

**TIME OF STORAGE CALCULATIONS**

5.2 MGD = 3611 gpm

**Pipe Storage**

2-10" Diameter Sewers  
 Storage=(Area)(Length of Pipe)(7.481)  
 Storage=( $\pi/4$ )(10/12)<sup>2</sup>(2000+641)(7.481)  
 Storage=10,776 gal

**1-18" Diameter Sewers**

Storage=(Area)(Length of Pipe)(7.481)  
 Storage=( $\pi/4$ )(18/12)<sup>2</sup>(2433)(7.481)  
 Storage=32,164 gal

**Wet Well Storage**

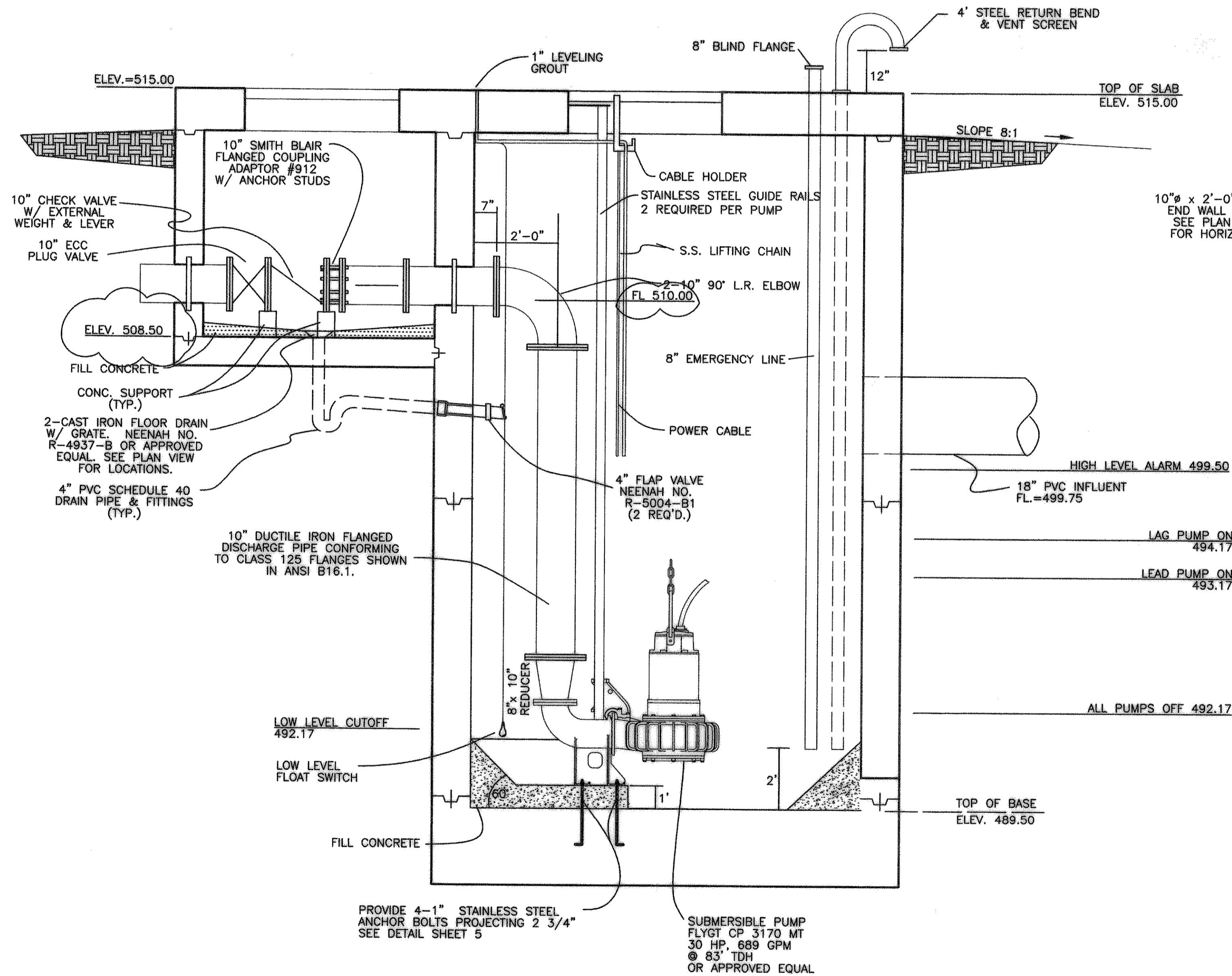
Storage=(Area)(Height)(7.481)  
 Storage=12'x13'(499.75)(invert elevation of 18")-492.00(pumps off)(7.481)  
 Storage=9,045 gal

Total storage volume = 51,985 gal  
 Minutes of storage @ peak flow of 5.2 MGD =51,985/3611=14.4 min

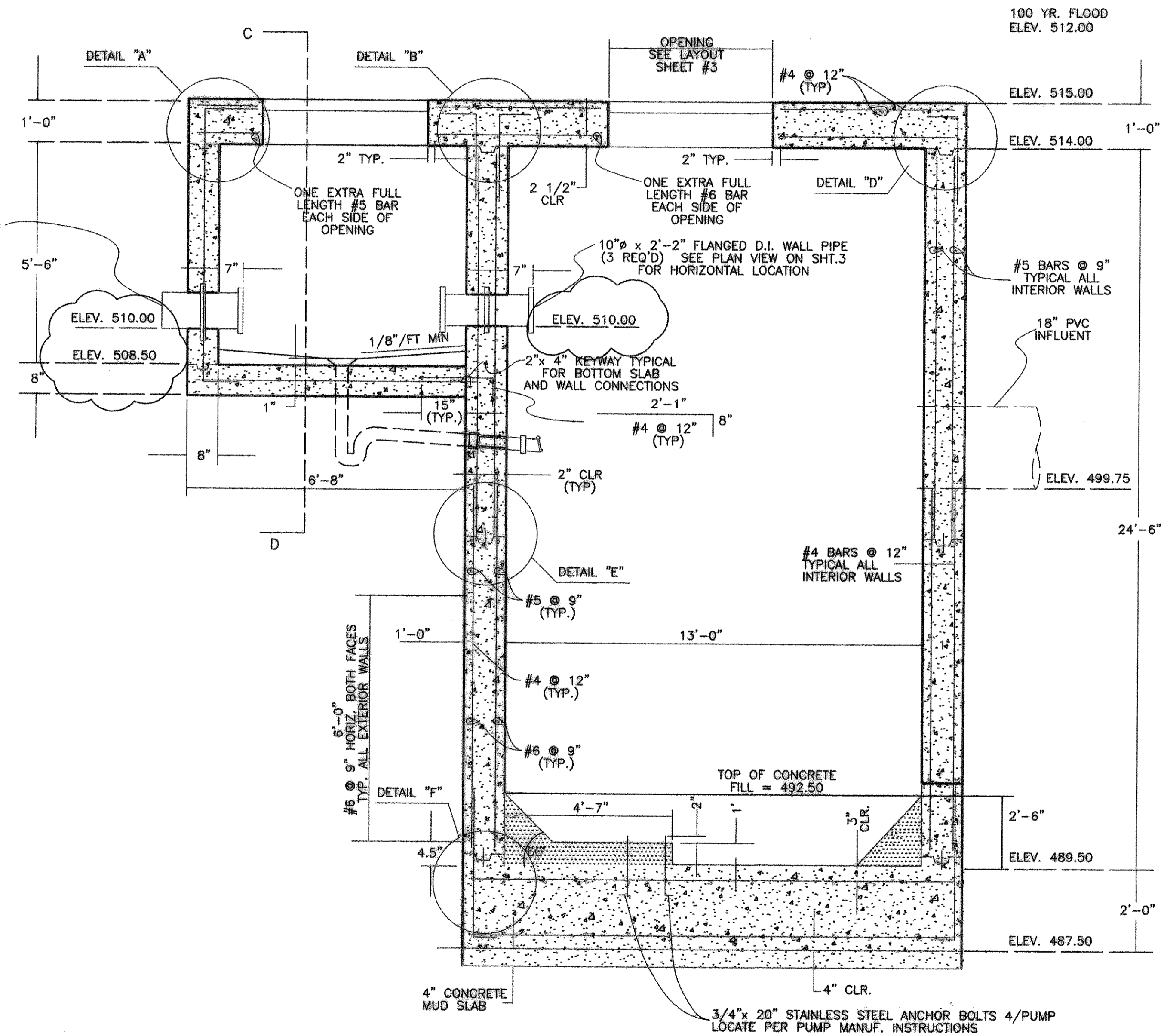
Note: 20 minutes of storage is not needed due to the placement of a generator on the site as per TNRCC.

**GENERAL NOTES:**

1. USE NON-SHRINK GROUT AT ALL STRUCTURE PENETRATIONS (SEE CONSTRUCTION NOTE 2.)
2. SEAL ALL ELECTRIC CONDUIT PIPE WITH FLEX SEALER SO THAT NO SEWER GAS PENETRATES ELECTRICAL CONTROL CABINET.
3. LEVEL CONTROLS SHALL BE INSTALLED IN DISTRIBUTION WELL. DEVICE SHALL BE "MULTIRADE" LIQUID LEVEL CONTROL SYSTEM BY ITT FLYGT OR AN APPROVED EQUAL. ALSO, ONE (1) FLOAT SWITCH SHALL BE INSTALLED IN EACH PUMP WELL (3 REQ'D) FOR LOW LEVEL CUT-OFF AND ONE (1) FLOAT SWITCH SHALL BE INSTALLED IN DISTRIBUTION BOX/WET WELL FOR HIGH LEVEL ALARM SWITCH. CLAMP LOW LEVEL FLOW SWITCH CABLE TO PIPE TO PREVENT EXCESSIVE MOVEMENT OF FLOAT.

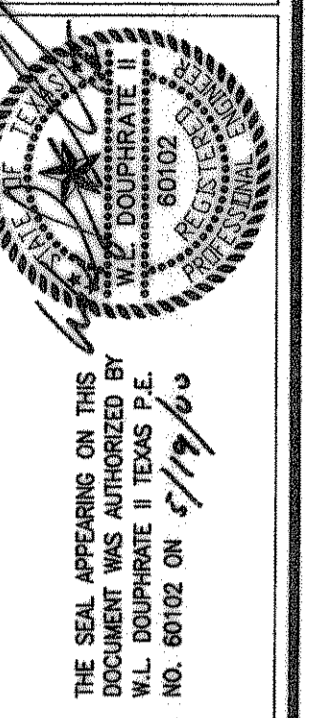


**SECTION A-A**  
 1/2" = 1'-0"



**RECORD DRAWINGS:**  
 THE INTENT OF THE OWNER AND ENGINEER WAS TO CONSTRUCT THESE FACILITIES ACCORDING TO THESE PLANS AS APPROVED BY THE CITY OF Rockwall. THE LINES AND GRADES WERE SET ON THE GROUND FOR CONSTRUCTION ACCORDING TO SAID PLANS. THE CITY OF Rockwall INSPECTED THE CONSTRUCTION. THE OWNER FOR ENGINEER DID NOT VERIFY LINES OR GRADES AFTER CONSTRUCTION. WE ARE NOT AWARE OF ANY CHANGES OR REVISIONS TO THESE PLANS DURING CONSTRUCTION EXCEPT AS NOTED

**LIFT STATION SECTION A**  
 1/2" = 1'-0"



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**SECTION A-A PLAN**  
**MIMS ROAD REGIONAL**  
**LIFT STATION**  
 ROCKWALL, ROCKWALL COUNTY, TEXAS

REV. 5/19/2000	CHANGE VALVE BOX ELEV. REVISION
W.L.D.	CHECKED
A.J.W.	DRAWN
11/3/99	DATE
9825L53-A	PROJECT
18	OF
30	