

DEKALB COUNTY

BRIDGE NUMBER 019 - 4007 SOUTH BRANCH OF KISHWAUKEE RIVER SECTION 77-05119-00-BR FRANKLIN ROAD DISTRICT 1978

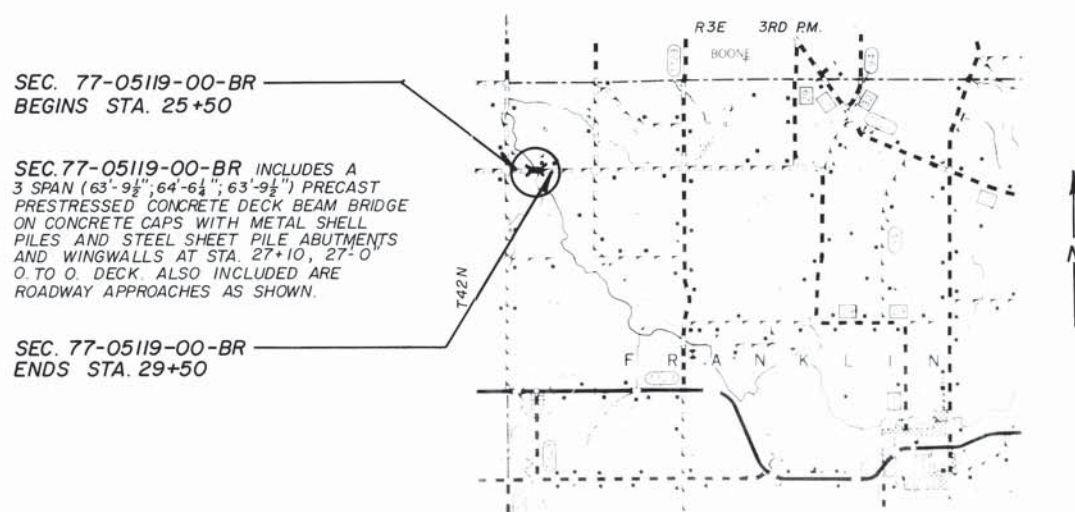
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2. PLAN & PROFILE
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6. ABUTMENTS
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9. PILE DETAILS
10. STD. 2113-1 NAME PLATES
11. STD. 2298-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
12. STD. 2299-7 DESIGN OF TRAFFIC CONTROL DEVICES

TOWNSHIP BRIDGE PROGRAM 1978

SUMMARY OF QUANTITIES

ITEM	UNIT	QUAN.
EARTH EXCAVATION	CU. YD.	69
BORROW EXCAVATION	CU. YD.	617
AGGREGATE SURFACE COURSE, TYPE B	TON	229
CLASS X CONCRETE	CU. YD.	39.4
REINFORCEMENT BARS	POUND	4220
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1920
PRECAST PRESTRESSED CONCRETE DECK BEAMS, 27" DEPTH	SQ. FT.	5218
STEEL SHEET PILING	SQ. FT.	2880
STEEL RAILING, TYPE S	LIN. FT.	387
HARDWARE	POUND	2650
FURNISHING METAL PILE SHELLS 12"	LIN. FT.	220
DRIVING AND FILLING SHELLS	LIN. FT.	220
TEST PILES, METAL SHELL	EACH	1
NAME PLATES	EACH	1
REMOVAL OF EXISTING STRUCTURES	EACH	1
CHANNEL EXCAVATION	CU. YD.	450
FURNISHING STEEL PILES (HP 8 x 36)	LIN. FT.	264
DRIVING STEEL PILES	LIN. FT.	264
TEST PILES STEEL (HP 8 x 36)	EACH	1



LOCATION MAP
SCALE: 1" = 1 MILE*

NET LENGTH = 400.00 FEET = 0.076 MILES

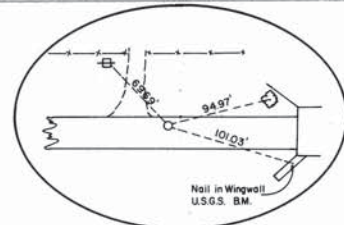


PLANS PREPARED BY:

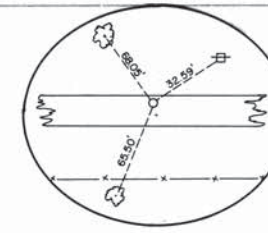
Harold P. Wendler
& Associates

DIXON, ILLINOIS
PRINCETON, ILLINOIS

B.M.#2 R.R. SPIKE IN POWER POLE
 STA. 24+70 28' LT.
 ELEV. 730.27



P.O.T. STA. 25+34.32
 3/4" IRON PIN BURIED 4"



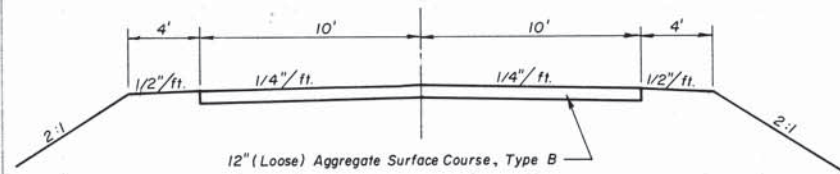
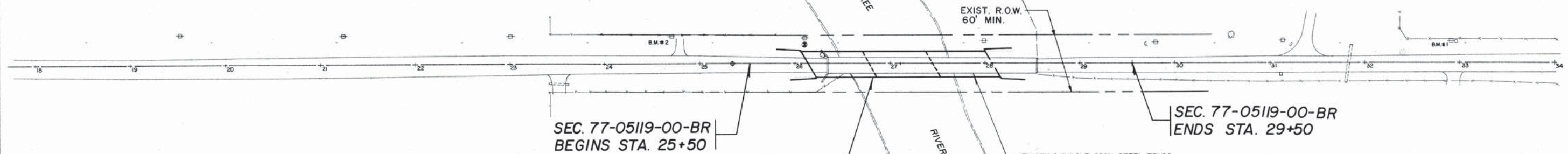
P.O.T. STA. 29+55.08
 3/4" IRON PIN BURIED 4"

B.M.#1 R.R. SPIKE IN POWER POLE
 STA. 32+92 23' LT.
 ELEV. 744.89



DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

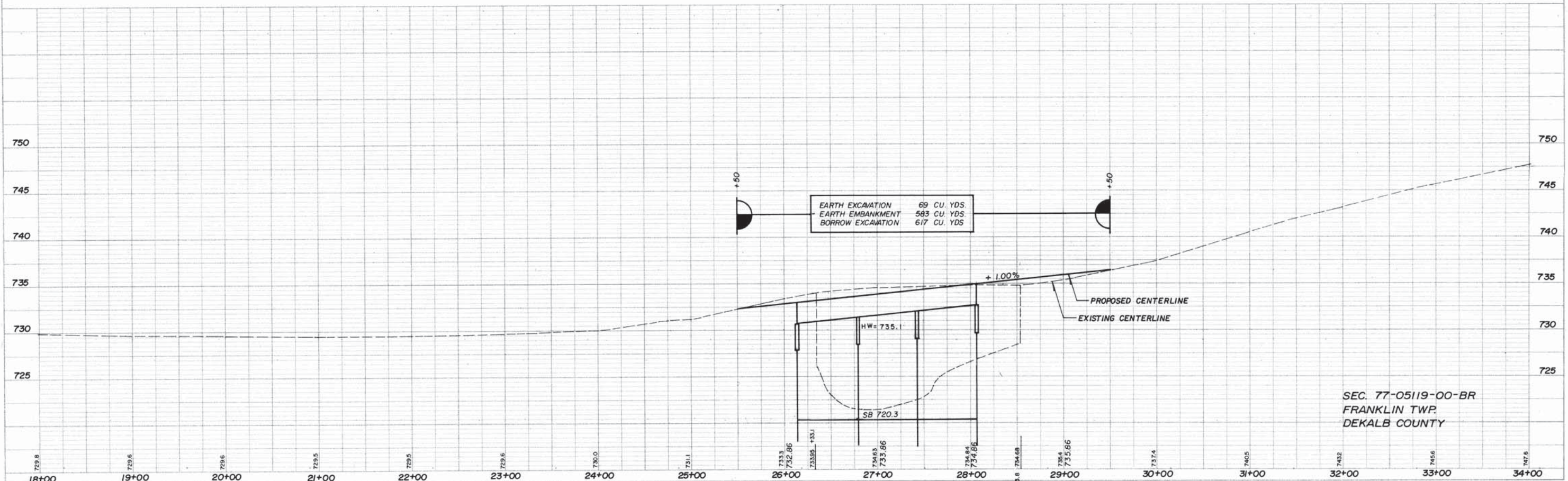
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TYPICAL SECTION

AGGREGATE SURFACE COURSE, TYPE B

STA. 25+50 - 26+13.28	70 TON
STA. 28+06.72 - 29+50	159 TON
TOTAL	229 TON



SEC. 77-05119-00-BR
 FRANKLIN TWP.
 DEKALB COUNTY

FINAL SURVEY
 SURVEY PLOTTED
 NO. BY DATE
 AREAS CHECKED

ORIGINAL SURVEY
 SURVEY PLOTTED
 NO. BY DATE
 AREAS CHECKED

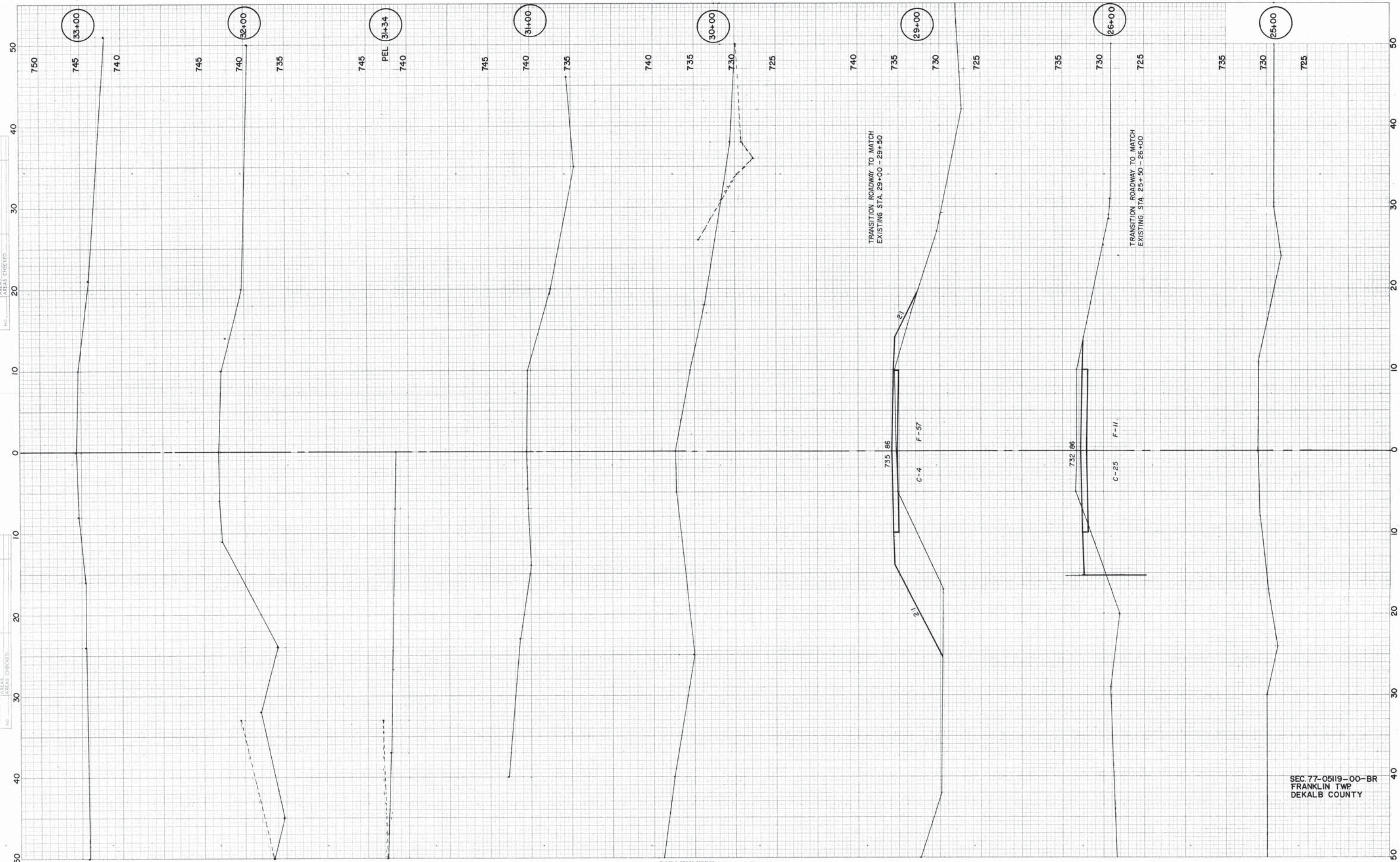
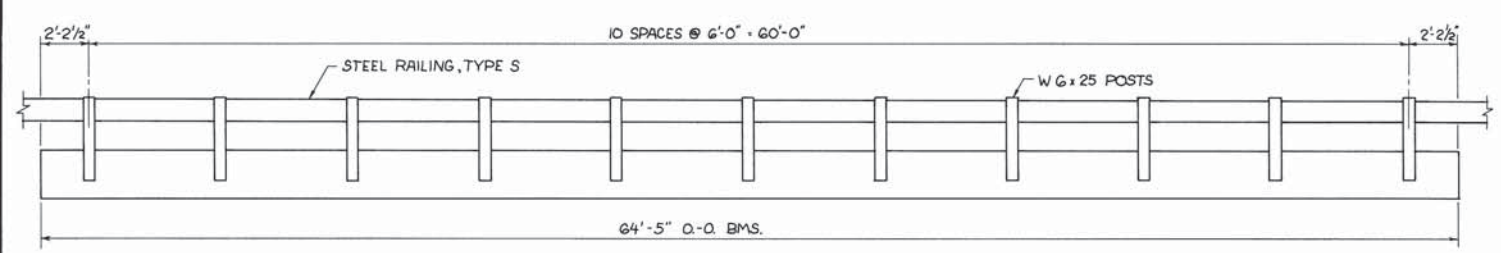
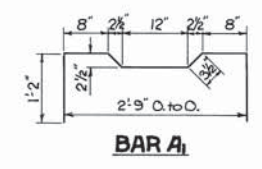


PLATE 3 CROSS SECTION G. P. S. & R. S. STANDARD
 100% BAIL-PROOF YELLOW PAPER AND PRINTED IN U. S. A.
 BUREAU OF HIGHWAYS

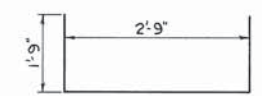
SEC. 77-05119-00-BR
 FRANKLIN TWP
 DEKALB COUNTY



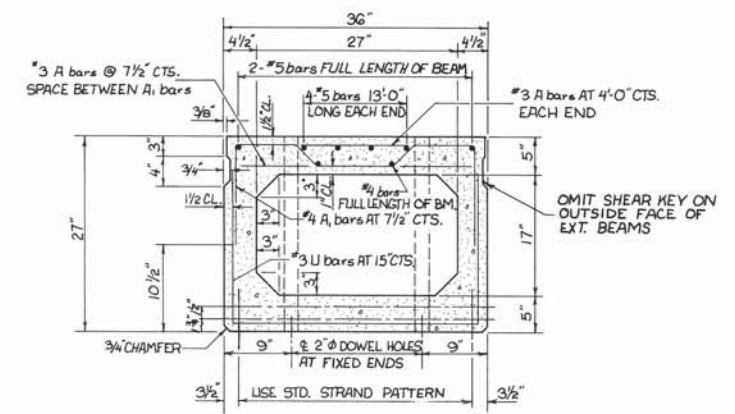
ELEVATION



BAR A1

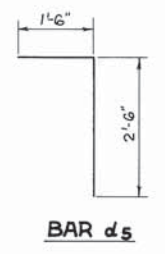


BARS u & ul

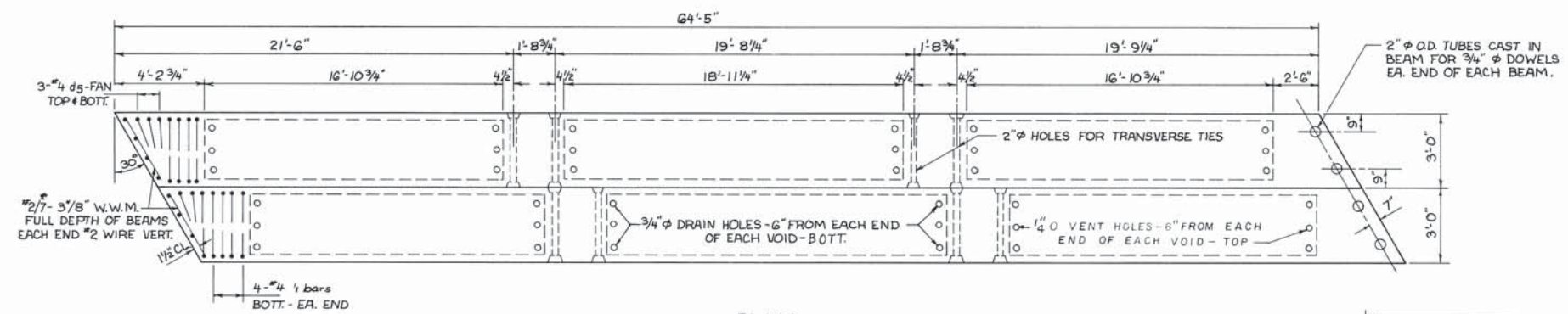


TYPICAL SECTION THRU 27" x 36" BEAM

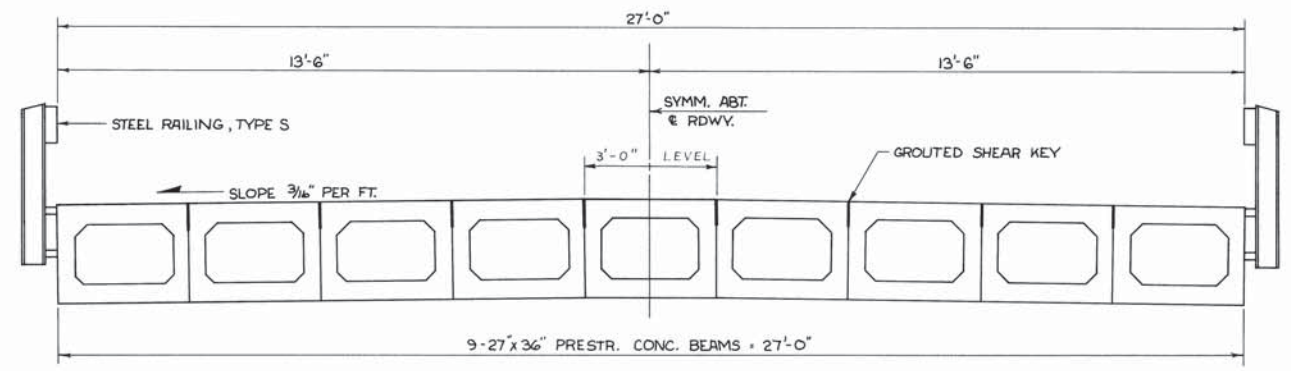
19 - 7 WIRE - 7/16" STRANDS, EACH STRAND STRESSED TO 21,700 LBS. 9 STRANDS 1 3/4" UP, 10 STRANDS 3/4" UP.



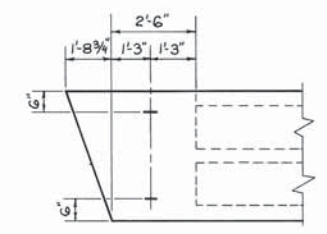
BAR ds



PLAN

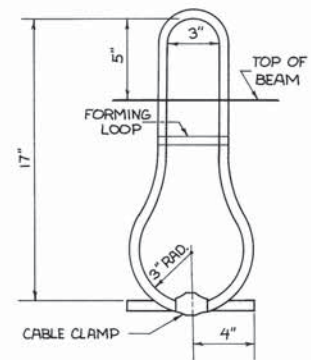


TYPICAL CROSS SECTION



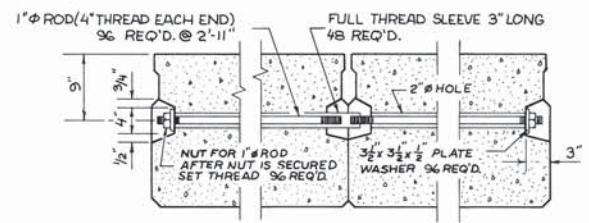
PLAN OF END OF BEAM SHOWING LOCATION OF LIFTING LOOPS

EACH BEAM SHALL HAVE FOUR LIFTING LOOPS, TWO CAST IN EACH END AS SHOWN ABOVE. LOOPS SHALL BE BURNED OFF AFTER BEAMS HAVE BEEN ERECTED.



DETAIL OF LIFTING LOOP

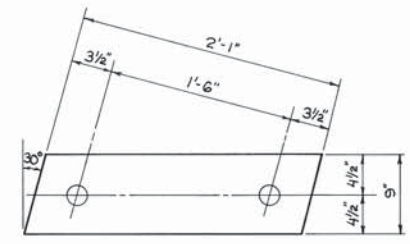
LIFTING LOOPS SHALL BE Gx25 CLASS WIRE 3/4" diameter ROPE WITH FIBER CORE, MIN. ULTIMATE TENSILE STRENGTH SHALL BE = 46,000 LBS.



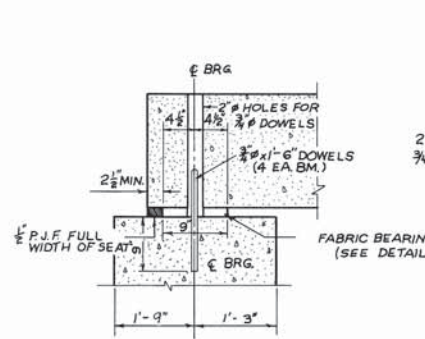
TRANSVERSE TIE ASSEMBLY

GENERAL NOTES

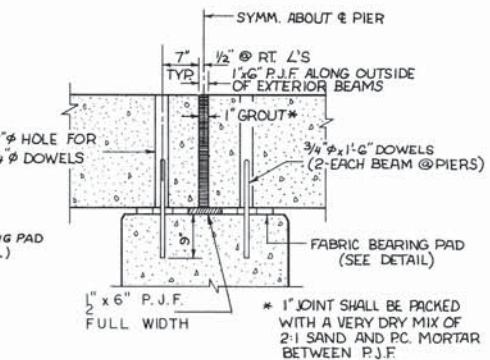
- Prestressing steel shall be non-galvanized high strength stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 7/16" and the nominal cross-sectional area shall be 0.115 square inch.
- The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set.
- Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place.
- Longitudinal shear keys shall be dry packed with 2:1 sand and P.C. mortar.
- Dowel bars shall be drilled and grouted in place after beams have been erected.
- Cost of reinforcement and accessories casted into beam, of bearing pads, of furnishing and assembling transverse ties, of furnishing, drilling and grouting dowel holes, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Bridge Deck."



1/2" FABRIC BEARING PAD



SECTION THRU ABUTMENTS AT RIGHT ANGLES

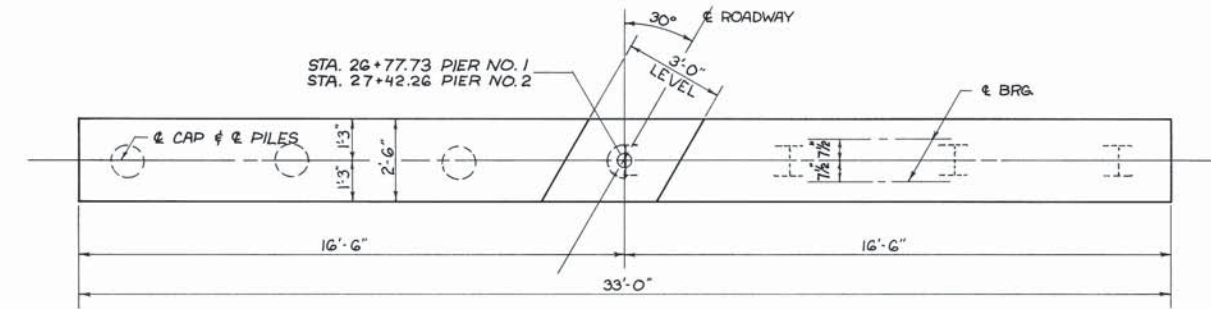


SECTION THRU PIER AT RIGHT ANGLES

BILL OF MATERIAL SUPERSTRUCTURE

PRECAST PRESTRESSED CONC. DECK BEAMS 27"	5218 SQ. FT.
STEEL RAILING, TYPE S	387 LIN. FT.

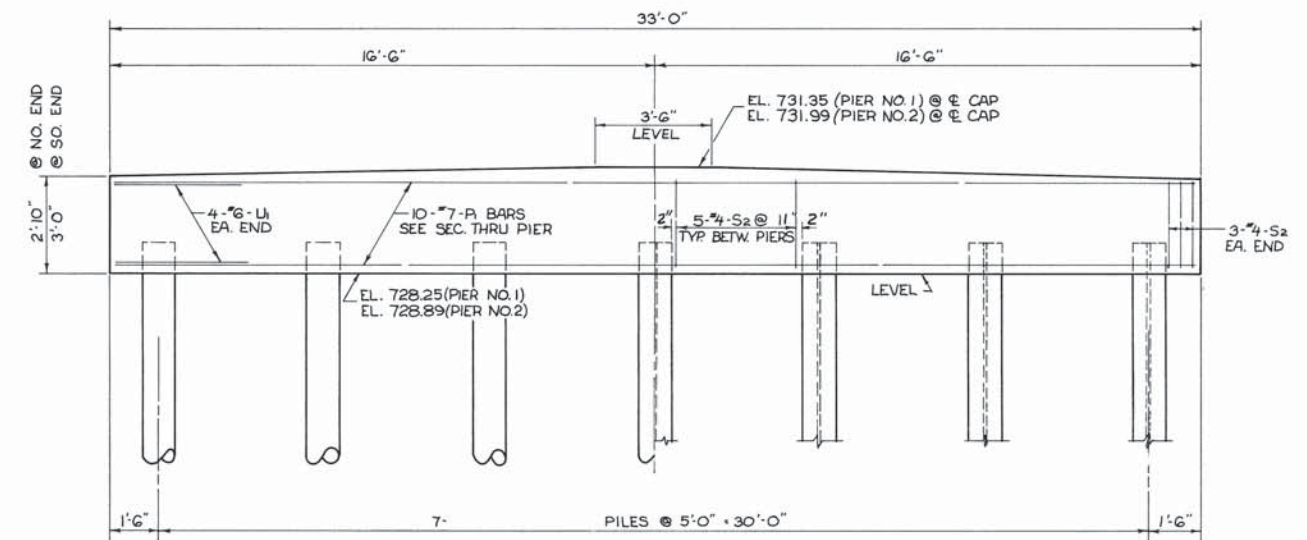
**SUPERSTRUCTURE
SEC. 77-05119-00-BR
FRANKLIN RD. DIST.
DEKALB COUNTY**



PLAN

PIER 1

PIER 2

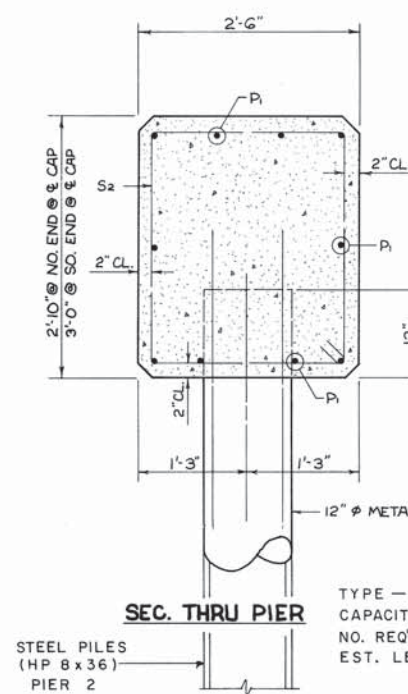


ELEVATION

PIER 1

PIER 2

NOTE: SLOPE TOP OF CAP 1/8" PER FOOT WITH GRADE OF ROADWAY.

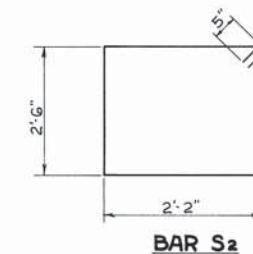


SEC. THRU PIER

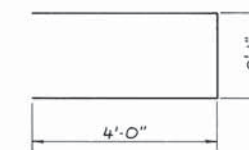
STEEL PILES (HP 8x36) PIER 2

PIER NO. 2 PILE DATA

TYPE - STEEL PILES (HP 8x36)
CAPACITY - 45 TONS
NO. REQ'D. - 6+1 TEST PILE
EST. LENGTH - 24 FT.



BAR S2



BAR U1

PIER NO. 1 PILE DATA

TYPE 12" ϕ METAL SHELL
CAPACITY 45 TON
NO. REQ'D. PIER NO. 1 - 7
EST. LENGTH 20 FT.

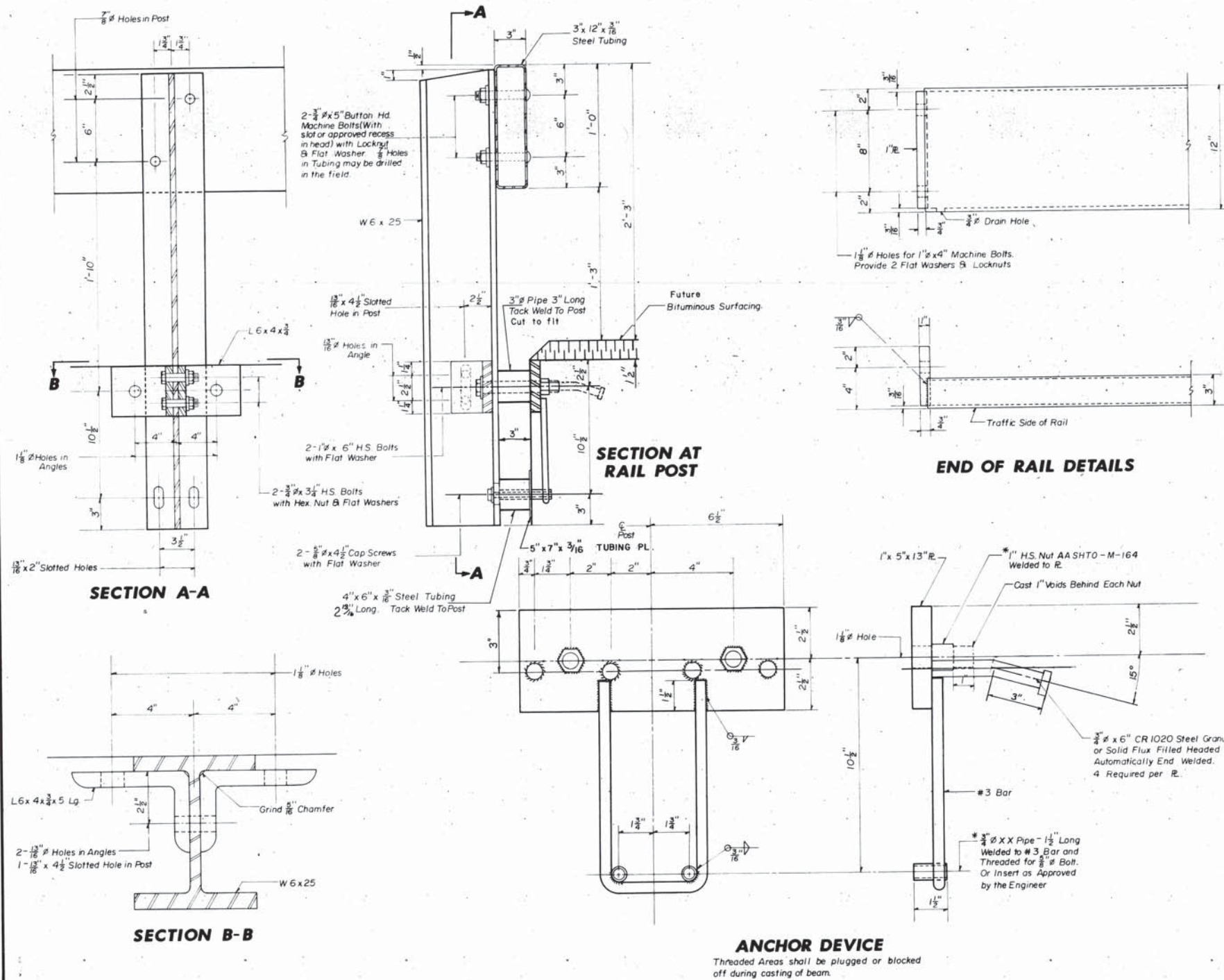
BILL OF MATERIALS - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
P1	20	#7	32'-6"	—
S2	72	#4	10'-2"	□
U1	16	#6	10'-1"	—
CLASS X CONCRETE		CU. YD.	17.8	
REINFORCEMENT BARS		LBS.	2060	
FURN. METAL PILE SHELLS (12")		LIN. FT.	140	
DRIVING AND FILLING SHELLS		LIN. FT.	140	
TEST PILES STEEL (HP 8x36)		EA.	1	
FURN. STL. PILES (HP 8x36)		LIN. FT.	144	
DRIVING STL. PILES		LIN. FT.	144	

PIERS
SEC. 77-05119-00-BR
FRANKLIN RD. DIST.
DEKALB CO.

NOTE = FOR DETAIL OF RAIL SPACING, SEE SHEET 5

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
S.B.L. F.A.	75-12118-00-BR	WOODFORD			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				SHEETS



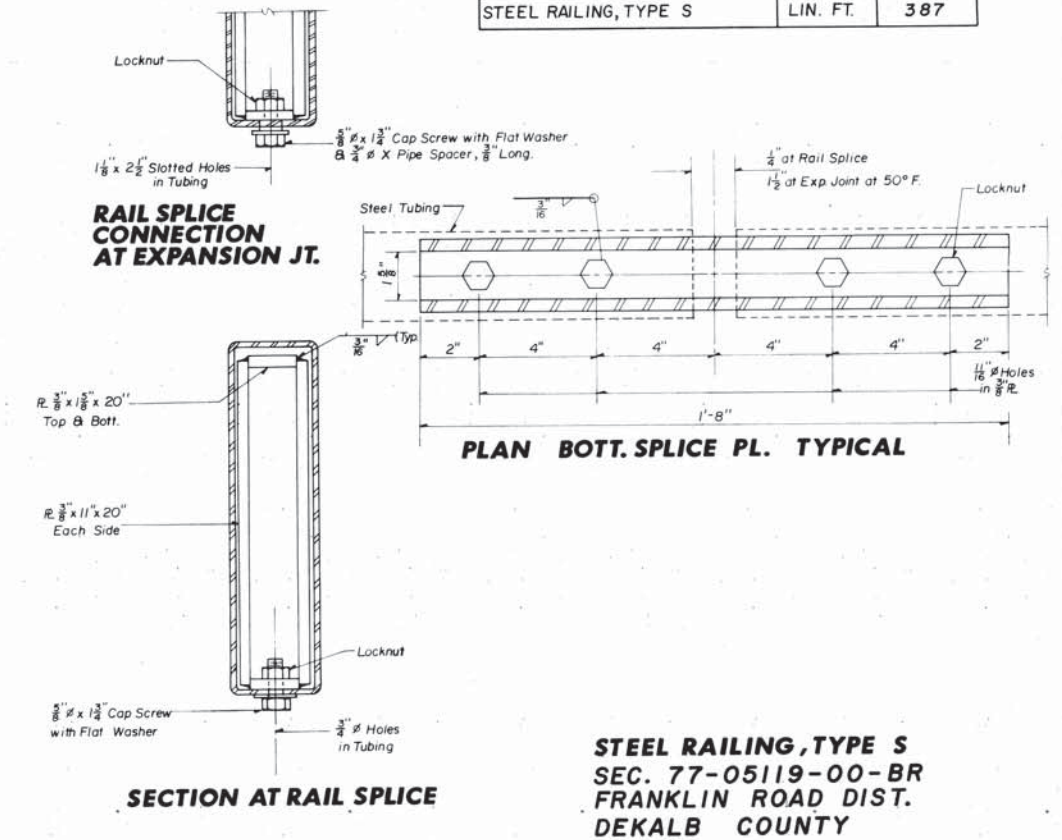
NOTES

HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A-500 GRADE B OR A-501 STRUCTURAL STEEL TUBING.
 ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M183 EXCEPT POSTS SHALL CONFORM TO AASHTO M188.
 BOLTS, CAP SCREWS, AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A-307 EXCEPT FOR HIGH STRENGTH BOLTS, NUTS AND WASHERS NOTED WHICH SHALL CONFORM TO DESIGNATION AASHTO M164.
 ALL BOLTS, NUTS, CAP SCREWS, WASHERS AND LOCK WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M232.
 ALL POSTS, RAILING, RAIL SPLICES, ANCHOR DEVICES AND ANGLES SHALL BE GALVANIZED AFTER SHOP FABRICATION IN ACCORDANCE WITH AASHTO DESIGNATION M111 AND A.S.T.M. GALVANIZED RAIL SHALL NOT BE PAINTED.
 RAILING SHALL BE IN ACCORDANCE WITH SECTION 508 OF THE STANDARD SPECIFICATIONS, EXCEPT AS NOTED, AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR STEEL RAILING, TYPE S.
 ALL FIELD DRILLED HOLES SHALL BE COATED WITH AN APPROVED ZINC RICH PAINT BEFORE ERECTION.

THE 3/4" HIGH STRENGTH BOLTS USED TO CONNECT THE 6 X 4 X 3/4 ANGLES TO THE POST SHALL BE TIGHTENED IN ACCORDANCE WITH ARTICLE 507.04 (9)(3) OF THE STANDARD SPECIFICATIONS. THE 1" HIGH STRENGTH BOLTS CONNECTING THE ANGLES TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
 FOR MULTI-SPAN BRIDGES, SUFFICIENT 1/4" X 6" X 1'-5" GALVANIZED STEEL SHIMS SHALL BE PROVIDED TO ALIGN RAIL BETWEEN ADJACENT SPANS. COST INCIDENTAL TO STEEL RAILING.

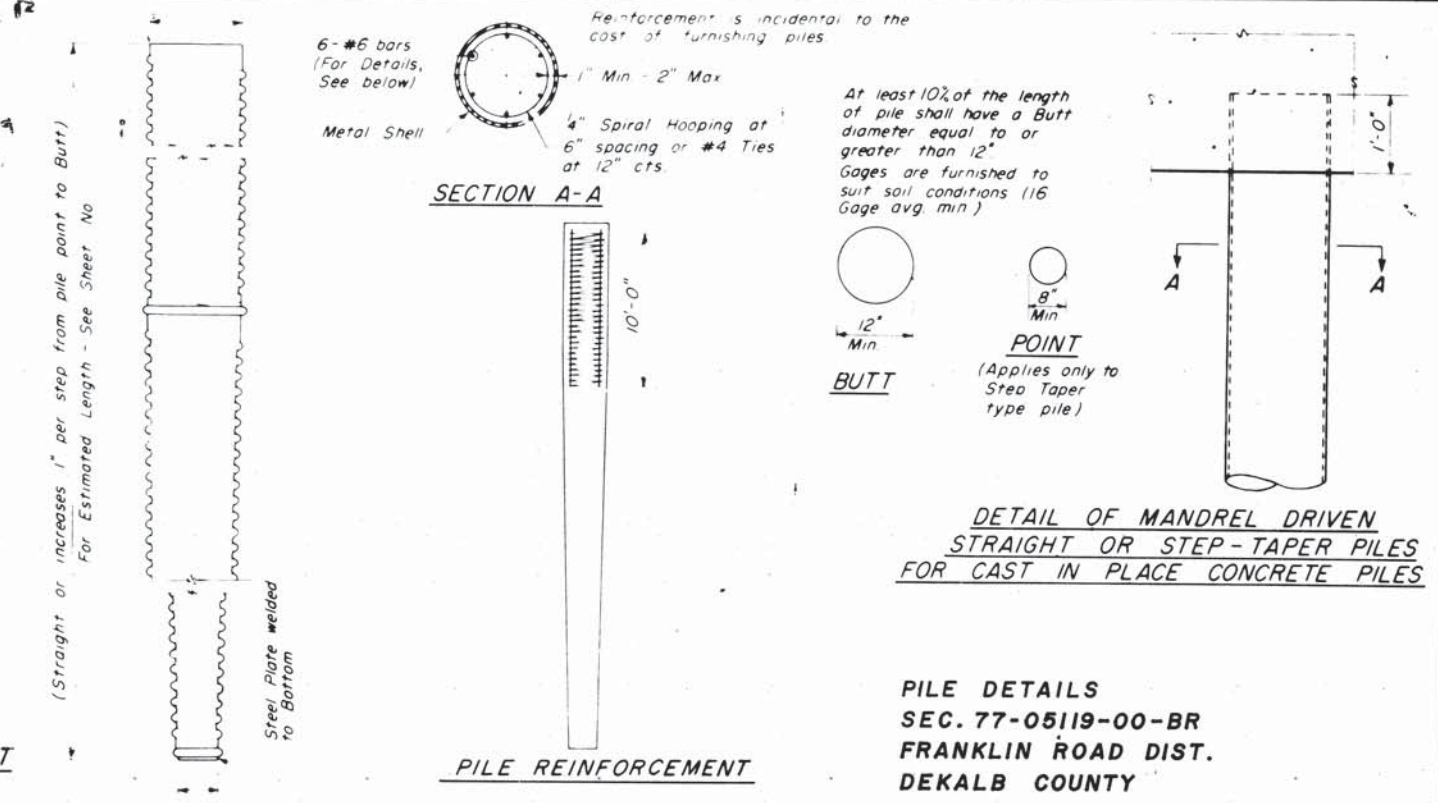
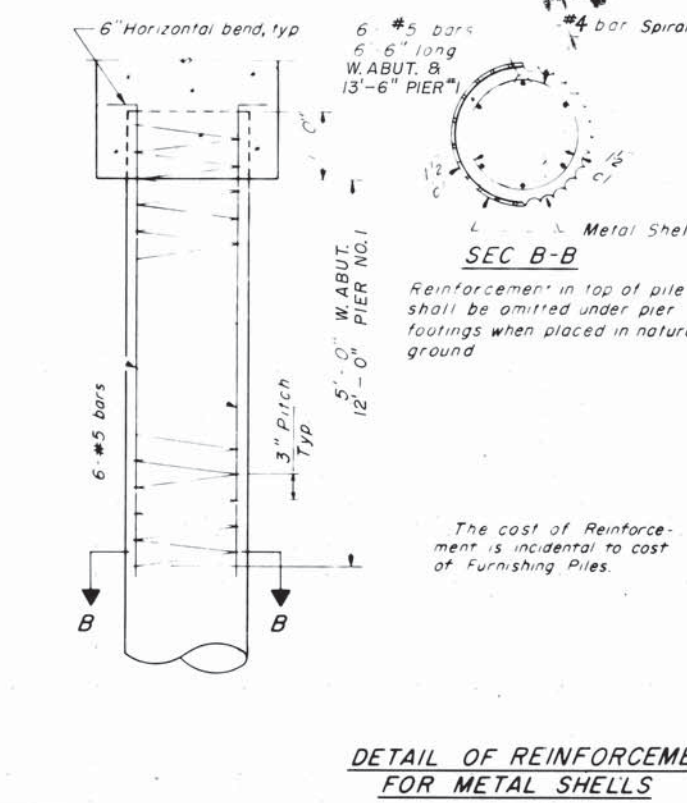
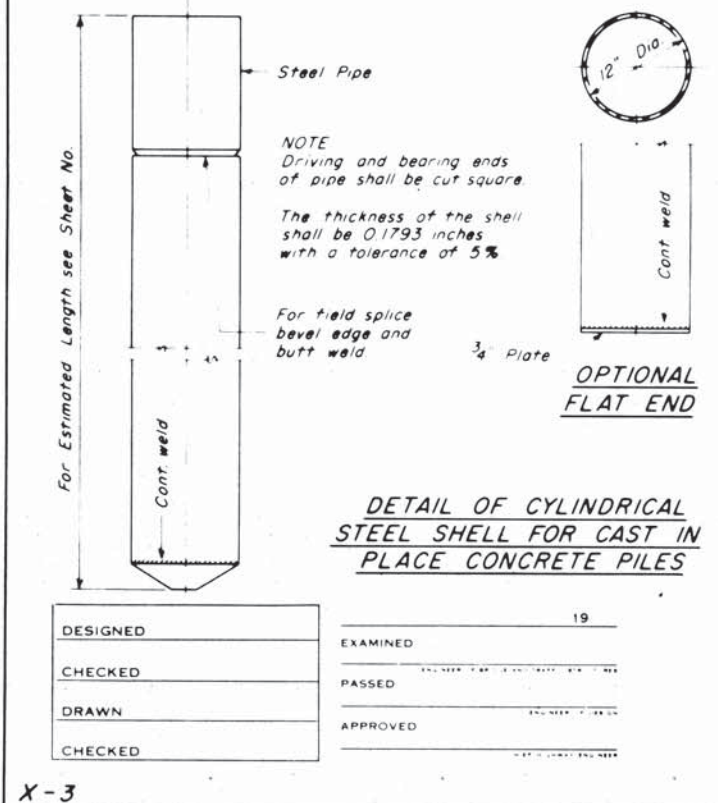
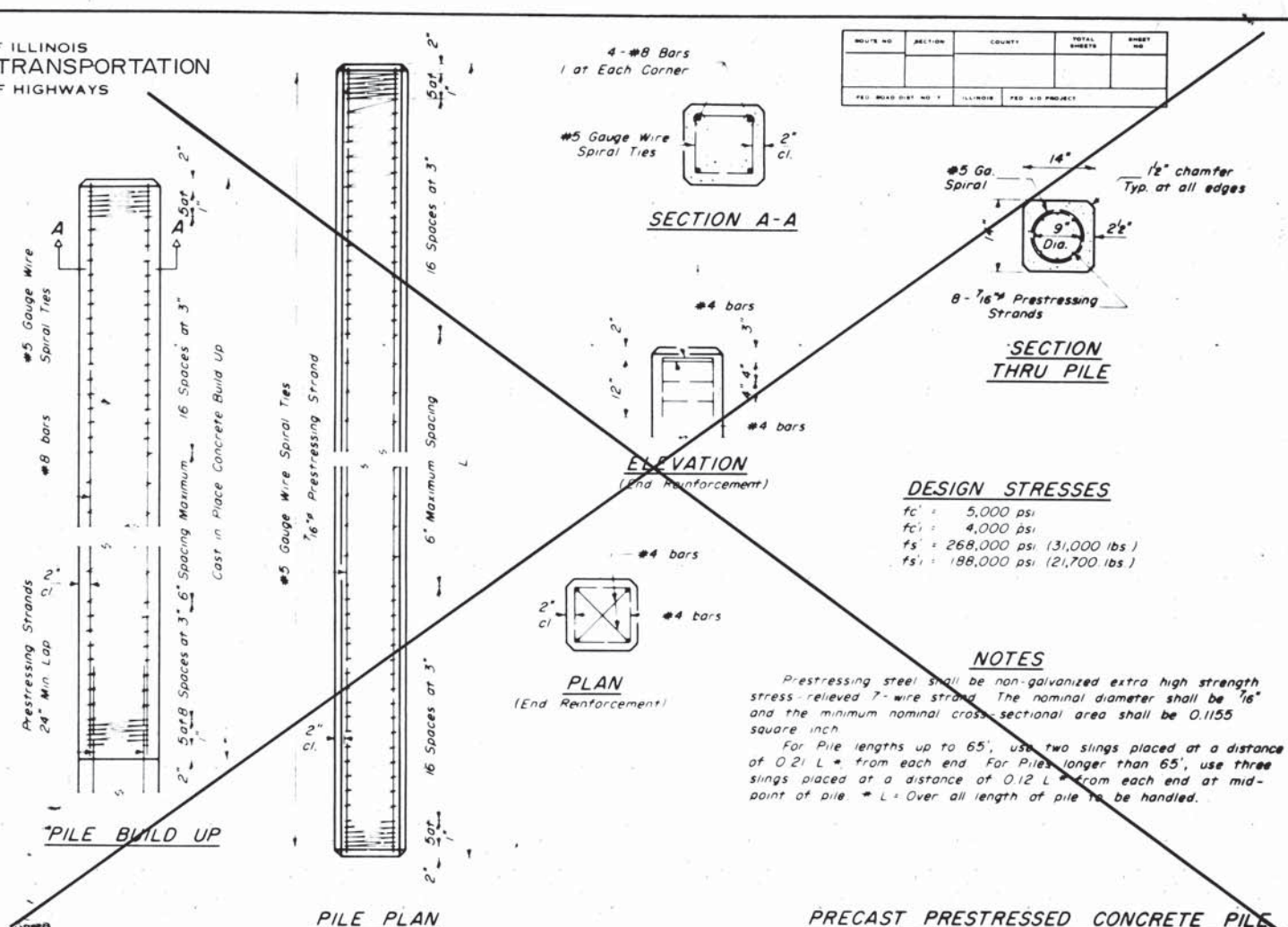
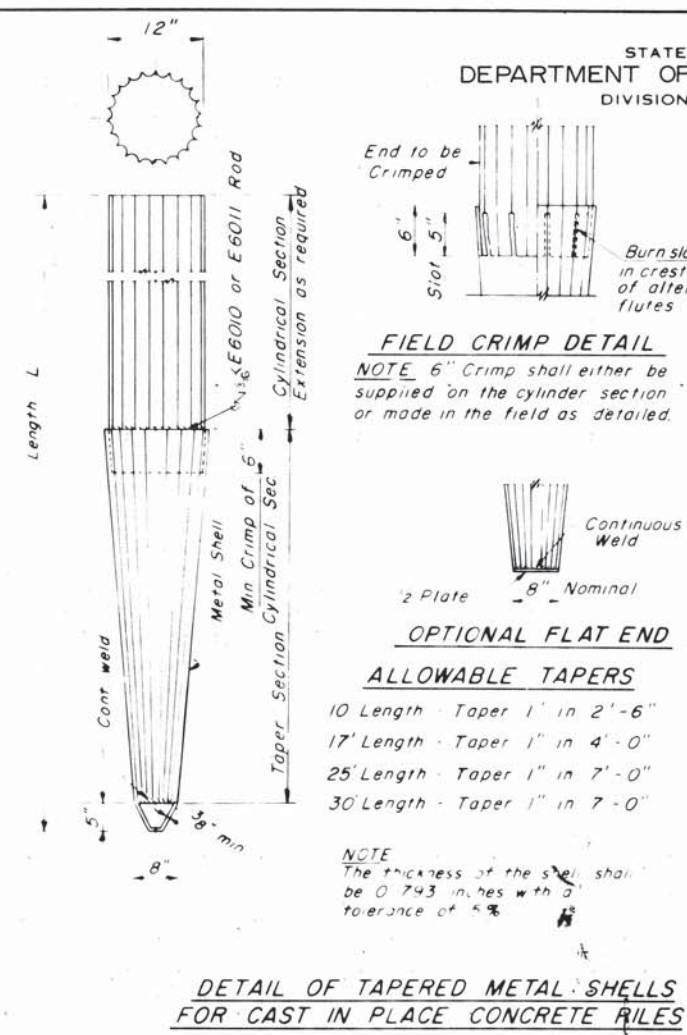
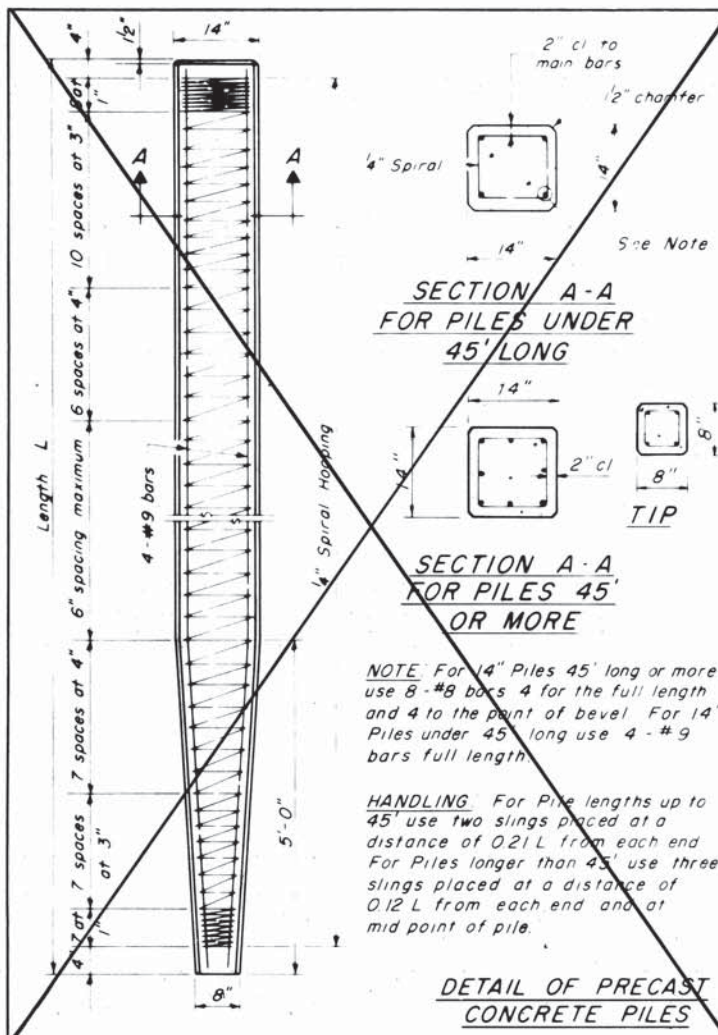
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
STEEL RAILING, TYPE S	LIN. FT.	387



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



DESIGNED	EXAMINED	19
CHECKED	PASSED	
DRAWN	APPROVED	
CHECKED		