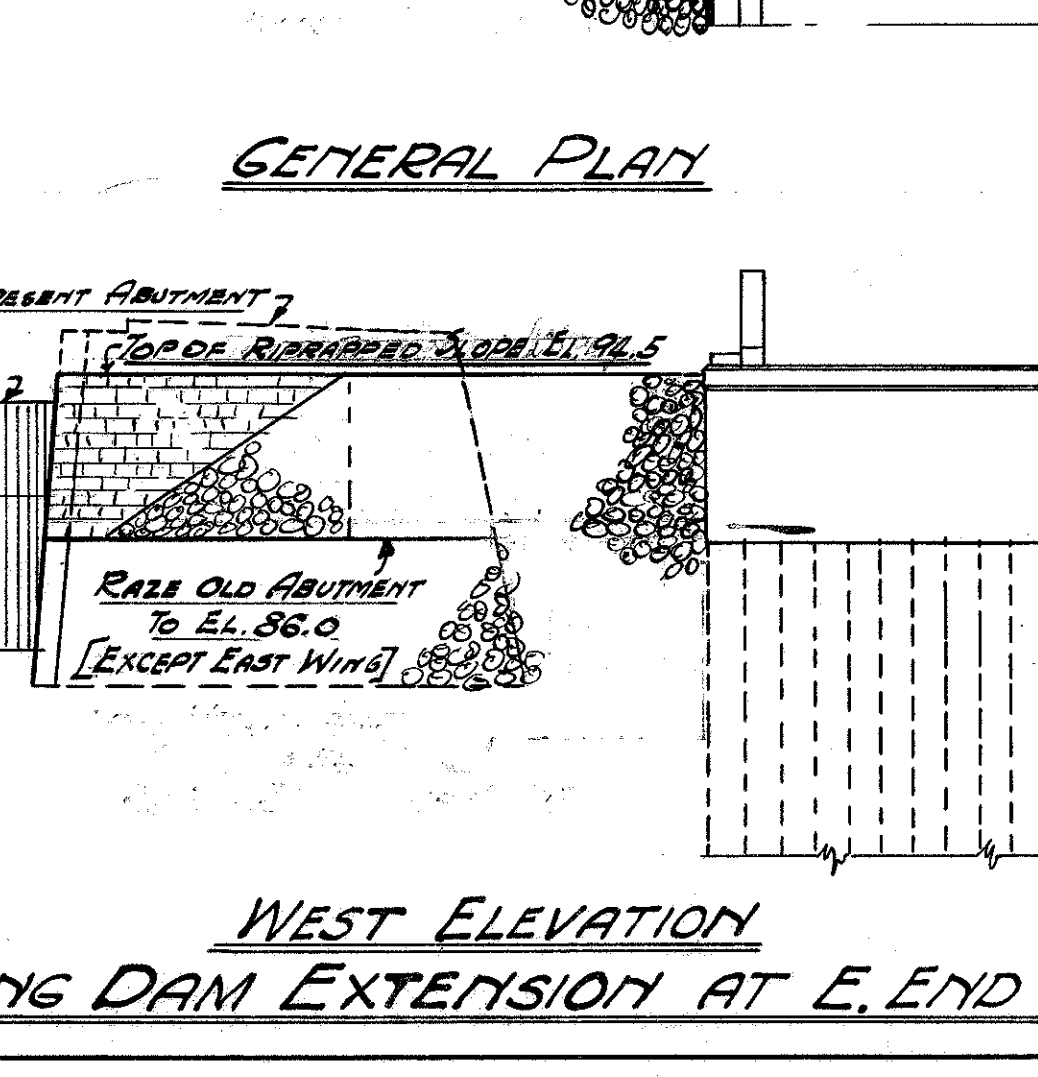
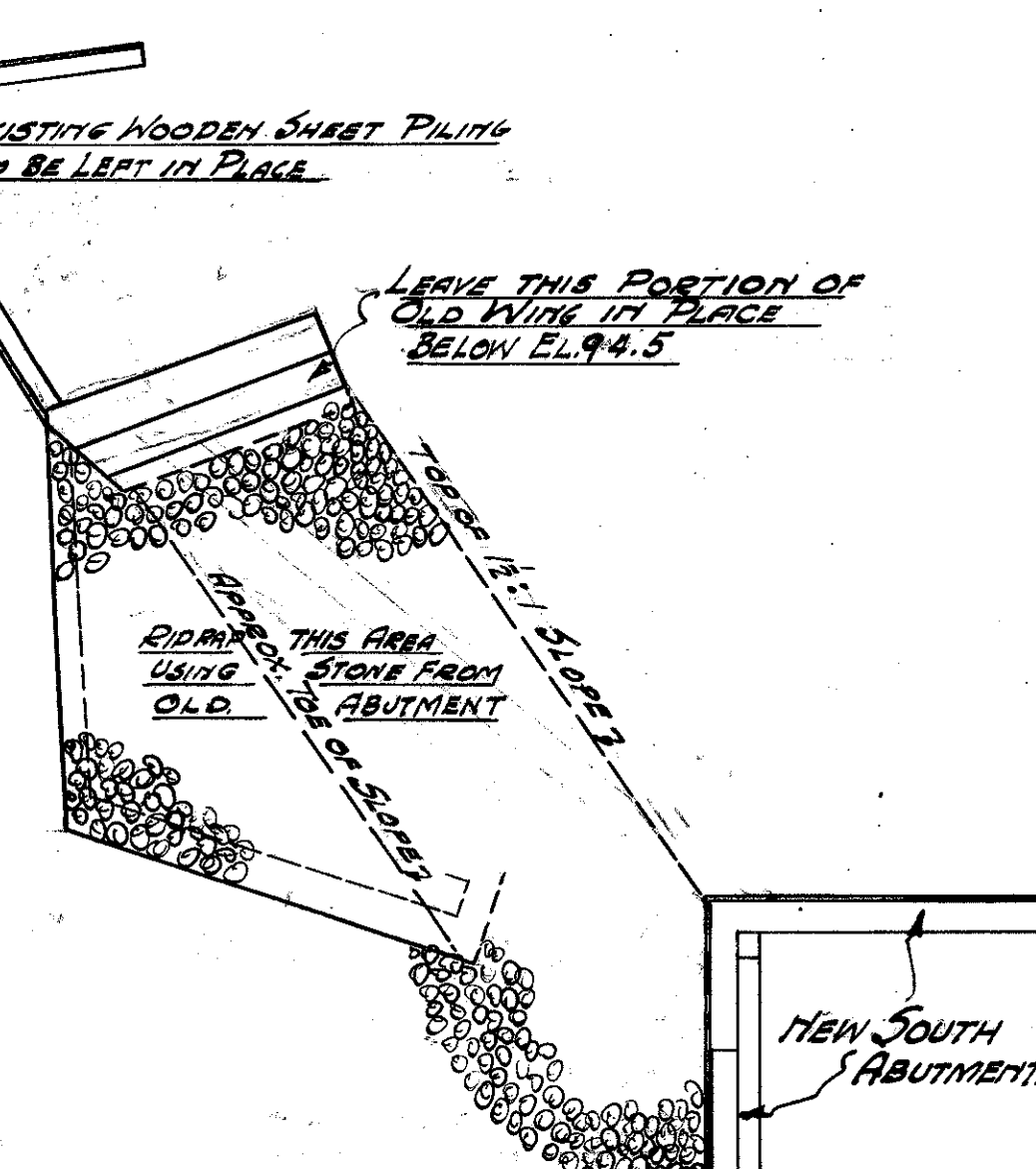
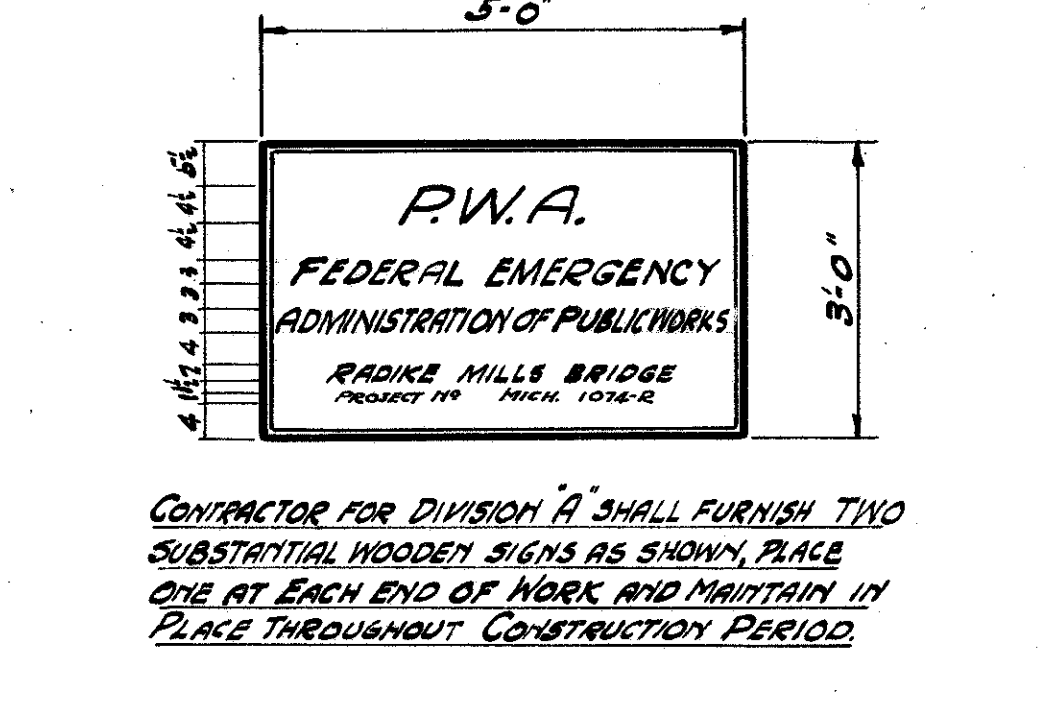
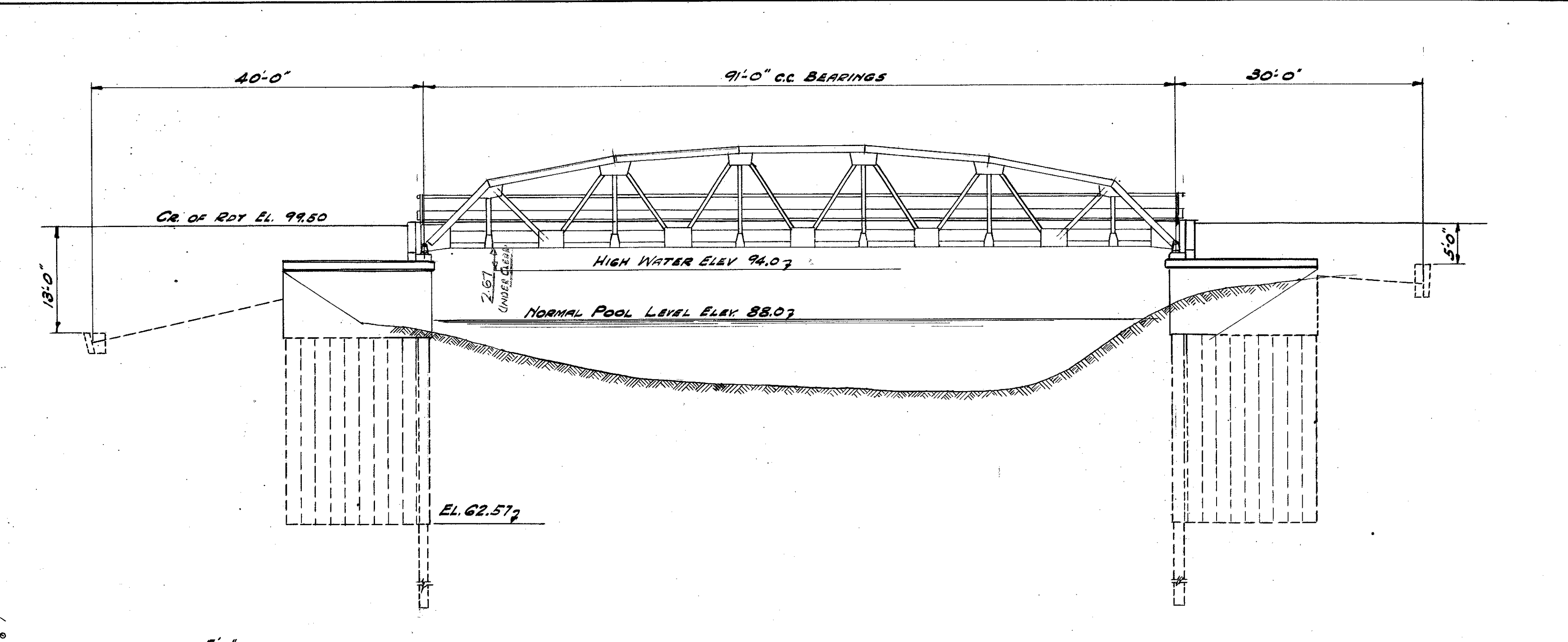
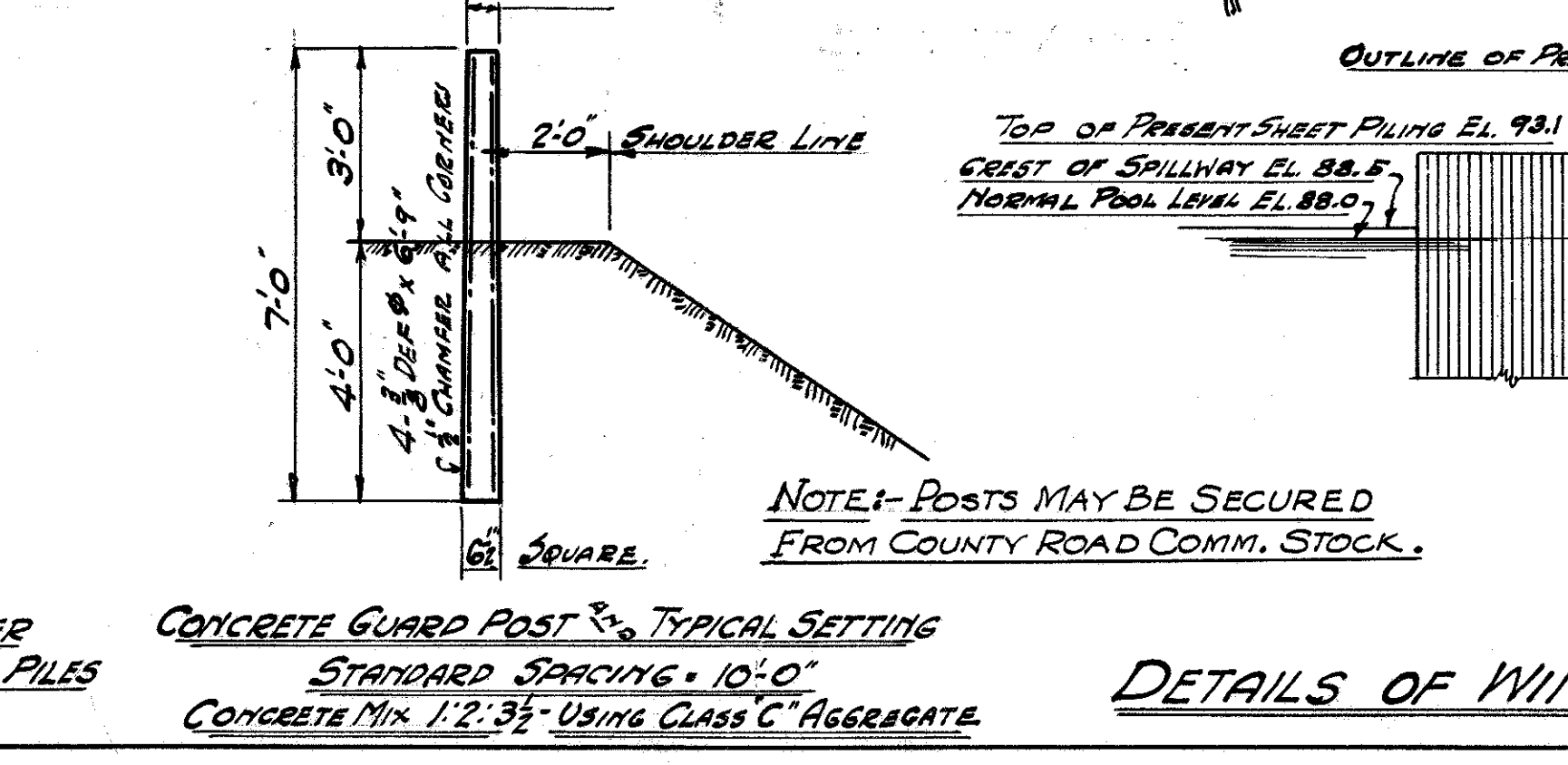
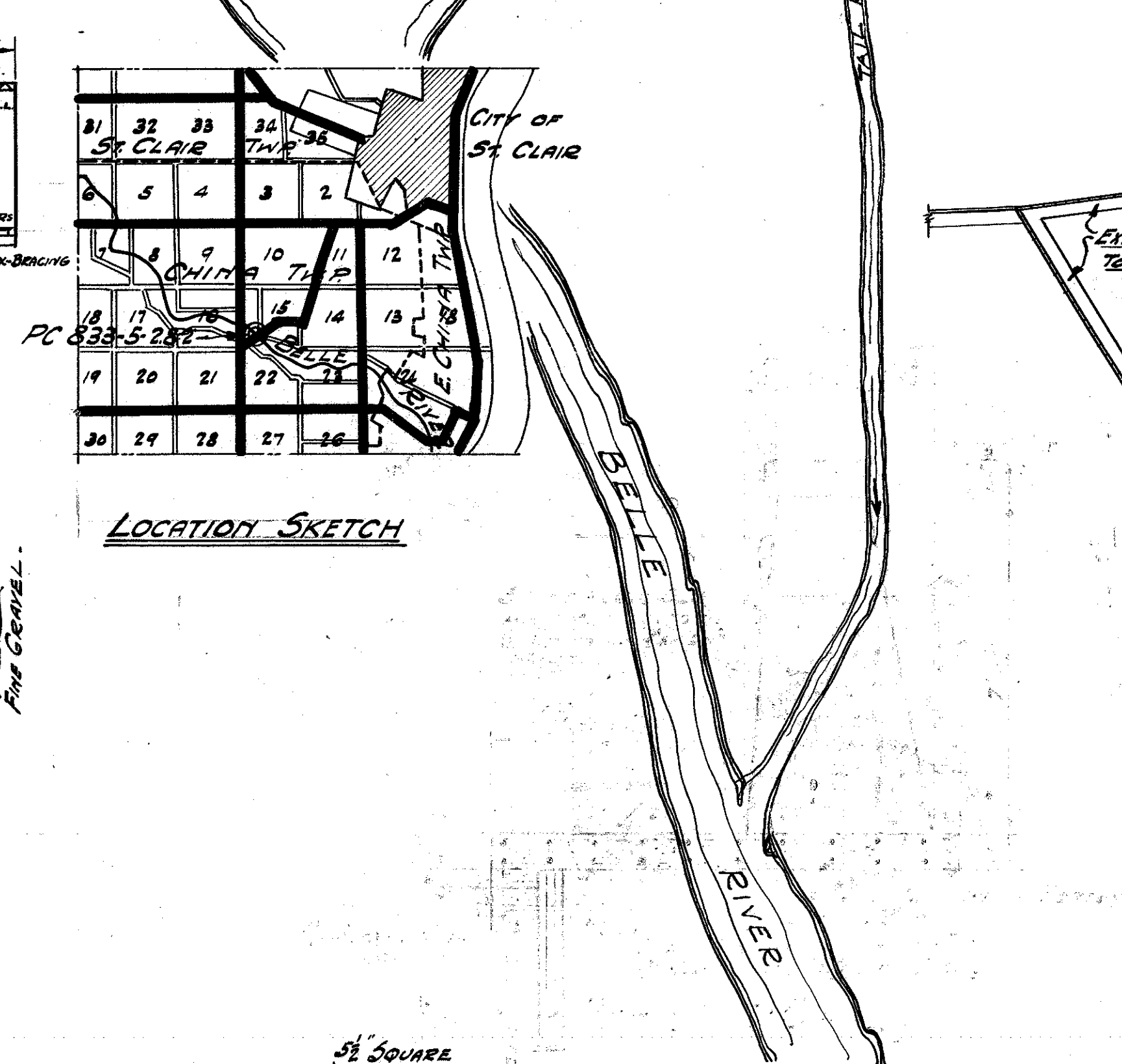


LOG OF BORINGS
SAFE BEARING CAPACITY OF SOIL ABOUT ONE TON PER SQUARE FOOT. BRIDGE LOAD IS CARRIED ON BEARING PILES



LIST OF PAY QUANTITIES - DIVISION OF WORK

DIVISION OF WORK	ITEM NO	1	2	3	4	5	6	7	8	9	REMARKS
	POSITION IN STRUCTURE	CONCRETE CUB. YDS.	CONCRETE CUB. YDS.	CONCRETE CUB. YDS.	REIN. STEEL IN PLACE POUNDS	REIN. STEEL IN PLACE POUNDS	REIN. STEEL IN PLACE POUNDS	STRUCTURAL STEEL SHEET PILING ONLY POUNDS	ERECT ONLY DOWNDRIFTS & BRATES EACH		
A	SOUTH ABUTMENT	2613	57.3			2639					STEEL SHEET PILING INCLUDES BRATING, PILING, WALLS, TIE RODS, BOLTS.
	NORTH ABUTMENT	2613	57.3			2639					
	SOUTH ABUT. ANCHOR			7.7			884				
	NORTH ABUT. ANCHOR			6.3			529				
	BRIDGE DECK BACKWALL FLOORING AND ANCHOR BOLTS				55.4			14271	4		INCLUDES SETTING OF DOWNDRIFTS
TOTALS		3226	114.6	14.0	55.4	5278	1413	14271	781	4	
B	POSITION IN STRUCTURE										
	TRUSSES & FLOOR	105795			1876	4					INCLUDES SHOP PRIME
	TRUSSES & FLOOR		105795				4	4	4	4	INCLUDES ALL FIELD PRIME
	RAILING							187.6			INCLUDES BOLTS, FASTENINGS AND PRIME
	ANCHOR BOLTS & BACKWALL FLOORING	781									INCLUDE SWAY TABLES, SHOP PRIME
TOTALS		106576	105795	1876	4	4	187.6	4			
C	POSITION IN WORK										
	STA 0+00 TO 12+00						1964				
	STA 0+00 TO 12+00	3263									TRUSSES AND FLOOR ONLY STEEL ESTIMATED AT 13.35 TONS RUBBLE MASONRY INCLUDES REMOVAL OF OLD SOUTH ABUTMENT AS SHOWN
	WING DAM EXTENSION			40			125				
	TOTALS		3263	40	1	125	1964				

PWA PROJECT MICHIGAN 1074-R
ST. CLAIR COUNTY ROAD COMMISSION
PORT HUON MICHIGAN
BRIDGE OVER BELLE RIVER ON AD 31
GENERAL DRAWING

THE EXISTING BRIDGE AND ROAD SHALL BE KEPT UNOCCUPIED AND OPEN TO TRAFFIC UNTIL THE NEW BRIDGE AND APPROACHES ARE COMPLETE AND OPENED TO TRAFFIC.
EXCAVATION FOR STRUCTURES WILL NOT BE PAID FOR AS SUCH THE COST SHALL BE ABSORBED IN THE RESPECTIVE STRUCTURES FOR WHICH IT IS MADE.

DRAWN ERE-OCT 26
TRACED ERE-OCT 26
CHECKED B.L. PHILIP OCT 26
APPROVED W.L. WATSON

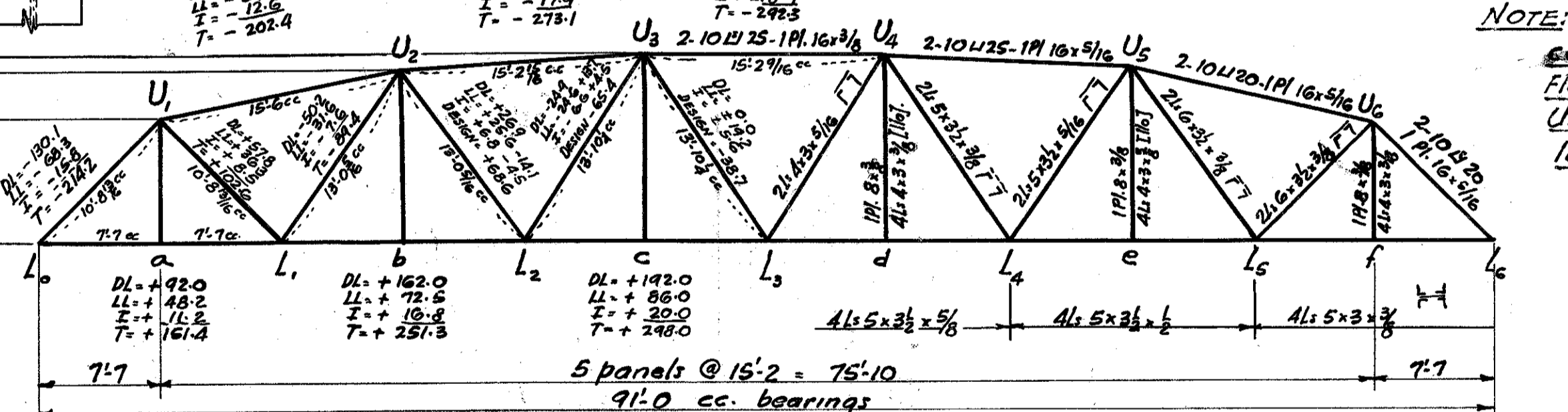
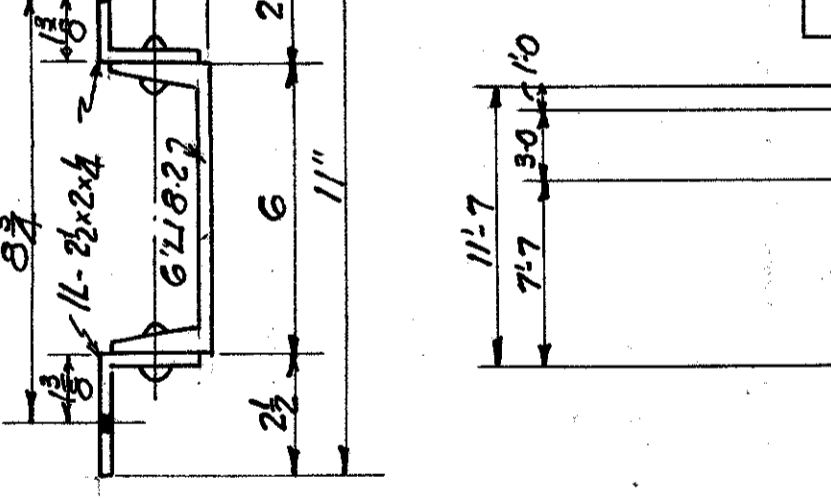
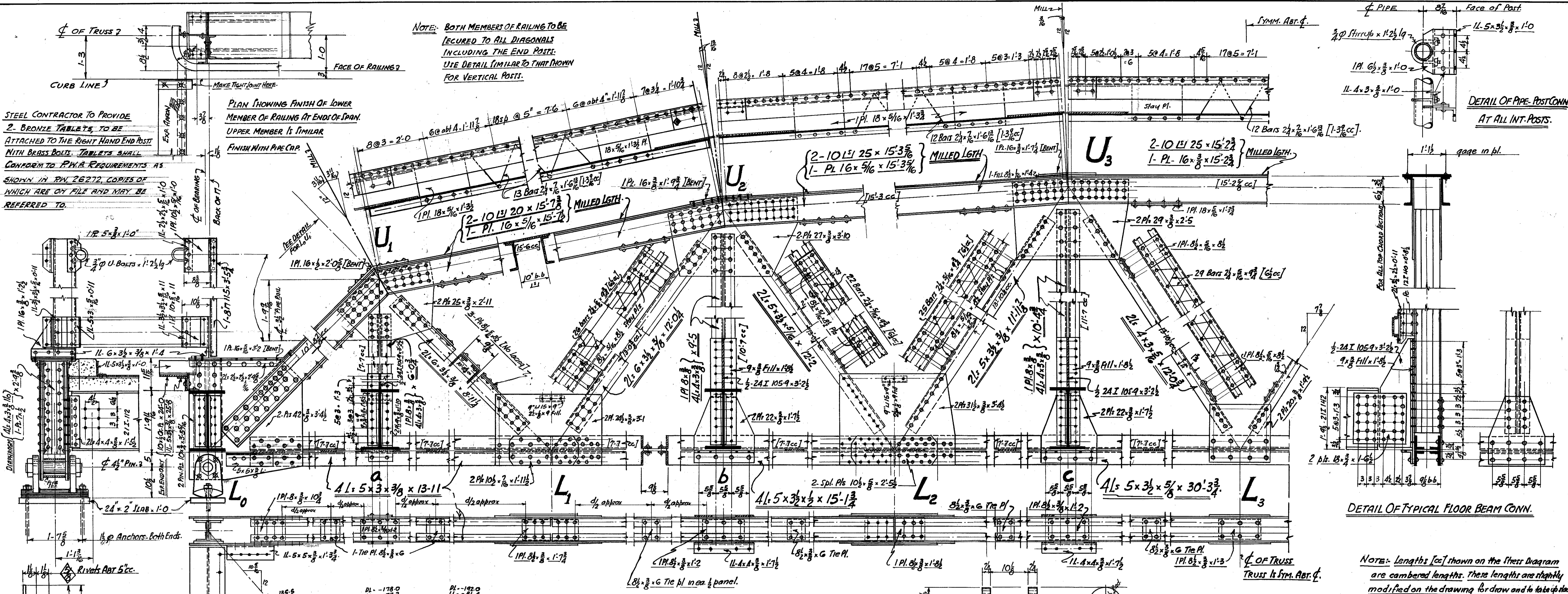
Job No PC-833-5-282
DRAWING NO. 1

BRIDGE OVER BELLE RIVER ON A.D. 31
A-5-3 5-5P

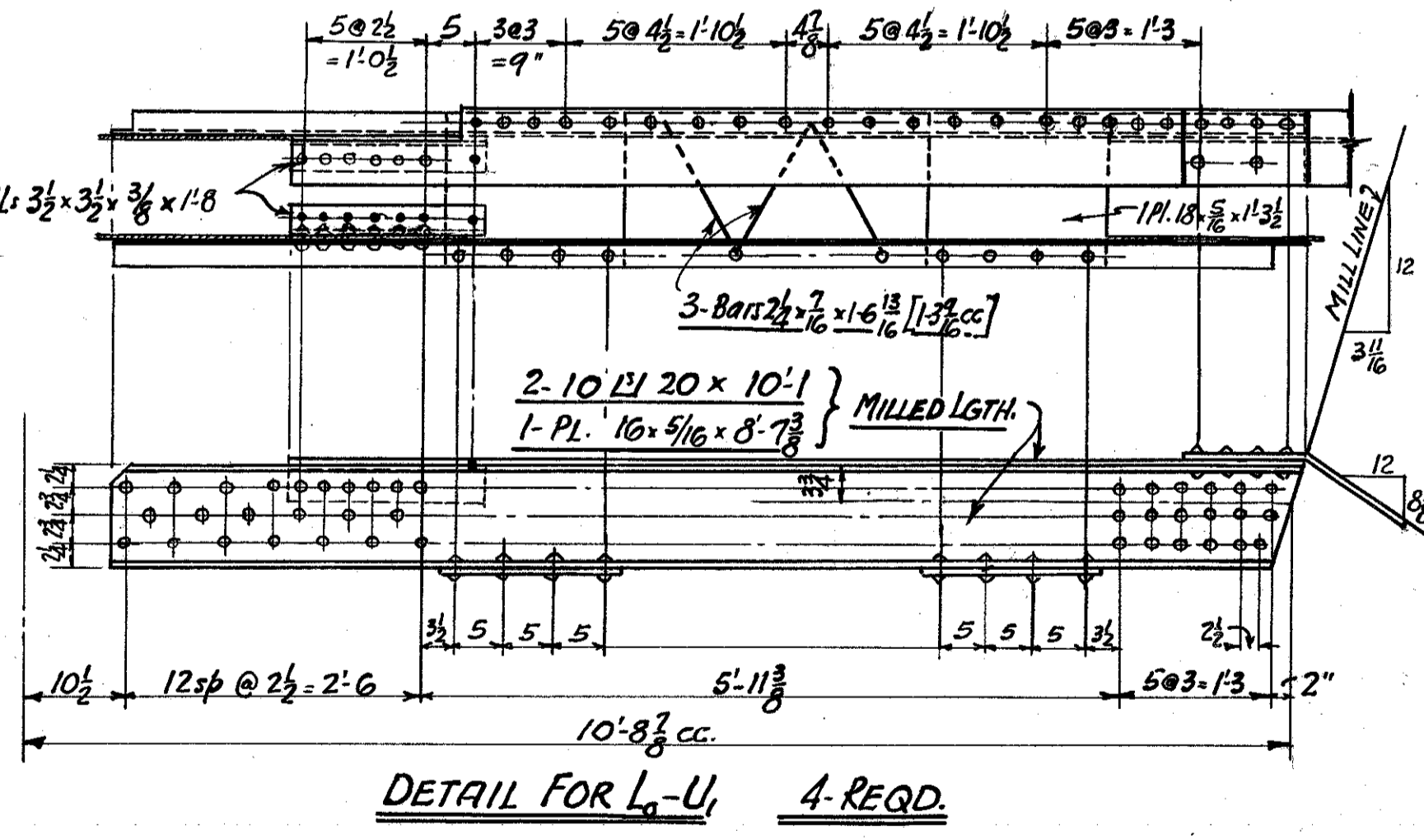
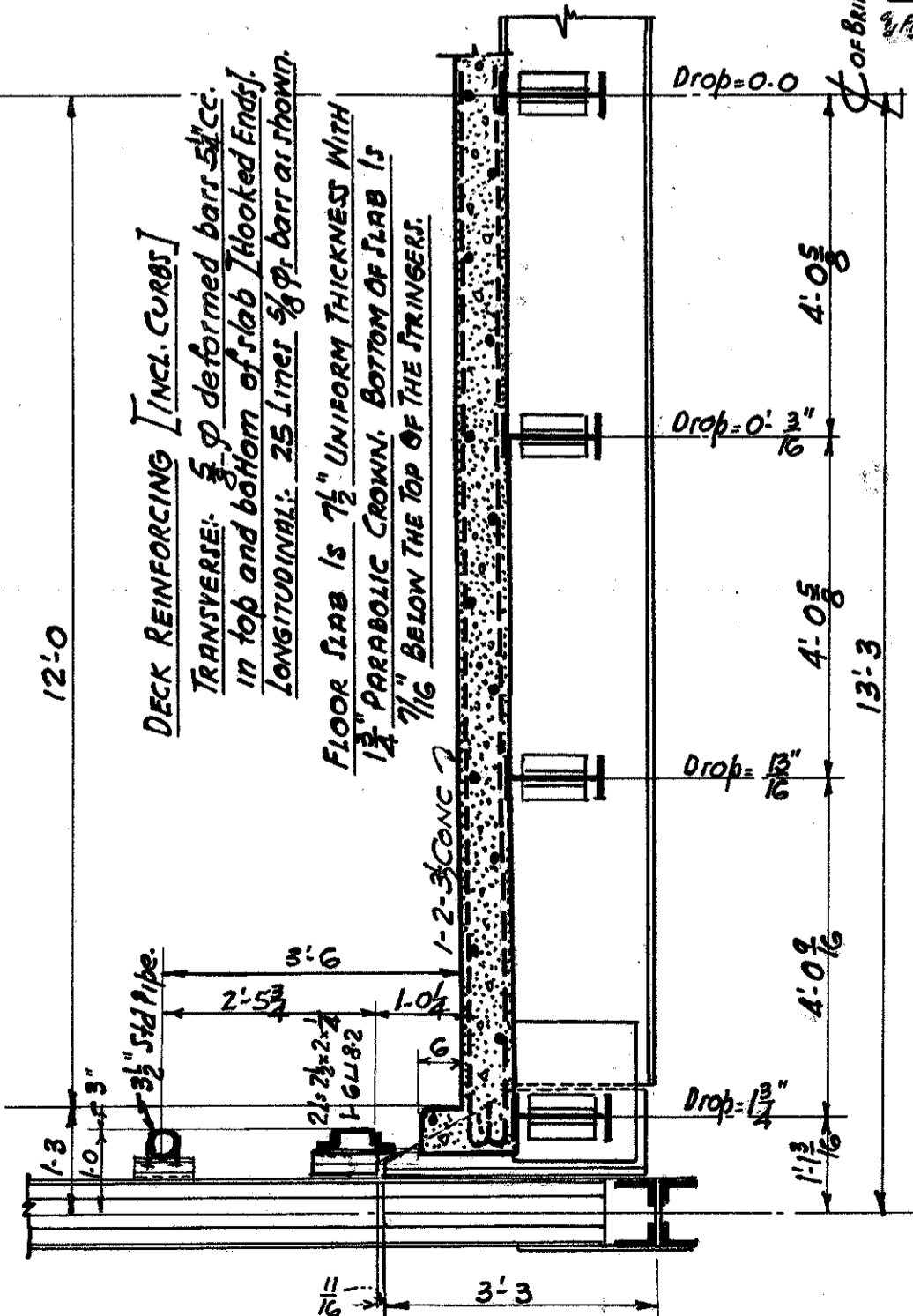
NOTE: BOTH MEMBERS OF RAILING TO BE SECURED TO ALL DIAGONALS INCLUDING THE END POSTS. USE DETAIL SIMILAR TO THAT SHOWN FOR VERTICAL POSTS.

STEEL CONTRACTOR TO PROVIDE 2 BRONZE TABLETS TO BE ATTACHED TO THE RIGHT HAND END POST WITH BRASS BOLTS. TABLETS SHALL CONFORM TO P.H.A. REQUIREMENTS AS SHOWN IN P.H.A. 26272, COPIES OF WHICH ARE ON FILE AND MAY BE REFERRED TO.

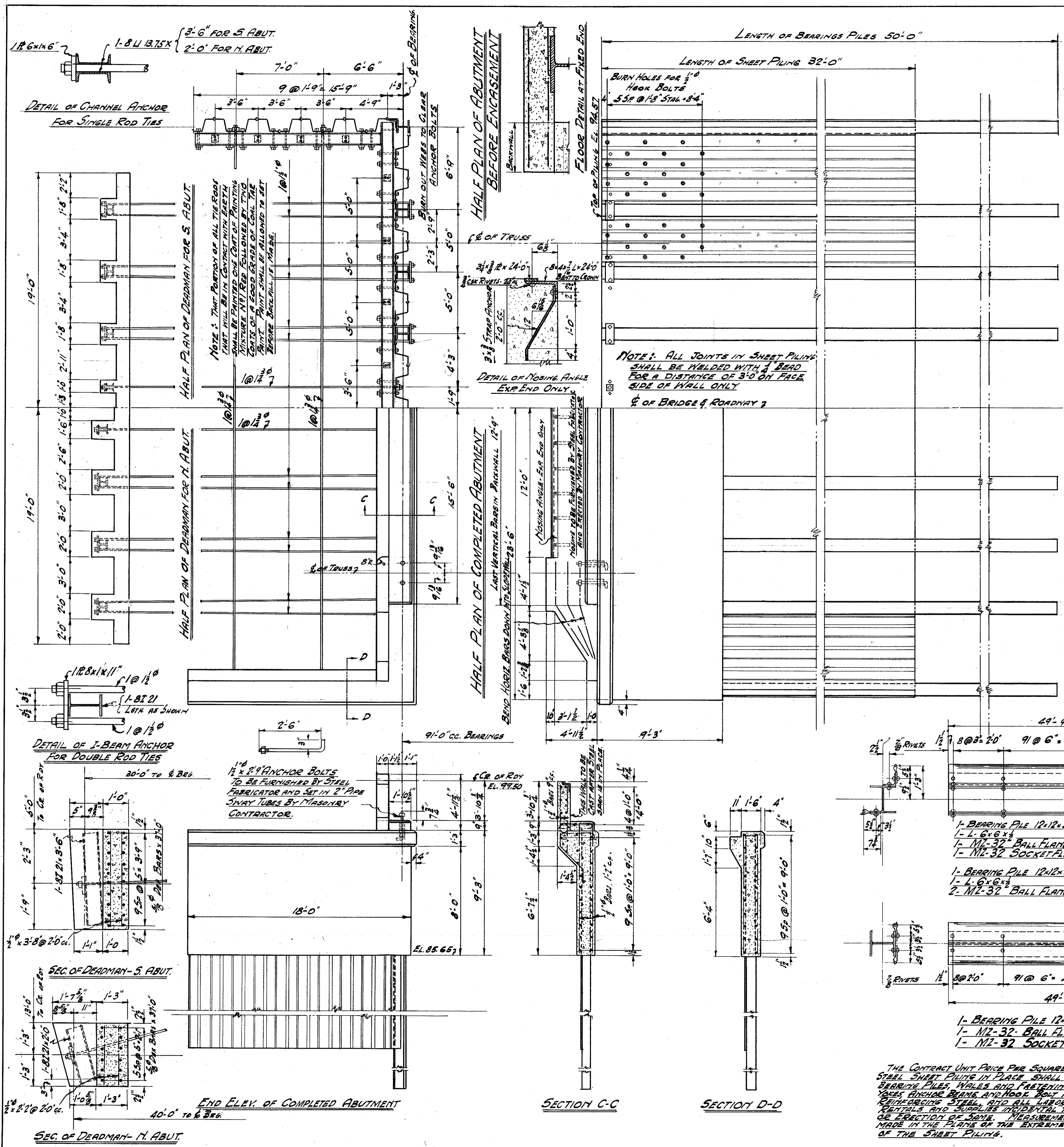
PLAN SHOWING FINISH OF LOWER MEMBER OF RAILING AT ENDS OF SPAN. UPPER MEMBER IS SIMILAR. FINISH WITH PIPE CAP.



NOTE: Bot Laterals to be connected to bot. flg. of floor Bm. by the 4x4 Lchp. Use 5-3/4 rivets to connect lateral to conn. plate.



ST. CLAIR COUNTY ROAD COMMISSION		
PORT HURON MICHIGAN.		
TRUSS BRIDGE OVER BELLE RIVER ON AD-31.		
STRUCTURAL STEEL.		
REVISED:	DRAWN: B.L. PARKER 10/26/36	JOB No. P.C. 833-5-282
	CHECKED: E.P. BENDER 10/27/36	
	APPROVED: W.W. [Signature]	DRAWING No. 2.



NOTE: THAT PORTION OF ALL THE ROOF THAT WILL BE IN CONTACT WITH EARTH SHALL BE PAINTED OR COATED OF PAINTING MIXTURE NOT RED FOLLOWED BY TWO COATS OF A GOOD GRADE OF COAL TAR PAINT. PAINT SHALL BE ALLOWED TO SET BEFORE BACKFILL IS MADE.

NOTE: ALL JOINTS IN SHEET PILING SHALL BE WELDED WITH A BEAD FOR A DISTANCE OF 3'-0" ON FACE SIDE OF WALL ONLY

1/4" x 2 1/2" ANCHOR BOLTS TO BE FURNISHED BY STEEL FABRICATOR AND SET IN 2" DIA. SPRAY TUBES BY MASONRY CONTRACTOR.

SET DOWNSPOUTS 1/3" TOWARD MID-SIDE FROM E OR SECOND FLOOR BEAM BOTH ENDS OF JOINT, BOTH SIDES OF ROADWAY.

ALL WORK SHALL CONFORM TO THE COMMISSION'S GENERAL SPECIFICATIONS - EDITION OF 1930

ALL CONCRETE SHOWN ON THIS SHEET SHALL BE GRADE A (1:2:3 1/2)

ALL REINFORCING BARS SHALL BE DEFORMED ROUNDS UNLESS OTHERWISE NOTED

ALL STEEL SHEET PILING INDICATED ON THIS SHEET SHALL BE CARNEGIE-ILLINOIS SECTION MZ-32 OR EQUAL

PWA PROJECT MICHIGAN 1074-R

ST. CLAIR COUNTY ROAD COMMISSION
PORT HURON MICHIGAN

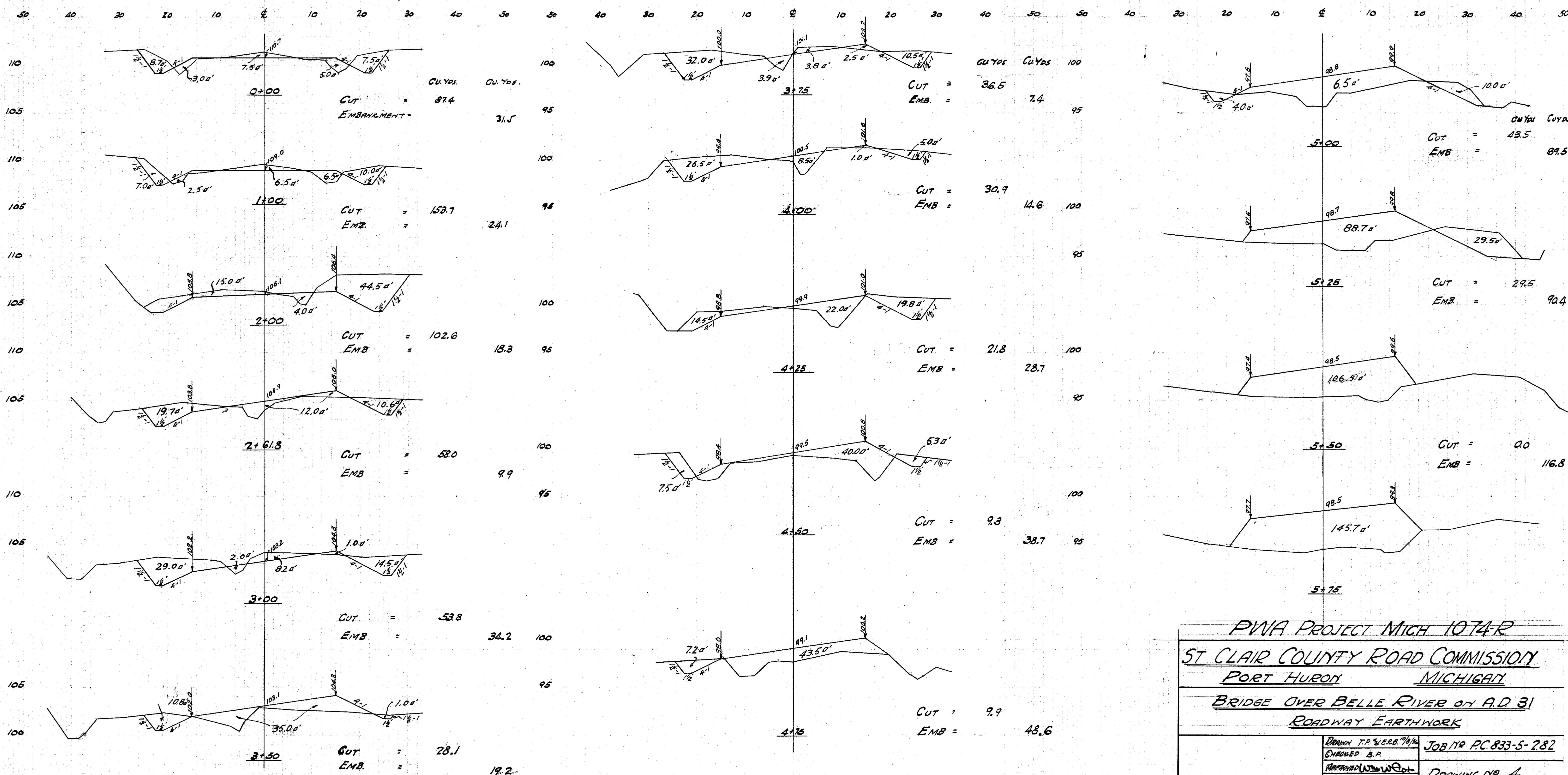
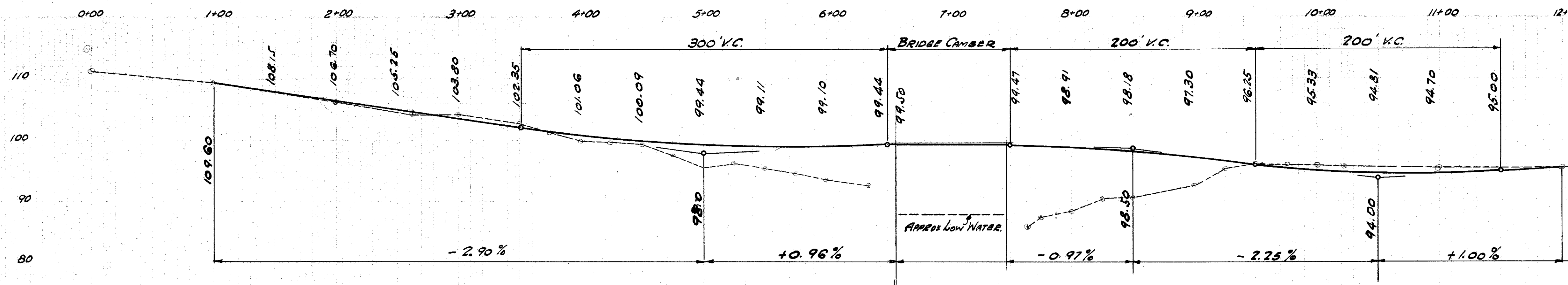
BRIDGE OVER BELLE RIVER ON AD 31
ABUTMENTS

135

DESIGNED - E.R.B. Sept 30	JOB NO PC 833-5-282
TRACED - E.R.B. Sept 30	
CHECKED - B.L. PHOENIX Oct 30	
APPROVED - W.L. PHOENIX Oct 30	DRAWING NO 3

A-1-3 55P

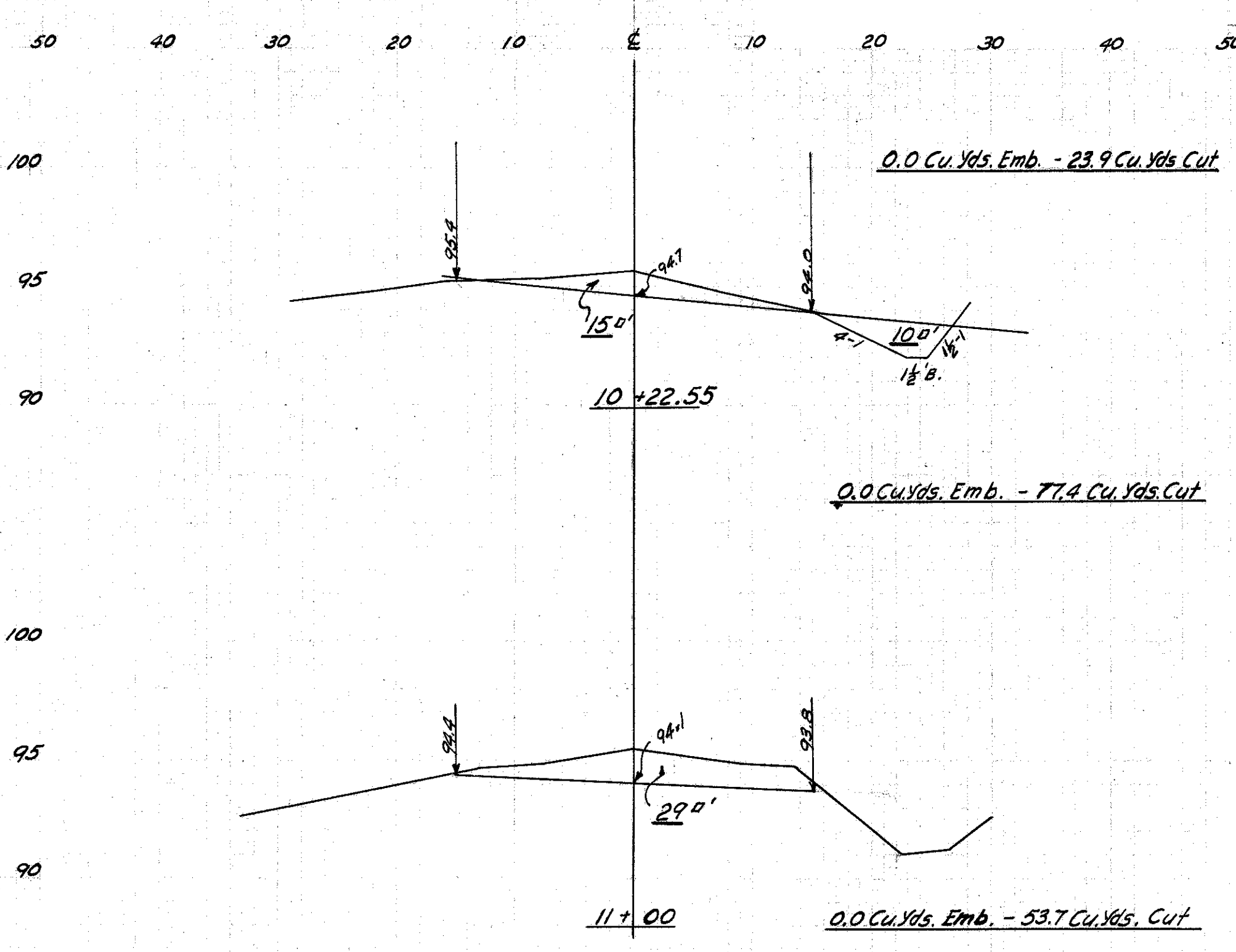
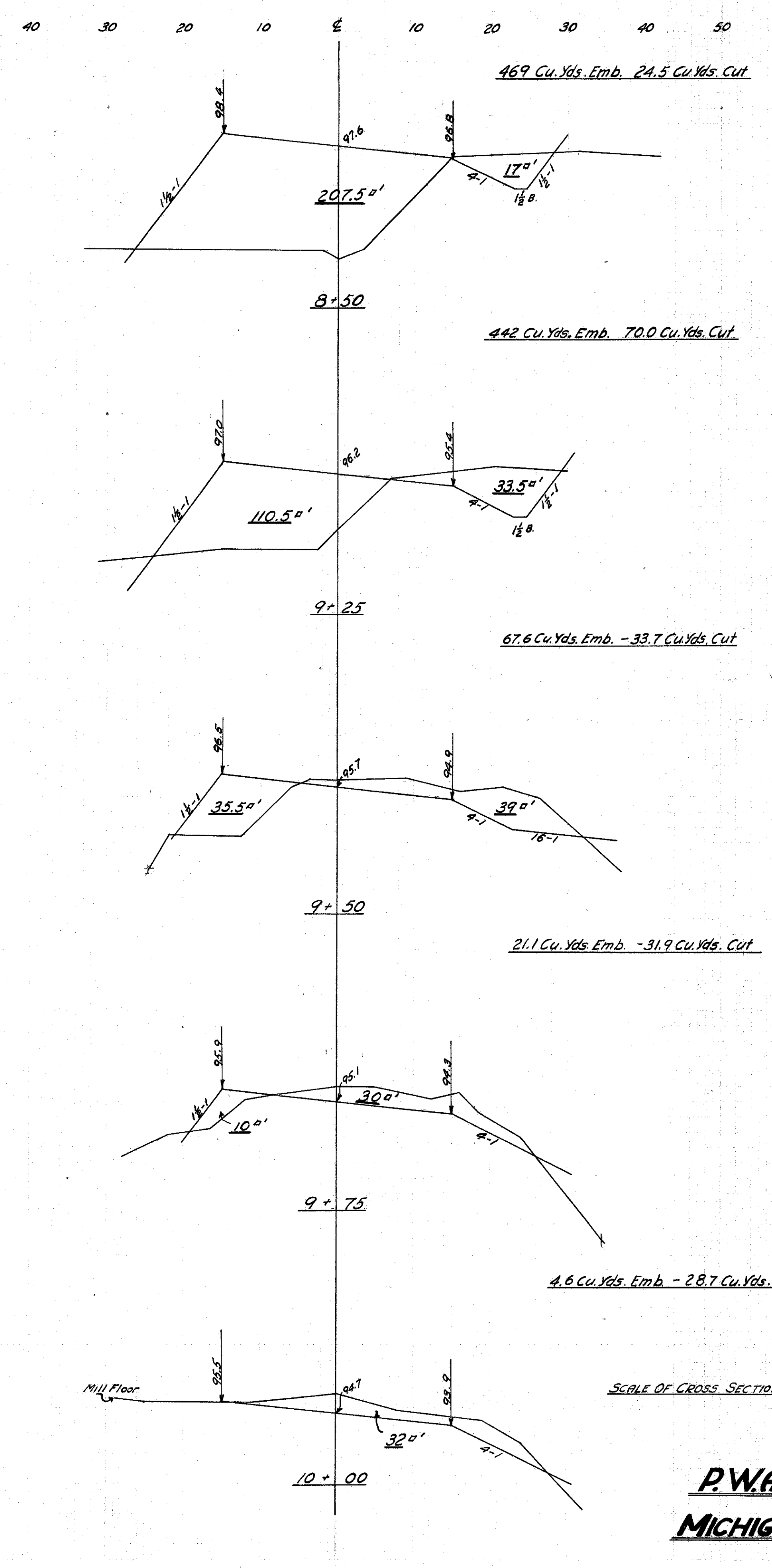
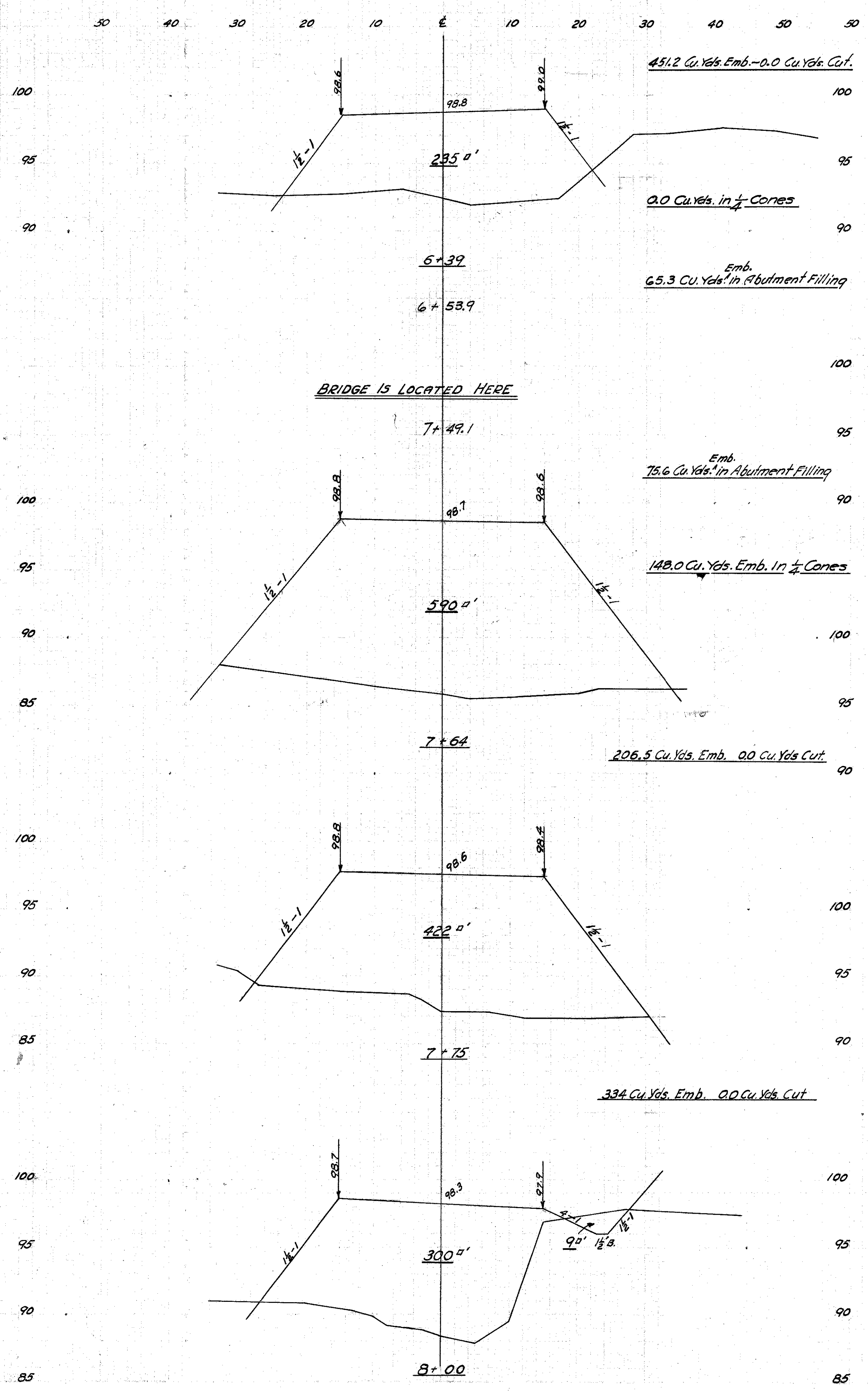
THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR STEEL SHEET PILING IN PLACE SHALL INCLUDE THE BEARING PILES, WALES AND FASTENINGS TO ROSS AND TIES, ANCHOR BEAMS AND HOOK BOLT ANCHORS FOR REINFORCING STEEL AND ALL LABOR MATERIALS, RIGGING AND SUPPLY INCIDENTAL TO THE INSTALLATION OR ERECTION OF SAME. MEASUREMENT SHALL BE MADE IN THE PLANE OF THE ENTRANCE FORWARD FACE OF THE SHEET PILING.



PWA PROJECT MICH 1074-R
ST CLAIR COUNTY ROAD COMMISSION
PORT HURON MICHIGAN
BRIDGE OVER BELLE RIVER ON A.D. 31
ROADWAY EARTHWORK

DRAWN T.P. W.E.R.B. 10/14 CHECKED B.P. APPROVED W.S. W.S.	JOB NO. PC. 833-5-282 DRAWING NO. 4
-----------------------------------------------------------------	----------------------------------------

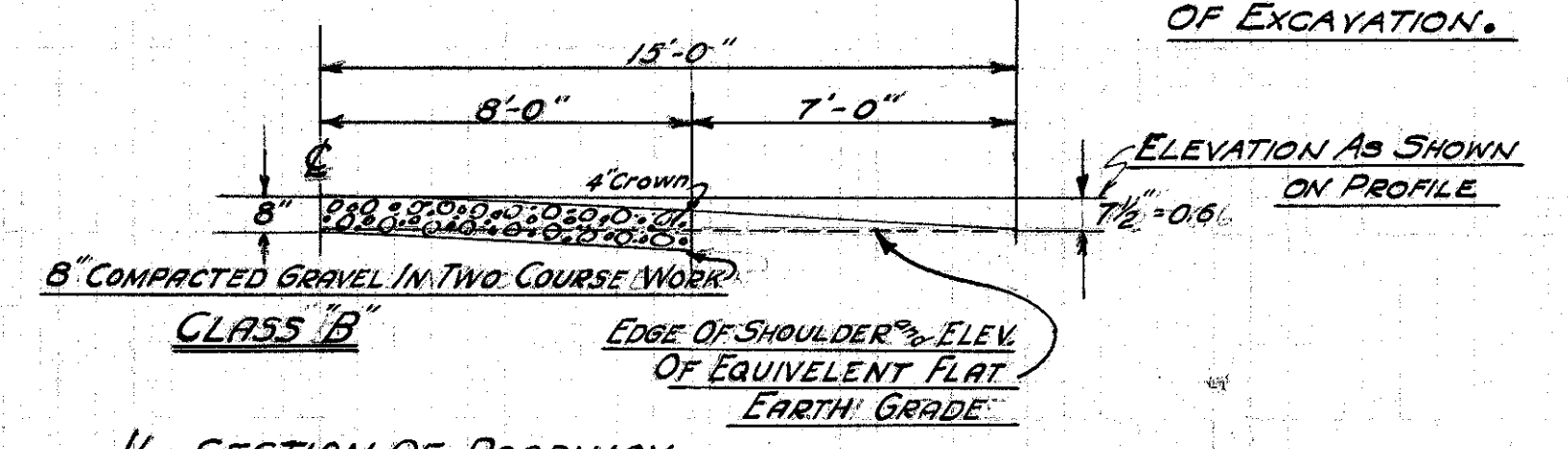
4' Emb.
 1 1/2' HR



No Work At Sta. 12+00 Or Beyond

EARTH WORK SUMMARY [ROADWAY ONLY]

TOTAL CUT IN ROADWAY = 967.5 Cu. Yds.
 TOTAL FILLING IN ROADWAY = 2836.8 Cu. Yds.
 ALLOWING 15% SHRINKAGE ABT. 2293 Cu. Yds. MUST BE BORROWED
 BORROW EXCAVATION SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR WITHIN THE LIMIT OF FREE HAUL
 [1000 FT.] IF POSSIBLE. THE COST OF THIS BORROW TO BE ABSORBED IN THE UNIT PRICE BID PER CU. YD.
 OF EXCAVATION.



1/2 SECTION OF ROADWAY
SYM. ABT. ϕ

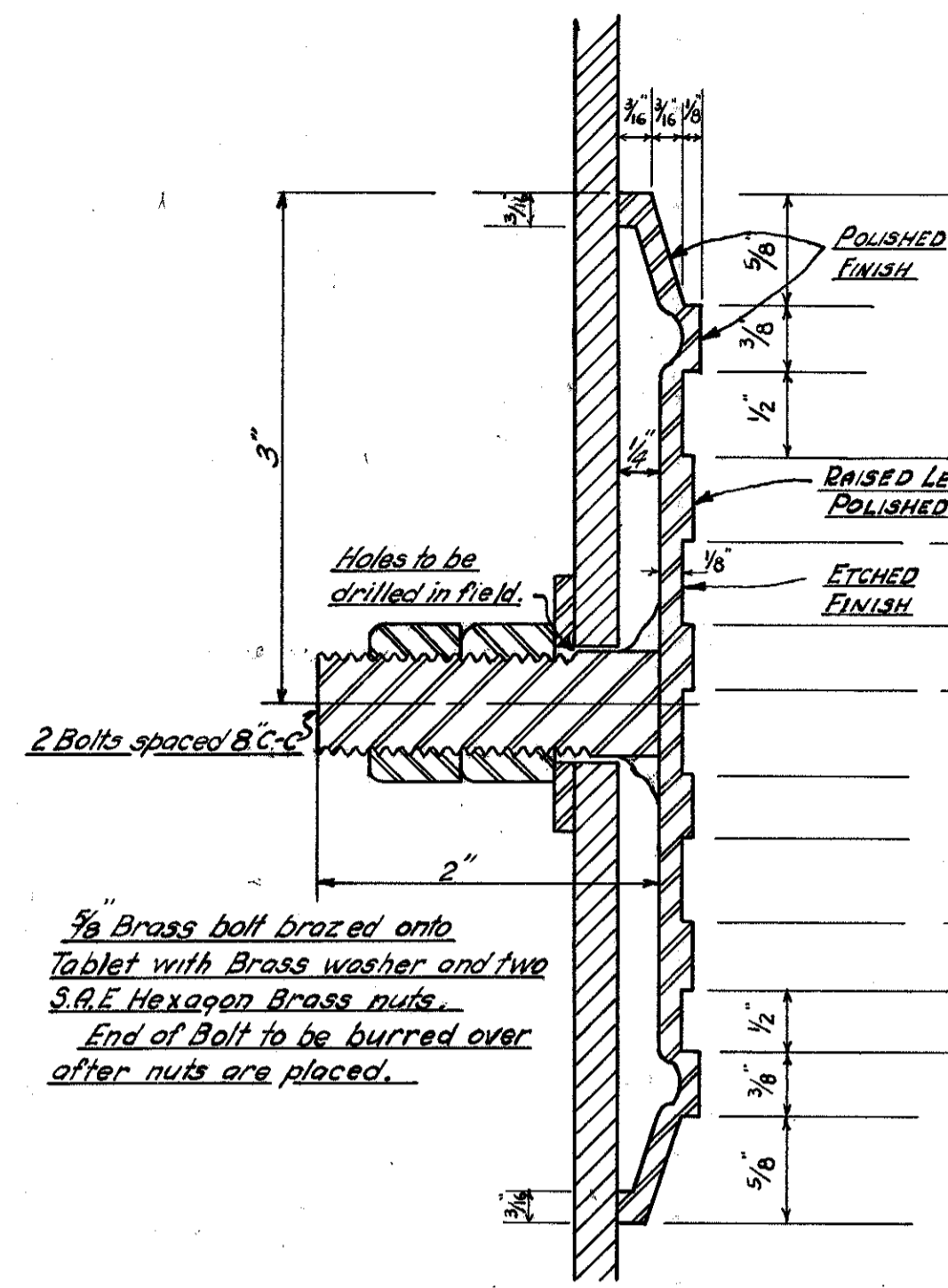
NEW GRAVEL SURFACE EXTENDS FROM STATION 0+00 TO STATION 12+00
 OUTAGE AT BRIDGE = 95.25 LIN. FT.
 NET SURFACE = 1964 Sq. Yds.

NOTE: The Contractor May Salvage a part of the present Gravel Surface for use in later resurfacing.
 If this is done, the yardage so removed will not be paid for as excavation.
 Excavation & Embankment has been figured on the basis that the present Gravel Surface remains in place.

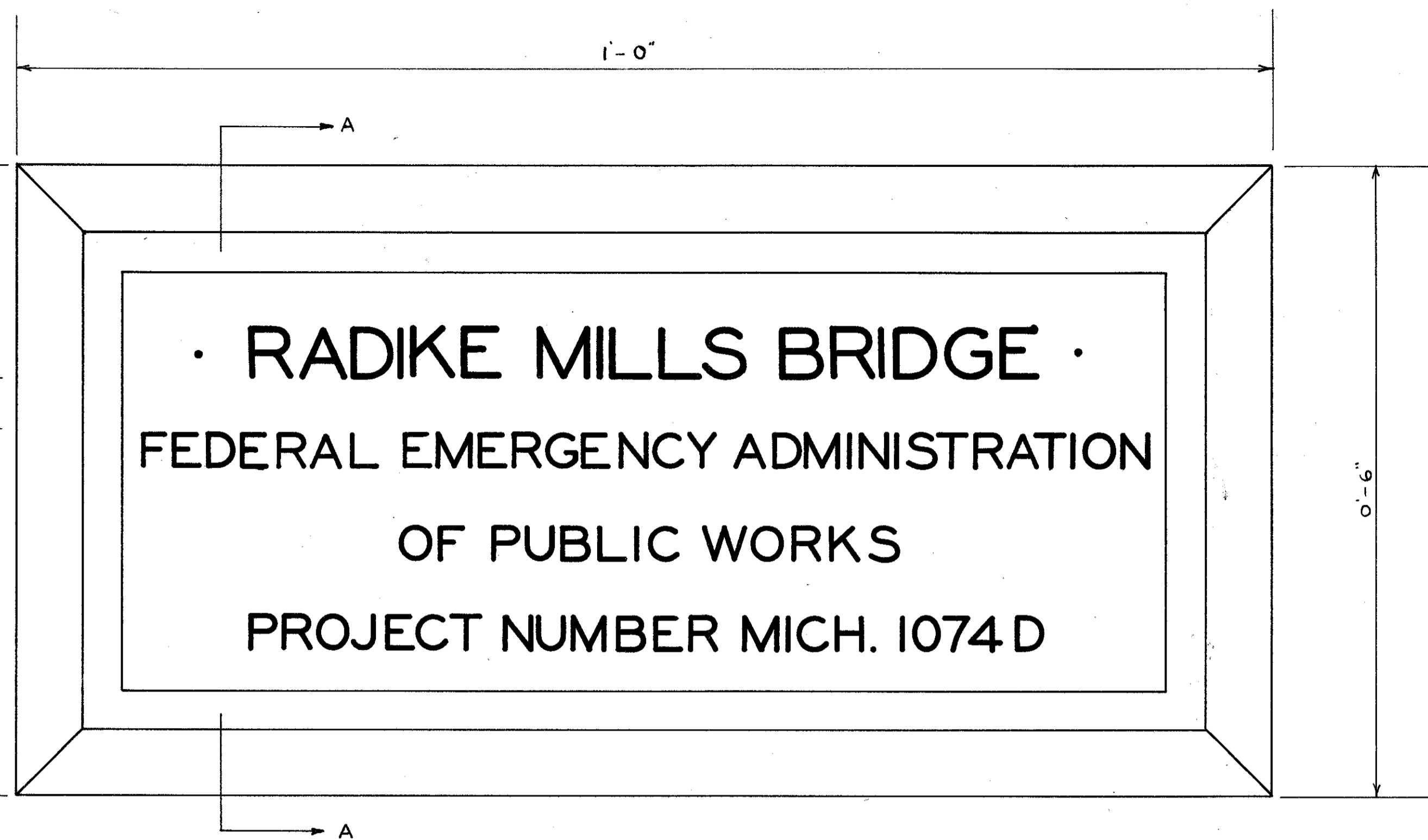
SCALE OF CROSS SECTIONS
 1" = 5'-0" VERT.
 1" = 10'-0" HORIZ.

P.W.A. PROJECT
MICHIGAN - 1074-R

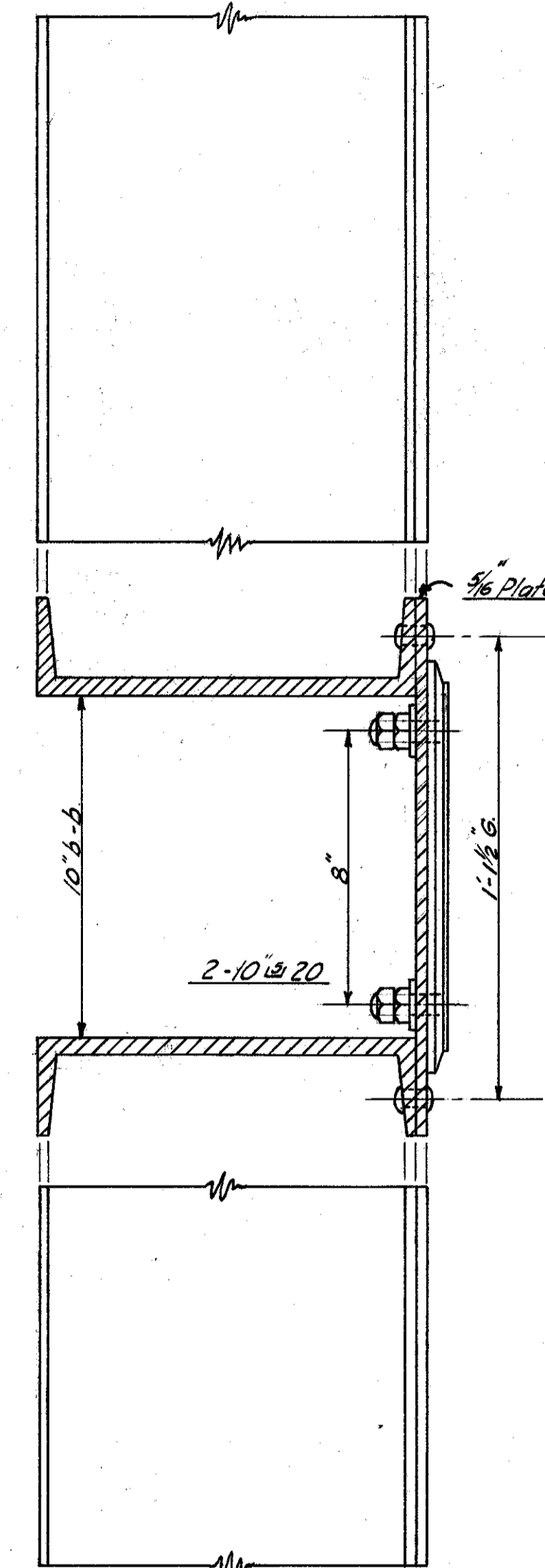
ST. CLAIR COUNTY ROAD COMMISSION		
PORT HURON		MICHIGAN
BRIDGE OVER BELLE RIVER ON AD. 31		
EARTHWORK		
REVISED:	DRAWN T.P. 2/16/46	Job. No. PC. 833-5-282
	CHECKED - K.G.	
	APPROVED W.M. [Signature]	DRAWING No. 5



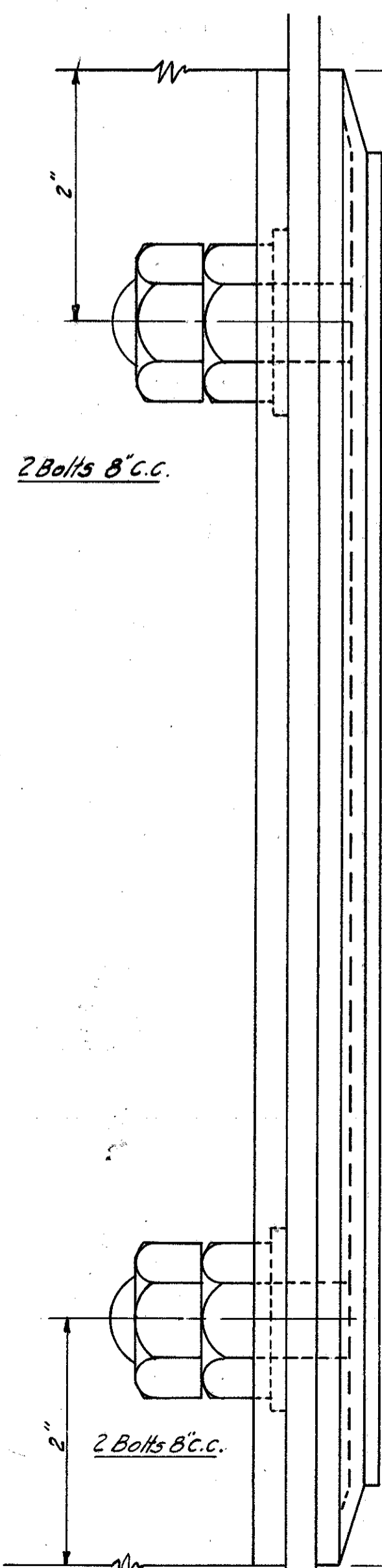
SECTION A-A



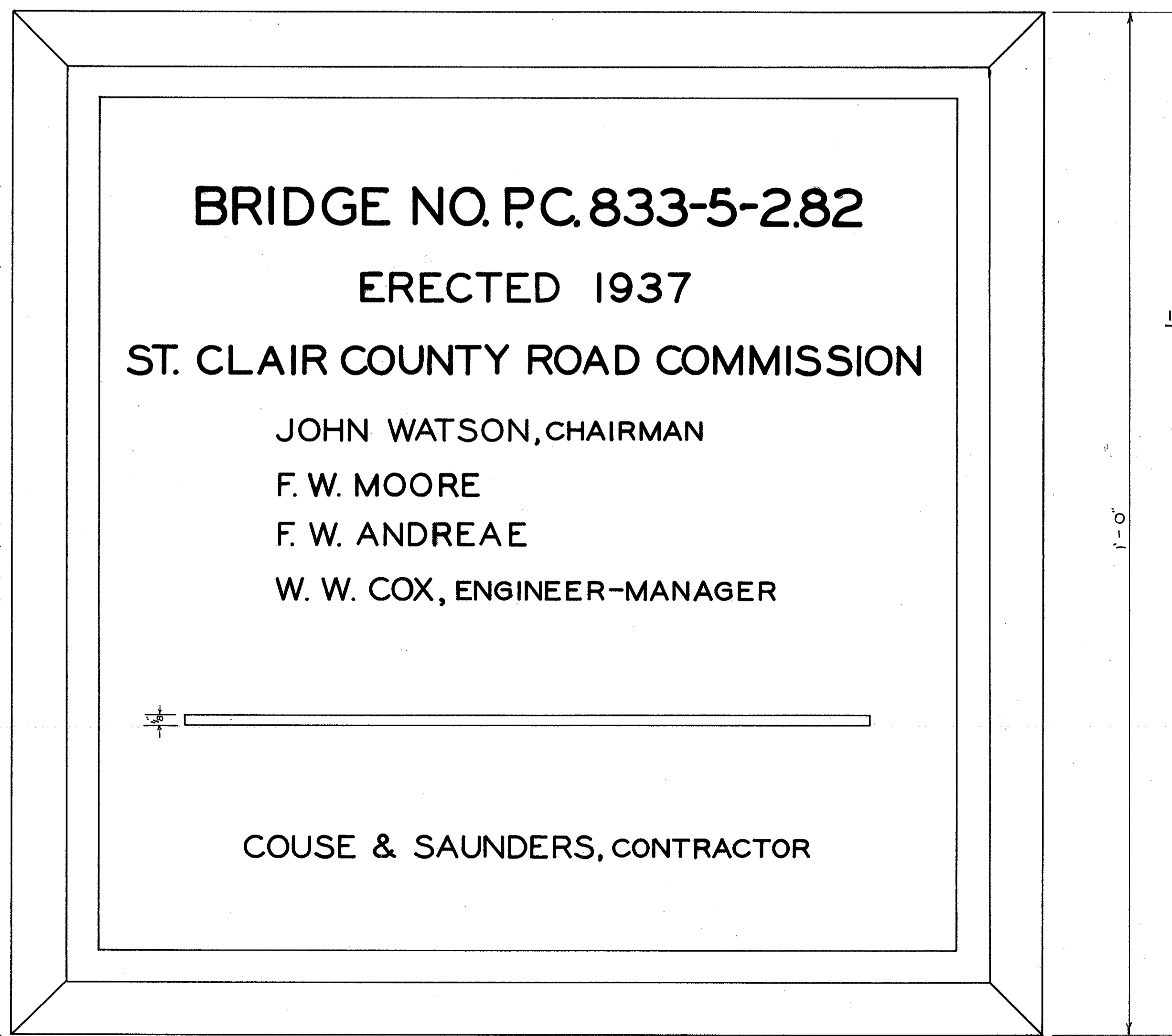
1 TABLET LIKE THIS REQUIRED
FULL SIZE DETAIL



Scale 3"=1'
DETAIL OF TABLET ATTACHMENT
TO BATTER POST.



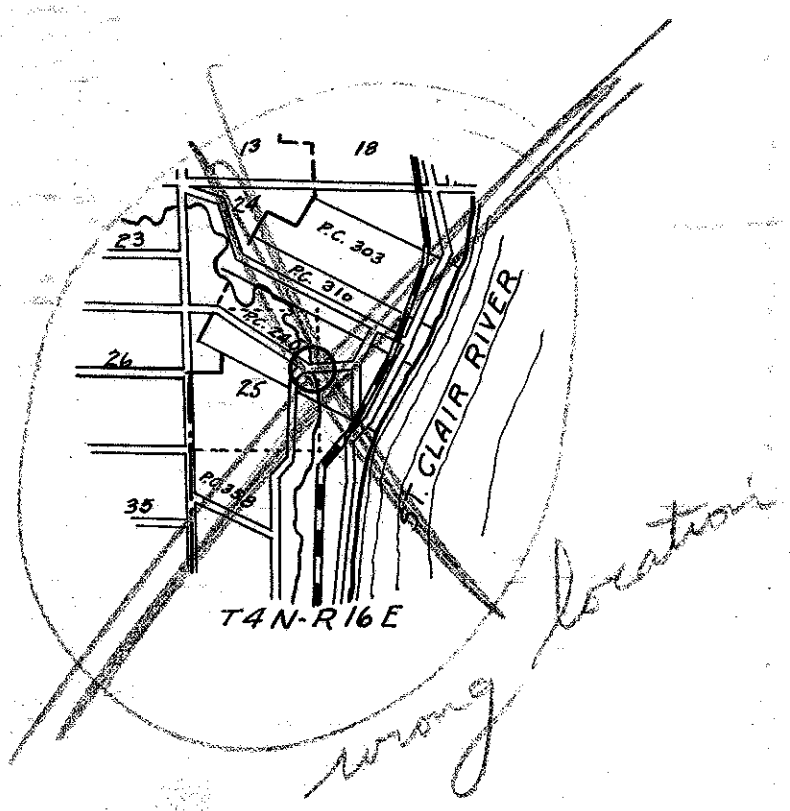
SIDE ELEVATION



1 TABLET LIKE THIS REQUIRED
FULL SIZE DETAIL

ST. CLAIR COUNTY ROAD COMMISSION		
PORT HURON		MICHIGAN
BRONZE TABLETS		
FOR		
BRIDGE AT RADIKE MILLS ON AD 31		
DRAWN T.A.P. R.L.F. 5/20/37	APPROVED [Signature]	JOB NO. P.C. 833-5-2.82
CHECKED K.R.Gaffield 9/20/37	APPROVED [Signature]	RWA. MICHIGAN 1074 D
REVISED	APPROVED [Signature]	DRAWING No. 6

No survey
 Look for another tracing
 Make plan using all
 data we can find

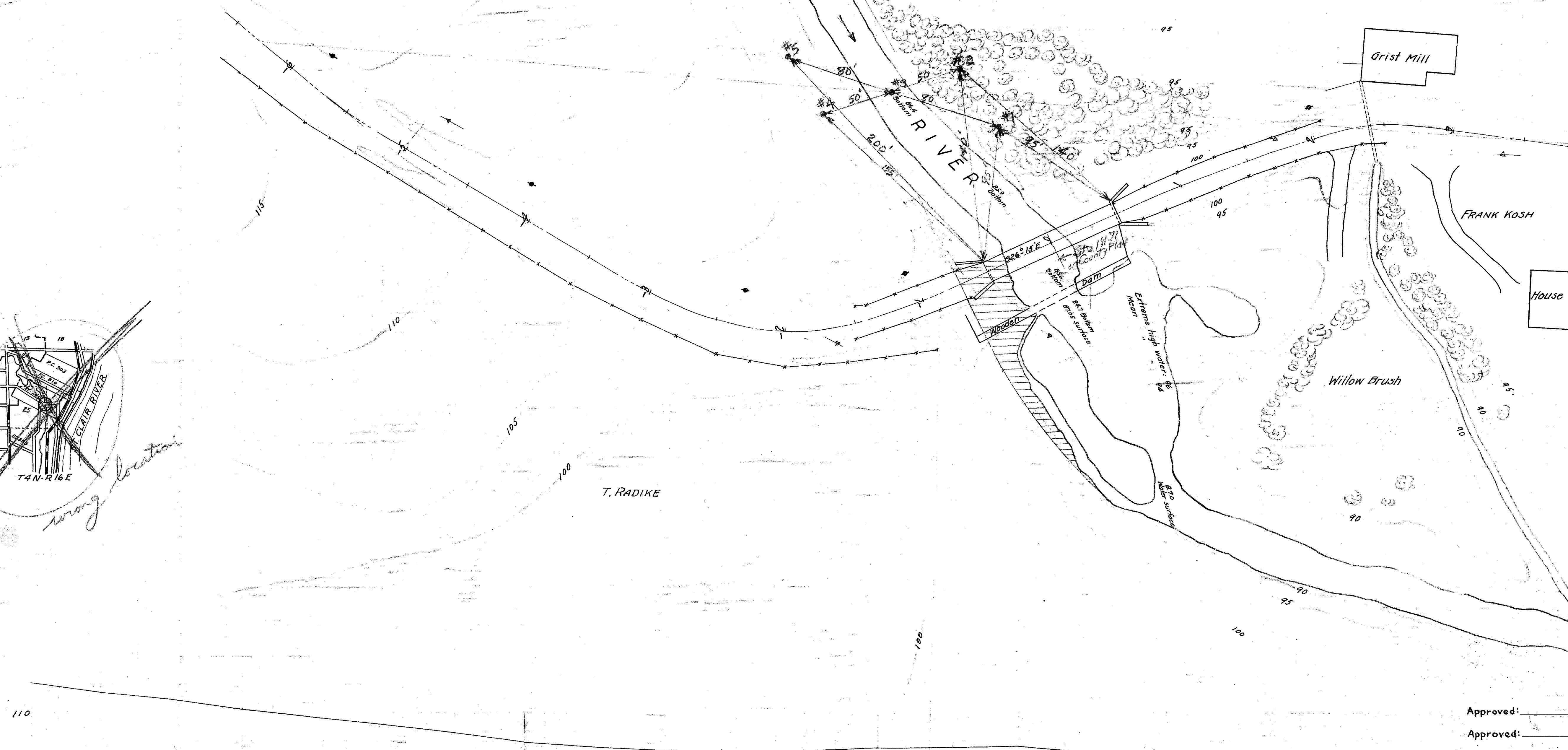
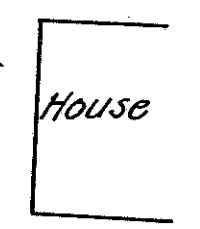


2 @ 65' 10" S.D.G
 30' Roadway 24' walks
 50° angle of crossing

FRANK KOSH

L. CLARKE

BELLE RIVER



St. Clair Co.
 Bldg 77-5-21

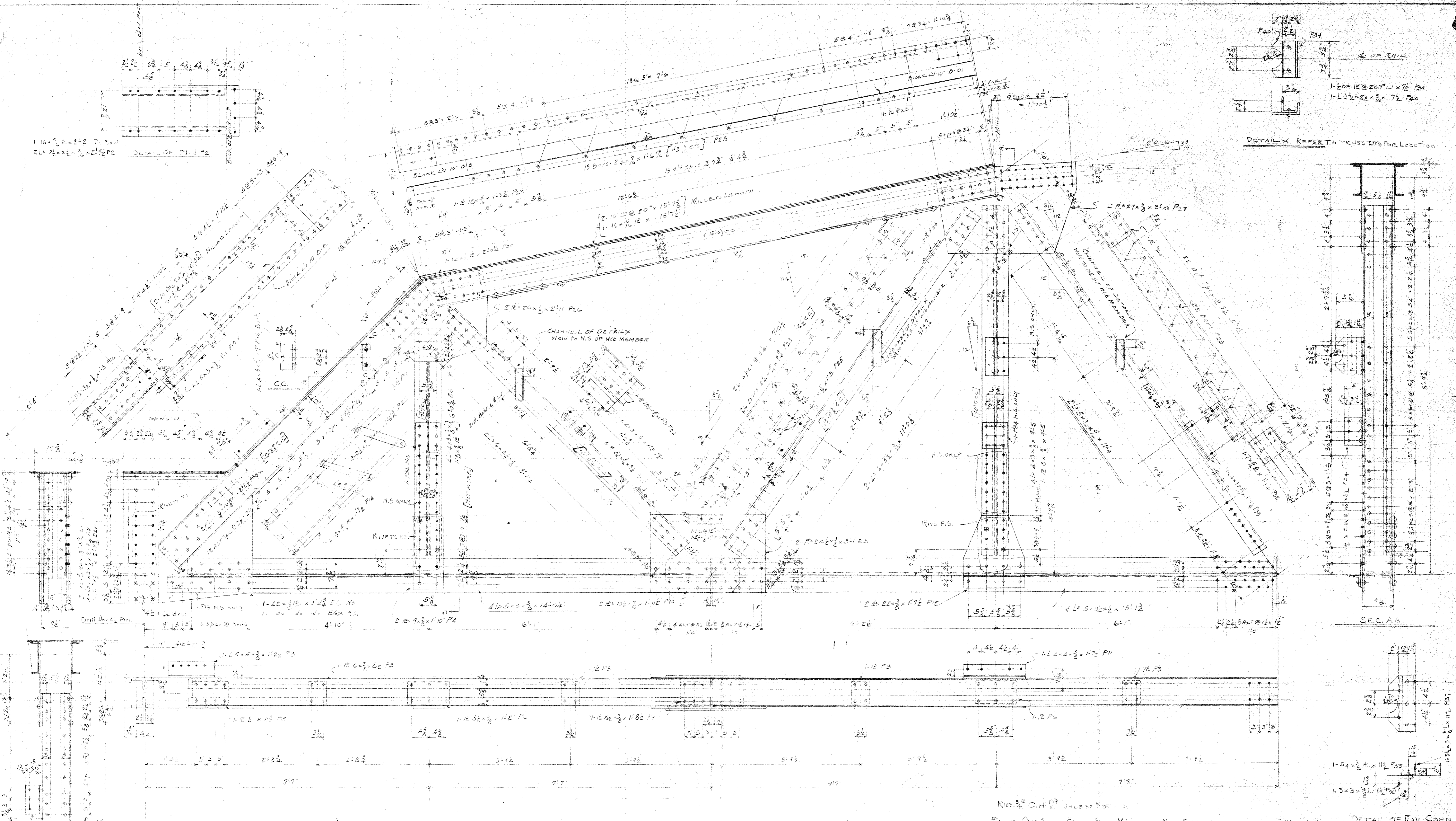
Approved: _____
 Approved: _____
 Approved: _____
 Asst. Bridge Engineer.
 Bridge Engineer.

110
 100
 115.3
 -6/1138
 112.3
 -5/1077
 109.2
 -4/1079
 106.4
 -3/1068
 104.0
 -2/1035
 103.2
 -1/1033
 103.9
 0/1039
 104.0
 1/1029
 102.4
 2/1018
 101.5
 3/1013
 101.1

MICHIGAN
 STATE HIGHWAY DEPARTMENT
 PRELIMINARY STUDY
 FOR
 INDIAN TRAIL RD. PROPOSED BRIDGE FILE NO. 770502
 CROSSING BELLE RIVER SEC. T4N-R16W
 CHINA TWP. ST. CLAIR CO.
 SCALE 1" = 40 FT. 15 5-5P

Br. of 77-5-21

22-34



Recommended for Approval B.L. Parker

P.W.A. PROJECT MICH. 1074 R.

F. YEAGER BRIDGE & CULVERT WORKS
PORT HURON, MICH.
 Steel Details For Trusses
 FOR
 Belle River Bridge A.D. 31
 Cause And Saunders Contr.
 Dec. 3 1936 Order 6132 Sheet 5