

CIVIL CONSTRUCTION PLANS FOR:

# LIFT STATION DIESEL BYPASS PUMP INSTALLATION

PREPARED FOR:  
**CITY OF MEXICO BEACH**  
**BAY COUNTY**  
**FLORIDA**



CITY OF MEXICO BEACH

- Al Cathey, Mayor
  - Jerry Smith
  - Bobby Pollock
  - Adrian Welle
  - Richard Wolff
  - Doug Baber
- City Administrator



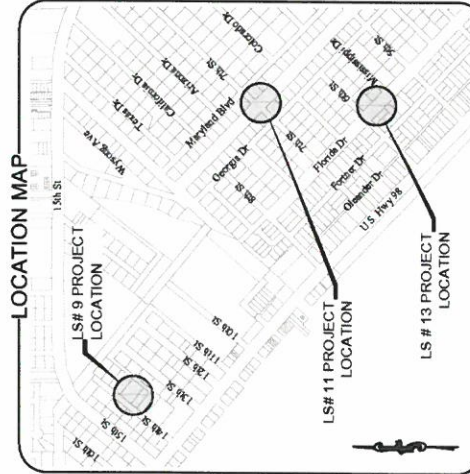
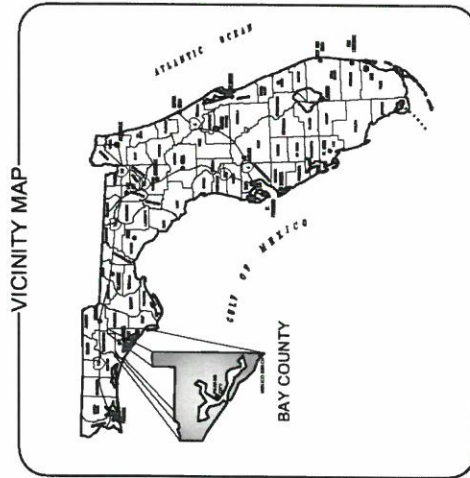
**BID PURPOSES ONLY**  
**NOT FOR CONSTRUCTION**

PREPARED BY:  
**Dewberry**  
 203 Aberdeen Pkwy, Panama City, FL 32405  
 (850) 522-0844  
 EB 0008794

PROJECT NUMBER - 50112881

MAY 2022

NO.	DATE	REVISION DESCRIPTION	PREPARED BY	APPROVED BY



**DRAWING INDEX**

TITLE	NO.
COVER	1
GENERAL NOTES	C1
LIFT STATION #9	C2
LIFT STATION #11	C3
LIFT STATION #14	C4-C5
DETAILS	C6
MOT	



**UTILITY GENERAL NOTES:**

1. ALL MAINS SHALL BE INSTALLED ACCORDING TO ENGINEERING PLANS AND SPECIFICATIONS.
2. ALL UTILITY WORK (WATER, SEWER, RECLAIMED WATER, IRRIGATION) MUST BE IN PLACE PRIOR TO PAVING OPERATIONS.
3. ALL VALVES AND MATERIALS SHALL COMPLY WITH AWWA (AMERICAN WATER WORKS ASSOCIATION) STANDARDS, LATEST EDITION.
4. ALL MAIN LINE VALVES SHALL BE RESILIENT SEATED GATE VALVES.
5. THE CONTRACTOR WILL BE REQUIRED TO REMOVE AND REPLACE ITEMS ENCOUNTERED IN THE FIELD, I.E. SIGNS, FENCING, POST, ETC..
6. MAINS SHALL HAVE A MINIMUM OF 36" COVER UNLESS APPROVED BY ENGINEER.
7. CONTRACTOR IS TO FURNISH "AS BUILT PLANS" INDICATING LOCATIONS OF ALL FITTINGS, VALVES, AND DEAD END RUNS WITH THREE (3) PHYSICAL FEATURES (LOT CORNERS, TREES, ETC.)
8. ALL FORCE MAINS, PRESSURE TESTING SHALL BE IN ACCORDANCE WITH AWWA C600 AND CITY OF MEXICO BEACH STANDARDS.
9. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ENGINEER 48 HOURS PRIOR TO PRESSURE TESTING, DISINFECTION, AND BACTERIOLOGICAL TESTING. PRESSURE TESTING SHALL BE VALVE TO VALVE. CONTRACTOR SHALL USE 2" AIR RELEASE VALVE PORTS OR SHALL TAP THE WATER MAIN WITH A 1" TAPPING SADDLE.
10. BASE AND BACKFILL MATERIALS SHALL BE EITHER OF THE SAME TYPE AND COMPOSITION AS THE MATERIALS REMOVED, OR OF EQUAL OR GREATER STRUCTURAL ADEQUACY. MATERIALS CONTAMINATED WITH DELETERIOUS SUBSTANCES DURING EXCAVATION SHALL NOT BE USED FOR FILL.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FITTINGS, TAPS, EQUIPMENT FOR BY-PASS PUMPING, EQUIPMENT AS REQUIRED FOR FLUSHING SYSTEM, PRESSURE TESTING, DISINFECTION, AND BACTERIOLOGICAL TESTING.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF EXISTING UTILITIES, AND TO DETERMINE IF OTHER UTILITIES WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK, AND TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION.
13. UTILITIES SHOWN ON THE PLAN MAY NOT BE ACCURATE AND ALL UTILITIES MAY NOT BE SHOWN.
14. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION.
15. ALL VALVE BOXES SHALL BE INSTALLED PER DETAIL SHOWN. PRE-CAST VALVE PADS SHALL NOT BE USED. ALL VALVE BOX RISERS SHALL BE DUCTILE IRON, NOT PVC.
16. ALL PAVEMENT SHALL BE CUT AND PATCHED IN ACCORDANCE WITH ENGINEERING PLANS AND SPECIFICATIONS.
17. ALL CONCRETE ENCASED DUCTILE IRON SHALL BE WRAPPED WITH A PLASTIC MATERIAL AND TAPED TOGETHER BEFORE CONCRETE IS PLACED AROUND THE PIPE.
18. WHERE THERE IS LESS THAN 12" CLEARANCE BETWEEN PVC/DI PIPE AND OTHER PIPE OR SPECIFIED AREAS, THE PIPE SHALL BE ENCASED WITH 6" THICKNESS AROUND THE PIPE AND 6" CLEARANCE EACH WAY IN THE AXIAL DIRECTION.
19. THE CONTRACTOR SHALL REMOVE AND REPLACE, TO THEIR ORIGINAL NATURE, ALL DISTURBED MATERIALS OR OBJECTS WITHIN THE PATH OF THE NEW UTILITIES AS NECESSARY. ALL REPLACED MATERIALS SHALL BE EQUAL OR BETTER AND SHALL BE APPROVED BY THE ENGINEER. THIS INCLUDES ALL LANDSCAPING WITHIN THE RIGHT OF WAY IN THE PATH OF THE NEW UTILITIES.
20. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING. THE SURVEY MAY NOT SHOW ALL OBJECTS WITHIN THE PATH OF THE NEW UTILITIES. IF OBJECTS ARE NOT SHOWN ON THE SURVEY, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHIN 7 DAYS PRIOR TO THE BID DATE. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ALL OBJECTS NOT SHOWN ON THE SURVEY.
21. ALL SPOIL MATERIAL SHALL BE PLACED ON THE UPLAND SIDE OF ANY SLOPED CONSTRUCTION AREA.
22. THE CONTRACTOR SHALL USE RESTRAINED JOINT PIPE FOR ALL BENDS, TEES, VALVES, AND TRANSITION FITTINGS.
23. INSULATED 12 GA. LOCATING WIRE SHALL BE INSTALLED ON TOP OF ALL NON-METALIC PIPE, WHICH INCLUDES SERVICE CONNECTIONS. ALL LOCATING WIRE SHALL BE CONNECTED AND SHALL TERMINATE IN VALVE BOXES AND METER BOXES AS SHOWN IN THE DETAILS.
24. ALL PIPE SHALL BE INSTALLED IN DRY CONDITIONS. WELL POINTING MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER. WELL POINTS OR SOCK PIPE MAY BE USED.
25. CONTRACTOR SHALL FOLLOW ALL OSHA REQUIREMENTS FOR CONSTRUCTION.
26. THE CONTRACTOR SHALL FOLLOW ALL CONDITIONS OF THE PERMIT REQUIREMENTS. SEE SPECIFICATIONS FOR COPY OF PERMITS.
27. ALL DISTURBED AREAS SHALL BE SODED.
28. A ONE FOOT STRIP OF SOD SHALL BE INSTALLED AROUND ALL ABOVE GROUND CONCRETE STRUCTURES INCLUDING BUT NOT LIMITED TO VALVE PADS, BLOW OFF VAULTS, AND AIR RELEASE VAULTS.
29. CONTRACTOR SHALL PROVIDE ALL FITTINGS, SLEEVES AND TRANSITION ADAPTERS AS NECESSARY TO COMPLETE THIS PROJECT.
30. ALL VALVES 4" AND LARGER SHALL BE EPOXY COATED RESILIENT SEAT GATE VALVES.
31. ALL ABOVE GROUND UTILITIES ARE TO BE SCREENED BY LANDSCAPING.
32. TEMPORARY BY-PASS PUMP SHALL BE CAPABLE TO CONVEY 600 GPM @ 45 FEET TDH. CONTRACTOR SHALL PROVIDE AND MAINTAIN FUEL DURING SEWAGE BY-PASS PUMPING OPERATION.

**EROSION AND SEDIMENT CONTROL NOTES:**

1. CONTRACTOR SHALL STAGE AND TIME CONSTRUCTION TO MINIMIZE THE SIZE OF EXPOSED SOIL AREAS AND THE TIME BETWEEN EXPOSING THE SOIL AREA AND FINISHING THE SOIL AREA. THE CONTRACTOR WILL STABILIZE THE SOIL FOR LONG, NARROW AREAS, AS SOON AS GRADING IS COMPLETE IN AN AREA. THE CONTRACTOR SHALL STABILIZE CONTINUOUSLY DURING GRADING OPERATIONS. ROUGH GRADED AREAS SHOULD BE STABILIZED WITH TEMPORARY EROSION CONTROL. IF FINAL GRADING AND STABILIZATION WILL NOT BE PERFORMED WITHIN FIVE (5) DAYS, FAILURE TO STABILIZE EXPOSED SOIL AREAS IN A TIMELY MANNER AFTER GRADING MAY BE CONSIDERED A VIOLATION OF CHAPTERS 17.3, 17-12, AND/OR 17/26, FLORIDA ADMINISTRATIVE CODE. BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND SUBJECT TO CORRECTIVE ACTION, PURSUANT TO SECTION 403.121-403.161 FLORIDA STATUTES. ALL STABILIZATION MEASURES WILL BE AT THE CONTRACTOR'S SOLE EXPENSE.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING A TASK TO PROVIDE EROSION CONTROL UNLESS ANOTHER PARTY HAS BEEN PREVIOUSLY SPECIFIED AS RESPONSIBLE FOR THE EROSION CONTROL ASSOCIATED WITH THAT TASK. IN THE EVENT ANOTHER PARTY IS RESPONSIBLE FOR EROSION CONTROL, THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR COORDINATION WITH THAT PARTY RESPONSIBLE. IN THE EVENT THAT DAMAGE TO THE CONSTRUCTED ITEM RESULTS ARE DUE TO LACK OF EROSION CONTROL, THE CONTRACTOR SHALL REPAIR OR REPLACE THE ITEM AT NO CHARGE TO THE OWNER.
3. TEMPORARY EROSION CONTROL SHALL CONSIST OF TEMPORARY GRASS, TEMPORARY MULCH, TEMPORARY SOD, ARTIFICIAL COVERINGS, BALED HAY OR STRAW, SILT FENCES, AND TURBIDITY BARRIERS. TEMPORARY EROSION CONTROL SHALL BE IN ACCORDANCE WITH SECTION 104 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS.
4. PERMANENT EROSION CONTROL SHALL BE IN ACCORDANCE WITH SECTIONS 570 AND 575 OF THE FDOT COVERINGS. PERMANENT EROSION CONTROL SHALL BE IN ACCORDANCE WITH SECTIONS 570 AND 575 OF THE FDOT STANDARD SPECIFICATIONS. SEED OR GRASS TYPE SHALL MATCH EXISTING OR BE AS SPECIFIED BY OWNER UNLESS NOTED OTHERWISE.
5. GRASS BY SEEDING SHALL BE IN ACCORDANCE WITH SECTIONS 104, 570, 981, 982, AND 983 OF FDOT STANDARD SPECIFICATIONS. THIS SHALL BE USED ONLY IN AREAS SUBJECT TO LIGHT EROSION SUCH AS FLAT AREAS.
6. GRASS BY HYDRO-SEEDING SHALL BE IN ACCORDANCE WITH SECTIONS 104, 570, 981, 982, AND 983 OF FDOT STANDARD SPECIFICATIONS. HYDRO-SEEDING MAY BE USED FOR FLAT AREAS AND SLOPE SIDES WHICH DO NOT EXCEED 2:1.
7. DRAINAGE DITCHES OR LARGE SWALES MUST HAVE ADDITIONAL PROTECTION BESIDES HYDRO-SEEDING.
8. MULCH AND MULCH SHALL BE IN ACCORDANCE WITH SECTIONS 104, 570, 991, 992, AND 993 OF FDOT STANDARD SPECIFICATIONS. GRASS AND MULCH MAY BE USED IN ALL AREAS EXCEPT LARGE SWALES OR DITCHES. MULCH SHALL BE APPLIED IN ACCORDANCE WITH SECTION 570. SOD SHALL BE IN ACCORDANCE WITH SECTIONS 104, 575, 981, 982, AND 993 OF FDOT STANDARD SPECIFICATIONS. SOD MAY BE USED IN ALL AREAS FOR SLOPES LESS THAN 2:1. SOD SHOULD NOT BE USED ON SLOPES GREATER THAN 1:2 (V:H). EROSION CONTROL BLANKETS WITH GRASS OR OTHER SLOPE STABILIZATION TECHNIQUES SHOULD BE USED ON SLOPES GREATER THAN 1:2. SOD SHALL BE STAGGERED SO AS TO AVOID A CONTINUOUS SEAM. IN AREAS WITH SLOPES 3:1 OR STEEPER, EACH PIECE OF SOD SHALL BE PEGGED WITH SOD PEGS. IN DIFFICULT SOIL CONDITIONS WITH STEEP SLOPES, IT MAY BE NECESSARY TO COVER SOD WITH ARTIFICIAL COVERINGS SUCH AS JUTE MESH UNTIL SOD BECOMES ESTABLISHED.
9. TEMPORARY EROSION CONTROL BY ARTIFICIAL COVERINGS SHALL CONSIST OF STRAW BLANKETS, COCONUT FIBER BLANKETS, POLYESTER BLANKETS, JUTE MESH, AND DRAINAGE FABRICS. MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SEEDING SHALL BE INCLUDED IF MATERIAL REQUIRES VEGETATION TO FUNCTION PROPERLY.
10. THE CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES, SILT FENCE, TURBIDITY BARRIER, OR AS SPECIFIED IN THE CONSTRUCTION DRAWINGS) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND WETLAND OR JURISDICTIONAL AREAS. IF, IN THE OPINION OF THE ENGINEER AND/OR REGULATORY AUTHORITIES, EXCESSIVE QUANTITIES OF MATERIAL ARE TRANSPORTED OFFSITE BY EROSION OR STORM WATER RUNOFF, THE CONTRACTOR SHALL IMPROVE CONDITIONS TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. IN NO CASE SHALL CONSTRUCTION COMMENCE PRIOR TO INSTALLATION OF EROSION CONTROL/SEDIMENTATION BARRIER.
11. CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE.
12. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AREA USING SPRINKLING IRRIGATION OR OTHER ACCEPTABLE METHODS.

**MAINTENANCE:**

1. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETED AND ACCEPTED. THEN MAINTENANCE SHALL BE IN ACCORDANCE WITH SECTION 104 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS OR BAY COUNTY SPECIFICATIONS.
2. SILT FENCES AND TURBIDITY BARRIERS SHALL BE CHECKED DAILY FOR EFFECTIVENESS, BREACHES, AND ROUTINE MAINTENANCE.



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**GENERAL NOTES**  
**LIFT STATION DIESEL BYPASS PUMP INSTALLATION**  
**CITY OF MEXICO BEACH**  
**BAY COUNTY**

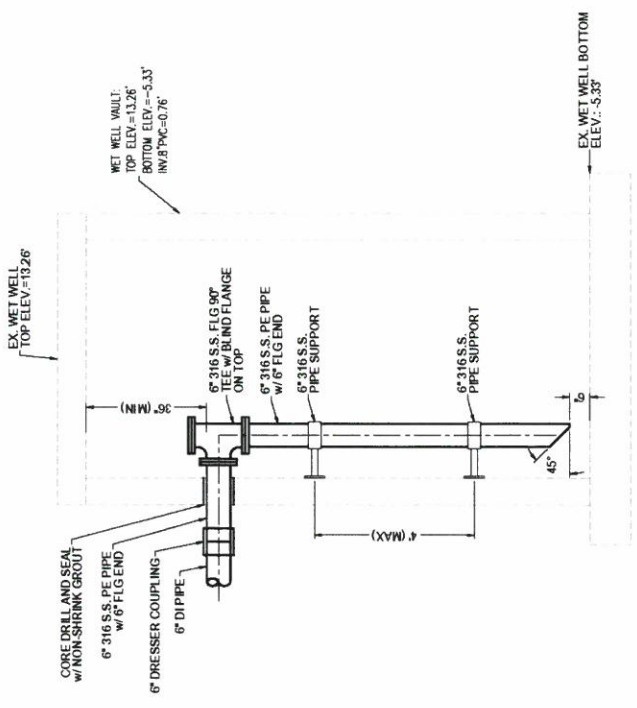
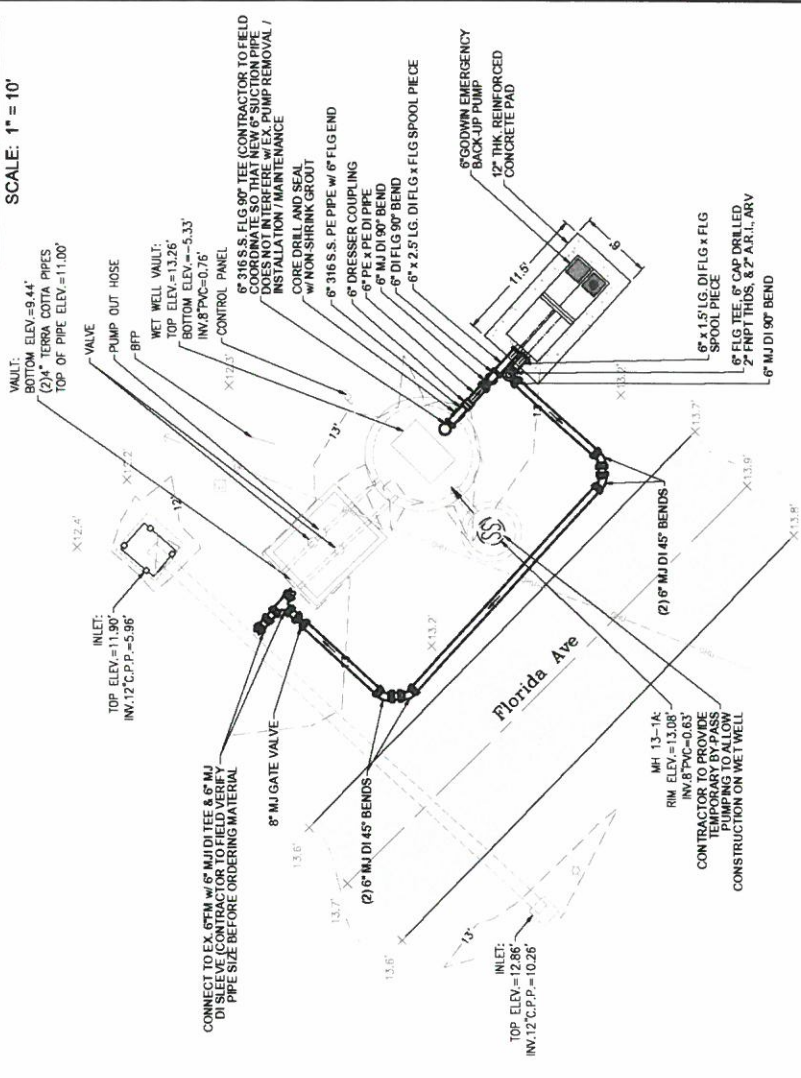
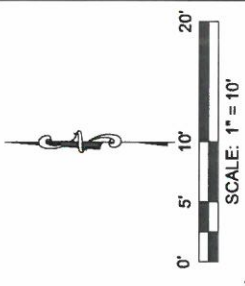
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SCALE	1" = 10'	DRAWN	
BY		CHECKED	
APPROVED		DATE	
		BY	
		PROJECT	
		SHEET	1

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SECTION VIEW  
DETAIL LIFT STATION #13  
SCALE: 1/8\"/>

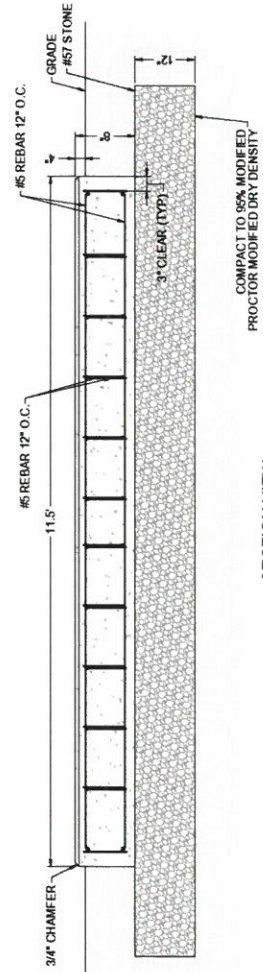
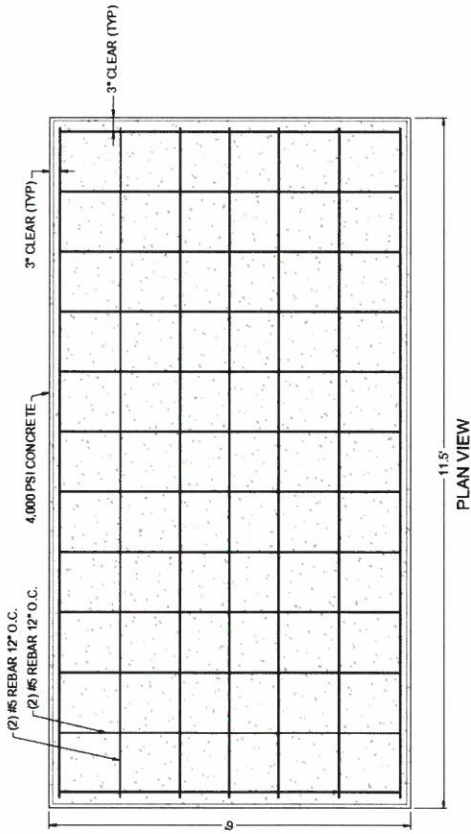
DATE	MAY 2022
PROJECT NO	50112881
SCALE	
COUNTY	BAY
APPROVED	J. FREIERA
SHEET	C3

**LIFT STATION #13**  
LIFT STATION DIESEL BYPASS PUMP INSTALLATION  
CITY OF MEXICO BEACH  
BAY COUNTY

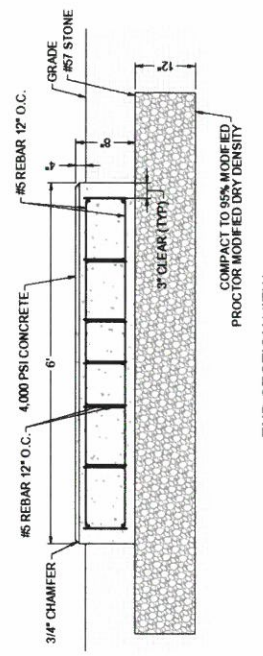
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NO.	DATE	REVISION
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SECTION VIEW



END SECTION VIEW

- NOTES:
1. COMPACT SOIL BELOW SLAB TO 95% OF THE SOIL'S MODIFIED PROCTOR MAX. DRY DENSITY PER ASTM D698
  2. USE 4,000 PSI CONCRETE (28 DAY BREAKING STRENGTH) AND GRADE 60 REINFORCING BARS CONFORMING TO ASTM A615M)
  3. PROVIDE THE FOLLOWING CLEAR COVER FOR REINFORCEMENT UNLESS OTHERWISE SHOWN, AT BOTTOM OF SLAB 3" (MIN.)

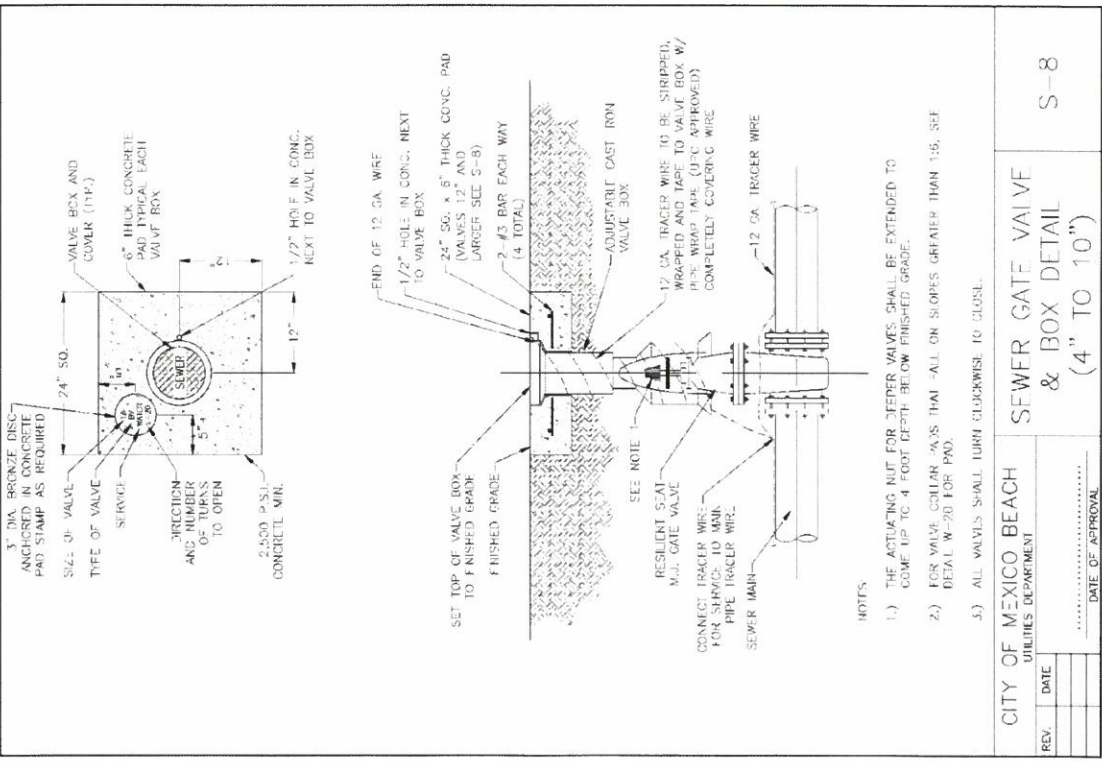
DETAIL CONCRETE BY-PASS PUMP PAD  
SCALE N.T.S.

NO.	DATE	APP.	REVISION
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DETAILS  
LIFT STATION DIESEL BYPASS PUMP INSTALLATION  
CITY OF MEXICO BEACH  
BAY COUNTY

DATE	PROJECT NO.
MAY 2022	50112881
SCALE	SHEET
1"=1'-0"	C4
DESIGNER	APPROVED
B. RAY	J. FERREIRA



- NOTES
- 1.) THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.
  - 2.) FOR VALVE COLOR MARKS THAT ALL ON SLOPES GREATER THAN 1:5, SEE DETAIL W-20 FOR PAD.
  - 3.) ALL VALVES SHALL TURN CLOCKWISE TO CLOSE.

REV.	DATE	BY	REVISION

CITY OF MEXICO BEACH  
 UTILITIES DEPARTMENT  
 DATE OF APPROVAL: \_\_\_\_\_  
 (4" TO 10")  
 S-8

NO.	DATE	APP.	REVISION
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**DETAILS**  
**LIFT STATION DIESEL BYPASS PUMP INSTALLATION**  
 CITY OF MEXICO BEACH  
 BAY COUNTY

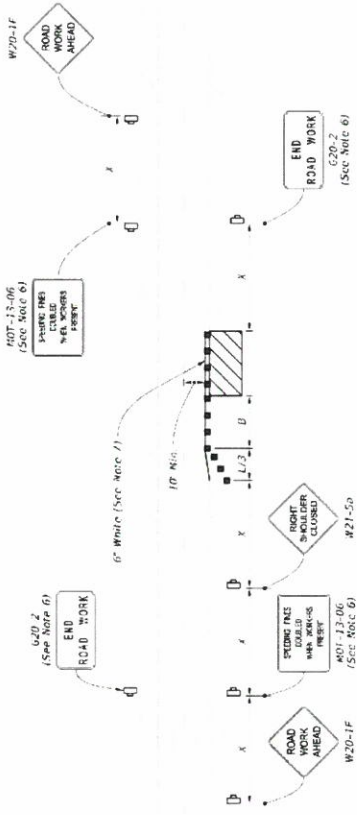
DATE	PROJECT NO.
10/2022	50112881
SCALE	SHEET
1" = 10'	C5
DRAWN	DESIGNED
S RAY	J PEREIRA

**NOTE:**

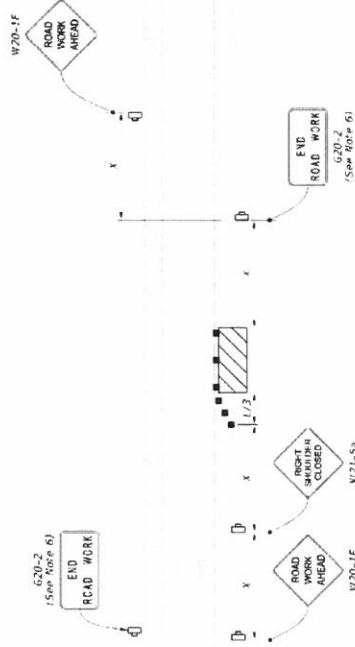
- This Index applies to Two Lane, Two Way and Multilane Roadways including Medians of divided roadways, with work on the shoulder.
- L = Lane Length  
X = Work Zone Sign Spacing  
B = Buffer Length  
See Index 102-600 for "L", "X", "B", and channelizing device spacing tables.
- Where work activities are between 2' and 15' from the edge of traveled way, the Engineer may post signs and channelizing devices for work operations 60 inches or less.
- When four or more work vehicles enter the through traffic lanes in a one hour period, including passing and merging, the work zone shall be closed to allow the work to accommodate work vehicle ingress and egress.
- For work less than 2' from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
- The "Stopping Trains Doubled When Workers Present" signs (W21-5a) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be utilized when the work operation is in place for 24 hours or less.
- The temporary detour markings may be omitted when the work operation is in place for 3 days or less.
- Only "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
- When there is no paved shoulder, the "worker" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

**SYMBOLS:**

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic



**TWO-LANE ROADWAY  
SHOULDER WORK LESS THAN 2' FROM THE TRAVELED WAY  
WITH WORK ZONE SPEED OF 45 MPH OR LESS**



**TWO-LANE ROADWAY  
SHOULDER WORK BETWEEN 2' AND 15' FROM THE TRAVELED WAY**

**FDOT**  
FY 2022-23  
STANDARD PLANS

TWO-LANE AND MULTILANE, WORK ON SHOULDER

INDEX  
102-602

SHEET  
1 of 2

REVISION

NO. DATE

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

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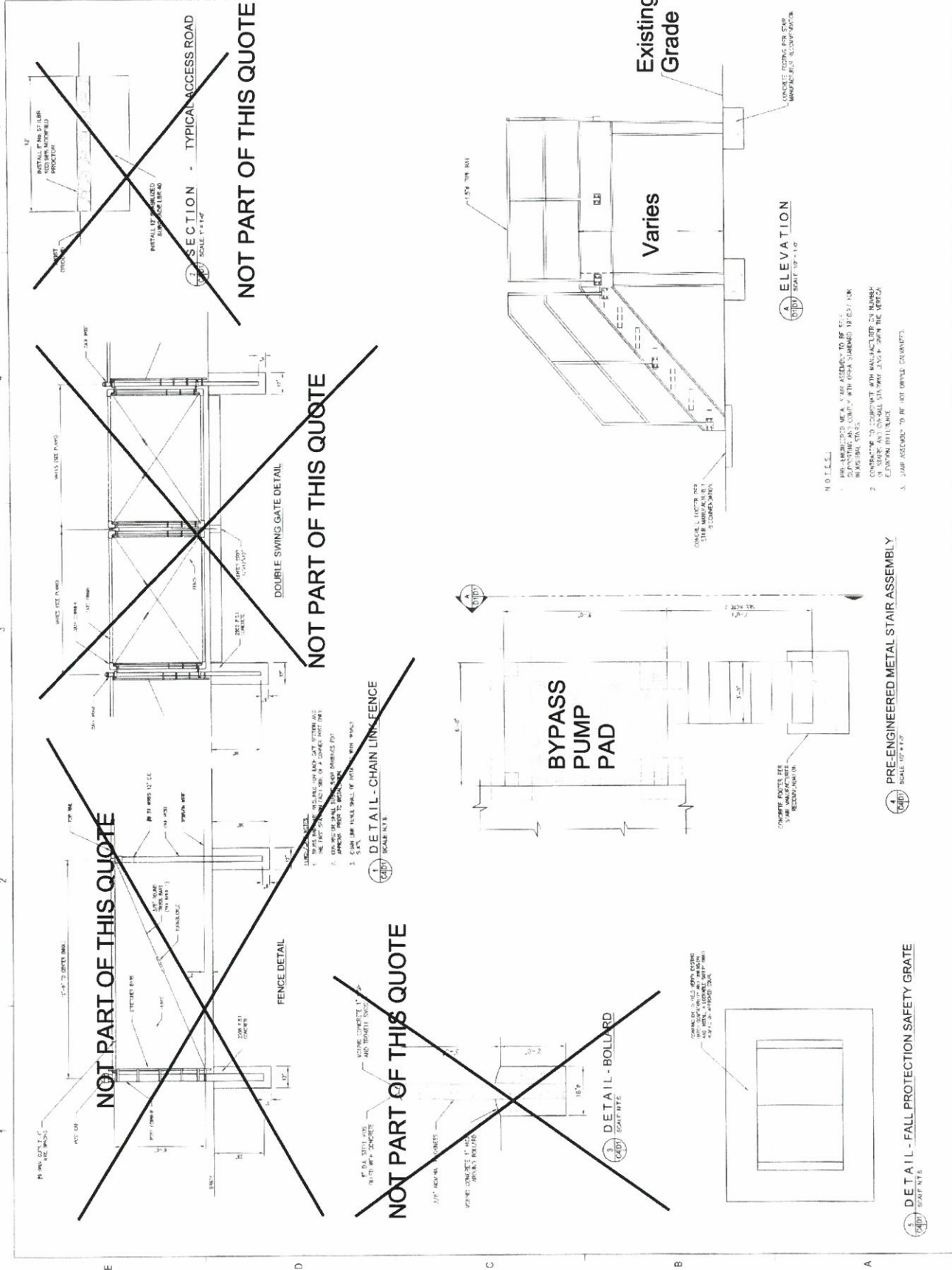
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**Notes:**

FFE of Pad for LS #9 = 7.0 FT  
 Approx. 14 FT height from existing grade

FFE of Pad for LS #11 = 14.0 FT  
 Approx. 3 FT height from existing grade



**NOT PART OF THIS QUOTE**

**NOT PART OF THIS QUOTE**

**NOT PART OF THIS QUOTE**

**BYPASS PUMP PAD**

**Existing Grade**

**Varies**

5. **DETAIL - FALL PROTECTION SAFETY GRATE**  
 SCALE: 1/8" = 1'-0"

4. **PRE-ENGINEERED METAL STAIR ASSEMBLY**  
 SCALE: 1/8" = 1'-0"

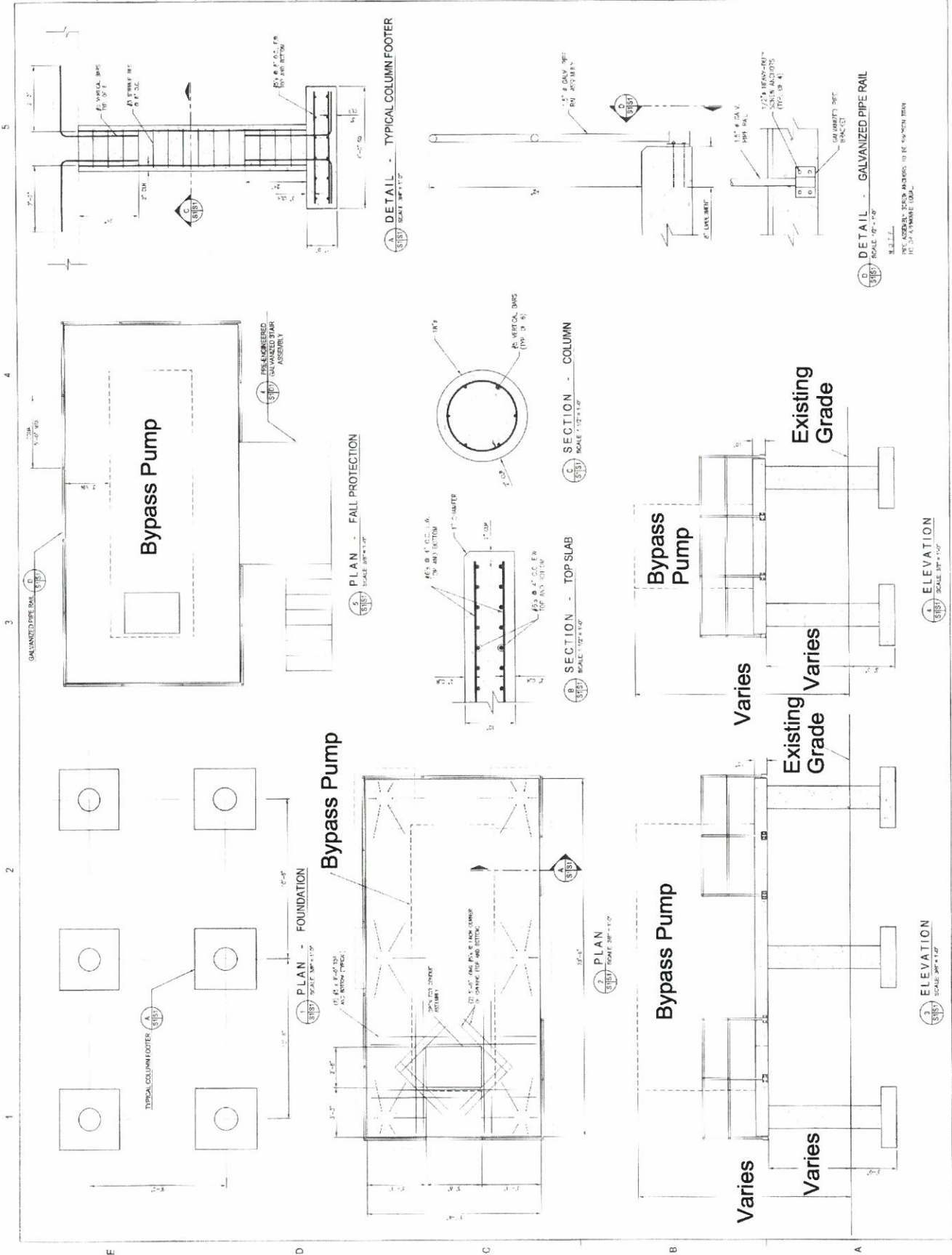
A. **ELEVATION**  
 SCALE: 1/8" = 1'-0"

- NOTES:**
1. PRE-ENGINEERED METAL STAIR ASSEMBLY TO BE SUPPLIED BY MANUFACTURER'S STANDARD SPECIFICATIONS.
  2. CONTRACTOR TO CONSULT WITH MANUFACTURER ON NUMBER OF STAIRS AND ON SMALL STAIRWAY LAYOUTS ON THE VERTICAL ELEVATION REFERENCE.
  3. STAIR ASSEMBLY TO BE SET ON THE CONCRETE.

**ELEVATED CONCRETE PAD FOR BYPASS PUMP - LS # 9 & 11**

**Notes:**  
 FFE of Pad for LS #9 = 7.0 FT  
 Approx. 14 FT height from existing grade

FFE of Pad for LS #11 = 14.0 FT  
 Approx. 3 FT height from existing grade



**ELEVATED CONCRETE PAD FOR BYPASS PUMP - LS # 9 & 11**