

**SEDIMENTATION AND EROSION CONTROL MEASURES**

1. CLEAR TREES, BRUSH FROM AREA TO BE GRADED.
2. INSTALL SILT FENCE EROSION BARRIER (SEE PLAN).
3. FILL AND GRADE ONLY THOSE AREAS SHOWN ON PLAN.
4. REMOVE ALL STONES, STUMPS, ETC. FROM GRADED AREA, THEN PLACE LOAM TO A DEPTH OF 4" OR MORE.
5. DURING SEED BED PREPARATION, APPLY FERTILIZER AT THE RATE OF 7.5 LBS. PER 1000 SQUARE FEET USING 10-10-10 OR EQUIVALENT.
6. SEED ALL EXPOSED AREAS WITH THE FOLLOWING SEED MIXTURE:  
 KENTUCKY BLUEGRASS 2.25 LBS/1000 SQ. FT.  
 CREEPING RED FESCUE 2.25 LBS/1000 SQ. FT.  
 PERENNIAL RYEGRASS 50 LBS/1000 SQ. FT.
7. AFTER SEEDING, MULCH SHOULD BE APPLIED TO EXPOSED AREAS. STRAW AND HAY MULCHES REQUIRE ANCHORING. THIS MAY BE ACCOMPLISHED BY THE USE OF A MULCHING ANCHORING TOOL, LIQUID MULCH BINDER, OR BY DRIVING TRACKED EQUIPMENT UP AND DOWN THE SLOPE, KEEPING THE TRACK CLEATS PERPENDICULAR TO THE SLOPE.
8. WHERE VEGETATIVE COVER HAS NOT BEEN ESTABLISHED PRIOR TO OCTOBER 30, APPLY LUTE MESH AS PER CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
9. ALL INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES MUST BE MAINTAINED UNTIL THE AREA IS ESTABLISHED. INSPECTIONS SHOULD BE MADE AT LEAST ONCE A WEEK AND AFTER EACH RAIN.

**CONSTRUCTION NOTES FOR SEPTIC SYSTEM**

1. REMOVE TOPSOIL FROM SYSTEM AREA AND STORE ON-SITE FOR FUTURE USE.
2. ENGINEER TO SET A BENCHMARK AND STAKE SEPTIC SYSTEM PRIOR TO CONSTRUCTION. ENGINEER TO AS-BUILT SEPTIC SYSTEM COMPONENTS PRIOR TO BACKFILL AND PROVIDE AN AS-BUILT MAP. CONTRACTOR TO NOTIFY ENGINEER (3) BUSINESS DAYS IN ADVANCE FOR REQUEST TO PERFORM STAKEOUT OR AS-BUILT SURVEYS.
3. PRIOR TO FILL PLACEMENT, KEEP HEAVY EQUIPMENT TRAFFIC TO A MINIMUM IN SYSTEM AREA TO AVOID COMPACTION OF SUBSOIL. SCARIFY SUBSOIL WHERE COMPACTION OR IF HEAVY RAIN FALLS DURING CONSTRUCTION WHEN SUBSOIL IS EXPOSED.
4. ANY UNSUITABLE MATERIAL ENCOUNTERED BELOW TOPSOIL TO BE REMOVED. AREA TO BE INSPECTED AND APPROVED BY DESIGN ENGINEER AND TOWN SANITARIAN PRIOR TO PLACEMENT OF FILL.
5. PLACE APPROVED FILL TO CONTOURS SHOWN IN 6" LIFTS. FILL IN SYSTEM AREA TO BE APPROVED BY TOWN SANITARIAN AND DESIGN ENGINEER, AND CONFORM TO THE FOLLOWING GRADATION DETERMINED BY WASHED SIEVE ANALYSIS:  
 A. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE #4 SIEVE.  
 B. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE.  
 C. THE MATERIAL THAT PASSES THE #4 SIEVE IS THE REWEIGHED AND THE SIEVE ANALYSIS STARTED.  
 D. THE REMAINING MATERIAL SHALL MEET THE FOLLOWING GRADATION CRITERIA:

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 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%.
- 6. EXCAVATE AND INSTALL LEACHFIELD OR GALLERY. LEACHFIELD OR GALLERY MUST BE INSPECTED BY TOWN SANITARIAN BEFORE BACKFILLING.
- 7. AFTER BACKFILLING SYSTEM, GRADE, LOAM AND SEED ALL EXPOSED AREAS IMMEDIATELY. ALL SEEDING MUST BE COMPLETE PRIOR TO SEPTEMBER 15.
- 8. IMPLEMENT STEPS 5-9 OF SEDIMENTATION & EROSION CONTROL MEASURES.

**GRADATION TABLE FOR ASTM C-33 SAND TO BE USED IN GEOMATRIX PRODUCTS**

SIEVE SIZE	PERCENT PASSING
3/8"	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#50	10-30
#100	2-10
#200	0-3

**GRADATION TABLE FOR CRUSHED AGGREGATE FILL TO BE USED AS COVER OVER GEOMATRIX PRODUCTS**

SIEVE SIZE	PERCENT PASSING
1 1/2"	100
3/4"	50-100
#4	25-50
#10	10-20
#20	5-15
#40	<10

**TEST HOLE DATA**

DATE: 9-15-21  
 PRESENT: LEE L. ARCHER, (WESTBROOK SANITARIAN)  
 FEIN TREMBLAY (ALM/IGPS),  
 JIM COTE, (OWNER)

- TH 1**  
 0 - 30" FILL  
 30 - 63" LIGHT ORANGE BROWN BANDED MEDIUM TO COURSE SAND & GRAVEL  
 63 - 98" LIGHT BROWN VERY FINE TO FINE LOAMY SAND  
 STAINING @ 48"  
 ROOTS @ 52"  
 WATER @ 74", MOTTLING @ 50", NO LEDGE
- TH 2**  
 0 - 15" PAVEMENT & GRAVEL BASE (FILL)  
 15 - 35" TAN LIGHT BROWN FINE TO MEDIUM COMPACT SANDY LOAM W/ STONES  
 35 - 61" LIGHT BROWN VERY FINE TO FINE SILTY SAND  
 61 - 86" TAN MEDIUM TO COURSE SAND & GRAVEL  
 NO ROOTS  
 WATER @ 68", MOTTLING @ 52", NO LEDGE
- TH 3**  
 0 - 23" PAVEMENT & GRAVEL (FILL)  
 23 - 33" OLD PAVEMENT & BASE (FILL)  
 33 - 42" GRAY BROWN VERY FINE TO FINE SAND  
 42 - 51" REDDISH BROWN MEDIUM TO COURSE SAND & GRAVEL  
 51 - 87" GRAY BROWN FINE TO MEDIUM BANDED SAND  
 ROOTS TO 32"  
 SEEPAGE @ 50", NO APPARENT MOTTLING, NO LEDGE
- TH 4**  
 0 - 57" FILL (ORGANIC)  
 57 - 78" FINE TO MEDIUM GRAY SAND  
 WATER (SEEPAGE) @ 41", MOTTLING @ 47"
- TH 5**  
 0 - 21" TOPSOIL & FILL  
 21 - 34" ORANGE BROWN LOAMY SAND  
 34 - 70" TAN GRAY MEDIUM TILL  
 70 - 92" TAN GRAY FINE TO MEDIUM SAND (LITTLE SILT)  
 ROOTS TO 32"  
 WATER @ 84", MOTTLING @ 70", NO LEDGE

**LEGEND**

- UTILITY POLE
- CONN. HIGHWAY DEPT. MONUMENT
- CONC. MON. FOUND
- IRON PIN
- STONEWALL
- FIRE HYDRANT
- EDGE OF WETLAND/FLAG NUMBER
- W.S.O. WATER SHUTOFF
- W.G. WATER GATE
- CB CATCH BASIN
- G.S.O. GAS SHUTOFF
- L.P. LIGHT POLE
- TC TOP OF CURB
- BC BOTTOM OF CURB
- M.H. MANHOLE
- B.C.C. BITUMINOUS CONCRETE LIP CURBING

**SANITARY SYSTEM DESIGN CRITERIA**  
 PROPOSED 5,000 SF RETAIL STORE  
 2,000 SF COOLERS/STORAGE/UTILITY/OFFICE  
 3,000 SF RETAIL  
 DESIGN PERCOLATION RATE = <10.0 MIN/INCH  
 DESIGN DISCHARGE BASED ON HISTORIC METER READINGS ON A SIMILAR FACILITY = 56 GPD  
 56 GPD X 1.5 = #4 GPD, DESIGN DISCHARGE = 100 GPD  
 SEWAGE APPLICATION RATE = 1.5 GAL/SF/DAY  
 INSTALL 50 LF GEOMATRIX GST6212  
 59 LF X 5.9 SF/LF = 342.2 SF LEACHING AREA PROVIDED

MLSS  
 DESIGN DISCHARGE = 100 GPD  
 RESTRICTIVE LAYER = 20"  
 HYDRAULIC GRADIENT = 1.4%  
 HF = 62  
 PF = 1.0  
 FF = 100/300 = 0.33  
 MLSS REQUIRED = 62 x 1.0 x 0.33 = 21 LF REQUIRED  
 MLSS PROVIDED = 50 LF

**PERCOLATION TEST DATA**

DATE: 9/28/2021  
 DEPTH: 42"  
 MARKER AT 9"  
 BEGIN PRESOAK: 12:15  
 PRESOAK EHPT: 12:50

PT 1

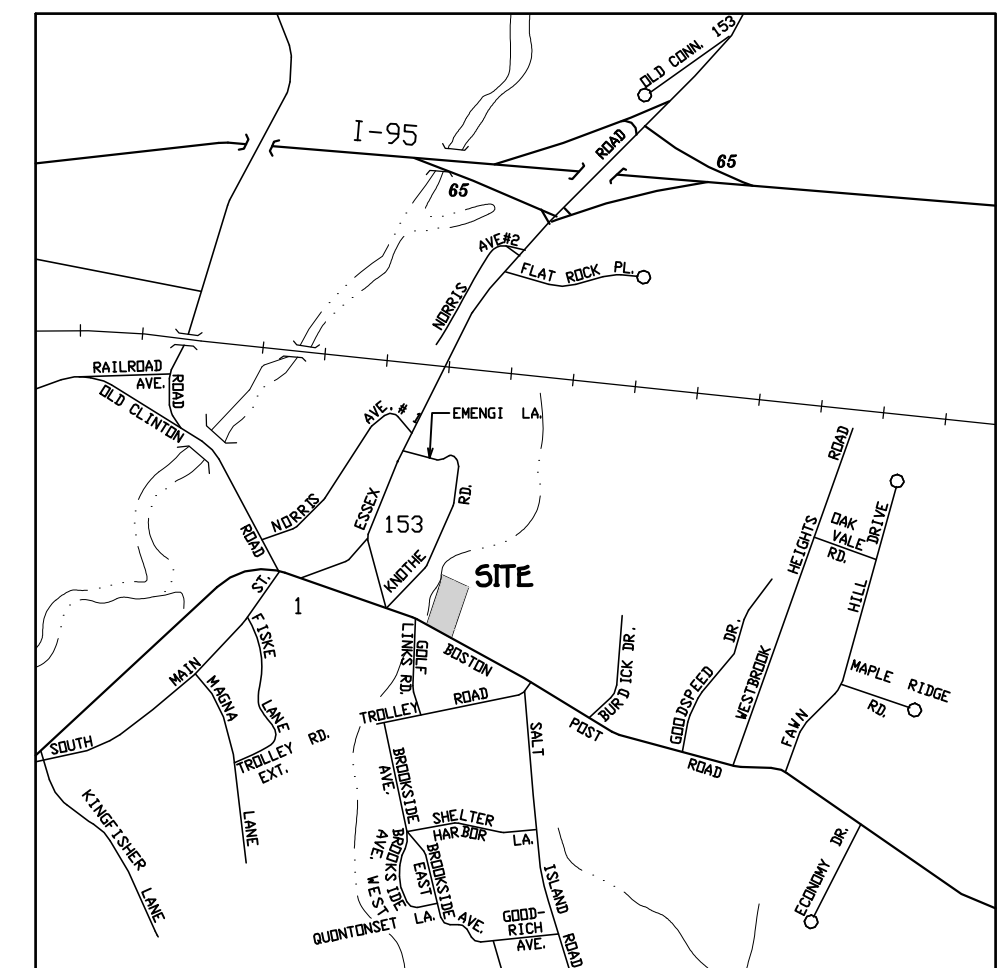
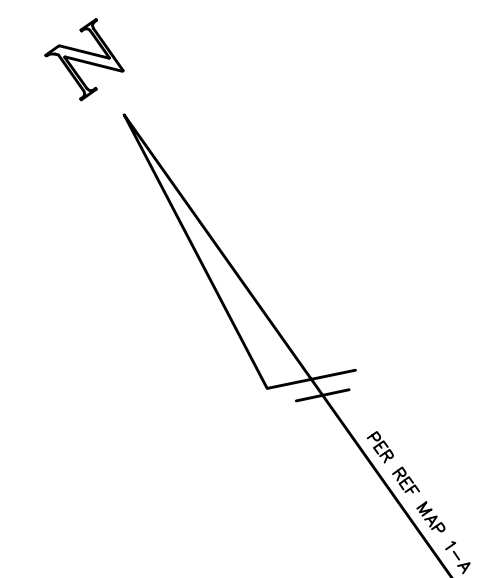
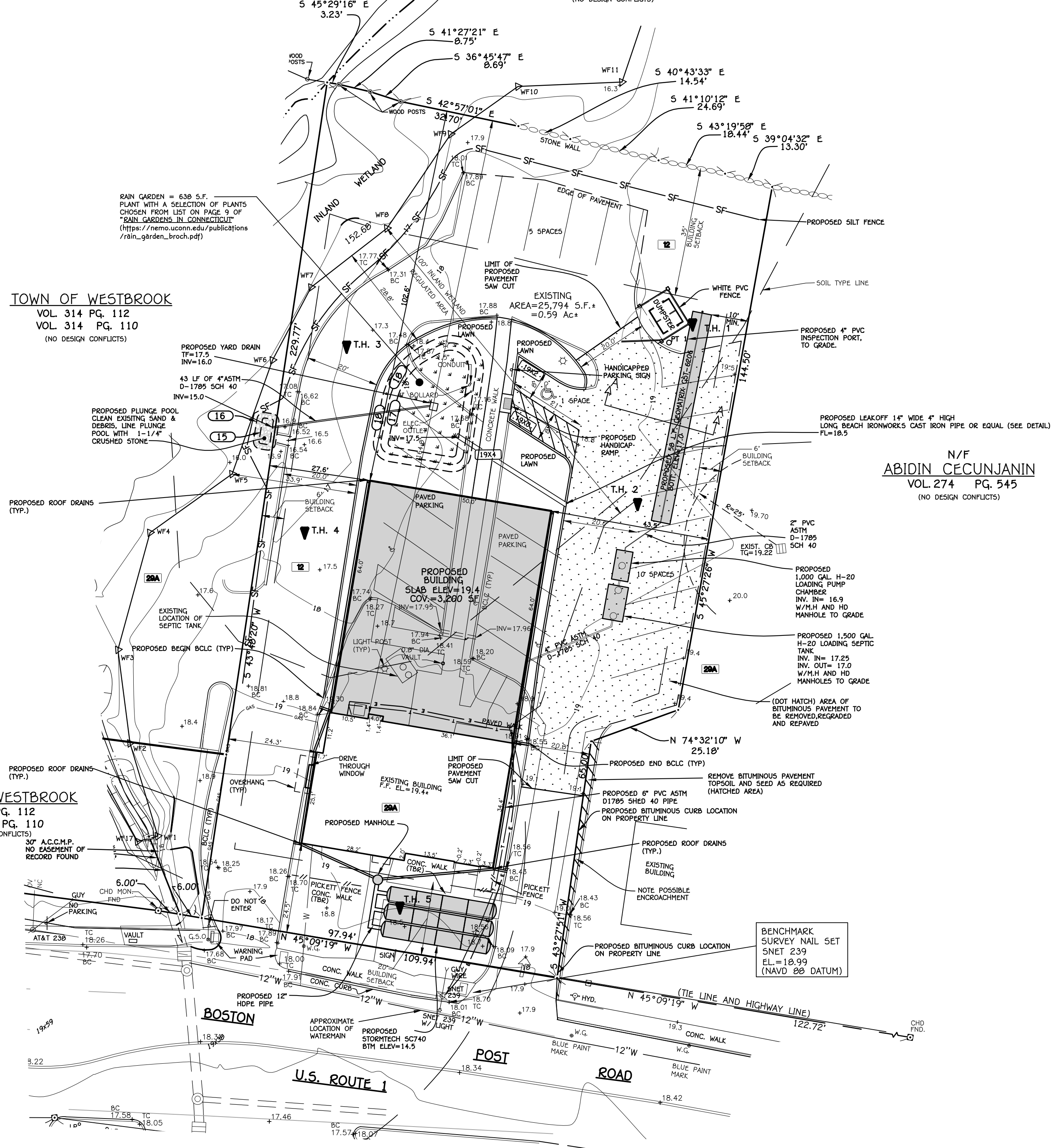
TIME:	DROP:
12:50	21.5"
1:00	25"
1:05	27"
1:10	28"
1:15	30"

PERCOLATION RATE = <5 MIN/INCH

N/F  
**PATCHOGUE PLACE COOPERATIVE INC.**  
 VOL 196 PG. 917  
 (NO DESIGN CONFLICTS)

TOWN OF WESTBROOK  
 VOL 314 PG. 112  
 VOL 314 PG. 110  
 (NO DESIGN CONFLICTS)

N/F  
**ABIDIN CECUNJANIN**  
 VOL 274 PG. 545  
 (NO DESIGN CONFLICTS)



LOCATION MAP  
 SCALE: 1"=1000'

OWNER: KEY BANK NATIONAL ASSOCIATION  
 OWNER ADDRESS: 100 PUBLIC SQUARE, CLEVELAND, OH 44113-2207  
 APPLICANT: JAGG ENTERPRISES, LLC  
 APPLICANT ADDRESS: 11 HILL STREET, OLD SAYBROOK, CT 06475

ZONING DATA TABLE	REQUIRED/ALLOWED	EXISTING	PROPOSED
MINIMUM LOT AREA	15,000 S.F.	25,794 S.F.	25,794 S.F.
MINIMUM FRONTAGE	50'	109.94'	109.94'
<b>SETBACKS</b>			
FRONT YARD	20'	24.5'	24.5'
SIDE YARD	5'	(E)20.8' (W)24.3'	(E)20.8' (W)24.3'
REAR YARD	35'	164.8'	125.4'
BUFFER FROM TIDAL WETLANDS	6'	N/A	N/A
<b>COVERAGE</b>			
MAXIMUM FLOOR AREA RATIO	0.25	7.0%	19.4%
MAXIMUM BLDG. HEIGHT	35'	1,813.5 FT	5,013.5 FT

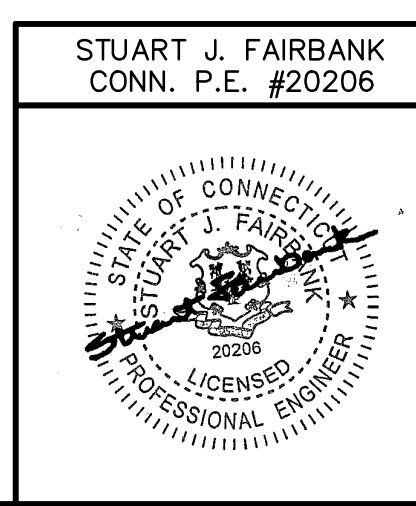
\*SQUARE FOOTAGE DEPICTED IS TAKEN FROM TOWN OF WESTBROOK VISION APPRAISAL RECORDS

**PARKING CALCULATIONS**  
 PROPOSED 5,000 SF BUILDING  
 2,000 SF COOLERS/STORAGE/UTILITY/OFFICE  
 3,000 SF RETAIL SPACE  
 5 SPACES + (3X4) = 17 SPACES  
 16 + 1 SHARED SPACE (TOWN PARKING LOT) = 17 SPACES PROVIDED

**SOIL TYPE LEGEND**  
 SOURCE: NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY URL: <http://websoilsurvey.nrcs.usda.gov>  
 MAP UNIT SYMBOL: MAP UNIT NAME:  
 29A ACAMA FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES  
 12 RAYPOL SILT LOAM

- NOTES:**
1. REFERENCE IS MADE TO THE FOLLOWING MAPS:  
 A. PROPERTY LINE REVISION MAP PROPERTIES OF TOWN OF WESTBROOK & FIRST NIAGARA BANK, NATIONAL ASSOCIATION KNOTHE ROAD AND U.S. ROUTE 1, WESTBROOK, CONNECTICUT, DATED: OCTOBER 07, 2015, REVISED TO 03-11-16 SHEET 1 OF 1 SCALE: 1"=20' BY: ANGUS McDONALD / GARY SHARPE & ASSOCIATES, INC.
  2. FOR SUBJECT PROPERTIES, REFERENCE IS MADE TO THE FOLLOWING DEEDS ON FILE IN THE TOWN OF WESTBROOK LAND RECORD AS VOL. 174 PG. 561 AND LISTED ON ASSESSOR'S MAP 177 AS LOT 23.
  3. THE STONEMAS AND/OR FENCES SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES OF COURSE BETWEEN PRINCIPAL POINTS OF COURSE INDICATED.
  4. ELEVATIONS SHOWN ARE BY FIELD SURVEY AND BASED ON NAVD 83 DATUM.
  5. SITE DOES NOT LIE WITHIN FLOOD ZONE AS PER FEMA FLOOD INSURANCE RATE MAP: TOWN OF WESTBROOK, CONNECTICUT COMMUNITY PANEL #09007C03373 MAP REVISED: FEBRUARY 6, 2013.
  6. SITE IS NOT WITHIN COASTAL AREA MANAGEMENT ZONE (CAM). PER CAM MAPPING DATE: 1979.

I HAVE REVIEWED THE WETLANDS BOUNDARIES AS SHOWN ON THIS PLAN AND AM OF THE OPINION THAT THEY REPRESENT THE SOIL BOUNDARIES MARKED BY ME IN THE FIELD.  
*Richard Snarski*  
 RICHARD SNARSKI, CERTIFIED SOIL SCIENTIST, #1975 DATE 5-06-2014

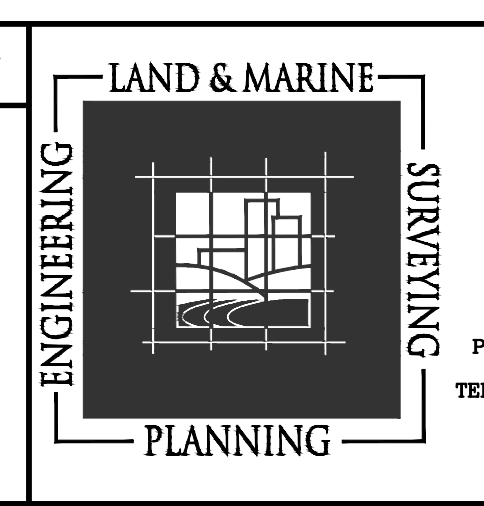


**CERTIFICATION NOTES:**

1. THIS SURVEY PLAN HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTION 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
- A. TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY
- B. BOUNDARY DETERMINATION: RESURVEY
- C. THIS SURVEY CONFORMS TO THE STANDARDS AND ACCURACY OF CLASS A-2, T-2

THE WORD "CERTIFY", AS USED IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE ENGINEER OR SURVEYOR. IT IS A DECLARATORY STATEMENT WHICH IS BASED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AS SUCH IT CONSTITUTES NEITHER GUARANTEE NOR WARRANTY, EXPRESSED OR IMPLIED, OF ANY INFORMATION CONTAINED HEREON. NO CERTIFICATION IS EXPRESSED OR IMPLIED ON ANY ORIGINAL OR ANY DUPLICATE OF THIS PLAN UNLESS IT BEARS AN ORIGINAL STAMP OR SEAL AND ORIGINAL SIGNATURE OF THE INDIVIDUAL WHOSE REGISTRATION NUMBER APPEARS HEREON.

ANGUS L. McDONALD JR.  
 CONN. L.S. #70173



**ANGUS McDONALD GARY SHARPE & ASSOCIATES, INC.**  
 SINCE 1966  
 P.O. BOX 808, 233 BOSTON POST ROAD  
 OLD SAYBROOK, CONNECTICUT 06475  
 TEL. (860) 388-4471 FAX (860) 388-3862

**SITE DEVELOPMENT PLAN**  
 PREPARED FOR  
**JAGG ENTERPRISES, LLC**  
 1238 BOSTON POST ROAD (U.S. ROUTE 1)  
 WESTBROOK, CONNECTICUT  
 DATE: SEPTEMBER 09, 2021 SCALE: 1"=20'  
 DR'N MCM [CKD] APP'D [APD]  
 SHEET 1 of 2 [JOB NO. 963615A]  
 REVISIONS: 11-08-21 - TOWN ENGINEER'S COMMENTS ADDRESS