

INDEX OF SHEETS

SET NO.	TITLE
1	TYPICAL CROSS SECTIONS
2	ESTIMATE OF QUANTITIES
3	MISCELLANEOUS QUANTITIES
4	RIGHT OF WAY PLAN
5	PLAN AND PROFILE STA. 66+15.0 TO STA. 105+91.5
6	STANDARD DETAILS
7	DRAINAGE STRUCTURES
8	CROSS SECTIONS

CONTRACT AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT	SECTION NUMBER	DATE
376	390	11.8	WIS	27

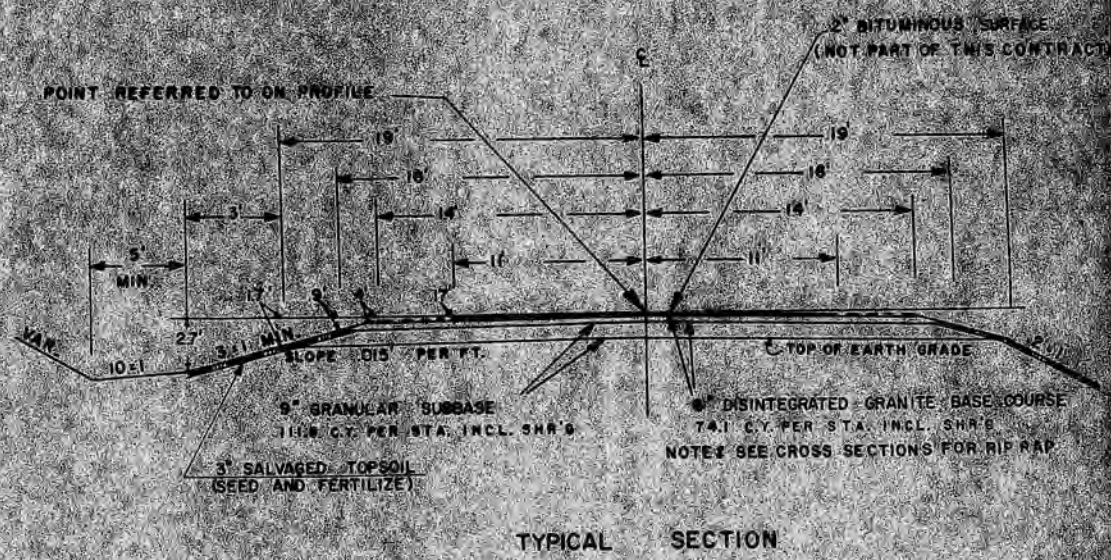
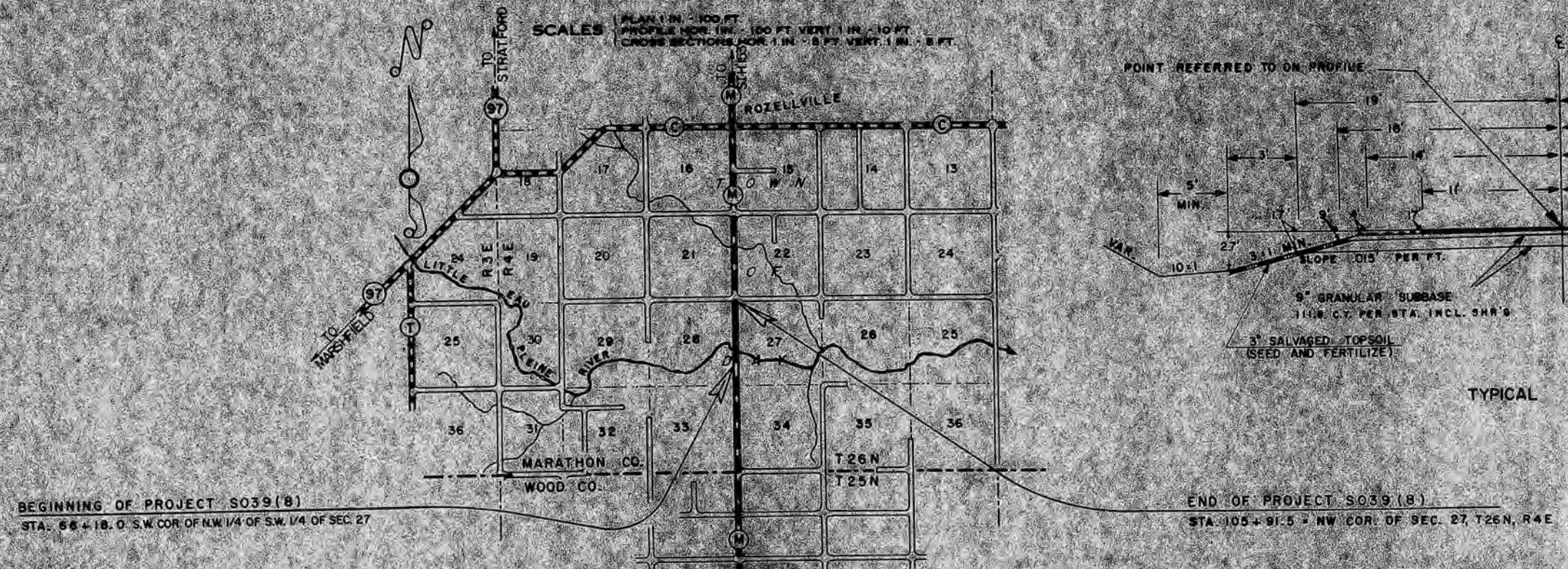
STATE OF WISCONSIN
STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED
SO. CO. LINE — C.T.H. "C" ROAD

G.T.H. "M"
MARATHON COUNTY
PROJECT S039(8)



SCALES: PLAN 1 IN. = 100 FT.
PROFILE HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.
CROSS SECTIONS FOR 1 IN. = 8 FT. VERT. 1 IN. = 8 FT.



CONVENTIONAL SIGNS

STATE LINE	---	CULVERTS IN PLACE	—
COUNTY LINE	---	CULVERTS REQUIRED	—
TOWNSHIP OR RANGE LINE	---	DROP INLET	□
SECTION LINE	---	POWER POLE	—
NEW RIGHT OF WAY LINE	---	TELEPHONE OR TELEGRAPH POLE	—
PRESENT RIGHT OF WAY LINE	---	RIGHT OF WAY MARKERS	—
WIRE FENCE	---	REFERENCE STAKE FOR HUBS ONLY	—
WOVEN	---	MARSH	—
BARBED	---	HEDGE	—
LOT LINE	---	TREES	—
CORPORATE OR CITY LIMITS	---	GROUND ELEVATION	DATUM LINE 73.9
PROPERTY LINE	---	GRADE ELEVATION	DATUM LINE 75.6
TRAVELED WAY OR P.E.	---		
RAILROADS	---		
BASE OR SURVEY LINE	---		

LAYOUT

SCALE: ONE MILE
TOTAL NET LENGTH OF CENTERLINE = 0.753 MI.

APPROVED FOR
Marathon County
W. F. Steuber
Date *6/23/60* County Highway Commissioner Title

STATE HIGHWAY COMMISSION OF WISCONSIN
MADISON, WIS.

SURVEYOR: C. E. C. NOTE BOOK: N-87
DIVISION COMPLETER: R. T. M.G. CHECKER:
DISTRICT CHECKER: G. F. N. CONTRACT:

CORRECT: DATE: *6/23/60* *W. F. Steuber* DISTRICT ENGINEER

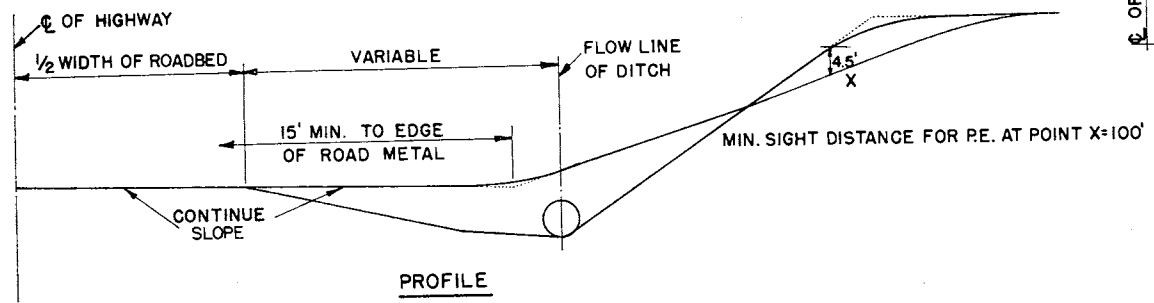
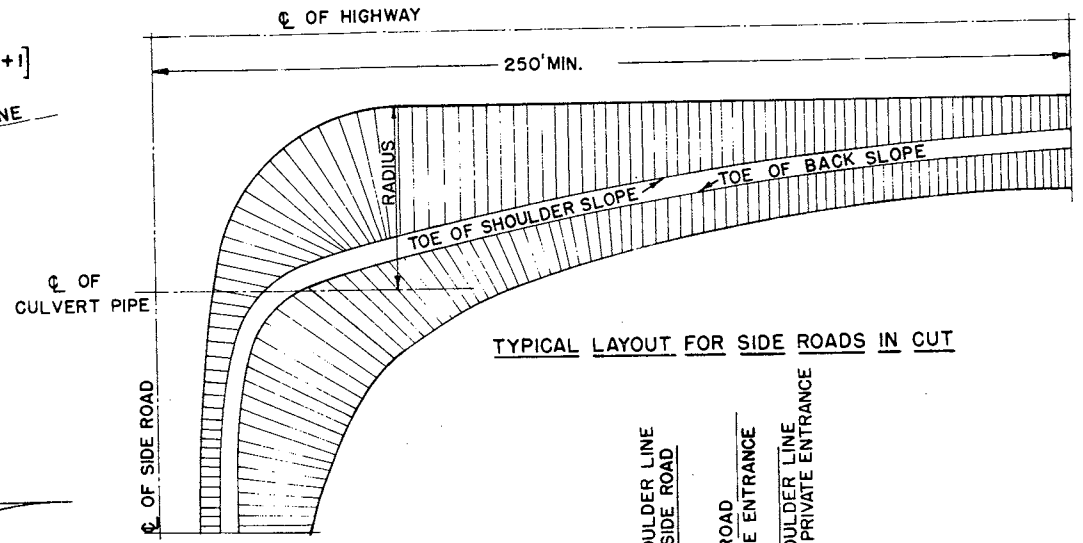
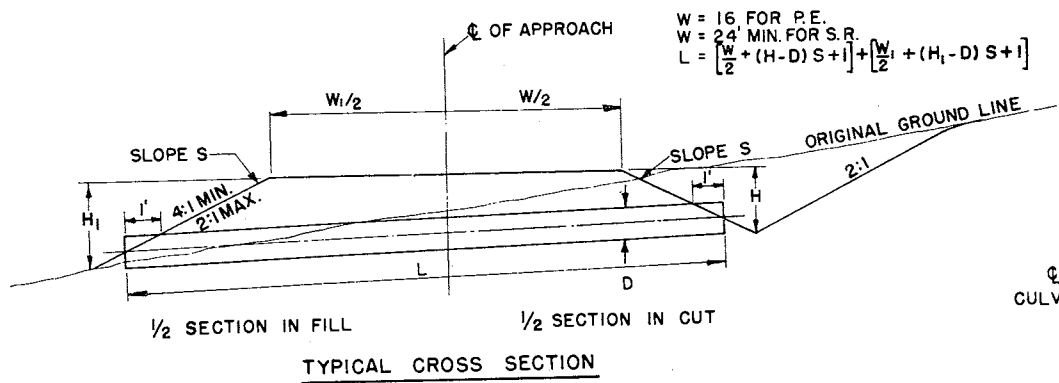
RECOMMENDED FOR APPROVAL: DATE: *6/23/60* *J. P. Pelt* ENGINEER OF DESIGN

APPROVED: DATE: *6/23/60* *W. F. Steuber* STATE HIGHWAY ENGINEER

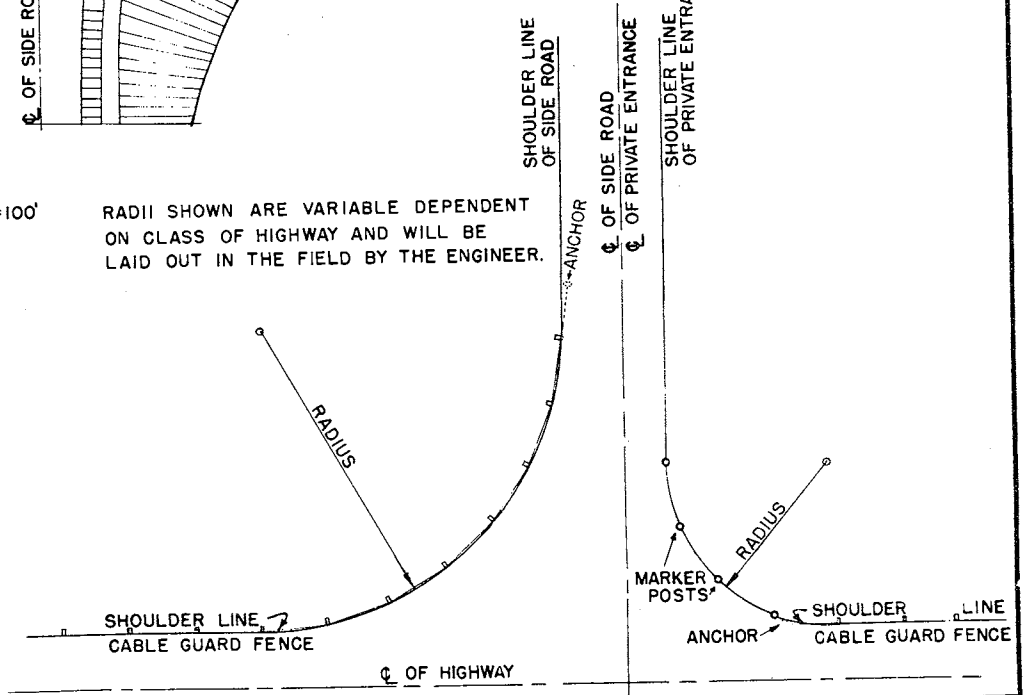
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____

S039(8)



RADIi SHOWN ARE VARIABLE DEPENDENT ON CLASS OF HIGHWAY AND WILL BE LAID OUT IN THE FIELD BY THE ENGINEER.



TYPICAL LAYOUT FOR PRIVATE ENTRANCES AND SIDE ROADS IN HIGH FILLS.

DETAILS OF PRIVATE ENTRANCE AND SIDE ROAD APPROACHES

STATE HIGHWAY COMMISSION OF WISC.

RECOMMENDED FOR APPROVAL:

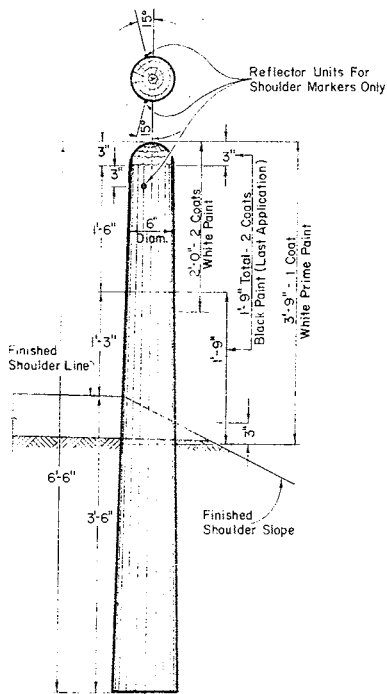
Frank Crane
DESIGN ENGINEER

W. Bluh
CONSTRUCTION ENGINEER

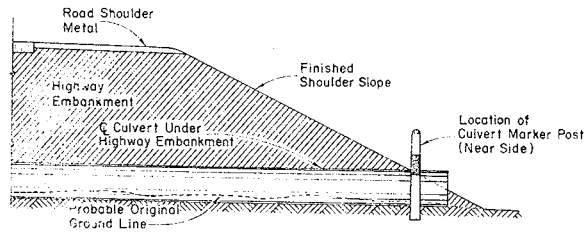
DATE

APPROVED: OCT. 1, 1945

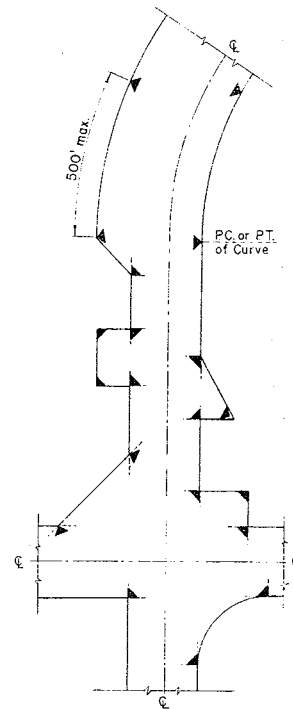
DRAWN: *W. Bluh*
CHECKED: _____ DATE: _____ STATE HIGHWAY ENGINEER



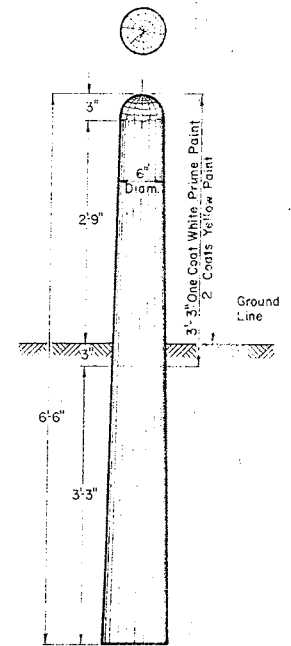
MARKER POST FOR ROAD SHOULDERS AND CULVERTS



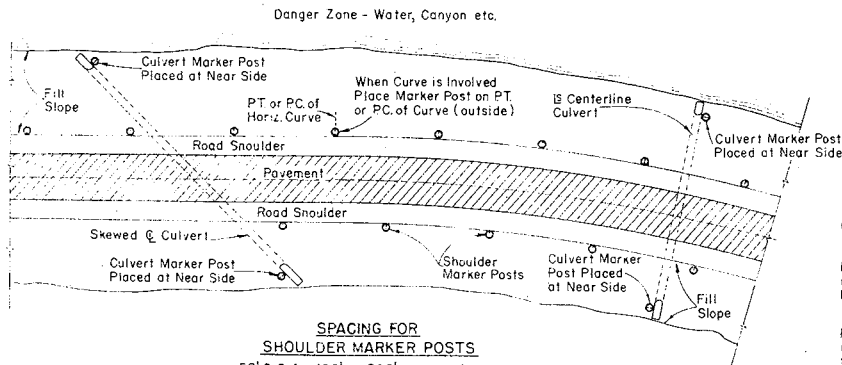
SECTION SHOWING RELATIVE LOCATION OF MARKER POST FOR CULVERTS



LOCATION DIAGRAM SHOWING TYPICAL LOCATIONS OF MARKER POSTS FOR RIGHT OF WAY



MARKER POST FOR RIGHT OF WAY



SPACING FOR SHOULDER MARKER POSTS
50' C.C for 100' to 500' Danger Zones
100' C.C for Over 500' Danger Zones
LOCATION DIAGRAM
SHOWING RELATIVE LOCATIONS OF SHOULDER MARKER POSTS
AND CULVERT MARKER POSTS

MARKER POSTS FOR ROAD SHOULDERS AND CULVERTS

MARKER POST FOR RIGHT OF WAY

GENERAL NOTES:

Details of Construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications Sections 2523, 4124 and 4125 and the applicable Special Provisions.

All posts for Road Shoulder Markers, Culvert Markers and Right of Way Markers are identical except for Painting and Reflector Units. All Posts shall be round and untreated and shall be either Northern White Cedar, Southern Yellow Pine, Norway Pine, White Pine or Jack Pine.

MARKER POSTS FOR RIGHT OF WAY

Right of Way Marker Posts shall be erected in advance of Grading Operations. Posts may be shaped and pointed prior to erection. Any damaged areas occurring to paint surface during erection or other subsequent operations must be repainted prior to acceptance.

Posts shall be placed at the outer limits of the Highway Right of Way, but entirely within the Right of Way and shall be so placed that the outer edge of the posts shall be tangent to the Right of Way line or lines extended. The exact location of all Right of Way Posts shall be staked in the field by the Engineer.

REFLECTOR UNITS

Reflector Units shall have plastic crystal lens 7/8" in diameter. Unit assembly shall be a minimum of 7/8" in length. Reflector Units shall be furnished with flared expanding metal clips for wood mounting. Units shall be mounted in tightest fit possible and securely stayed in posts. Reflector Units shall be installed in Road Shoulder Marker Posts only.

BID ITEMS

No 2523-5 Marker Posts Each
No 2523-6 Marker Posts for Right of Way Each

MARKER POSTS & MARKER POSTS FOR RIGHT OF WAY

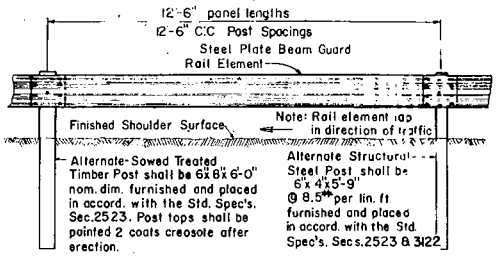
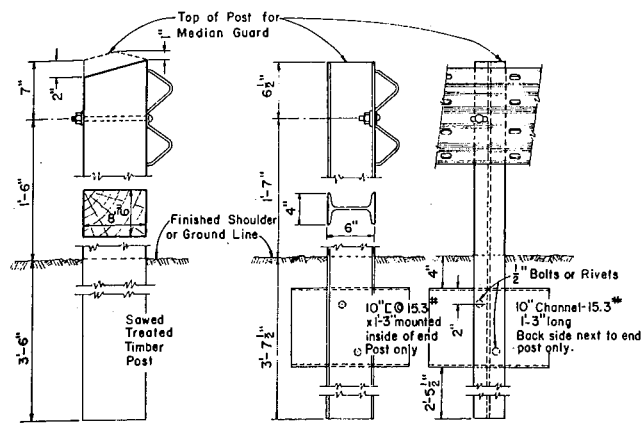
STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL

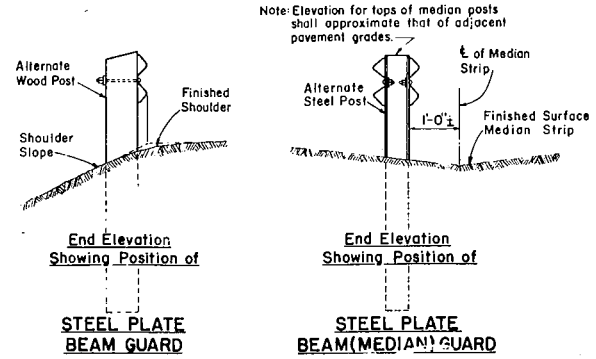
5/16/57
DATE

APPROVED

5/16/57
DATE



FRONT (Traffic Side) ELEVATION
STEEL PLATE BEAM GUARD OR
STEEL PLATE BEAM (MEDIAN) GUARD



GENERAL NOTES

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

The Steel Plate Beam Guard or (Median) Guard shall consist of steel 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 road side of the guard. The rail element shall be spliced by lapping in the direction of traffic or by butt joint with splice plate. 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 percent tested in tension. The minimum tensile strength of the rail element shall, when tested in conjunction with splices and end connections, be 30,000 lbs. The rail element when loaded as a simple beam, freely supported at each end on 12'-0" centers shall support a concentrated load of 1,500 lbs., applied at the center point, with a maximum deflection of 2 1/2 inches and shall support a concentrated load of 2,000 lbs. when tested in like manner with a maximum deflection of 3 1/2 inches.

PAINTING (When not furnished galvanized)

SHOP COAT - Promptly following fabrication, the plates for steel rail element and steel posts shall be thoroughly cleaned and painted with red lead primer or, upon the Engineers approval, an alternate of rust inhibitive primer may be used. All parts, hardware and appurtenant fittings for the complete beam guard assembly shall likewise be painted.

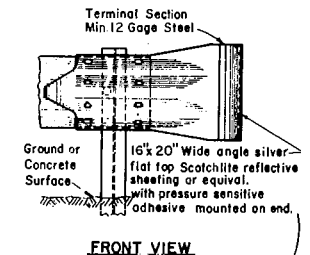
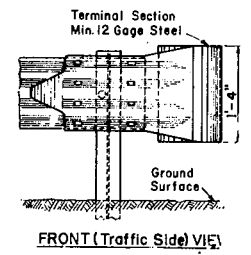
FIELD COAT - Following erection the steel rail elements, parts, hardware appurtenant fittings and steel posts shall be painted in accord with Standard Specifications with aluminum paint as provided in Section 3125.

Any damaged areas occurring to shop coat during transportation or erection shall be cleaned and painted with red lead or an approved rust inhibitive primer prior to any field coat painting.

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

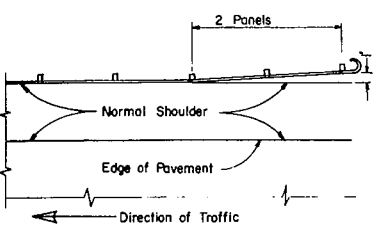
All threaded portions of fittings, fasteners and end cuts of bolts shall be pointed as specified immediately following erection.

ALTERNATE TYPE POSTS FOR
STEEL PLATE BEAM GUARD AND
STEEL PLATE BEAM (MEDIAN) GUARD

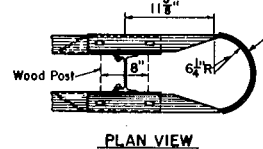
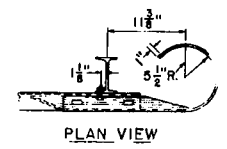


TERMINAL SECTION DETAILS FOR
STEEL PLATE BEAM GUARD

TERMINAL SECTION DETAILS FOR
STEEL PLATE BEAM (MEDIAN) GUARD



LOCATION DIAGRAM FOR STEEL PLATE BEAM GUARD INTERMEDIATE SECTIONS



CIRCULAR STEEL PLATE ELEMENT

Steel plate beam elements for beam guard or (median) guard for radii of 20 ft to 150 ft shall be shop-curved prior to shop coat painting. Steel plate beam elements shall be bent to true circular curvature, void of kinks. Kinks shall be cause for rejection.

Steel plate beam elements shall have a minimum bending radius of 20 feet.

ALTERNATE POSTS

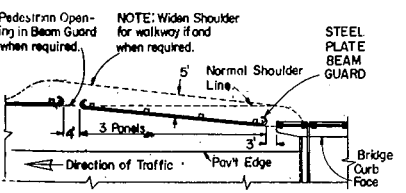
One type of post shall be used for Steel Plate Beam Guard and/or Steel Plate Beam (Median) Guard throughout the length of each project unless specific authorization is obtained from the Engineer to use alternate types.

GALVANIZED-ALTERNATE

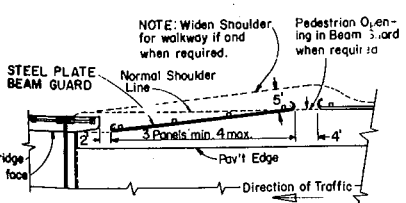
Steel rail elements may be furnished galvanized. Spalter coating shall be the hot dip process in accord with AASHTO designation M36. Only one type surface treatment (either painted or galvanized) may be used throughout the length of each project unless specific authorization is obtained from the Engineer to do otherwise.

MEASUREMENT & PAYMENT

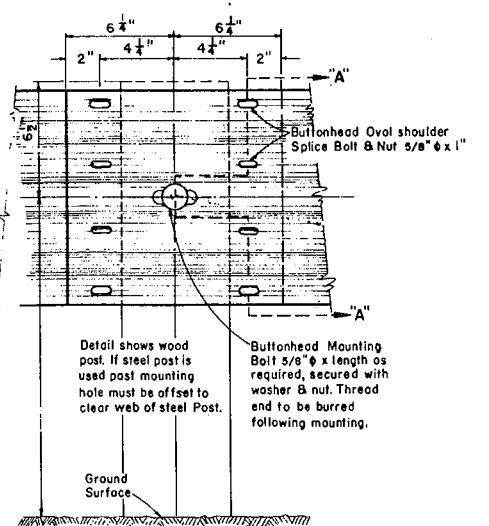
The items of "Class B" Steel Plate Beam Guard and "Class B" Steel Plate Beam (Median) Guard shall be measured and paid for at the contract unit price per linear foot, measured in place by length in linear feet from end to end - out to out of steel plate terminal sections, which price shall be full compensation for furnishing and placing all materials and performing all work to completion in accord with the plans and the Standard Specifications Section 2523 and the applicable Special Provisions.



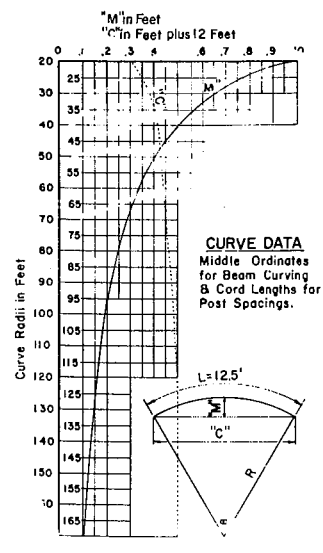
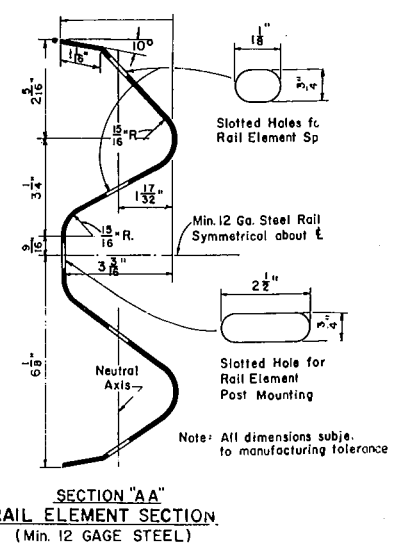
LOCATION DIAGRAM FOR STEEL PLATE BEAM GUARD AT BRIDGE EXITS

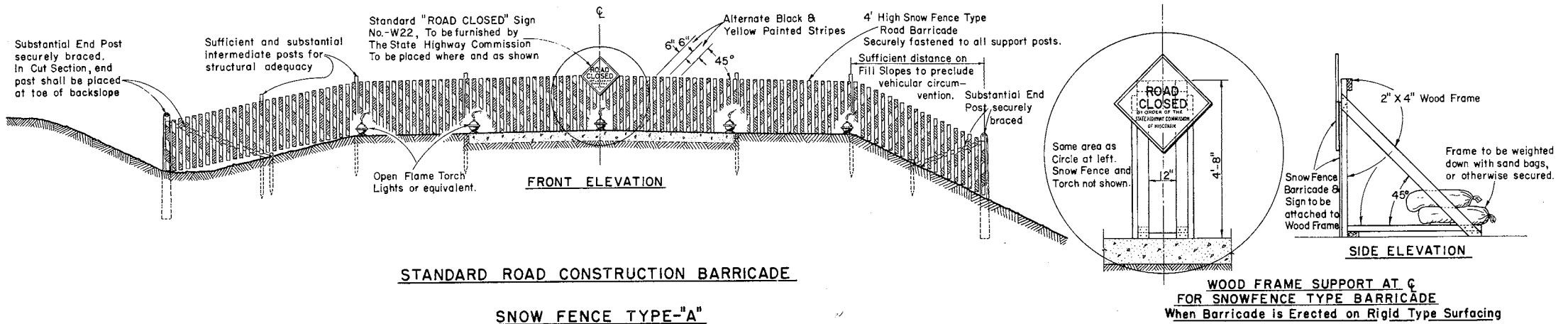


LOCATION DIAGRAM FOR STEEL PLATE BEAM GUARD AT BRIDGE APPROACHES



RAIL ELEMENT SPLICING & POST MOUNTING DETAILS





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. Pelt
ENGINEER OF DESIGN

APPROVED:

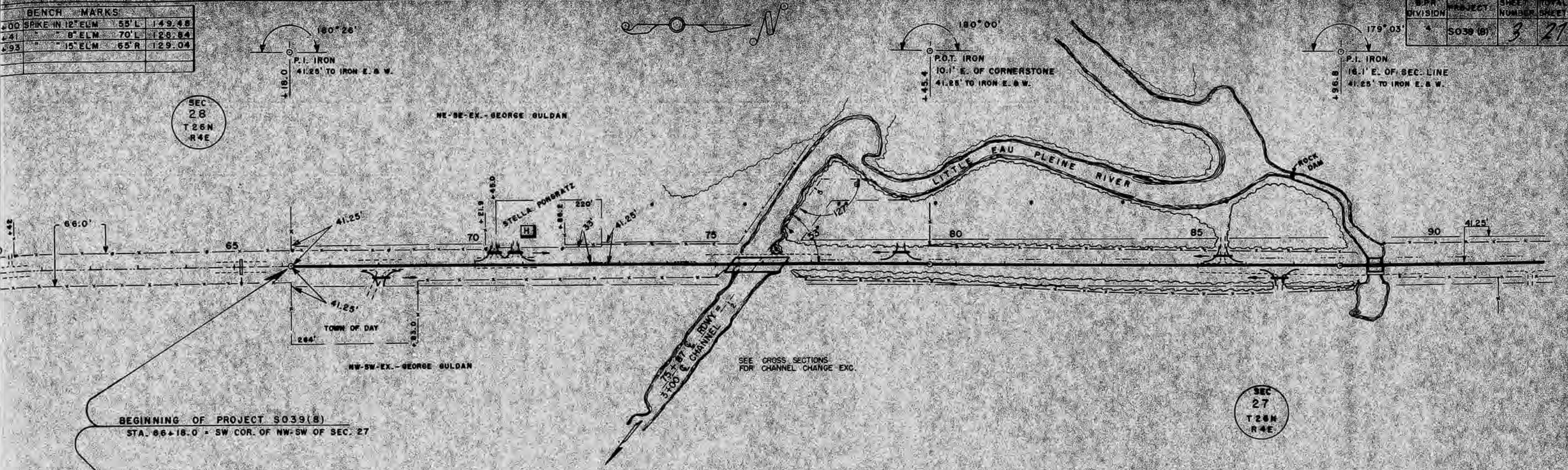
6/2/55
DATE

E. C. Rusthman
STATE HIGHWAY ENGINEER

BENCH MARKS			
400	SPIKE IN 12" ELM	55' L	149.48
441	" " 8" ELM	70' L	128.84
493	" " 15" ELM	65' R	129.04

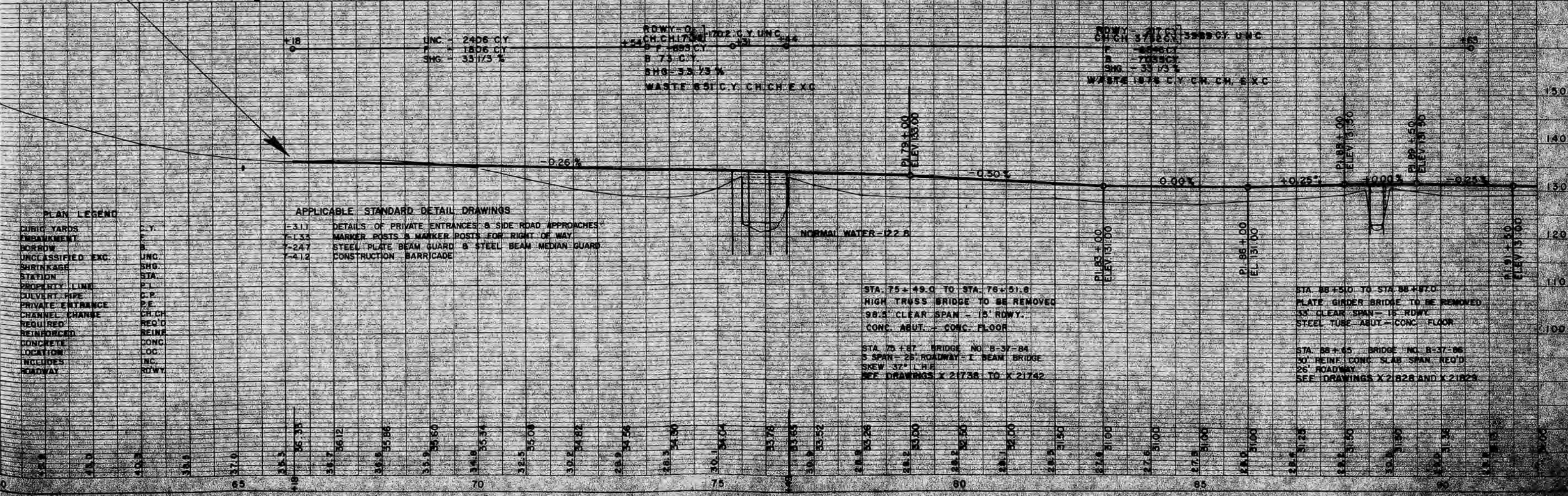
SEC 28
T26N
R4E

SEC 27
T26N
R4E



BEGINNING OF PROJECT S039(8)
STA. 66+18.0 - SW COR. OF NW-SW OF SEC. 27

NET LENGTH OF C-LINE STA. 66+18.0 TO STA. 88+96.8 = 2,278.8 LINEAL FT.



PLAN LEGEND

CUBIC YARDS	C.Y.
EMBANKMENT	E
BORROW	B
UNCLASSIFIED EXC.	UNC.
SHRINKAGE	SHG.
STATION	STA.
PROPERTY LINE	P.L.
CULVERT PIPE	C.P.
PRIVATE ENTRANCE	P.E.
CHANNEL CHANGE	CH.CH.
REQUIRED	REQ'D
REINFORCED	REINF.
CONCRETE	CONC.
LOCATION	LOC.
INCLUDES	INC.
ROADWAY	RD.WAY

APPLICABLE STANDARD DETAIL DRAWINGS

F-3.11	DETAILS OF PRIVATE ENTRANCES & SIDE ROAD APPROACHES
F-1.33	MARKER POSTS & MARKER POSTS FOR RIGHT OF WAY
F-2.47	STEEL PLATE BEAM GUARD & STEEL BEAM MEDIAN GUARD
F-4.12	CONSTRUCTION BARRICADE

STA. 75+49.0 TO STA. 76+51.8
HIGH TRUSS BRIDGE TO BE REMOVED
98.5' CLEAR SPAN - 15' ROWY.
CONC. ABUT. - CONC. FLOOR

STA. 75+87 BRIDGE NO. B-37-84
5 SPAN - 25' ROADWAY - I BEAM BRIDGE
SKEW 37° L.H.E.
SEE DRAWINGS X 21738 TO X 21742

STA. 88+50 TO STA. 88+96.8
PLATE GIRDER BRIDGE TO BE REMOVED
53' CLEAR SPAN - 15' ROWY.
STEEL TUBE ABUT. - CONC. FLOOR

STA. 88+65 BRIDGE NO. B-37-86
50' REINF. CONC. SLAB SPAN REQ'D
26' ROADWAY
SEE DRAWINGS X 21828 AND X 21829

D.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S 039(8)	4	27

BENCH MARKS			
6	92+93	SPIKE IN 15" ELM	65' R 129.04
7	100+52	" 18" OAK	95' R 133.79
8	110+40	" P. POLE	33' L 144.72
	99+25	TOP U.S.G.S.	33' L 1132.51

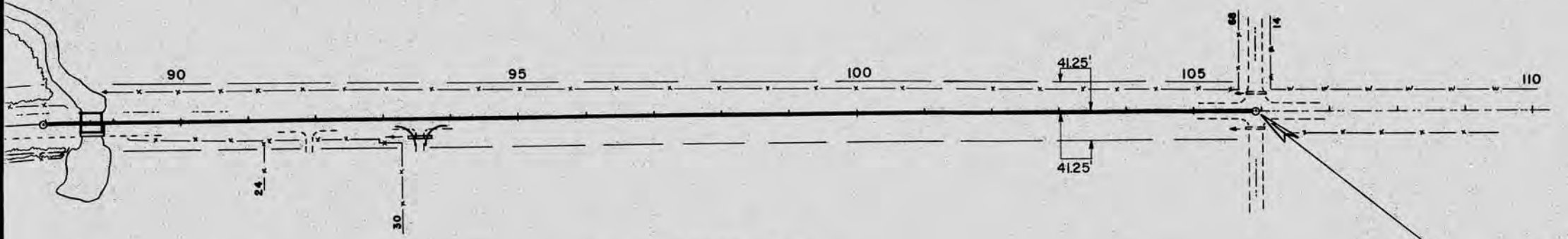
179° 05'
P.I. IRON
18.1' E. OF SEC. LINE
41.25' TO IRON E. & W.
+96.8

179° 25'
CORNERSTONE
43.3' TO P. POLE NE
40.4' TO STOP SIGN NE
40.2' TO T. POLE SE
+91.5

SEC
28
T26N
R4E

SEC.
21
T26N
R4E

SE-NE - OTTO STOCKHEIMER - NE-NE



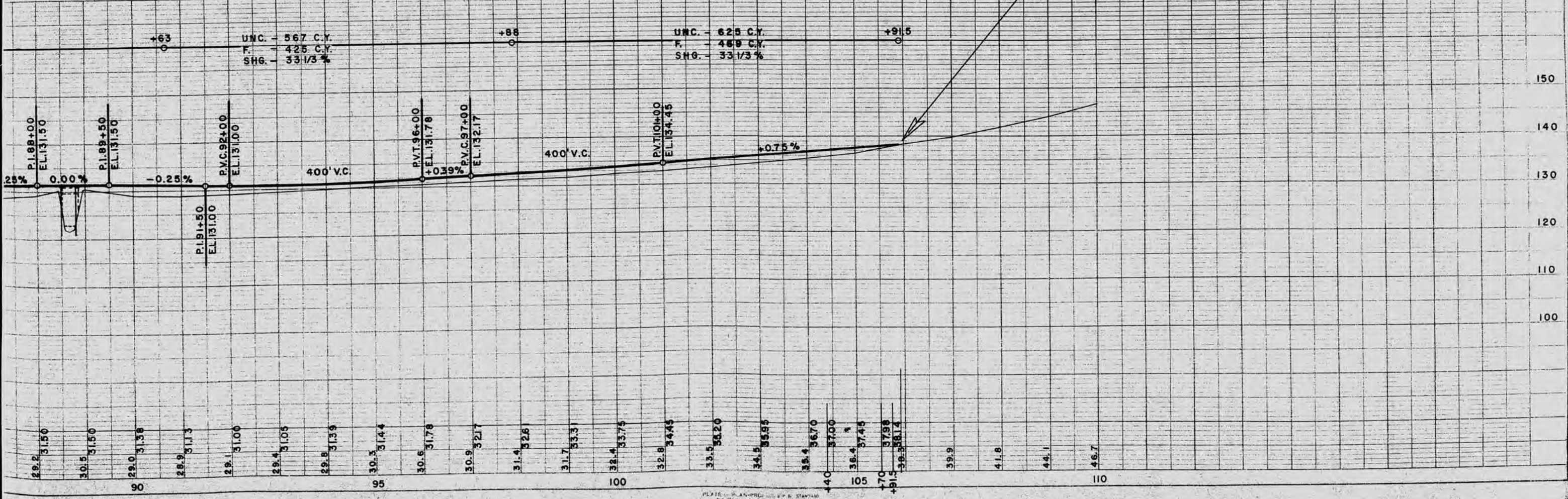
SEC
27
T26N
R4E

SEC.
22
T26N
R4E

SW-NW - GEORGE GULDAN - NW-NW

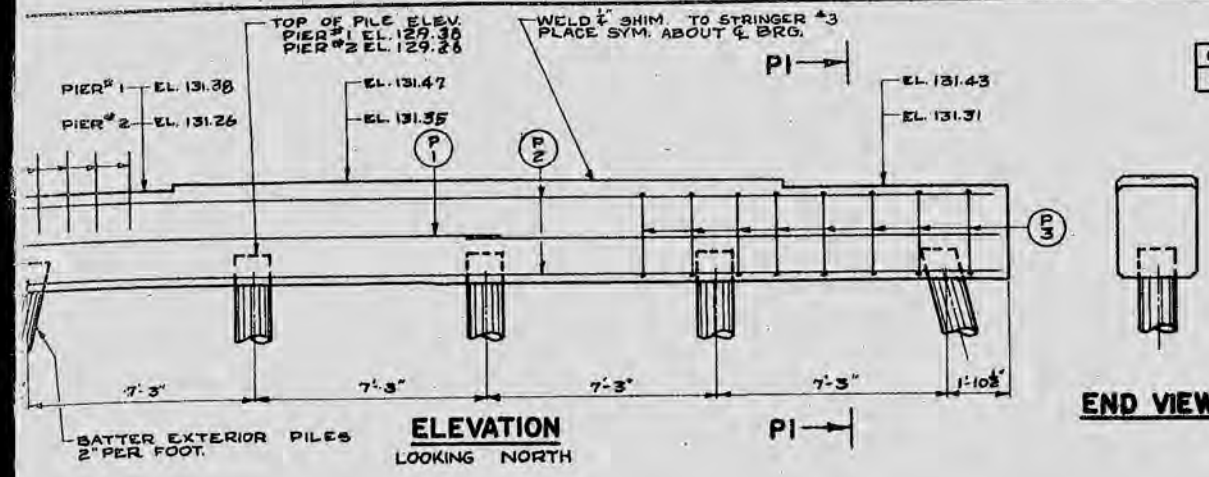
END OF PROJECT S 039(8)
STA. 105 + 91.5 = NW COR. OF SEC. 27

NET LENGTH OF Q STA. 88 + 96.8 TO STA. 105 + 91.5 = 1,694.7 LINEAL FT.



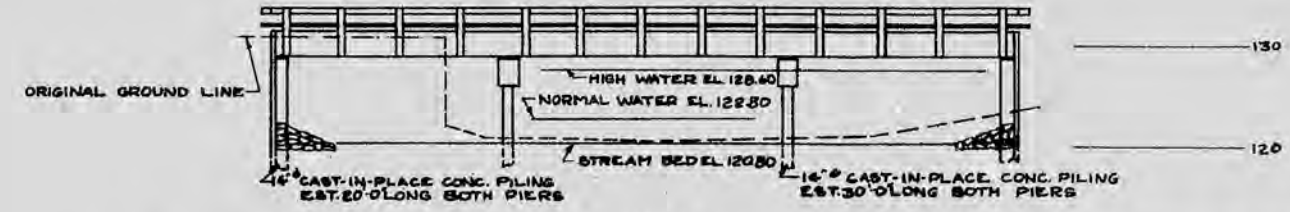
BENCH MARK

NO.	LOC.	DESCRIPTION	ELEV.
5	47+41.00	SPIKE IN 6" ELM	70' L. 128.84

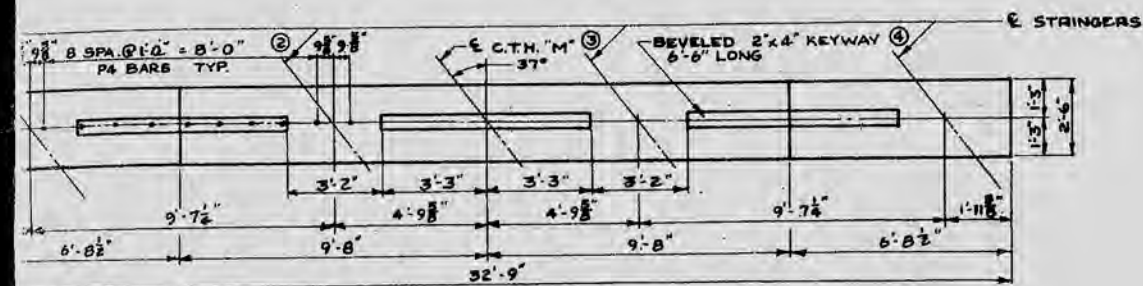


ELEVATION
LOOKING NORTH

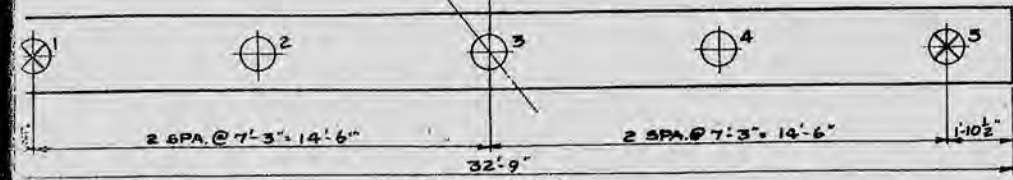
END VIEW



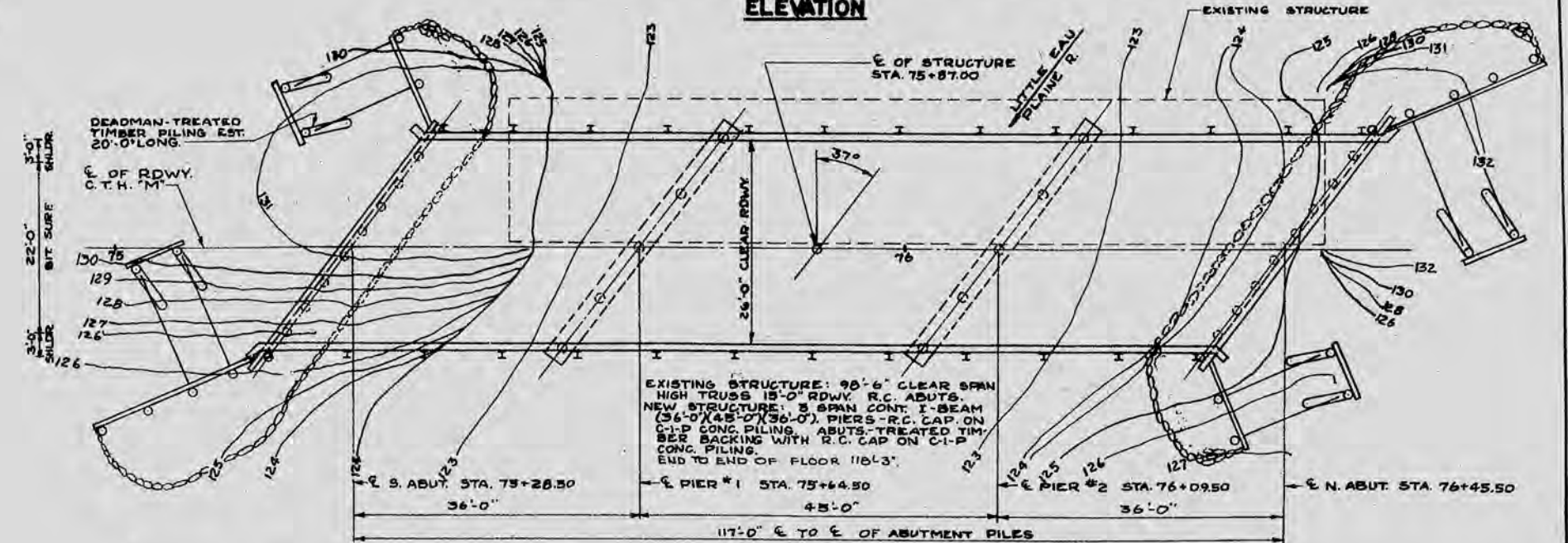
ELEVATION



PLAN



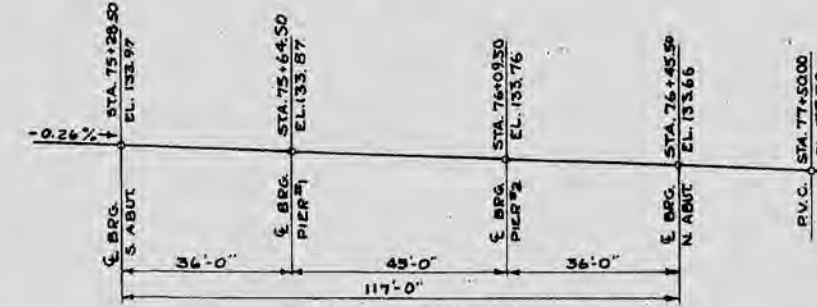
PILE PLAN



LAYOUT

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 ALL CONCRETE MASONRY SHALL BE GRADE "AA".
 BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.
 THE USE OF STRUCTURAL GRADE BAR STEEL REINFORCEMENT IS PROHIBITED.
 PILING AT ABUTMENTS SHALL BE 14" CAST-IN-PLACE CONCRETE PILES EST. 20'-0" LONG & DRIVEN TO A MIN. BEARING VALUE OF 20 TONS PER PILE.
 PILING USED AS ABUTMENT WING TIES SHALL BE TREATED TIMBER PILING EST. 20'-0" LONG & DRIVEN TO A MINIMUM BEARING VALUE OF 20 TONS PER PILE.
 PILING AT PIERS SHALL BE 14" CAST-IN-PLACE CONCRETE PILES, EST. 30'-0" LONG & DRIVEN TO A MINIMUM BEARING VALUE OF 30 TONS PER PILE.
 THE FRONT FACE OF THE ABUTMENTS SHALL BE RIPRAP WITH HEAVY RIPRAP AS SHOWN ON THIS SHEET AND ON X21742 THE SLOPE IN FRONT OF THE WINGS SHALL COVERED WITH HEAVY RIPRAP TO A MINIMUM THICKNESS OF 2'-0".
 BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
 ALL FIELD CONNECTIONS SHALL BE 3/4" RIVETS UNLESS OTHERWISE SHOWN OR NOTED.
 IN LIEU OF RIVETS AS CALLED FOR ON THE PLANS, THE CONTRACTOR MAY SUBSTITUTE 3/4" HIGH-TENSILE STRENGTH BOLTS.
 THE 3'x10' BULKHEAD PLANK IN THE BODY OF THE ABUTMENTS MAY BE SPLICED. SPLICES MUST BE AT 1/4 OF PILES AND MUST BE STAGGERED IN ADJACENT PLANKS.



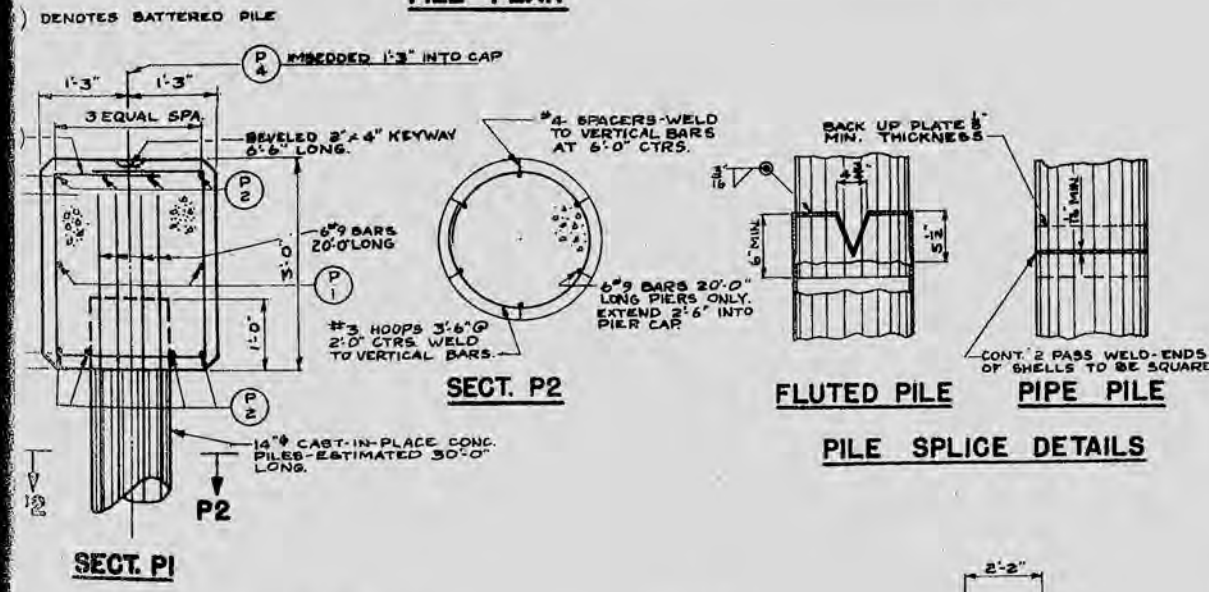
GRADE DIAGRAM

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	ABUTS.	PIERS	TOTAL
REMOVING OLD BRIDGE	L.S.	—	—	—	1
EXCAVATION FOR STRUCTURES	C.Y.	—	50	—	50
CONCRETE MASONRY	C.Y.	80.6	23.3	18.6	122.5
BAR STEEL REINFORCEMENT	LB.	17,060	1,560	1,360	19,980
STRUCTURAL CARBON STEEL	LB.	42,680	720	—	43,400
TREATED LUMBER & TIMBER	M.B.M.	—	5.59	—	5.59
TREATED TIMBER PILING DEL.	L.F.	—	196	—	196
TREATED TIMBER PILING DR.	L.F.	—	160	—	160
CAST-IN-PLACE CONC. TEST PILING	L.S.	—	—	—	1
CAST-IN-PLACE CONC. PILING DEL.	L.F.	—	620	270	890
CAST-IN-PLACE CONC. PILING DR.	L.F.	—	360	190	550
STEEL RAILING	L.F.	242	—	—	242
HEAVY RIPRAP	C.Y.	—	70	—	70
BEARING PADS	SF.	18	—	—	18
NON BID ITEMS					

LIST OF DRAWINGS

- 1. GENERAL PLAN & PIERS X 21738
- 2. SUPER STRUCTURE X 21739
- 3. SUPER STRUCTURE X 21740
- 4. SUPER STRUCTURE X 21741
- 5. ABUTMENTS X 21742



BILL OF BARS 1360*

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
P1	8	4	16-9	SHOWN	CAP - LONGITUDINAL	
P2	16	6	32-0	SHOWN	"	
P3	44	4	10-6	1-6	VERTICAL	A
P4	58	3	3-3	1-0	& SUPER.	



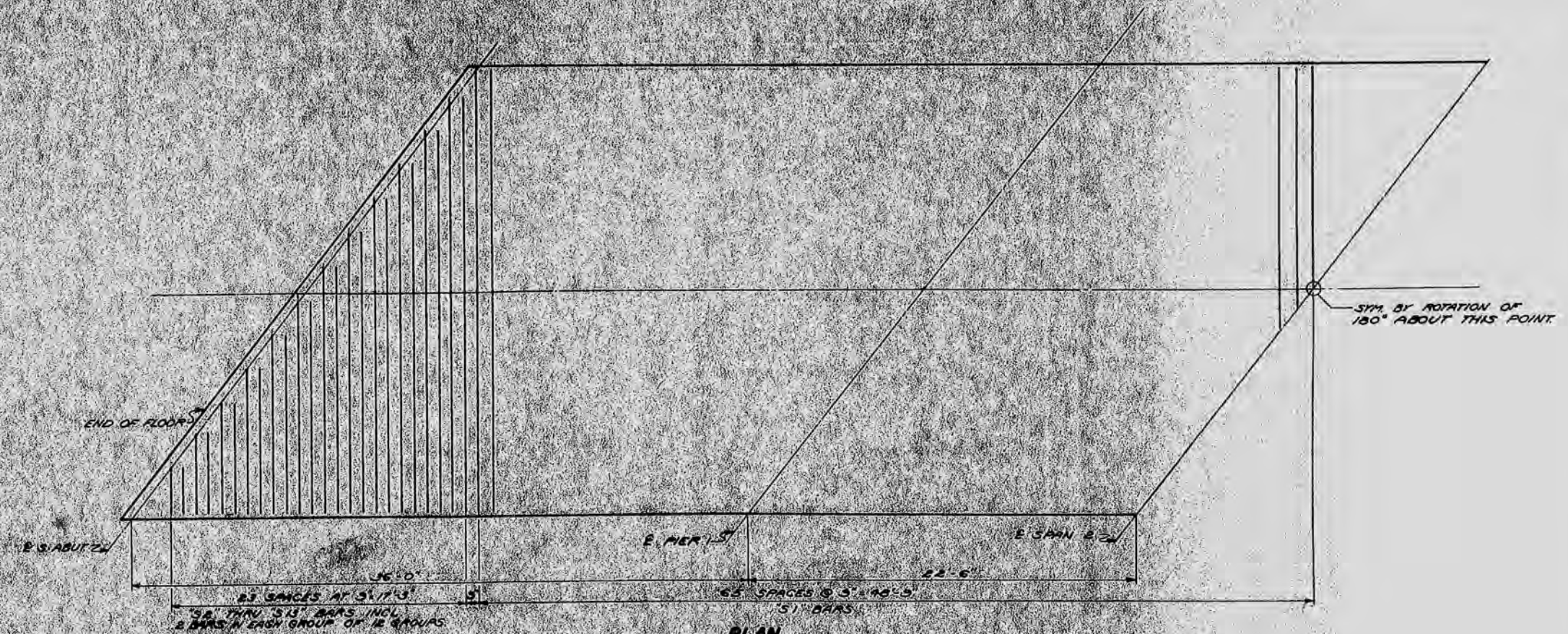
DETAIL A

* DRIVE ONE 30'-0" LONG CAST-IN-PLACE CONCRETE TEST PILE AT S. ABUT. & ONE 45'-0" LONG CAST-IN-PLACE CONCRETE TEST PILE AT PIER 2.

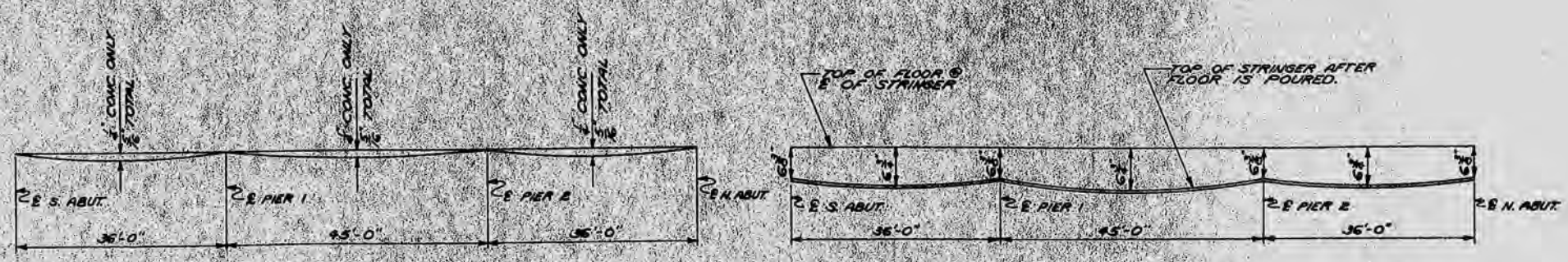
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
GENERAL PLAN & PIERS				
CO. MARATHON	DAY	STA. 75+87.00		
SECTION 27+28	TOWN 26 N	RANGE 4 E		
DESIGN SPEC. A.A. & H.O. 6	LOADING H 16	SHEET 1957		
DATE 7-7-60	DESIGN A.C.G.	DRAWN	CKD. E.C.L.	
SUBMITTED	<i>W. F. Schultz</i> ENGINEER OF BRIDGES			
APPROVED	<i>W. F. Schultz</i> STATE HIGHWAY ENGINEER			
STRUCTURE B - 37 - 84			SHEET 1 OF 5	

BILL OF BARS (17065)
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

MARK NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
S1	8#8	24'-0"	9"	TRANSVERSE BOTTOM & TOP	
S2	8	24'-6"	9"		
S3	8	22'-6"	9"		
S4	8	20'-6"	9"		
S5	8	18'-6"	9"		
S6	8	16'-6"	9"		
S7	8	14'-6"	9"		
S8	8	12'-6"	9"		
S9	8	10'-6"	9"		
S10	8	8'-6"	9"		
S11	8	6'-6"	9"		
S12	8	4'-6"	9"		
S13	8	2'-9"	9"		
S14	1#8	30'-0"	SHOWN	LONGITUDINAL BOTTOM & TOP OVER PIERS	
S15	1#6	15'-0"			



PLAN
SHOWING TRANSVERSE BAR STEEL REINFORCEMENT AS SHOWN CAN BE ALTERED SLIGHTLY TO AVOID INTERFERENCE WITH SHEAR LUGS

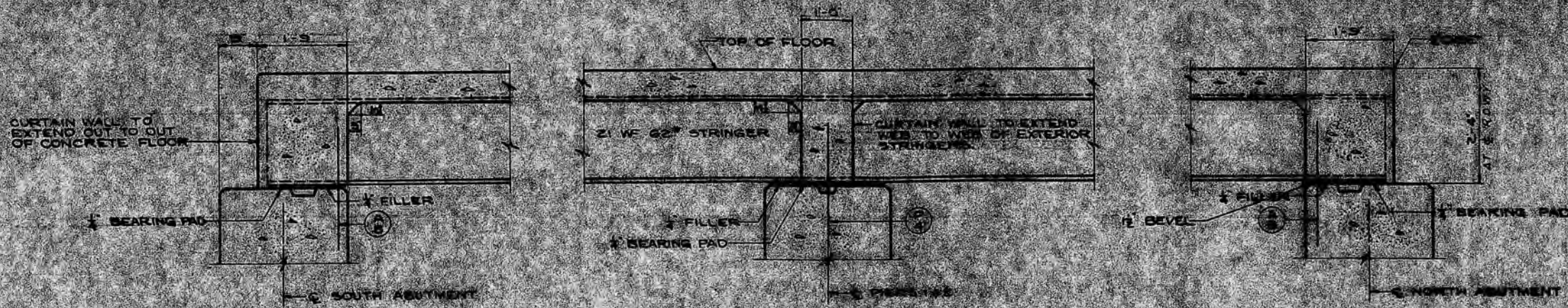


DEFLECTION DIAGRAM

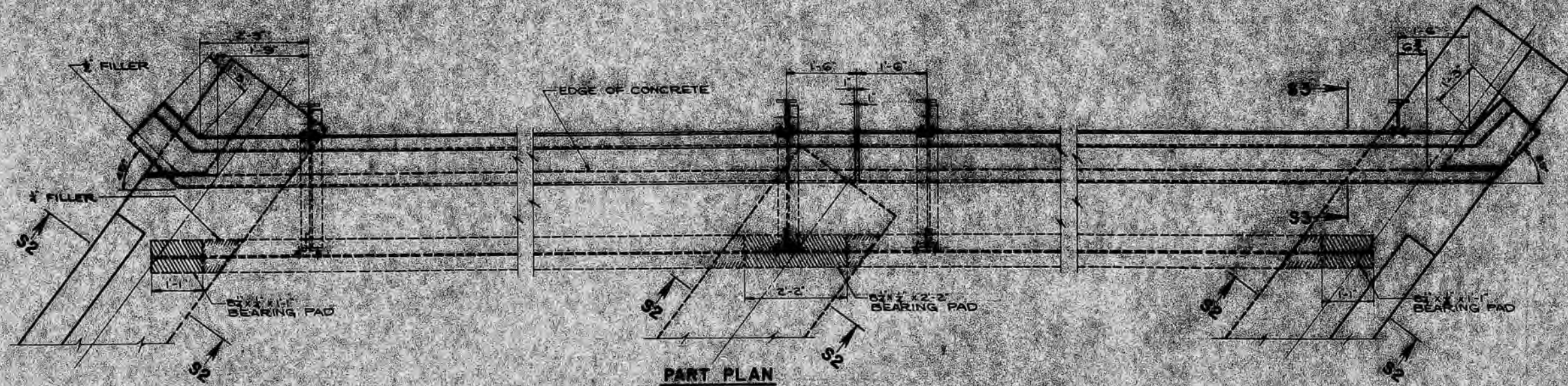
NOTE: SLAB THICKNESS FIGURES SHOWN ARE THEORETICAL AND ARE SUBJECT TO CORRECTION TO MEET VARIABLE FIELD CONDITIONS.

FORMING DIAGRAM

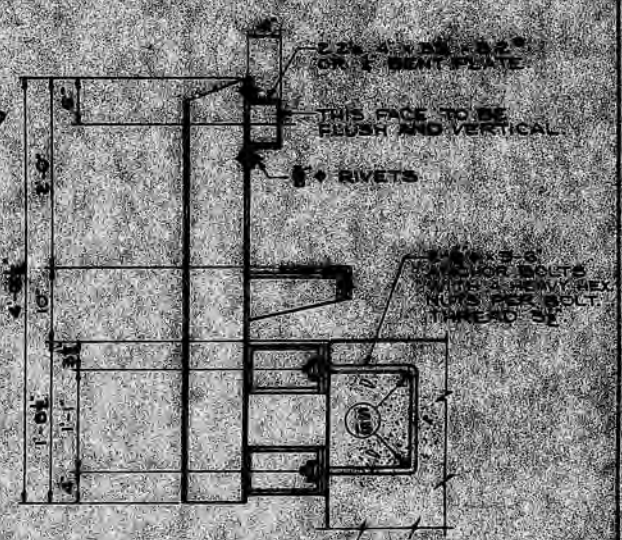
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN		
	SUPERSTRUCTURE		
	DESIGN SPEC. AASHTO 57	LOADING H 18	SPC 1357
	DATE 5-7-66	DESIGN A.C.S.	DRAWN BY C.R.O. h.h.l.
STRUCTURE	B-37-84	SHEET	3 of 5



SECTION S2

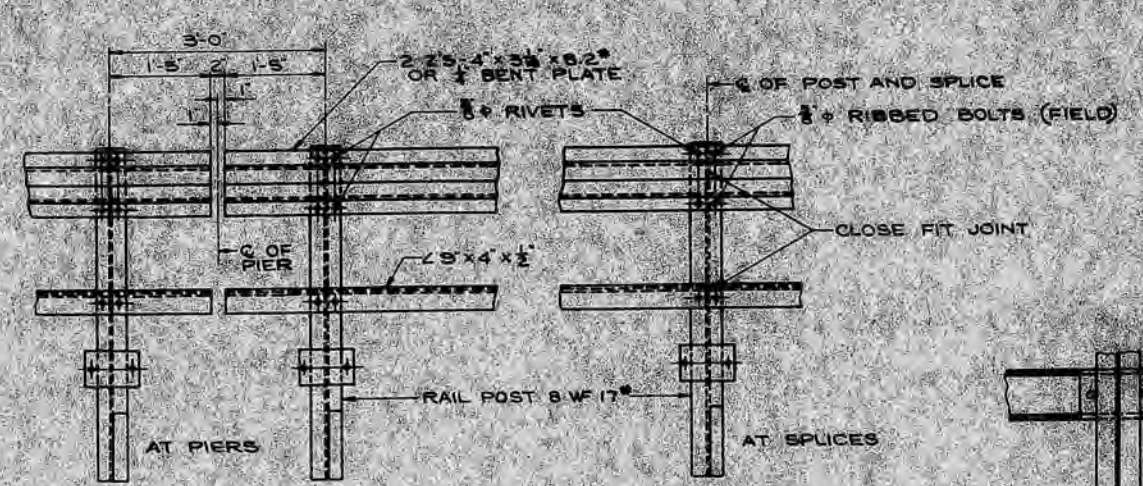


PART PLAN

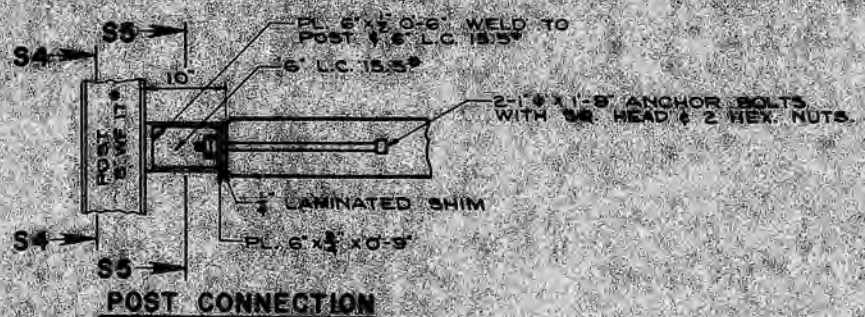


SECTION S3

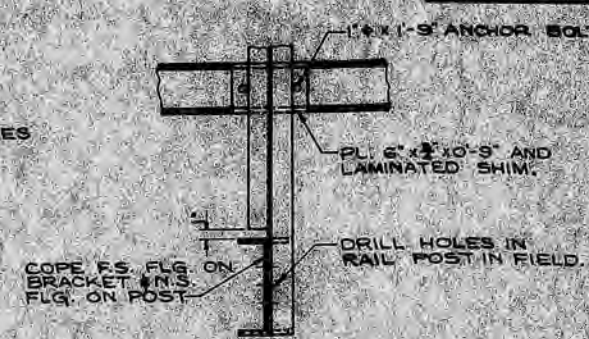
FOR DETAILS NOT SHOWN SEE K21759



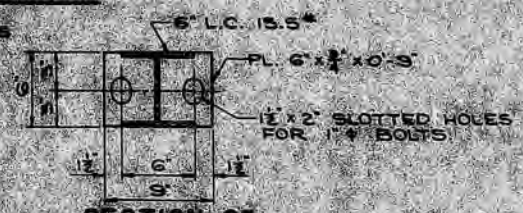
PART ELEVATION OF RAILING



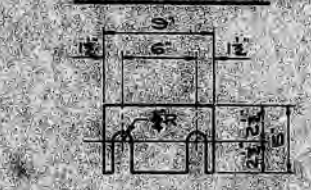
POST CONNECTION



SECTION S4



SECTION S5



LAMINATED SHIM

REVISED	STATE HIGHWAY COMMISSION OF MICHIGAN
	SUPERSTRUCTURE
	DESIGN SPEC. AASHTO 11/10/1975
	DATE 5-7-42
STRUCTURE	B-37-84

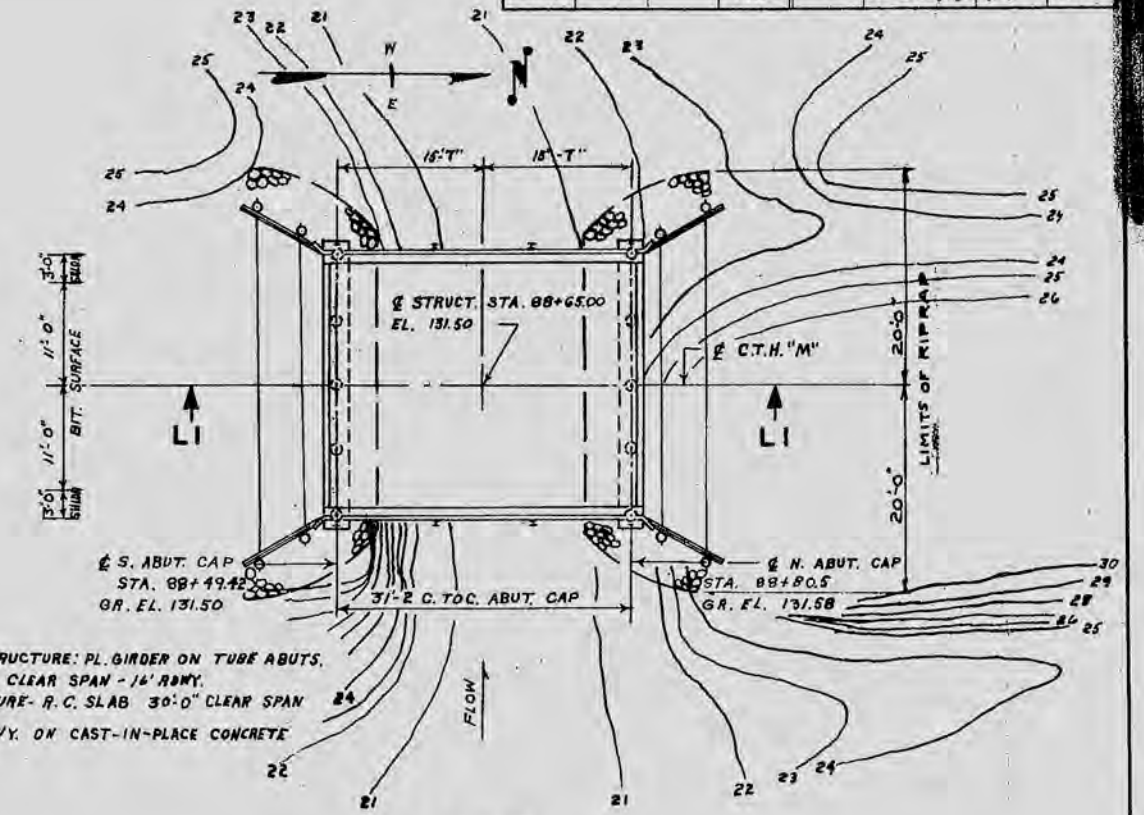
BENCH MARK			
NO	STATION	LOCATION	ELEVATION
6	52+9.3	SPIKE IN 15' ELM 65'-0" A	129.04

GENERAL NOTES

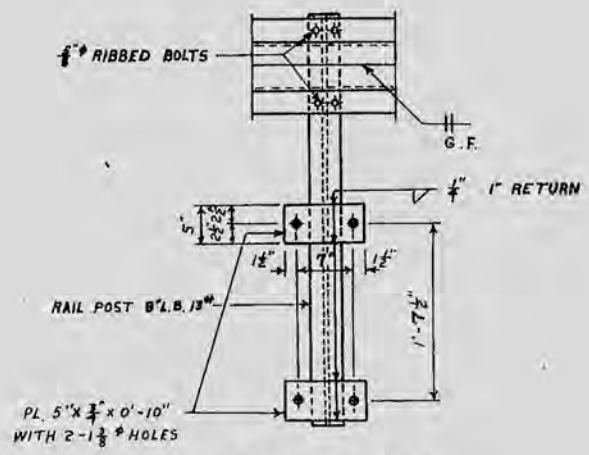
DRAWINGS SHALL NOT BE SCALED.
 ALL CONCRETE MASONRY SHALL BE GRADE "AA".
 BEVEL ALL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.
 BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED OR NOTED.
 THE USE OF STRUCTURAL GRADE BAR STEEL REINF. IS PROHIBITED.
 THE 4"x10" BULKHEAD PLANK IN THE BODY OF THE ABUTMENT MAY BE SPLICED.
 SPLICES SHALL BE AT THE 1/2 OF PILE AND SHALL BE STAGGERED IN ADJACENT PLANKS.
 THE PILING AT THE ABUTMENTS SHALL BE CAST-IN-PLACE CONCRETE PILING.
 THE PILING AT THE ABUTMENTS SHALL BE CAST-IN-PLACE CONCRETE PILING.
 PILING 35'-0" LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 20 TONS PER PILE.
 ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH GRANULAR BACKFILL TO THE ORIGINAL GROUND LINE. PAYMENT WILL BE MADE ONLY FOR MATERIAL ACTUALLY PLACED WITHIN THE LIMITS SPECIFIED IN "EXCAVATION FOR STRUCTURES".
 THE FRONT FACE OF THE ABUTMENTS SHALL BE RIPRAPPED AS SHOWN ON THIS SHEET AND X21829. THE SLOPE IN FRONT OF THE WINGS SHALL BE COVERED WITH HEAVY RIPRAP TO A MINIMUM THICKNESS OF 2'-0".
 ALL RIVETS SHALL BE 5/8" UNLESS OTHERWISE SPECIFIED.
 DRIVE TEST PILE AT SOUTH ABUTMENT.

TOTAL ESTIMATED QUANTITIES

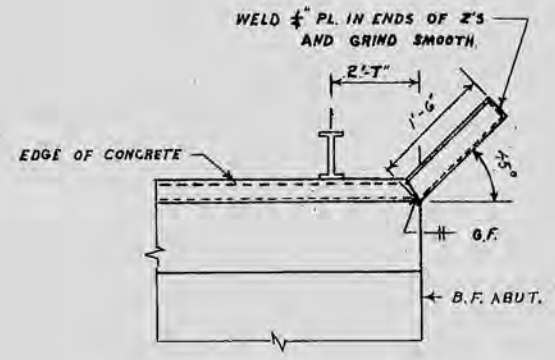
REMOVING OLD BRIDGE	1 L.S.
EXCAVATION FOR STRUCTURES	40 C.Y.
GRANULAR BACKFILL	30 C.Y.
CONCRETE MASONRY	584 C.Y.
BAR STEEL REINFORCEMENT	11,160 LB.
STRUCTURAL CARBON STEEL	680 LB.
TREATED LUMBER AND TIMBER	45 MBF
CAST-IN-PLACE CONCRETE TEST PILING (1 @ 45'-0")	1 L.S.
CAST-IN-PLACE CONCRETE PILING (DELIVERED)	585 L.F.
CAST-IN-PLACE CONCRETE PILING (DRIVEN)	445 L.F.
STEEL RAILING	75 L.F.
HEAVY RIPRAP	60 C.Y.



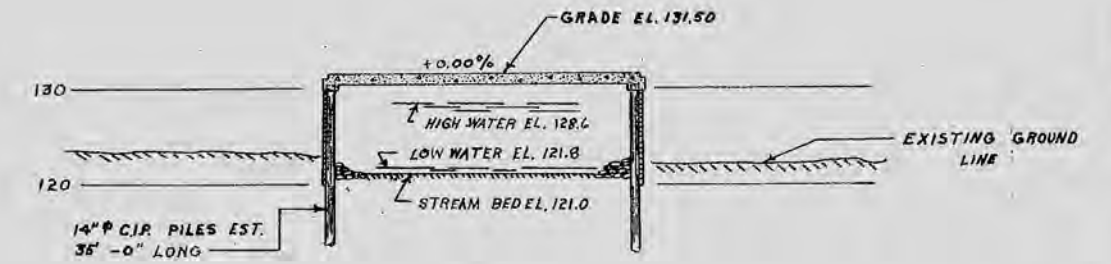
LAYOUT



RAIL POSTS



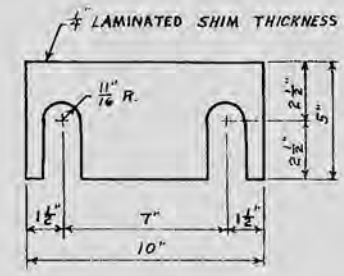
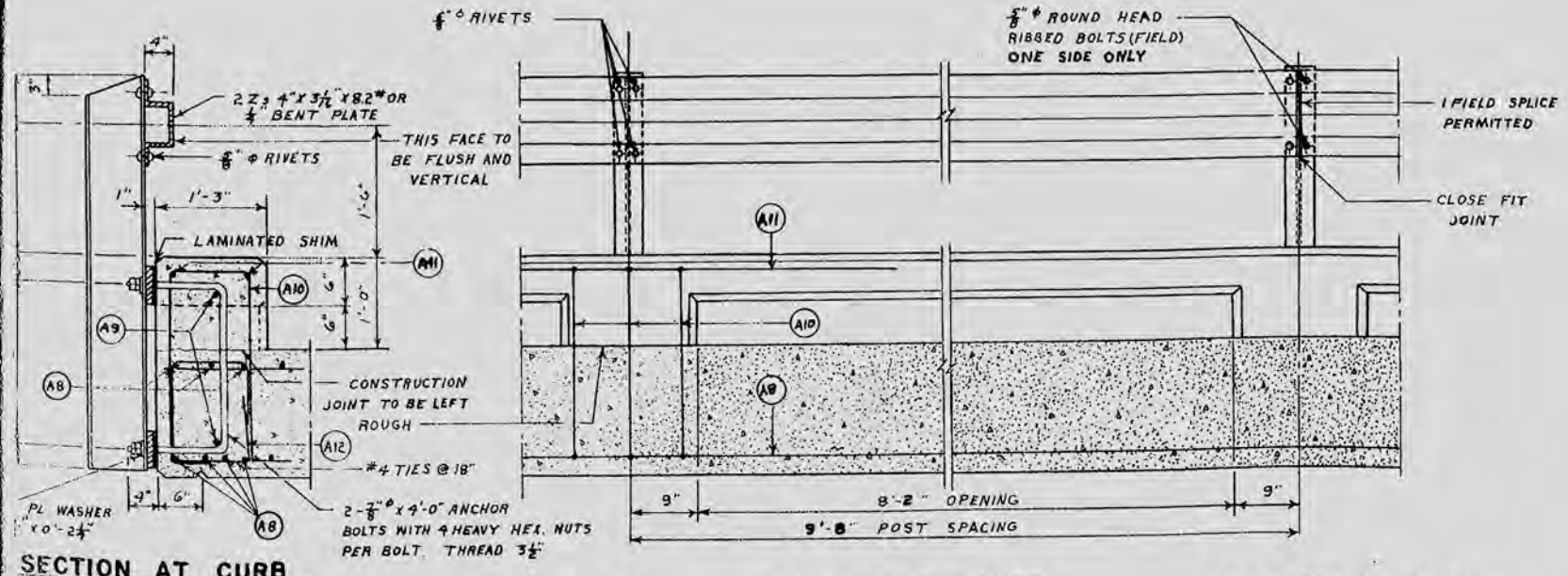
PART PLAN AT ABUT.



SECTION LI

LIST OF DRAWINGS

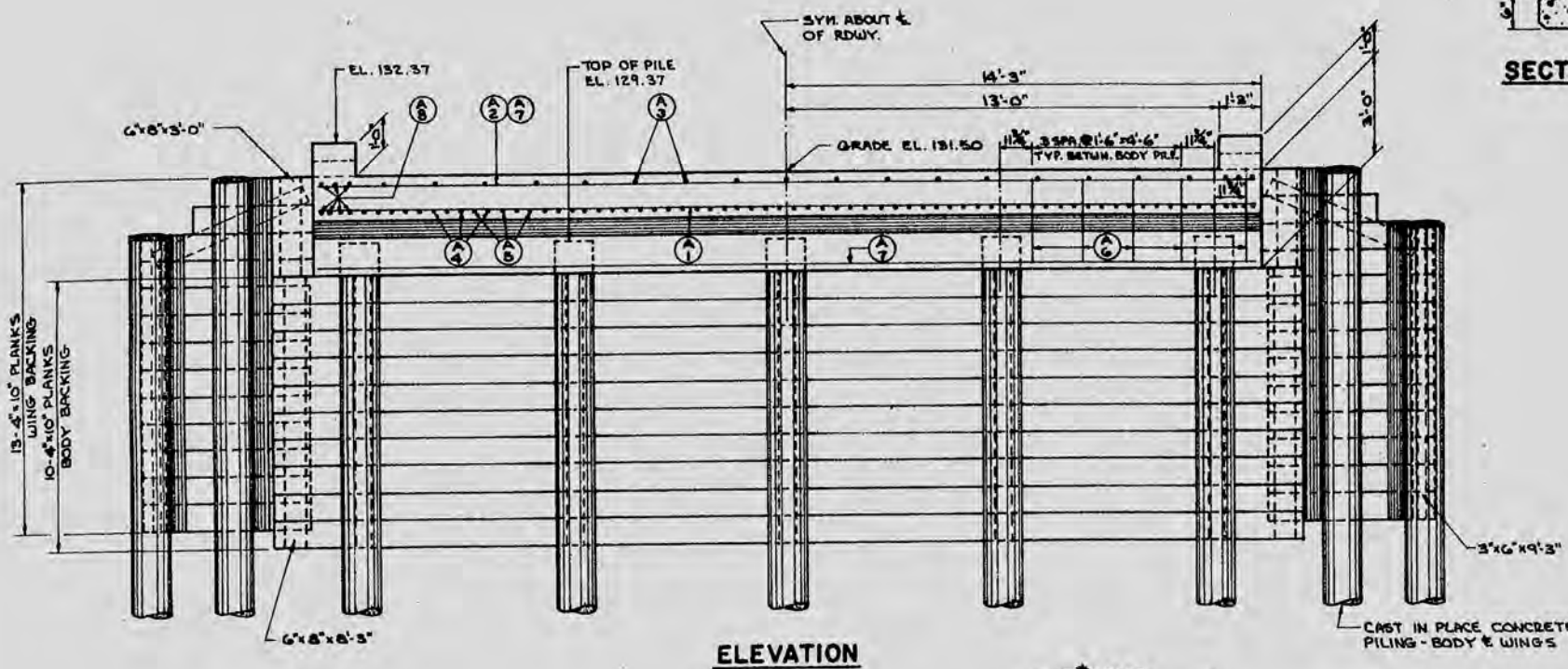
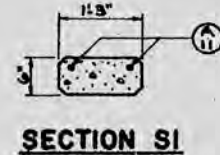
1. LAYOUT & RAIL DETAIL	X 21828
2. SUPERSTRUCTURE & ABUTMENT	X 21829



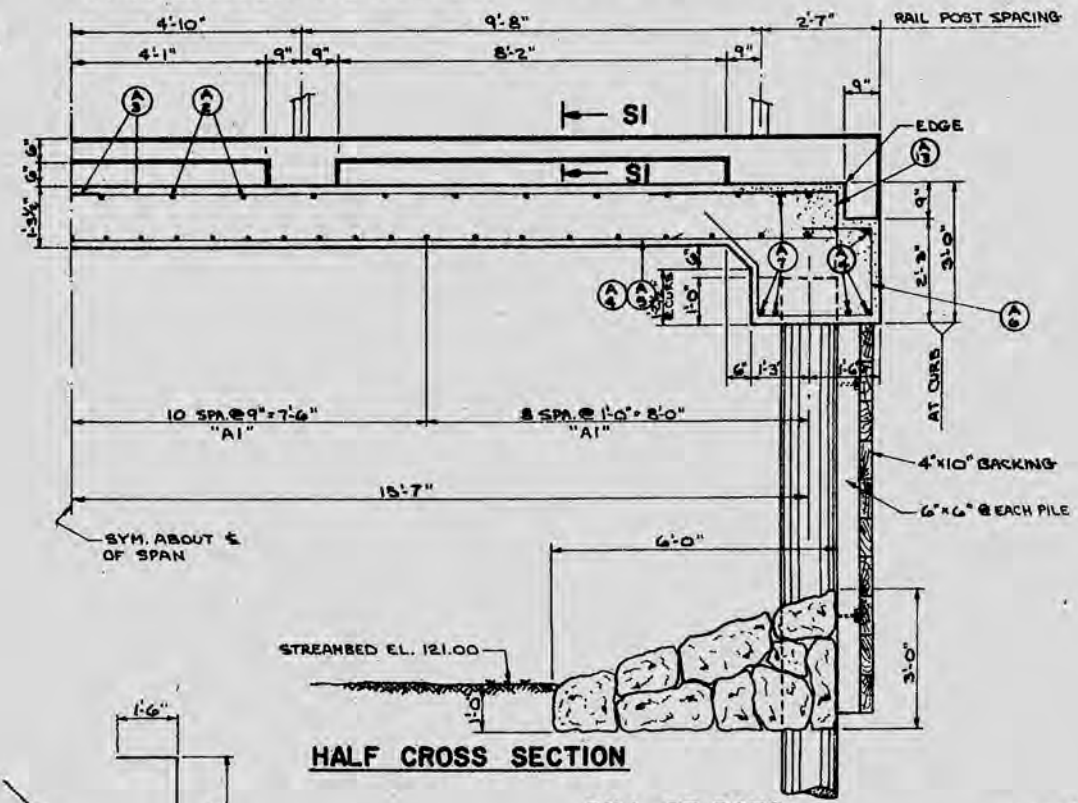
LAMINATED SHIM

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
	LAYOUT & RAIL DETAIL			
	CO. MARATHON	CITY DAY	STA. 88+65	
	SECTION 27 F 28	TOWN 26 N	RANGE 4 E	
	DESIGN SPEC. AASHO 57	LOADING H-18	DATE 6-1-60	DESIGN J.W.
	DRAWN M.H. CKD. B.P.R.			
	SUBMITTED: <i>V.B. Schultz</i> ENGINEER OF BRIDGES			
	APPROVED: <i>W.F. Heuber</i> ASSIST. STATE HIGHWAY ENGINEER			
	STRUCTURE B - 37 - 86	SHEET 1 OF 2		

SLAB THICKNESS SHOWN IS MINIMUM. ANY TOLERANCE NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES SHALL BE PLUS. ALTERNATE TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.



ELEVATION



HALF CROSS SECTION

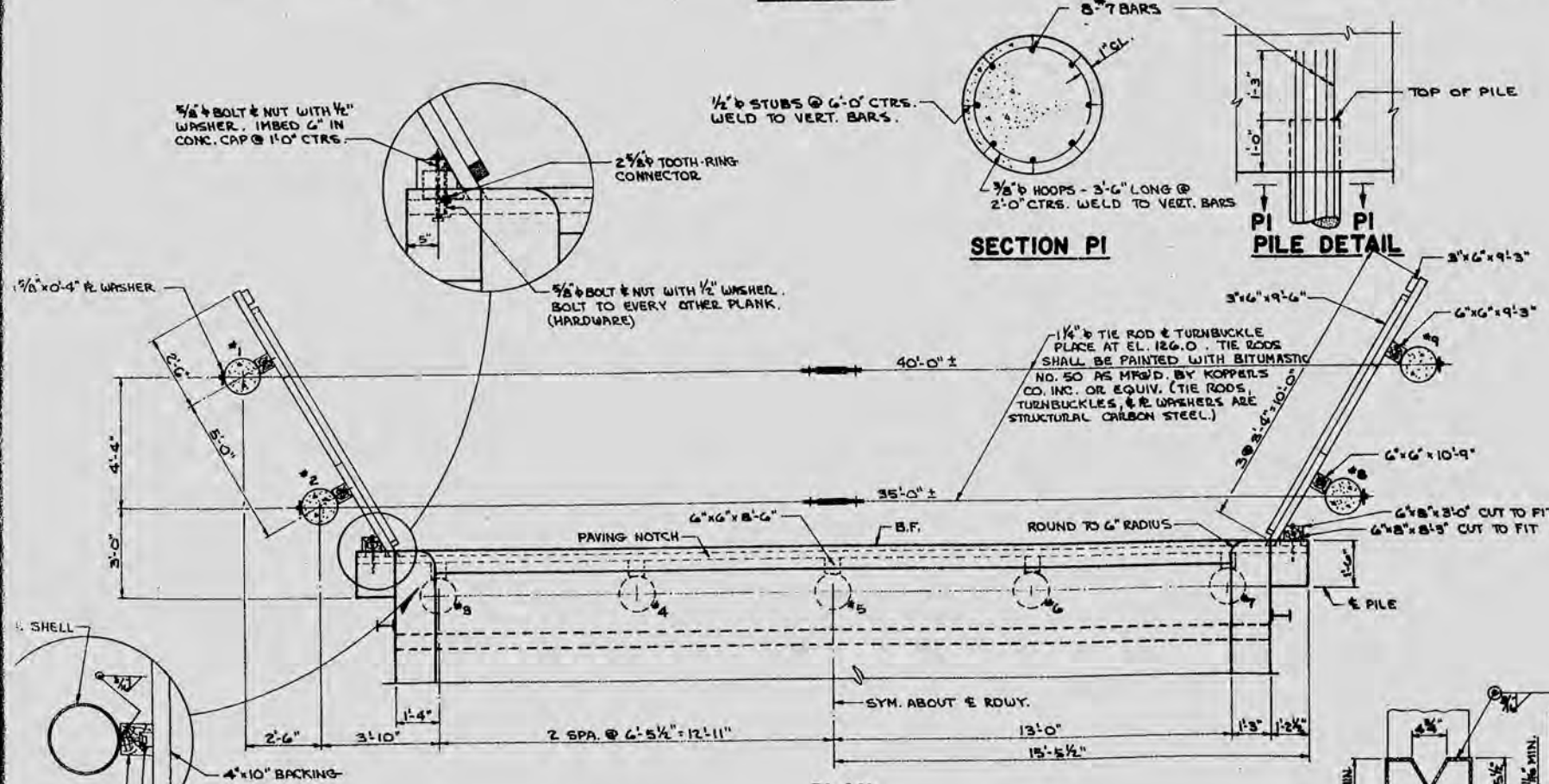
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT. 11160 #

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
A1	37	5	28-0	SHOWN	FLOOR - TRANS. - BOTTOM		
A2	22	4	28-0	1-6	" - TOP		
A3	34	4	16-6	1-6	" - LONG. - "		
A4	31	9	33-9	10"	" - " - BOTTOM		
A5	31	9	25-6	10"	" - " - "		
A6	26	4	7-3	SHOWN	ABUTMENT CAP	A	
A7	6	4	28-0	"	"		
A8	14	10	32-0	"	FLOOR @ CURBS - LONG.		
A9	16	6	4-6	"	CURB - SYM. ABOUT C/ OF EA. POST		
A10	24	5	6-0	"	" - 3 @ EA. POST	B	
A11	4	6	33-6	"	" - LONG.		
A12	44	4	4-2	1-6	" - TIE BARS	C	
A13	36	4	5-0	SHOWN	CAP & SLAB	D	
A14	6	4	30-6	"	BACK FACE OF CAP		

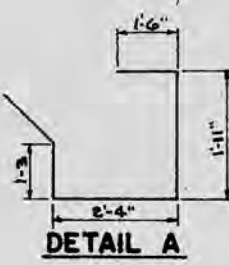
TREATED LUMBER & TIMBER

NOM SIZE	NO.	LENGTH	LOCATION	GRADE
3' x 6"	4	9'-3"	WING - VERT. CLEAT	1200# J&P
	4	9'-6"	" - DIAGONAL CLEAT	"
6' x 6"	10	8'-6"	BODY - NAILING STRIP	"
	4	9'-3"	WING - "	"
	4	11'-0"	" - "	"
6' x 8"	4	3'-0"	WING @ BODY - CLEAT	1200# J&P
	4	8'-3"	" - " - "	"
4' x 10"	20	3'-0"	BODY - BACKING	1600# J&P
	44	10'-0"	WING - "	"
	4	6'-9"	" - "	"
	4	3'-3"	" - "	"

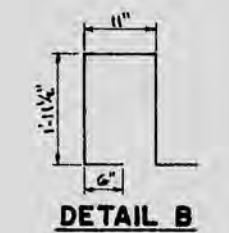


SECTION P1

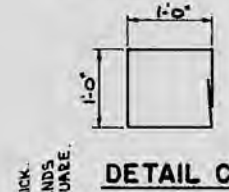
PI PILE DETAIL



DETAIL A



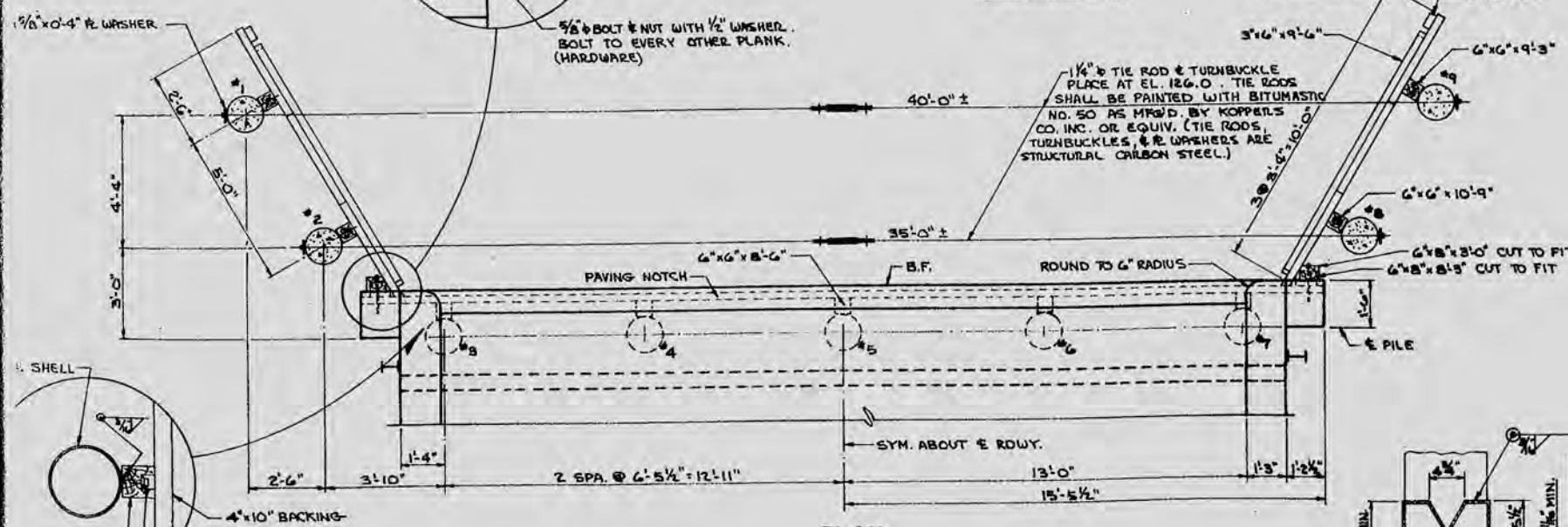
DETAIL B



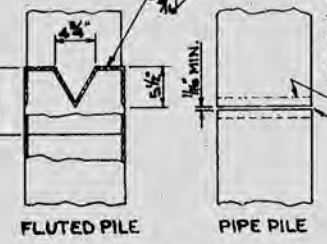
DETAIL C



DETAIL D

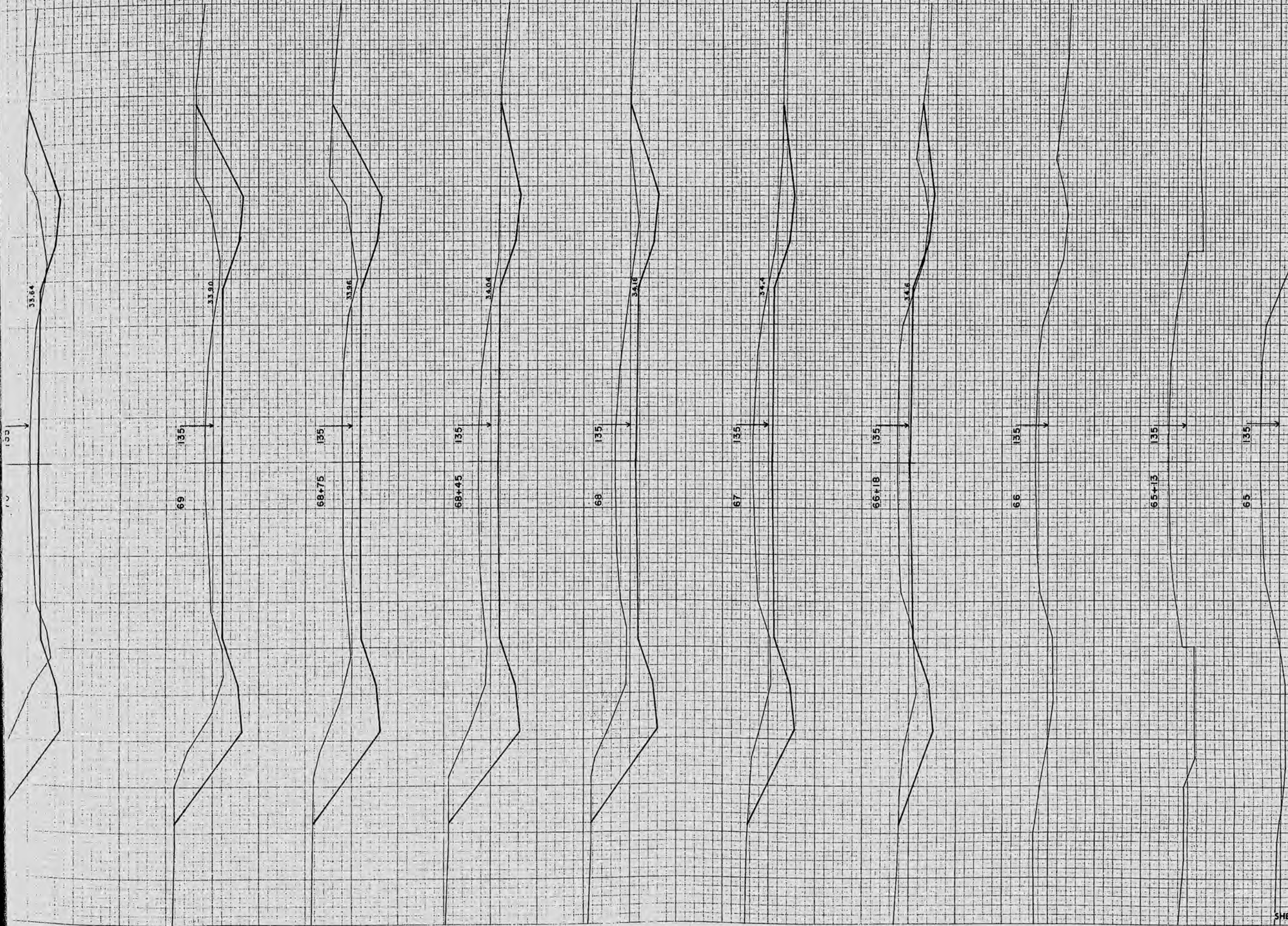


PLAN

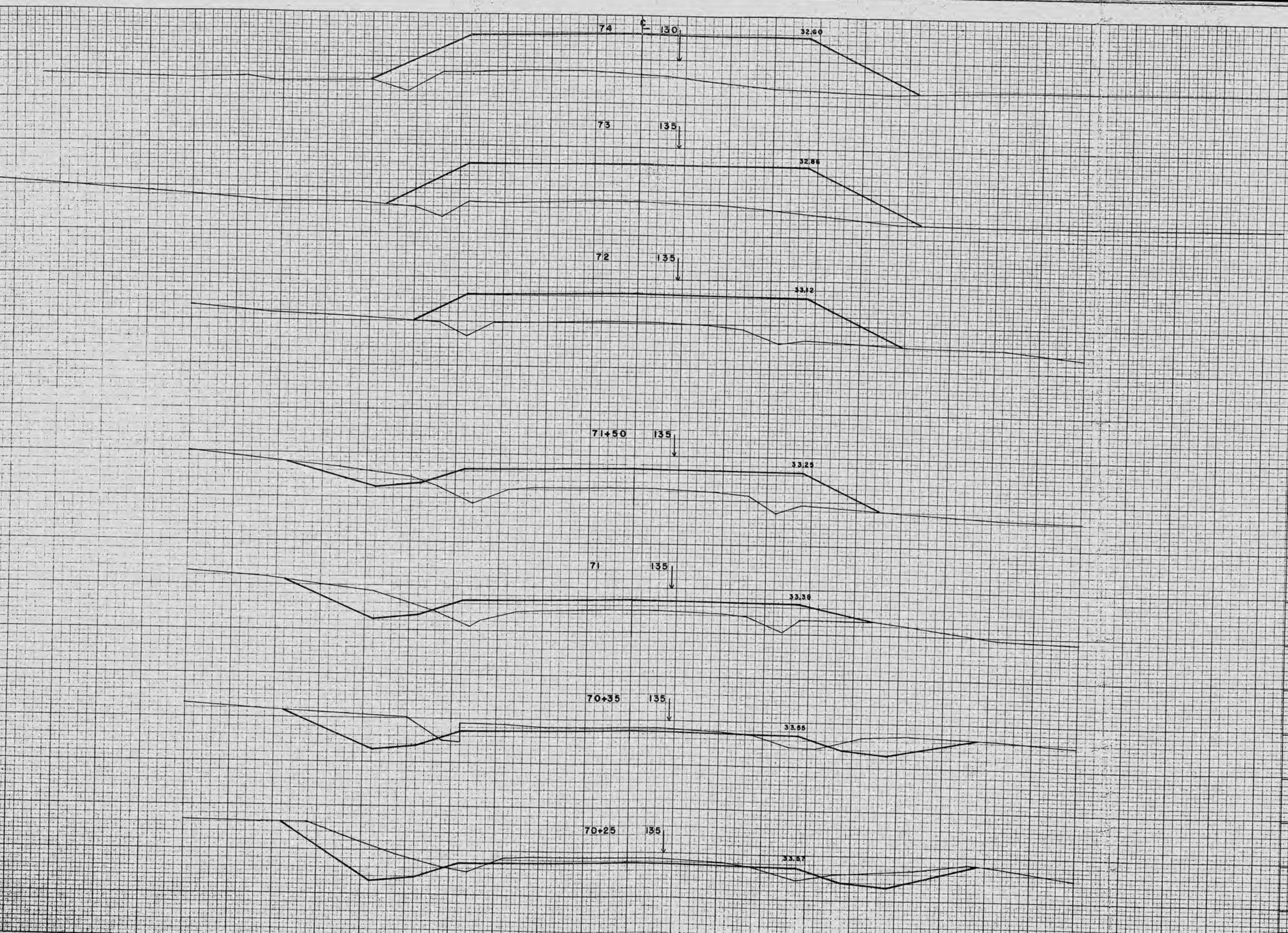


PILE SPlice DETAIL

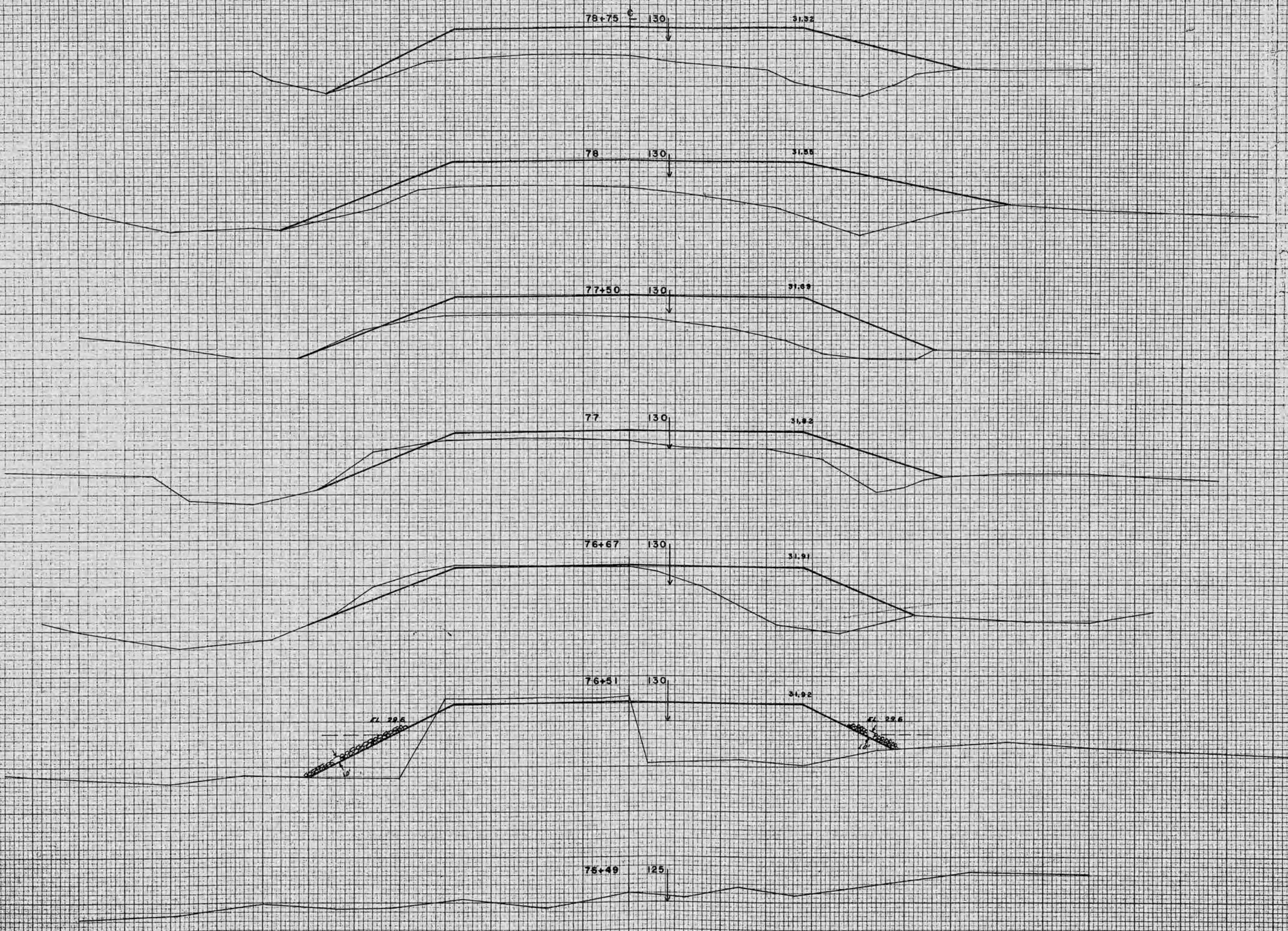
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN		
	SUPERSTRUCTURE & ABUTMENT		
	DESIGN SPEC. AASHTO 57	LOADING H-15	SPRINT 1957
	DATE 6-1-60	DESIGN J.M.J.	DRAWN C.K.D.
STRUCTURE	B - 37 - 66	SHEET	2 - 2



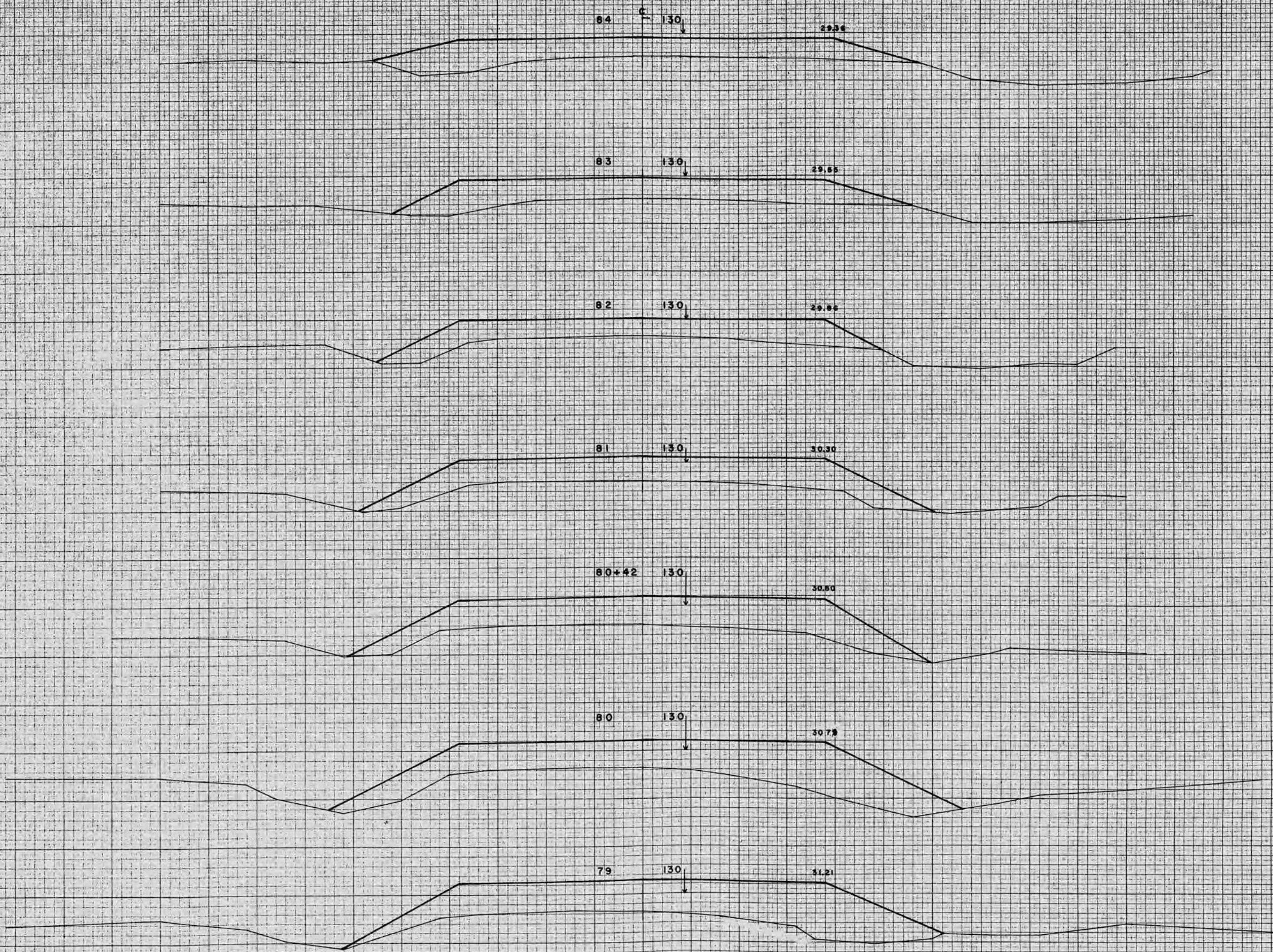
STATION	DISTANCE	YARDAGE	
		UNC	FILL
65			
+1.3			
66			
+1.8			
67		322	2
68		556	0
+4.5		289	0
69		206	0
+7.5		169	0
70		543	6
SHEET TOTAL		2085	8



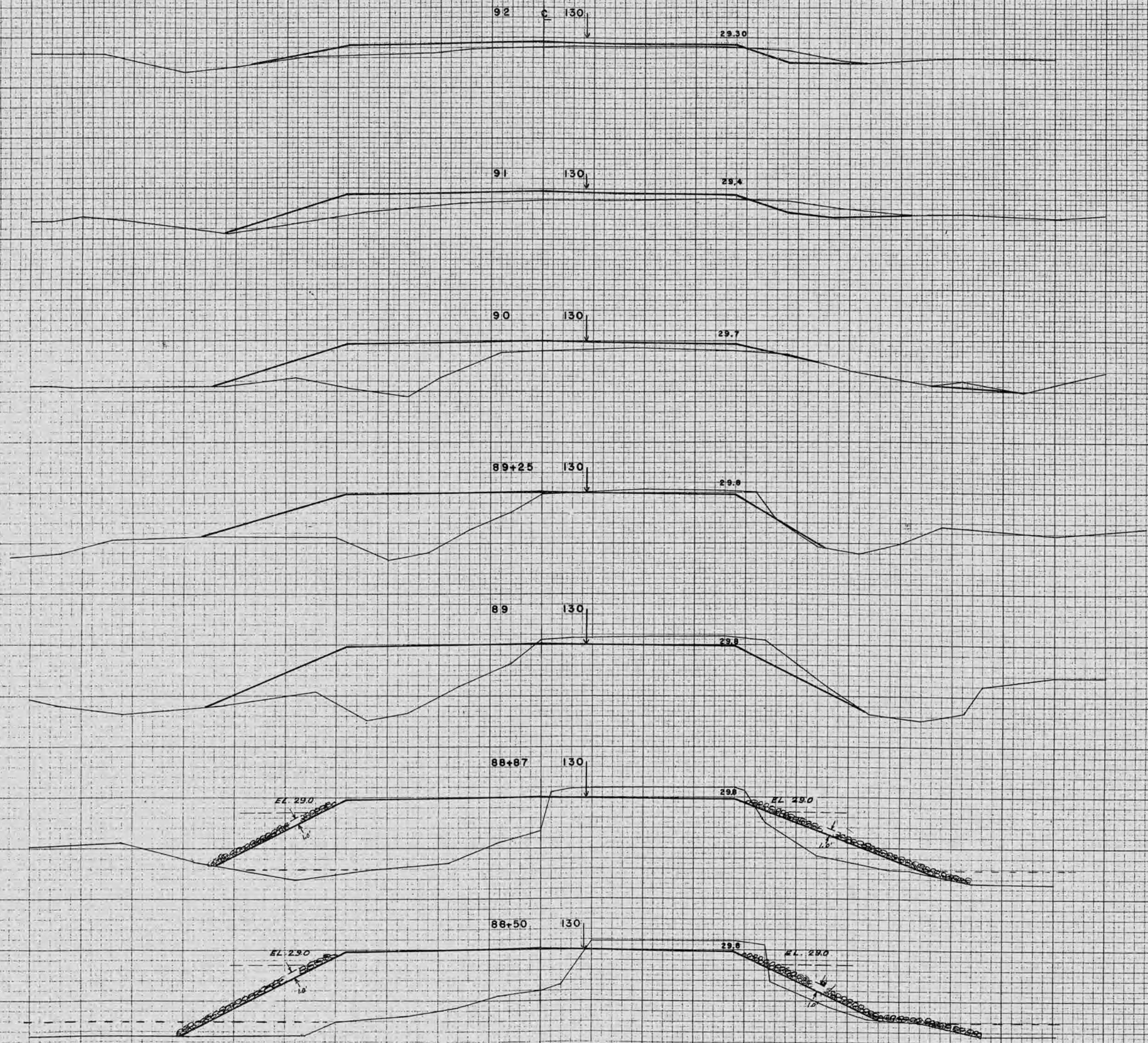
STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		U	C	
70				
+25	96			6
+35	32			4
71	129			94
+50	41			160
72	13			278
73	0			754
74	0			887



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
78			
+86	4		38
76			
+51	7		85
+67	15		124
77			
	9		241
+50			
	2		381
76			
	C.H.C.H. 1676 1270		659
+75			
76+67			
76+51			
75+49			
SHEET TOTAL		1676	659

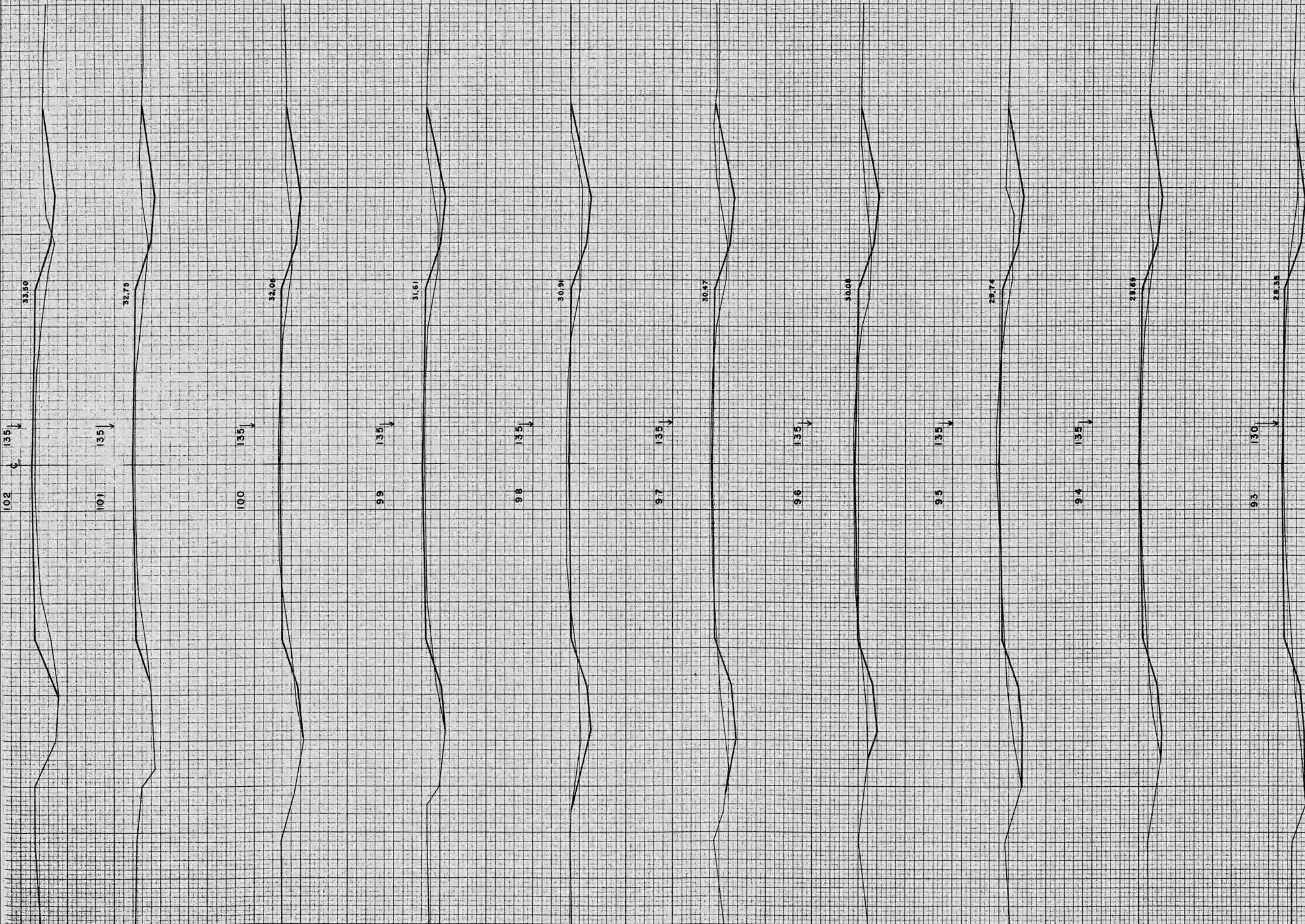


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		U.N.C.	
76			
+75		0	200
79		0	757
80		0	206
+42		0	322
81		0	454
82		0	407
83		0	430
84			
SHEET TOTAL		0	268



STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNC	FILL
88			
+35	22		7.0
+50			
+80	8		4.3
+87			
89	17		6.5
+25	30		9.9
90	32		23.7
91	28		21.3
92	33		11.9

SHEET TOTAL 170 8.3



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
92			
93	39		70
94	65		50
95	107		35
96	98		26
97	111		28
98	117		20
99	92		37
100	63		44
101	61		54
102	46		83
SHEET TOTAL		789	

