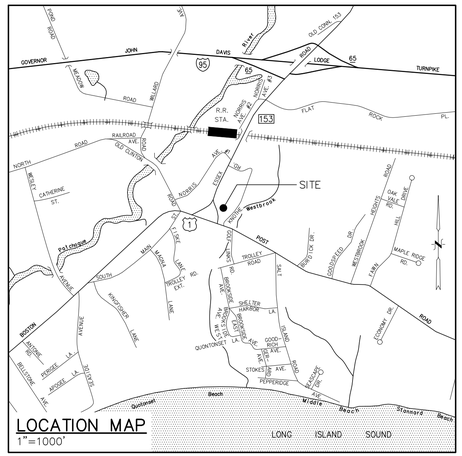


LOCATION MAP
1"=1000'

SEPTIC SYSTEM KEY

(A1) 22.5± L.F. 4" SCH. 40 PVC ASTM D1785 BUILDING SEWER PIPE @ ¼" PER FT. MIN. SLOPE, 12" MIN. COVER & 22.5 DEGREE BENDS AS SHOWN. PIPE SHALL REPLACE EXISTING BUILDING SEWER PIPE BACK TO THE FOUNDATION WALL. RESTAURANT KITCHEN SEWAGE ONLY ~ SEE CONST. NOTE #14.

(A2) 23.1± L.F. 4" SCH. 40 PVC ASTM D1785 BUILDING SEWER PIPE @ ¼" PER FT. MIN. SLOPE, 12" MIN. COVER & 22.5 DEGREE BENDS AS SHOWN. DOMESTIC SEWAGE ONLY ~ ALL SEWAGE EXCEPT RESTAURANT KITCHEN SEWAGE ~ SEE CONST. NOTE #14.

(B) 1,000-GALLON H-20 CONCRETE GREASE INTERCEPTOR TANK (JOLLEY PRECAST OR EQUIVALENT) (SEE DETAIL).*

(C) 4" SCH. 40 PVC ASTM D1785 TO CONNECT GREASE INTERCEPTOR TANK TO SEPTIC TANK.

(D) 1,000-GALLON H-20 CONCRETE SEPTIC TANK (JOLLEY PRECAST OR EQUIVALENT) (SEE DETAIL).*

(E) 4" SCH. 40 PVC ASTM D1785 TO CONNECT SEPTIC TANK TO PUMP CHAMBER.

(F) 1,000-GALLON H-20 CONCRETE PUMP CHAMBER (UNITED CONCRETE OR EQUIVALENT) (SEE DETAIL).*

(G) 2" SCH. 40 PVC ASTM D1785 WITH ¼" WEEP HOLE FOR ANTI-SIPHON & ELBOX FACING DOWN.

SEPTIC SYSTEM KEY (CONT'D)

(H) 6-HOLE H-20 CONCRETE DISTRIBUTION (JOLLEY PRECAST OR EQUIVALENT).*

(I) 4" SCH. 40 PVC ASTM D1785 TO CONNECT TO LEACHING SYSTEM PER MANUFACTURER'S REQUIREMENTS.

(J) 4" SDR 35 PVC ASTM D3034 DISTRIBUTION TEE (TYP. X2).

(K) ROW OF 54.0 L.F. OF GEOMATRIX GST6224 LEACHING SYSTEM (SEE DETAILS).

(L) 4" SCH. 40 PVC ASTM D1785 INSPECTION PORT – GEOMATRIX PART NO.: IPGST15.*

*GREASE INTERCEPTOR TANK & SEPTIC TANK SHALL HAVE H-20 RISERS TO WITHIN 12" OF FINISHED GRADE. PUMP CHAMBER SHALL HAVE H-20 RISERS TO FINISHED GRADE. DISTRIBUTION BOX SHALL HAVE AN H-20 RISER TO WITHIN 12" OF FINISHED GRADE, IF NECESSARY. INSPECTION PORTS SHALL HAVE GEOMATRIX RISERS AND COVERS TO WITHIN 12" OF FINISHED GRADE, IF NECESSARY. CONTRACTOR SHALL VERIFY SEPTIC TANK IS WATERTIGHT PRIOR TO INSTALLATION.

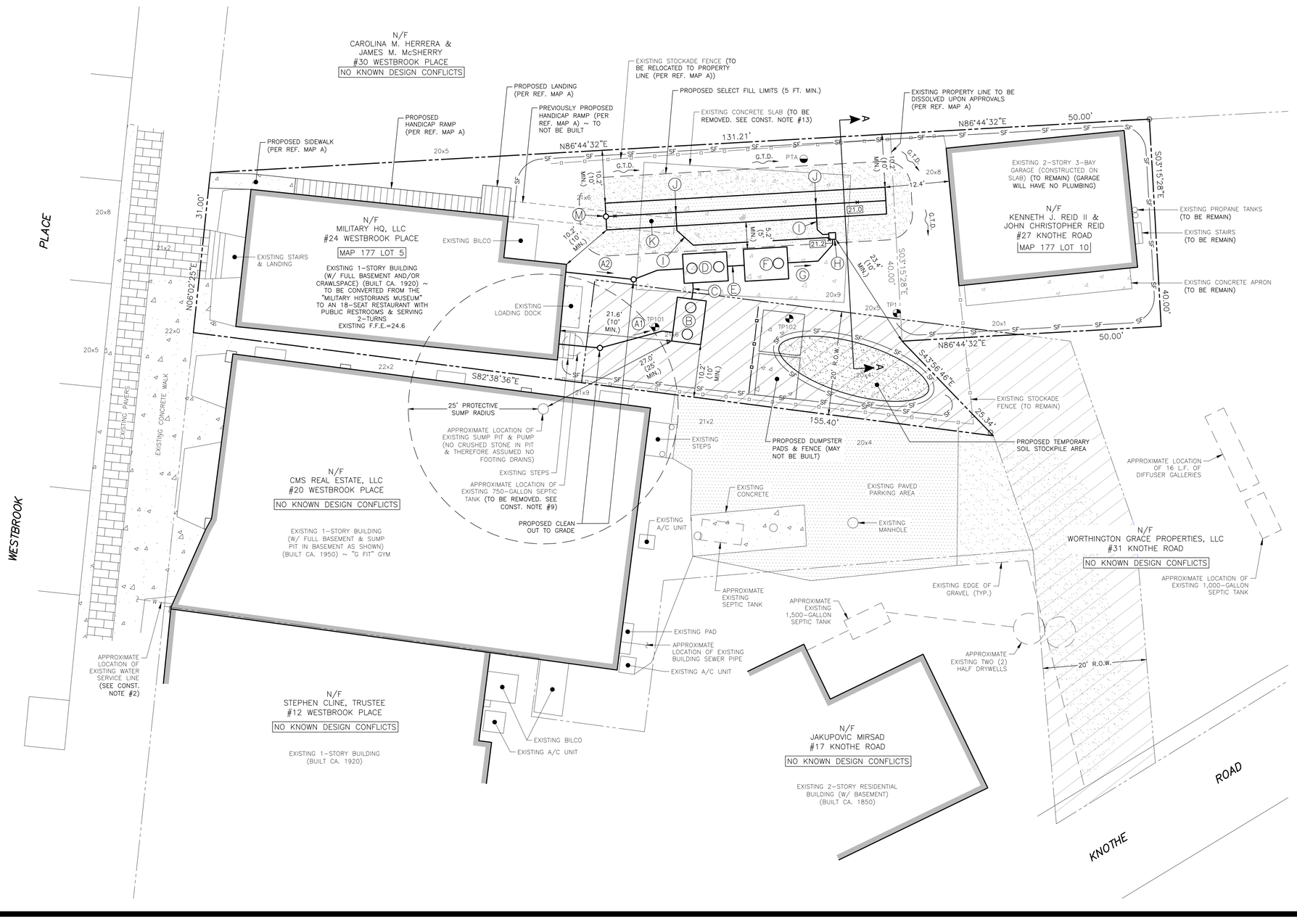
REFER TO SEPTIC SYSTEM INVERT TABLE ON SHEET ST-1 (2 OF 3) FOR PROPOSED INVERT ELEVATIONS.

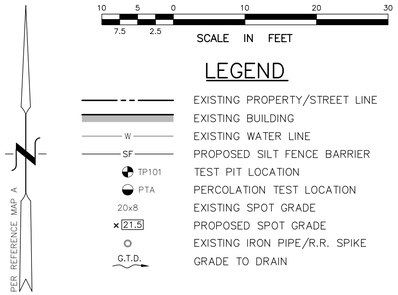
GENERAL NOTES:

1. THIS PLAN WAS COMPILED USING THE FOLLOWING REFERENCE INFORMATION:
   - A) A CLASS A-2 SURVEY MAP ENTITLED "PROPERTY SURVEY, LAND OF MILITARY HISTORIANS MUSEUM, LLC, 24 WESTBROOK PLACE – WESTBROOK, CONNECTICUT", SCALE: 1"=10', DATED: MARCH 3, 2018 WITH REVISIONS THROUGH OCTOBER 8, 2020, PREPARED BY ROBERT C. SIMONI, L.S.
   - B) SEPTIC AS BUILT INFORMATION FOR ADJACENT PROPERTIES ON FILE AT THE TOWN OF WESTBROOK.
2. THE APPLICANT IS KENNETH J. REID II OF 8 HATCHETTS HILL ROAD, OLD LYME, CT 06371. THE OWNER OF LOT 5 (24 WESTBROOK PLACE) IS MILITARY HQ, LLC. THE OWNER OF LOT 10 (27 KNOTHE ROAD) IS KENNETH J. REID II AND CHRISTOPHER JOHN REID.
3. THE SUBJECT PARCELS ARE IDENTIFIED AS LOTS 5 (24 WESTBROOK PLACE) AND 10 (27 KNOTHE ROAD) ON TAX ASSESSOR'S MAP 177. THE DEED REFERENCE OF THE PROPERTIES IS VOLUME 350 PAGE 411 AND VOLUME 269 PAGE 758, RESPECTIVELY. THE AREA OF LOT 5 (24 WESTBROOK PLACE) IS 5,963 S.F. OR 0.14 ACRES.
4. THE SUBJECT PROPERTY IS LOCATED WITHIN THE COMMERCIAL TOWN CENTER 'CTC' ZONING DISTRICT. THIS PROPERTY IS LOCATED WITHIN THE COASTAL AREA MANAGEMENT ZONE.
5. THE APPLICANT IS PROPOSING TO CONVERT THE EXISTING MILITARY MUSEUM INTO A 18-SEAT RESTURANT WITH PUBLIC RESTROOMS AND SERVING 2-TURNS PER DAY. REMOVE/ABANDON THE EXISTING SEPTIC SYSTEM AND INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE-COMPLIANT SEPTIC SYSTEM AND OTHER ASSOCIATED IMPROVEMENTS. THE EXISTING LOT LINE BETWEEN LOTS 5 AND 10 IS PROPOSED TO BE DISSOLVED UPON APPROVALS.
6. THE SOLE PURPOSE OF THIS PLAN IS FOR REVIEW BY THE WESTBROOK HEALTH DEPARTMENT FOR COMPLIANCE WITH THE CONNECTICUT PUBLIC HEALTH CODE.
7. THIS PROPERTY IS SERVED BY PUBLIC WATER AND A SUBSURFACE SEWAGE DISPOSAL SYSTEM. THERE ARE NO KNOWN WELLS OR ANY OTHER KNOWN DESIGN CONFLICTS WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEM.
8. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD-88 DATUM PER REF. MAP A.

CONSTRUCTION NOTES:

1. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD LOCATIONS AND INFORMATION PROVIDED BY OTHERS. THEIR ACTUAL LOCATION MAY VARY FROM THOSE INDICATED AND ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 800-922-4455 TO MARK OUT ALL UNDERGROUND UTILITIES A MINIMUM OF 3 BUSINESS DAYS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY. CONTRACTOR SHALL VERIFY ALL LOCATIONS, DIMENSIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL ADHERE TO ALL APPLICABLE TOWN OF WESTBROOK STANDARDS AND REGULATIONS.
2. IF ANY UTILITY WORK IS NECESSARY, IT SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF WESTBROOK AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 5 FEET FROM THE EXISTING SEPTIC SYSTEM AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. ALL WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE PROPOSED SEPTIC SYSTEM.
3. ALL PROPERTY LINES SHALL BE VERIFIED IN THE FIELD. NO PRIVATE PROPERTY SHALL BE DISTURBED UNLESS PROPER RIGHTS ARE OBTAINED PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONFIRM AND ABIDE BY ANY APPLICABLE 'NO HAMMER' TIME PERIODS OF THE COMMUNITY.
5. THE CONTRACTOR SHALL OBTAIN, REVIEW AND ADHERE TO ALL REQUIREMENTS AND ANY CONDITIONS OF APPROVAL OF THE TOWN OF WESTBROOK.
6. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES FROM ANY EROSION AND/OR SEDIMENTATION. SILT FENCE SHALL BE INSTALLED AS SHOWN AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
7. THE EXISTING MUSEUM BUILDING AT 24 WESTBROOK PLACE WAS BUILT CA. 1920 AND HAS A CRAWL SPACE AND/OR BASEMENT. BASED ON IT'S AGE IT LIKELY DOES NOT HAVE FOOTING DRAINS. THE EXISTING DETACHED GARAGE AT 27 KNOTHE ROAD IS CONSTRUCTED ON SLAB AND DOES NOT HAVE FOOTING DRAINS. THE ABUTTING RESIDENTIAL DWELLING DIRECTLY TO THE NORTH (30 WESTBROOK PLACE) WAS BUILT CA. 1870 AND HAS A PARTIAL FULL BASEMENT. BASED ON IT'S AGE IT DOES NOT HAVE FOOTING DRAINS. THE ABUTTING "G FIT" GYM DIRECTLY TO THE SOUTH (20 WESTBROOK PLACE) WAS BUILT CA. 1950 AND HAS A FULL BASEMENT WITH A SUMP PIT AND PUMP AS SHOWN. THERE ARE NO KNOWN DOWNGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 25 FEET OF ANY UPGRADIENT GROUNDWATER DRAINS OR ANY UPGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 50 FEET OF ANY DOWNGRADIENT GROUNDWATER DRAINS.
8. ALL EXISTING DRAINAGE PATTERNS SHALL BE MAINTAINED. THE CONTRACTOR SHALL GRADE THE PROPERTY IN SUCH A MANNER TO MAINTAIN EXISTING LOCAL DRAINAGE PATTERNS AND TO PREVENT EXCESS RUNOFF AND/OR PONDING ON ADJACENT PROPERTIES BOTH DURING AND AFTER CONSTRUCTION.
9. THE APPROXIMATE LOCATION OF EXISTING SEPTIC SYSTEMS ARE SHOWN HEREON PER REF. MAP A AND/OR REF. INFORMATION B. ALL EXISTING SEPTIC SYSTEM COMPONENTS ON 24 WESTBROOK PLACE SHALL BE LOCATED IN THE FIELD AND SHALL BE PUMPED DRY AS NECESSARY AND SHALL BE PROPERLY CRUSHED, FILLED AND ABANDONED AND/OR REMOVED IN ACCORDANCE WITH THE CONNECTICUT PUBLIC HEALTH CODE AND ALL APPLICABLE LOCAL REGULATIONS.
10. THE PROPOSED SEPTIC SYSTEM SHALL BE STAKED OUT BY A LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE SEPTIC SYSTEM IN THE EXACT LOCATION SHOWN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL DISTURBED AREAS TO THEIR PRE-CONSTRUCTION CONDITION OR BETTER ONCE ALL WORK IS COMPLETE. ALL GRASSED AREAS SHALL BE LOAMED, SEEDED AND MULCHED AS NECESSARY.
12. THE CONTRACTOR SHALL FULLY COORDINATE WITH GEOMATRIX SYSTEMS, LLC (GEOMATRIX) AND SHALL ABIDE BY ALL SPECIFICATIONS AND INSTRUCTIONS FOR INSTALLATION OF THE GEOMATRIX GST LEACHING SYSTEM. GEOMATRIX SHALL DISCUSS AND REVIEW SYSTEM OPERATION WITH OWNER INCLUDING ALTERNATING FLOWS TO LEACHING ROWS. IT IS STRONGLY RECOMMENDED, ALTHOUGH NOT REQUIRED BY THE PUBLIC HEALTH CODE, TO INSTALL A SOLAIR SYSTEM ON THE PROPOSED LEACHING SYSTEM. AT A MINIMUM, SOIL AIR PIPING SHALL BE INSTALLED TO FACILITATE POTENTIAL FUTURE SOIL AIR BLOWER CONNECTIONS. IF SOIL AIR SYSTEM IS NOT INSTALLED, GEOMATRIX WILL REQUIRE OWNER TO SIGN A DISCLAIMER AGREEMENT.
13. ANY EXISTING FILL, UNSUITABLE SOIL OR EXISTING SEPTIC SYSTEM COMPONENTS WITHIN 5 FEET OF THE LEACHING SYSTEM SHALL BE REMOVED AND BACKFILLED WITH SELECT FILL. THE SOIL THAT IS 25 FEET DOWNGRADIENT OF THE LEACHING SYSTEM AND WITHIN THE AREA OF THE EXISTING GARAGE SHALL BE REMOVED AND BACKFILLED WITH SELECT FILL AS SHOWN (SEE FILL & GRADING NOTES ON SHEET 3 OF 3).
14. ALL KITCHEN WASTE LINES USED FOR THE RESTAURANT SHALL CONNECT TO PROPOSED BUILDING SEWER PIPE "A1" AND TIE INTO THE PROPOSED GREASE INTERCEPTOR TANK. ALL DOMESTIC WASTE LINES SHALL CONNECT TO PROPOSED BUILDING SEWER PIPE "A2" AND TIE INTO THE PROPOSED SEPTIC TANK. THE EXACT LOCATION AND INVERT OF THE EXISTING BUILDING SEWER PIPE IS UNKNOWN. THE EXISTING INVERT IS ESTIMATED TO BE APPROXIMATELY ELEVATION 20.0± (SEE SANITARY SYSTEM PIPE INVERT TABLE ON SHEET 2 OF 3). THE EXISTING BUILDING SEWER PIPE SHALL BE REMOVED AND REPLACED BACK TO THE FOUNDATION WALL. CONTRACTOR SHALL CONFIRM THAT THE INTERIOR PLUMBING CAN BE MODIFIED AS NECESSARY TO ACHIEVE ALL REQUIRED BUILDING SEWER PIPE LOCATIONS AND INVERTS AS INDICATED. CONTRACTOR TO CONTACT DESIGN ENGINEER IF PROPOSED BUILDING INVERT ELEVATIONS CANNOT BE ACHIEVED. CONTRACTOR MAY ADJUST THE SEPTIC INVERT ELEVATIONS OF THE PROPOSED TANKS IF NECESSARY WITH PRIOR REVIEW AND APPROVAL OF THE DESIGN ENGINEER.





PLAN PREPARED BY:
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THE EMBOSSED SEAL OF THIS SURVEYOR IS TO BE AFFIXED HERE FOR THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
3	4/29/2022	MINOR REVISIONS PER HEALTH DEPT. COMMENTS	JG
2	3/25/2022	SEPTIC SYSTEM MODIFIED AND GARAGE TO REMAIN	JG
1	9/3/2021	MINOR REVISIONS PER HEALTH DEPT. COMMENTS	RG

SEPTIC SYSTEM REPAIR PLAN
PREPARED FOR KENNETH J. REID II
24 WESTBROOK PL. & 27 KNOTHE RD. -- MAP 177 LOTS 5 & 10
WESTBROOK, CONNECTICUT

DATE: JUNE 16, 2021
SCALE: 1"=10'
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: SR-1
SHEET NO.: 1 of 3
JOB. NO.: 2020-593

GENERAL NOTES (SEPTIC SYSTEM):

1. THE APPLICANT IS PROPOSING TO CONVERT THE EXISTING MILITARY MUSEUM INTO A 18–SEAT RESTURANT WITH PUBLIC RESTROOMS AND SERVING 2–TURNS PER DAY, REMOVE/ABANDON THE EXISTING SEPTIC SYSTEM AND INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE–COMPLIANT SEPTIC SYSTEM AND OTHER ASSOCIATED IMPROVEMENTS. THE EXISTING LOT LINE BETWEEN LOTS 5 AND 10 IS PROPOSED TO BE DISSOLVED UPON APPROVALS.
2. THIS PROPERTY IS SERVED BY PUBLIC WATER AND A SUBSURFACE SEWAGE DISPOSAL SYSTEM. THERE ARE NO KNOWN WELLS OR ANY OTHER KNOWN DESIGN CONFLICTS WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEM.
3. THE USE OF A GARBAGE DISPOSAL IS NOT RECOMMENDED. IF A GARBAGE DISPOSAL OR A TUB OVER 100 GALLONS IS INSTALLED, THE PROPOSED SEPTIC TANK SIZE SHALL BE INCREASED IN CONFORMANCE WITH THE PUBLIC HEALTH CODE.
4. THE EXISTING MUSEUM BUILDING AT 24 WESTBROOK PLACE WAS BUILT CA. 1920 AND HAS A CRAWL SPACE AND/OR BASEMENT. BASED ON IT'S AGE IT LIKELY DOES NOT HAVE FOOTING DRAINS. THE EXISTING DETACHED GARAGE AT 27 KNOTHE ROAD IS CONSTRUCTED ON SLAB AND DOES NOT HAVE FOOTING DRAINS. THE ABUTTING RESIDENTIAL DWELLING DIRECTLY TO THE NORTH (30 WESTBROOK PLACE) WAS BUILT CA. 1870 AND HAS A PARTIAL FULL BASEMENT. BASED ON IT'S AGE IT DOES NOT HAVE FOOTING DRAINS. THE ABUTTING "G FIT" GYM DIRECTLY TO THE SOUTH (20 WESTBROOK PLACE) WAS BUILT CA. 1950 AND HAS A FULL BASEMENT WITH A SUMP PIT AND PUMP AS SHOWN. THERE ARE NO KNOWN DOWNGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 25 FEET OF ANY UPGRADIENT GROUNDWATER DRAINS OR ANY UPGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 50 FEET OF ANY DOWNGRADIENT GROUNDWATER DRAINS.
5. IF ANY UTILITY WORK IS NECESSARY, IT SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF WESTBROOK AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 5 FEET FROM THE EXISTING SEPTIC SYSTEM AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. ALL WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE PROPOSED SEPTIC SYSTEM.
6. SINCE THE BUILDING WILL BE SERVED BY A PUMP SYSTEM FOR SEWAGE DISPOSAL, THE PROPERTY OWNER SHOULD BE AWARE THAT THE PUMP SYSTEM IS RUN ON ELECTRICITY AND IN THE CASE OF A POWER OUTAGE, WILL NOT OPERATE UNLESS A BACKUP POWER SUPPLY IS PROVIDED.

GENERAL CONSTRUCTION NOTES (SEPTIC SYSTEM):

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CONNECTICUT PUBLIC HEALTH CODE, AS AMENDED.
2. A LICENSED SURVEYOR SHALL FIELD STAKE THE PROPOSED SEPTIC SYSTEM PRIOR TO CONSTRUCTION AND SET A STABLE SITE BENCHMARK (NAVD–88) ON SITE PRIOR TO CONSTRUCTION.
3. NO WORK SHALL COMMENCE IN THE SYSTEM AREA UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.
4. THE LICENSED INSTALLER SHALL PERFORM SITE PREPARATION AND SHOULD CONTACT "CALL BEFORE YOU DIG" AT 1–800–922–4455 TO VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION.
5. THE LICENSED INSTALLER SHALL BE ON SITE DURING SYSTEM CONSTRUCTION. THE SYSTEM SHALL BE INSTALLED IN CONFORMANCE TO THESE PLANS. ANY REQUESTED MODIFICATIONS SHALL BE DISCUSSED WITH THE ENGINEER PRIOR TO CONSTRUCTION. ALL MODIFICATIONS MUST BE APPROVED BY THE ENGINEER AND TOWN SANITARIAN PRIOR TO CONSTRUCTION.
6. A MINIMUM OF 24 HOURS NOTICE SHALL BE GIVEN BY THE LICENSED INSTALLER TO THE ENGINEER AND TOWN SANITARIAN BEFORE ANY STRIPPING IS DONE FOR THE SYSTEM. STRIP INSPECTIONS WILL BE PERFORMED BY THE ENGINEER AND SANITARIAN.
7. THE LICENSED INSTALLER SHALL BE RESPONSIBLE FOR PREPARING THE LEACHING AREA IN A WORKMANLIKE MANNER. ALL NECESSARY STEPS SHALL BE TAKEN TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SILTATION ONCE EXPOSED.
8. THE INSTALLER SHALL NOTIFY THE ENGINEER AND SANITARIAN AT LEAST 24 HOURS IN ADVANCE OF BEING READY FOR A FINAL INSPECTION. THE ENGINEER AND SANITARIAN SHALL CONDUCT THE FINAL INSPECTION TOGETHER WITH THE LICENSED INSTALLER. NO DEVIATION FROM THE PLAN APPROVED BY THE SANITARIAN SHALL BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE SANITARIAN. THE SYSTEM SHALL NOT BE BACKFILLED WITHOUT THE APPROVAL OF THE SANITARIAN.
9. A LICENSED ENGINEER OR SURVEYOR SHALL PREPARE A SEPTIC SYSTEM AS–BUILT DRAWING CERTIFYING THE SYSTEM IS CODE–COMPLIANT. THIS PLAN SHALL INCLUDE ALL ESSENTIAL ACCESS POINTS INCLUDING TANK MANHOLES AND LEACHING SYSTEM ENDS. THE AS–BUILT PLAN SHALL BE COMPLETED IN A TIMELY MANNER.
10. THE LEACHING SYSTEM SHALL BE PROPERLY COVERED BY THE LICENSED SYSTEM INSTALLER WITHIN TWO (2) WORKING DAYS FOLLOWING THE LOCAL HEALTH DEPARTMENT'S FINAL INSPECTION AND APPROVAL.
11. NO HEAVY EQUIPMENT SHALL BE DRIVEN OVER THE INSTALLED LEACHING SYSTEM AREA.
12. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IF HE WISHES TO CHANGE THE LOCATION OR ELEVATION OF ANY PROPOSED SEPTIC SYSTEM COMPONENT PRIOR TO CONSTRUCTION.
13. THE LICENSED INSTALLER IS RESPONSIBLE TO INSTALL THE SUBSURFACE SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN.
14. THE GREASE INTERCEPTOR TANK & SEPTIC TANK SHALL HAVE H–20 RISERS TO WITHIN 12" OF FINISHED GRADE. THE PUMP CHAMBER SHALL HAVE H–20 RISERS TO FINISHED GRADE. THE DISTRIBUTION BOX SHALL HAVE AN H–20 RISER TO WITHIN 12" OF FINISHED GRADE, IF NECESSARY. THE INSPECTION PORTS SHALL HAVE GEOMATRIX RISERS AND COVERS TO WITHIN 12" OF FINISHED GRADE, IF NECESSARY. THE CONTRACTOR SHALL VERIFY SEPTIC TANK IS WATERTIGHT PRIOR TO INSTALLATION.
15. THE PROPOSED LEACHING SYSTEM, GEOMATRIX GST62244, SHALL BE INSTALLED IN CONFORMANCE WITH ALL MANUFACTURER'S SPECIFICATIONS. A GEOMATRIX SYSTEMS REPRESENTATIVE WILL RESTURANTVER THE GEOMATRIX GST FORMS TO THE SITE AND WILL BE ON SITE DURING INSTALLATION OF THE SYSTEM TO ENSURE PROPER INSTALLATION. THE INSTALLER SHALL OBTAIN, REVIEW AND STRICTLY ADHERE TO THE ALL INSTALLATION INSTRUCTIONS AND MATERIAL SPECIFICATIONS. MORE INFORMATION CAN BE OBTAINED FROM THE MANUFACTURER, GEOMATRIX SYSTEMS, LLC – 114 MILL ROCK ROAD EAST, OLD SAYBROOK, CT – 860–510–0730 OR AT WWW.GEOMATRIXSYSTEMS.COM.
16. A TWO–PART CONCRETE SEPTIC TANK SHALL BE USED BUT MUST BE MADE 100% WATERTIGHT BY GASKETING AND MORTARING ALL JOINTS. IF A TWO–PART TANK IS USED, IT SHALL BE FILLED WITH WATER ABOVE THE JOINT AND INSPECTED BY THE ENGINEER AND/OR THE TOWN SANITARIAN WITHIN 24 HOURS. THE CONTRACTOR SHALL MONITOR THE WATER LEVEL IN THE TANK DURING THIS PERIOD AND SHALL PERMANENTLY REPAIR ANY LEAKS TO THE SATISFACTION OF THE ENGINEER AND THE TOWN SANITARIAN.
17. THE LICENSED INSTALLER SHALL CONFIRM THAT NO LEDGE IS PRESENT WITHIN 48 INCHES BELOW THE BOTTOM OF THE PROPOSED LEACHING SYSTEM.
18. THE CONTRACTOR SHALL GRADE THE AREA IN THE VICINITY OF THE LEACHING FIELD IN SUCH A MANNER THAT ALL SURFACE RUNOFF IS SUFFICIENTLY DIRECTED AWAY FROM THE LEACHING FIELD AREA AND NOT RESULT IN PONDING ON THE SUBJECT PROPERTY OR ANY ADJACENT PROPERTY OR ROADWAY.
19. THE LICENSED INSTALLER SHALL INCLUDE ALL ADEQUATE PROVISIONS FOR FREEZE PROTECTION FOR ALL PIPING AND JUNCTIONS.
20. LICENSED INSTALLER SHALL PROVIDE SIEVE ANALYSES FOR C–33 SAND AND SELECT FILL PRIOR TO CONSTRUCTION. PRIOR TO LEACHING SYSTEM INSTALLATION, THE DESIGN ENGINEER SHALL CONDUCT A PERCOLATION TEST WITHIN THE SELECT FILL BED TO CONFIRM THE DESIGN PERCOLATION RATE IS LESS THAN 10.1 MINS./INCH.
21. THE APPROXIMATE LOCATION OF EXISTING SEPTIC SYSTEMS ARE SHOWN HEREON PER REF. MAP A AND/OR REF. INFORMATION B. ALL EXISTING SEPTIC SYSTEM COMPONENTS ON 24 WESTBROOK PLACE SHALL BE LOCATED IN THE FIELD AND SHALL BE PUMPED DRY AS NECESSARY AND SHALL BE PROPERLY CRUSHED, FILLED AND ABANDONED AND/OR REMOVED IN ACCORDANCE WITH THE CONNECTICUT PUBLIC HEALTH CODE AND ALL APPLICABLE LOCAL REGULATIONS.
22. THE CONTRACTOR SHALL FULLY COORDINATE WITH GEOMATRIX SYSTEMS, LLC (GEOMATRIX) AND SHALL ABIDE BY ALL SPECIFICATIONS AND INSTRUCTIONS FOR INSTALLATION OF THE GST LEACHING SYSTEM. GEOMATRIX SHALL DISCUSS AND REVIEW SYSTEM OPERATION WITH OWNER INCLUDING ALTERNATING FLOWS TO LEACHING ROWS. IT IS STRONGLY RECOMMENDED, ALTHOUGH NOT REQUIRED BY THE PUBLIC HEALTH CODE, TO INSTALL A SOILAIR SYSTEM ON THE PROPOSED LEACHING SYSTEM. AT A MINIMUM, SOIL AIR PIPING SHALL BE INSTALLED TO FACILITATE POTENTIAL FUTURE SOIL AIR BLOWER CONNECTIONS. IF SOIL AIR SYSTEM IS NOT INSTALLED, GEOMATRIX WILL REQUIRE OWNER TO SIGN A DISCLAIMER AGREEMENT.
23. ANY EXISTING FILL, UNSUITABLE SOIL OR EXISTING SEPTIC SYSTEM COMPONENTS WITHIN 5 FEET OF THE LEACHING SYSTEM SHALL BE REMOVED AND BACKFILLED WITH SELECT FILL. THE SOIL THAT IS 25 FEET DOWNGRADIENT OF THE LEACHING SYSTEM AND WITHIN THE AREA OF THE EXISTING GARAGE SHALL BE REMOVED AND BACKFILLED WITH SELECT FILL AS SHOWN ON THE SITE PLAN (SEE FILL & GRADING NOTES ON SHEET 3 OF 3).
24. ONCE THE SEPTIC SYSTEM AREA IS STRIPPED, AND PRIOR TO LEACHING SYSTEM INSTALLATION, DESIGN ENGINEER SHALL CONDUCT A PERCOLATION TEST WITHIN THE UNDERLYING SOIL TO CONFIRM THE DESIGN PERCOLATION RATE IS 1.0–10.0 MINUTES PER INCH.
25. ALL KITCHEN WASTE LINES USED FOR THE RESTAURANT SHALL CONNECT TO PROPOSED BUILDING SEWER PIPE "A1" AND TIE INTO THE PROPOSED GREASE INTERCEPTOR TANK. ALL DOMESTIC WASTE LINES SHALL CONNECT TO PROPOSED BUILDING SEWER PIPE "A2" AND TIE INTO THE PROPOSED SEPTIC TANK. THE EXACT LOCATION AND INVERT OF THE EXISTING BUILDING SEWER PIPE IS UNKNOWN. THE EXISTING INVERT IS ESTIMATED TO BE APPROXIMATELY ELEVATION 20.0± (SEE SANITARY SYSTEM PIPE INVERT TABLE ON THIS SHEET). THE EXISTING BUILDING SEWER PIPE SHALL BE REMOVED AND REPLACED BACK TO THE FOUNDATION WALL. CONTRACTOR SHALL CONFIRM THAT THE INTERIOR PLUMBING CAN BE MODIFIED AS NECESSARY TO ACHIEVE ALL REQUIRED BUILDING SEWER PIPE LOCATIONS AND INVERTS AS INDICATED. CONTRACTOR TO CONTACT DESIGN ENGINEER IF PROPOSED BUILDING INVERT ELEVATIONS CANNOT BE ACHIEVED. CONTRACTOR MAY ADJUST THE SEPTIC INVERT ELEVATIONS OF THE PROPOSED TANKS IF NECESSARY WITH PRIOR REVIEW AND APPROVAL OF THE DESIGN ENGINEER.
26. THE CONTRACTOR SHALL PREPARE THE SITE AND PERFORM THE WORK IN A WORKMANLIKE MANNER AND SHALL KEEP THE SITE AND ADJACENT PROPERTIES SAFE TO VEHICLES AND PEDESTRIANS AT ALL TIMES.

DEEP TEST PIT DATA

DATE: 11/15/2017
WITNESSED BY: JOE WREN, P.E. (INDIGO)
EXCAVATED BY: KENNETH J. REID II (OWNER)
RECORDED BY: SHIRLEY MICKENS, R.S. (HEALTH)

TP #1

EXISTING GRADE = ELEV. 20.5±

0–6"
PAVEMENT, PROCESSED STONE

6"–13"
TOPSOIL

13"–41"
BROWN MEDIUM SAND

41"–86"
ORANGE TO BROWN STRATIFIED LAYERS OF MEDIUM TO COARSE SAND

86"–103"
GRAY FINE MOTTLED SAND

MOTTLING @ 82" (ELEV. = 13.7±)
NO GROUNDWATER
NO LEDGE
ROOTS TO 36"

TP #102

EXISTING GRADE = ELEV. 20.9±

0–8"
FILL

8"–16"
ORIGINAL TOPSOIL – DARK BROWN FINE SANDY LOAM

16"–32"
YELLOW–BROWN FINE SANDY LOAM

32"–44"
LIGHT–BROWN COARSE SAND W/ LITTLE GRAVEL

44"–60"
STRIATED YELLOW TO LIGHT BROWN MEDIUM SAND

60"–83"
YELLOW–BROWN GRAVELLY COARSE SAND, MOIST

83"–97"
GRAY FINE SAND, WET

MOTTLING @ 58" (ELEV. = 16.1±)
GROUNDWATER @ 77" (ELEV. = 14.5±)
NO LEDGE
ROOTS TO 36"

DEEP TEST PIT DATA

DATE: 4/7/2021
WITNESSED BY: JOE WREN, P.E. (INDIGO)
LEE ARCHER, R.S. (HEALTH)
PAM SOLIS (HEALTH)
EXCAVATED BY: WATERVIEW LANDSCAPING
RECORDED BY: BOB RUSSO, C.P.S.S. (CLA)

TP #101

EXISTING GRADE = ELEV. 21.6±

0–14"
FILL

14"–22"
ORIGINAL TOPSOIL

22"–41"
DARK BROWN FINE SANDY LOAM

41"–51"
BROWN FINE LOAMY SOIL

51"–64"
BROWN FINE MEDIUM SANDY LOAM

64"–70"
LIGHT BROWN COARSE SAND W/ LITTLE GRAVEL

70"–100"
YELLOW–BROWN GRAVELLY COARSE SAND

MOTTLING @ 68" (ELEV. = 15.9±)
GROUNDWATER @ 84" (ELEV. = 14.6±)
NO LEDGE
ROOTS TO 36"

PERCOLATION TEST DATA

CONDUCTED BY: ROSS GLADSTONE, E.I.T. (INDIGO)

PT A

DATE: 4/8/2021
DEPTH: 37"± (SAND, LITTLE GRAVEL)

TIME (MINUTE)		DEPTH (INCHES)	DROP (INCHES)	PERC RATE (MIN./IN.)
0	@	25		
3	@	32	7	0.4
6	@	33 3/4	1 3/4	1.7
9	@	35	1 1/4	2.4
12	@	35 3/4	3/4	4.0
15	@	36 1/2 (DRY)	3/4	4.0

PERCOLATION RATE: 1.0–10.0 MIN./INCH

GROUNDWATER MONITORING RESULTS

DATE (2021)	GROUNDWATER ELEVATIONS	
	TP101	TP102
4/28	DRY	13.91
5/5	DRY	13.92
5/12	DRY	13.91
5/19	DRY	13.54
5/26	DRY	13.24
MAX. AVERAGE	DRY	13.70

SANITARY SYSTEM DESIGN CRITERIA

DESIGN PERC RATE	BUILDING USE	REQUIRED LEACHING AREA	LEACHING SYSTEM TYPE	EFF. LEACHING AREA	LEACHING AREA PROVIDED	REQ'D TANK CAPACITY	TANK CAPACITY PROVIDED
LESS THAN 10.1 MINS./IN. (1)	18–SEAT RESTURANT (2)	675 S.F. (3)	ONE (1) ROW OF 54.0 L.F. OF GEOMATRIX GST6224	18.1 S.F./L.F. (GST6224)	977.4 S.F. (4)	1,000–GAL. G.I.T. & 1,000–GAL. SEPTIC TANK (5)	1,000–GAL. G.I.T. & 1,000–GAL. SEPTIC TANK (5)

(1) ONCE THE SEPTIC SYSTEM AREA IS STRIPPED, AND PRIOR TO LEACHING SYSTEM INSTALLATION, DESIGN ENGINEER SHALL CONDUCT A PERCOLATION TEST WITHIN THE UNDERLYING SOIL TO CONFIRM THE DESIGN PERCOLATION RATE IS 1.0–10.0 MINUTES PER INCH.
(2) PROPOSED 18–SEAT RESTURANT WITH 2–TURNS (BREAKFAST & LUNCH OR LUNCH & DINNER) AND PUBLIC RESTROOMS.
DESIGN FLOW (RESTURANT) = 18 SEATS (MAX.) x 30 GPD PER SEAT = 540 GPD
(3) E.L.A. REQUIRED (RESTURANT) = 540 GPD / 0.8 APPLICATION RATE (PROBLEMATIC SEWAGE) = 675 S.F.
(4) E.L.A. PROVIDED = 54.0 L.F. x 18.1 S.F./L.F. (GEOMATRIX GST6224) = 977.4 S.F.
(5) MINIMUM GREASE INTERCEPTOR TANK (G.I.T.) AND SEPTIC CAPACITY FOR NON–RESIDENTIAL USES SHALL BE EQUAL TO THE 24–HOUR DESIGN FLOW (BUT NOT LESS THAN 1,000 GALLONS).
GREASE INTERCEPTOR TANK VOLUME REQUIRED (RESTURANT) = 540 GPD x 1 DAY = 540 GALLONS –– USE A 1,000 GALLON GREASE INTERCEPTOR TANK
SEPTIC TANK VOLUME REQUIRED (RESTURANT) = 540 GPD x 1 DAY = 540 GALLONS –– USE A 1,000 GALLON SEPTIC TANK

MLSS COMPUTATIONS

DESIGN PERC RATE	BUILDING USE	RECEIVING SOIL DEPTH	HYDRAULIC GRADIENT	HYDRAULIC FACTOR (HF)	FLOW FACTOR (FF)	PERCOLATION FACTOR (PF)	MLSS REQUIRED (HFxFFxPF)	MLSS PROVIDED
UP TO 10.0 MINS./IN. (1)	18–SEAT RESTURANT (2)	48.1–60.0 INCHES (3)	LESS THAN 1% ONE–DIRECTIONAL FLOW (4)	30	1.8 (5)	1.0	54.0 FT.	54.0 FT.

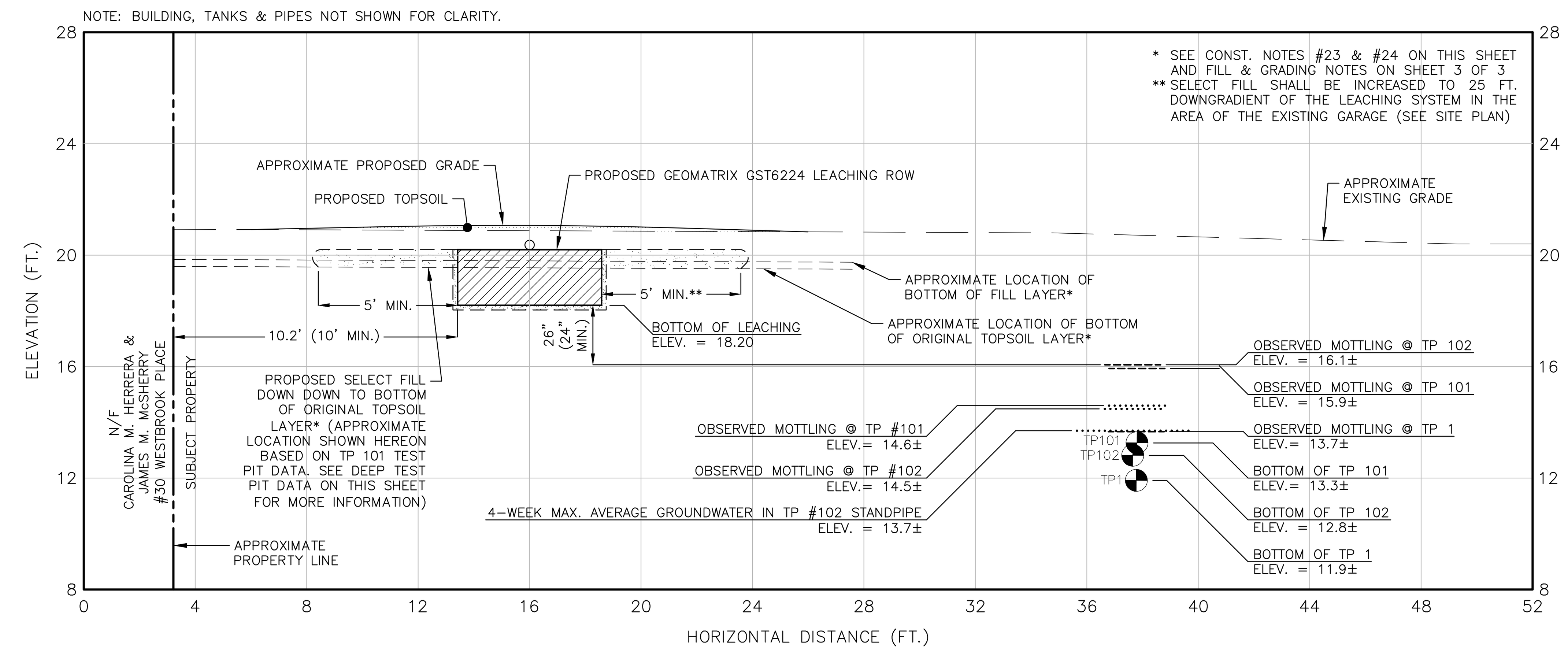
(1) ONCE THE SEPTIC SYSTEM AREA IS STRIPPED, AND PRIOR TO LEACHING SYSTEM INSTALLATION, DESIGN ENGINEER SHALL CONDUCT A PERCOLATION TEST WITHIN THE UNDERLYING SOIL TO CONFIRM THE DESIGN PERCOLATION RATE IS 1.0–10.0 MINUTES PER INCH.
(2) PROPOSED 18–SEAT RESTURANT WITH 2–TURNS (BREAKFAST & LUNCH OR LUNCH & DINNER) AND PUBLIC RESTROOMS.
DESIGN FLOW (RESTURANT) = 18 SEATS (MAX.) x 30 GPD PER SEAT = 540 GPD
(3) THE PROPOSED LEACHING SYSTEM WILL BE ABOVE NATURAL GRADE. THEREFORE, PER THE CT PUBLIC HEALTH CODE, RECEIVING SOIL SHALL BE MEASURED FROM THE TOP OF THE LEACHING SYSTEM DOWN TO THE RESTRICTIVE LAYER AND MAY INCLUDE UP TO 24" OF SELECT FILL BELOW THE LEACHING SYSTEM.
RECEIVING SOIL DEPTH = 24" (THICKNESS OF SYSTEM) + 26" (NATURAL SOIL ABOVE MOTTLING PROVIDED) = 48.0"
AT TP1 AND TP102, THE RECEIVING SOIL DEPTH WILL BE MORE THAN 48" AND THEREFORE THE AVERAGE RECEIVING SOIL DEPTH WILL BE GREATER THAN 48.1" (SEE X–SECTION BELOW). USE A RECEIVING SOIL DEPTH RANGE OF 48.1"–60.0" FOR DESIGN.
(4) THE SITE HAS BEEN FILLED IN THE PAST SO THE ON–SITE GROUND TOPOGRAPHY IS NOT ENTIRELY NATURAL. HOWEVER, IT APPEARS THAT THE ORIGINAL TOPOGRAPHY IN THE AREA WAS GENERALLY FLAT AND THEREFORE A HYDRAULIC GRADIENT OF LESS THAN 1% WAS USED FOR DESIGN. ALSO, CONSERVATIVELY, ONE–DIRECTIONAL FLOW IS ASSUMED AND THAT THE GROUNDWATER FLOWS FROM NORTH/NORTH–WEST TO SOUTH/SOUTHEAST TOWARD "WEST BROOK". SEE LOCATION MAP ON SHEET 1 OF 3.
(5) FLOW FACTOR (RESTURANT) = 540 GPD (DESIGN FLOW) / 300 = 1.8

SANITARY SYSTEM PIPE INVERT TABLE

STRUCTURE	PIPE AT BUILDING (A1)	PIPE AT BUILDING (A2)	GREASE INTER. TANK (B)	SEPTIC TANK (D)	PUMP CHAMBER (F)	DISTRIBUTION BOX (H)	LEACHING ROW (K)
INV. IN (FT.)	–––	–––	19.50	19.15	18.80	20.15	19.70
INV. OUT (FT.)	20.0± (1)(5)	20.00 (1)(5)	19.25	18.90	18.55	20.05 (6)	–––

(1) PROPOSED 4" SCH. 40 PVC ASTM D1785 BUILDING SEWER PIPE.
PERCENT SLOPE (PIPE "A1") = (20.0'± – 19.50') x 100% / 22.5'± = 2.22%± > 2.08% (MIN.).
PERCENT SLOPE (PIPE "A2") = (20.0'± – 19.50') x 100% / 23.1'± = 2.16%± > 2.08% (MIN.).
(2) FOR ALL PIPE, A MIN. OF 12" OF COVER SHALL BE PROVIDED.
(3) BOTTOM OF LEACHING SYSTEM SHALL BE SET LEVEL AND AT ELEVATION 18.20'.
(4) SEPTIC SYSTEM LABELS SHOWN FOR CLARITY (REFER TO SEPTIC SYSTEM KEY ON SHEET 1 OF 3).
(5) THE EXACT LOCATION AND INVERT OF THE EXISTING BUILDING SEWER PIPE IS UNKNOWN. THE EXISTING INVERT IS ESTIMATED TO BE APPROXIMATELY ELEVATION 20.0± AS SHOWN. THE EXISTING BUILDING SEWER PIPE SHALL BE REMOVED AND REPLACED BACK TO THE FOUNDATION WALL. CONTRACTOR SHALL CONFIRM THAT THE INTERIOR PLUMBING CAN BE MODIFIED AS NECESSARY TO ACHIEVE ALL REQUIRED BUILDING SEWER PIPE LOCATIONS AND INVERTS AS INDICATED. CONTRACTOR TO CONTACT DESIGN ENGINEER IF PROPOSED BUILDING INVERT ELEVATIONS CANNOT BE ACHIEVED. CONTRACTOR MAY ADJUST THE SEPTIC INVERT ELEVATIONS OF THE PROPOSED TANKS IF NECESSARY WITH PRIOR REVIEW AND APPROVAL OF THE DESIGN ENGINEER.
(6) THE PIPES EXITING THE DISTRIBUTION BOX SHALL BE SET LEVEL FOR THE FIRST 5 FT. FOR EQUAL DISTRIBUTION.

NOTE: BUILDING, TANKS & PIPES NOT SHOWN FOR CLARITY.



PROPOSED LEACHING SYSTEM PROFILE – X–SECTION A–A

HORIZ. SCALE = VERT. SCALE = 1"=4'

PLAN PREPARED BY:
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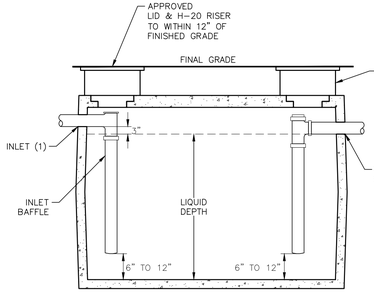
THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED HERE FOR THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
3	4/29/2022	MINOR REVISIONS PER HEALTH DEPT. COMMENTS	JG
2	3/25/2022	SEPTIC SYSTEM MODIFIED AND GARAGE TO REMAIN	JG
1	9/3/2021	MINOR REVISIONS PER HEALTH DEPT. COMMENTS	RG

SOIL TESTING DATA & SEPTIC DESIGN CRITERIA

PREPARED FOR KENNETH J. REID II
24 WESTBROOK PL. & 27 KNOTHE RD. -- MAP 177 LOTS 5 & 10
WESTBROOK, CONNECTICUT

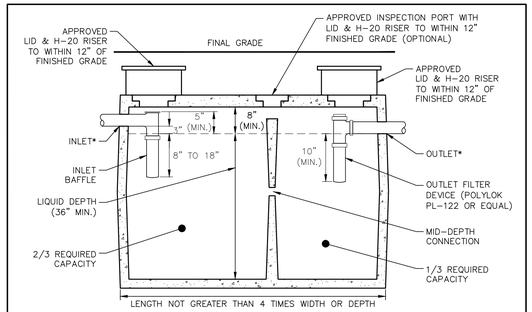
DATE: JUNE 16, 2021
SCALE: AS NOTED
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: ST-1
SHEET NO.: 2 of 3
JOB. NO.: 2020-593



NOTES:
1. INLET AND OUTLET PIPING SHALL BE AS LEVEL AS POSSIBLE AND SHALL NOT EXCEED 1/4" PER FOOT.
2. ALL TANKS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 59 LBS AND/OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO A TANK. ALL BELOW GRADE TANK OR RISER COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE LOCATED WITH A METAL DETECTOR.

1,000 GALLON H-20 CONCRETE GREASE INTERCEPTOR TANK DETAIL

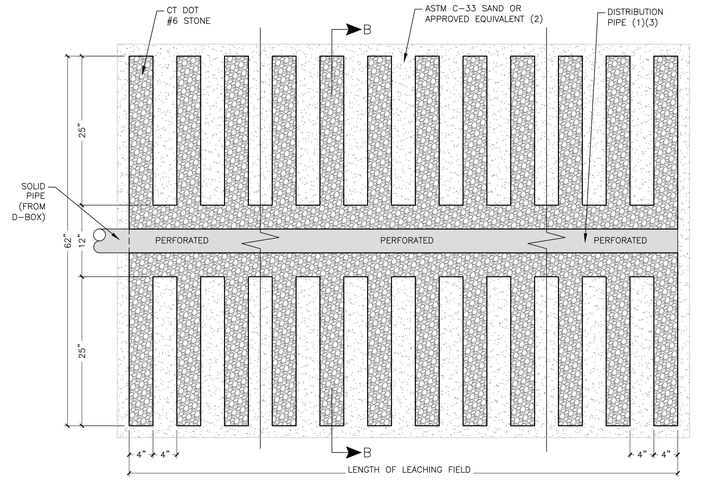
NOT TO SCALE



NOTES:
1. INLET AND OUTLET PIPING SHALL BE AS LEVEL AS POSSIBLE AND SHALL NOT EXCEED 1/4" PER FOOT.
2. ALL TANKS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 59 LBS AND/OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO A TANK. ALL BELOW GRADE TANK OR RISER COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE LOCATED WITH A METAL DETECTOR.

1,000 GALLON H-20 CONCRETE SEPTIC TANK DETAIL

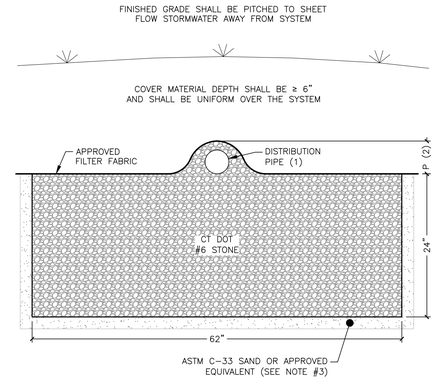
NOT TO SCALE



NOTES:
1. 3" (MIN.) SCH. 40 ASTM D-1785 PVC PIPE FOR GRAVITY APPLICATIONS.
   0.75" (MIN. I.D.) SCH. 40 ASTM D-1785 PVC PIPE FOR PRESSURE APPLICATIONS.
2. 2" MINIMUM ASTM C-33 SAND OR APPROVED EQUIVALENT ON PERIMETER, BOTTOM AND SIDES OF SYSTEM.
3. DISTRIBUTION PIPES SHALL EXTEND TO THE ENDS OF ROWS AND SHALL BE PROPERLY CAPPED.

GEOMATRIX GST6224 LEACHING SYSTEM – PLAN VIEW

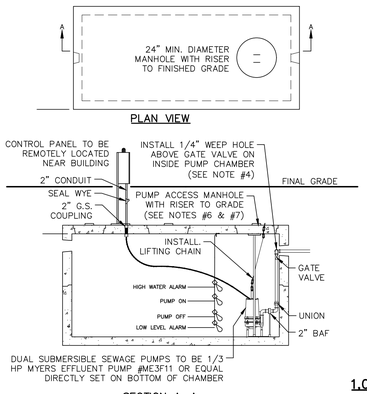
NOT TO SCALE



NOTES:
1. 3" (MIN.) SCH. 40 ASTM D-1785 PVC PIPE FOR GRAVITY APPLICATIONS.
   0.75" (MIN. I.D.) SCH. 40 ASTM D-1785 PVC PIPE FOR PRESSURE APPLICATIONS.
2. P = 2" TO 5.5"
3. 2" MINIMUM ASTM C-33 SAND OR APPROVED EQUIVALENT ON PERIMETER, BOTTOM AND SIDES OF SYSTEM.

GEOMATRIX GST6224 LEACHING SYSTEM – X-SECTION B-B

NOT TO SCALE



PLAN VIEW

SECTION A-A

CONSTRUCTION NOTES (PUMP SYSTEM):

1. CONCRETE: 4,000 P.S.I. WITH 4 TO 7% AIR ENTRAINMENT. MINIMUM COMPRESSIVE STRENGTH PRIOR TO SHIPPING.
2. PUMP CHAMBER SHALL BE INSTALLED IN STRICT CONFORMANCE WITH ALL MANUFACTURER'S SPECIFICATIONS. EARTH COVER SHALL NOT EXCEED 4 FEET. CONSTRUCTION JOINT-SEALED WITH 1" DIA. BUTYL RUBBER OR EQUIVALENT. PUMP CHAMBER SHALL BE WATERTIGHT. TANK SHALL BE PROPERLY VENTED PER MANUFACTURER'S SPECIFICATIONS.
3. PUMP CHAMBER SHALL HAVE DUAL ALTERNATING PUMPS. PUMPS SHALL BE 1/3 HP MYERS EFFLUENT PUMP #ME3F11 OR EQUAL SUPPLIED BY BLAKE EQUIPMENT CO. INC. OR EQUAL.
4. ADEQUATE FREEZE PROTECTION SHALL BE PROVIDED FOR ALL FORCE MAINS AND JUNCTIONS. A WEEP HOLE SHALL BE PROVIDED IN THE PUMP DISCHARGE LINE INSIDE THE PUMP CHAMBER AS SHOWN. BACK SIPHONAGE FROM THE LEACHING SYSTEM AND/OR EXCESSIVE PUMP CYCLING MUST BE AVOIDED WHEN A WEEP HOLE IS PROVIDED.
5. INSTALL PUMP CONTROL PANEL AND PROVIDE ALL CONTROLS, WIRING AND EQUIPMENT FOR A COMPLETE SYSTEM.
6. APPROVED H-20 RATED MANHOLE LIDS AND RISERS SHALL BE INSTALLED ON THE PUMP CHAMBER AND ACCESS SHALL BE EXTENDED TO FINISHED GRADE.
7. PROVISIONS SHALL BE INCLUDED TO PREVENT UNAUTHORIZED ACCESS INTO THE PUMP CHAMBER.
8. PRESSURE DISTRIBUTION AND FORCE MAIN PIPING SHALL BE SMOOTH, RIGID HEAVY-WALLED PLASTIC PIPE SCHEDULE 40 PVC ASTM D-1785. VALVES AND FITTINGS SHALL CONFORM TO ASTM D-2466 WITH SOLVENT WELD JOINTS, OR AWWA C900 PVC PRESSURE PIPE AND AWWA C907 PVC PRESSURE FITTINGS OR APPROVED EQUALS.
9. THE CONTRACTOR SHALL COORDINATE WITH GEOMATRIX, LLC – 860-510-0730 AND/OR PUMP MANUFACTURER REGARDING THE DOSE VOLUME OF THE PUMP CHAMBER. MECHANICAL FLOAT SWITCHES SHALL BE INSTALLED SO THAT THE DOSED VOLUME DOES NOT EXCEED 99.7 GALLONS (20% OF THE TOTAL STORAGE VOLUME OF THE LEACHING SYSTEM) AS RECOMMENDED BY THE CONNECTICUT PUBLIC HEALTH CODE. USE FLOAT SWITCHES AND HIGH WATER ALARM #15SGMNO OR APPROVED EQUAL AND LOW WATER ALARM #15SGMNC OR APPROVED EQUALS AS SPECIFIED BY THE SUPPLIER. THE HIGH WATER ALARM SHALL BE INSTALLED SO THAT IT MAXIMIZES THE AMOUNT OF EMERGENCY STORAGE VOLUME IN THE PUMP CHAMBER (EMERGENCY STORAGE VOLUME IS THE VOLUME ABOVE THE HIGH WATER ALARM LEVEL AND BELOW THE INLET PIPE INVERT). THE EMERGENCY STORAGE VOLUME SHALL BE 540 GALLONS OR MORE SO THAT AT LEAST 24 HOURS OF EMERGENCY STORAGE VOLUME IS PROVIDED. CONTRACTOR SHALL VERIFY HIGH/LOW WATER ALARMS AND ON/OFF HEIGHTS WITH THE DESIGN ENGINEER AND THE WESTBROOK HEALTH DEPARTMENT PRIOR TO SETTING ALL FLOAT HEIGHTS. THESES HEIGHTS SHALL NOT BE CHANGED WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DESIGN ENGINEER AND THE WESTBROOK HEALTH DEPARTMENT.
10. A DIFFERENT BRAND OF PUMP CHAMBER MAY BE USED WITH PRIOR APPROVAL FROM THE DESIGN ENGINEER AND THE WESTBROOK HEALTH DEPARTMENT. THE CONTRACTOR SHALL SUBMIT SPECIFICATIONS, SHOP DRAWINGS AND MECHANICAL FLOAT SWITCH LEVEL COMPUTATIONS TO THE DESIGN ENGINEER AND THE WESTBROOK HEALTH DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING. DIMENSIONS SHOWN ON DETAIL MAY VARY.

1,000 GALLON H-20 CONCRETE PUMP CHAMBER DETAIL (JOLLEY PRECAST)

NOT TO SCALE

FILL AND GRADING NOTES (SEPTIC SYSTEM):

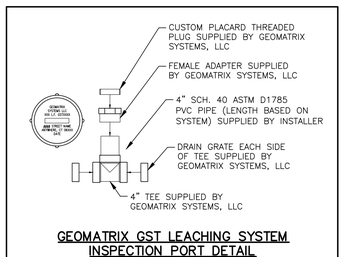
1. REMOVE ALL TOPSOIL, FILL AND/OR UNSUITABLE SOIL WITHIN THE SYSTEM AREA AND SCARIFY THE SURFACE IN THE PROPOSED LEACHING SYSTEM AREA PRIOR TO PLACING ANY SELECT FILL MATERIAL. AVOID COMPACTING THE SCARIFIED AREA. FILL SHALL NOT BE PLACED OVER SNOW OR FROZEN GROUND. DISCONTINUE FILL PLACEMENT DURING HEAVY RAINFALL AND A MINIMUM OF 24 HOURS THEREAFTER. THE SELECT FILL MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 90% DENSITY.
2. SELECT FILL MATERIAL SHALL CONSIST OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE PUBLIC HEALTH CODE PROVIDED IN THE TABLE ON THIS SHEET.
3. THE LICENSED INSTALLER SHALL BE RESPONSIBLE FOR PREPARING THE LEACHING AREA UTILIZING THE SELECT FILL MATERIAL.
4. ALL NECESSARY STEPS SHALL BE TAKEN TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SILTATION ONCE EXPOSED.
5. THE CONTRACTOR SHALL PROVIDE GRADATION SPECIFICATIONS OF THE SELECT FILL MATERIAL TO BE USED FOR THE PROPOSED SEPTIC SYSTEM TO THE DESIGN ENGINEER AND TOWN SANITARIAN PRIOR TO ORDERING AND INSTALLATION.
6. ONCE THE SEPTIC SYSTEM AREA IS STRIPPED, AND PRIOR TO LEACHING SYSTEM INSTALLATION, DESIGN ENGINEER SHALL CONDUCT A PERCOLATION TEST WITHIN THE UNDERLYING SOIL TO CONFIRM THE DESIGN PERCOLATION RATE IS 1.0-10.0 MINUTES PER INCH.

SELECT FILL GRADATION TABLE

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50*	10-75
#100	0-20	0-5
#200	0-5	0-2.5

* PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

** A SIEVE ANALYSIS FOR THE SELECT FILL MATERIAL SHALL BE PROVIDED TO THE DESIGN ENGINEER. ONLY THE DESIGN ENGINEER MAY APPROVE SELECT FILL MATERIAL NOT IN COMPLIANCE WITH THE GRADATION TABLE IF THE MATERIAL PASSING THE #200 SIEVE DOES NOT EXCEED 6% BASED ON WET SIEVE.



GEOMATRIX GST LEACHING SYSTEM INSPECTION PORT DETAIL

NOT TO SCALE

PLAN PREPARED BY:
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THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED HERE FOR THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
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2	3/25/2022	SEPTIC SYSTEM MODIFIED AND GARAGE TO REMAIN	JG
1	9/3/2021	MINOR REVISIONS PER HEALTH DEPT. COMMENTS	RG

SEPTIC DETAILS & NOTES AND CONST. DETAILS

PREPARED FOR KENNETH J. REID II
24 WESTBROOK PL. & 27 KNOTHE RD. -- MAP 177 LOTS 5 & 10
WESTBROOK, CONNECTICUT

DATE: JUNE 16, 2021
SCALE: NOT TO SCALE
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: CD-1
SHEET NO.: 3 of 3
JOB. NO.: 2020-593