

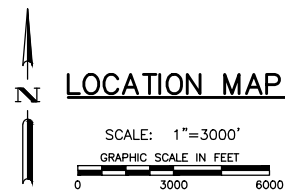
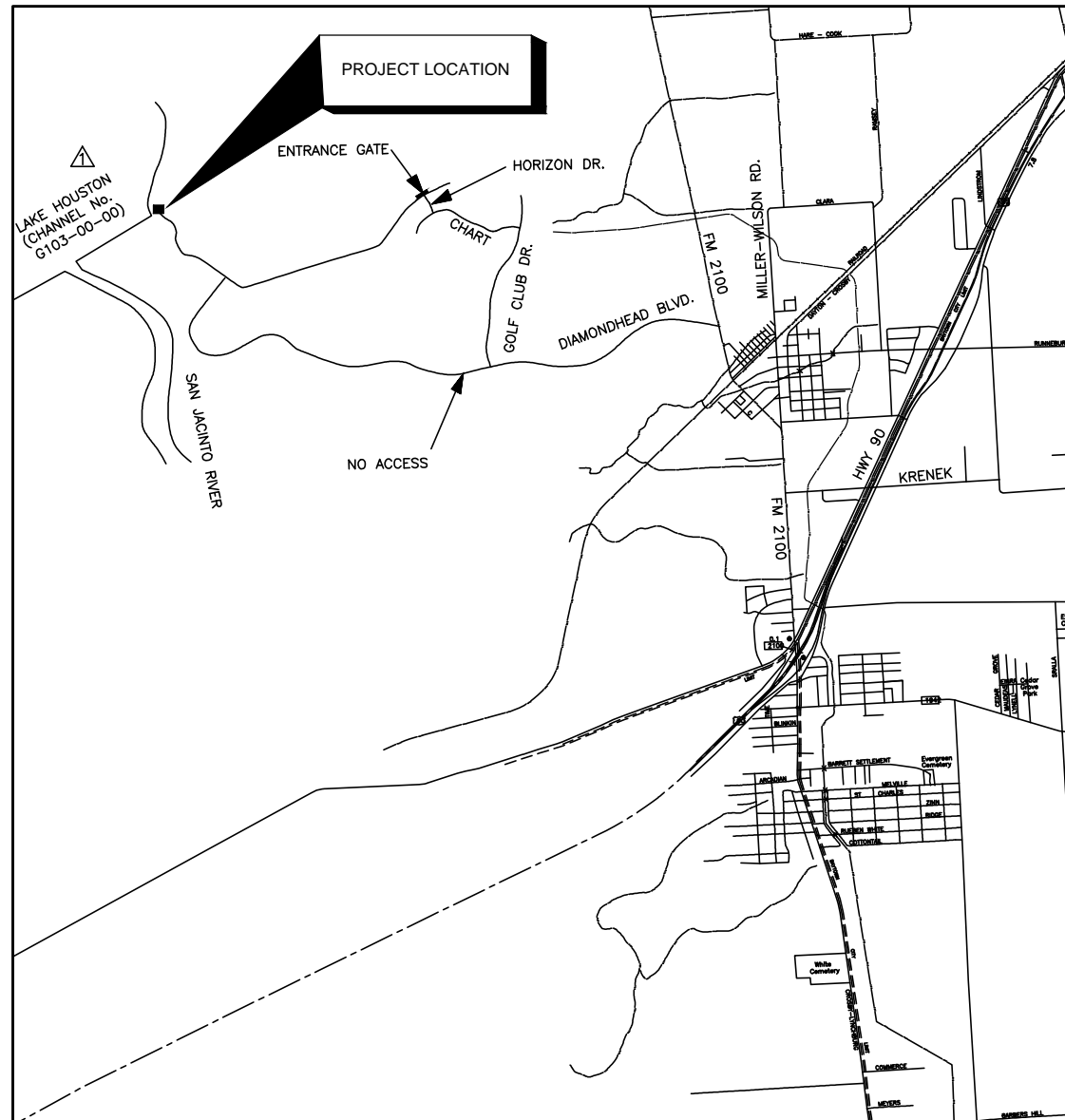
# SAN JACINTO RIVER AUTHORITY

## HIGHLANDS DIVISION

### LAKE HOUSTON PUMP STATION SCREEN CHANNEL REHABILITATION

#### RFP NO. 20-0061

#### CONTRACT NO. 20-0061



## RFP SUBMITTAL

### DIRECTORS

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RONALD W. "RONNIE" ANDERSON	VICE PRESIDENT
JAMES C. "JIM" ALEXANDER	DIRECTOR
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KAAREN CAMBIO	SECRETARY
BRENDA COOPER	DIRECTOR

**GENERAL MANAGER: JACE A. HOUSTON**

### SHEET INDEX

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### GENERAL NOTES

- THE FOLLOWING NOTES ARE GENERAL AND APPLY TO ALL SHEETS OF THESE CONSTRUCTION DRAWINGS AS IF THEY WERE WRITTEN ENTIRELY ON EACH SHEET.
- SCALES NOTED ON DRAWINGS ARE ASSOCIATED WITH HALF SIZE DRAWINGS (11-IN X 17-IN).
- CONTRACTOR SHALL COORDINATE ALL WORK, RFIs, AND FIELD CHANGES WITH THE CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL PROVIDE NECESSARY EQUIPMENT TO PROTECT EXISTING STRUCTURES, PIPES AND FACILITIES, WHETHER OR NOT INDICATED ON THE DRAWINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SECURITY TO PROTECT HIS/HER PROPERTY, EQUIPMENT, WORK IN PROGRESS AND COMPLETED WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING HIS/HER PROPERTY, EQUIPMENT, WORK IN PROGRESS AND COMPLETED WORK FROM ALL WEATHER CONDITIONS AT NO ADDITIONAL COST TO SJRA.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE SAFETY OF HIS/HER LABORERS (INCLUSIVE OF ALL SUB-CONTRACTORS) FOR THE ENTIRE DURATION OF THE PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP OF THE SITE AND ADJOINING ACCESS ROADS DURING ALL ASPECTS OF THE CONSTRUCTION. SITE AND IMPACTED ACCESS ROADS SHALL BE CLEAR OF TRASH AT THE END OF CONSTRUCTION EVERY DAY. ALL ACCESS ROADS TO BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO COST TO SJRA UPON COMPLETION OF THE PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING STRUCTURES, UTILITIES, TREES, SHRUBS, FENCES, AND OTHER ADJOINING FACILITIES, AND SHALL REPAIR OR REPLACE TO ORIGINAL OR BETTER CONDITION IF DAMAGE IS CAUSED BY CONTRACTOR AT NO COST TO OWNER. SOME DIMENSIONS AND ELEVATIONS RELATED TO EXISTING STRUCTURES WERE OBTAINED FROM PREVIOUS SURVEYS AND CONSTRUCTION/RECORD DRAWINGS. ALL EXISTING DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE AND PRINCIPAL ARCHITECT/ENGINEER IF THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH WORK.
- OBTAIN AND COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL PERMITS AND APPROVALS, WITH ASSISTANCE FROM PRINCIPAL ARCHITECT/ENGINEER AND OWNER'S REPRESENTATIVE, IF NECESSARY.



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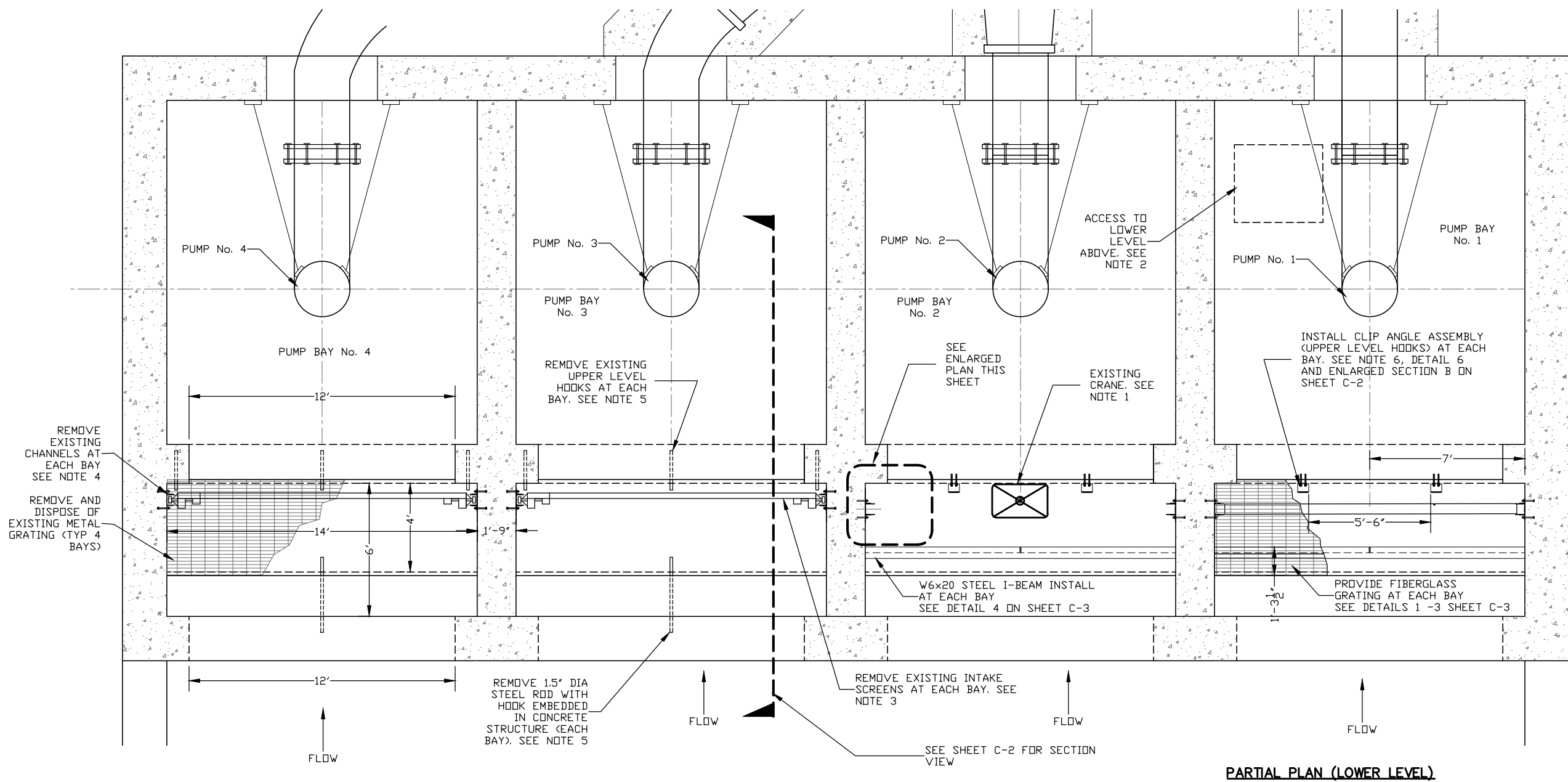
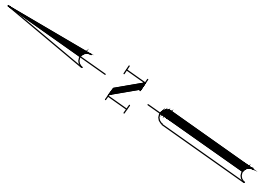


5-27-20

COVER

SHEET  
SEQ.

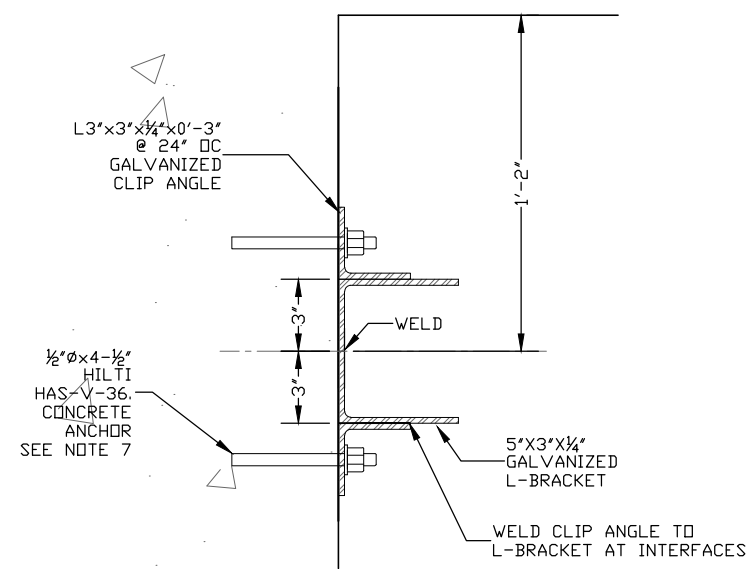
1 OF 5



**PARTIAL PLAN (LOWER LEVEL)**  
SCALE: 3/8"=1'-0"

**NOTES:**

1. CONTRACTOR MAY USE EXISTING CRANE FOR CHANNEL REMOVAL AND INSTALLATION. COORDINATE WITH SJRA ON CRANE OPERATION AND USE.
2. ACCESS TO LOWER LEVEL IS THROUGH AN OPEN ACCESS FROM THE UPPER LEVEL (GROUND) DOWN A SHIPS LADDER. SEE PHOTOGRAPH NO. 1 FOR PICTURE OF SHIPS LADDER ACCESS.
3. CONTRACTOR TO REMOVE A TOTAL OF FOUR (4) EXISTING INTAKE SCREENS, HAUL OFF AND DISPOSE. DO NOT REMOVE SCREENS IF ASSOCIATED PUMP IS IN OPERATION. PHASE SCREEN REMOVAL WITH CHANNEL INSTALLATION. EXISTING INTAKE SCREENS NOT SHOWN IN PUMP BAYS No. 1 AND No. 2 FOR CLARITY. CONTRACTOR TO ASSEMBLE AND INSTALL OWNER PROVIDED NEW INTAKE SCREENS AFTER CHANNEL INSTALLATION. REFER TO SPECIFICATION SECTION 01 14 19 - USE OF PREMISES.
4. CONTRACTOR TO REMOVE A TOTAL OF EIGHT (8) EXISTING INTAKE SCREEN CHANNELS (TWO PER BAY), HAUL OFF AND DISPOSE. DO NOT PERFORM CHANNEL REMOVAL WORK IF ASSOCIATED PUMP IS IN OPERATION. AFTER REMOVAL OF CHANNELS, BURN OFF END OF ANCHORS SO THAT THEY ARE FLUSH WITH THE FACE OF THE EXISTING CONCRETE WALL. APPLY EPOXY COATING OVER END OF BURNED OFF ANCHORS PRIOR TO INSTALLATION OF NEW CHANNELS. EXISTING INTAKE SCREEN CHANNELS NOT SHOWN IN PUMP BAYS No. 1 AND No. 2 FOR CLARITY.
5. CONTRACTOR TO REMOVE EXISTING HOOKS AT EACH BAY. BURN OFF END OF HOOKS SO THAT THEY ARE FLUSH WITH THE FACE OF THE EXISTING CONCRETE WALL. APPLY EPOXY COATING OVER END OF BURNED OFF HOOKS. EXISTING HOOKS IN BAYS 1 AND 2 ARE NOT SHOWN FOR CLARITY.
6. INSTALL HOOKS AT UPPER LEVEL AS SHOWN IN EACH BAY. SEE SECTION ON SHEET C-2 FOR INSTALLATION. HOOKS IN BAYS 3 AND 4 ARE NOT SHOWN FOR CLARITY.
7. INSTALL HILTI GALVANIZED ANCHORS WITH HIT-RE 500V3 EPOXY AT 24" OC. SEE SPECIFICATION SECTION 05 50 00 - METAL FABRICATIONS.
8. CONTRACTOR TO VERIFY BOTTOM WIDTH OF EACH BAY PRIOR TO CHANNEL INSTALLATION. DO NOT INSTALL CHANNELS UNTIL WIDTH OF BAY HAS BEEN VERIFIED AND CONFIRMED WITH OWNER AND OWNER'S REPRESENTATIVE.



**ENLARGED PLAN**  
SCALE: 3"=1'-0"



**PHOTOGRAPH 1**



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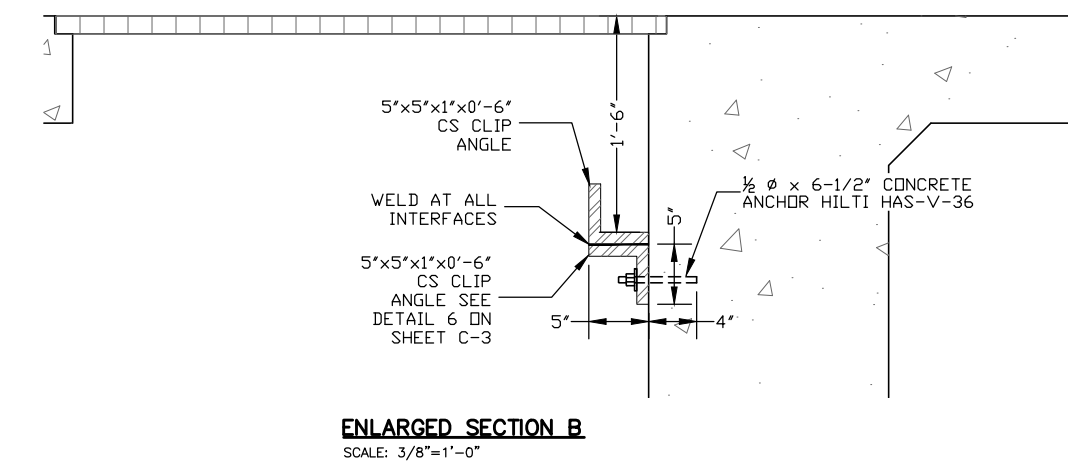
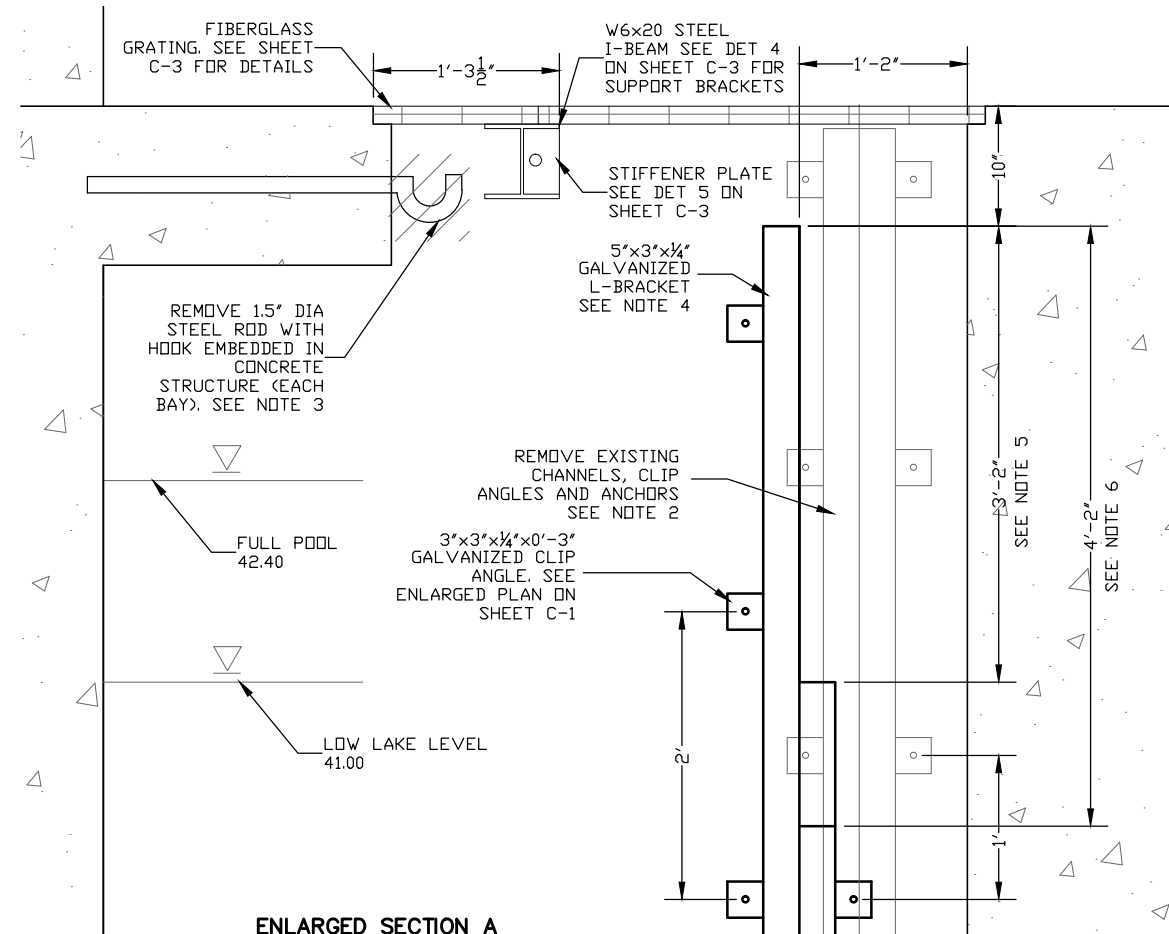
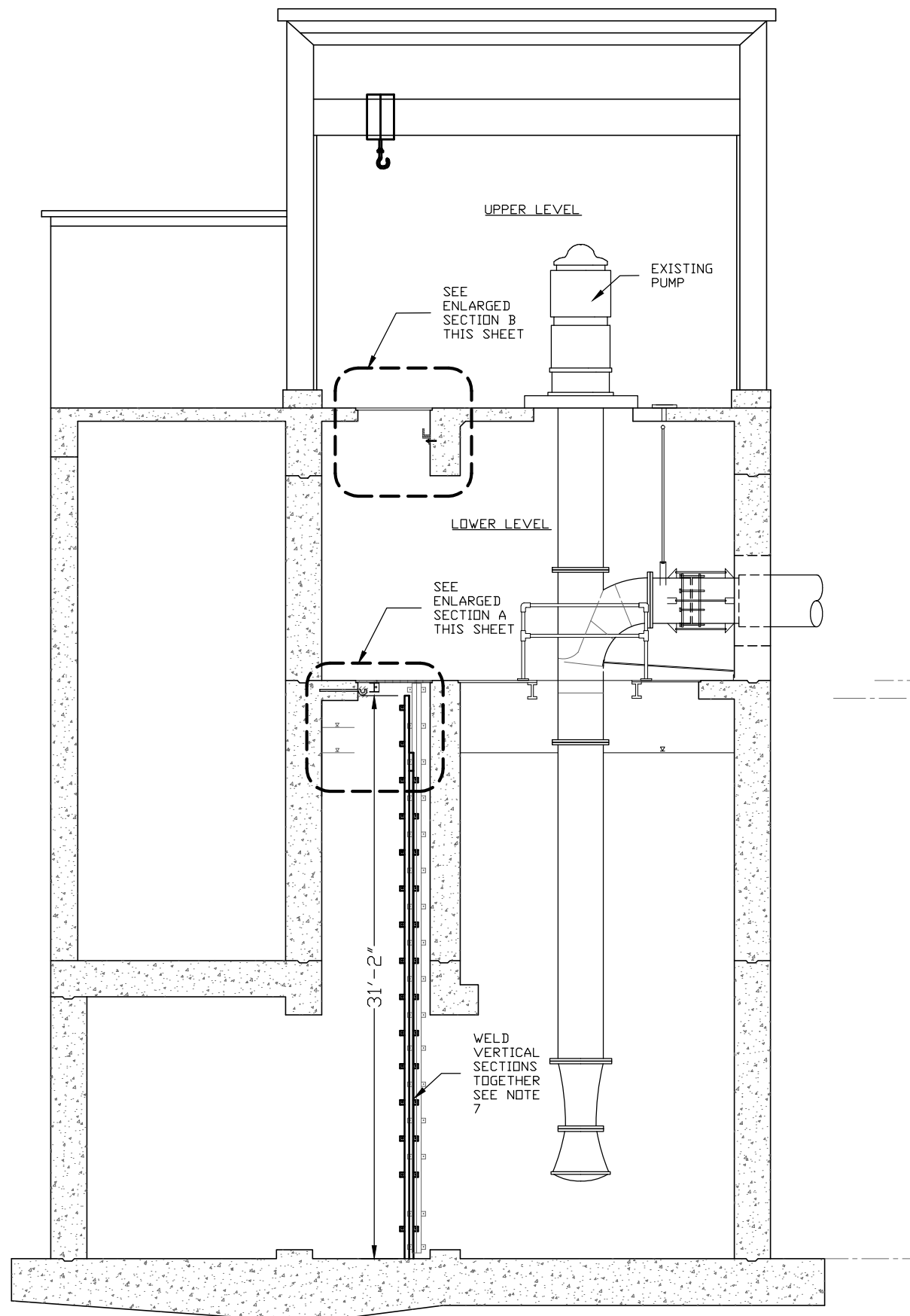
**LAKE HOUSTON PUMP STATION**  
SCREEN CHANNEL REHABILITATION

ISSUE	DATE	DESCRIPTION
SJRA PROJECT NO: HDPR0026.1007.2C001		
FILE NAME:		
DRAWN BY: VF		
CHECKED BY:		
SCALE:		AS SHOWN

**PLAN**

SHEET **C-1**  
SEQ. 2 OF 5

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**NOTES:**

1. CONTRACTOR MAY USE EXISTING CRANE FOR CHANNEL REMOVAL AND INSTALLATION. COORDINATE WITH SJRA ON CRANE OPERATION AND USE.
2. CONTRACTOR TO REMOVE A TOTAL OF EIGHT (8) EXISTING INTAKE SCREEN CHANNELS (TWO PER BAY), HAUL OFF AND DISPOSE. DO NOT PERFORM CHANNEL REMOVAL WORK IF ASSOCIATED PUMP IS IN OPERATION. AFTER REMOVAL OF CHANNELS, BURN OFF END OF ANCHORS SO THAT THEY ARE FLUSH WITH THE FACE OF THE EXISTING CONCRETE WALL. APPLY EPOXY COATING OVER END OF BURNED OFF ANCHORS PRIOR TO INSTALLATION OF NEW CHANNELS.
3. CONTRACTOR TO REMOVE EXISTING HOOKS AT EACH BAY. BURN OFF END OF HOOKS SO THAT THEY ARE FLUSH WITH THE FACE OF THE EXISTING CONCRETE WALL. APPLY EPOXY COATING OVER END OF BURNED OFF HOOKS.
4. PROVIDE A SMOOTH CONCRETE SURFACE FOR MOUNTING CHANNELS. REPAIR ALL SURFACE DEFECTS ACCORDING TO SPECIFICATION SECTION 03 31 32 - CONCRETE FINISHING AND REPAIRING OF SURFACE DEFECTS PRIOR TO NEW CHANNEL INSTALLATION.
5. DIMENSION SHOWN IS APPLICABLE TO CHANNELS TO BE INSTALLED IN BAYS NO. 2 AND 3.
6. DIMENSION SHOWN IS APPLICABLE TO CHANNELS TO BE INSTALLED IN BAYS NO. 1 AND 4.
7. WELD SECTIONS TOGETHER AND REPAIR GALVANIZED COATING PRIOR TO INSTALLING CHANNELS UNDER WATER. PROVIDE A SMOOTH TRANSITION BETWEEN WELDED SECTIONS.



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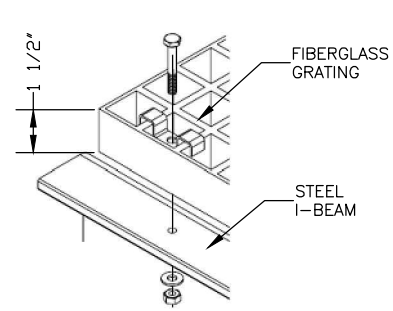
LAKE HOUSTON PUMP  
STATION  
SCREEN CHANNEL  
REHABILITATION

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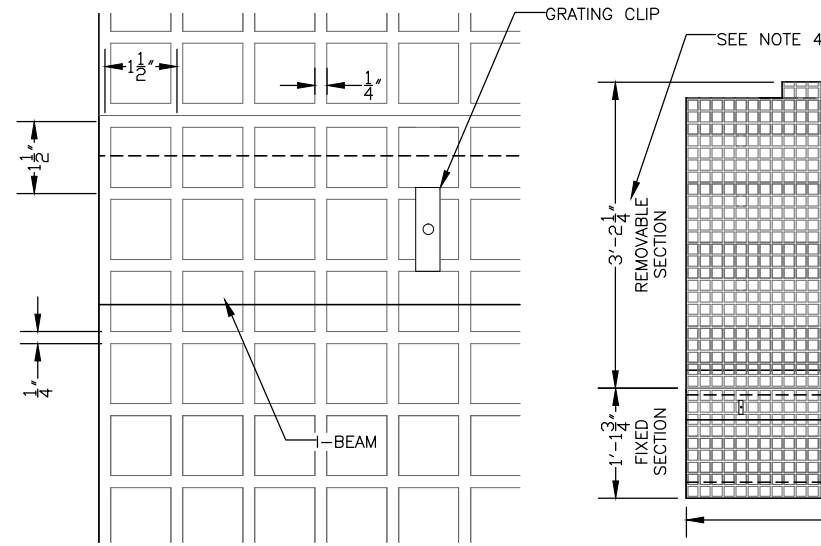
**SECTION**

SHEET **C-2**  
SEQ. 3 OF 5

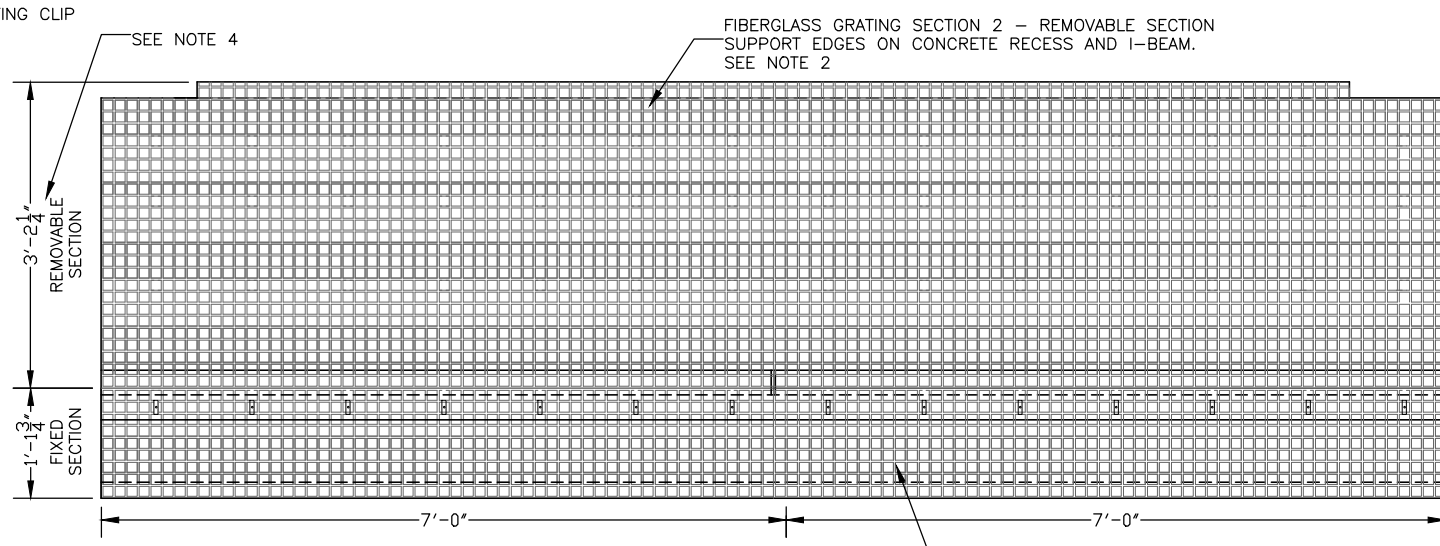
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**DETAIL 1 - GRATING CLIP ATTACHMENT**  
NTS



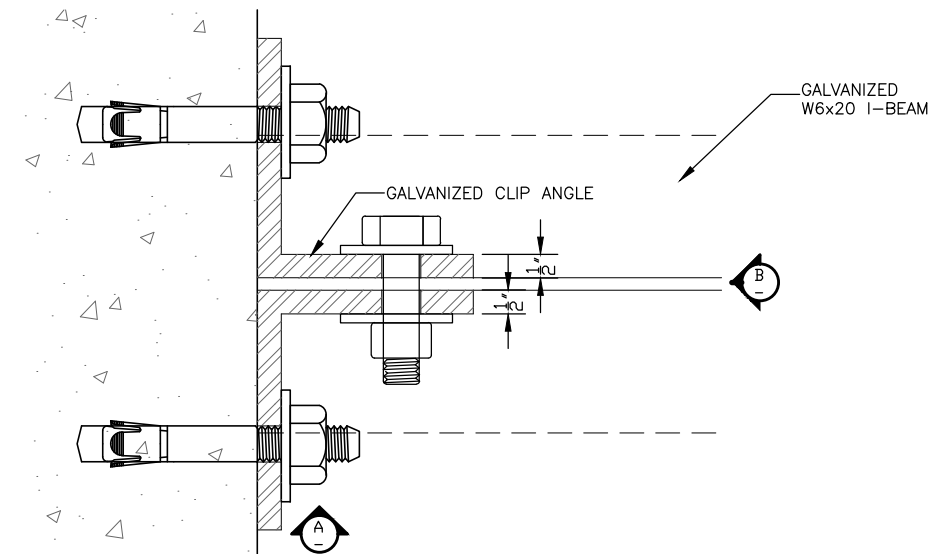
**DETAIL 2 - FIBERGLASS GRATING MESH SPACING**  
SCALE: 6"=1'-0"



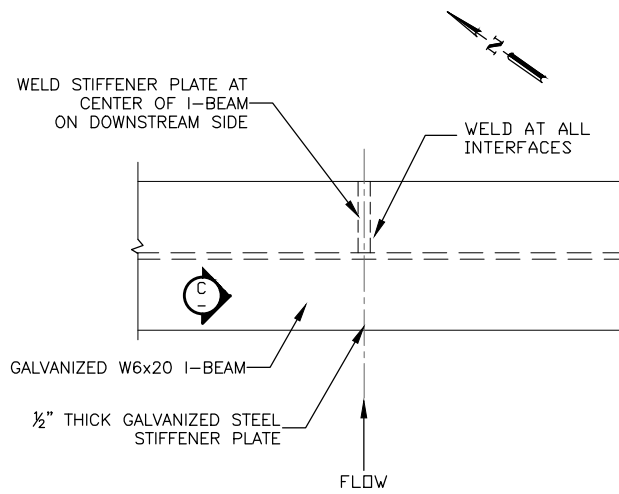
**DETAIL 3 - FIBERGLASS GRATING PANELS**  
SCALE: 1"=1'-0"

**NOTES:**

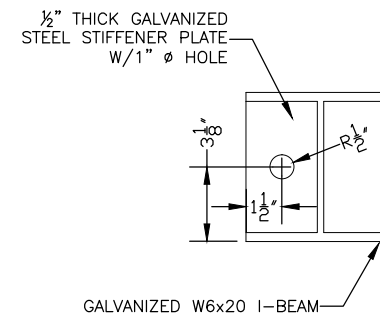
1. MOUNT I-BEAM AND CLIP ANGLES SUCH THAT THE TOP OF THE SAFETY GRATING IS FLUSH WITH THE ADJACENT FLOOR ELEVATION.
2. PROVIDE AND INSTALL FIBERGLASS PANELS IN EACH BAY IN TWO MOUNTING CONFIGURATIONS: SECTION 1- PROVIDE TWO (2) PANELS FIXED WITH CLIPS ATTACHED TO 1 BEAM AND SECTION 2 -PROVIDE TWO (2) REMOVABLE PANELS.
3. DRILL HOLES AS REQUIRED IN EACH I-BEAM (TOTAL OF 4 BAYS) TO ATTACH GRATING CLIPS.
4. CONTRACTOR TO VERIFY OPENING SIZE AND GRATING DIMENSIONS PRIOR TO CUTTING AND/OR INSTALLATION.



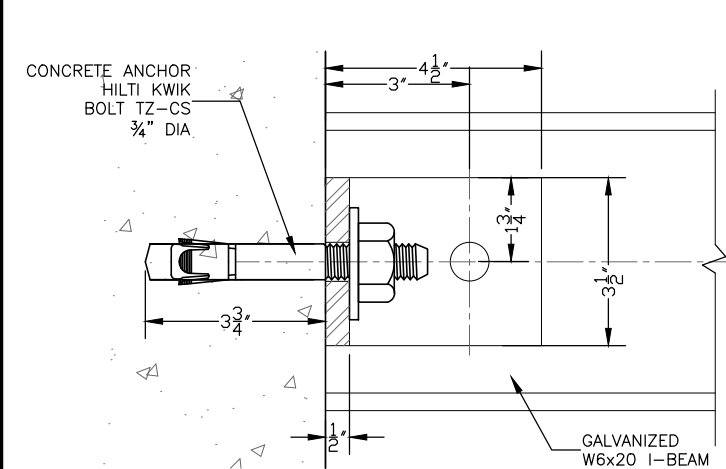
**DETAIL 4 - I-BEAM ATTACHMENT TO CONCRETE (PLAN VIEW)**  
6"=1'-0"



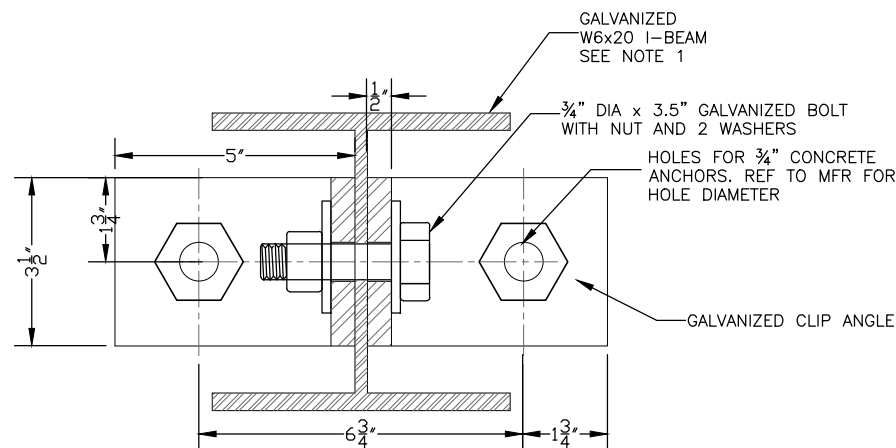
**DETAIL 5 - I-BEAM STIFFENER PLATE (PLAN VIEW)**  
3" = 1'-0"



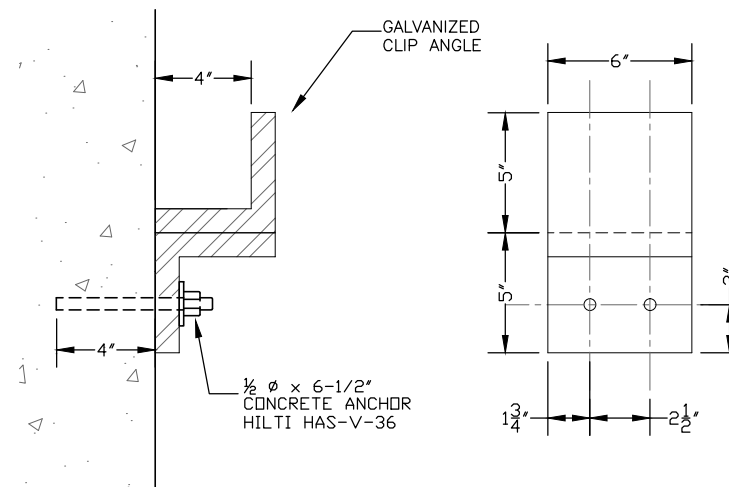
**SECTION C**  
3" = 1'-0"



**SECTION A**  
6"=1'-0"



**SECTION B**  
6"=1'-0"



**DETAIL 6 - UPPER LEVEL HOOKS**  
3" = 1'-0"



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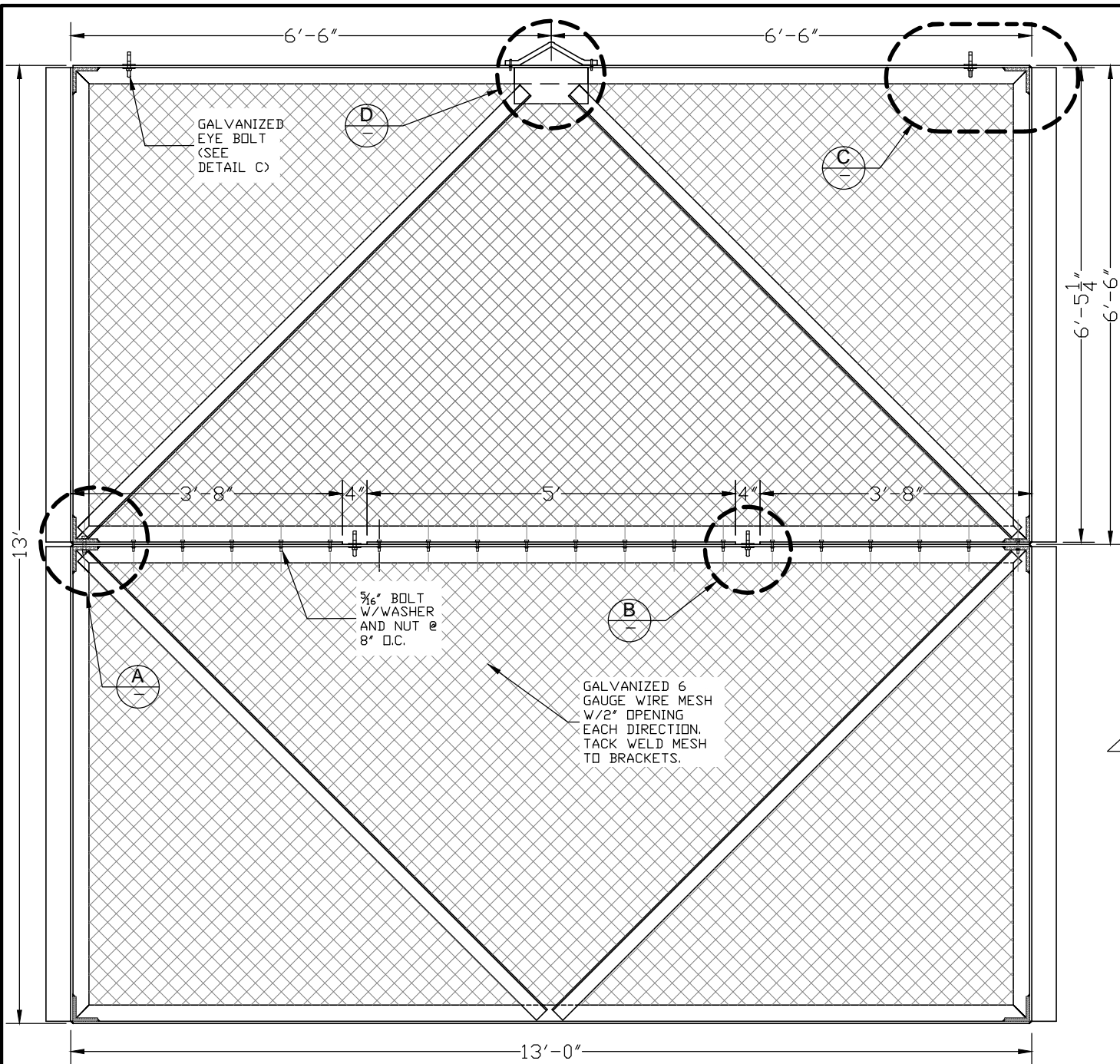
LAKE HOUSTON PUMP  
STATION  
SCREEN CHANNEL  
REHABILITATION

ISSUE	DATE	DESCRIPTION
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DRAWN BY:	VF	
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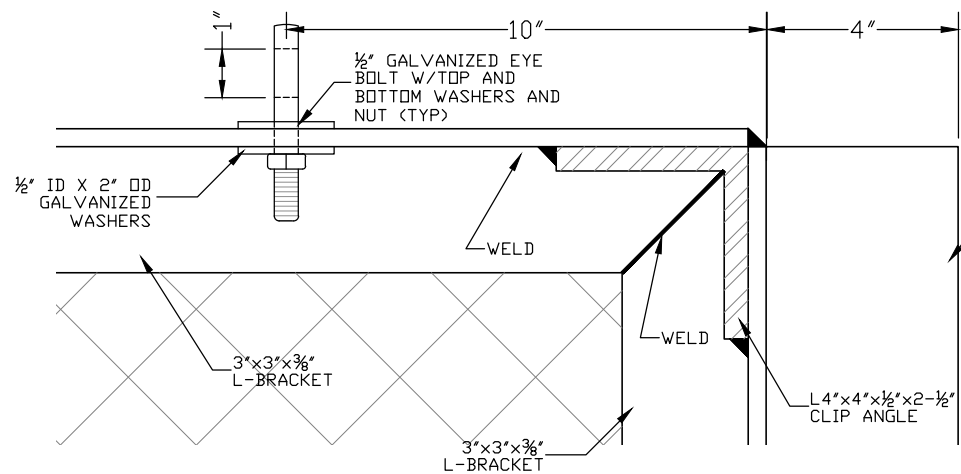
**DETAILS**

SHEET **C-3**  
SEQ. 4 OF 5

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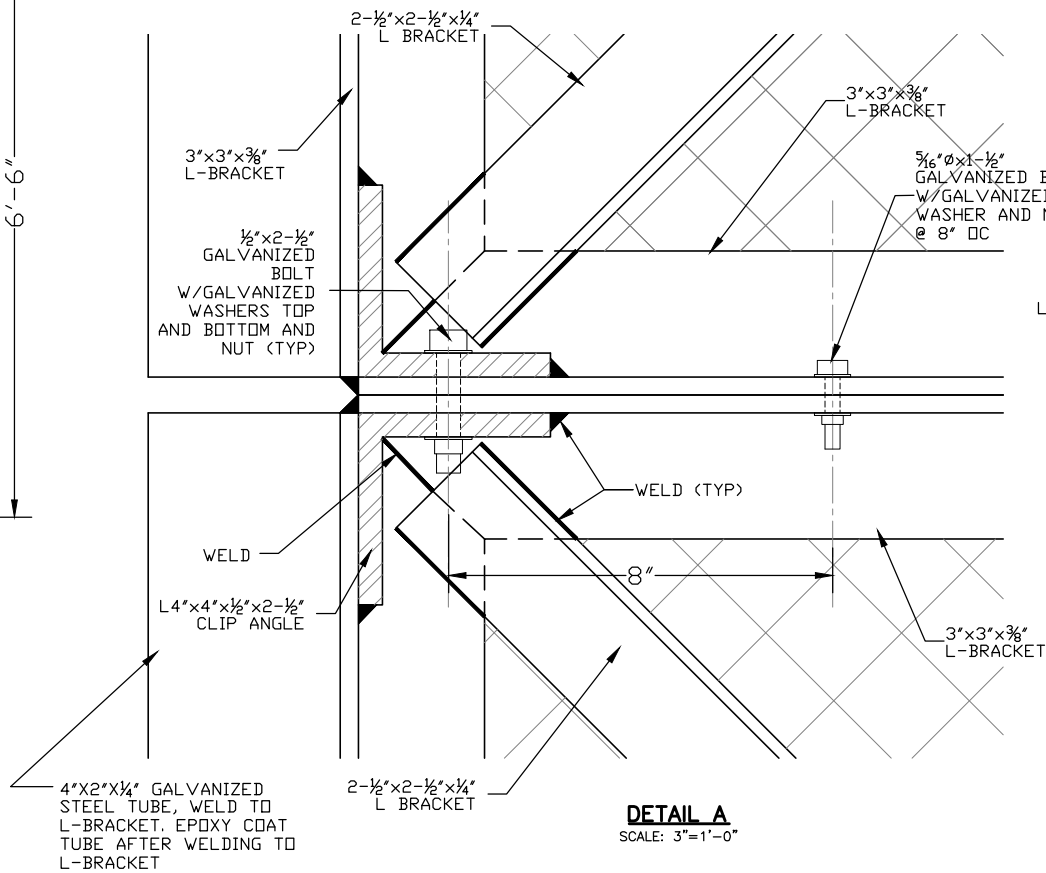


**INTAKE SCREEN ELEVATION  
(VIEW FACING DOWNSTREAM)**  
SCALE: 1/2"=1'-0"

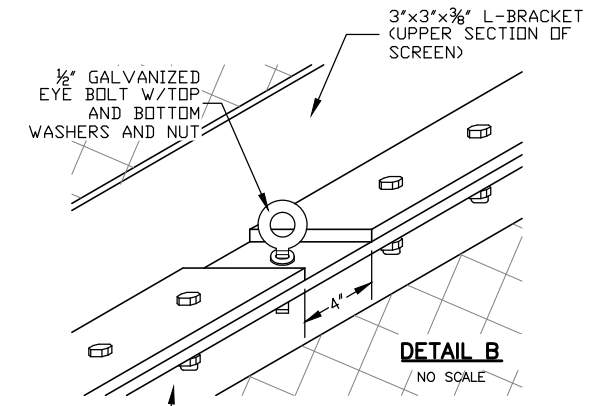


**DETAIL C**  
SCALE: 3"=1'-0"

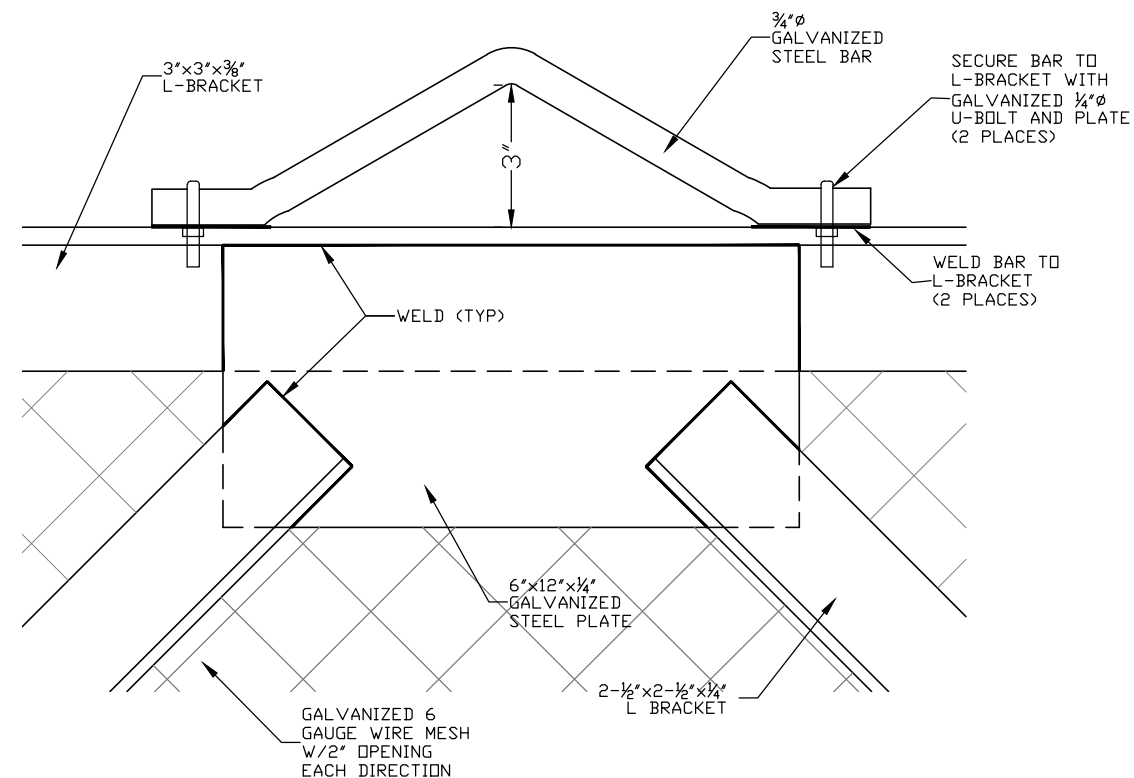
DRAWING IS INCLUDED FOR REFERENCE ONLY. SCREENS TO BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. SCREENS ARE STORED ON SITE IN TWO SEPARATE PIECES. CONTRACTOR IS RESPONSIBLE FOR MOVING THE SCREENS INSIDE PUMP STATION, ASSEMBLE, AND INSTALL IN NEW CHANNELS.



**DETAIL A**  
SCALE: 3"=1'-0"



**DETAIL B**  
NO SCALE



**DETAIL D**  
SCALE: 3"=1'-0"



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**LAKE HOUSTON PUMP  
STATION  
SCREEN CHANNEL  
REHABILITATION**

ISSUE	DATE	DESCRIPTION
SURA PROJECT NO: HDPR0026.1007.2C001		
FILE NAME:		
DRAWN BY: VF		
CHECKED BY:		
SCALE:		AS SHOWN

**INTAKE  
SCREENS**

SHEET **C-4**  
SEQ. 2 OF 5

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