

CROWLEY SUBDIVISION

137 GAY HILL ROAD, MONTVILLE, CONNECTICUT

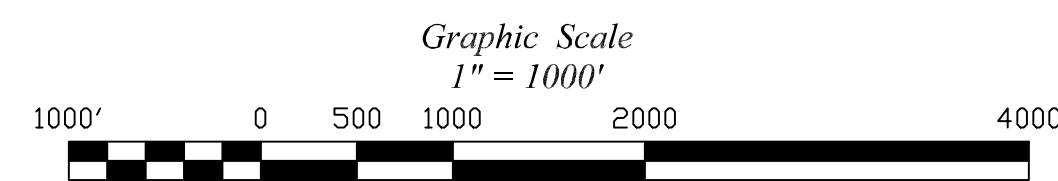
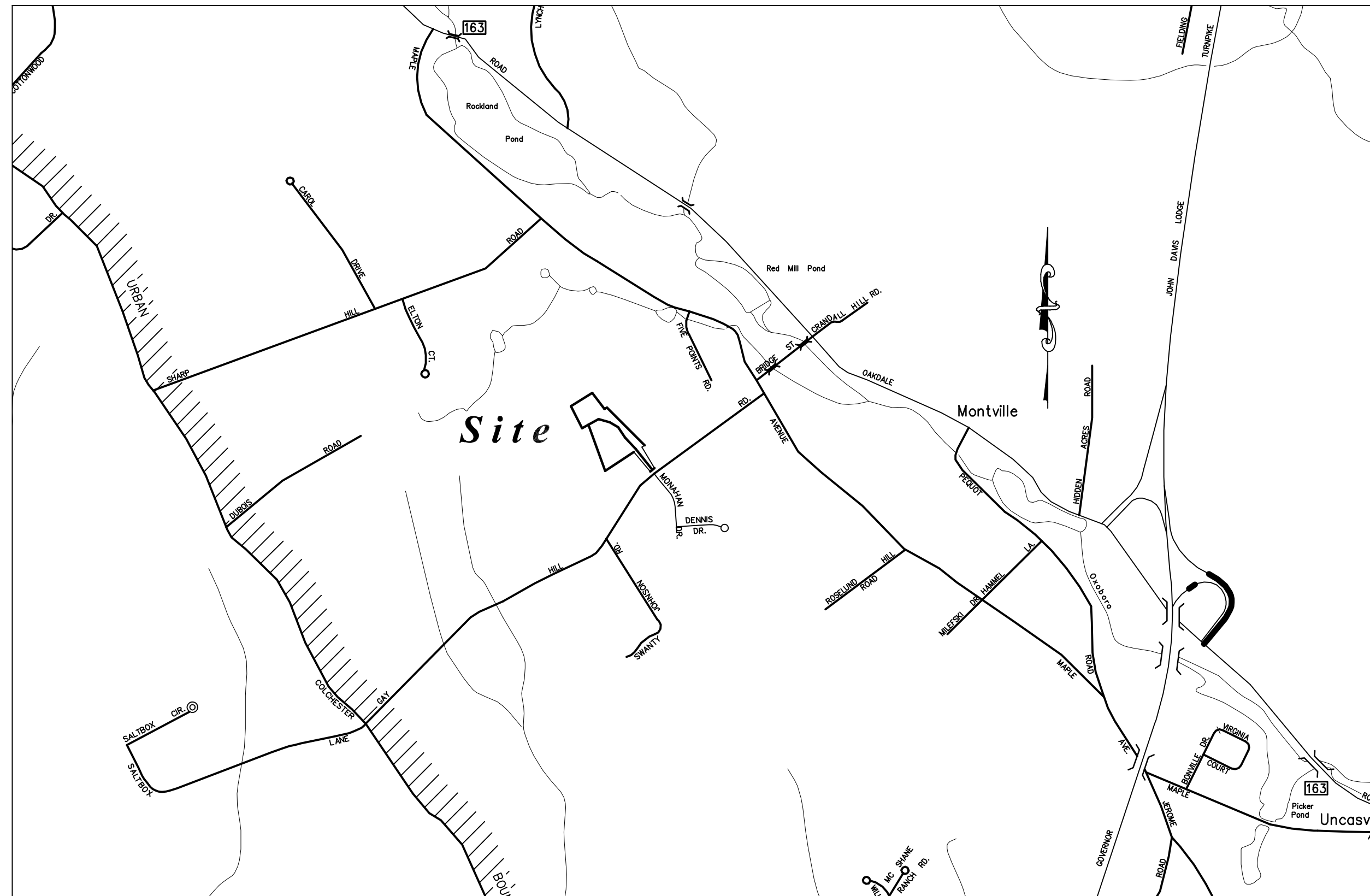
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Applicant: John & Lynette Crowley
 Mailing Address: 137 Gay Hill Road, Montville, CT
 Phone: 860-885-4763
 Email: jcrowley27@sbcglobal.net

Revision Dates:
 December 2, 2022
 December 6, 2022
 December 12, 2022

Approved by Health District

Uncas Health District _____ Date _____

Date of Completion of All Work - _____

Approved by the Montville Planning and Zoning Commission:

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 _____

Date of completion for all work: _____

LAND SURVEYOR:

Florek Surveying, LLC

239 Shore Road
 Waterford, CT 06385
 860-271-6006

bflorek@floreksurveyingllc.com

WETLAND SCIENTIST:

Cowen EcoDesign, LLC
 Ecological Design, Wetland, Biological and Soil Sciences

ENGINEER:

DLC ENGINEERING SERVICES, LLC
 STORMWATER DRAINAGE • SEPTIC SYSTEMS • SITE DESIGN
 259 NOANK LEDYARD ROAD
 MYSTIC, CT 06355
 860-966-5528
 dlcengineeringservicesllc@gmail.com

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. CDNC. MON. Existing Concrete Monument To Be Set
- TBS To Be Set
- Limits of Clearing/Tree Line
- CT Highway Department Monument
- Existing Contour Line
- Proposed Contour Line
- Silt Fence
- Water Line
- Sewer Line
- Electric Service
- Communications Service
- 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

Note: There is an existing 50' easement in favor of 320 Maple Avenue and 95 Gay Hill Road over the extents of the former 137 Gay Hill Road prior to the Lot Line Revisions per Volume 618 Page 495 and Volume 684 Page 789.

This easement recorded in Volume 151 Page 1043 calls for "a 50' Right of Way in favor of the releasor (Leopold & Jennie Y. Szczygiel), their heirs, successors and assigns for the purpose of ingress and egress to other remaining lands of the releasors."

This easement is most likely intended to follow the driveway, but it's location is not defined in Volume 151 Page 1043.

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 Kratzer, 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.
 E) Lot Line Revision Survey property belonging to John M. & Lynette S. Crowley 137 Gay Hill Rd Montville, Connecticut Zone: R-40 Scale: 1"=40' Dated April 30, 2022 Revised to July 16, 2022. Filed on the Town of Montville Land Records on November 7, 2022 as Map 2875.
- 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.

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

Bearing & Distance Chart:

LINE	BEARING	DISTANCE
L1	S 57°25'01" W	32.68'
L2	S 56°27'57" W	8.44'
L3	N 57°39'57" E	26.36'

SURVEY NOTES:

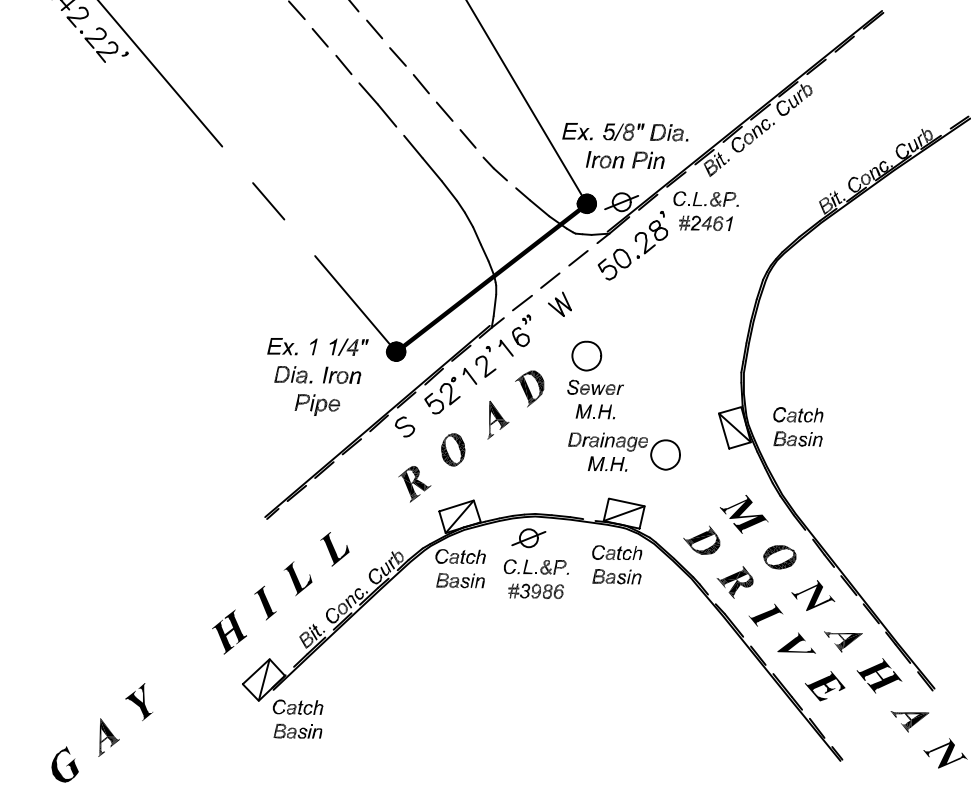
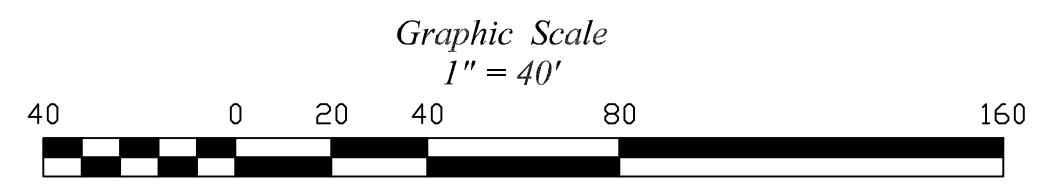
1. This survey has been prepared pursuant to the regulations of the Connecticut State Agencies, Sections 20-300b-1 through 20-300b-20 and the "Standards for surveys and maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996; Amended October 20, 2018. This survey type is a PROPERTY SURVEY. It is intended to show the CURRENT PROPERTY CONFIGURATION FOR 137 GAY HILL ROAD.

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

Not Valid
 Without
 Embossed Seal

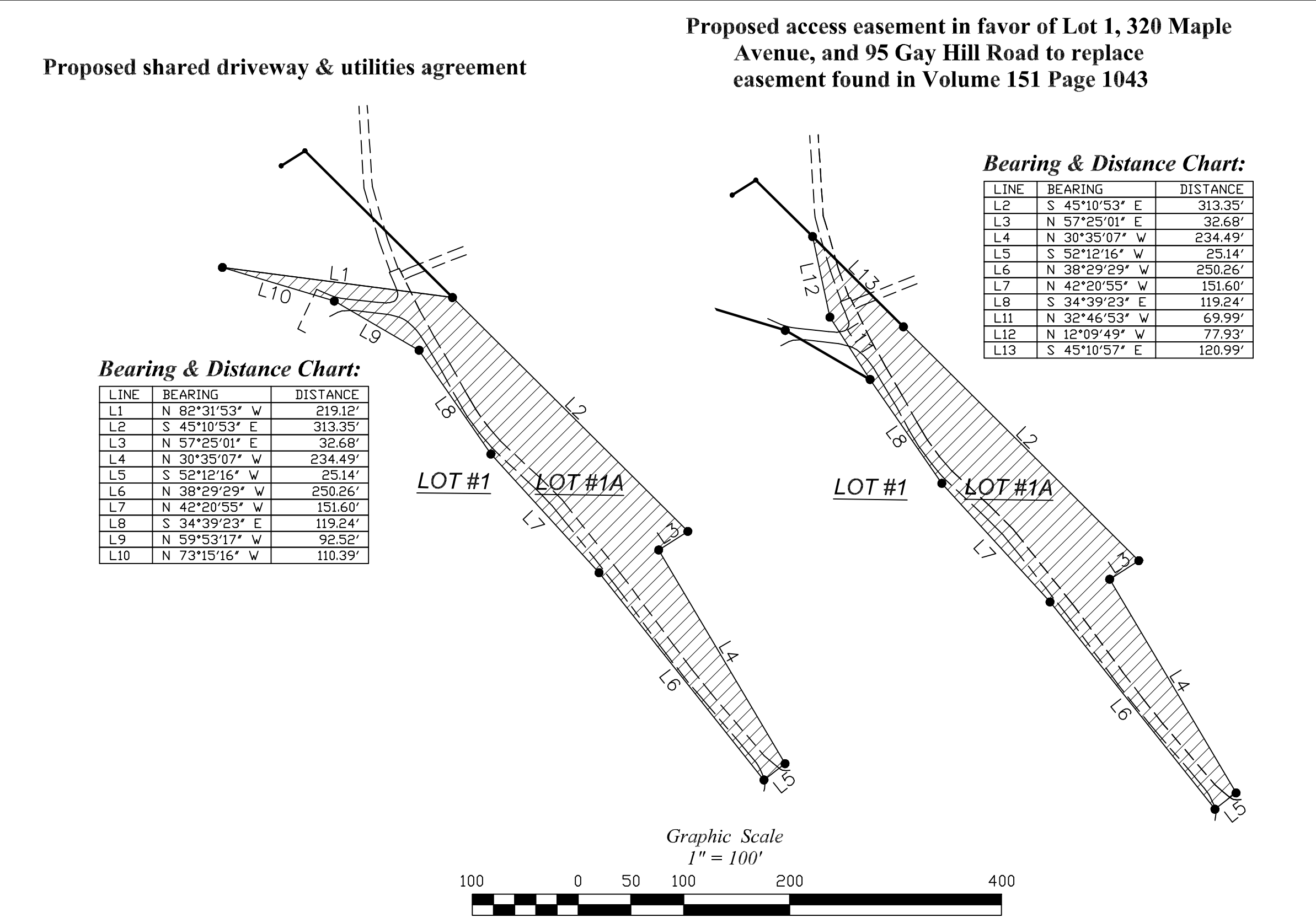
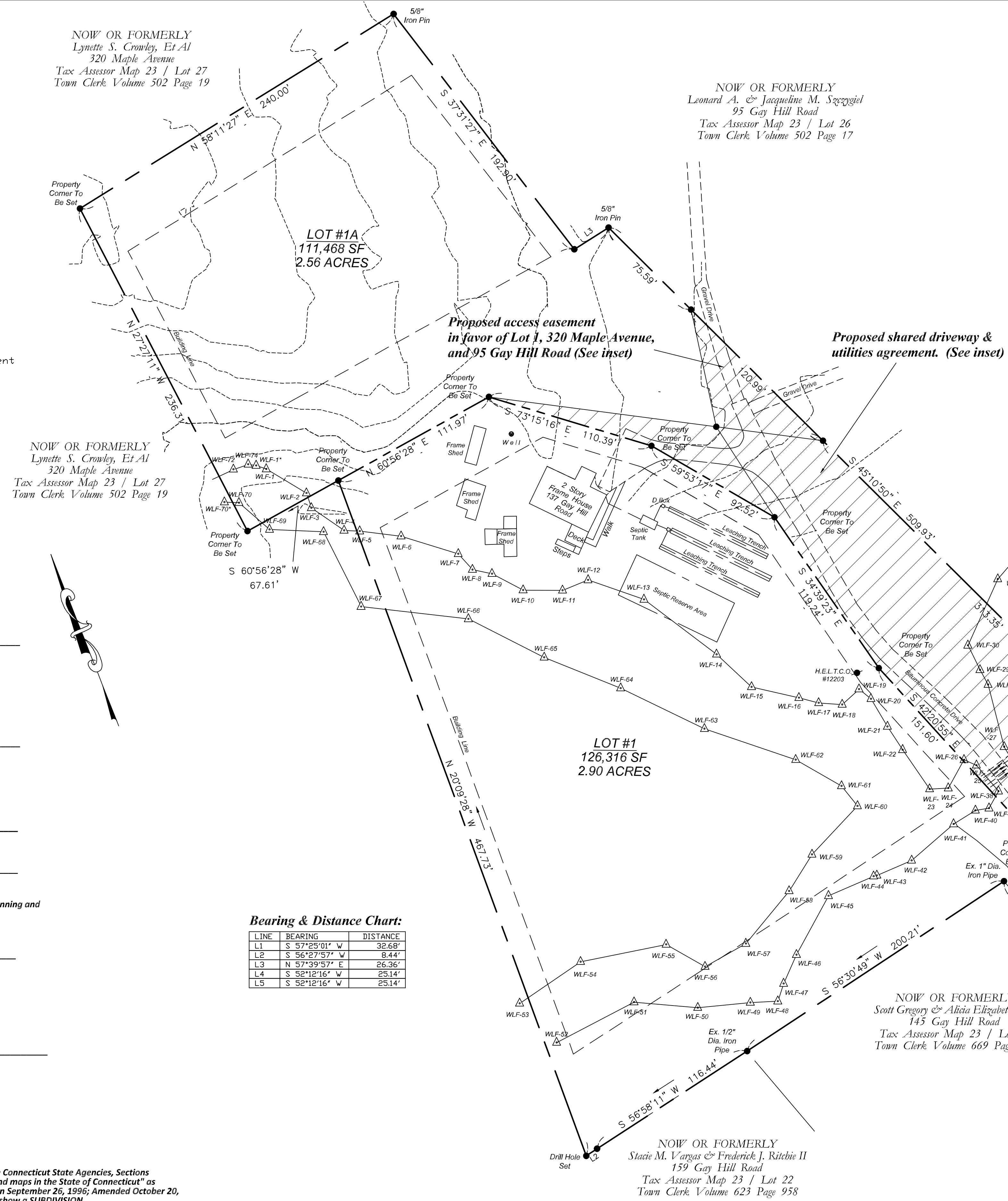


EXISTING CONDITIONS
 PROPERTY BELONGING TO:
JOHN M. & LYNETTE S. CROWLEY
137 GAY HILL ROAD
MONTVILLE, CONNECTICUT
ZONE: R - 40
SCALE: 1" = 40'
OCTOBER 11, 2022

LEGEND

These standard symbols may be found in the drawing.

- ★ Light Pole
- CDNC Concrete
- BIT Bituminous
- UP 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. CDNC. MDN. Existing Concrete Monument To Be Set
- TBS Limits of Clearing/Tree Line
- CHD CT Highway Department Monument
- - - Existing Contour Line
- - - Proposed Contour Line
- Silt Fence
- Water Line
- Sewer Line
- Electric Service
- Communications Service
- BCLC Bit Conc Lipped Curbing
- Drainage Pipe



Approved by the UNCAS Health District:

UNCAS Health District _____ Date _____

Date of Completion of All Work - _____
 Approved by the Montville Planning & Zoning Commission: _____

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 _____

Date of completion for all work: _____

SURVEY NOTES:

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

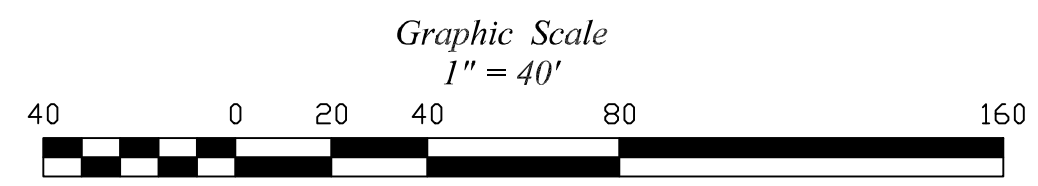
To the best of my knowledge and belief this map is substantially correct as noted thereon.

Brian D. Florek, L.S. #70135 _____ Date _____
 Managing Member, Florek Surveying, LLC
 239 Shore Road, Watford, 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	N 57°39'57" E	26.36'
L4	S 52°12'16" W	25.14'
L5	S 52°12'16" W	25.14'

Not Valid Without Embossed Seal



CROWLEY SUBDIVISION PLAN
 PROPERTY BELONGING TO:
JOHN M. & LYNETTE S. CROWLEY
137 GAY HILL ROAD
MONTVILLE, CONNECTICUT
ZONE: R - 40
SCALE: 1" = 40'
DECEMBER 6, 2022

REVISED THROUGH:
 DECEMBER 12, 2022
 SHEET 2 OF 4

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%)(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

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 - 23"

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"

BULK REQUIREMENTS/ZONING COMPLIANCE TABLE
R-40 ZONE - REAR/INTERIOR LOTS (Sections 8 & 4.11.4)

	REQUIRED R-40	REQUIRED INT. LOT	PROVIDED INT. LOT	LOT 1A PROVIDED INT. LOT
TOTAL LOT AREA:		60,000 FT ²	126,316 FT ²	111,467 FT ²
MINIMUM LOT FRONTAGE:	150 FT	25 FT	25 FT	25 FT
MINIMUM FRONT YARD SETBACK:	40 FT	60 FT	332 FT	75 FT
MINIMUM SIDE YARD SETBACK:	15 FT	15 FT	27 FT	86 FT
MINIMUM REAR YARD SETBACK:	40 FT	40 FT	59 FT	101 FT
MAXIMUM BUILDING HEIGHT:	35 FT	35 FT	<35 FT	<35 FT
MINIMUM ACCESSORY BUILDING SETBACK:	10 FT	10 FT	11 FT	N/A

NOTES:
 1. THE FRONT LINE FOR AN INTERIOR/REAR LOT, PER ZONING REGULATIONS SECTION 4.11.4.5, SHALL BE MEASURED AT THE POINT CLOSEST TO THE STREET WHERE THE LOT WIDTH IS EQUAL TO THE MINIMUM LOT FRONTAGE FOR THE SUBJECT ZONE.

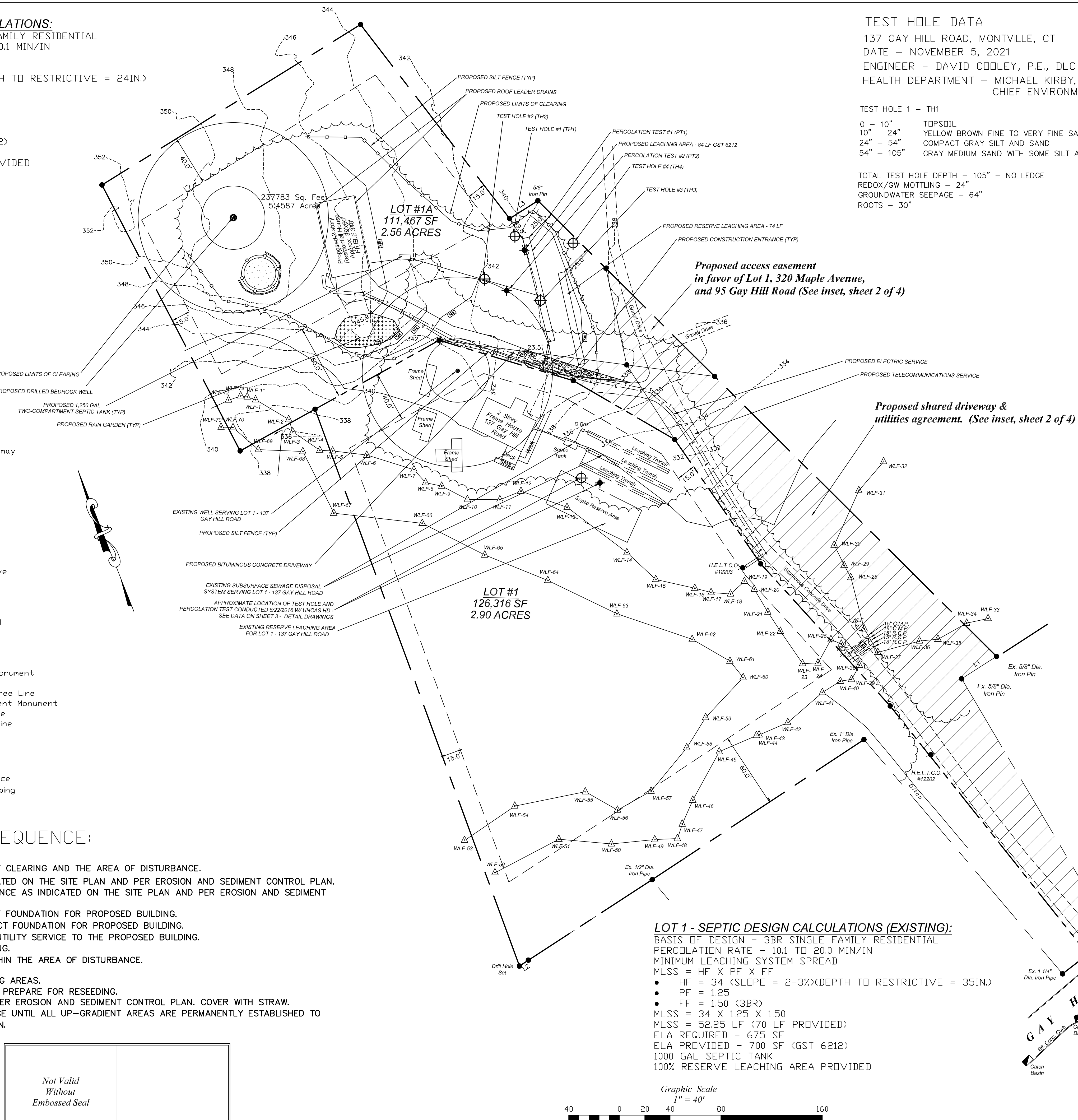
LEGEND

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
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- Stone Wall
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- SMH Sewer Manhole
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- RR SPIKE FOUND Railroad Spike Found
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- WLF 2 Wetland Flag
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- EX. CDNC. MDN. Existing Concrete Monument
- TBS To Be Set
- Limits of Clearing/Tree Line
- CHD CT Highway Department Monument
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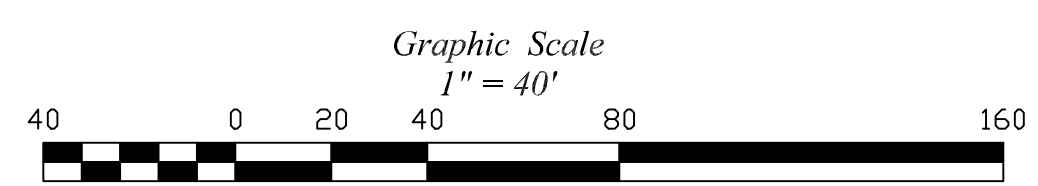
CONSTRUCTION SEQUENCE:

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.



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%)(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



Not Valid
Without
Embossed Seal

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

David Cooley, P.E. #24892 Date
 Managing Member, DLC Engineering Services, LLC

CONCEPTUAL DEVELOPMENT PLAN
CROWLEY SUBDIVISION

PROPERTY BELONGING TO:
JOHN M. & LYNETTE S. CROWLEY
137 GAY HILL ROAD
MONTVILLE, CONNECTICUT
ZONE: R - 40
SCALE: 1" = 40'
OCTOBER 11, 2022
 REVISED THROUGH: DECEMBER 12, 2022

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.

- ESTIMATED DURATION OF MAJOR CONSTRUCTION ACTIVITIES - 90 DAYS.
- SURVEYOR TO MARK WETLAND SETBACK LIMITS ON THE PROPERTY AS APPLICABLE.
- SILT FENCE IS TO BE INSTALLED, AS INDICATED ON THE SITE PLAN, PRIOR TO ANY CONSTRUCTION ACTIVITY AND INSPECTED BY THE ZONING AND WETLANDS OFFICER. A MINIMUM OF 48 HOURS NOTICE SHALL BE GIVEN FOR THE PURPOSE OF INSPECTION PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- CONSTRUCTION ENTRANCE TO BE INSTALLED, AS INDICATED ON THE SITE PLAN, PRIOR TO ANY CONSTRUCTION ACTIVITY.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS INDICATED IN THE CONSTRUCTION SEQUENCE ON THE SITE PLAN.
- STOCKPILE AREAS MUST BE DIRECTLY CONTAINED WITHIN SILT FENCE AROUND THE COMPLETE PERIMETER. HAYBALES SHALL BE USED TO BACKUP THE DOWNGRADIENT PERIMETER OF THE STOCKPILE AREA.
- EXCESS SPOILS SHALL BE DISPOSED OF OFF SITE AT AN APPROPRIATELY LICENSED FACILITY.
- STORM WATER MITIGATION MEASURES SHALL BE PROTECTED FROM SEDIMENTATION UNTIL ALL DISTURBED AREAS HAVE ESTABLISHED VEGETATION.
- STRAW BALES SHALL BE USED AS INDICATED ON THE SITE PLAN AND ANY OTHER EXPOSED AREAS DRAINING DIRECTLY TO EXISTING DEVELOPED AREAS.
- ALL REMAINING DISTURBED AREAS SHALL BE SEEDED WHEN THEY ARE EXPECTED TO REMAIN UNSTABILIZED FOR A PERIOD OF MORE THAN 30 DAYS OR UPON COMPLETION OF CONSTRUCTION, IF DURING THE PLANTING SEASON. RECOMMENDED SEEDING DATES SHALL BE BETWEEN APRIL 15 AND SEPTEMBER 15. TEMPORARY STABILIZATION SEED MIXES, APPLICATION RATES AND SEASONS SHALL BE AS FOLLOWS:
ANNUAL RYEGRASS - 3/1 TO 6/15 OR 8/1 TO 10/15 - 1.0 LB PER 1,000 S.F.
BUCKWHEAT - 4/1 TO 9/15 - 0.4 LB PER 1,000 S.F.
CT DOT ALL PURPOSE MIX - 3/15 TO 6/15 OR 8/15 TO 10/15 - 3.4 LB PER 1,000 S.F.
RECOMMENDED PERMANENT SEED MIX, APPLICATION RATES AND SEASONS:
NEW ENGLAND CONSERVATION MIX - 4/15 TO 9/15 - 3.0 LB PER 1,000 S.F.
- APPLY STRAW OR HAY MULCH ON ALL NEWLY SEEDED AREAS AT A RATE OF 2 BALES PER 1000 SF.
- FERTILIZER MAY BE APPLIED AT THE RATE OF 7.5 LB PER 1,000 S.F. OF 10-10-10.
- THE CONTRACTOR SHALL SEED AND MULCH DISTURBED AREAS EXPECTED TO REMAIN UNSTABILIZED FOR A PERIOD OF MORE THAN 30 DAYS.
- SILT FENCE BARRIER TO BE MAINTAINED AND LEFT IN PLACE UNTIL ALL DISTURBED AREAS HAVE ESTABLISHED VEGETATION TO THE SATISFACTION OF THE ZONING AND WETLANDS OFFICER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF SILT FENCE AND EROSION AND SEDIMENT CONTROL CONDITIONS ONSITE DURING CONSTRUCTION. THE CONTACT INFORMATION FOR THE SELECTED CONTRACTOR SHALL BE PROVIDED TO THE ZONING AND WETLANDS OFFICER PRIOR TO THE START OF CONSTRUCTION.
- PROJECT ENGINEER MAY BE CALLED FOR SPECIAL INSPECTIONS TO ASSESS EROSION AND SEDIMENT CONTROL PLAN EFFECTIVENESS AND MAKE REVISIONS AS NECESSARY.
- PROJECT ENGINEER MAY ALSO BE CALLED IN TO ASSESS EMERGENCY SITUATIONS (I.E. SEVERE FLOODING, RAINS OR OTHER ENVIRONMENTAL PROBLEMS).

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 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

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.

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

Where,

$$R = 0.05 + 0.009(I)$$

Where,

$$I = \text{percent impervious cover}$$

$$I = 6.06\% (6.06)$$

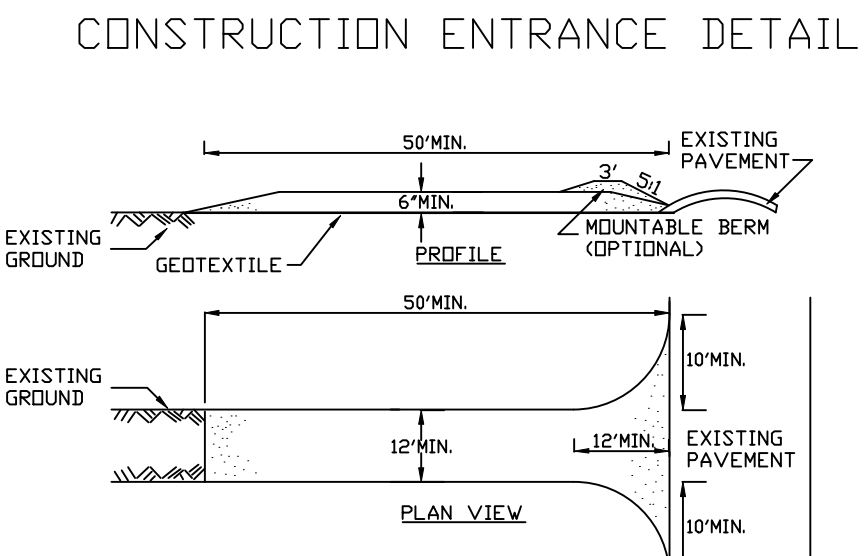
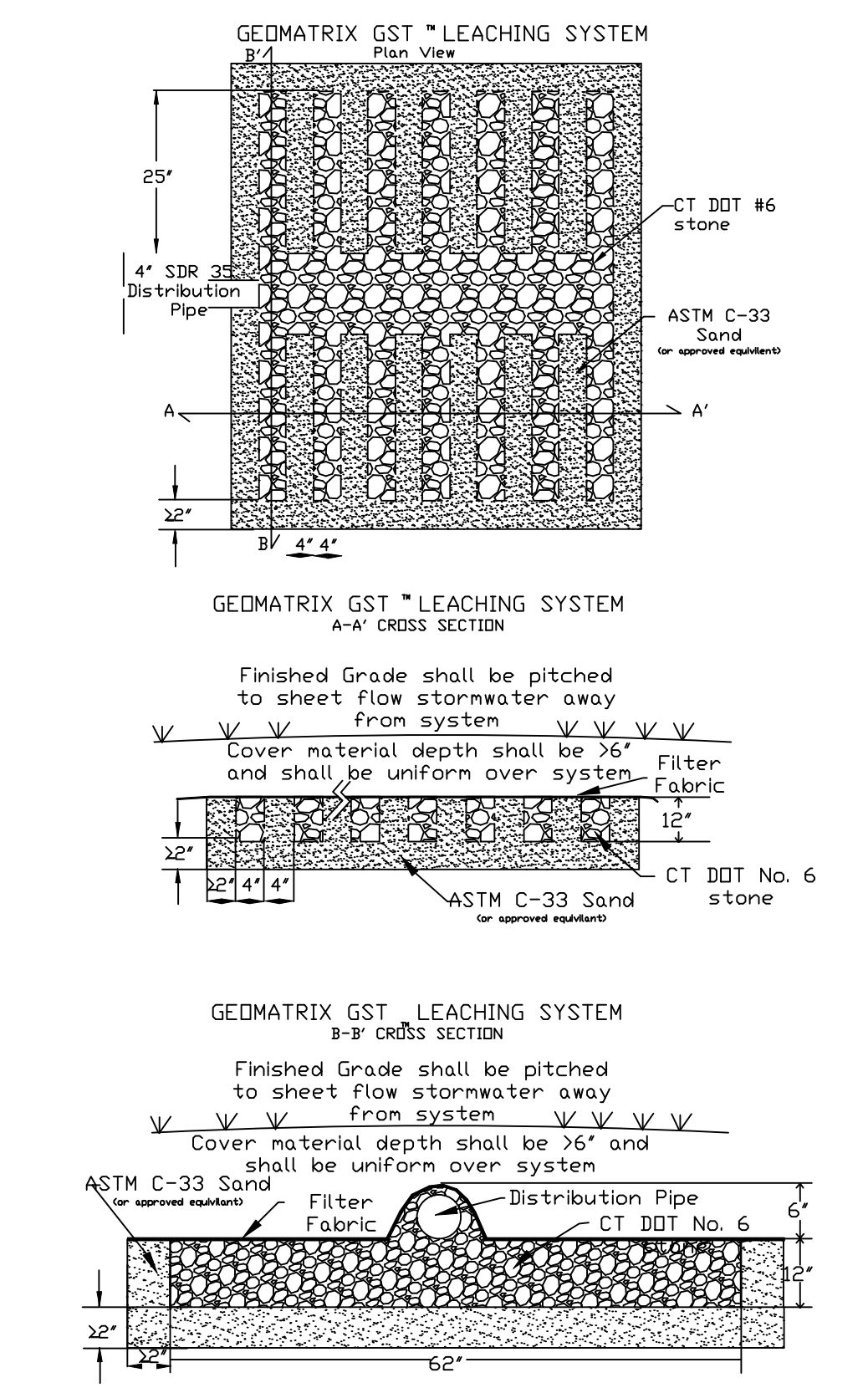
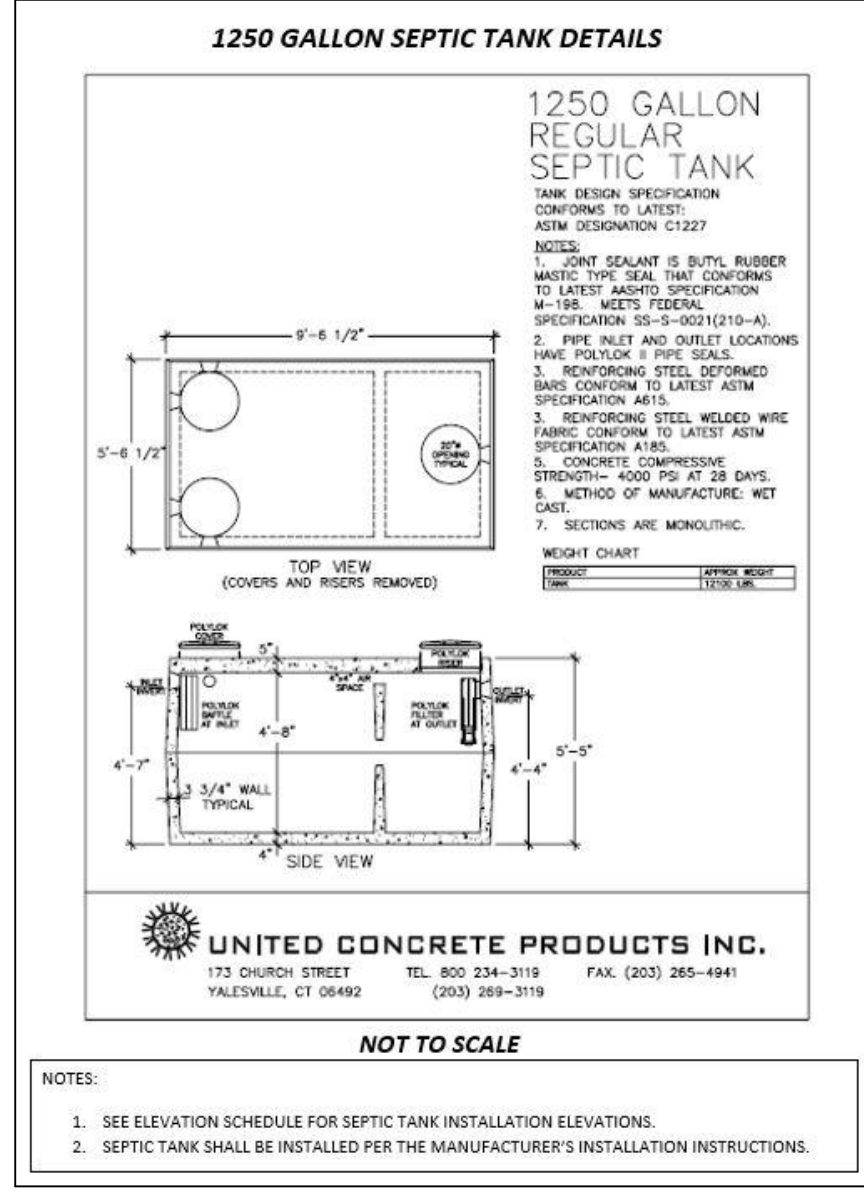
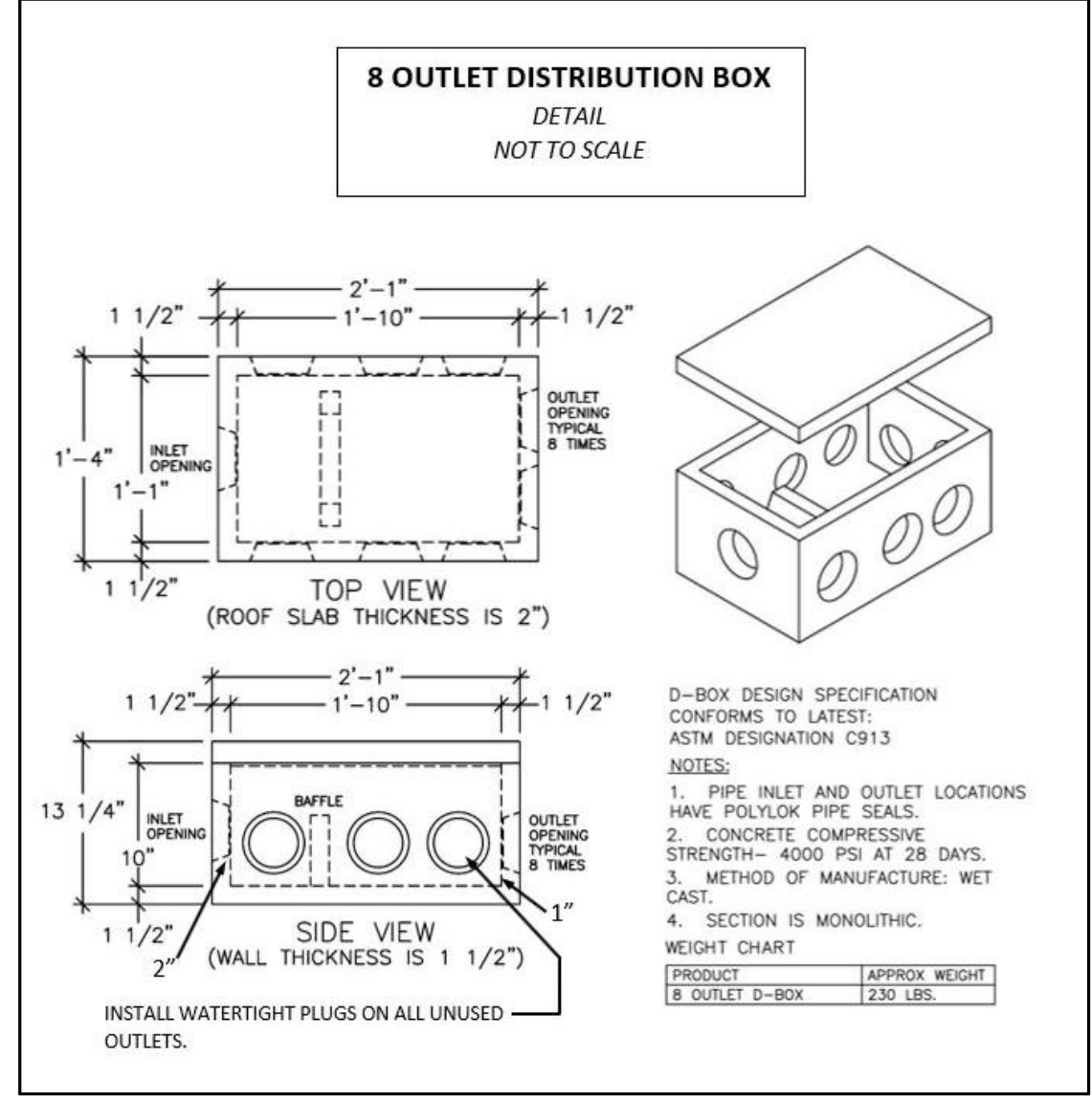
$$R = 0.05 + 0.009(6.06)$$

$$R = 0.1045$$

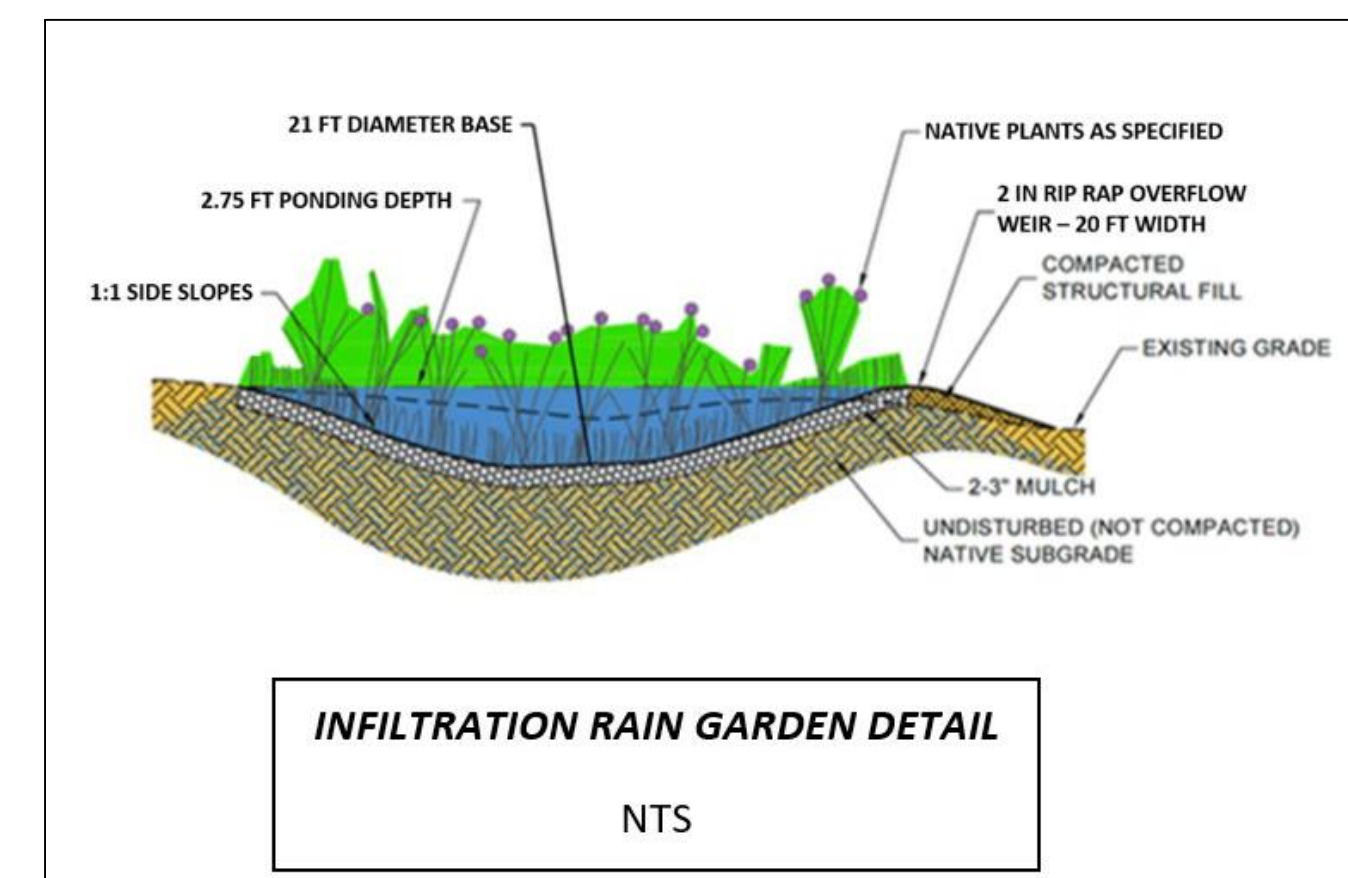
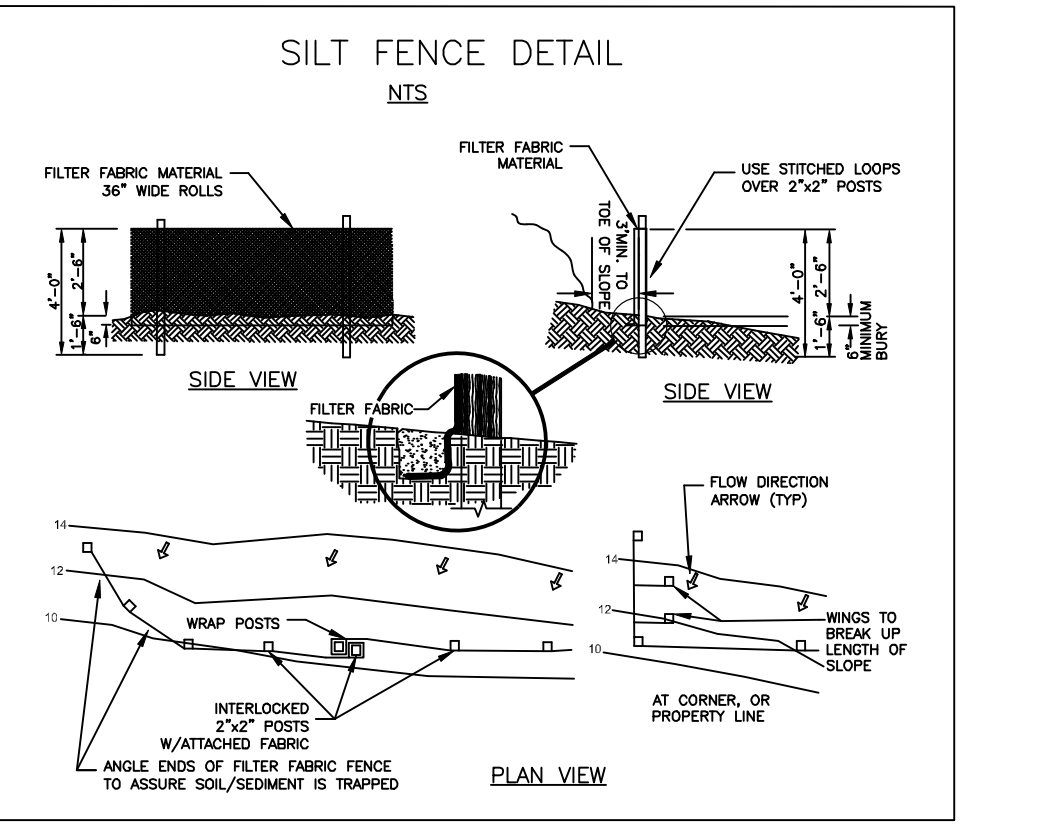
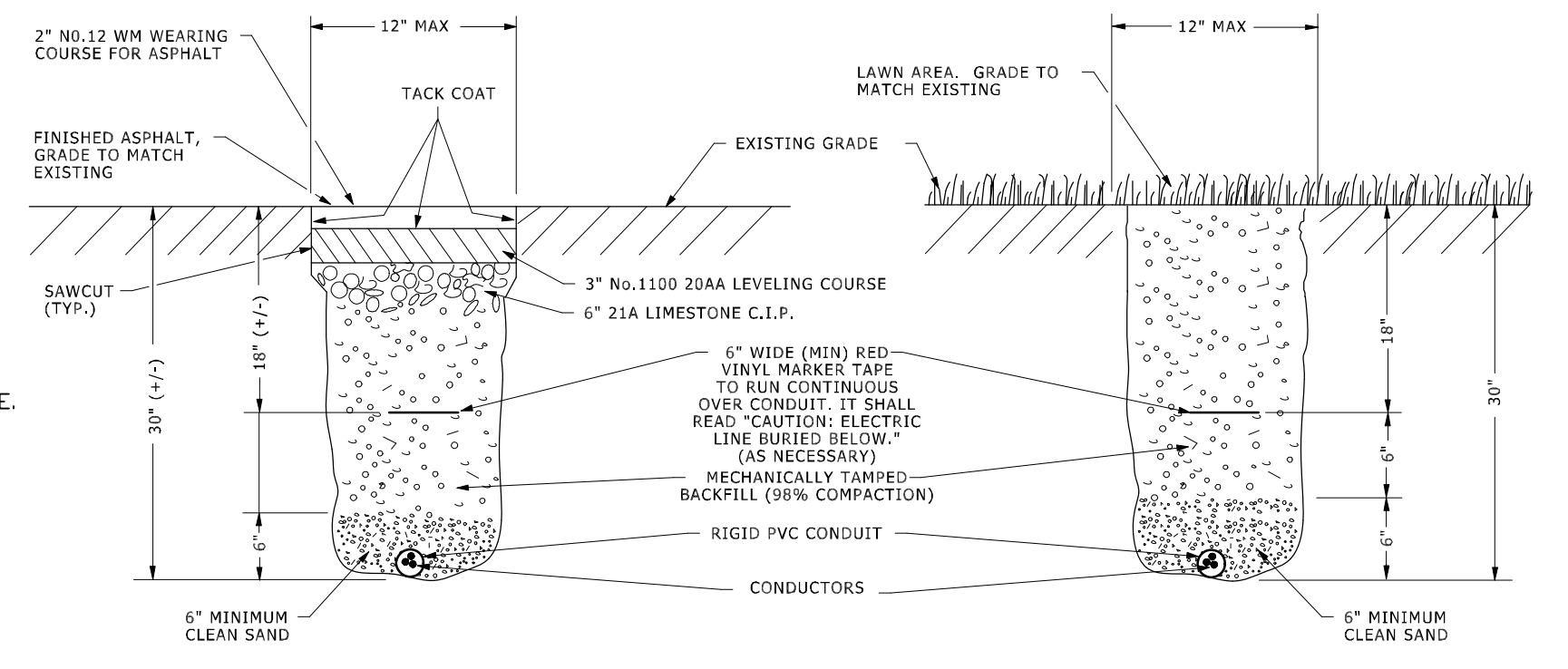
$$A = 5.46 \text{ acres}$$

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

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



- ### CONSTRUCTION SPECIFICATIONS
- STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
 - THICKNESS - NOT LESS THAN SIX (6) INCHES.
 - 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.
 - GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
 - 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.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



- ### RAIN GARDEN NOTES:
- CONSTRUCTED TO SCALE AND GRADES INDICATED ON SITE PLAN.
 - RAIN GARDEN TO BE PLANTED WITH THE FOLLOWING NATIVE PLANT THROUGHOUT THE MULCHED AREA. PLANTS ARE TO BE 2 IN. PLUGS.
 - SWAMP MILKWEED
 - NEW ENGLAND ASTER
 - FOX SEDGE
 - SPOTTED JOE-PYE WEED
 - BLUE FLAG
 - CARDINAL FLOWER
 - WILD BERGAMOT
 - GOLDEN RAGWORT
 - SMOOTH BEARDEWORT
 - CUT-LEAF CONEFLOWER
 - IRONWEED
 - 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 LEGGE 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

CROWLEY SUBDIVISION SEPTIC SYSTEM DETAIL & TYPICALS

PROPERTY BELONGING TO:
JOHN M. & LYNETTE S. CROWLEY
137 GAY HILL ROAD
MONTVILLE, CONNECTICUT
OCTOBER 11, 2022

REVISED THROUGH: DECEMBER 12, 2022