

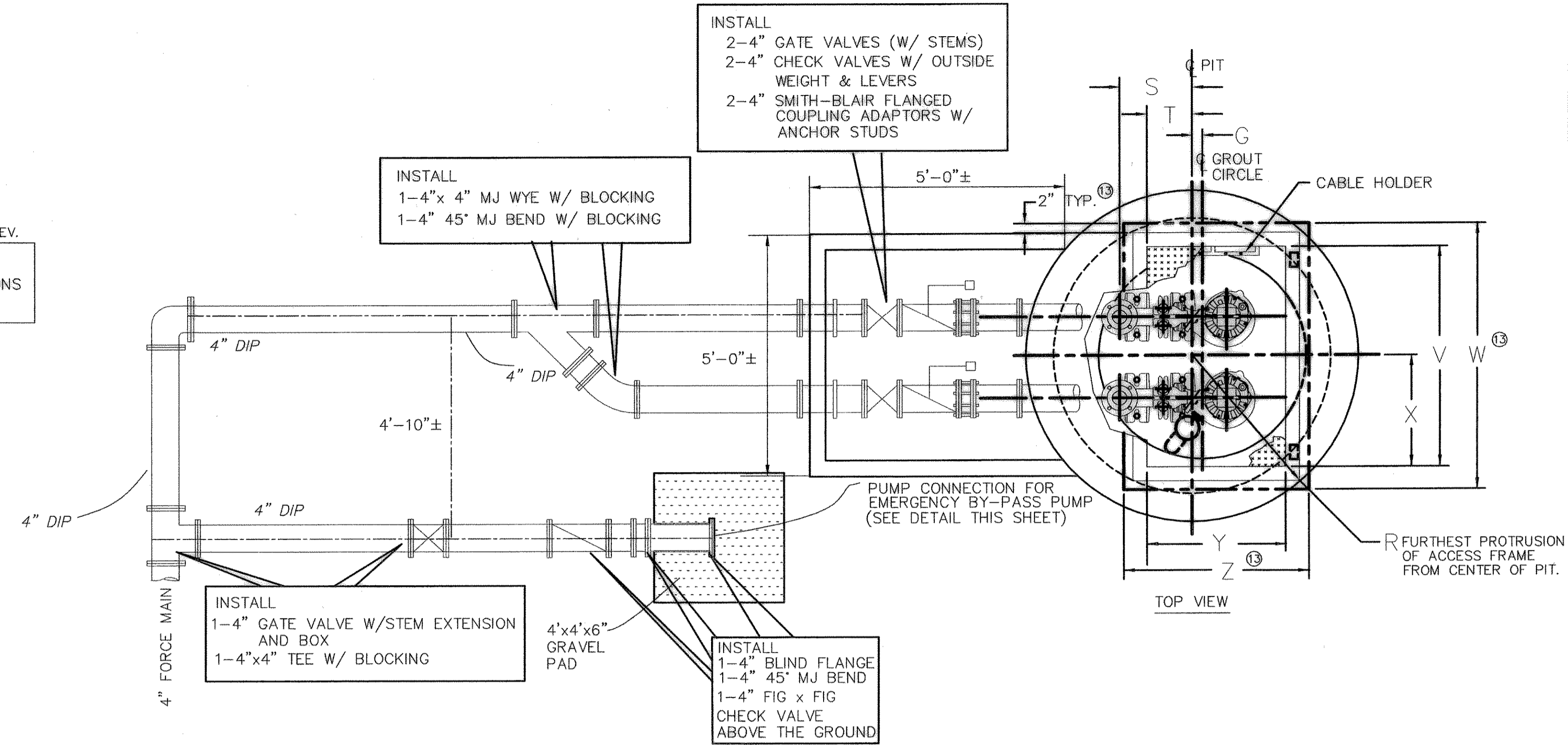
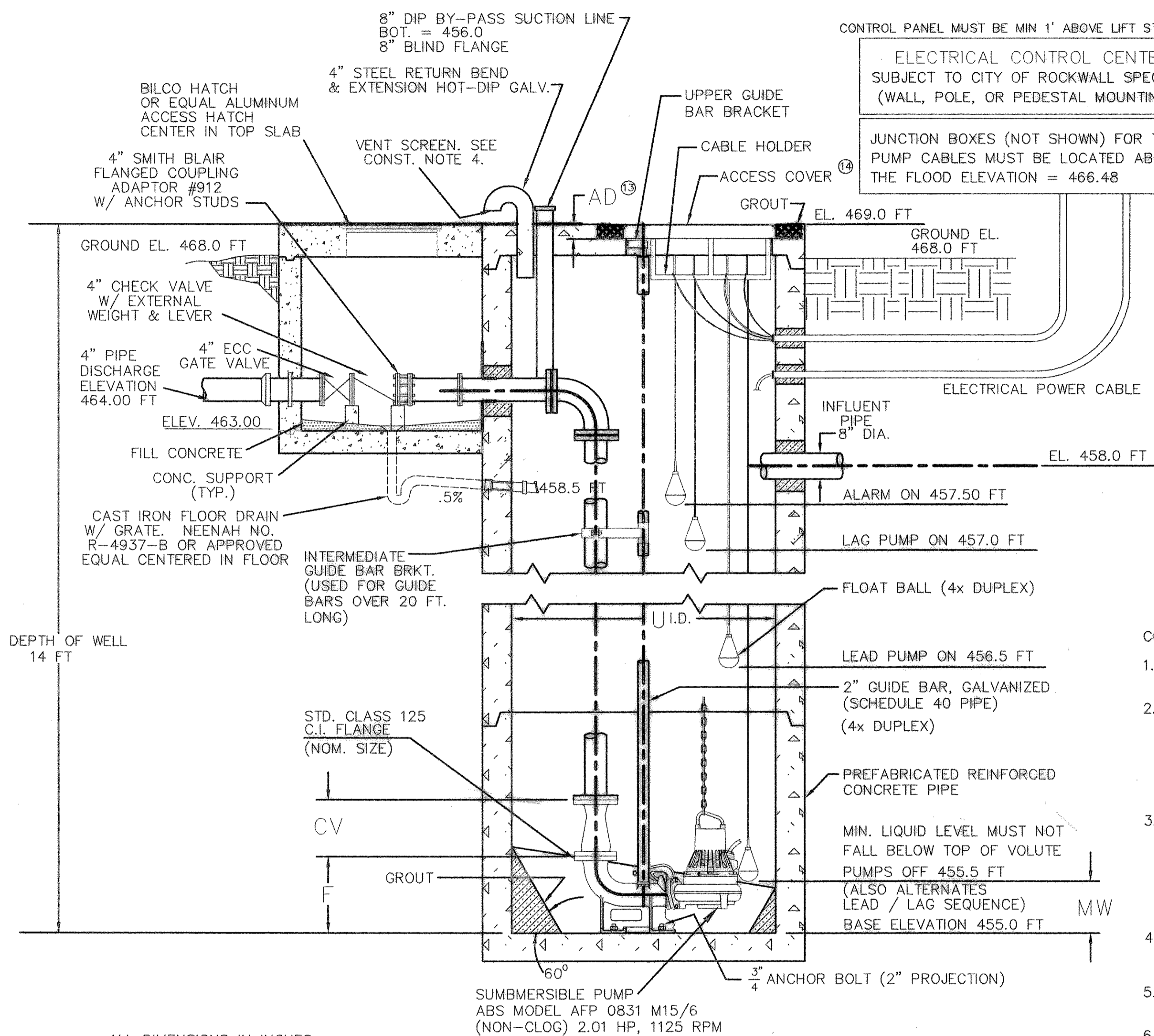
AVERAGE FLOW CALCULATIONS:
 PHASE 1-A: 32 LOTS*3.1 PERSONS/LOT*100gpcd=9920 gpd
 PHASE 2: 10 LOTS*3.1 PERSONS/LOT*100 gpcd= 3100 gpd
 Total Average Flow= 13020 gpd

PEAK FLOW CALCULATIONS:
 PHASE 1-A: 9920 gpd * 5 PEAKING FACTOR=49600 gpd
 PHASE 2: 3100 gpd * 5 PEAKING FACTOR =15500 gpd
 Total Peak Flow=65100 gpd=45.2 gpm

STORAGE CALCULATIONS:
 STORAGE REQUIRED FOR 81 MIN=Q*81 MIN/7.48
 VOL=45.21 GPM*81 MIN/7.48
 VOL=489.46 CF

WET WELL STORAGE=9'*19.63 SF= 176.71 CF
 LINE L = 161'*A8=161'*1.396 SF=224.79 CF
 LINE M = 100'*A8=100'*1.396 SF=139.62 CF
 MANHOLE STA. 1+61.16 LINE L = 5'*A4=5'*12.56 SF=62.83

TOTAL PROVIDED STORAGE=603.95 CF



CONSTRUCTION NOTES:

- CONTRACTOR SHALL INSTALL PACKAGE STATION, ARRESTOR, LEVEL CONTROLS, PIPING, VALVES AND RELATED ITEMS IN A CONCRETE SUMP IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
 - REINFORCED CONCRETE BOX SHALL MEET ASTM C 789 REQUIREMENTS, CONFORMING TO NCTCOG 2.12.32.
 - ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
 - ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
 - ALL GROUT SHALL BE NONSHRINK, HAVING MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS, COMPLYING WITH CORPS OF ENGINEERS CRD-C-621.
- PIPING AND VALVES
 - ALL PIPING AS SHOWN SHALL BE DUCTILE IRON, CLASS 50 PER AWWA C150/C151. FLANGES SHALL BE 125 LB ANSI B 16.1. BOLTS AND NUTS SHALL CONFORM TO ASTM A307. GASKETS SHALL BE GRADE 1 RUBBER, RING TYPE.
 - THE CONTRACTOR SHALL USE FLANGED PIPING WITHIN THE WET WELL. PIPING SHALL BE RIGIDLY SUPPORTED TO THE WET WELL TO PREVENT MOVEMENT.
- VENT SCREEN. WELD 3/8" X 9" O.D. PLATE FLANGE TO END OF ELL. PROVIDE COMPANION PLATE FLANGE TO HOLD BUG SCREEN WITH NOT LESS THAN 6 BOLTS. ALL MATERIALS TO BE HOT-DIP GALVANIZED. BUG SCREEN SHALL BE STAINLESS STEEL 8 MESH.
- PROVIDE CONCRETE THRUST BLOCKS AT ALL ELBOWS, POINTS OF DEFLECTION, ETC., ON DISCHARGE LINE AND FORCE MAINS.
- CONTRACTOR SHALL PROVIDE 6-INCHES OF ROCK UNDER PUMP STATION SUMP BASE SLAB. THE BASE MATERIAL SHALL BE COMPACTED AND GRADED LEVEL.
- PAINTING SYSTEM. CONTRACTOR SHALL APPLY A COAL-TAR EPOXY COATING SYSTEM TO ALL CARBON STEEL COMPONENTS.
 - PUMP STATION WET WELL - COAL-TAR EPOXY CONSISTING OF NEAR WHITE METAL BLAST CLEANING PER SSPC-SP-10, PRIMER COAT, AND TWO FINISH COATS TO A MINIMUM DRY FILM THICKNESS OF 17.5 MILS.
 - PIPING AND VALVES, VALVE VAULT - POLYURETHANE-EPOXY SYSTEM CONSISTING OF NEAR WHITE BLAST CLEANING PER SSPC-SP-10, PRIMER COAT AND TWO FINISH COATS TO A MINIMUM DRY FILM THICKNESS OF 8.0 MILS, COLOR: GRAY.
- CONTRACTOR SHALL FURNISH AND INSTALL CONTROL PANEL STAND (CONSISTING OF 2 GALV. METAL POSTS), INSTALL AN ELECTRIC COMPANY FURNISHED METER BASE & METER. BRACE STAND AS REQUIRED AND PROVIDE ELECTRICAL SERVICE CONNECTIONS AS REQUIRED BY ELECTRIC COMPANY. ALL ELECTRICAL SERVICE SHALL COMPLY WITH NEC AND CITY CODES. SEAL ALL ELECTRICAL CONDUIT PIPE AT BOTH ENDS WITH FLEX SEALER TO PREVENT SEWER GAS FROM ENTERING ELECTRICAL CONTROL CABINET.
- THE NONEXPOSED EXTERIOR OF THE VAULT AND LIFT STATION WILL BE COATED WITH COAL-TAR EPOXY PRIOR TO BACK FILLING
- BACKFILL MATERIAL SHALL BE COMPACTED ON-SITE CLAY MATERIALS. ALL SURPLUS EXCAVATION WILL BE DISPOSED OF BY THE CONTRACTOR ON SITE. BACKFILL IN ACCORDANCE WITH NCTCOG 7.1.1 & 7.1.3 (b). THE FILL SHOULD BE PLACED IN WELL-COMPACTED LIFTS NOT EXCEEDING 6 TO 8 INCHES IN THICKNESS WITH EACH LIFT COMPACTED TO A DRY DENSITY OF BETWEEN 95 AND 100 PERCENT OF THE MAXIMUM LABORATORY DENSITY (ASTM D 698, STANDARD PROCTOR) THE COMPACTION MOISTURE CONTENT SHOULD BE BETWEEN OPTIMUM AND 5 PERCENT ABOVE OPTIMUM MOISTURE CONTENT. ADDITIONAL CARE SHOULD BE EXERCISED TO AVOID OVERSTRESSING THE LIFT STATION WALLS BY OPERATING HEAVY COMPACTORS NO CLOSER THAN 5 FEET OF THE LIFT STATION WALLS. USE OF THINNER LOOSE LIFTS (ON THE ORDER OF 6 INCHES OR LESS) IS RECOMMENDED IN CONJUNCTION WITH OPERATION OF HAND-OPERATED OR SMALL RIDING TYPE COMPACTORS BEHIND THE WALLS.
- CHAMFER ALL EXPOSED CONCRETE SURFACES 3/4".

RECORD DRAWINGS:

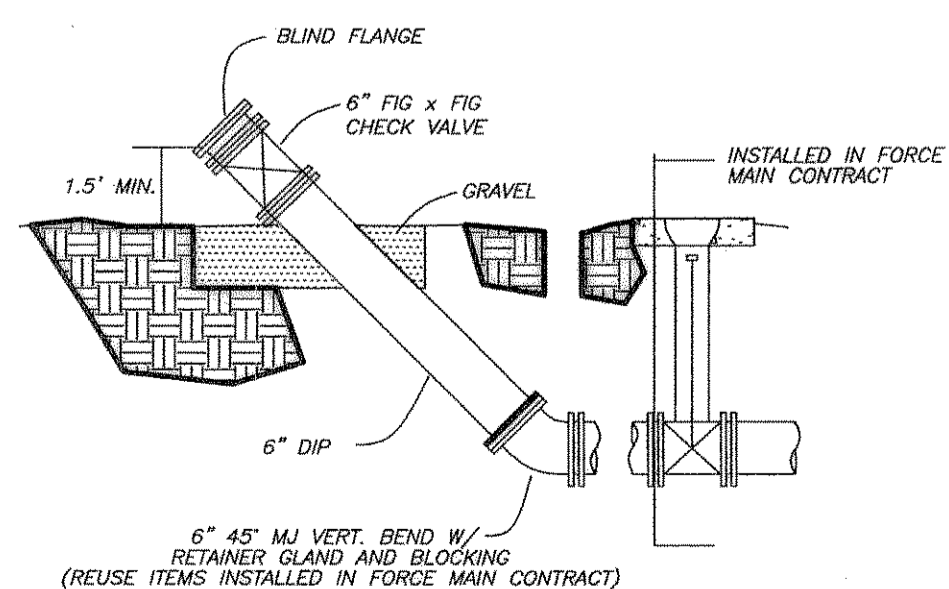
THE INTENT OF THE OWNER AND ENGINEER WAS TO CONSTRUCT THESE FACILITIES ACCORDING TO THESE PLANS AS APPROVED BY THE CITY OF Rockwall. THE LINES AND GRADES WERE SET ON THE GROUND FOR CONSTRUCTION ACCORDING TO SAID PLANS. THE CITY OF Rockwall INSPECTED THE CONSTRUCTION. THE OWNER NOR ENGINEER DID NOT VERIFY LINES OR GRADES AFTER CONSTRUCTION. WE ARE NOT AWARE OF ANY CHANGES OR REVISIONS TO THESE PLANS DURING CONSTRUCTION EXCEPT AS NOTED 4/18/02.

- LOCATE ANCHOR BOLTS USING CLEAR INSIDE EDGE OF ACCESS FRAME AND CENTER LINE OF PUMP AS REF. POINT. BOLT LOCATIONS MUST BE HELD TO MAINTAIN EXACT POSITION OF PUMP RELATIVE TO ACCESS FRAME.
- GROUT OPENING FOR ACCESS FRAME.
- COVER SHOWN IS FOR STANDARD DUTY ANGLE FRAME. FOR ADDITIONAL DIMENSIONS ON STANDARD DUTY TROUGH FRAME, HEAVY DUTY ANGLE FRAME AND HEAVY DUTY TROUGH FRAME.
- CONFIGURATION AND DIMS. SHOWN ARE SUGGESTED REQUIREMENTS ONLY. ALL DETAILS, INCLUDING SIZING OF PIT, TYPE, LOCATION AND ARRANGEMENT OF VALVES AND PIPING, ETC. ARE TO BE SPECIFIED BY THE CONSULTING ENGINEER AND ARE SUBJECT TO HIS APPROVAL.
- FOR OUTLINE DIMENSIONS OF PUMP, SEE DRAWING SHT 8A
- INSTALL A PLUG FOR A PORTABLE GENERATOR IN THE ELECTRICAL PANEL

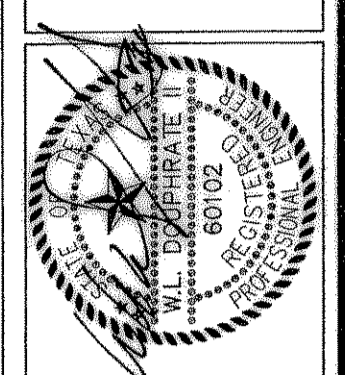
ALL DIMENSIONS IN INCHES

MODEL	NOM. SIZE	VERSION	STATION													COVER										
			A	B	C	D	F	G	H	R	S	T	U	CV	MW	PL	SIZE	V	W	X	Y	Z	AD			
CP	3"	HT	2 1/2	9 1/2	8	4	15 1/2	1	45	36	15 1/2	9 1/2	60	9 1/2	11	8	FLE-6	30	x	48	48	59	24	30	44	3
DP	3"	HT	2 1/2	9 1/2	8	4	15 1/2	1	45	36	15 1/2	9 1/2	60	9 1/2	12	9	FLE-6	30	x	48	48	59	24	30	44	3
CP/DP	3"	MT	2 1/2	9 1/2	8	4	15 1/2	1	45	36	15 1/2	9 1/2	60	9 1/2	12	9	FLE-6	30	x	48	48	59	24	30	44	3
CP/DP	4"	MT	2 1/2	9 1/2	8	4	13 1/2	1	45	36	16 1/2	10	60	11 1/2	8	9	FLE-6	30	x	48	48	59	24	30	44	3

CAD DRAWING (D)



EMERGENCY BY-PASS DETAIL
N.T.S.



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LIFT STATION PLAN
 LAKEVIEW SUMMIT PHASE 1-A
 CITY OF ROCKWALL
 ROCKWALL COUNTY TEXAS

REVISION	W.L.D. CHECKED
DRAWN	K.E.B.
DATE	2/6/01
PROJECT	99191-ILS1
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