

STATE OF IOWA  
 STATE HIGHWAY COMMISSION  
 PLAN FOR PROPOSED IMPROVEMENT  
 ON THE  
 SECONDARY ROAD SYSTEM  
 CRAWFORD COUNTY  
 PROJECT NO. 66-19

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	66-19	1966	1	5

DESIGN FOR 130' X 20' HIGH TRUSS BRIDGE  
 WITH ONE 42' X 20' I-BEAM APPROACH SPAN

THE IOWA STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR  
 CONSTRUCTION WORK, SERIES OF 1964, SHALL APPLY TO WORK ON THIS  
 PROJECT, PLUS CURRENT SUPPLEMENTAL SPECIFICATIONS AND  
 SPECIAL PROVISIONS.

SHEET NO.	ITEM
1	TITLE SHEET & ESTIMATE OF QUANTITIES
2-5	PLAN FOR BRIDGE

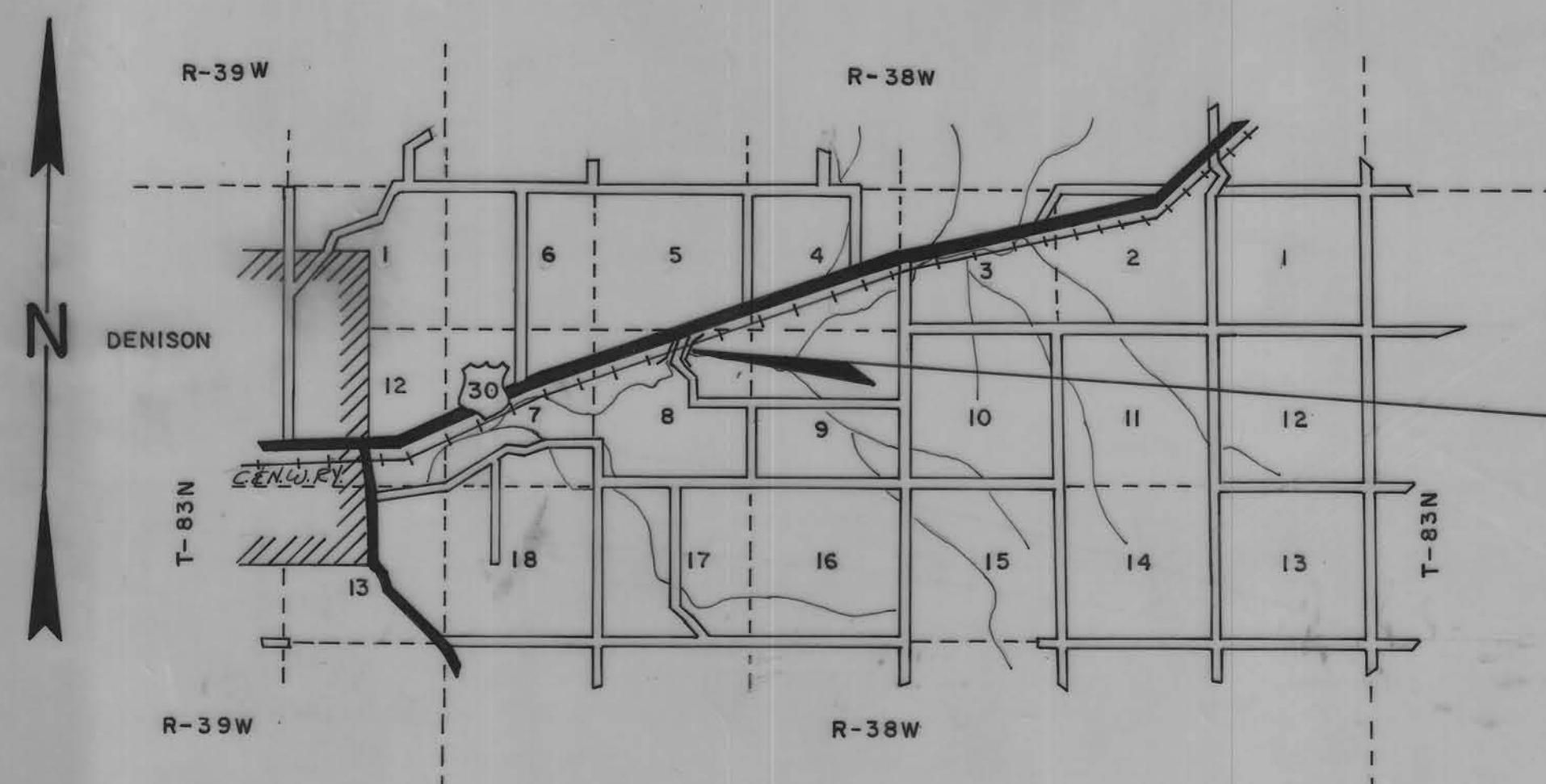
*Mileage Bridge = 172' = 0.033 mile  
 This bridge will require bridge sign assemblies  
 furnished and placed by the County.*

ESTIMATE OF QUANTITIES			
ITEM	UNIT	QUANTITY	TOTAL
Structural Steel Erection		①	Lump Sum
Laminated Floor Plank	F.B.M. ②	27,000 Floor Deck 870 Blocking	27,870
Wood Caps	F.B.M.		1,594
Backing Plank	F.B.M.		690
Wood Piling	LF	6 @ 20' 16 @ 25'	670
Steel H Piling	LF	12 @ 50'	600
Wood Bank Retard Piling	LF	26 @ 25' 2 @ 20'	690
Retard Mesh	SF		2,500

① Includes approach pier steel & truss bridge  
 ② Includes wood deck blocking  
 County to furnish all bridge materials except as noted below.  
 Bridge Contractor to furnish all necessary high tensile  
 bolts, drift pins, floor clips, and nails.  
 Original 130' X 20' High Truss Bridge Plan available at  
 County Engineer's Office.

*I hereby certify these plans were  
 made under my supervision and  
 that I am a duly Registered Pro-  
 fessional Engineer under the laws  
 of the State of Iowa.*

DATE: October 12, 1966  
*Donald Turner*  
 Reg. No. 4988



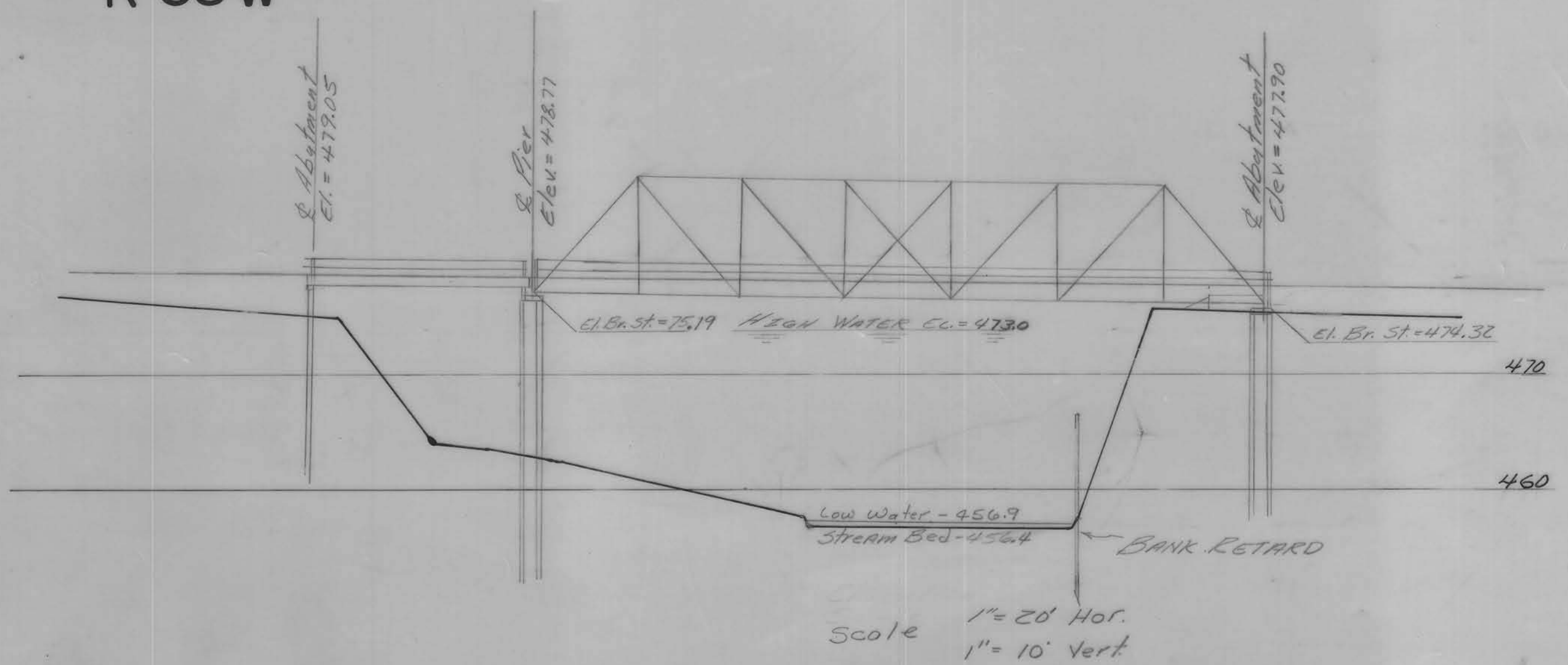
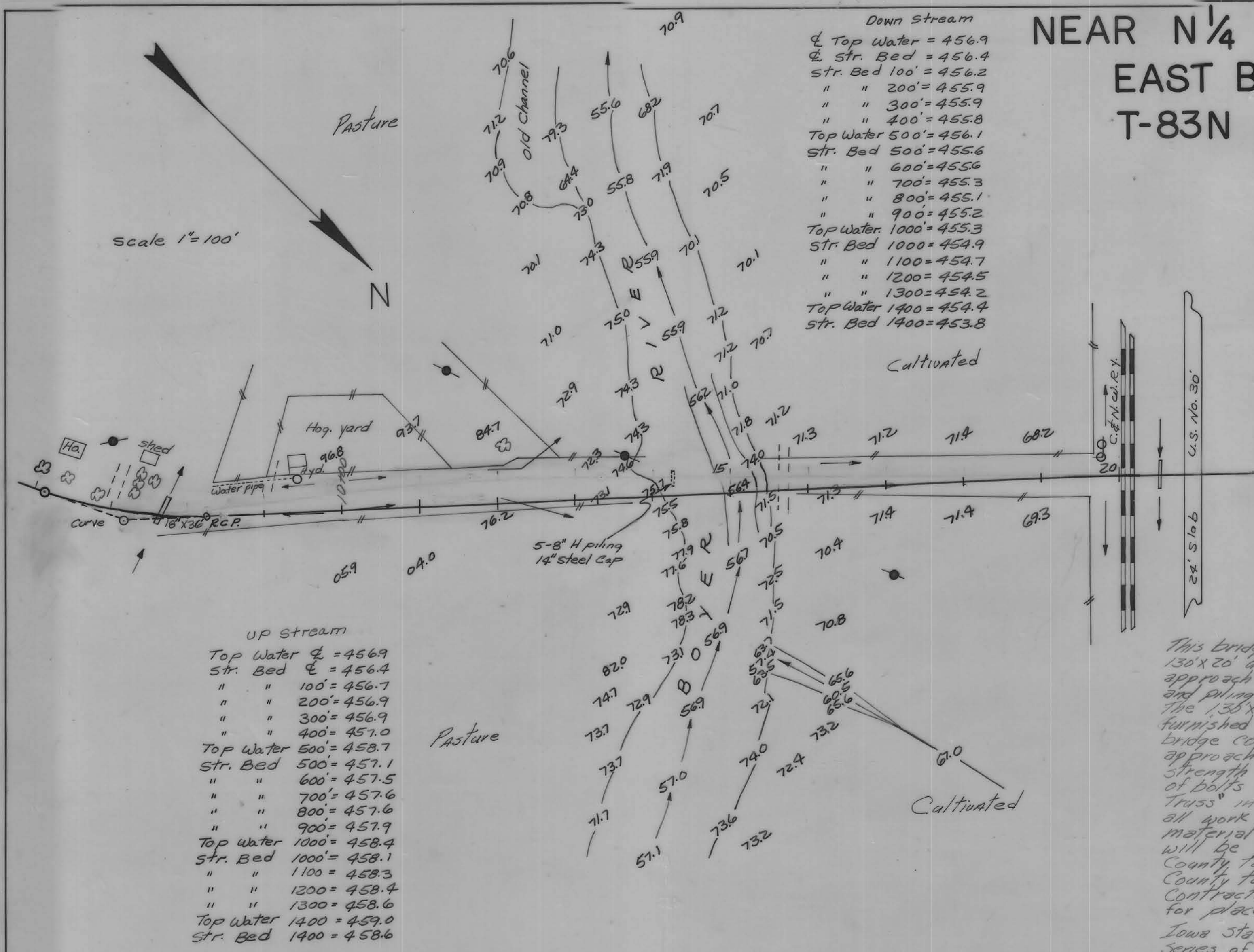
STA. 15+00 @ 130' X 20' HIGH TRUSS BRIDGE  
 WITH ONE 42' X 20' I-BEAM APPROACH SPAN

APPROVED	DATE	APPROVED	DATE
		DIRECTOR OF ENGINEERING IOWA HIGHWAY COMMISSION	
CHAIRMAN			
		COUNTY ENGINEER	
		APPROVED	DATE
BOARD OF SUPERVISORS			

1961 TRAFFIC 22 V.P.D.



NEAR N 1/4 CORNER SECTION 8  
EAST BOYER TOWNSHIP  
T-83N R-38W



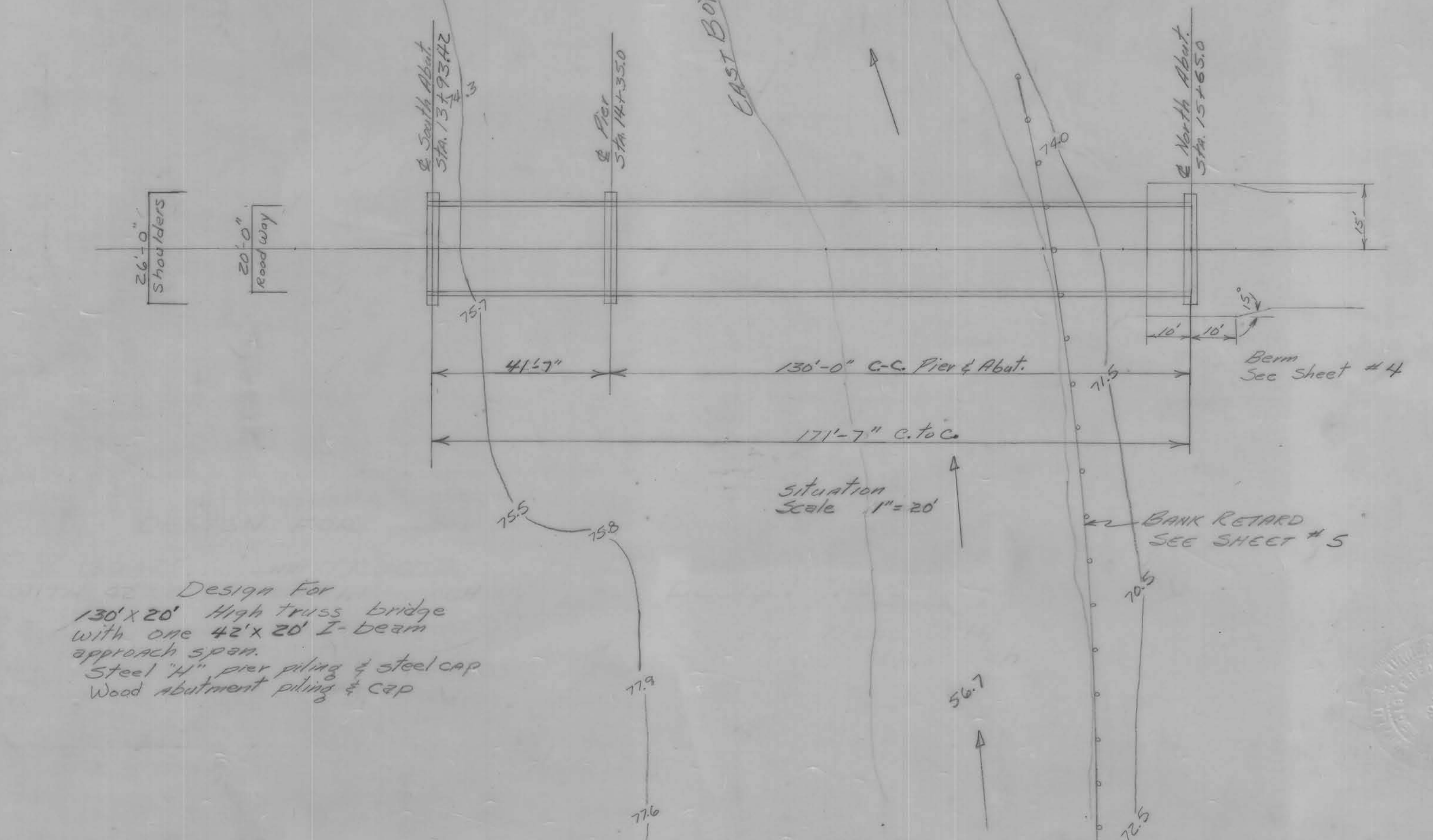
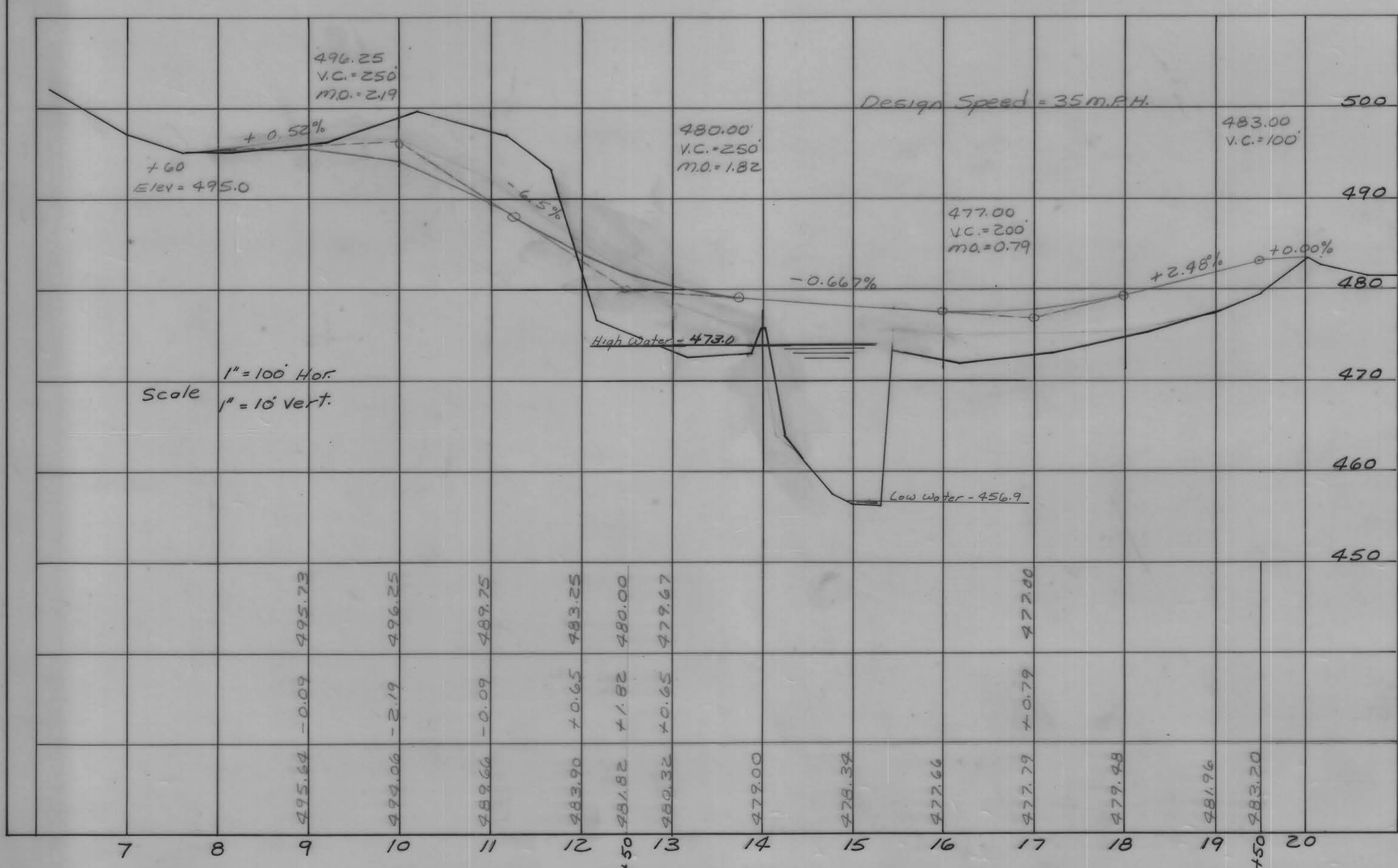
GENERAL NOTES

This bridge designed for H-15 loading. Proposed 130' x 20' used high truss bridge with one 42" I-beam approach span, laminated wood floor, wood abutments and piling steel pier & H piling. The 130' x 20' truss bridge and approach span will be furnished by Crawford County and is available to the bridge contractor at the erection site. The truss & approach to be erected and laid out with high strength bolts. Bridge contractor to include furnishing of bolts in price bid for erection. The item "erecting truss" in total estimate of quantities to include all work connected with the erection. The cost of material for replacement of any missing truss member will be paid for by the County. County to paint structure. County to furnish wood laminated floor material. Bridge contractor to furnish clips & to include cost in bid for placement of wood laminated floor. Iowa State Highway Commission Standard Specifications Series of 1964 and current special provisions shall apply.

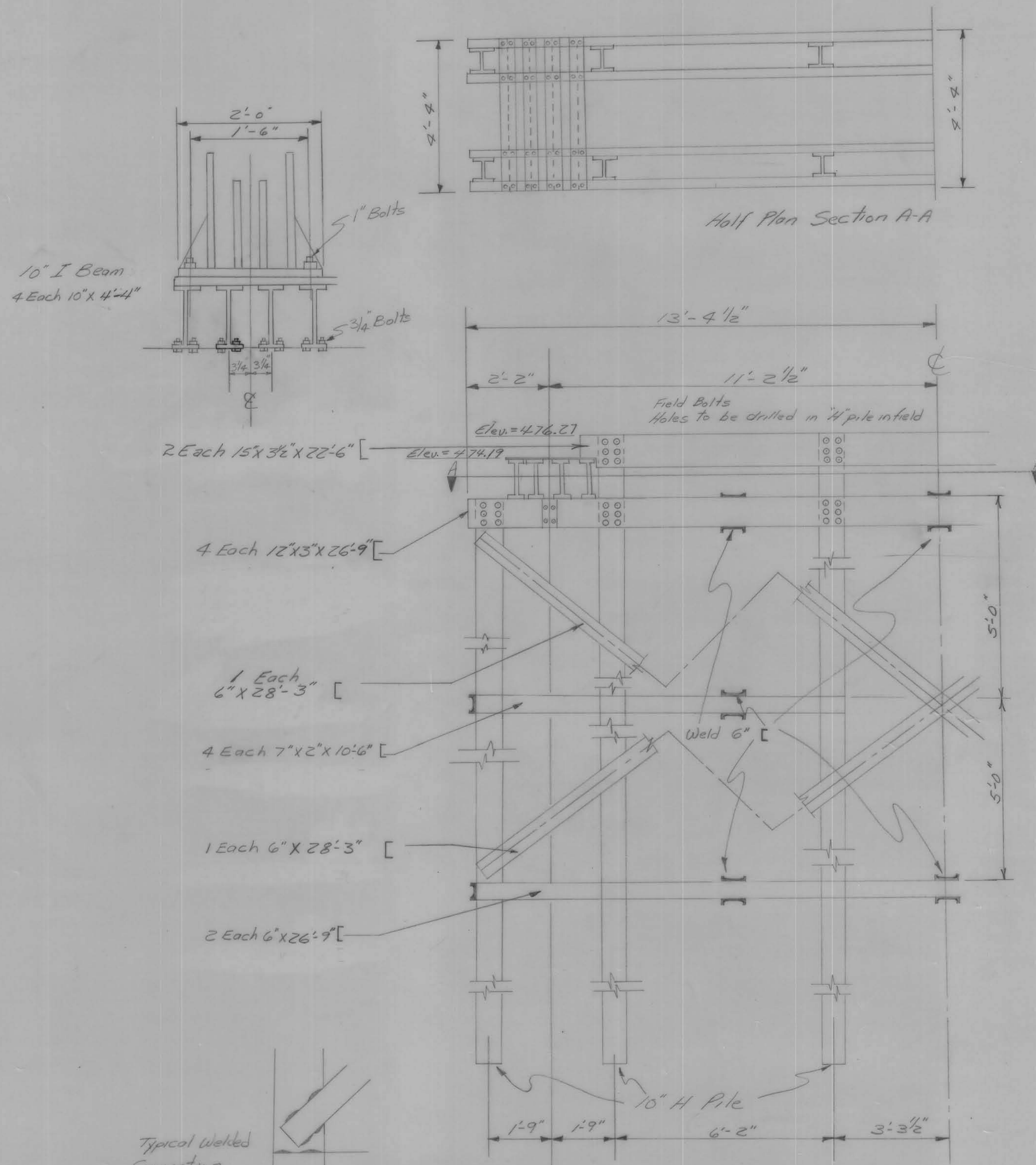
Note: No existing structure

**HYDRAULIC DATA**

D.A. = 110 Sq Miles, R. to H.  
Des H.W. = 176  
n = 0.04 S = 0.0017  
Area below H.W. = 1808 s.f.  
WP = 182 R = 9.93  
QD = 13,184  
Q = 6.5(1808) = 11,720  
C = 1808 / 2200 = 0.81



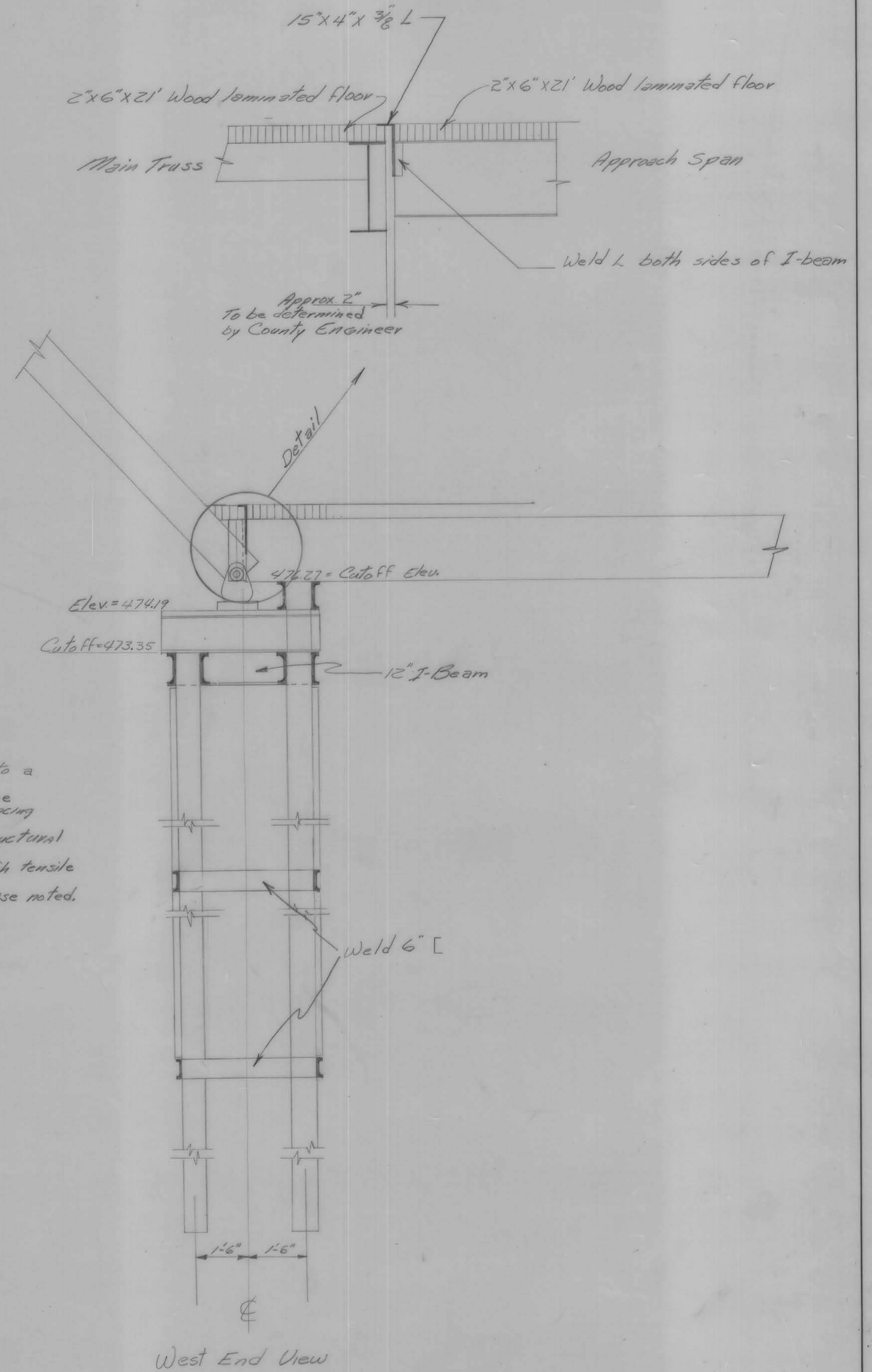




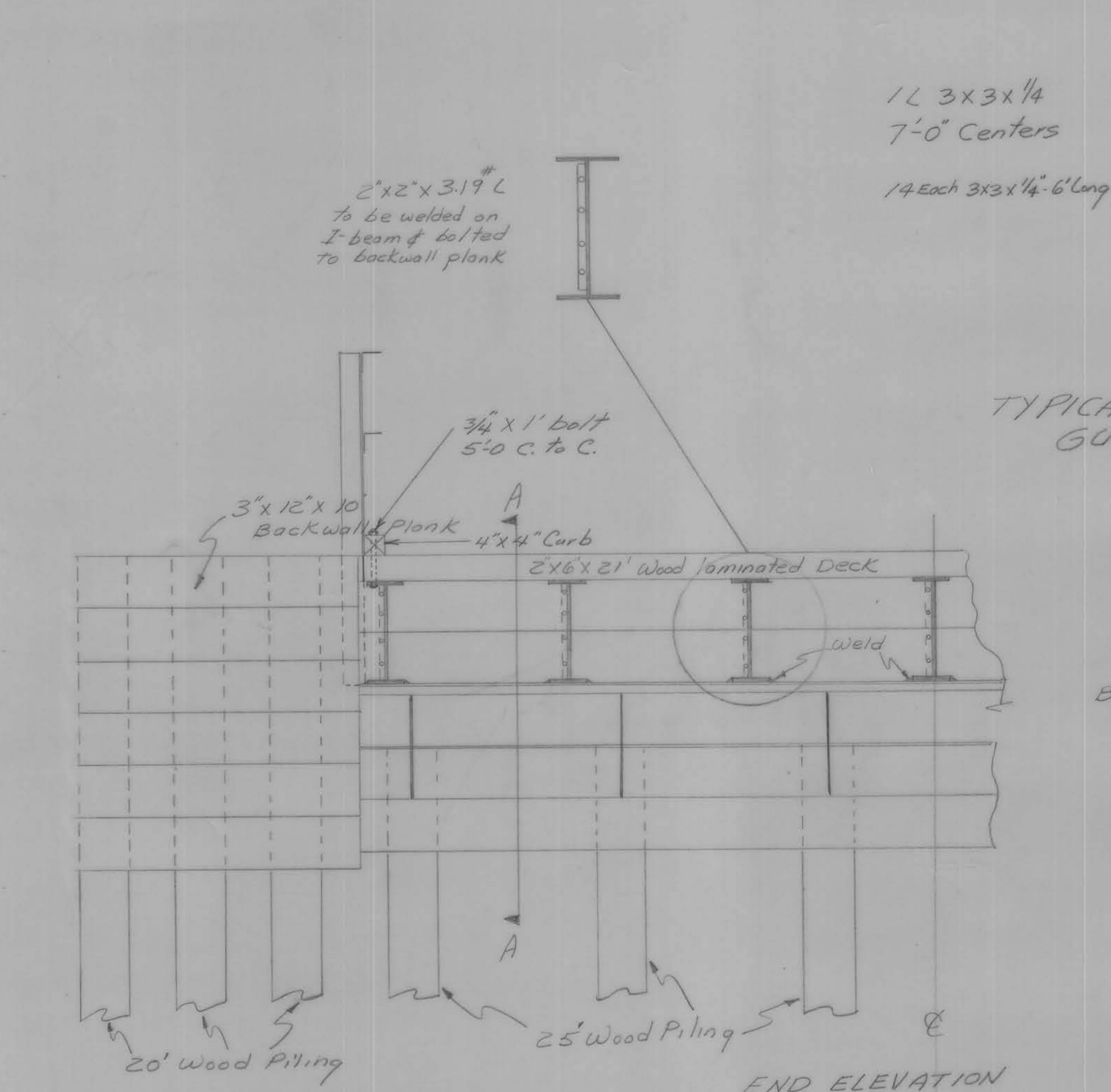
PIER DETAIL

Typical Welded Connection  
All welds to be 1/2" x 3"  
unless otherwise noted

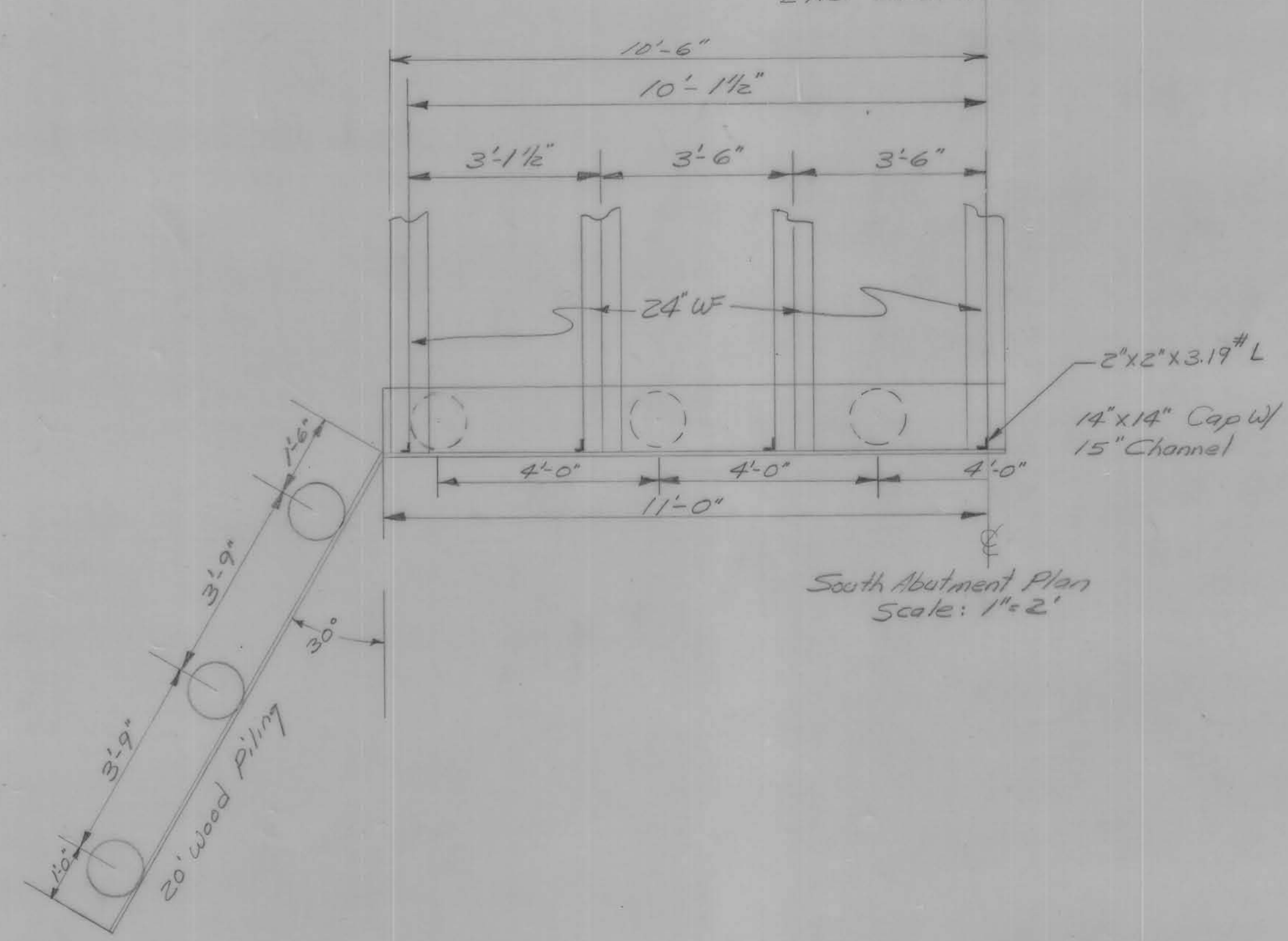
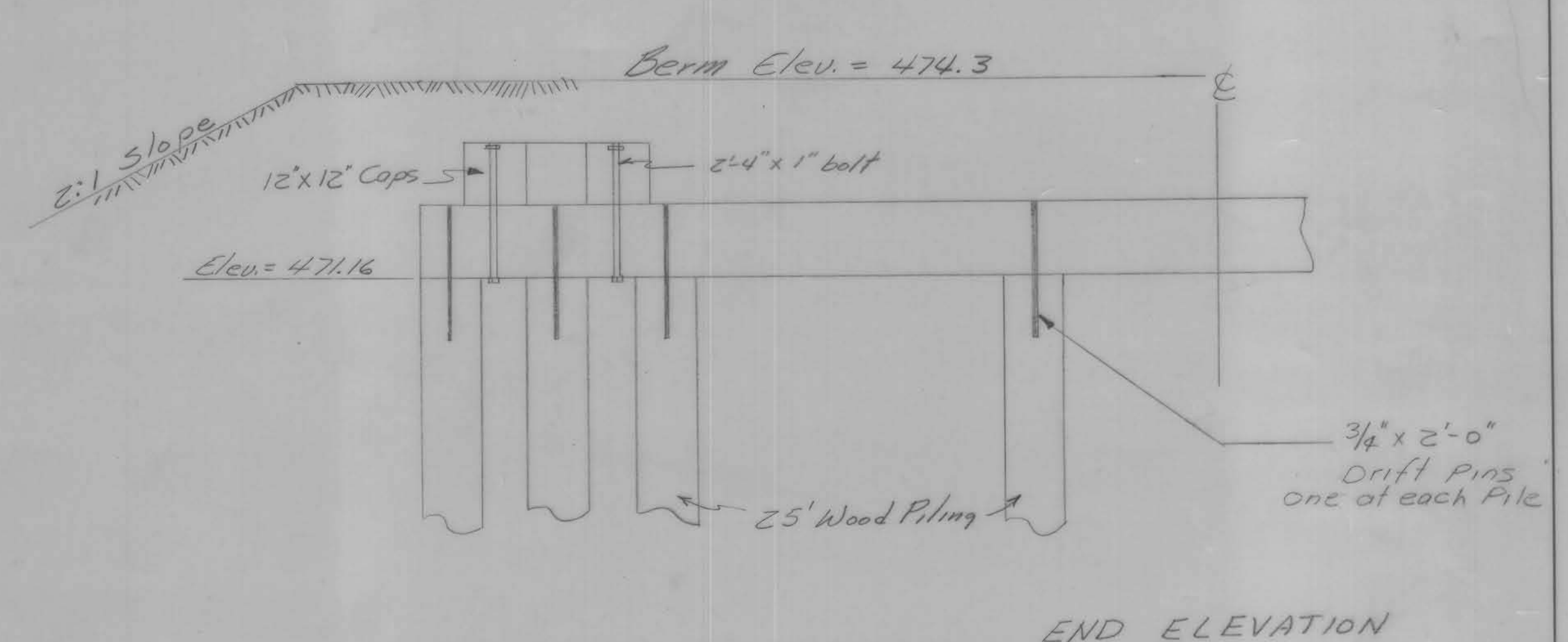
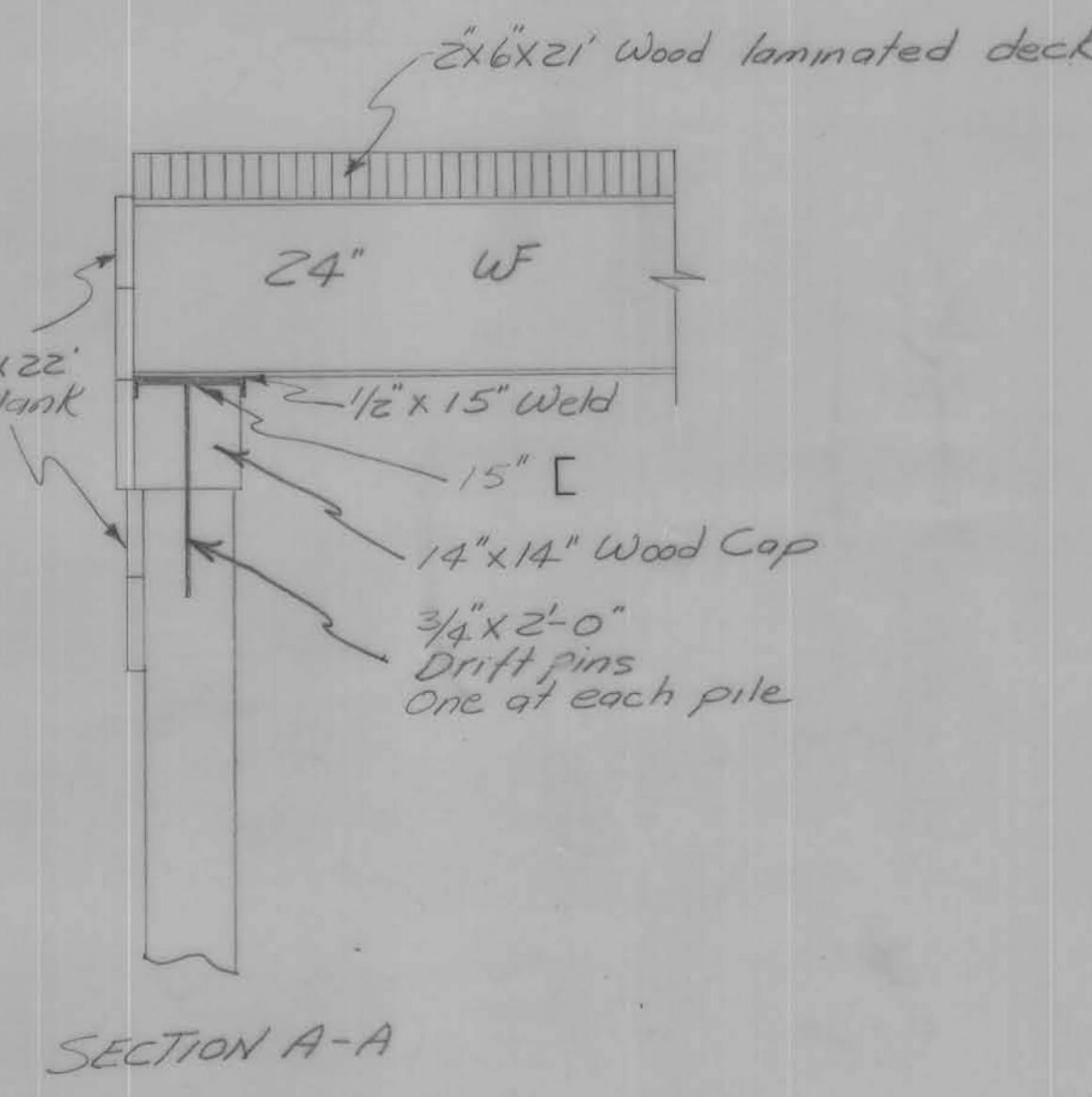
**General Notes:**  
 Steel H-piling shall be driven to a minimum 28 ton bearing.  
 Provisions shall be made by bridge contractor for securing accurate spacing and placement of piling.  
 Pier steel to be included in structural steel erection.  
 Bridge contractor to furnish high tensile bolts.  
 All bolts 3/4" diameter unless otherwise noted.



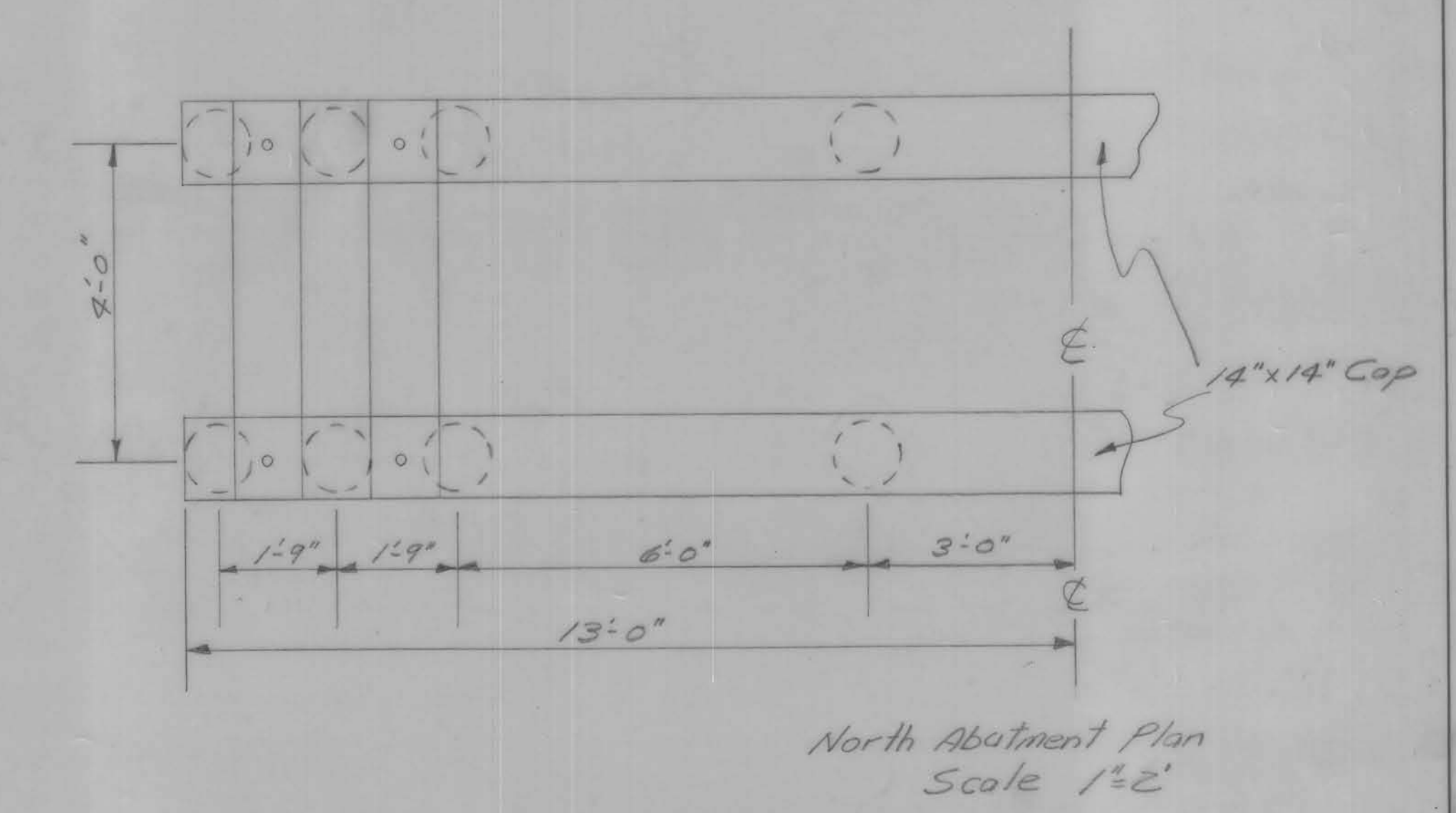




TYPICAL APPROACH SPAN  
GUARDRAIL DETAIL

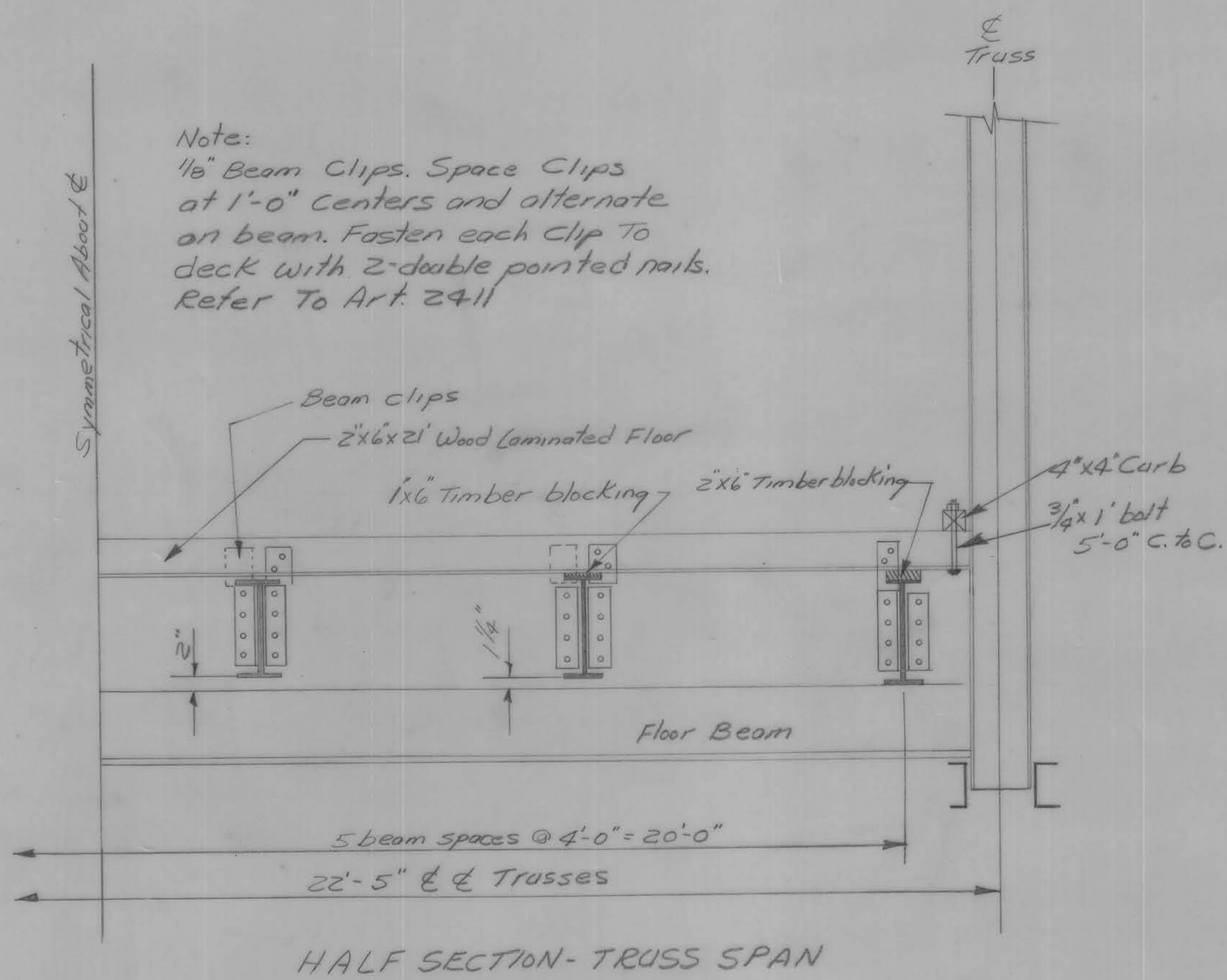


General Notes:  
Wood piling shall be driven to full penetration or a maximum of 20 fms bearing.  
Drift pins to be furnished by bridge contractor.

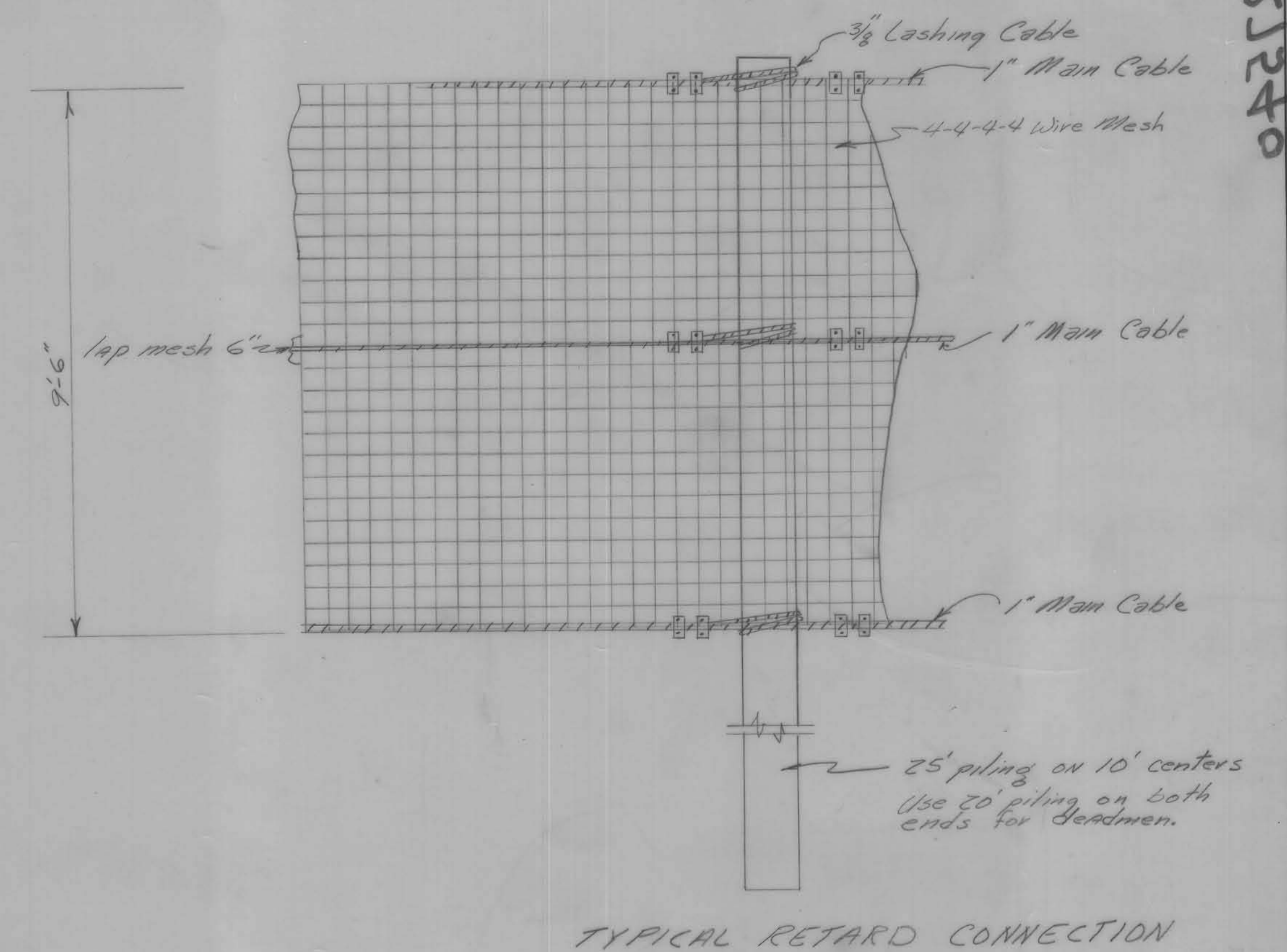




General Notes:  
 Bridge contractor to furnish beam clips & nails.



General Notes:  
 Bill of material per piling - furnished by County  
 1" Cable Clamps - 12 ea.  
 2" Staples - 12 ea.  
 1/4x6" Boat Spikes - 15 ea.  
 3/8 Lashing Strand - 31 ft.  
 Piles are to be driven to full penetration if practicable



155240  
 01-19  
 EARL BOWEN - T.O.C.A.T.

