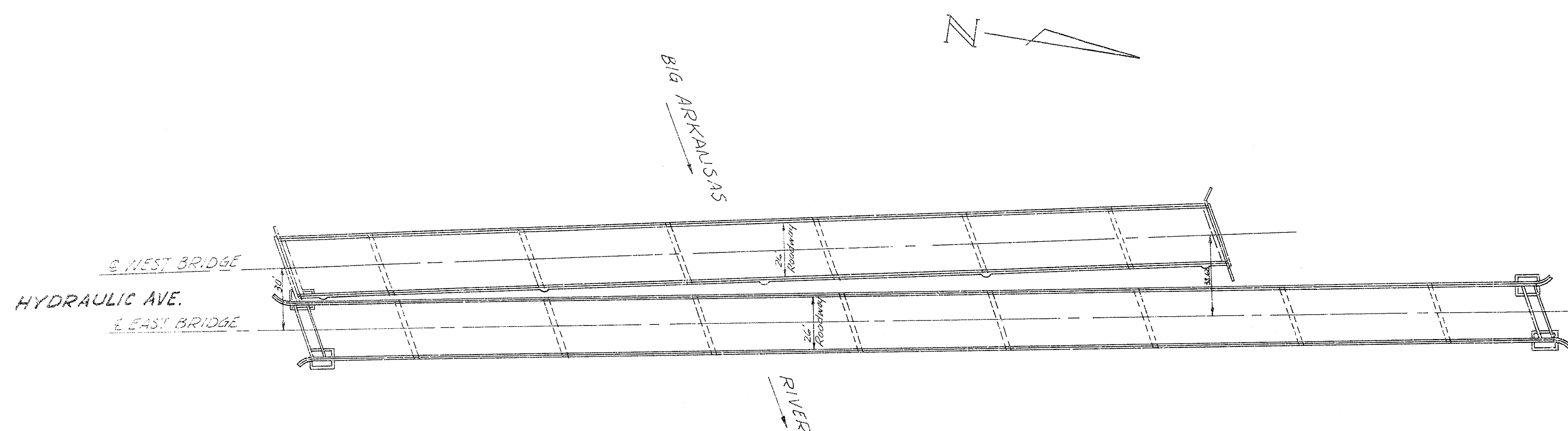
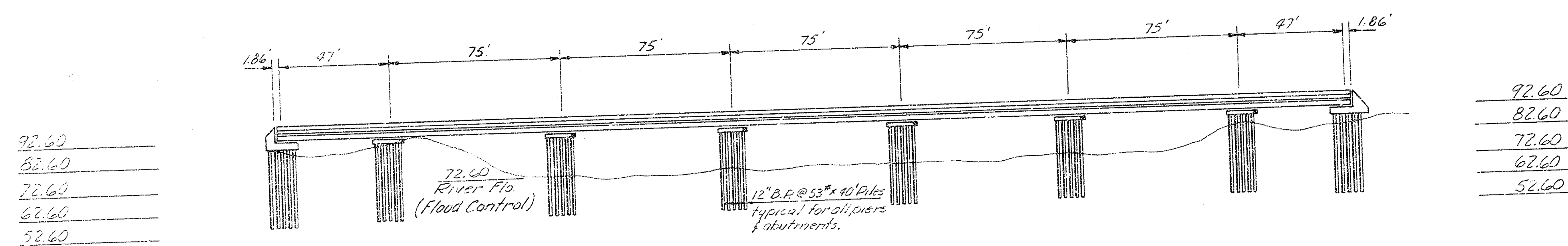


B.M. 84.273 City Bench Mark Disc., 31 ft. West and 31 ft. South of Section Corner, Hydraulic & Mac Arthur Road.
B.M. 96.529 City Bench Mark Disc., North End Wing on Northeast Corner of East Bridge over Arkansas River.
at "Hydraulic & Mac Arthur Road" Arkansas River Bridge.

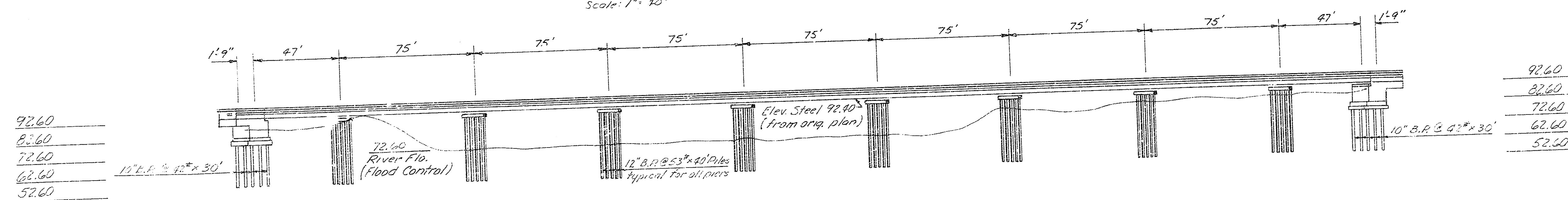


PLAN
(Existing Bridges)
Scale: 1" = 40'



ELEVATION-WEST BRIDGE

47'-50.75'-47' Continuous Spans
Steel Pile Bent Piers
Skew 20° Left
26' Roadway
Scale: 1" = 40'



ELEVATION-EAST BRIDGE

47'-70.75'-47' Continuous Spans
U-Type Abutments, Steel Pile Bent Piers
Skew 20° Left
26' Roadway
Scale: 1" = 40'

GENERAL NOTES

PILING REPAIRS: THE NUMBER OF PILING REPAIRS AND EXTENT OF REPAIRS REQUIRED, AS WELL AS CONCRETE ENCASEMENT REQUIRED, SHALL BE DETERMINED IN THE FIELD BY INSPECTION OF EACH PILING. THE LENGTH OF PILE TO BE REPLACED MAY VARY DEPENDING ON THE DEGREE OF DETERIORATION, AND THE LENGTH OF PILE TO BE REPLACED ON STREAM BEDS AS SHOWN ON THE PLAN SHALL BE CONSIDERED A MINIMUM. THE LENGTH OF REPLACEMENT WILL BE DETERMINED IN ORDER TO GUARANTEE A FULL CROSS SECTION WILL BE AVAILABLE AT THE SPlice LOCATION.

DIMENSIONS: DIMENSIONS OF THE BRIDGES HAVE BEEN TAKEN FROM THE ORIGINAL BRIDGE PLANS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

UNIT WEIGHTS: $f_c = 20,000$ PSI, $f_y = 3,000$ PSI, $f_u = 1,200$ PSI. *ALL STEEL IS ACCORDANCE WITH SP-15.0 SPECIFICATIONS FOR STATE ROAD BRIDGE CONSTRUCTION, STATE HIGHWAY COMMISSION OF KANSAS.*

WELDING: ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER AND SHALL BE IN ACCORDANCE WITH THE LATEST A.W.S. SPECIFICATIONS, USING LOW HYDROGEN ELECTRODES E60 SERIES FOR MANUAL ELECTRODES OR GRADE SAW-1 WIRE FLUX COMBINATION FOR SUBMERGED ARC WELDING.

SEQUENCE OF PILING REPAIR: STEEL PILES SHALL NOT BE REMOVED UNTIL FALSE WORK SUPPORTS OR OTHER ADEQUATE PIER SUPPORTS ARE IN PLACE. ONLY ONE PILE SHALL BE REMOVED AT A TIME. WHEN THE MIN LENGTH OF PILE IS COMPLETELY WELDED IN PLACE, THE CONTRACTOR MAY PROCEED WITH THE NEXT PILE.

REMOVAL OF EXISTING STRUCTURE: THE PIECES OF PILING REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE BRIDGE SITE.

PAINTING: ALL STRUCTURAL STEEL AND BEARING DEVICES SHALL BE CLEANED AND PAINTED. ALL AREAS WHERE RUSTING HAS OCCURRED, AND WHICH ARE ACCESSIBLE, SHALL BE SANDBLASTED TO BARE METAL, EXCEPT WHERE RUSTING IS CONTAINED TO SMALL AREAS, WHICH, IF SANDBLASTED, WOULD RESULT IN THE CLEANING OF RELATIVELY LARGE AREAS WHERE THE PAINT IS STILL IN GOOD CONDITION, THEN OTHER APPROVED MEANS MAY BE EMPLOYED BY THE CONTRACTOR TO REMOVE THE RUST.

ALL AREAS OF SURFACE COAT DETERIORATION WILL BE CLEANED USING APPROVED HAND CLEANING METHODS. PRIOR TO PAINTING, ALL SURFACES MUST BE FREE OF DUST, GREASE, OLD PAINT SCALE, AND ANY OTHER MATERIALS WHICH WOULD PREVENT A GOOD BOND.

ALL NEW STEEL AND ALL AREAS WHICH HAVE BEEN CLEANED TO BARE METAL SHALL RECEIVE THREE (3) COATS OF PAINT. THE FIRST COAT TO BE PURE RED LEAD AND LINSEED OIL PRIMER AS PER AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS SPECIFICATION M72-57, TYPE II. THE PRIMER SHALL BE APPLIED TO THE BARE METAL AS SOON AFTER REMOVAL OF RUST AS IS PRACTICABLE.

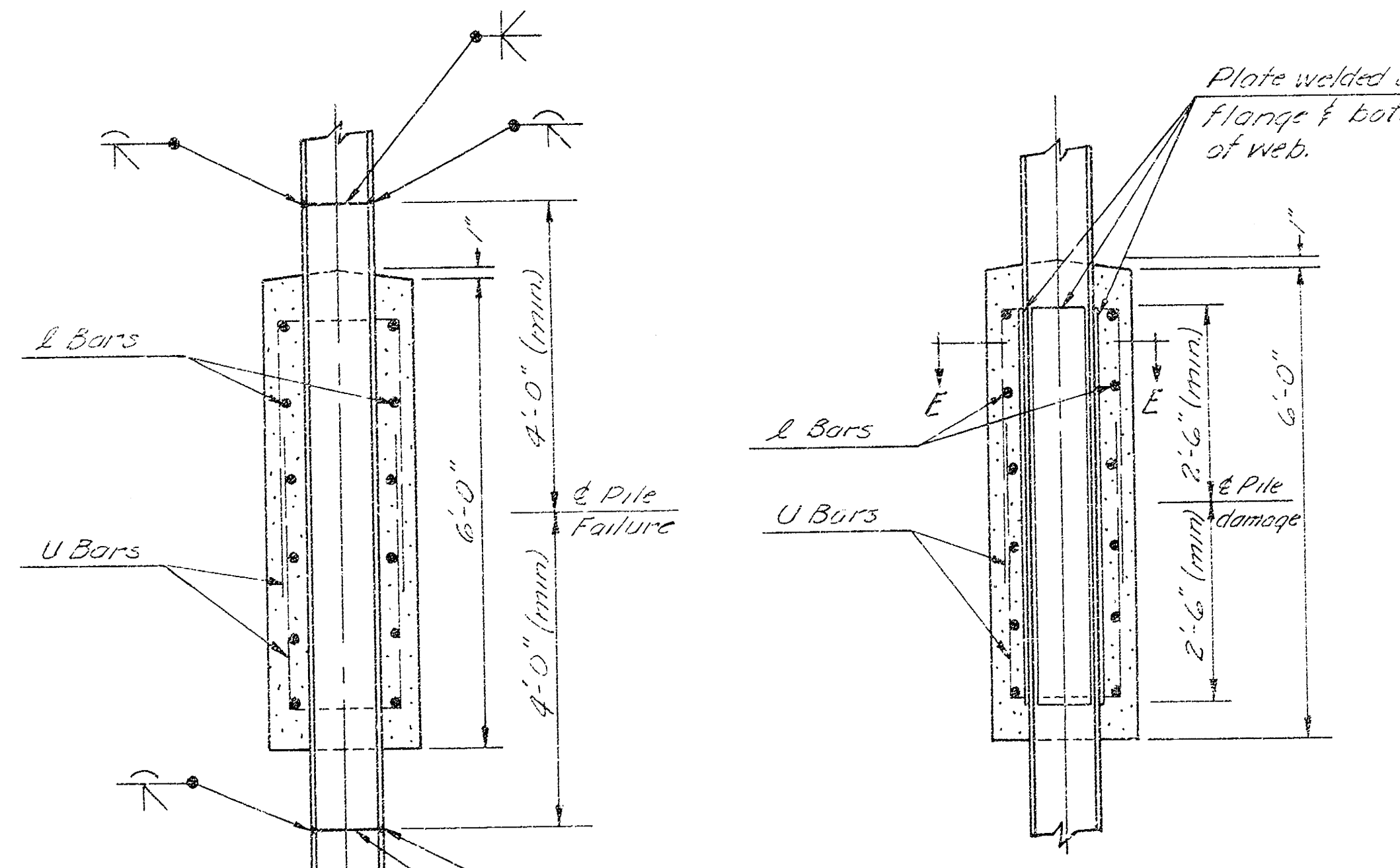
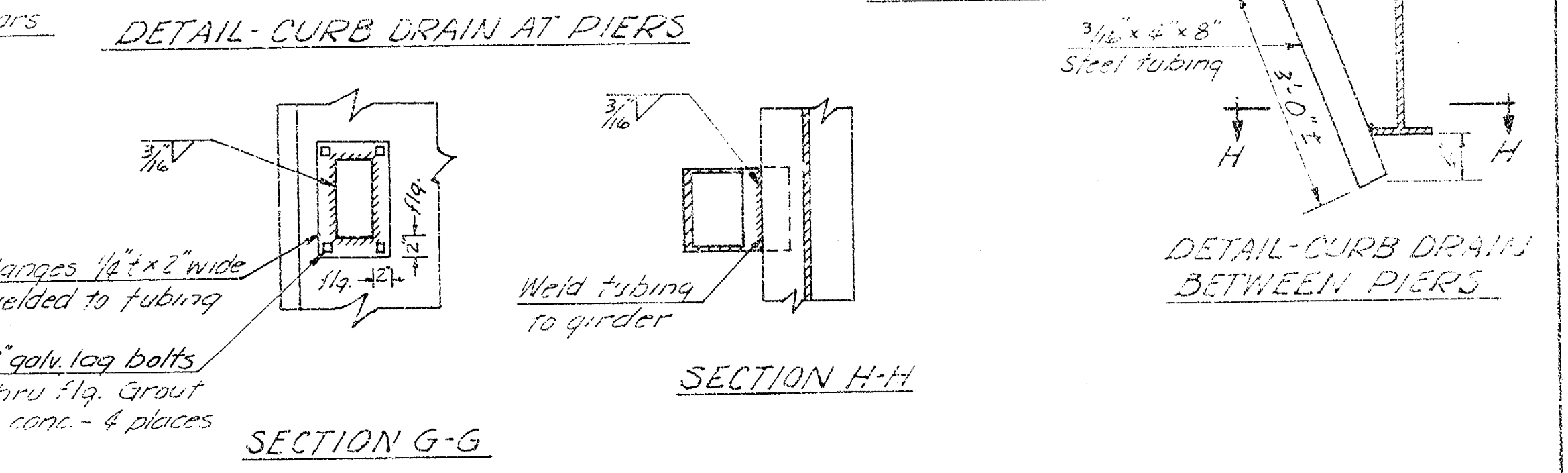
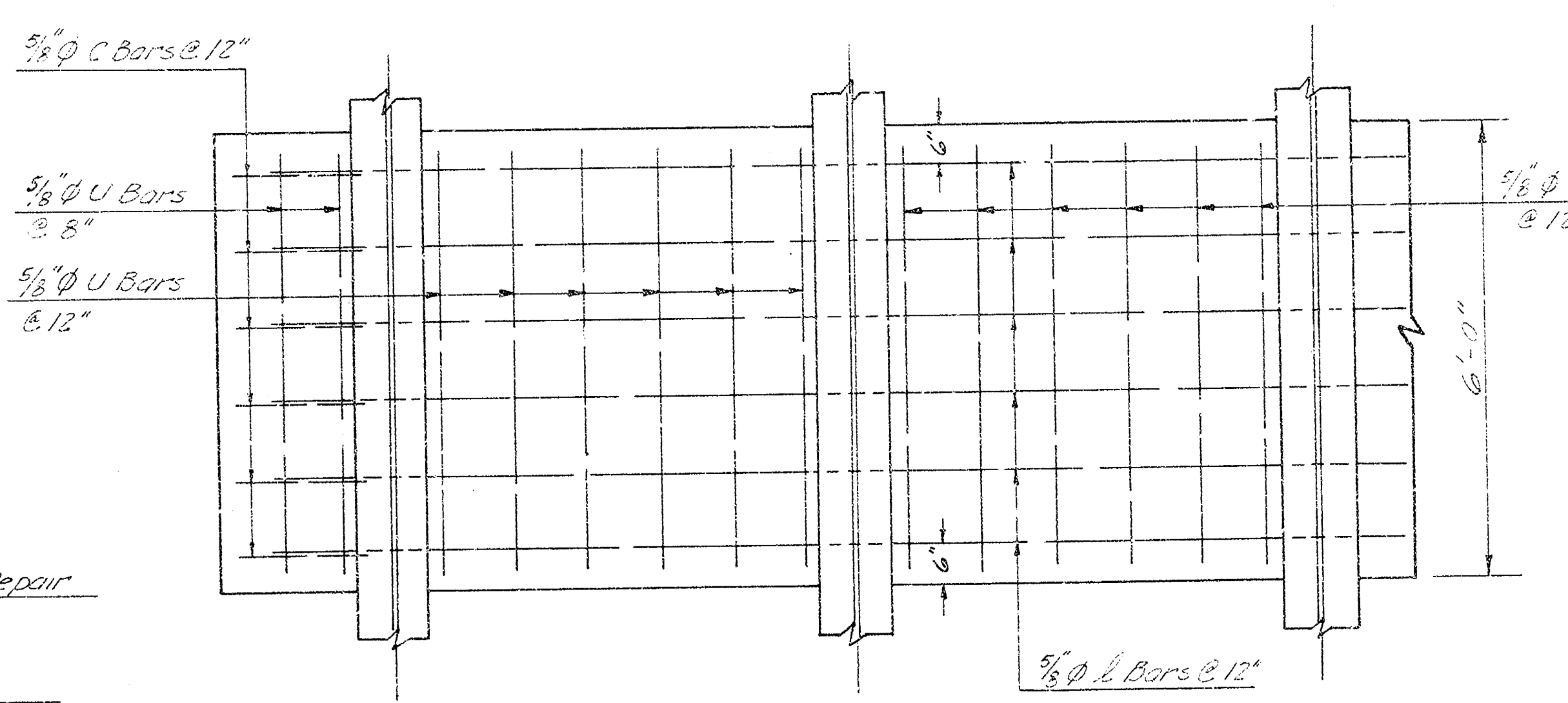
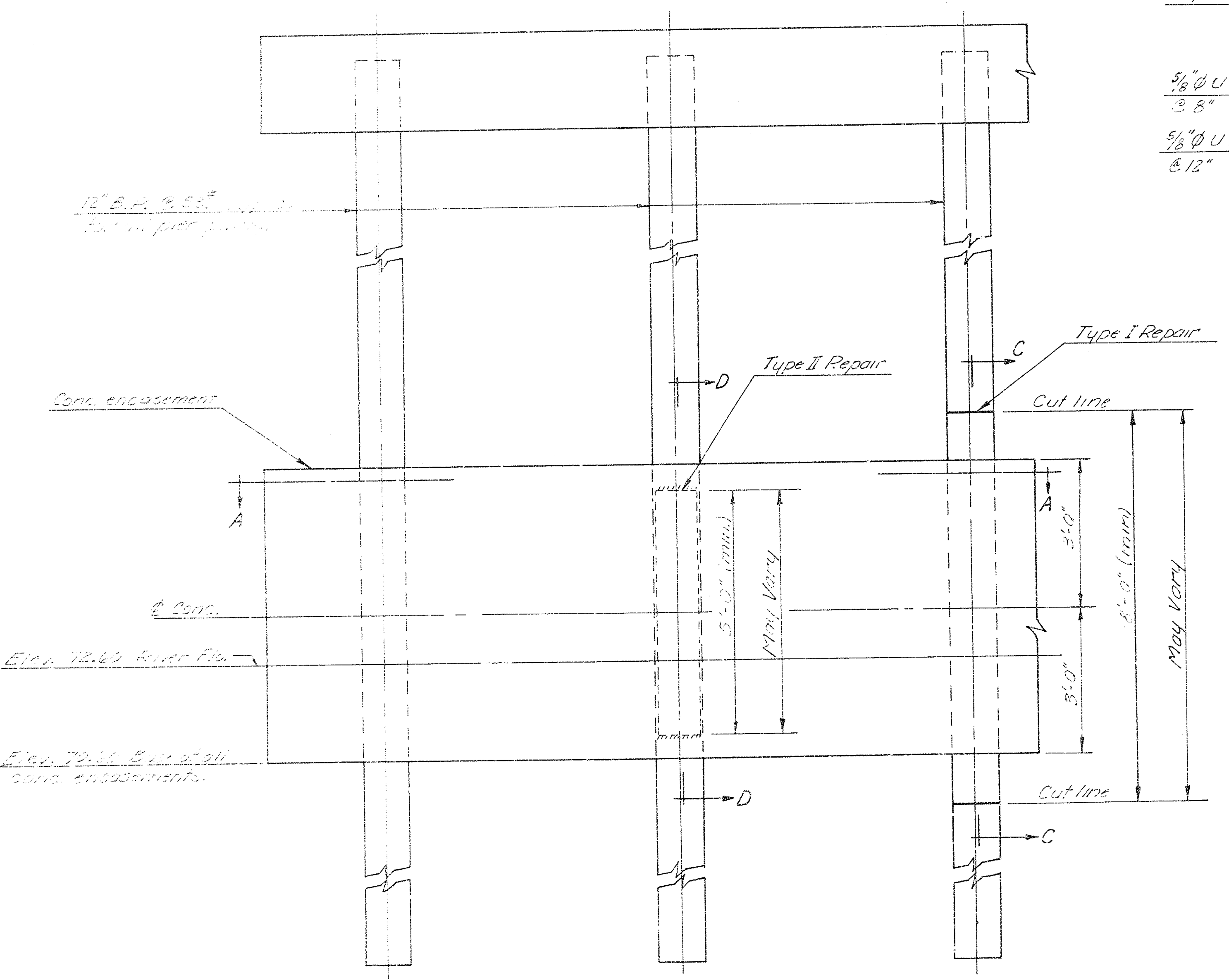
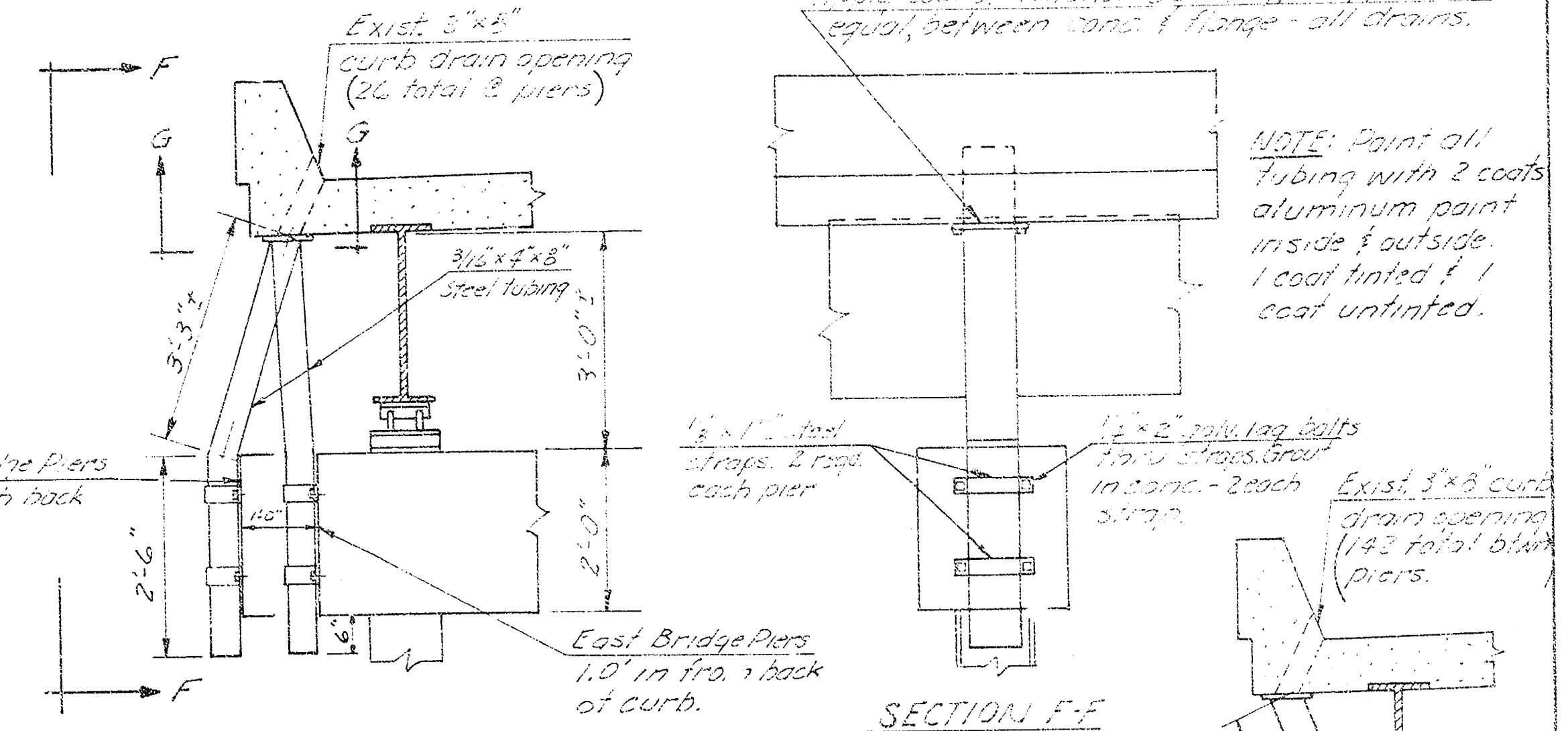
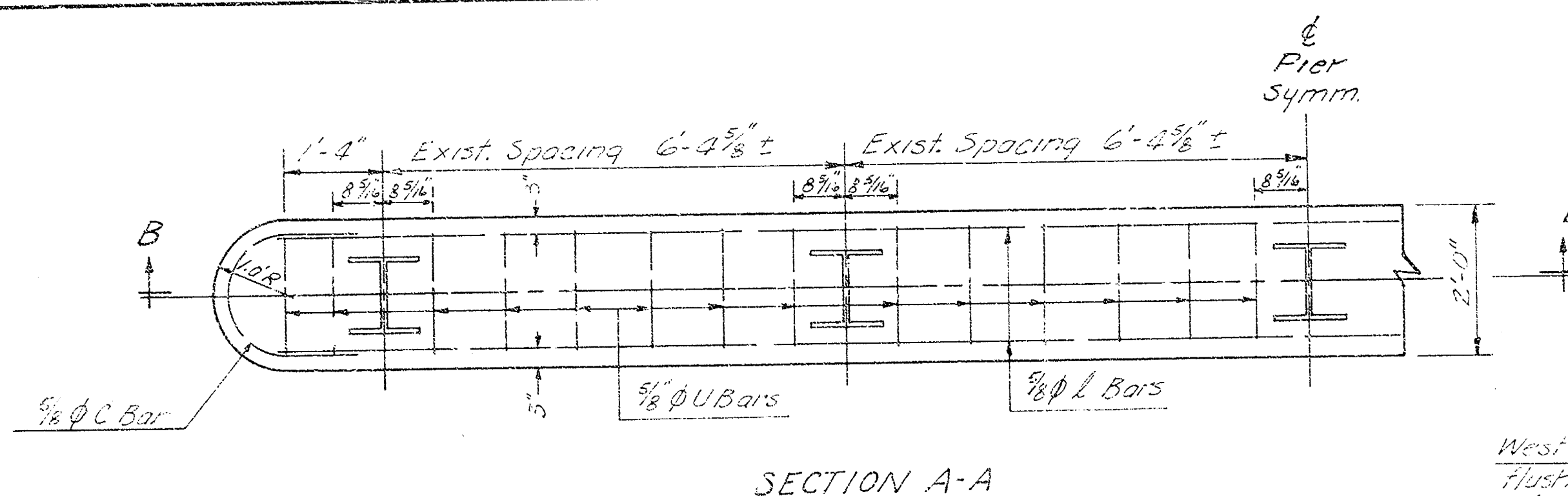
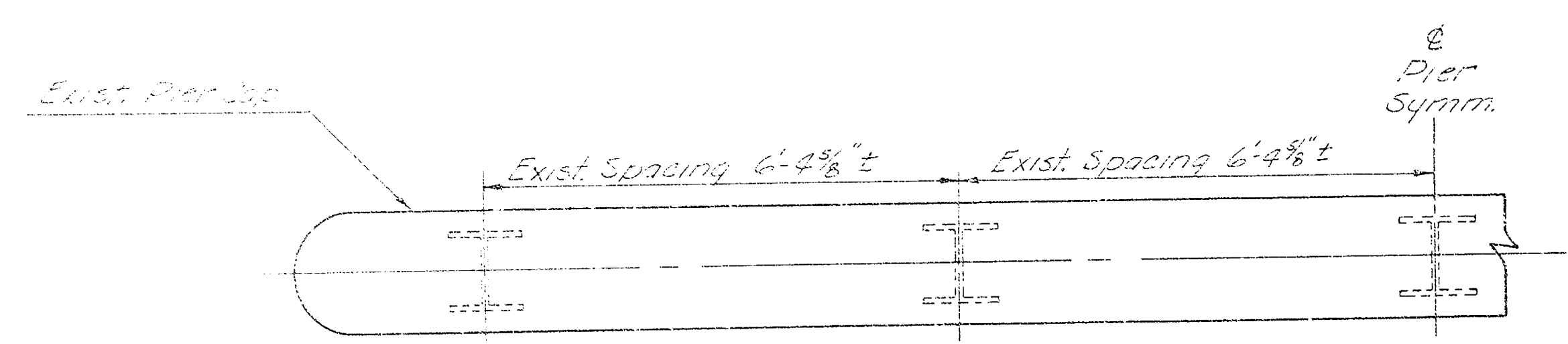
THE SECOND COAT SHALL BE ALUMINUM PAINT (TINTED), AND THE THIRD COAT SHALL BE ALUMINUM PAINT (UNTINTED), BOTH PER STATE HIGHWAY COMMISSION OF KANSAS, STANDARD MATERIALS SPECIFICATION, 1955 EDITION, SECTION 114, OR LATEST EDITION.

ALL OTHER AREAS SHALL RECEIVE ONE COAT OF ALUMINUM PAINT (UNTINTED) AS PER STATE HIGHWAY COMMISSION STANDARD MATERIALS SPECIFICATIONS, 1955 EDITION, SECTION 114, OR LATEST EDITION.

BID ITEMS: (1) REINFORCED CONCRETE ENCASEMENT SHALL INCLUDE EXCAVATION AND ALL MATERIALS AND LABOR TO CONSTRUCT ONE (1) REINFORCED CONCRETE ENCASEMENT AROUND FIVE (5) BEARING PILES, (1 PIER), AND ALL OTHER INCIDENTAL WORK AND MATERIAL NECESSARY TO COMPLETE THE WORK. (2) **PIER, TYPE I REPAIR:** SHALL INCLUDE ALL MATERIALS AND LABOR TO REMOVE AND REPLACE THE DAMAGED SECTION OF ONE (1) 12" B.P. 53", AND ALL OTHER INCIDENTAL WORK AND MATERIAL NECESSARY TO COMPLETE THE WORK. (3) **TYPE II REPAIR, PIER:** SHALL INCLUDE ALL MATERIALS AND LABOR TO REINFORCE THE FLANGES AND WEB OF ONE (1) 12" B.P. 53" WITH STEEL PLATES, AND ALL OTHER INCIDENTAL WORK AND MATERIAL NECESSARY TO COMPLETE THE WORK. (4) **BRIDGE PAINTING:** SHALL INCLUDE ALL MATERIAL AND LABOR TO PREPARE THE SURFACE AND PAINT THE STEEL STRUCTURE OF THE TWO (2) BRIDGES, AND ALL OTHER INCIDENTAL WORK AND MATERIAL NECESSARY TO COMPLETE THE WORK. (5) **CURB DRAIN EXTENSIONS:** SHALL INCLUDE ALL MATERIAL AND LABOR TO FABRICATE AND INSTALL THE EXTENSIONS ON ALL CURB DRAINS FOR TWO (2) BRIDGES, AND ALL OTHER INCIDENTAL WORK AND MATERIAL NECESSARY TO COMPLETE THE WORK.

THE EAST BRIDGE IS TO BE REPAIRED FIRST.

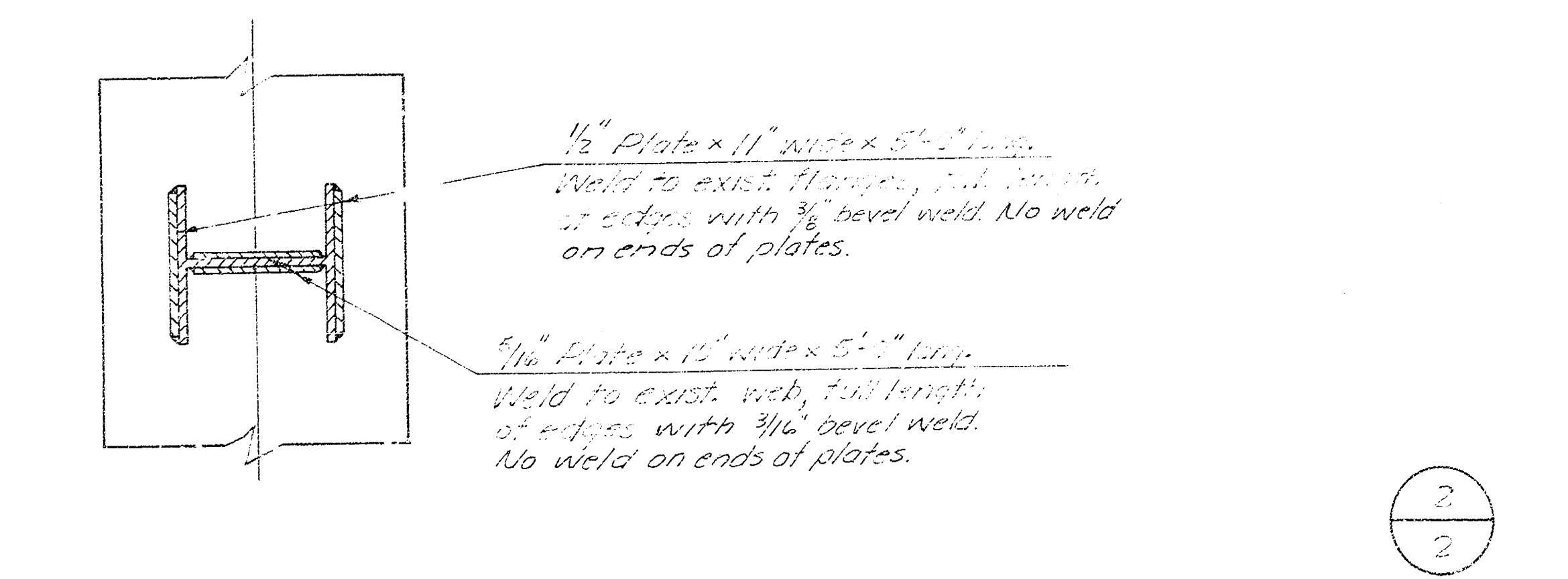
BRIDGE REPAIR
HYDRAULIC AVE. SOUTH &
BIG ARKANSAS RIVER
CITY OF WICHITA, KANSAS
R.W. LINN CITY ENGINEER
DATE PROJ. NO. DAKB 576034



BAR BENDING DIAGRAM

BAR SCHEDULE (1 PIER)					
BAR	SIZE	LENGTH	N.O.	SHAPE	WEIGHT
A	5/8"	26'-9"	12	—	152.34
U	5/8"	2'-6"	56	U	476.97
C	5/8"	4'-8"	12	C	28.10

Concrete (1 Pier) = 13.23 Cu. Yd.



*NOTE:
TYPE I REPAIR: THIS REPAIR SHALL BE USED WHEN THE EXISTING STEEL BEARING PILE IS FOUND TO BE SEVERELY CORRODED TO THE POINT WHERE THERE ARE HOLES IN THE WEBS AND/OR FLANGES AND THE PILE IS NO LONGER CAPABLE OF CARRYING THE LOAD. THE REPAIR SHALL INCLUDE REMOVING THE DAMAGED AREA OF PILE AND REPLACING IT WITH A NEW SECTION OF 12" B.P. 53# AS SHOWN ON THE PLAN. THIS TYPE OF REPAIR SHALL BE USED ON THE EAST BRIDGE ONLY.

TYPE II REPAIR: THIS REPAIR SHALL BE USED WHEN EXISTING PILING NEEDS STRENGTHENING BUT ARE NOT DAMAGED TO THE EXTENT OF REQUIRING A TYPE I REPAIR. THIS TYPE OF REPAIR SHALL BE USED ON BOTH EAST AND WEST BRIDGES WHERE REQUIRED.

BRIDGE REPAIR
HYDRAULIC AVE. SOUTH
BIG ARKANSAS RIVER
PROJ. NO. DAKB 576034