

LEGEND

These standard symbols may be found in the drawing.

- ★ Light Pole
- CDNC Concrete
- BIT. Bituminous
- U Utility Pole
- WV Water Valve
- GV Gas Valve
- X X Chain Link Fence
- Boundary Line
- - - Proposed Lot Line
- ==== Edge of Road / Drive
- Stone Wall
- CB Catch Basin
- SMH Sewer Manhole
- I.P.S. 5/8" Iron Pin Set
- RR SPIKE FOUND Railroad Spike Found
- D.H.F. Drill Hole Found
- D.H.S. Drill Hole Set
- WLF 2 Wetland Flag
- GMS Granite Merestone
- EX. CONC. MON. Existing Concrete Monument
- TBS To Be Set
- Limits of Clearing/Tree Line
- CHD CT Highway Department Line
- Existing Contour Line
- Proposed Contour Line
- Silt Fence
- Water Line
- Sewer Line
- Electric Service
- Communications Service
- BCLC Bit Conc Lipped Curbing
- Drainage Pipe

NOW OR FORMERLY
Lynette S. Crowley, Et Al
320 Maple Avenue
Tax Assessor Map 23 / Lot 27
Town Clerk Volume 502 Page 19

NOW OR FORMERLY
Leonard A. & Jacqueline M. Szczygiel
95 Gay Hill Road
Tax Assessor Map 23 / Lot 26
Town Clerk Volume 502 Page 17

NOW OR FORMERLY
Lynette S. Crowley, Et Al
320 Maple Avenue
Tax Assessor Map 23 / Lot 27
Town Clerk Volume 502 Page 19

NOW OR FORMERLY
Scott Gregory & Alicia Elizabeth Pahr
145 Gay Hill Road
Tax Assessor Map 23 / Lot 23
Town Clerk Volume 669 Page 262

NOW OR FORMERLY
Stacie M. Vargas & Frederick J. Ritchie II
159 Gay Hill Road
Tax Assessor Map 23 / Lot 22
Town Clerk Volume 623 Page 958

NOW OR FORMERLY
Joseph C. & Cynthia L. Knight
115 Gay Hill Road
Tax Assessor Map 23 / Lot 25
Town Clerk Volume 166 Page 151

Approved by the WPCA or Health District

Montville WPCA _____ Date _____

Ledge Light Health District _____ Date _____

Date of Completion of All Work - _____

Planning and Zoning Chairman or Secretary _____ Date _____

Passive Solar Energy Techniques as Prescribed by Law Have Been Considered in Development of this Plan

Developer _____ Date _____

Engineer _____ Date _____

Erosion and Sediment Control Plan - Certified by the Montville Planning and Zoning Commission

Planning and Zoning Chairman or Secretary _____ Date _____

SURVEY NOTES:

1. This survey has been prepared pursuant to the regulations of the 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; Amended October 20, 2018. This survey type is a PROPERTY SURVEY. It is intended to show AREA TO BE CONVEYED TO JOHN M. & LYNETTE S. CROWLEY.

2. This survey conforms to Class A-2/T-2

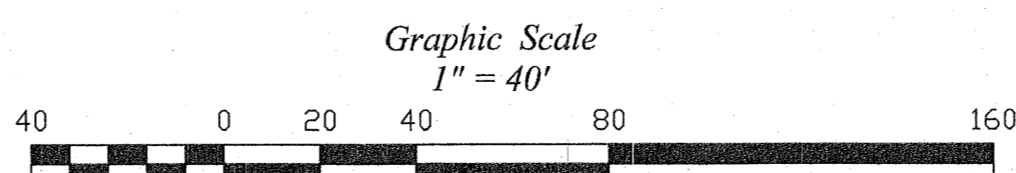
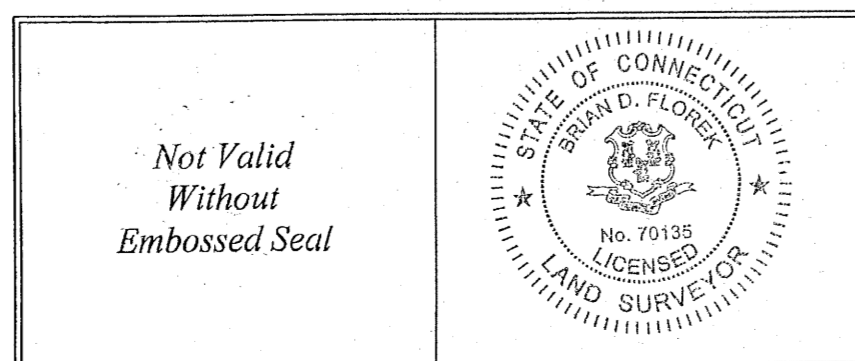
To the best of my knowledge and belief this map is substantially correct as noted thereon.

Brian D. Florek 11/5/22
Date

Brian D. Florek, L.S. #70135
Managing Member, Florek Surveying, LLC
239 Shore Road, Waterford, CT 06385
bflorek@floreksurveyingllc.com (860) 271.6006

Bearing & Distance Chart:

| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| L1 | S 57°25'01" W | 32.68' |
| L2 | S 56°27'57" W | 8.44' |
| L3 | S 52°12'16" W | 50.28' |

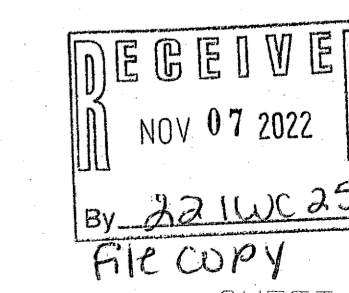


GENERAL NOTES:

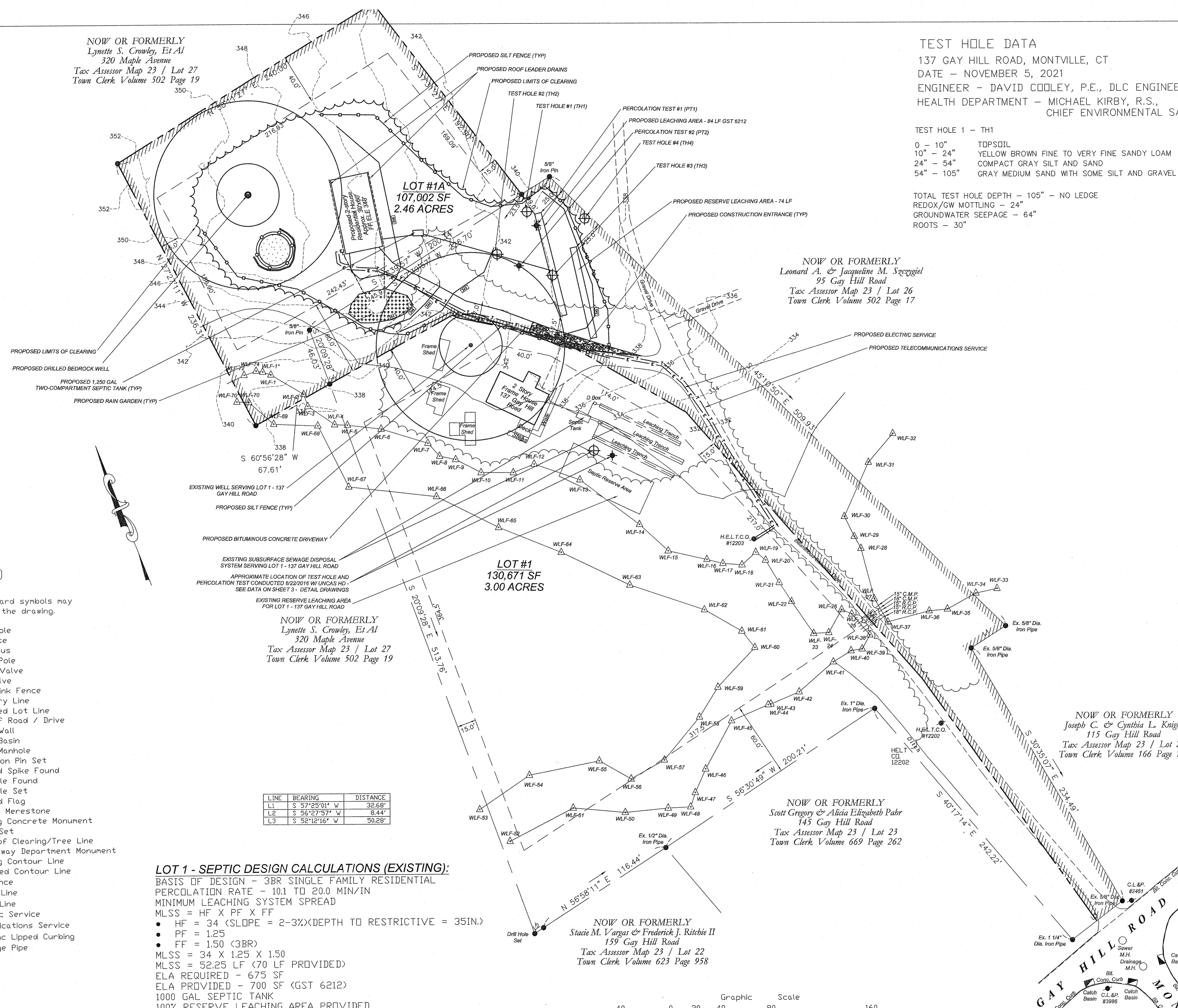
- 1) Reference is made to the following plans:
 A) "Lot Line Adjustment Site Plan For Proposed Addition, Property Belonging To: John M. & Lynette S. Crowley, 137 Gay Hill Road, Montville, Connecticut, Zone: R-40, Scale: 1"=40", May 8, 2016, Revised: June 28, 2016, Sheet 1 of 2. Plan surveyed and mapped by Florek Surveying, LLC.
 B) "Property Map for Lindsay Szczygiel, Gay Hill Road, Montville, CT, Scale: 1"=20", Dated: 3/1/01." Plan surveyed and mapped by Kratzler, Jones & Associates, Inc. Plan recorded on the Montville Land Records as Map #1939.
 C) Map Showing Transfer Of Property From Leopold A. & Jennie S Szczygiel to Leonard & Jacqueline Szczygiel, Gay Hill Road, Montville, CT, Scale: 1"=60", Dated: August 16, 2004. Plan surveyed and mapped by Jones Engineering, LLC. Plan provided to Florek Surveying, LLC by the client.
 D) Plan Showing Property Of John M. & Lynette S. Crowley, 137 Gay Hill Road, Montville, Connecticut, Scale: 1"=40", Dated: October 24, 1993. Map surveyed and mapped by William F. Kent. Plan in Florek Surveying, LLC records.
- 2) Underground utilities are not shown on this plan. Call Before You Dig (C.B.Y.D.) should be called prior to any construction. Surveyor makes no guarantee of items not shown on plan.
- 3) Existing septic system data taken from an as-built map provided to Florek Surveying, LLC by the client.
- 4) Subject property was conveyed subject to a 50' right of way in favor of the grantor, their heirs, successors and assigns for the purpose of ingress and egress to other remaining lands of the grantor.
- 5) The removal or destruction of survey monumentation, whether set or found, as shown on this survey plan may be subject to Connecticut Statute 47-34a.
- 6) North orientation is based on a GPS / RTK observation in November 2021 utilizing the Acorn Network.

PROPERTY SURVEY
PROPERTY BELONGING TO:
137 GAY HILL ROAD SUBDIVISION
JOHN M. & LYNETTE S. CROWLEY
137 GAY HILL ROAD
MONTVILLE, CONNECTICUT
ZONE: R - 40
SCALE: 1" = 40'

REVISIONS:
APRIL 30, 2022
AUGUST 15, 2022



NOW OR FORMERLY
Lynette S. Crowley, Et Al
320 Maple Avenue
Tax Assessor Map 23 / Lot 27
Town Clerk Volume 502 Page 19



TEST HOLE DATA
137 GAY HILL ROAD, MONTVILLE, CT
DATE - NOVEMBER 5, 2021
ENGINEER - DAVID COOLEY, P.E., DLC ENGINEERING SERVICES, LLC
HEALTH DEPARTMENT - MICHAEL KIRBY, R.S.,
CHIEF ENVIRONMENTAL SANITARIAN, UNCAS HD

TEST HOLE 1 - TH1
0 - 10" TOPSOIL
10" - 24" YELLOW BROWN FINE TO VERY FINE SANDY LOAM
24" - 54" COMPACT GRAY SILT AND SAND
54" - 105" GRAY MEDIUM SAND WITH SOME SILT AND GRAVEL
TOTAL TEST HOLE DEPTH - 105" - NO LEDGE
REDOX/GW MOTTLING - 24"
GROUNDWATER SEEPAGE - 64"
ROOTS - 30"

TEST HOLE 2 - TH2
0 - 10" TOPSOIL
10" - 28" YELLOW BROWN FINE TO VERY FINE SANDY LOAM
28" - 97" GRAY MEDIUM SAND WITH SOME SILT AND GRAVEL
TOTAL TEST HOLE DEPTH - 97" - NO LEDGE
REDOX/GW MOTTLING - 24"
GROUNDWATER SEEPAGE - 70"
ROOTS - 30"

TEST HOLE 3 - TH3
0 - 11" TOPSOIL
11" - 32" YELLOW BROWN FINE TO VERY FINE SANDY LOAM
32" - 99" GRAY MEDIUM SAND WITH SOME SILT AND GRAVEL
TOTAL TEST HOLE DEPTH - 99" - NO LEDGE
REDOX/GW MOTTLING - 32"
GROUNDWATER SEEPAGE - 74"
ROOTS - 34"

TEST HOLE 4 - TH4
0 - 12" TOPSOIL
12" - 25" YELLOW BROWN FINE TO VERY FINE SANDY LOAM
25" - 108" GRAY MEDIUM SAND WITH SOME SILT AND GRAVEL
TOTAL TEST HOLE DEPTH - 108" - NO LEDGE
REDOX/GW MOTTLING - 25"
GROUNDWATER SEEPAGE - 69"
ROOTS - 17"

LOT 1A - SEPTIC DESIGN CALCULATIONS:
BASIS OF DESIGN - 4BR SINGLE FAMILY RESIDENTIAL
PERCOLATION RATE - LESS THAN 10.1 MIN/IN
MINIMUM LEACHING SYSTEM SPREAD
MLSS = HF X PF X FF
• HF = 42 (SLOPE = 3.9%) X DEPTH TO RESTRICTIVE = 24IN.)
• PF = 1.0
• FF = 1.75 (4BR)
MLSS = 42 X 1.0 X 1.75
MLSS = 73.5 LF (84 LF PROVIDED)
ELA REQUIRED - 577.5 SF
ELA PROVIDED - 840 SF (GST 6212)
1250 GAL SEPTIC TANK
100% RESERVE LEACHING AREA PROVIDED

| | BULK REQUIREMENTS/ZONING COMPLIANCE TABLE | | |
|---|---|-------------------------|------------------------|
| | R-40 ZONE - REAR LOTS (Sections 8 & 4.11.4) | | |
| | REQUIRED | LOT 1 PROVIDED | LOT 1A PROVIDED |
| MINIMUM LOT AREA (BEYOND 150 FT LOT WIDTH): | 60,000 FT ² | 122,467 FT ² | 64,817 FT ² |
| MINIMUM LOT FRONTAGE: | 25 FT | 25 FT | 25 FT |
| MINIMUM FRONT YARD SETBACK: | 60 FT | 332 FT | 75 FT |
| MINIMUM SIDE YARD SETBACK: | 15 FT | 33 FT | 86 FT |
| MINIMUM REAR YARD SETBACK: | 40 FT | 58 FT | 101 FT |
| MAXIMUM BUILDING HEIGHT: | 35 FT | <35 FT | <35 FT |
| MINIMUM ACCESSORY BUILDING SETBACK: | 10 FT | 11 FT | N/A |

LEGEND

These standard symbols may be found in the drawing.

- Light Pole
- CONC. Concrete
- BIT. Bituminous
- U Utility Pole
- WV Water Valve
- GV Gas Valve
- X X Chain Link Fence
- Boundary Line
- Proposed Lot Line
- Edge of Road / Drive
- Stone Wall
- CB Catch Basin
- SMH Sewer Manhole
- I.P.S. 5/8" Iron Pin Set
- RR SPIKE FOUND Railroad Spike Found
- D.H.F. Drill Hole Found
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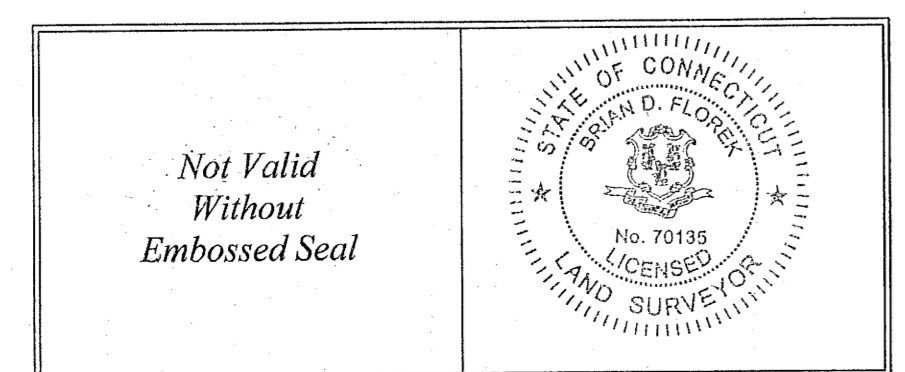
| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| L1 | S 57°25'01" W | 32.68' |
| L2 | S 56°27'57" W | 8.44' |
| L3 | S 52°11'16" W | 50.29' |

LOT 1 - SEPTIC DESIGN CALCULATIONS (EXISTING):
BASIS OF DESIGN - 3BR SINGLE FAMILY RESIDENTIAL
PERCOLATION RATE - 10.1 TO 20.0 MIN/IN
MINIMUM LEACHING SYSTEM SPREAD
MLSS = HF X PF X FF
• HF = 34 (SLOPE = 2-3%) X DEPTH TO RESTRICTIVE = 35IN.)
• PF = 1.25
• FF = 1.50 (3BR)
MLSS = 34 X 1.25 X 1.50
MLSS = 52.25 LF (70 LF PROVIDED)
ELA REQUIRED - 675 SF
ELA PROVIDED - 700 SF (GST 6212)
1000 GAL SEPTIC TANK
100% RESERVE LEACHING AREA PROVIDED

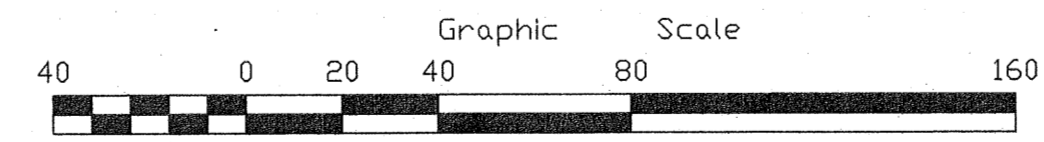
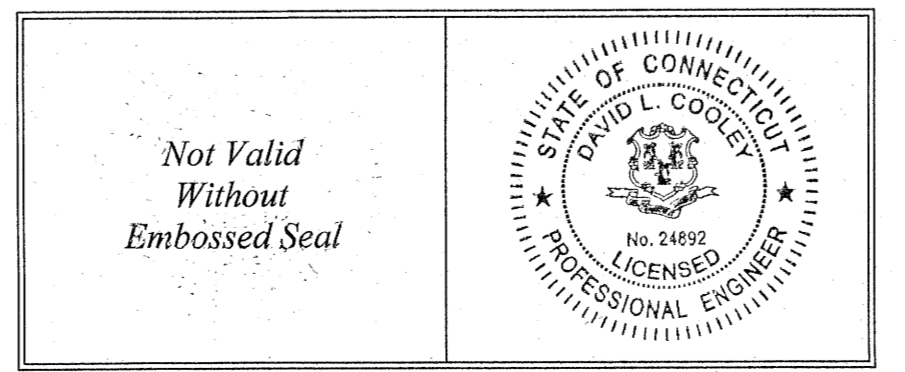
SURVEY NOTES:

- This survey has been prepared pursuant to the regulations of the 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 survey type is a Subdivision Plan. It is intended to show a Proposed Building Lot.
- This survey conforms to Class A-2/T-2

To the best of my knowledge and belief this map is substantially correct as noted thereon.
Brian D. Florek, L.S. #70135 Date 11/5/22
Managing Member, Florek Surveying, LLC



To the best of my knowledge and belief this plan is substantially correct as noted thereon.
David Cooley, P.E. #24892 Date 11/5/22
Managing Member, DLC Engineering Services, LLC



- GENERAL NOTES:**
- Reference is made to the following plans:
A) "Lot Line Adjustment/Site Plan For Proposed Addition, Property Belonging To: John M. & Lynette S. Crowley, 137 Gay Hill Road, Montville, Connecticut, Zone: R-40, Scale: 1"=40', May 8, 2016, Revised: June 28, 2016, Sheet 1 of 2."
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 - Subject property was conveyed subject to a 50' right of way in favor of the grantor, their heirs, successors and assigns for the purpose of ingress and egress to other remaining lands of the grantor.

137 GAY HILL ROAD SUBDIVISION
PROPERTY BELONGING TO:
JOHN M. & LYNETTE S. CROWLEY
137 GAY HILL ROAD
MONTVILLE, CONNECTICUT
ZONE: R - 40
SCALE: 1" = 40'

REVISIONS:
October 11, 2021
June 22, 2022
JULY 26, 2022
AUGUST 15, 2022

PERCOLATION TEST DATA

137 GAY HILL ROAD, MONTVILLE, CT
 DATE - NOVEMBER 5, 2021
 ENGINEER - DAVID COOLEY, P.E., DLC ENGINEERING SERVICES, LLC

PERCOLATION TEST 1 - PT1

DEPTH - 15"
 PRE-SOAK - 11:50AM

| TIME | READING | WATER LEVEL DROP (RATE MIN./IN.) | |
|------|---------------|----------------------------------|------|
| 1:05 | 5.40" | | |
| 1:10 | 6.72" | 1.32" | 3.79 |
| 1:15 | 7.92" | 1.20" | 4.17 |
| 1:20 | 8.88" | 0.96" | 5.21 |
| 1:25 | 9.60" | 0.72" | 6.94 |
| 1:30 | 10.32" | 0.72" | 6.94 |
| 1:35 | 10.92" | 0.60" | 8.33 |
| 1:40 | 11.52" | 0.60" | 8.33 |
| 1:50 | 12.72" | 1.20" | 8.33 |
| 2:00 | 13.80" | 1.08" | 9.26 |
| 2:10 | 14.88" | 1.08" | 9.26 |
| 2:20 | FULLY DRAINED | | |

PERCOLATION RATE AT 15" DEPTH = < 10.1 MINUTES/INCH

PERCOLATION TEST 2 - PT2

DEPTH - 15"
 PRE-SOAK - 11:50AM

| TIME | READING | WATER LEVEL DROP (RATE MIN./IN.) | |
|------|---------------|----------------------------------|------|
| 1:03 | 7.44" | | |
| 1:08 | 9.60" | 2.16" | 2.32 |
| 1:13 | 10.68" | 1.08" | 4.63 |
| 1:18 | 11.76" | 1.08" | 4.63 |
| 1:23 | 12.60" | 0.84" | 5.95 |
| 1:28 | 13.56" | 0.96" | 5.21 |
| 1:33 | 14.16" | 0.60" | 8.33 |
| 1:38 | 14.88" | 0.72" | 6.94 |
| 1:43 | 15.48" | 0.60" | 8.33 |
| 1:53 | 16.56" | 1.08" | 9.26 |
| 2:03 | 17.64" | 1.08" | 9.26 |
| 2:13 | FULLY DRAINED | | |

PERCOLATION RATE AT 15" DEPTH = < 10.1 MINUTES/INCH

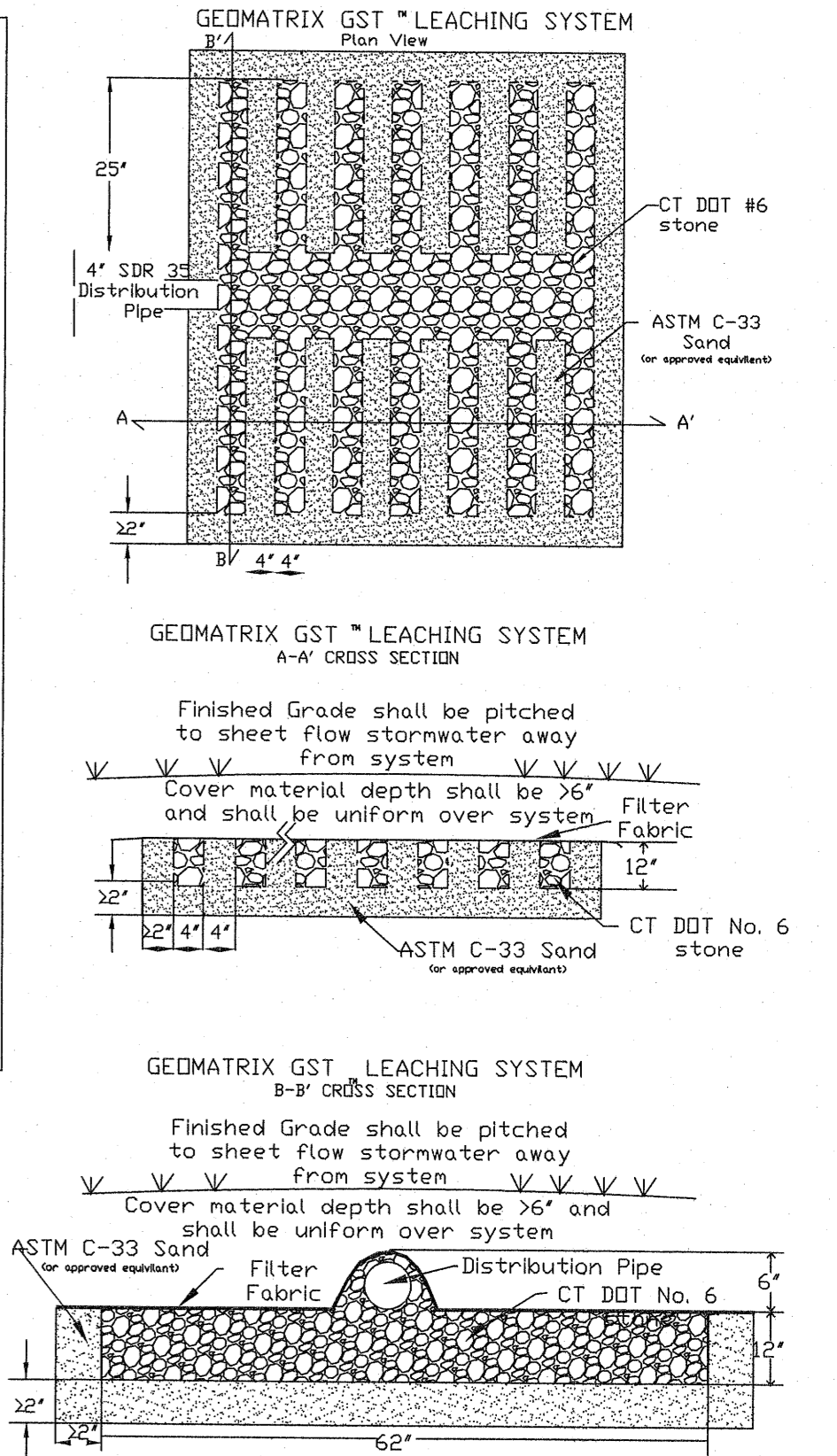
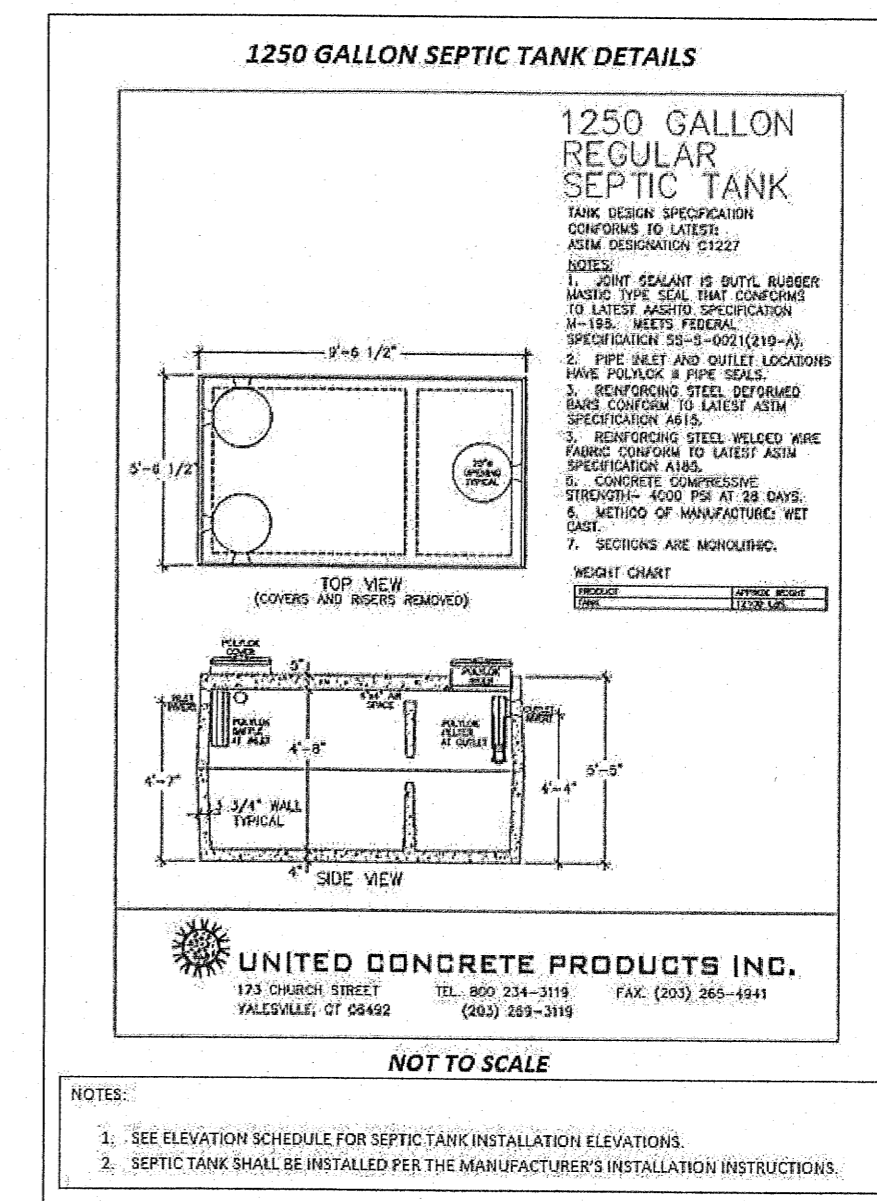
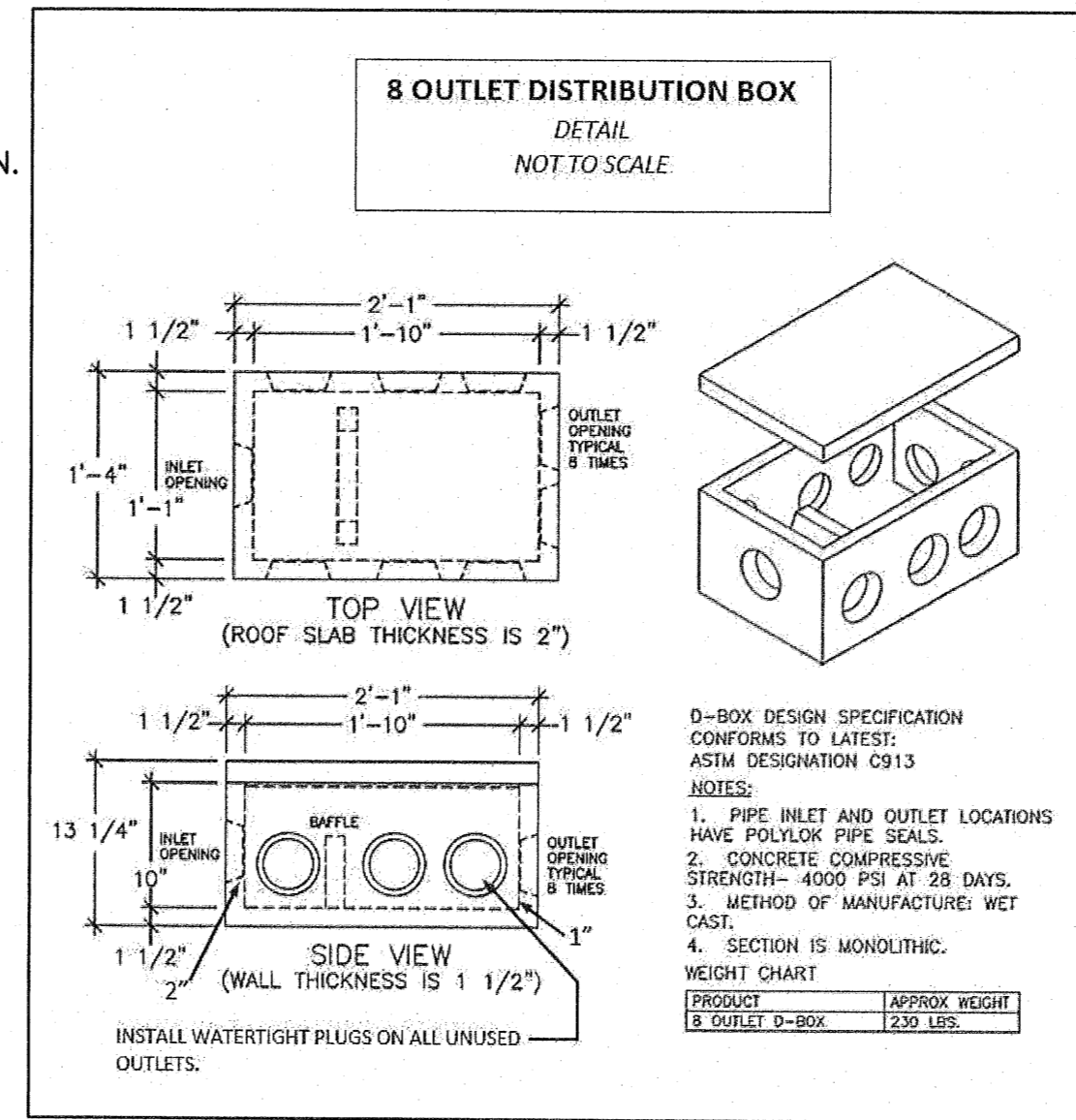
CONSTRUCTION SEQUENCE:

1. SURVEYOR TO MARK LIMITS OF CLEARING AND THE AREA OF DISTURBANCE.
2. INSTALL SILT FENCE AS INDICATED ON THE SITE PLAN AND PER EROSION AND SEDIMENT CONTROL PLAN.
3. INSTALL CONSTRUCTION ENTRANCE AS INDICATED ON THE SITE PLAN AND PER EROSION AND SEDIMENT CONTROL PLAN.
4. SURVEYOR TO MARK LIMITS OF FOUNDATION FOR PROPOSED BUILDING.
5. EXCAVATE FOR AND CONSTRUCT FOUNDATION FOR PROPOSED BUILDING.
6. EXCAVATE FOR AND INSTALL UTILITY SERVICE TO THE PROPOSED BUILDING.
7. CONSTRUCT PROPOSED BUILDING.
8. COMPLETE FINAL GRADING WITHIN THE AREA OF DISTURBANCE.
9. INSTALL SEPTIC SYSTEM.
10. INSTALL DRIVEWAY AND PARKING AREAS.
11. TOPSOIL OF EXPOSED SOILS TO PREPARE FOR RESEEDING.
12. RESEED ALL EXPOSED AREAS PER EROSION AND SEDIMENT CONTROL PLAN. COVER WITH STRAW.
13. SILT FENCE TO REMAIN IN PLACE UNTIL ALL UP-GRADIENT AREAS ARE PERMANENTLY ESTABLISHED TO THE SATISFACTION OF THE TOWN.

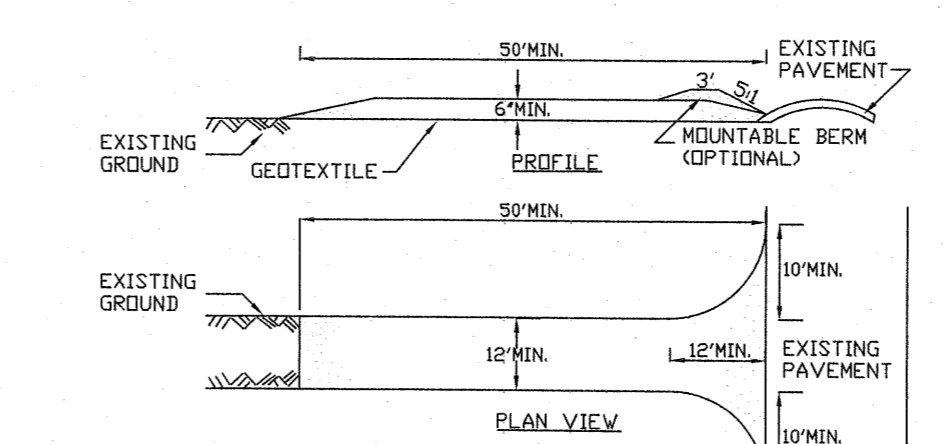
EROSION AND SEDIMENT CONTROL PLAN:

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AND INSTALLED PER THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.

1. ESTIMATED DURATION OF MAJOR CONSTRUCTION ACTIVITIES - 90 DAYS.
2. SURVEYOR TO MARK WETLAND SETBACK LIMITS ON THE PROPERTY AS APPLICABLE.
3. SILT FENCE IS TO BE INSTALLED, AS INDICATED ON THE SITE PLAN, PRIOR TO ANY CONSTRUCTION ACTIVITY AND INSPECTED BY TOWN STAFF. A MINIMUM OF 48 HOURS NOTICE SHALL BE GIVEN FOR THE PURPOSE OF INSPECTION PRIOR TO ANY CONSTRUCTION ACTIVITIES.
4. CONSTRUCTION ENTRANCE TO BE INSTALLED, AS INDICATED ON THE SITE PLAN, PRIOR TO ANY CONSTRUCTION ACTIVITY.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS INDICATED IN THE CONSTRUCTION SEQUENCE ON THE SITE PLAN.
6. STOCKPILE AREAS MUST BE DIRECTLY CONTAINED WITHIN SILT FENCE AROUND THE COMPLETE PERIMETER.
7. EXCESS SPOILS SHALL BE DISPOSED OF OFF SITE AT AN APPROPRIATELY LICENSED FACILITY.
8. ALL REMAINING DISTURBED AREAS SHALL BE SEEDING UPON COMPLETION OF CONSTRUCTION IF DURING THE PLANTING SEASON, RECOMMENDED SEEDING DATES SHALL BE BETWEEN APRIL 15 AND SEPTEMBER 15. SEED MIX WILL CONSIST OF 0.45 LB PER 1,000 S.F. OF CREEPING RED OR TALL FESCUE, 0.05 LB PER 1,000 S.F. OF REDTOP AND 0.20 LB PER 1,000 S.F. OF BIRD'S FOOT TREFLOID WITH INNOCULENT. FERTILIZER MAY BE APPLIED AT THE RATE OF 7.5 LB PER 1,000 S.F. OF 10-10-10.
9. SILT FENCE BARRIER TO BE MAINTAINED AND LEFT IN PLACE UNTIL ALL DISTURBED AREAS HAVE ESTABLISHED VEGETATION TO THE SATISFACTION OF TOWN STAFF.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF SILT FENCE AND EROSION AND SEDIMENT CONTROL CONDITIONS ONSITE DURING CONSTRUCTION.
11. PROJECT ENGINEER MAY BE CALLED FOR SPECIAL INSPECTIONS TO ASSESS EROSION AND SEDIMENT CONTROL PLAN EFFECTIVENESS AND MAKE REVISIONS AS NECESSARY.
12. PROJECT ENGINEER MAY ALSO BE CALLED IN TO ASSESS EMERGENCY SITUATIONS (I.E. SEVERE FLOODING, RAINS OR OTHER ENVIRONMENTAL PROBLEMS).

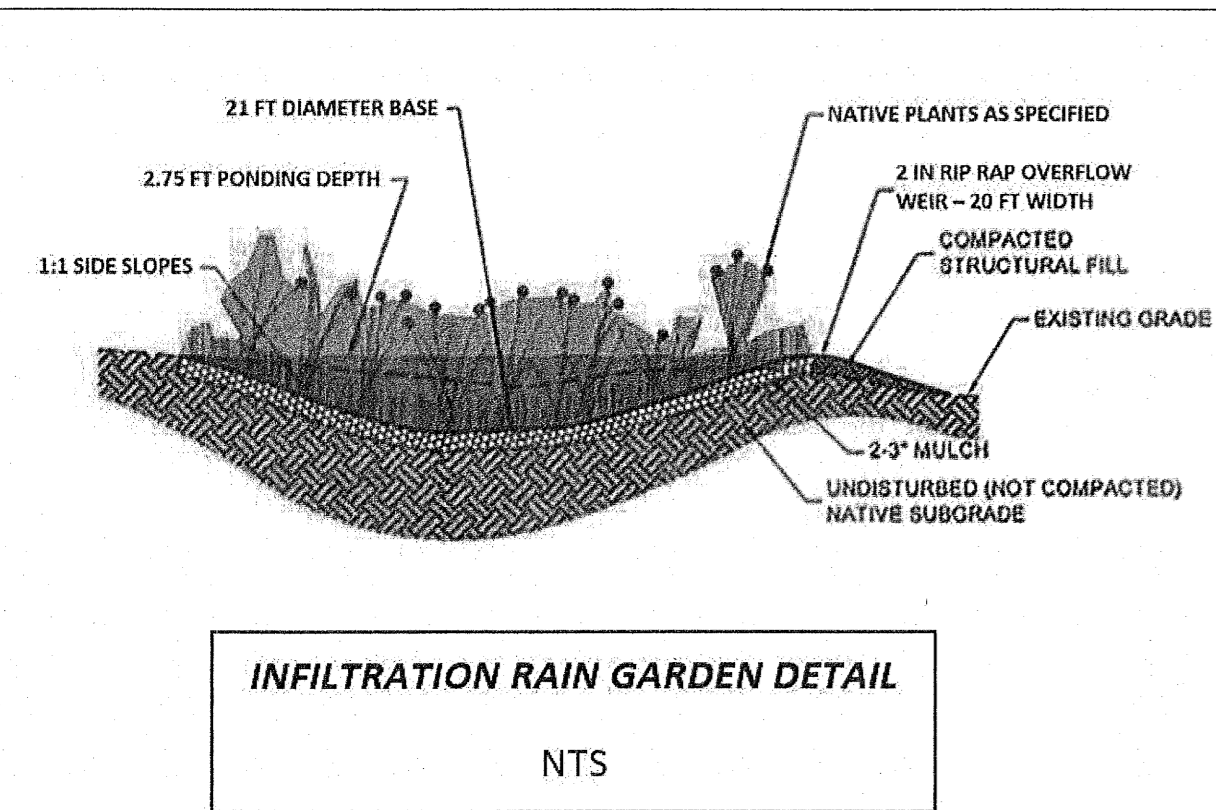
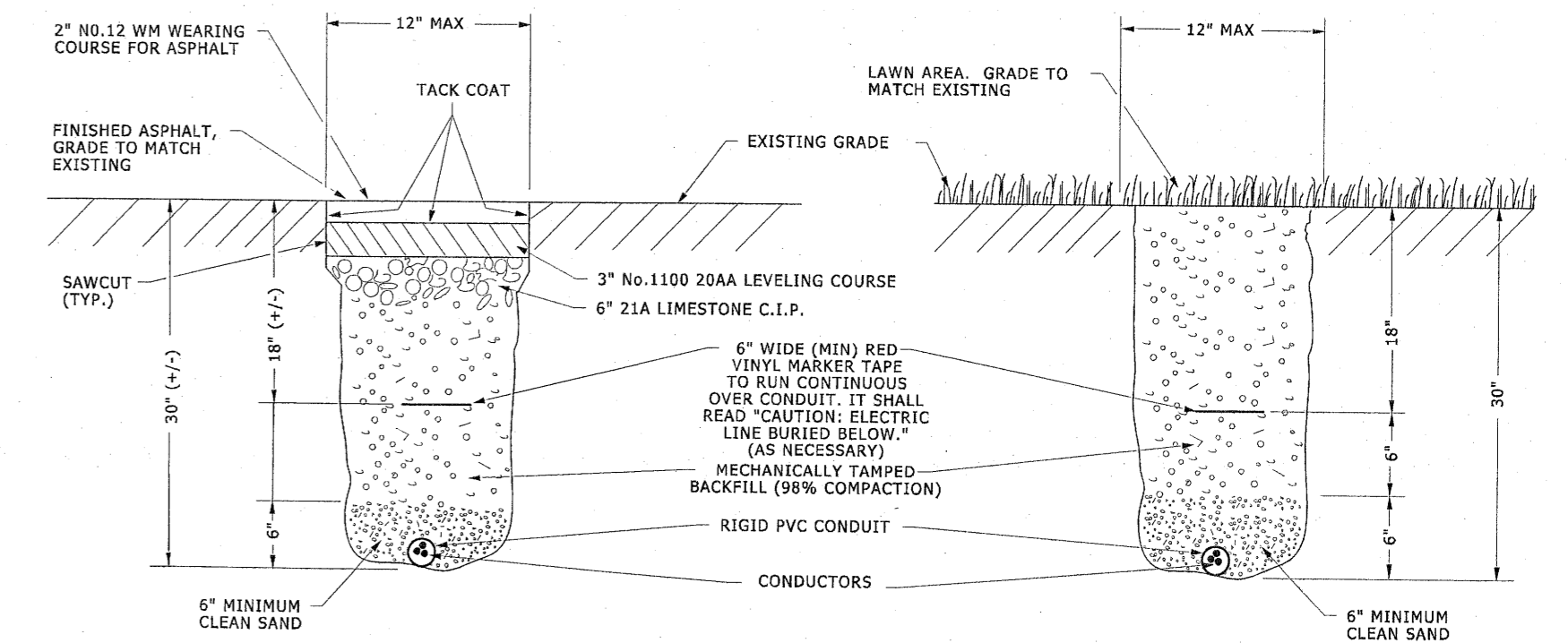


CONSTRUCTION ENTRANCE DETAIL



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLS DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



- RAIN GARDEN NOTES:**
1. CONSTRUCTED TO SCALE AND GRADES INDICATED ON SITE PLAN.
 2. RAIN GARDEN TO BE PLANTED WITH THE FOLLOWING NATIVE PLANT THROUGHOUT THE MULCHED AREA. PLANTS ARE TO BE 2 IN. PLUGS.
 - a. SWAMP MILKWEED
 - b. NEW ENGLAND ASTER
 - c. FOX SEDGE
 - d. SPOTTED JOE-PYE WEEED
 - e. BLUE FLAG
 - f. CARDINALFLOWER
 - g. WILD BERGAMOT
 - h. GOLDEN RAGWORT
 - i. SMOOTH BEARDEBTONGUE
 - j. CUT-LEAF CONEFLOWER
 - k. IRONWEED
 - l. GOLDEN ALEXANDERS

137 GAY HILL ROAD - EXISTING STRUCTURE DATA

TEST HOLE DATA - EXISTING STRUCTURE

137 GAY HILL ROAD, MONTVILLE, CT
 DATE - JUNE 22, 2016
 PRESENT - BILL BOND, JOHN & LYNETTE CROWLEY HEALTH DEPARTMENT - KIMBERLY HAMLEY, SANITARIAN, UNCAS HD

TEST HOLE 1 - TH1
 0 - 15" TOPSOIL
 15" - 35" BROWN FINE SANDY LOAM
 35" - 75" WET SAND AND GRAVEL

TOTAL TEST HOLE DEPTH - 75" - NO LEDGE
 REDOX/GW MOTTLING - 35"

PERCOLATION TEST DATA - EXISTING STRUCTURE

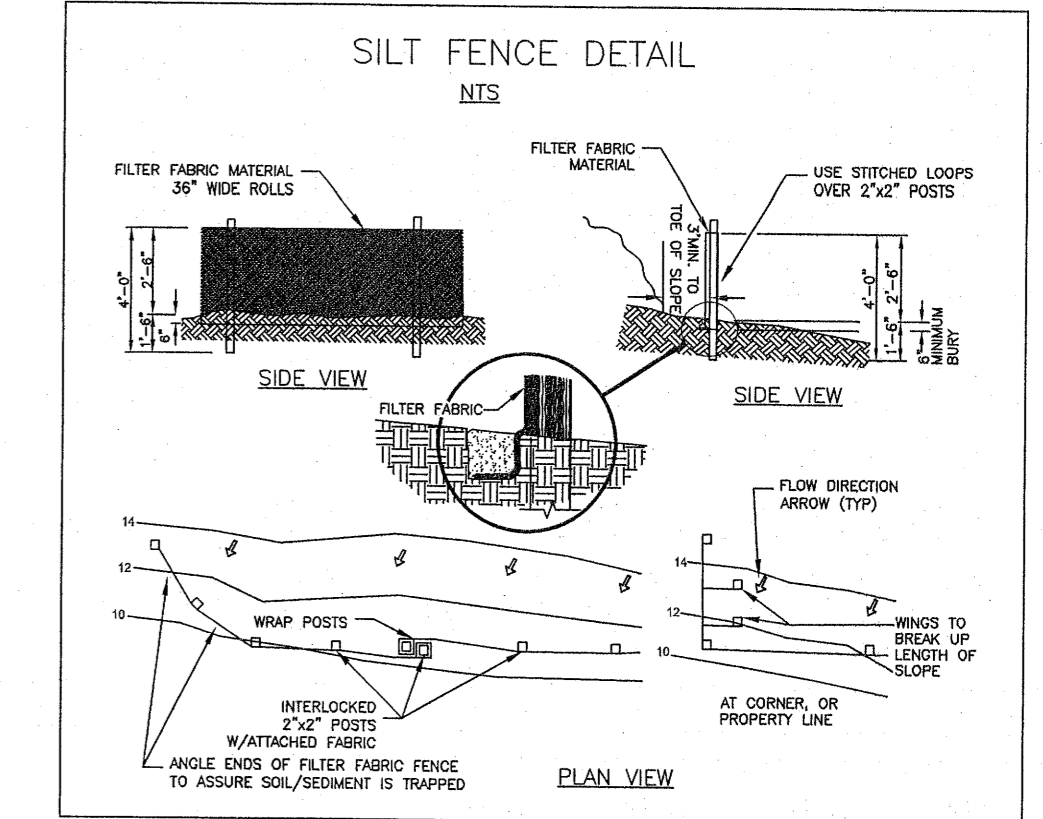
137 GAY HILL ROAD, MONTVILLE, CT
 DATE - JUNE 22, 2016
 PRESENT - BILL BOND, JOHN & LYNETTE CROWLEY HEALTH DEPARTMENT - KIMBERLY HAMLEY, SANITARIAN, UNCAS HD

PERCOLATION TEST 1 - PT1

DEPTH - 24"
 PRE-SOAK - 9:10AM

| TIME | READING | WATER LEVEL DROP (RATE MIN./IN.) | |
|-------|---------|----------------------------------|-------|
| 9:45 | 4.50" | | |
| 9:51 | 15.50" | 11.00" | 0.55 |
| 9:59 | 18.00" | 2.50" | 3.20 |
| 10:06 | 19.50" | 1.50" | 4.67 |
| 10:20 | 21.00" | 1.50" | 9.33 |
| 10:25 | 21.50" | 0.50" | 10.00 |
| 10:30 | 21.50" | 0.00" | 0.00 |
| 10:35 | 22.00" | 0.50" | 10.00 |
| 10:40 | 23.00" | 1.00" | 5.00 |
| 10:45 | 23.50" | 0.50" | 10.00 |

PERCOLATION RATE AT 24" DEPTH = 10 MINUTES/INCH



DETAIL DRAWINGS
137 GAY HILL ROAD SUBDIVISION
 PROPERTY BELONGING TO:
JOHN M. & LYNETTE S. CROWLEY
137 GAY HILL ROAD
MONTVILLE, CONNECTICUT

REVISIONS:
 June 27, 2022
 JULY 26, 2022
 AUGUST 15, 2022

WATER QUALITY VOLUME

THE WATER QUALITY VOLUME (WQV) FOR THE SUBDIVISION IS CALCULATED TO BE 2,071 FT³ AS PRESENTED BELOW. THE WQV IS TREATED WITH A PROPOSED RAIN GARDEN ON LOT 1A WITH MINIMUM 2,100 FT³ OF TREATMENT CAPACITY.

$$WQV = \frac{(1')(R)(A)}{12}$$

$$WQV = 0.0475 \text{ acre} - \text{foot}$$

$$WQV = 2,071 \text{ ft}^3$$

Where,
 $R = 0.05 + 0.009(I)$
 Where,
 $I = \text{percent impervious cover}$
 $I = 6.06\% (6.06)$
 $R = 0.05 + 0.009(6.06)$
 $R = 0.1045$
 $A = 5.46 \text{ acres}$