

REVISIONS		
DATE	DESCRIPTION	BY
01/16/19	REV PER FORWD & IDEM	JEF
	COMMENTS	



SIMS-DURKIN ASSOCIATES  
ENGINEERING COMPANY  
1546 COUNTRY CLUB ROAD, INDIANAPOLIS, INDIANA 46234  
PHONE: (317)288-4433 WEBSITE: WWW.SIMS-DURKIN.COM

SPRINGBROOK PRELIMINARY PLAN  
MADISON COUNTY, INDIANA  
LIFT STATION  
EQUIPMENT LOCATION AND SECTION VIEW



DESIGN BY	LA. SOL
CHECKED BY	JEF
DATE	NOVEMBER 30, 2018
SCALE	AS SHOWN
SHEET	JOB NUMBER 2017-271

C5.7

LIFT STATION EQUIPMENT LOCATION AND SECTION VIEW

© 2017

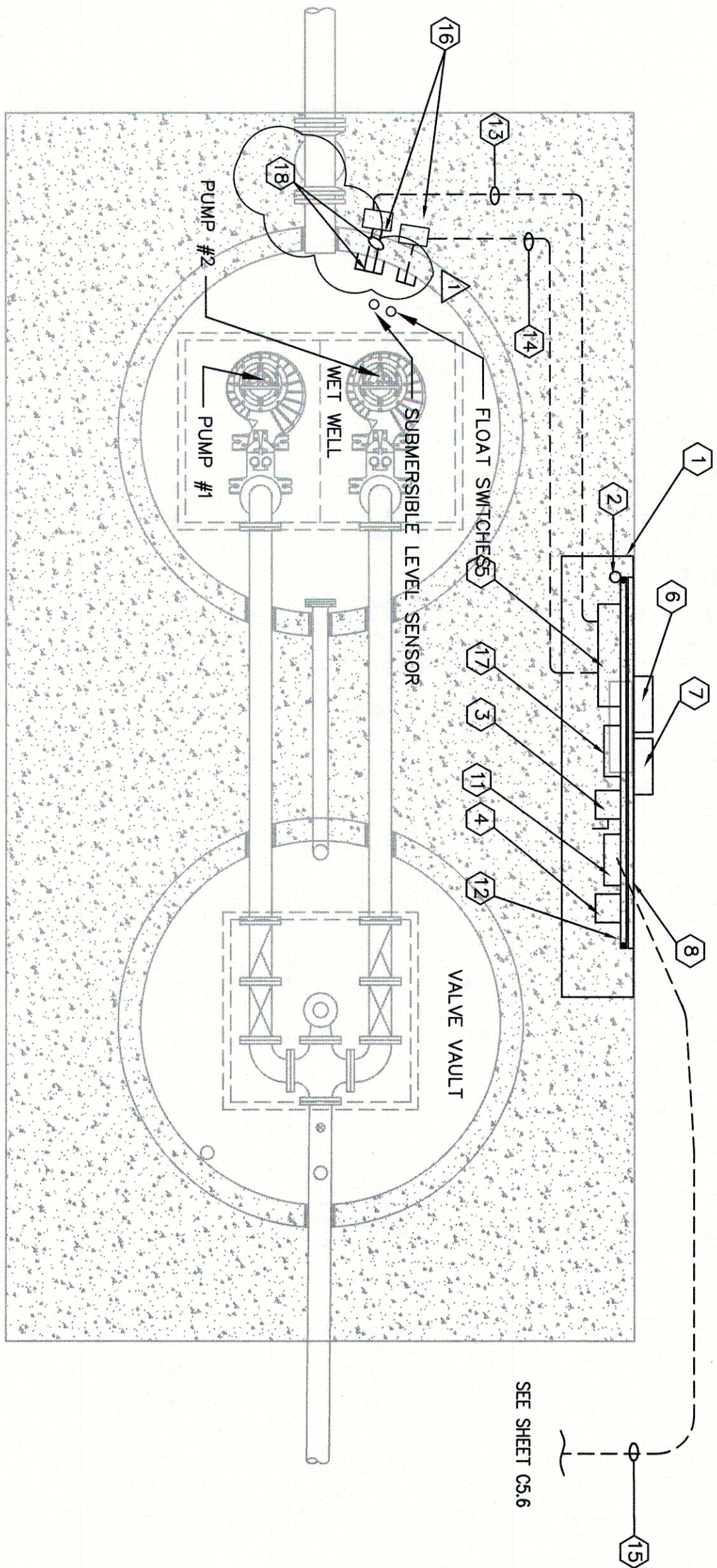
GENERAL ELECTRICAL NOTES:

- CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR NEW SERVICE WITH LOCAL UTILITY. **UTILITY FEES TO BE INCURRED BY CONTRACTOR.** (Name: Marc Diller, Email: marc.diller@duke-energy.com)
- PROVIDE ONE LINE DIAGRAM FOR ADDITIONAL DETAILS AND REQUIREMENTS.
- PROVIDE STAINLESS STEEL HARDWARE FOR ALL EQUIPMENT INSTALLED IN WET WELL. THIS INCLUDES BUT NOT LIMITED TO KELLEMS' CABLE GRIPS, CABLE RACKS, MOUNTING BRACKETS, BOLTS AND NUTS.
- WITHIN A 5' RADIUS OF ANY VENTED OPENING ATTACHED TO THE WET WELL SHALL BE CLASS 1 DIVISION 2 GROUP D RATED.
- THE WET WELL CLASSIFICATION IS CLASS 1 DIVISION 1 GROUP D ENVIRONMENTAL PER NFPA 820. ALL EQUIPMENT SHALL MEET NEC REQUIREMENTS FOR THIS ENVIRONMENT.
- LOCATE ALL EXISTING PIPING AND UTILITIES BEFORE INSTALLING UNDERGROUND CONDUITS; PROTECT ALL EXISTING INSTALLATIONS.
- ALL BELOW GRADE CONDUIT SHALL BE SCH. 80 PVC. ALL TRANSITIONS (90 DEGREE ELBOW) FROM BELOW GRADE TO ABOVE GRADE SHALL BE GALVANIZED RIGID STEEL. ALL ABOVE GRADE CONDUIT SHALL BE RIGID ALUMINUM. INCLUDING INDOORS COAT ALL RIGID ALUMINUM CONDUITS WHERE IN CONTACT WITH EARTH OR CONCRETE WITH OXIDATION RESISTANT COATING. ALL CONDUITS FROM VENTED TERMINAL BOXES INTO WET WELL SHALL BE GALVANIZED RIGID STEEL.
- MAINTAIN 3" SEPARATION BETWEEN 480V POWER CONDUITS AND LOW VOLTAGE (NETWORK, 24V DC CONTROL, OR INTRINSICALLY SAFE CIRCUIT) CONDUITS. MAINTAIN 1" SEPARATION BETWEEN 120V POWER CONDUITS AND LOW VOLTAGE (NETWORK, 24V DC CONTROL, OR INTRINSICALLY SAFE CIRCUIT) CONDUITS.
- WHERE CONDUIT CROSSES UNDER EXISTING OR FUTURE PAVEMENT, CONDUIT SHALL BE GALVANIZED RIGID STEEL. SAW CUT AND REPAIR EXISTING PAVEMENT AS NECESSARY.
- WIRE AND CONDUIT ROUTES AND ELECTRICAL EQUIPMENT LOCATIONS ARE APPROXIMATE.
- ALL WIRING, CONDUIT, AND TERMINATIONS FURNISHED AND INSTALLED BY CONTRACTOR.
- CONTRACTOR SHALL COORDINATE NEW SERVICE AND TRANSFORMER WITH UTILITY.
- MAINTAIN 5" MINIMUM SEPARATION BETWEEN VENTED TERMINAL BOXES AND OTHER ELECTRICAL EQUIPMENT.
- EXISTING CONDITION INFORMATION PROVIDED ON THIS DRAWING WAS OBTAINED BY SITE VISUAL OBSERVATION AND FIELD MEASUREMENTS. CONTRACTOR SHALL VERIFY THE SCOPE OF WORK BY SITE INSPECTION PRIOR TO BIDDING. THIS DRAWING SHALL BE CONSIDERED INCOMPLETE AND USED FOR REFERENCE ONLY.

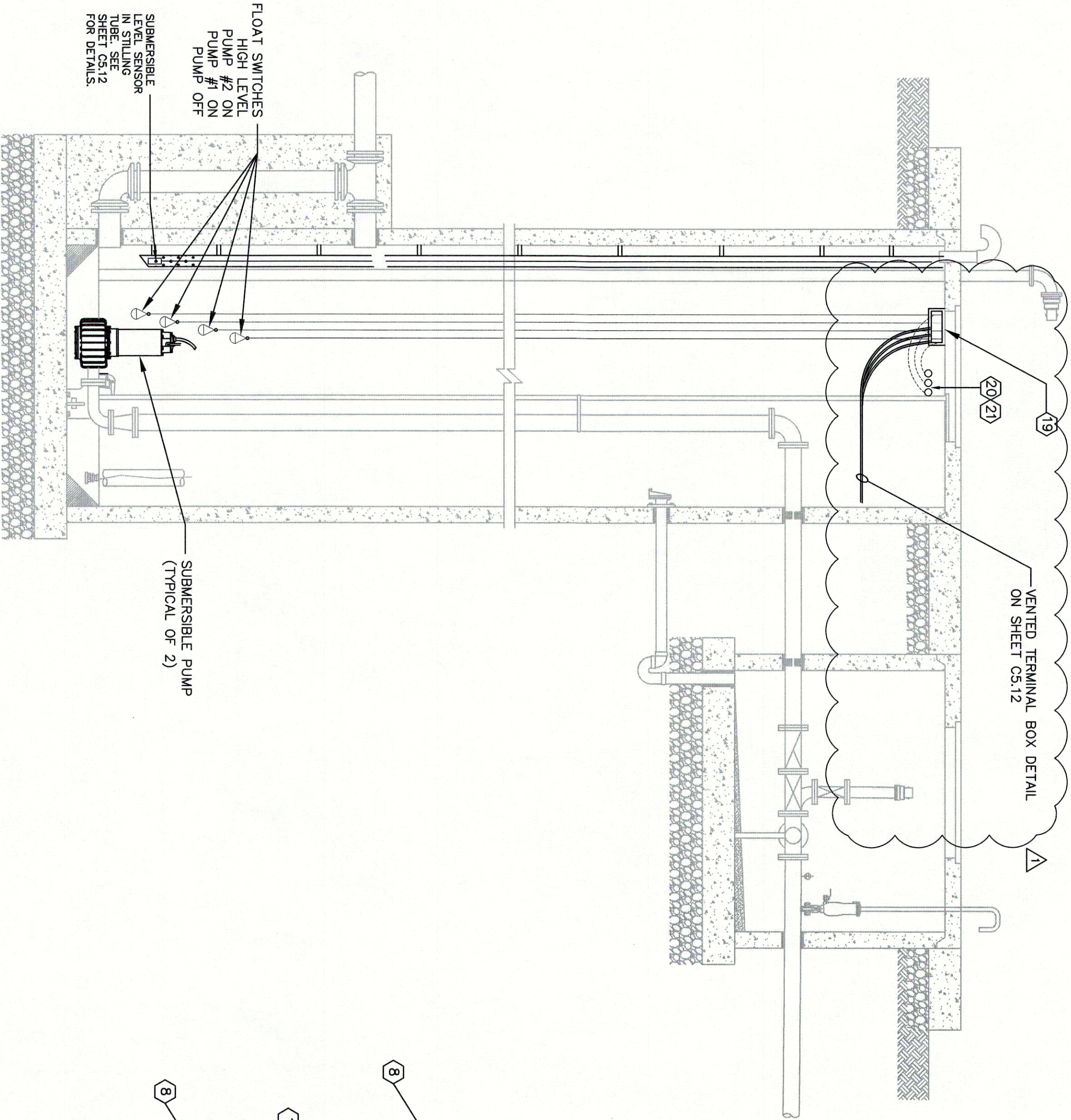
ELECTRICAL KEYED NOTES: □

- NEW CONCRETE PAD: 4" THICK, 3000 PSI STRENGTH.
- CONTRACTOR SHALL FURNISH AND INSTALL WET WELL LIGHTING FIXTURE. STAINLESS STEEL MOUNTING BRACKET SHALL BE KELLEMS' OR EQUIVALENT LED MANUFACTURERS INCLUDE: DAY-BRITA, HOLLOWAYNE.
- NEW 400A ENCLOSED CIRCUIT BREAKER.
- NEW UTILITY METER.
- NEW PUMP CONTROL PANEL.
- LC LINE SIDE HARMONIC FILTER #1.
- LC LINE SIDE HARMONIC FILTER #2.
- WELDED HEAVY DUTY STAINLESS STEEL SUPPORT FRAME, USING 4" X 4" SQUARE VERTICAL POSTS AND 2" X 2" STAINLESS STEEL HORIZONTAL BRACES. FRAME SHALL BE 3" DEEP, 18" WIDE, 10' LONG. 3000 PSI CONCRETE WITH ASPHALT ROOF. CEMENT CORROSION PROTECTION ON VERTICAL POSTS BELOW GRADE.
- NEW H-O-A SWITCH AND PHOTOCELL FOR CONTROL OF ALL AREA LIGHTING. SEE SHEET C5.8.
- NEW WP /GFI 20A RECEPTACLE, 2-#12 CU, 1-#12 CU GND. SEE SHEET E3.
- NEW CT/PT CABINET.
- ELECTRICAL EQUIPMENT RACK. SEE DETAILS THIS SHEET.
- NEW PUMP #1 POWER AND CONTROLS, PUMP #2 POWER AND CONTROLS, AND LEVEL SENSOR CONTROL CIRCUITS. SEE ONE-LINE DIAGRAM (MULTIPLE CONDUITS). □
- NEW LEVEL SENSOR CONTROL CIRCUIT. SEE ONE-LINE DIAGRAM. MAINTAIN MINIMUM 3" CLEARANCE FROM POWER CONDUIT. WHEN CROSSING OVER POWER CONDUIT IS SHALL BE AT 90 DEGREE ANGLES. SEE ONE-LINE DIAGRAM.
- NEW UNDERGROUND FEEDER FROM UTILITY POLE TO CT/PT CABINET. SEE ONE-LINE DIAGRAM.
- NEW VENTED TERMINAL BOXES. SEE SHEET C5.12 FOR DETAILS.
- NEW 400A ATS WITH NEMA 4X ENCLOSURE.
- PROVIDE LINK SEAL FOR CONDUIT PENETRATIONS INTO WET WELL. TERMINATE CONDUIT WITH BUSHING. TYPICAL.
- CONTRACTOR SHALL PROVIDE STAINLESS STEEL MOUNTED HARDWARE, L-HOOKS AND KELLEMS GRIPS. INSTALL NEAR ACCESS HATCH.
- TERMINATE CONDUIT WITH BUSHING. TYPICAL.
- PROVIDE LINK SEAL FOR ALL WET WELL CONDUIT PENETRATIONS. TYPICAL.

ENLARGED PROPOSED LIFT STATION PLAN VIEW  
SCALE: 3/8" = 1'-0"



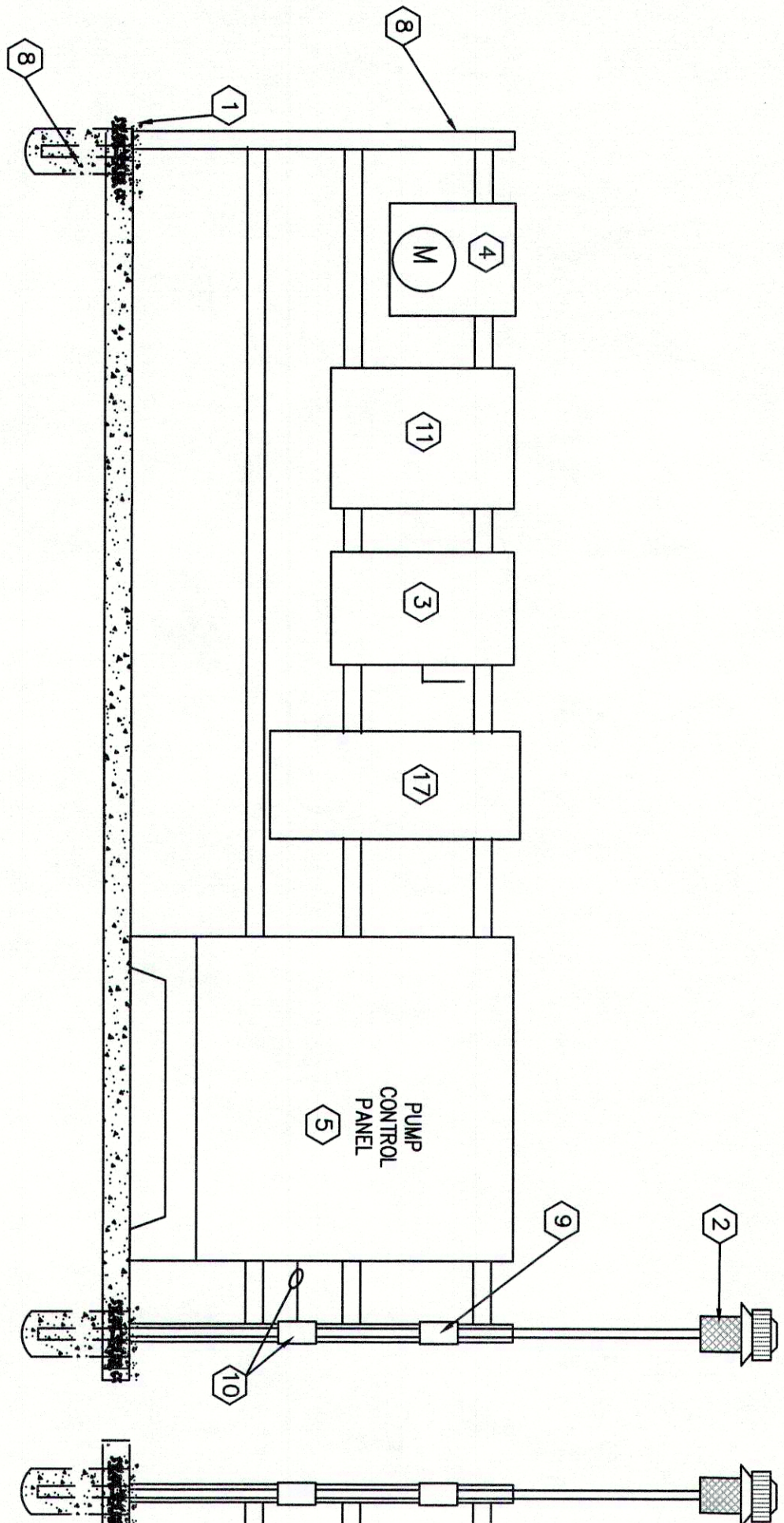
VENTED TERMINAL BOX DETAIL  
ON SHEET C5.12



PROPOSED LIFT STATION SECTION VIEW  
SCALE: 3/8" = 1'-0"

ELECTRICAL EQUIPMENT RACK ELEVATION DETAILS  
FACING NORTH

SCALE: NONE



ELECTRICAL EQUIPMENT RACK ELEVATION DETAILS  
FACING SOUTH

SCALE: NONE

