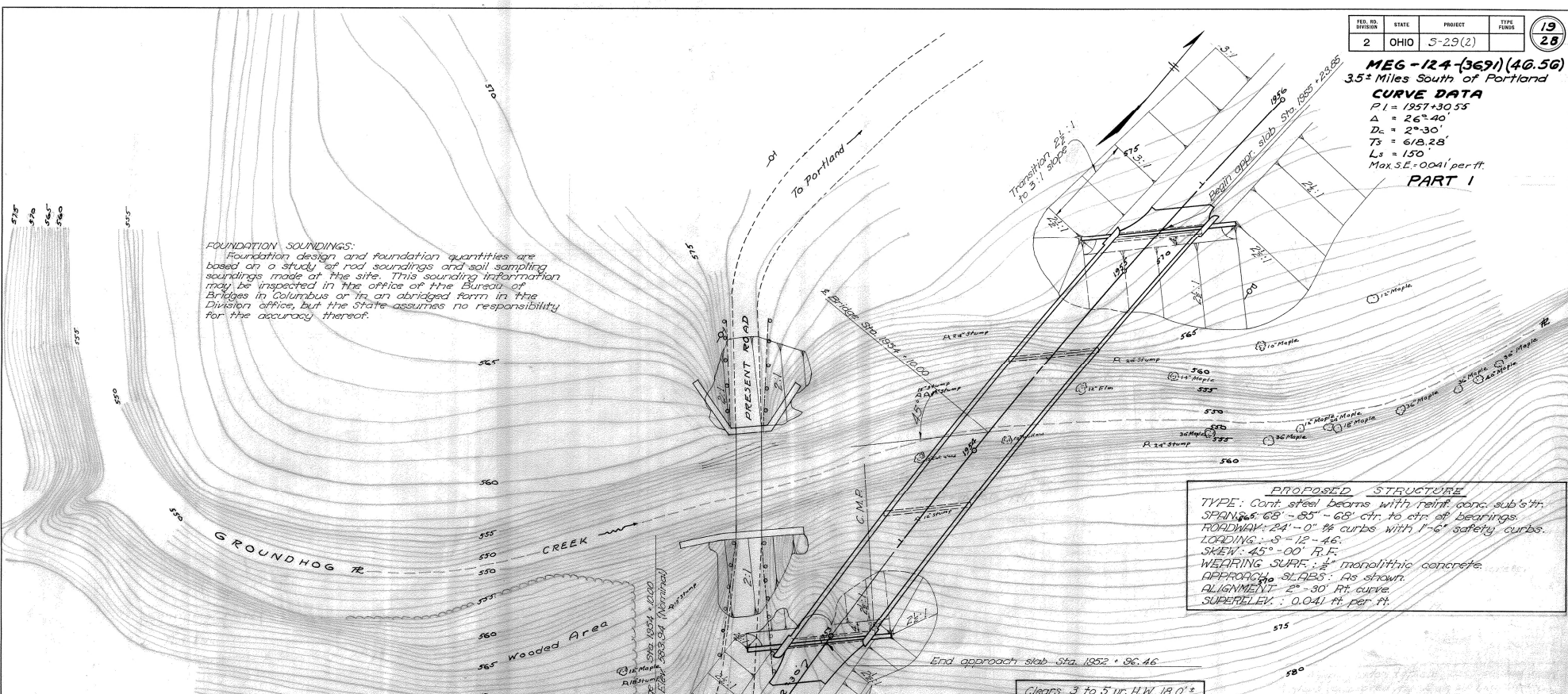


MEG-124-(3691) (40.56)
3.5 Miles South of Portland
CURVE DATA
 P1 = 1957+30.55
 Δ = 26°40'
 Dc = 2°30'
 T3 = 618.28'
 Ls = 150'
 Max. S.E. = 0.041 per ft.
PART I

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 an abridged form in the Division office, but the State assumes no responsibility for the accuracy thereof.

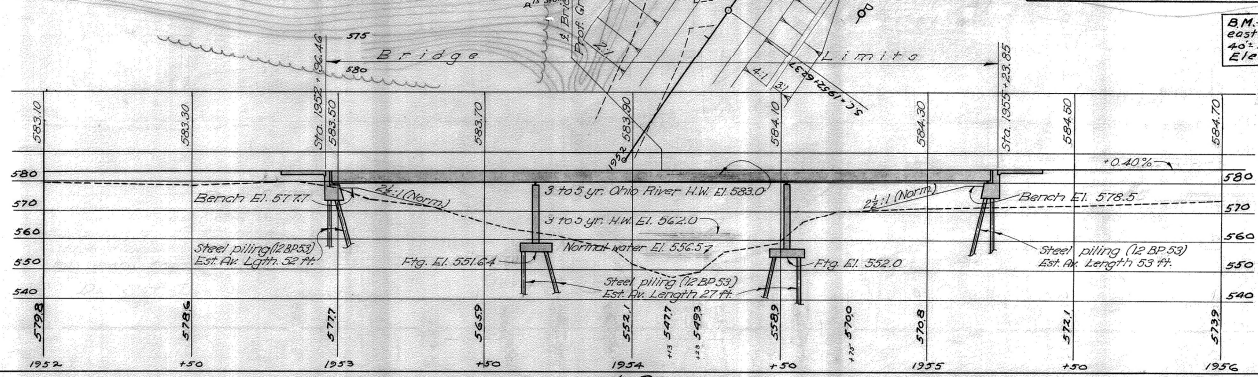


PROPOSED STRUCTURE
 TYPE: Cont. steel beams with reinf. conc. sub's'tn.
 SPAN: 68'-85'-68' ctr. to ctr. of bearings.
 ROADWAY: 24'-0" 1/8 curbs with 1'-6" safety curbs.
 LOADING: S-12-46.
 SKEW: 45°-00' R.F.
 WEARING SURF: 4" monolithic concrete.
 APPROACH: 30.1235' as shown.
 ALIGNMENT: 2°-30' R.F. curve.
 SUPERELEV.: 0.041 ft. per ft.

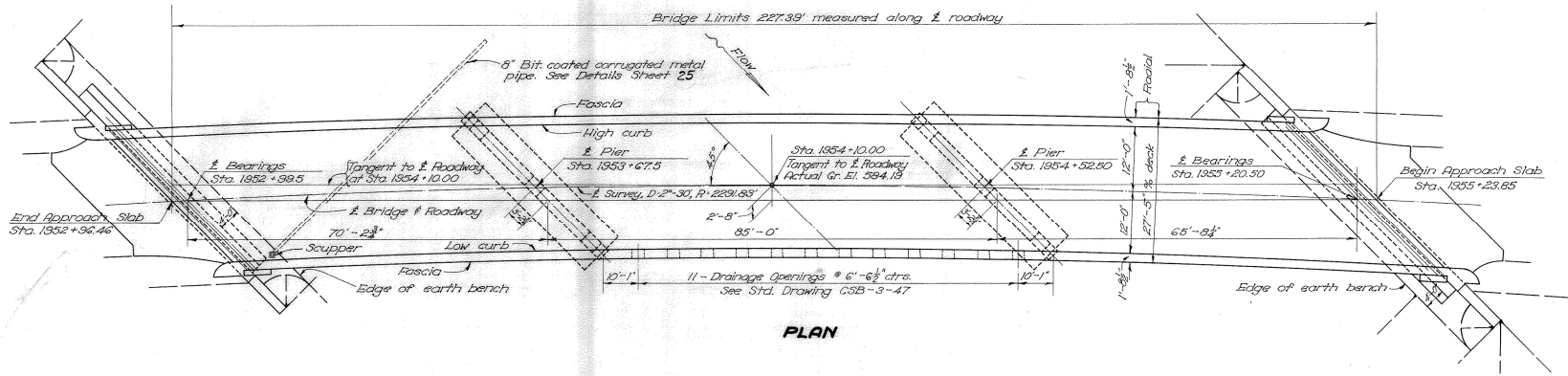
B.M. on south east abutment
 40' left Sta. 1953+25
 Elev. 580.00

DRAINAGE AREA 8630.00
 NORMAL WATER ELEVATION 556.5'
 3705 YEAR HIGH WATER ELEV. 562.0'
 3705 YEAR OHIO RIVER BACKWATER 583.0'
DATA ON PRESENT BRIDGE
 BRIDGE No. ME-124-412
 Low Truss
 Clear Span 44'-0"
 Length out to out bridge floor 50'-6"
 Width between bridge railings 11'-5"
 Width out to out trusses 14'-5"
 Stone Abutments
 Elevation of bridge floor 578.5
 Streambed elevation of bridge 548.0

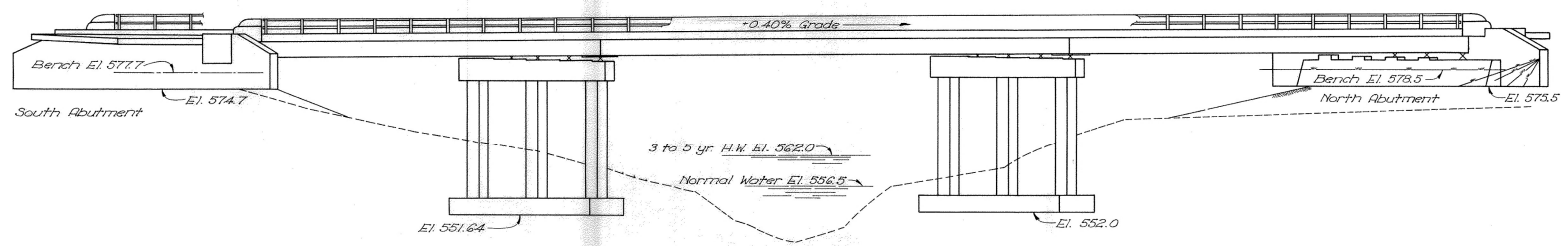
STATE OF OHIO
 DEPARTMENT OF HIGHWAYS
 BUREAU OF BRIDGES
SITE PLAN
 BRIDGE No. ME-124-412
 OVER
 GROUND HOG CREEK
 MEIGS CO.
 Sec. MEG-124-3691 Sta. 1954+10.00
 Scale 1:20
 Present Topography Proposed Work
 Surveyed Drawn Designed/Drawn Checked/Reviewed
 Beeble C.E.F. J.N.B. J.N.B. C.F.H.D.
 DFG W.H.C. 6-5-33



PROFILE



PLAN



ELEVATION
Piling not shown

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CSB-3-47, revised 7-27-49, and RB-1-47, revised 7-27-49, for details not shown.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic, the existing structure shall be removed and become the property of the Contractor. The North abutment shall be removed to 6" below the ground line. The South abutment shall be removed to El. 560.0. Earth back of abutments shall be dressed to 2:1 slope, dressing at slopes included with removal of existing structure for payment. Suitable waste masonry may be dumped as bank protection at the direction of the Engineer.

EXCAVATION QUANTITY includes the removal of fill material between top of earth bench and bottom of abutment crossbeam.

PILING shall be driven with a steam hammer of not less than 7000# energy per blow to firm contact with the layers of sandstone and blue clay, which shall be considered as attained when the capacity according to the formula in Sec. 8-18.05 is at least 60 tons for the pier piles and 25 tons for abutment piles if a 7,000# hammer is used, or 45 tons for the pier piles and 17 tons for the abutment piles if a 15,000# hammer is used, and if the length of penetration is approximately equal to the depth to the sandstone and clay layers as indicated by the bridge foundation investigation report. If the energy rating of the hammer is between these values, the required formula capacity shall be determined by interpolation. (The design load is 36 tons for the pier piles and 17 tons for the abutment piles.)

WELDING of structural steel shall be Class T1 except as otherwise shown.

PAINTING, both shop and field, shall be according to Item S-8 except that the paint shall be applied by brushing. Spray application will not be permitted.

METAL WASHERS, of approximately 3" diameter shall be provided on the anchor bolts, between the railing posts and the fascia of the deck, to hold the railing in accurate alignment. Washers shall be used only to the extent necessary for this purpose. The space between each railing post and the face of the concrete shall be thoroughly and neatly filled with 'Leacrite' or approved equivalent to exclude moisture. Payment for washers and filling shall be considered as included in the contract price per lin. ft. of railing.

SURFACE FINISH OF CONCRETE: Railing end posts, curb faces, and fascias of deck shall receive a rubbed surface finish. All other exposed surfaces shall be governed by the provisions of Item S-1.

STEEL FOR END FINISH need not be copper-bearing.

ESTIMATED QUANTITIES

Item	Total	Unit	Description	N. Abut.	S. Abut.	Piers	Superst.	Gen.	As Built
E-2	Lump	Sum	Cofferdams, cribs and sheeting					Lump	
E-2	462	cu. yd.	Unclassified excavation	30	53	353		4	
S-1	153	cu. yd.	Glass "C" concrete, superstructure				153		
S-1	132	cu. yd.	Glass "C" concrete, abutments	65	65			2	
S-1	60	cu. yd.	Glass "C" concrete, pier caps & columns			60			
S-1	76	cu. yd.	Glass "E" concrete, pier footings			76			
S-4	61,820	lbs.	Reinforcing steel	6,085	6,039	19,761	29,935	283	
S-7	194,900	lbs.	Structural steel				194,900		194,900 193,158
S-8	184,490	lbs.	Field railing of structural steel				184,490		184,490 193,158
S-14	4520	lin. ft.	Railing (steel with concrete and posts)				4520		
S-16	Lump	sum	First test pile					Lump	
S-18	6,340	lin. ft.	Steel piling, 12" BP # 53 lbs.	690	690	970			6,340 2,358.3
S-24	Lump	sum	Removal of existing structure					Lump	
S-29	65	lin. ft.	8" Bitum. coated corrugated metal pipe, including specials					65	

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGE AND RAILROAD ENGINEERING

**GENERAL PLAN & ELEVATION,
NOTES & ESTIMATED QUANTITIES**
BRIDGE No. ME-124-412
over GROUNDHOG CREEK

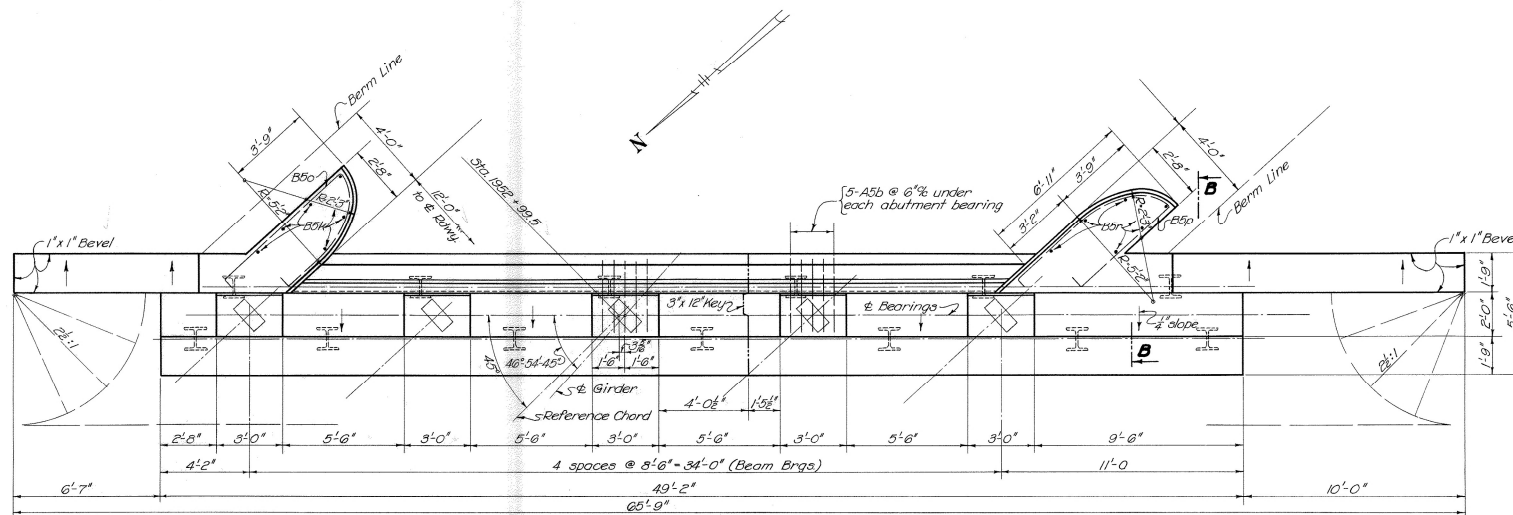
Meigs County
Sec. MEG-124-36.91 Sta. 1954+10.00

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	REVISED
JYG	JYG	JVP	SLB	BFG	6-5-53	

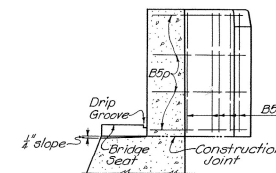
P.G. 6/29/55

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	21
2	OHIO	J-29(2)		2B

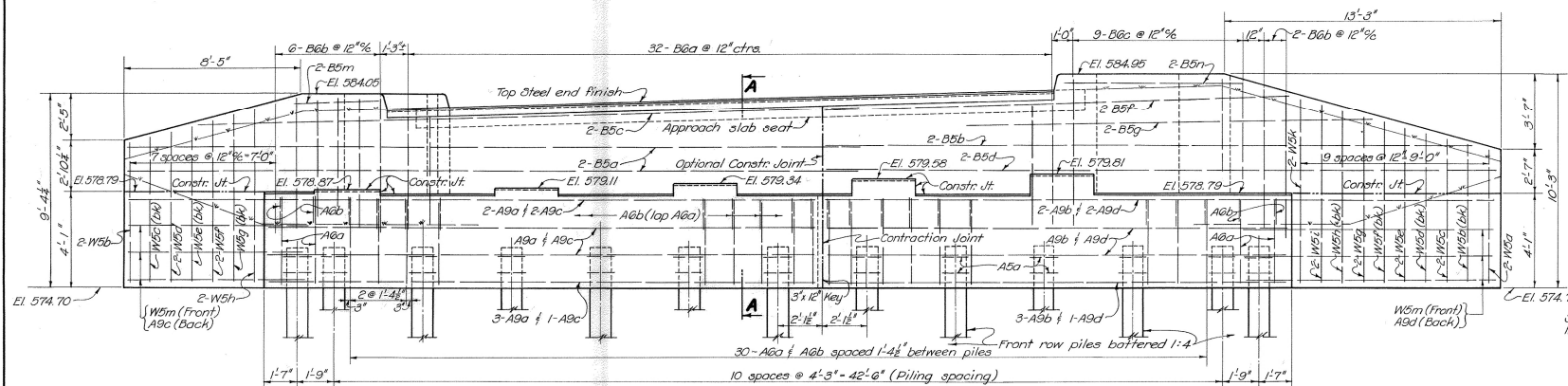
MEG-124-(36.91)(46.56)
PART I



PLAN OF SOUTH ABUTMENT

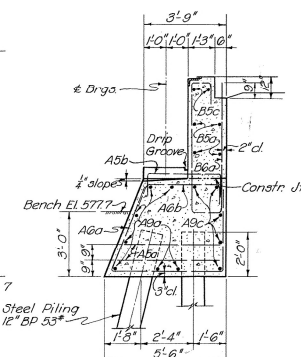


SECTION B-B



ELEVATION OF SOUTH ABUTMENT

For notes See Sheet No. 22



SECTION A-A

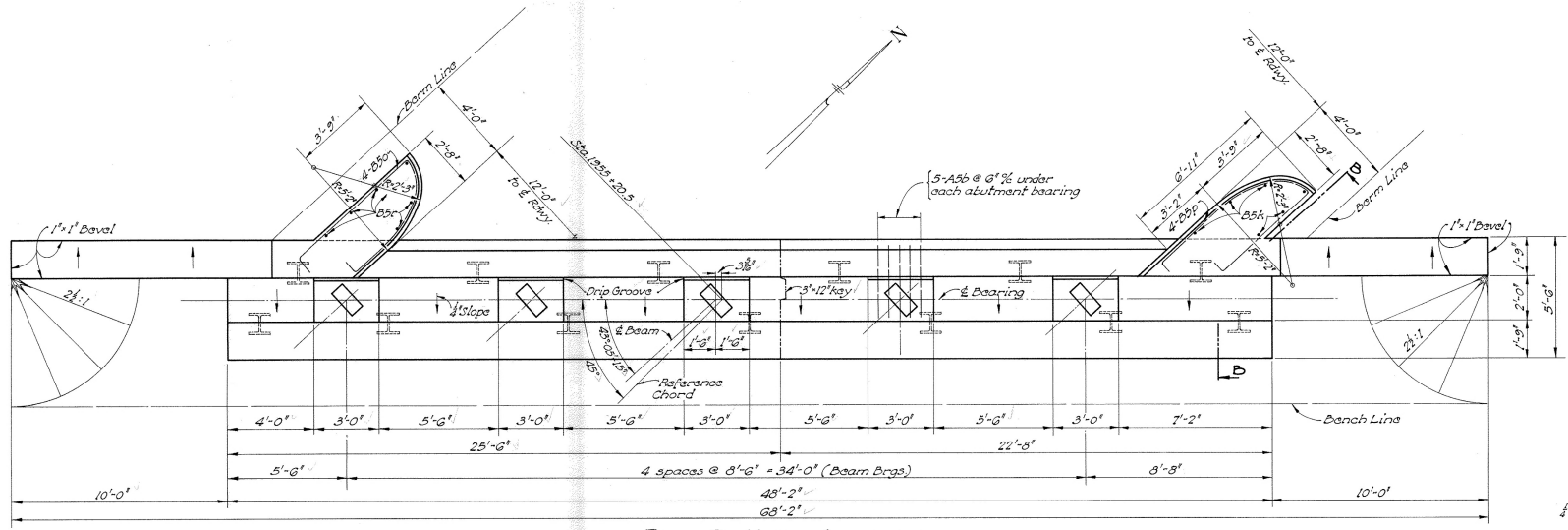
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND ROADWAY CROSSINGS

SOUTH ABUTMENT DETAILS
BRIDGE NO. ME-124-412
OVER GROUNDHOG CREEK

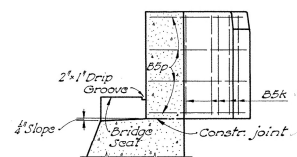
MEIGS COUNTY
J.E.C. MEG-124-36.91 STA. 1954+10.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.V.G.	J.V.G.	N.E.X.	Stb	W.H.C.	6-5-53	

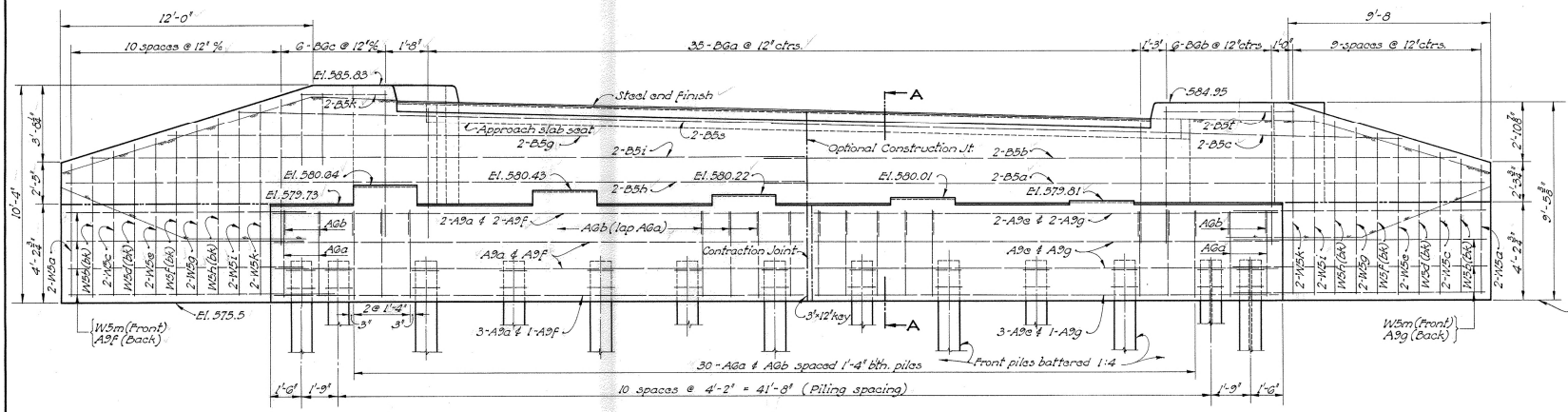
MEG-124-(36.91)(46.56)
PART I



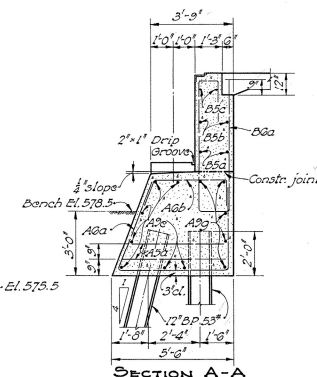
PLAN OF NORTH ABUTMENT



SECTION B-B



ELEVATION OF NORTH ABUTMENT



SECTION A-A

Note: All earth fill around abutments shall be made full height of earth bench. Excavation shall then be made for abutment cap, after which piling shall be driven.

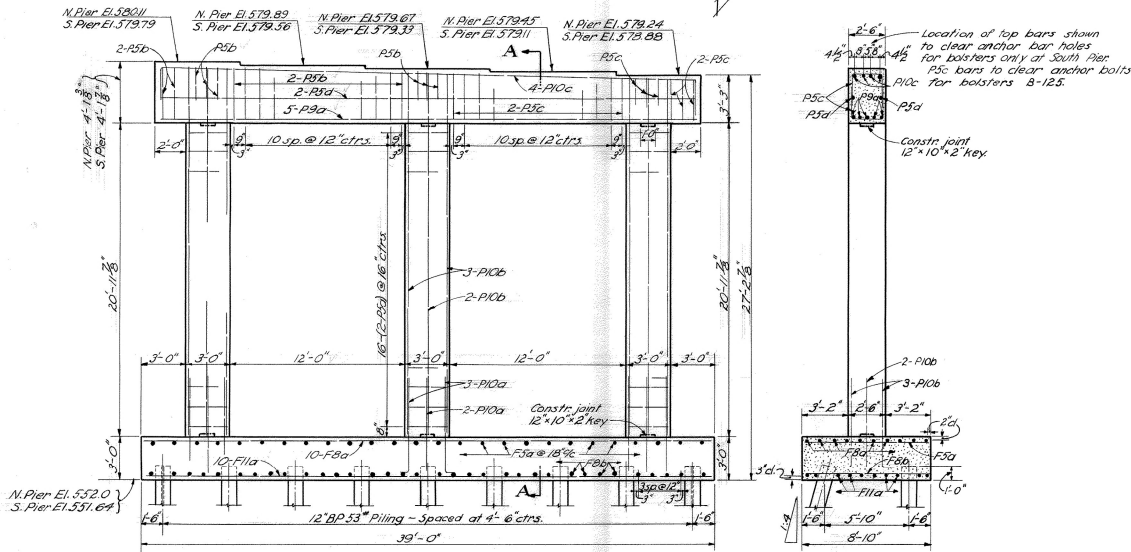
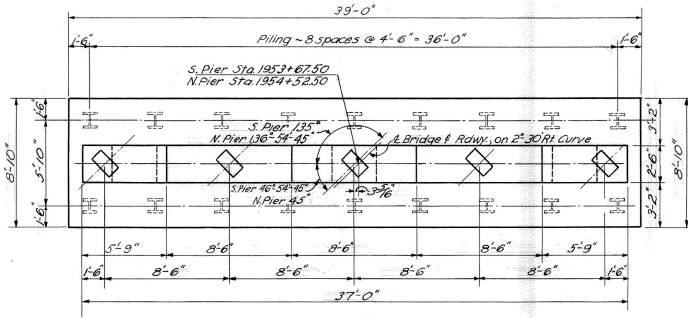
Concrete above bridge seat construction joint shall not be placed until after steelwork is erected. Steel and finish shall be used as a template for top of backwall.

Unless otherwise noted, reinforcing bar clearances shall be 2" from faces of concrete.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS						
NORTH ABUTMENT DETAILS						
BRIDGE No. ME-124-412						
OVER GROUNDHOG CREEK						
MEIGS COUNTY STA. 1954+10.00						
Sec. MEG-124-36.91						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWG	JWG	JAMES	[Signature]	WYC	6-5-55	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S-29(2)	23 28

MEG-124-(36.91)(46.56)
PART 1

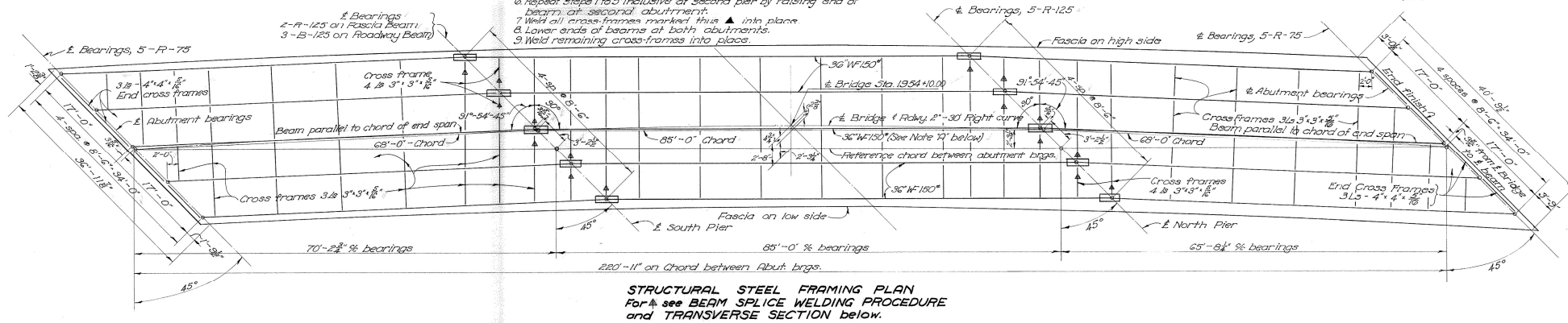


Batter piles on stream side only.

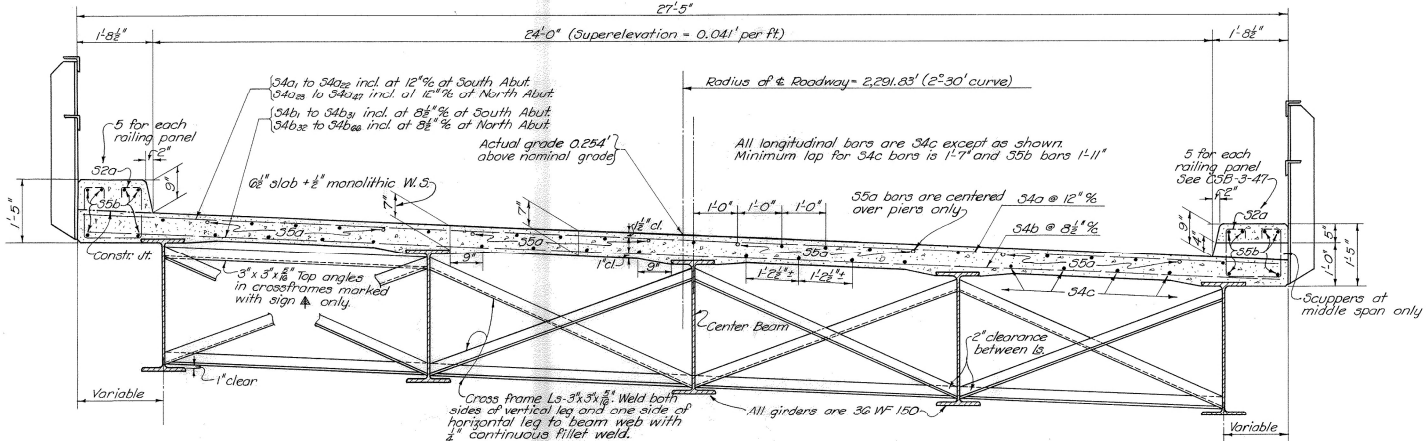
Note: Reinforcing bars shall have 2" clearance from face of concrete unless otherwise noted.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS						
PIER DETAILS						
BRIDGE No. ME-124-412 OVER GROUNDHOG CREEK						
MEIGS COUNTY STA. 1954+10.00 SEC. MEG-124-36.91						
DESIGNED	DRAWN	TRACED	CHECKED	REMOVED	DATE	REVISED
JVG.	JVG.	LJE	[Signature]	[Signature]	6-5-55	

- BEAM SPLICE WELDING PROCEDURE**
- At First Pier, weld bottom flange splice plate to beam on middle span side of joint only.
 - Raise end of beam at first abutment 2 1/2 inches.
 - Weld beam flanges and web at first pier.
 - Weld top flange splice plate at first pier (both sides of joint).
 - Complete welding of bottom flange splice plate at first pier.
 - Repeat steps 1 to 5 inclusive of second pier by raising end of beam at seasonal abutment.
 - Weld all cross-frames marked thus ▲ into place.
 - Lower ends of beams at both abutments.
 - Weld remaining cross-frames into place.

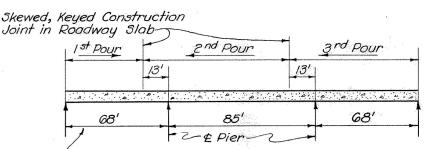


STRUCTURAL STEEL FRAMING PLAN
For see BEAM SPLICE WELDING PROCEDURE and TRANSVERSE SECTION below.



TYPICAL ROADWAY SECTION

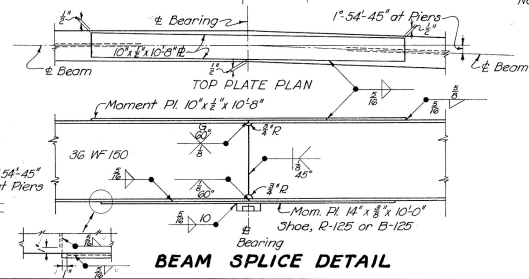
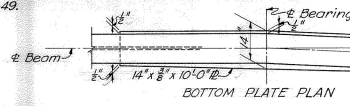
NOTE "A" The Center Beam of the middle span is to bisect the middle ordinate of the 2°30' curve (± Roadway) and parallel to its chord, extending from center to center of bearings of the span.
The Center Beams of the End Spans shall extend from the bearings of middle span beam, parallel to the respective chords of end spans.
The other beams in each span shall be parallel to center beam of the same span. Bridge deck shall be built on curve.
For details not shown see Standard Drawing CSB-3-47, revised 7-27-49.



DECK CONSTRUCTION PROCEDURE: Deck slab shall be placed in sections, between skewed transverse construction joints, in the numerical order and in the direction indicated on the diagram above in order that the major portion of the dead load deflection may occur prior to placing concrete over each pier.

LOCATION	OUTSIDE BEAMS		INSIDE BEAMS	
	END SPAN	MIDDLE SPAN	END SPAN	MIDDLE SPAN
Deflection due to weight of steel	2"	2"	2"	2"
Deflection due to remaining D.L.	2"	2"	2"	2"
Total D.L. Deflection	4"	4"	4"	4"
Required Shop Camber	2"	2"	-	2"

Note: No cambering required of inside beams of end spans, but they shall be so fabricated that any curved beams will be placed with the convex flange up.

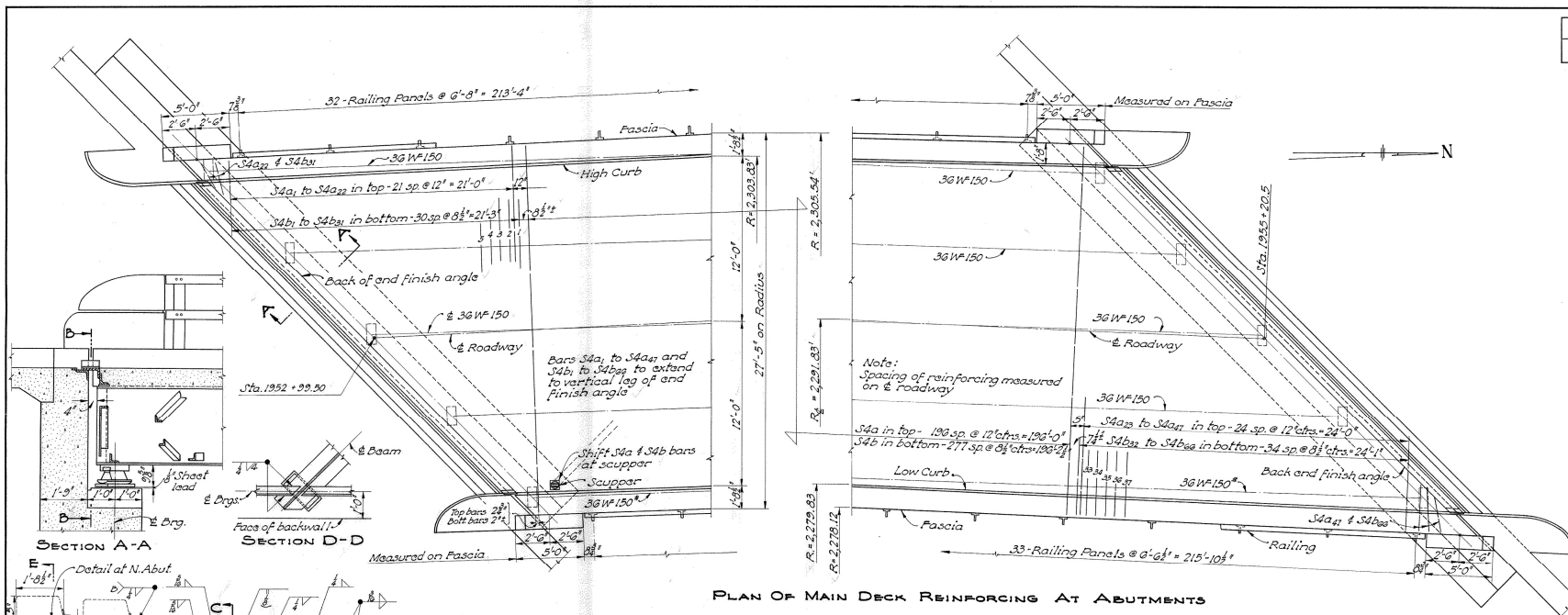


STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND HIGHWAY ENGINEERING

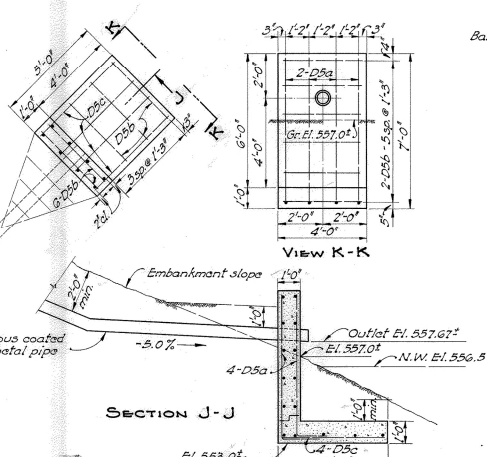
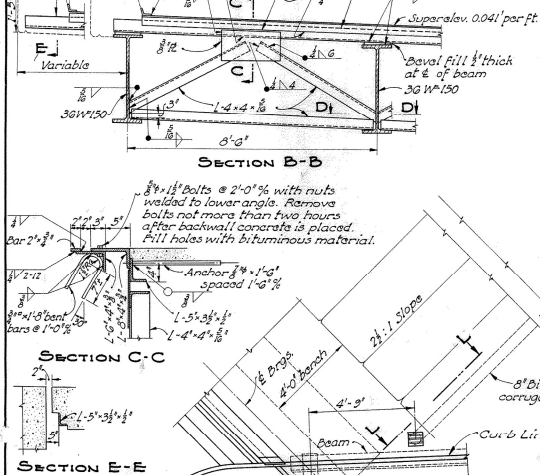
SUPERSTRUCTURE FRAMING PLAN AND TRANSVERSE SECTION
BRIDGE NO. ME-124-412
OVER GROUNDHOG CREEK

MEIGS COUNTY
SEC. MEG-124-36.91
STA. 1954+10.00

DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.W.G.	J.P.H.	J.P.H.	W.H.C.	6-9-55	



PLAN OF MAIN DECK REINFORCING AT ABUTMENTS



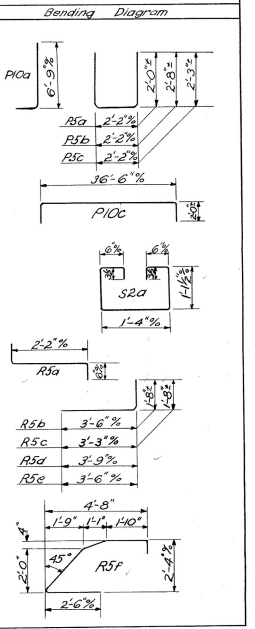
PLAN OF DRAINAGE AT SOUTHEAST CORNER OF BRIDGE

NOTE:-
ESTIMATED QUANTITIES FOR SCUPPER & DRAINAGE
Excavation quantity for concrete outlet included in Item E-2, Unclassified excavation.
Concrete quantity included in Item S-1, Class C, abutments.
The Scupper, which includes the 3/8" metal transition with 6" pipe as a unit is included in Item S-7 Structural Steel, for payment.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS			
DECK REINFORCING PLAN DRAINAGE DETAILS			
BRIDGE NO. ME-124-412 OVER GROUNDHOG CREEK MEigs COUNTY Sta. 1954+10.00 SEC MEG-124-36.91			
DESIGNED	DRAWN	CHECKED	DATE
J.K.G.	J.K.G.	S.P.H.	4-5-53
		S.B.J.	

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Sps	Mark	No.	Length	Weight	Sps	Mark	No.	Length	Weight	Sps	Mark	No.	Length	Weight	Sps
South Abutment																			
A9a	7	26'-3"	625	5	B5a	2	34'-4"	72	5	S4a	1	25'-11"	25	5	S46a	1	7'-6"	8	5
A9b	7	22'-0"	528	5	B5b	2	34'-4"	72	5	S4b	1	23'-1"	24	5	S46b	1	7'-11"	7	5
A9c	5	32'-0"	538	5	B5c	2	30'-0"	63	5	S4c	1	22'-4"	23	5	S46c	1	6'-5"	7	5
A9d	5	32'-0"	544	5	B5d	2	20'-0"	42	5	S4d	1	21'-6"	22	5	S46d	1	5'-9"	6	5
A6a	34	12'-7"	643	B	B5e	2	35'-0"	73	5	S4e	1	20'-0"	21	5	S46e	1	4'-6"	33	5
A6b	34	6'-11"	353	B	B5f	4	14'-1"	59	B	S4f	1	22'-7"	24	5	S46f	1	30'-0"	8261	S
A5a	52	9'-3"	302	B	B5g	4	14'-1"	59	B	S4g	1	20'-6"	22	5	S46g	1	18'-5"	19	5
A5b	25	5'-10"	152	B	B5h	6	5'-8"	35	5	S4h	1	20'-5"	21	5	S46h	1	17'-2"	18	5
B5a	4	35'-4"	147	S	B5i	2	27'-0"	36	5	S4i	1	19'-4"	20	5	S46i	1	16'-10"	18	5
B5c	2	30'-0"	63	5	B5j	2	6'-6"	14	5	S4j	1	19'-8"	19	5	S46j	1	16'-2"	17	5
B5d	2	32'-0"	67	5	W5a	4	6'-8"	26	5	S4k	1	17'-5"	18	5	S46k	1	15'-3"	16	5
B5f	2	22'-0"	46	5	W5b	2	6'-8"	26	5	S4l	1	17'-1"	18	5	S46l	1	14'-6"	15	5
B5g	2	20'-0"	42	5	W5c	4	7'-0"	31	5	S4m	1	16'-0"	17	5	S46m	1	13'-9"	14	5
B5h	6	4'-8"	29	S	W5d	2	7'-0"	31	5	S4n	1	14'-10"	16	5	S46n	1	12'-11"	13	5
B5i	2	4'-0"	8	S	W5e	4	7'-4"	31	5	S4o	1	13'-9"	14	5	S46o	1	12'-2"	13	5
B5j	2	8'-6"	18	S	W5f	2	7'-8"	31	5	S4p	1	14'-10"	16	5	S46p	1	11'-4"	12	5
B5k	4	14'-1"	59	B	W5g	4	8'-0"	34	5	S4q	1	13'-9"	14	5	S46q	1	10'-7"	11	5
B5l	4	14'-1"	59	B	W5h	2	8'-4"	17	5	S4r	1	12'-8"	13	5	S46r	1	9'-10"	10	5
B5m	6	5'-8"	35	5	W5i	4	8'-8"	36	5	S4s	1	11'-7"	12	5	S46s	1	9'-10"	10	5
B5n	4	14'-1"	59	B	W5j	4	9'-0"	38	5	S4t	1	10'-5"	11	5	S46t	1	9'-10"	10	5
B5o	3	17'-4"	833	B	W5k	6	12'-0"	75	5	S4u	1	9'-4"	10	5	S46u	1	8'-3"	9	5
B6a	8	14'-1"	169	B	W5l	4	8'-8"	36	5	S4v	1	8'-3"	9	5	S46v	1	7'-6"	8	5
B6c	9	15'-7"	211	B	W5m	6	12'-0"	75	5	S4w	1	7'-2"	8	5	S46w	1	6'-8"	7	5
Piers																			
W5a	2	6'-3"	13	5	F8a	20	38'-8"	2085	S	S4x	1	6'-7"	6	5	S46x	1	5'-4"	5	5
W5b	3	6'-6"	20	5	F8b	68	8'-6"	1892	S	S4y	1	5'-2"	5	5	S46y	1	4'-4"	4	5
W5c	3	6'-9"	21	5	F8c	68	8'-6"	1892	S	S4z	4	2'-9"	12	5	S46z	1	3'-6"	4	5
W5d	3	7'-0"	22	5	F8d	68	8'-6"	1892	S	S4aa	1	26'-1"	27	5	S46aa	1	2'-9"	14	5
W5e	3	7'-4"	23	5	F8e	68	8'-6"	1892	S	S4ab	1	25'-2"	26	5	S46ab	1	2'-6"	28	5
W5f	3	7'-8"	24	5	F8f	68	8'-6"	1892	S	S4ac	1	24'-3"	25	5	S46ac	1	2'-5"	27	5
W5g	3	8'-0"	25	5	F8g	68	8'-6"	1892	S	S4ad	1	23'-4"	24	5	S46ad	1	2'-4"	28	5
W5h	3	8'-4"	26	5	F8h	68	8'-6"	1892	S	S4ae	1	22'-6"	23	5	S46ae	1	2'-3"	29	5
W5i	2	8'-8"	18	S	F8i	68	8'-6"	1892	S	S4af	1	21'-7"	22	5	S46af	1	2'-2"	30	5
W5j	2	8'-8"	18	S	F8j	68	8'-6"	1892	S	S4ag	1	20'-8"	21	5	S46ag	1	2'-1"	31	5
W5k	2	9'-0"	19	5	F8k	68	8'-6"	1892	S	S4ah	1	19'-9"	20	5	S46ah	1	1'-9"	32	5
W5m	6	12'-0"	75	5	F8l	68	8'-6"	1892	S	S4ai	1	18'-10"	19	5	S46ai	1	1'-8"	33	5
Drainage Concrete																			
D5a	8	8'-3"	69	B	P5a	188	5'-11"	1185	B	S4aj	1	17-7"	18	5	S46aj	1	21-10"	22	5
D5b	15	3'-8"	59	B	P5b	12	7'-3"	974	B	S4ak	1	17-0"	17	5	S46ak	1	20-7"	21	5
D5c	4	7'-8"	20	S	P5c	70	6'-5"	468	B	S4al	1	16-7"	17	5	S46al	1	19-11"	21	5
					P5d	4	36'-8"	153	S	S4am	1	15-2"	16	5	S46am	1	18-3"	20	5
North Abutment																			
A9a	7	25'-2"	599	S						S4an	1	15-2"	16	5	S46an	1	14-9"	15	5
A9e	7	22'-3"	530	S						S4ao	1	14-3"	15	5	S46ao	1	13-6"	14	5
A9f	5	32'-3"	598	S						S4ap	1	13-4"	14	5	S46ap	1	12-10"	13	5
A9g	5	32'-3"	548	S						S4aq	1	12-2"	13	5	S46aq	1	11-7"	12	5
A6a	34	12'-7"	643	B						S4ar	1	11-6"	12	5	S46ar	1	10-11"	11	5
A6b	34	6'-11"	353	B						S4as	1	10-8"	11	5	S46as	1	10-3"	11	5
A5a	52	9'-3"	302	B						S4at	1	9-9"	10	5	S46at	1	9-8"	10	5
A5b	25	5'-10"	152	B						S4au	1	8-10"	9	5	S46au	1	8-4"	9	5
B6a	35	17'-4"	911	B						S4av	1	7-11"	8	5	S46av	1	7-2"	8	5
B6b	6	14'-1"	127	B						S4aw	1	7-0"	7	5	S46aw	1	6-8"	7	5
B6c	6	15'-7"	140	B						S4ax	1	6-7"	6	5	S46ax	1	5-4"	5	5



Note: The bar size designations shown in the superstructure do not correspond with the size designations given in the January 1, 1953 edition of the Construction and Materials specifications.

Note: Replacement bars indicated with rolling for payment.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS REINFORCING STEEL LIST BRIDGE NO. ME-124-412 OVER GROUNDHOG CREEK MEIGS COUNTY SEC. MEG-124-36.91 Sta.