

1935 ORIGINAL CONSTRUCTION PLANS

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

U.S.P.W.H.P. No OHIO
N.R.S. 718-B (1935)

FED. RD. DIST. NO. 10 STATE OHIO FED. AID PROJ. NO. NR. 5718-B FISCAL YEAR 1935
S.H. NO. 310 WILLIAMS SEC. "F-2" COUNTY

1/24

BRYAN-NAPOLEON ROAD
WILLIAMS COUNTY

S.H. NO. 310 SEC. "F-2"

BUREAU OF CONSTRUCTION

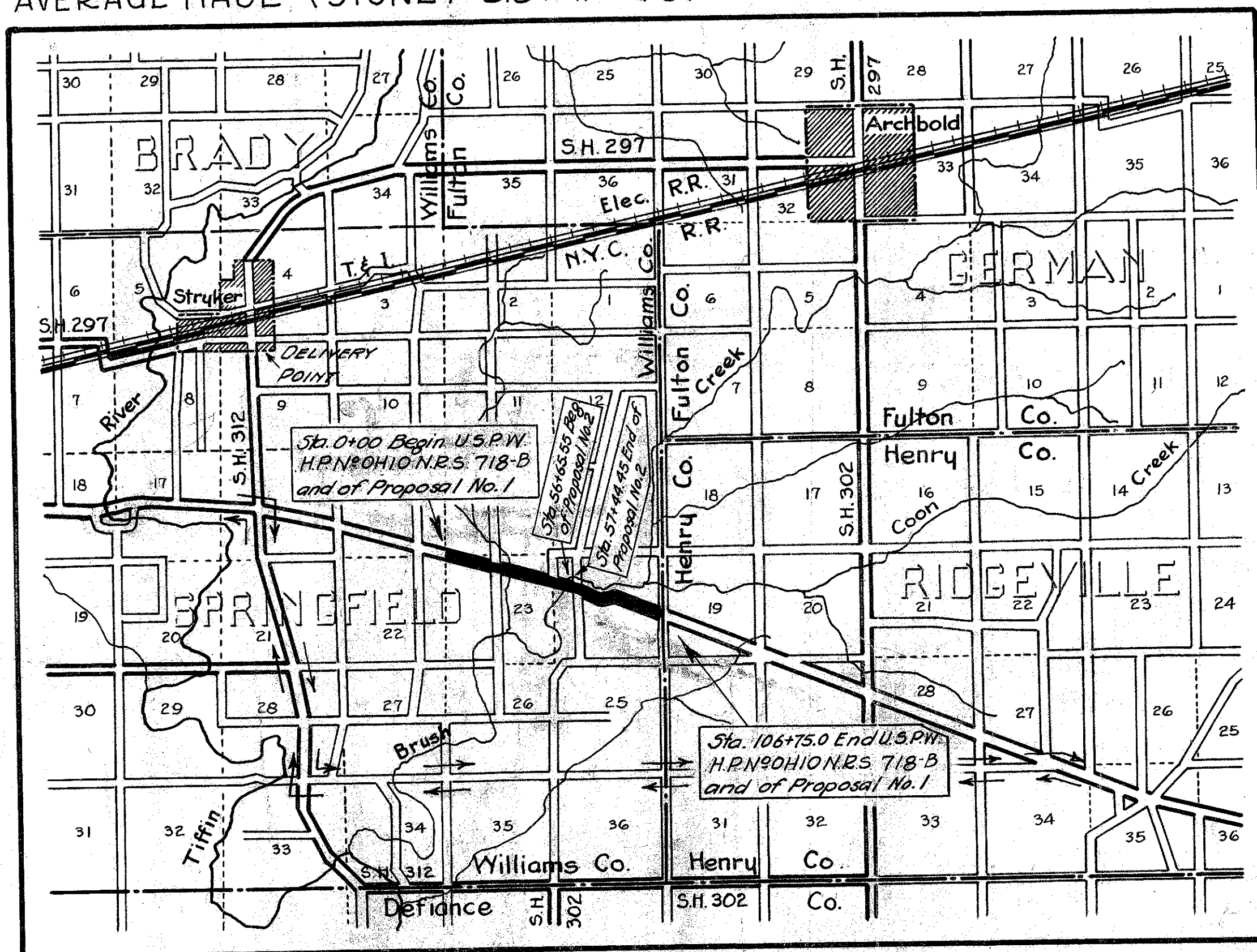
NET LENGTH OF PROJECT 10652.58 LIN. FT.
AVERAGE HAUL (STONE) 5.5 MI. (BITUMINOUS MATERIAL) 40.0 MI.

CONVENTIONAL SIGNS

State Line	---
County Line	----
Township Line	-----
Section Line	-----
Center Line	-----
Property Line	-----
City or Village Line	-----
Fence Line	-----
Pole Line	-----
Steam Railroad	-----
Electric Railroad	-----
Guard Rail	-----
Drain Pipe New	-----
Drain Pipe Old	-----

INDEX OF SHEETS

TITLE PAGE	PAGE
TYPICAL SECTION	2
PLAN AND PROFILE	3-6
SCHEDULES OF SUPERELEVATION	7
CROSS SECTIONS	8-16
CHANNEL CROSS SECTIONS	17
STRUCTURE OVER 20' SPAN	18-21
STRUCTURES UNDER 20' SPAN	22
SUMMARY SHEETS	23-24



LOCATION PLAN

SCALE OF MILES

0 1 2

Portion to be improved
State roads
Other roads

SCALES

PLAN 1" = 100'
PROFILE (VERTICAL) 1" = 10'
PROFILE (HORIZONTAL) 1" = 100'
CROSS-SECTIONS 1" = 5'
SITE PLAN 1" = 20'

LINE DATA
Sta. 0+00 to Sta. 106+75
Gross Length 10675.0 Lin. Ft.

Deductions -
Sta. 26+83.60 to Sta. 27+06.02 = 2242 Lin. Ft.

Net Length 10652.58 Lin. Ft.
PROPOSAL No. 1 10573.68 " " 2.000 Miles
PROPOSAL No. 2 78.90 " " .015 " "

Totals 10652.58 " " 2.017 " "

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

G-7.07, I-8-CB, I-2 & 2-2, S-27 PC-3, I-1, 2, 3, 4 & 5, I-8-I No. 1

BD-33

ROAD INDEX BY SHEETS
Right of Way is 60'
SCALE 1" = 2000'

The Standard Specifications of the State of Ohio, Department of Highways together with the "Special Provisions for United States Public Works Highway Projects" and Supplemental Specification No. 6 (Revised 12-5-34) in force on date of contract will govern this improvement.

I hereby approve these plans and declare that the making of this improvement will require the closing to traffic of the highway and that detours will be provided as shown on the plans and estimates, and that the necessary R/W has been provided.

Approved Bert Beucher
Date 11-15-34 Resident District Deputy Director

Approved Richard Orth
Date 11-15-34 Resident Division Deputy Director

Approved
Date Chief Engr. Bureau of Maintenance

Approved W. Burkey
Date 11-20-34 Chief Engr. Bureau of Bridges and Railroad Crossings

Approved Ernest Riley
Date 12-10-34 Chief Engr. Bureau of Construction

Approved H. O. Chapman
Date 12-10-34 First Asst. Director and Chief Engineer

Approved O. W. Menefee
Date 12-10-34 Director of Highways

Recommended for Approval
Date Dist. Engr. Bureau of Public Roads

Recommended for Approval
Date Chief Engr. Bureau of Public Roads

Approved
Date Chief of Bureau

CHECKING RECORD		
Office	By	Date
Resident	1224	Nov. 18/34
Division		
Bureau of Maintenance		
Bureau of Bridges	11/17/34	
Bureau of Construction	11/26/34	
Bureau of Public Roads		

RECEIVED	
By M. L. Leland	
Clerk of Sales	
Date	12-11-1934

REMARKS	
Planning Engineer	Date
Remarks	
13-20 Base Courses	
7-60 or 6 Surface Course	
Grading & Structures	

WILLIAMS COUNTY
S.H. 310 SEC. F-2

GENERAL NOTES

PROPOSED STRUCTURE is a single span concrete bridge with steel beams 75 ft % bearing plates, 24 ft roadway, 20° R.F. skew, 4" concrete surface course, no approach slabs.

LOADING: This bridge is designed for H-15-33 loading.

EXISTING STEEL TRUSS BRIDGE to be carefully dismantled, match marked, small parts boxed and piled along R/W of the disposal of the State.

EXISTING ABUTMENTS to be removed and used as riprap as directed by the Engineer. Payment for removal included in Excavation.

EXCAVATION: All excavation above and below Elev. 692.1 shall be classified as "Foundation Excavation, Dry" and "Foundation Excavation, Wet" respectively, except that designated as "Channel Excavation".

CONCRETE CLASSIFICATION: Concrete in superstructure shall be 1:5½ mix. Concrete in substructure shall be 1:6½ mix.

CHAMFER all exposed edges ¾" unless otherwise noted.

CONSTRUCTION JOINTS: No horizontal construction joints other than those shown will be permitted. Vertical construction joints allowed only by special permission of the Engineer. All construction joints in abutment above low water elevation shall be sealed on back with Type "B" Waterproofing, 36" wide.

POROUS BACKFILL as shown, shall extend full length of abutment and wings. Any undisturbed earth above the 1:1 slope need not be replaced with porous backfill. To be paid for as a separate Lump Sum item.

HAND LAID RIPRAP shall be placed where shown on Site Plan and otherwise as directed by the Engineer. Listed with Prop. No. 1.

PILING if used shall be driven to a minimum bearing capacity of 18 tons and preferably 21 tons.

BARS marked X G to X I are ones furnished to replace specimens cut from ends of reinforcing bars to be submitted for testing purposes. Bars marked "X" may be used for testing but not to exceed 20 % (by number). 2-ft. test specimens to be cut from as near the end of bar as possible. Two 2-ft specimens should be cut from the same bar.

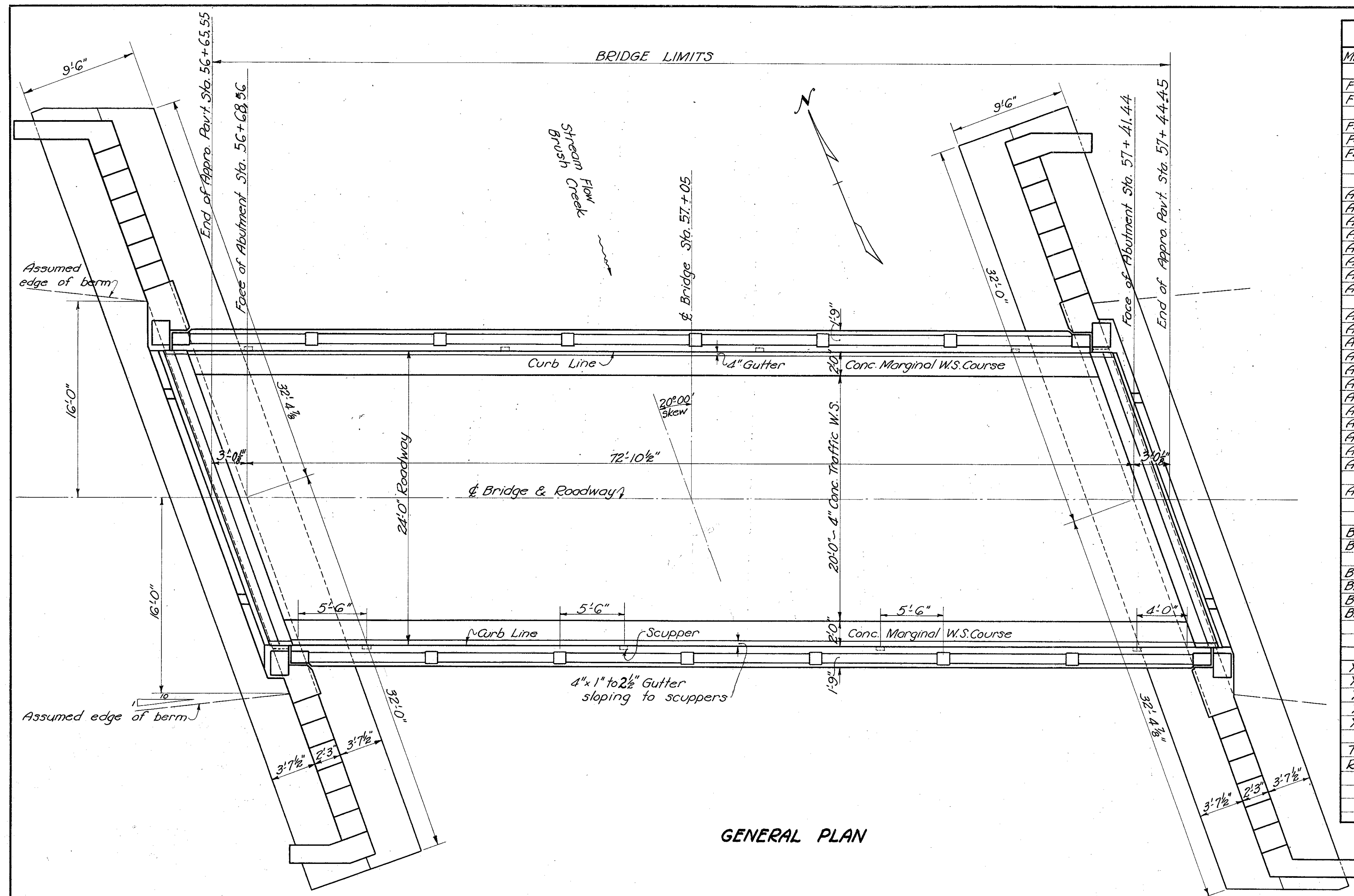
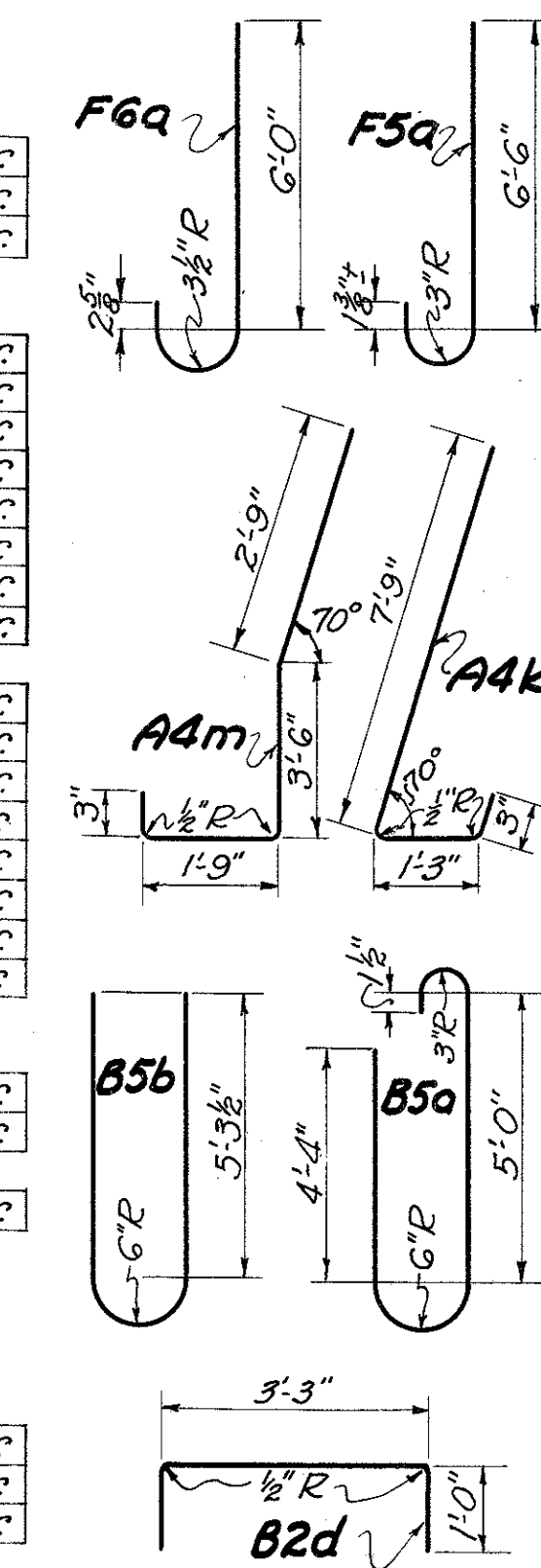
PROPOSAL NO. 2.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES				
GENERAL PLAN & ELEVATION, NOTES, STEEL LIST & ESTIMATED QUANTITIES				
BRIDGE NO. WI-G-252				
OVER BRUSH CREEK				
WILLIAMS COUNTY S.H. 310				
SEC. F-2 STA. 57+05				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
W.C.K.	W.C.K.	P.E.R.	W.F.	W.C.K.
				DATE
				11/17/34

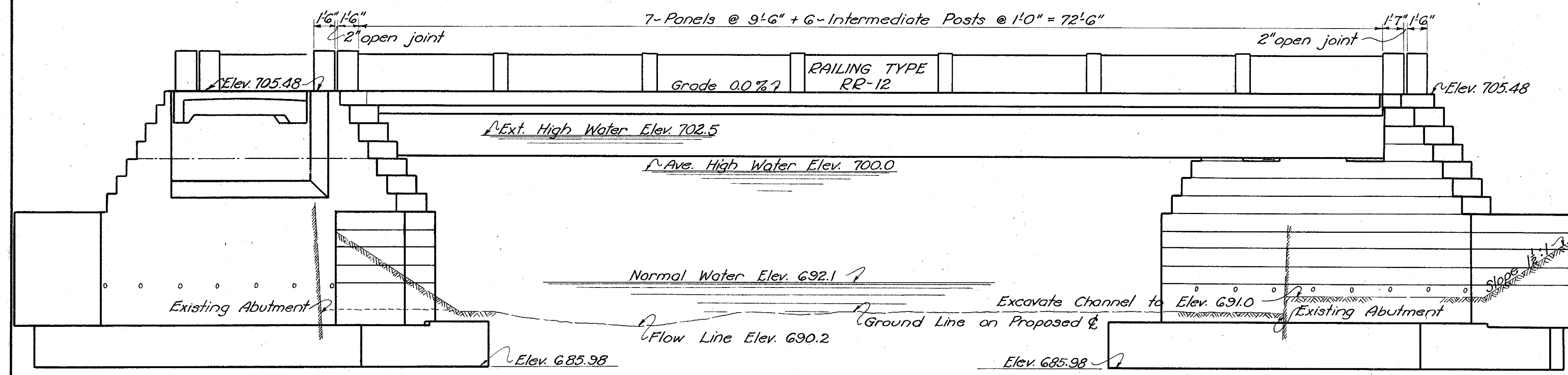
STEEL LIST

MARK	SIZE	No.	LENGTH	WEIGHT	SHAPE
ABUTMENT STEEL					
F6a	¾"	204	7'3"	3026	Str.
F5a	¾"	310	7'6"	3493	Str.
F4a	¾"	32	35'0"	1169	Str.
F4b	¾"	40	10'0"	418	Str.
F4c	¾"	24	9'0"	226	Str.
A6a	¾"	46	11'9"	1106	Str.
A6b	¾"	16	16'3"	532	Str.
A6c	¾"	6	15'3"	187	Str.
A6d	¾"	6	14'0"	172	Str.
A6e	¾"	4	12'9"	104	Str.
A6f	¾"	4	10'3"	84	Str.
A6g	¾"	6	9'0"	111	Str.
A6h	¾"	22	7'9"	349	Str.
A4a	¾"	8	30'0"	251	Str.
A4b	¾"	2	26'0"	54	Str.
A4c	¾"	2	23'0"	48	Str.
A4d	¾"	8	32'0"	267	Str.
A4e	¾"	2	31'0"	65	Str.
A4f	¾"	2	27'0"	56	Str.
A4g	¾"	4	9'0"	38	Str.
A4h	¾"	4	6'0"	25	Str.
A4k	¾"	8	9'3"	77	Str.
A4m	¾"	8	8'3"	69	Str.
A4n	¾"	8	7'6"	63	Str.
A4p	¾"	24	10'0"	251	Str.
A2a	½"	24	11'3"	180	Str.
B5a	¾"	20	12'0"	361	Str.
B5b	¾"	28	12'3"	516	Str.
B2a	½"	6	27'6"	110	Str.
B2b	½"	4	15'6"	42	Str.
B2c	½"	4	11'6"	31	Str.
B2d	½"	76	5'3"	267	Str.
REPLACEMENT STEEL					
X6	¾"	1	7'6"	15	Str.
X5	¾"	1	7'0"	11	Str.
X4	¾"	1	6'6"	7	Str.
X2	½"	1	6'0"	4	Str.
X1	¾"	1	5'6"	3	Str.
TOTAL ABUTMENT & REPLACEMENT STEEL				13,788	

Note: Bar lengths are measured along & of bar. All radii given are to inside edge.



GENERAL PLAN

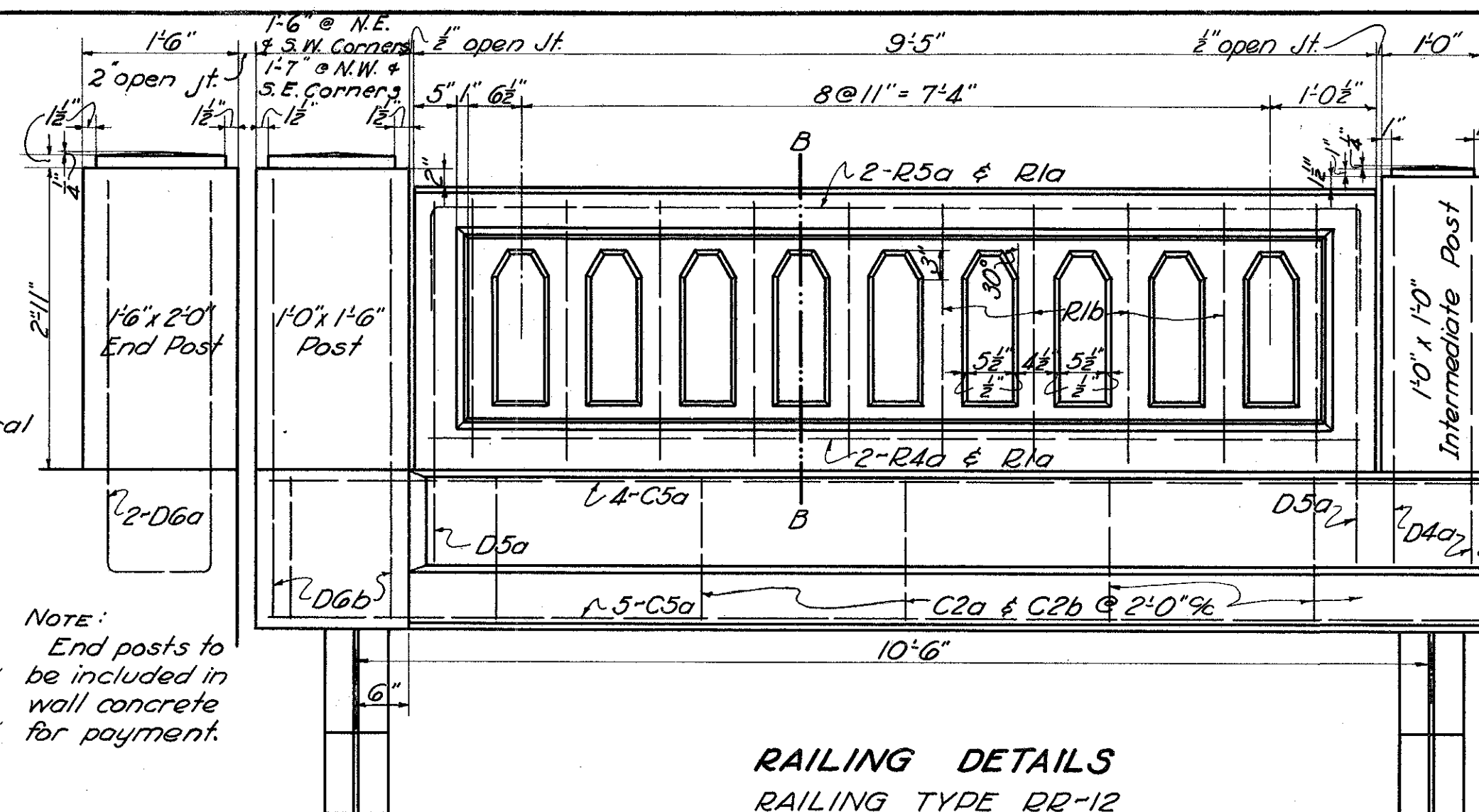
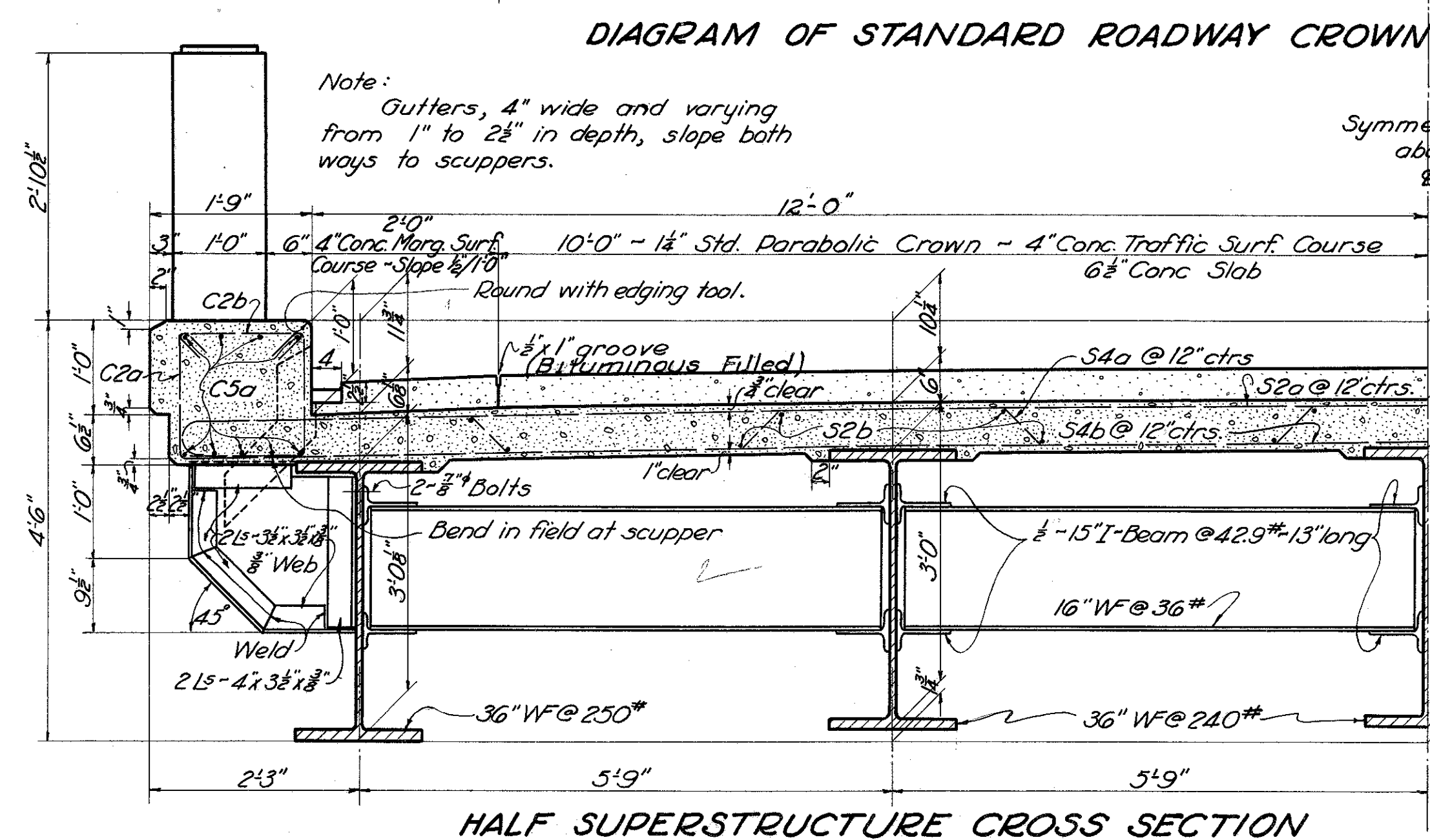


ELEVATION

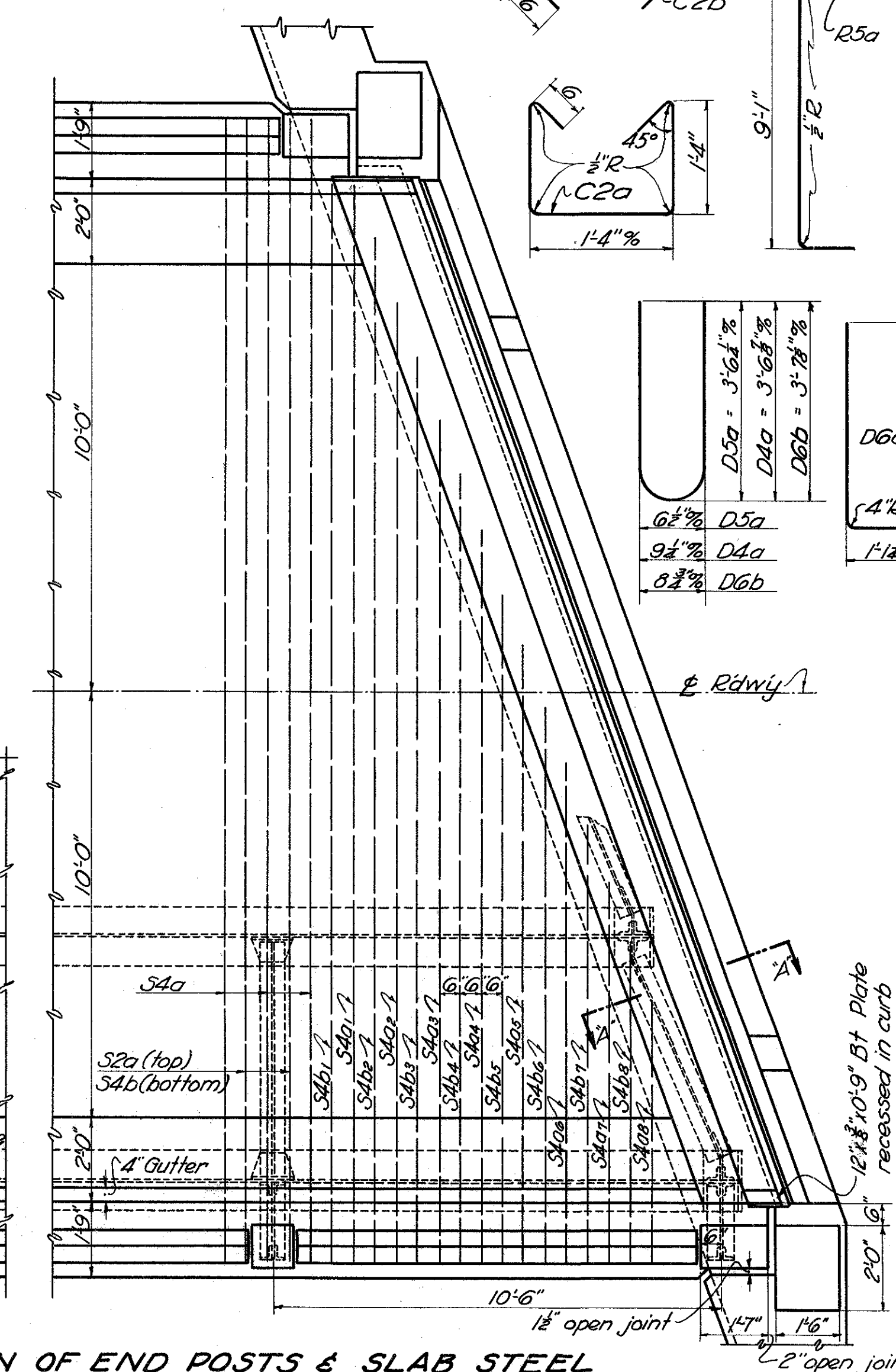
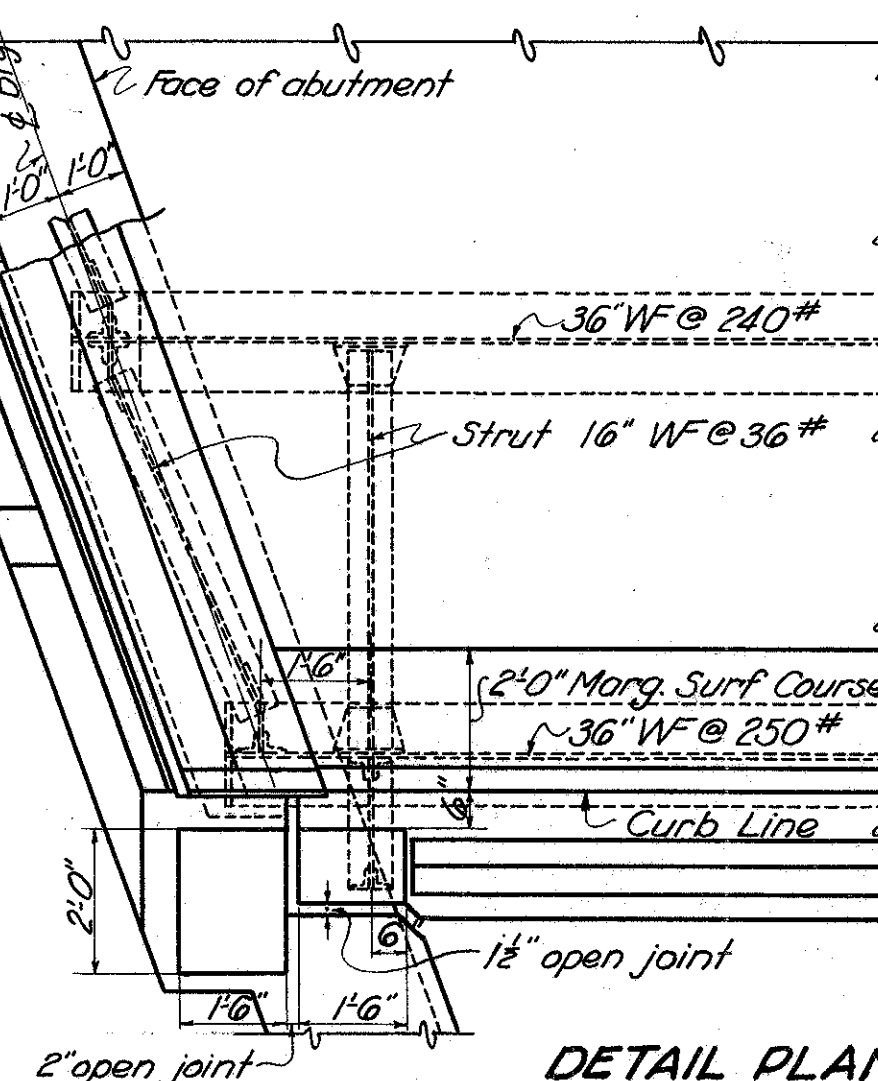
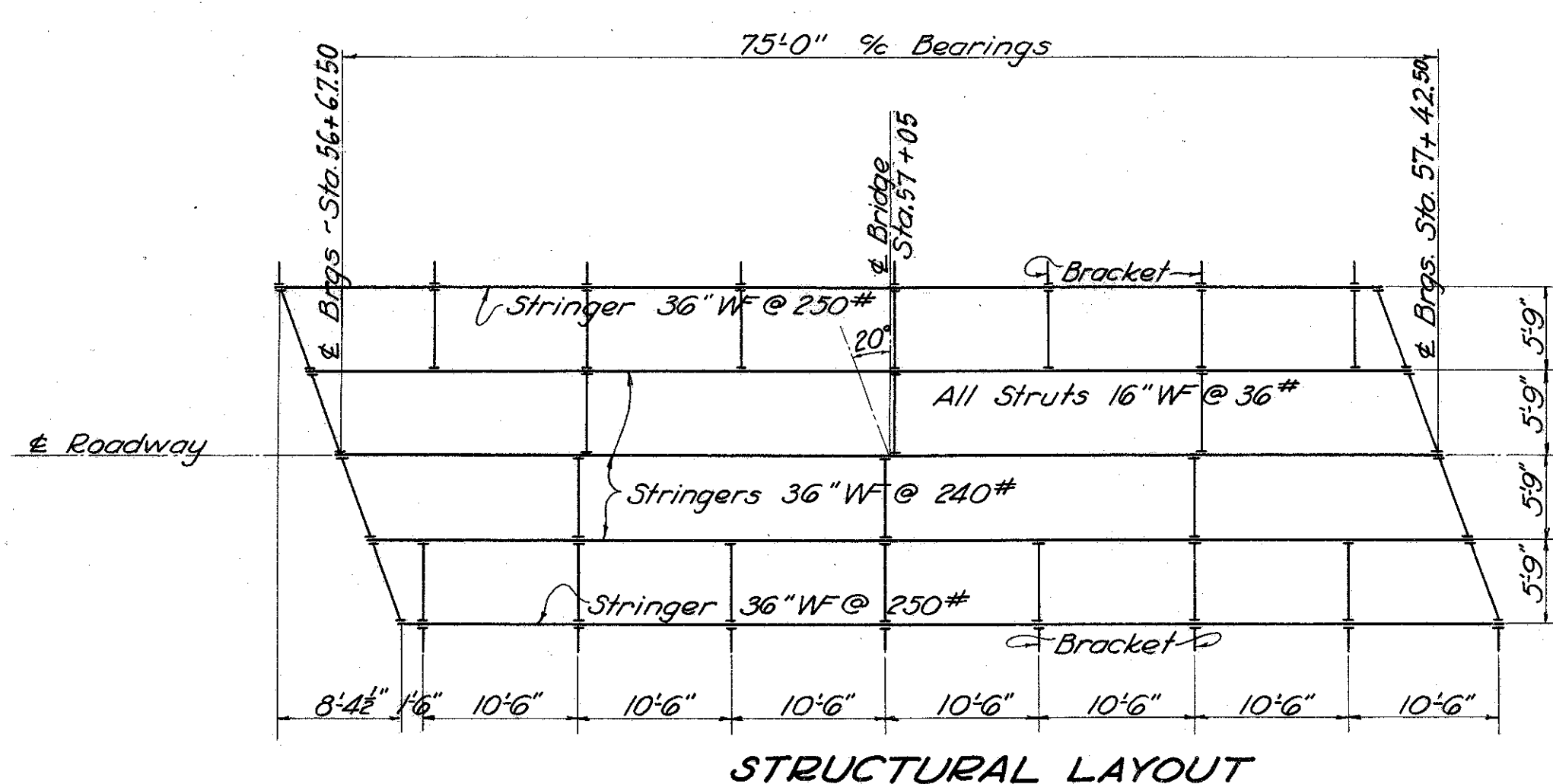
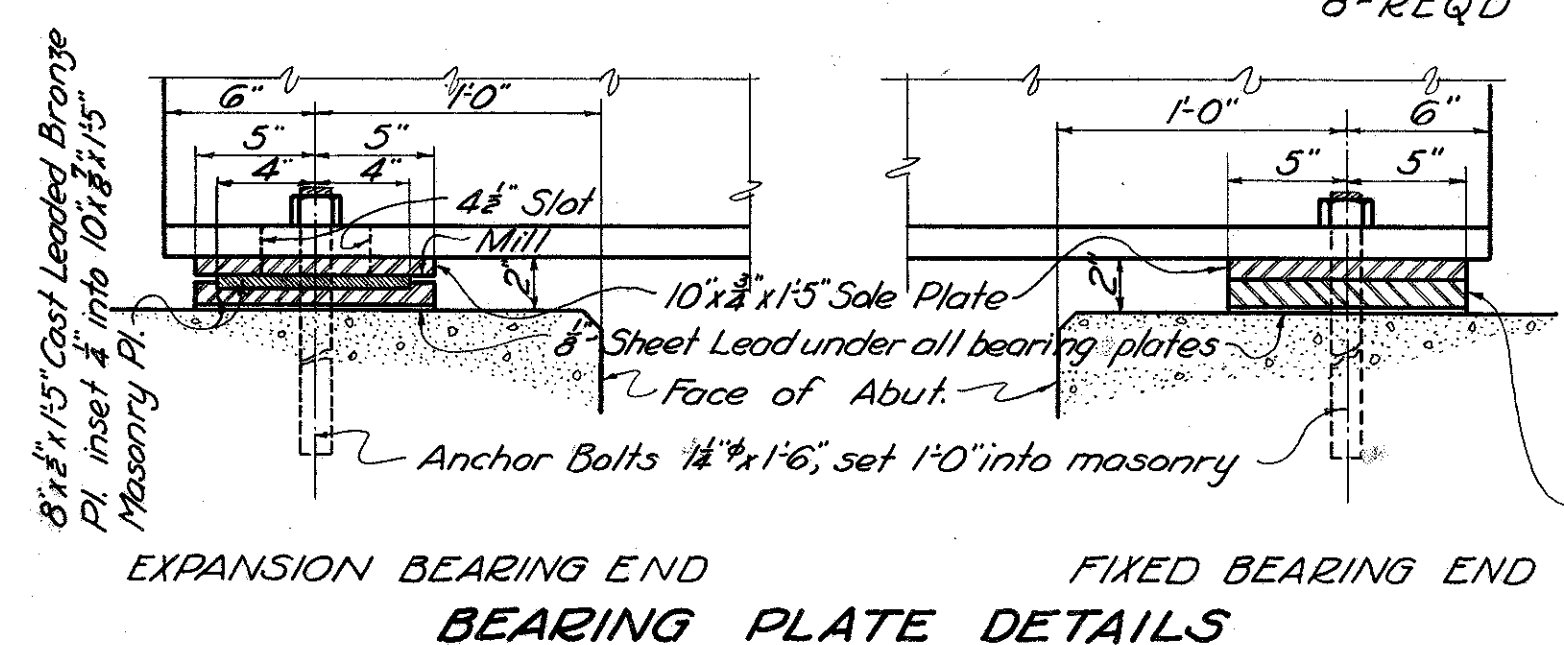
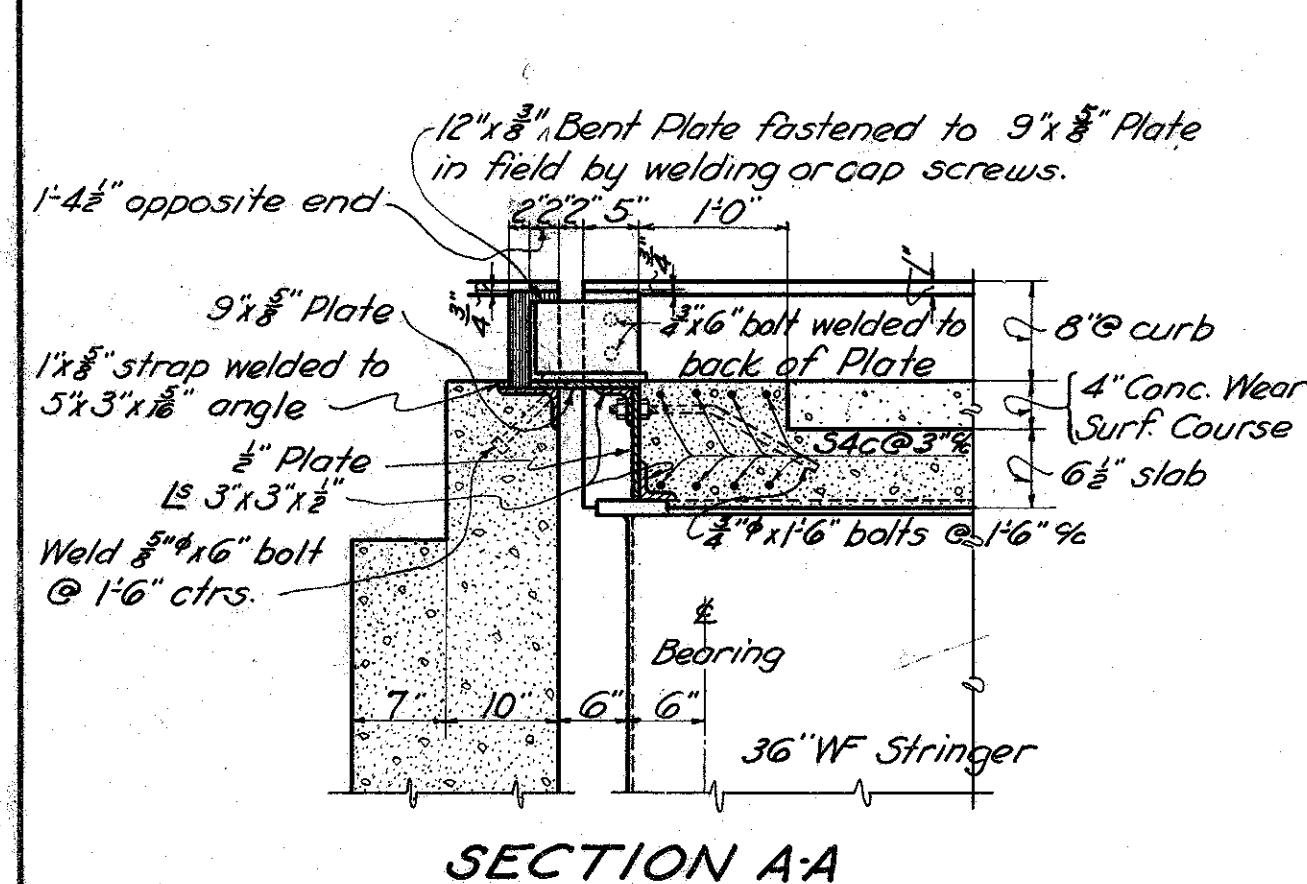
ESTIMATED QUANTITIES

Cofferdams, Sheeting & Pumping	Lump Sum
Foundation Excavation, Dry (including abutments)	60 Cu.Yds.
Foundation Excavation, Wet	350 Cu.Yds.
1:5½ Concrete, Superstructure	52 Cu.Yds.
1:6½ Concrete, Walls	160 Cu.Yds.
1:6½ Concrete, Footings	145 Cu.Yds.
Type "B" Waterproofing, 36" wide	32 Sq.Yds.
Reinforcing Steel	23,920 Lbs.
Reinf. Conc. Bridge Railing (1:5½ mix)	
Type RE-12	151.17 Lin.Ft.
Structural Steel (except field painting)	111,000 Lbs.
Keyed Contraction Joint, including	
12" @ 24 oz. Folded Copper Strip	25 Lin.Ft.
½" Leadad Bronze Sliding Plates (Cast)	81 Lbs.
First Test Pile (Timber)	Lump Sum
Timber Piling (to establish unit price) apply to any quantity from 0 lin.ft. to 3000. lin.ft.	1 Lin.Ft.
Removal of Existing Superstructure	Lump Sum
4" Concrete Wearing Surface Course	197.3 Sq.Yds.
Porous Backfill	Lump Sum
Scuppers (Special Type) (cast iron)	8 Pieces
Field Painting of structural steel	111,000 Lbs.

WILLIAMS COUNTY
S.H. 310 SEC. F-2



SUPERSTRUCTURE STEEL											
MARK	SIZE	NO.	LENGTH	WEIGHT	SHAPE	MARK	SIZE	NO.	LENGTH	WEIGHT	SHAPE
S40	3/8" #	65	29'-0"	1968	Bent	S2b	1/2" #	48	26'-0"	834	Str #
S401	3/8" #	2	27'-0"	56	Bent						
S402	3/8" #	2	24'-2"	51	Bent	C5a	3/4" #	54	26'-0"	2110	Str #
S403	3/8" #	2	21'-3"	44	Bent						
S404	3/8" #	2	18'-4"	38	Bent	C2a	1/2" #	76	5'-0"	254	Bent
S405	3/8" #	2	15'-6"	32	Bent	C2b	1/2" #	76	2'-4"	118	Bent
S406	3/8" #	2	12'-7"	26	Bent						
S407	3/8" #	2	9'-8"	20	Bent						
S408	3/8" #	2	6'-9"	14	Bent						
									RAILING		
S4b	3/8" #	64	26'-9"	1787	Str #	D6a	3/8" #	8	8'-3"	135	Bent
S4b1	3/8" #	2	25'-9"	54	Str #	D6b	3/8" #	8	7'-6"	123	Bent
S4b2	3/8" #	2	24'-0"	50	Str #						
S4b3	3/8" #	2	21'-3"	44	Str #	D5a	3/4" #	28	7'-3"	305	Bent
S4b4	3/8" #	2	18'-6"	39	Str #						
S4b5	3/8" #	2	15'-9"	34	Str #	D4a	3/8" #	24	7'-6"	188	Bent
S4b6	3/8" #	2	13'-0"	27	Str #						
S4b7	3/8" #	2	10'-3"	21	Str #	R5a	3/4" #	28	11'-3"	*	Bent
S4b8	3/8" #	2	7'-6"	16	Str #						
						R4a	3/8" #	28	9'-3"	*	Str #
S4c	3/8" #	16	25'-0"	418	Str #						
						R1a	3/8" #	28	9'-3"	*	Str #
S2a	1/2" #	64	26'-9"	1144	Str #	R1b	3/8" #	140	2'-6"	*	Str #
S201	1/2" #	2	25'-9"	35	Str #						
S202	1/2" #	2	24'-0"	32	Str #						
S203	1/2" #	2	21'-3"	28	Str #						
S204	1/2" #	2	18'-6"	25	Str #						
S205	1/2" #	2	15'-9"	21	Str #						
S206	1/2" #	2	13'-0"	17	Str #						
S207	1/2" #	2	10'-3"	14	Str #						
S208	1/2" #	2	7'-6"	10	Str #						
						TOTAL SUPERSTR.					
						STEEL					10/132 #
						* Included in railing for payment					



NOTES

RIVETS shall be $\frac{3}{4}$ " ϕ "Dardelet" Rivet Bolts" may be substituted for field rivets.

FIELD HOLES shall be reamed.

WEARING SURFACE COURSE, see note @ DRG. BD-33

LOADING Bridge is designed for H-15-33 Loading

ANCHOR BOLT HOLES shall be drilled after masonry bed plates are located. Care shall be taken in placing reinforcing bars under masonry plates so that they will not be cut when the holes are drilled.

STRUCTURAL STEEL ITEM includes $\frac{1}{8}$ " sheet lead cast iron name plates and anchor bolts in addition to structural steel proper. Scuppers are listed separately. Painting to be done according to construction specifications.

CAMBER The 36" WF Beams shall have a minimum camber of 2" under no load; the cambering to be done at the rolling mill either while hot or in the straightening gag after cooling.

PLACING CONCRETE Concrete on superstructure shall be placed full width of bridge out to out of curbs between transverse construction joints approved by the Engineer.

END FINISH shall be used as a templet for top of backwall. Backwall shall not be built until the structural steel has been erected.

PROPOSAL NO. 2.

For additional
notes - see
Sheet No. 19

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

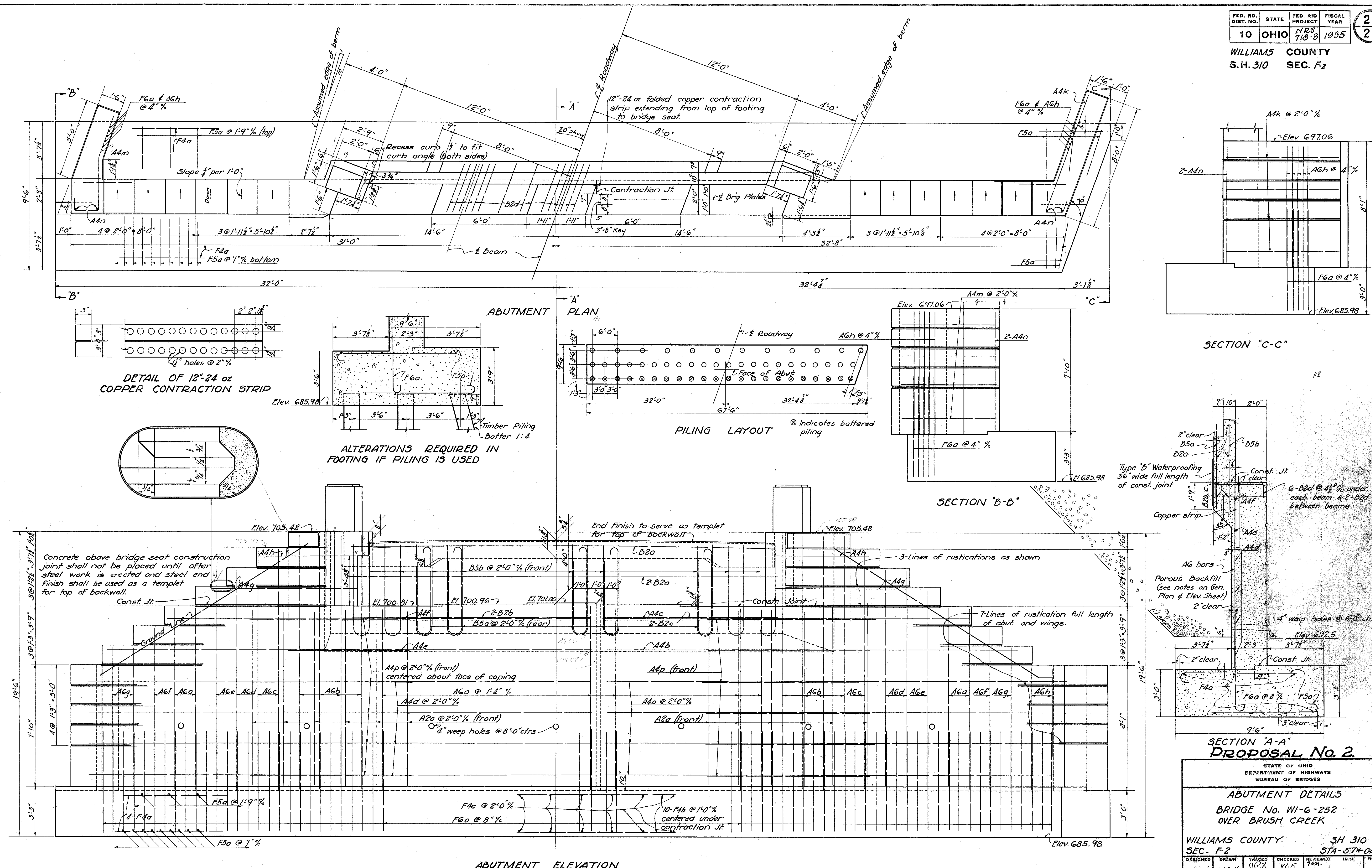
*SUPERSTRUCTURE DETAILS
NOTES & STEEL LIST*

*BRIDGE NO W-6-252
OVER BRUSH CREEK*

*WILLIAMS COUN
STA 57+05*

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISI
<i>N.C.K.</i>	<i>N.C.K.</i>	<i>L.G.U.</i>	<i>W.F.</i>	<i>W.F.</i>	<i>11/17/54</i>	

WILLIAMS COUNTY
S.H. 310 SEC. F-2



SECTION "A-A"
PROPOSAL No. 2.

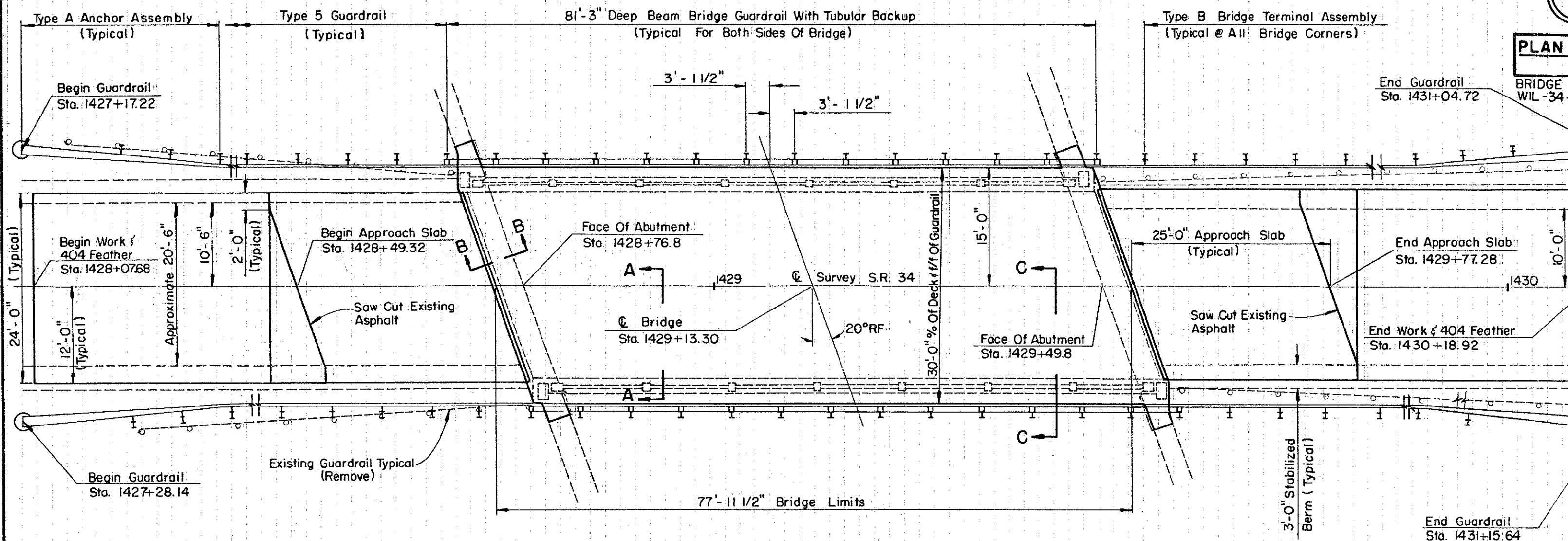
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

ABUTMENT DETAILS

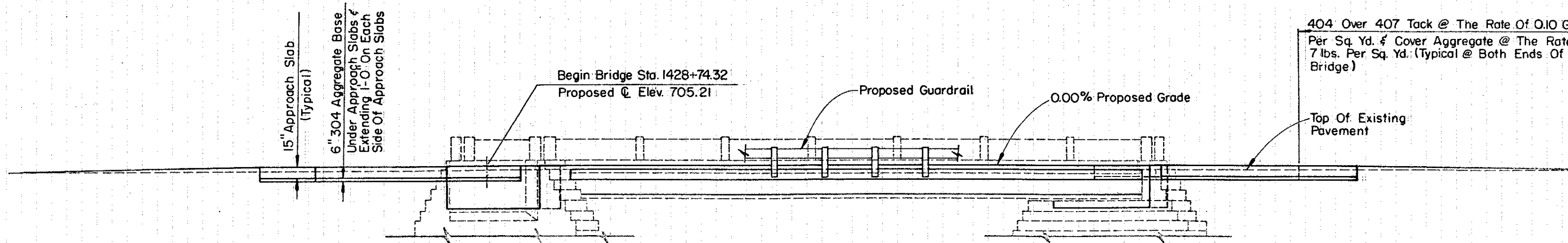
BRIDGE No. WI-6-252
OVER BRUSH CREEK

WILLIAMS COUNTY				SH 310	
SEC. F-2				STA-574-05	
DESIGNED W.C.K.	DRAWN W.C.K.	TRACED J.S.A.	CHECKED W.F.	REVIEWED J.C.	DATE 11/17/54

1979 REHABILITATION PLANS



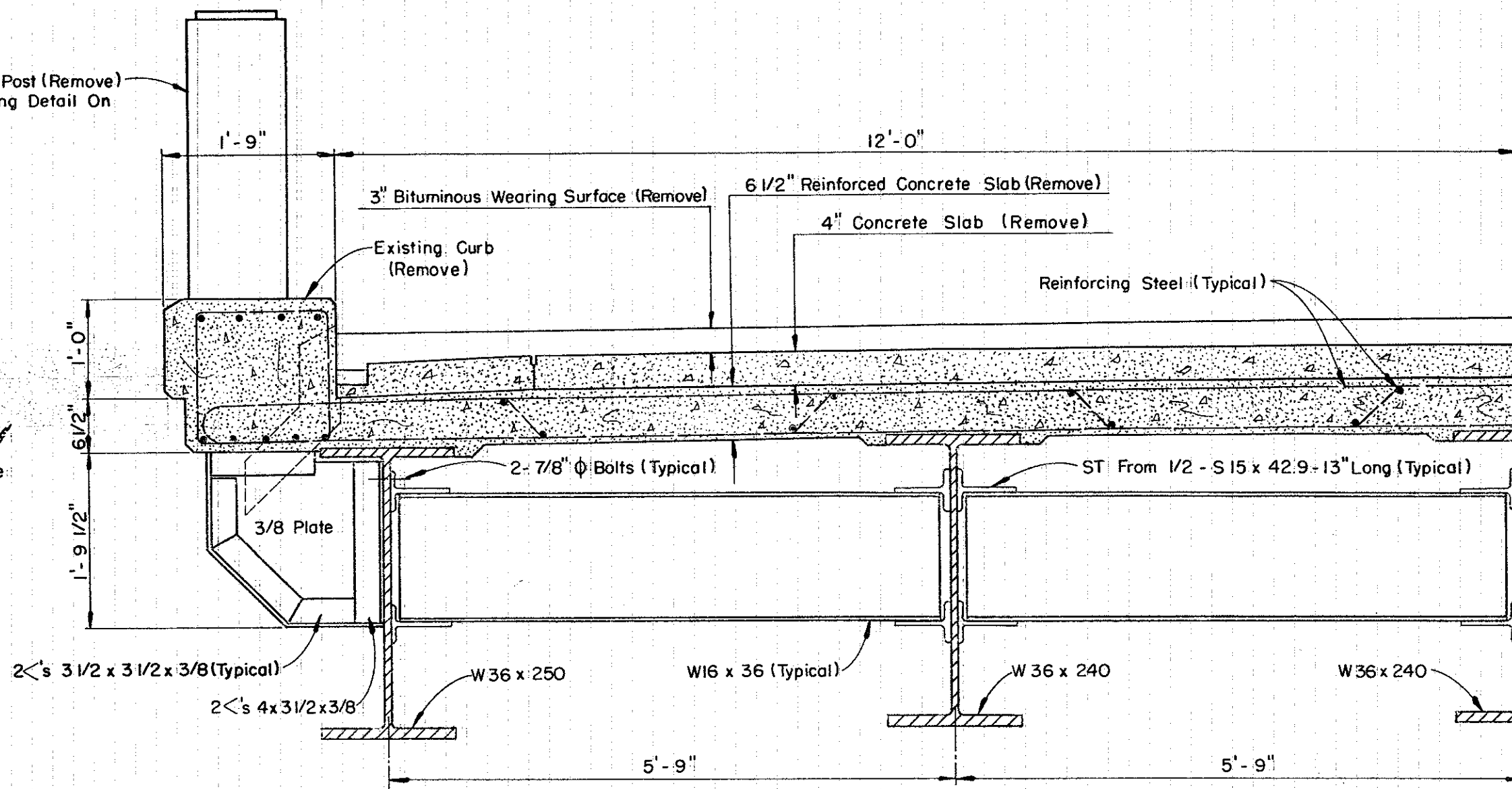
PLAN



--- EXISTING
— PROPOSED

**GENERAL PLAN
& ELEVATION**

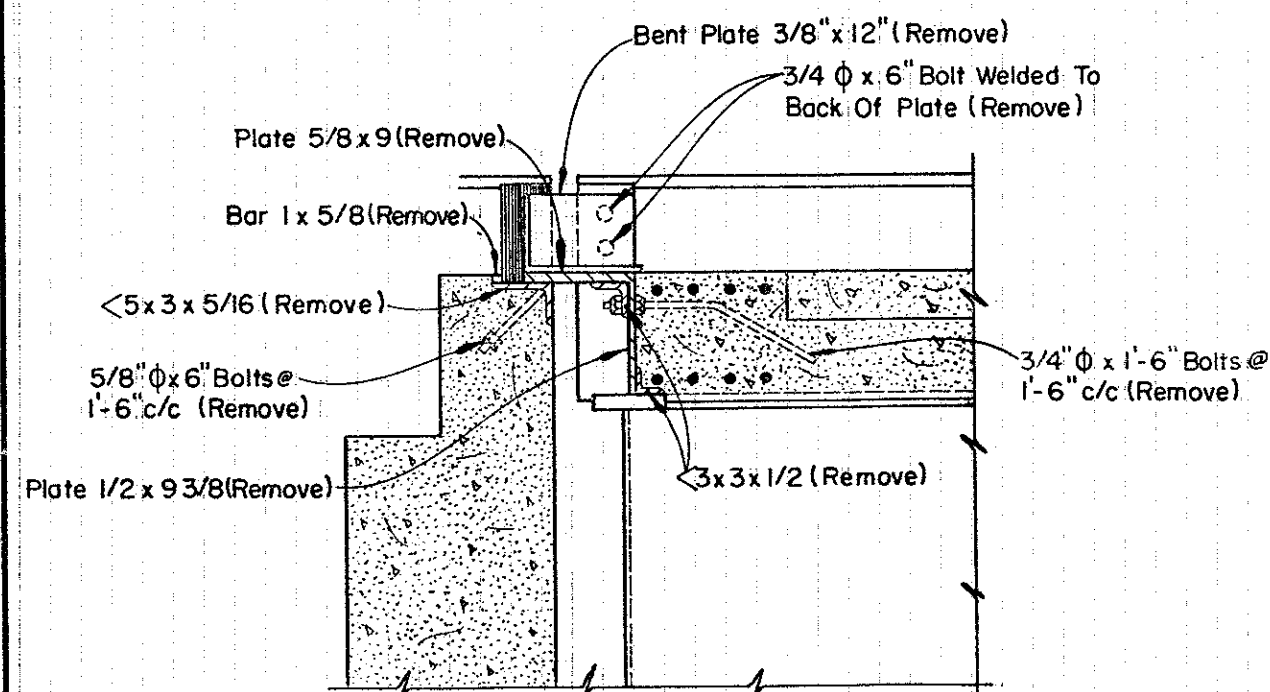
Concrete Post (Remove)
See Railing Detail On
Sheet 17



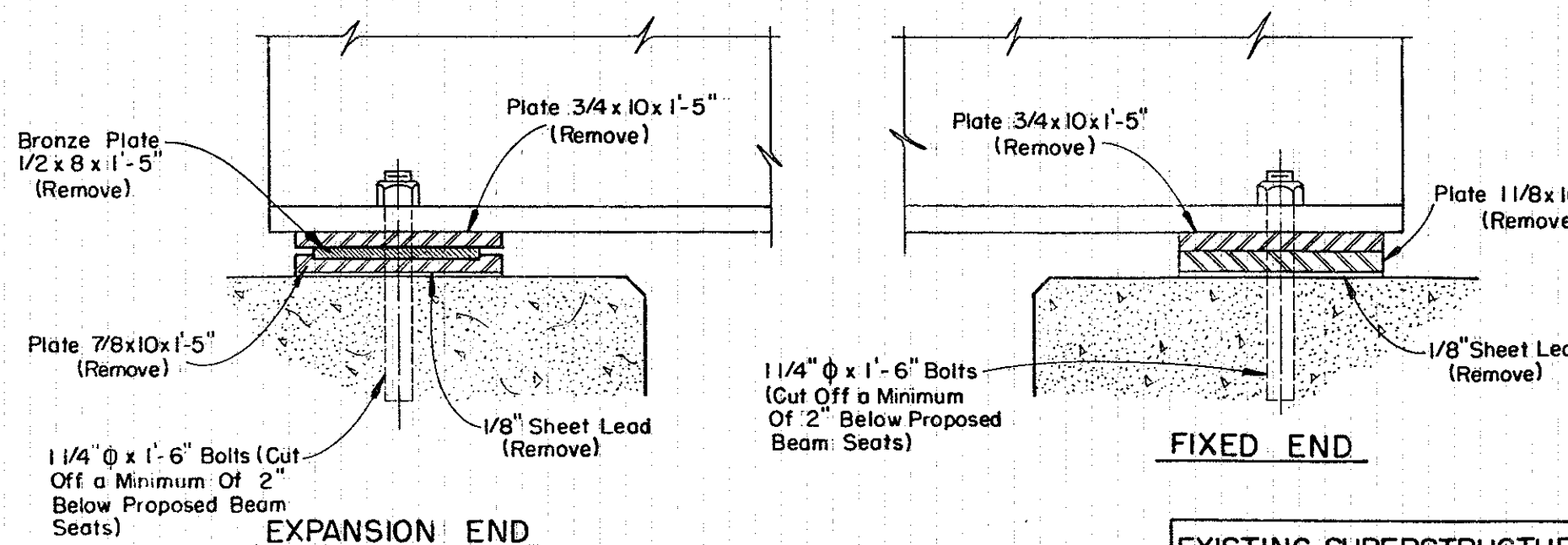
Symmetrical About C
Survey S.R. 34

Remove Bracket (3/8" Plate &
Attached Angles) By Cutting
Off Outstanding Legs Of The
Two <s 4 x 3 1/2 x 3/8

SECTION "A-A" THROUGH EXISTING SUPERSTRUCTURE

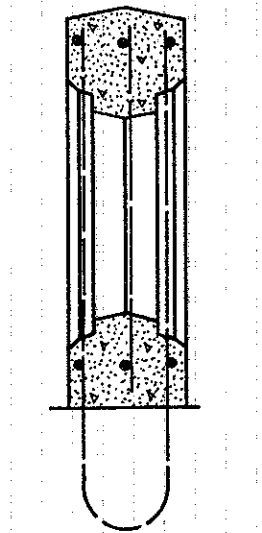
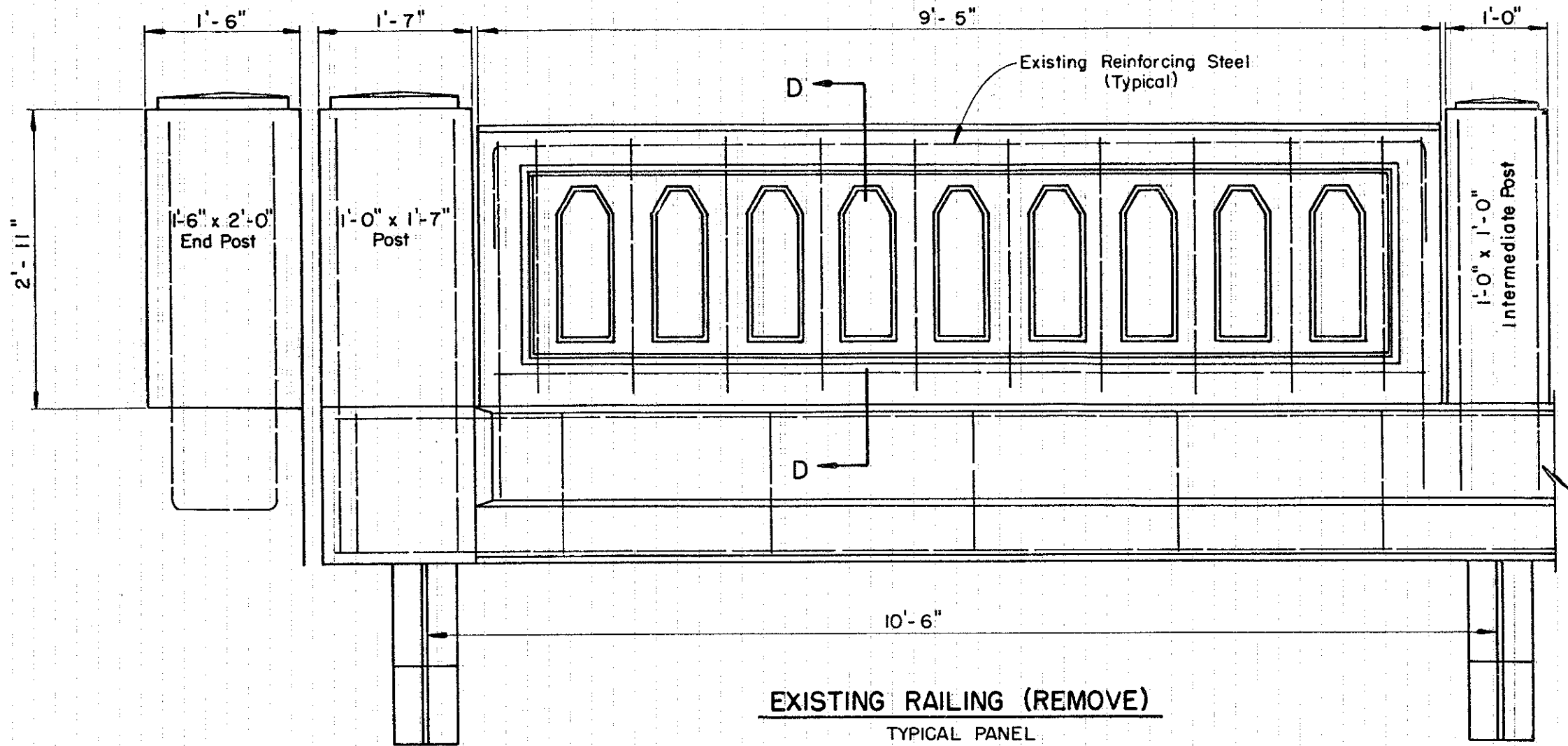


SECTION "B-B" THROUGH EXISTING END DAM ASSEMBLY
(TYPICAL FOR BOTH ENDS OF BRIDGE)

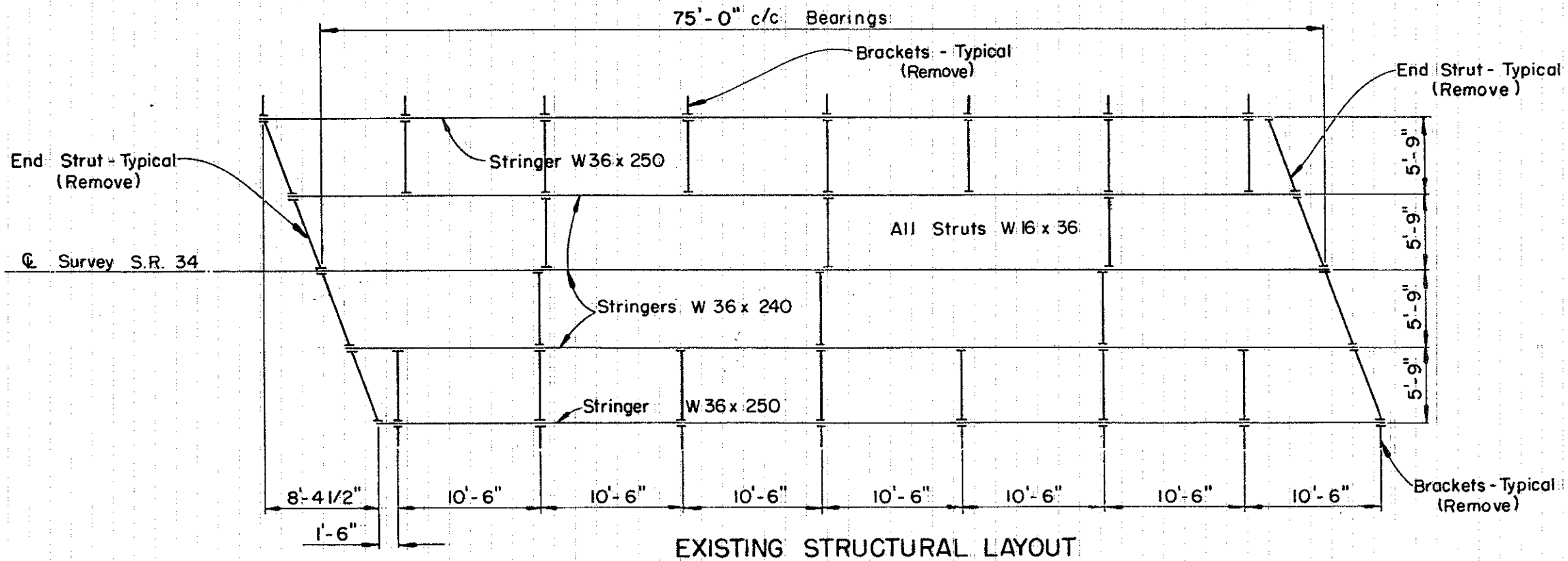


EXISTING BEARING ASSEMBLIES

EXISTING SUPERSTRUCTURE
SHOWING REMOVALS

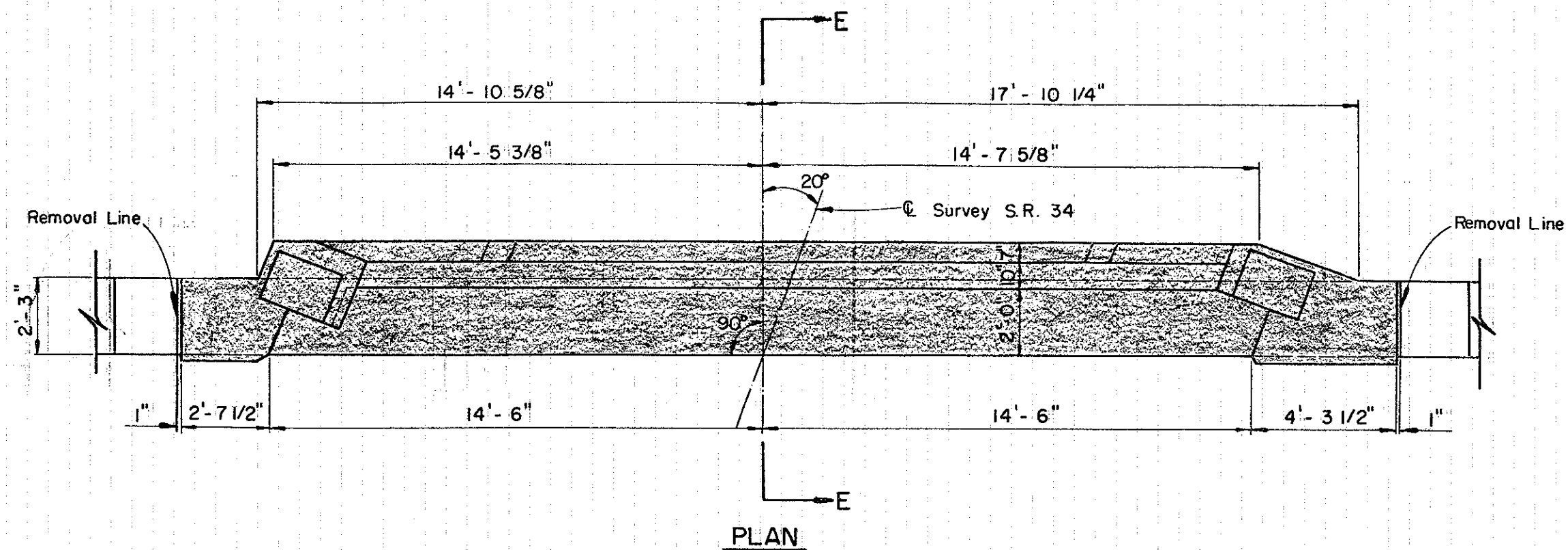


EXISTING RAILING (REMOVE)
TYPICAL PANEL

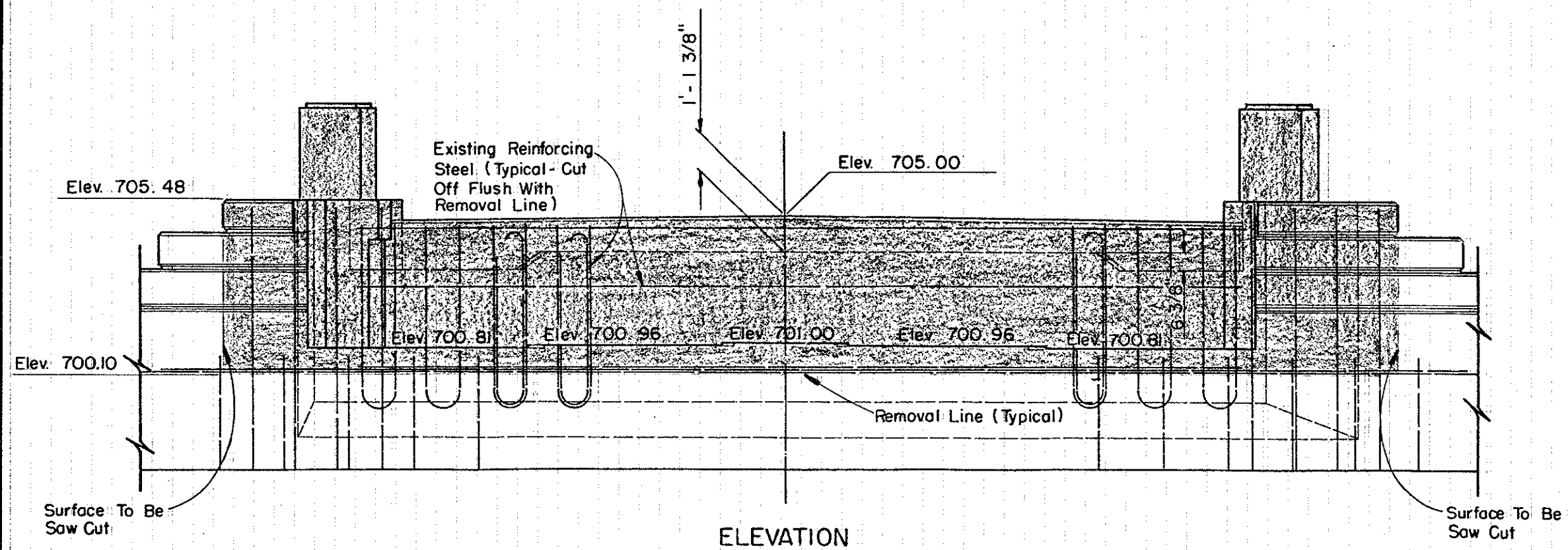


EXISTING STRUCTURAL LAYOUT

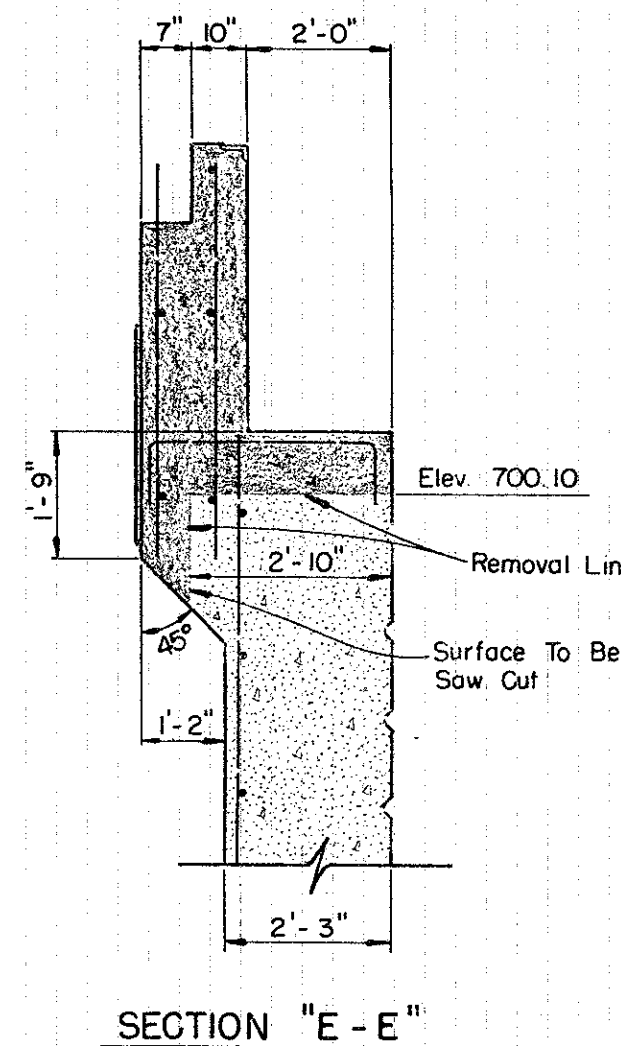
EXISTING SUPERSTRUCTURE
SHOWING REMOVALS

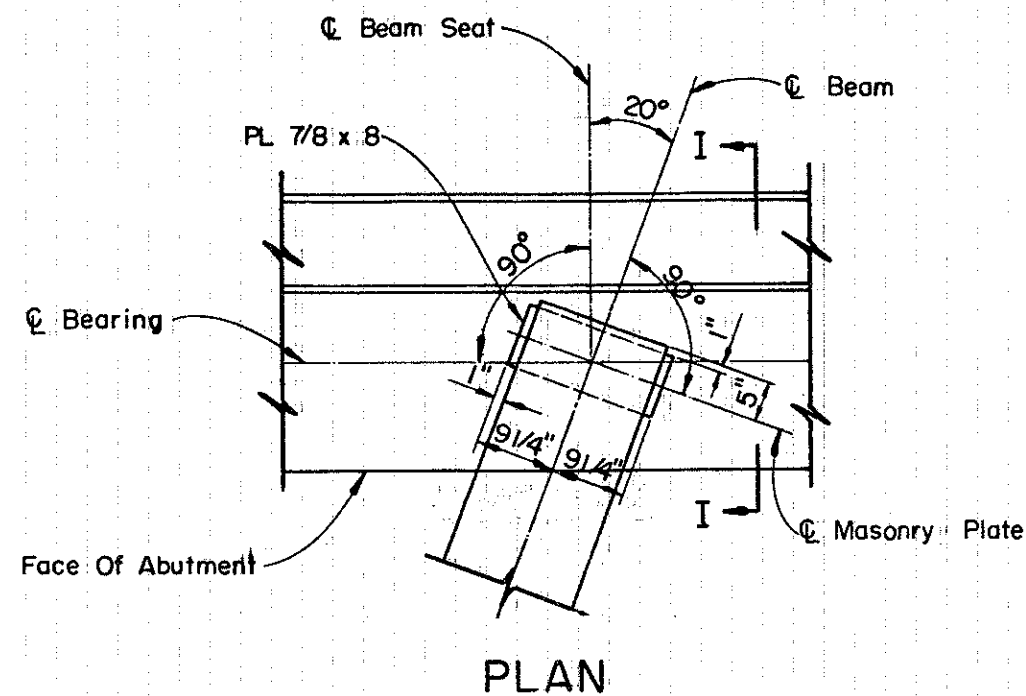


REMOVAL AREAS

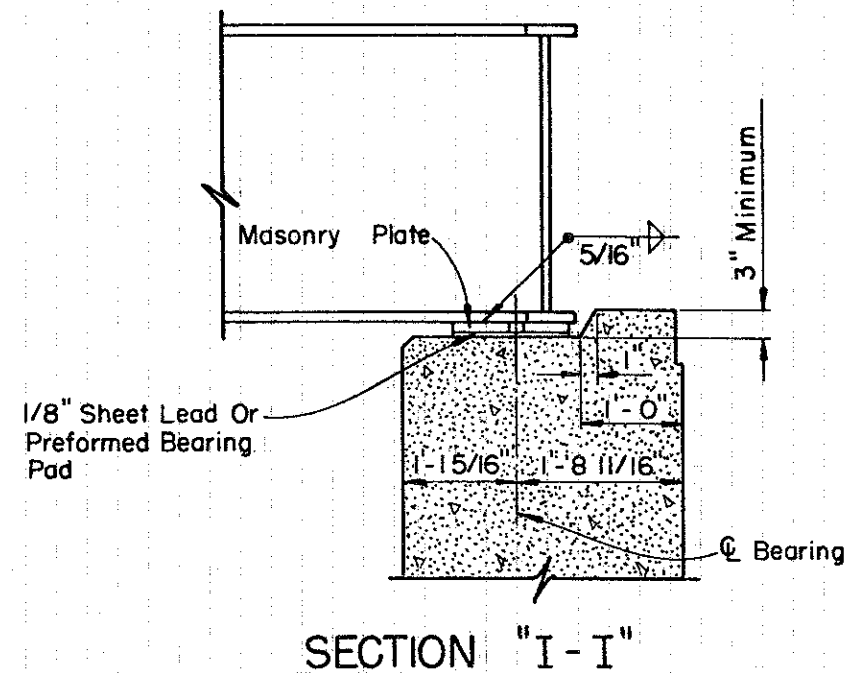


EXISTING ABUTMENT DETAILS SHOWING REMOVAL





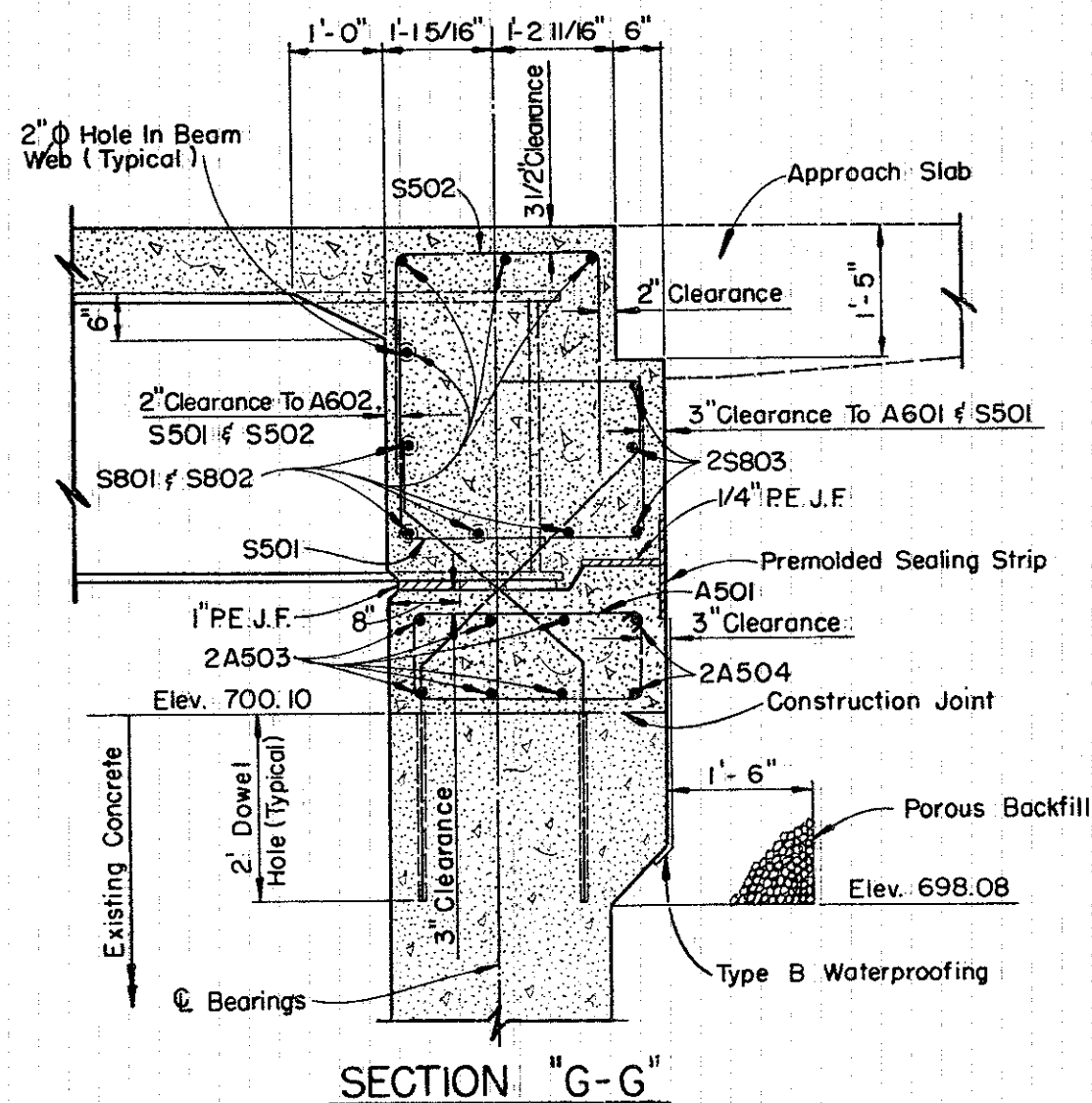
BEARING DETAIL



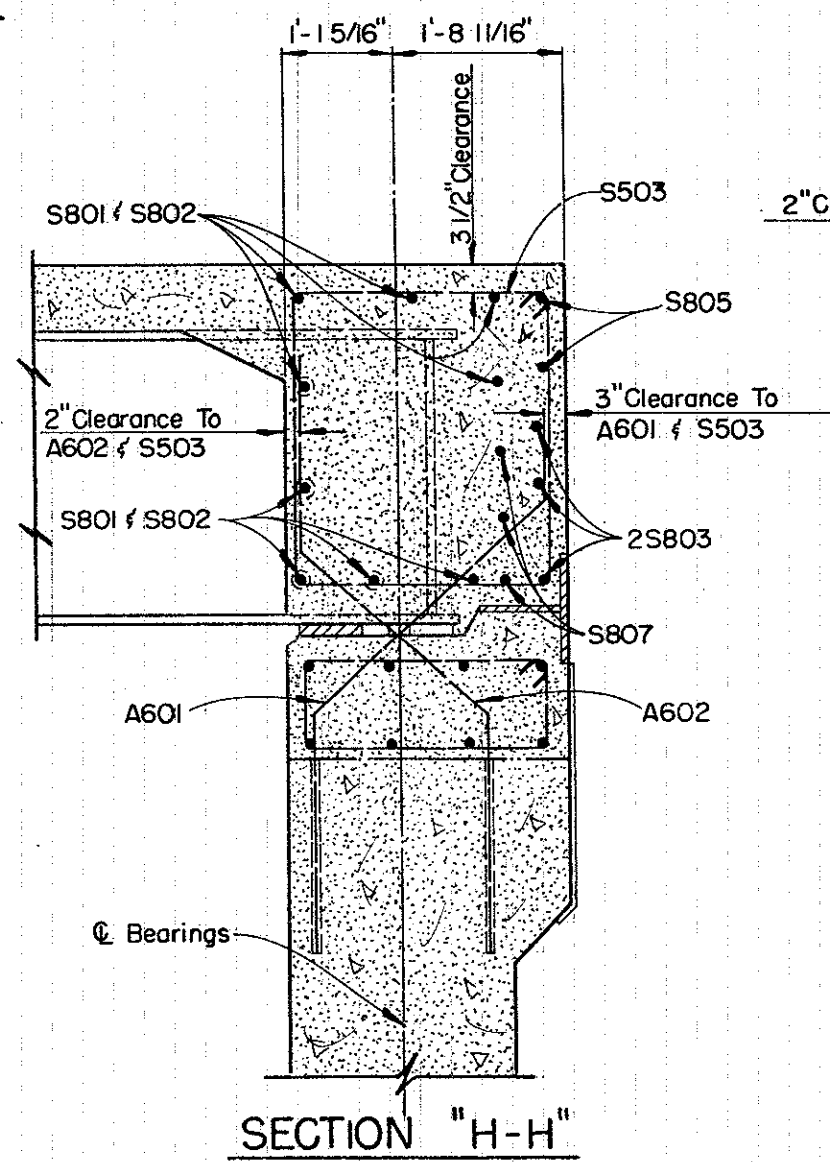
NOTE :

For Sections "F-F", "G-G", & "H-H" Place Horizontal Reinforcing Steel @ Equal Spaces Within A501, A502, S501, S502, S503 & S504 Bars. Dimensions & Details Not Shown In Sections "F-F" & "H-H" Are Similar To Those In Section "G-G".

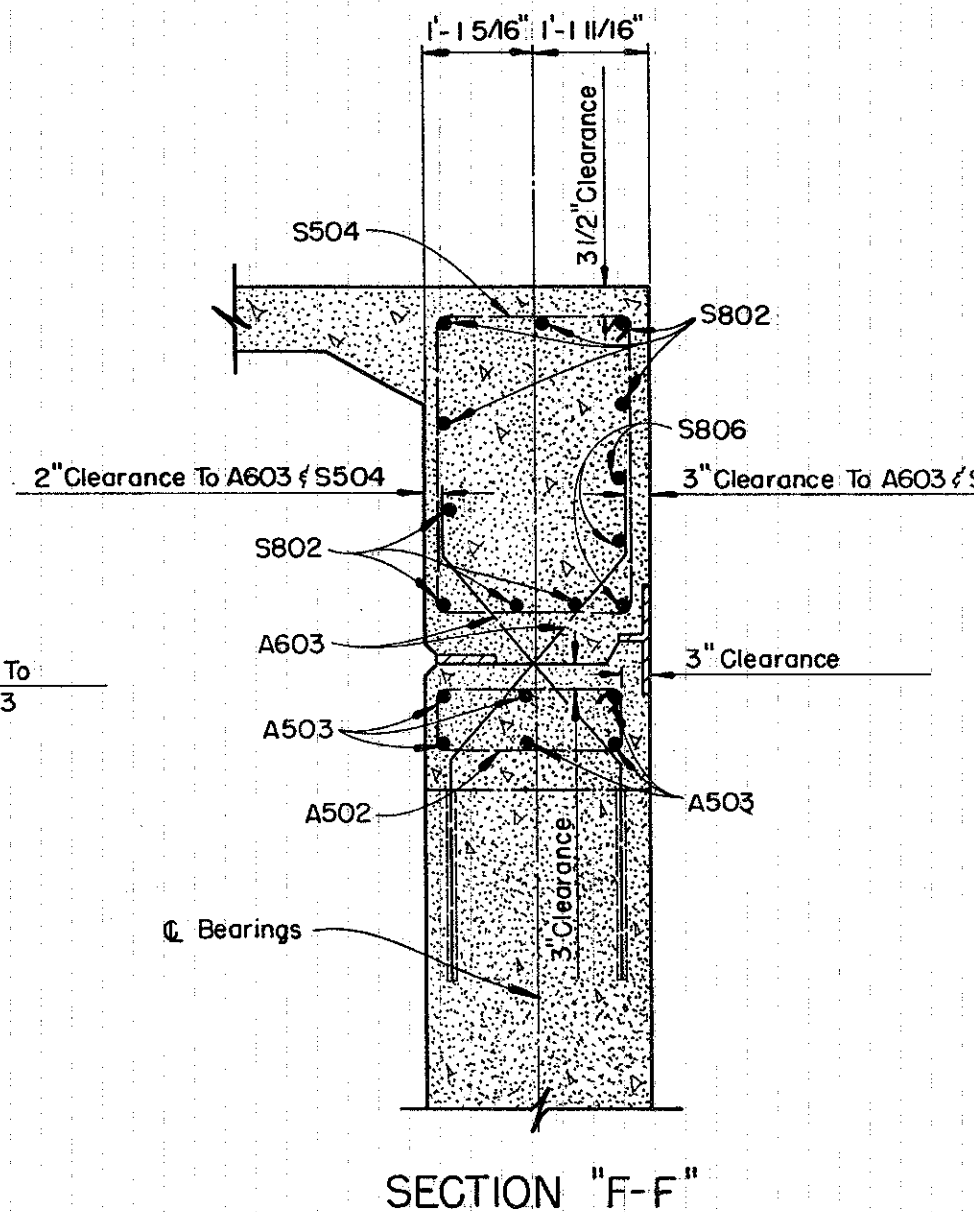
PLAN

BRIDGE
WIL-34

TAKEN FROM PLAN VIEW SHEET 19



TAKEN FROM PLAN VIEW SHEET 19



TAKEN FROM PLAN VIEW SHEET 19

PROPOSED ABUTMENT
SUPERSTRUCTURE DETAIL

PART 2

WIL-3

Bearing Rear Abutment

Survey S.R. 34

75' - 4 5/16" c/c Bearings

Existing Stringer W36 x 250

Existing Strut
(Typical)Existing Stringers
W36 x 240

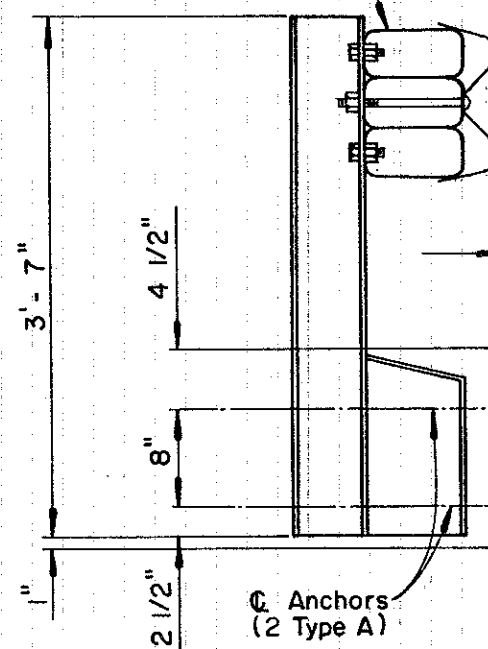
Existing Stringer W36 x 250

Bearing Forward Abutment

8' - 4 1/2" 10' - 6" 10' - 6" 10' - 6" 10' - 6" 10' - 6" 10' - 6" 10' - 6"

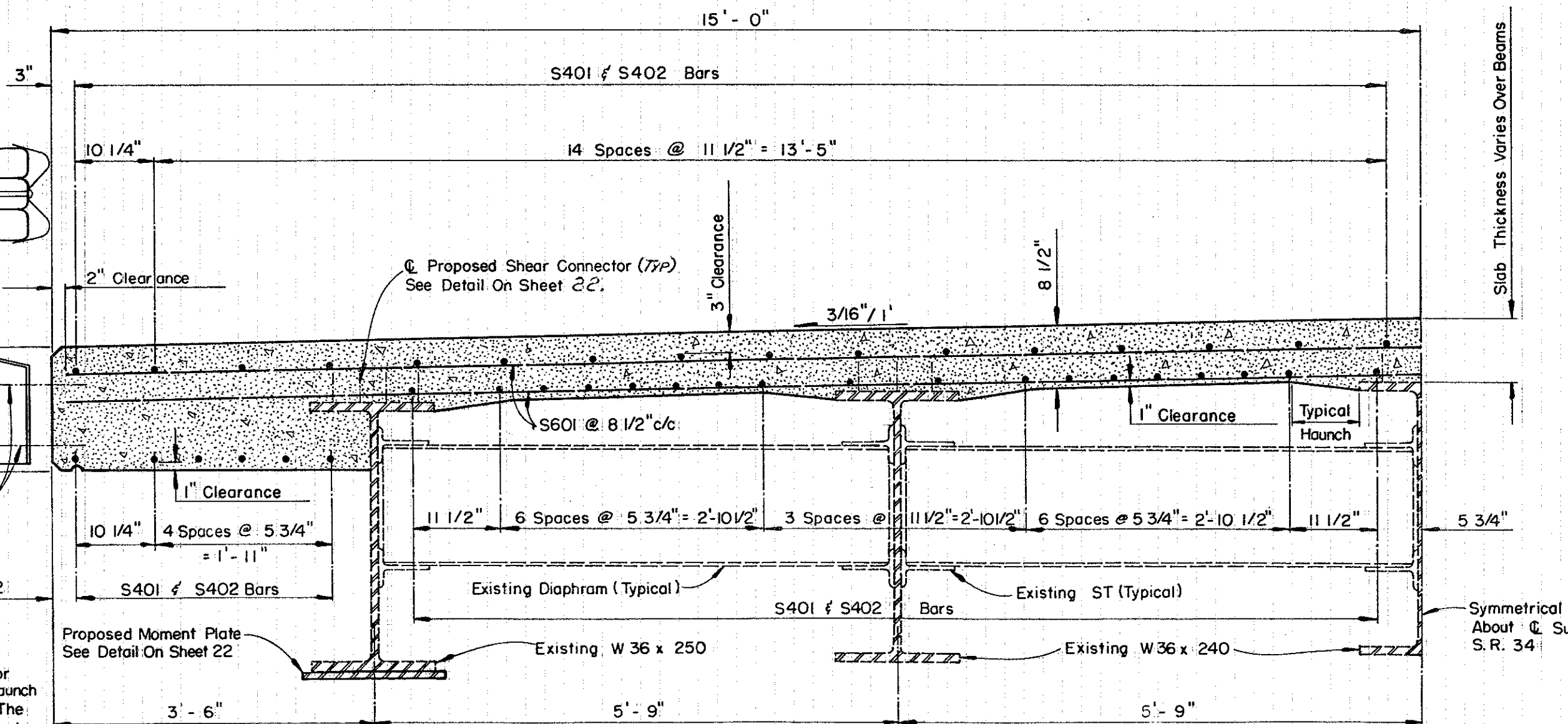
1' - 6"

PROPOSED STRUCTURAL LAYOUT

For Additional Guard Rail
Details Refer To Standard
Drawing DBR-2-73 Dated
4-10-73Anchors
(2 Type A)3" - 1" Diameter 1/2"
Round Drip Groove

NOTE:

A Typical Haunch Width Of 9" Shall Be Used For Computing Quantity Of Concrete. However, The Haunch Width May Vary Between 6" & 12" Provided That The Slope Shall Not Be More Than 1:4 For A Haunch Less Than 9" In Width.



Slab Thickness Varies Over Bearings

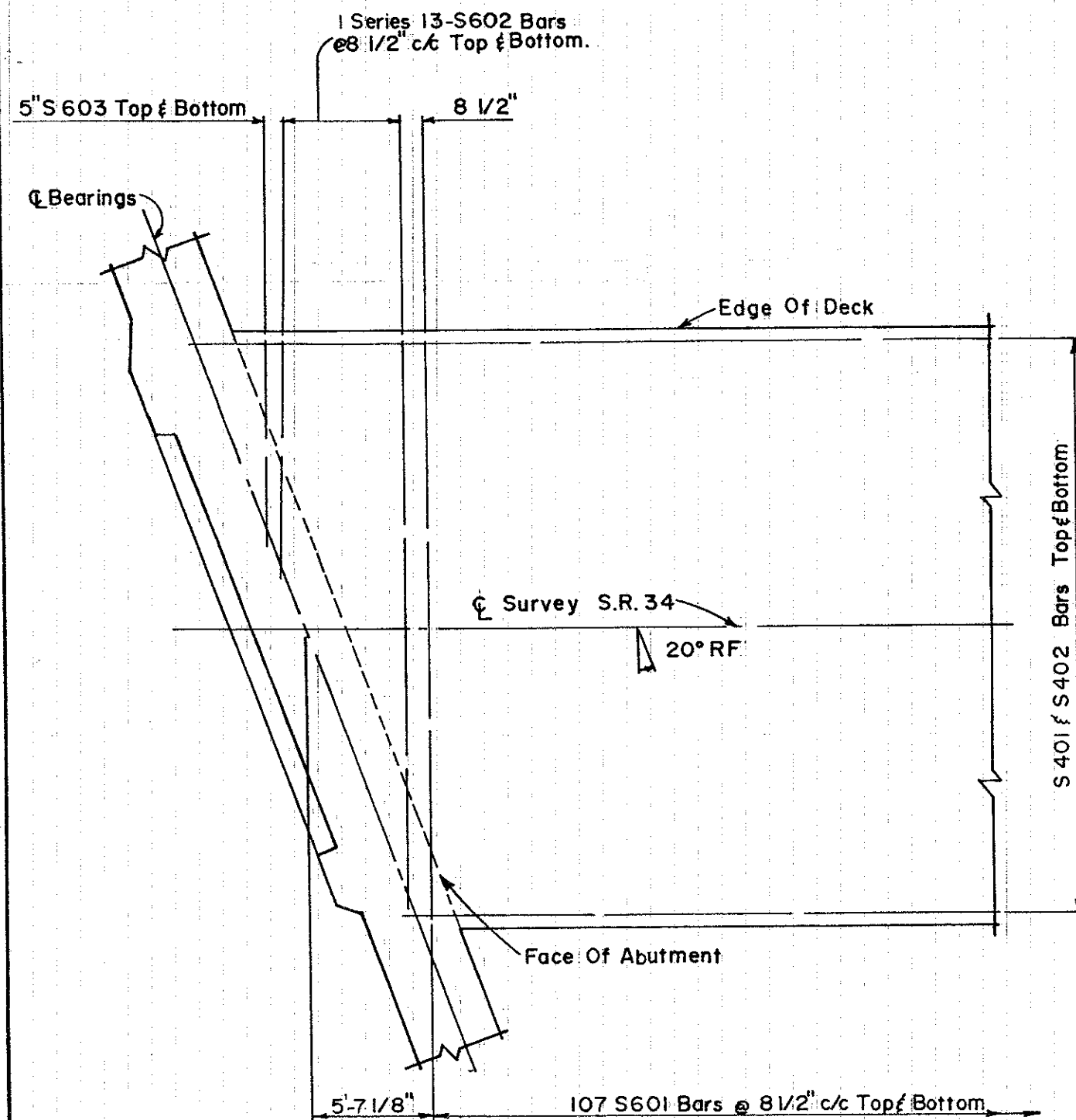
Symmetrical
About C S.R. 34

SECTION "C-C" THROUGH PROPOSED SUPERSTRUCTURE

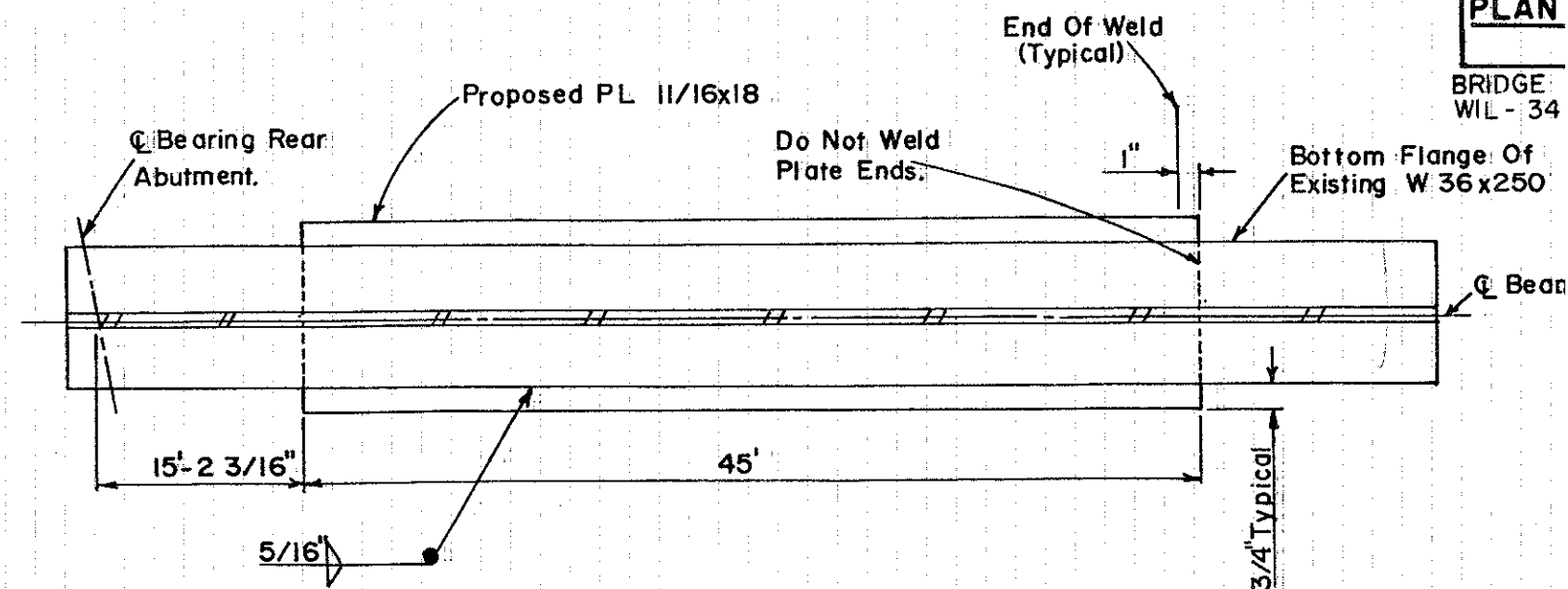
PROPOSED SUPERSTRUCTURE
DETAILS

PART 2

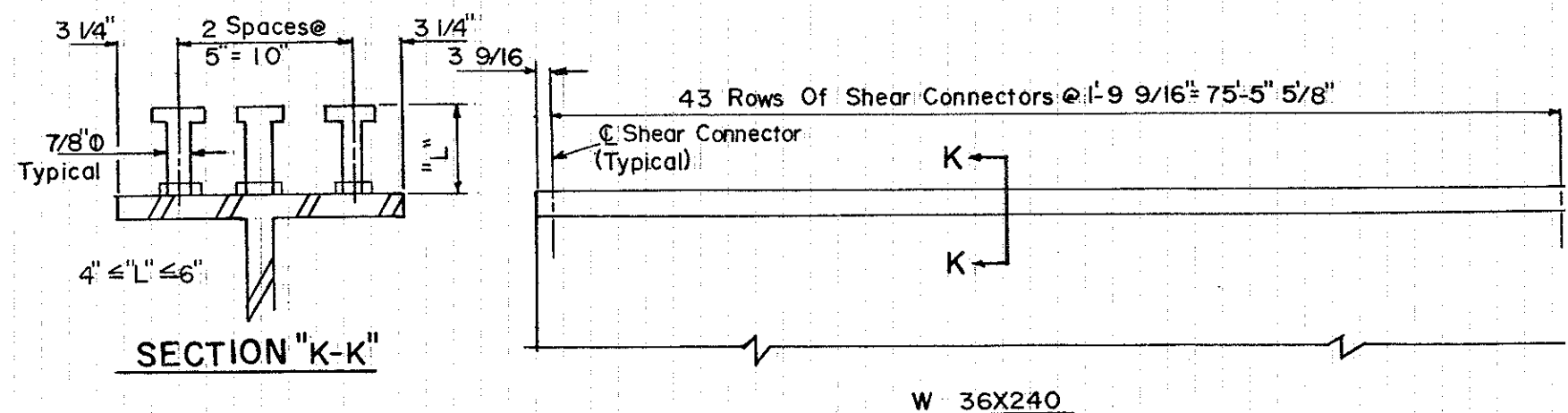
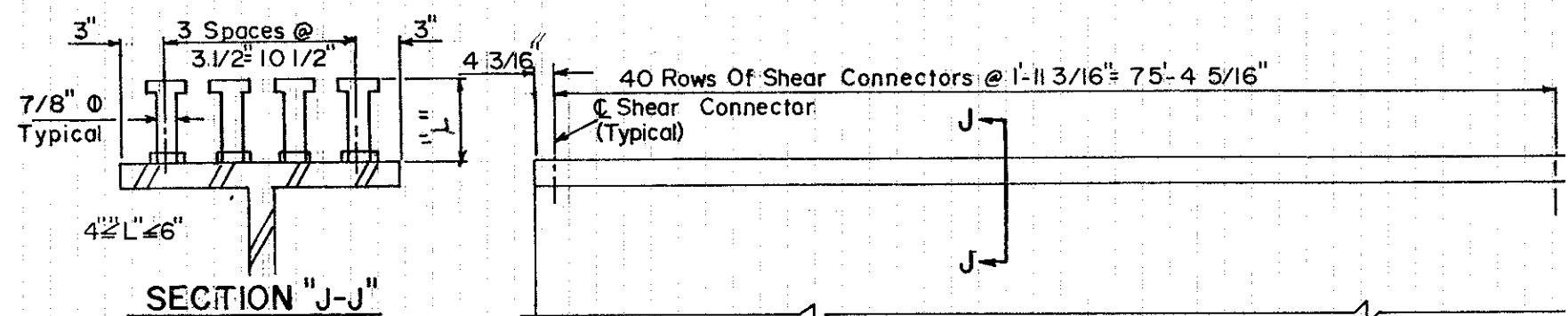
WIL-3



PARTIAL DECK PLAN
(TYPICAL FOR BOTH ENDS OF BRIDGE)



MOMENT PLATE DETAIL FOR W 36X250



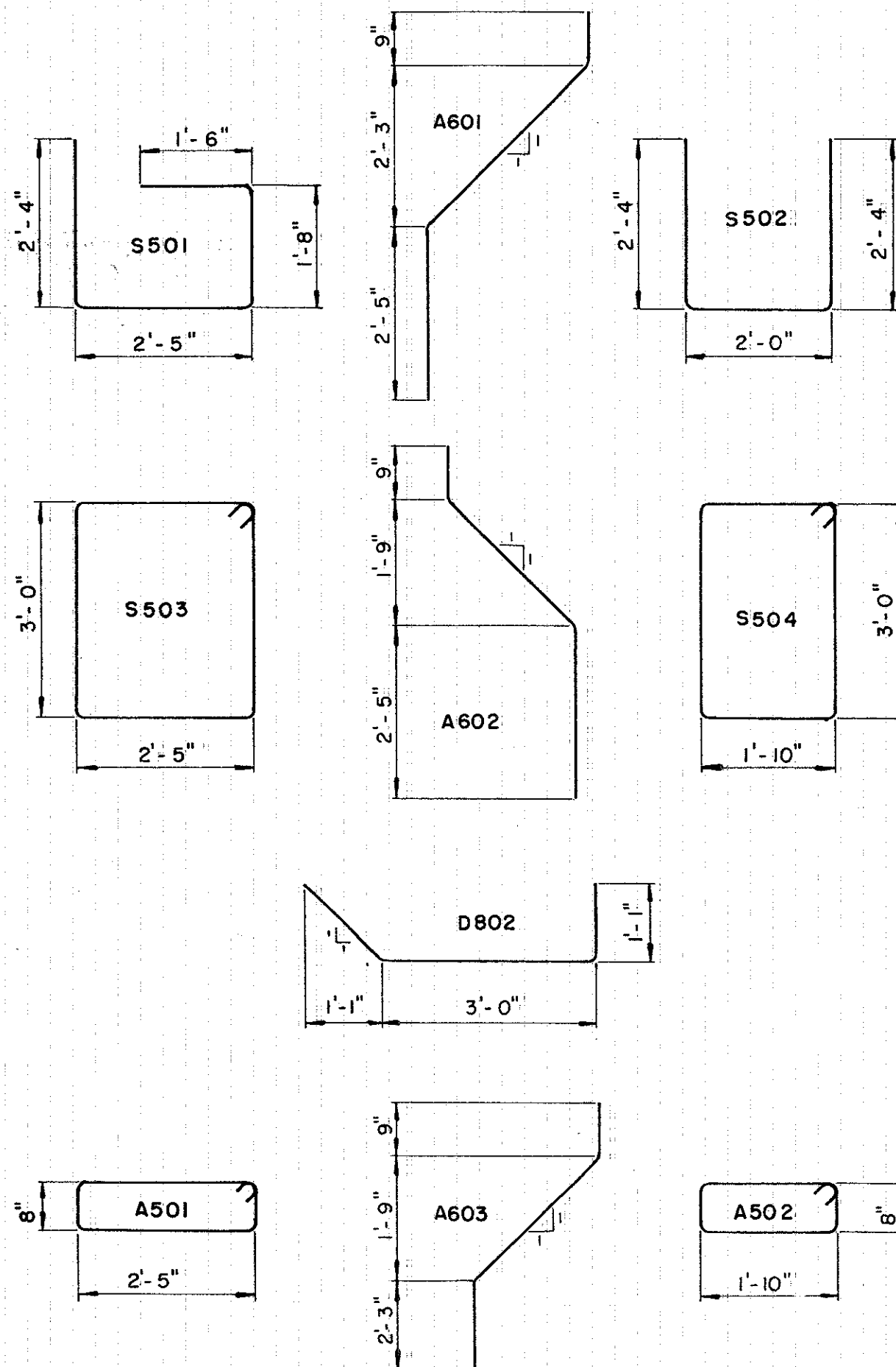
SHEAR CONNECTOR DETAIL

REINFORCING STEEL LIST

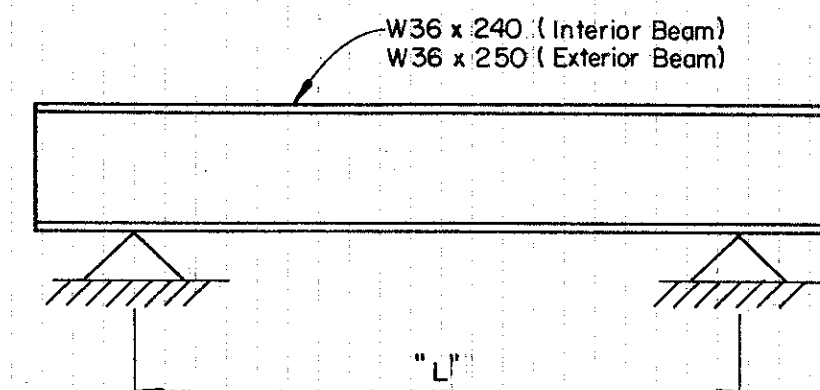
MARK	NO.	LENGTH	WEIGHT	SHAPE
ABUTMENTS				
A601	62	6'-2"	575	B
A602	62	5'-6"	512	B
A603	24	5'-4"	192	B
SUPERSTRUCTURE				
S801	18	24'-1"	1157	S
S802	18	16'-8"	801	S
S803	12	17'-10"	571	S
S804	4	2'-6"	27	S
S805	4	2'-0"	21	S
S806	6	5'-0"	80	S
S807	6	3'-8"	59	S
D802	34	5'-4"	484	B
S601	214	29'-8"	9,537	S
S602	4 Series Of 13	5'-4" To 28'-4"	1,315	S
S603	4	3'-11"	24	S
S501	50	7'-6"	391	B
S502	50	6'-5"	335	B
S503	12	11'-3"	141	B
S504	12	10'-1"	126	B
S401	160	30'-0"	3,206	S
S402	80	21'-1"	1,127	S
FOR S602 BARS SERIES INCREMENTS = 1'-11"				
SPLICE LENGTHS				
A503		2'-2"		
A504		2'-2"		
S801 To S802		5'-0"		
S803		5'-0"		
S401		1'-11"		
S401 To S402		1'-11"		

NOTE:
REINFORCING STEEL SAMPLES

Refer To CMS Sections 106.03, 700, 709.01 Thru 709.05 & 709.08. Sufficient Additional Reinforcing Steel Shall Be Provided For Sampling. Random Samples Shall Be Replaced In The Structure By The Additional Steel, Spliced In Accordance With 509.08.



LOCATION	BEAM DEFLECTION (INCHES) DUE TO SUPERIMPOSED DEAD LOAD	
	W36 x 240	W36 x 250
0.1L	5/16	1/2
0.2L	5/8	1
0.3L	7/8	1 1/16
0.4L	1	1 1/4
0.5L	1 1/16	1 5/16
0.6L	1	1 1/4
0.7L	7/8	1 1/16
0.8L	5/8	1
0.9L	5/16	1/2

PROPOSED SUPERSTRUCTURE
DETAILS

PART 2

WIL - 34 - 2

GENERAL NOTES

202 PORTIONS OF STRUCTURES REMOVED:

When no longer needed to maintain traffic the designated portions of the existing structure shall be removed.

203 EXCAVATION INCLUDING EMBANKMENT CONSTRUCTION:

121 cu.yds. of excavation including embankment construction has been provided. The excavation shall be that which is required to facilitate abutment repair, placement of porous backfill and aggregate base. The excavation for abutment repair and placement of porous backfill shall be bounded on the top by the existing cross sections and on the bottom, sides and ends by the limits of the porous backfill. The excavation for placement of aggregate base shall be bounded on the top by the existing cross sections and on the bottom, sides and ends by the limits of the aggregate base.

The embankment shall be that which is required for shaping and filling at the bridge corners and adjacent to feathers as directed by the Engineer.

509 REINFORCING STEEL AS PER PLAN:

The cost of burning 2 inch diameter holes in beam webs to provide for placement of reinforcing steel shall be included in the unit price bid for reinforcing steel.

513 STRUCTURAL STEEL:

This item shall consist of furnishing and installing moment plates.

513 WELDED STUD SHEAR CONNECTORS:

The current American Welding Society Specification D2.0 shall govern this item.

606 GUARDRAIL, TYPE 5 AS PER PLAN:

All Type 5 guardrail posts shall be a minimum of 8'-0" in length.

611 REINFORCED CONCRETE APPROACH SLABS AS PER PLAN:

Approach slabs shall be as per Standard Drawing AS-1-72 dated 6/30/72 except that the width shall be 24'-0" and approach slab jacking holes shall be deleted.

SPECIAL SANDBLAST CLEANING AS PER PLAN:

This item shall consist of cleaning of all existing structural steel which will be in contact with moment plates, bearing plates, welded stud shear connectors and superstructure concrete. The method of cleaning shall be by sandblasting and shall be in accordance with SS 837.04.

Payment shall be made at the contract price for:

<u>ITEM</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
Special	Lump sum	Sandblast cleaning as per plan

SPECIAL RAISING, SUPPORTING AND LOWERING STRUCTURE AS PER PLAN:

This item shall consist of all handling of existing structural steel as required to facilitate modifications, including the setting of said steel into its final position as shown on sheet 21. The operation shall be conducted in such a manner as to prevent damage to existing superstructure members which are designated for use in the repaired structure. Details of the procedure shall be submitted to the Engineer fifteen days prior to beginning the operation and work shall not begin until approval is given.

Payment shall be made at the contract price for:

<u>ITEM</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
Special	Lump sum	Raising, supporting and lowering structure as per plan.

PLANS OF THE EXISTING STRUCTURE may be examined at the District Office of the Ohio Department of Transportation in Bowling Green, Ohio.

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS: AS-1-72 dated 6/30/72, BP-5 dated 8/11/75, GR-1 dated 12/6/76, GR-2B dated 12/6/76, GR-3 dated 12/6/76, GR-4 dated 12/6/76, DBR-2-73 dated 4/10/73, MC-3 dated 6/1/73 and to supplemental specifications SS 808 dated 1/1/71, SS 825 dated 8/19/71 and SS 837 dated 12/7/72.

DESIGN DATA:

Design Loading is HS20-44

Concrete Class C - unit stress 1200 p.s.i. for superstructure
unit stress 1333 p.s.i. for substructure

Reinforcing Steel - ASTM A615, A616 or A617
unit stress 20,000 p.s.i.