

INDEX OF SHEETS

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- SHEET NO. 33-34 CROSS SECTIONS



STATE OF WISCONSIN
STATE HIGHWAY COMMISSION OF WISCONSIN

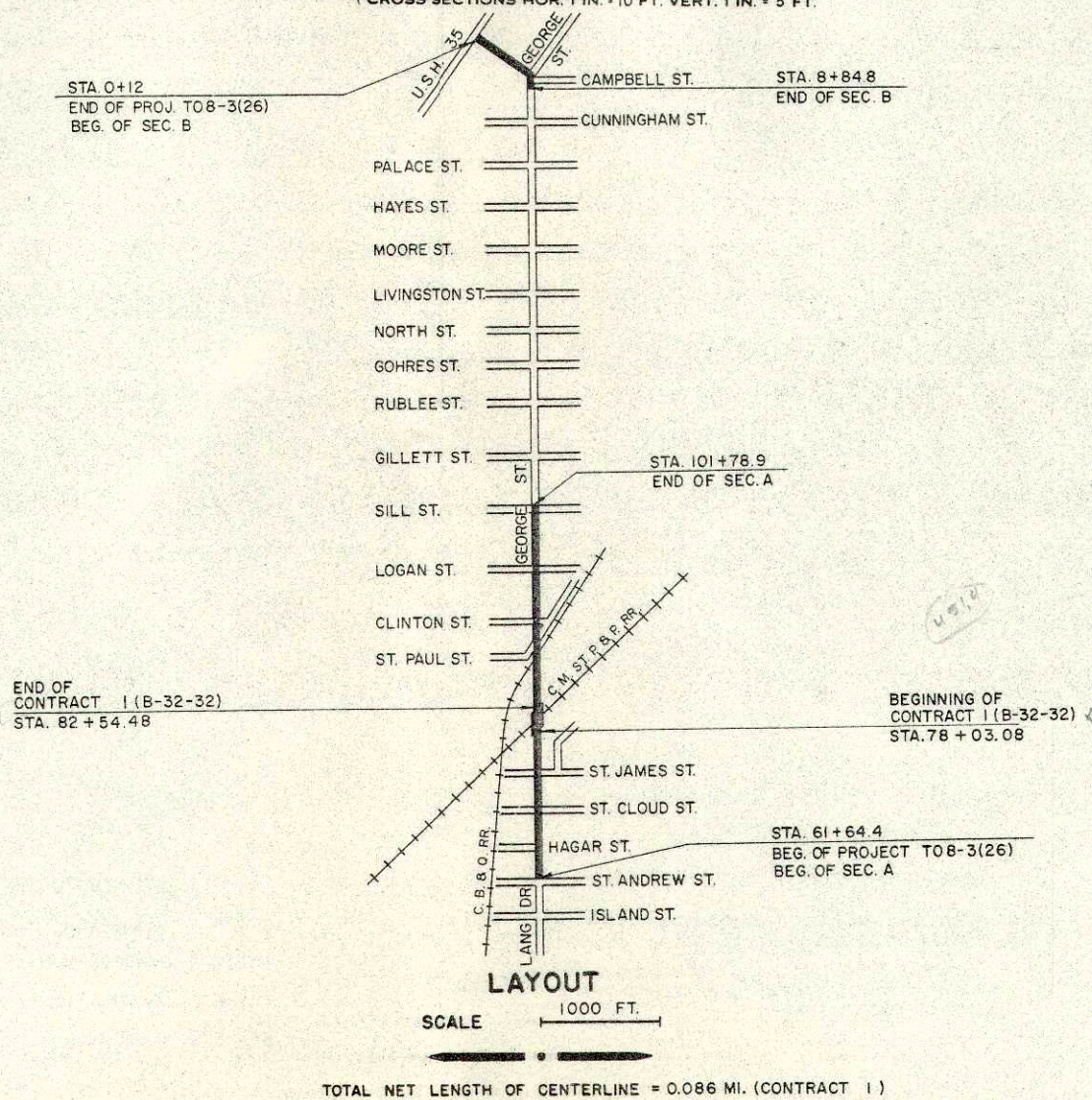
COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
32.1	8.3	22.26		WIS. 4	1	34



PLAN AND PROFILE OF PROPOSED
LANG DRIVE - GEORGE STREET EXTENSION, CITY OF LA CROSSE
S.T.H. CONNECTING STREET
LA CROSSE COUNTY
PROJECT TO 8-3(26)

BEGINNING AT A POINT 977.58 FEET SOUTH AND 5 FEET WEST OF THE NORTH QUARTER CORNER OF SECTION 29 T 16 N, R 7 W, THENCE NORTH PARALLEL TO AND 5' WEST OF THE NORTH-SOUTH QUARTER LINE OF SAID SECTION 29, A DISTANCE OF 451.40 FEET.

SCALES { PLAN 1 IN. = 20 FT.
PROFILE HOR. 1 IN. = 20 FT. VERT. 1 IN. = 5 FT.
CROSS SECTIONS HOR. 1 IN. = 10 FT. VERT. 1 IN. = 5 FT.

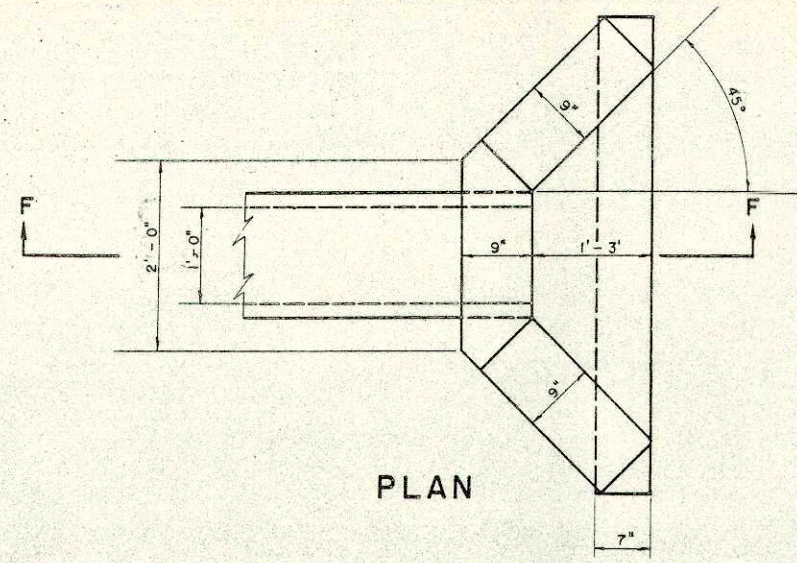


CONVENTIONAL SIGNS

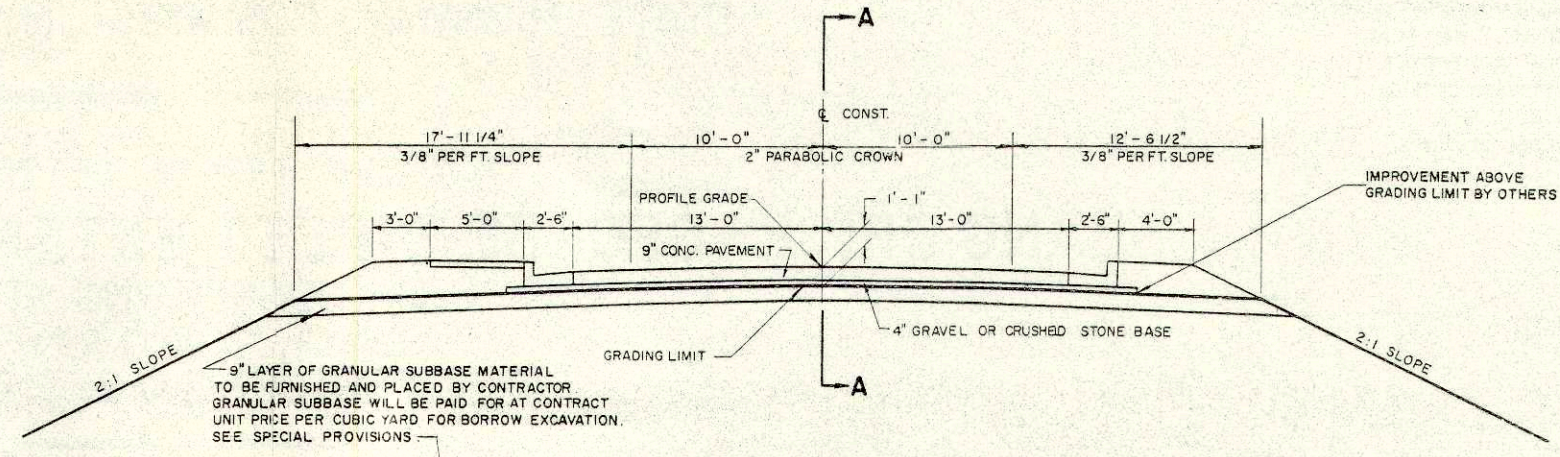
<p>STATE LINE.....</p> <p>COUNTY LINE.....</p> <p>TOWNSHIP OR RANGE LINE.....</p> <p>SECTION LINE.....</p> <p>NEW RIGHT OF WAY LINE.....</p> <p>PRESENT RIGHT OF WAY LINE.....</p> <p>WIRE FENCE { WOVEN..... BARBED.....</p> <p>LOT LINE.....</p> <p>CORPORATE OR CITY LIMITS.....</p> <p>PROPERTY LINE..... PL + 32.6</p> <p>TRAVELED WAY OR P.E.....</p> <p>RAILROADS.....</p> <p>BASE OR SURVEY LINE..... 30</p>	<p>CULVERTS IN PLACE.....</p> <p>CULVERTS REQUIRED.....</p> <p>DROP INLET.....</p> <p>POWER POLE.....</p> <p>TELEPHONE OR TELEGRAPH POLE.....</p> <p>RIGHT OF WAY MARKERS.....</p> <p>REFERENCE STAKE FOR HUBS ONLY.....</p> <p>MARSH.....</p> <p>HEDGE.....</p> <p>TREES.....</p> <p>GROUND ELEVATION..... DATUM LINE 73.9</p> <p>GRADE ELEVATION..... DATUM LINE 75.16</p>
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ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS CHICAGO, ILLINOIS	STATE HIGHWAY COMMISSION OF WISCONSIN MADISON, WIS.
CORRECT: _____ DATE 7.20.61 <i>J. Benesch</i>	SURVEYOR: _____ NOTE BOOK: _____ DIVISION COMPUTER: _____ M. O. CHECKER: W.H.B. DISTRICT CHECKER: _____ CORRECT: _____
APPROVED FOR CITY OF LA CROSSE	CORRECT: _____ DATE 8-14-61 <i>G. M. ...</i> DISTRICT ENGINEER
APPROVED: _____ DATE 8/14/61 <i>J. S. Pelt</i> CITY ENGINEER	RECOMMENDED FOR APPROVAL: DATE 8-28-61 <i>J. S. Pelt</i> ENGINEER OF DESIGN
APPROVED: _____ DATE 8/28/61 <i>E. C. ...</i> STATE HIGHWAY ENGINEER	DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS
	APPROVED: _____ DATE _____ DISTRICT ENGINEER

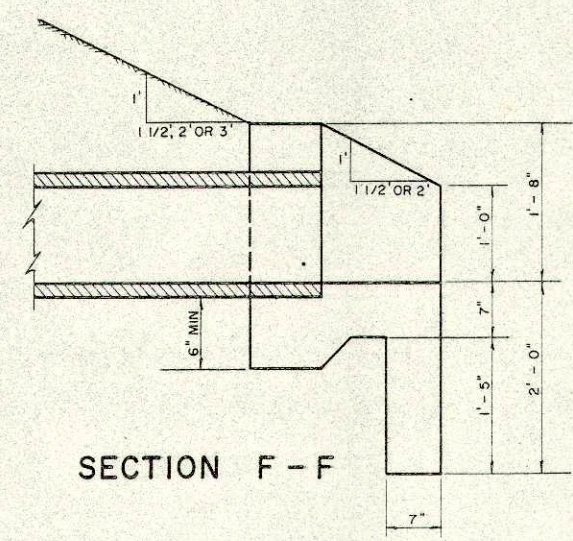
1431



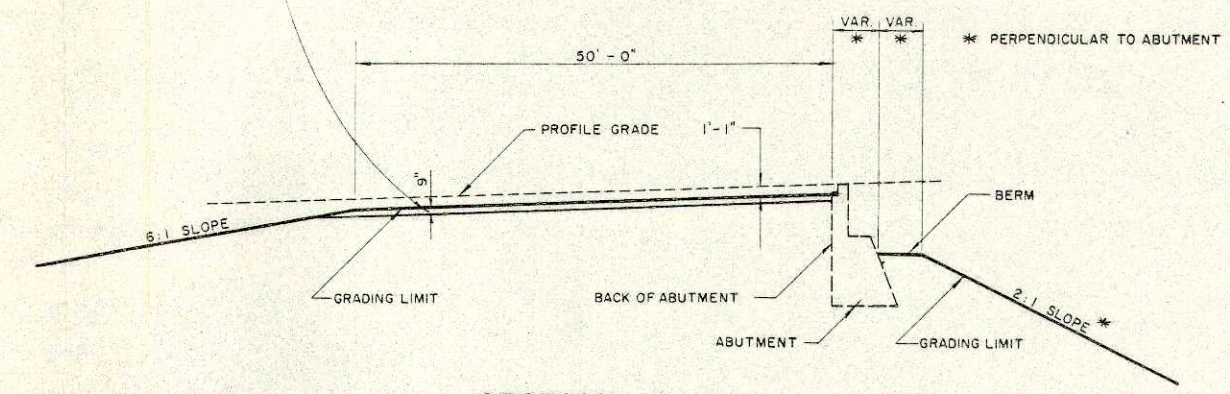
PLAN



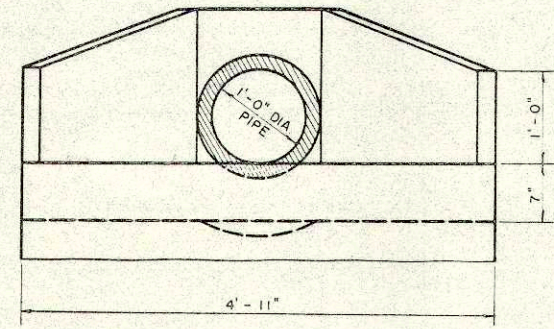
TYPICAL SECTION



SECTION F-F



SECTION A-A



END VIEW

PLAIN CONCRETE HEADWALL
 STA. 81+56 LT.

GENERAL NOTES:

1. SEE PLANS AND CROSS - SECTIONS FOR VARIATIONS IN CONSTRUCTION NOT SHOWN ON TYPICAL SECTIONS.
2. CONCRETE PAVEMENT, CONCRETE SIDEWALK, CONCRETE CURB AND GUTTER, TOPSOIL AND SEEDING ARE NOT PART OF THIS CONTRACT.

STANDARD DETAIL DRAWINGS

- 5-3. 7. 1 MANHOLES
- 5-3. 8. 2 MANHOLE COVERS
- 7-4. 1. 2 CONSTRUCTION BARRICADE
- 8-3. 3. 4 SLOPE PAVING

NO	DATE	REVISION	BY

STATE HIGHWAY COMMISSION
 OF WISCONSIN
 LANG DRIVE - GEORGE ST. EXTENSION LA CROSSE WISCONSIN

TYPICAL SECTIONS & DETAILS

SCALE: AS SHOWN
 DESIGNED: A.B. DATE
 DRAWN: E.R. DATE
 CHECKED: A.B. DATE
 ALFRED BENESCH & ASSOCIATES
 CONSULTING ENGINEERS
 10 50 WABASH AVE., CHICAGO 3, ILLINOIS
 DWG. NO. SHEET OF

ESTIMATE OF QUANTITIES

CONTRACT NO. 1

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	T08-3(26)	3	34

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE HIGHWAY COMMISSION OF WISCONSIN - EDITION OF 1957 AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSAL.

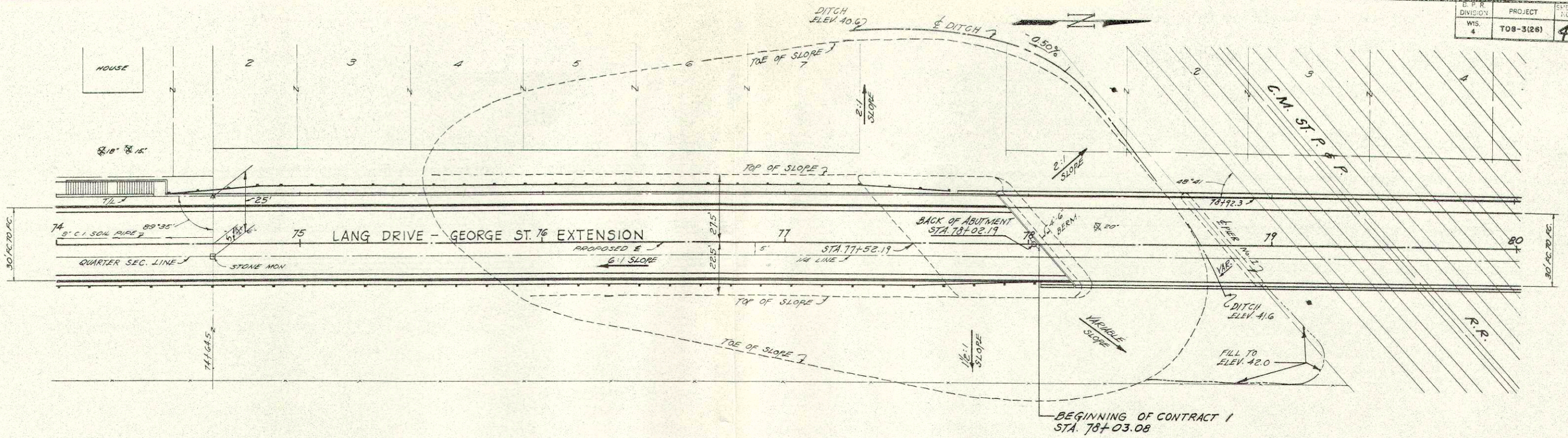
SEC. NO.	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING				GRUBBING				REMOVING OLD CULVERT		SALVAGED FENCE	EXCAVATION				GRANULAR BACK-FILL	FINISHING ROADWAY	OBLITERATING OLD ROAD	GRANULAR SUBBASE COURSE	CONCRETE		CONCRETE PAVEMENT		CONCRETE DRIVEWAYS	CONCRETE HEADERS	CONCRETE SURFACE DRAINS	CONCRETE PAVEMENT REINF.	PREP ROAD-BED FOR BITUM. SURF.	BITUM. MAT. FOR PRIME COAT	SINGLE AGGREGATE BITUMINOUS SURFACE	BITUMINOUS CONCRETE PAVEMENT	BITUM. MAT. FOR SURFACE COURSE		
			2101-1		2101-2		2101-4		2101-5		2104-1			UNCLASS.	ROCK	MARSH	BORROW					BASE COURSE	IN STOCK PILES	BASE COURSE	CONCRETE PAVEMENT											
			STA.	IN DIA.	STA.	IN DIA.	STA.	IN DIA.	STA.	IN DIA.	STA.	IN DIA.																							CY.	CY.
	ITEM NO.		2101-1	2101-2	2101-4	2101-5	2104-1				S.P.		2106-5	2106-2	2106-4	2109-1	2110-1	2114-1	2116-1	220-1	2202-1		220	220	2301-1	2301-	2301-7	2301-9	2301-0	2301-11	2310-1	2311-1	2315-1	2317-1	23	
	UNIT	LIN. FT.	STA.	IN DIA.	STA.	IN DIA.	LS.				LF.		CY.	CY.	CY.	CY.	CY.	LS.	STA.	SQ. YD.				SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	CY.	SQ. YD.	STA.		TON	TON			
1	LANG DRIVE-GEORGE ST OVERPASS	451.40																																		
2	APPROACHES			109		41					100																									
TOTAL				109		41					100																									

SEC. NO.	BRIDGES (STRUCTURES OVER 20FT. SPAN)															CULVERTS (STRUCTURES 20FT. SPAN & UNDER)																					
	EXCAVATION FOR STRUCTURES	GRANULAR BACK-FILL	CONCRETE MASONRY	BAR STEEL REINF.	STRUCTURAL CARBON STEEL	STRUCTURAL LOW-ALLOY STEEL	CAST-IN-PLACE CONCRETE TEST PILING		CAST-IN-PLACE CONCRETE PILING		TREATED TIMBER PILING		CONC. TEST PILING	CONCRETE PILING		FLOOR DRAINS	SLOPE PAVING (CONC. BLOCK)	LUBRICATED BRONZE PLATES	BEARING PADS	6 INCH DRAIN PIPE	ALUMINUM RAILING	ELECTRICAL WORK	REMOVE OLD CULV'T STA.	COM-MON EXC.	EXCAVATION FOR STRUCTURES	GRANULAR BACK-FILL	CONCRETE MASONRY	BAR STEEL REINF.	STRUCTURAL CARBON STEEL	SHEET LEAD	SHEET ZINC	TRT'D LUMBER AND TIMBER	UNTR'D TIMBER TEST PILING	TREATED TIMBER PILING		FLOOR DRAINS	RIP-RAP
							2 @ 80'-0" / 2 @ 55'-0" / 1 @ 45'-0"	2505-1	2505-2 / 2505-3	2501-4	2501-5	2502-1		2502-2 / 2502-3	2508-1																			2515-2	S.P.		
	2107-1	2110-1	2401-1	2406-1	2407-1	2407-2	2505-1	2505-2 / 2505-3	2501-4	2501-5	2502-1	2502-2 / 2502-3	2508-1	2515-2	S.P.	S.P.	S.P.	S.P.	S.P.	2104-1	2106-1	2107-2	2110-1	2404-1	2406-2	2407-1	2407-9	2407-11	2408-2	2501-1	2501-4	2501-5	2508-1	2512-1			
	CY	CY	CY	LB	LB	LB	LS.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LS.	LIN. FT.	LIN. FT.	EACH.	SQ. YD.	LB.	SQ. FT.	LIN. FT.	LIN. FT.	LS.	LS.	CY.	CY.	CY.	CY.	LB	LB	LB	LB	MBM.	LS.	LIN. FT.	LIN. FT.	EACH.	CY.	
1	555	288	1153	197,200	540,460	32,400	1	5,805	5,805				8	770	118	49	120	961	1																		
2																																					
TOTAL	555	288	1153	197,200	540,460	32,400	1	5,805	5,805				8	770	118	49	120	961	1																		

SEC. NO.	CONCRETE MASONRY		CULVERT										PIPE				RIP-RAP	HEAVY RIPRAP	SLOPE PAVING		DITCH CHECKS		PIPE UNDER DRAIN	STORM SEWER REINFORCED CONCRETE CULVERT PIPE				MANHOLES				CONCRETE			CABLE GUARD FENCE	STEEL PLATE BEAM GUARD	MARKER POSTS FOR R-O-W	ANCHOR AGES FOR CABLE GUARD FENCE	CALCIUM CHLORIDE SURFACE TREATMENT	TOP-SOIL	SALVAGED TOP-SOIL	FER-TILIZER	SEEDING	SOD-DING
	HEAD-WALLS	DRY	12"		18"		24"		30"		36"		42"		48"				54"		60"			66"		72"		TYPE 2-M	ACCESS ROAD	CURB	CURB AND GUTTER	SIDE WALKS												
			2404-5	2409-3	2411-	2411-	2411-	2411-	2411-	2411-	2411-	2411-	2411-	2411-	2512-1	2512-2			2515-1	2515-2	2516-	2516-		2517-1	2519-31	2519-	2519-						2519-	2520-										
			2411-	2411-	2411-	2411-	2411-	2411-	2411-	2411-	2411-	2512-1	2512-2	2515-1	2515-2	2516-	2516-	2517-1	2519-31	2519-	2519-	2519-	2520-	2520-	2520-11	2520-	S.P.	2520-	2521-1	2521-1	2522-1	2523-	2523-	2523-5	2523-6	2523-7	2525-1	2528-1	2528-2	2531-1	2532-1	2533-1		
	CY	CY	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	CY.	CY.	SQ. YD.	SQ. YD.		CY.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH.	EACH.	EACH.	EACH.	L.S.	EACH.	LIN. FT.	LIN. FT.	SQ. FT.	LIN. FT.	LIN. FT.	EACH.	EACH.	EACH.	TON		SQ. YD.	CWT.	SQ. YD.	SQ. YD.		
1																																												
2	1																																											
TOT	1																																											

3 of 31

DATE: 7-61
 BY: J.C.H.
 SURVEYED: []
 PLOTTED: []
 GRADES CHECKED: []
 P.M. NOTED: []
 STRUCTURE NOTED: []
 PLAN: []
 NOTE BOOK NO. []



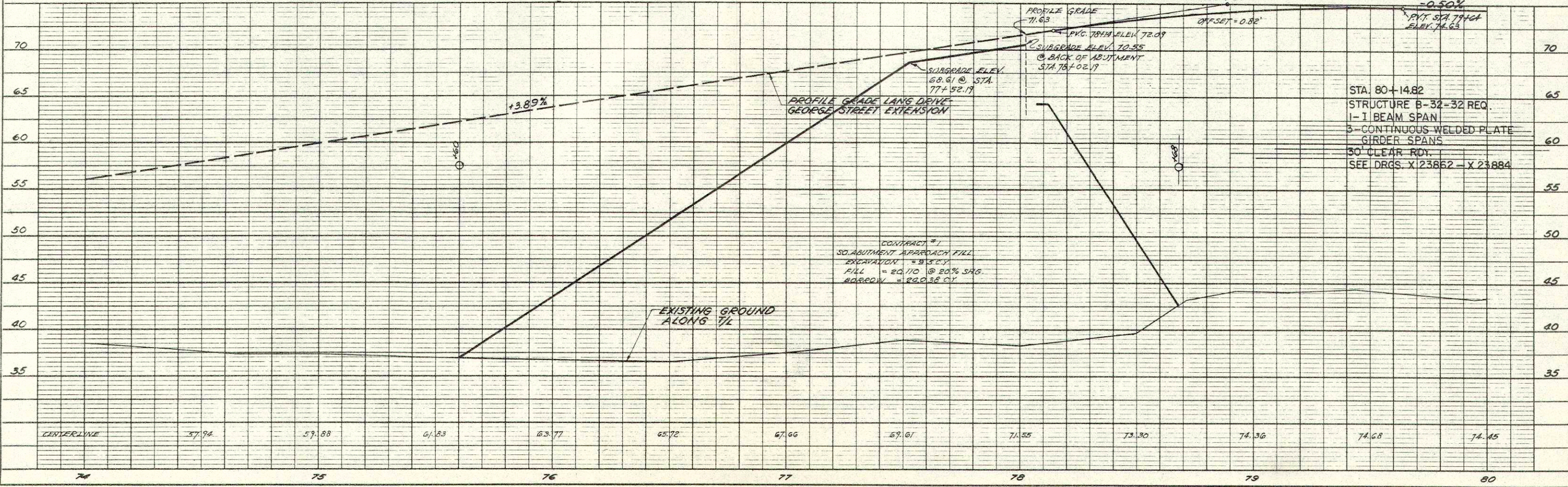
B.M. ELEV. 42.53
 TOP NUT OF HYDRANT
 30.9' LT. OF STA. 73+08

NOTE: CONCRETE PAVEMENT, GUARD RAIL, CONCRETE SIDEWALK, CONCRETE CURB AND GUTTER, TOP SOIL AND SEEDING ARE NOT PART OF CONTRACT 1

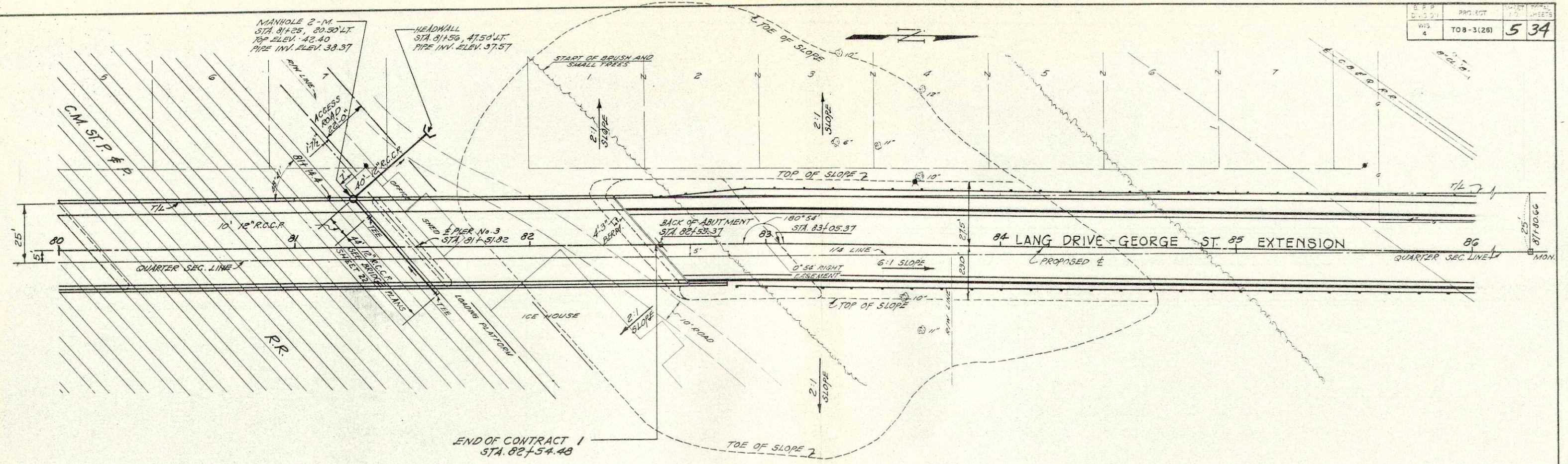
SALVAGE FENCE
 STA. 77+46 TO STA. 78+46-57' RT.

P.V.I. STA. 78+89
 ELEV. 75.01
 150' V.C.

DATE: 7-61
 BY: J.C.H.
 SURVEYED: []
 PLOTTED: []
 GRADES CHECKED: []
 P.M. NOTED: []
 STRUCTURE NOTED: []
 PROFILE: []
 NOTE BOOK NO. []

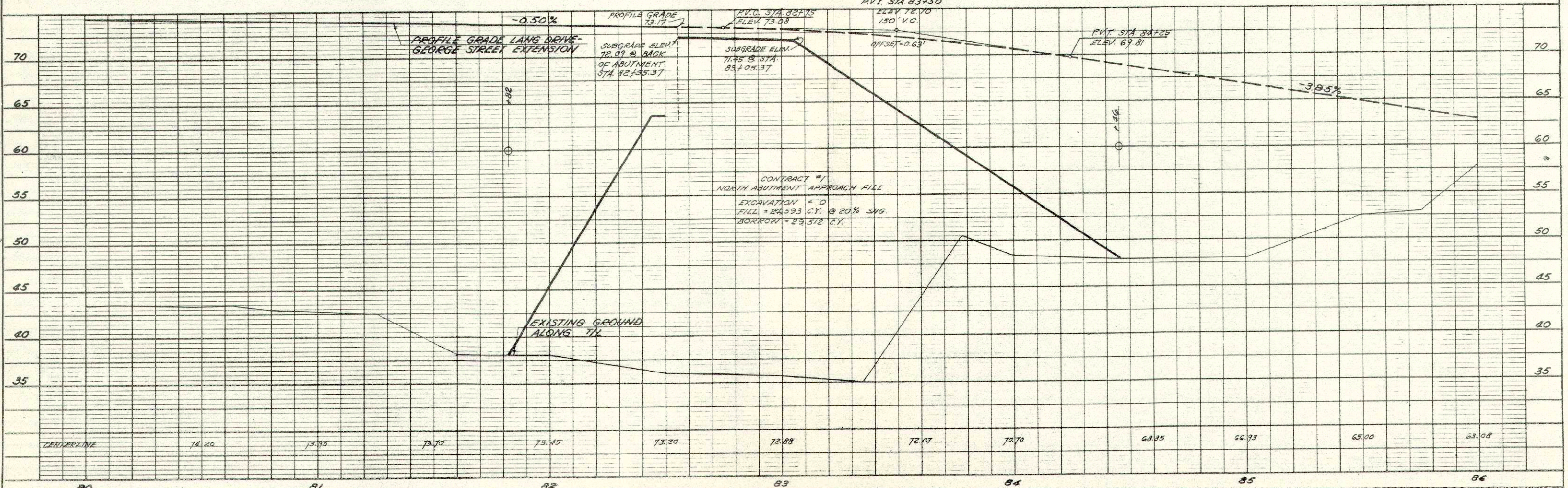


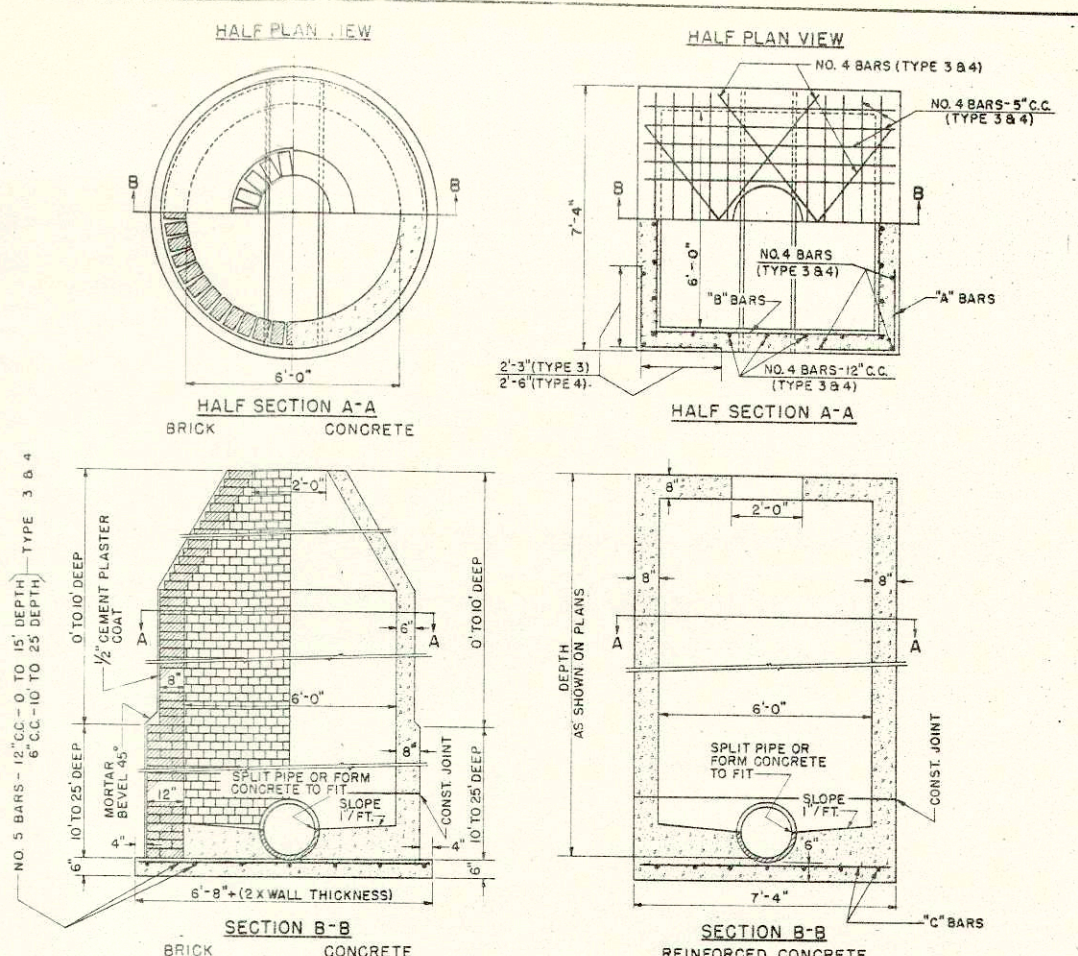
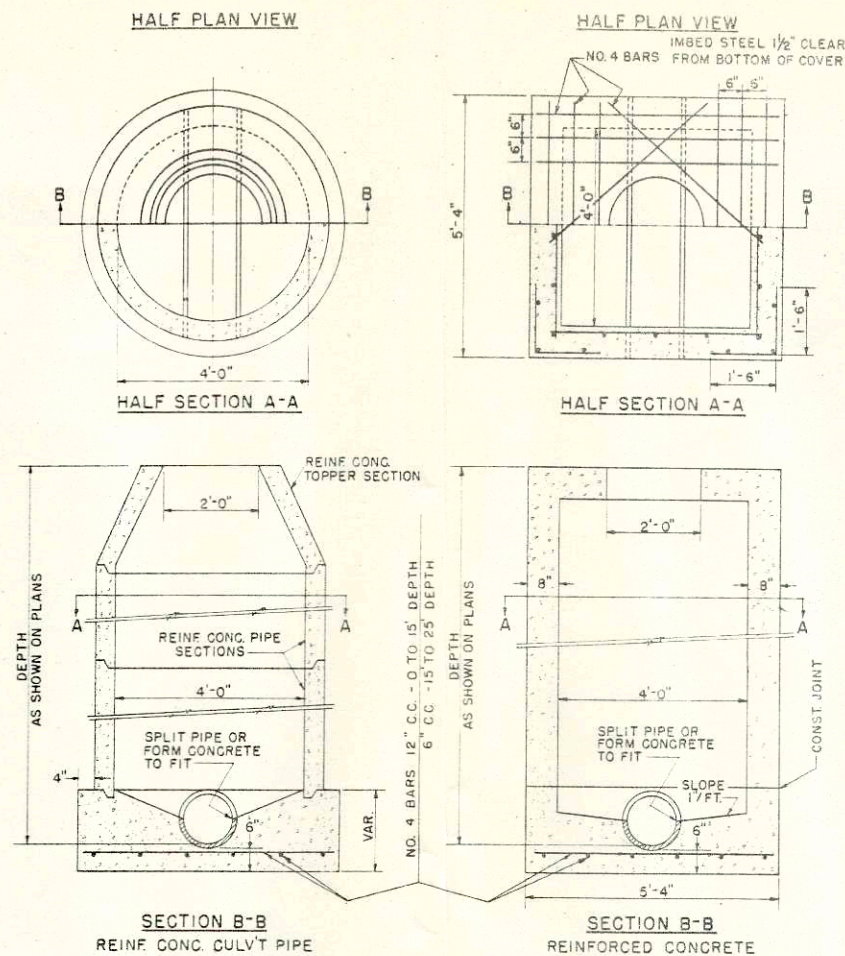
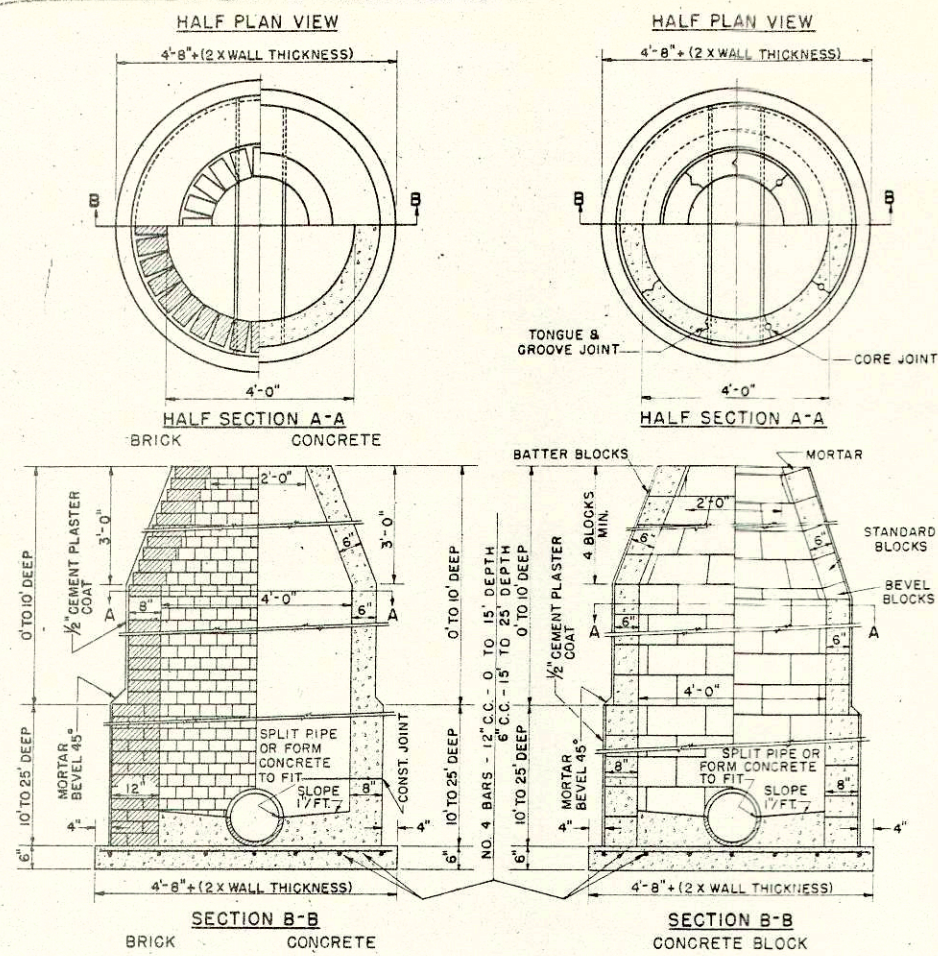
5 of 31



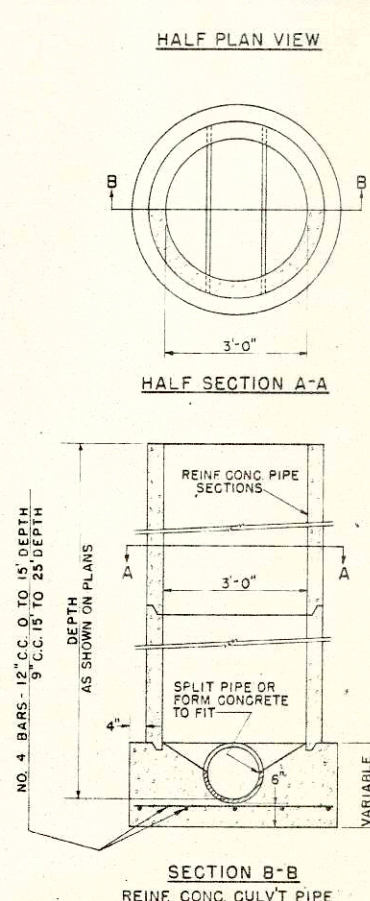
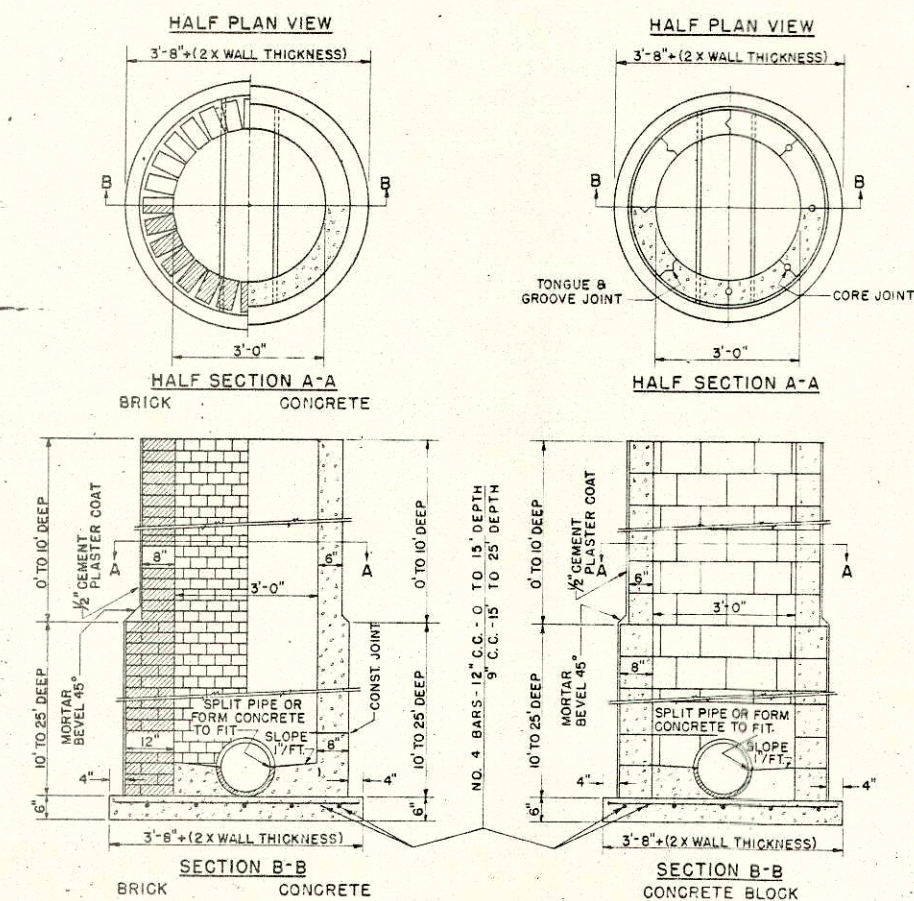
NOTE: CONCRETE PAVEMENT, GUARD RAIL, CONCRETE SIDEWALK, CONCRETE CURB AND GUTTER, TOP SOIL AND SEEDING ARE NOT PART OF CONTRACT 1

B.M. ELEV. 52.66
TOP NUT OF HYDRANT
15' RT. OF STA. 87+86





TYPE 1



TYPE 2

CONSTRUCTION NOTES

DETAILS RELATIVE TO THESE ITEMS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. STEPS SHALL BE INSTALLED IN ALL MANHOLES.

VARIATIONS IN DIMENSIONS AND DESIGN WILL BE PERMISSIBLE PROVIDING EQUIVALENT CAPACITY AND STRENGTH ARE ATTAINED.

STRUCTURES ARE CALLED FOR ON THE PLANS AS "MANHOLES 1-J", "MANHOLES 2-K" ETC. THE NUMERAL DESIGNATES THE OPTIONAL MASONRY PORTION OF THE STRUCTURE AND THE LETTER DESIGNATES THE COVER TO BE USED THEREON.

THE REINFORCED CONCRETE TOPPER SECTION AS SHOWN FOR TYPE 1, REIN. CONC. CULV'T PIPE MANHOLE, MAY BE USED AS AN ALTERNATE CONE ON TYPE 1 BRICK, CONCRETE OR CONCRETE BLOCK MANHOLES.

WHEN ANY STRUCTURE IS CONSTRUCTED OF CONCRETE, CONCRETE BLOCK OR REIN. CONC. CULV'T PIPE, THE TOP OF THE MASONRY SHALL BE LEFT SUFFICIENTLY LOW TO PERMIT PROPER ADJUSTMENT OF COVER TO GRADE BY THE USE OF MORTAR AND BRICK.

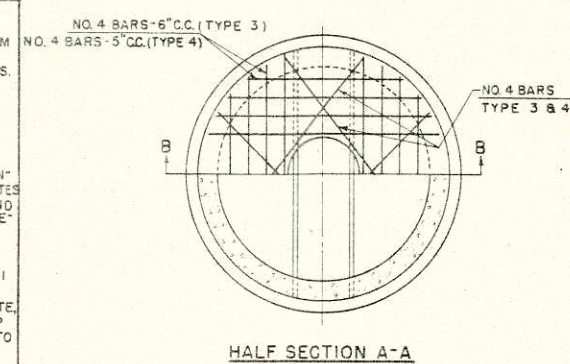
DESIGN NOTES

INSIDE DIMENSIONS FOR MANHOLES:

USE 3' DIAMETER WHEN NECESSARY TO PLACE IN CONSTRICTED AREAS.

USE 4' DIAMETER WHEN SEWER IS UNDER 18" IN DIAMETER.

USE 6' DIAMETER OR 6' SQUARE WHEN SEWER IS 18" TO 54" DIAMETER.



TYPE 3

- "A" BARS - NO. 4 BARS - 12" C.C. - 0 TO 10' DEPTH
6" C.C. - 10' TO 25' DEPTH
- "B" BARS - NO. 4 BARS - 12" C.C. - 0 TO 25' DEPTH
10" C.C. - 10' TO 25' DEPTH
- "C" BARS - NO. 5 BARS - 12" C.C. - 0 TO 10' DEPTH
6" C.C. - 10' TO 25' DEPTH

TYPE 4

FOR SEWER GREATER THAN 54" DIAMETER SPECIAL DESIGN IS REQUIRED SHOWING INSIDE DIMENSION OF MANHOLE TO BE DIAMETER OF SEWER PLUS 18". SPECIAL DESIGN SHALL CONFORM TO THE GENERAL DETAILS FOR TYPE 3.

- "A" BARS - NO. 5 BARS - 12" C.C. - 0 TO 10' DEPTH
6" C.C. - 10' TO 25' DEPTH.
- "B" BARS - NO. 4 BARS - 12" C.C. - 0 TO 10' DEPTH.
10" C.C. - 10' TO 25' DEPTH.
- "C" BARS - NO. 5 BARS - 10" C.C. - 0 TO 10' DEPTH.
5" C.C. - 10' TO 25' DEPTH.

MANHOLES

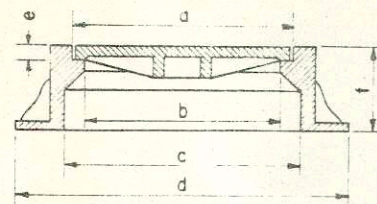
STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

DATE 1/27/53
APPROVED: [Signature] CONSTRUCTION ENGINEER

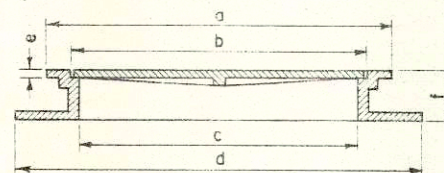
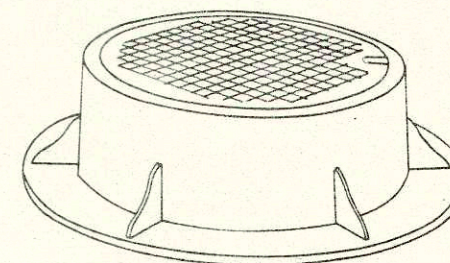
DATE 1/27/53
APPROVED: [Signature] STATE HIGHWAY ENGINEER

DRAWN LJD
CHECKED



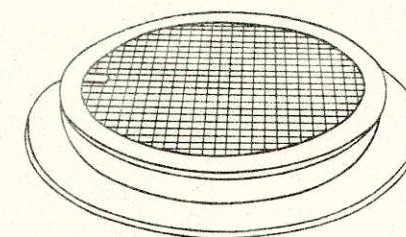
	a	b	c	d	e	f	Weight
TYPE "J"	23"	20 1/2"	25 1/2"	36"	1 1/2"	9"	400 Lbs.
TYPE "K"	32 1/2"	30"	36"	48"	1 1/2"	10"	750 Lbs.

TYPE "J" & "K"



	a	b	c	d	e	f	Weight
TYPE "L"	25"	24"	22 1/2"	33"	5/8"	4"	210 Lbs.
TYPE "M"	42"	37 1/2"	36"	47"	3/4"	4"	475 Lbs.

TYPE "L" & "M"



CONSTRUCTION NOTES

DETAILS RELATIVE TO THESE ITEMS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

VARIATIONS IN DIMENSIONS AND DESIGN WILL BE PERMISSIBLE PROVIDING EQUIVALENT CAPACITY AND STRENGTH ARE ATTAINED.

MANHOLES ARE CALLED FOR ON THE PLANS AS "MANHOLES 1-J", "MANHOLES 2-K" ETC., THE NUMERAL DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE LETTER DESIGNATES THE FIXTURE TO BE USED THEREON. MANHOLE FRAMES AND COVERS SUBJECT TO TRAFFIC TO BE MACHINED OR NON-ROCKING TYPE.

DESIGN NOTES

TYPES "J" & "K" TO BE USED WHERE FACILITY WILL BE SUBJECT TO TRAFFIC.

TYPES "L" & "M" TO BE USED WHERE FACILITY WILL NOT BE SUBJECT TO TRAFFIC.

MANHOLE COVERS

STATE HIGHWAY COMMISSION OF WISCONSIN

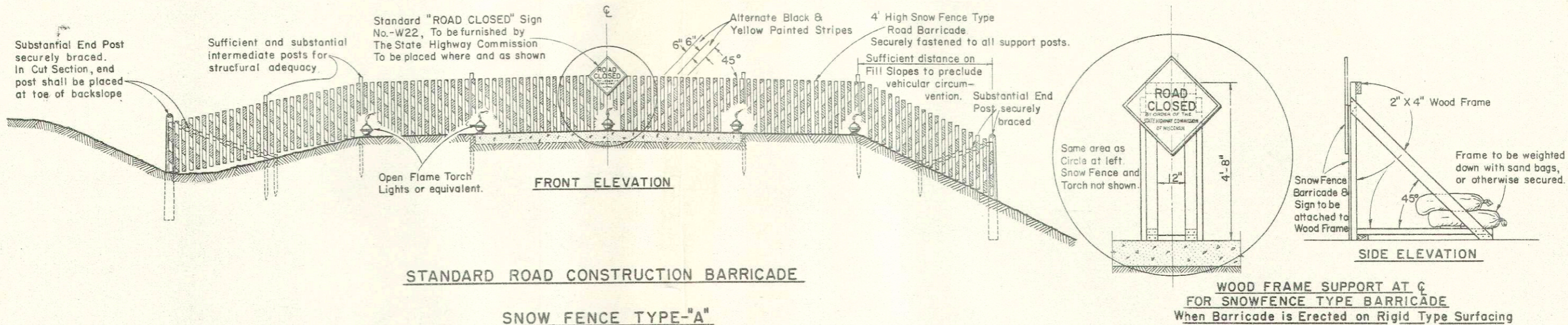
RECOMMENDED FOR APPROVAL:

DATE 1/27/53 *Asst. Eng.*
CONSTRUCTION ENGINEER

APPROVED:

DATE 1/27/53 *E. C. Routh*
STATE HIGHWAY ENGINEER

DRAWN LJD
CHECKED



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.

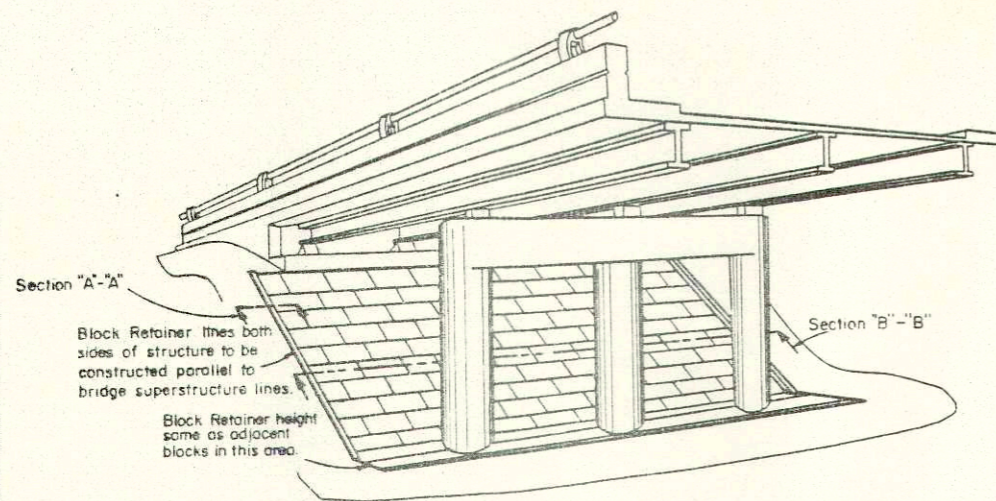
ALTERNATE DESIGNS

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.

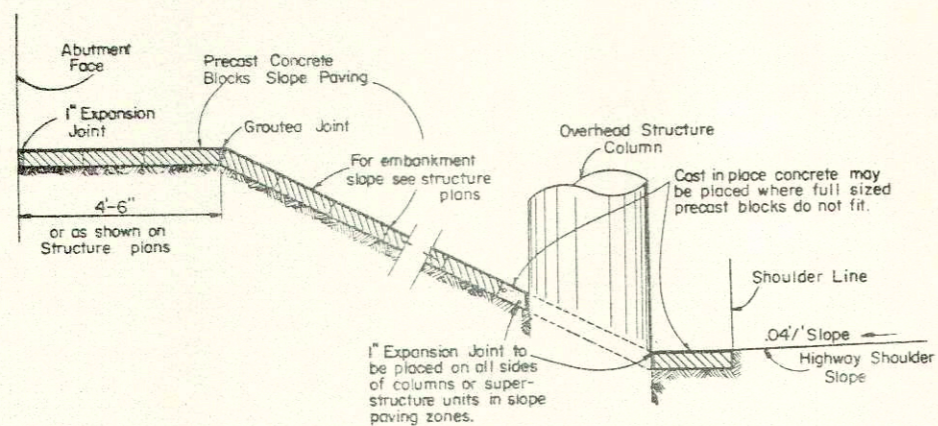
MEASUREMENT & PAYMENT

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.

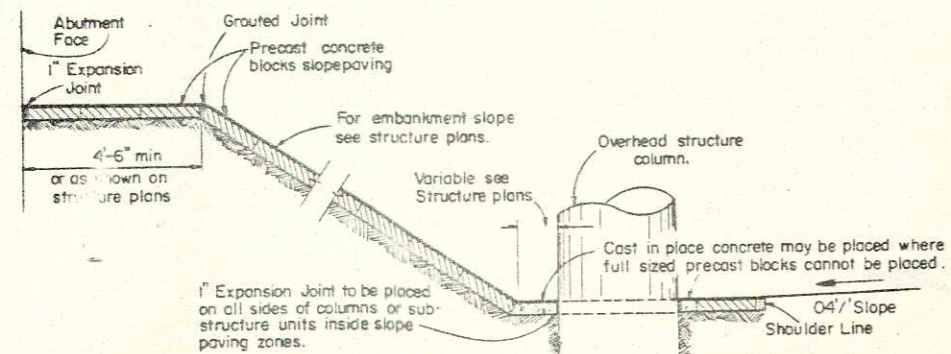
CONSTRUCTION BARRICADE	
<i>STATE HIGHWAY COMMISSION OF WISCONSIN</i>	
RECOMMENDED FOR APPROVAL:	
DATE <u>6/2/55</u>	<i>J. S. Pelt</i> ENGINEER OF DESIGN
APPROVED:	
DATE <u>6/2/55</u>	<i>E. S. R. Thayer</i> STATE HIGHWAY ENGINEER



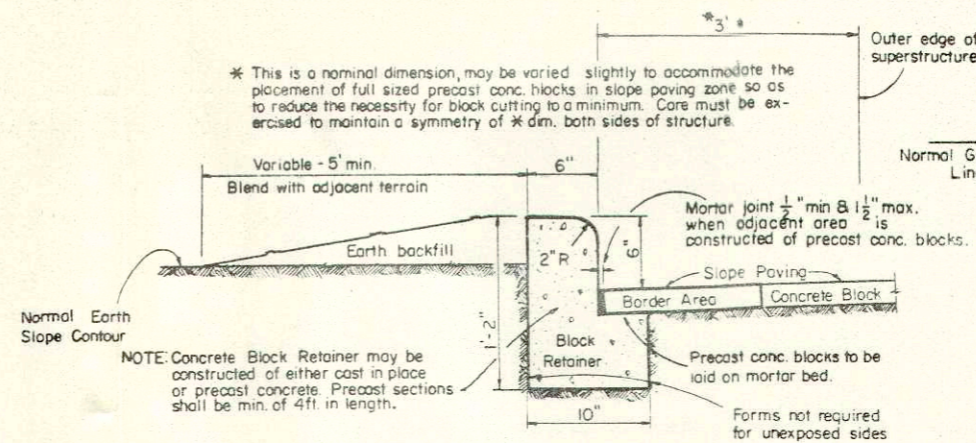
TYPICAL LOCATION DIAGRAM FOR SLOPE PAVING UNDER STRUCTURES



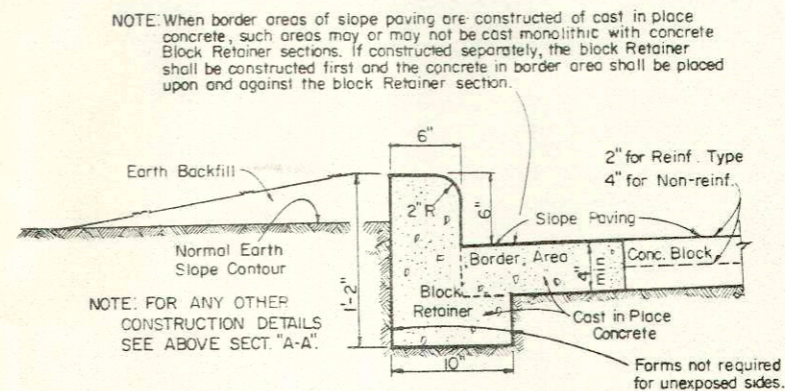
TYPICAL RURAL SECTION HIGHWAY GRADE SEPARATION



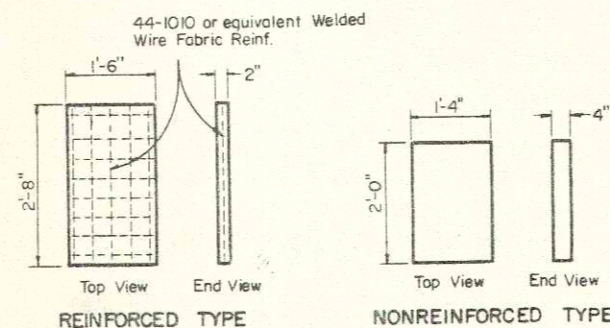
TYPICAL RURAL SECTION HIGHWAY GRADE SEPARATION



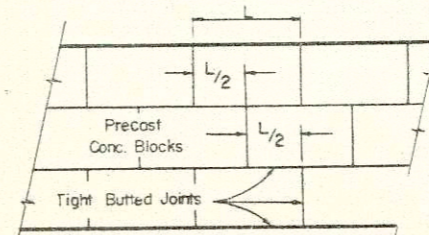
SECTION "A-A" SHOWING CONCRETE BLOCK RETAINER DETAILS WHEN BORDER AREA IS CONSTRUCTED OF PRECAST CONCRETE BLOCKS



SECTION "A-A" SHOWING CONCRETE BLOCK RETAINER DETAILS WHEN BORDER AREA IS CONSTRUCTED OF CAST IN PLACE CONCRETE



PRECAST CONCRETE BLOCKS



PLACEMENT DIAGRAM FOR PRECAST CONCRETE BLOCKS

GENERAL NOTES -

Details of construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications Section 2515 and the applicable Special Provisions.

DESCRIPTION OF WORK

The work under the item Slope Paving shall consist of the furnishing and placing of precast concrete blocks, cast in place concrete or sawn precast concrete blocks for such areas where full sized precast concrete blocks do not fit, concrete block retainers, grouting, expansion and other joints as hereon shown and/or as described in the Standard Specifications.

CONCRETE

The concrete mix for precast concrete blocks shall be of such proportions and consistency as to produce a block true to shape and dimension. The aggregates shall be so graded and proportioned with cement and water so as to produce a homogeneous concrete meeting the required strength and density. In no case however, shall the proportions of portland cement in the mixture be less than 6 bags per cu. yd. of concrete. The units shall indicate by laboratory test a minimum modulus of rupture of 400 p.s.i. and water absorption of not more than 8 percent of dry weight before use in the work. The precast concrete blocks shall be true to shape and dimension having smooth faces free from honeycomb, and free from cracks that would impair their strength.

The concrete mix for cast-in-place concrete shall be Grade AA of the Stand. Specs. The cement mortar shall be furnished in accord with Section 3103 of the Standard Specifications.

In the areas where cast in place concrete is permitted and used it shall have a minimum thickness of 4". The surface thereof shall be scored or marked with an edging tool 1/4" min. in depth to present the appearance of joints as though precast concrete blocks had been used.

EXPANSION JOINTS

Expansion joint filler where used as shown hereon shall conform to the Standard Specifications Sect. 3112.

MEASUREMENT & PAYMENT

The work under this item shall be measured and paid for in accord with Sections 2515.04 and 2515.05 of the Standard Specifications, the measurements therein described shall include all precast and cast in place concrete for blocks, block retainers, borders, grouting, joints and all other incidentals within the perimeter of such measurement limits.

SLOPE PAVING (CONCRETE BLOCKS)

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

10-11-60
DATE

J. A. Pelly
Engineer Of Design

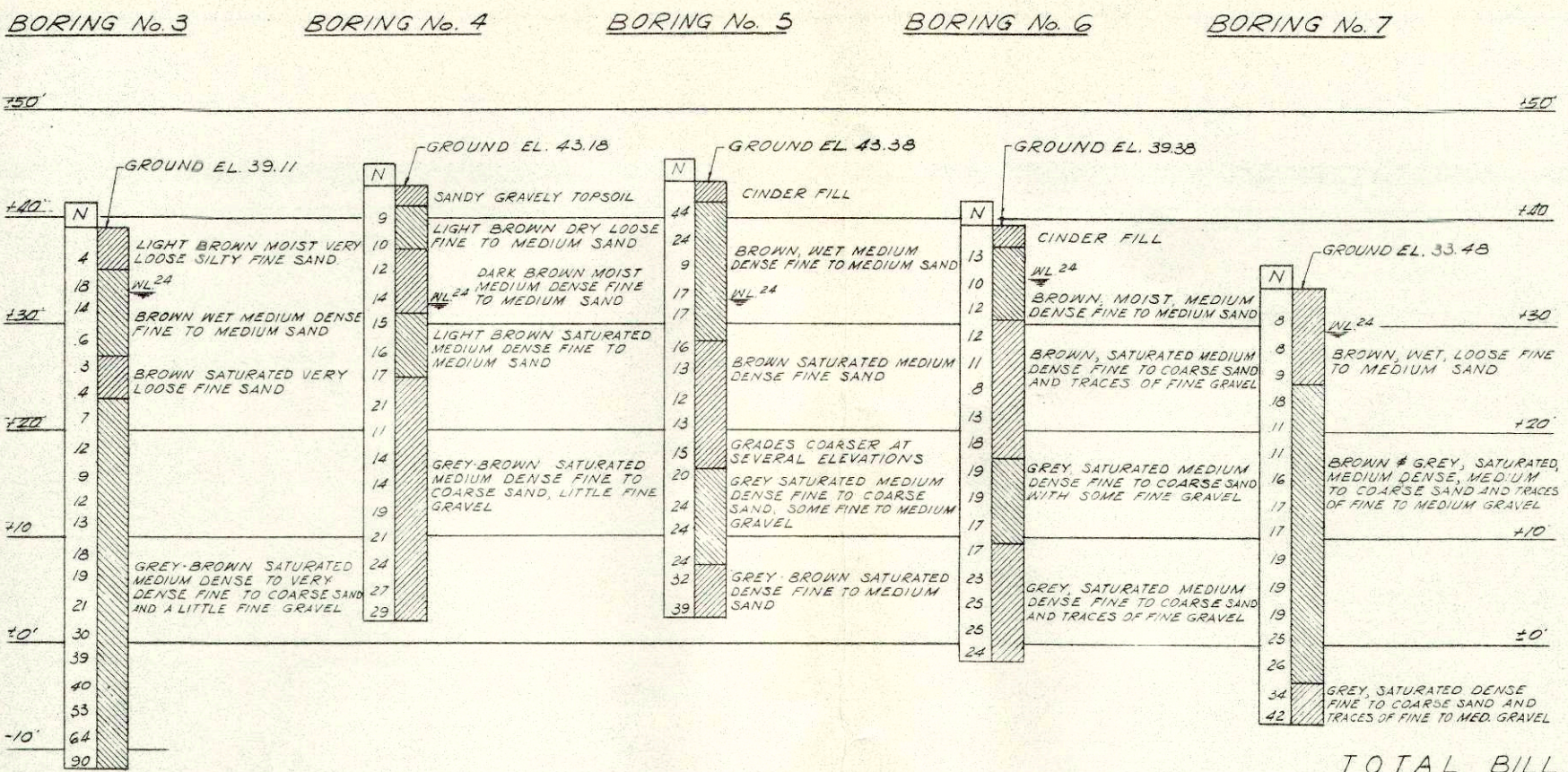
APPROVED:

10/25/60
DATE

E. G. Rottman
State Highway Engineer

SOIL TEST BORINGS

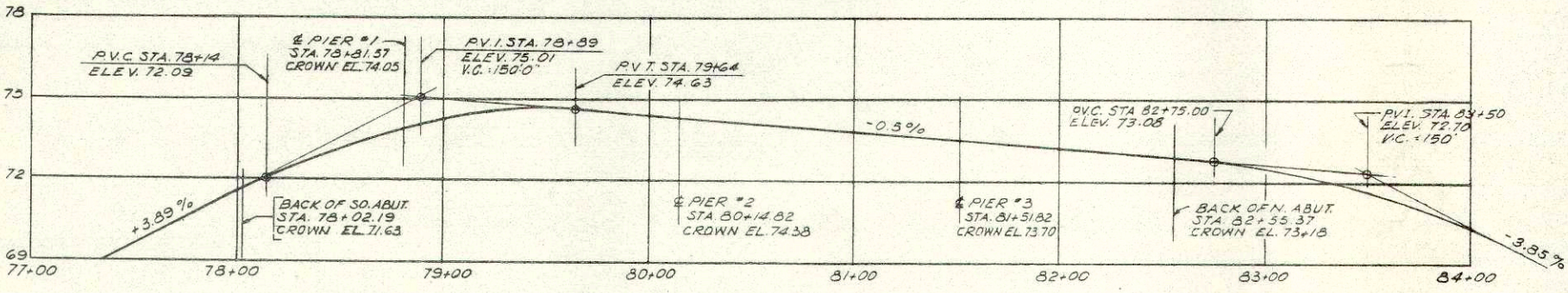
- GENERAL NOTES**
- SPECIFICATIONS:**
 - DESIGN OF STRUCTURE SHALL BE IN ACCORDANCE WITH A.A.S.H.O. STANDARDS AND SPECIFICATIONS FOR HIGHWAY BRIDGES, 1957 EDITION.
 - WELDING SHALL BE IN ACCORDANCE WITH CURRENT SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES OF THE AMERICAN WELDING SOCIETY.
 - ALL DETAILS, CONSTRUCTION, MATERIALS AND FABRICATION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE HIGHWAY COMMISSION OF WISCONSIN (1957) EXCEPT AS OTHERWISE NOTED.**
 - STEEL WIDE FLANGE BEAMS AND THE COVER PLATES AND PIN CONNECTION PLATES FOR THE WIDE FLANGE BEAMS SHALL BE STRUCTURAL CARBON STEEL FOR WELDING CONFORMING TO A.S.T.M. A373.
 - ALL FLANGE, WEB, BEARING STIFFENER, SOLE AND PIN CONNECTION PLATES OF THE WELDED PLATE GIRDERS SHALL BE STRUCTURAL CARBON STEEL FOR WELDING CONFORMING TO A.S.T.M. A373 EXCEPT THE FLANGE AND WEB PLATES MARKED ON THE PLANS TO BE LOW ALLOY. ALL MATERIAL MARKED LOW ALLOY SHALL BE HIGH-STRENGTH LOW ALLOY STRUCTURAL MANGANESE VANADIUM STEEL CONFORMING TO A.S.T.M. A441.
 - PINS SUPPORTING SUSPENDED STRINGERS SHALL BE FORGED IN ACCORDANCE WITH A.S.T.M. A235, CLASS F.
 - ALL OTHER STEEL SHALL BE STRUCTURAL CARBON STEEL CONFORMING TO A.S.T.M. A7.
 - FOR LUBRICATED BRONZE PLATE REQUIREMENTS: SEE SPECIAL PROVISIONS.
 - ALL SHOP CONNECTIONS SHALL BE WELDED, EXCEPT WHERE OTHERWISE SHOWN OR NOTED. ALL FIELD CONNECTIONS SHALL BE BOLTED WITH 3/4" HIGH TENSILE STRENGTH BOLTS EXCEPT WHERE OTHERWISE SHOWN OR NOTED. RIVETS MAY BE USED IN LIEU OF BOLTS. HOLES SHALL BE 1/16" LARGER THAN BOLT OR RIVET DIAMETER.
 - EXPANSION DEVICE SHALL BE FULLY ASSEMBLED IN THE SHOP IN PROPER POSITION AND LEFT ASSEMBLED FOR INSPECTION.
 - STRUCTURAL STEEL SHALL BE SHOP INSPECTED BY THE STATE HIGHWAY COMMISSION BEFORE PAINTING.
 - STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
 - ALL CONCRETE MASONRY SHALL BE GRADE AA.
 - BEVEL ALL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SHOWN OR NOTED.
 - KEYWAYS SHALL BE FORMED FROM BEVELED SURFACED LUMBER OF THE SIZE SHOWN.
 - ALL BAR REINFORCEMENT SHALL HAVE A 2" MINIMUM COVER UNLESS OTHERWISE SHOWN OR NOTED.
 - THE USE OF STRUCTURAL GRADE STEEL BAR REINFORCEMENT IS PROHIBITED.
 - THE CONTRACTOR SHALL DRIVE AND POUR ONE CAST-IN-PLACE CONCRETE TEST PILE AT BOTH ABUTMENTS AND PIERS 1, 2, 3 IN A LOCATION WITHIN THE ABUTMENT CAP AND PIER FOOTINGS AS DIRECTED BY THE ENGINEER. THE TEST PILE SHALL REMAIN IN PLACE AND BE USED AS A PERMANENT PILE.
 - ALL ELEVATIONS ARE REFERRED TO THE CITY OF LA CROSSE DATUM.
 - DRAWINGS SHALL NOT BE SCALED.
 - SLAB HAS BEEN DESIGNED IN ACCORDANCE WITH ARTICLE 1.5.2 OF THE SPECIFICATIONS AS MODIFIED BY T-8(59) WITH f_c USED AS 1400 PSI.



SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN

For the design of the structure foundation, to obtain relative data concerning the character of material in and upon which the foundation might be built, borings and soundings were made at points approximately as indicated on the drawings with the log of such exploration data as interpreted for such design purpose as shown. The explorations were made by ordinary and conventional methods and care, deemed adequate for such purpose. However, since it is a matter of common knowledge that the exact character of any material and its reaction is difficult to determine from such subsurface exploration and that the kind and character of material at the site where the foundations are built may vary substantially from that indicated by the log they are made available to the bidders simply for what they are worth, without any warranty, express or implied that the material to be encountered in building the foundation will conform therewith. If the log is used by the contractor in making his bid, it is hereby expressly stipulated that the Commission accepts no responsibility for said use.

- NOTES**
- FOR LOCATION OF BORINGS SEE SHEET 1.
 - "N" INDICATES NUMBER OF BLOWS REQUIRED TO DRIVE A SPLIT SPOON 12" WITH 140 LB. HAMMER FALLING 30 INCHES.



PROFILE GRADE
 SCALE: HORIZONTAL 1" = 40' 0"
 VERTICAL 1" = 3' 0"

TOTAL BILL OF MATERIAL

S.H.C.W. SPEC. REF.	BID ITEM	UNIT	BRIDGE NO.					TOTAL
			S.ABUT.	PIER 1	PIER 2	PIER 3	N.ABUT.	
2107-1	EXCAVATION FOR STRUCTURES, BRIDGES	C.Y.	50	160	173	126	46	555
2110-1	GRANULAR BACKFILL	C.Y.	21	89	93	66	19	288
2401-1	CONCRETE MASONRY, BRIDGES	C.Y.	80	146	157	129	101	1153
2406-1	BAR STEEL REINFORCEMENT BRIDGES	LB.	4850	15,700	21,050	15,450	6350	133,880
2407-1	STRUCTURAL CARBON STEEL	LB.	730	3,210	1,720	4,050	870	529,880
2407-2	STRUCTURAL LOW-ALLOY STEEL	LB.						32,400
2505-1	CAST-IN-PLACE CONCRETE TEST PILING (SEE TABLE)	LUMP SUM						1
2505-2	CAST-IN-PLACE CONCRETE PILING 12" DELIVERED	LIN. FT.	1190	1170	1015	1170	1260	5805
2505-3	CAST-IN-PLACE CONCRETE PILING 12" DRIVEN	LIN. FT.	1190	1170	1015	1170	1260	5805
2508-1	FLOOR DRAINS	EACH					3	3
2515-2	SLOPE PAVING (CONCRETE BLOCKS)	SQ. YD.	400				370	770
S.P.	LUBRICATED BRONZE PLATE	LB.	56				62	118
S.P.	BEARING PADS	SQ. FT.	6	11	12	13	7	49
S.P.	6" DRAIN PIPE	LIN. FT.		55		65		120
S.P.	ALUMINUM RAILING	LIN. FT.	26'				38	897'
S.P.	ELECTRICAL WORK	L.S.						1

TEST PILE TABLE

ITEM NO.	LOCATION	LENGTH
2505-1	S. ABUT.	1 @ 80'
	PIER 1	1 @ 55'
	PIER 2	1 @ 45'
	PIER 3	1 @ 55'
	N. ABUT.	1 @ 80'

NON-BID ITEMS
 WATERPROOFING
 JOINT FILLER

NO.	DATE	REVISION	BY

STATE HIGHWAY COMMISSION OF WISCONSIN

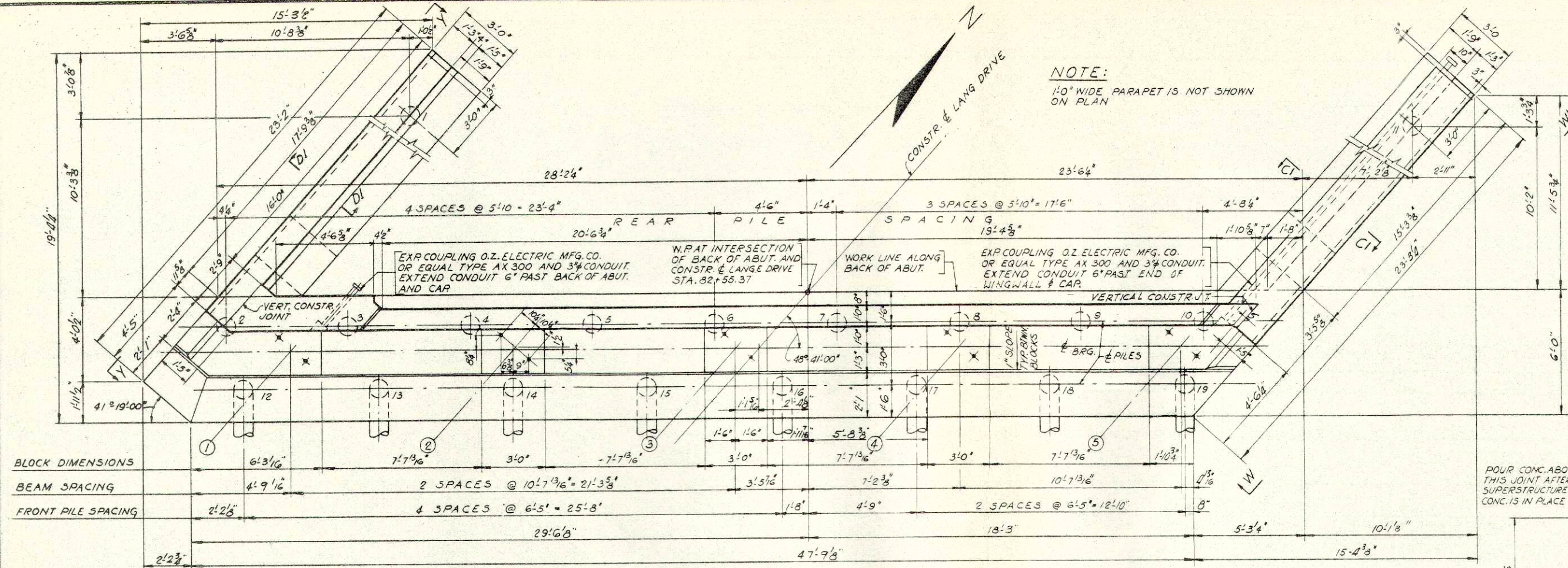
LANG DRIVE-GEORGE ST. EXTENSION LA CROSSE, WISCONSIN

C. M. ST. P. & P. RAIL ROAD OVER PASS
 BRIDGE NO. B-32-32

QUANTITIES, GENERAL NOTES
 BORINGS & PROFILES

SCALE: AS NOTED
 DESIGNED: D.V.R. DATE
 DRAWN: V.B. DATE
 CHECKED: D.V.R. DATE 7-12-54

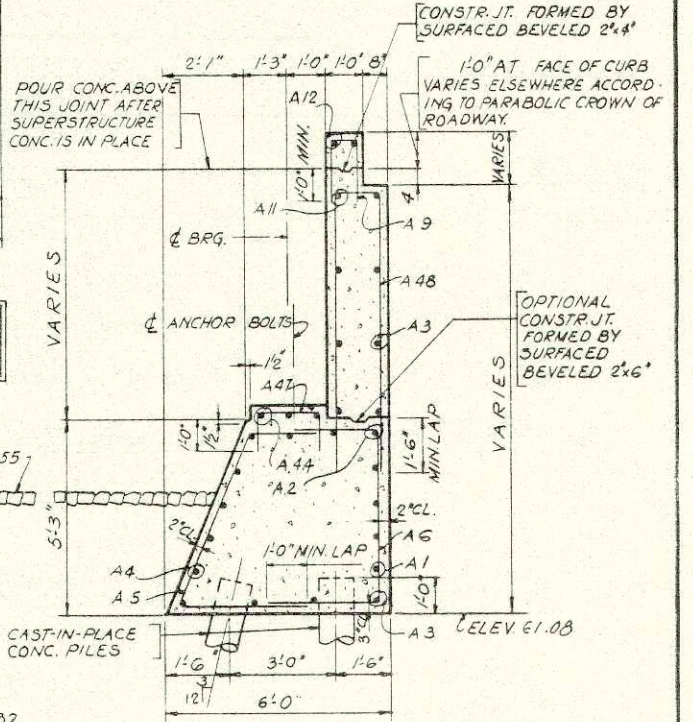
ALFRED BEMSECH & ASSOCIATES
 CONSULTING ENGINEERS
 1830 WABASH AVE., CHICAGO 3, ILLINOIS
 DWG. NO. X 23865 SHEET 2 OF 25



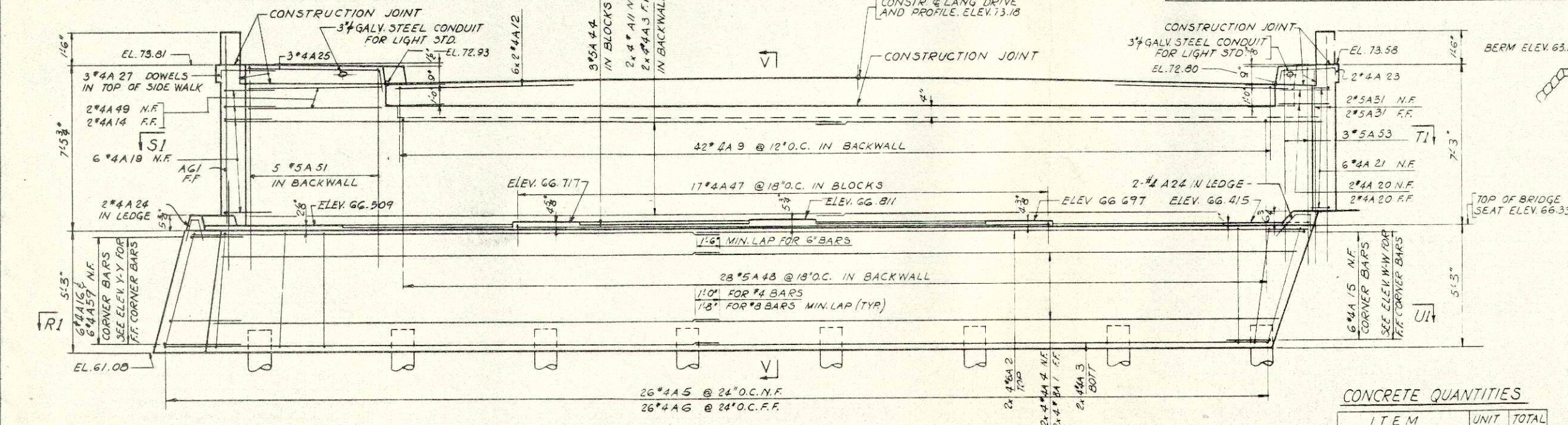
BLOCK DIMENSIONS	6'-3 1/16"	7'-7 13/16"	3'-0"	7'-7 13/16"	3'-0"	7'-7 13/16"	3'-0"	7'-7 13/16"	1'-0 1/4"	15'-2 3/8"
BEAM SPACING	4'-9 1/16"	2 SPACES @ 10'-7 13/16" = 21'-3 3/8"		3'-5 1/16"	7'-2 3/8"	10'-7 13/16"	4'-3/16"			
FRONT PILE SPACING	2'-2 1/8"	4 SPACES @ 6'-5" = 25'-8"		1'-8"	4'-9"	2 SPACES @ 6'-5" = 12'-10"		8"		
	2'-2 3/8"	29'-6 3/8"		47'-9 3/8"		13'-3"		5'-3 1/4"	10'-1 1/8"	

PLAN

SUMMARY OF PILING
13-12" CAST-IN-PLACE CONCRETE PILES x 70' ESTIMATED LENGTH
1-12" CAST-IN-PLACE CONCRETE PILE x 80' ESTIMATED LENGTH
CAPACITY 40 TONS PER PILE



SECTION V-V



FRONT ELEVATION

CONCRETE QUANTITIES

ITEM	UNIT	TOTAL
PILE CAPS & WINGWALL FOOTINGS	CU. YD.	68
ABUT. BACKWALL & WINGWALL	CUYD.	33

NO.	DATE	REVISION	BY

STATE HIGHWAY COMMISSION OF WISCONSIN

LANG DRIVE-GEORGE ST. EXTENSION LACROSSE, WISCONSIN

C. M. ST. P. & P. RAIL ROAD OVER PASS

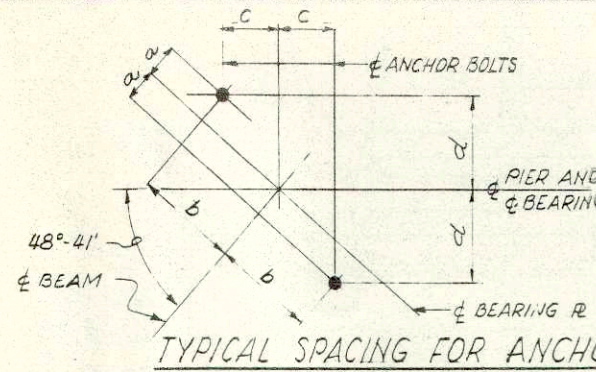
BRIDGE NO. B-32-32

NORTH ABUTMENT

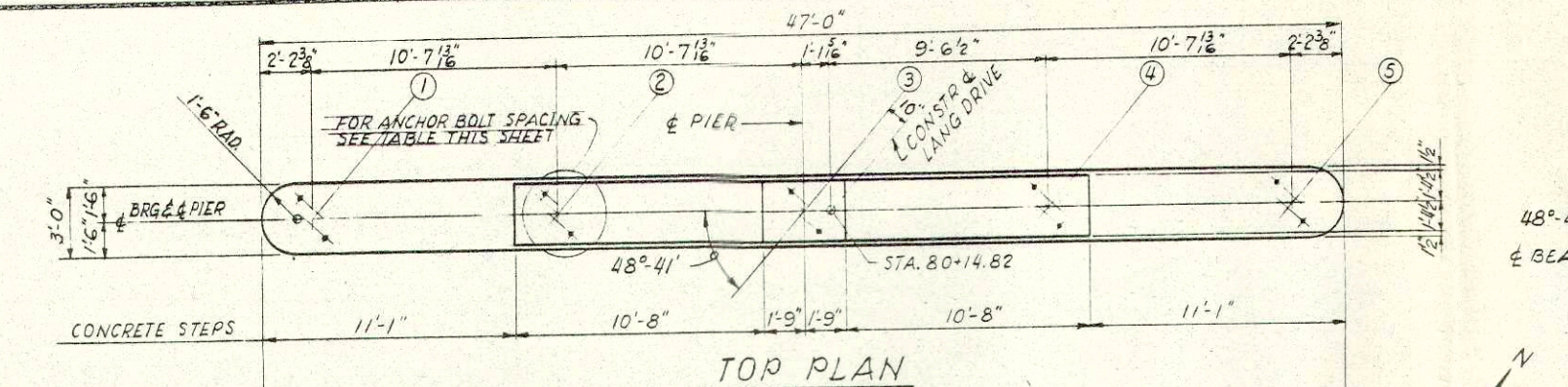
SCALE: 3/8" = 1'-0"

ALFRED BENESCH & ASSOCIATES
CONSULTING ENGINEERS
16 SO. WABASH AVE., CHICAGO 2, ILLINOIS
DWS. No. X-23865 SHEET 4 OF 23

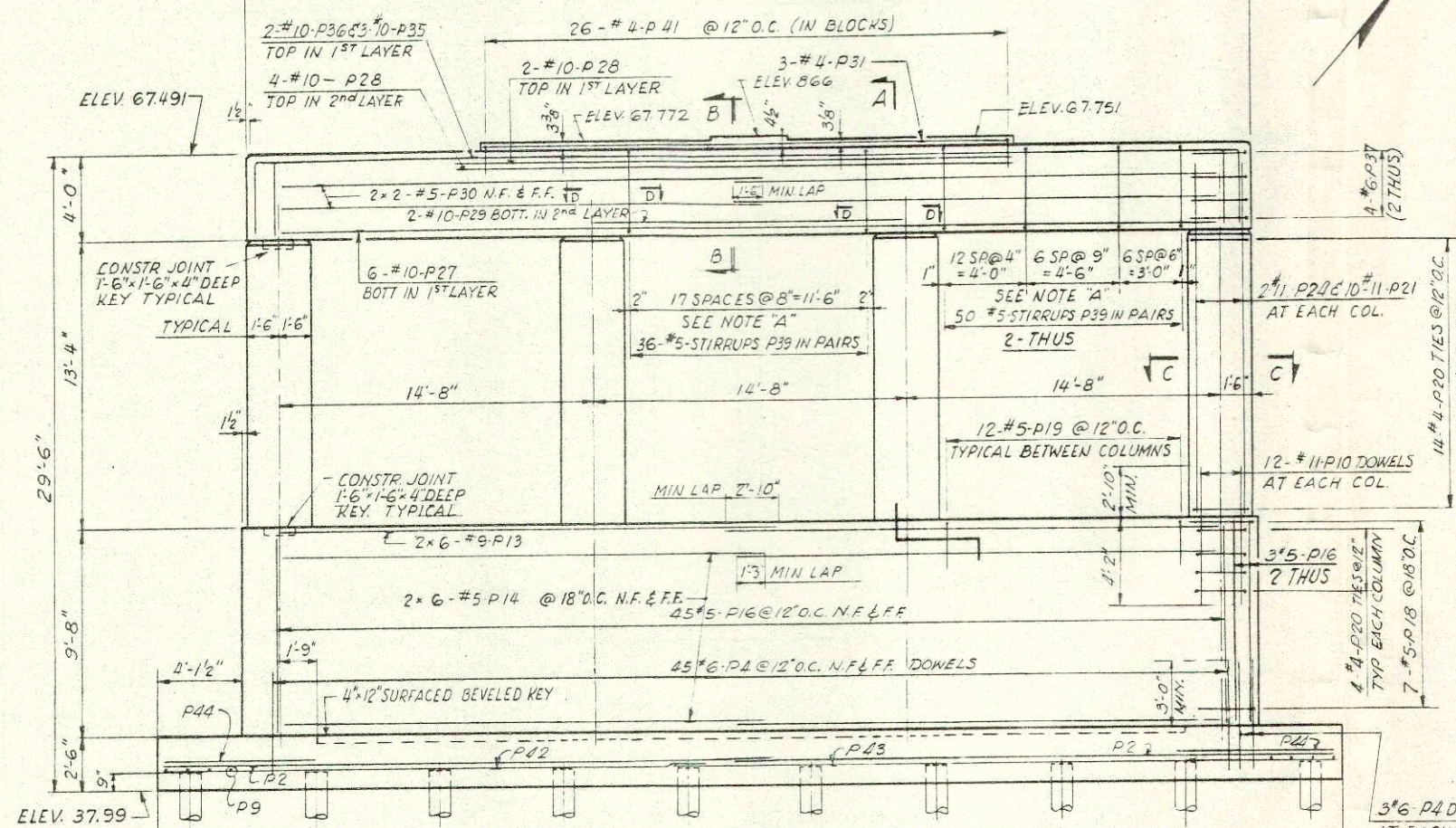
LOCATION	BEAM	a	b	c	cl
PIER 1	1 THRU 5	4"	11 1/2"	6"	10 3/8"
	1	4"	1-1"	7 7/8"	11 7/8"
PIER 2	2 THRU 4	4"	1-0 1/2"	6 3/4"	11 1/4"
	5	3"	11 1/2"	6 5/8"	9 1/2"
PIER 3	1 THRU 4	4"	1-2"	7 7/8"	1-0 1/4"
	5	4"	1-1"	7 7/8"	11 1/8"



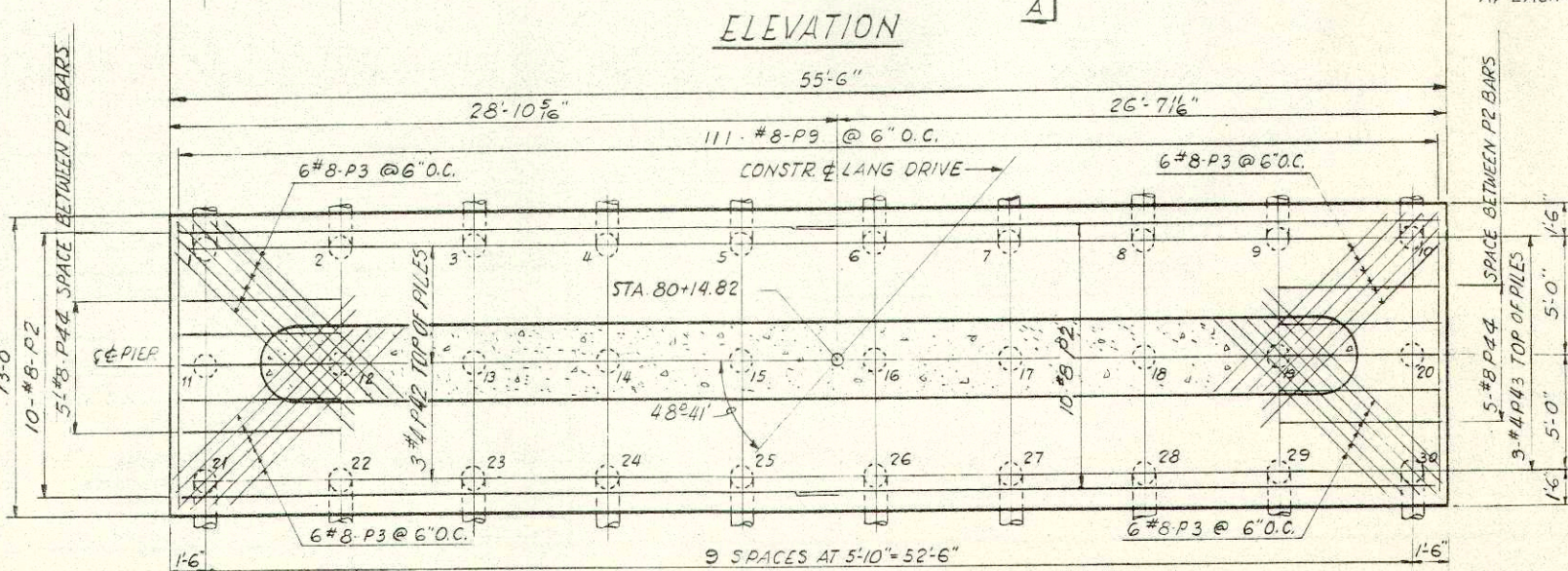
TYPICAL SPACING FOR ANCHOR BOLTS



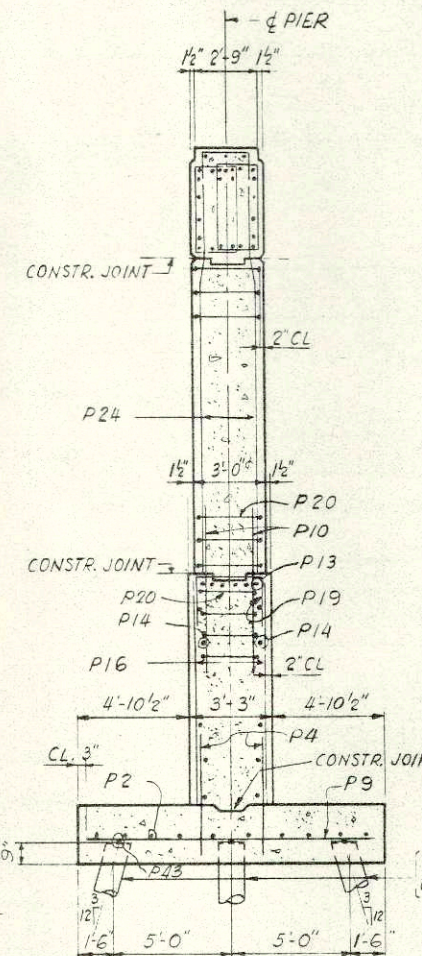
TOP PLAN



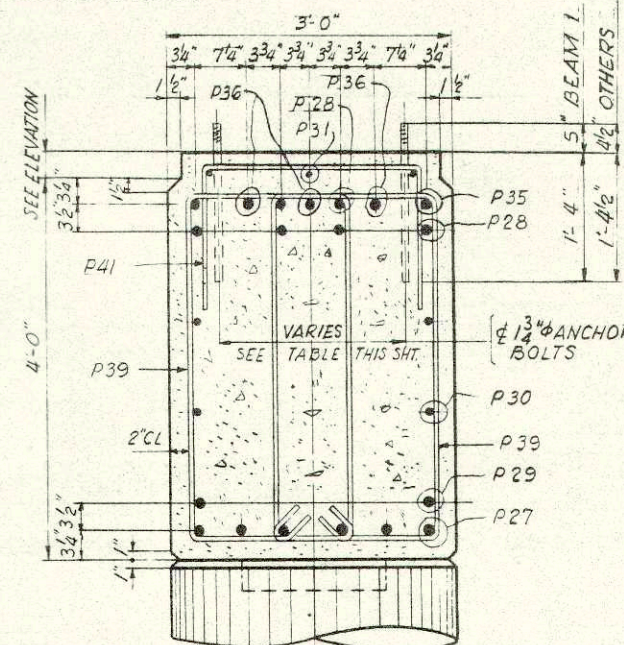
ELEVATION A



FOOTING PLAN

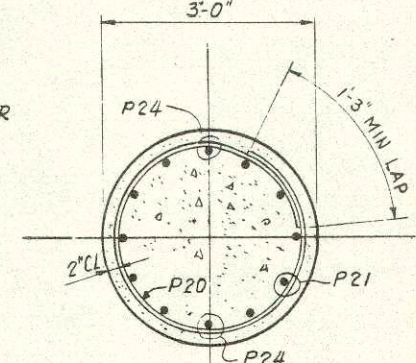


SECTION A-A



SECTION B-B

SCALE: 1"=1'-0"



SECTION C-C

SCALE: 3/4"=1'-0"

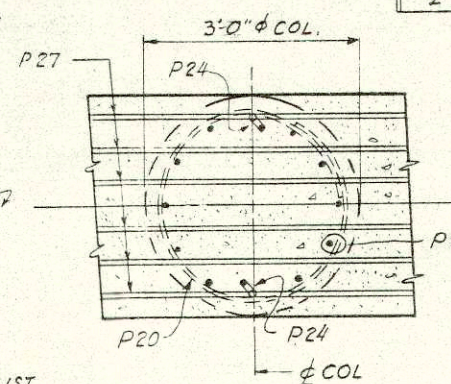
NOTE A: ADJUST STIRRUP SPACING TO AVOID INTERFERENCE WITH DRILLING OF HOLES FOR ANCHOR BOLTS.

SUMMARY OF CONCRETE QUANTITIES

PIER	UNIT	FOOTING	CRASHWALL	COLUMNS	CAP	TOTAL
2	CY.	67	54	14	22	157

SUMMARY OF PILING

29 - 12" φ CAST-IN-PLACE CONCRETE PILE x 35' 0" ESTIMATED LENGTH
 1 - 12" φ CAST-IN-PLACE CONCRETE PILE x 15' 0" ESTIMATED LENGTH
 CAPACITY = 40 TONS PER PILE



SECTION D-D

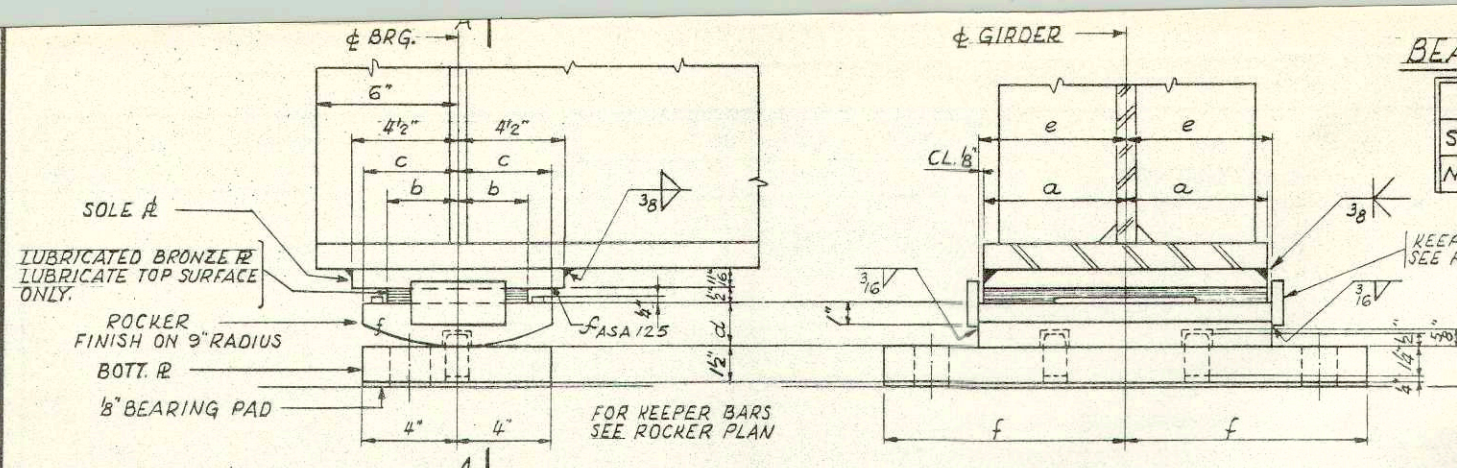
INTERIOR COLUMN SHOWN EXTERIOR COLUMN SIMILAR SCALE: 3/4"=1'-0"

NOTE:
 SEE SHEET 23 FOR REINFORCEMENT BAR LIST.
 BEARING BLOCKS TO BE POURED MONOLITHICALLY WITH TOP BEAM.
 N.F. - INDICATES NEAR FACE.
 F.F. - INDICATES FAR FACE.
 BARS MARKED THUS 2-#6-#5 ETC INDICATES 2 IDENTICAL LENGTHS OF BARS PER LINE WITH 6 LINES OF BARS.

NO.	DATE	REVISION	BY

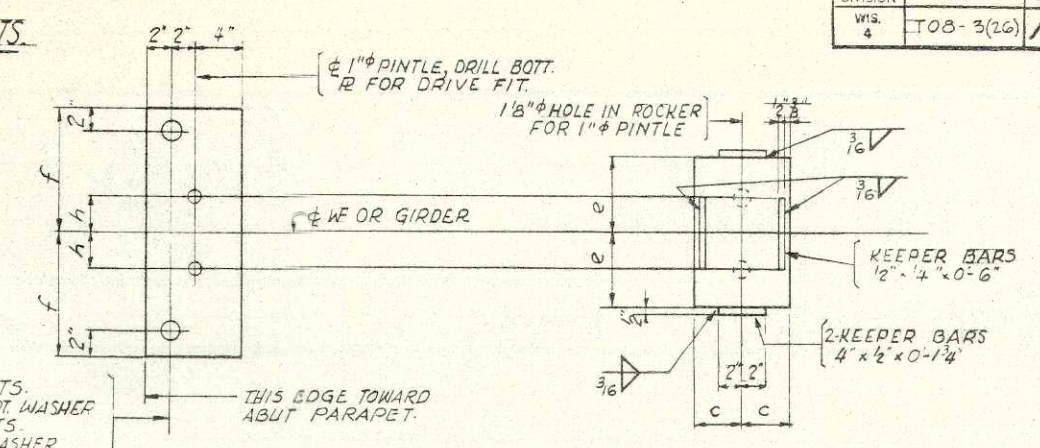
STATE HIGHWAY COMMISSION
 OF WISCONSIN
 LANG DRIVE-GEORGE ST. EXTENSION LA CROSSE, WISCONSIN
 C. M. ST. R. & P. RAIL ROAD OVERPASS
 BRIDGE NO. B-32-32
 PIER 2

13 of 31



BEARING PLATE DIMENSIONS AT ABUTMENTS

	a	b	c	d	e	f	h
S. ABUTMENT	6"	3"	4"	1 1/8"	6 8"	10 4"	3"
N. ABUTMENT	8"	2 1/2"	3 1/2"	1 7/8"	8 8"	1'0 4"	4"



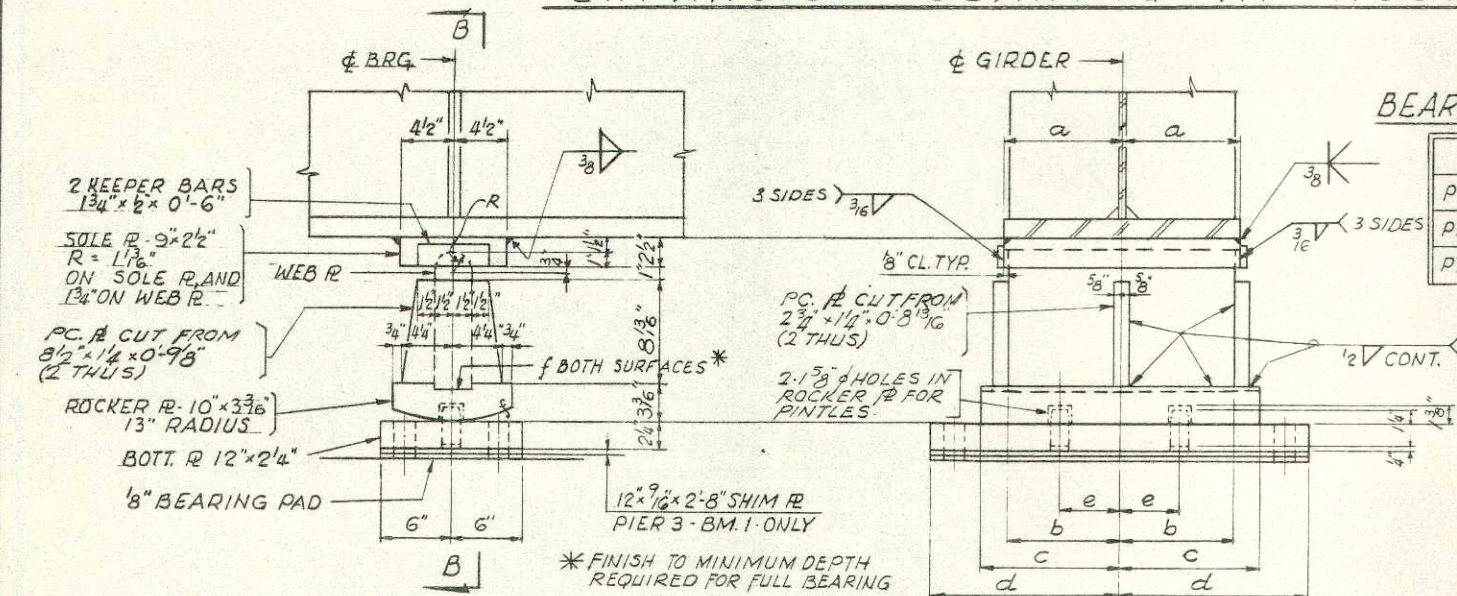
ELEVATION
SCALE: 3"=1'-0"

SECTION A-A
SCALE: 3"=1'-0"

BOTTOM PLATE PLAN
SCALE: 1/2"=1'-0"

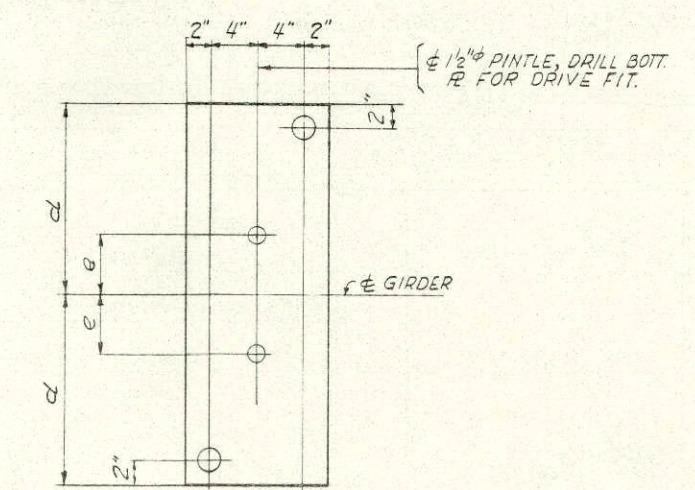
ROCKER PLAN
SCALE: 1/2"=1'-0"

EXPANSION BEARING AT ABUTMENTS.



BEARING PLATE DIMENSIONS AT PIER 1 AND 3

	a	b	c	d	e
PIER-1 ALL BEAMS	7"	6 7/8"	9 1/4"	1'-1 1/2"	4"
PIER-3 BEAM 1 THRU 4	10"	9 7/8"	11 3/4"	1'-4"	5"
PIER-3 BEAM 5	9"	8 7/8"	10 3/4"	1'-3"	5"

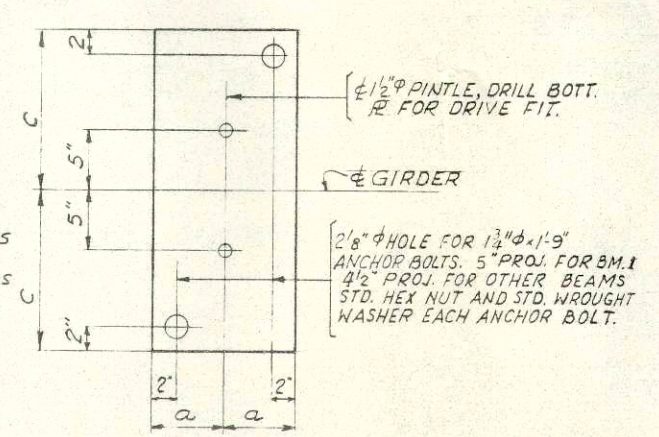
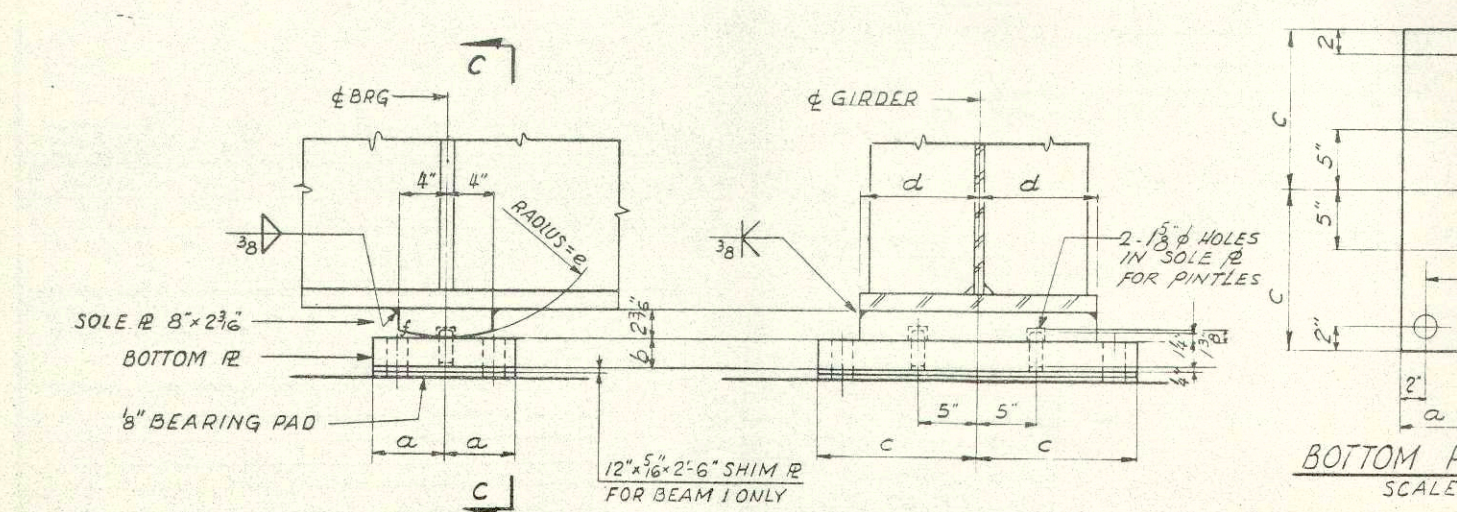


ELEVATION
SCALE: 1/2"=1'-0"

SECTION B-B
SCALE: 1/2"=1'-0"

BOTTOM PLATE PLAN
SCALE: 1/2"=1'-0"

EXPANSION BEARING AT PIER 1 AND 3.



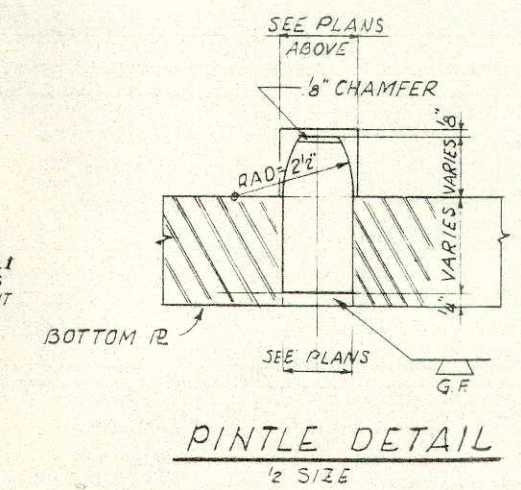
ELEVATION
SCALE: 1/2"=1'-0"

SECTION C-C
SCALE: 1/2"=1'-0"

BOTTOM PLATE PLAN
SCALE: 1/2"=1'-0"

BEARING PLATE DIMENSIONS AT PIER 2

	a	b	c	d	e
BEAM 1	6"	2 1/2"	1'-3"	10"	24"
BEAM 2, 3, 4	6"	2 1/4"	1'-2 1/2"	10"	24"
BEAM 5	5"	2 1/4"	1'-1 1/2"	9"	24"



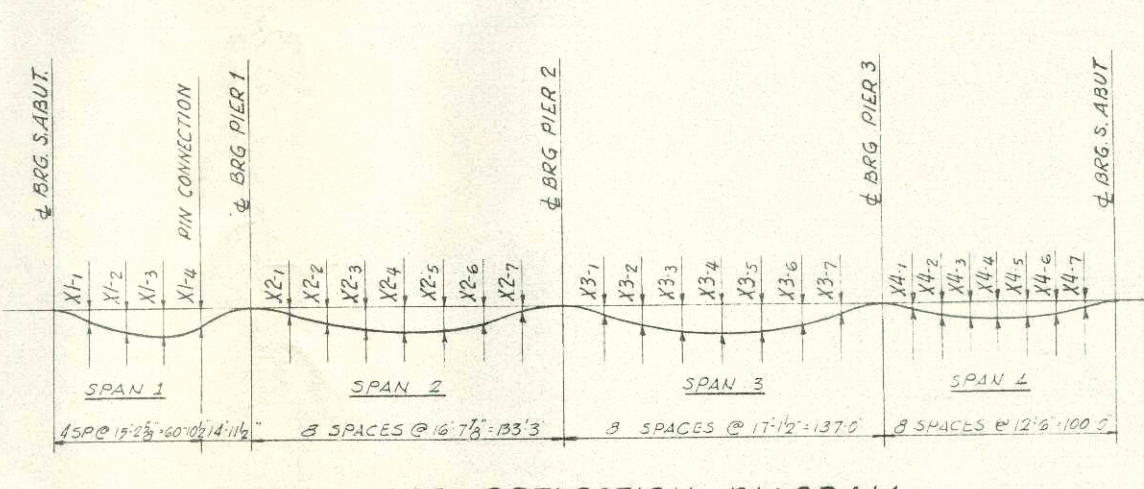
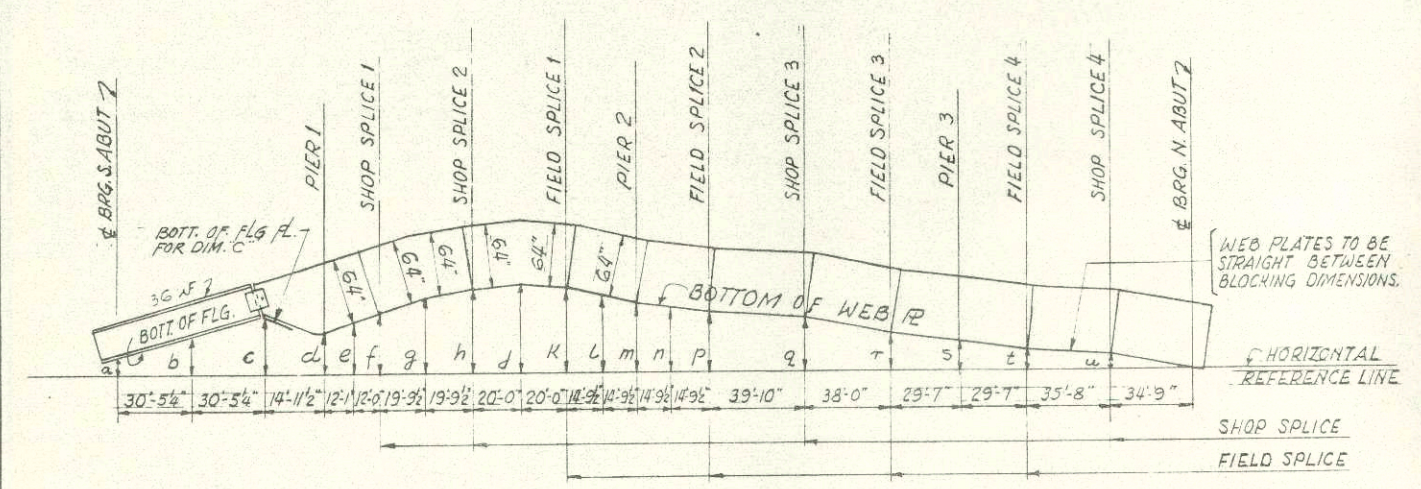
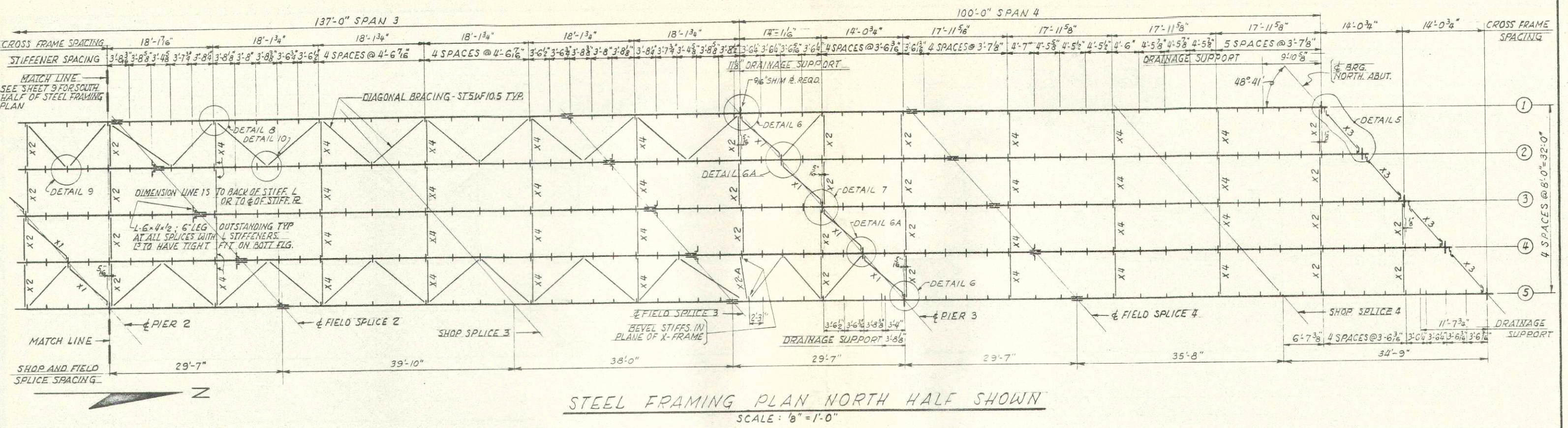
NOTES:
 ALL BEARING PLATES SHALL BE STRUCTURAL CARBON STEEL FLAT ROLLED PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP, AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL.
 ALL PLATE-CUTS SHALL BE MACHINE OR MACHINE-FLAME CUTS.
 ALL SURFACES MARKED 'f' SHALL BE MACHINE FINISHED TO A.S.A. 250 UNLESS OTHERWISE NOTED.
 ALL STEEL FOR WELDED ROCKERS SHALL BE STRUCTURAL CARBON STEEL FOR WELDING CONFORMING TO A.S.T.M. A373.
 SOLE RS AT ABUTMENTS ON EXPANSION BEARINGS SHALL BE FINISHED IN DIRECTION OF MOVEMENT.

NO.	DATE	REVISION	BY

STATE HIGHWAY COMMISSION OF WISCONSIN
 LANG DRIVE-GEORGE ST. EXTENSION LACROSSE, WISCONSIN
 C. M. ST. P. & P. RAIL ROAD OVER PASS
 BRIDGE No. B-32-32
BEARING DETAILS

SCALE: AS NOTED
 DESIGNED: D.V.R. DATE _____
 DRAWN: A.S.F. DATE _____
 CHECKED: D.V.R. DATE 7-10-29

ALFRED BENESCH & ASSOCIATES
 CONSULTING ENGINEERS
 18 SO. WABASH AVE., CHICAGO 3, ILLINOIS
 DWG. No. X 23869 SHEET 8 OF 23



NOTE:
 ALL DIMENSIONS SHOWN ON PLAN ARE HORIZONTAL AND TAKEN ALONG THE CENTER LINE OF GIRDER FOR GRADE, SLOPE, AND GENERAL DIMENSIONS OF DECK SEE GENERAL PLAN, PROFILES AND SLAB PLAN ON SHT. 1, 2, 15 & 16. OMIT INTERMEDIATE STIFFENERS ON OUTSIDE OF EXTERIOR GIRDERS 1 & 5. ALL GIRDERS SHALL BE FABRICATED TO BLOCKING DIAGRAM AS SHOWN. FOR TYPICAL ELEVATIONS OF GIRDERS SEE SHT. 11. FOR ELEVATION OF CROSS-FRAME SEE SHT. 13. FOR TYPICAL DETAIL OF FIELD SPLICE AND FOR DETAIL OF END DIAPHRAGMS SEE SHT. 12. FOR DETAIL OF DIAGONAL BRACING SEE SHT. 13. FOR DETAIL OF DRAINAGE SUPPORTS SEE SHT. 22.

NOTE: DIMENSIONS IN TABLE BELOW FOR CAMBER INCLUDE TOTAL DEAD LOAD DEFLECTION AND VERTICAL CURVE ADJUSTMENT.

CAMBER BLOCKING DIMENSION

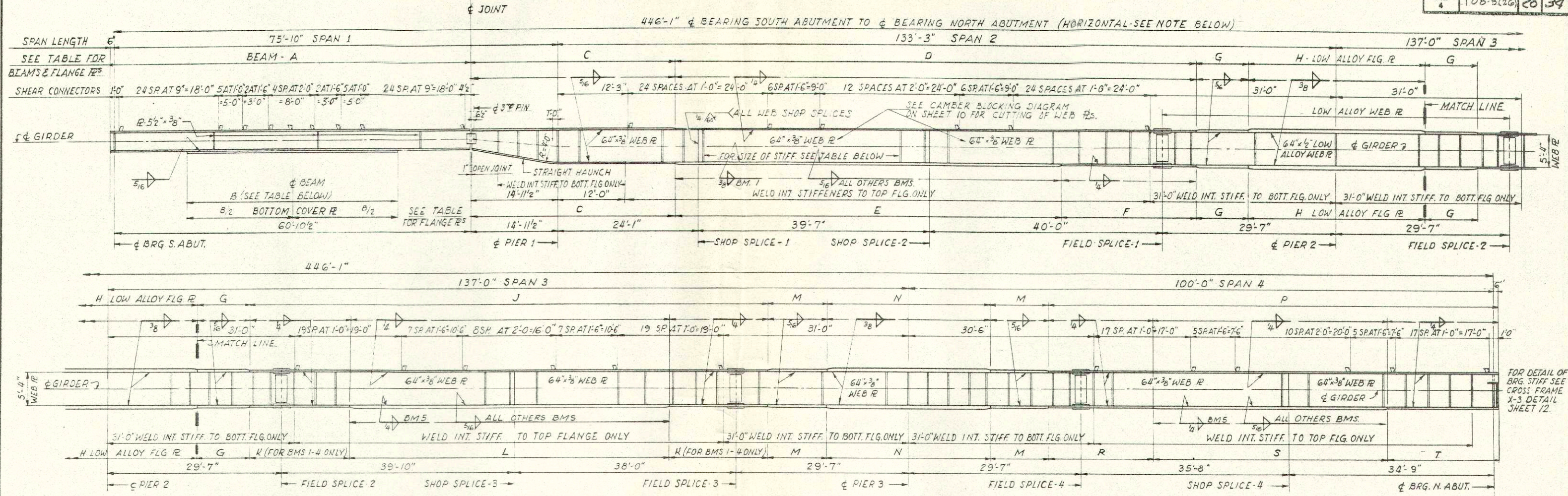
BEAM	a	b	c	d	e	f	g	h	i	j	k	l	m	n	p	q	r	s	t	u
1	3 3/8"	1'-7 1/4"	2'-5 1/8"	5 3/8"	8 3/8"	11 3/8"	1'-3 1/2"	1'-5 3/4"	1'-6 5/8"	1'-4 1/8"	1'-2 1/2"	1'-1 3/4"	1'-0 7/8"	1'-0"	10 5/16"	7 1/2"	5 1/2"	3 3/4"	2 3/8"	
2-4	7 1/2"	1'-10 3/8"	2'-8 1/8"	7 1/2"	10 1/2"	1'-1 3/8"	1'-5 1/8"	1'-7 1/8"	1'-7 1/8"	1'-5 3/8"	1'-2 1/2"	1'-1 7/8"	1'-0 15/16"	1'-0"	10 3/8"	7 1/4"	5 5/8"	3 3/4"	3"	
3	11 3/8"	2'-2 1/8"	2'-11 1/4"	9 1/2"	1'-0 3/8"	1'-3 3/8"	1'-6 1/4"	1'-7 3/8"	1'-7 3/8"	1'-5 3/8"	1'-2 3/4"	1'-1 3/8"	1'-0 1/2"	1'-0"	10 3/8"	7 1/2"	5 3/8"	3 3/4"	3"	
4	1'-3 3/8"	2'-5 3/8"	3'-1 1/8"	11 3/8"	1'-2 1/4"	1'-4 1/2"	1'-7 1/8"	1'-8"	1'-7 3/8"	1'-5 3/8"	1'-2 3/4"	1'-1 7/8"	1'-0 1/2"	1'-0"	10 3/8"	7 1/4"	5 5/8"	3 3/4"	3"	
5	1'-6 1/2"	2'-8 3/8"	3'-3 3/8"	1'-1 1/8"	1'-3 3/8"	1'-5 1/8"	1'-7 1/2"	1'-6 3/4"	1'-5"	1'-3 3/8"	1'-2"	1'-1 1/8"	1'-0 3/4"	1'-0 1/2"	10 3/8"	7 1/2"	5 3/4"	4"	2 3/8"	

DEAD LOAD DEFLECTION TABLE

BEAM	LOCATION	X1-1	X1-2	X1-3	X1-4	X2-1	X2-2	X2-3	X2-4	X2-5	X2-6	X2-7	X3-1	X3-2	X3-3	X3-4	X3-5	X3-6	X3-7	X4-1	X4-2	X4-3	X4-4	X4-5	X4-6	X4-7	
1	CONCRETE ONLY	3/4"	1"	3/4"	3/2"	1/2"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	3/4"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	0"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
	TOTAL DEAD LOAD	1"	1 1/8"	1"	1 1/8"	1 1/8"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1"	3/4"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	0"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"
2-4	CONCRETE ONLY	3/4"	1"	3/4"	3/2"	1/2"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	3/4"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	0"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
	TOTAL DEAD LOAD	1"	1 1/8"	1"	1 1/8"	1 1/8"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1"	3/4"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	0"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"
5	CONCRETE ONLY	3/4"	1"	3/4"	3/2"	1/2"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	3/4"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	0"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
	TOTAL DEAD LOAD	1"	1 1/8"	1"	1 1/8"	1 1/8"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1"	3/4"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	0"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"

NOTE: WEIGHT OF STRUCTURAL STEEL IS INCLUDED IN TOTAL D.L. DEFLECTION "CONCRETE ONLY" SUBTRACTED FROM "TOTAL DEAD LOAD" EQUALS THE DEFLECTIONS EXPECTED TO OCCUR IN THE GIRDER BEFORE THE CONCRETE IS PLACED. IN PLACING FORMS FOR THE CONCRETE DECK, ALLOWANCE SHALL BE MADE FOR THE CONCRETE DEFLECTION ONLY. (-) NEGATIVE VALUE D.L. DEFLECTIONS ARE UPWARD DEFLECTIONS.

NO.	DATE	REVISION	BY
STATE HIGHWAY COMMISSION OF WISCONSIN			
LANG DRIVE - GEORGE ST EXTENSION LACROSSE, WISCONSIN			
C. M. ST. P & P. RAIL ROAD OVERPASS			
BRIDGE NO. B-32-32			
STRUCTURAL STEEL FRAMING PLAN (NORTH HALF SHOWN)			
SCALE: AS NOTED		ALFRED BENECH & ASSOCIATES	
DESIGNED: OVE DATE		CONSULTING ENGINEERS	
DRAWN: AF DATE		1830 N. WABASH AVE., CHICAGO 1, ILL. 60615	
CHECKED: OVE DATE 7-10-37		DWG. NO. X 238 11 SHEET 10 OF 23	



TYPICAL ELEVATION OF GIRDERS
SCALE: 1/8"=1'-0"

NOTE: FOR STIFFENER SPACING SEE FRAMING PLAN.
FOR STIFF. SIZE NOT NOTED ON ELEVATION - SEE TABLE

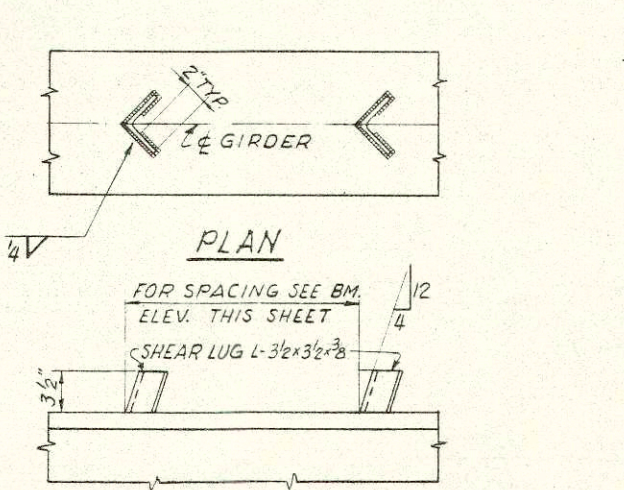
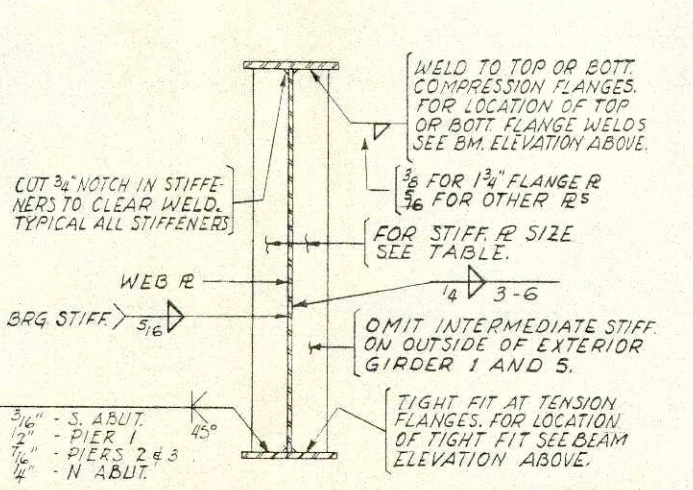
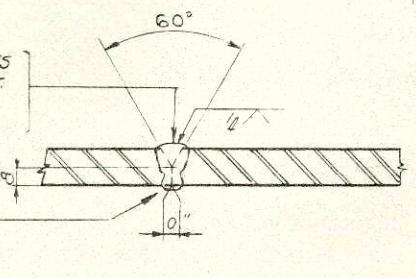
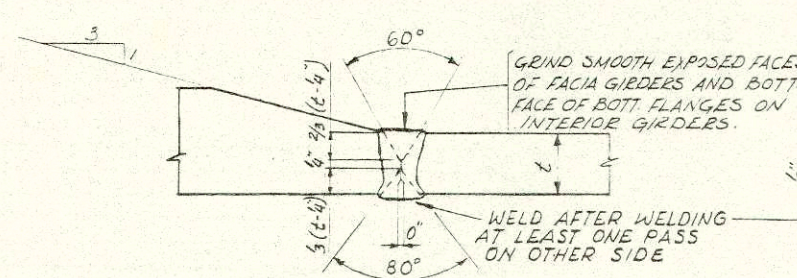
NOTE: LENGTH OF PLATES SHOWN IN PLATE SCHEDULE
BELOW ARE BASED ON HORIZONTAL DIMENSIONS
ALONG ϕ OF GIRDER.

COVER PLATE AND WELDED PLATE GIRDER FLANGE PLATE SCHEDULE

STIFFENER TABLE

BM	A	B	C	D	E	F	G	H - LOW ALLOY	J	K	L	M	N	P	R	S	T
1	36 WF 170	R-11 x 3/8 x 36'-0"	R-14 x 1/2 x 34'-11 1/2"	R-14 x 3/4 x 89'-3"	R-18 x 1/2 x 66'-3"	R-16 x 3/4 x 23'-0"	R-18 x 1/4 x 9'-0"	R-20 x 1/2 x 30'-0"	R-14 x 5/8 x 89'-0"	R-16 x 3/4 x 17'-0"	R-16 x 1/2 x 55'-0"	R-18 x 1 x 10'-0"	R-20 x 1/2 x 28'-0"	R-14 x 5/8 x 76'-6"	R-16 x 3/4 x 18'-0"	R-16 x 1/4 x 40'-0"	R-16 x 3/4 x 18'-6"
2-4	36 WF 160	R-11 x 3/8 x 37'-0"	R-14 x 1/2 x 45'-2 1/2"	R-14 x 3/8 x 79'-0"	R-18 x 1/2 x 53'-0"	R-16 x 3/4 x 26'-0"	R-18 x 1/4 x 10'-0"	R-20 x 1/2 x 28'-0"	R-14 x 5/8 x 91'-0"	R-16 x 3/4 x 25'-0"	R-16 x 3/8 x 41'-0"	R-18 x 1 x 10'-0"	R-20 x 1/2 x 24'-0"	R-14 x 5/8 x 78'-6"	R-16 x 3/4 x 20'-0"	R-16 x 3/8 x 38'-0"	R-16 x 3/4 x 20'-6"
5	36 WF 160	R-11 x 3/8 x 30'-0"	R-14 x 1/2 x 45'-2 1/2"	R-14 x 3/8 x 81'-0"	R-16 x 1/2 x 50'-0"	R-16 x 3/4 x 31'-0"	R-18 x 3/8 x 10'-0"	R-18 x 1/2 x 24'-0"	R-14 x 5/8 x 93'-0"	FOR K & L R-16 x 3/4 x 93'-0"	R-18 x 3/8 x 10'-0"	R-18 x 1/2 x 24'-0"	R-14 x 5/8 x 78'-6"	FOR R, S & T R-16 x 3/4 x 78'-6"			

SPAN 1 SPAN 2 SPAN 3 SPAN 4

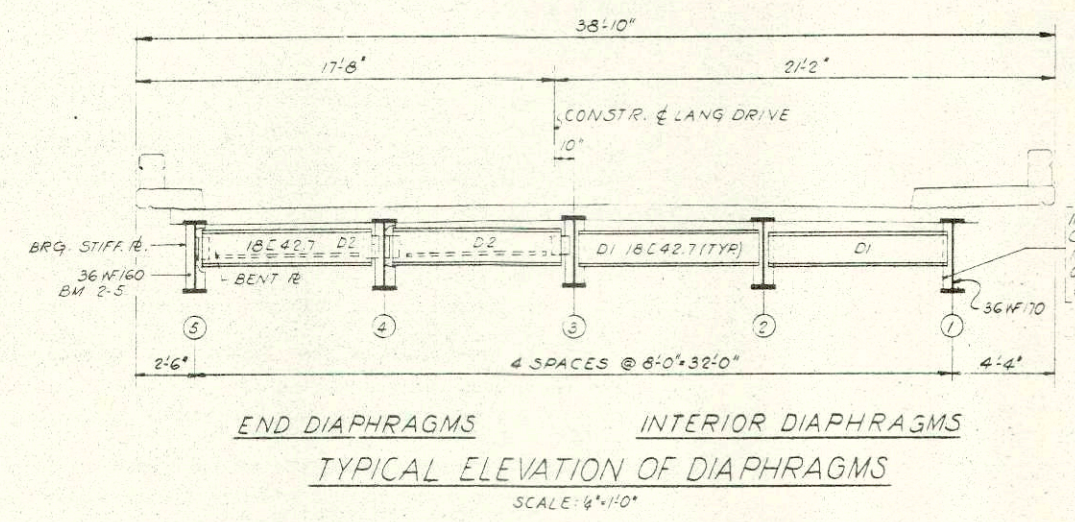


NOTES:
WHERE INTERMEDIATE STIFFENERS ARE CLOSER THAN 3" FROM ϕ OF A SHOP WELDED FLANGE OR WEB SPLICE, STIFFENERS SHALL NOT BE WELDED TO FLANGE.
FOR FRAMING PLAN SEE SHEETS 9 AND 10.
ALL LONGITUDINAL DIMENSIONS SHOWN ON THIS ELEVATION ARE HORIZONTAL AND TAKEN ALONG THE CENTER LINE OF GIRDER.
ALL MATERIAL TO BE STRUCTURAL CARBON STEEL EXCEPT AS OTHERWISE NOTED.
FOR CAMBER AND DEAD LOAD DEFLECTION SEE SHT 10.

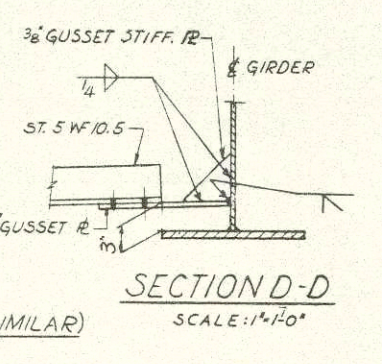
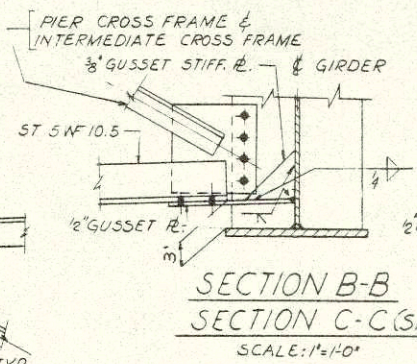
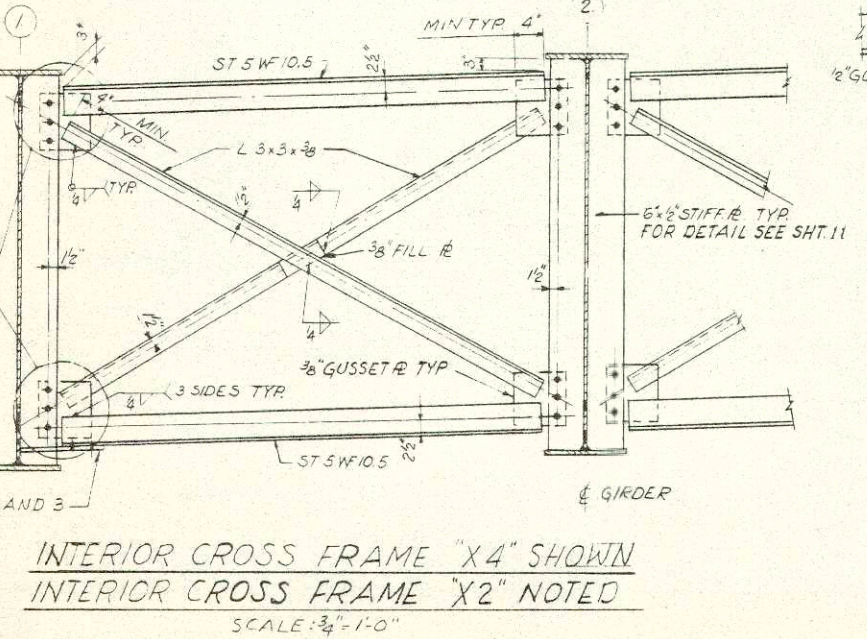
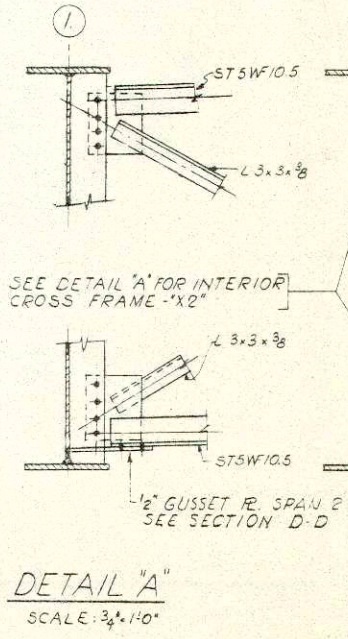
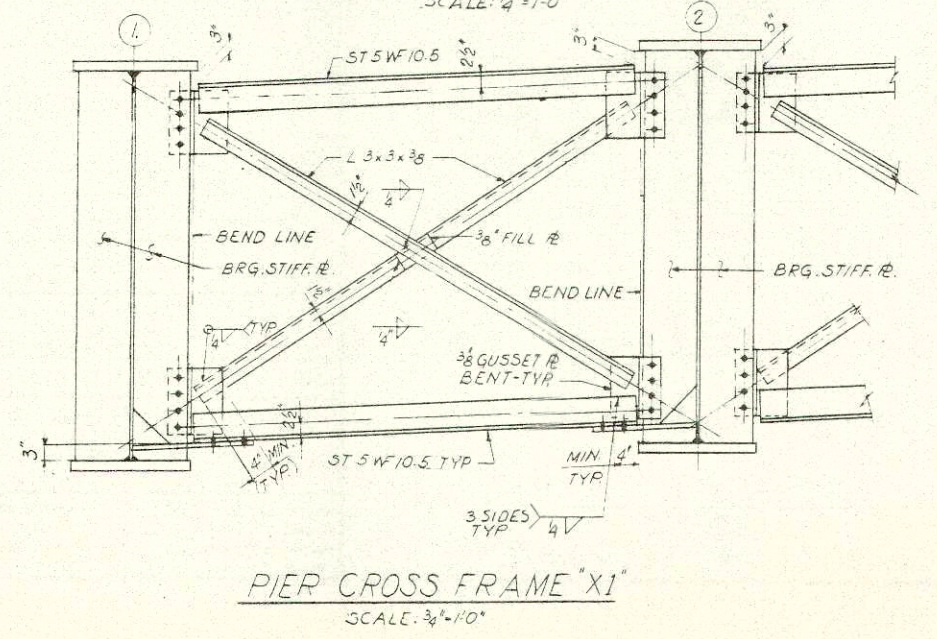
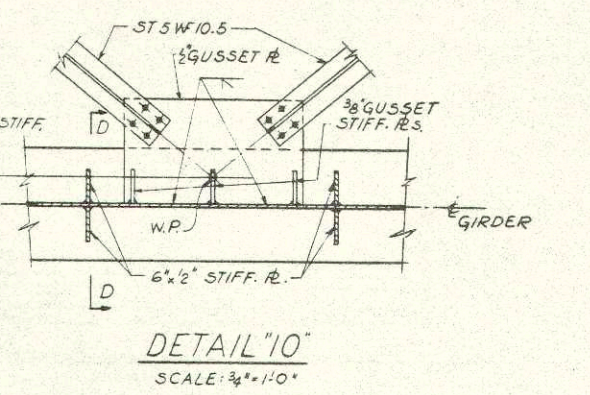
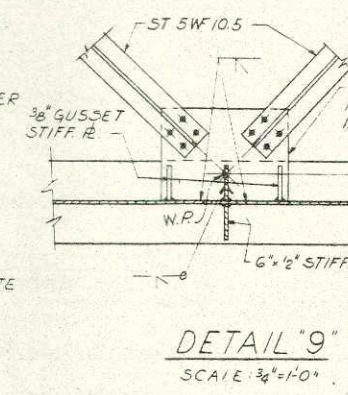
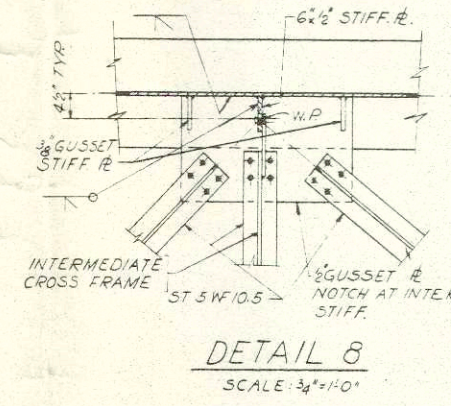
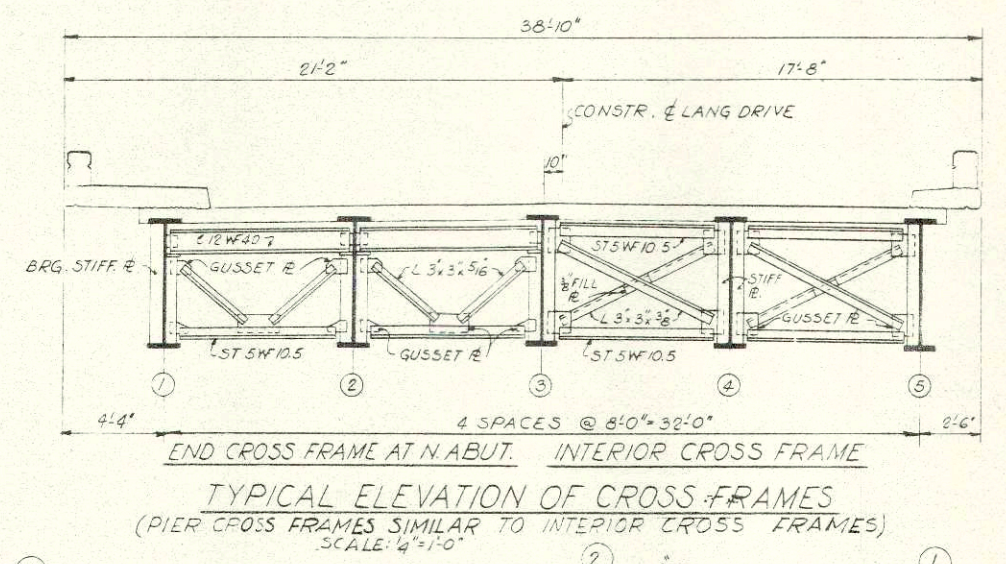
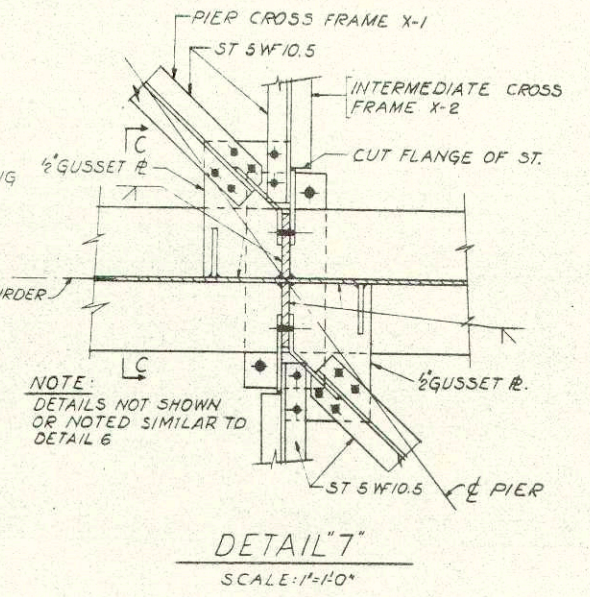
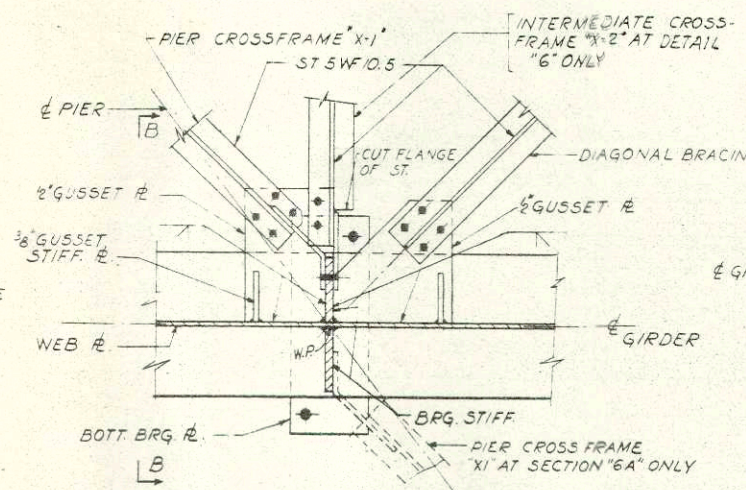
NO.	DATE	REVISION	BY

STATE HIGHWAY COMMISSION OF WISCONSIN
LANG DRIVE-GEORGE ST. EXTENSION LACROSSE, WISCONSIN
C. M. ST. R. & P. RAIL ROAD OVER PASS
BRIDGE NO. B-32-32
STEEL DETAILS

17 of 31



INTERMEDIATE STIFF R. CONNECTION RS FOR INTERIOR DIAPHRAGMS OMIT ON EXTERIOR FACE OF BMS 145

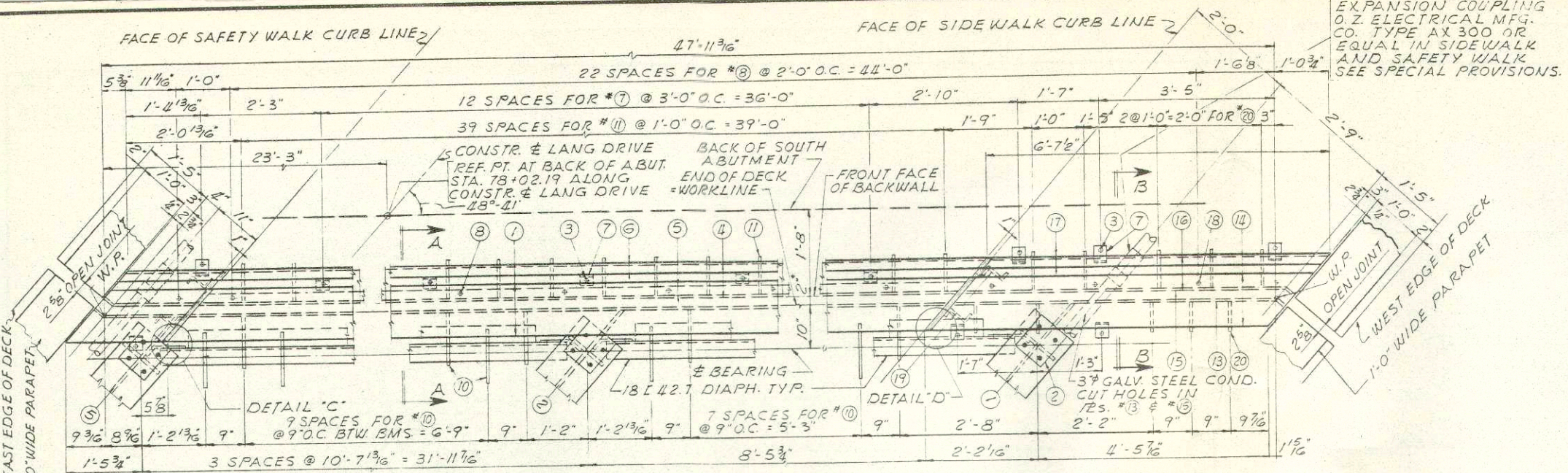


NO.	DATE	REVISION	BY

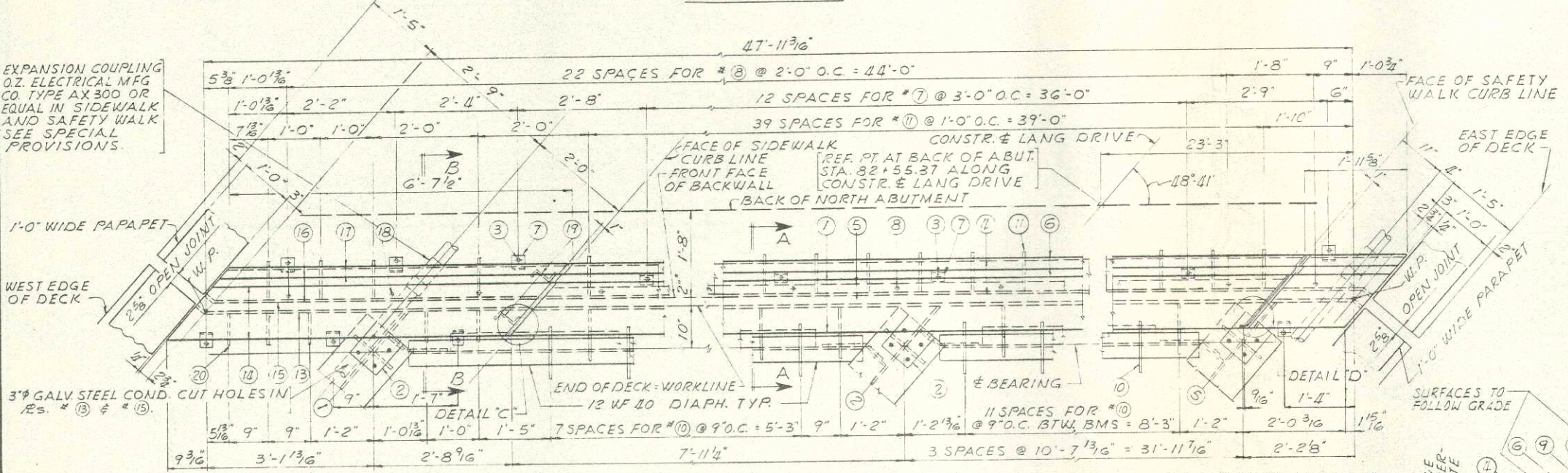
STATE HIGHWAY COMMISSION OF WISCONSIN
LANG DRIVE-GEORGE ST. EXTENSION 1A CROSSE, WISCONSIN
C. M. ST. P. & P. RAIL ROAD OVER PASS
BRIDGE No. B-32-32
STEEL DETAILS

SCALE: AS NOTED
DESIGNED: D.V.E. DATE
DRAWN: A.F. DATE
CHECKED: D.V.E. DATE 7-10-31
ALFRED BENECH & ASSOCIATES
CONSULTING ENGINEERS
10 SO. WABASH AVE., CHICAGO 3, ILLINOIS
DWG. No. X25874 SHEET 15 OF 23

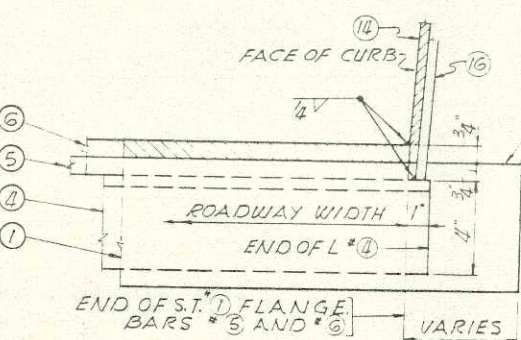
17 of 31



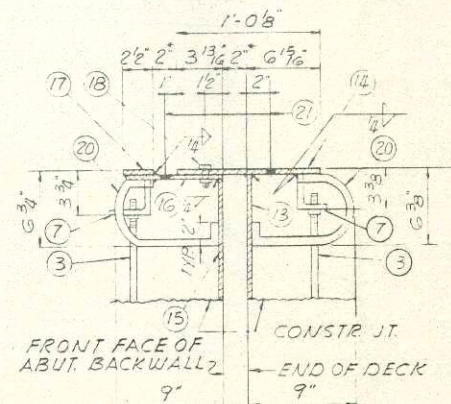
PART PLAN OF EXPANSION DEVICE AT SOUTH ABUTMENT
SCALE: 3/4" = 1'-0"



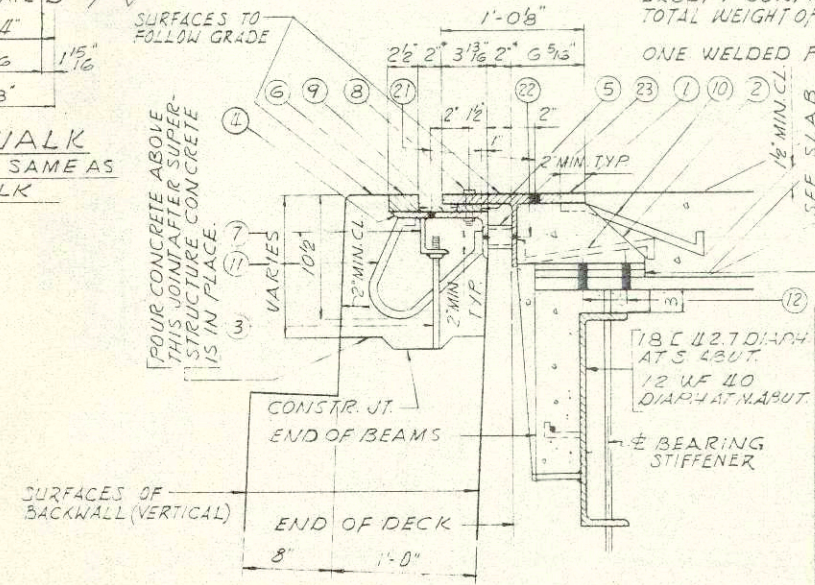
PART PLAN OF EXPANSION DEVICE AT NORTH ABUTMENT
SCALE: 3/4" = 1'-0"



DETAIL 'D' DETAIL 'C' OPPOSITE HAND
SCALE: 3" = 1'-0"



SECTION B-B
SCALE: 1 1/2" = 1'-0"



SECTION A-A
SCALE: 1/2" = 1'-0"
S. ABUT. SHOWN - N. ABUT. SIMILAR

- LEGEND
- S.T. 6" WF 39.5#.
 - P.C. S.T. 6" WF 20#. WELD TO STEM AND FLANGE OF S.T. #1 WITH 2 LINES OF 1/4" CONTINUOUS PILLET WELD.
 - 1/2" x VARIABLE LENGTH ADJUSTING BOLT AT 3'-0" O.C. THREAD 4", TACK WELD NUT TO L #7.
 - L 8" x 4" x 7/16".
 - BAR 2" x 3/4". WELD TO L #4 WITH 2 LINES OF 1/4" PILLET WELDS, 2" LONG @ 6" O.C.
 - BAR 2 1/2" x 1 1/2". WELD TO L #4 WITH 2 LINES OF 1/4" PILLET WELDS, 2" LONG @ 6" O.C.
 - L 3" x 2 1/2" x 3/8" x 0'-3" LONG, WELD TO L #4, #5, #14, AND #15, WITH 2 LINES OF 1/4" CONTINUOUS PILLET WELDS. PROVIDE 9/16" HOLE IN 2 1/2" LEG FOR BOLT #3.
 - 3/4" BOLT WITH SQUARE HEAD AT 2'-0" O.C. GREASE FOR EASY REMOVAL. 13/16" x 1 3/4" SLOTTED HOLE IN S.T. #1. LONG DIMENSION OF SLOTTED HOLE PARALLEL TO C OF ROADWAY. 13/16" HOLES IN L #4 AND BAR #5. TACK WELD SQUARE NUT TO L #4. AFTER CONCRETE HAS SET, REMOVE BOLTS AND PILL HOLES WITH HOT POURED ELASTIC TYPE JOINT SEALER.
 - APPLY 1/16" COAT OF BITUMASTIC TO THIS SURFACE. AFTER CONCRETE HAS SET, FILL JOINT WITH HOT POURED ELASTIC TYPE JOINT SEALER.
 - 5/8" BENT BAR ALTERNATING AT 9" O.C., BETWEEN GIRDERS. WELD TO S.T. #1 WITH 1/4" PILLET WELD ALL AROUND.
 - 5/8" BENT BAR AT 1'-0" O.C. WELD TO L #4 WITH 1/4" PILLET WELD ALL AROUND.
 - PROVIDE 13/16" HOLES IN S.T. #2 AND 5/8" LAMINATED SHIM PLATES AND DRILL 13/16" HOLES IN GIRDER FLANGE IN FIELD, FOR 4 - 3/4" ERECTION BOLTS.
 - 3/8" PLATE CUT TO LIMITS OF SIDEWALK AND SAFETY WALK.
 - 1/2" x 3/8". BEND DOWN FLUSH WITH FACE OF CURB. WELD TO #13 WITH 2 LINES OF 1/4" PILLET WELDS. FIELD WELD TO S.T. #1.
 - 3/8" PLATE CUT TO LIMITS OF SIDEWALK AND SAFETY WALK.
 - 1/2" x 3/8". BEND DOWN PARALLEL WITH FACE OF CURB. WELD TO #15 WITH 1 LINE OF 1/4" PILLET WELDS. FIELD WELD TO L #4.
 - BAR 2 1/2" x 3/8". BEND DOWN FLUSH WITH FACE OF CURB. WELD TO #16 WITH 2 LINES OF CONTINUOUS 1/4" PILLET WELDS. FIELD WELD TO BAR #6.
 - 1/2" BOLT. SAME AS #8 EXCEPT FOR LENGTH. 9/16" x 1 1/2" SLOTTED HOLES IN #14, & 9/16" HOLES IN #15.
 - ANCHOR BAR 2 1/2" x 3/8" x 1'-0". WELD TO #14 AND #15.
 - 5/8" BENT BAR. WELD TO #13 & #14, #15 & #16 WITH 1/4" PILLET WELDS ALL AROUND.
 - 13/16" VENT HOLES AT 2'-0" O.C. IN S.T. #1, L #4, #14 & #15.
 - 9/16" HOLES AT 3'-0" O.C. IN 4" LEG OF L #4 AND STEM OF S.T. #1.
 - PROVIDE 1/2" BOLT AND NUT WITH PIPE SLEEVE AT EACH LOCATION OF HOLE #22 AND SHIP ASSEMBLED. REMOVE PRIOR TO FINAL ASSEMBLY IN FIELD.

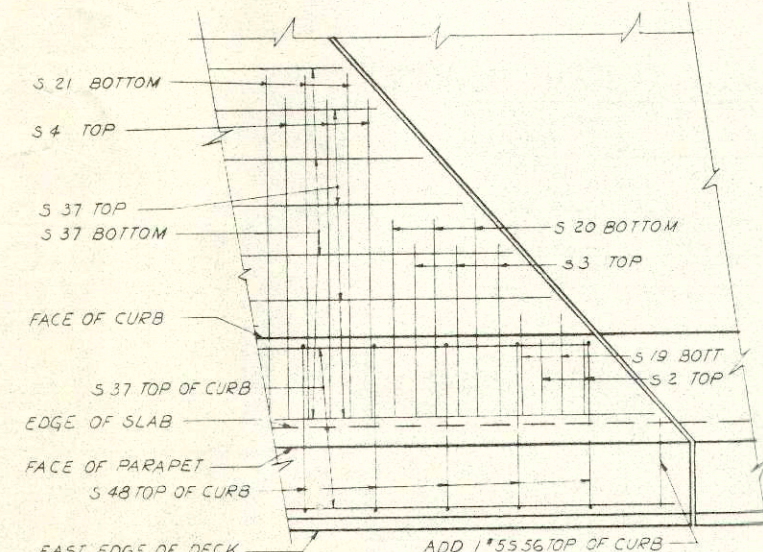
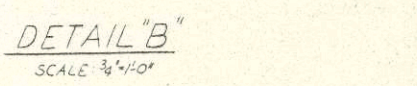
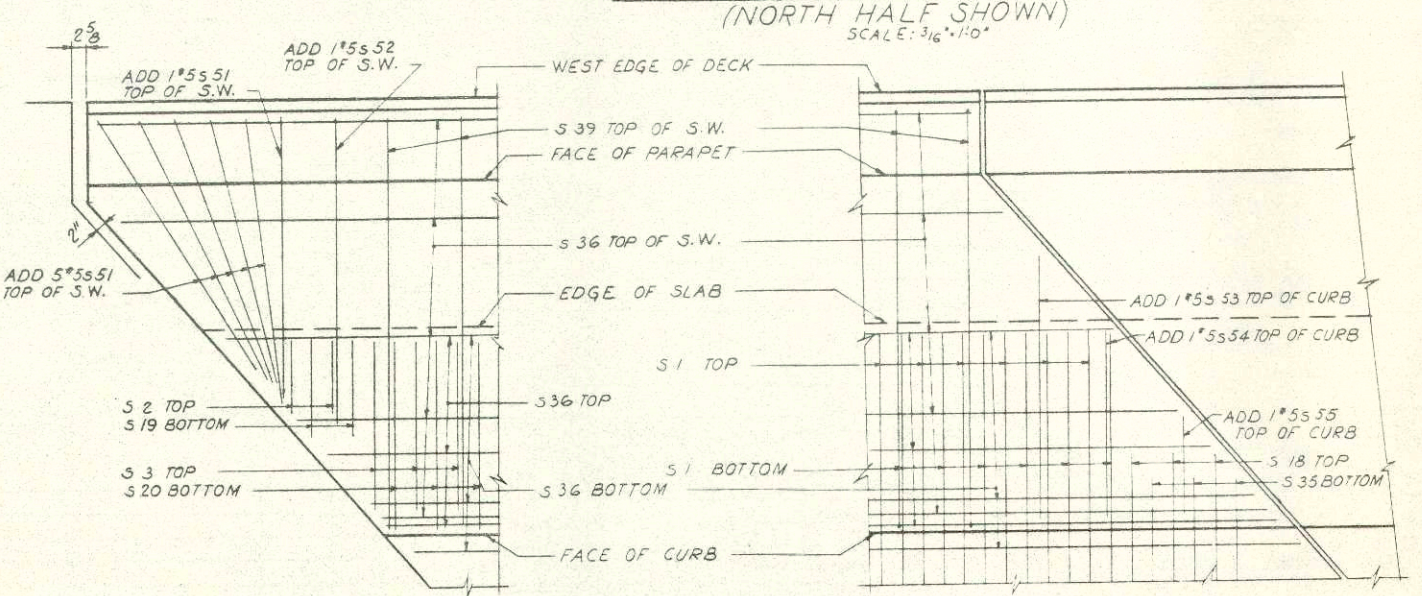
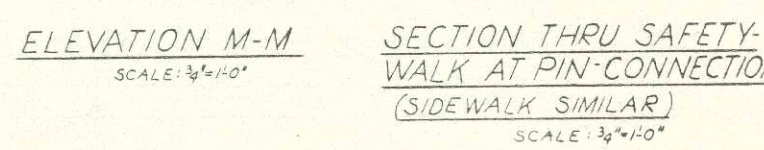
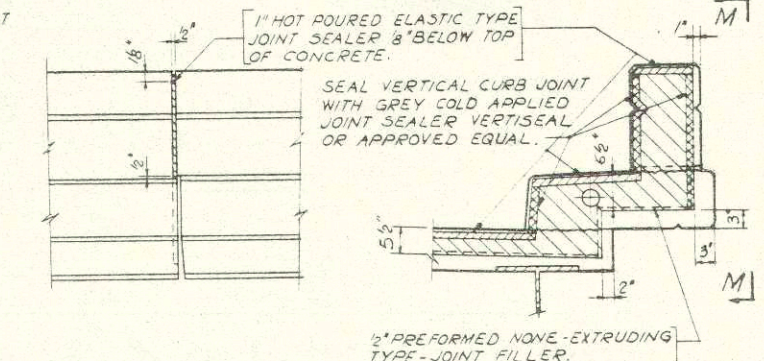
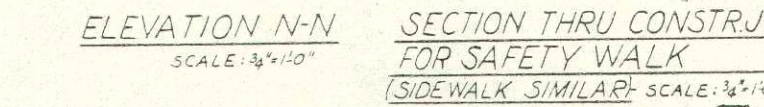
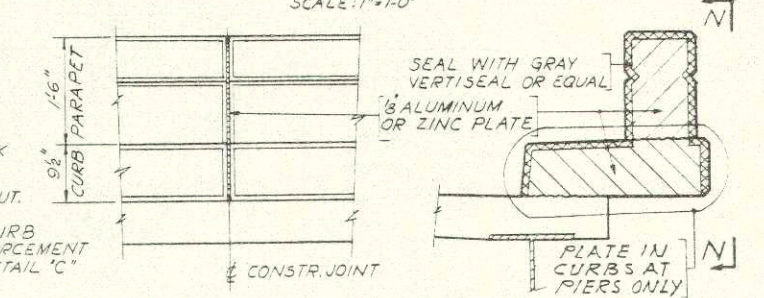
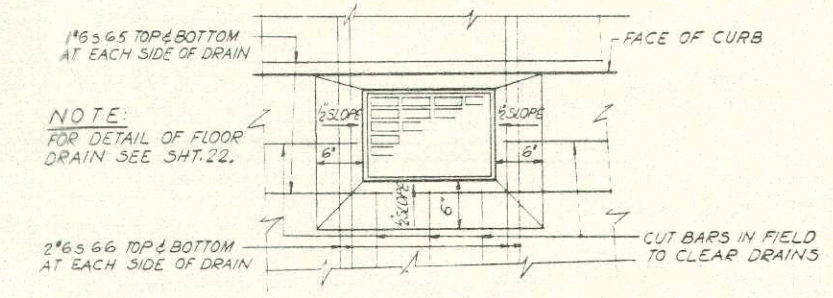
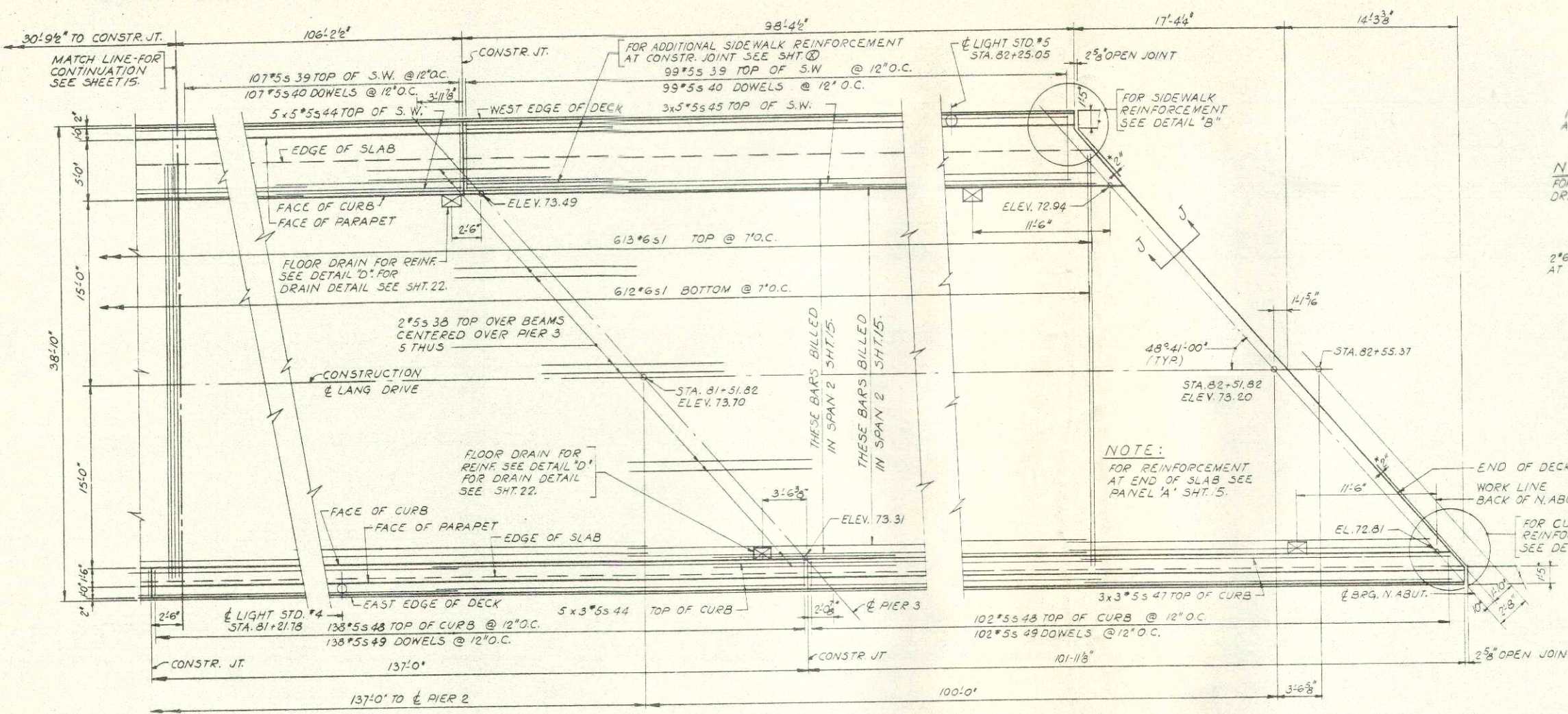
NOTES:
ALL DIMENSIONS, SPACING, ETC. ARE HORIZONTAL. FOR CROSS SECTION OF ROADWAY SEE SHT. #17.
EXPANSION DEVICE SHALL BE FABRICATED TO CONFORM TO ROADWAY CROWN AND GRADE. ASSEMBLE IN SHOP FOR INSPECTION.
ALL SURFACES INACCESSIBLE AFTER ERECTION SHALL RECEIVE TWO SHOP COATS OF RED LEAD PAINT EXCEPT SURFACES IMBEDDED IN CONCRETE.
TOTAL WEIGHT OF EXPANSION DEVICE IS: S. ABUT. 3890# N. ABUT. 3870#
ONE WELDED FIELD SPLICE SHALL BE PERMITTED IN ROADWAY SECTION OF EXPANSION JOINT.
*- AT RIGHT ANGLE TO BACK OF ABUTMENT AT 60° F.

NO.	DATE	REVISION	BY

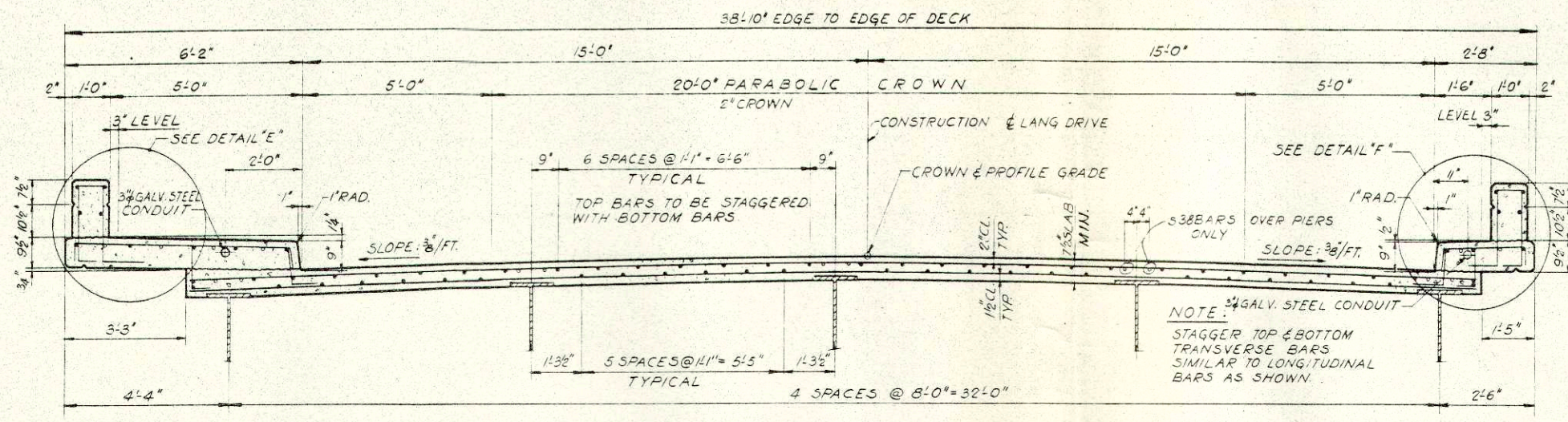
STATE HIGHWAY COMMISSION OF WISCONSIN
LANG DRIVE-GEORGE ST. EXTENSION LA CROSSE, WISCONSIN
C. M. ST. P. & P. RAIL ROAD OVER PASS
BRIDGE NO. B-32-52
EXPANSION DEVICE

SCALE: AS NOTED
DESIGNED: DR DATE
DRAWN: I.O. DATE
CHECKED: DR DATE 7/10/61

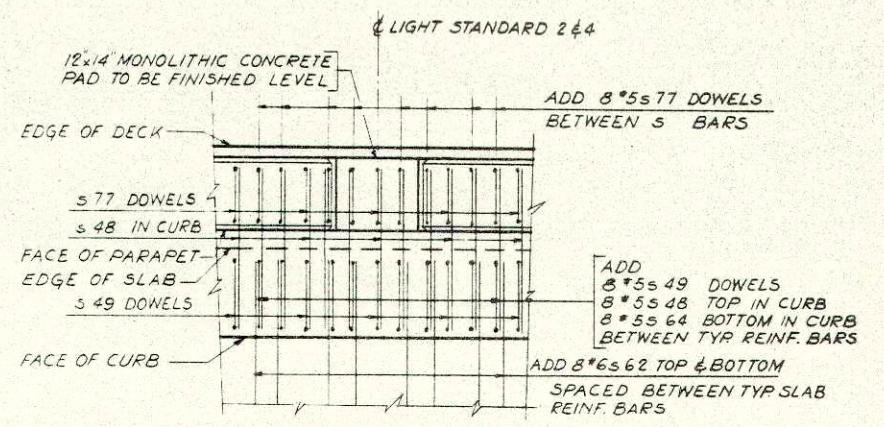
ALFRED BENESCH & ASSOCIATES
CONSULTING ENGINEERS
10 SO. WABASH AVE., CHICAGO 3, ILLINOIS
DWS. No. 423875 SHEET 14 OF 23



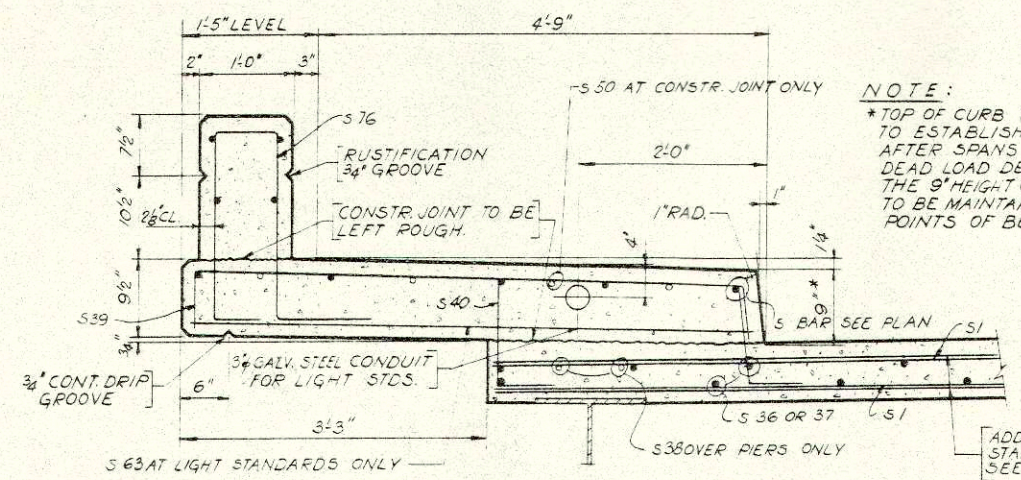
NO.	DATE	REVISION	BY
STATE HIGHWAY COMMISSION OF WISCONSIN			
LANG DRIVE-GEORGE ST. EXTENSION LA CROSSE, WISCONSIN			
C. M. ST. P. & P. RAIL ROAD OVER PASS			
BRIDGE NO. B-32-32			
PLAN OF DECK REINFORCEMENT (NORTH HALF SHOWN)			
SCALE: AS NOTED			
DESIGNED: DR DATE			
DRAWN: YB DATE			
CHECKED: DR DATE 7-10-61			
ALFRED BEMESCH & ASSOCIATES		CONSULTING ENGINEERS	
18 SO. WABASH AVE., CHICAGO 3, ILLINOIS			
DWS. No. X23877 SHEET 10 OF 23			



CROSS SECTION
SCALE: 1/2"=1'-0"

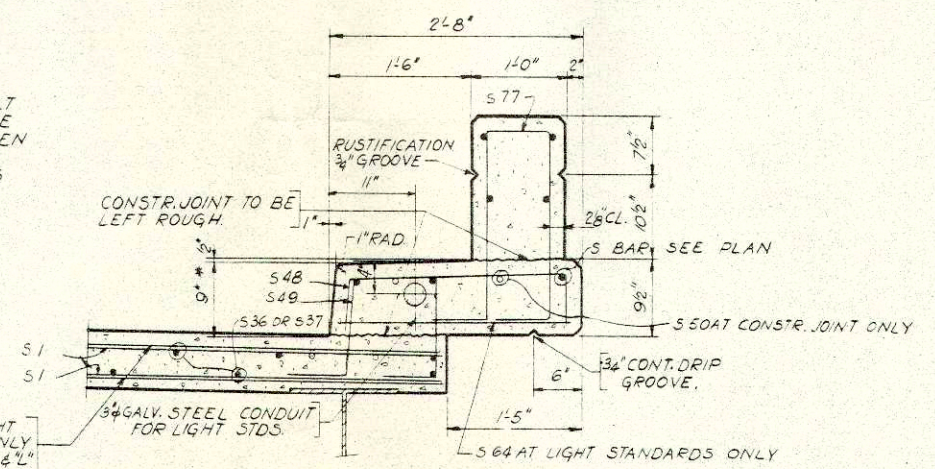


DETAIL "K"
SAFETY WALK REINFORCEMENT AT LIGHT STANDARD (2 THUS)
SCALE: 1/2"=1'-0"

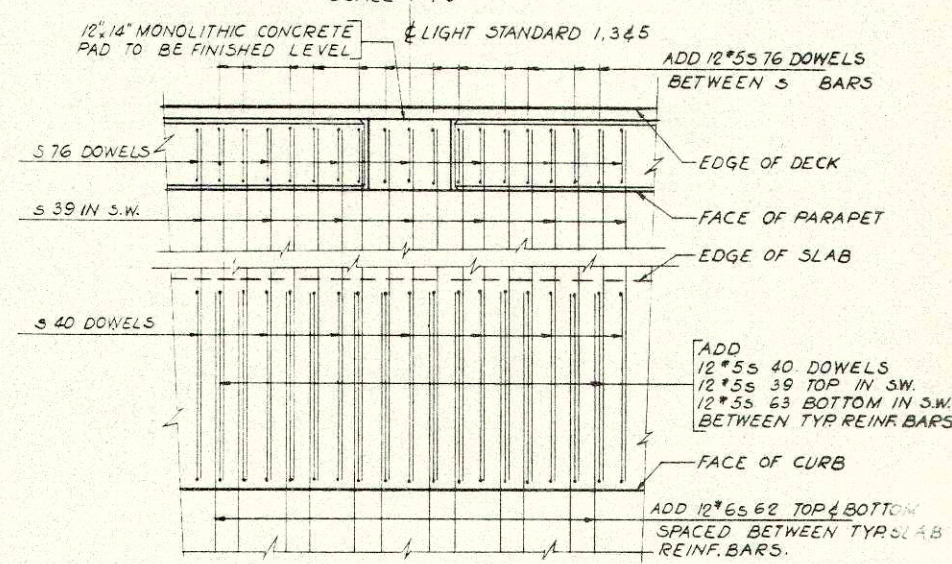


DETAIL "E"
SCALE: 1/4"=1'-0"

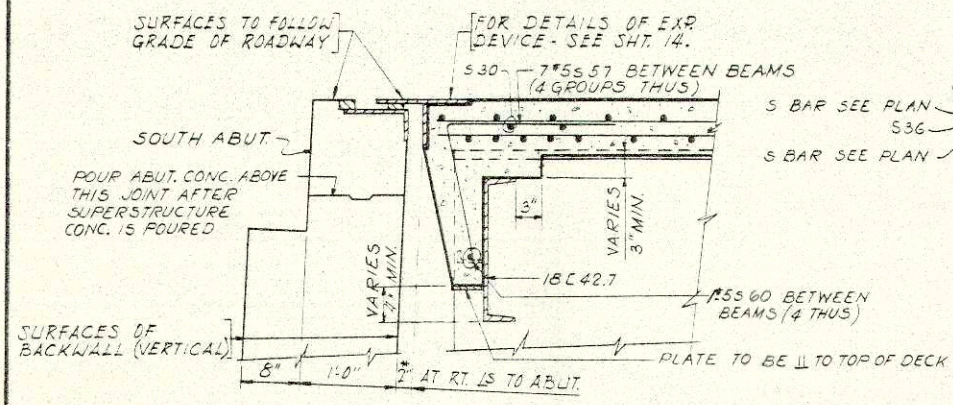
NOTE:
*TOP OF CURB TO BE BUILT TO ESTABLISHED GRADE AFTER SPANS HAVE TAKEN DEAD LOAD DEFLECTION. THE 9" HEIGHT OF CURB IS TO BE MAINTAINED AT POINTS OF BEARING.



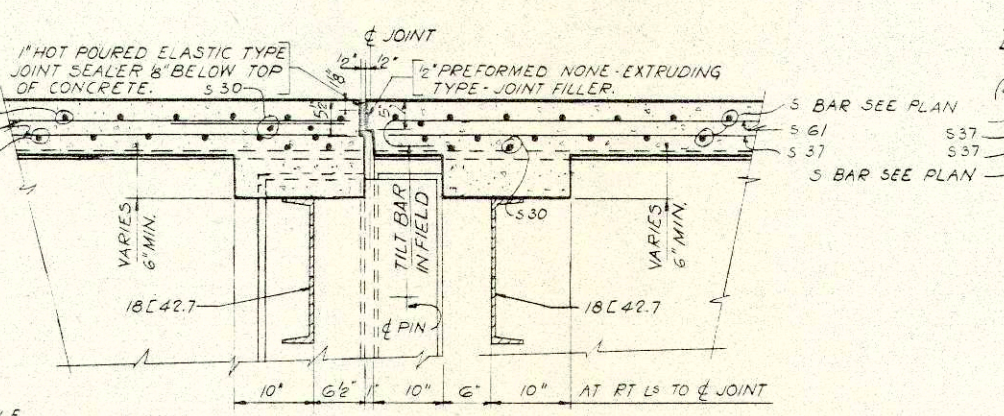
DETAIL "F"
SCALE: 1/4"=1'-0"



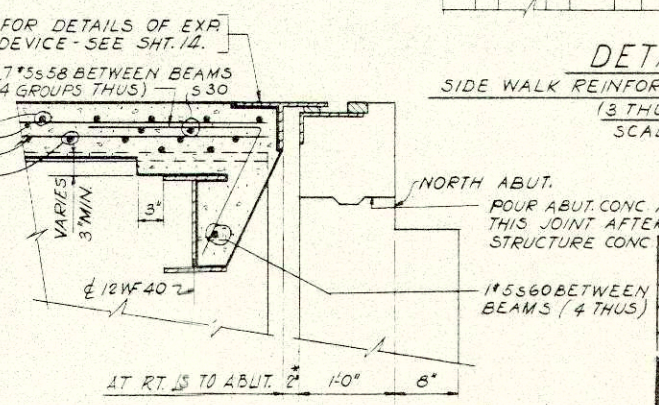
DETAIL "L"
SIDE WALK REINFORCEMENT AT LIGHT STANDARD (3 THUS)
SCALE: 1/4"=1'-0"



SECTION G-G
SCALE: 1"=1'-0"



SECTION H-H
SCALE: 1"=1'-0"

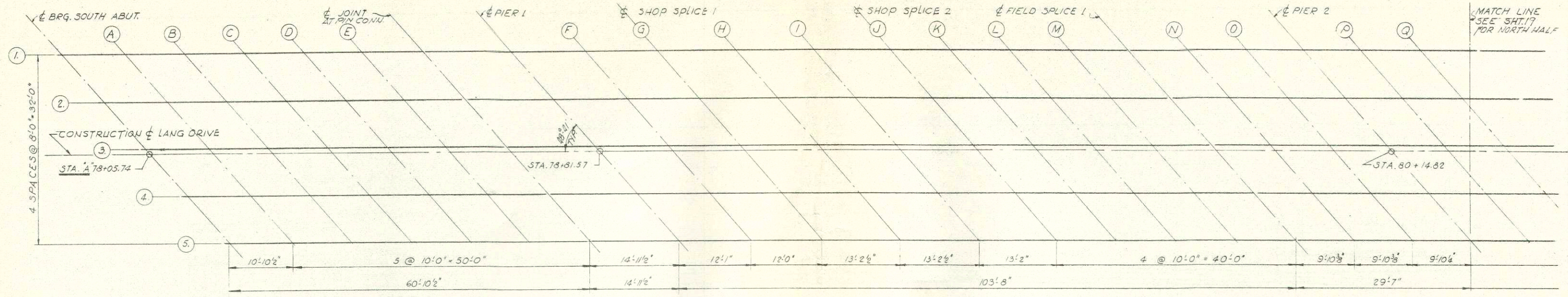


SECTION J-J
SCALE: 1"=1'-0"

NO.	DATE	REVISION	BY
STATE HIGHWAY COMMISSION OF WISCONSIN			
LANG DRIVE - GEORGE ST. EXTENSION LA CROSSE, WISCONSIN			
C. M. ST. P. & P. RAIL ROAD OVER PASS			
BRIDGE NO. B-32-32			
DECK REINFORCEMENT DETAILS			

SCALE: AS NOTED
DESIGNED: DC DATE _____
DRAWN: VB DATE _____
CHECKED: DC DATE 7-10-61
ALFRED BENESCH & ASSOCIATES
CONSULTING ENGINEERS
10 SO. WABASH AVE., CHICAGO 3, ILLINOIS
D.W. No. X 23878 SHEET 17 OF 23

23 of 31



TOP OF SLAB ELEVATION PLAN
 SOUTH HALF SHOWN
 SCALE: 3/4\"/>

SPAN 1

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
Brg.	2	7797.975	8.833	71.339	71.339
Se. Abut.	3	7805.007	.833	71.742	71.742
	4	7812.040	- 7.166	71.931	71.931
A	2	7808.850	8.833	71.762	71.819
	3	7815.882	.833	72.164	72.221
	4	7822.915	- 7.166	72.342	72.399
B	2	7818.850	8.833	72.148	72.241
	3	7825.882	.833	72.533	72.627
	4	7832.915	- 7.166	72.690	72.784
C	2	7828.850	8.833	72.508	72.617
	3	7835.882	.833	72.873	72.982
	4	7842.915	- 7.166	73.009	73.119
D	2	7838.850	8.833	72.839	72.938
	3	7845.882	.833	73.183	73.282
	4	7852.915	- 7.166	73.299	73.398
E	2	7848.850	8.833	73.140	73.203
	3	7855.882	.833	73.464	73.526
	4	7862.915	- 7.166	73.560	73.622
Joint @ Pin Conn	2	7858.850	8.833	73.413	73.418
	3	7865.882	.833	73.716	73.721
	4	7872.915	- 7.166	73.791	73.796
Brg. Pier #1	2	7873.809	8.833	73.766	73.766
	3	7880.841	.833	74.038	74.038
	4	7887.873	- 7.166	74.082	74.082

SPAN 2

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
F	2	7885.892	8.833	74.003	74.013
	3	7892.924	.833	74.250	74.260
	4	7899.956	- 7.166	74.269	74.280
Shop Spl. 1	2	7897.892	8.833	74.196	74.232
	3	7904.924	.833	74.419	74.455
	4	7911.956	- 7.166	74.413	74.450
H	2	7911.100	8.833	74.360	74.454
	3	7918.132	.833	74.555	74.649
	4	7925.165	- 7.166	74.523	74.617
I	2	7924.308	8.833	74.473	74.608
	3	7931.341	.833	74.641	74.776
	4	7938.373	- 7.166	74.581	74.717
Shop Spl. 2	2	7937.475	8.833	74.535	74.691
	3	7944.507	.833	74.676	74.832
	4	7951.540	- 7.166	74.589	74.745
K	2	7947.475	8.833	74.548	74.714
	3	7954.507	.833	74.668	74.835
	4	7961.540	- 7.166	74.561	74.728
L	2	7957.475	8.833	74.531	74.698
	3	7964.507	.833	74.631	74.798
	4	7971.540	- 7.166	74.512	74.678
M	2	7967.475	8.833	74.488	74.633
	3	7974.507	.833	74.581	74.727
	4	7981.540	- 7.166	74.462	74.608
N	2	7977.475	8.833	74.438	74.552
Field Spl. 1	2	7984.507	.833	74.531	74.646
	3	7991.540	- 7.166	74.412	74.526
	4	7998.572	- 7.166	74.388	74.472
O	2	7994.372	.833	74.482	74.565
	3	8001.404	- 7.166	74.362	74.446
	4	8008.437	- 7.166	74.339	74.370
	5	8015.470	- 7.166	74.219	74.149
	6	8022.502	- 7.166	74.100	74.029
Brg. Pier #2	2	8007.059	8.833	74.290	74.290
	3	8014.091	.833	74.383	74.383
	4	8021.123	- 7.166	74.264	74.264

SPAN 1

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
Brg. Se. Abut.	1	7790.943	16.833	70.815	70.815
	5	7819.072	- 15.166	71.958	71.958
A	1	7801.818	16.833	71.238	71.295
	5	7829.947	- 15.166	72.347	72.405
B	1	7811.818	16.833	71.627	71.721
	5	7839.947	- 15.166	72.675	72.769
C	1	7821.818	16.833	72.007	72.116
	5	7849.947	- 15.166	72.973	73.083
D	1	7831.818	16.833	72.359	72.458
	5	7859.947	- 15.166	73.242	73.341
E	1	7841.818	16.833	72.681	72.743
	5	7869.947	- 15.166	73.482	73.545
Joint @ Pin Conn	1	7851.818	16.833	72.974	72.979
	5	7879.947	- 15.166	73.693	73.698
Brg. Pier 1	1	7866.776	16.833	73.357	73.357
	5	7894.905	- 15.166	73.953	73.953

SPAN 2

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
F	1	7878.860	16.833	73.619	73.625
	5	7906.989	- 15.166	74.116	74.121
Shop Spl. 1	1	7890.860	16.833	73.837	73.869
	5	7918.989	- 15.166	74.235	74.278
H	1	7904.068	16.833	74.028	74.086
	5	7932.197	- 15.166	74.318	74.375
I	1	7917.276	16.833	74.169	74.273
	5	7945.405	- 15.166	74.349	74.453
Shop Spl. 2	1	7930.443	16.833	74.257	74.377
	5	7958.572	- 15.166	74.329	74.449
K	1	7940.443	16.833	74.291	74.421
	5	7968.572	- 15.166	74.284	74.414
L	1	7950.443	16.833	74.295	74.426
	5	7978.572	- 15.166	74.234	74.364
M	1	7960.443	16.833	74.270	74.380
	5	7988.572	- 15.166	74.184	74.293
Field Spl. 1	1	7970.443	16.833	74.222	74.306
	5	7998.572	- 15.166	74.134	74.217
N	1	7980.307	16.833	74.173	74.230
	5	8008.437	- 15.166	74.084	74.142
O	1	7990.172	16.833	74.124	74.150
	5	8018.301	- 15.166	74.035	74.061
Brg. Pier 2	1	8000.026	16.833	74.074	74.074
	5	8028.155	- 15.166	73.986	73.986

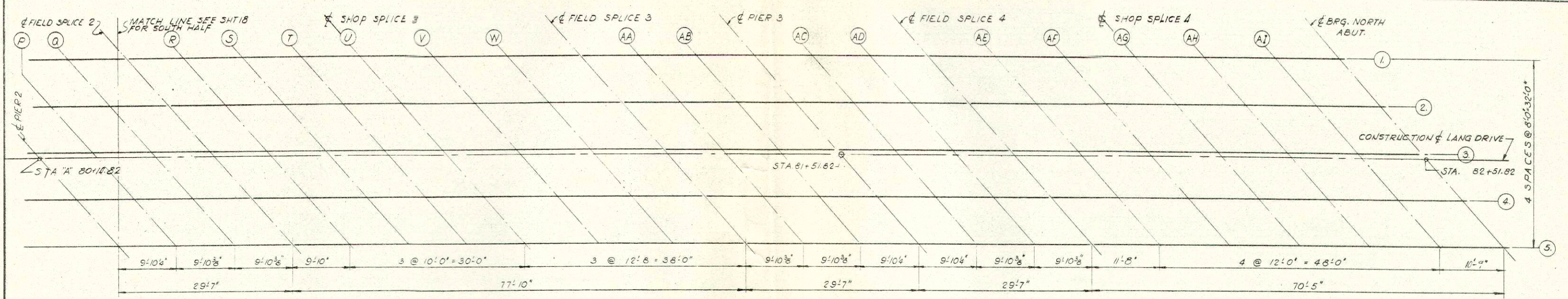
NO.	DATE	REVISION	BY

STATE HIGHWAY COMMISSION
 OF WISCONSIN

LANG DRIVE-GEORGE ST. EXTENSION LACROSSE, WISCONSIN
 C. M. ST. P. & P. RAIL ROAD OVER PASS
 BRIDGE NO. B-32-32
 TOP OF DECK ELEVATIONS
 (SOUTH HALF SHOWN)

SCALE: AS NOTED
 DESIGNED: DR DATE
 DRAWN: VB DATE
 CHECKED: DR DATE 7/10/61

ALFRED BEMESCH & ASSOCIATES
 CONSULTING ENGINEERS
 10 SO. WABASH AVE., CHICAGO 3, ILLINOIS
 DTD. No. X 23879 SHEET 18 OF 23



TOP OF SLAB ELEVATION PLAN
NORTH HALF SHOWN
SCALE: 1/8"=1'-0"

SPAN 3

SPAN 4

SPAN 3

SPAN 4

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
Brge. Pier 2	2	8007.055	8.833	74.290	74.290
	3	8014.087	.833	74.383	74.383
	4	8021.120	- 7.166	74.264	74.264
P	2	8016.909	8.833	74.240	74.241
	3	8023.942	.833	74.334	74.334
	4	8030.974	- 7.166	74.215	74.215
Q	2	8026.774	8.833	74.191	74.191
	3	8033.806	.833	74.285	74.285
	4	8040.839	- 7.166	74.165	74.165
Field Splice 2	2	8036.639	8.833	74.142	74.142
	3	8043.671	.833	74.236	74.236
	4	8050.703	- 7.166	74.116	74.116
R	2	8046.472	8.833	74.093	74.103
	3	8053.504	.833	74.187	74.197
	4	8060.536	- 7.166	74.067	74.077
S	2	8056.472	8.833	74.043	74.063
	3	8063.504	.833	74.136	74.157
	4	8070.536	- 7.166	74.017	74.038
T	2	8066.472	8.833	73.993	74.029
	3	8073.504	.833	74.086	74.123
	4	8080.536	- 7.166	73.967	74.003
Shop Splice 3	2	8076.472	8.833	73.943	73.984
	3	8083.504	.833	74.036	74.078
	4	8090.536	- 7.166	73.917	73.958
V	2	8089.139	8.833	73.879	73.916
	3	8096.171	.833	73.973	74.010
	4	8103.203	- 7.166	73.853	73.890
W	2	8101.805	8.833	73.816	73.847
	3	8108.838	.833	73.910	73.941
	4	8115.870	- 7.166	73.790	73.821
Field Splice 3	2	8114.472	8.833	73.753	73.768
	3	8121.504	.833	73.846	73.862
	4	8128.537	- 7.166	73.727	73.742
AA	2	8124.337	8.833	73.703	73.703
	3	8131.369	.833	73.797	73.797
	4	8138.401	- 7.166	73.677	73.677
AB	2	8134.201	8.833	73.654	73.654
	3	8141.233	.833	73.748	73.748
	4	8148.266	- 7.166	73.628	73.628
Brge. Pier 3	2	8144.055	8.833	73.605	73.605
	3	8151.088	.833	73.698	73.698
	4	8158.120	- 7.166	73.579	73.579

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
AC	2	8153.910	8.833	73.555	73.556
	3	8160.942	.833	73.649	73.649
	4	8167.974	- 7.166	73.530	73.530
AD	2	8163.774	8.833	73.506	73.511
	3	8170.806	.833	73.600	73.605
	4	8177.839	- 7.166	73.480	73.485
Field Splice 4	2	8173.639	8.833	73.457	73.483
	3	8180.671	.833	73.551	73.577
	4	8187.703	- 7.166	73.431	73.457
AE	2	8185.306	8.833	73.398	73.445
	3	8192.338	.833	73.492	73.539
	4	8199.370	- 7.166	73.373	73.419
AF	2	8197.306	8.833	73.338	73.401
	3	8204.338	.833	73.432	73.495
	4	8211.370	- 7.166	73.313	73.375
AG	2	8209.306	8.833	73.278	73.351
	3	8216.338	.833	73.372	73.445
	4	8223.370	- 7.166	73.253	73.325
AH	2	8221.306	8.833	73.218	73.281
	3	8228.338	.833	73.312	73.375
	4	8235.370	- 7.166	73.193	73.255
AI	2	8233.306	8.833	73.158	73.211
	3	8240.338	.833	73.252	73.304
	4	8247.370	- 7.166	73.133	73.185
Brge. No. Abut	2	8244.056	8.833	73.105	73.105
	3	8251.088	.833	73.198	73.198
	4	8258.120	- 7.166	73.079	73.079

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
Brge. Pier 2	1	8000.023	16.833	74.074	74.074
	5	8028.152	- 15.166	73.986	73.986
P	1	8009.877	16.833	74.025	74.025
	5	8038.006	- 15.166	73.937	73.937
Q	1	8019.742	16.833	73.976	73.976
	5	8047.871	- 15.166	73.887	73.887
Field Splice 2	1	8029.606	16.833	73.926	73.927
	5	8057.735	- 15.166	73.838	73.838
R	1	8039.440	16.833	73.877	73.882
	5	8067.569	- 15.166	73.789	73.794
S	1	8049.440	16.833	73.827	73.838
	5	8077.569	- 15.166	73.739	73.749
T	1	8059.440	16.833	73.777	73.793
	5	8087.569	- 15.166	73.689	73.704
Shop Splice 3	1	8069.440	16.833	73.727	73.748
	5	8097.569	- 15.166	73.639	73.660
V	1	8082.106	16.833	73.664	73.685
	5	8110.235	- 15.166	73.575	73.596
W	1	8094.773	16.833	73.601	73.611
	5	8122.902	- 15.166	73.512	73.522
Field Splice 3	1	8107.440	16.833	73.537	73.537
	5	8135.569	- 15.166	73.449	73.449
AA	1	8117.304	16.833	73.488	73.488
	5	8145.433	- 15.166	73.399	73.400
AB	1	8127.169	16.833	73.439	73.439
	5	8155.298	- 15.166	73.350	73.350
Brge. Pier 3	1	8137.023	16.833	73.389	73.389
	5	8165.152	- 15.166	73.301	73.301

Line	Beam	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for Dead Load Deflection
AC	1	8146.877	16.833	73.340	73.340
	5	8175.006	- 15.166	73.252	73.252
AD	1	8156.742	16.833	73.291	73.296
	5	8184.871	- 15.166	73.202	73.207
Field Splice 4	1	8166.607	16.833	73.241	73.267
	5	8194.736	- 15.166	73.153	73.179
AE	1	8178.273	16.833	73.183	73.225
	5	8206.402	- 15.166	73.095	73.137
AF	1	8190.273	16.833	73.123	73.180
	5	8218.402	- 15.166	73.035	73.092
AG	1	8202.273	16.833	73.063	73.125
	5	8230.402	- 15.166	72.975	73.037
AH	1	8214.273	16.833	73.003	73.055
	5	8242.402	- 15.166	72.915	72.966
AI	1	8226.273	16.833	72.943	72.974
	5	8254.402	- 15.166	72.855	72.885
Brge. No. Abut	1	8237.023	16.833	72.889	72.889
	5	8265.152	- 15.166	72.801	72.801

NO.	DATE	REVISION	BY
STATE HIGHWAY COMMISSION OF WISCONSIN			
LANG DRIVE-GEORGE ST. EXTENSION LACROSSE, WISCONSIN			
C. M. ST. P. & P. RAIL ROAD OVER PASS			
BRIDGE NO. B-32-32			
TOP OF DECK ELEVATIONS (NORTH HALF SHOWN)			

SCALE: AS NOTED
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 ALFRED BENESCH & ASSOCIATES
 CONSULTING ENGINEERS
 18 SO. WABASH AVE., CHICAGO 3, ILLINOIS
 REG. NO. X-238,800 SHEET 28 OF 28

25 of 31

REINFORCEMENT BAR LISTS

SUPERSTRUCTURE

NO. REQUIRED	SPANS	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	K	J
1	2,3,4				BENT										
68	408	*5	6-11	S39	16		6'-5-10	7'						3/4	7"
68	408	*5	6-3	S40	16	9 1/2	1-1/2	2-6	1-1	9"				1 1/2	1-1
61	403	*5	3-4	S48	16		6'-2-4	7'						3/4	7"
61	403	*5	4-9	S49	16	9 1/2	1-1/2	1-0	1-1	9"				1 1/2	1-1
28		*5	3-5	S57	T5		1-9	1-8						4"	1-7
28		*5	3-2	S58	T5		1-9	1-5						6 1/2	1-4
30		*5	3-7	SG1	1	7	3-10								5

STRAIGHT

NO. REQUIRED	SPANS	SIZE	LENGTH	MARK
111	1225	*6	33-9	S1
4	4	*6	1-3	S2
6	6	*6	2-6	S3
6	6	*6	4-6	S4
6	6	*6	6-6	S5
6	6	*6	8-6	S6
6	6	*6	10-6	S7
6	6	*6	12-6	S8
6	6	*6	14-6	S9
6	6	*6	16-6	S10
6	6	*6	18-6	S11
6	6	*6	20-6	S12
6	6	*6	22-3	S13
6	6	*6	24-3	S14
6	6	*6	26-3	S15
6	6	*6	28-3	S16
6	6	*6	30-3	S17
6	6	*6	32-3	S18
4	4	*6	1-6	S19
6	6	*6	2-9	S20
6	6	*6	4-9	S21
6	6	*6	6-9	S22
6	6	*6	8-9	S23
6	6	*6	10-9	S24
6	6	*6	12-9	S25
6	6	*6	14-9	S26
6	6	*6	16-9	S27
6	6	*6	18-9	S28
6	6	*6	20-9	S29
22	22	*6	22-6	S30

PARAPET STRAIGHT

4	*5	17-6	S42
12	*5	34-3	S43
4	*5	16-6	S44
8	*5	30-6	S67
12	*5	33-0	S68
12	*5	33-3	S69

BENT

76	423	*5	6-2	S76	65	6"	2-0	7 1/2	2-0	1-0 1/2
64	413	*5	5-9	S77	55	6"	2-0	7 1/2	2-0	7 1/2

ABUTMENTS

NO. REQUIRED	ABUTMENTS	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	K	J
8	B	*8	12-0	A35	3	6-0	6-0							4-3	4-3
21		*5	11-10	A8	2	5-3	1-4							5-3	
5		*5	13-4	A26	2	5-9	1-10							5-9	
21	33	*5	9-10	A36	T1	6'-2-8	1-9	2-8	1-9					6"	
28		*5	14-4	A48	2	6-6	1-4							6-6	
2		*5	15-0	A50	2	7-0	1-0							7-0	
5		*5	19-4	A51	2	8-9	1-10							8-9	
3		*5	18-0	A53	2	8-6	1-0							8-6	

26	26	*4	11-5	A5	T5	3-9	5-1/2	2-6 1/2						1-10 1/2	2-9
26	26	*4	10-3	A6	2	2-6	4-9							3-0	
25		*4	5-11	A7	2	2-0	1-11							2-0	
9	9	*4	4-6	A15	3	1-6	3-0							1-1/2	1-0
6	6	*4	3-3	A16	3	1-9	1-6							1-0	1-1/2
2		*4	4-8	A22	16	2-0	5	2-3						1-0	2-0 1/2
2	4	*4	2-7	A24	16	1-0	5	1-2						6 1/2	1-0 1/2
3	3	*4	6-0	A39	3	1-6	4-6							1-1/2	1-0
3	3	*4	4-6	A40	21	1-6	3-0							1-0	1-1/2
3	3	*4	6-0	A41	21	1-6	4-6							1-0	1-1/2
17	17	*4	4-11	A47	2	1-6	1-11							1-6	
6	6	*4	4-9	A59	2	3-0	1-9								

STRAIGHT

8		*10	12-6	A28
8		*10	19-0	A57
6		*8	12-6	A29
8		*8	26-9	A1
6		*8	19-0	A30
8	8	*6	26-6	A2
3		*5	24-3	A10
1		*5	7-6	A17
4		*5	6-3	A18
4		*5	10-0	A31
6		*5	12-6	A32
30	42	*5	11-0	A33
3		*5	24-0	A44
6		*5	19-0	A58
8	8	*4	26-3	A3
8	8	*4	25-0	A4

ABUTMENTS & PIERS

NO. REQUIRED	ABUTMENTS	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	K	J
13	19	*5	4-5	A37	16	6"	1-9	9"	1-5					1-0	1-0
13	19	*5	3-8	A38	16	6"	1-3	9"	1-2					10'	10'
42	42	*4	5-2	A9	2	2-3	8"							2-3	
5	6	*4	2-10	A19	16	1-0	10"	1-0						8"	9"
5	6	*4	3-3	A21	2	1-6	1-9								
3	3	*4	3-4	A23	16	6"	2-3	7"						3 1/4"	7"
3	3	*4	6-6	A25	16	5-9	9"							3 1/4"	9"
3	3	*4	3-0	A27	2	6"	2-6								

4		*5	10-0	A31
16		*5	12-6	A32
18		*5	7-0	A34
5		*5	5-9	A42
17		*5	6-0	A43
2		*5	11-6	A45
30		*5	9-3	A52
22		*5	18-6	A54
3		*5	8-0	A55
4		*5	15-9	A56
29		*5	9-0	A60
2		*5	8-6	A61
6	8	*4	26-3	A3
6	8	*4	25-6	A11
12	12	*4	7-6	A12
2		*4	8-0	A13
2	2	*4	7-0	A14
2	4	*4	2-3	A20
2		*4	5-9	A49

NO. REQUIRED	PIERS	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	K	J
26	38	*5	3-2	A62	2	1-3	8"							1-3	
8		*5	12-3	A63											
8		*5	18-3	A46											

NO. REQUIRED	PIERS	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	K	J
1	2	3			STRAIGHT										
8	8	*8	49-6	P1											
20		*8	28-9	P2											
24		*8	11-0	P3											
67	67	*5	9-6	P8											
111		*8	12-6	P9											
10		*8	7-3	P44											
96	96	*6	5-3	P4											
6	3	*4	25-6	P42											
3		*4	31-3	P43											

PIERS

NO. REQUIRED	PIERS	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	K	J
48		*11	7-0	P10											
48	48	*9	6-6	P11											
12	12	*9	23-6	P13											
32	24	*5	22-9	P14											
96		*5	11-9	P15											
96		*5	9-6	P16											
96		*5	8-9	P17											

18	14	14	*5	7-0	P18	10	1-3	4-6	1-3	1-5				2-10
36	36	36	*5	5-5	P19	2	1-3	2-11						1-3
16	16	16	*4	9-8	P20	T3	1-3	2-8						

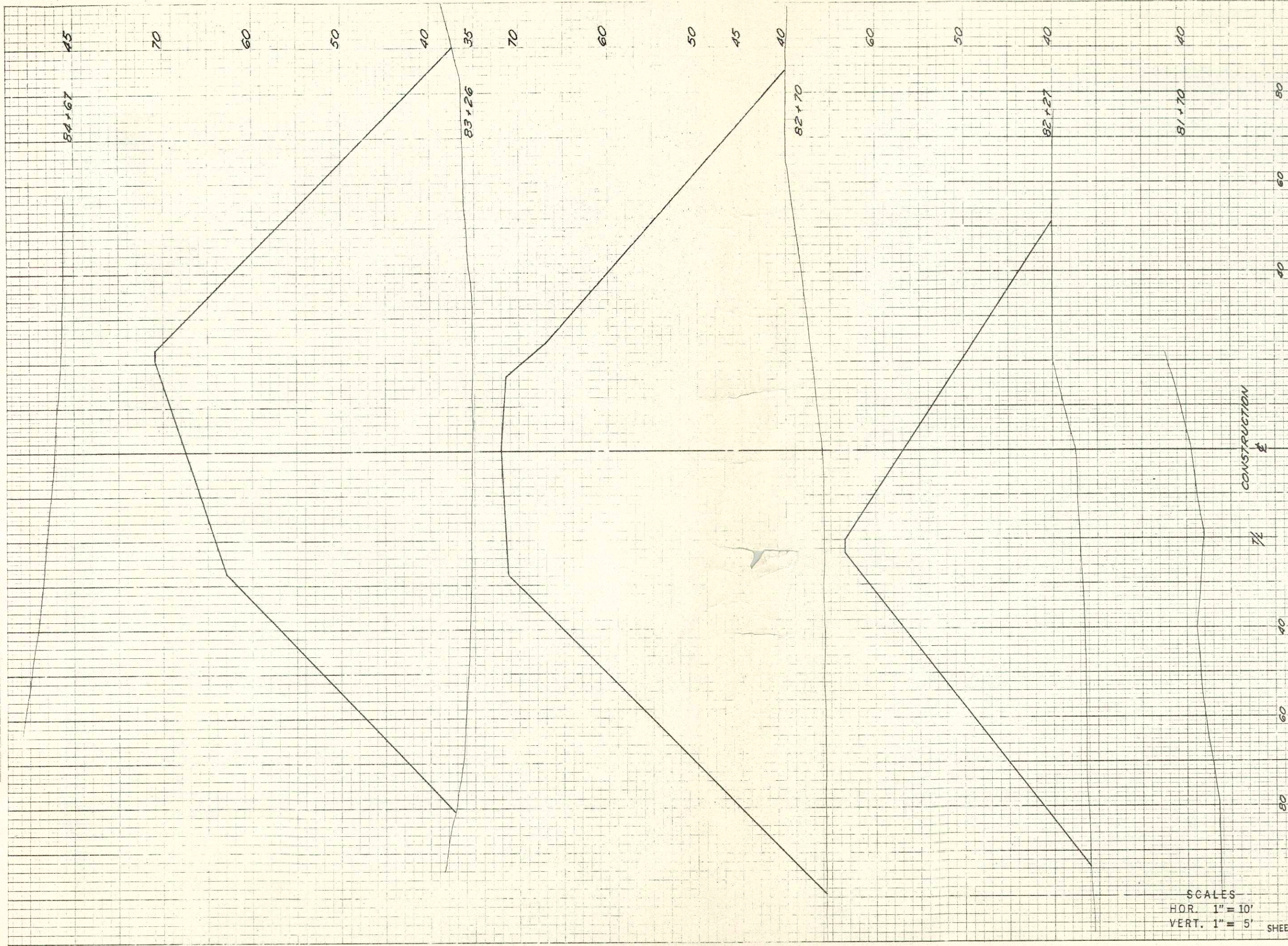
40		*11	16-6	P21											
40		*9	14-3	P22											
40		*9	16-0	P23											
8		*11	16-6	P24	3	12-1	1-03-5							3"	1-0
8		*9	14-3	P25	3	10-3	1-03-0							3"	1-0
8		*9	16-0	P26	3	12-0	1-03-0							3"	1-0
48	56	56	*4	9-8	P20	T3	1-3 1/2	2-8							

6	6	6	*10	14-0	P27									
6	6	6	*10	24-9	P28									
2	2	2	*10	14-9	P29									
8	8	8	*5	22-9	P30									
3	3	3	*4	24-6	P31									
3		*4	11-9	P32										
3	3	*10	52-2	P33	2	3-0	4-6-2							3-0
2	2	*10	50-0	P34	2	3-0	4-4-0							3-0
3		*10	53-2	P35	2	3-6	4-6-2							3-6
2		*10	51-0	P36	2	3-6	4							

3/9/81

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	AREAS CHECKED		



STATION	DISTANCE
81+70	57
82+27	43
82+70	56
83+26	141
84+67	

SCALES
 HOR. 1" = 10'
 VERT. 1" = 5'

SHEET TOTAL