

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

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

ACI-1088 (3)

MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
EXPRESSWAY-PART 3
MOT-25-15.88

DAYTON EXPRESSWAY SYSTEM

Yellow

NOTE: Federal Project No. D-1088(3) appearing throughout these plans shall be considered to read ACI-1088(3).

MOT.-25-15.88
MONTGOMERY COUNTY
CITY OF DAYTON
HARRISON TOWNSHIP

LIMITED ACCESS

PART 3 - KEOWEE STREET TO NEFF ROAD

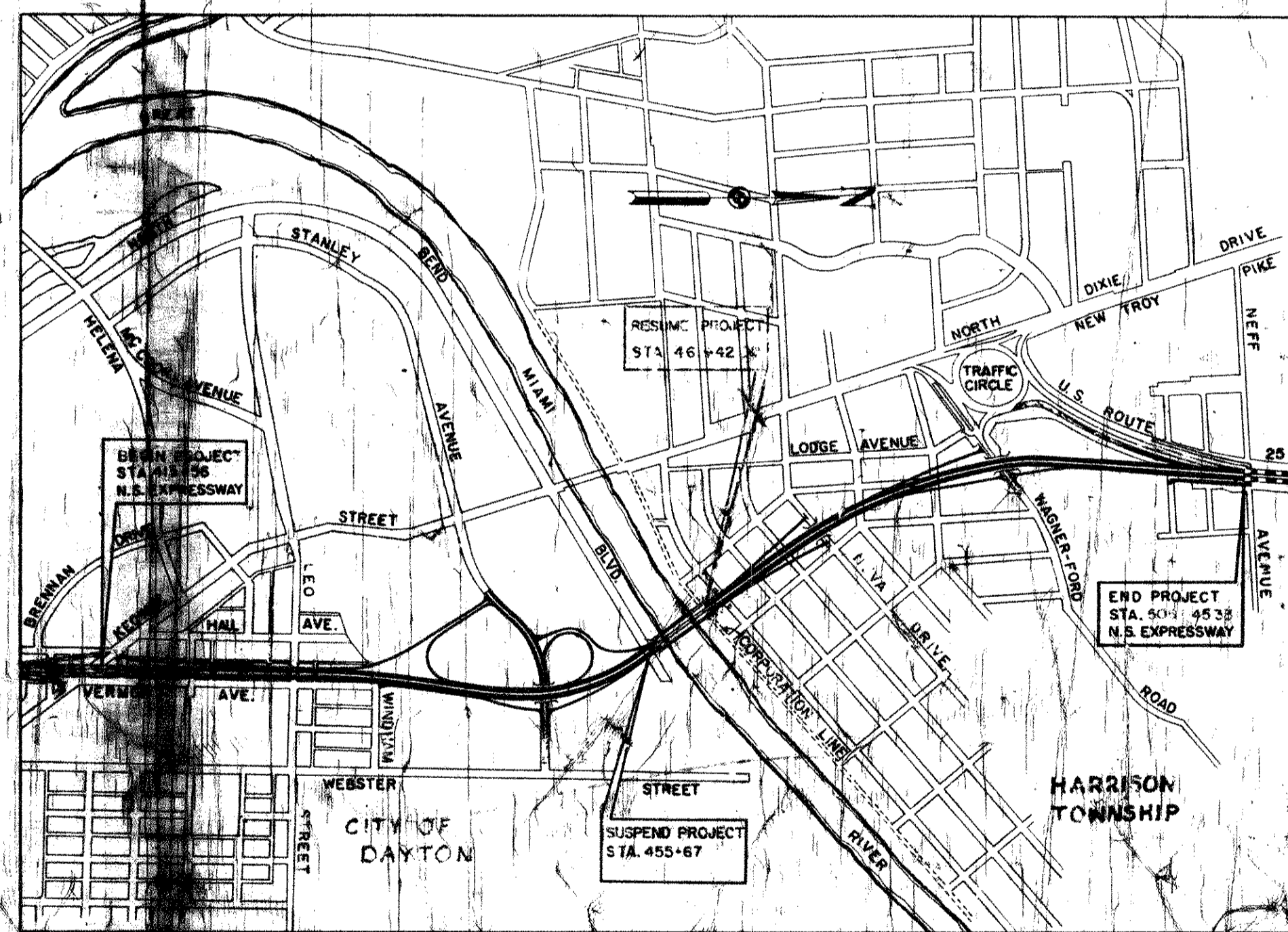
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Shts 114-113 revised 6-3-58
Sheet 81 revised 2-30-58
Sheets 103, 112 & 144 revised 1-16-58

LINE DATA

RESUME PROJECT	STA. 413+56.00	
SUSPEND PROJECT	STA. 455+67.00	4211.00 LIN. FT.
RESUME PROJECT	STA. 461+42.00	4403.83 LIN. FT.
END PROJECT	STA. 505+43.33	
TOTAL LENGTH OF PROJECT		8614.83 LIN. FT. = 1.631 MILES
AVENUE	STA. 0+00 TO STA. 15+40 = 1494.91 LIN. FT.	
	STA. 410+10 TO STA. 413+56 = 346.00 LIN. FT.	
	STA. 455+67 TO STA. 456+95 = 128.00 LIN. FT.	
	STA. 460+52 TO STA. 461+42 = 90.00 LIN. FT.	
	STA. 505+43.33 TO STA. 505+84 = 40.51 LIN. FT.	
	STA. 0+56 TO STA. 8+64 = 826.00 LIN. FT.	
WORK		11,537.91 LIN. FT. = 2.185 MILES.



LOCATION PLAN

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

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

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

APPROVED DATE 12-18-57
APPROVED DATE 12-18-57
APPROVED DATE 12-18-57
APPROVED DATE 12-14-57
APPROVED DATE 12-3-58
APPROVED DATE 12-30-57
APPROVED DATE 1-2-58
APPROVED DATE 1-2-58
APPROVED DATE 1-2-58
APPROVED DATE 1-2-58

Max L. Mitchell
CHIEF ENGINEER MIAMI CONSERVANCY DISTRICT

Director of Service and Buildings, City of Dayton

City Manager, City of Dayton

Deputy Director

Deputy Director of Planning and Programming

Engineer of Bridges

Engineer of Location and Design

Deputy Director of Design and Construction

First Assistant Director

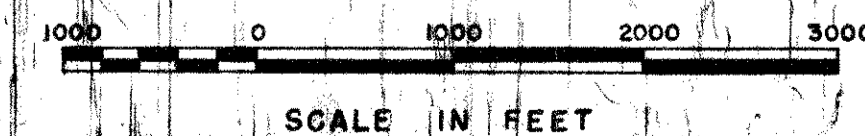
Acting Director of Highways

RECOMMENDED BY
STAMMEN & BERGENDOFF
ENGINEERS
MELAND NEW YORK

H. G. SOURS
ASSOCIATE
COLUMBUS

SUPPLEMENTAL SPECIFICATIONS

NUMBER	DATE	BY
5	6-1-55	
18	REV	
E-101	1-1-55	
S-114	REV	



PORTION TO BE IMPROVED
OTHER HIGHWAYS AND STREETS
FUTURE WORK

STANDARD DRAWINGS

NUMBER	DATE	NUMBER	DATE
S-27	4-1-54	I-8 C.B. 2-50	2-6 5-11-52
		I-8 C.B. 3-1	2-4 5-11-52
I-21-23	8-1-56		
L-3-A	4-1-50	I-8 I.N.O. 2	12-1-54
L-3	4-1-50	I-8 M.H. NO. 1	5-1-52
R-1	1-3-55	I-8 M.H. NO. 1-A	1-3-55
T-35	1-2-56	I-8 M.H. NO. 2	5-1-52
L.J. NO. 1	7-1-55	I-12	7-1-54
T.J.	5-1-56		4-1-57
AS-1-54	12-1-54	I-15 NO. 1	8-1-55
OS-1	12-17-56	I-15 NO. 2	6-1-57
I-1, 2, 3, 4, 5	2-20-45		
I-6, 7, 8, 2-AB	8-1-54	6-7-07	6-1-56

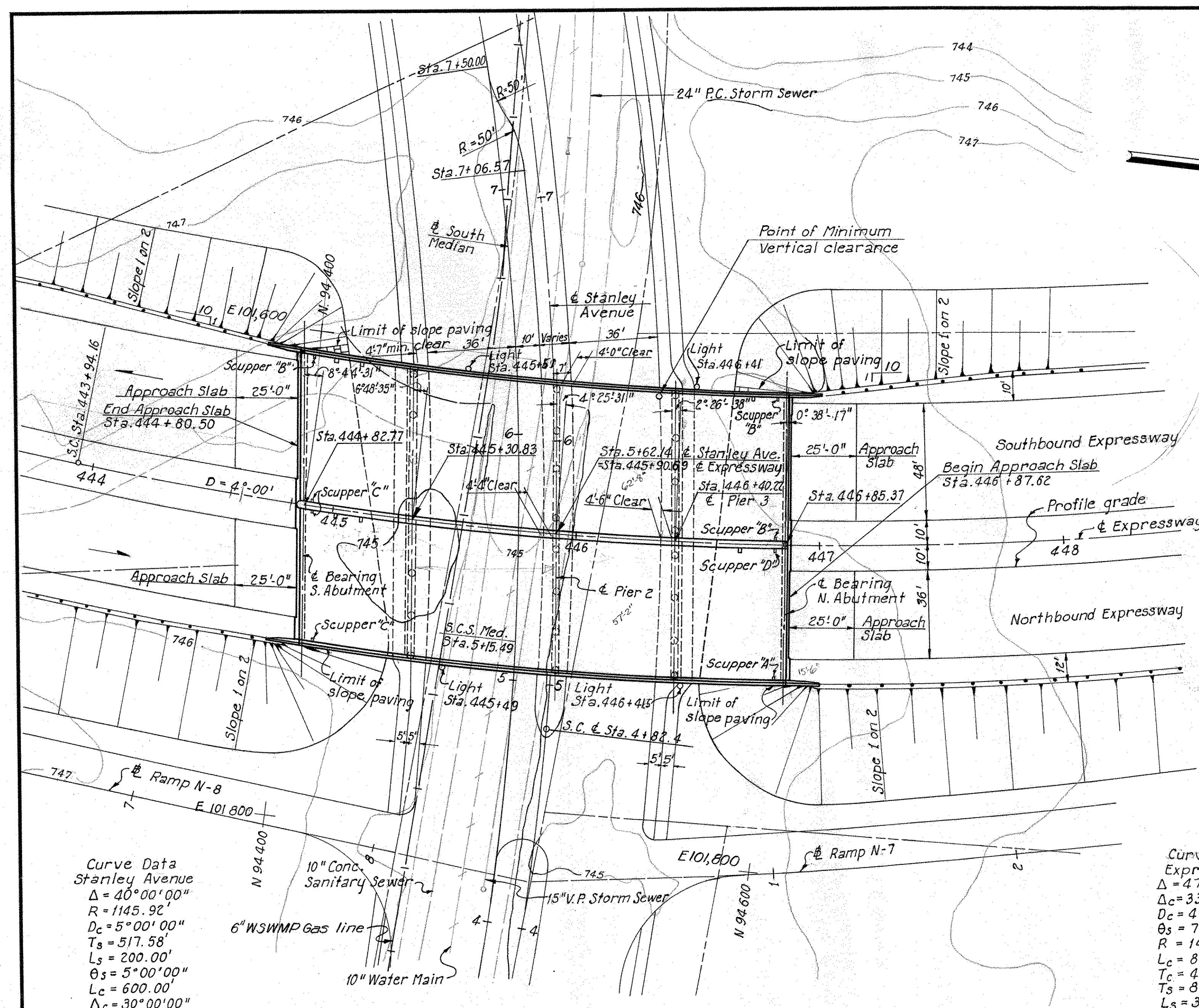
Revised R/W Plan, Sheet No. 75
by adding three non-limited access
parcels
J.R.B. 5-14-58

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

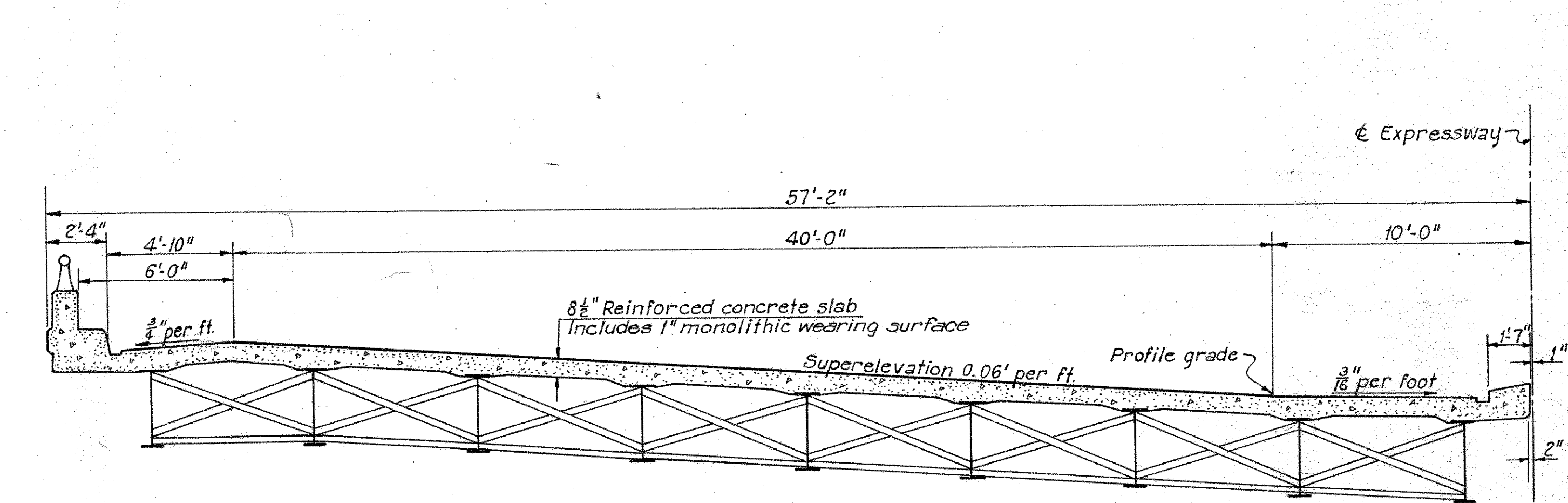
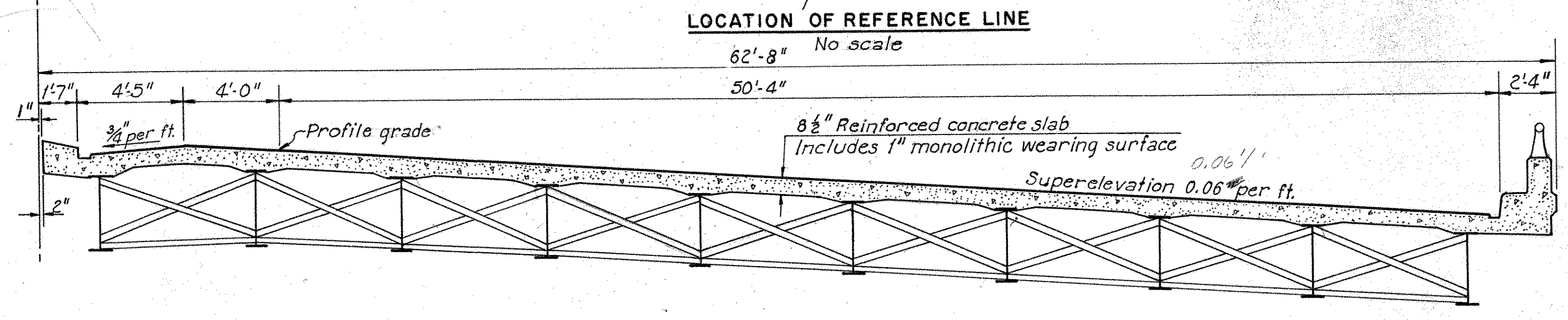
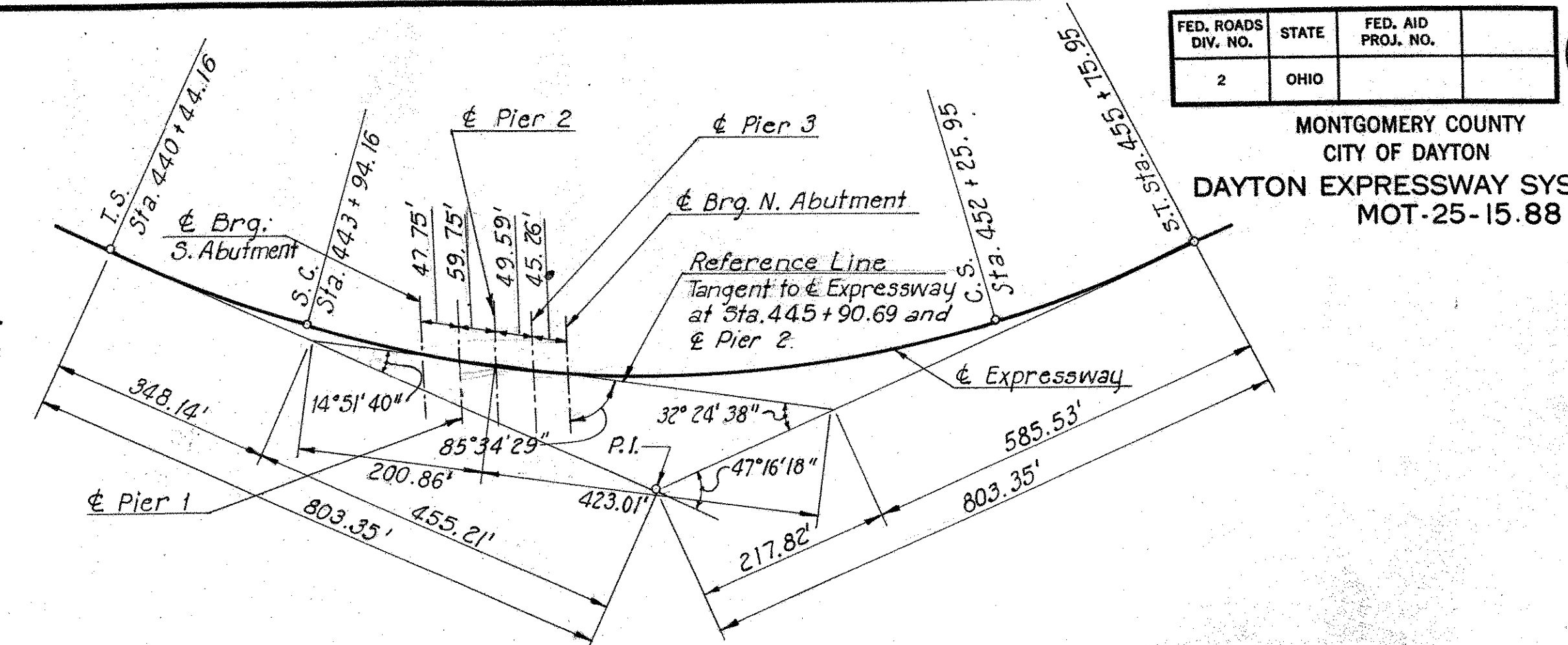
APPROVED:

ENGINEER

MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
MOT-25-15.88



PLAN
Scale: 1" = 30'-0"



TYPICAL CROSS SECTIONS
Scale: 1/4" = 1'-0"

Note:
Foundation Soundings: Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus, or in the Division Office but the State assumes no responsibility for the accuracy thereof.

PROPOSED STRUCTURE

Type: four span continuous rolled beam bridges with reinforced concrete deck and substructure.

Spans: 48'; 60'; 50'; 45'

Roadways:
 Southbound Expressway-58'-9" Roadway with 1'-0" curb.
 Northbound Expressway-53'-3" Roadway with 1'-0" curb.

Loading: CF 2000(SI) adequate for AASHTO alternate loading.

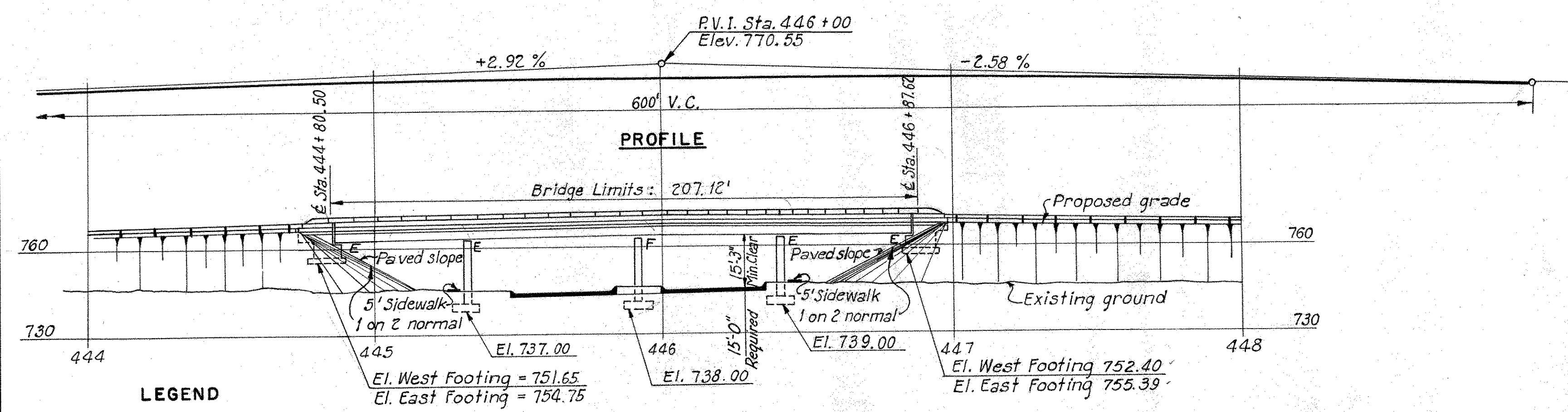
Skew: 4°-25'-31" (RF)

Surface: One inch monolithic concrete wearing surface

Approach Slabs: A.S.-1-54 (25' long)

Alignment: 4° curve

Superlevation: 0.06'/ft.



- LEGEND**
- Storm Sewer
 - Sanitary Sewer
 - Water Main
 - Water Valve
 - Manhole
 - Gas Line
 - Property Line

ELEVATION
Scale: 1" = 30'-0"

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

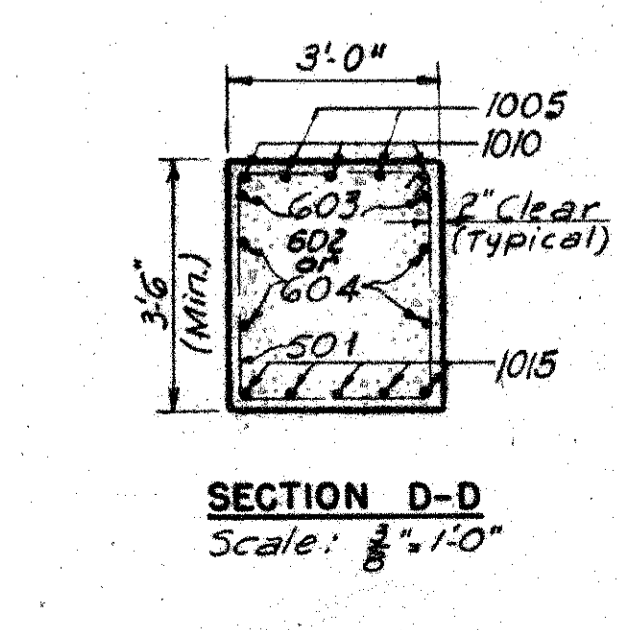
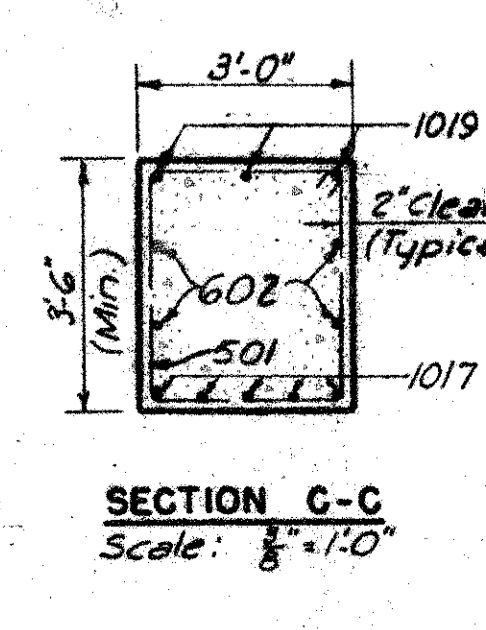
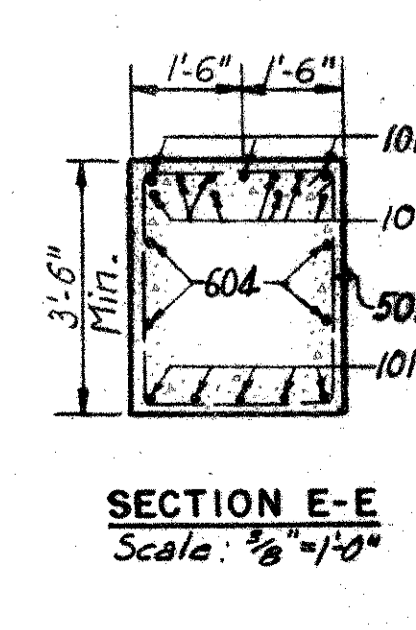
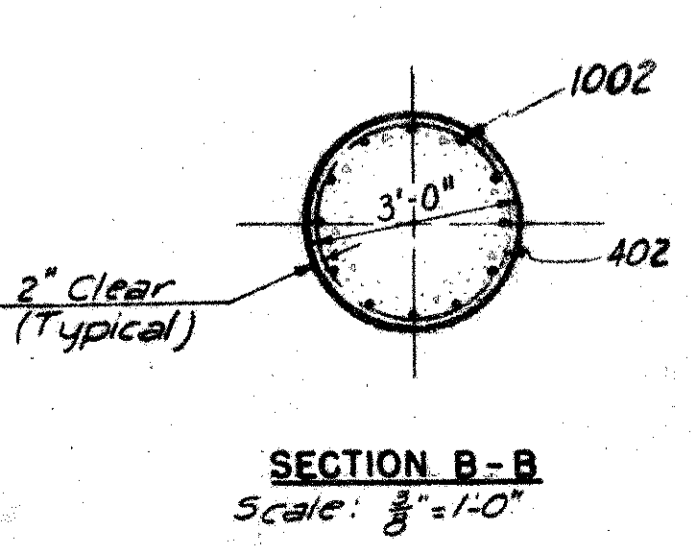
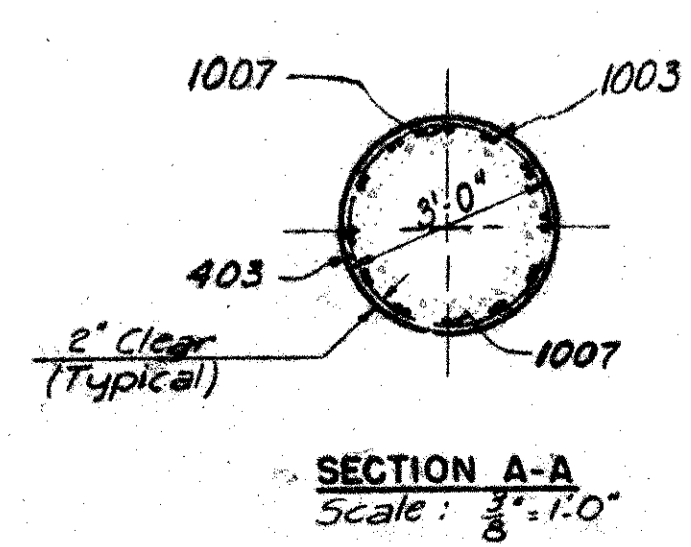
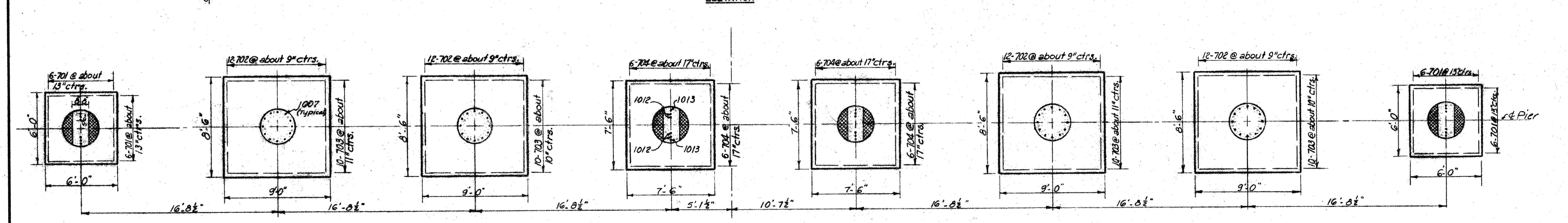
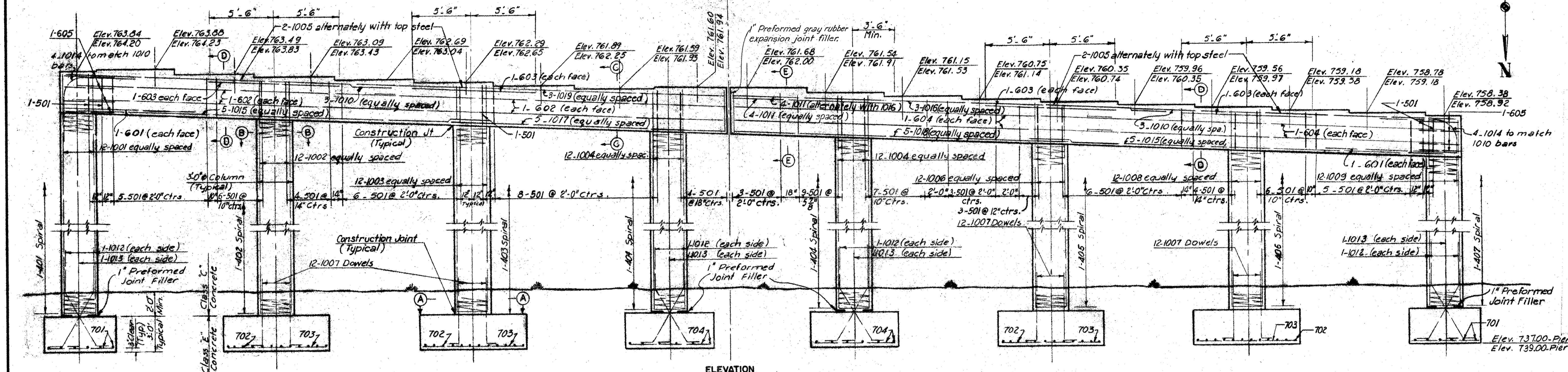
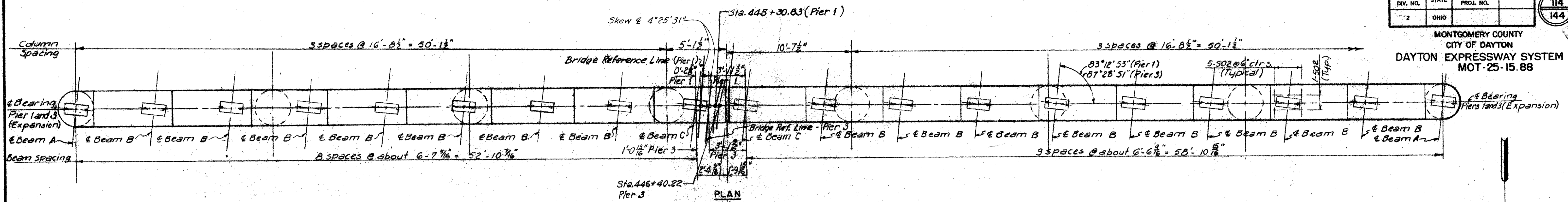
SITE PLAN
EXPRESSWAY OVER STANLEY AVENUE

BR. NO. MOT-25-1652 STA. 444 + 80.50
SCALE: 446 + 87.62

DAYTON EXPRESSWAY SYSTEM
DAYTON, MONTGOMERY COUNTY, OH

DRAWN GJB	TRACED AH	CHECKED RFL	REVIEWED	REVISED
DATE 1-7-57	DATE 9-3-57	DATE 10-26-57	DATE	DATE

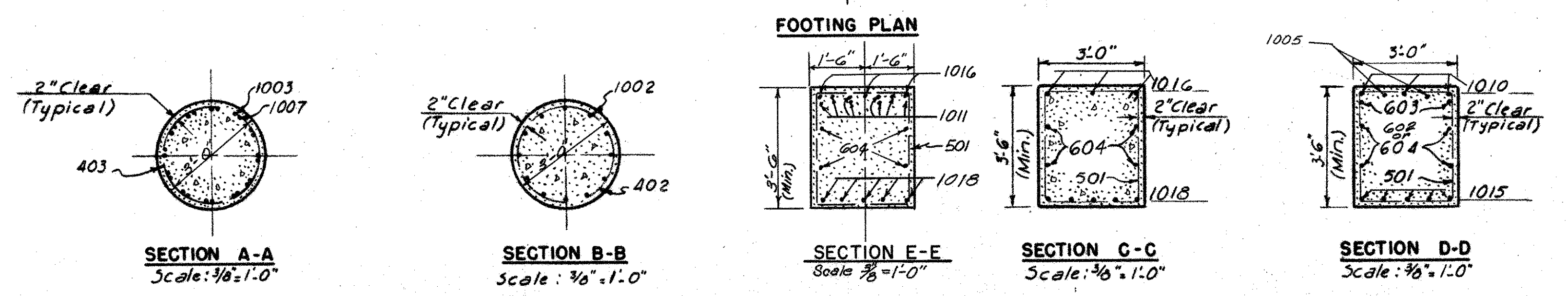
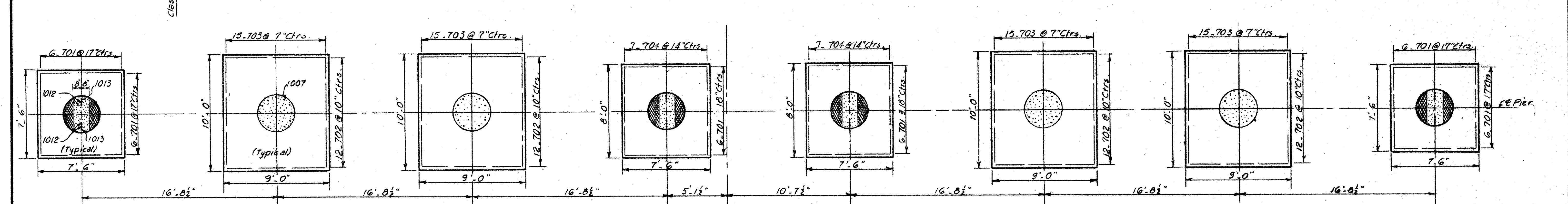
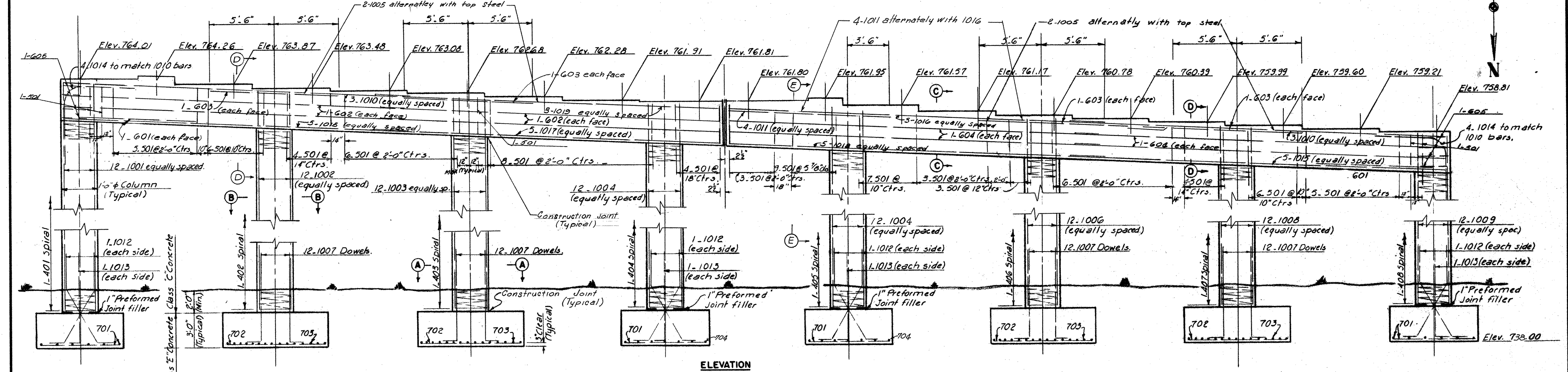
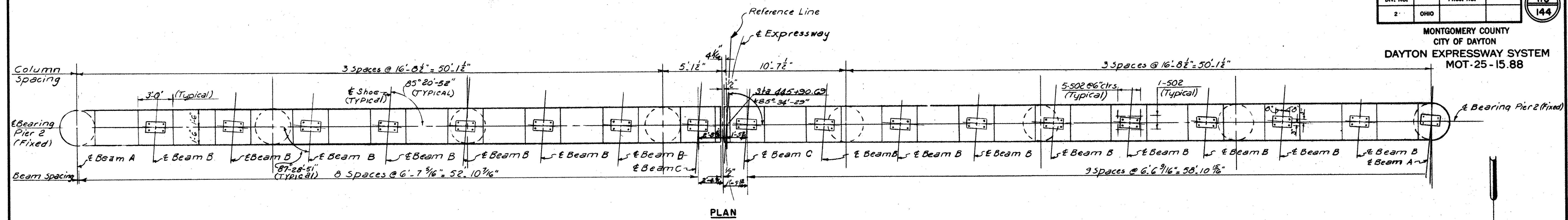
944 SHEET 113



Note:
Elevations above the line are for Pier 1; those below the line are for Pier 3.
Maximum footing pressure = 4.55 Tons per sq. ft.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF CONSULTING ENGINEERS KANSAS CITY CLEVELAND NEW YORK			
PIER 1 AND 3			
EXPRESSWAY OVER STANLEY AVENUE			
BR. NO. MOT-25-1652	STA. 444+80.50		
SCALE: 1/4"=1'-0" except as noted	446+87.62		
DAYTON EXPRESSWAY SYSTEM			
DAYTON, MONTGOMERY COUNTY, OHIO			
DRAWN BY: JH	TRACED	CHECKED BY: GA	REVIEWED
DATE: 8-15-57	DATE	DATE: 10-26-57	DATE: 10-26-57
			944 SHEET 114

MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
MOT-25-15.88



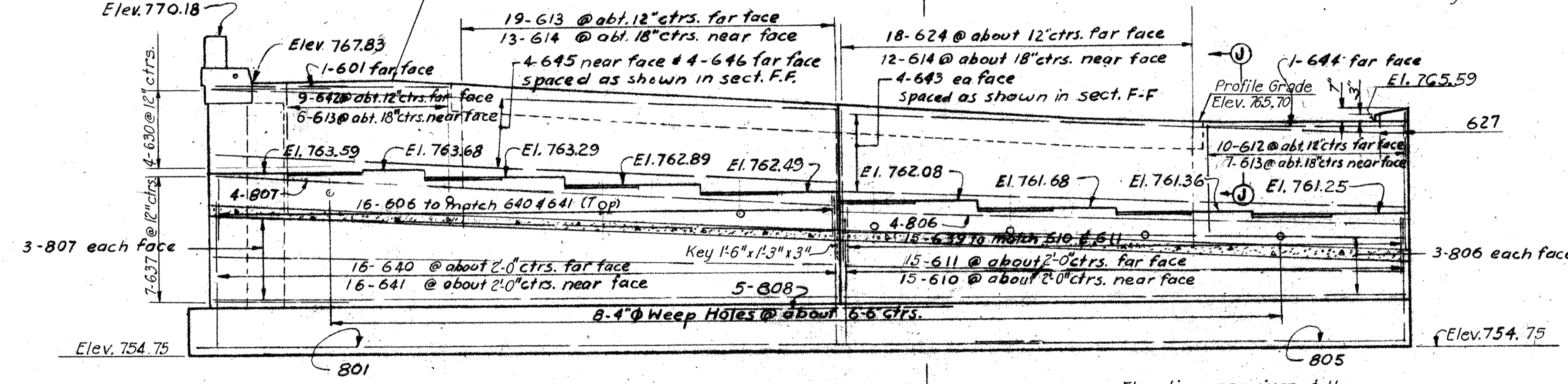
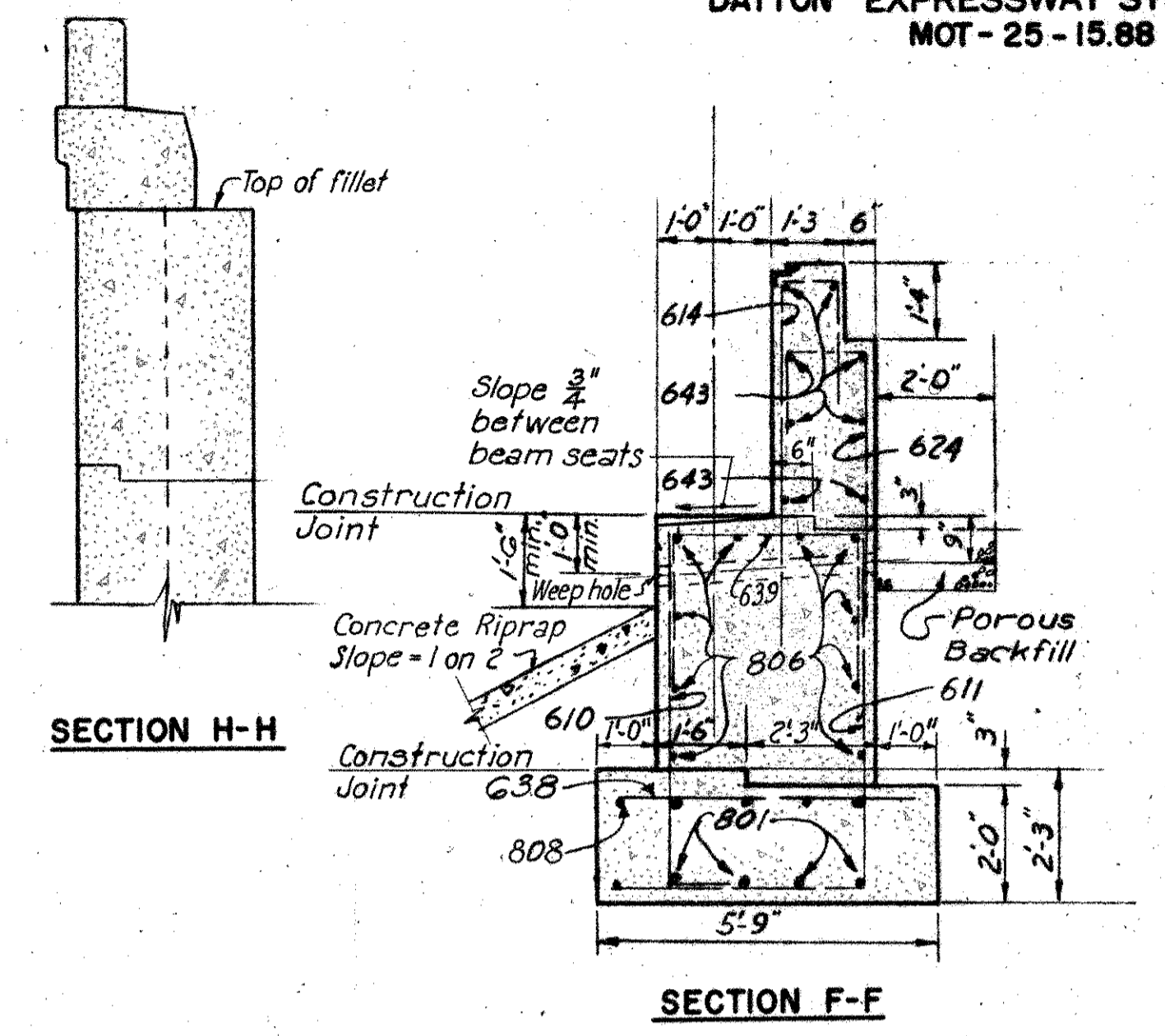
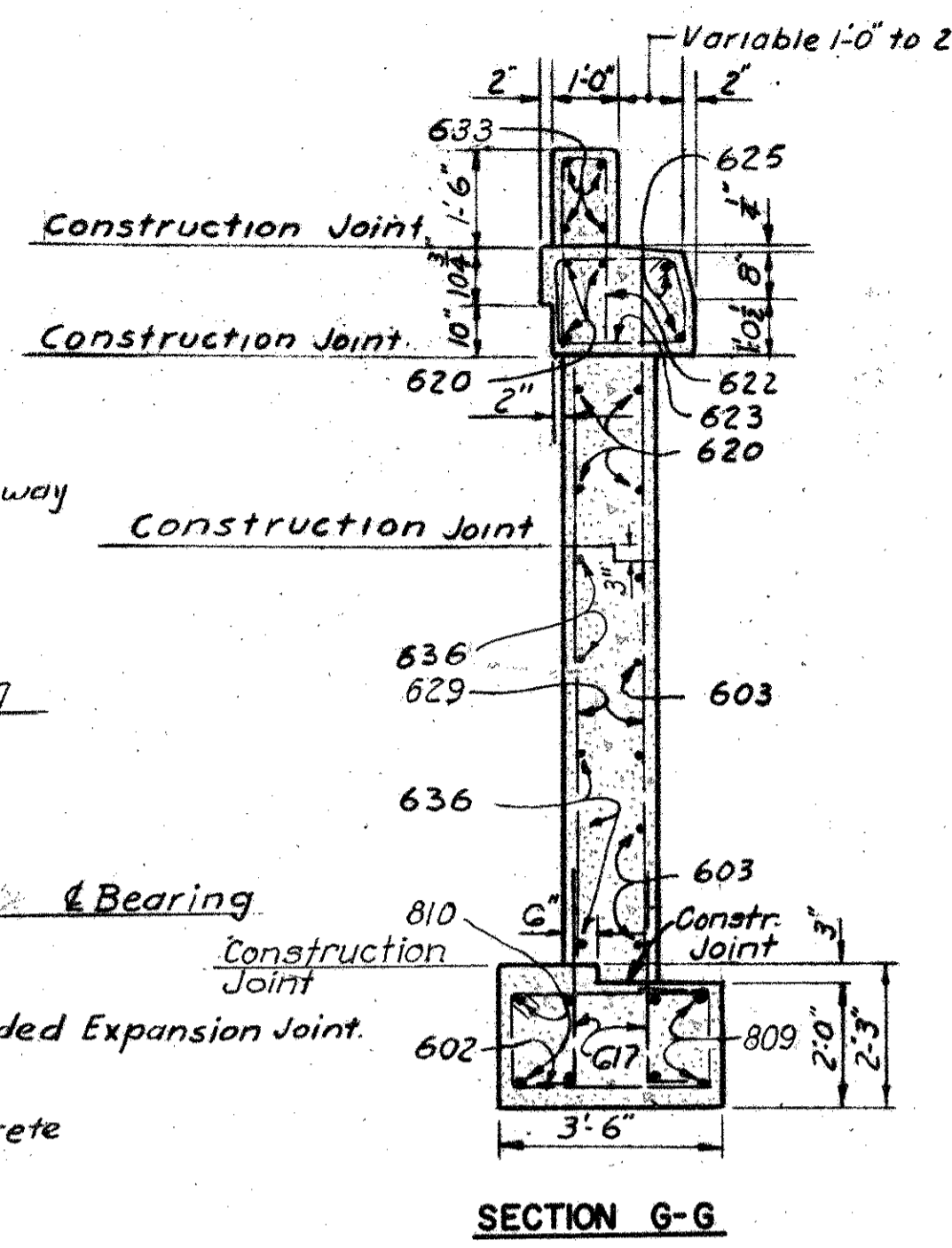
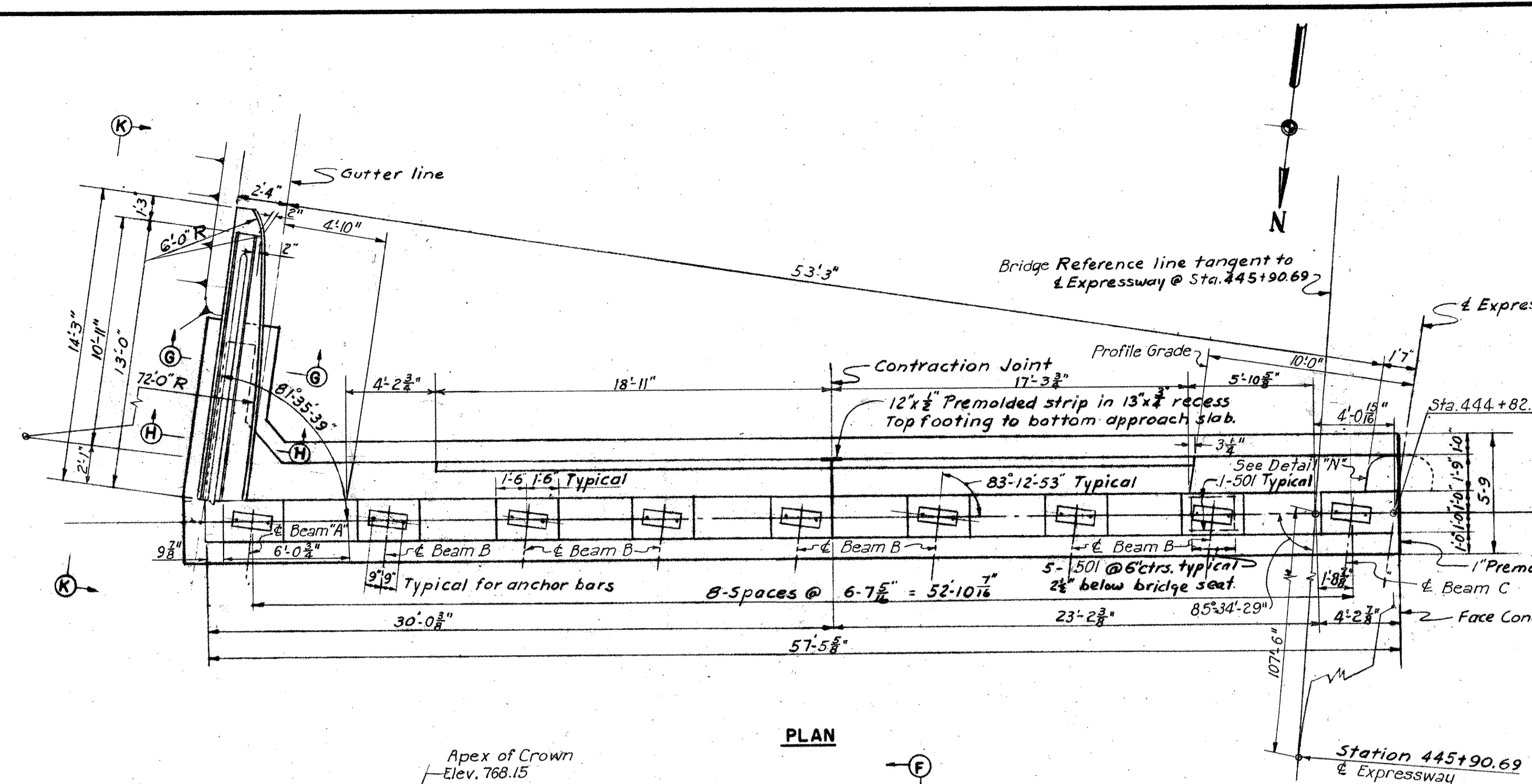
NOTE:
Maximum footing pressure
4.55 tons per square foot.

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KANSAS CITY CLEVELAND NEW YORK

PIER 2
EXPRESSWAY OVER STANLEY AVENUE
BR. NO. MOT-25-1652 STA. 444 + 80.50
SCALE: 1/4" = 1'-0" Except as noted 446 + 87.62
DAYTON EXPRESSWAY SYSTEM
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN BY	TRACED	CHECKED BY	REVIEWED	REVISION
DATE 8/20/57	DATE	DATE 8/26/57	DATE 8/26/57	944 SHEET 115

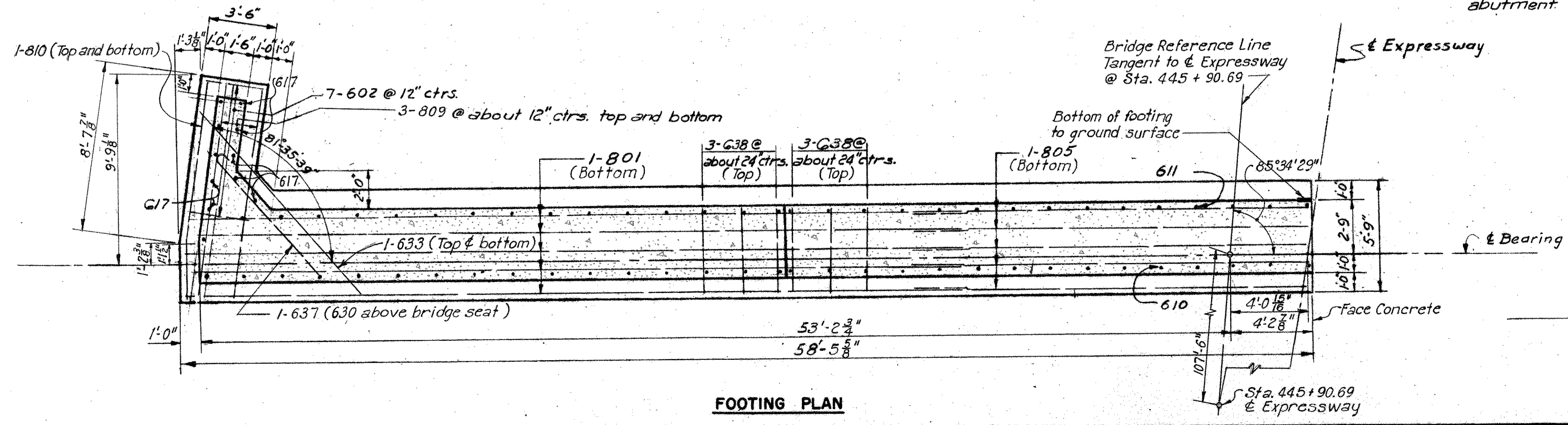
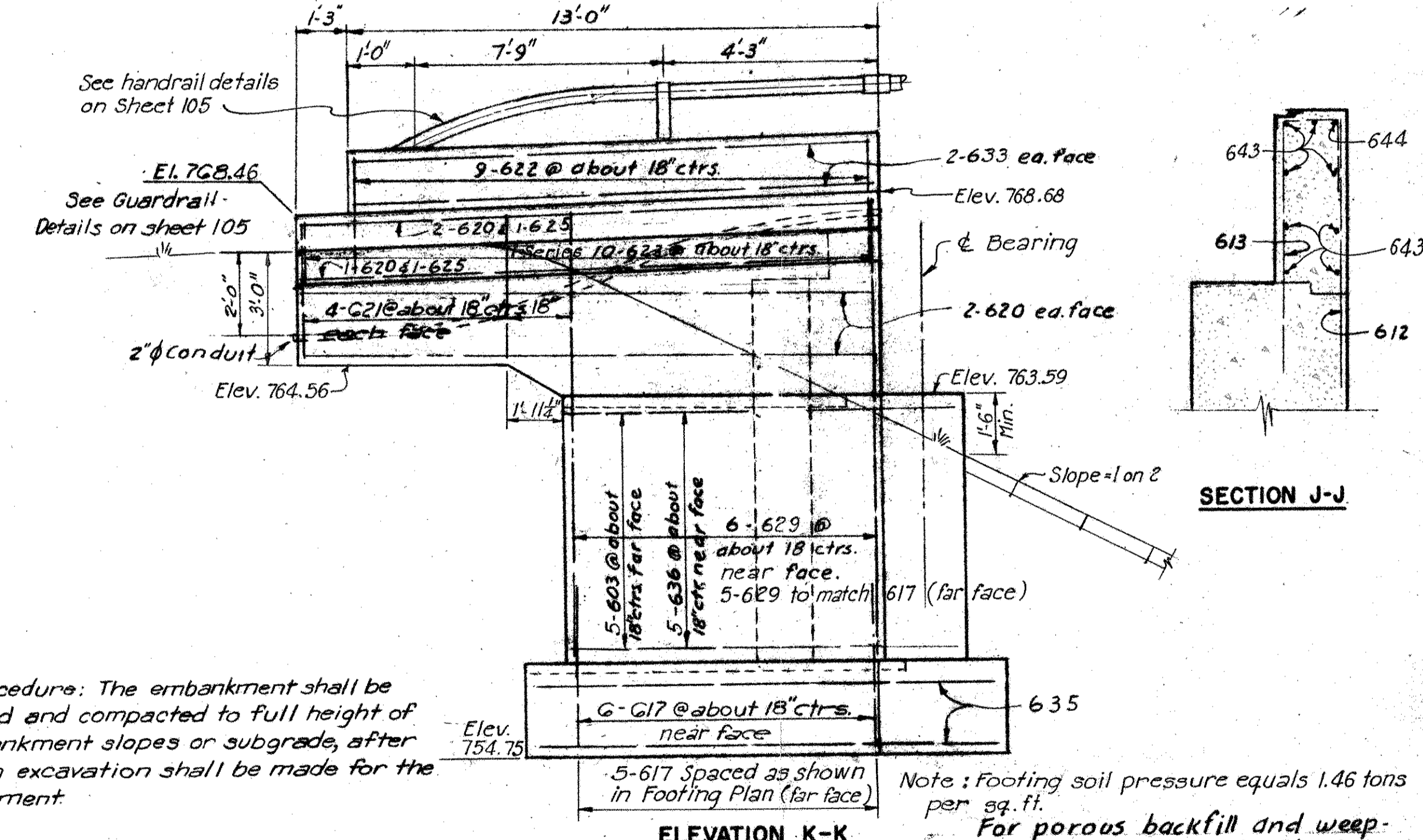
MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
MOT-25-15.88



Note: Care shall be taken in spacing weepholes to clear area for placing anchor bars for bearing plates.

Elevations are given at the front face of the backwall.

Note: Procedure: The embankment shall be placed and compacted to full height of embankment slopes or subgrade, after which excavation shall be made for the abutment.



DETAIL "N"
Scale: 3/4" = 1'-0"

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CONSULTING ENGINEERS
KANSAS CITY KANSAS CLEVELAND OHIO NEW YORK

EAST HALF OF SOUTH ABUTMENT

EXPRESSWAY OVER STANLEY AVENUE

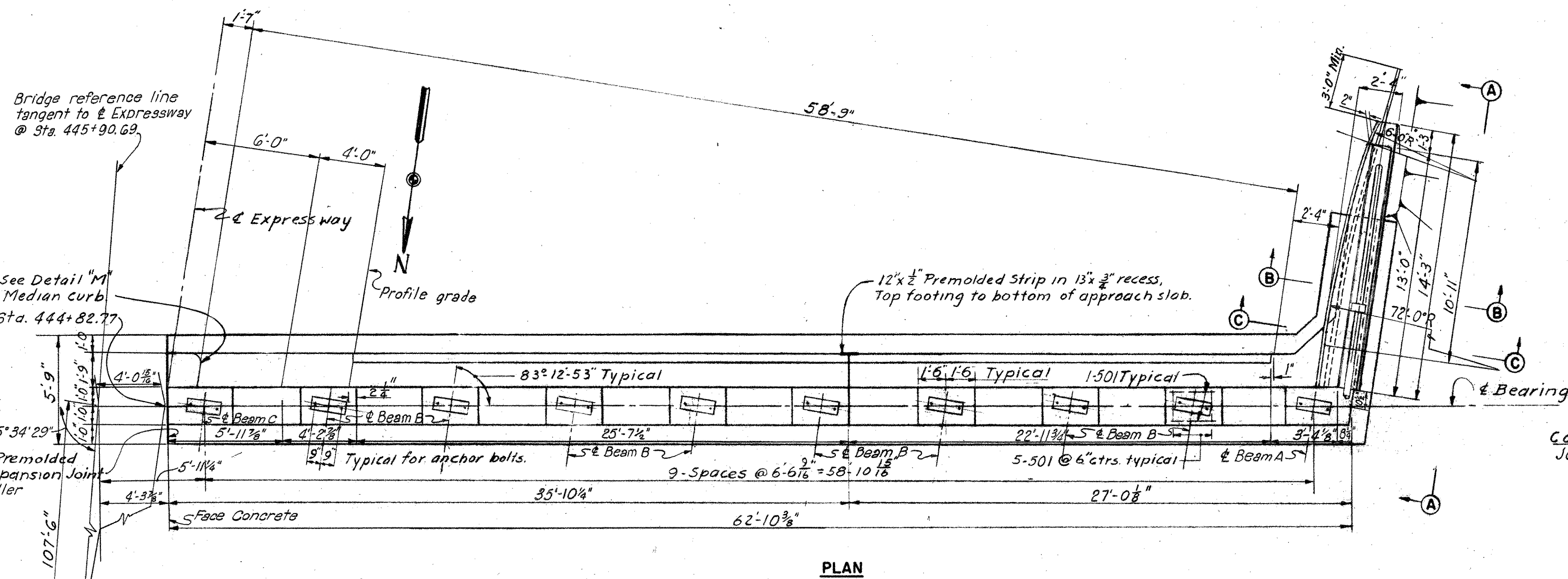
BR. NO. MOT-25-1652 STA 444 + 80.50

SCALE: 3/4" = 1'-0" Except as shown 446 + 87.62

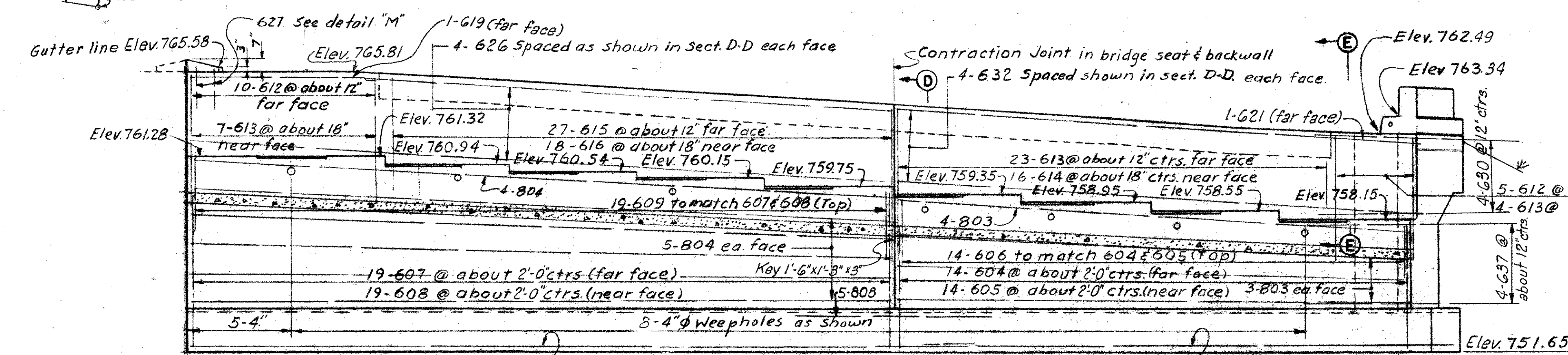
DAYTON EXPRESSWAY SYSTEM
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN H.J.C.	TRACED	CHECKED J.J.J.	REVIEWED G.A.	REVISED
DATE 10-4-57	DATE	DATE 10-24-57	DATE 11-1-57	944 SHEET 116

MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
MOT-25-15.88

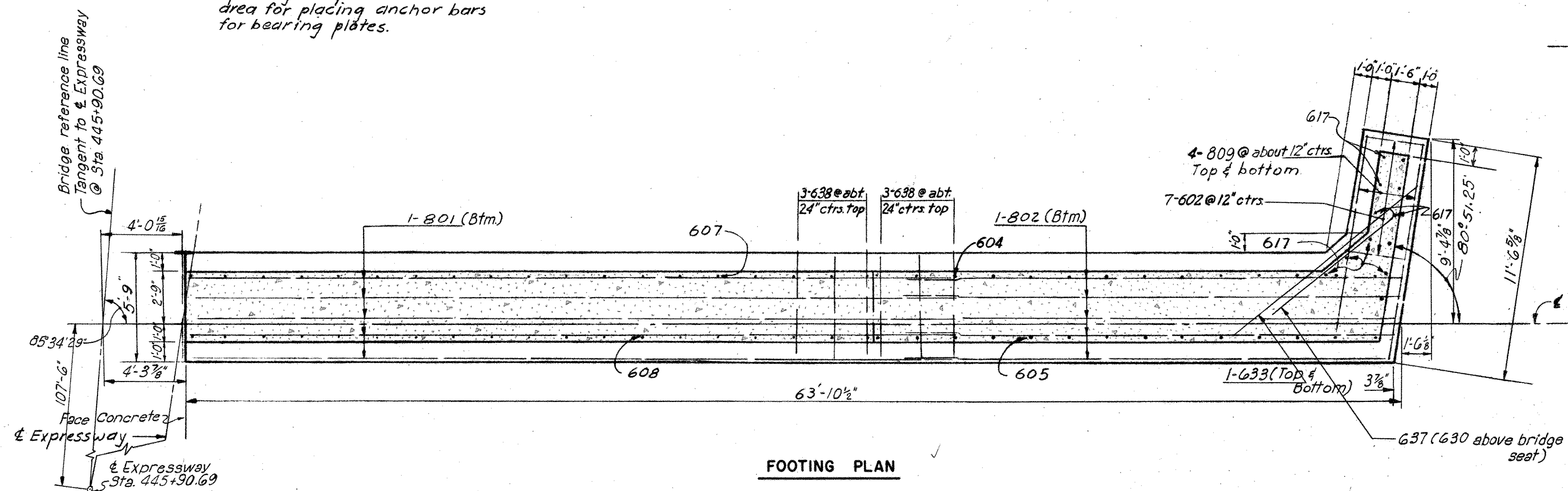


PLAN

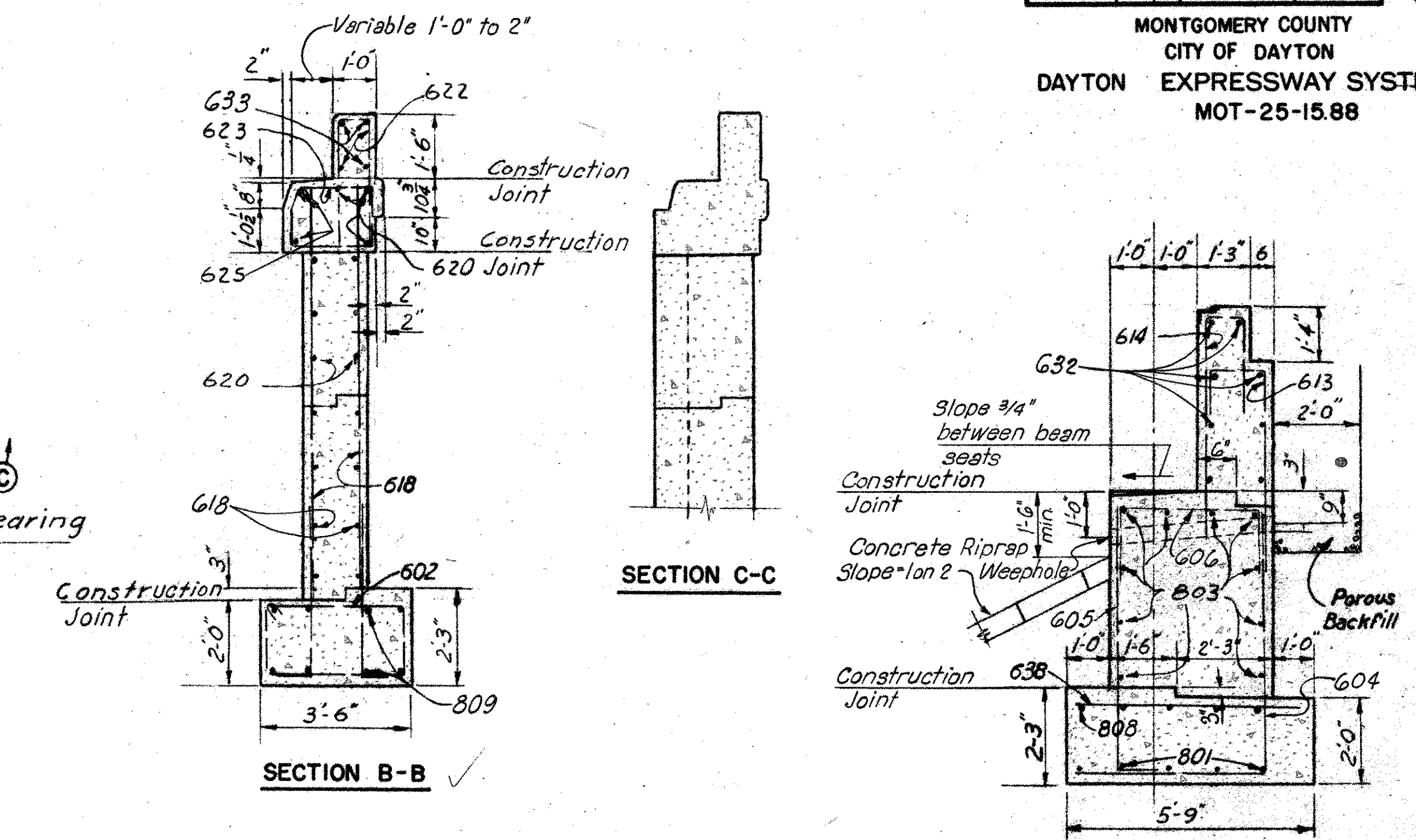


ELEVATION

Note:
Care shall be taken in
spacing weepholes to clear
area for placing anchor bars
for bearing plates.

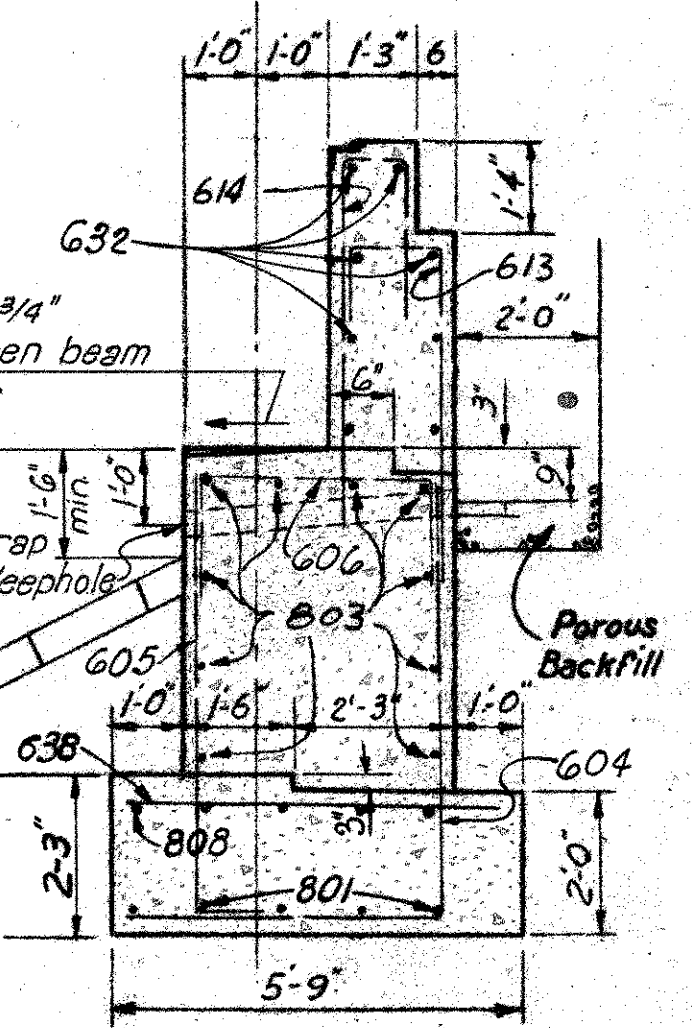


FOOTING PLAN

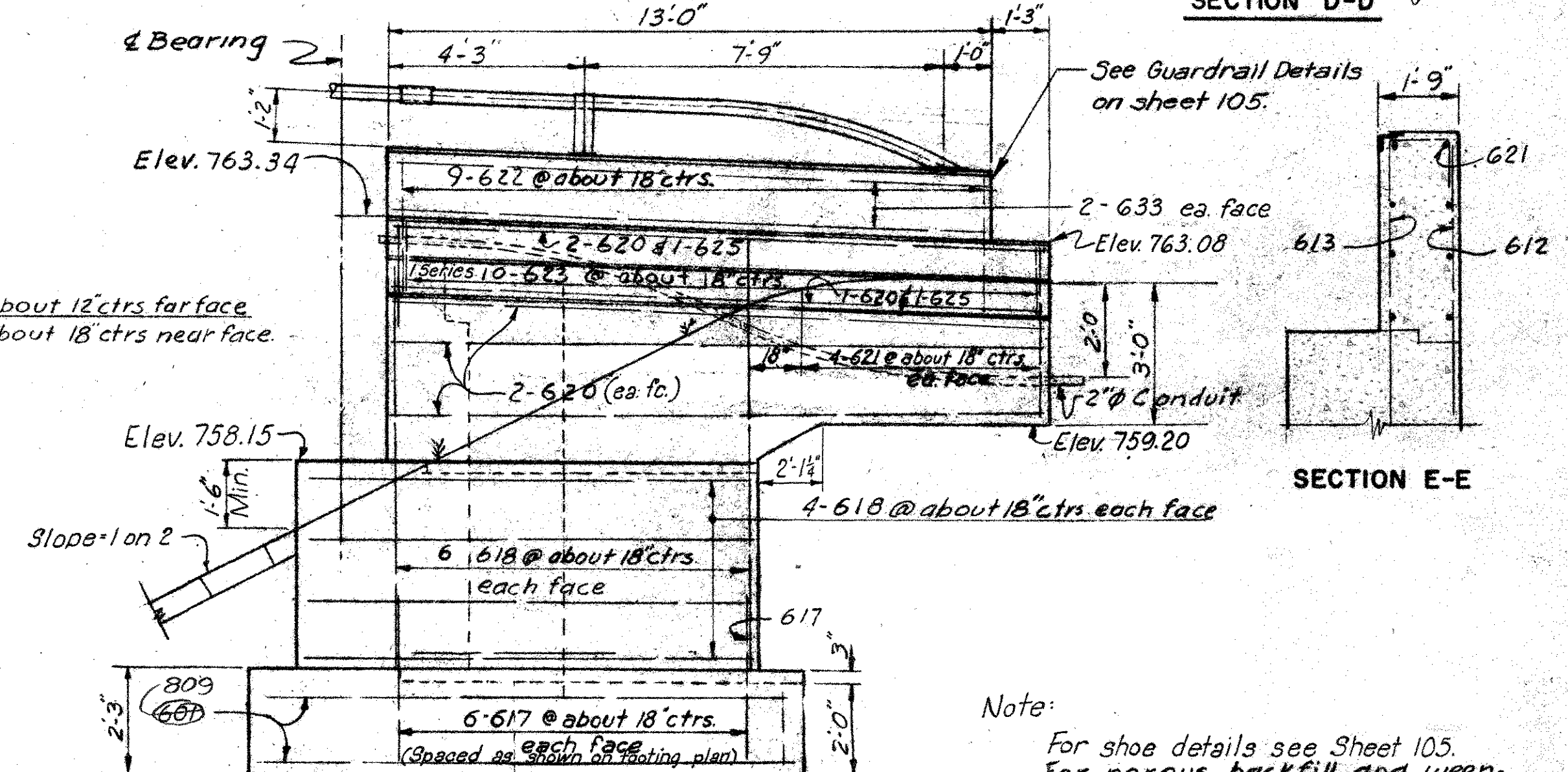


SECTION B-B

SECTION C-C

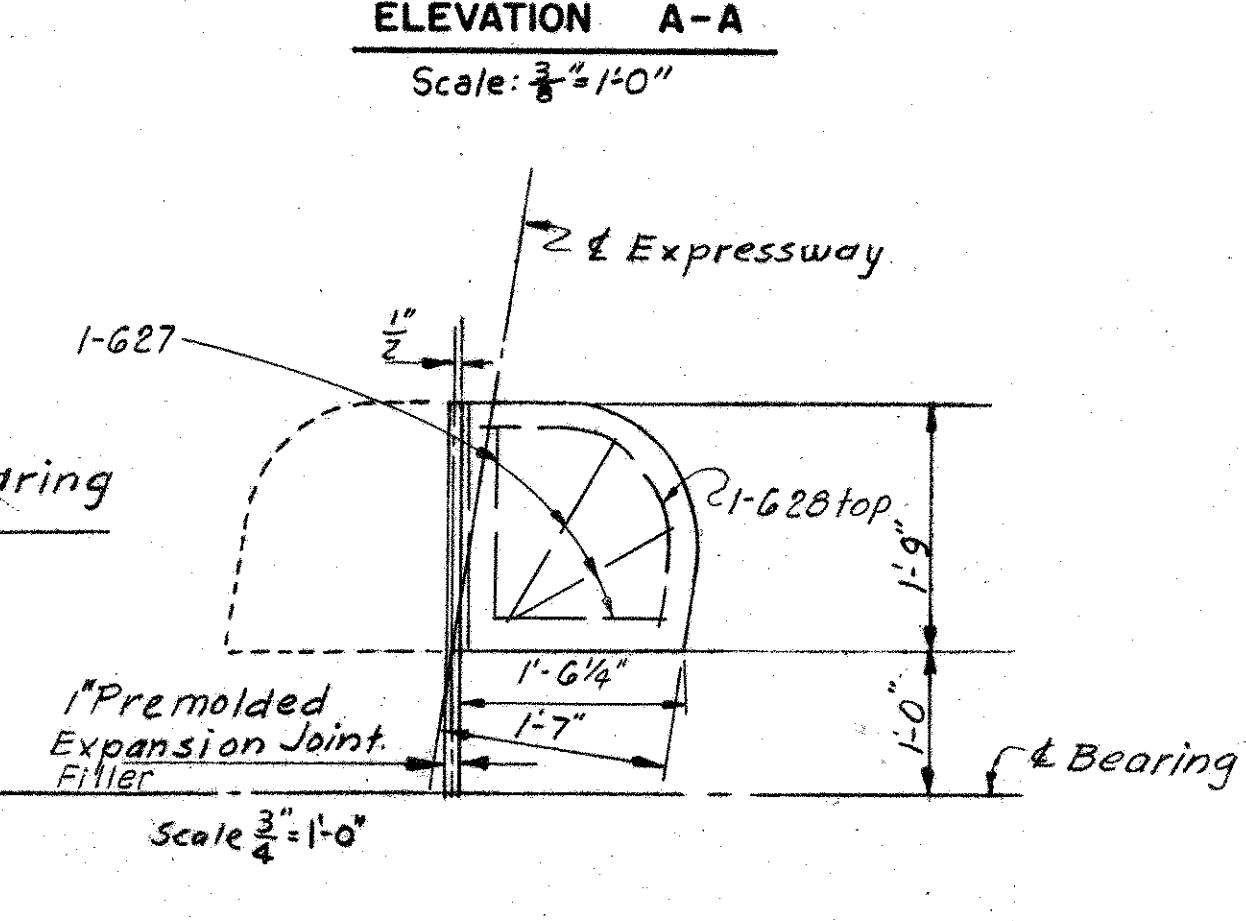


SECTION D-D



ELEVATION A-A

SECTION E-E



DETAIL "M"

Note:
For shoe details see Sheet 105.
For porous backfill and weep-
holes see common details, Sheet 104.
For reinforcing steel schedule
see sheet 123.
For Expansion Joint Details
see common details.
For details of slope paving
see common details, Sheet 104.
Procedure: The embankment shall be
placed and compacted to full height of
embankment slopes or subgrade, after
which excavation shall be made for the
abutment.
Footing soil pressure = 1.4 G Tons per sq. ft.

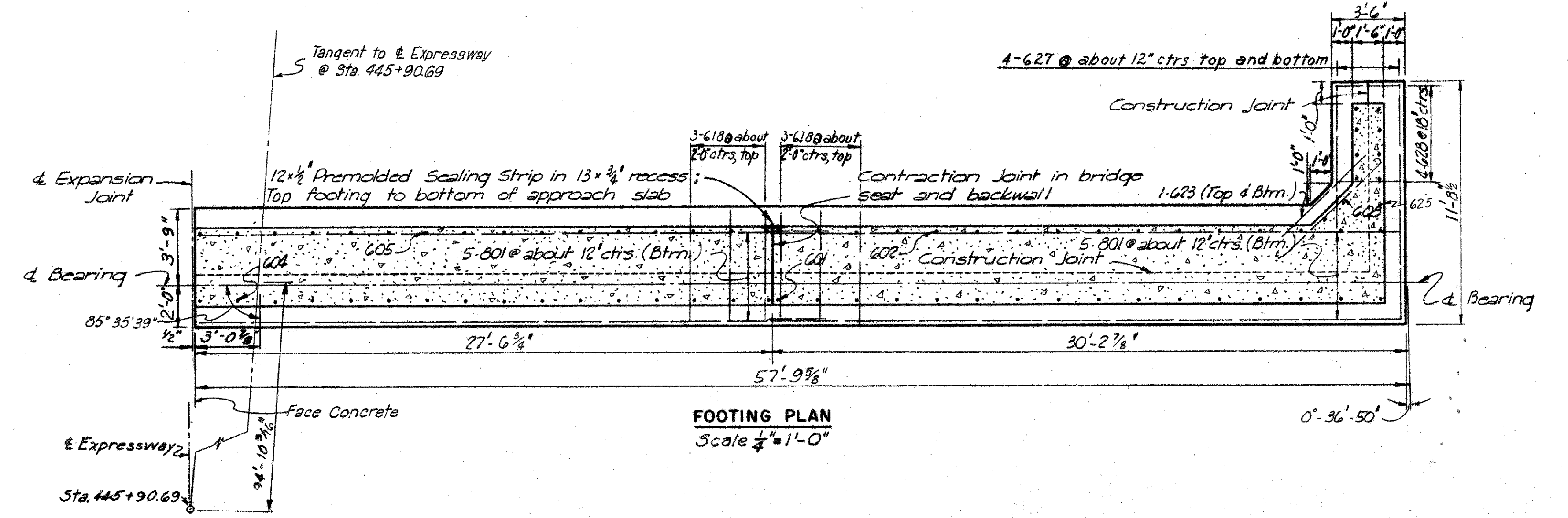
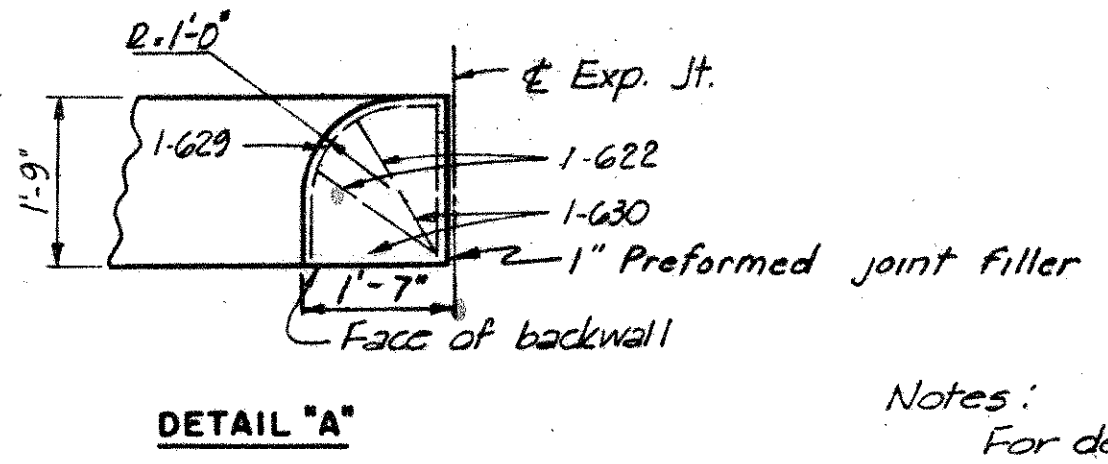
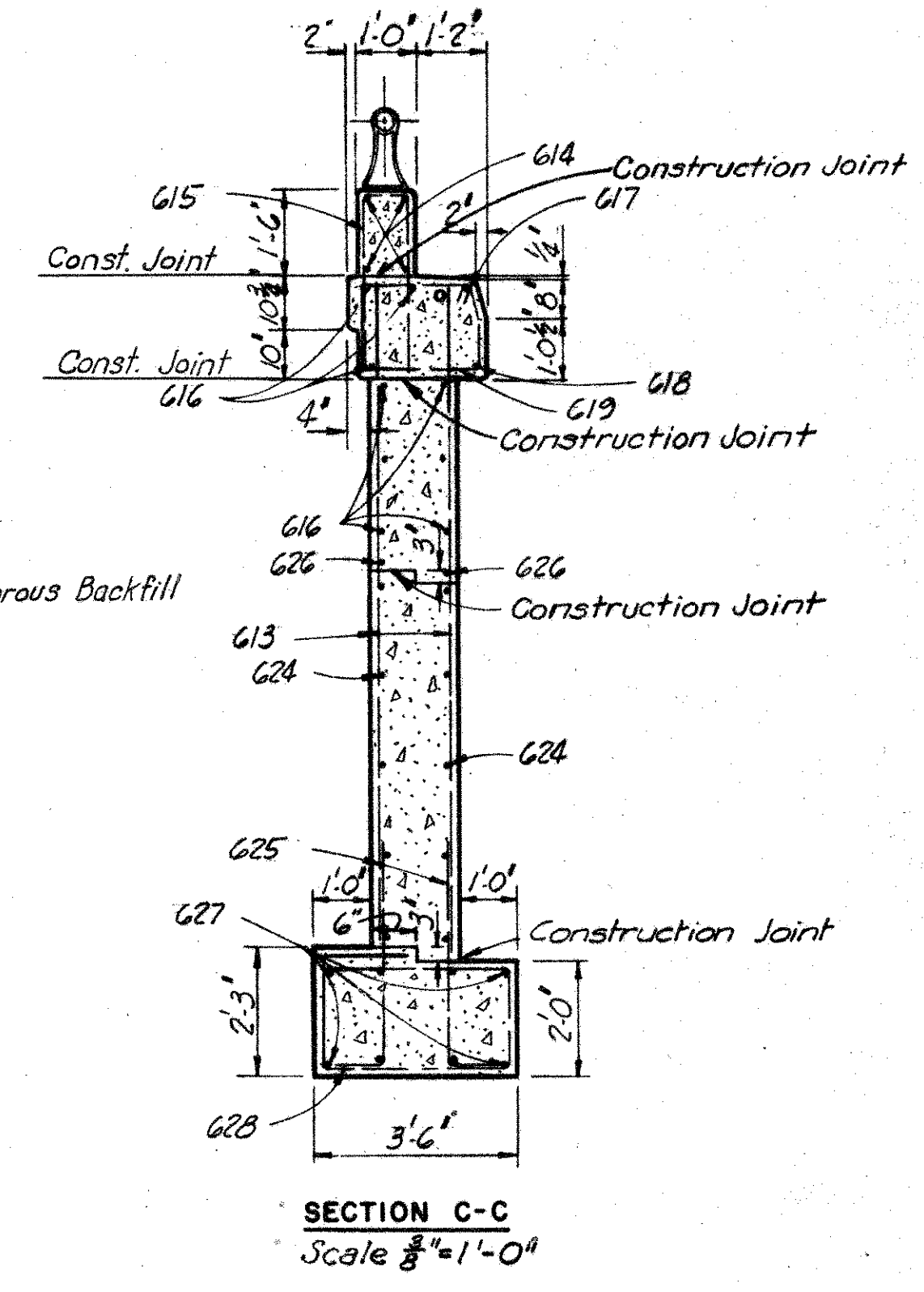
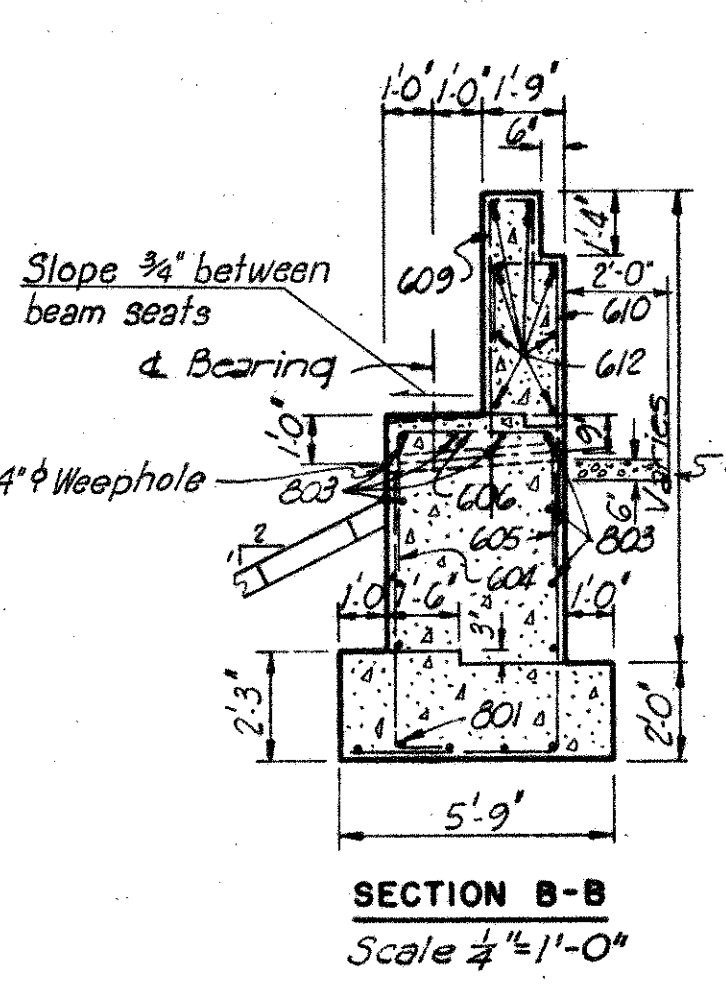
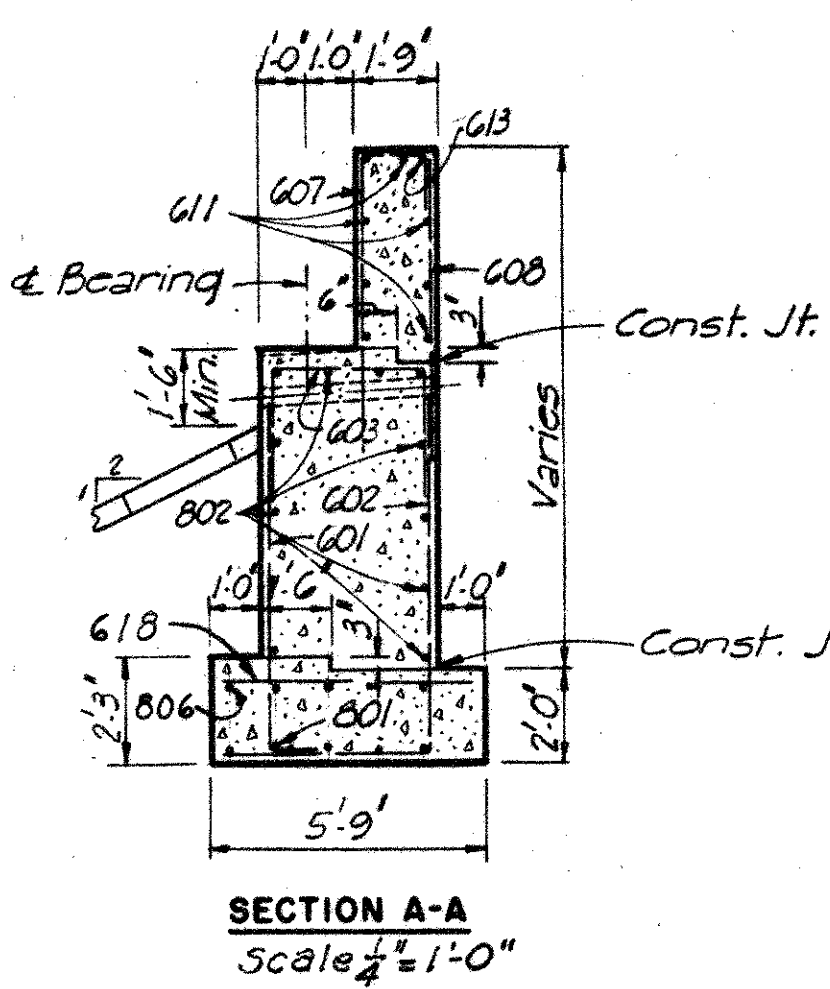
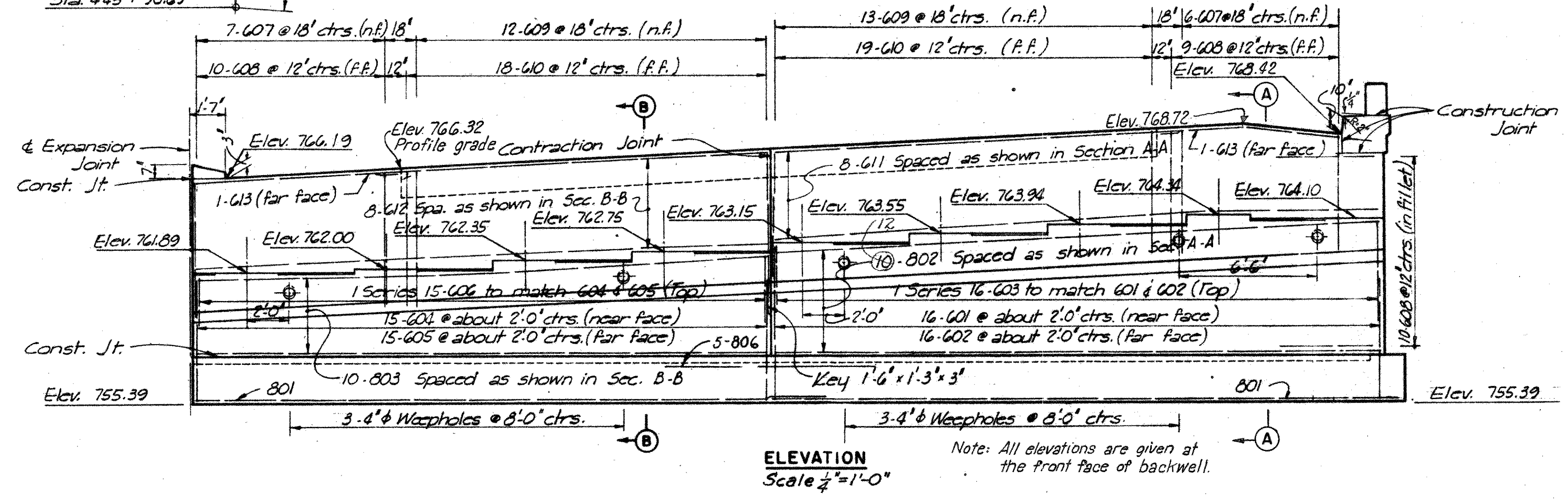
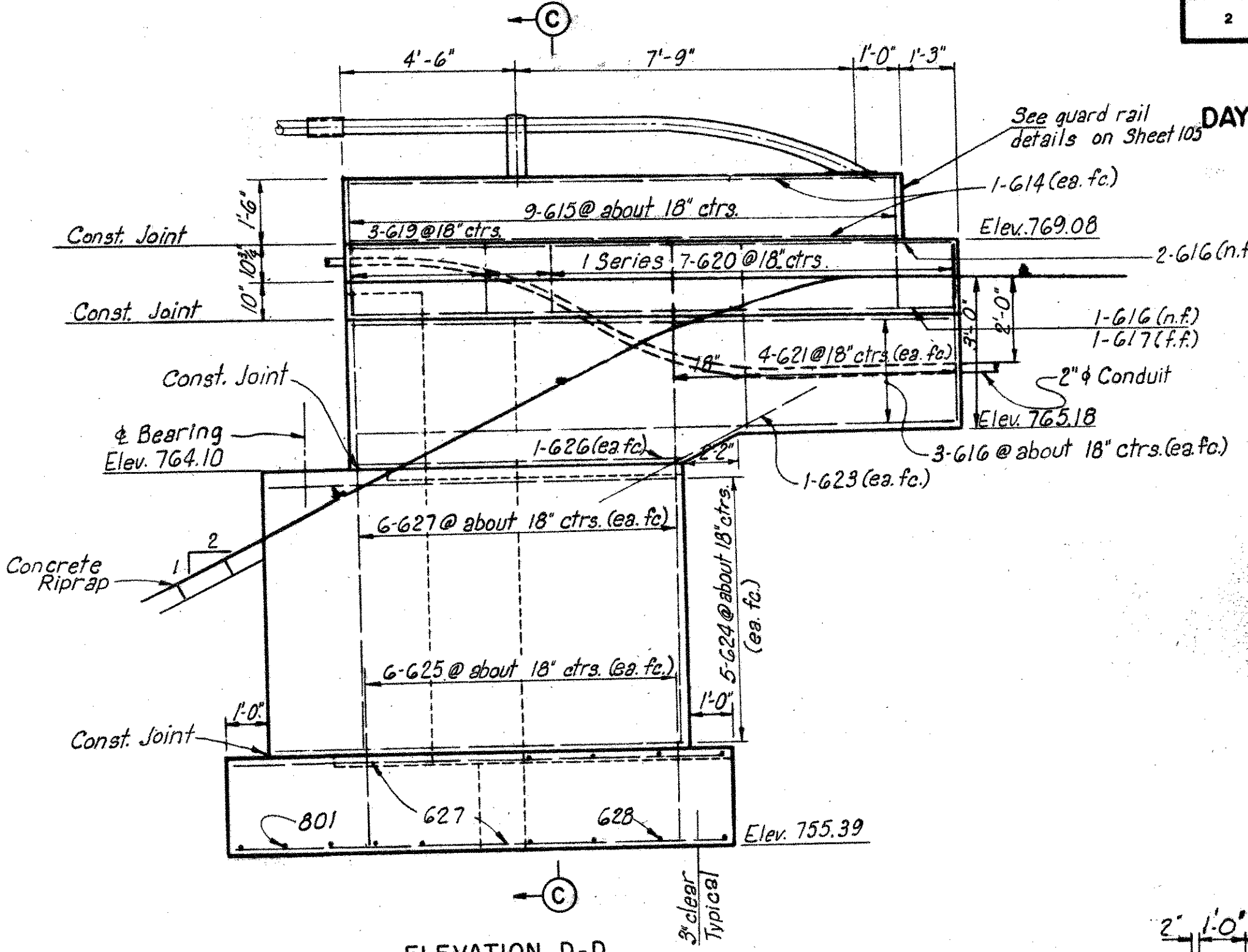
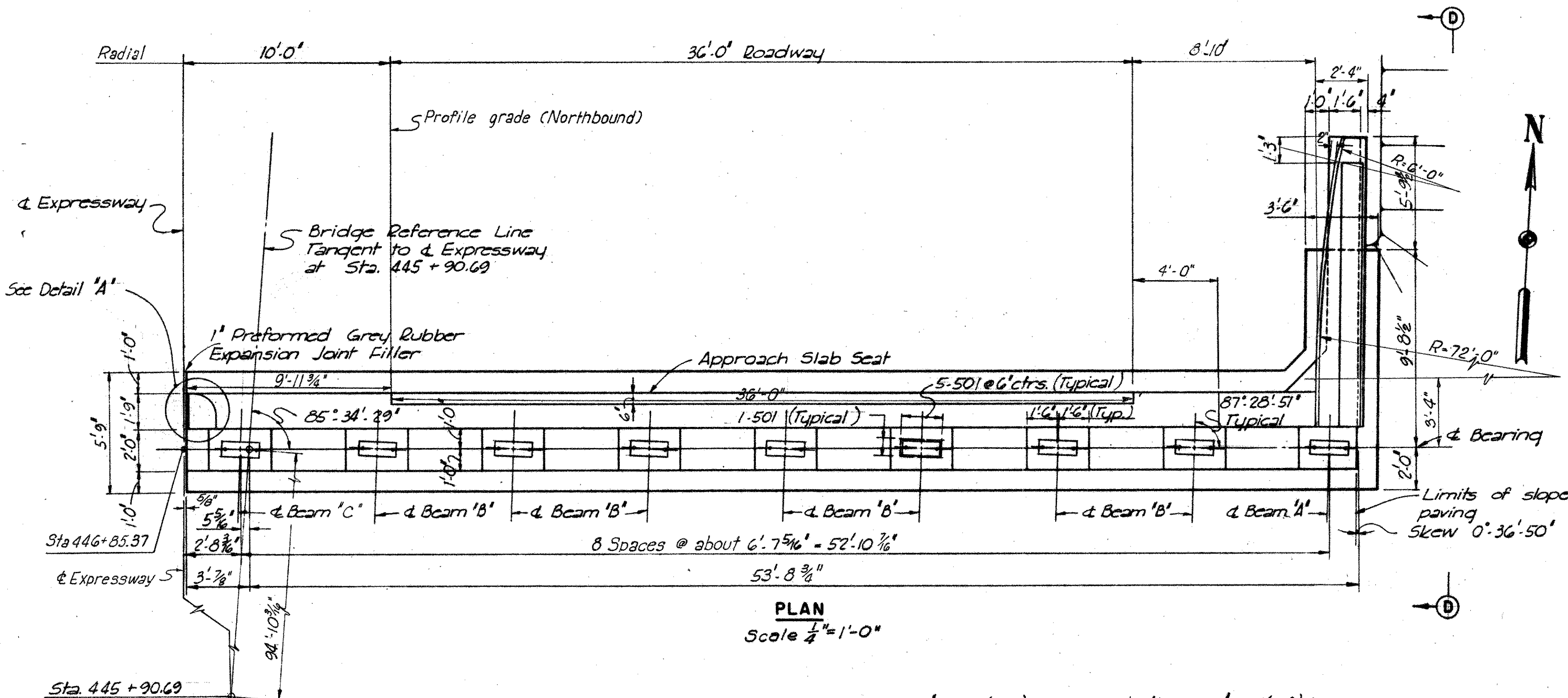
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CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

WEST HALF OF SOUTH ABUTMENT
EXPRESSWAY OVER STANLEY AVENUE
BR. NO. MOT-25-1652 STA. 444 + 80.50
SCALE: 1/4" = 1'-0" Except as shown 446 + 87.62

DAYTON EXPRESSWAY SYSTEM
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN J.F.C.	TRACED	CHECKED	REVIEWED	REVISED
DATE	DATE	DATE	DATE	DATE
				4-28-57
				944 SHEET 117

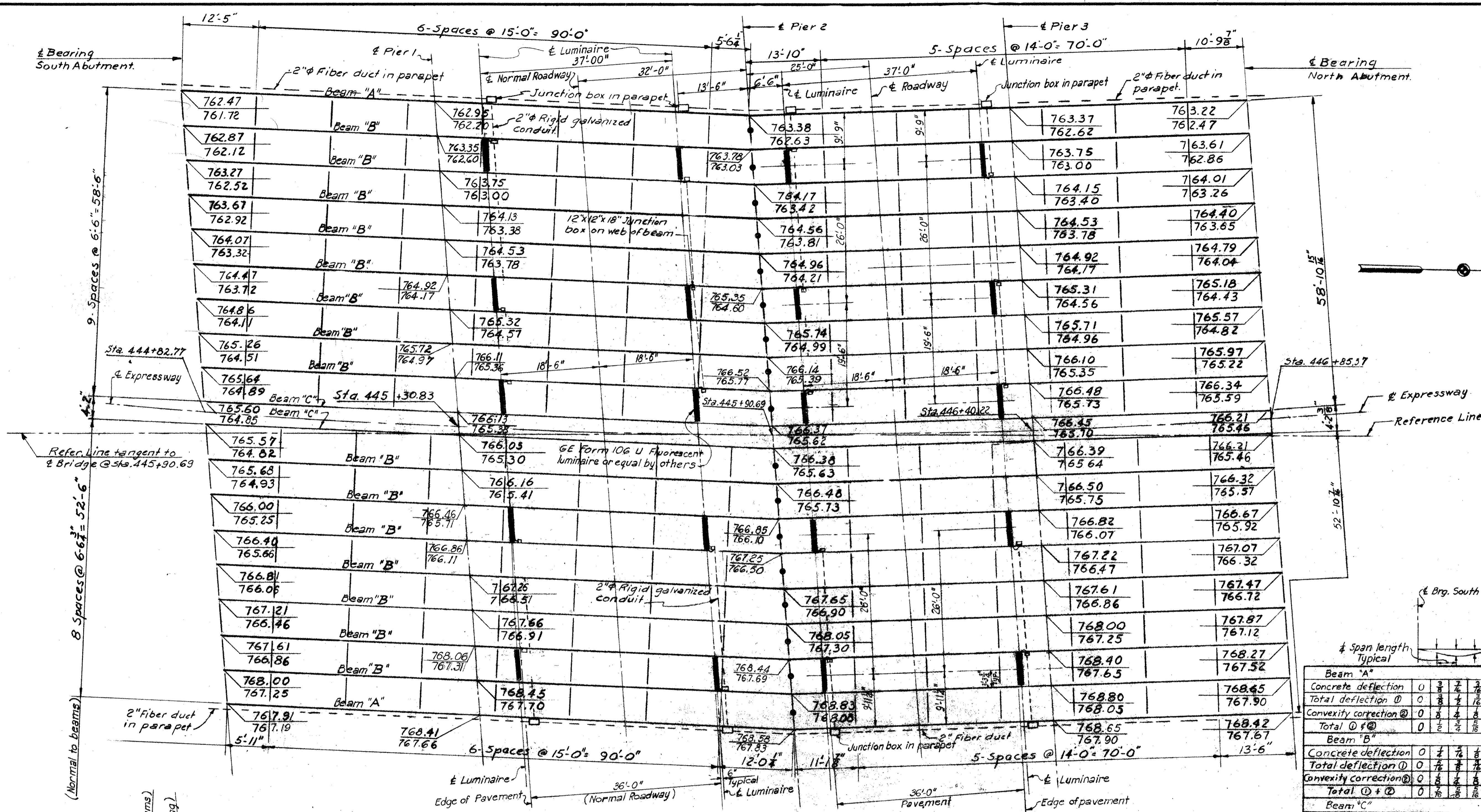
MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
MOT-25-15.88



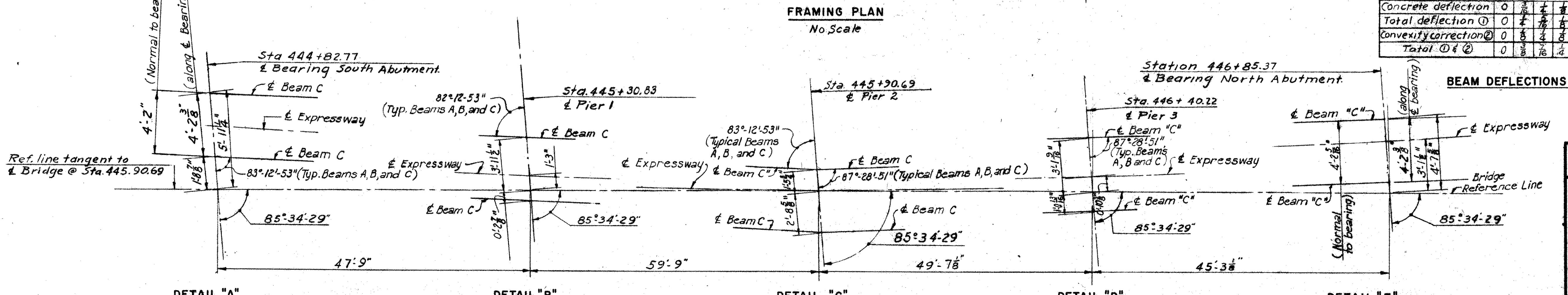
Notes:
For details of porous backfill, weepholes, slope paving, expansion joint details and shoes see Common Details.
For Reinforcing Schedule see sheet 123.
Footing soil pressure 1.46 tons per sq.ft. For details of West Half, North Abutment see sheet 118.
Procedure: The embankment shall be placed and compacted to full height of embankment slopes or subgrade, after which excavation shall be made for the abutment.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF CONSULTING ENGINEERS KANSAS CITY CLEVELAND NEW YORK			
EAST HALF OF NORTH ABUTMENT			
EXPRESSWAY OVER STANLEY AVENUE			
BR. NO. MOT - 25 - 1652	STA. 444 + 80.50		
SCALE: AS SHOWN	446 + 87.62		
DAYTON EXPRESSWAY SYSTEM			
DAYTON,	MONTGOMERY COUNTY,	OHIO	
DRAWN 222	TRACED	CHECKED J.J.M.	REVIEWED GA
DATE 8-16-57	DATE	DATE 10-27-57	DATE 12-30-57
			REVISED 4-28-59
			944 SHEET 119

Notes:
Elevations above the line denote top of slab and elevations below the line denote top of beam.
For beam elevations see Sheet 121.
For end finish and intermediate cross framing details see Sheet 122.
For underdeck lighting details see sheet 110.
Crossframes marked with a ● have an additional horizontal strut.



Beam Deflections and Convexity Corrections												
NO SCALE												
Beam "A"												
Concrete deflection	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	-1/8	0	-1/8
Total deflection (D)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	-1/8	0	-1/8
Convexity correction (C)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	1/8	1/4	3/8
Total (D+C)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	0	1/4	3/8
Beam "B"												
Concrete deflection	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	-1/8	0	-1/8
Total deflection (D)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	-1/8	0	-1/8
Convexity correction (C)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	1/8	1/4	3/8
Total (D+C)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	0	1/4	3/8
Beam "C"												
Concrete deflection	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	-1/8	0	-1/8
Total deflection (D)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	-1/8	0	-1/8
Convexity correction (C)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	1/8	1/4	3/8
Total (D+C)	0	1/8	1/4	3/8	0	1/8	1/4	3/8	0	0	1/4	3/8



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CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

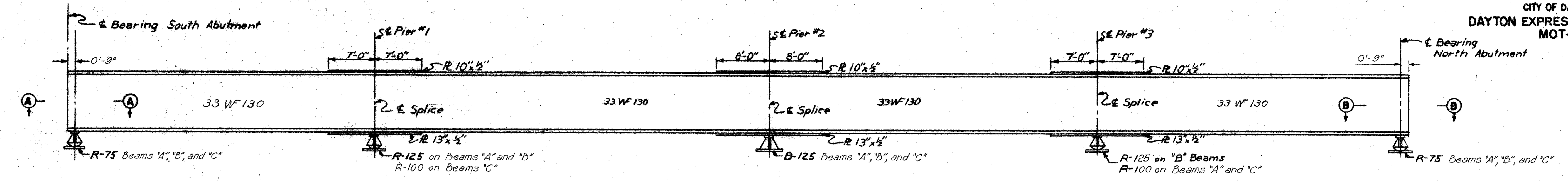
FRAMING PLAN
EXPRESSWAY OVER STANLEY AVENUE
BR. NO. MOT- 25-1652 STA. 444+82.77
446+85.37

DAYTON EXPRESSWAY SYSTEM
DAYTON, MONTGOMERY COUNTY, OHIO

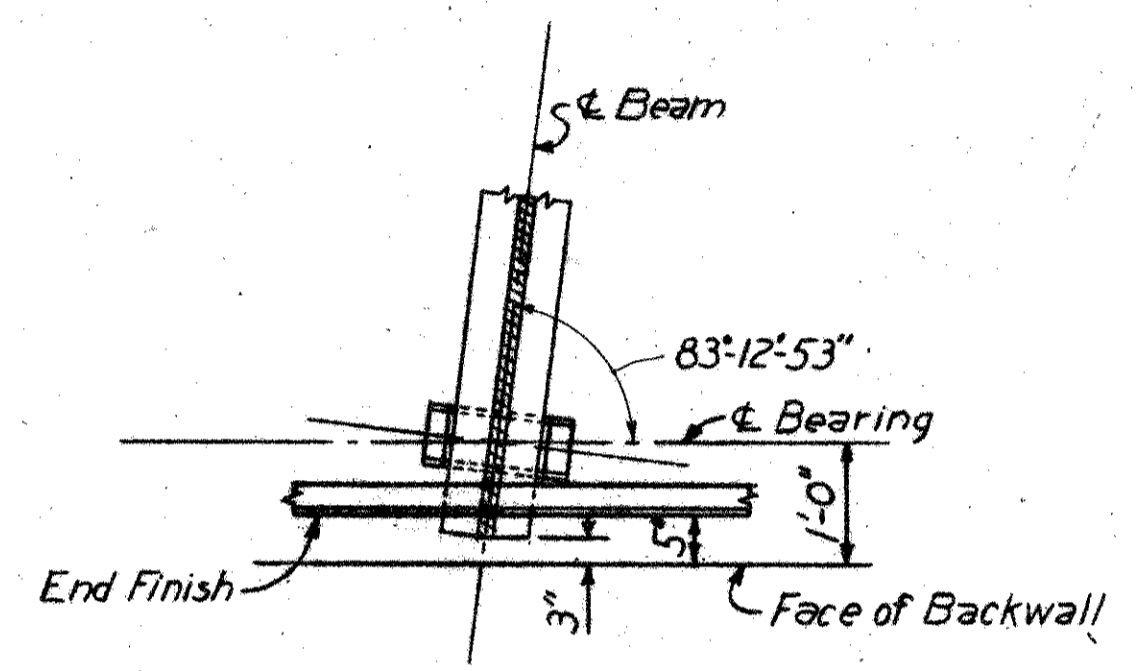
DRAWN H.F.C.	TRACED	CHECKED G.R.C.	REVIEWED G.A.	REVISED
DATE 7-30-57	DATE	DATE 10-29-57	DATE 10-29-57	DATE

944 SHEET 120

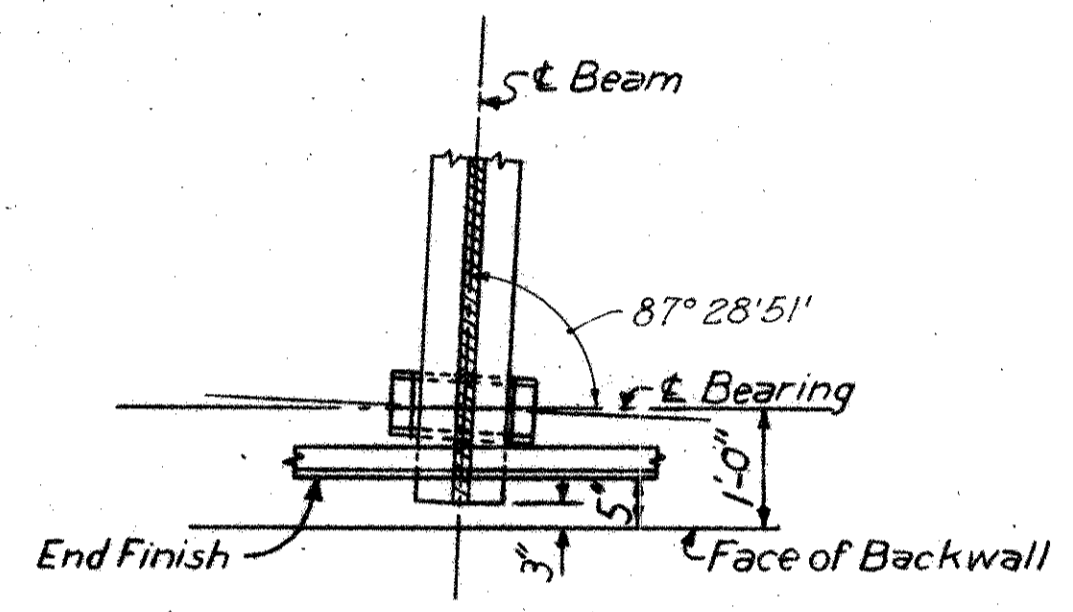
MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
MOT-25-15.88



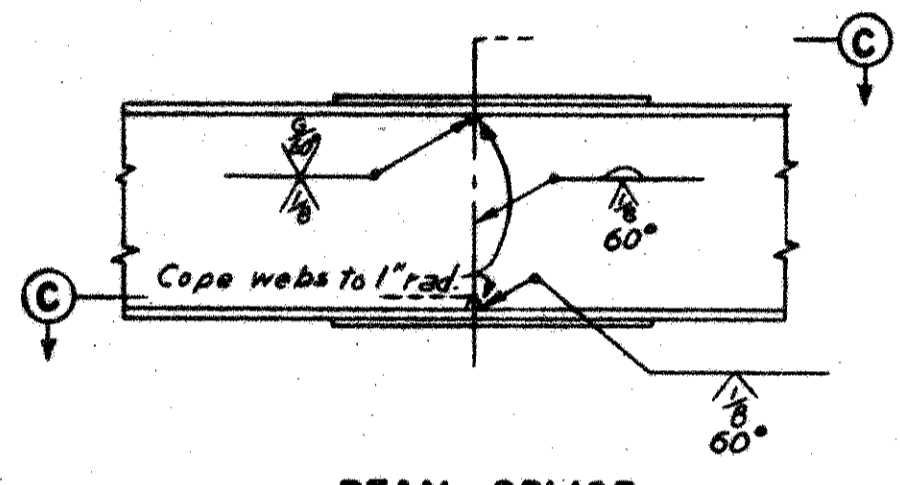
BEAM ELEVATION
Scale 1/8" = 1'-0"



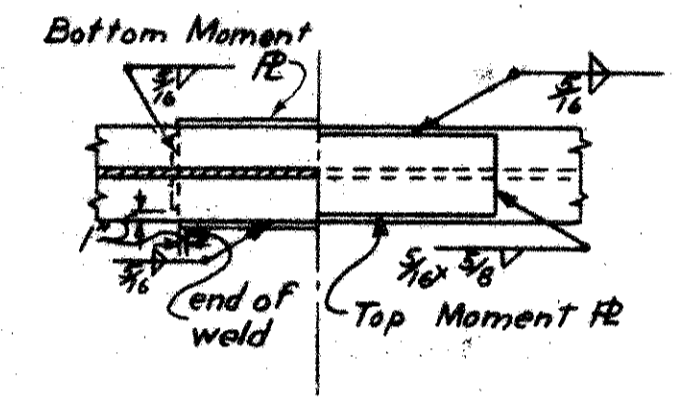
SECTION A-A
Scale 1/2" = 1'-0"



SECTION B-B
Scale 1/2" = 1'-0"



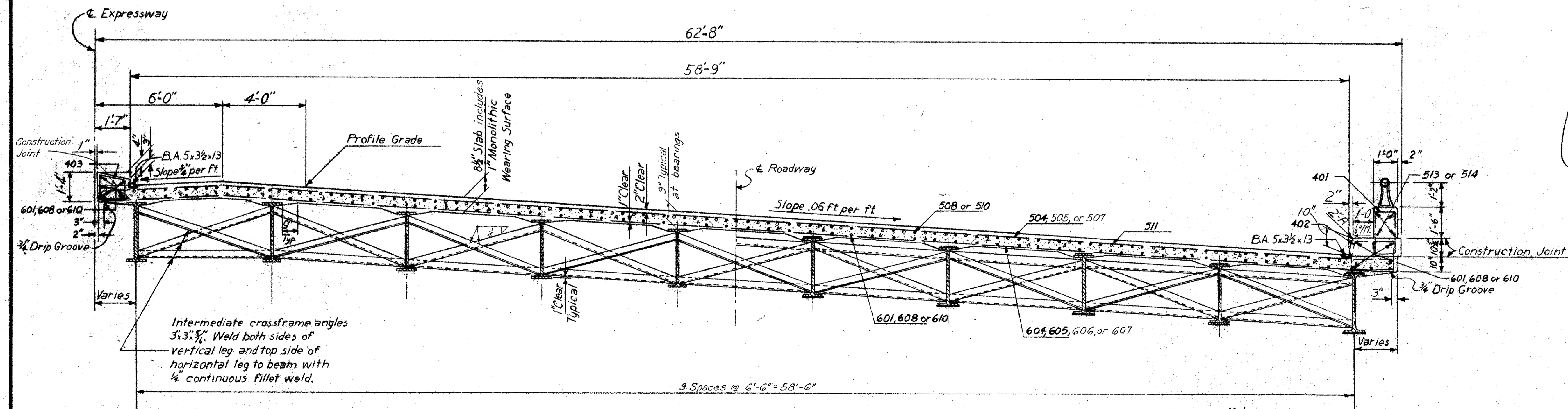
BEAM SPLICE
Scale 1/8" = 1'-0"



SECTION C-C
Scale 1/2" = 1'-0"

Notes:
For details of shoes see Common Details, sheet 105.

- Beam Splice Welding Procedure:**
1. Raise end of beam at Pier 1 1/16".
 2. Butt weld the beam flanges and web at Pier 2, using the following sequence: make one pass on each flange, then one on the web; repeat until welds are complete.
 3. Weld the bottom and top moment plates.
 4. Lower beam into place.
 5. For splices at Piers 1 and 3 repeat steps similar to 1 through 4 except by raising end of beam at South Abutment 3/8" and 5/16" at North Abutment.
 6. Weld crossframes into place.
 7. Crossframes marked with a ● at Pier 2 shall be welded in place while the beam is in the raised position.



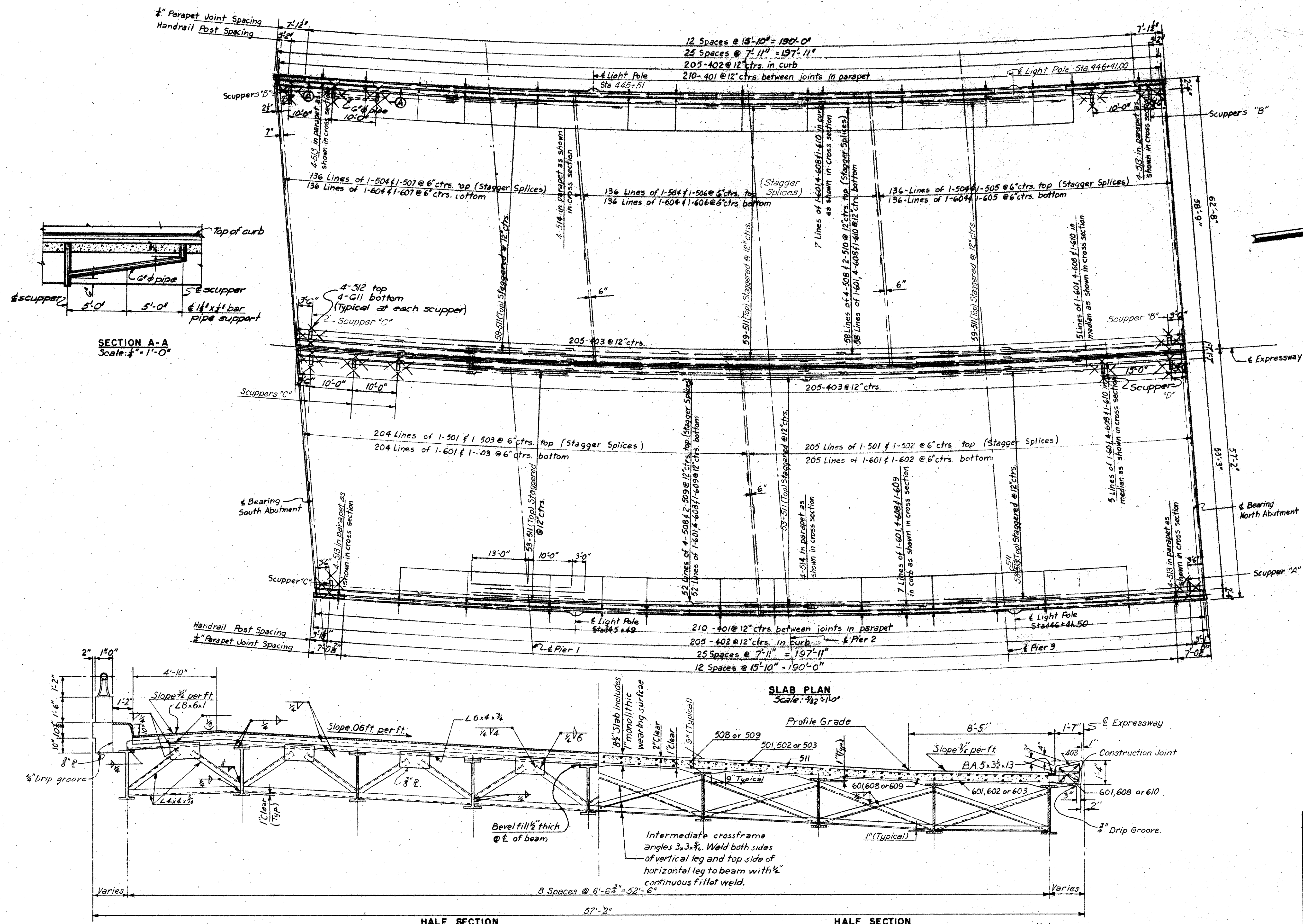
HALF SECTION
AT INTERMEDIATE CROSS-FRAME
Scale 3/8" = 1'-0"
(Southbound Lane)

HALF SECTION
AT PIER 2
Scale 3/8" = 1'-0"
(Southbound Lane)

Note:
Southbound Lane only shown.
For section through Northbound Lane and details of end finish see sheet 122.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF CONSULTING ENGINEERS KANSAS CITY CLEVELAND NEW YORK			
BEAM ELEVATIONS AND CROSS SECTIONS			
EXPRESSWAY OVER STANLEY AVENUE			
BR. NO MOT-25-1652	STA. 444+80.50		
SCALE: As Shown	446+87.62		
DAYTON EXPRESSWAY SYSTEM			
DAYTON, OHIO		MONTGOMERY COUNTY, OHIO	
DRAWN RMS	TRACED	CHECKED G.A.	REVIEWED
DATE 8/27/57	DATE	DATE 10-26-57	DATE
			REVISED
			944 SHEET 121

MONTGOMERY COUNTY
CITY OF DAYTON
DAYTON EXPRESSWAY SYSTEM
MOT-25-15.86



SECTION A-A
Scale: 1/4" = 1'-0"

SLAB PLAN
Scale: 3/32" = 1'-0"

HALF SECTION
AT ABUTMENTS
Scale: 3/8" = 1'-0"

HALF SECTION
AT INTERMEDIATE CROSS-FRAME
Scale: 3/8" = 1'-0"

Notes:
For reinforcement schedule see sheet 0.123.
For details of light supports and scuppers see sheet 104.
For slab pouring sequence see General Notes.

HOWARD, NEEDLES, TAMMEN & BERGENOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

SLAB PLAN AND CROSS SECTIONS
EXPRESSWAY OVER STANLEY AVENUE
BR. NO. MOT-25-1652 STA. 444+80.50
SCALE: As Shown. 446+87.62

DAYTON EXPRESSWAY SYSTEM
DAYTON, MONTGOMERY COUNTY, OHIO

DRAWN	TRACED	CHECKED	REVIEWED
DATE 8/26/57	DATE 10-26-57	DATE 10-26-57	DATE 1-28-59

944 SHEET 122

Note:
Section through East Roadway shown. For section through West Roadway see sheet 121.

