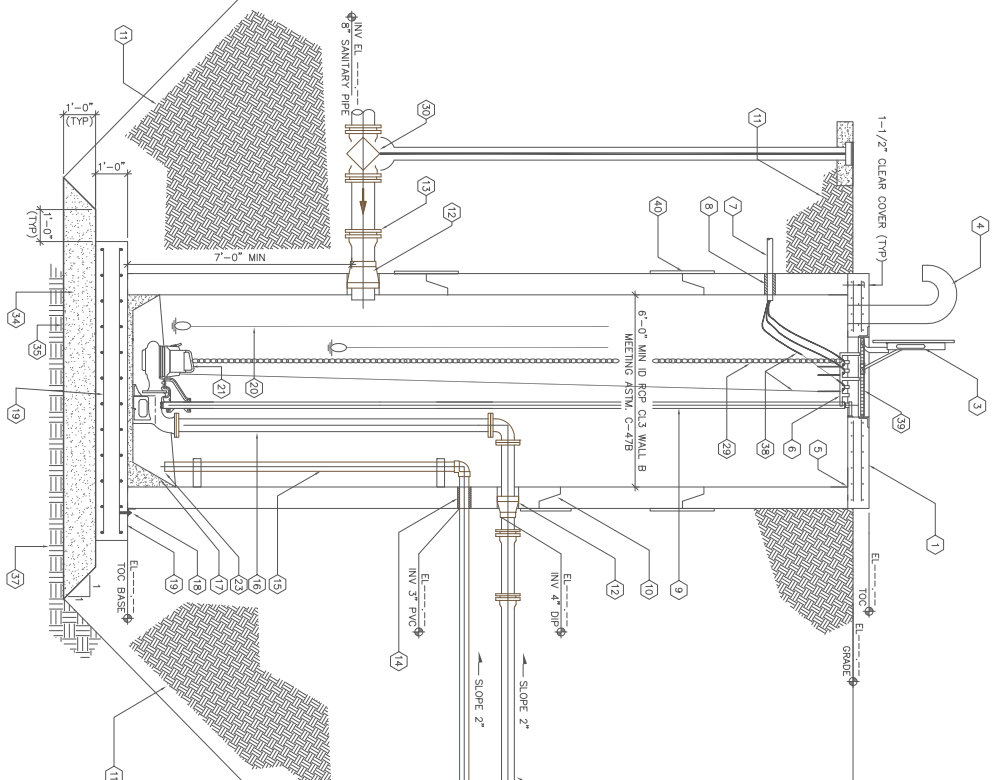
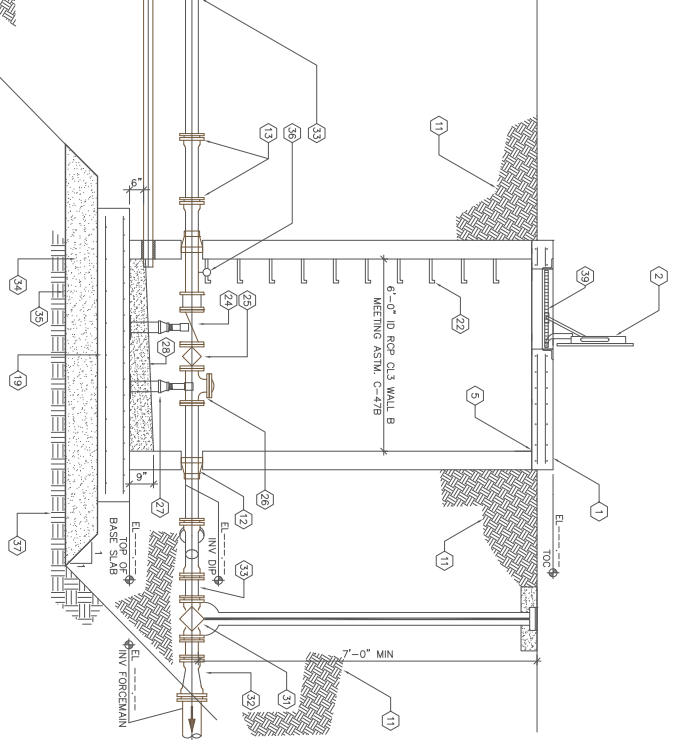


PUMP CONTROL ELEVATIONS	
LOW LEVEL ALARM	-----
PUMP OFF	-----
LEAD PUMP ON	-----
LAG PUMP ON	-----
HIGH LEVEL ALARM	-----

LIFT STATION MANHOLE



VALVE VAULT MANHOLE



GENERAL NOTES:

1. AT LEAST ONE SOIL BORING AND ACCOMPANYING GEOTECHNICAL REPORT IS REQUIRED AT THE LIFT STATION SITE.
2. DESIGN ALLOWABLE NET SOIL BEARING PRESSURE: 2500 PSF (ASSUMED).
3. ABOVE AND BELOW PILES.
4. PARTS OF SECTION VIEW OF DRAWING ARE ROTATED FOR CLARITY.
5. SEE PLAN VIEW AND SITE PLAN FOR ORIENTATION OF PIPES.
6. CONTRACTOR TO VERIFY EXISTING CONDITIONS.
7. PAINT ALL INTERIOR MANHOLE CONCRETE AND PILING WITH (2) COATS OF EPOXY PAINT.
8. COMPACT BACKFILL TO 100% OF STANDARD PROCTOR DRY DENSITY BELOW VALVE MANHOLE AT A MIN OF 1:1 OVERSIZING WITHIN THE ZONE PREVIOUSLY EXCAVATED FOR INSTALLATION OF THE LIFT STATION.
9. RED AND BROWN PIPE BRANCHES TO FOOT ABOVE. PREVIOUSLY EXCAVATED AND REINSTALLED WITH GRANULAR MATERIAL. SEE DETAIL V/53.
10. ELEVATION OF PIPING IN VALVE VAULT MUST BE AT LOWEST ELEVATION, OTHERWISE AN AIR RELEASE VALVE SHALL BE INSTALLED IN THE VAULT.

KEYNOTES:

- 1 PRECAST CONCRETE COVER WITH #4 @ 9" E.W. TOP AND #5 @ 4 1/2" E.W. BOTTOM, REINFORCEMENT.
- 2 80° OPENING. SEE PLAN AT GRADE FOR COVER HINGE ORIENTATION.
- 3 SEE DETAIL V/47 ALUMINUM HATCH WITH UPPER GUIDE RAILS AND 1/2" DIA. STAINLESS STEEL STRAPS AND 3/8" DIA. STAINLESS STEEL ANCHOR BOLTS, NUTS AND WASHERS.
- 4 CORE DRILL FOR ELEC CONDUIT AND SEAL WITH NON-SHINK GROUT.
- 5 PRECAST COVER CONNECTION - SEE DETAIL D/53.
- 6 ELECTRICAL CABLE HOLDER.
- 7 RIGID PVC CONDUIT @ ELEVATION - SEE DETAIL V/53 FOR ELEVATION. SEE ELECTRICAL SITE PLAN UNDERGROUND. SEE ELECTRICAL SITE PLAN.
- 8 CORE DRILL FOR ELEC CONDUIT AND SEAL WITH NON-SHINK GROUT.
- 9 PUMP GUIDE RAILS.
- 10 PRECAST JOINT WITH BUTYL RUBBER JOINT SEAL (KENT, RAMMER, OR CONSEAU) (TYPICAL).
- 11 ON-SITE MATERIAL (SEE NOTE #3 FOR COMPACTION).
- 12 PIPE SEAL GASKET - SEE DETAIL A/53 (TYP).
- 13 PIPE CONNECTION - SEE DETAIL C/43 (TYP).
- 14 CORE DRILL AND SEAL WITH LINK SEAL (TYP).
- 15 3" PVC (SCH. 40) VALVE MANHOLE DRAIN - FASTEN TO WALL WITH 2X6 STAINLESS STEEL STRAPS AND 3/8" DIA. STAINLESS STEEL ANCHOR BOLTS, NUTS AND WASHERS.
- 16 DIP PUMP DISCHARGE TO VALVE MANHOLE (TYP OF 2).
- 17 GROUT CIRCLE AS RECOMMENDED BY PUMP MANUFACTURER.
- 18 CONCRETE BASE SLAB CONNECTION - SEE DETAIL E/53.
- 19 12" THICK CONCRETE SLAB WITH #6 @ 12" E.W. BOTTOM AND #8 @ 6" E.W. TOP, REINFORCING GRADE 60.
- 20 PUMP CONTROL LEVEL FLOATS.
- 21 SUBMERGIBLE PUMP (2 REQUIRED) INSTALL PER MANUFACTURER GROUT CIRCLE AS RECOMMENDED BY PUMP MANUFACTURER.
- 22 MANHOLE STEPS @ 12" ON CENTER.
- 23 EXTEND BELOW PUMP SHUTOFF ELEVATION.
- 24 RUBBER FLAPPER CHECK VALVE (2 REQD).
- 25 GATE VALVE WITH LEVER OPERATOR (2 REQD).
- 26 FLANGED TEE WITH BLIND FLANGE.
- 27 PIPE SUPPORT FROM FLOOR (4) - SEE DETAIL G/53 GROUT BOTTOM OF MANHOLE - SLOPE TO DRAIN PIPE S.S. CHAINS AND SHACKLES.
- 28 1/4" PLUG VALVE WITH GEAR OPERATOR, EXTENSION AND VALVE BOX TO GRADE (SEE DETAIL H/53).
- 29 1/2" GATE VALVE WITH GEAR OPERATOR, EXTENSION AND VALVE BOX TO GRADE (SEE DETAIL H/53).
- 30 1/2" REDUCER.
- 31 POLY WRAP DIP.
- 32 CLASS 5 MATERIAL - SEE GENERAL NOTE NO. 2.
- 33 MANDOT 3733 TYPE 9 GEOTEXTILE FABRIC.
- 34 PRESSURE GAUGES (2).
- 35 UNENCASED SOLIS.
- 36 PUMP CONTROLS AND POWER CABLES, S.S. FLOAT FLOOR MOUNTED PRESSURE TRANSDUCER WITH 2' FIBERGLASS FALL PROTECTION GRATING.
- 37 BUTYL JOINT WRAP.



LIFT STATION AND VALVE STANDARD DETAIL (ELEVATION)

PLATE: 5402-A

REVISED: 2-10

ENGINEERING DEPARTMENT

FILE NAME:
 G:\ENG\SPCS\5402A