



STATE OF CONNECTICUT – COUNTY OF TOLLAND
INCORPORATED 1786

TOWN OF ELLINGTON

55 MAIN STREET – PO BOX 187
ELLINGTON, CONNECTICUT 06029-0187
www.ellington-ct.gov

TEL. (860) 870-3120 **TOWN PLANNER'S OFFICE** FAX (860) 870-3122

INLAND WETLANDS AGENCY REGULAR MEETING AGENDA MONDAY, JUNE 13, 2022, 7:00 P.M.

**IN-PERSON ATTENDANCE: TOWN HALL ANNEX, 57 MAIN STREET, ELLINGTON, CT
REMOTE ATTENDANCE: VIA ZOOM MEETING, INSTRUCTIONS PROVIDED BELOW**

I. CALL TO ORDER

II. PUBLIC COMMENTS (on non-agenda items):

III. PUBLIC HEARING(S):

1. IW202110 - Juliano Family One LLC, owner/ Brian Juliano, applicant, request for modification to Wetlands Permit IW202110 to construct a detention basin and outside storage area at 100 Windermere Ave., APN 018-021-0000.

IV. OLD BUSINESS: None

V. NEW BUSINESS:

1. IW202205 - Ellington McIntire, LLC, owner/applicant, request for a permit to conduct regulated activity to construct a single family home and site improvements associated with a 2-lot subdivision at 153 Webster Road, APN 185-001-0000.

VI. ADMINISTRATIVE BUSINESS:

1. Approval of the May 9, 2022 Regular Meeting Minutes.
2. Correspondence/Discussion:

VII. ADJOURNMENT:

Next Regular Meeting is scheduled for July 18, 2022

Instructions to attend remotely via Zoom Meeting listed below. The agenda is posted on the Town of Ellington webpage (www.ellington-ct.gov) under Agenda & Minutes, Inland Wetlands Agency.

Join Zoom Meeting via link:

<https://us06web.zoom.us/j/81705678819>

Meeting ID: 817 0567 8819

Passcode: 390978

Join Zoom Meeting by phone:

+1 646 558 8656 US (New York)

Meeting ID: 817 0567 8819

Passcode: 390978

Town of Ellington Planning Department



DATE: June 2, 2022
TO: Inland Wetlands and Watercourses Agency
FROM: John D. Colonese, Assistant Town Planner/Wetland Agent
SUBJECT: IW202110 - Juliano Family One LLC, owner/ Brian Juliano, applicant, request for modification to Wetlands Permit IW202110 to construct a detention basin and outside storage area at 100 Windermere Ave., APN 018-021-0000.

The intention of this memorandum is to outline the documents submitted as part of the subject application and notify you of remaining items to be submitted. The following documents have been submitted which are included in your June 13th meeting agenda packet:

- Application
- Responses to Application Checklist
- On-site Soil Investigation & Wetland Delineation Report dated 5/26/22 by REMA Ecological Services LLC
- Stormwater Drainage Report Hydrology & Methodology, and Site Specific Narrative dated 5/26/22 by Juliano Associates LLC
- Plans described as: Property and Topographic Survey, Site Plan, Erosion Control Specifications and Details, Drainage Area Map, Construction Sequence, Storm Water Maintenance Program and Details, Land of Juliano Family One LLC 100 Windermere Ave by Juliano Associates, LLC Sheets 1 through 5 dated 5/26/22

Remaining items:

- Comments from the Town Engineer (*plans and drainage report were received in the Planning Department office on May 31, 2022 and delivered to Town Engineer on June 1, 2022*).
- Functional and qualitative analysis, describing the ecological communities and functions of the wetlands, watercourses and upland review areas affected by the proposed regulated activity and the effects of the proposed regulated activities on these communities and wetland functions.
- Restoration and planting recommendations as noted on the plans.
- Any other items the Agency deems necessary in order to properly and fully evaluate the proposed activity (*see Section 7.5 of the regulations on page 2 of memo*).

Application documents received prior to the June 13th meeting will be forwarded to you via email as well as provided to you the night of the meeting.

The June 13th meeting agenda and application are being sent out early to allow for time to review the documentation and visit the site. If you would prefer to visit the site with me, please feel free to contact the Planning Department to set up a time.

SECTION VII APPLICATION REQUIREMENTS

- 7.5 If the Agency determines, based upon its review of the initial submittal that either the proposed activity involves a significant activity as determined by the Agency, or additional technical or other information is necessary in order to properly and fully evaluate the proposed activity, any or all of the additional information listed below, may be required. Requests for approval of significant activities shall only be approved by the Agency.
- a. Engineering reports and analyses and additional drawings to fully describe the proposed project and any filling, excavation, drainage or hydraulic modifications to watercourses or watershed areas;
 - b. Mapping of all soil types consistent with the categories established by the National Cooperative Soil Survey of the U.S. Soil Conservation Service;
 - c. A functional and qualitative analysis, describing the ecological communities and functions of the wetlands, watercourses and upland review areas affected by the proposed regulated activity and the effects of the proposed regulated activities on these communities and wetland functions. Such analysis shall be prepared by a professional having demonstrated competence by virtue of relevant education and experience in the fields of wetland ecology, plant biology, hydrology and related areas;
 - d. Description of how each alternative considered by the applicant would change, diminish, or enhance the ecological communities and functions of the wetlands or watercourses involved in the application; and a description of why each alternative not chosen was deemed neither prudent nor feasible;
 - e. Analysis of chemical or physical characteristics of any fill material;
 - f. Existing and anticipated alkalinity, salinity, Ph, nitrate, phosphate, turbidity, bacteria levels, temperature, dissolved oxygen levels, and similar attributes of any affected watercourses or water bodies directly affected by the proposed activity;
 - g. State DEP groundwater and surface water quality designations for existing water resources on and within 1,000 feet of the subject activity, as well as the State DEP's target classification for these same areas;
 - h. An indication whether or not any endangered, threatened or species of special concern (plant and animal) are located within 1,000 feet of the subject activity, but limited to species that are wetland dependent, and based on the most recent State DEP Natural Diversity Database mapping.
 - i. Location of any State designated fisheries within 1,000 feet of the subject activity.
 - j. Measures that would mitigate the impact of the proposed activity. Such measures include, but are not limited to, plans or actions which avoid destruction or diminution of wetland or watercourse functions, recreational uses and natural habitats, which prevent flooding, degradation of water quality, erosion and sedimentation and obstruction of drainage, or which otherwise safeguard water resources.

Town of Ellington Inland Wetlands and Watercourses Agency Application

Application # IW 202110-Med
Date Submitted 3/14/22

<p>Notices associated with this application will be sent to the applicant unless otherwise requested.</p> <p>Owner's Information</p> <p>Name: <u>Juliano Family One LLC</u></p> <p>Mailing Address: <u>321 Talcottville Road</u> <u>Vernon, CT 06066</u></p> <p>Email: <u>brian@julianospools.com</u></p> <p>WHEN NOT REQUIRED BY LAW TO MAIL NOTICE BY USPS, MAY NOTICES BE EMAILED TO YOU? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Primary Contact Phone #: <u>860 729 6869</u></p> <p>Secondary Contact Phone #: _____</p> <p>Owner's Signature: <u>Neddu WJ</u> Date: <u>3/14/22</u></p> <p>By signing below I certify that all information submitted with this application is true and accurate to the best of my knowledge, that I am aware of and understand the application requirements and regulations, and acknowledge that the application is to be considered complete only when all information and documents required by the Agency have been submitted. Moreover, by signing above I/we expressly provide written consent to the filing of the application and access to the site by the Agency or its staff.</p>	<p>Notices associated with this application will be sent to the applicant unless otherwise requested.</p> <p>Applicant's Information (if different than owner)</p> <p>Name: <u>Brian Juliano</u></p> <p>Mailing Address: <u>321 Talcottville Road</u> <u>Vernon, CT 06066</u></p> <p>Email: <u>brian@julianospools.com</u></p> <p>WHEN NOT REQUIRED BY LAW TO MAIL NOTICE BY USPS, MAY NOTICES BE EMAILED TO YOU? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Primary Contact Phone #: _____</p> <p>Secondary Contact Phone #: _____</p> <p>Applicant's Signature: <u>Neddu WJ</u> Date: <u>3/14/22</u></p> <p>By signing below I certify that all information submitted with this application is true and accurate to the best of my knowledge, that I am aware of and understand the application requirements and regulations, and acknowledge that the application is to be considered complete only when all information and documents required by the Agency have been submitted.</p>
<p style="text-align: right; font-weight: bold; font-size: 1.2em;">RECEIVED</p> <p style="text-align: right; font-weight: bold; font-size: 1.2em;">MAR 14 2022</p> <p style="text-align: right; font-weight: bold; font-size: 1.2em;">TOWN OF ELLINGTON PLANNING DEPARTMENT</p>	
<p>Street Address: <u>100 Windermere Avenue</u></p> <p>Assessor's Parcel Number (APN): <u>018 - 021 - 0000</u></p> <p>Proposed upland review area affected in square feet: <u>22,000 SF +/-</u></p> <p>Proposed wetlands/watercourses affected in square feet and linear feet (as applicable): <u>38,000 SF +/-</u></p> <p>Total area of wetlands/watercourses on parcel in square feet or acres: <u>60,000 SF +/-</u></p> <p>Public Water: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Public Sewer: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If not served by public water and sewer, applicant shall make application to North Central District Health Department (Enfield Office) if required.</i></p> <p>Is the project in a public water supply watershed area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If YES, applicant is required to notify the Connecticut Water Company and Commissioner of Public Health by certified mail, return receipt within 7 days of this application (Conn. Gen Stat. Sec 22a-42f). Copy of application, plans, and supporting documents must accompany notice. Applicant can email the Commissioner of Public Health using their approved form. Proof of notice (return receipt and sent email) must be provided to the Planning Department.</i></p> <p>Describe the nature of proposed regulated activity, request for acceptance of a permitted use as of right or a nonregulated use, map or regulation amendment, or other activity requiring review by the Agency or its Agent: <i>See attached Application Checklist and Appendix D for guidance when preparing application</i></p> <p><u>Moving detention basin, expanding for storage</u> <u>Request to modify IWA Permit IW202110</u></p>	

Applicant shall provide certification in accordance with Wetlands Regulation, Section 7.4e, Application Requirements:

Whether or not any portion of the property on which the regulated activity is proposed is located within 500 feet of an adjoining town. Yes No

Whether or not a significant portion of the traffic to the completed project will use streets within an adjoining town to exit or enter the site. Yes No

Whether or not a significant portion of the sewer or water drainage from the project will flow through and significantly impact the sewer or water drainage system of an adjoining town. Yes No

Whether water run-off from the improved site will impact streets or other municipal/private property within an adjoining town. Yes No

FOR OFFICE USE ONLY

If YES to any of the above, the Agency shall, in accordance with CGS 8-7d(f), notify the clerk of any adjoining municipality of the pendency of any application, petition, appeal, request or plan concerning any project on any site. Notice of the pendency of such application shall be made by certified mail, return receipt requested, and shall be mailed within seven (7) days of the date of receipt of the application, petition, appeal, request or plan. (See Agency requirements Section 8.4)

Type of Project: (check one)

Commercial/Industrial ___ Residential ___ Mixed Use ___ Timber ___ Agricultural
___ Other, explain: _____

Type of Application: (check one)

- ___ Notification for Non-Regulated Use (Section 4.2)
- ___ Notification of Permitted Use as of Right (Section 4.1)
- ___ Administrative Permit (Section 6.4)
- Agency Permit (**TWELVE COPIES REQUIRED**)
- ___ Permit Modification
- ___ Permit Extension
- ___ Regulation Amendment
- ___ Map Amendment
- ___ Appeal of Administrative Permit

Application Submittals:

- ___ Completed Application Form (Section 7.4a)
- ___ Application Fee (Section 7.4b)
- ___ Abutters List (Section 7.4c)
- ___ Certification as to Adjacent Towns (See above)
- ___ Certification as to Connecticut Water Company & Commissioner of Public Health (See above)
- ___ Notification Narrative and Supporting Documentation (If applicable, Appendix D)
- ___ Project Narrative and Supporting Documentation (Section 7.4g, 1-11 inclusive, as deemed applicable)
- ___ Project Site Plan - circle one: Administrative (Section 7.4h1) / Agency (Section 7.4h2)
- ___ Supplemental Information (Section 7.5a-j, inclusive, as deemed applicable)



TOWN OF ELLINGTON

INLAND WETLANDS & WATERCOURSES APPLICATION CHECKLIST

(For use as a guide in preparation and review of plans. Not intended to replace regulations.)

NARRATIVE REQUIREMENTS BELOW (See Section 7.4.g)

Check each item supplied or list recommended abbreviation: N/A = Not Applicable; N/P = Not Provided; W/R = Waiver Requested)

- ___ 1. The amount of regulated upland review area affected, in square feet & acreage;
30,042 Sq. Ft.
- ___ 2. The amount of inland wetlands & watercourses affected, in square or linear feet, as applicable;
43,766 Sq. Ft.
- ___ 3. The overall (aggregate) area affected;
73,808 Sq. Ft.
- ___ 4. The amount of permanent versus temporary impact;
Permanent Impact = 17,381 SQ. Ft.
- ___ 5. The general characteristics of the regulated areas being affected by the proposal in terms of land cover, vegetation, soil types, slope, and relationship to other regulated areas on and off the project site;
See REMA Ecological Services Report.
- ___ 6. The purpose and a description of the proposed activity;
The purpose of the activity is to provide Juliano Pools with additional outdoor storage for their business use. There is a small island of that is not classified as wetland soils that will be converted into a shallow detention basin. We are also proposing to relocate an existing patch of 675 Square Feet of wetlands and proposing to add 1,402 Square Feet of wetlands. In the area that will be regraded the topsoil will be removed, and stockpiles created once final grading has been achieved the topsoil will then be spread back out.
- ___ 7. The proposed erosion and sedimentation controls and other best management practices and mitigation measures which may be considered as a condition of issuing a permit for the proposed regulated activity including, but not limited to, measures to:
 - prevent or minimize pollution or other environmental damage,
 - maintain or enhance existing environmental quality, or
 - in the following order of priority, restore, enhance and create productive wetland or watercourse resources.**The proposed Erosion & Sediment controls that are proposed are to include, silt fence down gradient from all disturbed areas, material stockpile, plantings/stabilization based upon REMA Ecological Services Recommendations, and the proposed detention basin will be stone lined.**
- ___ 8. For commercial and industrial uses, a general description of the business operations, including but not limited to:
 - the type of business - **The existing business is a pool contractor.**
 - production and manufacturing procedures, Pool creation and manufacturing are not completed on this property. **Pool creation and manufacturing are not completed on this property. The pools are constructed in the final location of the pool on the client's property.**

- handling and disposition of any process wastewaters, cooling waters, and/or stormwater, **There is no processing of wastewater, cooling waters and or stormwaters at the property.**
- types of materials used and stored on site, **Construction equipment such as excavators, dump trucks and trailers, pool filters, buckets, hand tools, piping, and other equipment as required to construct pools.**
- spill contingency plans, **We are planning on getting some spill kits around the property (we have done this at our Vernon location). This is the type of kit that we used in Vernon. https://www.uline.com/BL_276/Universal-20-Gallon-Drum-Spill-Kit**
- septic disposal (unless tied to sewers), **Property Tied to Sewers**
- waste/refuse storage, handling and disposal, and similar operations. **Refuse is stored in dumpsters as show on the site plans.**

___ 9. For commercial and industrial uses, a list of current State of Connecticut and Federal environmental and land use permits issued for the facility. Such list shall also include a disclosure of any enforcement action taken by the State DEEP regarding the facility, either current or within the previous five years from the date of the subject application, including any consent orders, fines, penalties and/or resolution of such enforcement actions. **The design professional is unaware of any state or federal land use permits issued for the facility.**

___ 10. A construction or project narrative describing:

- method of construction,
- duration of construction activity,
- methods to control stormwater and limit erosion before, during & following construction,
- type of equipment to be used,
- type and location of access to the regulated area,
- storage and disposal of excess materials or stockpiles,
- type and composition of any fill material,
- removal and disposition of trees and stumps,
- measures to dewater, divert flows, and similar activities.

Added to sheet 5 of 5.

___ 11. A description of any changes to water velocity, volume or course, the anticipated impacts of these changes, and measures to mitigate those impacts. **There are no changes to Surface water anticipated with the proposed project.**

___ 12. A list of any other local, State of Connecticut or U.S. environmental or land use approvals required for the proposed regulated activity such as but not limited to, DEEP Construction or Commercial Stormwater Permit Registration, Army Corp permits, ConnDOT, STC, and waste water or process water discharge permits.

As the proposed project is to disturb more than one acre a Stormwater and Dewatering Wastewaters from Construction Activities General Permit will need to be files with the state of Connecticut.

___ 13. Where stormwater systems are proposed, detailed storm drainage calculations, construction details and other support documentation, certified by a Professional Engineer licensed to practice in the State of Connecticut.

Storm drainage calculations have been provided.

___ 14. If the area to be disturbed is ½ acre or more in area, a detailed erosion control plan and narrative, in compliance with the latest State DEEP Guidelines for Soil Erosion and Sediment Control.

This has been provided on sheets 3 or 5 and 5 or 5.

- ___ 15. A disclosure listing any previous Ellington inland wetland permit applications and Ellington wetland enforcement actions regarding the subject parcel(s).

This property has recently received approval from Ellington Inland Wetland as Permit No. IW202110.

- ___ 16. A graphic and textual description of all alternatives to the proposed regulated activity considered, and a general discussion of each, including the reason or reasons for choosing the proposed alternative. This requirement relates to the evaluation of the initial application only, and shall not be construed as a conclusion by the Agency or its agent that the proposed activity is "significant." The determination of significance shall be made by the Agency or its agent after review of the initial application, and if the proposed regulated activity or any component of that activity is deemed "significant," the applicant may be required by the Agency or its agent to submit a more detailed analysis of alternatives, in order to allow the Agency to make the necessary findings with respect to prudent and feasible alternatives.

A description of all alternatives to the proposed activity. Based on the location of the wetlands on the property I don't believe there are alternatives for additional storage. We are going to be using the building for as much storage as possible but need the area in the field for additional storage of materials that we don't have room for in the building.



REMA ECOLOGICAL SERVICES, LLC

164 East Center Street, Suite 8
Manchester, CT 06040

860.649.REMA (7362)

REPORT DATE: May 26, 2022

PAGE 1 OF 3

ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT

PROJECT NAME & SITE LOCATION:
(+/- 5.74 acres)
100 Windemere Avenue
(corner Lower Butcher Road)
Ellington, CT

REMA Job No.: 21-2441-ELL23

Field Investigation Date(s): 11/8 & 11/17/2022

Field Investigation Method(s):
 Spade and Auger
 Backhoe Test Pits
 Other: _____

REPORT PREPARED FOR:
Juliano Family One, LLC
321 Talcotville Road
Vernon, CT 06066

Field Conditions:
Weather: sunny/mostly cloudy /40s
Soil Moisture: Moderate to high
Snow Depth: N/A
Frost Depth: N/A

Purpose of Investigation:

- Wetland Delineation/Flagging in Field
- Wetland Mapping on Sketch Plan or Topographic Plan
- High Intensity Soil Mapping by Soil Scientist
- Medium Intensity Soil Mapping from *The Soil Survey of Connecticut* Maps (USDA-NRCS)
- Other: verified wetland delineations by others, including ditched watercourse/wetland

Base Map Source: CT Web Soil Survey; USDA-NRCS (attached); Figures A & A1 (attached)

Wetland Boundary Marker Series: RES-A1 to RES-A-17 (open line), and RES-B-1 to RES-B-17 (closed loop; upland island)

General Site Description/Comments: The "study area" encompasses the roughly 2.25-acre eastern, undeveloped portion of the overall 5.74-acre property, located to the southeast of the intersection of Lower Butcher Road and Windemere Avenue, in Ellington. The study area is within the hydraulic 100-year floodplain of the northerly flowing Hockanum River, which defines the eastern boundary of the overall parcel. The study area's soils are both disturbed and undisturbed, with the disturbed soils associated with historic shallow fill, particularly in the section of the delineated wetland between flags A-5 and A-11. The study area's soils are derived from both glaciofluvial (i.e., stratified sand and gravel), and alluvial (i.e., stratified sand and silt) deposits, as well as from sandy/silty fill. The undisturbed upland soil types are the moderately well-drained Ellington (20) soil series. The wetland-type soils are the poorly drained Rippowam (103) soil series, and the disturbed Aquents (308w) soil mapping unit. We note that while the delineated wetland soils qualify as poorly drained, their hydrology has been somewhat altered by the channelization of the Hockanum River many years ago, to the point that this area has been able to sustain crops (i.e., silage corn) for many decades. Dominant or common vegetation within the delineated wetlands include grasses, yellow foxtail, purple loosestrife, sticktights, goldenrods, asters, purple willowherbs, bushy aster, barnyard grass, red top, curly dock, joe-pye-weeds, Virginia jumpseed, soft rush, sedges, smartweeds, and others.

ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT (CONTINUED)

PROJECT NAME & SITE LOCATION: (+/- 5.74 acres)
100 Windemere Avenue, Ellington, CT

SOIL MAP UNITS**Upland Soils**

Ellington silt loam (20). This series consists of deep, moderately well drained soils formed in a coarse-silty mantle underlain by sandy water deposited glacial outwash materials. They are level to gently sloping soils in shallow drainageways and low lying positions on outwash plains and terraces. The soils formed in loamy over stratified sandy and gravelly glacial outwash derived mainly from Triassic sandstone, shale, conglomerate and basalt. Typically, these soils have a very dark reddish, brown silt loam surface layer 8 inches thick. The upper part of the subsoil from 8 to 18 inches is reddish brown silt loam. The lower part of the subsoil from 18 to 26 inches is mottled, reddish brown very fine sandy loam. The substratum from 26 to 60 inches is dark reddish brown very gravelly sand.

Udorthents (308). This soil mapping unit consists of well drained to moderately well drained soils that have been altered by cutting, filling, or grading. The areas either have had two feet or more of the upper part of the original soil removed or have more than two feet of fill material on top of the original soil. Udorthents or Made Land soils can be found on any soil parent material but are typically fluvial on glacial till plains and outwash plains and stream terraces.

Wetland Soils

Rippowam fine sandy loam (103). The Rippowam series consists of deep, poorly drained soils formed in loamy, alluvial sediments. They are nearly level soils on floodplains. The soils formed in recent alluvium derived mainly from schist, gneiss or granite. Typically, these soils have a very dark grayish brown fine sandy loam surface layer 5 inches thick. The subsoil from 5 to 27 inches is dark grayish brown, mottled fine sandy loam and sandy loam. From 27 to 60 inches the substratum is dark gray and grayish brown, loose stratified, loamy sand and very gravelly sand. This soil was formerly mapped in Connecticut as Rumney.

Aquents (308W). This soil map unit consists of poorly drained and very poorly drained, disturbed land areas. They are most often found on landscapes which have been subject to prior filling and/or excavation activities. In general, this soil map unit occurs where two or more feet of the original soil surface has been filled over, graded or excavated. The Aquents are characterized by a seasonal to prolonged high ground water table and either support or are capable of supporting wetland vegetation. Aquents are recently formed soils which have an aquic moisture regime. An aquic moisture regime is associated with a reducing soil environment that is virtually free of dissolved oxygen because the soil is saturated by groundwater or by water of the capillary fringe. The key feature is the presence of a ground water table at or very near to the soil surface for a period of fourteen days or longer during the growing season.

ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT (CONTINUED)

PROJECT NAME & SITE LOCATION: (+/- 5.74 acres)
100 Windemere Avenue, Ellington, CT

SOIL MAP UNITS

See previous page

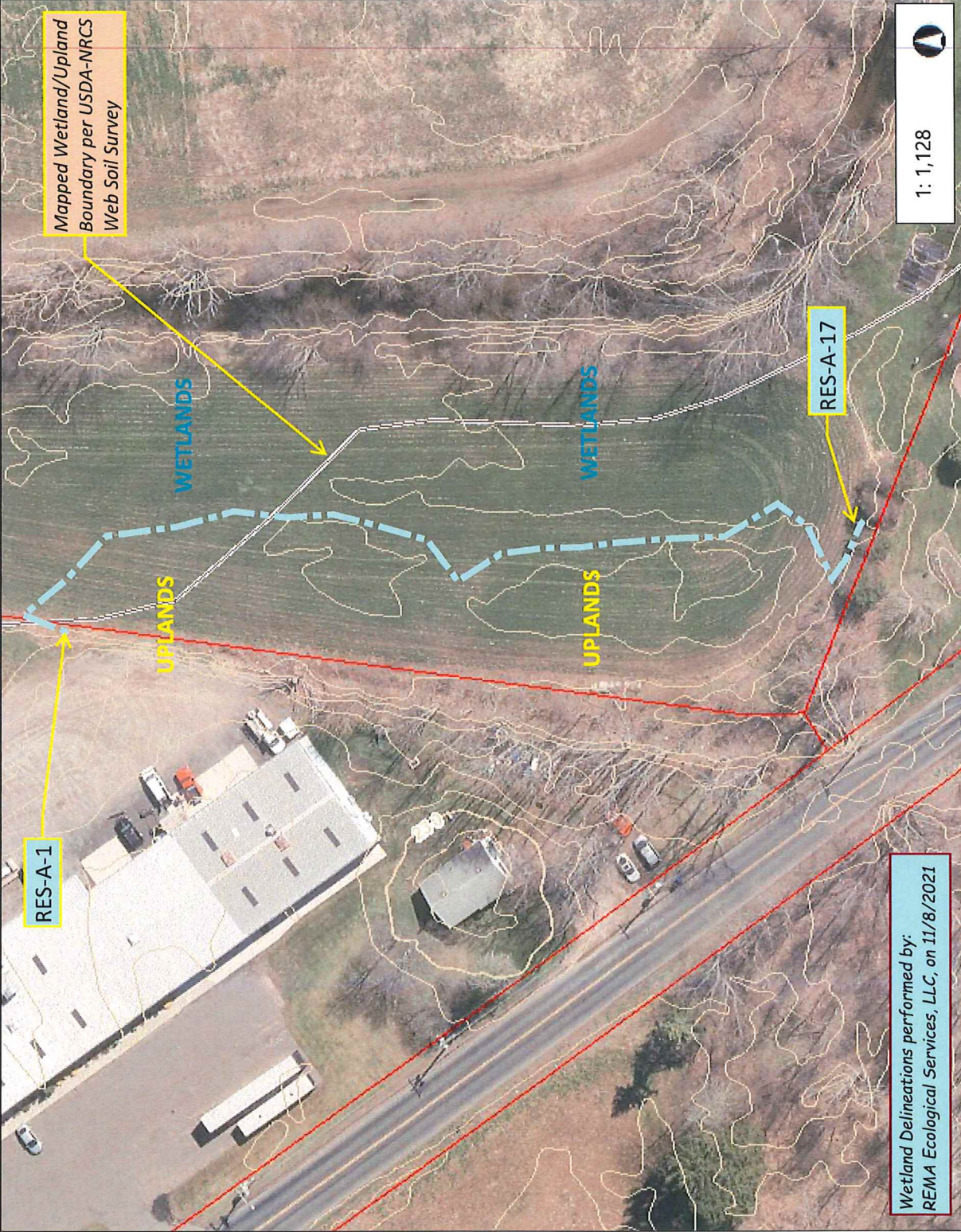
Any accompanying soil logs and soil maps, and the on-site soil investigation narrative are in accordance with the taxonomic classification of the National Cooperative Soil Survey of the USDA Natural Resource Conservation Service, and with the Connecticut Soil Legend (DEP Bulletin No.5, 1983), as amended by USDA-NRCS. Jurisdictional wetland boundaries were delineated pursuant to the Connecticut General Statutes (CGS Sections 22a-36 to 22a-45), as amended. The site investigation was conducted and/or reviewed by the undersigned Registered Soil Scientist(s) [registered with the Society of Soil Scientists of Southern New England (SSSSNE) in accordance with the standards of the Federal Office of Personnel Management].

Respectfully submitted,

REMA ECOLOGICAL SERVICES, LLC



George T. Logan, MS, PWS, CSE
Registered Soil Scientist
Field Investigator/Senior Reviewer



Wetland Delineations performed by:
REMA Ecological Services, LLC, on 11/8/2021



© Connecticut Environmental Conditions Online THIS MAP IS NOT TO BE USED FOR NAVIGATION

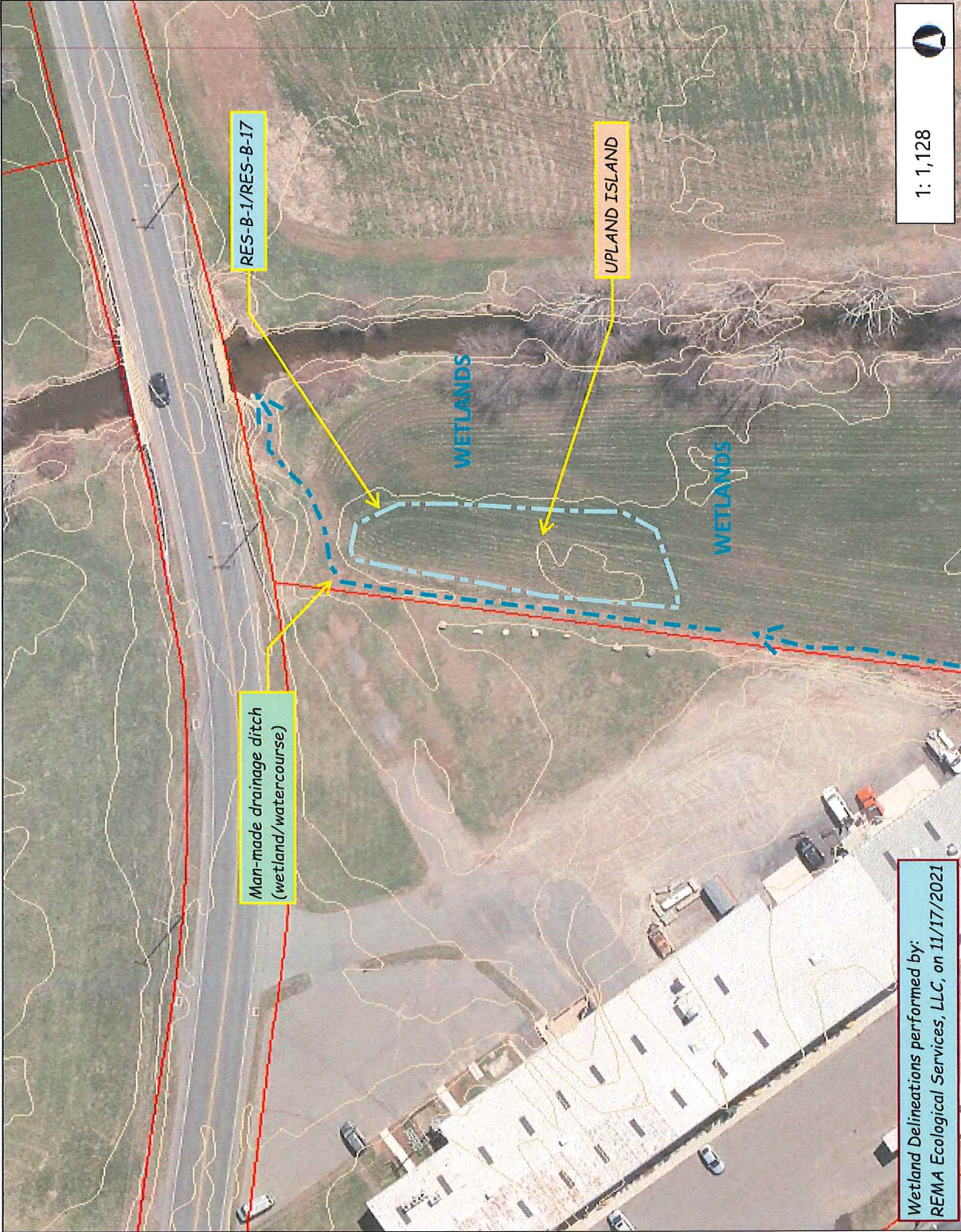
This map is intended for general planning, management, education, and research purposes only. Data shown on this map may not be complete or current. The data shown may have been compiled at different times and at different map scales, which may not match the scale at which the data is shown on this map.



- Legend**
- Parcels for Protected Open Sp
 - Soils
 - Light Gray Canvas Base

Notes

FIGURE A1: WETLAND DELINEATIONS SKETCH MAP



Wetland Delineations performed by:
REMA Ecological Services, LLC, on 11/17/2021



© Connecticut Environmental Conditions Online THIS MAP IS NOT TO BE USED FOR NAVIGATION

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1: 1,128

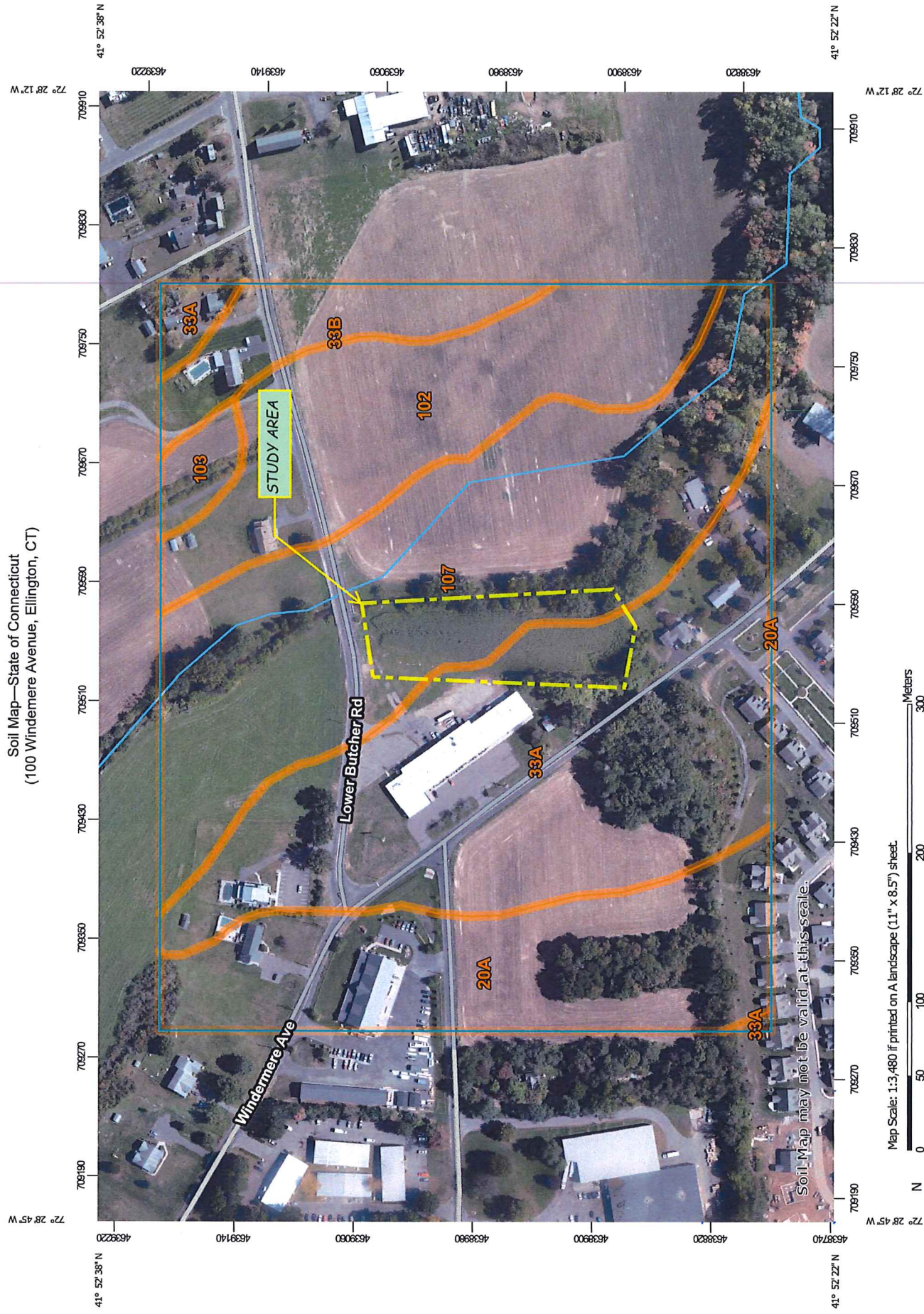


Legend

- Parcels for Protected Open Sp
- Light Gray Canvas Base

Notes

Soil Map—State of Connecticut
(100 Windemere Avenue, Ellington, CT)



Map Scale: 1:3,480 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Soil Map may not be valid at this scale.

MAP LEGEND

- Area of Interest (AOI)
- Area of Interest (AOI)
- Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points
- Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features
- Water Features**
- Streams and Canals
- Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads
- Background**
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 21, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 3, 2019—Oct 22, 2019

The orthophoto or other base map on which the soil lines were imaged and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
20A	Ellington silt loam, 0 to 5 percent slopes	8.8	17.1%
33A	Hartford sandy loam, 0 to 3 percent slopes	16.0	31.2%
33B	Hartford sandy loam, 3 to 8 percent slopes	2.6	5.1%
102	Pootatuck fine sandy loam	8.0	15.7%
103	Rippowam fine sandy loam	0.8	1.5%
107	Limerick and Lim soils	15.0	29.3%
Totals for Area of Interest		51.2	100.0%

JULIANO ASSOCIATES, LLC
405 MAIN STREET
YALESVILLE, CONNECTICUT 06492
203-265-1489

STORMWATER DRAINAGE REPORT

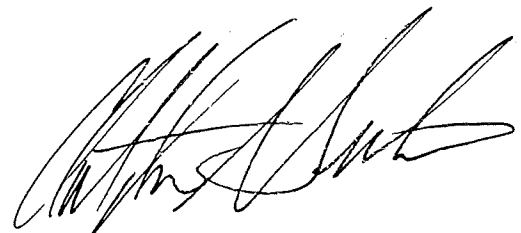
PROPOSED IMPROVEMENTS

#100 WINDERMERE AVENUE
ELLINGTON, CONNECTICUT
MAY 26, 2022

RECEIVED

MAY 31 2022

TOWN OF ELLINGTON
PLANNING DEPARTMENT

A handwritten signature in black ink, appearing to be "A. H. Smith", is located at the bottom right of the page.

STORM WATER DRAINAGE SYSTEM REPORT

HYDROLOGY & METHODOLOGY

The principal method of predicting the surface water runoff rates utilized in this report is a computer model based upon the SCS/TR-20 watershed modeling. The model forecasts the rate of surface water runoff and river flow rates based upon several factors. The input data includes information on land use, soil types, vegetation, watershed areas, time of concentrations, rainfall data, storage volumes, and hydraulic capacities of structures. The computer model predicts the amount of runoff as a function of time, including the attenuation effects due to wetlands, floodplains, bodies of water, and man made storage facilities. Runoff rates during specific rainstorms may vary due to different assumptions concerning soil moisture, water levels in ponds, snowmelt, and rainfall patterns.

The input data for rainfall with statistical recurrence frequencies of 2, 5, 10, 25, 50 and 100 years were obtained from the U.S. Weather Bureau Technical Papers. The National Weather Service developed four synthetic storms to simulate rainfall patterns around the country. For analysis within Connecticut, the type III rainfall pattern with a 24-hour distribution is valid. Years 2, 5, 10, 25, 50 and 100 year storms have been provided in the drainage report.

SITE SPECIFIC NARRATIVE

The subject site is a 250,228 Sq. Ft. (5.74 Acre) parcel located at the intersection of Windermere Avenue and Lower Butcher Road in Ellington Connecticut. The property is in the industrial park (IP) Zone. The existing site consists of commercial building with outdoor vehicle and material storage. This property was analyzed from the existing roadways to the existing wetlands. The proposed application is an extension of a previously approved site plan for the property.

The changes from the originally approved site plan include the moving of the proposed detention basin further east into the exiting wetland area. There will also be an addition of millings to the south east of the building which will be installed for outdoor storage. There will also be some minor relocation of existing wetland soils.

The proposed outdoor storage area will be constructed of approximately 17,000 sq ft of millings. This area will be graded to a small swale to the northwest and piped under the milling area. This stormwater will discharge into the proposed detention basin. The proposed detention basin will also capture all previously approved changes to the site. The excavation in the rear of the property will result in a net cut of 24,249 Cubic feet of compensatory storage volume.

The proposed rear area of the property will be graded to predominantly sheet flow into the proposed shallow detention basin. This detention basin will also receive the overflow from the front underground detention system as well as surface runoff from the proposed milling storage area. This detention basin will be predominantly grass lined except for the overflow weir. This weir will be 17.5' wide and will be lined with 10' of stone. The bottom of the basin will be at 222.5, have a top/berm elevation of 224.5 and a weir elevation of 222.75. The sides of the basin will be graded at a 6'H:1'V slope. During the 100 year storm the water elevation reaches 223.24' which will leave over 1' of freeboard on the berm. The test pit revealed soils that would drain quickly, however, a conservative infiltration rate of 1inch/hr was used.

Due to existing site conditions and ground water elevation, there is not a way to achieve 3' of separation distance from the bottom of the detention basin to the ground water elevation. Due to site constraints, we are able to achieve 0.5' of separation distance to groundwater in the rear detention basin. This will be a significant improvement over what is currently on the site as there is no stormwater management. Completing the Water Quality Calculation as per the 2004 DOT Drainage Manual, the required volume for the site is 796.88 Cubic Feet. $WQV = (1'')(R)(A)/12 = (1'')(0.3821)(5.74)/12 = 0.182771 \text{ Acre} - \text{Ft} = 796.88 \text{ Cubic Feet}$. The proposed detention basin has a volume at the weir of 16,930 Cubic Feet.

Existing Property

<u>Event</u>	<u>Inflow (cfs)</u>
2 - Year	7.24
5 - Year	11.37
10 - Year	15.39
25 - Year	22.29
50 - Year	28.82
100 - Year	36.68

Proposed Property

<u>Event</u>	<u>Inflow (cfs)</u>
2 - Year	<u>3.88</u>
5 - Year	<u>8.37</u>
10 - Year	<u>12.63</u>
25 - Year	<u>19.12</u>
50 - Year	<u>24.90</u>
100 - Year	<u>31.78</u>

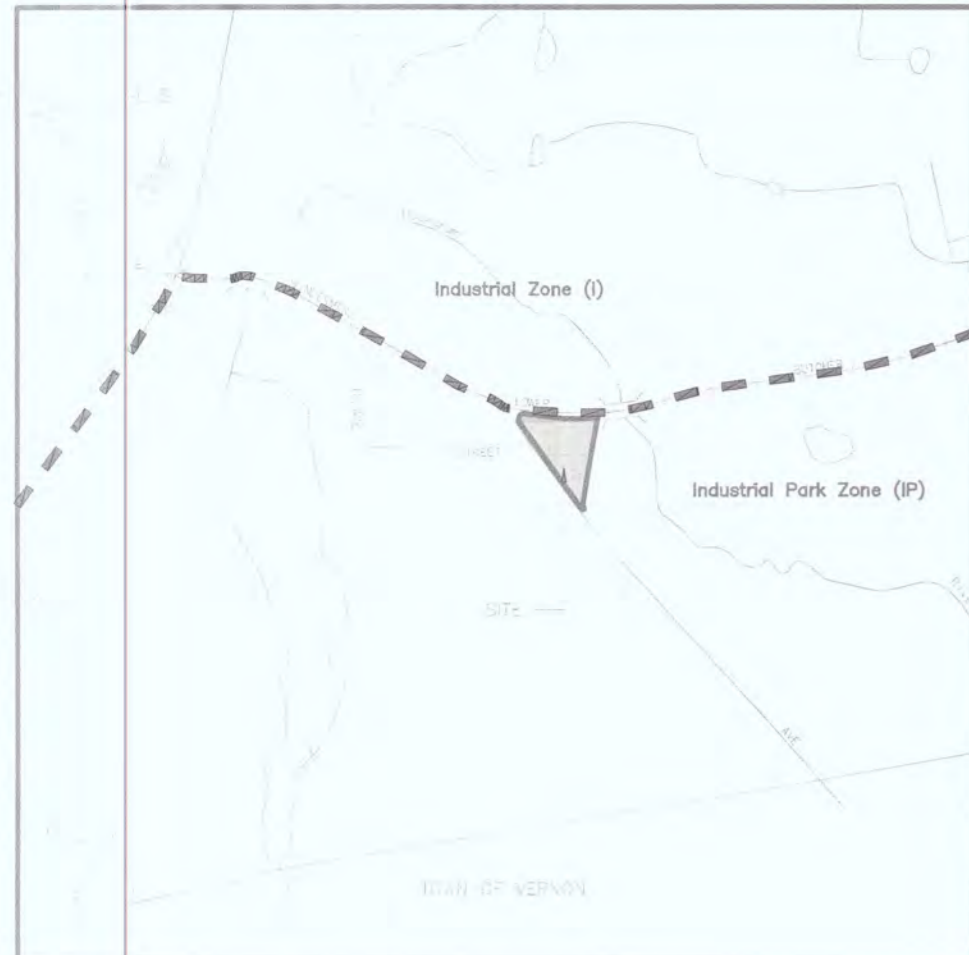
Proposed Rear Detention Basin

<u>Event</u>	<u>Inflow (cfs)</u>	<u>Primary (cfs)</u>	<u>Elevation (feet)</u>	<u>Storage (cubic – feet)</u>
2 - Year	8.34	2.74	222.91	,6579
5 – Year	11.18	5.70	223.01	8,214
10 – Year	13.77	8.45	223.08	9,438
25 – Year	17.97	12.47	223.17	10,968
50 – Year	21.78	15.90	223.23	12,096
100 - Year	26.26	19.91	223.30	13,287

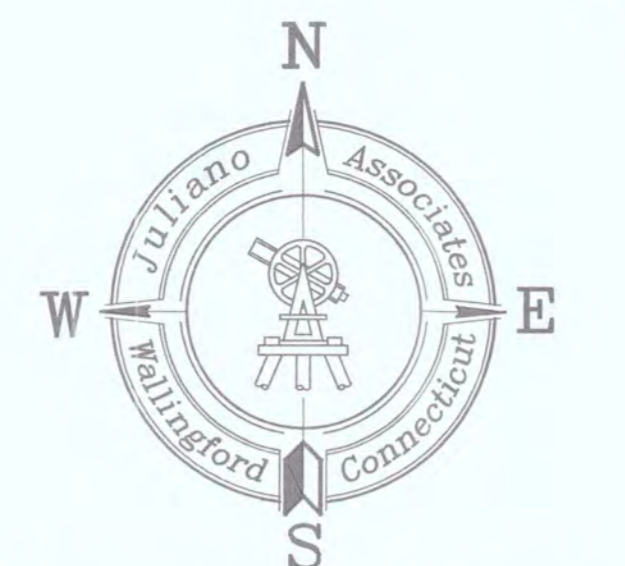
In summary,

As indicated within the previous tables, the post construction flows leaving the site will be less than existing conditions flows for all storm events up to and including the 100-year design storm thereby confirming that the project's storm water handling plan meets the Town and State requirements for storm water management.

Juliano Associates, LLC
Christopher S. Juliano, PELS #19725



Site Location Plan
Scale:

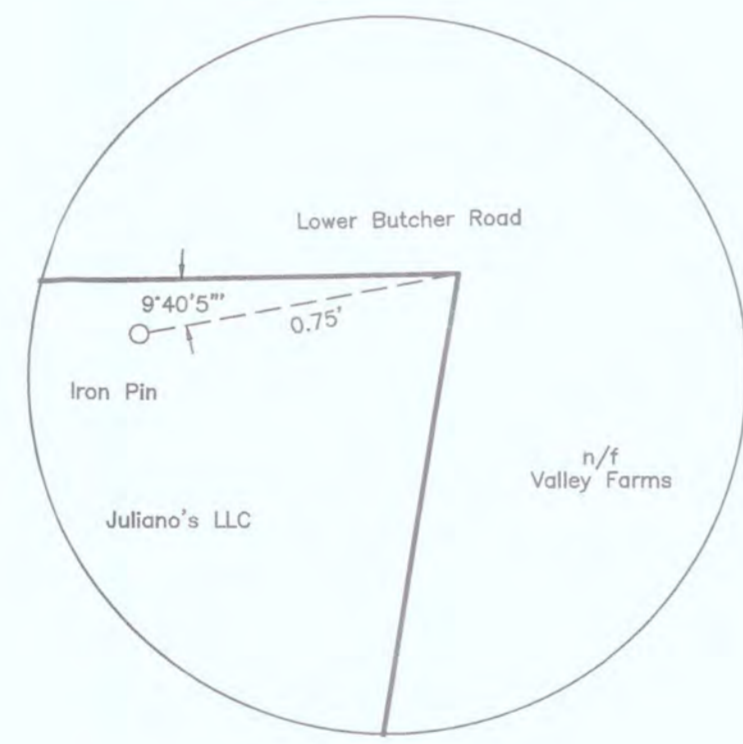


Connecticut Grid System
(NAD 83)

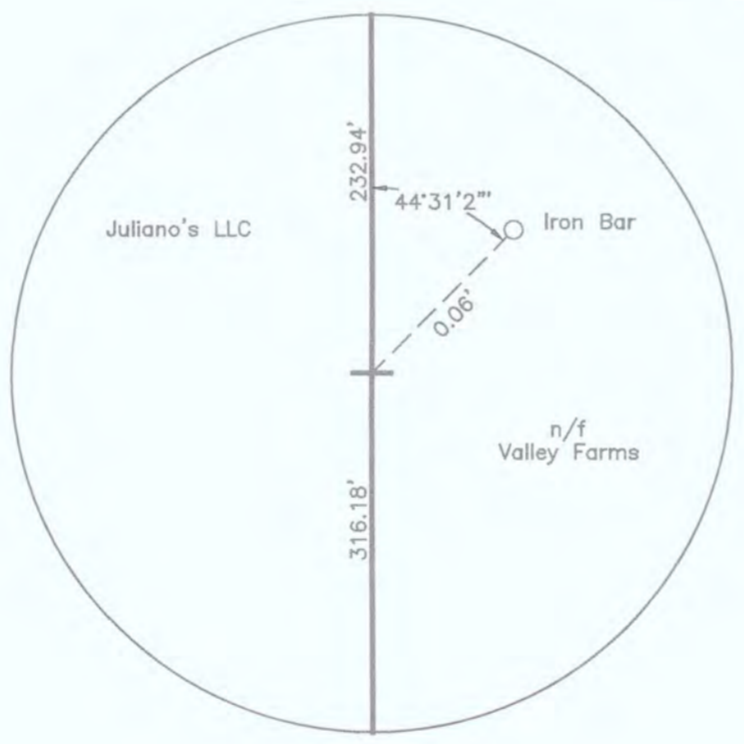


SURVEYOR'S NOTES:

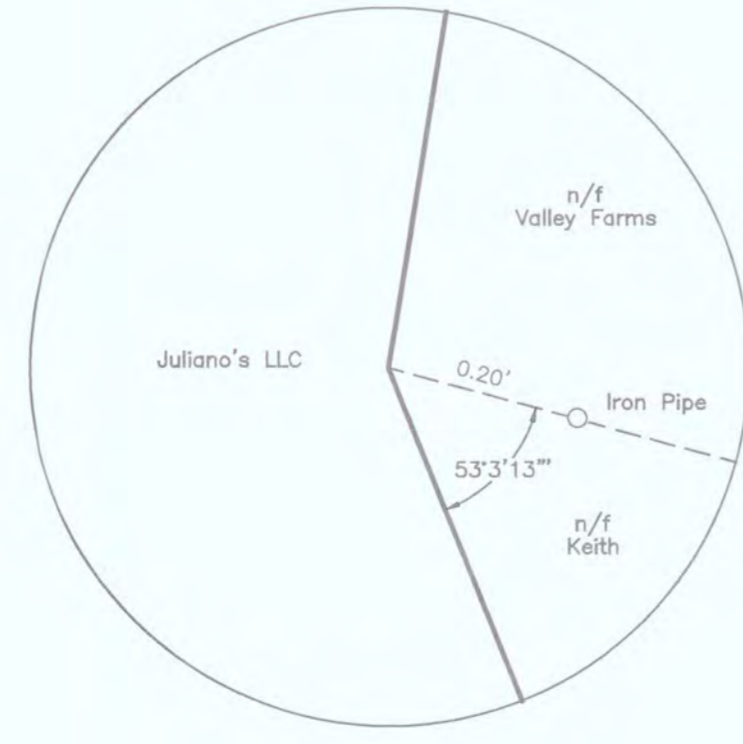
- THIS SURVEY AND MAP HAVE BEEN PREPARED IN CONFORMANCE WITH REGULATIONS AS DEFINED IN THE STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20, AS AMENDED OCTOBER 26, 2018.
- THE TYPE OF SURVEY PERFORMED IS A PROPERTY SURVEY WHICH IS INTENDED TO DEPICT BOUNDARIES, EASEMENTS, RIGHTS AND PRINCIPAL IMPROVEMENTS (ONLY) ON AND ADJACENT TO THE PROPERTY.
- THE BOUNDARY DETERMINATION CATEGORY IS A RESURVEY.
- THIS SURVEY CONFORMS TO A HORIZONTAL ACCURACY STANDARD OF CLASS A-2 AND A VERTICAL ACCURACY OF CLASS V-2.
- AZIMUTHS AND COORDINATES AS DEPICTED HEREON ARE BASED UPON THE CONNECTICUT GRID SYSTEM NORTH AMERICAN DATUM OF 1983. ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- THE PROPERTY IS LOCATED WITHIN AN INDUSTRIAL PARK (IP) ZONE.
- THE PROPERTY IS DESIGNATED ON THE ELLINGTON ASSESSOR'S RECORDS AS PARCEL 018-01-0000.
- THE PROPERTY AREA IS 250,228± SQUARE FEET (5.74± ACRES).
- REFERENCE IS MADE TO THE FOLLOWING MAPS:
 - PROPERTY & TOPOGRAPHIC SURVEY, LAND OF JULIANO'S LLC, #100 WINDERMERE AVENUE, ELLINGTON, CONNECTICUT. SCALE: 1" = 40'. DATE: 01/03/07, REVISED TO: 03/15/07. MAP PREPARED BY JULIANO ASSOCIATES.
 - RECONFIGURATION SURVEY PREPARED FOR CARLSON & JULIANO, LOWER BUTCHER RD & WINDERMERE AVE ELLINGTON, CONNECTICUT, SCALE 1"=50', DATED 7/30/2021, PREPARED BY LANDMARK SURVEYS, LLC.
- THE PROPERTY IS SUBJECT/PRIVILEGED TO THE FOLLOWING:
 - EFFECT OF AN AGREEMENT WITH THE ROCKVILLE-WILLMANTIC LIGHTING COMPANY RECORDED IN VOLUME 35 AT PAGE 594 OF THE ELLINGTON LAND RECORDS.
 - A REAR YARD VARIANCE TO ACROMOLD PRODUCTS CORP. DATED JULY 11, 1980 AND RECORDED IN VOLUME 115 AT PAGE 548 OF THE ELLINGTON LAND RECORDS.
 - EASEMENT FROM MOSER FARMS DAIRY, INC. RECORDED IN VOLUME 71 AT PAGES 11-12 OF THE ELLINGTON LAND RECORDS.
 - OTHER RIGHTS, RESTRICTIONS, ENCUMBRANCES, COVENANTS, EASEMENTS, ETC. AS THE RECORD MAY APPEAR.
- WINDERMERE AVENUE AND LOWER BUTCHER ROAD ARE CEPTED TOWN HIGHWAYS.
- INLAND WETLANDS WERE FIELD DELINEATED ("FLAGGED") BY GEORGE LOGAN, REMA SOIL SCIENTISTS, INC. ON JANUARY 14, 2022. INLAND WETLANDS WERE FIELD LOCATED AND MAPPED BY JULIANO ASSOCIATES ON JANUARY 16, 2022.
- INLAND WETLAND PERMIT IW200837 GRANTED BY THE ELLINGTON INLAND WETLANDS AGENCY DECEMBER 11, 2006.
- THE PROPERTY IS LOCATED IN THE FOLLOWING FLOOD ZONE(S): ZONE AE & ZONE X AS DEPICTED ON FLOOD INSURANCE RATE MAPS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, COMMUNITY PANEL NUMBER 090158 0015C MAP REVISED FEBRUARY 5, 1997.
- THIS BOUNDARY OPINION WAS MADE AND SURVEY MAP PREPARED FROM INFORMATION CONTAINED IN DEEDS AND MAPS OF RECORD ALONG WITH PHYSICAL EVIDENCE LOCATED DURING THE FIELD SURVEY JULY 25 AND AUGUST 1, 2006. THE PROPERTY WAS RESURVEYED ON MAY 25, 2011. THE CURRENT DEPICTION OF THE PROPERTY REPRESENTS FIELD CONDITIONS AS SURVEYED ON MAY 16 & 17, 2022.



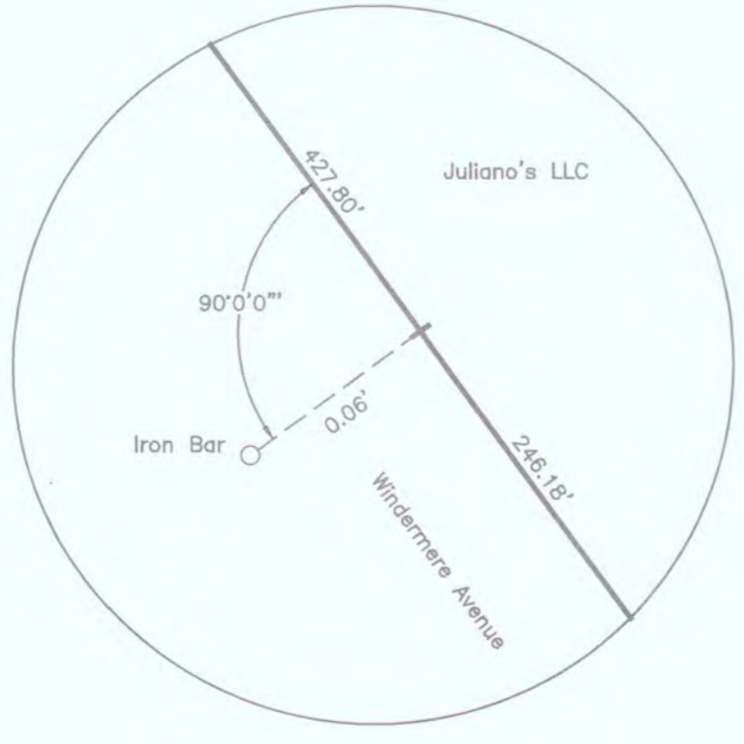
Detail 'A' nts



Detail 'B' nts



Detail 'C' nts



Detail 'D' nts

LEGEND

○ IRON PIN/PIPE RECOVERED	— PROPERTY LINES
□ MONUMENT RECOVERED	— EXISTING PAVEMENT (NO CURB)
↑ TRAFFIC SIGN	— EXISTING PAVEMENT (CURBED)
⊕ UTILITY POLE	— LIMIT OF LAWN AREA
⊖ DOWNSPOUT	— EXISTING BUILDING
⊞ CATCH BASIN	— EXISTING WOODEN FENCE
⊙ GUY WIRE ANCHOR	— EXISTING OVERHEAD ELECTRIC SERVICE
⊙ MANHOLE	— INLAND WETLANDS
⊙ ELECTRIC METER	— UPLAND REVIEW LINE
⊙ TREE/TREE CLUSTER	— 2' CONTOUR
× EXISTING SPOT GRADE	— 10' CONTOUR
↑ FLAG POLE	— PAVEMENT MARKINGS
⊙ GROUND LIGHTS	— GAS LINE
	— EXISTING DECK
	— EXISTING SIDEWALK
	— EXISTING STAIRS
	— EXISTING RETAINING WALL
	— STREAM
	— SANITARY SEWER LINE
	— EXISTING SILT FENCE
	— STORM DRAIN LINE
	— EXISTING PAVED DRIVE
	— EXISTING CONCRETE
	— DEBRIS PILE
	— TREE LINE
	— EXISTING ELECTRIC FENCE

Zone Table Data

Zone:	Required/Permitted	Existing
Lot Area	4 Acres	5.74 Acres
Width	200 Ft.	> 200 Ft.
Front Setback	100 Ft.	57.6± Ft. **
Side Setback	10 Ft.	n/a
Rear Setback	50 Ft.	192.3± Ft.
Building Height	38 Ft.	< 38 Ft.
Lot Coverage	60%	25.8%±

** 50 feet permitted on local roads

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

Christopher S. Juliano
Christopher S. Juliano, LS #19725 Date: 05/26/22

This survey is not valid unless it contains the live signature and seal of the above noted professional. Subsequent revisions to this plan other than by the original surveyor effectively void this certification.



REVISIONS

DATE	DESCRIPTION



Juliano Associates, LLC
Engineers & Surveyors
405 Main Street (Yalesville)
Wallingford, Connecticut 06492
Voice (203)265-1489 Fax (203)949-1523
www.JulianoAssociates.com
JulianoAssociatesLLC@gmail.com

Property and Topographic Survey

Land of Juliano Family One LLC
#100 Windermere Avenue
Ellington, Connecticut

Project no.:	21-161	Date:	05/26/22	Scale:	1" = 40'
Work map:	RSWEET	Checked:	CJULIANO	Sheet:	1 of 1
Final map:	RSWEET	Released:	CJULIANO	Revision:	0

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MAY 31 2022
TOWN OF ELLINGTON
PLANNING DEPARTMENT

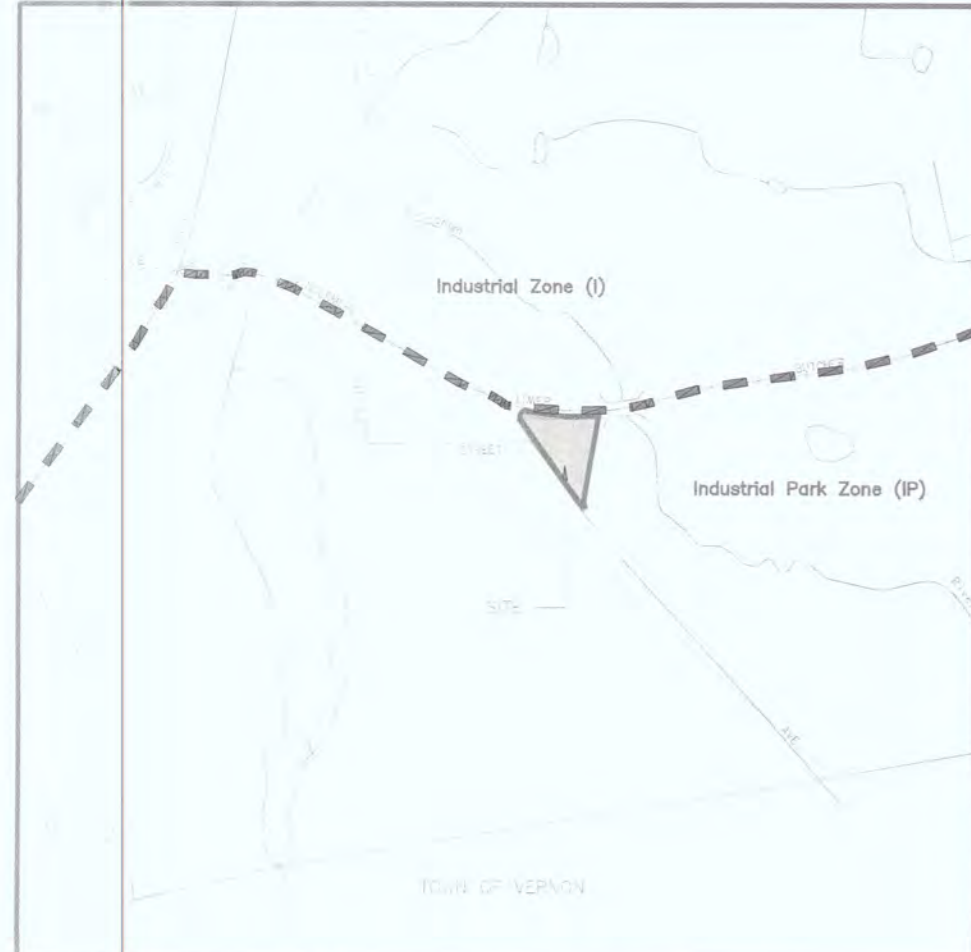
n/f
Judith A. & Walter W. Carlson
Lower Butcher Road
018-20-0001

15" HDPE
Inv (S) = 223.10
Inv (N) = 223.19

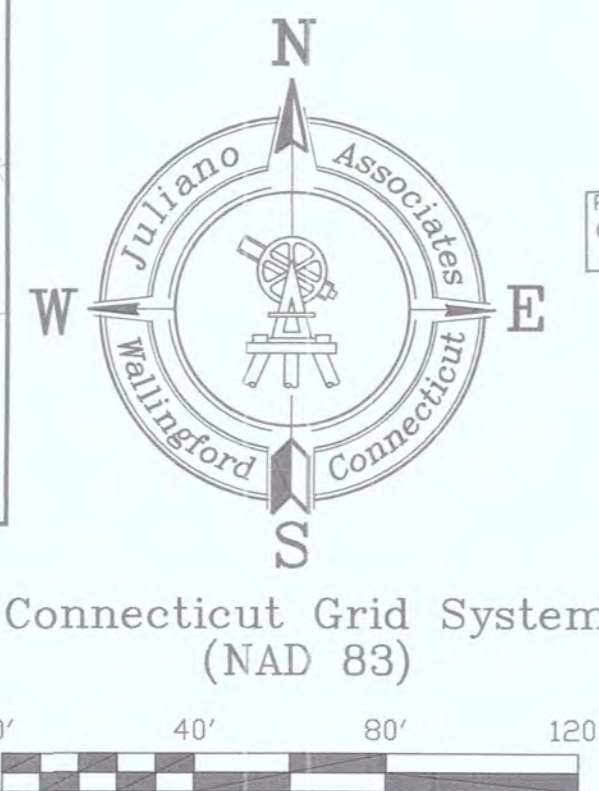
15" HDPE
Inv (S) = 223.64
Inv (N) = 223.64

12" RCP Culvert
Inv (W) = 224.03
Inv (E) = 224.59

n/f
Christina J. Champeau
& John P. Chionnezz
#84 Windermere Avenue
018-23-0000



Site Location Plan
Scale: 1" = 1000'



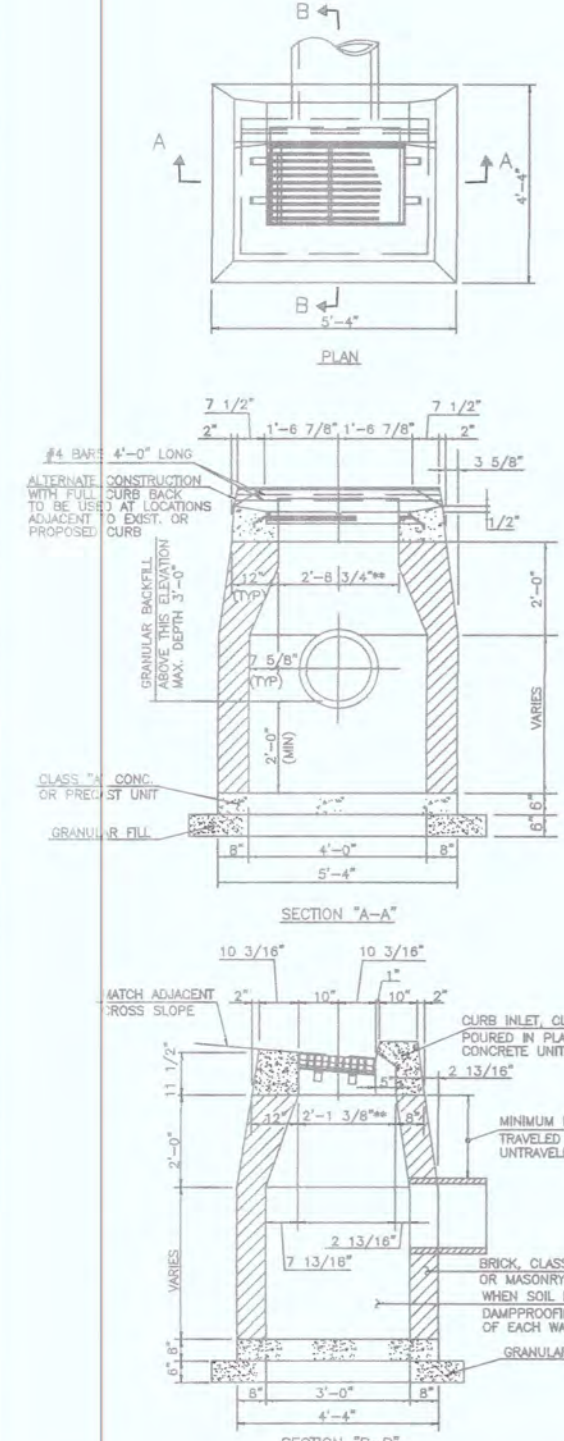
Connecticut Grid System
(NAD 83)

LEGEND

- IRON PIN/PIPE RECOVERED
- MONUMENT RECOVERED
- ▲ TRAFFIC SIGN
- UTILITY POLE
- ▽ DOWNSPOUT
- CATCH BASIN
- GUY WIRE ANCHOR
- SANITARY SEWER MANHOLE
- BUSH
- TREE/TREE CLUSTER
- EXISTING SPOT GRADE
- MATERIAL STOCKPILE
- PROPERTY LINES
- EXISTING PAVEMENT (NO CURB)
- EXISTING PAVEMENT (CURBED)
- LIMIT OF LAWN AREA
- EXISTING BUILDING
- EXISTING CHAIN LINK FENCE
- EXISTING OVERHEAD ELECTRIC SERVICE
- INLAND WETLANDS
- EXISTING WALK/CONCRETE PAD
- PAVEMENT/CURBING TO BE REMOVED
- PROPOSED EDGE OF PAVEMENT (NO CURB)
- PROPOSED CURBING
- PROPOSED PARKING/LINE STRIPING
- PROPOSED STRUCTURE
- PROPOSED SILT FENCE

Zoning Table Data			
Zone:IP	Required/Permitted	Existing	Proposed
Lot Area	4 Acres	5.74 Acres	No Change
Width	200 Ft.	>200 Ft.	No Change
Front Setback	100 Ft.	57.6± Ft.**	No Change
Side Setback	10 Ft.	N/A	No Change
Rear Setback	50 Ft.	192.3± Ft.	No Change
Building Height	38 Ft.	<38 Ft.	No Change
Lot Coverage	60%	25.8±%	47.0±%

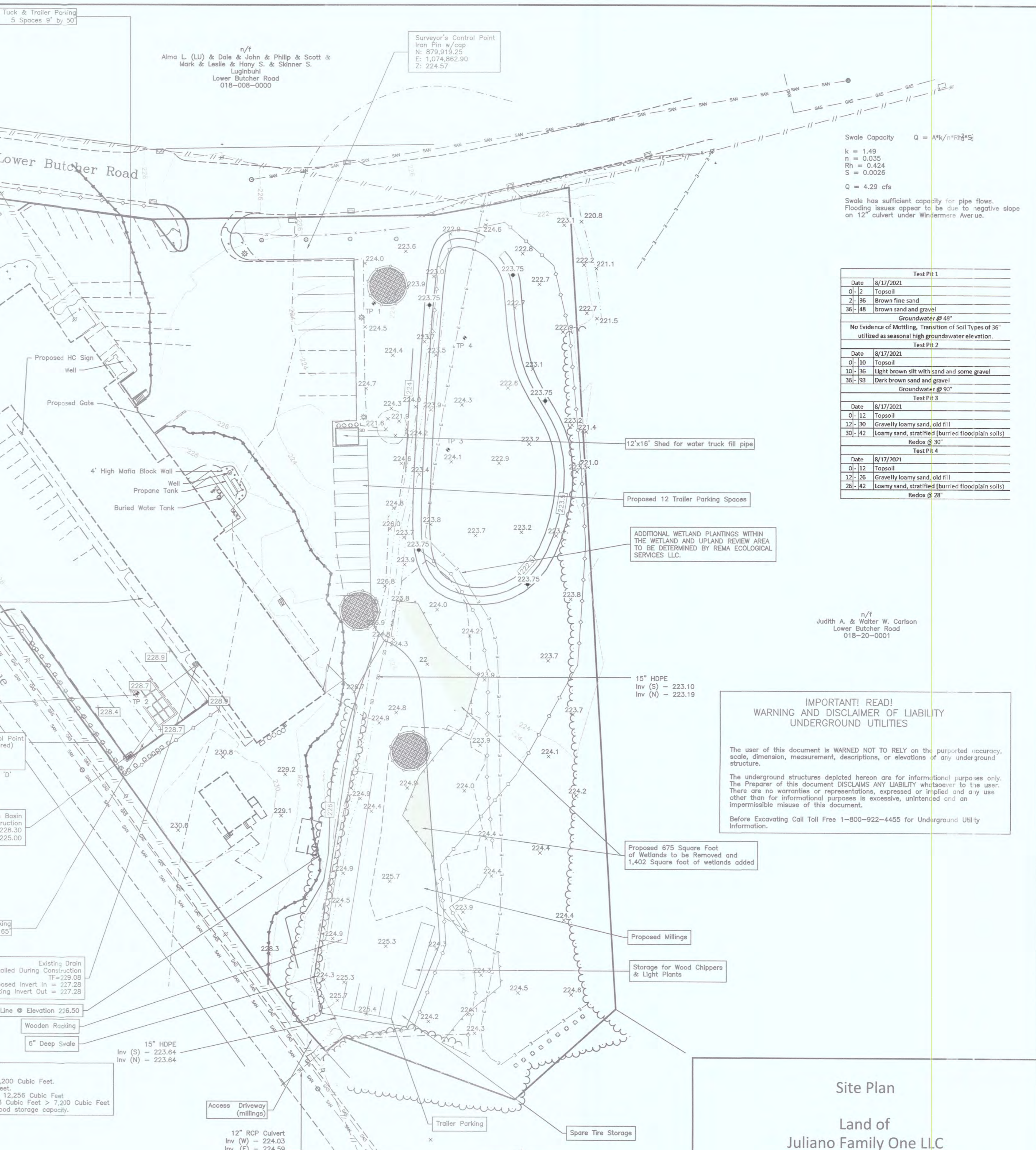
** 50 Feet permitted on local roads



SYMBOL	COMMON NAME	QTY	Planting Size
○	Weeping Hemlock	1	2-1/2" Capliper
○	Weeping Tree	1	2-1/2" Capliper
○	Dwarf Blue Spruce	2	2-1/2" Capliper
○	Blue Spruce Hoopsi	2	12' Height
*	Arborvitae	27	6' Height
●	Kwanzan Cherry	3	2-1/2" Capliper
●	October Glory	4	2-1/2" Capliper
●	wheeping norway spruce	2	8' Height
●	Gold Thread Cypress	18	
●	Concolor Fur	2	
●	Sedum	12	
●	dwarf threadleaf False Cypress	8	
○	Dwarf Holly	3	Small Plantings
○	Hosta	2	
○	Hinoki Falso Cypress	6	
○	Upright Holly	2	
○	Hakone Grass	4	

Volume Report
Wed Mar 9 13:25:19 2022
Area in Cut: 47,249.7 S.F., 1.09 Acres
Area in Fill: 10,880.6 S.F., 0.25 Acres
Total Inclusion area: 58,229.3 S.F., 1.34 Acres
Cut to Fill ratio: 4.83
Average Cut Depth: 0.69 Average Fill Depth: 0.63
Max Cut Depth: 2.02 Max Fill Depth: 2.05
Cut (C.Y.) / Area (acres): 911.28
Fill (C.Y.) / Area (acres): 188.73
Cut volume: 32,890.2 C.Y., 1,218.16 C.Y.
Fill volume: 6,811.9 C.F., 252.29 C.Y.

THIS DOCUMENT HAS BEEN PREPARED AS PART A MUNICIPAL HEALTH DEPARTMENT/DISTRICT, IWWC, TPZ, OR ZBA) LAND USE APPLICATION PROCESS. THIS DOCUMENT CAN NOT BE CONSIDERED FINAL NOR USED FOR ANY CONSTRUCTION PURPOSES UNTIL ALL NECESSARY LOCAL, STATE, AND FEDERAL APPROVALS HAVE BEEN SECURED.
Christopher S. Juliano PELS #19725

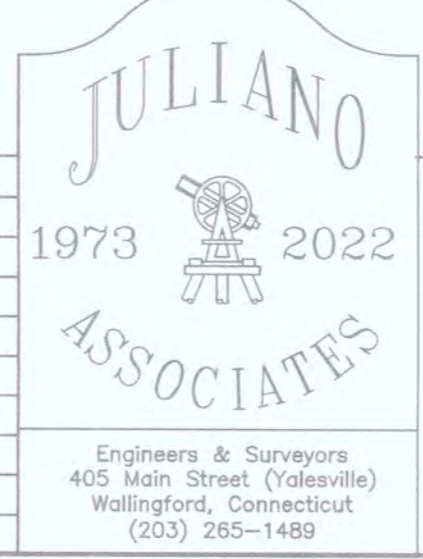


Swale Capacity $Q = A^2/n \cdot S^{1.48}$
 $k = 1.48$
 $n = 0.035$
 $R_h = 0.424$
 $S = 0.0026$
 $Q = 4.29$ cfs
 Swale has sufficient capacity for pipe flows. Flooding issues appear to be due to negative slope on 12" culvert under Windermere Avenue.

Test Pit 1	
Date	8/17/2021
0-12	Topsoil
12-36	Brown fine sand
36-48	Brown sand and gravel
Groundwater @ 48"	
No Evidence of Mottling, Transition of Soil Types of 36" utilized as seasonal high groundwater elevation.	
Test Pit 2	
Date	8/17/2021
0-10	Topsoil
10-36	Light brown silt with sand and some gravel
36-93	Dark brown sand and gravel
Groundwater @ 93"	
Test Pit 3	
Date	8/17/2021
0-12	Topsoil
12-30	Gravelly loamy sand, old fill
30-142	Loamy sand, stratified (buried floodplain soils)
Redox @ 97"	
Test Pit 4	
Date	8/17/2021
0-12	Topsoil
12-26	Gravelly loamy sand, old fill
26-62	Loamy sand, stratified (buried floodplain soils)
Redox @ 28"	

IMPORTANT! READ!
 WARNING AND DISCLAIMER OF LIABILITY
 UNDERGROUND UTILITIES
 The user of this document is WARNED NOT TO RELY on the purported accuracy, scale, dimension, measurement, descriptions, or elevations of any underground structure. The underground structures depicted hereon are for informational purposes only. The Preparer of this document DISCLAIMS ANY LIABILITY whatsoever to the user. There are no warranties or representations, expressed or implied, and any use other than for informational purposes is excessive, unintended and an impermissible misuse of this document. Before Excavating Call Toll Free 1-800-922-4455 for Underground Utility Information.

Site Plan
 Land of
 Juliano Family One LLC
 #100 Windermere Avenue
 Ellington, Connecticut



Christina J. Champagne
 & John P. Chianza
 #84 Windermere Avenue
 018-23-0000
Juliano Associates, LLC
 Engineers & Surveyors
 405 Main Street (Yalesville)
 Wallingford, Connecticut 06492
 Voice (203)265-1489 Fax (203)949-1523
 www.JulianoAssociates.com
 JulianoAssociatesLLC@gmail.com

REVISIONS	
DATE	DESCRIPTION

Project no.:	21-161	Date:	05/26/22	Scale:	1" = 40'
Work map:	RSWEET	Checked:	CJULIANO	Sheet:	2 of 5
Final map:	RSWEET	Released:	CJULIANO	Revision:	0

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 MA SUBMITTED: 20210616:08-2-0.DWG 5/26/2022 10:37 PM CJ

SEDIMENT BARRIERS

1. DEFINITION
A temporary barrier installed across or at the toe of a slope.
2. PURPOSE
To intercept and retain small amounts of sediment from disturbed or unprotected areas of limited extent.
3. APPLICABILITY
The sediment barrier is used where:
 - a. Sedimentation can pollute or degrade adjacent wetland and/or watercourses.
 - b. Sedimentation will reduce the capacity of storm drainage systems or adversely affect adjacent areas.
 - c. Contributing drainage area is less than 1 acre and the length of slope above the barrier is less than 150 feet. If the slope length is greater, other measures such as diversions may be necessary to reduce slope length.

4. PLANNING CONSIDERATIONS
Sediment barriers may consist of filter fence, straw, hay bales, stone berms, or other filter materials. Planned lifespan of sediment barriers varies. Straw or hay bales shall only be used as a temporary barrier for no longer than 60 days. Synthetic filter fences can be used for 60 days or longer depending on their stability and manufacturer's recommendations. Stone barriers can be used for longer periods of time.
5. INSTALLATION REQUIREMENTS

- a. Straw/Hay Bales
 - (1) Sheet Flow Applications
 - (a) Bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another.
 - (b) Bales shall be wire-bound only and shall be installed so that binding does not contact the earth.
 - (c) The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfilled soil shall conform to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the barrier. Ideally, bales shall be placed 10 feet away from toe of slope.
 - (d) Each bale shall be securely anchored by at least two stakes driven through the bale. The first stakes in each bale shall be driven toward the previously laid bale to force the bales together. Stakes shall be driven deep enough into the ground to securely anchor the bales.
 - (e) Gaps between bales shall be chinked (filled by wedging) with straw to prevent water from escaping between bales. (Loose straw scattered over the area immediately uphill from a straw bale barrier tends to increase barrier efficiency.)

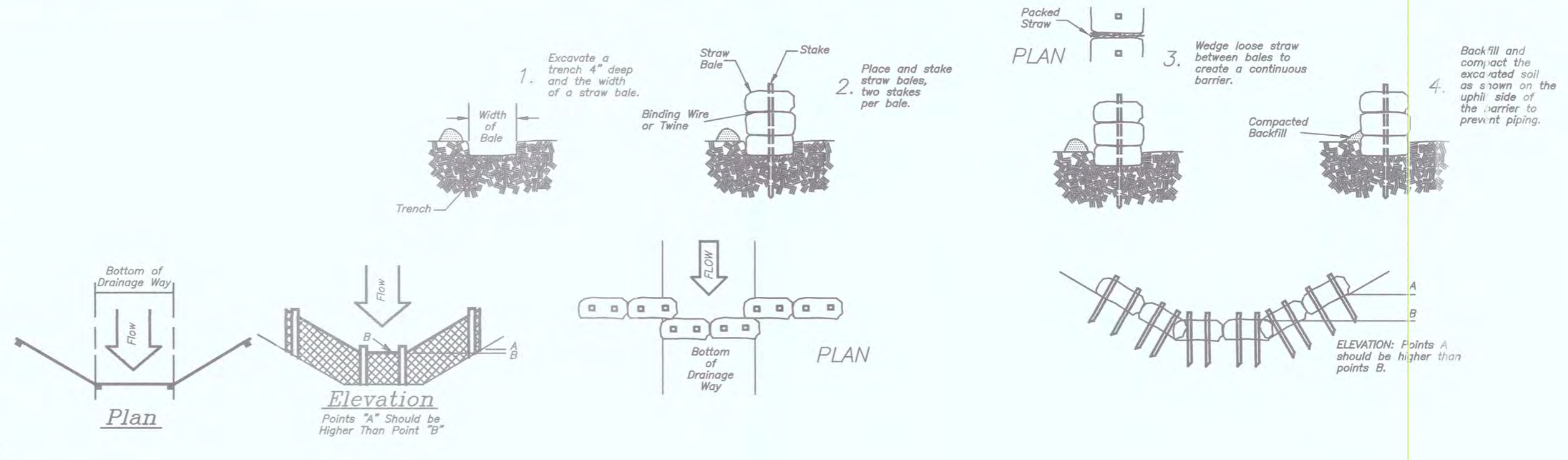
In sloping areas where surface flow follows the bale line, perpendicular bale checks shall be installed at appropriate intervals (100 feet maximum).

 - (f) Inspection, repair and/or replacement shall be made on a continuing basis.
 - (g) Bale barriers shall be removed when they have served their usefulness, but not before construction areas have been permanently stabilized.
- (2) Channel Flow Applications
 - (a) Bales shall be placed in a single row, lengthwise, oriented perpendicular to the channel, with ends of adjacent bales tightly abutting one another.
 - (b) Specifications for installing a bale barrier for sheet flow applications apply here with the following addition:
 - 1) The barrier shall be extended to such a length that the bottoms of the end bales are higher in elevation than the top of the lowest middle bale to assure that sediment laden runoff will flow either through or over the barrier, but not around it.
- (3) Catch Basin Application
 - (a) Bales shall be placed in a square or rectangular shape around depressed catch basin inlets. Catch basins constructed on sloping areas should not be encircled by bales, but shall have downhill side left open.
 - (b) The areas immediately around the catch basin may be excavated slightly to increase ponding of runoff water around catch basin.
 - (c) Remaining specifications for installing a bale barrier for sheet flow applications apply here.

- (4) Maintenance
 - (a) Inspection shall be made weekly and after each storm and repair or replacement shall be made promptly as needed.
 - (b) Cleanout of accumulated sediment behind the bales is necessary if 1/2 of the original height of the bales becomes filled in with sediment.
- b. Filter Fences
 - (1) Materials
 - (a) Synthetic Filter Fabric
Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene filaments and certified by the manufacturer or supplier as conforming to the following requirements:

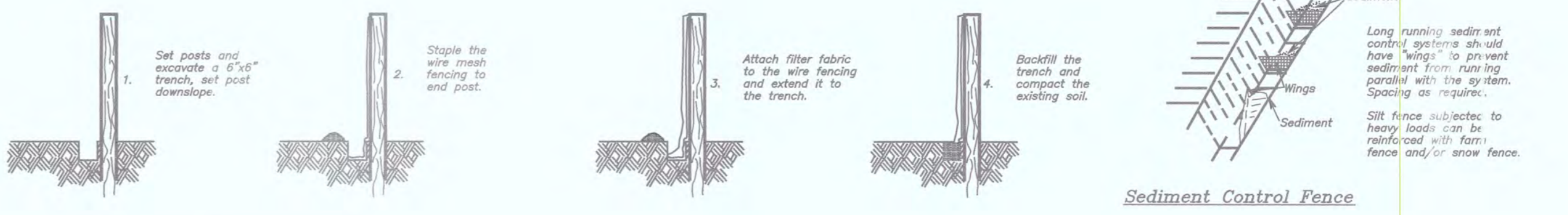
Physical Property	Requirements
Filtering Efficiency	75% (min.)
Tensile Strength at 20% (max.) Elongation	Extra Strength 50 lbs./lin. inch (min.)
	Standard Strength 30 lbs./lin. inch (min.)
Flow Rate	0.3 gal./sq. ft./min (min.)
 - (b) Burlap shall be 10 ounce per square yard fabric.
 - (c) Stakes for filter fences shall be 1" x 2" wood or equivalent metal with a minimum length of 3 feet.
Where additional strength is required, posts for filter fences shall be either 2 x 3 or 2 x 4 inch wooden studs or 0.5 (min.) pounds/linear foot steel with a minimum length of 5 feet. Steel posts shall have projections for fastening wire.
 - (d) Wire fence reinforcement for silt fences using standard strength filter cloth shall be a minimum of 42 inches in height, a minimum of 14 gauge and shall have a maximum mesh spacing of 6 inches.
Some silt fences do not require a wire backing. Consult manufacturer's instructions for proper installation requirements.
 - (2) Installation Requirements
This sediment barrier utilizes burlap, standard or extra strength synthetic filter fabrics. It is designed for situations in which only sheet or overland flows are expected. In special cases burlap may be used in drainageways.
 - (a) The height of the barrier shall not exceed 36 inches. (Higher barriers may impound volumes of water sufficient to cause failure of the structure.) Ideally the filter fence shall be placed 10 feet away from the toe of slope.
 - (b) When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6 inch overlap, and securely sealed. See manufacturer's recommendations.
 - (c) Posts shall be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 12 inches). When extra strength fabric is used without the wire support fence, space posts as manufacturer recommends.
 - (d) A trench shall be excavated approximately 6 inches wide and 6 inches deep along the line of posts as manufacturer recommends.
 - (e) When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1 inch long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2 inches and shall not extend more than 36 inches above the original ground surface.
 - (f) The standard strength filter fabric shall be stapled, wired or tied to the wire fence, and 8 inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
 - (g) When extra strength filter fabric or burlap and closer post spacing are used, the wire mesh support fabric is stapled, wired or tied directly to the posts with all specifications of (f) above applying.
 - (h) The trench shall be backfilled and the soil compacted over the filter fabric.
 - (i) Filter barriers shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

- (3) Maintenance
 - (a) Filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
 - (b) Should the fabric decompose or become ineffective, the fabric shall be replaced promptly.
 - (c) Sediment deposits shall be removed when they reach approximately one-half the height of the barrier.
 - (d) Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.
- c. Stone Barrier
The stone shall meet ASTM C-33 size no. 2 or 3 (3" or 2-1/2").
 - (1) Installation Requirements
 - (a) The stone shall be piled to a natural angle of repose with a 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 and/or replacement 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.
- d. Vegetative Filter
Vegetative filters shall be used to filter sediment from overland flow only where concentrations of sediment and rates of runoff are low.
 - (1) Installation Requirements
The minimum width of the filter strip shall be at least 15 feet.
The width of the filter strip shall be increased proportionately for slopes longer than 150 feet or for higher sediment concentrations. When using filter strips at inlets to storm sewers, as large an area as possible shall be provided. Filters shall be placed along the contours whenever possible. No construction shall be allowed within filter strip areas.
Vegetation must be adapted to sediment producing areas. Either existing or established vegetation must be healthy and have a vigorous growth habit. Establishing vegetation by seed or sodding shall be done in accordance with the specifications for Permanent Vegetative Cover or Sodding and shall be established prior to land disturbance.
 - (2) Maintenance
Maintenance of vegetative filter strips is the same as that recommended for any vegetation as specified in Permanent Vegetative Cover. A healthy growth of vegetation can best be maintained by fertilizing, removing sediment when the filter becomes clogged, and by preventing construction traffic from driving upon or across filter strips.

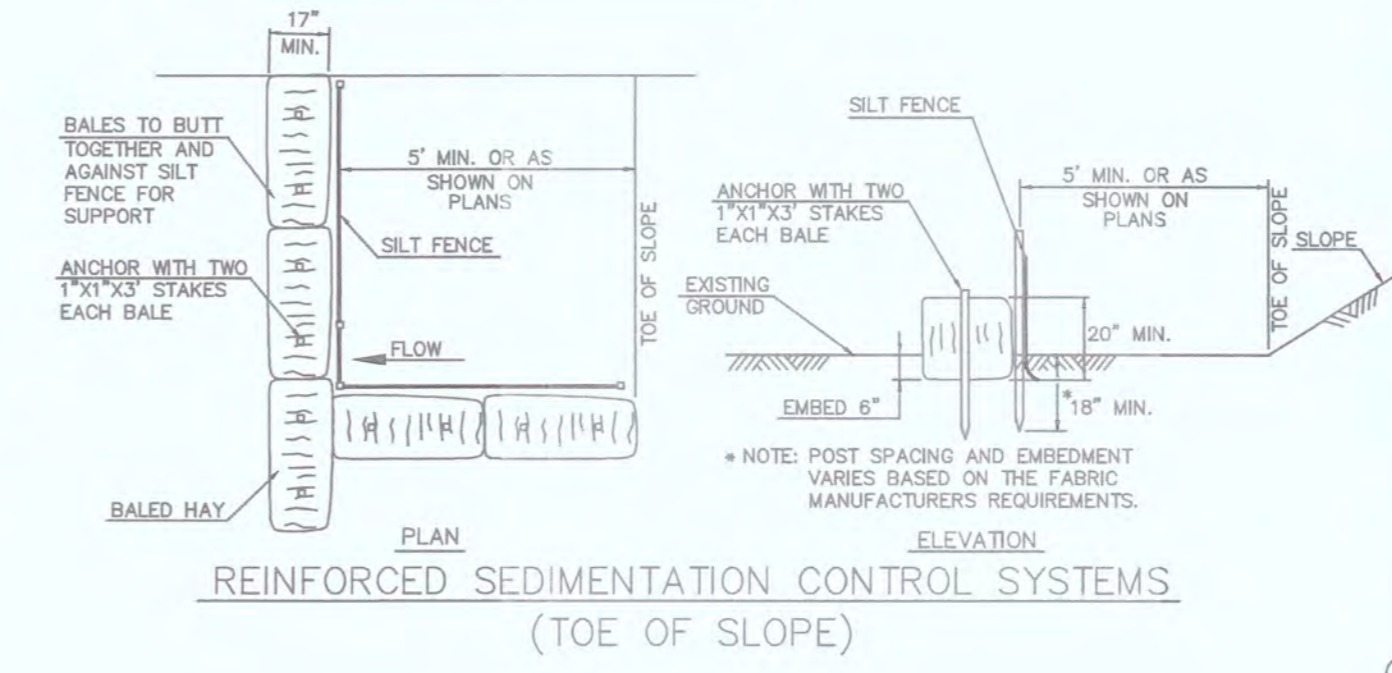


Placement and Construction of a Synthetic Filter Barrier

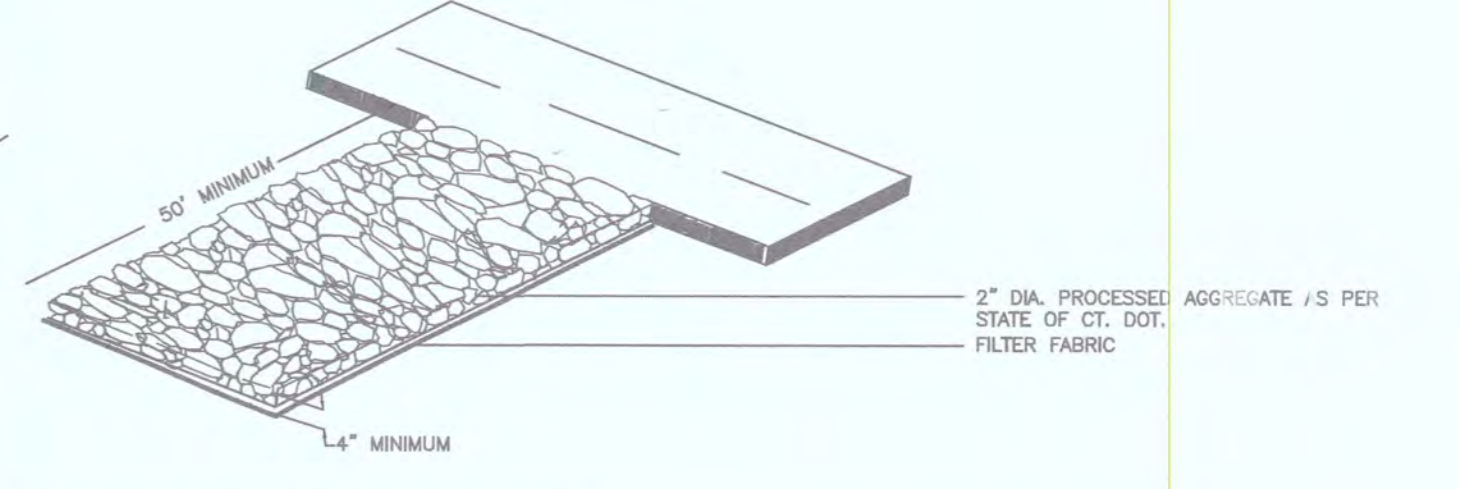
Placement and Construction of a Hay Bale Barrier



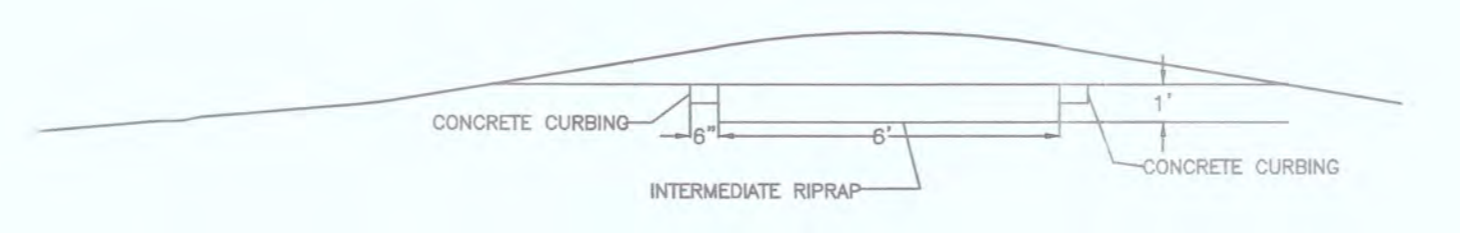
Sediment Control Fence



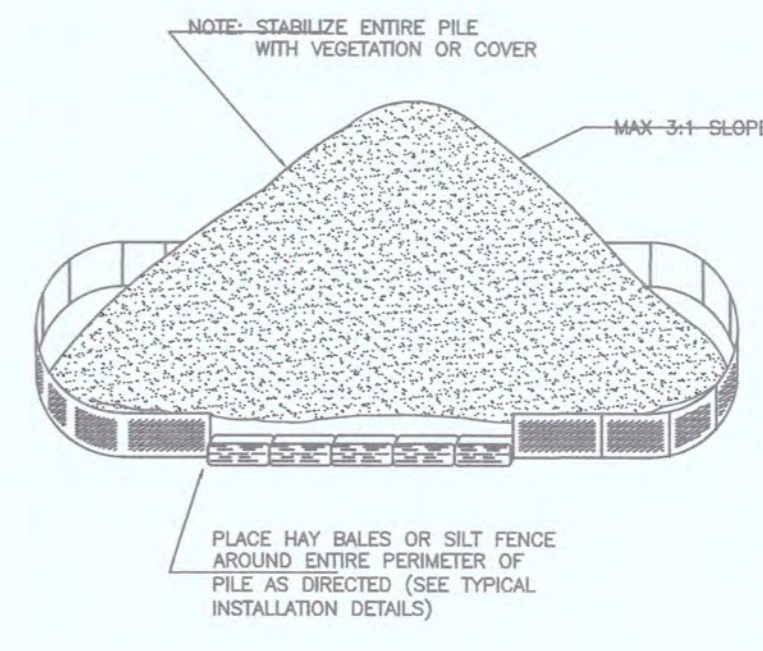
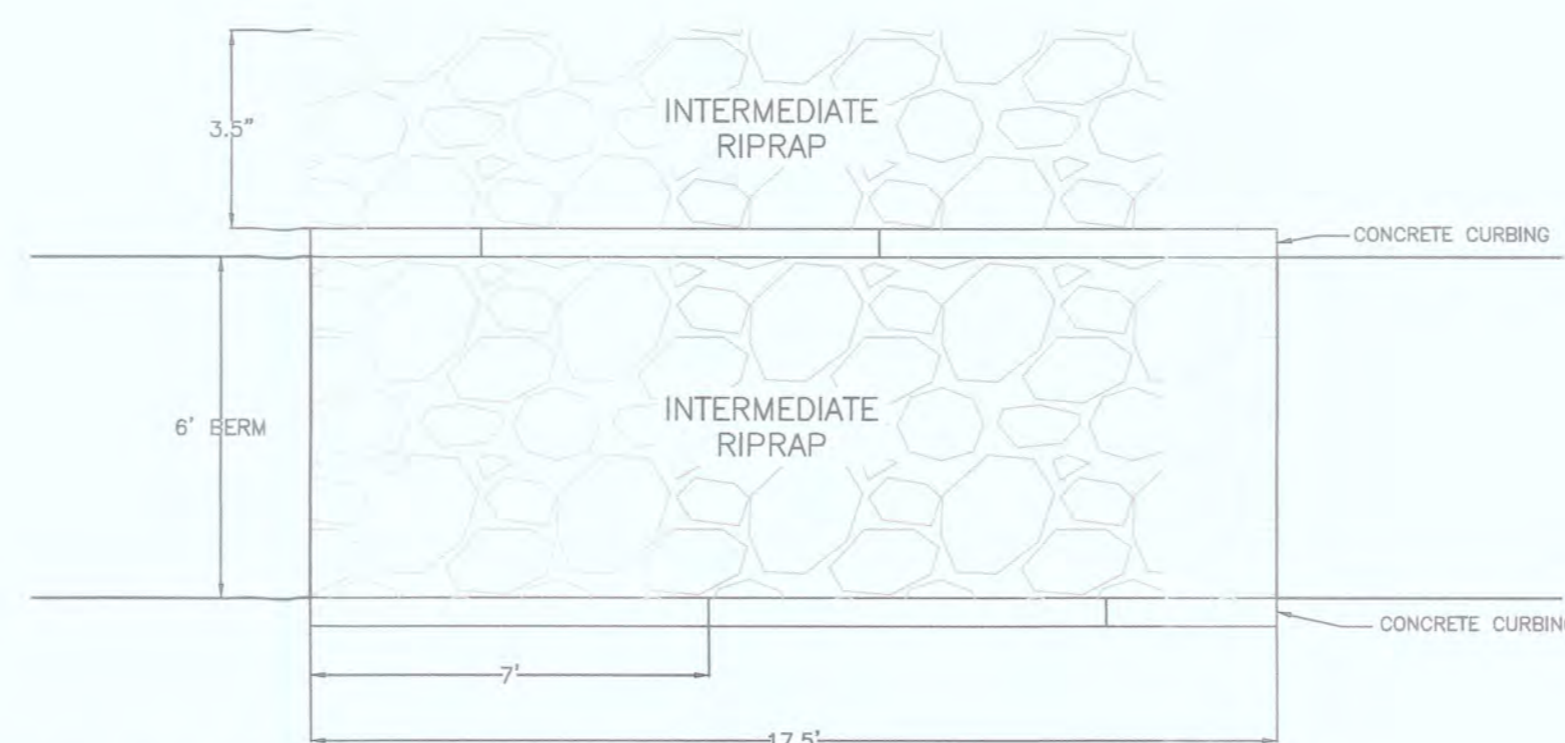
REINFORCED SEDIMENTATION CONTROL SYSTEMS (TOE OF SLOPE)



CONSTRUCTION ENTRANCE



BROAD CRESTED WEIR



TEMPORARY SOIL STOCKPILE

- INSTALLATION NOTES:
1. AREA CHOSEN FOR STOCKPILE OPERATION SHALL BE DRY AND STABLE.
 2. THE GROUND SURFACE SHALL SLOPE AWAY FROM THE STOCKPILE.
 3. IF NECESSARY, PLACE TARP OR IMPERVIOUS MATERIAL BENEATH STOCKPILE TO PREVENT MIXING OF SOIL.
 4. COVER STOCKPILE WITH FABRIC OR VEGETATION AS DIRECTED.
 5. MAX SLOP OF STOCKPILE SHALL BE 3:1 (H:V) UNLESS OTHERWISE APPROVED.

DURING CONSTRUCTION THERE SHALL BE A SUPPLY OF SILT FENCE AND/OR HAY BALES STORED ON SITE FOR EMERGENCY SEDIMENT AND EROSION CONTROL PURPOSES.

THIS DOCUMENT HAS BEEN PREPARED AS PART A MUNICIPAL HEALTH DEPARTMENT/DISTRICT, IW/C, TPZ, OR ZBA LAND USE APPLICATION PROCESS. THIS DOCUMENT CAN NOT BE CONSIDERED FINAL NOR USED FOR ANY CONSTRUCTION PURPOSES UNTIL ALL NECESSARY LOCAL, STATE, AND FEDERAL APPROVALS HAVE BEEN SECURED.
Christopher S. Juliano PELS #19725



REVISIONS	
DATE	DESCRIPTION

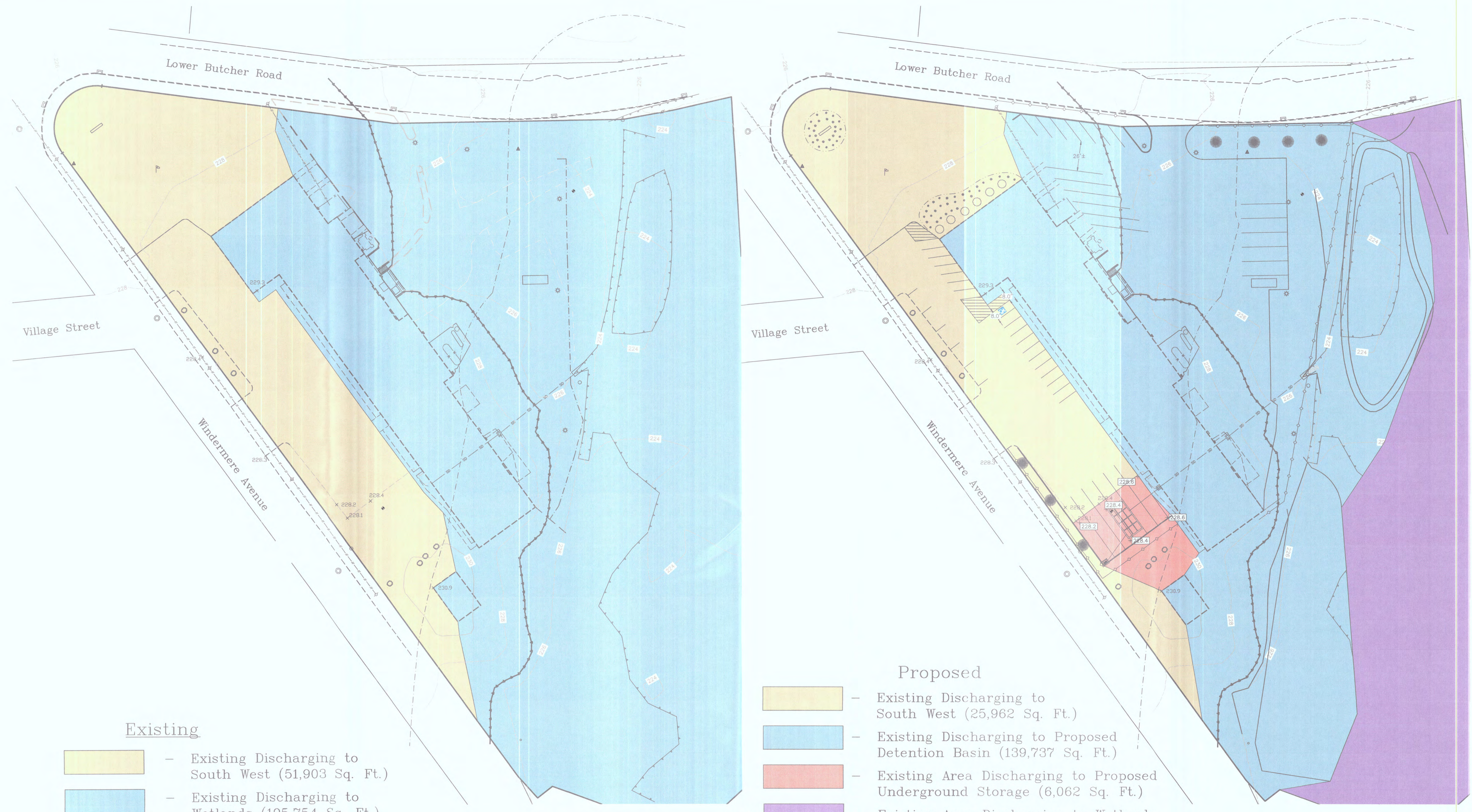


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JulianoAssociatesLLC@gmail.com

Erosion Control Specifications and Details
Land of
Juliano Family One LLC
#100 Windermere Avenue
Ellington, Connecticut

Project no.:	21-161	Date:	05/26/22	Scale:	NTS
Work map:	RSWEET	Checked:	CIJULIANO	Sheet:	5 of 5
Final map:	RSWEET	Released:	CIJULIANO	Revision:	0

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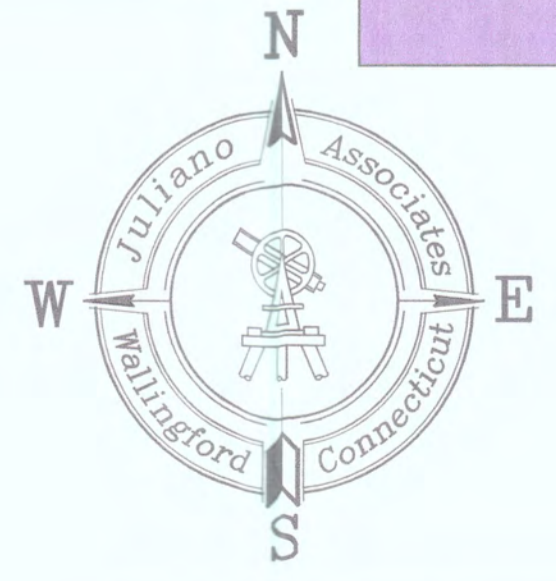


Existing

- Existing Discharging to South West (51,903 Sq. Ft.)
- Existing Discharging to Wetlands (195,754 Sq. Ft.)

Proposed

- Existing Discharging to South West (25,962 Sq. Ft.)
- Existing Discharging to Proposed Detention Basin (139,737 Sq. Ft.)
- Existing Area Discharging to Proposed Underground Storage (6,062 Sq. Ft.)
- Existing Area Discharging to Wetlands Not Captured (55,598 Sq. Ft.)



Drainage Area Map
Land of
Juliano Family One LLC
#100 Windermere Avenue
Ellington, Connecticut

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Christopher S. Juliano PELS #19725

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Voice (203)265-1489 Fax (203)949-1523
www.JulianoAssociates.com
JulianoAssociatesLLC@gmail.com

Project no.:	21-161	Date:	05/26/22	Scale:	1" = 40'
Work map:	RSWEET	Checked:	CJULIANO	Sheet:	4 of 5
Final map:	JDIMEO	Released:	CJULIANO	Revision:	

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The following is a proposed sequence of construction:

Phase II Rear of Property

1. Install erosion controls as depicted on the plans.
2. Remove existing topsoil in areas of proposed disturbance and stockpile the material as shown on plans.
3. Construct the proposed detention basin in the rear of the property and stabilize any disturbed areas.
4. Make any adjustments to grading, should be minor site grading.
5. Complete any landscaping and tree planting in the area as depicted by REMA Ecological Services.
6. Spread existing, lime, fertilizer, seed and mulch all disturbed areas.
7. Install the Milling Storage Area as per the approved plans.
8. Remove accumulated sediment from all silt barriers and sediment control structures.

Project is anticipated to be completed in no longer than 6 months from start date. Equipment to be used are to include excavators for movement of earth and other materials. This project is not proposing to fill any materials other than the proposed millings in the disturbed area. There is no proposal to remove any trees or stumps.

Project Completion - Entire Project

1. Fix any broken curbing and patch pavement binder course as required.
2. Install final pavement surface coarse to driveway and parking area.
3. Install final pavement markings, line striping, and any remaining signage throughout site.
4. Install any remaining landscaping throughout site and inspect existing vegetation to replace any dead or damaged plant material(s).

In addition to the measures listed above, the following work will be performed as required.

- A. Remove accumulated sediment from all sediment and erosion control barriers as necessary and dispose of offsite in a manner consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.
- B. Just and wind erosion shall be controlled throughout the duration of the construction of the improvements. Dust control shall include but not be limited to sprinkling of water on exposed surfaces and roads.
- C. If excavation interrupted by heavy rains, additional mulching or gravel work mats may be required on areas of exposed soils. Soils that have become unsuitable for use due to exposure to heavy rains shall be removed from the work area and dried.
- D. Any other reasonable measures or practices which are deemed necessary by the Town Engineer and/or Inland Wetlands Enforcement Officer as a result of construction activities.

Operation and Maintenance

During Construction

- A. Best management practices as outlined by the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, shall be utilized to control storm water discharges and to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands or watercourses. For information and technical assistance, contact the Inland Wetlands Enforcement Officer. The permittee shall immediately inform the Planning Department of any problems involving wetlands or watercourses which have developed in the course of, or which are caused by, the authorized work.
- B. No equipment or material including but not limited to fill construction materials, or debris, shall be deposited, placed or stored in any wetland or watercourse on or off site.
- C. Timely implementation and maintenance of sediment and erosion control measures are required. All sediment and erosion control measures must be maintained until all disturbed areas are stabilized.
- D. A pre-construction meeting shall be held prior to the commencement of any construction activities on the site with the owner, contractor, and Town Staff.
- E. As contained in the Sedimentation and Erosion Control Specifications, operations and maintenance during construction will consist of periodic replacement and/or cleaning of clogged hay bales, silt fence and construction entrances at no additional cost to the owner. Any temporary sedimentation basins will be cleaned of accumulated sediment when the depth of accumulated sediment exceeds six inches. All drainage structures shall be inspected on a weekly basis and more often as required with the occurrence of storm events and any necessary corrective action taken.

STORMWATER MAINTENANCE PROGRAM

Upon site development, there will be a need to periodically maintain the various elements of the stormwater facilities onsite. The stormwater system consists of two catch basins, catch basin insert filters, and an underground detention/infiltration system along with the associated storm drainage piping.

In order to ensure optimal pollution prevention to receiving waters, the following stormwater maintenance program has been established. The applicant or their designated property management company shall be the entity responsible for the implementation of this program.

A. Driveway & Parking Area Sweeping

All parking areas and sidewalks shall be swept clean of sand and litter at least twice per year, once between November 15 and December 15 (after leaf fall) and once during the month of April (after snow melt) and at other times as may be necessary.

B. Catch Basins

Catch basins contain sumps that will require periodic maintenance. Each catch basin on the property shall be inspected quarterly for the first two years, and the frequency of such monitoring in subsequent years shall be adjusted based on observation in the first two years. Sediment and debris shall be removed at least once a year, during the month of April and more frequently, if needed.

C. Catch Basin Insert Filter

The recommended maintenance specification for the FlowGuard +Plus Catch Basin Insert is attached.

D. Underground Galleys System

These facilities provide storage for runoff during storms as a result of development. Detention is the collection and temporary storage of surface water at a controlled rate of outflow, infiltration is the collection and immediate conveyance of surface water. It is imperative that these facilities be monitored and maintained to ensure that they are functioning properly.

The underground system is to be installed with a minimum of two (2) access/inspection ports as denoted on the plans. The system is to be inspected a minimum of two (2) times per year during the months of April and October. During the inspections the amount of sediment and/or debris shall be measured and recorded in a maintenance log. If sediment is noted at inspection ports, the galley system shall be cleaned with the use of a vacuum truck.

E. Storm Water Detention Basin

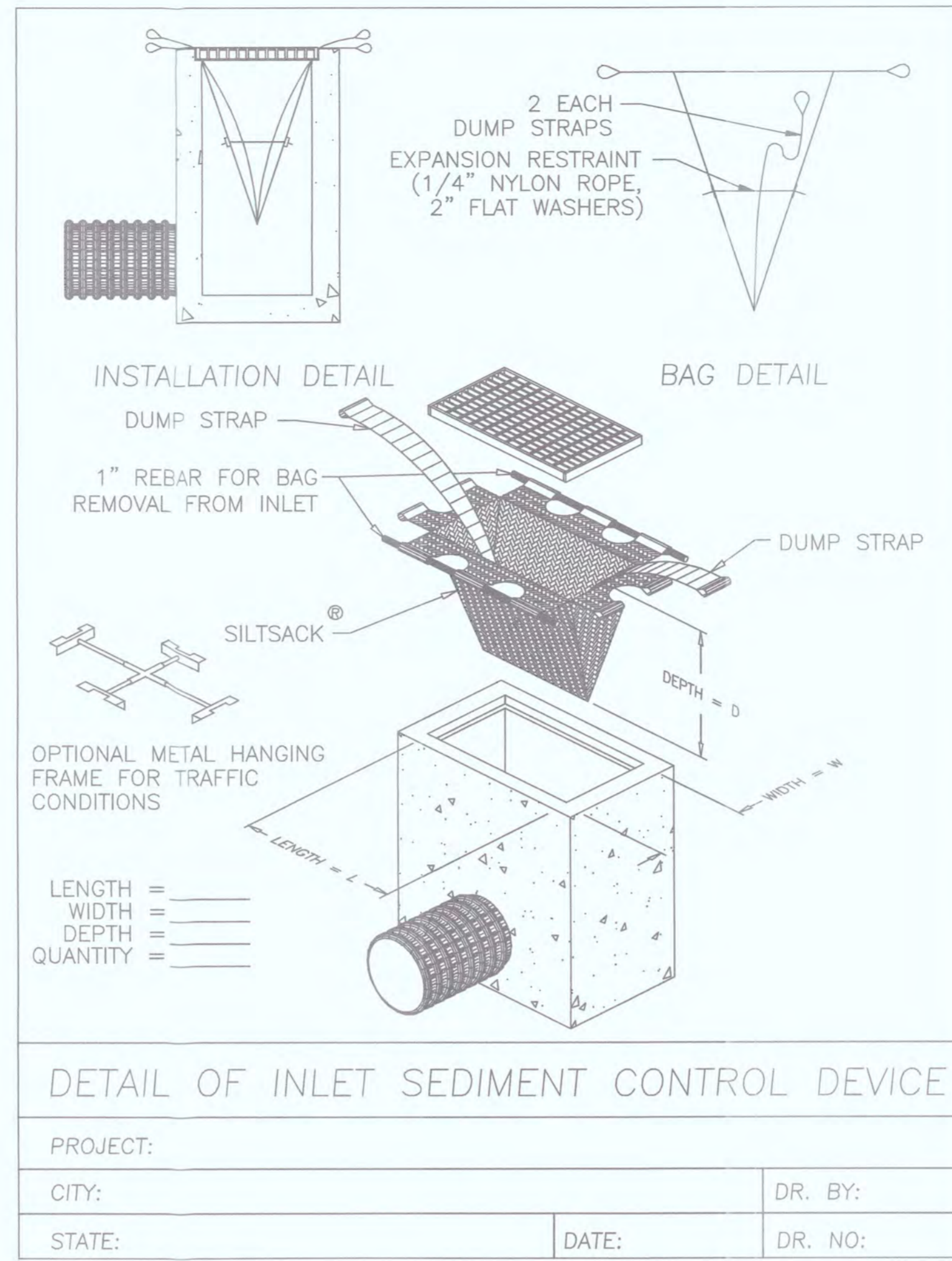
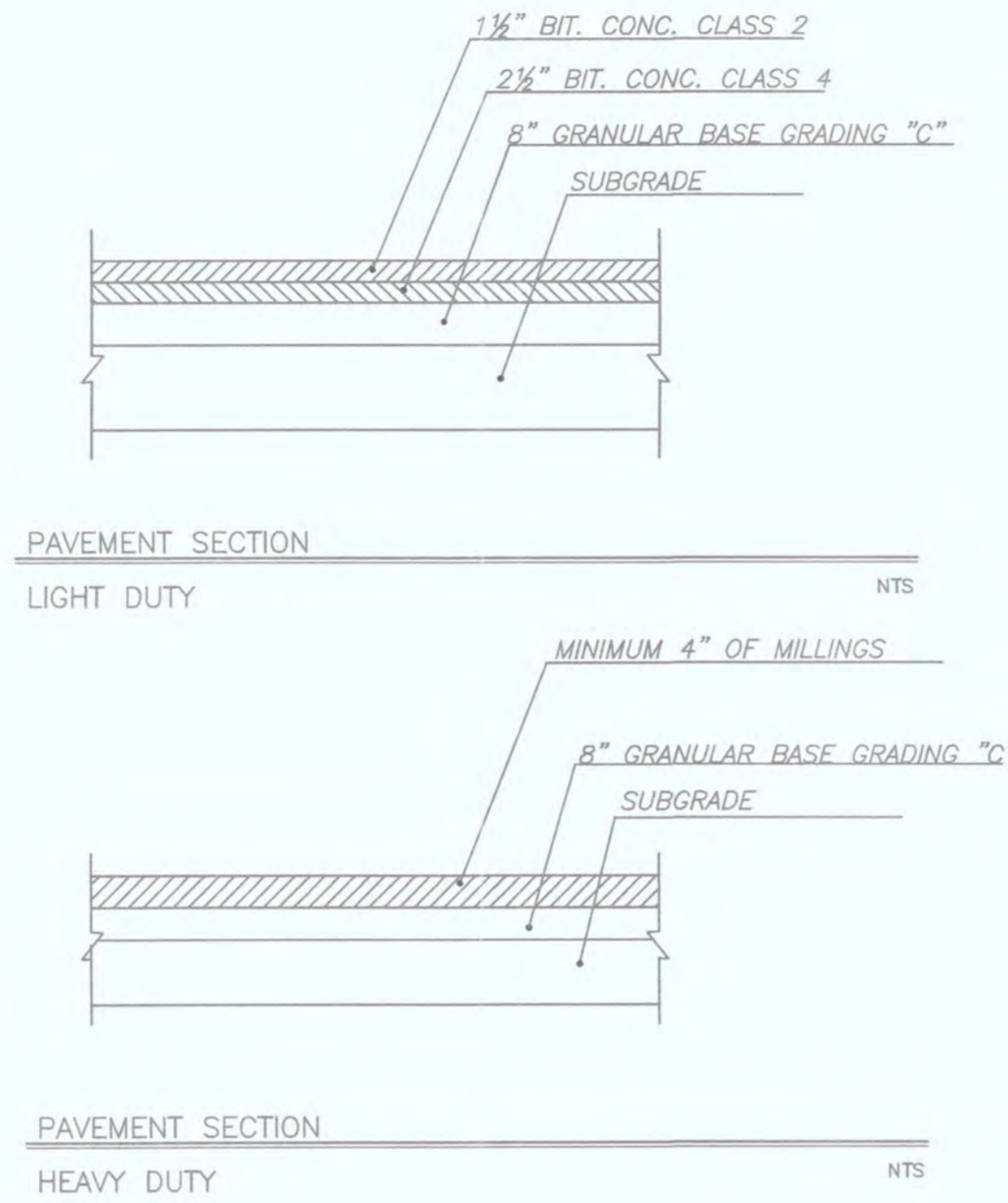
1. Inspection Schedule

- a. Visual inspections shall be conducted weekly, particularly after heavy rain event, to ensure proper functioning of the storm water detention basin, and outlet structure (i.e. no pooling or blockages).
- b. Detailed inspections shall be conducted at least monthly. Detailed inspections are meant to identify erosion, damage to vegetation, grass or plant height, debris, litter, areas of sediment accumulation and pools/standing water.

2. Maintenance Activities

a. Routine or preventative maintenance is intended to ensure the storm water detention area and outlet structure are in proper working order. This includes debris removal, silt and sediment removal, and clearing of vegetation around flow control devices to prevent clogging. Also included is maintenance of a healthy vegetative cover.

- i. Erosion: Areas of erosion and slope failure shall be repaired and replanted as soon as possible. Eroded areas near the inlet or outlet may also need to be lined with riprap, which will be determined on a case basis.
- ii. Damage to Vegetation: If the storm water detention area develops ruts or holes, it shall be repaired utilizing a suitable soil that is properly tamped and seeded. The grass or plant cover should be thick; if not, it shall be replanted with in-kind plants, as necessary.
- iii. Grass or Plant Height: The storm water detention area shall be mowed twice annually. Cuttings will be removed and properly disposed/composted.
- iv. Debris/Litter: Remove all litter or debris within the storm water detention area and outlet structure and prior to mowing and as inspections warrant.
- v. Areas of sediment accumulation: Remove sediment by hand with a flat-bottomed shovel whenever sediment covers vegetation or begins to reduce the capacity of the storm water detention area and outlet structure. Sediment accumulating near inlets and in channels should be removed when it builds up to 3 inches at any spot, or covers vegetation. Keep all level spreaders even and free of debris.
- vi. Pools and standing water: Observe soil at the bottom of the storm water detention area for uniform percolation throughout. If portions of the storm water detention area do not drain within 5 days after the end of a storm, the soil shall be tilled, regraded and replanted with a seed mix similar to those originally planted in the swale.
- vii. Pesticides and Fertilizers: Application of pesticides and fertilizers shall be minimal. Only organic pesticides and fertilizers shall be used.



SILTSACK® SPECIFICATIONS
NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

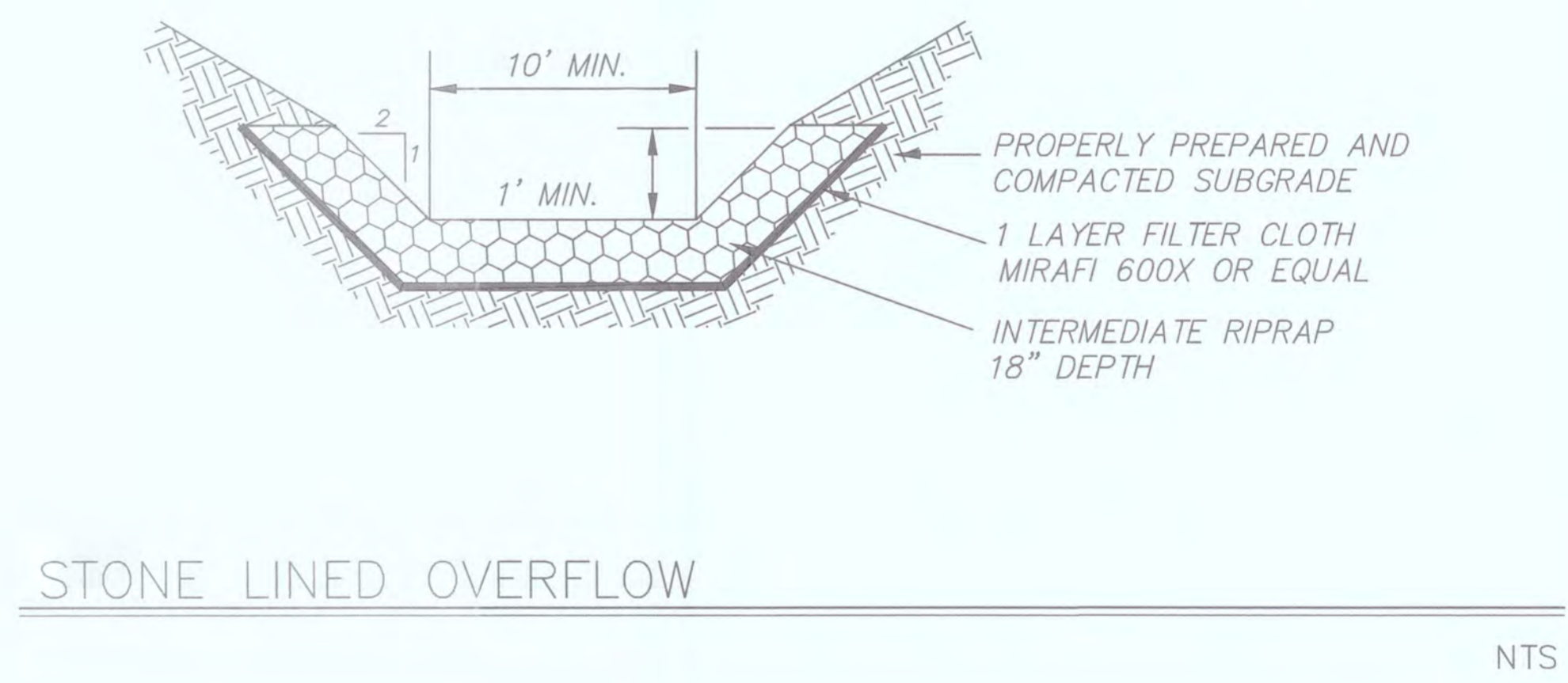
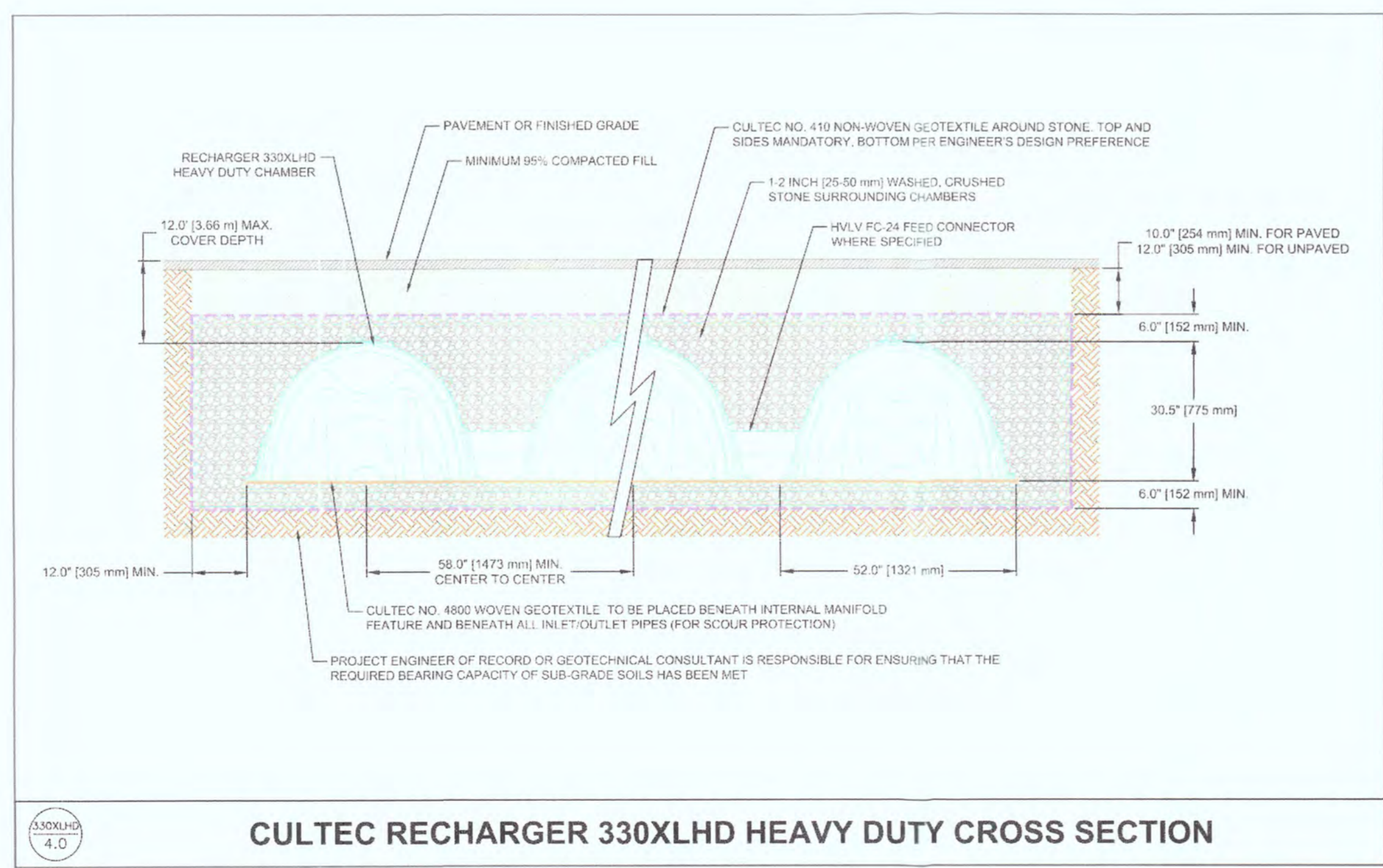
REGULAR FLOW SILTSACK®
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS	
GRAB TENSILE STRENGTH	ASTM D-4632		300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632		20 %
PUNCTURE	ASTM D-4833		120 LBS
MULLEN BURST	ASTM D-3786		800 PSI
TRAPEZOID TEAR	ASTM D-4533		120 LBS
UV RESISTANCE	ASTM D-4355		80 %
APPARENT OPENING SIZE	ASTM D-4751		40 US SIEVE
FLOW RATE	ASTM D-4491		40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491		0.55 SEC -1

HI-FLOW SILTSACK®
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS	
GRAB TENSILE STRENGTH	ASTM D-4632		265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632		20 %
PUNCTURE	ASTM D-4833		135 LBS
MULLEN BURST	ASTM D-3786		420 PSI
TRAPEZOID TEAR	ASTM D-4533		45 LBS
UV RESISTANCE	ASTM D-4355		90 %
APPARENT OPENING SIZE	ASTM D-4751		20 US SIEVE
FLOW RATE	ASTM D-4491		200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491		1.5 SEC -1

OIL-ABSORBANT SILTSACK®
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK® CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK®, WITH A WOVEN PILLLOW INSERT.

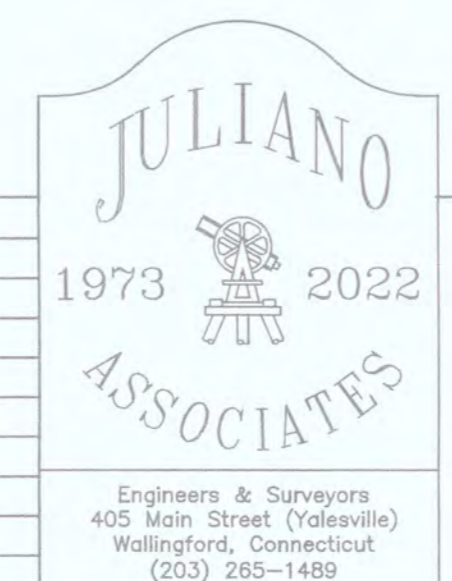


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Construction Sequence, Storm Water Maintenance Program and Details

Land of
Juliano Family One LLC
#100 Windermere Avenue
Ellington, Connecticut

Project no.:	21-161	Date:	05/26/22	Scale:	NTS
Work map:	RSWEET	Checked:	CJULIANO	Sheet:	5 of 5
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Town of Ellington Inland Wetlands and Watercourses Agency Application

Application # FW 202204
Date Submitted 4/22/2022

Notices associated with this application will be sent to the applicant unless otherwise requested.

Owner's Information

Name: Ellington McIntire, LLC
Mailing Address: 140 Webster Road
Ellington, CT 06029
Email: _____

WHEN NOT REQUIRED BY LAW TO MAIL NOTICE BY USPS, MAY NOTICES BE EMAILED TO YOU? Yes No

Primary Contact Phone #: _____

Secondary Contact Phone #: _____

Owner's Signature:  Date: 4/11/22

By signing below I certify that all information submitted with this application is true and accurate to the best of my knowledge, that I am aware of and understand the application requirements and regulations, and acknowledge that the application is to be considered complete only when all information and documents required by the Agency have been submitted. Moreover, by signing above I/we expressly provide written consent to the filing of the application and access to the site by the Agency or its staff.

Notices associated with this application will be sent to the applicant unless otherwise requested.

Applicant's Information (if different than owner)

Name: Same
Mailing Address: _____

Email: _____

RECEIVED
APR 22 2022
TOWN OF ELLINGTON
PLANNING DEPARTMENT

WHEN NOT REQUIRED BY LAW TO MAIL NOTICE BY USPS, MAY NOTICES BE EMAILED TO YOU? Yes No

Primary Contact Phone #: _____

Secondary Contact Phone #: _____

Applicant's Signature: _____ Date: _____

By signing below I certify that all information submitted with this application is true and accurate to the best of my knowledge, that I am aware of and understand the application requirements and regulations, and acknowledge that the application is to be considered complete only when all information and documents required by the Agency have been submitted.

Street Address: 153 Webster Road

Assessor's Parcel Number (APN): 185 - 001 - 0000

Proposed upland review area affected in square feet: 36,000

Proposed wetlands/watercourses affected in square feet and linear feet (as applicable): None

Total area of wetlands/watercourses on parcel in square feet or acres: 6.0 acres - per map ref. 3B

Public Water: Yes No Public Sewer: Yes No *If not served by public water and sewer, applicant shall make application to North Central District Health Department (Enfield Office) if required.*

Is the project in a public water supply watershed area? Yes No
If YES, applicant is required to notify the Connecticut Water Company and Commissioner of Public Health by certified mail, return receipt within 7 days of this application (Conn. Gen Stat. Sec 22a-42f). Copy of application, plans, and supporting documents must accompany notice. Applicant can email the Commissioner of Public Health using their approved form. Proof of notice (return receipt and sent email) must be provided to the Planning Department.

Describe the nature of proposed regulated activity, request for acceptance of a permitted use as of right or a nonregulated use, map or regulation amendment, or other activity requiring review by the Agency or its Agent:
See attached Application Checklist and Appendix D for guidance when preparing application

We hereby apply for an Agency Permit for activities within the upland review area associated with the development of a new residential building lot. Said proposed activities in the upland review area are less than the previously approved application.

Applicant shall provide certification in accordance with Wetlands Regulation, Section 7.4e, Application Requirements:

Whether or not any portion of the property on which the regulated activity is proposed is located within 500 feet of an adjoining town. Yes No

Whether or not a significant portion of the traffic to the completed project will use streets within an adjoining town to exit or enter the site. Yes No

Whether or not a significant portion of the sewer or water drainage from the project will flow through and significantly impact the sewer or water drainage system of an adjoining town. Yes No

Whether water run-off from the improved site will impact streets or other municipal/private property within an adjoining town. Yes No

FOR OFFICE USE ONLY

If YES to any of the above, the Agency shall, in accordance with CGS 8-7d(f) notify the clerk of any adjoining municipality of the pendency of any application, petition, appeal, request or plan concerning any project on any site. Notice of the pendency of such application shall be made by certified mail, return receipt requested, and shall be mailed within seven (7) days of the date of receipt of the application, petition, appeal, request or plan. **(See Agency requirements Section 8.4)**

Type of Project: (check one)

Commercial/Industrial Residential Mixed Use Timber Agricultural
 Other, explain: _____

Type of Application: (check one)

- Notification for Non-Regulated Use (Section 4.2)
- Notification of Permitted Use as of Right (Section 4.1)
- Administrative Permit (Section 6.4)
- Agency Permit (**TWELVE COPIES REQUIRED**)
- Permit Modification
- Permit Extension
- Regulation Amendment
- Map Amendment
- Appeal of Administrative Permit

Application Submittals:

- Completed Application Form (Section 7.4a)
- Application Fee (Section 7.4b)
- Abutters List (Section 7.4c)
- Certification as to Adjacent Towns (See above)
- Certification as to Connecticut Water Company & Commissioner of Public Health (See above)
- Notification Narrative and Supporting Documentation (If applicable, Appendix D)
- Project Narrative and Supporting Documentation (Section 7.4g, 1-11 inclusive, as deemed applicable)
- Project Site Plan - circle one: Administrative (Section 7.4h1) / Agency (Section 7.4h2)
- Supplemental Information (Section 7.5a-j, inclusive, as deemed applicable)

GARDNER & PETERSON ASSOCIATES, LLC

PROFESSIONAL ENGINEERS • LAND SURVEYORS

178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT 06084

KENNETH R. PETERSON, L.S.
ERIC R. PETERSON, P.E., L.S.
MARK A. PETERSON, P.E.

TELEPHONE: (860) 871-0808

info@GardnerPeterson.com
www.GardnerPeterson.com

April 7, 2022

Mr. Kenneth Braga
Chairman-Inland Wetland Agency
57 Main Street
P.O. Box 187
Ellington, Connecticut 06029

RECEIVED
APR 22 2022
TOWN OF ELLINGTON
PLANNING DEPARTMENT

Re: IWC Application-Appendix D
Ellington McIntire, LLC
153 Webster Road
Ellington, CT 06029

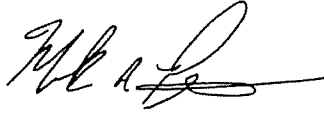
Dear Chairman Braga,

This application proposes to create two residential building lots at the northwesterly corner of 153 Webster Road. The excess land will remain with the existing house at 153 Webster Road. The area of the proposed lots is wooded, has moderate slopes and contains moderately well drained soils. The majority of Lot #1 and a sliver of Lot #2 are within the 250' zone of influence of a narrow wetland at the northwest corner of the property. We are not proposing any disturbance within the inland wetlands. The proposed activities on Lot #1 within the 250' zone of influence consist of the house, driveway, septic system and site utilities with the closest disturbance being approximately 85 feet from the wetlands. All fill material brought to the site will be clean and any excavated soil will be reused on site. The subdivision plans contains proper sedimentation and erosion controls measures that are shown in plan view and in detail.

This application is nearly identical to IWC and Subdivision applications that were approved in 2013/2014 that have expired. The former application created two nearly identical building lots each having their own stormwater management area. The difference between the former and current application is the amount of upland review area disturbance and their proximity to the inland wetlands. The approved plans from 2013 depicted a stormwater management area within 5 feet of the inland wetlands which resulted in an upland review area disturbance of

approximately 50,000s.f. The current layout creates a shared stormwater area on the front of Lot 2 and has 36,000s.f. of disturbance within upland review area.

I look forward to discussing this application with you and the commissioners.



Mark A. Peterson P.E.

GARDNER & PETERSON ASSOCIATES, LLC

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TOWN OF ELLINGTON
PLANNING DEPARTMENT

April 7, 2022

Mr. Dana Steele, Town Engineer
Town of Ellington
J.R. Russo & Associates
1 Shoham Road
East Windsor, Connecticut 06088

Re: McIntire Subdivision
153 Webster Road, Ellington

Dear Dana,

The following is a pre & post development drainage analysis of a 50-year storm frequency for the two proposed lots on the east side of Webster Road on property owned by Ellington McIntire, LLC. I have designed stormwater management basin and outlet structure to connect to the existing 15" RCP culvert under Webster Road. The attached report includes the peak flow rates for the 50-year storm which demonstrate a minor reduction in peak flows, from 4.9cfs to 4.5cfs, to the existing drainage system.

Please contact me with any questions.



Mark A. Peterson P.E.



North Central District Health Department

- Enfield—31 North Main Street, Enfield, CT 06082 * (860) 745-0383 Fax (860) 745-3188
- Vernon—375 Hartford Turnpike, Room 120, Vernon, CT 06066 * (860) 872-1501 Fax (860) 872 1531
- Windham—Town Hall, 979 Main Street, Willimantic, CT 06226 * (860) 465-3033 Fax (860) 465-3034
- Stafford—Town Hall, 1 Main Street, Stafford Springs, CT 06076 * (860) 684-5609 Fax (860) 684-1768

Patrice A. Sulik, MPH, R.S.
Director of Health

Conrad McIntire
140 Webster Road
Ellington, Ct. 06029

May 10, 2022

Subject: Two lot Subdivision level plan Approval Entitled “Subdivision Plan Prepared for Conrad McIntire, LLC map id: 185 /001 / 0000, 153 Webster Road Ellington, Connecticut. Prepared by Gardner & Peterson Associates LLC. Dated 4/01/2022 sheets 1-4. This Plan has been reviewed in accordance with the CT. Public Health Code Sections 19-13-B103a thru f, On-site Sewage Disposal Regulations and the pursuant Technical Standards for Subsurface Sewage Disposal Systems.

Upon review of the plan for the above referenced subdivision, the North Central District Health Department concurs with the feasibility of this parcel for future development. Approval to construct a sub-surface sewage disposal system and well for the individual lots may be granted upon the demonstration of compliance with the Public Health Code, the technical standards and other appropriate Town and State regulations. This demonstration of compliance shall be done through a site-specific Engineers plot plan showing the proposed house, well and septic system details. Regarding the septic systems, all of the lots demonstrated areas of suitable soils for the construction of subsurface sewage systems, however some of the areas tested have shallow ledge rock.

Lot 1, 163 Webster Rd. - Lot approval for a maximum of a 4 bedroom home served by a private well and proposed onsite septic system consisting of a minimum of 582 square feet of effective leaching area and a minimum of 65 linear feet of leaching system hydraulic width.

Lot 2, 155 Webster Rd. – Lot approval for a maximum of a 4 bedroom home served by a private well and onsite septic system consisting of a minimum of 820 square feet of effective leaching area and a minimum of 75 linear feet of leaching system hydraulic width.

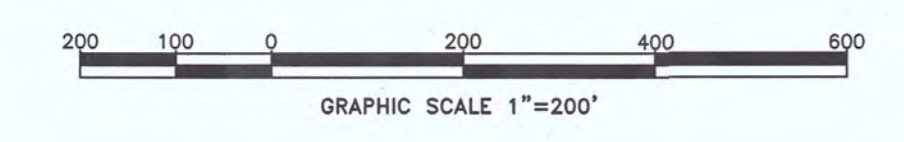
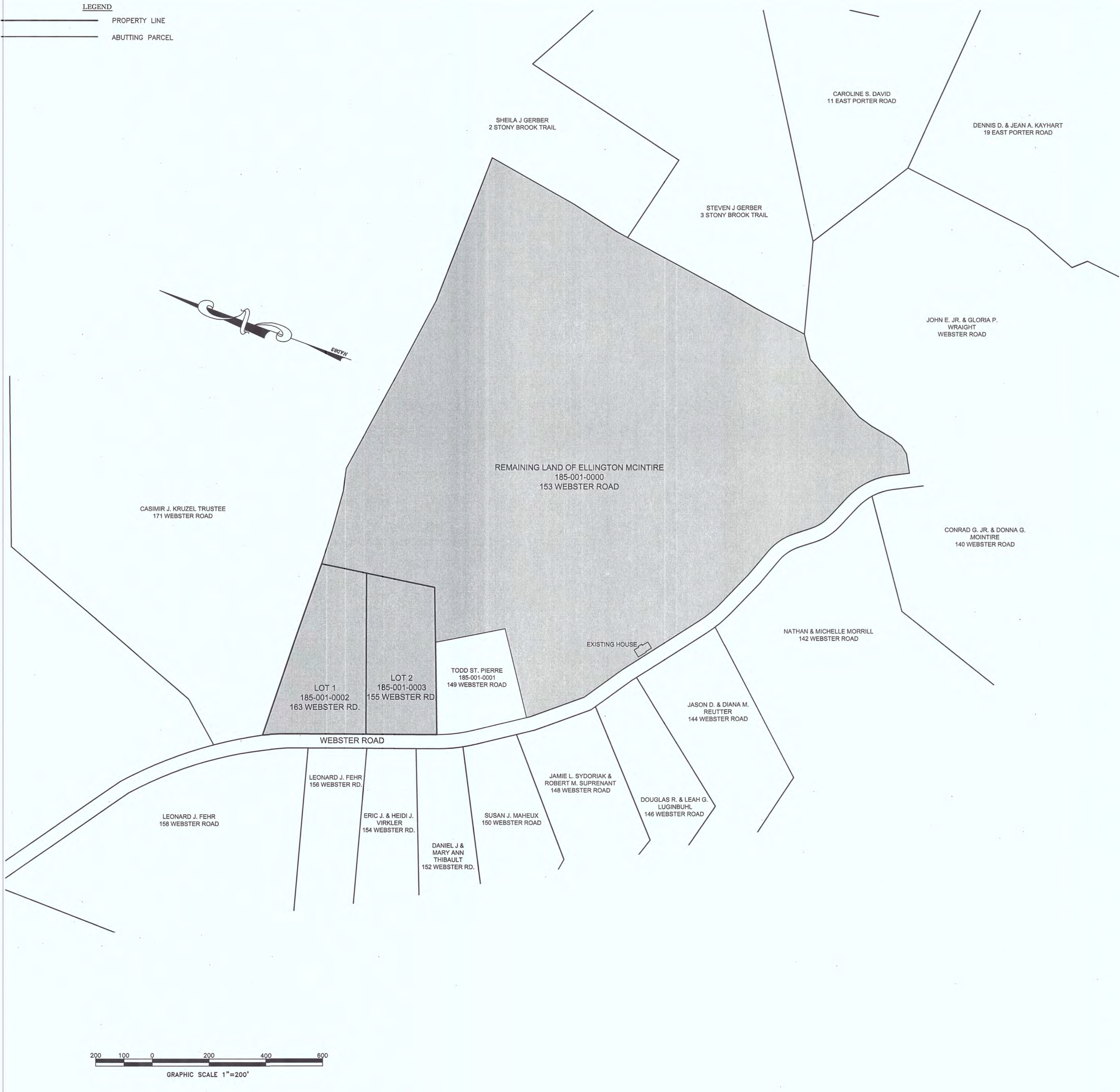
Further investigation may be required as a result of site alteration or lot re-configuration. Care must be taken to protect the septic area from sedimentation, compaction or any disturbance that could compromise the quality of the area. Final approval of the subdivision shall be granted by the appropriate Commissions, Boards, Agencies or Departments within the Town of Ellington Connecticut.

Respectfully,

Westford Lirot B.S. R.S
Registered Sanitarian

CC: Gardner & Peterson Assoc. LLC
Ellington P&Z

LEGEND
 _____ PROPERTY LINE
 _____ ABUTTING PARCEL



THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN.

STEVEN JACOBS C.S.S.

SHEET NO.	TITLE	SCALE
1	COVER SHEET	1"=200'
2	BOUNDARY PLAN	1"=40'
3	SITE DEVELOPMENT & EROSION CONTROL PLAN	1"=40'
4	DETAILS, SOIL DATA & MLSS	

APPROVED BY THE TOWN PLANNING AND ZONING COMMISSION OF THE TOWN OF ELLINGTON ON THIS DAY OF 20__ IN ACCORDANCE WITH SECTION 8-26c OF THE CONNECTICUT GENERAL STATUTES, ALL WORK IN CONNECTION WITH THE SUBDIVISION MUST BE COMPLETED BY 20__.

SECRETARY _____ CHAIRMAN _____

OWNER/APPLICANT
 ELLINGTON MCINTIRE LLC
 140 WEBSTER ROAD
 ELLINGTON, CT

ZONING TABLE

RAR ZONE	REQUIRED
MIN. LOT SIZE *	40,000 SQ.FT.
MIN. LOT WIDTH*	125 FEET
FRONT YARD	35 FEET
SIDE YARD	10 FEET
REAR YARD	25 FEET-PRINCIPLE 10 FEET-ACCESSORY
MAX. LOT COVERAGE	25%

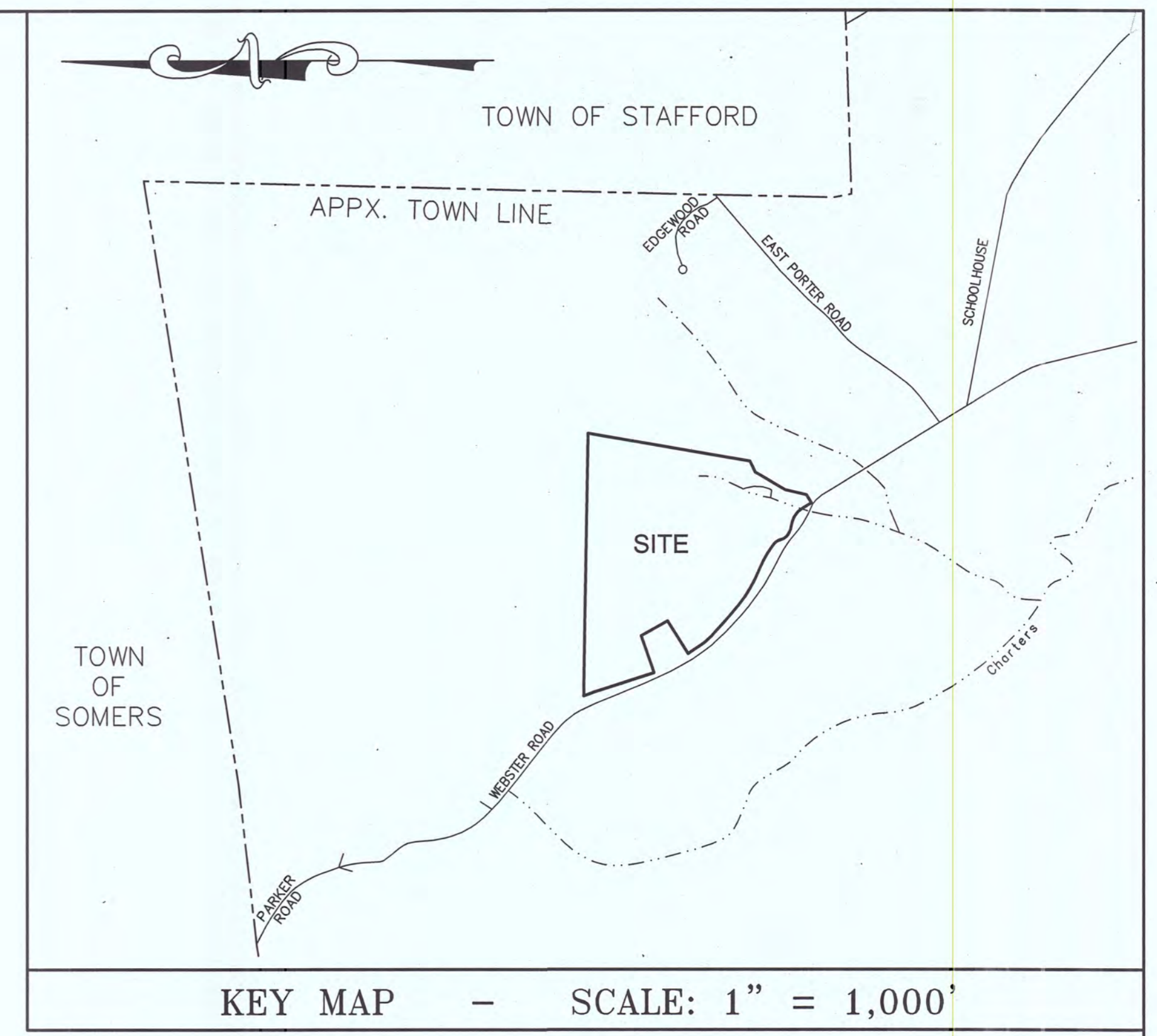
*Per Section 3.2.2 (1) of the Zoning Regulations: Under the density limitation formula only and provided that soil suitability is sufficient to allow a reduction in lot size for an onsite sanitary system or has access to public sewers, the following shall apply:
 a. Lot size may be reduced but not less than 32,000 square feet.
 b. Lot frontage may be reduced but not less than 75 feet measured at the front property line.

DENSITY CALCULATION:
 PER MAP REFERENCE 3B.

AREA OF SUBDIVISION:	55.77 Acres
DENSITY FACTOR:	0.5
WETLANDS:	6.0 ACRES
WATERCOURSE:	2,508 L.F.
SLOPES > 15%:	6 Acres
FLOODPLAIN:	0 S.F.
OPEN SPACE (10%):	5.57 ACRES (ALREADY CONVEYED OFF SITE)
DEVELOPABLE ACREAGE:	43.77
LOT YIELD:	22 LOTS

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ERIC R. PETERSON
 LICENSED PROFESSIONAL ENGINEER
 REGISTRATION NO. L.S. 23430



- NOTES:**
- THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT". THIS IS A PROPERTY SURVEY BASED ON A DEPENDANT RESURVEY OF THE PERIMETER BOUNDARY AND AN ORIGINAL SURVEY OF THE PROPOSED PROPERTY LINES CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND HORIZONTAL ACCURACY CLASS D OF THE REMAINING LAND. THE TOPOGRAPHIC ACCURACY CONFORMS TO CLASS T-D.
 - BEARINGS AND ELEVATIONS DEPICTED ON THIS PLAN ARE BASED UPON THE 1983 NORTH AMERICAN DATUM (NAD 83/87) AND THE 1988 NORTH AMERICAN DATUM RESPECTIVELY AS PROVIDED BY GPS COORDINATES FROM J.R. RUSSO & ASSOCIATES.
 - REFERENCE IS MADE TO THE FOLLOWING MAPS:
 A. PROPERTY SURVEY-"FIRST CUT" PREPARED FOR CONRAD, SR. EST., CONRAD, JR. & RANDAL MCINTIRE 153 WEBSTER ROAD ELLINGTON, CONNECTICUT BY LANDMARK SURVEYS, LLC SCALE: 1"=40', DATE: 12/17/2012 JOB NO. 201212-1.
 B. BOUNDARY SURVEY PREPARED FOR ELLINGTON MCINTIRE LLC WEBSTER ROAD ELLINGTON, CONNECTICUT LANDMARK SURVEYS, LLC SCALE: 1"=40', DATE 6/11/2013, REVISED TO 12/9/13, SHEETS 1-4.
 C. PROPERTY SURVEY PREPARED FOR JAY & AMBER FEHR 158 WEBSTER ROAD ELLINGTON, CONNECTICUT LANDMARK SURVEYS, LLC SCALE: 1"=60', DATE: 7/28/06, JOB NO. 20505-15-SUB, SHEET 1 OF 4.
 - THIS PARCEL AND ALL ABUTTING PARCELS ARE LOCATED IN THE RURAL AGRICULTURAL RESIDENTIAL 90 (RAR-90) ZONE.
 - WETLANDS ARE TAKEN FROM MAP REFERENCE 3B.
 - UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND OTHER DATA SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES AND/OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES, LLC. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.
 - IRON PINS AND MONUMENTS ARE TO BE SET AS DEPICTED ON THE SUBDIVISION PLAN.
 - LOTS ARE TO BE SERVED BY INDIVIDUAL WELLS AND SUBSURFACE SEWAGE DISPOSAL SYSTEMS. THE LATTER TO BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
 - DRIVEWAYS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH TOWN SPECIFICATIONS.
 - THIS PARCEL IS LOCATED IN FLOOD HAZARD ZONE 'A' (AREA OF MINIMAL FLOODING, NO SHADING) PER FIRM FLOOD INSURANCE RATE MAP TOWN OF ELLINGTON, CONNECTICUT, TOLLAND COUNTY, PANEL 5 OF 15, COMMUNITY-PANEL NUMBER 090158 0005 B, EFFECTIVE DATE: MARCH 15, 1982.
 - PARCEL IS NOT LOCATED WITHIN THE AQUIFER PROTECTION AREA.
 - INLAND WETLANDS WERE FIELD DELINEATED BY STEVE JACOBS C.S.S. PER MAP REFERENCE 3C.
 - OPEN SPACE CONTRIBUTION HAS BEEN SATISFIED FOR THIS PROPERTY. THE REAR OF 134 WEBSTER ROAD HAS BEEN CONVEYED TO THE STATE OF CONNECTICUT SHENIPSIT STATE FOREST PER V.464, P.1098-1100 AS RECORDED IN THE ELLINGTON LAND RECORDS.
 - CLEARING LIMITS ON LOT #1 WITHIN THE UPLAND REVIEW AREA SHALL BE FLAGGED BY A LAND SURVEYOR.
 - THE MAINTENANCE OF THE STORMWATER BASIN AND ITS APPURTENANCES SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER IN PERPETUITY AND SUCH FACILITIES SHALL BE MAINTAINED IN COMPLIANCE WITH THE APPROVED PLANS. FURTHERMORE, IN THE EVENT THE OWNER FAILS TO CONDUCT PROPER MAINTENANCE, THE TOWN OF ELLINGTON HAS THE RIGHT TO ACCESS AND MAINTAIN THE STORMWATER BASIN AT THE OWNER'S EXPENSE.
 - AN APPROVED CODE COMPLIANT AREA FOR THE EXISTING HOUSE IS ON FILE WITH THE NORTH CENTRAL DISTRICT HEALTH DEPARTMENT.

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 PLANNING DEPARTMENT



REVISIONS
 04-20-2022 SOIL SCIENTIST

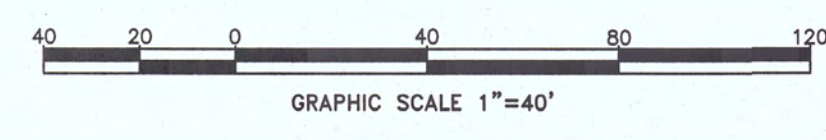
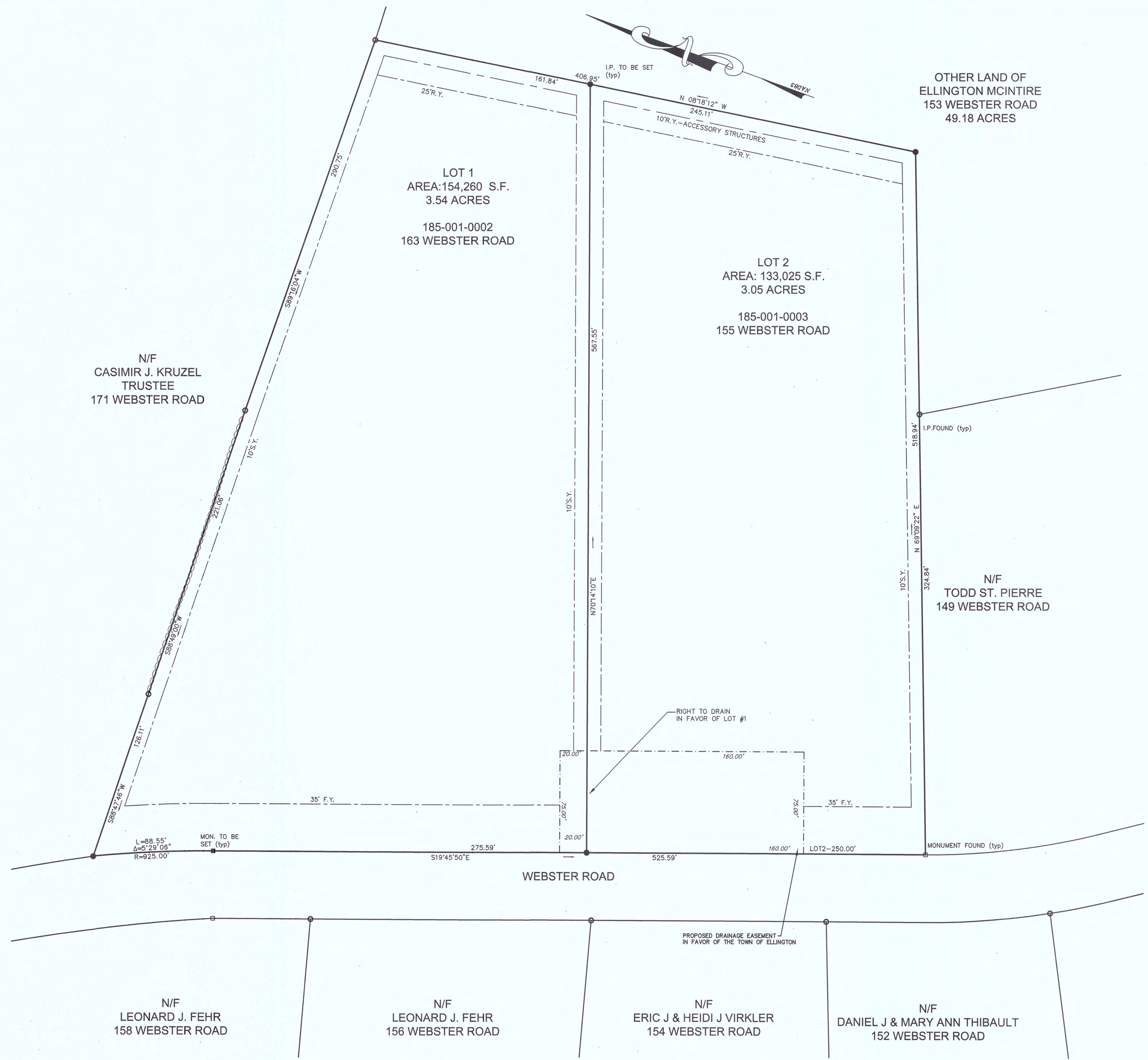
COVER SHEET S202201

SUBDIVISION PLAN
PREPARED FOR CONRAD MCINTIRE
ELLINGTON MCINTIRE, LLC
MAP ID: 185/001/0000
153 WEBSTER ROAD
ELLINGTON, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
 178 HARTFORD TURNPIKE
 TOLLAND, CONNECTICUT
 PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
M.A.P.	1"=200'	04-01-2022	1 OF 4	11024

LEGEND	
	PROPERTY LINE
	ZONING SETBACK
	ABUTTING PARCEL
	EXISTING IRON PIN
	EXISTING MONUMENT
	EDGE OF ROAD
	STONEWALL
	I.P. TO BE SET
	MON. TO BE SET



APPROVED BY THE TOWN PLANNING AND ZONING COMMISSION OF THE TOWN OF ELLINGTON ON THIS _____ DAY OF _____, 20____ IN ACCORDANCE WITH SECTION 8-26c OF THE CONNECTICUT GENERAL STATUTES. ALL WORK IN CONNECTION WITH THE SUBDIVISION MUST BE COMPLETED BY _____, 20____.

SECRETARY _____ CHAIRMAN _____

RECEIVED
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TOWN OF ELLINGTON
PLANNING DEPARTMENT

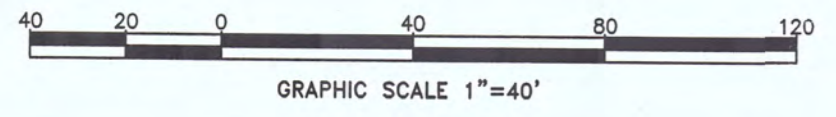
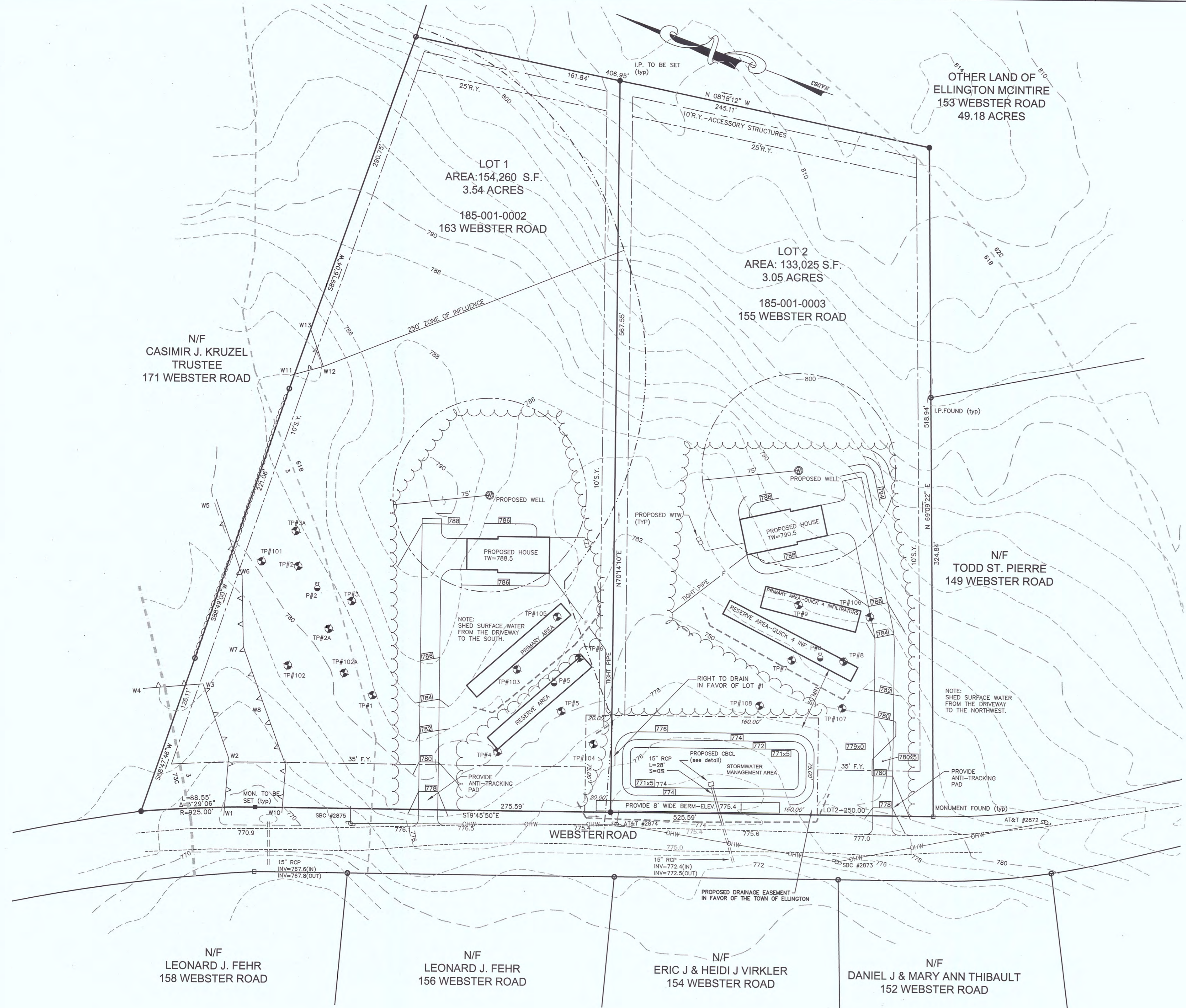
BOUNDARY PLAN
SUBDIVISION PLAN
PREPARED FOR CONRAD MCINTIRE
ELLINGTON MCINTIRE, LLC
MAP ID: 185/001/0000
153 WEBSTER ROAD
ELLINGTON, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

REVISIONS				
BY	SCALE	DATE	SHEET NO.	MAP NO.
M.A.P.	1"=40'	04-01-2022	2 OF 4	11024

11024.dwg 11024.dwg

- LEGEND**
- PROPERTY LINE
 - - - ZONING SETBACK
 - - - ABUTTING PARCEL
 - EXISTING IRON PIN
 - EXISTING MONUMENT
 - - - SOIL LINE—WEB SOIL SURVEY
 - - - EDGE OF ROAD
 - STONEWALL
 - I.P. TO BE SET
 - MON. TO BE SET
 - - - PROPOSED HAYBALES/SILT FENCE
 - x531.4 EXISTING SPOT ELEVATION
 - - - EXISTING CONTOUR
 - - - PROPOSED CONTOUR
 - - - PROPOSED FOOTING DRAIN
 - - - PROPOSED TREELINE
 - PROP. WATER TREATMENT WASTEWATER
 - 771x6 PROPOSED ELEVATION



WEB SOIL SURVEY
MAP UNIT SYMBOL

MAP UNIT NAME

3 RIDGEBURY, LEICESTER, AND WHITMAN SOILS, 0 TO 8 PERCENT SLOPES, EXTREMELY STONY
61B CANTON AND CHARLTON FINE SANDY LOAMS, 0 TO 8 PERCENT SLOPES, VERY STONY
62C CANTON AND CHARLTON FINE SANDY LOAMS, 3 TO 15 PERCENT SLOPES, EXTREMELY STONY

APPROVED BY THE TOWN PLANNING AND ZONING COMMISSION OF THE TOWN OF ELLINGTON ON THIS _____ DAY OF _____ 20____ IN ACCORDANCE WITH SECTION 8-26c OF THE CONNECTICUT GENERAL STATUTES, ALL WORK IN CONNECTION WITH THE SUBDIVISION MUST BE COMPLETED BY _____ 20____

SECRETARY _____ CHAIRMAN _____

RECEIVED
APR 22 2022
TOWN OF ELLINGTON
PLANNING DEPARTMENT

TOPOGRAPHIC PLAN				
SUBDIVISION PLAN				
PREPARED FOR CONRAD MCINTIRE ELLINGTON MCINTIRE, LLC MAP ID: 185/001/0000 153 WEBSTER ROAD ELLINGTON, CONNECTICUT				
GARDNER & PETERSON ASSOCIATES, LLC				
178 HARTFORD TURNPIKE TOLLAND, CONNECTICUT				
PROFESSIONAL ENGINEERS		LAND SURVEYORS		
REVISIONS 04-20-2022 SOIL SCIENTIST	SCALE 1"=40'	DATE 04-01-2022	SHEET NO. 3 OF 4	MAP NO. 11024
BY M.A.P.				

11024.dwg 11/22/24

Conrad McIntire
153 Webster Road
Ellington, CT

Soils test witnessed by: Rick Zulick, R.S.,
North Central District Health Dept.
Soils tests were conducted on Nov. 16, 2012.
Groundwater Table below max.
Soil Moisture medium

TEST PIT # 1
Ledge @ 12-30"
Area of TEST PIT # 1 is unsuitable
due to shallow bedrock

TEST PIT # 2
0"-10" Topsoil
10"-25" Fine Sandy Loam Friable
25"-37" Sandy Loam Till Somewhat Friable
37"-66" Sandy Loam Till Firm
66"-84" Decayed Bedrock
Roots to 33"
Ledge @ 84"
Redox @ 37" (Few, Faint)

TEST PIT # 2A
0"-9" Topsoil
9"-27" Fine Sandy Loam Friable
27"-43" Sandy Loam Till Friable
43"-63" Sandy Loam Till Firm
63"-76" Decayed Bedrock
Roots to 31"
Ledge @ 76"
Redox None

TEST PIT # 3
0"-8" Topsoil
8"-28" Fine Sandy Loam Friable
28"-51" Loamy Sand Till Friable
Ledge @ 32"
Area of TEST PIT # 3 is unsuitable
due to shallow bedrock
Redox None

TEST PIT # 3A
0"-9" Topsoil
9"-28" Fine Sandy Loam Friable
28"-53" Sandy Loam Till Somewhat Friable
53"-80" Decayed Bedrock
Roots to 33"
Ledge @ 80"
Redox @ 36" (Few, Faint)

TEST PIT # 4
0"-8" Topsoil
8"-31" Fine Sandy Loam Friable
31"-40" Sandy Loam Till Friable
40"-48" Sandy Loam Till Firm
48"-82" Decayed Bedrock
Roots to 42"
Ledge @ 82"
Redox None

TEST PIT # 5
0"-9" Topsoil
9"-33" Fine Sandy Loam Friable
33"-48" Sandy Loam Till Friable
48"-98" Sandy Loam Till Firm
Roots to 40"
Water @ 92"
Redox @ 48" (Few, Faint)

TEST PIT # 6
0"-8" Topsoil
8"-29" Fine Sandy Loam Friable
29"-42" Sandy Loam Till Somewhat Friable
42"-53" Sandy Loam Till Firm
53"-85" Decayed Bedrock
Roots to 37"
Ledge @ 53"-85"
Redox None

TEST PIT # 7
0"-7" Topsoil
7"-26" Fine Sandy Loam Friable
26"-34" Sandy Loam Till Somewhat Friable
34"-85" Sandy Loam Till Firm
Roots to 35"
Water @ 66"
Redox @ 32" (Few, Faint)

TEST PIT # 8
0"-10" Topsoil
10"-23" Fine Sandy Loam Friable
23"-32" Sandy Loam Till Friable
32"-81" Sandy Loam Till Firm
Roots to 32"
Water @ 44"
Redox @ 28" (Few, Faint)

TEST PIT # 9
0"-7" Topsoil
7"-27" Fine Sandy Loam Friable
27"-82" Sandy Loam Till Firm
Roots to 30"
Water @ 36"
Redox @ 27" (Few, Faint)

TEST PIT # 101
0"-12" Topsoil
12"-28" Fine Sandy Loam Friable
28"-33" Sandy Loam Till Somewhat Friable
33"-66" Sandy Loam Till Firm
Ledge @ 66"
Redox @ 29" (Few, Faint)

TEST PIT # 102
0"-9" Topsoil
9"-26" Fine Sandy Loam Friable
26"-32" Sandy Loam Till Somewhat Friable
32"-63" Sandy Loam Till Firm
Roots to 35"
Ledge @ 48"-63"
Redox None

TEST PIT # 102A
0"-5" Topsoil
5"-25" Fine Sandy Loam Friable
25"-32" Sandy Loam Till Somewhat Friable
32"-69" Sandy Loam Till Firm
Roots to 32"
Ledge @ 69"
Redox None

TEST PIT # 103
0"-5" Topsoil
5"-24" Fine Sandy Loam Friable
24"-31" Sandy Loam Till Somewhat Friable
31"-76" Sandy Loam Till Firm
Roots to 38"
Redox None

TEST PIT # 104
0"-8" Topsoil
8"-29" Fine Sandy Loam Friable
29"-48" Rocky Sandy Loam Till Somewhat Friable
Roots to 36"
Redox None

TEST PIT # 105
0"-8" Topsoil
8"-24" Fine Sandy Loam Friable
24"-78" Very Rocky Sandy Loam Till Somewhat Friable
Roots to 36"
Ledge @ 48"
Redox None

TEST PIT # 106
0"-6" Topsoil
6"-23" Fine Sandy Loam Friable
23"-72" Sandy Loam Till Very Firm
Roots to 26"
Redox @ 23" (Few, Faint)

TEST PIT # 107
0"-8" Topsoil
8"-24" Fine Sandy Loam Friable
24"-34" Sandy Loam Till Somewhat Friable
34"-82" Sandy Loam Till Firm
Roots to 35"
Redox @ 24" (Few, Faint)

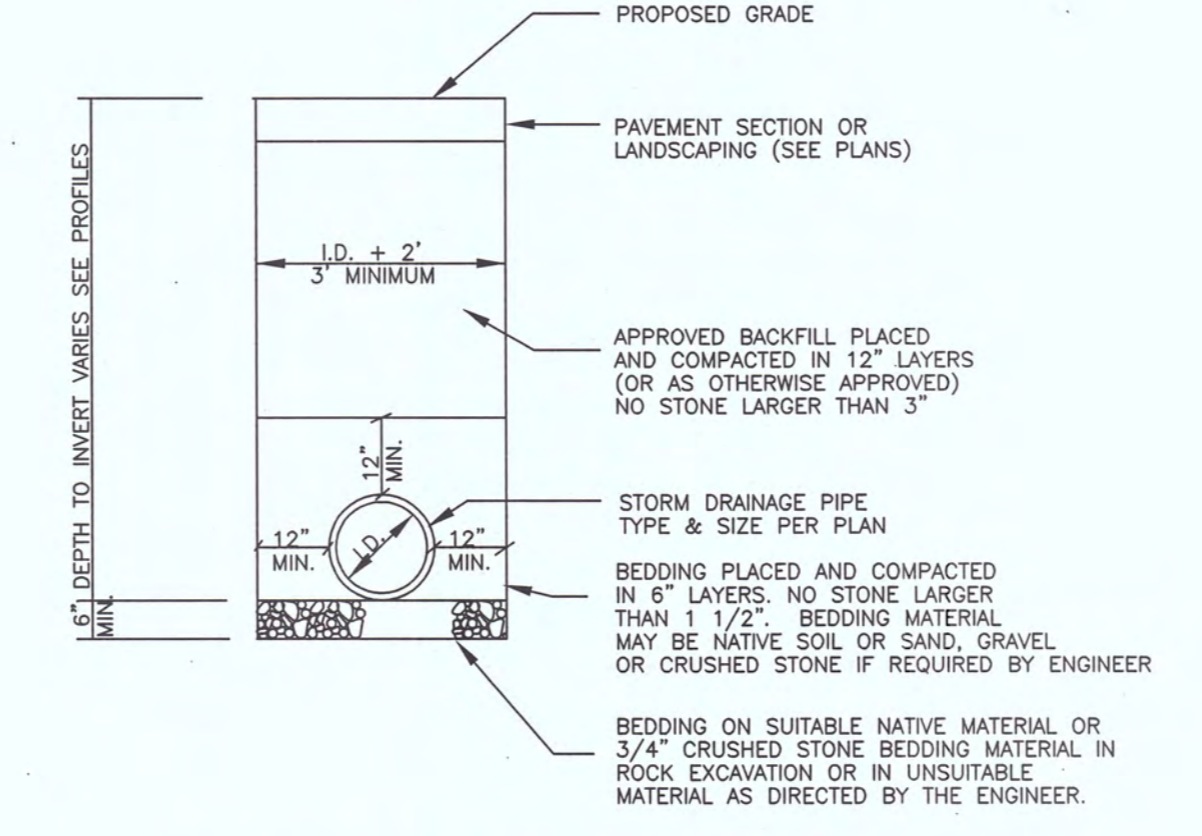
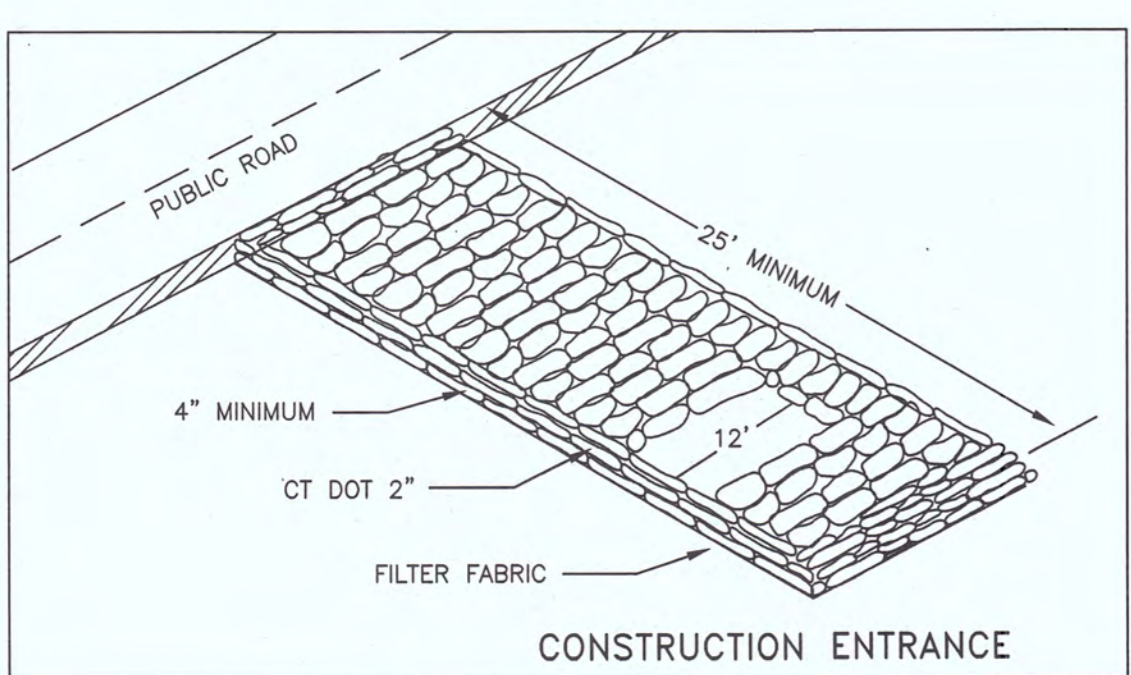
TEST PIT # 108
0"-9" Topsoil
9"-27" Fine Sandy Loam Friable
27"-35" Sandy Loam Till Somewhat Friable
35"-89" Sandy Loam Till Firm
Redox @ 27" (Few, Faint)

PERC P2 Depth 24"	PERC P5 Depth 20"	PERC P8 Depth 20"
20 min per inch	6-10 min per inch	20 min per inch
TIME	DROP	TIME
0	6"	0
30	15 7/8"	30
40	17 13/16"	40
50	19 3/8"	50
60	21 1/8"	60

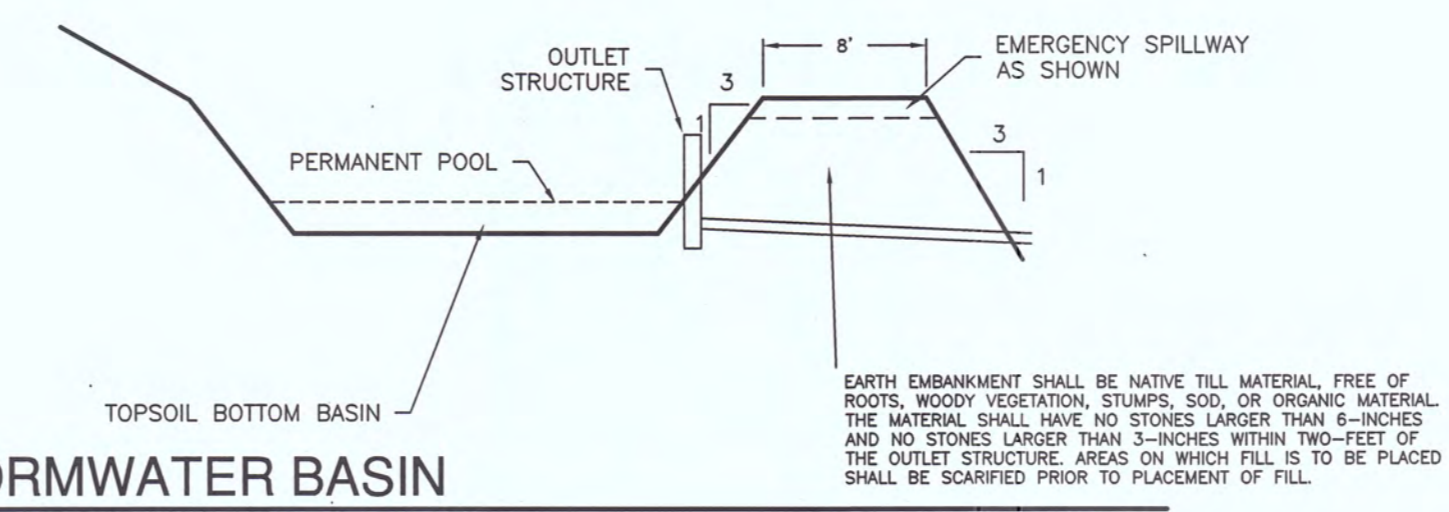
MLSS CALCULATIONS

LOT	S.F.	PERC	S	R	HF X FF X PF = MLSS	PROPOSED
LOT 1	577.5	10 MIN/IN	5.6%	28"	34 X 1.75 X 1.0 = 65'	USE 2 X 97' TRENCHES = 582 S.F.
LOT 2	787.5	20 MIN/IN	5.6%	25"	34 X 1.75 X 1.25 = 75'	USE 3 X 76' INFILTRATORS = 820 S.F.

NOTE:
A CODE COMPLIANT AREA FOR THE EXISTING HOUSE ON THE REMAINING LAND IS ON FILE AT THE NORTH CENTRAL DISTRICT HEALTH DEPARTMENT.



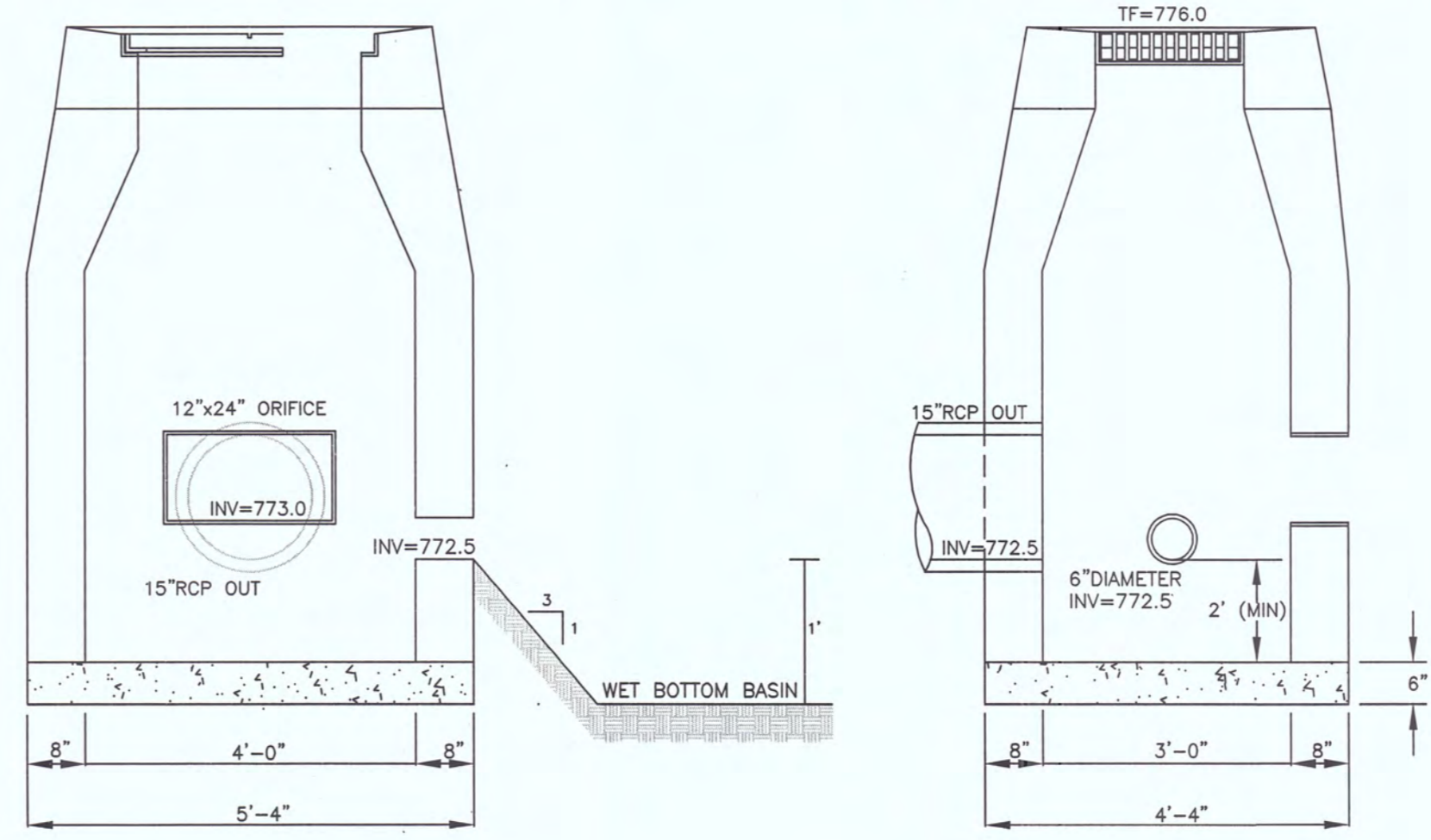
STORM DRAIN TRENCH DETAIL
N.T.S.



STORMWATER BASIN

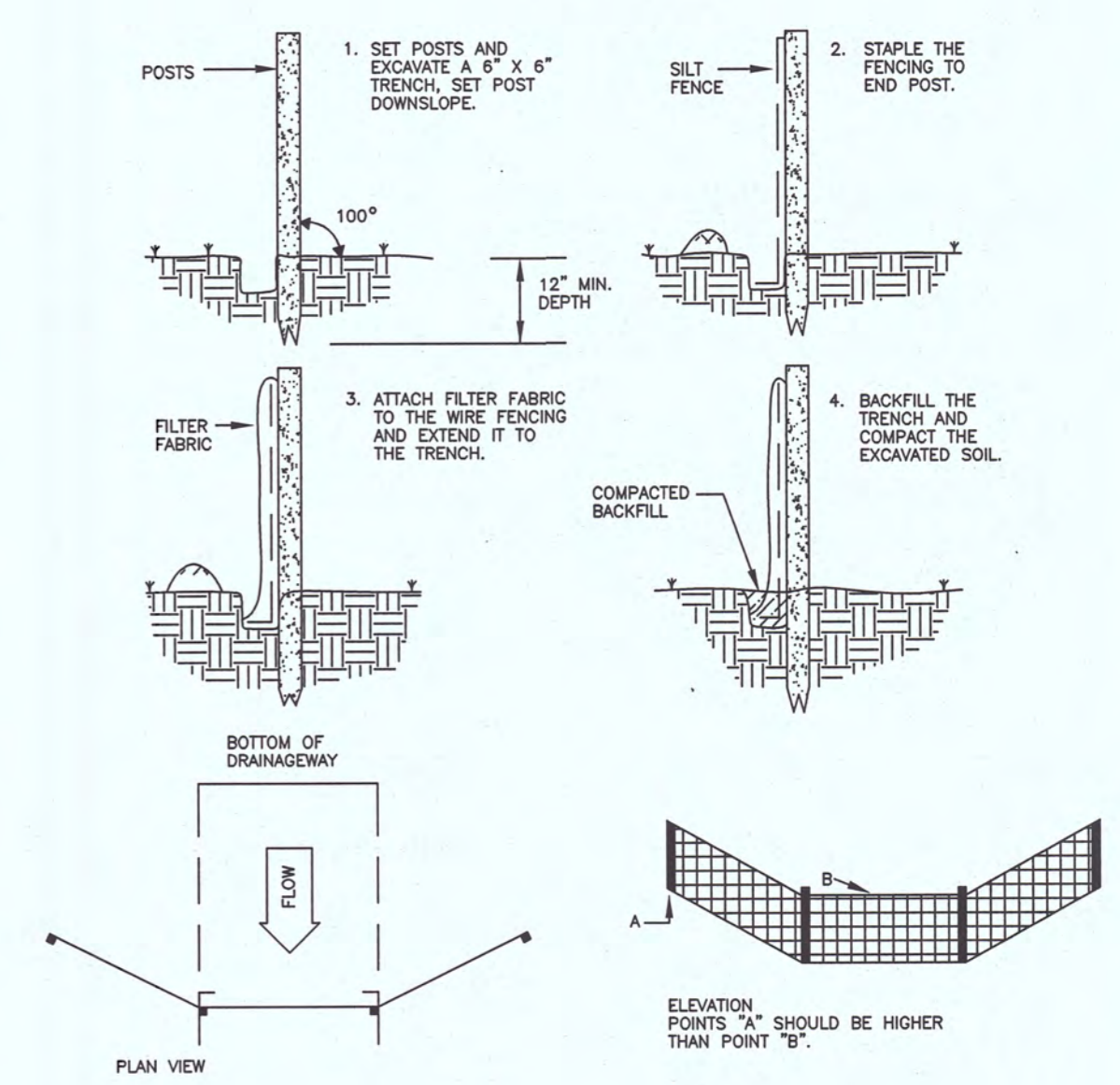
EARTH EMBANKMENT SHALL BE NATIVE TILL MATERIAL, FREE OF ROOTS, WOODY VEGETATION, STUMPS, SOIL, OR ORGANIC MATERIAL. THE MATERIAL SHALL HAVE NO STONES LARGER THAN 6-INCHES AND NO STONES LARGER THAN 3-INCHES WITHIN TWO-FEET OF THE OUTLET STRUCTURE. AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL.

- NOTES:
- TYPE 'C-1' CATCH BASIN TOPS SHALL CONFORM TO CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION M. 08. 02-4.
 - STRUCTURE TO BE PRECAST CLASS 'F' CONCRETE, OR MASONRY CONCRETE UNITS. WHERE MASONRY CONCRETE UNITS ARE USED CORRELLING WILL BE PERMITTED. MAXIMUM CORREL TO BE 3".
 - SUMPS TO BE PRECAST CONCRETE OR CONSTRUCTED ON A CONCRETE SLAB, WHERE PRECAST UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLET FROM THE CATCH BASIN.



OUTLET STRUCTURE

PLACEMENT AND CONSTRUCTION OF A SYNTHETIC FILTER BARRIER



TEMPORARY SEEDING SCHEDULE:

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
ANNUAL RYEGRASS	40	0.9	3/1-4/15, 8/1-10/1
WINTER RYE	40	0.9	4/15-5/15, 8/15-10/1
SUDANGRASS	11	0.25	5/15-8/15

TEMPORARY SEEDING IS NOT LIMITED TO THE SPECIES SHOWN. OTHER SPECIES RECOMMENDED BY THE SCS OR AS LIMITED BY SITE CONDITIONS MAY BE USED.
STRAW MULCH IS TO BE APPLIED TO SEEDING AREA AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE, 70 TO 90 LBS. PER 1000 SQ. FT.

FINAL SEEDING SCHEDULE:

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
KENTUCKY BLUEGRASS	40	0.90	4/15-6/15, 8/15-9/15
CREeping RED FESCUE	120	2.75	
PERENNIAL RYEGRASS	40	0.90	

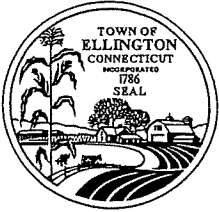
PROVIDE 4 INCHES OF TOPSOIL MINIMUM, FREE OF ROOTS, LARGE STONES, AND OTHER OBJECTS.

RECEIVED
APR 22 2022
TOWN OF ELLINGTON
PLANNING DEPARTMENT

DETAIL SHEET
SUBDIVISION PLAN
PREPARED FOR CONRAD MCINTIRE
ELLINGTON MCINTIRE, LLC
MAP ID: 185/001/0000
153 WEBSTER ROAD
ELLINGTON, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

REVISIONS 04-20-2022 SOIL SCIENTIST	SCALE 1"=40'	DATE 04-01-2022	SHEET NO. 4 OF 4	MAP NO. 11024
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TOWN OF ELLINGTON

55 MAIN STREET – PO BOX 187
ELLINGTON, CONNECTICUT 06029-0187
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TEL. (860) 870-3120 TOWN PLANNER'S OFFICE FAX (860) 870-3122

INLAND WETLANDS AGENCY REGULAR MEETING MINUTES MONDAY, MAY 9, 2022, 7:00 P.M.

IN PERSON ATTENDANCE: TOWN HALL ANNEX, 57 MAIN STREET, ELLINGTON, CT
REMOTE ATTENDANCE: ZOOM MEETING
(ATTENDEES BELOW WERE IN PERSON UNLESS OTHERWISE NOTED)

PRESENT: Chairman Ken Braga, Regular members Art Aube, Jean Burns, Steve Hoffman and Katherine Heminway

ABSENT: Vice Chairman Ron Brown and regular member Hocine Baouche

STAFF

PRESENT: John Colonese, Assistant Town Planner/Wetland Enforcement Officer and Barbra Galovich, Land Use Assistant/Recording Clerk

I. CALL TO ORDER: Chairman Ken Braga called the Ellington Inland Wetlands Agency meeting to order at 7:00 pm.

II. PUBLIC COMMENTS (on non-agenda items): None

III. PUBLIC HEARINGS:

1. IW202110 - Juliano Family One LLC, owner/ Brian Juliano, applicant, request for modification to Wetlands Permit IW202110 to construct a detention basin and outside storage area at 100 Windermere Ave., APN 018-021-0000.

Chairman Braga stated the application is not sufficient for review by the Agency as it is currently missing a report from the Soil Scientist with regard to onsite soils and proposed activity. Furthermore, the Town Engineer reviewed the plans and drainage report and has identified a number of items that need to be addressed relevant to the wetlands application, and feels the plans are not ready for approval at this time.

MOVED (AUBE) SECONDED (BURNS) AND PASSED UNANIMOUSLY TO TABLE THE OPENING OF THE PUBLIC HEARING TO JUNE 13, 2022 REGULAR MEETING FOR IW202110 - Juliano Family One LLC, owner/Brian Juliano, applicant, request for modification to Wetlands Permit IW202110 to construct a detention basin and outside storage area at 100 Windermere Ave., APN 018-021-0000.

2. IW202204 - Apostolic Christian Church of Ellington, Inc., owner/applicant, request for a permit to conduct regulated activity to construct a 16,000 SF fellowship hall and associated site improvements at 34 Middle Butcher Road, APN 028-023-0000.

Time: 7:02 pm

Seated: Braga, Aube, Burns, Hoffman and Heminway

Peter Welti, 257 Crystal Lake Road, and Tom Swale, Alfred Benesch & Company, 120 Hebron Avenue, Glastonbury, CT were present to represent the application.

Mr. Welti explained the previous building behind the church was a congregate living facility which was demolished about a year ago. The plan is to construct a fellowship hall. Mr. Welti noted they received town staff comments from the Town Engineer and Fire Marshal and they will be addressed by Alfred Benesch & Company.

Commissioner Burns asked how they intend on repairing the pipe outlets by the brook. Mr. Welti replied some of the work will require using heavy equipment, but for most of the activity they will be using low impact equipment in the area. Commissioner Hoffman asked if the storm water calculations for runoff would be higher than the previous building. Mr. Welti said the total runoff is calculated to be less than the previous building and site. Mr. Colonese noted the Stormwater Management Report, dated April 2022, stated under the proposed conditions, the imperviousness is reduced from 4.32 acres (27.3%) to 4.21 acres (26.6%). The discharge points remain the same and a majority of the existing drainage structures and piping are to remain. He noted four drywells will be installed on the site.

Chairman Braga asked who will be monitoring and checking up after the site is completed. Mr. Colonese responded the maintenance schedule is incorporated in the Stormwater Management Report, and the owners are responsible to complete the maintenance as noted on page 5 and 6, Maintenance and Operation, of the Stormwater Management Report.

Mr. Swale noted the only direct impact will be a minimal amount at the existing pipe outfalls. He stated they will be incorporating the Town Engineer's comments into the plans.

Mr. Colonese read Dana Steele's email dated May 9, 2022 as follows, "I've reviewed the plans and Stormwater Management Report for the Apostolic Christian Church fellowship hall prepared by Alfred Benesch & Company dated 4/8/22. My comments related to the wetland application are as follows:

1. Provide a construction detail of the proposed drywells.
2. Consider maintaining the existing drywell near drywell #2 rather than replacing.
3. Provide a pre-treatment BMP for runoff from paved vehicle areas before discharging to a drywell.
4. Consider larger stone size for riprap aprons along the stream bank to resist shearing stress in Turkey Brook.

I discussed these comments with the design engineer and we agree they can be incorporated as conditions of approval."

There were no comments from the public.

MOVED (BURNS) SECONDED (HOFFMAN) AND PASSED UNANIMOUSLY TO MAKE A DETERMINATION OF A SIGNIFICANT ACTIVITY FOR IW202204.

MOVED (AUBE) SECONDED (HOFFMAN) AND PASSED UNANIMOUSLY TO CLOSE THE PUBLIC HEARING FOR IW202204.

MOVED (AUBE) SECONDED (HOFFMAN) AND PASSED UNANIMOUSLY TO APPROVE WITH CONDITIONS FOR IW202204 - Apostolic Christian Church of Ellington, Inc., owner/applicant, request for a permit to conduct regulated activity to construct a 16,000 SF fellowship hall and associated site improvements at 34 Middle Butcher Road, APN 028-023-0000.

Conditions:

1. Shall comply with Town Engineer comments in Email dated May 9, 2022 as follows:
 - a. Provide a construction detail of the proposed drywells.
 - b. Consider maintaining the existing drywell near drywell #2 rather than replacing.
 - c. Provide a pre-treatment BMP for runoff from paved vehicle areas before discharging to a drywell.
 - d. Consider larger stone size for riprap aprons along the stream bank to resist shearing stress in Turkey Brook.
2. Erosion control measures shall be installed then inspected by the Wetlands Agent prior to activity, and remain fully operational until the site is stabilized.

IV. OLD BUSINESS: None

V. NEW BUSINESS:

1. IW202206 - Town of Ellington, owner/ Ad Hoc Ellington Trails Committee, applicant, request for acceptance to maintain trails and install four bridges as permitted nonregulated uses on Ellington Highlands Subdivision open space parcel on Stein Road, APN 037-005-0082.

Rachel Dearborn, 62 Lower Butcher Road, was present to represent the application. Ms. Dearborn stated the access to the trails is located on Stein Road and the Ad Hoc Ellington Trails Committee would like to repair a total of four bridges and maintain the trails throughout the parcel. She explained Bridge 1 is currently installed over a collapsed culvert and they will be adding some timber to the existing wood bridge to make it trail worthy. Bridge 4 is currently installed but it is in disrepair due to a tree falling on it and will to be repaired. Bridge 2 will be a new bridge that will be installed across a stream at the narrowest and safest location. Bridge 3 will also be a new bridge that will be installed more as a boardwalk to cross a wet area to access a loop trail. Ms. Dearborn stated they will be breaking this into two phases. Bridges 1, 2 and 3 are part of phase I to open the main trail and Bridge 4 is part of phase II to open a secondary loop trail.

Commissioner Hoffman asked if they will be using pressure treated wood, Ms. Dearborn said they will be using pressure treated wood and the trails committee has received some Trex decking as a donation. She also noted that any of the broken materials will be removed from the site. It was noted that this property is owned by the Town of Ellington.

MOVED (HEMINWAY) SECONDED (HOFFMAN) AND PASSED UNANIMOUSLY TO ACCEPT IW202206 - Town of Ellington, owner/ Ad Hoc Ellington Trails Committee, applicant, request for acceptance to maintain trails and install four bridges as permitted nonregulated uses on Ellington Highlands Subdivision open space parcel on Stein Road, APN 037-005-0082.

2. Kimberly Schneider, owner/ David Schneider, applicant, request for a permit to conduct regulated activity to construct an in-ground pool, patio, pool shed, retaining wall and associated site work at 90A Ellington Ave, APN 029-049-0001.

Mr. Colonese reviewed the proposed project and plan with the Agency. He said silt fence and a boulder wall will be installed approximately 7 feet from the wetlands and abut the conservation area. Beyond the wall will be a pool and shed and other site improvements. He asked if the Agency would consider delegating authority to him as the wetlands agent. Commissioner Hoffman asked the owner when the wetlands delineations were completed. Mr. Schneider stated they were completed around 1994 when the house was built. Commissioner Burns noted concerns about where the chemicals for the pool will be stored. Commissioner Heminway noted concerns about potential backwash water from the pool. Mr. Colonese said he would incorporate their concerns into his review.

MOVED (HOFFMAN) SECONDED (AUBE) AND PASSED UNANIMOUSLY TO DELEGATE AUTHORITY TO THE WETLANDS AGENT FOR - Kimberly Schneider, owner/ David Schneider, applicant, request for a permit to conduct regulated activity to construct an in-ground pool, patio, pool shed, retaining wall and associated site work at 90A Ellington Ave, APN 029-049-0001.

3. IW202205 - Ellington McIntire, LLC, owner/applicant, request for a permit to conduct regulated activity to construct a single family home and site improvements associated with a 2-lot subdivision at 153 Webster Road, APN 185-001-0000.

MOVED (HEMINWAY) SECONDED (HOFFMAN) AND PASSED UNANIMOUSLY TO RECEIVED AND SET FOR THE JUNE 13, 2022 MEETING AS NEW BUSINESS FOR IW202205 - Ellington McIntire, LLC, owner/applicant, request for a permit to conduct regulated activity to construct a single family home and site improvements associated with a 2-lot subdivision at 153 Webster Road, APN 185-001-0000.

VI. ADMINISTRATIVE BUSINESS:

1. Approval of the April 11, 2022 Regular Meeting Minutes.

MOVED (HEMINWAY) SECONDED (BURNS) AND PASSED UNANIMOUSLY TO APPROVE THE APRIL 11, 2022 REGULAR MEETING MINUTES AS WRITTEN.

2. Election of Officers

a. Chairman

MOVED (HOFFMAN) TO NOMINATE COMMISSIONER BURNS FOR CHAIRMAN OF THE INLAND WETLANDS AGENCY FOR 2022.

COMMISSIONER BURNS ACCEPTED THE NOMINATION. HEARING NO FURTHER NOMINATIONS, NOMINATIONS CLOSED.

MOVED (HOFFMAN), SECONDED (AUBE) AND PASSED UNANIMOUSLY TO ELECT COMMISSIONER BURNS FOR CHAIRMAN OF THE INLAND WETLANDS AGENCY FOR 2022.

b. Vice Chairman

MOVED (BURNS) TO NOMINATE COMMISSIONER HEMINWAY FOR VICE CHAIRMAN OF THE INLAND WETLANDS AGENCY FOR 2022.

COMMISSIONER HEMINWAY ACCEPTED THE NOMINATION. HEARING NO FURTHER NOMINATIONS, NOMINATIONS CLOSED.

MOVED (AUBE), SECONDED (BURNS) AND PASSED UNANIMOUSLY TO ELECT COMMISSIONER HEMINWAY FOR VICE CHAIRMAN OF THE INLAND WETLANDS AGENCY FOR 2022.

3. Correspondence/Discussion:

a. 50 East Shore Road

Mr. Colonese said the owner of 50 East Shore Road would like to install an elevated platform and dock about 200 feet in length through the wetlands to the lake similar to the platform approved at 48 East Shore Road. He explained, according to the owner, there will be no digging and the platform will be installed on metal legs. The Agency briefly discussed the request and decided to have the owner apply for a wetlands permit for the activity.

b. 10 Fairview Ave

Mr. Colonese stated the owner had a Soil Scientist stake a portion of the wetlands area on the parcel. The owner is planning an approximate 20ft x 20ft addition to the house within the upland review area approximately 30 feet from the wetlands. Mr. Colonese showed the Agency a drawing and asked if the Agency would consider delegating authority to him for the project. The Agency agreed to allow Mr. Colonese to review the application for agent permit approval.

VII. ADJOURNMENT:

MOVED (AUBE) SECONDED (BURNS) AND PASSED UNANIMOUSLY TO ADJOURN THE MAY 9, 2022 REGULAR MEETING OF THE INLAND WETLANDS AGENCY AT 7:45 PM.

Respectfully submitted,

Barbra Galovich, Recording Clerk