COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
37.6	12.0		11.3	WIS. 4	1	20

INDEX OF SHEETS

STATE OF WISCONSIN

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED

WAUSAU - BIRNAMWOOD

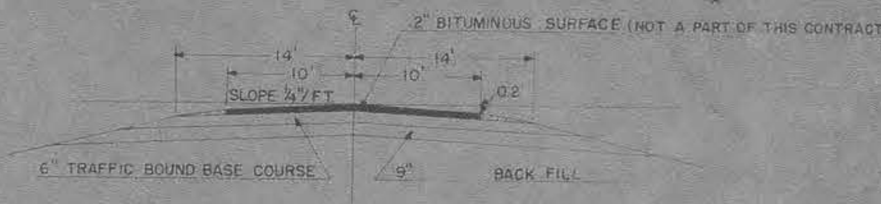
GLEASON BRIDGE

MARATHON COUNTY

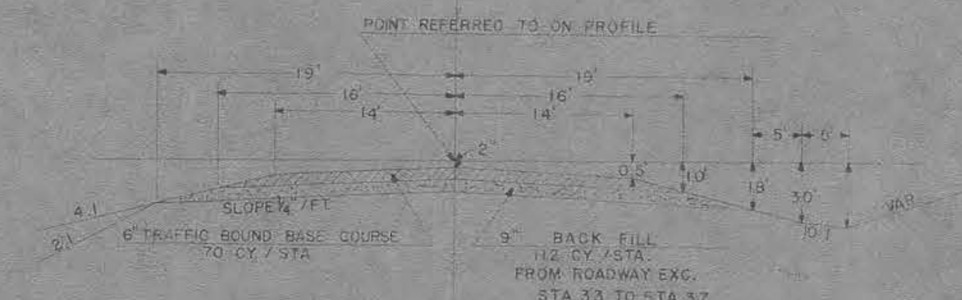
PROJECT S 012 (3)

C.T.H. "N"

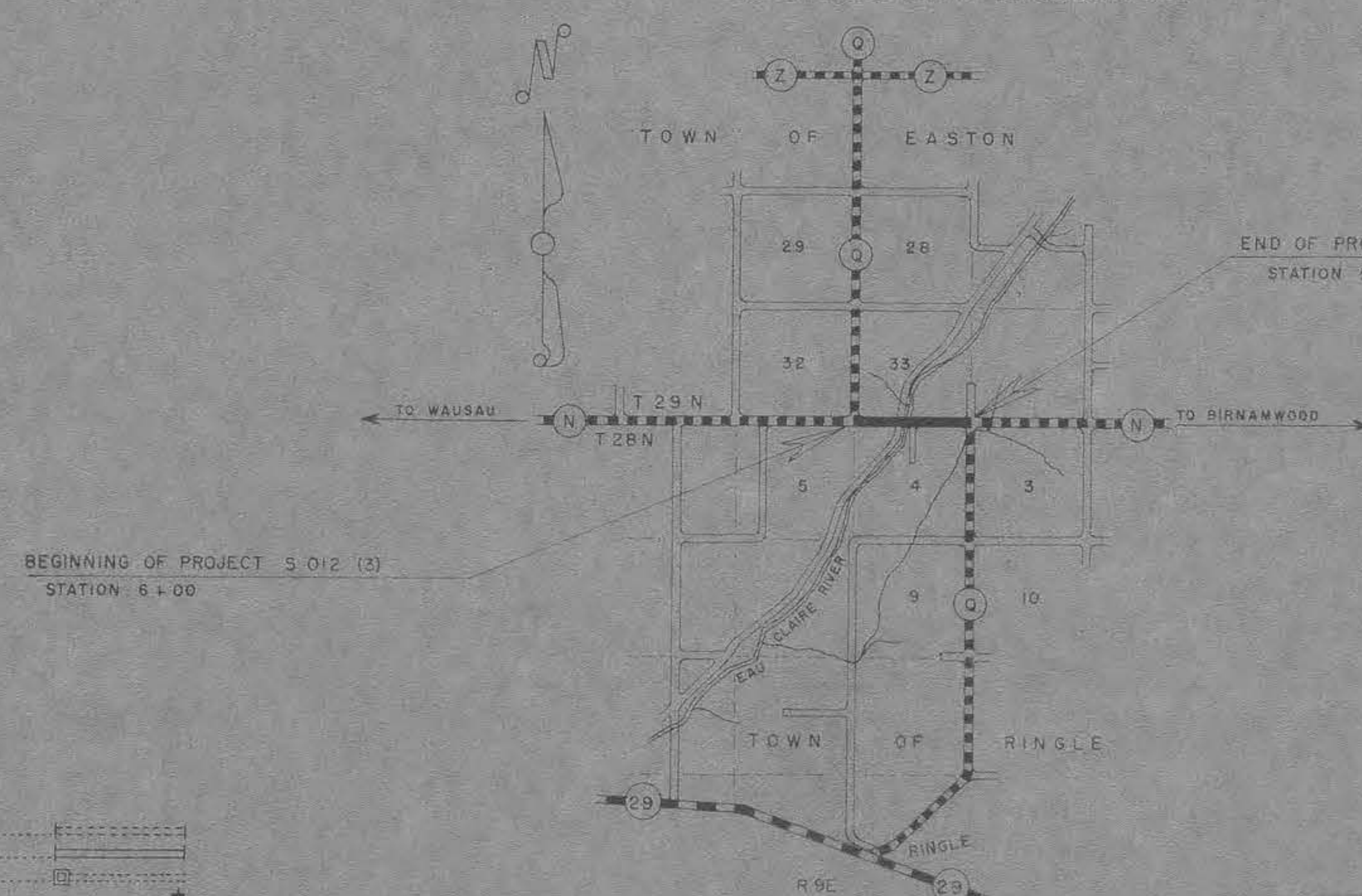
SCALES { PLAN 1 IN. = 100 FT.
PROFILE HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.
CROSS SECTIONS HOR. 1 IN. = 5 FT. VERT. 1 IN. = 5 FT.



ULTIMATE SECTION



TYPICAL SECTION



LAYOUT

SCALE 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.999 MI.

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
NEW RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
WIRE FENCE { WOVEN / BARBED
LOT LINE
CORPORATE OR CITY LIMITS
PROPERTY LINE — PL + 32.6
TRAVELED WAY OR P.E.
RAILROADS
BASE OR SURVEY LINE

CULVERTS IN PLACE
CULVERTS REQUIRED
DROP INLET
POWER POLE
TELEPHONE OR TELEGRAPH POLE
RIGHT OF WAY MARKERS
REFERENCE STAKE FOR HUBS ONLY
MARSH
HEDGE
TREES
GROUND ELEVATION — DATUM LINE
GRADE ELEVATION — DATUM LINE

STATE HIGHWAY
COMMISSION OF WISCONSIN
MADISON, WISCONSIN

SURVEY CH. C.E.C. NOTE BOOK
DISTRICT COMPUTER C.E.C. M. O. CHECKER
DISTRICT CHECKER J.C.E. CORRECT

CORRECT:
DATE 4/3/56 _[signature]_ DISTRICT ENGINEER

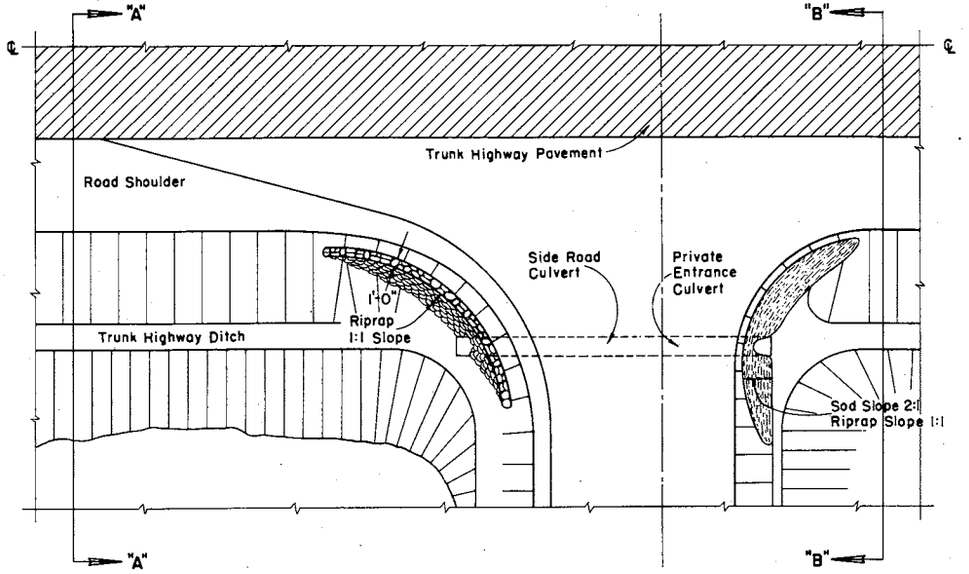
RECOMMENDED FOR APPROVAL
DATE 4/4/56 _[signature]_ ENGINEER OF DESIGN

APPROVED:
DATE 4/6/56 E. L. Roettiger STATE HIGHWAY ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: ______ DATE
DISTRICT ENGINEER

S 012 (3)

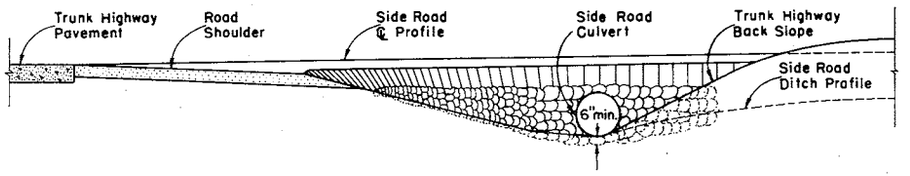


PLAN VIEW
HALF SECTION SHOWING
RIPRAP PLACED AT
SIDE ROAD CULVERT

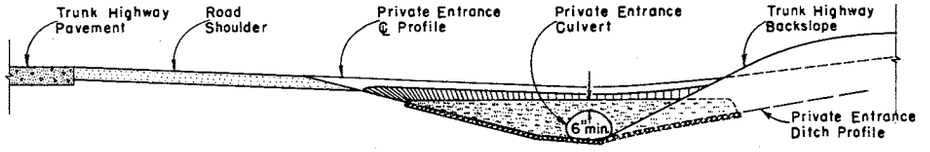
PLAN VIEW
HALF SECTION SHOWING
SOD OR RIPRAP PLACED AT
PRIVATE ENTRANCE CULVERT

TABLE OF QUANTITIES

SIDE ROAD CULVERTS		PRIVATE ENTRANCE CULVERTS		
Size of Culvert Pipe	Cu. Yds. Riprap One End	Size of Culvert Pipe	Cu. Yds. Riprap One End	Sq. Yds. Sod One End
—	—	18"	0.7	4
24"	1.0	24"	1.0	5
30"	1.3	30"	1.3	6
36"	2.0	36"	2.0	7
42"	2.7	42"	2.7	8
48"	3.6	48"	3.6	10



ELEVATION VIEW SECTION "A-A"
SHOWING RIPRAP PLACED AT SIDE ROAD CULVERT



ELEVATION VIEW SECTION "B-B"
SHOWING SOD OR RIPRAP PLACED AT PRIVATE ENTRANCE CULVERT

GENERAL NOTES

Details of construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications, Section 2512 for Riprap, and Section 2533 for Sodding, and the applicable Special Provisions.

BID ITEMS

No. 2512 - 1 Riprap _____ Cu. Yds.
No. 2533 - 1 Sodding _____ Sq. Yds.

RIPRAP AT SIDE ROAD CULVERTS & RIPRAP OR SOD AT PRIVATE ENTRANCE CULVERTS

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

4/15/55
DATE

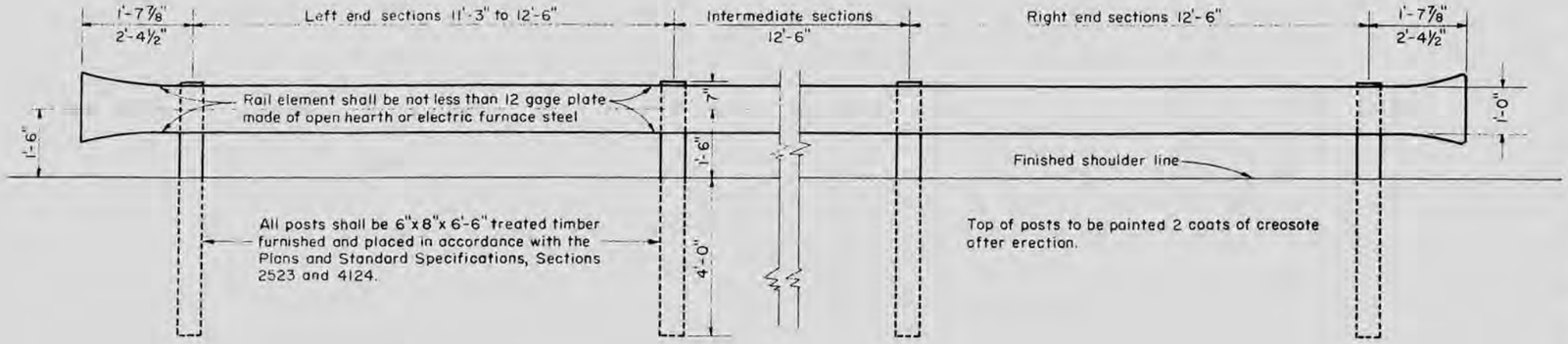
J. J. Pelt
ENGINEER OF DESIGN

APPROVED:

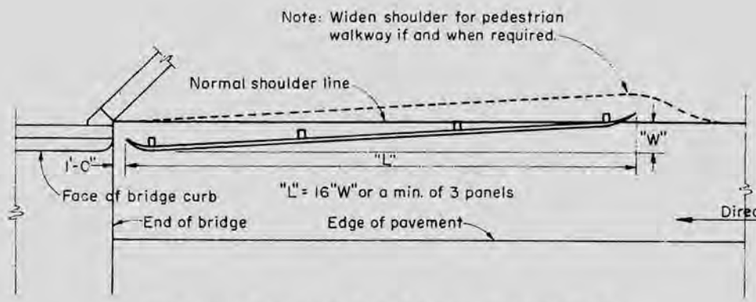
4/15/55
DATE

E. L. Rettiger
STATE HIGHWAY ENGINEER

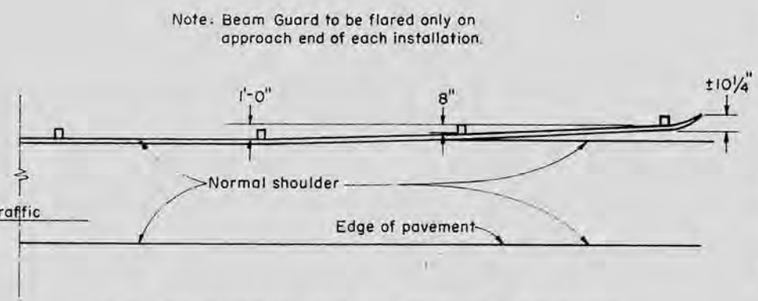
PLATE NO. 6-2.5.1.



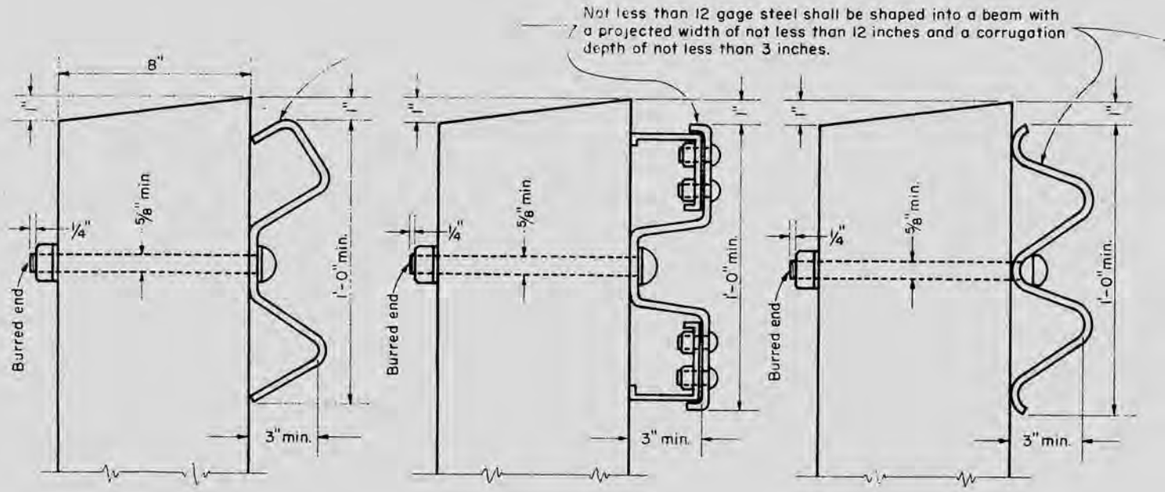
FRONT ELEVATION



LOCATION DIAGRAM FOR BRIDGE APPROACHES

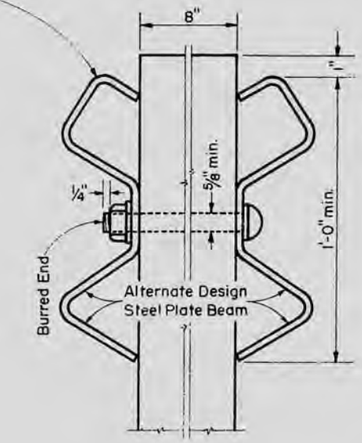


LOCATION DIAGRAM FOR INTERMEDIATE SECTIONS

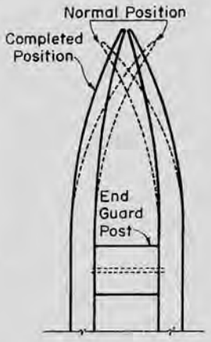


SIDE ELEVATIONS

ALTERNATE DESIGNS-STEEL PLATE BEAM GUARD (CLASS "B")



SIDE ELEVATION



PLAN VIEW TERMINAL SECTIONS

ALTERNATE DESIGN - STEEL PLATE BEAM (MEDIAN) GUARD (CLASS "B")

GENERAL NOTES

Details of construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and applicable Special Provisions.

The Steel Plate Beam Guard shall consist of plate made of open hearth or electric furnace steel.

Plates shall be blanked to proper shape, fabricated and ready for assembly when received in the field. The plates shall be true to plan dimensions and of uniform section. Warped or deformed plates will be rejected. The edges of the plates shall be rolled or rounded so that they present no sharp edges. All connections and splices shall be formed with flat round headed bolts, or similar detail, so that no appreciable projection will be presented on the traffic side of the guard. The rail element shall be spliced by lapping in the direction of traffic or by butt joint with splice plate. The holes in the plate near the post shall be slotted to facilitate erection and to make provision for expansion and contraction. Plate ends in lap splices or plate ends and splice plate in butt splices shall make contact throughout the entire area of the splice.

TESTS

The elongation of a 2 inch specimen of the steel plate used in the rail element shall be not less than 12% when tested in tension.

The minimum tensile strength of the rail element shall, when tested in conjunction with splices and end connections, be 50,000 pounds. The rail element when loaded as a simple beam, freely supported at each end on 12'-6" centers, shall support a concentrated load of 2,000 pounds, applied at the center point, with a maximum deflection of 3½ inches and shall support a concentrated load of 2,400 pounds, tested in like manner, with a maximum deflection of 5½ inches.

PAINTING

SHOP COAT

Promptly following fabrication, the plates for steel rail element shall be thoroughly cleaned and shall be painted with a Red Lead Primer, or if an alternate of Red Lead Oxide Rust Inhibitive Primer or equivalent is used, the Engineer's prior approval shall be obtained. All parts, hardware and appurtenant fittings for the complete Beam Guard assembly shall likewise be painted when not furnished as galvanized.

FIELD COAT

Following erection, the steel rail elements and all parts, hardware and appurtenant fittings shall be painted in accordance with the Standard Specifications for Aluminum Paint, Section 4125.

Any damaged areas occuring to the shop coat during transportation or erection shall be cleaned and painted with an approved Rust Inhibitive Primer prior to any field coat painting.

Where the steel plate elements make contact with post mountings etc. all such areas which are impossible to paint after erection, shall be painted prior to erection.

All threaded portions of fittings and fasteners and cut ends of bolts shall be painted as specified or as directed by the Engineer.

ALTERNATE DESIGNS

Manufacturers may submit to the Engineer, for approval, designs for "Steel Plate Beam Guard" other than those shown on this drawing, providing that such alternate designs shall conform to the same physical tests and inspection requirements prescribed on this drawing for "Class 'B' Steel Plate Beam Guard."

MEASUREMENT & PAYMENT

The items of "Class 'B' Steel Plate Beam Guard" and "Class 'B' Steel Plate Beam (Median) Guard" shall be measured and paid for at the contract unit price per linear foot, measured in place by length in linear feet from end to end of Steel Plate or Steel Plates, which price shall be full compensation for furnishing all materials and performing all installation work to completion in accordance with the Plans and the Standard Specifications, Sections 2523 and 4124.

BID ITEMS

No. 2523-6 Steel Plate Beam Guard (Class "B") ..... Lin. Ft.
No. 2523-7 Steel Plate Beam (Median) Guard (Class "B") ..... Lin. Ft.

CLASS "B" STEEL PLATE BEAM GUARD & STEEL PLATE BEAM (MEDIAN) GUARD

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

12-21-53
DATE

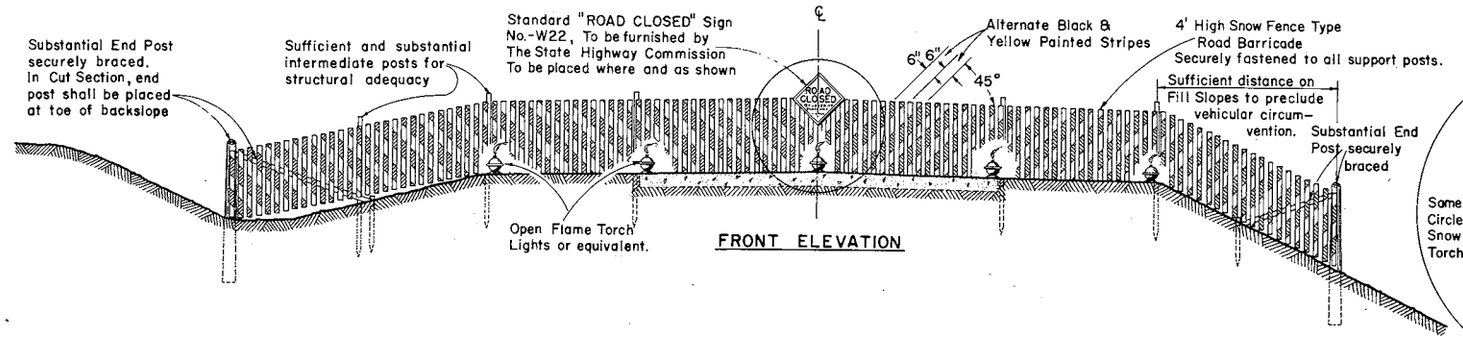
J. S. Pilf
ENGINEER OF DESIGN

APPROVED:

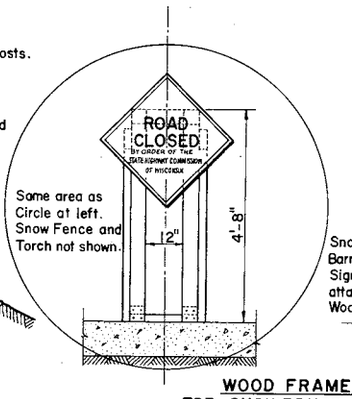
12/22/53
DATE

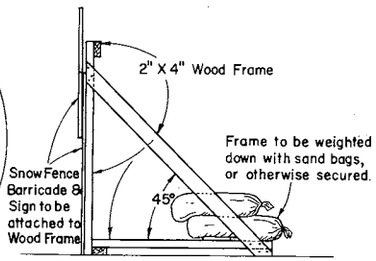
E. L. Ruettiger
STATE HIGHWAY ENGINEER

PLATE NO. 7-2.41



FRONT ELEVATION





SIDE ELEVATION

WOOD FRAME SUPPORT AT ℄
FOR SNOWFENCE TYPE BARRICADE
When Barricade is Erected on Rigid Type Surfacing

STANDARD ROAD CONSTRUCTION BARRICADE

SNOW FENCE TYPE-"A"

GENERAL NOTES

The Contractor shall construct, place and maintain barricades as shown on this drawing and as required by the Standard Specifications Section 1107 for the duration of the project. Barricades shall be painted and structurally maintained for maximum visibility at all times.

Provision shall be made in the construction of barricades to provide for ingress and egress for local access as may be required.

ALTERNATE DESIGNS

Contractors may submit to the Engineer for approval, designs for Barricades other than shown on this drawing, and upon the Engineer's approval may be used as alternates.

MEASUREMENT & PAYMENT

All Barricades, unless otherwise provided for in the Plans and/or Special Provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.

CONSTRUCTION BARRICADE

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

6/2/55 — DATE — J. S. Pilt — ENGINEER OF DESIGN

APPROVED:

6/2/55 — DATE — E. C. Rustigan — STATE HIGHWAY ENGINEER

PLATE NO. 7-4.1.2

ESTIMATE OF QUANTITIES

CONTRACT NO. 1

B.F.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
WIS SN	S 012 (3)	2	20

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE HIGHWAY COMMISSION OF WISCONSIN — EDITION OF 1951. APPROVED JANUARY 23, 1952, FEDERAL AID REQUIRED CONTRACT PROVISIONS APPROVED JANUARY 31, 1955, AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

SEC NO	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	REMOVING OLD CULVERT	REMOVING OLD BRIDGE	EXCAVATION				SAND GRAVEL FILL (SALV.)	FINE GRADING	SHOULDER EMBANKMENT	FINISHING ROADWAY	OBLITERATING OLD ROAD	CONCRETE BASE COURSE	TRAFFIC BOUND BASE COURSE	CONCRETE PAVEMENT		CONCRETE HEADERS	CONCRETE SURFACE DRAINS	CONCRETE PAVEMENT REINF	PREP ROADBED FOR BITUM. SURF	BITUM. MAT. FOR PRIME COAT	BITUM. ROAD MIX SURFACE	AGGREGATES FOR BITUM. ROAD MIX SURFACE	BITUM. MAT. FOR SURFACE COURSE
	ITEM NO.		2101-1	2101-3 2101-4 2101-6	2104-1	2106-2	2106-5	2106-2	2106-4		2110-1	2112-1	2113-1	2114-1	2116-1	2201-1	2204-1	2301-1	2301-	2301-5	2301-6	2301-7	2310-1	2311-1	2313-1	2313-2	23
	UNIT	LIN. FT.	STA.	STA.	L.S.	L.S.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	STA.	C.Y.	STA.	STA.	SQ. YD.	C.Y.	SQ. YD.	SQ. YD.	SQ. YD.	C.Y.	SQ. YD.	STA.		SQ. YD.	C.Y.	
	6+00 TO 58+72.5	5,272.5	3	3			19,518							53			4,010										
	TOTAL	5,272.5	3	3			19,518							53			4,010*										

* INCLUDES 296 C.Y. FOR P.E.'S & S.R.'S

BRIDGES (STRUCTURES OVER 20 FT. SPAN)

SEC NO	REMOVE OLD BRIDGE AT STA.	COMMON EXC.	EXCAVATION FOR STRUCTURES	SAND GRAVEL FILL	CONCRETE MASONRY	BAR STEEL REINF	STRUCTURAL CARBON STEEL	STEEL CASTINGS	CARBON STEEL FORGINGS	SHEET LEAD	SHEET ZINC	TRT'D LUMBER AND TIMBER	UNTR'D TIMBER TEST PILING	UNTREATED TIMBER PILING DELIVERED	UNTREATED TIMBER PILING DRIVEN	TREATED TIMBER PILING DELIVERED	TREATED TIMBER PILING DRIVEN	FLOOR DRAINS	RIP-RAP
	30+27	2106-1	2107-1	2110-1	2401-1	2406-2	2407-1	2407-3	2407-4	2407-9	2407-11	2408-2	2501-1	2501-2	2501-3	2501-4	2501-5	2507-1	2512-1
	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	LB.	LB.	LB.	LB.	LB.	LB.	M.B.M.	L.S.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	C.Y.
	1		460		257.8	36,900	128,790			226	87								230
	1		460		257.8	36,900	128,790			226	87								230

CULVERTS (STRUCTURES 20 FT. SPAN)

REMOVE OLD CULVT. STA.	COMMON EXC.	EXCAVATION FOR STRUCTURES	SAND GRAVEL FILL	CONCRETE MASONRY	BAR STEEL REINF	STRUCTURAL STEEL	STEEL CASTINGS	CARBON STEEL FORGINGS	SHEET LEAD	SHEET ZINC	TRT'D LUMBER AND TIMBER	UNTR'D TIMBER TEST PILING	TREATED TIMBER PILING DELIVERED	TREATED TIMBER PILING DRIVEN	FLOOR DRAINS	RIP-RAP
2104-1	2106-1	2107-2	2110-1	2404-1	2406-3	2407-	2407-3	2407-4	2407-9	2407-11	2408-2	2501-1	2501-4	2501-5	2507-1	2512-1
L.S.	C.Y.	C.Y.	C.Y.	C.Y.	LB.	LB.	LB.	LB.	LB.	LB.	M.B.M.	L.S.	LIN. FT.	LIN. FT.	EACH	C.Y.

CULVERT PIPE R.C.C.P.

STATION	P.E. & S.R. L	P.E. & S.R. R	TOTAL REQ'D (NEW) DIAM. - IN.	SALVAGE LTH. - FT.	SALVAGE D. - IN.	SALVAGE L. - FT.	RIP RAP
6+00	X		24	36			6
20+82	X		24	24			6
20+96		X	18	24			6
28+68		X			FROM 28+78		6
28+78	X		30	42	24	36	6
32+06		X	18	24			6
32+45		X	18	30			6
36+45		X	18	24			4
38+53	X		18	24			
46+54	X		18	24			
53+55	X				NONE REQ.		
58+73	X		18	30			

CLEARING AND GRUBBING

STA. TO STA.	CLEAR. - STA.	GRUB. - STA.
31+50 TO 34+50	3	3

SEC NO	RUBBLE MASONRY MORTAR	RUBBLE MASONRY DRY	CULVERT PIPE 18"	CULVERT PIPE 24"	CULVERT PIPE 30"	CONCRETE CULVERT PIPE SALVAGED 24"	RIP RAP	HEAVY RIPRAP	RUBBLE PAVING PLAIN	RUBBLE PAVING 3ROT'D	DITCH CHECKS	PIPE UNDER DRAIN	STORM SEWER	CATCH BASINS	MANHOLES	INLETS	CONCRETE CURB	CONCRETE CURB AND GUTTER	CONCRETE SIDE WALK	GUARD FENCE STEEL PLATE BEAM GUARD CLASS "B"	GUARD FENCE TIMBER RAIL	GUARD FENCE ANCHORAGES FOR CABLE	MARKER POSTS	MARKER POSTS FOR R-O-W	CALCIUM CHLORIDE SURFACE TREATMENT	TOP SOIL	SALVAGED TOP SOIL	FERTILIZER	SEEDING	SODDING
	2409-2	2409-3	2411-	2411-12	2411-13	2411-	2512-1	2512-2	2515-1	2515-2	2516-	2517-1	2518-	2519-	2519-	2519-	2520-	2521-	2521-3	2521-4	2523-8	2523-2	2523-5	2523-3	2523-4	2525-1	2528-1	2528-2	2531-	2532-	2533-1
	C.Y.	C.Y.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	C.Y.	C.Y.	SQ. YD.	SQ. YD.	C.Y.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EACH	LIN. FT.	LIN. FT.	EACH	EACH	EACH	TON		SQ. YD.	CWT.	SQ. YD.	SQ. YD.
			180	60	42		161														258									
			180	60	42		161														258									

STEEL PLATE BEAM GUARD CLASS "B"

STATION TO STATION	LEFT LIN. FT.	RIGHT LIN. FT.
28+74 - 29+04		30
29+04 - 29+32		30
28+86 - 29+11	38	
29+11 - 29+32	30	
31+29 - 31+84	55	55

7 - 12.5' SECTIONS OF BEAM TYPE GUARD FENCE TO BE FABRICATED IN SHOP TO A CURVATURE OF A 30' RADIUS

C.T.H. "N" - MARATHON COUNTY

C.T.H. "N" - MARATHON COUNTY

BENCH MARKS			
1	5+64	TOP END N. PIPE BLDG. 95' L	300.00
2	23+36	SPIKE IN 20" PINE 95' L	259.97
3	28+85	" " 10" ELM 70' R	249.57
4	31+65	" " 10" ELM 45' R	258.32

BEGINNING OF PROJECT S 012 (3)
STATION 6+00.0

NET LENGTH OF CENTERLINE STA. 6+00.0 TO STA. 29+00.0 = 2,300 LINEAL FEET

UNC = 4006 C.Y.
F = 3081 C.Y.
B.F. = 2590 C.Y.
F = 5671 C.Y.
SHG = 30%

PLAN LEGEND

BACK FILL	B.F.
UNCLASSIFIED EXCAVATION	UNC.
EMBANKMENT	F
SHRINKAGE	SHG.
PRIVATE ENTRANCE	P.E.
SIDE ROAD	S.R.
REINFORCED CONCRETE CULVERT PIPE	R.C.C.P.
CUBIC YARD	C.Y.

APPLICABLE STANDARD DRAWINGS

RIPRAP AT SIDE ROAD & PRIVATE ENTRANCE CULVERTS	6-2.5.1
CLASS "E" STEEL PLATE BEAM GUARD	7-2.4.1
CONSTRUCTION BARRICADE	7-4.1.2

CLEARING & GRUBBING		
STA. TO STA.	CLEARING STA.	GRUBBING STA.
31+50 - 34+50	3	3

STA. 29+37.2 TO STA. 31+18.0
REMOVE: TWO HIGH TRUSS SPANS
EACH 86.5' CLEAR SPANS & 15' RDWY.
SUBSTRUCTURE STEEL PLATE & TUBES

	S 012 (3)	4	20

BENCH MARKS				
3	28 + 85	SPIKE IN 10" ELM	70' R	249.57
4	31 + 65	" " 10" ELM	45' R	258.32
5	45 + 59	" " 12" BOX ELDER	44' L	279.68
6	58 + 95	" " 12" ELM	110' R	280.65
7	89 + 66	" " 20" OAK	30' L	281.08

STA. TO STA.	LEFT LIN. FT.	RIGHT LIN. FT.
28+74 — 29+32		80
28+86 — 29+32	68	
31+29 — 31+84	55	55

STEEL PLATE BEAM GUARD CLASS "B"
7-12.5' SECTIONS OF STEEL PLATE BEAM GUARD
TO BE FABRICATED IN SHOP TO A CURVATURE
OF 30' RADIUS

END OF PROJECT S 012 (3)
STATION 58 + 72.5

NET LENGTH OF CENTERLINE STA. 29 + 00.0 TO 58 + 72.5 = 2,972.5 LINEAL FEET

UNC. = 15512 C.Y. (INCLUDES 1000 C.Y. CHANNEL EXCAVATION) - WASTE
F = 6180 C.Y.
B.F. = 3890 C.Y. > F = 10,070 C.Y.
SHG. = 30%
HAUL = 2590 C.Y. OF B.F. FROM STA. 33-37 TO STA. 5+00 TO 26+27
HAUL = 3890 C.Y. OF B.F. FROM STA. 33-37 TO STA. 26+27 TO 60+00

BRIDGE NO. B-37-26
STA. 29+34.25 — 31+27.75
193.50' OVER-ALL LENGTH — 24' RDWY.
3 SPAN I-BEAM STRUCTURE — 58-74-58
SEE DRAWINGS X15322 TO X15327 INCL.

RIPRAP REQUIRED
STA. 28+92 TO 29+33 LT. 25 C.Y.
STA. 29+08 TO 29+33 RT. 18 C.Y.
STA. 31+29 TO 31+79 LT. 47 C.Y.
STA. 31+29 TO 31+54 RT. 25 C.Y.

COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	CLASS & AGREEMENT FEDERAL	B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
37.6	12.0		11.3	4	5012(3)	8	20

BILL OF BARS

DIMENSIONS IN BENDING ARE OUT TO OUT

SUPERSTRUCTURE

23,560#

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DETAIL
POUR 1	S1	116	5	24-0	7	FLOOR - TOP & BOTTOM	
	S2	34	5	24-9	1-6	" - "	
	S3	24	5	24-9	1-1	" - BOTTOM	
POUR 2	S1	260	5	24-0	7	FLOOR - TOP & BOTTOM	
	S2	51	5	24-9	1-6	" - "	
	S3	36	5	24-9	1-1	" - BOTTOM	
	S4	16	5	30-0	1-6	" - TOP (SYM. ABOUT ℄ OF PIER)	
POUR 3	S1	286	5	24-0	7	FLOOR - TOP & BOTTOM	
	S2	51	5	24-9	1-6	" "	
	S3	36	5	24-9	1-1	" BOTTOM	
	S4	16	5	30-0	1-6	" TOP (SYM. ABOUT ℄ PIER)	

PIERS

5,580#

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DETAIL
FOOTINGS	P1	56	5	6-3	6	FOOTINGS	
	P2	52	4	6-9	6	"	
	P3	56	7	8-3	SHOWN	" - DOWELS	
COLUMNS & GIRDER	P4	28	7	11-3	SHOWN	COLUMN - VERTICAL - PIER 1	
	P5	28	7	13-3	SHOWN	" - " - " 2	
	P6	124	3	7-6	1-0	" - HOOPS - PIERS 1 & 2	E
	P7	6	9	21-0	SHOWN	GIRDER - BOTTOM	F
	P8	8	9	21-0	SHOWN	" - "	
	P9	24	8	12-9	SHOWN	" - CORNERS	A
	P10	12	4	12-0	2-0	STIRRUPS	D
	P11	4	4	12-9	1-6	"	D
	P12	4	4	13-6	1-6	"	D
	P13	4	4	14-3	1-6	"	D
	P14	4	4	13-0	SHOWN	" - TIES	
	P15	56	4	4-6	6	GRIDS	C
	P16	24	4	3-6	SHOWN	"	

WEST ABUTMENT

2,770#

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DETAIL
FOOTINGS	B1	18	5	8-6	6	FOOTING	
	B2	34	5	4-6	6	"	
	B3	8	9	6-0	SHOWN	" & COLUMNS - BACK FACE	A
	B4	24	6	4-9	SHOWN	" " " - SIDES	
	B5	4	6	4-9	SHOWN	" " " - FRONT FACE	
COLUMNS, GIRDER & BODY	B6	4	3	13-3	1-0	COLUMNS - HOOPS	D
	B7	4	3	13-0	1-0	" - "	D
	B8	4	3	12-6	1-0	" - "	D
	B9	4	3	12-3	1-0	" - "	D
	B10	8	9	12-3	SHOWN	" & GIRDER - BACK FACE	
	B11	24	6	9-9	SHOWN	" " " - SIDES	
	B12	4	6	9-9	SHOWN	" " " - FRONT FACE	
	B13	3	9	17-0	SHOWN	GIRDER - BOTTOM	
	B14	2	9	21-0	SHOWN	" - "	
	B15	4	6	21-0	SHOWN	" - FRONT FACE	
	B16	8	6	10-0	9	" - BACK "	
	B17	1	4	17-3	SHOWN	" - " " - TIE BARS	
	B18	10	4	15-3	2-0	" STIRRUPS	D
	B19	8	5	4-0	SHOWN	HAUNCH	
	B20	8	6	10-0	SHOWN	PARAPET	
	B21	2	4	15-6	SHOWN	"	
	B22	17	5	7-6	1-6	"	B
	B23	4	5	18-0	SHOWN	"	
	B24	4	4	8-3	1-0	WINGS	B
	B25	6	4	9-9	1-0	"	B
	B26	4	4	2-3	1-0	"	
	B27	6	4	4-0	1-0	"	
	B28	4	4	7-0	1-0	"	
	B29	4	4	5-0	1-0	"	
	B30	24	4	4-0	SHOWN	GRID	C
	B31	16	4	2-6	SHOWN	"	

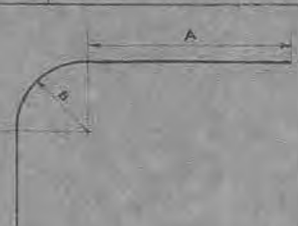
EAST ABUTMENT

4,990#

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DETAIL
FOOTINGS	A1	38	6	13-6	5	FOOTING - BOTTOM	
	A2	66	4	7-6	5	" - "	
	A3	10	5	6-9	1-6	" - TOP	
	A4	12	5	13-6	1-6	" - "	
	A5	14	4	7-6	1-0	" - "	
	A6	8	4	7-6	2-0	" - "	
	A7	12	9	9-3	SHOWN	" & COLUMN	A
	A8	8	9	5-3	9	" " "	A
	A9	24	6	7-6	SHOWN	" " "	
	A10	4	6	8-0	SHOWN	" " "	
COLUMNS, GIRDER & BODY	A11	8	9	20-0	SHOWN	COLUMN & GIRDER - BACK FACE	
	A12	24	6	16-9	SHOWN	" - " - SIDES	
	A13	4	6	16-9	SHOWN	" " " FRONT FACE	
	A14	6	3	16-0	1-0	" - HOOPS	D
	A15	6	3	15-3	1-0	" - "	D
	A16	6	3	14-6	1-0	" - "	D
	A17	6	3	13-9	1-0	" - "	D
	A18	6	3	13-0	1-0	" - "	D
	A19	6	3	12-3	1-0	" - "	D
	A20	3	9	17-0	SHOWN	GIRDER - BOTTOM	
	A21	2	9	21-0	SHOWN	" - "	
	A22	4	6	21-0	SHOWN	" FRONT FACE	
	A23	8	6	10-0	9	" BACK "	
	A24	10	4	15-3	2-0	" - STIRRUPS	D
	A25	8	5	4-0	SHOWN	HAUNCH	
	A26	4	4	8-3	1-0	PARAPET	B
	A27	6	4	9-9	1-0	"	B
	A28	17	5	7-6	1-6	"	B
	A29	8	6	10-0	SHOWN	" - TOP	
	A30	2	4	15-6	SHOWN	" - TIE BARS	
	A31	4	4	2-3	1-0	WINGS - VERTICAL - FRONT FACE	
	A32	6	4	4-0	1-0	" - " - "	
	A33	4	4	7-0	1-0	" - HORIZONTAL " "	
	A34	4	4	5-0	1-0	" - " - " "	
	A35	4	5	18-0	SHOWN	" - "	
	A36	1	4	17-3	SHOWN	GIRDER - TIE BAR - TOP - FRONT FACE	
	A37	16	4	2-6	SHOWN	GRID	
	A38	24	4	4-0	SHOWN	"	C

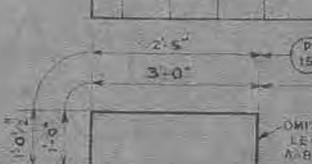
DETAIL "B"

BAR	A
A26	3-6½
A27	4-3½
A28	3-2
B22	3-2
B24	3-6½
B25	4-3½

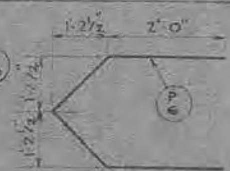


DETAIL "A"

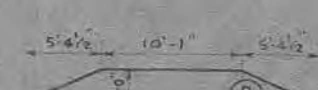
BAR	A	B
A7	7-0	1-6
A8 & B3	3-0	1-6
P-9	6-3	1-4½



DETAIL "C"



DETAIL "E"



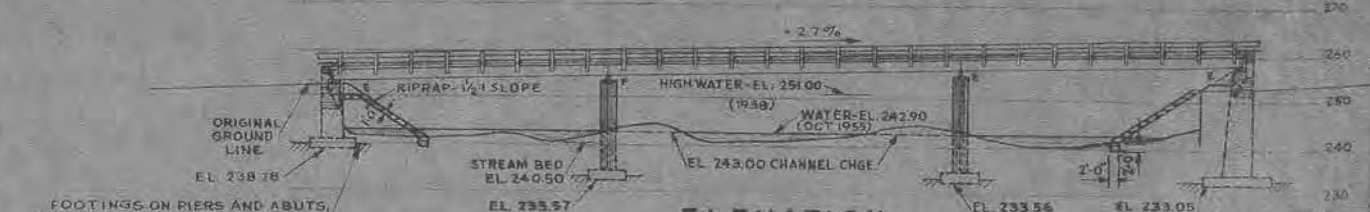
DETAIL "F"

DETAIL "D"

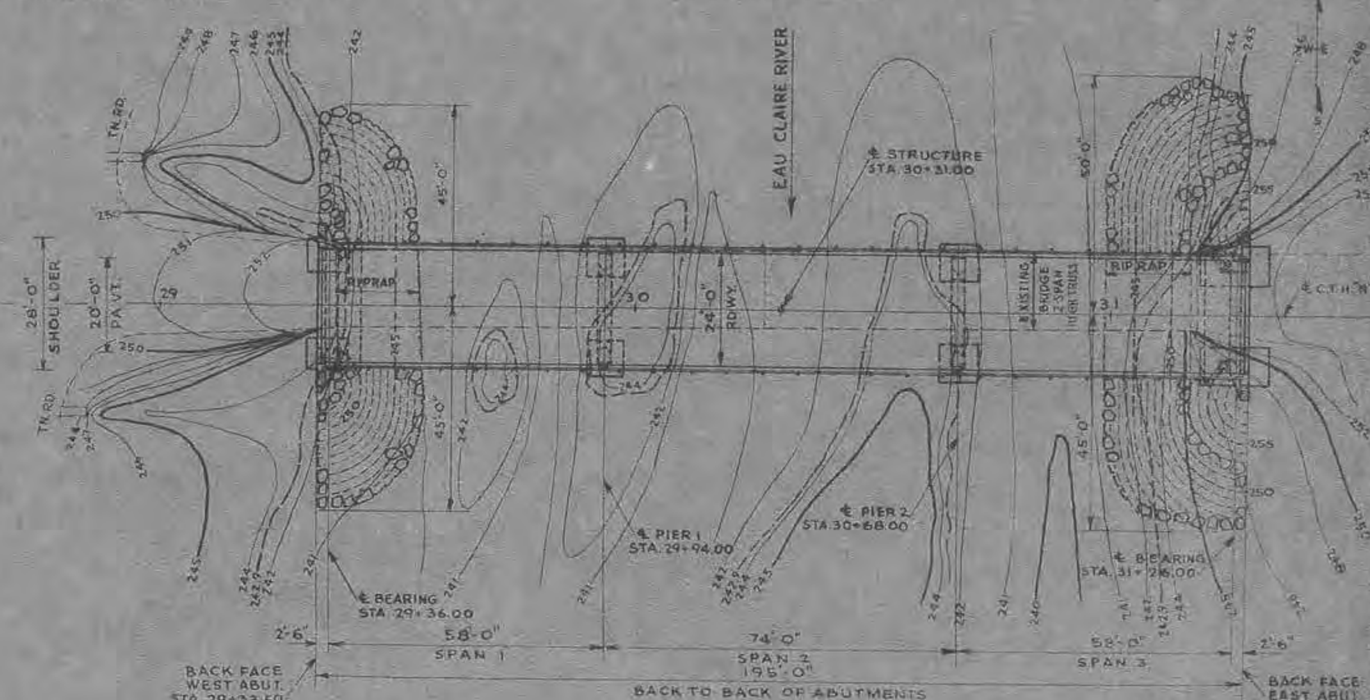
BAR	A	B
A14	2-2	5-4
A15	2-2	4-11½
A16	2-2	4-7
A17	2-2	4-2½
A18	2-2	3-10
A19 & B9	2-2	3-5½
A24 & B18	3-5	3-8
B6	2-2	4-0
B7	2-2	3-9½
B8	2-2	3-6½
P10	2-5	3-2
P11	2-5	3-6
P12	2-5	3-9
P13	2-5	4-3

BENCH MARK

NO.	STA. NO.	DESCRIPTION	ELEV.
4	31+65.00	SPIKE IN 10" ELM - 45' R.	258.32



ELEVATION



LAYOUT

GRADE DIAGRAM

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
ALL CONCRETE MASONRY SHALL BE GRADE "AA".
BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.
BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
THE USE OF STRUCTURAL GRADE BAR STEEL REINFORCEMENT IS PROHIBITED.
ALL RIVETS SHALL BE ¾" ⌀ RIVETS UNLESS OTHERWISE SPECIFIED.
THE TOP AND SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE RIPRAPPED AS SHOWN IN "SECTION A1" ON DRAWING X15325 AND "SECTION A1" ON DRAWING X15327 AND TO THE EXTENT SHOWN IN "LAYOUT" ABOVE ON THIS DRAWING.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER-STRUCTURE	WEST ABUT.	PIERS	EAST ABUT.	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.	—	50	140	270	460
CONCRETE MASONRY	C.Y.	109.3	34.8	58.3	55.4	257.8
BAR STEEL REINFORCEMENT	LB.	23,560	2,770	5580	4,990	36,900
STRUCTURAL CARBON STEEL	LB.	127,750	—	1,040	—	128,790
SHEET LEAD	LB.	226	—	—	—	226
SHEET ZINC	LB.	87	—	—	—	87
RIPRAP	C.Y.	—	100	—	130	230
NON-BID ITEMS						
EXPANSION JOINT FILLER	SIZE	1"	—	—	—	1"

* THE DESIGN OF THIS STRUCTURE IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, A.A.S.H.O., EDITION OF 1953.

LIST OF DRAWINGS

1. LAYOUT AND BILL OF BARS — X15322
2. SUPERSTRUCTURE — X15323
3. SUPERSTRUCTURE — X15324
4. WEST ABUTMENT — X15325
5. PIERS — X15326
6. EAST ABUTMENT — X15327

STATE HIGHWAY COMMISSION OF WISCONSIN

LAYOUT & BILL OF BARS

CO. MARATHON — EASTON & RINGLE — STA. 30+31.00

SECTION 33 & 4 — TOWN 28 & 29 N. — RANGE 9 E.

2-28-56 — LEB — 1951* — LOAD H15

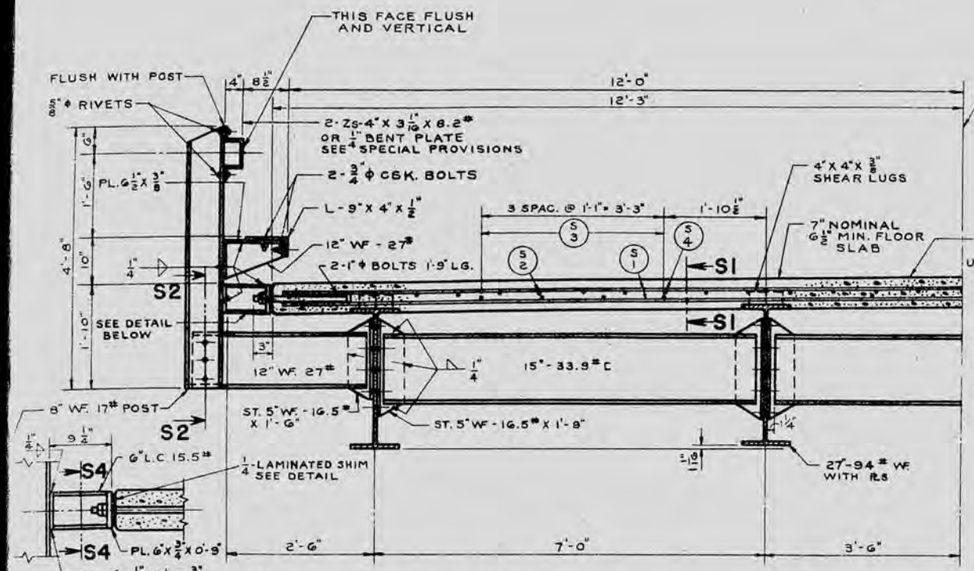
H. B. Schulz — BRIDGE ENGINEER

E. C. Roettiger — STATE HIGHWAY ENGINEER

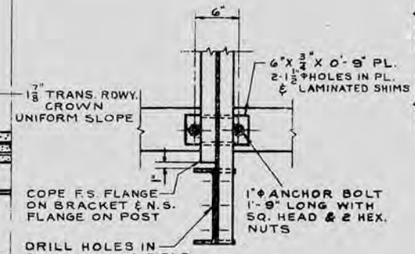
STRUCTURE B-37-26 — SHEET 1 OF 6

X15322

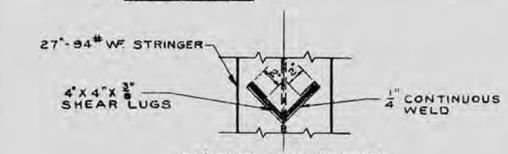
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	5012(3)	9	20



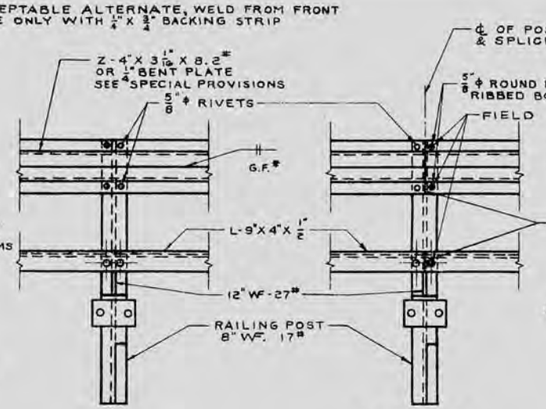
HALF CROSS SECTION THRU ROADWAY



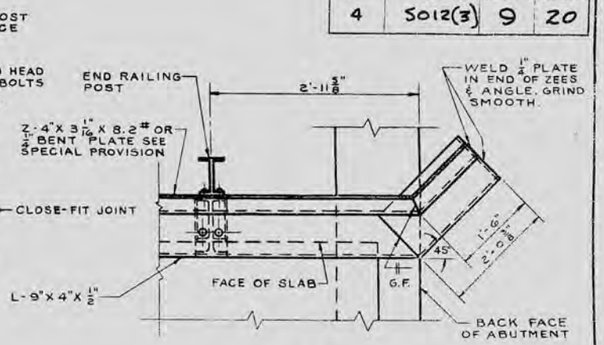
SECTION S2



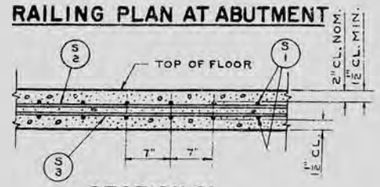
SHEAR LUG DETAIL



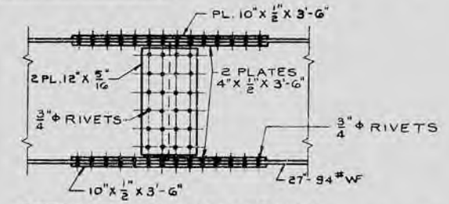
RAILING DETAILS



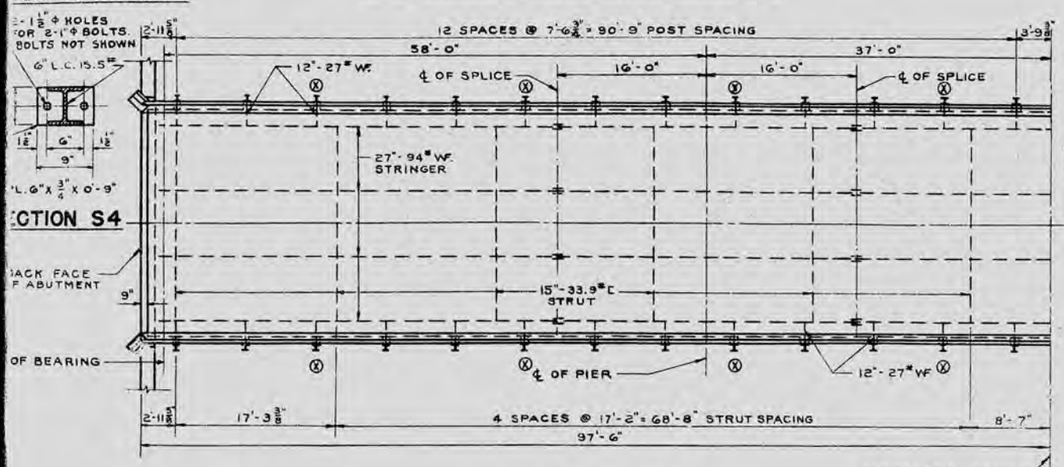
RAILING PLAN AT ABUTMENT



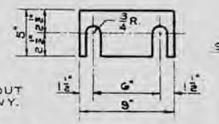
SECTION S1



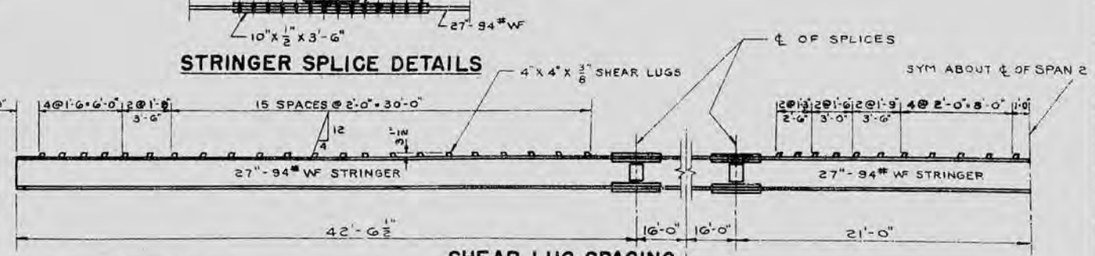
STRINGER SPLICE DETAILS



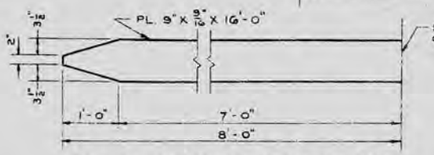
HALF FLOOR PLAN



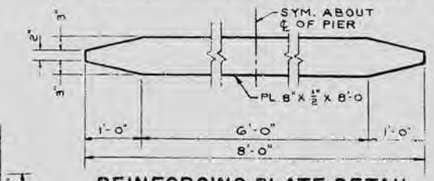
LAMINATED SHIM



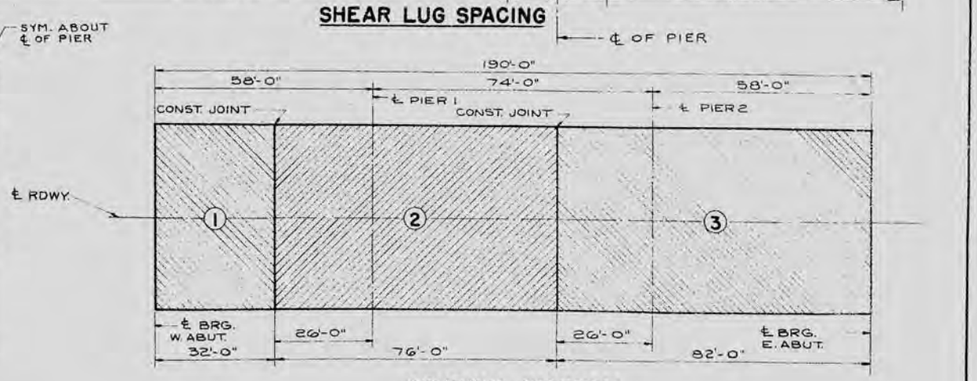
SHEAR LUG SPACING



REINFORCING PLATE DETAIL

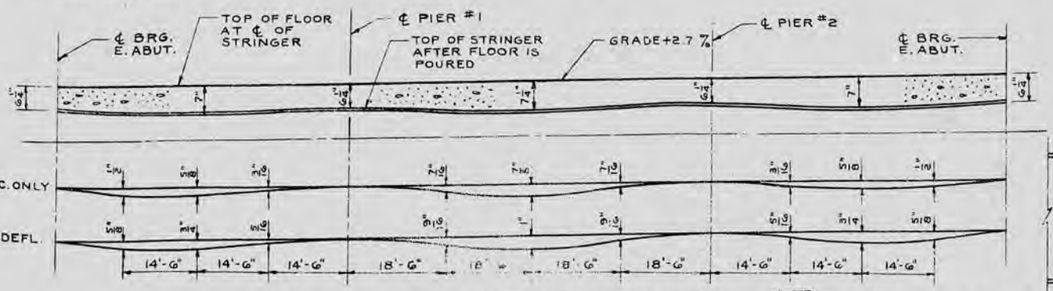


REINFORCING PLATE DETAIL



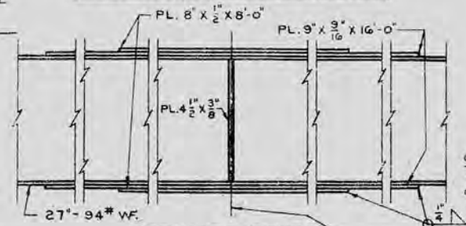
POURING DIAGRAM

FLOOR POURS SHALL BE MADE IN THE SEQUENCE SHOWN ABOVE

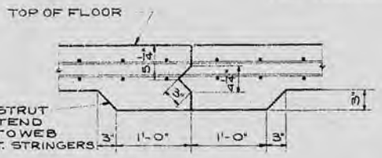


DEFLECTION DIAGRAM

NOTE:
SLAB THICKNESS FIGURES SHOWN ARE THEORETICAL AND ARE SUBJECT TO CORRECTION TO MEET VARIABLE FIELD CONDITION.



STRINGER DETAIL AT PIERS

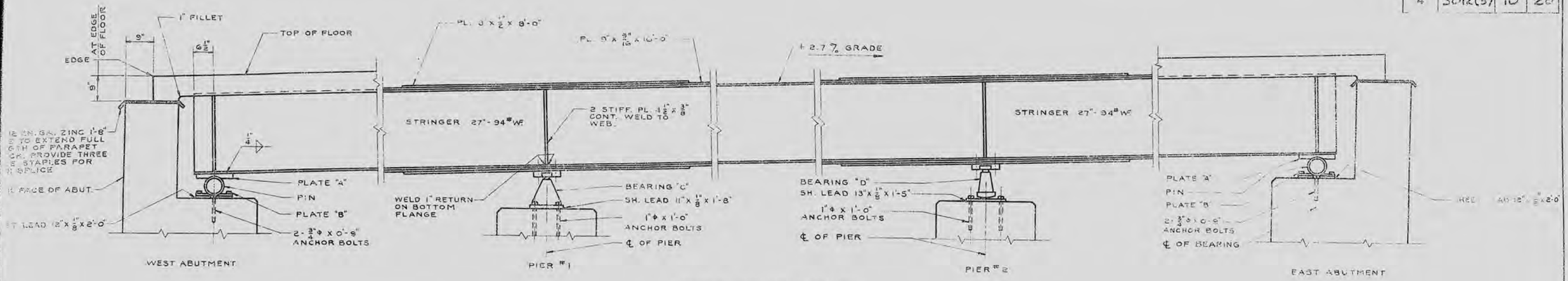


CONST. JOINT

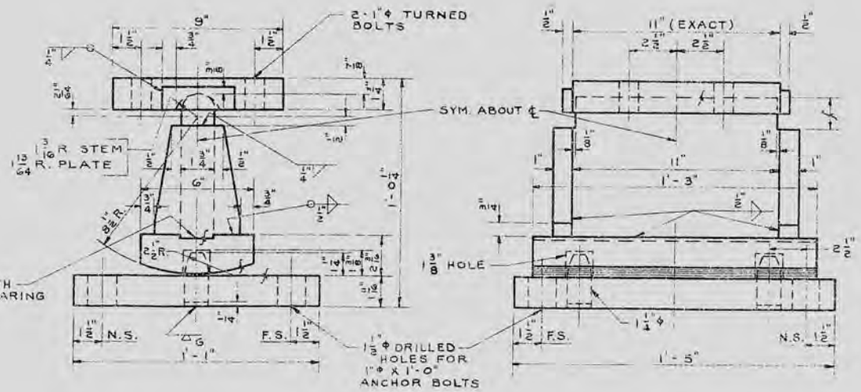
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DATE 2-6-56 DRWN. W.J.K. CKD. SPEC. 1951 LOAD H 15
STRUCTURE B-37-26	SHEET 2 OF 6

X 15323

	PROJECT	SHEET NO.	TOTAL SHEETS
4	S012(3)	10	20

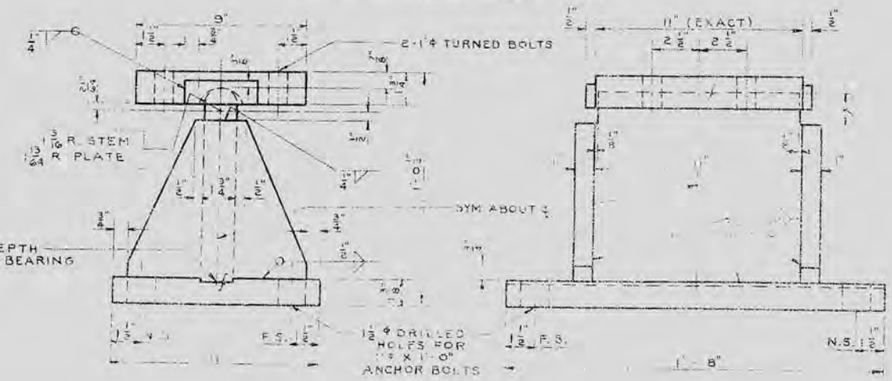


LONGITUDINAL SECTION



BEARING D

WT. OF ONE BEARING — 282# 4 REQD.



BEARING C

WT. OF ONE BEARING — 237# 4 REQD.

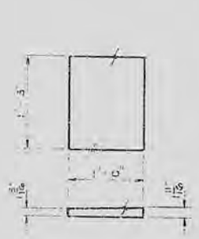
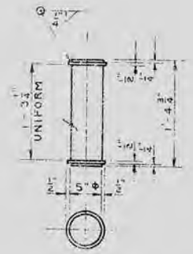


PLATE A

8 REQD



PIN

8 REQD.

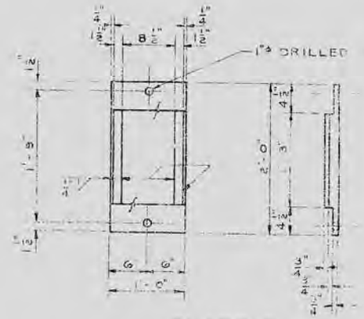


PLATE B

8 REQD.

ABUTMENT BEARING DETAILS

BEARING NOTES

ALL STRUCTURAL CARBON STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.
ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.
ALL SURFACES MARKED √ SHALL BE MACHINE FINISHED.
PAY QUANTITY FOR SIDE PLATES ON BEARINGS WILL BE BASED ON ACTUAL SIZE.
PINTLES SHALL BE MACHINED TO A DRIVING FIT.
BOLT TOP PLATE TO I-BEAM FOR SHIPMENT.
ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE 1/4" WASHER AND ONE HEX. NUT PER ANCHOR BOLT.

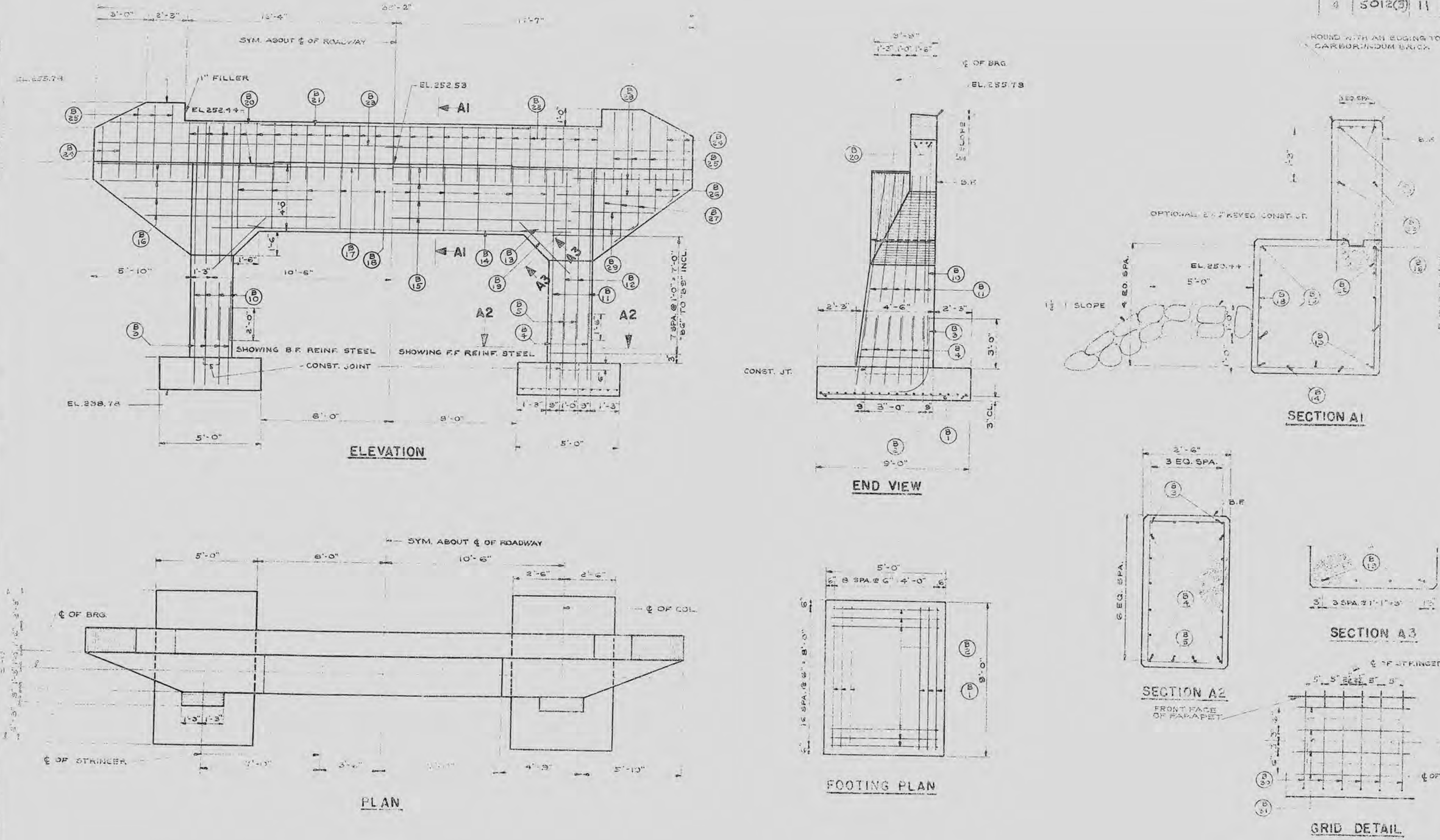
HIGHWAY COMMISSION OF WISCONSIN

SUPERSTRUCTURE

B-37-26 | 3 OF 6

15324

ROUND WITH AN EDGING TOOL OR CARBORUNDUM BRICK


SYM. ABOUT ℄ OF ROADWAY
1" FILLER
EL. 252.44
EL. 252.53
A1
A2
A3
SHOWING B.F. REINF. STEEL
SHOWING F.F. REINF. STEEL
CONST. JOINT
EL. 238.78
7 SPA. @ 1'-0" = 7'-0" "B5" TO "B8" INCL.
ELEVATION
℄ OF BRG.
EL. 255.78
B.F.
CONST. JT.
END VIEW
OPTIONAL 2 x 2 KEYED CONST. JT.
1½ : 1 SLOPE
EL. 250.44
SECTION A1
3 EQ. SPA.
SECTION A2
FRONT FACE OF PARAPET
SECTION A3
℄ OF STRINGER
GRID DETAIL
SYM. ABOUT ℄ OF ROADWAY
℄ OF COL.
℄ OF STRINGER
PLAN
8 SPA. @ 6" = 4'-0"
FOOTING PLAN

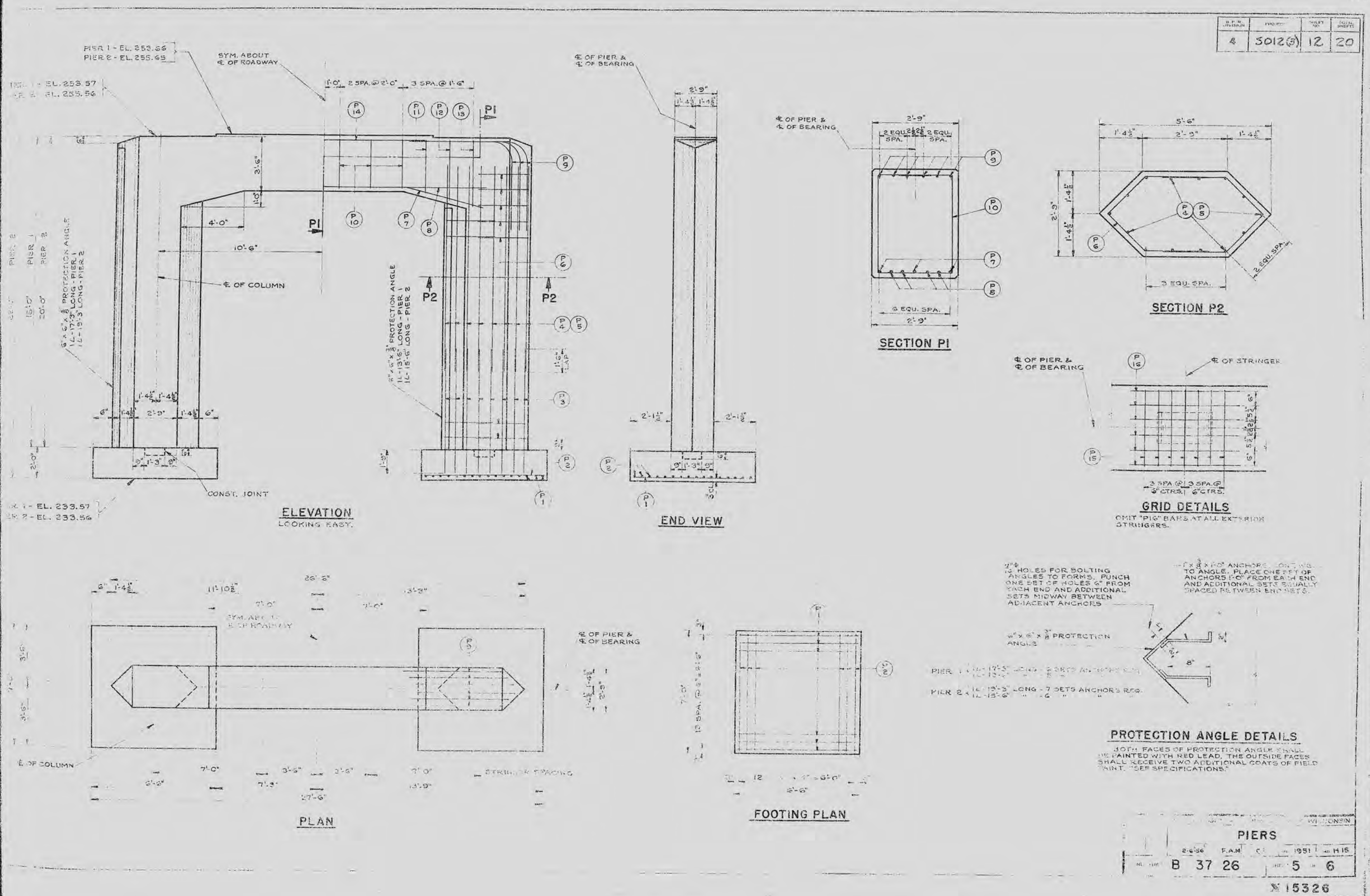
WISCONSIN

WEST ABUTMENT

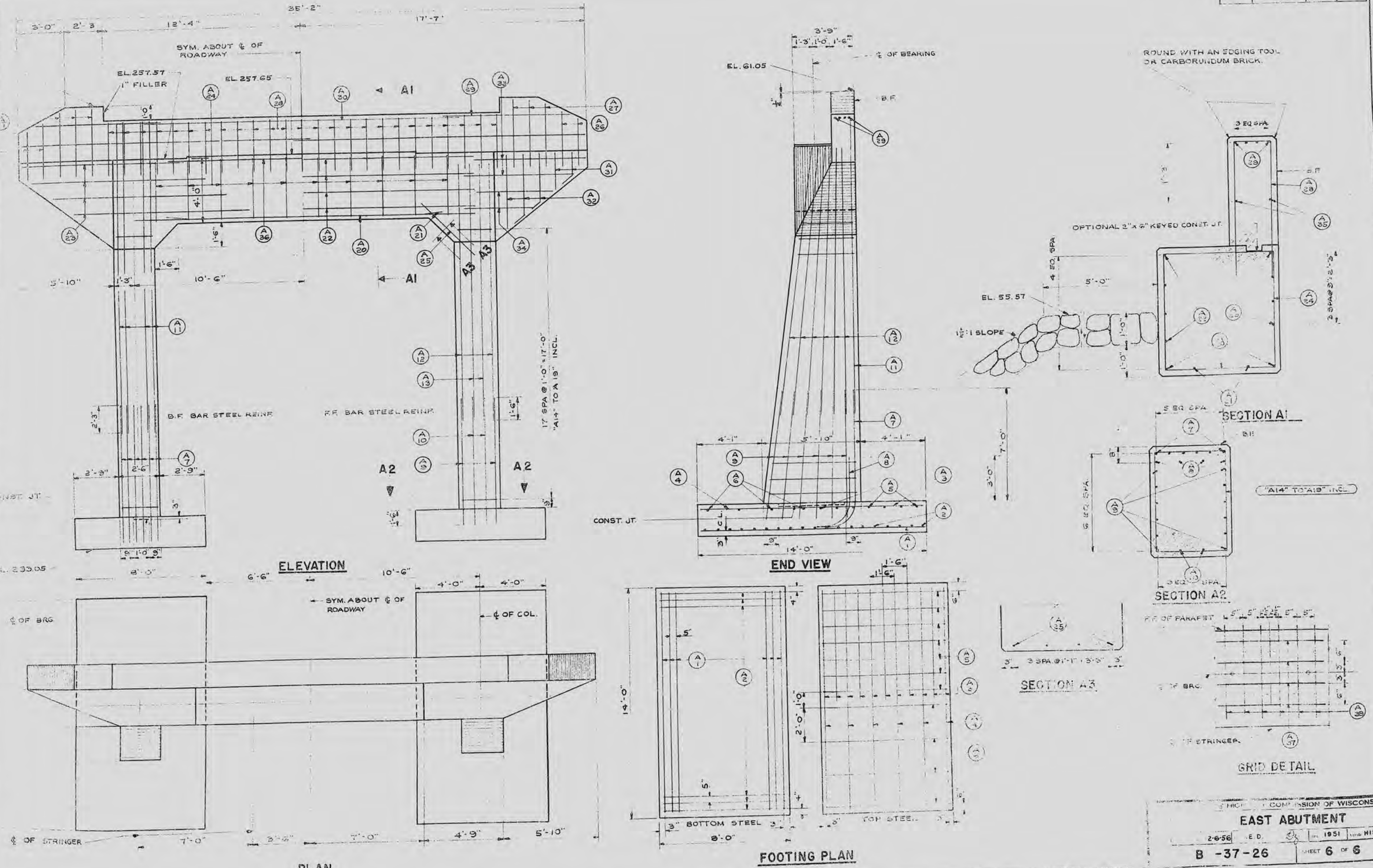
2-6-56 | E.D. | 1951 | H15

B-37-26 | SHEET 4 of 6

X 15325


4 | 5012(3) | 12 | 20
PIER 1 - EL. 253.66
PIER 2 - EL. 255.65
SYM. ABOUT
℄ OF ROADWAY
1'-0" 2 SPA. @ 2'-0" 3 SPA. @ 1'-6"
P1
P2
4'-0"
10'-6"
℄ OF COLUMN
6"x6"x3/8" PROTECTION ANGLE
1L-17'-3" LONG - PIER 1
1L-19'-3" LONG - PIER 2
6"x6"x3/8" PROTECTION ANGLE
1L-13'-6" LONG - PIER 1
1L-15'-6" LONG - PIER 2
CONST. JOINT
EL. 233.57
EL. 233.56
ELEVATION
LOOKING EAST.
℄ OF PIER &
℄ OF BEARING
END VIEW
SECTION P1
SECTION P2
3 EQU. SPA.
6 EQU. SPA.
℄ OF STRINGER
GRID DETAILS
OMIT "P16" BARS AT ALL EXTERIOR STRINGERS.
3 SPA. @ 6" CTRS. 3 SPA. @ 6" CTRS.
PLAN
FOOTING PLAN
℄ OF COLUMN
STRINGER SPACING
HOLES FOR BOLTING ANGLES TO FORMS. PUNCH ONE SET OF HOLES 6" FROM EACH END AND ADDITIONAL SETS MIDWAY BETWEEN ADJACENT ANCHORS
ANCHORS ... TO ANGLE. PLACE ONE SET OF ANCHORS 1'-0" FROM EACH END AND ADDITIONAL SETS EQUALLY SPACED BETWEEN END SETS.
6"x6"x3/8" PROTECTION ANGLE
PIER 1
PIER 2 1L-19'-3" LONG - 7 SETS ANCHORS REQ.
PROTECTION ANGLE DETAILS
BOTH FACES OF PROTECTION ANGLE SHALL BE PAINTED WITH RED LEAD. THE OUTSIDE FACES SHALL RECEIVE TWO ADDITIONAL COATS OF FIELD PAINT. "SEE SPECIFICATIONS."
WISCONSIN
PIERS
2-6-56 F.A.M. 1951 H 15
B 37 26 5 6
15326

F.A.P. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	5012(3)	13	20



STATE HIGHWAY COMMISSION OF WISCONSIN

EAST ABUTMENT

2-6-56 | 1951 | H15

B -37-26 | SHEET 6 OF 6

X 15327

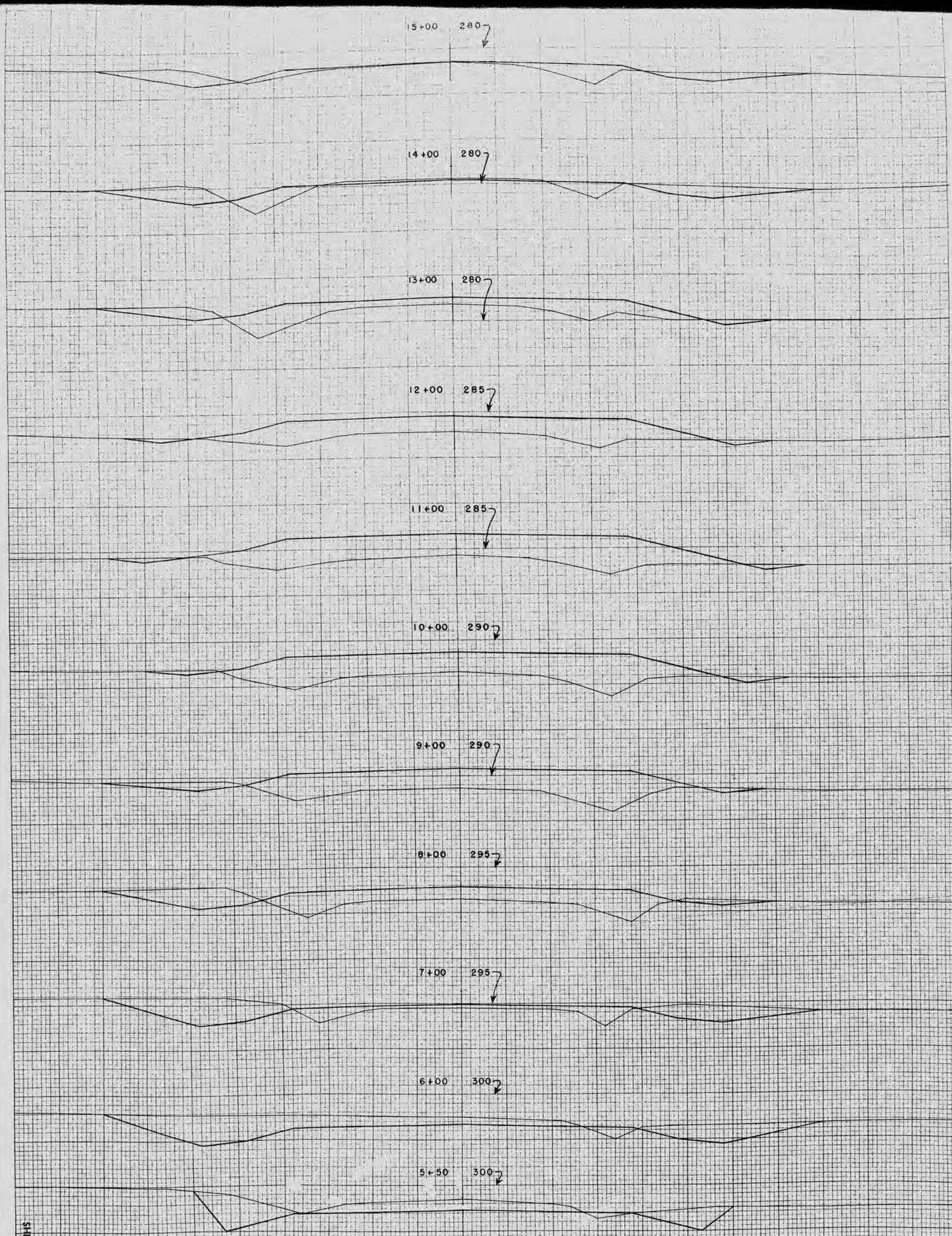


PLATE 1-CROSS SECTION O. P. A. & B. E. STANDARD
THE FREDERICK HUBY CO. CHICAGO

SHEET TOTAL

STATION	15+00	14+00	13+00	12+00	11+00	10+00	9+00	8+00	7+00	6+00	5+00
DISTANCE	100	100	100	100	100	100	100	100	100	50	
EXCAVATION UNCL.	115	93	33	19	20	33	74	159	291	S.R.30 213	
YARDAGE FILL	78	163	306	450	515	483	354	189	61	11	

1080

2590

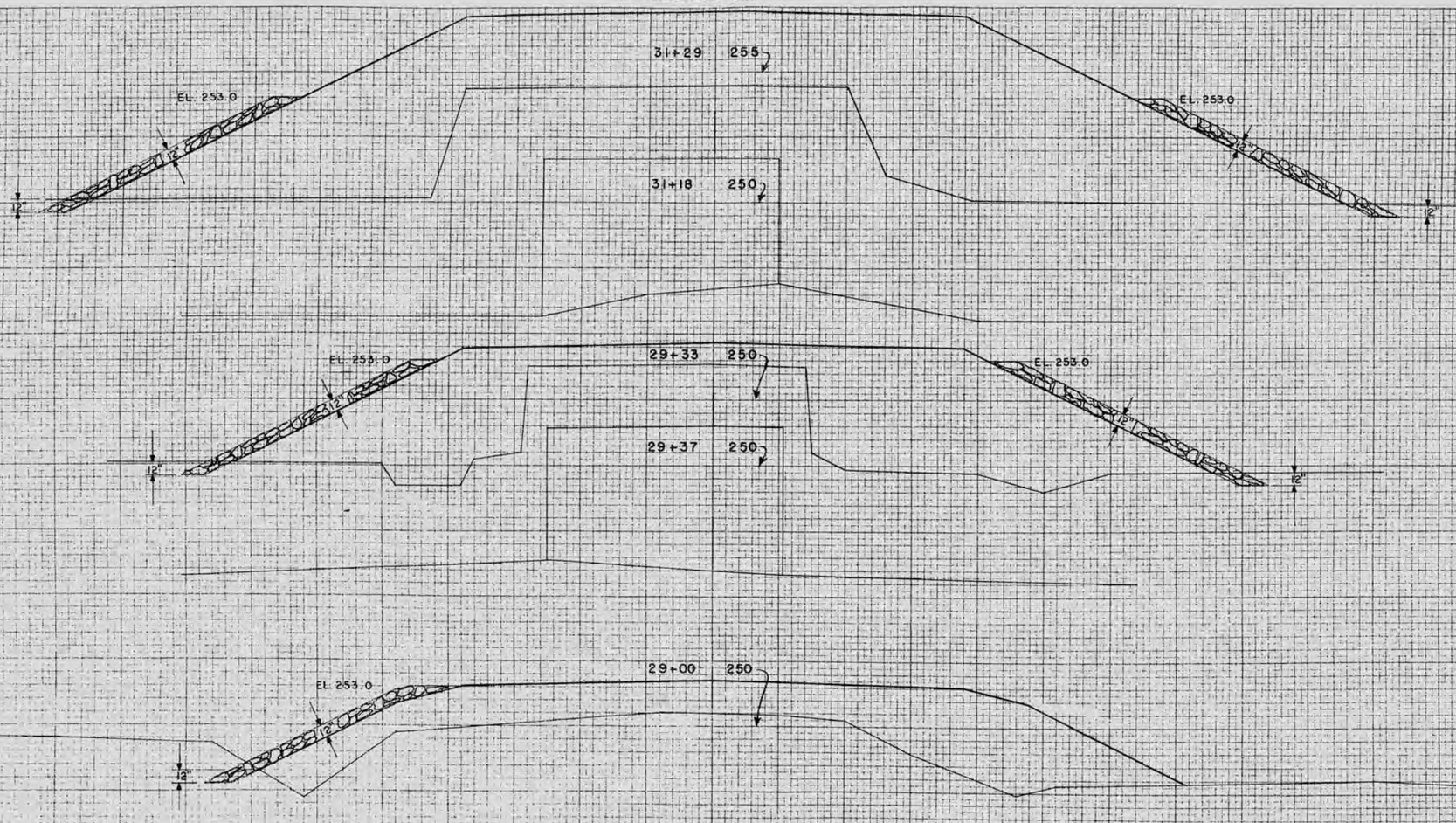
P.R.A. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. SN	S 012 3	14	20

P.R.A. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 5N	S 012 3	15	20

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
15+00			
	100	122	52
16+00			
	100	276	17
17+00			
	100	461	7
18+00			
	100	370	28
19+00			
	100	181	41
20+00			
	100	287	17
21+00			PE 30
	100	41	2
22+00			
	100	441	
23+00			
	100	293	2
24+00			
	100	128	48
25+00			
	100	128	115
26+00			
	100	183	96
			33
SHEET TOTAL		2870	456

N - GLEASON BR.

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
W15. 4	S 012 3	16	20

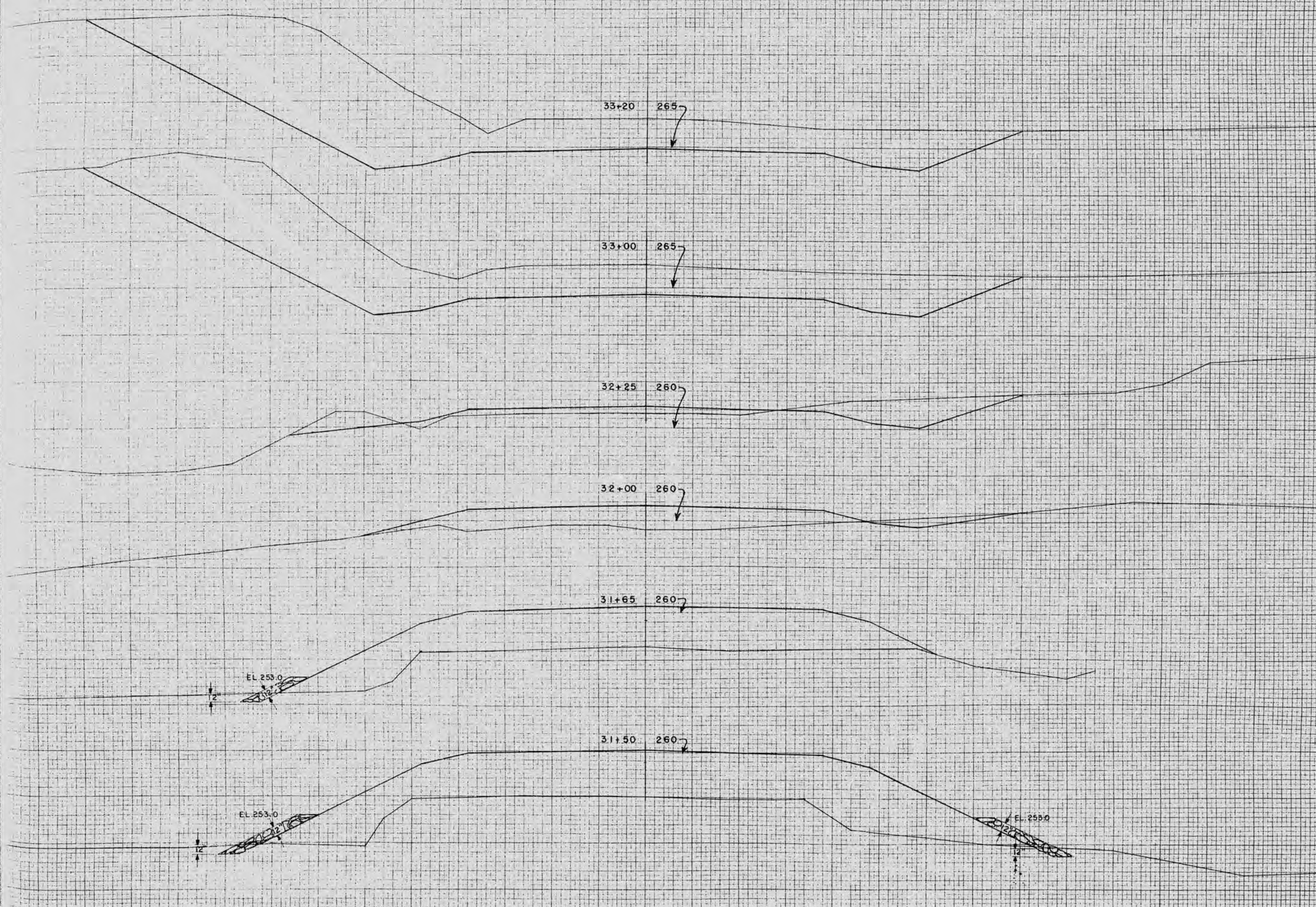


STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL	
26+00				
	100	208	19	
27+00				
	100	137	159	
28+00				
	70	72	276	
28+70				SR 730
	30	17	202	
29+00				
	33	0	357	
29+33				
	23	0	144	
29+56				
30+98				
31				
31+29				
	111		374	
SHEET TOTAL	445		2281	

PLATE 3 CROSS SECTION O. P. H. & R. E. STANDARD
(20") BAR PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

N - GLEASON BR.

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 012 3	17	20



STATION	DISTANCE	YARDAGE – EXCAVATION – UNCL.			FILL
31+29	21	7			398
31+50	15	0			178
31+65	35	6			231
32+00	25	31			54 P.E. 25
32+25	75	689			30
33+00	20	S.R. 50 346			0
33+20					
SHEET TOTAL		1129			916

N - GLEASON BR.

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 012 3	18	20

38+00 275

37+00 275

36+00 275

35+00 275

34+00 275

33+40 270

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
33+20	20	472	0
33+40	60	1885	0
34+00	100	3291	0
35+00	100	2648	0
36+00	100	P.E. 50 1500	0
37+00	100	439	91
38+00			

SHEET TOTAL 10295 31

PLATE 3 CROSS SECTION U. S. B. R. & R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 012 3	19	20

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE EXCAVATION FILL
38+00			P.E. 30 102
	100	126	
39+00			33
	100	231	
40+00			81
	100	156	
41+00			183
	100	74	
42+00			217
	100	48	
43+00			220
	100	53	
44+00			226
	100	54	
45+00			239
	100	35	
46+00			P.E. 30 200
	100	56	
47+00			193
	100	50	
48+00			228
	100	39	
49+00			230
	100	50	
52+00			235
	100	44	
51+00			
SHEET TOTAL		1026	2427

PLATE 3-CROSS SECTION U.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

B.P.R. DISTRICT OFFICE	PROJECT	SHEET NUMBER	TOTAL SHEETS
WIS. 4	S 012 3	20	20

(CLEAN DITCHES BEYOND FOR NECESSARY DRAINAGE)

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE FILL
59+22			
	50	95	0
58+72			
	72	165	0
	S.R. 30		
	281		
58+00			
	100	293	2
57+00			
	100	211	115
56+00			
	100	169	39
55+00			
	100	137	59
54+00			PE. 15
	100	126	63
53+00			91
	100	106	
52+00			180
	100	70	
51+00			
SHEET TOTAL	643		470

PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.