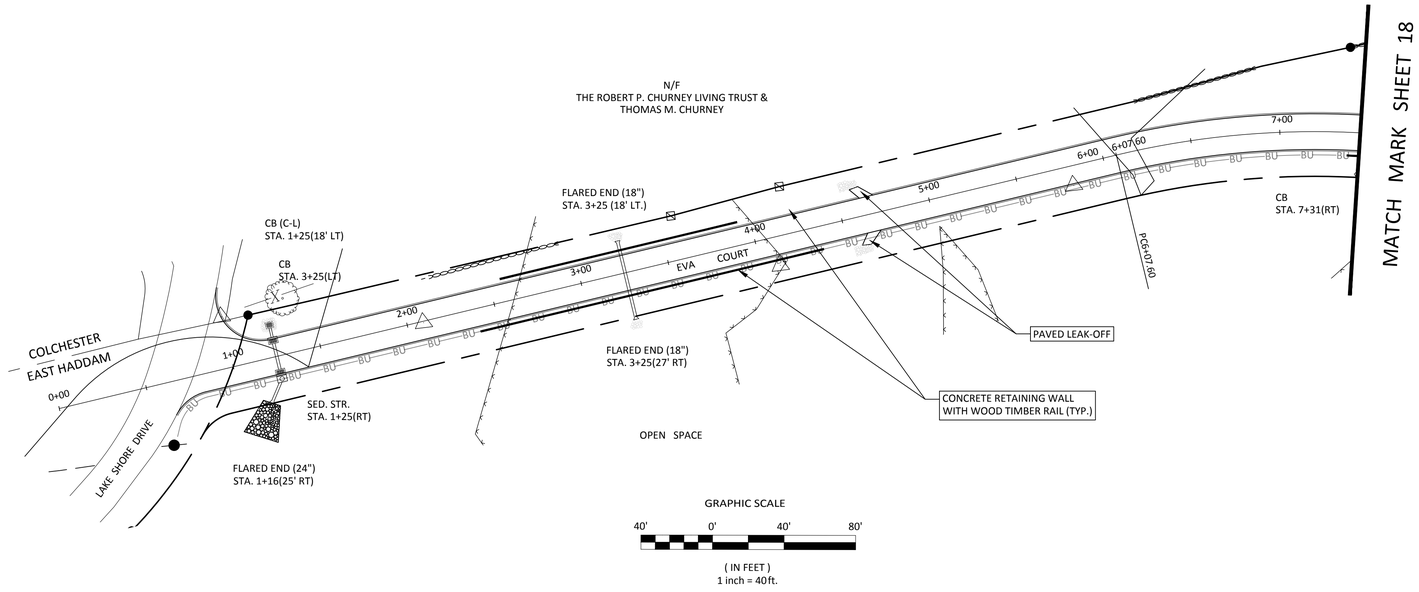
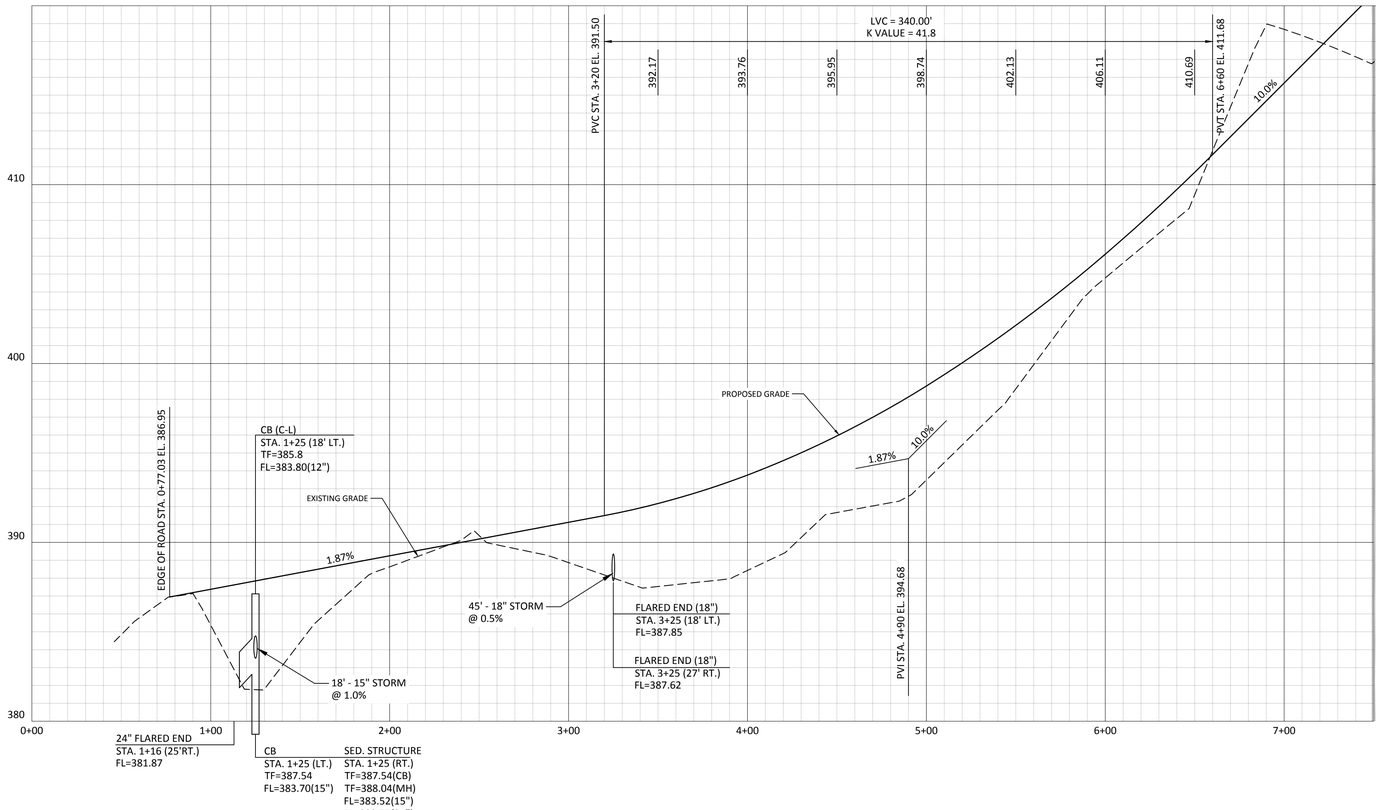






MATCH MARK SHEET 18

SCALE:
1"= 40' (HORIZONTAL)
1" = 4' (VERTICAL)

ROB HELLSTROM
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Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-033_bndy

Drawing Scale: 1"=40'

Drawing date: 1/6/22

Rev.	Date	Revision	By
1	8/30/22	DRAINAGE & RAIN GARDENS	SAM
2	9/28/22	REVIEW COMMENTS	SAM

PLAN & PROFILE

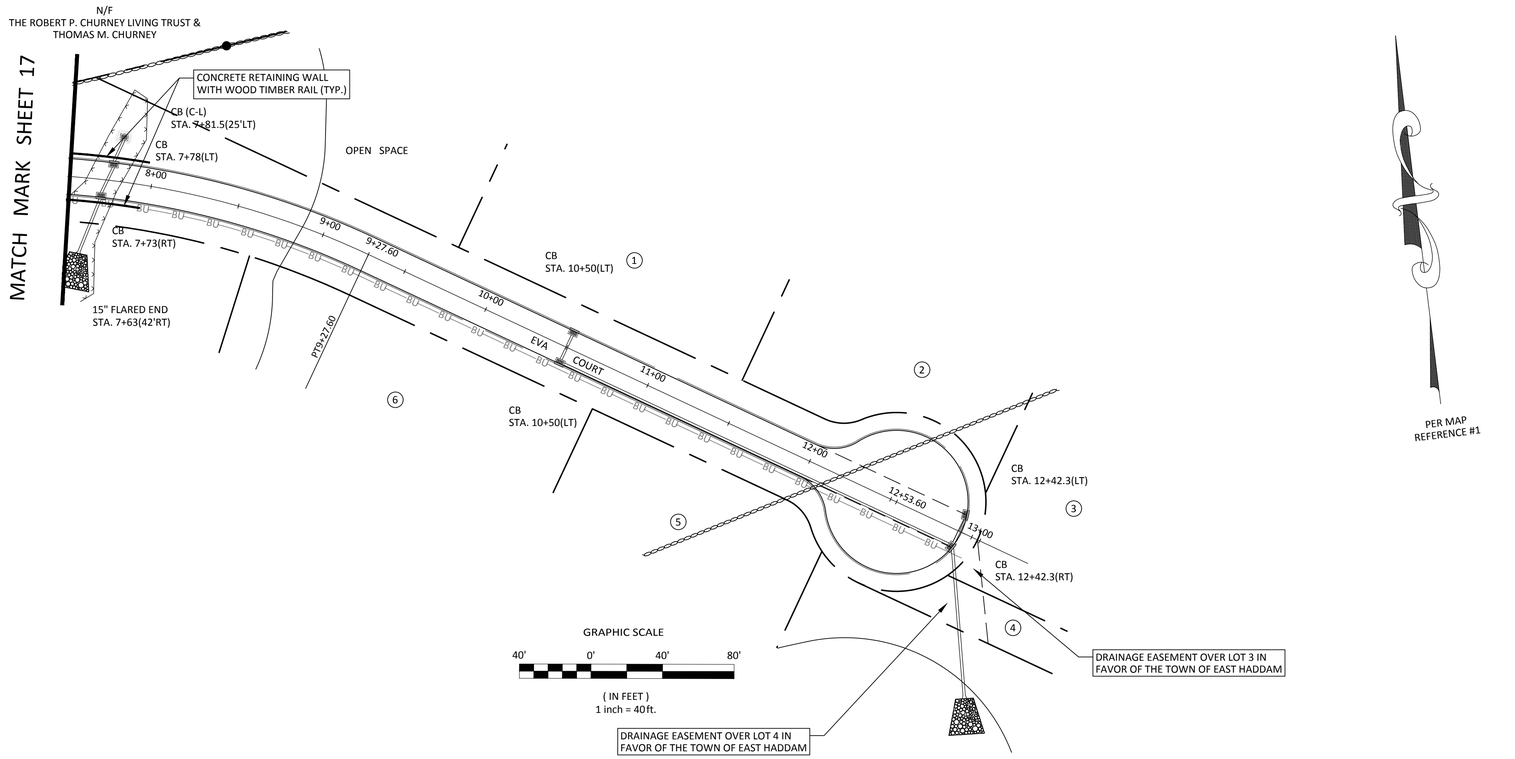
PROJECT TITLE: LAKE HAYWARD PRESERVE
LAKE SHORE DRIVE EAST HADDAM, CT

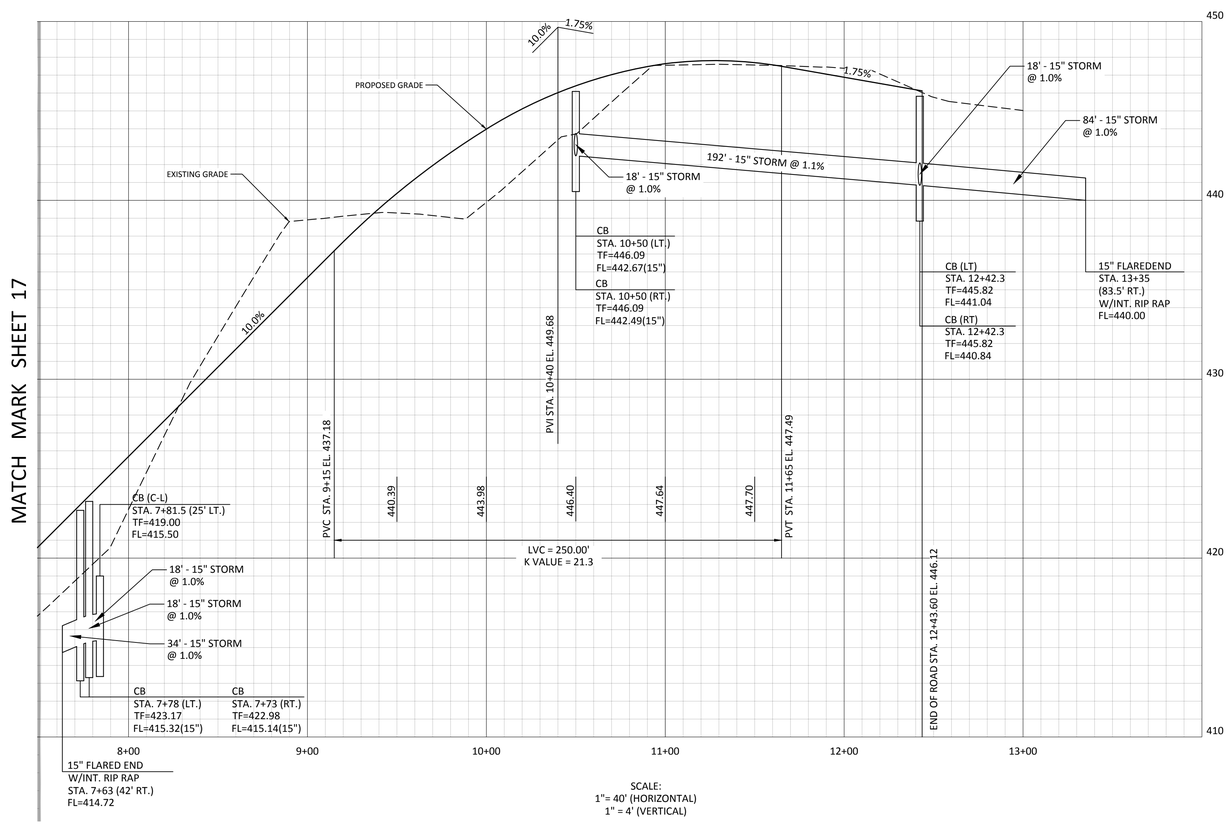
PREPARED FOR: ANTHONY SILVESTRI

CIVIL ENGINEERING CONSULTANTS
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RES
Reynolds Engineering Services, LLC

Drawing #: 17 OF 27

Job #: 21-033





Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-033_bndy

Drawing Scale: 1"=40'

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PLAN & PROFILE

PROJECT TITLE: *LAKE HAYWARD PRESERVE*
LAKE SHORE DRIVE EAST HADDAM, CT

PREPARED FOR: *ANTHONY SILVESTRI*

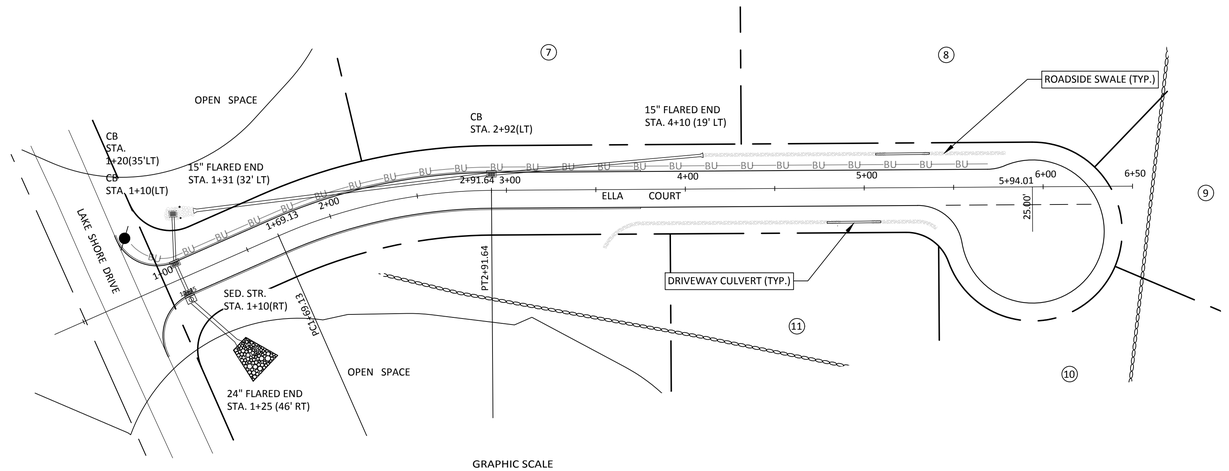
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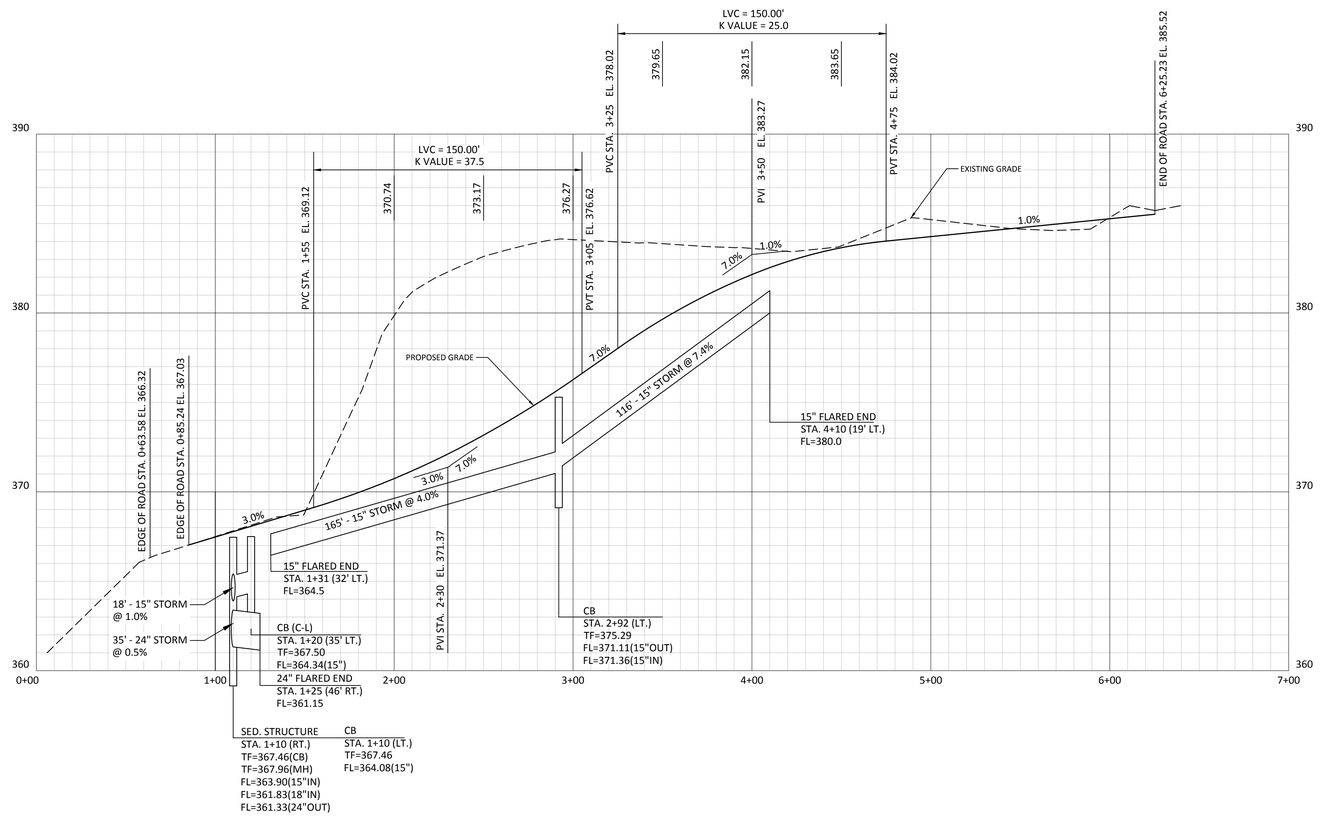


PER MAP REFERENCE #1

GRAPHIC SCALE

40' 0' 40' 80'

(IN FEET)
1 inch = 40 ft.



SCALE:
1"= 40' (HORIZONTAL)
1" = 4' (VERTICAL)

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Rev.	Date	Revision	By
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PLAN & PROFILE

PROJECT TITLE: LAKE HAYWARD PRESERVE
LAKE SHORE DRIVE EAST HADDAM, CT

PREPARED FOR: ANTHONY SILVESTRI

CIVIL ENGINEERING CONSULTANTS
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Drawing #: 19 OF 27

Job #: 21-033

SOIL EROSION AND SEDIMENT CONTROL MEASURES

A.) APPROVAL REQUIRED TO START CONSTRUCTION

NO CONSTRUCTION SHALL TAKE PLACE ON THIS PROPERTY UNTIL THE HEREIN STATED EROSION AND SEDIMENT CONTROL HAS BEEN REVIEWED AND CERTIFIED BY THE STAFFORD PUBLIC WORKS DIRECTOR OR ITS DESIGNATED AGENT(S).

B.) DESCRIPTION OF PROPOSED DEVELOPMENT

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 1,900 L.F. OF ROADWAY TO SERVE RESIDENTIAL LOTS. THE SITE ON WHICH THE CONSTRUCTION WILL OCCUR IS A WOODED AREA. CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING FOR THE ROADWAY, INCLUDING DRAINAGE IMPROVEMENTS AND EXCAVATION OF A RETENTION BASIN.

C.) GENERAL SEQUENCE OF DEVELOPMENT

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION AS MAY BE REQUIRED DURING THE CONSTRUCTION OF THE PROJECT. IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSES, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS, AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT INSOFAR AS POSSIBLE, EROSION ON THE SITE. NO SITE DEVELOPMENT FOR A LOT SHALL BEGIN UNTIL THE HEREIN STATED SOIL EROSION AND SEDIMENT CONTROL PLAN HAS BEEN CERTIFIED AND THOSE CONTROL MEASURES SCHEDULED FOR INSTALLATION PRIOR TO SITE DEVELOPMENT HAVE BEEN INSTALLED AND ARE FUNCTIONAL.

D.) ROADWAY DEVELOPMENT

AFTER INSTALLING EROSION AND SEDIMENTATION CONTROLS, AREAS OF DISTURBANCE SHALL BE CLEARED BY PLACING STUMPAGE AND DEBRIS IN DESIGNATED STOCKPILE AREAS FOR OFFSITE DISPOSAL. TOPSOIL SHALL BE STRIPPED AND ALSO PLACED IN STOCKPILE AREAS TO BE USED FOR ON SITE LOAMING. INSTALLATION OF STORM DRAINAGE SHALL BEGIN BY EXCAVATING THE DETENTION PONDS AND PLACING A TEMPORARY 2' STONE BERM AROUND THE OUTLET STRUCTURES UTILIZING THE PONDS AS SEDIMENTATION BASINS DURING CONSTRUCTION. OUTLET PROTECTION AND SEDIMENTATION CONTROL SHALL BE PUT IN PLACE IMMEDIATELY UPON INSTALLATION OF STORM DRAINAGE. ALL DISTURBED AREAS ARE TO BE STABILIZED, LOAMED & SEEDED IMMEDIATELY AFTER FINAL GRADING. EROSION AND SEDIMENTATION CONTROLS SHALL REMAIN AND BE MAINTAINED UNTIL SITE HAS STABILIZED AND VEGETATION HAS BEEN ESTABLISHED. ADDITIONAL MEASURES MAY BE REQUIRED TO ADDRESS FIELD CONDITIONS AS ORDERED BY THE TOWN OF EAST HADDAM OR ITS DESIGNATED AGENT(S). ALL EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION PRACTICES SHALL BE AS DESCRIBED HEREIN AND FURTHER DETAILED IN THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" (REVISED 2002) AND AMENDMENTS, AS PUBLISHED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.

E) LAND GRADING

THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA.

- THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 : 1)

- THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 : 1)

- THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1 : 4)

- NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE, OR WASH UPON THE PREMISES OF ANOTHER OWNER, OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODY.

DEVELOPMENT SCHEDULE

IT IS ANTICIPATED THAT GRADING AND CONSTRUCTION ACTIVITIES WILL BEGIN FALL 2020.

1. INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES.
2. ROUGH GRADE DRIVEWAY
3. INSTALL CULVERT AND DRAINAGE FEATURES.
4. INSTALL DRIVEWAY.
5. LOAM, SEED AND MULCH LANDSCAPE AREAS.
6. REMOVE EROSION AND SEDIMENT CONTROL.

I. GENERAL EROSION AND SEDIMENTATION CONTROL NOTES
(SEE II. & III. FOR SPECIFIED CONSTRUCTION MEASURE)

THIS CONSTRUCTION PLAN PROPOSES EROSION CONTROL MEASURES WHICH WILL PERFORM ONE OR MORE OF THE FOLLOWING FUNCTIONS: MINIMIZATION OF SOIL EXPOSURE, CONTROL OF RUNOFF, SHIELDING OF THE SOILS AND BUILDING OF THE SOILS. PROPER EROSION MANAGEMENT WILL MINIMIZE THE EROSION, BUT IT MUST BE UNDERSTOOD THAT ONLY "REASONABLE" EROSION CONTROL CAN BE EXPECTED. THUS, EVEN WITH THE BEST PLAN, SOME EROSION MUST BE ANTICIPATED. SEDIMENTATION CONTROLS ARE THE SECONDARY LINE OF DEFENSE ON THE CONSTRUCTION SITE.

DURING THE COURSE OF SITE CONSTRUCTION WEEKLY INSPECTIONS OF ALL EROSION AND SEDIMENTATION MEASURES WILL BE CONDUCTED BY A QUALIFIED EROSION AND SEDIMENTATION CONTROL PROFESSIONAL AND REPORTS FILED WITH THE CITY'S AGENT.

WATER GENERATED SEDIMENT IS A SERIOUS PROBLEM WHEN NATURAL VEGETATION IS REMOVED OR ALTERED, FOR THIS REASON, A RECOMMENDATION FOR MINIMAL SITE DISTURBANCE TO EXISTING VEGETATION AND SOIL IS PROPOSED. MINIMAL SOIL EXPOSURE NOT ONLY ENTAILS DEMARCATING SITE DISTURBANCE LIMITS, BUT ALSO INVOLVES THE STAGING OF GRADING AND SUBSEQUENT REV OF DISTURBED AREAS, SO THAT THE LEAST AMOUNT OF SOIL SURFACE IS EXPOSED AT ANY ONE TIME.

RUNOFF SHALL BE CONTROLLED BY THE INTERCEPTION, DIVERSION AND SAFE DISPOSAL.PRECIPITATION RUNOFF SHALL ALSO BE CONTROLLED BY THE STAGING OF CONSTRUCTION ACTIVITY AND THE PRESERVATION OF NATURAL VEGETATION WHENEVER POSSIBLE. THE BINDING OF SOIL PARTICLES TO MAKE THEM LESS SUSCEPTIBLE TO REMOVAL BY RAIN SPLASH OR RUNOFF BY THE USE OF NATURAL AND PHYSICAL "BINDERS" (MULCHES AND FABRICS) MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR THE CITY'S AGENT.

TO PREVENT SEDIMENT FROM LEAVING THE SITE, TURBID SURFACE RUNOFF SHALL BE DIVERTED THROUGH "LEVEL SPREADER" DEVICES. TEMPORARY LEVEL SPREADER DEVICES SHALL BE CREATED BY PLACING ENGINEERING FABRIC DOWN GRADIENT OF SOIL DISTURBING ACTIVITIES. THUS FLOW WILL BE DISPERSED OVER A WIDE AREA AND FILTERED BY THE FABRIC. THE FENCE SHALL FOLLOW THE EXISTING CONTOURS WITH THE ENDS OF THE FENCE TURNED UPHILL TO PREVENT END CUTTING. FILTER FABRIC USED AS SILT FENCE AND NOT PLACED ON CONTOUR SHOULD HAVE "WINGS" AT INTERVALS OF NO GREATER THAN 100 FEET TO INTERRUPT FLOWS PARALLEL TO THE FENCE. TECHNIQUES SUCH AS "WINGED" FABRIC SILT FENCE CHECK DAMS, HAY BALES INSTALLED AND MAINTAINED AROUND ALL CATCH BASINS, FABRIC SILT FENCE /LEVEL SPREADERS AND SEDIMENTATION PONDS MAY BE USED.

DUST CONTROL, IF DETERMINED TO BE REQUIRED DURING THE WEEKLY INSPECTIONS, SHALL BE ACHIEVED BY THE APPLICATION OF ANIONIC OR CATIONIC ASPHALT EMULSIONS, LATEX EMULSION OR RESIN IN WATER. FOR APPLICATION RATES AND DILUTION REQUIREMENTS, REFER TO MANUFACTURER'S GUIDELINES. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST, BUT WATER SHALL NOT BE EXCLUSIVELY USED.

IN AN EFFORT TO REDUCE THE POTENTIAL FOR TRACKING MUD OF THE SITE, COARSE STONE "TRACKING PADS AND IMMEDIATE CONSTRUCTION OF GRAVEL SUBBASE FOR ROADWAYS WILL MINIMIZE ANY OFF-SITE TRACKING. ACCUMULATED DIRT TRACKED ONTO EXISTING ROADWAYS SHALL BE REMOVEDBY SHOVEL AND BROOM AT THE END OF EACH WORK DAY.

BEFORE AND AFTER EACH STORM EVENT AND ONCE EVERY DAY, ALL SEDIMENT AND EROSION CONTROLS WILL BE INSPECTED BY THE ENGINEER OR ENVIRONMENTAL SUPERVISOR. ANY CORRECTIVE MEASURES TO MITIGATE ENVIRONMENTAL CONCERNS WILL BE ORDERED AT THAT TIME. THERE WILL BE 150 FT. OF SILT FENCE WITH THE REQUIRED POSTS ON HAND FOR EMERGENCY SITUATIONS.

EXCAVATIONS WHICH MUST BE DEWATERED WILL BE PUMPED INTO AN ACTIVE DRAINAGE SYSTEM. BOTH THE INLET AND OUTLET OF THE PUMPS SHOULD BE FILTERED AND PROTECTED FROM SURGE ACTION. IN THE EVENT ON CONFLICT BETWEEN THESE PLANS AND OTHER REGULATIONS, THE MORE STRINGENT SHALL APPLY.

THE CONSTRUCTION INSPECTION SCHEDULE SHALL BE DEVELOPED WITH THE PUBLIC WORKS DEPARTMENT AND THE TOWN ENGINEER PRIOR TO THE START OF CONSTRUCTION.

II. CONSTRUCTION SEQUENCE AND DETAILED EROSION CONTROL MEASURES

1. A REGISTERED LAND SURVEYOR SHALL FIELD STAKE THE CENTER LINE OF THE NEW ROAD.
2. UPON COMPLETION OF THE FIELD STAKING, EXISTING TREES WHICH ARE TO BE SAVED ARE TO BE FLAGGED AND PROTECTED. ALL REMAINING VEGETATION INCLUDING OVERHANGING LIMBS FROM TREES TO BE SAVED SHALL BE CHIPPED AND SUCH CHIPS STORED IN NON-GRADED AREAS ALONG THE RIGHT OF WAY FOR FUTURE USE AS MULCH. CORD WOOD AND/OR TIMBER FROM APPROPRIATE CLEARED AREAS SHALL BE REMOVED FROM THE SITE. EROSION AND SEDIMENT MEASURES SHALL BE INSTALLED AS APPROPRIATE PRIOR TO ANY SITE DISTURBANCE.
3. STUMPING SHALL COMMENCE ALONG THE PROPOSED ACCESS ROAD WITHIN AREAS STAKED BY THE SURVEYOR AND CLEARED IN TASK 2 ABOVE. LOAM SHALL BE STRIPPED FROM THE CLEARED AREA AND STOCKPILED JUST OUTSIDE THE DRIVEWAY GRADING LIMITS AT INTERVALS NOT EXCEEDING 300 FEET, AND RINGED WITH HAY BALES ON THE DOWN GRADIENT SIDE OF THE STOCKPILE UPON STRIPPING THE BALANCE OF THE DRIVEWAY. THE ANIT-TRACKING PAD SHALL BE INSTALLED. THIS ANTI-TRACKING PAD SHALL BE MAINTAINED AND REPLACED AS NECESSARY WHEN NO LONGER EFFECTIVE IN PREVENTING TRACKING OF MATERIALS OFF SITE.
4. THE ROADWAY SHALL BE BROUGHT TO ROUGH GRADE AND SILT FENCE CHECK DAMS SHALL BE PLACED IN THE GUTTERS OF THE CROWNED PAVEMENT AT 100' INTERVALS (MAXIMUM), AS SHOWN UPON THE PLAN, OR MORE FREQUENTLY AS REQUIRED AND DIRECTED BY THE ENGINEER.
5. ROADWAY SHOULDERS IN BOTH CUT AND FILL AREAS SHALL BE FINE GRADED IN ACCORDANCE WITH "III GENERAL NOTES".
6. UNDERGROUND UTILITIES (GAS,WATER,TELEPHONE, ELECTRIC AND CABLE) SHALL BE INSTALLED NEXT.
7. FOLLOWED BY THE PLACEMENT OF THE PROCESS GRAVEL BASE, AND BITUMINOUS PAVEMENT. THE SHOULDERS OF THE ROADWAY SHALL BE FINE GRADED, LOAM AND SEEDED,AS SPECIFIED UNDER "IV. GENERAL NOTES".

III. SITE DEVELOPMENT

IN ADDITION TO THE RECOMMENDATIONS FOR THE INDIVIDUAL PHASES OF THE DEVELOPMENT, THE FOLLOWING PROCEDURES SHALL APPLY TO INDIVIDUAL STRUCTURES BEING DEVELOPED.
1. THE LIMITS OF DISTURBANCE SHALL BE ESTABLISHED IN THE FIELD FOR EACH PROPOSED RESIDENTIAL STRUCTURE. MAXIMUM DISTURBANCE LIMITS OF 25-35 FT BEYOND THE PHYSICAL DIMENSIONS OF THE STRUCTURE AND RELATED APPURTENANCES IS RECOMMENDED.
2. TOPSOIL AND EXCAVATED SUBSOIL FROM THE FOUNDATION AREA SHALL BE STOCKPILED WITHIN THE AREA OF DISTURBANCE IF NOT USED FOR ON SITE REGRADING. EACH STOCKPILE SHALL BE ADEQUATELY RINGED ON THE DOWN GRADIENT SIDE WITH SEDIMENT CONTROL MATERIALS (i.e. HAY BALES AND/OR FABRIC FENCE).
3. ANY ADDITIONAL STOCKPILING OF LUMBER AND BUILDING MATERIALS SHALL BE CONFINED TO THE AREA OF DISTURBANCE, SIMILARLY, VEHICULAR MOVEMENT SHALL BE DIRECTED TO ESTABLISHED PARKING AREAS.

IV. GENERAL NOTES

SEED BED PREPARATION

FINE GRADE AND RAKE SOIL SURFACE TO REMOVE STONES LARGER THAT 2-INCH IN DIAMETER. INSTALL NEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIVERSIONS. APPLY LIMESTONE AT A MINIMUM RATE OF 2 TONS PER ACRE OR 40 LBS. PER 1000 SQUARE FEET. FERTILIZE WITH 10-10-10 AT THE RATE OF 300 LBS. PER ACRE OR 7.5 LBS. PER 1000 SQUARE FEET. WORK LIME AND FERTILIZER INTO SOIL UNIFORMLY TO A DEPTH OF 4 INCHES WITH A WISK, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT FOLLOWING THE CONTOUR LINES.

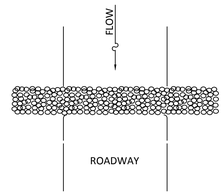
SEED APPLICATION

APPLY GRASS SEE MIXTURE BY HAND, CYCLONE SEEDER OR HYDROSEEDER. INCREASE SEED MIXTURE BY 10 PERCENT IF HYDROSEEDING. LIGHTLY DRAG OR ROLL THE SEEDED SURFACE TO COVER SEED. SEEDING SHOULD BE DONE BETWEEN APRIL 1 AND JUNE 1, OR BETWEEN AUGUST 15 AND OCTOBER 15. IF SEEDING CANNOT BE DONE DURING THESE TIMES, REPEAT MULCHING PROCEDURE UNTIL SUCH TIMES AS SEEDING CAN TAKE PLACE. THE TYPE OF SEED MIXTURE SHALL BE DETERMINED FROM FIGURES 6-2 AND 6-3 OF THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL".

MULCHING

IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1.5 TO 2 TONS PER ACRE. SPREAD MULCH BY HAND OR MULCH BLOWER. PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISH HARROW SET STRAIGHT. MULCH MATERIAL SHOULD BE "SET" INTO SOIL SURFACE APPROXIMATELY 2-3 INCHES.

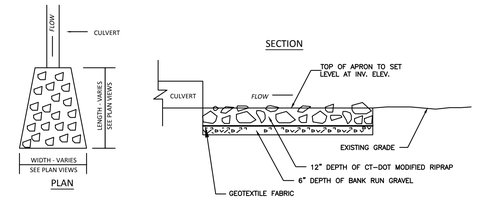
DURING CONSTRUCTION IT SHALL BE THE RESPONSIBILITY OF OWNER TO INSURE THE IMPLEMENTATION OF THIS EROSION AND SEDIMENT CONTROL PLAN. A BI - WEEKLY INSPECTION OF THE SITE SHALL BE PERFORMED TO INSURE COMPLIANCE WITH THIS SEDIMENT AND EROSION PLAN. A BI - WEEKLY INSPECTION REPORT SHALL BE SUBMITTED TO THE CITY'S AGENT. THIS RESPONSIBILITY INCLUDES INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PROPERTIES ENGAGED ON THE SITE OF REQUIREMENTS AND OBJECTIVES OF THIS PLAN, NOTIFYING THE CITY'S AGENT OF ANY TRANSFERS OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF AND WHEN TITLE OF LAND IS TRANSFERRED.



PLAN

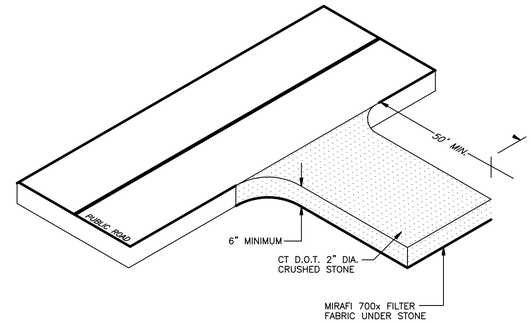
NOTE:
1. INSTALLATION REQUIREMENTS
   a. THE STONE SHALL BE PILED TO A NATURAL ANGLE OF REPOSE WITH THE HEIGHT OF AT LEAST 2 FEET.
   b. THE BARRIER SHALL BE CONSTRUCTED SO WATER CANNOT BYPASS THE BARRIER AROUND THE ENDS.
2. MAINTENANCE
   a. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
   b. THE BARRIER SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STONE BARRIER
NOT TO SCALE

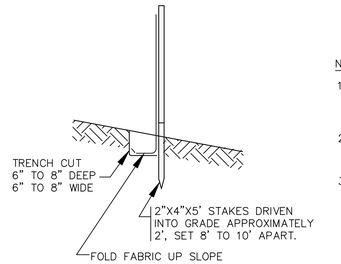


ROCK APRON DETAIL
NOT TO SCALE

ROCK APRON TABLE		
APRON	LENGTH (ft.)	WIDTH (ft.)
1	15	8



CONSTRUCTION ENTRANCE
NOT TO SCALE

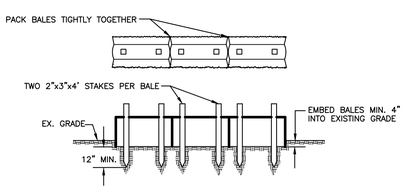


NOTES:
1. SEDIMENT CONTROL FABRIC TO BE A WOVEN POLYPROPYLENE MATERIAL TREATED TO RESIST DEGRADATION FROM EXPOSED SUNLIGHT.
2. ACCEPTABLE SILT SCREEN FABRIC– "PROPEX SILT STOP" BY AMOCO FABRICS CO.
3. AFTER FOLDING FABRIC EDGE, BACKFILL TRENCH WITH ORIGINAL SOIL.

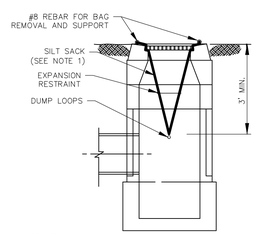
SILT FENCE INSTALLATION
NOT TO SCALE

LOT DEVELOPMENT EROSION & SEDIMENT CONTROL NOTES:

1. ALL EROSION & SEDIMENT CONTROL MEASURES TO BE CONSTRUCTED AS DETAILED AND SPECIFIED IN THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL JANUARY 2002 AS AMENDED.
2. ALL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION, PROPERLY MAINTAINED DURING CONSTRUCTION AND REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN PROPERLY STABILIZED. AFTER INSTALLATION OF THE INITIALLY PRESCRIBED MEASURES, ADDITIONAL MEASURES MAY BE REQUIRED TO ADDRESS FIELD CONDITIONS AS ORDERED BY THE STATE OF CONNECTICUT DOT AND THE TOWN OF EAST HAMPTON OR ITS DESIGNATED AGENT(S).
3. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED. THE EXPOSURE SHOULD BE THE SHORTEST PERIOD OF TIME. WHEN NECESSARY TEMPORARY VEGETATION AND OR MULCHING SHOULD BE USED TO PROTECT EXPOSED AREAS. FINAL VEGETATION SHOULD BE INSTALLED AS SOON AS POSSIBLE. WHEREVER FEASIBLE NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.
4. THE STOCKPILING OF BUILDING MATERIALS SHALL BE WITHIN THE AREA OF DISTURBANCE.
5. SEEDBED PREPARATION: FINE GRADE AND RAKE SOIL TO REMOVE ANY STONES LARGER THAN 2 INCHES. INSTALL ANY NEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIVERSIONS. APPLY LIMESTONE AT A RATE OF TWO TONS PER ACRE OR 90 POUNDS PER 1000 SQUARE FEET. FERTILIZE WITH 10-10-10 AT A RATE OF 11 POUNDS PER 100 SQUARE FEET. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF FOUR INCHES.
6. SEED APPLICATION: APPLY SHADE TOLERANT GRASS MIXTURE BY HAND, CYCLONE SEEDER OR HYDROSEEDER. SEEDING SHALL BE DONE BETWEEN APRIL 1 AND JUNE 1 OR BETWEEN AUGUST 15 AND SEPTEMBER 1. IF SEEDING CANNOT BE DONE DURING THESE TIMES, REPEAT MULCHING PROCEDURE UNTIL SEED CAN BE DONE.
7. ESTABLISH PERMANENT VEGETATION USING A SEED MIXTURE OF:
   KENTUCKY BLUEGRASS 20 LBS/ACRE
   CREEPING RED FESCUE 20 LBS/ACRE
   PERENNIAL RYE GRASS 5 LBS/ACRE
   TOTAL 45 LBS/ACRE
   THE RECOMMENDED DATES FOR SEEDING ARE APRIL 1 THROUGH JUNE 1 AND AUGUST 15 THROUGH SEPTEMBER 1.
8. MULCHING: IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH SHALL BE SPREAD BY HAND OR WITH A MULCH BLOWER. PUNCH MULCH INTO SOIL SURFACE APPROXIMATELY TWO TO THREE INCHES.
9. WOOD CHIPS ARE A SUITABLE SUBSTITUTE WITH THE APPROCAL OF THE PUBLIC WORKS DEPARTMENT AND THE TOWN ENGINEER.



HAYBALE BARRIER
NOT TO SCALE



NOTES:
1. SILT SACKS SHALL BE HI-FLOW SILTSACK® 'TYPE A' FOR TYPE "C-L" CB TOPS AND 'TYPE B' WITH CURB DEFLECTORS FOR TYPE "C" CB TOPS OR OTHER STRUCTURES WITH CURB INLETS AS MANUFACTURED BY ACF ENVIRONMENTAL, INC OR APPROVED EQUAL.
2. SILT SACKS SHALL BE PROVIDED WITH INTERNAL OVERFLOWS.
3. SILT SACKS SHALL BE EMPTIED WHEN THEY HAVE COLLECTED 6" TO 12" OF SEDIMENT. INSPECT EVERY 1 TO 2 WEEKS AND AFTER EVERY MAJOR RAINFALL EVENT.

SILT SACK
NOT TO SCALE

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Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-033_bndy

Drawing Scale: AS NOTED
Drawing date: 1/6/22

Rev.	Date	Revision	By
1	8/30/22	DRAINAGE & RAIN GARDENS	SAM
2	9/28/22	REVIEW COMMENTS	SAM

EROSION CONTROL NOTES & DETAILS

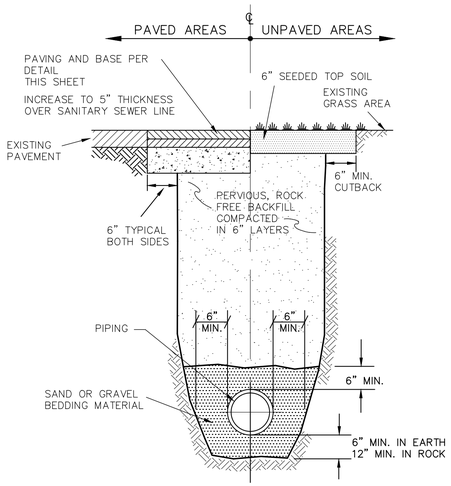
PROJECT TITLE: LAKE HAYWARD PRESERVE
LAKE SHORE DRIVE EAST HADDAM, CT

PREPARED FOR: ANTHONY SILVESTRI

CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE- SUITE 202
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RES
Reynolds Engineering Services, LLC

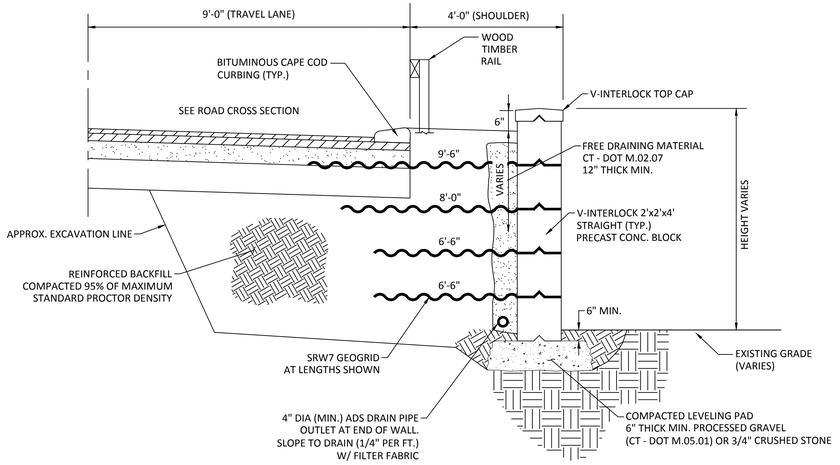
Drawing #: 20 OF 27

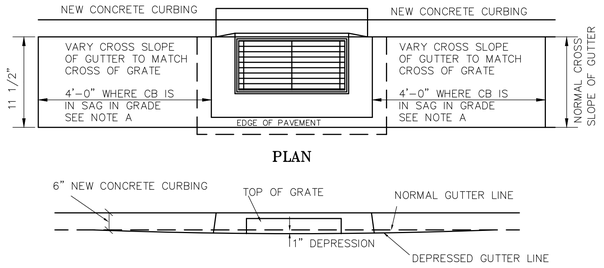
Job #: 21-033

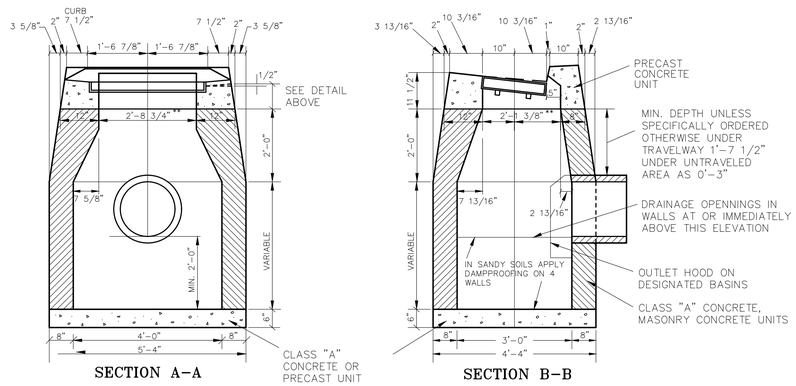


STORM PIPING TRENCHES

NOT TO SCALE

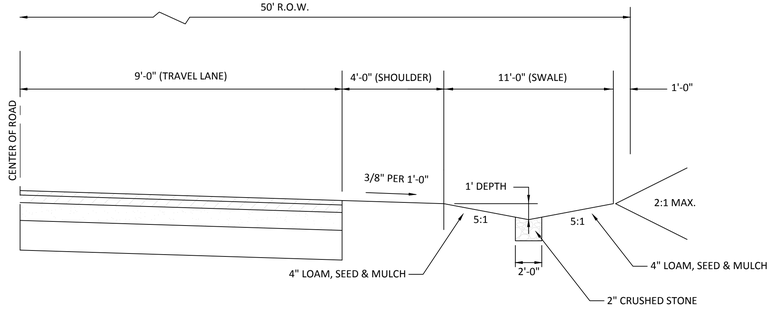






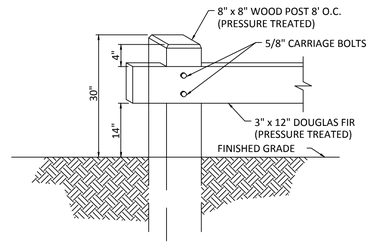
TYPE "C" CATCH BASIN (SINGLE INLET)

NOT TO SCALE



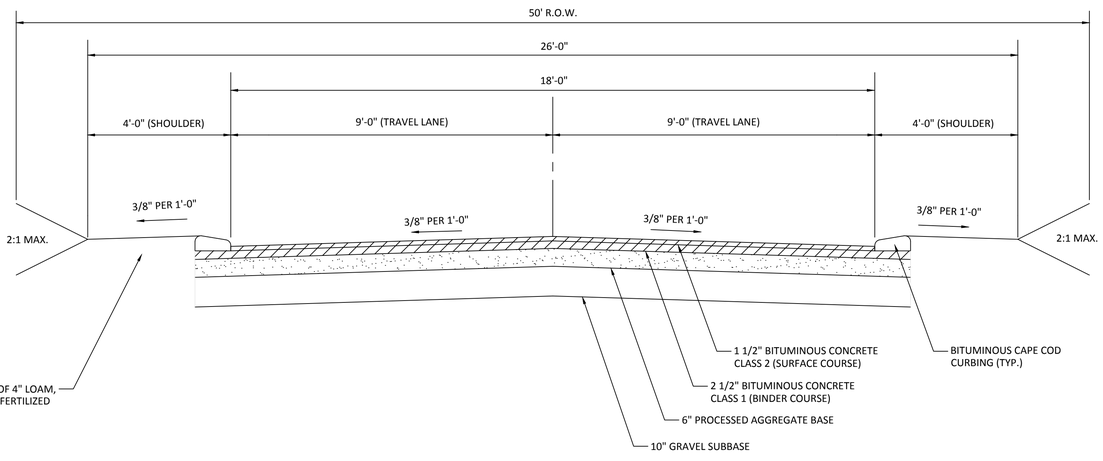
ROADSIDE SWALE DETAIL

NOT TO SCALE



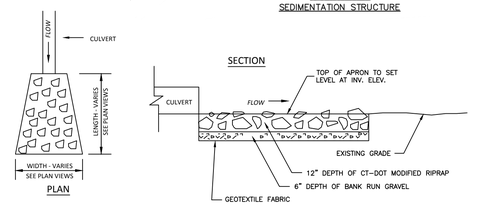
WOOD GUIDE RAIL

NOT TO SCALE



TYPICAL STREET CROSS SECTION LAYOUT

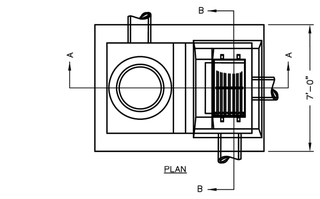
NOT TO SCALE



ROCK APRON DETAIL

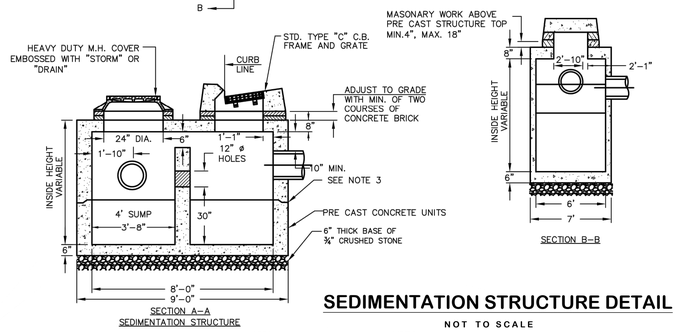
NOTE: DETAIL FOR USE ON INLET SIDE OF CROSS CULVERTS

NOT TO SCALE



NOTES:

1. BAFFLE CONSTRUCTION TO BE OF CAST MATERIAL WITH THRU HOLES ABOVE OUTLET FLOW LINE OR MORTARED CEMENT BLOCKS WITH WEEP HOLES ABOVE OUTLET FLOW LINE.
2. ADJUST M.H. FRAME TO SUIT REQUIRED FIELD HEIGHT.
3. CONSTRUCTION JOINT – SEALED WITH 1" DIA. BUTYL RUBBER OR ACCEPTABLE EQUIVALENT
4. DESIGN LOADING – AASHTO HS20–44.
5. STEEL REINFORCEMENT – ASTM A–615–75, GRADE 60, 2" MIN. COVER.
6. CONCRETE MINIMUM STRENGTH – 5,000 P.S.I. @ 28 DAYS.
7. MAXIMUM HEIGHT OF EACH ADDITIONAL PIECE 4'–0".
8. MAXIMUM INSIDE HEIGHT FOR 2 PIECE CHAMBER 8'–0".
9. ROOF AND SIDE WALL OPENINGS AS SPECIFIED.
10. STRUCTURE TO BE INSTALLED IN AN "OFFLINE" CONFIGURATION WITH DIVERSION MANHOLES AS PER TOWN PUBLIC IMPROVEMENT STANDARDS.



SEDIMENTATION STRUCTURE DETAIL

NOT TO SCALE

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GENERAL NOTES & DETAILS

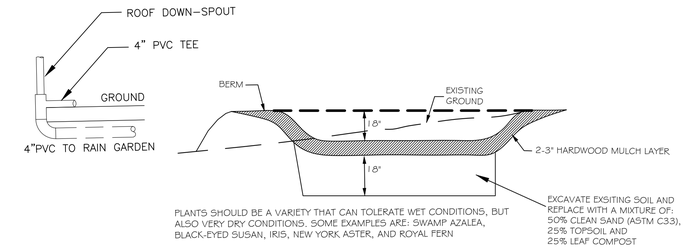
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PREPARED FOR: *ANTHONY SILVESTRI*

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Drawing #: 21 OF 27

Job #: 21-033



NOTE:
1. RAIN GARDEN DEPTH IS 18 INCHES.
2. EXCESS RUNOFF IS CALCULATED AS THE DIFFERENCE IN RUNOFF BETWEEN THE SUBDIVISION PRE - DEVELOPMENT SITE DRAINAGE MODEL RUNOFF CURVE NUMBER (55) AND THE PROPOSED COVER. ROOFS (RCN-98), DRIVEWAYS (RCN-98) AND LAWN(RCN-61) FOR THE 100-YEAR RAINFALL (7.91").

RCN	RUNOFF
55	2.72"
61	3.37"
98	7.67"

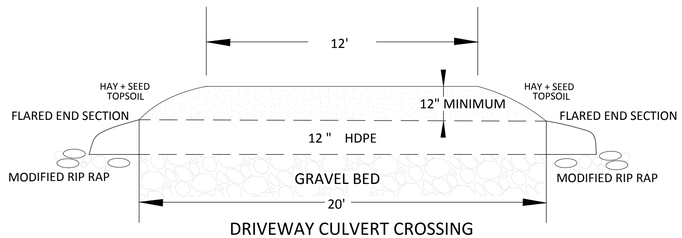
OPERATION AND MAINTENANCE PLAN - RAIN GARDENS

1. THE HOMEOWNER SHALL NOT REMOVE A RAIN GARDEN, SEVER OR RE-ROUTE ANY DRAINAGE LINE LEADING TO THE RAIN GARDEN OR TAKE NAY OTHER ACTION WHICH PREVENT SURFACE RUNOFF FROM REACHING THE RAIN GARDEN AND FLOWING THROUGH IT AS DESIGNED.
2. THE HOMEOWNER SHALL ANNUALLY REMOVE SEDIMENT , LEAVES, LITTER, OR OTHER MATERIALS WHICH MAY HAVE ACCUMULATED IN THE RAIN GARDEN.

RAIN GARDEN SIZING TABLE

LOT	ROOF	DRIVEWAY	LAWN	EXCESS RUNOFF ROOF/DRIVE	EXCESS RUNOFF LAWN	EXCESS RUNOFF	PROPOSED RAIN GARDEN DIMENSIONS		RAIN GARDEN VOLUME
	(SF)	(SF)	(SF)	(INCHES)	(INCHES)	(CF)	WIDTH (FT)	LENGTH (FT)	(CF)
#	-	-	N/A	4.95	N/A	-	-	-	-

RAIN GARDEN DETAIL
CROSS SECTION
NOT TO SCALE



DRIVEWAY CULVERT CROSSING
NOT TO SCALE

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Drawing #: 22 OF 27

Job #: 21-033

FORM #2 State of Connecticut Department of Public Health Application/Permit No._____ 1/1/04

SITE INVESTIGATION FOR A SEWAGE DISPOSAL SYSTEM

Property Owner:**Gregan**

Location: Lake Shore/East Shore Rd East Haddam
Map 087 Lot 142 & 143

DEEP TEST PIT DATA/SOIL DESCRIPTIONS

DATE: 10/20/2020

(Record all Test Pits)

Holes Observed By Liz Davidson RS And Don Mitchell

TEST PIT: 1	TEST PIT: 2	TEST PIT: 3	TEST PIT: 4
0"-7" Topsoil 7"-20" Orange brown fine silty loam with gravel 20"-67" Red brown grading to grey, cobbly sand and gravel 67"-88" Light brown shisty fine sand	0"-9" Topsoil 9"-21" Med coarse orange brown sand and gravel 21"-95" Grey fine silty sand with gravel; Loose 21"-38"	0"-8" Topsoil 8"-17" Med to coarse red brown sand with gravel 17"-38" Orange brown coarse gravely sand 38"-53" Cobbles and sand 53"-64" Grey coarse sand and gravel 64"-89" Dark brown cobbly sand and gravel	0"-7" Topsoil 7"-20" Brown fine silty loam 20"-41" Med and coarse brown/orange sand 41"-58" Layers of stratified sand and gravel, orange staining 58"-88" Cobbles with coarse sand and gravel 88"-100" Decomposed Ledge
Mottles: No	Mottles: No	Mottles: Spotty staining 47"	Mottles: 63" possible
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 46"	Roots: 84"	Roots: 47"	Roots: 63"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: 5	TEST PIT: 6	TEST PIT: 7	TEST PIT: 8
0"-9" Topsoil 9"-21" Red brown fine silty loam 21"-37" Fine tan sand with gravel 37"-90" Grey sandy till, orange staining	0"-9" Topsoil 9"-16" Red brown fine silty loam 16"-33" Light brown/tan fine sand with silt and gravel 33"-96" Gravelly sand	0"-7" Topsoil 7"-24" Light orange brown fine sandy loam 24"-35" Tan silty very fine sand with gravel 35"-95"Grey fine sandy till with gravel	0"-11" Topsoil 11"-24" Red brown fine sandy loam with gravel 24"-31" Light tan fine silty sand with gravel 31"-49" Orange brown coarse sand with gravel 49"-85" Cobbly sand and gravel 85"-106" Grey silty sand with stones and gravel
Mottles: No	Mottles: 64"	Mottles: No	Mottles: No
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 73"	Roots: 47"	Roots: 41"	Roots: some 60"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: 9	TEST PIT: 10	TEST PIT: 11	TEST PIT: 12
0"-10" Topsoil 10"-19" Orange brown fine medium silty loam 19"-34" Tan silty fine sand 34"-96" Light grey sandy till	0"-7" Topsoil 7"-19" Red orange brown fine to medium silty loam 19"-34" Light tan fine silty sand 34"-57" Gravelly coarse sand 57"-84" Rotten rock	0"-6" Topsoil 6"-17" Brown fine silty loam 17"-38" Light olive brown fine to medium sand with gravel 38"-99" Brown/grey decomposed rotten rock, sandy texture	0"-8" Topsoil 8"-18" Brown fine sandy loam 18"-32" Light tan very fine silty sand, firm 32"-113"Orange brown gravelly coarse sand stratified in layers
Mottles: No	Mottles: No	Mottles: No	Mottles: 42" some stratified between layers not continuous around hole
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 50"	Roots: 47"	Roots: Some 51"	Roots: 41"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: 13	TEST PIT: 14	TEST PIT: 15	TEST PIT: 16
0"-14" Topsoil 14"-22" Red brown fine sandy loam 22"-52" Light brown/tan firm very fine sand with silt/ trace light brown gravel with roots 52"-101" Brown orange gravely coarse sand	0"-6" Topsoil 6"-18" Brown fine silty loam 18"-27" Light brown fine sand with silt and gravel 27"-88" Gravelly coarse sand wit cobbles 88"-98" Very fine very light brown/silver sand	0"-10" Topsoil and leaf 10"-17" Brown fine silty loam 17"-26" Light brown/tan very fine sand 26"-84" Orange brown gravelly coarse sand 84"-96" Medium sand	0"-5" Topsoil and leaf litter 5"-14" Light brown fine silty loam with gravel 14"-35" Gravelly brown orange fine o medium sand, very loose 35"-47" Light orange brown loose fine to coarse sand with gravel. dry 47"-84" orange brown cobbly sand and gravel
Mottles: No	Mottles: No	Mottles: No	Mottles: No
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 49"	Roots: 66"	Roots: 30	Roots: 30"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

Groundwater table: (Near max, below max etc.) Below Max

Soil Moisture (High, medium, low etc.) Low

Date 10.21.2020- Next Day Holes Observed By Liz Davidson RS And Emily Miller

TEST PIT: 17	TEST PIT: 18	TEST PIT: 19	TEST PIT: 20
0-5" -Topsoil 5-33" -Brown grading to light brown sandy loam 33-97" -Cobbly Coarse sand and gravel	0"-7" -Topsoil 7"-25" -Red Brown fine loam grading to light brown 25"-90"-Light grey/light brown fine silty sand, moderately compact with some cobbles and more gravel	0"-5" -Topsoil 5"-16"-Brown Fine silty loam with gravel 16"-27"-Olive brown silty loam with gravel 27"-90"-light grey/light brown fine to medium silty sand, moderately compact	0"-7"-Topsoil 7"-16" -Brown fine silty loam 16"-27" -Olive brown silty loam with gravel 27"-100" Grey fine to medium silty sand, compact with rocks
Mottles: 70"	Mottles: 41"	Mottles: Staining at 33"	Mottles: 43" faint staining
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 29"	Roots: 45"	Roots: 50"	Roots: 45"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: 21	TEST PIT: 22	TEST PIT: 23	TEST PIT: 24
0"-6" -Topsoil 6"-28"- Brown orange fine to medium silty loam with gravel 28"-92" -Grey compact sandy hardpan with rocks and gravel	0"-7" -Topsoil 7"-19"- Red Brown Fine silty loam 19"-57" -Light brown fine sand, some silt with rocks and stones, firm	0"-7"-Topsoil 7"-27"-Red brown fine silty loam grading to brown. 27"-83"-Grey brown fine silty schisty sand with stones and gravel. Rocks and large boulders throughout.	0"-10" -Topsoil 10"-22"-Red brown fine silty loam with cobbles 22"-88"-Cobbly sand and gravel , medium and coarse some silt
Mottles: 37"	Mottles: 34"	Mottles:40" Staining	Mottles: No
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: 57"	Ledge: No	Ledge: No
Roots: 46"	Roots: 35"	Roots: 47"	Roots: Most to 29"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: 25	TEST PIT: 26	TEST PIT: 27	TEST PIT: 28
0"-7" -Topsoil 7"-17"-Red brown fine silty loam with cobbles 17"-91"-Cobbly sand and gravel, medium and coarse some silt	0"-5"-Topsoil 5"-23"-Red Brown grading to light brown silty loam 23"-56"-Cobbly sand and gravel, fine to medium 56"-93"-Light brown fine silty sand	0"-6" Topsoil 6"-13"-Brown medium silty sand with stones 13"-28"-Orange Brown gravelly coarse sand 28"-38"-Medium orange brown clean sand 38-45" Medium to coarse sand with stones 45"-94"-Stratified layers of orange brown medium sand and light brown fine sand, firm	0"-6" Topsoil 6"-18"Medium brown silty loam with gravel 18"-40" Medium to coarse sand with cobbles and gravel 40"-91"-Tan/light brown fine silty sand with gravel
Mottles: No	Mottles: 54"	Mottles: 45"	Mottles: 53"
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 30"	Roots: 65"	Roots: 45"	Roots: 40"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: 29	TEST PIT: 30	TEST PIT: 31	TEST PIT: 32
0"-7" -Topsoil 7"-18"-Red brown fine silty loam with cobbles and some gravel 18"-52"Cobbly sand and gravel 52"-89"-Mottled Orange brown and Grey, clean medium sand	0"-5"-Topsoil 5"-9"-Light brown Silty loam 9"-18"-Light brown clean sand 18"-100"-Firm light brown/light grey fine sandy loam with silty orange stratification throughout	0"-4" Topsoil 4"-80 Medium to coarse light brown clean sand *Possibly filled in stump with previous test hole. Upper portion of hole is damp	0"-4" -Topsoil 4"-29"-light brown medium to coarse sand with gravel and silt 29"-73" light brown/tan medium to coarse sand, linear striations
Mottles: 52"	Mottles: No	Mottles: No	Mottles: No
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 50"	Roots: 85"	Roots: @ 77" significant roots	Roots: 61"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: 33	TEST PIT: 34	TEST PIT: 35	TEST PIT: 36
0"-4" -Topsoil 4"-43"- light brown fine silty sand 43"-84" -Stratified layers of light brown and orange fine silty sand	0"-1"-Topsoil 1"-5"-Brown coarse sand with small gravel 5"-90"-Light brown/tan medium to coarse sand	0"-7"- Topsoil (sandy with stones) 7"-41"-Medium light orange brown sand 41"-75"-Light orange brown fine sand with silt	0"-1"-Topsoil (sandy) 1"-20"-Brown coarse sand with gravel 20"-78"-Light brown/tan medium to coarse sand
Mottles: No	Mottles: No	Mottles: No	Mottles:No
GW: No	GW: No	GW: No	GW: No
Ledge: No	Ledge: No	Ledge: No	Ledge: No
Roots: 75"	Roots: 60"	Roots: 50"	Roots: 50"
Restrictive:	Restrictive:	Restrictive:	Restrictive:

TEST PIT: **33B**
0"-2"-Topsoil 2"-22"-Brown orange coarse sand and gravel with cobbles 22"-70"-Medium to coarse light brown sand LEFT SIDE: loose, less staining RIGHT SIDE: More firm and staining
Mottles: NO
GW: NO
Ledge: NO
Roots: 63"
Restrictive:

DESIGN RECOMMENDATIONS/COMMENTS:

1. **Testing conducting for a 8-9 lot proposed subdivision**
2. **Perc to be done by PE or LS (2 min per lot)**
3. **Locations to be surveyed by LS.**
4. **All holes labeled by LS on site**

PERCOLATION TEST 1P

HOLE DEPTH: 20"

TIME	DEPTH	
12:04	7.5"	PRESOAK
1:02	DRY	
2:02	8"	
2:12	11 1/4"	
2:22	13 1/8"	
2:32	14 1/2"	
2:42	15 7/8"	
2:52	16 5/8"	
3:02	17 3/8"	
3:12	18 1/4"	
3:22	18 7/8"	
3:32	19 3/4"	

PERC RATE: 13.3 min./inch

PERCOLATION TEST 1R

HOLE DEPTH: 22.5"

TIME	DEPTH	
12:06	8.5"	PRESOAK
12:52	DRY	
2:05	9 3/4"	
2:15	13 3/4"	
2:25	16"	
2:35	18"	
2:45	19 1/8"	
2:55	20 5/8"	
3:05	21 3/4"	

PERC RATE: 7.6 min./inch

PERCOLATION TEST 2P

HOLE DEPTH: 19.5"

TIME	DEPTH	
12:28	6.5"	PRESOAK
1: 18	DRY	
2:07	7"	
2:17	11.5"	
2:27	13 1/8"	
2:37	14 3/8"	
2:47	15 3/4"	
2:57	17 1/2"	
3:07	19"	

PERC RATE: 5.7 min./inch

PERCOLATION TEST 2R

HOLE DEPTH: 24"

TIME	DEPTH	
12:35	11"	PRESOAK
1: 18	DRY	
2:18	11.5"	
2:28	15 7/8"	
2:38	18 1/4"	
2:48	20"	
2:58	21 5/8"	
3:08	23"	

PERC RATE: 6.7 min./inch

PERCOLATION TEST 3P

HOLE DEPTH: 20.5"

TIME	DEPTH	
1:22	8.5"	PRESOAK
1: 55	DRY	
3:16	7 3/4"	
3:26	12 1/2"	
3:36	15 1/4"	
3:46	17 3/8"	
3:56	18 3/4"	
4:06	19 3/4"	

PERC RATE: 8.4 min./inch

PERCOLATION TEST 3R

HOLE DEPTH: 20"

TIME	DEPTH	
1:26	8"	PRESOAK
1: 56	DRY	
3:18	7"	
3:28	12 3/4"	
3:38	15 5/8"	
3:48	18 1/8"	
3:58	19"	

PERC RATE: 5.9 min./inch

PERCOLATION TEST 5P

HOLE DEPTH: 21.5"

TIME	DEPTH	
1:33	9.5"	PRESOAK
2:40	DRY	
8:54	9"	
9:04	15"	
9:14	17 3/4"	
9:21	19 1/2"	
9:28	21	

PERC RATE: 4.3 min./inch

PERCOLATION TEST 5R

HOLE DEPTH: 21"

TIME	DEPTH	
1:37	9"	PRESOAK
2:40	DRY	
8:55	7.5"	
9:05	13 1/2"	
9:15	15 1/2"	
9:24	17"	
9:31	17 1/2"	
9:38	29 1/8"	
9:45	19 1/2"	

PERC RATE: 7.0 min./inch

PERCOLATION TEST 6P

HOLE DEPTH: 20"

TIME	DEPTH	
7:51	8"	PRESOAK
8:58	DRY	
9:00	8.5"	
9:10	15 1/4"	
9:20	18 1/4"	
9:27	20"	
9:32	20 1/2"	

PERC RATE: 4.2 min./inch

PERCOLATION TEST 6R

HOLE DEPTH: 20"

TIME	DEPTH	
7:54	8"	PRESOAK
8:57	DRY	
8:59	7 3/4"	
9:09	13"	
9:19	16 1/8"	
9:26	18 3/4"	
9:31	19 3/4"	

PERC RATE: 3.3 min./inch

PERCOLATION TEST 7P

HOLE DEPTH: 22"

TIME	DEPTH	
8:36	10"	PRESOAK
9:50	DRY	
10:08	9 3/4"	
10:13	13 5/8"	
10:18	16 1/4"	
10:23	17 5/8"	
10:28	18 3/4"	
10:33	20 1/4"	
10:38	21 3/4"	

PERC RATE: 3.7 min./inch

PERCOLATION TEST 7R

HOLE DEPTH: 22"

TIME	DEPTH	
8:34	10"	PRESOAK
9:53	DRY	
10:09	9 1/8"	
10:14	12 1/8"	
10:19	14"	
10:24	15 1/2"	
10:29	16 7/8"	
10:34	18 3/8"	
10:39	19"	
10:44	19 7/8"	
10:54	21 1/8"	

PERC RATE: 7.3 min./inch

PERCOLATION TEST 8P

HOLE DEPTH: 19.5"

TIME	DEPTH	
8:41	7.5"	PRESOAK
9:56	DRY	
10:12	7"	
10:17	9 1/2"	
10:22	11"	
10:27	12 1/8"	
10:32	13 3/8"	
10:37	14 1/2"	
10:42	15 5/8"	
10:52	17 1/4"	
11:02	18 3/4	
11:04	19"	

PERC RATE: 6.5 min./inch

PERCOLATION TEST 9P

HOLE DEPTH: 24"

TIME	DEPTH	
8:38	12"	PRESOAK
9:02	DRY	
9:23	10 1/2"	
9:28	13 1/4"	
9:33	15 1/8"	
9:38	17"	
9:43	18 1/4"	
9:48	19 1/2"	
9:53	20 1/2"	
9:58	22"	

PERC RATE: 4.0 min./inch

PERCOLATION TEST 9R

HOLE DEPTH: 22 1/2"

TIME	DEPTH	
8:40	10 1/2"	PRESOAK
9:18	DRY	
9:25	10 1/2"	
9:30	13 1/4"	
9:35	15 1/8"	
9:40	17"	
9:45	18 1/4"	
9:50	19 1/2"	
9:55	20 1/2"	
10:00	22"	
10:05	20 3/4"	
10:10	21 1/4"	
10:15	22"	
10:17	22 1/2"	

PERC RATE: 7.1 min./inch

PERCOLATION TEST 10P

HOLE DEPTH: 20"

TIME	DEPTH	
8:54	8"	PRESOAK
9:16	DRY	
10:03	6 3/4"	
10:08	16"	
10:11	18 1/2"	
9:40	17"	

PERC RATE: 0.7 min./inch

PERCOLATION TEST 10R

HOLE DEPTH: 25 1/2"

TIME	DEPTH	
8:59	13 1/2"	PRESOAK
9:16	DRY	
10:21	12 3/4"	
10:26	19 1/2"	
10:28	21 1/2"	
10:30	22 1/2"	
10:32	22 3/4"	
10:34	23 1/8"	
10:36	24 1/4"	
10:38	24 1/2"	

PERC RATE: 4.0 min./inch

PERCOLATION TEST 11P

HOLE DEPTH: 24"

TIME	DEPTH	
10:38	12"	PRESOAK
11:10	DRY	
11:12	12 3/4"	
11:17	15 5/8"	
11:22	17 1/4"	
11:27	18 1/2"	
11:32	19 3/4"	
11:37	20 7/8"	
11:42	21 3/4"	
11:47	22 7/8"	
11:52	23 1/4"	
11:57	24 3/4"	

PERC RATE: 5.2 min./inch

PERCOLATION TEST 11R

HOLE DEPTH: 24 1/2"

TIME	DEPTH	
10:39	12 1/2"	PRESOAK
11:07	DRY	
11:10	13 1/2"	
11:15	16 7/8"	
11:20	19"	
11:25	20 7/8"	
11:30	21 1/2"	
11:35	22 1/4"	
11:40	23 1/2"	
11:45	24 1/4"	
11:50	24 3/4"	
11:53	25 1/2"	

PERC RATE: 5.5 min./inch

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Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-033_bndy

Drawing Scale: AS NOTED

Drawing date: 1/6/22

Rev.	Date	Revision	By
1	8/30/22	DRAINAGE & RAIN GARDENS	SAM
2	9/28/22	REVIEW COMMENTS	SAM

SOILS DATA

PROJECT TITLE: LAKE HAYWARD PRESERVE
LAKE SHORE DRIVE
EAST HADDAM, CT

PREPARED FOR: ANTHONY SILVESTRI

CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE SUITE 202
COLCHESTER, CT
(860) 465-7419
RES
Reynolds Engineering Services, LLC

Drawing #: 23 OF 27

Job #: 21-033

Form # 2 Alternate — Technical Standards for Subsurface Sewage Disposal Systems

CHATHAM HEALTH DISTRICT SITE INVESTIGATION FOR A SUBSURFACE SEWAGE DISPOSAL SYSTEM PG1

Location: Lakeshore and East Shore Dr, East Haddam 8 lots — Weather:

Percent Slope: — Parent Material: — Date: 6/22/2021 Time: 10:15am

Completed by: Ryan McCammon (P.E. or Certified Local Health Agent) — Accuracy Assured by (if P.E. completed form): Ryan McCammon (Certified Local Health Agent)

Others Present for Site Investigation: Mark Reynolds PE (Installer, Developer, P.E., etc.)

Test Pit #: 50-83" Depth to Observed Ground-Water (inches): Weeping: N/ O — Standing: N/0 50-53 1 — Observed Ledge 83"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-30"	Medium Brown				med sandy loam	3	friable	Yes	
Rr	30-55"	Orange Brown				fine sandy loam	20	friable	No	Schist
Rr	55-83"	Grey				med silty loam	20	very firm	No	Almost ledge

Test Pit #: 51-80" Depth to Observed Ground-Water (inches): Weeping: N/ O — Standing: N/0 — Observed Ledge 80"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-24"	Medium Brown				med sandy loam	3	friable	Yes	
Rr	24-48"	Tan/Grey				med sandy loam	20	friable	No	Schist boulders
Rr	48-80"	Grey				med silty loam	20	very firm	No	Almost ledge

Test Pit #: 52-61" Depth to Observed Ground-Water (inches): Weeping: N/ O — Standing: N/0 — Observed Ledge 61"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-20"	Medium Brown				med sandy loam	3	friable	Yes	
Rr	20-46"	Tan/Grey				med sandy loam	20	friable	No	Schist boulders
Rr	46-61"	Grey				med silty loam	20	very firm	No	Almost ledge

Test Pit #: 53-62" Depth to Observed Ground-Water (inches): Weeping: N/ O — Standing: N/0 — Observed Ledge 62"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-21"	Medium Brown				med sandy loam	3	friable	Yes	
Rr	21-49"	Tan/Grey				med sandy loam	20	friable	No	Schist boulders
Rr	49-62"	Grey				med silty loam	20	very firm	No	Almost ledge

Test Pit #: 54-92" Depth to Observed Ground-Water (inches): Weeping: N/ O 54-57 4 — Standing: N/0 — Observed Ledge 92"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-29/33"	Medium Brown				med sandy loam	3	friable	Yes	
Rr	29/33-49	Tan/Grey				med sandy loam	20	friable	No	Schist boulders
Rr	49-92"	Grey				med silty loam	20	very firm	No	Almost ledge

Test Pit #: 55-80" Depth to Observed Ground-Water (inches): Weeping: 64" — Standing: 76" — Observed Ledge N/O

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-25"	Medium Brown				med sandy loam	3	friable	Yes	
B2	25-36"	Tan/Grey				fine sandy loam	0	friable	Yes	
Rr	36-64"	Orange Brown				med sandy loam	15	friable	No	Schist boulders
Rr	64-76"	Grey				med silty loam	20	very firm	No	We

Test Pit #: 56-78" Depth to Observed Ground-Water (inches): Weeping: 64" — Standing: 76" — Observed Ledge 78"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-26"	Medium Brown				med sandy loam	3	friable	Yes	
B2	26-47"	Tan/Grey				med silty loam	15	friable	No	Schist
Rr	47-78"	Grey				med sandy loam	15	firm	No	Schist boulders

Test Pit #: 57-93" Depth to Observed Ground-Water (inches): Weeping: 78" — Standing: 89" — Observed Ledge 93"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-29"	Medium Brown				med sandy loam	3	friable	Yes	
B2	29-53"	Tan/Grey				med loamy sand	15	friable	No	Schist
Rr	53-89"	Grey				med sandy loam	15	very firm	No	Schist boulders

Test Pit #: 58-88" Depth to Observed Ground-Water (inches): Weeping: 73" — Standing: 86" — Observed Ledge 86"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-27"	Medium Brown				med sandy loam	5	friable	Yes	
B2	27-40"	Tan/Grey				fine sandy loam	0	friable	No	
Rr	40-56"	Tan				med loamy sand	15	firm	No	Schist boulders
Rr	56-86"	Dark Grey				med sandy loam	20	very firm	No	Almost ledge

Test Pit #: 59-72" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge 72"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-32"	Medium Brown				med sandy loam	5	friable	Yes	
Rr	32-72"	Tan				med loamy sand	15	firm	No	Schist boulders

Test Pit #: 60-80" Depth to Observed Ground-Water (inches): Weeping: N/ O — Standing: N/0 — Observed Ledge 80"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-27"	Medium Brown				med sandy loam	3	friable	Yes	
Rr	27-48"	Tan/Grey				coarse loamy sand	20	friable	No	Schist boulders
Rr	48-80	Grey				med silty loam	20	very firm	No	Almost ledge

Test Pit #: 61-84" Depth to Observed Ground-Water (inches): Weeping: N/ O — Standing: N/0 — Observed Ledge 84"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-26"	Medium Brown				med sandy loam	3	friable	Yes	
Rr	26-68"	Tan/Grey				coarse loamy sand	20	friable	No	Schist boulders
Rr	68-84	Dark Grey				med silty loam	20	very firm	No	Almost ledge

Test Pit #: 62-75" Depth to Observed Ground-Water (inches): Weeping: 48" — Standing: 65" — Observed Ledge 75"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-7"	Black				topsoil	0	friable	Yes	
B1	7-26"	Orange Brown				med sandy loam	3	friable	Yes	
C1	26-37"	Tan/Grey	26"	Orange	15%	med sandy loam	10	friable	No	
Rr	37-65"	Dark Grey				med silty loam	20	very firm	No	Schist boulders

Test Pit #: 63-80" Depth to Observed Ground-Water (inches): Weeping: 41" — Standing: 72" — Observed Ledge 80"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-24"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
C1	24-48"	Light Grey	24"	Orange	15%	fine sandy loam	10	firm	No	Cobbles
Rr	37-65"	Dark Grey				med silty loam	20	very firm	No	Schist

Test Pit #: 64-77" Depth to Observed Ground-Water (inches): Weeping: 63" — Standing: 72" — Observed Ledge 77"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-23"	Orange Brown				med sandy loam	3	friable	Yes	
C1	23-39"	Light Grey	23"	Orange	15%	fine sandy loam	10	firm	No	Cobbles
Rr	39-72"	Dark Grey				med silty loam	20	very firm	No	Schist

Test Pit #: 65-76" Depth to Observed Ground-Water (inches): Weeping: 50" — Standing: 71" — Observed Ledge 76"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-27"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
C1	27-50"	Light Grey	27"	Orange	15%	fine silty loam	10	firm	No	
Rr	50-71"	Dark Grey				med silty loam	20	very firm	No	Schist
Lot 1A										

Test Pit #: 66-84" Depth to Observed Ground-Water (inches): Weeping: 64" — Standing: 80" — Observed Ledge 84"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-26"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
C1	26-64'	Light Grey	26"	Orange	15%	fine silty loam	10	firm	No	Cobbles
Rr	64-80"	Dark Grey				med silty loam	20	very firm	No	Schist

Test Pit #: 67-84"" Depth to Observed Ground-Water (inches): Weeping: N/O — Standing: N/O — Observed Ledge 84"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-25"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
C1	25-60"	Tan				med loamy sand	10	firm	No	Cobbles
Rr	60-84"	Dark Grey				med silty loam	20	very firm	No	Schist

Test Pit #: 68-73" Depth to Observed Ground-Water (inches): 59" — Standing: 70" — Observed Ledge 73"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-22"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
C1	22-45"	Tan	24"	Orange	45%	fine silty loam	5	firm	No	
Rr	45-70"	Dark Grey				med silty loam	20	very firm	No	Schist platey

Test Pit #: 69-80" Depth to Observed Ground-Water (inches): 66" — Standing: 74" — Observed Ledge 80"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-25"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
C1	25-52"	Light Grey	25"	Orange	45%	fine silty loam	5	firm	No	
Rr	55-74"	Dark Grey				med silty loam	20	very firm	No	Schist platey

Test Pit #: 70-77" Depth to Observed Ground-Water (inches): 66" — Standing: 74" — Observed Ledge 80"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-6"	Black				topsoil	0	friable	Yes	
B1	6-27"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
Rr	27-77"	Light Grey				fine silty loam	5	firm	No	Schist

Test Pit #: 71-81" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge 81"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-23"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
C1	23-37"	Tan				coarse loamy sand	15	very friable	No	
Rr	37-81"	Dark Grey				fine silty loam	10	very firm	No	

Test Pit #: 72-80" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge 81"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-26"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
Rr	26-80"	Dark Grey				coarse loamy sand	15	very friable	No	Rotten Rock

Lot 5

Test Pit #: 73-80" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge 80"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-32"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
Rr	32-80"	Dark Grey				coarse loamy sand	15	very friable	No	Rotten Rock

Test Pit #: 74-93" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge 80"

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-4"	Black				topsoil	0	friable	Yes	
B1	4-26"	Orange Brown				med sandy loam	3	friable	Yes	Cobbles
Rr	26-65"	Grey				coarse loamy sand	15	friable	No	Rotten Rock
Rr	65-93"	Grey				fine silty loam	15	very firm	No	Almost ledge

Lot 9

Test Pit #: 75-77" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge N/O

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-3'	Black				topsoil	0	friable	Yes	
B1	3-11"	Orange Brown				med sandy loam	10	friable	Yes	Cobbles
B2	11-29"	Orange Brown				coarse sand/gravel	25	very friable	No	Cobbles
C1	29-54"	Tan				medium sand	10	loose	No	
C2	54-77"	Tan				coarse sand/gravel	25	very friable	No	Cobbles

Test Pit #: 76-88" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge N/O

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-12"	Black				topsoil	0	friable	Yes	
B1	12-32"	Orange Brown				med sandy loam	10	friable	Yes	Cobbles
B2	32-49"	Tan				fine sandy loam	10	firm	No	
C1	49-88"	Light Grey	49"	Orange	15%	fine silty loam	3	very firm	No	

Test Pit #: 77-81 Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge N/O

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-7"	Black				topsoil	0	friable	Yes	
B1	7-25"	Orange Brown				med sandy loam	10	friable	Yes	Cobbles
B2	25-31"	Tan				fine sandy loam	10	firm	No	
C1	31-51"	Light Grey	31"	Orange	15%	fine silty loam	3	very firm	No	
C2	51-81"	Dark Grey	51"	Orange	15%	fine silty loam	3	very firm	No	

Test Pit #: 78-81" Depth to Observed Ground-Water (inches): N/O — Standing: N/O — Observed Ledge N/O

Soil Horizon	Depth (inches)	Matrix Color	Redoximorphic Features: Depth	Color	%	Soil Texture (USDA)	Gravel Percent	Soil Consistence	Roots	Other
A	0-5"	Black				topsoil	0	friable	Yes	
B1	5-26"	Orange Brown				med sandy loam	10	friable	Yes	Cobbles
B2	26-36"	Tan				fine sandy loam	10	firm	No	
C1	36-42"	Light Grey	36"	Orange	15%	fine silty loam	3	very firm	No	
C2	42-81	Dark Grey	42"	Orange	15%	fine silty loam	3	very firm	No	

SEPTIC SYSTEM CONSTRUCTION NOTES:

1. CONSTRUCTION SEQUENCE
   A. STRIP & STOCKPILE TOPSOIL FROM LEACHING AREA.
   B. CONSTRUCT LEACHING UNITS TO DESIGN LINE & GRADE.
   D. LOAM, FINE GRADE TO FINISHED GRADE AND SEED. PROTECT DISTURBED AREAS WITH EROSION CONTROLS UNTIL FIRST MOWING.
2. THE PIPE BETWEEN THE HOUSE AND SEPTIC TANK SHALL BE 4 IN. EXTRA HEAVY CAST IRON, DUCTILE IRON OR EXTRA STRENGTH PVC ASTM D1785 SCHD 40 OR APPROVED EQUAL.
3. ALL DISTRIBUTION PIPE IS TO BE ASTM D3034 SDR 35 (4"PVC) OR APPROVED EQUAL UNLESS NOTED.
4. SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF 6" OF PROCESSED GRAVEL OR BROKEN STONE ON COMPACTED SUBGRADE.
5. THERE ARE NO APPARENT WELLS OR SEPTIC FIELDS WITHIN 75' OF THE PROPOSED WELL AND SEPTIC SYSTEM AS SHOWN ON THIS PLAN.
6. APPROVED STONE AGGREGATE FOR LEACHING TRENCHES SHALL BROKEN STONE, CRUSHED STONE, OR SCREENED GRAVEL MEETING CT DOT FROM 814A SPECIFICATION FOR M.01.01 FOR NO. 4 STONE:

SIEVE SIZE	NO. 4 STONE AGGREGATE (A.K.A., 1 & 1/4" STONE) PERCENT PASSING (BY WEIGHT)	NO. 6 STONE AGGREGATE (A.K.A., 3/4" STONE) PERCENT PASSING (BY WEIGHT)
2-INCH	100	N/A
1-1/2-INCH	90-100	N/A
1-INCH	20-55	100
3/4-INCH	0-15	90-100
1/2-INCH	N/A	20-55
3/8-INCH	0-5	0-15
#4	N/A	0-5

7. THE LOCATION AND ELEVATION OF THE PROPOSED SEPTIC SYSTEM SHALL BE STAKED IN THE FIELD BY A LICENSED LAND SURVEYOR. BENCHMARK TO BE SET IN THE VICINITY OF THE LEACH FIELD AT THE TIME OF STAKEOUT.

LEACHING SYSTEM CONSTRUCTION NOTES:

1. TOPSOIL TO BE STRIPPED OFF PRIOR TO FILLING. FILL MATERIAL BETWEEN AND BEYOND TRENCHES TO BE PERVIOUS, GOOD QUALITY AND CLEAN MEDIUM SAND (SELECT FILL) PLACED AND COMPACTED IN 6" LIFTS. SELECT FILL SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   A. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 3 INCHES.
   B. THE FILL SHALL NOT CONTAIN MORE THAN 45 PERCENT GRAVEL (GRAVEL IS BETWEEN NO. 4 & 3" SIEVES) NO MORE THAN 45 PERCENT OF THE MATERIAL CAN BE RETAINED ON THE NO. 4 SIEVE.
   C. THE FILL LESS THE GRAVEL SHALL MEET THE FOLLOWING GRADATION CRITERIA:

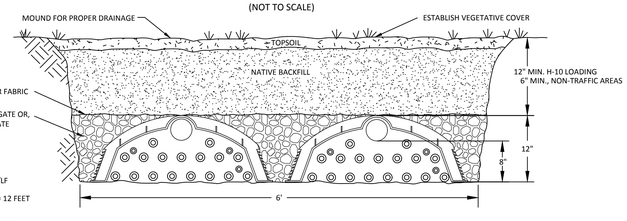
SIEVE SIZE:	#4	#10	#40	#100	#200
% PASSING: WET SEIVE	100	70-100	**10-50	0-20	0-5
% PASSING: DRY SEIVE	100	70-100	10-75	0-5	0-2.5

** PERCENT PASSING THE #40 SIEVE 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%.

2. DOCUMENTATION OF TEST RESULTS ARE TO BE PROVIDED TO THE HEALTH DISTRICT.
3. FILL MATERIAL TO BE PLACED PRIOR TO TRENCH EXCAVATION. NO TRAFFIC OTHER THAN TRACK-DRIVEN EQUIPMENT IS TO CROSS, DUMP, UNLOAD OR OTHERWISE COMPACT THE FILL AREA AFTER TOPSOIL REMOVAL. FILL MATERIAL TO BE DUMPED AT THE EDGE OF THE STRIPPED AREA AND SPREAD AND COMPACTED WITH TRACK-DRIVEN VEHICLES. STOCKPILING IS TO TAKE PLACE UPGRADIENT OF THE LEACHING AREA. THE AREA DOWN GRADIENT OF THE LEACHING AREA IS NOT TO BE DISTURBED.

DOUBLE INFILTRATOR QUICK 4 STANDARD

(NOT TO SCALE)



NOTES:
- EFFECTIVE LEACHING AREA = 5.9 SQ.FT/LF
- CENTER-TO-CENTER TRENCH SPACING = 12 FEET
- INSTALL INFILTRATORS ACCORDING TO MANUFACTURER'S CURRENT INSTALLATION INSTRUCTIONS

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Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-033_bndy

Drawing Scale: AS NOTED
Drawing date: 1/6/22

Rev.	Date	Revision	By
1	8/30/22	DRAINAGE & RAIN GARDENS	SAM
2	9/28/22	REVIEW COMMENTS	SAM

SOILS DATA

PROJECT TITLE: LAKE HAYWARD PRESERVE
LAKE SHORE DRIVE EAST HADDAM, CT

PREPARED FOR: ANTHONY SILVESTRI

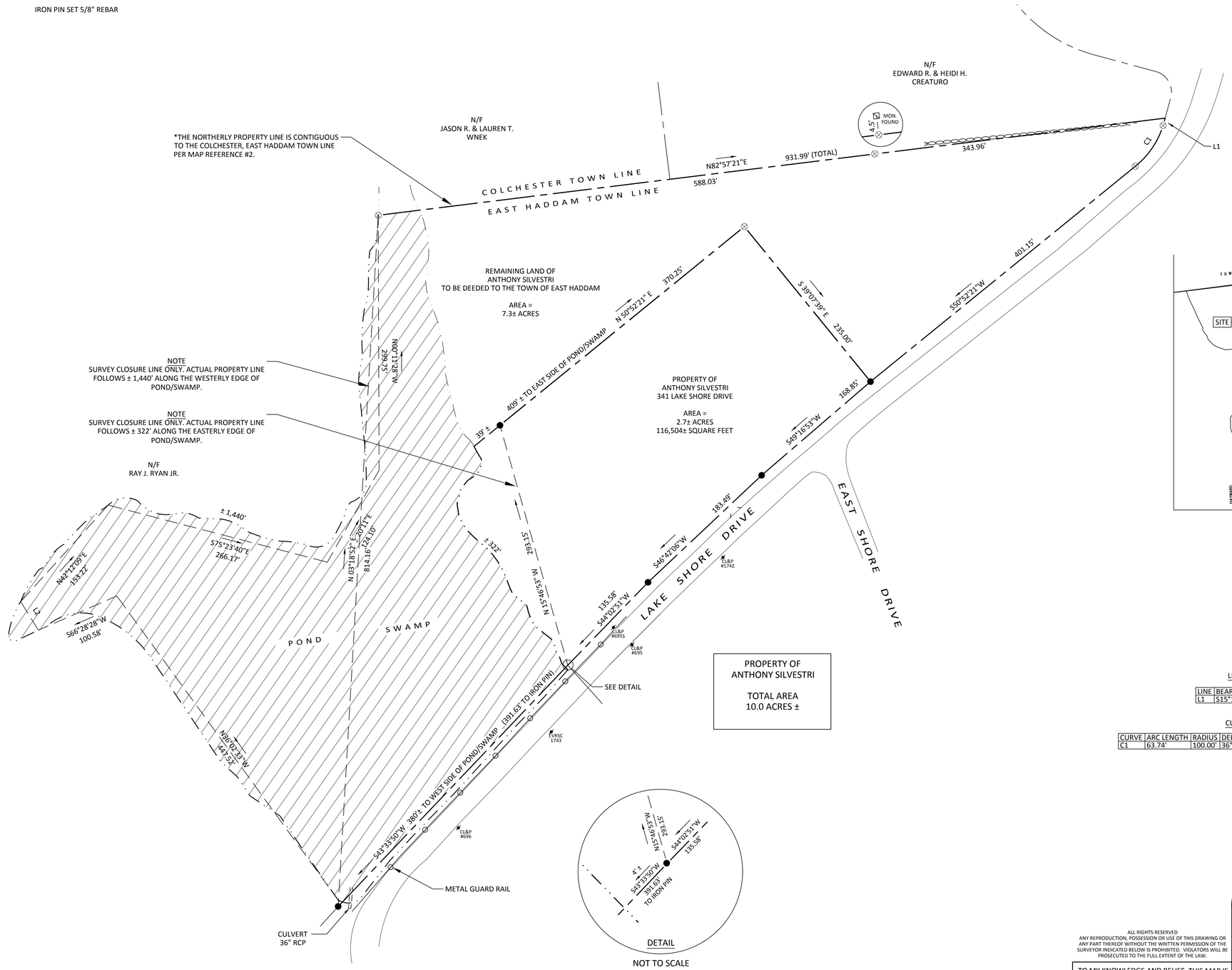
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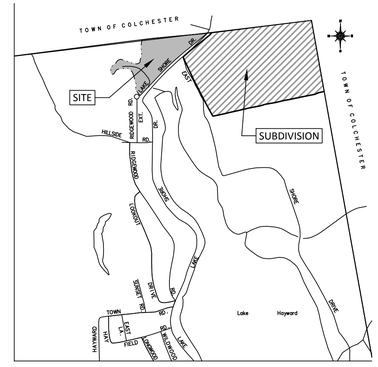
Drawing #: 24 OF 27

Job #: 21-033

LEGEND

- PROPERTY LINE
- STONE WALL
- APPROXIMATE EDGE OF POND (NOT FIELD LOCATED)
- ANGLE POINT
- MONUMENT FOUND
- IRON PIN SET 5/8" REBAR





GENERAL LOCATION MAP
SCALE 1"= 1000'

LINE TABLE

LINE	BEARING	DISTANCE
L1	S15°19'23"W	4.26'

CURVE TABLE

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	63.74'	100.00'	36°31'21"	N32°53'25"E	62.67'

0 15 30 60

SCALE: 1"= 60'

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

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Drawing date: 9/28/22

PROPERTY DIVISION MAP

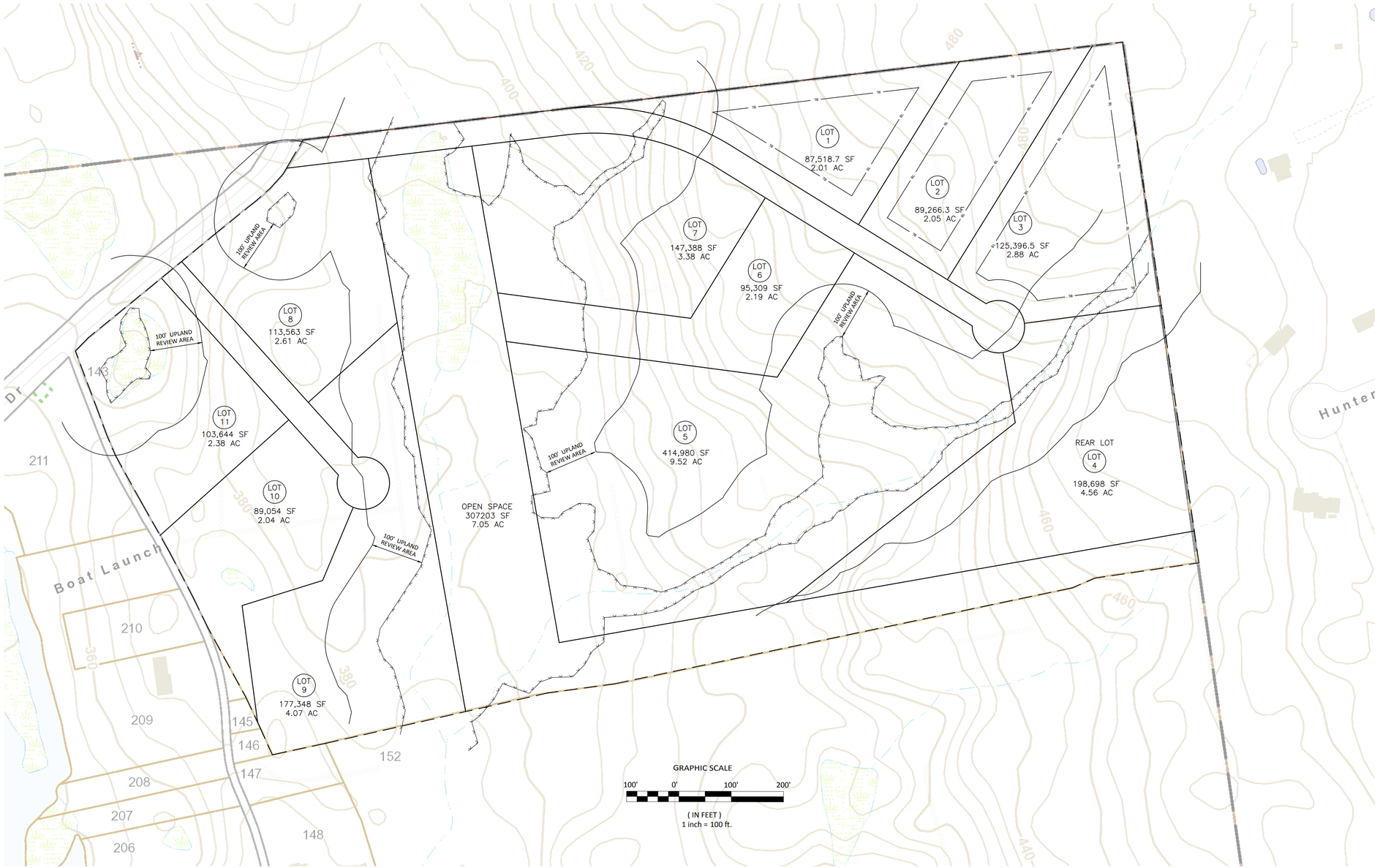
PROJECT TITLE: *LAKE HAYWARD PRESERVE*
341 LAKE SHORE DRIVE EAST HADDAM, CT

PREPARED FOR: *ANTHONY SILVESTRI*

CIVIL ENGINEERING CONSULTANTS
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NUMBER OF LOTS: 11
ZONE: R-2
TOTAL PARCEL AREA
2,134,794.57 S.F. / 49.01 AC.

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Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-033_YIELD PLAN

Drawing date: 1/6/22
Drawing Scale: 1" = 100'

Rev.	Date	Revision	By
1	8/30/22	DRAINAGE & RAIN GARDENS	SAM
2	9/28/22	REVIEW COMMENTS	SAM

YIELD PLAN

PROJECT TITLE: LAKE HAYWARD PRESERVE
LAKE SHORE DRIVE EAST HADDAM, CT

PREPARED FOR: ANTHONY SILVESTRI

CIVIL ENGINEERING CONSULTANTS
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Drawing #: 26 OF 27

Job #: 21-033

LEGEND

- PROPERTY LINE
- STONE WALL
- WIRE FENCE REMAINS
- FENCE POST WITH WIRE
- ANGLE POINT
- IRON PIN OR PIPE FOUND
- MONUMENT FOUND
- DRILL HOLE FOUND
- IRON PIN TO BE SET 5/8" REBAR
- DRILL HOLE TO BE SET
- SURVEYOR CONTROL POINT
- TREE WITH WIRE (TYPICAL)
- TREE WITH WIRE (HELD)

*STREET LINE PER MAP REFERENCE "CHURNEY"

N/F
THE ROBERT P. CHURNEY LIVING TRUST & THOMAS M. CHURNEY
MBL 02-10-032-000

*NORTHERLY PROPERTY LINE IS CONTIGUOUS TO THE COLCHSETER/ EAST HADDAM TOWN LINE PER MAP REFERNCE "PHILLIPS"

STEP THREE
ROADWAY ALIGNMENTS (TYP.)
SEE SHEETS 9,10,11,17,18 & 19

N/F
ROBERT J. PORTER JR.
MBL02-10-018-25A

STEP FOUR
LOT LINES (TYP.)
SEE SHEETS 5,6,7 & 8

N/F
DOUGLAS A & KAREN SCHOLL
MBL 02-10-018-24A

N/F
MELISSA M. LAPARRE
MBL 02-10-018-22A

*EASTERLY PROPERTY LINE IS CONTIGUOUS TO THE COLCHSETER/ EAST HADDAM TOWN LINE PER MAP REFERNCE "CHURNEY"

N/F
LINDSAY SCALISE
MBL 02-10-018-18A

N/F
MICHAEL E. & MERTIE L. MCCUNE
MBL 02-10-018-17A

PER MAP REFERENCE #1

STEP THREE
DRIVEWAY ALIGNMENTS (TYP.)
SEE SHEETS 9,10 & 11

STEP THREE
ROADWAY ALIGNMENTS (TYP.)
SEE SHEETS 9,10,11,17,18 & 19

STEP TWO
HOUSE SITE (TYP.)
SEE SHEETS 9,10 & 11

STEP TWO
SEPTIC AREA / SOILS TESTING (TYP.)
SEE SHEETS 9,10,11,22 & 23)

STEP ONE
CONSERVATION / OPEN SPACE (TYP.)

N/F
MARLEE D. MOONEY

N/F
ANTHONY SILVESTRI
PARCEL# M87 / L142

N/F
ALICE L. FEDUS TRUSTEE

N/F
STATE OF CONN.

N/F
ALICE L. & STEPHEN FEDUS

N/F
ALICE L. FEDUS TRUSTEE

PROPERTY OF
CHRISTOPHER JOHN & ERIC PAUL GREGAN
ASSESSORS #87-143

PARCEL AREA
2,134,795 SQ.FT
49.01 ACRES

WETLAND SOILS

OPEN SPACE

100' UPLAND REVIEW AREA

REAR LOT

EAST HADDAM

COLCHESTER

LAKE SHORE DRIVE

EAST SHORE DRIVE

EVAS COURT

EASEMENT LINE

CL&P 692

CL&P 6093

CL&P 1741

CL&P 4090

CL&P 2665

CL&P 2666

1) 41,890 S.F. 0.95 AC.
2) 39,544 S.F. 0.91 AC.
3) 48,359 S.F. 1.11 AC.
4) 67,841 S.F. 1.33 AC.
5) 33,550 S.F. 0.77 AC.
6) 43,850 S.F. 1.01 AC.
7) 41,187 S.F. 0.94 AC.
8) 47,112 S.F. 1.08 AC.
9) 41,641 S.F. 0.96 AC.
10) 40,210 S.F. 0.92 AC.
11) 36,432 S.F. 0.84 AC.

TOWN OF COLCHESTER

SITE

TOWN OF HEBRON

GENERAL LOCATION MAP
SCALE 1"= 1000'

GRAPHIC SCALE

100' 0' 100' 200'

(IN FEET)
1 inch = 100 ft.

CONSERVATION SUBDIVISION REQUIREMENTS

ZONE:	R-2
MINIMUM LOT AREA:	0.75 ACRE
MAXIMUM LOT AREA:	1.25 ACRES
MINIMUM LOT WIDTH:	150 FT.
MINIMUM FRONT YARD:	25 FT.
MINIMUM SIDE YARD:	25 FT.
MINIMUM REAR YARD:	25 FT.

SUBDIVISION PROCESS KEY

- STAGE ONE: IDENTIFYING CONSERVATION AREAS (WETLANDS)
- STAGE ONE: IDENTIFYING CONSERVATION AREAS (OPEN SPACE)
- STAGE TWO: LOCATING DEVELOPABLE HOUSE SITES (HOUSE)
- STAGE TWO: LOCATING DEVELOPABLE HOUSE SITES (SEPTIC/SOILS TESTING)
- STAGE THREE: ALIGNING STREETS AND DRIVEWAYS
- STAGE FOUR: DRAWING IN THE LOT LINES

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SUBDIVISION PROCESS PLAN

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Job #: 21-033