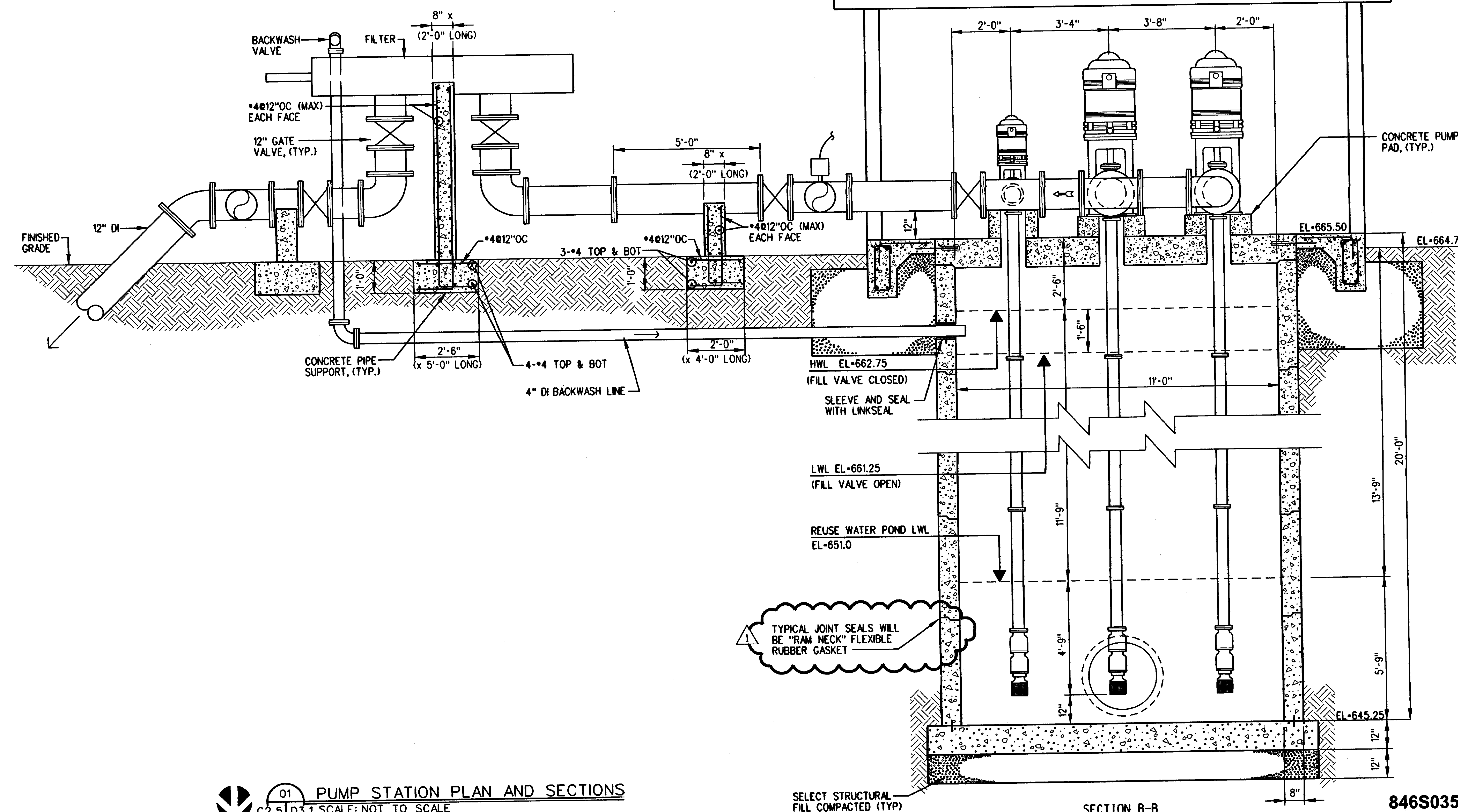
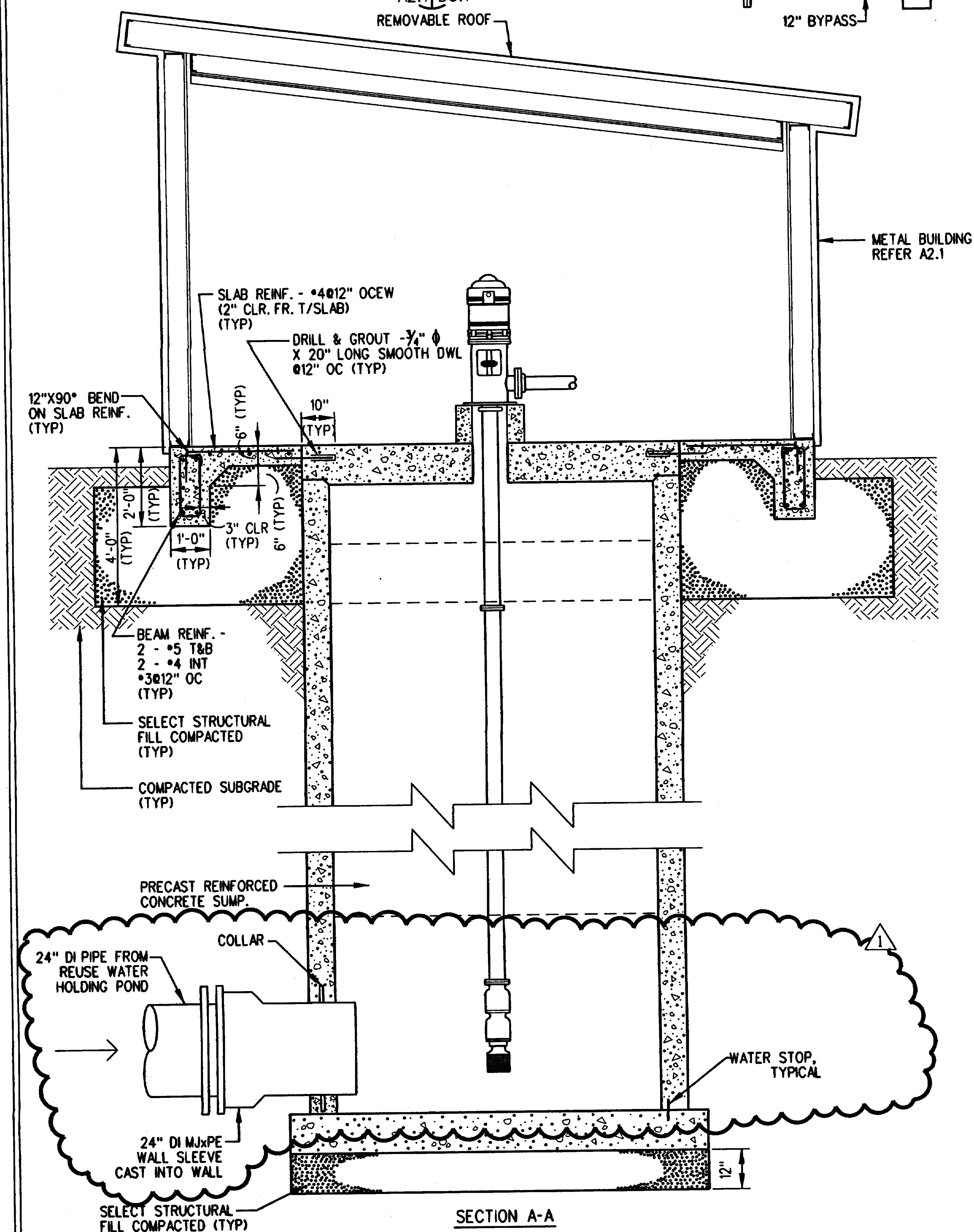
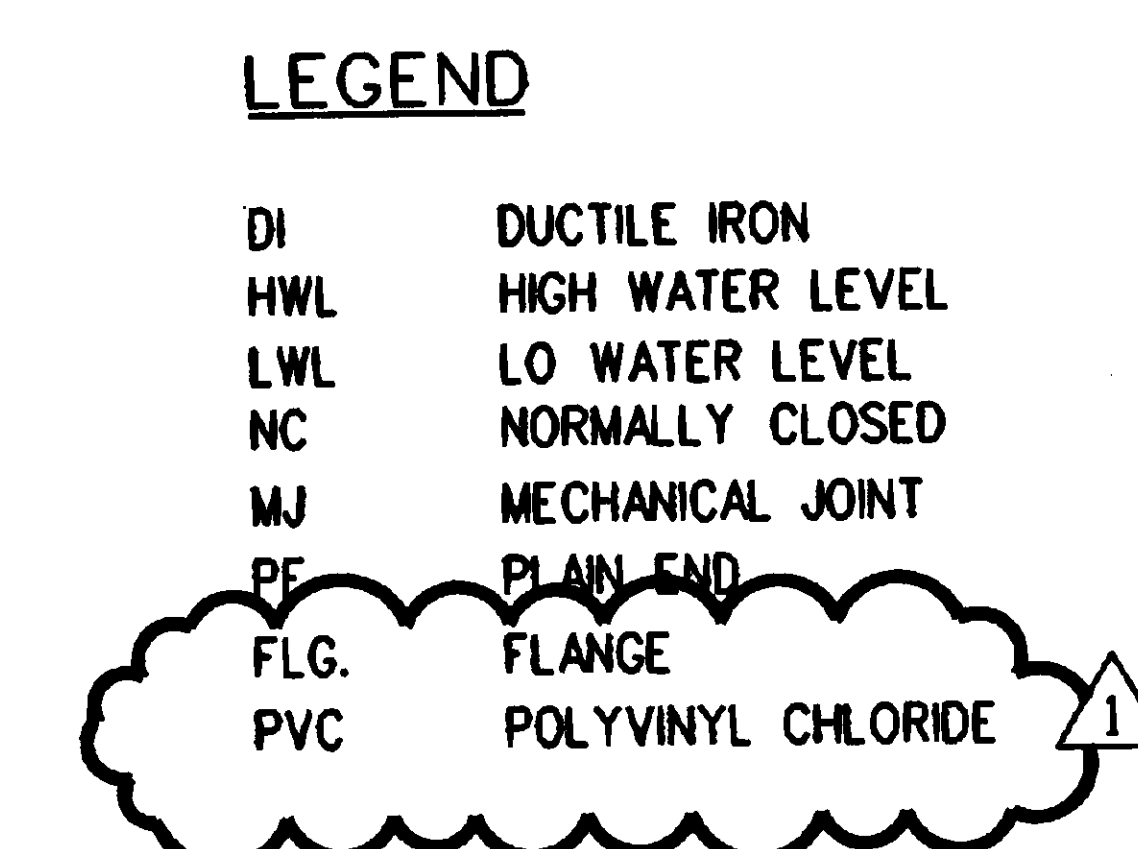



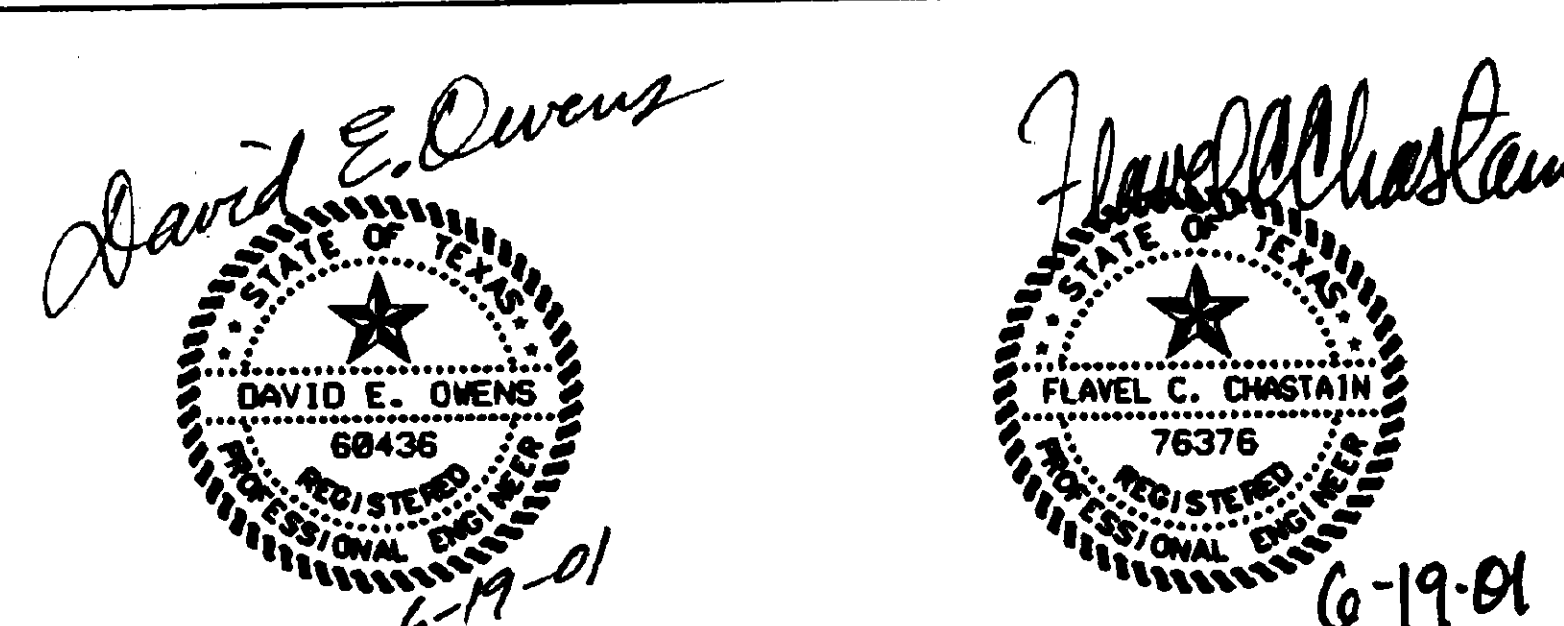
1. THE PRE-ENGINEERED METAL BUILDING WILL BE PER SECTION 13121, AND THE STRUCTURAL REQUIREMENTS OF THESE DOCUMENTS.
2. THE LOUVERS WILL BE EQUIPPED WITH THERMOSTATIC CONTROLLED EXHAUST FANS. ACTIVATE AT 85°F AND DEACTIVATE AT 80°F.
3. AN ELECTRIC UNIT HEATER WILL BE PROVIDED TO KEEP THE TEMPERATURE WITHIN THE BUILDING OVER 40°F AT ALL TIMES.
4. LIGHTING AND GFI RECEPTACLE (MIN. 2 EACH) REQUIRED WITHIN THE BUILDING.
5. HEAT TRACING FREEZE PROTECTION WITH INSULATION AND WEATHERPROOF COVER WILL BE PROVIDED ON ALL PIPING AND TUBING LESS THAN 3" DIAMETER.
6. ALL PANELS TO BE MOUNTED 44" ABOVE FINISHED FLOOR TO BOTTOM OF PANEL.




 01 PUMP STATION PLAN AND SECTIONS  
C2.5 D3.1 SCALE: NOT TO SCALE  
C3.5

[illegible]

LECON, INC.  
4319 PINEMONT  
HOUSTON, TX 77018  
(713) 681-4366



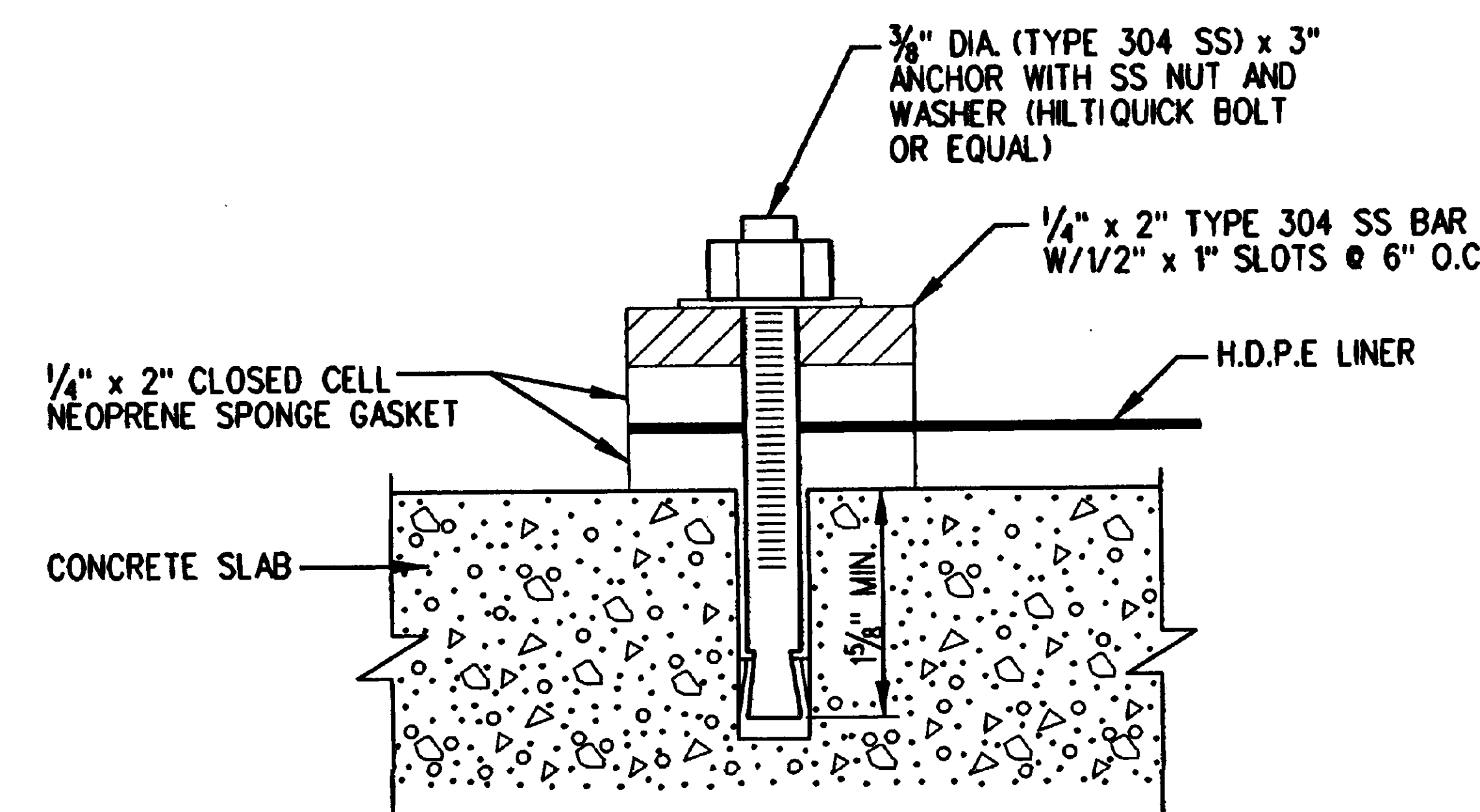
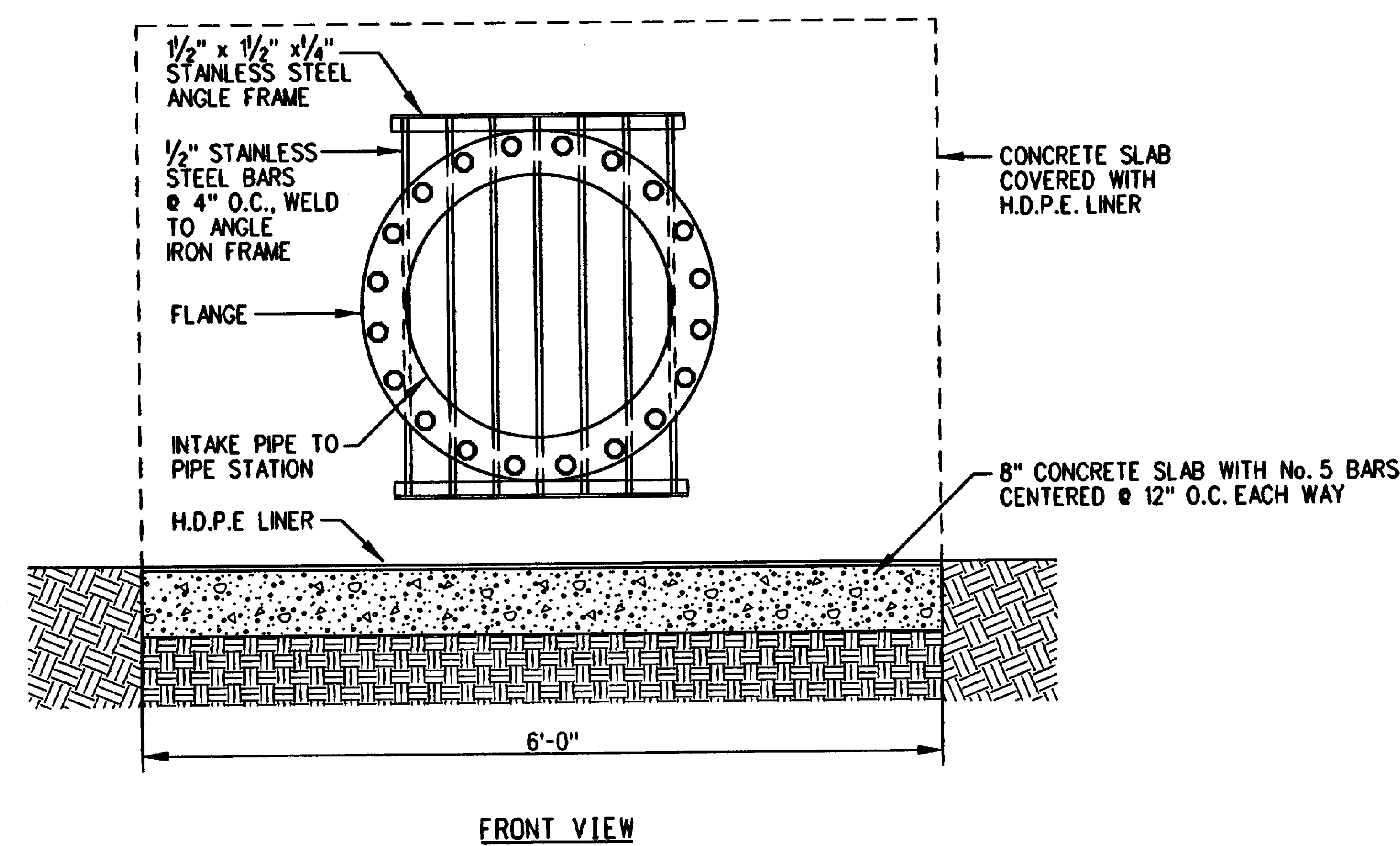
Huitt-Zollars, Inc. Engineering / Architecture  
500 W. 7th St., Ste. 300 Fort Worth, Texas 76102  
Phone (817) 335-3000 Fax (817) 335-1025

DRAWING TITLE <b>PUMP STATION PLAN AND SECTIONS</b>		PROJECT TITLE Gravesite Expansion - Phase II VA National Cemetery		PROJECT NUMBER <b>*846-021B</b>		 Department of Veterans Affairs
				BUILDING NUMBER		
APPROVED: NCS ABA TEAM PROJECT DIRECTOR		LOCATION VANC Fort Sam Houston San Antonio, Texas		DRAWING NUMBER <b>D3.1</b>		
APPROVED: DIRECTOR TECHNICAL SUPPORT		DATE March 2, 2001	CHECKED TSB	DRAWN SEP	DWG. OF	

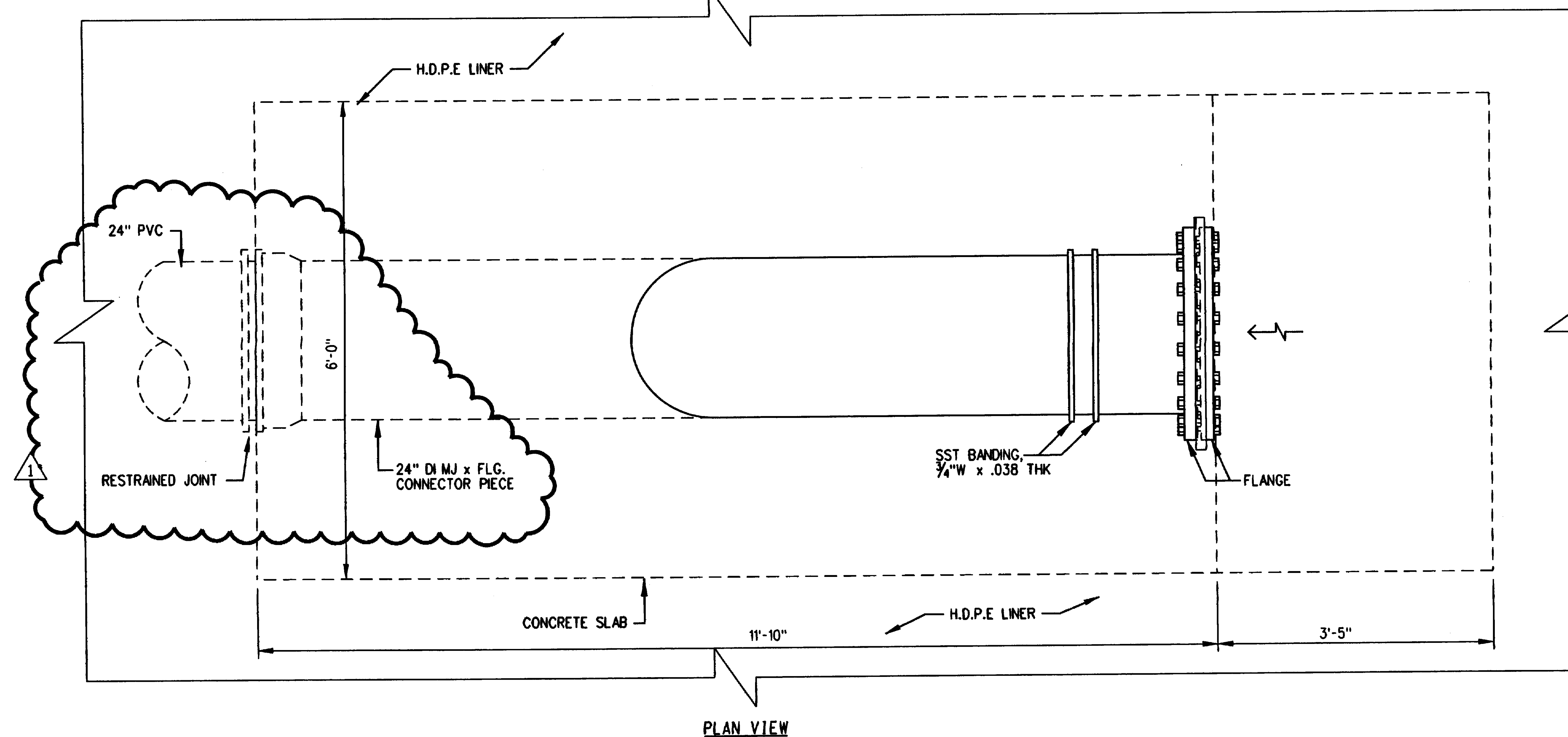
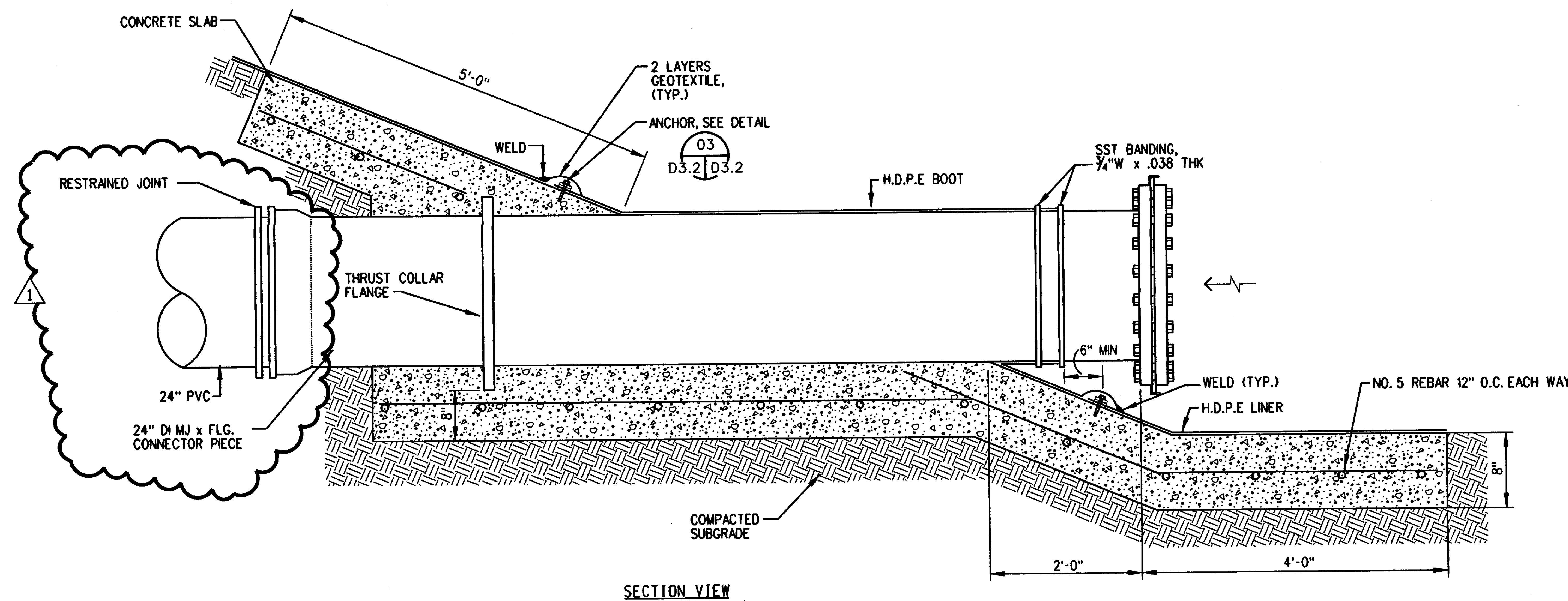


Department of Veterans Affairs

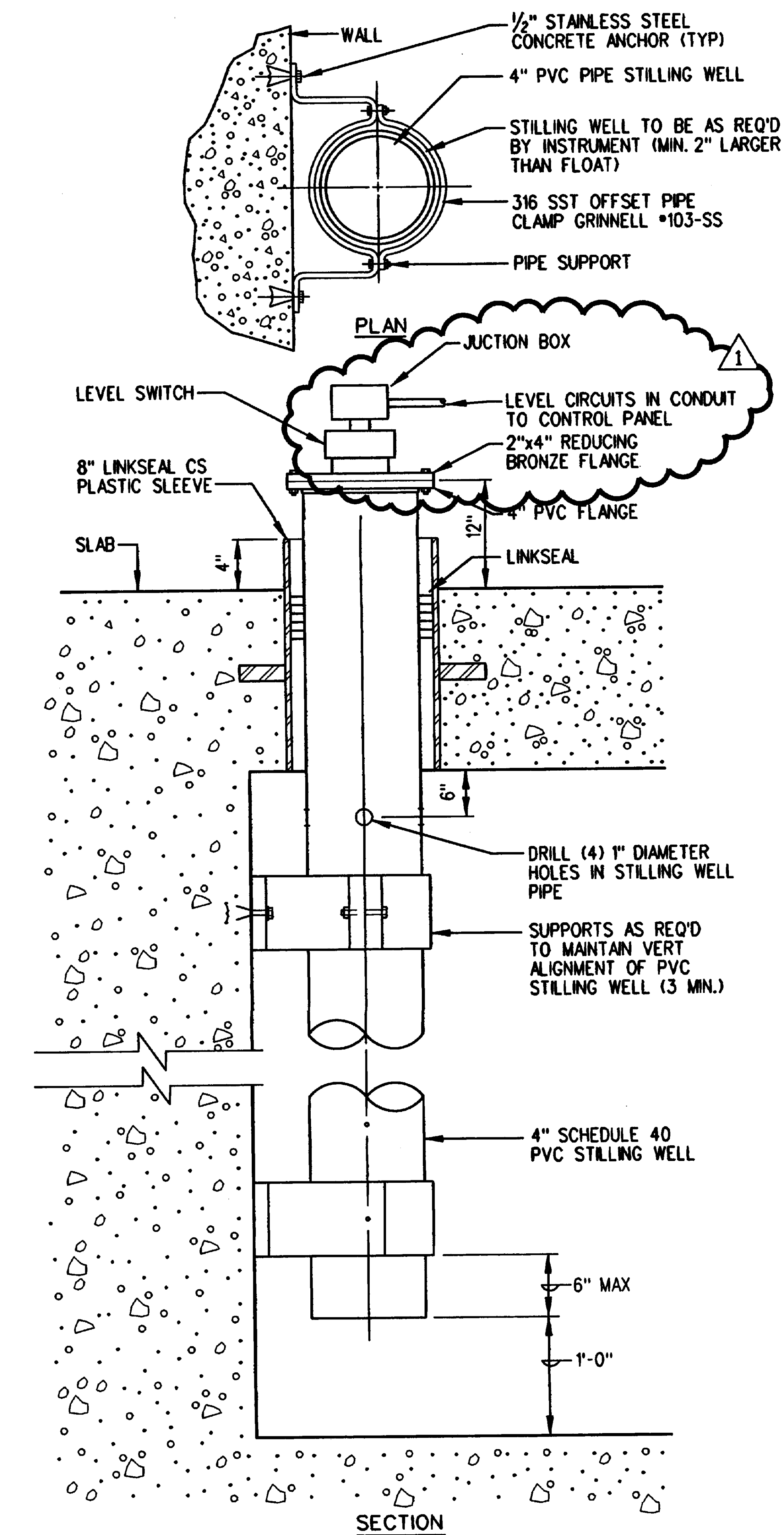




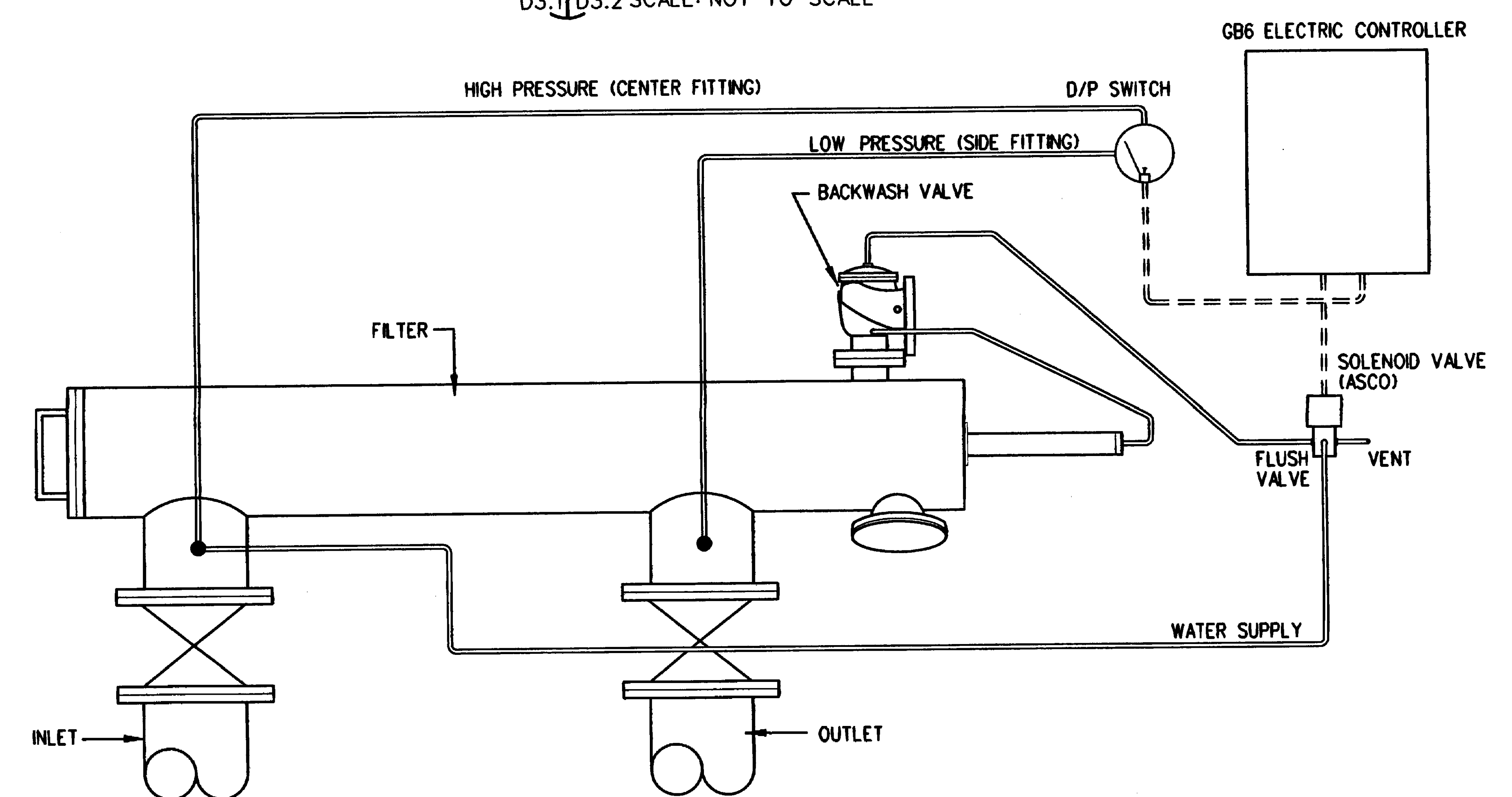
03 ANCHOR DETAIL  
D3.2 | D3.2 SCALE: NOT TO SCALE



01 SUCTION PIPE INTAKE DETAIL  
C2.5 | D3.2 SCALE: NOT TO SCALE  
C3.5



02 STILLING WELL DETAIL  
D3.1 | D3.2 SCALE: NOT TO SCALE

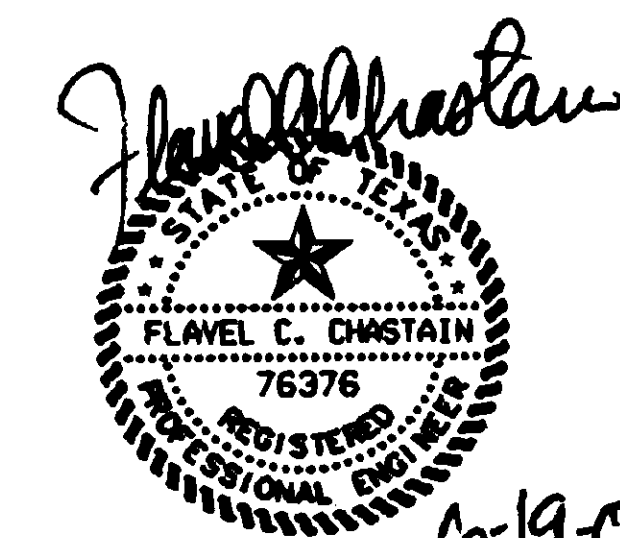


04 AUTOMATIC FILTER DIAGRAM  
D3.1 | D3.2 SCALE: NOT TO SCALE

REV #	DESCRIPTION	APP'D	DATE
0	ISSUE FOR CONSTRUCTION		3/2/01
1	CLARIFICATIONS		6/20/01

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DRAWING TITLE  
**PUMP STATION DETAILS**

APPROVED: MCS / VBA TEAM PROJECT DIRECTOR  
APPROVED: DIRECTOR TECHNICAL SUPPORT

PROJECT TITLE  
Gravesite Expansion - Phase II  
VA National Cemetery

LOCATION  
VANC Fort Sam Houston  
San Antonio, Texas

PROJECT NUMBER  
\*846-021B

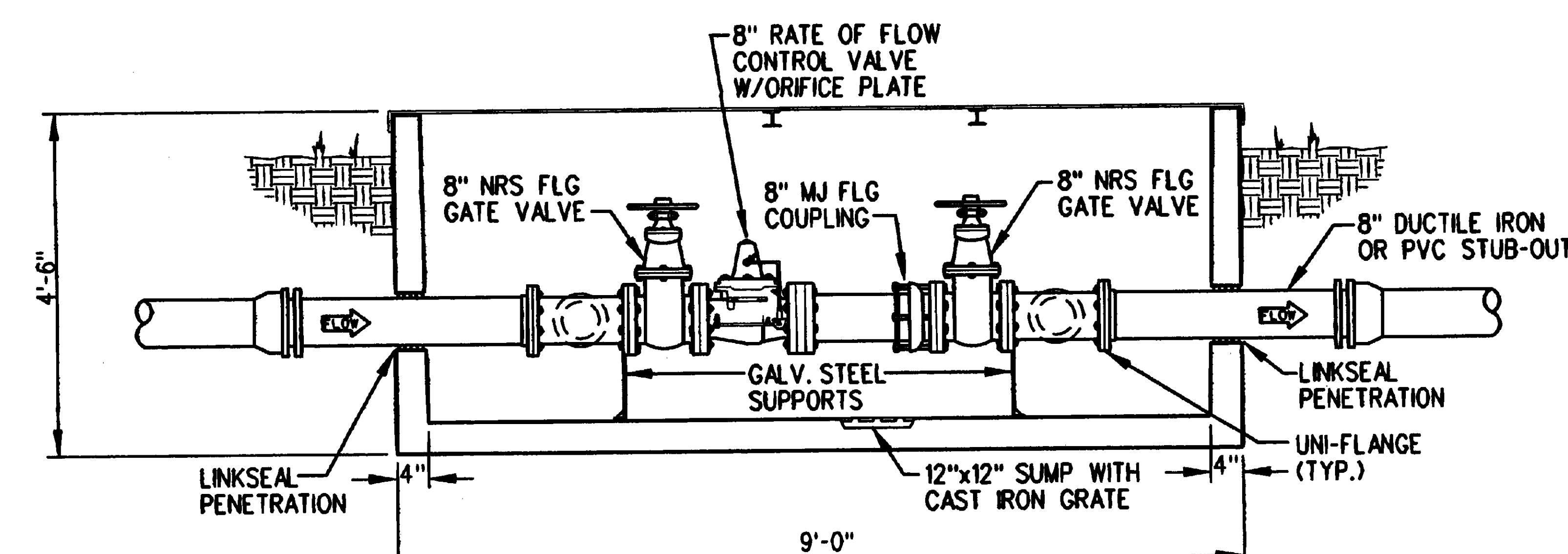
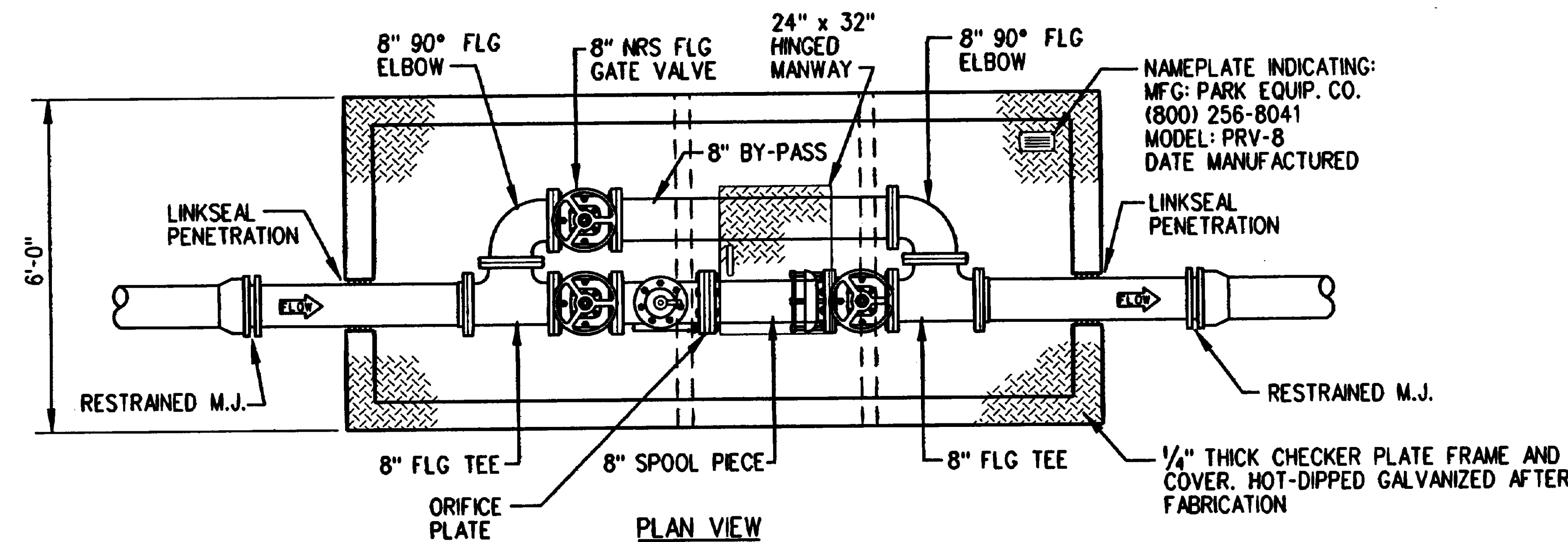
DRAWING NUMBER  
D3.2



Department of Veterans Affairs

846S0353





**SPECIFICATIONS**  
**CONCRETE:** CLASS 1 CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH. GROSS EMPTY WEIGHT OF APPROXIMATELY 20,000 POUNDS.  
**REINFORCEMENT:** GRADE 60 REINFORCED STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.  
**STEEL COVER:** 1/4\"/>

**01 POND FEED CONTROL VALVE AND PRECAST VAULT DETAIL**  
 C2.5/D3.3 SCALE: NOT TO SCALE  
 C3.5

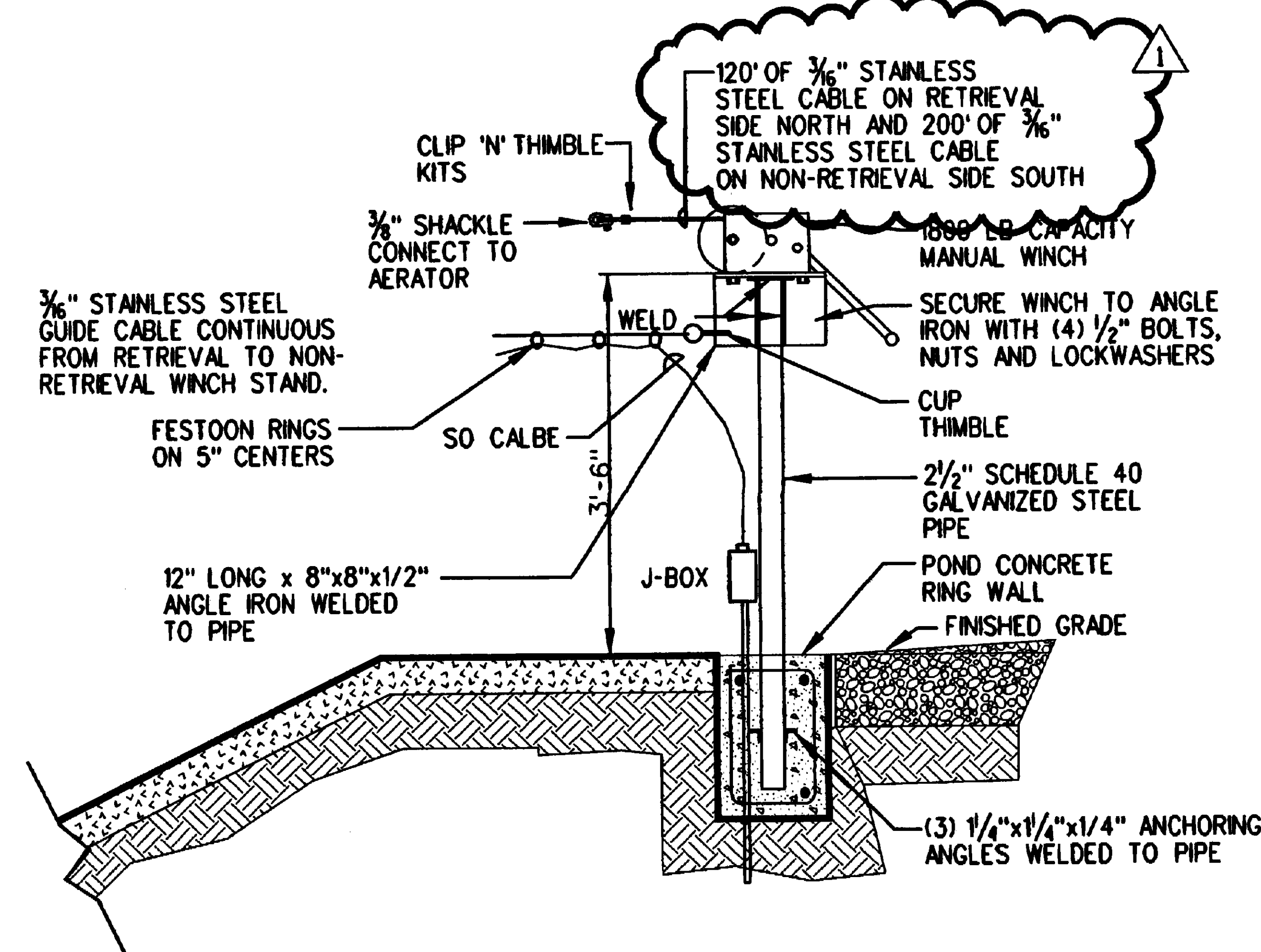
### SEQUENCE OF OPERATION

#### PUMP STATION

1. REUSE WATER PUMP (RWP-1) AND VARIABLE FREQUENCY DRIVE (VFD-1) WILL BE CONTROLLED BY PUMP CONTROL PRESSURE TRANSMITTER AND PLC IN THE PUMP CONTROL PANEL. THE PLC WILL CONTROL THE PUMP AND VFD VIA 4-20MA SIGNAL FROM THE PRESSURE TRANSMITTER. REUSE WATER PUMP WILL MAINTAIN A MINIMUM DISCHARGE PRESSURE OF 100 PSI. IF THE PRESSURE EXCEEDS MORE THAN 110 PSI AT THE MINIMUM SPEED IT WILL SHUT DOWN THE PUMP.
2. REUSE WATER PUMP (RWP-2A) AND VARIABLE FREQUENCY DRIVE (VFD-2) WILL BE CONTROLLED BY PUMP CONTROL PRESSURE TRANSMITTER AND PLC IN THE PUMP CONTROL PANEL. LOCATED IN THE PUMP STATION. THE PLC WILL CONTROL THE PUMP AND VFD VIA 4-20MA SIGNAL FROM THE PRESSURE TRANSMITTER. WHEN THE DISCHARGE PRESSURE DROPS BELOW 100 PSI FOR MORE THAN 30 SECONDS RWP-2A WILL START AND RWP-1 WILL SHUT DOWN. RWP-2A WILL MAINTAIN A MINIMUM DISCHARGE PRESSURE OF 100 PSI. WHEN THE DISCHARGE PRESSURE EXCEEDS 110 PSI AT THE MINIMUM SPEED FOR MORE THAN 30 SECONDS RWP-2A WILL SHUT DOWN AND RWP-1 WILL START AND MAINTAIN A PRESSURE OF 100 PSI.
3. REUSE WATER PUMPS (RWP-2A & RWP-2B) WILL ALTERNATE STARTS EVERY 24 HOURS AT A PRESET TIME.
4. ALL REUSE WATER PUMPS WILL BE PROVIDED WITH AN ADJUSTABLE MINIMUM RUN TIME TIMER SET FOR 30 SECONDS.
5. ALL PUMPS WILL SHUT DOWN WHEN WATER LEVEL IN THE PUMP STATION WET WELL DROPS TO THE LOW WATER LEVEL.

#### POND FEED CONTROL VALVE

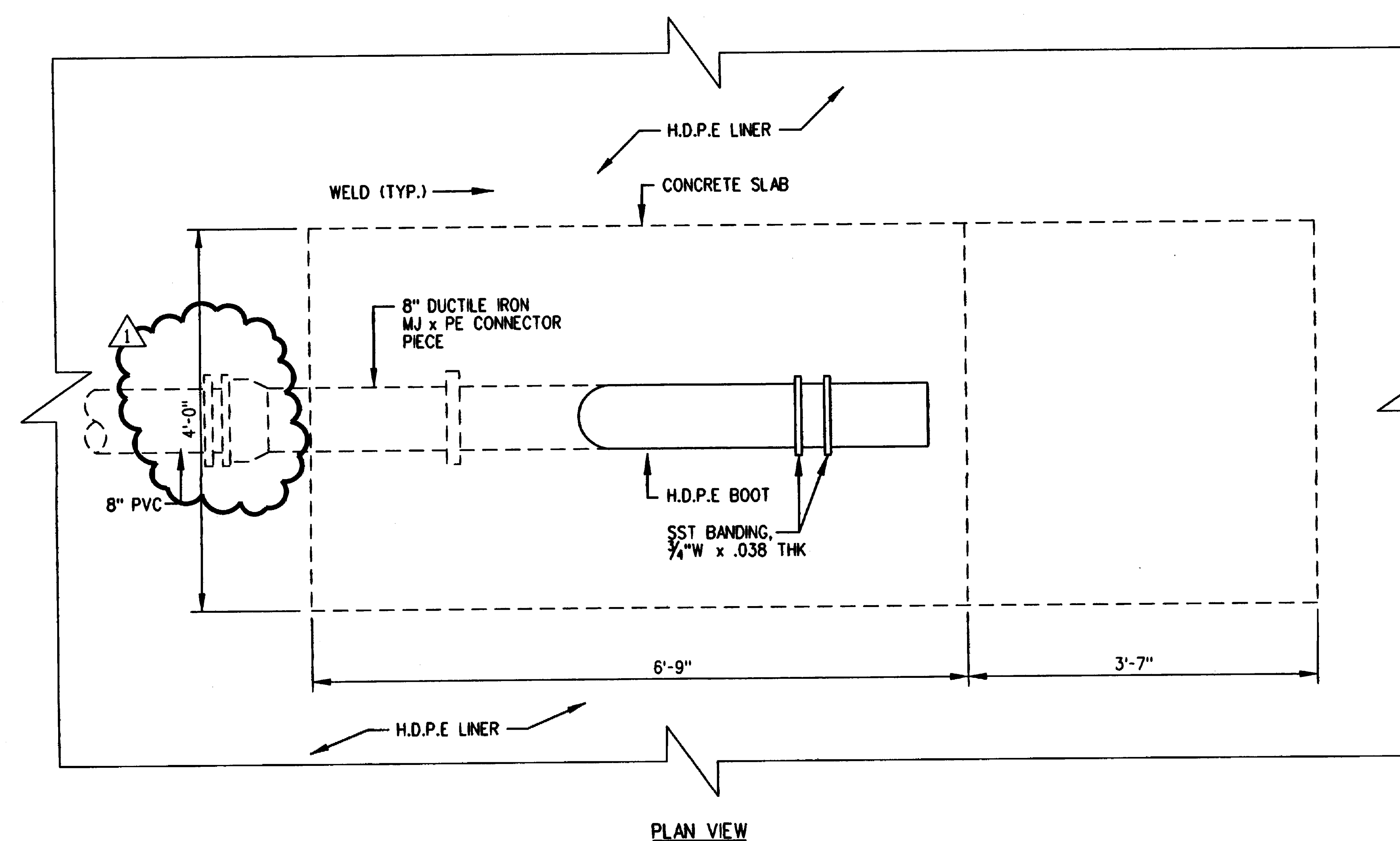
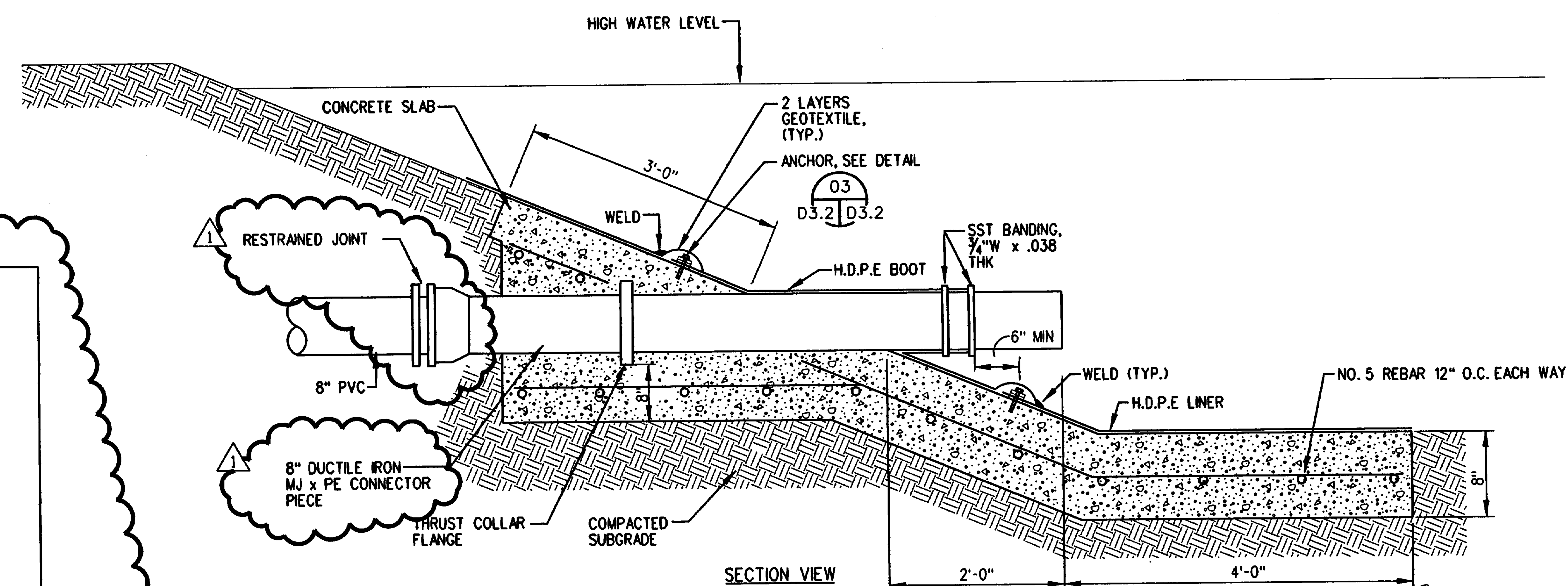
1. POND FEED CONTROL VALVE WILL BE CONTROLLED BY LIQUID LEVEL SWITCHES IN THE PUMP STATION WET WELL AND RELAYS IN THE REUSE WATER HOLDING POND. LIQUID LEVEL CONTROL PANEL LOCATED IN THE PUMP STATION. THE LIQUID LEVEL SWITCHES AND RELAYS WILL OPEN AND CLOSE THE POND FEED CONTROL AND MAINTAIN THE LIQUID LEVEL IN THE REUSE HOLDING POND.



**03 AERATOR RETRIEVAL SYSTEM**  
 C2.5/D3.3 SCALE: NOT TO SCALE

### ELECTRIC PUMP SCHEDULE

PUMP NO.	SERVICE	MAXIMUM GPM (EA.)	MINIMUM GPM (EA.)	DESIGN GPM (EA.)	PRESSURE @ MAXIMUM GPM (FT. HD.)	PRESSURE @ MINIMUM GPM (FT. HD.)	PRESSURE @ DESIGN GPM (FT. HD.)	SUCTION SIZE (IN.)	DISCHARGE SIZE (IN.)	RPM @ MAXIMUM GPM	RPM @ MINIMUM GPM	RPM @ DESIGN GPM	HP @ MAXIMUM GPM	HP @ MINIMUM GPM	HP @ DESIGN GPM	EFF. % @ MAXIMUM GPM	EFF. % @ MINIMUM GPM	EFF. % @ DESIGN GPM	ELECTRICAL VOLTS	PHASE	REMARKS/MANUFACTURER
RWP-1	REUSE WATER JOCKEY PUMP	80	20	---	231	231	---	4	4	1770	1600	---	6.38	3.56	---	73.4	33	---	460	3	VERTICAL TURBINE/NATIONAL PUMP NO. M6MC VARIABLE SPEED CONTROL/ROBICON *454 GT PWM
RWP-2A	REUSE WATER PUMP - A	2200	70	975	231	98	242	10	10	1770	1300	1525	157	7.5	91.4	81.4	50	64	460	3	VERTICAL TURBINE/NATIONAL PUMP NO. H12HC VARIABLE SPEED CONTROL/ROBICON *454 GT PWM
RWP-2B	REUSE WATER PUMP - B	2200	70	975	231	98	242	10	10	1770	1300	1525	157	7.5	91.4	81.4	50	64	460	3	VERTICAL TURBINE/NATIONAL PUMP NO. H12HC VARIABLE SPEED CONTROL/ROBICON *454 GT PWM

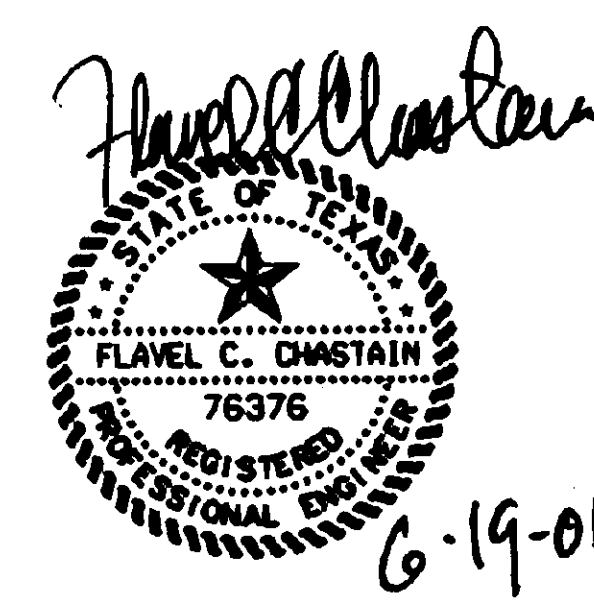


**02 OUTLET PIPE FILL DETAIL**  
 C2.5/D3.3 SCALE: NOT TO SCALE

REV.	DESCRIPTION	APPD.	DATE
0	ISSUE FOR CONSTRUCTION		3/2/01
1	CLARIFICATIONS		6/20/01

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**PUMP STATION DETAILS AND SCHEDULE**  
 APPROVED: NCS ABA TEAM PROJECT DIRECTOR  
 APPROVED: DIRECTOR TECHNICAL SUPPORT

**PROJECT TITLE**  
 Gravesite Expansion - Phase II  
 VA National Cemetery  
**LOCATION**  
 VANC Fort Sam Houston  
 San Antonio, Texas  
**DATE**  
 March 2, 2001  
**CHECKED**  
 TSB  
**DRAWN**  
 GMM

**PROJECT NUMBER**  
 \*846-021B  
**BUILDING NUMBER**  
**DRAWING NUMBER**  
 D3.3  
**DWG. OF**



846S0354