



St. Johns River Water Management District

Michael A. Register, P.E., Executive Director

525 Community College Parkway S.E. • Palm Bay, FL 32909 • 321-984-4940 • www.sjrwmd.com

DATE: April 8, 2020

TO: Prospective Respondents

FROM: Amy Lucey, Procurement Specialist

SUBJECT: Addendum #4 to Quote Request, # 37728, Install new 60-inch Aluminum Flap Gate on S-259 Discharge Pipe

As a result of inquiries, the following clarifications/changes are provided for your information. Please make all appropriate changes to your bid documents. Note: changes are reflected with original language shown with strike-through and new language is underlined.

- Q1: In the OBJECTIVE section of the bid documents it says to install a flap gate on the Southern pipe. Isn't it the Northern gate that gets the new flap gate?
- A1: Yes, it is the north gate that gets the new gate, there was minor miscommunication between staff when referencing which gate required the new flap gate. Fortunately the Installation remains the same.
- Q2: Is the existing South flap gate constructed and installed the same way as the construction drawings? Can you please provide the contact information for the manufacturer of that gate?
- A2: The District does not have this information. The USACE was responsible for constructing this structure in the early 1990s. Attached are pertinent drawings/details from the original construction. The gate was manufactured for a 72-inch CMP and then retrofitted when sliplined in 2016.
- Q3: Is flow through the culverts and flap gates created by pumps? If so what is the maximum flow rate that the gate would see?
- A3: Yes, the three pumps at PS#4 operate at a maximum capacity of 150,000 gpm.
- Q4: The inspection report in addendum 3 describes the HDPE pipes as 54" diameter (ID or OD not specified) and the bid request is to install a 57.5" OD sleeve. Can you please tell me what dimension we need to use for fabrication of the sleeve?
- A4: For this application a 60-inch DuroMaxx reinforced polyethylene pipe with a smooth wall interior was used to slipline the 72-inch CMP. We believe the information from the diving service that performed the inspection, made a generalization on the pipe size. The 57.5 inches is based on the actual pipe used to slipline the pipe and provides for nominal pipe deformations. For bidding purposes this size sleeve shall be utilized. **PLEASE NOTE: EACH CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL WORK PRIOR TO FABRICATION.** Any major deviations from the proposed design will be addressed at that time.
- Q6: Does the SJRWMD have a crane that would support lowering the flap gate into the water? If so would you consider providing that support for the project?
- A6: The District does not have a crane for this work, all equipment shall be provided by the contractor.

- Q7: I did not see any mention, in addendum 3, regarding the concrete that needs to be removed to facilitate gate installation. Do you have any information on the quantity of concrete to be removed?
- A7: It is our understanding that 6-12 inches of concrete exists at the invert and extends 4-5 feet out from the end of the pipe for the full width of the pipe.
- Q8: The bid documents call for installation of a "structural member" to be attached to the walkway piles. I see in the report provided in addendum 3 that the piles are timber. Can you please tell us the diameter of the piles and the distance on center between piles? What material do you want the structural member made of?
- A8: The piles are 18-inch diameter piles, the structural member(s) shall be aluminum. See details of existing flap gate construction on attached drawings.
- Q9: Can you please tell us the length of 1/2" stainless chain that will be required to attach the bottom of the gate to the bottom of the walkway?
- A9: We are requesting that 32 LF of stainless steel chain be provided.
- Q10: Will the ¼" thick aluminum sleeve need to be coated on the outside where it is in contact with the grout? Many EORs do not like to have aluminum in direct contact with cementitious materials.
- A10: The District has no issues with the aluminum coming in contact with the cementitious materials used for grouting, there is no requirement for coating the outside of the aluminum sleeve.
- Q11: Please provide details identifying how the sleeve is to be mechanically fastened to the existing pipe (type, diameter, spacing, etc.).
- A11: It is the contractor's responsibility to design the fastening system for the sleeve. This design shall account for the restraining force from the closing of the gate. Without knowing the specific gate to be used, this anchoring system could differ from gate to gate. The proposed fastening system shall be shown on the shop drawings.

Correction:

EXHIBIT 1, STATEMENT OF WORK, Section **II. OBJECTIVE**, Page 6, has been changed as follows:

The objective of this work order is to install a new 58-inch diameter aluminum flap gate to the ~~southern~~ **northern** pipe (see attached construction drawing).

Attachment:

Original Drawings S-259 Flap Gate

EXHIBIT 1 – STATEMENT OF WORK, page 6 revised addendum 4

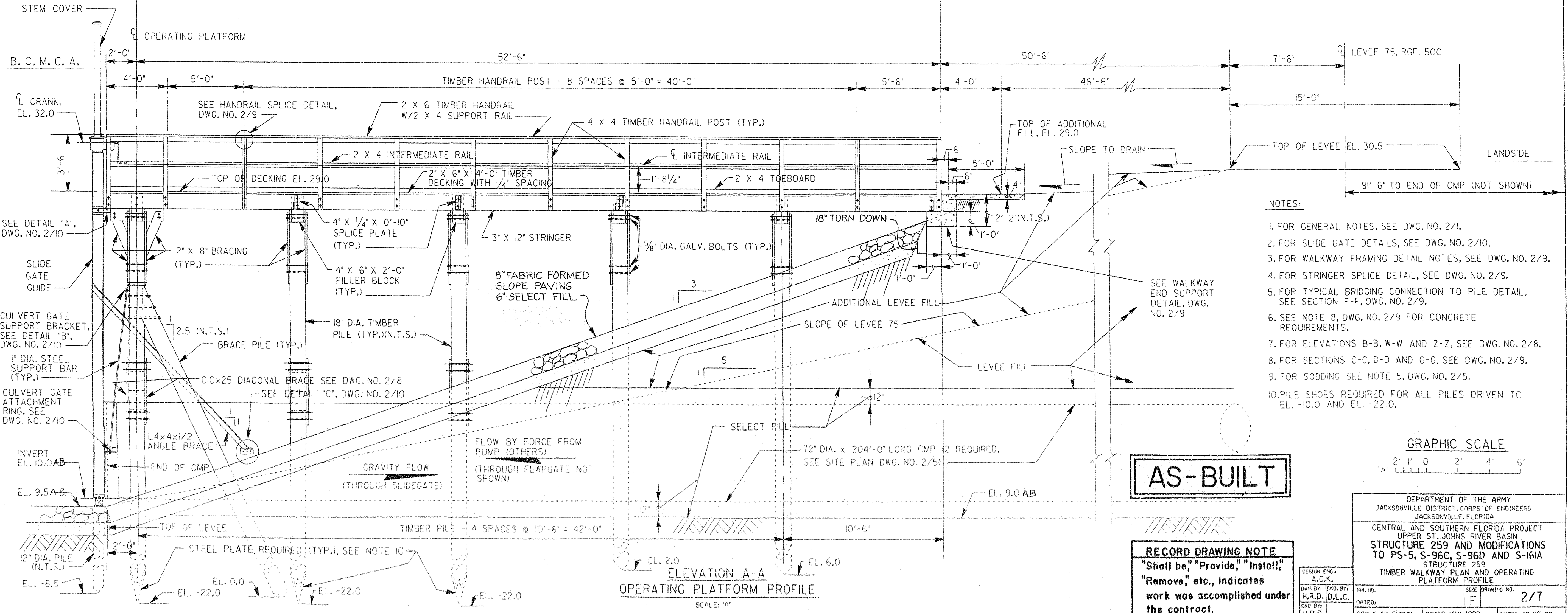
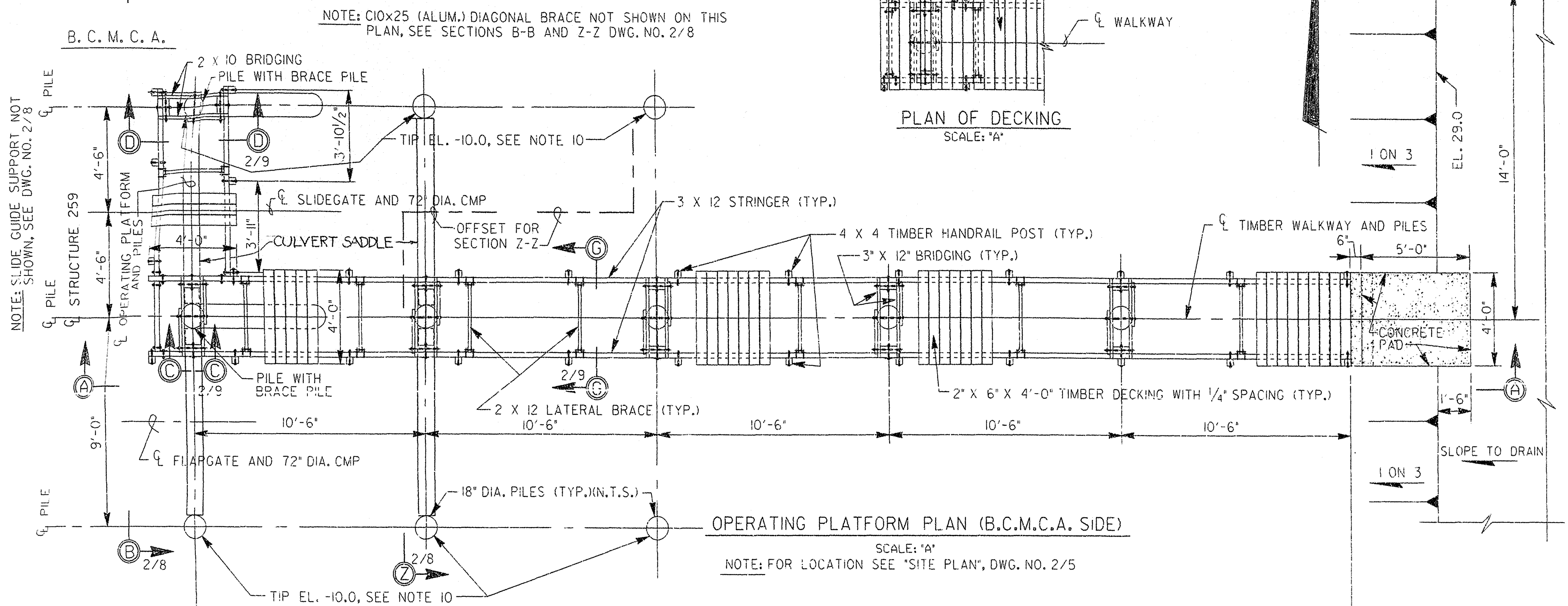
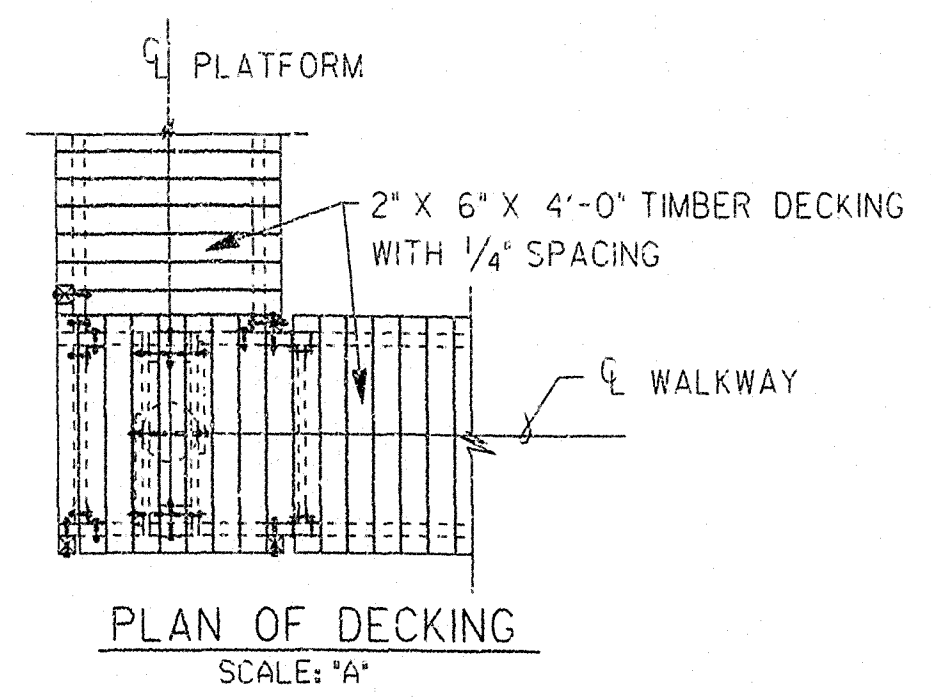
NOTE: The Quote Due Date **remains 2:00 p.m., Thursday, April 21, 2022**

Please acknowledge receipt of this Addendum on the Quote FORM provided in the proposal package.

If you have any questions, please e-mail me at alukey@sjrwm.com.

REVISIONS				
NO.	SYMBOL	DESCRIPTION	DATE	APPROVED

SAFETY ON THIS JOB
DEPENDS ON YOU



- NOTES:
1. FOR GENERAL NOTES, SEE DWG. NO. 2/1.
 2. FOR SLIDE GATE DETAILS, SEE DWG. NO. 2/10.
 3. FOR WALKWAY FRAMING DETAIL NOTES, SEE DWG. NO. 2/9.
 4. FOR STRINGER SPLICE DETAIL, SEE DWG. NO. 2/9.
 5. FOR TYPICAL BRIDGING CONNECTION TO PILE DETAIL, SEE SECTION F-F, DWG. NO. 2/9.
 6. SEE NOTE 8, DWG. NO. 2/9 FOR CONCRETE REQUIREMENTS.
 7. FOR ELEVATIONS B-B, W-W AND Z-Z, SEE DWG. NO. 2/8.
 8. FOR SECTIONS C-C, D-D AND G-G, SEE DWG. NO. 2/9.
 9. FOR SODDING SEE NOTE 5, DWG. NO. 2/5.
 10. PILE SHOES REQUIRED FOR ALL PILES DRIVEN TO EL. -10.0 AND EL. -22.0.

AS-BUILT

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

GRAPHIC SCALE
1" = 4'-0"

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 259 AND MODIFICATIONS
TO PS-5, S-96C, S-96D AND S-161A
STRUCTURE 259
TIMBER WALKWAY PLAN AND OPERATING
PLATFORM PROFILE

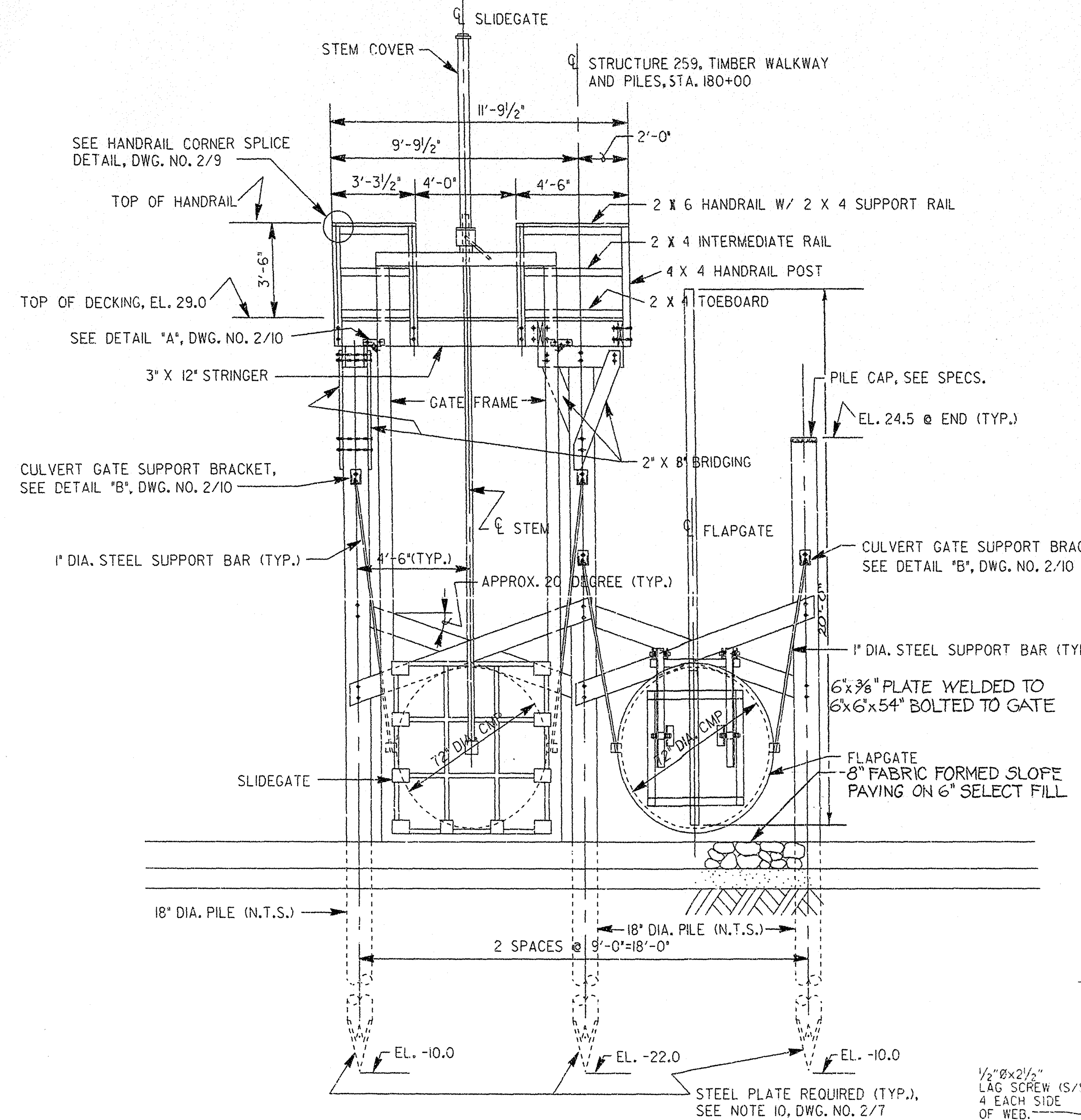
DESIGN ENGR. A.C.K.
DWG. BY H.R.D. D.L.C.
CHKD BY H.R.D.
DATE: DATED: MAY 1992
SCALE: AS SHOWN
SHEET 10 OF 29

SIZE DRAWING NO. 2/7

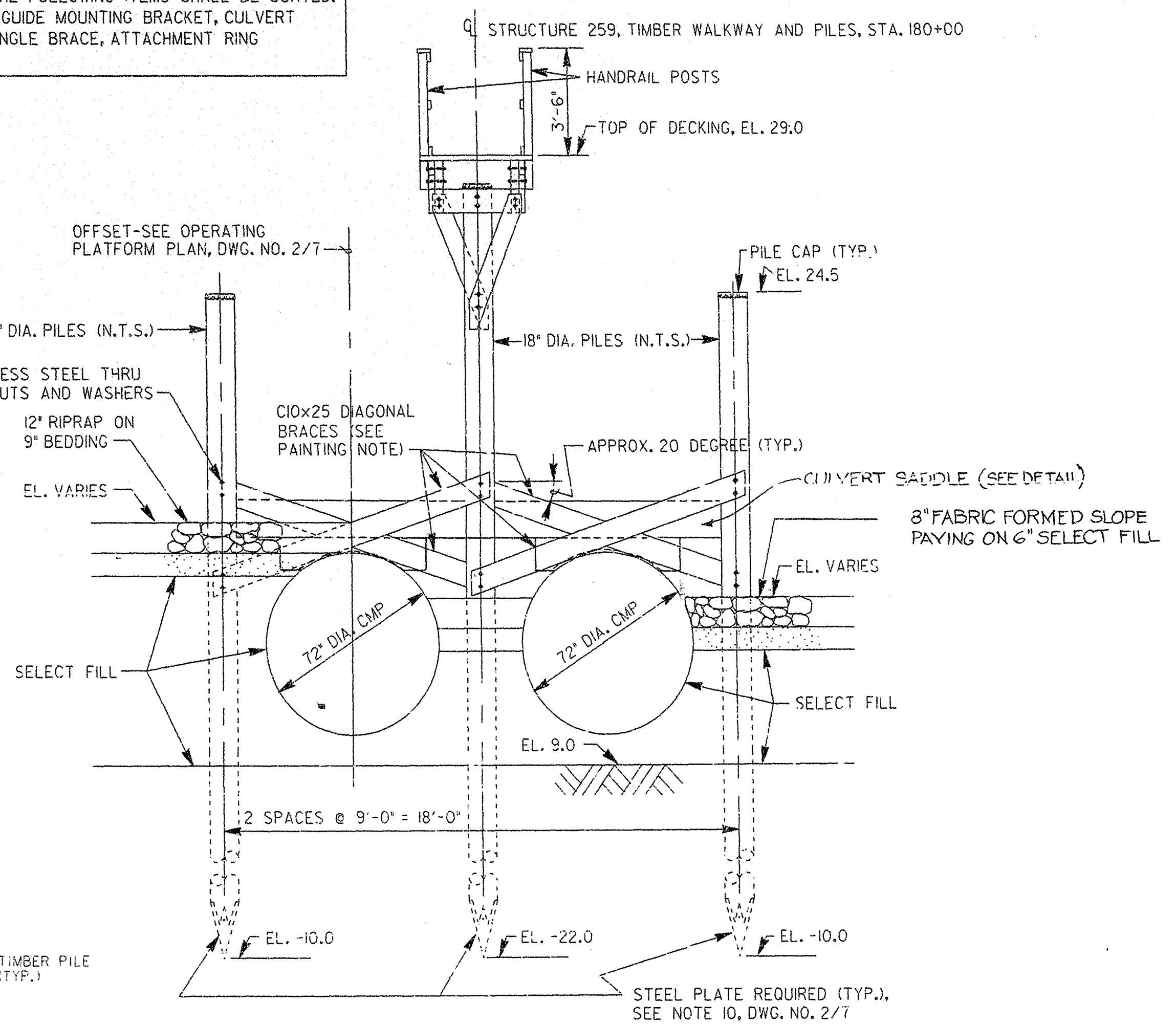
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED

PAINTING NOTE:
 FERROUS SURFACES LISTED BELOW SHALL BE SHOP BLASTED AND PAINTED AFTER FABRICATION. SURFACES SHALL BE ABRASIVE BLAST CLEANED IN ACCORDANCE WITH SSPC-SP5. COATING SHALL CONFORM TO SSPC-PAINT 16. APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. TOTAL DRY FILM THICKNESS SHALL AVERAGE 16 MILLS. COATED ITEMS SHALL BE HANDLED IN SUCH A MANNER TO AVOID DAMAGE TO THE PROTECTIVE COATING. NICKS AND SCRATCHES SHALL BE TOUCH-UP PAINTED IN THE FIELD WITH THE COATING SPECIFIED ABOVE. THE FOLLOWING ITEMS SHALL BE COATED: STEEL CHANNEL CROSS BRACING, GATE GUIDE MOUNTING BRACKET, CULVERT GATE ATTACHMENT RING, GATE GUIDE ANGLE BRACE, ATTACHMENT RING SUPPORT RODS (BARS).

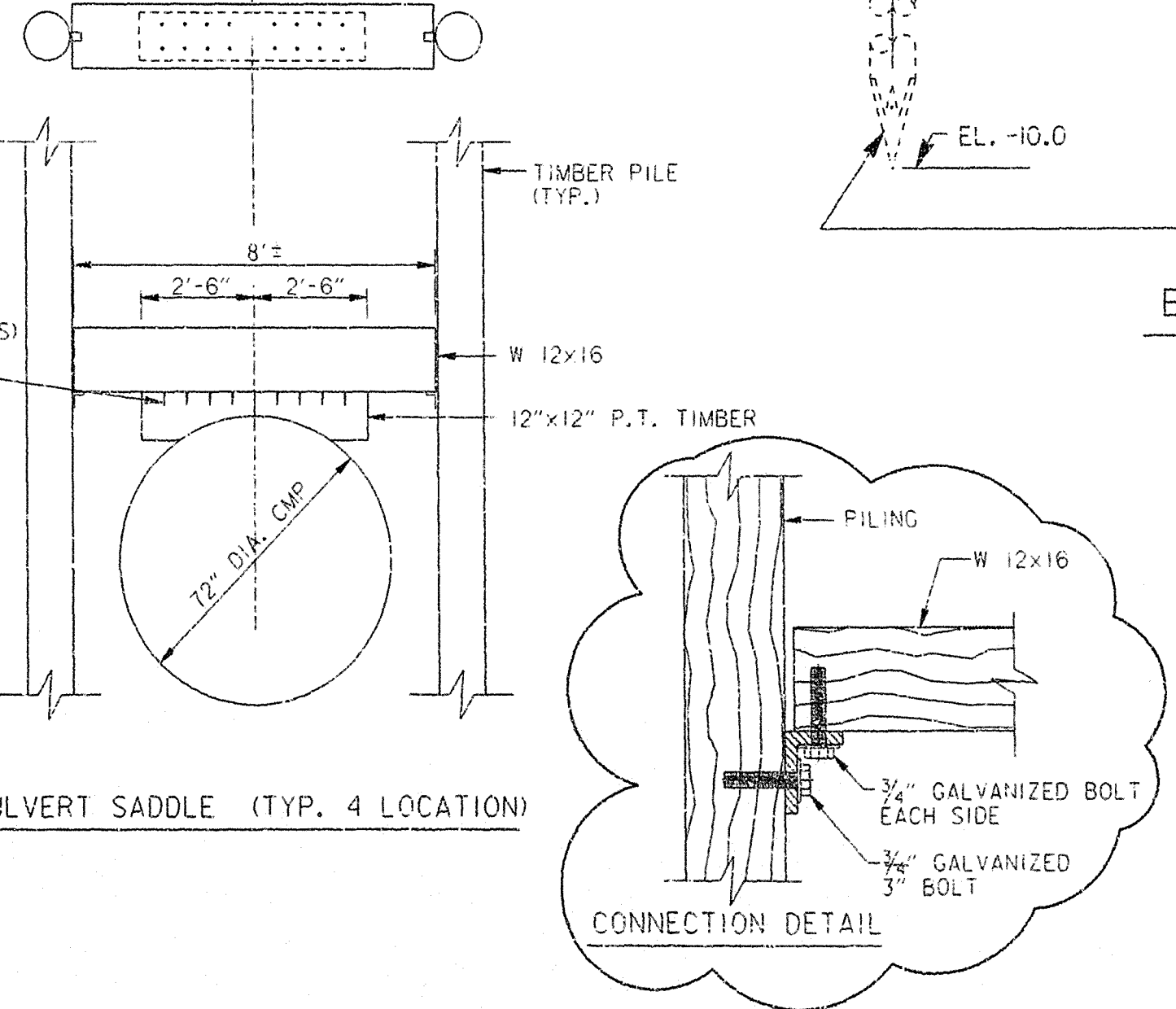
SAFETY ON THIS JOB
 DEPENDS ON YOU



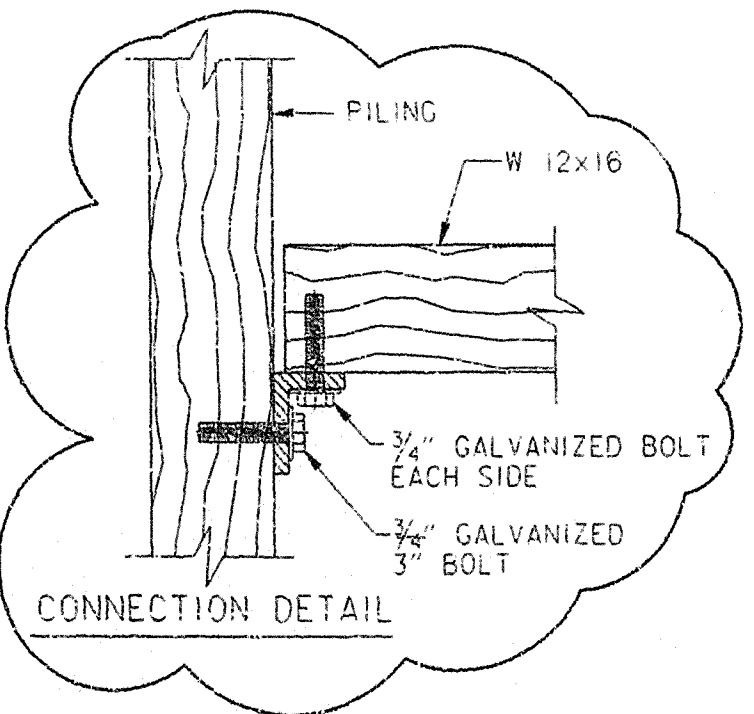
ELEVATION B-B
 FACE OF TIMBER OPERATING PLATFORM
 SCALE: "A"



ELEVATION Z-Z
 SCALE: "A"

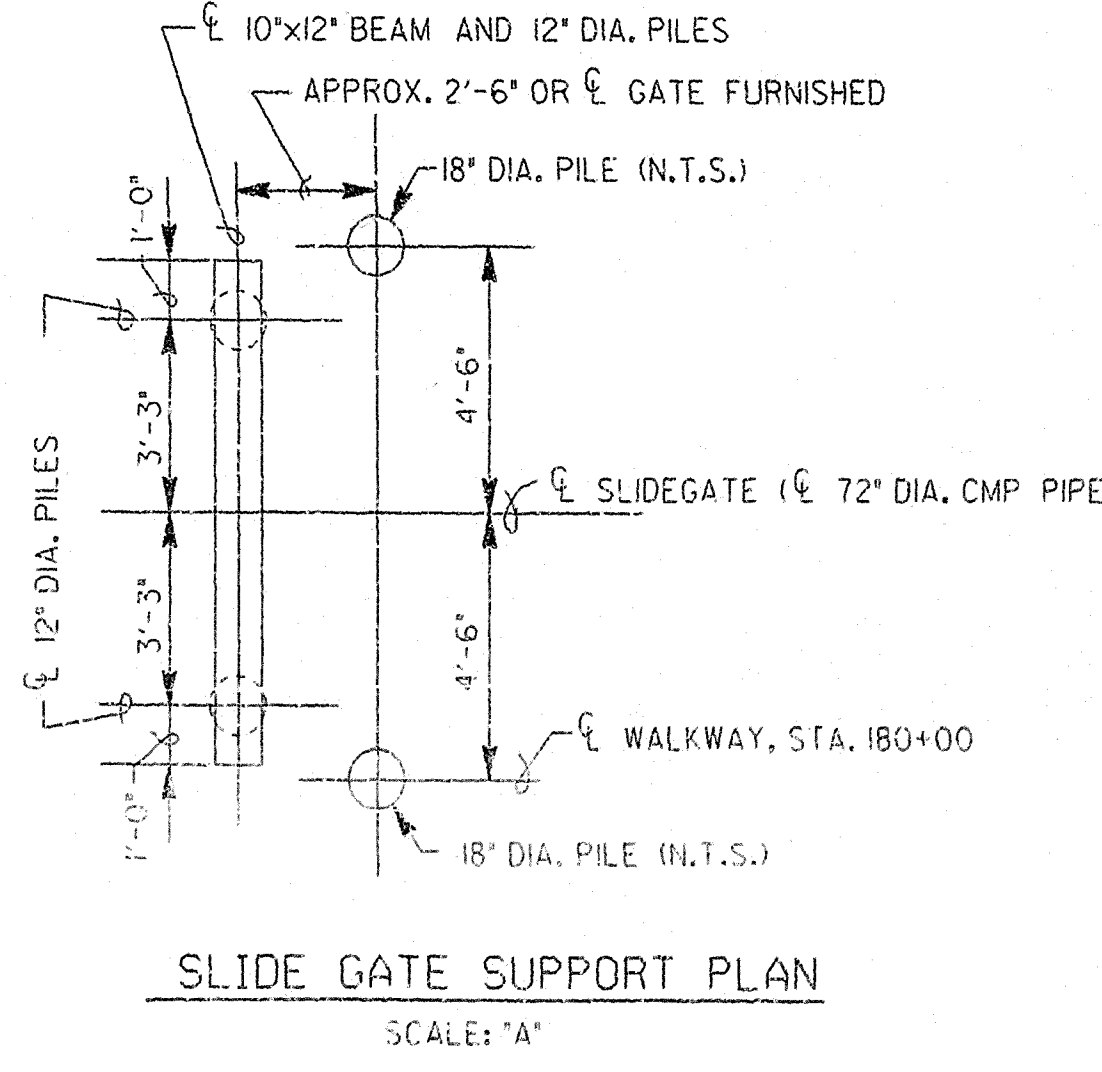


CULVERT SADDLE (TYP. 4 LOCATION)

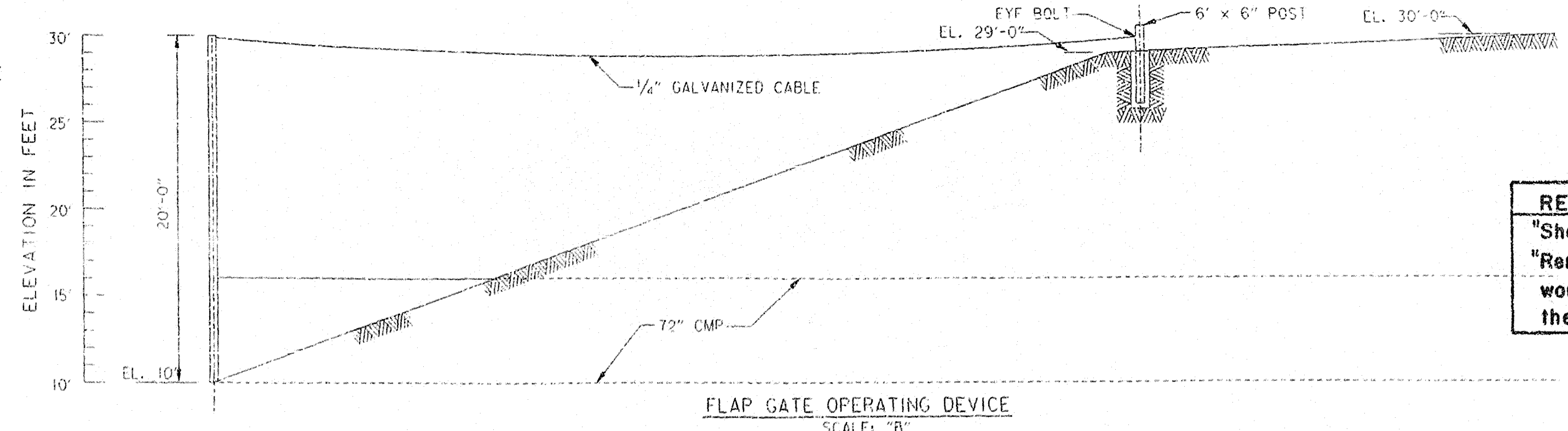


CONNECTION DETAIL

- NOTES:**
1. FOR GENERAL NOTES, SEE DWG. NO. 2/1.
 2. FOR SLIDE GATE DETAILS, SEE DWG. NO. 2/10.
 3. FOR WALKWAY FRAMING DETAIL NOTES, SEE DWG. NO. 2/9.
 4. FOR STRINGER SLICE DETAIL, SEE DWG. NO. 2/9.
 5. FOR TYPICAL BRIDGING CONNECTION TO PILE DETAIL, SEE SECTION F-F, DWG. NO. 2/9.
 6. SEE NOTE 8, DWG. NO. 2/9 FOR CONCRETE REQUIREMENTS.
 7. FOR WALKWAY PLAN AND PROFILE SECTIONS, SEE DWG. NO. 2/7.

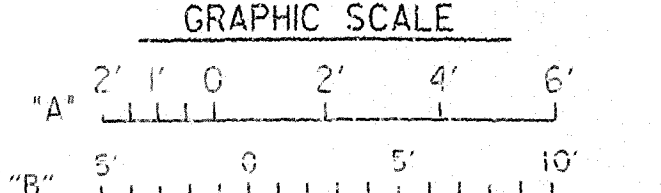


SLIDE GATE SUPPORT PLAN
 SCALE: "A"



FLAP GATE OPERATING DEVICE
 SCALE: "B"

AS-BUILT

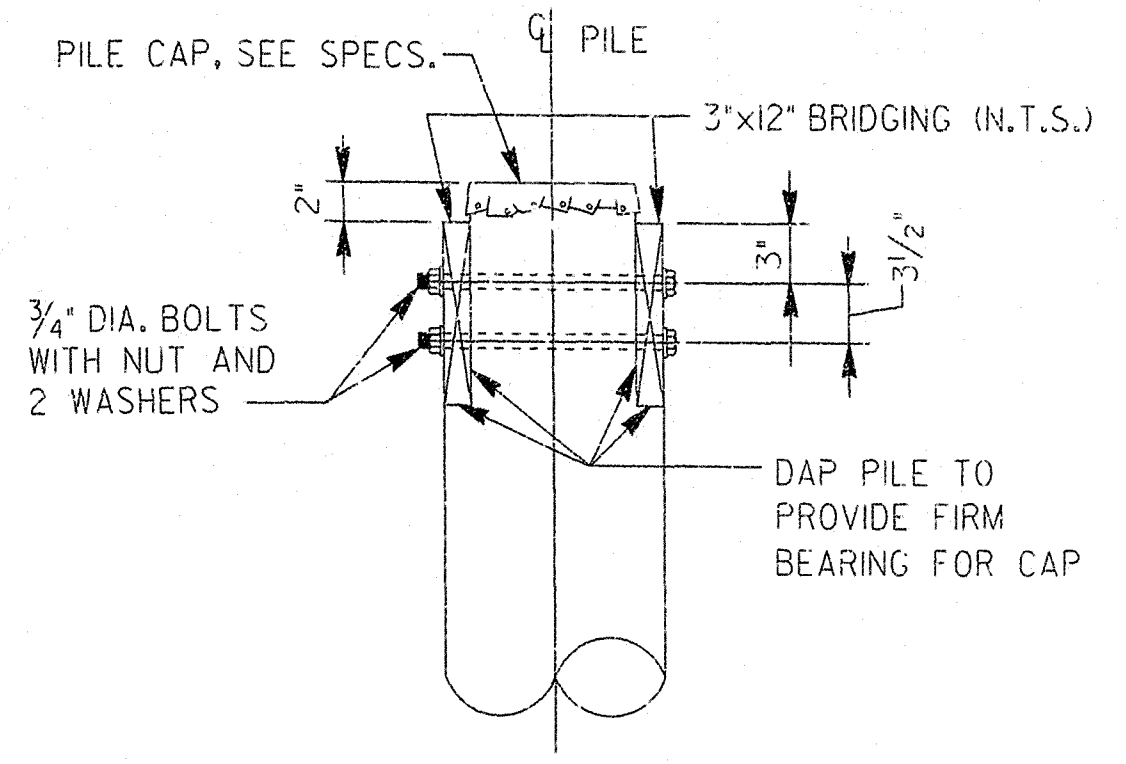
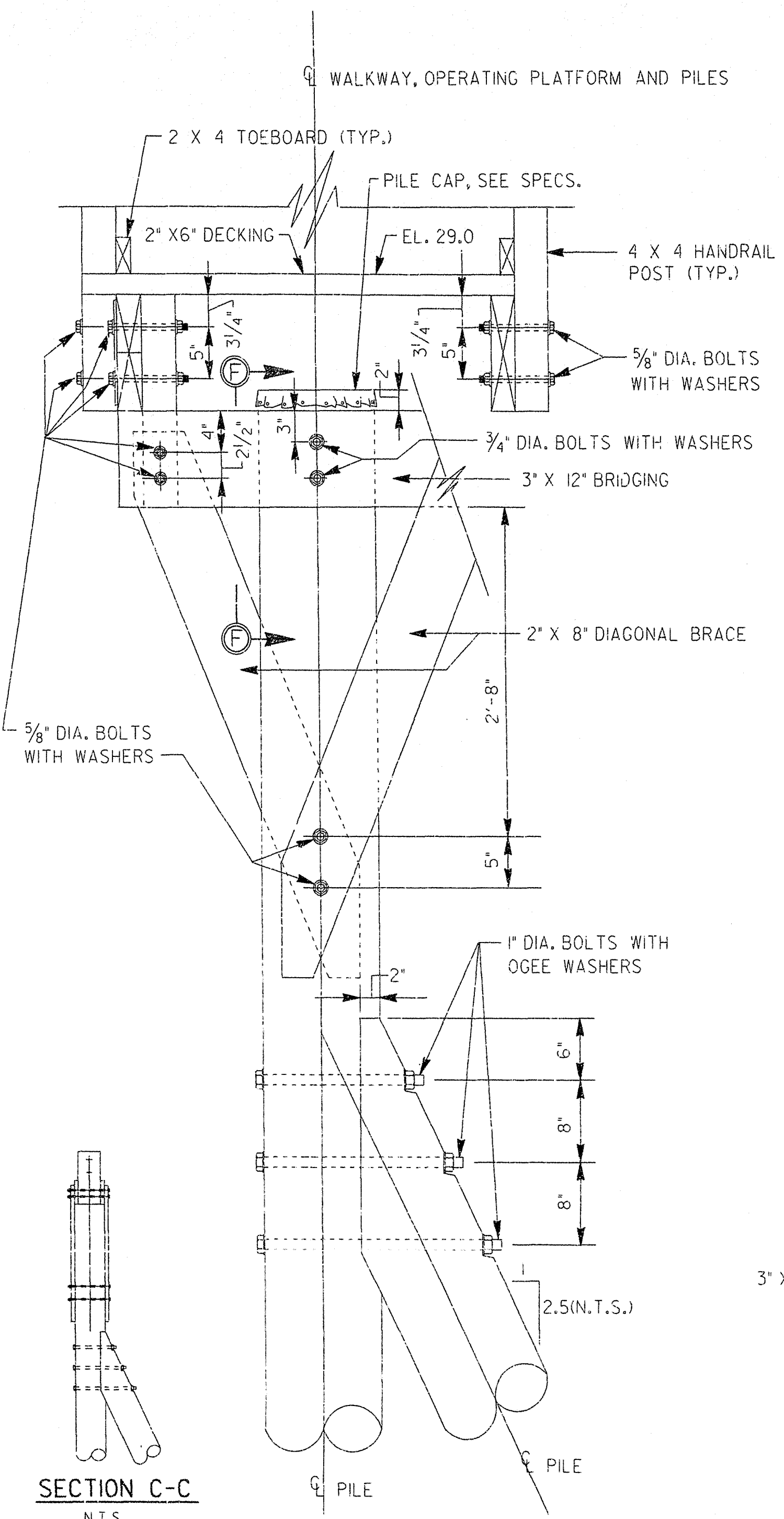


RECORD DRAWING NOTE
 "Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

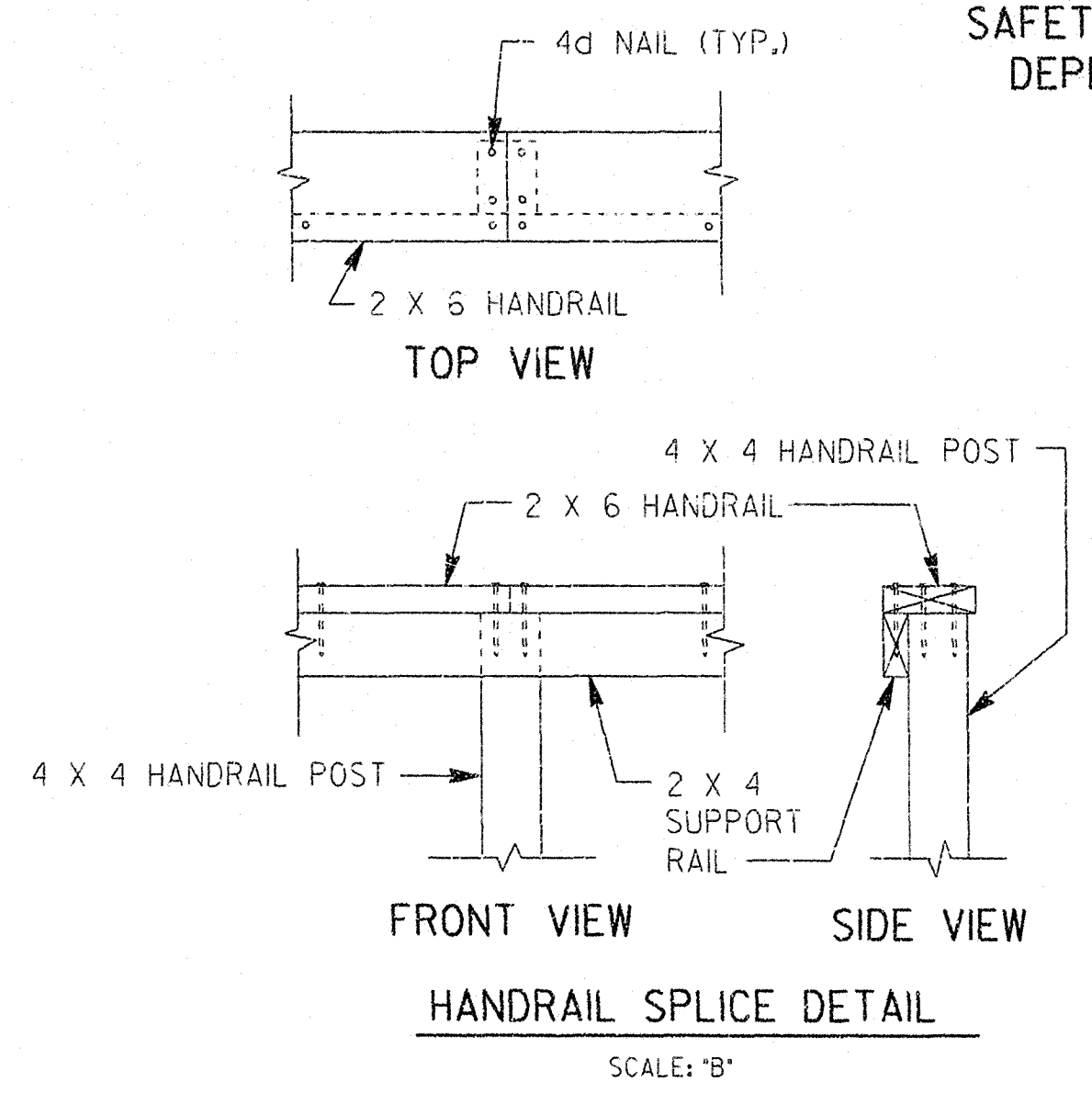
DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN STRUCTURE 259 AND MODIFICATIONS TO PS-5, S-96C, S-96D AND S-161A STRUCTURE 259 TIMBER WALKWAY ELEVATION AND DETAILS			
DESIGN ENG. A.C.K.	INV. NO.	SIZE DRAWING NO. F 2/8	
DRAWN BY (D.S.) H.R.D.	DATE:	SCALE: AS SHOWN	
CAD LAY. H.R.D.	DATE:	MAY 1992	
SHEET 11 OF 29		D. O. FILE NO. 400-36,195	

REVISIONS				
NO.	SYMBOL	DESCRIPTION	DATE	APPROVED

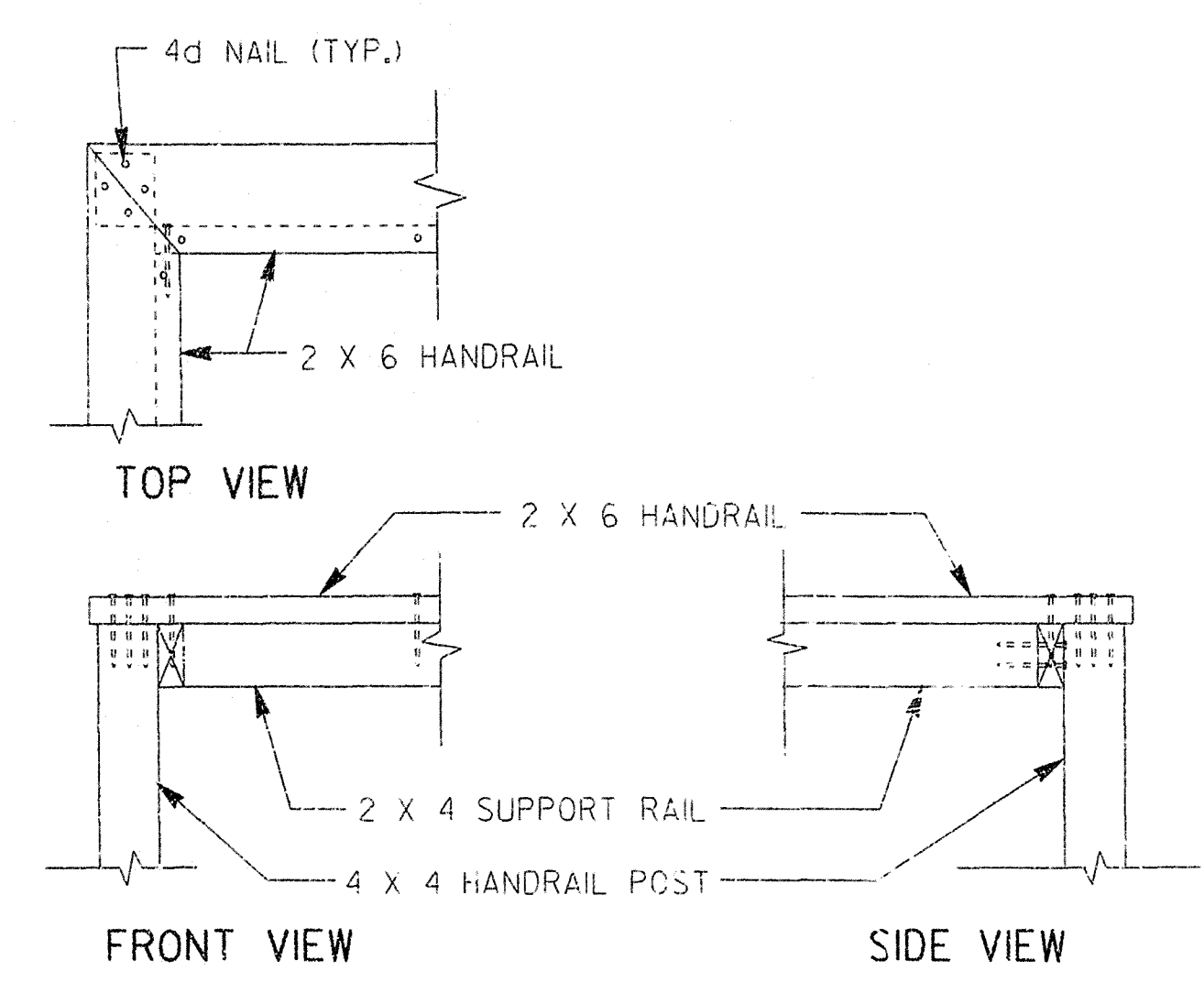
SAFETY ON THIS JOB
DEPENDS ON YOU



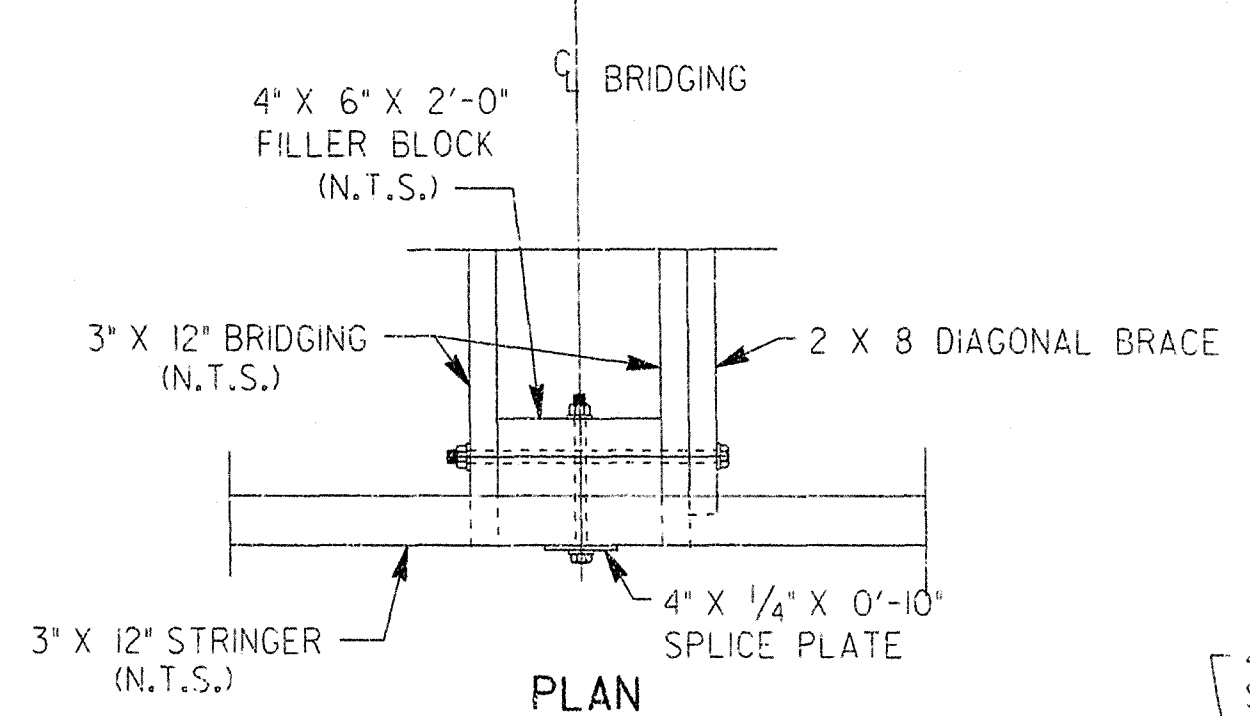
SECTION F-F
SCALE: "B"
NOTE:
ABOVE DETAIL IS TYPICAL FOR
BRIDGING CONNECTION TO
VERTICAL TIMBER PILES



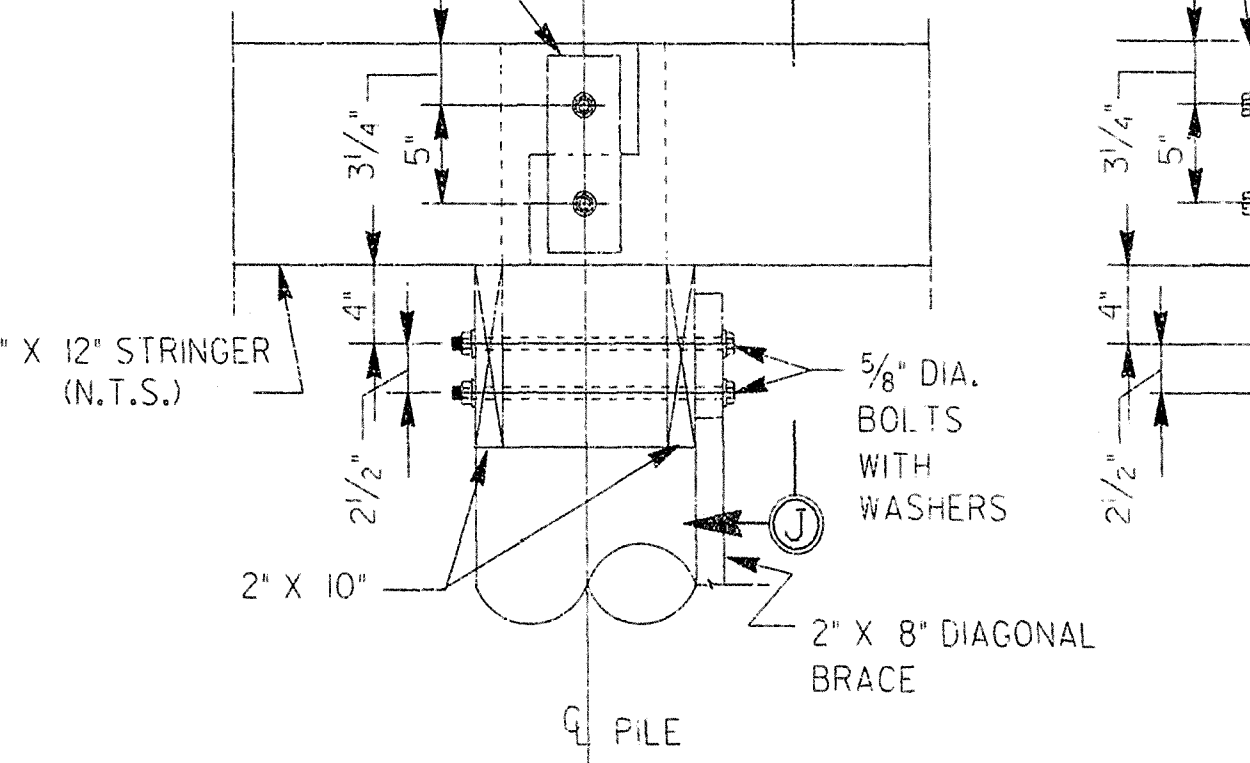
HANDRAIL SPLICE DETAIL
SCALE: "B"



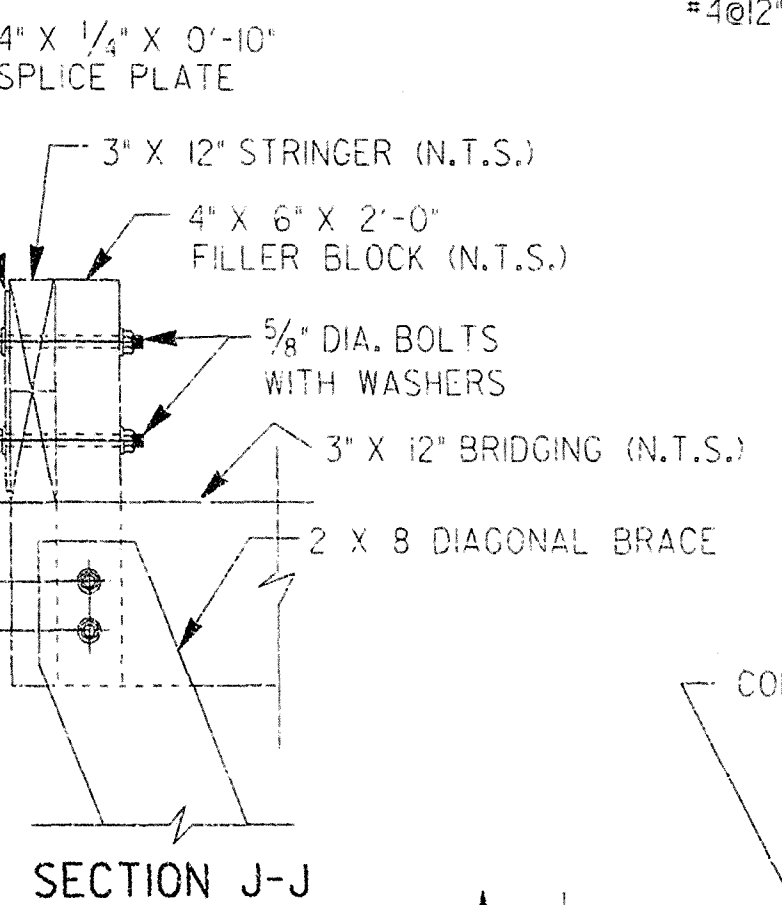
HANDRAIL CORNER SPLICE DETAIL
SCALE: "B"



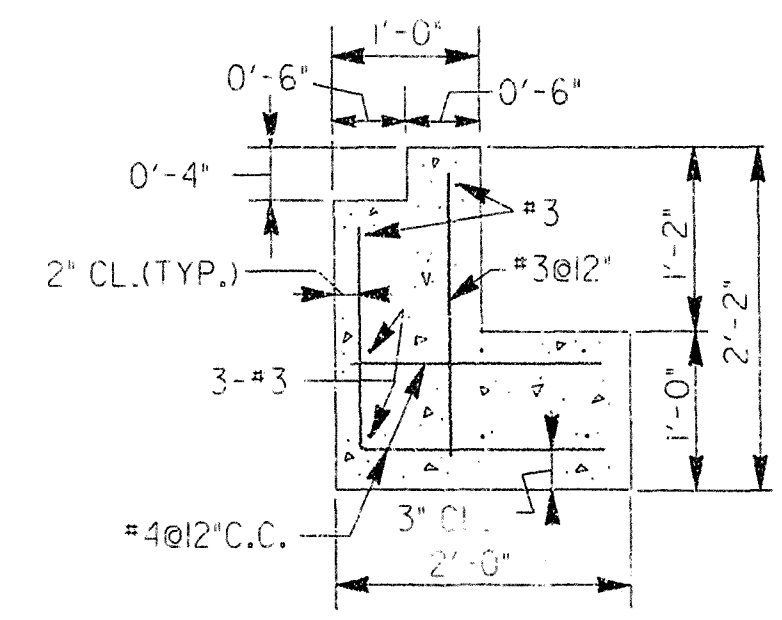
PLAN
SCALE: "B"



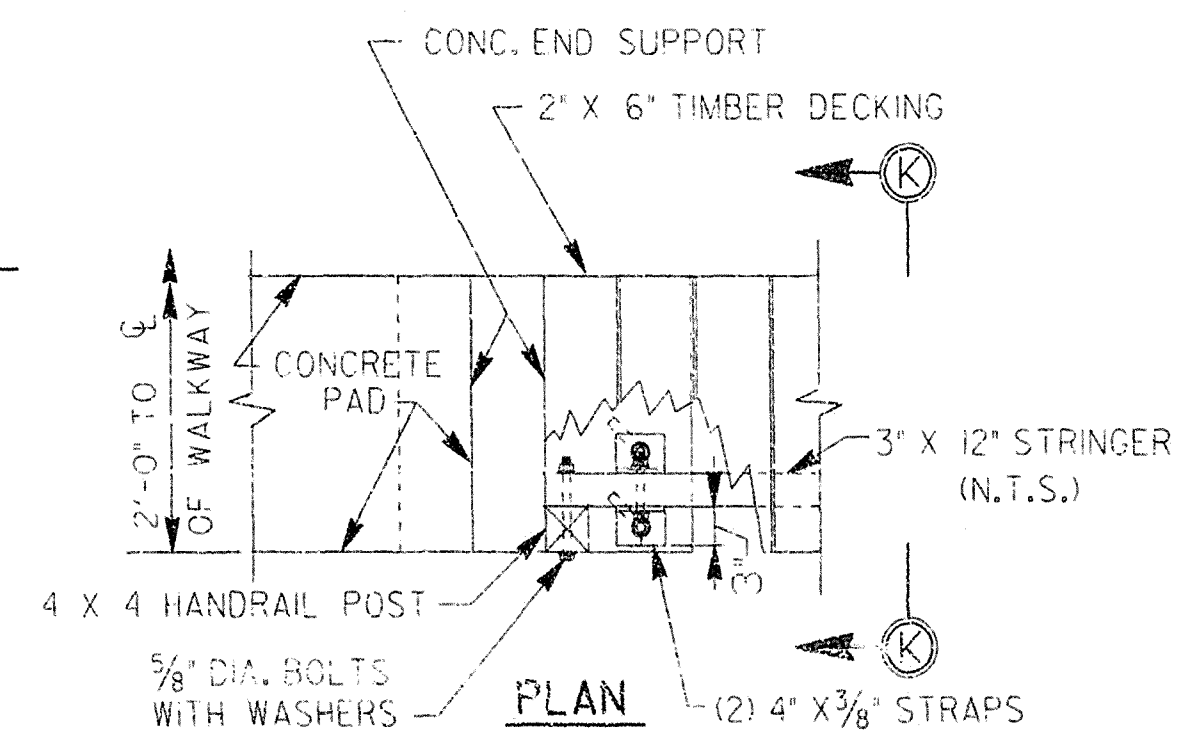
ELEVATION
STRINGER SPLICE DETAIL (TYP.)
SCALE: "B"



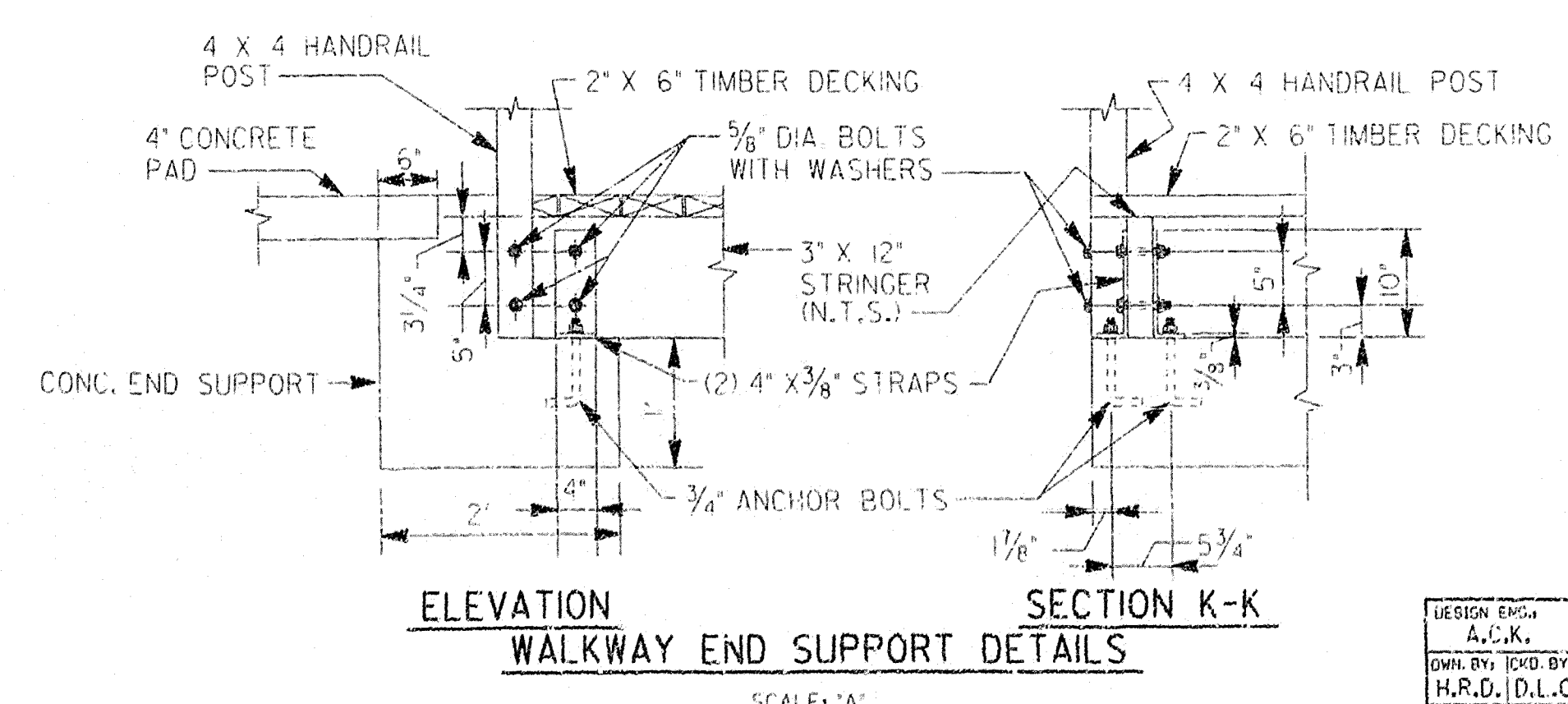
SECTION J-J



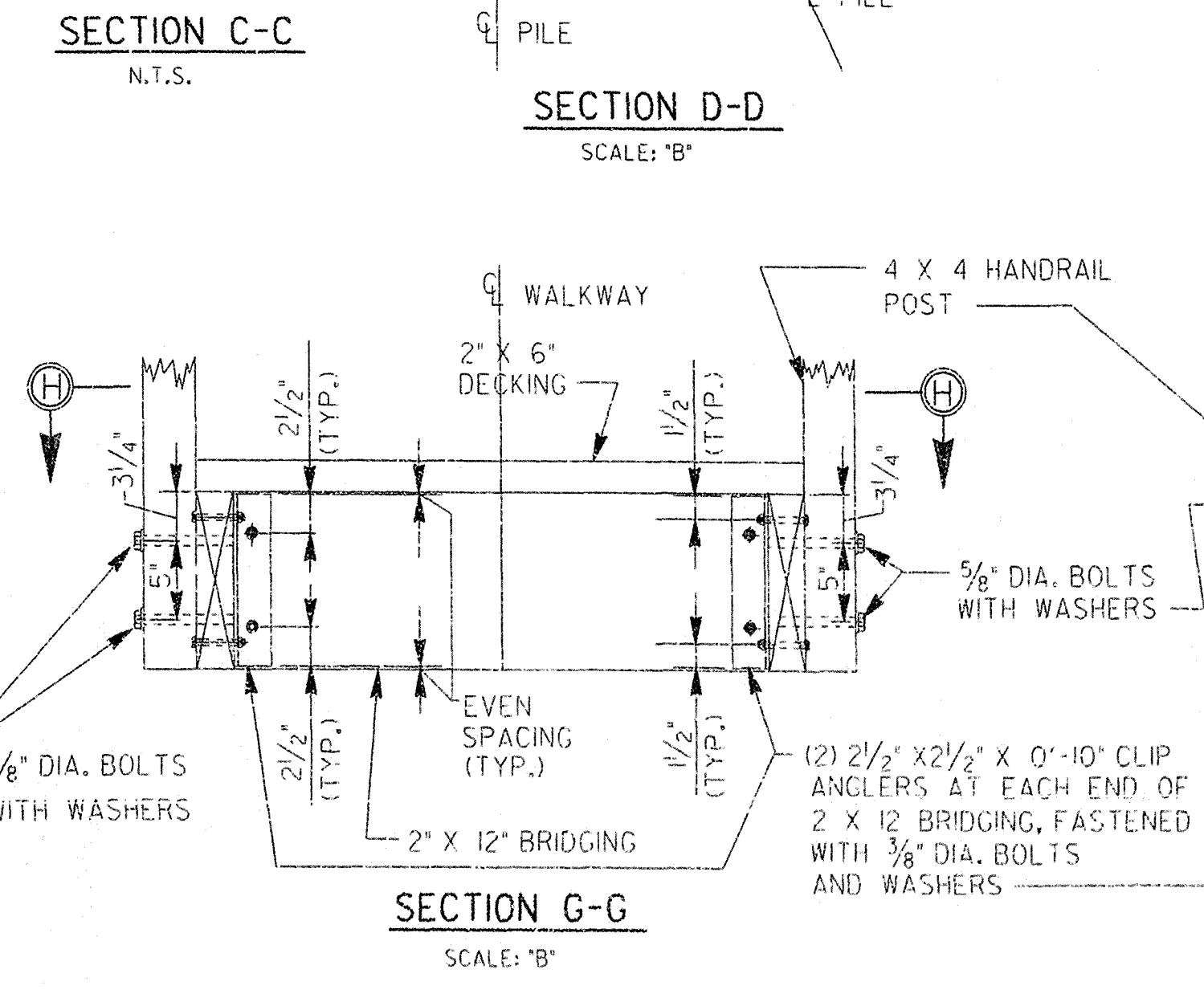
WALKWAY END SUPPORT REINFORCEMENT
SCALE: "A"



PLAN



ELEVATION
WALKWAY END SUPPORT DETAILS
SCALE: "A"



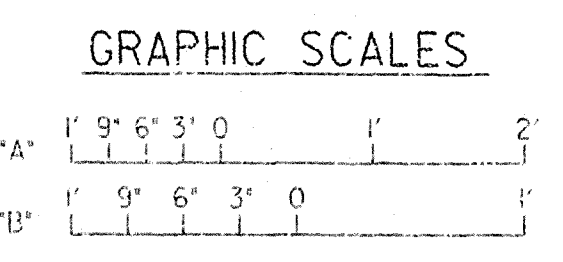
SECTION G-G
SCALE: "B"

SECTION H-H
SCALE: "B"

- NOTES:
- TIMBER HANDRAIL, HANDRAIL POSTS, SUPPORT RAILS AND TOEBOARDS SHALL BE SURFACED ON 4 SIDES. DECKING, BRACING, BRIDGING AND STRINGERS SHALL BE FULL DIMENSION. SEE SPECIFICATIONS.
 - ALL BOLTS, NUTS, WASHERS, NAILS AND MISCELLANEOUS HARDWARE SHALL BE HOT DIPPED GALVANIZED (ASTM A-123).
 - ALL PILES AND TIMBER SHALL BE PRESSURE TREATED.
 - ALL CLIP ANGLES, UNLESS SHOWN OTHERWISE, SHALL BE 16 GAGE OR THICKER.
 - EACH BOLT WILL BE FURNISHED WITH STANDARD WASHERS EXCEPT WHERE OEGEE WASHERS ARE INDICATED.
 - ALL PILES SHALL BE DAPPED UNDER ALL OEGEE WASHERS.
 - NAILS FOR DECKING, INTERMEDIATE RAILS AND TOEBOARDS SHALL BE 16d GALVANIZED. NAILS FOR HANDRAIL AND SUPPORT RAILS SHALL BE 4d GALVANIZED.
 - REINFORCEMENT DETAILING AND PLACEMENT SHALL CONFORM TO ACI 318-66 AND ACI 318. CONCRETE SHALL CONFORM TO ASTM C 94. CONCRETE WORK SHALL CONFORM TO ACI 318, PART ENTITLED "CONSTRUCTION REQUIREMENTS." COMPRESSIVE STRENGTH IN 28 DAYS SHALL BE 3,000 PSI. ENTRAINMENT AIR CONTENT OF EXTERIOR CONCRETE SHALL BE BETWEEN 5 AND 7 PERCENT BY VOLUME. SLUMP SHALL BE BETWEEN 3 AND 4 INCHES. CONCRETE SHALL BE CURED FOR 7 DAYS AFTER PLACEMENT.

AS-BUILT

RECORD DRAWING NOTE
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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 259 AND MODIFICATIONS
TO PS-5, S-96C, S-96D AND S-161A
STRUCTURE 259
TIMBER WALKWAY SECTIONS AND DETAILS

DESIGN ENGR. A.C.K.	INV. NO.	SCALE DRAWING NO.
DRAWN BY: T.O.D. BY: H.R.D./D.L.C.	DATE:	F
CAD BY: H.R.D.	SCALE: AS SHOWN	DATE: MAY 1992
		SHEET 12 OF 29

5

4

3

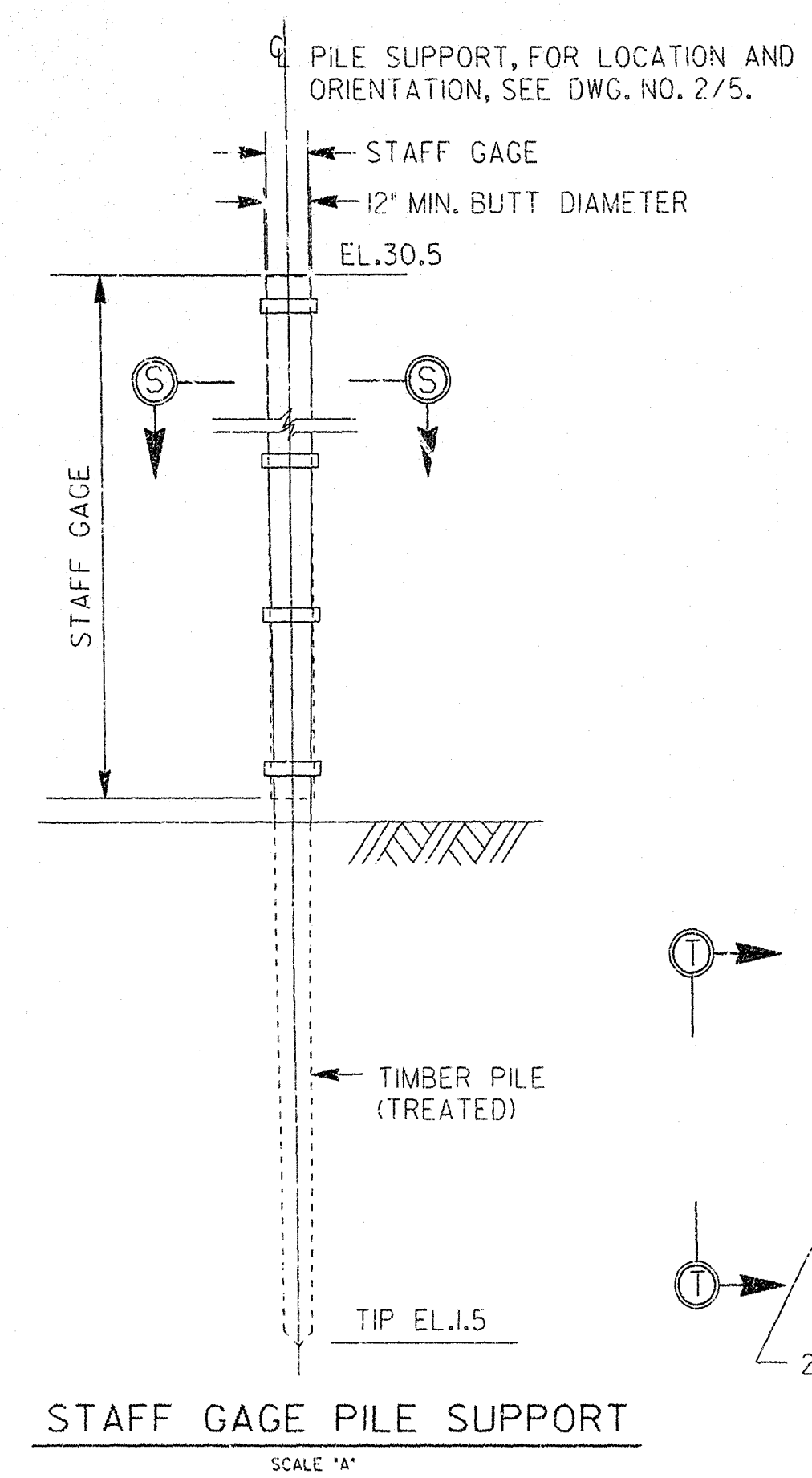
2

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED

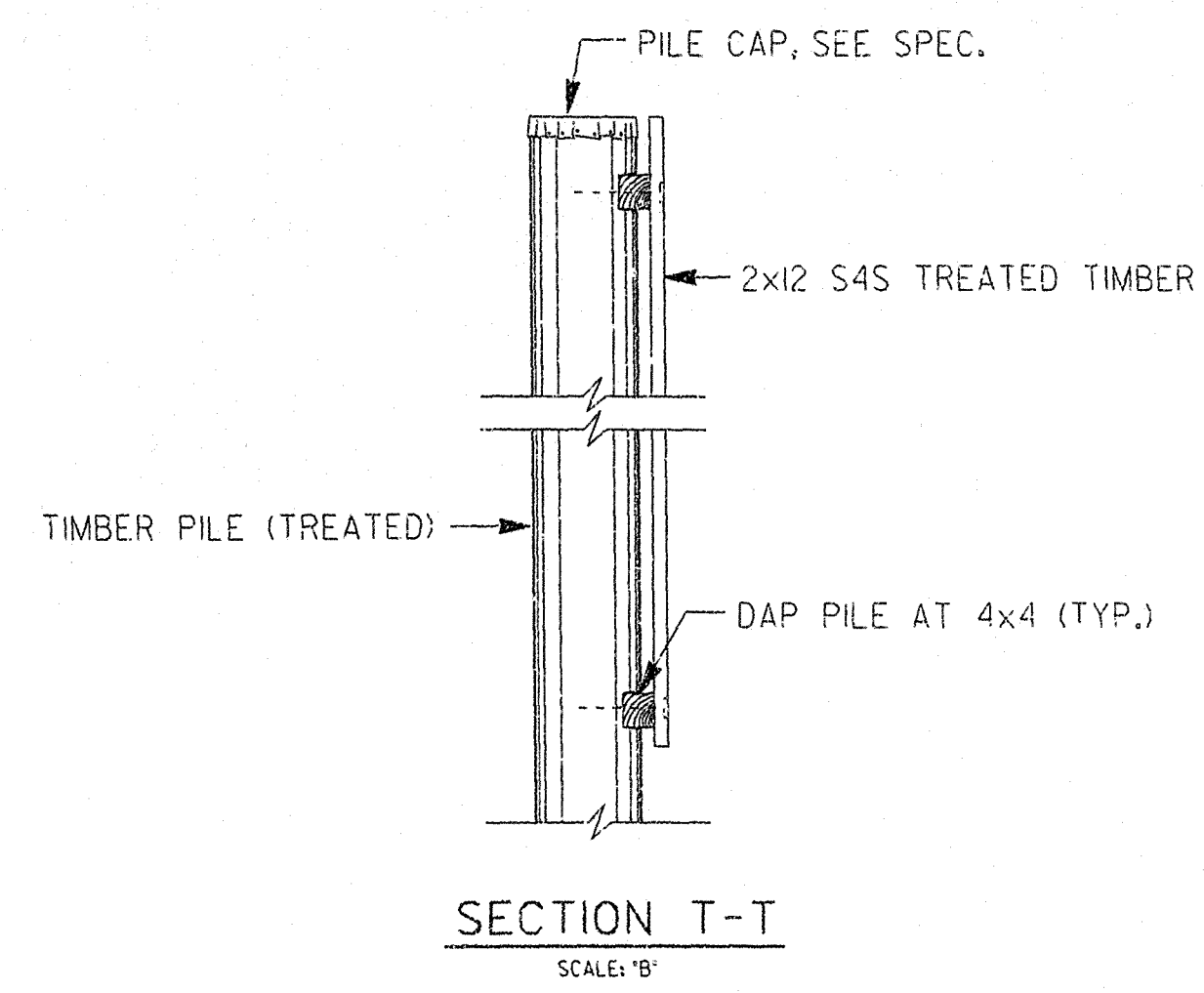
SAFETY ON THIS JOB
DEPENDS ON YOU

SLIDE GATE NOTES:

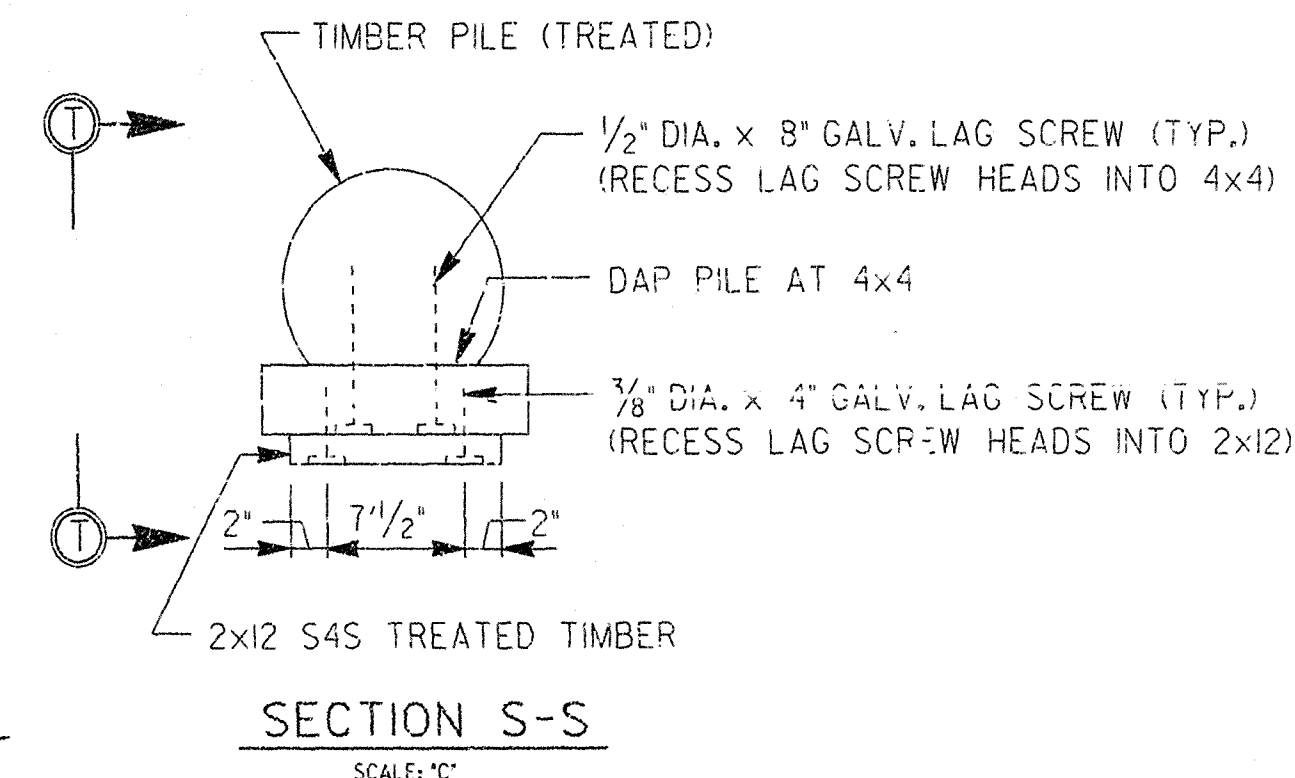
1. NOT USED.
2. FOR LOCATION OF DETAILS "A", "B" AND "C", SEE DWG. NOS. 2/7 AND 2/8.
3. SLIDE GATE DETAILS ARE GENERAL AND SHOP DRAWINGS ARE REQUIRED FOR CONTRACTORS DESIGN.



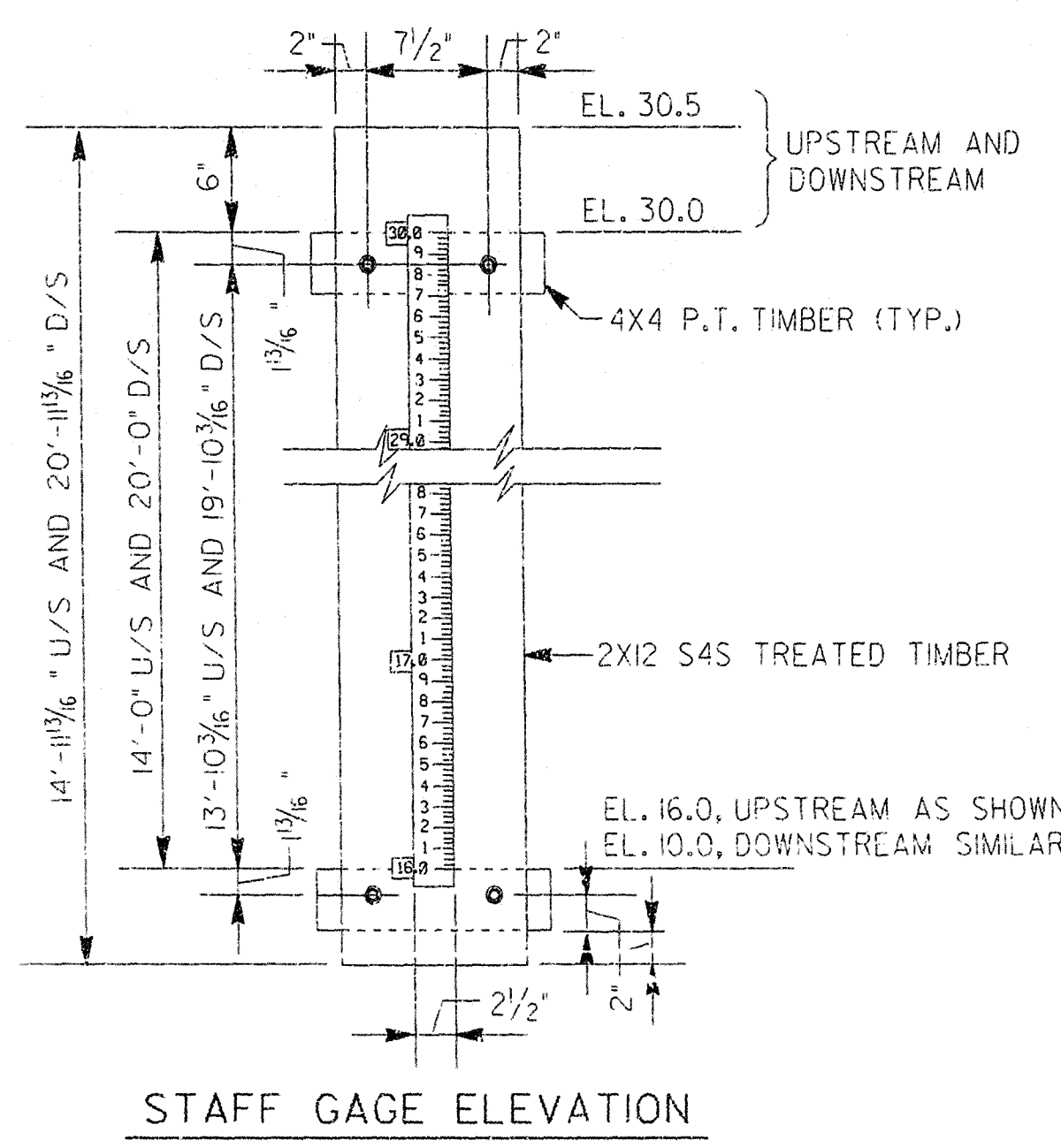
STAFF GAGE PILE SUPPORT
SCALE "A"



SECTION T-T
SCALE: 'B'

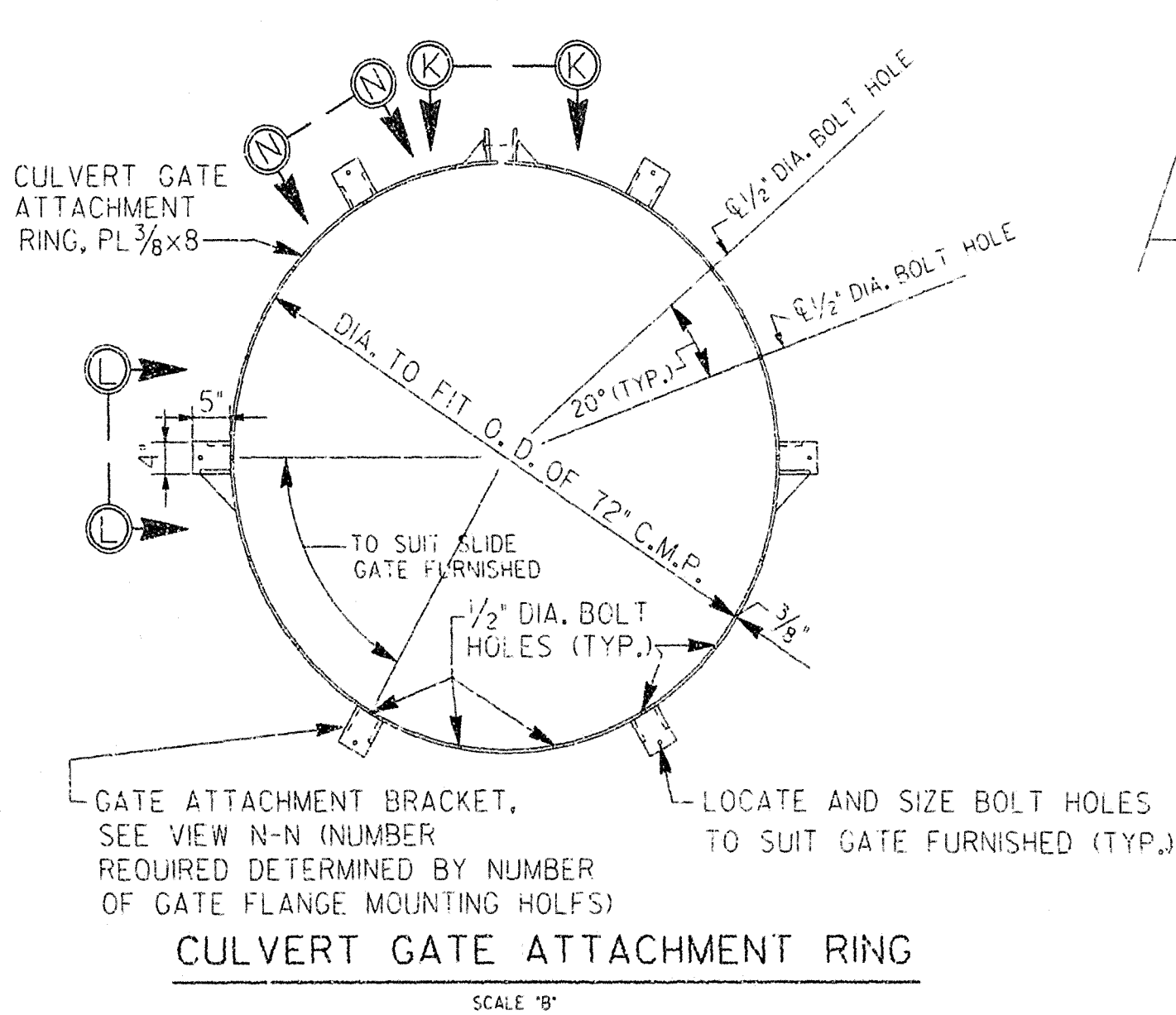


SECTION S-S
SCALE: 'C'

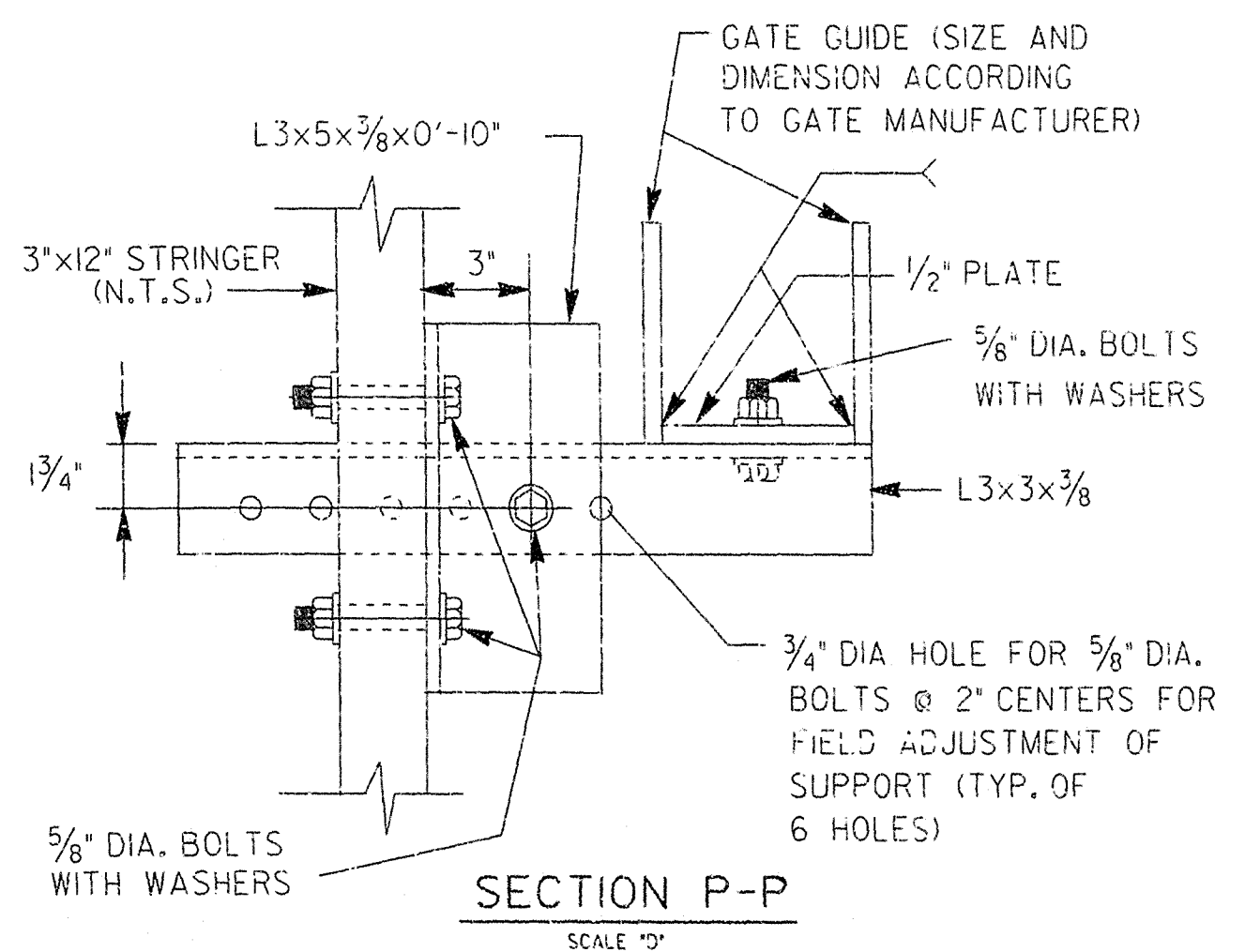


STAFF GAGE ELEVATION
SCALE: 'C'

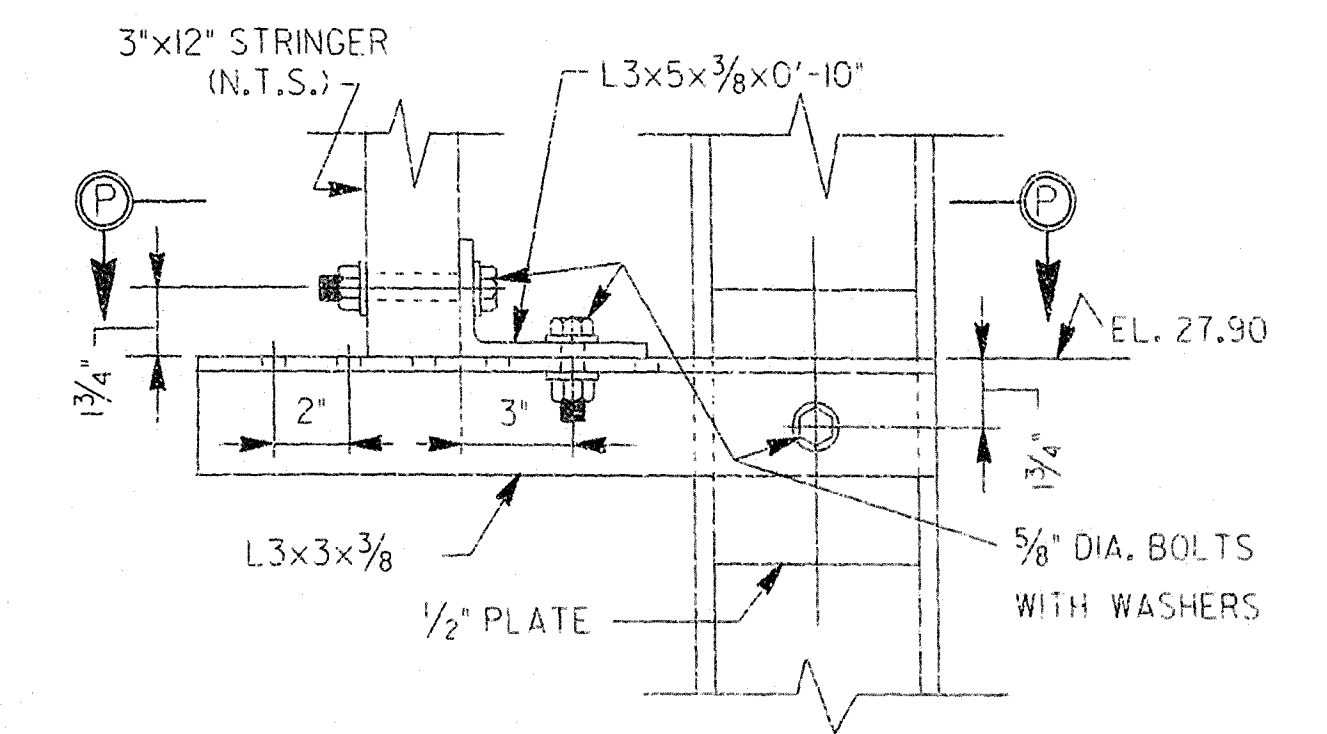
UPPER AND LOWER POOL
STAFF GAGE DETAILS



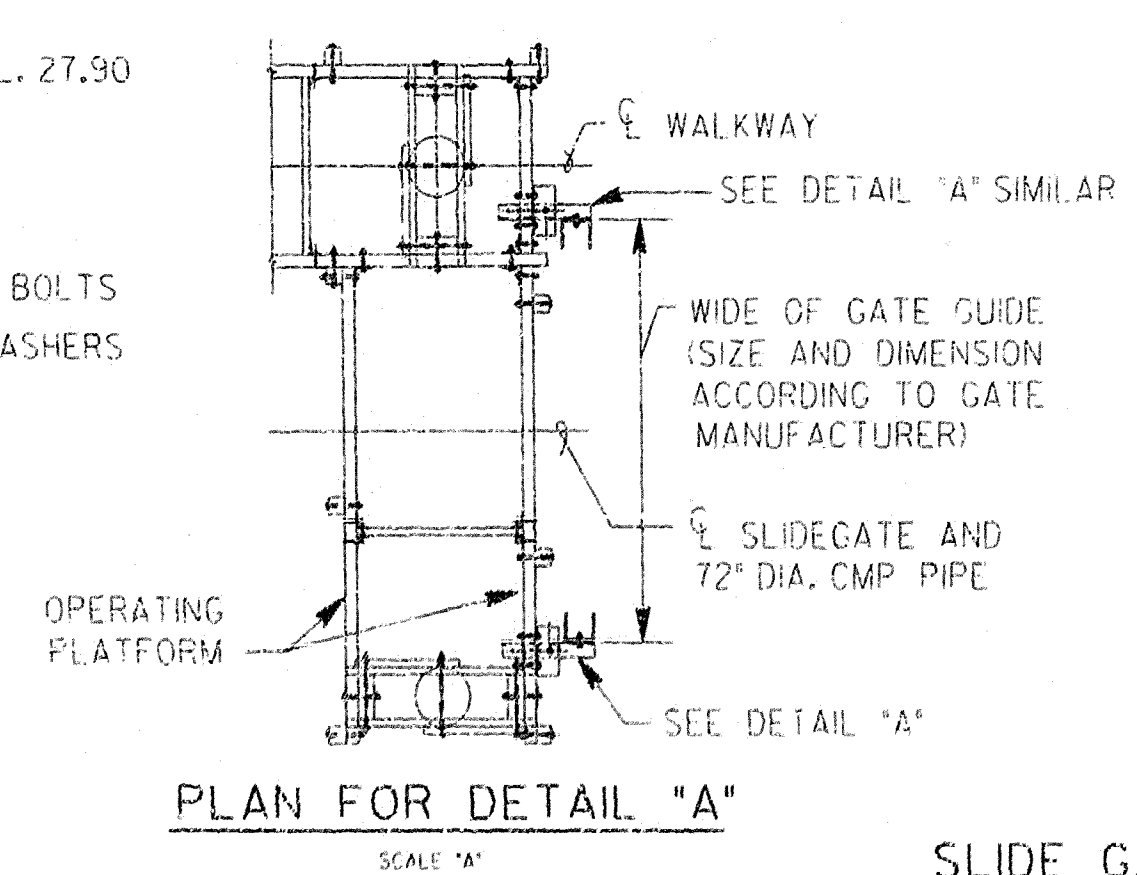
CULVERT GATE ATTACHMENT RING
SCALE: 'B'



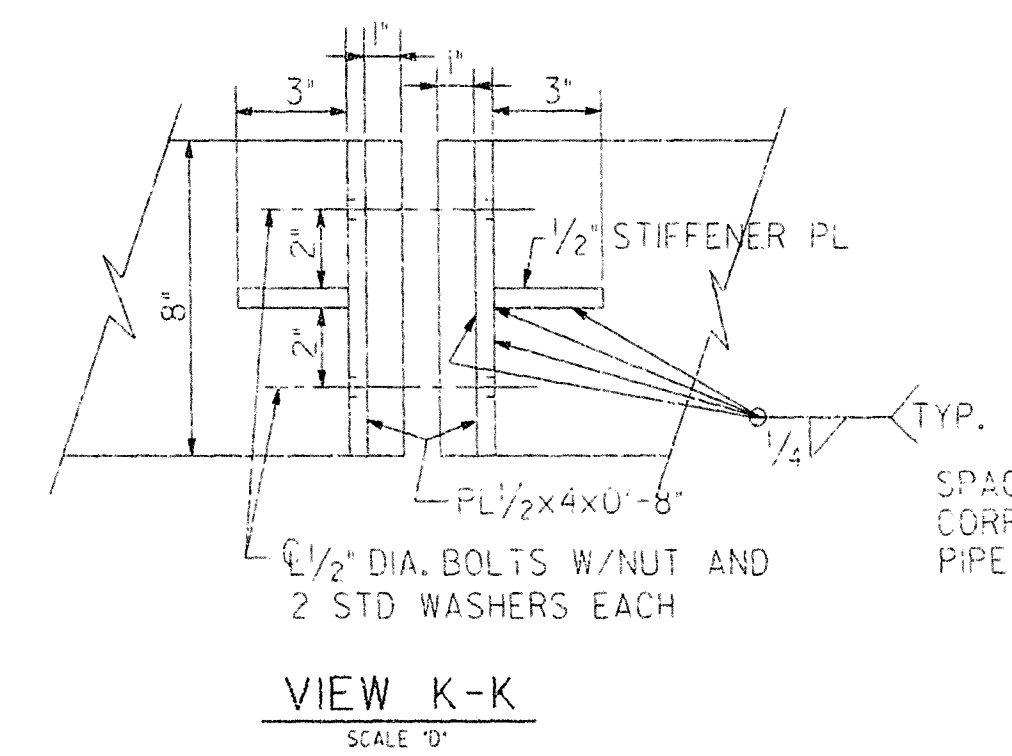
SECTION P-P
SCALE: 'D'



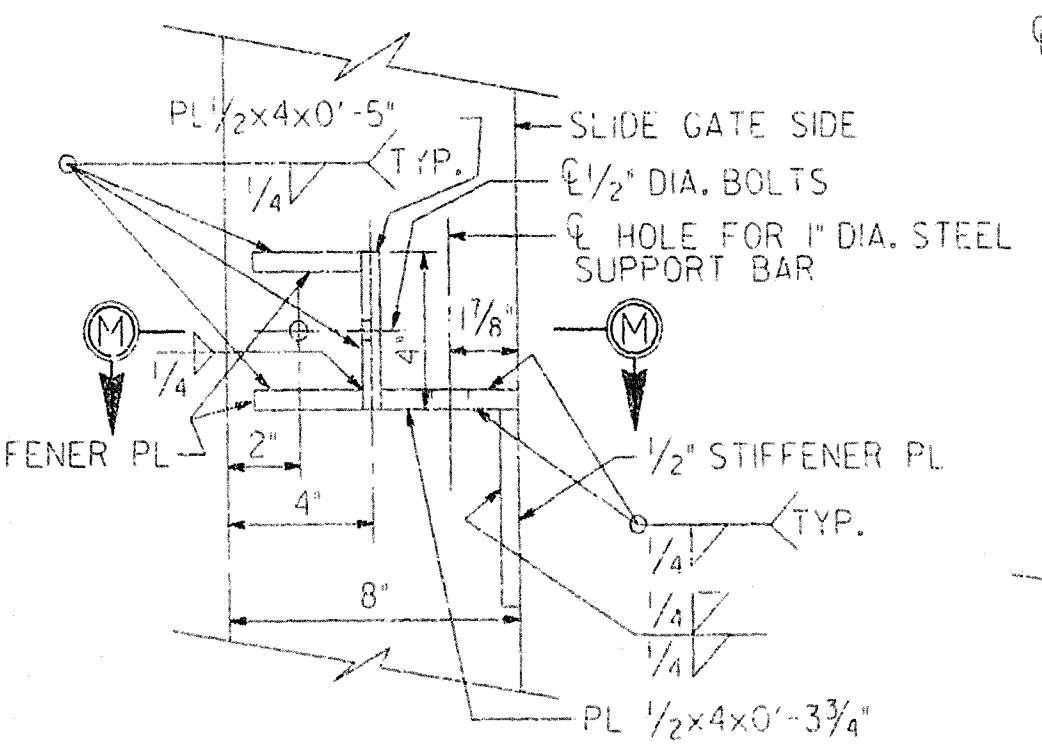
DETAIL "A"
SCALE: 'D'



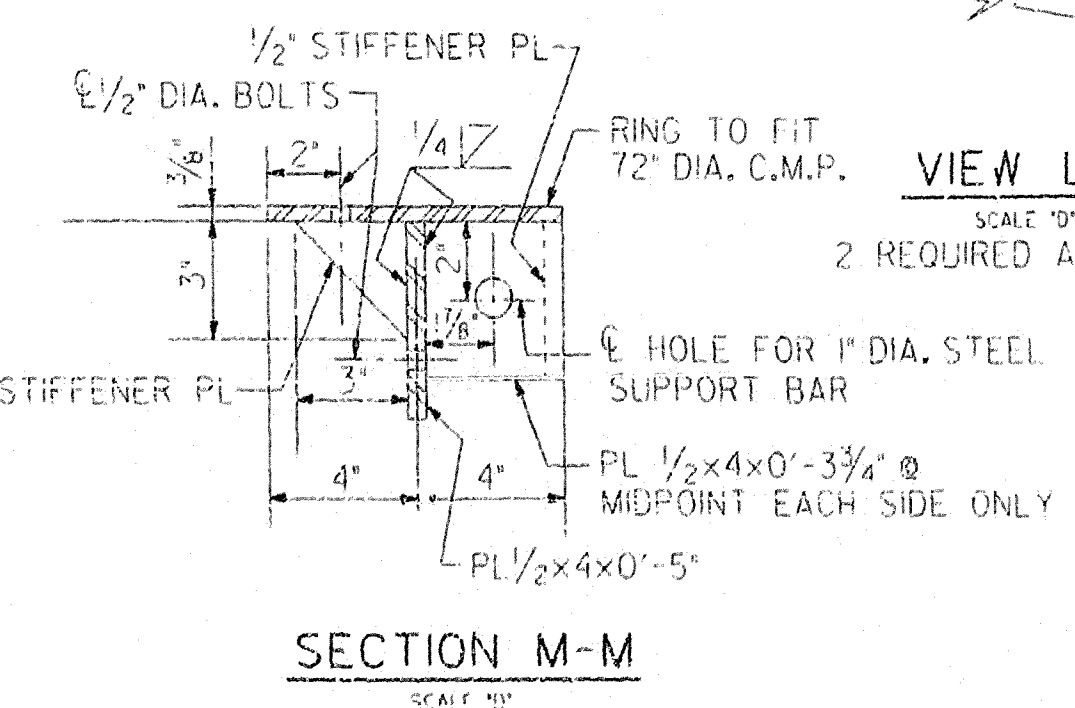
PLAN FOR DETAIL "A"
SCALE: 'A'



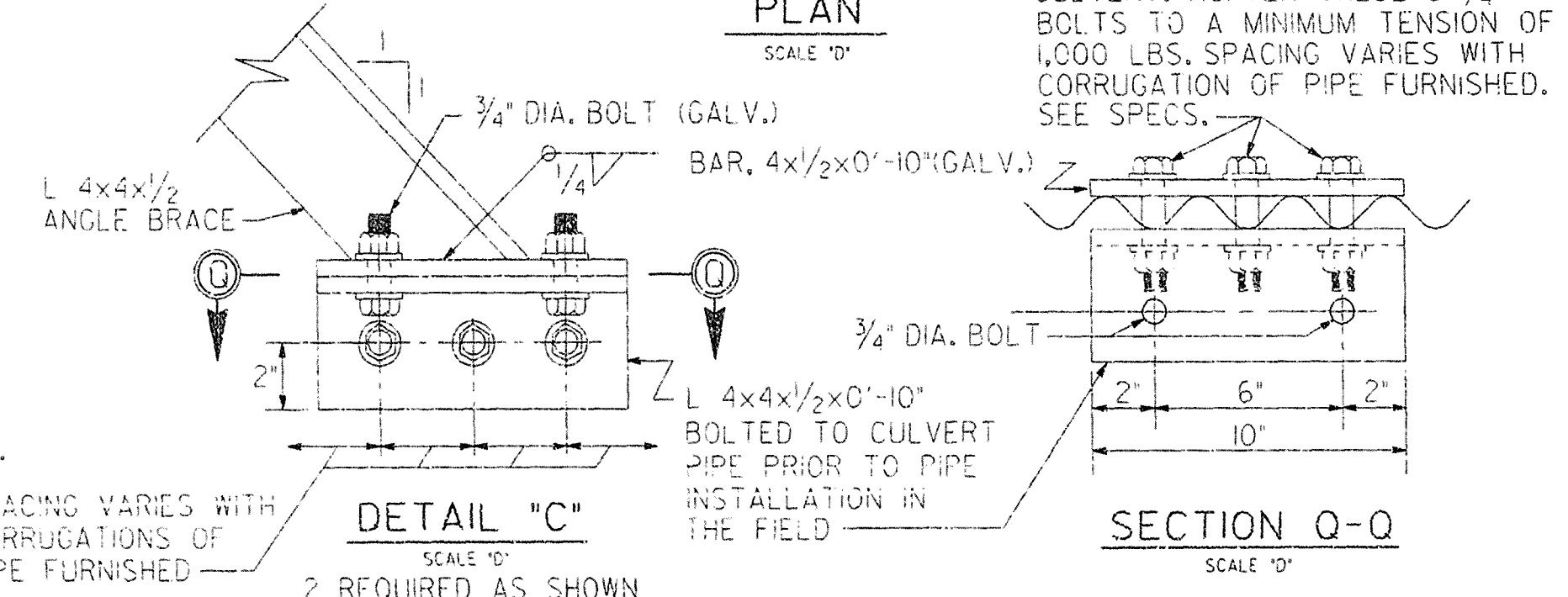
VIEW K-K
SCALE: 'D'



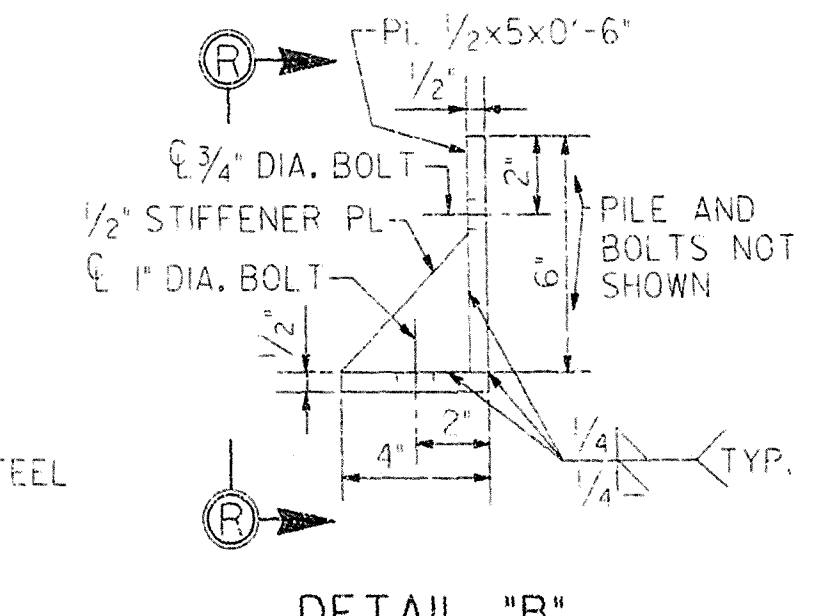
VIEW L-L
SCALE: 'D'



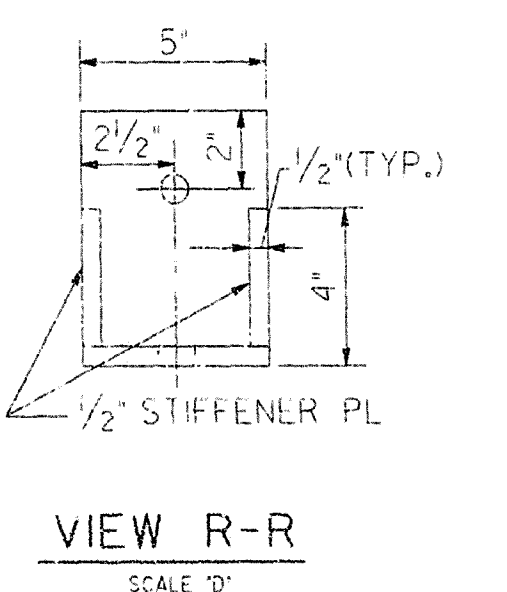
SECTION M-M
SCALE: 'D'



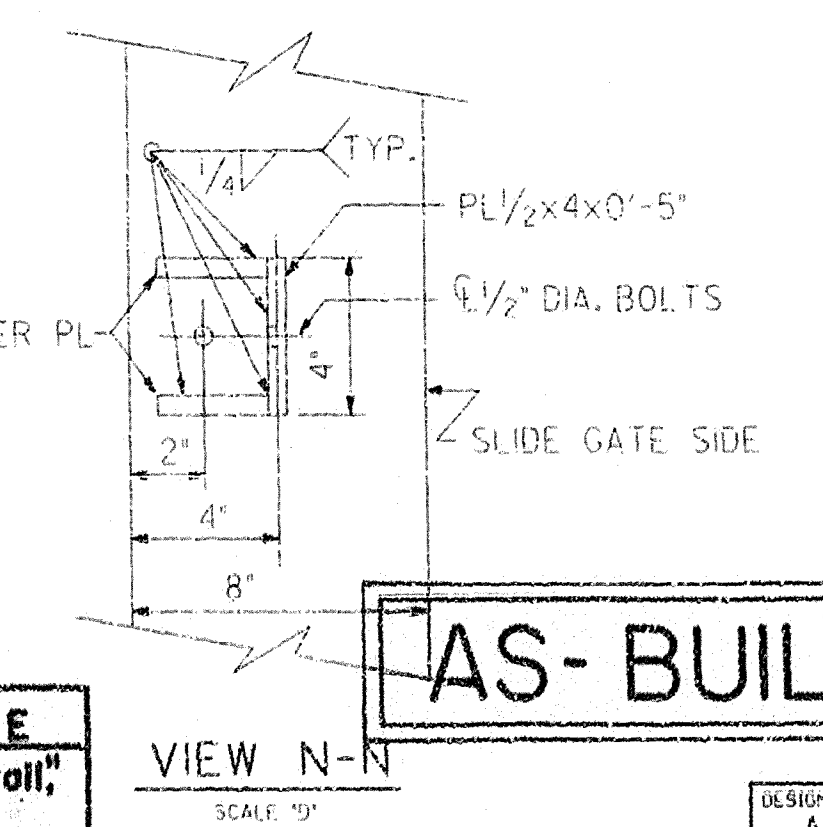
DETAIL "C"
SCALE: 'D'



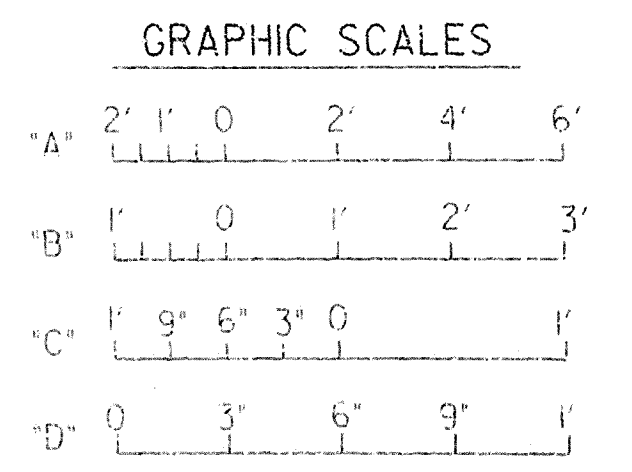
DETAIL "B"
SCALE: 'D'



VIEW R-R
SCALE: 'D'



VIEW N-N
SCALE: 'D'



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN STRUCTURE 259 AND MODIFICATIONS TO PS-5, S-96C, S-96D AND S-16IA STRUCTURE 259 OPERATING PLATFORM SLIDE GATE AND STAFF GAGE DETAILS			
DESIGN ENG. A.C.K.	CHKD. BY H.R.D.	DATE MAY 1992	DRAWING NO. 2/10
SCALE AS SHOWN	DATE	SHEET 13 OF 29	

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

AS-BUILT

EXHIBIT 1 — STATEMENT OF WORK
**INSTALL 58-INCH DIAMETER FLAP GATE
UPPER ST. JOHNS RIVER BASIN**

I. INTRODUCTION

The St. Johns River Water Management District (District) comprises all or part of 18 counties starting at the Florida/Georgia border (Nassau County) down to Vero Beach (Indian River County) and from the Atlantic Ocean to Interstate 75 and south through Orlando. The District is a local sponsor for the US Army Corps of Engineers (USACE) federal flood control projects within the District's boundaries and conducts water control operations throughout many of these counties. USACE requires inspection of all underwater structures within federal flood control levees every five years.

One of these water control structures is S-259 (see attached location map). This structure is comprised of two (2) 72-inch CMP gated pipes connecting a pump station on private property east of L-75 with the St. Johns Water Management Area (SJWMA, aka Stick Marsh). The southern pipe was equipped with a flap gate and the northern pipe was equipped with a screw gate. In 2017, the two CMP pipes were slip lined utilizing a 60-inch HDPE pipe for the liner. In May 2020, the screw gate became unattached from the pipe and was been removed from the water body. Because the operation schedule has changed, the District prefers to install a flap gate on this pipe instead of reinstalling the screw gate.

II. OBJECTIVE

The objective of this work order is to install a new 58-inch diameter aluminum flap gate to the ~~southern~~ **northern** pipe (see attached construction drawing).

III. SCOPE OF WORK

The scope of work generally includes fabricating a new 58-inch diameter aluminum flap gate and pipe sleeve, install the new flap gate and aluminum into the existing 60-inch HDPE pipe (underwater) and all ancillary items to complete the work. The end of the culvert is torn and fatigued. There is also an accumulation of grout at the end of the culvert that needs to be chipped away.

IV. TASK IDENTIFICATION

Contractor's Responsibilities:

- Coordinate project with District staff 48 hours in advance of mobilizing to site.
- Mobilize equipment, labor (including alligator trapping services and diving services) and all materials necessary to complete the work.
- Prepare shop drawings of proposed repair per the attached construction drawing. Shop drawing shall include detailed installation plan. Schematic and plan to be approved by District prior to installation.
- Prepare existing pipe (as necessary) to receive new flap gate and ensure flap gate closes tightly, including removing grout from in front of existing pipe.
- Supply and install new aluminum flap gate and aluminum sleeve.
- The sleeve will be installed and mechanically fastened with stainless steel hardware to the inside the existing 60" HDPE slip liner. The repair sleeve will also be grouted to provide a leak free seal between the HDPE liner and the aluminum repair sleeve.
- A structural member (by contractor) will be attached to the walkway piles just above the culvert to restrain uplift.
- Install and fasten a new ½" stainless steel chain from bottom of flap gate to walkway above.
- Once work is complete, inspect both flap gates to ensure gates properly operate and close tightly and free of any debris/grout.