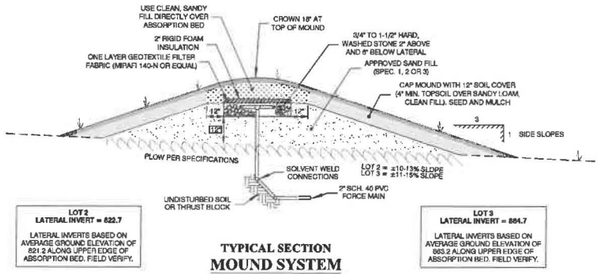
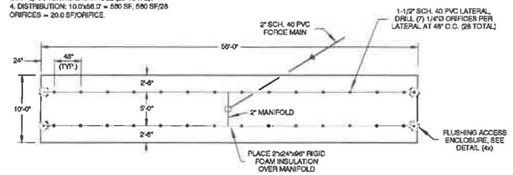
EXHIBIT
Q



TYPICAL SECTION
MOUND SYSTEM
NTS

ABSORPTION BED NOTES

1. EXCAVATE BED BOTTOM LEVEL. RAKE TO SCARIFY SURFACE.
2. PRIME AND SOLVENT WELD ALL CONNECTIONS.
3. ORIFICES SHALL POINT DOWNWARDS WITH A 'SIMTECH' ORIFICE SHIELD (OR APPROVED EQUAL) COVERING EACH HOLE (28 TOTAL).
4. DISTRIBUTION: 10.0x66.0' = 660 SF, 660 SF/28 ORIFICES = 20.0 SF/ORIFICE.

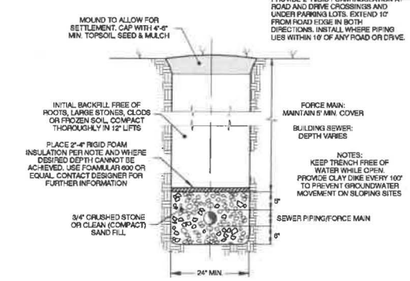


LOT 2 PLAN
MOUND SYSTEM
1" = 10'

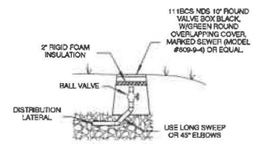
§1-913(c) SAND FILL SPECIFICATIONS		
(1)		
SIEVE NO.	OPENING (MM)	% PASSING (BY WGT)
3/8	9.500	85 - 100
40	0.420	25 - 75
60	0.240	0 - 30
100	0.149	0 - 10
200	0.074	0 - 5
(3)		
SIEVE NO.	OPENING (MM)	% PASSING (BY WGT)
4	4.750	95 - 100
8	2.360	80 - 100
16	1.190	50 - 85
30	0.590	25 - 60
50	0.297	10 - 30
100	0.149	2 - 10
200	0.075	0 - X*
ASTM SPECIFICATION C-33, INTENDED FOR MANUFACTURED MATERIAL.		
(3)		
SIEVE NO.	OPENING (MM)	% PASSING (BY WGT)
3/8	9.500	85 - 100
40	0.420	30 - 50
200	0.074	0 - 5
THE FILL MATERIAL MUST MEET SPECIFICATIONS (1), (2), OR (3) ABOVE. INTERPOLATION OF ANALYSIS IS NOT PERMITTED.		
*X = 3% FOR SYSTEM SAND; X = 5% FOR SAND FILL.		

SYSTEM SAND

INSULATION NOTE:
PROVIDE 2" RIGID FOAM INSULATION AT ROAD AND DRIVE CROSSINGS AND UNDER PARKING LOTS. EXTEND 10' FROM ROAD EDGE IN BOTH DIRECTIONS. INSTALL WHERE PIPING LIES WITHIN 18' OF ANY ROAD OR DRIVE.



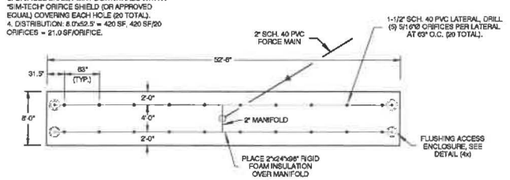
SECTION
SEWER TRENCH
NTS



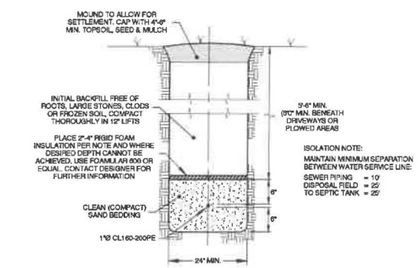
FLUSHING ENCLOSURE
NTS

ABSORPTION BED NOTES

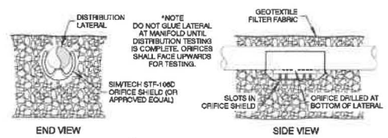
1. EXCAVATE BED BOTTOM LEVEL. RAKE TO SCARIFY SURFACE.
2. PRIME AND SOLVENT WELD ALL CONNECTIONS.
3. ORIFICES SHALL POINT DOWNWARDS WITH A 'SIMTECH' ORIFICE SHIELD (OR APPROVED EQUAL) COVERING EACH HOLE (20 TOTAL).
4. DISTRIBUTION: 8.0x52.5' = 420 SF, 420 SF/20 ORIFICES = 21.0 SF/ORIFICE.



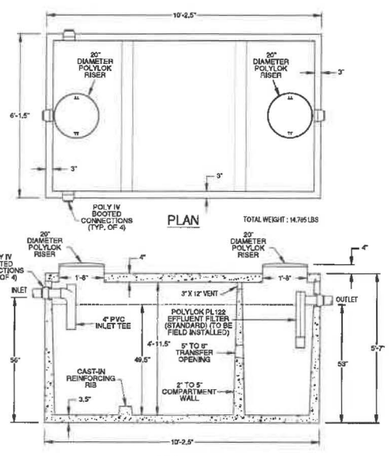
LOT 3 PLAN
ABSORPTION BED
1"=10'



SECTION
WATER SERVICE TRENCH
NTS



ORIFICE SHIELD
NTS



SECTION

1,500 GAL.
2 COMPARTMENT
SEPTIC TANK
CAMP PRECAST #1500STL2CW
NTS

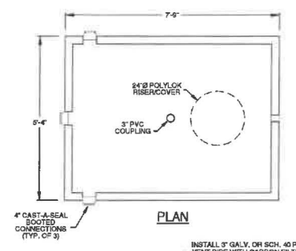
SPECIFICATIONS:

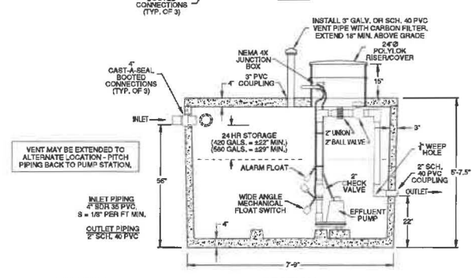
- CONCRETE MINIMUM STRENGTH 5000PSI @ 28 DAYS.
- STEEL REINFORCEMENT GRADE 60.
- EFFLUENT FILTER TO BE FIELD INSTALLED BY CONTRACTOR.
- TOP SEAM CONSTRUCTION.
- WATER TIGHT TO TOP OF CONCRETE.
- BOOTED PIPE CONNECTIONS.
- EFFLUENT FILTER ALARM AVAILABLE.
- WEIGHTS SUBJECT TO VARIATION.

*PROVIDE ADDITIONAL RISER EXTENSIONS TO GRADE AS NECESSARY. COVERS TO BE BOLTED DOWN W/SS SCREWS.

- CAUTION -
GAS WITHIN SEPTIC TANKS AND PUMP STATIONS CAN CAUSE DEATH IF ENTERED WITHOUT PROPER RESPIRATORY EQUIPMENT. SUCH SPACES ARE SUBJECT TO CONFINED-SPACE ENTRY REGULATIONS PUBLISHED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA STANDARD CFR 1910.146).

SUBSURFACE TANK MINIMUM ISOLATION REQUIREMENTS	
FOUNDATION/FOOTING DRAIN	10'
WATER SERVICE	25'
DRILLED WELL	50'
DRIVEWAY	5'





SECTION

1,000 GAL.
PUMP STATION
CAMP PRECAST #1000PS
NTS

SPECIFICATIONS:

- CONCRETE MINIMUM STRENGTH 5000PSI @ 28 DAYS.
- STEEL REINFORCEMENT GRADE 60.
- TOP SEAM CONSTRUCTION.
- WATER TIGHT TO TOP OF CONCRETE.
- 4" CAST-A-SEAL BOOTED CONNECTIONS.
- WEIGHTS SUBJECT TO VARIATION

*PROVIDE ADDITIONAL RISER EXTENSIONS TO GRADE AS NECESSARY. COVERS TO BE BOLTED DOWN W/SS SCREWS.

SUBSURFACE TANK NOTE

THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AN AREA WHICH CONTAINS SUFFICIENT SOIL DEPTH FOR TANK PLACEMENT. ALTERNATE LOCATIONS MAY BE REQUIRED TO ACHIEVE DESIRED ELEVATIONS AND PROPER SOIL COVER OVER TANK. SOIL DEPTH SHOULD VERIFIED PRIOR TO ORDERING OR DELIVERY OF TANK(S).

CONSULT WITH DESIGNER PRIOR TO DETERMINING FINAL TANK DEPTHS. SHALLOW DEPTHS MAY BE NECESSARY TO OVERCOME BUOYANT FORCES.

KEEP EXCAVATION FREE OF WATER DURING INSTALLATION. PLACE 3"–6" CRUSHED STONE BED BENEATH TANK.

PROVIDE INTERIOR OR EXTERIOR AUDIO-VISUAL ALARM PANEL IN LOCATION APPROVED BY OWNER. ALL ELECTRICAL WORK SHALL BE COMPLETED BY A LICENSED ELECTRICIAN.

LOT 2:

TANK VOLUME: ±235 GALS./FT. (AVG.)

MIN. 4 DOSES PER DAY: 560 GPD/4 = 140 GAL./DOSE.

NETWORK VOLUME = ±10 GALS. 10 GAL.x5 = 50 GAL. MIN. DOSE.

SET FLOAT TO DISCHARGE ±100 GALS./DOSE = ±5-6 DOSES/DAY.

SELECT EFFLUENT PUMP CAPABLE OF DISCHARGING 40 GPM @ 10' TDH.

LOT 3:

TANK VOLUME: ±235 GALS./FT. (AVG.)

MIN. 4 DOSES PER DAY: 420 GPD/4 = 105 GAL./DOSE.

NETWORK VOLUME = ±9 GALS. 9 GAL.x5 = 45 GAL. MIN. DOSE.

SET FLOAT TO DISCHARGE ±100 GALS./DOSE = 4+ DOSES/DAY.

SELECT EFFLUENT PUMP CAPABLE OF DISCHARGING 40 GPM @ 10' TDH.

STATE OF VERMONT
JUSTIN T. WILLIS
NO. 344-8
LICENSED DESIGNER

NO.	DATE	REVISION	BY

WILLIS DESIGN ASSOC., INC.
P.O. BOX 1001, JERICHO, VERMONT 05465 (802) 858-9228

DETAILS
3 LOT SUBDIVISION

PETER M. BINGHAM
59 LOWER ENGLISH SETTLEMENT ROAD
UNDERHILL - VERMONT

DRAWN: JTW
DESIGN: JTW
DATE: 2/28/19
PROJECT: 18-027
DRAWING: 18027-1
SCALE: NOTED
SHEET: D1

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