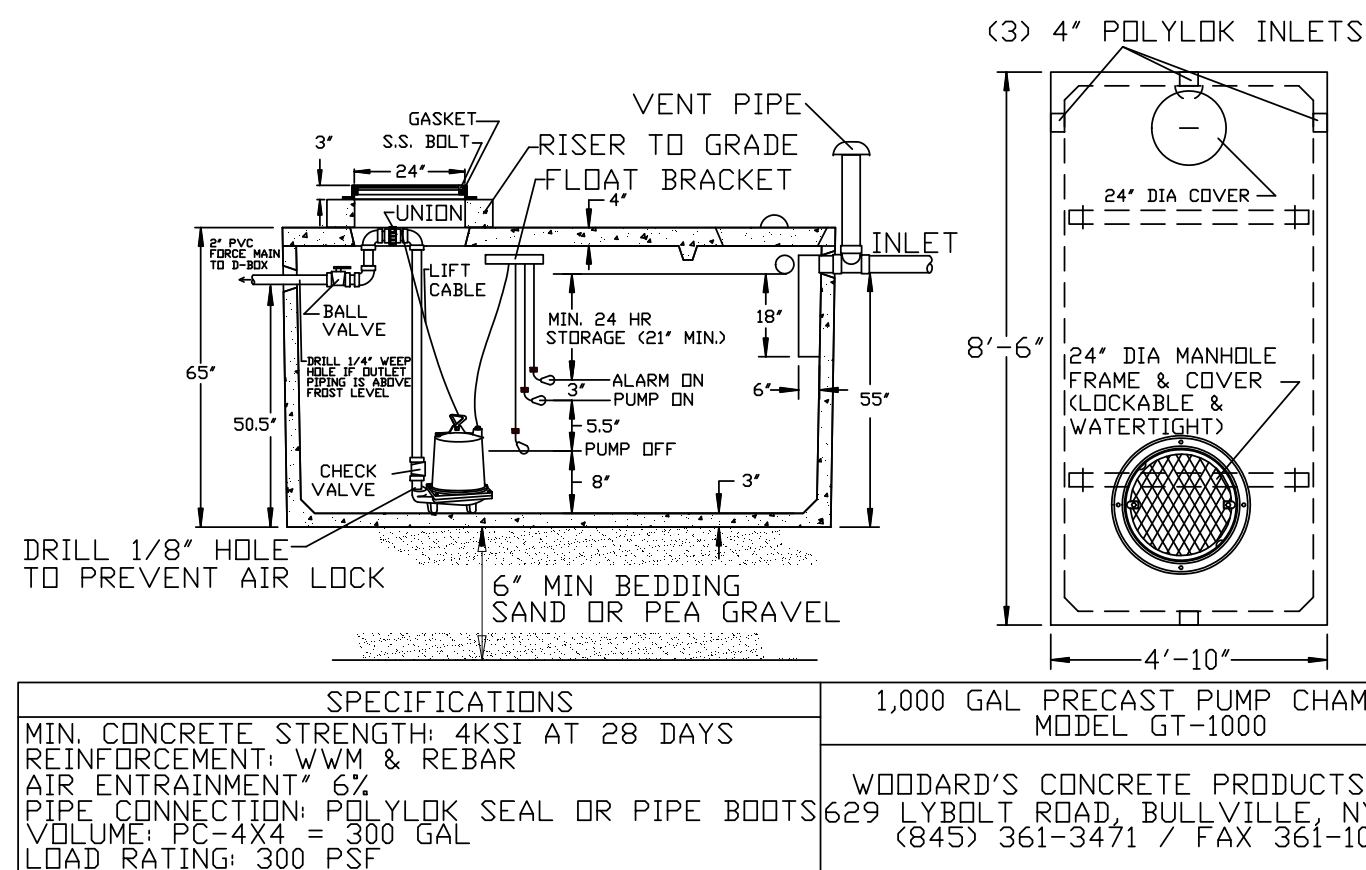


ASTM C33 SAND SPECIFICATIONS		
SIEVE SIZE	PERCENT MINIMUM	PASSING BY WEIGHT MAXIMUM
3/8"	100	
NO. 4	95	100
NO. 8	80	100
NO. 16	50	85
NO. 30	25	60
NO. 50	5	30
NO. 100	1	10
NO. 200 (WET)	0	5

EFFLUENT PUMP CALCULATIONS													
LOT #	PUMP OFF ELEVATION	D-BOX INV. IN	STATIC HEAD	FRICTION HEAD	TDH	DOSE VOLUME PER MODULE (MAX.)	DOSE VOLUME	FORCE MAIN VOLUME	TOTAL VOLUME	GAL PER INCH LL	PUMP-DOWN DEPTH	24 HR. STORAGE VOLUME (MIN)	STORAGE VOLUME PROVIDED
4	301.0'	322.0'	21.0'	5.1'	26.1'	4 GAL	96 GAL	17 GAL	113 GAL	21.6 GAL	5.5'	440 GAL / 21'	594 GAL / 27.5'



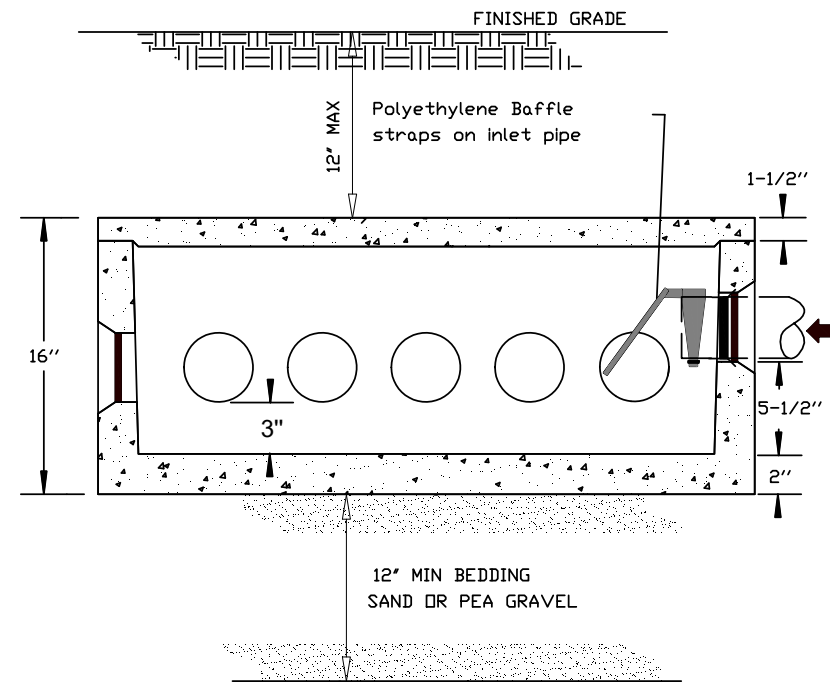
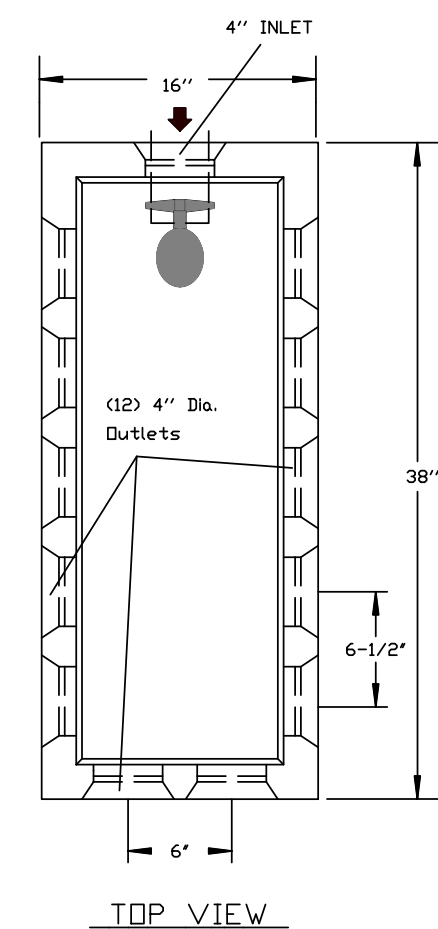
NOTES: (NOT TO SCALE)

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- The image contains two technical drawings of a gas deflector tank, labeled 'SECTION' and 'TOP VIEW'.
- SECTION:** This side-view drawing shows a rectangular tank with a width of 5'-0" and a height of 10'-0". The bottom is labeled '12" MIN CLEAN SAND UNDER TANK'. The interior walls are 3" thick. The top is covered with a '20" DIA. COVER'. Inside the tank, there are three '4" DIA. INLETS' and one '4" DIA. OUTLET'. A 'Baffle (deflector on outlet only)' is shown at the top right. The drawing also indicates 'FINISHED GRADE' and 'STAKE AT COVER'. A 'Gas Deflector' is shown in a separate detail view. Dimensions include 65" for the total height, 50-3/4" for the internal height, 12" MAX for the top edge, 1'-6" for the bottom edge, and 4" for the side wall thickness. The bottom is labeled 'LIQUID LEVEL'.
- TOP VIEW:** This top-down drawing shows the rectangular shape of the tank with dimensions 5'-0" by 10'-0". It shows the locations of the '4" DIA. INLETS' and '4" DIA. OUTLET'. A note states: '(3) 4" Polylok Inlets Baffle can be relocated to sides'. The drawing also shows '(3) 8" DIA. COVERS' and a '20" DIA. COVER'.

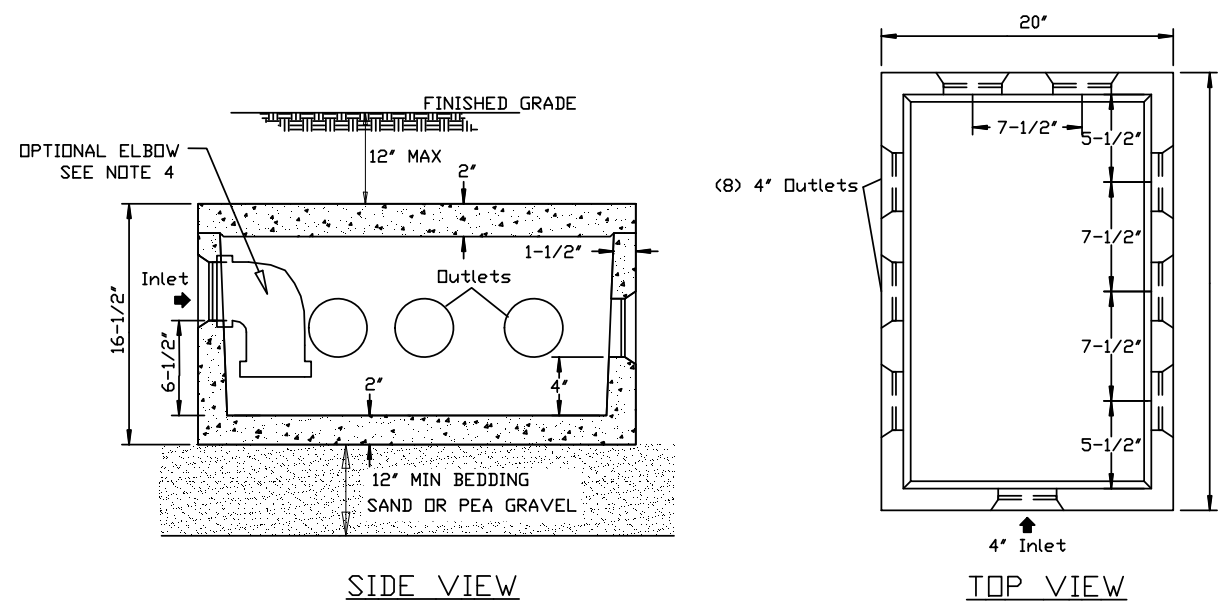
(NOT TO SCALE)

NOTES:

1. SEPTIC TANK SHALL BE PRECAST WOODARDS CONCRETE PRODUCTS MODEL ST-1250 OR EQUAL.
2. CONCRETE MINIMUM STRENGTH: 4,000 P.S.I. AT 28 DAYS.
3. STEEL REINFORCEMENT: #4 BAR GR.60, FORTA FERRO 5LB/CY.
4. CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER SEALANT.
5. POLYLOK SEAL TO BE USED AT ALL PIPE CONNECTIONS.



(NOT TO SCALE)



(NOT TO SCALE)

1. THIS DESIGN AND CONSTRUCTION REQUIREMENT COMPLIES WITH APPENDIX 75-A AND LOCAL HEALTH DEPARTMENT REGULATIONS.
2. THIS DESIGN COMPLIES WITH AND MUST BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT ELJEN NEW YORK DESIGN AND INSTALLATION MANUAL.
3. THIS SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE DISPOSAL.
4. THIS SYSTEM IS NOT DESIGNED FOR BACKWASH FROM A WATER SOFTENER.
5. ORGANIC MATERIAL THAT CAN RESTRICT FLOW MUST BE REMOVED FOR RAISED BEDS. THE SOIL MUST BE SCARIFIED TO PROVIDE DEEP CHANNELS FOR THE SAND. A PLOWED INTERFACE ON CONTOUR IS RECOMMENDED TO PREPARE THE SOIL FOR FILL PLACEMENT.
6. SCARIFY ANY SMEARED SUBSOIL PRIOR TO FILL PLACEMENT.
7. FILL MATERIAL SHALL MEET OR EXCEED STATE OF NEW YORK CODE REQUIREMENTS. ALL FILL MATERIAL SHALL BE CLEAN BANK RUN SAND, FREE OF TOPSOIL, HUMUS, AND "DREDGING" DIRECTLY BENEATH THE GSF SYSTEM.
8. ASTM C33 SPECIFIED SAND WITH LESS THAN 10% PASSING A #100 SIEVE AND LESS THAN 5% PASSING A #200 SIEVE SHALL BE PLACED BELOW AND AROUND THE GSF MODULES, WITH 6 INCHES MINIMUM UNDERNEATH AND 6 INCHES MINIMUM SURROUNDING THE GSF MODULES IN TRENCH CONFIGURATIONS. IN BED SYSTEMS, USE 6 INCHES MINIMUM UNDERNEATH THE MODULES WITH 12 INCHES MINIMUM BETWEEN MODULE ROWS AND 12 INCHES MINIMUM AROUND THE PERIMETER OF THE MODULES.
9. ELJEN PROVIDED GEOTEXTILE COVER FABRIC SHALL PROVIDE PROPER TENSION AND ORIENTATION OF THE FABRIC AROUND THE SIDES OF THE PERFORATED PIPE ON TOP OF OF THE GSF MODULES. FABRIC SHOULD BE NEITHER TOO LOOSE, NOR TOO TIGHT. THE CORRECT TENSION OF THE COVER FABRIC IS SET BY:
 - SPREADING THE COVER FABRIC OVER THE TOP OF THE MODULE AND DOWN BOTH SIDES OF THE MODULE WITH THE COVER FABRIC TENTED OVER THE TOP OF THE PERFORATED DISTRIBUTION PIPE.
 - PLACE SHOVEL FULL'S OF SPECIFIED SAND DIRECTLY OVER THE PIPE AREA ALLOWING THE COVER FABRIC TO FORM A MOSTLY VERTICAL ORIENTATION ALONG THE SIDES OF THE PIPE. REPEAT THIS STEP MOVING DOWN THE PIPE.
10. BACKFILL MATERIAL SHALL BE CLEAN WITH NO ROOTS OR STONES LARGER THAN 2 INCHES IN ANY DIMENSION TO A MINIMUM DEPTH OF 8 INCHES OVER THE GSF MODULES AND FINAL COVER FOR VEGETATION OF 4 INCHES TO 6 INCHES OF CLEAN LOAM.
11. ANY SYSTEM WHICH IS MORE THAN 18 INCHES BELOW FINISH GRADE AS MEASURED FROM THE TOP OF THE MODULE SHALL BE VENTED.

1. ALL SEWAGE DISPOSAL SYSTEMS ARE TO BE LOCATED AT LEAST 100 FEET FROM STREAMS AND AT LEAST 35 FEET FROM DRAINAGE EASEMENTS.
2. NO MORE THAN ONE (1) SINGLE FAMILY DWELLING PER LOT.
3. NO SWIMMING POOLS, DRIVEWAYS OR STRUCTURES THAT MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD.
4. ALL TREES ARE TO BE CUT AND REMOVED FROM THE AREA OF THE SEWAGE DISPOSAL SYSTEM IN A MANNER THAT WILL NOT SIGNIFICANTLY DISTURB THE VIRGIN SOIL.
5. NO ROOF, CELLAR, OR FOOTING DRAINS ARE TO BE DISCHARGED INTO THE AREA OF THE SEWAGE DISPOSAL SYSTEM, OR TOWARD THE WELL.
6. THE PERIMETER OF THE ABSORPTION FIELD SHALL BE GRADED TO DIVERT SURFACE RUNOFF.
7. ALL TRENCHES SHALL BE EQUAL LENGTH.
8. SEPTIC TANKS SHALL BE PRECAST CONCRETE AND SHALL BE MANUFACTURED TO WOODWARDS CONCRETE PRODUCTS SPECIFICATIONS, OR AN APPROVED EQUAL.
9. A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL AS ALLOWED BY THE NYS EDUCATION DEPT) SHALL INSPECT THE SANITARY FACILITIES AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED & TESTED FOR WATER TIGHTNESS.
10. THIS SEPTIC DISPOSAL SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARBAGE GRINDERS JACUZZI TYPE SPA TUBS (OVER 100 GAL.) OR WATER SOFTENERS. AS SUCH THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SEWAGE DISPOSAL SYSTEM IS REDESIGNED TO ACCOMMODATE FOR THEM AND APPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
11. NO GRADING CUTS ARE TO BE MADE IN THE AREA OF THE SEWAGE DISPOSAL SYSTEM. NO FILL IS TO BE PLACED IN THE AREA OF THE SEWAGE DISPOSAL SYSTEM, UNLESS SO INDICATED ON THE PLANS.
12. PROPOSED SEWER LATERALS ARE TO BE LAID OUT AND CONSTRUCTED PARALLEL WITH EXISTING GROUND CONTOURS.
13. HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
14. THE DESIGN AND LOCATION OF THE SANITARY FACILITIES SHOWN SHALL NOT BE CHANGED WITHOUT REVIEW AND APPROVAL OF THE ORANGE COUNTY DEPARTMENT OF HEALTH.
15. SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS. DISTRIBUTION BOXES SHOULD BE INSPECTED ANNUALLY TO ASSURE THEY ARE LEVEL AND OPERATING PROPERLY. PUMP CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND PHYSICAL DAMAGE.
16. THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
17. THE OWNER/APPLICANT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.
18. DISCHARGING BRINE BACKWASH FROM WATER SOFTENING EQUIPMENT TO THE SEPTIC SYSTEM MAY SHORTEN THE LIFE OF THE ABSORPTION FIELD.

ENGINEER	C.M. TERRIZZI ENGINEERING, PLLC		
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	SEPTIC SYSTEM DETAILS		
	SUBDIVISION FOR: MITCHELL M&CO. INC. S.B.L.: 103.3-4-44 / 1559 RT 9W / 11.7 ACRES TOWN OF MARLBOROUGH, ULSTER COUNTY, NY		
DATE 4/29/2023	SCALE N.T.S.	SHEET NUMBER 6 OF 6	