

**SURVEY NOTES:**

- 1.) THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES "MINIMUM STANDARDS OF ACCURACY, CONTENT AND CERTIFICATION FOR SURVEYS AND MAPS", AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON AUGUST 29, 2019. IT IS A GENERAL LOCATION SURVEY MAP BASED ON A RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS D AND TOPOGRAPHICAL SURVEY ACCURACY CLASS T-2. THIS MAP WAS PREPARED FROM RECORD RESEARCH, OTHER MAPS, AND OTHER SOURCES. IT IS NOT TO BE CONSTRUED AS A PROPERTY/BOUNDARY OR LIMITED PROPERTY/BOUNDARY SURVEY AND IS SUBJECT TO SUCH FACTS AS SAID SURVEYS MAY DISCLOSE THE
- 2.) THE PROPERTY IS LOCATED IN A R-80 ZONE.
- 3.) THE EXISTING BARN SHOWN IS NON-CONFORMING TO CURRENT TOWN OF COVENTRY ZONING REGULATIONS FOR FRONT YARD SETBACK REQUIREMENTS.

**MAP REFERENCES:**

- 1.) SUBDIVISION PLAN COVENTRY HILLS OWNER & DEVELOPER DAVID J. WEBSTER COVENTRY, CONN. MEGSON & HYPYPA CIVIL ENGINEERS GLASTONBURY, CONN. SCALE 1"=50' DATE 5-21-85 MAP NO. 339-84-1C SHEET 1 OF 4 SHEETS

**OWNER/APPLICANT:** ZACHARY STUDENROTH  
PO. BOX 2492  
SAG HARBOR, NY. 11963

TOTAL AREA OF SUBDIVISION: 274,462 SQ. FT. / 6.30 ACRES  
TOTAL AREA OF OPEN SPACE 53,050 SQ.FT. / 1.22 ACRES  
(19.3% OF TOTAL SUBDIVISION AREA)

**DRIVEWAY SIGHTLINE DISTANCES:**

LOT 1	NORTH: 475 FT. +
	SOUTH: 175 FT. +
LOT 2	NORTH: 175 FT. +
	SOUTH: 300 FT. +

LOT 2:  
AREA OF UPLAND REVIEW AREA IMPACTED: 6,305 SQ.FT. +/- 0.14 ACRES

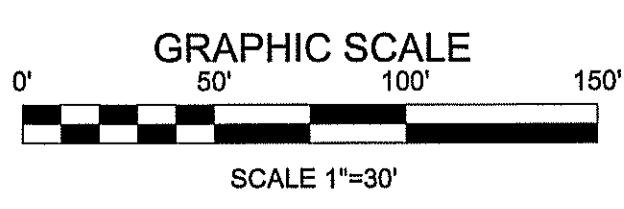
**LEGEND**

- EXISTING IRON ROD
- PROPOSED WELL
- STONE WALL
- EXISTING UTILITY POLE
- WETLANDS FLAG
- EDGE OF FIELD LOCATED WETLANDS
- PROPOSED SPOT GRADE
- EXISTING SPOT GRADE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED SILT FENCE/ LIMIT OF DISTURBANCE

THE WETLAND SOILS ON THIS MAP WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CT PA 72-155 AS AMENDED BY PA 73-571 AND ARE SUBSTANTIALLY ACCURATELY REPRESENTED ON THIS PLAN.

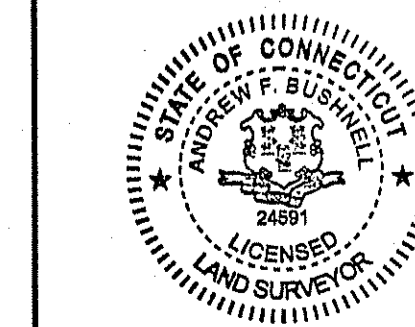
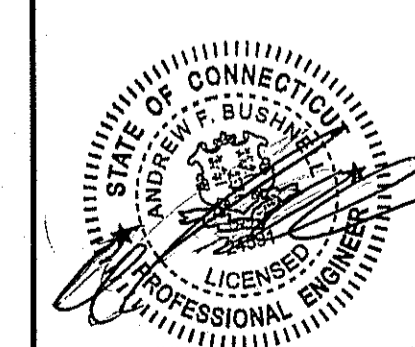
RICHARD ZULICK  
CERTIFIED SOIL SCIENTIST

JULY 19, 2022  
DATE



TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ANDREW F. BUSHNELL P.E. L.S. 24591  
THIS MAP IS NOT VALID UNLESS IT BEARS THE EMBOSSED SEAL OF THE LICENSED LAND SURVEYOR WHOSE REGISTRATION NUMBER AND SIGNATURE APPEAR ABOVE.



PLAN PREPARED FOR			
ZACHARY STUDENROTH			
GOOSE LANE		COVENTRY, CT.	
SITE PLAN			
SCALE: 1"=30'	DATE: 7/15/2022	FILE NO. 2021-119	SHEET: 1 OF 2
BUSHNELL ASSOCIATES LLC.			
CIVIL ENGINEERING AND LAND SURVEYING			
663 WOODBRIDGE STREET		MANCHESTER, CT. 06042	
860-643-7875			
REVISIONS: 8/16/2022			

N/F  
SCOTT R. VISNY &  
LISA M. LYON-VISNY  
390 GOOSE LANE

LOT 1  
99,659 SQ. FT.  
2.29 ACRES

LOT 2  
174,803 SQ. FT.  
4.01 ACRES

PROPOSED CONSERVATION  
EASEMENT  
53,050 SQ. FT.  
1.22 ACRES  
(DELINEATE IN FIELD  
PRIOR TO ANY SITE  
DISTURBANCE)

N/F  
SARAH TOTH  
471 GOOSE LANE

N/F  
MARK A. & JEWEL K.  
MERRELL  
481 GOOSE LANE

N/F  
GABOR & CAROL M..  
SZABO  
491 GOOSE LANE

N/F  
RINA L. TWEED  
46 GERALDINE DRIVE

N/F  
DEBBIE LYNN  
MLINEK  
38 GERALDINE DRIVE

N/F  
WALTER & LORI A.  
IACOBUCCI  
22 GERALDINE DRIVE



EROSION CONTROL CONSTRUCTION SEQUENCE PLAN HOUSE LOT DEVELOPMENT  
 NOTE: ALL EROSION AND SEDIMENT CONTROL ACTIVITIES SHALL CONFORM TO THE METHODS OUTLINED  
 IN THE 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL MANUAL.

- COORDINATE MARKING OF LIMITS OF DISTURBANCE BY A LICENSED LAND SURVEYOR. SUPPLY TOWN EROSION CONTROL OFFICER WITH A LETTER FROM THE SURVEYOR CERTIFYING THE LIMITS OF DISTURBANCE WERE MARKED IN ACCORDANCE WITH THE APPROVED PLAN.
- CLEAR TREES AS REQUIRED.
- PRIOR TO SOIL DISTURBANCE INSTALL EROSION CONTROL MEASURES, SILT FENCE AND ANTI-TRACKING PAD (SEE PLAN DETAILS AND LOCATIONS). ADDITIONAL MEASURES MAY BE REQUIRED AS SITE CONDITIONS REQUIRE. COORDINATE AN INSPECTION OF INSTALLED MEASURES WITH THE EROSION CONTROL OFFICER. SUPPLY THE TOWN OF COVENTRY EROSION CONTROL OFFICER WITH THE NAME AND PHONE NUMBER OF A CONTACT PERSON RESPONSIBLE FOR THE EROSION CONTROL MEASURES.
- PERIODICALLY AND AFTER LARGE RAIN EVENTS INSPECT EROSION CONTROL MEASURES AND REPAIR AS NECESSARY.
- GRUB AND STRIP TOPSOIL. STOCKPILE TOPSOIL IN AREAS INDICATED ON THE APPROVED PLAN.
- CONSTRUCT AND STABILIZE DRIVEWAY.
- CONSTRUCT HOUSE, WELL, DRIVEWAY, SEPTIC SYSTEM AND OTHER IMPROVEMENTS AS SHOWN.
- SPREAD STOCKPILED TOPSOIL. MACHINE RAKE, FERTILIZE, SEED AND MULCH DISTURBED AREAS. USE GRASS SEED THAT IS ACCEPTABLE FOR THE SITE CONDITIONS (I.E. SUN OR SHADE) AND THE SEASON OF THE YEAR IN WHICH THIS ACTIVITY IS COMPLETED. PROVIDE TEMPORARY STABILIZATION OF THE SITE (I.E. STRAW OR HAY ETC.) IF THE TOPSOIL IS SPREAD DURING A TIME OF YEAR WHEN GRASS SEED WILL NOT GERMINATE. PROVIDE PERMANENT STABILIZATION WHEN WEATHER CONDITIONS ALLOW.
- REMOVE EROSION CONTROL MEASURES AFTER THE SITE HAS BECOME FULLY ESTABLISHED.
- ANY EXISTING DISTURBED AREAS MUST BE SEEDED WITH PERMANENT OR TEMPORARY GROUND COVER AND MULCHED BY OCTOBER 15.
- DEWATERING OPERATIONS, IF REQUIRED, SHALL UTILIZE A CRUSHED STONE INTAKE SUMP AND A TEMPORARY OUTLET SILT POOL LOCATED WITHIN THE LIMITS OF DISTURBANCE.

**SITE SEEDING NOTES:**  
 PREPARATION: FINE GRADE AND RAKE SOIL SURFACE TO REMOVE STONES LARGER THAN 2" IN DIAMETER. INSTALL SEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIVERSIONS AS REQUIRED. APPLY LIMESTONE AT A RATE OF 2 TONS/AC. OR 8 LBS. PER 1000 SQ.FT. FERTILIZE WITH 10-10-10 AT A RATE OF 300 LBS./AC. OR 7.5 LBS. PER 1000 SQ.FT. WORK LIME AND FERTILIZER INTO SOIL UNIFORMLY TO A DEPTH OF 4".

**SEED APPLICATION:** APPLY SEED MIXTURE FROM THE CHART BELOW BY HAND, CYCLONE SEEDER OR HYDRO SEEDER. INCREASE SEED MIXTURE BY 10% IF HYDRO SEEDER IS USED. LIGHTLY DRAG OR ROLL THE SEEDED SURFACE TO COVER SEED. SEEDING SHOULD BE DONE BETWEEN THE TIMES SHOWN ON THE CHART BELOW. IF SEEDING CANNOT BE DONE DURING THESE TIMES, REPEAT MULCHING PROCEDURE BELOW UNTIL SEEDING CAN TAKE PLACE.

**MULCHING:** IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEED SURFACE WITH STRAW OR HAY AT A RATE OF 2 TO 3 TONS/AC. SPREAD MULCH BY HAND OR MULCH BLOWER. PUNCH MULCH INTO SOIL SURFACE WITH A TRACK MACHINE OR DISK HARROW SET STRAIGHT UP. IF USING HYDRO SEED MIX USE TACTIFIER ADDITIVES TO ADHERE MULCH MATERIAL TO THE SURFACE.

SEED SELECTION:	LB/1000 SQ. FT.	SEED MIXTURE	RECOMMENDED SEEDING DATES
PERMANENT LAWN	0.45	KENTUCKY BLUEGRASS	4/1-8/15
	0.45	CREeping RED FESCUE	8/15-10/1
	0.10	PERENNIAL RYEGRASS	
SLOPES & COARSE LAWN	0.45	CREeping RED FESCUE	4/1-8/15
	0.05	RED TOP	8/15-10/1
	0.45	TALL FESCUE	
SLOPES (NO MOWING)	1.8	CREeping RED FESCUE	4/1-8/15
	0.2	RED TOP	8/15-10/1
TEMPORARY COVER	3.0	WINTER RYE	4/15-6/15, 8/15-10/15
		OR	
	1.0	ANNUAL RYEGRASS	3/1-6/15, 8/1-10/15

IF SEED IS PLANTED OUTSIDE THE RECOMMENDED SEEDING DATES IRRIGATION MAYBE REQUIRED AT A UNIFORM APPLICATION RATE OF 1 TO 2 INCHES OF WATER APPLIED PER APPLICATION, SOAKING THE GROUND TO A DEPTH OF 4 INCHES.

**GENERAL NOTES:**  
 1.) ALL WORK SHALL CONFORM TO THE TOWN OF COVENTRY REGULATIONS AND STANDARDS AND SPECIFICATIONS.

2.) UNDERGROUND UTILITIES MAY EXIST IN THE AREA OF THIS SURVEY. CONTRACTOR TO VERIFY THE PRESENCE AND EXACT LOCATION OF ANY UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION.

3.) ANY TREES TO BE REMOVED WITHIN THE TOWN ROAD RIGHT OF WAY MUST BE POSTED BY THE TREE WARDEN PRIOR TO REMOVAL.

4.) SOLAR ORIENTATION OF THE PROPOSED HOUSE LOCATION WAS TAKEN INTO CONSIDERATION THE HOUSE SHOWN ON THIS PLAN IS FOR FEASIBILITY. THE HOMEOWNER WILL HAVE SOME FLEXIBILITY CONCERNING THE FINAL HOUSE LOCATION.

5.) PROPOSED DRIVEWAY SHALL NOT EXCEED 15% SLOPES.

6.) NO UNDERGROUND STORAGE TANKS ARE TO BE INSTALLED EXCEPT PROPANE.

7.) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF USE AND COMPLIANCE FOR THE PROPOSED HOUSE:

- ALL REQUIRED BOUNDARY MONUMENTS SHALL BE SET BY A LICENSED LAND SURVEYOR. THE LAND SURVEYOR SHALL SUPPLY THE PLANNING AND ZONING DEPARTMENT WITH A LETTER VERIFYING THE SETTING OF THE REQUIRED MONUMENTATION.
- ALL GRADING AND CLEARING, ESPECIALLY FOR PROPER SIGHT LINE AND INSTALLATION OF DRIVEWAY APRON SHALL BE COMPLETED AND INSPECTED BY THE TOWN OF COVENTRY.
- STREET NUMBERS FOR THE PROPOSED HOUSE SHALL BE PLACED ON THE FRONT OF THE HOUSE OR IN AN AREA MORE VISIBLE FROM THE STREET AND APPROVED BY THE TOWN OF COVENTRY.
- THE PROPOSED DRIVEWAYS SHALL BE BUILT IN THE DEPICTED LOCATION OR IN A LOCATION WITH EQUIVALENT OR BETTER SIGHT LINE AND DRAINAGE CONDITIONS AS DETERMINED BY THE ZONING AGENT AND/OR SUPERINTENDENT OF STREETS. THE DRIVEWAY SHALL HAVE A PAVED APRON.
- ALL DISTURBED AREAS SHALL BE TOPSOILED SEEDED AND MULCHED OR STABILIZED ACCORDING TO THE SEASON OF THE YEAR.
- ALL OTHER REQUIREMENTS AS STATED ON THIS PLAN SHALL HAVE BEEN MET AS PER TOWN OF COVENTRY REGULATIONS.
- A SEPTIC SYSTEM AS-BUILT PLAN SHALL BE PROVIDED TO THE EASTERN HIGHLANDS HEALTH DISTRICT BY THE LICENSED SEPTIC SYSTEM INSTALLER.

8.) NO LIQUID OR SOLID CHEMICAL FERTILIZERS, PESTICIDES, HERBICIDES OR PETROLEUM DUST CONTROL AGENTS SHALL BE APPLIED ON THIS SITE.

9.) OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS.

10.) LIMIT OF INDIVIDUAL LOT DISTURBANCE IS TYPICALLY DELINEATED BY THE SILT FENCE SYMBOLS SHOWN ON THE PLANS.

11.) PROPOSED HOUSE, SEPTIC, DRIVEWAY, FOOTING DRAIN AND LIMIT OF DISTURBANCE LOCATIONS SHOWN ARE PRELIMINARY, LOCATIONS MAY CHANGE WITH FINAL LOT DESIGN.

12.) ALL UTILITIES SHALL BE APPROVED BY THE LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTION. ALL UTILITIES SHALL BE CONSTRUCTED TO LOCAL UTILITY COMPANY SPECIFICATIONS AND INSTALLED UNDERGROUND.

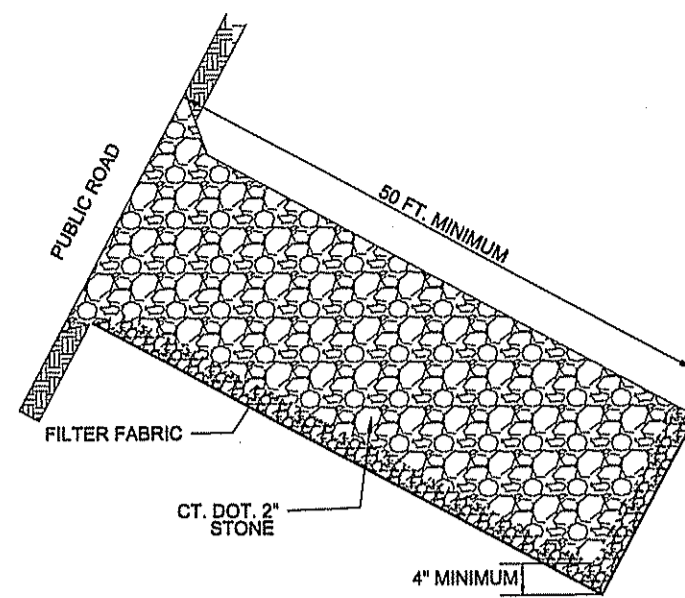
13.) ANY DRAINAGE, COMMON DRIVEWAY, CONSERVATION, UTILITY AND ANY OTHER APPLICABLE EASEMENTS SHALL BE PLACED ON THE DEEDS FOR EACH LOT AFFECTED.

14.) INDIVIDUAL SITE PLAN IS REQUIRED FOR LOT 2 PRIOR TO HOUSE CONSTRUCTION. THE PLAN SHALL SHOW THE FOLLOWING: PROPOSED EROSION AND SEDIMENT CONTROLS, HOUSE LOCATION, SEPTIC SYSTEM, WELL, DRIVEWAY, CURTAIN DRAINS (IF REQUIRED), FOOTING DRAIN AND GRADING.

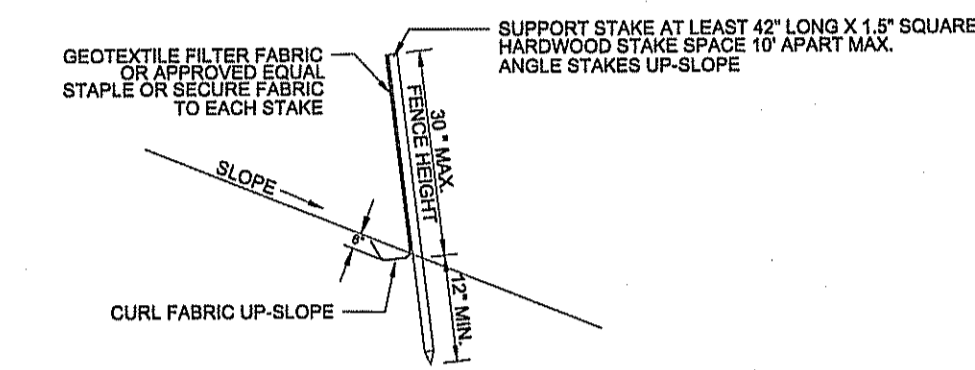
15.) STONEWALLS SHALL BE PRESERVED WHENEVER POSSIBLE. STORE AND REUSE STONES REMOVED FOR DRIVEWAY CONSTRUCTION FOR REPAIR OF STONEWALL ALONG THE PARCEL FRONTAGE.

16.) INDIVIDUAL CLEARING LIMITS OF LOT 2 SHALL BE FLAGGED BY A LICENSED LAND SURVEYOR AND CERTIFIED, TO THE TOWN OF COVENTRY, TO BE CONSISTENT WITH THE INDIVIDUAL LOT DEVELOPMENT PLAN PRIOR TO THE START OF ANY SITE DISTURBANCE.

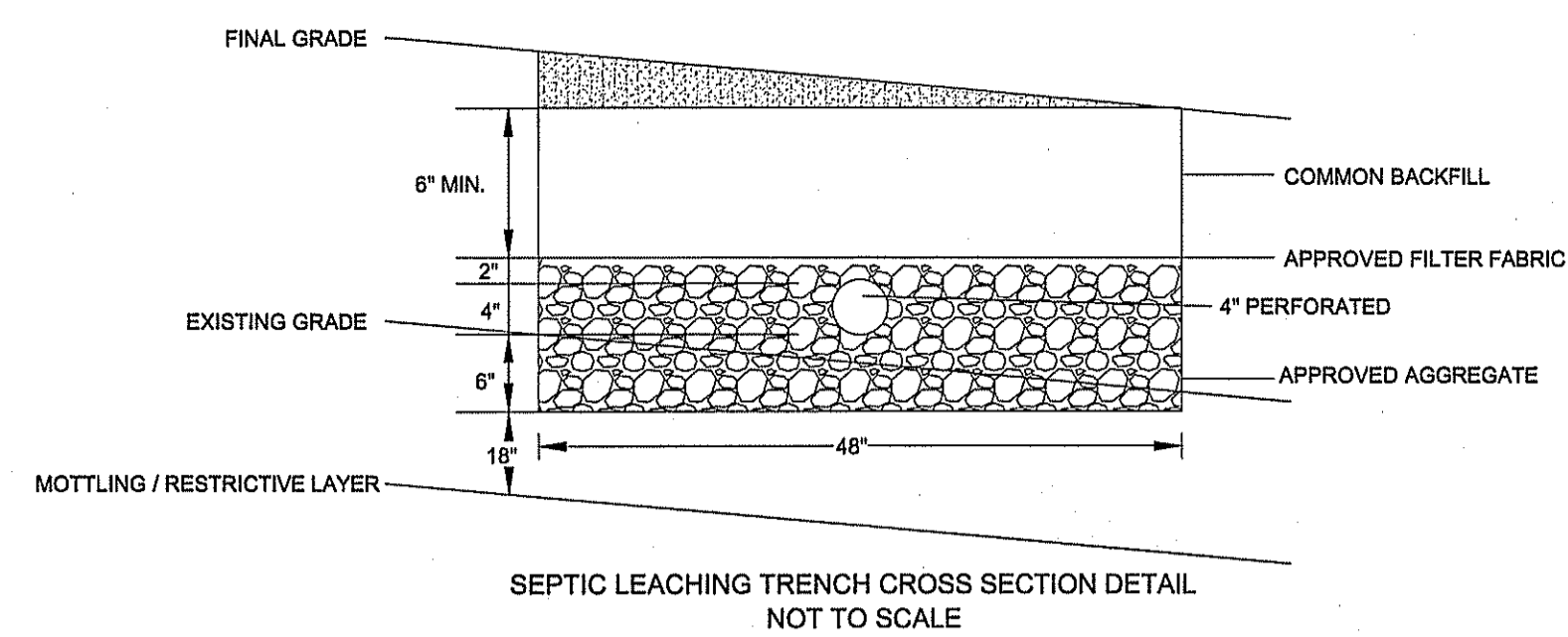
17.) STREET TREES SHALL BE PLANTED IN ACCORDANCE WITH SECTION 1208B-LANDSCAPING OF THE TOWN OF COVENTRY ROAD REGULATIONS DATED DEC. 14, 1998.



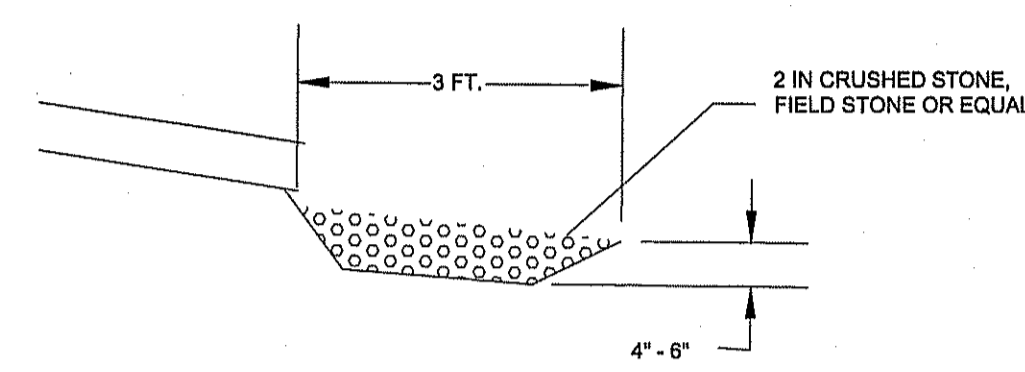
ANTI-TRACKING CONSTRUCTION ENTRANCE  
NOT TO SCALE



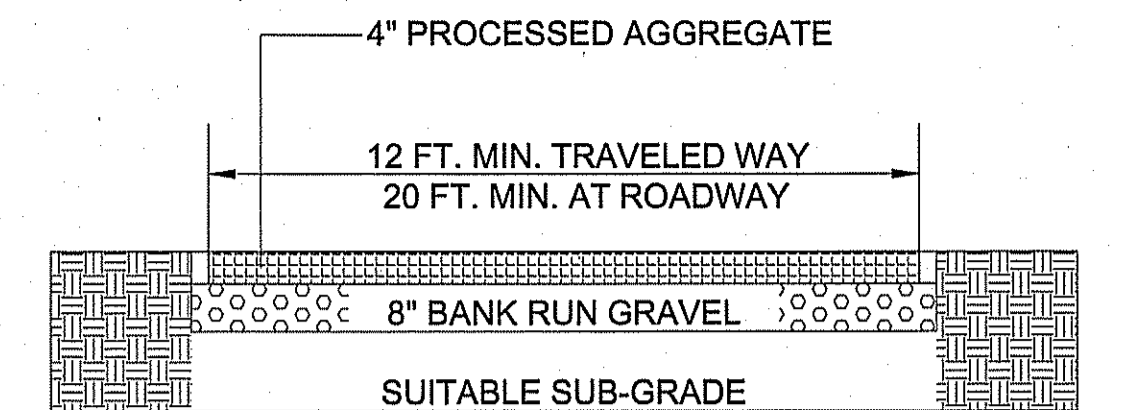
SILT FENCE DETAIL  
NOT TO SCALE



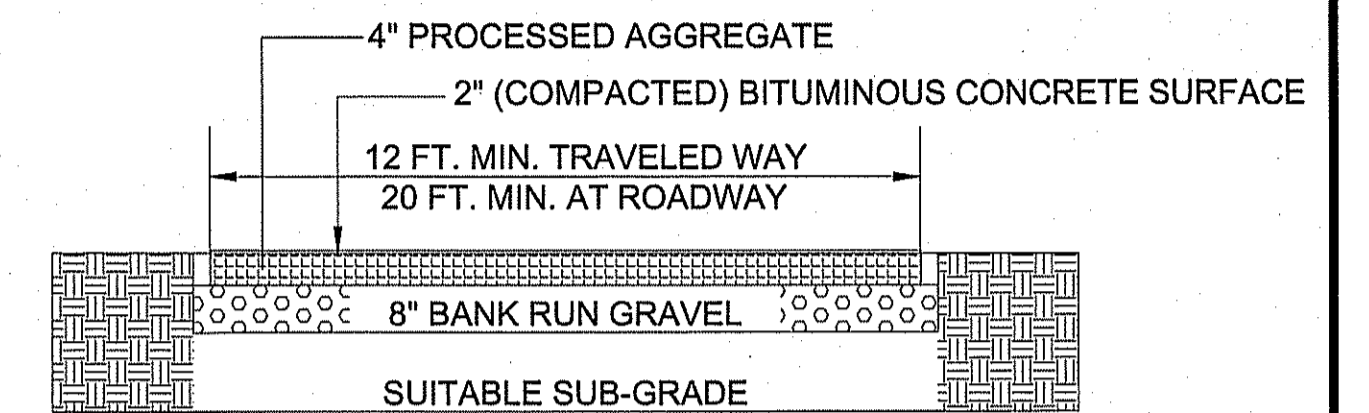
SEPTIC LEACHING TRENCH CROSS SECTION DETAIL  
NOT TO SCALE



FOOTING DRAIN OUTLET DETAIL  
NOT TO SCALE



GRAVEL DRIVEWAY DETAIL (10% MAX. GRADE)  
NOT TO SCALE



PAVED DRIVEWAY DETAIL (15% MAX GRADE)  
NOT TO SCALE

TEST PITS OBSERVED BY GLENN BAGDOIAN OF EASTERN HIGHLANDS HEALTH DISTRICT & ANDREW BUSHNELL P.E. BUSHNELL ASSOCIATES LLC 5-28-2022 (ACROSS FROM #445)

**TEST PIT 1**  
 0-8" TOPSOIL / ROOTS  
 8-32" BROWN SANDY LOAM  
 32-56" GREY SANDY LOAM  
 DEPTH 56"  
 LEDGE 56"  
 MOTTLING 32"  
 ROOTS 32"

**TEST PIT 2**  
 0-4" TOPSOIL  
 4-34" BROWN FINE SANDY LOAM  
 34-72" GREY COMPACT SANDY TILL  
 DEPTH 72"  
 MOTTLING 34"  
 ROOTS TO 34"  
 NO LEDGE

**TEST PIT 3**  
 0-5" TOPSOIL  
 5-34" BROWN SANDY LOAM  
 34-56" GREY COMPACT SANDY TILL  
 DEPTH 56"  
 MOTTLING 34"  
 ROOTS TO 34"  
 NO LEDGE

**TEST PIT 4**  
 0-5" TOPSOIL  
 5-34" BROWN BONEY SANDY LOAM  
 34-52" GREY TIGHT SANDY LOAM  
 DEPTH 52"  
 LEDGE 52"  
 MOTTLING 34"  
 ROOTS TO 34"

**TEST PIT 5**  
 0-5" TOPSOIL  
 5-24" BROWN SANDY LOAM  
 24-32" TAN-GRAY SANDY LOAM  
 32-56" COMPACT GRAY SANDY TILL  
 DEPTH 56"  
 LEDGE 56"  
 MOTTLING 32"  
 ROOTS TO 32"  
 NO LEDGE

**TEST PIT 6**  
 0-8" TOPSOIL  
 8-30" TAN-BROWN SANDY LOAM  
 30-60" GREY MOTTLLED SANDY TILL  
 MOTTLING 30"  
 NO LEDGE

**TEST PIT 7**  
 0-8" TOPSOIL  
 8-22" BROWN SANDY LOAM  
 22-58" GREY MOTTLLED SANDY TILL  
 SEEPAGE 38"  
 MOTTLING 22"  
 NO LEDGE

**TEST PIT 8**  
 0-8" TOPSOIL  
 8-30" BROWN SANDY LOAM  
 30-60" GREY MOTTLLED SANDY TILL  
 SEEPAGE 32"  
 MOTTLING 30"  
 NO LEDGE

**TEST PIT 9**  
 0-8" TOPSOIL  
 8-30" BROWN FINE SANDY LOAM  
 30-60" GREY MOTTLLED SANDY TILL  
 MOTTLING 30"  
 ROOTS 30"  
 NO LEDGE

**TEST PIT 10**  
 0-7" TOPSOIL  
 7-32" BROWN SANDY LOAM  
 32-60" GREY SANDY TILL MOTTLLED  
 SEEPAGE 40"  
 MOTTLING 32"  
 ROOTS 32"  
 NO LEDGE

PERCOLATION TEST RESULTS PERFORMED BY - BUSHNELL ASSOCIATES LLC

**PERC 1**  
 6/3/2022  
 PRE-SOAK 2:30 PM 6/2/2022  
 DRY START @ 10:16 AM 6/3/2022  
 18" DEEP HOLE

TIME	READING	DIFFERENCE
0	7"	-
5	8"	1"
10	9"	1"
15	9 1/2"	1/2"
20	10"	1/2"
25	10 1/2"	1/2"
30	11"	1/2"
35	11 1/2"	1/2"
40	12"	1/2"
45	12 1/2"	1/2"
50	13"	1/2"
55	13 1/2"	1/2"
60	14"	1/2"

PERCOLATION RATE = 1-10 MIN./IN.

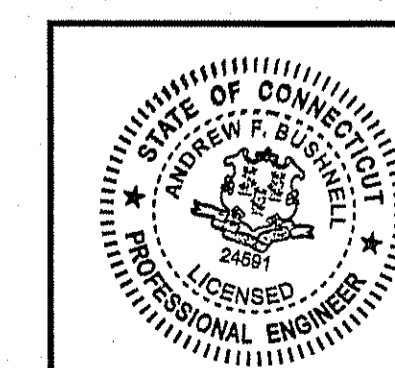
**PERC 2**  
 6/3/2022  
 PRE-SOAK @ 2:30 PM 6/2/2022  
 DRY START @ 10:16 AM 6/3/2022  
 18" DEEP HOLE

TIME	READING	DIFFERENCE
0	4"	-
5	6 1/2"	2 1/2"
10	8 1/2"	2"
15	10"	1 1/2"
20	11"	1"
25	12"	1"
30	13"	1"
35	13 1/2"	1/2"
40	14"	1/2"
45	14 1/2"	1/2"
50	15"	1/2"
55	15 1/2"	1/2"
60	16"	1/2"
65	16 1/2"	1/2"

PERCOLATION RATE = 1-10 MIN./IN.

**LOT 1 SEPTIC SYSTEM DESIGN CALCULATIONS:**  
 RESTRICTIVE LAYER 32" (TEST PIT 15)  
 PERCOLATION RATE: 1-10 MIN./IN.  
 GROUND SLOPE: 4.1-6.0%  
 4 BEDROOM HOUSE  
 M.L.S.S = 28 HF X 1.0 PF X 1.75 FF = 49 FT.  
 EFFECTIVE LEACHING AREA REQUIRED 677.5 SQ. FT.  
 PROVIDED: 3-65 FT. ROWS OF 4FT WIDE STONE AND PIPE LEACHING TRENCH @ 3.0 SQ. FT./FT. EFFECTIVE LEACHING AREA=585 SQ.FT. EFFECTIVE LEACHING AREA

**LOT 2 SEPTIC SYSTEM DESIGN CALCULATIONS:**  
 RESTRICTIVE LAYER 22" (TEST PIT 7)  
 PERCOLATION RATE: 1-10 MIN./IN.  
 GROUND SLOPE: 4.1-6.0%  
 2 BEDROOM HOUSE  
 M.L.S.S = 42 HF X 1.0 PF X 1.0 FF = 42 FT.  
 EFFECTIVE LEACHING AREA REQUIRED 375 SQ. FT.  
 PROVIDED: 2-65 FT. ROWS OF 4FT WIDE STONE AND PIPE LEACHING TRENCH @ 3.0 SQ. FT./FT. EFFECTIVE LEACHING AREA=380 SQ.FT. EFFECTIVE LEACHING AREA



SUBDIVISION PLAN PREPARED FOR

ZACHARY N. STUDENROTH

GOOSE LANE COVENTRY, CT.

CONSTRUCTION / E&S/ SEPTIC DETAILS

SCALE: NONE DATE: 7/15/2022 FILE NO. 2021-119 SHEET: 2 OF 2

**BUSHNELL ASSOCIATES LLC.**  
 CIVIL ENGINEERING AND LAND SURVEYING  
 563 WOODBRIDGE STREET MANCHESTER, CT. 06042  
 860-643-7875

REVISIONS: