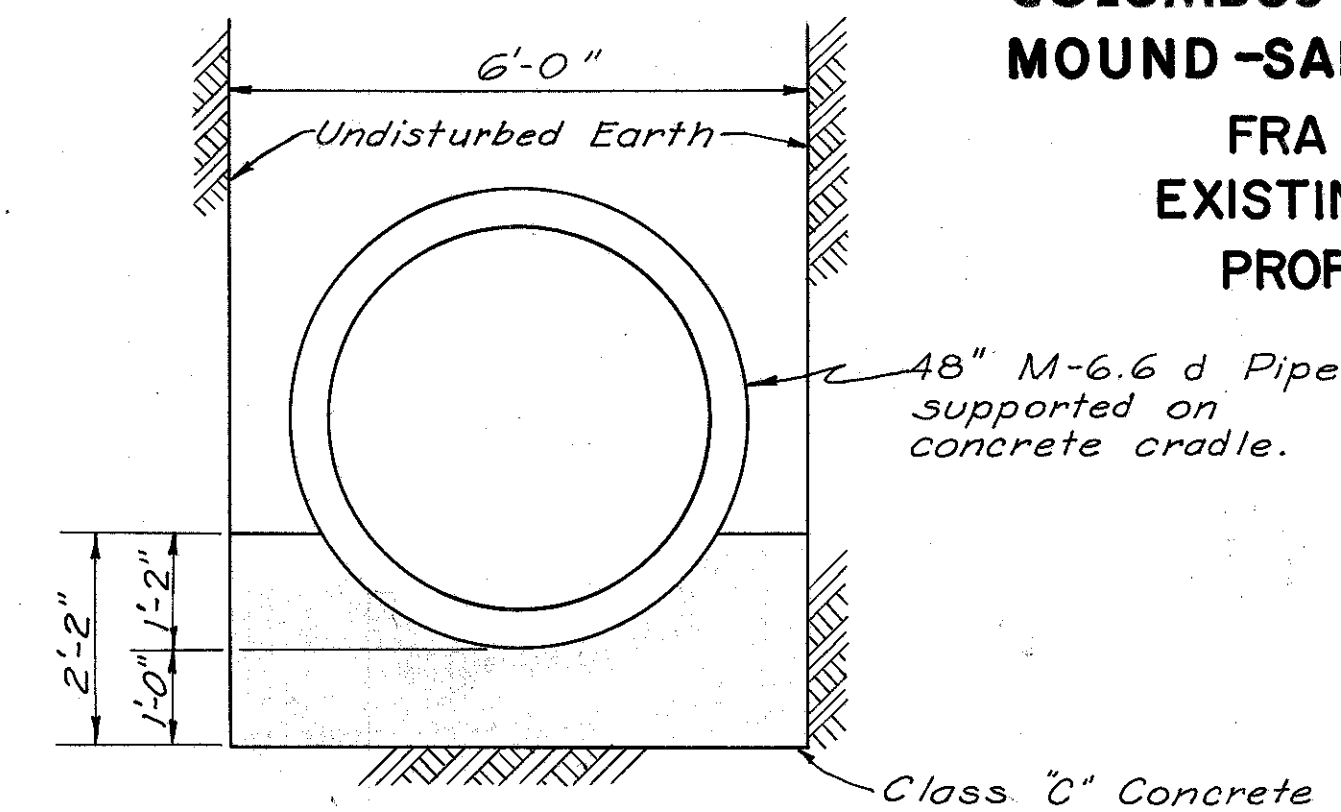
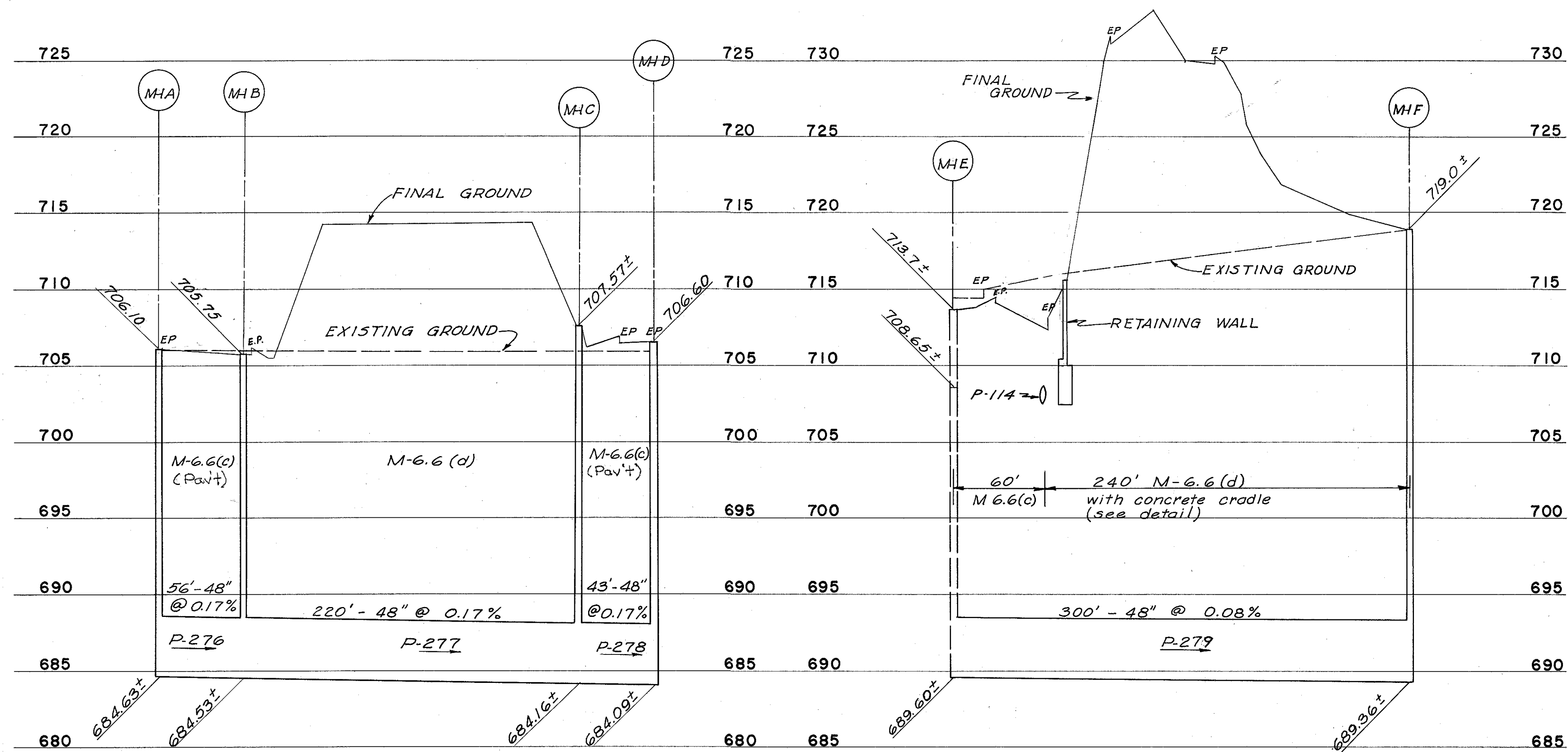
TRACED	BURGESS & NIPLE	SCALE
CHECKED	CONSULTING ENGINEERS	1"=100'
NO.	COLUMBUS, OHIO	DATE

See Sheet No. 145 for Details of Sluice Gate Manhole and Flap Gate Manhole

† Non-Participating

FRANKLIN COUNTY
CITY OF COLUMBUS

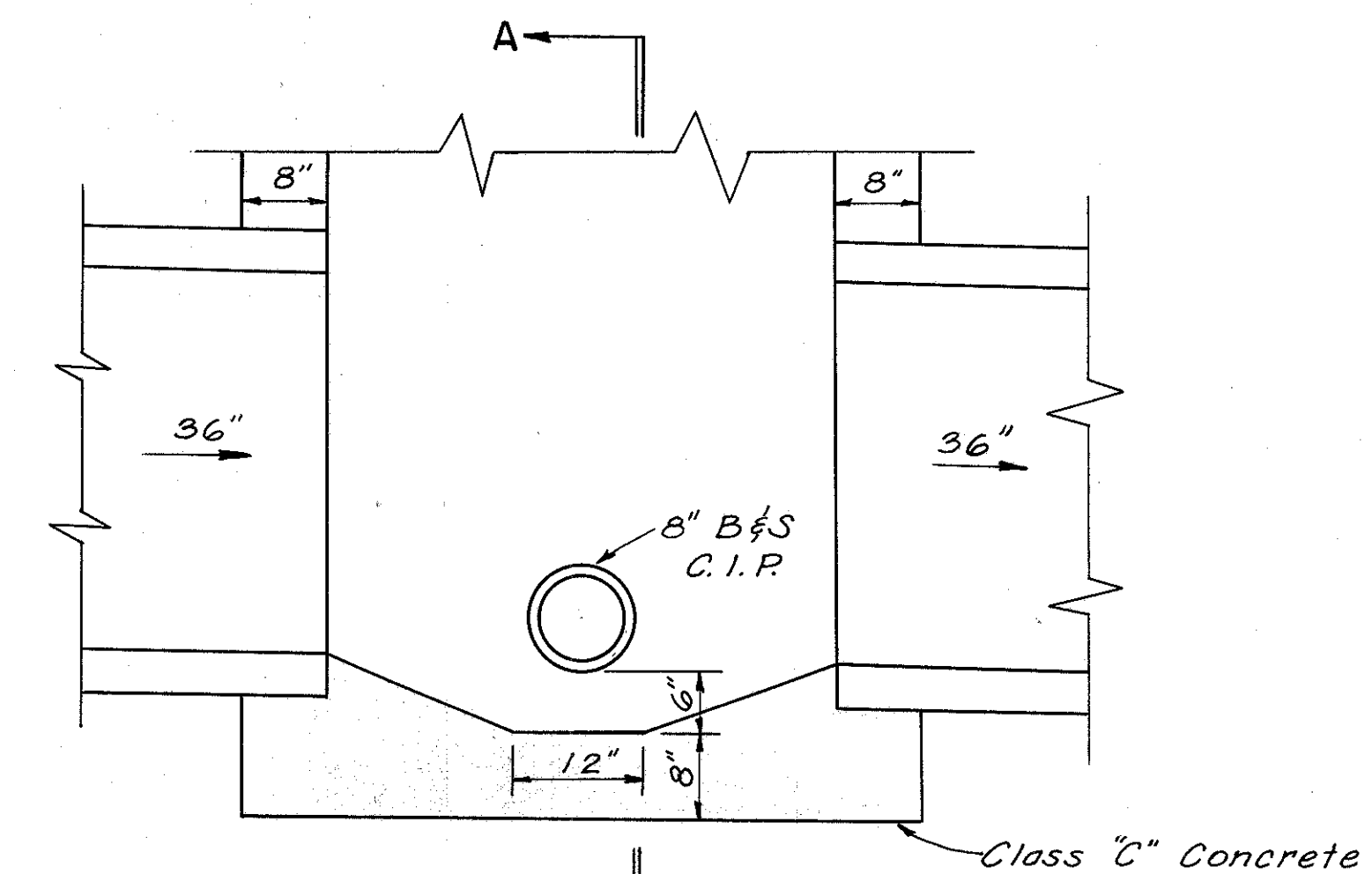
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70
EXISTING SEWER RELOCATION
PROFILES AND DETAILS



CONCRETE CRADLE DETAIL

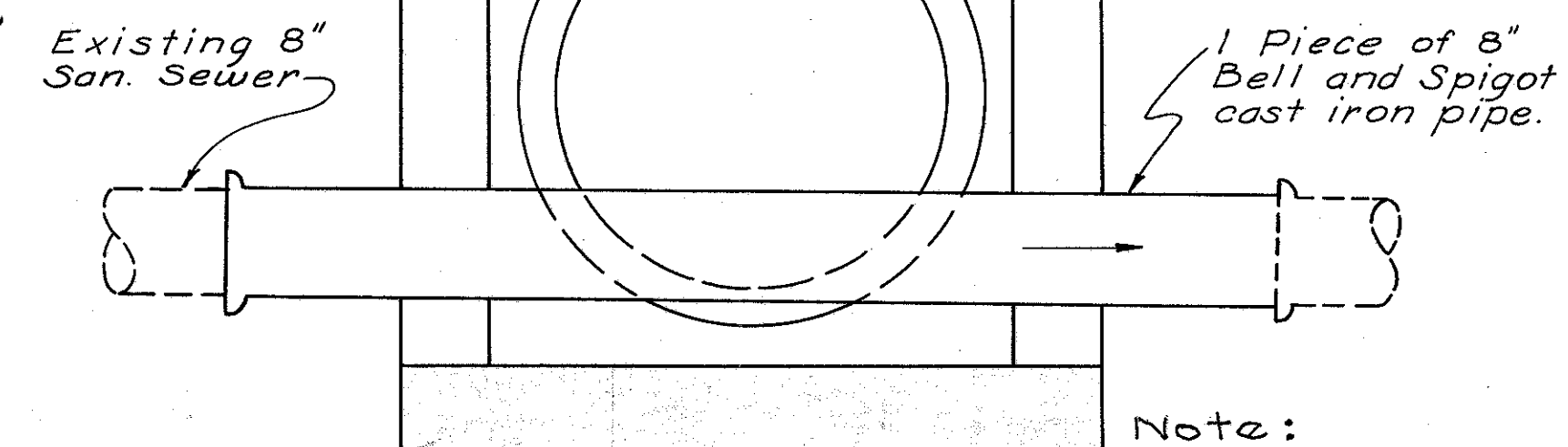
SCALE: 1/2"=1'-0"

Note: Payment for concrete cradle and for additional excavation required to place concrete cradle is included in the unit price bid for Item I-2 48" Storm Sewers, Sec. M-6.6(d), as per plan.

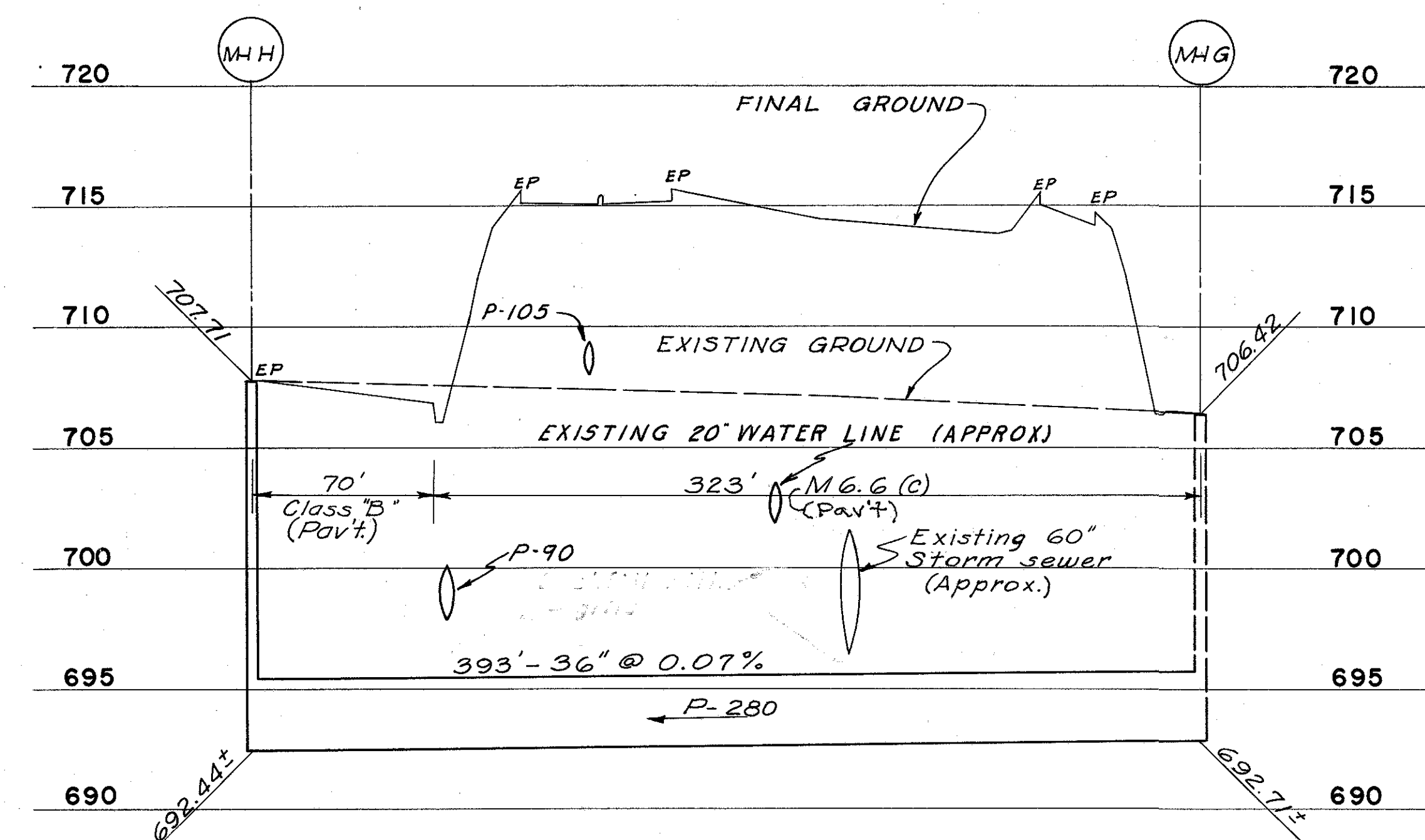


SECTION A-A
DETAIL M.H. NO. 5
STD. NO. 1M (MOD).

SCALE: 3/4"=1'-0"



Note: Weight of 8" Bell and Spigot cast iron pipe per 5 ft. length shall be 150 lb. minimum for single hub and 157 lb. minimum for double hub. Payment for furnishing and installing 8" cast iron pipe, as shown, shall be included in the unit price bid for Item I-8 Standard No. 1 Manhole Modified, as per plan.



SCALE: H: 1" = 50'
V: 1" = 5'

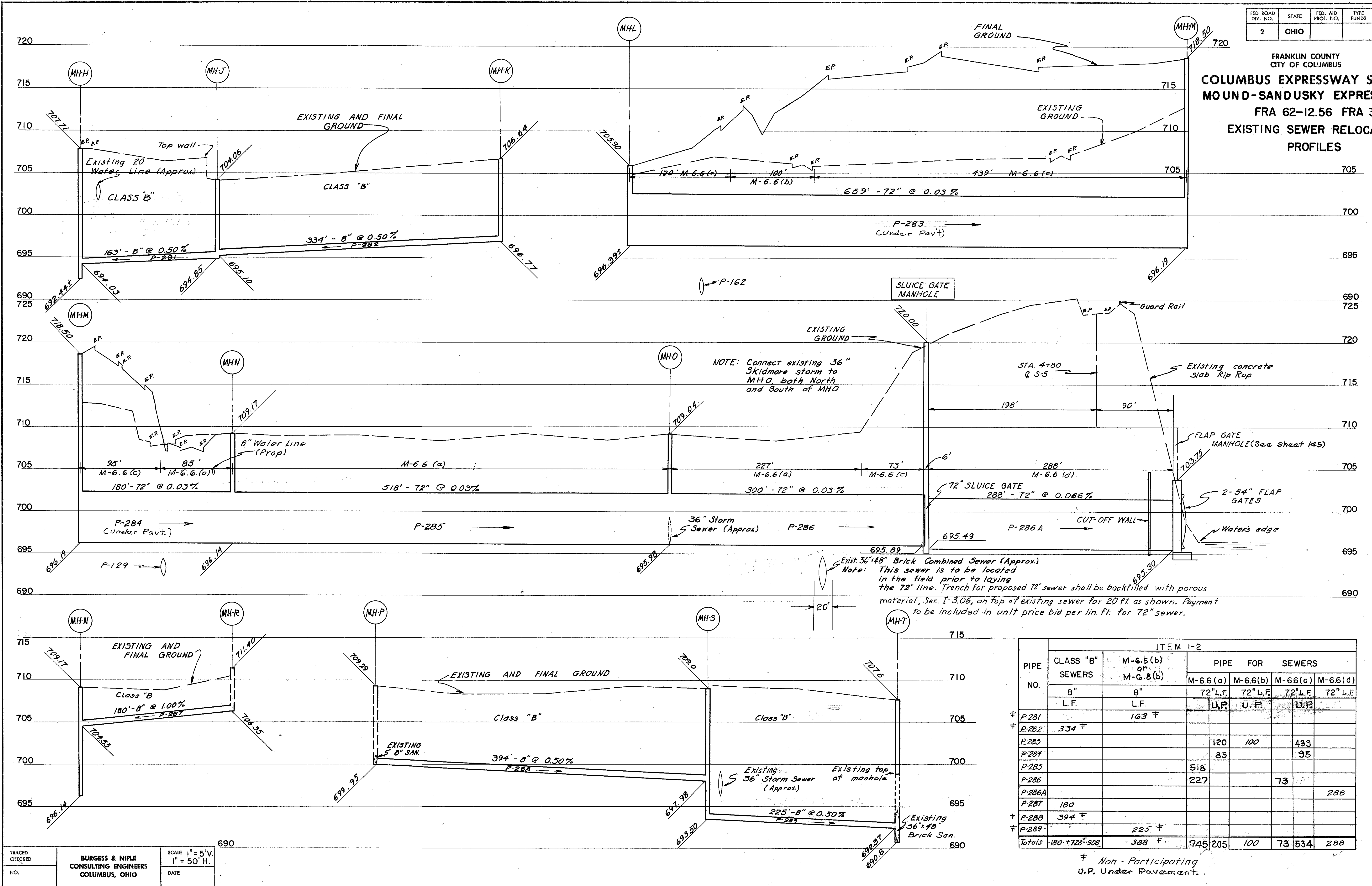
PIPE NO.	ITEM I-2				L.F.	COST
	CLASS "B" SEWERS UNDER PAVEMENT OR APPROACHES	PIPE FOR SEWERS		L.F.		
		M-6.6(c)	M-6.6(d)			
		36"	36 U.P.			
	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.
P276			56			
P277				220	220	
P278			43			
P279			60		*240	
* P-280	70 #	#323				
TOTALS	70 #	#323	159	220	240	

* Non-Participating U.P. Under Pavt.

* Includes Conc. Cradle, as per plan.

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COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
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PROFILES

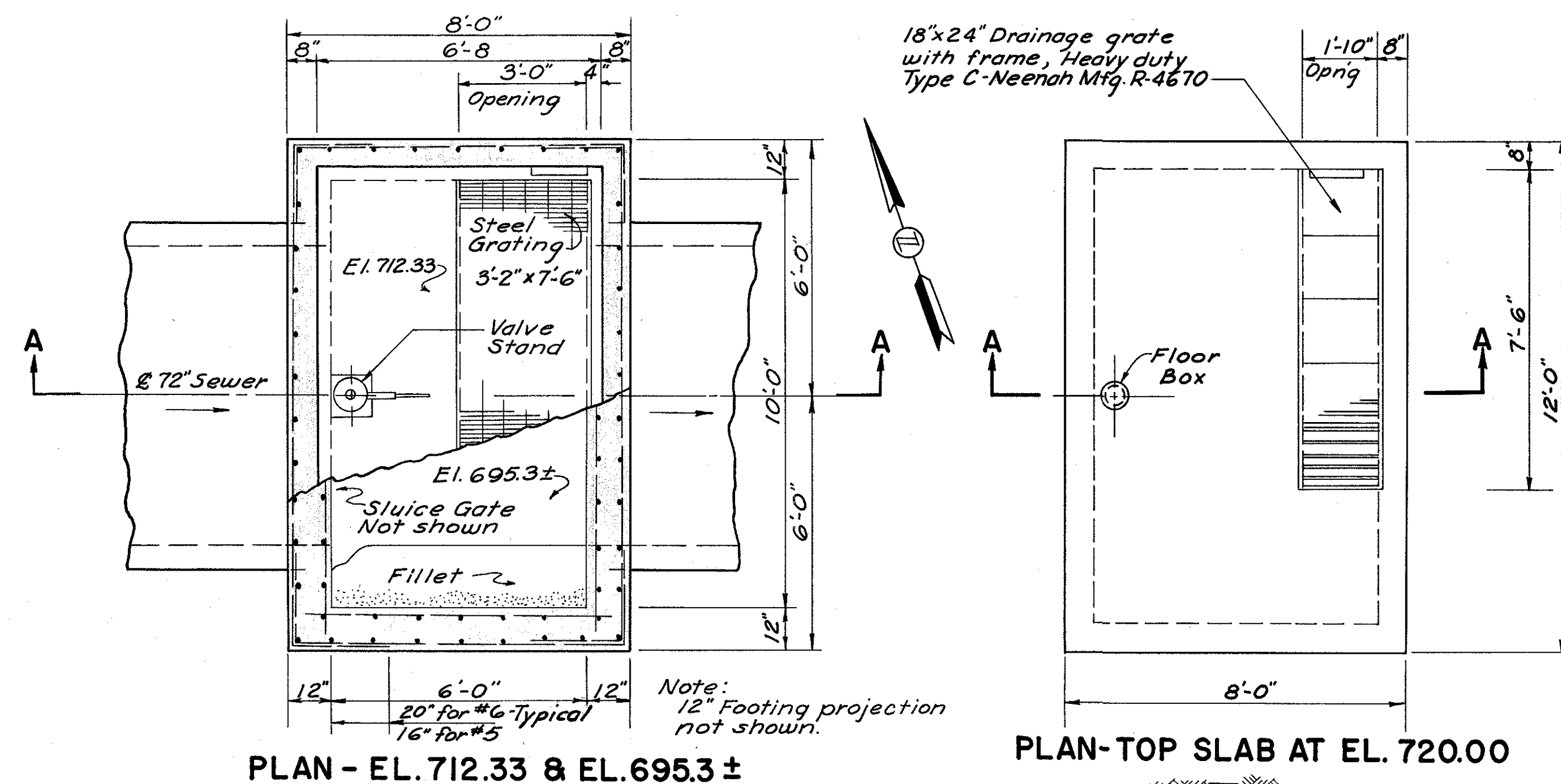


PIPE NO.	CLASS "B" SEWERS	ITEM 1-2 M-6.5(b) or M-6.8(b) 8" L.F.	PIPE FOR SEWERS			
			M-6.6(a)	M-6.6(b)	M-6.6(c)	M-6.6(d)
			72" L.F.	72" L.F.	72" L.F.	72" L.F.
			U.P.	U.P.	U.P.	U.P.
P-281		143				
P-282	334					
P-283			120	100	439	
P-284			85		95	
P-285			518			
P-286			227		73	
P-286A						288
P-287	180					
P-288	394					
P-289		225				
Totals	180 + 728 = 908	388	745	205	100	73

† Non-Participating
U.P. Under Pavement.

FRANKLIN COUNTY
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COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62 - 12.56 FRA 3-13.70
EXISTING SEWER RELOCATION
DETAILS



	ITEM E-2	ITEM S-1	ITEM I-8	ITEM I-8		
LOCATION	STRUCTURE EXCAVATION C.Y.	STRUCTURE CONCRETE C.Y.	SLUICE GATE MANHOLE E.A.	FLAP GATE MANHOLE INCLUDING OUTLET STRUCTURE E.A.		
72" Sluice Gate Manhole			1			
54" Flap Gate Manhole				1		
8" CUT-OFF WALL	5	3.7				
TOTALS	5	3.7	1	1		

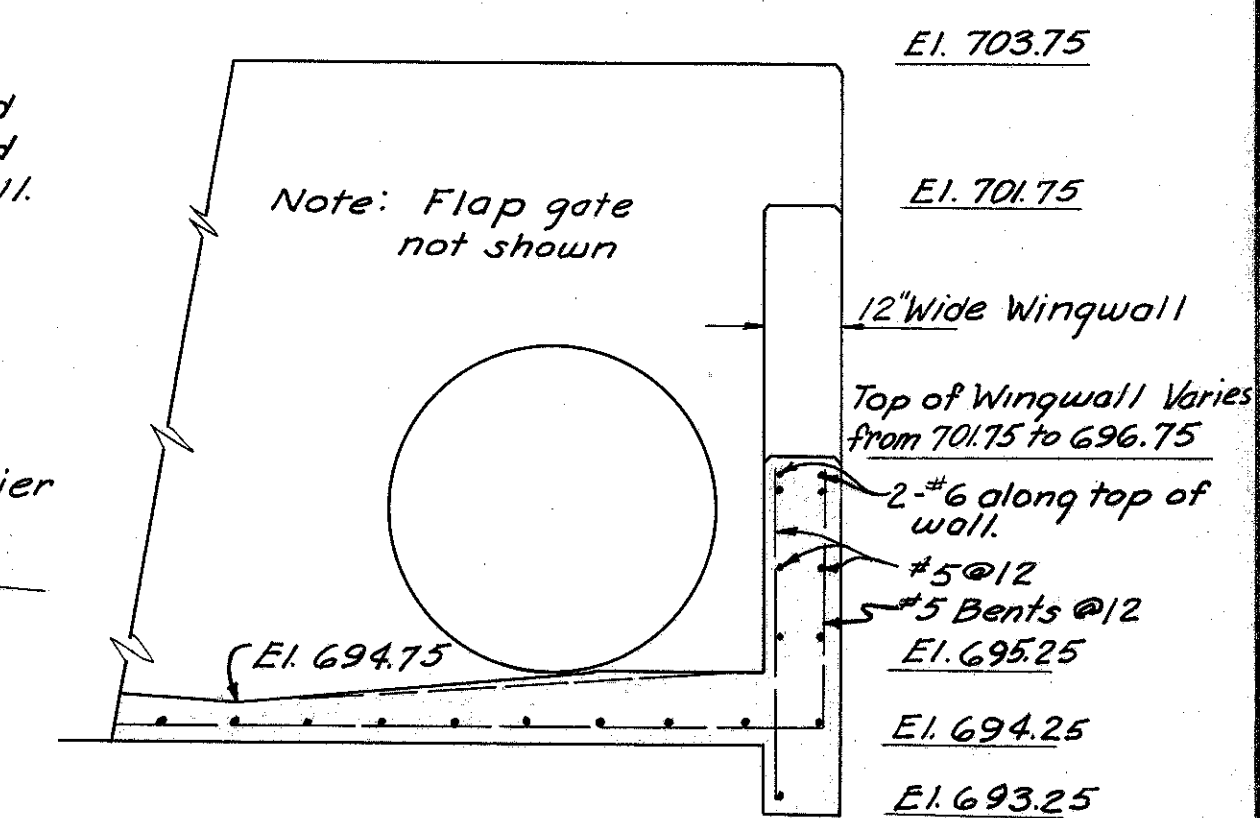
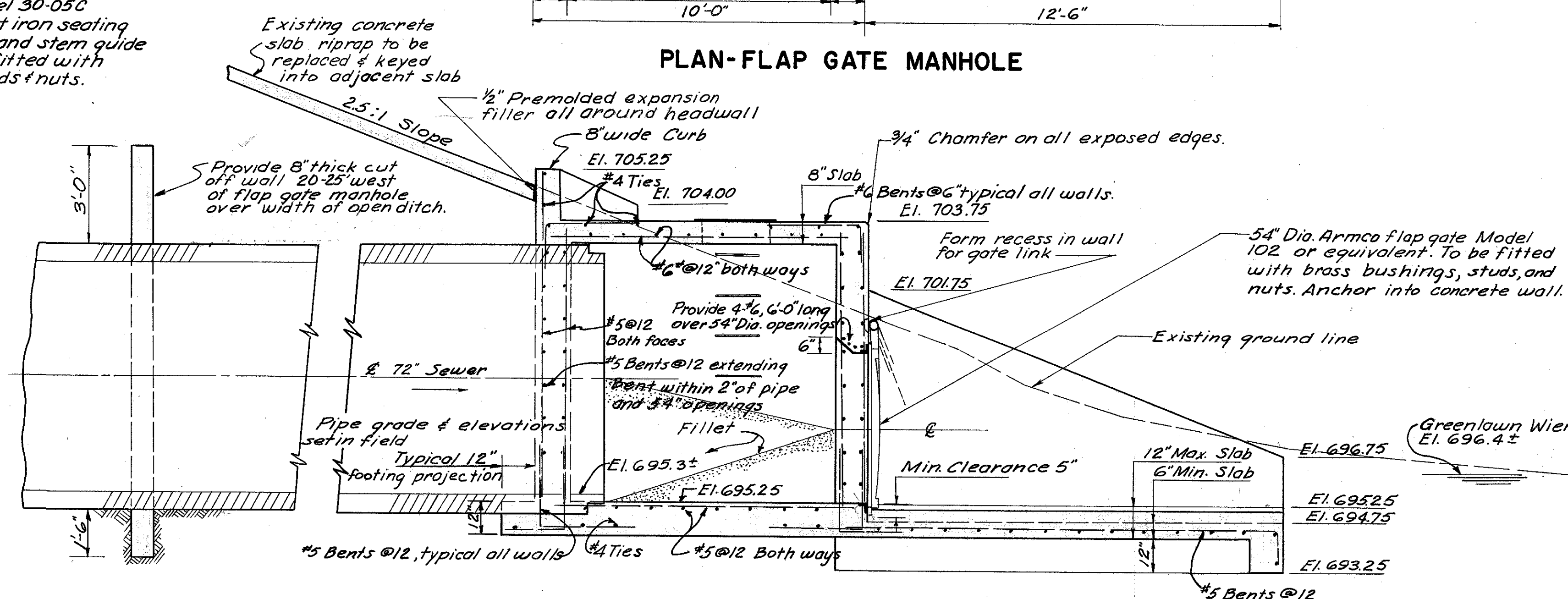
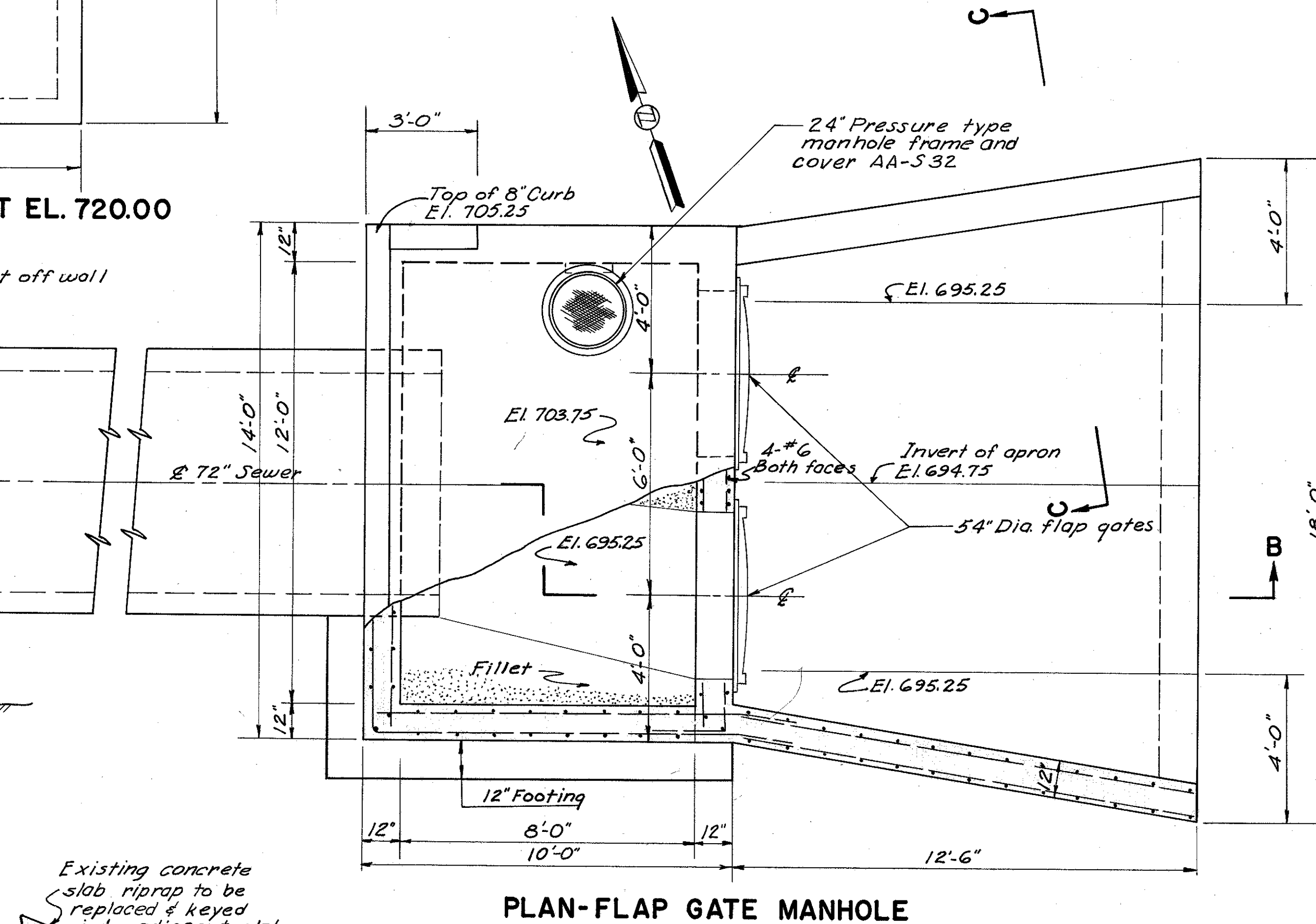
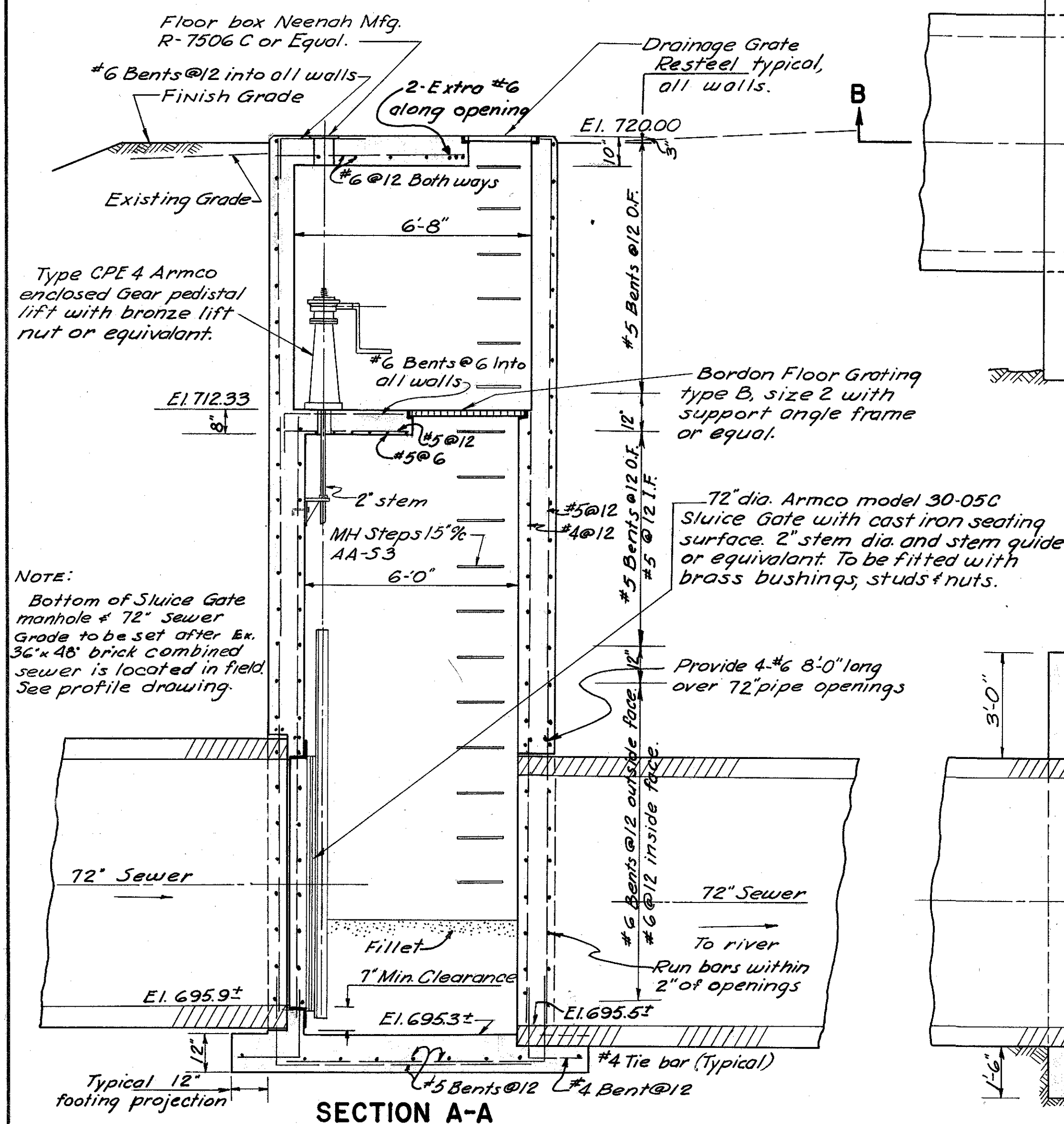
Note: Payment for concrete slab riprap removal to be included in the price bid per cubic yard for Item E-2 Structure Excavation.

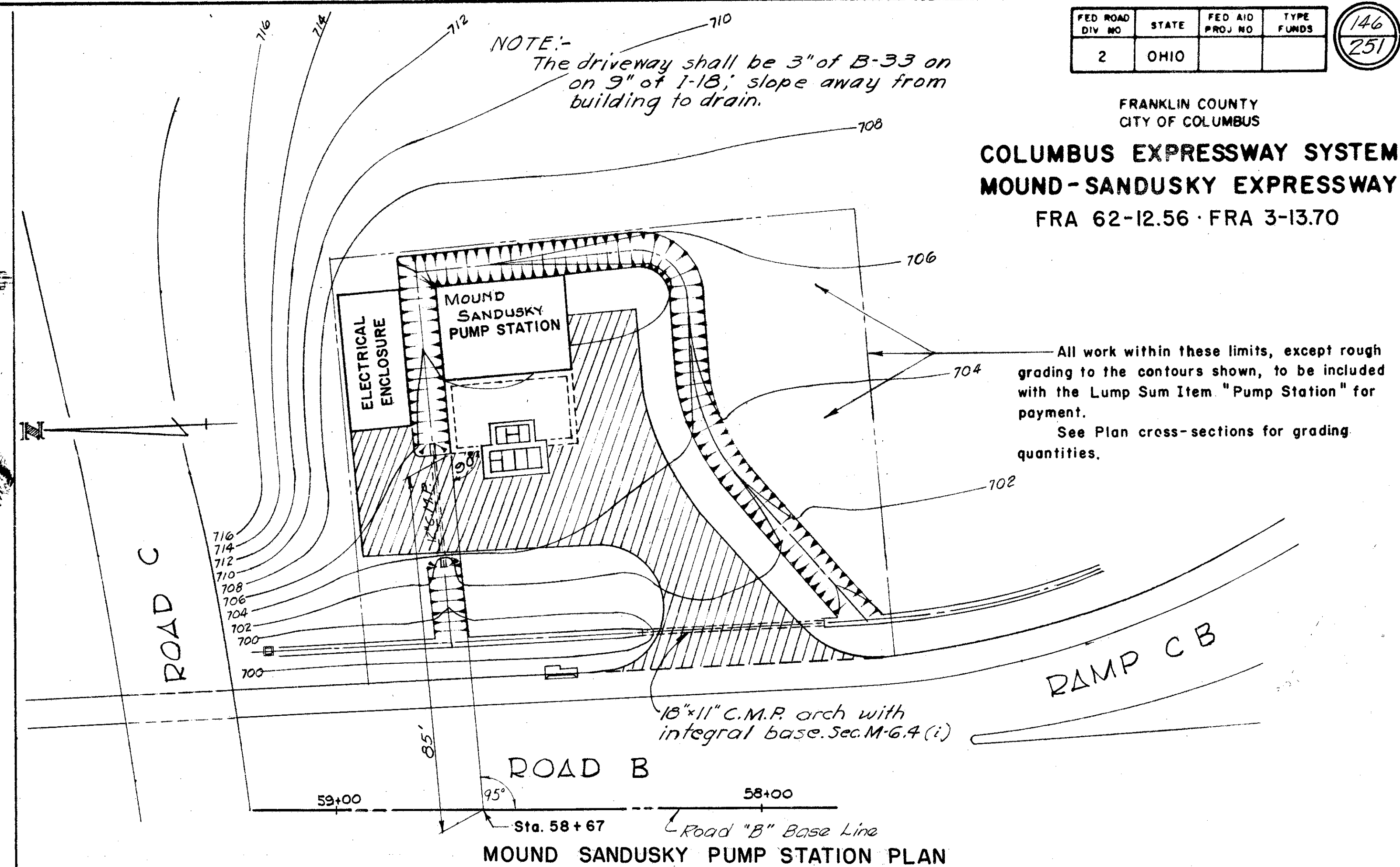
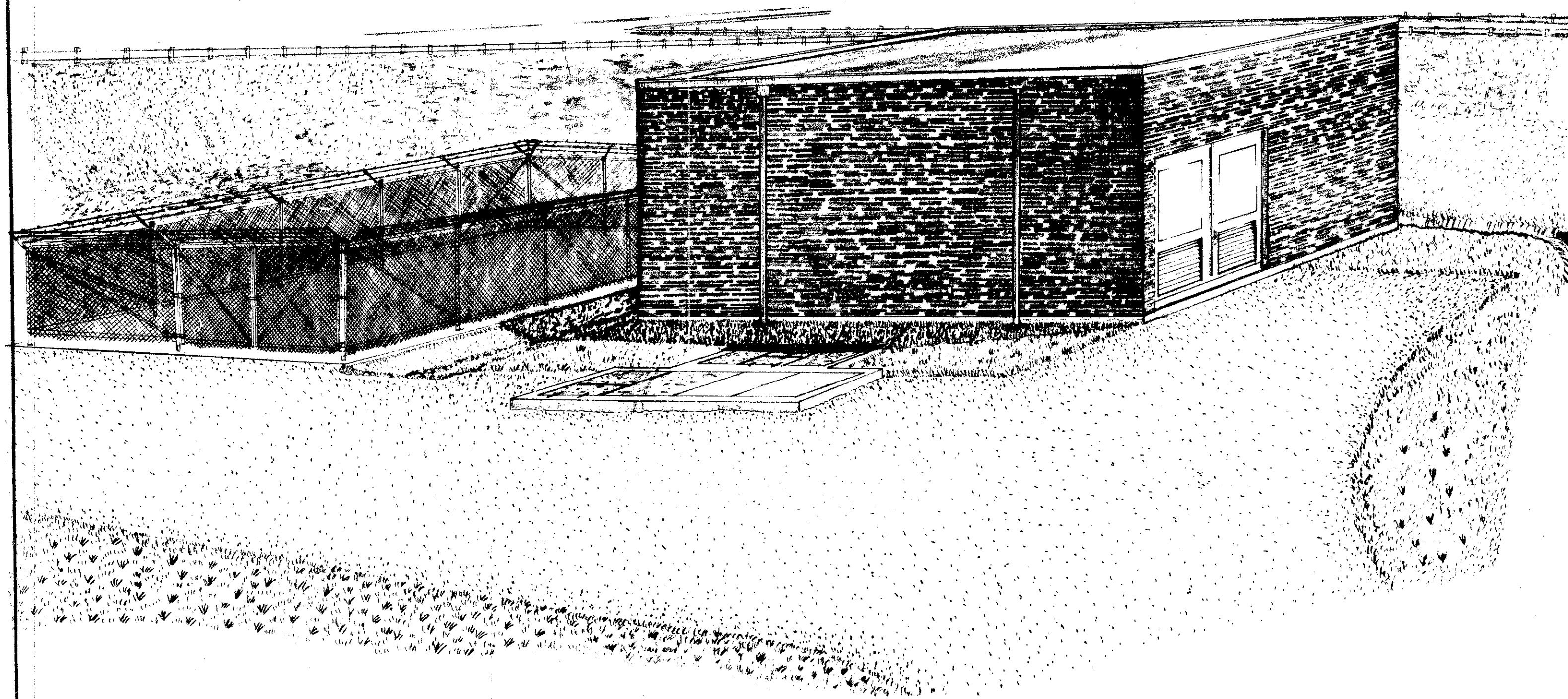
Payment for concrete slab riprap replacement and 1/2" premoled expansion joint filler to be included in the price bid per cubic yard for item S-1 Structure Concrete.

Payment for grating, drainage grate and frame casting, floor box, sluice gates and flap gates is included in the unit price bid for the respective manholes.

All concrete to be Class "C."

Steel Reinforcement:
Schedule omitted as bars may be cut to fit at job.





GENERAL NOTES FOR PUMP STATION

DESCRIPTION OF ITEM:

The pump station item shall include the excavation, backfill, seeding, driveway, drainage, fence, equipment, building and all other materials and labor necessary to complete the pump station within the limits as shown above on the plans.

PUMP STATION

MATERIAL SPECIFICATIONS:

State of Ohio, Construction and Material specifications, dated January 1, 1957 shall govern the materials and construction of this pump station except as otherwise noted.

EXCAVATION AND BACKFILL:

All labor and methods shall conform to the requirements of Item E-2.

CONCRETE:

All materials, labor and methods shall conform to the requirements of vibrated Class "C" concrete under Item S-1. A grout finish shall be given to all wall surfaces.

REINFORCING STEEL:

All materials, labor and methods shall conform to the requirements of Item S-4.

STRUCTURAL STEEL:

All materials used in the grit chamber and wet well frame and cover, frame for sump grating, hand crane supporting members, stairway supports, shall conform to the requirements of Sec. M-7.4(a), all labor and methods shall conform to the requirements of Item S-7.

HAND RAILING:

Handrailing shall conform to the requirements of Sec. S-14

BRICK:

Brick shall be hard-burned shale, uniform in size and texture and red colored. Walls shall be laid in common bond with full headers every sixth course and laid true to line both vertically and horizontally. The brick used shall meet ASTM Spec. C 62-50.

MORTAR:

Mortar shall be of an approved brand of masonry cement and clean sand, mix as directed by the manufacturer. Mortar joints shall not exceed one-half inch in thickness. Exterior joints shall be weathered, interior joints shall be flush.

CONCRETE BLOCK:

Concrete block shall be Grade A quality, thoroughly cured and of the size shown on the plans, free from imperfections and of a physical quality satisfactory to the Engineer. Concrete block shall be made with gravel and meet ASTM Spec. C 90-52.

ESTIMATED QUANTITIES			
Item	Total	Unit	Description
Special	Lump	Sum	MOUND SANDUSKY PUMP STATION

BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
MOUND SANDUSKY PUMP STATION SITE PLAN & GENERAL NOTES					
FRANKLIN COUNTY					
DESIGNED GmL	DRAWN KJB PTP	TRACED P.P.	CHECKED USD	REVIEWED DATE #18 10-9-57	REVISED

GENERAL NOTES FOR PUMP STATION

FED ROAD DIV NO	STATE	FED AID PROJ NO	TYPE FUNDS
2	OHIO		

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251

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

PUMPING EQUIPMENT

A. GENERAL:

The Contractor shall provide the Engineer with equipment drawings showing complete details for construction purposes. The Contractor shall obtain written approval, of the Director of Highways, of the equipment he proposes to install before the equipment is purchased and installed. All of the pumping equipment shall be supplied by one manufacturer.

B. PUMP SPECIFICATIONS:

1. VOLUTE CASING:

Volute casing shall be made of high grade cast iron or semi-steel of sufficient thickness to withstand all stresses and strains of service at full operating pressure. A hydrostatic pressure test of 75 lbs., per sq. inch shall be applied. A hand hole shall be located in the discharge nozzle for inspection of the pump. The inner contour of the hand hole cover shall conform to that of the volute. Provide eye bolts for lifting on number 2 and 3 pumps.

2. IMPELLER:

The impeller shall be made of close grained cast iron. It shall be cast in one piece and shall be balanced. The impeller shall be keyed to the shaft and firmly held in place by a threaded locknut. Renewable impeller and casing rings shall be provided.

3. HEADS:

The cast iron suction and back heads shall be cast separate from the volute, and so built to allow for complete removal of bearings, shaft and impeller by simply unbolting the head. A hand hole shall be provided in the suction head for inspection of the pump impeller.

4. STUFFING BOX:

The stuffing box shall be cast integral with the backhead, and shall be of sufficient depth to insure satisfactory operation at all times with minimum attention. The bronze gland shall be of the split removable type. A water seal ring shall be provided with connection for grease seals.

5. FRAME:

The cast iron pump frame shall carry both radial and thrust bearings. It shall be accurately centered, and bolted to the backhead and pump casing. Large openings shall be provided in the frame adjacent to the stuffing box to facilitate repacking and adjustment.

6. SHAFT:

The shaft shall be made of manganese alloy steel, ground and polished and key seated for mounting of the impeller and coupling. It shall be protected by a corrosion and wear-resisting centrifugally cast bronze shaft sleeve of 180 Brinnell hardness where it passes through the stuffing box.

7. BEARINGS:

Pumps shall be provided with an inner roller bearing of the heavy duty, grease lubricated, anti-friction type, capable of carrying safely all radial loads imposed upon it within the entire working range of the pump. The entire pump thrust load shall be carried by a heavy duty, grease lubricated ball thrust bearing located in the upper end of the frame.

PUMP STATION
CONTINUED

FENCE AND GATE:

The fence around the transformer platform shall be eight (8) feet high plus one foot (3 strands) of barbed wire on top. The gates will also have barbed wire mounted on them the same height as the fence. The fence material and erection directions shall conform to Supplemental specification No. 18 type C chain link fence.

PAINTING:

All metal surfaces except doors and those specified to be galvanized shall be painted in accordance with Item S-8, one coat of shop paint and two coats of field paint. Doors shall be given two field coats of black paint according to Item S-8. The first coat of field paint shall be tinted a different color than the shop color or finish color.

WATERTIGHT TEST:

The watertight seal of the wall between the wet well and the pump room shall be checked by filling the wet well full of water for 24 hours and observing the wall in the pump room. If there is any leakage through the wall it shall be repaired and tested again for watertightness.

CONSTRUCTION USAGE:

If the contractor elects to construct, equip and use the storm water pumping station during the construction of the project, he may do so by assuming full responsibility for the station and equipment and he shall furnish such temporary electrical power connections as may be required and he shall assume all operating costs thereof. If the station is so operated, the contractor must provide all preventive and corrective maintenance necessary to operate the station during the construction of the project and he must replace or repair all damage to the structure, equipment or controls to the satisfaction of the Director.

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COLUMBUS, 12, OHIO.

MOUND SANDUSKY
PUMP STATION
GENERAL NOTES

FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
pmf				HHH 10-9-57	

GENERAL NOTES FOR PUMP STATION

PUMPING EQUIPMENT CONTINUED

8. PUMP CHARACTERISTICS:

The pumps supplied shall be Fairbanks-Morse vertical angleflow figure 5710 pumps or equal and they shall have the following characteristics:

Pump Number	Unit	1	2, 3
Capacity at Operating Head	GPM	4,000	20,000
Operating Head TDH	ft.	46	50
Operating Head Efficiency	%	75	86
Capable of operating down to a low head of ft.		32	39
Shut off head not less than	ft.	57	73
Suction and discharge pipe size	inches	14	24
Maximum Speed of pump	RPM	900	600
Minimum Horsepower	BHP	75	300

Certified pump curves shall be supplied by the manufacturer for each pump.

Provide a 1" air release valve No. 200A APCO 75 psi W.P. cast iron body and cover, Brass trim and copper float or equal on each pump volute.

9. SUMP PUMP:

The Sump pump shall be an Automatic heavy duty sump pump, Fairbanks-Morse 4675-B or equal.

10. PUMP TESTS:

The Contractor shall provide the instruments and perform the tests as may be required by the Engineer under the direct supervision of the pump manufacturer. The pumps shall be tested for the following:

1. Sequence of operation and liquid level control.
2. Wire to water efficiency at the operating head.

Pumps, steady bearings, universal joint brackets and all the other accessories necessary for the pump installation are included in the item "Pump Station" for payment.

C. PIPING:

1. PIPE:

Cast iron pipe shall conform to Federal Specification No. WW-P-421a including latest revisions thereto, covering centrifugally cast class 100 cast iron pipe. Flanged fittings shall conform to A.S.A. B 16.1 and shall be class 125. Mechanical joint fittings shall conform to A.S.A. a 21.11 or latest revision. Bell and spigot fittings shall conform to AWWA C 100 Class B.

2. GATE VALVES:

Gate valves larger than 3 inches shall have cast iron body and gate with bronze facing on the gate. Gate valves 3 inches and smaller shall be solid bronze. Gate valves shall be Rensselaer list 13A or equal.

3. CHECK VALVES:

Shall be cast iron body, stainless steel shaft bronze mounted, spring loaded Rensselaer list 340 or equal.

D. ELECTRICAL EQUIPMENT:

1. GENERAL:

Furnish and install complete the electrical installation as indicated on the plans. Work under this contract shall include the 480 volt, three phase service entrance into the pump station, providing the electric control panel and control equipment, installing branch feeder circuits and the lighting system all complete, tested and ready for operation. Further, this contract shall include providing the transformer substation site as indicated on the plans.

The omission of minor items in the plans is not to be construed as to release the contractor's obligation for an installation complete in all respects within the true intent and meaning of the plans. All labor shall be performed in the best manner by skilled electricians.

Equipment as specified on the plans is not intended as restrictive but rather as a guidance for the requirements of the installation. Equipment or material of an equal nature may be substituted for that specified upon the written approval of the Engineer.

2. SERVICE ENTRANCE:

Furnish and install the service entrance Feed-In duct equal to Square D Co. including cable tap box, flange extensions, connections to control panel, supports and fittings. Duct shall be insulated copper bus bars in weather-proof housing rated three pole, 480 volts, 1000 amperes continuous. Provide weather barrier in duct, flash opening where duct passes through wall and make weather tight.

3. CONDUCTORS, CONDUITS AND FITTINGS:

All conductors in conduit shall be single conductor copper, rated for 600 volts, rubber insulated with neoprene jacket conforming to A.S.T.M. specifications D752 and D754. Conductors shall be not less than #12 AWG and shall be stranded wire for conductors #6AWG and larger. Control panel wiring may be thermoplastic insulated Type TW.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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**COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY**
FRA 62-12.56 · FRA 3-13.70

D. ELECTRICAL EQUIPMENT
CONTINUED

Conduits shall be full strength galvanized steel conduit threaded and reamed. Fittings, boxes, etc., shall be of the "cast" type equal to Crouse-Hinds type FS condulets complete with covers as required. All conduits shall be routed neatly and in general shall be located at right angles to building lines. Provide pipe sleeves at all points where circuits enter the "dry well" from the exterior and caulk water-tight.

4. LIGHTING SYSTEM:

Provide the lighting system complete as indicated on the plans including lamps of the rating specified. All switches and receptacles shall be of the weatherproof type mounted in cast enclosures with gasketed covers.

5. AUTOMATIC PUMP CONTROLS:

Provide the automatic control system complete. Details of equipment are listed under the various control panel items. Features of the pump control system shall include the following:

- Pump sequencing by liquid level (LL1, LL2, LL3).
- Automatic alternation of sequence for pumps #2 and #3 (CR1, CR2, CR3).
- Timed "lock-out" to prevent simultaneous starting of pumps #2 and #3 (TD1, TD2, TD3).
- Timed "lock-out" against re-start for predetermined interval (TM1, TM2, TM3).
- Test circuit to permit manual testing of automatic controls and sequencing (TT).

6. CONTROL PANEL:

Furnish and install the control panel complete as shown on the plans or specified herein. The control panel shall be totally enclosed, free standing, NEMA Type 1 enclosure Square D Co. Class 8938 Control Center or an approved equal. Construction shall be Type "B" for 480 volt, three phase power service. Top, bottom and back cover plates shall be removable for access to equipment.

Complete detailed drawings and diagrams shall be furnished by the contractor and approved by the Engineer prior to installation. Each compartment shall be identified by an engraved type nameplate. The units shall be factory assembled and tested prior to shipment.

Circuit breakers shall be manually operated, trip free and provided with thermal element and instantaneous tripping. Motor starter contactors shall be equipped with automatic re-set overload relays.

Control switches and indicating lights shall be "Oil-Tight" Class 9001 flush mounted on compartments. All special controls, relays, timers, etc., shall be mounted to provide accessibility for adjustment and maintenance. Details for mounting shall be furnished to the Engineer and approved prior to installation.

The vertical sections shall be interconnected by horizontal copper bus bars rated for 1000 amperes continuous. Vertical bus bars shall be ample for the connected load but not less than 300 amperes. Joints and connections shall be silver to silver contact with all bus work suitably braced to withstand 50,000 RMS amperes short circuit current. Each vertical section shall be provided with one 200 watt, 120 volt space heater and thermostatic control. Terminal blocks for control circuits shall be provided in each compartment for control leads entering the compartment with the circuit identification indicated on the block.

The control panel shall include the following:

Compartment "A" - MAIN BREAKER

Provisions for connections to a 100 ampere "Feed-In" bus entering the control panel from the top. Main power air circuit breaker, single throw, rated 1200 amperes continuous, 60 cycle, 3 pole, 480 volts, fixed mounting with tripping devices on each pole providing long time delay and instantaneous tripping. Interrupting capacity shall be 50,000 RMS amperes. Circuit breaker to be type LA-50.

Compartment "B" - METERING

One ammeter ASA 6" rectangular switchboard type with current transformers and phase selector switch for measuring line currents of 1000 amperes.

One voltmeter ASA 6" rectangular switchboard type with phase selector switch for 600 volts full scale.

Surge protection equipment connected to the bus equal to Westinghouse type FP capacitors and type RM arresters.

Compartment "C" - PUMP #1 4,000 GPM

Combination, magnetic, full voltage, non-reversing motor starter with type ML-3 air circuit breaker for a 75 HP squirrel cage induction motor. Accessories shall include the following:

- Hand-off-automatic selector switch.
- Red indicating light.
- Control circuit fuse.
- Time meter General Electric Co. Type KT Cat. 550X12 or equal.
- Auxiliary relay (A1) Type BH, 120 volt coil, four N.O. contacts rated 15 amperes.
- Auxiliary relay (A4) Type AG, 120 volt coil, two N.C. contacts.
- Time clock (TMI) General Electric Co. TSA-18 Cat. #626X6 or equal, 120 volt coil, 10 minute interval, single circuit panel mounted.

Compartment "D" - PUMP #2 - 20,000GPM

Combination, magnetic, non-reversing, reduced voltage auto-transformer type motor starter with Type WL air circuit breaker short circuit protection for a 300 HP squirrel cage induction motor. The starter shall be suitable for one 15 second start each five minutes for a one hour period and shall include adjustable taps for 50%, 67% and 84% of line voltage. Accessories in addition to the standard starter components shall include the following:

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COLUMBUS, 12, OHIO

**MOUND SANDUSKY
PUMP STATION
GENERAL NOTES**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
Bml				4/18/80-9-87	

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
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D. ELECTRICAL EQUIPMENT
CONTINUED

- a. Hand-off-automatic selector switch.
- b. Red indicating light.
- c. Control circuit fuse.
- d. Auxiliary relay (A2) Type BH, 120 volt coil, four N.O. contacts and two N.C. contacts rated 15 amperes.
- e. Auxiliary relay (A5) Type AG, 120 volt coil, two N.C. contacts.
- f. Time clock (TM2) General Electric Co. TSA-18 Cat. #626x6 or equal, 120 volt coil, 10 minute interval, single circuit, panel mounted.
- g. Time delay relay (TD2) Type AO-1D, 120 volt coil, N.O. contacts to close 20 seconds after energization.
- h. Time meter General Electric Co. Type KT, Cat. #550X12 or equal.

Compartment "E" - PUMP #3 - 20,000 GPM

Same as specified for Compartment "D" with addition of time delay relay (TD1) Type AO-1D, 120 volt coil, N.O. contacts to close one second after energization.

Compartment "F" - LIGHTING FEEDER

Air circuit breaker feeder for lighting, transformer rated two pole, single throw, 20 amperes continuous.

Compartment "G" - LIGHTING TRANSFORMER

5 KVA, dry type, single phase lighting transformer with adjustable taps, 480 volt primary, 240/120 volt three wire secondary.

Compartment "H" - LIGHTING PANEL

Lighting panel Type D-5, 120/240 volt, three wire, solid neutral, lugs in the mains with 10 single pole and one double pole branch breakers rated as shown.

Compartment "I" - SPARE FEEDER

Air circuit breaker feeder rated three pole, single throw, 50 amperes continuous.

Compartment "J" - "BLOWER"

Single phase magnetic motor starter with overload protection for the 1 HP ventilating blower. Control with time clock Paragon Model #3001, 120 volt, SPST, 24 hour dial.

Compartment "K" - PUMP CONTROLS - TEST

- a. Automatic pump alternator (CR1, CR2, CR3) Class 9039 to operate on 120 volts and control pumps #2 and #3.
- b. Liquid level relays (LL1, LL2, LL3) Charles F. Warrick Co. Type 2DH2 suitable for 120 volt A.C. operation.
- c. One "ON-OFF" selector switch marked "MASTER TEST SWITCH".
- d. One white indicating light for 120 volts marked "TEST ON".
- e. Three pushbutton stations each having one set of N.O. and N.C. contacts. Mark "TEST NO. 1", "TEST NO. 2", "TEST NO. 3".
- f. Auxiliary relay (TT) Type BH, 120 volt coil, three N.O. and three N.C. contacts rated 15 amperes.

7. ELECTRIC MOTORS:

Electric pump motor drives shall be vertical, solid shaft, squirrel cage induction, drip-proof 40°C rise with Class A moisture resistant windings rated for 440 volt, three phase, 60 cycle, A.C. power suitable for extended shaft coupling to the centrifugal storm flow pumps. Motors shall have oil lubricated roller thrust bearings at the top and ball guide bearings at the bottom with oil reservoir and sight glass. Provide space heaters rated for 120 volts and energized when motor is shut down. Motors shall be pedestal mounted housed in welded steel frames for the 20,000 GPM pumps, and provided with a cast type frame for the 4,000 GPM pumps. Horsepower, speed, starting and full load torque shall be suitable for the pump being driven. Name plate ratings shall not be exceeded for conditions varying from the lowest operating head to shut-off head. Motors shall have low starting current characteristics and be capable of full voltage "across-the-line" starting. 20,000 GPM pump motors shall be suitable for control by auto transformer type starters with taps set for 67% of applied voltage

The contractor shall furnish certified test data for full load, locked-rotor and breakdown torque, starting inrush current, efficiency and power factor. Motors shall be Fairbanks, Morse and Co. Type Q Z K U or equal.

PAYMENT:

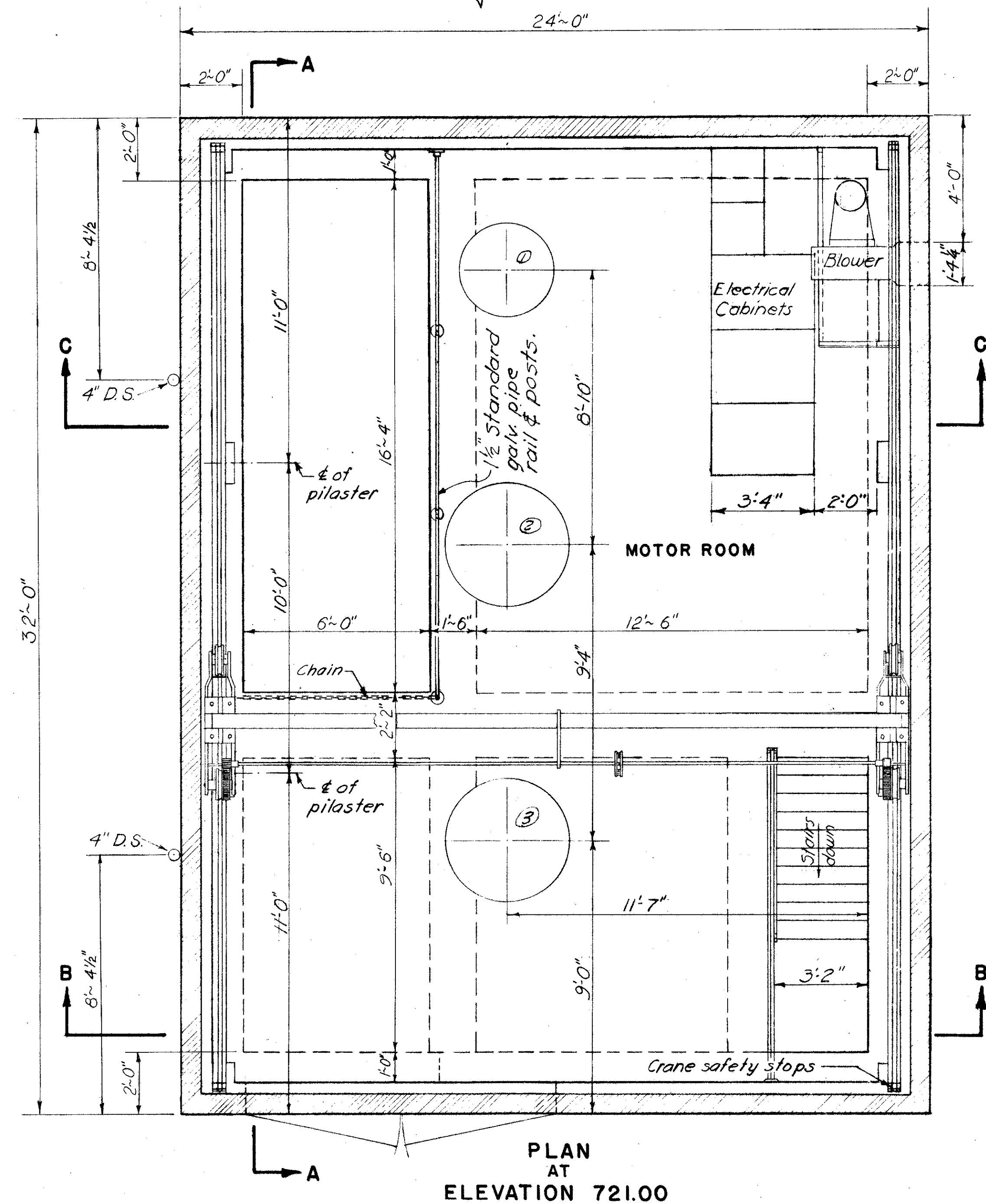
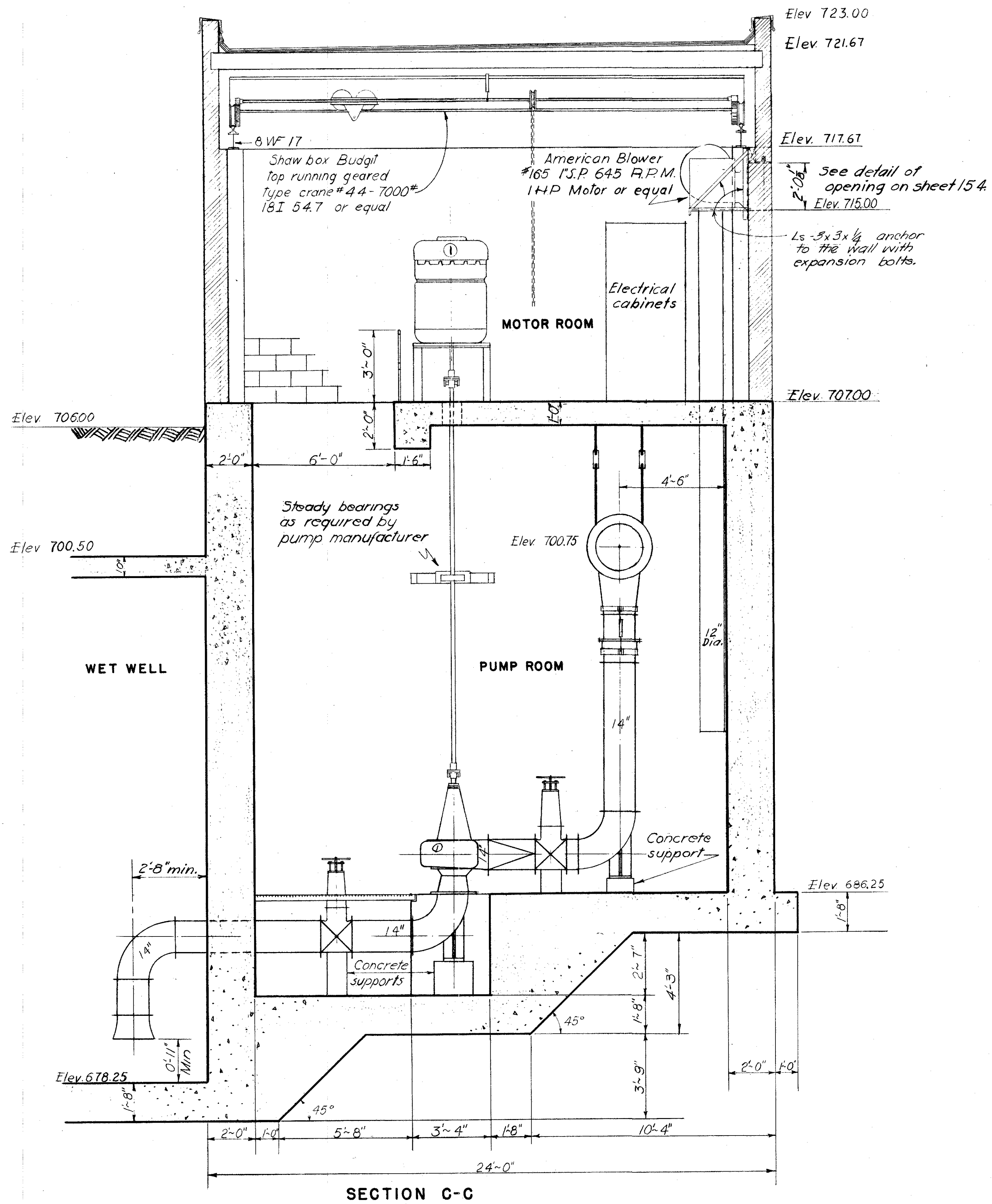
Payment shall be made on a lump sum basis for the item "Pump Station", which price shall include all excavation, backfill, seeding, driveway, drainage, fence, building, equipment and all other materials and labor necessary to complete this item within the limits shown on sheet 146 of the plans.

BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
MOUND SANDUSKY PUMP STATION GENERAL NOTES					
FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PMB				11/18/10-9-57	

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70



BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

**MOUND SANDUSKY
PUMP STATION
SECTION C-C AND PLAN
AT ELEV. 721.00**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
G.M.B.	K3B	V.M.T.	R.S.R.	4/18/10-9-57	

**COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY**

FRA 62-12.56 FRA 3-13.70

- * Lintel - 2-1s 6x4x $\frac{3}{8}$, 6" vert. legs welded back to back & 4x8" conc. lint.
- * Ceco hollow metal industrial door, Type 1-100/100 M2 and frame. Door opening 10'-0" wide by 10'-0" high. DSWO-RA.

Door Hardware

- * Latch and dead bolts - *1214 finished US 18A with key cylinder *28. Full mortise hinges *2110. Overlapping astragals *4411. Steel surface bolts *4001 & #400. Threshold - *4201-100. Louvers - *4601-24, with insect screens, one in each door.

Valve List

- 2-30" Gate valves, bevel gear with extended gear case, non-rising stems and hand wheels.
- 2-30" Gate valves, spur gear, non-rising stems and chain operated. Chain on direct mounted chain wheel.
- 2-14" Gate valves, spur gear, non-rising stems with hand wheels.
- 1-2" Gate valve with hand wheel.
- 2-30" Check valves, vert. mounted, spring loaded.
- 1-14" Check valve, horiz. mounted spring loaded.
- 1-2" Check valve.

Stair treads - Borden W/B deluxe bar 7 $\frac{1}{2}$ " galvanized, or equal.

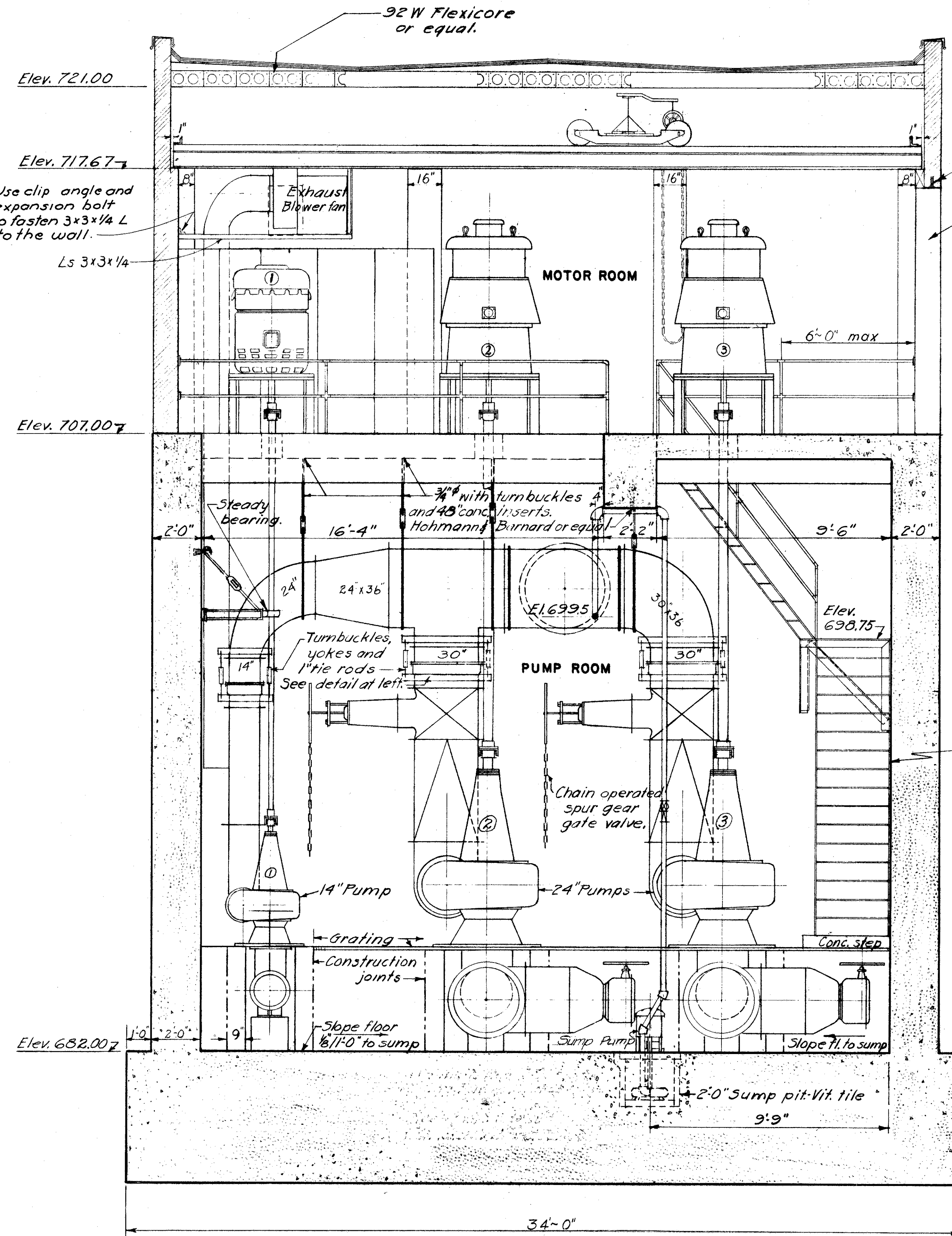
* Note: The doors & hardware shall be as specified above or an approved equal.

BURGESS & NIPLE - CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

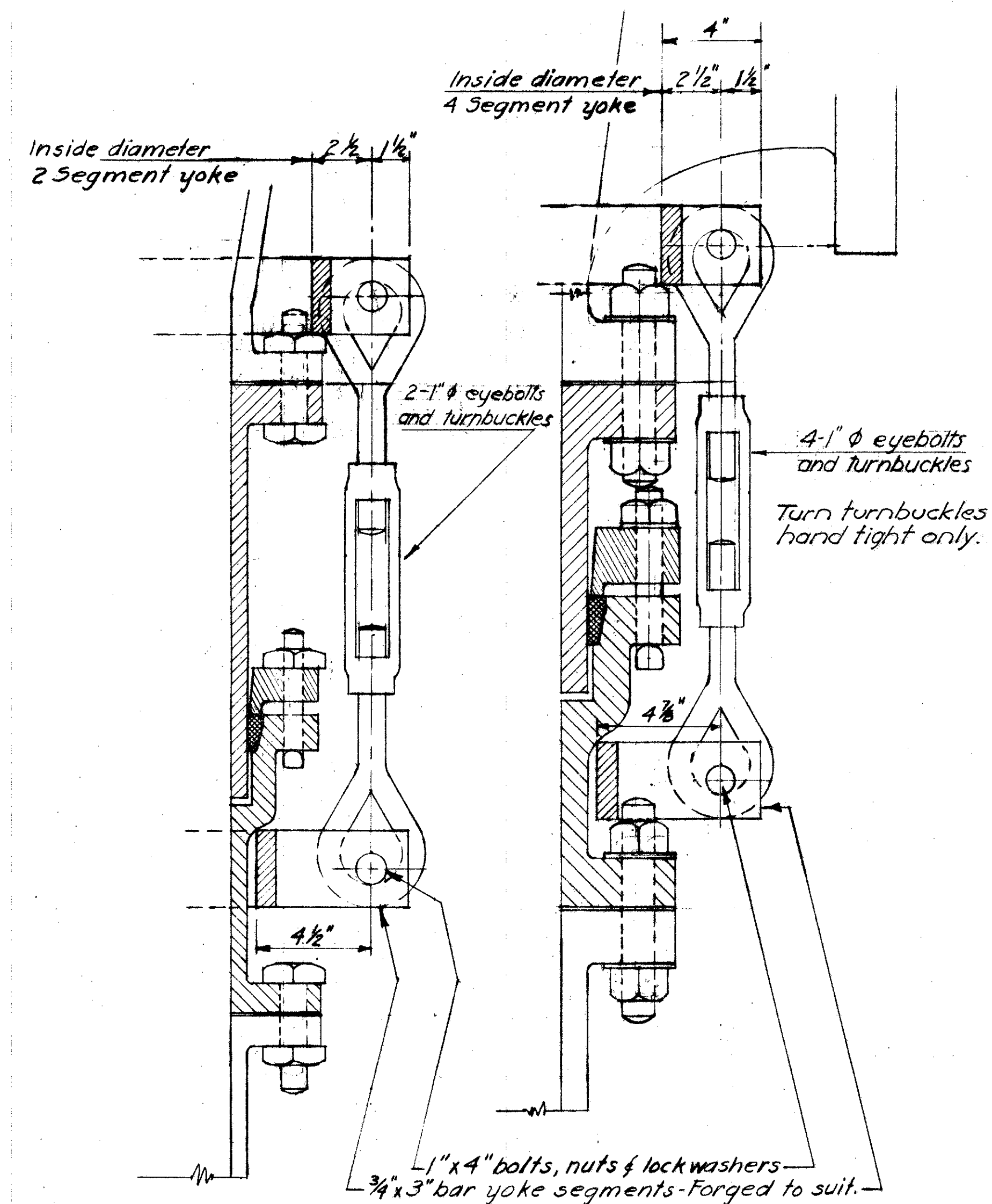
**MOUND SANDUSKY
PUMP STATION
SECTION A-A AND
MECHANICAL JOINT DETAIL**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.M.S.	K.S.B.	V.M.T.	D.S.R.	4/18/10-9-57	



SECTION A-A



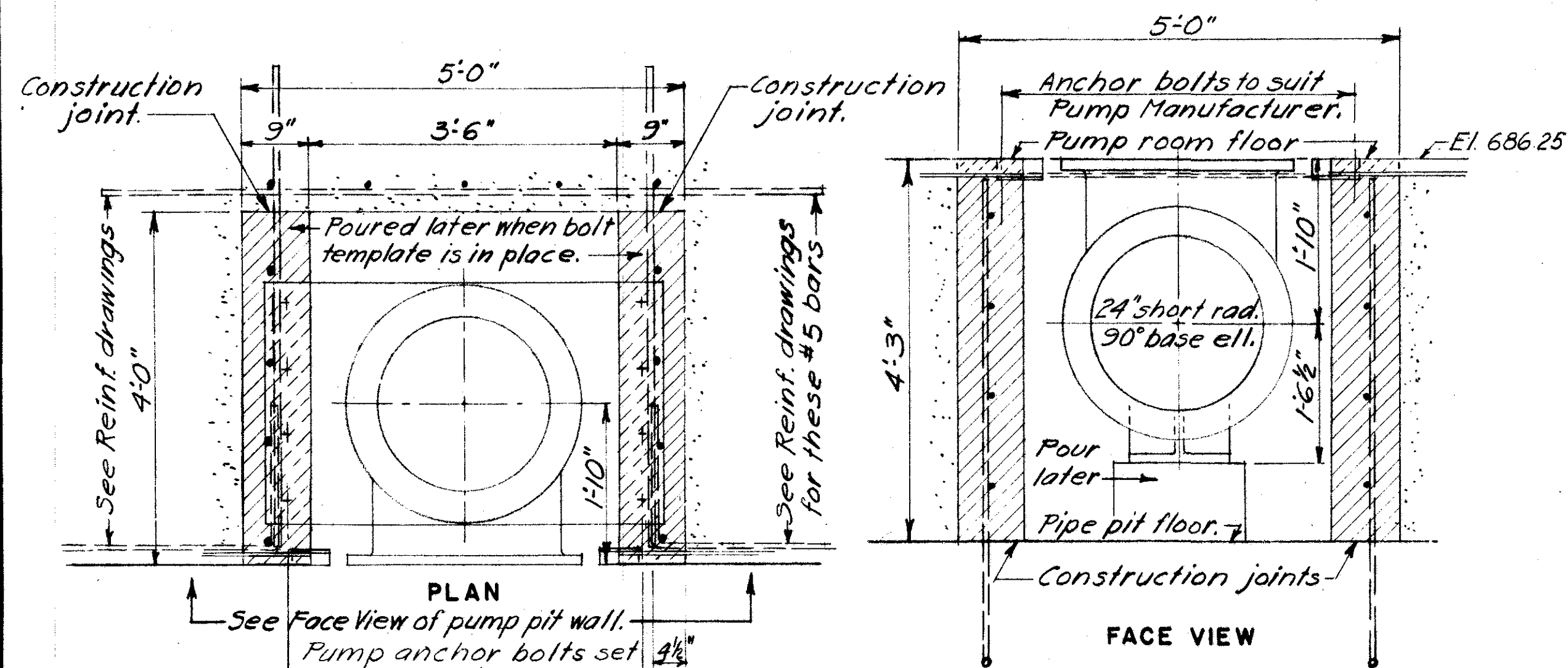
14" PIPE 30" PIPE
MECHANICAL JOINT DETAILS

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

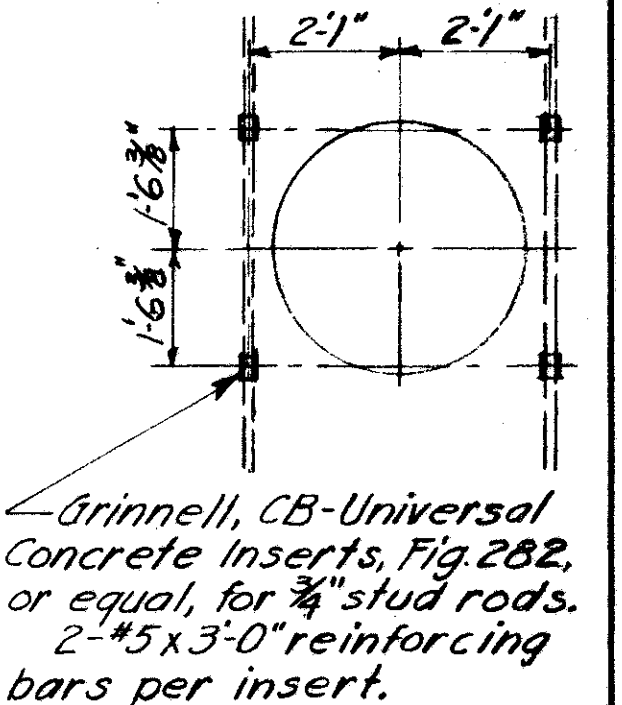
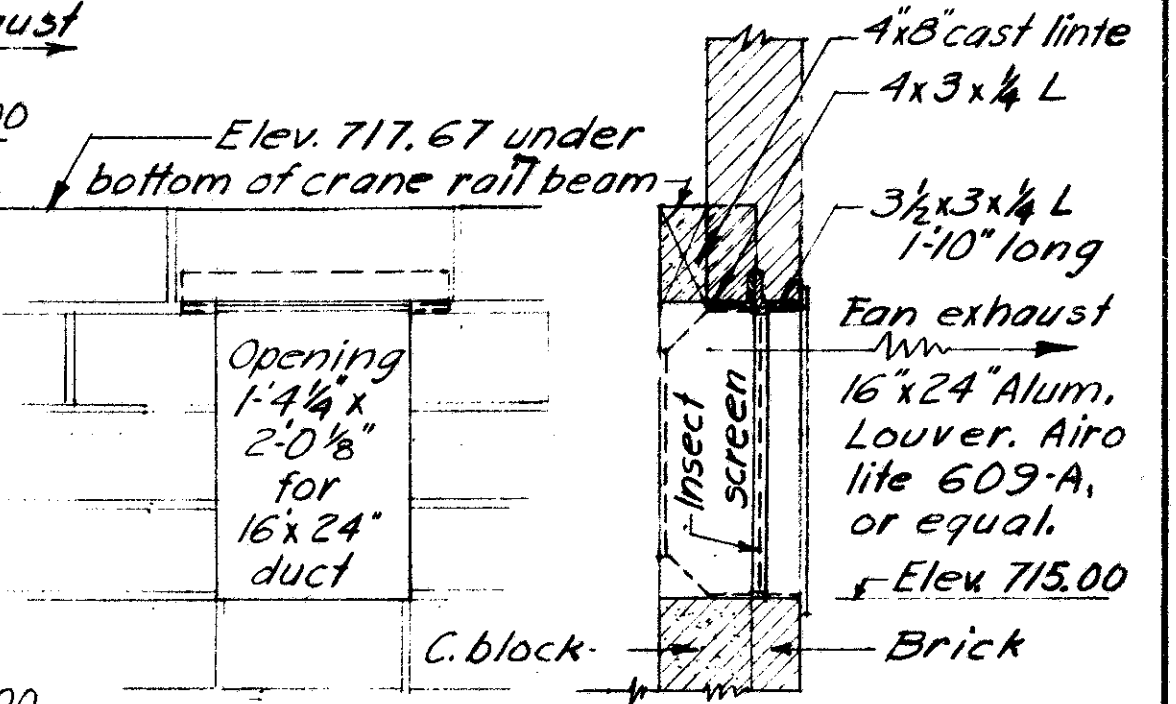
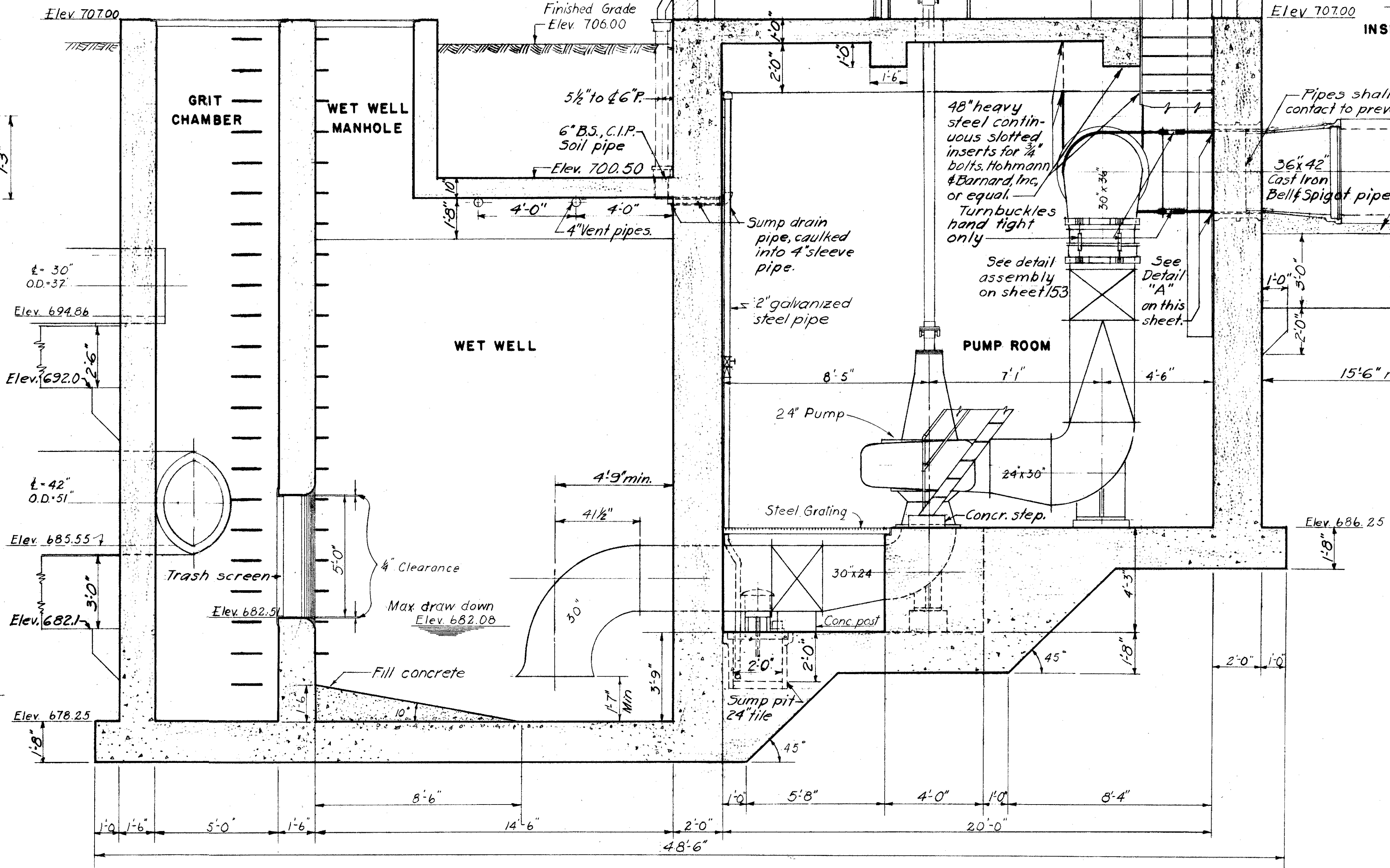
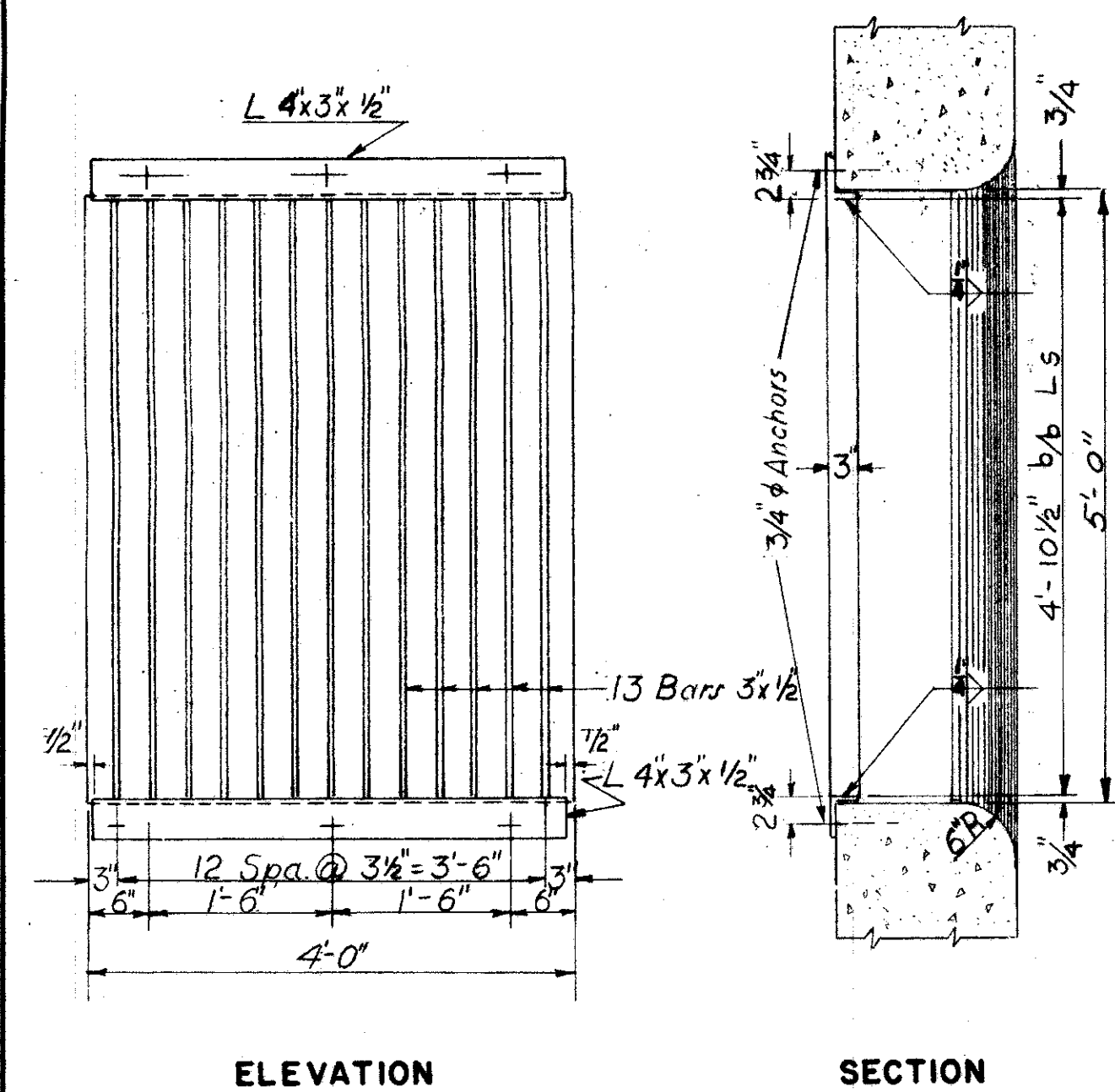
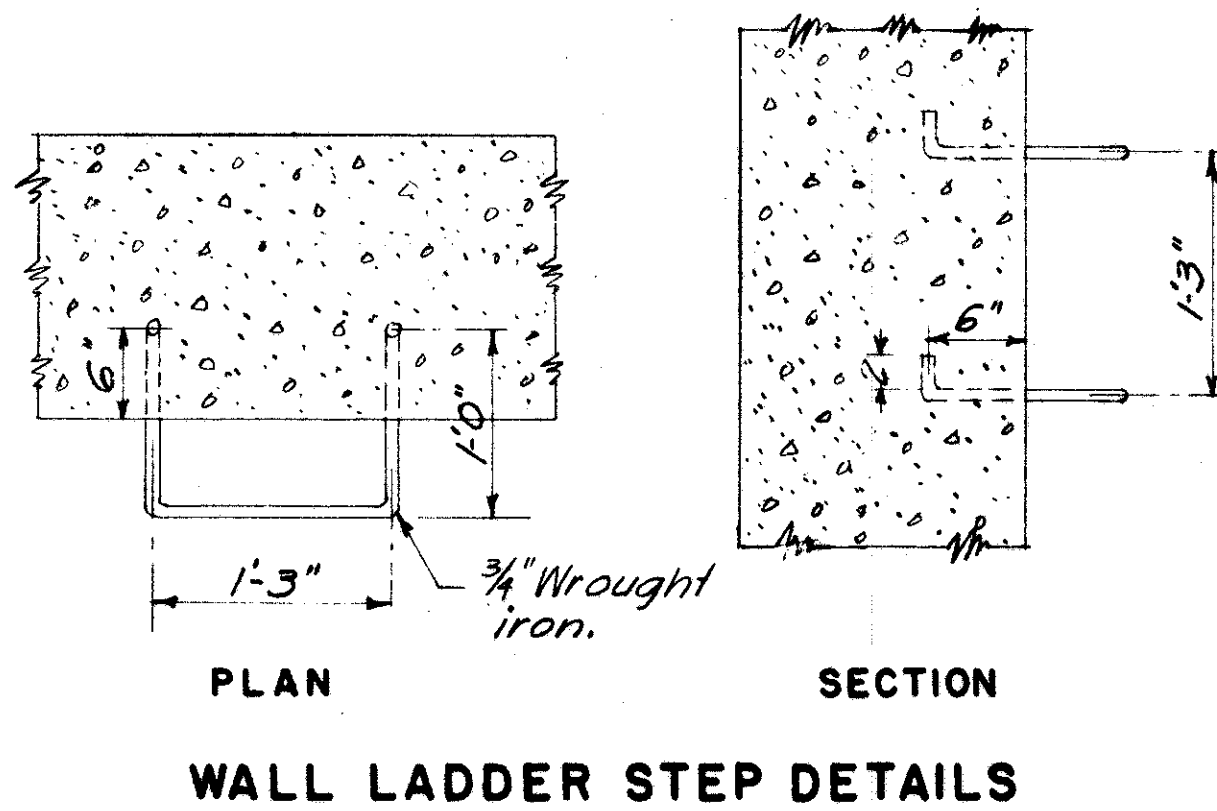
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FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

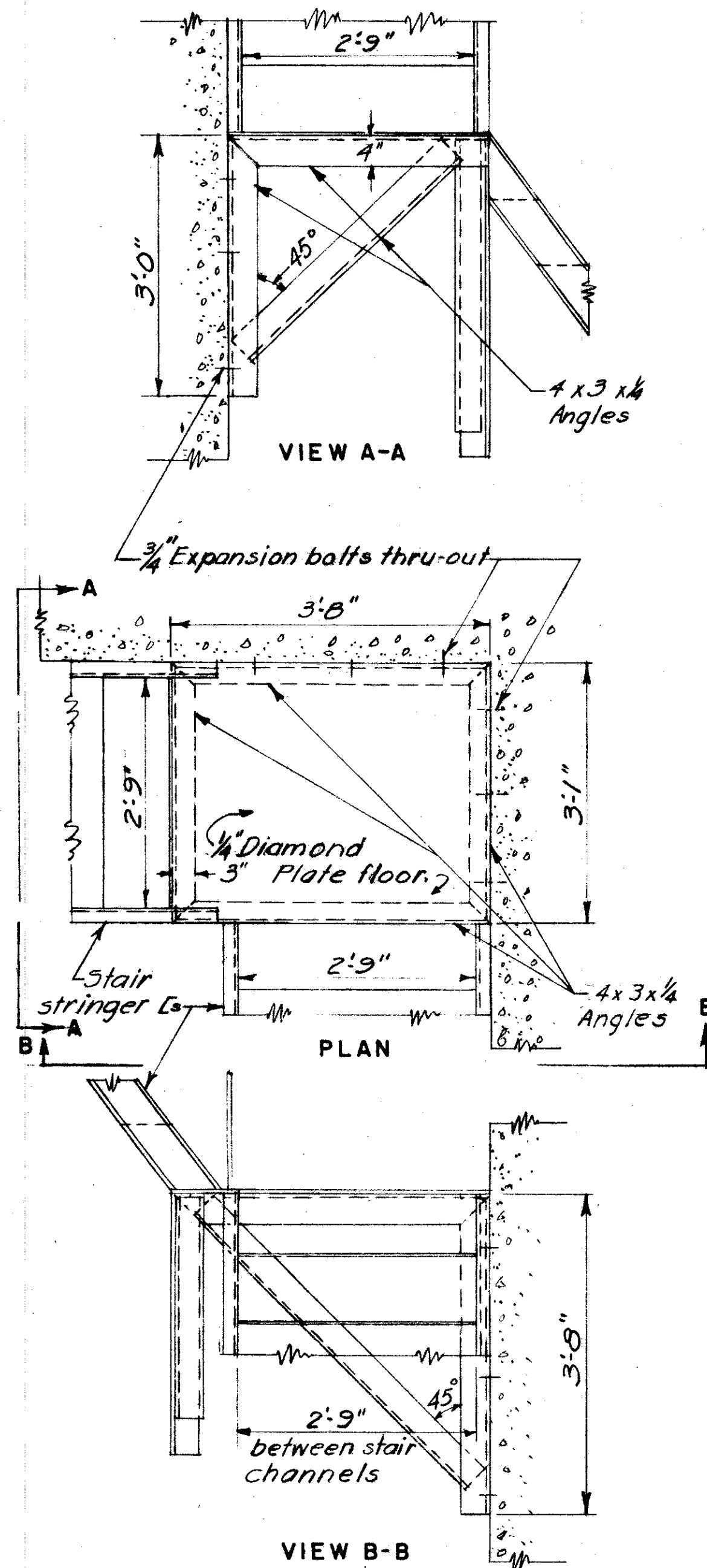


INSTALLATION DETAILS FOR 24" PUMPS
14" PUMP SIMILAR - SEE PLAN AT ELEV. 703.0

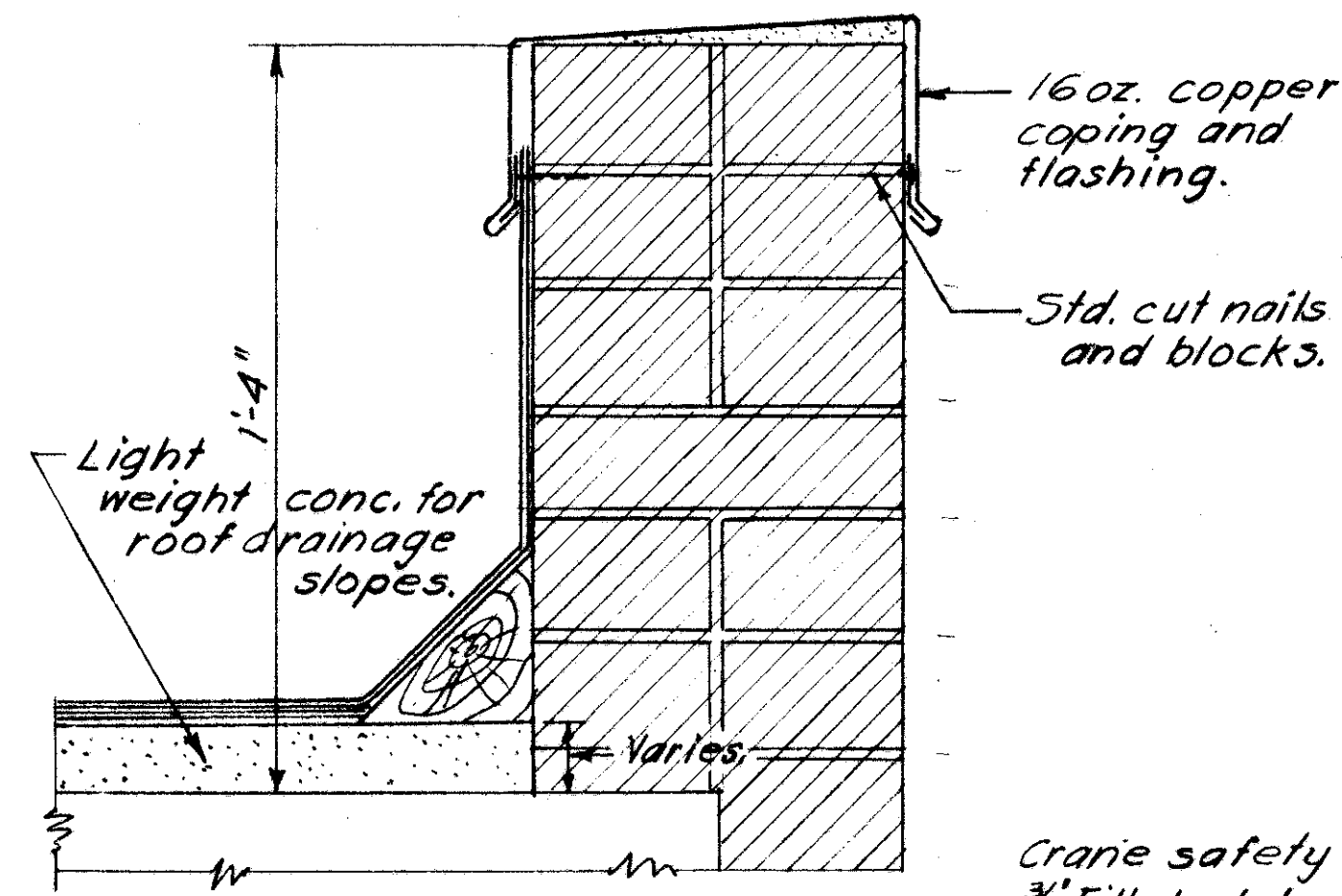


BURGESS & NIPLE - CONSULTING ENGINEERS COLUMBUS, 12, OHIO.				
MOUND SANDUSKY PUMP STATION				
SECTION B-B AND MISC. DETAILS				
FRANKLIN COUNTY				
DESIGNED C.M.A.	DRAWN K.B.	TRACED V.M.T.	CHECKED D.L.R.	REVIEWED DATE 11/8/10-9-57

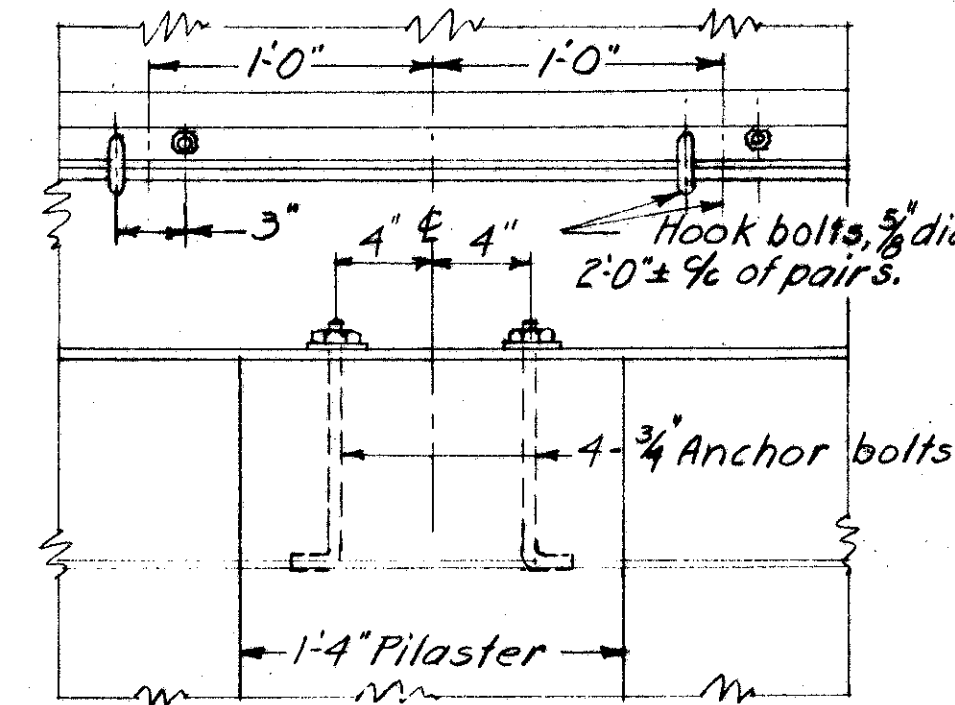
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



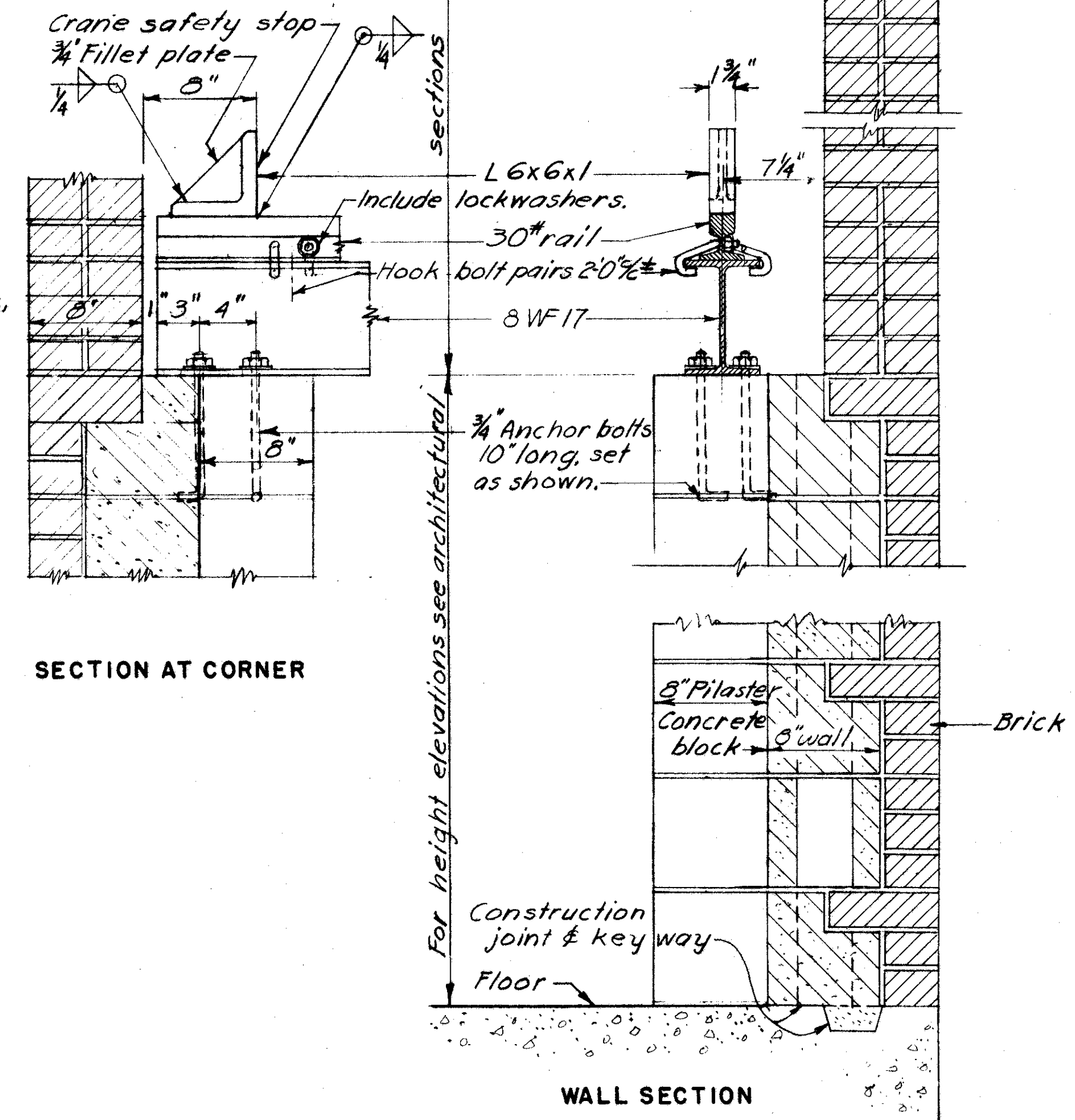
**TYPICAL DETAILS
OF
STAIR PLATFORMS**
Welded Construction



COPING DETAIL



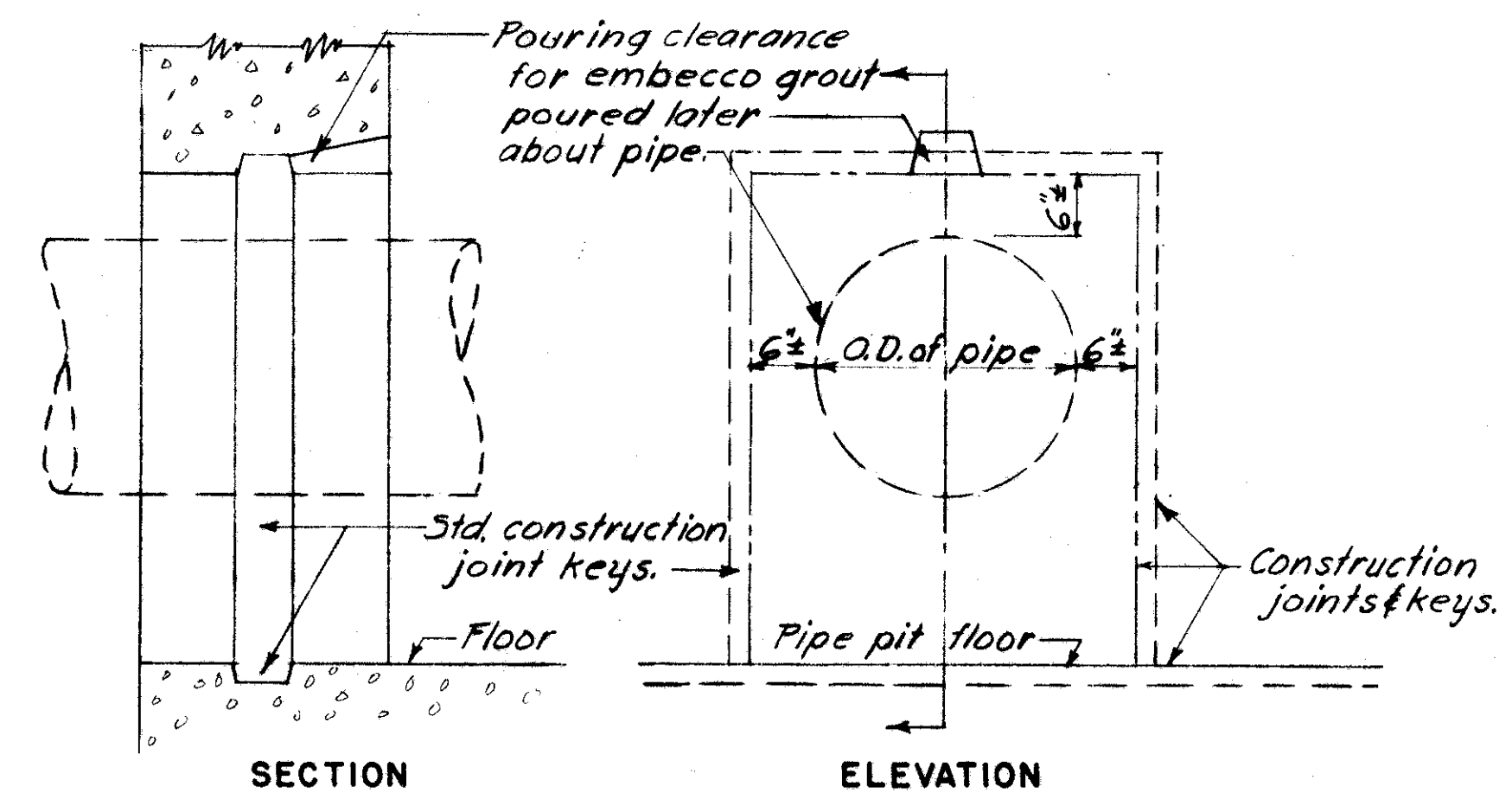
INSIDE VIEW



SECTION AT CORNER

WALL SECTION

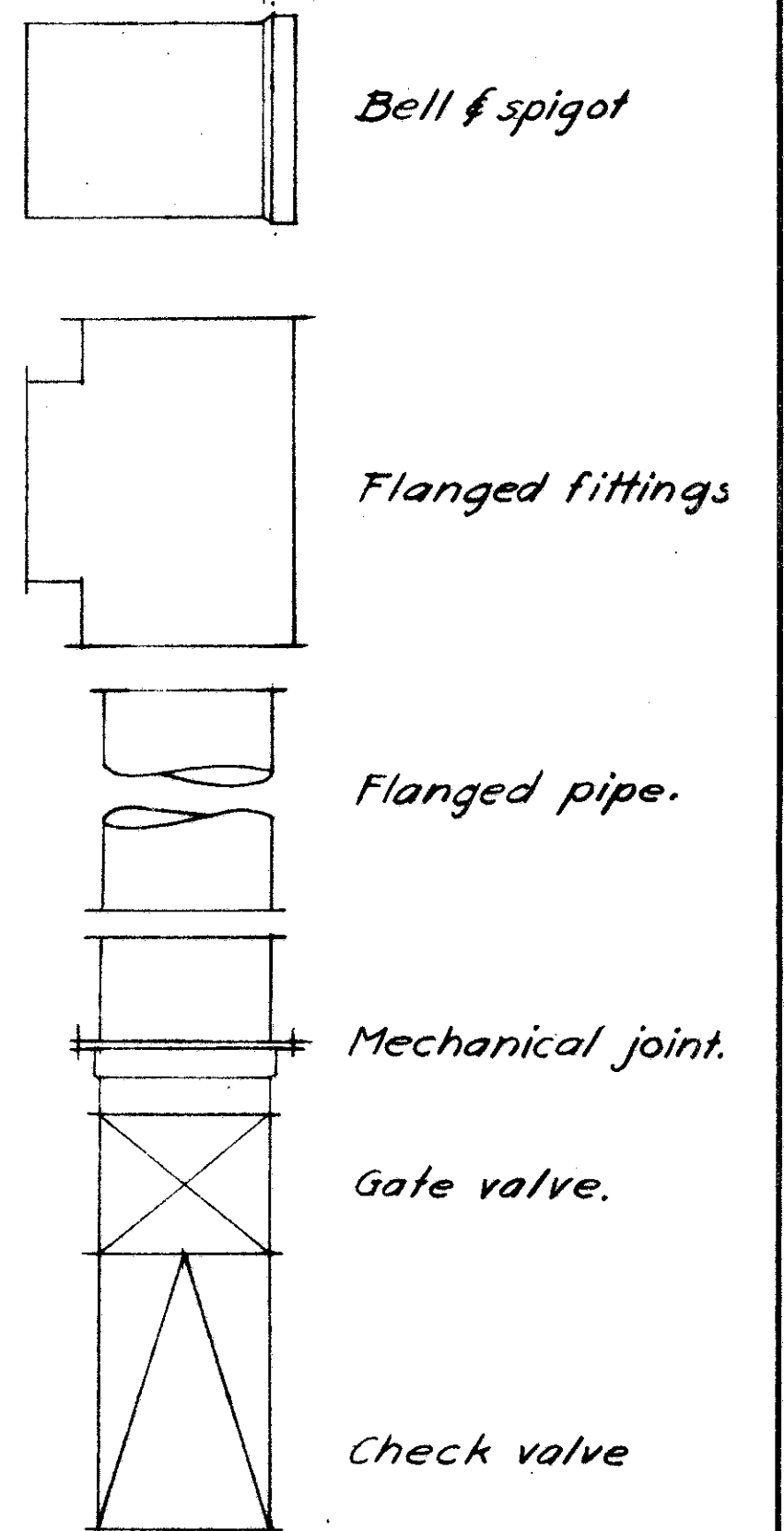
TYPICAL WALL DETAILS SHOWING CRANE RAIL AND BEAM



SECTION

ELEVATION

TYPICAL BOX-OUT IN WALL FOR INTAKE PIPES



PIPE SYMBOLS

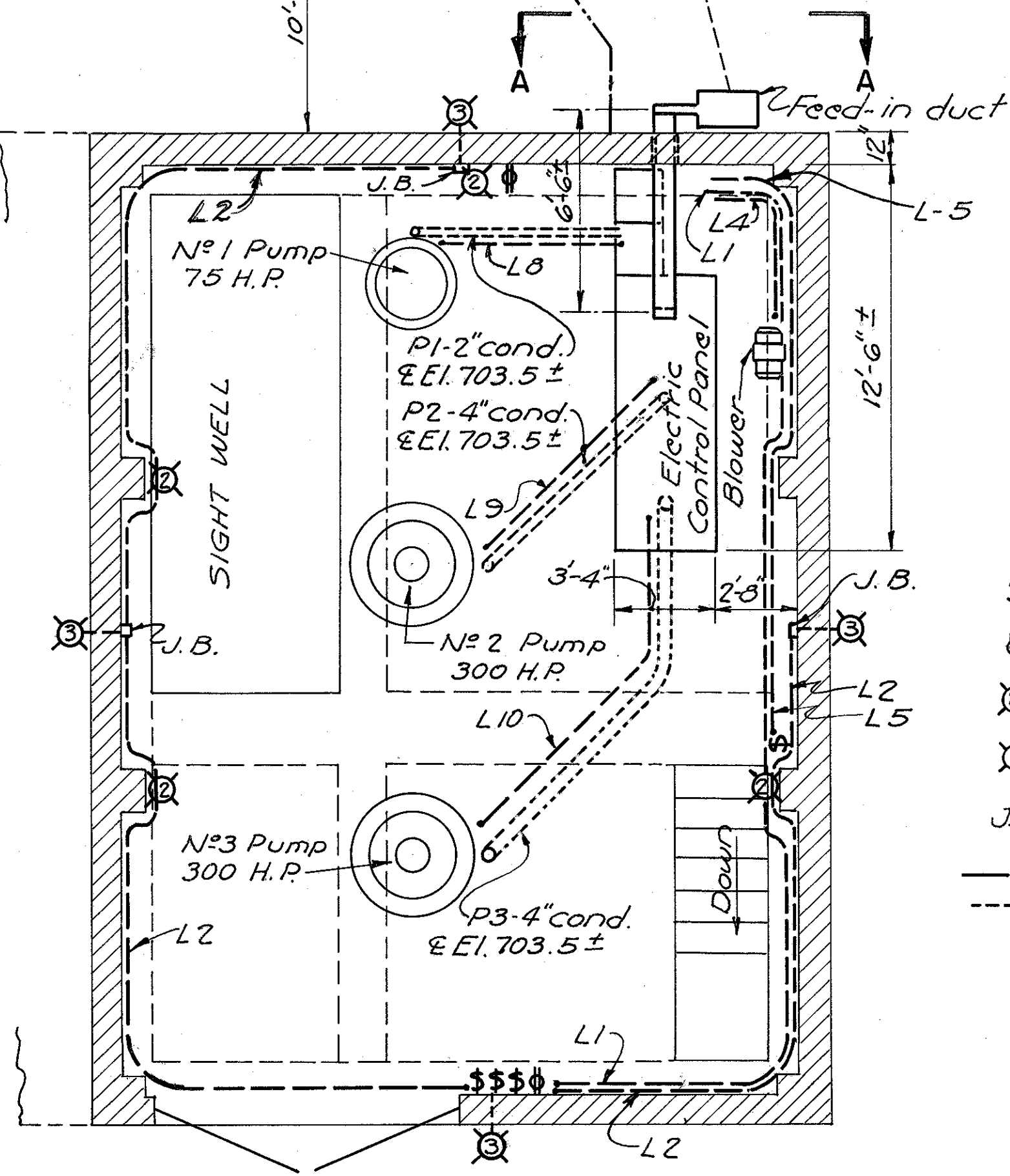
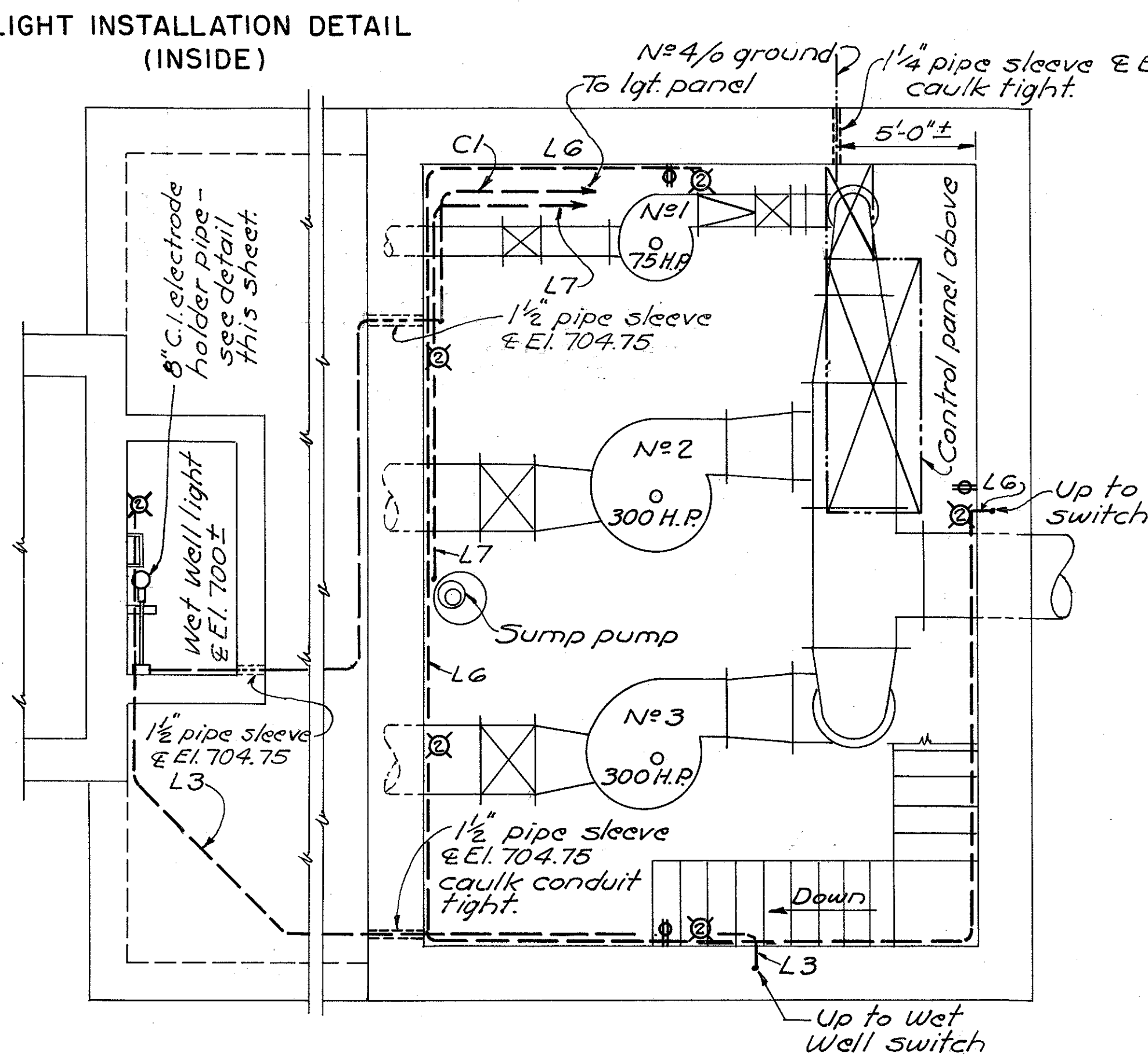
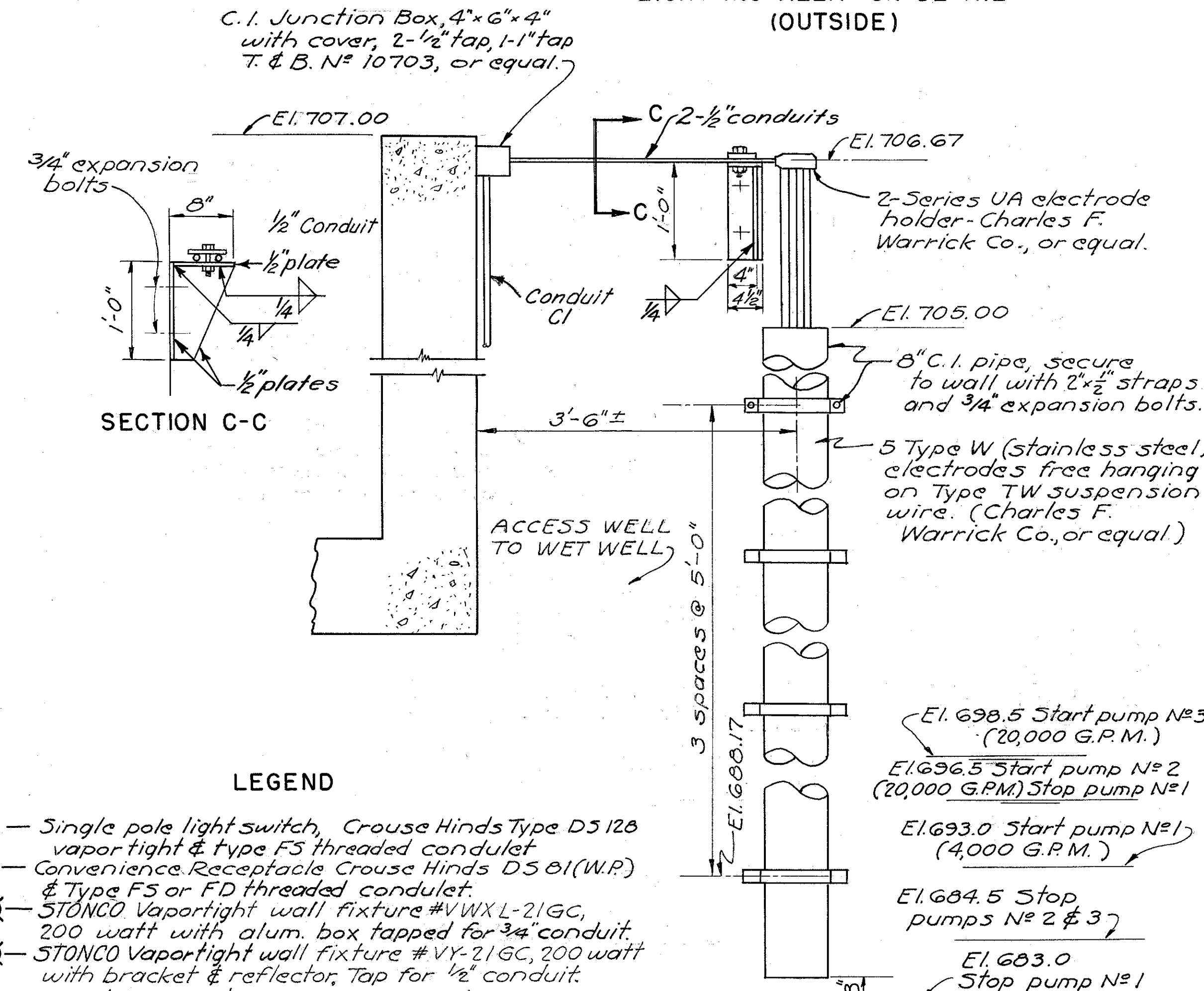
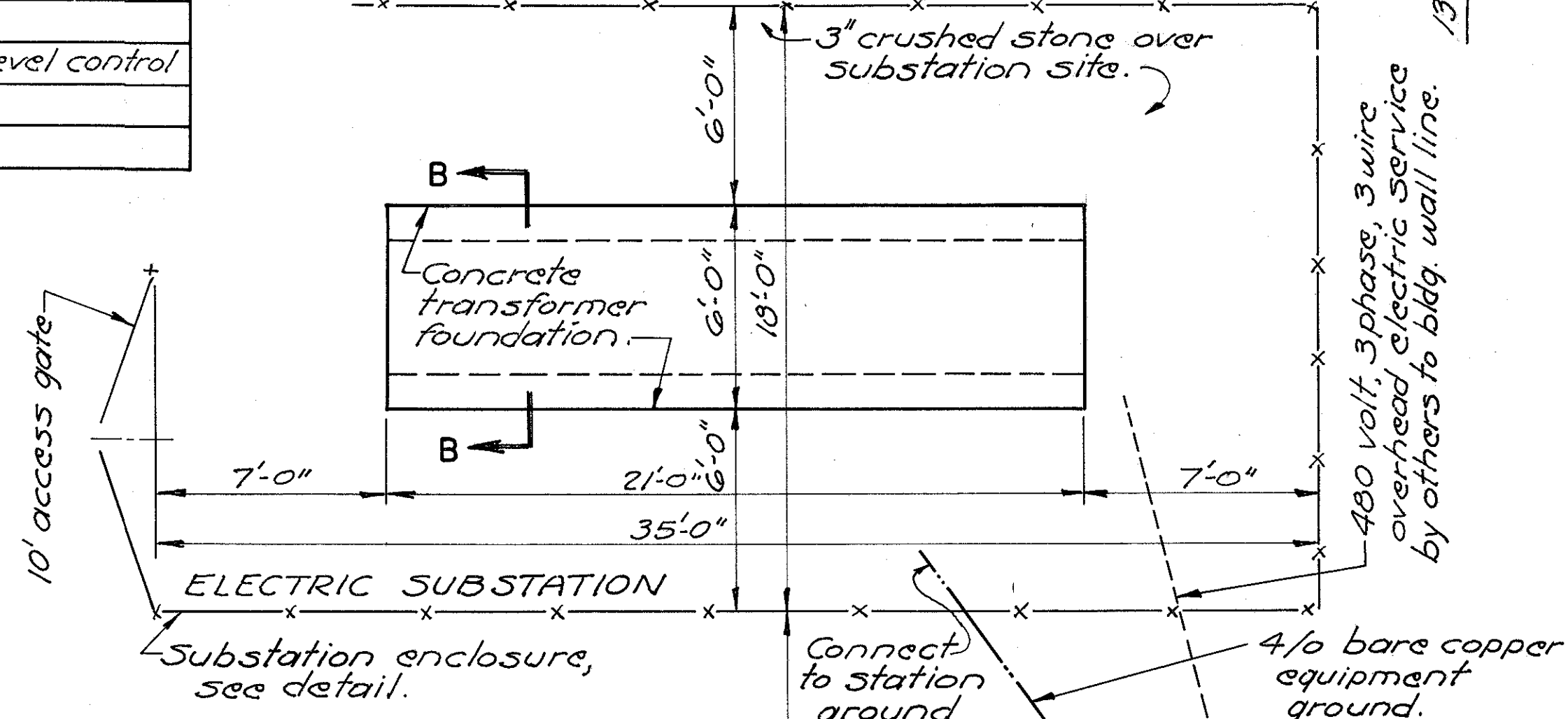
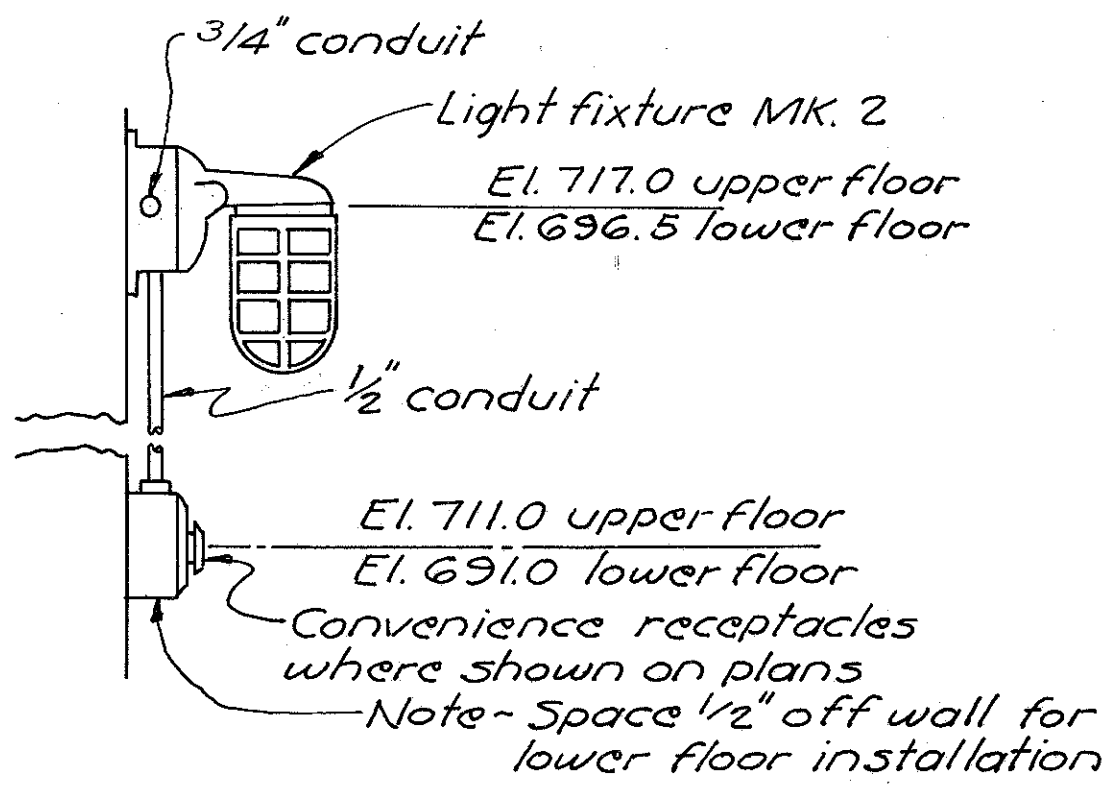
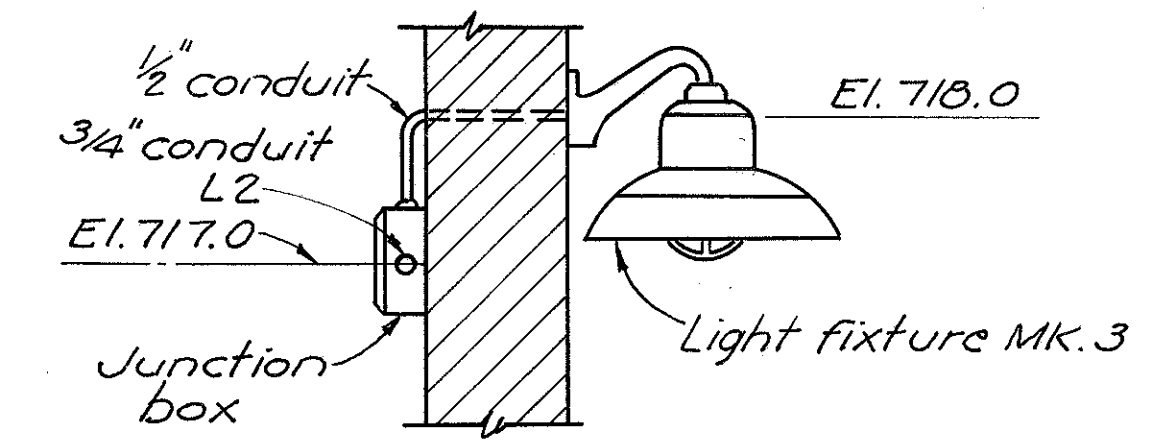
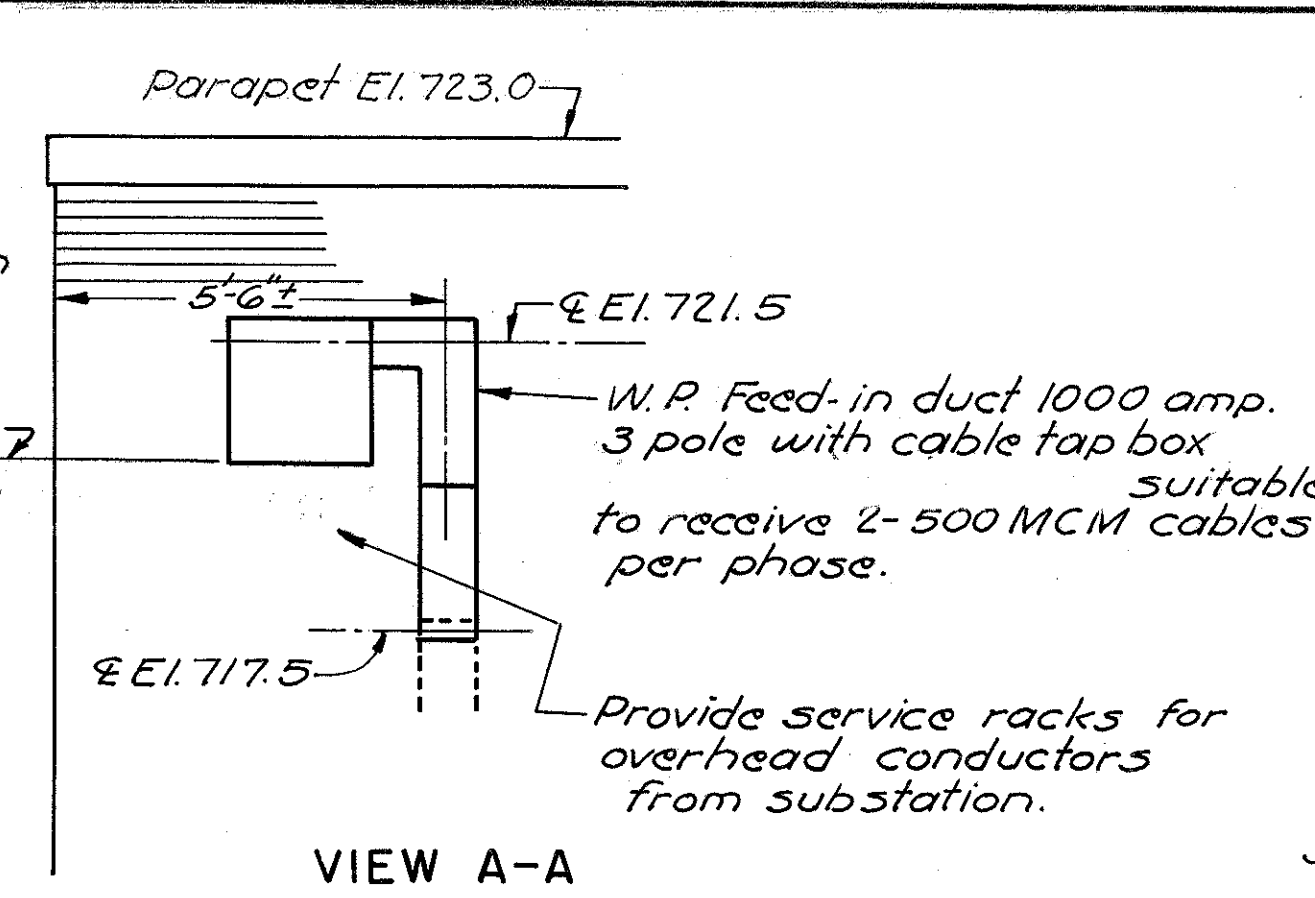
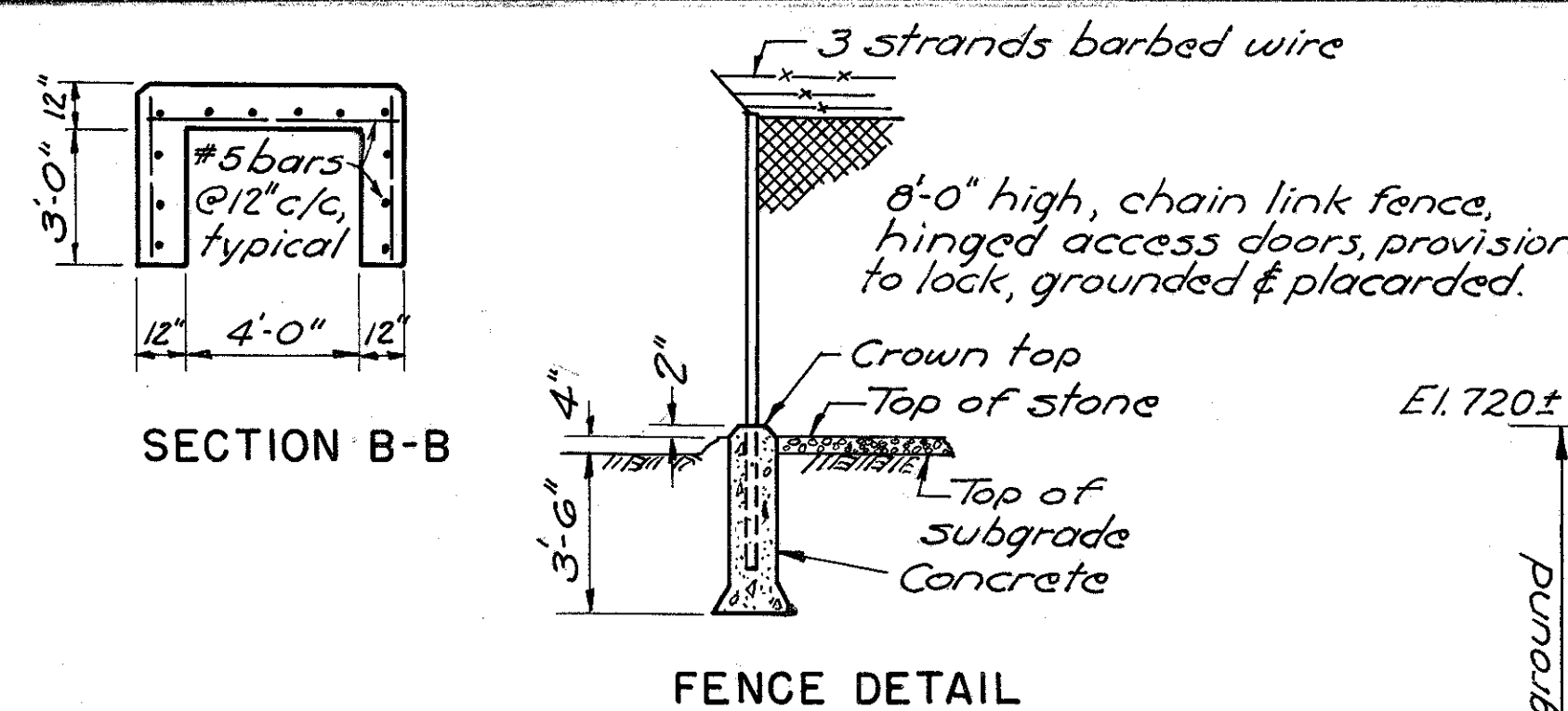
BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

**MOUND SANDUSKY
PUMP STATION
ARCHITECTURAL DETAILS
AND PIPE SYMBOLS**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.M.L.	K.G.B.	D.B.S.	D.L.R.	10-9-57	

CONDUIT SCHEDULE					
CONDUIT	SIZE	CONDUCTORS	FROM	TO	REMARKS
L1	3/4"	3 #12	Lgt. panel	Upper floor sws.	Ckt. 3 & 4 upper floor outside & wet well lights
L2	3/4"	4 #12	Upper floor sws.	Upper floor outside lgt.s. & C.O.	Ckt. 3 upper floor lgt.s. & C.O. Ckt. 4 outside lights
L3	3/4"	2 #12	Upper floor sws.	Wet Well	Ckt. 4
L4	3/4"	2 #10	Compartment J	Blower	Ckt. 7
L5	3/4"	2 #12	Lgt. panel	Lower floor sws.	Ckt. 5
L6	3/4"	3 #12	Lower floor sws.	Lower fl. lgt.s. & C.O.	Ckt. 5
L7	3/4"	2 #12	Lgt. panel	Sump pump	Ckt. 10
L8	3/4"	2 #12	Compartment C	N#1 pump	Ckt. 8 motor space heater
L9	3/4"	2 #12	" " " " " " " " " "	N#2 pump	" " " " " "
L10	3/4"	2 #12	" " " " " " " " " "	N#3 pump	" " " " " "
C1	1"	6 #12	Compartment R	Electrode holder	Pump liquid level control
P1, P2, P3-See plans					



- LEGEND**
- \$ - Single pole light switch, Crouse Hinds Type D5 128 vapor tight & type F5 threaded conduit
 - ⌘ - Convenience Receptacle Crouse Hinds D5 81 (W.P.) & Type F5 or FD threaded conduit.
 - ⊗ - STONCO Vaportight wall fixture #VWXL-21GC, 200 watt with alum. box tapped for 3/4" conduit.
 - ⊗ - STONCO Vaportight wall fixture #VY-21GC, 200 watt with bracket & reflector, Tap for 1/2" conduit.
 - J.B. - Junction Box & Cover - Crouse Hinds Type F5 with conduit taps as required.
 - - Conduit exposed.
 - - Conduit in concrete or below slab.

Notes: Metering equipment shall be furnished and installed by the Public Utility within the substation enclosure.

Work under this contract shall include preparation of the substation site, necessary grading, concrete transformer foundation, fence enclosure with gate & stone blanket over site.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
 FRA 62-12.56 FRA 3-13.70

BURGESS & NIPLE - CONSULTING ENGINEERS
COLUMBUS, 12, OHIO

MOUND-SANDUSKY PUMP STATION

ELECTRICAL DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
P.M.	P.M.	W.R.D.	A.L.R.	H.V.	10-9-57	

El. 698.5 Start pump N#3 (20,000 G.P.M.)

El. 696.5 Start pump N#2 (20,000 G.P.M.) Stop pump N#1

El. 693.0 Start pump N#1 (4,000 G.P.M.)

El. 684.5 Stop pumps N#2 & 3

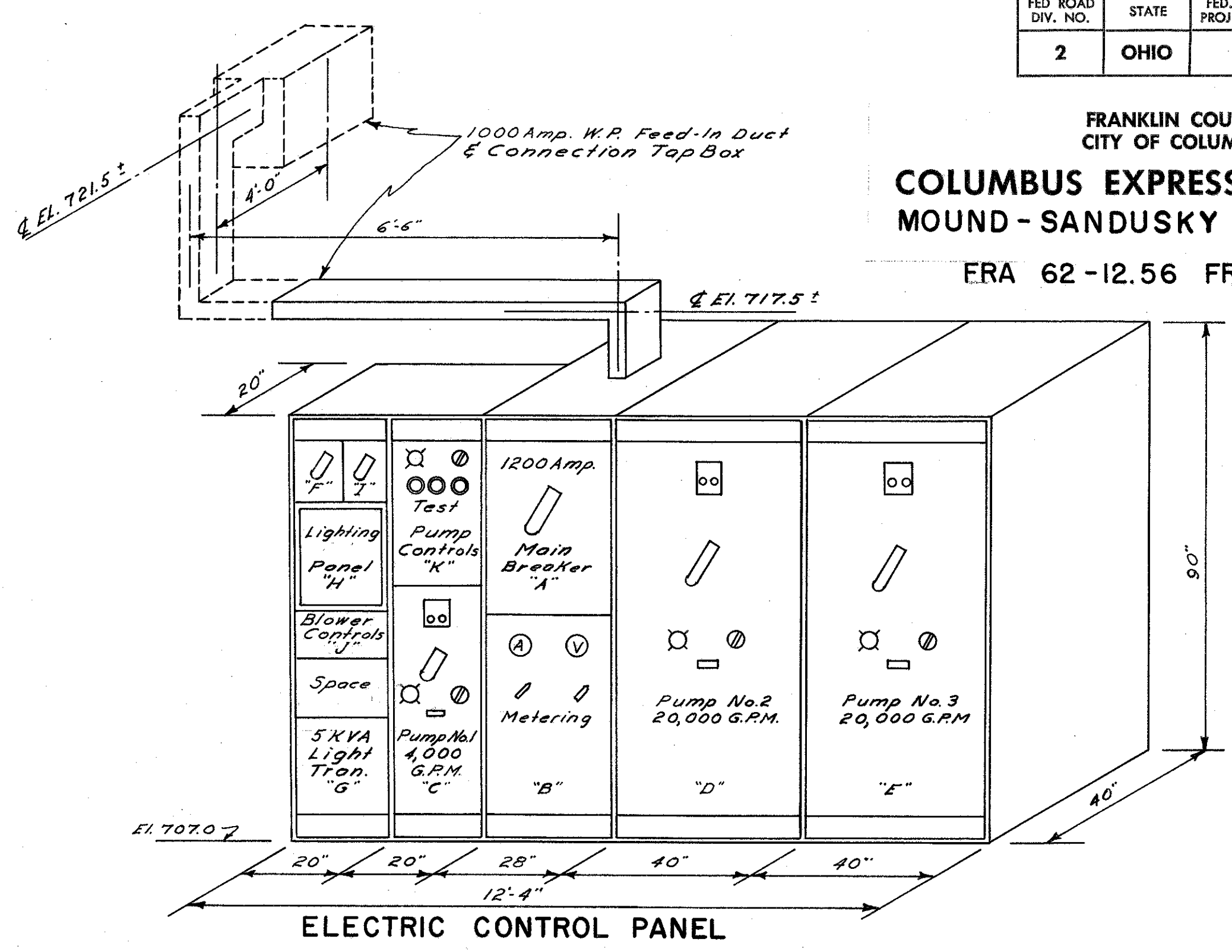
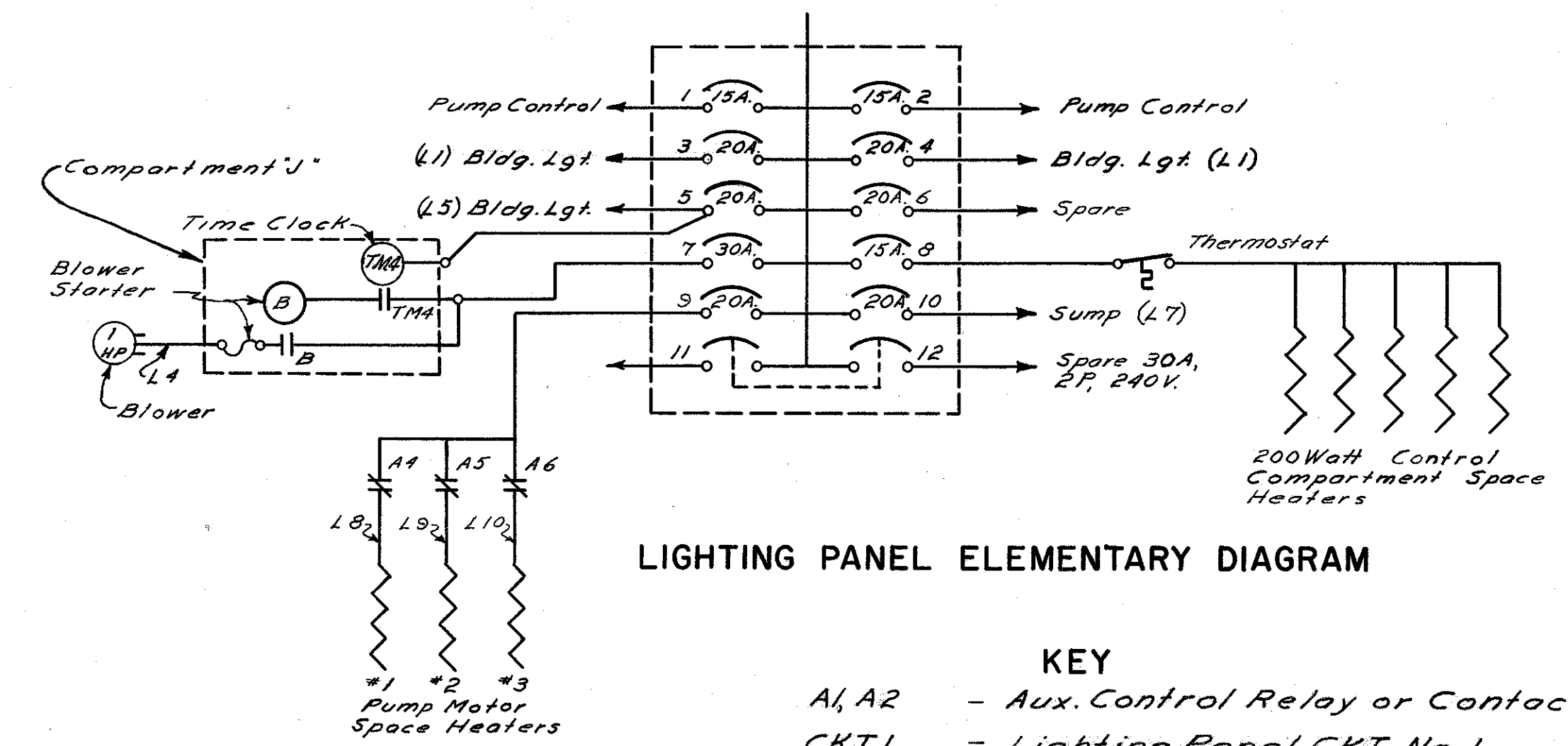
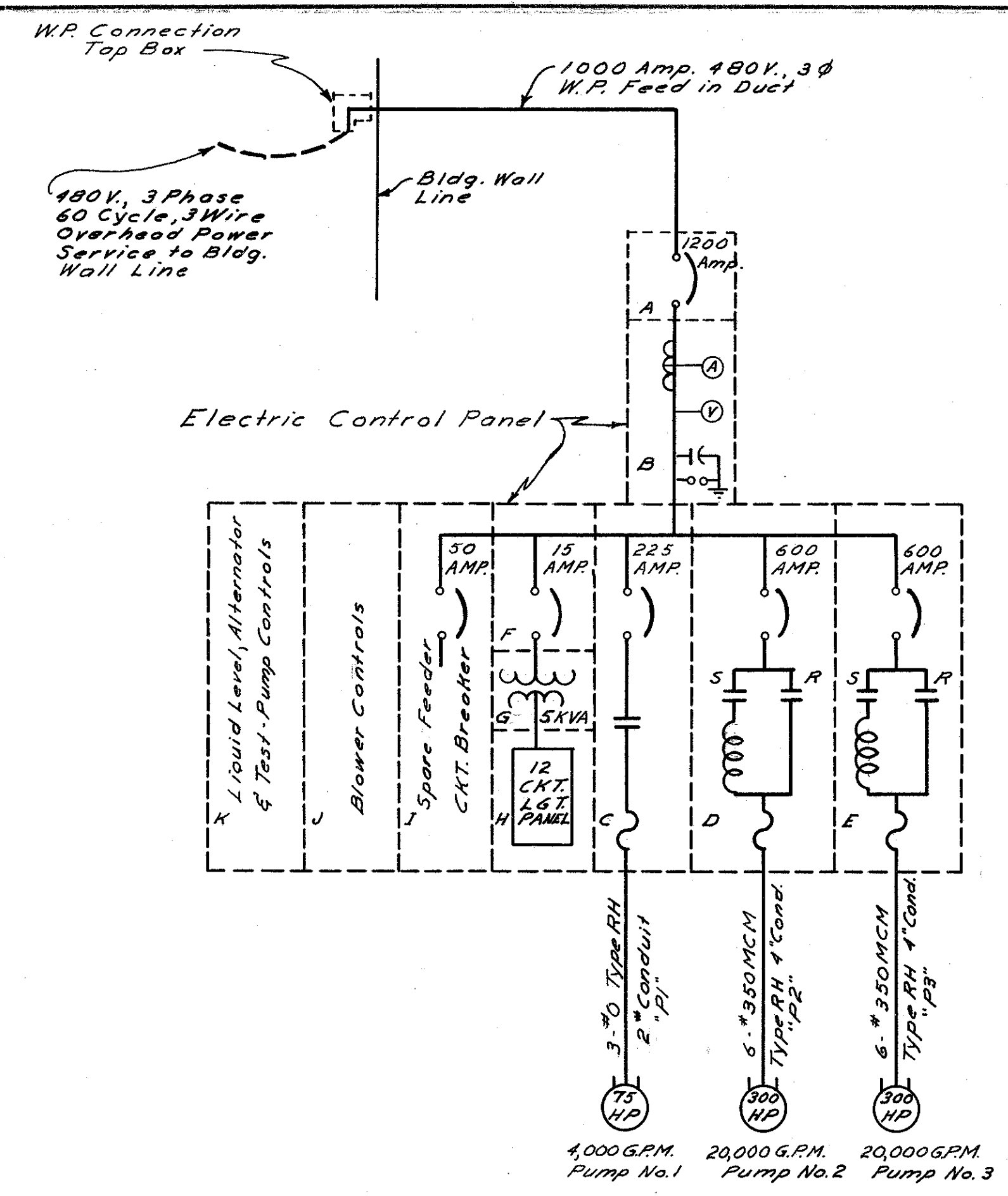
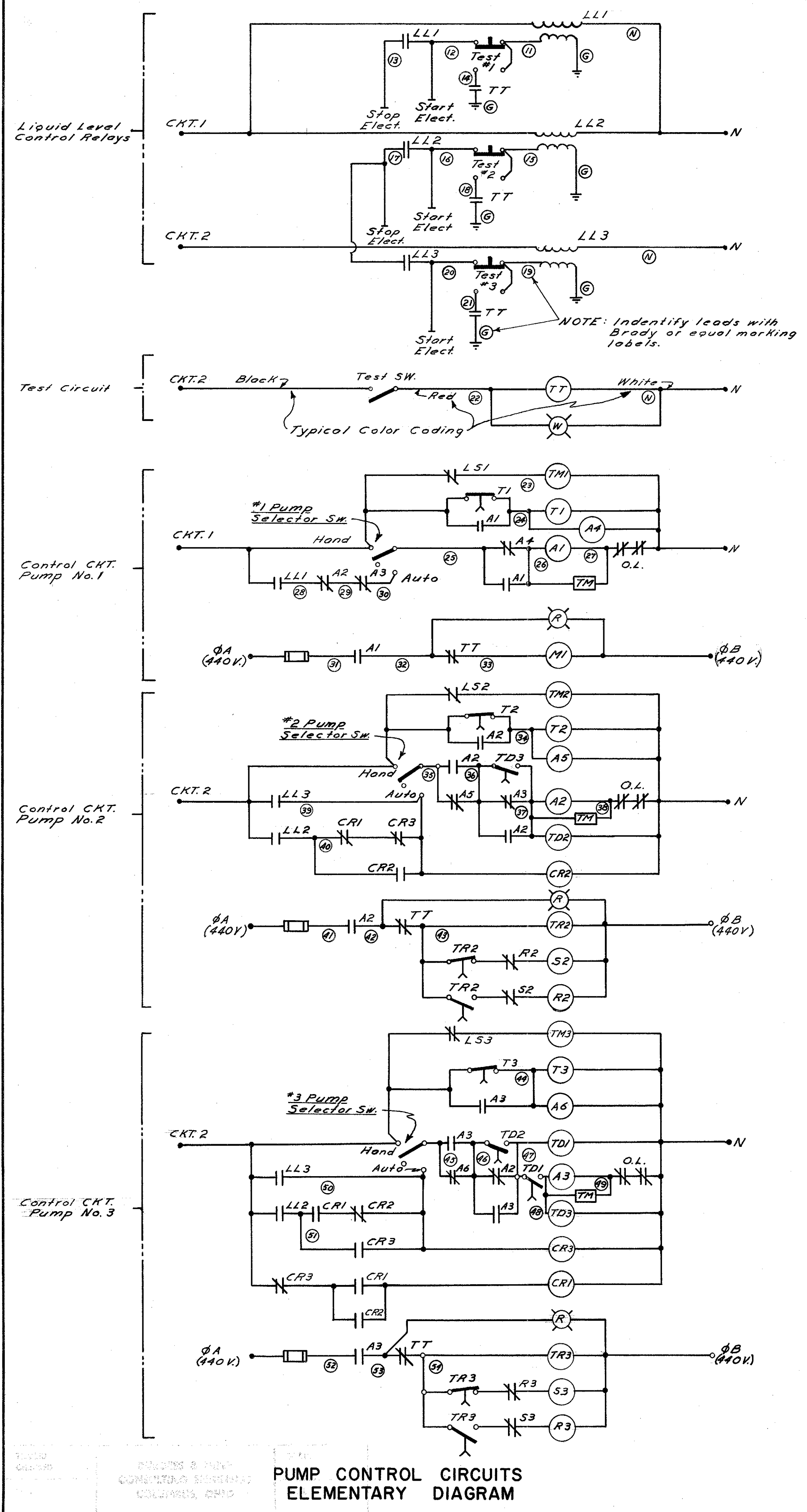
El. 683.0 Stop pump N#1

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM

MOUND-SANDUSKY EXPRESSWAY

FRA 62-12.56 FRA 3-13.70



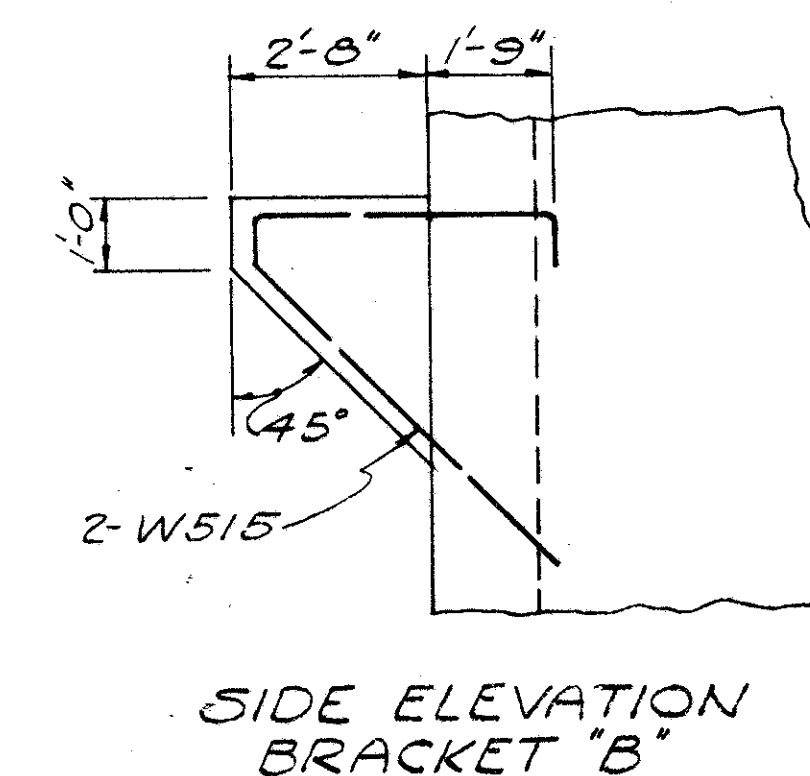
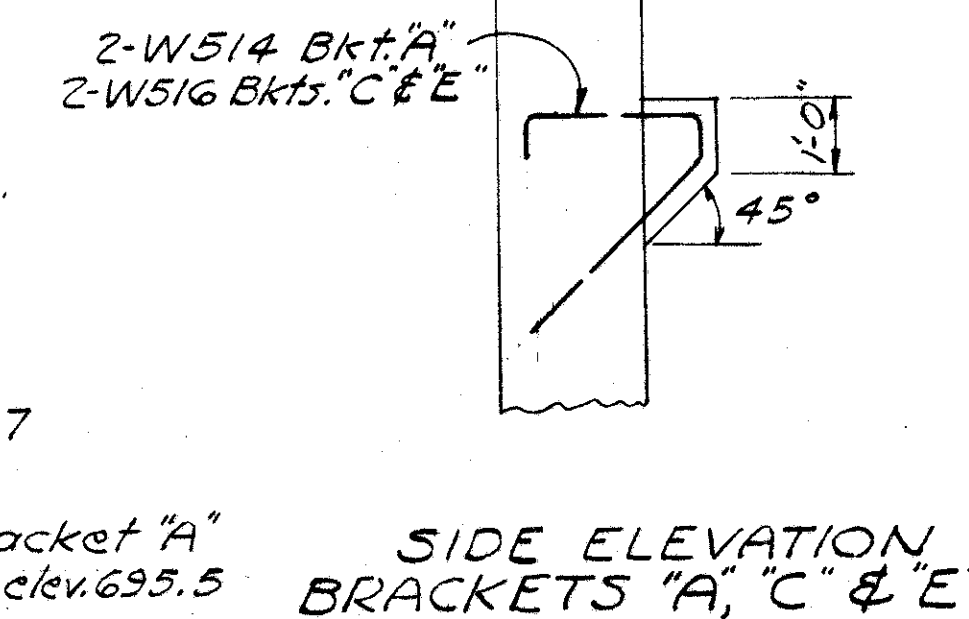
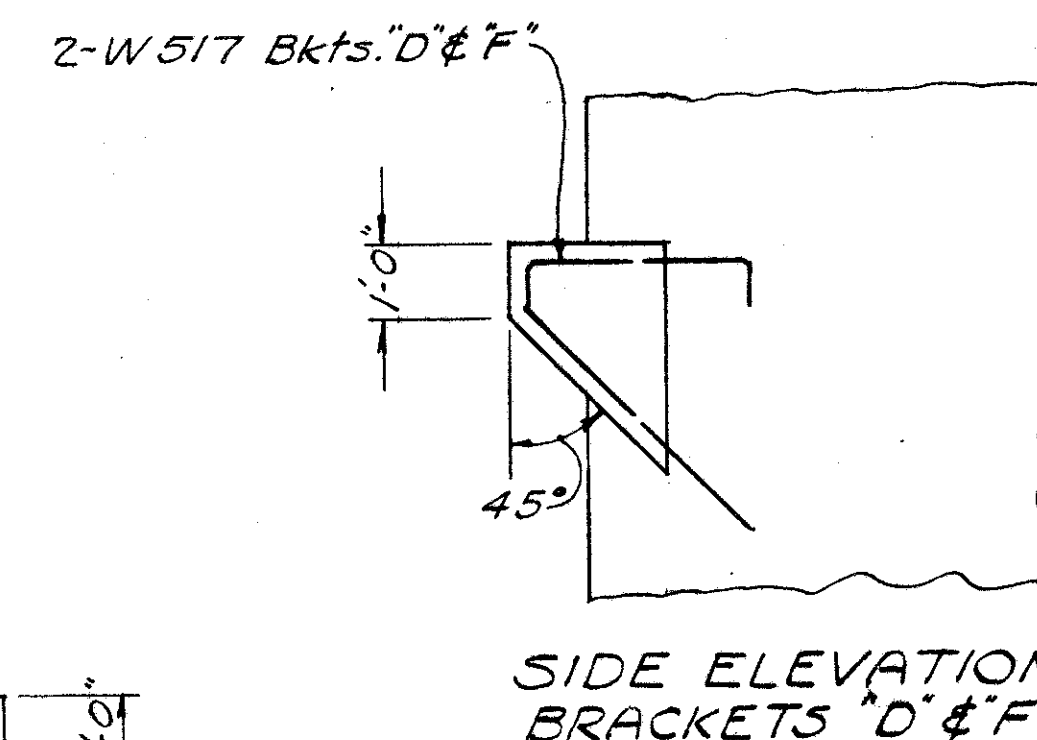
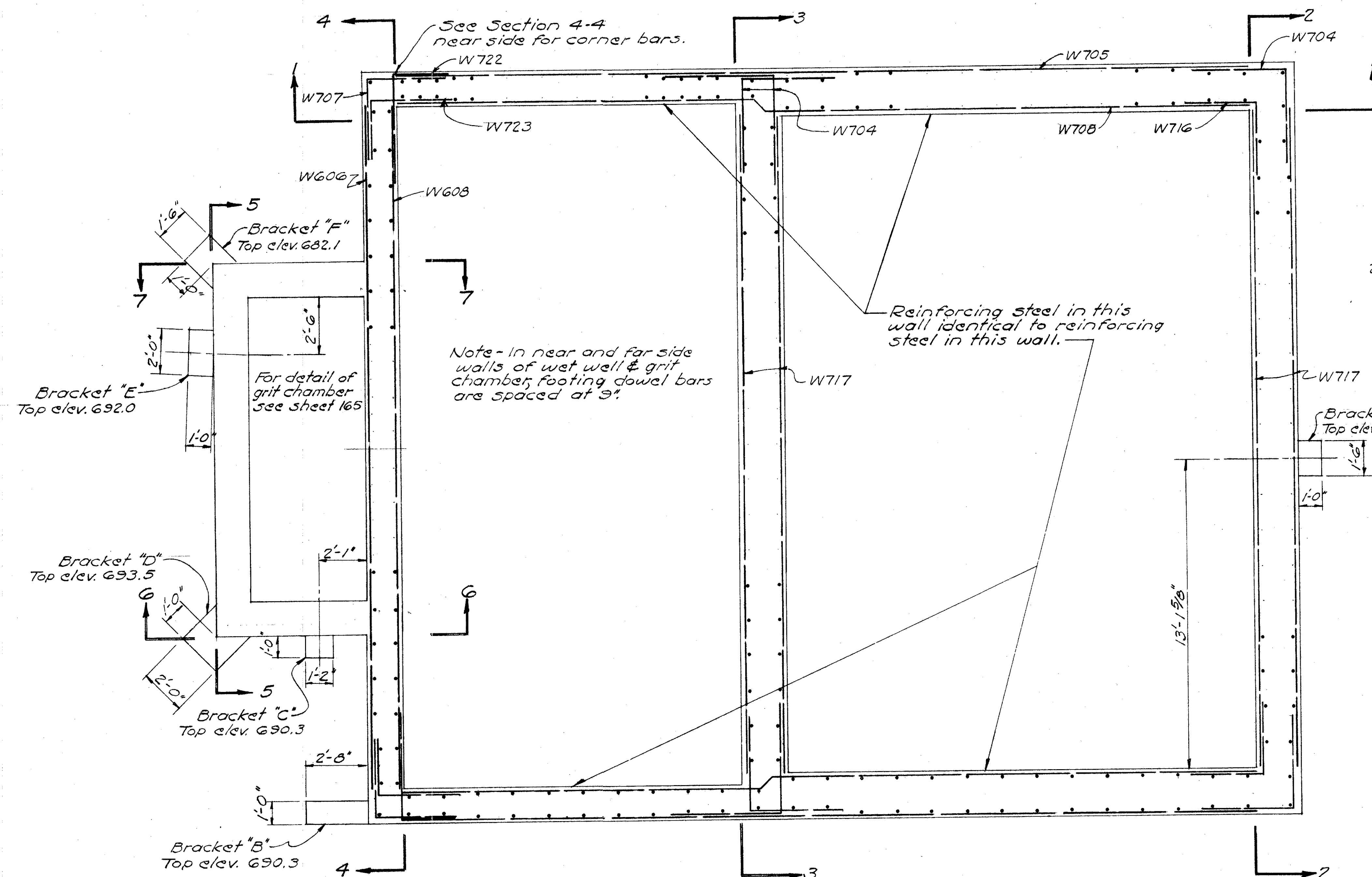
- LEGEND**
- Combination Magnetic Starter (Full Voltage)
 - Combination Magnetic Starter (Auto Tran.)
 - Circuit Breaker
 - Fuse
 - Disconnect Switch
 - Lighting Transformer
 - Current Transformer
 - Induction Motor
 - Lightning Arrester
 - Capacitor
 - Contactor or Relay Coil
 - Pushbutton N.O.
 - Pushbutton N.C.
 - Selector Switch
 - Contacts N.O.
 - Contacts N.C.
 - N.O. Contacts - Timed Closing After Energization
 - N.C. Contacts - Timed Opg. After Energization
 - Indicating Light - Letter Denotes Color
 - "Electrode" Type Liquid Level Relay

- KEY**
- A1, A2 - Aux. Control Relay or Contactor
 - CKT. 1 - Lighting Panel CKT. No. 1
 - CR1, CR2 - Pump Alternator Relays
 - LL1, LL2 - Liquid Level Relay
 - LS1, LS2 - Time Clock N.C. Limit Switch
 - MI - Motor Starter Contactor
 - N - 120 Volt Neutral (Lighting)
 - O.L. - Motor Overload Relay Contacts
 - RR, R3 - Motor Starter Contactor (Run)
 - S2, S3 - Motor Starter Contactor (Start)
 - TD1, TD2 - Time Delay Relay
 - T1, T2 - Time Clock Solenoid
 - TM1, TM2 - Time Clock Motor
 - TR2, TR3 - Motor Starter Timing Relay
 - TT - Control CKT. Test Contactor
 - TM - Time Meter
 - ② - Control Lead Identification

BURGESS & NIPLE - CONSULTING ENGINEERS COLUMBUS, 12, OHIO.				
MOUND-SANDUSKY PUMP STATION				
ELECTRICAL DETAILS				
FRANKLIN COUNTY				
DESIGNED POM	DRAWN RAM	TRACED G.A.	CHECKED A.S.R.	REVIEWED DATE 10-9-57

FRANKLIN COUNTY
CITY OF COLUMBUS

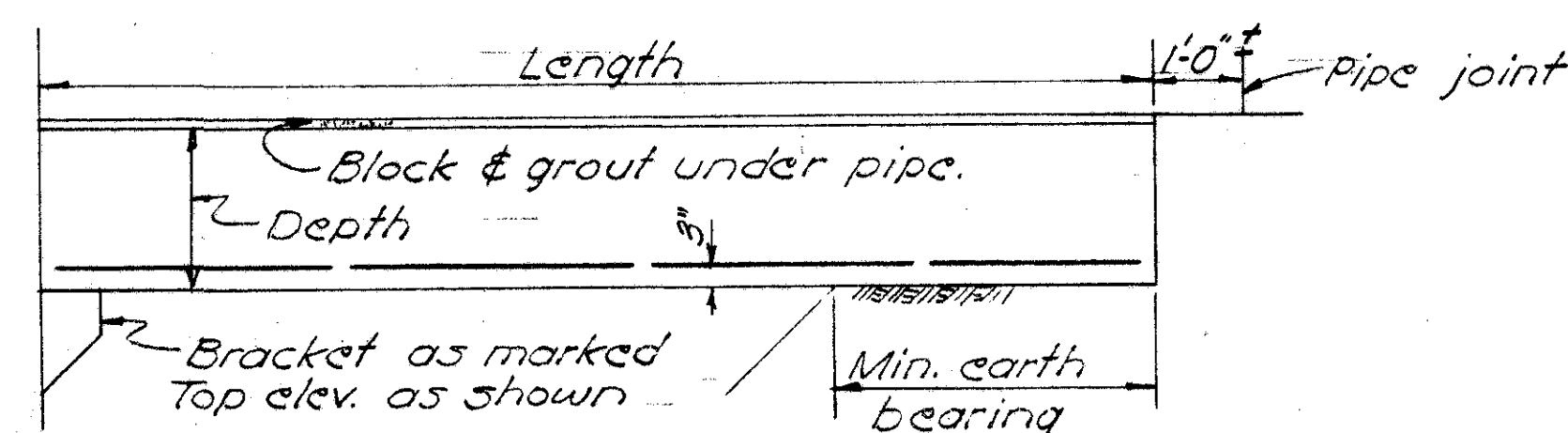
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



PIPE SUPPORT BEAMS TO SET ON BRACKETS AS MARKED					
Beam Bracket	Width	Depth	Max. length	Min. earth bearing of bars	Number Size
A	1'-6"	3'-0"	15'-6"	4'-0"	3 #11
B-C	1'-2"	2'-6"	26'-10"	6'-0"	3 #11*
D	2'-0"	2'-0"	20'-0"	3'-0"	4 #10
E	2'-0"	2'-6"	20'-9"	4'-6"	4 #11
F	1'-6"	3'-0"	11'-6"	6'-0"	3 #11

* Use same steel in top and bottom, this beam only.

PLAN AT ELEVATION 696.00



Note - All pipe beams are based on open excavation. If sheet piling is used, beam length may be reduced but minimum length of earth bearing shall not be reduced.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

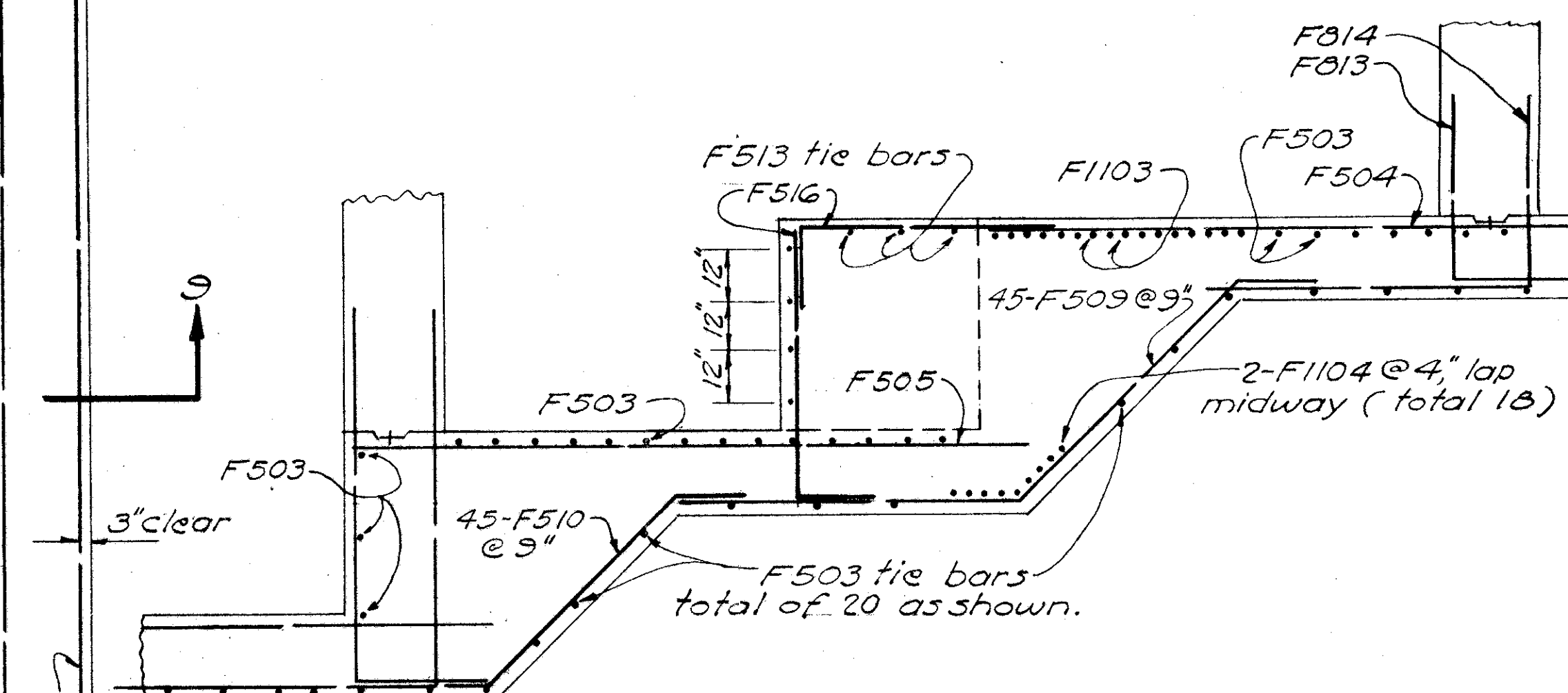
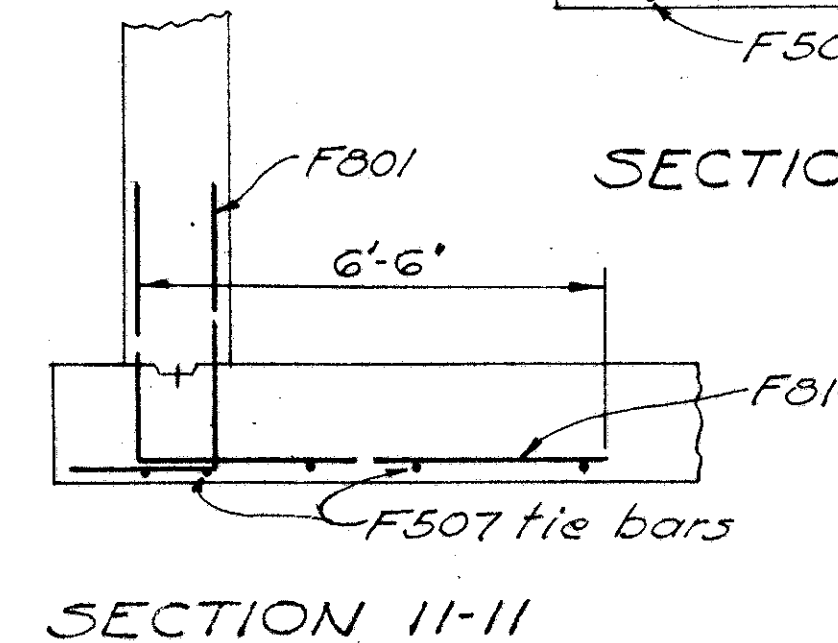
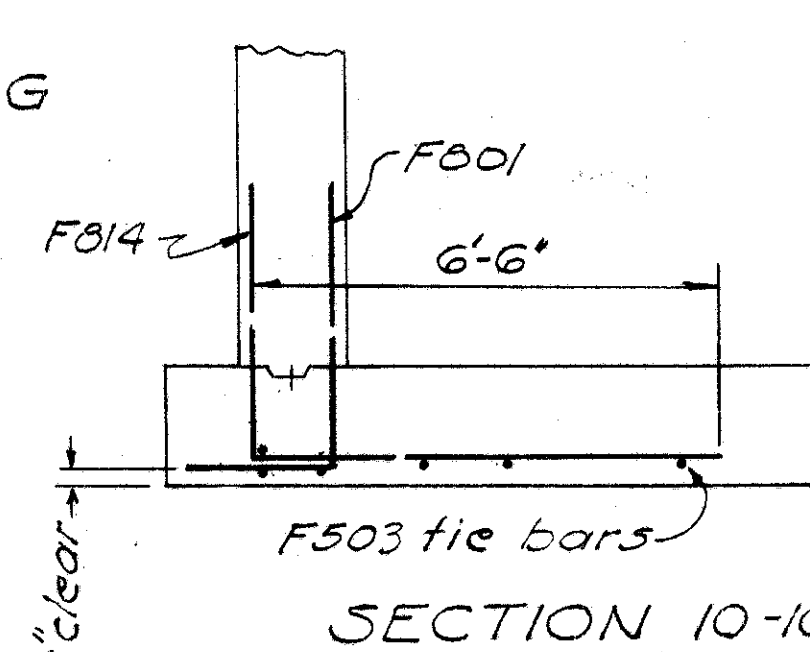
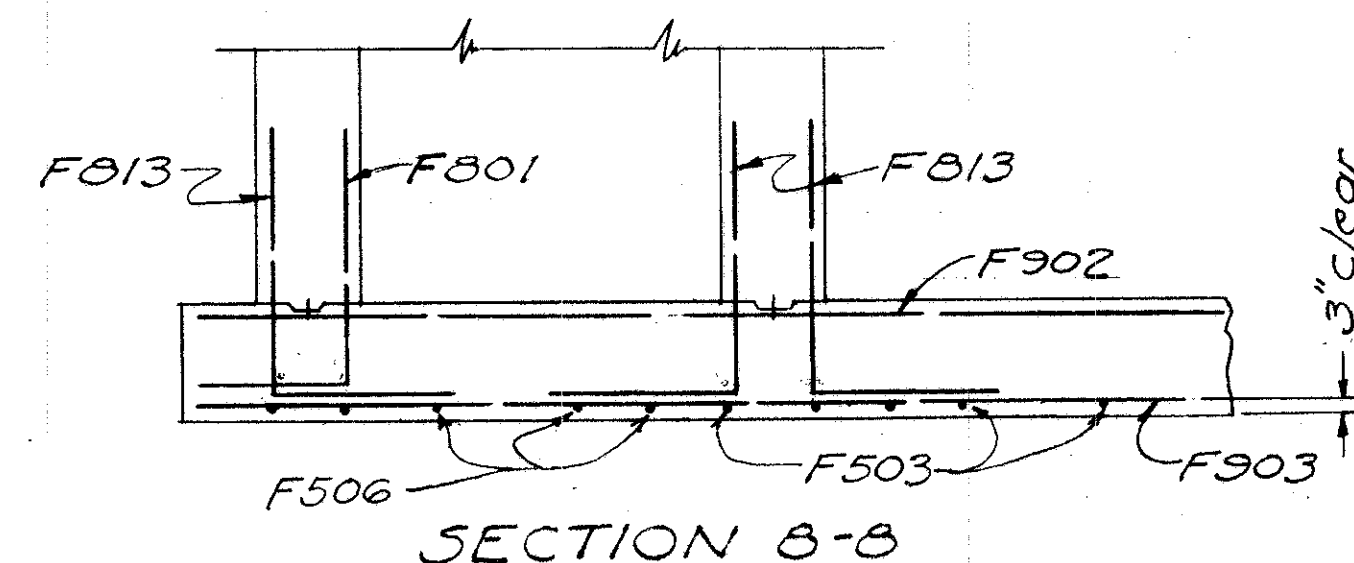
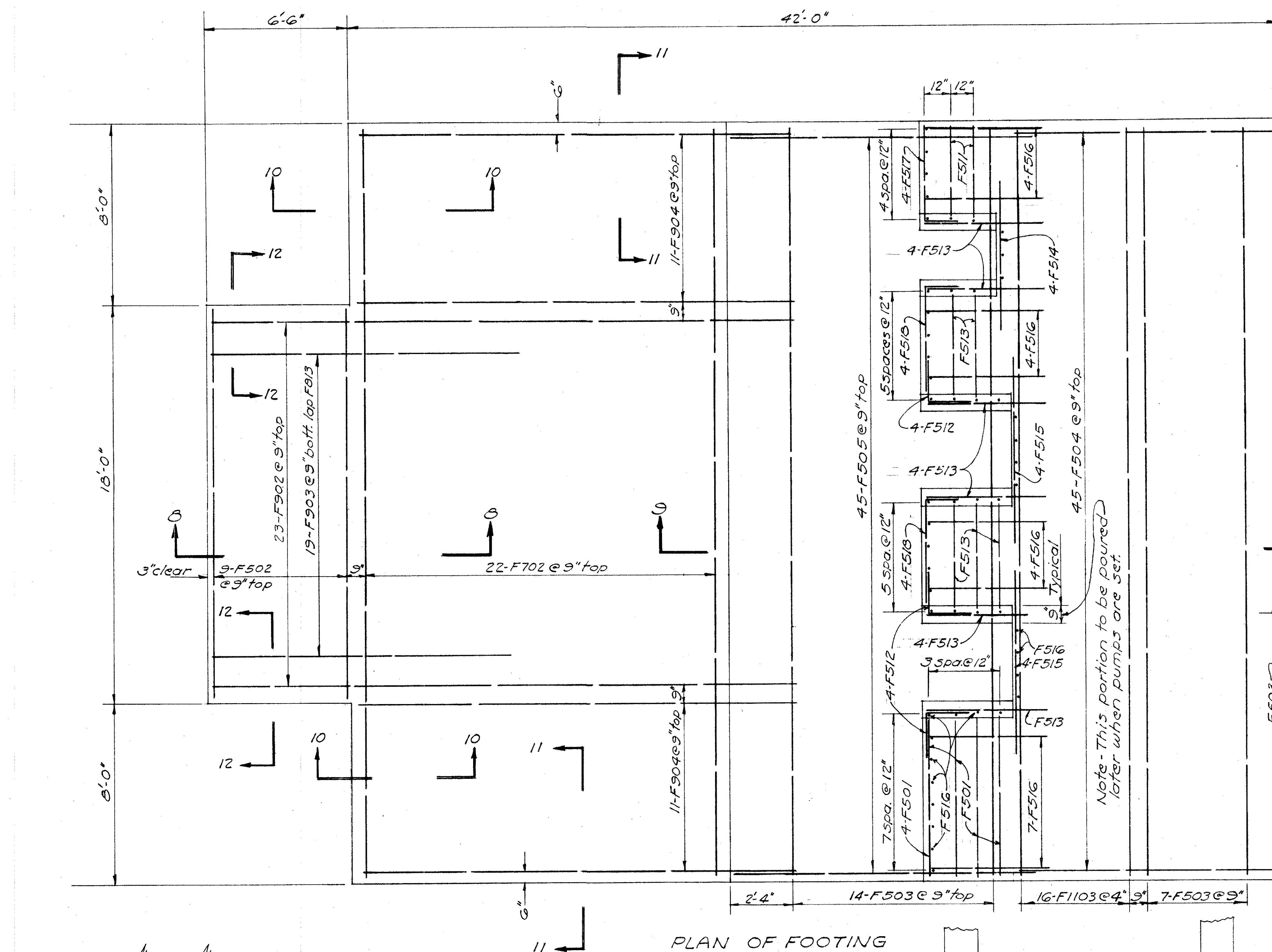
**MOUND SANDUSKY
PUMP STATION
REINFORCING STEEL**

FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.M.	WRD	WRD	B.S.R.	10-9-57	

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



SECTION 9-9

Note - For additional information on footing dowel bars see wall sections.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

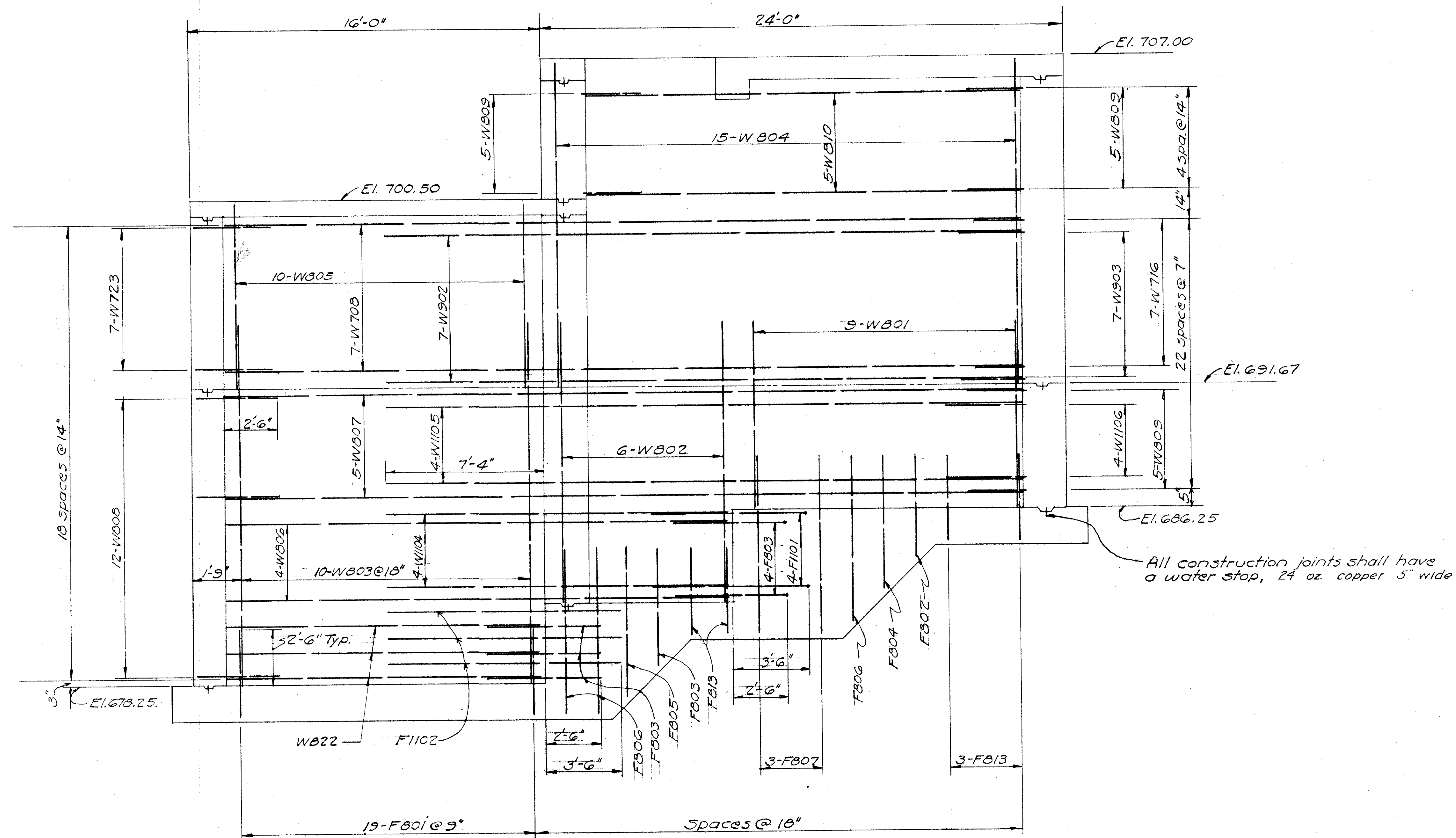
**MOUND SANDUSKY
PUMP STATION
REINFORCING STEEL**

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
G.M.L.	W.R.D.	W.R.D.	D.S.R.	4/18/10-9-57	

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



SECTION I-I NEAR SIDE

For additional information on
footing steel see sheet 159.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

**MOUND SANDUSKY
PUMP STATION
REINFORCING STEEL**

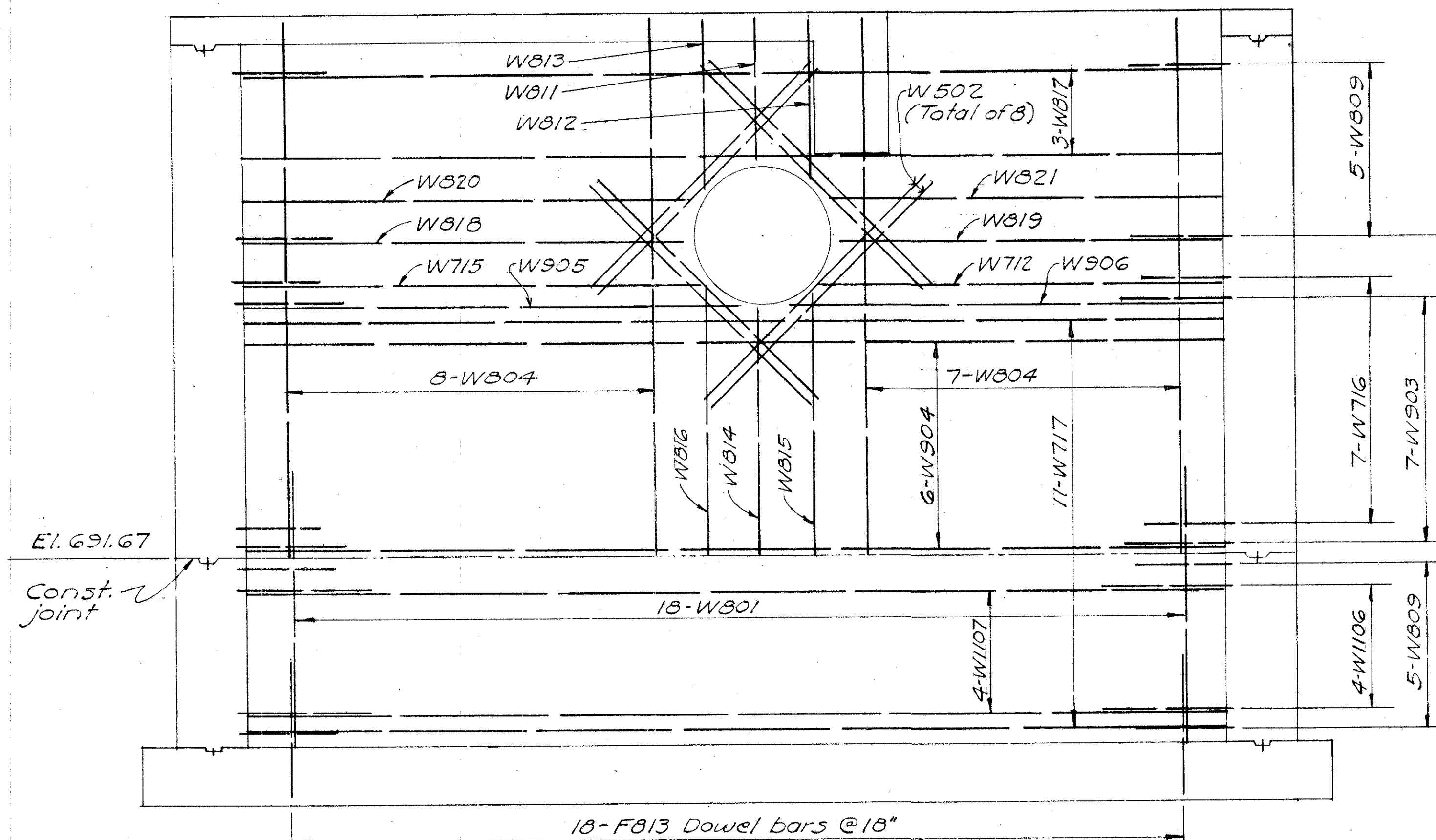
FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.M.L.	WRD	WRD	B.S.R.	11/10-9-57	

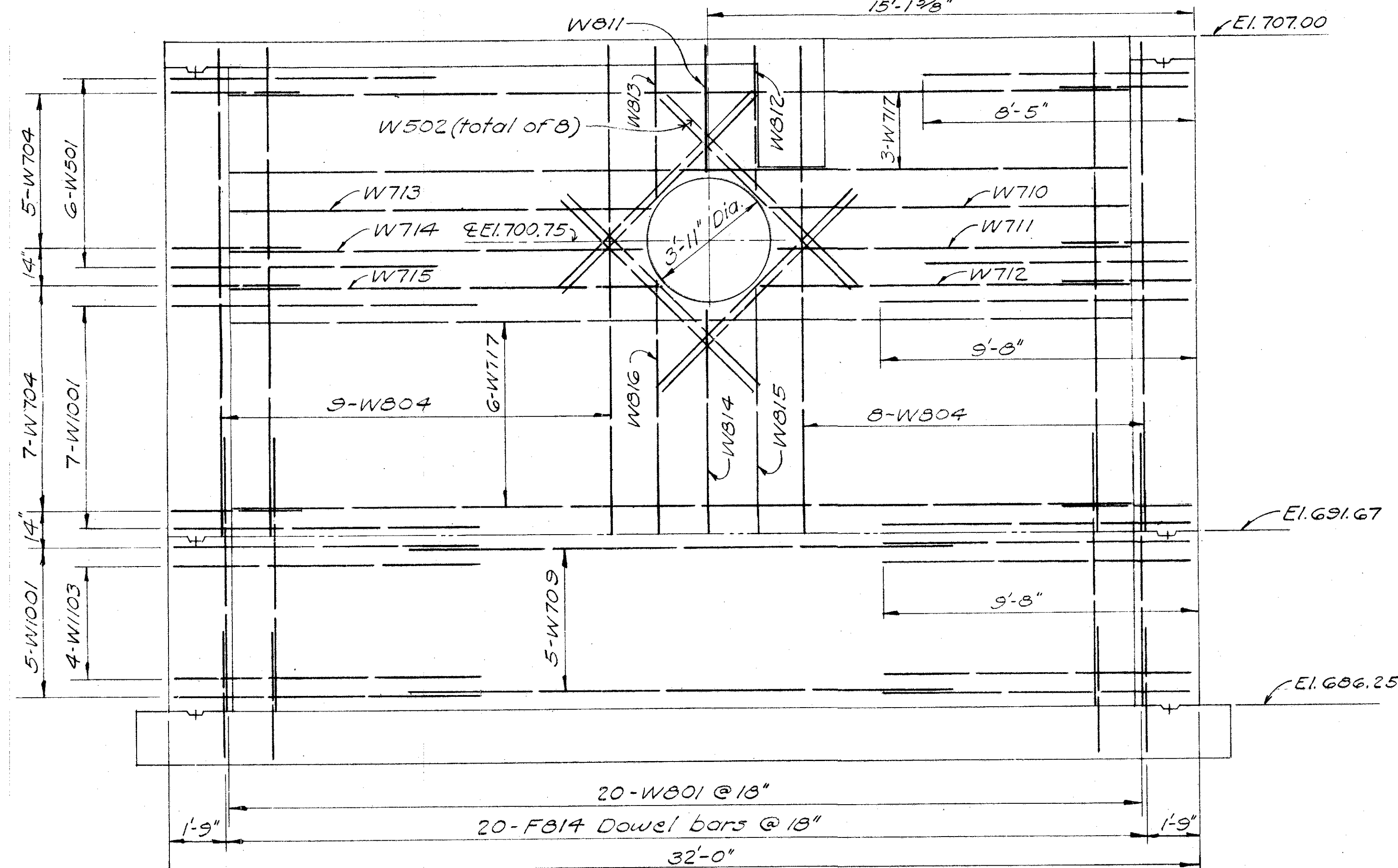
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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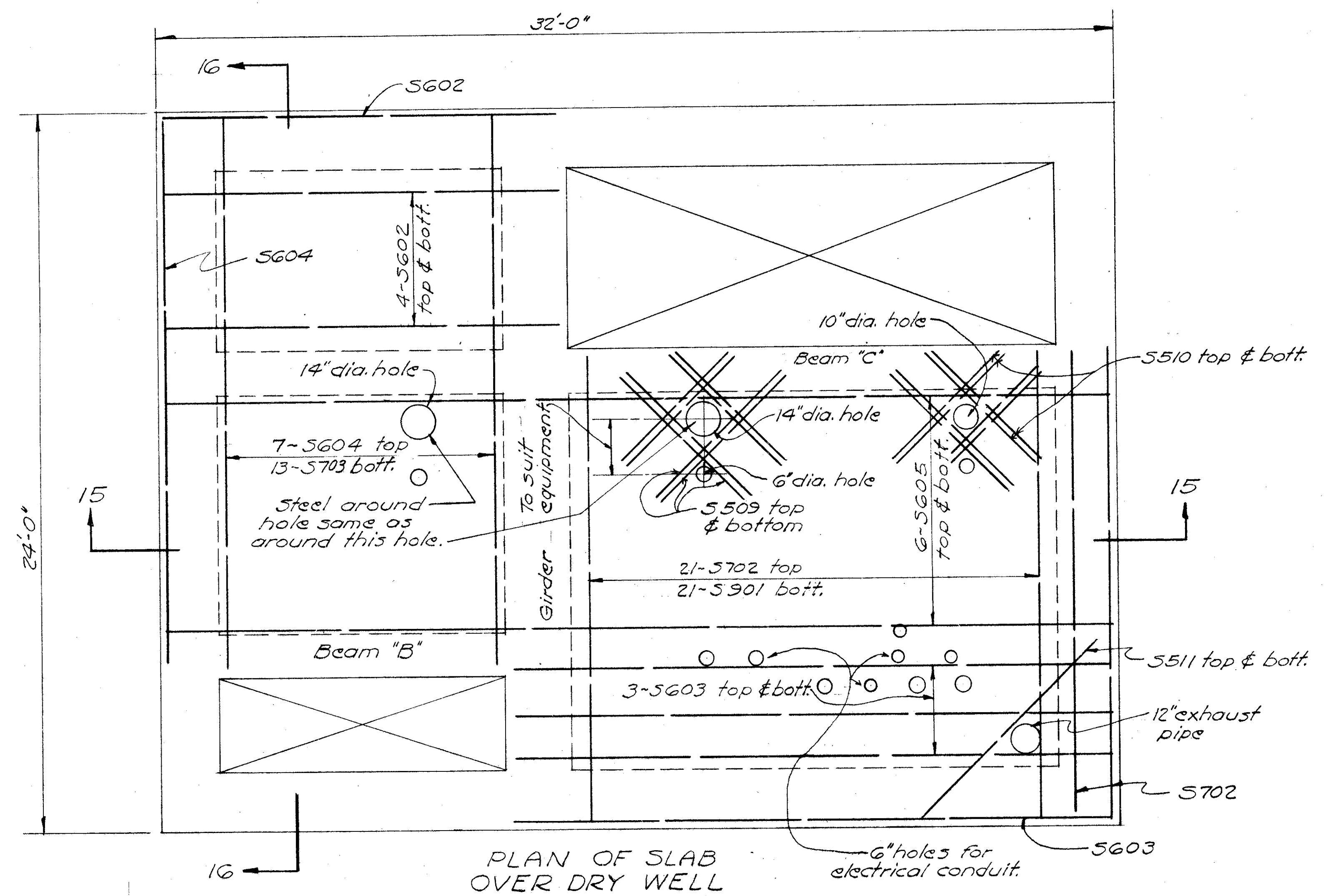
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



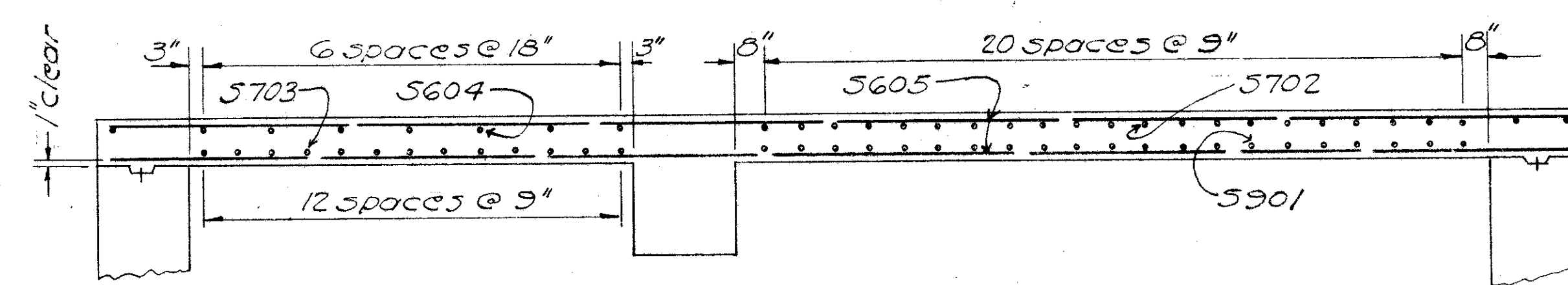
SECTION 2-2 NEAR SIDE
15'-1 3/8"



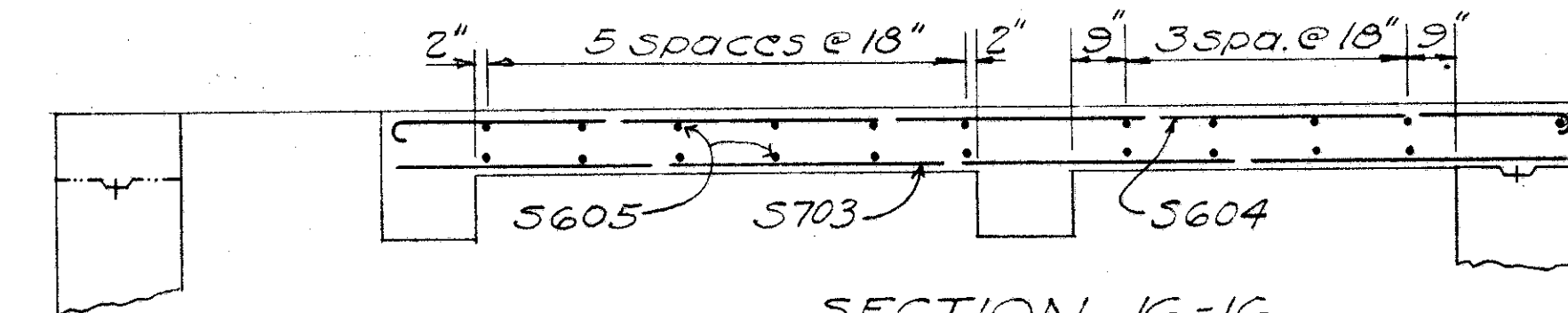
SECTION 2-2 FAR SIDE



PLAN OF SLAB
OVER DRY WELL



SECTION 15-15



SECTION 16-16

Note - For beam & girder details see sheet N=161.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

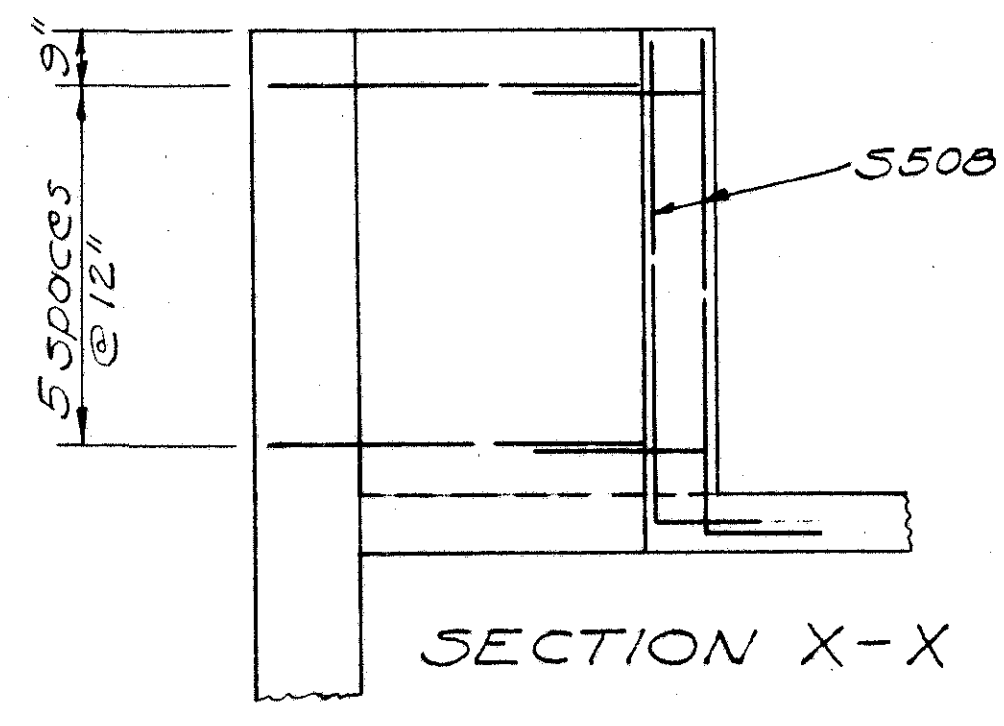
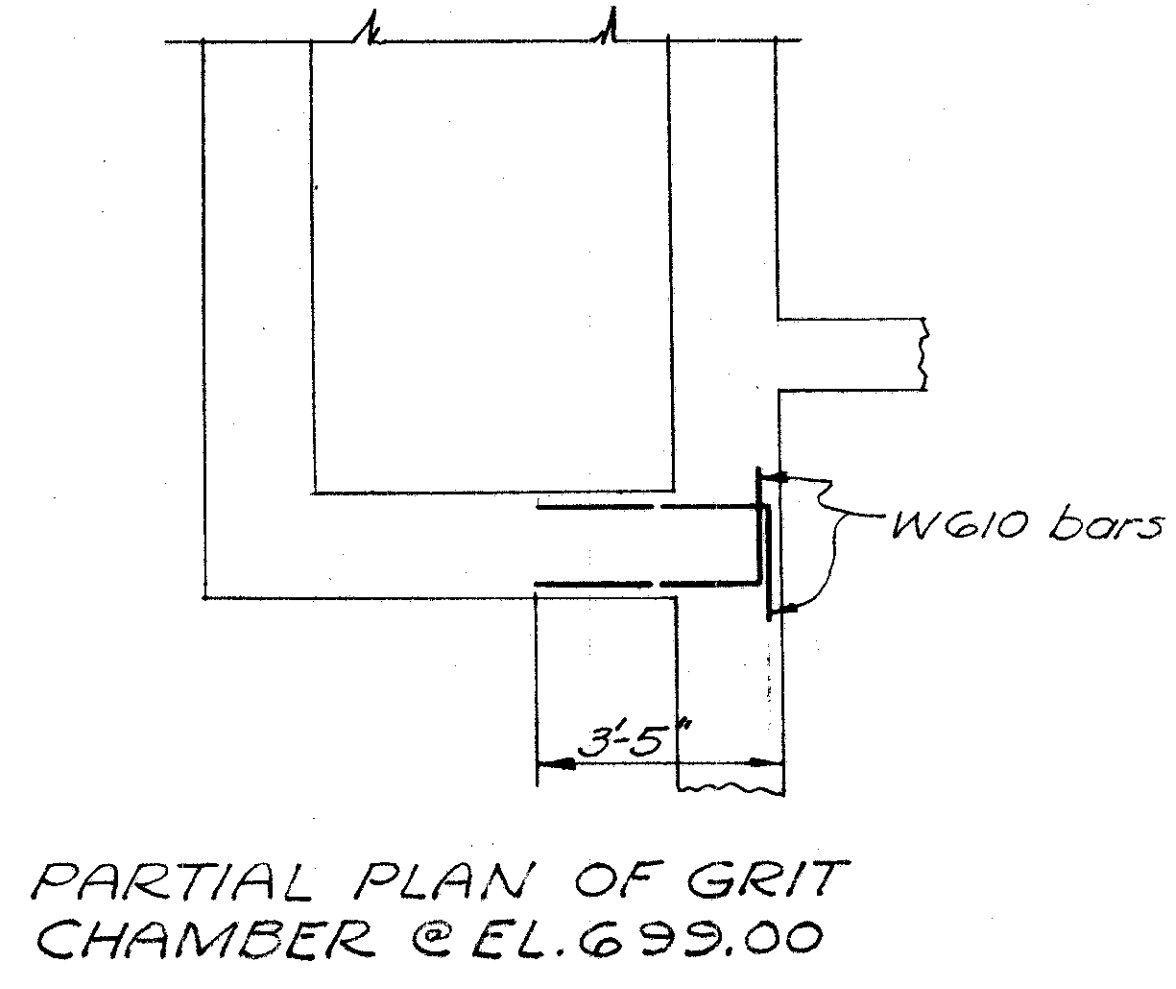
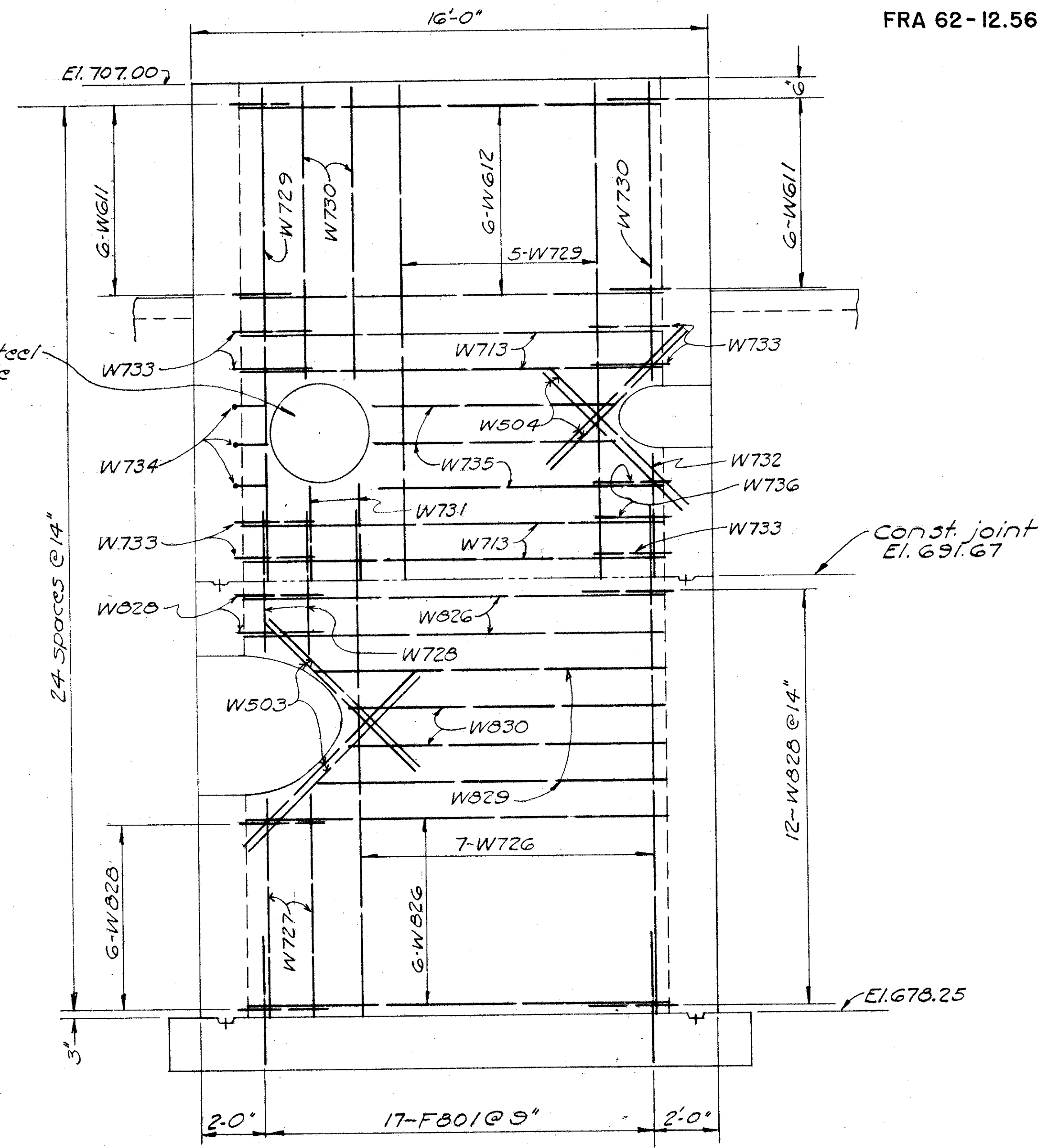
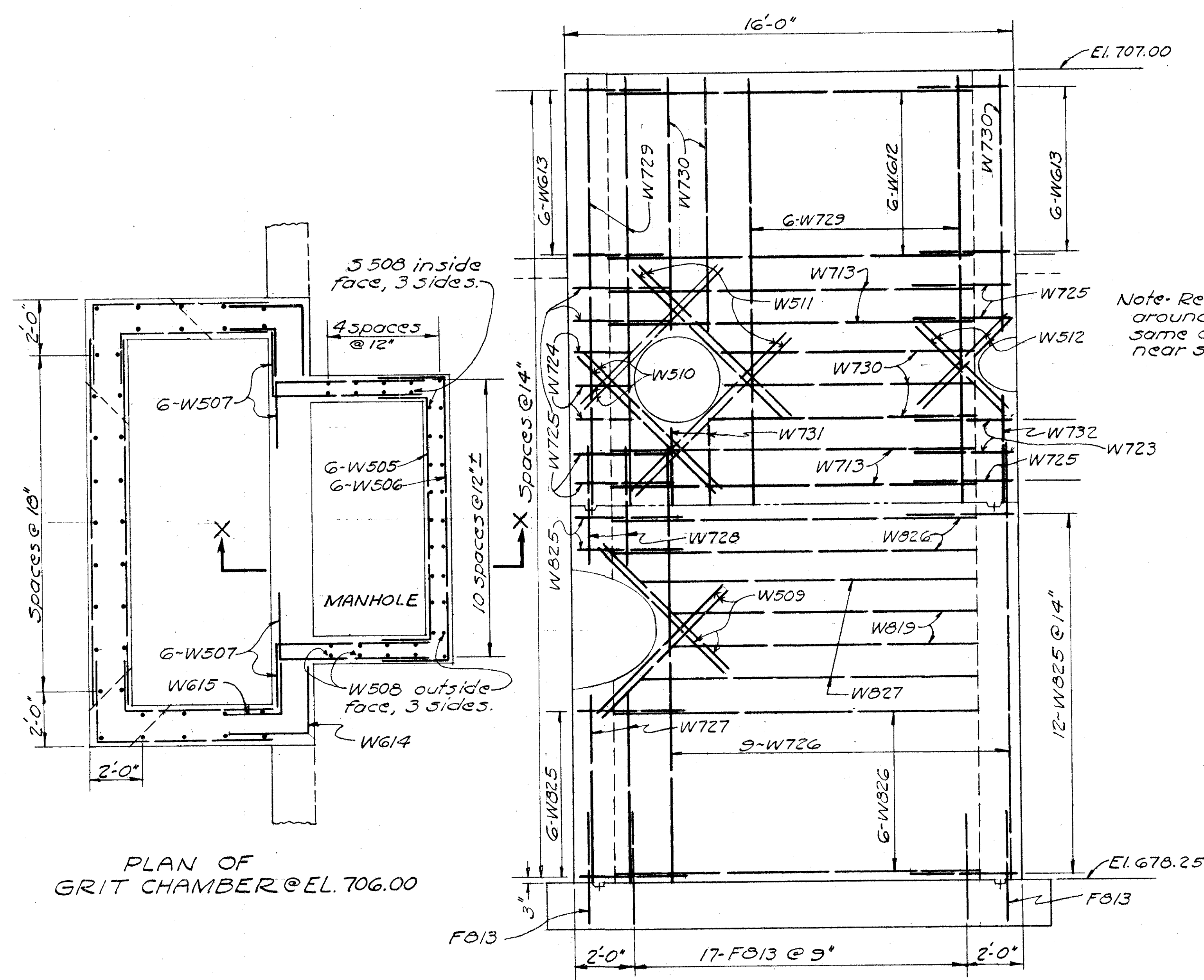
**MOUND SANDUSKY
PUMP STATION
REINFORCING STEEL**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
G.M.	W.R.	W.R.	R.S.R.	10-9-57	

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND - SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

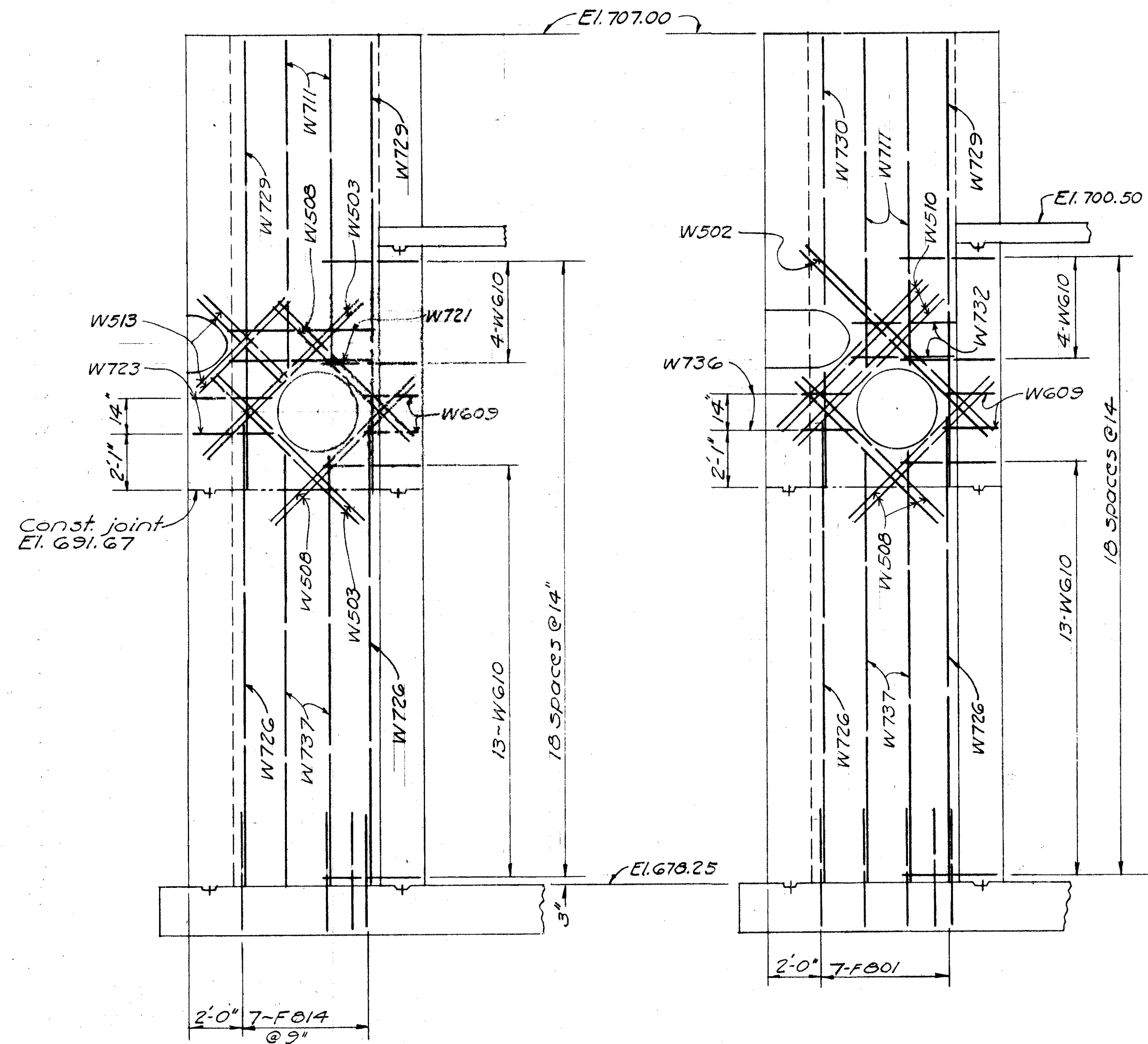


BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO.				
MOUND SANDUSKY PUMP STATION REINFORCING STEEL				
FRANKLIN COUNTY				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
P.M.L.	W.R.D.	W.R.D.	B.L.R.	4/10-9-57
REVISED				

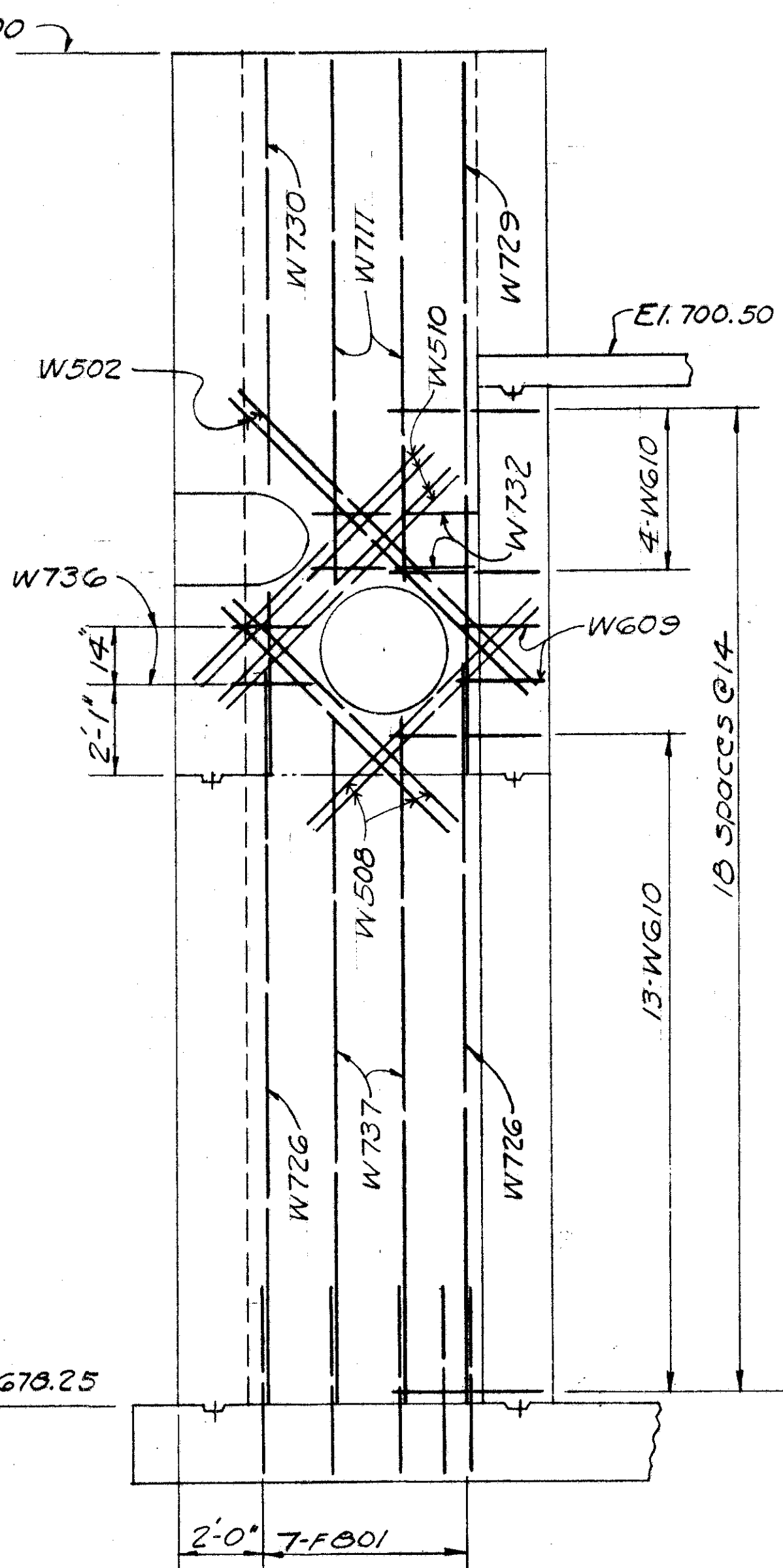
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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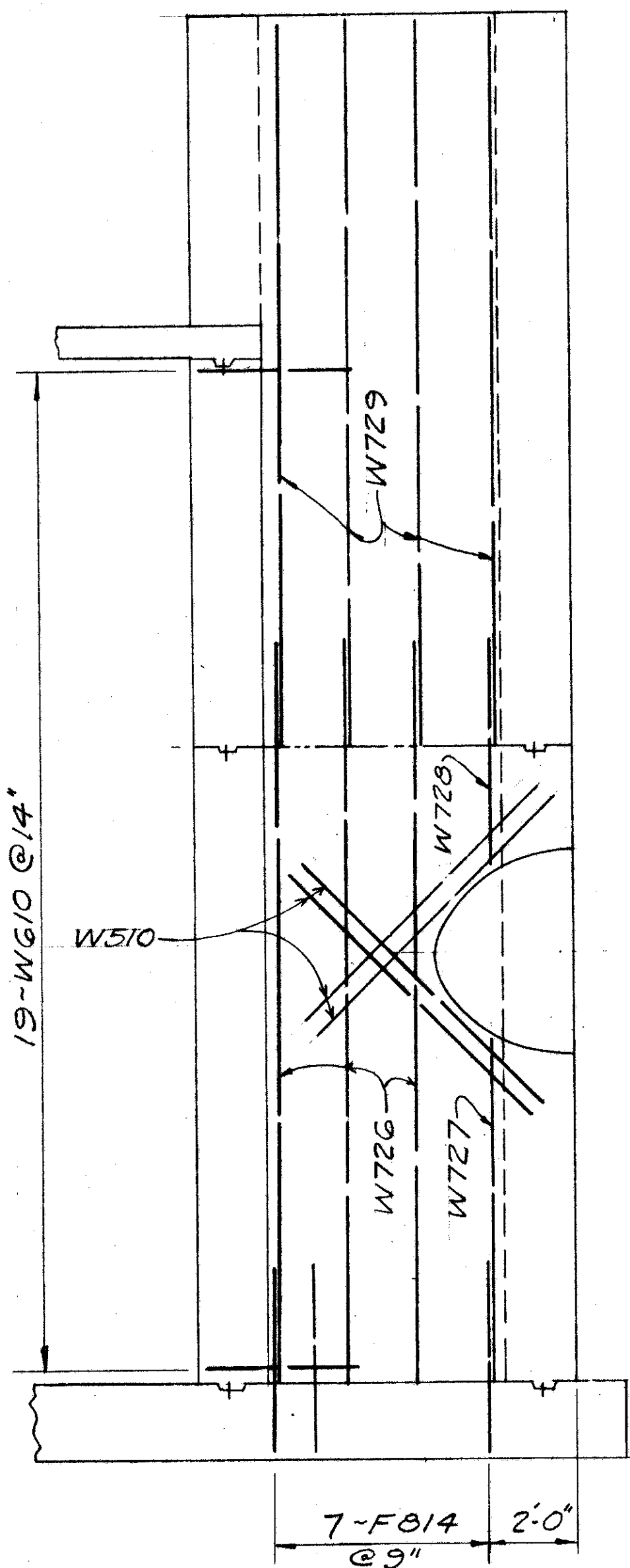
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



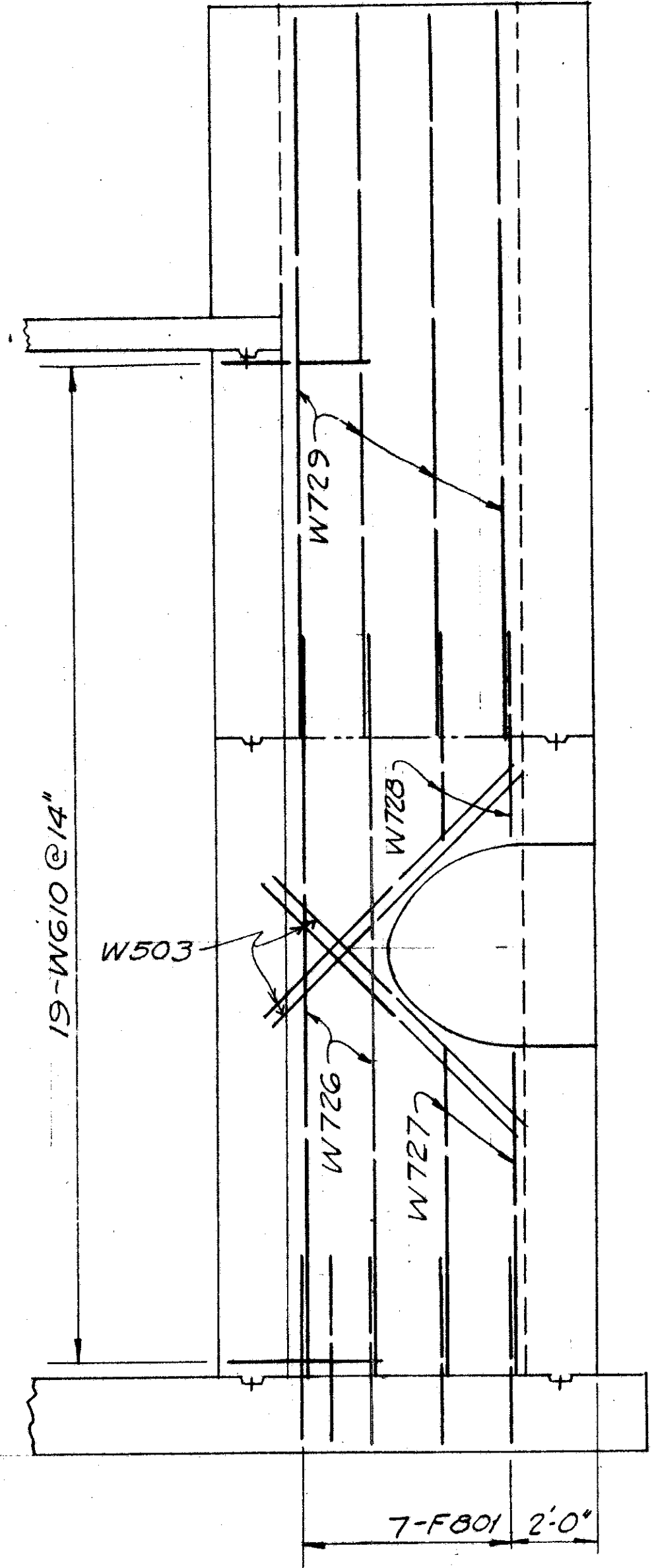
SECTION G-G NEAR SIDE



SECTION G-G FAR SIDE



SECTION 7-7 NEAR SIDE



SECTION 7-7 FAR SIDE

Note- See sheet 165 for horizontal
steel not shown.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

**MOUND SANDUSKY
PUMP STATION
REINFORCING STEEL**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PMB	WRD	WRD	D.L.R.	11/18/10-9-57	

REINFORCING STEEL

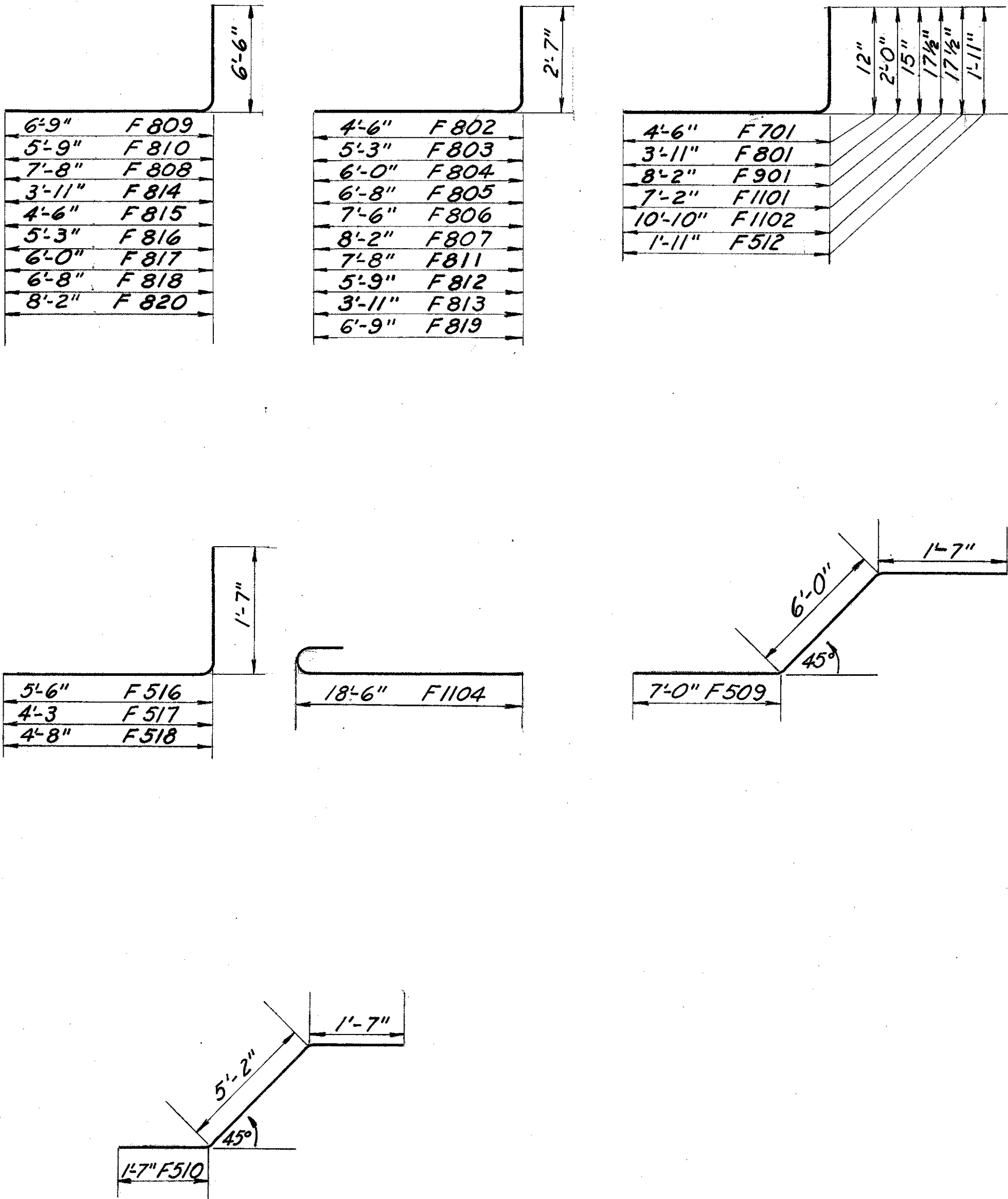
FED ROAD DIV NO	STATE	FED AID PROJ NO	TYPE FUNDS
2	OHIO		

167
251

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56-FRA 3-13.70

FOOTING		SECTIONS																		
	1-1 ^⓪	1-1 ^⓪	2-2	2-2	3-3	3-3	4-4	4-4	5-5	5-5	6-6	6-6	7-7	7-7						
Mark	F.S.	N.S.	F.S.	N.S.	F.S.	N.S.	N.S.	F.S.	N.S.	F.S.	N.S.	F.S.	N.S.	F.S.	Footing	No.	Length	Weight	Shape	
F1101	4	4														16	8'-4"	708	B	
F1102		3														6	12'-0"	383	B	
F1103															16	16	33'-6"	2,848	S	
F1104															18	18	20'-1"	1,920	B	
F901	3															6	9'-2"	187	B	
F902															23	23	26'-3"	2,053	S	
F903															19	19	13'-11"	899	S	
F904															22	22	19'-9"	1,477	S	
F801		19					20			17		7		7		89	5'-9"	1,366	B	
F802		1														2	6'-11"	37	B	
F803		8														16	7'-8"	328	B	
F804		1														2	8'-5"	45	B	
F805		1														2	9'-1"	48	B	
F806		3														6	9'-11"	159	B	
F807		3														6	10'-7"	169	B	
F808	3				30											36	14'-0"	1,346	B	
F809					1											1	13'-1"	35	B	
F810					6											6	12'-1"	194	B	
F811						30										30	10'-1"	807	B	
F812					6											6	8'-2"	131	B	
F813		5		18			19	19	19							85	6'-4"	1,437	B	
F814	26		20					20			7		7			106	10'-3"	2,901	B	
F815	1															2	10'-10"	58	B	
F816	1															2	11'-7"	62	B	
F817	1															2	12'-4"	66	B	
F818	1															2	13'-0"	69	B	
F819						1										1	9'-2"	24	B	
F820	3															6	14'-6"	232	B	
F701	7															14	5'-4"	153	B	
F702															22	22	33'6"	1,506	S	
F501					8	8									7	23	7'-6"	180	S	
F502															9	9	17'-6"	164	S	
F503															50	50	33'-6"	1,747	S	
F504															45	45	11'-11"	559	S	
F505															45	45	13'-6"	634	S	
F506															5	5	14'-6"	76	S	
F507															10	10	18'-6"	193	S	
F508															10	10	6'-0"	63	S	
F509															45	45	14'-7"	684	B	
F510															45	45	8'-5"	395	B	
F511															2	2	4'-3"	9	S	
F512															12	12	3'-9"	47	B	
F513															29	29	5'-6"	166	S	
F514															4	4	6'-10"	28	S	
F515															8	8	8'-2"	68	S	
F516															71	71	7'-0"	518	B	
F517															4	4	5'-9"	24	B	
F518															8	8	6'-2"	51	B	

⓪Two walls similar



BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
MOUND SANDUSKY PUMP STATION					
REINFORCING STEEL LIST					
FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
GML	WRD	WRD	R.L.R.	11/10-9-57	

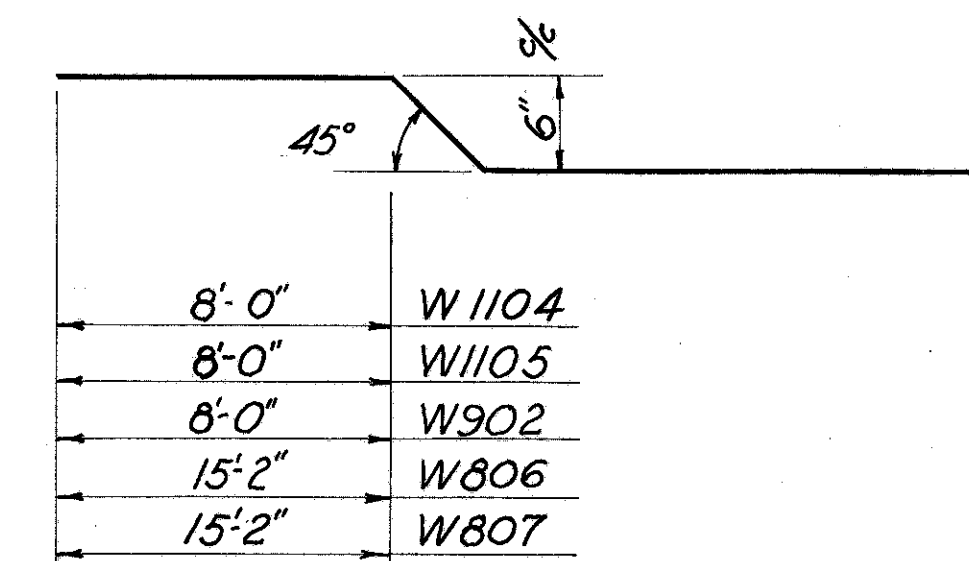
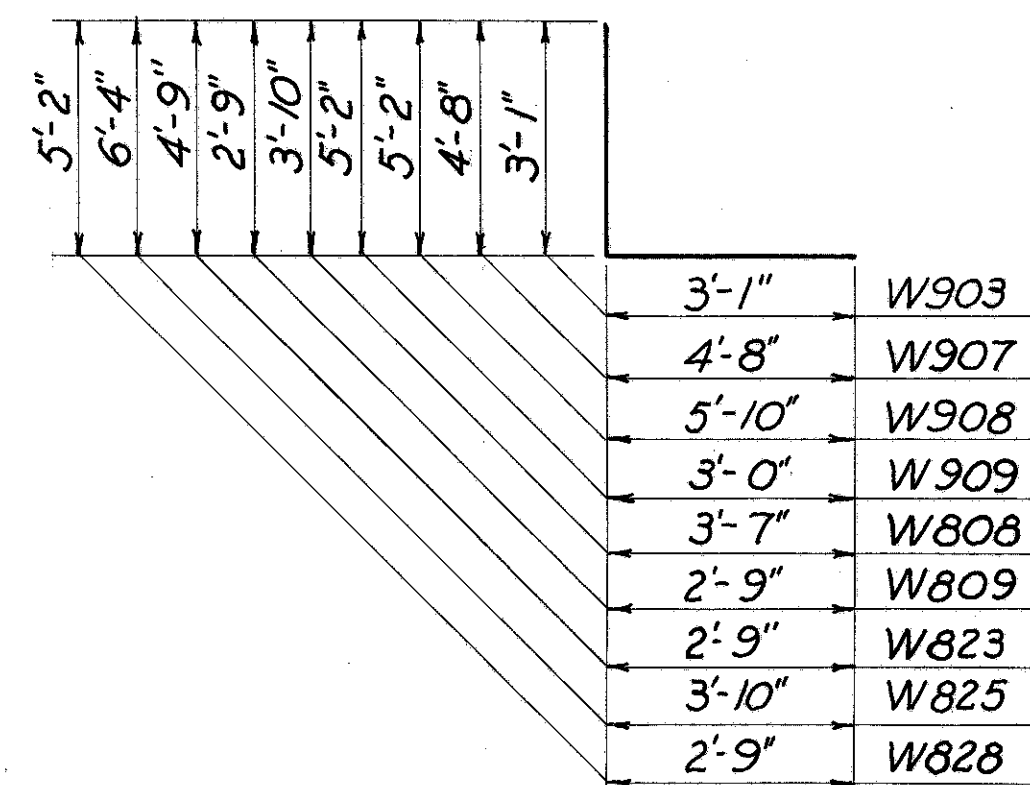
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56·FRA 3-13.70

SECTIONS																		
Mark	1-1 [⊙] F.S.	1-1 [⊙] N.S.	2-2 F.S.	2-2 N.S.	3-3 F.S.	3-3 N.S.	4-4 N.S.	4-4 F.S.	5-5 N.S.	5-5 F.S.	6-6 N.S.	6-6 F.S.	7-7 N.S.	7-7 F.S.	No.	Length	Weight	Shape
W801	10	9	20	18											76	7'-11"	1,607	S
W802	6	6			16	16									56	12'-2"	1,820	S
W803	11	10					14	14							70	15'-11"	2,975	S
W804	16	15	17	15	19	19	10	10							152	15'-2"	6,157	S
W805	11	10			3	3	10	10							68	8'-8"	1,574	S
W806		4													8	23'-2"	495	B
W807		5													10	36'-6"	975	B
W808		12													24	7'-3"	465	B
W809		15			10										40	5'-4"	569	B
W810		5													10	19'-10"	529	S
W811			1	1			6	6							14	3'-10"	143	S
W812			1	1											2	4'-7"	24	S
W813			1	1											2	4'-10"	26	S
W814			1	1											2	6'-9"	36	S
W815			1	1											2	7'-6"	40	S
W816			1	1											2	7'-9"	41	S
W817				3	5										8	27'-10"	594	S
W818				1											1	12'-9"	34	S
W819				1					2						3	11'-0"	88	S
W820				1											1	13'-10"	37	S
W821				1											1	11'-3"	30	S
W822		3													6	14'-4"	230	S
W823							24								24	7'-4"	470	B
W824							6	6							12	6'-0"	192	S
W825									20						20	10'-0"	534	B
W826									8	8					16	13'-0"	555	S
W827									2						2	12'-6"	67	S
W828										20					20	7'-9"	414	B
W829										2					2	10'-9"	57	S
W830										2					2	10'-0"	53	S



BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
MOUND SANDUSKY PUMP STATION					
REINFORCING STEEL LIST					
FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVIEWED
P.M.L.	WRD	V.M.T.	B.S.R.	4/18/10-9-57	

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



REINFORCING STEEL LIST

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

WALLS		SECTIONS																SECTIONS															
	1-1	1-1	2-2	2-2	3-3	3-3	4-4	4-4	5-5	5-5	6-6	6-6	7-7	7-7						4-4	4-4	5-5	5-5	6-6	6-6	7-7	7-7						
Mark	F.S.	N.S.	F.S.	N.S.	F.S.	N.S.	N.S.	F.S.	N.S.	F.S.	N.S.	F.S.	N.S.	F.S.	No.	Length	Weight	Shape	Mark	N.S.	F.S.	N.S.	F.S.	N.S.	F.S.	N.S.	F.S.	N.S.	F.S.	No.	Length	Weight	Shape
W701	3														6	14'-4"	176	S	W601	8									8	26'-0"	312	S	
W702	4														8	23'-0"	376	S	W602	8									8	7'-0"	84	S	
W703	5														10	29'-10"	609	S	W603	4	4								8	2'-0"	24	S	
W704	17				30	14									78	7'-10"	1,248	B	W604	4	4								8	9'-0"	108	S	
W705	7														14	36'-4"	1,040	S	W605	2	2								4	16'-4"	98	S	
W706	5														10	19'-10"	405	S	W606		15								15	28'10"	650	S	
W707	19														38	6'-10"	531	B	W607		8								8	8'-6"	102	S	
W708		7													14	36'-6"	1,044	B	W608	7									7	26'-4"	277	S	
W709			5			7									12	17'-0"	417	S	W609					2	2				4	3'10"	23	B	
W710			1												1	11'-3"	23	S	W610					17	17	19	19		72	5'-1"	549	B	
W711			1								2	2			5	11'-0"	112	S	W611					12					12	7'-2"	129	B	
W712			1	1											2	11'-7"	47	S	W612	6	6		6	6					24	13'-0"	469	S	
W713			1						4	4					9	13'-0"	239	S	W613				12						12	8'-3"	149	B	
W714			1												1	12'-9"	26	S	W614	6									6	6'-4"	57	B	
W715			1	1											2	13'-5"	55	S	W615		6								6	4'-2"	37	B	
W716		7													14	4'-8"	134	B															
W717			9	11	13	12									45	27'-10"	2,559	S															
W718					2										2	6'-6"	27	S															
W719					1										1	10'-6"	21	S															
W720					1										1	7'-0"	14	S															
W721					2						2				4	5'-4"	44	S															
W722							14								14	6'-10"	195	B															
W723		7									2				16	5'-9"	188	B															
W724									3						3	8'-1"	50	B															
W725									7						7	9'-7"	137	B															
W726									9	7	2	2	3	2	25	15'-7"	796	S															
W727									2	2			1	2	7	6'-9"	97	S															
W728									2	2			1	2	7	4'-3"	61	S															
W729									8	6	2	1	4	4	25	15'-2"	775	S															
W730									3	3		1			7	9'-0"	129	S															
W731									2	2					4	2'-9"	22	S															
W732									1	1		2			4	3'-9"	31	S															
W733										7					7	7'-5"	106	B															
W734										3					3	6'-0"	37	B															
W735										3					3	7'-6"	46	S															
W736											2	2			2	3'-9"	15	B															
W737											2	2			4	14'6"	119	S															

3'-3" W 610

5'-2" W 611

5'-2" W 613

4'-7" W 722

3'-6" W 723

6'-3" W 724

6'-3" W 725

5'-2" W 733

5'-2" W 734

2'-5" W 736

2'-0" W 609

3'-3" W 614

2'-2" W 615

4'-0" W 704

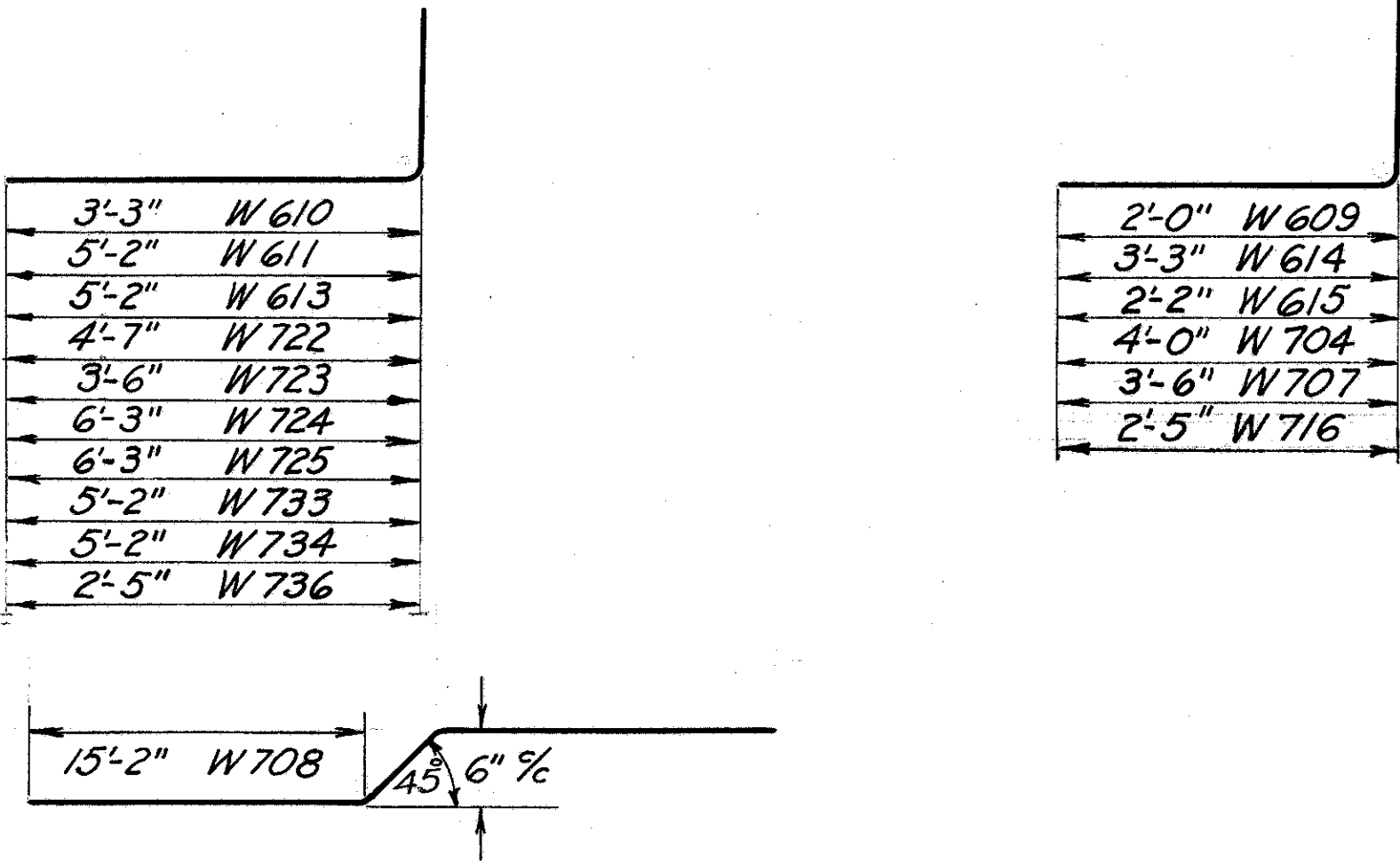
3'-6" W 707

2'-5" W 716

15'-2" W 708

45' 6" %

Two walls similar



BURGESS & NIPLE -- CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
MOUND SANDUSKY PUMP STATION					
REINFORCING STEEL LIST					
FRANKLIN COUNTY					
DESIGNED G.M.	DRAWN WRD	TRACED WRD	CHECKED R.D.R.	REVIEWED DATE #4/8 10-9-57	REVISED

REINFORCING STEEL LIST

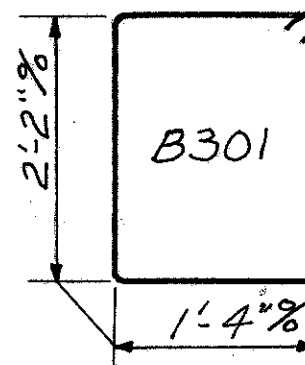
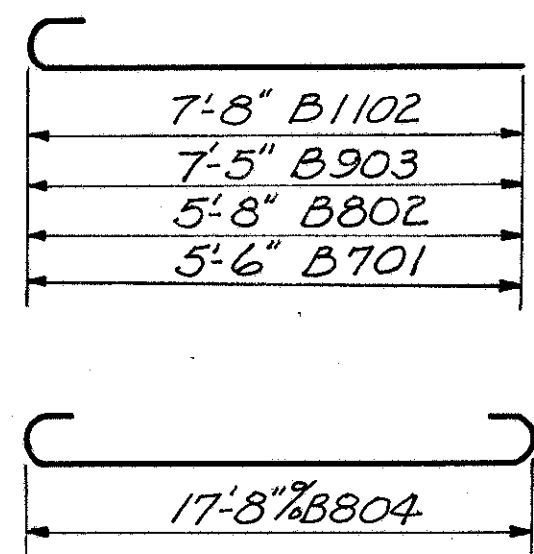
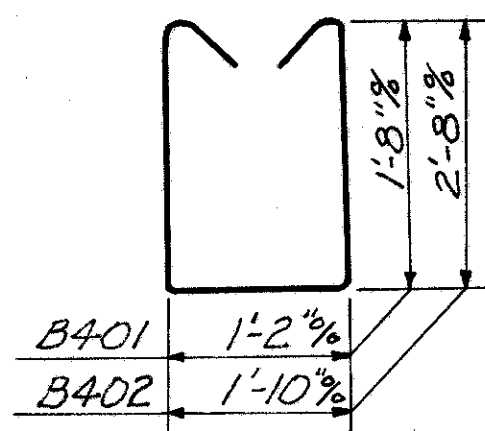
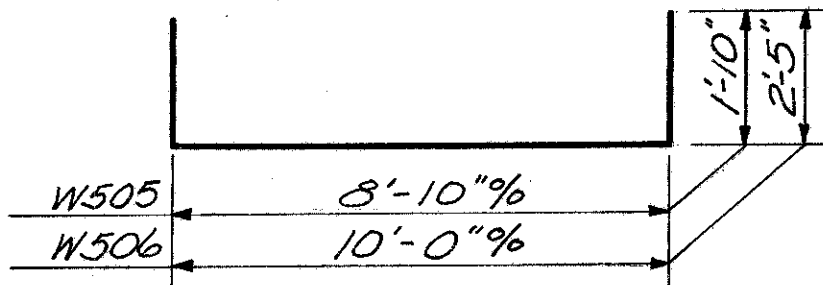
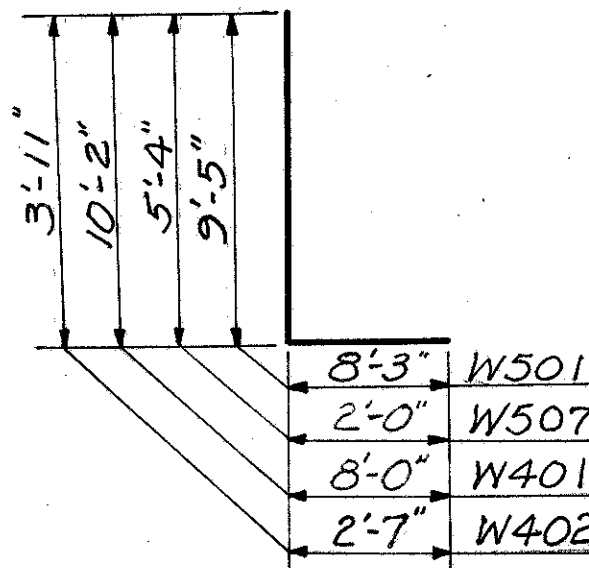
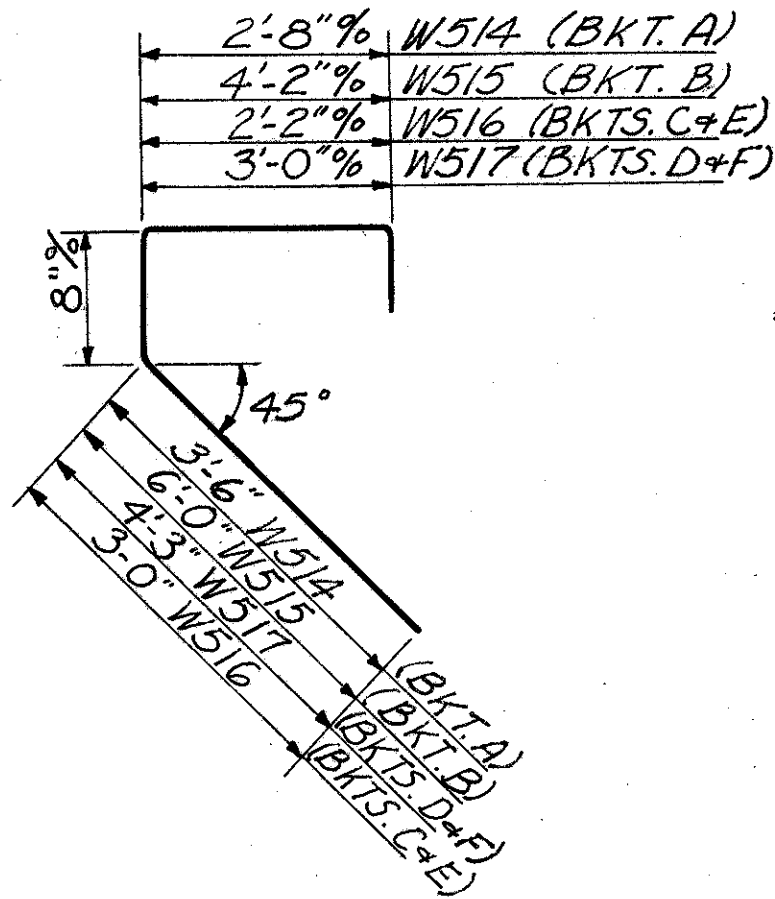
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56-FRA 3-13.70

MARK	NO.	REPLACEMENT LENGTH	BARS WEIGHT	SHAPE
REL100	1	7'-6"		S
REL000	1	7'-2"		S
RE 900	1	6'-10"		S
RE 800	2	6'-6"		S
RE 700	1	6'-2"		S
RE 600	1	5'-11"		S
RE 500	1	5'-7"		S
RE 400	1	5'-3"		S
RE 300	1	4'-11"		S

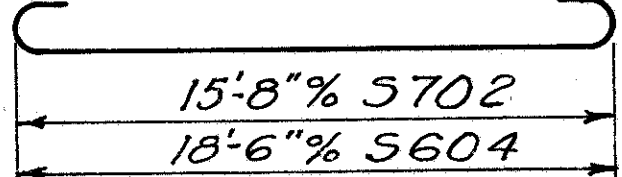
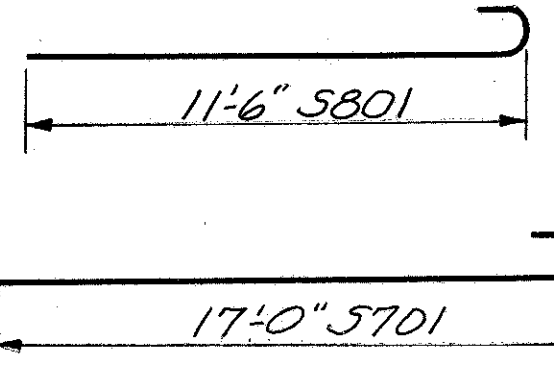
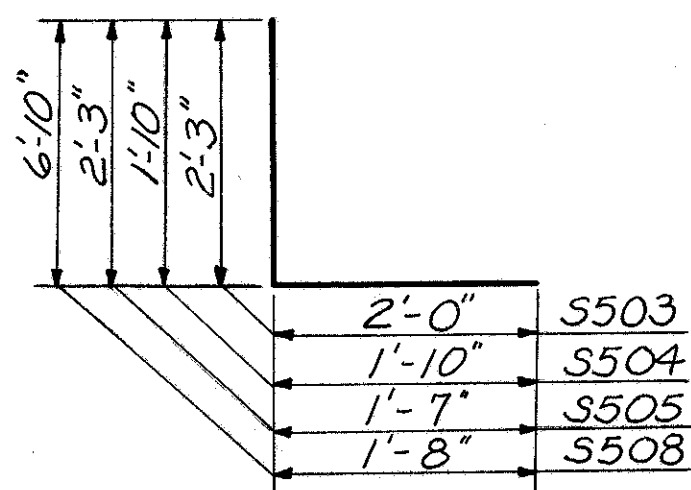


WALLS															SECTIONS				
Mark	1-1 F.S.	1-1 N.S.	2-2 F.S.	2-2 N.S.	3-3 F.S.	3-3 N.S.	4-4 N.S.	4-4 F.S.	5-5 N.S.	5-5 F.S.	6-6 N.S.	6-6 F.S.	7-7 N.S.	7-7 F.S.	M.H.	No.	Length	Weight	Shape
W501	6															12	17'-7"	220	B
W502			8	8	8	8					4	4		4		18	8'-9"	164	S
W503					8	8				4	4					28	7'-6"	219	S
W504					8	8				4						20	6'-0"	125	S
W505															6	6	12'-3"	77	B
W506															6	6	14'-7"	91	B
W507															24	24	7'-3"	181	B
W508											4	4				8	6'-9"	56	S
W509										4						4	6'-6"	27	S
W510										4	4	4	4			16	7'-0"	117	S
W511										4	4					8	8'-0"	67	S
W512										4						4	4'-6"	19	S
W513											4					2	4'-0"	17	S
W514											4					4	7'-2"	15	B
W515																2	11'-2"	23	B
W516																4	6'-2"	26	B
W517																4	8'-3"	34	B
W401	6															12	18'-1"	145	B
W402	11															22	6'-5"	94	B

Mark	No.	Length	Weight	Shape
BEAMS				
B1101	6	23'-8"	755	S
B1102	6	9'-3"	295	B
B901	2	19'-4"	131	S
B902	2	31'-8"	215	S
B903	3	8'-8"	88	B
B904	4	17'-8"	240	S
B801	4	16'-8"	178	S
B802	2	6'-9"	36	B
B803	3	13'-4"	107	S
B804	8	19'-10"	424	B
B701	4	6'-4"	52	B
B401	14	5'-0"	47	B
B402	8	7'-8"	41	B
B301	32	7'-5"	89	B

Mark	No.	Length	Weight	Shape
SLAB AT ELEV. 707.00				
S901	21	15'-8"	1,119	S
S702	23	17'-4"	815	B
S703	13	18'-6"	492	S
S602	9	13'-4"	180	S
S603	7	20'-2"	212	S
S604	8	19'-10"	238	B
S605	12	31'-8"	571	S
S509	32	6'-0"	200	S
S510	16	5'-9"	96	S
S511	2	8'-0"	17	S

Mark	No.	Length	Weight	Shape
SLAB AT ELEV. 700.50				
S801	12	12'-7"	403	B
S701	26	17'-10"	948	B
S601	13	31'-6"	615	S
S501	22	11'-6"	264	S
S502	14	15'-6"	226	S
S503	38	4'-2"	165	B
S504	34	3'-7"	127	B
S505	34	3'-9"	133	B
S506	16	17'-8"	295	S
S507	6	12'-2"	76	S
S508	36	8'-5"	316	B



© Two walls similar M.H. - Manhole

BURGESS & NIPLE - CONSULTING ENGINEERS COLUMBUS, 12, OHIO.					
MOUND SANDUSKY PUMP STATION					
REINFORCING STEEL LIST					
FRANKLIN COUNTY					
DESIGNED Pml	DRAWN WRD	TRACED R.A.F.	CHECKED B.S.R.	REVIEWED DATE 4/18/10-9-57	REVISED

LIGHTING NOTES

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

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FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

A. General. The roadway lighting system shall consist of luminaires supported on metal light standards mounted on concrete foundations. The work to be accomplished under this contract is the "mechanical portion" of the roadway lighting system including furnishing and installing light standards with bracket arms as specified, concrete foundations, pullboxes, conduits and necessary appurtenances to provide the mechanical installation complete in all respects.

The omission of minor items in the plans is not to be construed as to release the contractor's obligation for an installation complete in all respects according to the true intent and meaning of the plans. All materials shall be of the best of their several kinds in quality and all labor shall be performed in the best manner by skilled electricians.

Equipment as specified on the plans is not intended as restrictive but rather as a guidance for the requirements of the installation. Equipment or material of an equal nature may be substituted for that specified upon the written approval of the Engineer. Generally the light standards, pullboxes and conduits shall be installed as indicated on the plans, however, the right is reserved to add or delete work or relocate appurtenances as necessitated by the installation. Further, the right is reserved by the City of Columbus to install (at the appropriate time) in structures and at other points necessary conduits, pullboxes and appurtenances required for future electrical circuits.

B. Combined Light Standard Foundation and Pullbox. Install complete the concrete light standard foundation and pullbox as shown on the plans including excavation and backfill, anchor bolts, ground rod, conduit elbow with bushings, reinforcing steel and pullbox frame and cover. Concrete below bottom edge of pullbox may be poured neat with the excavation. The upper portion shall be formed using approved type methods. Concrete and reinforcing steel shall be as specified on the plans and shall be placed in accordance with applicable specifications of this contract. Selected backfill shall be hand tamped in place and shaped around foundation as indicated. Waste excavation shall be disposed of by this Contractor. Anchor bolts shall be of the size and number indicated on the plans subject to the verification of the light standard manufacturer. A template shall be provided to accurately and firmly hold the anchor bolts, ground rod and conduit

elbow during the pouring of the concrete. Electrically connect the driven ground rod to an anchor bolt using approved type ground connectors. Combined foundations and pullboxes with standard duty frame and cover shall be provided with cast aluminum covers as detailed on the plans including approved type anchors and cover screws. Aluminum for cast frame and cover shall be Alcoa alloy 356-T51 or equal conforming to the latest revisions of A.S.T.M. specification B-26 for aluminum alloy sand castings. Exposed surfaces shall be accurately machined to provide a finished appearance with cover accurately seating in frame. Detailed drawings shall be furnished to the Engineer and approved prior manufacture of frame and cover. Combined foundations and pullboxes with heavy duty frame and cover shall be equipped with a frame and cover suitable for heavy duty traffic and be of the type indicated on the plans. Payment will be made for each "Combined Light Standard Foundation and Pullbox with Standard Duty Frame and Cover" or "Combined Light Standard Foundation and Pullbox with Heavy Duty Frame and Cover" installed complete.

C. Concrete Pullbox. Furnish and install the concrete pullboxes complete with standard duty frame and covers or heavy duty frame and covers as indicated. Applicable items under Paragraph "B" Combined Light Standard Foundations and Pullboxes apply to this specification. Payment will be made for each pullbox with standard duty or heavy duty frame and cover installed complete.

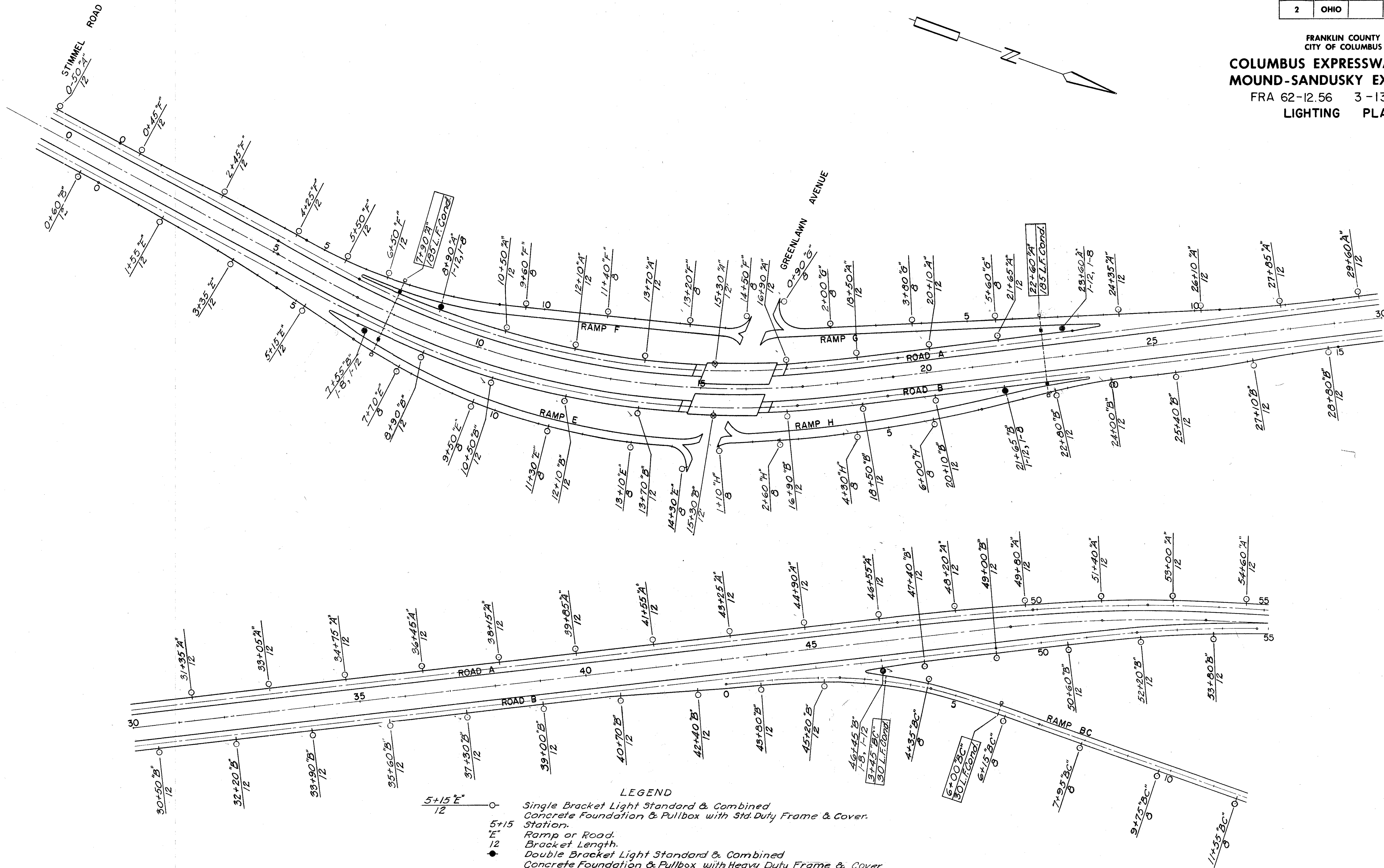
D. Fiber Conduit with Concrete Encasement. Furnish installed complete the fiber conduit encased in concrete as indicated on the plans together with fittings, couplings, bushings, separators, etc. Conduit shall be installed under paved roadways, paved berms and areas of future paved roadways as shown on the plans or as directed by the Engineer. Payment will be made per linear foot of fiber conduit encased in concrete as measured horizontally along centerline of conduit from start to termination of conduit.

E. Light Standard. Furnish and install complete tapered round steel light standards with bracket arms of the length and number as indicated on the plans. Bracket arms shall be installed so they are normal to the travelway and the bracket tip thirty (30) feet above the adjacent edge of travelway with a tolerance three inches above or below this dimension. In general the standards shall be of a uniform length with the top of foundation at such elevation as to accomplish this mounting height.

Standards located on bridges and retaining walls shall be of such length as to provide the proper mounting height. Complete detailed drawings of light standards and bracket arms showing standard and special configurations shall be furnished to and approved by the Engineer prior to fabrication. After erection the light standards and brackets shall be thoroughly brushed, cleaned and given one coat of primer and two coats of finish enamel in accordance with Item S-8 of the specifications and as approved by the City of Columbus. Payment will be made for each light standard equipped with bracket arm or bracket arms and appurtenances installed complete.

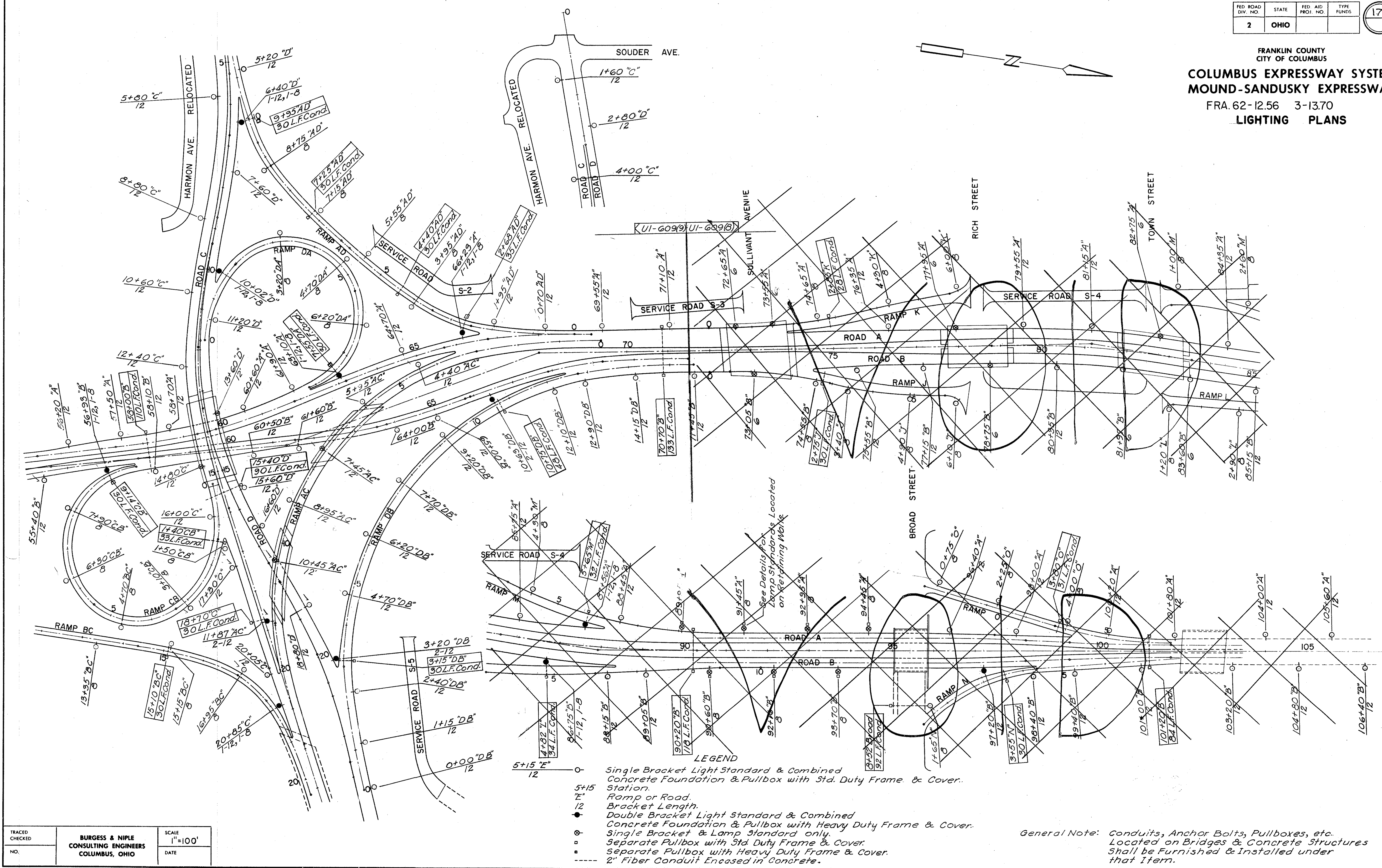
TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO.		DATE

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 3-13.70
LIGHTING PLANS

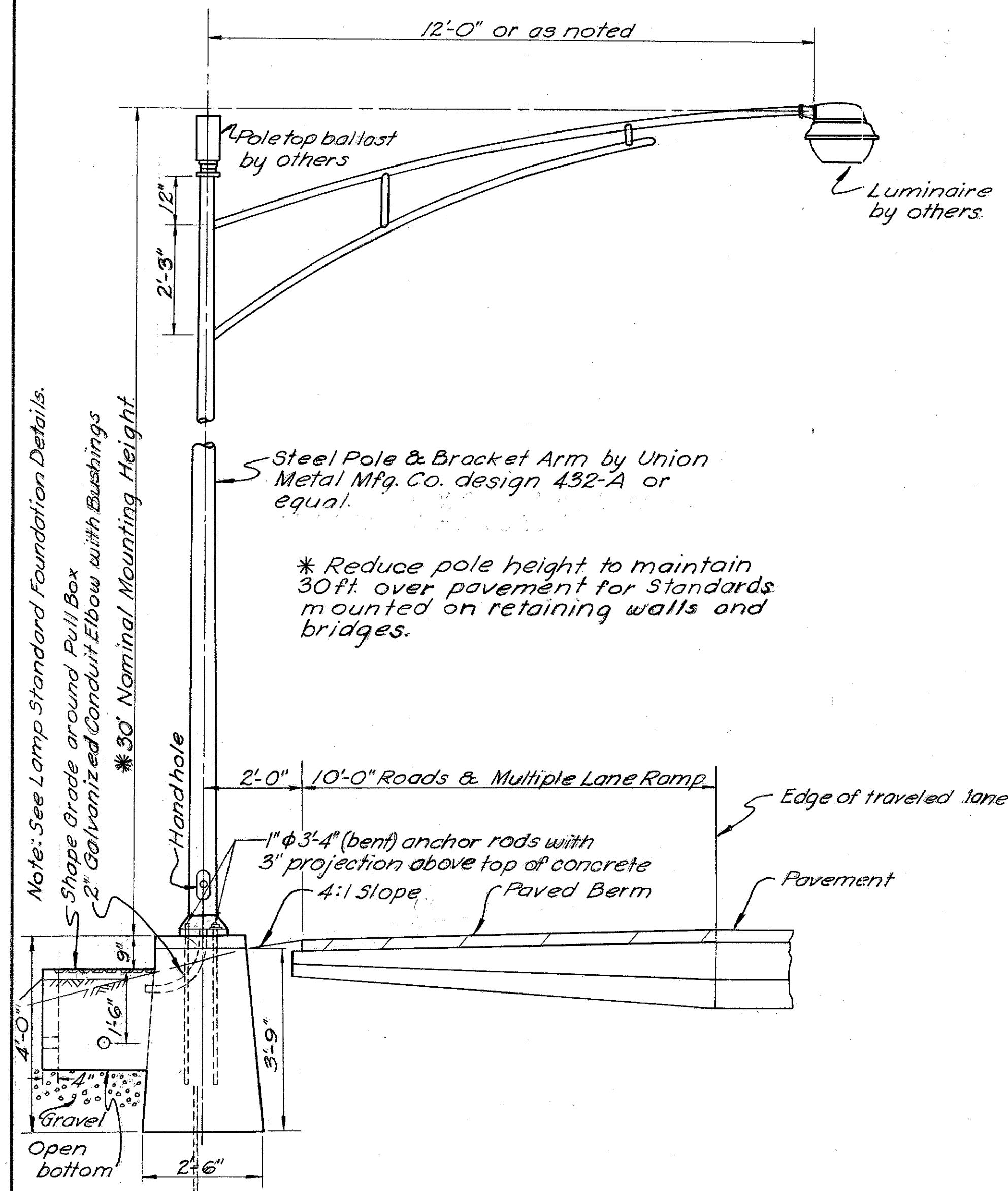


General Note: Conduits, Anchor Bolts, Pullboxes, etc. Located on Bridges & Concrete Structures shall be Furnished & Installed under that Item.

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA. 62-12.56 3-13.70
LIGHTING PLANS

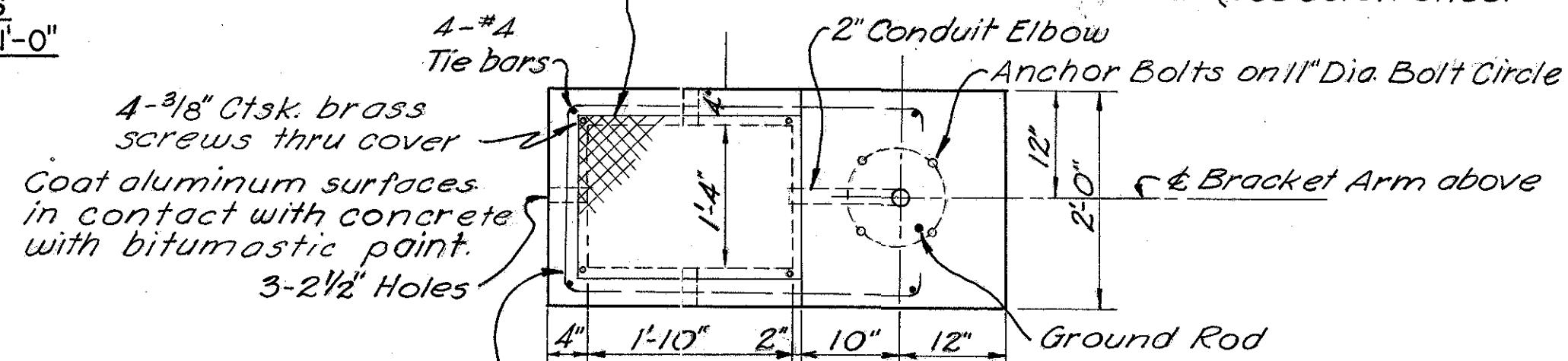


FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA. 62-12.56 3-13.70
LIGHTING DETAILS



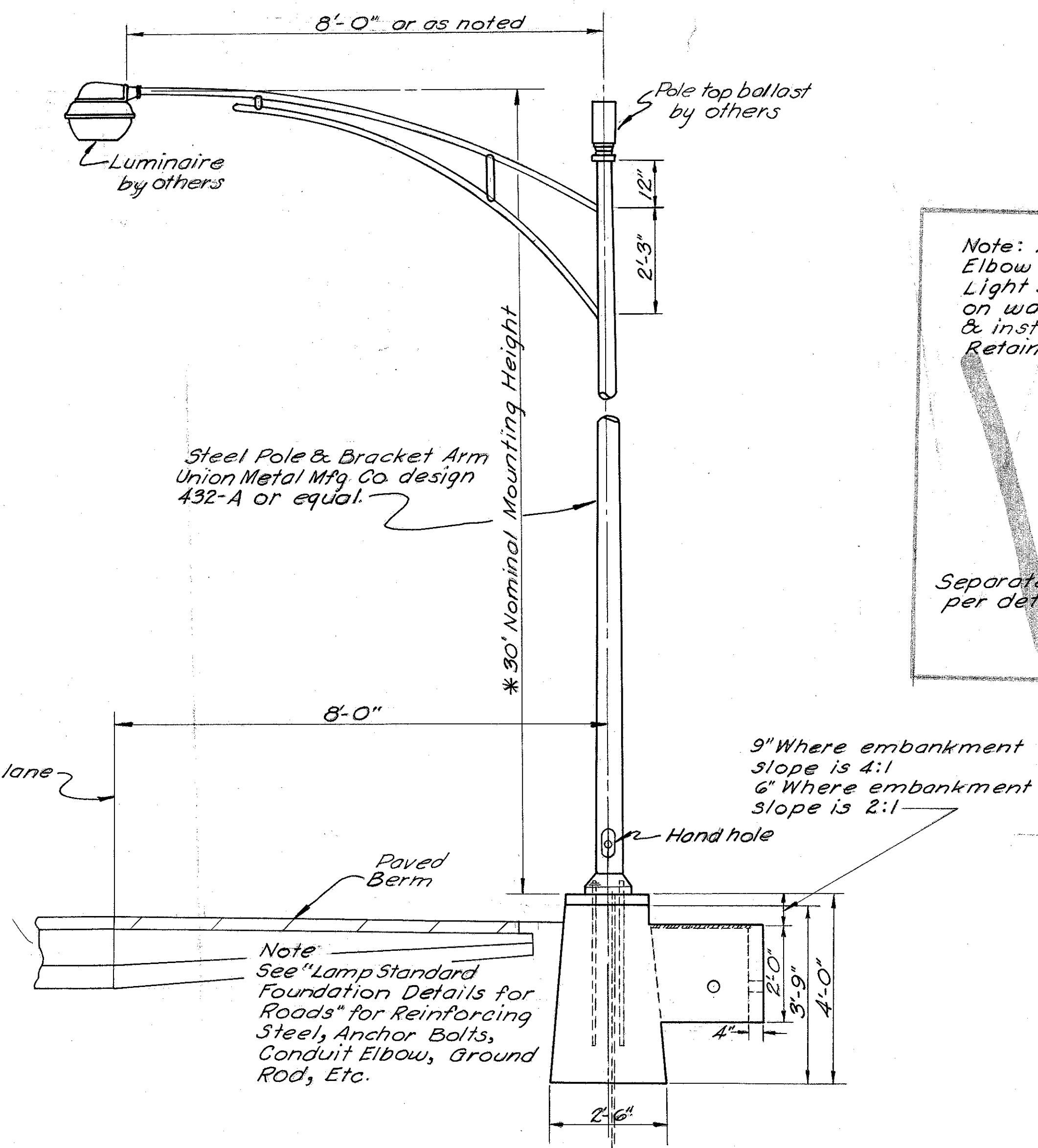
Note: Pull Box & Foundation above typical for Roads & Multiple Lane Ramps with 4:1 Slopes.

LAMP STANDARD AND FOUNDATION DETAILS FOR ROADS
Scale: 1/2"=1'-0"

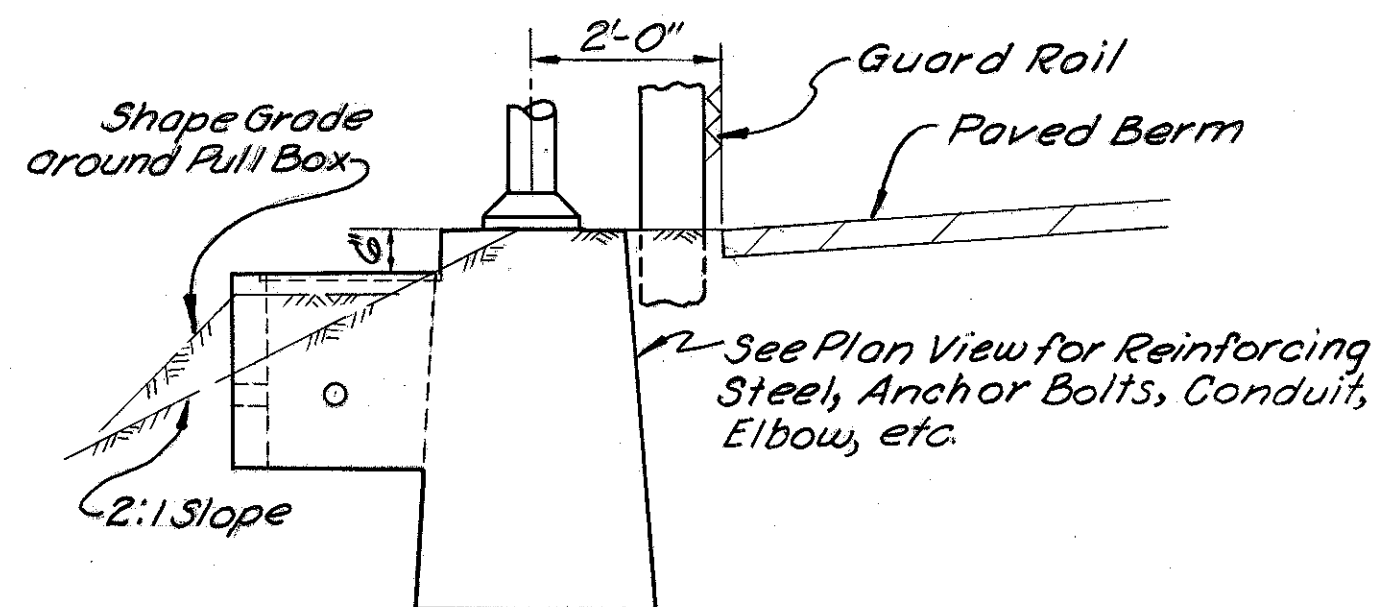


Note: Combined Lamp Standard Foundation & Pullbox with Heavy Duty Frame & Cover shall be as indicated above except Frame & Cover shall be Cast Iron suitable for Heavy Duty Traffic equal to Flockhart Foundry Co., Newark, N.J. No. 614-P Code 60834 with Cover Bolts, Lifting Ring & reduced Flange Section.

COMBINED LAMP STANDARD FOUNDATION & PULLBOX DETAILS WITH STANDARD DUTY FRAME & COVER
Scale: 3/4"=1'-0"

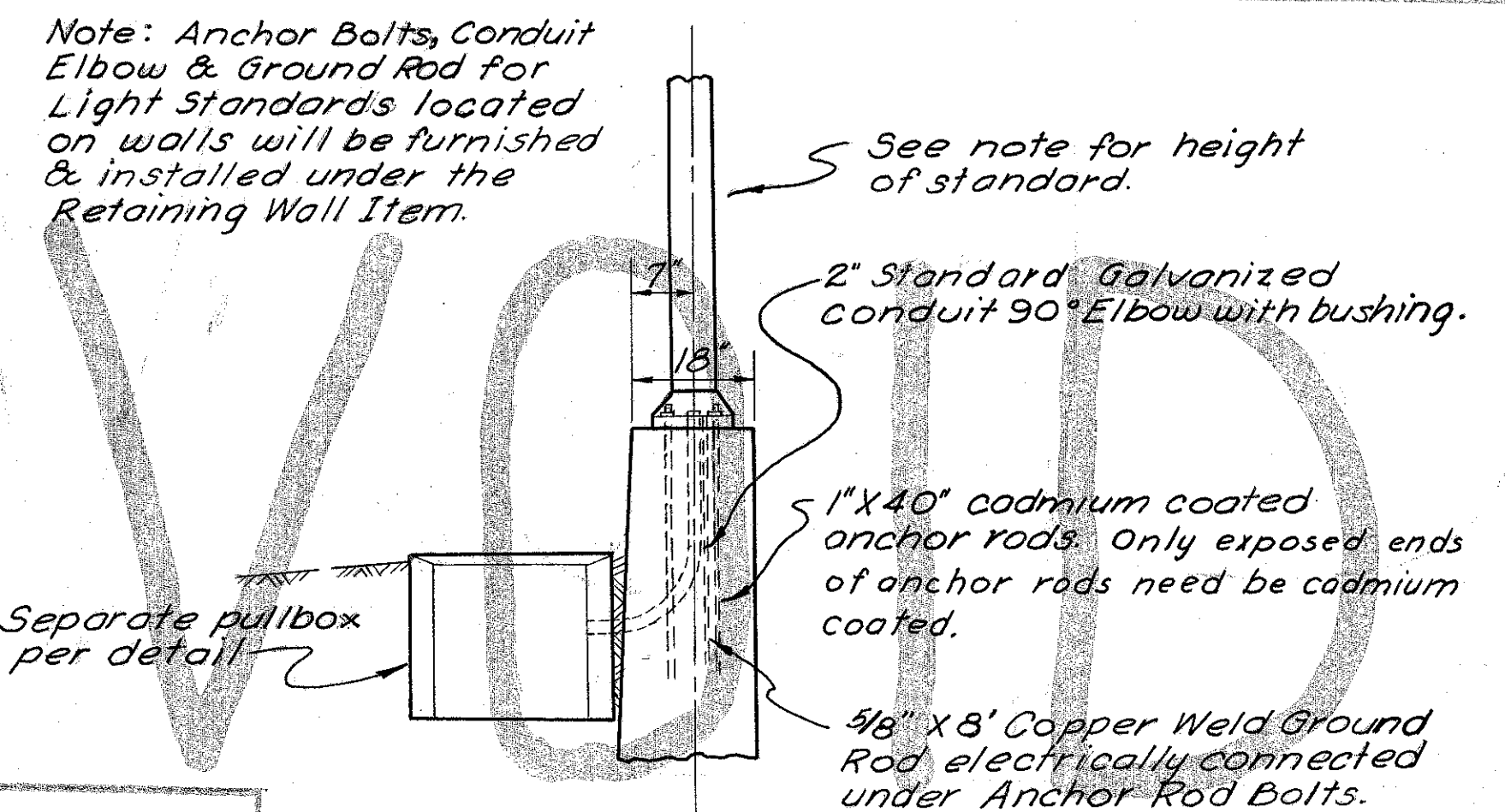


LAMP STANDARD AND FOUNDATION DETAILS FOR SINGLE LANE RAMP
Scale: 1/2"=1'-0"



Note: Pull Box & Foundation above typical for Roads & Multiple Lane Ramps with 2:1 Slope & Guard Rail.

LAMP STANDARD AND FOUNDATION DETAILS FOR ROADS
Scale: 1/2"=1'-0"



LAMP STANDARD ON RETAINING WALLS SOUTH OF BROAD STREET
Scale: 1/2"=1'-0"

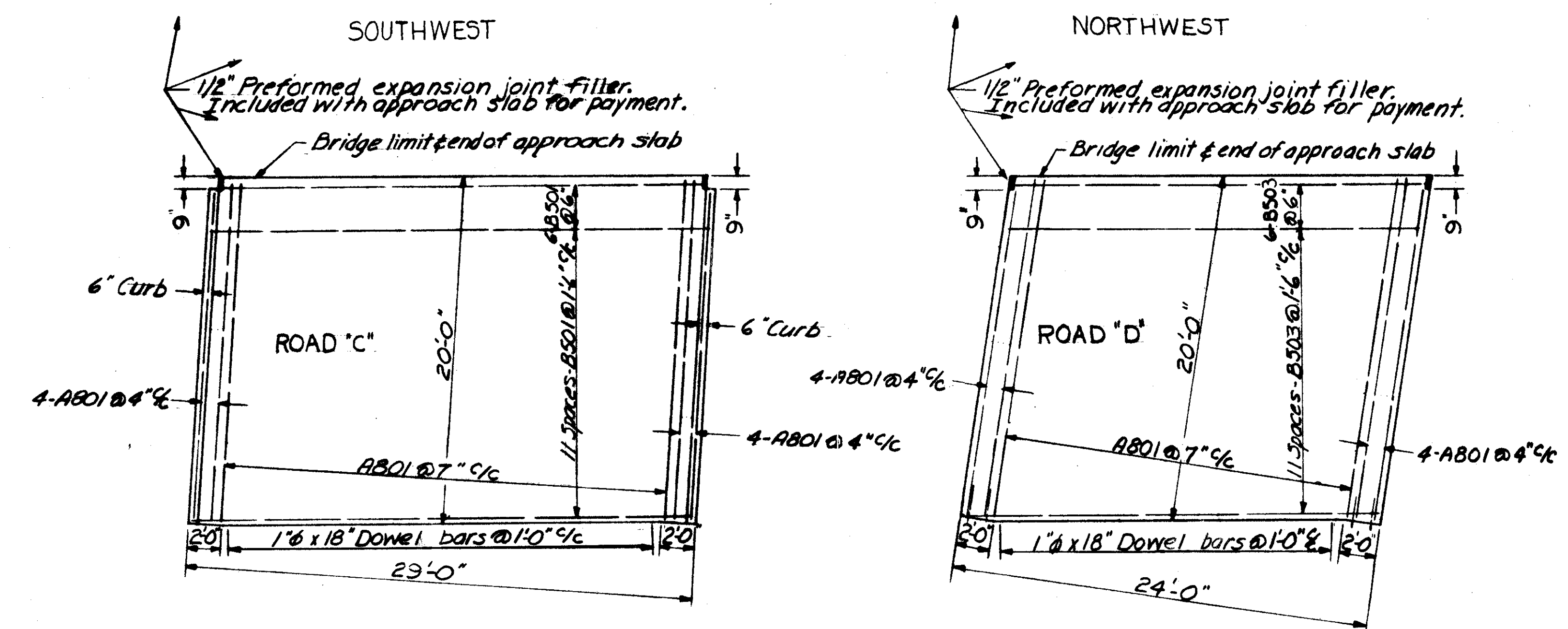
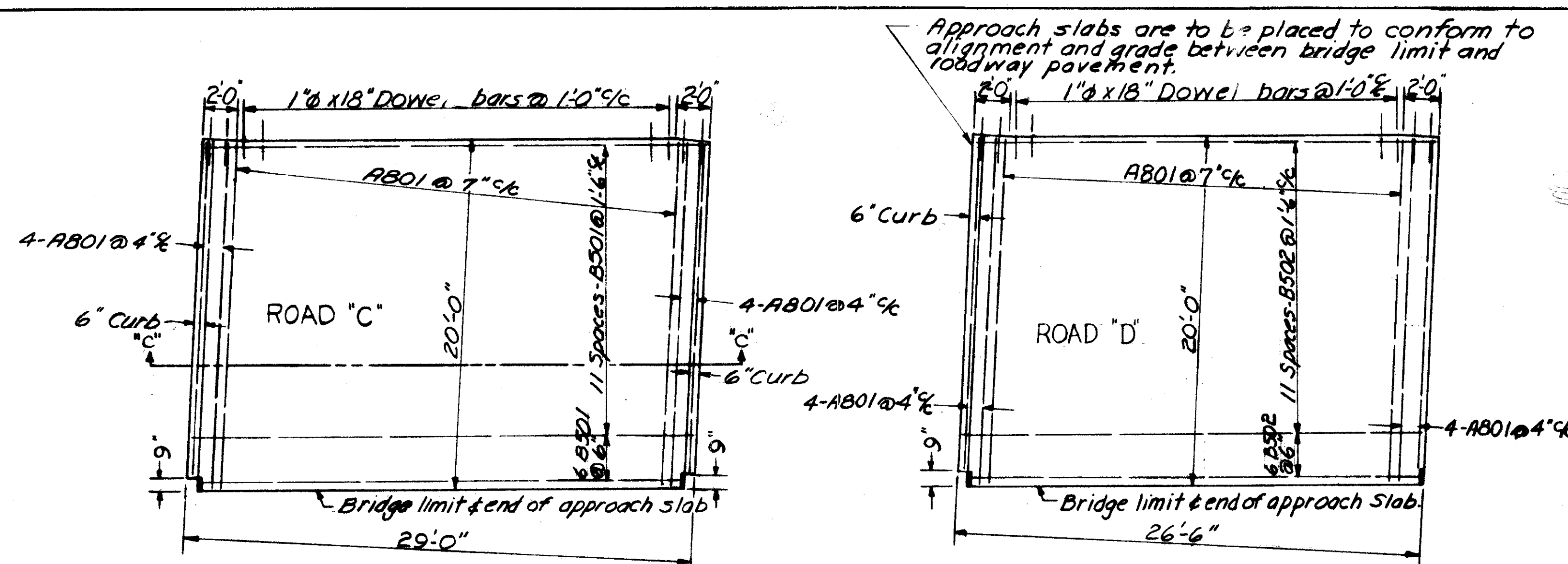
Concrete for duct lines, lamp standard foundations, pull boxes, etc. shall be class "C" using #4 aggregate.

Lamp standards shall be Union Metal Mfg. Co. Round Monotube Steel Pendant Anchor Base type design 432-A or equal.

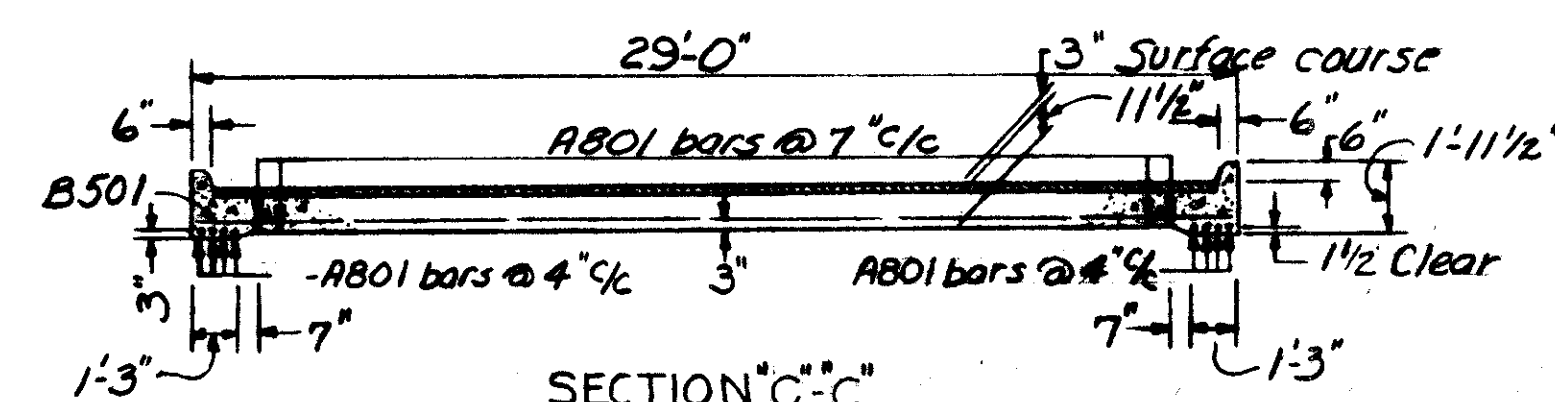
Conduit shall be Orangeburg Type I 2" ID Fibre Conduit or equal.

All pole bases shall be connected to a ground rod.

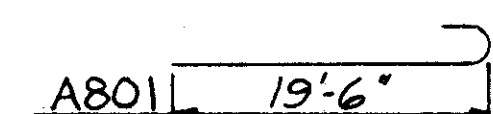
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70



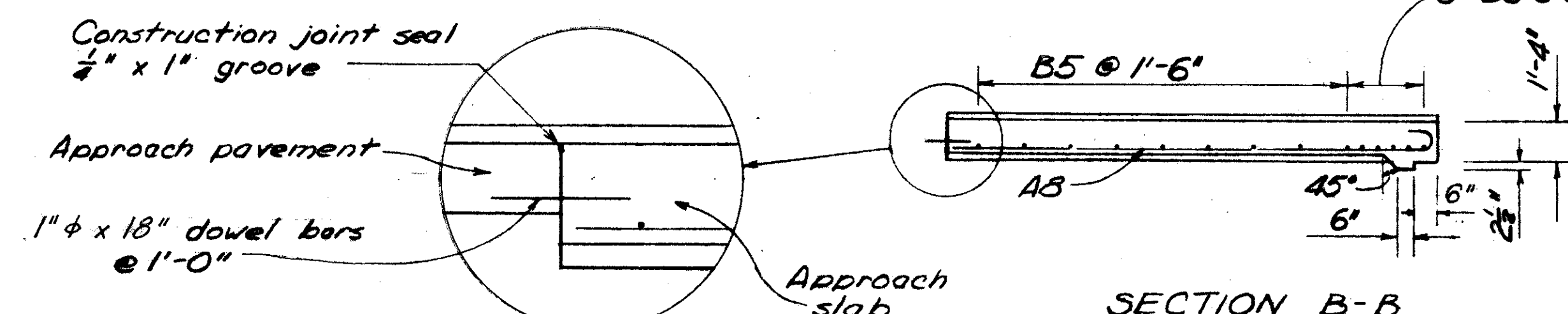
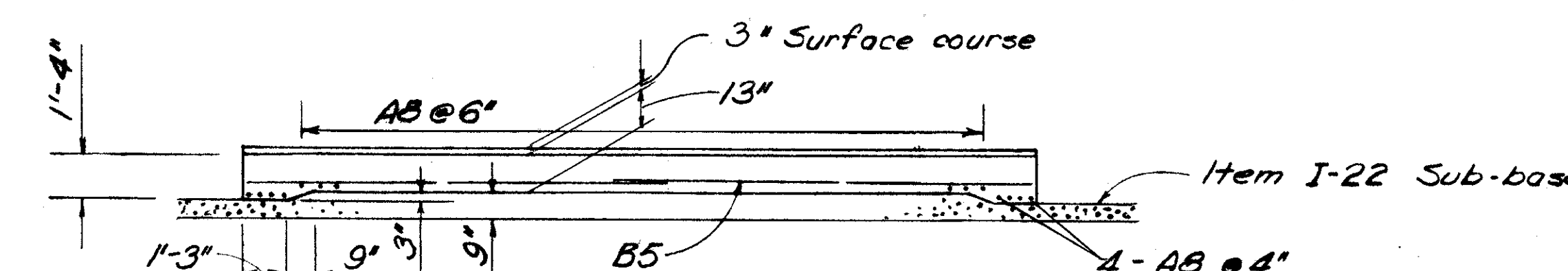
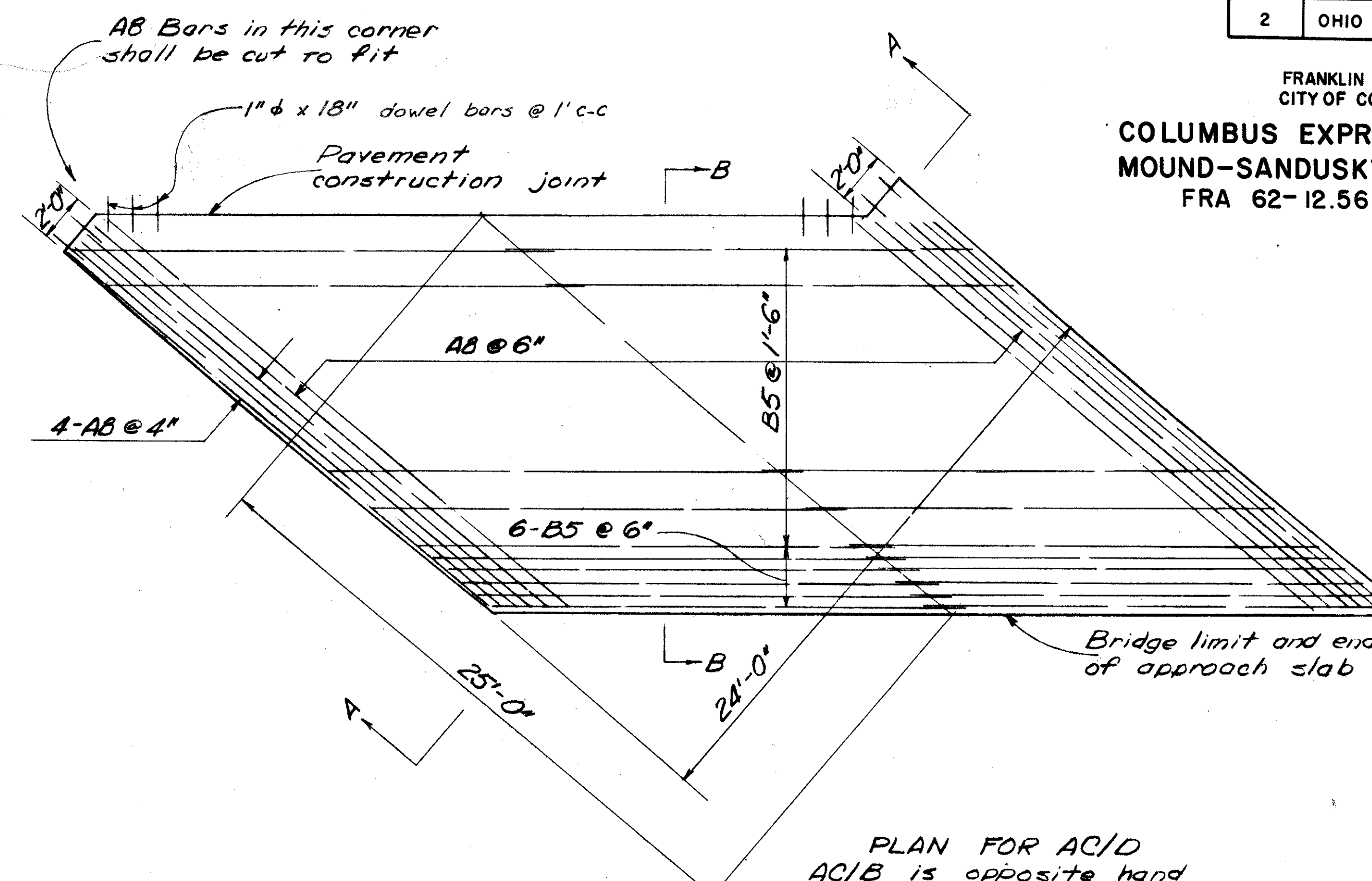
APPROACH SLABS
ROAD CD OVER ROAD AB
BR. NO. FRA-3-1369



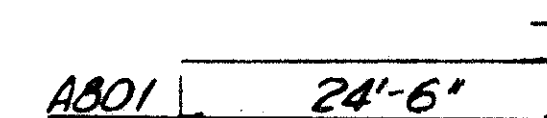
CD OVER AB REINFORCING LIST						
MARK	NORTHWEST	SOUTHWEST	NORTHEAST	SOUTHEAST	LENGTH	WEIGHT
AB01	48	52	43	52	20'-7"	10,717
B501		17		17	28'-6"	1011
B502	17				26'-0"	461
B503			17		23'-6"	417



1-7 Reinforced concrete approach slabs
241 sq. yds.



REINFORCING STEEL AC/B					REINFORCING STEEL AC/D				
MARK	No.	LENGTH	WEIGHT	SHAPE	MARK	No.	LENGTH	WEIGHT	SHAPE
AB01	52	25'-7"	7104	B	AB02	52	25'-7"	7104	B
B501	26	21'-4"	579	S	B503	30	18'-10"	589	S
B502	32	18'-3"	609	S	B504	26	22'-2"	601	S



1-7 Reinforced concrete approach slabs
133 + 133 = 266 sq. yds.

BURGESS & NIPLE - CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

BR. NO. FRA-3-1369
BR. NO. FRA-3-1375
BR. NO. FRA-40-1219

APPROACH SLAB DETAILS

FRANKLIN COUNTY				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
R. & R.	AM	V.T.	6/10	4/10/70-10-57

GENERAL NOTES FOR BRIDGES & RETAINING WALLS

1. DESIGN SPECIFICATIONS:

These structures conform to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 10-1-51, together with revisions thereof dated 7-15-52, 4-1-54, and 2-1-55.

2. REFERENCE:

Shall be made to standard drawing AR-1-57 dated 4-9-57; RB-1-55 dated 3-1-55; and to supplemental specification No. S-114, Aluminum for Bridge Railing, revised August 1, 1957.

3. FOOTING KEY:

The key on the bottom of the retaining wall footing shall be placed in a carefully made trench against undisturbed earth.

4. WELDED STEEL:

The steel for the 36" W beams shall conform to ASTM designation A-373. All other structural steel shall conform to either ASTM A-7 or A-373.

5. DECK SLAB CONSTRUCTION PROCEDURE:

In order to facilitate water curing of the concrete deck slab, the placing of concrete shall progress up grade. The slab may be placed in sections between transverse construction joints which are normal to the centerline of bridge and are located at or near the center of any span.

6. MAINTENANCE OF TRAFFIC:

Two way traffic shall be maintained on existing streets beneath the structures at all times with a clear width of 26 feet and a clear height of 12'-9". Platforms, nets, or other suitable means shall be provided above the traveled lanes to protect the traveling public.

7. EARTH EMBANKMENT

for stub abutments shall be placed and compacted to the height of the earth in front of the abutment, after which excavation shall be made for the abutment.

8. EXCAVATION QUANTITY

includes the removal of embankment material above the bottom of the stub abutment footing.

9. FOUNDATION SOUNDINGS:

Foundation design and foundation quantities are based on a study of rod soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.

10. UTILITIES:

The Contractor shall provide and maintain adequate protection to prevent damage to existing utilities. Any utility facilities encountered at the site of the work which will interfere with portions of the finished expressway or structures will be removed or relocated by others, unless otherwise shown. The Contractor shall coordinate his operations with the work of the utility owners or others who may be making the relocations and shall notify the owners of the utilities of his schedule sufficiently in advance to permit them to make the necessary alterations.

11. BAR SIZE

is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.

12. CAMBER

of 1/800 of the span shall be provided in each span of CONCRETE SLAB BRIDGES (in addition to any required for conformance to the profile of the highway) to allow for dead load deflection. This is the amount of camber required before falsework is released. To obtain this, proper allowance shall be made for the deflection of falsework members.

13. REPLACEMENT BARS:

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. S-4.02 need not be furnished, and replacement bars will not be required.

14. CURBS

on concrete slab bridges shall be placed after the shoring under the slab has been released sufficiently to permit the slab spans to attain full dead load deflection.

15. ELECTRIC LIGHTING SYSTEM:

This item shall include all pull boxes, junction boxes, ground wire, 1" anchor bolts, 1/2" inserts, and all labor and materials necessary to complete the electric lighting system as shown on the plans.


16. CONCRETE CLASS "C"

may be used for any part of the substructure where concrete Class "E" is specified, but payment will be made for the class of concrete specified on the plans.

17. PIER FOOTINGS:

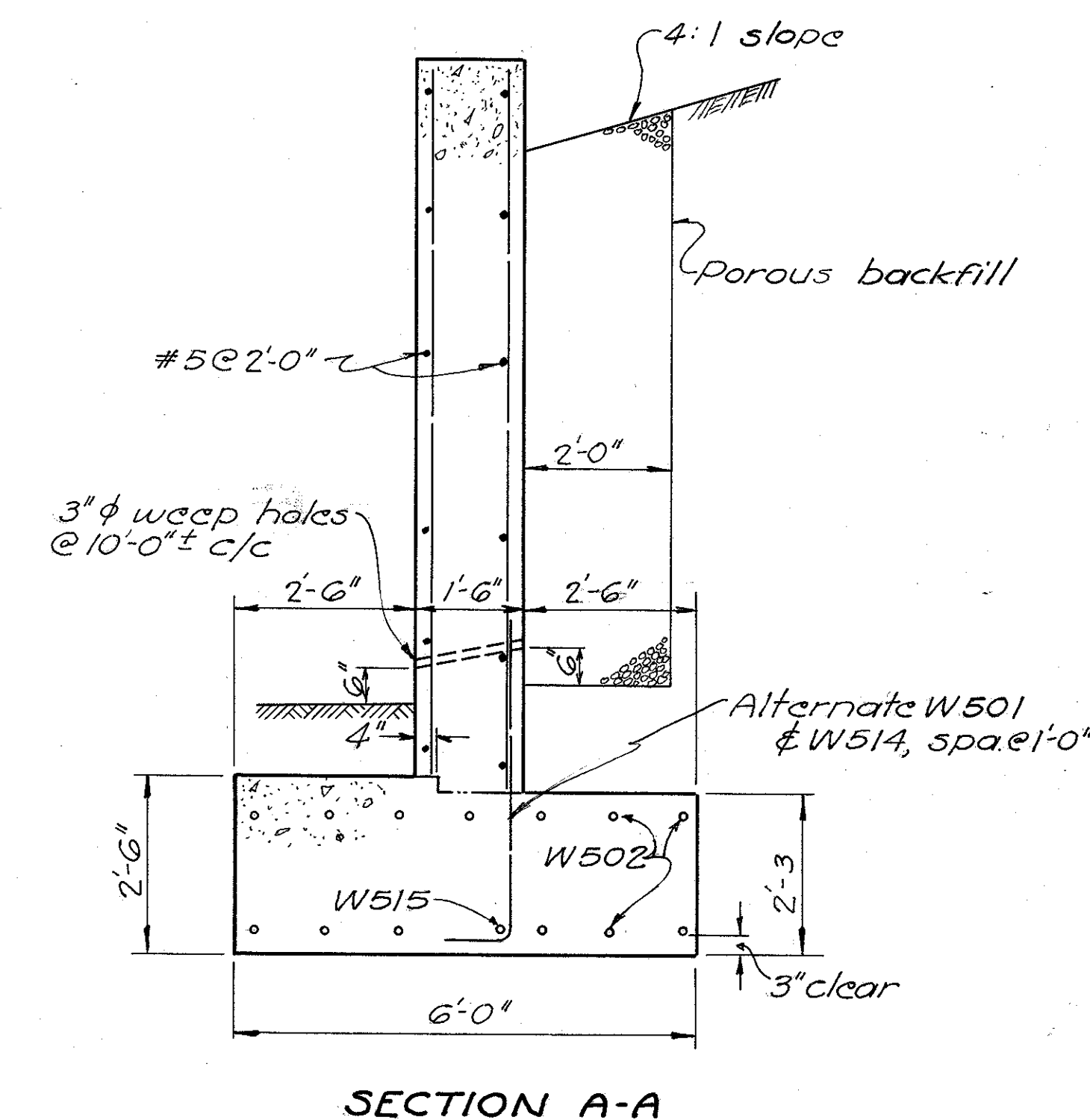
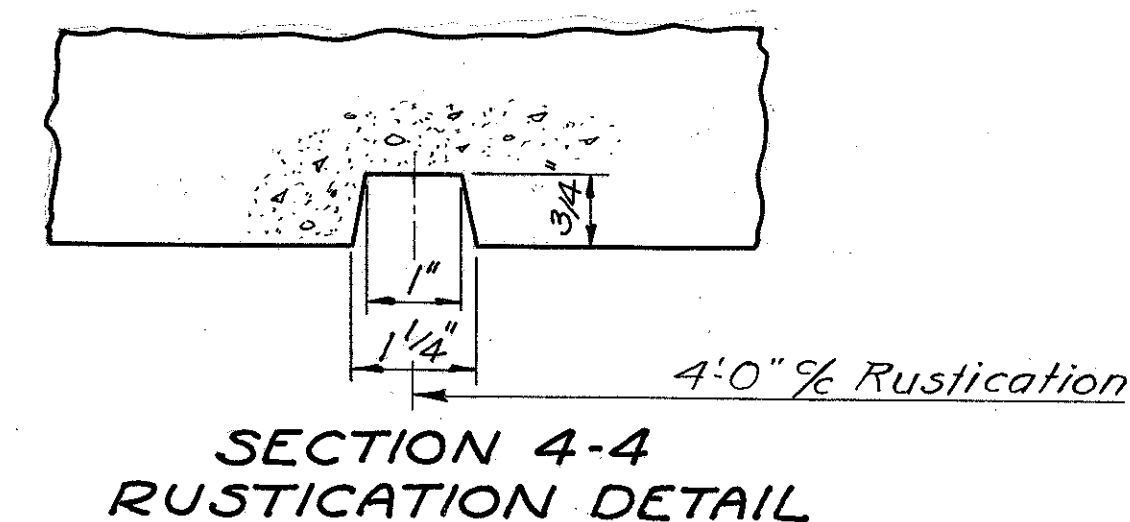
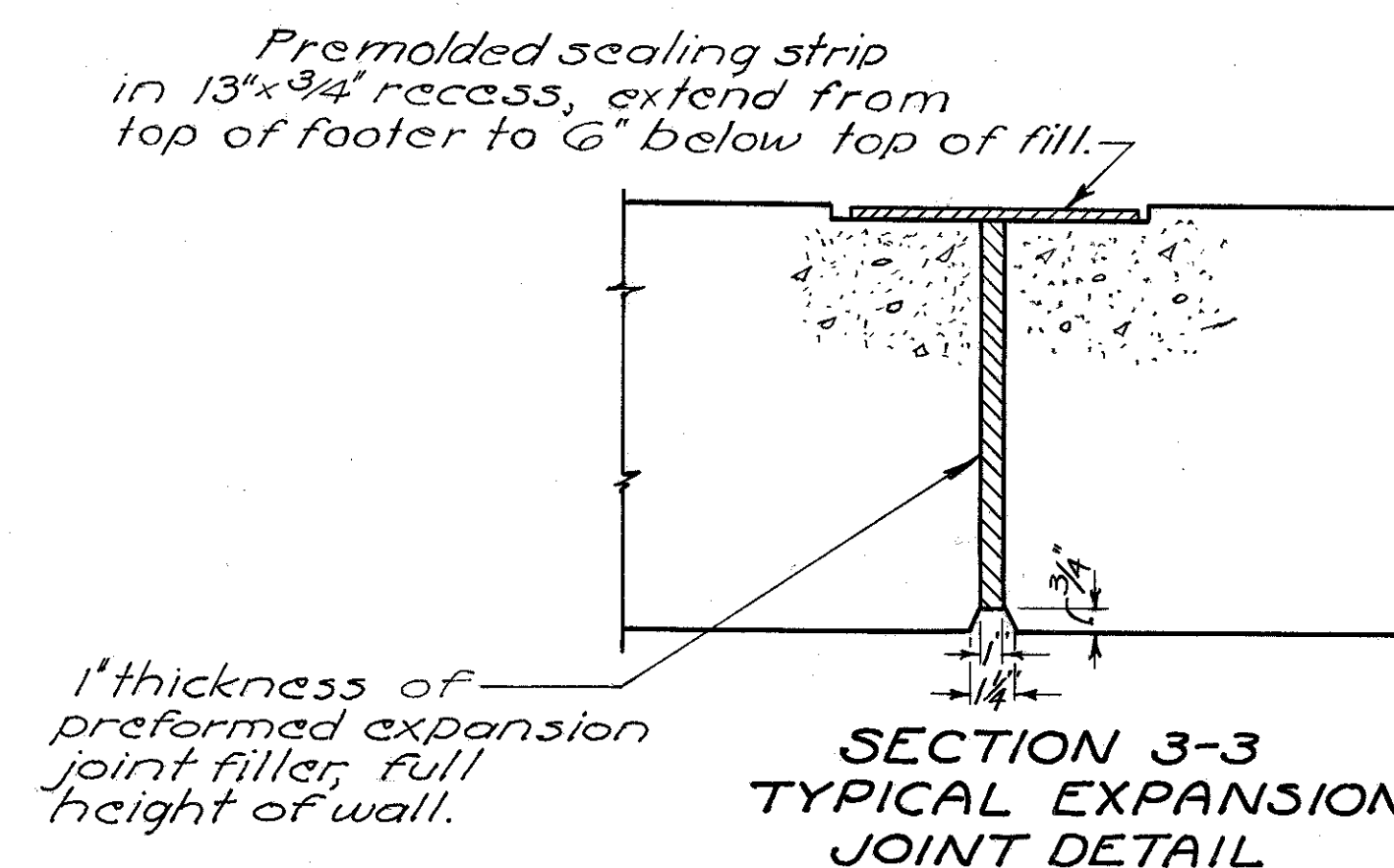
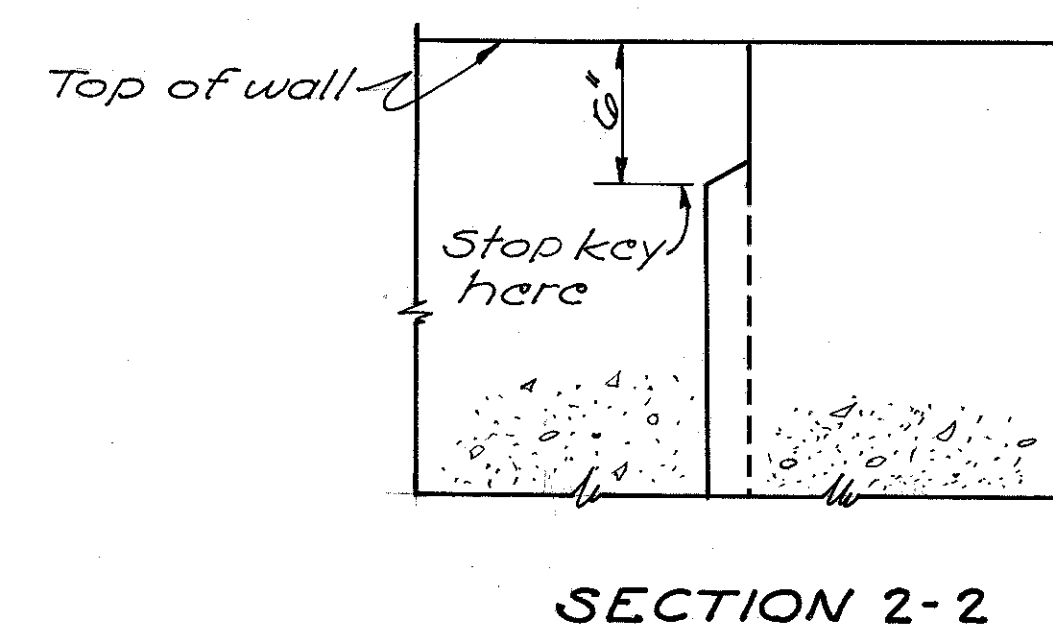
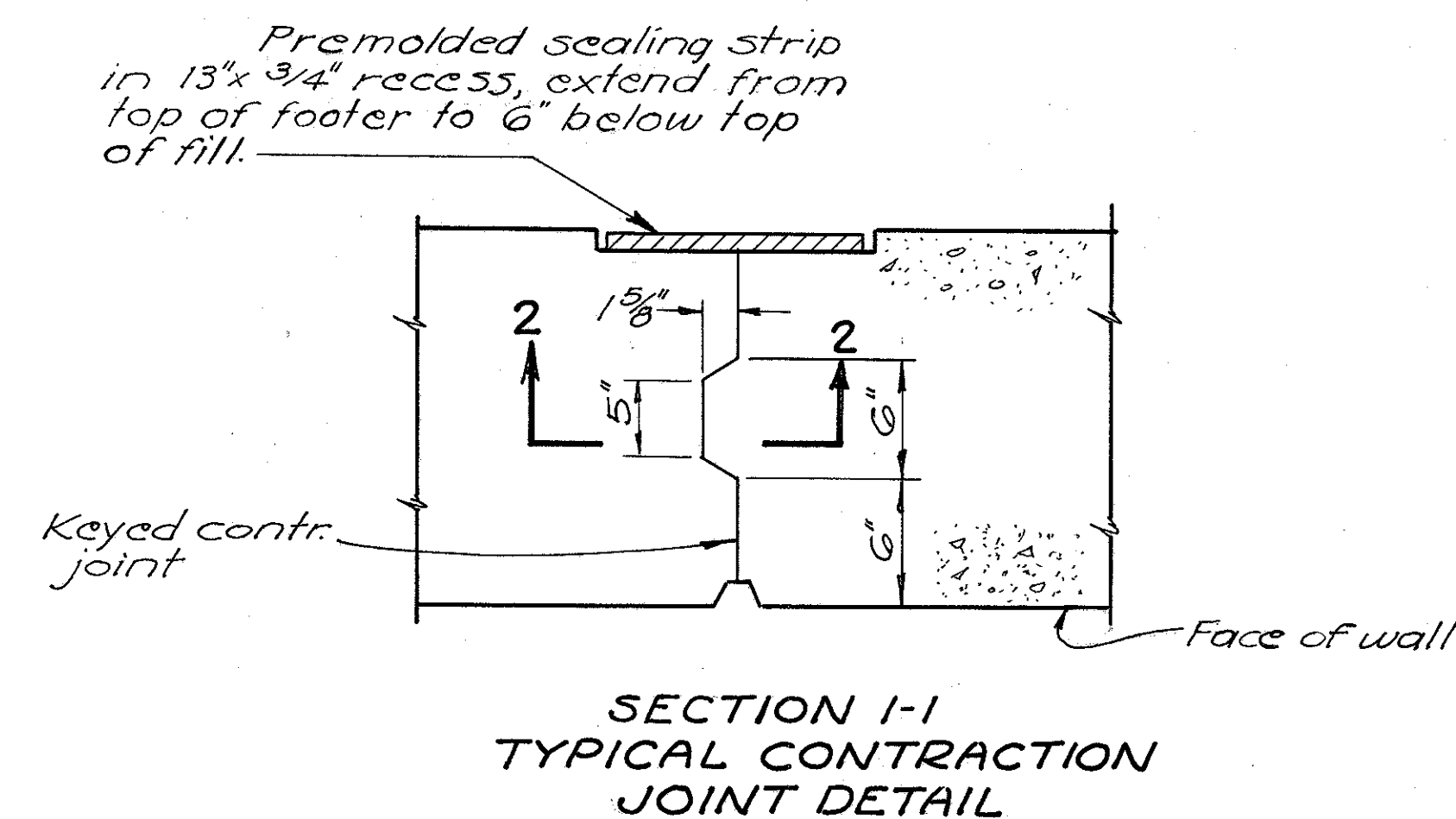
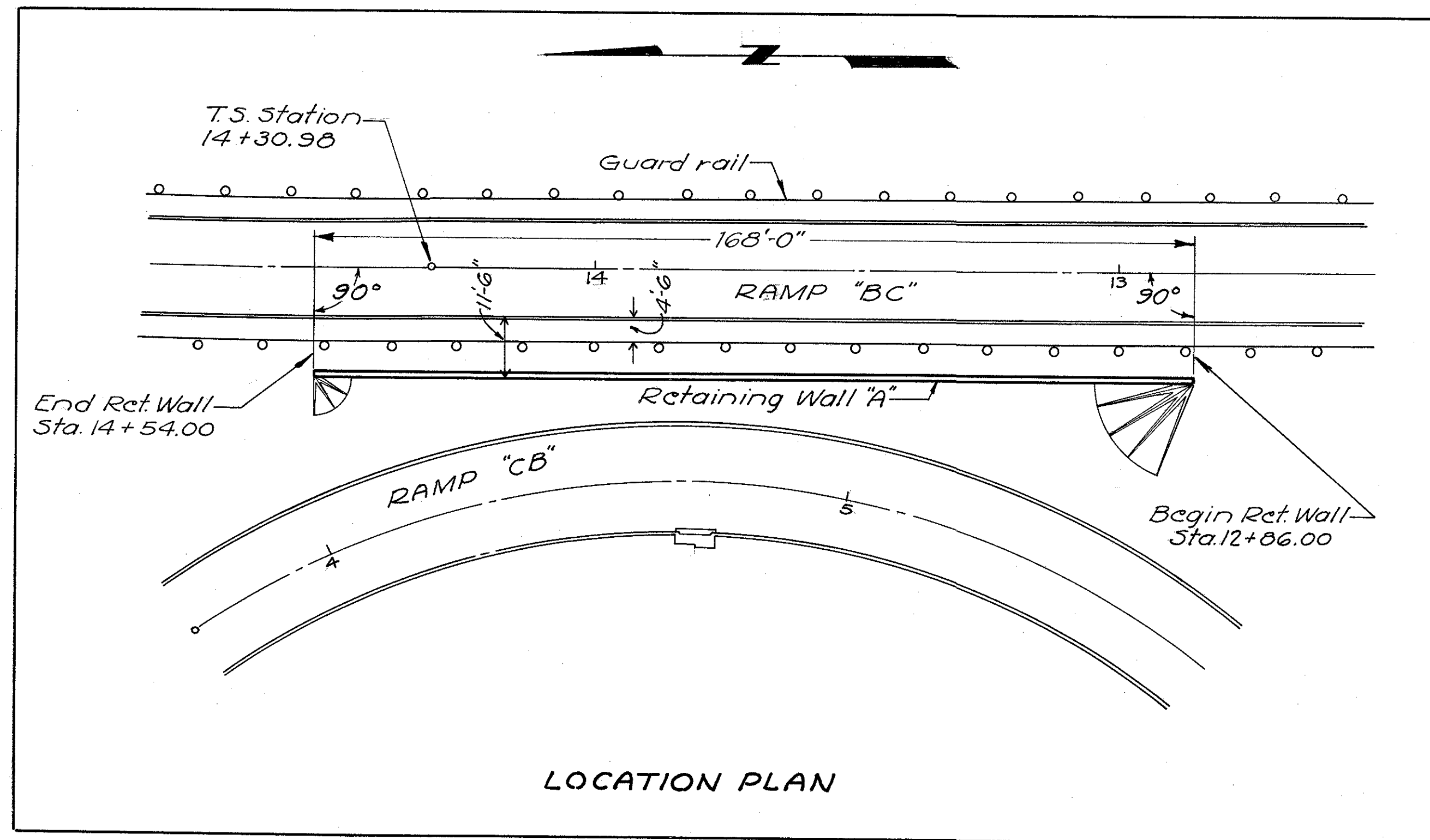
In constructing the piers the contractor shall be responsible for any damage to the existing pavement.

18. WELDING

of structural steel and of scuppers shall be Class "A" except as otherwise shown. Any welds shown as field welds may, at the option of the contractor, be made in the shop. Class "B" welding is shown thus: B 

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



REINFORCING STEEL LIST				
Mark	N ^o	Length	Weight	Shape
W501	84	4'-4"	380	B
W502	65	6'-0"	407	S
W503	26	7'-2"	194	S
W504	26	7'-5"	201	S
W505	14	8'-0"	117	S
W506	14	8'-3"	120	S
W507	16	8'-10"	147	S
W508	16	9'-1"	152	S
W509	28	9'-7"	280	S
W510	28	9'-10"	287	S
W511	36	27'-6"	1033	S
W512	9	23'-6"	220	S
W513	11	31'-6"	361	S
W514	84	6'-0"	570	B
W515	4	28'-6"	119	S

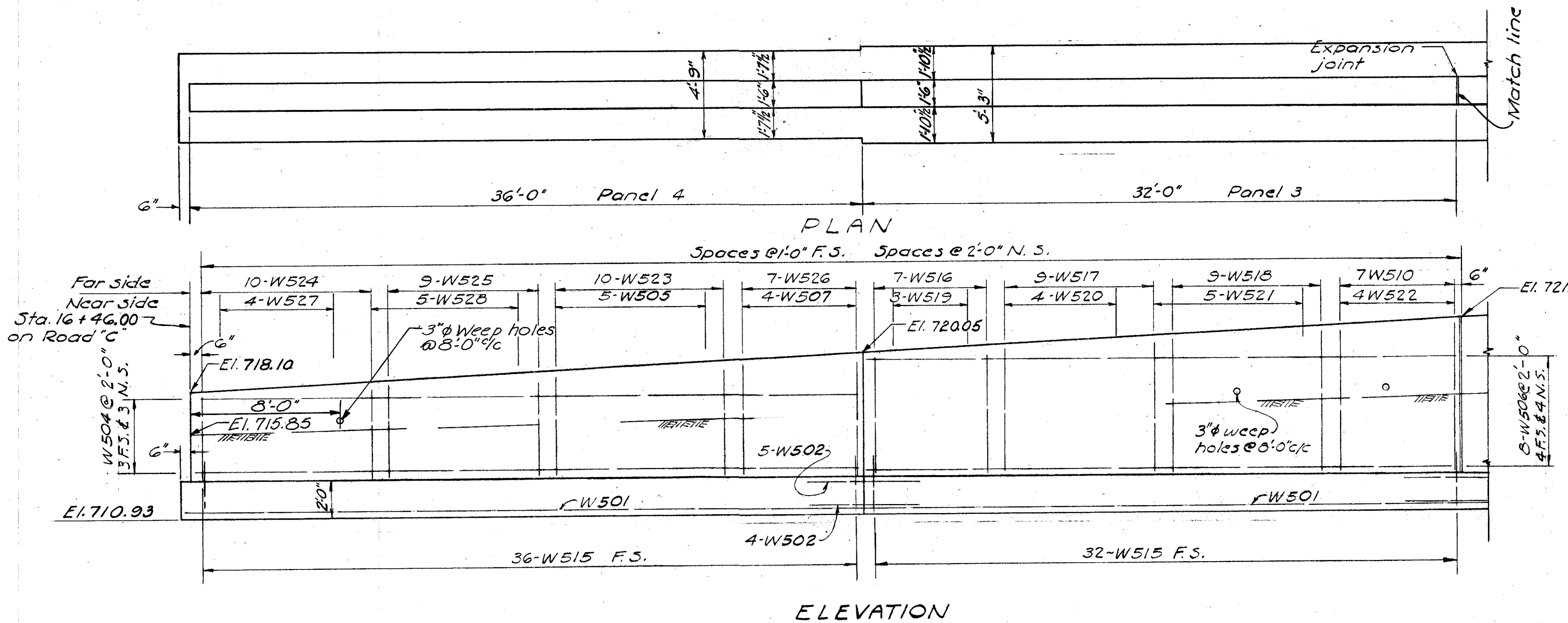
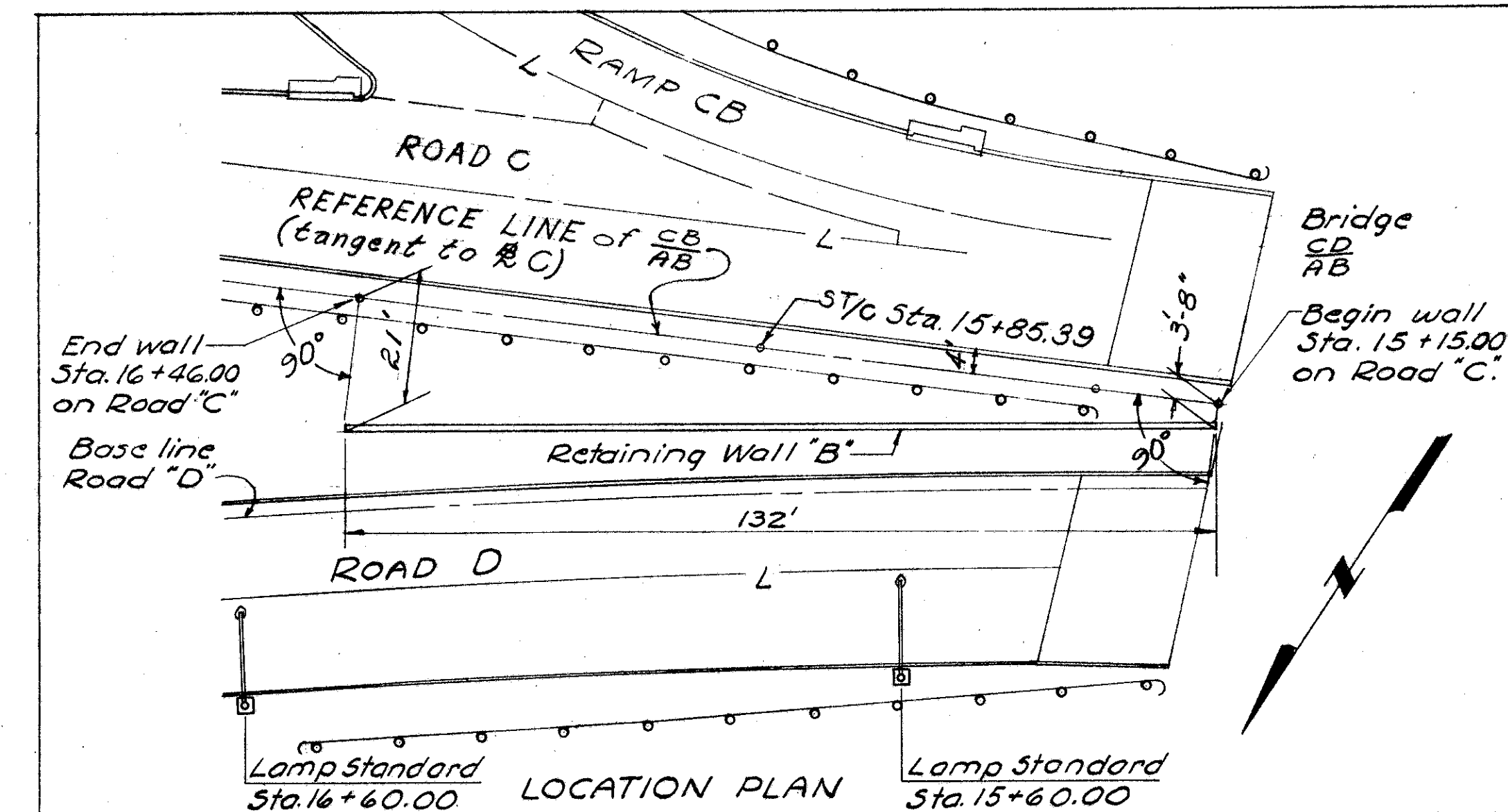
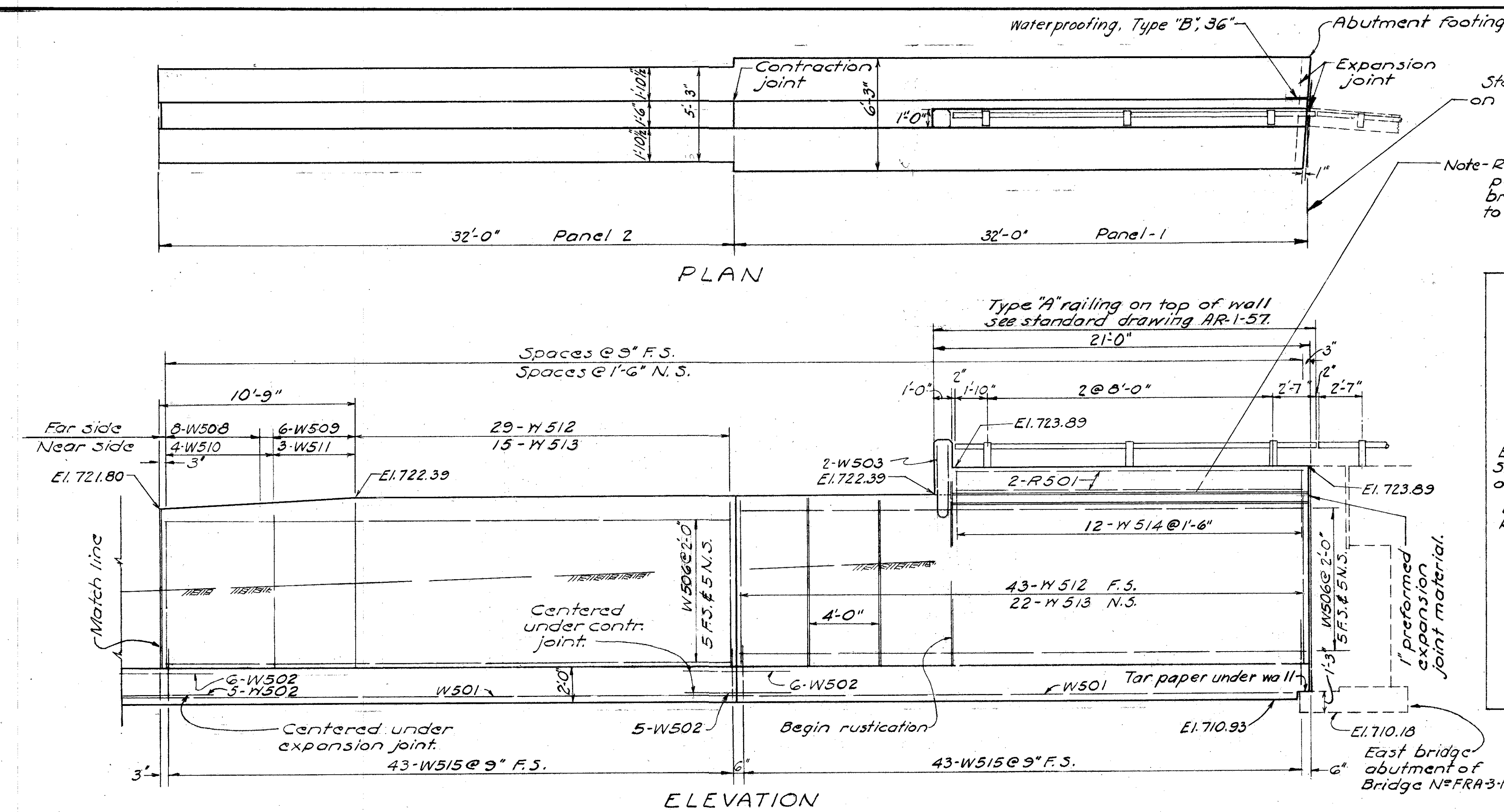
W501	3'-10"
W514	5'-6"

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

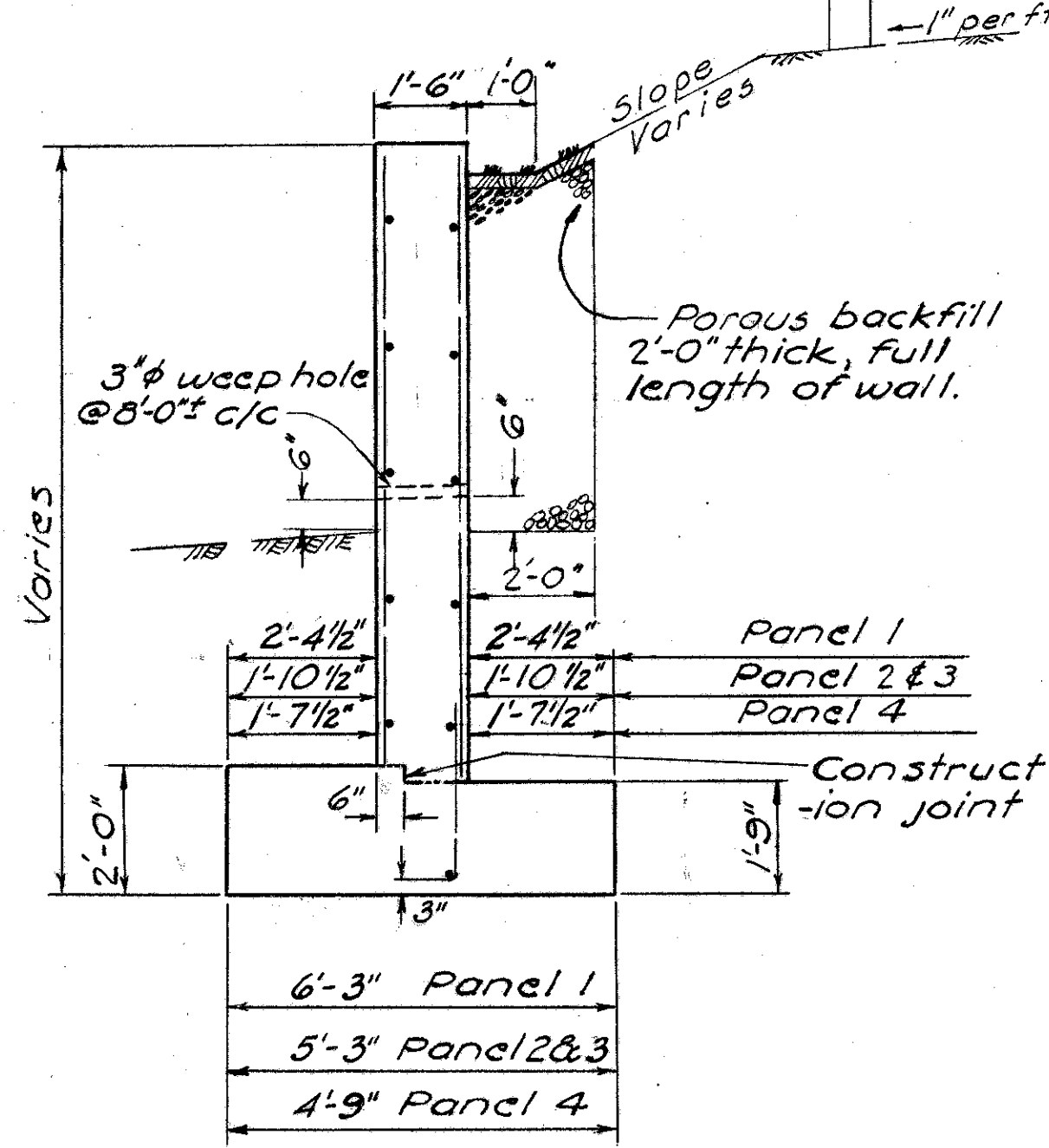
RETAINING WALL "A"
LOCATION PLAN
COMMON RETAINING WALL
DETAILS

FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
N.M.	N.M.	WRO	J.L.R.	4/18/80-9-57	

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70



REINFORCING STEEL LIST					
Mark	N°	Length	Weight	Shape	
W501	4	34'-2"	143	St.	
W502	31	6'-0"	194	St.	
W503	2	8'-4"	17	St.	
W504	6	35'-6"	222	St.	
W505	5	6'-1"	32	St.	
W506	28	31'-6"	920	St.	
W507	4	6'-7"	27	St.	
W508	3	8'-10"	74	St.	
W509	6	9'-3"	58	St.	
W510	11	8'-7"	98	St.	
W511	3	9'-0"	28	St.	
W512	72	9'-6"	713	St.	
W513	37	9'-3"	357	St.	
W514	12	4'-6"	56	St.	
W515	154	4'-0"	642	St.	
W516	7	7'-3"	53	St.	
W517	9	7'-8"	72	St.	
W518	9	8'-2"	77	St.	
W519	3	7'-0"	22	St.	
W520	4	7'-5"	31	St.	
W521	5	7'-11"	41	St.	
W522	4	8'-4"	35	St.	
W523	10	6'-4"	66	St.	
W524	10	5'-4"	56	St.	
W525	9	5'-11"	56	St.	
W526	7	6'-10"	50	St.	
W527	4	5'-1"	21	St.	
W528	5	5'-8"	30	St.	
R501	4	20'-6"	Include with railing for payment	St.	



TYPICAL SECTION

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

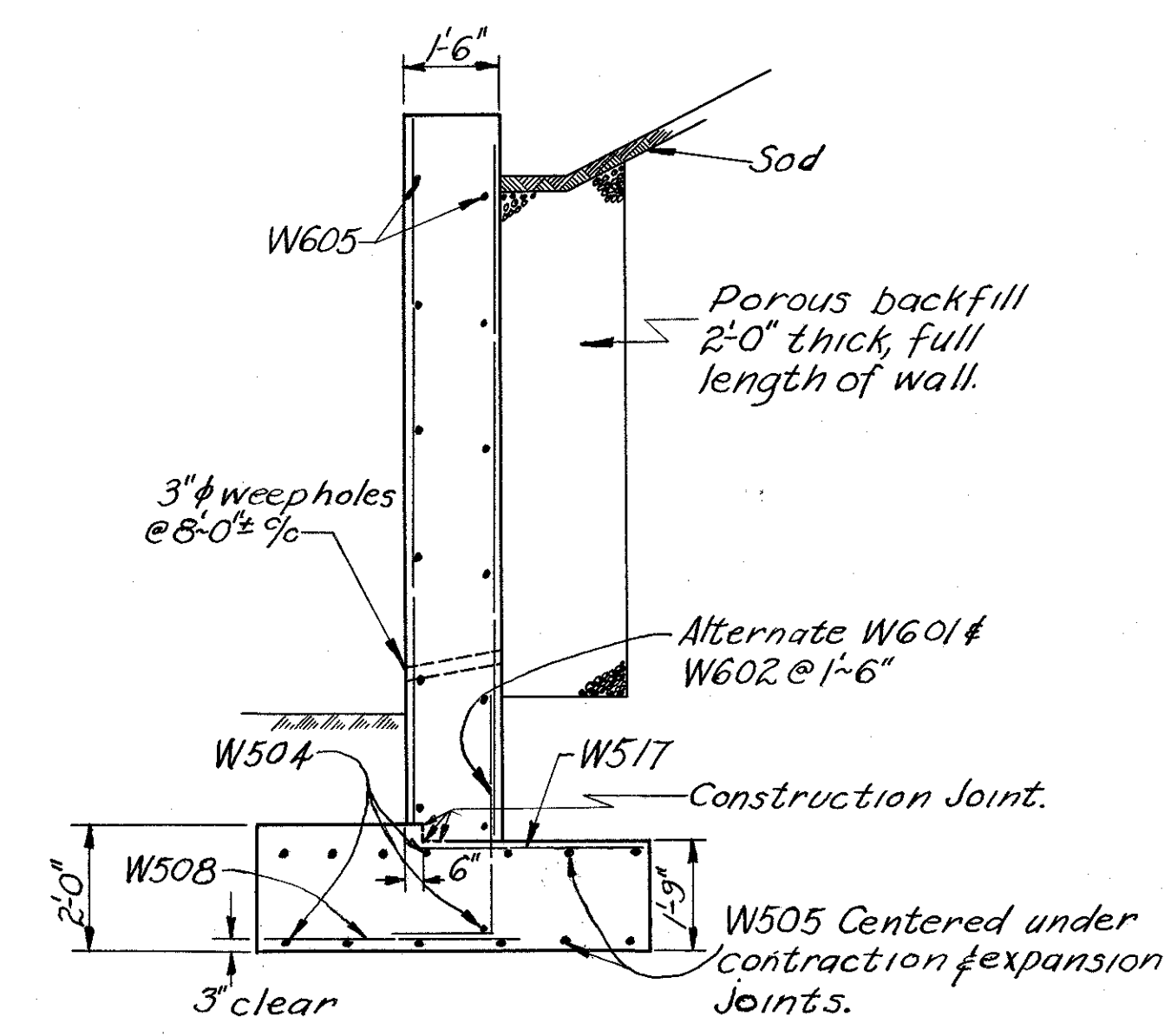
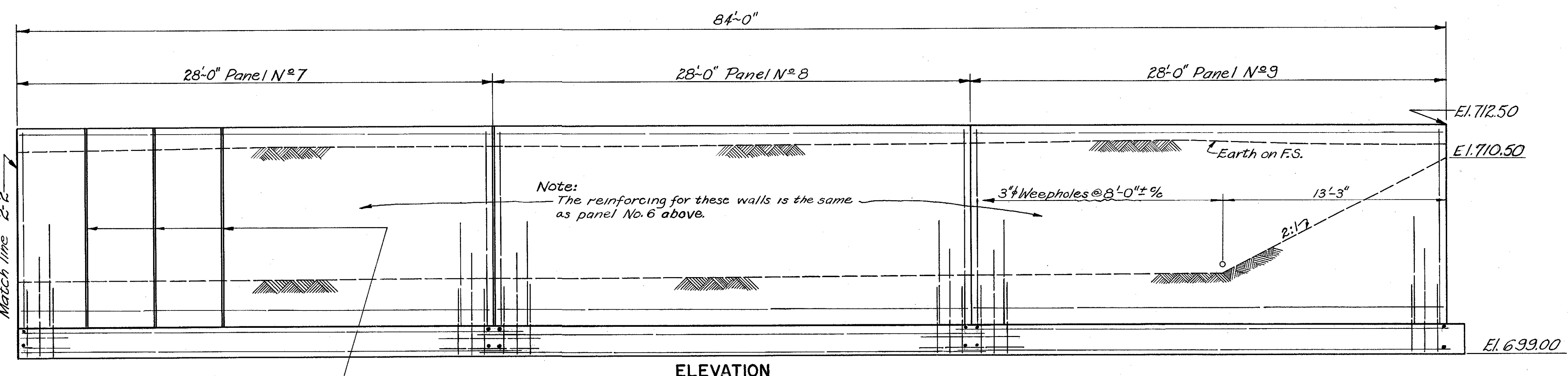
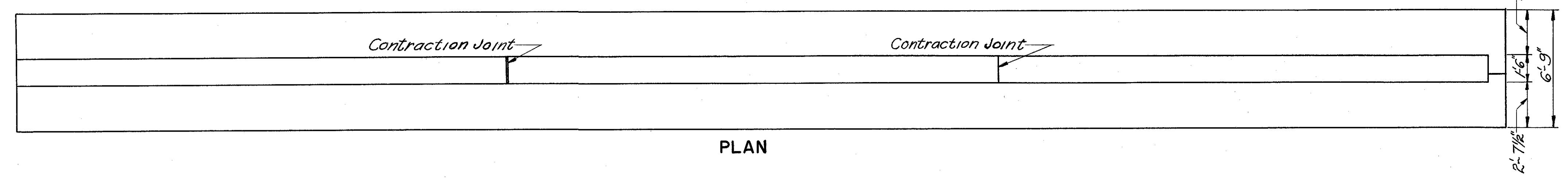
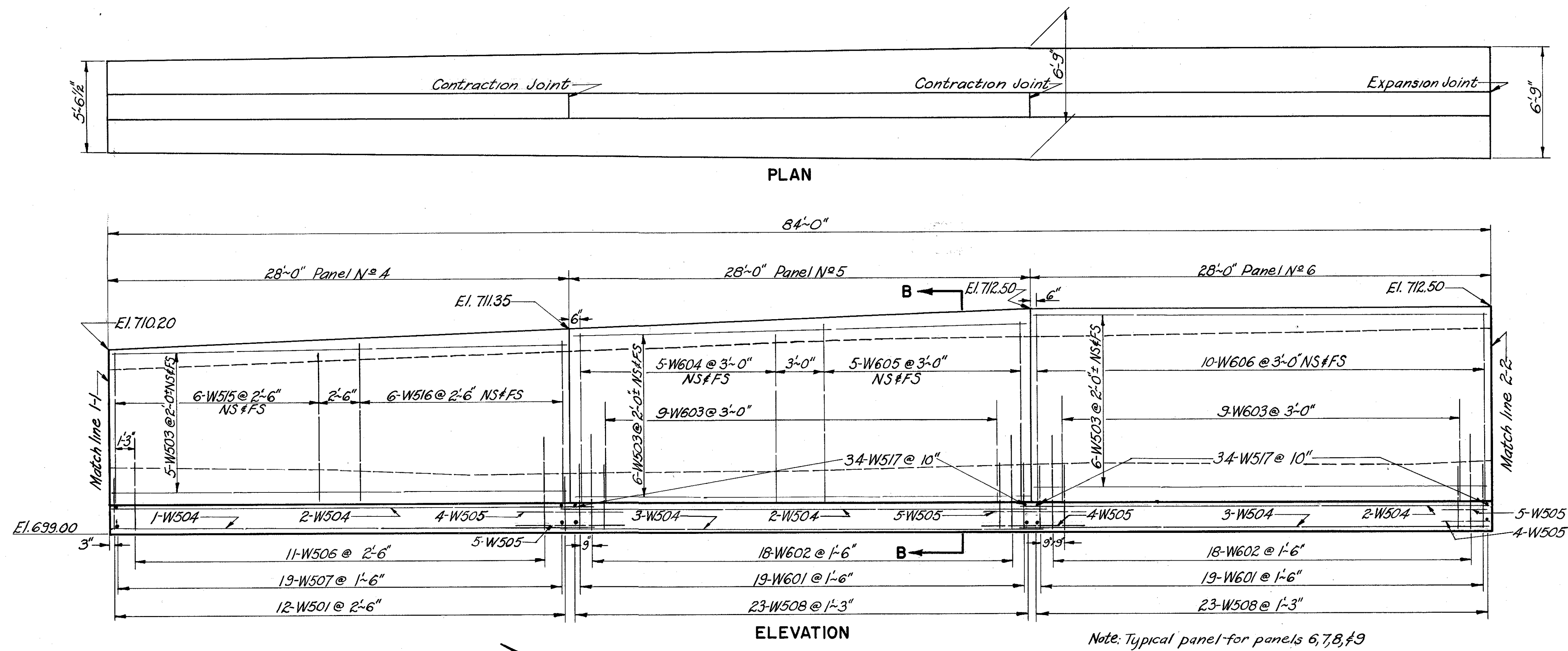
RETAINING WALL "B"
LOCATION PLAN
PLAN AND ELEVATION

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVIEWED
D.S.R.	WRD	K	P.M.R.	10-10-57	

Note- F.S. = Far Side
N.S. = Near Side
Note- For expansion joint detail see sheet N°180
For contraction joint detail see sheet N°180

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND - SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

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251



Notes-For expansion and contraction joints and rustication details see sheet N° 180
N.S. indicates near side
F.S. indicates far side

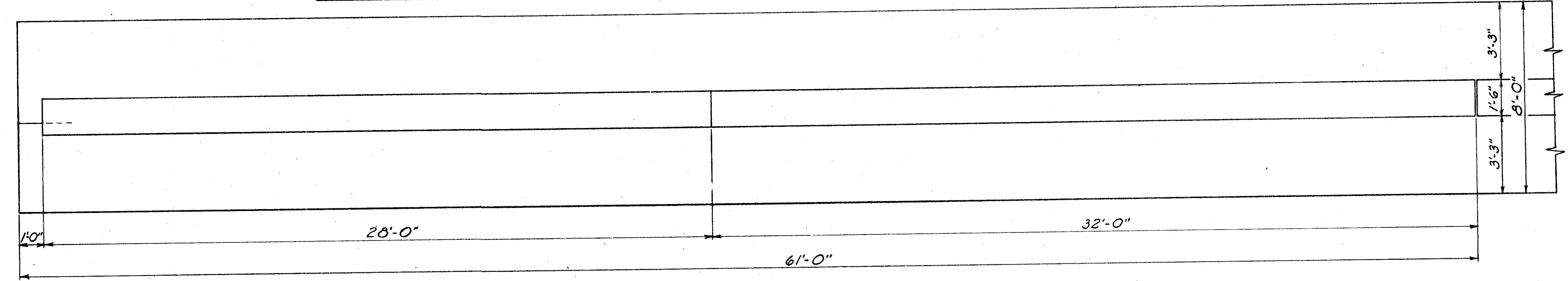
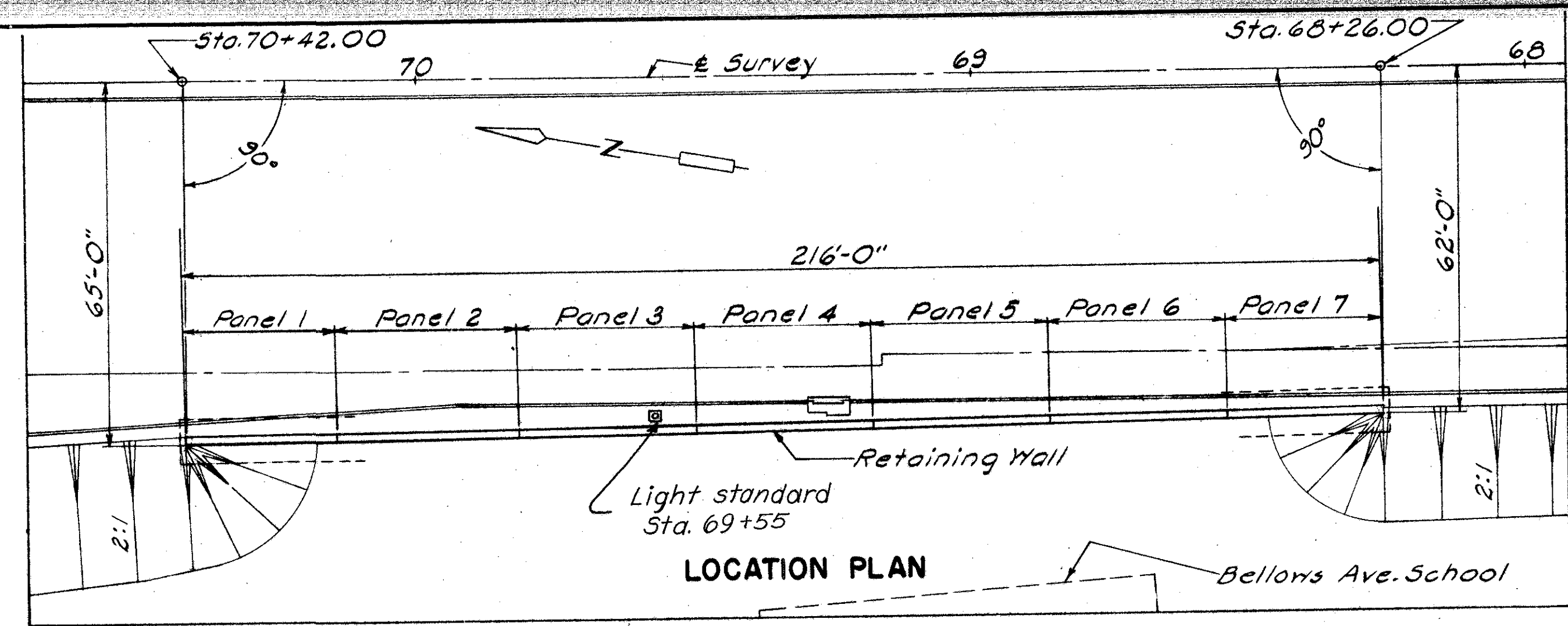
For reinf. steel list see sheet 186

BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS 12, OHIO					
RETAINING WALL "C"					
PLAN AND ELEVATION					
Sta. 50+00 to 52+52.64					
FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
V.M.T.	V.M.T.	R.L.M.	P.M.L.	4/8/10-9-57	

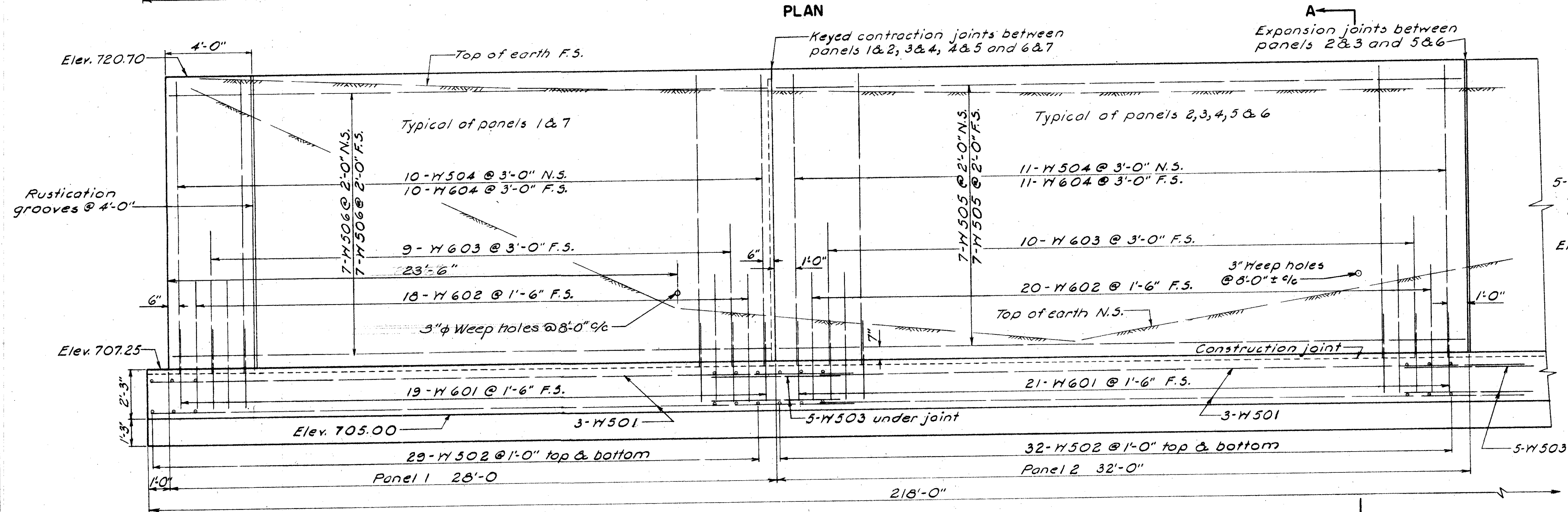
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

185
251

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



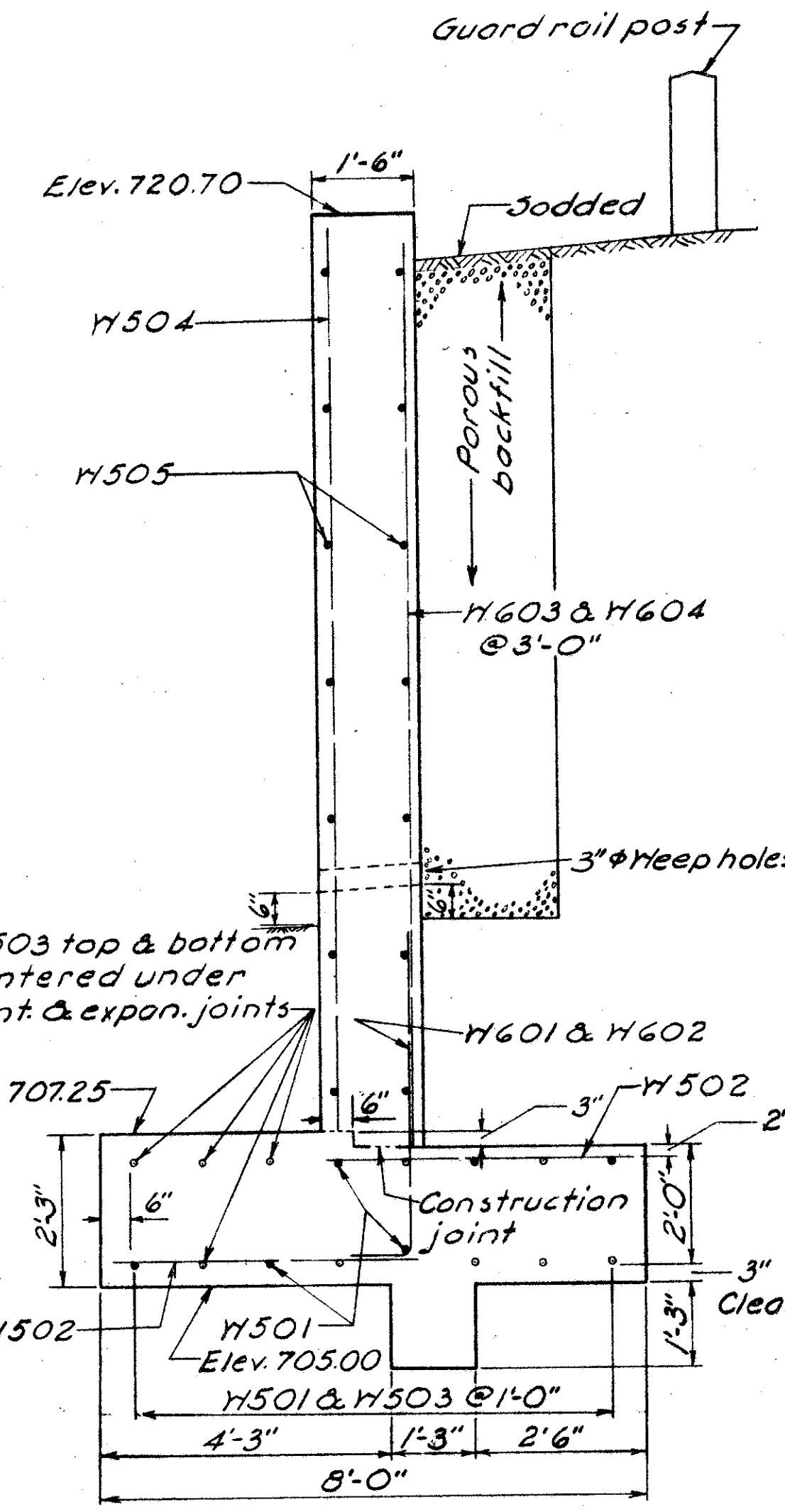
PLAN



ELEVATION

At the option of the contractor, one construction joint may be provided in the footer, but not under the expansion joint in the wall.

Notes
N.S. indicates near side
F.S. indicates far side
For contraction and expansion joint detail see sheet No. 180
Rustication detail sheet No. 180



SECTION A-A

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

RETAINING WALL "D"
LOCATION PLAN
PLAN AND ELEVATION
Sta. 68+26 to 70+42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.E.	J.E.	J.E.	R.S.R.	4/18/10-9-57	

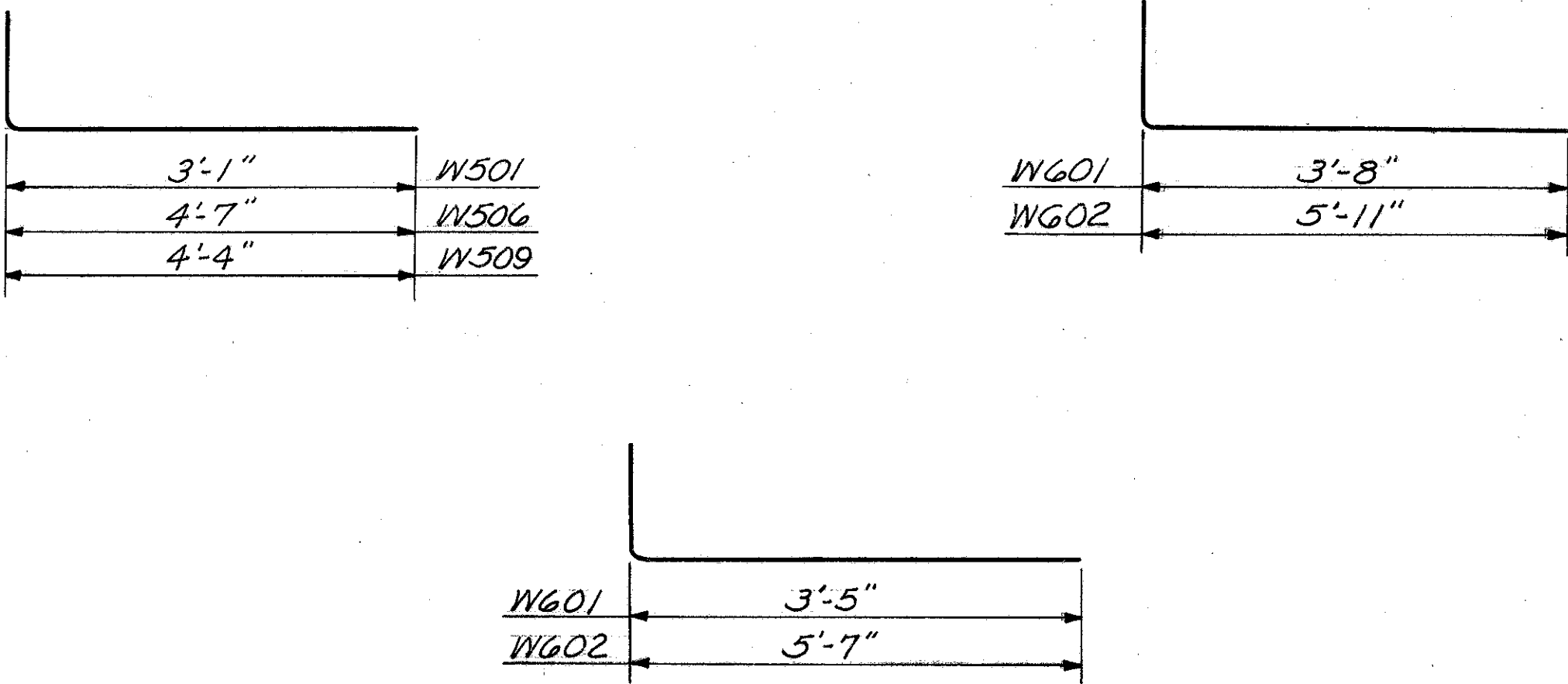
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

REINFORCING STEEL LIST FOR RETAINING WALL "C"				
Mark	Total No.	Length	Weight	Shape
W601	95	4'-6"	446	B
W602	90	6'-8"	626	B
W603	45	6'-1"	286	S
W604	10	10'-2"	106	S
W605	10	10'-10"	113	S
W606	80	11'-4"	946	S
W501	44	4'-0"	184	B
W502	10	5'-7"	58	S
W503	92	27'-8"	2,655	S
W504	32	29'-7"	987	S
W505	72	6'-0"	451	S
W506	11	5'-6"	631	B
W507	19	4'-0"	793	S
W508	115	4'-0"	480	S
W509	9	5'-3"	49	B
W510	10	6'-3"	65	S
W511	12	6'-9"	83	S
W512	12	7'-4"	92	S
W513	10	7'-11"	83	S
W514	10	8'-6"	89	S
W515	12	9'-1"	114	S
W516	12	9'-8"	121	S
W517	170	3'-8"	651	S

RETAINING WALLS A,B,C AND D REPLACEMENT BARS				
MARK	TOTAL NO.	LENGTH	WEIGHT	SHAPE
RE600	1	5'-11"		S
RE500	2	5'-7"		S

REINFORCING STEEL LIST FOR RETAINING WALL "D"				
Mark	Total No.	Length	Weight	Shape
W601	143	4'-9"	1,020	B
W602	136	7'-0"	1,430	B
W603	68	6'-7"	672	S
W604	75	13'-6"	1,521	S
W501	42	32'-6"	1,424	S
W502	436	4'-6"	2,047	S
W503	60	6'-0"	376	S
W504	75	13'-3"	1,037	S
W505	70	31'-8"	2,312	S
W506	28	27'-8"	808	S



FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

ESTIMATED BRIDGE QUANTITIES

ITEM	DESCRIPTION	UNIT	EXPRESSWAY OVER GREENLAWN AVE. BRIDGE NUMBER FRA-62-1286						ROADS C & D OVER ROADS A & B BRIDGE NUMBER FRA-3-1369						RAMP AC OVER ROAD B BRIDGE NUMBER FRA-3-1375										RAMP AC OVER ROAD D BRIDGE NUMBER FRA-40-1219									
			SUPER- STRUC- TURE	ABUT- MENT	PIERS	GENERAL	TOTAL	AS BUILT	SUPER- STRUC- TURE	ABUT- MENT	PIERS	GENERAL	TOTAL	AS BUILT	SUPER- STRUC- TURE	ABUT- MENTS	WING WALLS				GENERAL	TOTAL	AS BUILT	SUPER- STRUC- TURE	ABUT- MENTS	WING WALLS				GENERAL	TOTAL	AS BUILT		
																	N.W.	N.E.	S.E.	S.W.						N.W.	N.E.	S.E.	S.W.					
E-2	Cofferdams, Cribbs and Sheeting	Lump										Lump	Sum								Lump	Sum									Lump	Sum		
E-2	Unclassified Excavation	Cu.Yds.		550	330		880			225	415		640			836	380	195	464	275		2,150			522	69	261	92	86		1,030			
S-1	Class "C" Concrete Superstructure	Cu.Yds.	470				470							94								94		110							110			
S-1	Class "C" Concrete Pier Caps & Columns	Cu.Yds.			177		177																											
S-1	Class "E" Concrete Abutment Walls	Cu.Yds.		271			271			162			162			364						364			327							327		
S-1	Class "E" Concrete Footings	Cu.Yds.		111	107		218			47	128		175			318	105	51	135	71		680			221	28	93	35	62			439		
S-1	Class "C" Concrete Superstr. & Pier Caps	Cu.Yds.							1,171		52		1,223																					
S-1	Class "C" Concrete Pier Columns	Cu.Yds.									116		116																					
S-1	Class "E" Concrete Curved Wing Walls	Cu.Yds.															88	50	121	71		330				33	91	40	70			234		
S-3	Type "C" Waterproofing	Sq.Yds.	1,740				1,740		1,260				1,260		340							340		340								340		
S-3	Waterproofing, Premolded Sealing Strip	Lin.Ft.													53	16		35						46		28						74		
S-3	" " " " " " " " " " " "	Sq.Ft.														51	53	67	62		233				42	45	53	48				188		
S-4	Reinforcing Steel	Lbs.	147,752	11,805	37,831		197,388		259,242	7,455	39,259		305,956		30,027	74,017	3,048	2,026	5,753	3,008		117,879		32,148	36,217	2,629	8,036	3,310	6,426		88,766			
S-7	Structural Steel	Lbs.	450,000				450,000		6,000	5,000			11,000		140,000							140,000	153,000	163,500							163,500	C-13 + 2255		
S-8	Field Painting of Structural Steel	Lbs.	450,000				450,000						11,000		140,000							140,000	153,000	163,500							163,500	C-13 + 2255		
																																165,755		
S-9	1" Preformed Expansion Joint Filler	Sq.Ft.								400	60		460																					
S-9	1/2" Gray Sponge Rubber, Preformed Expansion Joint Filler - Type I	Sq.Ft.			22		22				33		33																					
S-9	3/8" Preformed Expansion Joint Filler	Sq.Ft.								203			203																					
S-9	Rolled Leaded Bronze Sliding Plates (Sec.M-7.12)	Lbs.								473			473																					
S-14	Railing (Alum. Rail & Supports, & Concrete Parapet.	Lin.Ft.	631	94			725								192							192		155	45							200		
S-14	Railing (Alum. Rail & Supports, Concrete Parapet and End Posts.)	Lin.Ft.																																
S-16	First Test Pile	Lump																																
S-18	Steel Piles 12 BP 53	Lin.Ft.			2,080		2,080				2,304		2,304																					
Special	Prebored holes for 4 piles	Lin.Ft.																																
S-25	Steel Light Standard with Single 12" Bracket Arm, As Per Plan	Each	2				2		2				2		1							1										1		
S-25	2" Electric Conduit & fittings (Galv. Rigid)	Lin.Ft.	344				344		446				446		103																			
S-25	Electric Lighting System	Lump																																
S-29	8" Perforated bituminous coated corrugated metal pipe (incl. Spec.)	Lin.Ft.																																
S-29	6" Wrought Iron or Galv. Steel Pipe (incl. Spec.)	Lin.Ft.				72	72			136			136			72																	72	
S-29	Subdrainage for Wearing Surface	Lin.Ft.	470				470		388				388		146																		142	
S-29	Structural Steel Scuppers	Each							7				7																				150	
S-29	Porous Backfill	Cu.Yds.														231	49	33	98	51		462				203	18	51	22	50			344	
I-10	Type "A" Riprap, Reinforced Concrete Slab	Sq.Yds.				1,005	1,005					712	712																					
T-35	Asphaltic Concrete Surface Course Type "C" (60-70)	Cu.Yds.	120				120		87				87		24							24		24									24	

BURGESS & NIPL E - CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

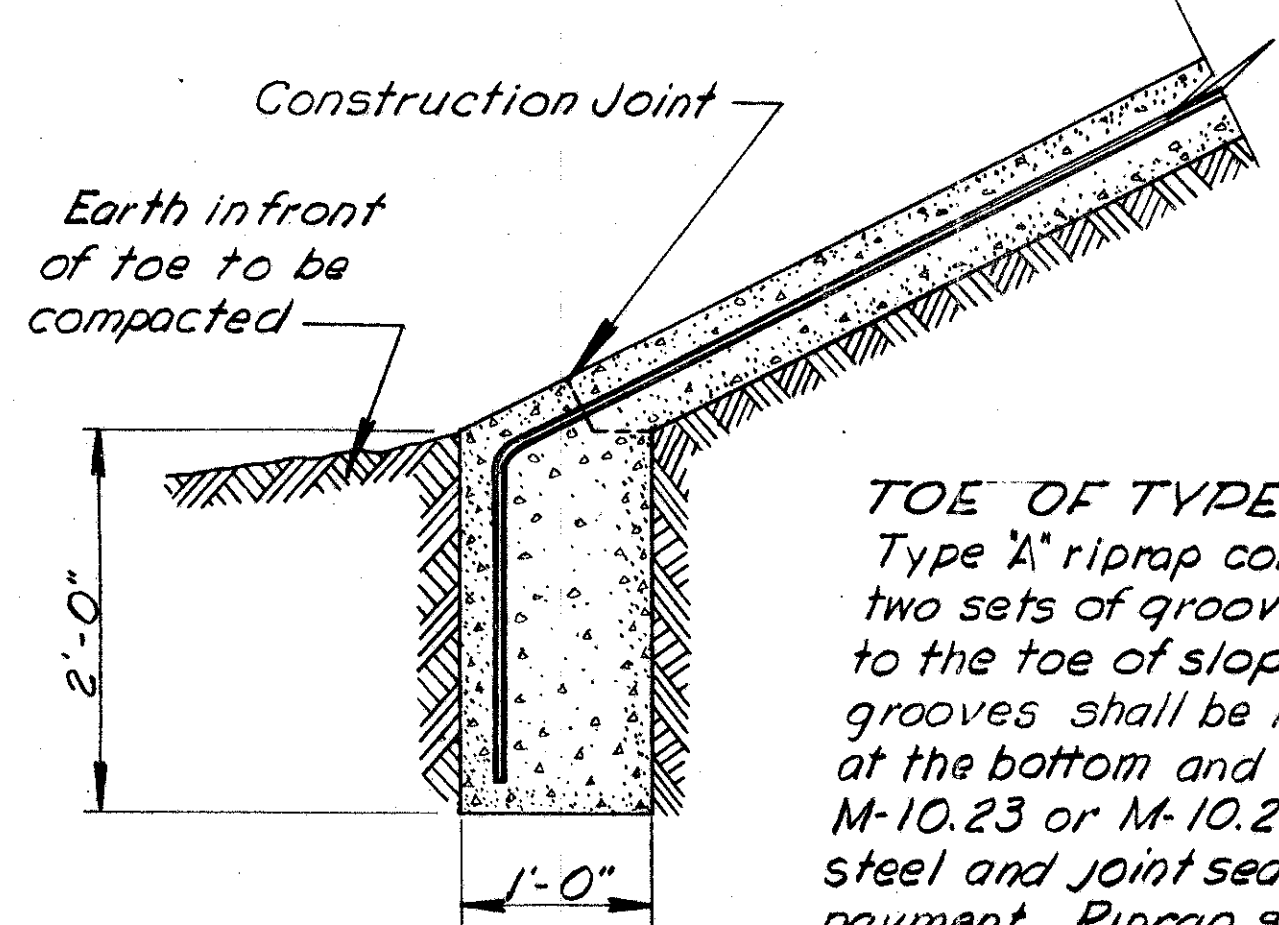
ESTIMATED BRIDGE
QUANTITIES SUMMATION

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
G.M.S.	D.S.S.	D.S.S.	D.S.S.	4/18/10-10-57	

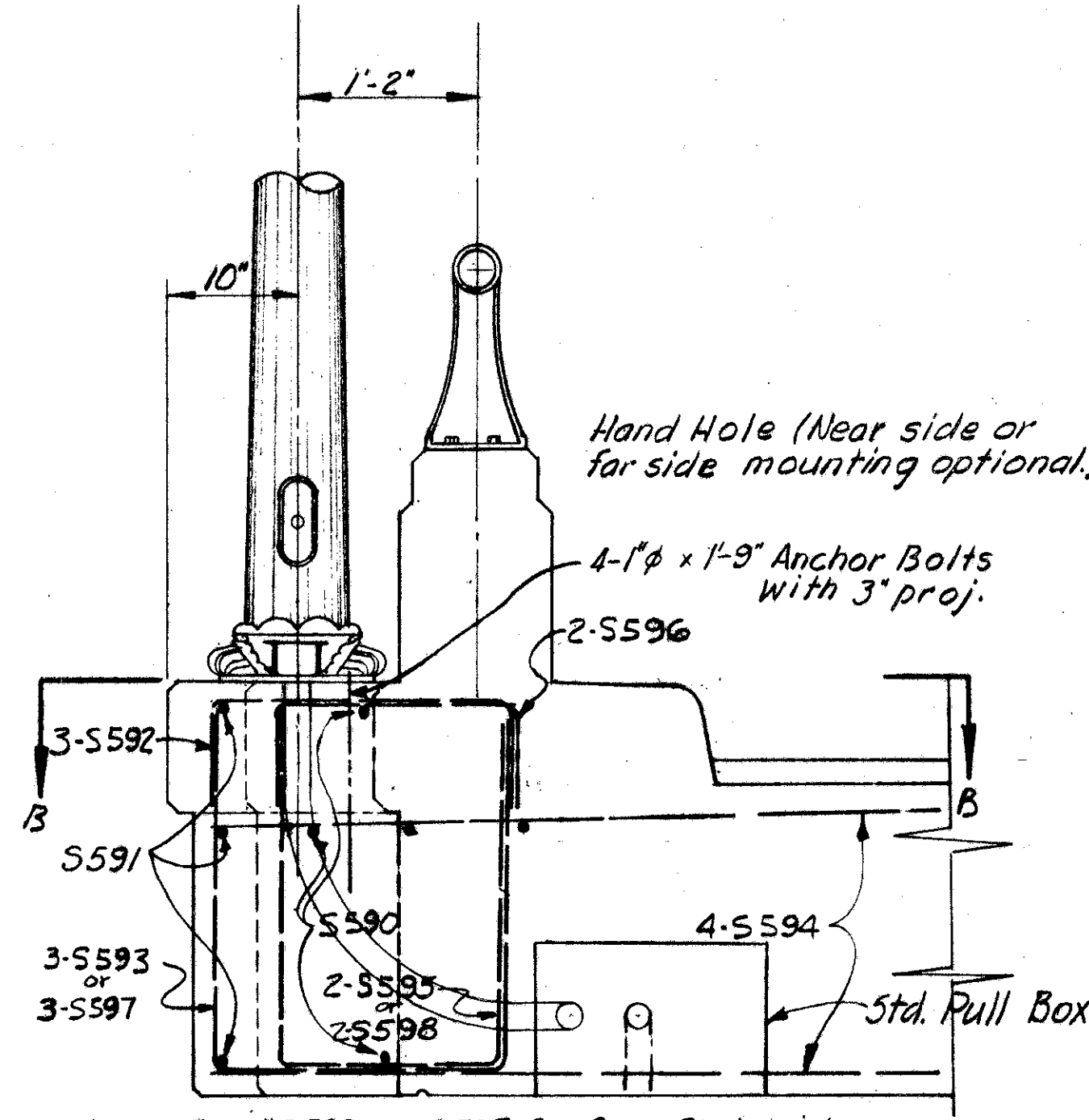
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

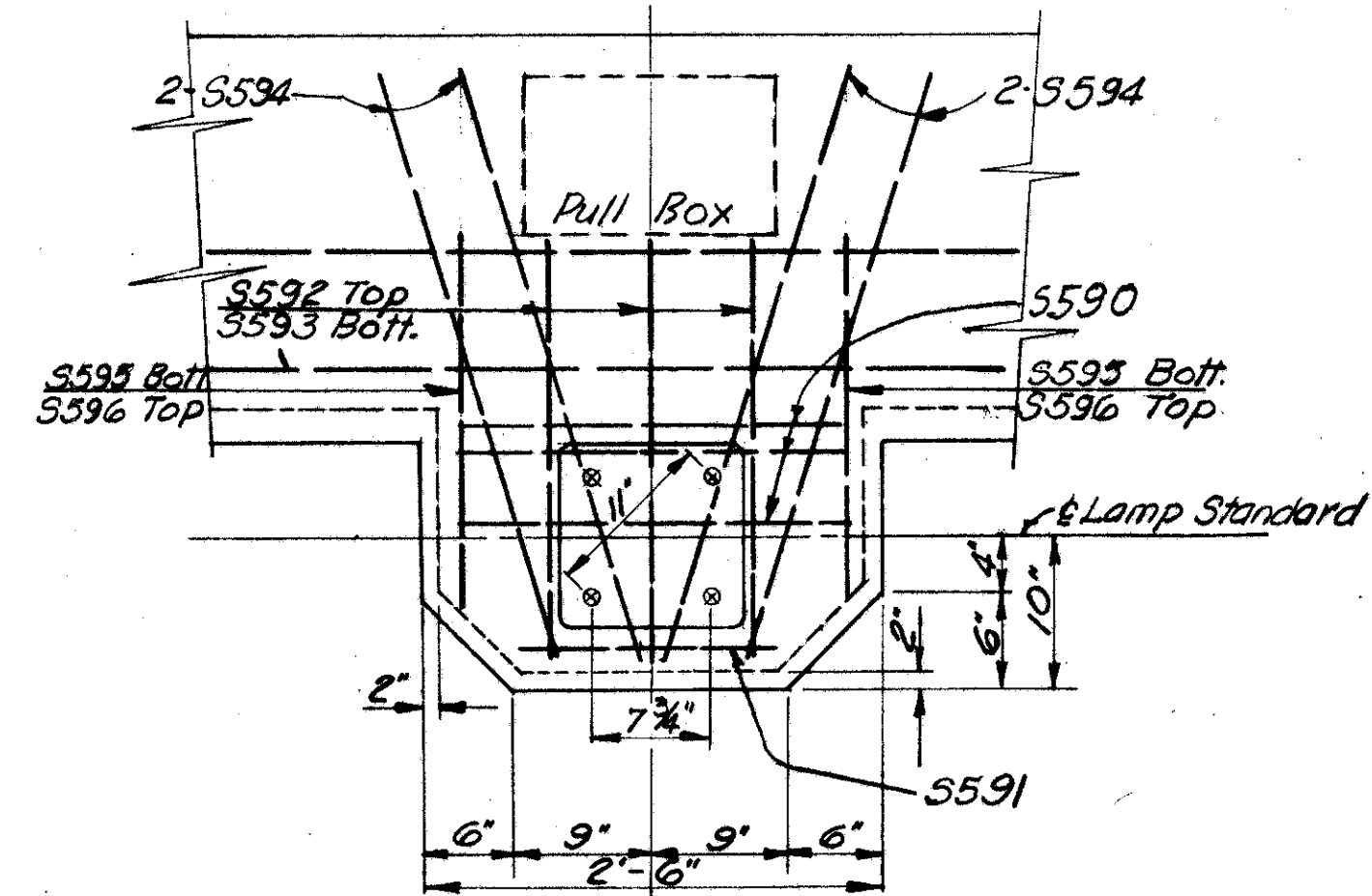


DETAIL OF TOE OF TYPE 'A' RIPRAP

TOE OF TYPE 'A' RIPRAP CONCRETE SLAB
Type 'A' riprap concrete slab shall be grooved with two sets of grooves, one normal and other parallel to the toe of slope and spaced 6'-0" each way. The grooves shall be 1½" deep by ¾" wide at the top and ¼" wide at the bottom and shall be filled with joint seal, per Sect. M-10.23 or M-10.26. Excavation, concrete reinforcing steel and joint seal are included with the riprap for payment. Riprap shall extend from face of abutment to toe of slope between edges of deck underneath the bridge.



Note: Bars #S593 and S595 for Conc. Slab bridges
Bars #S597 and S598 for Steel Beam bridges
LAMP STANDARD DETAIL



SECTION B-B

Conduit: Furnish and Install Complete, Full Strength, Rigid, Galvanized Iron Conduit, threaded and reamed after threading and of the size indicated. Price bid shall include Expansion Fittings where Conduit passes across Expansion Joints, Standard Fittings, Couplings, Bends, Bushings, Locknuts, Supports all else necessary to provide the installation complete. Payment will be made on a per linear foot basis as measured along centerline of Conduit from start to termination.

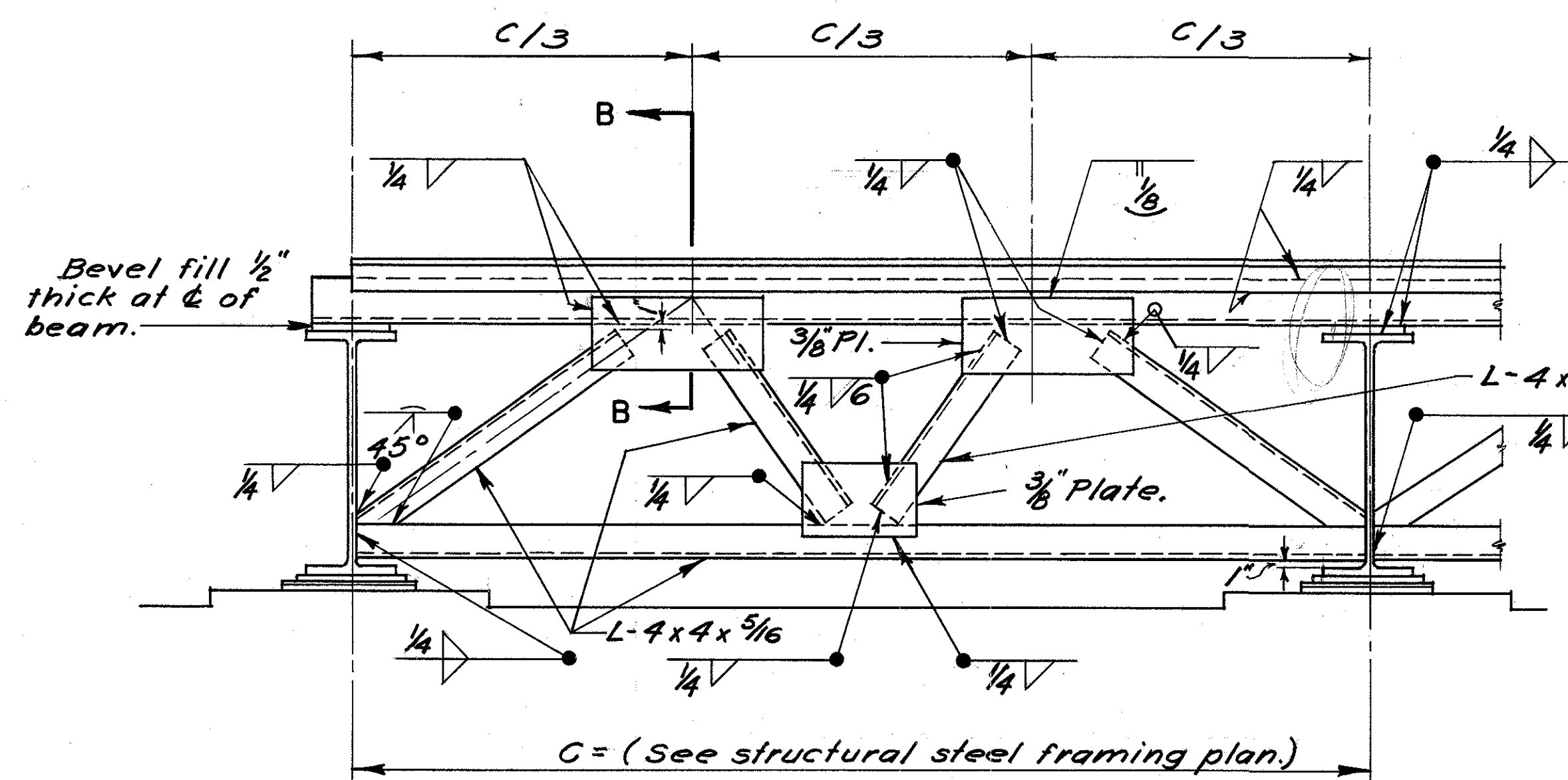
BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

COMMON DETAILS

FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.D.S.	D.D.S.	D.D.S.	10/10	10-1-57	

FRANKLIN COUNTY
CITY OF COLUMBUS

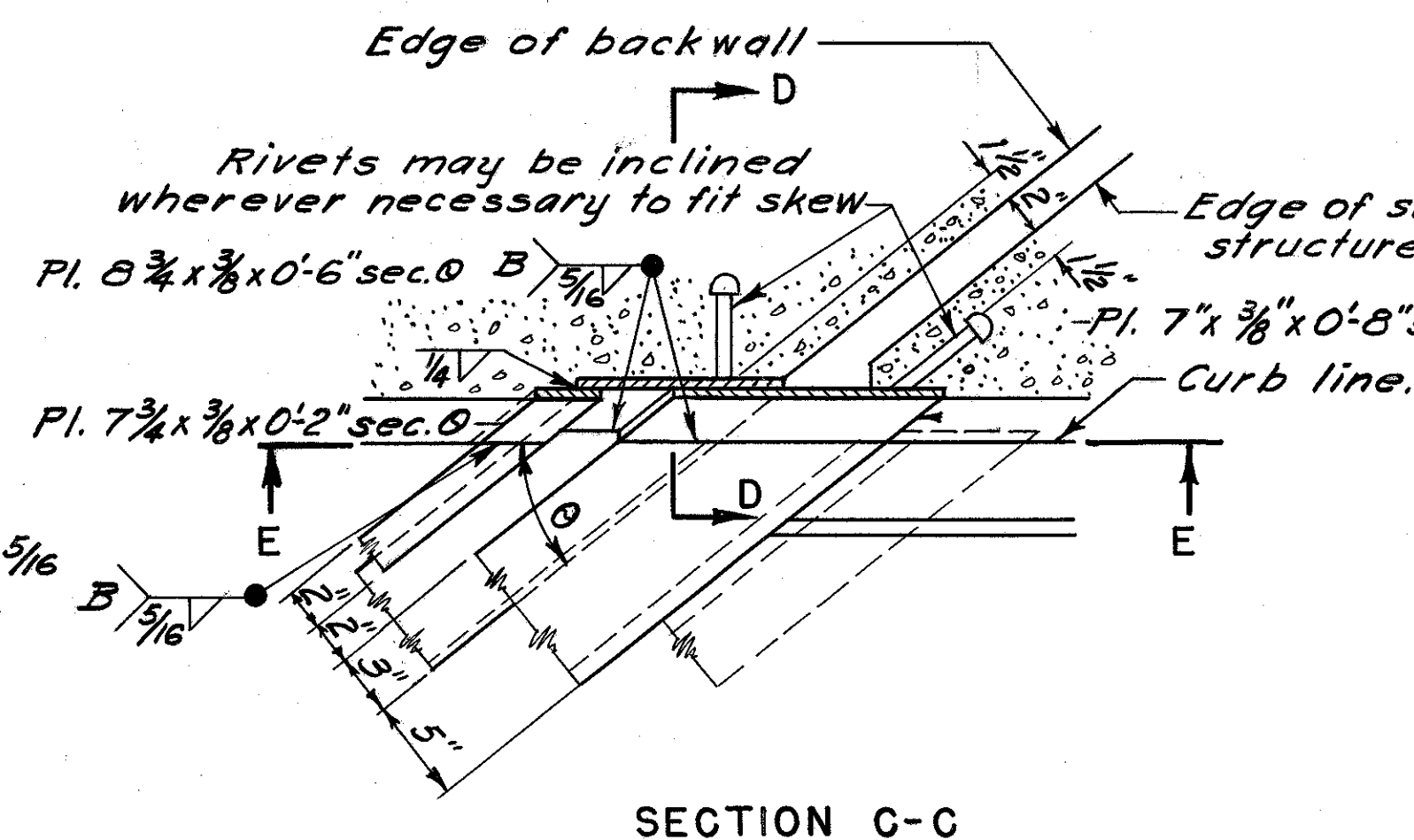
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56—FRA 3-13.70



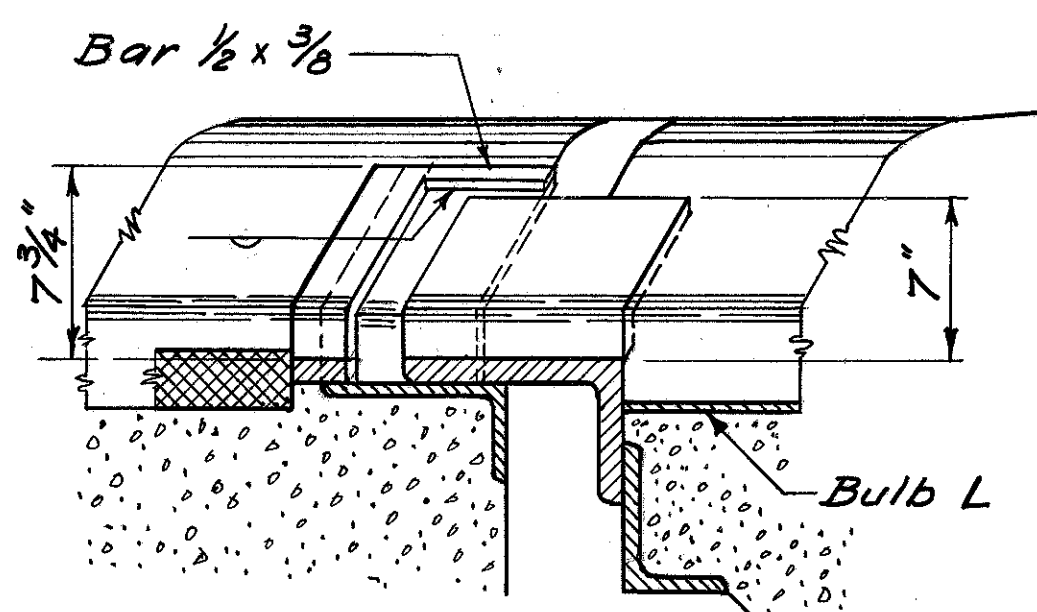
SECTION A-A
END FINISH FRAME DETAIL
Bridges AC over B
and AC over D only

A welded butt joint in the end finish along the center line of the bridge will be allowed for that portion of the end finish attached to the superstructure. The portion attached to the backwall shall be placed in segments not less than 6'-0" in length. These segments shall be closely butted but not welded.

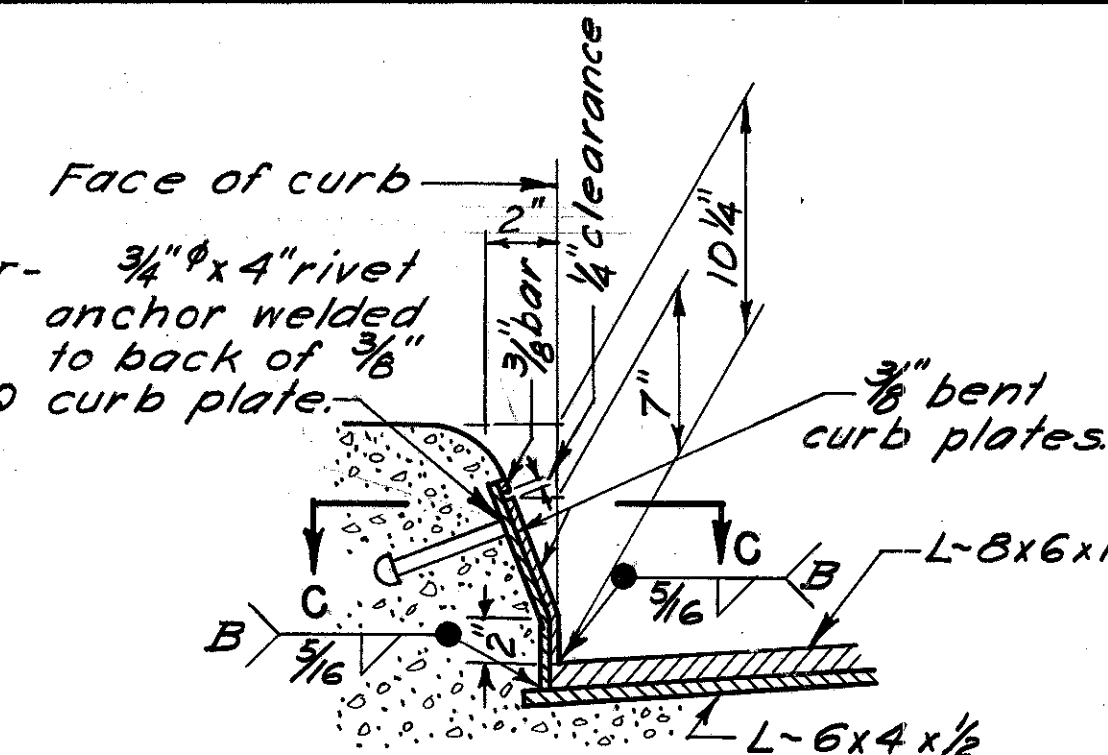
5/8 x 2 1/4" Bolts at not more than 2'-0" o.c., with nuts tack-welded to under side of lower angle. 1" holes in upper angle. Center 5/8" bolts in 1" holes. Apply flake graphite between washers and angle. Turn bolt tight and release one-half turn. Remove bolts as soon as concrete has been reasonably set, preferably within two hours, to avoid effect of temperature expansion or contraction of superstructure. Fill holes with bituminous material.



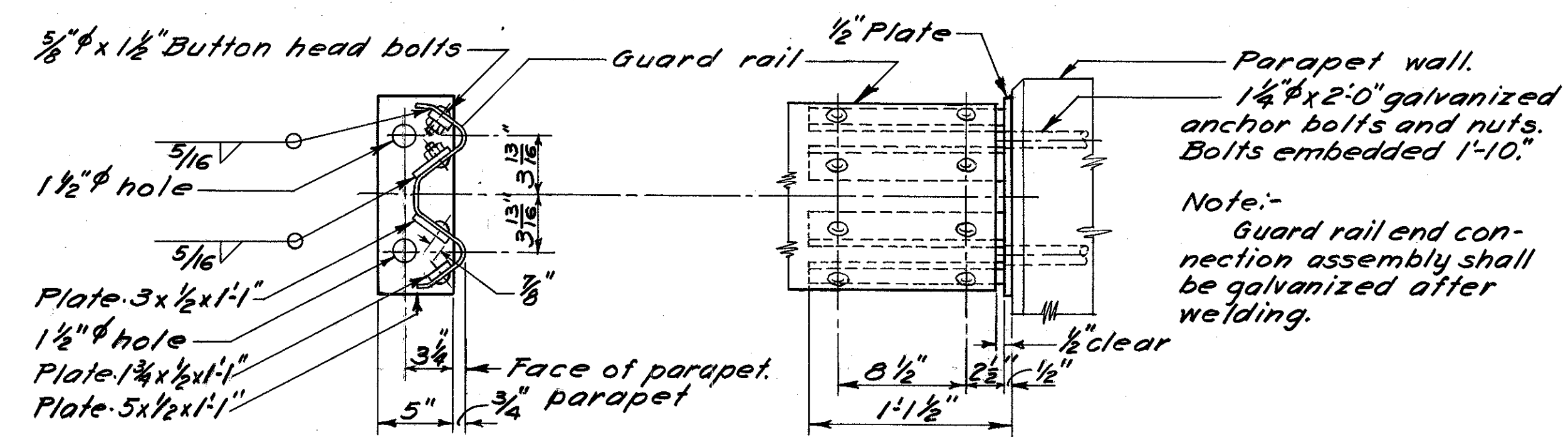
SECTION C-C



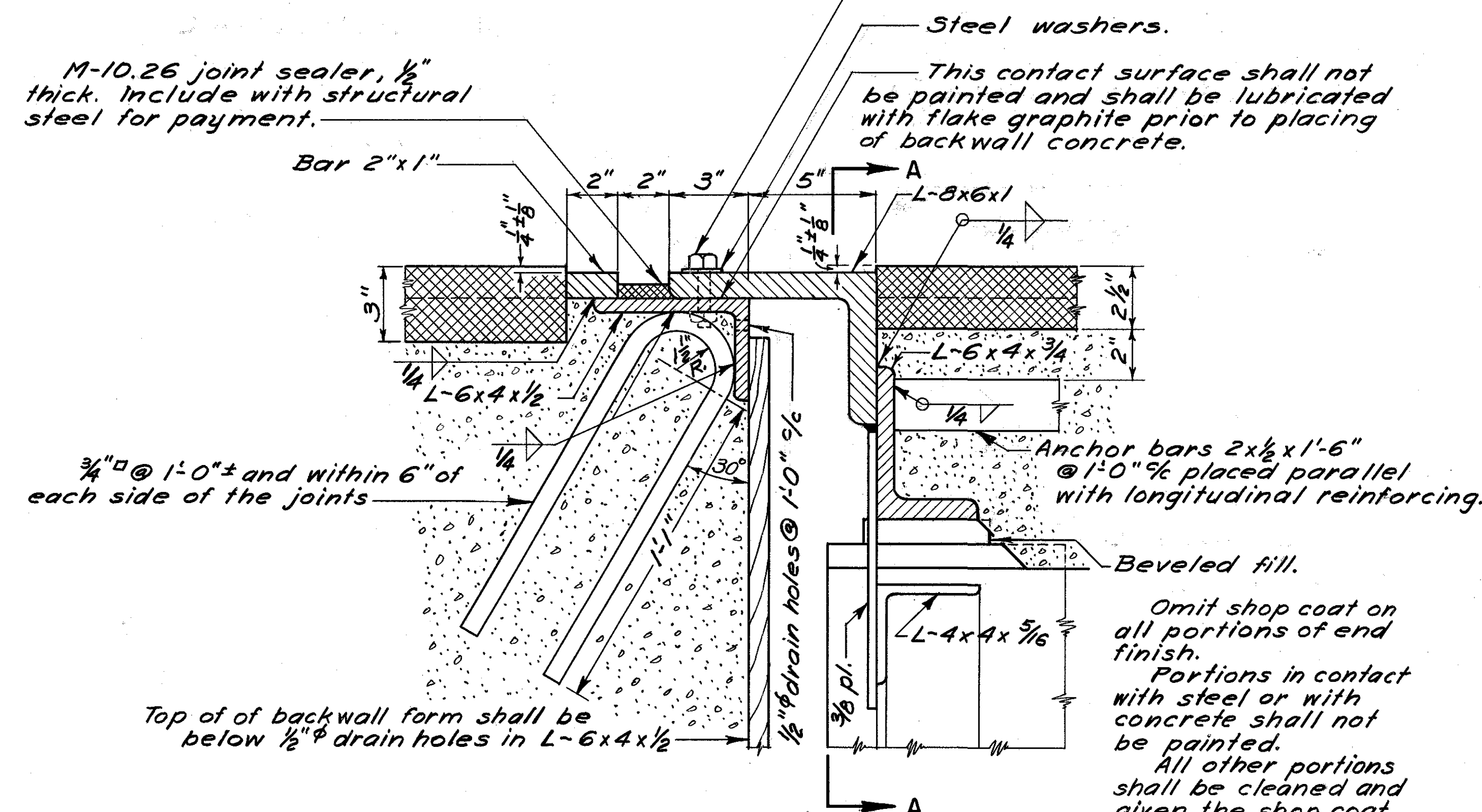
SECTION E-E
AT LOW CURB END



END FINISH AT CURB
SECTION D-D



CONNECTION OF GUARD RAIL TO PARAPET



SECTION B-B
END FINISH DETAIL

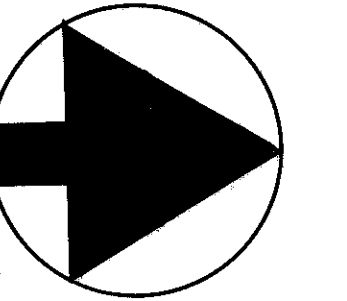
Omit shop coat on all portions of end finish. Portions in contact with steel or with concrete shall not be painted. All other portions shall be cleaned and given the shop coat in the field as well as the two field coats.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

COMMON BRIDGE DETAILS

FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.B.B.	D.B.B.	D.B.B.	add	4/4/8 7-14-97	

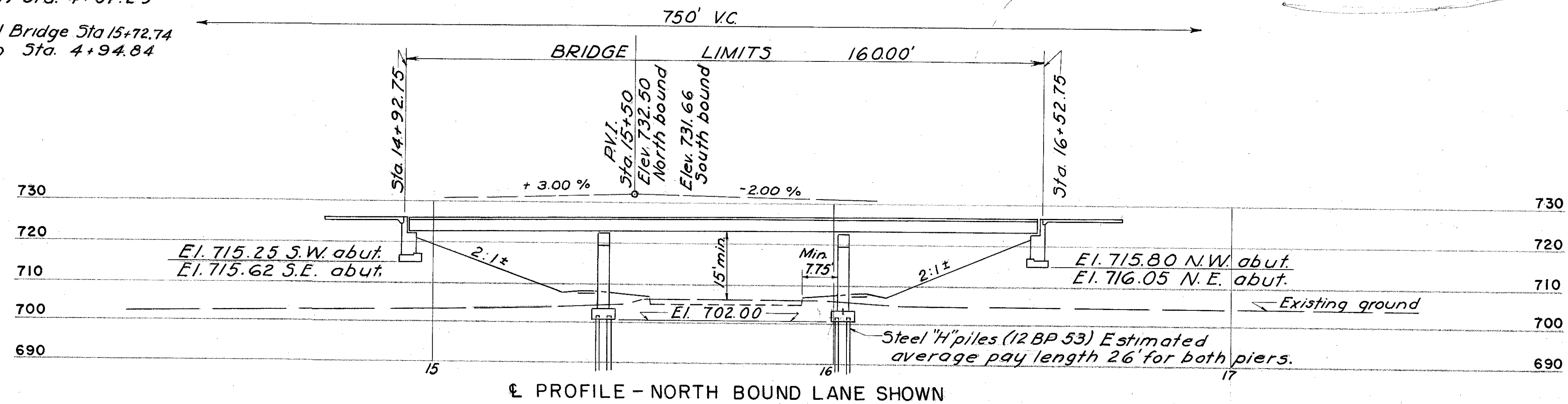
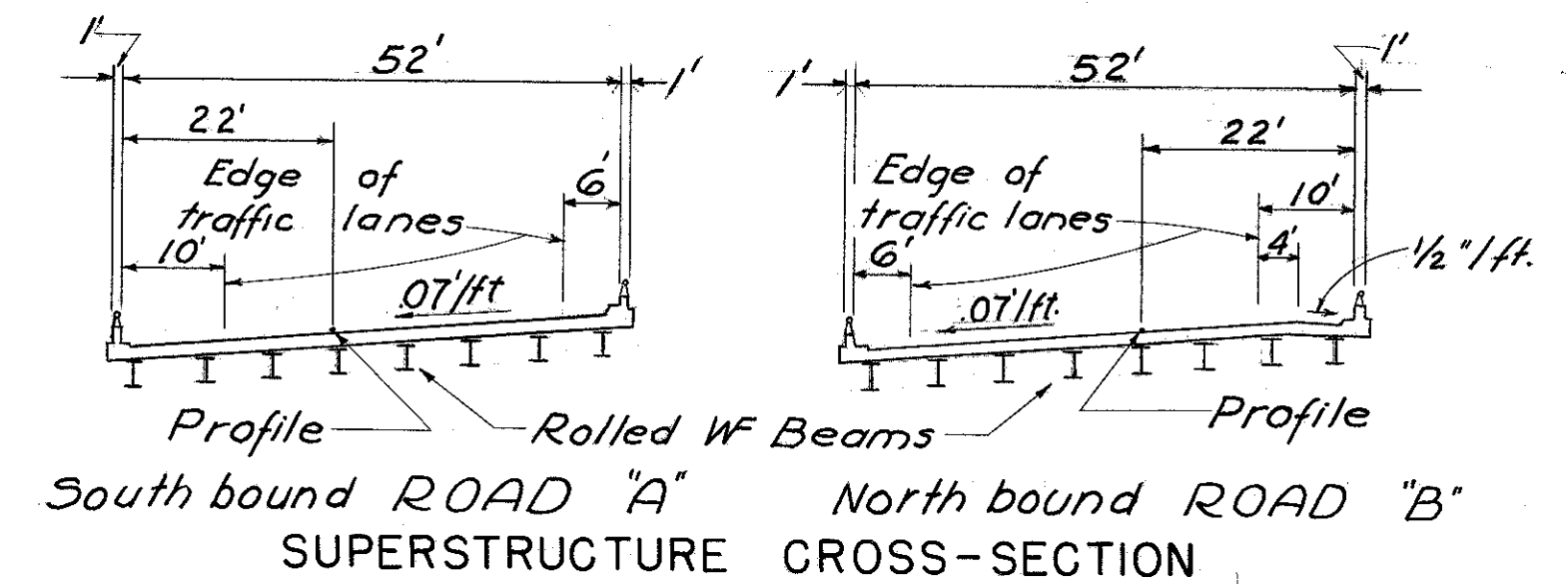
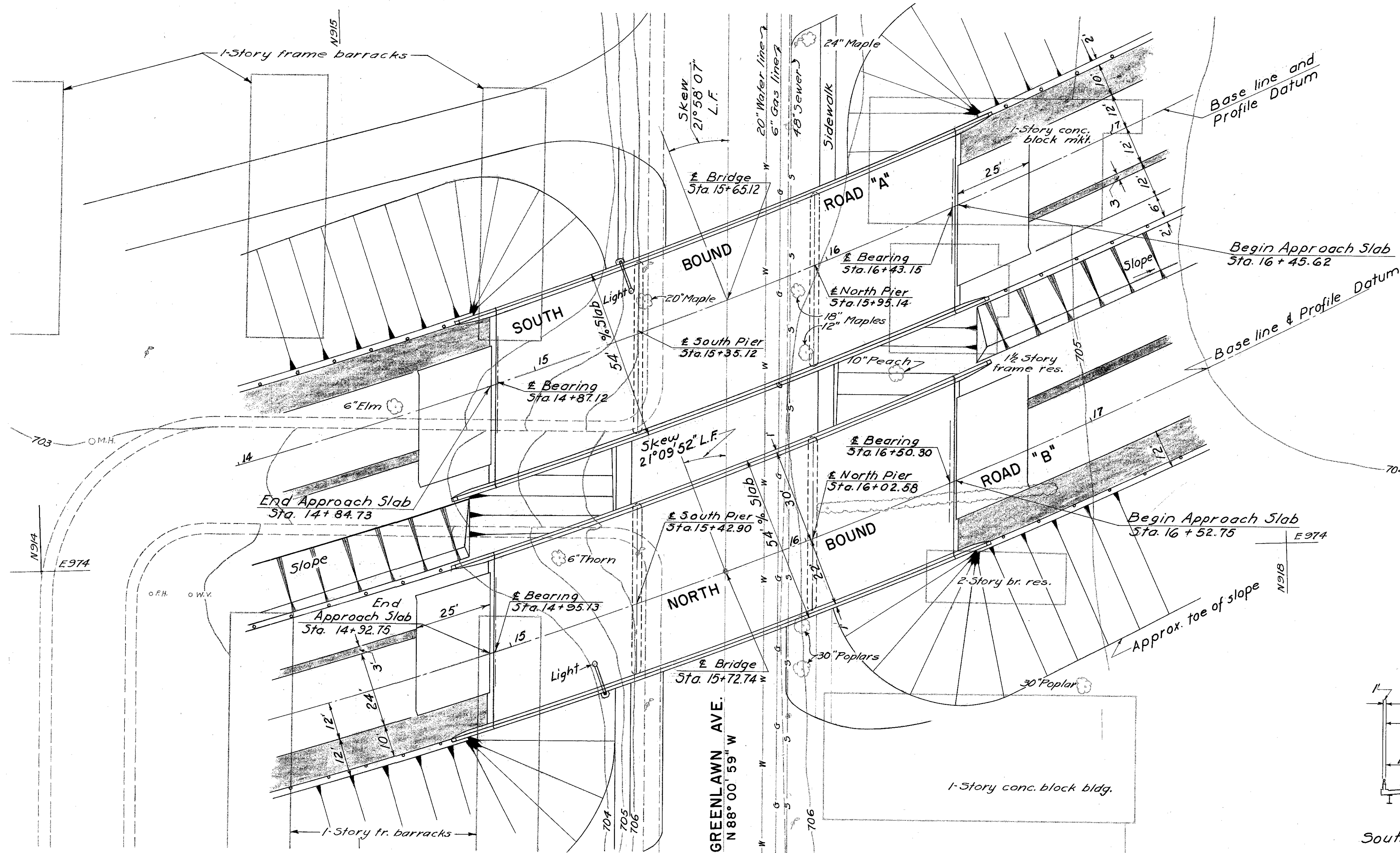
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



Curve Data
South Bound
Road "A"
Δ 36°20'24"
D 3°00'
R 1909.86'
Lc 1011.33'
Ts 727.11'
Ls 200.00
TS 19+05.85
SC 17+05.85
CS 6+94.52
ST 4+94.52

North Bound
Road "B"
Δ 36°20'24"
D 3°00'
R 1909.86'
Lc 1011.33'
Ts 727.11'
Ls 200.00
TS 5+28.94
SC 7+28.94
CS 17+40.27
ST 19+40.27

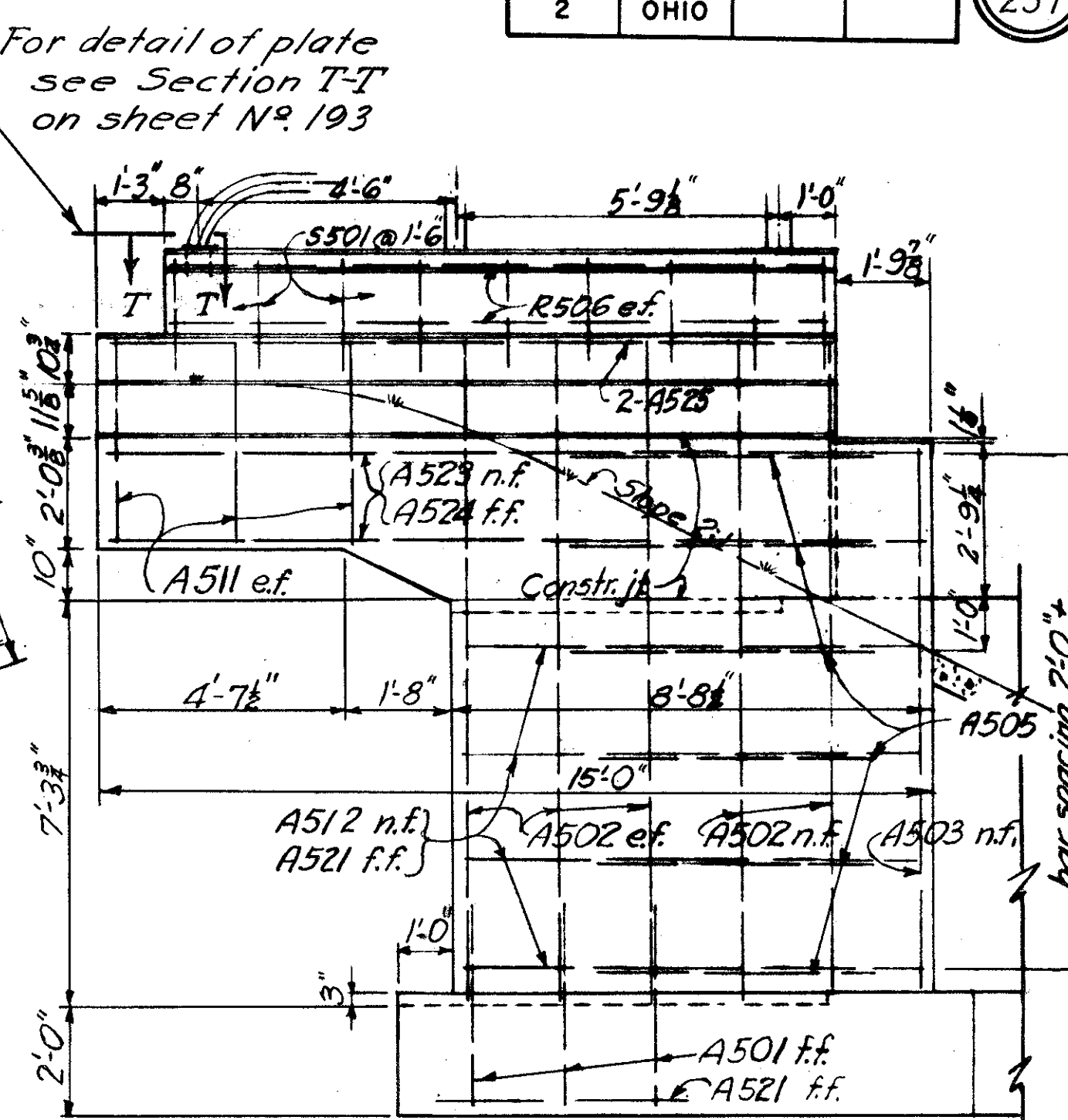
Note -
Base Line South Bound Bridge Sta. 15+65.12
= E Greenlawn Sta. 4+07.29
Base Line North Bound Bridge Sta. 15+72.74
= E Greenlawn Sta. 4+94.84



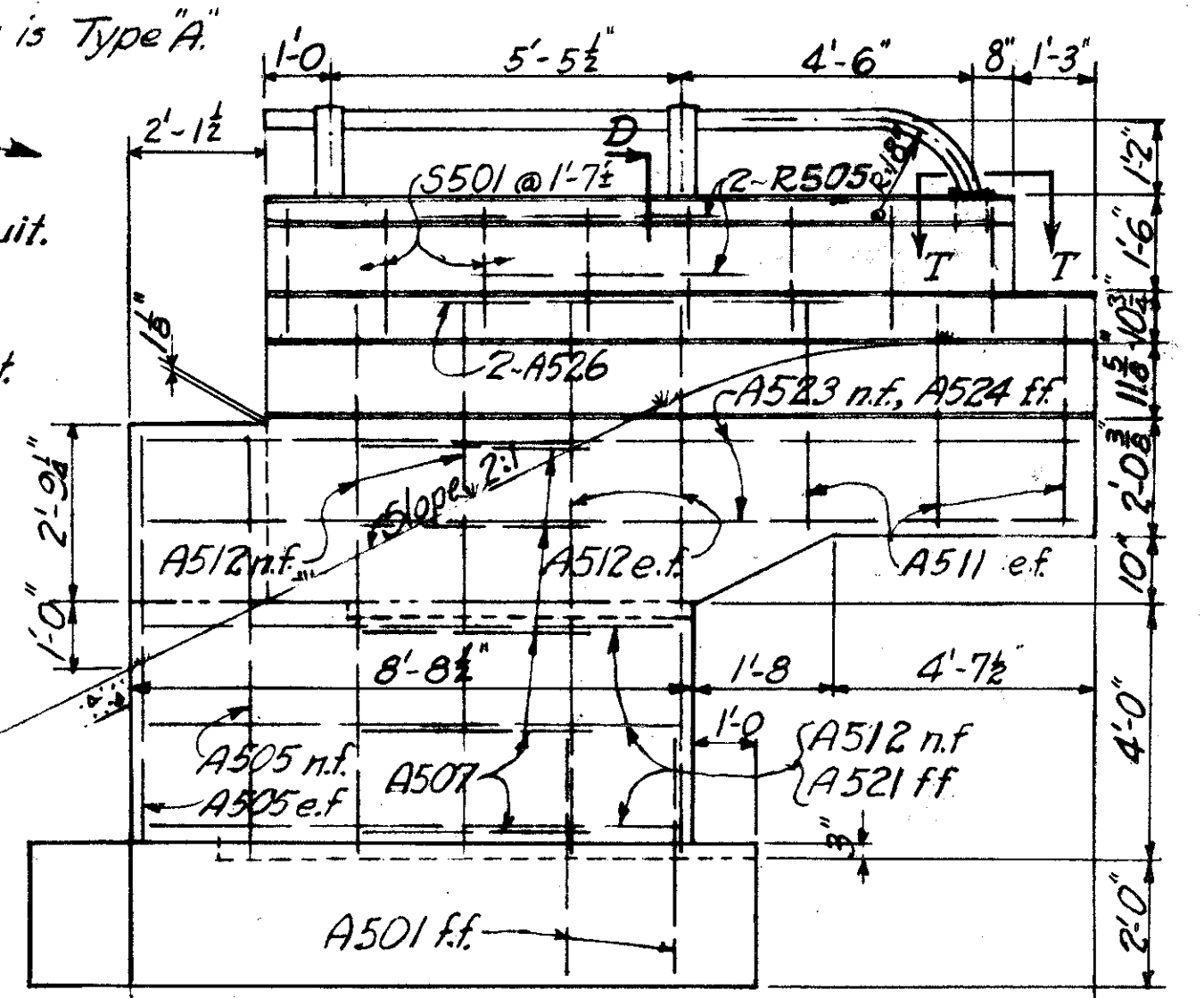
B.M. SB2
9 ELEV. 705.869

Concrete monument in grass south side Greenlawn Ave., near Kirby Ave., 27.52 ft. northeast of N.E. corner of storeroom #555 (Greenlawn Trailer Sales), 9.05 feet south of Greenlawn Ave., paved 40.2 feet, 3.0 feet southeast of utility pole, 0.3 feet west of west edge of concrete walk.

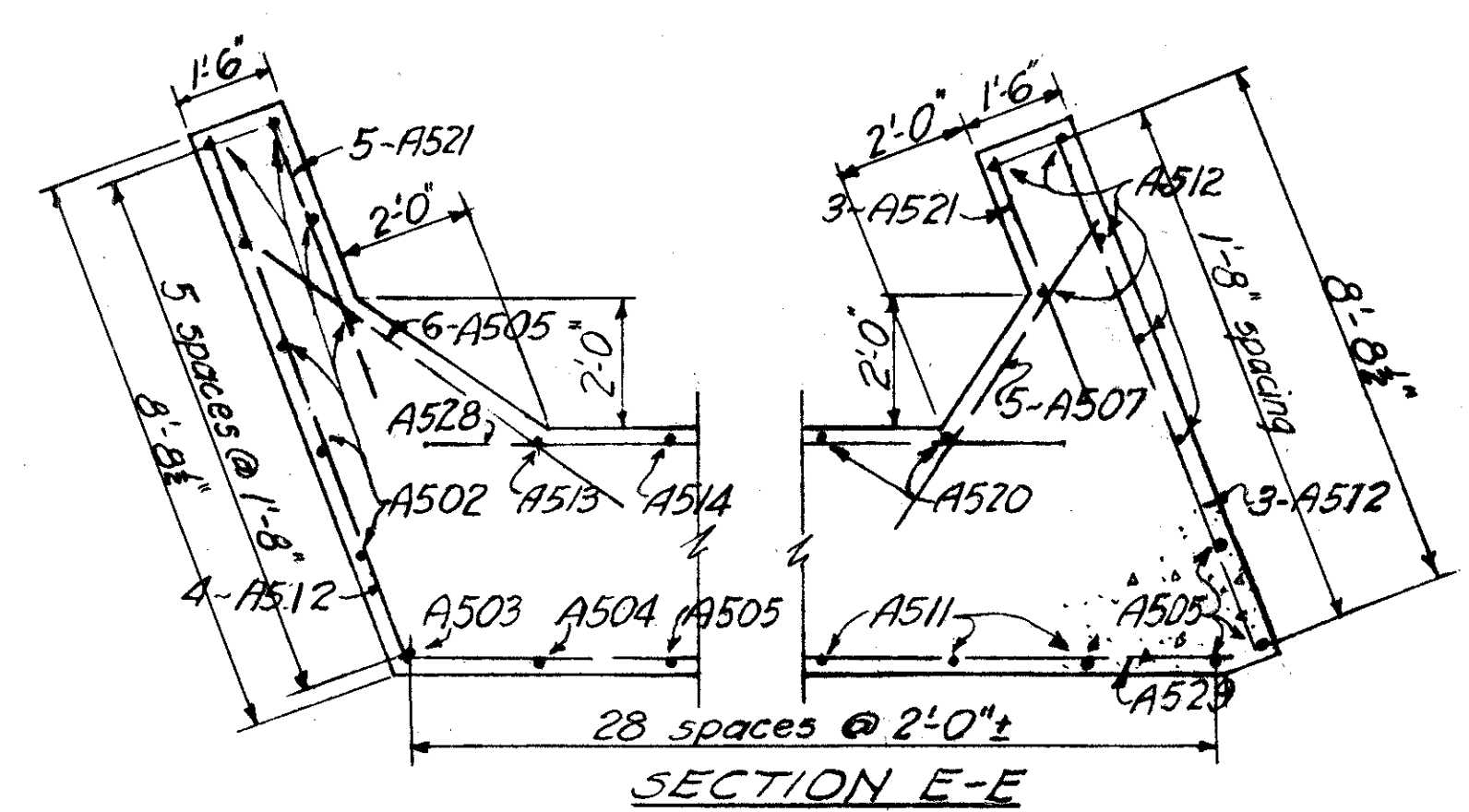
BURGESS & NIPLE-CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
EXPRESSWAY OVER GREENLAWN AVE.					
BR. NO. FRA-62-1286					
SITE PLAN					
FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
lbd	lbd	D.B.S.	C.R.D.	4/18/10-9-57	



VIEW A-A



VIEW B-B



Special care shall be taken in placing reinforcing steel so that it will not interfere with the drilling of anchor bolt holes.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

EXPRESSWAY OVER GREENLAWN AVE.
BR. NO. FRA-62-1286

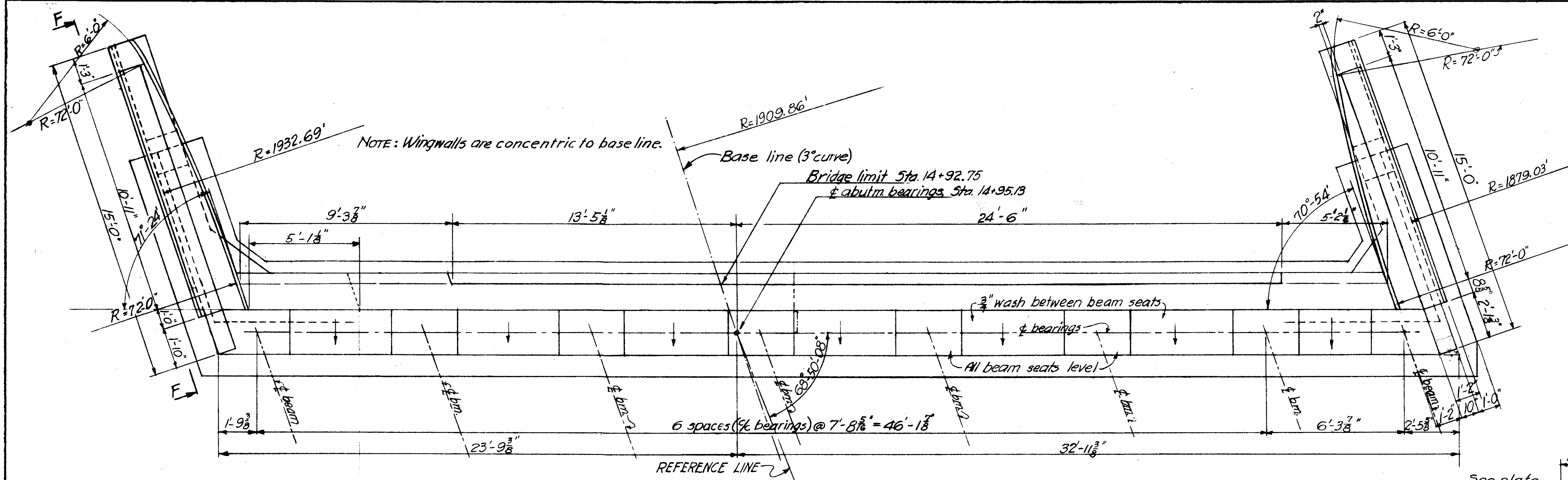
**SOUTHWEST
ABUTMENT DETAILS**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
<i>Geo D</i>	<i>W.D.</i>	<i>D.S.B.</i>	<i>C.K.D.</i>	<i>4/18/10-9-57</i>	

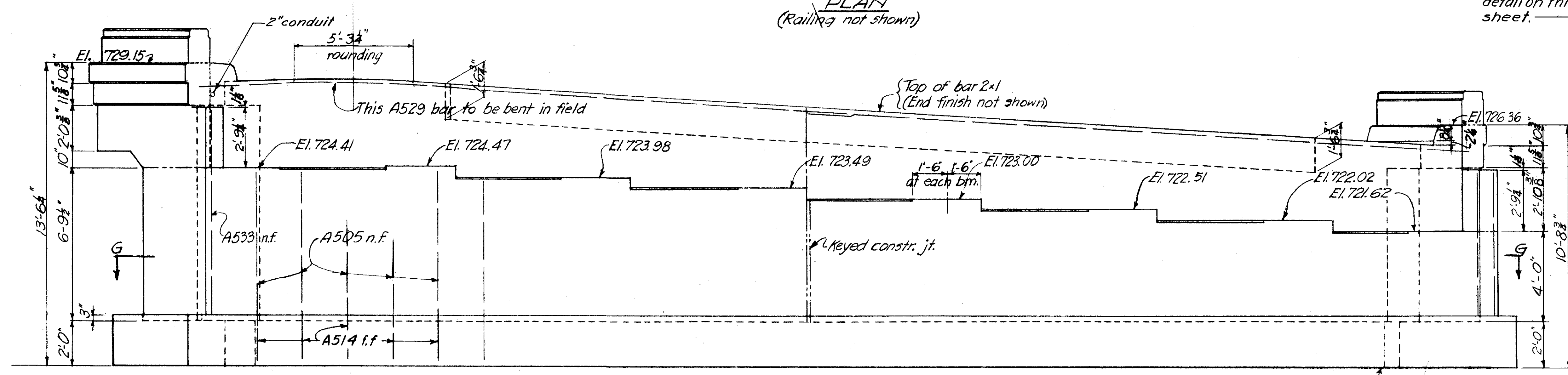
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

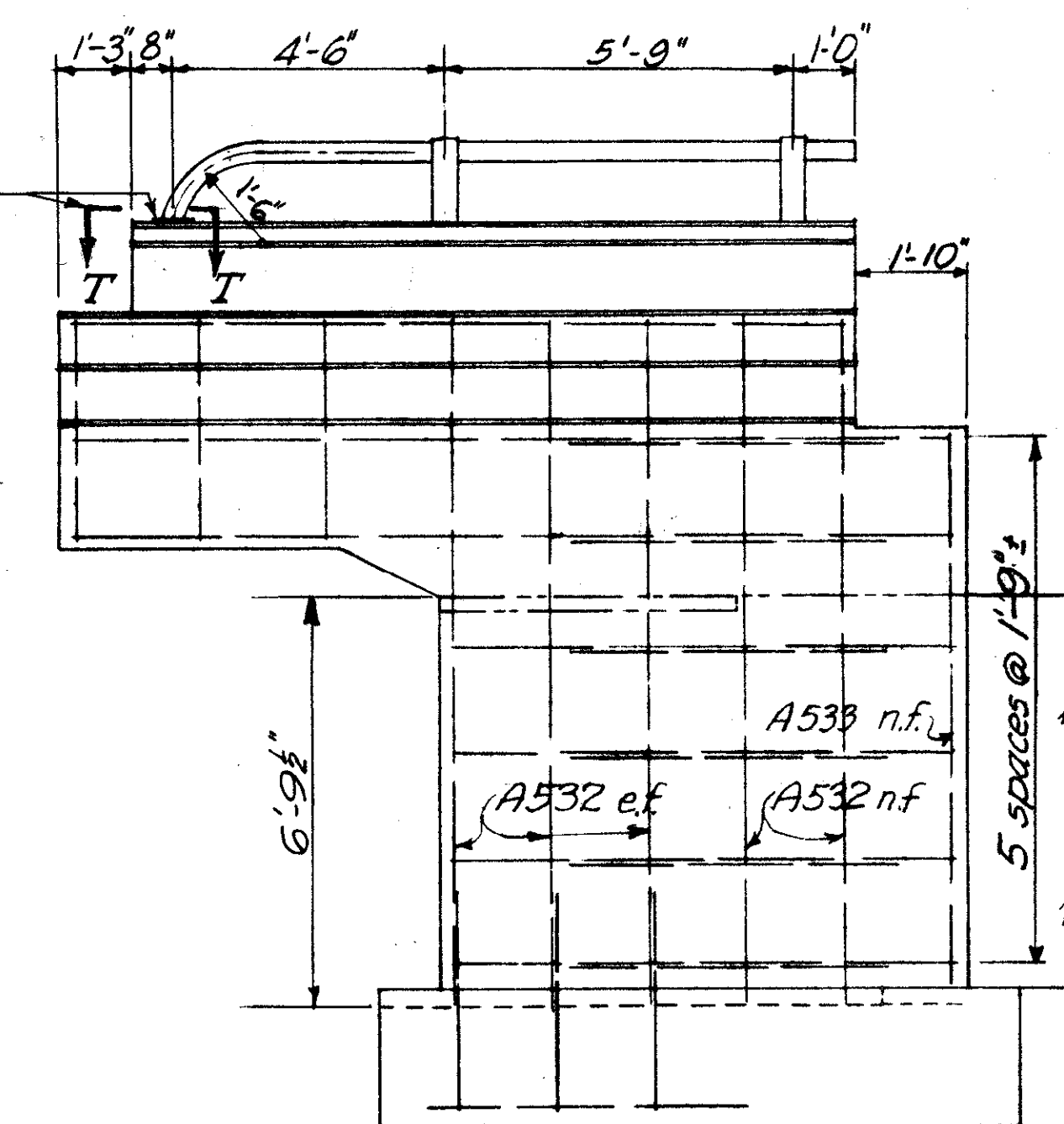


PLAN
(Railings not shown)

See plate
detail on this
sheet.

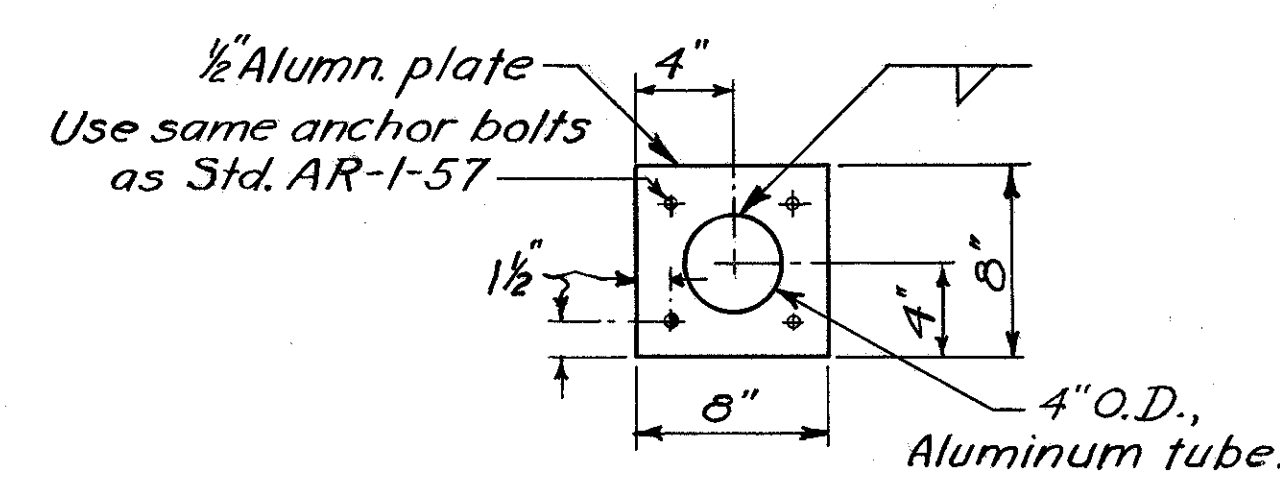


ELEVATION

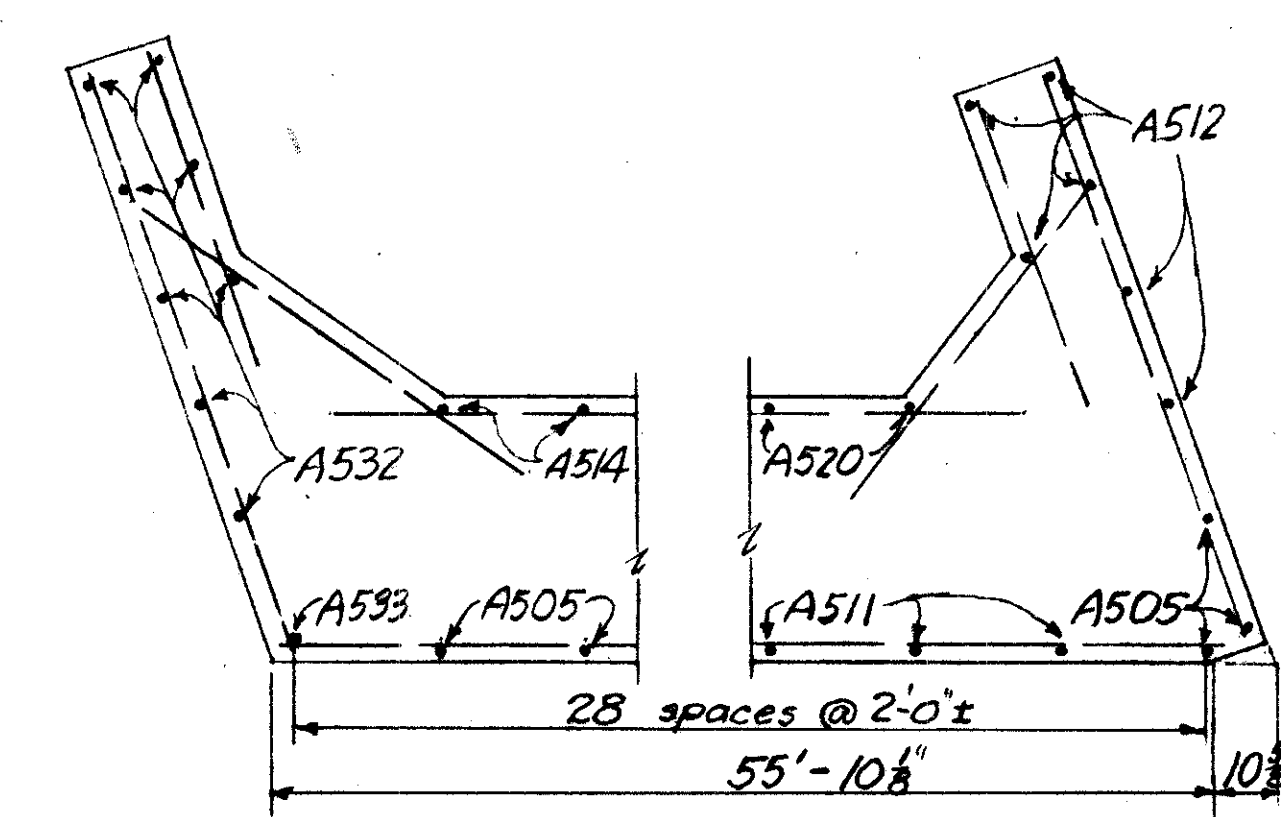


VIEW F-F

Details not shown same as in View B-B.



SECTION TT
RAILING BASE PLATE



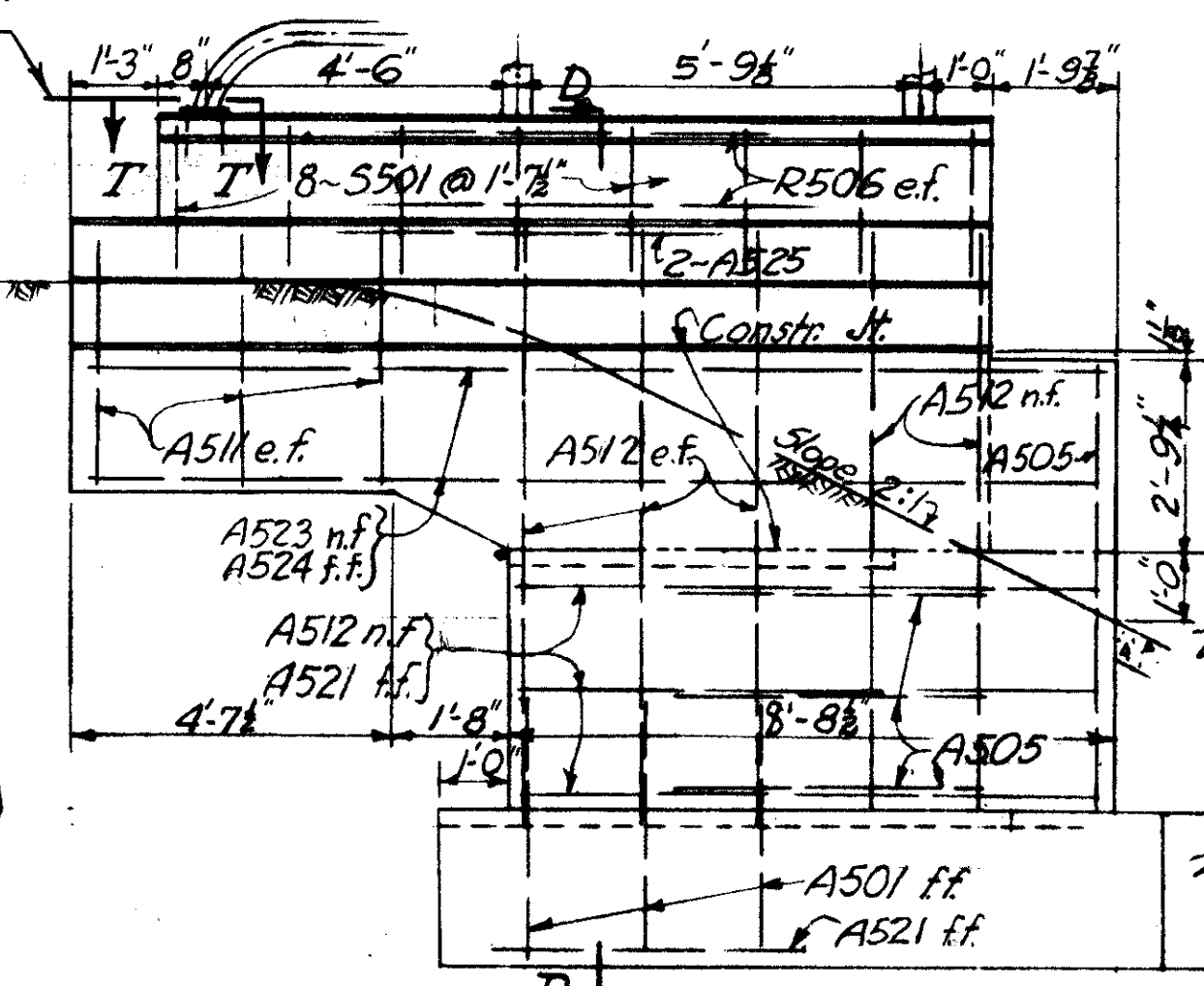
SECTION G-G

All bars and bar marks and details not shown
are the same as for S.W. abutment, sheet 192.

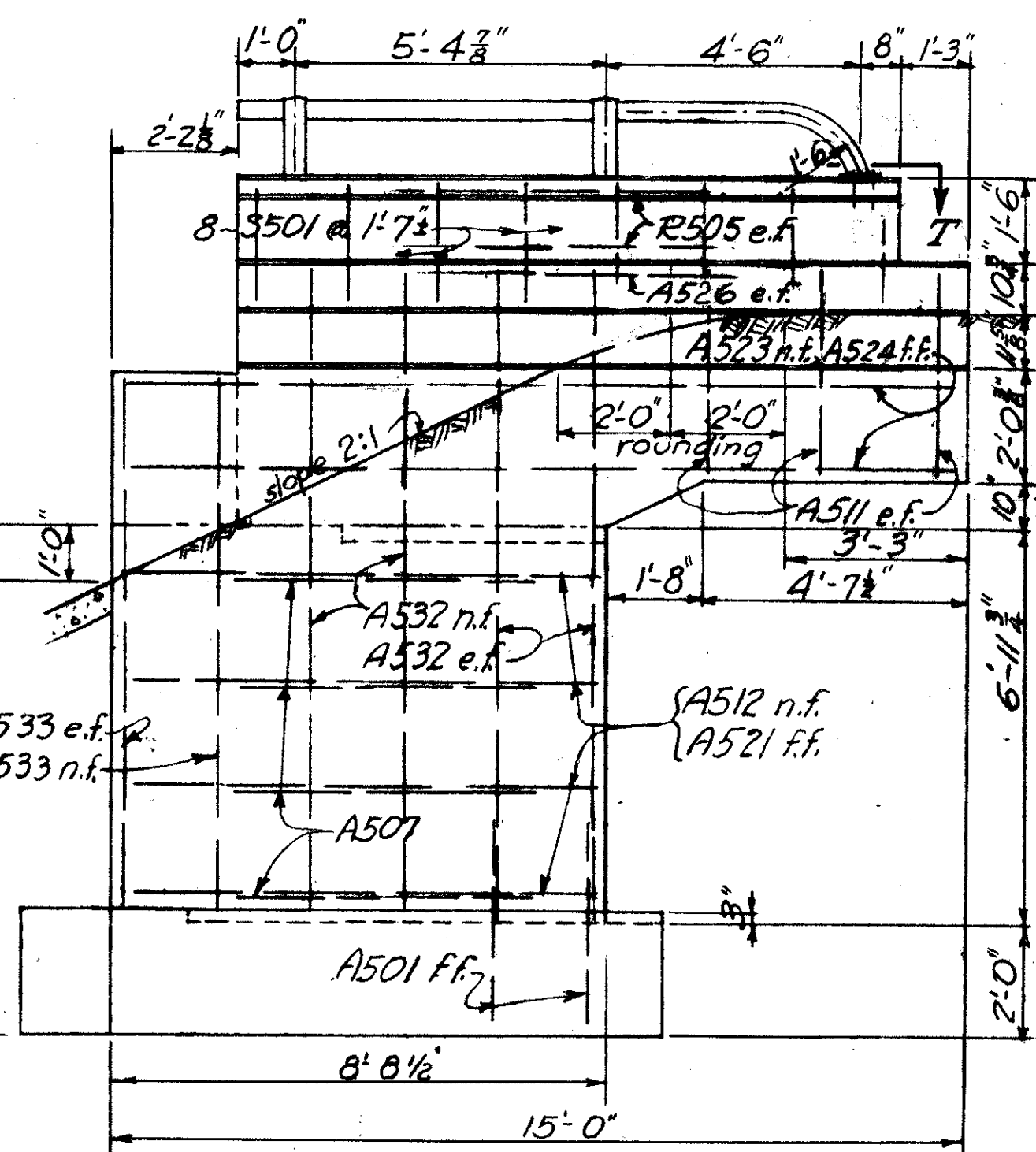
For notes see sheet 192.

BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO.					
EXPRESSWAY OVER GREENLAWN AVE. BR. NO. FRA-62-1286					
SOUTHEAST ABUTMENT DETAILS					
FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
lso	lso	D.B.B.	C.K.D.	4/18/10-9-57	

For detail of plate
See section T-T
on sheet
No. 193



VIEW I-I



VIEW J-J



For details of railing and parapet, see Std. Drwg. AR-1-57.
For end finish details see sheets 199 & 189.
For connection of guard rail to parapet, see sheet 189
SECTIONS C-C and D-D are as shown on sheet 192
except for bar marks.
For additional notes see sheet N^o 192

n.f. = near face.
f.f. = far face.
e.f. = each face.

NORTHEAST ABUTMENT DETAILS

DESIGNED <i>LSH</i>	DRAWN <i>LSH</i>	TRACED D.B.B.	CHECKED C.K.D.	REVIEWED DATE <i>HY 10-9-57</i>	REVISED
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SECTION B-B

3'-0"

58 pcs @ 5 1/2"

P501 @ 1'-6"

6-P601 @ 5 1/2"

3"

3/4"

A

rubber preformed filler. See 44-0-2

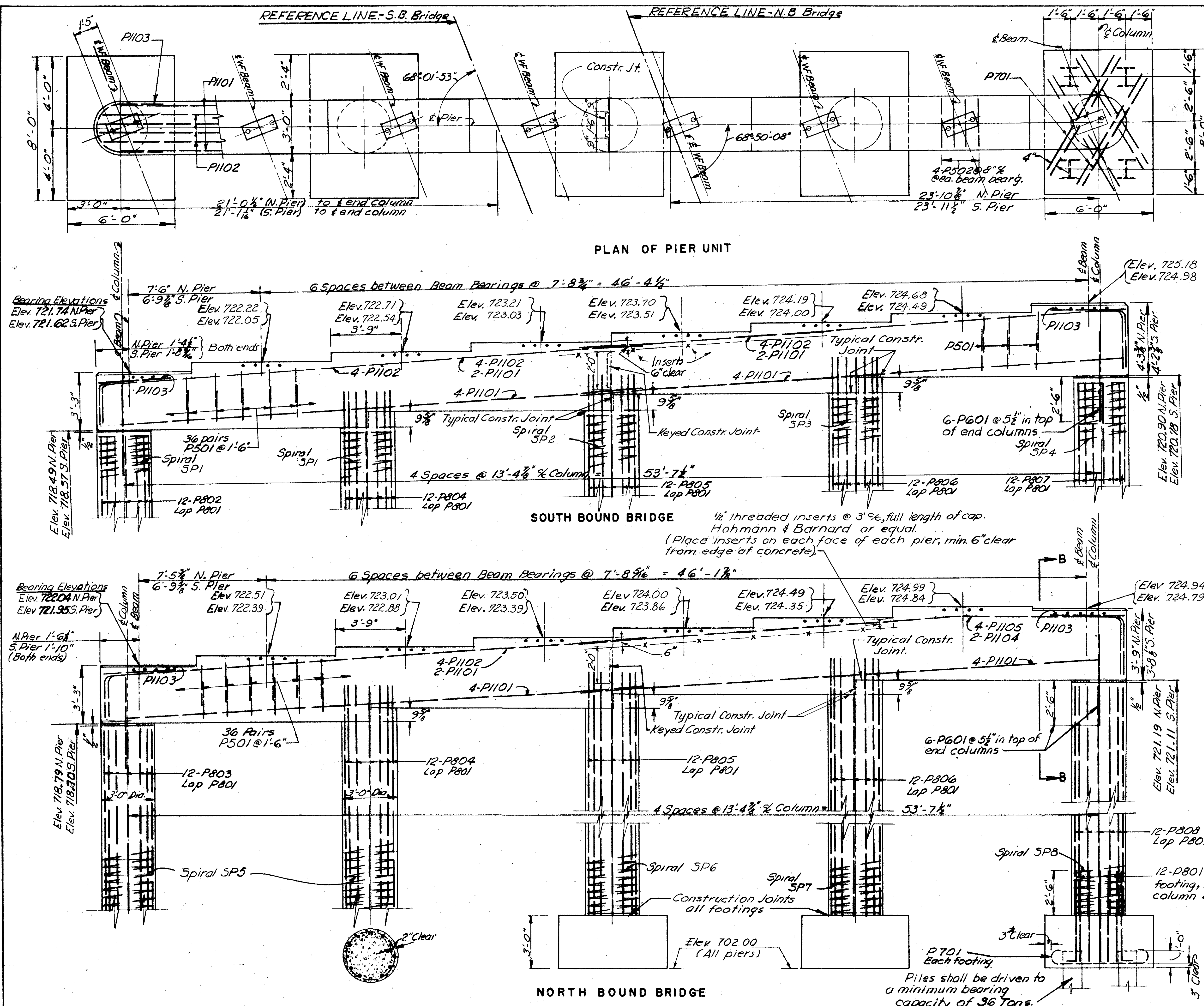
1/2" gray sponge rubber performed expansion joint filler, Sec. M-10.02 Type I. (Outside Columns only)

SECTION A-A

ELECTRICAL GROUNDS: A solid No. 6 gage bare copper wire electrical ground shall be embedded in the concrete in the East column of the South pier of each bridge. The lower end of the wire shall be brazed to one of the 12" steel piles, and the upper end shall extend sufficiently above the top of the concrete to provide for a suitable splice and extension for connection to superstructure. This connection shall be a number 6 gage, bare, stranded, tinned copper wire brazed or bolted to a steel beam flange and to the solid copper wire in the pier shaft. At the base of the lamp standards there shall be a tinned No. 6 gage copper wire brazed to one anchor bolt and the other end brazed or bolted to the outside steel beam flange.

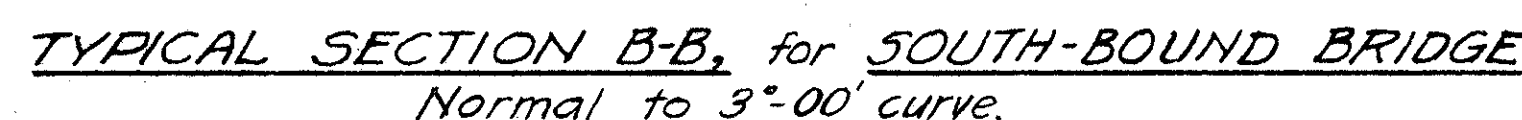
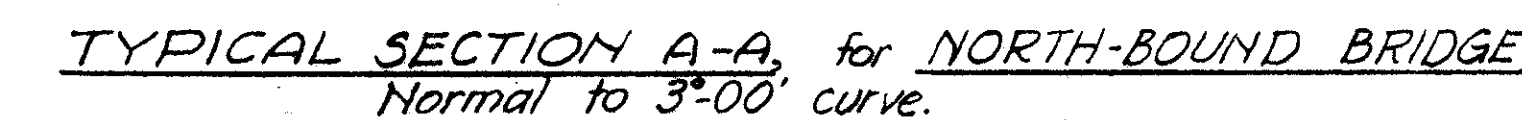
Payment for electrical grounds is included in the lump sum bid for Item S-25, "Electrical lighting system".

FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISION
<i>[Signature]</i>	<i>[Signature]</i>	D.B.B.	C.K.D.	4/10-9-57	



197
251

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



For location of Sections A-A and B-B see sheet 198.
For drainage details see sheet 200.
For plan of main reinforcing see sheet 199.

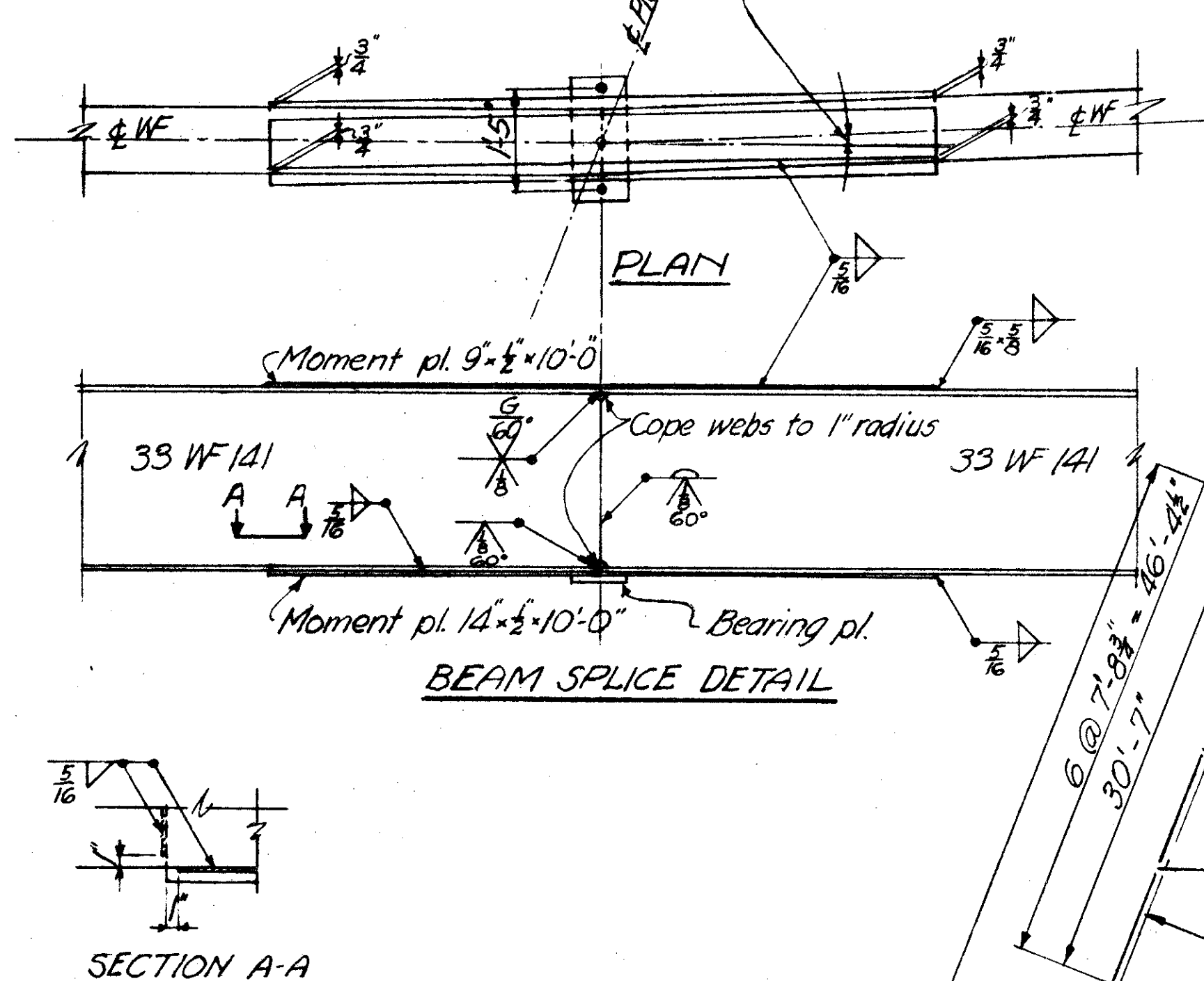
BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

**EXPRESSWAY OVER GREENLAWN AVE.
BR. NO. FRA-62-1286
SUPERSTRUCTURE
CROSS-SECTIONS**

FRANKLIN COUNTY

DESIGNED <i>hld</i>	DRAWN <i>hld</i>	TRACED D.S.B.	CHECKED C.K.D.	REVIEWED DATE APR 10-9-57	REVISED
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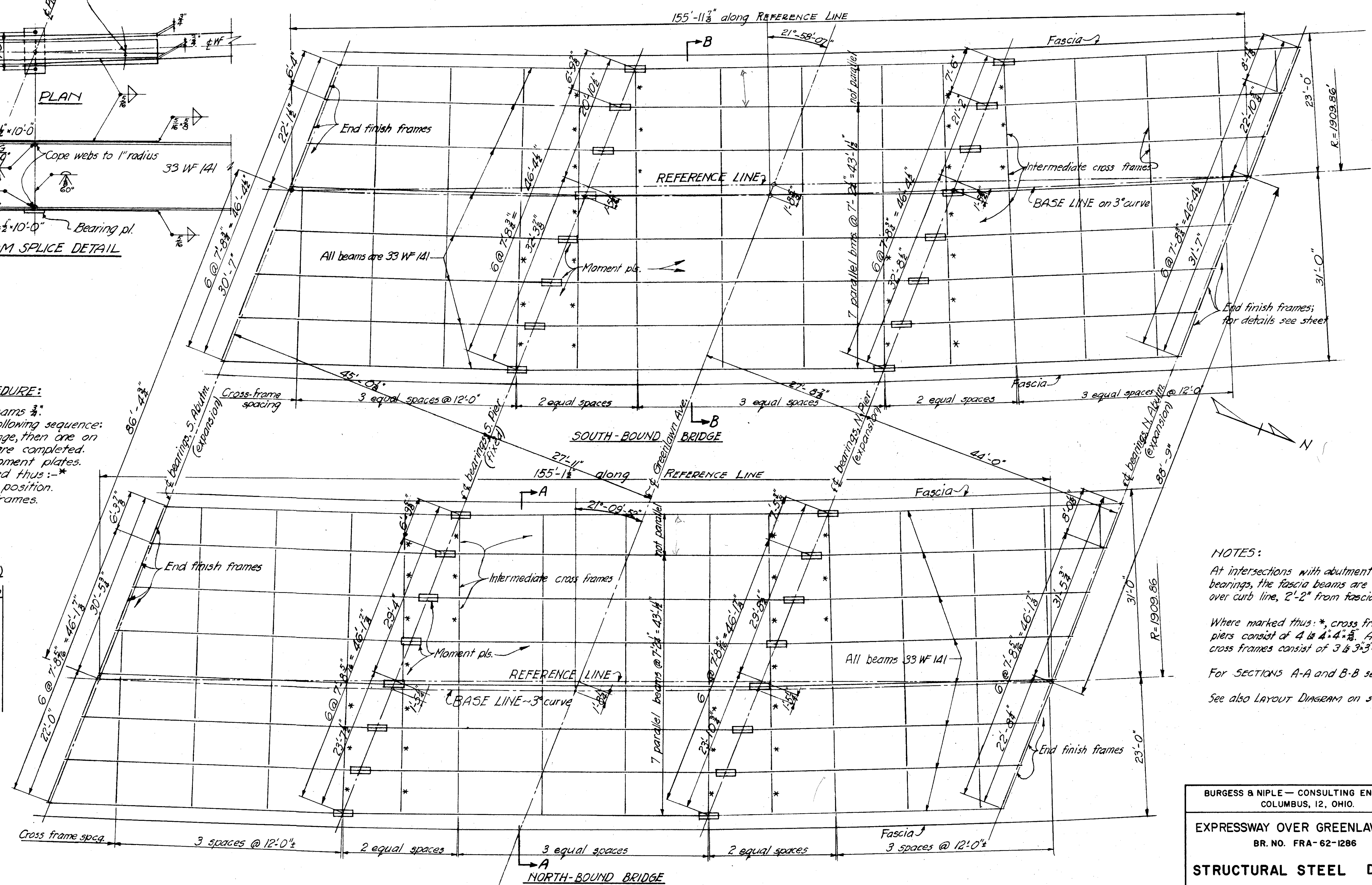
1'-38'-26" for West fascia beam intersections, both bridges.
1'-35'-32" for all other beam intersections.



- BEAM SPlice WELDING PROCEDURE:**
1. Raise abutment ends of beams $\frac{3}{8}$ ".
 2. Butt-weld beams using the following sequence:
make one pass on each flange, then one on the web; repeat until welds are completed.
 3. Weld the bottom and top moment plates.
 4. Weld cross frames marked thus: *
 5. Lower beam ends to final position.
 6. Weld remaining cross frames.

LENGTH of BEAMS (c/c bearings)

	S. BOUND	N. BOUND
South Span		
W. fascia beam	48'-1"	47'-10 1/2"
All other beams	47'-10 1/2"	47'-8 3/4"
Middle Span		
W. fascia beam	60'-1 1/2"	59'-9 3/4"
All other beams	59'-10 1/2"	59'-7 1/2"
North Span		
W. fascia beam	48'-1 1/2"	47'-10 1/2"
All other beams	47'-10 1/2"	47'-7 1/2"



NOTES:

At intersections with abutment and pier bearings, the fascia beams are centered over curb line, 2'-2" from fascia.

Where marked thus: *, cross frames at piers consist of 4 @ 4'-4 1/2". All other cross frames consist of 3 @ 3'-3 1/2".

For SECTIONS A-A and B-B see sheet 197.

See also LAYOUT DIAGRAM on sheet 191.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

EXPRESSWAY OVER GREENLAWN AVE.
BR. NO. FRA-62-1286

STRUCTURAL STEEL DETAILS

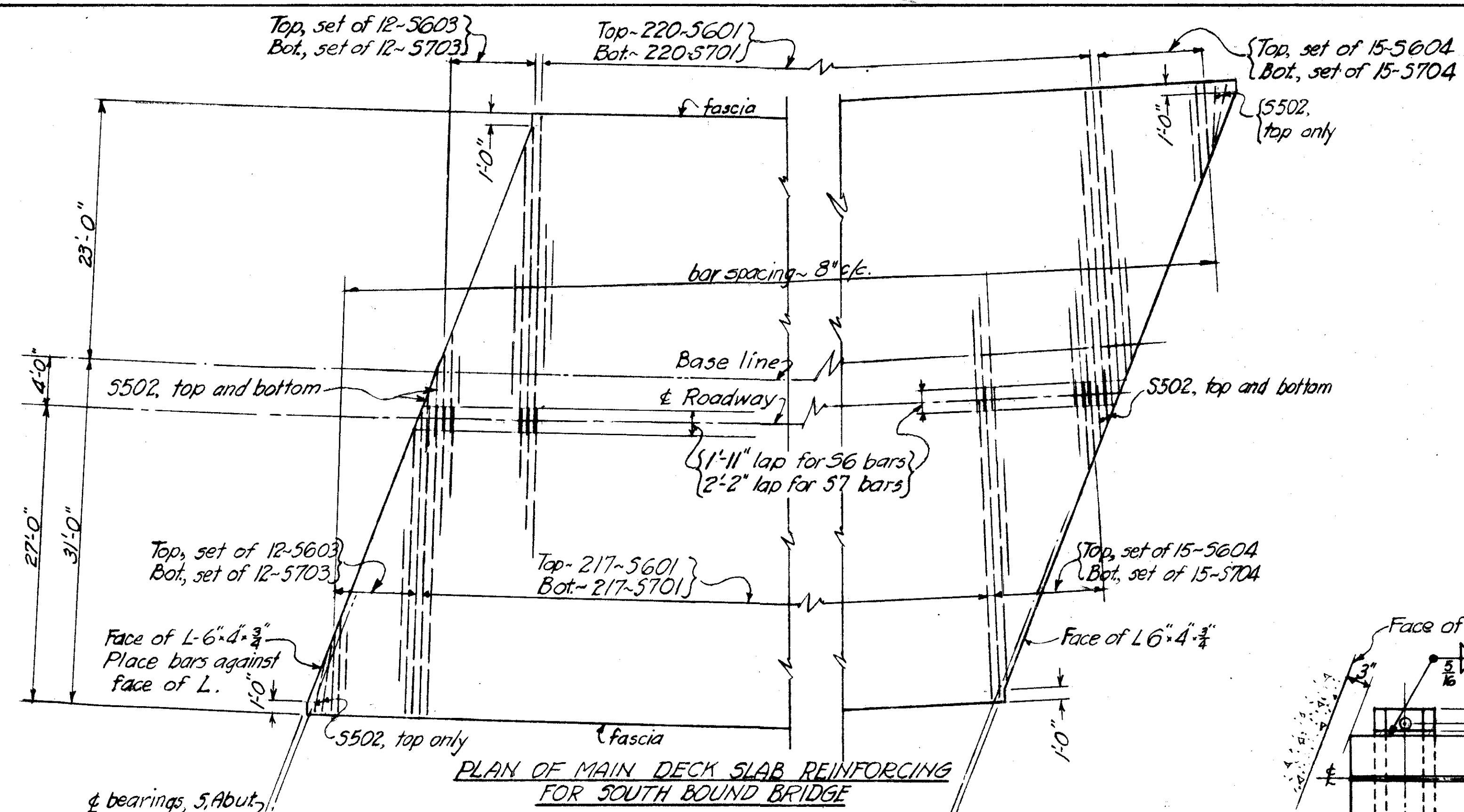
FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
B.L.D.	B.L.D.	D.S.B.	C.K.D.	4/18/10-9-57	

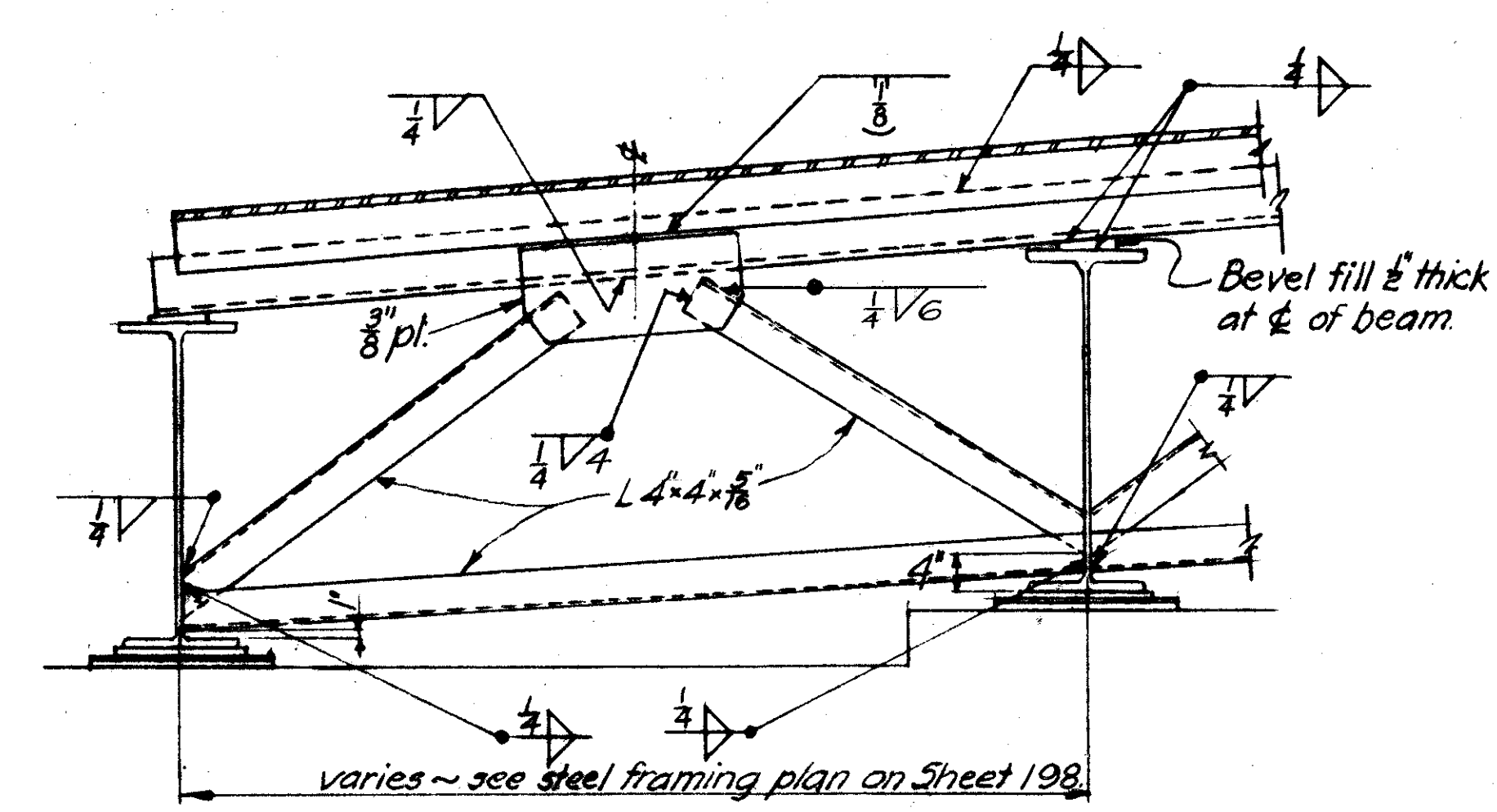
STRUCTURAL STEEL FRAMING PLAN

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



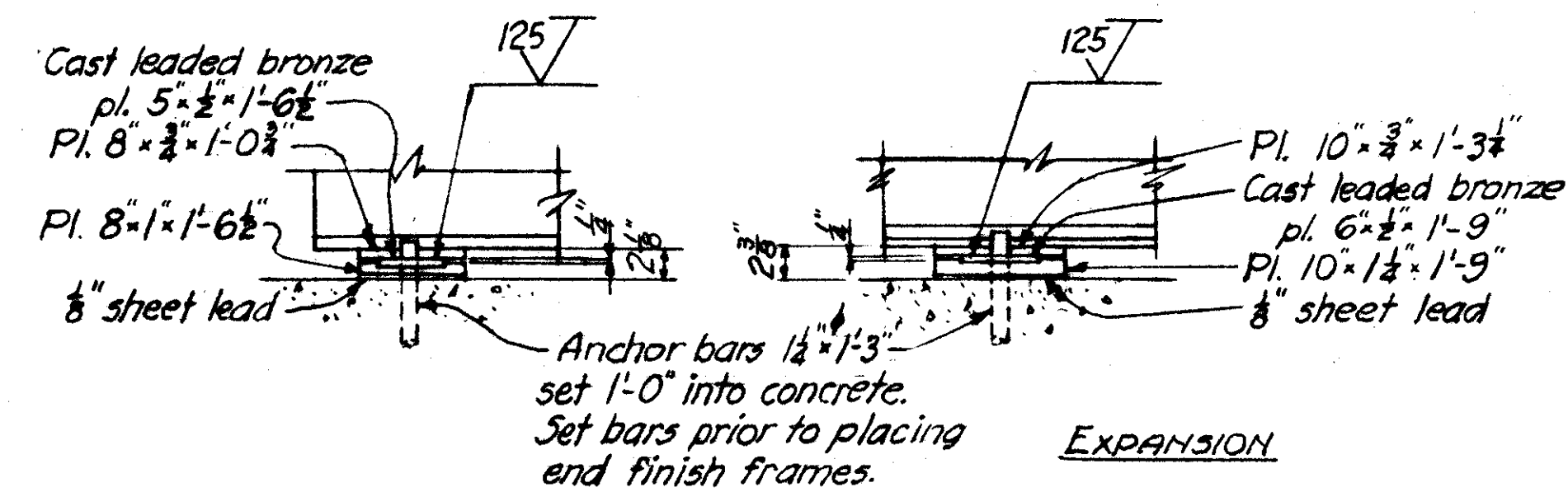
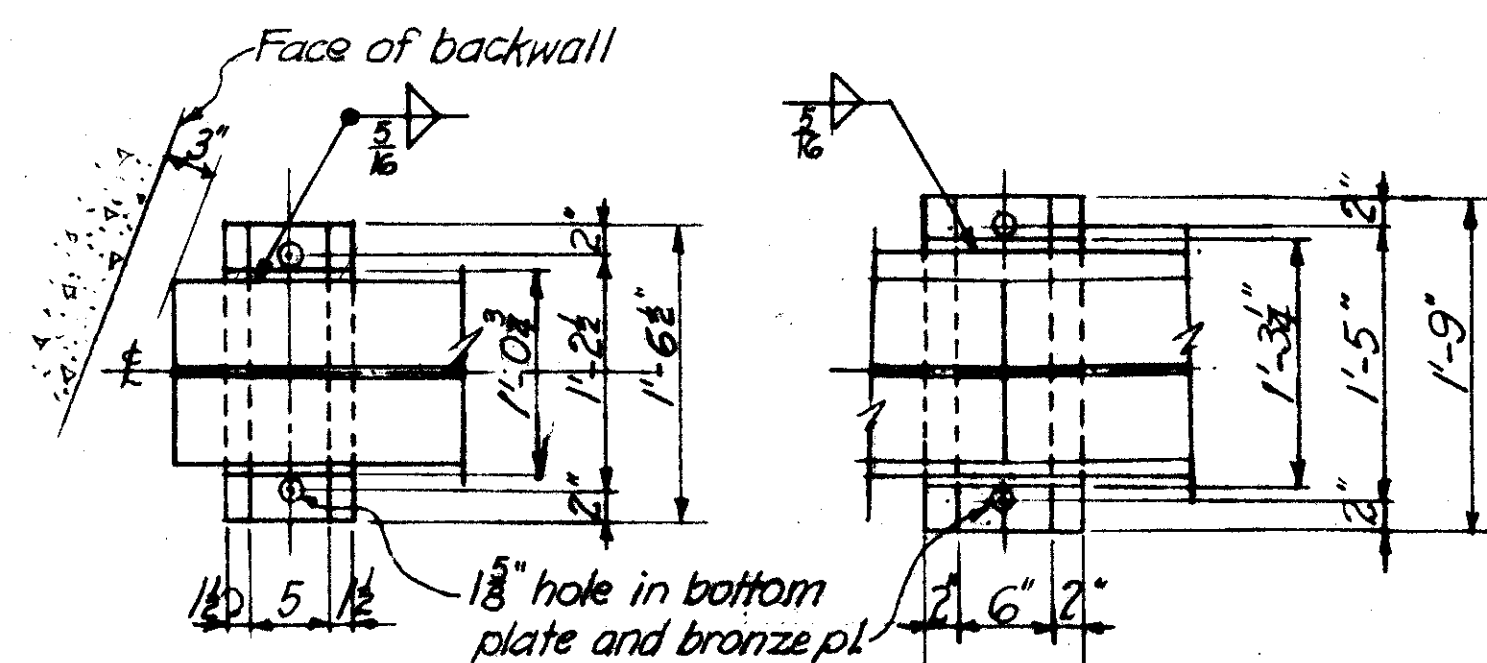
**PLAN OF MAIN DECK SLAB REINFORCING
FOR SOUTH BOUND BRIDGE**



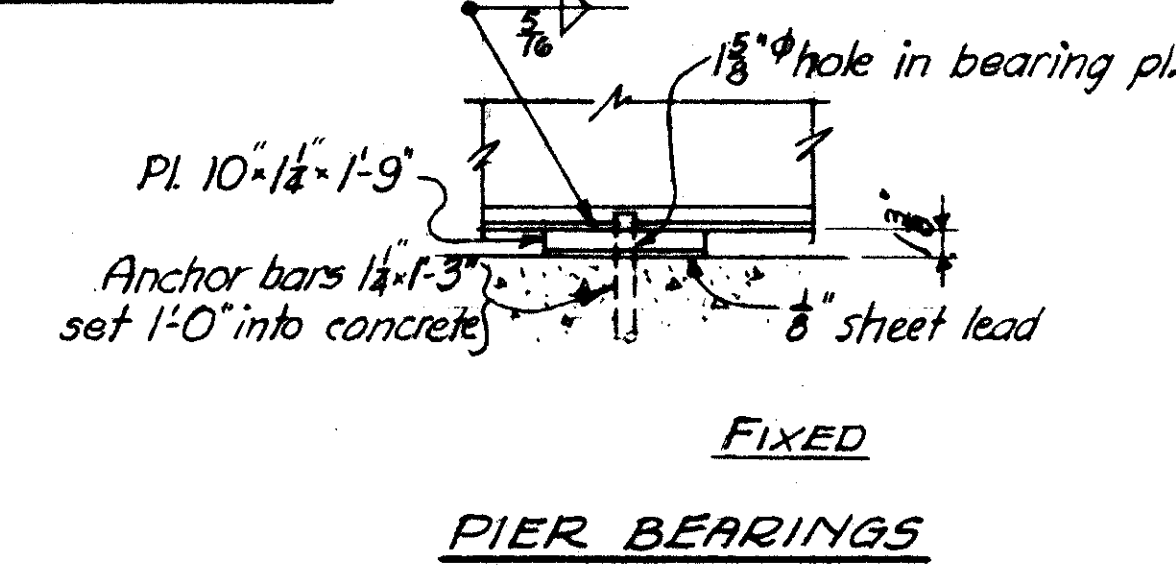
**SECTION A-A, SHEET NO. 189.
END-FINISH FRAME DETAILS**

BEAM CAMBER

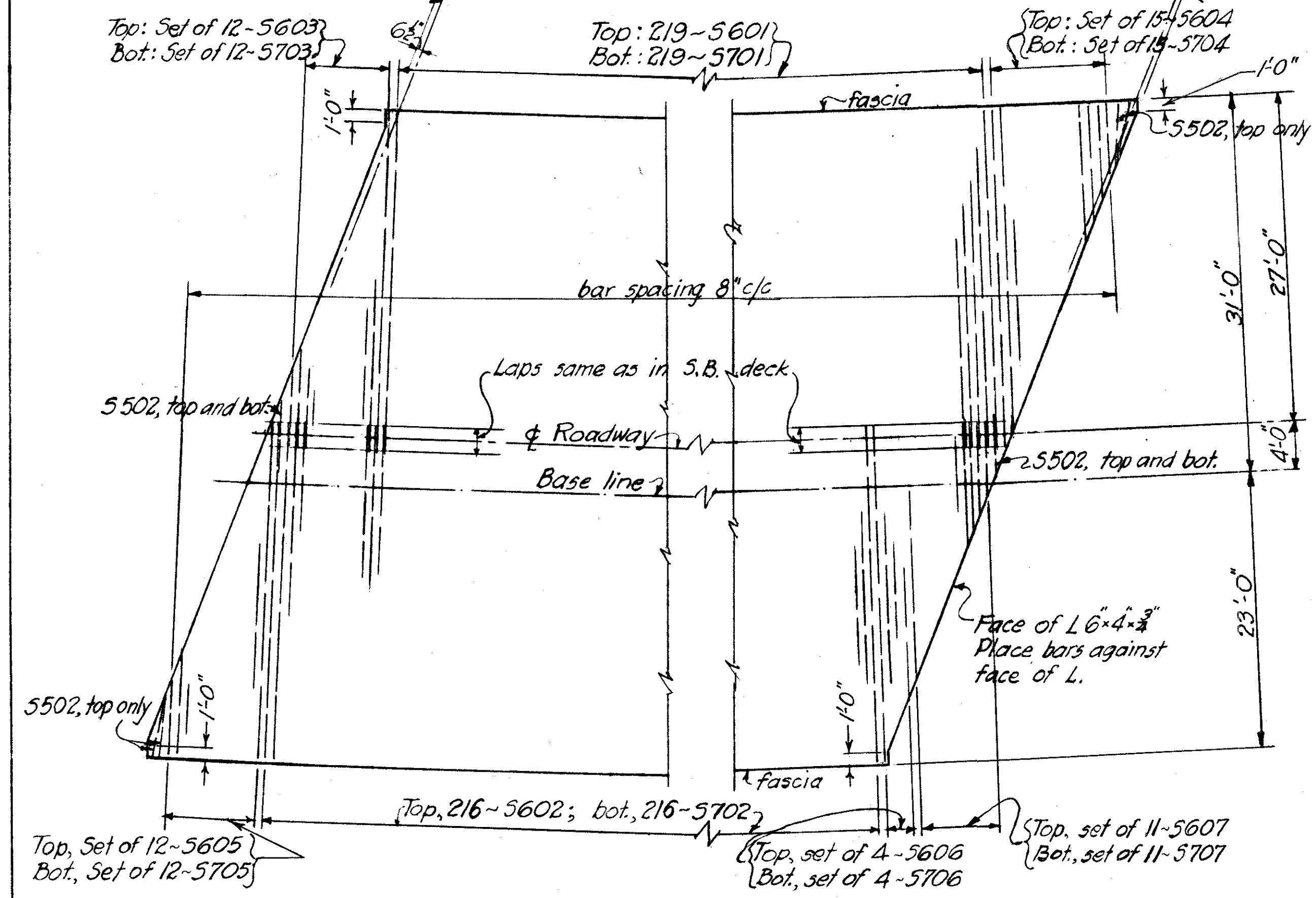
	Outside Beams		Inside Beams	
	End	Ctr	End	Ctr
	Span	Span	Span	Span
Deflection due to wt. of steel	1/16	1/16	1/16	1/16
Deflection due to remaining DL	1/4	1/4	3/16	3/16
Convexity reqd. for vertical curve	1/4	3/8	1/4	3/8
Sum	3/16	1/16	1/2	5/8
Required Camber	0	0	0	0



ABUTMENT BEARINGS



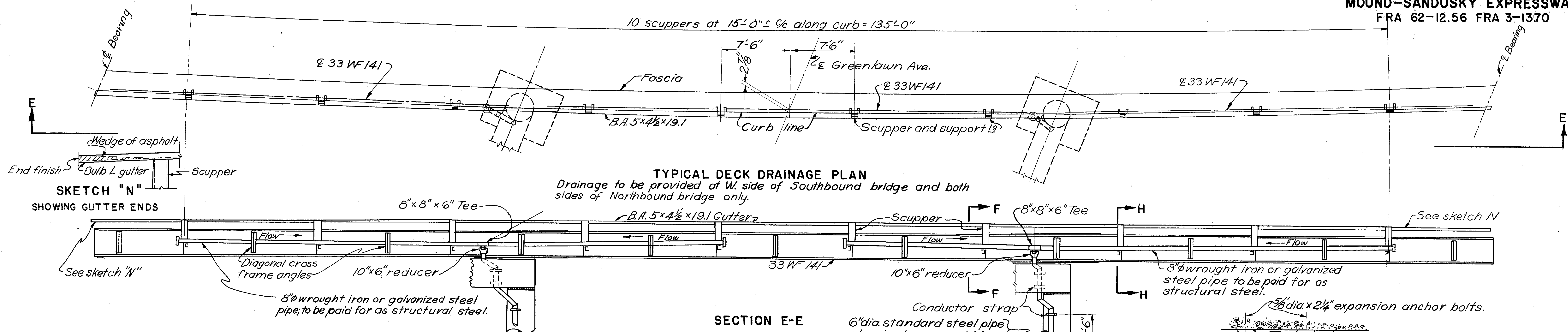
**FIXED
PIER BEARINGS**



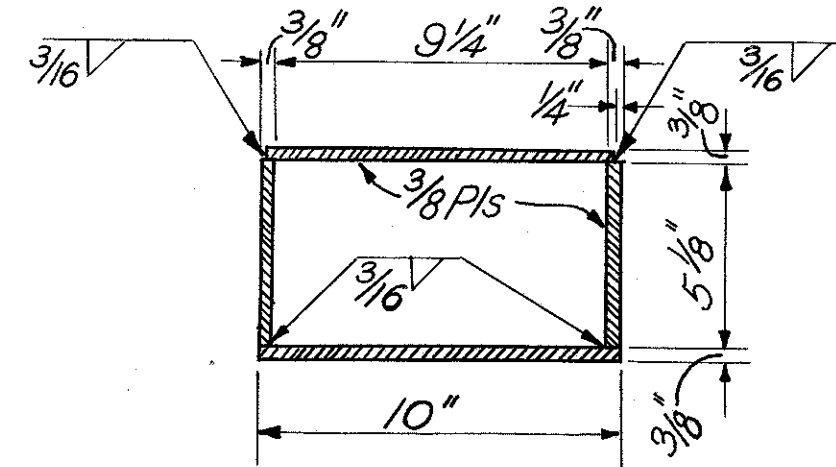
**PLAN OF DECK SLAB REINFORCING
FOR NORTH BOUND BRIDGE**

NOTE! - Place bars approximately perpendicular to beams.

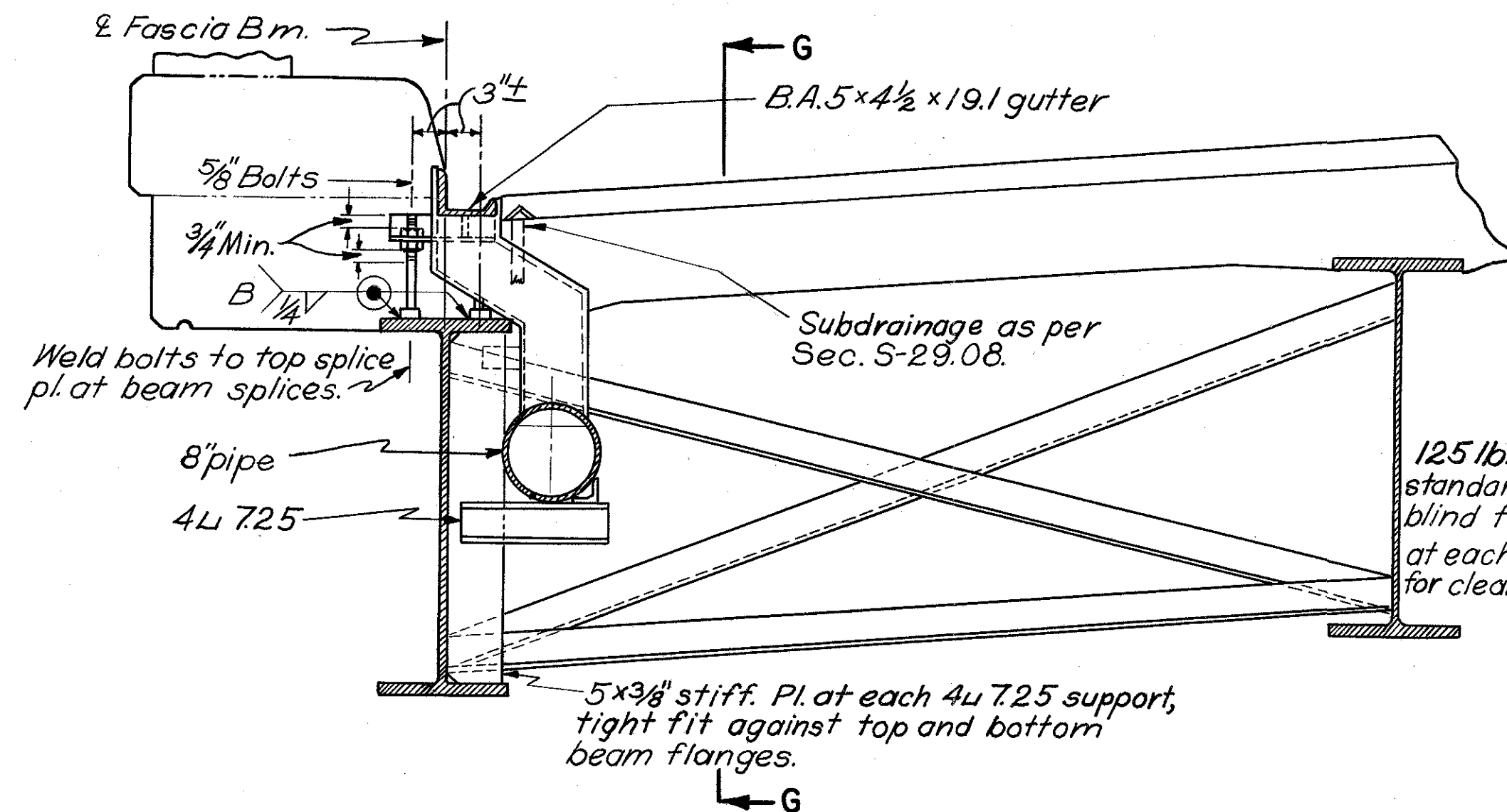
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70



SKETCH "N"
SHOWING GUTTER ENDS

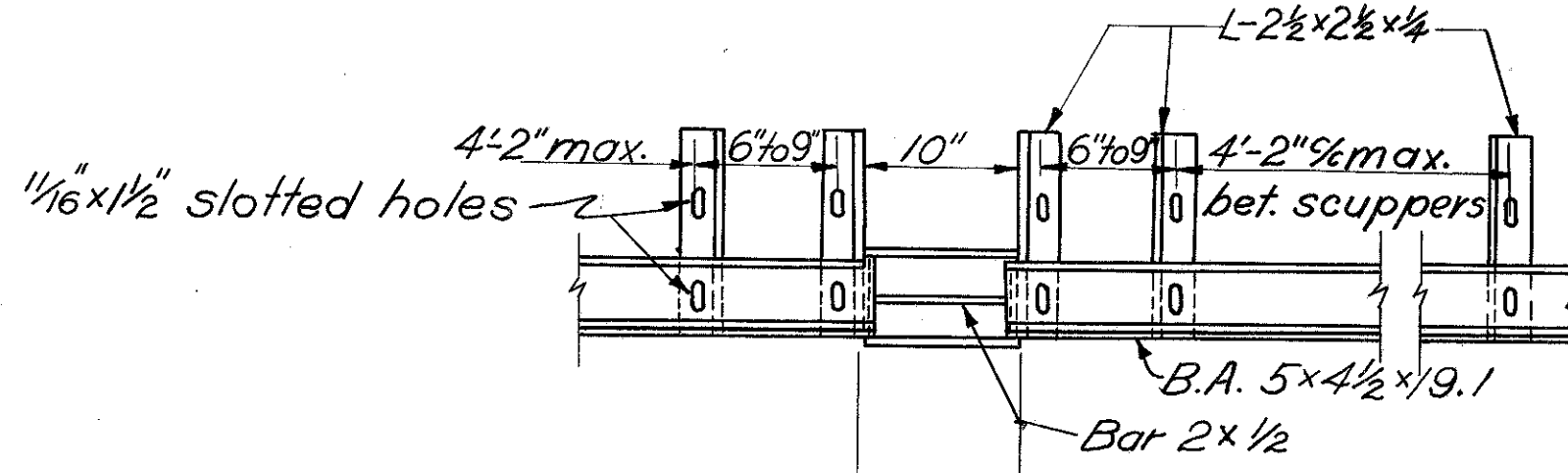


SECTION I-I

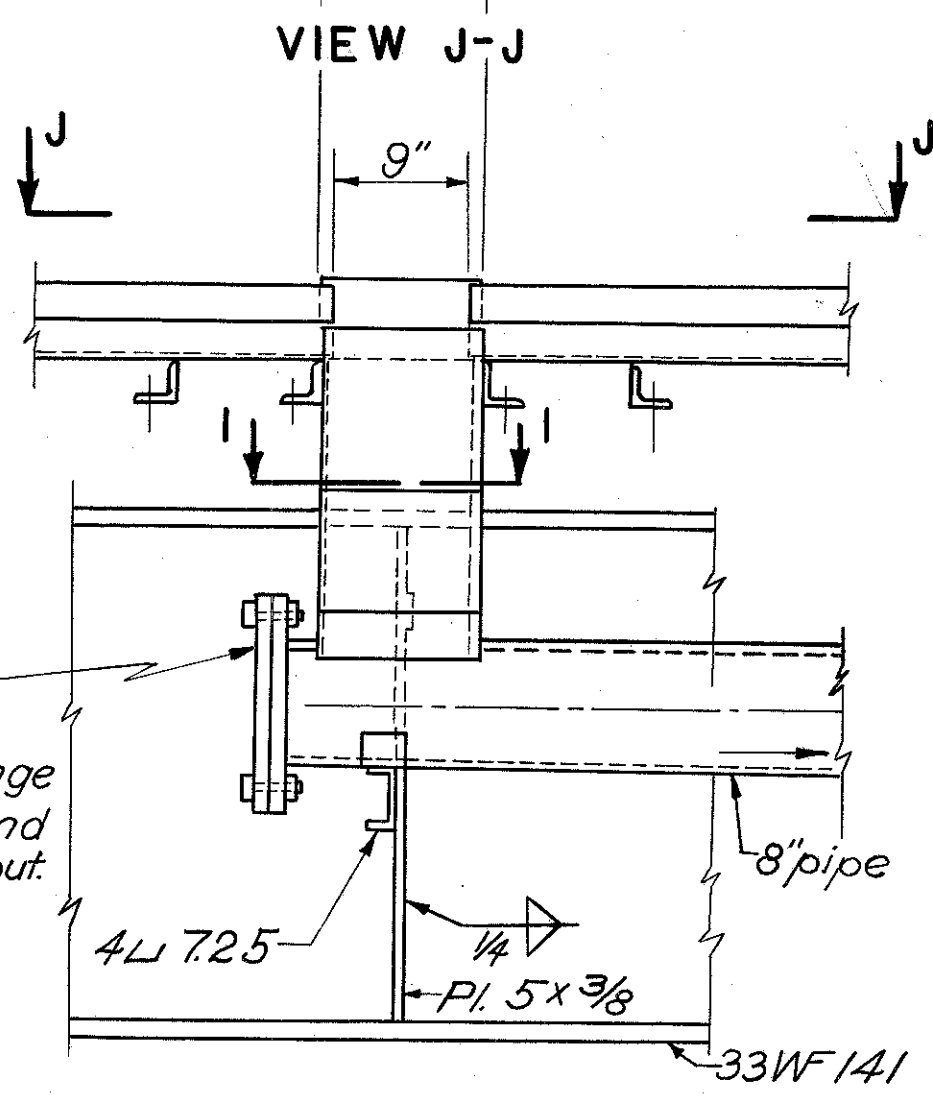


SECTION F-F

Gutters shall be accurately adjusted for alignment and grade, with allowances for dead load deflection, before concrete is placed.

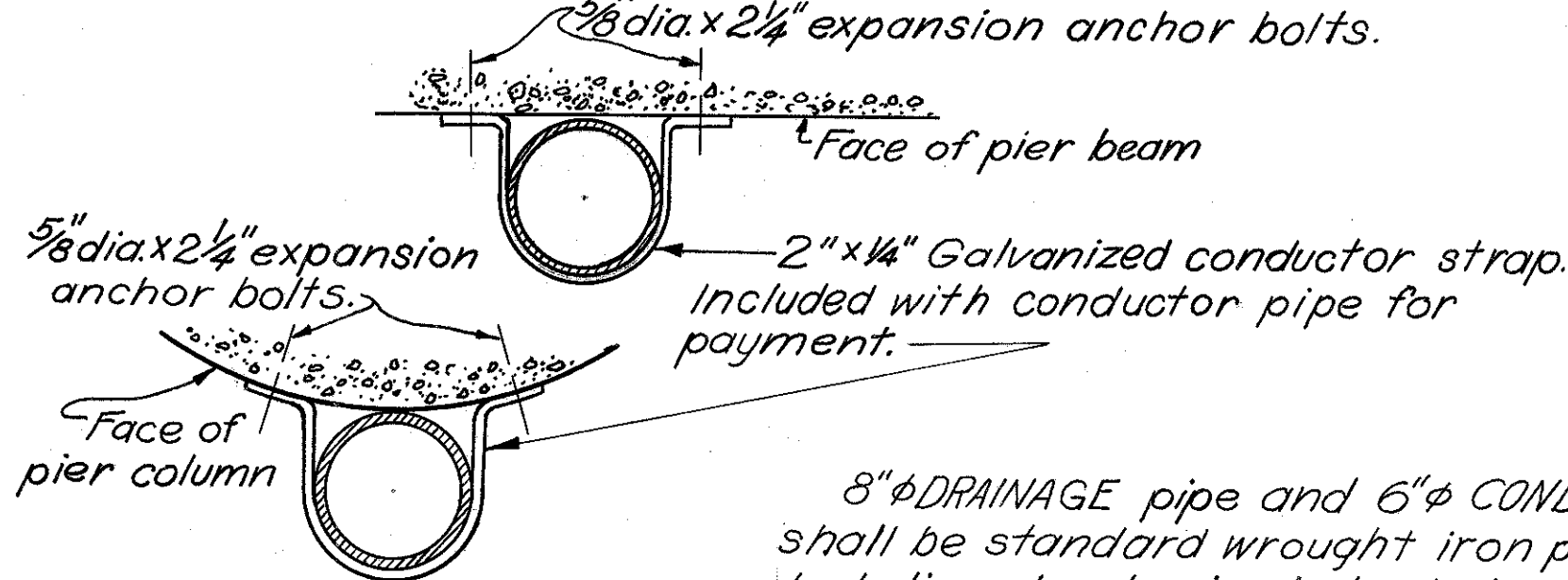
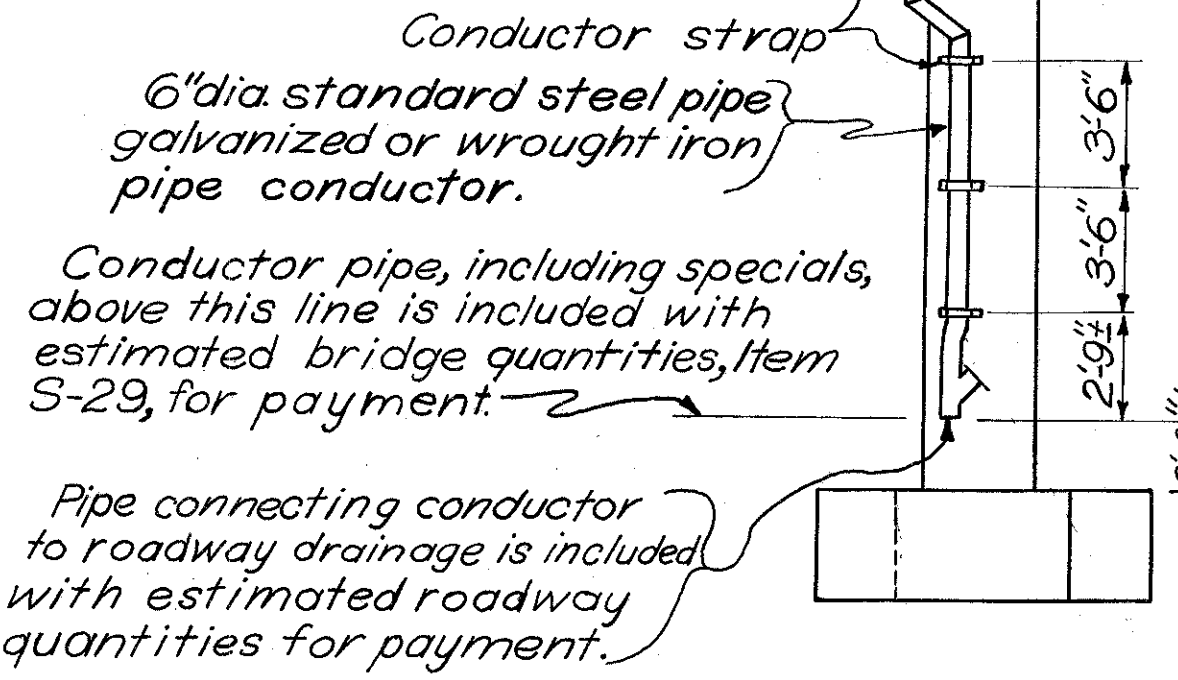


VIEW J-J



SECTION G-G

SECTION E-E

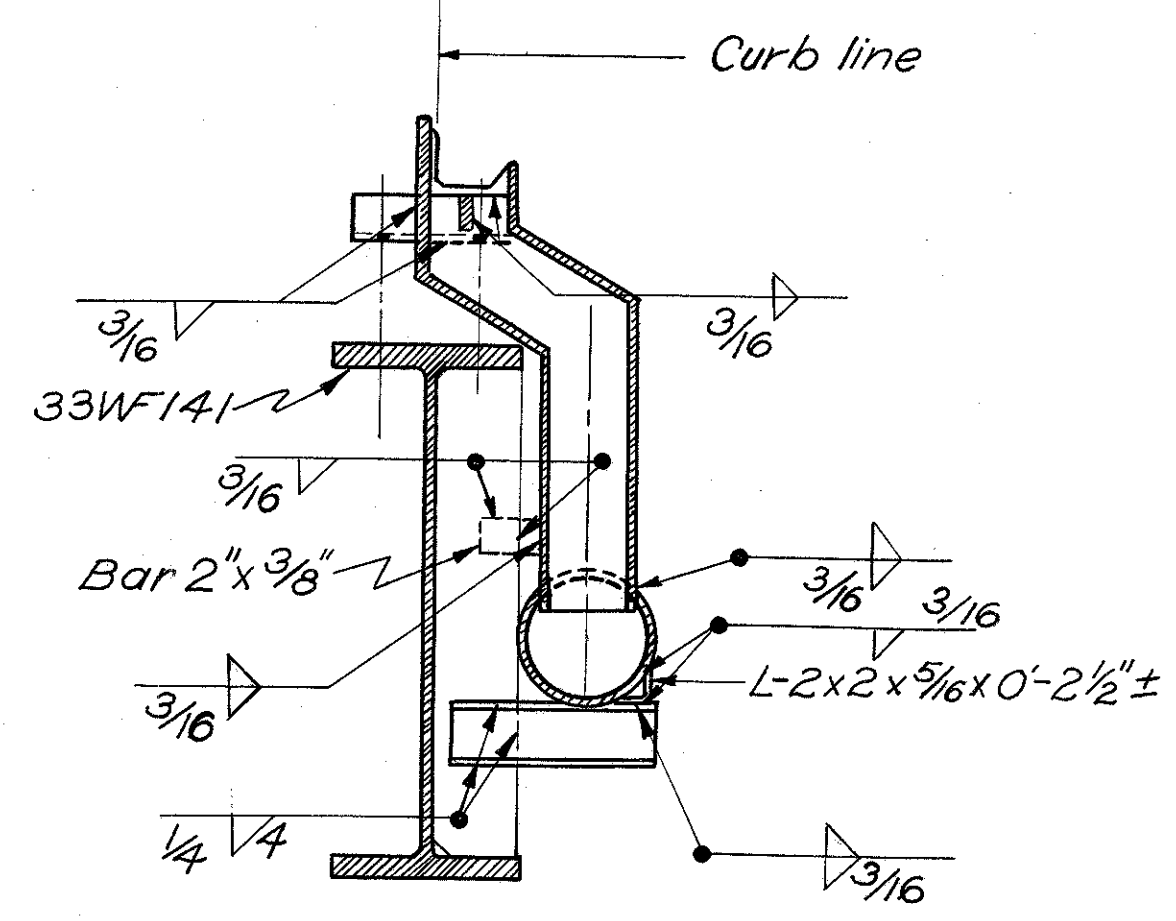


DETAILS OF CONDUCTOR STRAPS

8" DRAINAGE pipe and 6" CONDUCTOR shall be standard wrought iron pipe or hot dipped galvanized steel pipe. Joints shall be made by welding or by Victaulic couplings or by an approved equivalent. Any welding shall be done before galvanizing. Straps and bolts for mounting the conductors shall be galvanized steel, but such galvanizing as called for in Sec. M-10.30 will be considered sufficient.

The low points of the 8" pipe shall be as low, and the high points as high, as the space between crossframe angles permits.

The 8" drainage pipe, and fittings are included with the structural steel for payment.



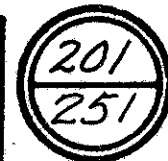
SECTION H-H
SHOWING SCUPPER AND 8" PIPE SECTION NEAR LOW END.

8" pipe shall fit tight against the 5" x 3/8" stiffener plate.

BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO.					
EXPRESSWAY OVER GREENLAWN AVE. BR. NO. FRA-62-1286					
DRAINAGE DETAILS					
FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
W.D.	W.D.	S.R.F.	C.R.D.	4/18/10-9-57	

REINFORCING STEEL LIST (BOTH BRIDGES)

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

Mark	Total No.	Length	Weight	Shape	S.W. Abut.	S.E. Abut.	N.W. Abut.	N.E. Abut.
ABUTMENTS								
A601	214	13'- 0"	4,179	B	53	53	54	54
A501	20	4'- 1"	85	B	5	5	5	5
A502	14	11'- 8"	171	S	8		6	
A503	4	9'- 8"	40	S	1		3	
A504	2	6'-11"	14	S	1		1	
A505	44	6'- 5"	295	S	13	14	8	9
A506	16	5'-11"	99	S	4	4	4	4
A507	34	5'- 5"	192	S	9	9	8	8
A508	14	4'-11"	72	S	4	4	3	3
A509	14	4'- 5"	65	S	3	3	4	4
A510	16	3'-11"	65	S	4	4	4	4
A511	62	3'- 6"	226	S	15	15	16	16
A512	56	8'- 4"	487	S	13	13	15	15
A513	1	9'- 5"	10	B	1			
A514	17	8'-11"	158	B	4	5	4	4
A515	27	8'- 5"	237	B	4	4	15	4
A516	16	7'-11"	132	B	4	4	4	4
A517	14	7'- 5"	108	B	4	4	3	3
A518	14	6'-11"	101	B	3	3	4	4
A519	16	6'- 5"	107	B	4	4	4	4
A520	12	6'- 0"	75	B	2	2	4	4
A521	32	4'- 0"	134	S	8	8	8	8
A522	36	8'- 0"	300	S	10	10	8	8
A523	16	14'- 8"	245	S	4	4	4	4
A524	16	10'-10"	181	S	4	4	4	4
A525	8	12'-10"	107	S*	2	2	2	2
A526	8	12'- 6"	104	S*	2	2	2	2
A527	8	26'- 3"	219	S	2	2	2	2
A528	10	27'- 3"	284	S	5	5		
A529	30	29'- 0"	907	S**	15	15		
A530	4	15'- 0"	63	S	2	2		
A531	8	10'- 6"	88	S	2	2	2	2
A532	14	11'- 2"	163	S		8		6
A533	4	9'- 2"	38	S		1		3
A534	10	28'- 3"	295	S**			5	5
A535	30	29'-10"	934	S			15	15
A536	4	13'- 6"	56	S			2	2
A401	128	5'- 2"	442	B	32	32	32	32
S501	66	4'- 9"	327	B	17	17	16	16

*To be bent in field

** 2 bars to be bent in field

Mark	No.	Length	Weight	Shape
SUPERSTRUCTURE				
S701	656	27'-0"	36,203	S
S702	216	27'-0"	11,920	B
S703	3 sets)	Vary uniformly by)	1,180	S
	of 12)	1'-11" steps from)		
		26'-7" to 5'-6")		
S704	3 sets)	Vary uniformly by)	1,495	S
	of 15)	1'-6" steps from)		
		26'-9" to 5'-9")		
S705	1 set)	Vary uniformly by)	393	B
	of 12)	1'-11" steps from)		
		26'-7" to 5'-6")		
S706	1 set)	Vary uniformly by)	200	B
	of 4)	1'-6" steps from)		
		26'-9" to 22'-3")		
S707	1 set)	Vary uniformly by)	298	S
	of 11)	1'-6" steps from)		
		20'-9" to 5'-9")		
S601	656	27'-9"	27,342	S
S602	216	27'-9"	9,003	B
S603	3 sets)	Vary uniformly by)	904	S
	of 12)	1'-11" steps from)		
		27'-3" to 6'-2")		
S604	3 sets)	Vary uniformly by)	1,143	S
	of 15)	1'-6" steps from)		
		27'-5" to 6'-5")		
S605	1 set)	Vary uniformly by)	302	B
	of 12)	1'-11" steps from)		
		27'-3" to 6'-4")		
S606	1 set)	Vary uniformly by)	151	B
	of 4)	1'-6" steps from)		
		27'-5" to 22'-11")		
S607	1 set)	Vary uniformly by)	230	S
	of 11)	1'-6" steps from)		
		21'-5" to 6'-5")		
S608	930	33'-0"	46,096	S
S609	176	24'-0"	6,344	S
S501	424	4'-9"	2,101	B
S502	20	5'-0"	104	S
S590	6	2'-2"	14	S
S591	6	1'-6"	10	S
S592	6	3'-5"	22	B
S594	16	5'-0"	84	S
S596	4	3'-1"	12	B
S597	6	4'-11"	30	B
S598	4	4'-7"	20	B
S401	420	4'-9"	1,333	B
S402	420	2'-11"	818	B

SPIRALS

Mark	No.	Size	Core Dia.	Length	Pitch	No. of Turns	No. of Spacers	Weight
SP1	4	1/2" ϕ	32"	13'- 2"	4 1/2"	38	4	980
SP2	2	1/2" ϕ	32"	14'-0"	4 1/2"	40	4	520
SP3	2	1/2" ϕ	32"	14'-10"	4 1/2"	42	4	550
SP4	2	1/2" ϕ	32"	15'- 7"	4 1/2"	44	4	574
SP5	4	1/2" ϕ	32"	13'- 6"	4 1/2"	39	4	1,000
SP6	2	1/2" ϕ	32"	14'- 4"	4 1/2"	41	4	530
SP7	2	1/2" ϕ	32"	15'- 1"	4 1/2"	43	4	556
SP8	2	1/2" ϕ	32"	15'-11"	4 1/2"	45	4	590

SPIRAL NOTE

The "Number of Turns" shown in the list for the spirals is the "length" divided by the "pitch" plus 1-1/2 extra turns for top and for bottom of spiral.

Spiral reinforcing shall be of intermediate grade steel, hot rolled, without deformations, conforming in other respects to Item S-4.

Four steel channel, tee, or angle spacers, equally spaced along the periphery of the coil, shall be provided for each spiral. The weight of these spacers, based on 0.68 p.l.f. of spacer, is included in the tabulated weight of the spiral bars.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

EXPRESSWAY OVER GREENLAWN AVE.

BR. NO. FRA-62-1286

REINFORCING STEEL LIST

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVIEWED
<i>hld</i>	<i>hld</i>	VMT	C.K.2	11/10-9-57	

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

REINFORCING STEEL LIST (BOTH BRIDGES)

Mark	No.	Length	Weight	Shape
------	-----	--------	--------	-------

PIERS

P1101	44	28'- 7"	6,682	S
P1102	24	32'- 1"	4,091	B
P1103	8	10'- 8"	453	B
P1104	4	28'- 7"	607	B
P1105	8	32'- 7"	1,385	B

P801	240	5'- 2"	3,311	B
P802	24	13'- 2"	844	S
P803	24	13'- 6"	865	S
P804	48	16'- 2"	2,072	S
P805	48	17'- 0"	2,179	S
P806	48	17'- 9"	2,275	S
P807	24	15'- 7"	999	S
P808	24	15'-11"	1,020	S

P701	160	8'- 8"	2,835	B
------	-----	--------	-------	---

P601	48	5'- 0"	360	S
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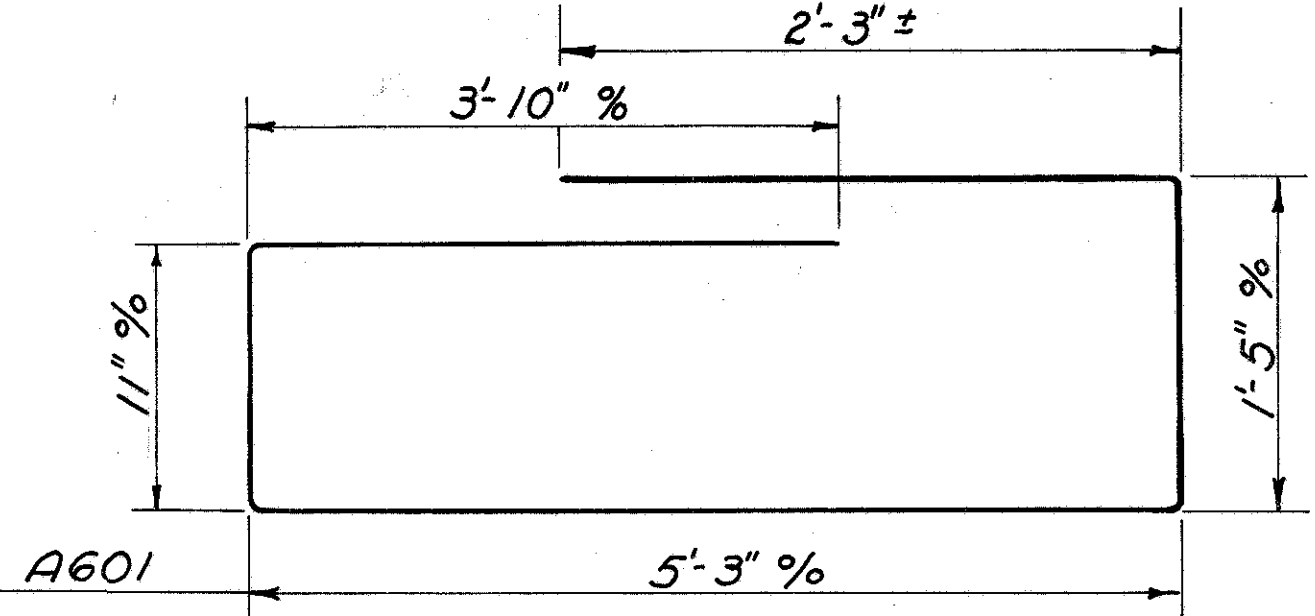
P501	288	6'- 6"	1,952	B
P502	128	4'- 6"	601	B

PARAPET

R501	128	15-11		S
R502	8	13-11	Included	S
R503	16	13-6	with rlg.	S
R504	8	13-2	for pay-	S
R505	16	11-3	ment	S
R506	16	11-7		S

REPLACEMENT BARS

RE1100	1	7'-6"	St.
RE 800	1	6'-6"	St.
RE 700	3	6'-2"	St.
RE 600	4	5'-11"	St.
RE 500	1	5'-7"	St.
RE 400	1	5'-3"	St.
RE SP.	1	5'-3"	Bt.

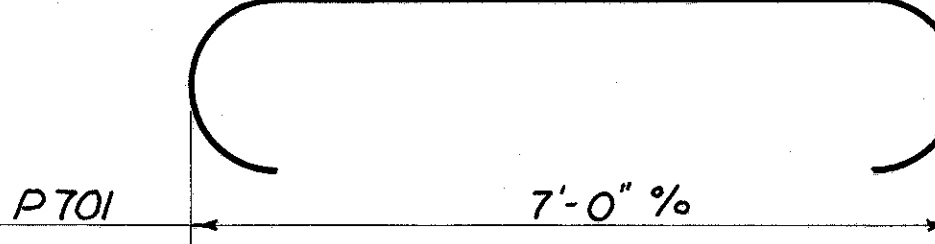
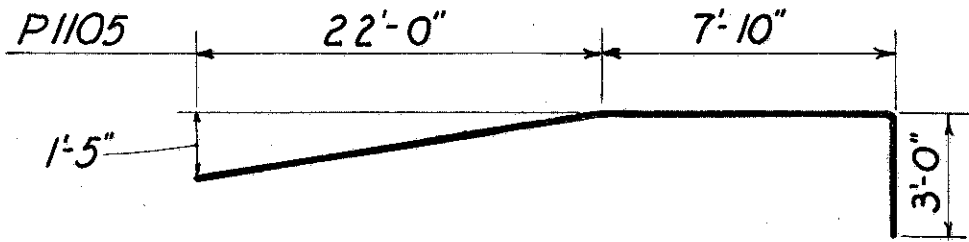
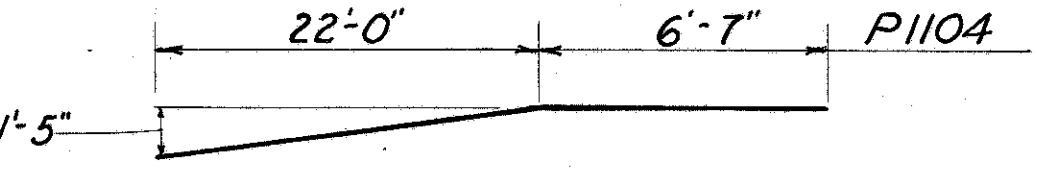
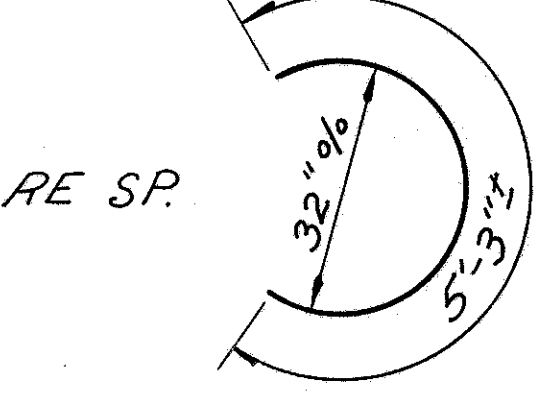


A501	3'- 7"
A513	8'-11"
A514	8'- 5"
A515	7'-11"
A516	7'- 5"
A517	6'-11"
A518	6'- 5"
A519	5'-11"
A520	5'- 6"
P801	5'- 3"
P1102	29'-10"

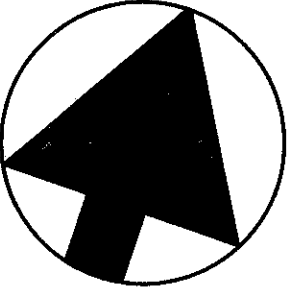
A401	3'- 5" %
S401	1'- 9" %
S402	1'- 9" %
S592	2'- 2" %
S596	1'-10" %
S597	2'- 2" %
S598	1'-10" %
P501	2'- 8" %
P502	2'- 8" %

S702	21'-0"
S705	6'-0"
S706	21'-1"
S602	21'-0"
S605	6'-10"
S606	21'-0"

S501	2'-2" ±
P1103	4'-10" ±

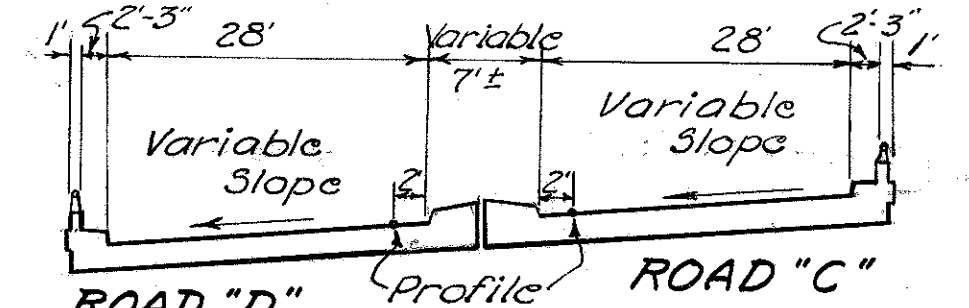


FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-1370



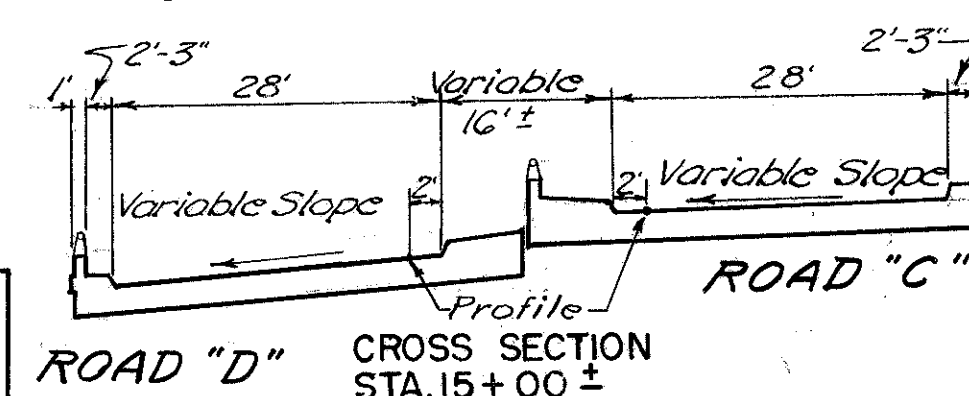
NOTE: Use expansion joints at both abutments on this bridge.

PROPOSED STRUCTURE
TYPE - 4 Span continuous concrete slab with reinforced concrete substructure.
SPAN - 44'-55'-55'-44' bearing
ROADWAY - Variable with 2'-1" Safety Curbs
SKIN - Varies
SURFACE COURSE - Bituminous concrete
APPROACH SLABS - 20' A5-1-54
ALIGNMENT - As shown
SUPERELEVATION - Varies
LOAD FREQUENCY RATING CF 2000 (51), adequate for AASHTO alternate loading.



CROSS SECTION
STA. 13+15
Note: Road "D" is a crest vertical curve on profile. See detail sheet 214.

B.M. $\frac{B4}{12}$ ELEV. 705.695
Axis at south edge of sidewalk, south side of Mound Street, in line with west edge of sidewalk, west side of Sandusky Street extended.



CROSS SECTION
STA. 15+00 ±

For Table of Pavement Elevations, see sheet 205.

BASELINE on ROAD "C"
Curve Data

Δ 28° 01' 32"
D 7° 00'
R 818.51
Lc 150.37
Ts 323.97
Ls 250.00
TS 9+35.02
SC 11+85.02
CS 13+35.39
ST 15+85.39

BASELINE on ROAD "D"
Curve Data

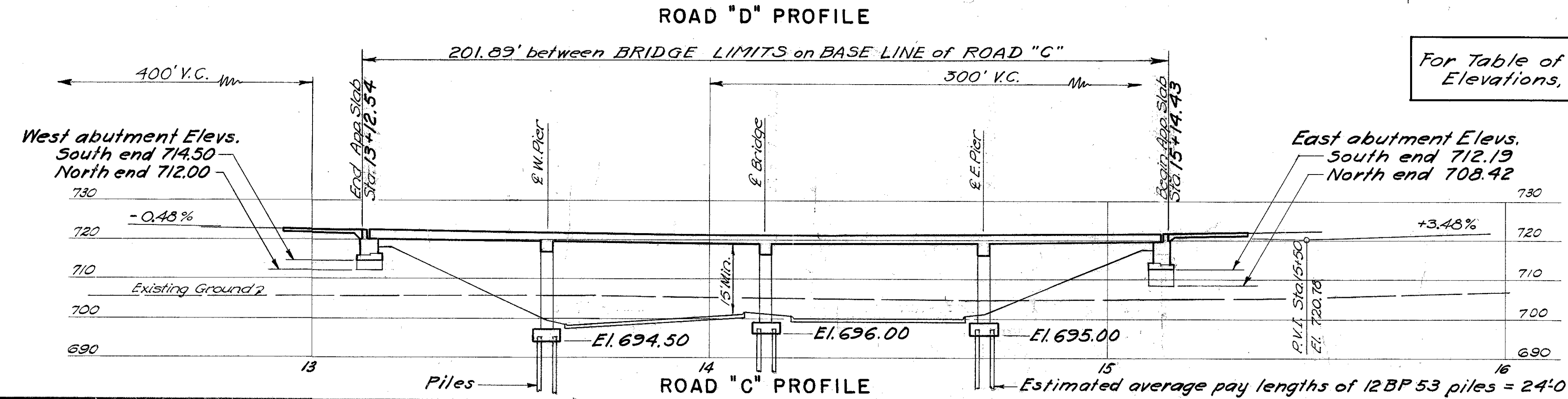
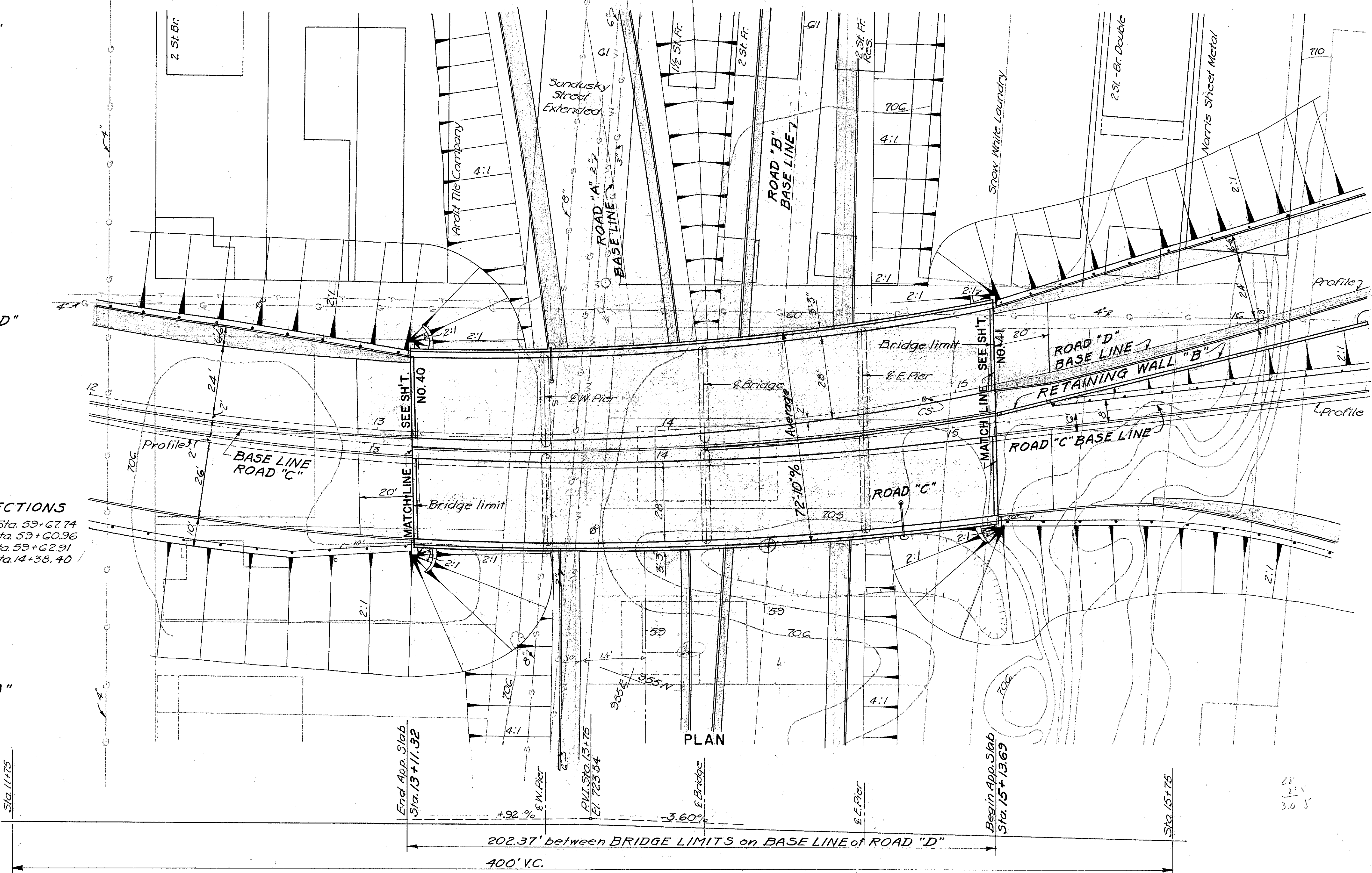
Δ 40° 00' 00"
D 7° 00'
R 818.51
Lc 321.43
Ts 423.97
Ls 250.00
ST 9+18.57
CS 11+68.57
SC 14+90.00
TS 17+40.00

BASELINE INTERSECTIONS

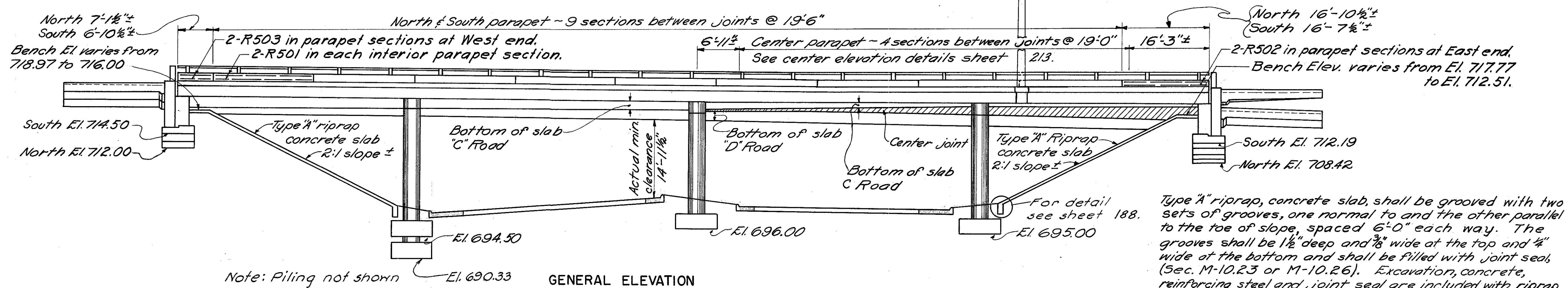
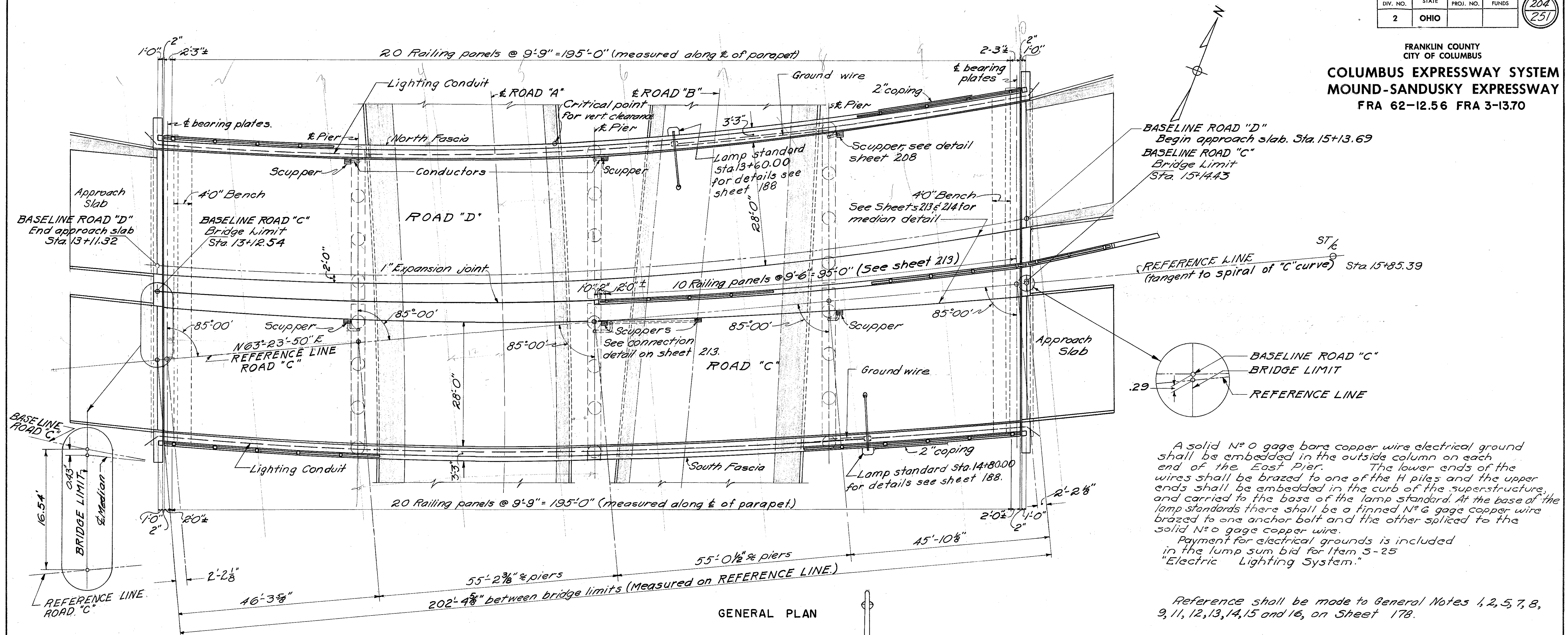
Road "D" Sta. 13+90.74 • Road "A" Sta. 59+67.74
Road "C" Sta. 13+92.30 • Road "A" Sta. 59+60.96
Road "D" Sta. 14+37.95 • Road "B" Sta. 59+62.91
Road "B" Sta. 59+54.43 • Road "C" Sta. 14+38.40

BASELINE on ROAD "A"
Curve Data

Δ 14° 44' 58"
D 6° 00'
R 954.93
Lc 45.82
Ts 223.79
Ls 200.00
ST 57+36.66
CS 59+36.66
SC 59+82.48
TS 61+82.48



BURGESS & NIPLE - CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
ROADS C & D OVER A & B					
BR. NO. FRA - 3-1369					
SITE PLAN					
FRANKLIN COUNTY					
DESIGNED HVS	DRAWN WRD	TRACED WRD	CHECKED HVS	REVIEWED DATE HVS 10-9-57	REVISED



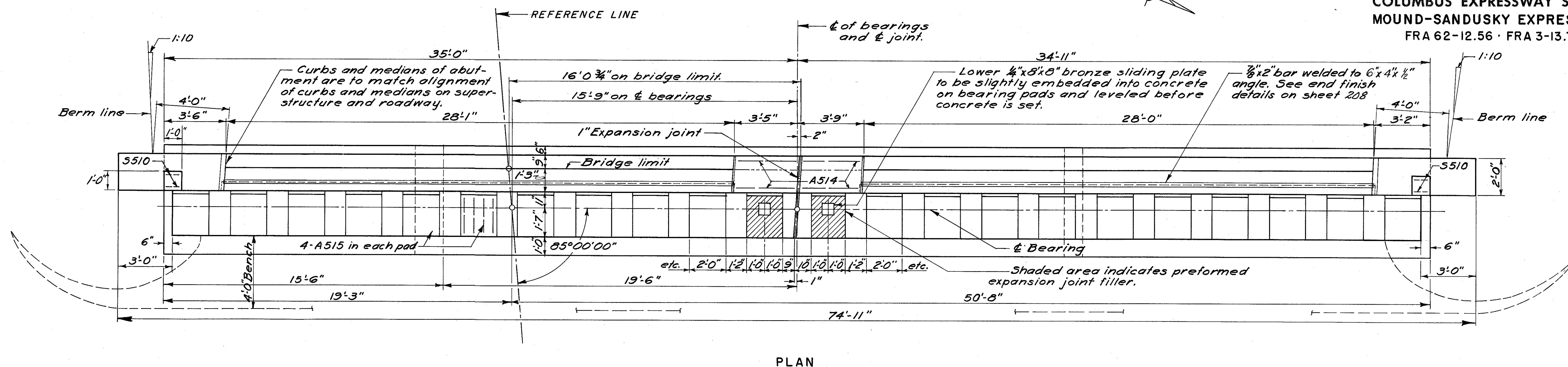
Type "A" riprap, concrete slab, shall be grooved with two sets of grooves, one normal to and the other parallel to the toe of slope, spaced 6'-0" each way. The grooves shall be 1 1/2" deep and 3/4" wide at the top and 1/2" wide at the bottom and shall be filled with joint seal (Sec. M-10.23 or M-10.26). Excavation, concrete, reinforcing steel and joint seal are included with riprap for payment.

Riprap shall extend from face of abutment to toe of slope between edges of deck.

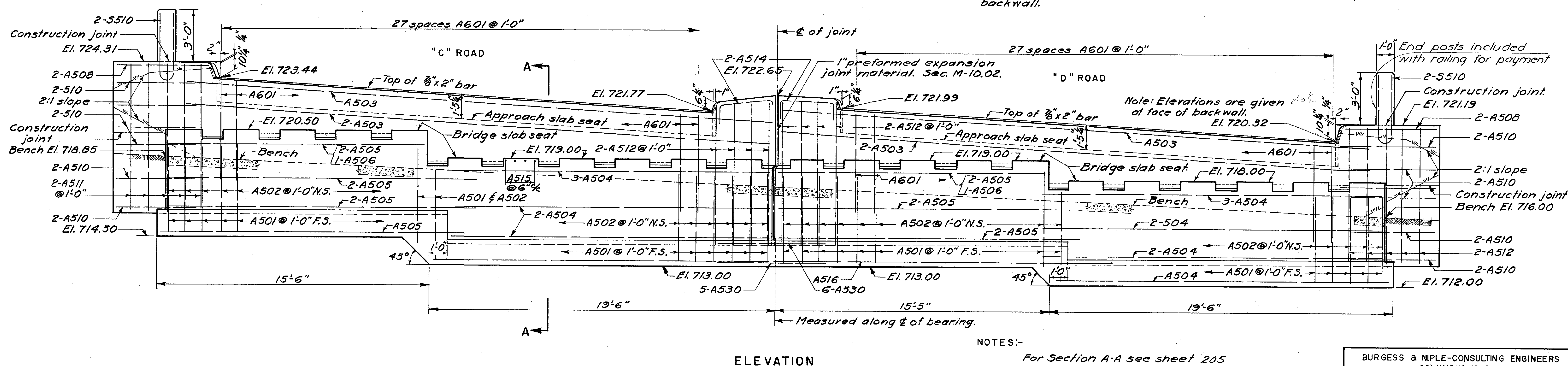
BURGESS & NIPLE -CONSULTING ENGINEERS COLUMBUS, 12, OHIO				
ROADS C & D OVER A & B				
BR. NO. FRA-3-1369				
GENERAL PLAN				
FRANKLIN COUNTY				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
D.S.R.	D.S.R.	V.T.	<i>[Signature]</i>	4/8/10-9-57
REVISED				

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



Concrete above bridge seat construction joint shall not be placed until after concrete bridge deck is in place. Steel end finish shall be used as a template for top of backwall.



NOTES:-

For Section A-A see sheet 205

For End Finish, see sheet 208

N.S. = near side.
F.S. = far side.

Design soil pressure = 5,000 p.s.f.

BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, 12, OHIO

ROADS C & D OVER A & B

BR. NO. FRA-3-1369

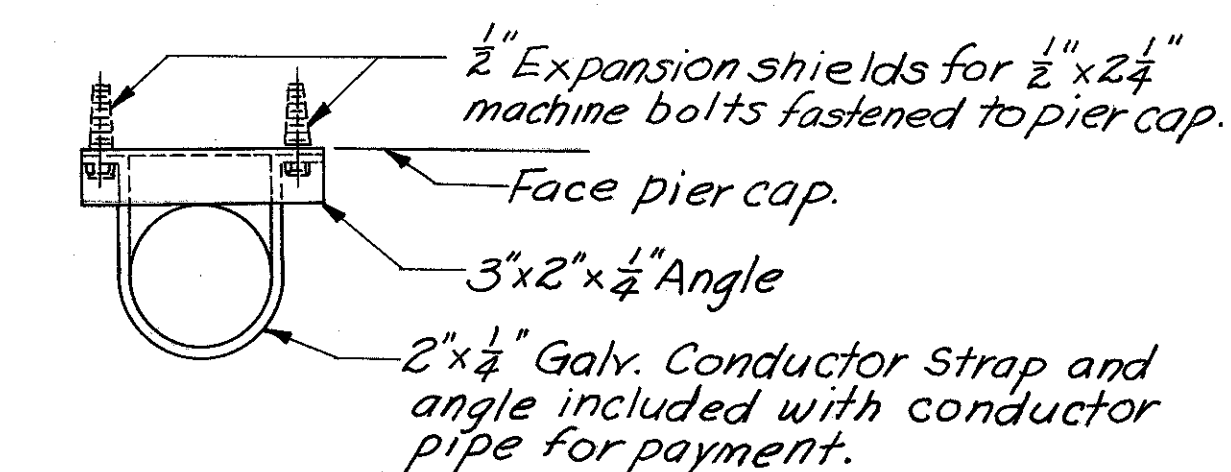
WEST ABUTMENT

FRANKLIN COUNTY

DESIGNED D.L.R.	DRAWN D.L.R.	TRACED D.S.S.	CHECKED bso	REVIEWED DATE 4/8 10-9-57	REVISI
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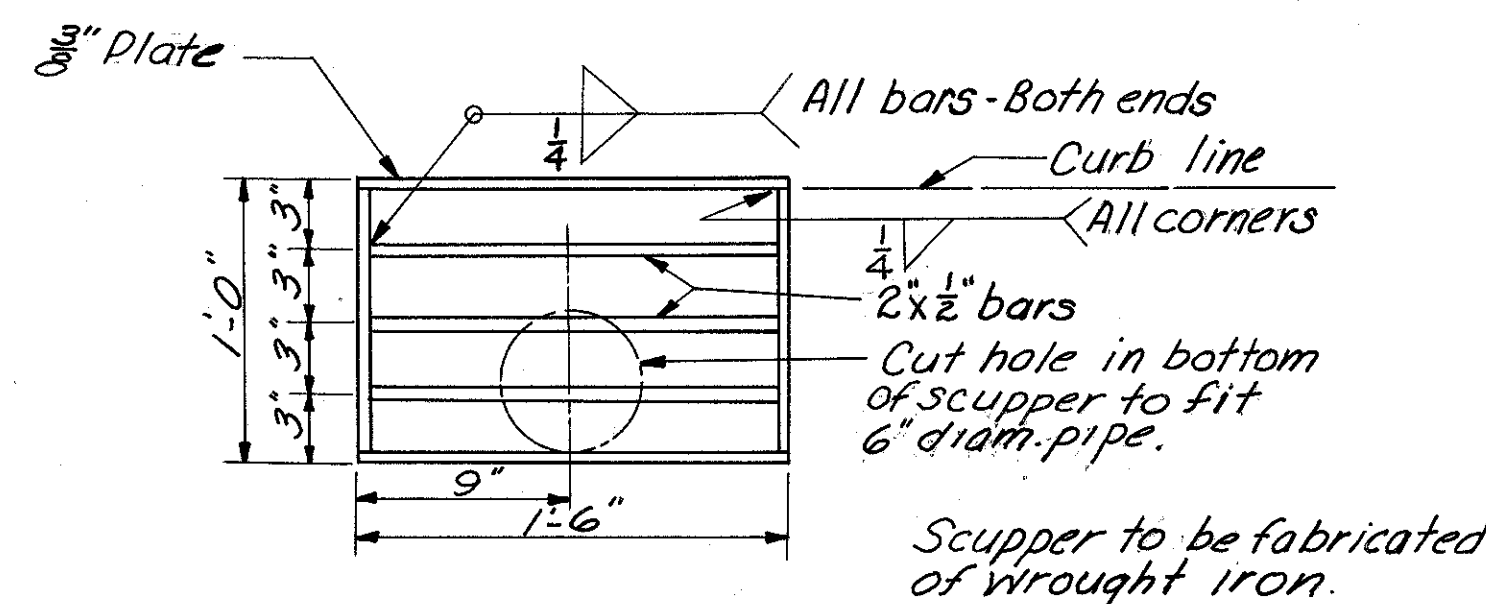
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

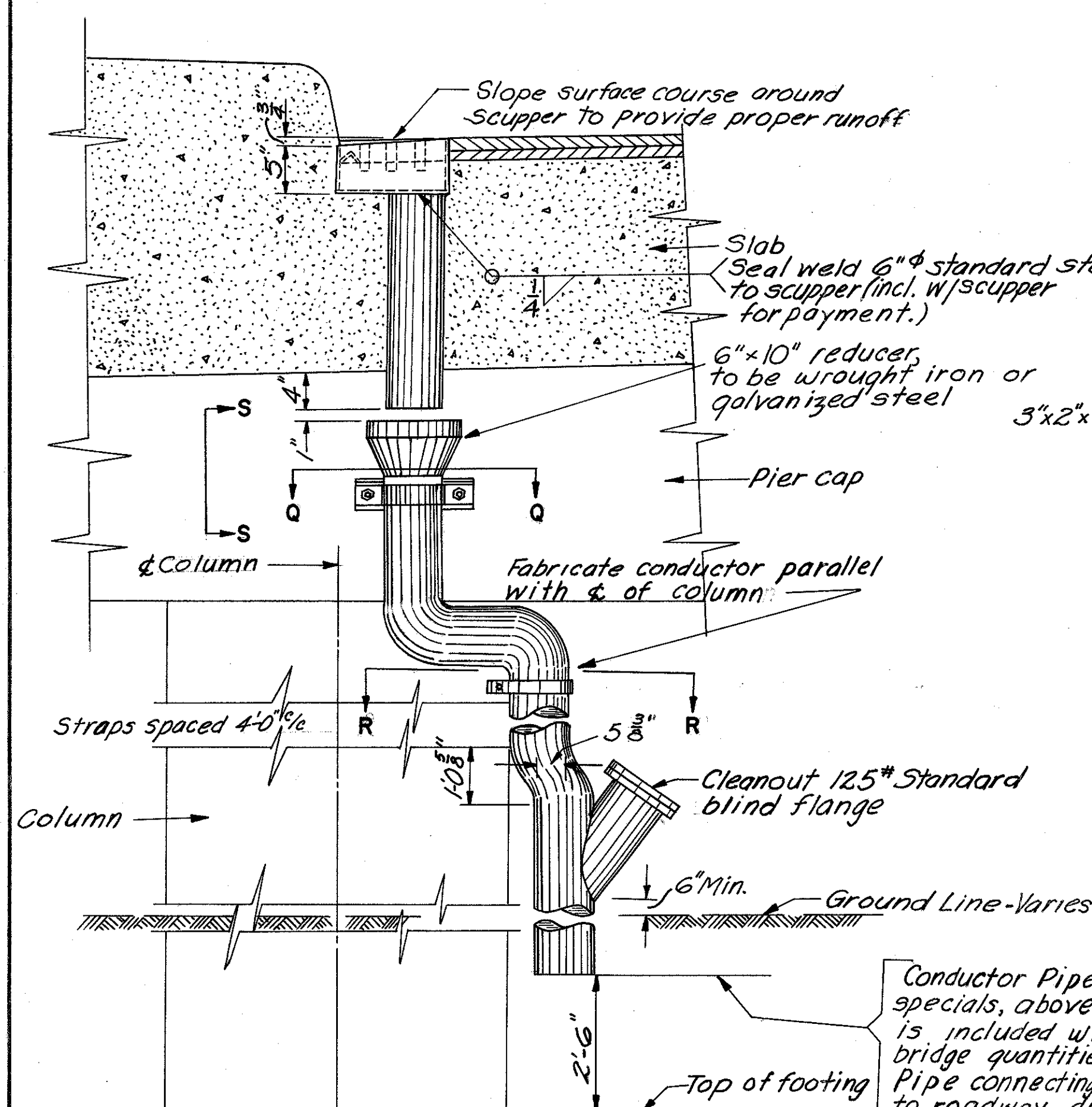


SECTION Q-Q

Conductor shall be 6" diameter standard wrought iron pipe or hot dipped galvanized steel pipe. Joints shall be made by welding or by Victaulic couplings or by an approved equivalent. Welding shall be done before galvanizing. For straps and bolts for mounting the conductor, galvanizing as called for in section M10.30 will be considered sufficient.



PLAN VIEW OF SCUPPER

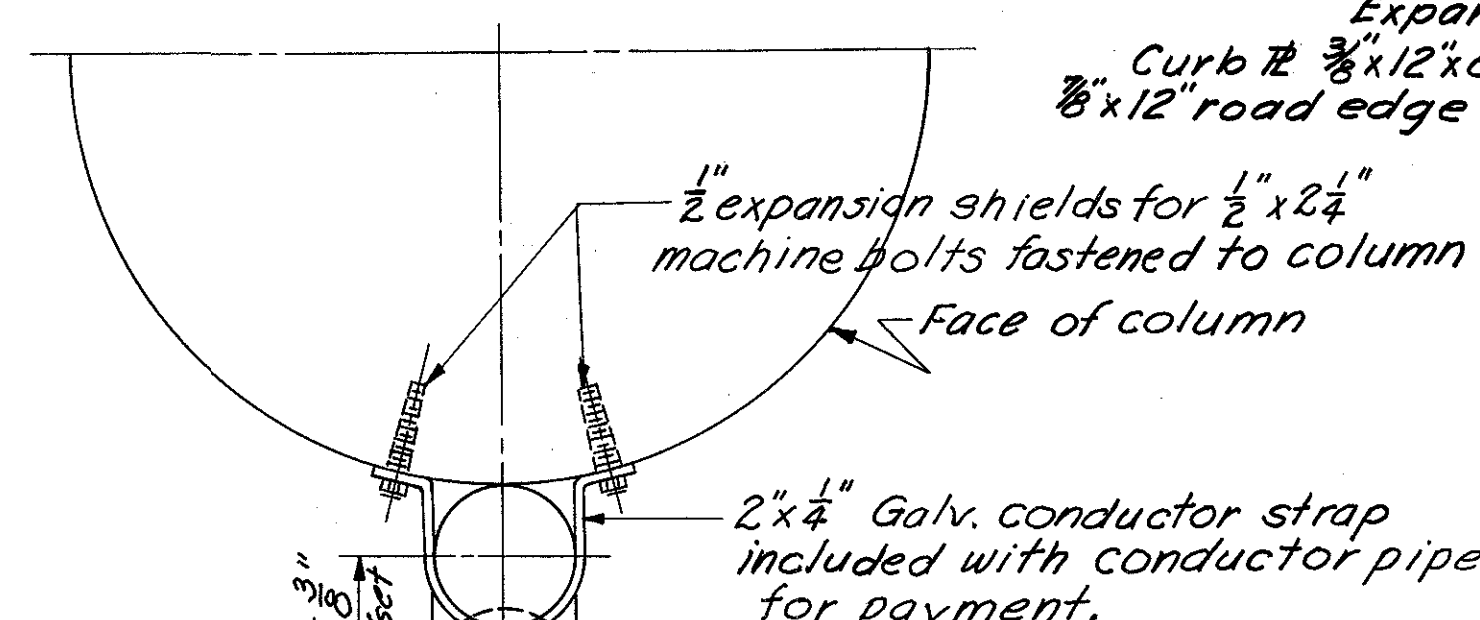


DETAIL SCUPPER AND CONDUCTOR PIPE

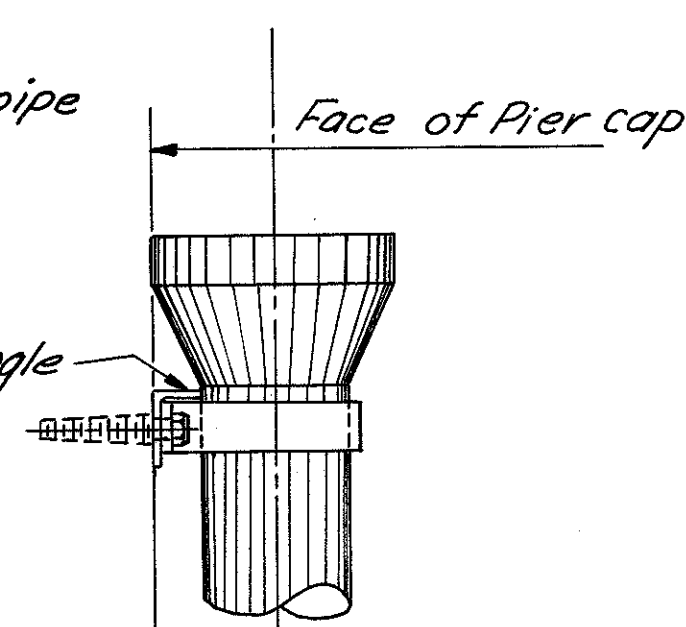
Conductor Pipe, including specials, above this line, is included with the estimated bridge quantities for payment. Pipe connecting conductor to roadway drainage is included with estimated road quantities for payment.

3/8"x2" bolts at 1'-6" ± with nuts & washers. Nuts tack welded to under side of angle. 1 1/8" holes in plate. Center 3/8" bolts in 1 1/8" holes. Apply flake graphite between washers and plate. Turn bolts tight and release one-half turn. Remove bolts as soon as concrete has been reasonably set, preferably within two hours, to avoid effects of temperature expansion or contraction of superstructure. Fill holes with bituminous material.

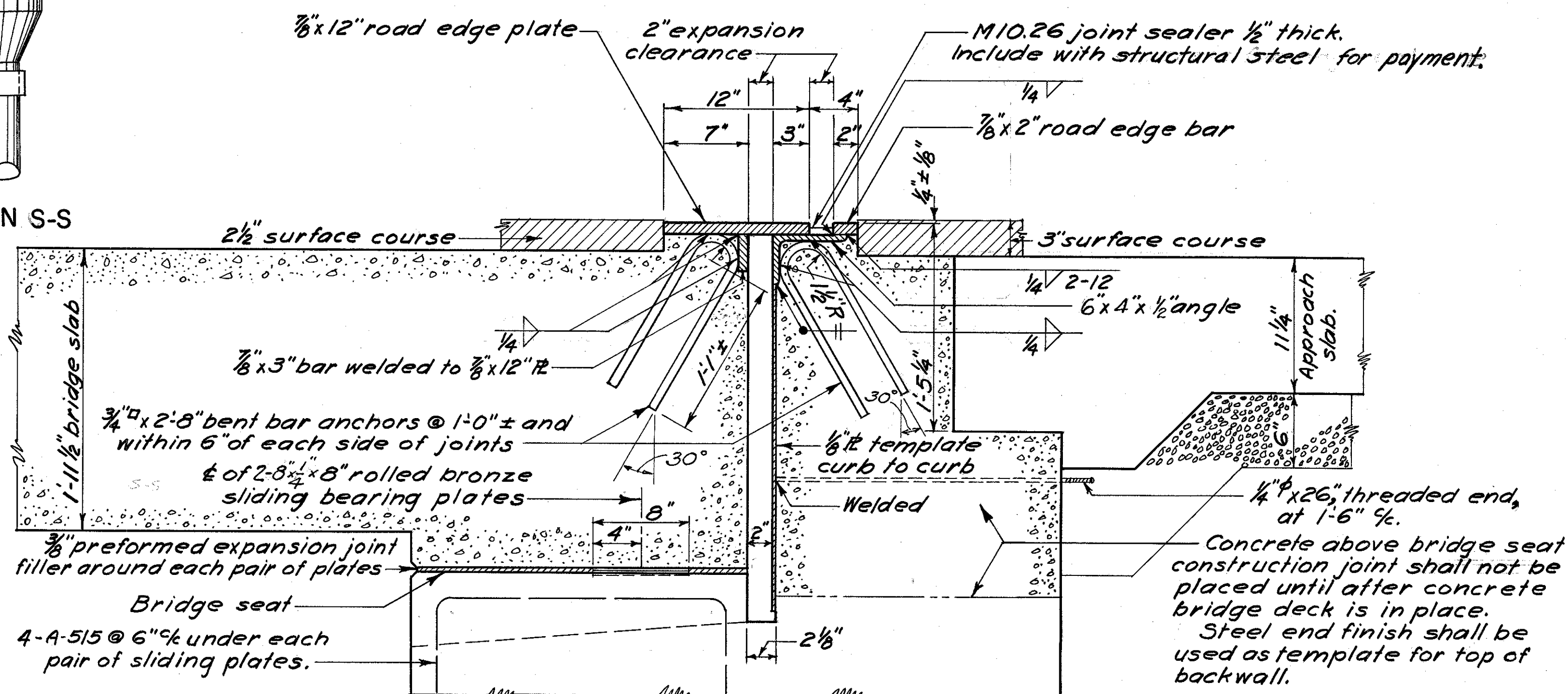
5/8"x2 1/2" bolts @ 1'-6" ± with nuts welded to bar. Remove bolts with forms.



SECTION R-R



SECTION S-S



SECTION OF
ROADWAY END FINISH

END FINISH
CONSTRUCTION METHODS

Curb end finish to follow alignment of roadway curb

PLAN

ELEVATION
END FINISH AT CURB

Omit shop coat on all portions of end finish. Portions in contact with steel or with concrete shall not be painted. All other portions shall be cleaned and given the shop coat in the field as well as the two field coats.

3/8"x2" road edge bar.

3" surface course.

6"x4"x1/2" bridge abutment angle.

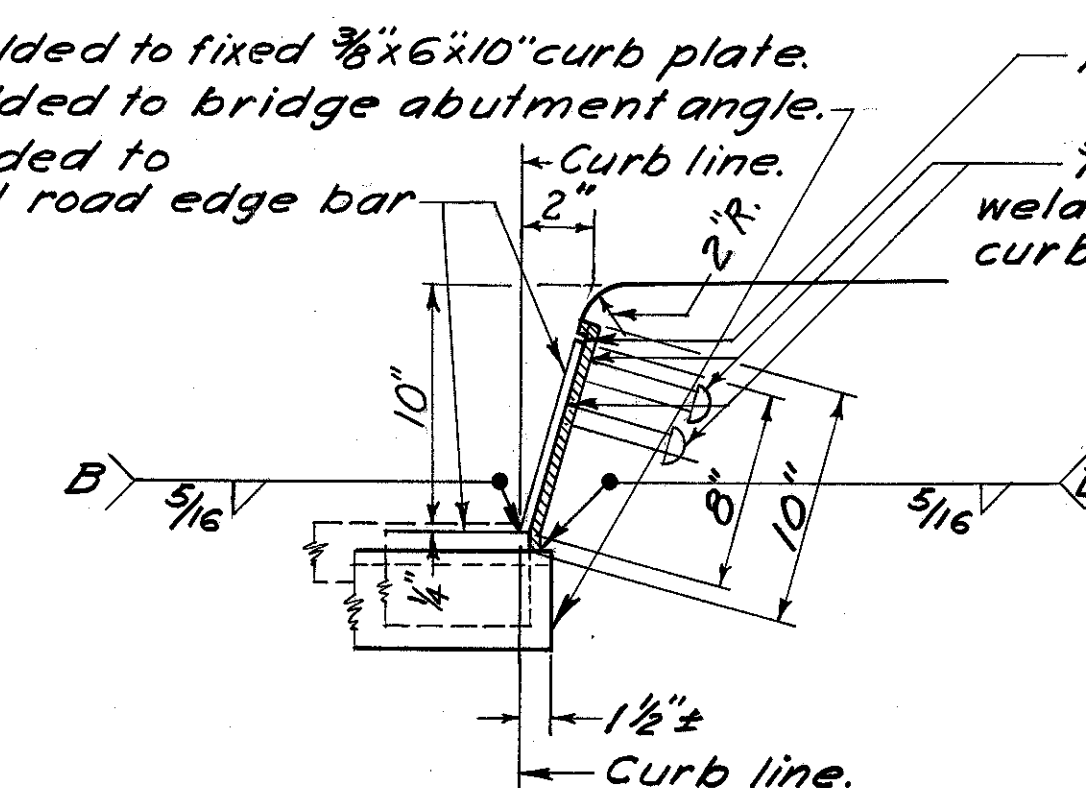
Provide a joint in the 3/8"x2" edge bar and in the angle on the center line of roadway. Additional joints may be provided in them at a minimum spacing of 6'-0". (These joints shall not be welded.)

This contact surface shall not be painted and shall be lubricated with flake graphite prior to placing of backwall concrete.

1/2" φ holes @ 1'-0" ±.

Curb bar 3/8"x1/2"x5" welded to fixed 3/8"x6"x10" curb plate.
Curb R 3/8"x12"x8" welded to 3/8"x12" road edge plate.
Curb R 3/8"x2"x10" welded to 3/8"x6"x10" curb plate and road edge bar.

1/4" clearance, minimum.
3/8" φ x 4" rivet anchors welded to back of 3/8" curb plates.



CURB SECTION P-P

BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, OHIO

ROADS C & D OVER A & B
BR. NO. FRA-3-1369

MISCELLANEOUS DETAILS

FRANKLIN COUNTY

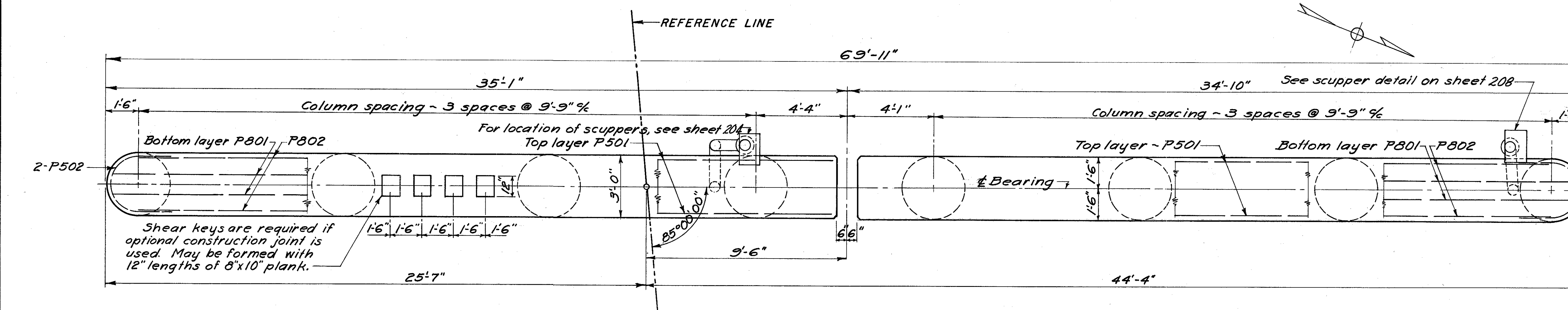
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.L.R.	D.L.R.	D.S.S.	6/8	10-9-57	

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

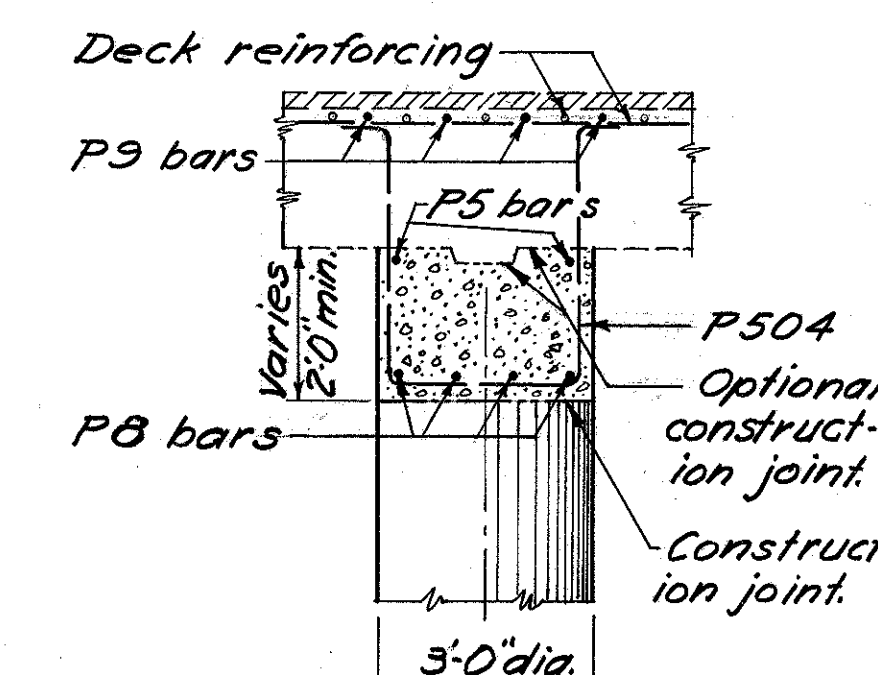
209
251

FRANKLIN COUNTY
CITY OF COLUMBUS

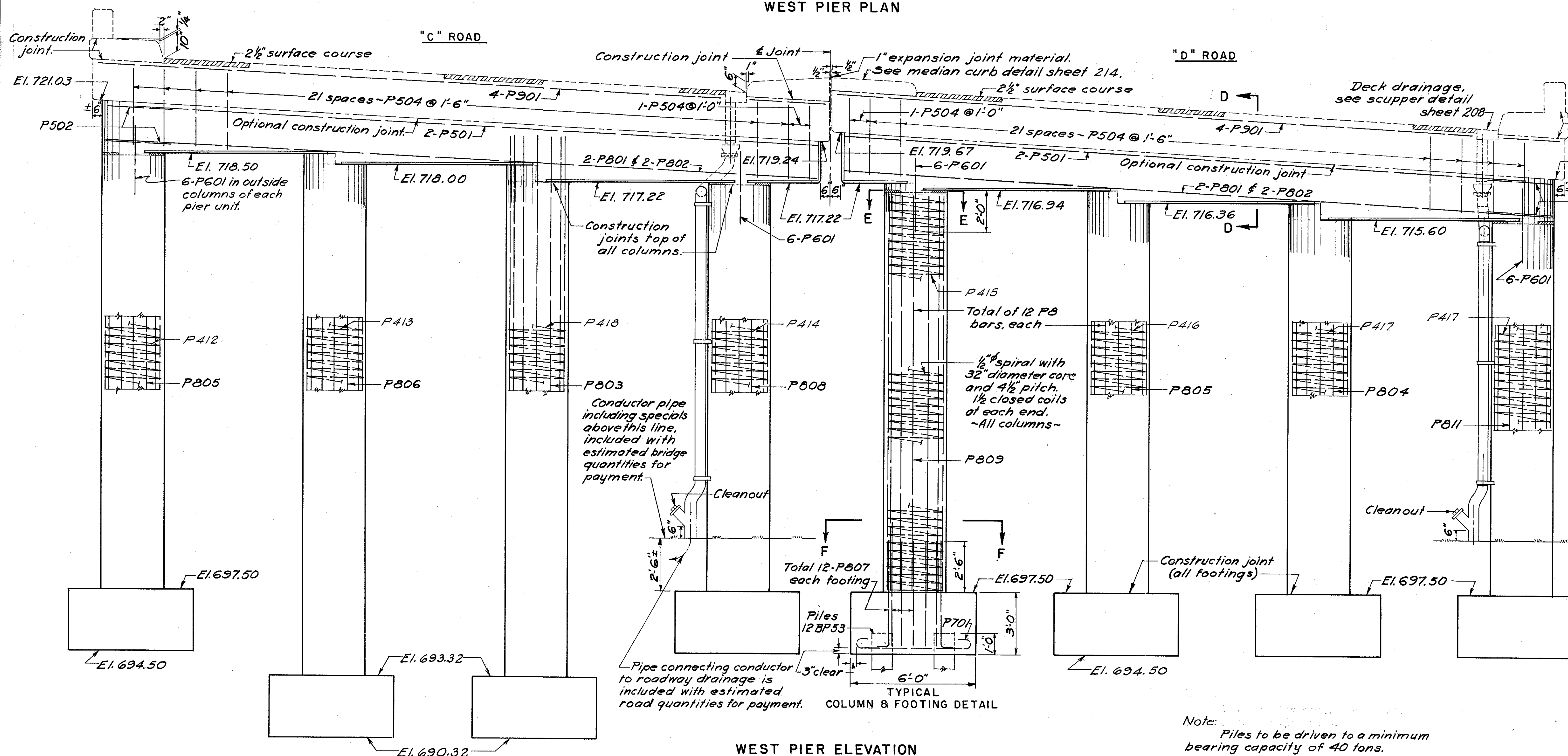
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



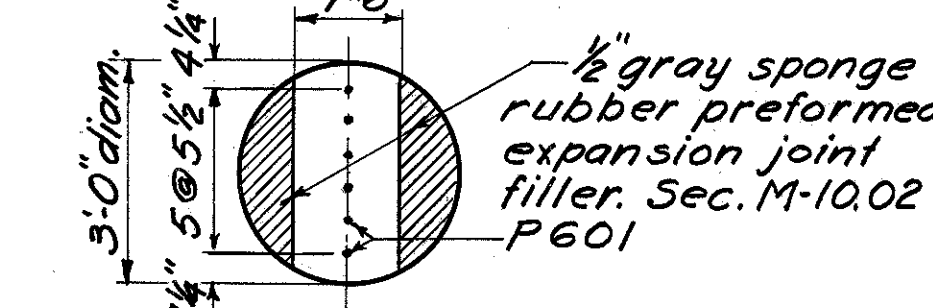
WEST PIER PLAN



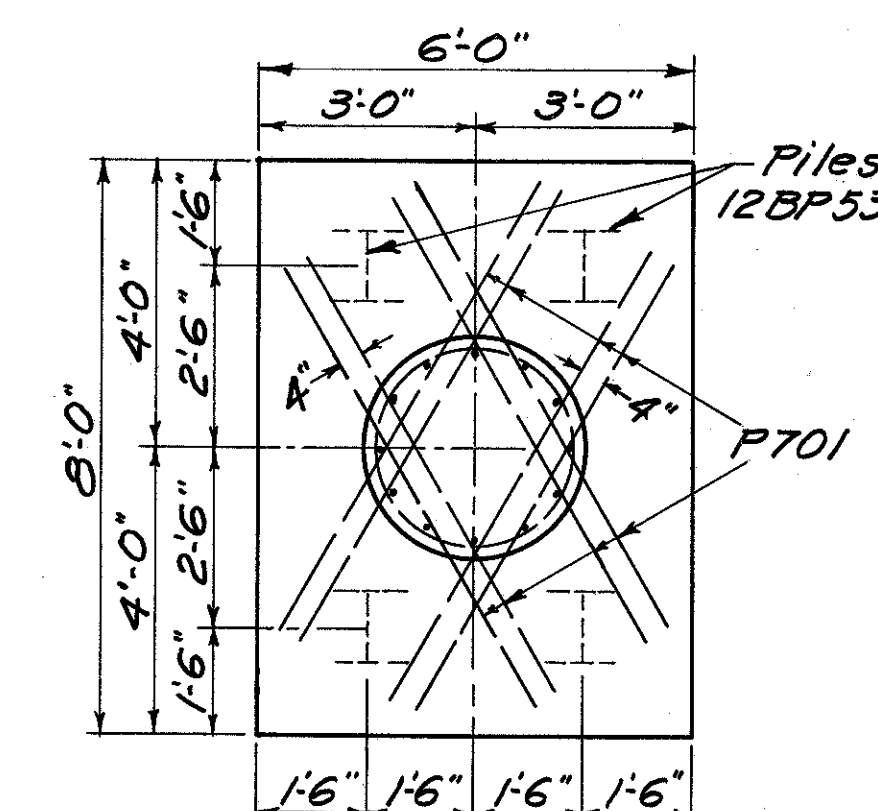
SECTION D-D



WEST PIER ELEVATION



SECTION E-E
TYPICAL OF OUTSIDE COLUMNS
OF EACH PIER UNIT



SECTION F-F
TYPICAL OF ALL FOOTINGS

BURGESS & NIPLE - CONSULTING ENGINEERS
COLUMBUS, OHIO

ROADS C & D OVER A & B

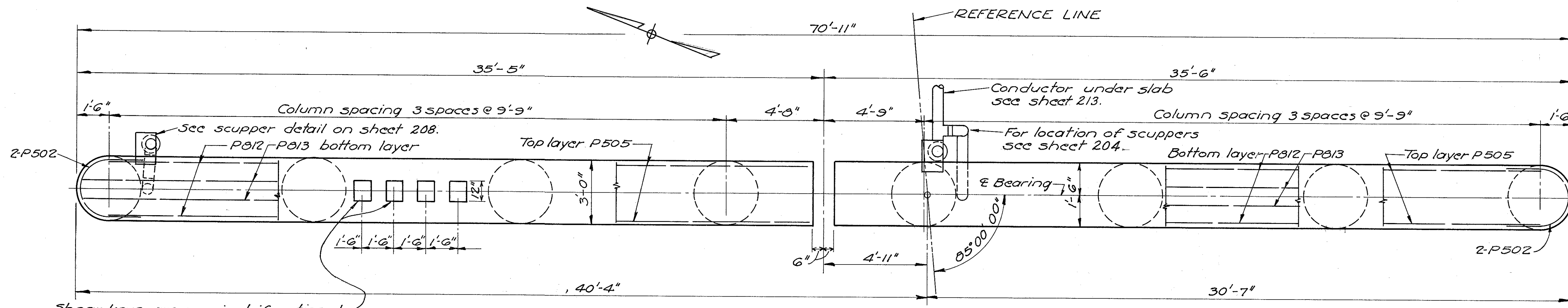
BR. NO. FRA-3-1369

WEST PIER DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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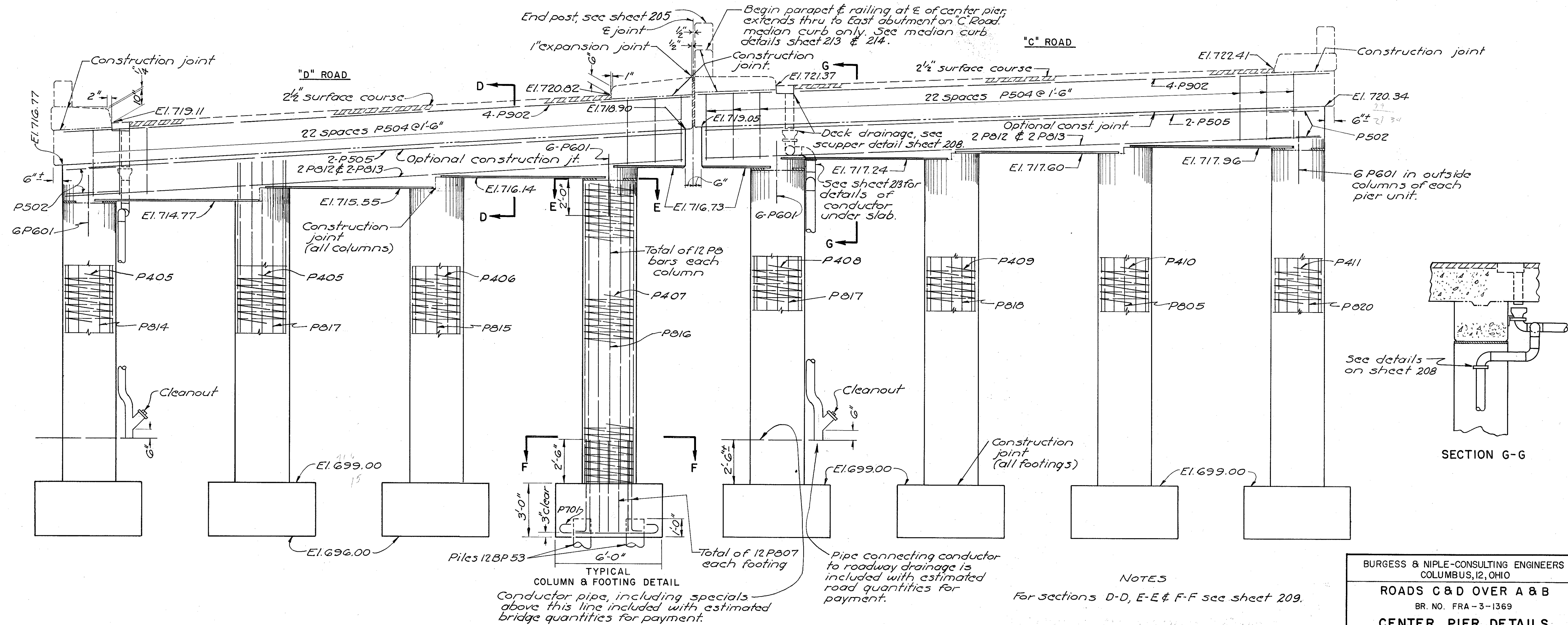
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



Shear keys are required if optional construction joint is used. May be formed with 12" lengths of 3" x 10" plank.

CENTER PIER PLAN



TYPICAL COLUMN & FOOTING DETAIL
Conductor pipe, including specials above this line included with estimated bridge quantities for payment.

CENTER PIER ELEVATION

NOTES

For sections D-D, E-E & F-F see sheet 209.

Piles to be driven to a minimum bearing capacity of 40 ton.

BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, OHIO

ROADS C & D OVER A & B

BR. NO. FRA-3-1369

CENTER PIER DETAILS

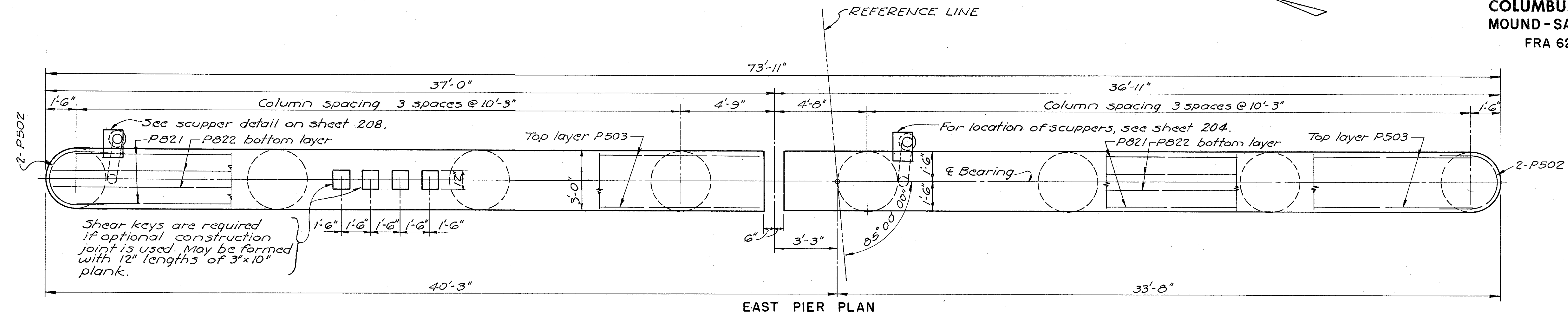
FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.S.R.	D.S.R.	W.R.D.	W.R.D.	10-9-57	

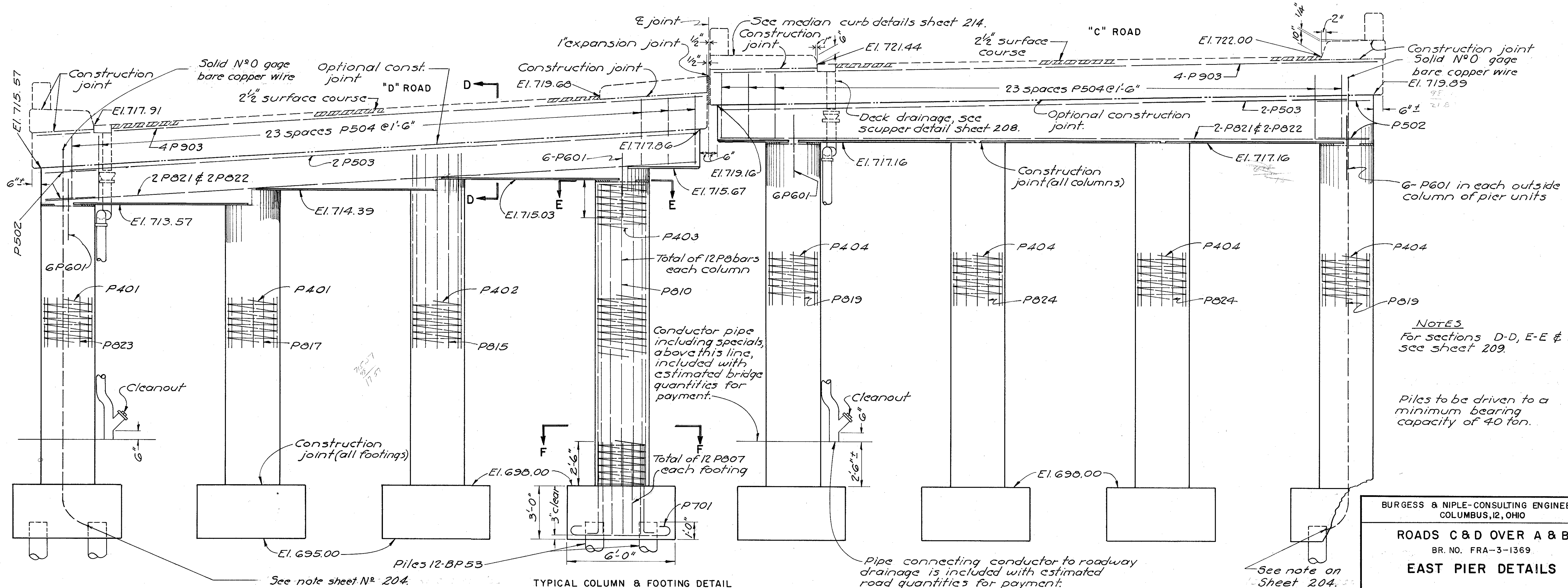
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

211
251

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



EAST PIER PLAN



TYPICAL COLUMN & FOOTING DETAIL

EAST PIER ELEVATION

BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, OHIO

ROADS C & D OVER A & B

BR. NO. FRA-3-1369

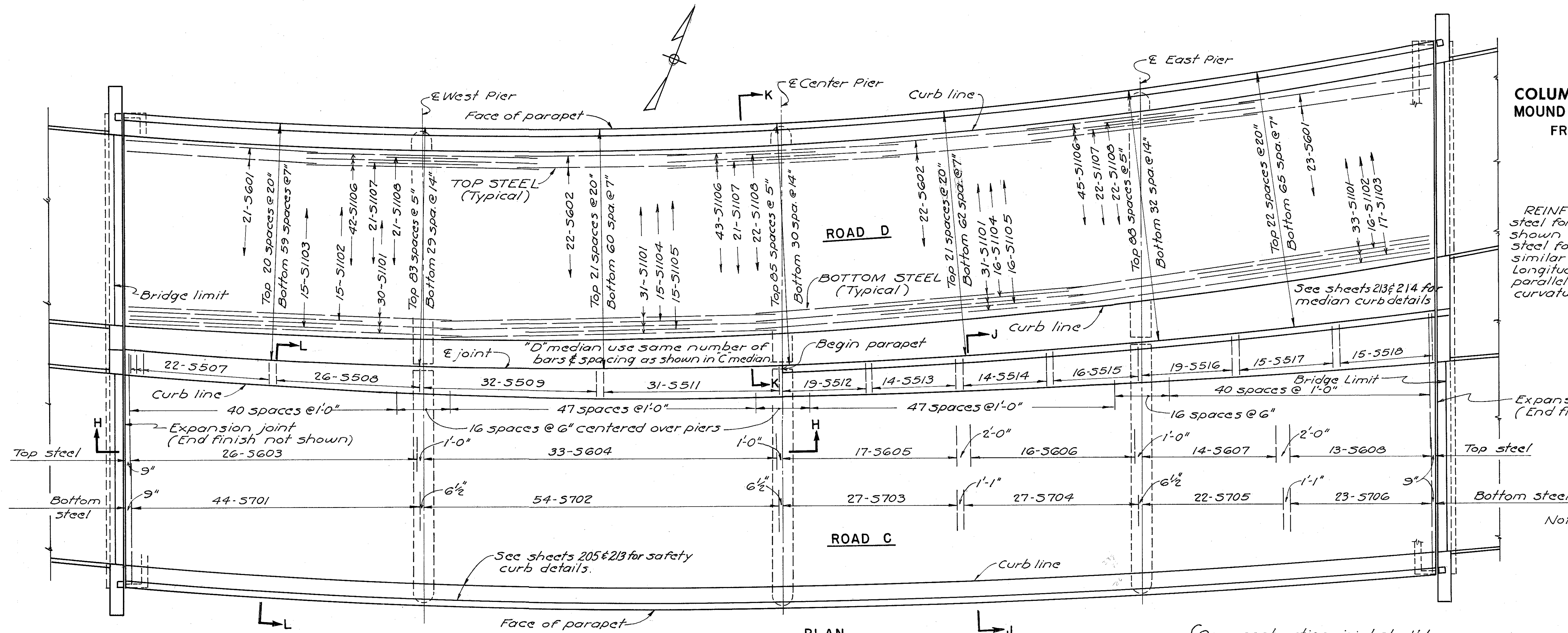
EAST PIER DETAILS

FRANKLIN COUNTY

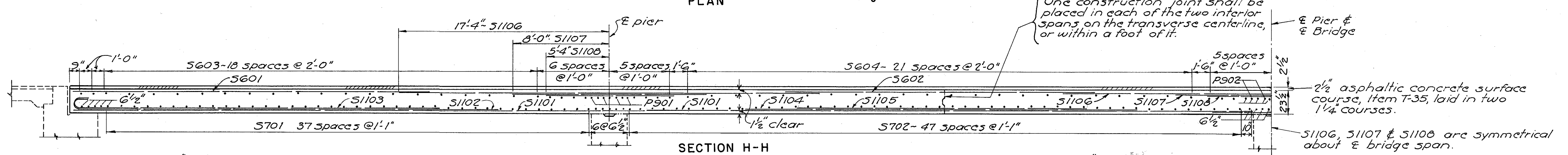
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.A.R.	D.A.R.	W.R.O.	W.R.O.	10-9-57	

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

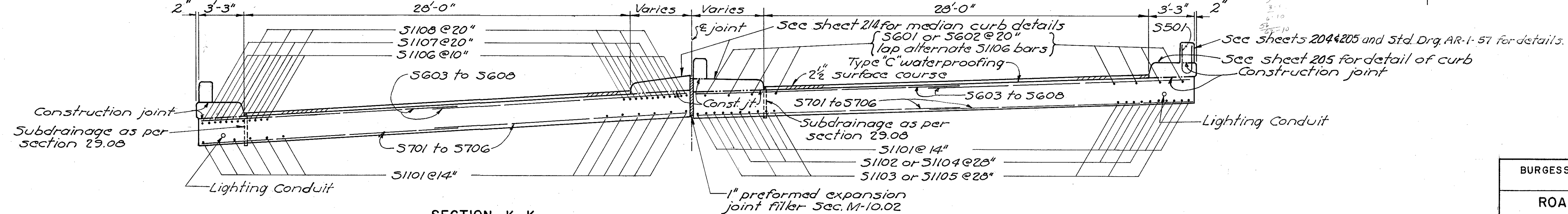
REINFORCING STEEL-Transverse steel for Road "D" shall be placed as shown for Road "C". Longitudinal steel for Road "C" shall be placed similar to that shown for Road "D". Longitudinal reinforcement shall parallel as nearly as possible the curvature of the roadway.



PLAN



SECTION H-H



SECTION K-K
(TYPICAL)

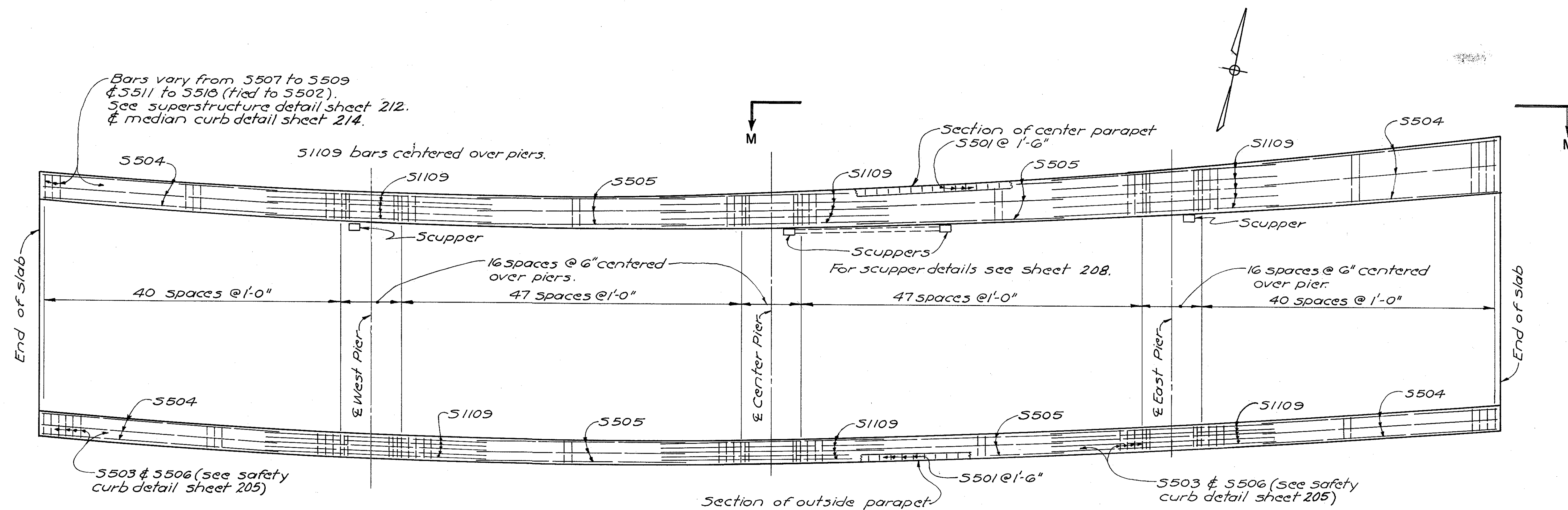
SECTION J-J
(SECTION L-L SIMILAR EXCEPT
PARAPET ON MEDIAN CURB)

BURGESS & NIPLE-CONSULTING ENGINEERS COLUMBUS, OHIO				
ROADS C & D OVER A & B				
BR. NO. FRA-3-1369				
SUPERSTRUCTURE				
FRANKLIN COUNTY				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
B.R.	B.R.	W.R.D.	W.R.D.	4/28/57
REVISED				

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

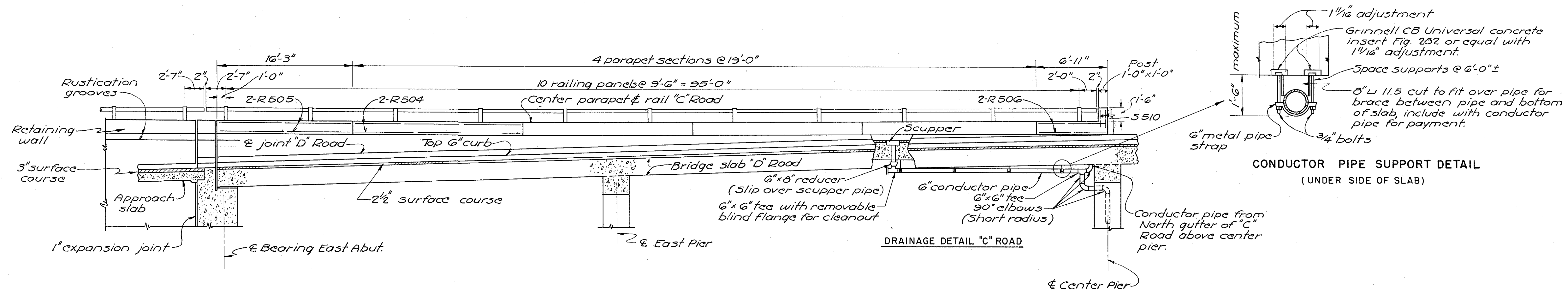
213
251

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND - SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



PLAN-ROAD "C"

(SHOWING REINFORCING STEEL IN MEDIAN & SAFETY CURBS)
("D" ROAD SIMILAR EXCEPT FOR CENTER PARAPET)



SECTION M-M

ELEVATION SHOWING CENTERLINE JOINT
SEPARATION BETWEEN C & D
(FOR CROSS-SECTIONS OF MEDIAN CURB SEE SHEET 214)

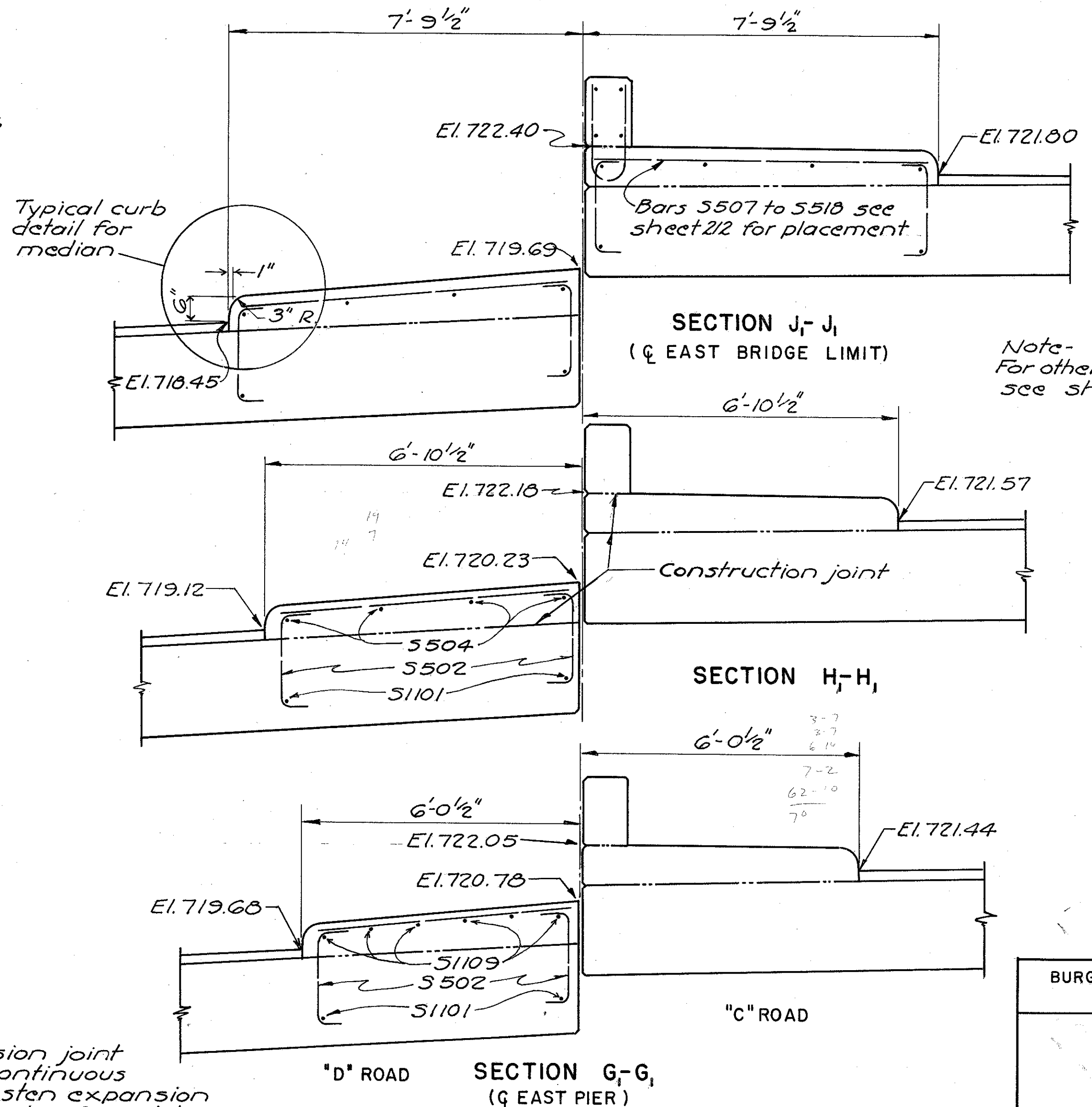
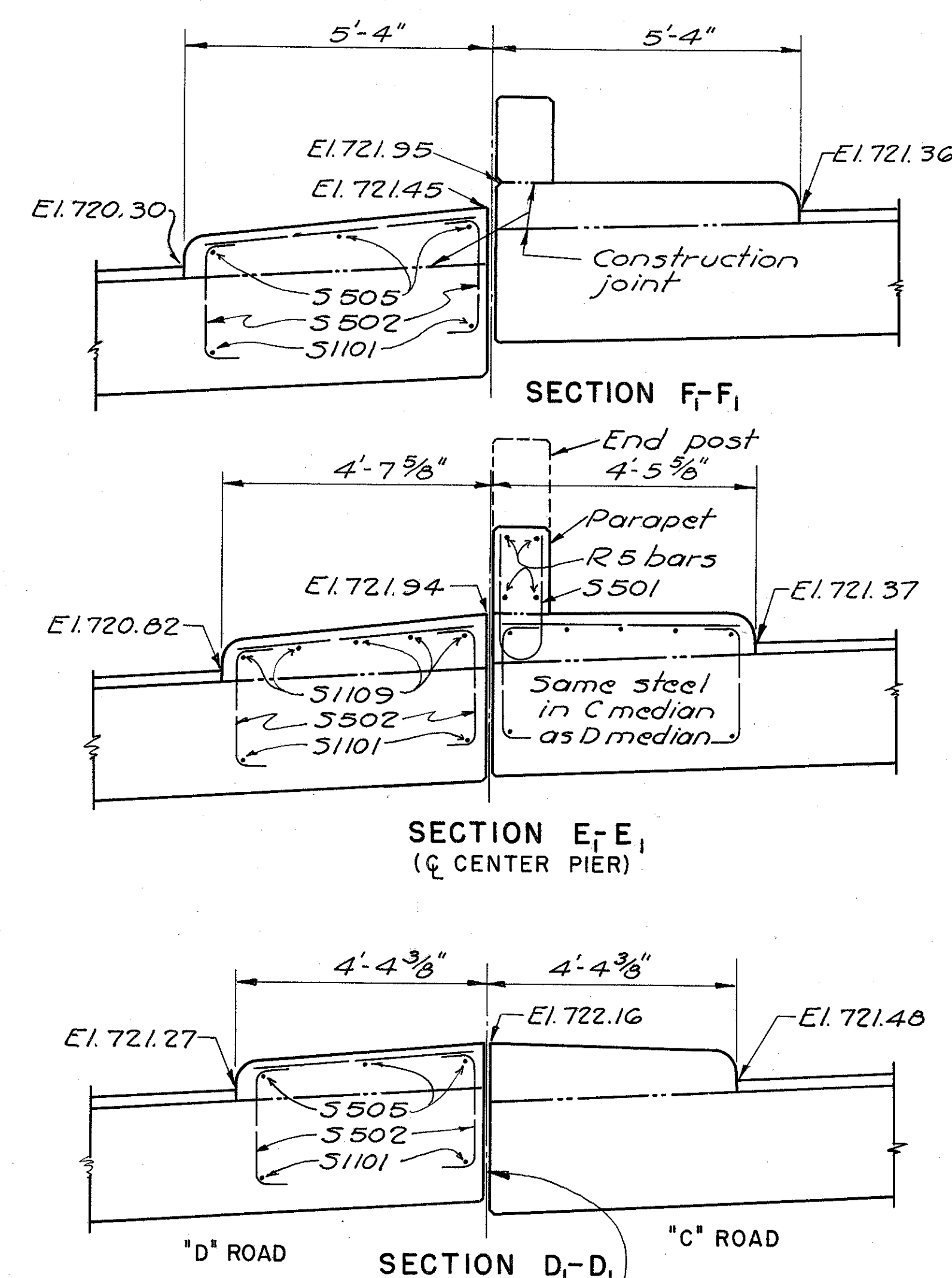
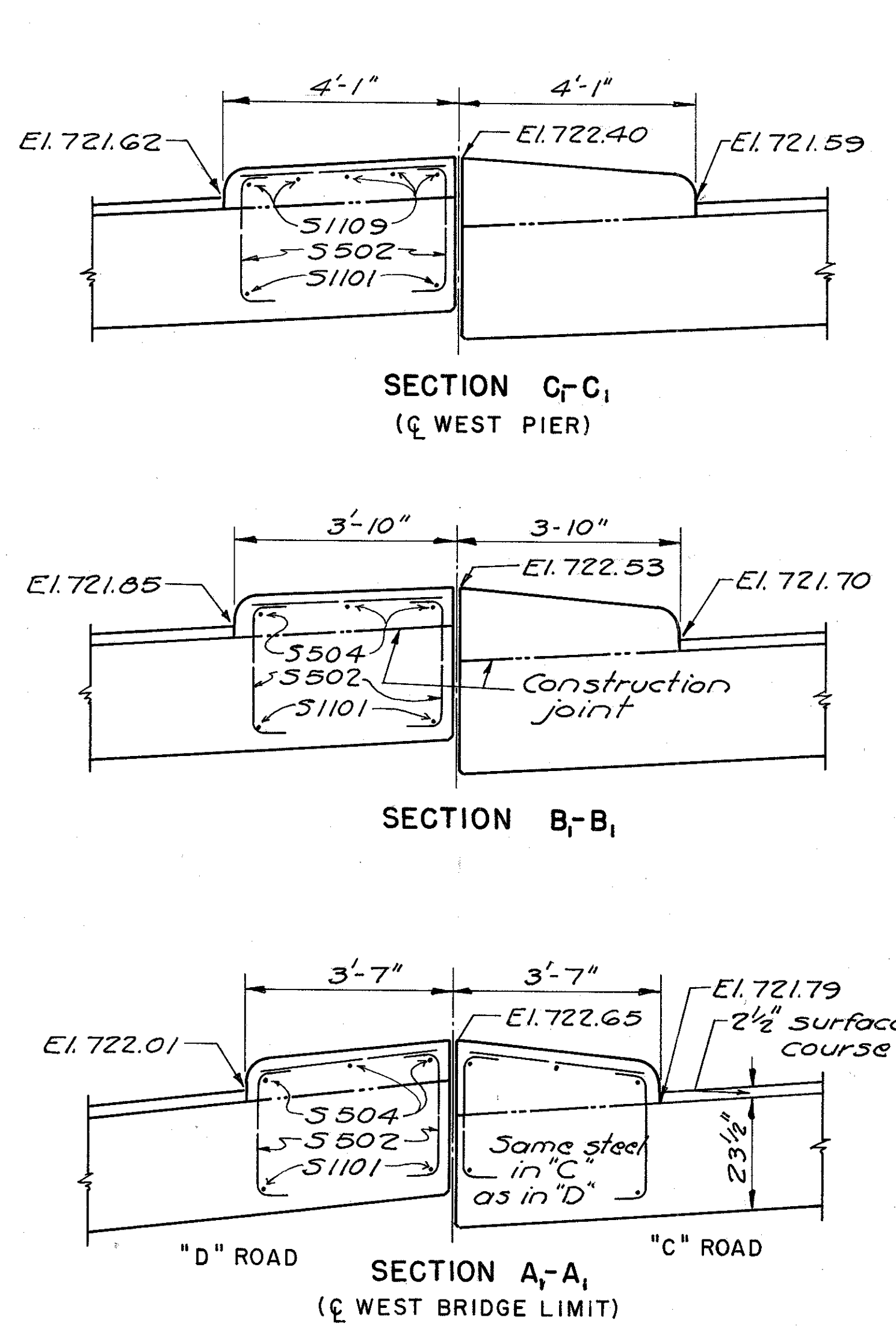
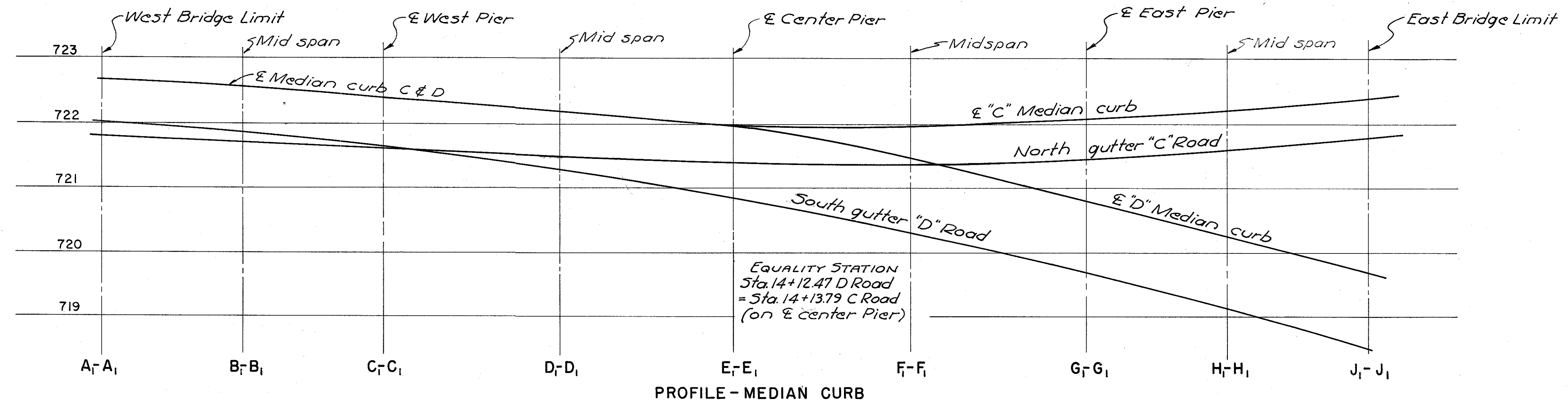
BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, OHIO

ROADS C & D OVER A & B
BR. NO. FRA-3-1369
**SUPERSTRUCTURE
DETAILS**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.S.R.	D.S.R.	W.R.D.	W.R.D.	4/18/10-2-57	

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

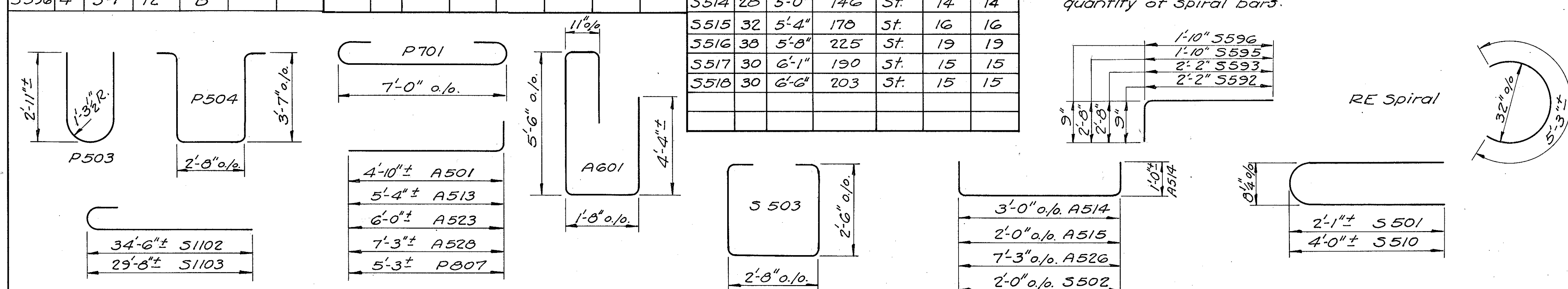


Note -
For other median curb details
see sheets 212 & 213.

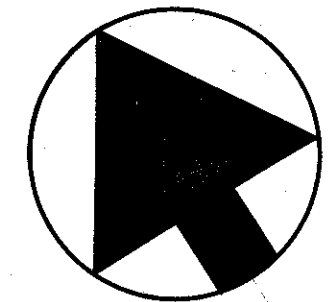
Note - In "C" median use same
number of bars & spacing
as shown in "D" median.

1" preformed expansion joint
filler Sec. M-10.02 continuous
between slabs. Fasten expansion
joint filler to one side of joint by
means of nails spaced approximately
6" longitudinally and 12" vertically.

Four steel channel, tee or angle spacers, weighing approximately 0.68 p.l.f. of spacer shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of lbs. of these spacers, based on 0.68 p.l.f. will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

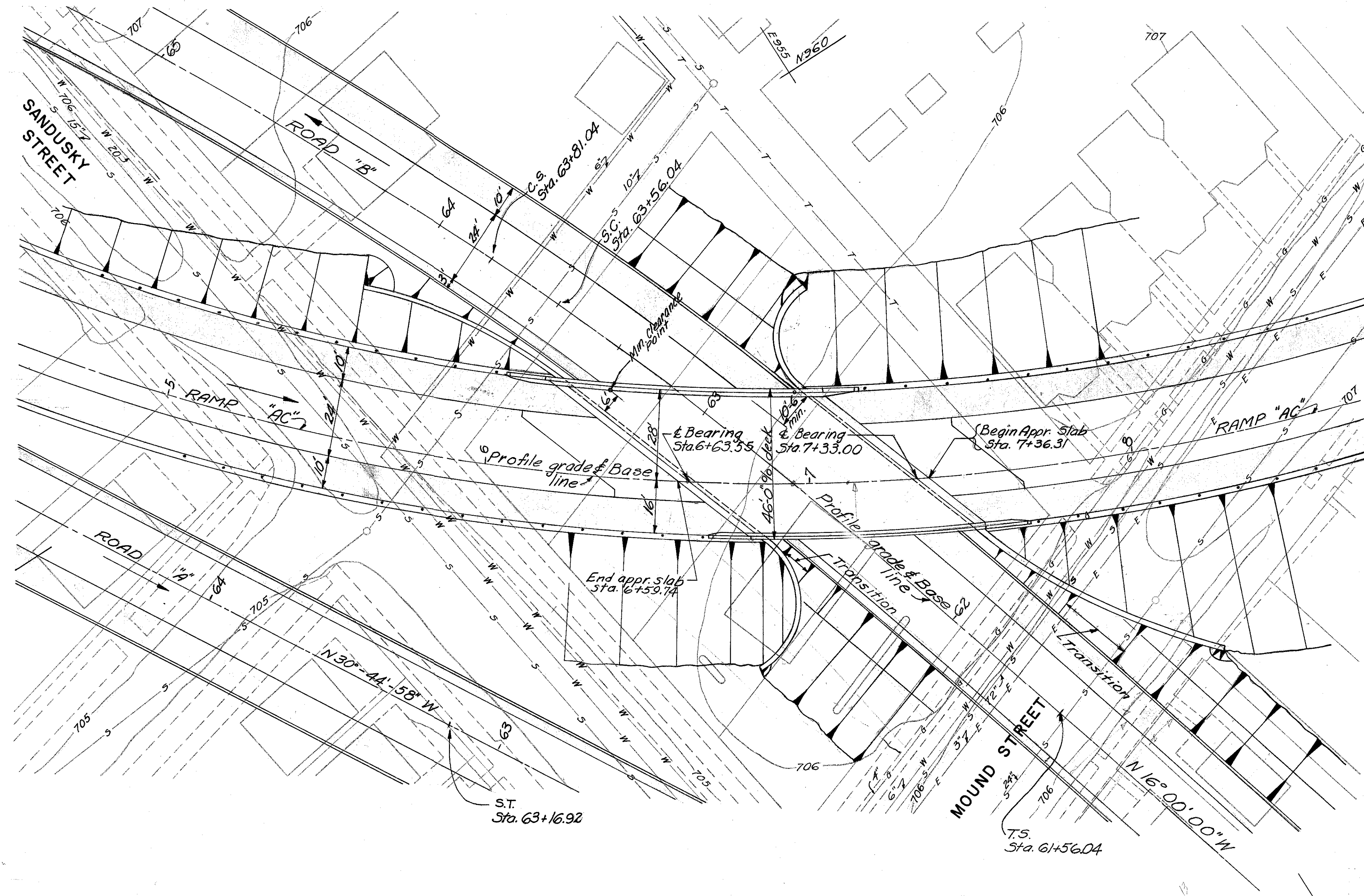


FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



Curve Data
Ramp AC over B
Δ 107°-21'-12"
D 9°-00'
R 636.62'
Lc 892.81'
Ts 1023.63'
Ls 300.00'
TS 0+00
SC 3+00
CS 11+92.81
ST 14+92.81

Curve Data
Road B
Δ 13°-30'-00"
D 6°-00'
R 354.93'
Lc 25.00'
Ts 213.19'
Ls 200.00'
TS 61+56.04
SC 63+56.04
CS 63+81.04
ST 65+81.04

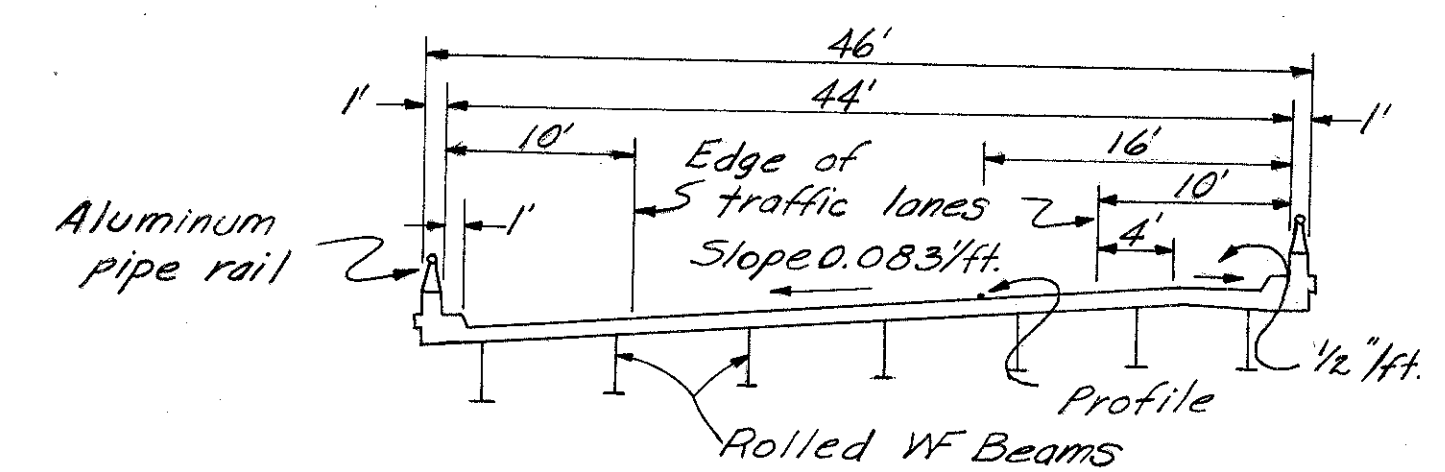


ROAD INTERSECTIONS
Road "AC" Sta. 6+95.10=
Road "B" Sta. 62+64.86

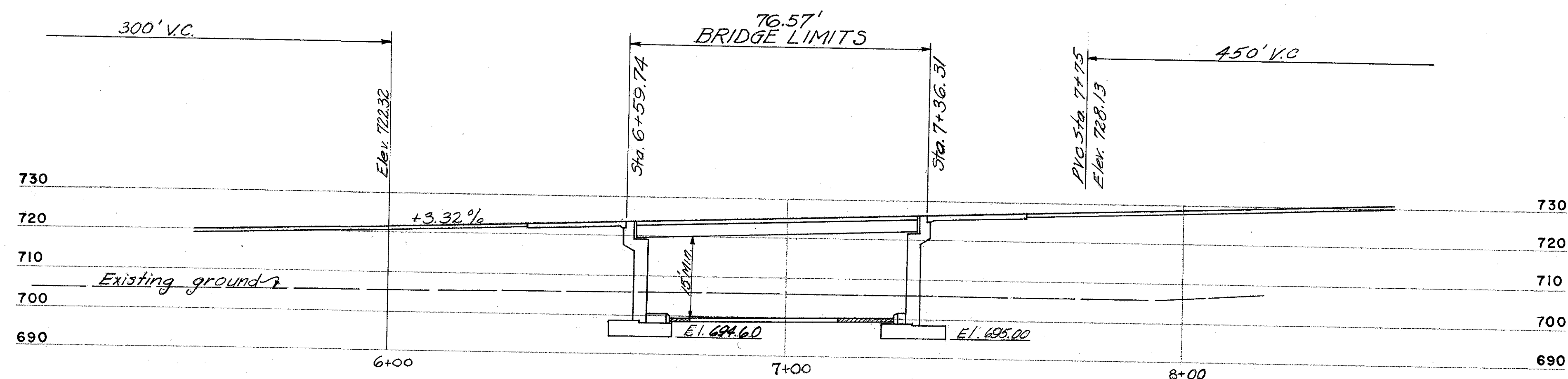
PLAN

PROPOSED STRUCTURE

TYPE-Simple span steel beam with reinforced concrete slab and abutments.
SPAN ~ 63.45 c/bearings along base line.
ROADWAY ~ 44'-0" f/t parapets.
SKEW ~ 50°-30'-51" to reference line.
SURFACE COURSE ~ Bituminous concrete
LOAD FREQUENCY RATING ~ CF 2000 (31), adequate for A.A.S.H.O. loading.
ALIGNMENT ~ 9° curve left.
SUPERELEVATION ~ .083 per ft.
APPROACH SLABS - A-5-1-54 (25' long)



SUPERSTRUCTURE CROSS-SECTION



PROFILE ALONG BASE LINE

B.M. B4
12 ELEV. 705.695

Axle at south edge of sidewalk,
south side of Mound St., in line
with west edge of sidewalk west
side of Sandusky Street extended.

BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, OHIO

RAMP AC OVER ROAD B

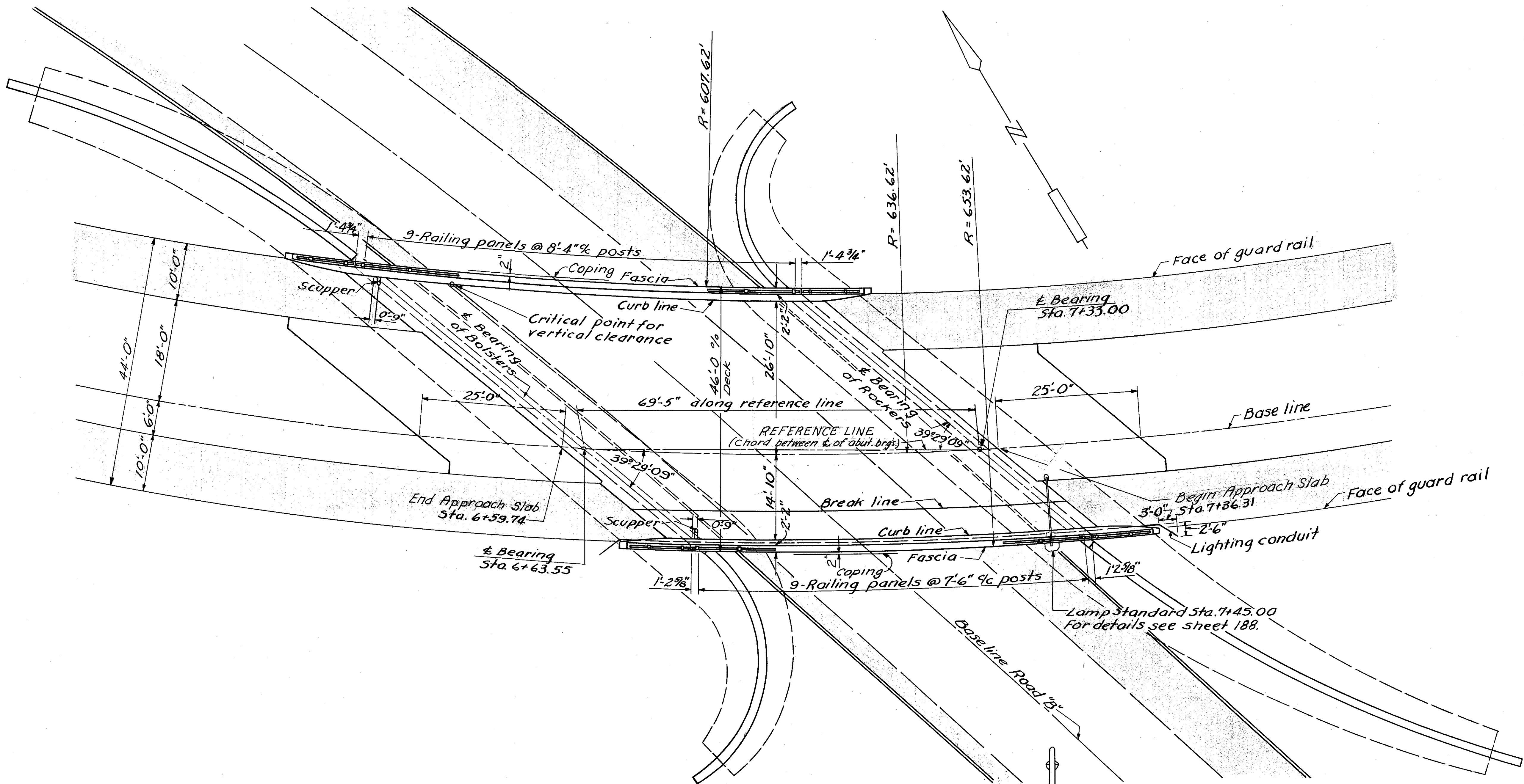
BR. NO. FRA-3-1375

SITE PLAN

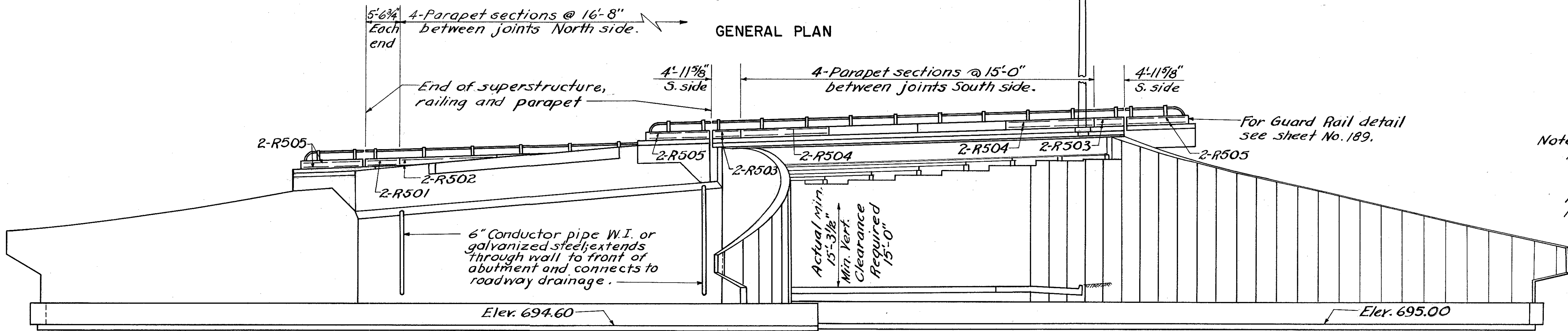
FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVIEWED
MM	MM	MM	MM	11/10-9-57	

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



PAVEMENT ELEVATIONS			
Station	North Curb	Break Line	South Curb
6+25	720.91	—	—
6+50	721.74	—	—
6+75	722.57	725.64	—
7+00	723.40	726.47	726.27
7+25	—	727.30	727.10
7+50	—	—	727.93



Notes:
Railing and parapet dimensions shown are measured along fascia.
Refer to General Notes 1, 2, 3, 4, 9, 10, 11, 13, 15, 16 and 18, on sheet 178.

BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, OHIO

RAMP AC OVER ROAD B
BR. NO. FRA-3-1375

GENERAL PLAN AND ELEVATION

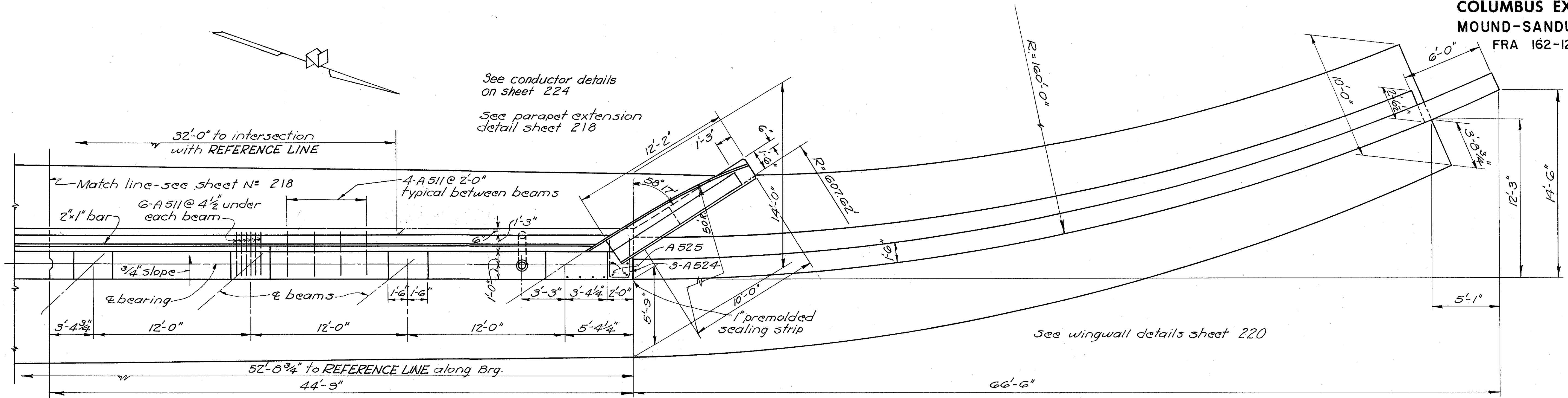
FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.R.R.	R.A.F.			4/18/10-9-57	

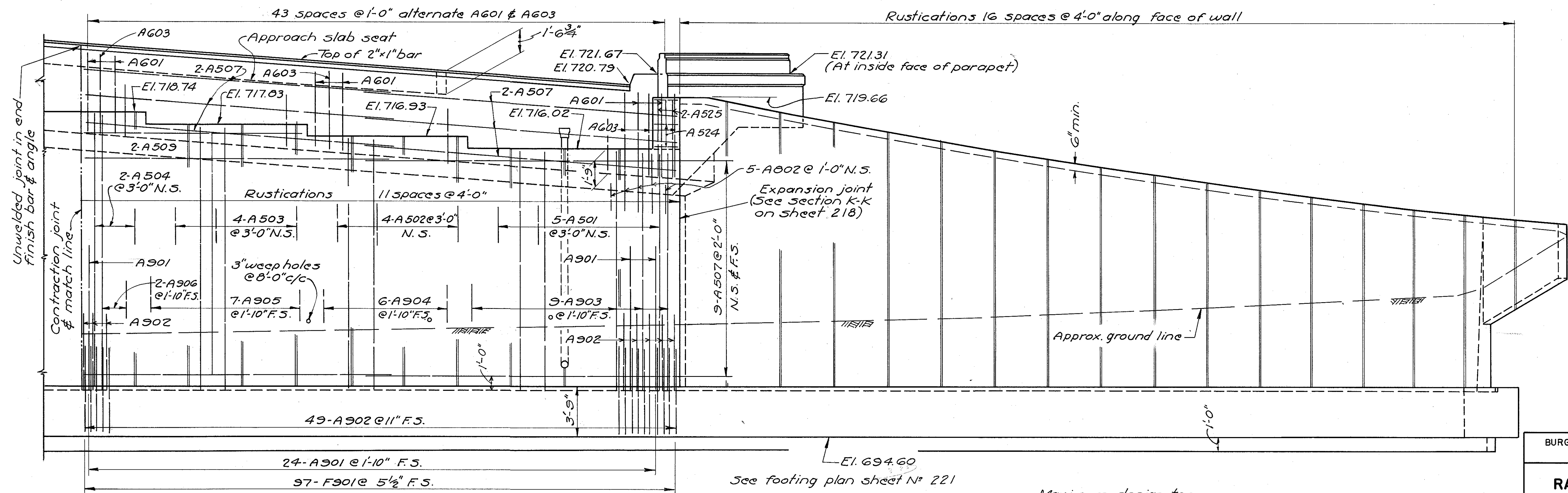
GENERAL ELEVATION

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 162-12.56 FRA 3-13.70



PART PLAN WEST ABUTMENT



PART ELEVATION WEST ABUTMENT

Maximum design toe pressure = 5800 p.s.f.

BURGESS & NIPLE - CONSULTING ENGINEERS
COLUMBUS, 12, OHIO

RAMP AC OVER ROAD B

BR. NO. FRA 3-1375

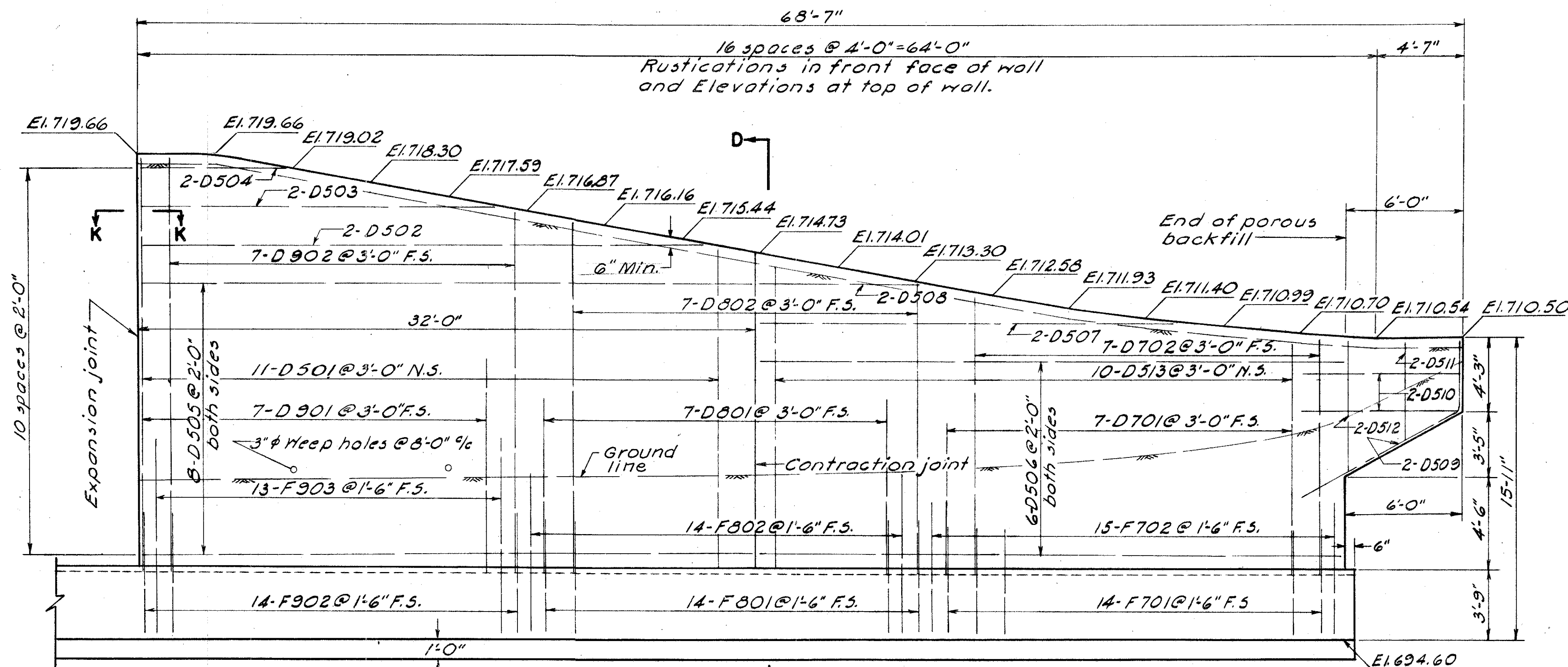
WEST ABUTMENT

FRANKLIN COUNTY

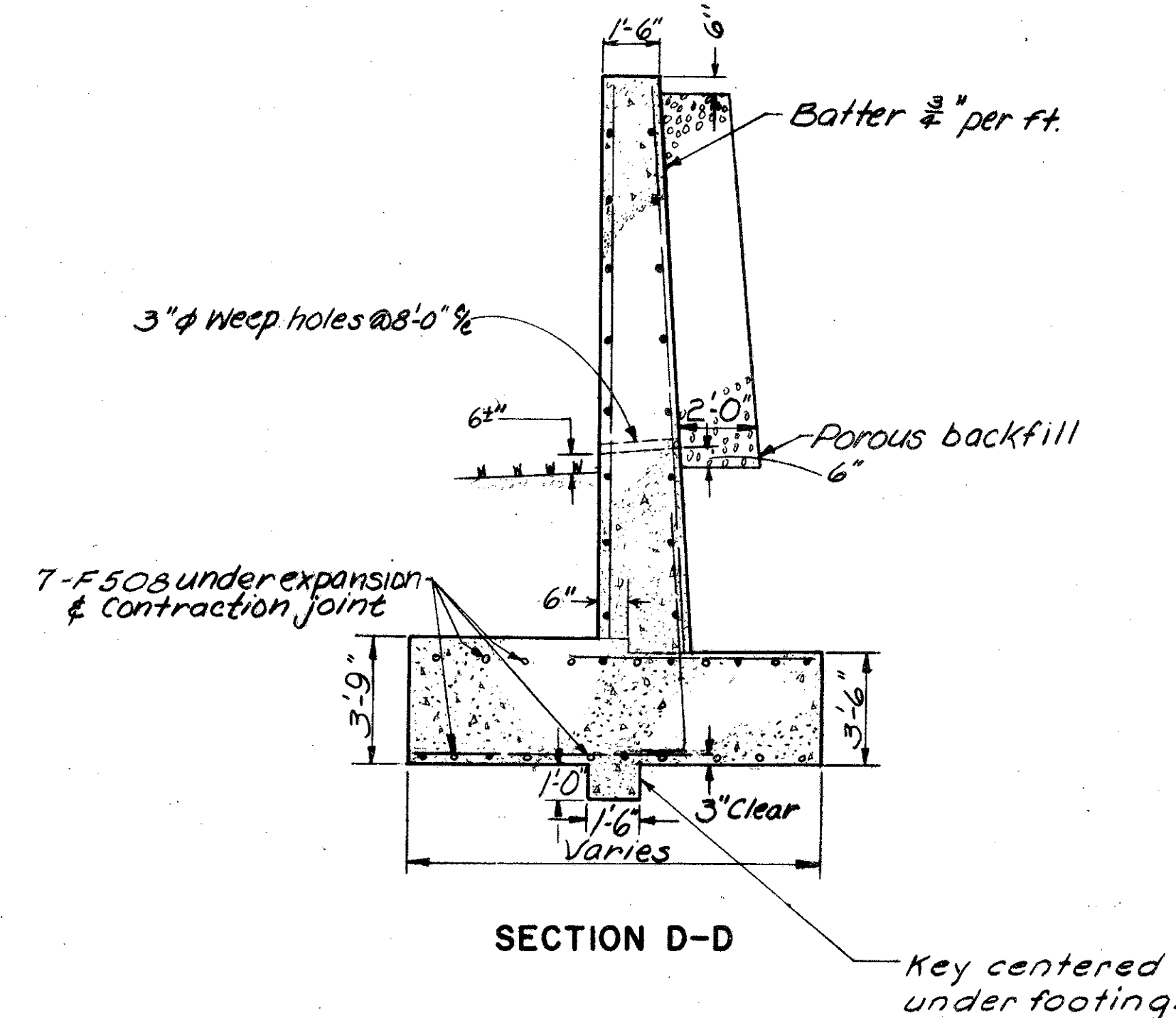
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P. J. C.	W. R. D.	W. R. D.	W. R. D.	10/10/57	

FRANKLIN COUNTY
CITY OF COLUMBUS

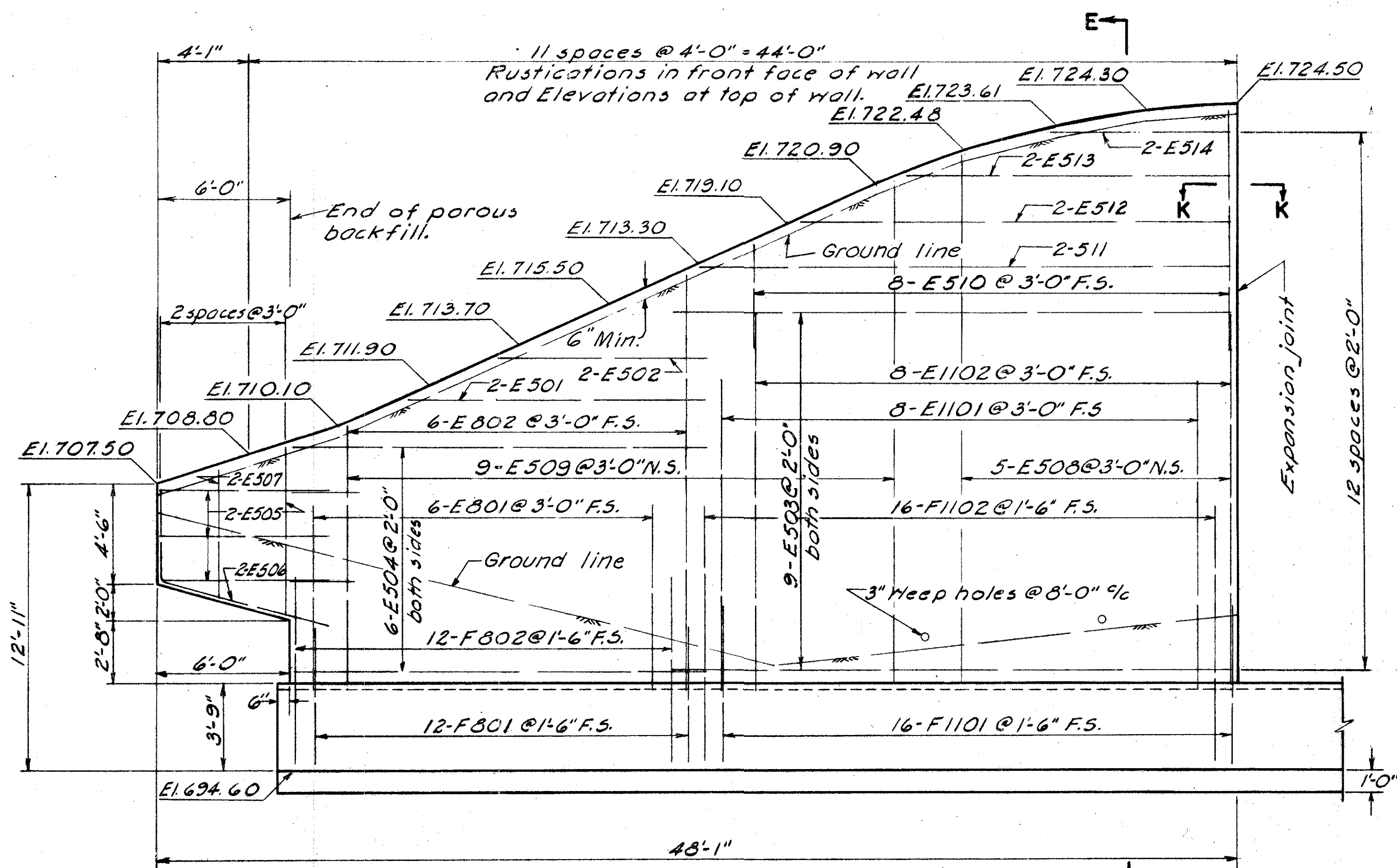
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70



DEVELOPMENT OF NORTHWEST WING WALL

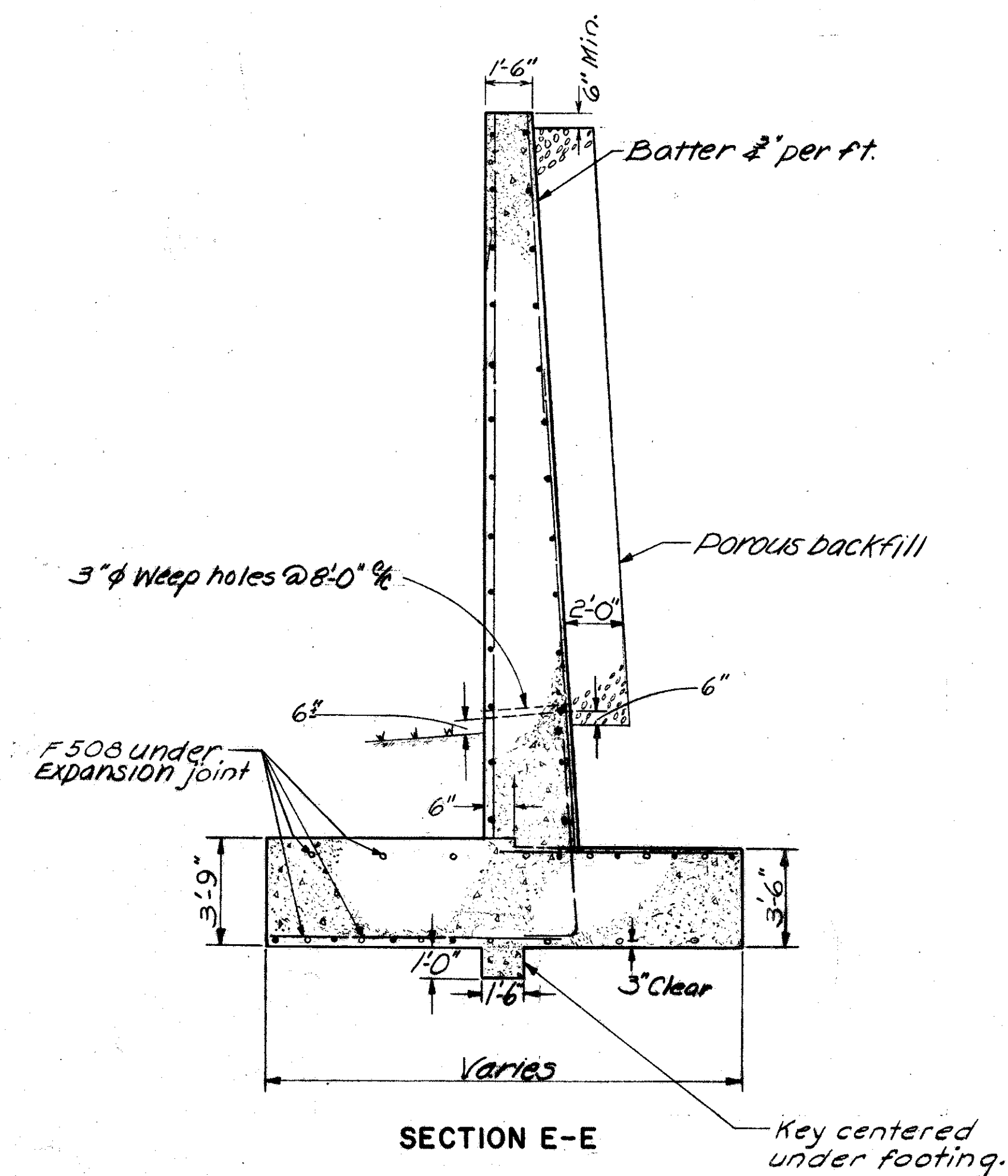


SECTION D-D



DEVELOPMENT OF SOUTHWEST WING WALL

N.S. = Near side
F.S. = Far side



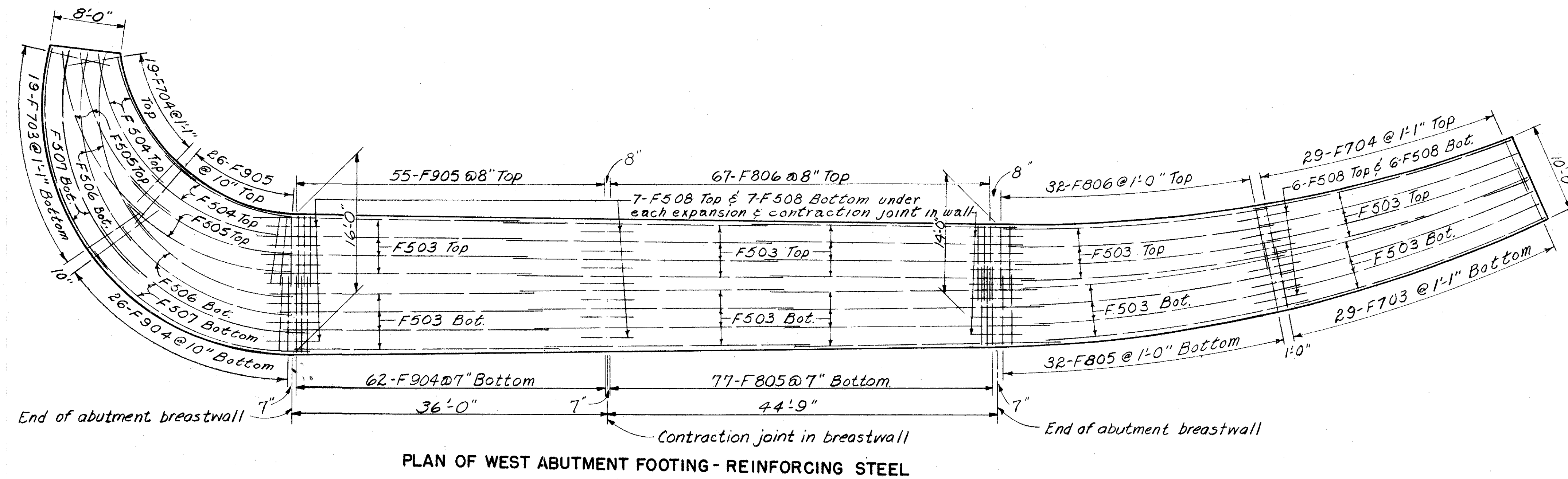
SECTION E-E

- Notes:
- Top of wing walls shall be a smooth curve.
 - All longitudinal dimensions along curved wing walls are measured along the front face of the wing.
 - For additional reinforcing steel in footer see sheet 221
 - For detail of contraction joints and rustication see sheet 180
 - For Section K-K see sheet 218

BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO.				
RAMP AC OVER ROAD B BR. NO. FRA-3-13.75				
DEVELOPMENT OF NORTHWEST AND SOUTHWEST WING WALLS				
FRANKLIN COUNTY				
DESIGNED D.S.R.	DRAWN R.B.F.	TRACED J.E.	CHECKED P.M.S.	REVIEWED DATE 4/18/10-9-57
REVISED				

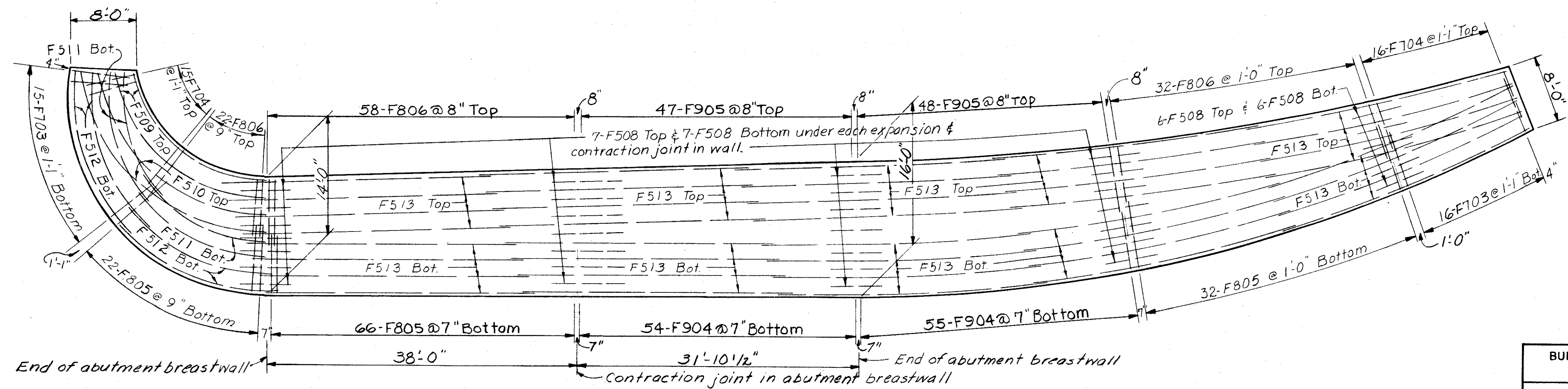
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70



Note:
Horizontal reinforcing steel spacing
measured along face of walls.

Dowel bars in footing not shown, see
wall details for placement



Maximum design toe pressure = 5800 p.s.f.

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

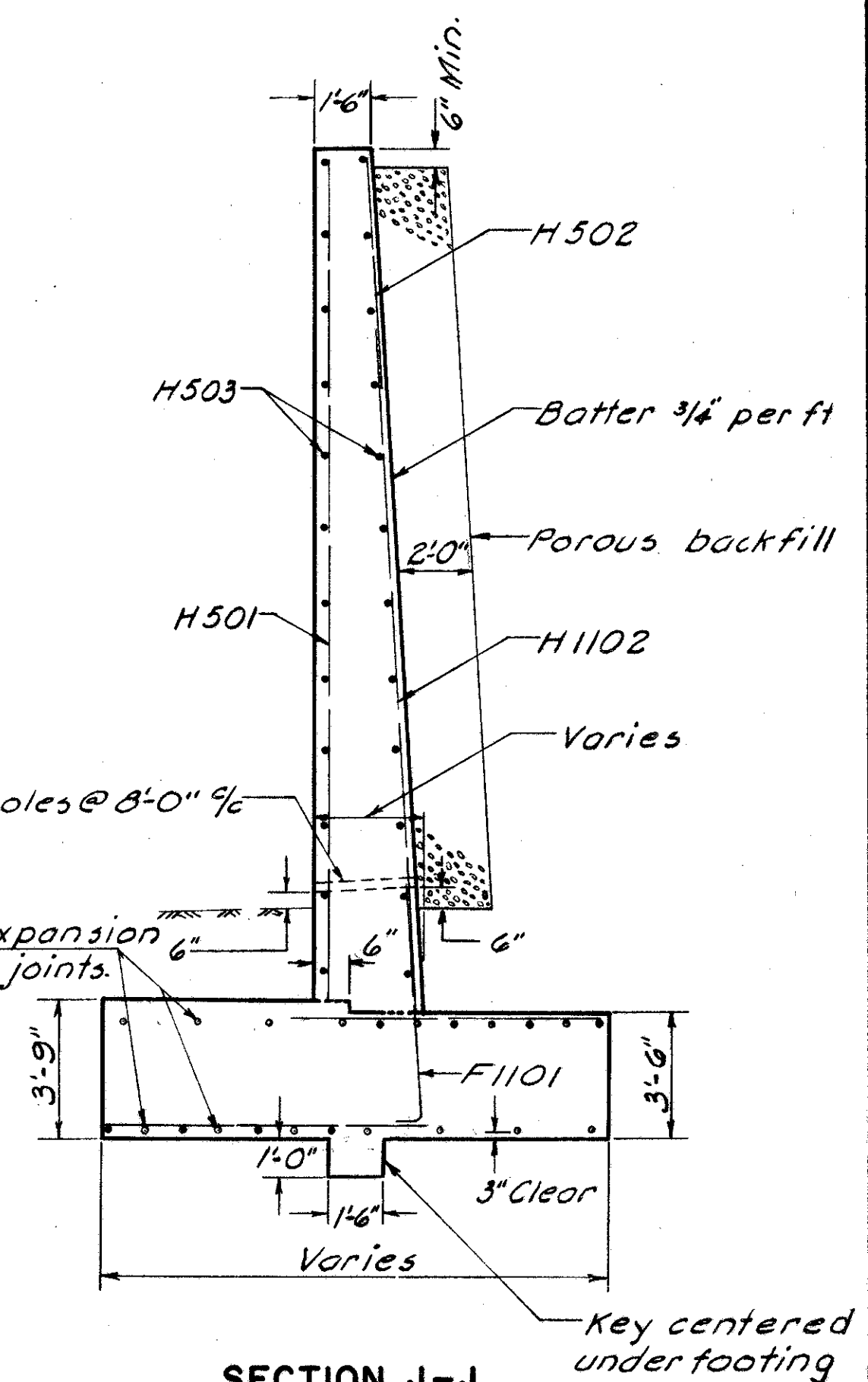
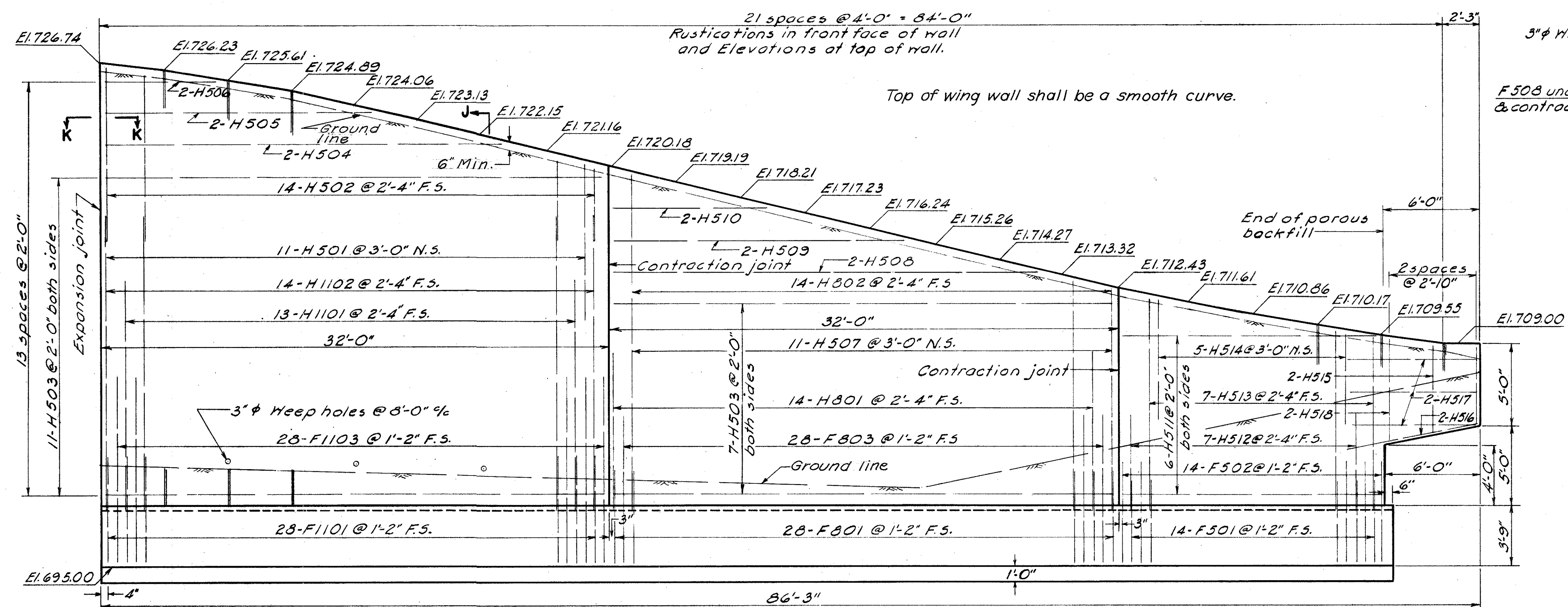
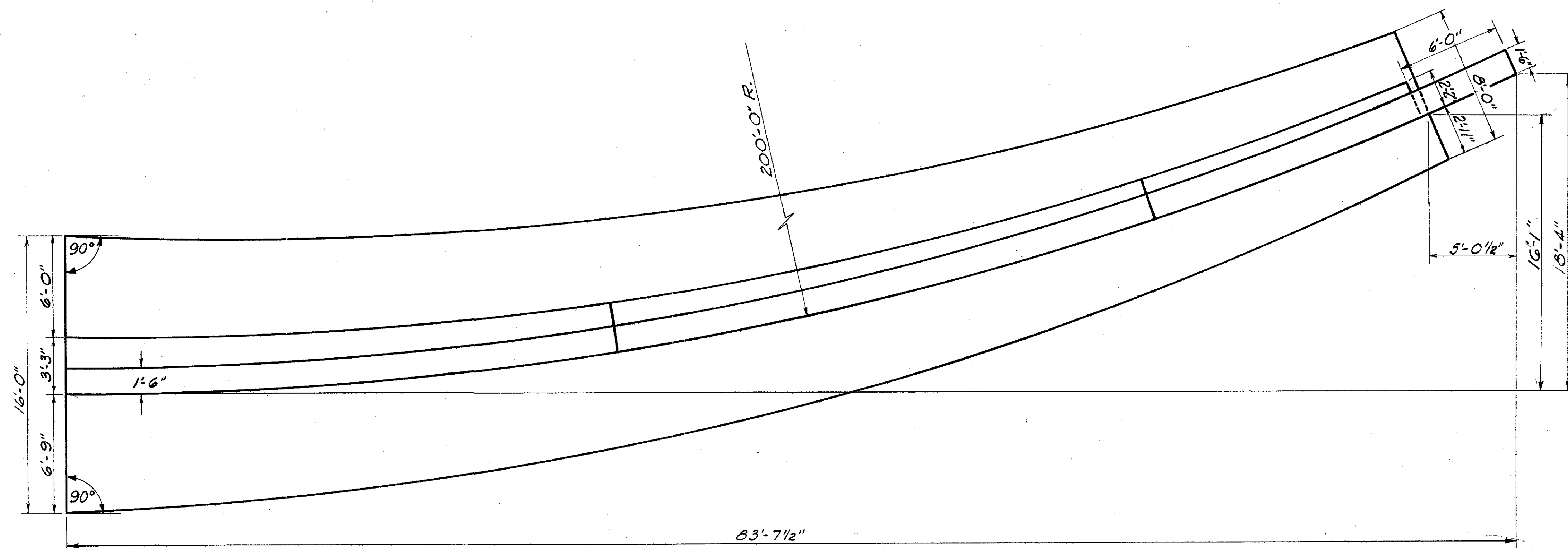
RAMP AC OVER ROAD B
BR. NO. FRA-3-13.75
**EAST AND WEST ABUTMENT
FOOTING PLAN**

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
B.S.R.	B.S.R.	N.H.	B.S.R.	4/18/57	

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

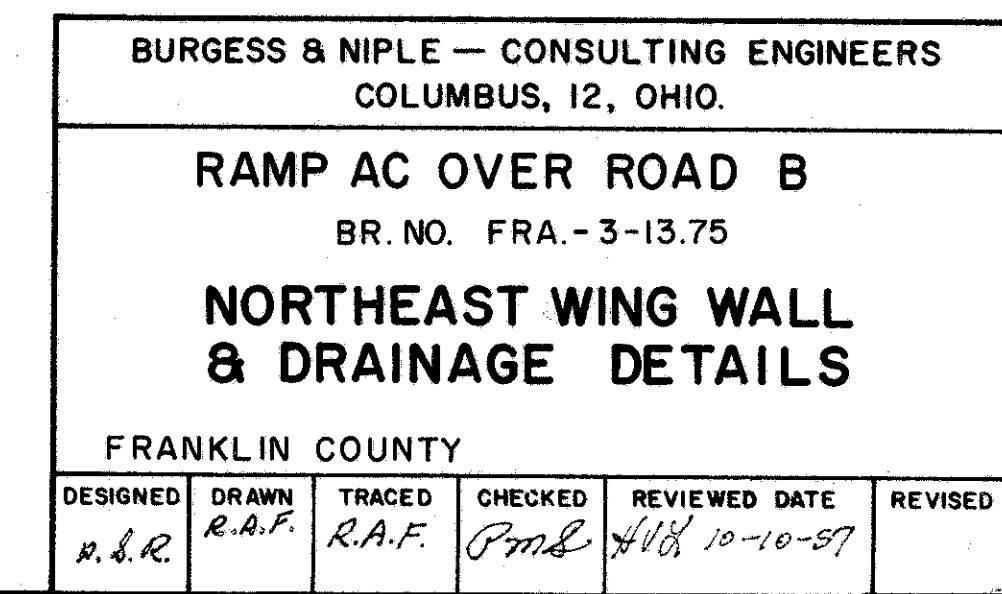
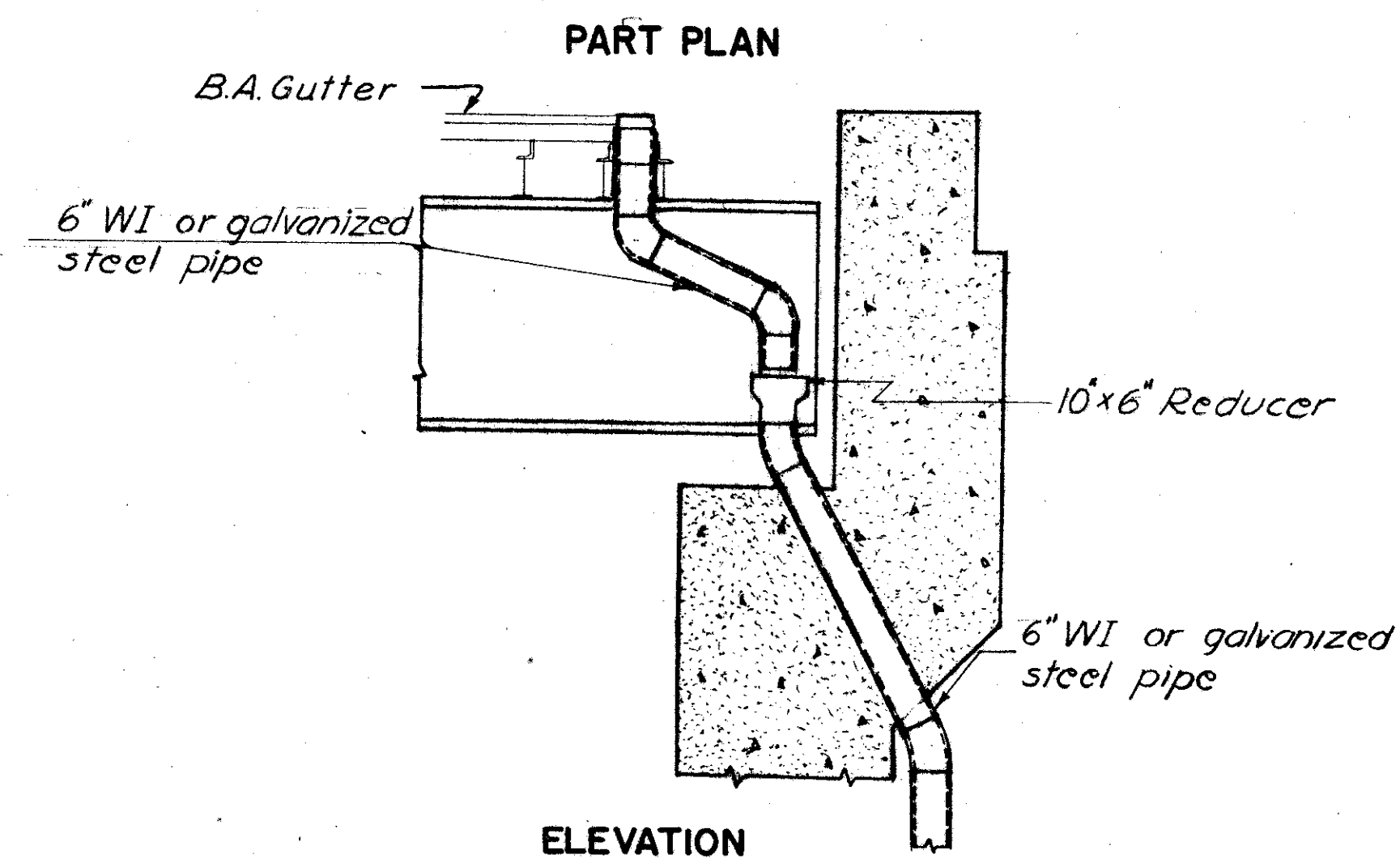
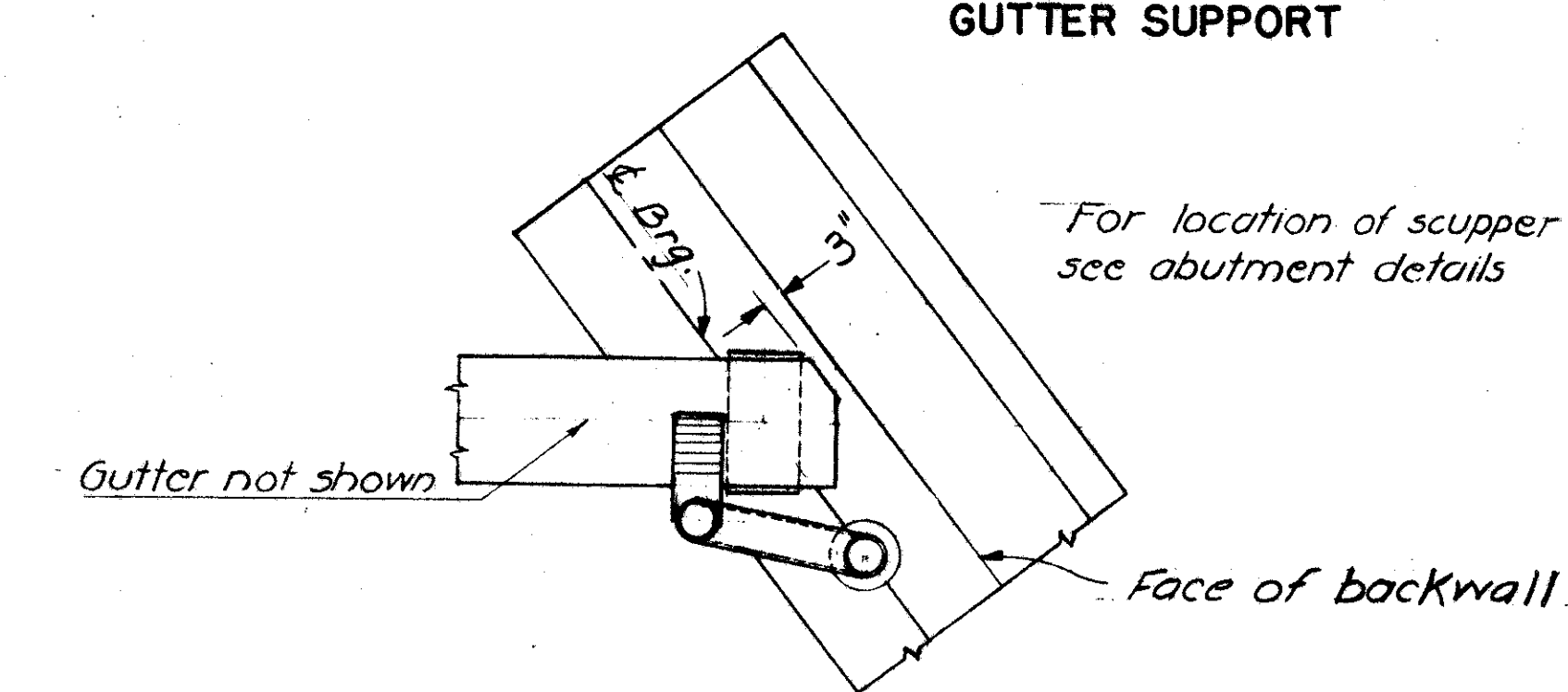
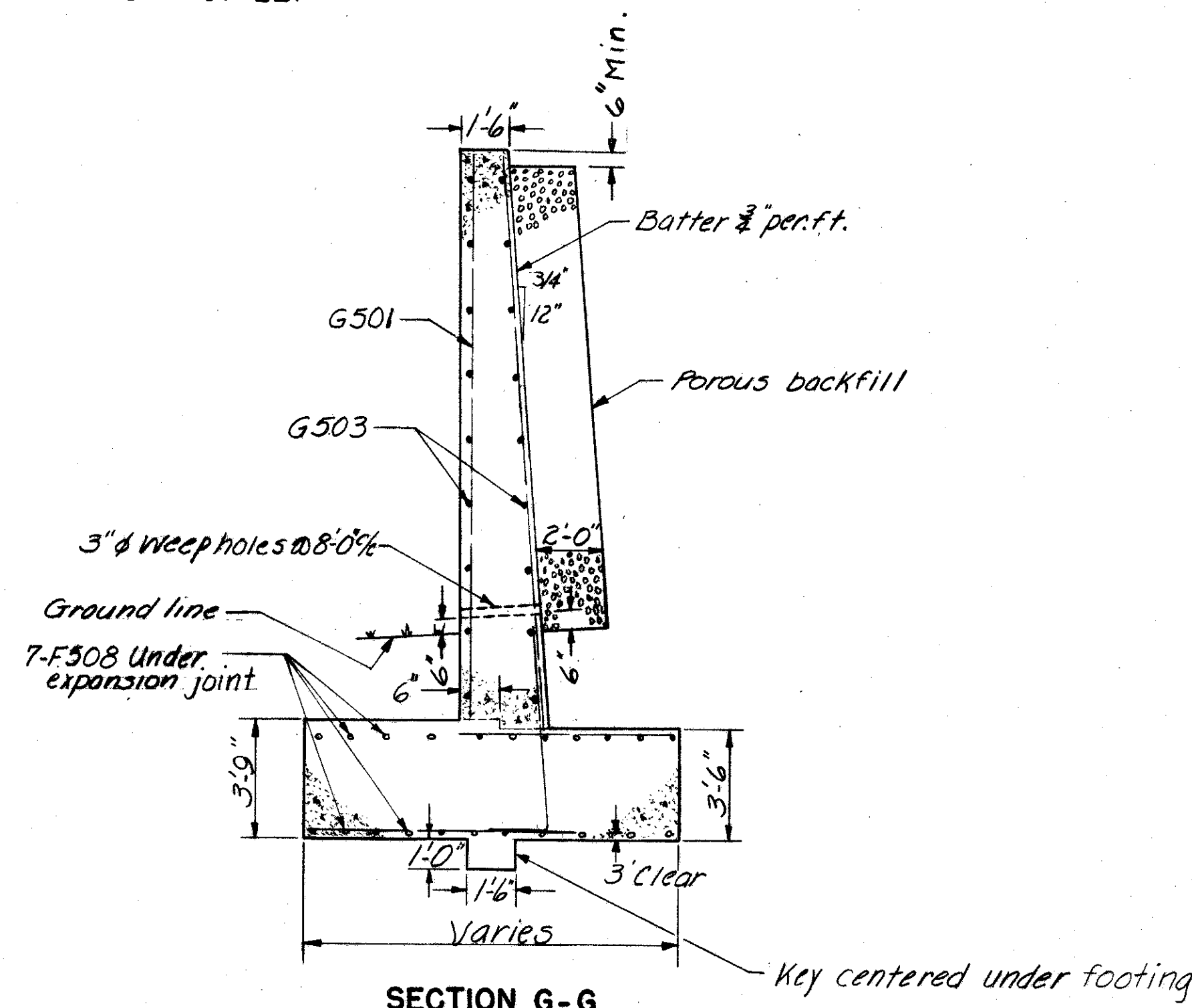
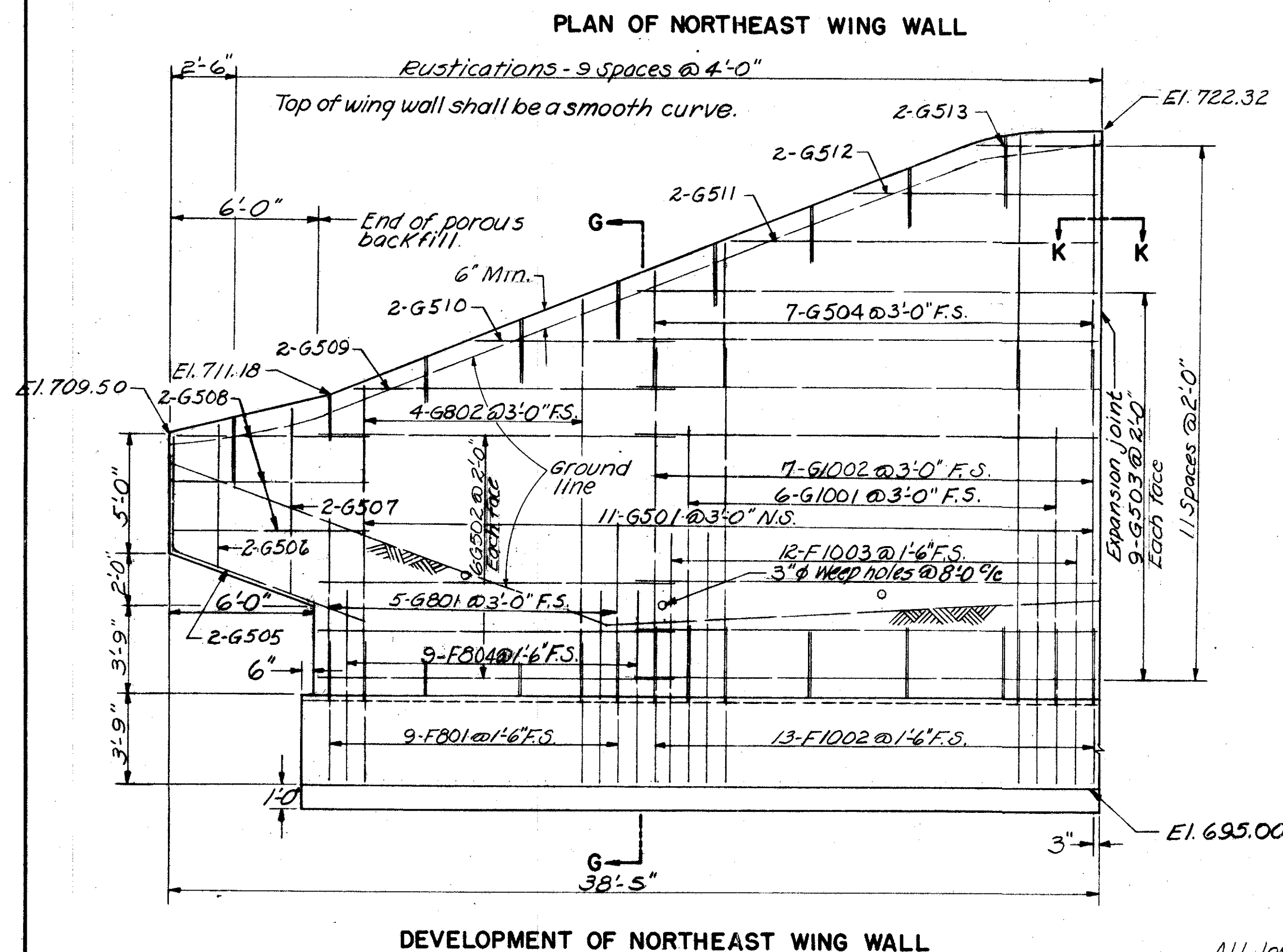
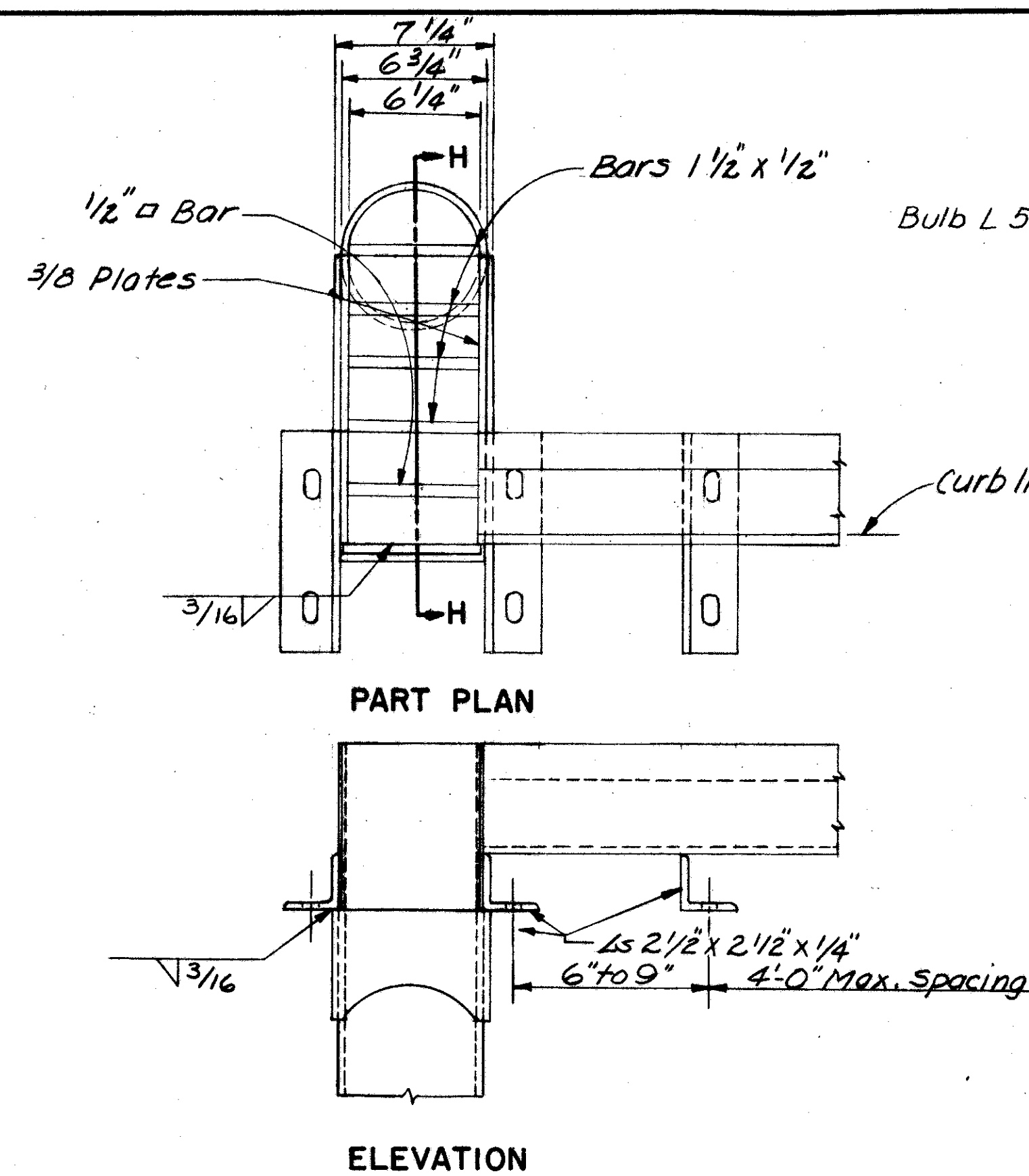
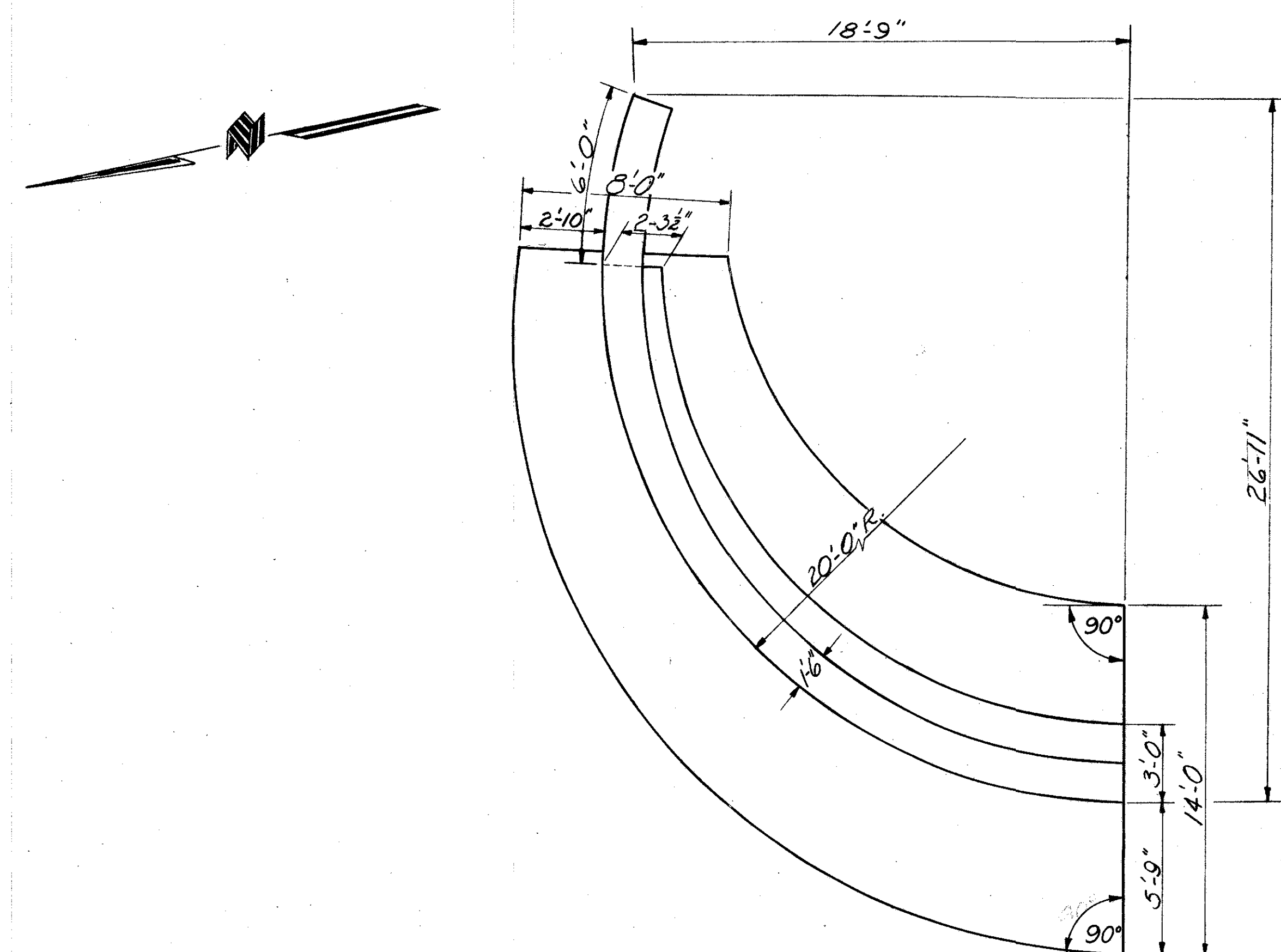
FRA. 62-12.56 FRA 3-13.70



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COLUMBUS, 12, OHIO.

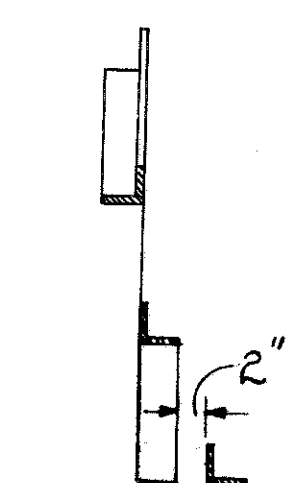
RAMP AC OVER ROAD B
BR.NO. FRA.-3-13.75
SOUTHEAST WING WALL
DETAILS

FRANKLIN COUNTY					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.S.R.	CE.	CE.	PmL	4/8/10-9-57	

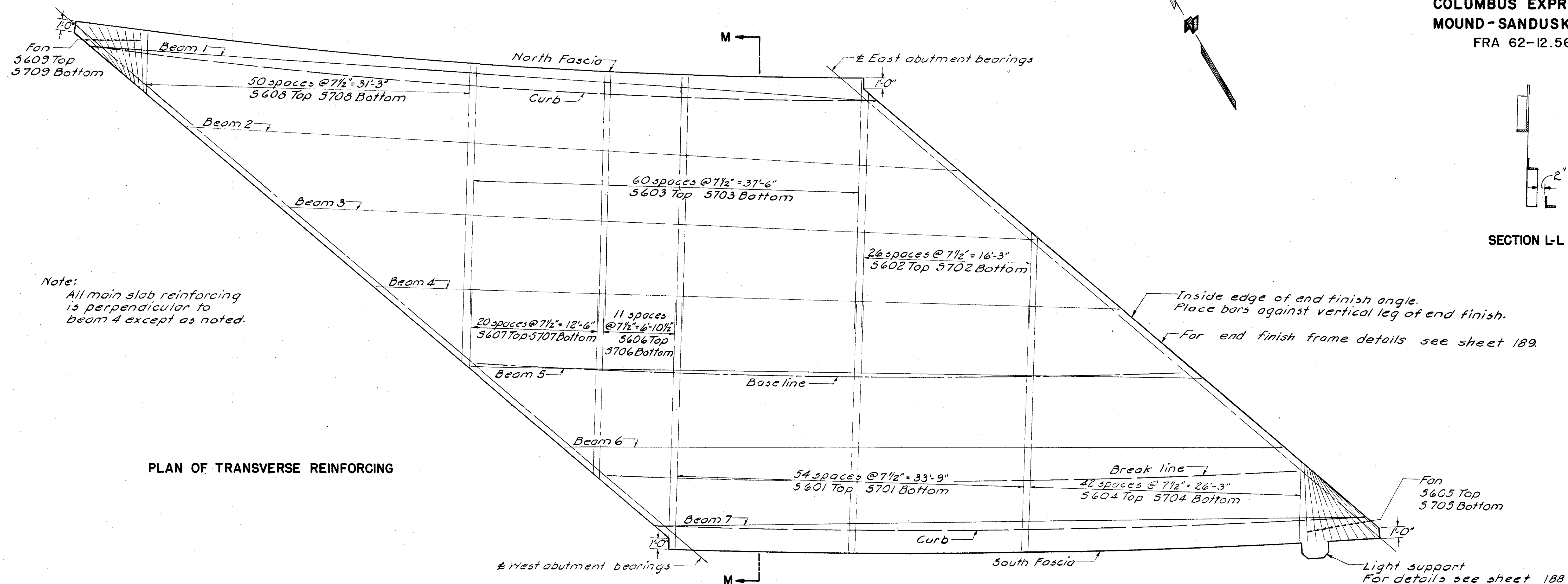


FRANKLIN COUNTY
CITY OF COLUMBUS

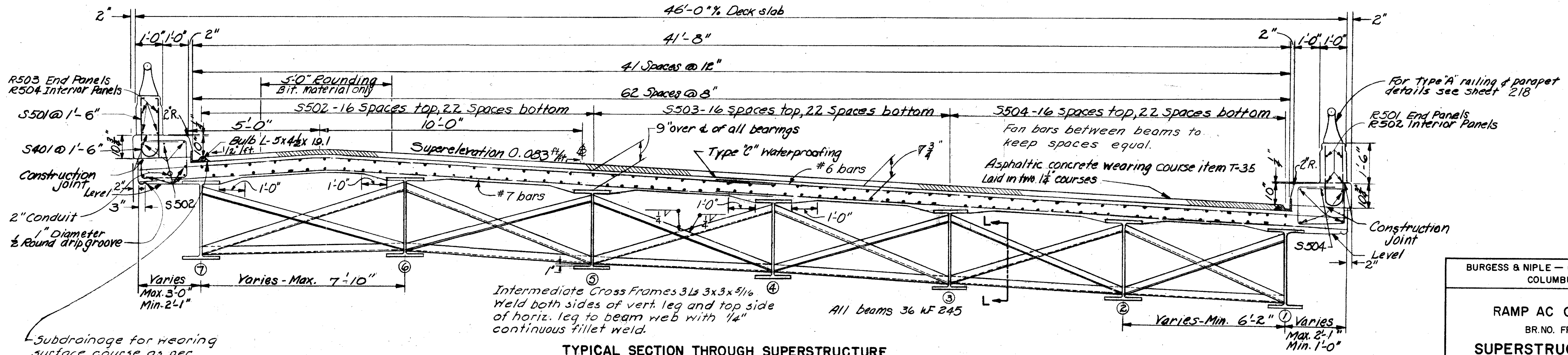
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



SECTION L-L



PLAN OF TRANSVERSE REINFORCING



TYPICAL SECTION THROUGH SUPERSTRUCTURE
(NORMAL TO CURVE)
SECTION M-M

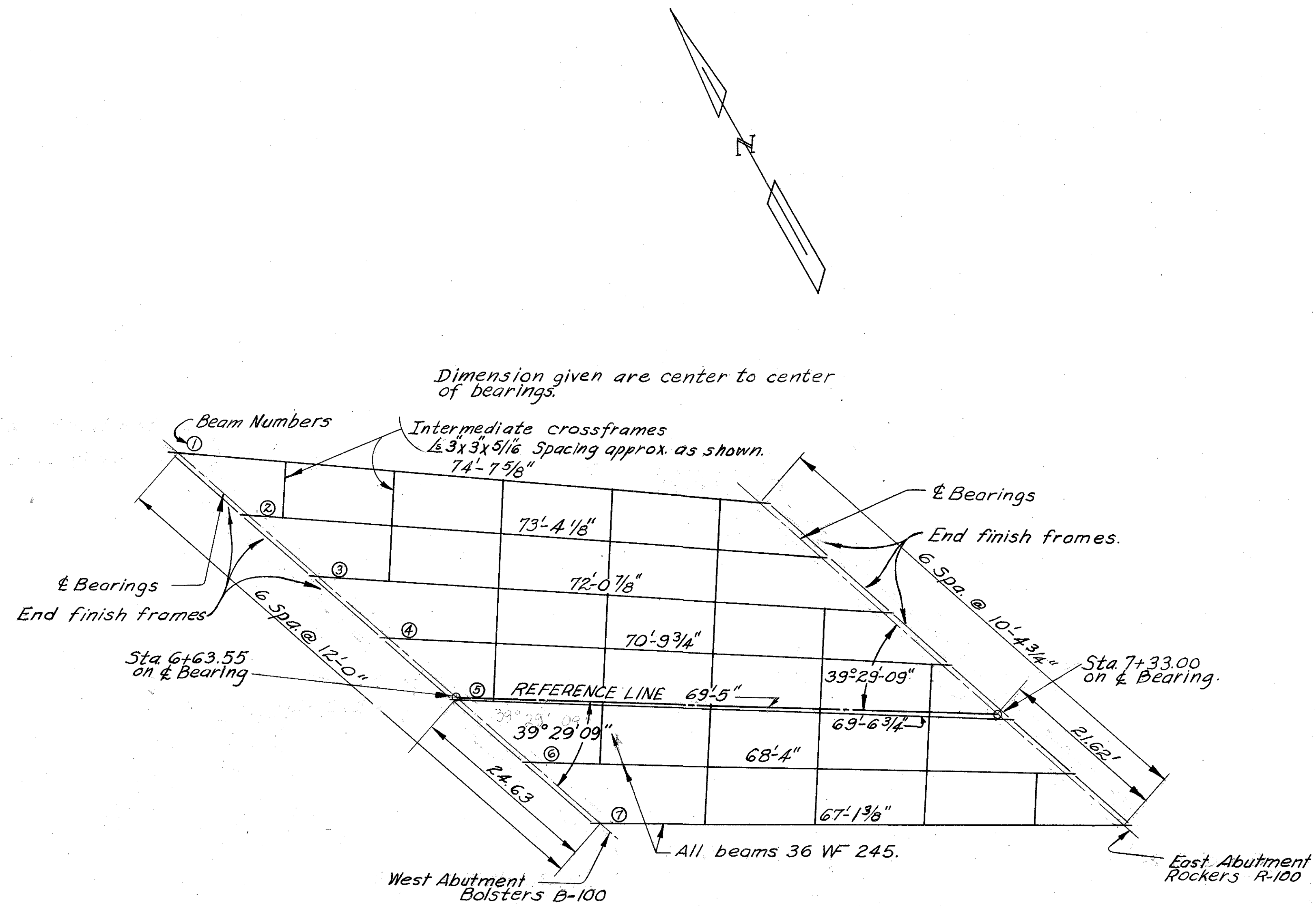
BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

RAMP AC OVER ROAD B
BR. NO. FRA-3-13.75
SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
A.B.R.	R.B.F.	R.A.F.	P.M.S.	4/18/10-10-57	

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



STRUCTURAL STEEL FRAMING PLAN

Intermediate crossframes are perpendicular to beam (4).

NOTE:
Rockers & Bolsters-R-100, B-100
Ref. to
Standard drawing RB-1-55.
For end finish frame details
see sheet 189.

Beam Camber	Beams						
	1	2	3	4	5	6	7
Deflection due to weight of steel	.360	.341	.317	.295	.276	.256	.235
Deflection due to remaining dead load	1.650	.978	.938	.893	.840	.810	1.080
Sum	2.010	1.319	1.255	1.188	1.116	1.066	1.315
Required Camber	2"	1 5/8"	1 1/4"	1 3/8"	1 1/8"	1 1/8"	1 3/8"

BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO.					
RAMP AC OVER ROAD B BR. NO. FRA-3-1375 STRUCTURAL STEEL FRAMING PLAN					
FRANKLIN COUNTY					
DESIGNED B.S.R.	DRAWN R.A.F.	TRACED H.R.C.	CHECKED P.M.L.	REVIEWED DATE 4/18 10-9-57	REVISED

REINFORCING STEEL LIST

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM MOUND-SANDUSKY EXPRESSWAY FRA 62-12.56 FRA 3-13.70

FOOTING

Mark	No.	Length	Weight	Shape	East Abut.	West Abut.
F1101	44	9'-0"	2,104	B	28	16
F1102	16	13'-9"	1,169	B		16
F1103	28	14'-0"	2,083	B	28	
F1001	230	8'-5"	8,333	B	152	78
F1002	13	8'-5"	471	B	13	
F1003	12	12'-4"	637	B	12	
F901	97	7'-10"	2,582	B		97
F902	14	7'-10"	373	B		14
F903	13	12'-7"	556	B		13
F904	197	9'-0"	6,028	S	109	88
F905	176	8'-0"	4,787	S	95	81
F801	63	7'-4"	1,233	B	37	26
F802	26	9'-10"	682	B		26
F803	28	10'-10"	810	B	28	
F804	9	9'-7"	230	B	9	
F805	229	8'-0"	4,891	S	120	109
F806	211	7'-0"	3,943	S	112	99
F701	14	6'-9"	193	B		14
F702	15	8'-1"	248	B		15
F703	79	7'-0"	1,130	S	31	48
F704	79	6'-0"	969	S	31	48
F501	14	6'-2"	90	B	14	
F502	14	7'-4"	107	B	14	
F503	40	30'-3"	1,262	*		40
F504	4	16'-6"	69	B		4
F505	4	21'-0"	88	B		4
F506	4	22'-6"	94	B		4
F507	4	28'-0"	117	B		4
F508	122	6'-0"	763	S	68	54
F509	2	25'-8"	54	B	2	
F510	2	32'-0"	67	B	2	
F511	4	17'-4"	72	B	4	
F512	4	21'-1"	88	B	4	
F513	40	32'-0"	1,335	*	40	

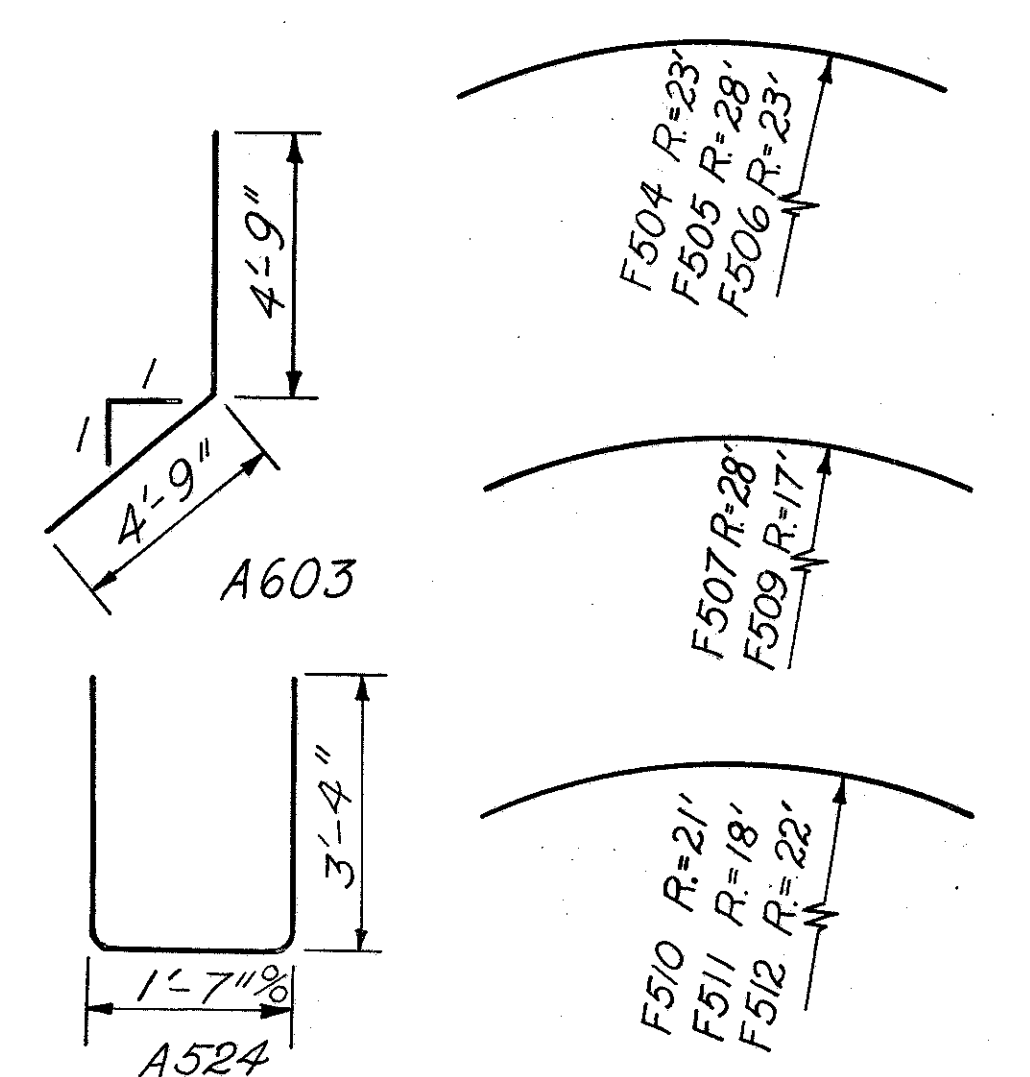
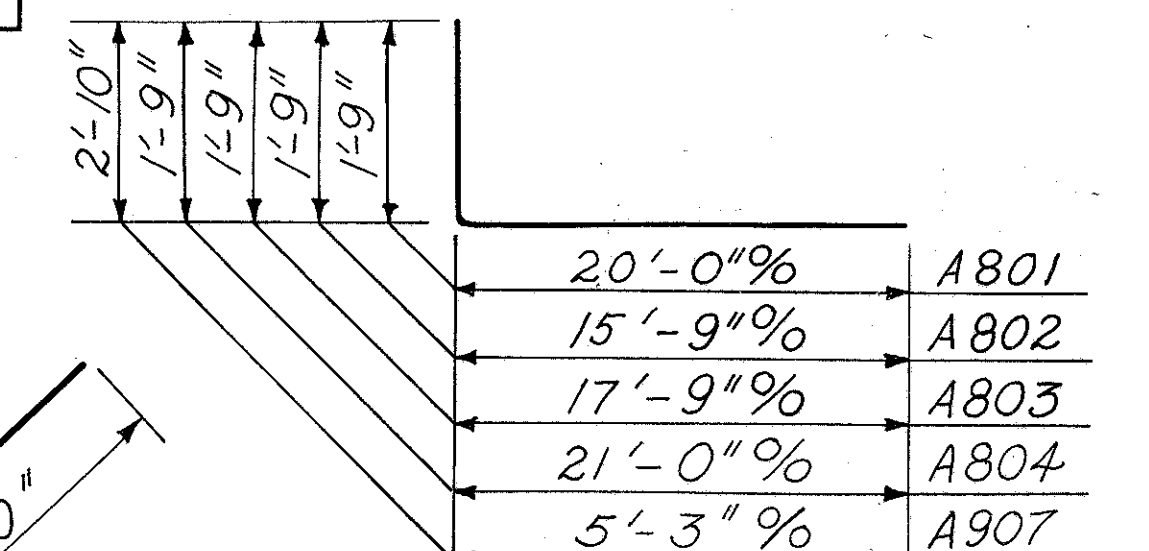
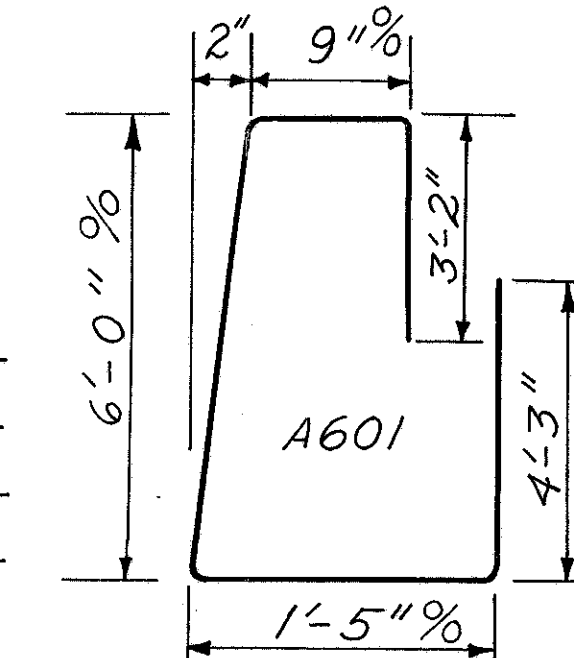
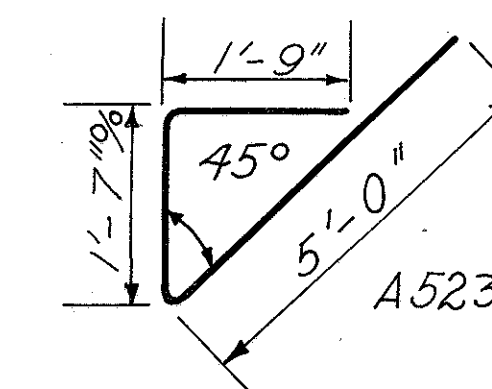
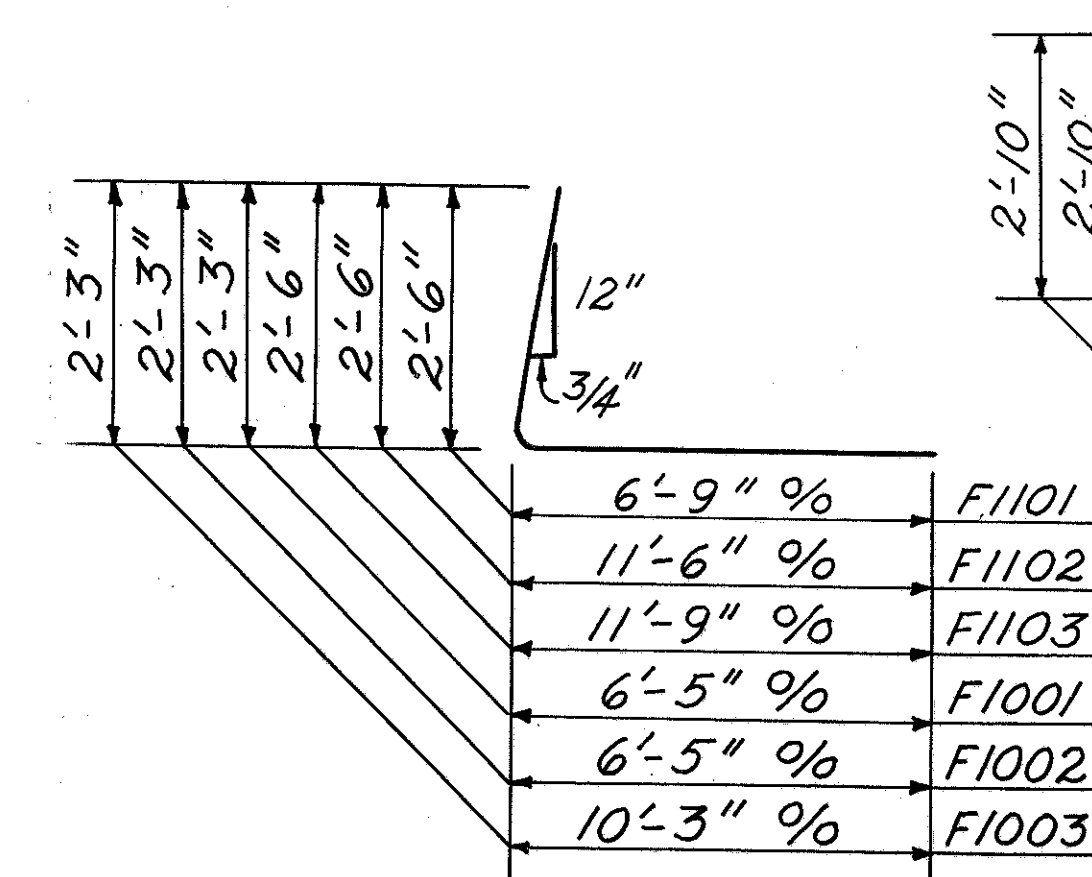
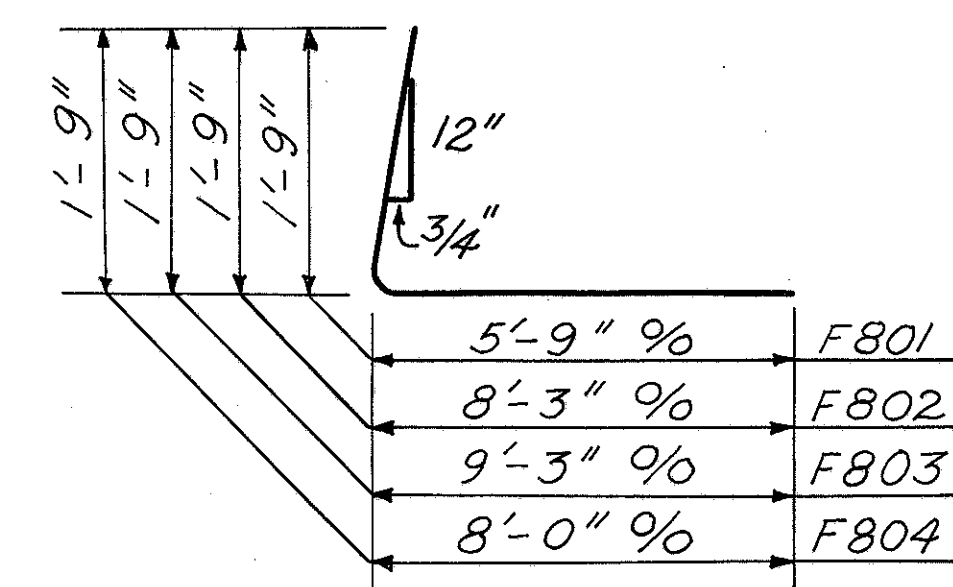
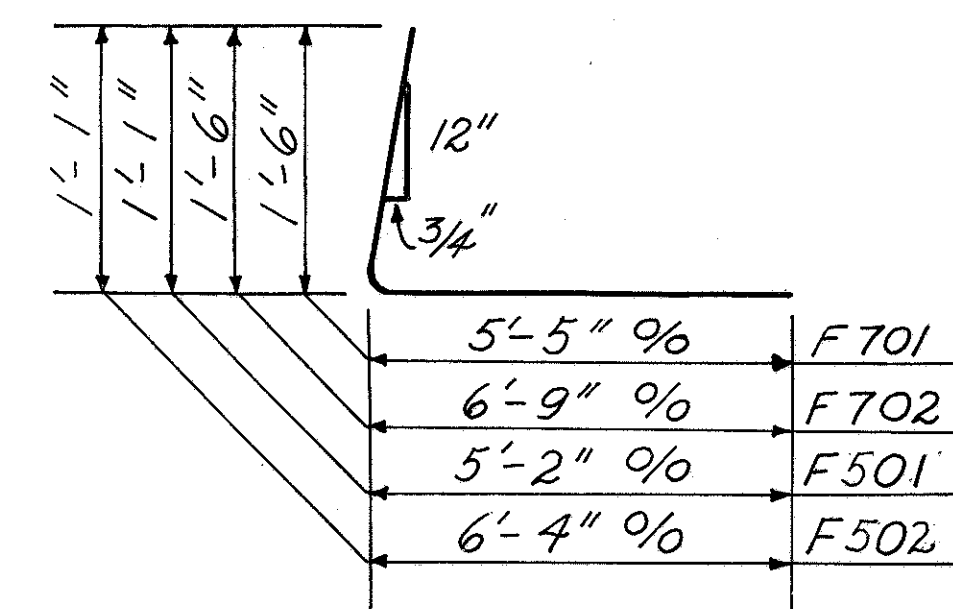
* Place bars to fit curve of wing. Bars may be bent in shop or field at option of the contractor.

ABUTMENTS

Mark	No.	Length	Weight	Shape	East Abut.	West Abut.
A1001	19	10'-9"	879	S		19
A1002	4	20'-5"	351	S		4
A1003	7	21'-4"	642	S		7
A1004	6	22'-3"	574	S		6
A1005	3	22'-7"	291	S		3
A1006	39	5'-9"	965	S		39
A1007	38	12'-9"	2,085	S	38	
A1008	76	7'-9"	2,534	S	76	
A1009	6	19'-11"	514	S	6	
A1010	6	20'-9"	536	S	6	
A1011	6	21'-7"	557	S	6	
A1012	5	22'-5"	482	S	5	
A1013	6	23'-3"	600	S	6	
A1014	6	24'-1"	622	S	6	
A1015	3	24'-4"	314	S	3	
A901	36	9'-6"	1,163	S	6	30
A902	49	5'-6"	916	S		49
A903	9	17'-9"	543	S		9
A904	6	18'-8"	381	S		6
A905	7	19'-7"	466	S		7
A906	2	20'-5"	139	S		2
A907	12	7'-10"	319	B	6	6
A801	5	21'-7"	288	B		5
A802	5	17'-4"	231	B		5
A803	5	19'-4"	258	B	5	
A804	5	22'-7"	301	B	5	
A805	12	3'-6"	112	S	6	6
A601	39	14'-11"	874	B		39
A602	33	15'-3"	756	B	33	
A603	74	9'-6"	1,056	B	34	40
A501	5	17'-6"	91	S		5
A502	4	18'-5"	77	S		4
A503	4	19'-4"	81	S		4
A504	4	20'-2"	84	S		4
A505	4	21'-1"	88	S		4
A506	4	22'-0"	92	S		4
A507	50	22'-4"	1,165	S		50
A508	26	35'-8"	967	S		26
A509	2	16'-0"	33	S		2
A510	2	28'-6"	59	S		2
A511	126	4'-4"	569	B	60	66
A512	16	11'-0"	184	S	8	8
A513	28	31'-6"	920	S	28	
A514	48	3'-6"	175	S	24	24

ABUTMENTS

Mark	No.	Length	Weight	Shape	East Abut.	West Abut.
A515	8	9'-0"	75	S	4	4
A516	4	19'-8"	82	S	4	
A517	4	20'-6"	86	S	4	
A518	3	21'-4"	67	S	3	
A519	4	22'-2"	92	S	4	
A520	3	23'-0"	72	S	3	
A521	4	23'-9"	99	S	4	
A522	2	24'-1"	50	S	2	
A523	6	8'-1"	51	B	3	3
A524	6	8'-2"	52	B	3	3
A525	16	6'-0"	100	S	8	8
A526	26	37'-6"	1,017	S	26	
A527	2	15'-0"	31	S	2	
A528	2	26'-0"	54	S	2	
A529	4	5'-7"	23	B	2	2
A530	16	4'-6"	75	S	8	8



BURGESS & NIPLE - CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

RAMP AC OVER ROAD B

BR. NO. FRA-3-13.75

REINFORCING STEEL LIST

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.S.R.	S.R.F.	S.R.F.	P.M.S.	10-11-57	

REINFORCING STEEL LIST

FED ROAD DIV NO	STATE	FED AID PROJ NO	TYPE FUNDS	228 251
2	OHIO			

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

SUPERSTRUCTURE

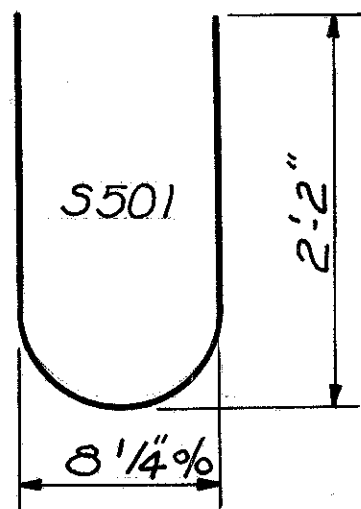
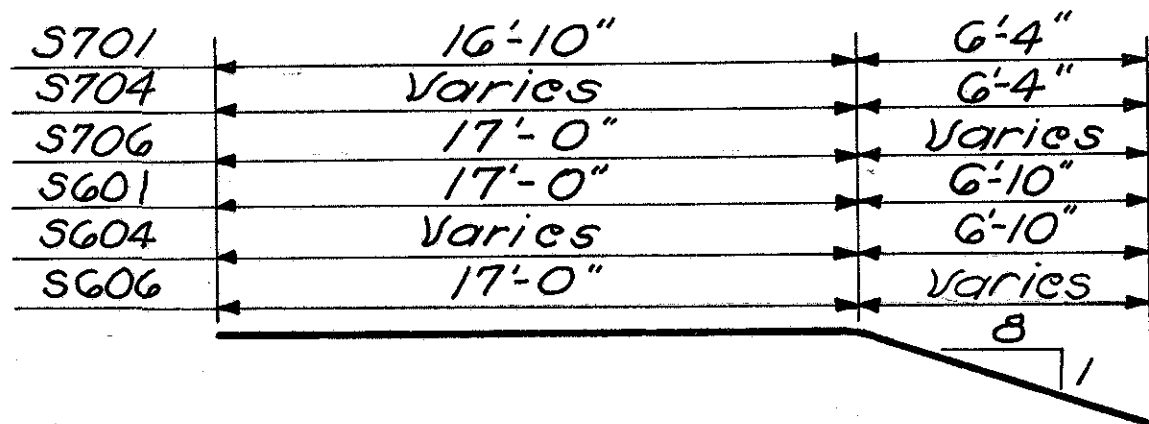
Mark	No.	Length	Weight	Shape
S701	55	23'-2"	2,607	B
S702	1 set of 27	Vary uniformly by 6" steps from 9'-6" to 22'-6"	883	S
S703	61	23'-6"	2,932	S
S704	1 set of 43	Vary uniformly by 6 1/2" steps from 6'-11" to 29'-8"	1,608	B
S705	10	6'-8"	136	S
S706	1 set of 12	Vary uniformly by 6" steps from 17'-6" to 23'-0"	497	B
S707	1 set of 21	Vary uniformly by 6" steps from 7'-3" to 17'-3"	526	S
S708	1 set of 51	Vary uniformly by 5 1/2" steps from 5'-2" to 28'-1"	1,734	S
S709	8	5'-0"	82	S
S601	55	23'-10"	1,969	B
S602	1 set of 27	Vary uniformly by 6" steps from 9'-6" to 22'-6"	649	S
S603	61	24'-0"	2,199	S
S604	1 set of 43	Vary uniformly by 6 1/2" steps from 7'-7" to 30'-4"	1,224	B
S605	10	7'-2"	108	S
S606	1 set of 12	Vary uniformly by 6" steps from 17'-6" to 23'-0"	365	B
S607	1 set of 21	Vary uniformly by 6" steps from 7'-3" to 17'-3"	386	S
S608	1 set of 51	Vary uniformly by 5 1/2" steps from 5'-8" to 28'-7"	1,312	S
S609	8	5'-6"	66	S
S501	124	4'-10"	625	B
S502	84	36'-6"	3,199	S
S503	72	37'-10"	2,841	S
S504	86	39'-5"	3,538	S
S590	3	2'-2"	7	S
S591	3	1'-6"	5	S
S592	3	3'-5"	11	B
S594	8	5'-0"	42	S
F596	2	3'-1"	6	B
S597	3	4'-11"	15	B
S598	2	4'-7"	10	B

SUPERSTRUCTURE

Mark	No.	Length	Weight	Shape
S401	96	6'-11"	444	B
PARAPET				
R501	8	5'-2"	Incl.	S
R502	16	16'-4"	with	S
R503	8	4'-7"	rlg.for	S
R504	16	14'-8"	payment	S
R505	16	10'-6"		S

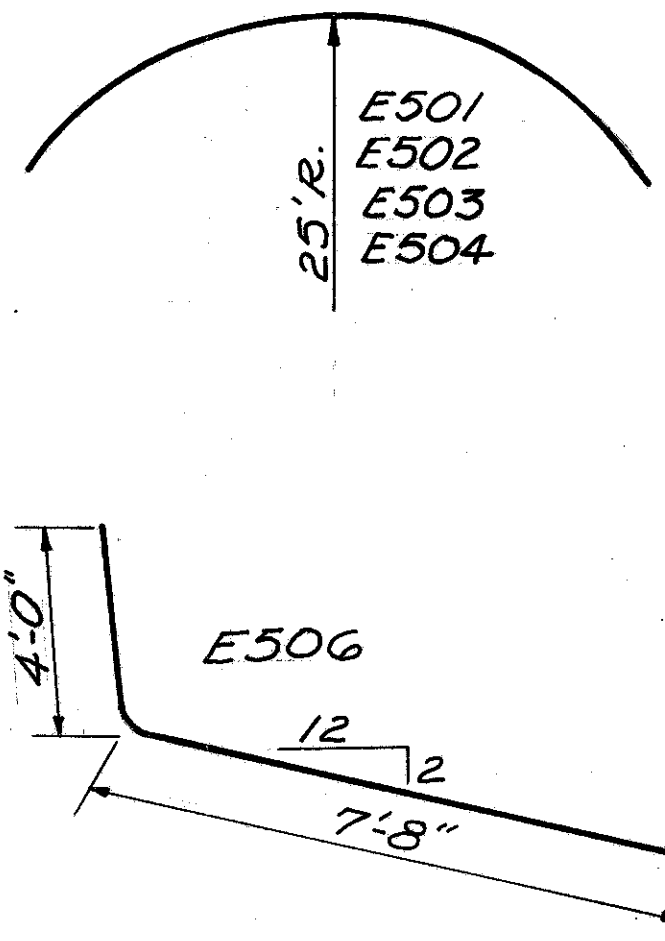
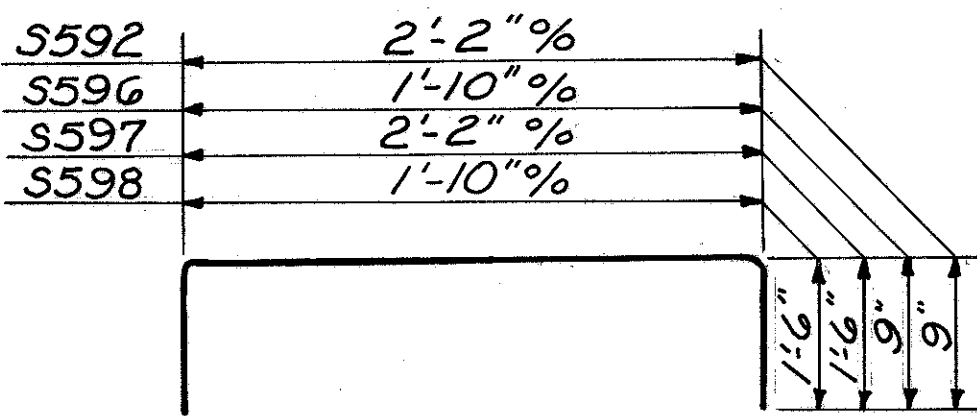
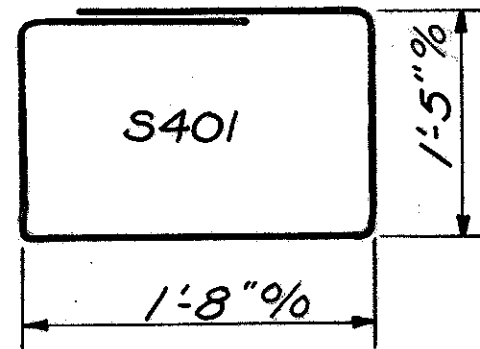
REPLACEMENT BARS

Mark	No.	Length	Weight	Shape
RE1100	1	7'-6"		S
RE1000	2	7'-2"		S
RE900	1	6'-10"		S
RE800	1	6'-6"		S
RE700	1	6'-2"		S
RE600	1	5'-11"		S
RE500	2	5'-7"		S
RE400	1	5'-3"		S



SOUTHWEST WING WALL

Mark	No.	Length	Weight	Shape
E1101	8	13'-10"	588	S
E1102	8	16'-9"	712	S
E801	6	8'-3"	132	S
E802	1 set of 6	Vary uniformly by 1'-4" steps from 11'-8" to 18'-4"	240	S
E501	2	13'-3"	28	B
E502	2	9'-4"	20	B
E503	18	25'-1"	471	B
E504	12	18'-5"	231	B
E505	8	7'-6"	63	S
E506	2	11'-7"	24	B
E507	2	5'-6"	12	S
E508	1 set of 5	Vary uniformly by 6" steps from 23'-8" to 25'-8"	129	S
E509	1 set of 9	Vary uniformly by 1'-4" steps from 11'-6" to 22'-2"	158	S
E510	1 set of 8	Vary uniformly by 10" steps from 4'-8" to 10'-6"	63	S
E511	2	23'-10"	50	S
E512	2	19'-2"	40	S
E513	2	14'-6"	30	S
E514	2	8'-2"	17	S

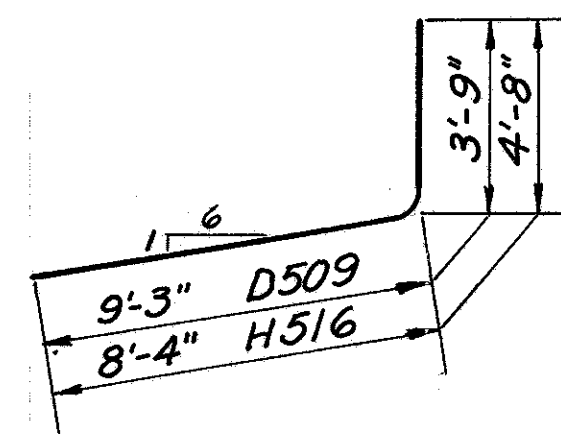


BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO					
RAMP AC OVER ROAD B BR. NO. FRA - 3-1375					
REINFORCING STEEL LIST					
FRANKLIN COUNTY					
DESIGNED B.S.R.	DRAWN R.A.F.	TRACED R.A.F.	CHECKED G.M.B.	REVIEWED DATE 4/18/10-11-57	REVISED

WING WALLS

NORTHWEST WING WALL

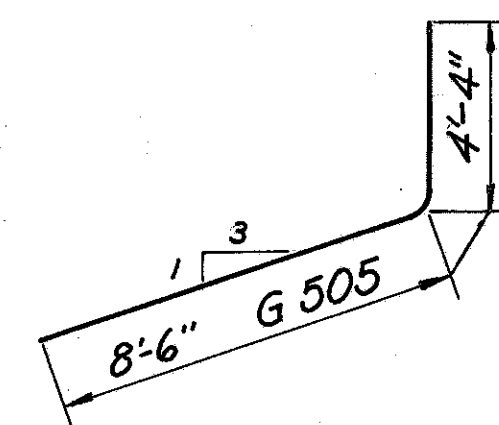
Mark	No.	Length	Weight	Shape
D901	7	11'-0"	262	S
D902	1 set of 7	Vary uniformly by 5" steps from 18'-10" to 21'-4"	479	S
D801	7	9'-0"	168	S
D802	1 set of 7	Vary uniformly by 6" steps from 15'-2" to 18'-2"	312	S
D701	7	7'-9"	111	S
D702	1 set of 7	Vary uniformly by 4" steps from 12'-0" to 14'-0"	186	S
D501	1 set of 11	Vary uniformly by 5 1/2" steps from 16'-7" to 21'-2"	217	S
D502	2	29'-3"	61	S
D503	2	18'-5"	39	S
D504	2	7'-5"	16	S
D505	16	31'-8"	529	S
D506	12	30'-3"	379	S
D507	2	21'-8"	45	S
D508	2	8'-5"	18	S
D509	2	12'-11"	27	B
D510	4	7'-8"	32	S
D511	2	5'-1"	11	S
D512	2	6'-9"	14	S
D513	1 set of 10	Vary uniformly by 5" steps from 11'-9" to 15'-6"	142	S



REINFORCING STEEL LIST

SOUTHEAST WING WALL

Mark	No.	Length	Weight	Shape
H1101	13	14'-6"	1,002	S
H1102	14	18'-7"	1,382	S
H801	14	10'-0"	374	S
H802	1 set of 14	Vary uniformly by 7" steps from 13'-3" to 20'-10"	637	S
H501	1 set of 11	Vary uniformly by 7" steps from 21'-8" to 27'-6"	282	S
H502	1 set of 14	Vary uniformly by 6" steps from 4'-6" to 11'-0"	113	S
H503	36	31'-8"	1,189	S
H504	2	25'-1"	53	S
H505	2	16'-8"	35	S
H506	2	6'-11"	15	S
H507	1 set of 11	Vary uniformly by 9" steps from 13'-4" to 20'-10"	196	S
H508	2	26'-9"	56	S
H509	2	18'-4"	38	S
H510	2	9'-9"	21	S
H511	6	15'-9"	99	S
H512	7	6'-1"	45	S
H513	1 set of 7	Vary uniformly by 5" steps from 10'-8" to 13'-2"	87	S
H514	1 set of 5	Vary uniformly by 6" steps from 10'-10" to 12'-10"	62	S
H515	2	5'-5"	11	S
H516	2	12'-11"	27	B
H517	6	7'-8"	16	S
H518	2	6'-3"	13	S



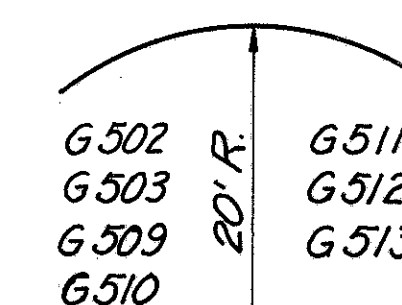
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUSCOLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-12.56 FRA 3-13.70

NORTHEAST WING WALL

Mark	No.	Length	Weight	Shape
G1001	6	11'-5"	295	S
G1002	7	14'-8"	442	S
G801	5	8'-0"	107	S
G802	1 set of 4	Vary uniformly by 1'-2" steps from 12'-7" to 16'-1"	153	S
G501	1 set of 11	Vary uniformly by 1'-1" steps from 12'-6" to 23'-4"	205	S
G502	12	14'-9"	185	B
G503	18	19'-0"	357	B
G504	1 set of 7	Vary uniformly by 0'-11" steps from 5'-0" to 10'-6"	57	S
G505	2	12'-10"	27	B
G506	2	5'-6"	11	S
G507	2	7'-6"	16	S
G508	8	7'-8"	64	S
G509	2	13'-3"	28	B
G510	2	8'-2"	17	B
G511	2	15'-0"	31	B
G512	2	10'-0"	21	B
G513	2	4'-9"	10	B

BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

RAMP AC OVER ROAD B

BR. NO. FRA-3-13.75

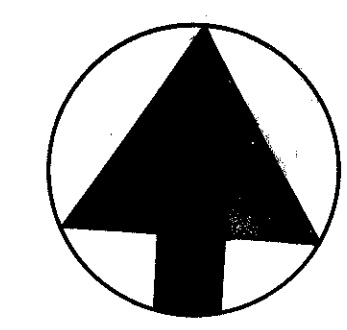
REINFORCING STEEL LIST

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
B.S.R.	AL	AL	G.M.S.	10-11-57	

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

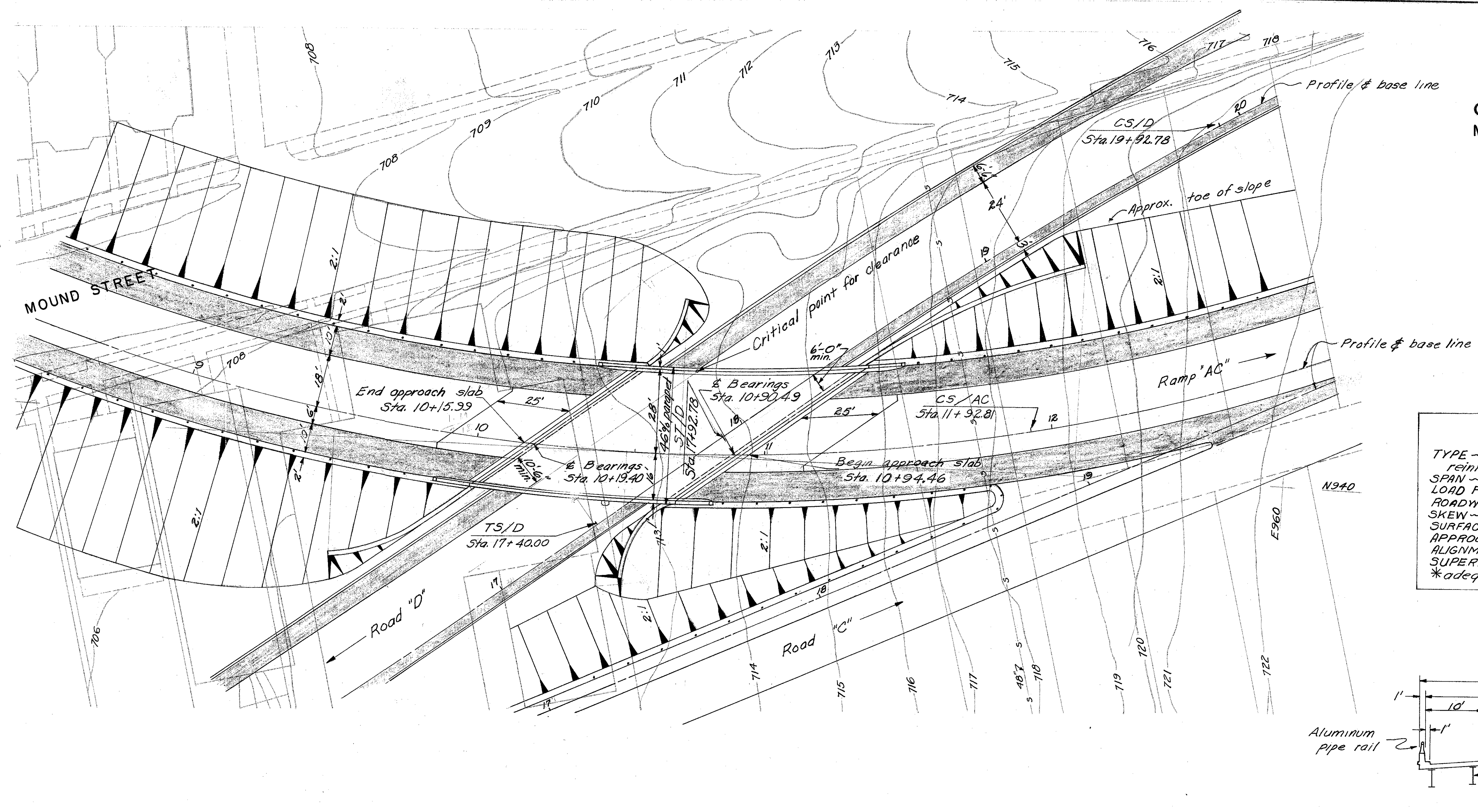


Curve Data
Ramp "AC"
Δ 107°21'-12"
D 9°00'
R 636.62
Lc 892.81
Ts 1023.63
Ls 300.00

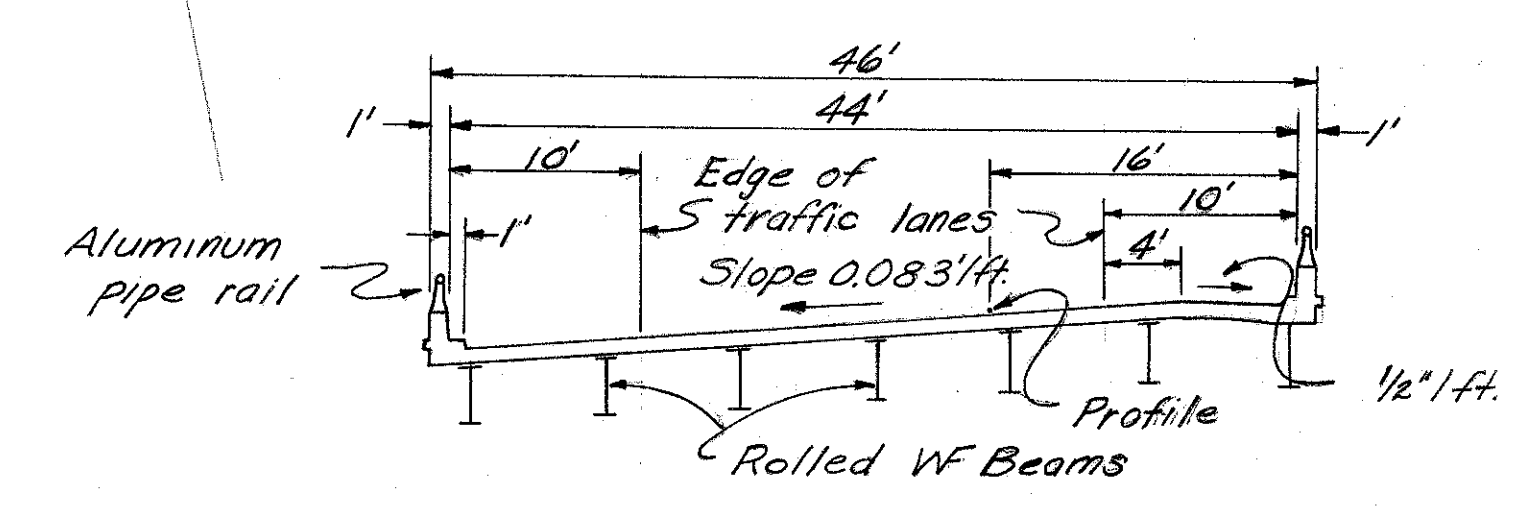
TS 0+00=69+39.72
SC 3+00
CS 11+92.81
ST 14+92.81

Curve Data
Road "D"
Δ 16°20'-43"
D 6°00'
R 954.93
Lc 72.42
Ts 237.36
Ls 200.00

TS 22+65.20
SC 20+65.20
CS 19+92.78
ST 17+92.78
17+40.00 = TS for next curve.



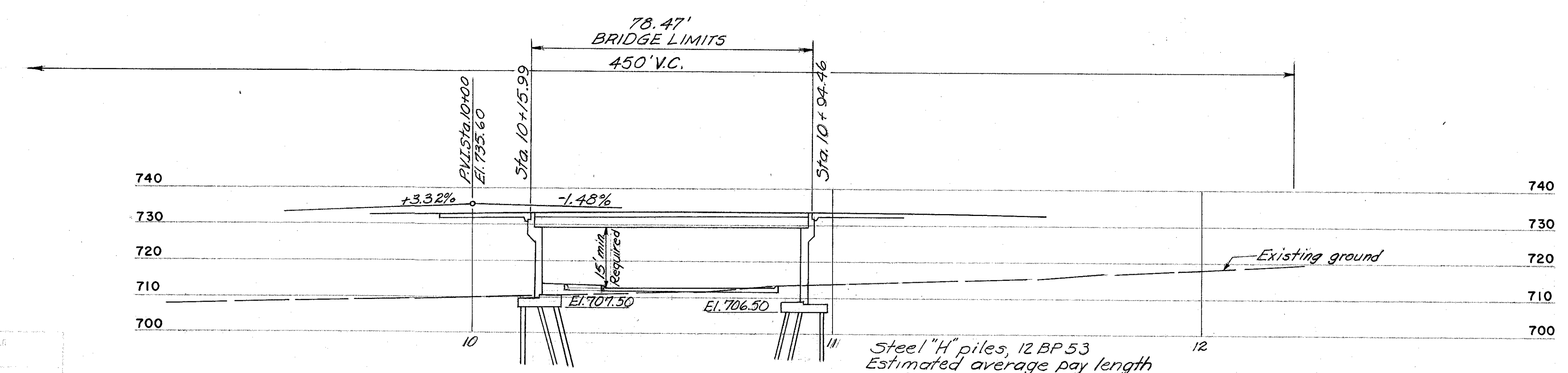
PROPOSED STRUCTURE
TYPE - Steel beam, simple span with reinforced concrete deck and abutments.
SPAN ~ 71.09% Bearings along base line.
LOAD FREQUENCY RATING ~ CF 2000 (SI). *
ROADWAY - 44' of parapets.
SKEW ~ 37° 52' 56" with reference line.
SURFACE COURSE - Bituminous concrete.
APPROACH SLABS - AS-1-54, 25' Long.
ALIGNMENT - 9° Left curve.
SUPERELEVATION ~ .083'/ft.
*adequate for AASHTO alternate loading.



SUPERSTRUCTURE CROSS-SECTION

ROAD INTERSECTIONS
Ramp "AC" Sta. 10+78.18 =
Road "D" Sta. 17+81.42

PLAN



PROFILE ON BASE LINE

Steel "H" piles, 12 BP 53
Estimated average pile length
39 ft. for west abutment piles
31 ft. for east abutment piles

B.M. $\frac{84}{10}$ ELEV. 721.046

Brass plug in concrete monument in ground at southwest corner of Scioto Boulevard and West Mound Street, 7.9 feet south of south curb of West Mound Street (Paved 46.4 feet), 72.7 feet west of projection of west curb of Scioto Boulevard, (Paved 40.6 feet).

BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, OHIO

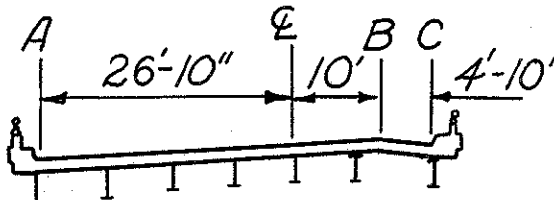
RAMP AC OVER ROAD D
BR. NO. FRA-40-1219
SITE PLAN

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
[Signature]	[Signature]	[Signature]	[Signature]	[Signature]	10-10-57	

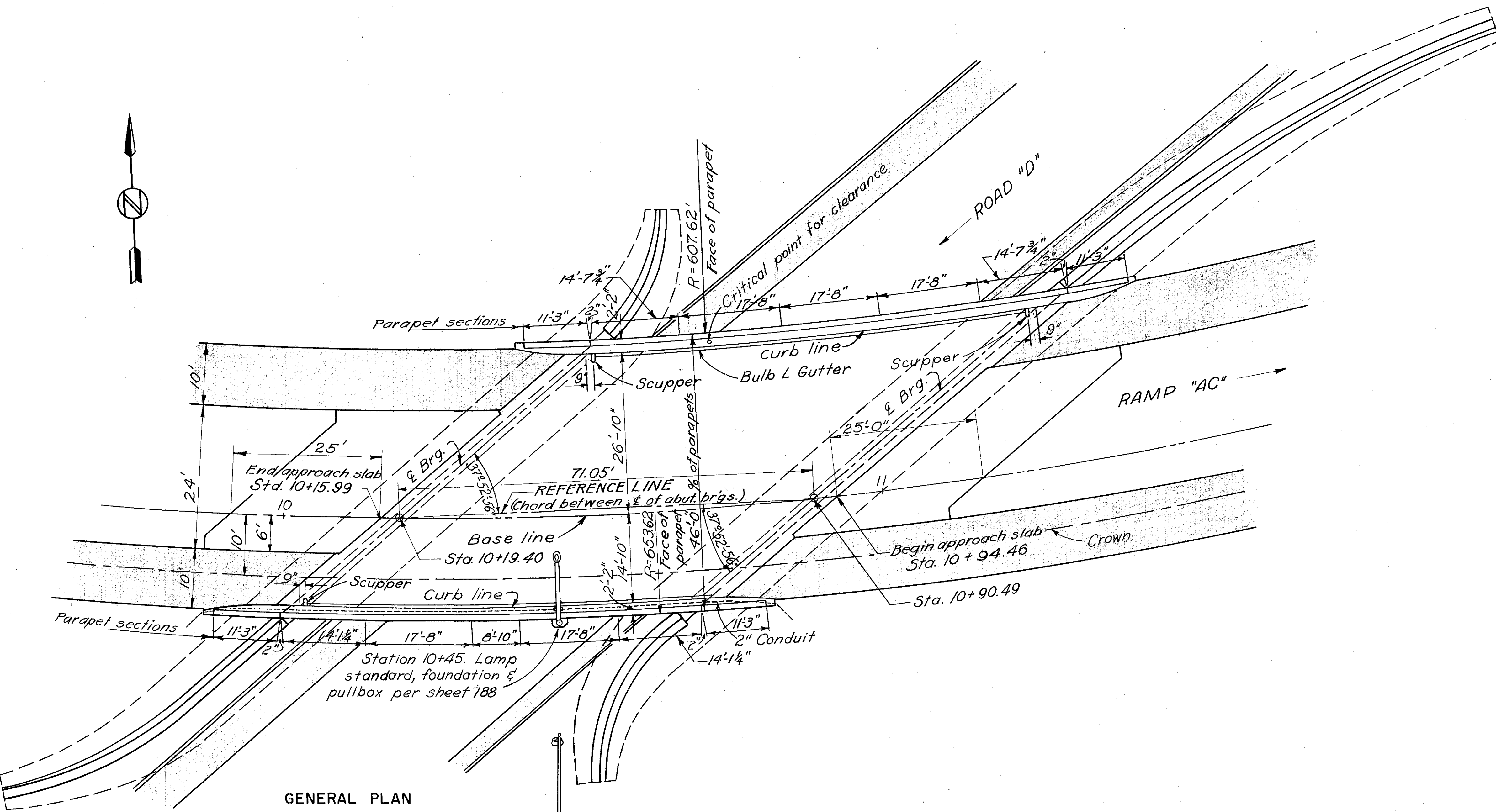
FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

PAVEMENT ELEVATIONS

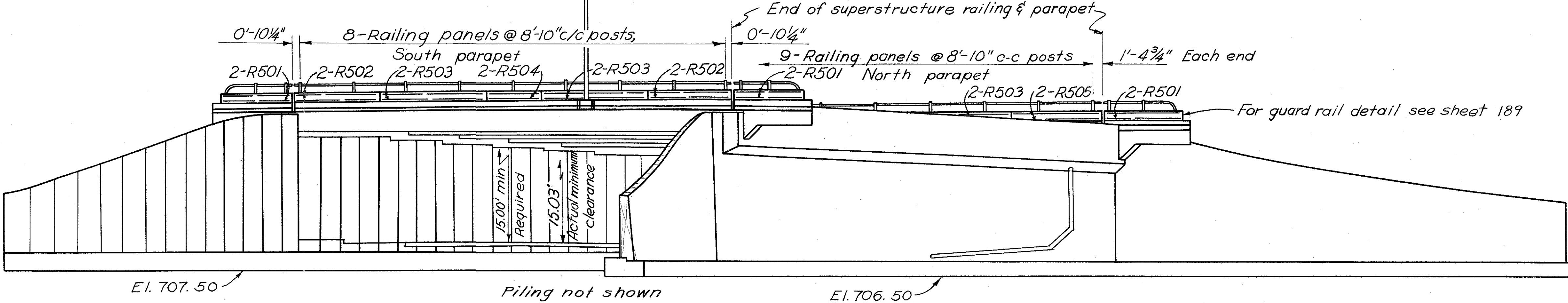


Sta.	A	B	C
10+03.02			733.56
10+08.22		733.81	733.60
10+25		733.93	733.73
10+50		734.06	733.86
10+52.53	731.00	734.07	733.87
10+70.02	731.06	734.12	733.91
10+75	731.06	734.12	
10+76.49	731.06	734.12	
11+00	731.06		
11+25	730.99		
11+33.06	730.94		

A - Pavement at north curb
B - Pavement at crown
C - Pavement at south curb



GENERAL PLAN



GENERAL ELEVATION

Refer to General Notes: 1, 2, 4, 9, 10, 11, 13, 15, 16, & 18 on Sheet 17B


BURGESS & NIPLE-CONSULTING ENGINEERS
COLUMBUS, 12, OHIO

RAMP AC OVER ROAD D
BR. NO. FRA-40-1219

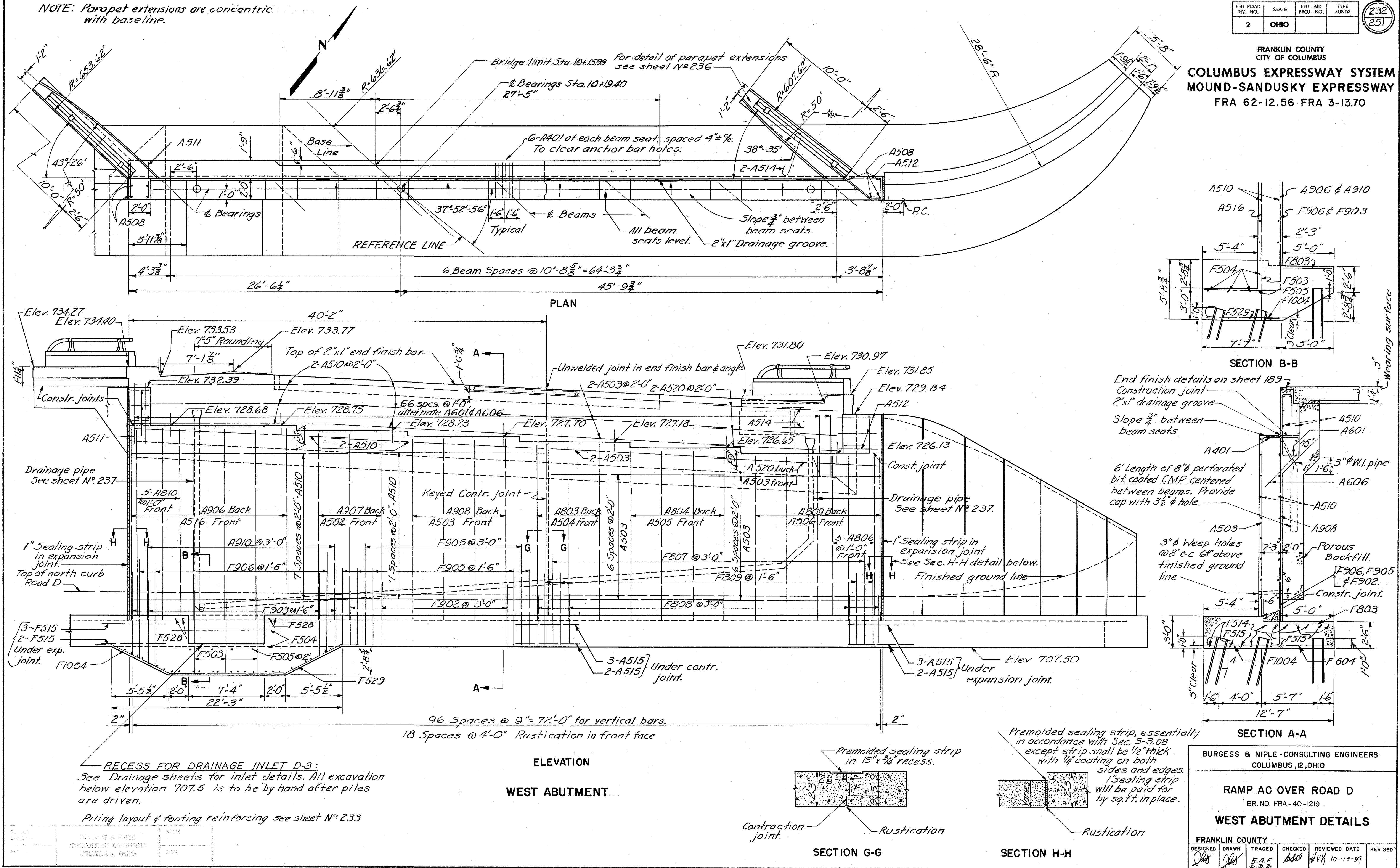
**GENERAL PLAN AND
ELEVATION**

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	WRO	S.R.F.	P.M.S.	4/18/10-10-57	

FED ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		



COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56·FRA 3-13.70



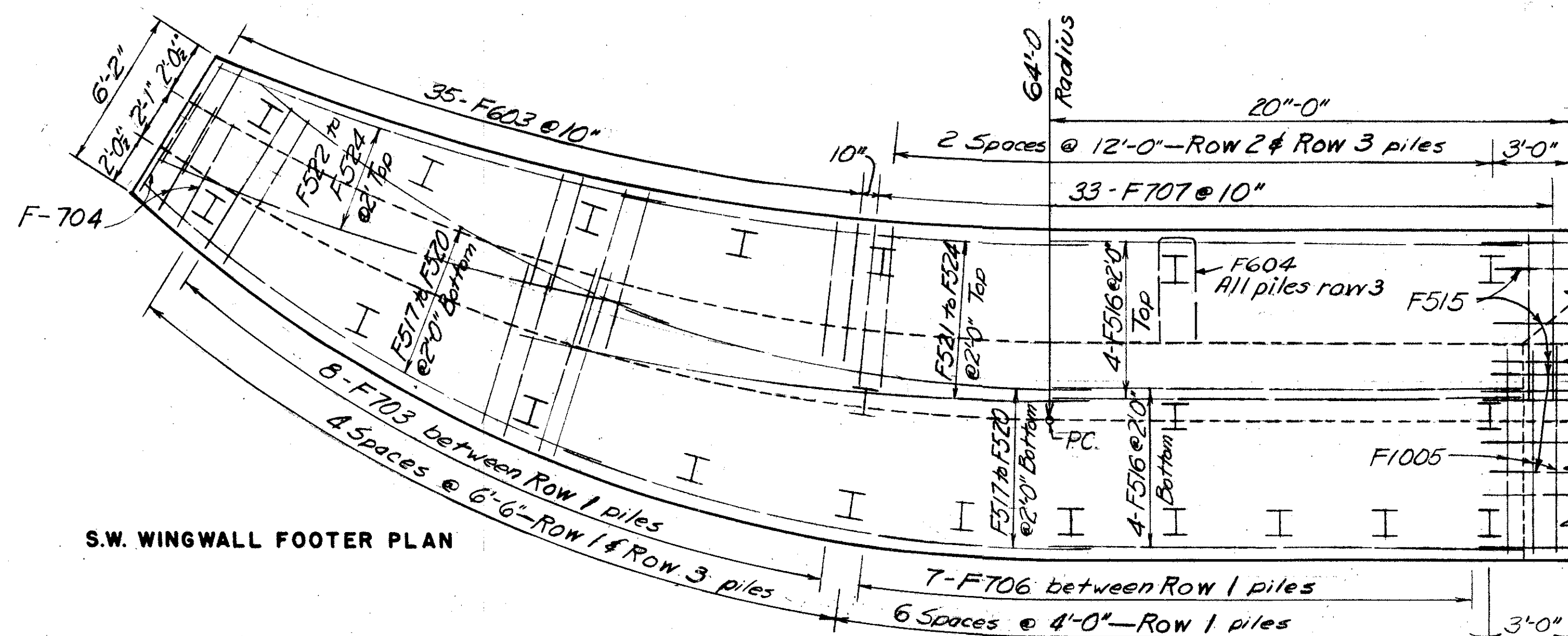
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA.62-12.56 FRA 3-13.70

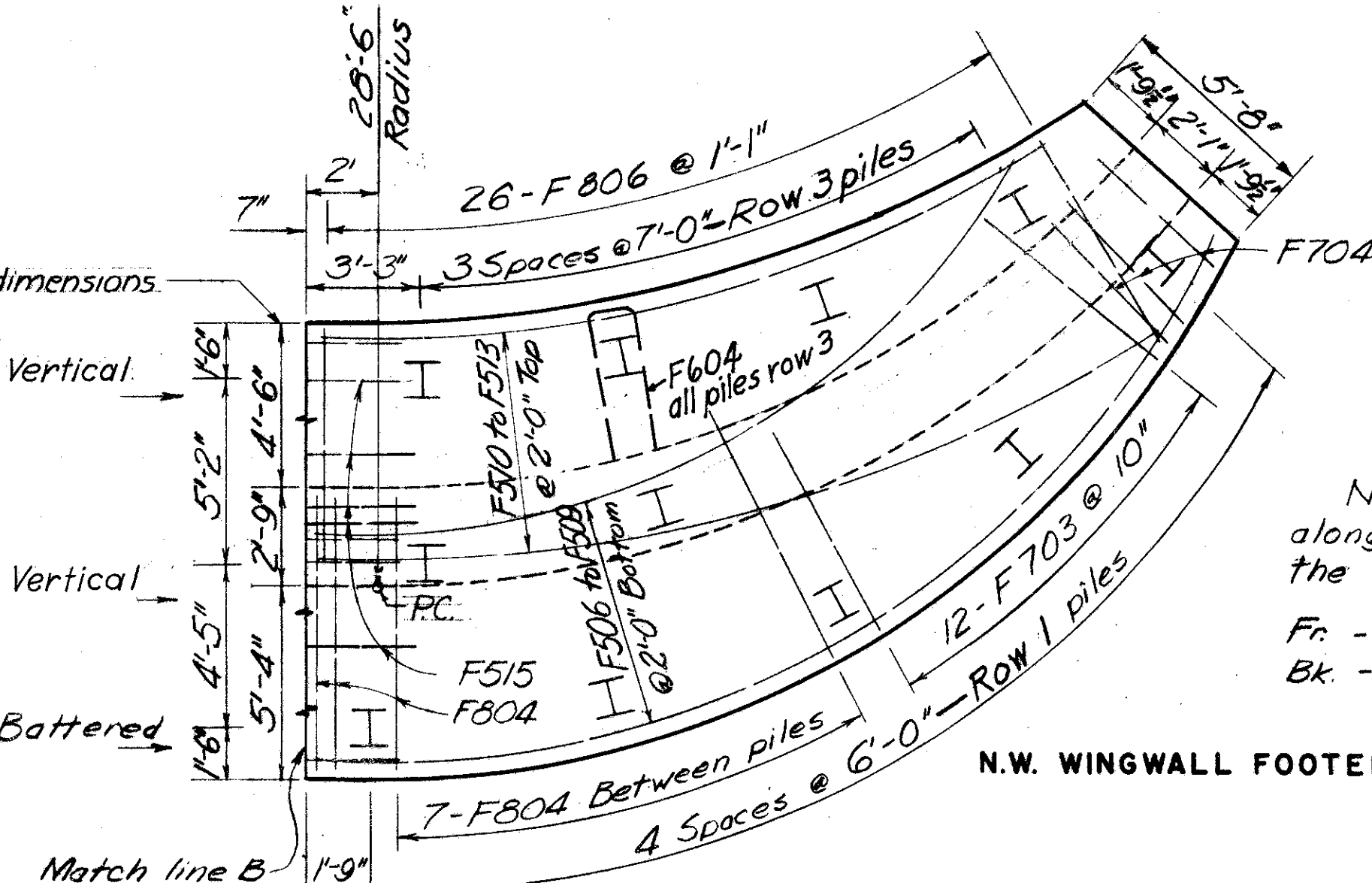
NOTE: All longitudinal dimensions along curved wingwalls are measured along the front face of the wingwall.

Fr. - Front side
Bk. - Back side

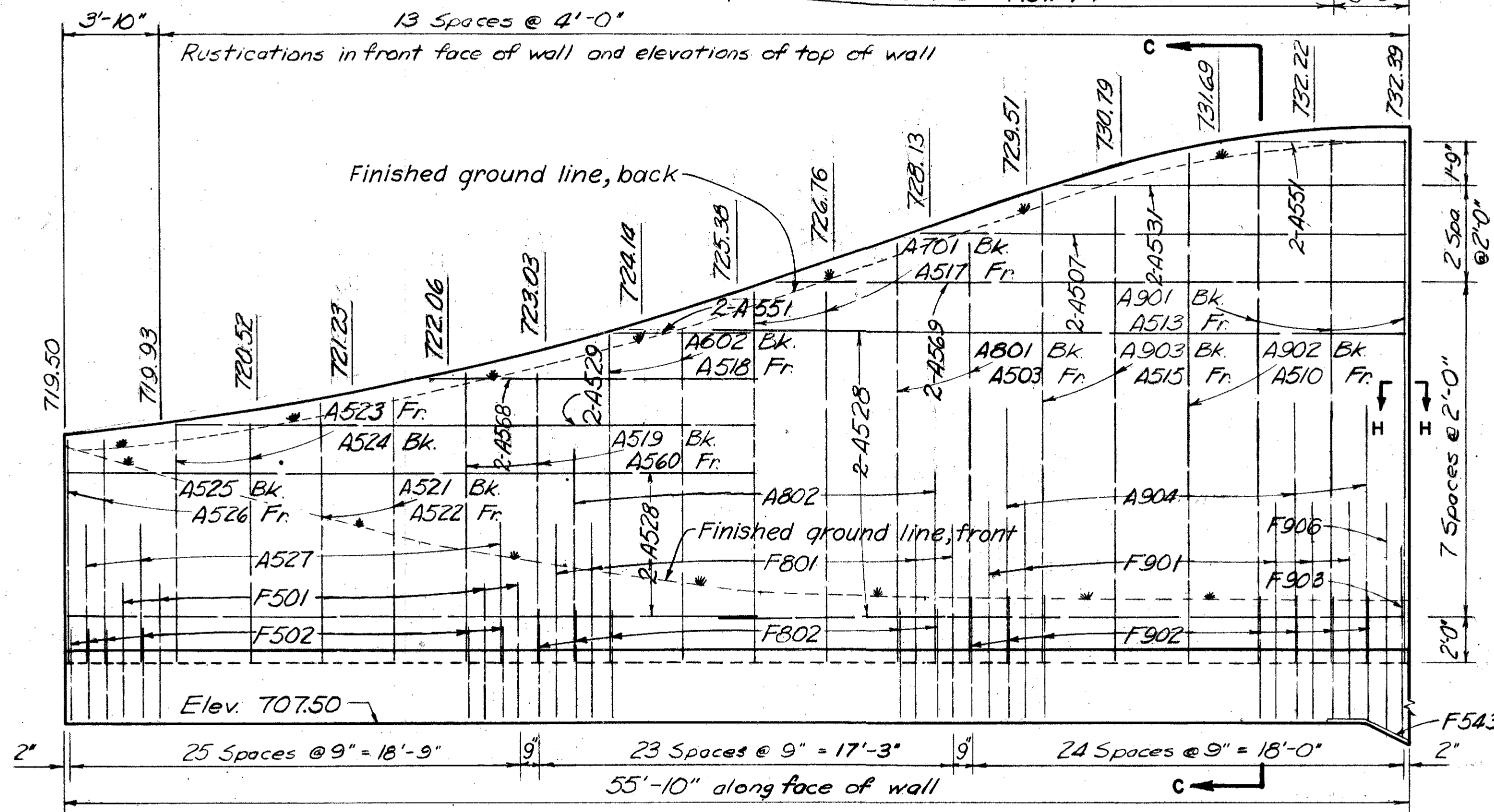
The top of the wing walls shall be a smooth curve.



S.W. WINGWALL FOOTER PLAN

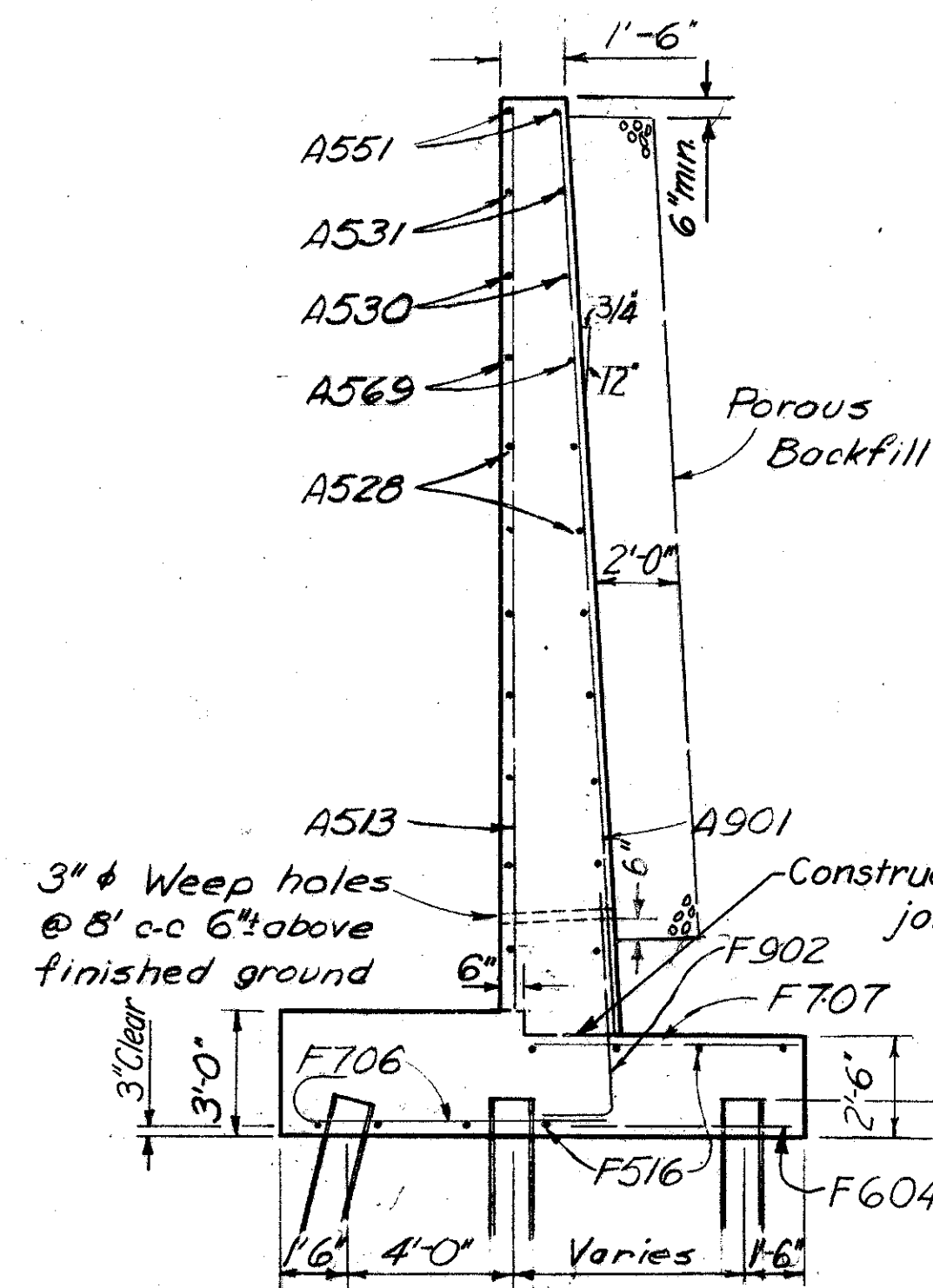


N.W. WINGWALL FOOTER PLAN

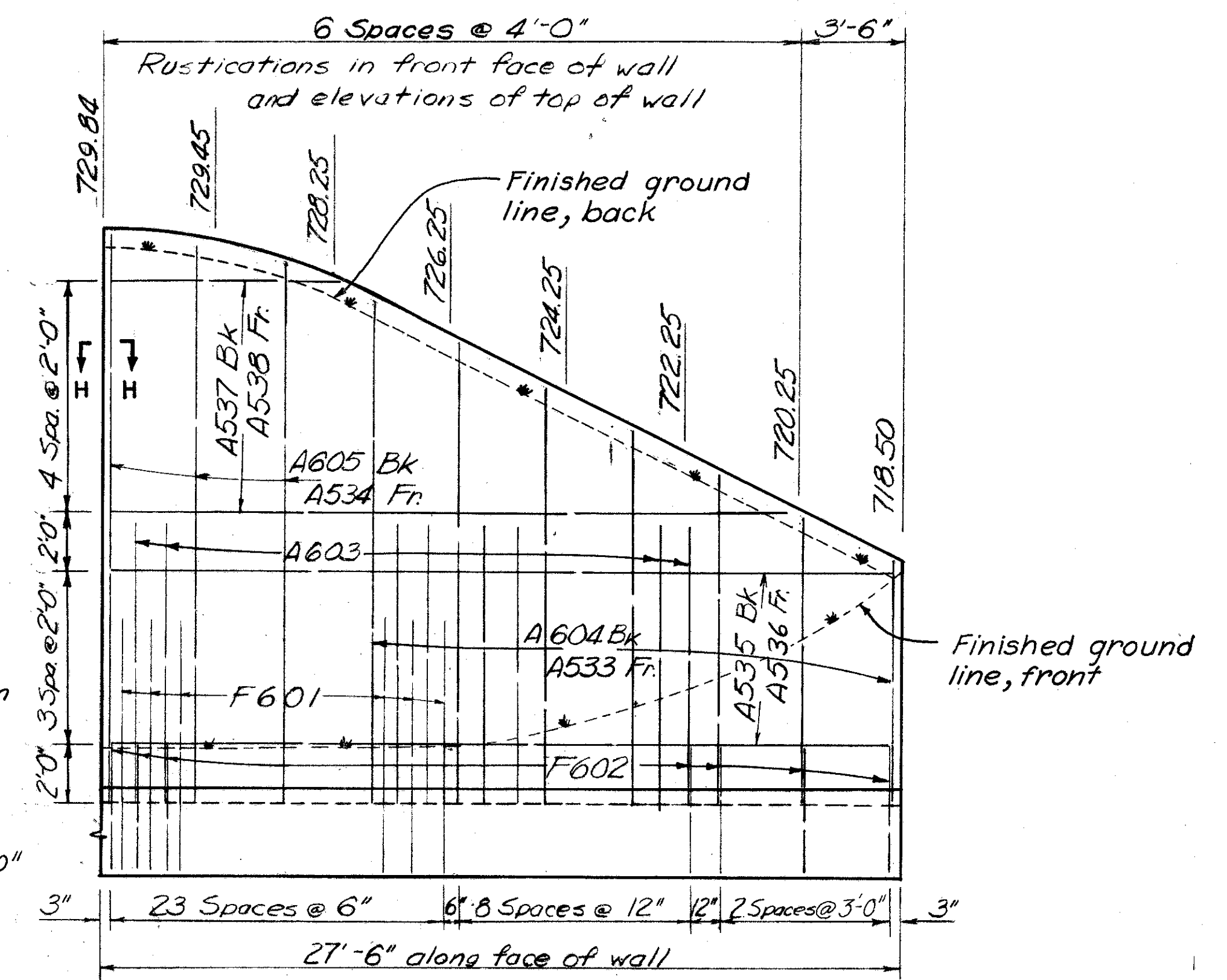


DEVELOPED ELEVATION

SOUTH-WEST WINGWALL



SECTION C-C

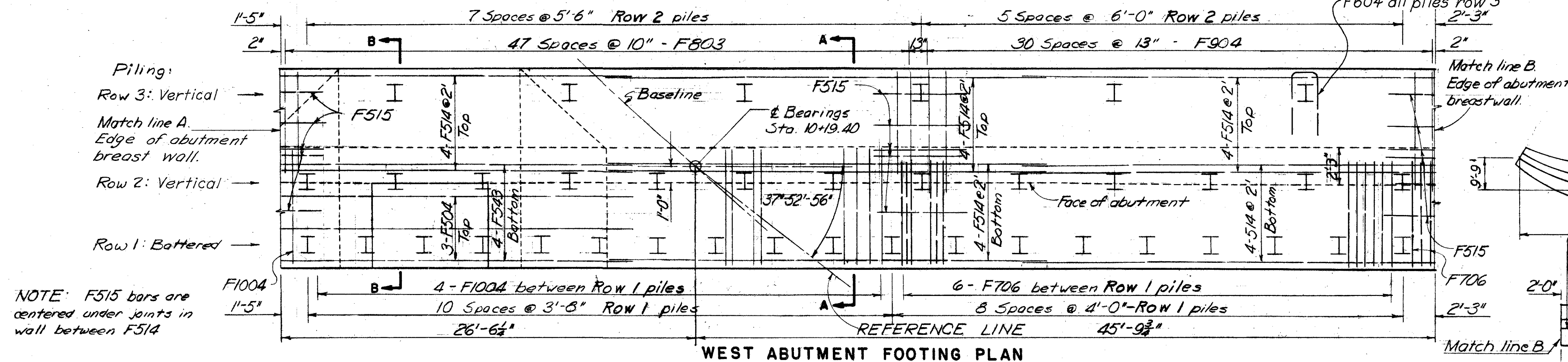


DEVELOPED ELEVATION

NORTH-WEST WINGWALL

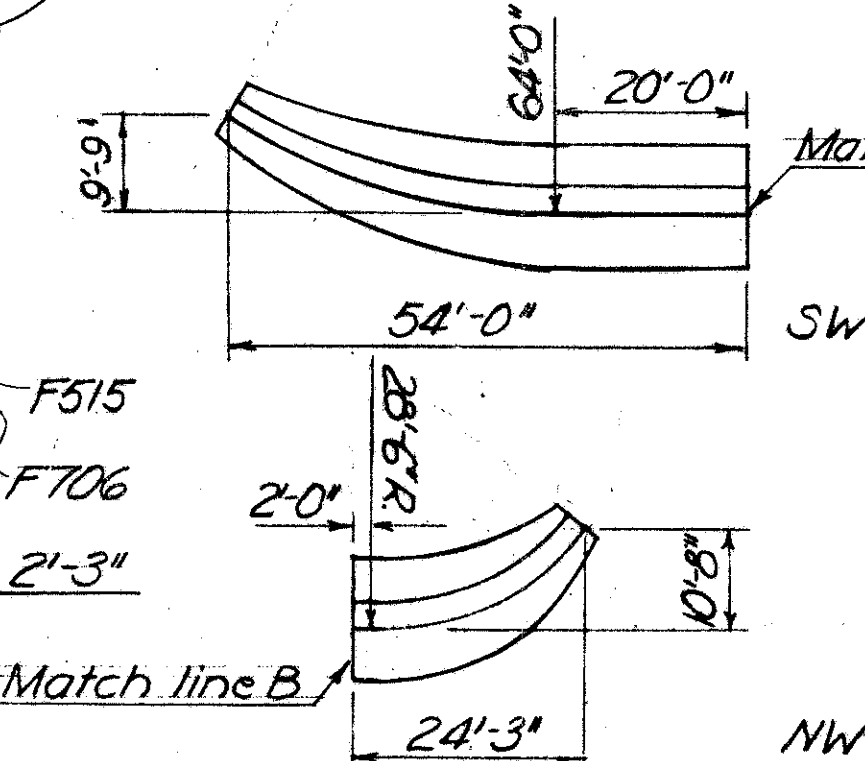
PILING: All piles are to be 12" steel "H" piles, 12BP53, driven to a minimum bearing capacity of 35 tons.

Battered piles are battered at 1:4.
Section H-H see sheet 232
Sec. AA & BB - See sheet 232
Rustication detail - See sheet 180



NOTE: F515 bars are centered under joints in wall between F514

WEST ABUTMENT FOOTING PLAN



BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

RAMP AC OVER ROAD D

BR.NO. FRA-40-12 19

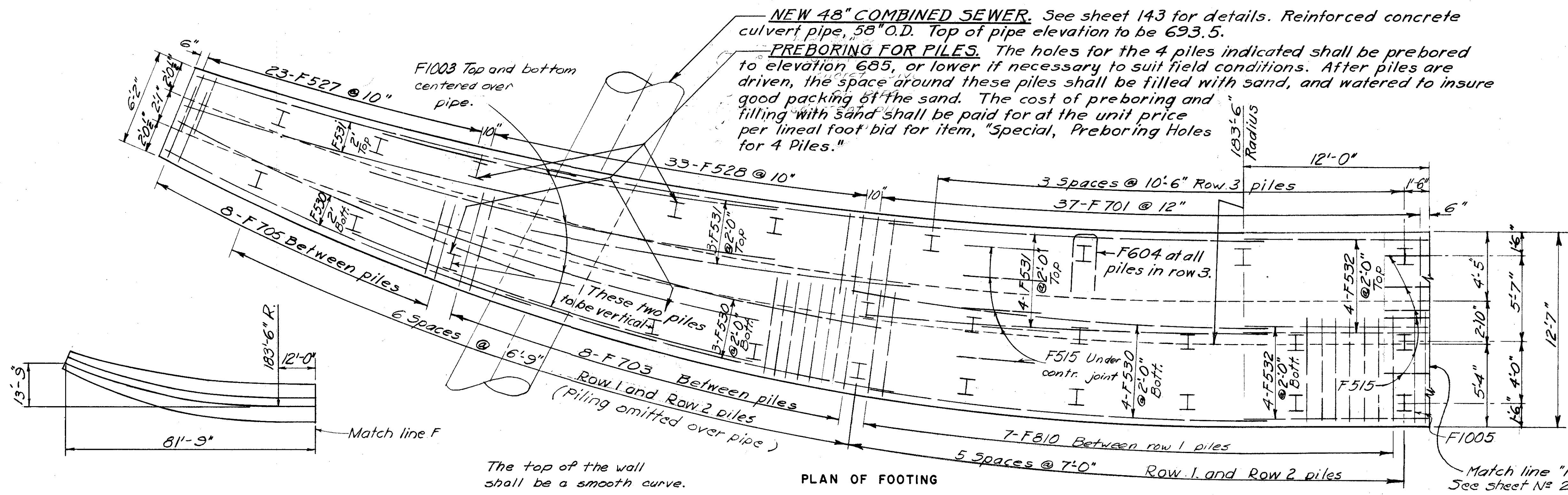
WEST ABUTMENT FOOTING PLAN & WING WALL DETAILS

FRANKLIN COUNTY

DESIGNED <i>[Signature]</i>	DRAWN <i>[Signature]</i>	TRACED SRF	CHECKED <i>[Signature]</i> Pml	REVIEWED DATE #18/10-10-57	REVISED
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FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70



Row 3 ~ Vertical piles

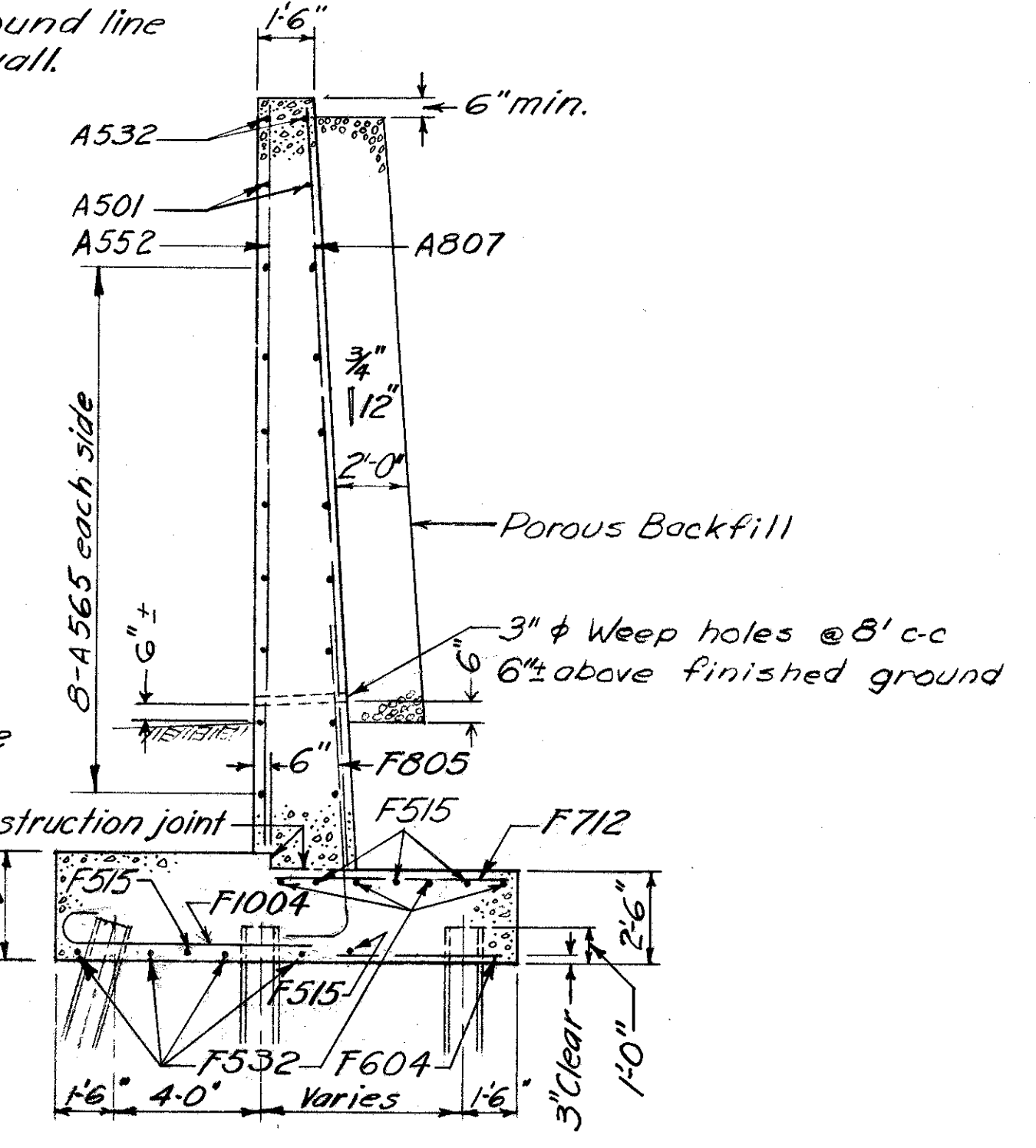
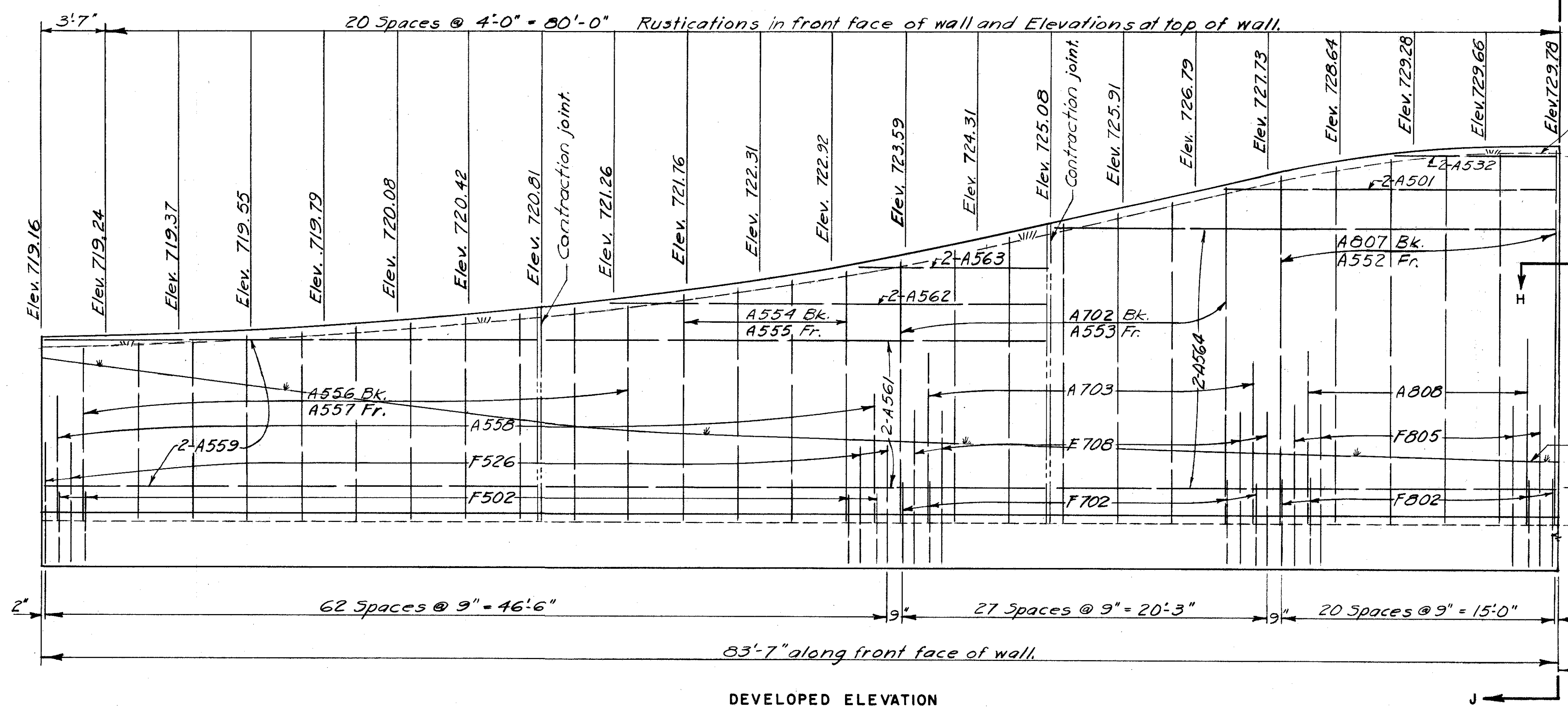
Row 2 ~ Vertical piles

Row 1 ~ Battered piles (except as shown).

NOTE:- All longitudinal dimensions along curved wing walls are measured along the front face of the wing.

Piling:- All piles are to be 12" steel "H" type 128P53, driven to a minimum bearing capacity of 35 tons.

Battered piles are at 1:4 batter.



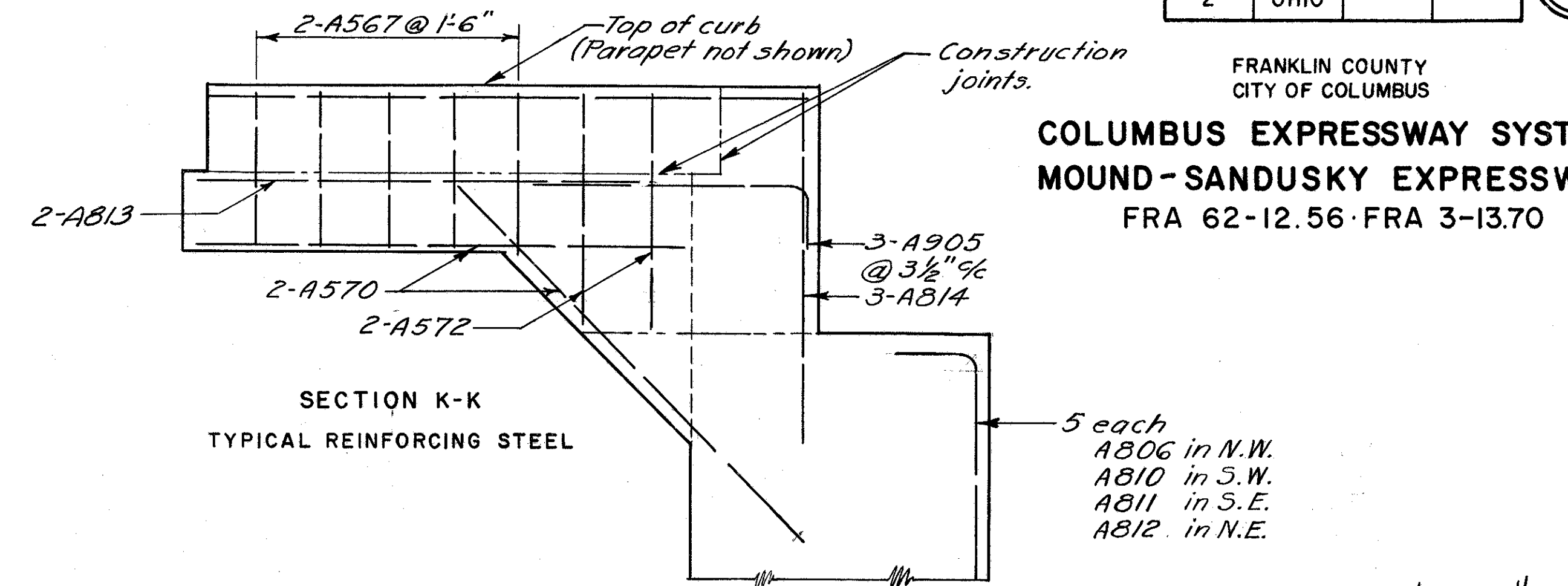
NORTH-EAST WINGWALL

Note - For detail of contraction joint and rustication see sheet N° 180

Bk. indicates back side.
Fr. indicates front side.
Section H-H, see sheet N° 232

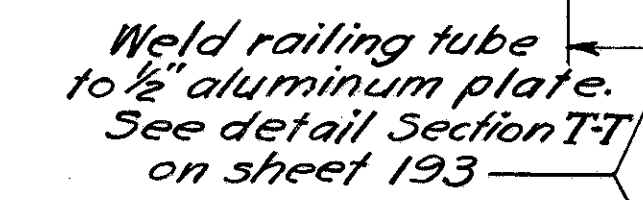
BURGESS & NIPLE — CONSULTING ENGINEERS COLUMBUS, 12, OHIO.					
RAMP AC OVER ROAD D BR. NO. FRA-40-1219					
NORTHEAST WING WALL DETAILS					
FRANKLIN COUNTY					
DESIGNED D.B.B.	DRAWN D.B.B.	TRACED D.B.B.	CHECKED D.B.B.	REVIEWED DATE 4/18/10-10-57	REVISED

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70



SECTION K-K
TYPICAL REINFORCING STEEL

5 each
A806 in N.W.
A810 in S.W.
A811 in S.E.
A812 in N.E.



PLAN

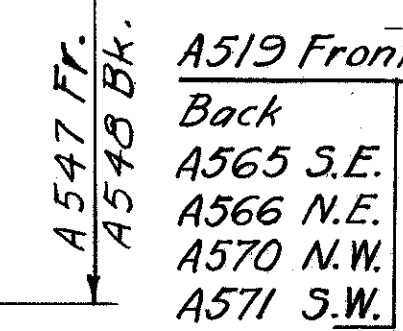


ELEVATION

PARAPET EXTENSION

SOUTHEAST WING WALL DETAILS AND PARAPET EXTENSION

DESIGNED <i>[Signature]</i>	DRAWN <i>[Signature]</i>	TRACED D.S.S.	CHECKED <i>[Signature]</i> Bml	REVIEWED DATE 10-10-57	REVISED
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DEVELOPED ELEVATION

Battered piles are at 1:4 batter.

SOUTH-EAST WING WALL

Fr. - Front side
Bk. - Back side
Sec. HH, See Sheet 232
Rustication details: See Sheet 180

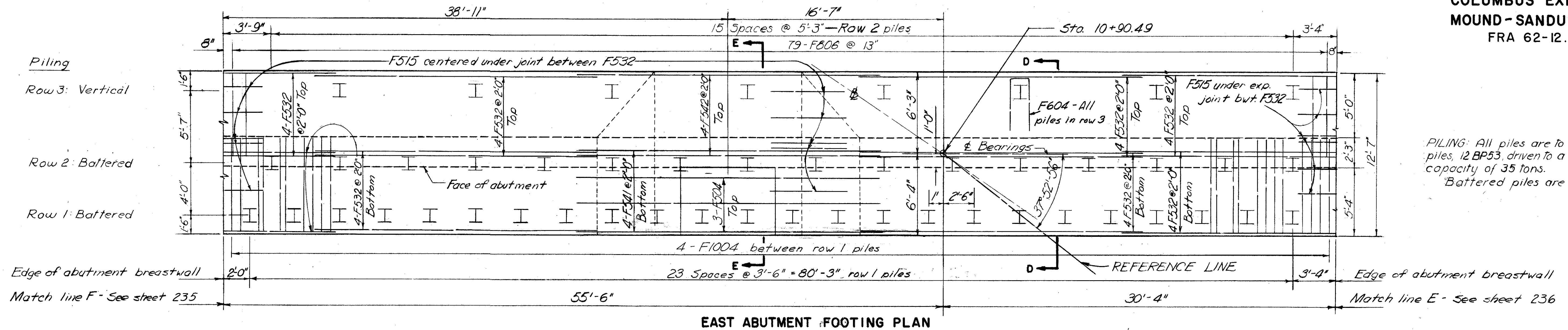
SECTION E-E

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

237
251

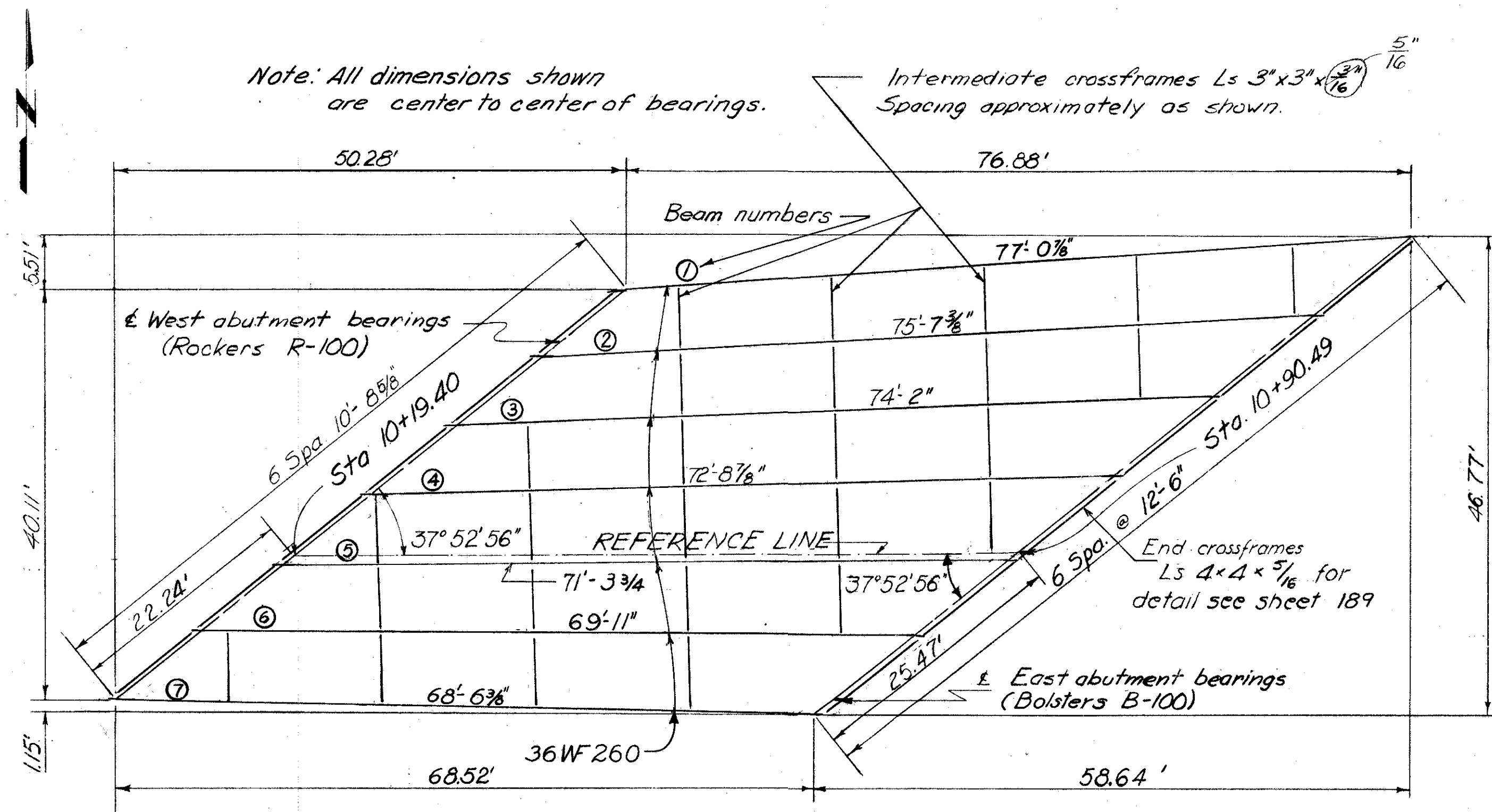
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND - SANDUSKY EXPRESSWAY
FRA 62-12.56-FRA 3-13.70



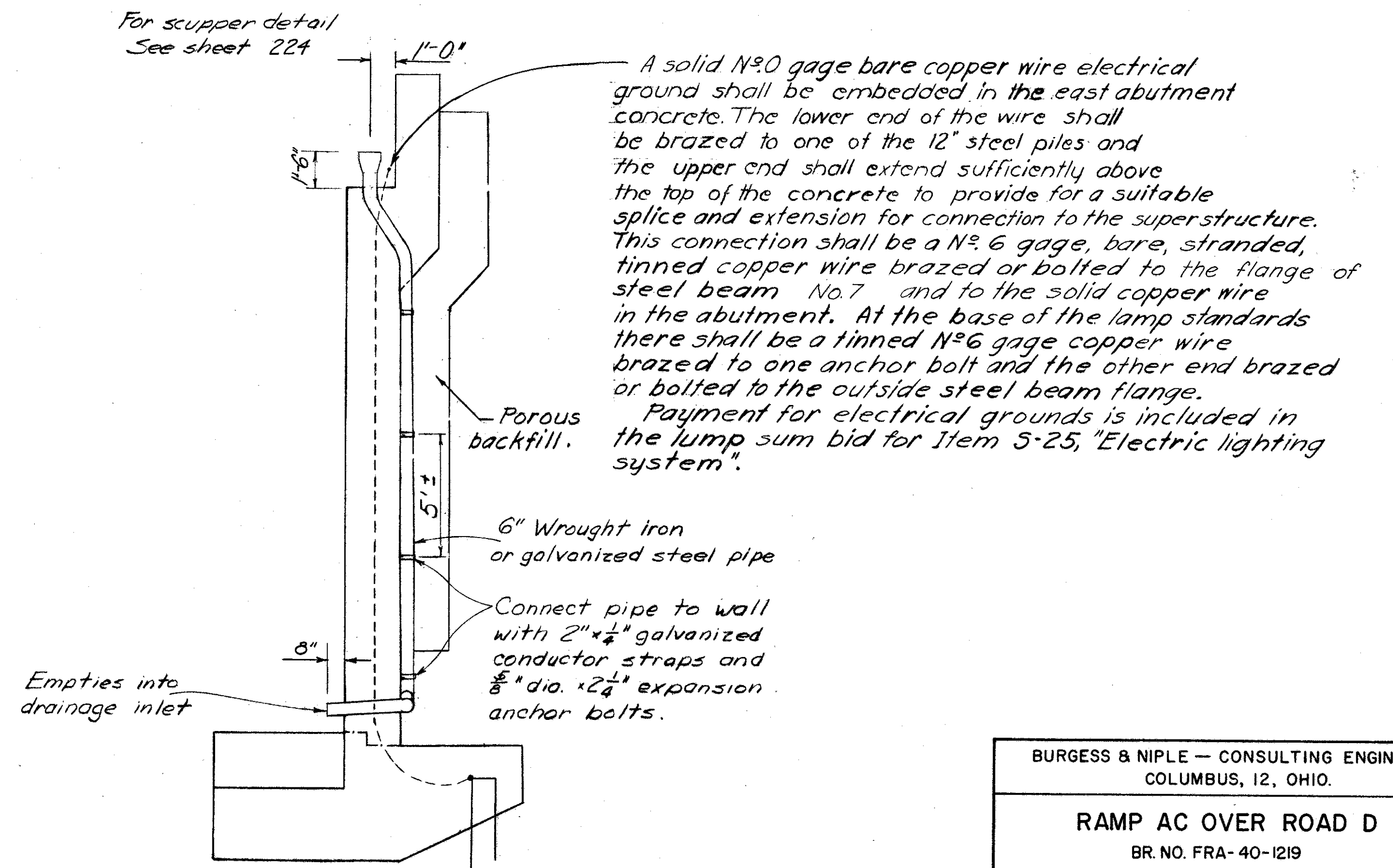
PILING: All piles are to be 12" steel "H" piles, 12 BP53, driven to a minimum bearing capacity of 35 tons.
Battered piles are battered at 1:4

Sec. DD & EE: See sheet 234



STRUCTURAL STEEL FRAMING PLAN

Intermediate crossframes are perpendicular to beam 4
For rocker & bolster details see Standard Drawing RB-1-55



BURGESS & NIPLE — CONSULTING ENGINEERS
COLUMBUS, 12, OHIO.

RAMP AC OVER ROAD D
BR. NO. FRA-40-1219

**EAST ABUTMENT FOOTING
AND STEEL FRAMING PLAN**

FRANKLIN COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
		N/M		11/10/10-57	12-58

REINFORCING STEEL LIST

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

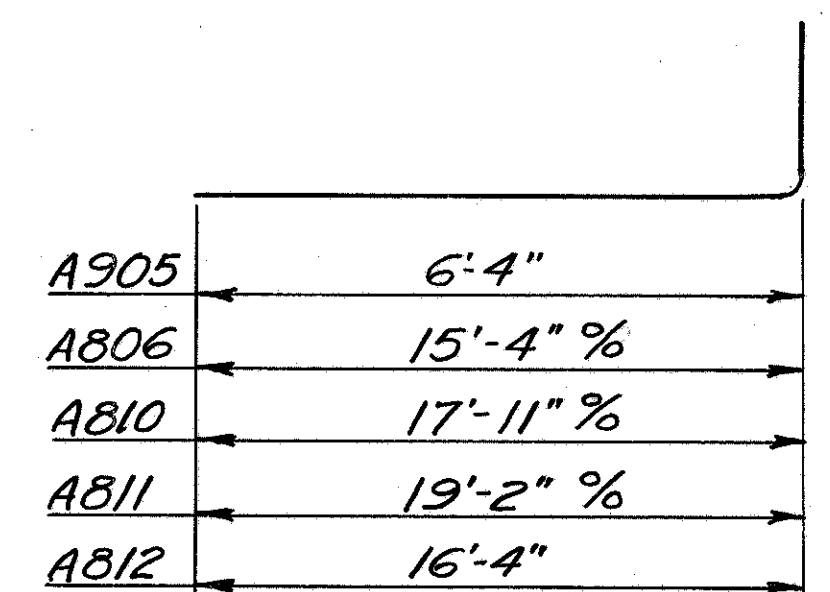
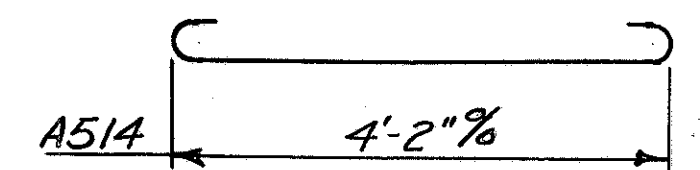
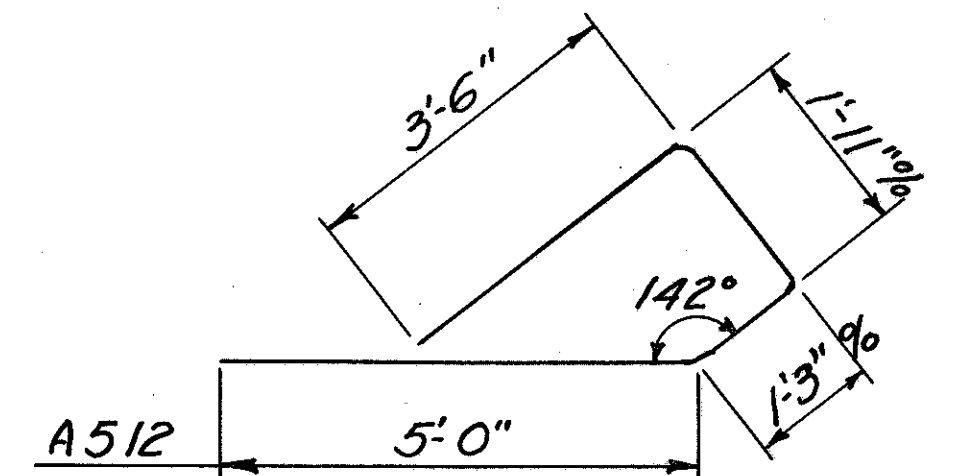
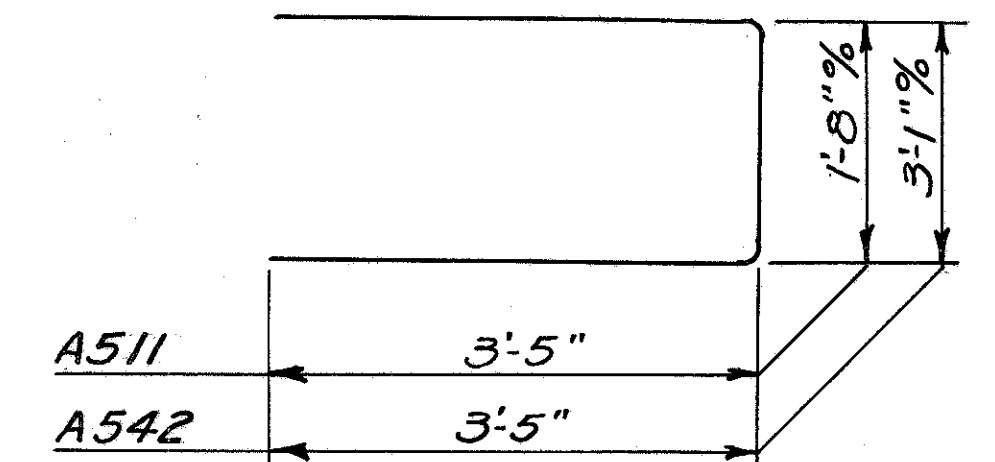
239
251

FRANKLIN COUNTY
CITY OF COLUMBUS

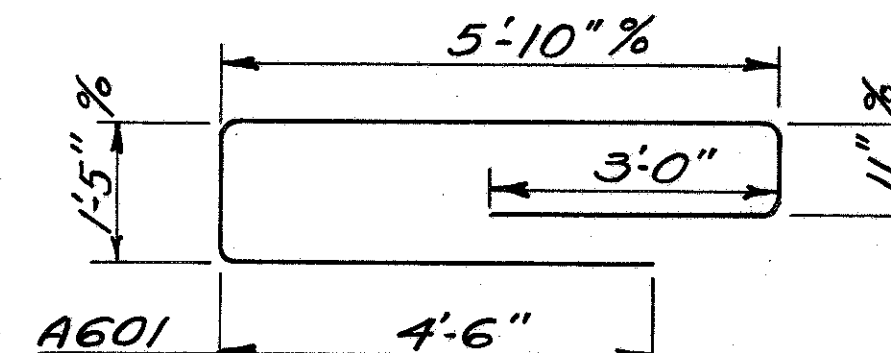
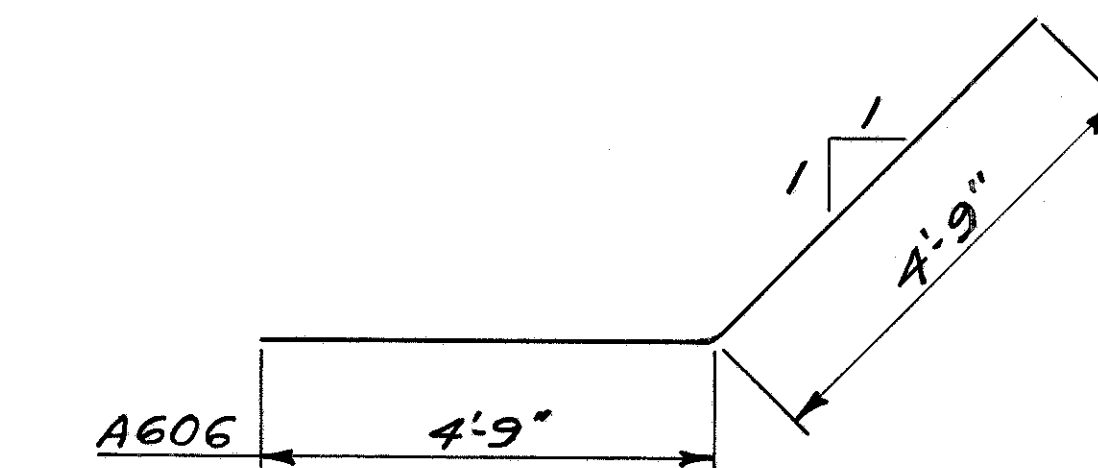
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

ABUTMENTS:						ABUTMENTS:						ABUTMENTS:					
Mark	No.		Length	Weight	Shape	Mark	No.		Length	Weight	Shape	Mark	No.		Length	Weight	Shape
	East	West					East	West					East	West			
A1001	4		19' - 0"	327	S	A601	40	33	15' - 0"	1,645	B	A533		1 set	Vary uniformly by	89	S
A1002	7		19' - 8"	592	S	A602		2	13' - 7"	41	S			of 7	1'-6" steps from		
A1003	12		8' - 6"	444	S	A603		14	9' - 0"	189	S	A534		1 set	Vary uniformly by	58	S
						A604		1 set	Vary uniformly by	131	S			of 3	6" steps from		
A901		3	21' - 9"	222	S			of 7	1'-6" steps from						19'-0" to 18'-0"		
A902		1	21' - 2"	72	S	A605		1 set	Vary uniformly by	84	S	A535		4	27' - 0"	113	B
A903		2	19' - 6"	133	S			of 3	6" steps from			A536		4	27' - 2"	113	B
A904	3	6	10' - 10"	331	S				19'-6" to 18'-6"			A537		1 set	Vary uniformly by	81	B
A905	6	6	7' - 9"	316	B	A606	41	34	9' - 6"	1,070	B			of 5	4'-0" steps from		
A906	4	6	18' - 5"	626	S										23'-6" to 7'-6"		
A907	4	3	17' - 10"	424	S							A538		1 set	Vary uniformly by	81	B
A908	4	4	17' - 3"	469	S									of 5	4'-0" steps from		
A910	7	7	7' - 5"	353	S	A501	2		18' - 1"	38	S				23'-6" to 7'-6"		
A911	1 set		Vary uniformly by	235	S	A502	4	3	17' - 4"	127	S	A539	7		Radius 27'-2"	140	S
	of 3		23'-4" to 22'-10"			A503	12	43	16' - 9"	961	S	A540	4		19' - 2"	77	S
						A504	6	3	16' - 3"	153	S	A541	44		18' - 6"	968	S
A801		2	17' - 5"	93	S	A505		4	15' - 10"	66	S	A542	3		21' - 1"	30	B
A802		6	8' - 6"	136	S	A506		5	15' - 4"	80	S	A543	1 set		9' - 8"	55	S
A803	6	3	16' - 9"	403	S	A507		2	20' - 0"	42	S		of 4		Vary uniformly by		
A804		4	16' - 4"	174	S	A508	9	8	5' - 0"	89	S				11'-6" steps from		
A805	1 set		Vary uniformly by	206	S	A509	2	49	8' - 6"	18	S	A544	4		15'-6" to 11'-0"	31	S
	of 4		1'-6" steps from			A510			20' - 8"	1,056	S	A545	1 set		7' - 6"	131	S
			21'-6" to 17'-0"			A511		3	8' - 3"	26	B		of 8		Vary uniformly by		
A806		5	16'-3"	217	B	A512	3	3	11' - 4"	71	B				1'-6" steps from		
A807	1 set		Vary uniformly by	314	S	A513		3	21' - 3"	66	S				21'-0" to 10'-6"		
	of 6		4" steps from			A514	2	2	5' - 4"	22	B						
			20'-5" to 18'-9"			A515		2	19' - 0"	40	S						
A808	9		10' - 3"	246	S	A516	4	6	17' - 11"	187	S						
A809		5	15' - 10"	211	S	A517		2	14' - 11"	31	S						
A810		5	18' - 10"	251	B	A518		2	13' - 1"	27	S						
A811	5		20' - 1"	268	B	A519	4	6	12' - 1"	126	S						
A812	5		17' - 3"	230	B	A520		7	13' - 0"	95	S						
A813	4	4	10' - 10"	231	S	A521		2	10' - 10"	23	S						
A814	6	6	8' - 0"	256	S	A522		2	10' - 4"	22	S						
						A523		2	9' - 9"	20	S						
A701		2	15' - 5"	63	S	A524		2	9' - 3"	19	S						
A702	1 set		Vary uniformly by	230	S	A525		2	9' - 4"	19	S						
	of 7		7" steps from			A526		2	8' - 10"	18	S						
			17'-10" to 14'-4"			A527		7	6' - 0"	44	S						
A703	7		9' - 4"	133	S	A528		22	28' - 7"	656	*						
						A529		2	24' - 2"	50	*						
						A530	48		23' - 1"	1,156	S						
						A531		2	14' - 0"	29	S						
						A532	2		9' - 0"	19	S						

(A5 bars continued on sheet N^o 240.)



Radius
A535 27'-2"
A536 28'-4"
A537 27'-2"
A538 28'-4"



* Place bars to fit curve of wing.
Bars may be bent in shop or field
at the option of the Contractor

BURGESS & NIPLE - CONSULTING ENGINEERS
COLUMBUS, 12, OHIO

RAMP AC OVER ROAD D
BR. NO. FRA - 40-1219

REINFORCING STEEL LIST

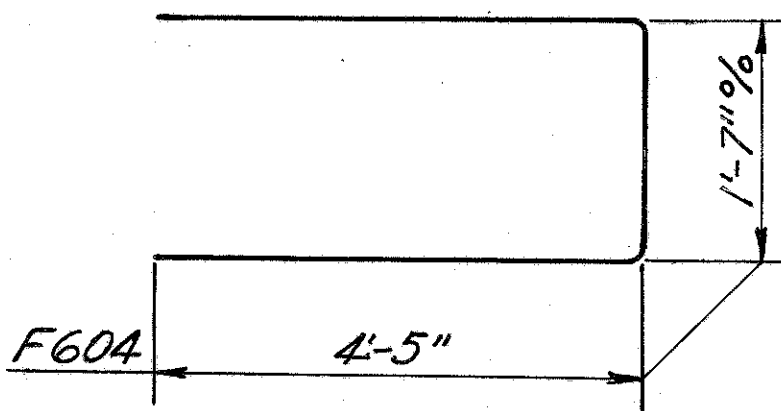
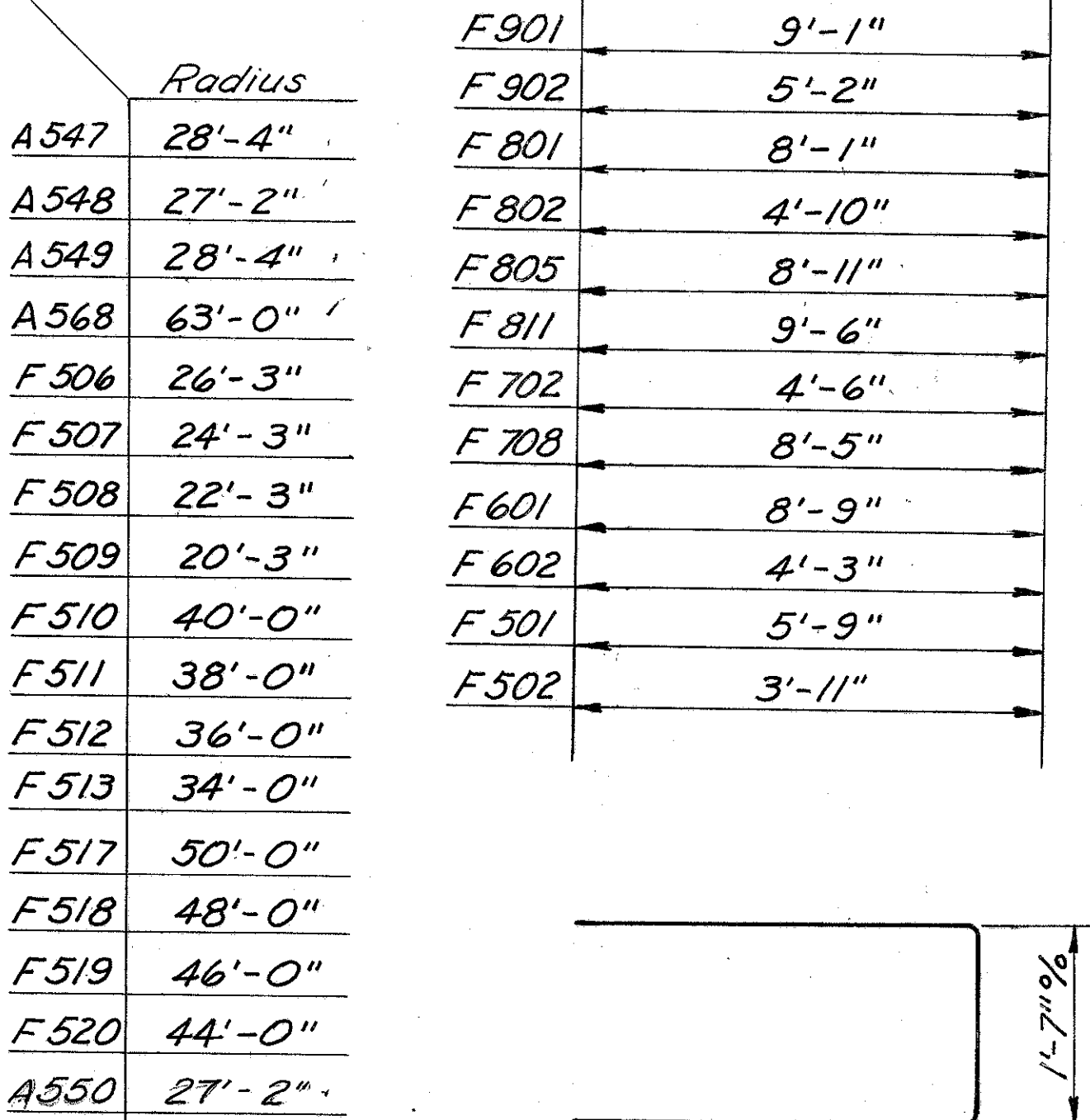
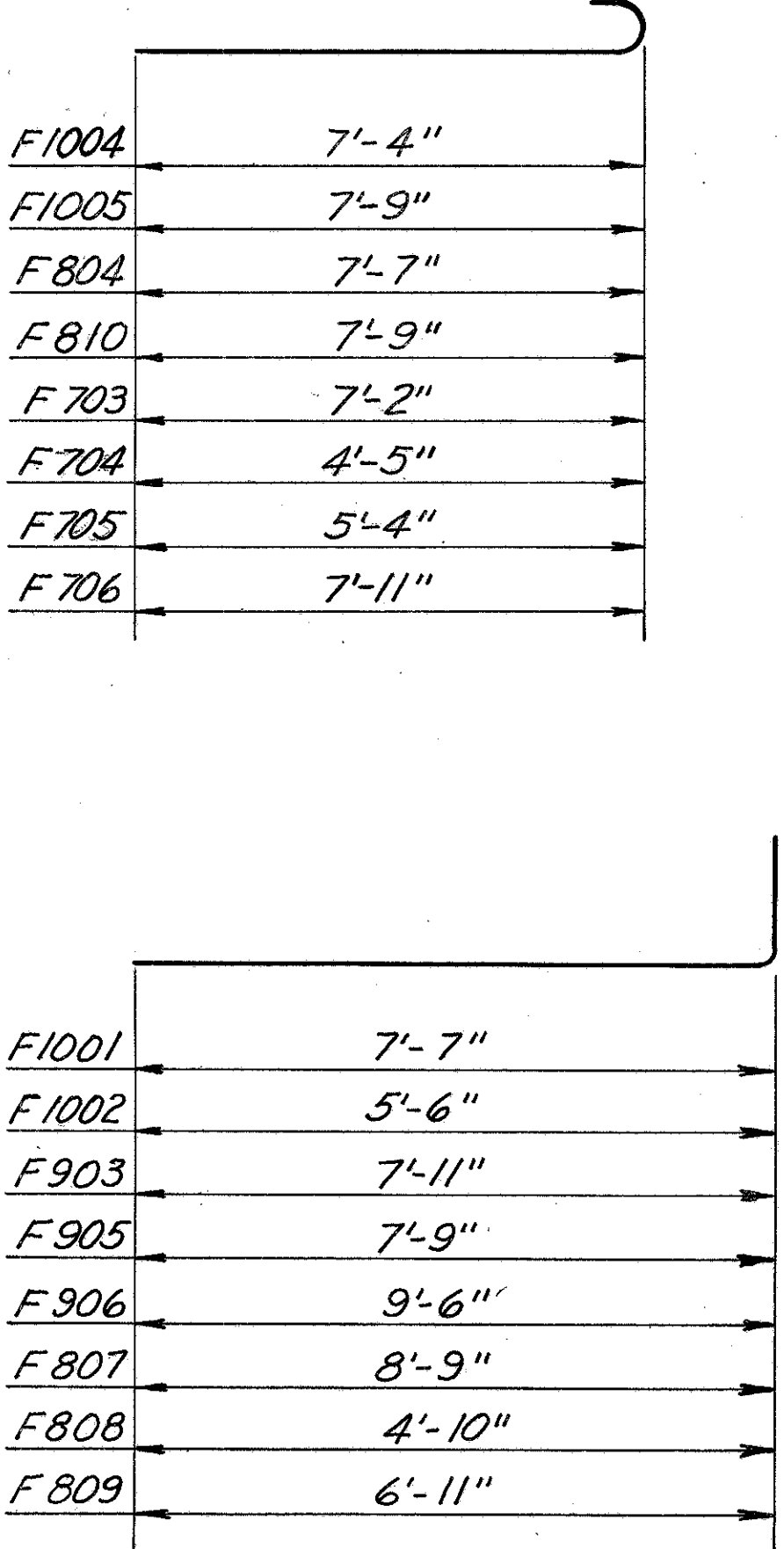
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
				10-11-57	

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

ABUTMENTS:						FOOTINGS:						FOOTINGS:					
(A5 bars continued from sheet N ^o . 239.)																	
Mark	No.		Length	Weight	Shape	Mark	No.		Length	Weight	Shape	Mark	No.		Length	Weight	Shape
	East	West					East	West					East	West			
A546	1 set of 3		Vary uniformly by 3" steps from 22'-10" to 22'-4"	71	S	F1001	24		8'- 8"	895	B	F501		12	6'- 9"	84	B
A547	5		31' - 6"	164	B	F1002	25		6'- 7"	708	B	F502	39	14	4'-10"	267	B
A548	5		31' - 6"	164	B	F1003	8		28'- 0"	964	*	F503	4	3	7'- 2"	52	S
A549	1 set of 5		Vary uniformly by 3'-10" steps from 27'-10" to 12'-6". Radius 28'-4"	105	B	F1004	98	41	8'- 9"	5,234	B	F504	4	4	9'- 6"	79	S
A550	1 set of 5		Vary uniformly by 3'-10" steps from 27'-10" to 12'-6". Radius 27'-2"	105	B	F1005	34	3	9'- 2"	1,459	B	F505	4	4	6'- 9"	56	S
A551		4	6' - 0"	25	S	F901	6	11	10'-10"	626	B	F506		1	30'- 0"	31	B
A552	1 set of 6		Vary uniformly by 4" steps from 19'-11" to 18'-3"	119	S	F902	16	18	6'-10"	790	B	F507		1	27'- 8"	29	B
A553	1 set of 7		Vary uniformly by 7" steps from 17'-4" to 13'-10"	114	S	F903		15	9'- 0"	459	B	F508		1	25'- 4"	26	B
A554	1 set of 4		Vary uniformly by 5" steps from 13'-9" to 12'-6"	55	S	F904		31	8'- 0"	843	S	F509		1	23'- 0"	24	B
A555	1 set of 4		Vary uniformly by 5" steps from 13'-3" to 12'-0"	53	S	F905	32	13	8'- 9"	1,339	B	F510		1	24'- 3"	25	B
A556	1 set of 11		Vary uniformly by 3" steps from 11'-11" to 9'-5"	122	S	F906	24	20	11'- 0"	1,646	B	F511		1	23'- 6"	25	B
A557	1 set of 11		Vary uniformly by 3" steps from 11'-5" to 8'-11"	117	S	F801		12	9'- 7"	307	B	F512		1	22'- 4"	23	B
A558	16		6'-11"	115	S	F802		12	6'- 4"	524	B	F513		1	21'- 2"	22	B
A559	10		27'- 3"	284	*	F803	19	12	6'- 4"	1,072	S	F514		20	27'- 7"	575	S
A560		2	11'- 7"	24	S	F804	13	48	6'- 7"	370	B	F515	21	15	6'- 0"	225	S
A561	10		27'- 8"	289	*	F805	10	16	8'- 8"	278	B	F516		8	18'- 3"	152	S
A562	2		24'- 0"	50	*	F806	79	26	7'- 0"	1,962	S	F517		2	20'- 7"	43	B
A563	2		10'- 3"	21	*	F807		11	9'- 8"	284	B	F518		2	19'-10"	41	B
A564	16		27'- 8"	462	*	F808		12	5'- 9"	184	B	F519		2	19'- 1"	40	B
A565	1		11'- 9"	12	S	F809		22	7'-10"	460	B	F520		2	18'- 4"	38	B
A566	1		14'- 3"	15	S	F810	35		8'-10"	825	B						
A567	24	24	3'- 6"	175	S	F811	8		11'- 0"	235	B						
A568		2	13'- 4"	28	B	F701	37		6'- 4"	479	S						
A569		2	26'- 0"	54	S	F702	14		6'- 6"	186	B						
A570	8	9	11'- 2"	199	S	F703	32	44	8'- 0"	1,243	B						
A571		1	13'- 6"	14	S	F704	4	6	5'- 3"	107	B						
A572	8	8	5'- 0"	83	S	F705	24		6'- 2"	303	B						
A401	42	42	5'- 2"	2,899	B	F706		93	8'- 9"	1,663	B						
						F707		33	6'- 8"	450	S						
						F708	14		9'- 9"	279	B						
						F601		12	9'-11"	179	B						
						F602		24	5'- 5"	195	B						
						F603	23	35	5'- 8"	494	S						
						F604	21	17	9'- 3"	556	B						

* Place bars to fit curve of wing. Bars may be bent in shop or field at the option of the Contractor.



REINFORCING STEEL LIST

FED ROAD DIV NO	STATE	FED AID PROJ NO	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 · FRA 3-13.70

FOOTINGS:

Mark	No.		Length	Weight	Shape
	East	West			
F521		1	22'-0"	23	B
F522		2	19'-2"	40	B
F523		2	18'-7"	38	B
F524		2	18'-0"	38	B
F525	7		8'-4"	61	B
F526	32		7'-8"	256	B
F527	23		4'-7"	110	S
F528	37	4	5'-7"	239	S
F529		4	26'-6"	111	B
F530	9		26'-1"	245	*
F531	9		24'-8"	232	*
F532	32		21'-9"	726	S
F533	1		31'-7"	33	B
F534	1		30'-0"	31	B
F535	1		27'-10"	29	B
F536	1		16'-0"	17	B
F537	1		14'-0"	15	B
F538	1		27'-0"	28	B
F539	1		24'-7"	26	B
F540	1		23'-3"	24	B
F541	3		24'-4"	76	B
F542	4		23'-6"	98	S

SUPERSTRUCTURE:

Mark	No.	Length	Weight	Shape
S701	1 set of 36	Vary uniformly by 6" steps from 6'-3" to 23'-9"	1,104	S
S702	55	23'-6"	2,642	S
S703	1 set of 49	Vary uniformly by 5 1/2" steps from 6'-0" to 28'-0"	1,703	S
S704	1	5'-10"	12	S
S705	6	5'-6"	67	S
S706	4	5'-3"	43	S
S707	1 set of 21	Vary uniformly by 6" steps from 7'-0" to 17'-0"	515	S
S708	1 set of 14	Vary uniformly by 6" steps from 17'-3" to 23'-9"	587	B
S709	56	23'-4"	2,671	B
S710	1 set of 35	Vary uniformly by 6 1/2" steps from 7'-5" to 25'-10"	1,189	B
S711	1	6'-8"	14	S
S712	1	6'-2"	13	S

SUPERSTRUCTURE:

Mark	No.	Length	Weight	Shape
S601	1 set of 36	Vary uniformly by 6" steps from 6'-3" to 23'-9"	811	S
S602	55	24'-0"	1,983	S
S603	1 set of 49	Vary uniformly by 5 1/2" steps from 6'-6" to 28'-6"	1,288	S
S604	1	6'-4"	10	S
S605	6	6'-0"	54	S
S606	4	5'-9"	35	S
S607	1 set of 21	Vary uniformly by 6" steps from 7'-0" to 17'-0"	379	S
S608	1 set of 14	Vary uniformly by 6" steps from 17'-3" to 23'-9"	431	B
S609	56	23'-10"	2,005	B
S610	1 set of 35	Vary uniformly by 6 1/2" steps from 7'-11" to 26'-4"	900	B
S611	1	7'-2"	11	S
S612	1	6'-8"	10	S
S501	126	4'-10"	638	B
S502	108	25'-0"	2,816	S
S503	108	25'-11"	2,919	S
S504	126	27'-0"	6,364	S
S505	15	24'-6"	385	S
S590	3	2'-2"	7	S
S591	3	1'-6"	5	S
S592	3	3'-5"	11	B
S594	8	5'-0"	42	S
S596	2	3'-1"	6	B
S597	3	4'-11"	15	B
S598	2	4'-7"	10	B
S401	98	6'-11"	453	B

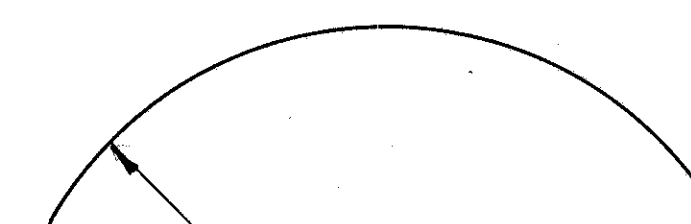
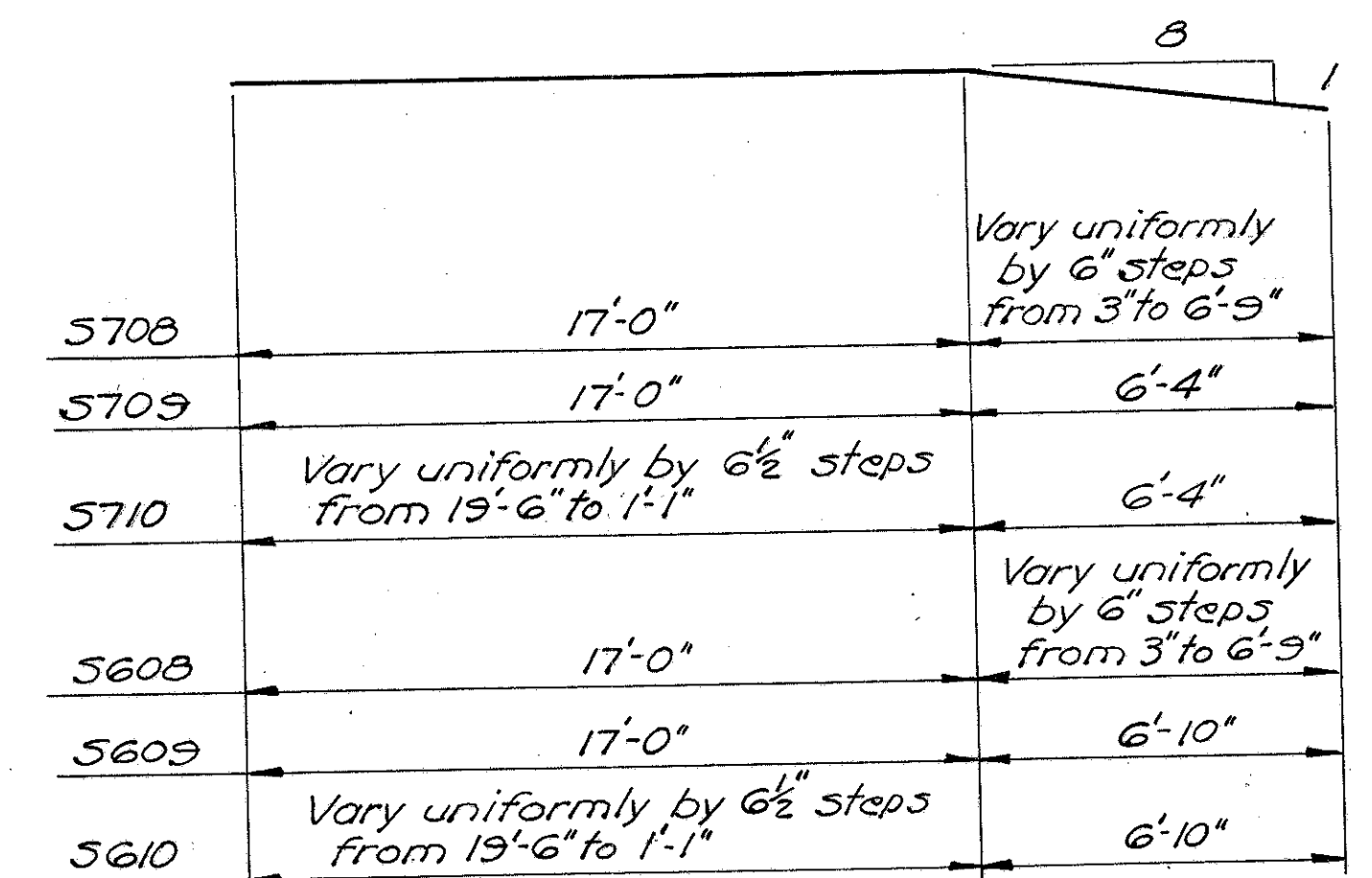
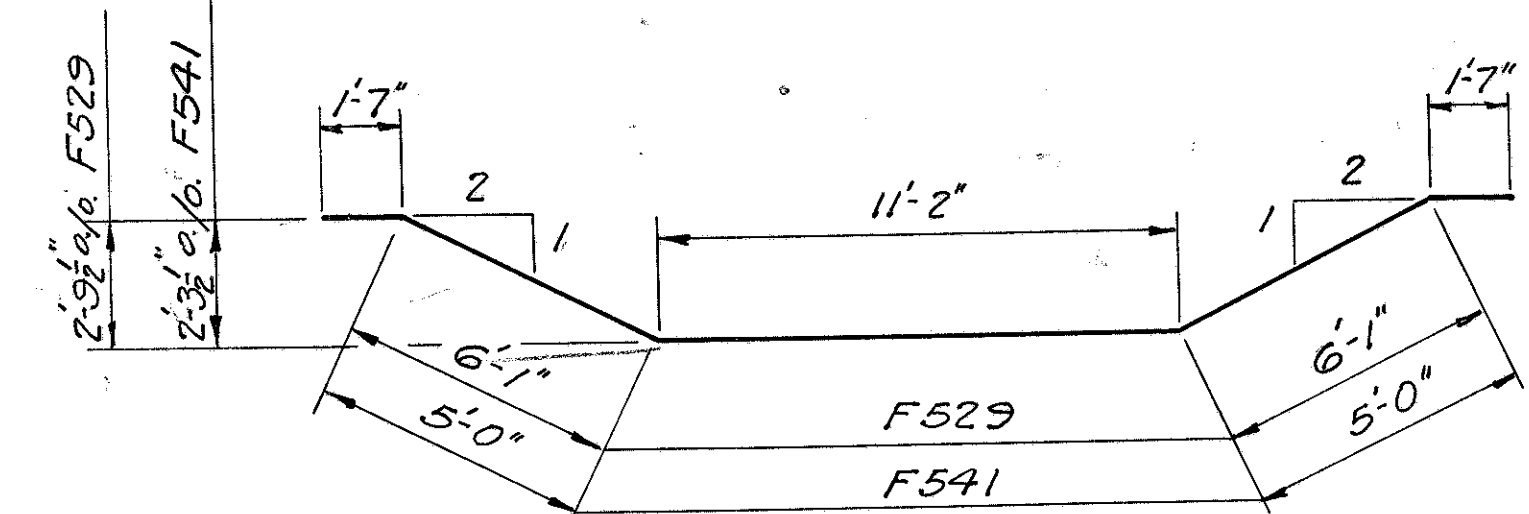
* Place bars to fit curve of wing. Bars may be bent in shop or field at the option of the Contractor.

PARAPET:

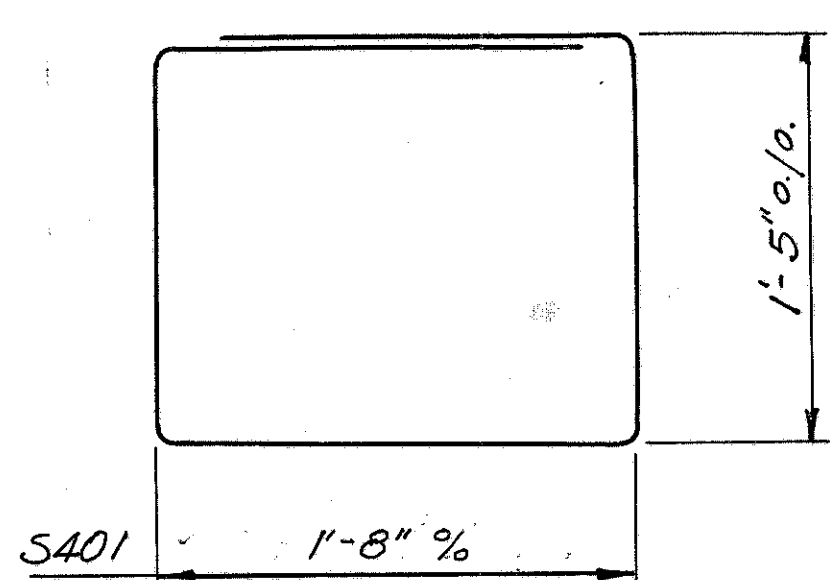
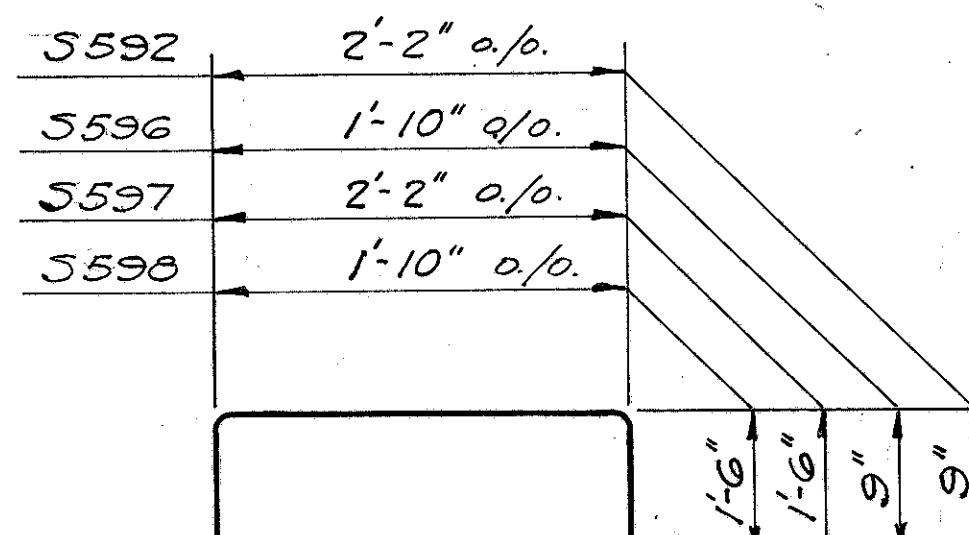
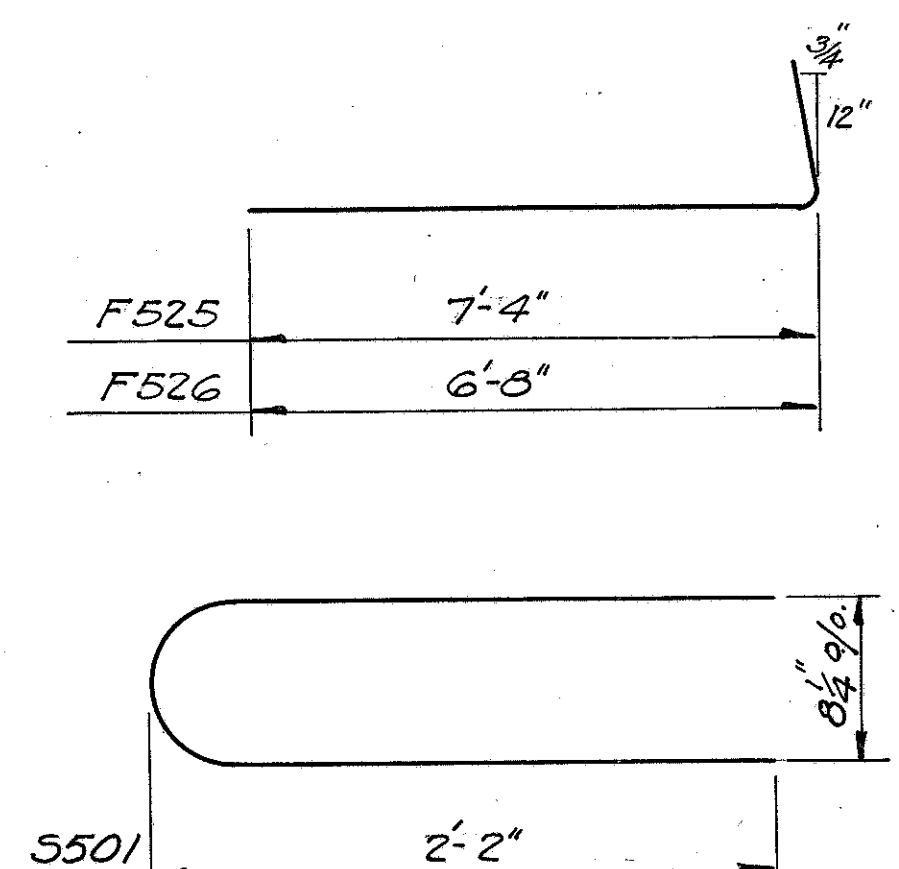
Mark	No.	Length	Weight	Shape
R501	16	10'-11"	Include	S
R502	8	13'-9"	with rlg.	S
R503	20	17'-4"	for	S
R504	4	8'-6"	payment	S
R505	8	14'-3"		S

REPLACEMENT BARS:

Mark	No.	Length	Weight	Shape
RE1000	1	7'-2"		S
RE900	1	6'-10"		S
RE800	1	6'-6"		S
RE700	1	6'-2"		S
RE600	1	5'-11"		S
RE500	2	5'-7"		S
RE400	1	5'-3"		S



F521	Radius 83'-4"
F522	87'-4"
F523	85'-4"
F524	83'-4"
F533	28'-0"
F534	26'-0"
F535	24'-0"
F536	22'-0"
F537	38'-0"
F538	36'-0"
F539	34'-0"
F540	32'-0"



BURGESS & NIPLE - CONSULTING ENGINEERS COLUMBUS, 12, OHIO.				
RAMP AC OVER ROAD D BR. NO. FRA-40-1219				
REINFORCING STEEL LIST				
FRANKLIN COUNTY				
DESIGNED C	TRACED WRD	CHECKED LBR	REVIEWED DATE 4/18/10-11-57	REVISED

STA. 0+00 TO 16+00

Greenlawn
Realty Company

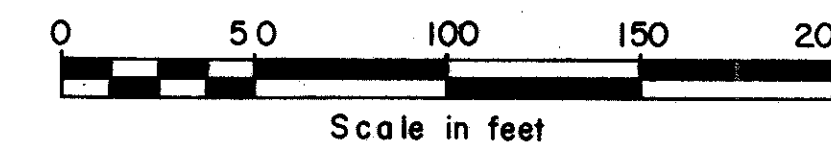
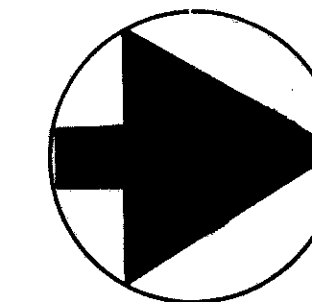
$$\frac{2}{LA}$$

~~E~~ — AVE. —

SEE SHEET 241

GREENLAWN 133.28'

Description, Elevations and City of Columbus coordinate values of control monuments are on file in the office of the Franklin County Engineers Columbus Ohio.



THE CITY OF COLUMBUS

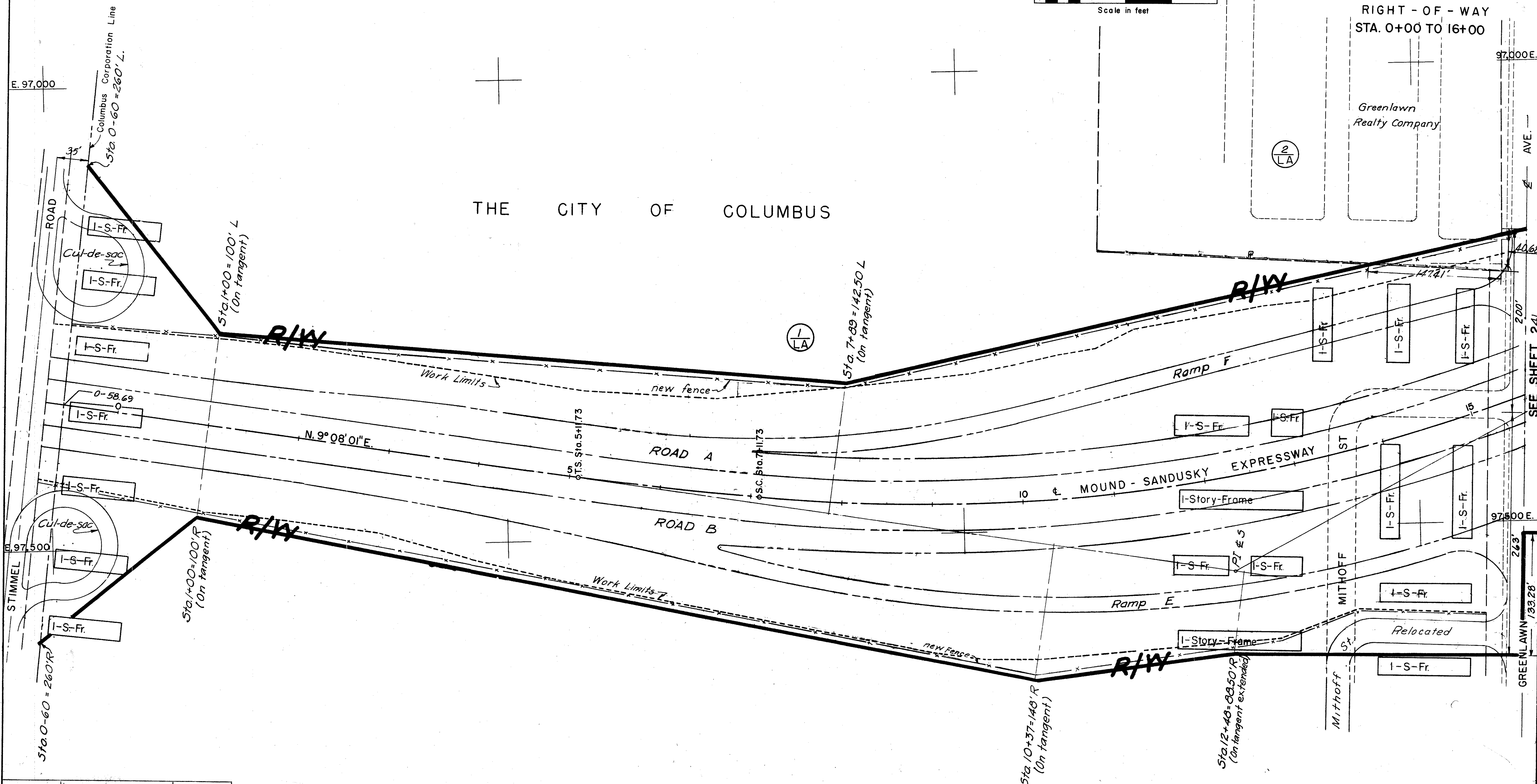
E. 97,000

E. 97,500

TRACED CHECKED NO.

**BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO**

SCALE
1" = 50'



FRANKLIN COUNTY
CITY OF COLUMBUS

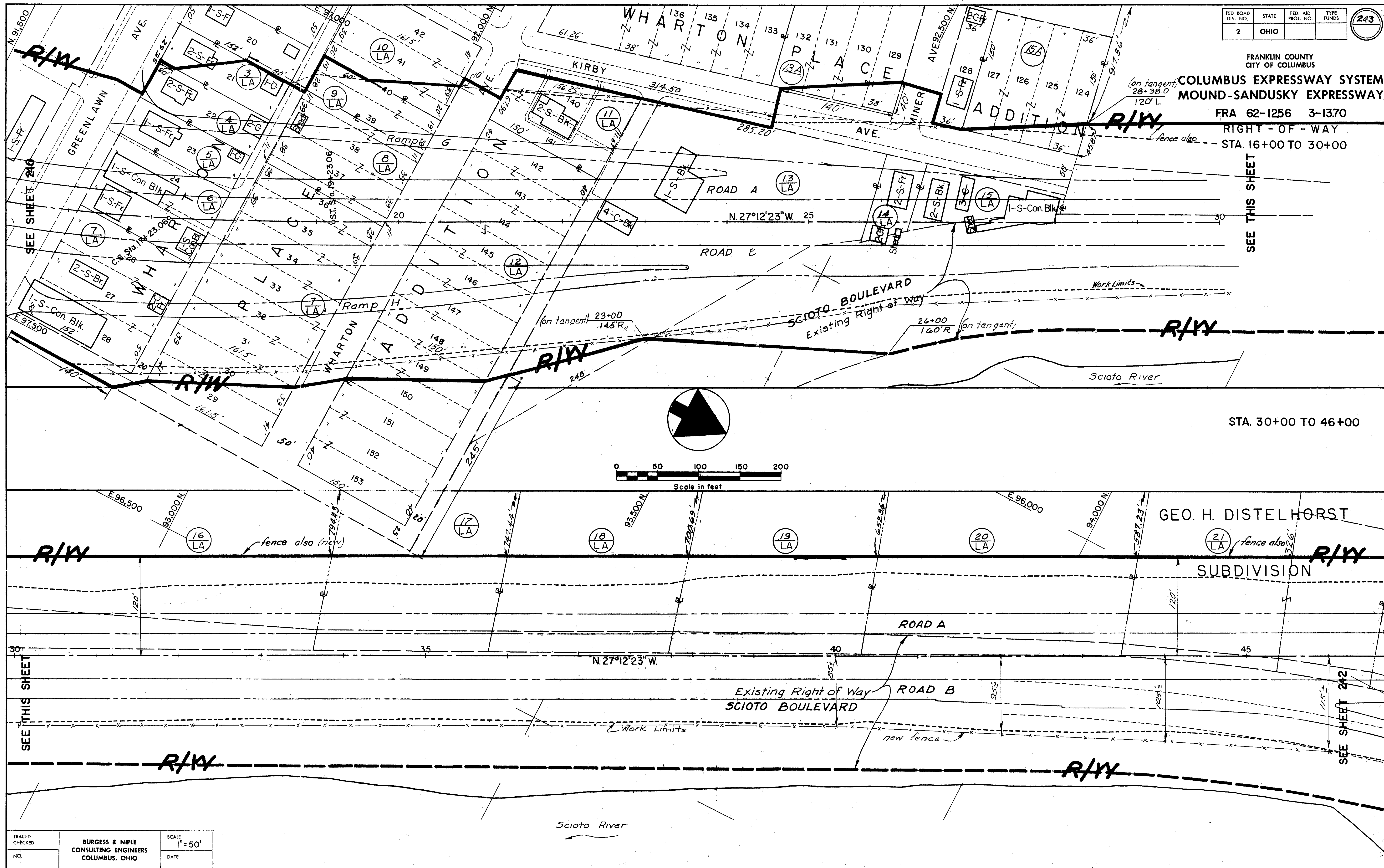
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

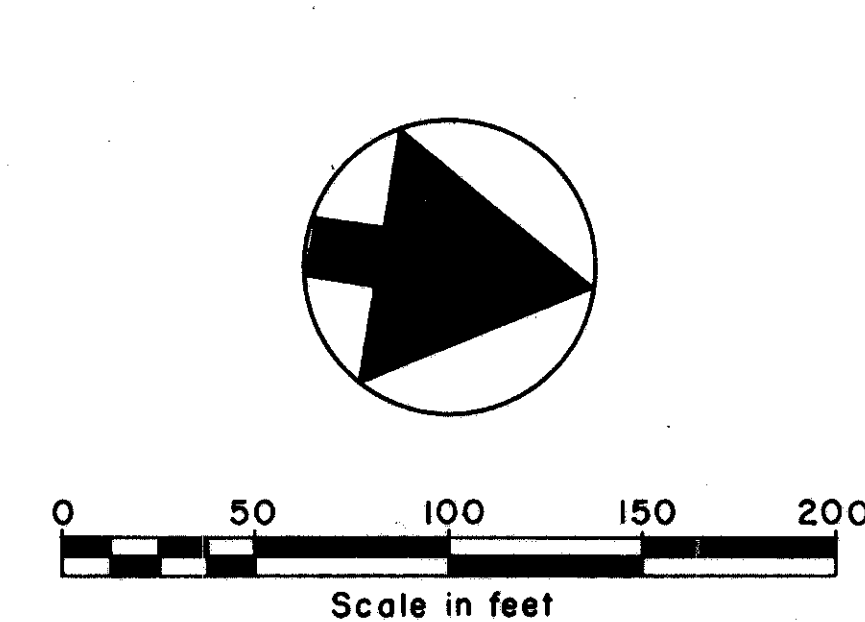
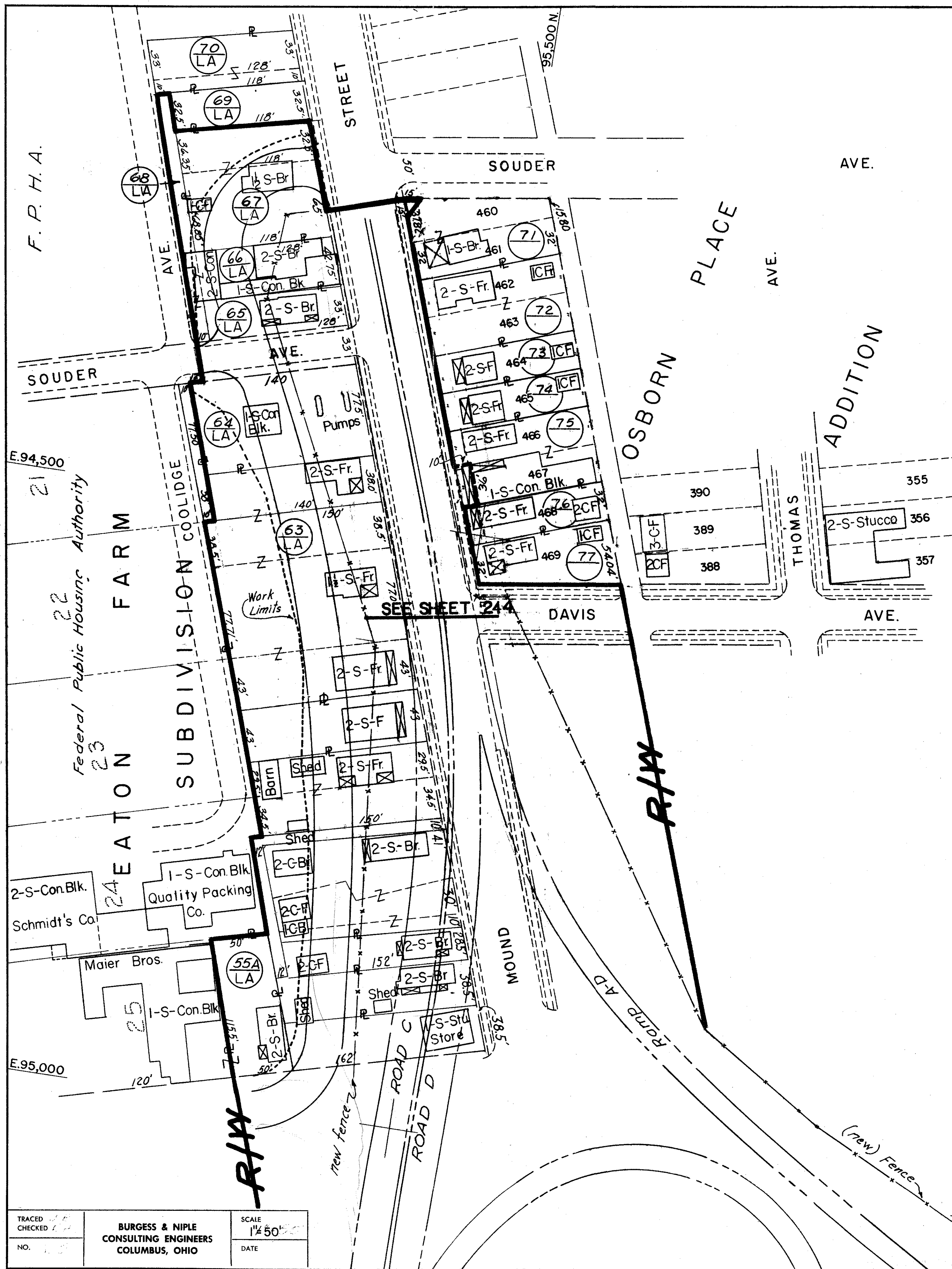
FRA 62-1256 3-1370

RIGHT-OF-WAY

STA. 16+00 TO 30+00

SEE THIS SHEET





FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-1256 3-1370

RIGHT-OF-WAY
STA. 0+00 TO 10+00 ROADS C & D

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2	OHIO		

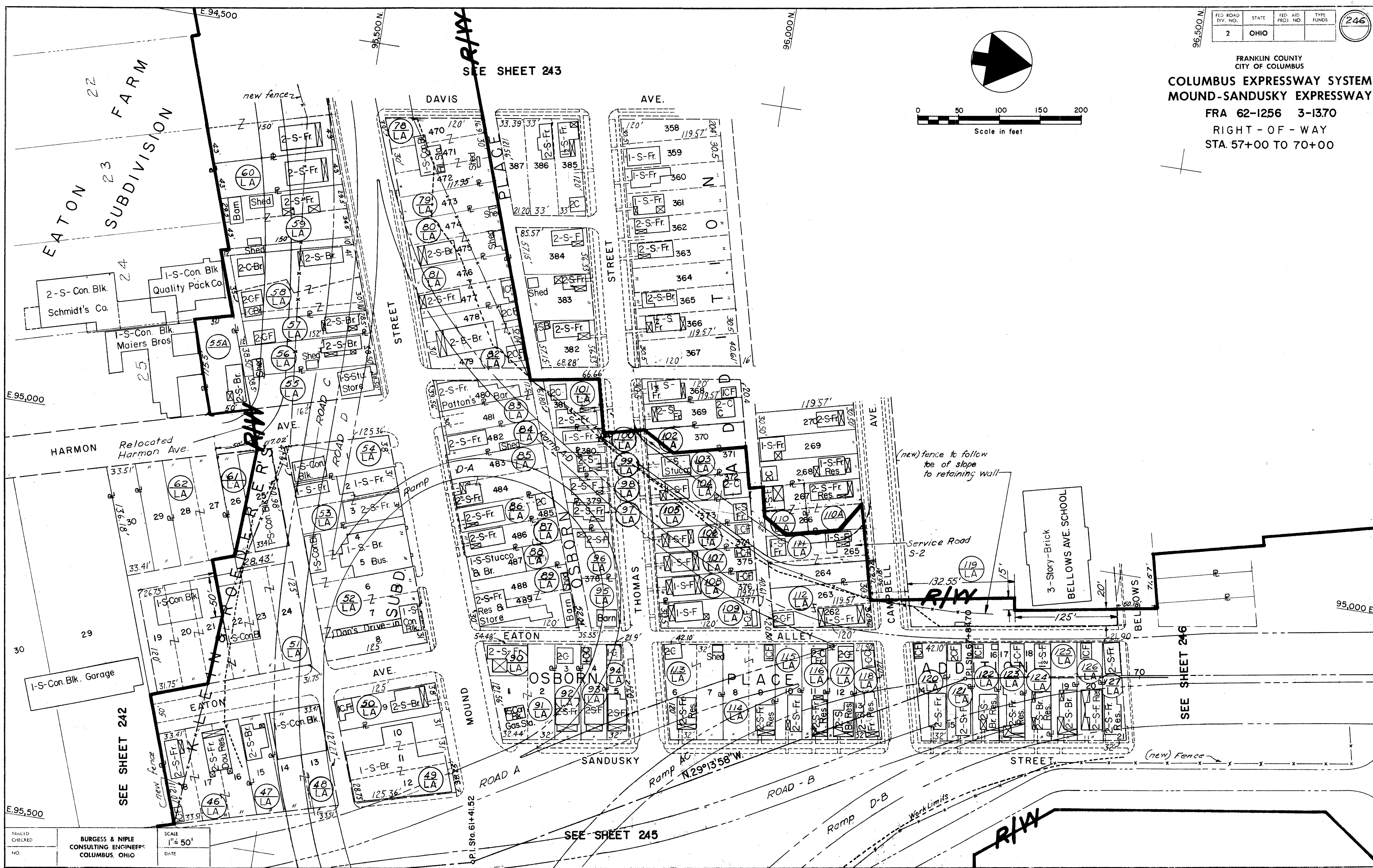
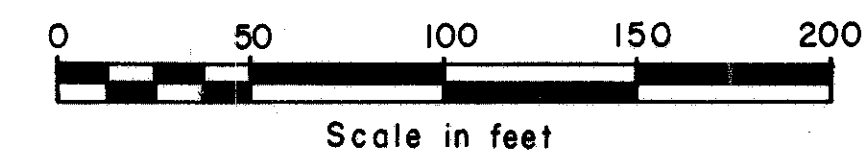
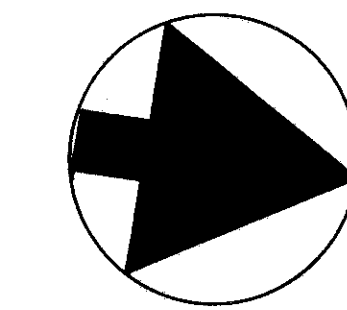
245

TRACED	BURGESS & NIPLE	SCALE
CHECKED	CONSULTING ENGINEERS	1" = 50'
NO.	COLUMBUS, OHIO	DATE

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-1256 3-1370
RIGHT-OF-WAY
STA. 57+00 TO 70+00



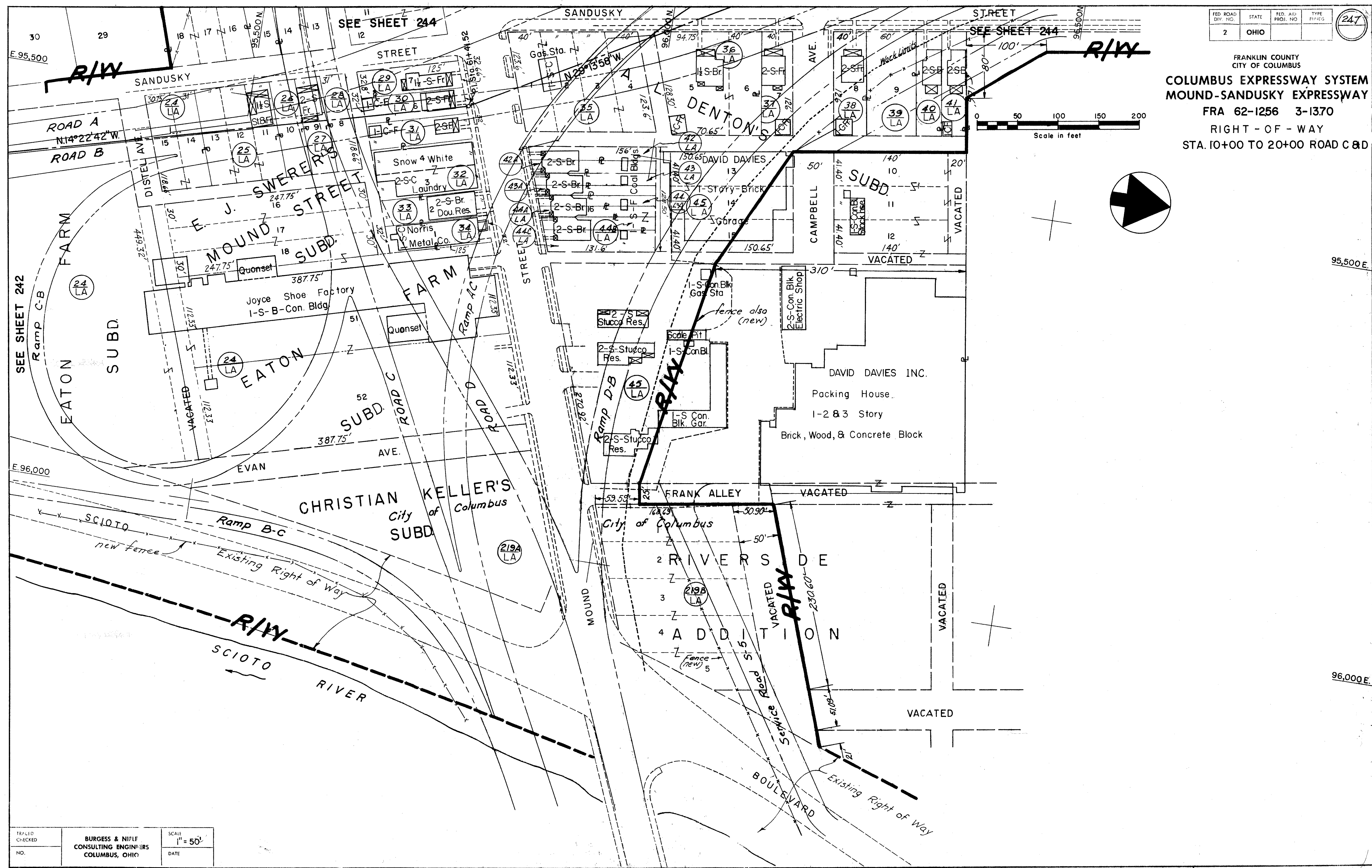
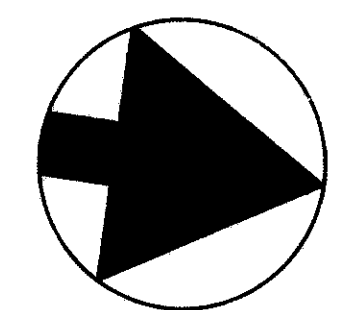
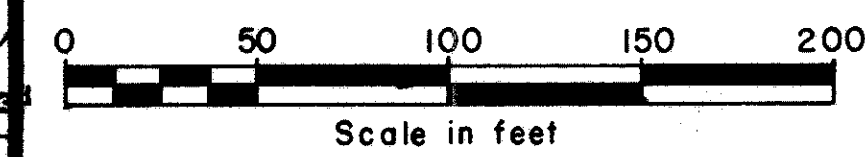
SEE SHEET 245

SEE SHEET 246

SEE SHEET 243

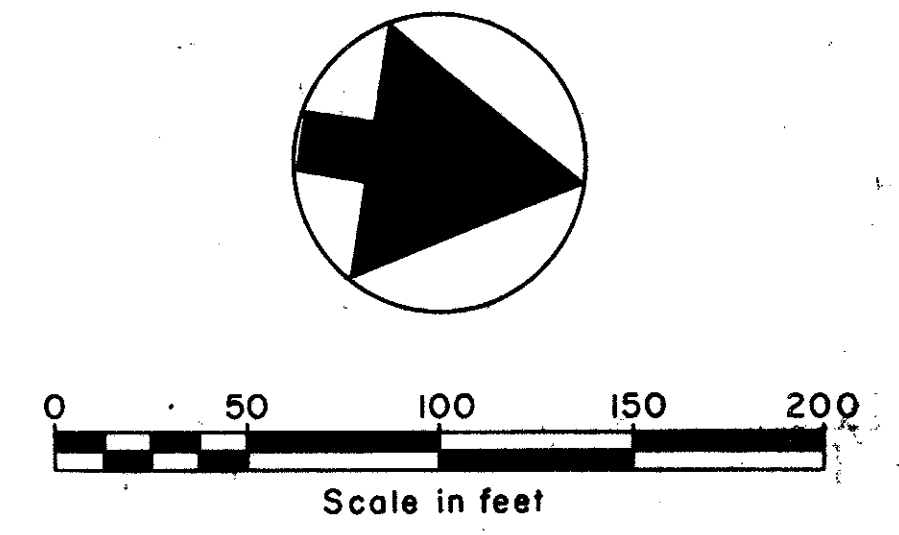
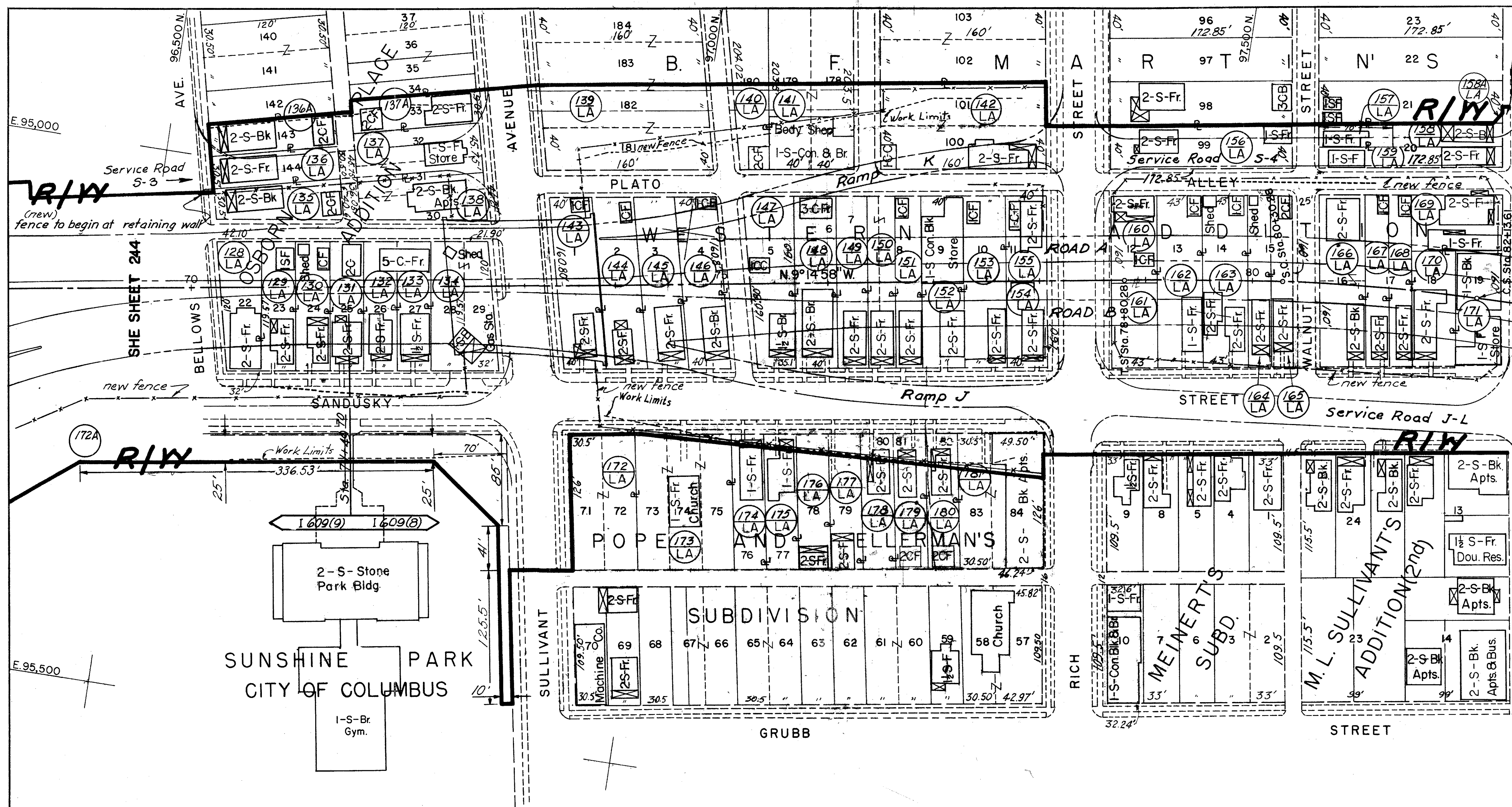
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-1256 3-1370
RIGHT - OF - WAY
STA. 10+00 TO 20+00 ROAD C & D



FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-1256 3-1370
RIGHT-OF-WAY
STA. 70+00 TO 83+00



FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

FRA 62-12.56 FRA 3-13.70

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required	Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
95231	1 -LA	City of Columbus		78.296 ac	11.244 ac	43276	15 A	William Roth	Wharton Place Add'n	Lot 124	1446 sf
95233	2 -LA	Greenlawn Realty Co.		8.95 ac	.069 ac	43277	15 A	"	"	Lot 125	1032 sf
27719	3 -LA	Emma A. Black	Wharton Place Add'n	Lot 21	All	43278	15 A	"	"	Lot 126	619 sf
54739	4 -LA	Lewis M. & Isabel Baer	"	Lot 22	All	43279	15 A	William Roth	Wharton Place Add'n	Lot 127	206 sf
54740	5 -LA	Albert & Rose M. Martin	"	Lot 23	All	41233	16 -LA	Oscar C. & Flossie M. Reiter	Eaton Farm Subd'n.	9.75 ac	.864 ac
54742	6 -LA	Norman C. & Lillian O. Devine	"	Lot 25	All	17012	17 -LA	O.D. & Frances F. Spencer	"	4.287 ac	.448 ac
54741	6A -LA	Norman Devine	"	Lot 24	All	16801	18 -LA	Nora O'Hearn & Katherine Eisel	"	4.573 ac	.445 ac
54743	7 -LA	Clair E. & Katherine Mackan	"	Lot 26	All	3092	19 -LA	John Eramo	"	4.15 ac	.444 ac
54744	7 -LA	"	"	Lot 27	All	11628	20 -LA	Mary Burkett et.al.	"	4.904 ac	.675 ac
54745	7 -LA	"	"	Lot 28	All	11609	21 -LA	Frances D. Waters	"	4.80	.816 ac
54746	7 -LA	"	"	Lot 29	All		22	Omit	"		
54747	7 -LA	"	"	Lot 30	All	38601	23 -LA	Anderson Concrete Corp.	"	4.357 ac	1.206 ac
54748	7 -LA	"	"	Lot 31	All	8042	23 -LA	Anderson Concrete Corp.	"	3.457 ac	1.497 ac
54749	7 -LA	"	"	Lot 32	All	1345	24 -LA	The Mound Boulevard Co.	"		
54750	7 -LA	"	"	Lot 33	All					Lots 45,	
54751	7 -LA	"	"	Lot 34	All					46,47,48	All
54752	7 -LA	"	"	Lot 35	All	11252	24 -LA	"	Eaton Farm Subd'n.	Lots 51,	134,294 sf
54753	7 -LA	Clair E. & Katherine Mackan	"	Lot 36	All					52	All
27720	8 -LA	Lewis M. & Isabel Baer	"	Lots 38,		31571	24 -LA	The Mound Boulevard Co.	E.J. Swerer Mound	Lots 14,	87,112 sf
			"	39 E. Part	All				St. Subd'n	15	All
54754	8 -LA	Lewis M. & Isabel Baer	"	Lots 37,		30993	24 -LA	"	"	Lot 16	All
			"	36 W. Part	All	30994	24 -LA	"	"	Lot 17	All
61817	9 -LA	Lucile B. Ruzicka	"	Lots 40 E.		32821	24 -LA	The Mound Boulevard Co.	"	Lot 18	All
			"	39 W. Part	All	17225	25 -LA	Samuel H. Gaver	"	Lot 11,	7432 sf
92047	10 -LA	Alois H. Thurn et.al.	"	Lot 40 W.					"	12	All
			"	Part	1617 sf	18546	25 -LA	Sam H. Gaver	"	Lot 13	14,714 sf
51365	10 -LA	Alois H. Thurn et.al.	"	Lot 41	870 sf	34421	26 -LA	H.L. Mayne	"	Lot 10	All
51367	11 -LA	Paul E. & Patricia A. Thurn	"	Lots 140,		8424	27 -LA	Paul G. Gardner	"	Lot 9	All
			"	141	All	42608	28 -LA	Martha G. Brewer	"	Lot 8	All
51369	12 -LA	Alois H. Thurn et.al.	"	Lot 142	All	16465	29 -LA	Allen E. & M. Jeannette McDowell	"	Lot 7	All
51370	12 -LA	"	"	Lot 143	All	34720	30 -LA	Theodore F. & Pauline M. Hicks	"	Lot 6	All
51371	12 -LA	"	"	Lot 144	All	54626	31 -LA	Gwelda M. Bolen	"	Lot 5	All
51372	12 -LA	"	"	Lot 145	All	34502	32 -LA	Gladys B. Radich	"	Lots 3,	4000 sf
51373	12 -LA	"	"	Lot 146	All				"	4	All
51374	12 -LA	"	"	Lot 147	All	24208	33 -LA	Property Rentals Inc.	"	Lot 2	All
51375	12 -LA	"	"	Lot 148	All	55980	34 -LA	Edward A. & Virginia V. Morris	E.J. Swerer Mound		4000 sf
51376	12 -LA	"	"	Lot 149	All				St. Subd'n	Lot 1	All
51377	12 -LA	"	"	Lot 150	All	11239	35 -LA	Gulf Refining Company	A.L. Denton's Subd'n	Lots 1	
51378	12 -LA	"	"	Lot 151	All				"	2,3,4	All
51379	12 -LA	"	"	Lot 152	All	62443	36 -LA	Lester F. Denton	"	Lot 5	All
51380	12 -LA	Alois H. Thurn et.al.	"	Lot 153	All	62444	36 -LA	Lester F. Denton	"	Lot 6	All
51382	13 -LA	Alois H. Thurn	"	2.097 ac.	All	62445	37 -LA	Walter F. & Eva S. Stabs	"	Lot 7	All
63314	13A	William Roth	"	Lot 129	1311 sf	66207	38 -LA	Fred A. Unkrodt Jr.	"	Lot 8	All
63315	13A	"	"	Lot 130	901 sf	62446	39 -LA	David Davies Inc.	"	Lot 9	All
63316	13A	"	"	Lot 131	490 sf	19564	40 -LA	Anna M. Kern	"	3780 sf	All
63317	13A	William Roth	"	Lot 132	98 sf	11248	41 -LA	Dorothy L. & Charles R. Cash	"	3780 sf	All
42786	14 -LA	Mary E. Roth	"	.11 ac.	All	62454	42 -LA	Lester F. Denton	A.L. Denton's Subd'n	Lot 16	All
42790	15 -LA	William & Pauline S. Roth	Wharton Place Add'n.	.23 ac.	All						2020 sf

250

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
62441	42A-IA	James W. Jr. & Agnes C.Lang	A.L.Denton's Subd'n	Lot 16	All 2325 sf
62454	43 -IA	Lester F. Denton	"	Lot 16	All 3990 sf
75894	44A-IA	Lulu J. Kean	"	Lot 16	All 1978 sf
62454	44A -IA	Lester F. Denton	"	Lot 16	All 8170 sf
62451	45 -IA	David Davies Packing Co.,Inc.	"	Lots 13, 14,15	13,080sf 13,080 sf
62448	45 -IA	"	"	Lot 10	All 6626 sf
62449	45 -IA	"	"	Lot 11	All 6626 sf
62450	45 -IA	"	"	Lot 12	All 8226 sf
43269	45 -IA	David Davies Packing Co.,Inc.	A.L.Denton's Subd'n	3.253 ac	.834 ac .834 ac
20846	46 -IA	Nellie Heil	Klein Roederer's Subd'n	Lots 16, 17, 18	All 11,625 sf
42394	47 -IA	George J. Igel Company	"	Lot 15	All 4024 sf
42407	48 -IA	Mirolo Realty Company	"	Lots 13, 14	All 8300 sf
26763	49 -IA	"	"	Lots 10, 11,12	All 11,938 sf
42392	50 -IA	Mirolo Realty Company	"	Lot 9	All 4750 sf
42410	51 -IA	George J. Igel Company	"	Lots 22, 23,24	22,23 24
41368	52 -IA	E. W. Distelhorst	"	21 Part	1191 sf 13,096 sf
11613	52 -IA	"	"	Lots 6, 7, 8	All 11,625 sf
19557	53 -IA	Oscar C. Reiter	"	Lots 4, 5	All 7750 sf
49339	53 -IA	Oscar C. Reiter	"	Lot 2	All 3875 sf
42415	54 -IA	Clara E. Bauermeister	Klein Roederer's Subd'n	Lot 3	All 3875 sf
42404	55 -IA	Robt. L. & Thelga V. McQuiniff	J. Overton Eaton 1st	Lot 1	All 5335 sf
57822	55A	Edith L. Suttles	"	Lot 25 NE part	All 6237 sf
42406	56 -IA	Albert J. Roederer	"	Lot 24 EC part	All 6237 sf
52220	57 -IA	Nellie V. Shrigley	"	Lot 25 NC part	All 6156 sf
33040	58 -IA	Ruth Lowery	"	Lot 25 NWPart	All 4033 sf
33031	58 -IA	Ruth Lowery	"	Lot 24 NC part	All 5768 sf
9024	59 -IA	John P. & Lillian D. Constans	"	Lot 24 NE part	All 6392sf
9025	59 -IA	John P. & Lillian D. Constans	"	Lot 23 NE part	All 4425 sf
9801	60 -IA	Bessie M. & J. Vey Morgan	J.Overton Eaton 1st	Lot 24 NW Part	All 5175 sf
				Lot 23 NE part	All 6300 sf

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
42416	61 -IA	Eva M. & Ralph D. McCarty	Klein Roederer's Subd'n	Lots 25, 26 Part of	5072 5072 sf
9435	62 63 -IA	Omit Mound Realty Company	J. Overton Eaton 1st Subd'n	Lot 23 NW part	All 6300 sf
44119	63 -IA	"	"	Lot 22 NE part	All 10,520 sf
42403	63 -IA	"	"	Lot 22 NW part	All 5270 sf
42405	63 -IA	Mound Realty Company	"	Lot 21 E part	All 5200 sf
19558	64 -IA	The Ohio Oil Company	"	Lot 21W Part	All 10,850 sf
52047	65 -IA	Florence D. Sturz	"	Lot 1	All 3800 sf
33037	66 -IA	Lola M. Greene	"	Lot 1	All 10,530 sf
62812	67 -IA	Homer Adams	"	Lot 1	All 7710 sf
62811	67 -IA	Homer Adams	"	Lot 1	All 3960 sf
33030	68 69 70	Harrison O. Mason Omit Omit	" J. Overton Eaton 1st Subd'n	Lot 1 Lot 1	All 1377 sf
37609	71 -IA	Wm. R. & Eva Robison	Osborn Place Add'n	Lots 460 461	110 sf 110 sf
56117	72 -IA	Adelia A. Halfhill	"	Lot 462	none none
10622	72 -IA	"	"	Lot 463	none none
70161	73 -IA	Harold E. Conrad	"	Lot 464	none none
70162	74 -IA	Goldie M. Schlichter	"	Lot 465	none none
35893	75 -IA	Linus Modlich	"	Lot 466, 467	360sf 360sf
40619	76 -IA	Nita McGowan	"	Lot 468	none none
37608	77 -IA	Helen T. Butler	"	Lot 469	none none
18880	78 -IA	The Pure Oil Company	"	Lots 470, 471,472	All 10,370 sf
30491	79 -IA	Edwin B. Zenker	"	Lot 473	All 3538 sf
37610	80 -IA	Carl W. & Dorothy H. Krebs	"	Lot 474	All 3538 sf
20870	80 -IA	"	"	Lot 475	All 3538 sf
20869	81 -IA	Louis Heim	"	Lots 476, 477	All 7077 sf
42409	82 -IA	Edward W. Distelhorst	"	Lots 478, 479	All 8377 sf
33036	83 -IA	August Wagner Realty Co.	"	Lots 480, 481	All 6907 sf
42398	84 -IA	Grace C. Dyer	"	Lot 482	All 3538 sf
13831	85 -IA	Neil O. & Minnie W. Emmelhainz	"	Lots 483, 484	All 7077 sf
13828	86 -IA	Charles S. & Sarah M. Summers	"	Lot 485	All 3538 sf
14202	87 -IA	Florence E. Kreher & Alice C. Denton	Osborn Place Add'n	Lot 486	All 3538 sf

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
FRA 62-12.56 FRA 3-13.70

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
24019	88 -LA	Mildred Painter	Osborn Place Add'n	Lot 487	All 3538 sf
55258	89 -LA	Oscar C. Reiter	"	Lots 488, 489	All 8374 sf
65172	90 -LA	Oliver M. Fowler	"	Lot 1	All 1954 sf
52147	91 -LA	The Cities Service Oil Company	"	W part Lots 1 E part, 2	All 7066 sf
30502	92 -LA	Lewis J. Emmelhainz	"	Lot 3	All 3825 sf
45441	93 -LA	Herbert M. & Frances A. Cox	"	Lot 4	All 3825 sf
13829	94 -LA	Bernica C. Currey	"	Lot 5	All 3221 sf
11624	95 -LA	Russel C. Wisecarver	"	Lot 378	All 2193 sf
45011	96 -LA	Anna Gargich	"	E part Lot 378	All 2720 sf
49807	97 -LA	Mary K. Johnson	"	W part Lot 379	All 1544 sf
1427	98 -LA	Catherine Sweeney	"	E part Lot 379	All 1645 sf
37972	99 -LA	Vernon J. Swartz	"	W part Lot 380	All 1737 sf
55047	100 -LA	Howard R. Green	"	E part Lot 380	All 1522 sf
29669	101 -LA	James R. & Lucille E. Groff	"	W part Lot 381	All 3854 sf
35667	102	Charles E. & Laura Groves	"	Lot 370	All 3647 sf
19782	103	Charles E. & Laura Groves	"	Lot 371	All 3647 sf
19783	104 -LA	Fannie M. Whitson	"	Lot 372	All 3647 sf
19784	105 -LA	Martin N. & Mary E. Ramsay	"	Lot 373	All 3647 sf
19785	106 -LA	Albert B. & Bessie L. Holton	"	Lot 374	All 3647 sf
6018	107 -LA	David C. Sherman	"	Lot 375	All 3647 sf
6019	108 -LA	John F. Smith	"	Lot 376	All 3647 sf
6020	109 -LA	Mary Limotta	"	Lot 377	All 4252 sf
19726	110	Harland Byerly	"	Lot 266,S 267 S	312sf 312 sf
10388	110A	Anderson J. & Vina Salmons	"	part Lot 266	465sf 465 sf
19725	111 -LA	Alice M. Wilson	"	N part Lot 264	All 3646 sf
34718	111 -LA	Alice M. Wilson	"	Lot 265	All 3646 sf
19723	112 -LA	Carl & Betty L. Wright	"	Lot 262	All 3672 sf
19724	112 -LA	Carl & Betty L. Wright	"	Lot 263	All 3646 sf
52213	113 -LA	Thomas J. & Tessa Blakeley	"	Lot 6	All 4430 sf
52214	113--LA	Thomas J. & Tessa Blakeley	"	Lot 7	All 3827 sf
1759	114 -LA	Lawrence H. Conroy	"	Lot 8	All 3827 sf
1761	114 -LA	Lawrence H. Conroy	"	Lot 9	All 3827 sf
2103	115 -LA	Fred Fox	"	Lot 10	All 3827 sf
38728	116 -LA	Gladys K. Dillow	"	Lot 11	All 3827 sf
34986	117 -LA	Frank L. & Erla H. Eitel	Osborn Place Add'n	Lot 12	All 3827 sf

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
50083	118 -LA	C.B. Mullens	Osborne Place Add'n	Lot 13	All 3228 sf
66726	119	Board of Education	"	Lots 146, 261,260	part of 7139sf 7139 sf
9009	120 -LA	Richard H. & Mary M. Jones	"	Lot 14	All 4431 sf
31772	121 -LA	Helen M. Russel	"	Lot 15	All 3827 sf
16644	122 -LA	Emma Fuchs	"	Lot 16	All 3827 sf
13822	123 -LA	Ernest & Berttie Caldwell	"	Lot 17	All 3827 sf
49158	124 -LA	William H. Dutton	"	Lot 18	All 3827 sf
52788	125 -LA	Gertrude Cahill	"	Lot 19	All 3827 sf
43228	126 -LA	Lucille Farrand	"	Lot 20	All 3827 sf
37889	127 -LA	Oakland Realty Inc.	"	Lot 21	All 3222 sf
22447	128 -LA	Grace M. Bennett	"	Lot 22	All 4430 sf
33916	129 -LA	LeRoy & Mabel Denny	"	Lot 23	All 3827 sf
37493	130 -LA	William G. & Lottie Greenland	"	Lot 24	All 3827 sf
31947	131 -LA	Sherman D. & Earnest E. McDonald Trs.	"	Lot 25	All 3827 sf
47569	135 -LA	Jeanette F. Hall	"	Lot 145	All 4266 sf
46837	136	Dora M. Salyer	"	Lot 144	All 3660 sf
4205	136A	Mark & Alice Bauchmire	"	Lot 143	All 3660 sf

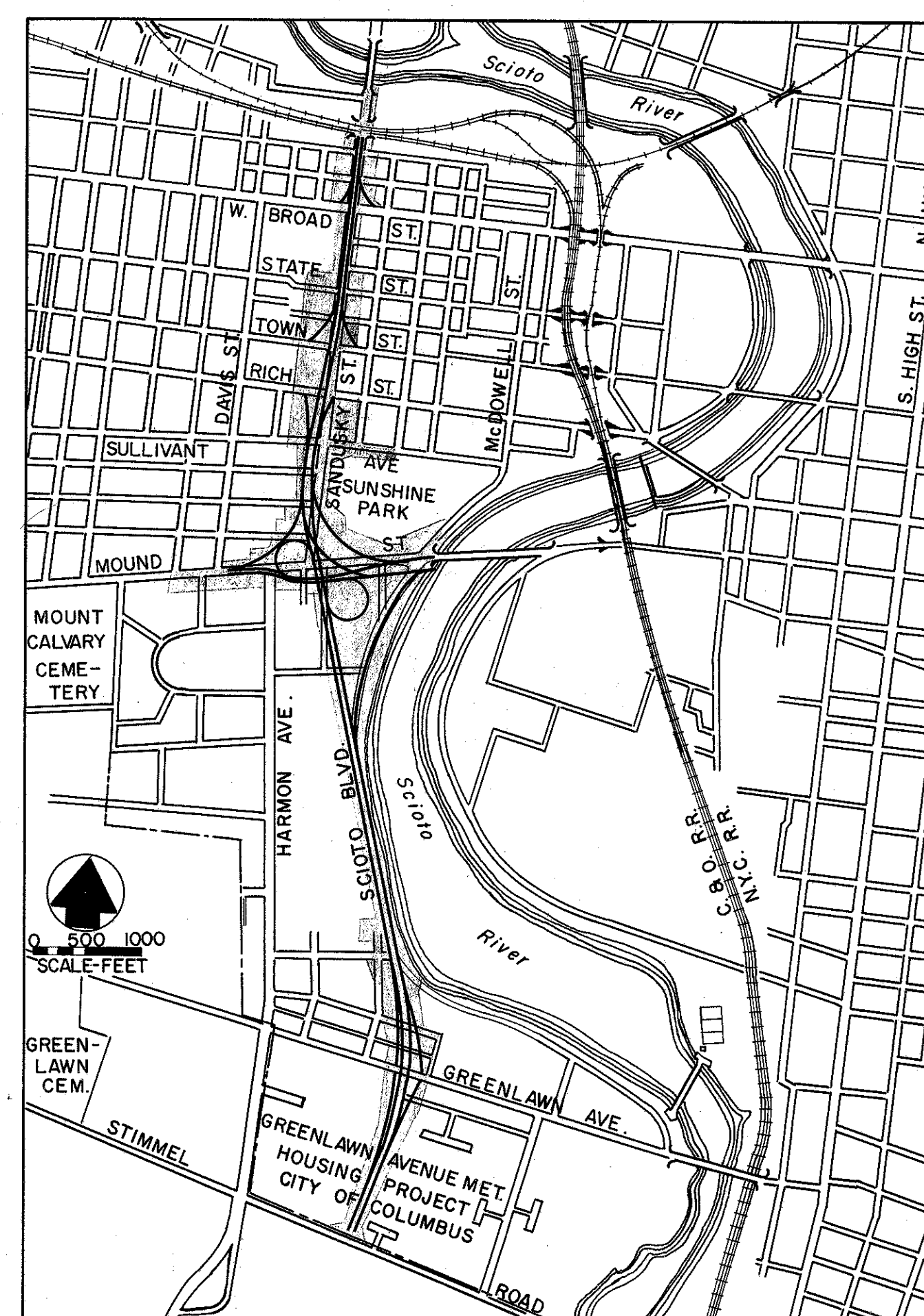
FRA-71-14.16
R/W Plans

COLUMBUS EXPRESSWAY SYSTEM MOUND-SANDUSKY EXPRESSWAY

ESTABLISHMENT, ALTERATION, WIDENING AND RELOCATION OF
SANDUSKY STREET FROM SCIOTO RIVER BRIDGE ON SANDUSKY
STREET SOUTH TO COLUMBUS CORPORATION LINE INCLUDING MOUND
STREET INTERCHANGE AND PORTION OF SOUTHWEST FREEWAY
"LIMITED ACCESS"

CITY OF COLUMBUS
FRANKLIN COUNTY OHIO

INDEX OF SHEETS
RIGHT OF WAY PLANS 1A-9
APPROPRIATION TABLES 10-14



VICINITY MAP

□ RIGHT-OF-WAY

APPROVED
DATE 11-30-56

Ed W. Turner
FRANKLIN COUNTY DEPUTY ENGINEER

APPROVED
DATE 11-30-56

Gray Elbin
FRANKLIN COUNTY ENGINEER

APPROVED
DATE 11-30-56

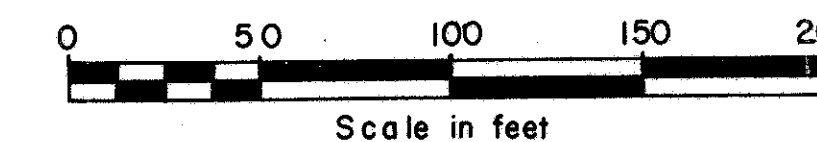
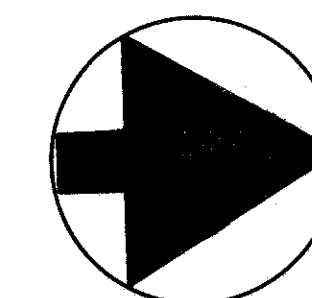
C. P. Landerbaugh
Harry T. Dyer
BOARD OF FRANKLIN COUNTY COMMISSIONERS

BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO

RECOMMENDED FOR APPROVAL *Ben K. Bare*
30 NOVEMBER 1956

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY



RIGHT - OF - WAY

Sta. 0+00 to 16+00

Greenlawn
Realty Company

2
LA

97,000 E.

AVE.

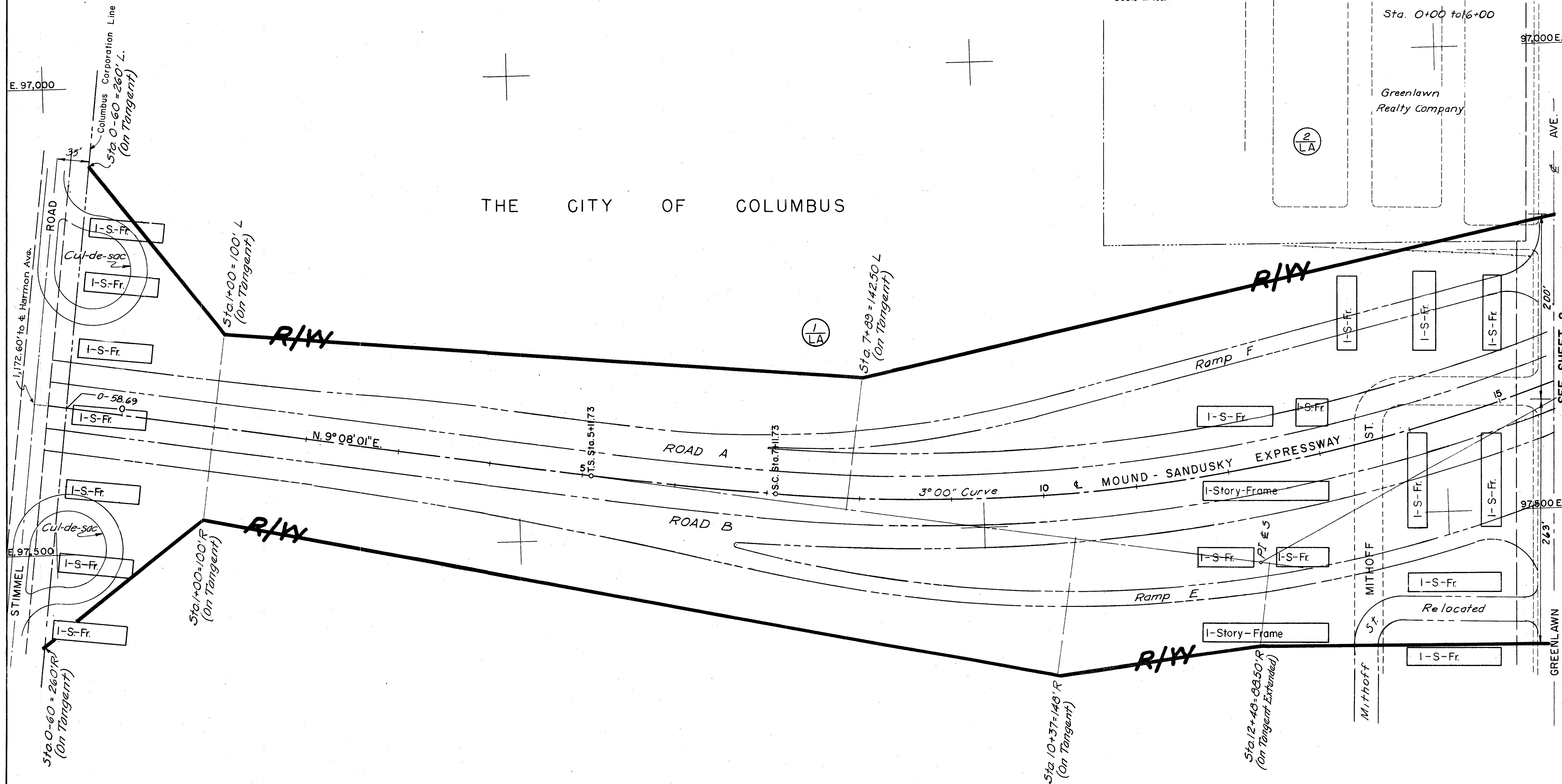
SEE SHEET 2

97,500 E.

GREENLAWN

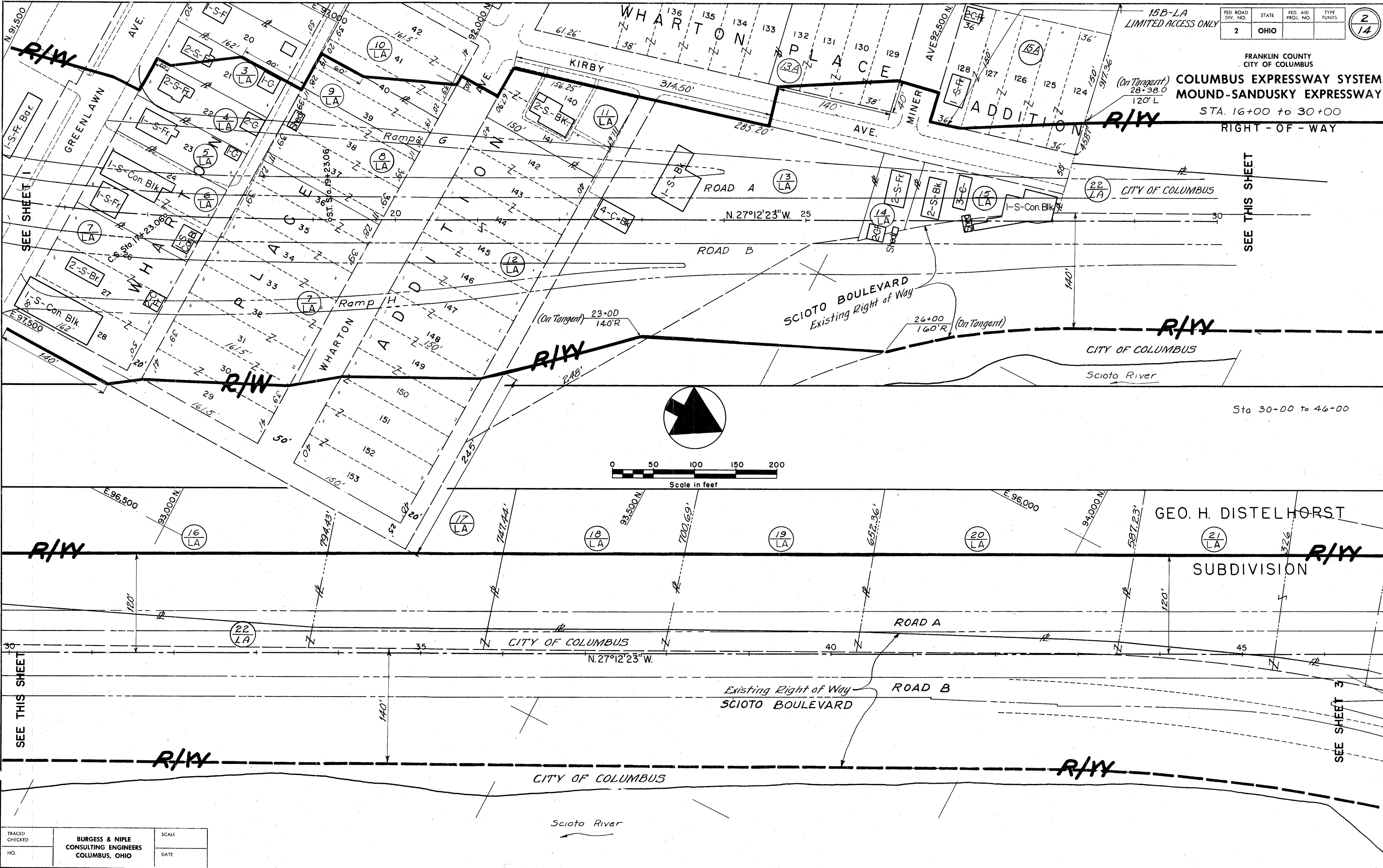
NOTE:
Description, Elevations and
City of Columbus coordinate
values of control monuments
are on file in the office of the
Franklin County Engineers
Columbus Ohio.

THE CITY OF COLUMBUS



TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO.		DATE

MOUND-SANDUSKY R/W REVISIONS 2-3-59
REVISED AS PER SET FROM DIVISION 6, 4-18-58

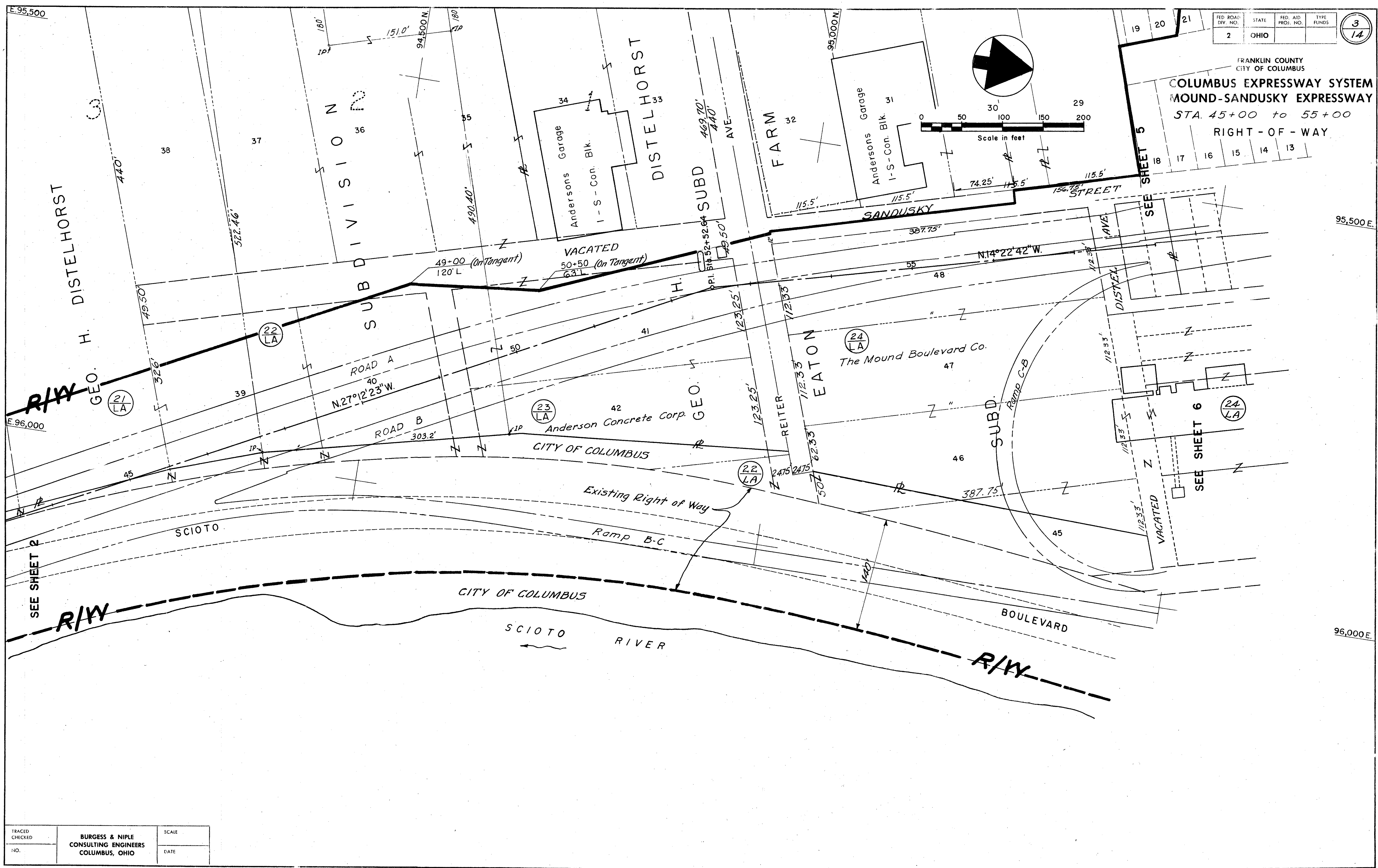


FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

15B-LA
LIMITED ACCESS ONLY

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
STA. 16+00 to 30+00
RIGHT-OF-WAY

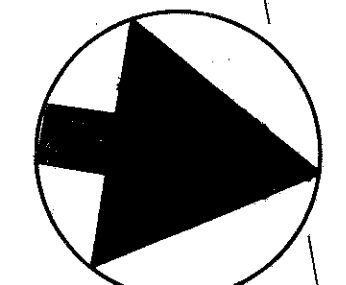
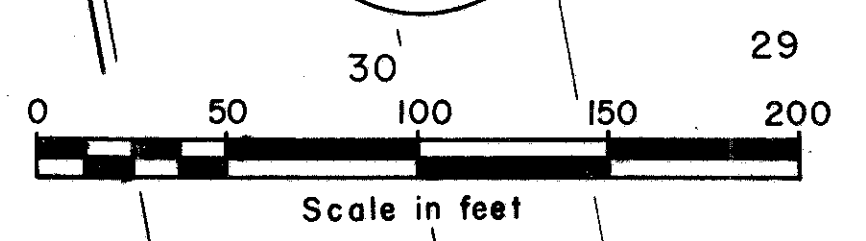
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NO.		DATE



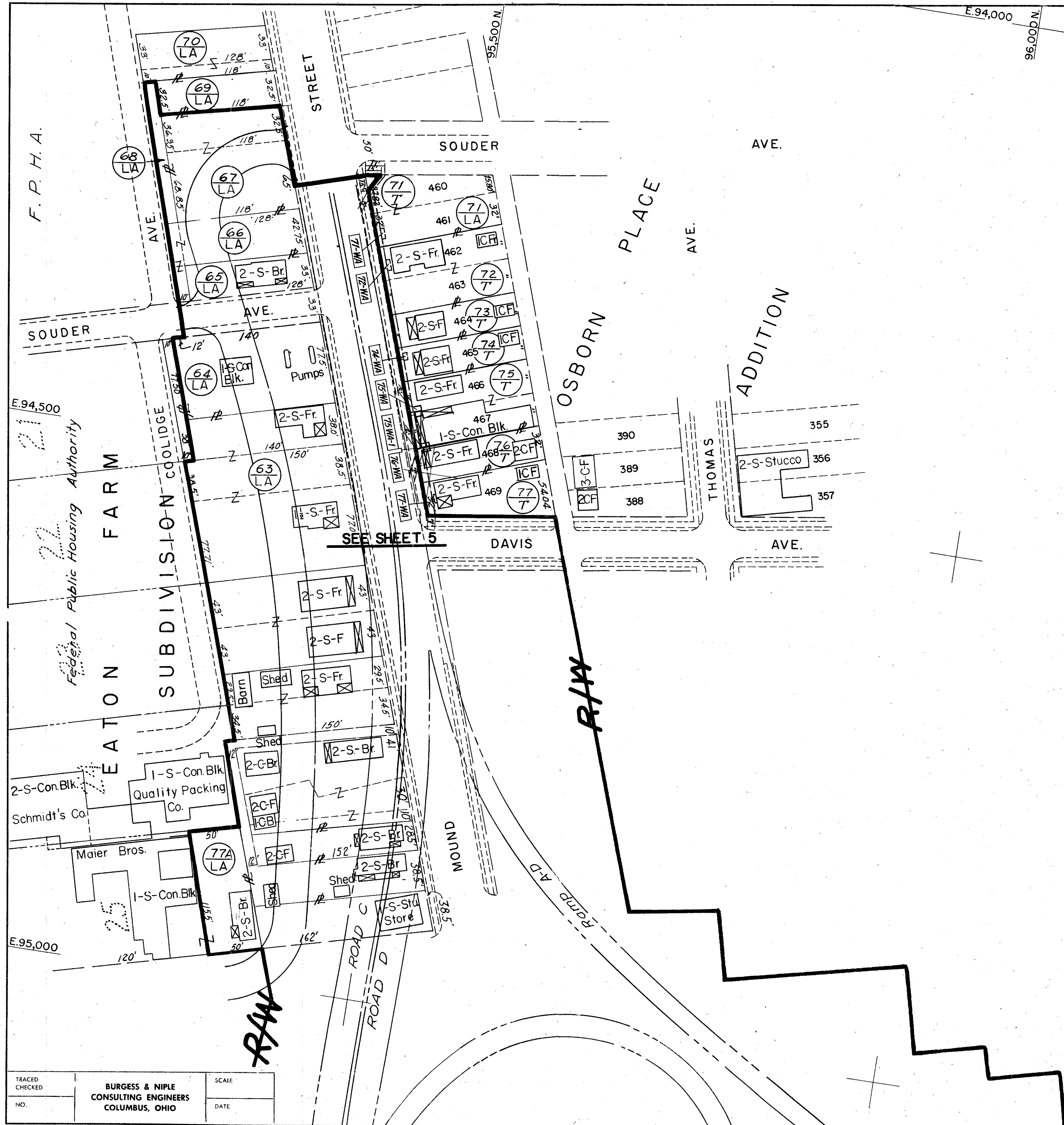
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

3
14

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
STA. 45+00 to 55+00
RIGHT-OF-WAY



TRACED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
CHECKED		
NO.		DATE



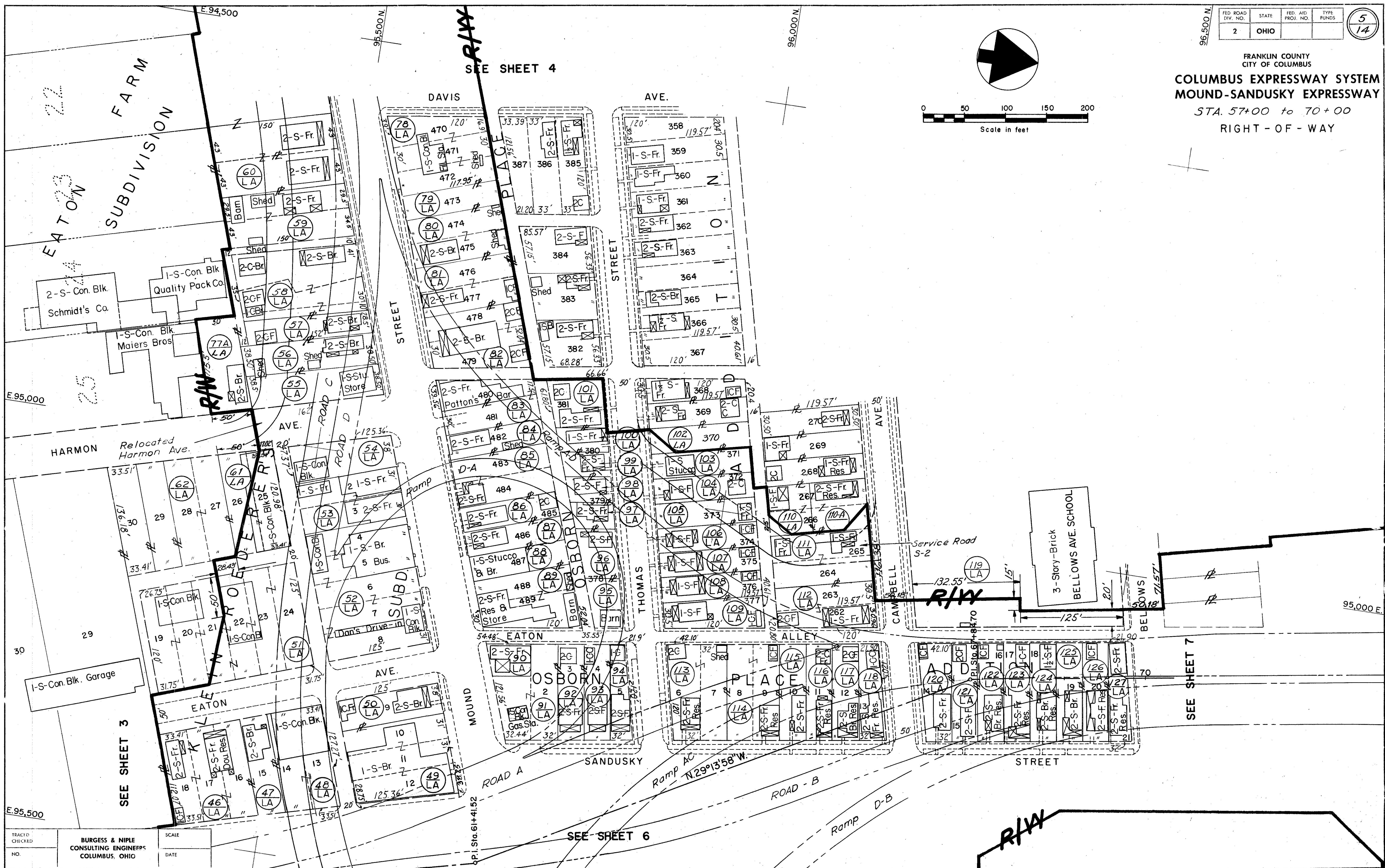
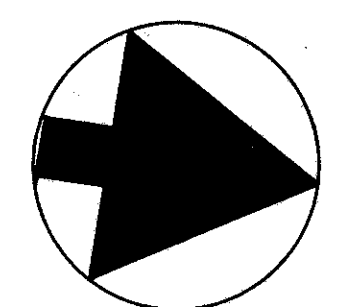
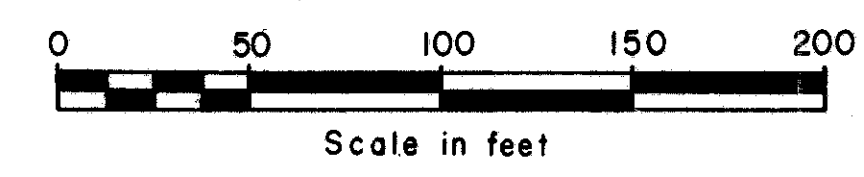
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
STA. 0+00 to 10+00 Roads C & D
RIGHT - OF - WAY

TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO.		DATE

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
STA. 57+00 to 70+00
RIGHT-OF-WAY



TRACED
CHECKED
NO.

BURGESS & NIPL
CONSULTING ENGINEERS
COLUMBUS, OHIO

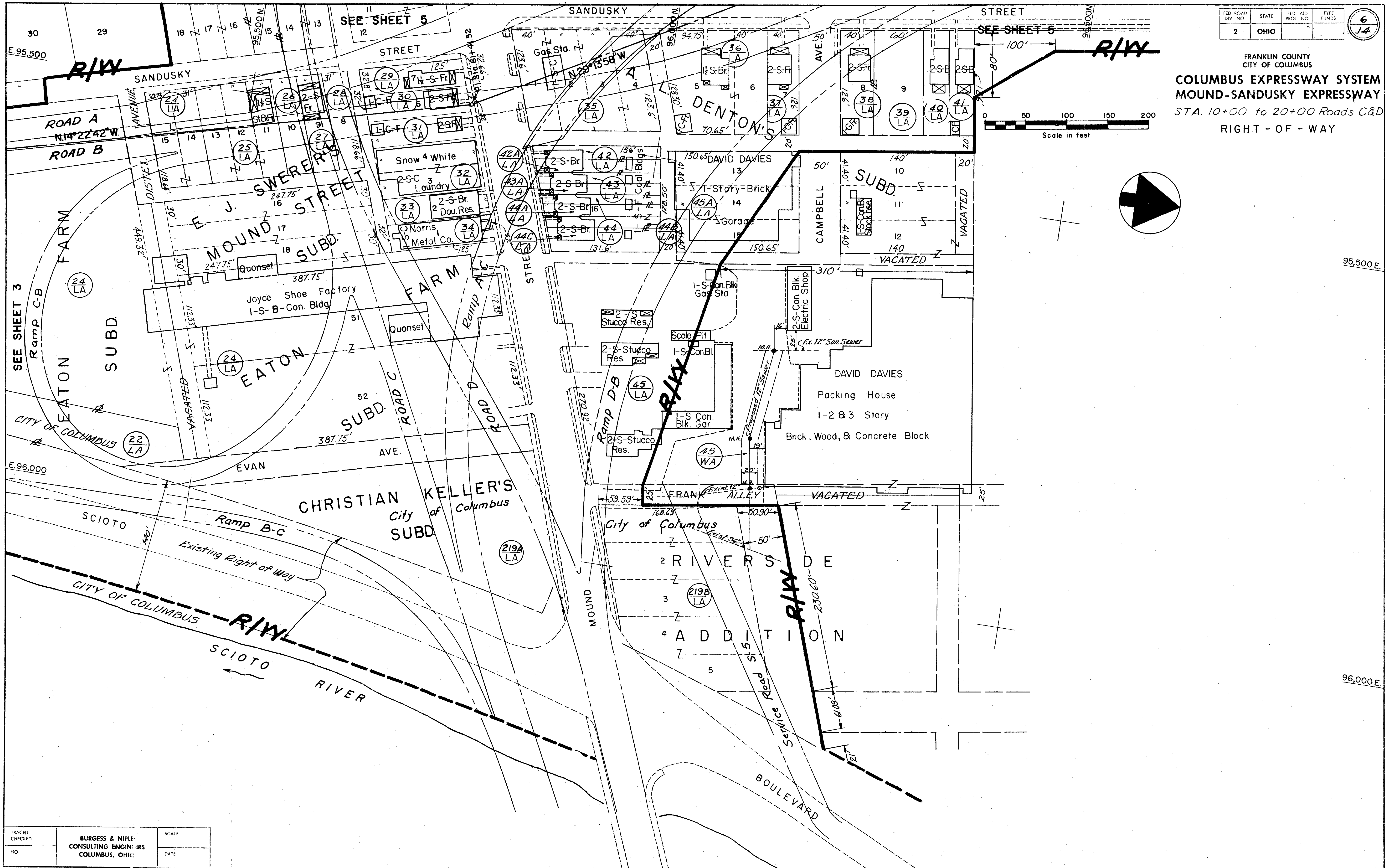
SCALE
DATE

SEE SHEET 3

SEE SHEET 4

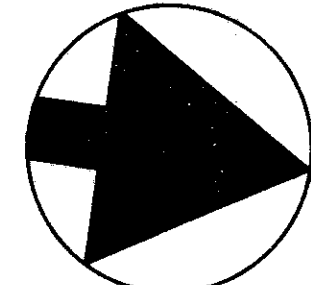
SEE SHEET 6

SEE SHEET 7



FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY
STA. 10+00 to 20+00 Roads C&D
RIGHT - OF - WAY

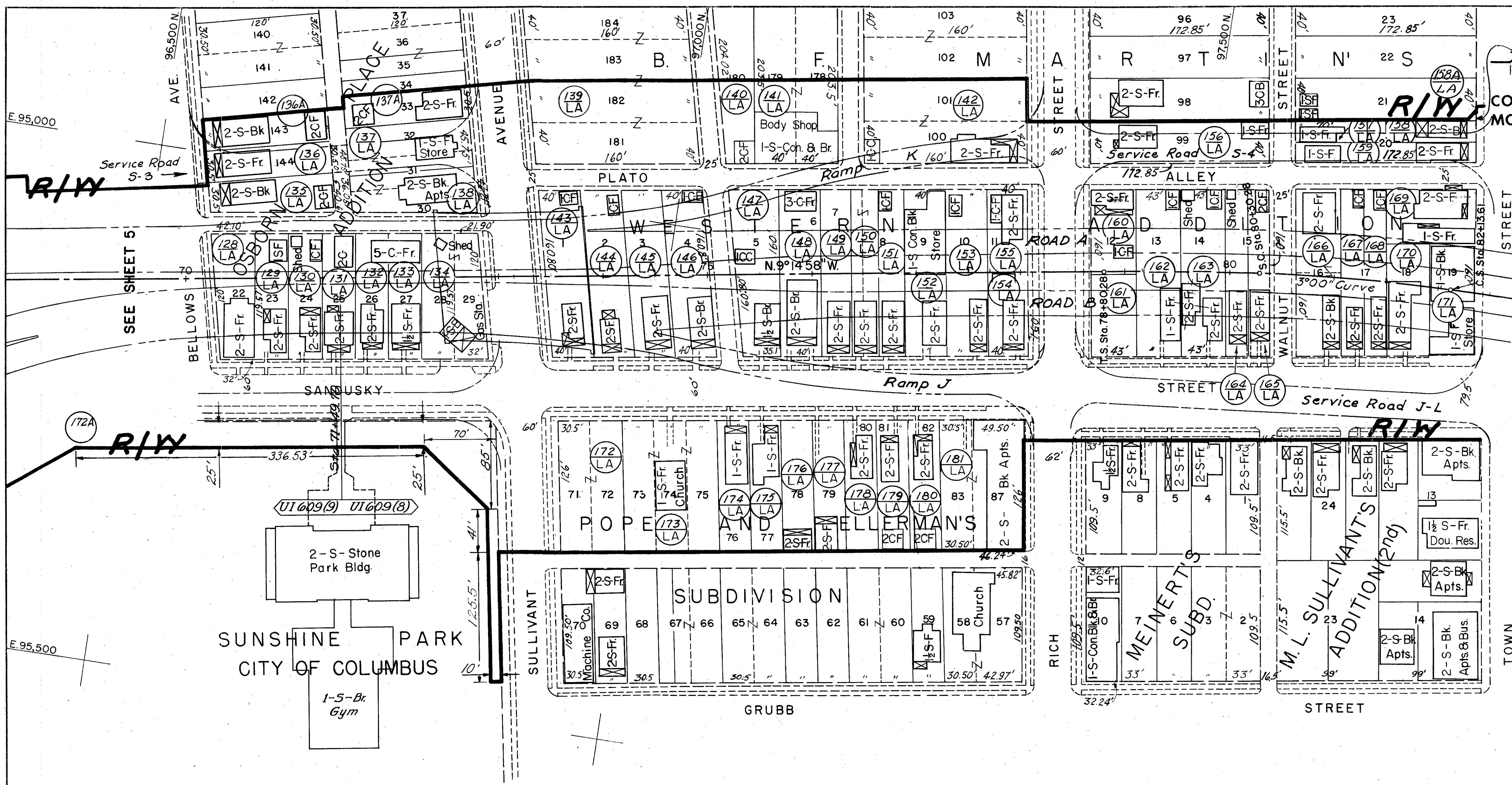


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NO.	DATE	

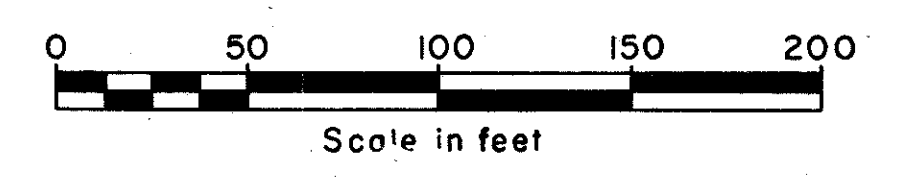
FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

STA. 70+00 to 83+00
RIGHT-OF-WAY



SEE SHEET 8



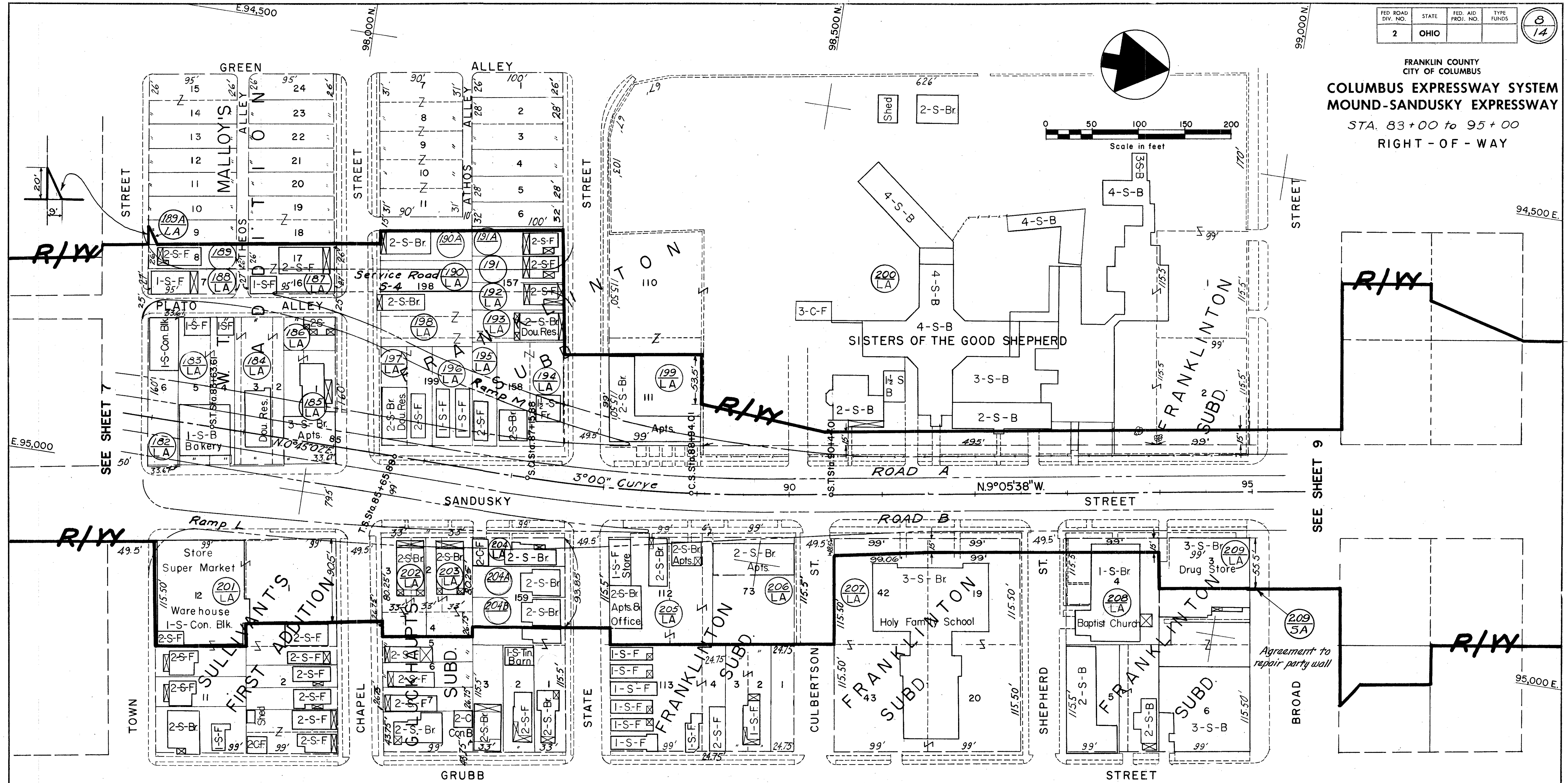
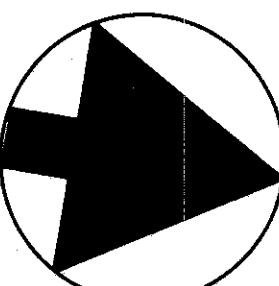
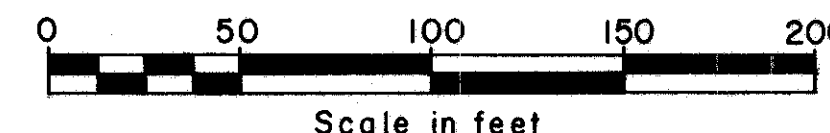
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

8
14

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

STA. 83+00 to 95+00

RIGHT-OF-WAY



TRACED CHECKED	BURGESS & NIPLE CONSULTING ENGINEERS COLUMBUS, OHIO	SCALE
NO.		DATE

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
95231	1 -LA	City of Columbus		78.296 ac.	11.244 ac.
95233	2 -LA	Greenlawn Realty Co.		8.95 ac.	.069 ac.
27719	3 -LA	Emma A. Black	Wharton Place Add'n	Lot 21	All
54739	4 -LA	Lewis M. & Isabel Baer	"	Lot 22	All
54740	5 -LA	Albert & Rose M. Martin	"	Lot 23	All
54742	6 -LA	Norman C. & Lillian O. Devine	"	Lot 25	All
54741	6A-LA	Norman Devine	"	Lot 24	All
54743	7 -LA	Clair E. & Katherine Mackan	"	Lot 26	All
54744	7 -LA	"	"	Lot 27	All
54745	7 -LA	"	"	Lot 28	All
54746	7 -LA	"	"	Lot 29	All
54747	7 -LA	"	"	Lot 30	All
54748	7 -LA	"	"	Lot 31	All
54749	7 -LA	"	"	Lot 32	All
54750	7 -LA	"	"	Lot 33	All
54751	7 -LA	"	"	Lot 34	All
54752	7 -LA	"	"	Lot 35	All
54753	7 -LA	Clair E. & Katherine Mackan	"	Lot 36	All
27720	8 -LA	Lewis M. & Isabel Baer	"	Lots 38, 39 E. Part	All
54754	8 -LA	Lewis M. & Isabel Baer	"	Lots 37, 36 W. Part	All
61817	9 -LA	Lucile B. Ruzicka	"	Lots 40 E. 39 W. Part	All
92047	10 -LA	Aloysius H. Thurn et.al.	"	Lot 40 W. Part	1617 s.f.
51365	10 -LA	Aloysius H. Thurn et.al.	"	Lot 41	870 s.f.
51367	11 -LA	Paul E. & Patricia A. Thurn	"	Lots 140, 141	All
51369	12 -LA	Aloysius H. Thurn et.al.	"	Lot 142	All
51370	12 -LA	"	"	Lot 143	All
51371	12 -LA	"	"	Lot 144	All
51372	12 -LA	"	"	Lot 145	All
51373	12 -LA	"	"	Lot 146	All
51374	12 -LA	"	"	Lot 147	All
51375	12 -LA	"	"	Lot 148	All
51376	12 -LA	"	"	Lot 149	All
51377	12 -LA	"	"	Lot 150	All
51378	12 -LA	"	"	Lot 151	All
51379	12 -LA	"	"	Lot 152	All
51380	12 -LA	Aloysius H. Thurn et.al.	"	Lot 153	All
51382	13 -LA	Aloysius H. Thurn	"	2.097 ac.	All
63314	13A	William Roth	"	Lot 129	1311 s.f.
63315	13A	"	"	Lot 130	901 s.f.
63316	13A	"	"	Lot 131	490 s.f.
63317	13A	William Roth	"	Lot 132	98 s.f.
42786	14 -LA	Mary E. Roth	"	.11 ac.	All
42790	15 -LA	William & Pauline S. Roth	Wharton Place Add'n	.23 ac.	All

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
43276	15 A	William Roth	Wharton Place Add'n	Lot 124	All
43277	15 A	"	"	Lot 125	All
43278	15 A	"	"	Lot 126	All
43279	15 A	William Roth	Wharton Place Add'n	Lot 127	All
41233	16 -LA	Oscar C. & Flossie M. Reiter	Geo. H. Distelhorst	9.75 ac.	.864 ac.
17012	17 -LA	O.D. & Frances F. Spencer	"	4.287 ac.	.448 ac.
16801	18 -LA	Nora O'Hearn & Katherine Eisel	"	4.573 ac.	.445 ac.
3092	19 - LA	John Eramo	"	4.15 ac.	.444 ac.
11628	20 -LA	Mary Burkett et.al.	"	4.904 ac.	.675 ac.
11609	21 -LA	Frances D. Waters	"	4.80 ac.	.816 ac.
38601	22 -LA	City of Columbus	"	4.357 ac.	1.206 ac.
8042	23 -LA	Anderson Concrete Corp.	Geo. H. Distelhorst	3.457 ac.	1.497 ac.
1345	24 - LA	The Mound Boulevard Co.	Eaton Farm Subd'n	Lots 45, 46, 47, 48	All
11252	24 - LA	"	"	Lots 51, 52	All
31571	24 - LA	"	"	Lots 14, 15	All
30993	24 - LA	"	"	Lot 16	All
30994	24 - LA	"	"	Lot 17	All
32821	24 - LA	The Mound Boulevard Co.	Eaton Farm Subd'n	Lot 18	All
17225	25 - LA	Samuel H. Gaver	Elmore J. Swerer's Mound St. Subd'n	Lots 11, 12	All
18546	25 - LA	Samuel H. Gaver	"	Lot 13	All
34421	26 - LA	H.L. Mayne	"	Lot 10	All
8424	27 - LA	Paul G. Gardner	"	Lot 9	All
42608	28 - LA	Martha G. Brewer	"	Lot 8	All
16465	29 - LA	Allen E. & M. Jeannette McDowell	"	Lot 7	All
34720	30 - LA	Theodore F. & Pauline M. Hicks	"	Lot 6	All
54626	31 - LA	Gwelda M. Bolen	Elmore J. Swerer's Mound St. Subd'n	Lot 5	All
34502	32 - LA	Gladys B. Radich	Elmore J. Swerer's Mound St. Subd'n	Lots 3, 4	All
24208	33 - LA	Property Rentals Inc.	"	Lot 2	All
55980	34 - LA	Edward A. & Virginia V. Morris	Elmore J. Swerer's Mound St. Subd'n	Lot 1	All
11239	35 - LA	Gulf Refining Company	A.L. Denton's Subd'n	Lots 1, 2, 3, 4	All
62443	36 - LA	Lester F. Denton	"	Lot 5	All
62444	36 - LA	Lester F. Denton	"	Lot 6	All
62445	37 - LA	Walter F. & Eva S. Stabs	"	Lot 7	All
66207	38 - LA	Fred A. Unkrodt Jr.	"	Lot 8	All
62446	39 - LA	David Davies Inc.	"	Lot 9	All
19564	40 - LA	Anna M. Kern	"	3780 s.f.	All
11248	41 - LA	Dorothy L. & Charles R. Cash	"	3780 s.f.	All
62454	42 - LA	Lester F. Denton	A.L. Denton's Subd'n	Lot 16	All

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
62441	42A-LA	James W. Jr. & Agnes C. Lang	A.L. Denton's Subd'n	Lot 16	All
62454	43 -LA	Lester F. Denton	"	Lot 16	All
75894	43A-LA	Lulu J. Kean	"	Lot 16	All
62454	44 -LA	Lester F. Denton	"	Lot 16	All
62451	45 -LA	David Davies Packing Co. Inc.	"	Lots 13, 14, 15	3080 s.f.
62448	45 -LA	"	"	Lot 10	All
62449	45 -LA	"	"	Lot 11	All
62450	45 -LA	"	"	Lot 12	All
43269	45 -LA	David Davies Packing Co. Inc.	A.L. Denton's Subd'n	3.253 ac.	.834 ac.
20846	46 -LA	Nellie Heil	Klein Roederer's Subd'n	Lots 16, 17, 18	All
42394	47 -LA	George J. Igel Company	"	Lot 15	All
42407	48 -LA	Mirolo Realty Company	"	Lots 13, 14	All
26762	49 -LA	"	"	Lots 10, 11, 12	All
42392	50 -LA	Mirolo Realty Company	"	Lot 9	All
42410	51 -LA	George J. Igel Company	"	Lots 22, 23, 24, 21 Part	22, 23, 24 1191 s.f.
41368	52 -LA	E. W. Distelhorst	"	Lots 6, 7, 8	All
11613	52 -LA	"	"	Lots 4, 5	All
19557	53 -LA	Oscar C. Reiter	"	Lot 2	All
49339	53 -LA	Oscar C. Reiter	"	Lot 3	All
42415	54 -LA	Clara E. Bauermeister	Klein Roederer's Subd'n	Lot 1	All
42404	55 -LA	Robt. L. & Thelga V. McQuiniff	Elmore J. Swerer's Mound St. Subd'n	Lot 25 NE Part	All
57822	55A	Edith L. Suttles	"	Lot 24 EC Part	All
42406	56 -LA	Albert J. Roederer	"	Lot 25 NC Part	All
52220	57 -LA	Nellie V. Shrigley	"	Lot 25 NW Part	All
33040	58 -LA	Ruth Lowrey	"	Lot 24 NC Part	All
33031	58 -LA	Ruth Lowrey	"	Lot 24 NE Part	All
9024	59 -LA	John P. & Lillian D. Constans	"	Lot 23 NE Part	All
9025	59 -LA	John P. & Lillian D. Constans	"	Lot 24 NW Part	All
9801	60 -LA	Bessie M. & J. Vey Morgan	Elmore J. Swerer's Mound St. Subd'n	Lot 23 NE Part	All

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
42416	61 -LA	Eva M. & Ralph D. McCarty	Elmore J. Swerer's Mound St. Subd'n	Lots 25, 26	5072 s.f.
	62	Omit	"	Lot 23 NW part	All
9435	63 -LA	Mound Realty Company	"	Lot 22 NE part	All
44119	63 -LA	"	"	Lot 22 NW part	All
42403	63 -LA	"	"	Lot 21 E part	All
42405	63 -LA	Mound Realty Company	"	Lot 21 W part	All
19558	64 -LA	The Ohio Oil Company	Elmore J. Swerer's Mound St. Subd'n	Lot 1	All
52047	65 -LA	Florence D. Sturz	Eatons 1st Subd'n	Lot 1	All
33037	66 -LA	Lola M. Green	"	Lot 1	All
62812	67 -LA	Homer Adams	"	Lot 1	All
62811	67 -LA	"	"	Lot 1	All
33030	68	Harrison O. Mason	"	Lot 1	All
	69	Omit	Eatons 1st Subd'n		
	70	Omit	Osborn Place Add'n	Lot 460	110 s.f.
37609	71 -LA	Wm. R. & Eva V. Robinson	"	Lot 461	317 s.f.
56117	71 -T	" " "	"	Lot 462	320 s.f.
10622	72 -T	Adelia A. Halfhill	"	Lot 463	
70161	73 -T	Harold E. Conrad	"	Lot 464	160 s.f.
70162	74 -T	Goldie M. Schlichter	"	Lot 465	160 s.f.
35893	75 -T	Linus Madlich	"	Lot 466, 467	352 s.f.
40619	76 -T	Nita McGowan	"	Lot 468	224 s.f.
37608	77 -T	Helen T. Butler	"	Lot 469	226 s.f.
18880	78 -LA	The Pure Oil Company	"	Lots 470, 471, 472	All
30491	79 -LA	Edwin B. Zenker	"	Lot 473	All
37610	80 -LA	Carl W. & Dorothy H. Krebs	"	Lot 474	All
20870	80 -LA	"	"	Lot 475	All
20869	81 -LA	Louis Heim	"	Lots 476, 477	All
42409	82 -LA	Edward W. Distelhorst	"	Lots 478, 479	All
33036	83 -LA	August Wagner Realty Co.	"	Lots 480, 481	All
42398	84 -LA	Grace C. Dyer	"	Lot 482	All
13831	85 -LA	Neil O. & Minnie W. Emmelhainz	"	Lots 483, 484	All
13828	86 -LA	Charles M. & Sarah Summers	"	Lot 485	All
14202	87 -LA	Florence E. Kreher & Alice C. Denton	Osborn Place Add'n	Lot 486	All

FRANKLIN COUNTY
CITY OF COLUMBUSCOLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
24019	88 -LA	Mildred Painter	Osborn Place Add'n	Lot 487	All
55258	89 -LA	Oscar C. Reiter	"	Lots 488, 489	All
65172	90 -LA	Oliver M. Fowler	"	Lot 1	All
52147	91 -LA	The Cities Service Oil Company	"	W part	All
				Lots 1	All
				E part,	All
				2	All
30502	92 -LA	Lewis J. Emmelhainz	"	Lot 3	All
45441	93 -LA	Herbert M. & Frances A. Cox	"	Lot 4	All
13829	94 -LA	Bernica C. Currey	"	Lot 5	All
11624	95 -LA	Russel C. Wisecarver	"	Lot 378	All
				E part	All
45011	96 -LA	Anna Gargich	"	Lot 378	All
				W Part	All
49807	97 -LA	Mary K. Johnson	"	Lot 379	All
				E part	All
1427	98 -LA	Catherine Sweeney	"	Lot 379	All
				W part	All
37972	99 -LA	Vernon J. Swartz	"	Lot 380	All
				E part	All
55047	100 -LA	Howard R. Green	"	Lot 380	All
				W part	All
29669	101 -LA	James R. & Lucille E. Graff	"	Lot 381	All
35667	102	Charles E. & Laura Groves	"	Lot 370	All
19782	103	Charles E. & Laura Groves	"	Lot 371	All
19783	104 -LA	Fannie M. Whitson	"	Lot 372	All
19784	105 -LA	Martin N. & Mary E. Ramsay	"	Lot 373	All
19785	106 -LA	Albert B. & Bessie L. Holton	"	Lot 374	All
6018	107 -LA	David C. Sherman	"	Lot 375	All
6019	108 -LA	John F. Smith	"	Lot 376	All
6020	109 -LA	Mary Limotta	"	Lot 377	All
19726	110	Harland Byerly	"	Lot 266,S 267 S part	312 s.f.
10388	110 A	Anderson J. & Vina Salmons	"	Lot 266	465 s.f.
				N part	All
19725	111 -LA	Alice M. Wilson	"	Lot 264	All
34718	111 -LA	Alice M. Wilson	"	Lot 265	All
19723	112 -LA	Carl & Betty L. Wright	"	Lot 262	All
19724	112 -LA	Carl & Betty L. Wright	"	Lot 263	All
52213	113 -LA	Thomas J. & Tessa Blakeley	"	Lot 6	All
52214	113 -LA	Thomas J. & Tessa Blakeley	"	Lot 7	All
1759	114 -LA	Lawrence H. Conroy	"	Lot 8	All
1761	114 -LA	Lawrence H. Conroy	"	Lot 9	All
2103	115 -LA	Fred Fox	"	Lot 10	All
38728	116 -LA	Gladys K. Dillow	"	Lot 11	All
34986	117 -LA	Frank L. & Erla H. Eitel	Osborn Place Add'n	Lot 12	All

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
50083	118 -LA	C. B. Mullens	Osborn Place Add'n	Lot 13	All
66726	119	Board of Education	"	Lots 146, 261, 260	7139 S.F.
				part of	All
9009	120 -LA	Richard H. & Mary M. Jones	"	Lot 14	All
31772	121 -LA	Helen M. Russel	"	Lot 15	All
16644	122 -LA	Emma Fuchs	"	Lot 16	All
13822	123 -LA	Ernest & Berttie Caldwell	"	Lot 17	All
49158	124 -LA	William H. Dutton	"	Lot 18	All
52788	125 -LA	Gertrude Cahill	"	Lot 19	All
43228	126 -LA	Lucille Ferrand	"	Lot 20	All
37889	127 -LA	Oakland Realty Inc.	"	Lot 21	All
22447	128 -LA	Grace M. Bennett	"	Lot 22	All
33916	129 -LA	LeRoy & Mabel Denny	"	Lot 23	All
37493	130 -LA	William G. & Lottie Greenland	"	Lot 24	All
31947	131 -LA	Sherman D. & Earnest E. McDonald Trs.	"	Lot 25	All
40793	132 -LA	John Thirtyacre	"	Lot 26	All
2160	133 -LA	Lena Baughman	"	Lot 27	All
52789	134 -LA	Sinclair Refining Company	"	Lots 28, 29	All
47569	135 -LA	Jeanette F. Hall	"	Lot 145	All
56837	136	Dora M. Salyer	"	Lot 144	All
4205	136 A	Mark & Alice Bauchmire	"	Lot 143	All
11963	137	Zella Edwards	"	Lots 31	All
				W part, 32	All
11967	137A	Anna M. Walsh	"	Lot 33	All
6016	138 -LA	Mathilda Crepeau	Osborn Place Add'n	Lots 30, 31	All
				E part	All
25968	139 -LA	Gooding Amusement Company	B.F. Martins Western	Lots 181, 182	All
			Add'n		
19133	140 -LA	Elizabeth Baehr	"	Lot 180	2680 s.f.
				E part	3200 s.f.
43197	141 -LA	Clement D. & Josephine Luckhaupt	"	Lot 178	3200 s.f.
				E part	3200 s.f.
19132	141 -LA	Clement D. & Josephine Luckhaupt	"	Lot 179	3200 s.f.
				E part	3200 s.f.
24455	142 -LA	Charles D. Johnson	"	Lots 100, 101	All
55046	143 -LA	Mary F. Walz	"	Lot 1	All
6092	144 -LA	Edwin & Alma Curtis	"	Lot 2	All
45841	145 -LA	Mary R. Bonner, et al.	"	Lot 3	All
26004	146 -LA	Joan & Frances A. Zuber	"	Lot 4	All
32178	147 -LA	Mary H. Crotty	"	Lot 5	All
4459	148 -LA	Frank Elgin	"	Lot 6	All
4460	149 -LA	Stella M. Washburn	"	Lot 7 S	All
34330	150 -LA	Myra C. Clippenger & Marcella L. Crain	"	Lots 7 N 8 S part	All
				Lot 8 N	All
37579	151 -LA	Mildred M. Wright	"	part	All
				Lot 9	All
17554	152 -LA	Mary E. Rippel	"	Lot 10	All
25473	153 -LA	Ralph J. & Goldie M. Cunningham	B.F. Martins Western		
			Add'n		

FRANKLIN COUNTY
CITY OF COLUMBUS
COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
16210	154 -LA	Ella White	B.F.Martins Western	Lot 11	
			Add'n	E part	All
27463	155 -LA	Bessie A. Wippel	"	Lot 11	
				W.part	All
42426	156	Ellwyn J. & A. L. Durfee	"	Lot 99	All
93725	157	Willamett Kline	"	Lot 20	
				W & S part	All
54970	158	Theodor & Helen Paduch	"	Lot 20	
				W & N part	All
51	159	Ira M. Brown	"	Lot 20 E	All
35434	160 -LA	Margaret Davis	"	Lot 12	
				W part	All
35434	161 -LA	City of Columbus	"	Lot 12	
				E part	All
33334	162 -LA	Jennie Melfi	"	Lot 13	All
52896	163 -LA	Ferne A. Zetty	"	Lot 14	All
44320	164 -LA	Carl J. & Beatrice M. Schmidt	"	Lot 15	
				S part	All
29264	165 -LA	H. E. Stinson	"	Lot 15	
				N Part	All
5568	166 -LA	Winifred Schwartz	"	Lot 16	
				W part	All
30647	166 -LA	Winifred Schwartz	"	Lot 16	
				E part	All
16169	167 -LA	Josephine DeLibra	"	Lot 17	
				S part	All
1737	168 -LA	Rose A. Reynolds	"	Lot 17	
				N part	All
18929	169 -LA	Kate M. Calhoun	"	Lots 18 W	
				19 W part	All
31285	170 -LA	Christena Perrini	"	Lot 18	
				E part	All
10545	171 -LA	Dora Abrams	B.F.Martins Western	Lot 19	
			Add'n	E part	All
16891	172	August Wagner Realty Company	Pope & Ellerman	Lots 71,	
			Subd'n	72	All
66781	172A	City of Columbus	"	7.25 ac.	.447 ac.
6101	173	Trustees Ebenezer Baptist Church	"	Lots 73,	
				74, 75	All
28103	174	Beeman E. & Verdie L. Dean	"	Lot 76	All
6103	175	Margaret Randell	"	Lot 77	All
825	176 -LA	William C. Rea	"	Lot 78	All
826	177 -LA	Charles F. Timerding	"	Lot 79	All
8829	178 -LA	Carolyn B. & James R. Shaw	"	Lot 80	All
35340	179 -LA	Madge Heflin	"	Lot 81	All
26825	180 -LA	Aullie Beard et al	"	Lot 82	All
37350	181 -LA	Sylvin C. Schecter & Ruth Shell	Pope & Ellerman	Lots 83,	
			Subd'n	84	All

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
30	182 -LA	Mary Burgoon	W.T.Malloy-Town St.	Lot 6	All
			Add'n.(Franklinton)		
34908	183 -LA	Paul K.A. & Barbara K.Meister	"	Lots 4 S	
				Part, 5	All
33865	184 -LA	Paul K.A. & Barbara K.Meister	"	Lots 2 S	
				3,4 N part	All
34907	185 -LA	Edith V. & Edith M. Wilson	"	Lots 1 E,	
				2 N part	All
57888	186 -LA	Baldwin & Luella Buck	"	Lots 1 W,	
				2 N part	All
34909	187	Hazel Kennedy	"	Lots 16,	
				17	All
40365	188	Russel & E. I. Blazer	"	Lot 7	All
26137	189	J. V. & Helen Luckhaupt	W.T.Malloy-Town St.	Lot 8	All
			Add'n.(Franklinton)		
26143	190	Loretta Reed	Franklinton	Lot 198	All
				C part	All
45522	190A-	Loretta Reed & Edward F.Simes	"	Lot 198	
				W part	All
14417	191	Lewis Jr. & Ida L. Walters	"	Lot 157	
				CW part	All
21968	191A	Vern F. & Vera H. Davis	"	Lot 157	
				W part	All
52902	192	Elzie & Alta Pelphrey	"	Lot 157	
				CE part	All
36068	193 -LA	Paul V. & Gladys Sherritt	"	Lot 157	
				E part	All
23341	194 -LA	Della E. Allard	"	Lot 158	
				N part	All
23342	194 -LA	Della E. Allard	"	Lot 158	
				C part	All
70	195 -LA	Louie & M.L. Schwenter	"	Lot 158	
				S part	All
27723	196 -LA	P. Edmond Welch	"	Lot 199	
				N part	All
46693	197 -LA	Lillian Shapter	"	Lot 199	
				C part	All
46694	197 -LA	Lillian Shapter	"	Lot 199	
				S part	All
45521	198 -LA	Edward F. Simes	"	Lot 198	
				E part	All
31284	199 -LA	Marion L. Hunt	"	Lot 111	All
67000	200 -LA	Michael J. Ready	Franklinton	Acre	.206 ac.
16176	201 -LA	Otto J. & Constance Trott	M.L.Sullivan's First	Lot 1	All
			& Second Add'n.	Lot 12	All
52203	201 -LA	"	"		
53296	201 -LA	Otto J. & Constance Trott	M.L.Sullivan's First	Lot 1	All
			& Second Add'n.		

FRANKLIN COUNTY
CITY OF COLUMBUS

COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
11738	202 -LA	Shell Realty Co.	C.Luckhaupt's Subd'n	Lots 2 S, 3,4S part	All
30086	203 -LA	Electrical Mechanics Inst.	C.Luckhaupt's Subd'n	Lots 1, 2, 4 N part	All
46691	204 -LA	Howard Simes	Franklinton Subd'n	Lot 159 W part	All
42168	204A	Kathern E. Hunter	"	Lot 159 C part	All
53140	204B	Donna B. Messenger	"	Lot 159 E part	All
23340	205 -LA	Della E. Allard	"	Lots 112 N 73 S part	All
23350	205 -LA	Della E. Allard	"	Lot 112 S part	All
22228	206 -LA	John Hulden Jr.	"	Lot 73 N part	All
66892	207 -LA	Michael J. Ready	"	Lots 19, 42	1980 s.f.
66947	208 -LA	Memorial Baptist Church	"	Lot 4	990 s.f.
790 *	209 -LA	Kath. M. & Walt. D. Barcroft	"	Lot 3 W part	All
45754 *	210 -LA	Gulf Refining Company	"	Lot 12 E part	All
50632	210A-LA	Joseph P. & Gertrude McGaw	"	Lot 11 E part	All
27836	211 -LA	Mary Kuhn	"	Lot 10 S part	All
37218	212 -LA	Gabriel & Suzzane L. Blumer	"	Lot 10 N part	All
42517	213 -LA	Abe I. Yenkin etal	"	Lot 29 S part	All
53304	213 -LA	Abe I. Yenkin etal	"	Lot 29 NW part	All
8342	214 -LA	Daniel W. Manes	"	Lot 29 NE part	All
38777	215 -LA	Minnie R. Delay	"	Lot 56	All
38772	216 -LA	The Book Realty Company	"	Lot 91 SE part	All
18963	217 -LA	Creth D. Irvin	"	Lot 91 NE part	All
56555	218 -LA	Herbert Nicholson	"	Lot 7 W part	All
54629	218A-LA	The Ohio National Bank of Columbus	"	Lot 7 part	30938 s.f.
66705	219 -LA	City of Columbus	"	Lots 6,9	All
46801	220 -LA	Velda Daulton etal	"	Lot 28 S part	All
16963	220 -LA	Velda Daulton etal	"	Lot 28 C part	All
27829	221 -LA	Ester J. Kuhn	Franklinton Subd'n	Lot 28 N part	All

Auditors Parcel No.	Engrs. Parcel No.	Owner's Name	Subdivision	Owned	Area Required
55158	222 -LA	Leland H. Wears	Franklinton Subd'n	Lot 55	All
55296	222 -LA	Leland H. Wears	"	Lot 55	All
66322	223 -LA	Columbus & Xenia Railroad Company	Franklinton Subd'n	Lot 89 Part	2970 s.f.
66781	219A-LA	City of Columbus	"	1.008 ac.	All
	219B-LA	City of Columbus	"	Lots 1,2, 3,4,5	All
32963	224 -LA	W. E. Benua	Franklinton Subd'n	Lots 184, 213 part of	3960 s.f.
3806	225 -LA	City Products Corp	Franklinton Subd'n	Lots 185, 214	None
		* 209-SA	Empire Reality Co. et. al.	Agreement for repair of party wall.	
		* 210B-LA	Walter J. Shapter Jr. et.al.	230 s.f.	

MS-40
El. 700.7

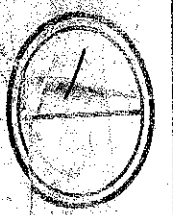
MS-39
El. 700.8

MS-38
El. 703.7

MS-37
El. 703.5

NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS SECURED FOR THE USE OF THE STATE OF OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO		

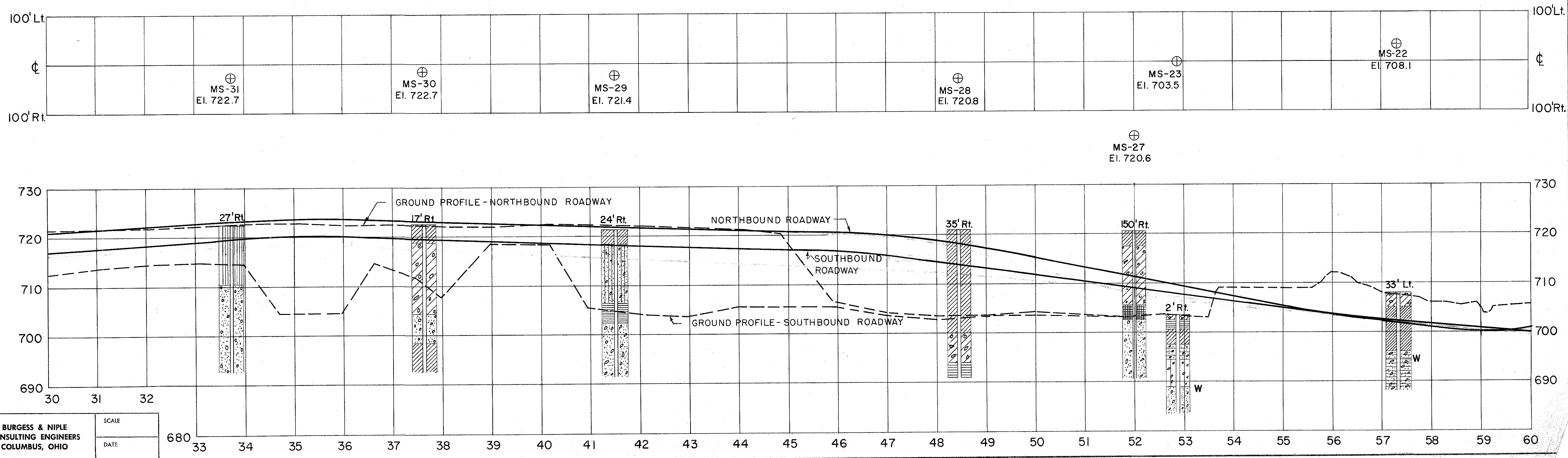
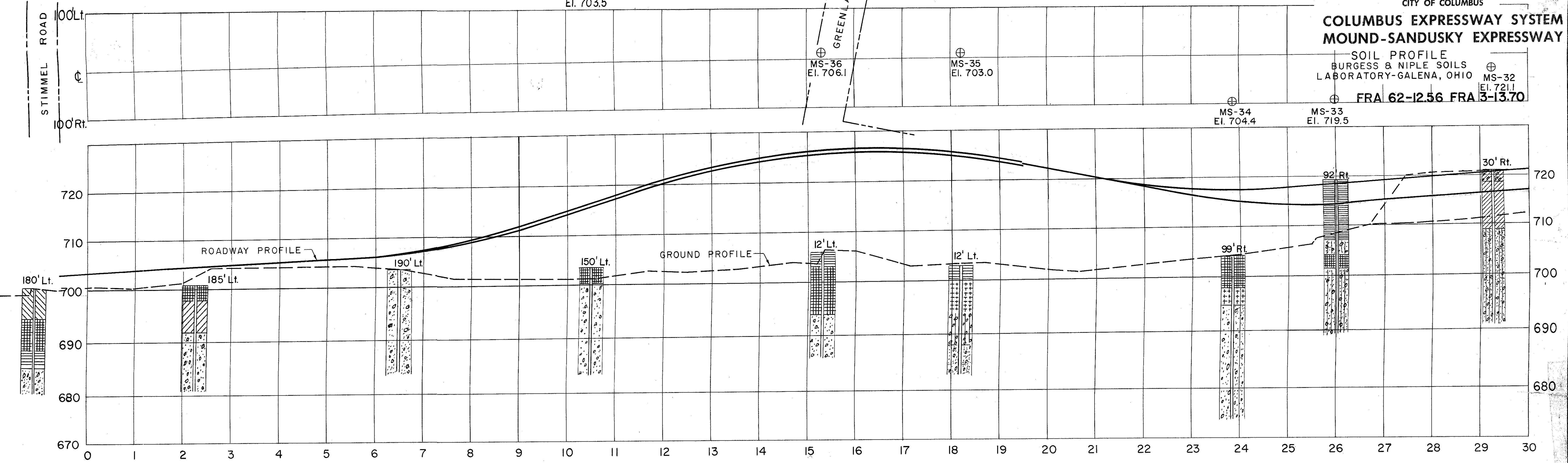


FRANKLIN COUNTY
CITY OF COLUMBUS

**COLUMBUS EXPRESSWAY SYSTEM
MOUND-SANDUSKY EXPRESSWAY**

SOIL PROFILE
BURGESS & NIPLE SOILS
LABORATORY-GALENA, OHIO

FRA 62-12.56 FRA 13-13.70



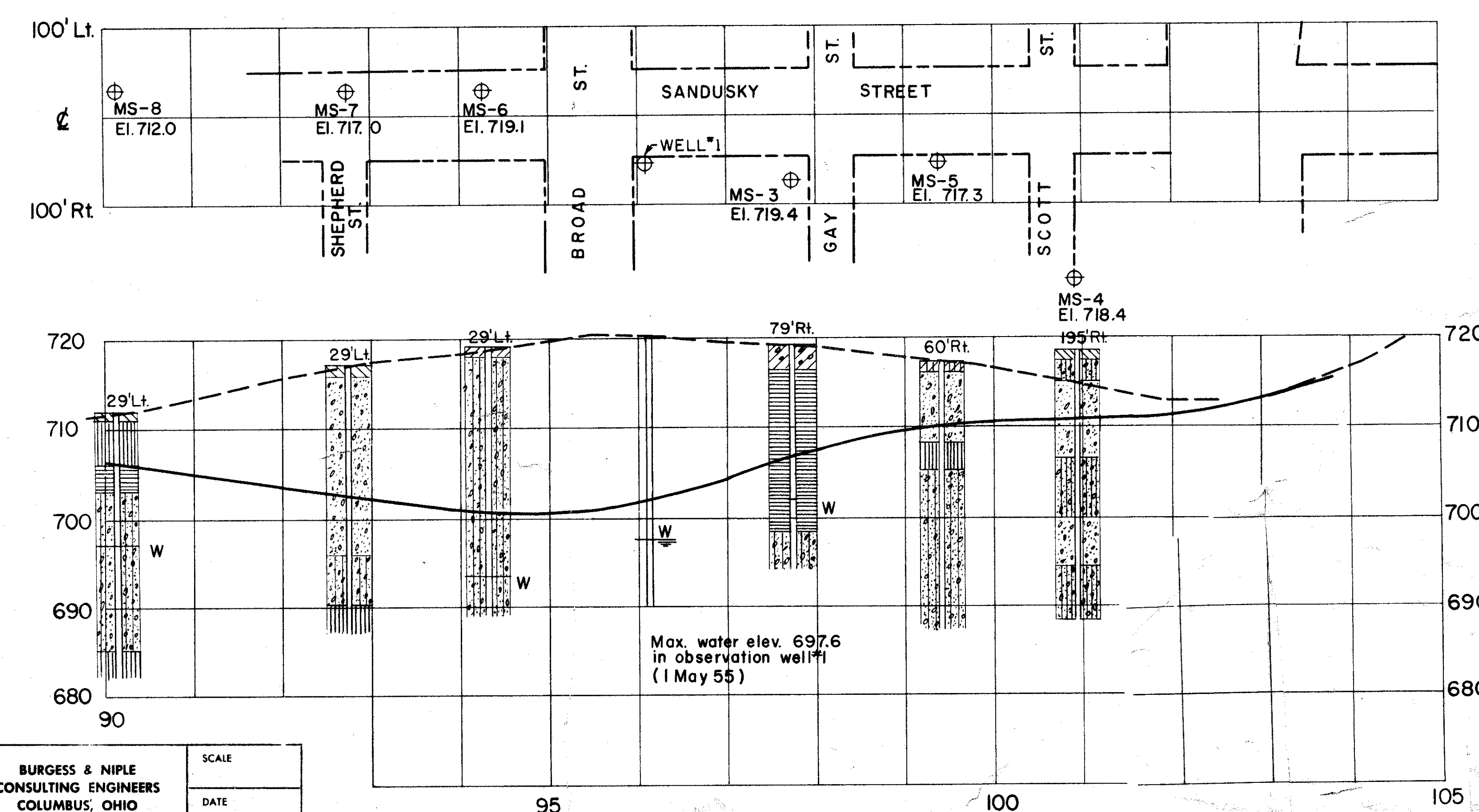
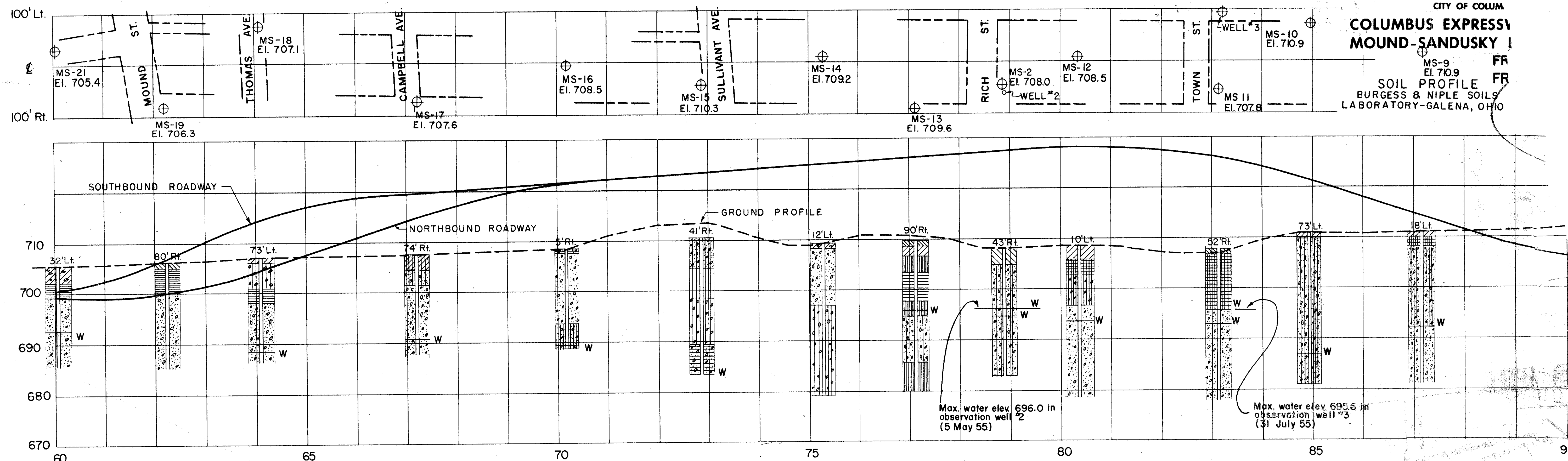
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FED. ROAD DIV. NO.	STATE	F. PR.
2	OHIO	

FRANKLIN CO.
CITY OF COLUM.

COLUMBUS EXPRESS MOUND-SANDUSKY I

MS-9
El. 710.9
FR
SOIL PROFILE
BURGESS & NIPLE SOILS
LABORATORY-GALENA, OHIO



MOUND-SANDUSKY EXPRESSWAY

Legend & Classification of Soil Samples Average Results of Tests

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% C AGG	% C SAND	% F SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTIC INDEX	SAMPLE TESTED
GRAVEL WITH SAND	A-1(0)	A-1-b	58	16	5	14	7	20	4	39
GRAVEL WITH SAND & SILT	A2-4(0)	A-2-4	46	19	6	20	9	21	6	51
GRAVEL WITH SAND, SILT & CLAY	A2-6(1)	A-2-6	40	26	6	19	9	32	14	5
GRAVEL WITH SAND, SILT & CLAY	A2-7(1)	A-2-7	46	18	7	23	6	45	25	2
COARSE & FINE SAND	A3-(0)	A-3-a	14	33	27	14	12	NON PLASTIC	NON PLASTIC	4
SANDY SILT	A4(1)	A-4-a	28	22	10	30	10	23	8	13
SILT	A4-(8)	A-4-b	6	4	16	57	17	26	9	3
SILT & CLAY	A6(4)	A-6-a	17	15	16	40	12	31	12	14
CLAY	A6(9)	A-6-b	12	13	11	48	16	38	18	14
ELASTIC CLAY	A7-5(8)	A-7-5a	1	19	8	60	12	41	2	2
CLAY	A7-6(14)	A-7-6a	6	9	10	59	16	44	22	14

16 SAMPLES IN ADDITION TO THOSE SHOWN ON THE CHART WERE CLASSIFIED BY VISUAL INSPECTION

15 SAMPLES-FILL MATERIAL, (BRICKS, BRICK FRAGMENTS, CINDER SAND, TOPSOIL, GRAVEL, ETC.)

1 SAMPLE - #8 SOIL 3.0' DEEP

BURGESS & NIPLE
CONSULTING ENGINEERS
COLUMBUS, OHIO

SCALE
DATE