

PRESTIGE SHOOTING COMPLEX OWTS

1565 COUNTY ROAD 103, FLORENCE, CO 81226



430 Main Street
Cañon City, CO 81212
719.430.5333
www.3rocksengeering.com

SCOPE OF PROJECT: ON-SITE WASTEWATER TREATMENT SYSTEM (OWTS)

CLIENT: AARON J MUSS

CONTRACTOR: TBD



DESIGN CRITERIA

SERVICED LOCATIONS: OFFICE AND VISITORS' BATHROOM
TYPE: PRESSURIZED TRENCH SYSTEM
DESIGN FLOW: 375 GPD
APPLIED LTAR: 0.15 GPD/SQ.FT

SIZING ADJUSTMENTS:

0.7 FOR CHAMBERS
0.8 FOR A PRESSURE DOSED TRENCH SYSTEM

TOTAL REQUIRED INFILTRATIVE SURFACE:
1400 SQ. FT

PRESSURIZED SYSTEM:

5 FT RESIDUAL HEAD
5/32 IN ORIFICE DIAMETER
3 FT ORIFICE SPACING O.C.

SPECIAL REMARKS AND/OR VARIANCES:

DESIGN FLOW IS FOR 25 DAILY VISITORS AT 15 GPD PER PERSON ACCORDING TO A TYPICAL HYDRAULIC LOAD OF OFFICE BUILDINGS PER EMPLOYEE PER EIGHT HOUR SHIFT.

GENERAL NOTES

- TOPOGRAPHY BASED UPON CWCB LIDAR AND PROPERTY LINE BASED UPON FREMONT COUNTY PARCEL VIEWER.
- THE JURISDICTIONAL AUTHORITY IS FREMONT COUNTY. PERMIT MUST BE OBTAINED BEFORE BEGINNING OF CONSTRUCTION.
- CONTRACTOR SHALL HAVE A PRINTED COPY OF THE PLANS AT ALL TIMES AT THE JOB SITE.
- CONTRACTOR IS RESPONSIBLE FOR READING THE ENTIRETY OF THE PLANS. FAILURE TO UNDERSTAND THE SCOPE OF THE PROJECT WILL NOT RESULT IN SUFFICIENT GROUNDS FOR CUTTING CORNERS OR POOR INSTALLATION PRACTICES. CONSTRUCTION THAT DOES NOT MATCH THE DESIGN SHALL BE CORRECTED BY THE INSTALLER AT THE INSTALLER'S EXPENSE.

SEPARATION REQUIREMENTS ACCORDING TO TABLE 7-1 OF FREMONT COUNTY OWTS REGULATIONS

	WELL, OR POTABLE WATER CISTERN	POTABLE WATER LINES	STRUCTURE WITH BASEMENT, CRAWL SPACE, OR FOOTING DRAINS	STRUCTURE W/OUT BASEMENT, CRAWL SPACE, OR FOOTING DRAINS	PROPERTY LINES	SUBSURFACE DRAIN, INTERMITTENT IRRIGATION LATERAL, DRYWALL, STORMWATER STRUCTURE	LAKE, WATER COURSE, IRRIGATION DITCH, STREAM, WETLAND
STA TRENCH	100	25	20	10	10	25	50
SEWER OR EFFLUENT LINES	50	5	0	0	10	10	50
SEPTIC TANK	50	10	5	5	10	10	50

ABBREVIATIONS:

APPROX = APPROXIMATE
ASPH = ASPHALT
BLDG = BUILDING
CONC = CONCRETE
φ = DIAMETER
E = EASTING
EL = ELEVATION
EX = EXISTING
IRR = IRRIGATION
N = NORTHING
O.C. = ON CENTER SPACING
PL = PROPERTY LINE
PROP = PROPOSED
ROW = RIGHT OF WAY
TP = SOIL OBSERVATION TEST
PIT
TYP = TYPICAL

*NOT ALL ABBREVIATIONS MAY BE PRESENT IN THIS DRAWING

LINE TYPE KEY:

4" S — 4" PVC SCH 40 MEETING ASTM F891 DWV
1.25" PVC — PVC SCH 40 MEETING ASTM D1785
- - - - - PROPERTY LINE
- - - - - OFFSETS
- - - - - EXISTING MAJOR CONTOURS
- - - - - EXISTING MINOR CONTOURS
- - - - - PROPOSED MAJOR CONTOURS
- - - - - PROPOSED MINOR CONTOURS

FOR MUNICIPAL USE:

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ISSUED FOR COUNTY REVIEW

V1.0-04/02/2024

PROJECT ENG: NRC
QA/QC: PB
Drawn by: MPH
Prj # 23.183
Date: 1/11/2024

C1/10
COVER



Know what's below.
Call before you dig.

SOIL OBSERVATION PIT # 1

DATE OF OBSERVATION						NOTES		
COORDINATES /LOCATION	SLOPE		LANDSCAPE POSITION			SOILS EVALUATOR	MORGAN HEGGIE, SEPTEMBER 2022 CPOW CERTIFIED	
DEPTH (IN)	SOIL TYPE, TEXTURE & LTAR (GAL PER DAY PER SQ FT)	PRESENCE OF R TYPE SOILS (ROCKY SOILS)	MATRIX COLOR(S)	MOTTLE COLOR(S)	REDOX KIND(S)	STRUCTURE SHAPE	STRUCTURE GRADE	CONSISTENCE
0-48	3A, SILTY CLAY LOAM, 0.3	NONE				MASSIVE		LOOSE
48-96	4A, SILTY CLAY, 0.15	NONE				MASSIVE		LOOSE

SOIL OBSERVATION PIT # 2

DATE OF OBSERVATION						NOTES:		
COORDINATES /LOCATION	SLOPE		LANDSCAPE POSITION			SOILS EVALUATOR	MORGAN HEGGIE, SEPTEMBER 2022 CPOW CERTIFIED	
DEPTH (IN)	SOIL TYPE, TEXTURE & LTAR (GAL PER DAY PER SQ FT)	PRESENCE OF R TYPE SOILS (ROCKY SOILS)	MATRIX COLOR(S)	MOTTLE COLOR(S)	REDOX KIND(S)	STRUCTURE SHAPE	STRUCTURE GRADE	CONSISTENCE
0-36	3A, SILTY CLAY LOAM, 0.3	NONE				MASSIVE		LOOSE
36-96	3A, SILTY CLAY LOAM, 0.3	NONE				MASSIVE		LOOSE

SOIL TYPES DETERMINED USING THE METHODOLOGY OF THE USDA NRCS GUIDE TO TEXTURE BY FEEL (S.J. THEIN, 1979) BASED ON CDPHE WQCC REGULATION 43 TABLE 10.1 SOIL TREATMENT AREA LONG TERM ACCEPTANCE RATES BY SOIL TEXTURE, SOIL STRUCTURE, PERCOLATION RATE AND TREATMENT LEVEL

*TYPE R SOILS (TYPE R SOILS MAY OR MAY NOT BE PRESENT IN THIS SOILS ANALYSIS)

TYPE R-0: SOIL TYPE 1, >35% ROCK (>2 mm). MAX LTAR: 1.0 FOR "PREFERRED SAND MEDIA"; 0.8 FOR "SECONDARY SAND MEDIA", PRESSURE DISTRIBUTION IS REQUIRED. 3-FT DEEP UNLINED SAND FILTER

TYPE R-1: SOIL TYPE 2-5, 35-65% ROCK (>2 mm); WITH >50% OF THE ROCK <20 mm. MAX LTAR: TL1 LTAR FROM TABLE 10-1 FOR THE SOIL TYPE CORRESPONDING TO THE SOIL MATRIX, WITH A MAXIMUM LTAR OF 0.8. PRESSURE DISTRIBUTION. MINIMUM 2-FOOT DEEP UNLINED SAND FILTER.

TYPE R-2 SOIL TYPE 2-5, >65% (>2mm), OR >50% OF THE ROCK >20mm. MAX LTAR: TL1 LTAR FROM TABLE 10-1 FOR THE SOIL TYPE CORRESPONDING TO THE SOIL MATRIX, WITH A MAXIMUM LTAR OF 0.8. TIMED, PRESSURE DISTRIBUTION IS REQUIRED. MINIMUM 3-FOOT DEEP UNLINED SAND FILTER.

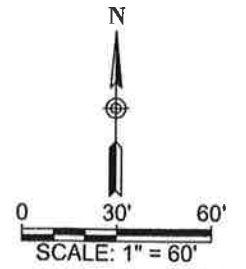


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C2/10
SOIL OBSERVATION



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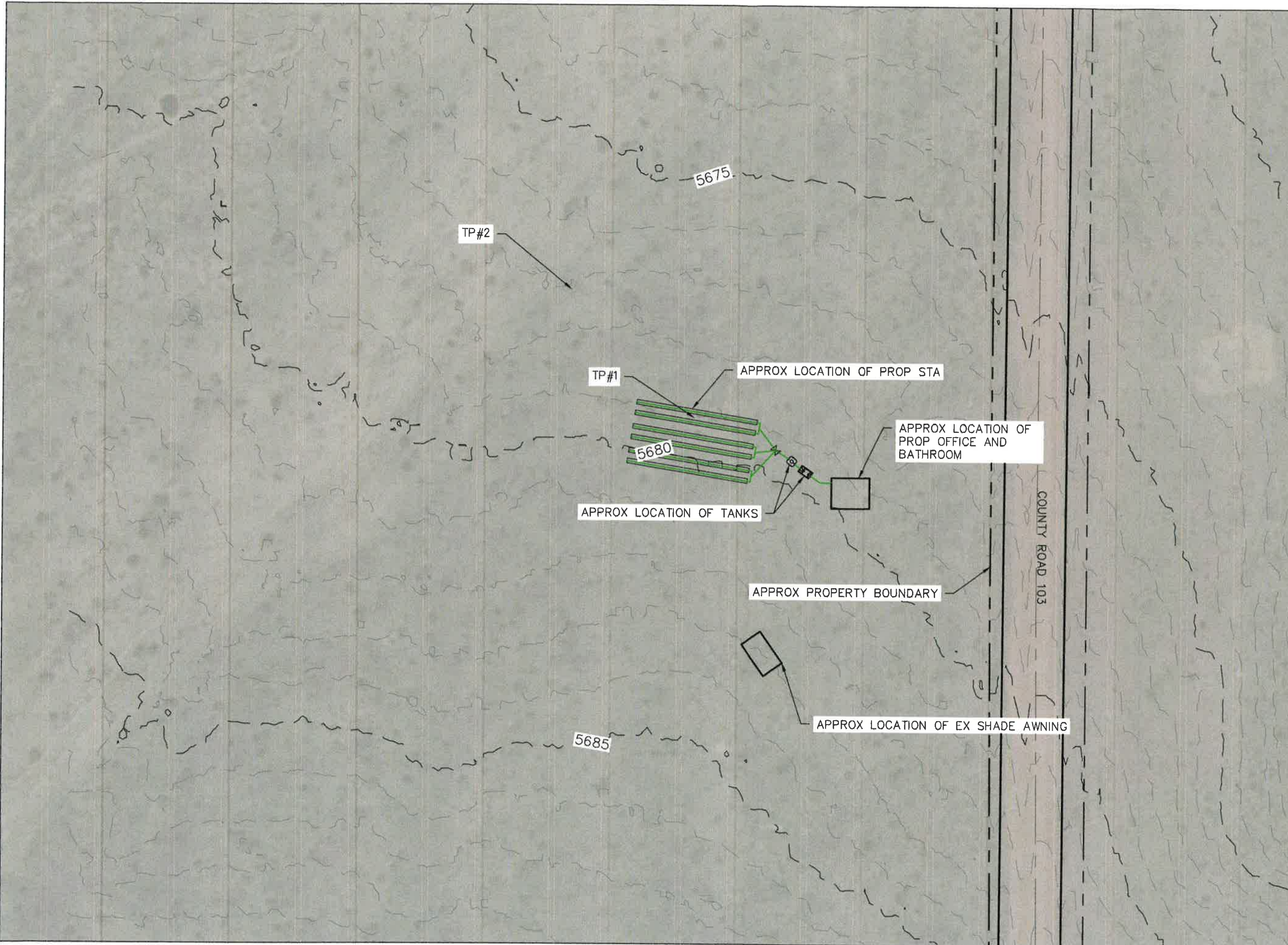
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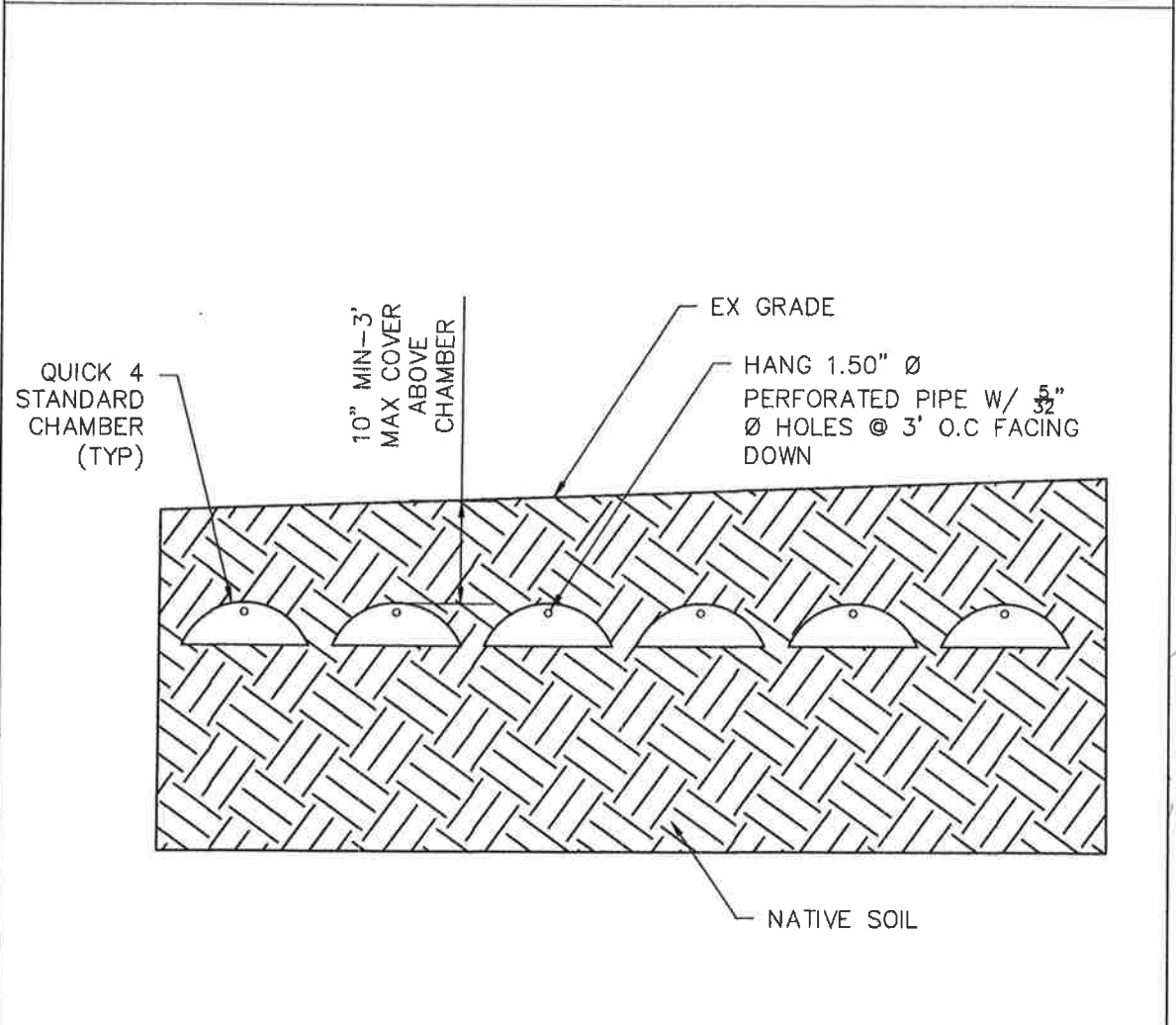
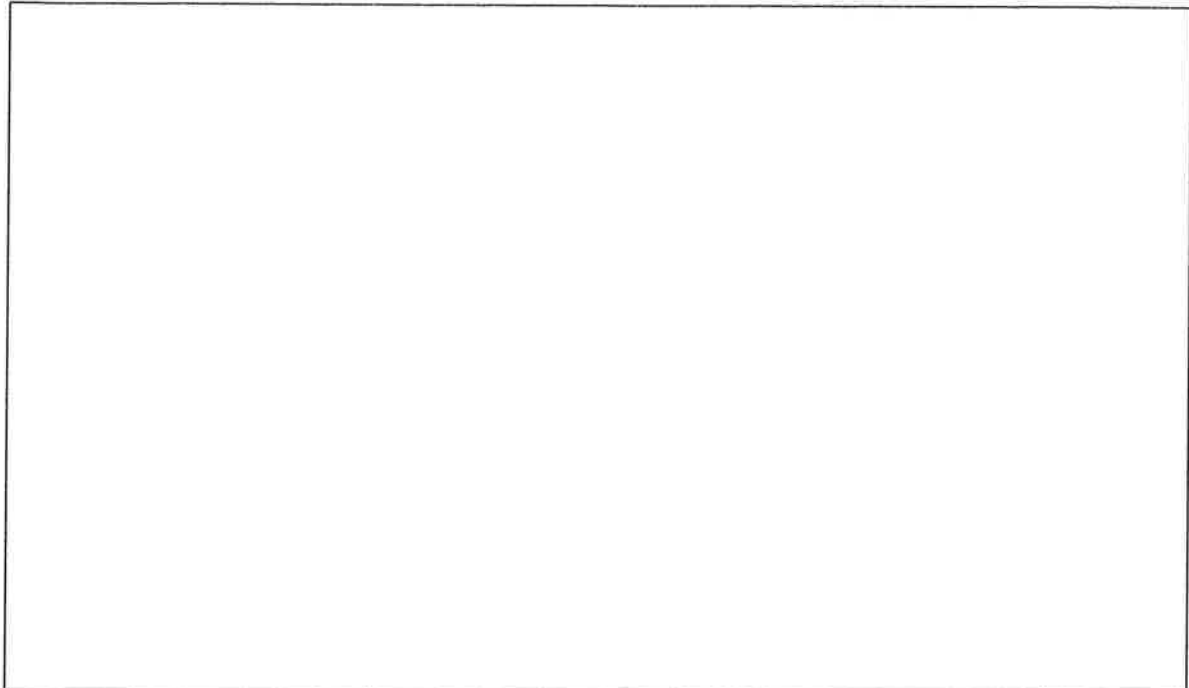
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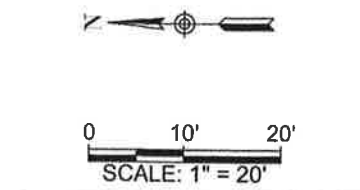
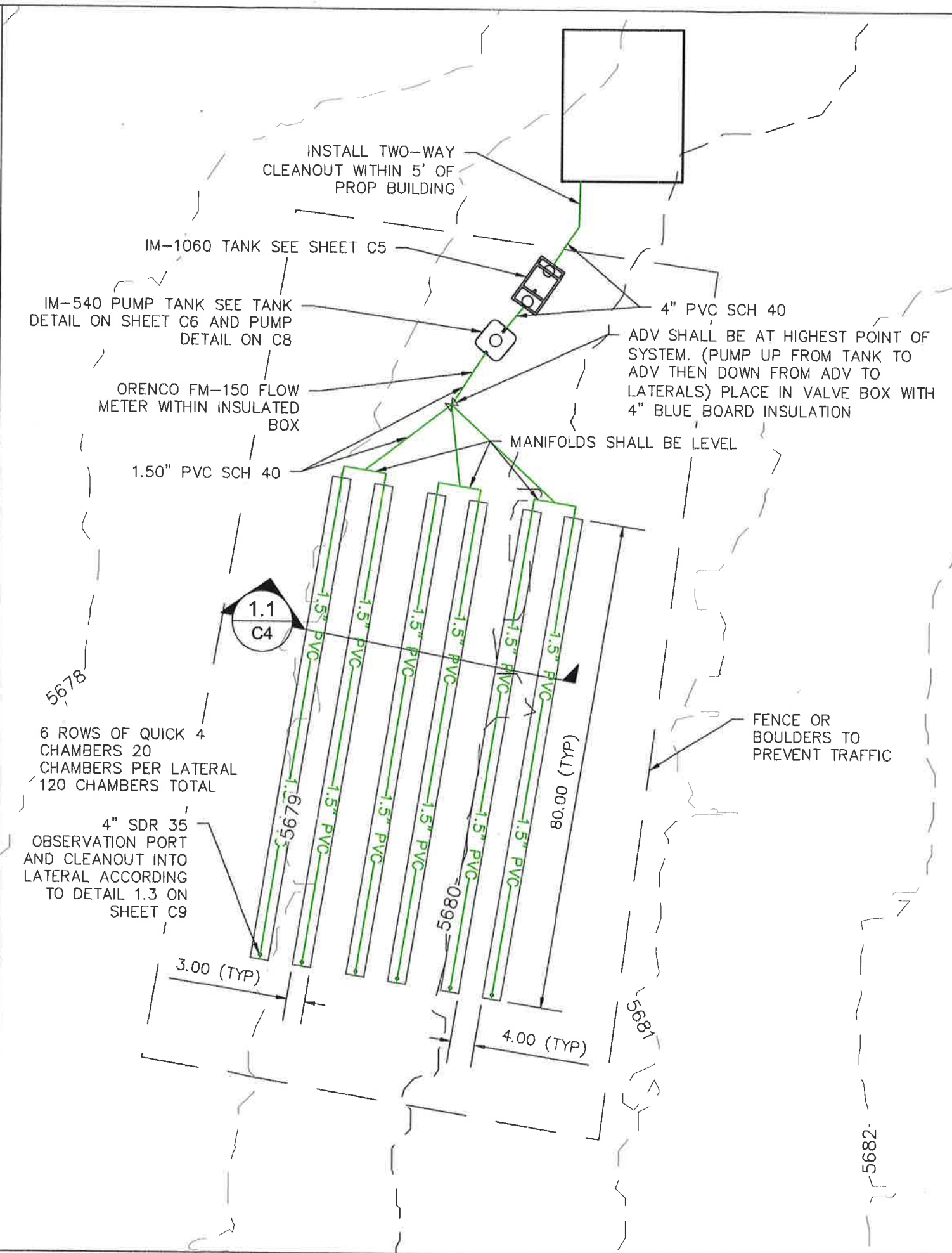
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C3/10
SITE PLAN





1.1 C5 INFILTRATION PROFILE VIEW
NTS



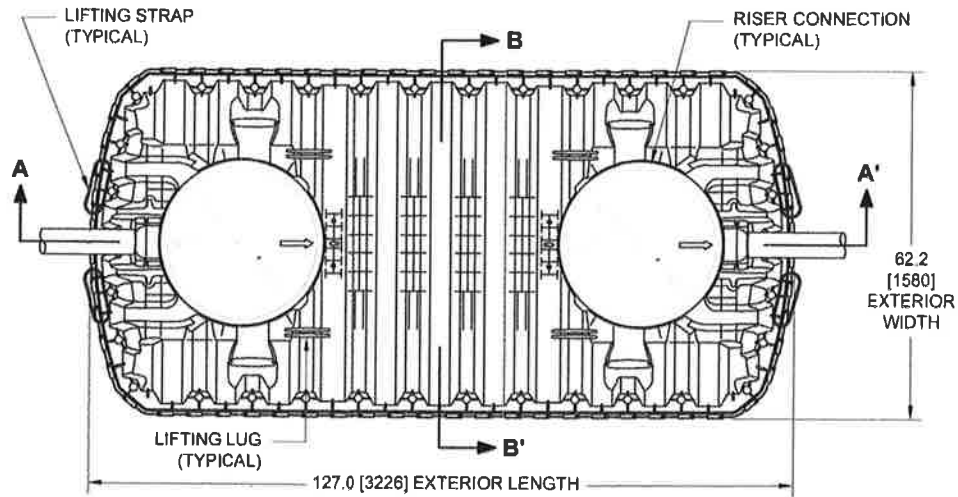
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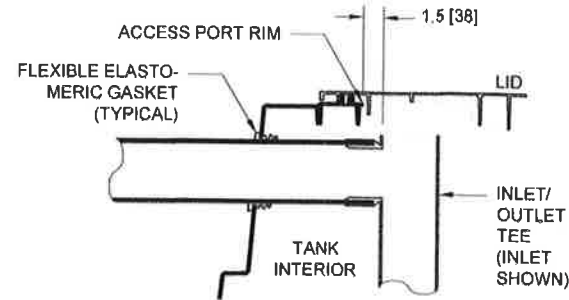
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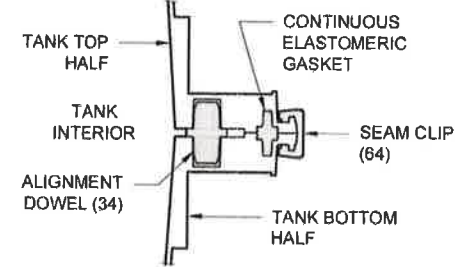
C4/10
OWTS DESIGN



TOP VIEW



(P) PIPE PENETRATION SECTION DETAIL

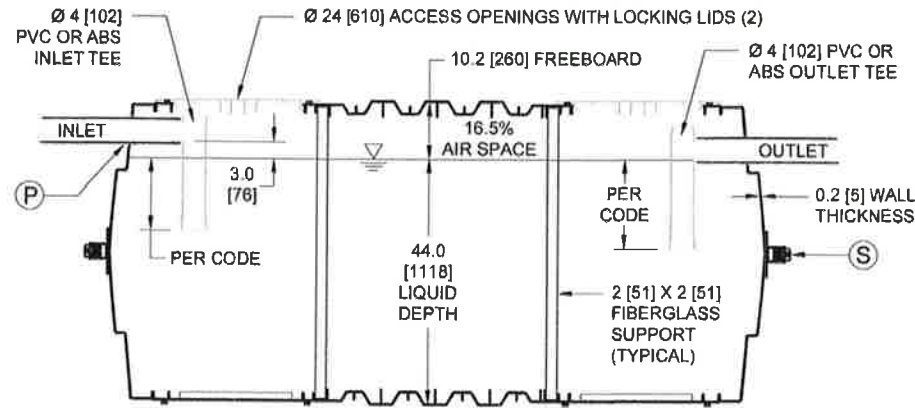


(S) MID-HEIGHT SEAM SECTION DETAIL

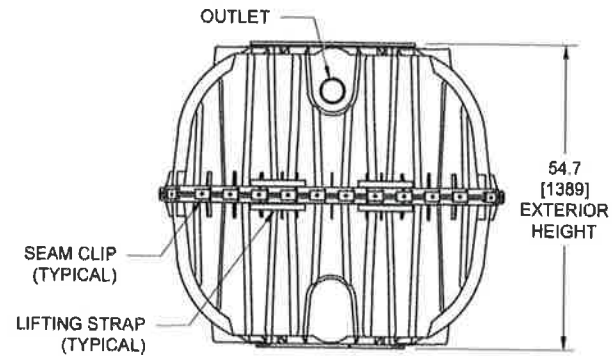
TANK EXTERIOR	
LENGTH	127.0 [3226]
WIDTH	62.2 [1580]
HEIGHT	54.7 [1389]

LIQUID DEPTH	44.0 [1118]
INVERT DROP	3.0 [76]
FREEBOARD	10.2 [260]

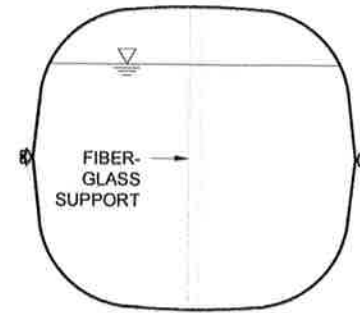
TOTAL CAPACITY	1287 GAL [4872 L]
WORKING VOLUME	1094 GAL [4141 L]



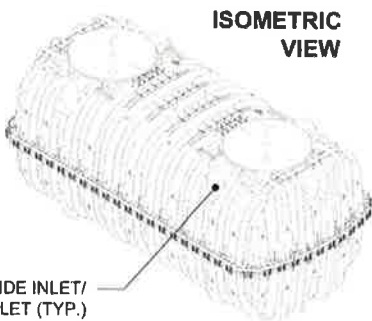
SECTION A - A'



END VIEW



SECTION B - B'



ISOMETRIC VIEW

NOTES:

1. ALL DRAWING DIMENSIONS IN INCHES [MILLIMETERS] OR AS NOTED.
2. EXTERIOR OF ACCESS OPENING LID INCLUDES THE FOLLOWING WARNING IN ENGLISH, FRENCH & SPANISH: "DANGER DO NOT ENTER: POISON GASES."
3. TANK MARKINGS WILL INCLUDE: MANUFACTURER NAME, MODEL NUMBER, LIQUID CAPACITY, DATE OF MANUFACTURE, MAXIMUM BURIAL DEPTH, INLET, AND OUTLET.
4. MAXIMUM BURIAL DEPTH IS 48 in [1219 mm].
5. MINIMUM BURIAL DEPTH IS 6 in [152 mm].
6. TANK IS FOR NON-TRAFFIC APPLICATIONS.
7. AIRSPACE IS 16.5%.
8. OUTLET TEE IS COMPATIBLE WITH AN EFFLUENT FILTER.
9. INTERIOR LENGTH TO WIDTH RATIO IS 2.3:1 (118.8-INCH LENGTH / 51.7-INCH WIDTH = 2.3).

NOTES

1. 2' MIN COVER ABOVE TANK
2. PLACE ORENCO BIOTUBE FT SERIES 4" EFFLUENT FILTER 1/8" SCREEN SIZE IN OUTLET COMPARTMENT OF THIS TANK.



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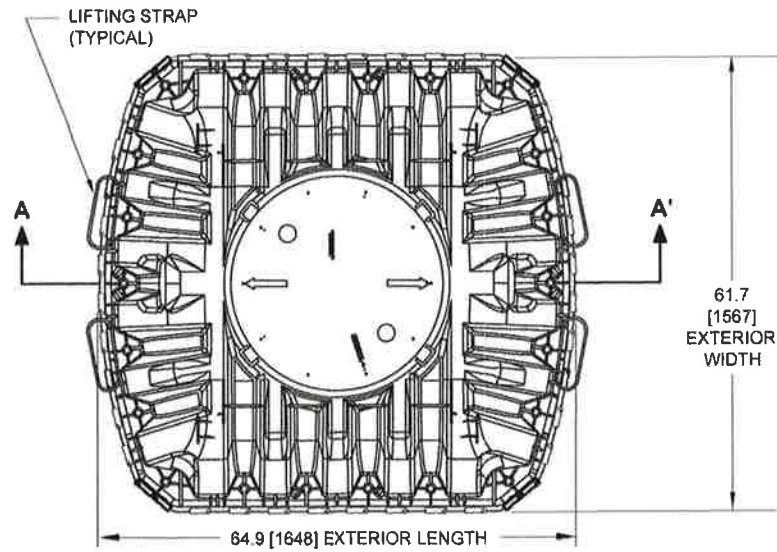
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C5/10
IM-1060 TANK

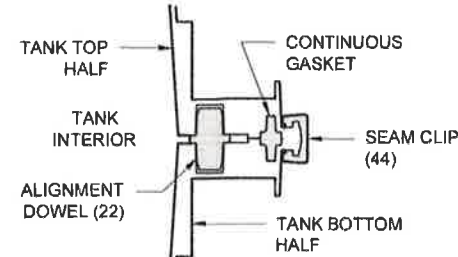
INFILTRATOR WATER TECHNOLOGIES
4 Business Park Rd. Old Saybrook, CT 06475
(800) 221-4436

INFILTRATOR IM-1060 TANK
1-COMPARTMENT CONFIGURATION

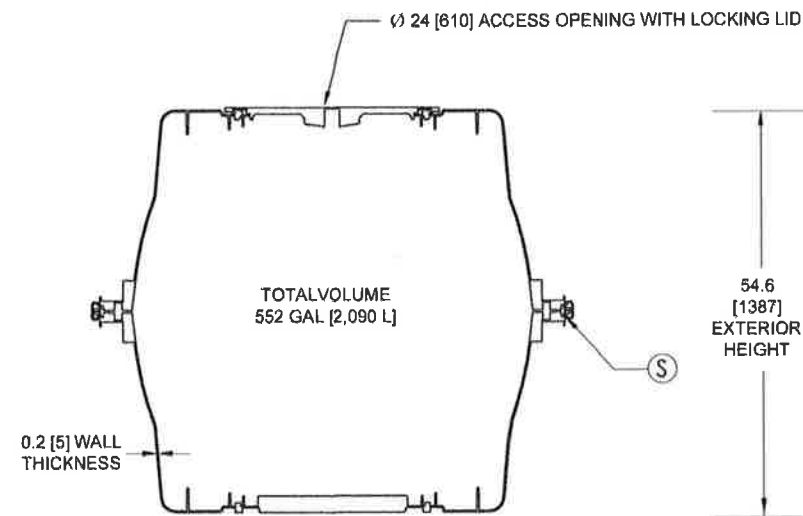
Drawn by: EMB Date: 08/05/2013
Scale: NOT TO SCALE Checked by: DFH Sheet: 1 of 1



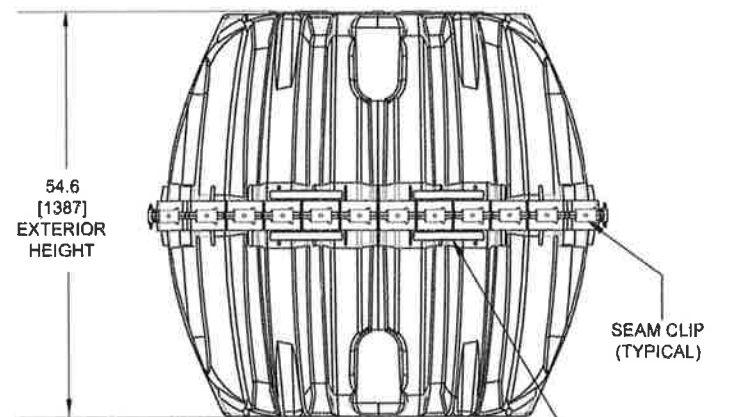
TOP VIEW



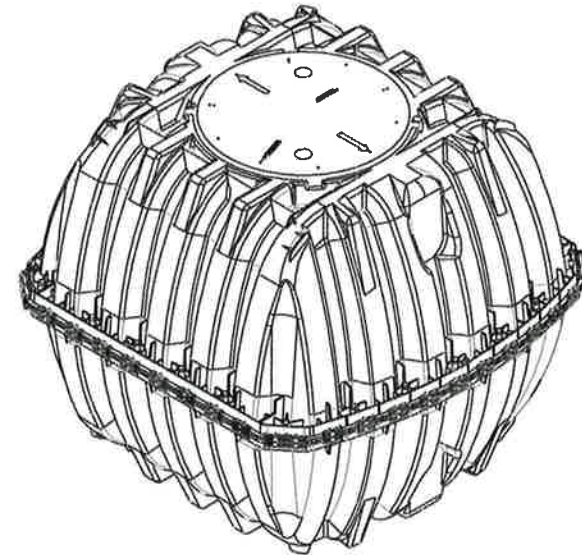
Ⓢ MID-HEIGHT SEAM SECTION DETAIL



SECTION A - A'



END VIEW



ISOMETRIC VIEW

NOTES:

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2. EXTERIOR OF ACCESS OPENING LID INCLUDES THE FOLLOWING WARNING IN ENGLISH, FRENCH & SPANISH: "DANGER DO NOT ENTER: POISON GASES."
3. TANK MARKINGS WILL INCLUDE: MANUFACTURER NAME, MODEL NUMBER, LIQUID CAPACITY, DATE OF MANUFACTURE CODE, MAXIMUM BURIAL DEPTH, INLET, AND OUTLET.
4. MAXIMUM BURIAL DEPTH IS 48 in [1219 mm].
5. MINIMUM BURIAL DEPTH IS 6 in [152 mm].
6. TANK IS FOR NON-TRAFFIC APPLICATIONS.
7. NOMINAL WALL THICKNESS IS 0.20 in [5 mm].

NOTES

1. 2' MIN COVER ABOVE TANK



Infiltrator Systems Inc.
4 Business Park Rd. Old Saybrook, CT 06475
(800) 221-4436

**IM-540
Pump/Siphon Tank Configuration**

Drawn by: EMB Checked by: DJL Date: 05-30-13
Scale: Not to scale Drawing: IM-540-VA Sheet: 1 of 1



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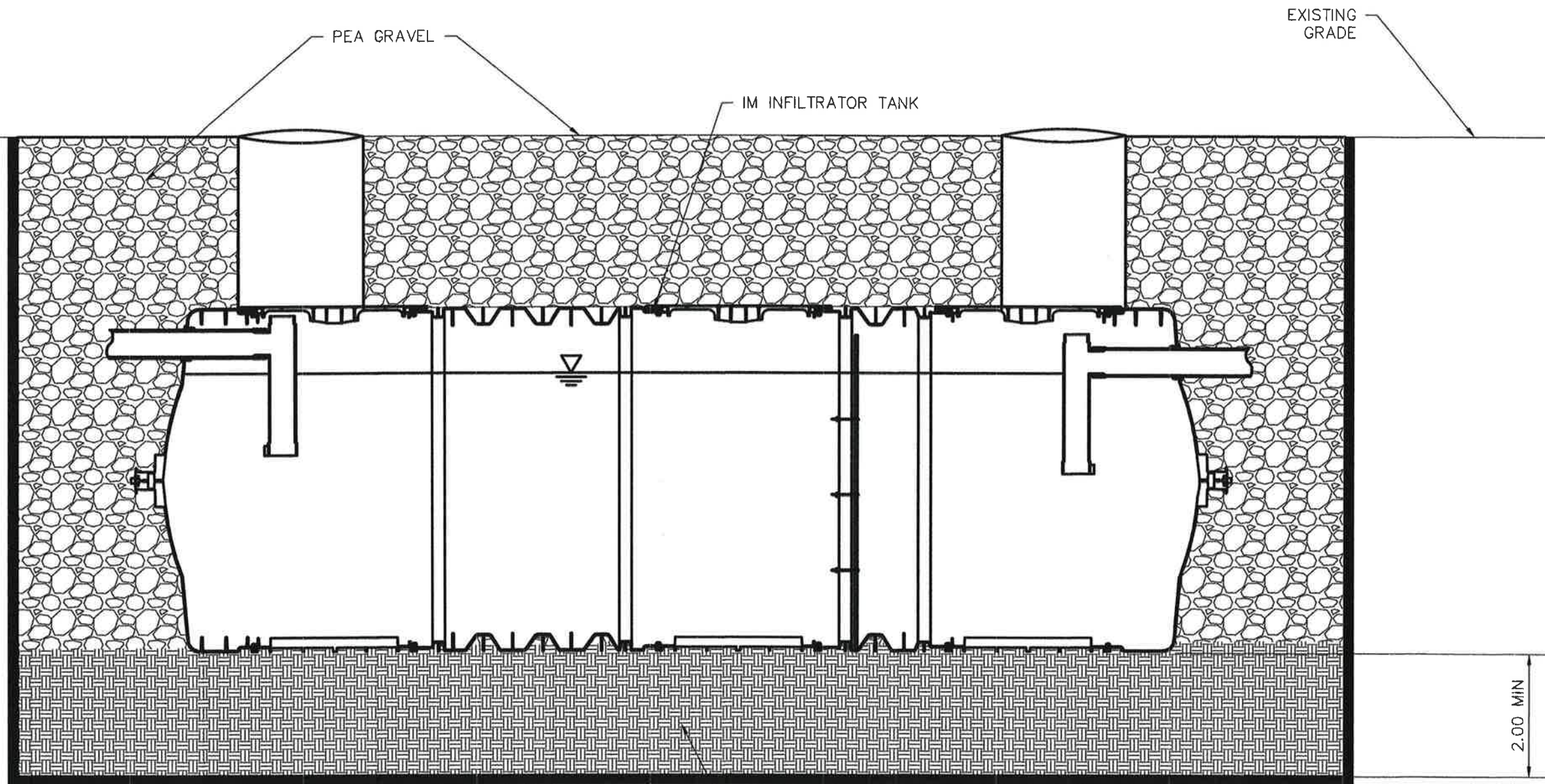
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C6/10
IM-540 TANK



PEA GRAVEL

IM INFILTRATOR TANK

EXISTING GRADE

MIRAFI 160N GEOTEXTILE FABRIC AROUND PERIMETER OF TANK. INSTALL FOR ALL TANKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS

REMOVE 2' MIN OF EX NATIVE MATERIAL AND REPLACE WITH CLASS 6 BACKFILL MATERIAL. COMPACT IN 6" LIFTS TO STANDARD 95% PROCTOR DENSITY

2.00 MIN

TANK BEDDING AND BACKFILL
NTS

- NOTES
1. BED ALL PROPOSED TANKS ACCORDING TO THIS DETAIL



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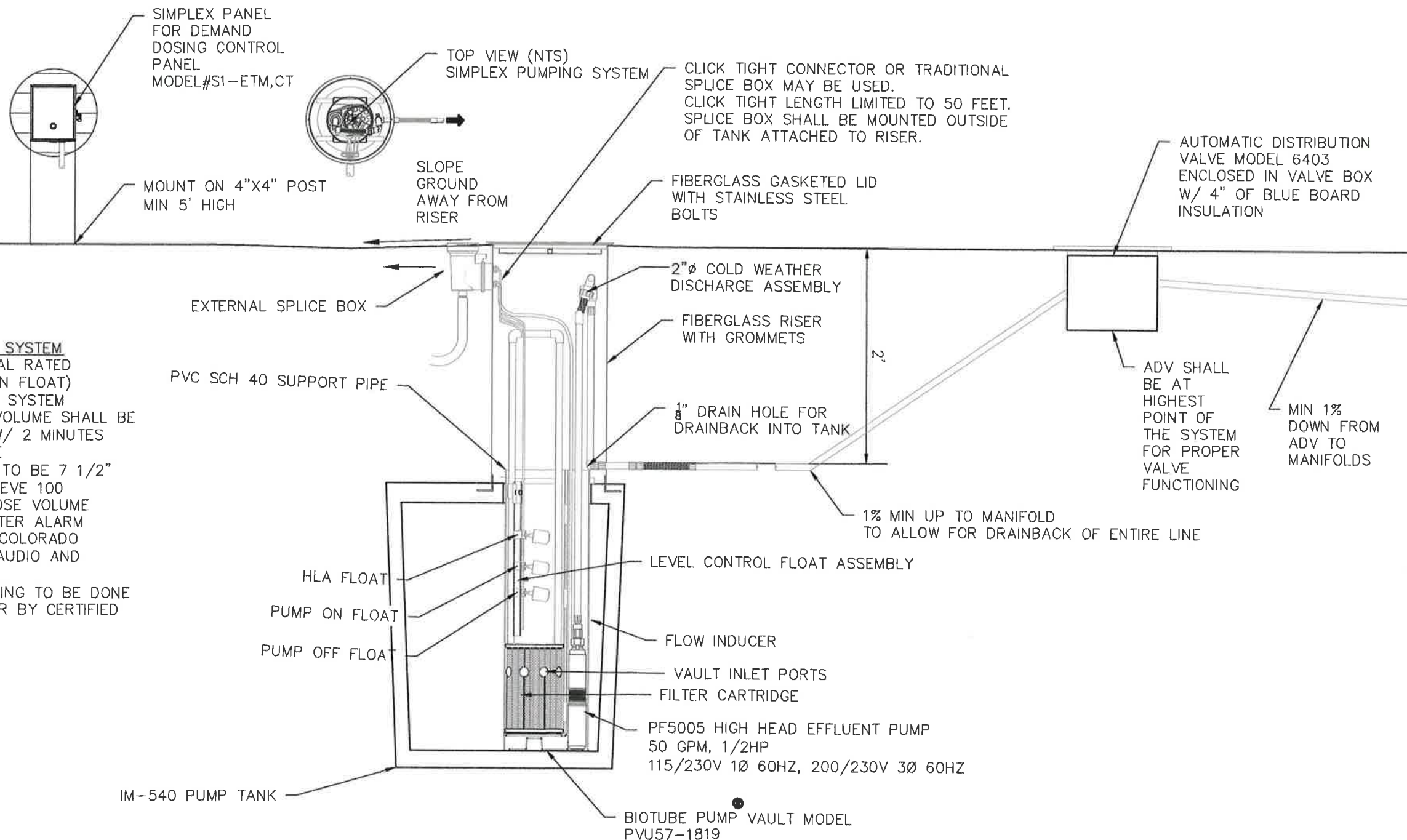
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C7/10
TANK BEDDING & REDFILL

1.2
C8
NTS

PUMP TANK SECTION VIEW-DEMAND DOSED SYSTEM



- NOTES FOR PUMP SYSTEM**
- USE ALL SIGNAL RATED FLOATS (P OR N FLOAT)
 - DEMAND DOSED SYSTEM
 - TARGET DOSE VOLUME SHALL BE 100 GALLONS W/ 2 MINUTES PUMP RUN TIME
 - ON/OFF FLOAT TO BE 7 1/2" APART TO ACHIEVE 100 GALLONS OF DOSE VOLUME
 - HIGH LEVEL WATER ALARM REQUIRED PER COLORADO REGULATIONS (AUDIO AND VISUAL)
 - FLOAT POSITIONING TO BE DONE BY ENGINEER OR BY CERTIFIED PROFESSIONAL

NDW-TD-EPS-HV-CT-02
Rev. 2.0 (05/21)

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*DETAIL TAKEN FROM ORENCO SYSTEMS WEBSITE AND MODIFIED ACCORDING TO SITE SPECIFIC DESIGN

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C8/10
PUMP TANK SECTION VIEW

p:\2023\23.183-prestige shooting complex\h-dwgs\civil\1565cr103-owts.dwg 4/5/2024 2:39:58 PM MORGAN HEGGIE

Pump Selection for a Pressurized System - Single Family Residence Project

Parameters

Discharge Assembly Size	2.00	inches
Transport Length Before Valve	20	feet
Transport Pipe Class	40	
Transport Line Size	1.50	inches
Distributing Valve Model	6403	
Transport Length After Valve	10	feet
Transport Pipe Class	40	
Transport Pipe Size	1.50	inches
Max Elevation Lift	6	feet
Manifold Length	30	feet
Manifold Pipe Class	40	
Manifold Pipe Size	1.50	inches
Number of Laterals per Cell	6	
Lateral Length	80	feet
Lateral Pipe Class	40	
Lateral Pipe Size	1.50	inches
Orifice Size	5/32	inches
Orifice Spacing	3	feet
Residual Head	5	feet
Flow Meter	None	inches
'Add-on' Friction Losses	0	feet

Calculations

Minimum Flow Rate per Orifice	0.68	gpm
Number of Orifices per Zone	54	
Total Flow Rate per Zone	37.1	gpm
Number of Laterals per Zone	2	
% Flow Differential 1st/Last Orifice	5.5	%
Transport Velocity Before Valve	5.9	fps
Transport Velocity After Valve	5.9	fps

Frictional Head Losses

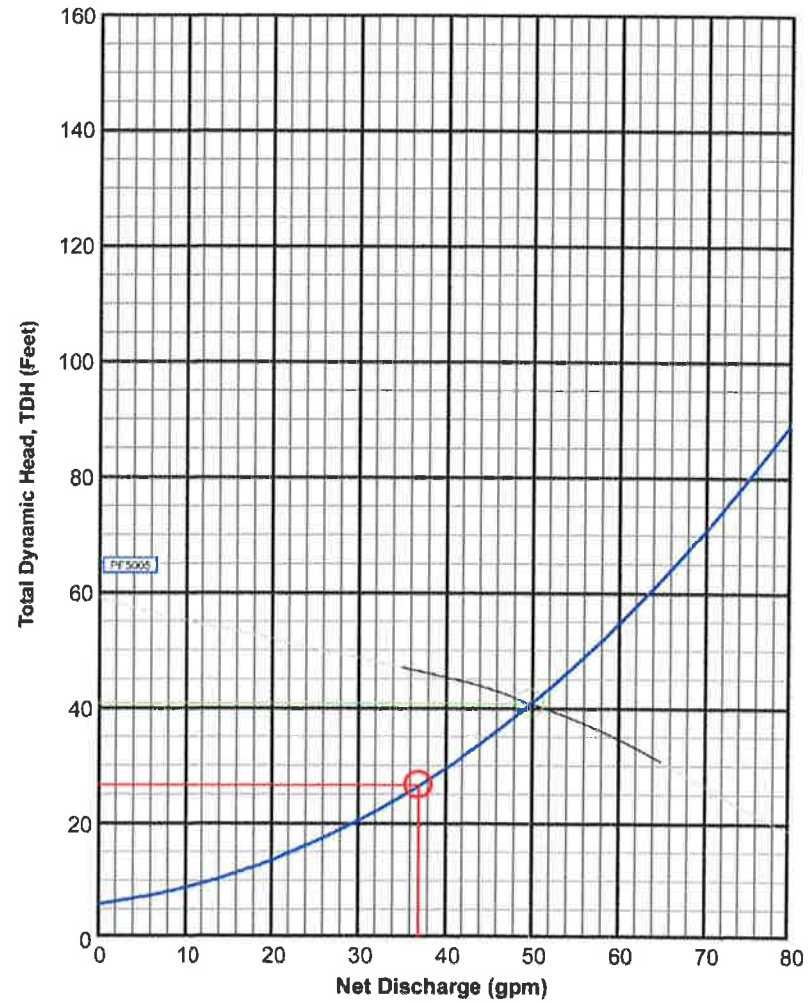
Loss through Discharge	2.7	feet
Loss in Transport Before Valve	1.5	feet
Loss through Valve	9.3	feet
Loss in Transport after Valve	0.8	feet
Loss in Manifold	0.6	feet
Loss in Laterals	0.6	feet
Loss through Flowmeter	0.0	feet
'Add-on' Friction Losses	0.0	feet

Pipe Volumes

Vol of Transport Line Before Valve	2.1	gals
Vol of Transport Line After Valve	1.1	gals
Vol of Manifold	3.2	gals
Vol of Laterals per Zone	16.9	gals
Total Vol Before Valve	2.1	gals
Total Vol After Valve	21.2	gals

Requirements

	37.1	gpm
	26.6	feet



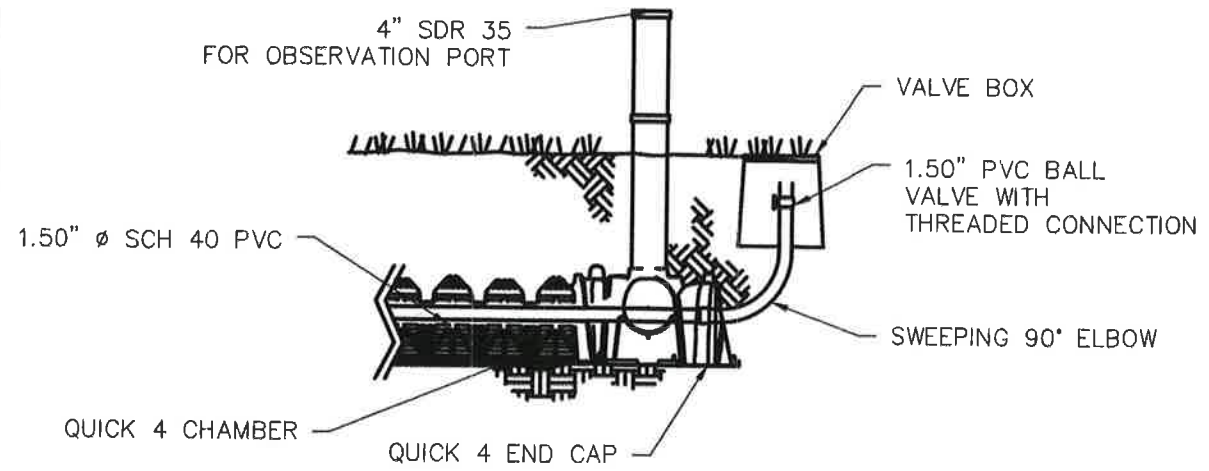
PumpData

PF5005 High Head Effluent Pump
50 GPM, 1/2HP
115/230V 1Ø 60Hz, 200/230V 3Ø 60Hz

Legend

System Curve:	—
Pump Curve:	—
Pump Optimal Range:	—
Operating Point:	○
Design Point:	○

ACCESS FOR PRESSURE DRAINFIELD
MAINTENANCE AND FLUSING



*DETAIL TAKEN FROM INFILTRATOR
WATER TECHNOLOGIES
AND MODIFIED ACCORDING TO SITE
SPECIFIC DESIGN

1.3 FLUSHING ASSEMBLY DETAIL
C9 NOT TO SCALE

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C9/10
PUMP CURVE &
DETAIL

NOTES:

1. GENERAL NOTES

- 1.1. THESE PLANS ARE THE RESULT OF INTERPRETATION OF THE ENGINEER'S ANALYSIS OF THE EXISTING SOIL CONDITIONS AS FOUND ON SITE FROM THE OPEN HOLE INSPECTION AND SUBSEQUENT ANALYSIS OF THE SOIL SAMPLES. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FAILURE OF SYSTEM. FAILURE TO FOLLOW PLANS THOROUGHLY, ENGINEER'S RECOMMENDATIONS, MANUFACTURER'S GUIDELINES FOR TANK INSTALLATION, QUICK 4 CHAMBER INSTALLATION, THE FREMONT COUNTY OWTS REGULATIONS CAN RESULT IN PREMATURE LEACH FIELD FAILURE. POOR CONTRACTOR PRACTICES, ABUSE OF SYSTEM, OR FAILURE TO PERFORM SCHEDULED MAINTENANCE CAN CAUSE PREMATURE FAILURE OF LEACH FIELD.
- 1.2. THESE PLANS ARE NOT A CONSTRUCTION MANUAL. FOR SUCCESSFUL SEPTIC SYSTEM INSTALLATION CONTRACTOR MUST REVIEW THE FREMONT COUNTY OWTS REGULATIONS, BE CERTIFIED FOR SEPTIC INSTALLATION, AND FOLLOW GENERAL CONTRACTOR BEST PRACTICES.
- 1.3. CONTACT ENGINEER IN CASE OF ANY UNCLEAR INFORMATION IN THESE PLANS.

2. CONSTRUCTION AND CONTRACTOR

- 2.1. FOLLOW INFILTRATOR WATER TECHNOLOGIES DOCUMENTS ON INSTALLATION OF QUICK 4 STANDARD CHAMBERS
- 2.2. CONTRACTOR REQUIRED TO LOCATE ALL UTILITIES PRIOR TO EXCAVATION.
- 2.3. COMPACTION OF SOIL INFILTRATIVE AREA TO BE AVOIDED DURING CONSTRUCTION (AVOID TRAFFIC AND STORAGE OF MATERIALS). IT IS RECOMMENDED TO STAKE OFF SOIL TREATMENT AREA (STA) FOOTPRINT DURING CONSTRUCTION AND PLACE PERMANENT SIGNS AFTER CONSTRUCTION. CONTRACTOR SHALL NOT DRIVE WHEELED MACHINERY OVER BOTTOM OF THE INFILTRATIVE SURFACE. IT IS RECOMMENDED TO PLACE CHAMBERS AND THEN BACKFILL WITH TRACKED MACHINERY. CONSTRUCTION SHOULD PROCEED ONLY WHEN THE SOIL IS SUFFICIENTLY DRY TO RESIST COMPACTION AND SMEARING DURING EXCAVATION. (TAKE A SAMPLE OF SOIL FROM THE BOTTOM OF INFILTRATIVE SURFACE AND IF WHEN ROLLED BETWEEN THE FINGERS FORMS A WIRE INSTEAD OF CRUMBLING, THE SOIL IS TOO WET). TRAFFIC OVER THE STA WILL CAUSE SOIL STRUCTURE CHANGE TO SOIL STRUCTURE AND SUBSEQUENT FAILURE. TOP SOIL TO BE EXCAVATED AND STOCKPILED FOR LATER USE. RESEED SOIL TREATMENT AREA WITH NATIVE VEGETATION (SHALLOW ROOT).
- 2.4. SLOPE FINISHED GRADE ABOVE LEACH FIELD 3-4% TO MAXIMIZE RUNOFF FROM PRECIPITATION. AVOID IRRIGATION ON STA.
- 2.5. QUICK 4 PLUS CHAMBERS PROPOSED FOR EFFLUENT DISTRIBUTION. PLACE CHAMBERS ACCORDING TO THE SECTION VIEW.
- 2.6. CONTACT ENGINEER AFTER ALL CONSTRUCTION HAS BEEN FINISHED BUT BEFORE BACKFILLING CHAMBERS AND TANKS FOR AN AS-BUILT INSPECTION. 3 ROCKS ENGINEERING CANNOT CERTIFY AN AS-BUILT SYSTEM THAT DOES NOT MATCH THESE PLANS. CONTRACTOR ASSUMES RESPONSIBILITY AND COST OF ANY WORK INCURRED BY DEVIATION FROM THESE PLANS. WET RUN OF SYSTEM MAY BE REQUIRED DURING THE AS-BUILT INSPECTION.

3. SANITARY LINES

- 3.1. GRAVITY SEWER LINE (4" SDR 35 ASTM F891 DWV PIPE, FROM OFFICE AND VISITORS' BATHROOM TO SOLIDS SETTLING TANK) TO BE INSTALLED WITH SLOPE NO LESS THAN 1/8" PER FOOT (~1%) AND NO GREATER THAN 1" PER FOOT (~8%). INSTALL CLEANOUTS SITES AT ANY CHANGE OF DIRECTION OF 45° OR GREATER OR IF NO OTHER CLEANOUT EXISTS WITHIN 40' OF THE BEND. SWEEPING 90'S MUST BE USED OR BENDS LIMITED TO 45° MUST BE PROVIDED. CLEANOUTS MUST BE PROVIDED AT INTERVALS OF NO MORE THAN 100'. 10' LATERAL SEPARATION IS REQUIRED FROM POTABLE WATER LINES AND 2' VERTICAL SEPARATION WITH SANITARY CROSSING UNDER.
- 3.2. IF ANY TWO SEWER LINES CONNECT THEY SHALL CONNECT THROUGH 45° Y FITTINGS AND A 2-WAY CLEANOUT MUST BE PROVIDED BEFORE THE CONNECTION
- 3.3. DISTRIBUTION MANIFOLD AND DISTRIBUTION PIPE SHALL BE LEVEL.
- 3.4. CONTACT ENGINEER IMMEDIATELY IF ANY VARIANCE IS SOUGHT FROM THIS PLAN.
- 3.5. 4" SCH 40 PIPE ASTM F891 DWV PIPE FOR ALL LINES FROM THE OFFICE AND VISITORS' BATHROOM TO PUMP TANK AND PVC SCH 40 (ASTM SCH 40 D1785) PIPE FOR ALL LINES AFTER PUMP TANK. ALTERNATIVE MATERIALS TO BE REVIEWED AND APPROVED BY ENGINEER BY WRITTEN MEANS.
- 3.6. INSERT A 4" SDR 35 SECTION OF PIPE (CAPPED AT THE END) INTO CHAMBER, THAT CAN BE ACCESSED FROM THE FINISHED GRADE SURFACE, AT THE END OF EACH LATERAL TO SERVE AS AN INSPECTION PORT.

4. OFFSET REQUIREMENTS

- 4.1. HORIZONTAL INFLUENCE AREA (ACCORDING TO CDPHE WQSA POLICY 6)
- 4.2. THERE ARE NO OTHER EXISTING SYSTEMS ON SITE THAT WILL INFLUENCE THE PROPOSED SYSTEM.
- 4.3. OFFSET REQUIREMENTS ACCORDING TO FREMONT COUNTY OWTS REGULATIONS ARE GIVEN IN THE TABLE (SHEET C1).
- 4.4. OWNER/CONTRACTOR TO VERIFY ALL SETBACKS ARE MET BEFORE CONSTRUCTION.

5. SEPTIC TANKS AND PUMP TANK

- 5.1. THE TANKS ARE NOT TRAFFIC RATED UNLESS CLEARLY SPECIFIED. PLACE BOULDERS OR FENCE AROUND PERIMETER OF TANKS TO AVOID DAMAGE. INSTALL TANK ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- 5.2. INSTALL TANKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

6. PRESSURE DOSED SYSTEM

- 6.1. ELECTRICAL WIRING, SPLICE BOX SET UP, AND CONTROL PANEL SET UP ARE ALL OUTSIDE OF THE SCOPE OF THESE PLANS. ALL OF THESE SHALL BE DONE BY A CERTIFIED AND COMPETENT ELECTRICIAN. ALL ELECTRICAL WORK, EQUIPMENT, AND MATERIAL MUST COMPLY WITH THE REQUIREMENTS OF THE CURRENTLY APPLICABLE NATIONAL ELECTRICAL CODE AS DESIGNATED BY THE STATE ELECTRICAL BOARD RULES AND REGULATIONS (3 CCR 710-1). A LOCAL ELECTRICAL PERMIT MAYBE REQUIRED BY THE JURISDICTION HAVING AUTHORITY.

7. OPERATION AND MAINTENANCE (O&M)

- 7.1. OPERATION AND MAINTENANCE IS OUTSIDE OF THE SCOPE AND RESPONSIBILITY OF 3 ROCKS ENGINEERING.
- 7.2. IT IS HIGHLY RECOMMENDED TO INSPECT SLUDGE AND SCUM LEVELS EVERY TWO OR THREE MONTHS IN BOTH COMPARTMENTS OF SEPTIC TANK. DUE TO MOSTLY ANAEROBIC CONDITIONS IN A SEPTIC TANK NOT ALL SOLIDS WILL BE DIGESTED BY THE BACTERIA AND THEREFORE SOLIDS WILL HAVE TO BE PUMPED OUT AS DETERMINED BY INSPECTION. A GOOD INTERVAL FOR PUMPING SLUDGE FROM TANK IS WHENEVER SCUM AND SLUDGE LEVELS SURPASS 25% OF WORKING CAPACITY OF TANK.
- 7.3. PULL ORENCO BIOTUBE FT SERIES AT LEAST 3 TIMES A YEAR AND RINSE SOLIDS INTO SOLIDS SETTLING TANK.
- 7.4. IT IS RECOMMENDED TO PLACE A SIGN AT EACH SERVICED LOCATION WITH INSTRUCTIONS FOR USERS TO PREVENT FLUSHING OF CHEMICALS, MEDICINES, AND ANY OTHER MATERIAL/SUBSTANCE THAT COULD CAUSE PREMATURE FAILURE OF LEACH FIELD.
- 7.5. IT IS HIGHLY RECOMMENDED TO VISUALLY CHECK ACTUATION OF THE AUTOMATIC DISTRIBUTION VALVES. (THE CLEAR TUBING SHOULD SHOW ACTUATION BETWEEN ZONES). VALVES WILL BUILD UP SLIME THAT WILL HAVE TO BE CLEANED AT AN INTERVAL TO BE DETERMINED UPON REGULAR INSPECTION. FAILURE TO CLEAN THE VALVE WILL RESULT IN THE CAM LOCKING INTO ONE ZONE AND WILL CAUSE SYSTEM FAILURE.



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ISSUED FOR
 COUNTY REVIEW

V1.0-04/02/2024

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 NOTES

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