

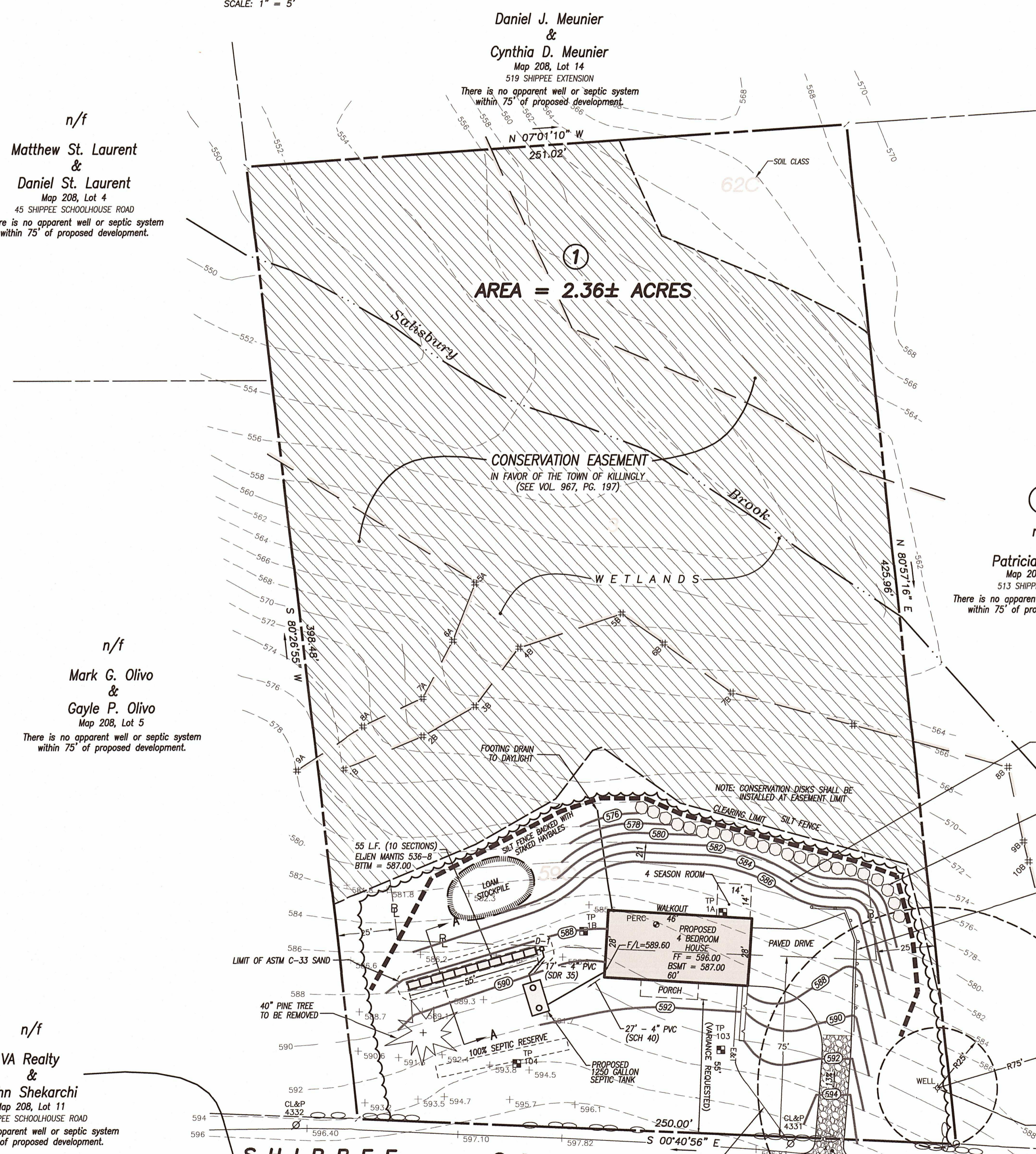
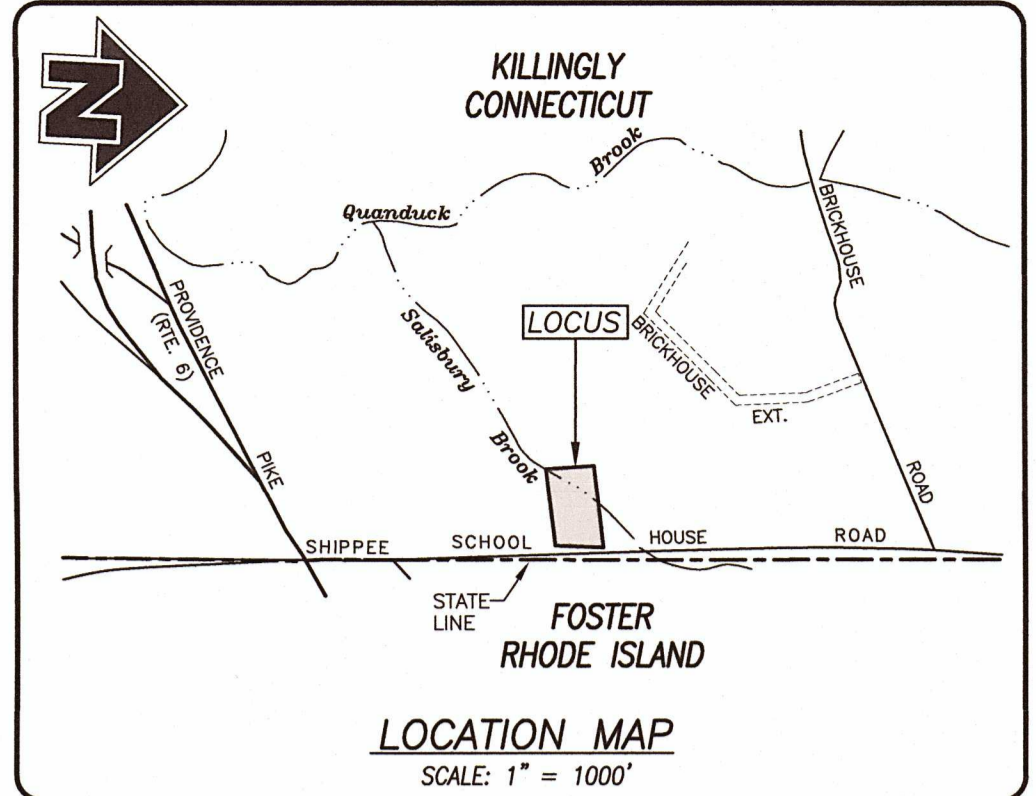
CROSS SECTION "A-A"
SCALE: 1" = 5'

TEST HOLE DATA - See Map Reference
Northeast District Department of Health

TEST PIT	DEPTH	PROFILE
1A	0" - 5"	Topsoil / Organics
	5" - 13"	Fine Sandy Loam
	13" - 40"	Loamy Sand
	40" - 82"	Med Compact Sand
	Ledge	N/A
	GWT	70"
	Mottling	40"
1B	0" - 5"	Organics / Topsoil
	5" - 22"	Fine Sandy Loam
	22" - 48"	Loamy Sand
	48" - 82"	Med Coarse Sand
	Ledge	N/A
	GWT	50"
	Mottling	N/A
103	0" - 6"	Topsoil
	6" - 18"	Fine Sandy Loam
	18" - 28"	Loamy Sand
	28" - 80"	Gray Tight Sandy Pan
	Ledge	N/A
	GWT	N/A
	Mottling	30"
104	0" - 6"	Topsoil
	6" - 18"	Fine Sandy Loam
	18" - 28"	Loamy Sand
	28" - 82"	Gravelly Sandy Pan
	Ledge	N/A
	GWT	N/A
	Mottling	32"

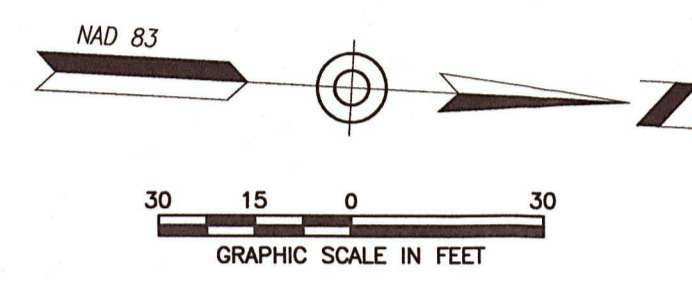
SEPTIC SYSTEM DESIGN DATA

Percolation Rate = 6.6 min. / in.
 4 bedroom house requires = 577.5 s.f. effective leaching area
 Effective Leaching area = 11 s.f. / l.f. of trench
 Length Required = 577.5/11 = 52.5 l.f.
 Length Provided = 55 l.f.
 Min. Leaching System Spread (MLSS) = 18 x 1.75 x 1.0 = 31.5'
 MLSS Provided = 55'
LEACHING FIELD
 1 Trench @ 55 l.f. each
 Maximum depth into existing grade = 12"



LEGEND

- F.F. FINISHED FLOOR
- o IRON PIN FOUND
- Ø UTILITY POLE
- - - - - EXISTING CONTOURS
- (---) PROPOSED CONTOURS
- W WETLANDS FLAG
- ▭ BUILDING SETBACK LINE
- ⊙ PERCOLATION TEST HOLE
- ⊙ TEST HOLE
- STONE WALL
- STONE WALL REMAINS
- SILT FENCE
- - - - - E&T PROPOSED UNDERGROUND UTILITIES



SURVEYOR SHALL SET A BENCH MARK IN THE AREA OF THE SEPTIC SYSTEM AT THE TIME OF CONSTRUCTION STAKE-OUT.

SEPTIC TANK	
1250 GALLON	
TWO COMPARTMENT	
F/L IN = 589.00	
F/L OUT = 588.75	
DISTRIBUTION BOXES	
D-1 (STANDARD)	
F/L IN = 588.17	
F/L OUT = 588.00	

NOTES:

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 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;
 This map was prepared from record research, other maps, limited field measurements 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.
 - This survey conforms to a Class "C" horizontal accuracy.
 - Topographic features conform to a Class "T-2", "V-2" vertical accuracy.
 - Survey Type: General Location Survey.
- Zone = RD.
- Owner of record: Alicia Bianco
7 Willow Road
Greenville, RI 02828
- Parcel is shown as Lot #12 on Assessors Map #208.
- Elevations shown are based on North American Vertical Datum of 1988 (NAVD 88). Contours taken from the Town of Killingly's GIS data and supplemented with actual field survey. Contour interval = 2'.
- Test Pit data taken from map reference.
- Wetlands shown were taken from map reference.
- Development area lies within Flood Hazard Zone 'C' (areas of minimal flooding) as shown on FIRM Map #0901360020B Effective Date: January 3, 1985.
- Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455 or 811.

MAP REFERENCE:

"Subdivision Plan - Shippee Schoolhouse Road & Brickhouse Road Killingly, Connecticut - Prepared for - Robert Loppi & Marco Loffredo - Scale: 1" = 100' - Date: 5/25/03 - Revised to: 4/15/04 Sheet 1 of 8 - Prepared by: Co-Operative Land Surveyors, LLC." On file in the Killingly Land Records as Map #5225.

DATE	DESCRIPTION
08/25/2021	FINAL PLAN REVIEW
	REVISIONS

GENERAL LOCATION SURVEY
 SEPTIC SYSTEM DESIGN PLAN
 PREPARED FOR
ALICIA BIANCO
 61 SHIPPEE SCHOOLHOUSE ROAD
 KILLINGLY, CONNECTICUT

Killingly Engineering Associates
 Civil Engineering & Surveying
 114 Westcott Road
 P.O. Box 421
 Killingly, Connecticut 06241
 (860) 779-7299
 www.killinglyengineering.com

DATE: 8/18/2021	DRAWN: AMR
SCALE: 1" = 30'	DESIGN: JES
SHEET: 1 OF 2	CHK BY: GG
DWG. No: CLIENT FILE	JOB No: 21088

ANY CHANGES TO THESE PLANS WITHIN 200' OF WETLANDS OR WATERCOURSES MUST BE RESUBMITTED TO THE KILLINGLY INLAND WETLANDS AND WATERCOURSES COMMISSION FOR ITS APPROVAL.

THE APPLICANT WILL CONTACT THE KILLINGLY INLAND WETLANDS AND WATERCOURSES COMMISSION'S AGENT AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED, PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON THE PROPERTY.

APPROVED BY THE TOWN OF KILLINGLY INLAND WETLANDS COMMISSION

CHAIRMAN DATE

CONTRACTOR SHALL COORDINATE LOCATION OF PROPOSED UNDERGROUND UTILITIES WITH UTILITY COMPANIES

Vincent Angelotti & Mary Angelotti
 Map 208, Lot 10
 2 SHIPPEE SCHOOLHOUSE ROAD
 There is no apparent well or septic system within 75' of proposed development.



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

GREG A. GLAUDE, L.S. Lic. No. 70191 DATE 8-30-2021

NORMAND THIBAUT, JR., P.E. No. 22834 DATE

EROSION AND SEDIMENT CONTROL PLAN:

REFERENCE IS MADE TO:

1. Connecticut Guidelines for Soil Erosion and Sediment Control 2002 (2002 Guidelines).
2. U.S.D.A. N.R.C.S. Web Soil Survey.

SOILS:

The proposed site is comprised mainly of three soil types; Ridgebury, Leicester, and Whitman (3), Gloucester (59C) and Canton and Charlton (62C)

- 3 Ridgebury, Leicester, and Whitman soils, extremely stony.

Included with this soil in mapping are areas of moderately well drained Sutton and Woodbridge soils that are slightly higher on the landscape. Sutton soils lack the dense substratum that Woodbridge soils have. Also included are a few non-stony surface soils, small areas of soils subject to flooding, small areas with steeper slopes, and areas with silt loam surface and subsoil textures. Minor components make up about 10 percent of the map unit.

Slope: nearly level to gently sloping
Landscape: depressions on uplands, drainageways on uplands
Surface cover: 3 to 14 percent stones
Size of map unit: Areas commonly range from 3 to 150 acres.

- 59C Gloucester gravelly sandy loam, 3 to 15 percent slopes, extremely stony

Included with this soil in mapping are areas of excessively drained Hinckley soils formed in stratified glacial outwash. Well drained Canton, Charlton, and Paxton soils are included in areas of finer textured soils. Paxton soils have a dense substratum. Areas of moderately well drained Sutton soils are in slightly lower areas, and poorly drained Leicester soils are in depressions and drainageways. Minor components make up about 20 percent of this map unit.

- 62C Canton and Charlton soils, 3 to 15 percent slopes, extremely stony

Included with these soils in mapping are areas of moderately well drained Sutton soils in slight depressions on the landscape, and poorly drained Leicester soils in depressions and drainageways. Also included are areas of moderately deep, somewhat excessively drained and well drained Chatfield soils where bedrock is 20 to 40 inches below the surface. Shallow, somewhat excessively drained and well drained Hollis soils are in small areas where bedrock is 10 to 20 inches below the surface. Minor components make up about 20 percent of the map unit.

Slope: gently sloping to strongly sloping
Landscape: hills on uplands
Surface cover: 3 to 15 percent stones
Size of map unit: Areas commonly range from 3 to 100 acres.

EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erosion and sediment controls is to absorb erosional energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequate erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

- Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.
- Route traffic patterns within the site to avoid existing or newly planted vegetation.
- Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Sequence the construction of storm drainage systems so that they are operational as soon as possible during construction. Ensure all outlets are stable before outletting storm drainage flow into them.
- Schedule construction so that final grading and stabilization is completed as soon as possible.

SLOW THE FLOW

Detachment and transport of eroded soil must be kept to a minimum by absorbing and reducing the erosive energy of water. The erosive energy of water increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases during development as a result of reduced infiltration rates caused by the removal of existing vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

- Use diversions, stone dikes, silt fences and similar measures to break flow lines and dissipate storm water energy.
- Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion.

KEEP CLEAN RUNOFF SEPARATED

Clean runoff should be kept separated from sediment laden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off-site generated runoff with sediment laden runoff generated on-site until after adequate filtration of on-site waters has occurred.

- Segregate construction waters from clean water.
- Divert site runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the development until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

While it may seem less complicated to collect all water to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub-drainage basins within the site. By reducing sediment loading from within the site, the chance of perimeter control failure and the potential off-site damage that it can cause is reduced. It is generally more expensive to correct off-site damage than it is to install proper internal controls.

- Control erosion and sedimentation in the smallest drainage area possible. It is easier to control erosion than to contend with sediment after it has been carried downstream and deposited in unwanted areas.

- Direct runoff from small disturbed areas to adjoining undisturbed vegetated areas to reduce the potential for concentrated flows and increase settlement and filtering of sediments.

- Concentrated runoff from development should be safely conveyed to stable outlets using rip rapped channels, waterways, diversions, storm drains or similar measures.

- Determine the need for sediment basins. Sediment basins are required on larger developments where major grading is planned and where it is impossible or impractical to control erosion at the source. Sediment basins are needed on large and small sites when sensitive areas such as wetlands, watercourses, and streets would be impacted by off-site sediment deposition. Do not locate sediment basins in wetlands or permanent or intermittent watercourses. Sediment basins should be located to intercept runoff prior to its entry into the wetland or watercourse.

SEPTIC SYSTEM CONSTRUCTION NOTES

1. The building, septic system and well shall be accurately staked in the field by a licensed Land Surveyor in the State of Connecticut, prior to construction.
2. Topsoil shall be removed and in the area of the primary leaching field scarified, prior to placement of septic fill. Septic fill specifications are as follows:
 - Max. percent of gravel (material between No. 4 & 3 inch sieves) = 45%

SIEVE SIZE	GRADATION OF FILL (MINUS GRAVEL)	
	PERCENT PASSING (WET SIEVE)	PERCENT PASSING (DRY SIEVE)
No. 4	100%	100%
No. 10	70% - 100%	70% - 100%
No. 40	10% - 50%	10% - 75%
No. 100	0% - 20%	0% - 5%
No. 200	0% - 5%	0% - 2.5%

Fill material shall be approved by the sanitarian prior to placement. It shall be compacted in 6" lifts and shall extend a minimum of five feet (5') around the perimeter of the system. Common fill shall extend an additional five feet (5') down gradient of the system (10' total) before tapering off at a maximum slope of 2H:1V.

3. Septic tank shall be two compartment precast 1250 gallon tank with gas deflector and outlet filter as manufactured by Jolley Precast, Inc. or equal.

4. Distribution boxes shall be 4 hole precast concrete as manufactured by Jolley Precast, Inc. or equal.

5. All precast structures such as septic tanks, distribution boxes, etc. shall be set level on six inches (6") of compacted gravel base at the elevations specified on the plans.

6. Solid distribution pipe shall be 4" diameter PVC meeting ASTM D-3034 SDR 35 with compression gasket joints. It shall be laid true to the lines and grades shown on the plans and in no case have a slope less than 0.125 inches per foot.

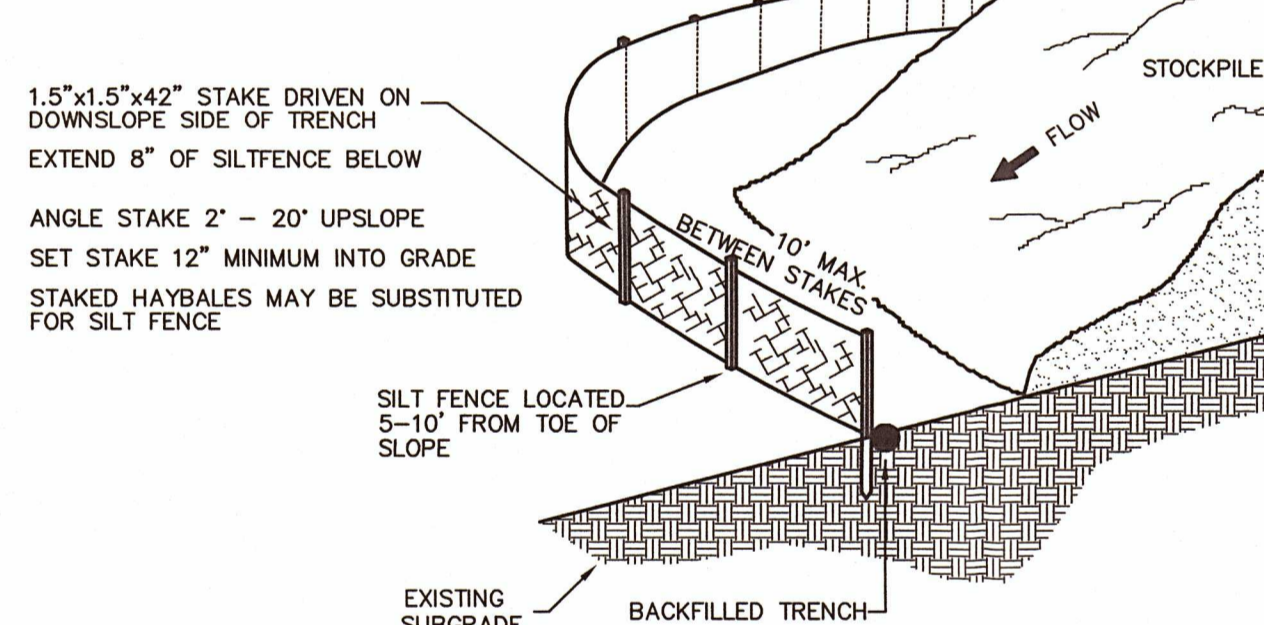
7. Perforated distribution pipe shall be 4" diameter PVC meeting ASTM D-3034 or ASTM F1760 for SDR 35, or ASTM F810 for SDR 38.

8. Sewer pipe from the foundation wall to the septic tank shall be schedule 40 PVC meeting ASTM D 1785. It shall be laid true to the grades shown on the plans and in no case shall have a slope less than 0.25 inches per foot.

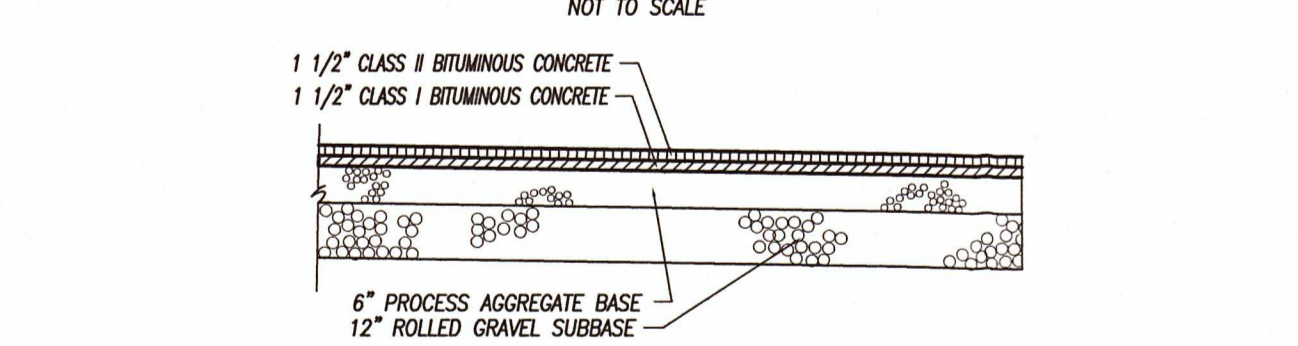
9. Solid footing drain outlet pipe shall be 4" Diameter PVC meeting ASTM D 3034, SDR 35 with compression gasketed joints. Footing drain outlet pipe shall not be backfilled with free draining material, such as gravel, broken stone, rock fragments, etc.

10. Septic sand shall meet the requirements of ASTM C-33 with less than 10% passing a 100 sieve and less than 5% passing a 200 sieve

SIEVE SIZE	% PASSING
0.375	100
#4	95-100
#8	80-100
#16	60-85
#30	25-60
#50	10-30
#100	<10
#200	<5

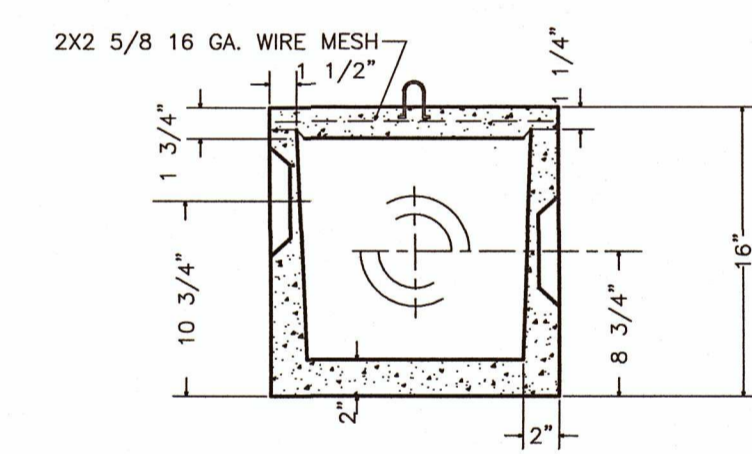


SILT FENCE @ TOE OF SLOPE APPLICATION



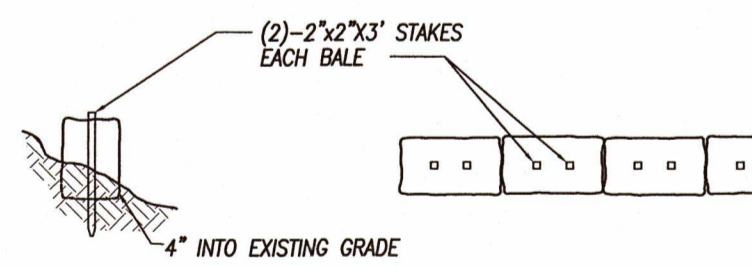
BITUMINOUS CONCRETE PAVEMENT

NOT TO SCALE



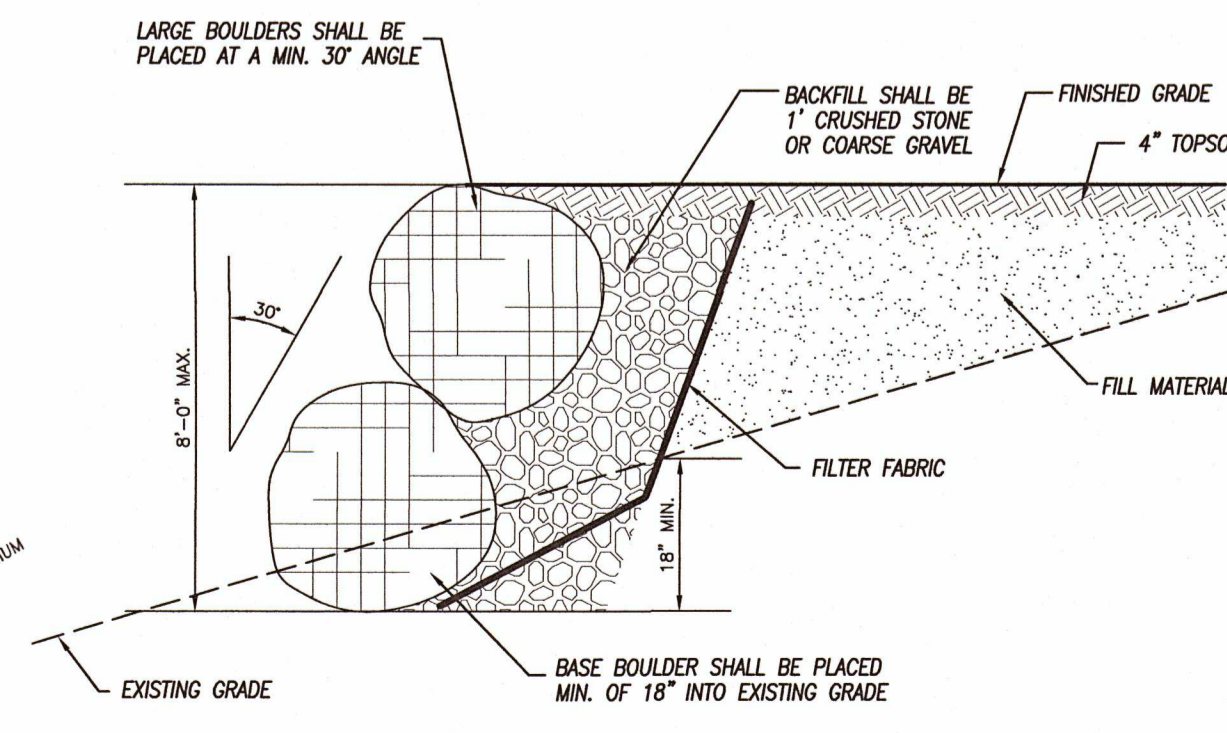
STANDARD D-BOX

NOT TO SCALE



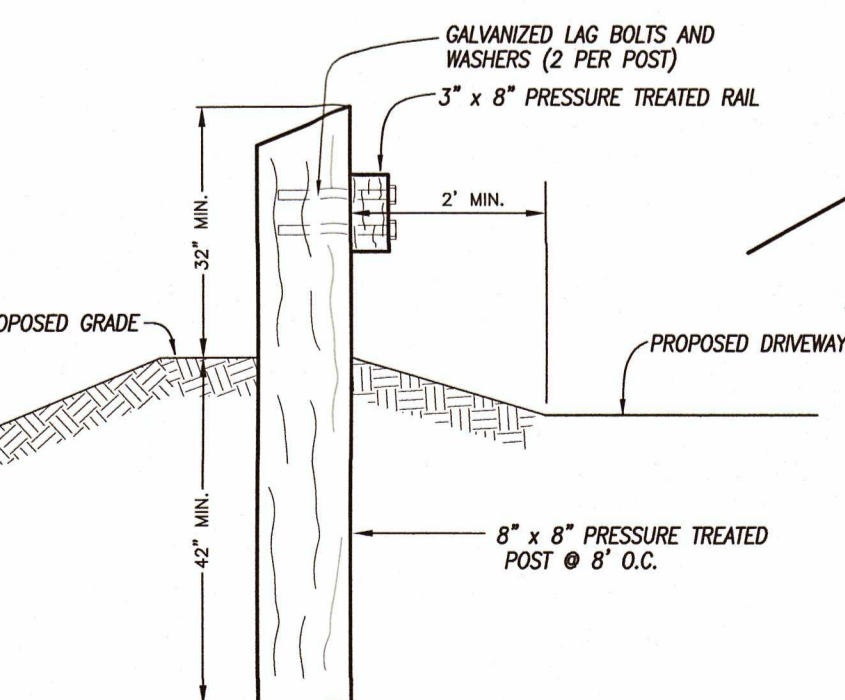
HAYBALE BARRIER

NOT TO SCALE



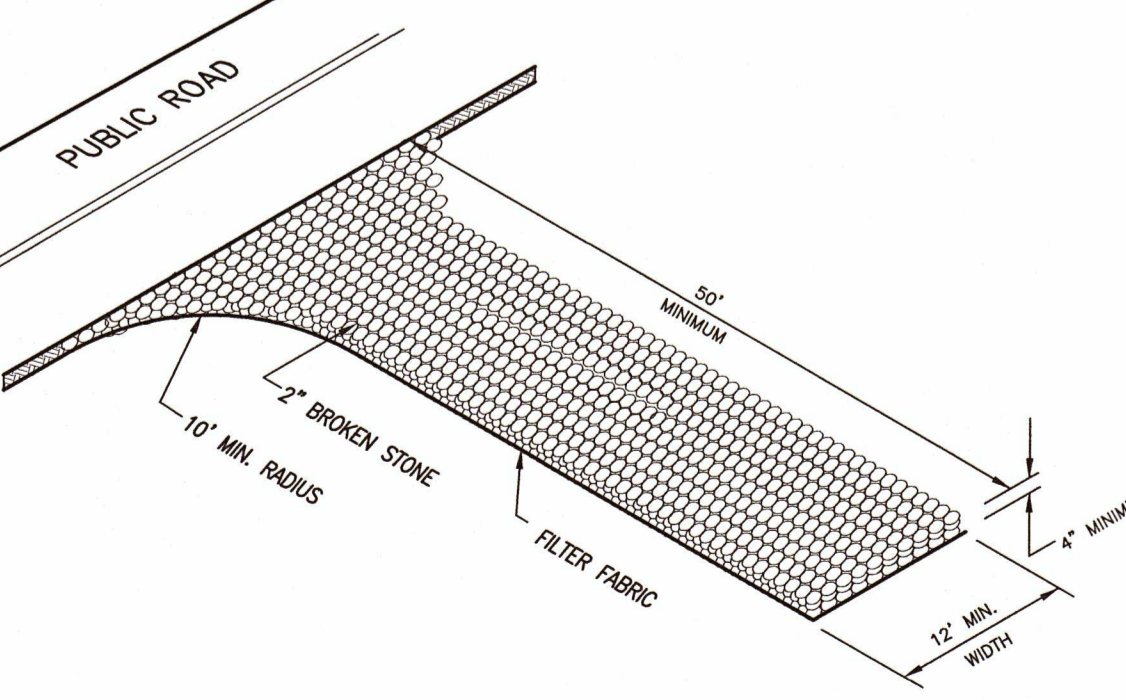
BOULDER RETAINING WALL

NOT TO SCALE



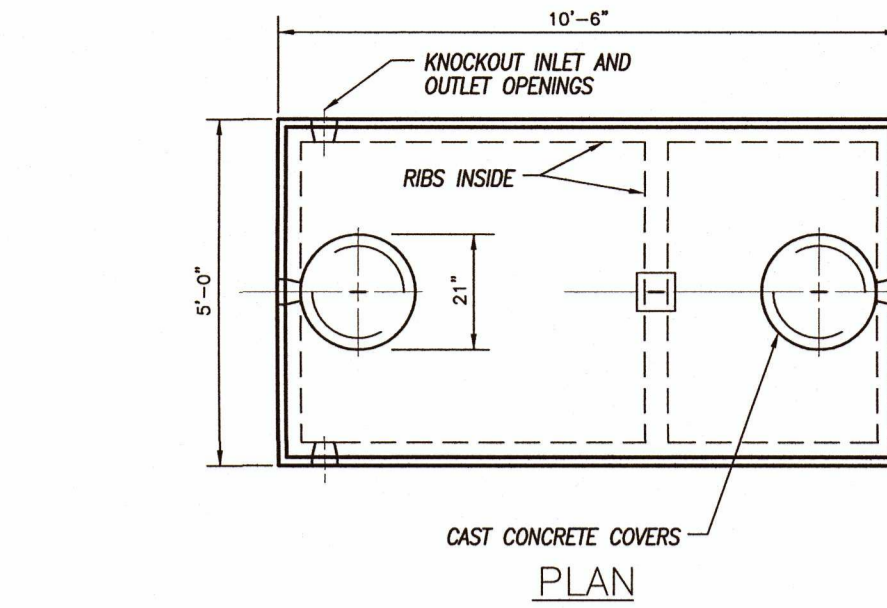
WOOD GUIDE RAIL

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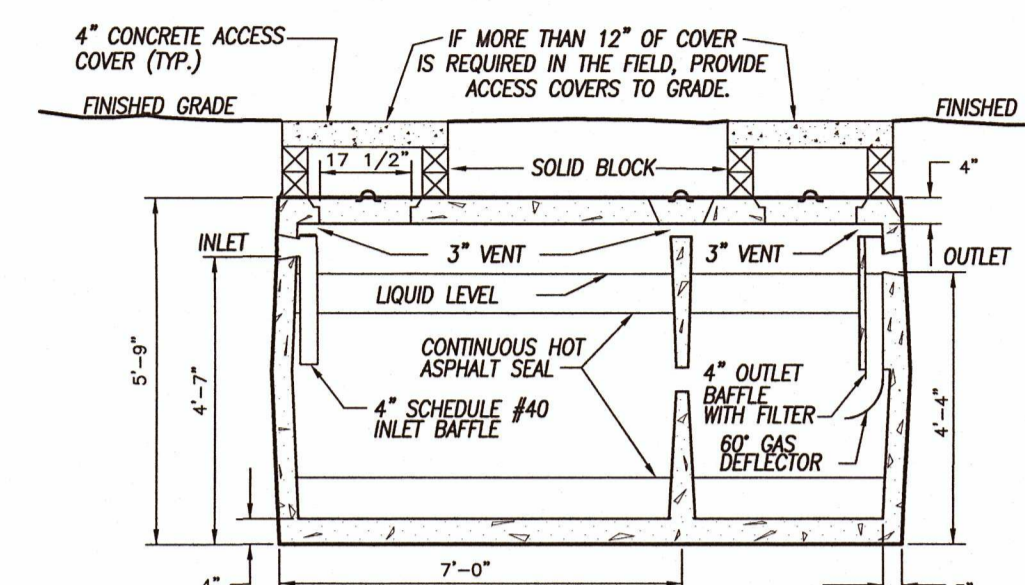


ANTI-TRACKING PAD

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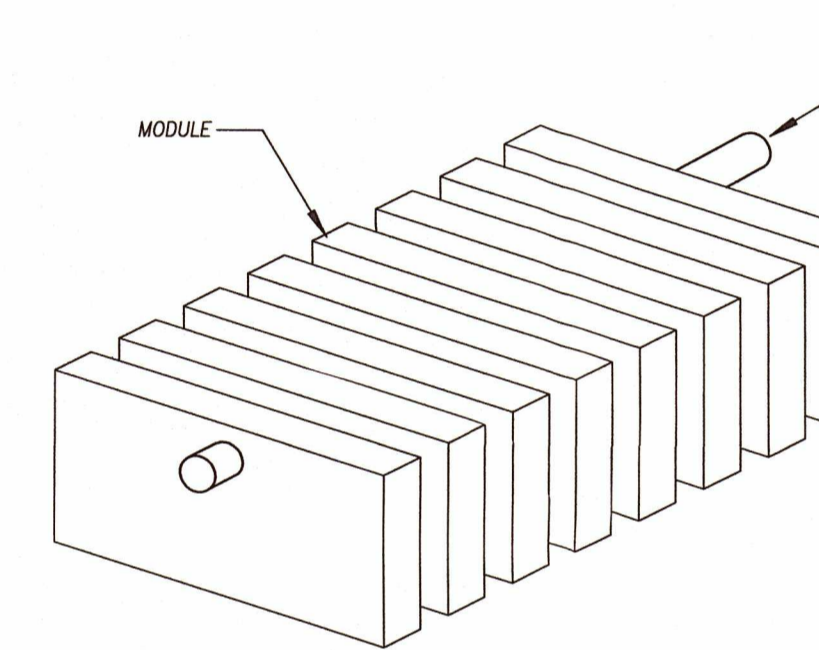
1250 GALLON 2 COMPARTMENT SEPTIC TANK



CROSS SECTION

1250 GALLON 2 COMPARTMENT SEPTIC TANK

NOT TO SCALE



STANDARD DRIVE DETAIL

NOT TO SCALE

1. THE ABOVE DETAIL IS ILLUSTRATIVE ONLY AND DOES NOT APPLY TO EVERY SITUATION. REVIEW YOUR DRIVEWAY PERMIT FOR YOUR SPECIFIC REQUIREMENTS.
2. DRIVEWAYS IN EXCESS OF 10% GRADE, AND ALL COMMON (SHARED) DRIVEWAYS SHALL BE PAVED WITH BITUMINOUS CONCRETE.

REVISIONS	
DATE	DESCRIPTION
08/25/2021	FINAL PLAN REVIEW

DETAIL SHEET

PREPARED FOR

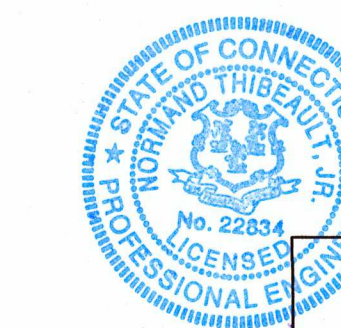
ALICIA BIANCO

61 SHIPPEE SCHOOLHOUSE ROAD
KILLINGLY, CONNECTICUT

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SHEET: 2 OF 2	CHK BY: GG
DWG. No: CLINET FILE	JOB No: 21088



Norman Thibault, Jr. 8/30/2021
NORMAND THIBAUT, JR., P.E. No. 22834 DATE