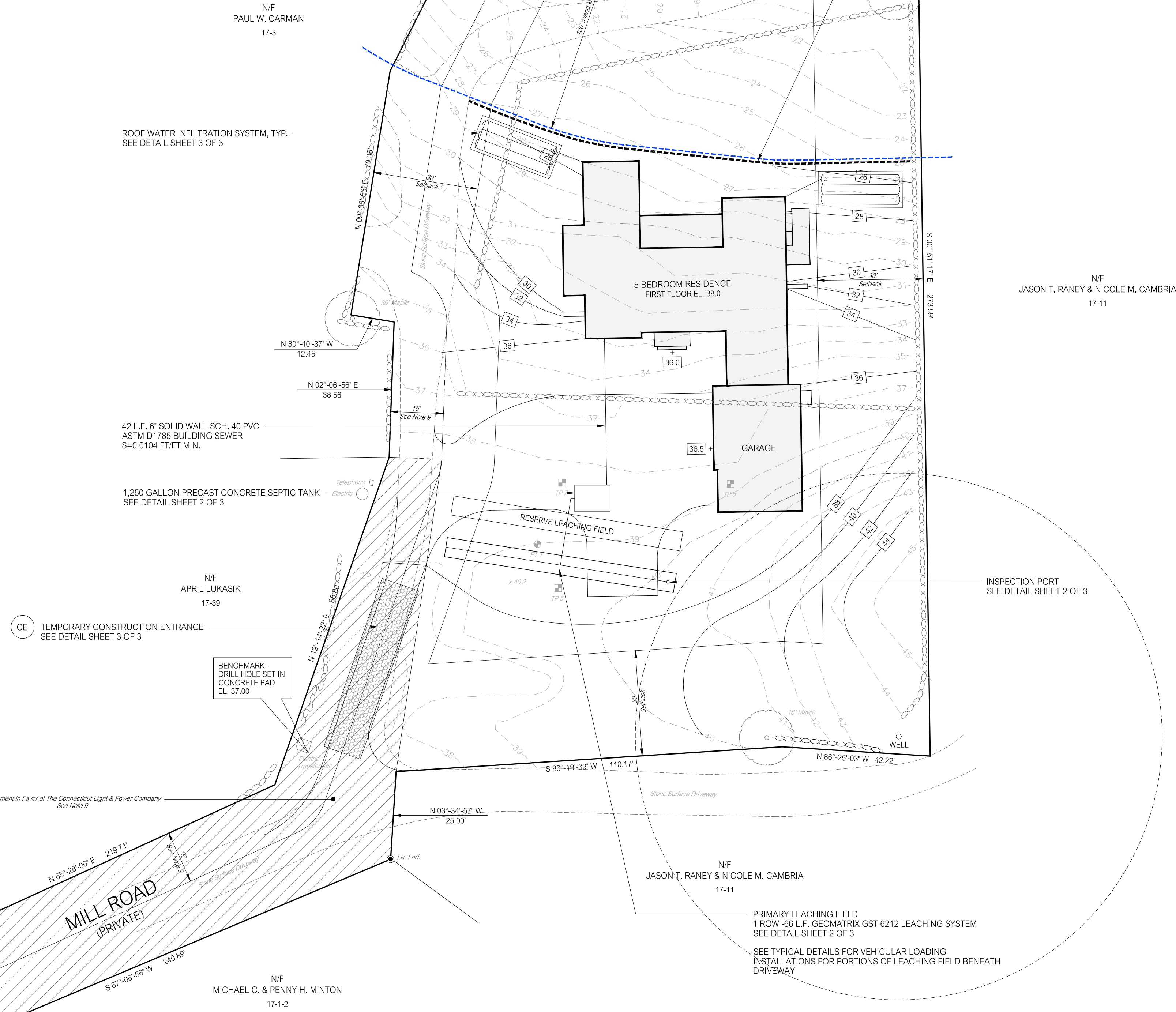


- GENERAL NOTES:**
1. THE PROPERTY BOUNDARY, INLAND WETLAND BOUNDARY, AND TOPOGRAPHIC INFORMATION DEPICTED HEREON HAS BEEN REPRODUCED FROM THE FOLLOWING MAP:
"TOPOGRAPHIC SURVEY ON PORTION OF LAND OF JONATHAN & KAITLYN WEISS NORTH MAIN STREET - MILL ROAD ESSEX, CONNECTICUT, SHEET 1 OF 1, DATE: 1-28-22, SCALE: 1"=20', PREPARED BY: RICHARD W. GATES, L.S.
 2. THE INLAND WETLAND BOUNDARY DEPICTED HEREON WAS DELINEATED BY R. RICHARD SNARSKI, CPSS OF NEW ENGLAND ENVIRONMENTAL SERVICES.
 3. NORTH IS BASED ON THE BEARING SYSTEM OF THE REFERENCE MAP NOTED.
 4. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 PER THE REFERENCE MAP NOTED.
 5. PARCEL AREA = 59,268± SF = 1.36± AC. PER THE REFERENCE MAP NOTED.
 6. THE PARCEL IS DEPICTED ON ASSESSORS MAP 17 AS LOT 11-1.
 7. THE PARCEL IS LOCATED WITHIN A RURAL RESIDENCE (RU) ZONING DISTRICT, THE COASTAL MANAGEMENT DISTRICT, AND THE GATEWAY CONSERVATION DISTRICT.
 8. THE PARCEL IS LOCATED WITHIN FLOOD ZONE X AND SPECIAL FLOOD HAZARD AREA ZONE AE. REFERENCE: FEMA NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP MIDDLESEX COUNTY, CONNECTICUT, PANEL 332 OF 450, MAP NUMBER 09009C0332G, EFFECTIVE DATE: 8-28-08.
 9. THE PARCEL IS SUBJECT TO A 15 FOOT WIDTH RIGHT-OF-WAY TO THE WATERS OF MILL POND AND AN EASEMENT IN FAVOR OF THE CONNECTICUT LIGHT & POWER COMPANY.
 10. THE COASTAL JURISDICTION LINE FOR THE TOWN OF ESSEX IS ELEVATION 2.8 FEET (NAVD OF 1988).
 11. THE UPLAND SOIL TYPE ON THE SUBJECT LAND PARCEL IS IDENTIFIED IN THE NATURAL RESOURCES CONSERVATION SERVICE SOIL SURVEY FOR THE STATE OF CONNECTICUT AS HINCKLEY LOAMY SAND, 15-45 PERCENT SLOPES (38E).
 12. IN GENERAL, EXISTING CONDITIONS AND FEATURES ARE DEPICTED IN SCREENED GRAPHICS AND TITLECASE LETTERING AND PROPOSED WORK IS DEPICTED IN BOLD GRAPHICS AND UPPERCASE LETTERING.
 13. PRIOR TO THE START OF WORK, THOROUGHLY REVIEW THE DRAWINGS, THE SITE OF THE WORK AND ALL EXISTING CONDITIONS AND FEATURES. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING CONDITIONS AND FEATURES IN THE FIELD.
 14. ADHERE TO THE REQUIREMENTS OF THE DRAWINGS. ALL APPLICABLE REGULATIONS AND ORDINANCES OF THE TOWN OF ESSEX, THE REGULATIONS OF ALL APPLICABLE STATE AND FEDERAL REGULATORY AUTHORITIES, AND THE REQUIREMENTS OF ALL APPROVALS AND PERMITS ISSUED FOR THE PROJECT.
 15. UNDERGROUND UTILITIES, STRUCTURES AND OTHER FACILITIES DEPICTED ON THE DRAWINGS HAVE BEEN COMPILED FROM REMOTE MAPPING AND FIELD LOCATIONS OF ABOVE GROUND FACILITIES AND MARKOUTS. ALL UNDERGROUND FACILITY LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE ONLY AND ALL FACILITIES MAY NOT BE SHOWN.
 16. BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND FOR THE MAINTENANCE AND PROTECTION THEREOF. CONTACT CALL BEFORE YOU DIG (1-800-422-4455) PRIOR TO THE START OF WORK TO ESTABLISH AND HAVE MARKED ON THE GROUND THE LOCATION OF ALL UNDERGROUND UTILITIES. NOTIFY THE ENGINEER IN THE EVENT THAT A UTILITY IS LOCATED DURING THE PROGRESS OF THE WORK THAT IS NOT INDICATED ON OR IS NOT IN ACCORDANCE WITH THE DRAWINGS.
- UTILITY COMPANY CONTACTS:**
- | | |
|---|----------------|
| CABLE TELEVISION - COMCAST OF CONNECTICUT, INC. | (518) 361-7234 |
| COMMUNICATIONS - FRONTIER COMMUNICATIONS OF CONNECTICUT | (203) 238-5000 |
| COMMUNICATIONS - LIGHT TOWER FIBER NETWORKS LLC | (508) 616-7818 |
| ELECTRIC - EVERSOURCE ENERGY | (860) 665-4733 |
| GAS - SOUTHERN CONNECTICUT GAS COMPANY | (203) 795-7868 |
| WATER - CONNECTICUT WATER COMPANY | (860) 664-6007 |
17. PROTECT ALL EXISTING CONDITIONS AND FEATURES WHERE NEW CONSTRUCTION IS NOT SHOWN ON THE DRAWINGS.
 18. INSTALL EROSION AND SEDIMENT CONTROLS AS SHOWN ON THE DRAWINGS OR AS ORDERED BY THE ENGINEER. THE MINIMUM STANDARDS FOR ALL EROSION AND SEDIMENT CONTROLS SHALL BE THOSE OUTLINED IN THE 2007 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL. LATEST REVISION. TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.
 19. BE RESPONSIBLE FOR THE CONTROL OF DUST RESULTING FROM CONSTRUCTION OPERATIONS.
 20. IN THE EVENT OF A CONTAMINANT RELEASE, IMMEDIATELY NOTIFY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION EMERGENCY RESPONSE AND SPILL PREVENTION DIVISION (860-424-3338 OR 866-337-7745) AND THE TOWN OF ESSEX FIRE MARSHALS OFFICE (860-767-4340).
 21. COORDINATE BUILDING UTILITY SERVICE WORK WITH THE APPLICABLE UTILITY COMPANIES.



NOTES TO CONTRACTOR

1. NO ACTIVITY SHALL BE CONDUCTED WITHIN 100 FEET OF THE INLAND WETLAND BOUNDARY WITHOUT THE APPROVAL OF THE TOWN OF ESSEX INLAND WETLAND ENFORCEMENT OFFICER AND/OR THE APPROVAL OF A REGULATED ACTIVITY PERMIT GRANTED BY THE TOWN OF ESSEX INLAND WETLANDS AND WATERCOURSES COMMISSION.
2. IN ACCORDANCE WITH SECTION 101F.1 OF THE TOWN OF ESSEX ZONING REGULATIONS, NO CUTTING OF VEGETATION WILL TAKE PLACE WITHIN 50 FEET OF THE COASTAL JURISDICTION LINE EXCEPT AS PROVIDED FOR IN THE REGULATION.

ZONING STANDARDS SCHEDULE

RURAL RESIDENCE (RU) DISTRICT				
SECTION	STANDARD	REQUIRED	EXISTING	PROVIDED
61B	MINIMUM LOT AREA	80,000 SF	59,268 SF	59,268 SF
61B	MINIMUM LOT WIDTH	150 FT	170 FT	170 FT
61B	SETBACKS			
	FRONT	40 FT	-	67.4 FT
	SIDE	30 FT	-	32.1 FT
61B	REAR	30 FT	-	123.9 FT
	MAXIMUM BUILDING COVERAGE	15%	-	6.25%
61B	MAXIMUM BUILDING HEIGHT	35 FT	-	34.8 FT

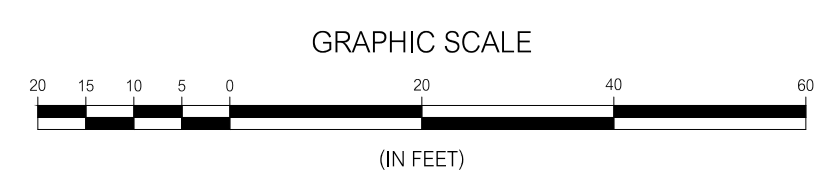
- NOTES:**
1. THE LOT SHALL CONTAIN A CONTIGUOUS BUILDING SITE OF AT LEAST 34,000 SQUARE FEET OF BUILDABLE LAND.

OWNER
 JONATHAN & KAITLYN WEISS
 9 LYNDENBORO STREET
 CHARLESTOWN, MASSACHUSETTS 02129
 281-825-8413

APPLICANT
 JONATHAN & KAITLYN WEISS
 9 LYNDENBORO STREET
 CHARLESTOWN, MASSACHUSETTS 02129
 281-825-8413

LEGEND

PROPERTY BOUNDARY LINE	—
STREET LINE	—
EASEMENT LINE	- - -
ELEVATION CONTOUR	- - - X 100.0
EDGE OF PAVEMENT	—
STONE WALL	—
FENCE	x x x
VEGETATION LINE	—
INLAND WETLAND BOUNDARY	—
COMMUNICATION/ELECTRIC SERVICE	- - - C/E
GAS MAIN/SERVICE	- - - G
WATER MAIN/SERVICE	- - - W
ASSESSORS MAP - BLOCK - LOT	53-32-8



REVISIONS

NO.	DATE	DESCRIPTION
1	6-1-22	MISCELLANEOUS

LAND OF
JONATHAN & KAITLYN WEISS
 14 MILL ROAD
 ESSEX, CONNECTICUT

PROJECT: WEISS RESIDENCE
 14 MILL ROAD
 ESSEX, CONNECTICUT

DATE: 5-1-22
 SCALE: 1"=20'
 DESIGNED: MJO
 CHECKED: LJM

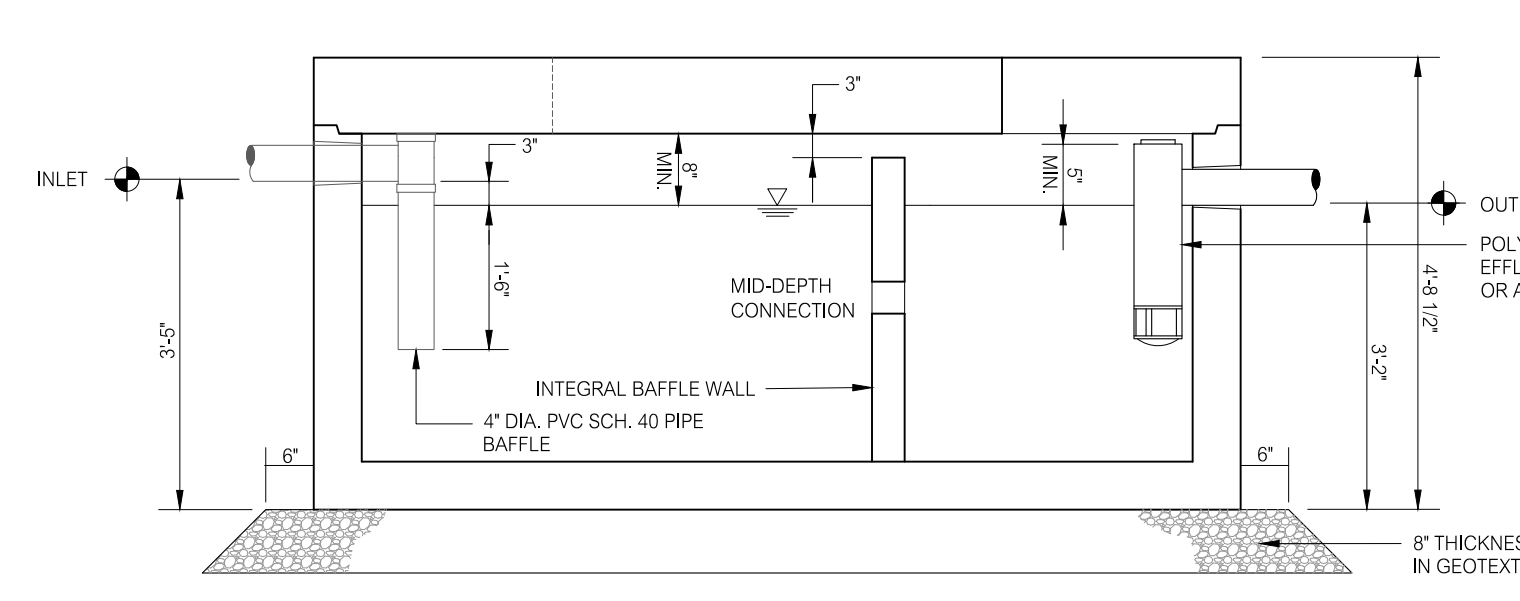
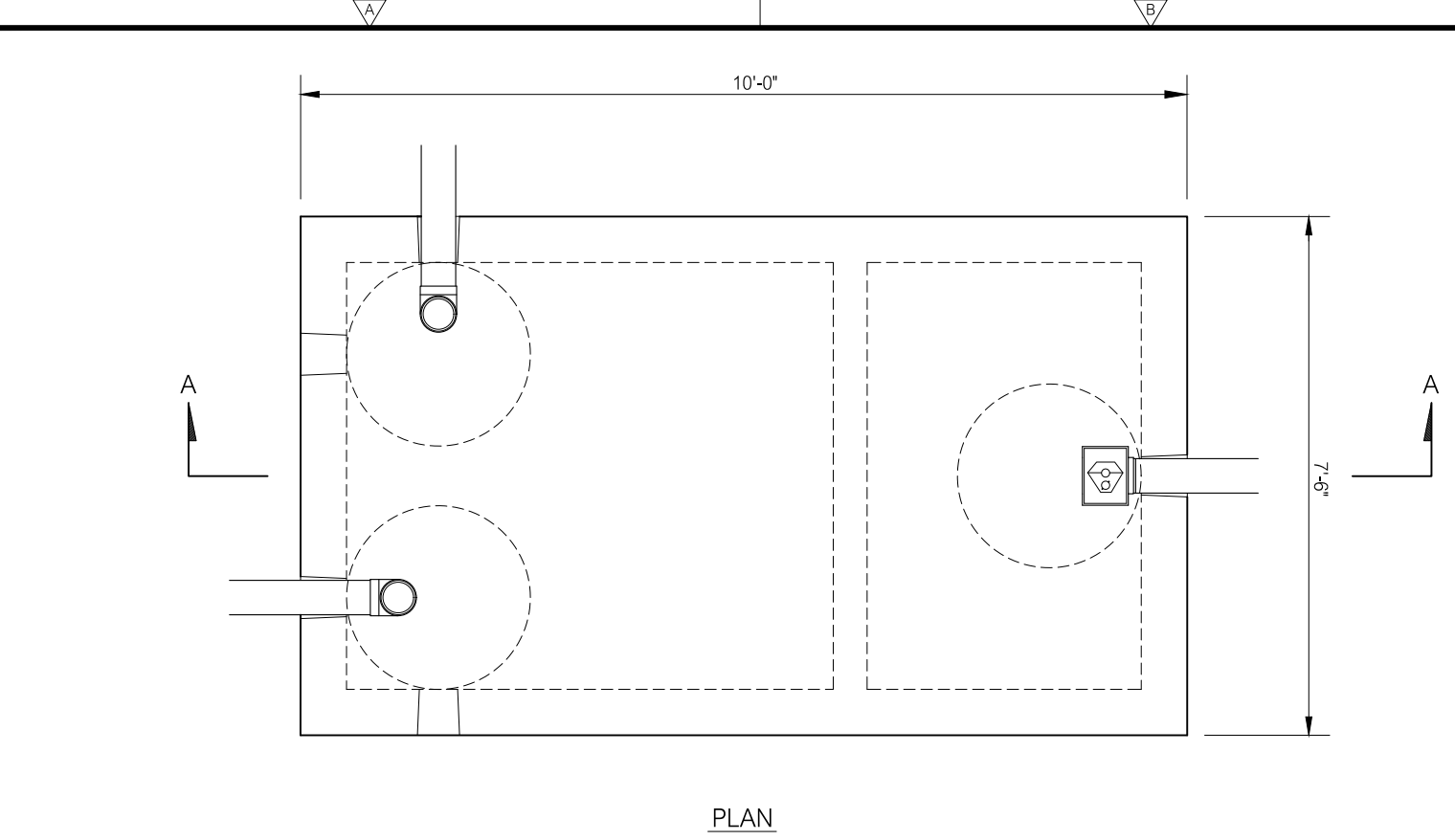
PROJECT NO.: 22-06

Summer Hill
 Civil Engineers & Land Surveyors, P.C.
 60 Wall Street
 P.O. Box 718
 Madison, Connecticut 06443-0718
 Telephone: (203) 245-0722

OWNER: JONATHAN & KAITLYN WEISS
 APPLICANT: JONATHAN & KAITLYN WEISS

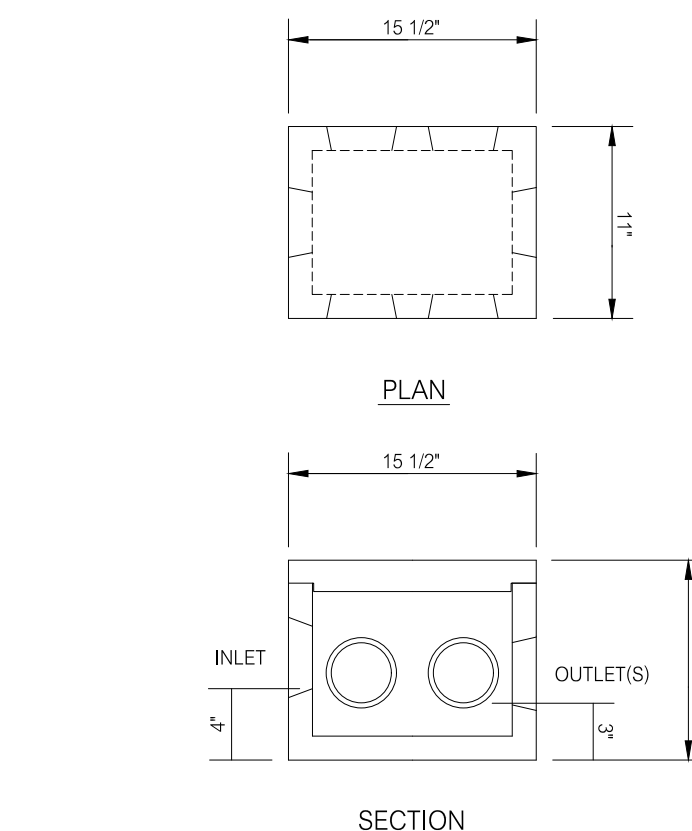
PROJECT NO.: 22-06

SHEET NO.: 1 OF 3



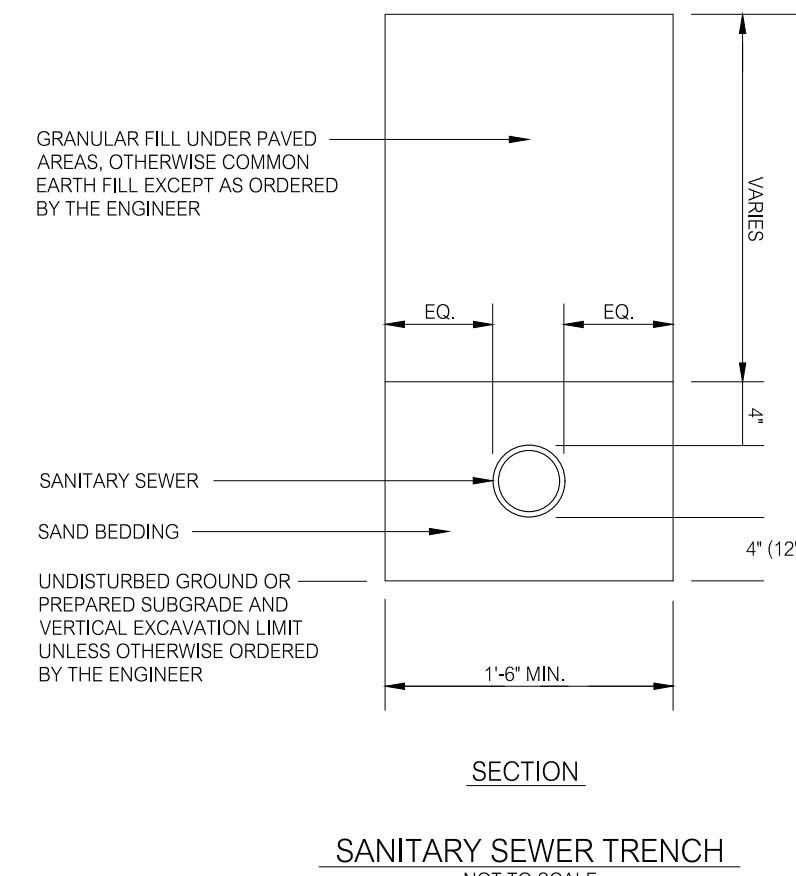
1,250 GALLON PRECAST CONCRETE SEPTIC TANK
NOT TO SCALE

- NOTES:
1. PRECAST CONCRETE SEPTIC TANK STRUCTURE DIMENSIONS SHOWN ARE BASED ON TYPICAL SEPTIC TANK STRUCTURE DESIGNS OF UNIFIED CONCRETE PRODUCTS, INC., WALLINGFORD, CONNECTICUT. SEPTIC TANK STRUCTURE DIMENSIONS OF OTHER PRECAST CONCRETE MANUFACTURERS MAY VARY FROM THOSE SHOWN.
 2. THE SEPTIC TANK STRUCTURE EXTERIOR BOTTOM AND SIDE WALL SURFACES SHALL BE COATED WITH A BITUMINOUS WATERPROOFING COMPOUND.
 3. DESIGN LOADING: AASHTO HS-20-44 WHEEL LOADING.
 4. CONCRETE REINFORCEMENT NOT SHOWN.



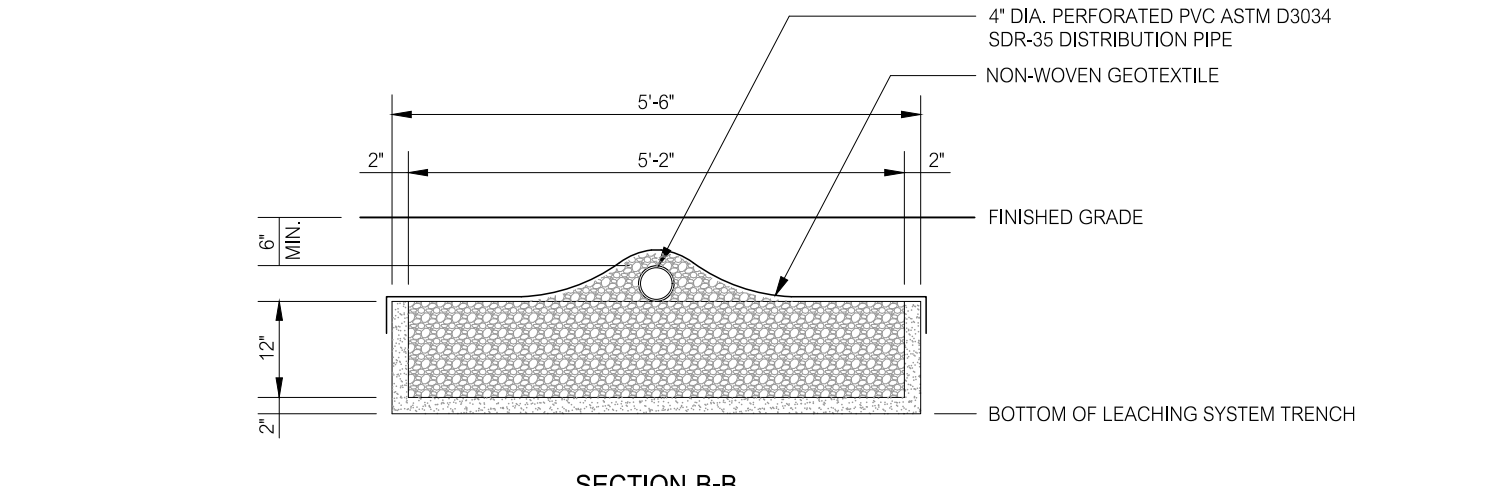
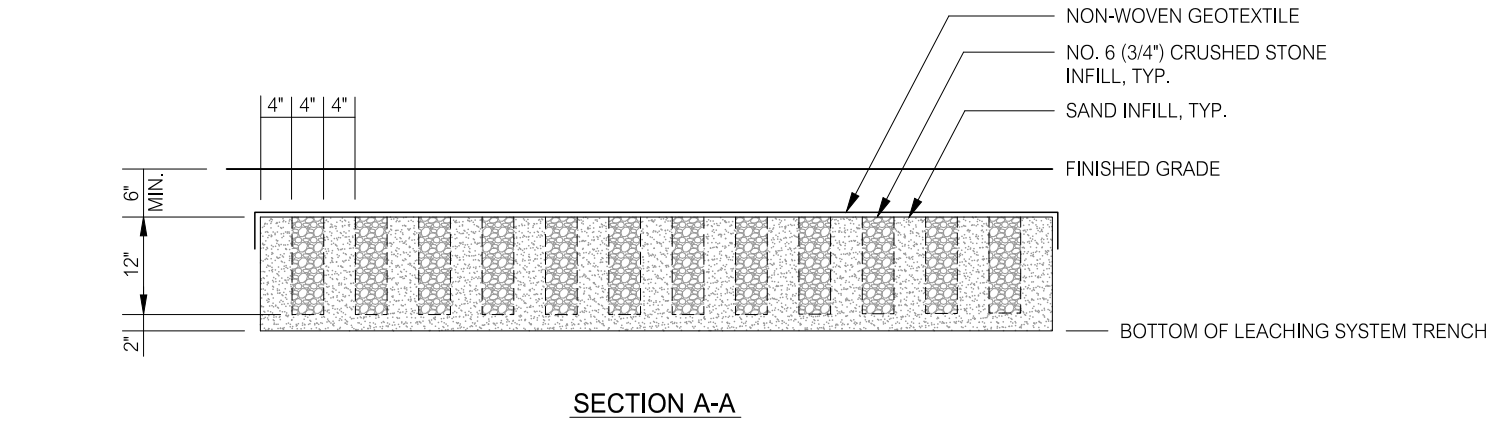
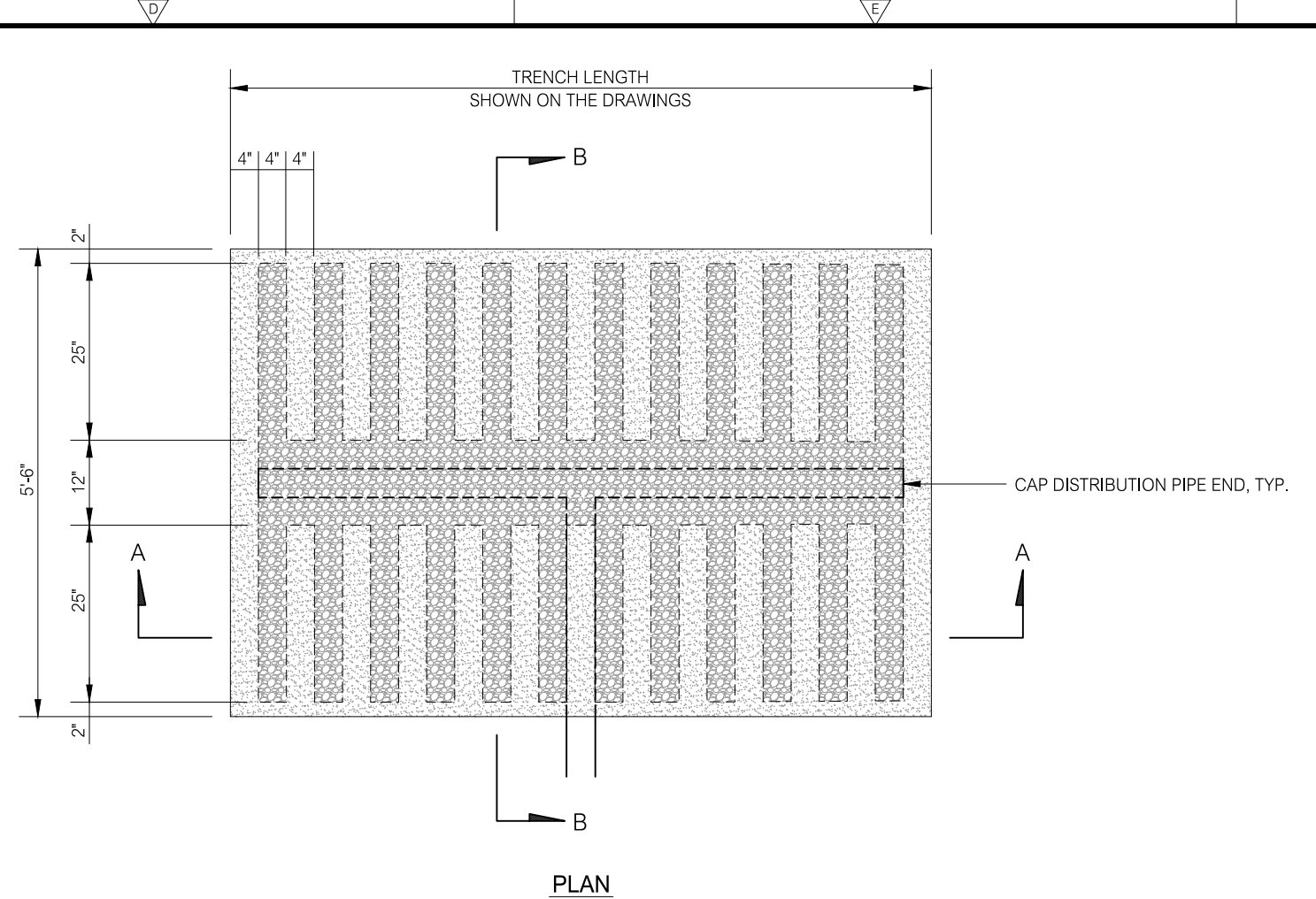
PRECAST CONCRETE DISTRIBUTION BOX
NOT TO SCALE

- NOTES:
1. SET DISTRIBUTION BOX LEVEL ON A 6" THICKNESS BASE OF 3/4" CRUSHED STONE.
 2. EXTEND EFFLUENT SEWER AND DISTRIBUTION PIPES INSIDE DISTRIBUTION BOX TO ALLOW FOR INSTALLATION OF FITTINGS TO BE USED FOR FLOW ADJUSTMENT.
 3. DISTRIBUTION BOX DIMENSIONS SHOWN ARE BASED ON TYPICAL PRECAST CONCRETE MANUFACTURER DESIGNS FOR THE TYPE OF DISTRIBUTION BOX SHOWN. DIMENSIONS MAY VARY WITH PRECAST MANUFACTURER.
 4. CONCRETE REINFORCEMENT NOT SHOWN.



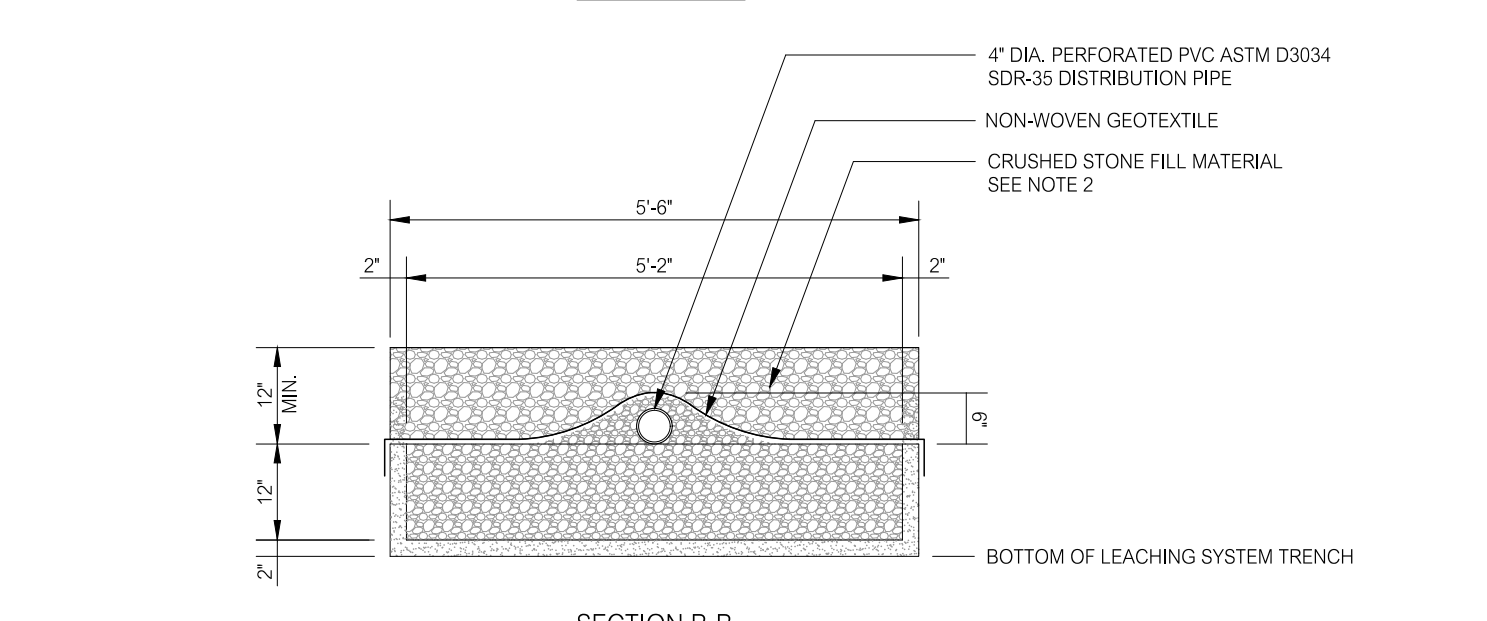
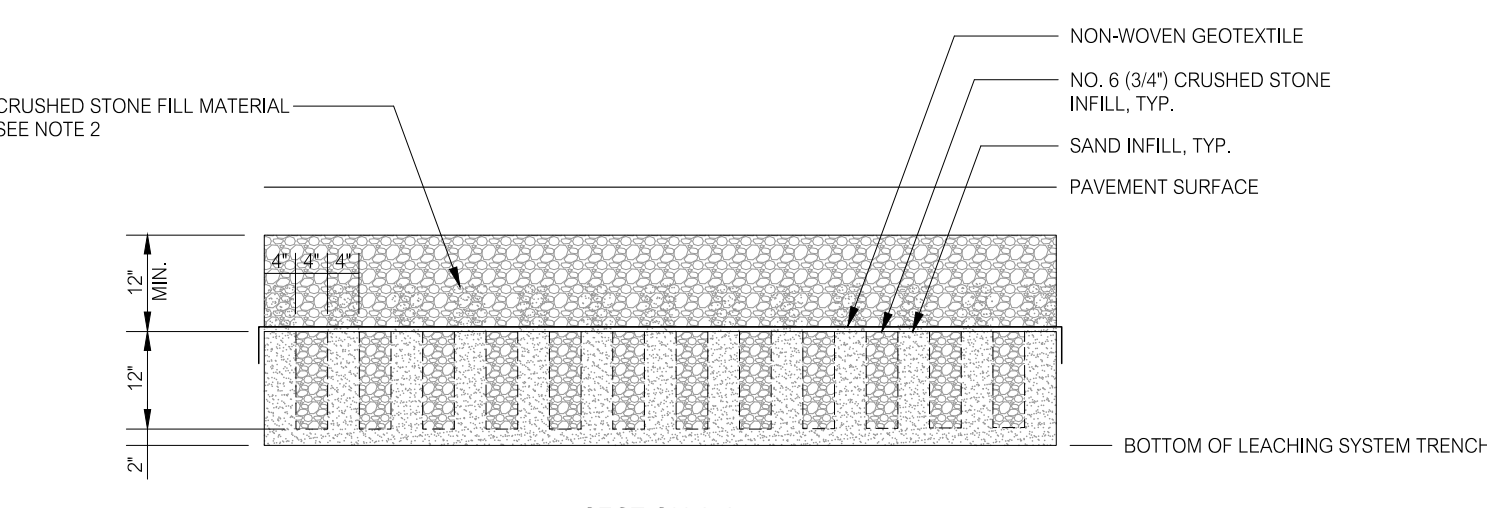
SANITARY SEWER TRENCH
NOT TO SCALE

- NOTES:
1. IN UNSUITABLE SOIL CONDITIONS OR ROCK, PROVIDE ADDITIONAL SAND BEDDING OR ADDITIONAL 3/4" CRUSHED STONE WRAPPED IN GEOTEXTILE BELOW THE VERTICAL EXCAVATION LIMIT.



GST 6212
GEOMATRIX GST LEACHING SYSTEM
NOT TO SCALE

- NOTES:
1. INSTALL LEACHING SYSTEM IN ACCORDANCE WITH THE LEACHING SYSTEM MANUFACTURER'S INSTRUCTIONS.



GST 6212
GEOMATRIX GST LEACHING SYSTEM
TYPICAL DETAILS FOR VEHICULAR LOADING INSTALLATIONS
NOT TO SCALE

- NOTES:
1. GEOMATRIX LEACHING SYSTEM INSTALLATION FOR AASHTO H-20 WHEEL LOADING CONDITION.
 2. CRUSHED STONE FILL MATERIAL LAYER ABOVE THE LEACHING SYSTEM SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 1 1/2 INCHES AND A FINE PARTICLE FRACTION PASSING THE #200 SIEVE OF LESS THAN 10% BY WEIGHT.
 3. INSTALL THE GEOMATRIX LEACHING SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

TEST PIT LOGS

- TEST PITS LOGGED BY DONALD MITCHELL, RS OF THE TOWN OF ESSEX HEALTH DEPARTMENT AND OBSERVED BY THE ENGINEER ON 3-22-22
- TP 5
- 0' - 8" DARK BROWN LOAMY FINE SAND
 - 8' - 10" ORANGE BROWN LOAMY FINE SAND
 - 10' - 67" TAN GREY FINE-MEDIUM SAND, SOME GRAVEL, MANY INTERLOCKING STONES AND ROCKS (ROOTS TO 3')
 - NO MOTTLING OBSERVED
 - NO GROUNDWATER OBSERVED
 - NO REFUSAL
- TP 6
- 0' - 9" DARK BROWN LOAMY FINE SAND
 - 9' - 23" ORANGE BROWN LOAMY FINE SAND WITH GRAVEL
 - 23' - 87" TAN GREY COARSE SAND AND GRAVEL, SOME FINER SAND IN LENSES (ROOTS TO 45')
 - NO MOTTLING OBSERVED
 - NO GROUNDWATER OBSERVED
 - NO REFUSAL
- TP 7
- 0' - 5" DARK BROWN LOAMY FINE SAND
 - 5' - 23" ORANGE BROWN COARSE SAND WITH GRAVEL
 - 23' - 88" GREY MEDIUM-COARSE SAND AND GRAVEL (ROOTS TO 39')
 - NO MOTTLING OBSERVED
 - NO GROUNDWATER OBSERVED
 - NO REFUSAL

PERCOLATION TEST RESULTS

PERCOLATION TESTS CONDUCTED BY THE ENGINEER ON 3-22-22

PT 1

DEPTH OF TEST HOLE: 31 INCHES
PRESOAKED @ 9:00
REFILLED @ 12:10

TIME (MIN)	DEPTH TO WATER (IN)
12:10	14
12:15	15 1/4
12:20	16 1/4
12:25	17
12:30	17 5/8
12:35	19 1/4
12:40	19 7/8
12:45	20 1/2

PERCOLATION RATE: 8 MINUTES PER INCH

PT 2

DEPTH OF TEST HOLE: 33 INCHES
PRESOAKED @ 9:00
REFILLED @ 12:12

TIME (MIN)	DEPTH TO WATER (IN)
12:12	17
12:17	17 7/8
12:22	18 1/8
12:27	18 3/4
12:32	19 1/2
12:37	20 1/8
12:42	20 5/8
12:47	21 1/8
12:52	21 5/8

PERCOLATION RATE: 10 MINUTES PER INCH

DESIGN BASIS

1. DESIGN WASTEWATER FLOW:
 - 5 BEDROOM RESIDENCE
 - 5 BEDROOMS X 150 GAL/DAY/BEDROOM = 750 GAL
2. MINIMUM SEPTIC TANK VOLUME:
 - 3 BEDROOMS: 1,000 GAL
 - 2 BEDROOM X 125 GALLONS/BEDROOM = 250 GAL
 - SEPTIC TANK VOLUME PROVIDED: 1,250 GAL
3. DESIGN PERCOLATION RATE: < 10.1 MIN/IN
4. EFFECTIVE LEACHING AREA REQUIRED:
 - 3 BEDROOMS: 495 SF
 - 2 BEDROOM X 82.5 SF/BEDROOM = 165 SF
 - 660 SF
5. EFFECTIVE LEACHING AREA PROVIDED:
 - 66 LF GEOMATRIX GST 6212 LEACHING SYSTEM X 10.0 SF/LF = 660 SF

SUBSURFACE SEWAGE DISPOSAL SYSTEM ELEVATIONS

BUILDING SEWER INVERT AT EXTERIOR FACE OF FOUNDATION WALL	35.00
SEPTIC TANK	
INLET INVERT	34.50
OUTLET INVERT	34.25
TOP LEACHING SYSTEM	34.08
BOTTOM LEACHING SYSTEM TRENCH	32.92

SUBSURFACE SEWAGE DISPOSAL SYSTEM NOTES:

1. THE SUBSURFACE SEWAGE DISPOSAL SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES CONNECTICUT PUBLIC HEALTH CODE SECTIONS 19-13-103a THROUGH 19-13-103f AND THE 'CONNECTICUT PUBLIC HEALTH CODE ON-SITE SEWAGE DISPOSAL REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS' (TECHNICAL STANDARDS). LATEST REVISION. THE SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL REQUIRE APPROVAL FROM THE TOWN OF ESSEX HEALTH DEPARTMENT.
2. WITH RESPECT TO THE REQUIREMENTS OF THE TECHNICAL STANDARDS, THERE ARE NO KNOWN CONFLICTS WITH THE DESIGN OF THE SUBSURFACE SEWAGE DISPOSAL SYSTEM.
3. NO DEVIATION FROM THE DRAWINGS OR SPECIFICATIONS SHALL BE ALLOWED WITHOUT THE APPROVAL OF THE TOWN OF ESSEX HEALTH DEPARTMENT AND THE ENGINEER.
4. CONTACT THE TOWN OF ESSEX HEALTH DEPARTMENT PRIOR TO THE START OF WORK TO OBTAIN AN APPROVAL TO CONSTRUCT FOR THE SUBSURFACE SEWAGE DISPOSAL SYSTEM AND TO ARRANGE FOR A SCHEDULE OF INSPECTIONS DURING THE PROGRESS OF THE WORK.
5. CONTACT THE ENGINEER PRIOR TO THE START OF WORK TO SCHEDULE THE CONSTRUCTION STAKING AND SETTING A BENCHMARK WITHIN 25 FEET OF THE SUBSURFACE SEWAGE DISPOSAL SYSTEM.
6. NOTIFY THE TOWN OF ESSEX HEALTH DEPARTMENT AND THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE OF THE START OF WORK AND IN ADVANCE OF ALL REQUIRED INSPECTIONS.
7. NOTIFY THE TOWN OF ESSEX HEALTH DEPARTMENT AND THE ENGINEER SHOULD SOIL OR GROUNDWATER CONDITIONS BE ENCOUNTERED THAT DIFFER FROM THOSE INDICATED IN THE TEST PIT LOGS PROVIDED ON THE DRAWINGS.
8. THE SUBSURFACE SEWAGE DISPOSAL SYSTEM HAS BEEN DESIGNED TO PROVIDE A MINIMUM EARTH COVER DEPTH OVER THE SEPTIC TANK OF SIX (6) INCHES. IF THE SEPTIC TANK IS INSTALLED SUCH THAT THE EARTH COVER DEPTH IS GREATER THAN TWELVE (12) INCHES, RISERS TO GRADE SHALL BE REQUIRED TO BE CONSTRUCTED OVER THE SEPTIC TANK INLET AND OUTLET. RISER ACCESS COVERS SHALL BE WATER-TIGHT AND BOLTED OR LOCKING TYPE. THE SEPTIC TANK MANUFACTURER ACCESS COVERS SHALL REMAIN INSTALLED ON THE SEPTIC TANK.
9. THE SUBSURFACE SEWAGE DISPOSAL SYSTEM HAS NOT BEEN DESIGNED TO ACCOMMODATE THE INSTALLATION OF GARBAGE GRINDERS OR LARGE CAPACITY (>100 GALLONS) BATH TUBS WITHIN THE BUILDING SERVED.
10. WHERE LEACHING FIELDS OR PORTIONS OF LEACHING FIELDS ARE SHOWN TO BE CONSTRUCTED IN SELECT FILL WITHIN THE LEACHING FIELD AREAS, REMOVE TOPSOIL AND UNSUITABLE SOILS WITHIN THE HORIZONTAL LIMITS AND TO THE SELECT FILL SURGRADE ELEVATION SHOWN ON THE DRAWINGS. DO NOT ALLOW RUBBER TIRE EQUIPMENT OR VEHICLES ON THE LEACHING FIELD SURGRADE SOIL AREA ONCE TOPSOIL AND UNSUITABLE SOILS HAVE BEEN REMOVED. SCARIFY THE SURGRADE SOIL AREA TO A DEPTH ADEQUATE TO REMOVE SOIL COMPACTION THAT MAY HAVE OCCURRED DURING TOPSOIL AND UNSUITABLE SOILS REMOVAL OPERATIONS.
11. PLACE SELECT FILL IN A MANNER THAT PREVENTS OVER COMPACTION OF THE LEACHING FIELD SURGRADE SOIL AREA. PLACE SELECT FILL BY PUSHING THE MATERIAL IN FROM THE PERIMETER OF THE AREA USING TRACK MOUNTED EQUIPMENT, MAINTAINING AT LEAST TWELVE (12) INCHES OF SELECT FILL UNDER THE EQUIPMENT TRACKS AT ALL TIMES. PLACE SELECT FILL IN LAYERS NOT EXCEEDING TWELVE (12) INCHES IN DEPTH (LOOSE LAYER THICKNESS). COMPACT EACH LAYER OF SELECT FILL WITH SUITABLE EQUIPMENT CAPABLE OF ACHIEVING A DRY DENSITY OF 90 PERCENT OF THE MAXIMUM DRY DENSITY FOR THE MATERIAL AS DETERMINED BY COMPACTION TESTING CONFORMING TO ASTM D1557, METHOD C.
12. PREVENT SEDIMENT FROM ENTERING THE LEACHING FIELD AREA DURING THE CONSTRUCTION PERIOD THROUGH THE USE OF TEMPORARY EARTH BERMS AND/OR OTHER EROSION AND SEDIMENT CONTROLS.
13. CONTACT THE ENGINEER PRIOR TO COVERING THE COMPLETED SUBSURFACE SEWAGE DISPOSAL SYSTEM TO SCHEDULE THE RECORD FIELD SURVEY OF THE SYSTEM.
14. THE COMPLETED SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL BE COVERED AS SOON AS IS PRACTICABLE FOLLOWING THE FINAL INSPECTION BY THE TOWN OF ESSEX HEALTH DEPARTMENT AND THE ENGINEER.
15. THE SUBGRADE OF DISTURBED GROUND SURFACES NOT NOTED TO BE SURFACED OTHERWISE SHALL RECEIVE A SIX INCH THICKNESS OF TOPSOIL UPON WHICH TURF SHALL BE ESTABLISHED.
16. A RECORD DRAWING OF THE COMPLETED SUBSURFACE SEWAGE DISPOSAL SYSTEM PREPARED BY THE ENGINEER SHALL BE SUBMITTED TO THE TOWN OF ESSEX HEALTH DEPARTMENT PRIOR TO THE ISSUANCE OF A PERMIT TO DISCHARGE WASTEWATER TO THE SUBSURFACE SEWAGE DISPOSAL SYSTEM.

MATERIAL REQUIREMENTS:

1. PRECAST CONCRETE PRODUCTS:
 - PRECAST CONCRETE PRODUCTS SHALL MEET THE REQUIREMENTS OF THE TECHNICAL STANDARDS AND:
 - SEPTIC TANKS, GREASE INTERCEPTOR TANKS, AND PUMP CHAMBERS: ASTM C1227 STANDARD SPECIFICATION FOR CONCRETE SEPTIC TANKS. SEALS AT PIPE AND CONDUIT PENETRATIONS SHALL BE WATER-TIGHT TYPE MEETING THE REQUIREMENTS OF ASTM C1644 STANDARD SPECIFICATION FOR RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE ON-SITE WASTEWATER TANKS AND PIPE.
 - LEACHING CHAMBERS: ASTM C913 STANDARD SPECIFICATION FOR PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES.
2. GRAVITY AND FORCE MAIN PIPE AND TUBING:
 - BUILDING SEWER AND FORCE MAIN PIPE: ASTM D1785 STANDARD SPECIFICATION FOR POLY(VINYL CHLORIDE) (PVC) SCHEDULES 40, 80, AND 120, SOLID WALL, WITH SOLVENT WELD FITTINGS AND JOINTS.
 - EFFLUENT SEWER AND DISTRIBUTION PIPE: ASTM D3034 STANDARD SPECIFICATION FOR TYPE PSM POLY(VINYL CHLORIDE) (PVC) SEWER PIPE AND FITTINGS, STANDARD DIMENSION RATIO 35, SOLID WALL, WITH BELL AND SPIGOT RUBBER COMPRESSION GASKET FITTINGS AND JOINTS MEETING THE REQUIREMENTS OF ASTM D2022 STANDARD SPECIFICATION FOR JOINTS FOR DRAIN AND SEWER PLASTIC PIPES USING FLEXIBLE ELASTOMERIC SEALS, OR SOLVENT WELD FITTINGS AND JOINTS, AND PERFORATED WITH BELL AND SPIGOT JOINTS.
 - FORCE MAIN PIPE AND TUBING: ASTM D1785 STANDARD SPECIFICATION FOR POLY(VINYL CHLORIDE) (PVC) SCHEDULES 40, 80, AND 120, SOLID WALL, WITH SOLVENT WELD FITTINGS AND JOINTS AND ASTM D3035-15, STANDARD SPECIFICATION FOR POLYETHYLENE (PE) PLASTIC PIPE (DR-PR) BASED ON CONTROLLED OUTSIDE DIAMETER, DIMENSION RATIO 11 WITH BUTT FUSED JOINTS.
3. GEOTEXTILES:
 - NON WOVEN SEPARATION/FILTRATION FABRIC COMPRISED OF PERVIOUS SHEETS OF POLYESTER, POLYPROPYLENE, OR POLYETHYLENE FABRICATED INTO A STABLE NETWORK OF FIBERS THAT RETAIN THEIR RELATIVE POSITION WITH RESPECT TO EACH OTHER. NONWOVEN GEOTEXTILE SHALL BE COMPOSED OF CONTINUOUS OR DISCONTINUOUS (STRAP) FIBERS HELD TOGETHER THROUGH NEEDLE-PUNCHING, SPUN-BONDING, THERMAL-BONDING, OR RESIN-BONDING.
 - GEOTEXTILE EDGES: SELVAGED OR OTHERWISE FINISHED TO PREVENT OUTER MATERIAL FROM PULLING AWAY FROM GEOTEXTILE.

MINIMUM AVERAGE ROLL VALUES:

PROPERTY	DESIGN VALUE	TEST METHOD	ACCEPTABLE MANUFACTURERS AND TYPES
TENSILE STRENGTH	120 LBS	ASTM D4632	MRAF166303, 65304 TERRATEX SOT 5, PO1.5 TYPAR 3151, 3201
ELONGATION	50%	ASTM D4632	
TRAPEZOIDAL TEAR	50 LBS	ASTM D4533	
MULLIN BURST STRENGTH	225 PSF	ASTM D3786	
PUNCTURE STRENGTH	65 LBS	ASTM D4533	
A.O.S.	70 (US SIEVE)	ASTM D4751	
PERMITTIVITY	1.8 SEC-1	ASTM D4491	

4. STONE AGGREGATE:

- CLEAN, WASHED CRUSHED OR BROKEN STONE OF THE SIZES SHOWN ON THE DRAWINGS MEETING THE GRADATION REQUIREMENTS OF SECTION M.01 AND THE REQUIREMENTS OF SECTION M.02.06.3, 4, AND 4. REGARDING RESISTANCE TO ABRASION AND SOUNDNESS RESPECTIVELY OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 817, 2016, LATEST REVISION, INCLUDING ALL SUPPLEMENTS THERETO.

5. SAND:

- CLEAN SAND MEETING THE PARTICLE SIZE GRADATION REQUIREMENTS OF ASTM C33 STANDARD SPECIFICATION FOR CONCRETE AGGREGATES:

SIEVE SIZE	PERCENT PASSING
3/8"	100
#4	95 - 100
#8	80 - 100
#16	50 - 85
#30	25 - 60
#50	5 - 30
#100	0 - 10
#200	0 - 5

6. SELECT FILL:

- CLEAN, SAND OR SAND AND GRAVEL MATERIAL FREE FROM DEBRIS, ICE, SNOW, FROZEN LUMPS, VEGETATION, STUMPS, ROOTS, OR OTHER ORGANIC MATERIALS, CONTAINING NO MATERIAL LARGER THAN THE THREE (3) INCH SIEVE, AND MEETING THE FOLLOWING PARTICLE SIZE GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70 - 100	70 - 100
#40	*10 - 50	10 - 15
#100	0 - 20	0 - 5
#200	0 - 5	0 - 2.5

* THE CRITERIA FOR THE PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN SEVENTY-FIVE (75) PERCENT IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED TEN (10) PERCENT AND THE PERCENT PASSING THE #200 SIEVE DOES NOT EXCEED FIVE (5) PERCENT.

7. COMMON FILL:
 - CLEAN, FRAGILE, NON-PLASTIC IN-ORGANIC SOIL MATERIAL CONTAINING NO STONE GREATER THAN TWO THIRDS (2/3) OF THE REQUIRED LOOSE LIFT THICKNESS. THE MATERIAL SHALL BE FREE FROM DEBRIS, ICE, SNOW, FROZEN LUMPS, VEGETATION, STUMPS, ROOTS, OR OTHER ORGANIC MATERIALS.

NO.	DATE	DESCRIPTION
6-1-22		MISCELLANEOUS
		REVISIONS

REVISIONS: _____ TITLE: _____

LAND OF JONATHAN & KAITLYN WEISS
14 MILL ROAD
ESSEX, CONNECTICUT

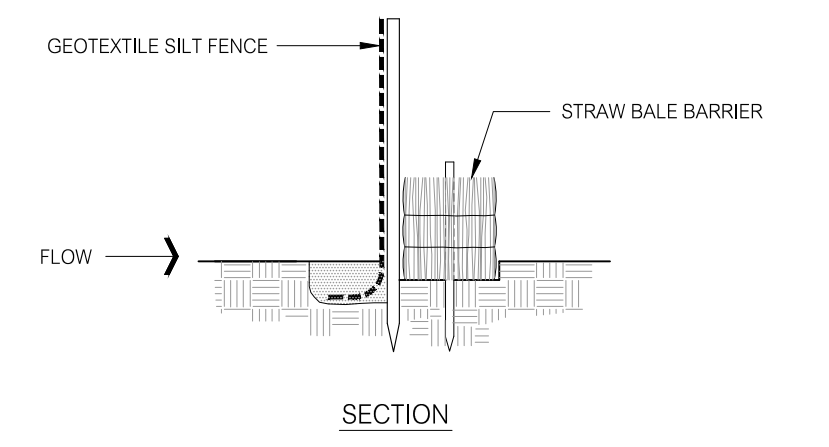
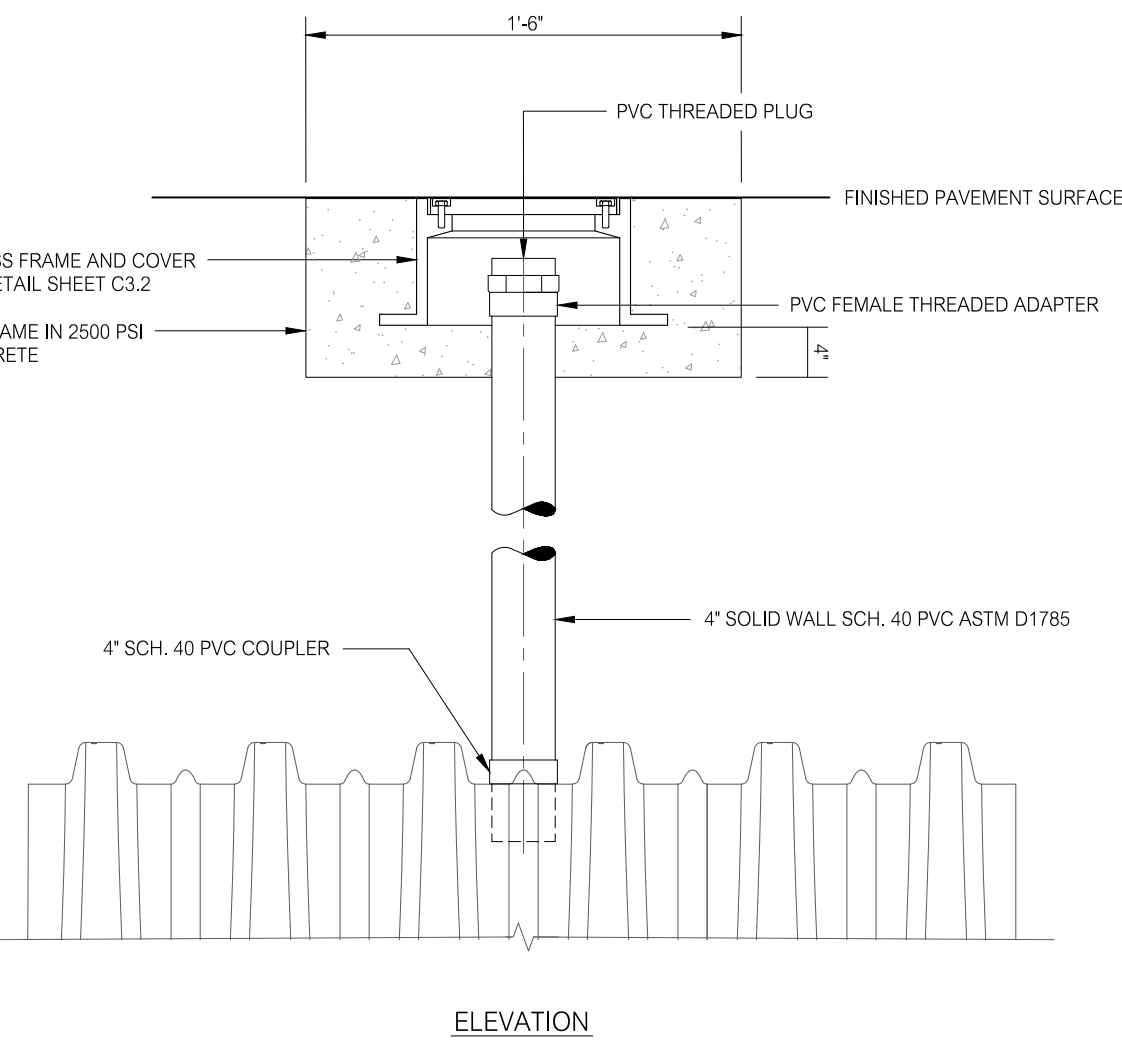
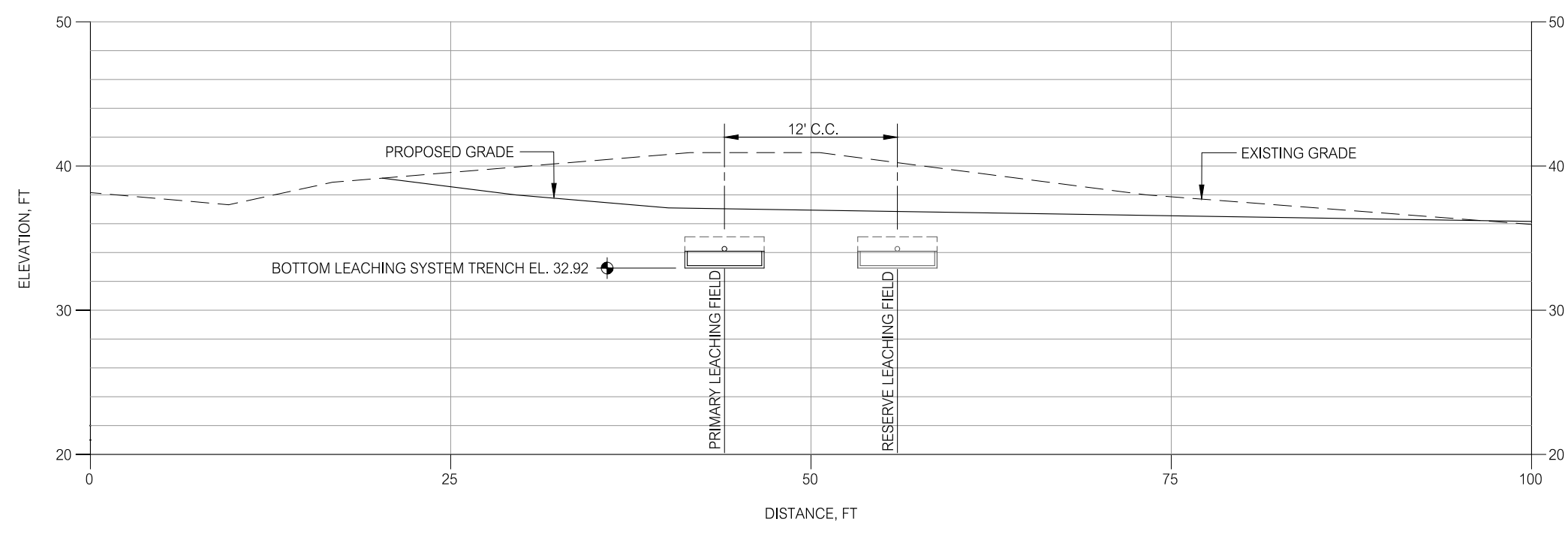
PROJECT: WEISS RESIDENCE
14 MILL ROAD
ESSEX, CONNECTICUT

PREPARED BY: Summer Hill
Civil Engineers & Land Surveyors, P.C.
60 Wall Street
P.O. Box 718
Madison, Connecticut 06443-0708
Telephone: (203) 245-0722

DATE: 5-1-22 SHEET: _____
SCALE: AS NOTED
DESIGNED: MJO
CHECKED: LJM FIELD BOOK: _____ PROJECT NO.: 22-06

NOTES AND DETAILS

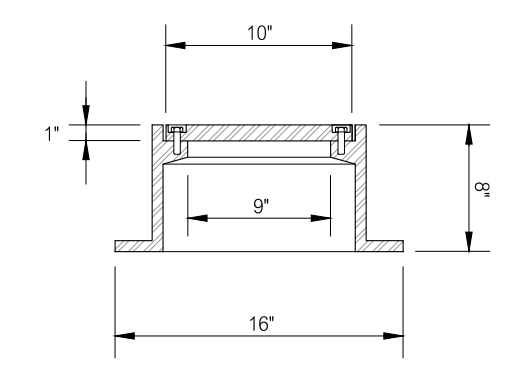
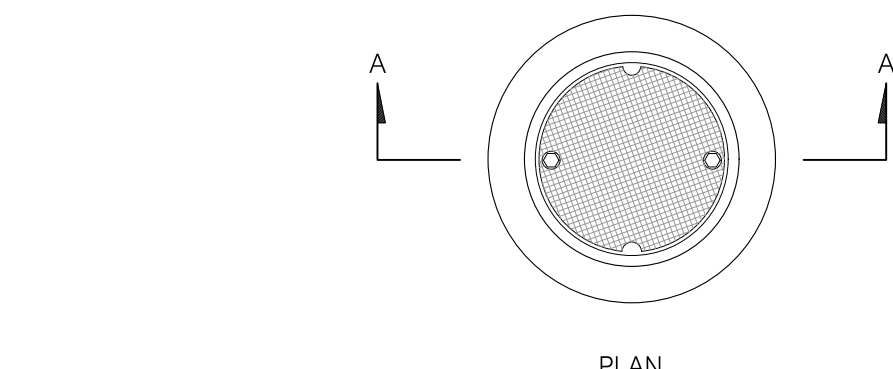
SHEET NO.: 2 OF 3



GEOTEXTILE SILT FENCE AND STRAW BALE SEDIMENT BARRIER
NOT TO SCALE

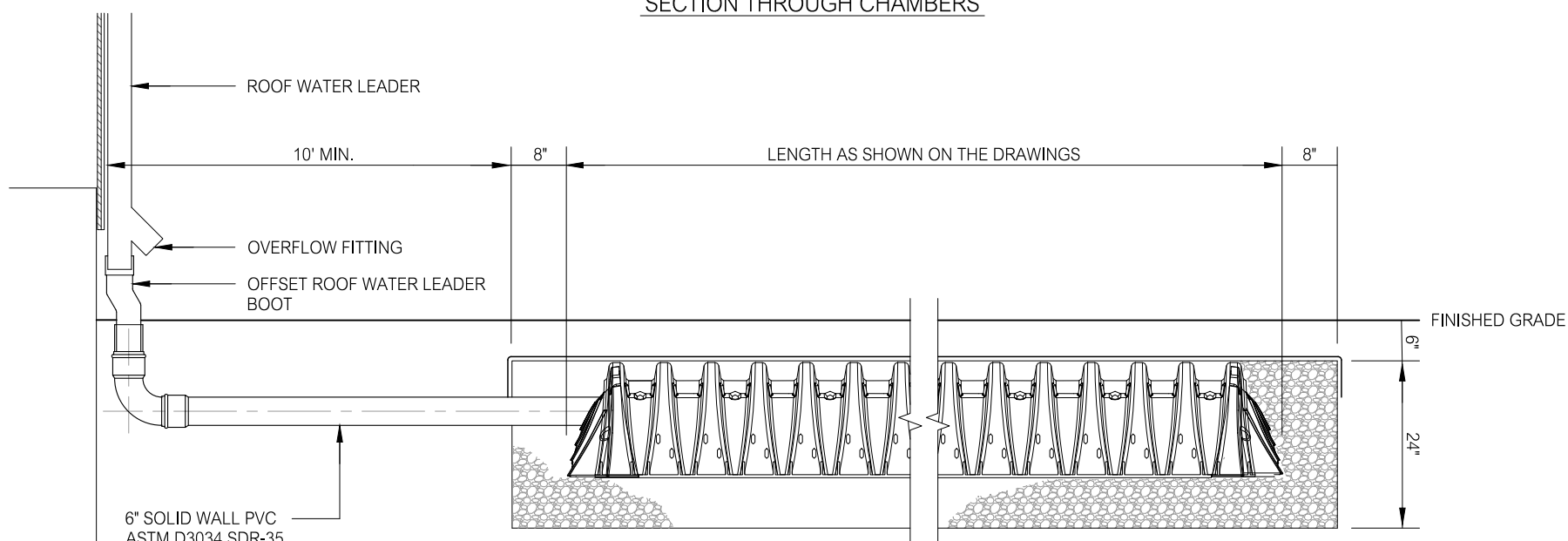
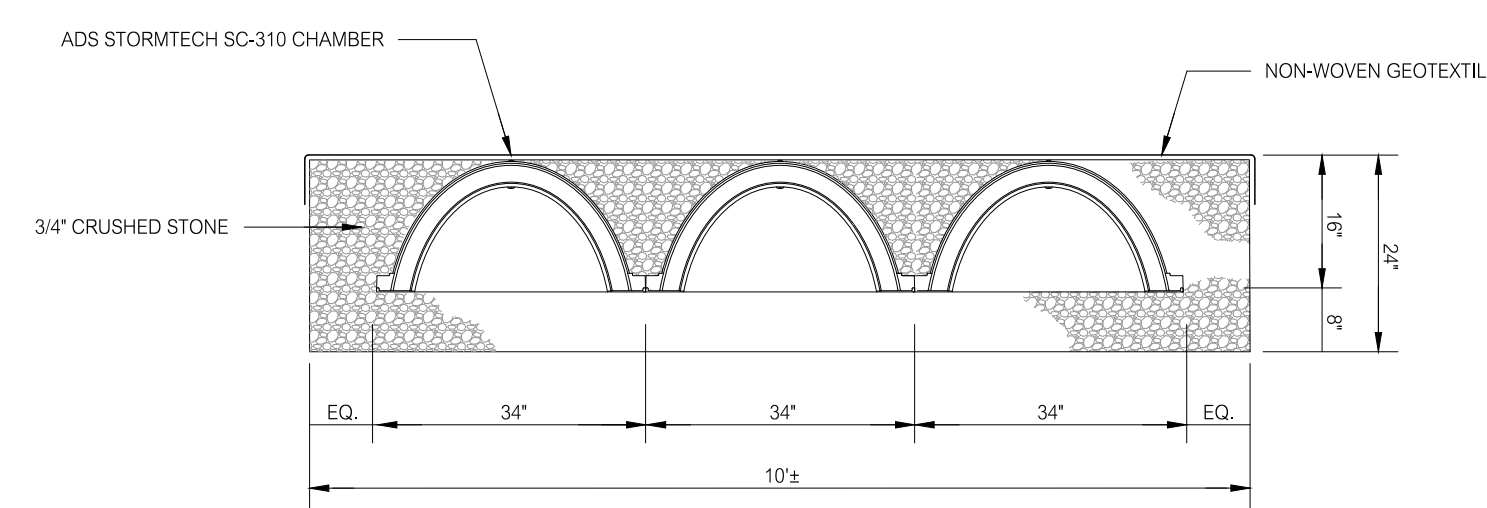
NOTE:
SEE GEOTEXTILE SILT FENCE AND STRAW BALE BARRIER DETAILS THIS SHEET.

TYPICAL LEACHING FIELD SECTION
SCALE: 1"=10'



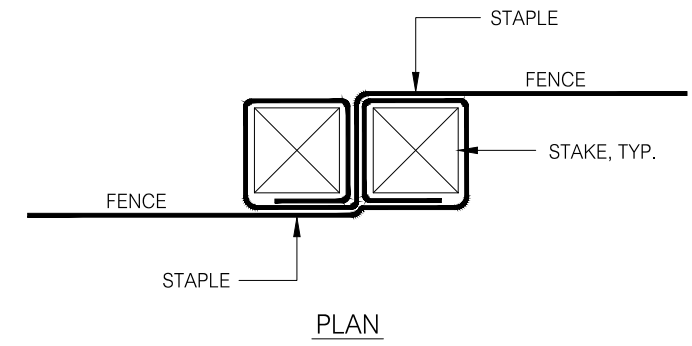
ACCESS FRAME AND COVER
NOT TO SCALE

NOTE:
HEAVY DUTY, BOLTED COVER ACCESS FRAME AND COVER-PATTERN NUMBER 4155, CAMPBELL FOUNDRY COMPANY, NORTH HAVEN, CONNECTICUT OR APPROVED EQUAL.

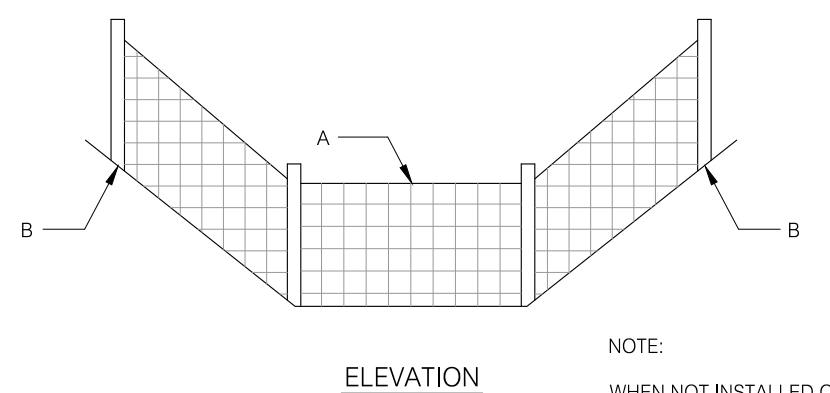


TYPICAL ROOF WATER INFILTRATION SYSTEM
NOT TO SCALE

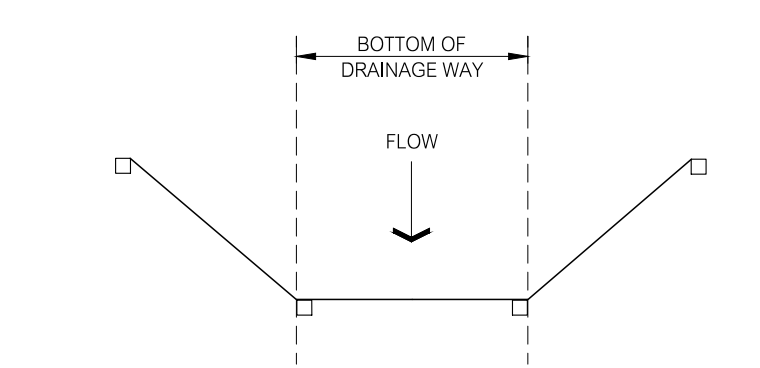
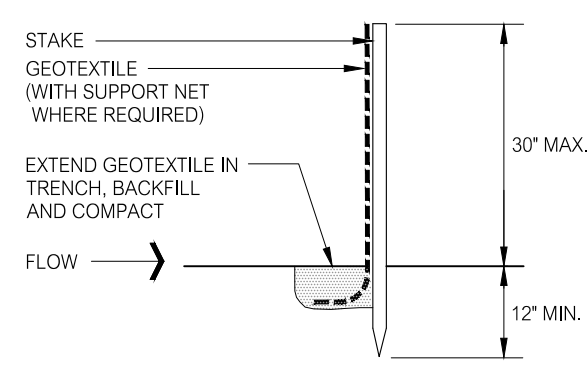
NOTE:
SEE DRAWINGS FOR LOCATIONS OF INFILTRATION SYSTEM(S) AND REQUIRED NUMBER AND ARRANGEMENTS OF CHAMBERS.



NOTE:
DRIVE STAKES TIGHTLY TOGETHER AND SECURE TOPS OF STAKES WITH CORD OR WIRE TO PREVENT FLOW-THROUGH OF SEDIMENT.



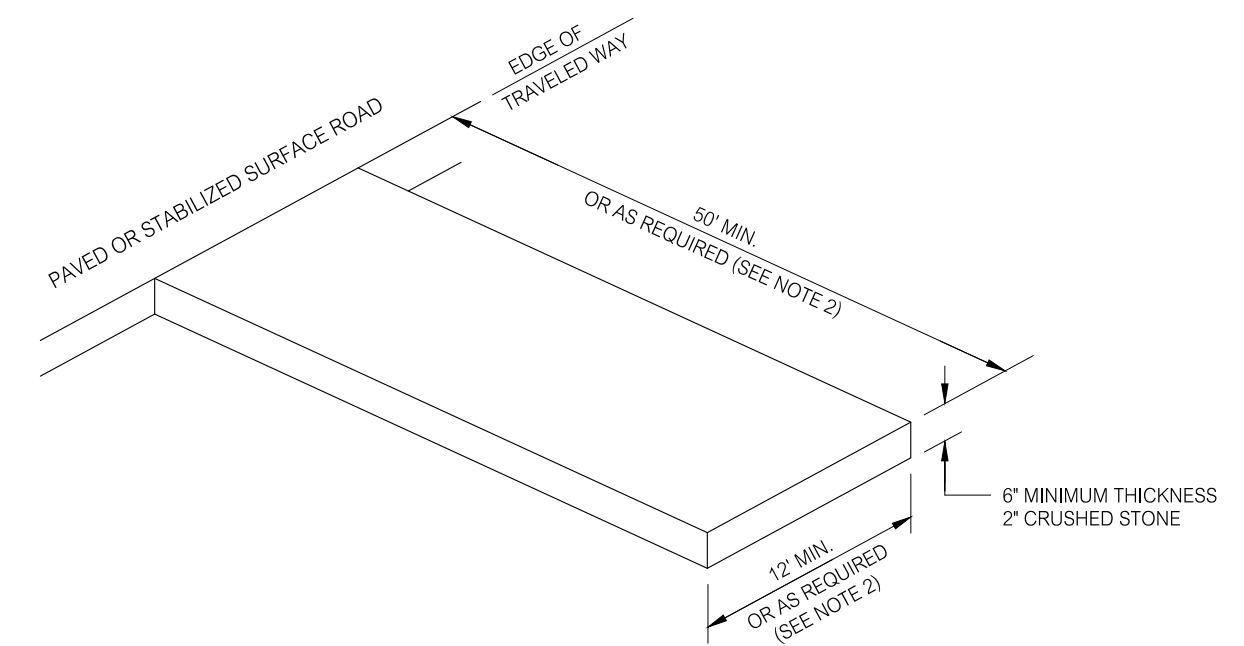
NOTE:
WHEN NOT INSTALLED ON THE CONTOUR OR WHEN INSTALLED IN A DRAINAGE WAY, THE ELEVATION OF POINTS B SHALL BE HIGHER THAN POINT A.



GSF GEOTEXTILE SILT FENCE
NOT TO SCALE

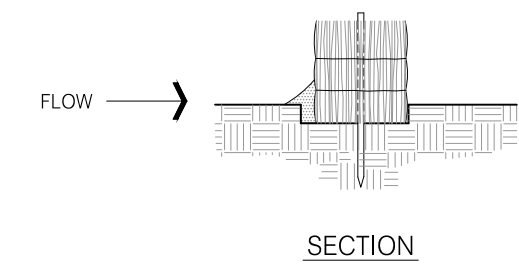
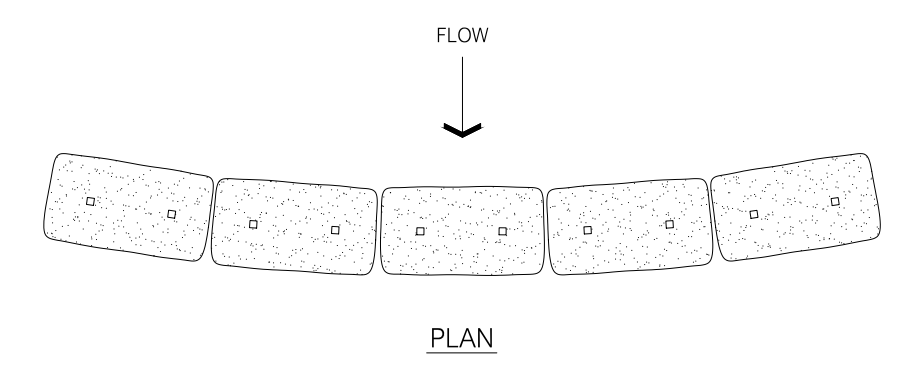
- EXCAVATE 6" DEEP TRENCH FOR LENGTH OF THE FENCE.
- EXTEND 6" LENGTH OF GEOTEXTILE INTO TRENCH, BACKFILL AND COMPACT.
- AS AN ALTERNATE METHOD, EXTEND LENGTH OF GEOTEXTILE HORIZONTALLY ON EXISTING GROUND, RAMP SOIL OVER GEOTEXTILE AND COMPACT.

- INSPECT FENCE AT LEAST ONCE PER WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 1/2 INCH OR GREATER.
- REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.



CE CONSTRUCTION ENTRANCE
NOT TO SCALE

- NOTES:
- CLEAR AND GRUB AREA AND REMOVE TOPSOIL BEFORE PLACEMENT OF CRUSHED STONE LAYER. A GEOTEXTILE MAY BE REQUIRED TO STRENGTHEN SUBGRADE SOILS AND TO PREVENT STONE MOVEMENT AND LOSS OF VOIDS WITHIN THE STONE ENTRANCE WHERE REQUIRED.
 - LENGTH OF ENTRANCE MAY BE LIMITED BY SITE CONDITIONS. PROVIDE ADEQUATE WIDTH OF ENTRANCE AT ROAD INTERSECTION TO ACCOMMODATE THE TURNING MOVEMENTS OF CONSTRUCTION VEHICLES.
 - MAINTAIN ENTRANCE SO AS TO PREVENT TRACKING OR WASHING OF SEDIMENT ONTO ROAD. SEDIMENT THAT MAY BE TRACKED OR OTHERWISE DEPOSITED WITHIN THE ROAD SHALL BE REMOVED IMMEDIATELY.
 - MAINTENANCE MAY INCLUDE THE REQUIREMENT FOR TOP DRESSING THE CRUSHED STONE LAYER OR REPLACING THE FULL DEPTH OF THE CRUSHED STONE LAYER.
 - SHOULD SITE CONDITIONS BE SUCH THAT SOIL CANNOT BE REMOVED BY VEHICLES TRAVELING OVER THE ENTRANCE, THE TIRES OF VEHICLES MAY HAVE TO BE WASHED PRIOR TO VEHICLES ENTERING THE ROAD. ALL WASH WATER SHALL BE DIRECTED THROUGH AN APPROVED SEDIMENT FILTER OR TO A SEDIMENT BASIN.

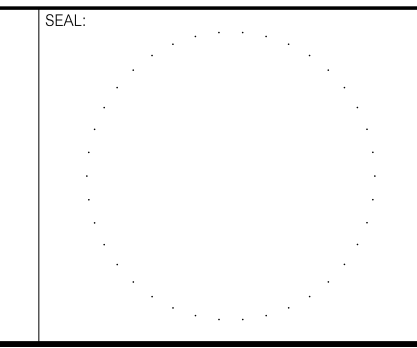


HB STRAW BALE BARRIER
NOT TO SCALE

- EXCAVATE 4" DEEP TRENCH FOR LENGTH OF BALES.
 - PLACE AND STAKE BALES, TWO (2) STAKES PER BALE.
 - PLACE BALES SUCH THAT BINDINGS ARE ORIENTED AROUND THE SIDES OF BALES RATHER THAN ALONG THE TOP AND BOTTOM OF BALES.
 - WEDGE LOOSE STRAW BETWEEN BALES.
 - BACKFILL AND COMPACT THE EXCAVATED SOIL ON UPHILL SIDE OF BARRIER.
- INSPECT BARRIER AT LEAST ONCE PER WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 1/2 INCH OR GREATER.
 - REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/2 THE HEIGHT OF THE BARRIER.

NO.	DATE	DESCRIPTION
6-1-22		MISCELLANEOUS
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LAND OF
JONATHAN & KAITLYN WEISS
14 MILL ROAD
ESSEX, CONNECTICUT



PREPARED BY:
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Civil Engineers & Land Surveyors, P.C.
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Telephone: (203) 245-0722

PROJECT: WEISS RESIDENCE 14 MILL ROAD ESSEX, CONNECTICUT		SHEET: DETAILS	SHEET NO.: 3 OF 3
DATE: 5-1-22	SCALE: AS NOTED	DESIGNED: MJO	CHECKED: LIM
PROJECT NO.: 22-06			