

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-390(9)

1
151

WAYNE COUNTY
WAY-3-9.94

SEE SHEET 2 FOR DETOUR MAP

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
WAY-3-9.94
WAYNE COUNTY
WOOSTER TOWNSHIP & CITY OF WOOSTER

F-390(9)

FEB 21 1964
GROUND PHOTOLAB

1959 SPECIFICATIONS
LIMITED ACCESS

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

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 12, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: E. L. Tolson
DATE 7-30-60 DIVISION DEPUTY DIRECTOR

APPROVED: Henry E. Nepper
DATE 3-28-61 DEPUTY DIRECTOR OF PLANNING & PROGRAMMING

APPROVED: D. H. Overman
DATE 12-8-1960 ENGINEER OF BRIDGES

APPROVED: W. J. ...
DATE 12-9-60 ENGINEER OF LOCATION & DESIGN

APPROVED: C. W. McLaughlin
DATE 12-9-60 DEPUTY DIRECTOR OF DESIGN & CONSTRUCTION

APPROVED: W. J. ...
DATE 3-21-61 DEPUTY DIRECTOR OF RIGHT-OF-WAY

APPROVED: W. J. Berry
DATE 3-28-61 FIRST ASSISTANT DIRECTOR

APPROVED: E. L. Tolson
DATE 3-28-61 DIRECTOR OF HIGHWAYS

FEB 21 1964
GROUND PHOTOLAB

*Sheets 136, 137, 138, 139, 140 & 142 revised 6-1-61.
Sheets 140 & 141 revised 6-28-61.
Sheets 136, 137 & 140 revised 8-22-61.*

*Revised participation in guard rail and fence as shown on sheets 2, 13 & 34.
REV. 7-18-61. R.E.G.*

LINE DATA		
	WORK	PROJECT
BEGIN	522+25	525+00
END	632+85.43	631+85.43
LENGTH	11,060.43 LIN. FT.	10,685.43 LIN. FT.
ADDITIONS-LOCAL ROADS	# 4,812.75 LIN. FT.	
NET LENGTH	15,873.18 LIN. FT. OR 3.006 MILES	10,685.43 LIN. FT. OR 2.024 MILES

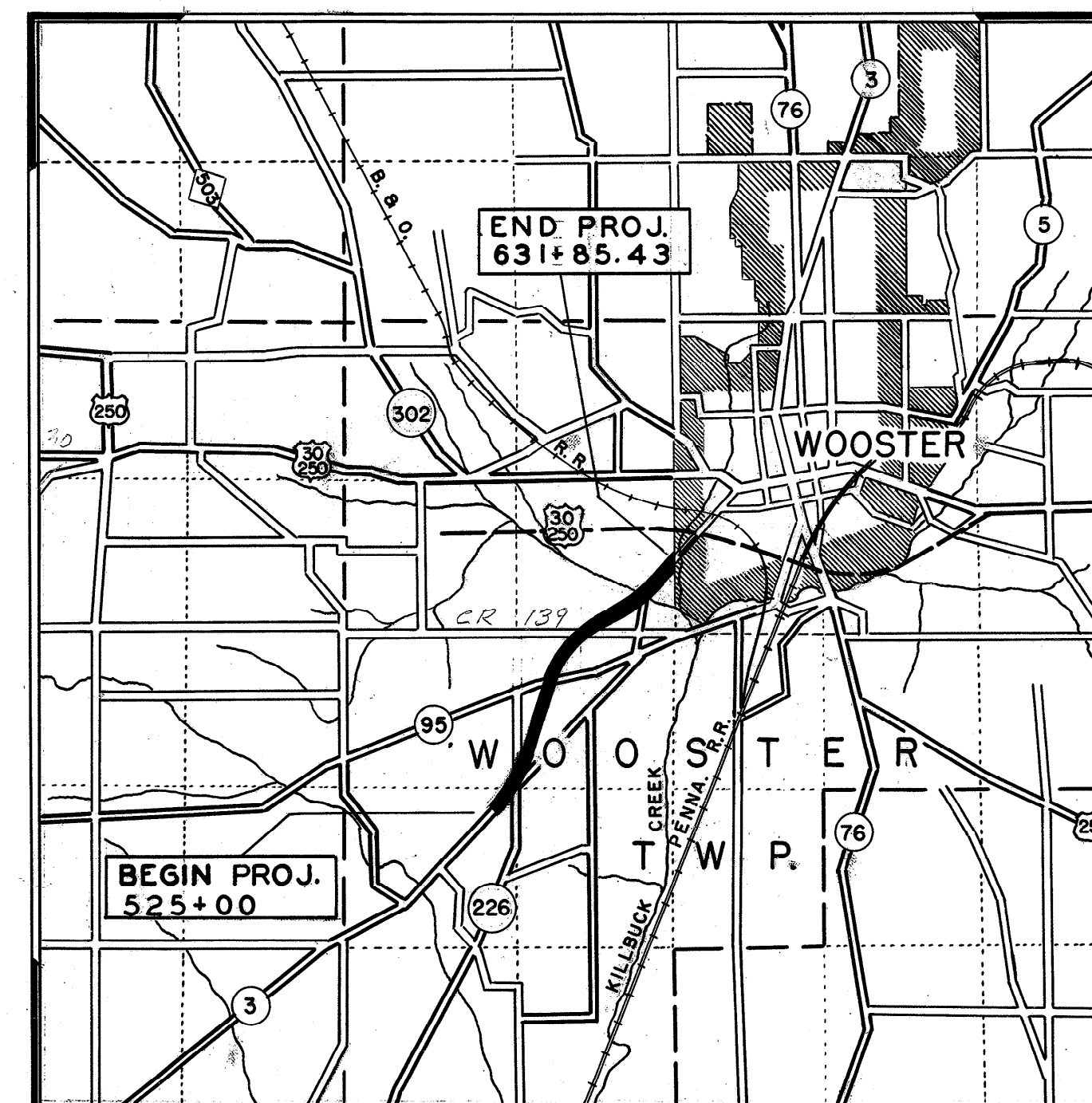
* SEE SHEET NO. 2

CONVENTIONAL SIGNS

TOWNSHIP LINE	-----
SECTION LINE	-----
CENTER LINE	-----
CORPORATION LINE	-----
FENCE LINE	x x x x
GUARD RAIL - EXIST.	o o o o
GUARD RAIL - PROPOSED	o o o o
RAILROAD	-----
ELEC. POWER POLES	o o o o
TELEPHONE POLES	o o o o
TREES OR STUMPS - EXIST.	o o o o

INDEX OF SHEETS

TITLE SHEET	1
SCHEMATIC PLAN	2
TYPICAL SECTIONS	3-10
GENERAL NOTES	11-12
GENERAL SUMMARY	13-14
CALCULATIONS	15-16
SUMMARY OF TABLES	17-18
SPECIAL CONST. DETAILS	19-22
PLAN & PROFILE	23-35
SUPERELEVATION TABLES	36-37
INTERSECTION DETAILS	38-42
CROSS SECTIONS	43-91
EXISTING STATE RT. 3 CONNECTION	92-99
STATE ROUTE 226 CONNECTION	100-108
STATE ROUTE 95	109-112
LOCAL ROADS	113-127
KILLBUCK CREEK CHANNEL SECTION	128
STRUCTURES 20' AND UNDER	129-131
APPROACH SLABS	132
STRUCTURES OVER 20' SPAN	133-142
R/W PLANS	143-151



DELIVERY POINT - WOOSTER, OHIO
AVERAGE HAUL FROM SIDING - 2.0 MILES

LOCATION MAP

SCALE IN MILES

PORTION TO BE IMPROVED
STATE ROADS
OTHER ROADS

SCALES

PLAN: HORIZONTAL
PROFILE: VERTICAL
CROSS SECTIONS

1" = 50'
1" = 50'
1" = 10'

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS							
DR-1	1-3-55	1-8 M.H. NO. 1	1-26-59	L-3	4-1-50	AS-1-54	12-1-54
G-7.07	6-1-56	1-12	7-1-54	L-3-A	4-1-50	AR-1-57	2-2-59
I-1, 2, 3, 4 & 5	4-24-58	1-14 G	1-22-52	R1-1	7-15-58	RB-1-55	2-2-59
I-8 C.B.-2-2A & B	3-2-59	1-15 NO. 1	5-21-59	S-27-P.C.-3	2-20-45	CSB-2-56	2-2-59
I-8 C.B.-2-3 & 2-4	1-26-59	1-15 NO. 2	8-17-60	S-27-P.C.-4	1-4-54	F-1	9-1-59
I-8 C.B.-NO. 6	1-26-59	1-15 NO. 2A	8-17-60	T-35	1-2-56	F-3	9-1-59
I-8 C.B.-NO. 7	3-11-60					S.P.-53	11-25-58
L-1	4-1-50	1-21-23	8-1-56				
		I-8 M.H. NO. 1-A	1-26-59				

SUPPLEMENTAL SPECIFICATIONS	
S-101	12-2-59
18	R. 6-15-59
S-307	8-23-60

PREPARED BY
SHAFFER, PARRETT AND ASSOCIATES
CONSULTING ENGINEERS
MANSFIELD OHIO WOOSTER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____
DIVISION ENGINEER _____ DATE _____

REV. 3-21-61

FILE No. 231-W
WAYNE COUNTY, WAY-3-9.94
DATE OF LETTING _____
CONTRACT No. _____

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

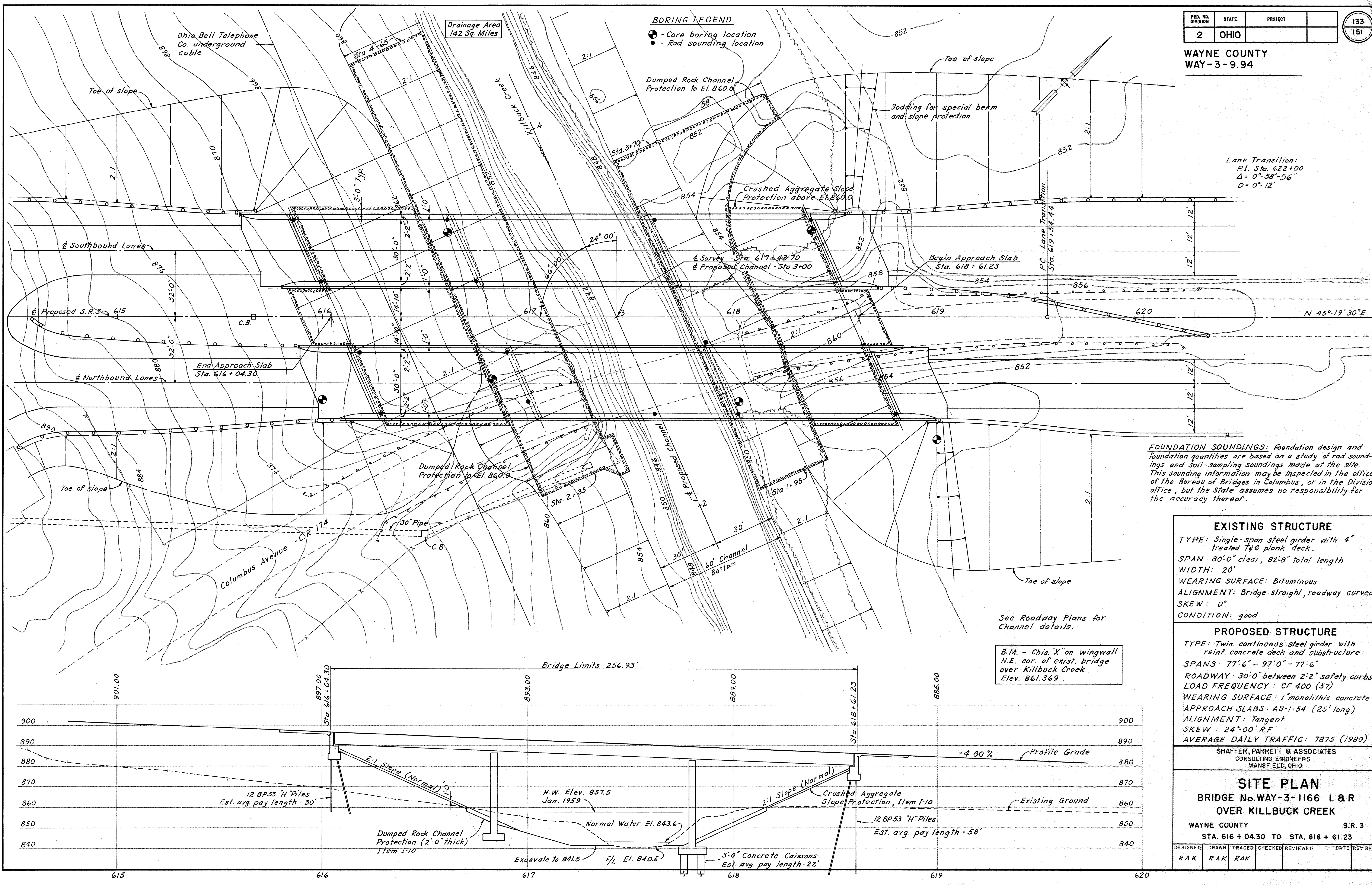
133
151

WAYNE COUNTY
WAY-3-9.94

Lane Transition:
P.I. Sta. 622+00
 $\Delta = 0^{\circ} 58' 56''$
 $D = 0^{\circ} 12'$

BORING LEGEND

- - Core boring location
- - Rod sounding location



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.

EXISTING STRUCTURE
 TYPE: Single-span steel girder with 4" treated 1x8 plank deck.
 SPAN: 80'-0" clear, 82'-8" total length
 WIDTH: 20'
 WEARING SURFACE: Bituminous
 ALIGNMENT: Bridge straight, roadway curved
 SKEW: 0°
 CONDITION: good

PROPOSED STRUCTURE
 TYPE: Twin continuous steel girder with reinf. concrete deck and substructure
 SPANS: 77'-6" - 97'-0" - 77'-6"
 ROADWAY: 30'-0" between 2'-2" safety curbs
 LOAD FREQUENCY: CF 400 (S7)
 WEARING SURFACE: 1" monolithic concrete
 APPROACH SLABS: AS-1-54 (25' long)
 ALIGNMENT: Tangent
 SKEW: 24°-00' RF
 AVERAGE DAILY TRAFFIC: 7875 (1980)

SHAFFER, PARRETT & ASSOCIATES
 CONSULTING ENGINEERS
 MANSFIELD, OHIO

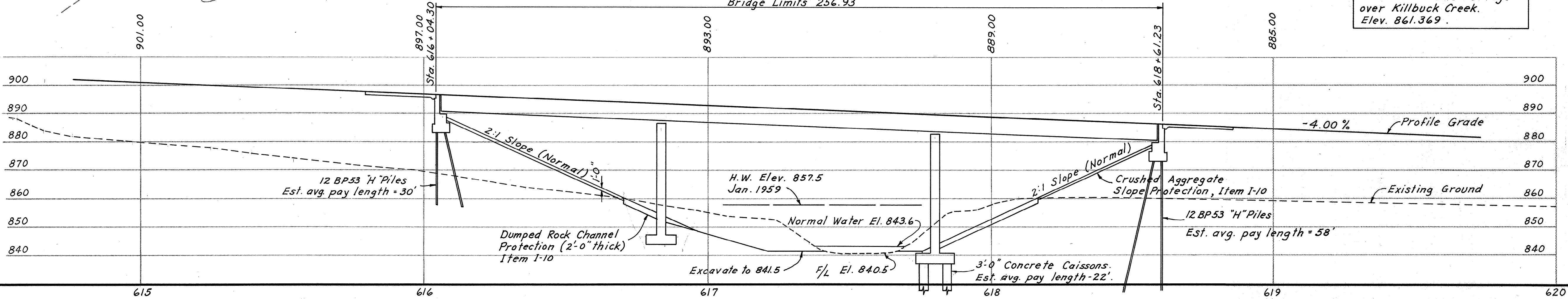
SITE PLAN
 BRIDGE No. WAY-3-1166 L & R
 OVER KILLBUCK CREEK
 WAYNE COUNTY S.R. 3
 STA. 616 + 04.30 TO STA. 618 + 61.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	RAK				

See Roadway Plans for Channel details.

B.M. - Chis. 'X' on wingwall N.E. cor. of exist. bridge over Killbuck Creek. Elev. 861.369.

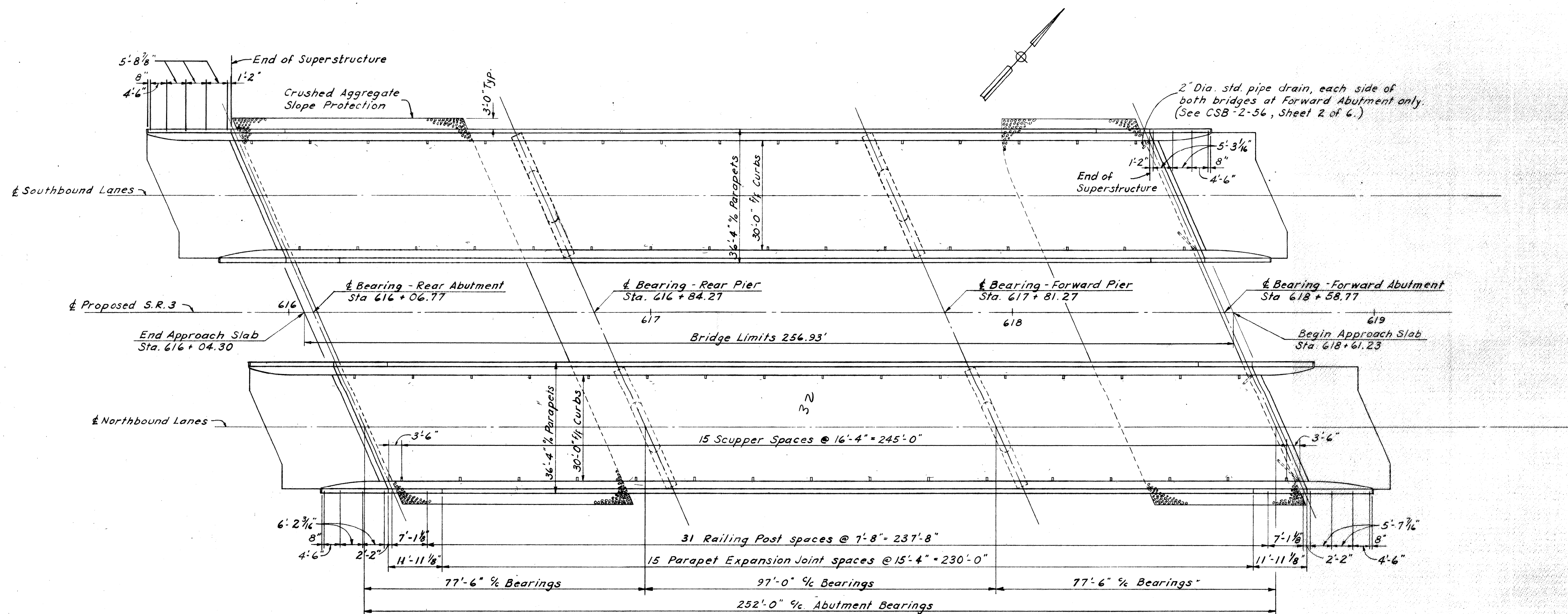
Bridge Limits 256.93'



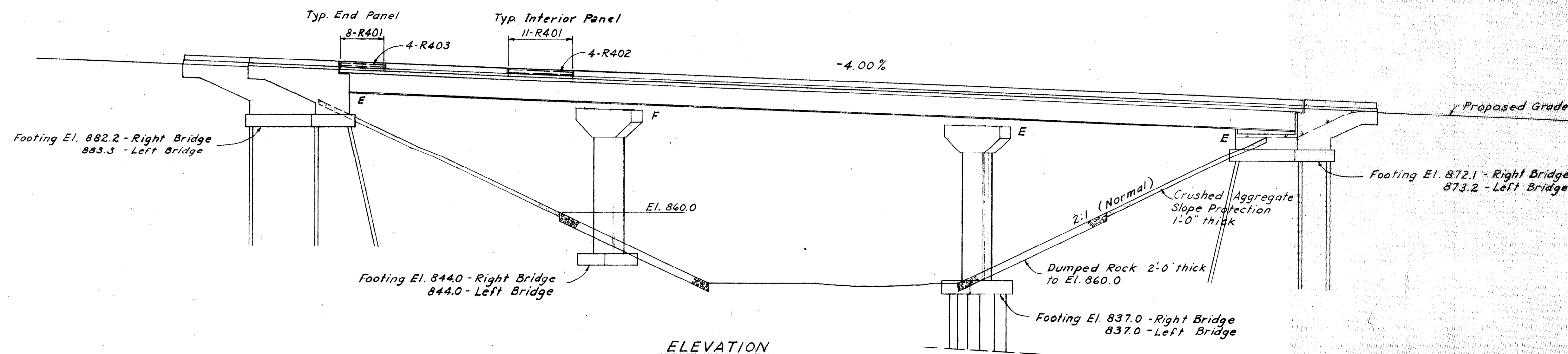
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

134
151

WAYNE COUNTY
WAY-3-9.94



PLAN



ELEVATION

NOTES:

PILES shall be driven to firm contact with bedrock using a pile hammer having an energy rating of not less than 15,000 ft. lbs. At the Contractor's option and expense, he may prebore through the embankments to obtain contact with bedrock. The design load for each pile is 30 tons.

GENERAL NOTES: See Sheet 135.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

GENERAL PLAN
BRIDGE No. WAY-3-1166 L & R
OVER KILLBUCK CREEK

WAYNE COUNTY S.R. 3
STA. 616 + 04.30 TO STA. 618 + 61.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	Bob	JMC.			

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

135
151

WAYNE COUNTY
WAY-3-9.94

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio Department of Highways, dated 9-1-57 with revision date 2-21-58.

REFERENCE shall be made to Standard Drawing AS-1-54 (revised 12-1-54), AR-1-57 (revised 2-2-59), RB-1-55 (revised 2-2-59), CSB-2-56, sheets 1, 2 and 3 of 6 (revised 2-2-59) and to Supplemental Specifications S-101 dated 12-2-59 and S-307 dated 8-23-60.

EXCAVATION QUANTITY includes the removal of fill material between the surface of the proposed embankment and the bottom of the footings.

DRILLED CAISSONS shall penetrate 7 feet into bedrock or to the elevation shown, whichever is lower.

REAR PIER FOOTINGS shall extend a minimum of 2 ft. 6 inches into firm rock or to the elevation shown, whichever is lower.

REMOVAL OF EXISTING STRUCTURE:

When no longer needed to maintain traffic, the existing structure shall be removed and shall become the property of the contractor.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop.

Class "B" welds are indicated on the plans as follows:

SHOP DRAWINGS for the girders shall include an overall layout with dimensions showing the relative unloaded vertical position of each girder or girder segment with respect to the others in the same girder line and with respect to a full length base or work line taking into account camber and the profile of the highway.

PILES shall be driven to firm contact with bedrock using a pile hammer having an energy rating of not less than 15,000 foot pounds. The design load for each pile is 30 tons.

If preboring is used, the holes shall be back-filled with material meeting the requirements of Sec. I-22.

PROCEDURE: The rock benching in the vicinity of the rear abutments, as shown on Sheet 21 and the excavation of unsuitable material in the vicinity of the forward abutments, as shown on Sheet 22, shall be completed and the embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade for a distance of 200 feet back of the abutments, after which excavation shall be made for the abutments and for the piers.

MACHINE FINISH: The top of the bridge deck slabs shall be machine finished in accordance with the Proposal Note "Machine Finishing of Bridge Deck Slabs."

STEEL: See Proposal regarding A-373 Steel.

SHOP ASSEMBLY: At least three adjacent girder segments shall be assembled in the shop in their correct unloaded positions as shown on the shop drawing layout required in the above note, so that the faced joints for welding the segments together may be checked for proper fit-up.

CONCRETE for superstructure, abutment parapets and caissons, shall be Class "C." Concrete for pier footings, caps and stems and concrete for abutments shall be Class "E."

PARAPETS: R402 thru R407 reinforcing bars and concrete above the parapet construction joint in both the superstructure and abutments shall be included in the price per lineal foot of railing for payment.

BRIDGE SEATS: Special care must be taken in placing bars in the bridge seats of the Rear Piers so that they will not interfere with the drilling of holes for anchor bolts.

POROUS BACKFILL 2'-0" thick shall extend upward to the subgrade elevation and for the full length of the abutment.

CRUSHED AGGREGATE SLOPE PROTECTION shall be provided under the structure at all abutments.

This material shall be 1'-0" thick and shall extend from the face of the abutment down to Elev. 860.0 and transversely to 3'-0" outside the exterior faces of the superstructure.

DUMPED ROCK CHANNEL PROTECTION shall be provided under the structure, shall extend from Elev. 860.0 down to Elev. 841.5, shall be 2'-0" thick and shall be located as shown on the Site Plan.

BACKWALL concrete above bridge seat construction joint shall not be placed until after the steel work is erected, but before placing the deck slab.

SPECIAL ITEM - DRILLED CAISSONS.

Description: This item shall consist of furnishing and installing caissons of the kind and size called for on the Plans and in the following Specifications. Caissons shall be installed in accordance with these Specifications and in the location and manner and to the elevation shown on the Plans or as directed by the Director. It shall be the Contractor's responsibility to determine the proper lengths of shells or casings and caisson materials to be brought to the site and this responsibility shall not be considered in any way affected if the approximate estimated pay lengths shown on the Plans are different from that found at the site.

Materials. The materials for concrete shall be the same as for "Item 5-1 Concrete for Structures." Concrete shall be Class "C." Reinforcing steel shall meet the requirements of Sec. M-7.1 and the vertical bars shall be deformed. Metal shells or casings shall be water-tight and shall be of sufficient strength to withstand earth pressure during installation and before being filled with concrete. Weld metal for splices shall be in accordance with Sec. M-7.16.

Metal Shells or Casings. Caissons shall be of a type using a metal shell or casing which may be left in place, or withdrawn, as the concrete is placed. If splices are required the Contractor shall make adequate preparation so as to reduce to a minimum the interruption of casing installation while the splice is being made. Welds shall be made at least two feet above ground.

Installation. The hole for the caisson shall be drilled through the overlying soil and into solid rock to the elevations specified on the Plans. When the proper depth has been reached, the hole shall be cleaned, dewatered, and inspected by the Engineer.

Upon his approval, reinforcement may be then placed and concrete poured up to the elevation shown on the Plans.

Installation-(Cont'd) The casing may be withdrawn during the placing of the concrete. In all cases, the concrete mix, after pouring, shall fill completely the excavated space to the top of the caisson. The tops of the shells or casings shall be completely covered until the concrete is placed. Any accumulation of water or other foreign matter in the shell or casing shall be removed before placing the concrete.

Defective Caissons. A caisson shall be removed and replaced at no additional cost to the State if it is injured, or if its location differs from the specified location by more than one inch at the top.

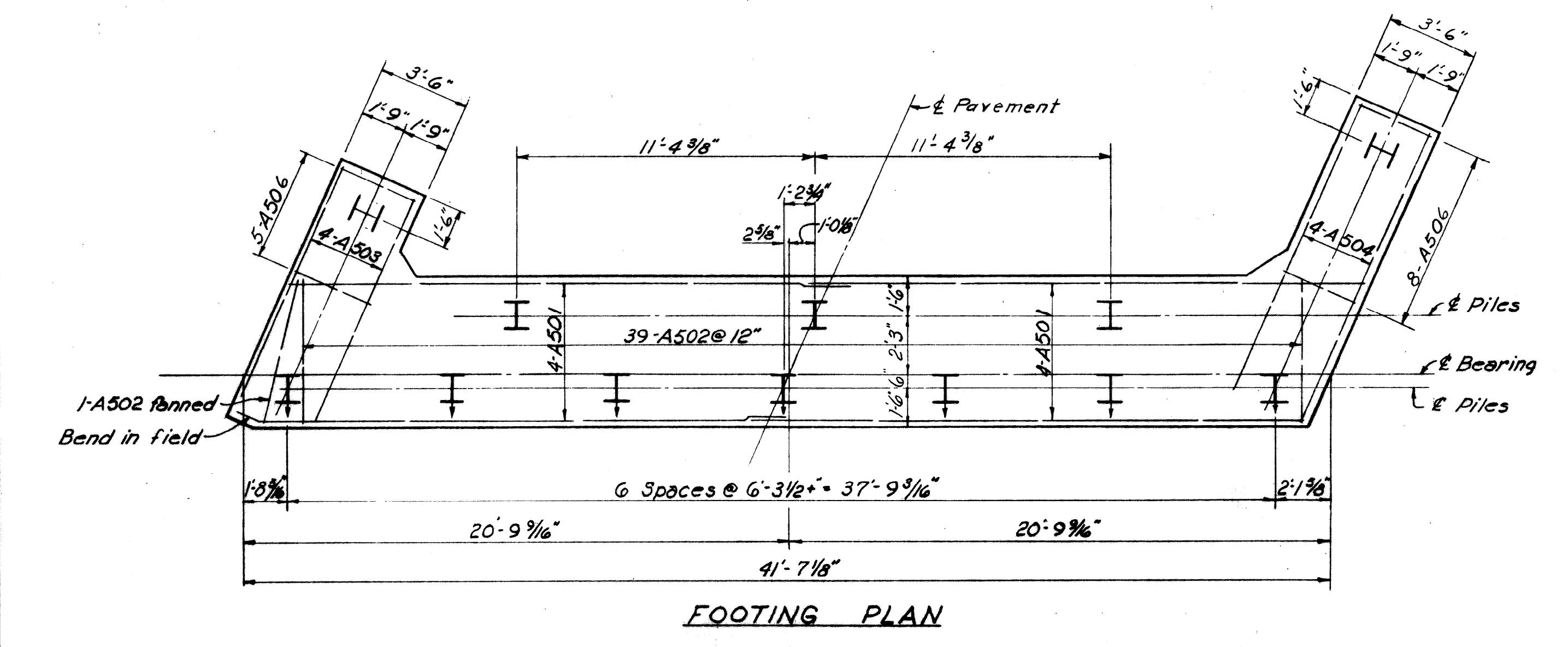
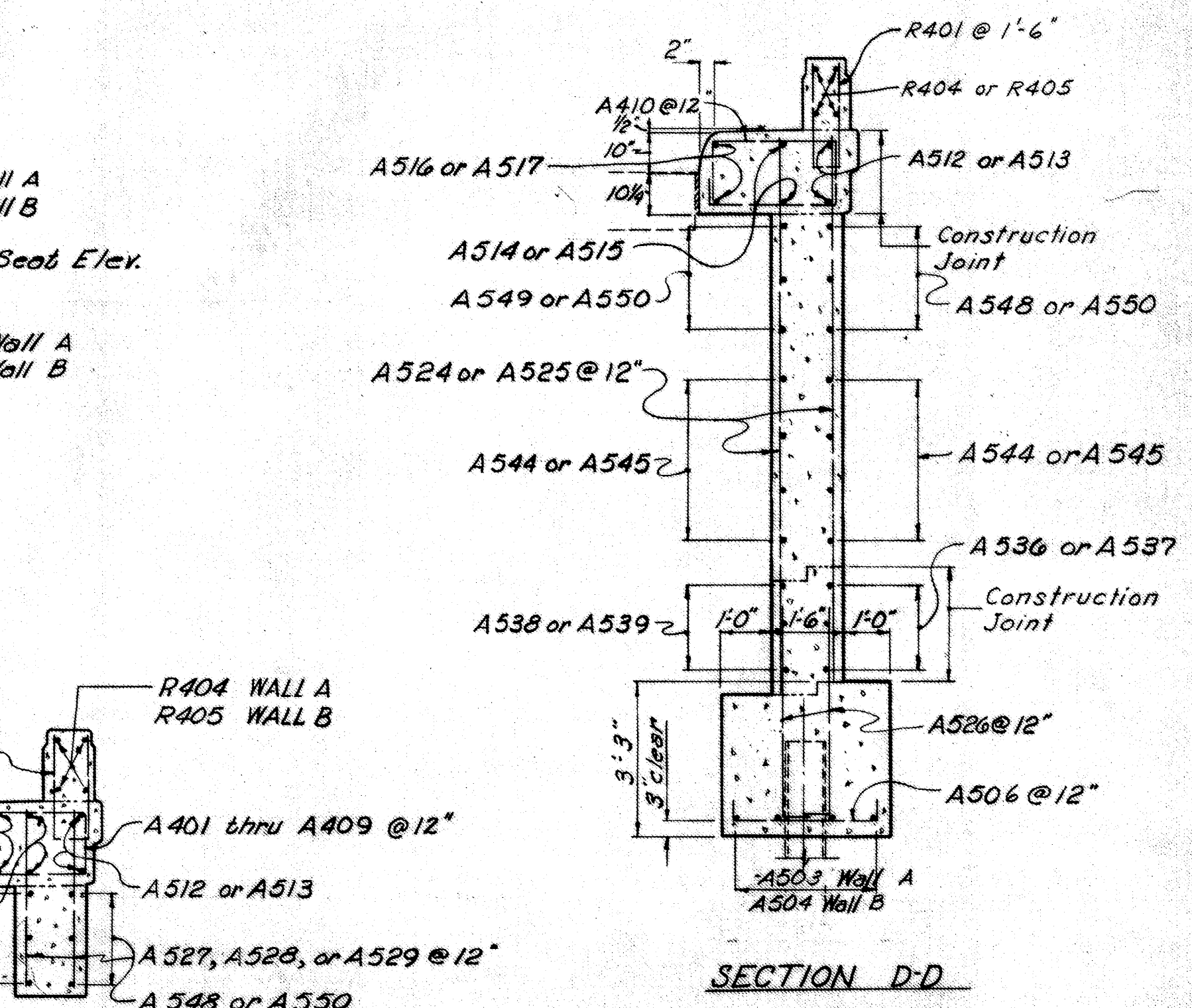
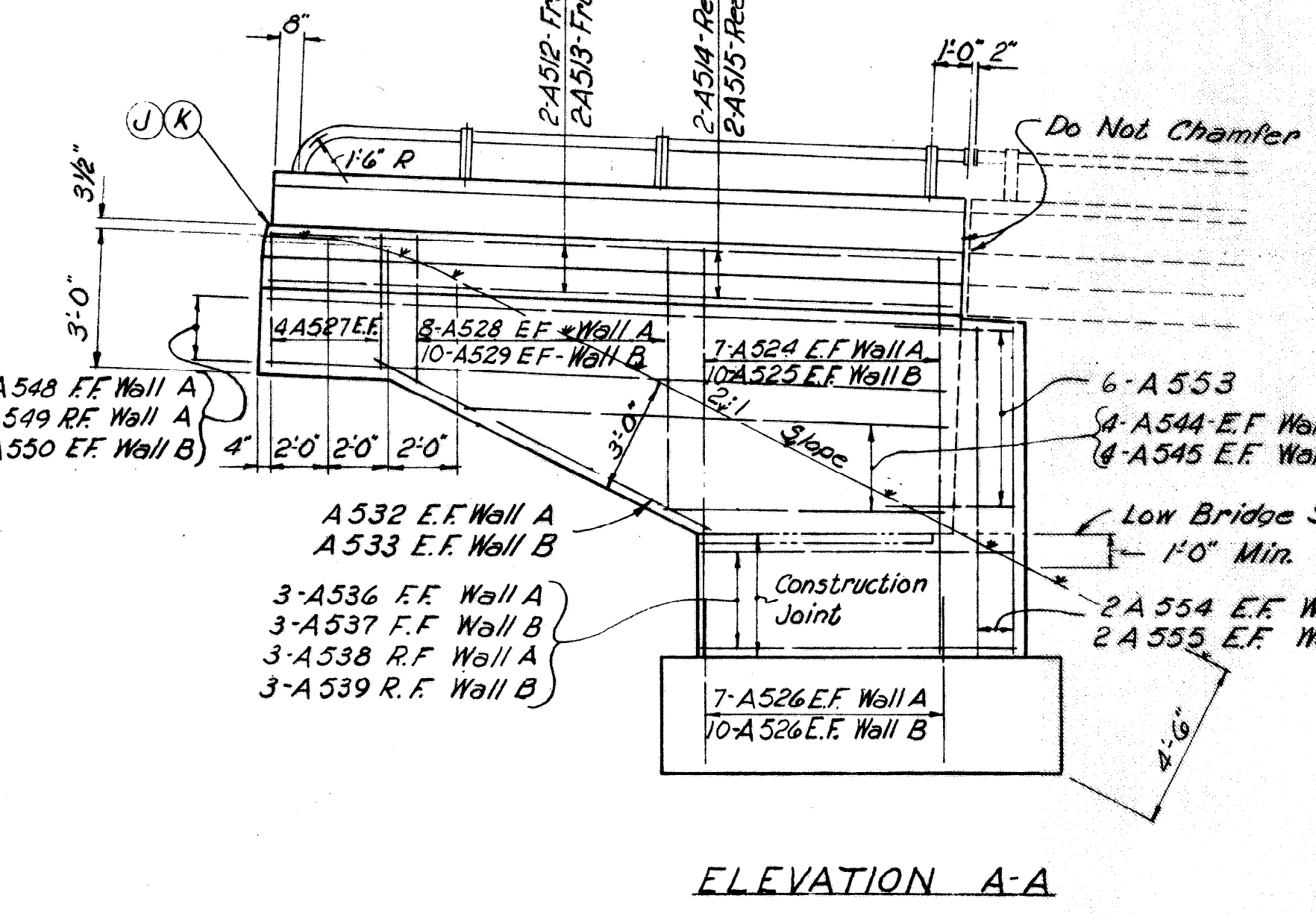
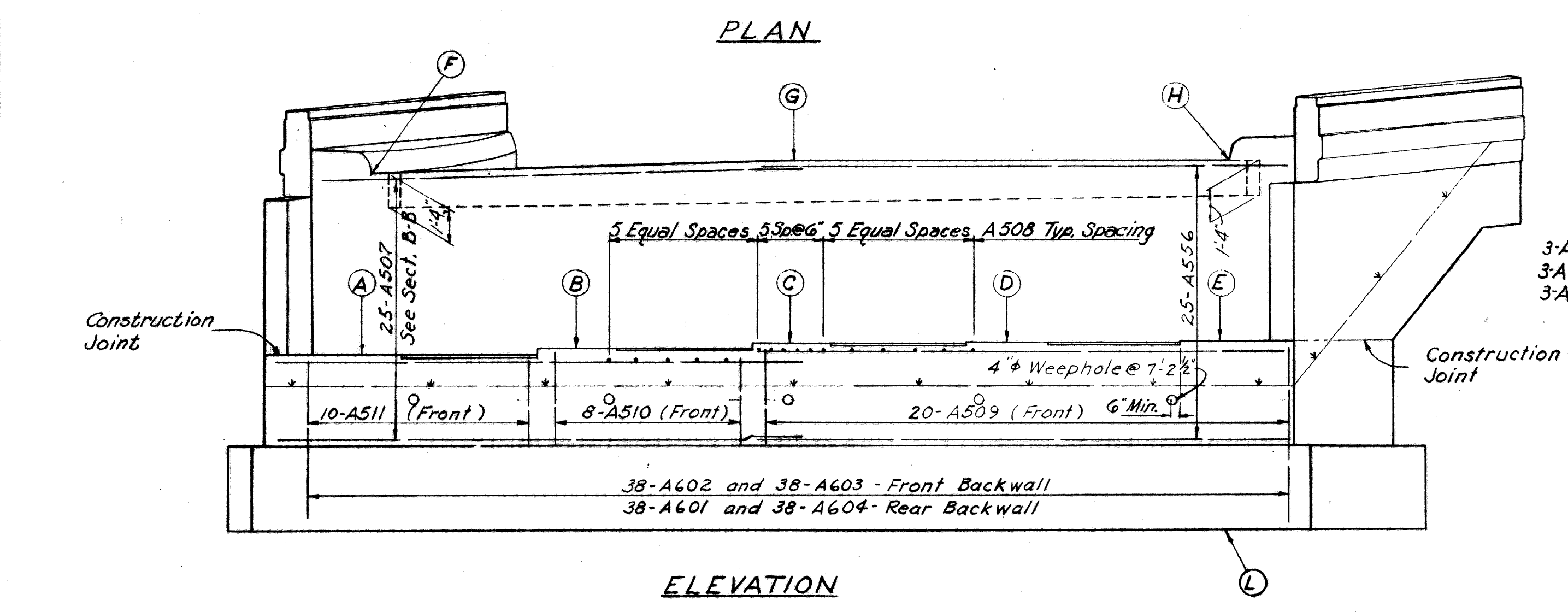
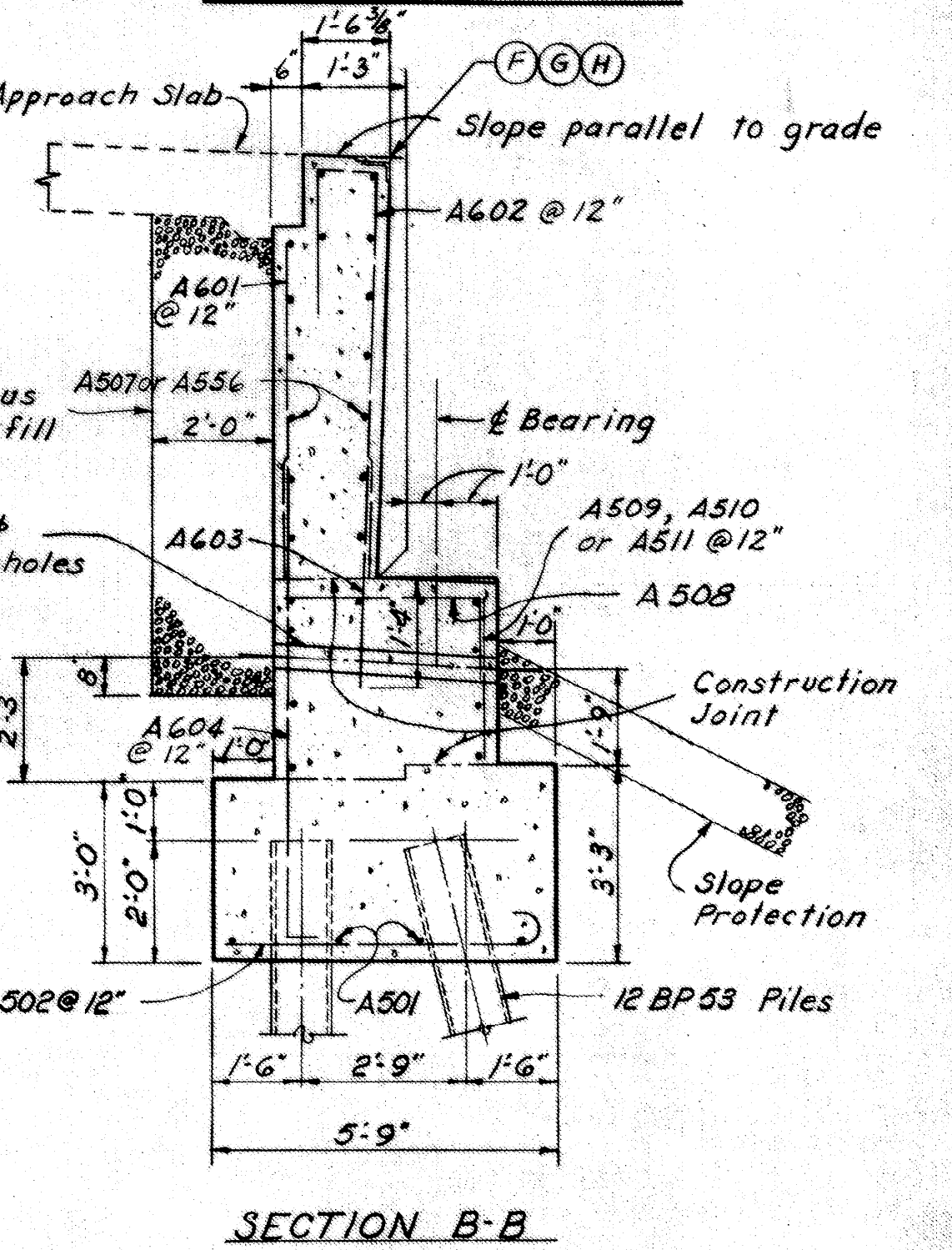
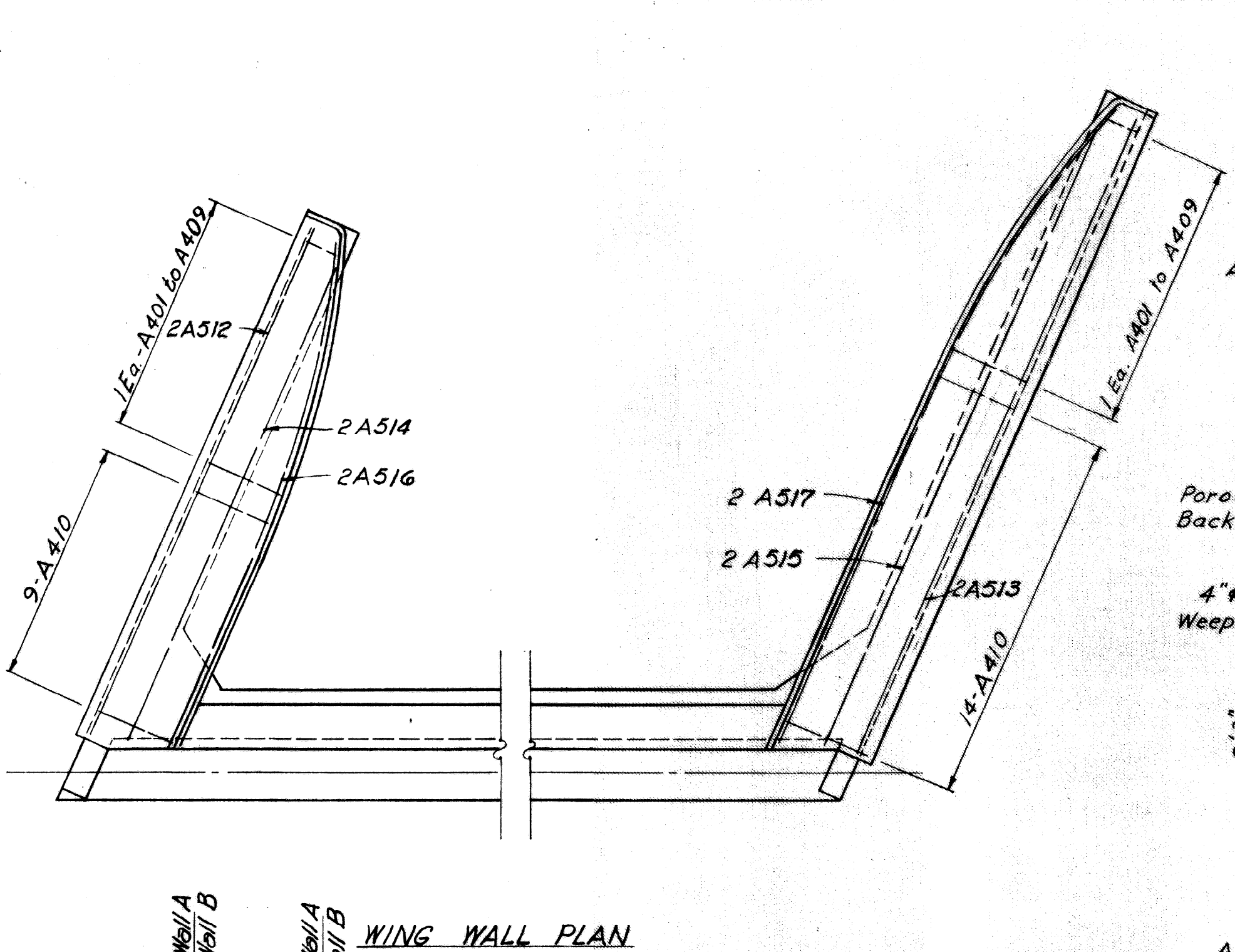
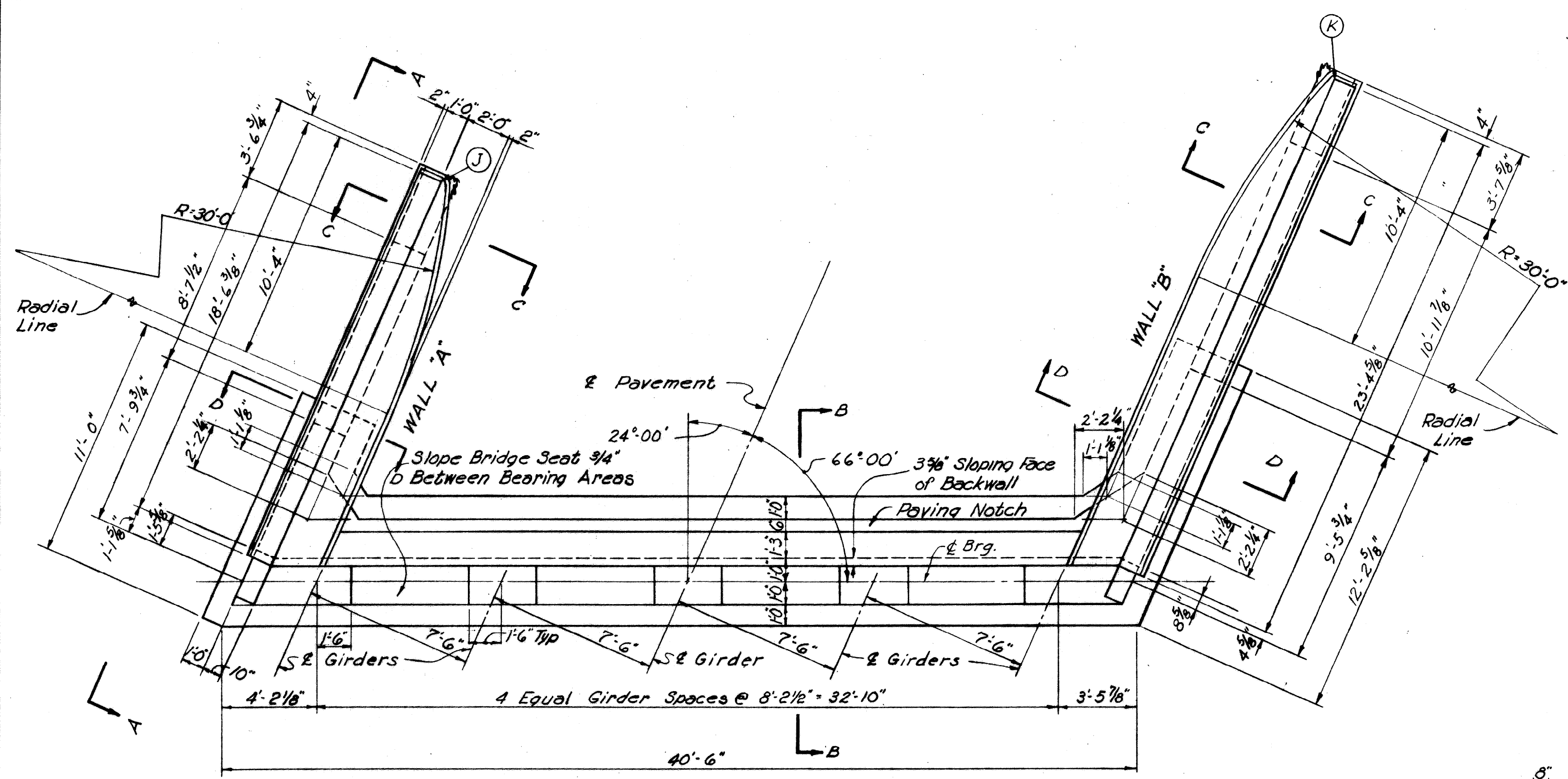
The caissons shall be installed straight and shall not be out of plumb more than two percent. If a caisson is out of plumb more than this, the design of the caisson shall be modified accordingly.

Method of Measurement. The length of each caisson to be paid for shall be the completed and accepted length, measured along the axis of the caisson from the bottom of the drilled hole to the underside of the footing. During the installation, no jettling to aid in the penetration shall be permitted.

Basis of Payment. The quantity of caissons, measured as described above, shall be paid for at the contract unit price per linear foot bid under "Special Item - Drilled Caissons," complete in place, which price and payment shall constitute full compensation for furnishing all materials, labor and work, the use of tools and equipment and all incidentals necessary to complete this item. If reinforcing steel is required to project from within the caisson to a point above the bottom of the footing, it shall be considered as an incidental which shall be paid for in the price per foot of caissons.

SHAFFER, PARRETT AND ASSOCIATES Consulting Engineers MANSFIELD, OHIO.						
GENERAL NOTES						
BRIDGE No. WAY-3-1166 L & R OVER KILLBUCK CREEK						
WAYNE COUNTY S.R. 3 STA. 616 + 04.30 TO STA. 618 + 61.23						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED

WAYNE COUNTY
WAY-3-9.94



NOTES:

CONCRETE: All abutment concrete shall be Class "E" except parapet which shall be Class "C".

RAILING: See AR-1-57 and Sheet 2. Tubing on abutment wingwalls shall be continuous.

⊥ Indicates vertical piles

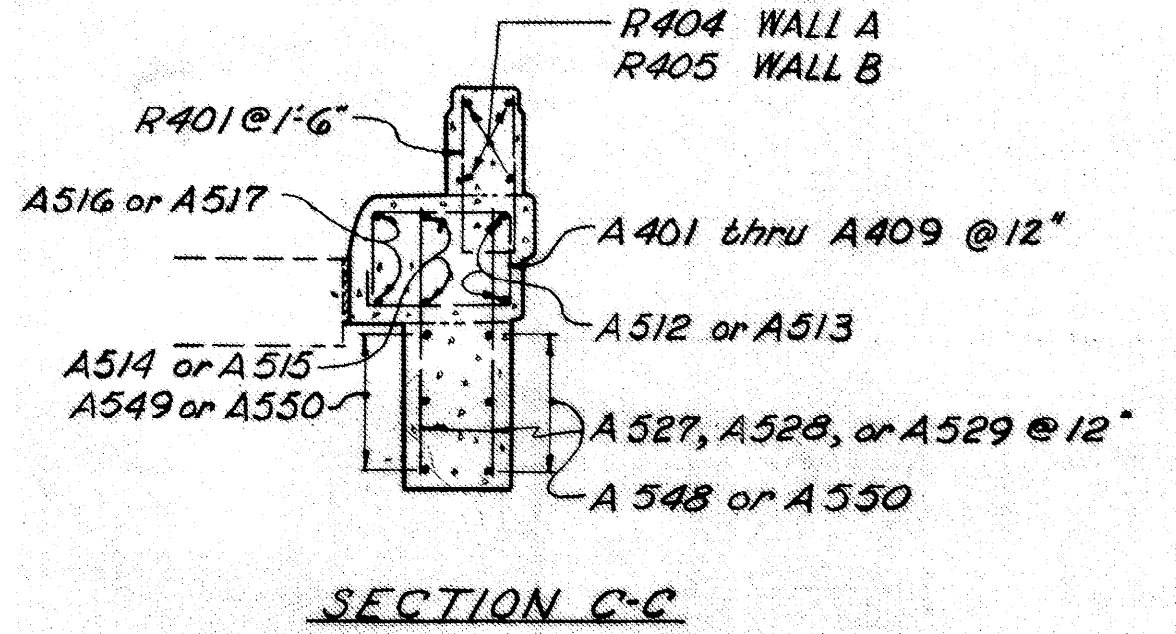
⊥ Indicates battered piles 1:4

FF - Front Face

RF - Rear Face

EF - Each Face

GENERAL NOTES: See Sheet 135.



LOCATION	A	B	C	D	E	F	G	H	J	K	L
Right Bridge	888.741	888.992	889.243	889.259	889.276	896.702	896.204	896.237	897.284	897.832	882.2
Left Bridge	889.851	890.132	890.353	890.399	890.416	896.842	897.344	897.377	898.424	899.072	883.3

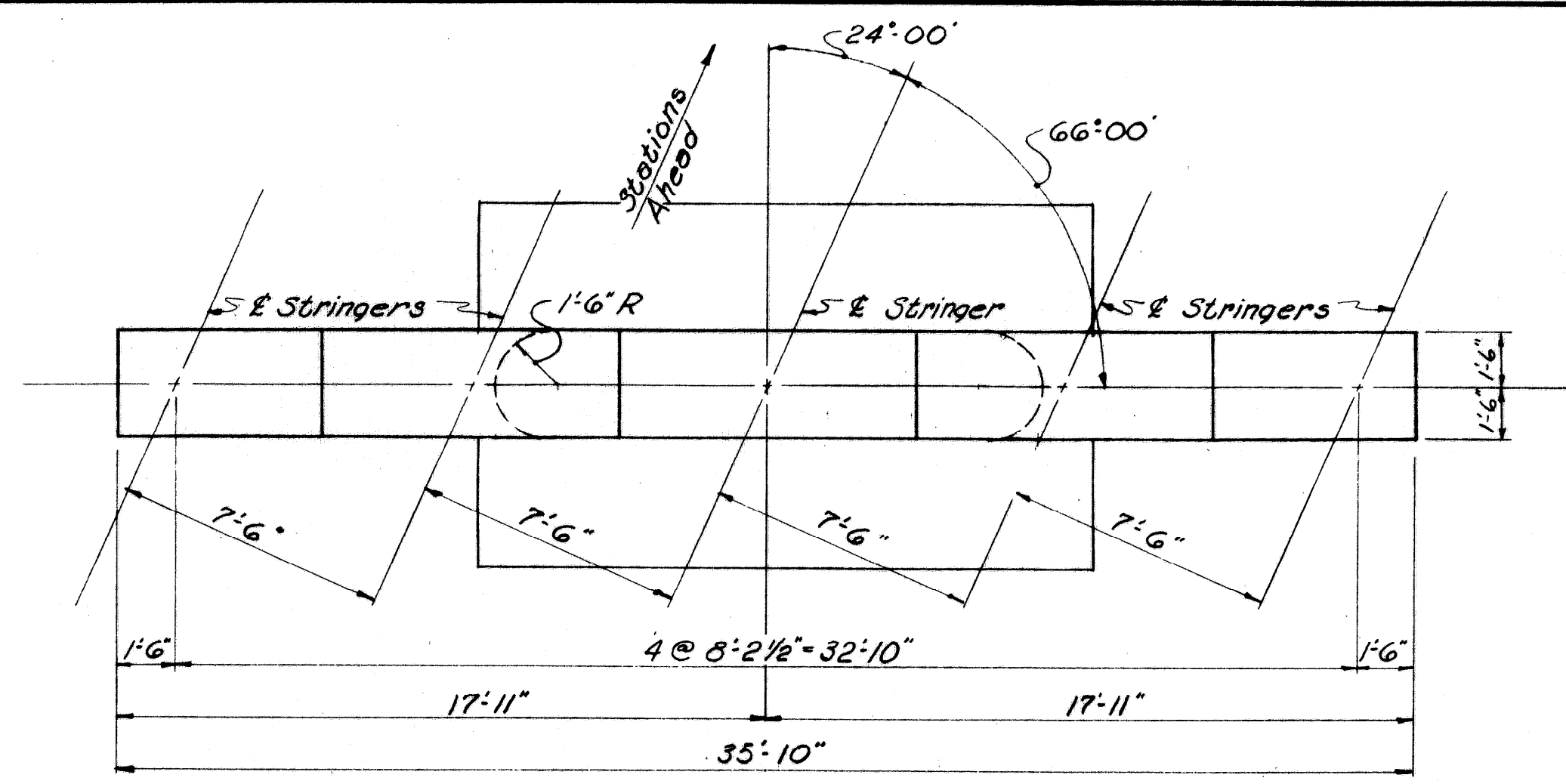
SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

REAR ABUTMENTS
BRIDGE No. WAY-3-1166 L & R
OVER KILLBUCK CREEK

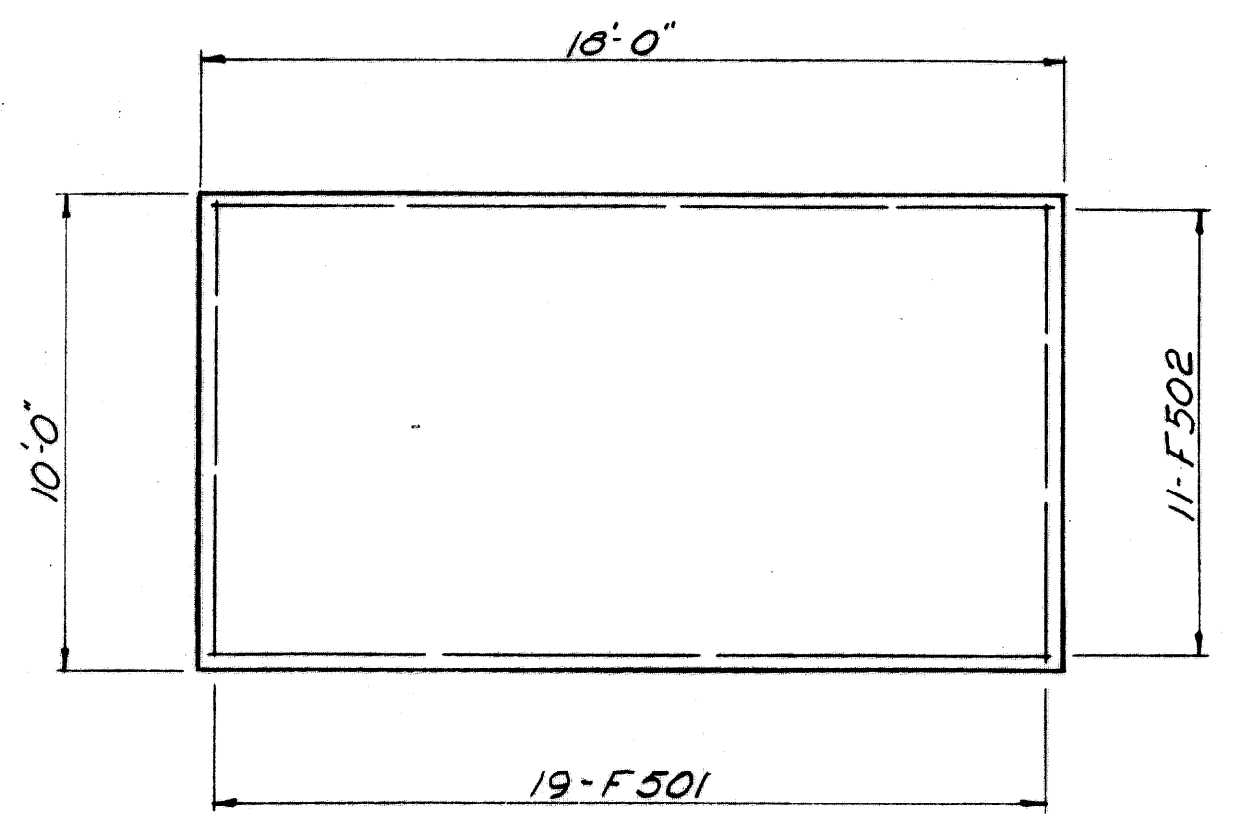
WAYNE COUNTY S.R. 3
STA. 616 + 04.30 TO STA. 618 + 61.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.W.C.	J.W.C.	jack	RAK.		6-1-01	8-22-01

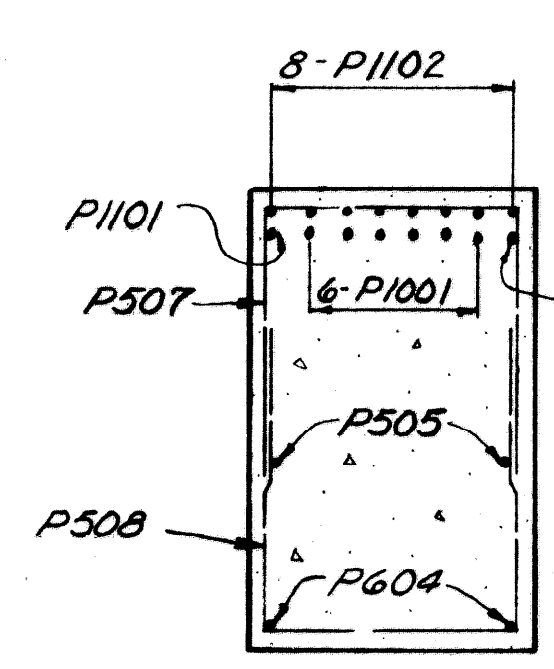
WAYNE COUNTY
WAY-3-9.94



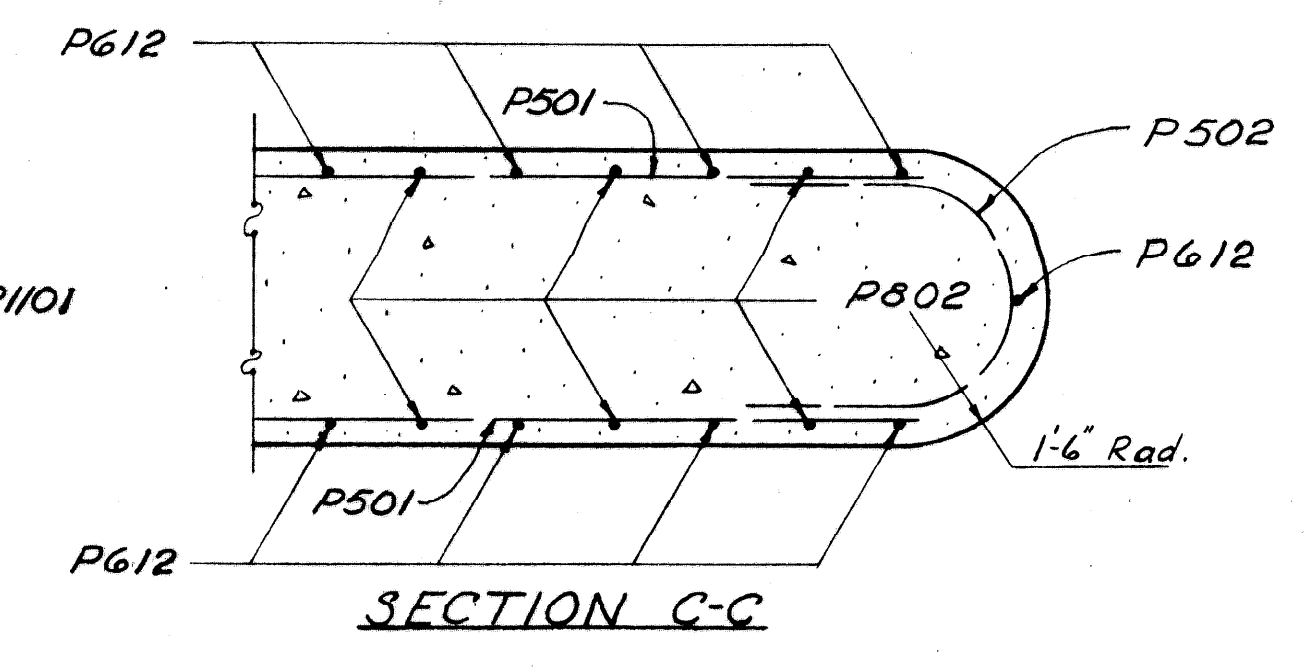
PLAN



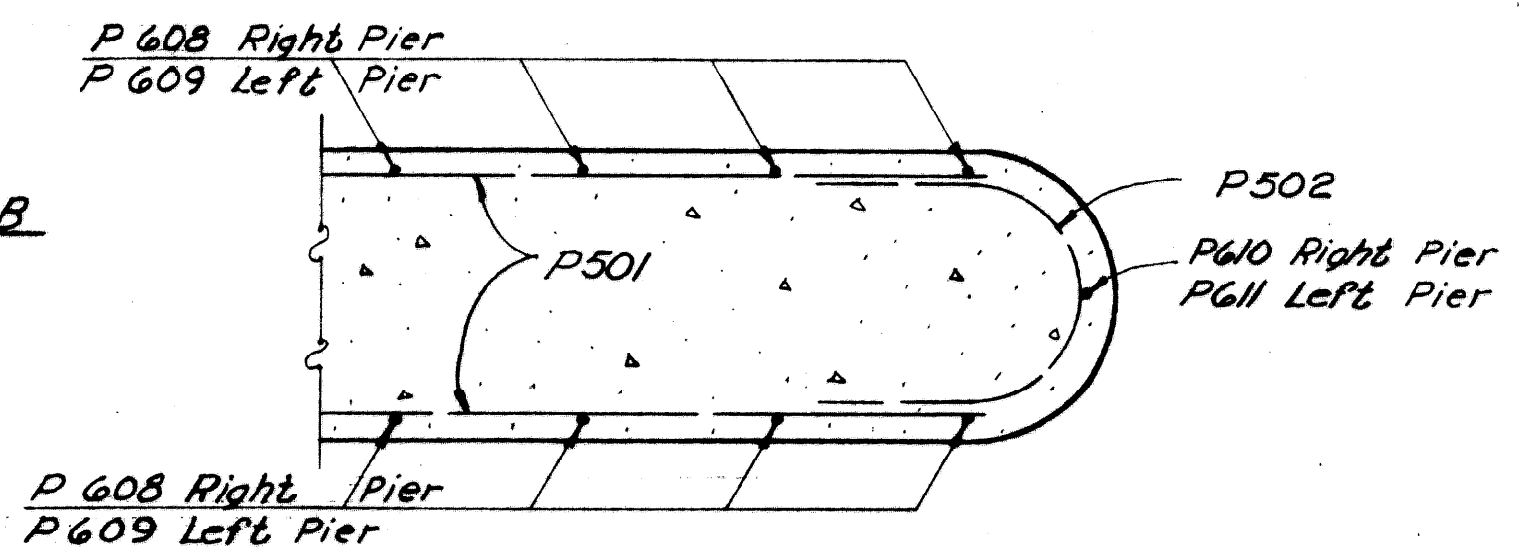
FOOTING PLAN



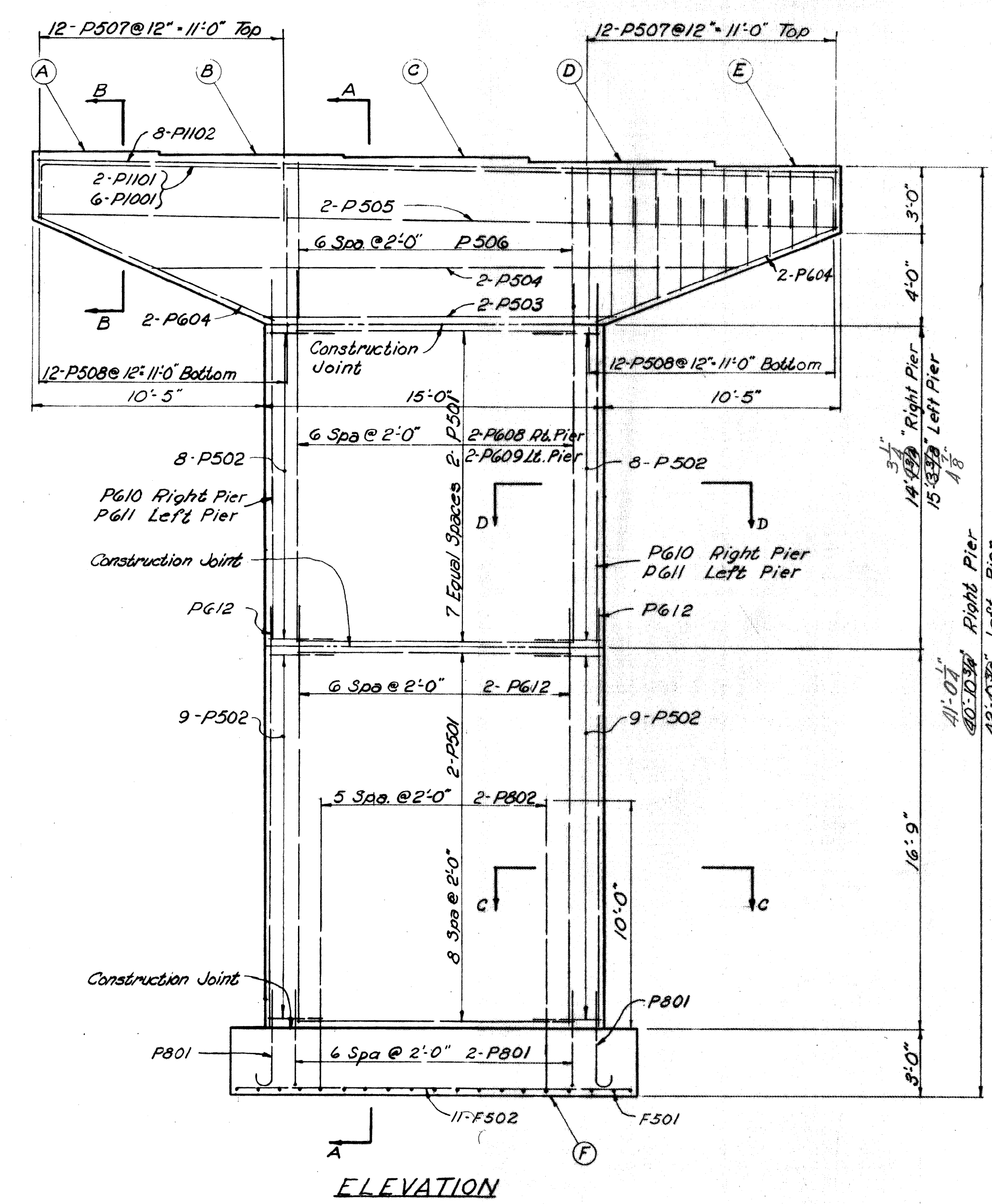
SECTION B-B



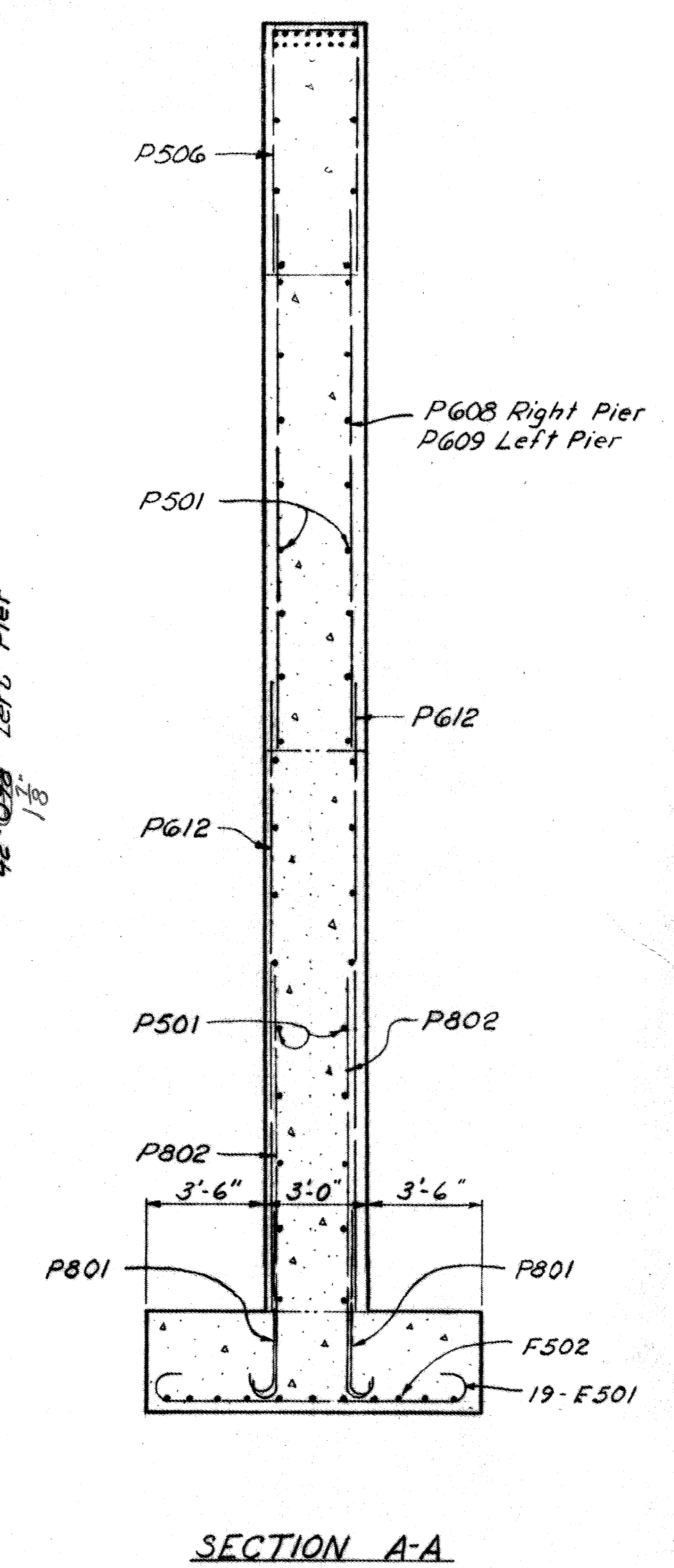
SECTION C-C



SECTION D-D



ELEVATION



SECTION A-A

TABLE OF ELEVATIONS						
	(A) ₅₅₁	(B) ₅₄₃	(C) ₅₁₈	(D) ₂₆₇	(E) ₁₅₆	(F)
Right Pier	885.63	885.63	885.63	885.63	885.63	844.0
Left Pier	886.63	886.63	886.63	886.63	886.63	844.0

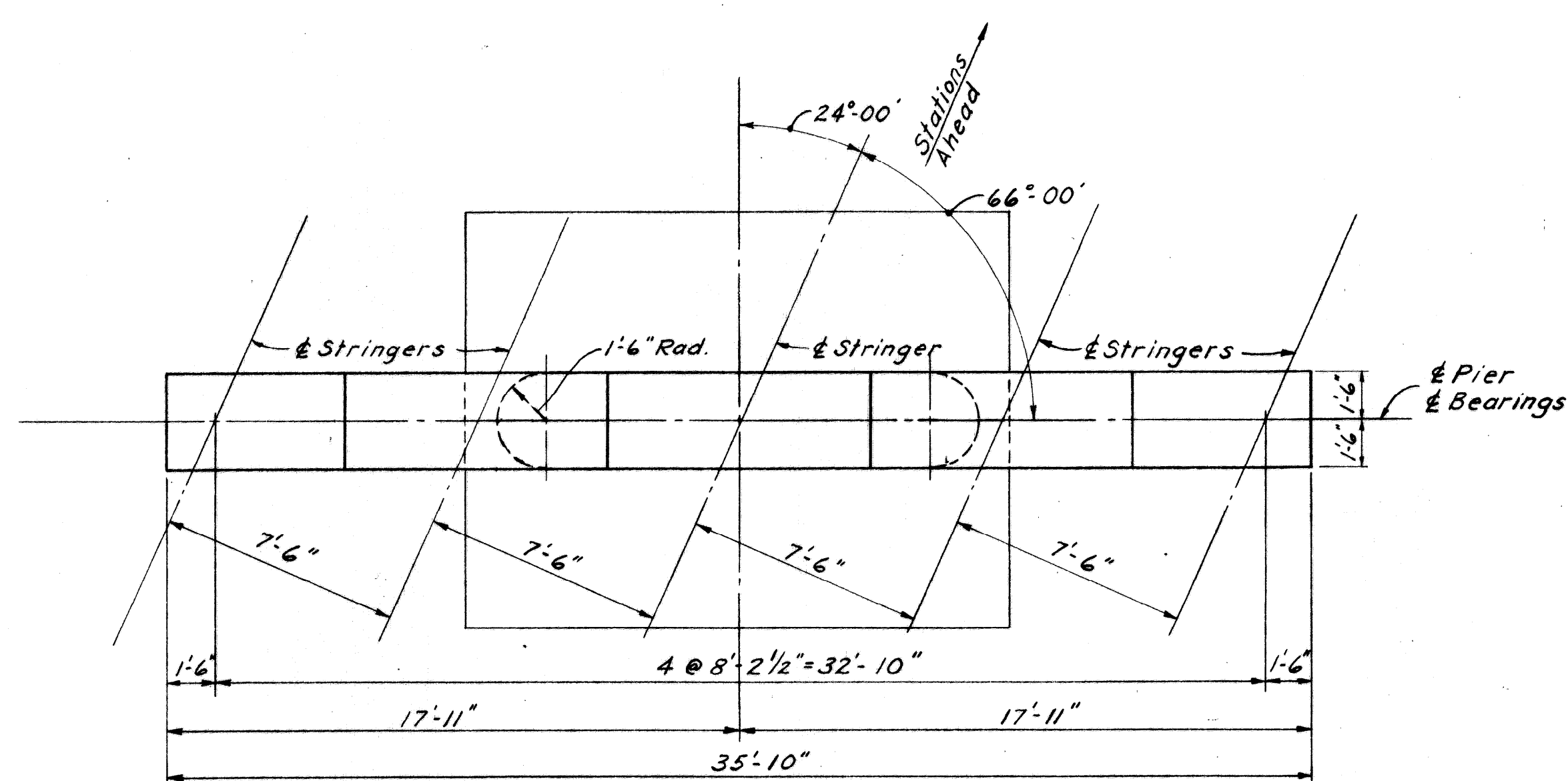
NOTES:
CONCRETE: All concrete for footings, caps and stems shall be Class 'E'.
FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure of 3 tons per square foot.
GENERAL NOTES: See Sheet 135.

SHAFFER, PARRETT AND ASSOCIATES
 Consulting Engineers
 MANSFIELD, OHIO.

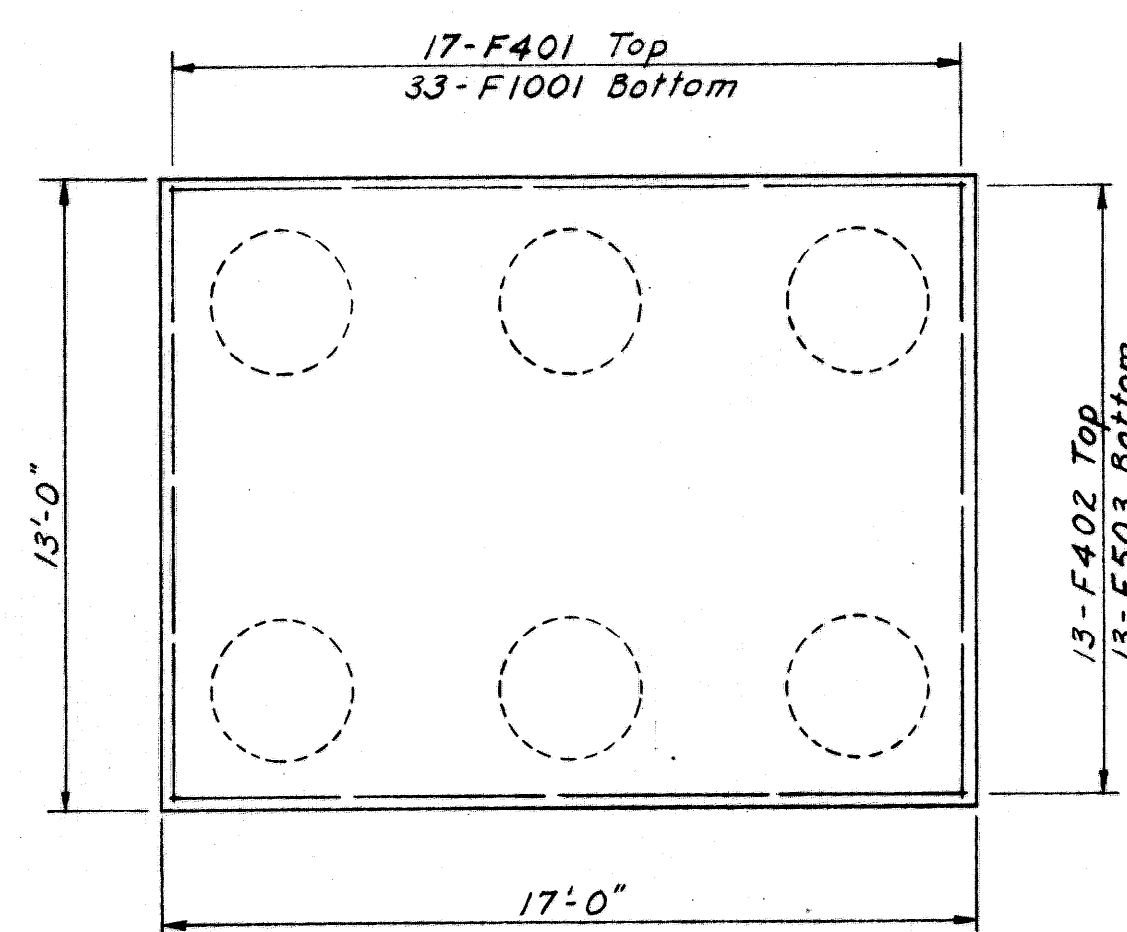
REAR PIERS
 BRIDGE No. WAY-3-1166 L & R
 OVER KILLBUCK CREEK

WAYNE COUNTY S.R. 3
 STA. 616 + 04.30 TO STA. 618 + 61.23

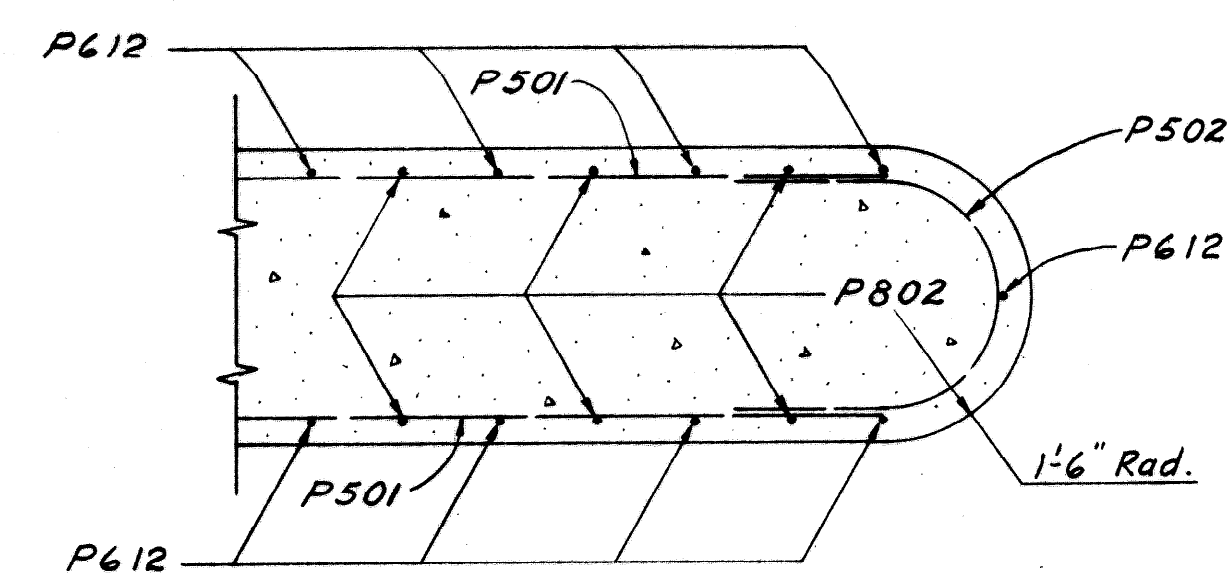
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	jack	DHT			6-1-01



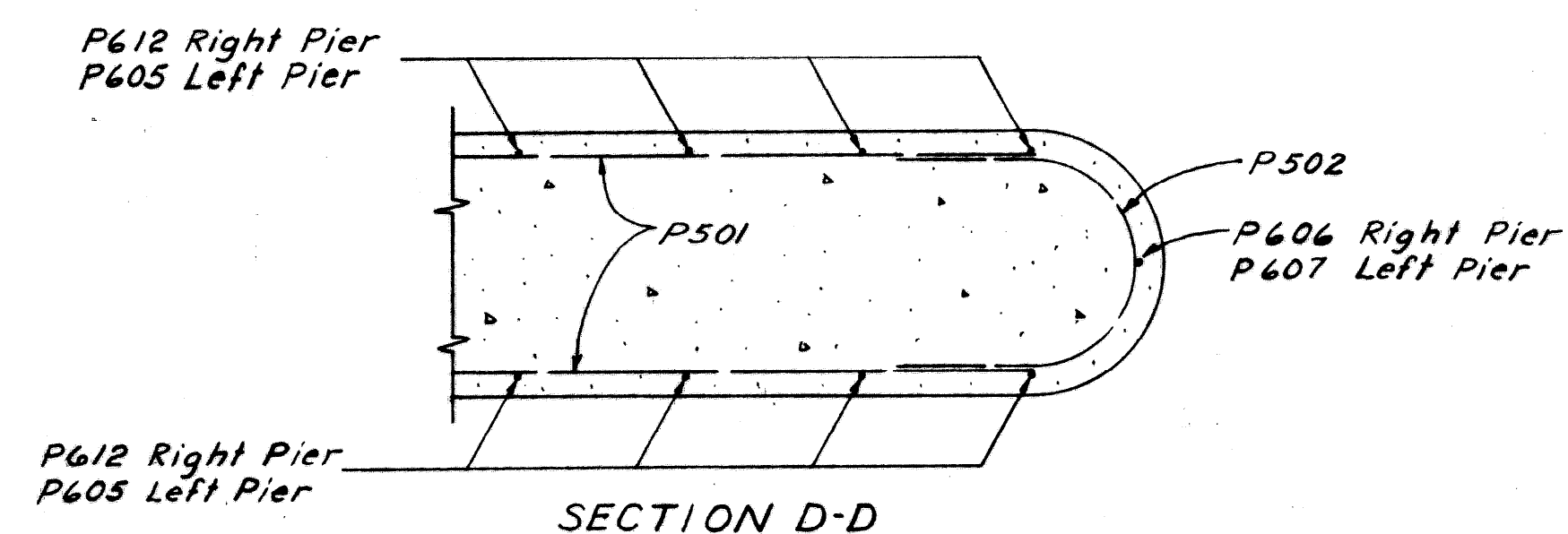
PLAN



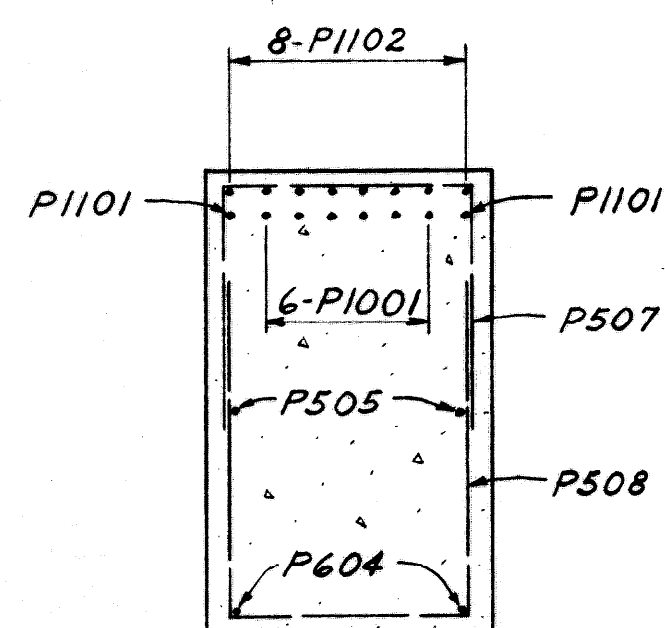
FOOTING PLAN



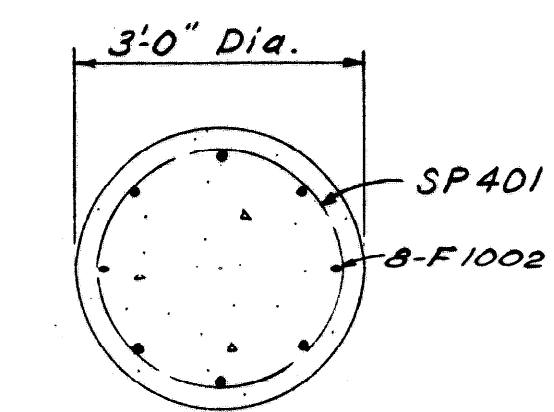
SECTION C-C



SECTION D-D



SECTION B-B



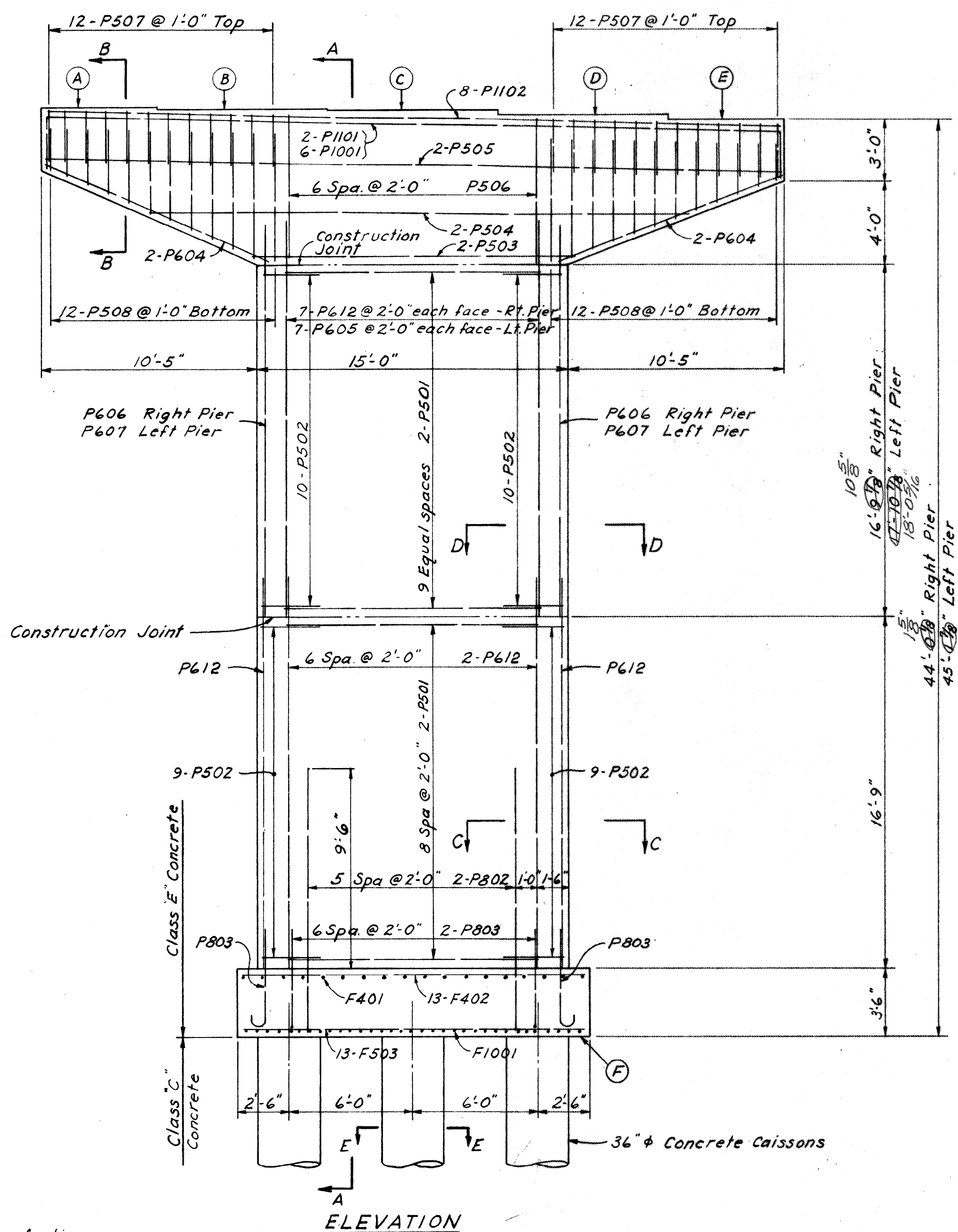
SECTION E-E

NOTES:

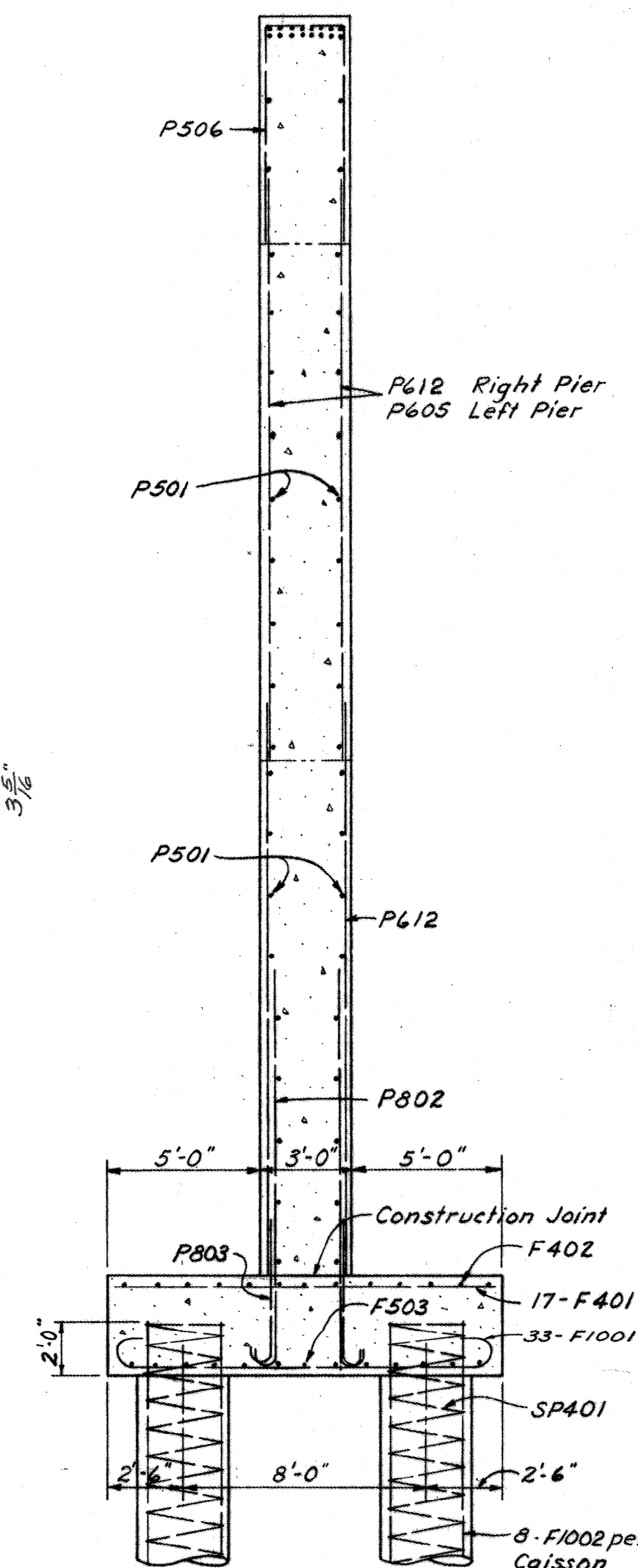
CONCRETE: All concrete for pier footings, caps and stems shall be Class "E" Concrete for the caissons shall be Class "C".

GENERAL NOTES: See Sheet 135.

CAISSONS shall penetrate 7 feet into bedrock or to Elev. 815.0, whichever is lower. The design load is 128 tons per caisson.



ELEVATION



SECTION A-A

	(A) ₆₇₁	(B) ₆₅₄	(C) ₆₃₈	(D) ₃₃₇	(E) ₁₃₇	(F)
Right Pier	881.609	881.533	881.578	881.523	881.078	837.0
Left Pier	882.733	882.733	882.719	882.463	882.413	837.0
	811	794	777	527	276	

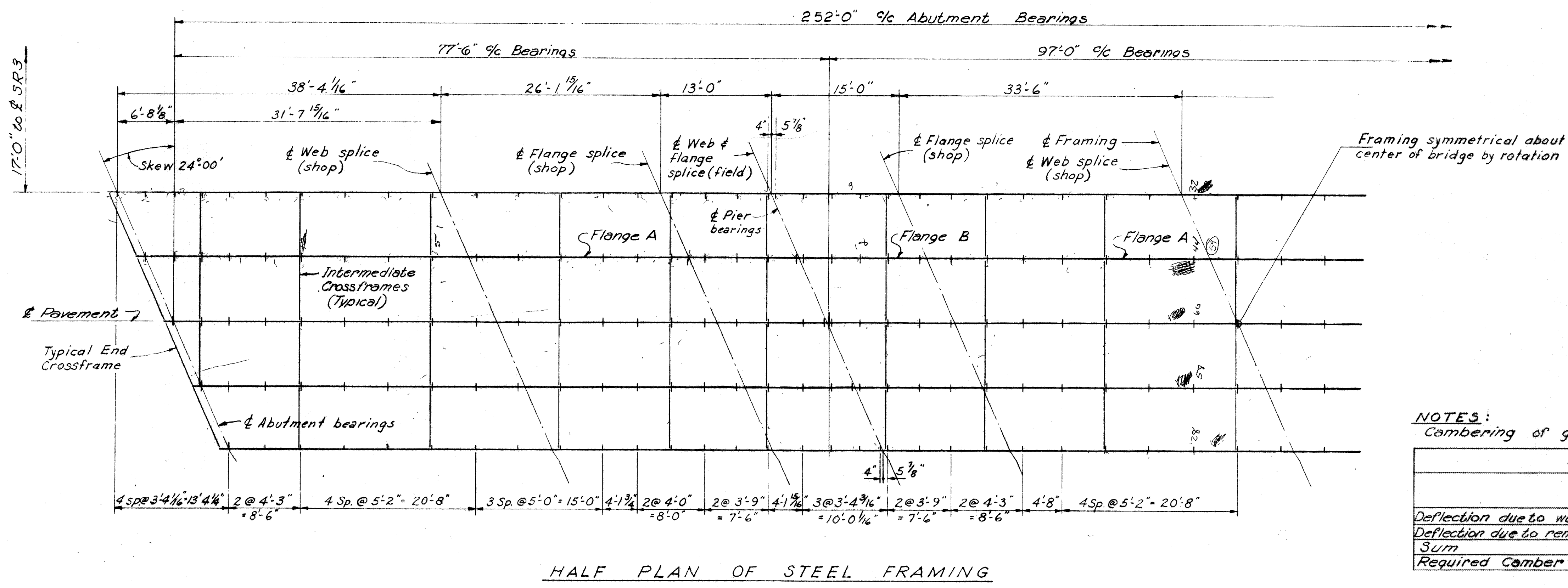
SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

FORWARD PIERS
BRIDGE No. WAY-3-1166 L & R
OVER KILLBUCK CREEK

WAYNE COUNTY S.R. 3
STA. 616 + 04.30 TO STA. 618 + 61.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	bob	JWC			6-1-61

WAYNE COUNTY
WAY-3-9.94



GIRDER MATERIALS	
Web	62 x 3/8
Flange A	14 x 3/4
Flange B	14 x 1 1/2
Intermediate Stiffeners	6 x 3/8
End Stiffeners	2-6 x 3/8
Pier Bearing Stiffeners	4-6 x 3/8

NOTES:
Cambering of girders is required in accordance with the following table:

	DEFLECTION AND CAMBER			
	INSIDE GIRDERS		OUTSIDE GIRDERS	
	End Spans	Middle Span	End Spans	Middle Span
Deflection due to weight of steel	3/16"	1/16"	3/16"	1/16"
Deflection due to remaining dead load	1/2"	1 3/8"	3/4"	1 3/16"
Sum	11/16"	1 3/4"	7/8"	2 3/16"
Required Camber	0-1"	2 3/8"	1"	2 3/16"

GIRDER SPLICE WELDING PROCEDURE [ASSUMING MIDDLE SPAN IS IN PLACE]:
 1. Raise end of girder at forward abutment 1/4".
 2. Butt-weld girder flanges and web at forward pier, using the following sequence: make two passes on each flange, then two on the web; repeat using one pass at each location until welds are completed. Weld bottom plate over shoe.
 3. Make splice at rear pier in the same manner, raising the end of the girder 1/4" at the rear abutment.
 4. After splices are completed at the piers, lower the ends of the girders at the abutments to final positions.

BEARINGS: See RB-1-55 for the following:
 R-100 Abutments
 B-225 Rear Pier
 R-225 Forward Pier

END CROSSFRAMES, END FINISH, GUTTERS, SCUPPERS, & CURB PLATE DETAILS: See CSB-2-56 Sheets 2 & 3 of 6

RAILING: See AR-1-57

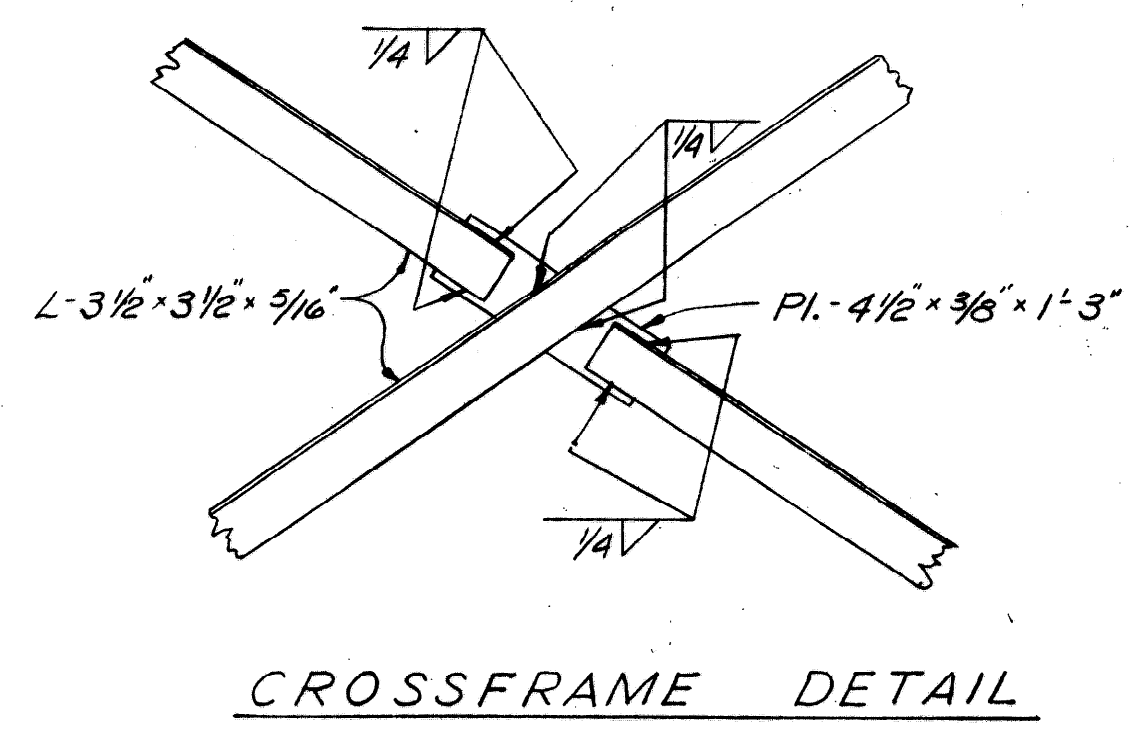
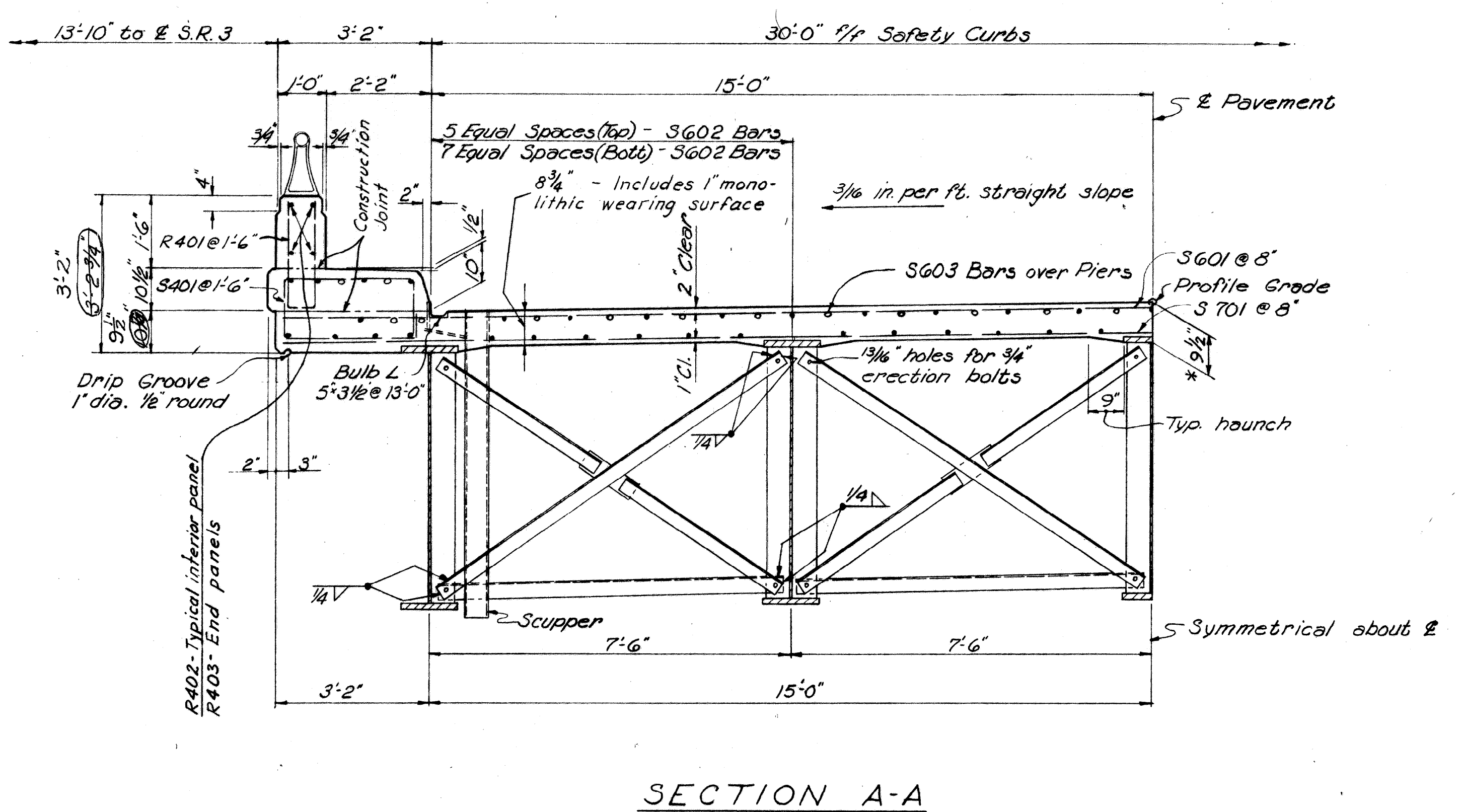
RAILING POST, PARAPET EXPANSION JOINT & SCUPPER SPACING: See sheet 134.

CONCRETE: All superstructure concrete shall be Class "C"

GENERAL NOTES: See sheet 135.

PAINTING: After erection and after the shop coat has been cleaned and, where necessary, repainted in accordance with Sec. 8.04, an additional coat of the same paint as used in the shop shall be applied over the outside face of the outside steel girders & all sides of bottom flanges.

END DAMS: For details see sheet 141.



* This is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

SHAFFER, PARRETT AND ASSOCIATES
 Consulting Engineers
 Mansfield, Ohio.

SUPERSTRUCTURE-I
 BRIDGE No. WAY-3-1166 L & R
 OVER KILLBUCK CREEK

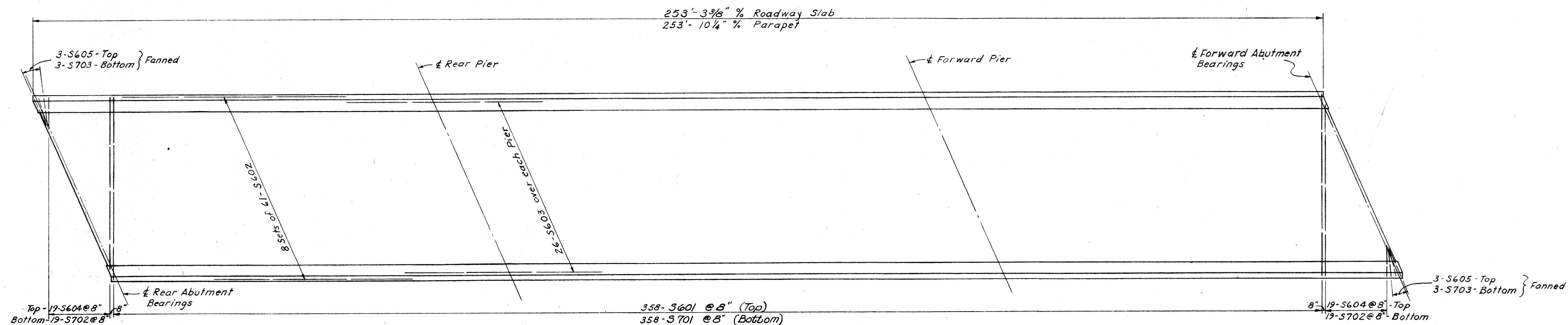
WAYNE COUNTY S.R. 3
 STA. 616 + 04.30 TO STA. 618 + 61.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	JWC	Jack	DHT			6-1-61 6-28-61 8-22-61

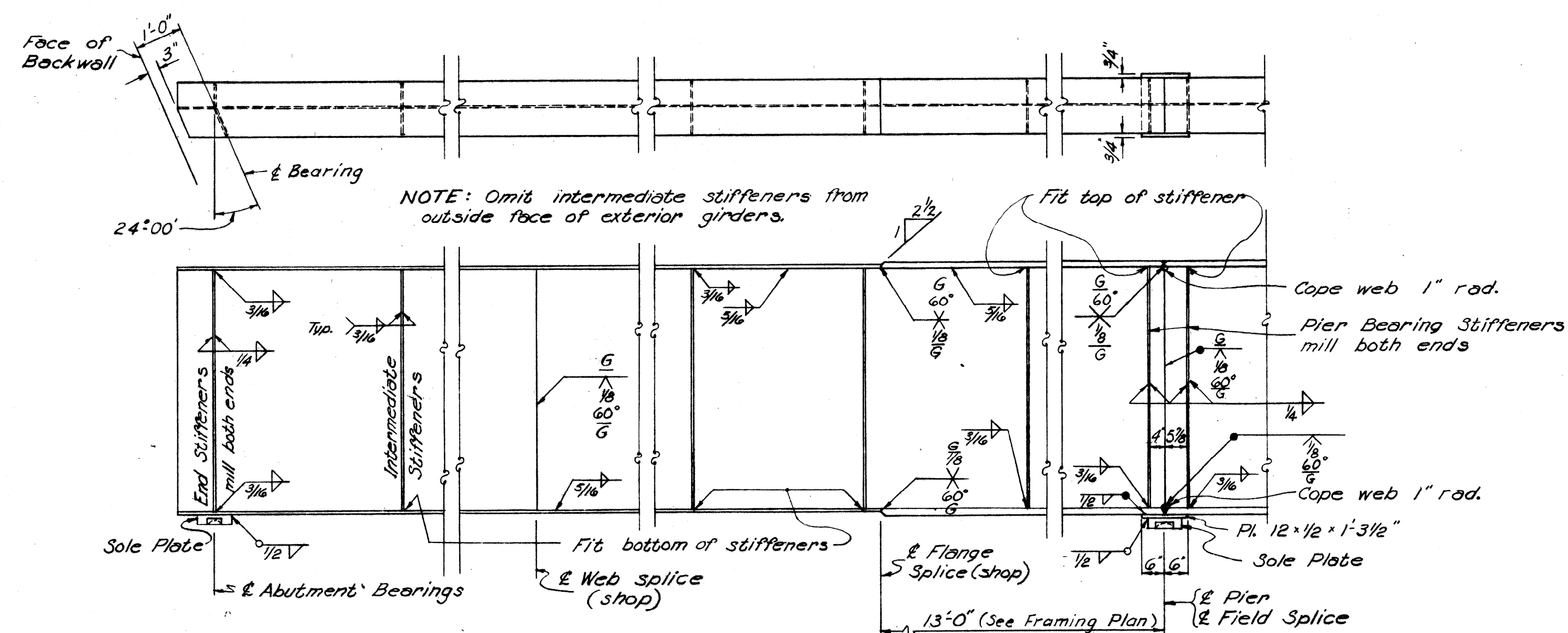
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

141
151

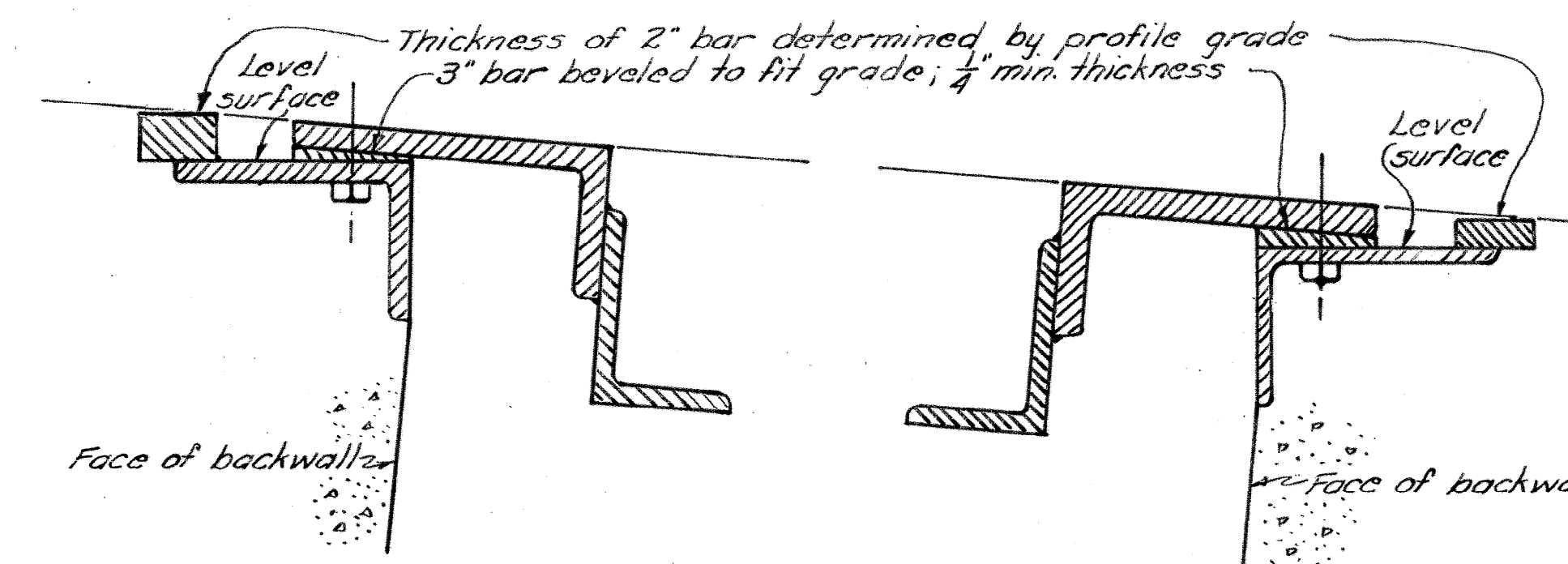
WAYNE COUNTY
WAY-3-9.94



DECK SLAB PLAN



TYPICAL GIRDER DETAILS



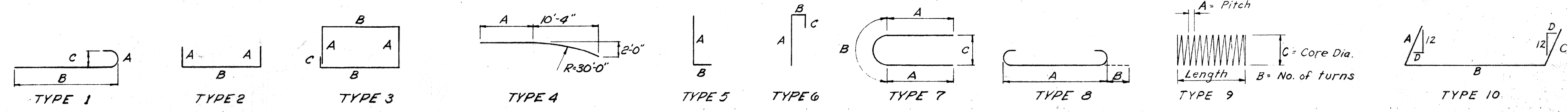
END DAM DETAILS
For details not shown
see Std. Drwg. CSB-2-56.

SHAFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

SUPERSTRUCTURE-2
BRIDGE No. WAY-3-1166 L & R
OVER KILLBUCK CREEK

WAYNE COUNTY S.R. 3
STA. 616 + 04.30 TO STA. 618 + 61.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	jack	DHT			6-28-61



ABUTMENTS											
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT	LOCATION	
R 401	110	5'-4"	2	2'-4"	8"				392	Rolling Stirrups	
R 404	8	18'-2"	Str.						*	Rolling Long. Rear Wall A	
R 405	8	23'-0"	"						*	" " Wall B	
R 406	8	16'-4"	"						*	" " Fwd " A	
R 407	8	17'-0"	"						*	" " " B	
A 401	8	8'-3"	3	1'-4"	2'-7 1/2"	4"			44	Curb Stirrups	
A 402	8	8'-2"	3	1'-4"	2'-7"	4"			44	" "	
A 403	8	8'-0"	3	1'-4"	2'-6"	4"			43	" "	
A 404	8	7'-10"	3	1'-4"	2'-5"	4"			42	" "	
A 405	8	7'-6"	3	1'-4"	2'-3"	4"			40	" "	
A 406	8	7'-0"	3	1'-4"	2'-0"	4"			37	" "	
A 407	8	6'-6"	3	1'-4"	1'-9"	4"			35	" "	
A 408	8	6'-0"	3	1'-4"	1'-6"	4"			32	" "	
A 409	8	5'-4"	3	1'-4"	1'-2"	4"			29	" "	
A 410	76	8'-4"	3	1'-4"	2'-8"	4"			423	Curb Stirrups	
A 501	32	21'-4"	Str.	Bend 4 in field as shown					712	Footings Longit.	
A 502	160	5'-10"	1	7'	5'3"	5'			973	" Transk	
A 503	8	9'-6"	Str.						79	Footings Wings Rear Wall A	
A 504	8	11'-10"	Str.						99	" " " Wall B	
A 505	16	10'-3"	Str.						171	" " Fwd Walls	
A 506	52	3'-8"	2	4'	3'-0"	4'			199	" " Transk	
A 507	100	21'-9"	10	1'-6"	20'-3"	- 5 1/2"			2249	Stem & Wall Longit.	
A 508	184	7'-6"	5	2'-4"	5'-2"				1439	Bridge Seats	
A 509	82	3'-8"	Str.						314	Stem Vert Front	
A 510	32	3'-5"	Str.						114	" " " "	
A 511	38	3'-2"	Str.						126	" " " "	
A 512	4	17'-10"	Str.						74	Front Wall A Rear Abut.	
A 513	4	22'-10"	Str.						95	" " " B	
A 514	4	17'-3"	Str.						72	Rear Wall A " "	
A 515	4	22'-3"	Str.						93	" " " B	
A 516	4	17'-7"	4	7'-0"	10'-7"				73	Curb Wall A " "	
A 517	4	24'-1"	4	13'-6"	10'-7"				101	" " " B	
A 518	4	16'-10"	Str.						70	Front Wall A Fwd Abut.	
A 519	4	16'-8"	Str.						69	" " " B	
A 520	4	15'-10"	Str.						66	Rear Wall A " "	
A 521	4	16'-6"	Str.						69	" " " B	
A 522	4	13'-8"	4	5'-1"	10'-7"				65	Curb Wall A " "	
A 523	4	18'-1"	4	7'-6"	10'-7"				75	" " " B	
A 524	60	11'-6"	Str.						720	Vert Wall A (E.F.) Rear Abut.	
A 525	72	11'-0"	Str.						826	" " " B Fwd Abut.	
A 526	132	4'-11"	5	4'-7"	4"				677	Footings Dowels Wings	
A 527	64	3'-10"	Str.						256	Vert Wall A & B Rear & Fwd Abut.	
A 528	32	Varies	Str.	4'-0" to 7'-3" Vary 4 ea. by 5 1/2"					189	Vert Wall A Rear Abut.	
A 529	40	Varies	Str.	4'-0" to 7'-9" Vary 4 ea. by 5"					245	" " " B	
A 530	24	Varies	Str.	4'-0" to 6'-9" Vary 4 ea. by 6 1/2"					135	" " " A Fwd "	
A 531	24	Varies	Str.	4'-0" to 6'-6" Vary 4 ea. by 6"					131	Vert Wall B " "	
A 532	4	10'-0"	Str.						42	Diag. Wall A Rear "	
A 533	4	11'-5"	Str.						48	" " " B	
A 534	4	7'-5"	Str.						31	" " " A Fwd "	
A 535	4	7'-9"	Str.						32	Diag. Wall B " "	
A 536	6	8'-2"	Str.						51	Horiz Wall A F.F. Rear Abut.	
A 537	6	10'-4"	Str.						65	" " " B F.F. " "	
A 538	6	7'-8"	Str.						48	" " " A R.F. " "	
A 539	6	10'-8"	Str.						67	" " " B R.F. " "	
A 540	6	9'-4"	Str.						58	" " " A F.F. Fwd "	
A 541	6	9'-0"	Str.						56	" " " B F.F. " "	
A 542	6	8'-10"	Str.						55	" " " A R.F. " "	
A 543	6	9'-6"	Str.						60	" " " B R.F. " "	
A 544	16	Varies	Str.	6'-9" to 12'-11" Vary 4 ea. by 2'-1"					164	" " " A E.F. Rear Abut.	
A 545	16	Varies	Str.	8'-5" to 15'-3" Vary 4 ea. by 2'-3"					198	" " " B E.F. " "	
A 546	12	Varies	Str.	8'-0" to 12'-3" Vary 4 ea. by 2'-0"					125	" " " A E.F. Fwd "	
A 547	12	Varies	Str.	7'-6" to 12'-0" Vary 4 ea. by 2'-3"					122	" " " B E.F. " "	
A 548	6	18'-2"	Str.						114	" " " A F.F. Rear "	
A 549	6	17'-9"	Str.						111	" " " A R.F. " "	
A 550	12	23'-0"	Str.						288	" " " B E.F. " "	
A 551	18	16'-11"	Str.						318	" " " A F.F. Fwd "	
A 552	6	16'-5"	Str.						103	Horiz Wall A R.F. Fwd Abut.	
A 553	48	7'-6"	2	3'-6"	6"				375	Curb Wall Stirrups	
A 554	16	9'-0"	Str.						150	" " " Vert "	
A 555	16	9'-7"	Str.						160	Curb Wall Vert "	
A 556	100	21'-9"	10	- 20'-3"	1'-6"	5 1/2"			2269	Stem and Wall Longit.	
A 601	132	5'-5"	Str.						1237	Backwall Back Vert	
A 602	132	10'-8"	6	6'-9"	1'-2"	2'-9"			2435	Backwall Front Vert	
A 603	152	3'-11"	Str.						894	Backwall Dowels	
A 604	132	8'-8"	5	8'-4"	4"				1979	Backwall Back Vert.	
TOTAL WEIGHT = 23,412											

PIERS											
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT	LOCATION	
F 401	34	12'-6"	Str.						284	Footings Fwd Piers	
F 402	26	16'-6"	Str.						287	" " " "	
F 501	38	10'-8"	8	9'-6"	7"				423	Footings Rear Piers	
F 502	22	17'-6"	Str.						402	" " " "	
F 503	26	16'-6"	Str.						447	Footings Fwd Piers	
F 1001	66	15'-4"	8	12'-6"	17"				4355	Footings Fwd Piers	
P 501	144	12'-2"	Str.						1827	Stems	
P 502	144	7'-4"	7	1'-7"	4'-2"	2'-8"			1101	" "	
P 503	8	15'-6"	Str.						129	Caps	
P 504	8	24'-0"	Str.						217	" "	
P 505	8	35'-6"	Str.						296	" "	
P 506	28	16'-6"	2	6'-11"	2'-8"				482	" "	
P 507	96	7'-8"	2	2'-6"	2'-8"				768	" "	
P 508	96	Varies	2	*** 2'-8"					371	Caps	
*** 1'-7" to 5'-10" Vary 3 ea. by 4'-4"											
P 801	32	5'-7"	1	13'	4'-6"	7"			477	Stem Rear Piers	
P 802	48	13'-10"	1	13'	12'-9"	7"			1773	Stems	
P 803	32	6'-1"	1	13'	5'-0"	7"			520	Fwd Pier Stem	
P 804	16	11'-6"	Str.						276	Caps	
P 605	14	19'-7"	Str.						412	Lt Fwd Pier Stem	
P 606	2	18'-3"	Str.						55	Rt " " "	
P 607	2	19'-3"	Str.						58	Lt " " "	
P 608	14	16'-0"	Str.						336	Rt Rear Pier Stem	
P 609	14	17'-2"	Str.						361	Lt " " "	
P 610	2	15'-6"	Str.						47	Rt " " "	
P 611	2	16'-9"	Str.						50	Lt " " "	
P 612	78	18'-8"	Str.						2187	Rt Fwd Pier Stem	
P 1001	24	35'-6"	Str.						3666	Caps	
P 1101	8	35'-6"	Str.						1509	Caps	
P 1102	32	39'-8"	8	35'-6"	1'-7"				6744	Caps	
F 1002	96	24'-0"	Str.						**	Caisson	
SP 401	12	23'-10"	9	4 1/2"	66"	30"			**	Caisson	
TOTAL WEIGHT 29,860											

* These rolling bars are included in Item S-14 for payment
 ** These caisson bars included in Item Special for payment

REPLACEMENT BARS		
MARK	NUMBER	LENGTH
RE 400	1	5'-3"
RE 500	2	5'-7"
RE 600	6	5'-11"
RE 700	3	6'-3"
RE 1000	1	7'-3"
RE 1100	1	7'-7"

TOTAL WEIGHT OF REINFORCING STEEL = 211,881

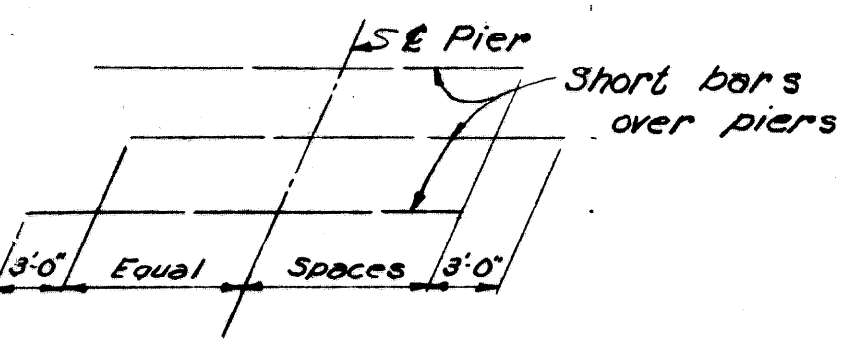


DIAGRAM SHOWING STAGGER OF SHORT BARS OVER PIERS

NOTES:
 REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has been previously 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.
 BAR SIZE is indicated on the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size number. For example, A 701 is a No. 7 size bar and A 1014 is a No. 10 size bar.

SUPERSTRUCTURE											
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT	LOCATION	
R 401	724	5'-4"	2	2'-4"	8"				2579	Rolling Stirrups	
R 402	240	15'-0"	Str.						*	" Longit. Interior	
R 403	32	11'-6"	Str.						*	" " Ends	
S 401	680	8'-8"	3	1'-4"	2'-9"	6"			3937	Curb Stirrups	
S 601	714	36'-0"	Str.						38,716	Top of Slab Transk.	
S 602	976	33'-3"	Str.						48,743	Slab Longit. Top & Bottom	
S 603	104	39'-6"	Str.						6170	" " Over Piers	
S 604	76	Varies	Str.	6'-10" to 33'-10" Vary 4 ea. by 1'-6"					2321	Slab Top - Ends	
S 605	12	7'-0"	Str.						126	" " (fanned)	
S 701	716	36'-0"	Str.						52,684	Bottom Slab Transk.	
S 702	76	Varies	Str.	6'-10" to 33'-10" Vary 4 ea. by 1'-6"					3159	" " " " Ends	
S 703	12	7'-0"	Str.		</						