

PLANS FOR PROPOSED SECTION 38-B-MFT WHITESIDE COUNTY

LOCATED IN SECTION 36
T.21 N., R.7 E. OF THE 4th P. M.

SUMMARY OF QUANTITIES

TOTAL	UNITS	ITEM
220	CU. YD.	CHANNEL EXCAVATION
276	CU. YD.	CONCRETE REMOVAL
16	EACH	EXPANSION BOLTS - 3/4"
4020	POUND	FURNISHING AND ERECTING STRUCTURAL STEEL
2.2	CU. YD.	HANDRAIL CONCRETE
1278	CU. YD.	CLASS X CONCRETE
27320	POUND	REINFORCEMENT BARS
480	LIN. FT.	FURNISHING PRECAST CONCRETE PILES - 14"
480	LIN. FT.	DRIVING PRECAST CONCRETE PILES
1	EACH	NAME PLATES

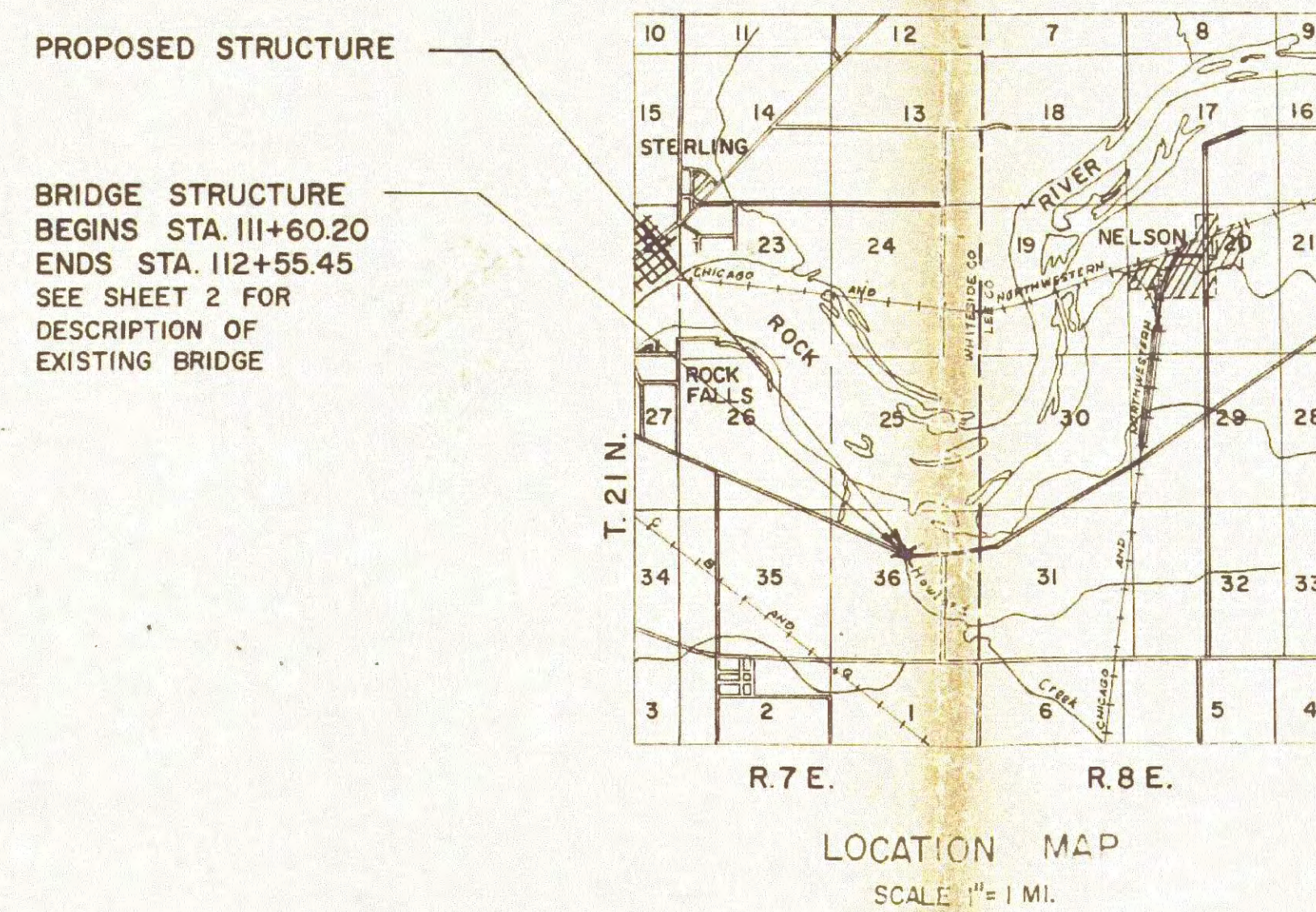
COUNTY HIGHWAY 3 1967

PLAN 1" = 50'
PROFILE, HORIZ. 1" = 50'
PROFILE, VERT. 1" = 5'
CROSS SECTIONS 1" = 5'

INDEX OF SHEETS

SHEET NO. 1	COVER SHEET
SHEET NO. 2	PLAN AND PROFILE
SHEET NO. 3	GENERAL PLAN AND ELEVATION
SHEET NO. 4	DECK WIDENING DETAILS
SHEET NO. 5	SUBSTRUCTURE WIDENING DETAILS
SHEET NO. 6	HANDRAIL AND PRECAST PILE DETAILS
SHEET NO. 7	STD. 2113-1 NAMEPLATE STD. 2208-2 BARRICADE

NET LENGTH = 95.25 (0.0181 MI.)



APPROVED
FOR SIGNATURE ONLY
[Signature]
Engineer of Bridge & Traffic Structures

PLANS PREPARED BY
WILLETT, HOFMANN & ASSOCIATES, INC.
CONSULTING ENGINEERS
DIXON, ILLINOIS

B.M. SP 6W SIDE 71" ELM 44' RT. 110+56
ELEV. 638.80

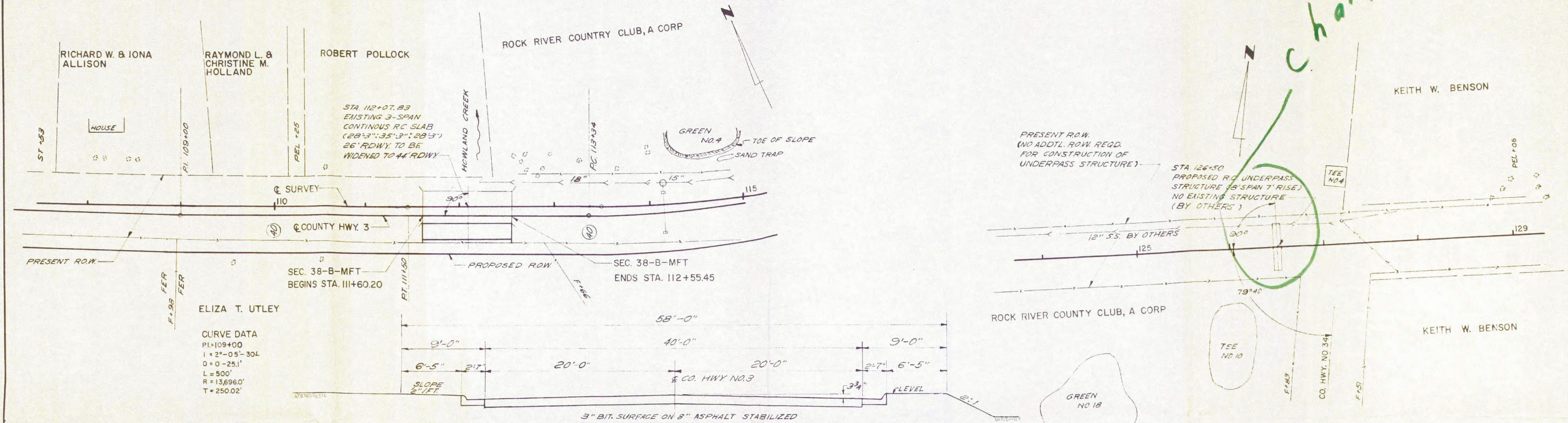
NOTE: THESE ELEVATIONS ARE 0.80 BELOW THE U.S.G.S. DATUM

B.M. SP 6W TP 31' RT. 127+50
ELEV. 647.99

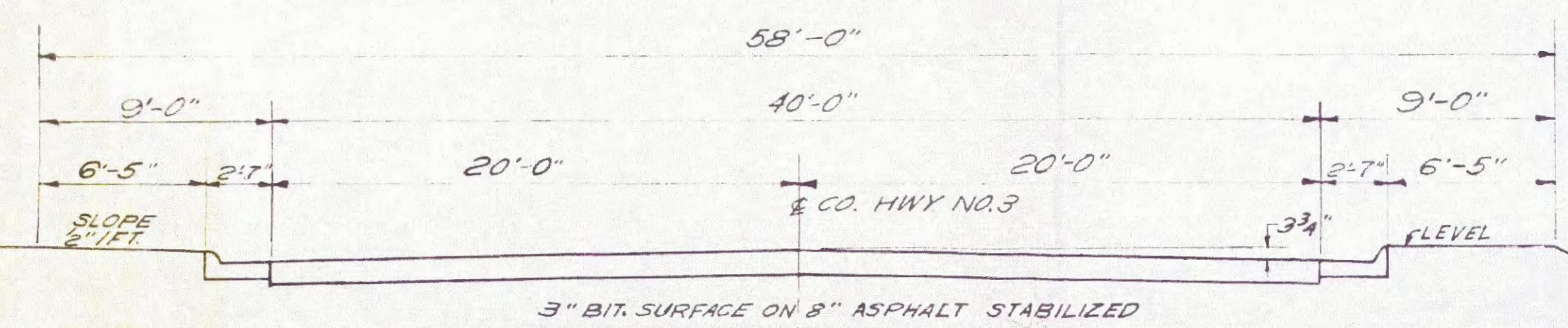
SECTION 38-B-MFT
WHITESIDE COUNTY
SHEET 2 OF 7 SHEETS

DATE	
BY	
CHECKED	
APPROVED	
NO. OF SHEETS	
NO. OF THIS SHEET	

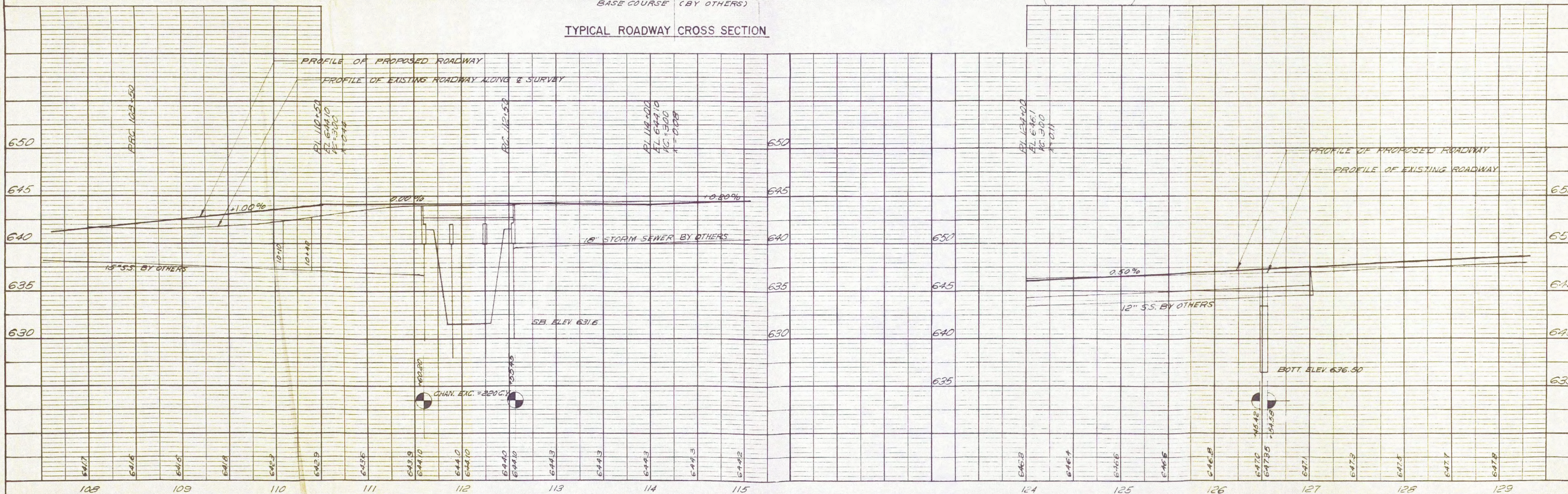
DATE	
BY	
CHECKED	
APPROVED	
NO. OF SHEETS	
NO. OF THIS SHEET	



ELIZA T. UTLEY
CURVE DATA
PI=109+400
I = 2°-05'-30"
D = 0 - 25.1'
L = 500'
R = 13,696.0'
T = 250.02'



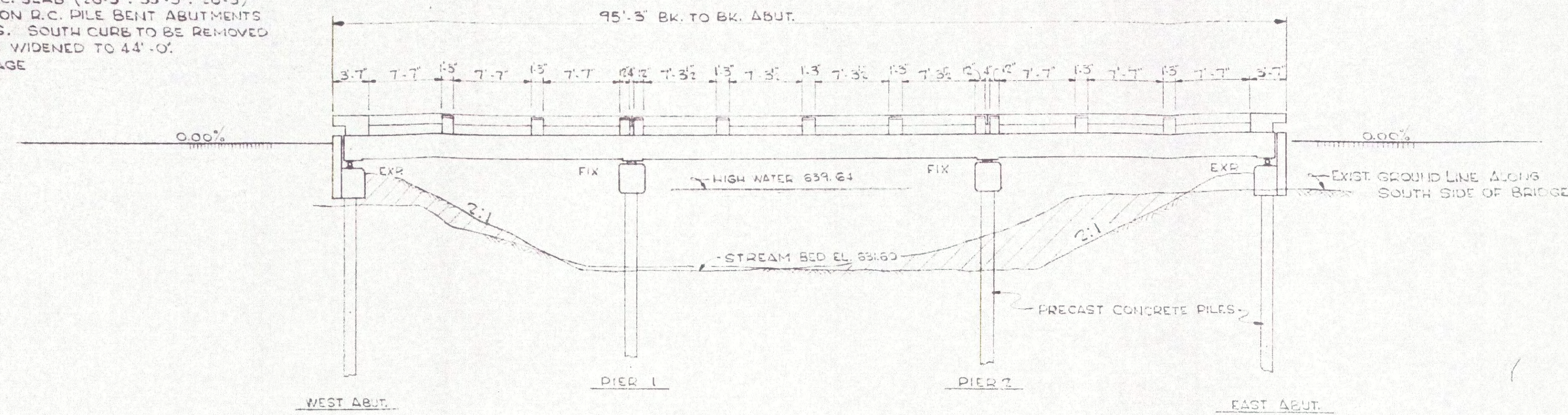
TYPICAL ROADWAY CROSS SECTION



BM - SPK. & W. IN 7" ELM 44' RT.
STA. 110156 ELEV. 638.60

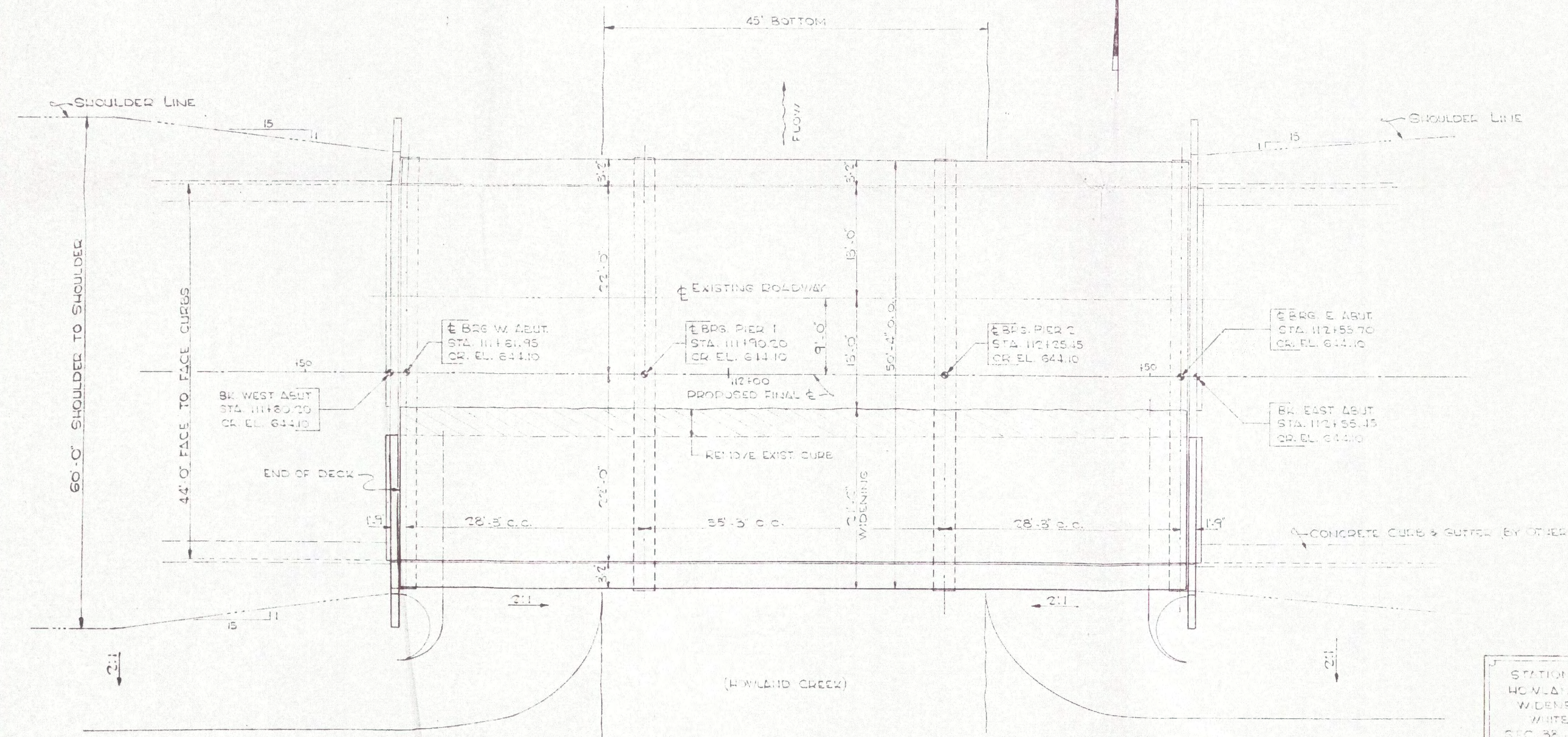
EXISTING STRUCTURE:
3 SPAN R.C. SLAB (28'-3" : 35'-3" : 28'-3")
26' RDWY. ON R.C. PILE BENT ABUTMENTS
AND PIERS. SOUTH CURB TO BE REMOVED
AND RDWY. WIDENED TO 44'-0".
NO SALVAGE

SECTION 38-B MET
WHITESIDE COUNTY
CO. HIGHWAY NO. 3
SHEET NO. 3 OF 7 SHEETS



ELEVATION

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



PLAN

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

DESIGN STRESSES

$f_c = 1400$ PSI SUPER
 $f_c = 1000$ PSI SUBSTR.
 $f_s = 20000$ PSI STRUCT. STEEL
 $f_s = 20000$ PSI REINF.
 $n = 10$ LOADING HS-20

STATION 112107.85
HOWLAND CREEK
WIDENED 1967 BY
WHITESIDE CO.
SEC. 38-B-MFT
LOADING HS-20

LETTERING FOR NAME PLATE
STD. 215-1

GENERAL NOTES

- Class X Concrete shall be used throughout except in handrail.
- Handrail concrete shall be used in rail and post.
- Handrail post and rail elements shall be poured in separate operations after the concrete floor slab forms have been removed.
- All reinforcement bars shall be lapped 20 bar diameters unless otherwise shown.
- All rollers, bearing plates, lead plates, anchor bolts and expansion guards are included for payment as Structural Steel.
- All Structural Steel with the exception of the expansion guards shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Article 56.1 to 56.5 inclusive of the Standard Specifications.
- The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint. The contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.
- All paint shall be furnished and applied by the Contractor.
- Portions of the superstructure and substructure shall be removed by the Contractor in accordance with Article 47.4 of the Standard Specifications. This work is included for payment per cubic yard of Concrete Removal.
- The channel shall be excavated and stones constructed according to the lines shown on bridge sheet No. 1. The limits of channel excavation shall be the proposed right of way lines.
- The cost of Class A Excavation for structures shall be included in the contract unit price per cubic yard of Class X Concrete.
- The bituminous surfacing of the entire bridge deck will be done by others except that the contractor shall furnish and install sufficient bituminous material at the ends of the bridge to build up the roadway to the top of the expansion device angles. The cost of this work shall be considered incidental to the contract.

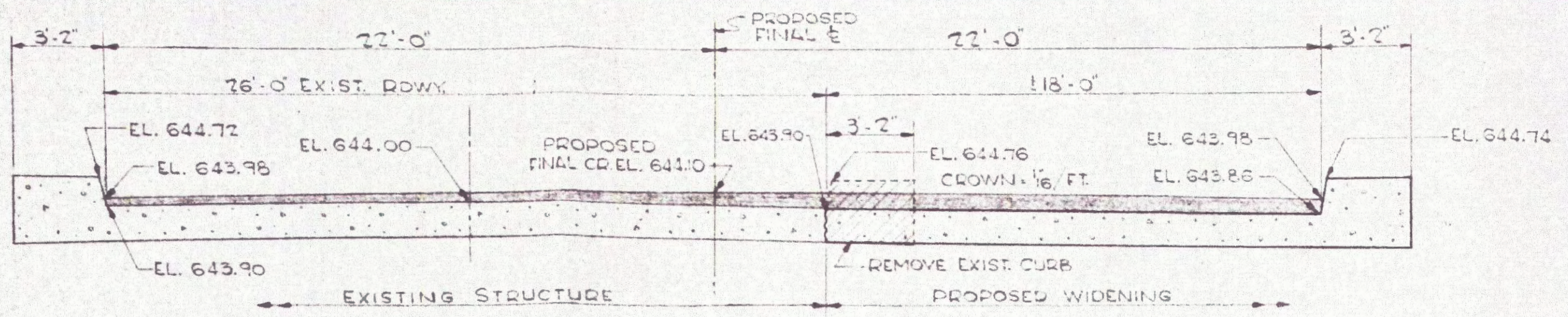
BILL OF MATERIAL - BRIDGE

ITEM	UNIT	SUB	SUPER	TOTAL
CLASS X CONCRETE	CUB. YD.	251.6	100.2	351.8
HANDRAIL CONCRETE	CUB. YD.		0.2	0.2
REINFORCEMENT BARS	LB.	2500	2450	4950
FURNISHING & ERECTING STRUCTURAL STEEL	LB.		4020	4020
NAME PLATES	EA.		1	1
FURNISHING PRECAST CONCRETE PILES (14)	LINEAL FT.	450		450
DRAWING PRECAST CONCRETE PILES	LINEAL FT.	450		450
CONCRETE REMOVAL	CUB. YD.	1.8	20.8	22.6
CHANNEL EXCAVATION	CUB. YD.			270
EXPANSION BOLTS 3/4"	EA.	10		10

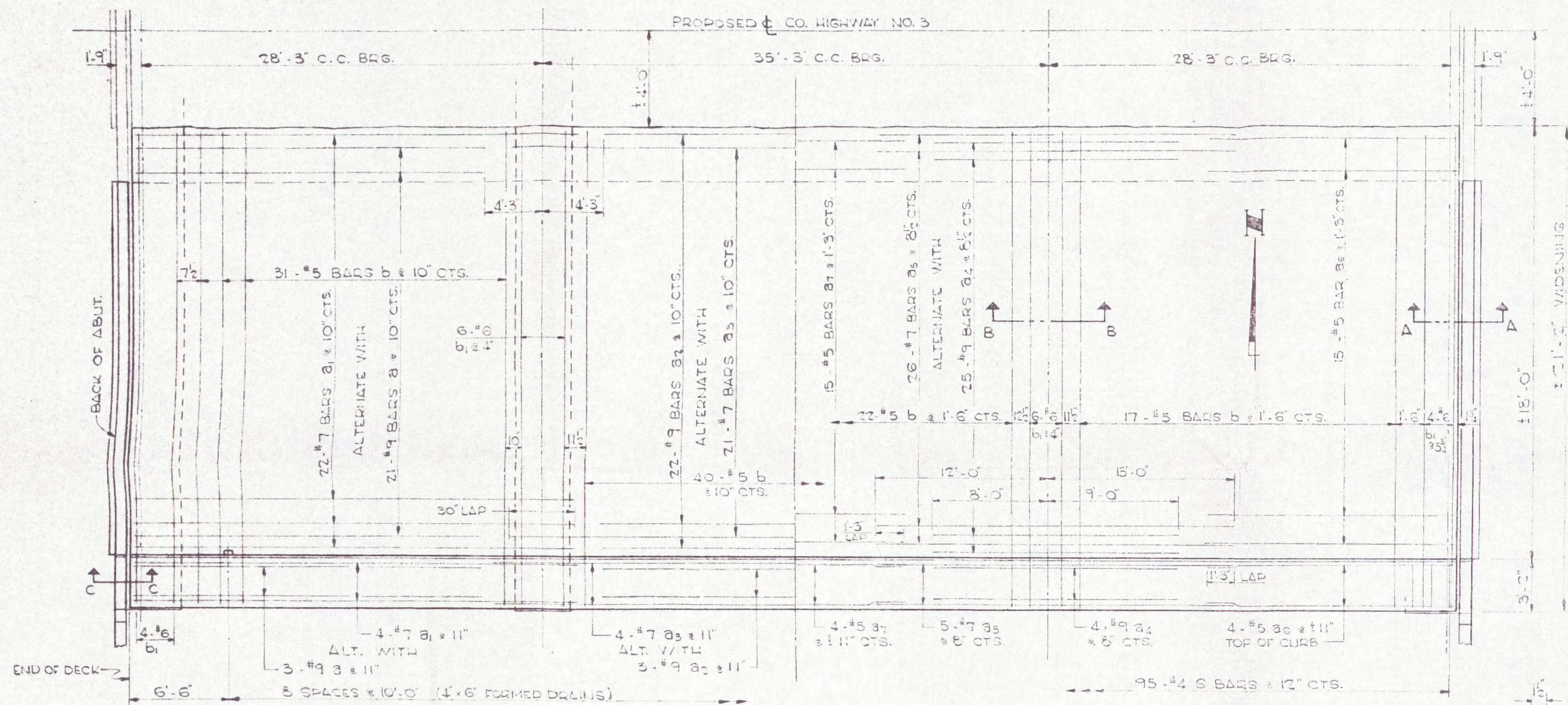
GENERAL PLAN AND ELEVATION
STATION 112107.85
BRIDGE OVER HOWLAND CREEK
CO. HIGHWAY NO. 3 SECTION 38-B MFT
WHITESIDE COUNTY

JAMES D. SCHROENHARD CO. Supt. OF HIGHWAYS

DESIGNED: D. HOFFMAN	WILLETT, HOFFMAN & ASSOCIATES, INC. CONSULTING ENGINEERS 112107.85
DRAWN: R. RICHARDS	
CHECKED: M. SPEER	
REVISED:	

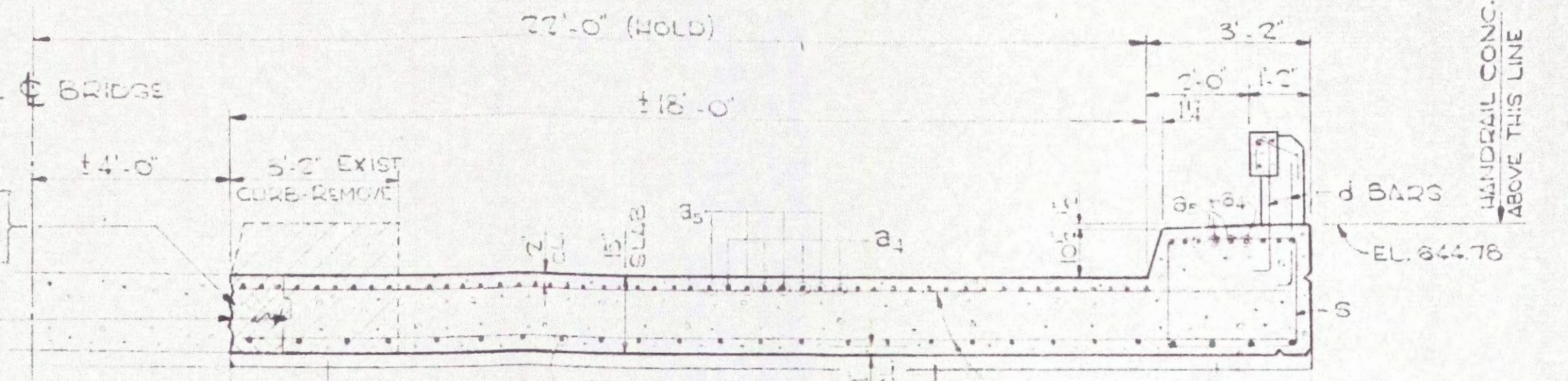


SECTION SHOWING PROPOSED BIT. SURFACE ELEVATIONS.
 (BITUMINOUS SURFACING BY OTHERS - SEE GENERAL NOTES)

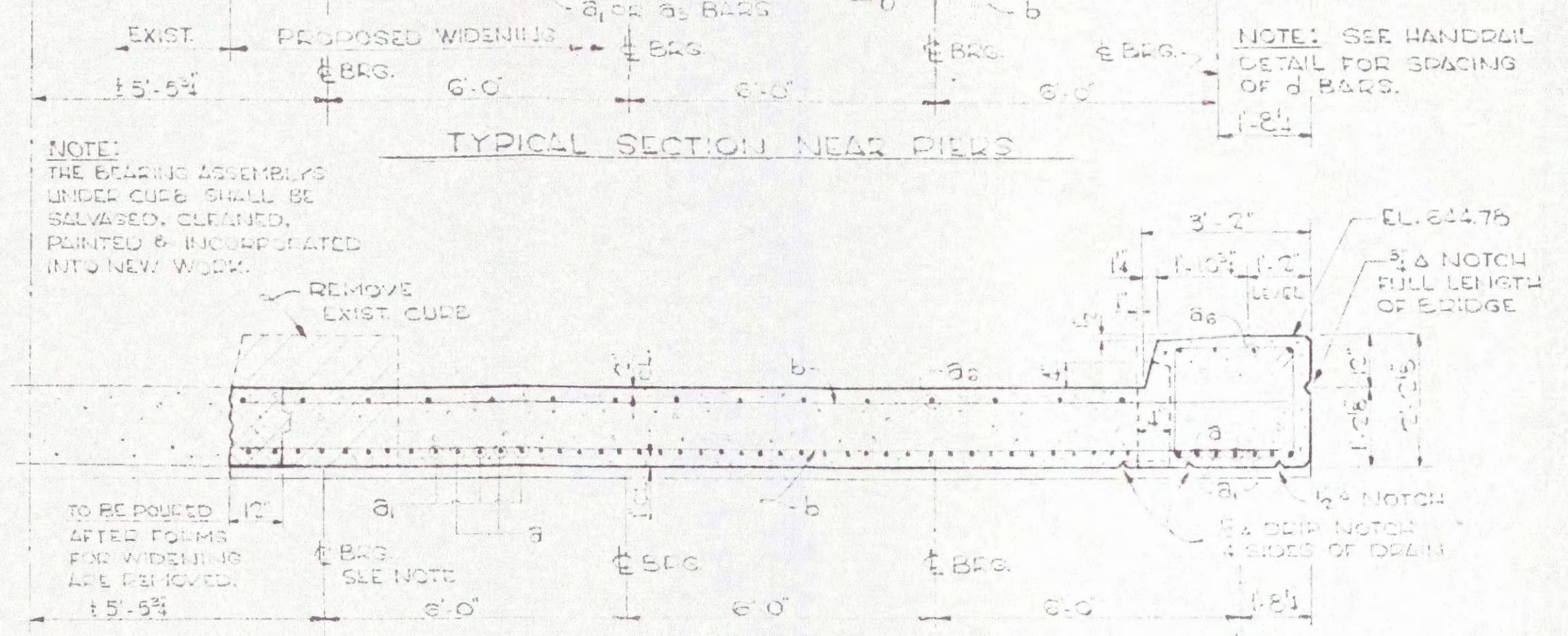


HALF PLAN SHOWING BOT. REINF.

HALF PLAN SHOWING TOP REINF.



TYPICAL SECTION NEAR PIERS

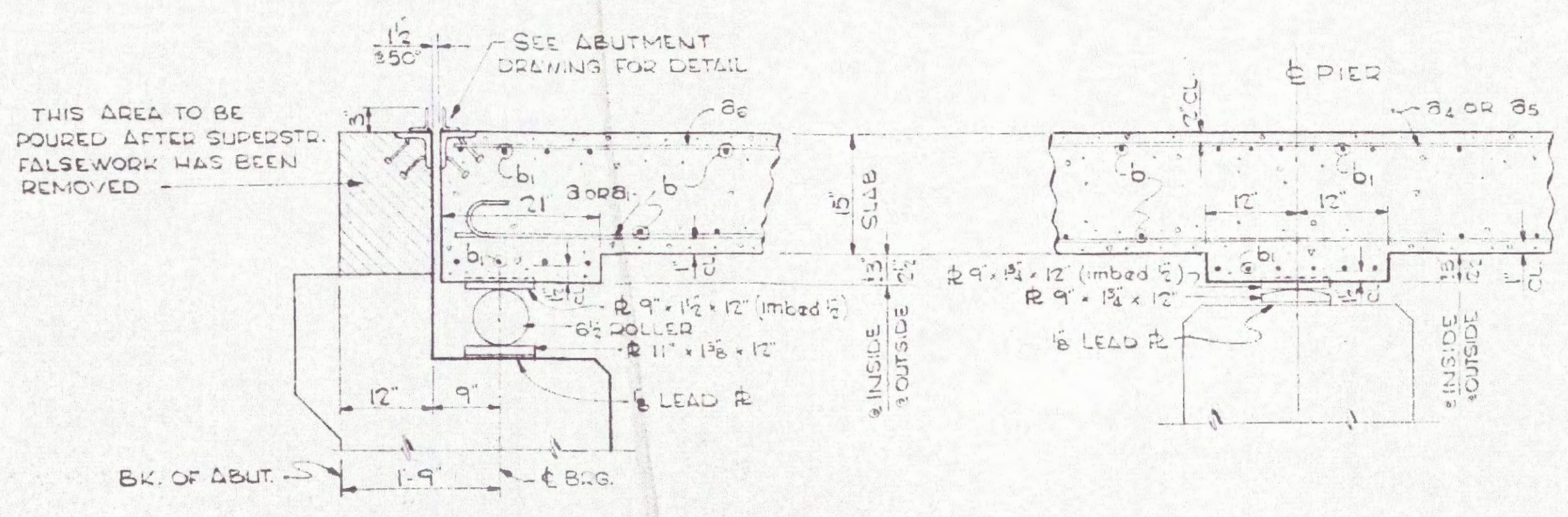


TYPICAL SECTION NEAR ABUT.

BILL OF MATERIAL - DECK WIDENING

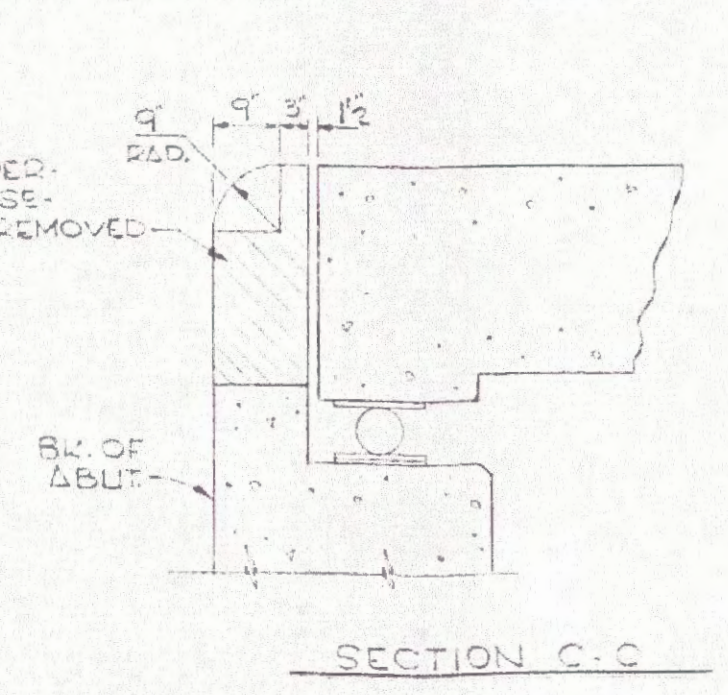
BAR	NO.	SIZE	LENGTH	SHAPE
a	48	#9	20'-6"	
a ₁	52	#7	50'-10"	
a ₂	25	#9	26'-0"	
a ₃	25	#7	57'-9"	
a ₄	58	#9	17'-0"	
a ₅	60	#7	28'-0"	
a ₆	58	#5	17'-0"	
a ₇	15	#5	3'-9"	
b	155	#5	21'-0"	
b ₁	10	#6	21'-0"	
d	54	#6	4'-0"	
c	95	#4	10'-6"	

CLASS X CONCRETE	CU YDS.	107.2
REINFORCEMENT BARS	LEBS	244.90
STRUCTURAL STEEL	LEBS	4020
CONCRETE REIN. 4/1	CU YDS.	25.8

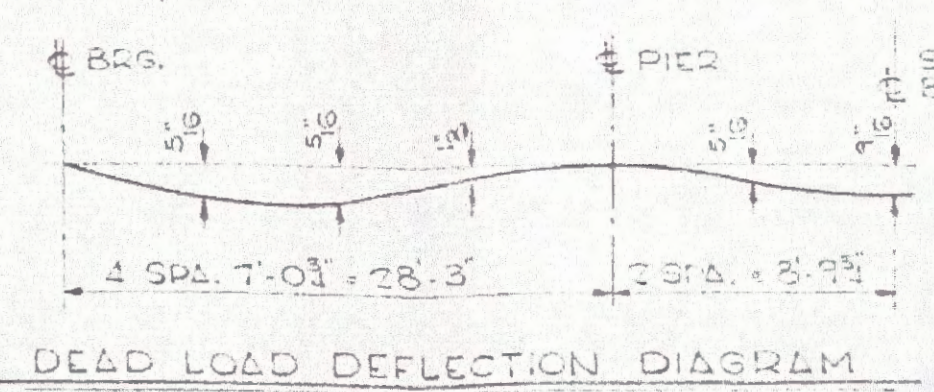


SECTION A-A

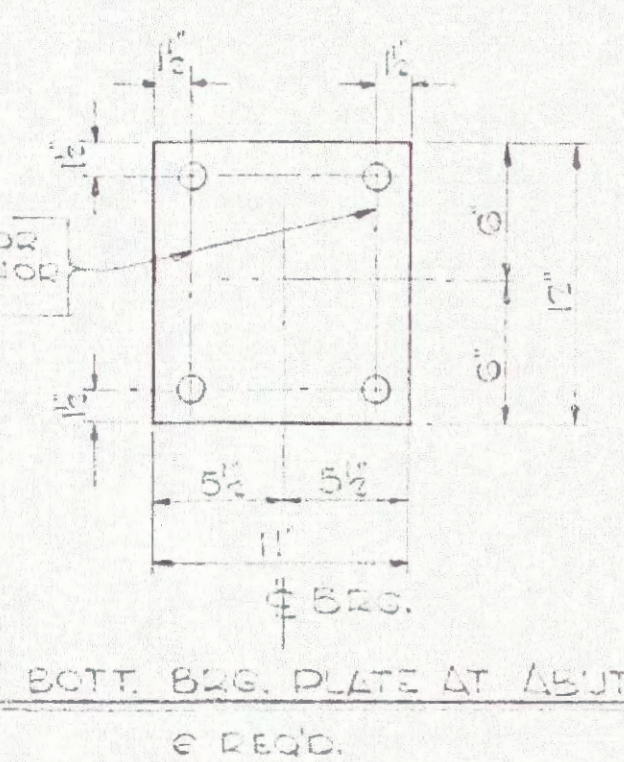
SECTION B-B



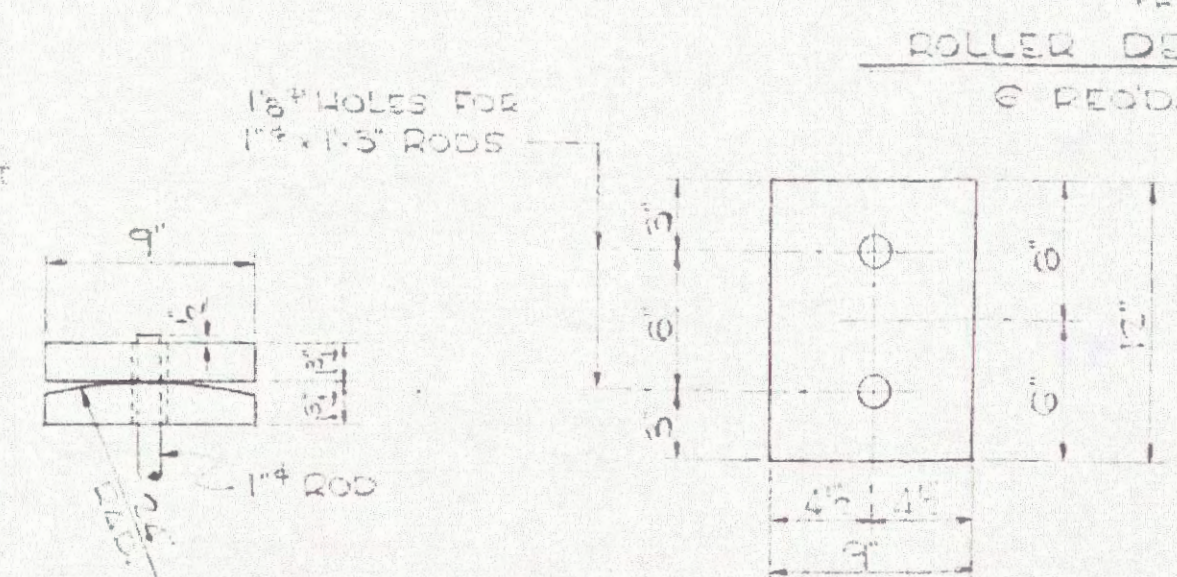
SECTION C-C



DEAD LOAD DEFLECTION DIAGRAM

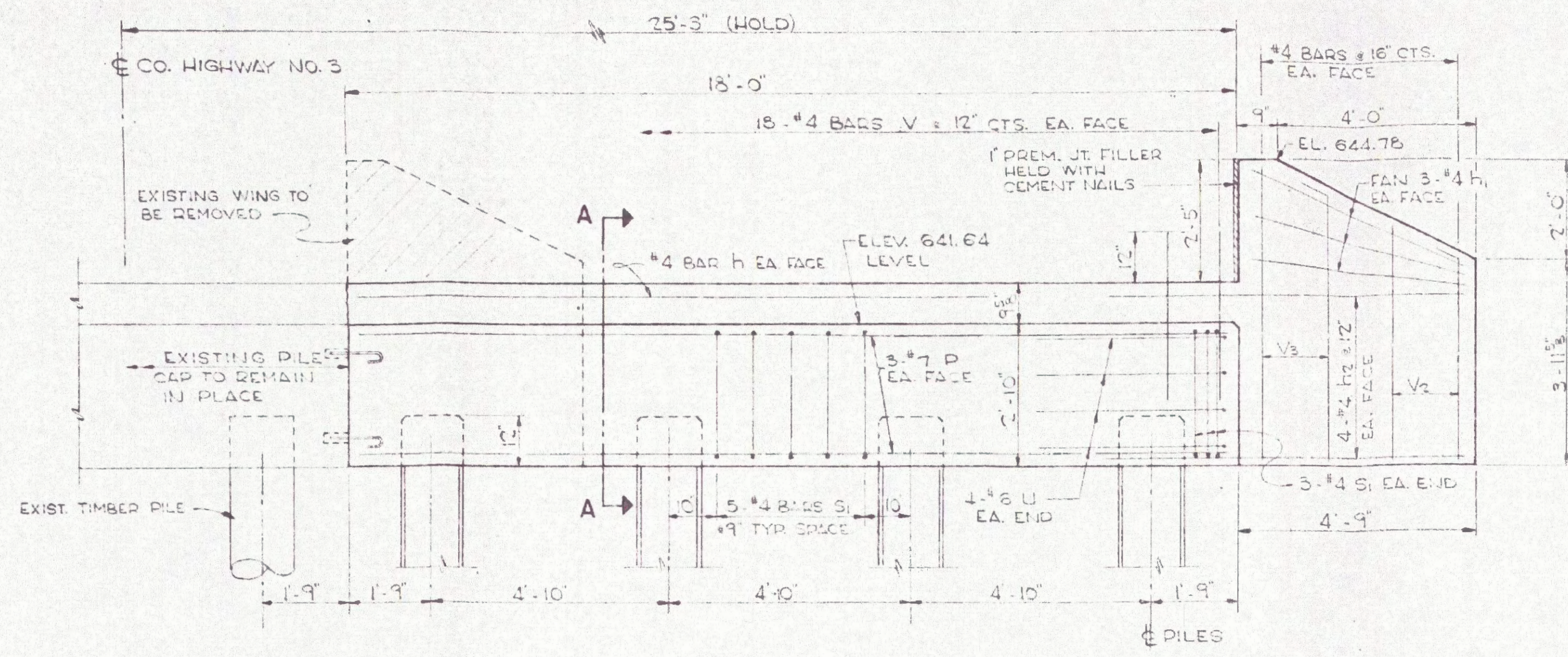


BOTT. BRG. PLATE AT ABUT.

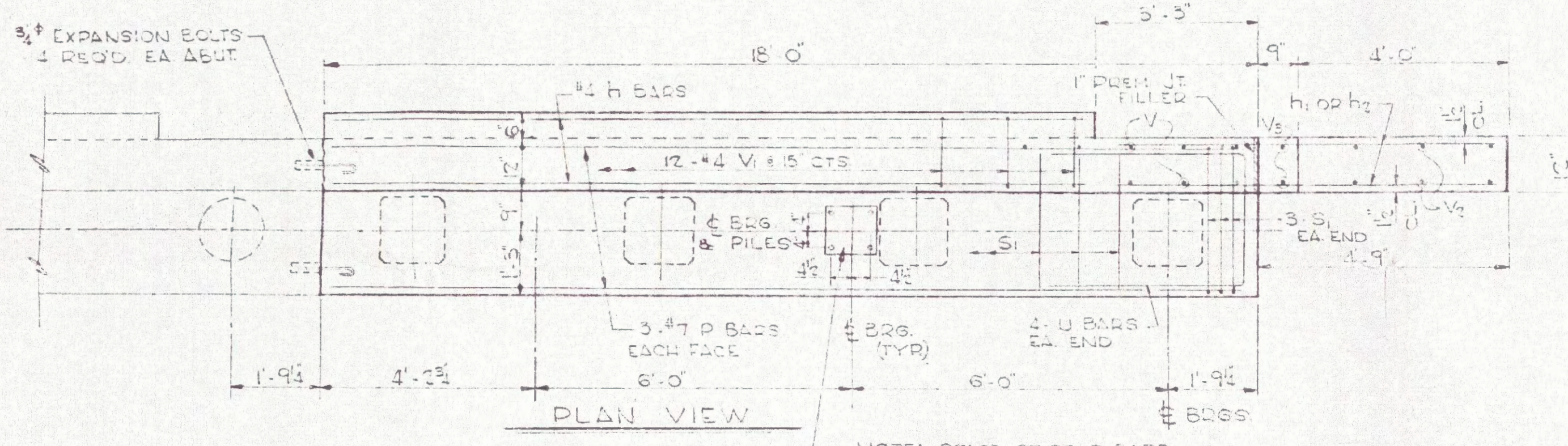


TOP & BOTT. BRG. PLATE AT PIERS (E RECD)

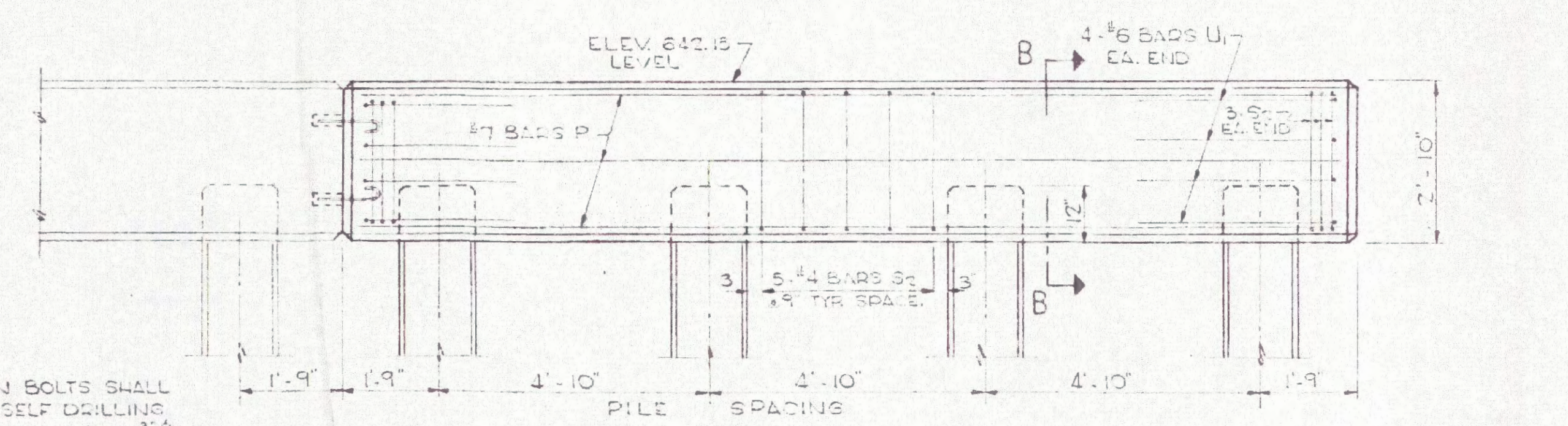
DECK WIDENING DETAILS
 BRIDGE OVER HOWLAND CREEK
 CO. HIGHWAY NO. 3 SECTION 38.6 MFT
 WHITESIDE COUNTY
 STATION 11210783



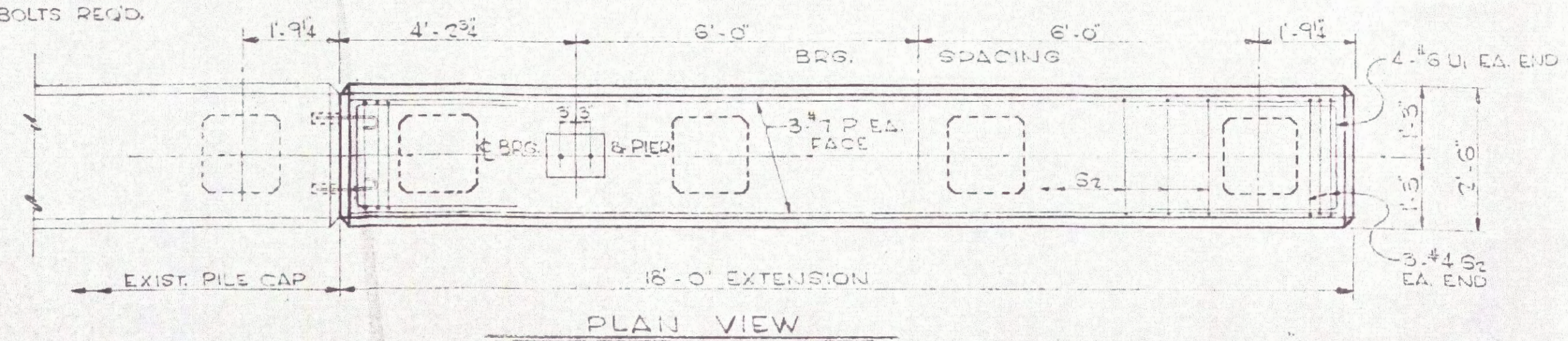
ELEVATION - ABUTMENT EXTENSION



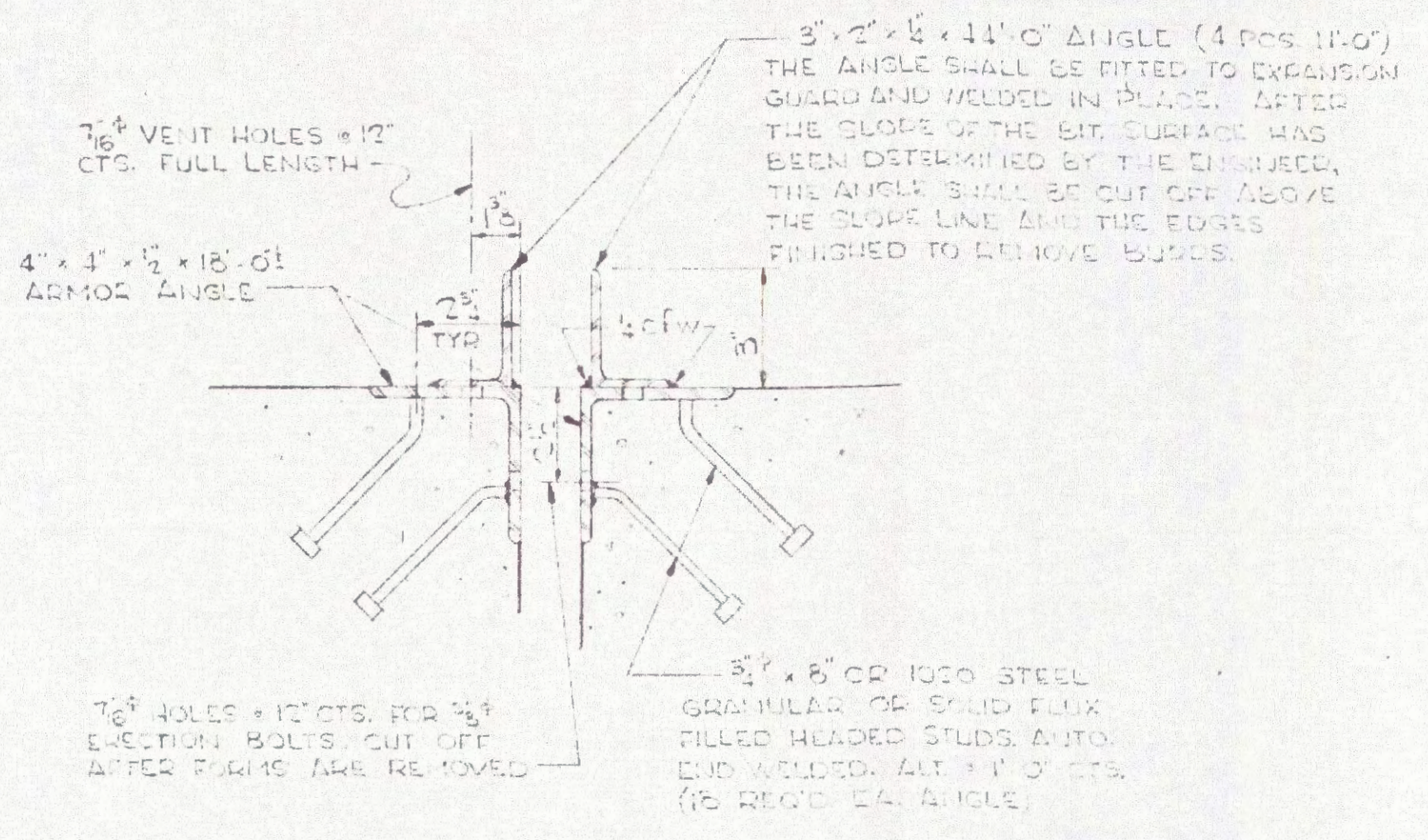
PLAN VIEW



ELEVATION - PIER CAP EXTENSION

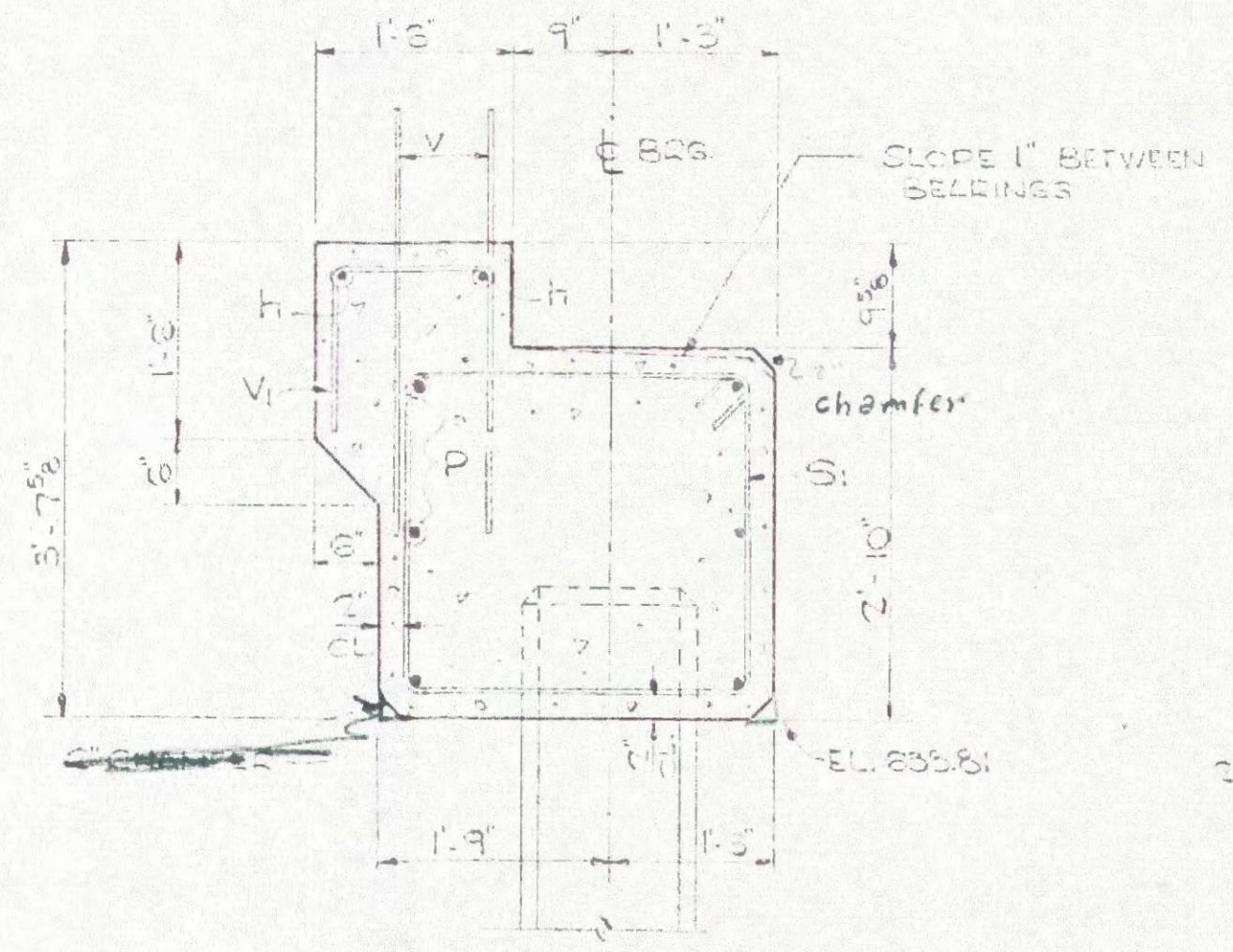
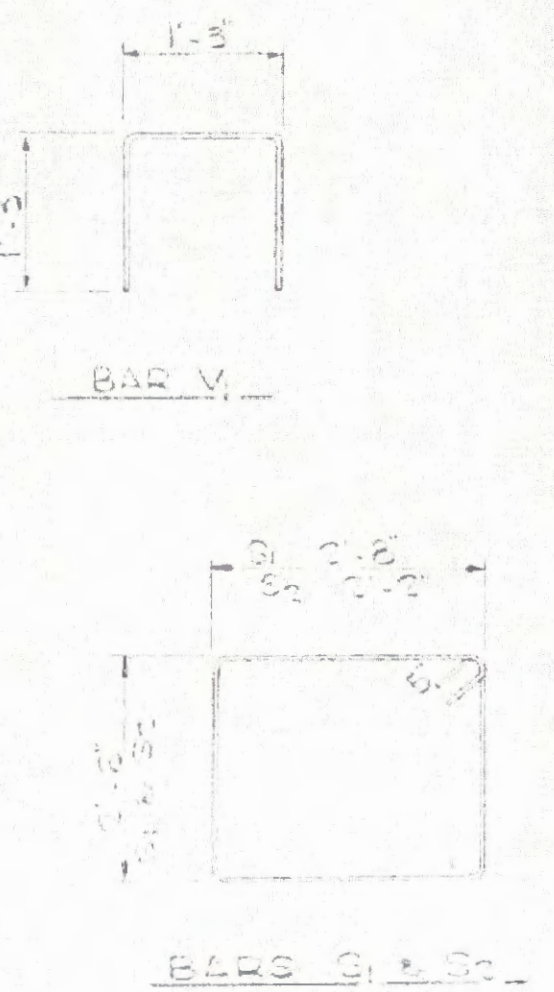
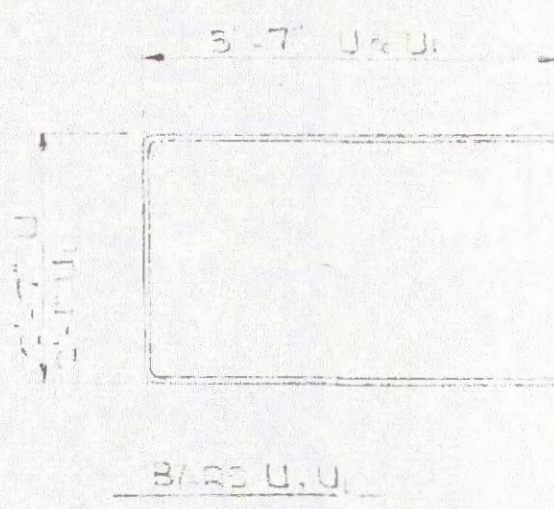


PLAN VIEW

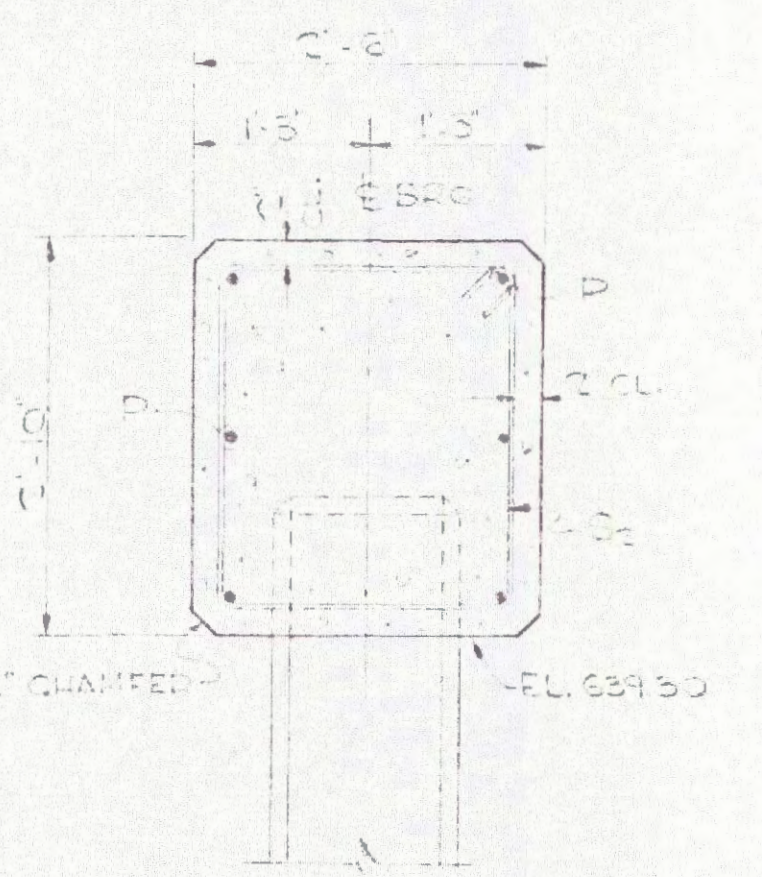


ARMOR ANGLE DETAILS

PILE DATA
 TYPE: PRECAST CONCRETE (4")
 MIN. CAPACITY: 54 TONS
 EST. LENGTH: 30 FEET
 NO. REIN: 16 (4 EA BENT)



SECTION A-A

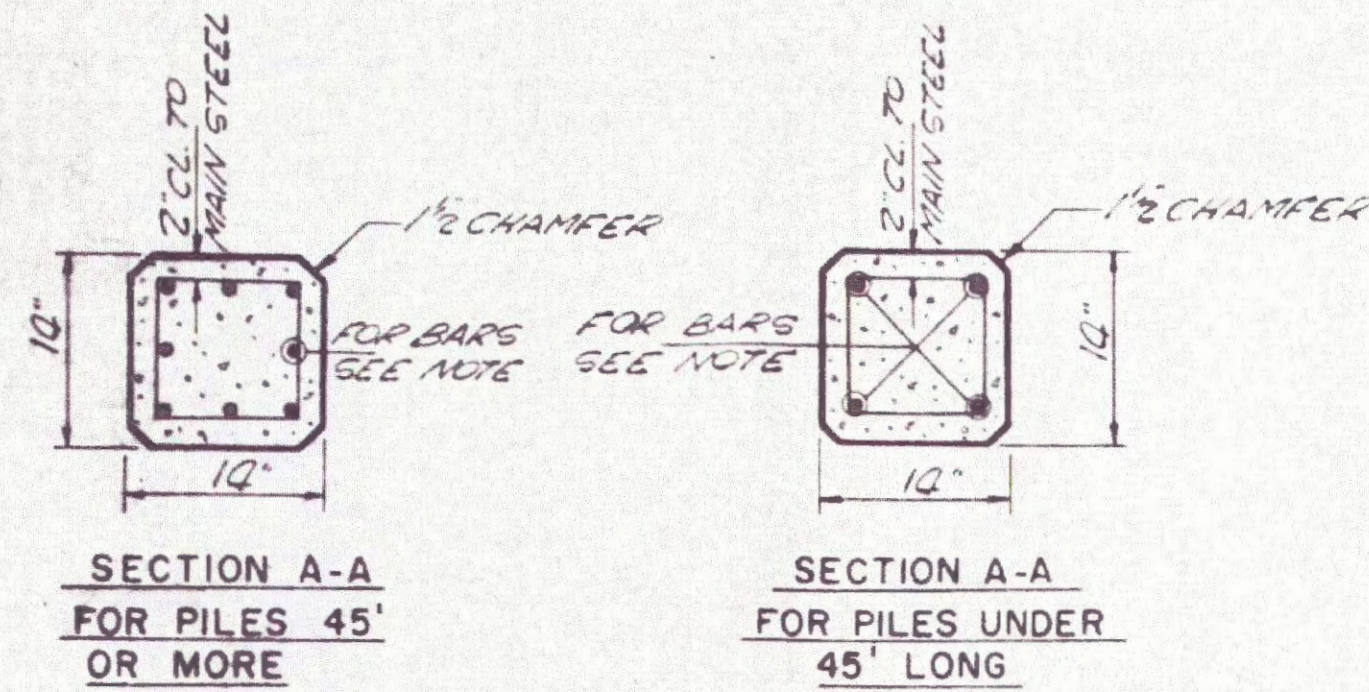
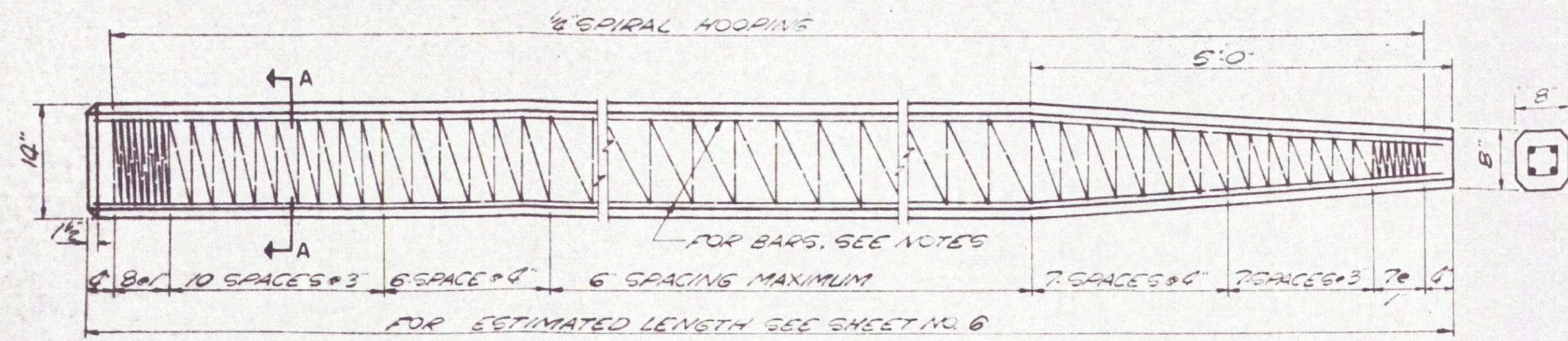


SECTION B-B

BILL OF MATERIAL - SUBSTR WIDENING

BAR	NO.	SIZE	LENGTH	SHAPE	
h	4	#4	14'-8"	—	
h	12	#4	4'-6"	—	
h ₂	16	#4	7'-5"	—	
V	72	#4	3'-6"	—	
V ₁	24	#4	3'-9"	□	
V ₂	3	#4	3'-9"	—	
V ₃	6	#4	3'-9"	—	
P	24	#7	17'-9"	—	
S ₁	42	#4	11'-7"	□	
S ₂	42	#4	15'-7"	□	
U	16	#6	3'-9"	—	
U ₁	16	#8	4'-3"	—	
CLASS X CONCRETE				CU YDS.	25.6
REINFORCEMENT BARS				WTS.	2360
CONCRETE REMOVAL				CU YDS.	1.3
EXPANSION BOLTS 3/4"				EACH	18
FURN. PRECAST CONC. PILES (4")				NO. EA.	450
DRILL/RECAST CONC. PILES (4")				LN FT.	450

SUBSTRUCTURE WIDENING DETAILS
 BRIDGE OVER HOWLAND CREEK
 CO. HIGHWAY NO. 3 SECTION 58-B MFT
 WHITESIDE COUNTY
 STATION 112+07.53

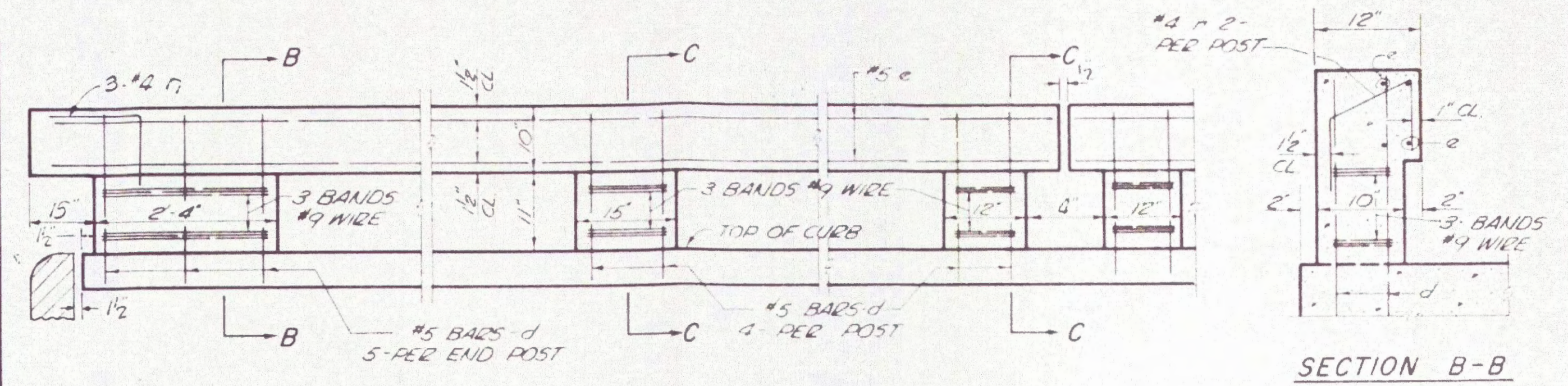


NOTE:
 FOR 12" PILES 45' LONG OR MORE USE 8-#9 BARS - 4 FOR THE FULL LENGTH AND 4 TO THE POINT OF BEVEL.
 FOR 12" PILES UNDER 45'-0' LONG USE 4-#9 BARS THE FULL LENGTH.
 HANDLING:
 FOR PILE LENGTHS UP TO 45 FT., USE TWO SLINGS PLACED AT A DISTANCE OF 0.21 L FROM EACH END.
 FOR PILES LONGER THAN 45 FT., USE THREE SLINGS PLACED AT A DISTANCE OF 0.21 L FROM EACH END, AND AT MID-POINT OF PILE.
 *L OVER ALL LENGTH OF PILE TO BE HANDLED.

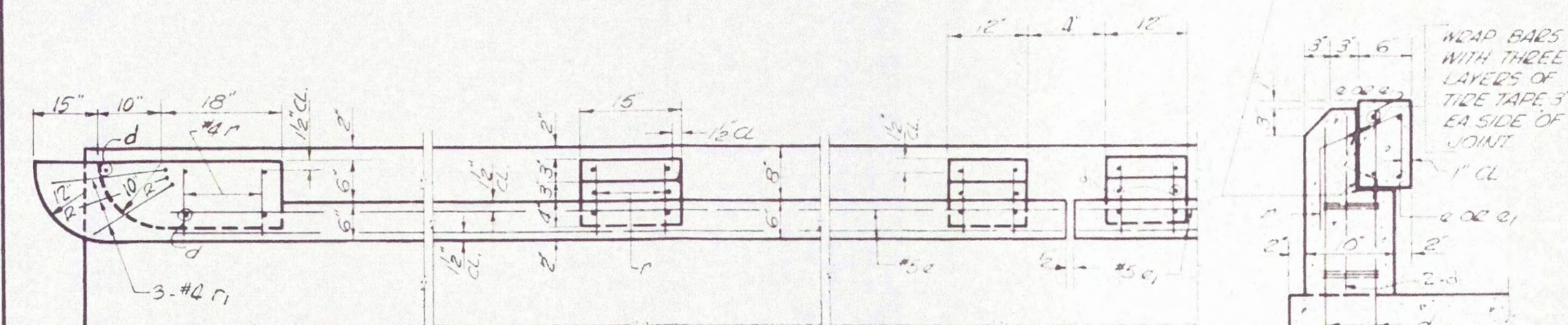
DETAIL OF PRECAST CONCRETE PILES

STANDARD DESIGN
 REINFORCED CONCRETE HANDRAIL
 (WITH CONSTRUCTION JOINT)

SECTION 38-B MFT
 WHITESIDE COUNTY
 CO. HIGHWAY NO. 3
 SHEET NO. 6 OF 7 SHEETS

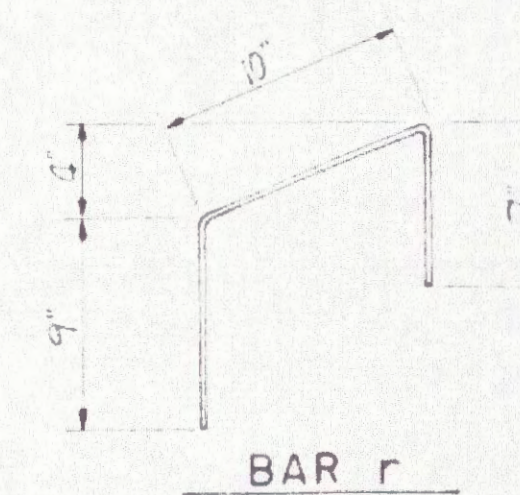


INSIDE ELEVATION OF RAIL

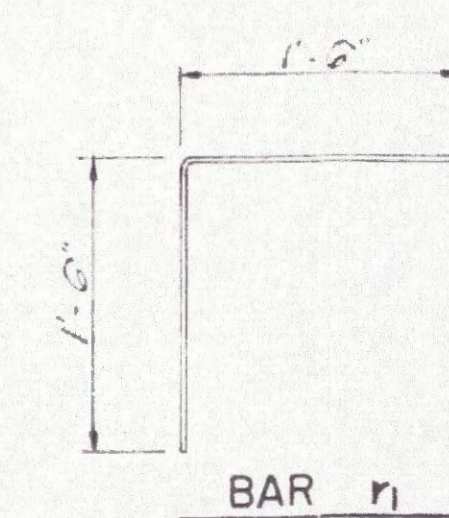


PLAN OF RAIL

NOTE:
 SEE BRIDGE PLANS FOR SPACING OF POSTS.
 USE DOUBLE POST AND 1/2" OPEN JOINT ONLY WHERE CALLED FOR ON BRIDGE PLANS.
 THE COST OF FURNISHING AND PLACING THE #9 GAGE WIRE, TIRE TAPE, AND ROOFING FELT SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD FOR HANDRAIL CONCRETE.

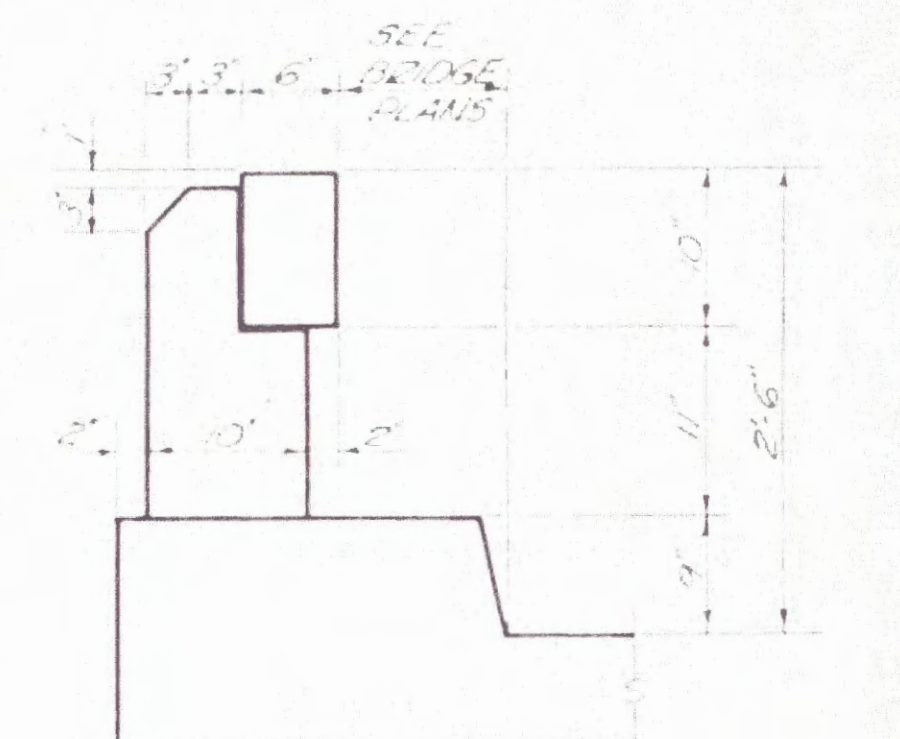


BAR r



BAR r1

BAR	NO	SIZE	LENGTH	SHAPE
c	8	#5	28'-8"	—
c1	4	#5	35'-0"	—
d1	22	#5	1'-6"	—
r	6	#4	3'-0"	Γ
r	26	#4	2'-2"	Γ
HANDRAIL CONCRETE CU. YDS.				2.2
REINFORCEMENT BARS LBS.				470



QUANTITIES

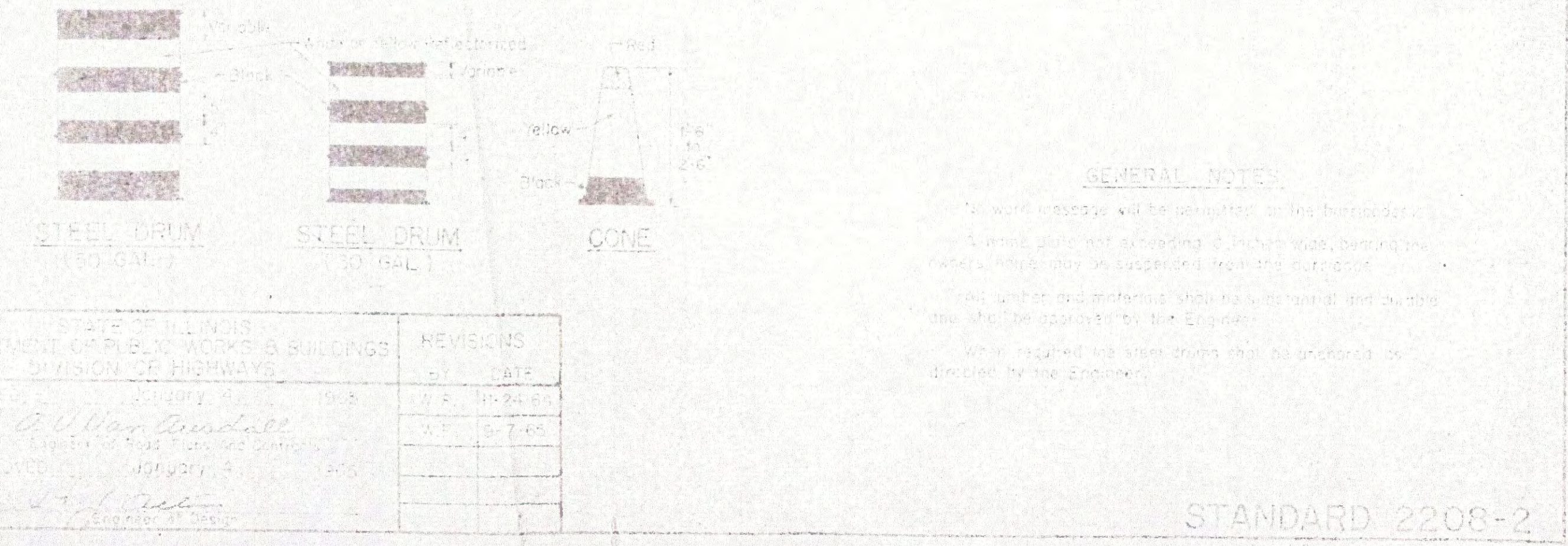
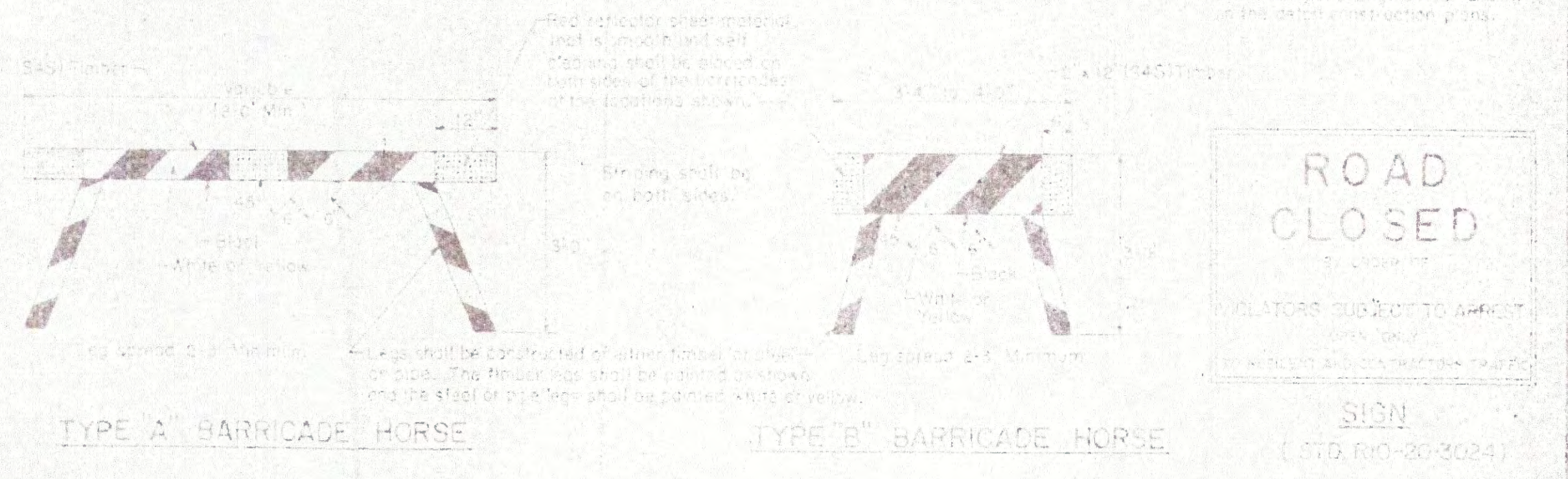
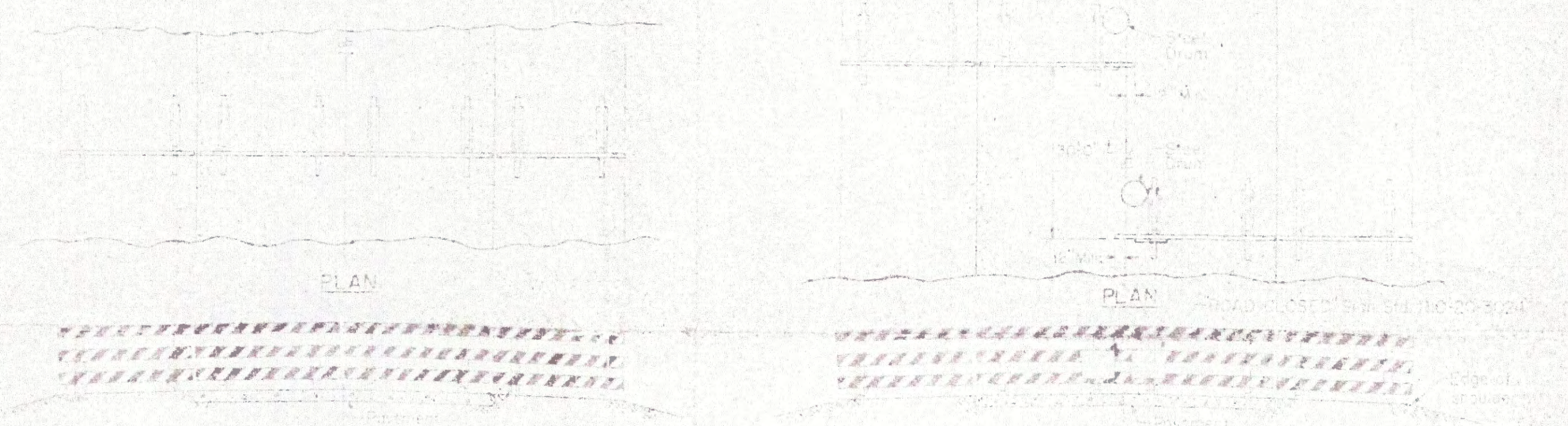
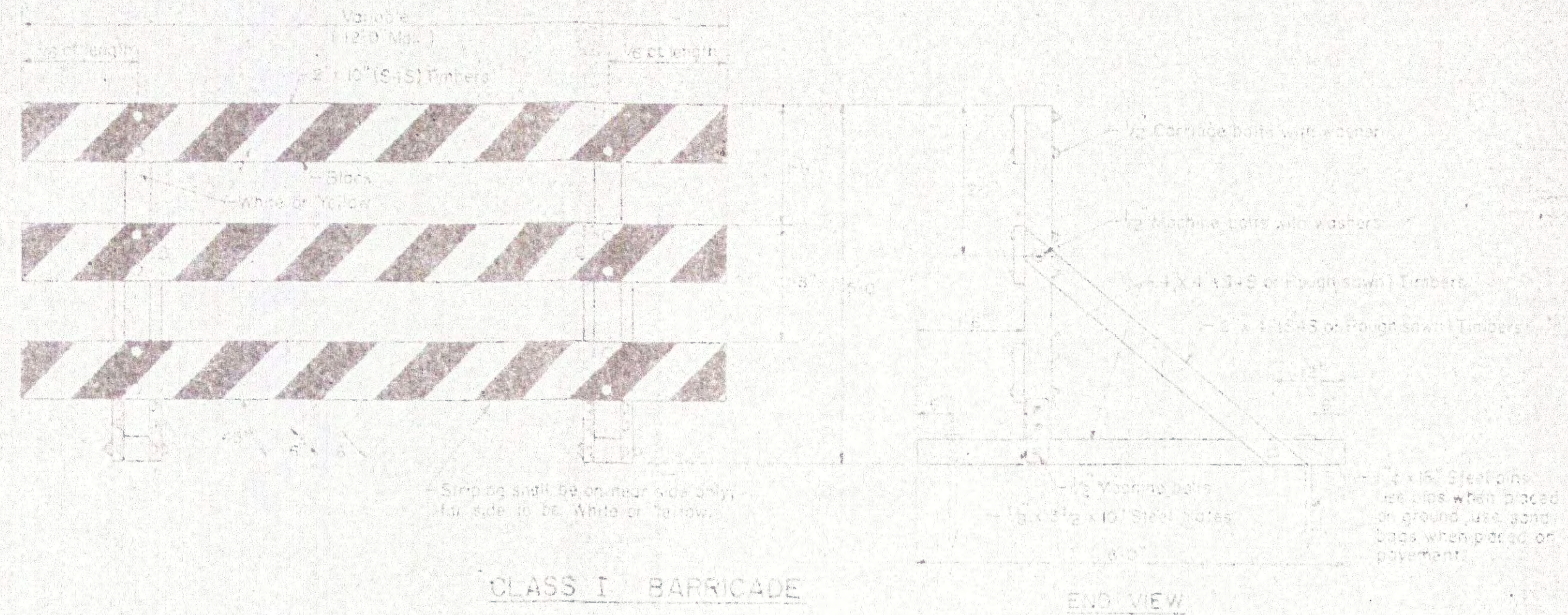
END POST CU. YDS.	INTERIOR P. CU. YDS.	DOUBLE POST EACH CU. YDS.
.1609	.0512	.0410

4.7 CU. FT. PER FT. OF RAIL (BETWEEN END POSTS)

HANDRAIL DETAILS
 BRIDGE OVER HOWLAND CREEK
 CO. HIGHWAY NO. 3 SECTION 38-B-MFT
 WHITESIDE COUNTY
 STATION 112+07.83

STANDARD DESIGN
BARRICADES

REVISED	DATE	BY	REASON
76			

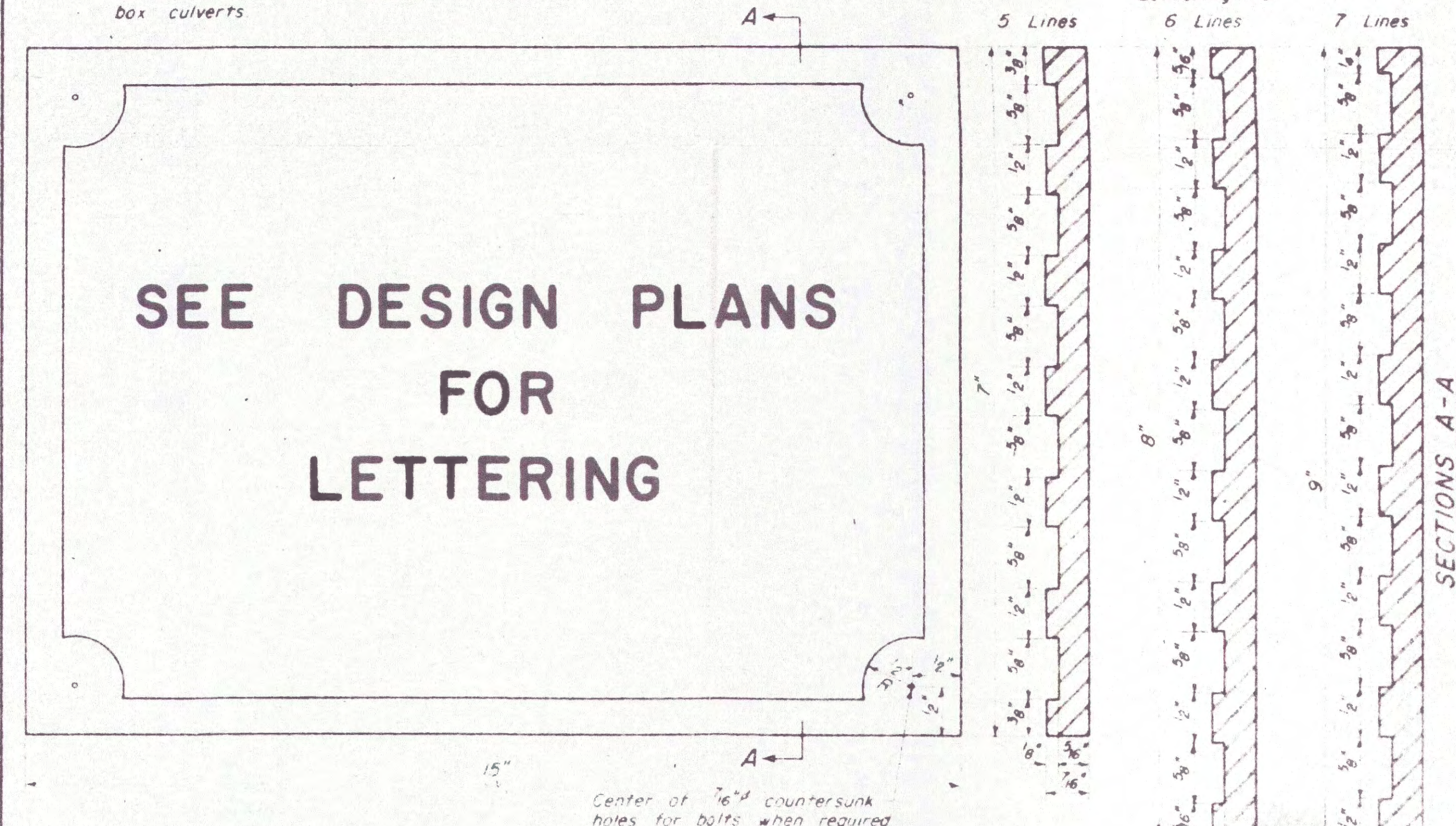
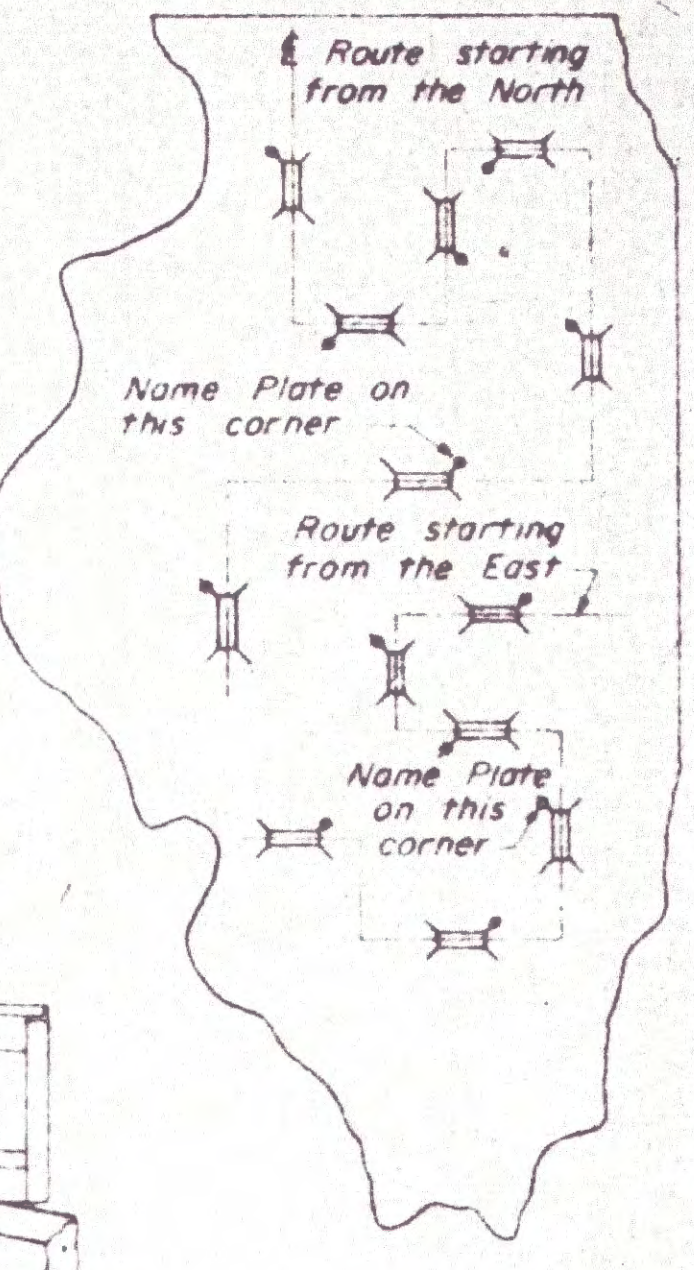
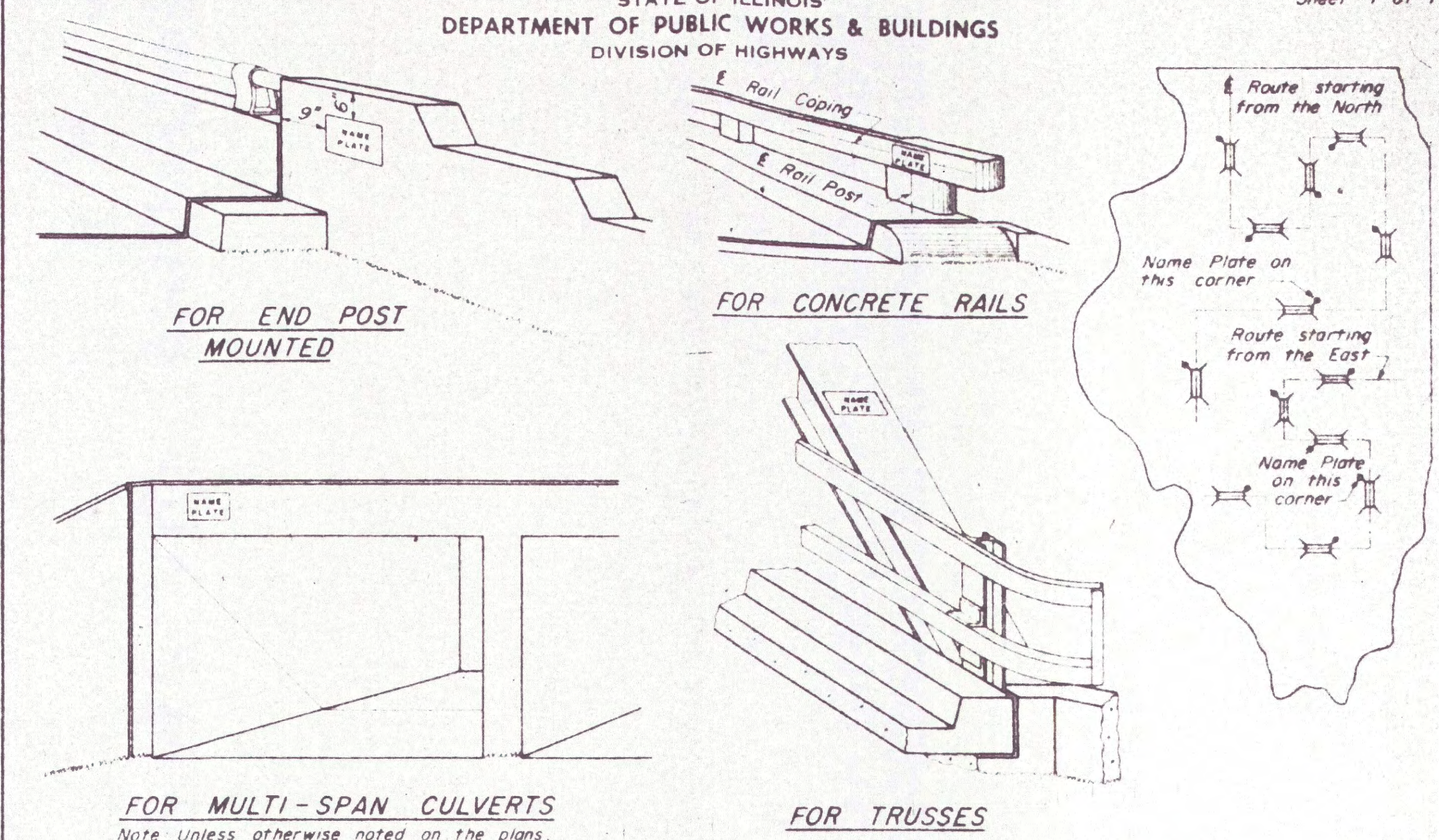


REVISIONS	BY	DATE
1	W.F.	11-24-63
2	W.F.	11-24-63

STANDARD 2208-2

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Sheet 7 of 7



Material	Best quality brass or bronze.
Border & Lettering	Raised 1/8 inch Square cut and not tapered. Top surface polished.
For Concrete Rails, Culvert	Four lugs at least three inches long, cast on back of plate.
Headwalls & Subways	Plate to be fastened on steel member at fabricating shop by brazing around entire perimeter of plate.
For Steel Truss Span	Plate to be bolted on with 4 - 3/8" brass or bronze machine bolts with countersunk head.
For Steel Rails	Plate to be centered on E of rail post and E of handrail coping.
For Concrete Rails	Plate to be centered on E of rail post and E of handrail coping.
For Steel Truss Span	Braze to end post about five feet above roadway.
For Steel Rails	Place midway between horizontal rail members.
For Subways	See design plans for location.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PASSED NOVEMBER 15, 1963
APPROVED NOVEMBER 15, 1963

A. J. Vandall
Engineer of Road Plans and Contracts

F. J. Smith
Engineer of Design

WHITESIDE COUNTY

BRIDGE DECK REHABILITATION

CO. HIGHWAY NO. 3 DIXON AVENUE BRIDGE OVER HOWLAND CREEK

SECTION 83-00081-00-BR

1983

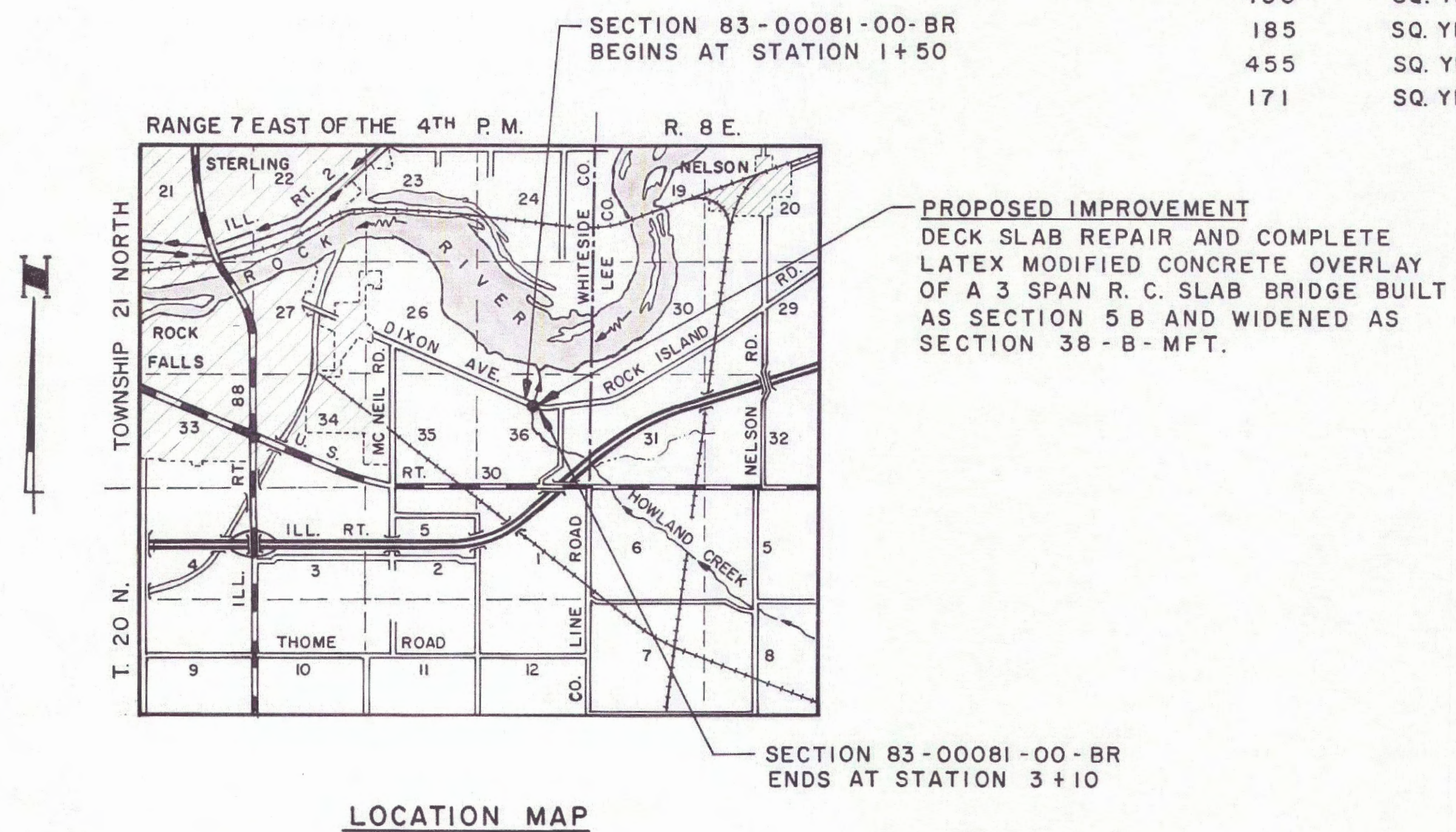
NET LENGTH: 160.0 FT. = 0.0303 MILES

INDEX OF SHEETS	
NO.	TITLE
1	COVER SHEET
2	PLAN AND PROFILE
3	GENERAL PLAN LAYOUT
4	DECK REPAIR DETAILS
5	CROSS SECTIONS OF DECK OVERLAY
6	CONCRETE REPAIR DETAILS
	STANDARD 2298 - 6 BARRICADE
	STANDARD 2299 - 9 BARRICADE
	STANDARD 2300 - 2 FLAGGER
	STANDARD BLR 21-1 TRAFFIC CONTROL

} INSERTED
IN PROPOSAL

SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEM
133	SQ. YD.	BITUMINOUS AGGREGATE MIXTURE BASE COURSE, 9 INCH
11	TON	BITUMINOUS CONCRETE BINDER COURSE
11	TON	BITUMINOUS CONCRETE SURFACE COURSE, CLASS I
7.6	CU. YD.	CONCRETE REMOVAL
8	EACH	EXPANSION BOLTS - 3/4" ϕ x 12"
17.0	CU. YD.	CLASS X CONCRETE
1225	POUND	FURNISHING AND ERECTING STRUCTURAL STEEL
1970	POUND	REINFORCEMENT BARS
60	LIN. FT.	COMBINATION CONCRETE CURB & GUTTER TYPE 6.24
60	LIN. FT.	COMBINATION CURB & GUTTER REMOVAL
133	SQ. YD.	PAVEMENT REMOVAL
15	LIN. FT.	EPOXY CRACK SEALING
10	SQ. FT.	REPAIR CONCRETE STRUCTURES
455	SQ. YD.	BRIDGE DECK LATEX CONCRETE OVERLAY
185	SQ. YD.	DECK SLAB REPAIR (PARTIAL)
455	SQ. YD.	CONCRETE BRIDGE DECK SCARIFICATION - 1 1/2"
171	SQ. YD.	BITUMINOUS CONCRETE SURFACE REMOVAL



J. Schuchert 8/1/83
COUNTY SUPERINTENDENT OF HIGHWAYS DATE



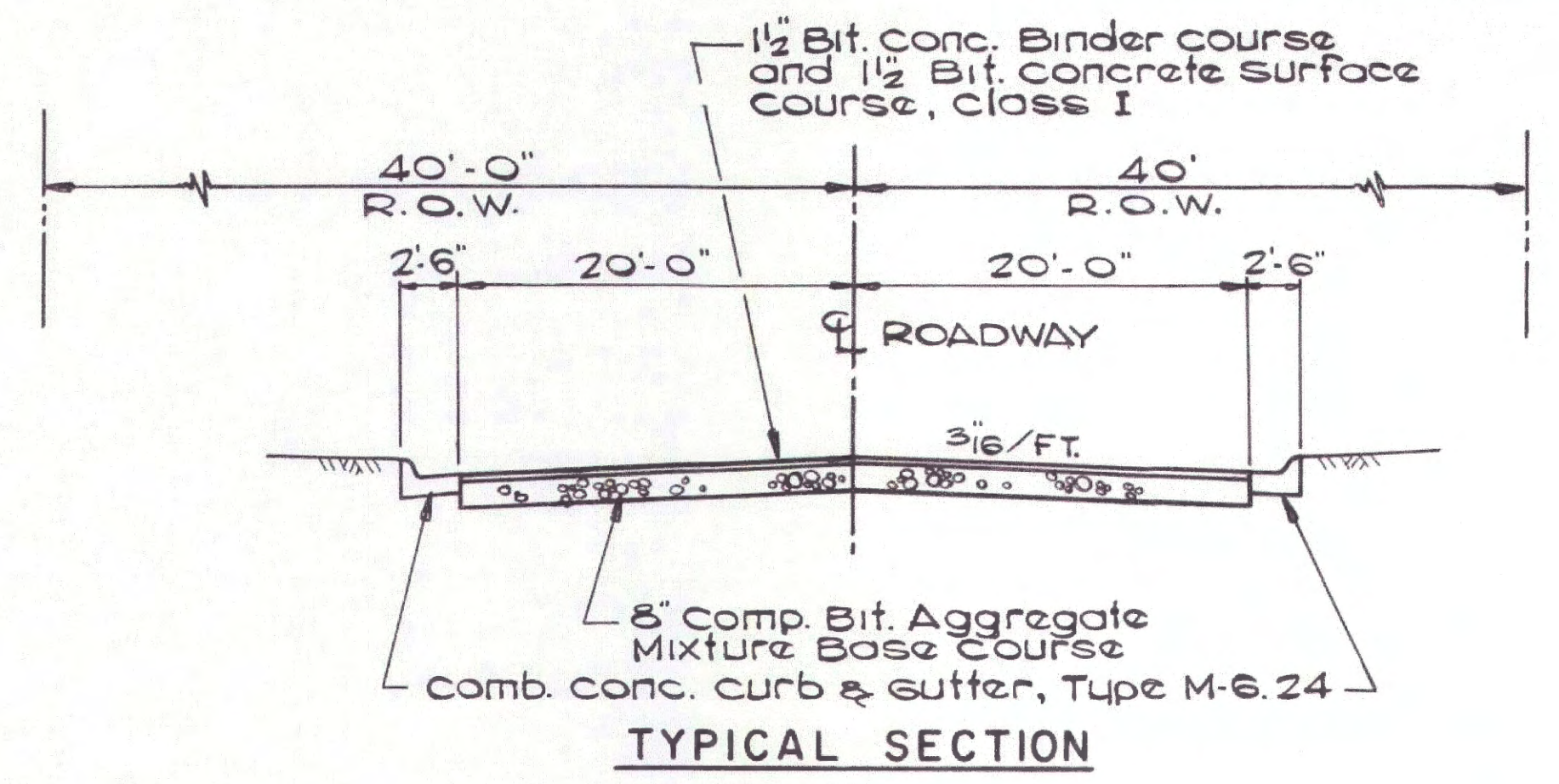
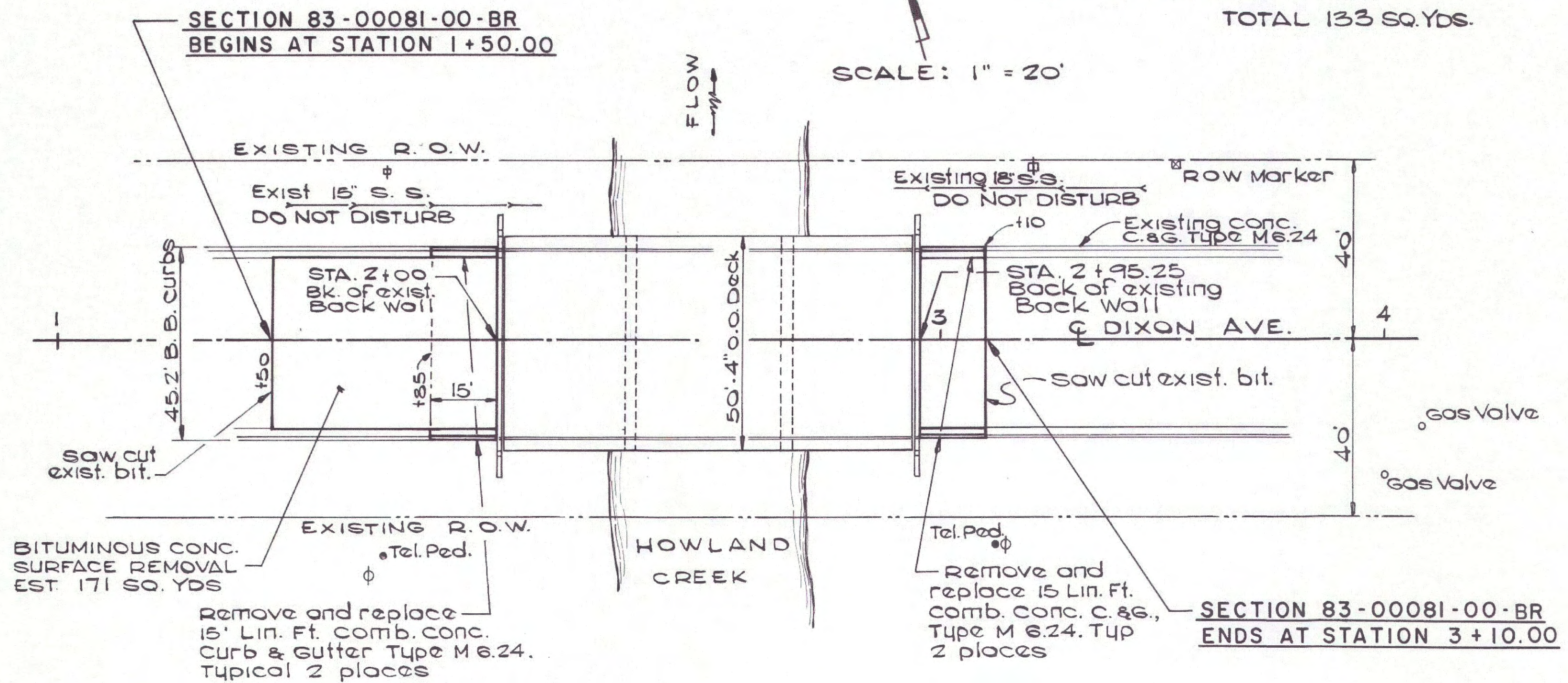
Donald E. Huffman
6-13-83

**WILLET
HOFMANN &
ASSOCIATES, Inc.**
Consulting Engineers

BENCH MARK: Chiseled "a" on southwest wingwall Elev. 644.78

SECTION	83-00081-00-BR	SHEET	2 OF 6
COUNTY	WHITE SIDE	ROUTE	C.H. 3
			DIXON AVENUE

PAVEMENT REMOVAL
 STA. 1+85 - 2+00 67 S.Y.
 STA. 2+95.25 - 3+10 66 S.Y.
 TOTAL 133 SQ. YDS.



COMBINATION CURB & GUTTER REMOVAL
 LT. & RT. STA. 1+85 - 2+00 30 L.F.
 LT. & RT. STA. 2+95.25 - 3+10 30 L.F.
 TOTAL 60 LIN. FT.

COMBINATION CURB & GUTTER TYPE M-6.24
 LT. & RT. STA. 1+85 - 2+00 30 L.F.
 LT. & RT. STA. 2+95.25 - 3+10 30 L.F.
 TOTAL 60 LIN. FT.

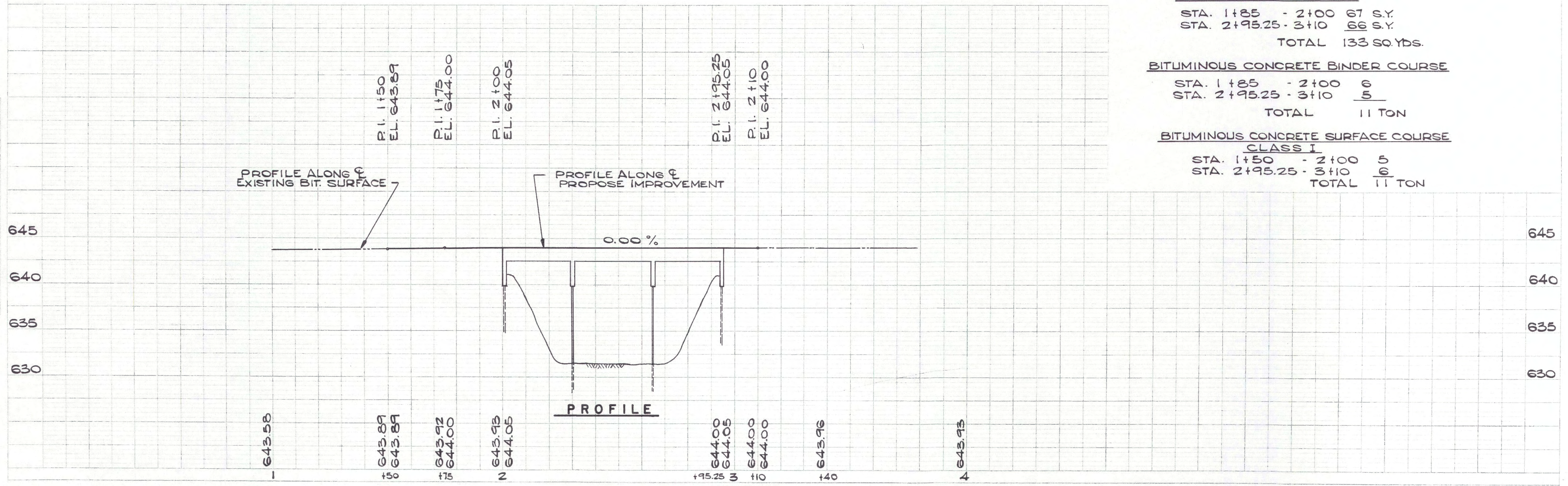
BITUMINOUS AGGREGATE MIXTURE BASE COURSE - 8 INCH
 STA. 1+85 - 2+00 67 S.Y.
 STA. 2+95.25 - 3+10 66 S.Y.
 TOTAL 133 SQ. YDS.

BITUMINOUS CONCRETE BINDER COURSE
 STA. 1+85 - 2+00 6
 STA. 2+95.25 - 3+10 5
 TOTAL 11 TON

BITUMINOUS CONCRETE SURFACE COURSE CLASS I
 STA. 1+85 - 2+00 5
 STA. 2+95.25 - 3+10 6
 TOTAL 11 TON

PLAN

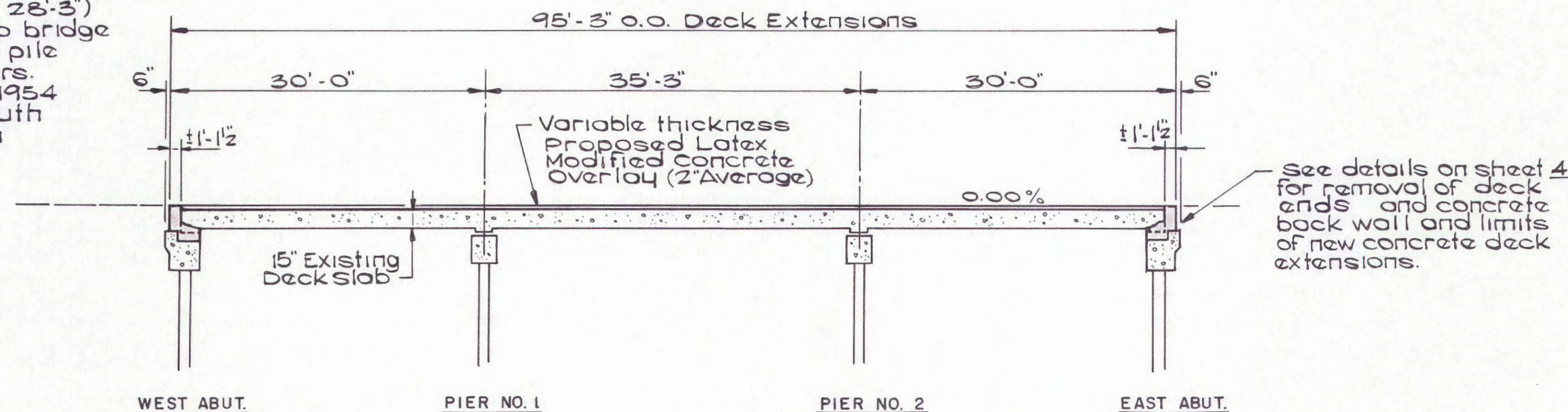
CALL J.U.L.I.E.
 BEFORE YOU DIG
 800-892-0123



EXISTING STRUCTURE
 Structure No. 098-3001
 A 3 span (28'-3" : 35'-3" : 28'-3")
 reinforced concrete slab bridge
 on timber and concrete pile
 bent abutments and piers.
 Built as Section 5-B in 1954
 and widened on the south
 side in 1967 as Section
 38-B-MFT.

BENCH MARK: chiseled "m" on southwest
 wingwall Elev. 644.78

SECTION 83-00081-00-BR	SHEET 3 OF 6
COUNTY WHITESIDE	ROUTE C.H. 3 DIXON AVENUE



LONGITUDINAL SECTION

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans & are subject to nominal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

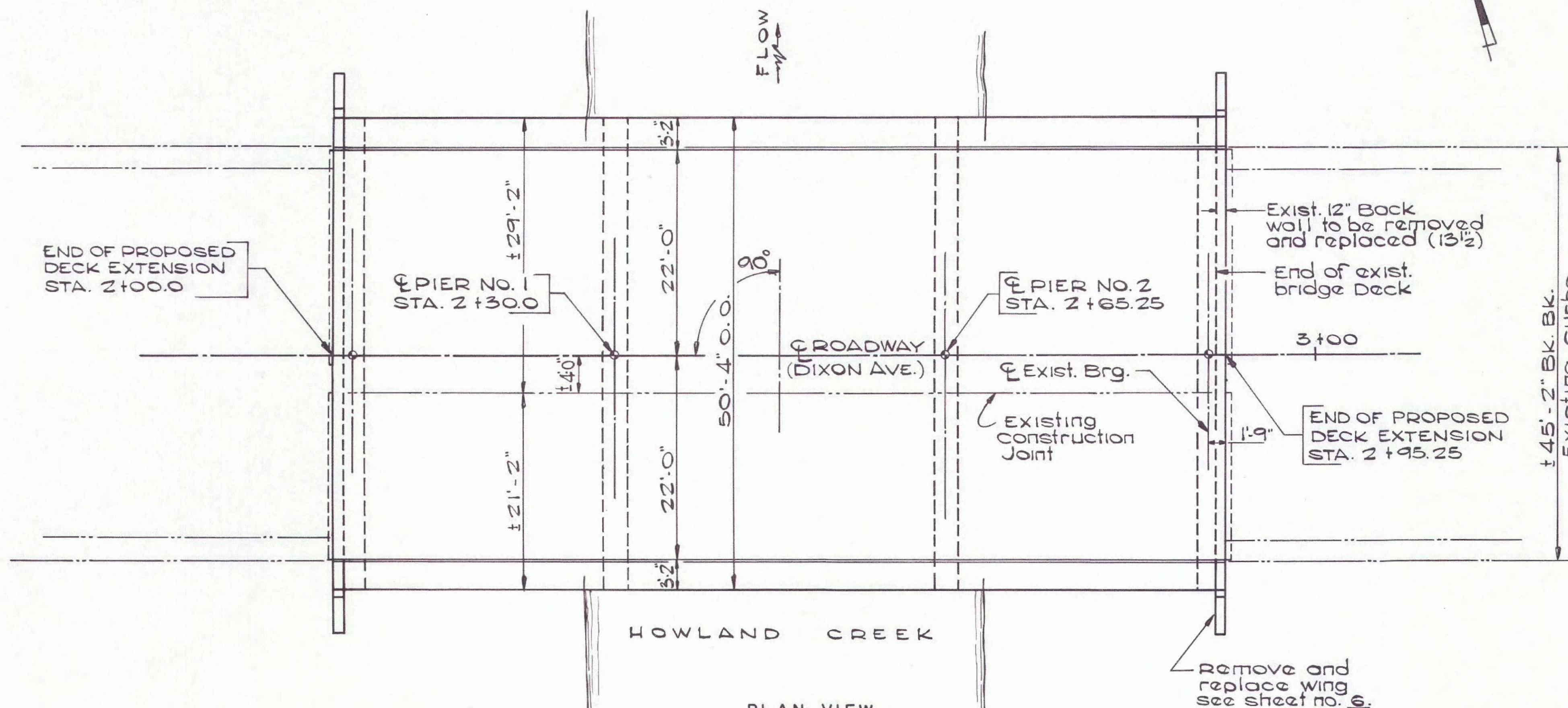
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.

Calculated weight of structural steel = 1225 lbs.

All structural steel shall be shop painted with two coats of basic lead silico chromate paint.

All structural steel shall be AASHTO M 183.

Expansion bolts shall consist of expansion anchors providing minimum certified proof load of 4080 lbs. and 3/4" x 12" hooked bolts.



PLAN VIEW

(CONCRETE RAIL ON CURB NOT SHOWN)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
BITUMINOUS AGGREGATE MIXTURE BASE COURSE - 8 INCH	SQ. YD.	133
BITUMINOUS CONCRETE BINDER COURSE	TON	11
BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TON	11
CONCRETE REMOVAL		7.6
EXPANSION BOLTS - 3/4" x 12"	EACH	8
CLASS X CONCRETE	CU. YD.	17
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1225
REINFORCEMENT BARS	POUND	1970
COMBINATION CONCRETE CURB AND GUTTER TYPE M 6.24	LIN. FT.	60
COMBINATION CURB AND GUTTER REMOVAL	LIN. FT.	60
PAVEMENT REMOVAL	SQ. YD.	133
EPOXY CRACK SEALING	LIN. FT.	15
REPAIR CONCRETE STRUCTURES	SQ. FT.	10
BRIDGE DECK LATEX CONCRETE OVERLAY	SQ. FT.	455
DECK SLAB REPAIR (PARTIAL)	SQ. YD.	185
CONCRETE BRIDGE DECK SCARIFICATION - 1/2"	SQ. YD.	455
BITUMINOUS CONCRETE SURFACE REMOVAL	SQ. YD.	171

NOTE

Structure repaired in accordance with AASHTO specifications dated 1977, and interm specifications dated 1978 thru 1981.

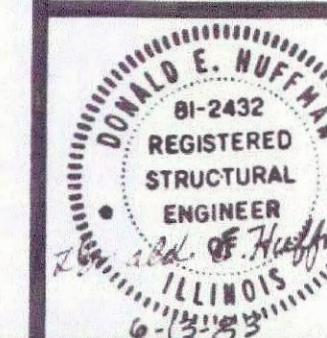
DESIGN STRESSES

f_t = 60,000 psi
 f'_c = 3500 psi

LOADING HS 20-44

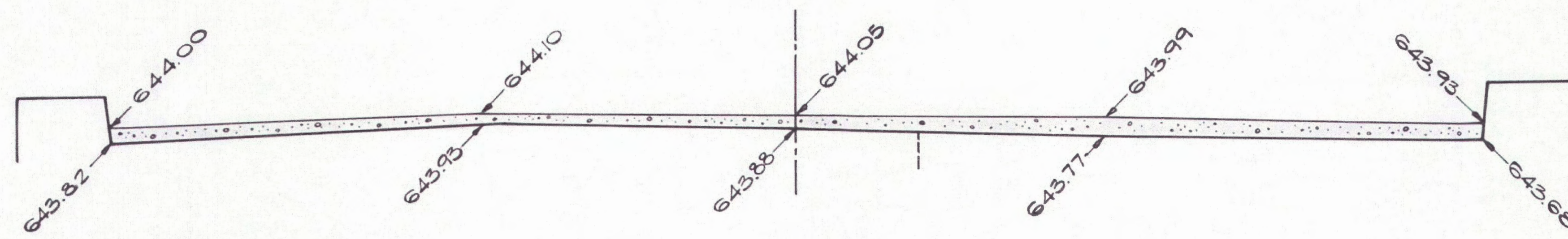
GENERAL PLAN LAYOUT

SECTION 83-00081-00-BR
 DIXON AVENUE BRIDGE
 OVER HOWLAND CREEK
 WHITESIDE COUNTY

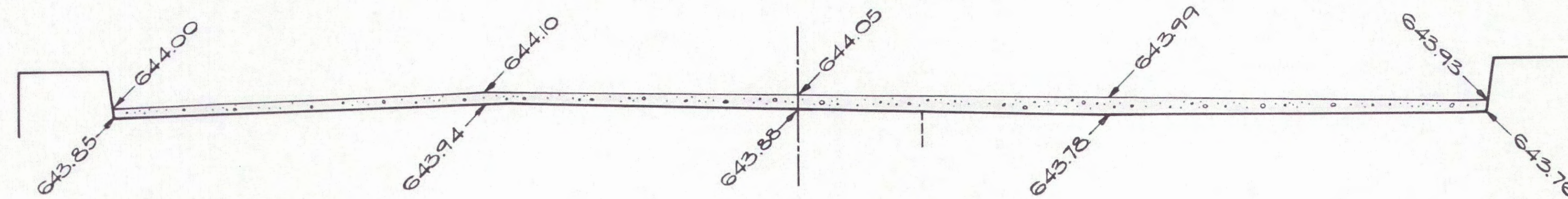


**WILLETT
 HOFMANN &
 ASSOCIATES, Inc.**
 Consulting Engineers

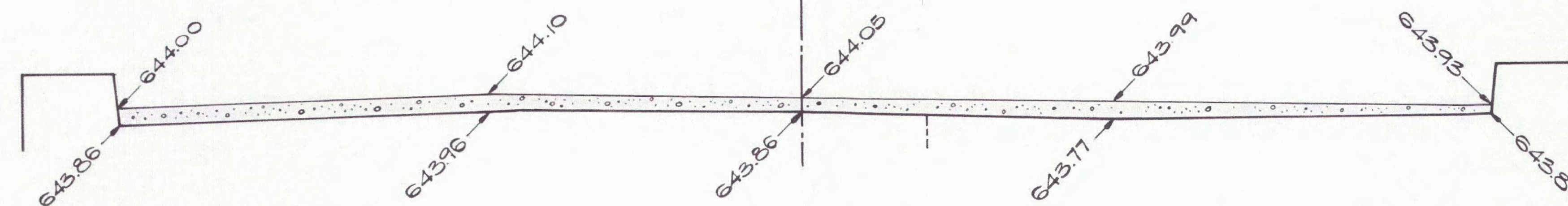
DESIGNED BY
 D. E. LUFFMAN
 DATE MAY 1983
 CHECKED BY
 B. THOMPSON
 DATE MAY 1983
 DRAWN BY
 R. RHOADS
 DATE MAY 1983



END OF DECK - EAST



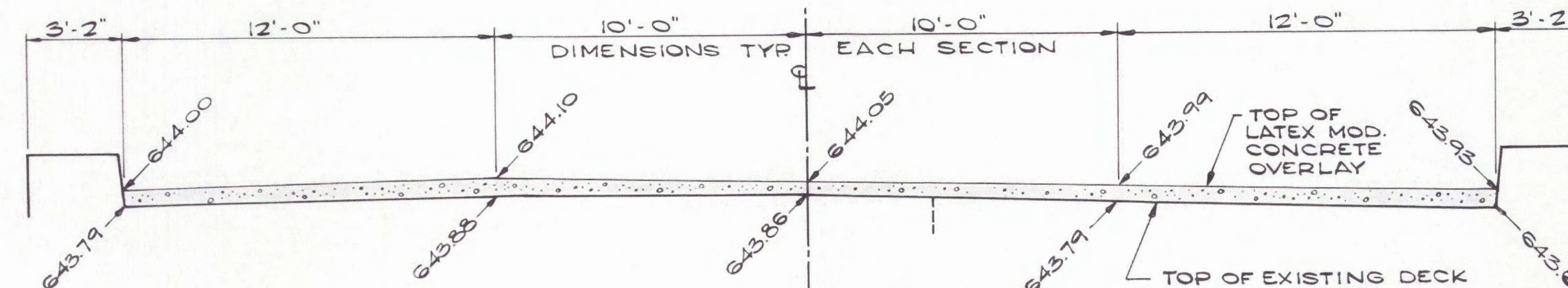
PIER NO. 2



PIER NO. 1

NORTH

SOUTH



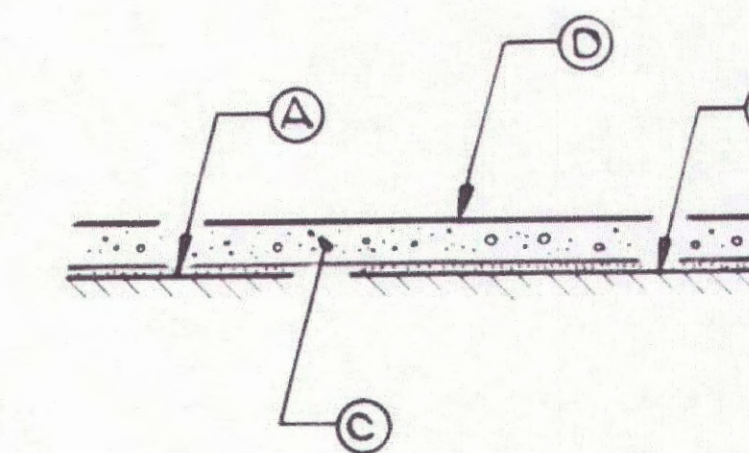
END OF DECK - WEST

SECTIONS LOOKING EAST

GENERAL NOTES

The existing bridge deck shall be scarified to a nominal depth of 1/2 inch by a power driven grinder (rotomill) to remove remnants of bituminous surface and minor defects in concrete surface. This work will be paid for at the contract unit per square yard for CONCRETE BRIDGE DECK SCARIFICATION - 1/2.

A latex modified concrete overlay shall be installed using specialized equipment on a sandblasted surface by experienced persons with a record of successful projects. This work will be paid for per sq. yard of BRIDGE DECK LATEX CONCRETE OVERLAY, see Special Provisions.



OVERLAY DETAIL

- (A) Existing concrete surface after scarification.
- (B) Sandblast existing concrete immediately before placing overlay.
- (C) Modified concrete overlay mixed in a "concrete mobile" placed and compacted with a roller type compactor. see Special Provisions.
- (D) Cured surface of overlay.

BILL OF MATERIAL

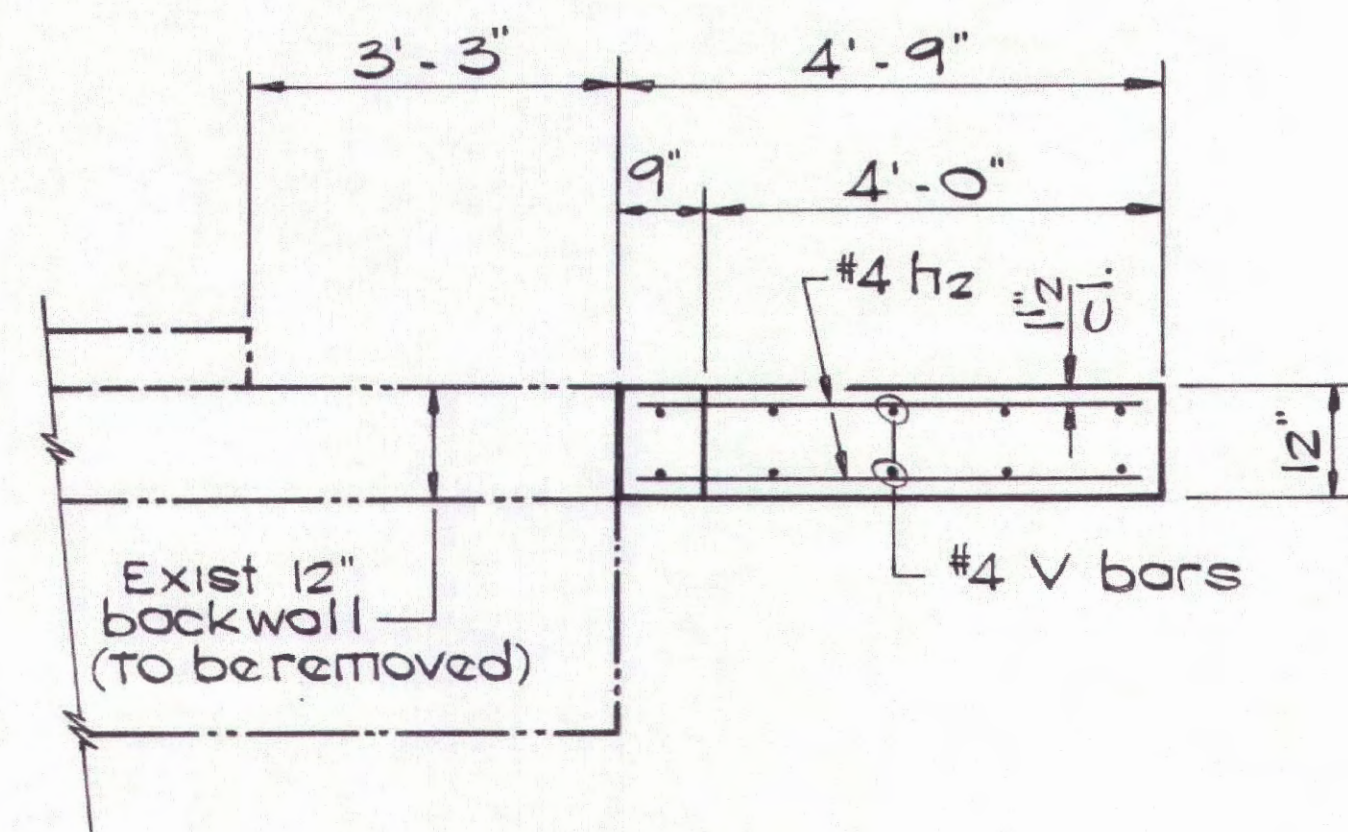
ITEM	QUANT.
BRIDGE DECK LATEX CONCRETE OVERLAY	SQ. YDS. 455
CONCRETE BRIDGE DECK SCARIFICATION - 1/2	SQ. YDS. 455

CONCRETE OVERLAY DETAILS

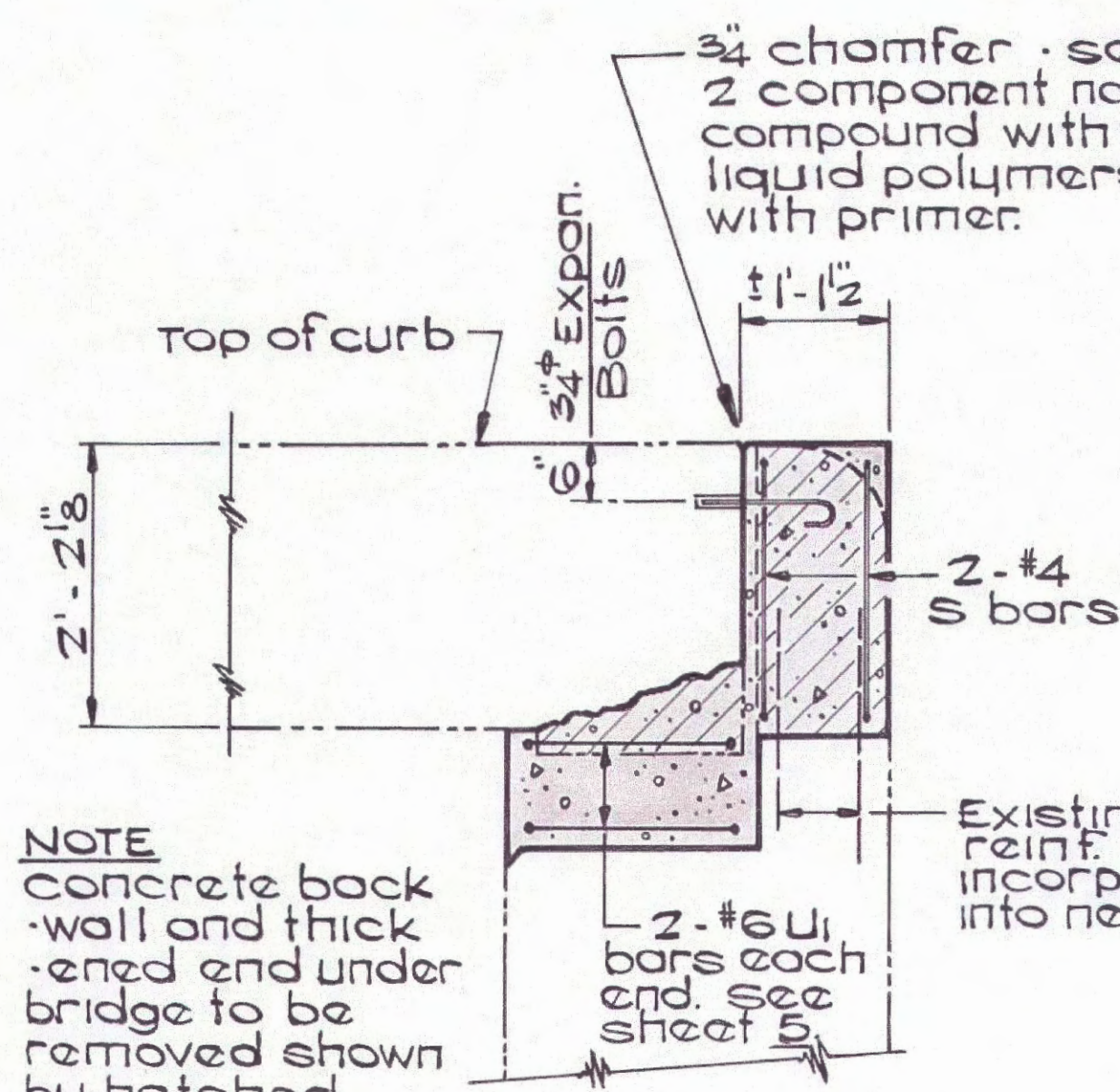
SECTION 83-00081-00-BR
DIXON AVENUE BRIDGE
OVER HOWLAND CREEK
WHITESIDE COUNTY

WILLET
OFMANN &
ASSOCIATES, Inc.

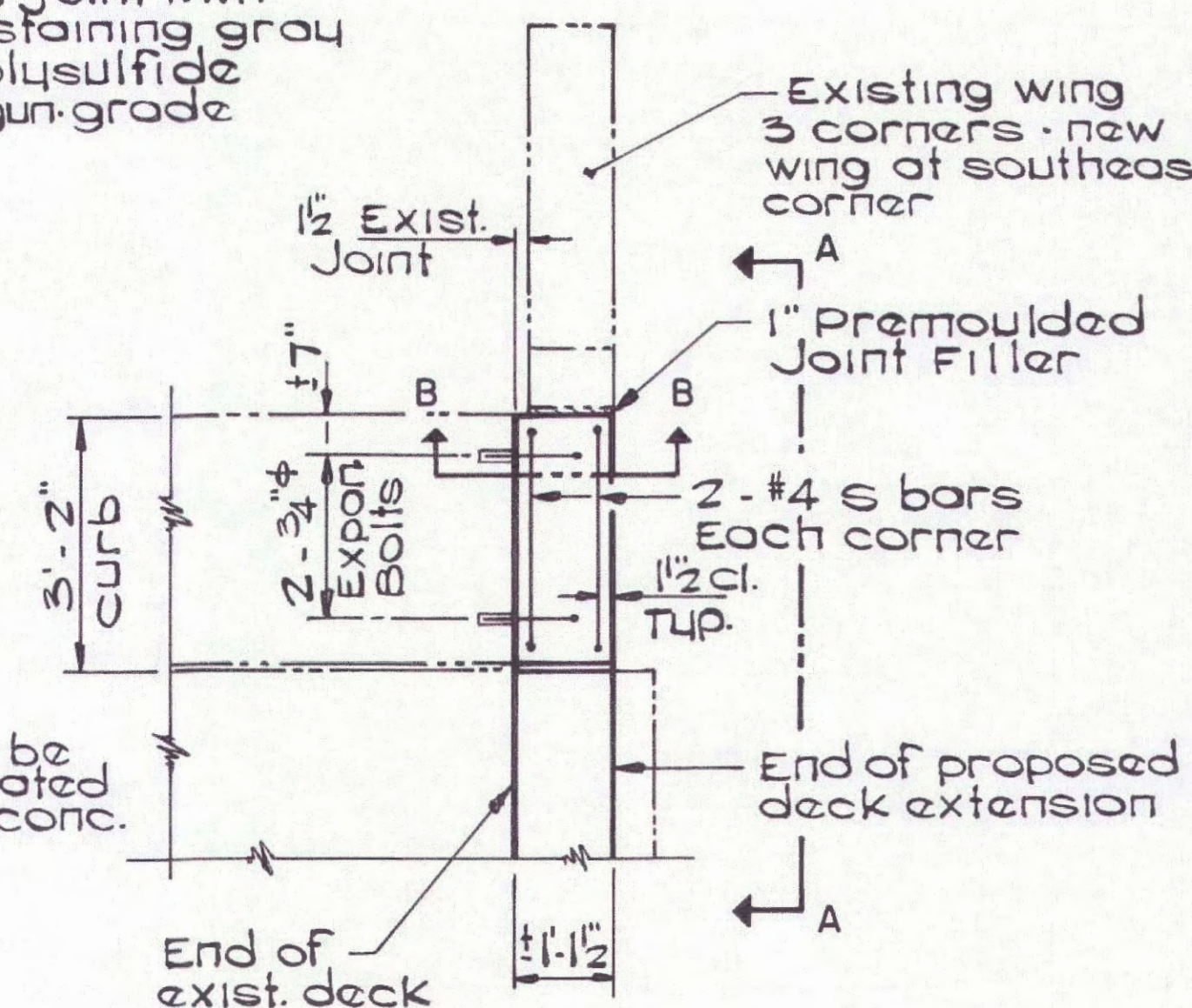
REVISIONS



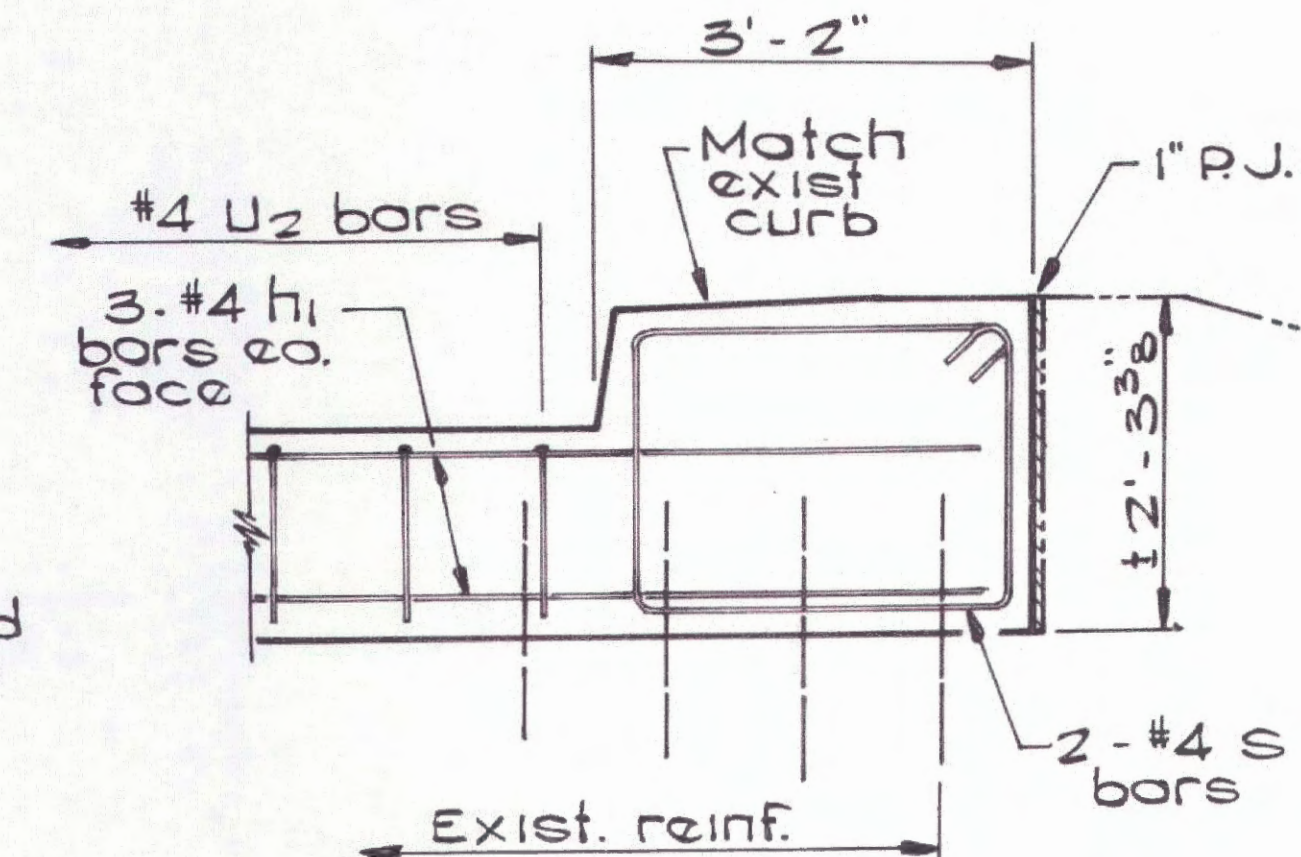
PLAN - SOUTHEAST WING



SECTION B-B

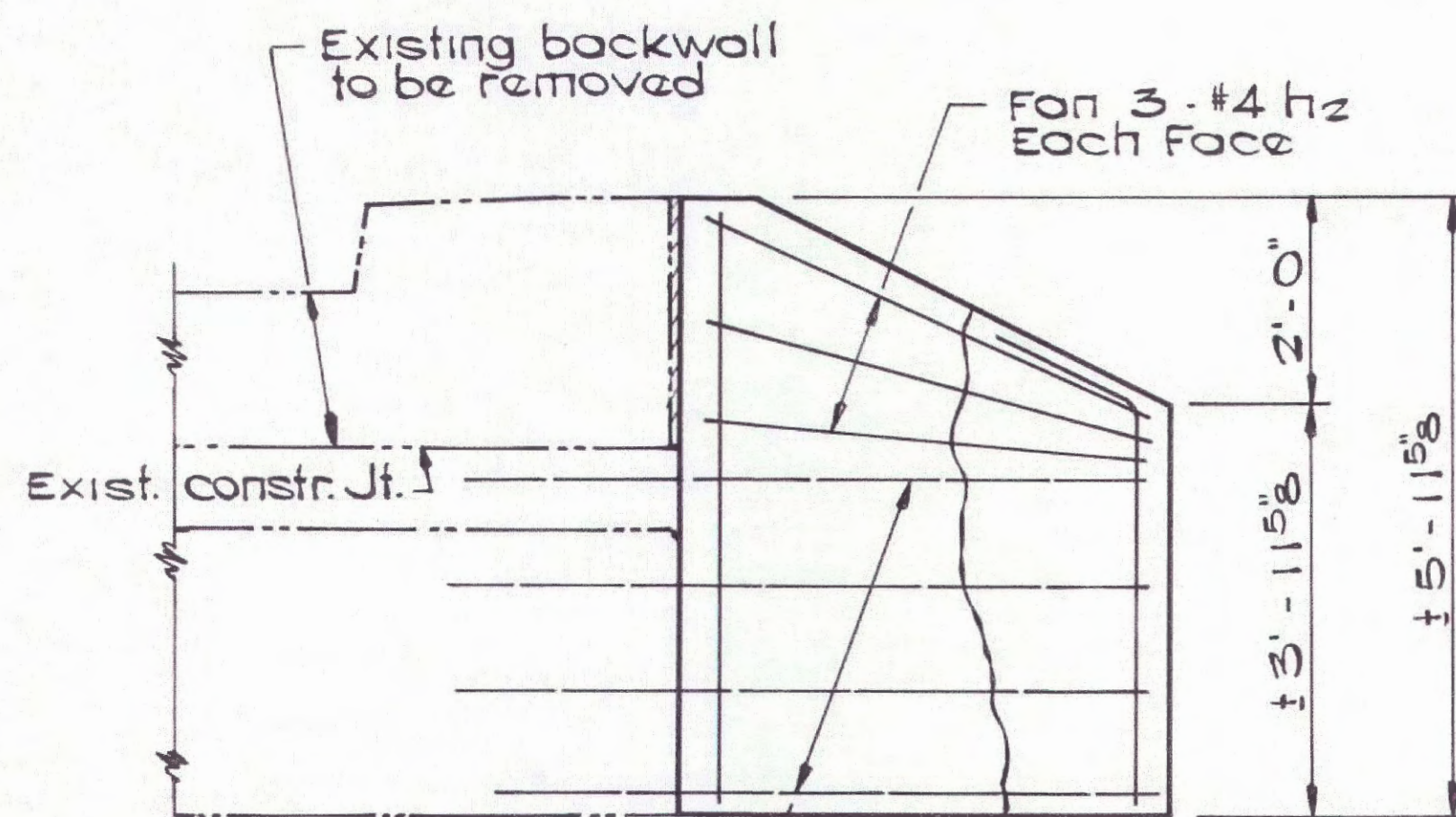


PLAN VIEW

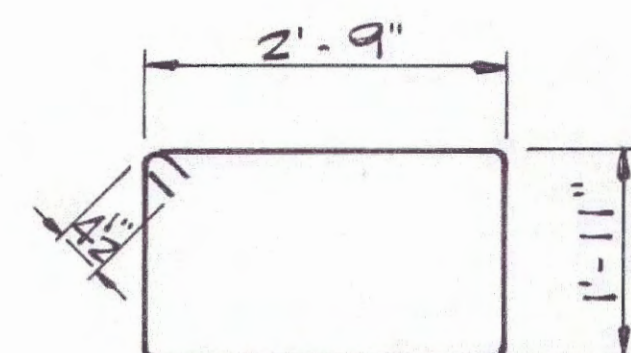


VIEW A-A

DETAILS OF CURB EXTENSION



ELEVATION PROPOSED WING REPLACEMENT



BAR S

BILL OF MATERIAL

ITEM	QUANT.	
CLASS X CONCRETE	CU. YD.	3.3
REINFORCEMENT BARS	LB.	110
3/4" x 12" EXPANSION BOLTS	EACH	8
EPOXY CRACK SEALING	LIN. FT.	15
REPAIR CONCRETE STRUCTURES	SQ. FT.	10
CONCRETE REMOVAL	CU. YD.	1.3

BAR LIST

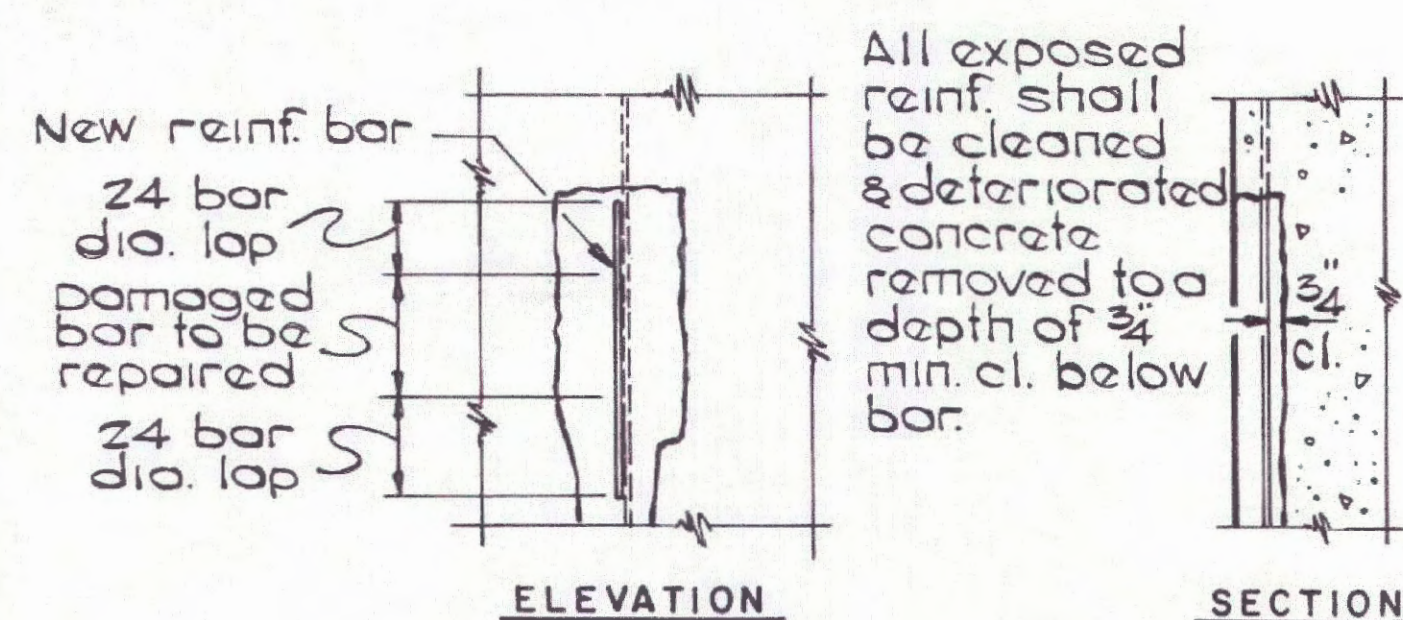
BAR	NO.	SIZE	LENGTH	SHAPE
h2	6	#4	4'-6"	—
S	8	#4	10'-1"	□
V	10	#4	5'-6"	—

CONCRETE REPAIR

LOCATION	EPOXY CRACK SEALING	REPAIR CONCRETE STRUCTURE
EXPOSED REINF. BAR IN RAIL NEAR S E CORNER		6 SQ. FT.
CRACKED S E RAILING END POST	12 LIN. FT.	
PROTRUDING REINF. BAR IN SOUTH RAIL AT PIER NO. 1		1 SQ. FT.
DAMAGED CONCRETE AT END OF SIDEWALK AT NW CORNER		3 SQ. FT.
CRACK IN WESTERLY RAIL POST OF NORTH RAIL AT PIER 1	3 LIN. FT.	

NOTE

The requirement for pneumatic placed concrete may be waived and the areas repaired with successive layers of hand applied sand cement grout.

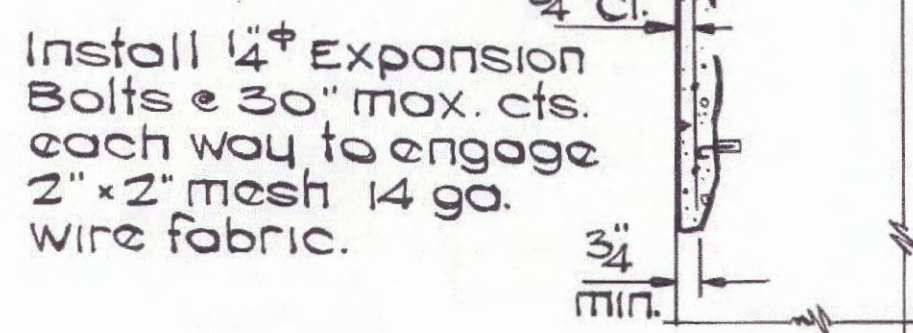


ELEVATION

SECTION

REPAIR CONCRETE STRUCTURES
SEE SPECIAL PROVISIONS

Existing reinforcement having 25% or more of cross-sectional area lost due to corrosion or damage during concrete removal shall be replaced with new reinforcement, lapped as shown in Elevation above. No welding permitted.



SECTION

Deteriorated concrete to be removed taking care to deepen concrete 3/4 inch minimum at the edges to provide vertical edges.

CONCRETE REPAIR DETAILS

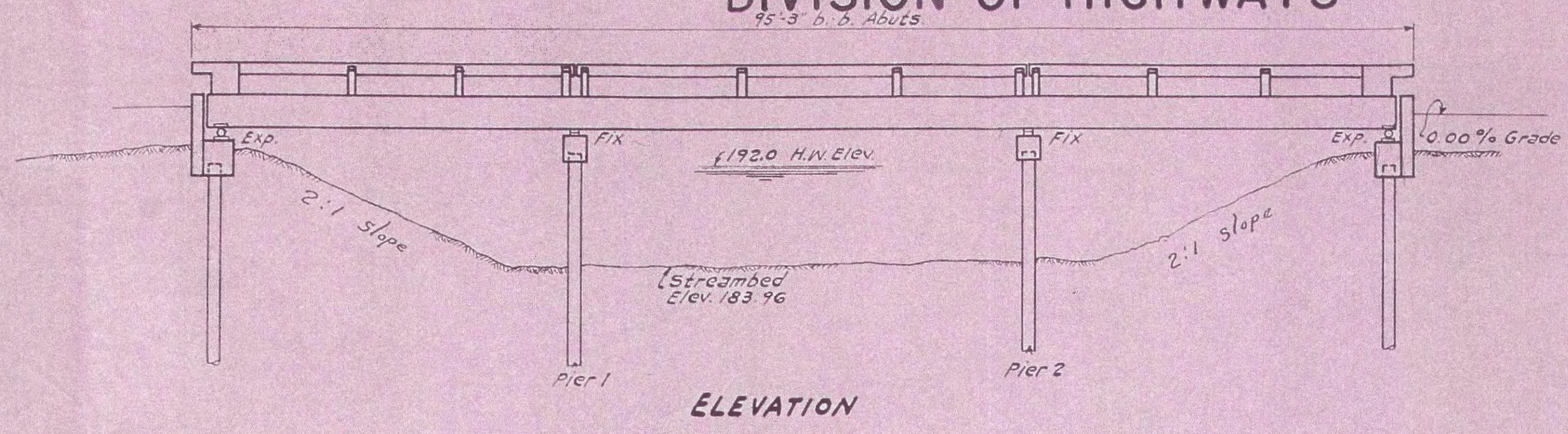
SECTION 83-00081-00-BR
DIXON AVENUE BRIDGE
OVER HOWLAND CREEK
WHITESIDE COUNTY

WILLETT OFMANN & ASSOCIATES, Inc.

REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO 1
3 SHEETS

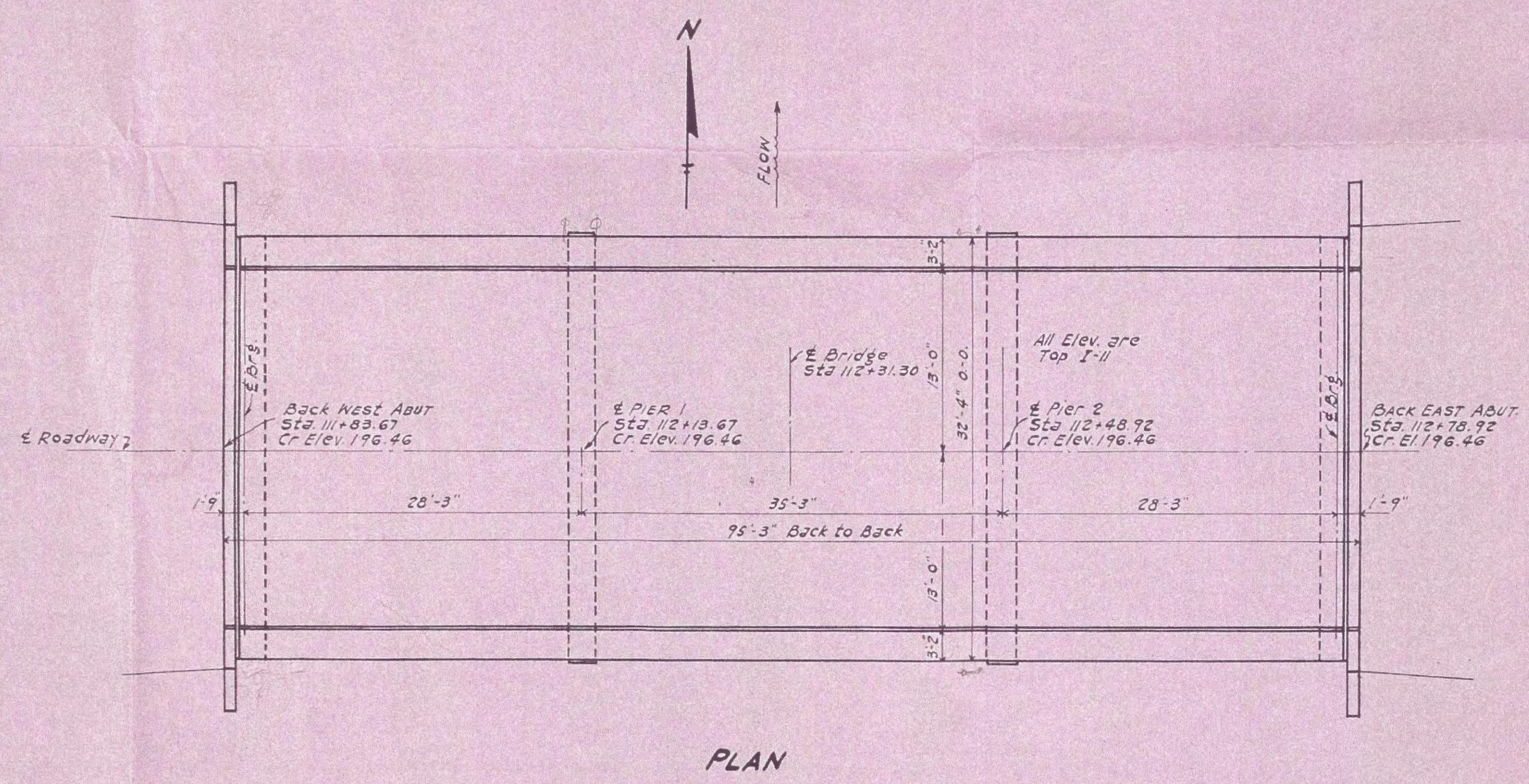


ELEVATION

GENERAL NOTES

Class X concrete shall be used throughout except in Handrail.
Handrail concrete shall be used in Handrail.
The concrete floor shall be finished in accordance with the applicable provisions of Sec. 27 of the Standard Specifications.
All rollers, bearing plates, lead plates and anchor bolts shall be fabricated and set in accordance with Art. 51.14 of the Standard Specs. and are included for payment as Structural Steel.
Expansion Girders shall be fabricated and erected in accordance with Art. 51.12 (d) of the Std. Specs. and are included for payment as Structural Steel.
The following surfaces shall be given two shop coats of red lead paint, 4" x 4" Ls and 2" x 6" Ls except as otherwise provided, all Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Arts. 57.1 to 57.5 inclusive of the Std. Specs.
All paint shall be furnished and applied by the Contractor.
The Contractor shall drive 2 test piles as directed by the Engineer before ordering or casting the remainder of piles. Drive concrete test pile in a permanent location.
BITUMINOUS SURFACE I-II NOT INCLUDED IN SECTION 5B

Note: Std. 2010RA Details of Reinforced Concrete Handrail Types 3A, 3B & 3C shall be considered a part of these plans.



PLAN

TOTAL BILL OF MATERIAL

ITEM	SUPER	SUBSTR.	TOTAL
Class X Concrete	Cu. Yds. 166.5	43.4	209.9
Handrail Concrete	Cu. Yds. 4.4		4.4
Reinforcement Bars	Lbs. 38,180	3660	42040
Structural Steel	Lbs. 6260		6260
Name Plate	Each 1		1
Precast Conc. Piles (35'lg)	Lin. Ft.		455
Cresoted Timber Piles (25'lg) Lin. Ft.			350
Conc. Test Piles	Each 1		1
Timber Test Pile	Each 1		1
REMOVAL OF EXISTING STRUCTURE	EACH		1

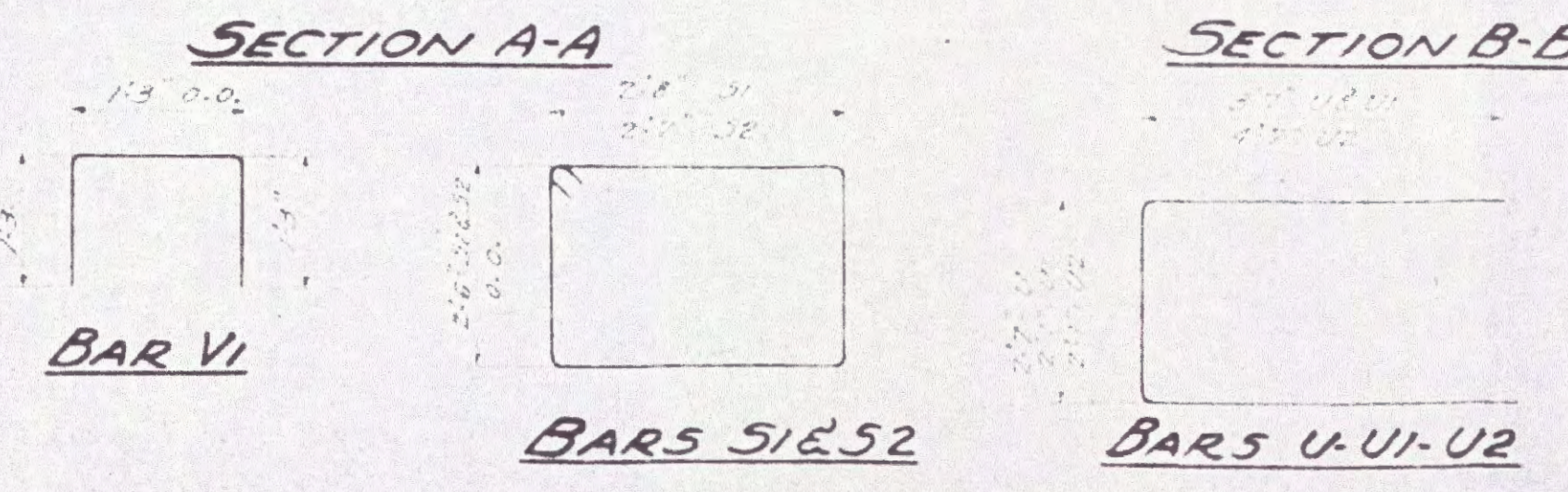
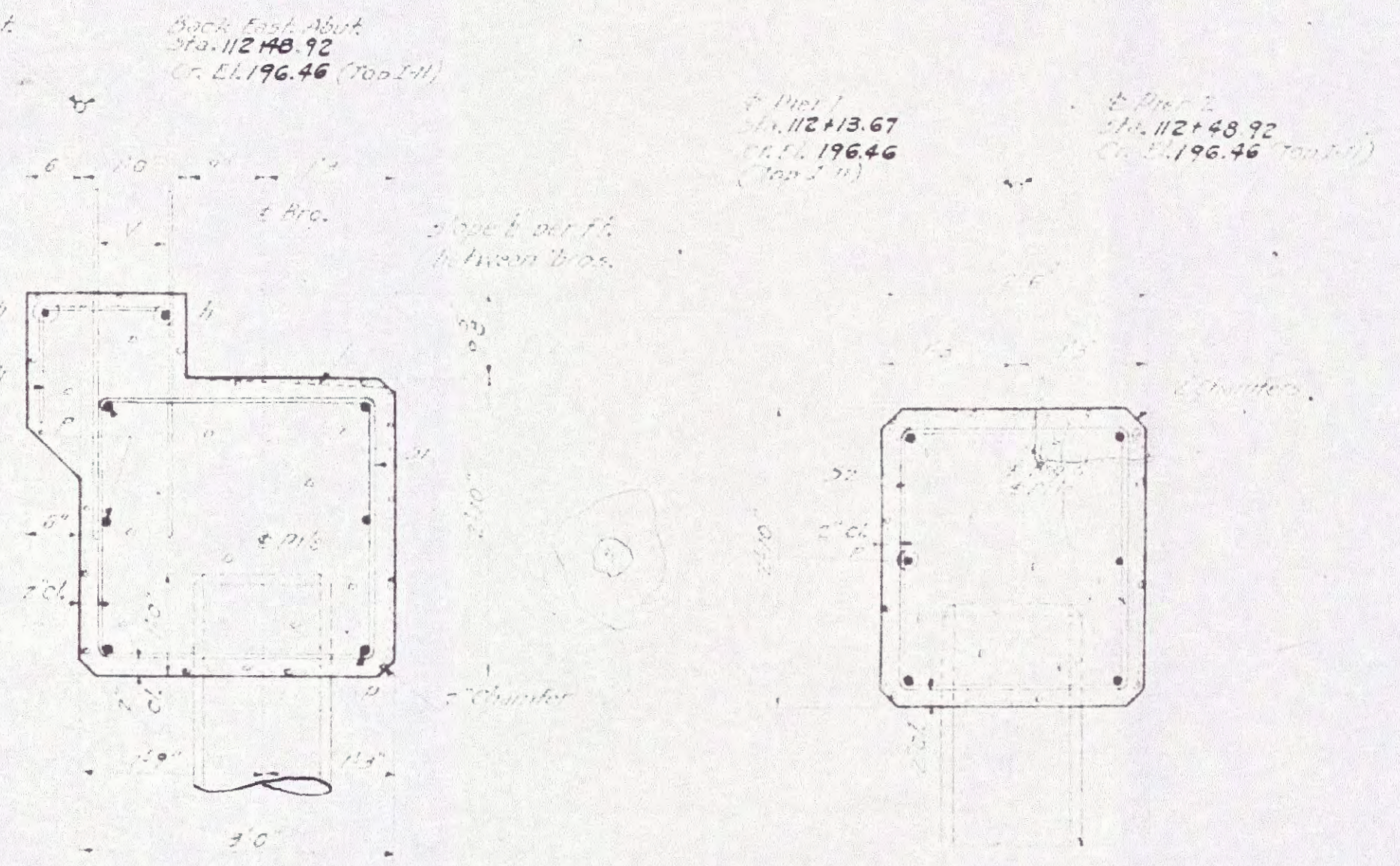
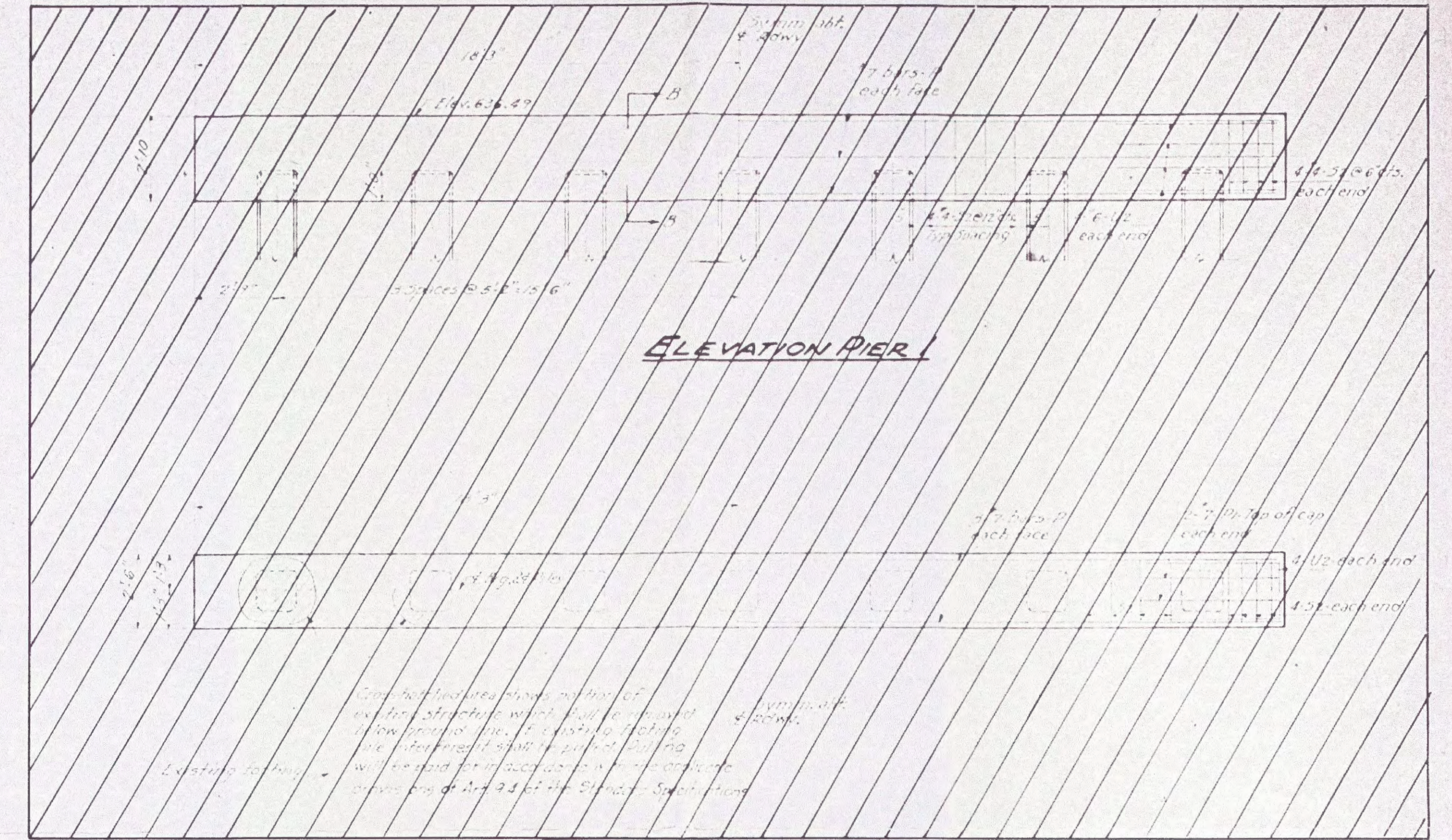
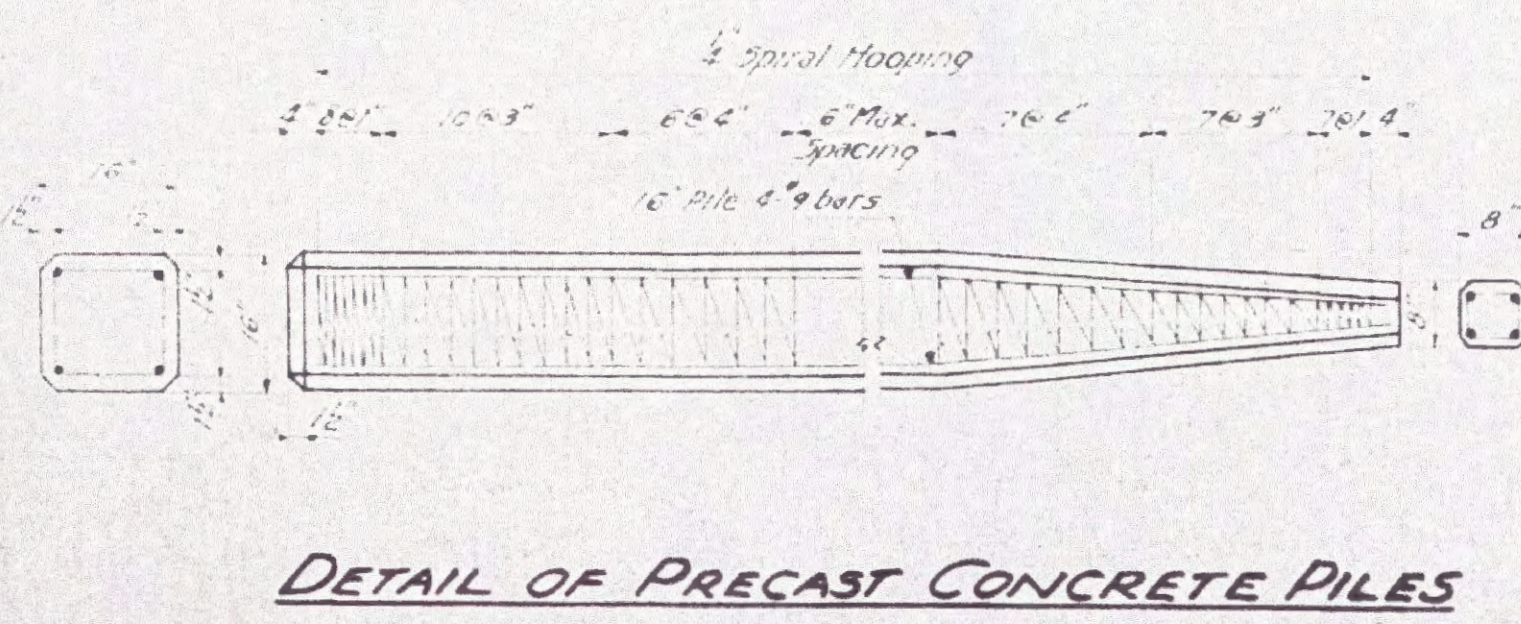
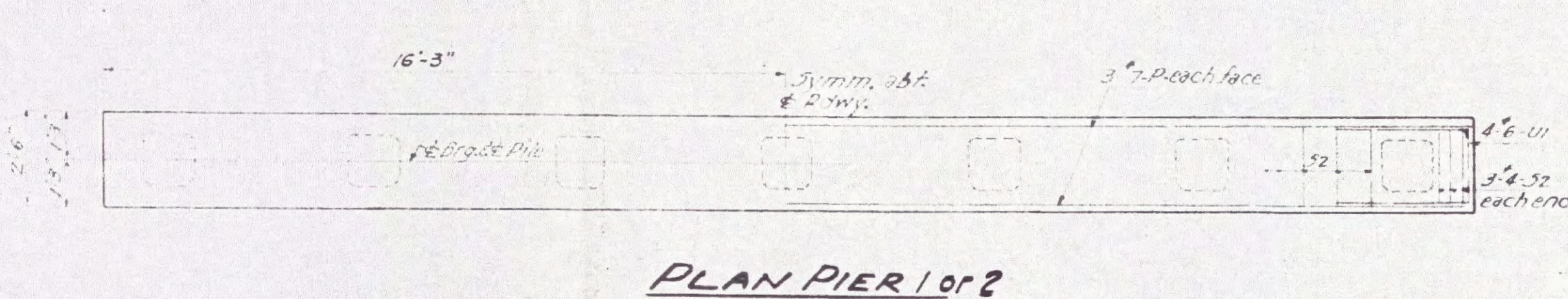
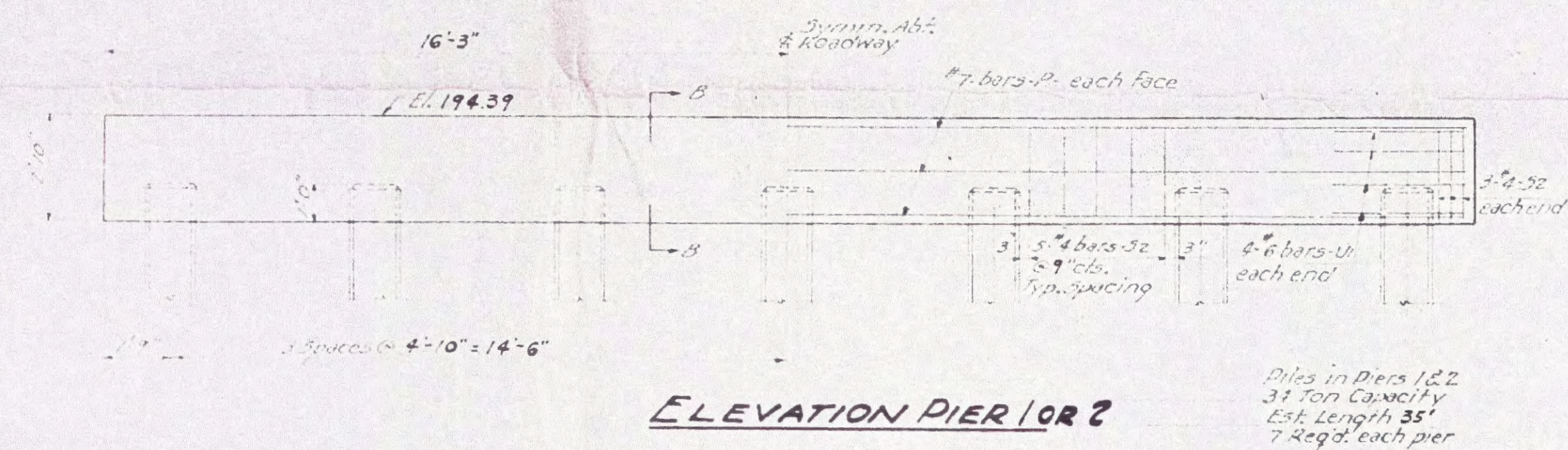
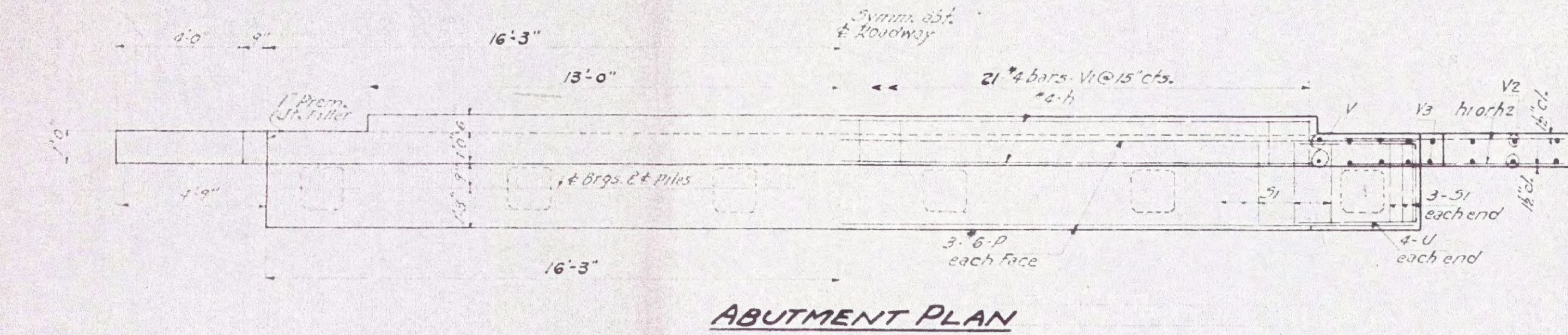
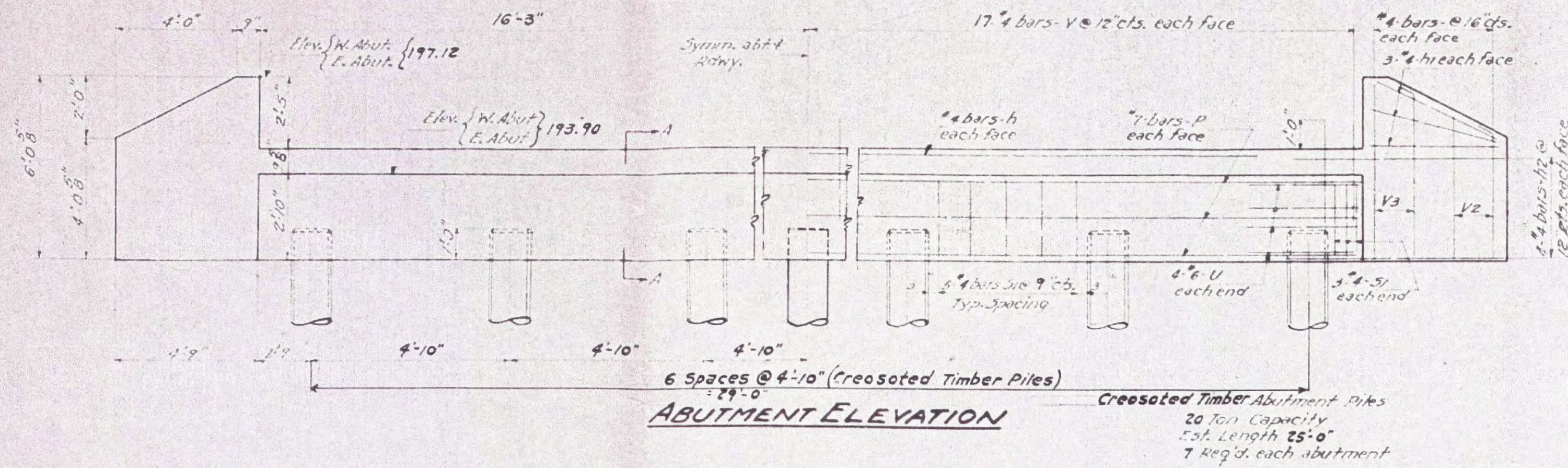
DESIGNED G.E.T.
EXAMINED
PASSED
APPROVED
DATE

STRESSES
f_c - 1400 #/sq Super
f_c - 800 #/sq Substr.
f_s - 18000 #/sq
f_s - 20000 #/sq
n - 10

HOWLAND CREEK BRIDGE
SECTION 5B
S.A. ROUTE 3
BUILT 1954 BY
WHITESIDE COUNTY

LETTERING FOR NAME PLATE
See Standard 2113

HOWLAND CREEK BRIDGE
SEC. 5-B
WHITESIDE COUNTY
STA. 112+31.3



BILL OF MATERIAL

Qty.	No.	Size	Length	Shape
1	1	16"	25'-6"	—
17	2	4"	7'-6"	—
12	3	6"	7'-6"	—
1	130	4"	3'-6"	—
1	42	4"	3'-9"	—
1	16	4"	3'-9"	—
1	16	4"	4'-2"	—
1	24	4"	32'-3"	—
1	72	4"	11'-0"	□
1	72	4"	10'-0"	□
1	16	4"	4'-9"	□
1	16	4"	4'-3"	□
		Class. X Concrete	Cu. Yds.	43.4
		Reinforcement Bars	Lbs.	3860
		Precast Conc. Piles (35' g.)	Lin. Ft.	445
		Creosoted Timber Piles (25')	Lin. Ft.	350
		Cast Pile (conc)	Each	1
		Test Piles (Timber)	Each	1

DESIGNED: Carl E. Farnum
CHECKED: B. Sarman
DRAWN: C. E. Miller
CHECKED: B. Sarman

DATE: May 5, 1934
BY: J. M. Barker
APPROVED: J. M. Barker

HOWLAND CREEK BRIDGE
SEC. 5-B
WHITESIDE COUNTY
STA. 112 + 31.3