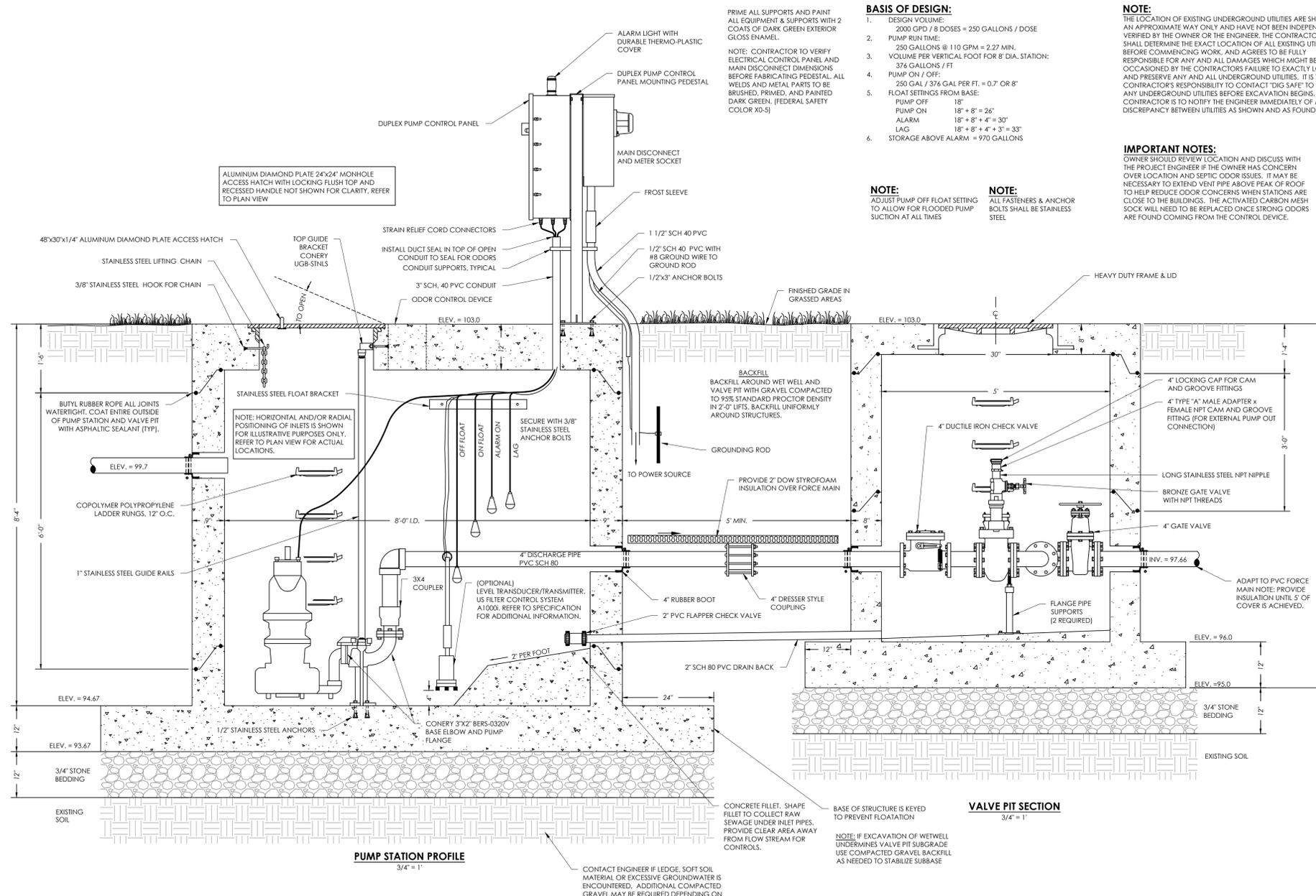




TRUDELL CONSULTING ENGINEERS
478 BLAIR PARK ROAD | WILISTON, VERMONT 05495
802.879.4331 | WWW.TCEVT.COM

Revisions
No. Description Date By



PRIME ALL SUPPORTS AND PAINT ALL EQUIPMENT & SUPPORTS WITH 2 COATS OF DARK GREEN EXTERIOR GLOSS ENAMEL.
NOTE: CONTRACTOR TO VERIFY ELECTRICAL CONTROL PANEL AND MAIN DISCONNECT DIMENSIONS BEFORE FABRICATING PEDESTAL. ALL WELDS AND METAL PARTS TO BE BRUSHED, PRIMED, AND PAINTED DARK GREEN, (FEDERAL SAFETY COLOR X0-5)

- BASIS OF DESIGN:**
- DESIGN VOLUME: 2000 GPD / 8 DOSES = 250 GALLONS / DOSE
 - PUMP RUN TIME: 250 GALLONS @ 110 GPM = 2.27 MIN. VOLUME PER VERTICAL FOOT FOR 8" DIA. STATION: 376 GALLONS / FT
 - PUMP ON / OFF: 250 GAL / 376 GAL PER FT. = 0.7' OR 8"
 - FLUAT SETTINGS FROM BASE:
PUMP OFF 18"
PUMP ON 18" + 8" = 26"
ALARM 18" + 8" + 4" = 30"
LAG 18" + 8" + 4" + 3" = 33"
STORAGE ABOVE ALARM = 970 GALLONS

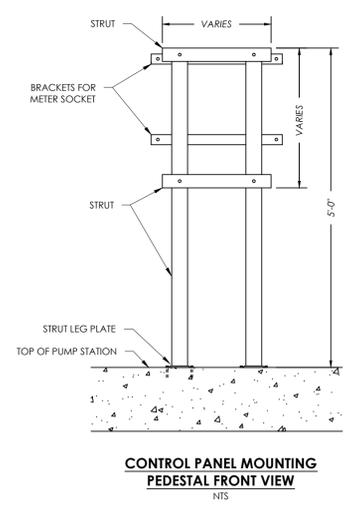
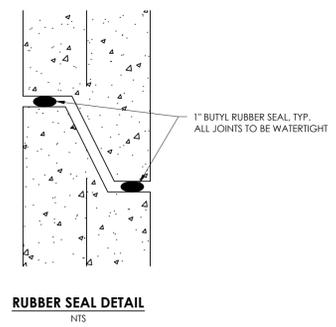
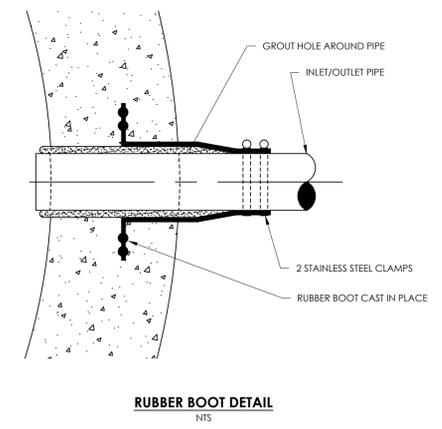
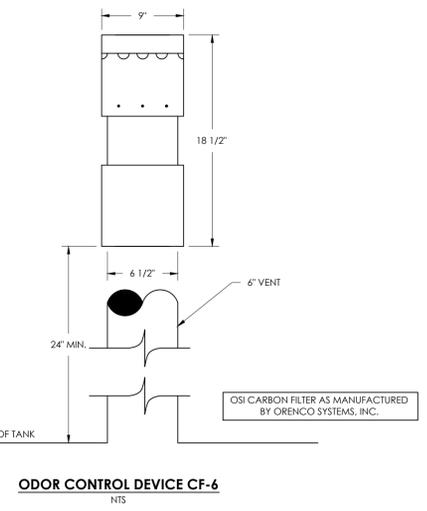
NOTE:
THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT "DIG SAFE" TO LOCATE ANY UNDERGROUND UTILITIES BEFORE EXCAVATION BEGINS. THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCY BETWEEN UTILITIES AS SHOWN AND AS FOUND.

IMPORTANT NOTES:
OWNER SHOULD REVIEW LOCATION AND DISCUSS WITH THE PROJECT ENGINEER IF THE OWNER HAS CONCERN OVER LOCATION AND SEPTIC ODOR ISSUES. IT MAY BE NECESSARY TO EXTEND VENT PIPE ABOVE PEAK OF ROOF TO HELP REDUCE ODOR CONCERNS WHEN STATIONS ARE CLOSE TO THE BUILDINGS. THE ACTIVATED CARBON MESH SOCK WILL NEED TO BE REPLACED ONCE STRONG ODORS ARE FOUND COMING FROM THE CONTROL DEVICE.

- EQUIPMENT SPECIFICATIONS SUMMARY**
- PRECAST CONCRETE PUMP STATION (8" DIA.), VALVE PIT (5" DIA.)
 - PUMPS: SGV3072L BARNES, 3HP, 208-230 V, 3450, 2" DISCHARGE TO PROVIDE 75 GPM @ 100' TDH, VORTEX IMPELLER, TANDEM MECHANICAL SEAL WITH N/O SEAL FAILURE, N/C THERMAL OL, OR ENGINEER APPROVED EQUIVALENT. THIS IS A GRINDER PUMP SELECTED FOR SYSTEM PERFORMANCE. SYSTEM IS NOT HANDLING SOLIDS.
 - SLIDE RAIL SYSTEM - CONERY BASE ELBOW BEES-0320V WITH UPPER GUIDE BRACKET UGB-STNS. USE WITH 1" STAINLESS STEEL RAILS, INTERMEDIATE GUIDE BRACKET NOT REQUIRED.
 - NEMA 3R (OUTDOOR) DUPLEX CONTROL PANEL FOR OPERATION OF ABOVE PUMPS. THE UNIT WILL EXAMPLET WITH TRANSFER SWITCH, CIRCUIT BREAKERS WITH MAIN POWER DISCONNECT, MAGNETIC CONTACTORS, OVERLOADS, H-O-A SWITCHES, SEAL FAILURE SENSOR LIGHT, ELAPSED TIME METERS, ALTERNATOR WITH SELECTOR SWITCH, LIGHTNING ARRESTOR, AND RUN LIGHTS FOR EACH PUMP. PROVIDE FLASHING RED LIGHT AND AUDIBLE ALARM.
 - PRESSURE TRANSDUCER LEVEL CONTROL SYSTEM OR FOUR MECHANICAL LIQUID LEVEL CONTROL FLOATS - NORMALLY OPEN, 30' CORDS FOR STATION CONTROL.
 - STAINLESS STEEL FLOAT BRACKET.
 - SCHEDULE 80 PVC PIPING AND FITTINGS MAY BE APPROVED FOR USE IN THE VALVE PIT UPON ENGINEER'S APPROVAL ONLY AFTER SHOP DRAWINGS HAVE BEEN SUBMITTED BY THE CONTRACTOR TO THE ENGINEER AND ARE FOUND TO BE ACCEPTABLE.

- CONSTRUCTION NOTES**
- PRIOR TO CONSTRUCTION OF THE PUMP STATION AND VALVE PIT, MEET WITH THE ENGINEER TO DISCUSS THE PLANS.
 - CONTACT DIGSAFE (1-800-344-7233) AND THE OWNER PRIOR TO ANY EXCAVATION ACTIVITIES.
 - SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR ALL MATERIALS AND EQUIPMENT, PRIOR TO ORDERING.
 - THE CONTRACTOR / SUPPLIER SHALL COORDINATE WITH POWER COMPANY ON ELECTRICAL REQUIREMENTS PRIOR TO ORDERING.
 - THE CONTRACTOR SHALL COMPLY WITH THE LATEST RULES OF THE VERMONT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (VOSH). CONSTRUCTION INSTALLATION OF THE PUMP STATION AND RELATED SHALL BE OBSERVED BY THE ENGINEER. THE MEANS, METHODS AND SAFETY OF THE INSTALLATION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
 - THE PUMP STATION SHALL BE LEAKAGE TESTED PRIOR TO BACKFILLING. SEE LEAKAGE TESTING DETAIL.
 - AFTER INSTALLATION OF ALL PUMPING EQUIPMENT, APPURTENANCES AND ELECTRICAL CONTROLS THE CONTRACTOR, MANUFACTURER, ENGINEER AND OWNER SHALL MEET FOR START-UP AND TESTING OF THE PUMP STATION. EACH PUMP WILL BE OPERATIONALLY TESTED ALONG WITH ALL CONTROLS.
 - THE MANUFACTURER WILL RECORD THE PUMPING RATES OF EACH PUMP TO VERIFY COMPLIANCE WITH OPERATING REQUIREMENTS.
 - THE MANUFACTURER SHALL PROVIDE ASSISTANCE TO THE OWNER FOR INSTALLATION, START-UP, AND ADVISING OPERATING PERSONNEL IN THE OPERATION AND MAINTENANCE OF THE EQUIPMENT. THE MANUFACTURER SHALL SUPPLY FIVE OPERATION AND MAINTENANCE MANUALS AFTER APPROVAL OF THE SHOP DRAWINGS. THE MANUFACTURER SHALL PROVIDE WRITTEN CERTIFICATION THAT THE EQUIPMENT WAS INSTALLED AND IS OPERATING CORRECTLY. A ONE YEAR GUARANTEE SHALL BE PROVIDED ON ALL EQUIPMENT. THE GUARANTEE WILL COVER THE REPAIR OR REPLACEMENT OF A FAULTY CONDITION CAUSED BY NORMAL OPERATION OF THE EQUIPMENT. THE ONE YEAR GUARANTEE BEGINS UPON THE ENGINEER'S ACCEPTANCE OF THE WRITTEN CERTIFICATION. IN THE EVENT OF FAULTY EQUIPMENT, THE ONE YEAR GUARANTEE PERIOD IS EXTENDED ONE YEAR BEYOND THE DATES OF ANY REPAIR THAT OCCURS DURING THE GUARANTEE PERIOD.

Use of These Drawings
1. Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
2. By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
3. Owner and Architect, are responsible for final design and location of buildings shown, including an area measured a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
4. Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the most current revisions.
5. These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings, and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. If errors or omissions are discovered, they shall be brought to the attention of TCE immediately.
6. It is the User's responsibility to ensure this copy contains the most current revisions. If unsure, please contact TCE.



Project Title

Point Bay Marina
1401 Thompson's Point Rd

Sheet Title

Pump Station Profile View

Date: 02/01/16
Scale: Shown
Project Number: 15-203
Drawn By: RMP
Project Engineer: JPP
Approved By:
Field Book:

C8-05