

Brooklyn Inland Wetlands Commission
Regular Meeting Agenda
Tuesday, November 14, 2023
Zoom and In-Person Meeting
Clifford B. Green Memorial Center
69 South Main Street
6:00 p.m.

In-Person: Clifford B. Green Memorial Center, 69 South Main Street, Brooklyn, CT	
Online: Click link below: https://us06web.zoom.us/j/83921116459	OR Go to Zoom.us , click Sign In On the top right, click Join a Meeting Enter meeting ID: 839 2111 6459
Phone: Dial 1 646 558 8656 US Toll Enter meeting number: 839 2111 6459 You can bypass attendee number by pressing #	

Call to Order:

Roll Call:

Staff Present:

Seating of Alternates:

Public Commentary:

Additions to Agenda: None.

Approval of Minutes: Special Meeting Minutes October 10, 2023

Public Hearings: None.

Old Business:

1. IWWC 23-011 Nicole Wineland-Thomson Fisher, applicant; 459 Wolf Den Road, Map 18, Lots 18A & 18B, RA Zone; Proposal to construct a gravel road and parking lot for 40 cars for wedding and event venue; majority of parking lot is within the upland review area, one small pocket of wetlands will be permanently filled.

2. DR22-001 – Map 34 Lot 31 Brown Road - Jared Chviek. RA Zone. Application for a Declaratory Ruling. Work includes removing dead oak trees killed by gypsy moths, creating pasture for cows, installing electric fence with solar powered generators, cutting and stockpiling firewood, and mitigation in the form of invasive species removal. **Complaint from Sharon Hawes, received on 10/16/22.**

New Business:

1. IWWC 23-012 Vachon Brooklyn LLC, owner; 512 Providence Road, Map 41, Lots 13A & 14, Planned Commercial Zone; Construction of a concrete pad and fencing for a dumpster enclosure and installation of fencing and bollards around an existing propane tank in the upland review area. Duly Authorized Agent Approval with Chairman's Approval.

Other Business:

1. 43 Herrick Road - James Salsich. Informal discussion with PC Survey.
2. Discussion regarding potential shift to digital information sharing from paper meeting packets, etc.

Communications:

1. Wetlands Agent Monthly Report.
2. Budget Update.

Public Commentary:

Adjourn:

Richard Oliverson, Chairman

Brooklyn Inland Wetlands and Watercourses Commission
Regular Meeting Minutes
Tuesday, October 10, 2023
Zoom and In-Person Meeting
Clifford B. Green Memorial Center
69 South Main Street
6:00 p.m.

Call to Order: 6:00 pm

Roll Call: Richard Oliverson; Adam Brindamour; Jason Burgess; James Paquin; Demian Sorrentino.
Absent with Notice: Janet Booth; Adam Tucker.

Staff Present: First Selectman, Austin Tanner (via Zoom); WEO, Margaret Washburn; Recording Secretary, Terry Mahanna.

Attendance: Attending in person: Paul Archer, Archer Surveying; Andrew Kausch, Brooklyn resident; Jake Kausch, Brooklyn resident; Stephanie Turner, Brooklyn Resident; Robert Navan, Builder for Stephanie Turner; Robert Ross; one additional attendee in audience.

Attending via Zoom: Austin Tanner; Sharon Loughlin; Sharon Hawes; Michael Podzalne; Chris Casadei; Jackie (last name not provided); one anonymous participant.

Seating of Alternates: None.

Public Commentary: None.

Approval of Minutes:
Special Meeting Minutes September 12, 2023 - APPROVED 5-0-0.

Public Hearings: Open at 6:01pm

- 1. IWWC 23-010 A. Kausch & Sons, Church Street, Map 37, Lot 21, RA Zone;** Driveway with wetlands crossing; 2,100 sq ft of wetlands alterations for single-family house, septic system, well and grading in the upland review area.

Paul Archer, representing this project, presented his revised plans which incorporated comments provided by Syl Pauley (Regional Engineer) and his conversation with Margaret Washburn. The only revision made from his last plans was adding splash pads at the end of each pipe, which bumped out the disturbance areas by 150 sf.

Mr. Archer also indicated he reflagged the wetlands and staked the house and center line of the driveway. In reference to Mr. Pauley's comments, he mentioned that 80% have to do with the septic system. He asked Ms. Washburn if she received the approval letter for the septic system from the Northeast District Department of Health (NDDH), to which she responded 'yes'.

Mr. Archer provided the following additional information in response to Mr. Pauley's comments:

- Wetlands disturbance crosshatching to include the rip rap splash pads does exist on the plan.
- Draining Calculations: When the driveway north of them on an adjacent lot was done, they put in two 15" pipes; he and his engineer (David Smith) did not feel it was necessary to include drainage calculations since those pipes already existed.
- Erosion & sediment controls: He extended them after talking with Ms. Washburn based on what she wanted to see.
- Driveway construction sequence: Based on what happened previously (regarding millings) they labeled it as "proposed gravel/millings driveway", which would allow Mr. Kausch to put millings down should he desire.
- Inverts on pipe elevation: They have inverts on all pipe elevations.
- Regarding the septic system Mr. Archer mentioned that all of Mr. Pauley's comments have been addressed by way of their dealings with NDDH.

Demian Sorrentino indicated for the record that he read the minutes for the meetings he missed and reviewed all materials for this project. James Paquin also indicated he went out to view the project.

Mr. Sorrentino asked why the existing driveway was not being utilized to access this lot. Mr. Archer indicated that firstly, it was not owned by A. Kausch but rather his son, Jake Kausch. Jake owns one of the lots in the rear and the access strip. Mr. Kausch would need to get a right-of-way from his son. Secondly, there is the potential to have another lot and Mr. Kausch does not want to give up this potential. Mr. Archer described the lot line reconfiguration that was previously approved.

Mr. Sorrentino, referring to Mr. Pauley's comment #3, asked Mr. Archer to confirm that there was no additional contributing area below the existing 15" pipes. Mr. Archer responded that his engineer does not believe there is enough there to warrant doing draining calculations, and that which was previously done on the adjacent lot should be sufficient. Mr. Sorrentino asked if the engineer put that in writing. Mr. Archer indicated he could get it in writing (and make it a condition of approval if desired).

Mr. Sorrentino also noted that he had seen water that was coming off the side of the driveway that looked suspect, north of flag 1-4. Adam Brindamour agreed and noted there appeared to be standing water. Mr. Paquin agreed as well.

Adam Brindamour asked if alternatives were considered for the placement of the driveway. Mr. Archer indicated they looked to see what would cause the least impact on wetlands and there was no other area that provided a lesser impact.

Ms. Washburn added that the square footage on the original application was 2,100, and she will correct the application to reflect 2,250 sf.

A **motion** was made by Jason Burgess at 6:22pm to close the public hearing, seconded by Adam Brindamour. The motion passed by unanimous vote 5-0-0.

Old Business:

1. **IWWC 23-010 A. Kausch & Sons, Church Street, Map 37, Lot 21, RA Zone;** Driveway with wetlands crossing; 2,250 sq ft of wetlands alterations for single-family house, septic system, well and grading in the upland review area.

Because this is a lot of record and there is no feasible and prudent alternative, a **motion** to approve with standard and special conditions was made by James Paquin, seconded by Adam Brindamour. The motion passed by a majority vote 3-2-0, with Demian Sorrentino and Jason Burgess opposing.

Special Condition(s): Sediment controls are to be installed and the wetlands agent is to be notified at 860-779-3411 ext. 31 for an inspection before any other work can begin.

2. **IWWC 23-002 IWWC 23-002 104 Church Street – Map 35, Lot 4-3 – Stephanie Turner, owner.** New single-family dwelling, septic system, driveway, well and associated grading in the upland review area. Compliance issues.

Margaret Washburn provided an introduction and explained that Demian Sorrentino expressed concerns (via email previously shared) about the construction process for the driveway and wetlands crossing and (potential) resistance to putting in an anti-tracking pad. Stephanie Turner explained that no construction vehicles are using the 104 Church driveway. Instead, they have been using the adjacent property/driveway, which is owned by her brother.

Mr. Sorrentino indicated his concerns: he watched the excavation and the pipe is on a mix of woody debris and topsoil; the pipe needs one foot of cover; the culvert is not properly bedded and will sink; there does not appear to be proper clearance between two of the trees and there is fill above the trees' root systems. Also, there needs to be proper clearance for emergency vehicles/fire trucks.

Robert Navan (Site Work Contractor) explained that the pipe is not bedded in woody debris; 6-8" of gravel was placed under the pipe; the width of the driveway is approximately 12-feet, wide enough for his dump truck and trailer; when paved the driveway will be flat and higher heading out.

Ms. Turner also mentioned she spoke with Eversource regarding the trees (and has a letter from them) indicating that the trees were no threat.

Discussion ensued between Commission members, Ms. Turner and Mr. Navan: whether a tracking pad is needed if the driveway is not being used for construction vehicles; potential line of sight issues; the Town Ordinance for driveways (at least 10-feet wide); the condition of the trees (which are on Town property); the need to show trees on plans.

Mr. Paquin stated he is convinced a fire truck can get in.

Mr. Sorrentino asked if the sediment controls were ok, Ms. Washburn responded 'yes, well done'.

Ms. Washburn asked if the exposed soils in the area at the pipe will be stabilized. Ms. Turner responded that it will all be raked out and seeded.

New Business:

1. **DR 23-003 Elizabeth Seabury, et al., owners C. Casadei, applicant. Old Tatnic Hill Road, Map 14, Lot 9, RA Zone;** Timber Harvest to remove unacceptable growing stock and establish natural regeneration; amount of forest products to be harvested: 150 mbf; 100 cords.

Chris Casadei (Forester) was present via Zoom.

Margaret Washburn inspected the property on 10/5/23 and recommended approval of this application.

As an agricultural use as-of-right, a **motion** was made by Adam Brindamour and seconded by Jim Paquin. The motion passed by unanimous vote 5-0-0.

2. **IWWC 23-011 Nicole Wineland-Thomson Fisher, applicant; 459 Wolf Den Road, Map 18, Lots 18A & 18B, RA Zone;** Proposal to construct a gravel road and parking lot for 40 cars for wedding and event venue; majority of parking lot is within the upland review area, one small pocket of wetlands will be permanently filled.

The application was received at this 10/10/23 meeting. No one was present to represent the project.

Margaret Washburn gave a description of the property. There was no discussion.

Other Business: None

Communications:

1. Wetlands Agent Monthly Report.
2. Budget Update.

Public Commentary: None

Adjourn: **Motion** to adjourn was made at 7:00 p.m. by James Paquin and seconded by Adam Brindamour. Motion carried unanimously by vote (5-0-0).

Submitted By:
Terry Mahanna
Recording Secretary

INLAND WETLANDS & WATERCOURSES COMMISSION
TOWN OF BROOKLYN, CONECTICUT

Date

10/2/23

Application # IWWC 23-011

APPLICATION -- INLAND WETLANDS & WATERCOURSES

APPLICANT Nicole Wineland-Thomson Fisher MAILING ADDRESS 53 Barnard Ave, Watertown, MA 02472
APPLICANT'S INTEREST IN PROPERTY _____ PHONE: CELL 617-955-7734 HOME: _____
E-MAIL Nicole.winelandthomson@gmail.com

PROPERTY OWNER IF DIFFERENT _____ PHONE: CELL: _____ HOME: _____
MAILING ADDRESS _____ EMAIL _____

ENGINEER/SURVEYOR (IF ANY)

Daniel Blanchette, J&D Civil Engineers LLC

ATTORNEY (IF ANY) _____

PROPERTY LOCATION/ADDRESS) 459 Wolf Den Road

MAP # 18 LOT # 18A & B ZONE RA TOTAL ACRES 97 ACRES OF WETLANDS ON PROPERTY 20 +/-

PURPOSE AND DESCRIPTION OF THE ACTIVITY

The applicant is proposing to construct a gravel road and gravel parking lot for 40 cars for their wedding and event venue.

The majority of the parking lot is located within the upland review area. One small pocket of wetlands will be permanently filled.

WETLANDS EXCAVATION AND FILL:

FILL PROPOSED yes CUBIC YDS 12 SQ FT 310

EXCAVATION PROPOSED no CUBIC YDS _____ SQ FT _____

LOCATION WHERE MATERIAL WILL BE PLACED: ON SITE yes OFF SITE _____

TOTAL REGULATED AREA ALTERED: SQ FT 49,160 ACRES 1.13

EXPLAIN ALTERNATIVES CONSIDERED (REQUIRED):

The originally approved parking lot was located near the road, but that location is not visually appealing and may impact the neighboring houses. Another design was evaluated in the flatter area below the currently proposed design, however that would involve too much wetland disturbance. The currently proposed design involves very minor wetland disturbance but is less of a nuisance to neighbors.

MITIGATION MEASURES (IF REQUIRED): WETLANDS/WATERCOURSES CREATED: CY _____ SQ FT _____ ACRES _____

IS PARCEL LOCATED WITHIN 500FT OF AN ADJOINING TOWN? no IF YES, WHICH TOWN(S) _____

IS THE ACTIVITY LOCATED WITHIN THE WATERSHED OF A WATER COMPANY AS DEFINED IN CT GENERAL STATUTES 25-32A? no



THE OWNER AND APPLICANT HEREBY GRANT THE BROOKLYN IWWC, THE BOARD OF SELECTMAN AND THEIR AUTHORIZED AGENTS PERMISSION TO ENTER THE SUBJECT PROPERTY FOR THE PURPOSE OF INSPECTION AND ENFORCEMENT OF THE IWWC REGULATIONS OF THE TOWN OF BROOKLYN. IF THE COMMISSION DETERMINES THAT OUTSIDE REVIEW IS REQUIRED, APPLICANT WILL PAY CONSULTING FEE.

NOTE: DETERMINATION THAT THE INFORMATION PROVIDED IS INACCURATE MAY INVALIDATE THE IWWC DECISION AND RESULT IN ENFORCEMENT ACTION.

APPLICANT: _____ DATE 10/1/2023

OWNER: _____ DATE 10/1/2023

REQUIREMENTS

☒ STANDARD APPLICATION FEE \$ (\$150) _____ STATE FEE (\$60) _____ CHECK # _____

☐ NOTICE OF ACTION PUBLICATION FEE \$ _____ CHECK # _____

☐ PUBLIC HEARING PUBLICATION FEE (\$100) \$ _____ (SUBJECT TO CHANGE DEPENDING ON PAPER) CHECK# _____

☐ SIGNIFICANT ACTIVITY FEE (PUBLIC HEARING) (\$250) \$ _____ CHECK # _____

☒ COMPLETION OF CT DEEP REPORTING FORM

☒ ORIGINAL PLUS COPIES OF ALL MATERIALS REQUIRED - NUMBER TO BE DETERMINED BY STAFF

☐ PRE-APPLICATION MEETING WITH THE WETLANDS AGENT IS RECOMMENDED TO EXAMINE THE SCOPE OF THE ACTIVITY

☒ SITE PLAN SHOWING LOCATION OF THE WETLANDS WITH EXISTING AND PROPOSED CONDITIONS.
APPLICANT MAY BE REQUIRED TO HAVE A CERTIFIED SOIL SCIENTIST IDENTIFY THE WETLANDS.

☒ COMPLIANCE WITH THE CONNECTICUT EROSION & SEDIMENTATION CONTROL MANUAL

_____ IF THE PROPOSED ACTIVITY IS DEEMED TO BE A "SIGNIFICANT IMPACT ACTIVITY" A PUBLIC HEARING IS REQUIRED ALONG WITH THE FOLLOWING INFORMATION:

- NAMES AND ADDRESSES OF ABUTTING PROPERTY OWNERS
- ADDITIONAL INFORMATION AS CONTAINED IN IWWC REGULATIONS ARTICLE 7.6

ADDITIONAL INFORMATION/ACTION NEEDED:

OTHER APPLICATIONS MAY BE REQUIRED. CONTACT THESE AGENCIES FOR FURTHER INFORMATION:
APPLICATION TO STATE OF CONNECTICUT DEEP

INLAND WATER RESOURCES DIVISION
79 ELM ST.
HARTFORD, CT. 06106
1-860-424-3019

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MA. 01742
1-860-343-4789

STAFF USE ONLY:

_____ DECLARATORY RULING: AS OF RIGHT & NON-REGULATED USES (SEE IWWC REGULATIONS SECTION 4)

_____ PERMIT REQUIRED:

_____ AUTHORIZED BY STAFF/CHAIR (NO ACTIVITY IN WETLANDS/WATERCOURSE AND MINIMAL IMPACT)

_____ CHAIR, BROOKLYN IWWC

_____ WETLANDS OFFICER

_____ AUTHORIZED BY IWWC

_____ SIGNIFICANT ACTIVITY/PUBLIC HEARING

_____ NO PERMIT REQUIRED

_____ OUTSIDE OF UPLAND REVIEW AREA

_____ NO IMPACT

_____ CHAIR, BROOKLYN IWWC

_____ WETLANDS OFFICER

_____ TIMBER HARVEST

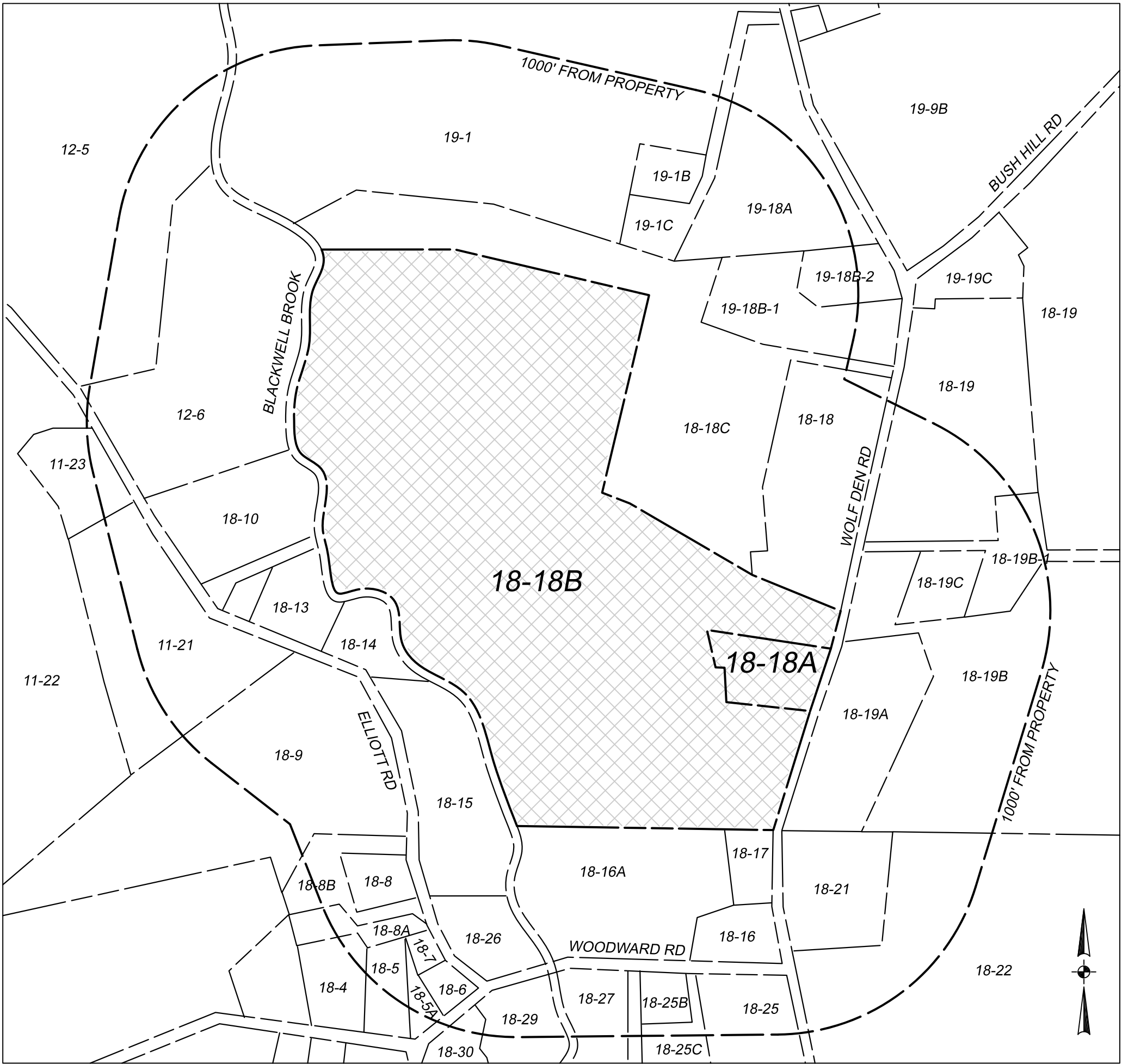
**SITE PLAN MODIFICATION FOR
SPECIAL PERMIT # 22-007
FOR WEDDING/EVENT VENUE FOR
WILLOW HILL LLC
459 WOLF DEN ROAD
BROOKLYN, CONNECTICUT
DATED: SEPTEMBER 29, 2023
REVISED: NOVEMBER 8, 2023**

PREPARED FOR:

WILLOW HILL LLC, CARE OF
NICOLE WINELAND-THOMSON FISHER
AND GREGORY FISHER
53 BARNARD AVENUE
WATERTOWN, MA 02472

INDEX OF DRAWINGS

- 1 COVER
- 2 ACCESS DRIVEWAY AND PARKING LOT PLAN
- 3 EVENT AREA PLAN
- 4 NOTES AND DETAILS
- 5 DRIVEWAY AND PARKING LOT DETAILS



LOCATION MAP
1" = 500'

ZONE: RESIDENTIAL AGRICULTURAL (RA)
USE: SPECIAL EVENTS

ITEM	REQUIRED	EXISTING	PROPOSED
FRONTAGE	150'	>336'	> 336'
FRONT SETBACK	50'	115'	115'
SIDE SETBACK	40'	5'	5'
REAR SETBACK	50'	293'	293'
LOT SIZE	2 ACRES	4+ ACRES	4+ ACRES
EVENT SETBACK*	200'	77.6'	77.6'
PARKING SPACES	57	15	59

*A VARIANCE WAS OBTAINED TO REDUCE THIS SETBACK REQUIREMENT

SPECIAL PERMIT APPROVAL BY THE BROOKLYN
PLANNING AND ZONING COMMISSION

TOWN OF BROOKLYN
RECEIVED FOR RECORDING

CHAIRMAN

DATE

TOWN CLERK DATE TIME MAP #

**J & D CIVIL
ENGINEERS, LLC**
**401 RAVENELLE ROAD
THOMPSON, CT 06255**
JDCIVILENGINEERS.COM
860-923-2920

SURVEY NOTES

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

SURVEY TYPE: GENERAL LOCATION

PURPOSE: SITE DEVELOPMENT

BOUNDARY DETERMINATION CATEGORY: NONE

HORIZONTAL ACCURACY: CLASS B

VERTICAL ACCURACY: CLASS T-2

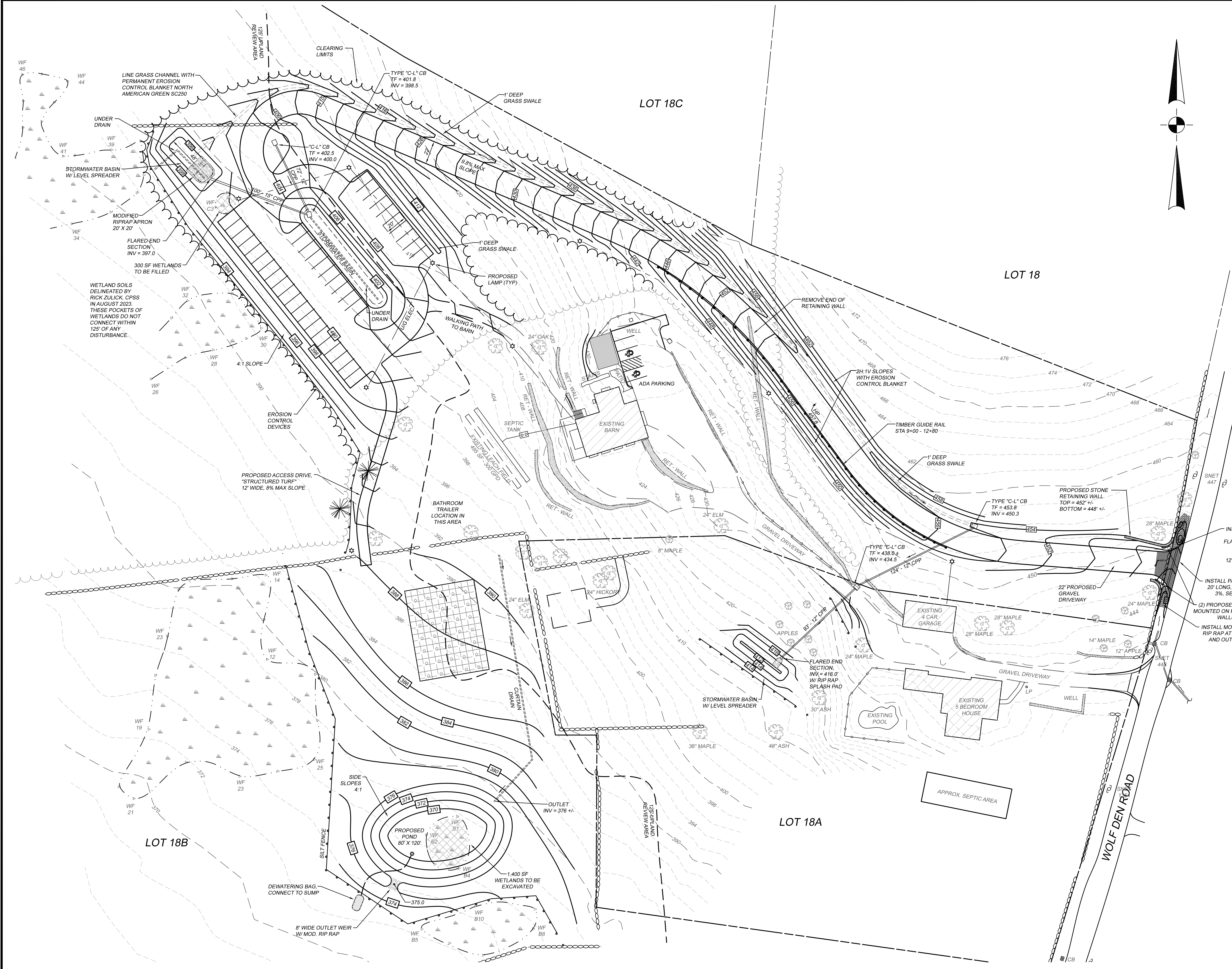
PROPERTY LINES DO NOT EXPRESS A BOUNDARY OPINION.

THIS MAP WAS PREPARED FROM RECORD RESEARCH, OTHER MAPS, LIMITED FIELD MEASUREMENTS AND OTHER SOURCES. IT IS NOT TO BE CONSTRUED AS A PROPERTY/BOUNDARY OR LIMITED PROPERTY/BOUNDARY SURVEY AND IS SUBJECT TO SUCH FACTS AS SAID SURVEYS MAY DISCLOSE.

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

DENNIS R. BLANCHETTE DATE 12107
LICENSE
NUMBER

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2023 J&D CIVIL ENGINEERS, LLC

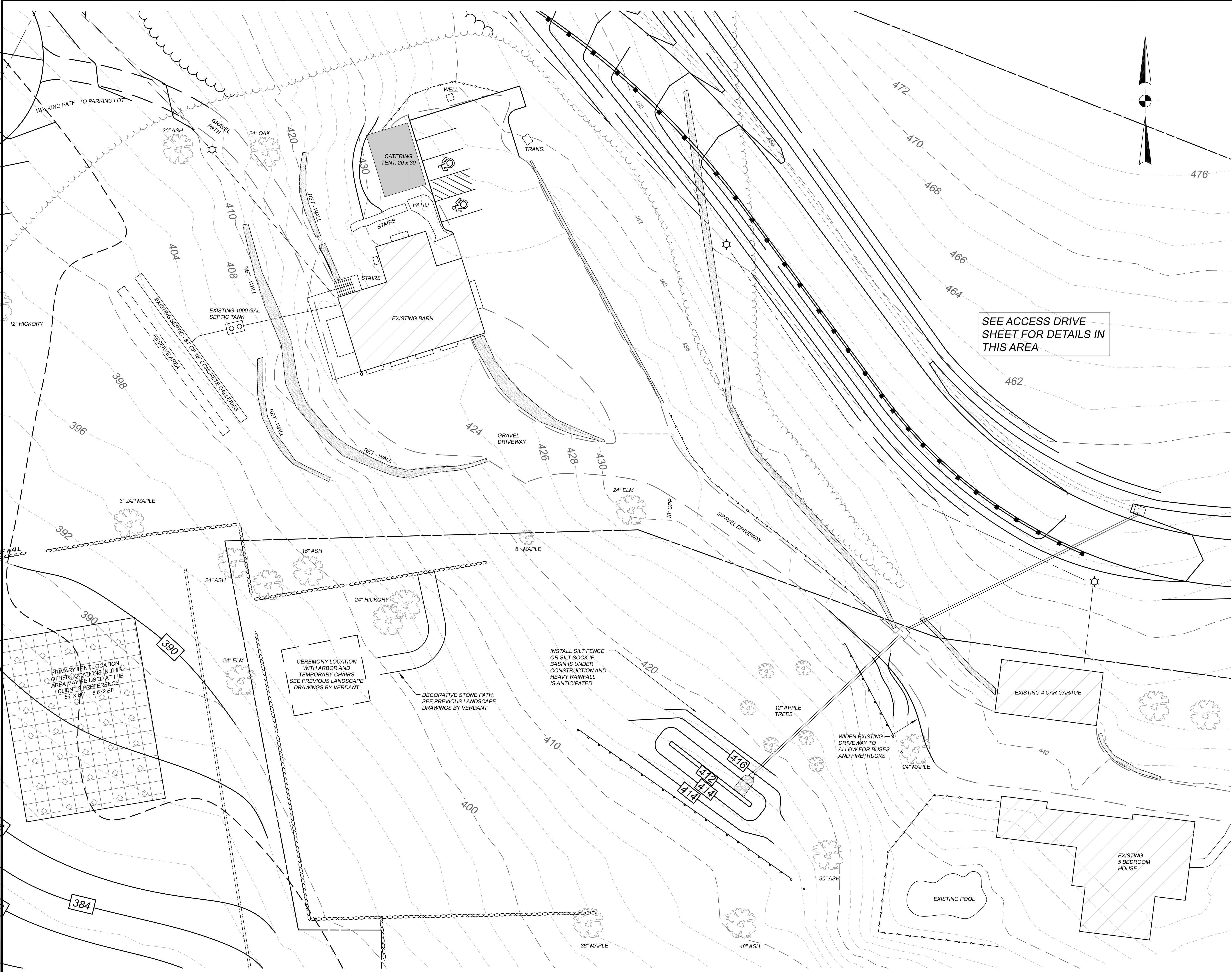


LEGEND	
	BUILDING SETBACK LINE
	PROPERTY LINE
	EXISTING MAJOR CONTOUR LINE
	EXISTING MINOR CONTOUR LINE
	PROPOSED CONTOUR LINE
	STONEWALL
	UTILITIES
	TREELINE
	FENCE
	SILT FENCE OR SILT SOCK
	PROPOSED LAMP
	UNDERGROUND ELECTRIC

ACCESS DRIVEWAY AND PARKING LOT PLAN
PREPARED FOR
WILLOW HILL LLC
459 WOLF DEN ROAD, BROOKLYN, CT
MAP 15 - LOTS 18 & 18A

J&D CIVIL
ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: DDB CHECKED: DRB	REVISIONS: 2023-11-05 TOWN COMMENTS
JOB NO: 22172 SCALE: 1" = 40'	DATE: SEPTEMBER 29, 2023 SHEET: 2 OF 5



SURVEY NOTES

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

SURVEY TYPE: GENERAL LOCATION

PURPOSE: TO DEPICT EXISTING CONDITIONS

BOUNDARY DETERMINATION CATEGORY: NONE

HORIZONTAL ACCURACY: CLASS B

VERTICAL ACCURACY: CLASS T-2

PROPERTY LINES DO NOT EXPRESS A BOUNDARY OPINION.

THIS MAP WAS PREPARED FROM RECORD RESEARCH, OTHER MAPS, LIMITED FIELD MEASUREMENTS AND OTHER SOURCES. IT IS NOT TO BE CONSTRUED AS A PROPERTY/BOUNDARY OR LIMITED PROPERTY/BOUNDARY SURVEY AND IS SUBJECT TO SUCH FACTS AS SAID SURVEYS MAY DISCLOSE.

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

DENNIS R. BLANCHETTE DATE 12107
LICENSE
NUMBER

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2023 J&D CIVIL ENGINEERS, LLC

LEGEND	
	BUILDING SETBACK LINE
	PROPERTY LINE
	EXISTING MAJOR CONTOUR LINE
	EXISTING MINOR CONTOUR LINE
	PROPOSED CONTOUR LINE
	LEACHING TRENCH
	STONEWALL
	UTILITIES
	TREELINE
	FENCE
	PROPOSED LAMP

EVENT AREA PLAN
PREPARED FOR
WILLOW HILL LLC
459 WOLF DEN ROAD, BROOKLYN, CT
MAP 18 - LOTS 18 & 18A

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: DDB
CHECKED: DRB

REVISIONS:
2023-11-08 TOWN COMMENTS

JOB NO: 22172
SCALE: 1" = 20'

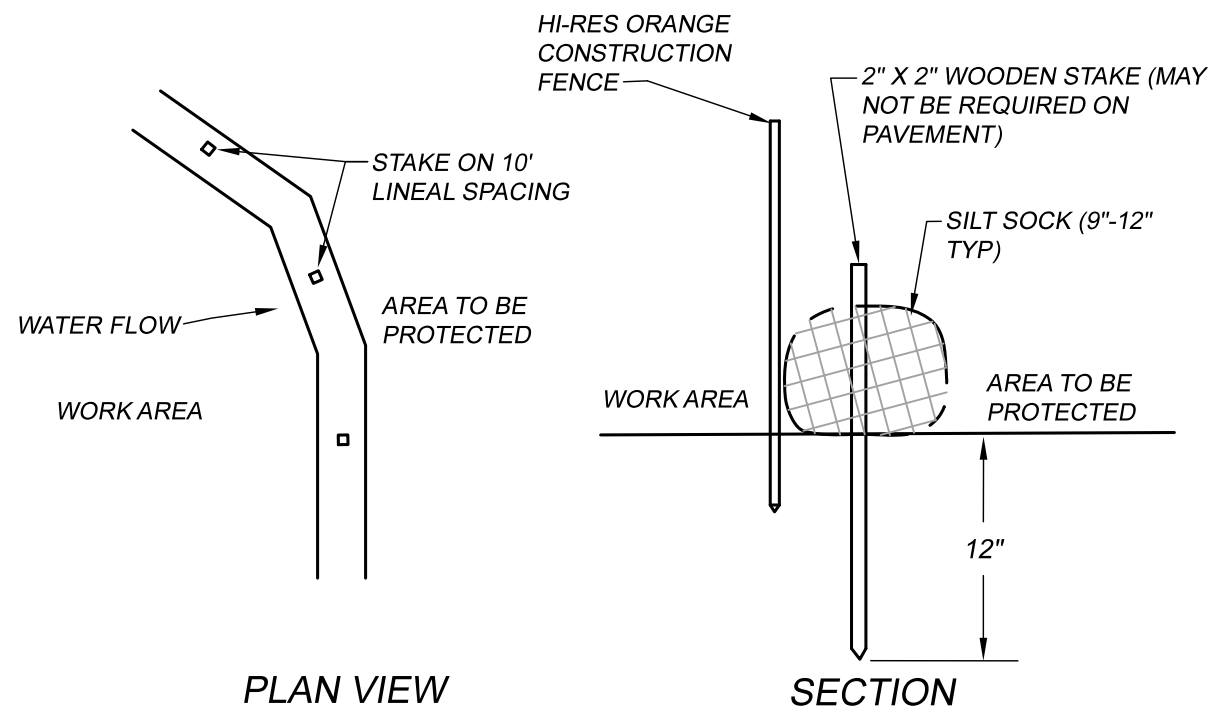
DATE: SEPTEMBER 29, 2023
SHEET: 3 OF 5

PROJECT DESCRIPTION:

1. THE APPLICANT IS PROPOSING TO HOLD WEDDINGS, BANQUETS, AND OTHER SIMILAR EVENTS AT THE PROPERTY. THE MAXIMUM NUMBER OF GUESTS SHALL BE LIMITED TO 225 PERSONS.
2. THE EXISTING FIVE BEDROOM HOUSE SHALL BE USED AS A PRIVATE RESIDENCE BY THE OWNER AND APPLICANT.
3. THE EXISTING BARN MAY BE USED TO HOLD SMALLER EVENTS. ADDITIONALLY, A TEMPORARY TENT OR TENTS MAY BE INSTALLED TO HOLD LARGER EVENTS.
4. GUESTS SHALL NOT BE ALLOWED TO USE THE RESTROOMS INSIDE THE BARN. A PORTABLE RESTROOM TRAILER SHALL BE DELIVERED TO THE SITE FOR ALL EVENTS.
5. NO FOOD SHALL BE PREPARED ON SITE. ALL FOOD SHALL BE PROFESSIONALLY CATERED AND DELIVERED TO THE SITE.
6. NO NEW BUILDINGS ARE PROPOSED WITH THIS APPLICATION. THE ONLY CONSTRUCTION SHALL CONSIST OF DRIVEWAYS, PARKING LOTS, DRAINAGE STRUCTURES, UTILITIES, AND LANDSCAPING.
7. THE MAXIMUM NUMBER OF EVENTS TO BE HELD IN A TWELVE MONTH PERIOD IS ESTIMATED AT 70 EVENTS WITH AMPLIFIED MUSIC, AND 30 EVENTS WITHOUT AMPLIFIED MUSIC.
8. NO SINGLE EVENT SHALL LAST FOR MORE THAN 3 CONSECUTIVE DAYS.
9. AMPLIFIED MUSIC, BOTH INDOOR AND OUTDOOR, SHALL BE TURNED OFF AT 10:00 PM.
10. THE MAXIMUM OCCUPANCY OF THE BARN SHALL BE 110 PERSONS. THE MAXIMUM OCCUPANCY OF A TEMPORARY TENT SHALL BE 225 PERSONS.

SIGN NOTES

1. THE APPLICANT IS PROPOSING TO INSTALL TWO SIGNS AT THE NEW ENTRANCE TO THE SITE.
2. EACH SIGN SHALL BE LESS THAN 3 FEET LONG AND LESS THAN 1 FOOT HIGH.
3. SIGNS SHALL BE MOUNTED ON RETAINING WALLS, AT A HEIGHT OF 2-3 FEET.
4. NO LIGHTING IS PROPOSED FOR THE SIGNS.
5. SIGNAGE SHALL COMPLY WITH ALL REQUIREMENTS IN 7.A.3.1 OF THE BROOKLYN ZONING REGULATIONS.



NOTES

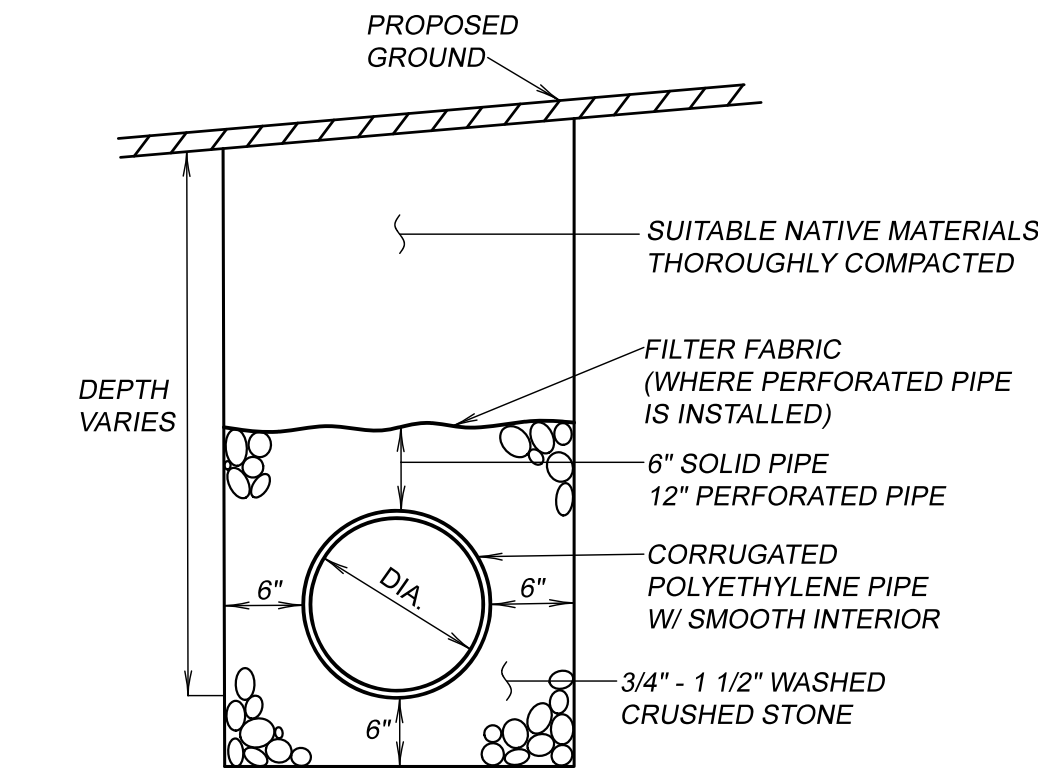
1. SILT SOCK MANUFACTURER SHALL BE SILT SOXX OR ENGINEER APPROVED EQUAL
2. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS
3. SEDIMENT SILT SOCK TO BE FILLED WITH LEAF COMPOST AND/OR WOODY MULCH PER MANUFACTURER'S REQUIREMENTS
4. FOLLOWING CONSTRUCTION AND SITE STABILIZATION, COMPOST MATERIAL SHALL BE REMOVED OR DISPERSED ON SITE, AS APPROVED BY THE ENGINEER

SILT SOCK DETAIL
NOT TO SCALE

NEIGHBORHOOD AGREEMENT:

THE APPLICANTS HAVE MET WITH THEIR ABUTTERS AND AGREED TO THE FOLLOWING TERMS FOR THIS PROJECT:

1. LIMIT WEEKEND EVENTS TO ONE OUTDOOR EVENT WITH AMPLIFIED ENTERTAINMENT PER WEEKEND, WHERE WEEKEND IS DEFINED AS FRIDAY-SATURDAY-SUNDAY.
2. NOISE LEVELS SHALL NOT EXCEED 55 dB DURING THE DAY AND 45 dB AFTER 10:00 PM, AS MEASURED FAT THE PROPERTY LINES THAT ABUT NEIGHBORS AND RUN ALONG WOLF DEN ROAD. SEE CT GENERAL STATUTES 22A-69
3. ON STREET PARKING BY GUESTS AND VENDORS SHALL BE PROHIBITED.
4. THERE SHALL BE NO MORE THAN 2 FIREWORKS DISPLAYS DURING THE CALENDAR YEAR. FIREWORKS DISPLAYS MUST BE RUN BY LICENSED PROFESSIONALS. FIREWORKS SHALL OTHERWISE NOT BE ALLOWED BY GUESTS.
5. RESIDENTS WITHIN 2,500 FEET OF THE PROPERTY IN ALL DIRECTIONS SHALL BE NOTIFIED AT LEAST 10 DAYS PRIOR TO UPCOMING FIREWORKS DISPLAYS.
6. FIREARMS SHALL BE PROHIBITED ON THE PROPERTY DURING ALL EVENTS.
7. OUTDOOR FIRES SHALL ONLY BE ALLOWED IN THE FIREPIT, WHICH WILL BE STARTED AND MAINTAINED BY THE OWNERS OR THEIR EMPLOYEES, AND OUTDOOR GRILL WILL BE AVAILABLE FOR USE ON THE PROPERTY.
8. RENTERS ARE RESPONSIBLE FOR REMOVING ALL EVIDENCE OF THE EVENT UPON CONCLUSION OF THE EVENT OR AS SOON AS REASONABLY FEASIBLE AFTER THE CONCLUSION OF THE EVENT. THIS INCLUDES TRASH, TENTS, FURNITURE, EQUIPMENT, PORTABLE TOILETS, AND ANYTHING ELSE WHICH IS VISIBLE FROM THE ROAD THAT HAS BEEN BROUGHT TO THE VENUE.
9. ALL RENTERS OF THE PROPERTY WILL AGREE TO AND SIGN A CONTRACT FOR USAGE OF THE PREMISES, WHICH WILL INCLUDE BUT NOT BE LIMITED TO THE RESTICTIONS ABOVE. IT WILL ASK THEM TO COMMIT TO RESPECTING THE LOCAL RESIDENTS AND SURROUNDING NEIGHBORHOODS WITH RESPECT TO NOISE, TRASH, AND DRIVING SPEED.
10. OUTDOOR LIGHTING SHALL ONLY BE TURNED ON DURING EVENTS WHEN NECESSARY.
11. ALL OUTDOOR LIGHTING SHALL BE DARK SKY COMPLIANT (IDA SEAL OF APPROVAL), AND MUST COMPLY WITH TOWN AND STATE SAFETY REQUIREMENTS. TO THE GREATEST EXTENT FEASIBLE, OUTDOOR LIGHTING SHALL BE DOWNCAST AND DIRECTED AWAY FROM THE ROAD AND ABUTTING PROPERTIES.
12. THERE SHALL BE AN ANNUAL MEETING WITH NEIGHBORS TO REVIEW THE SPECIAL PERMIT AND TO ENSURE THAT THE ABOVE CONDITIONS AS WELL AS THE INTERESTS OF PUBLIC HEALTH, SAFETY, AND GENERAL WELFARE OF THE NEIGHBORING RESIDENTS ARE BEING MET. ANY DISPUTE THAT CANNOT BE RESOLVED THROUGH DIRECT DIALOGUE SHALL BE BROUGHT TO THE COMMISSION FOR RESOLUTION.



CPP DRAINAGE PIPE INSTALLATION DETAIL
N.T.S.

GENERAL CONSTRUCTION NOTES:

LOCATIONS OF UNDERGROUND UTILITIES HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL NOTIFY CALL BEFORE YOU DIG AND FIELD VERIFY THE LOCATION, DEPTH AND ALIGNMENT OF ALL EXISTING PIPES, CABLES, ETC.

CONSTRUCTION SHALL BE IN CONFORMANCE WITH CONNDOT FORM 818 UNLESS OTHERWISE NOTED ON THE PLANS. UTILITY INSTALLATION SHALL BE IN CONFORMANCE WITH THE APPROPRIATE UTILITY COMPANY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH EACH UTILITY AND ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING FACILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING PIPING UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

TYPICAL DETAILS SHOWN ARE TO ILLUSTRATE THE ENGINEER'S INTENT AND ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS ENCOUNTERED IN THE FIELD. THE CONTRACTOR MAY SUBMIT PROPOSALS FOR ALTERNATE METHODS TO SUIT FIELD CONDITIONS.

ALL PIPING SHALL HAVE WARNING TAPE INSTALLED. IN ADDITION, ALL NONMETALLIC PIPE MUST BE PARALLELED BY A METALLIC WIRE OR METALLIC DETECTION TAPE FOR EASE OF LOCATING.

ALL PIPING SHALL BE CLEANED AND TESTED IN ACCORDANCE WITH THE APPLICABLE UTILITY'S REQUIREMENTS. COPIES OF ALL TESTS SHALL BE PROVIDED TO THE OWNER PRIOR TO ACCEPTANCE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TESTING EQUIPMENT.

ALL TRENCHING SHALL BE DONE IN COMPLIANCE WITH OSHA REGULATIONS AND THE INSTALLATION REQUIREMENTS OF THE PIPE MANUFACTURER. IF SHORING IS REQUIRED, IT MUST BE DESIGNED BY A LICENSED CT PROFESSIONAL ENGINEER.

BENCHMARKS WILL BE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR IN LAYING OUT THE PROJECT. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

THE CONTRACTOR SHALL PROTECT BENCHMARKS, PROPERTY CORNERS AND SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. ANY SUCH ITEMS WHICH NEED TO BE REPLACED SHALL BE AT THE CONTRACTOR'S EXPENSE.

SOIL EROSION AND SEDIMENT CONTROL

THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT AN VENUE FOR WEDDINGS AND OTHER SIMILAR EVENTS. SITE WORK WILL INCLUDE CONSTRUCTION OF ACCESS DRIVEWAYS, PARKING AREAS, DRAINAGE STRUCTURES, AND NECESSARY UTILITIES.

ATTENTION SHALL BE GIVEN TO THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES. NO ERODED SEDIMENTS SHALL BE PERMITTED TO FLOW OFF THE SITE. IF FIELD CONDITIONS WARRANT IT OR THE TOWN REQUESTS IT, ADDITIONAL E & S CONTROL MEASURES, BEYOND WHAT IS SHOWN ON THE PLAN, SHALL BE INSTALLED.

THE SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES WILL BE APPROXIMATELY AS FOLLOWS:

1. INSTALLATION OF EROSION CONTROL DEVICES
2. CLEARING & GRUBBING
3. ROUGH SITE GRADING
4. INSTALLATION OF UTILITIES INCLUDING DRAINAGE PIPES AND CB'S
5. PREPARATION OF ACCESS DRIVEWAYS AND PARKING LOT BASE
6. AFTER SITE IS STABILIZED, CONSTRUCT DRAINAGE BASIN
7. PERMANENT STABILIZATION INCLUDING LANDSCAPING
8. REMOVAL OF EROSION CONTROL MEASURES

SEDIMENT AND EROSION CONTROL DEVICES WILL BE INSTALLED AS DETAILED ON THIS SHEET AND CHECKED REGULARLY FOR REPLACEMENT AND AFTER EVERY RAIN FOR REMOVAL OF DEPOSITED MATERIALS. RESPONSIBILITY FOR COMPLIANCE WITH THIS PLAN SHALL BELONG TO THE CONTRACTOR. THE CONTRACTOR SHALL BE THE DESIGNATED ON-SITE AGENT RESPONSIBLE FOR ENSURING TO THE TOWN THAT E & S CONTROL MEASURES ARE STRICTLY ENFORCED.

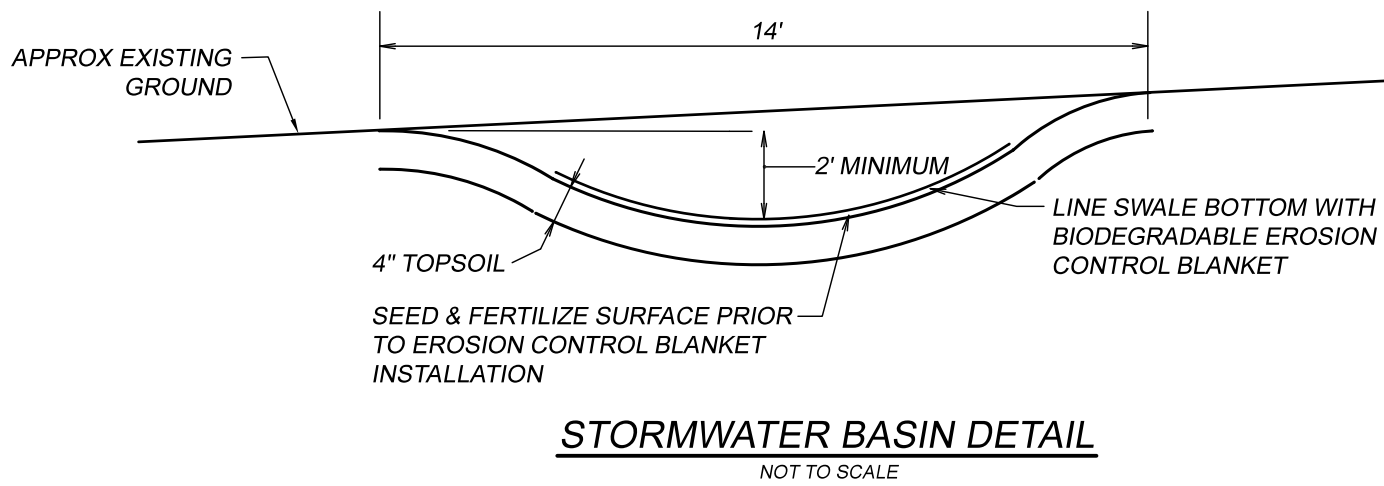
CATCH BASINS SHALL BE PROTECTED WITH FILTER FABRIC AND/OR SURROUNDED BY SILT SOCKS DURING CONSTRUCTION, WHEN DISTURBED AREAS ARE NOT STABILIZED.

OPERATIONS AND MAINTENANCE

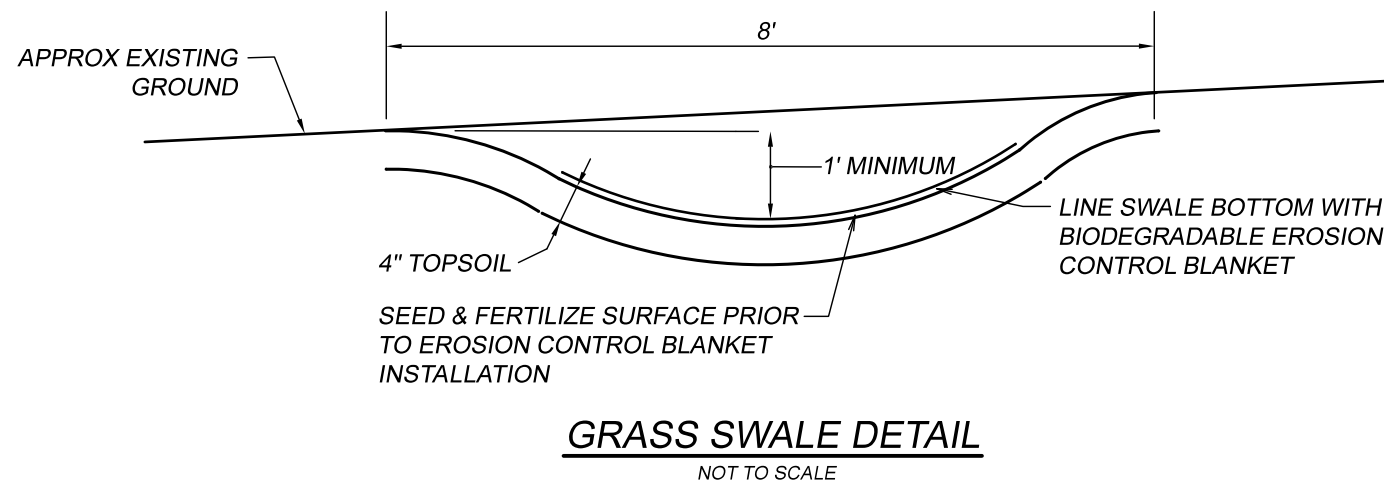
1. ALL PROPOSED WORK SHALL CONFORM TO "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL OF SOIL AND WATER CONSERVATION AND TOWN REGULATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE GOALS OF THIS EROSION CONTROL PLAN ARE MET BY WHATEVER MEANS ARE NECESSARY. THE CONTRACTOR SHALL PLAN ALL LAND DISTURBING ACTIVITIES IN A MANNER AS TO MINIMIZE THE EXTENT OF DISTURBED AREAS.
3. PRIOR TO CONSTRUCTION OR EXCAVATION, SEDIMENT BARRIERS SHALL BE INSTALLED IN LOCATIONS AS SHOWN ON THE PLAN OR AS REQUIRED BY THE TOWN AND MAINTAINED THROUGHOUT CONSTRUCTION.
4. UPON FINAL GRADING, DISTURBED AREAS SHALL COVERED WITH A MINIMUM OF 6" LOAM AND SEEDED WITH PERENNIAL GRASSES AS SPECIFIED FOR THE PROJECT. IMMEDIATELY AFTER SEEDING, MULCH THE SEEDED AREA WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE. SEEDING DATES ARE TO BE BETWEEN APRIL 1 THRU JUNE 15 AND AUGUST 15 THRU OCTOBER 15.
5. DAILY INSPECTIONS SHALL BE MADE OF EROSION AND SEDIMENT CONTROL MEASURES TO INSURE EFFECTIVENESS AND IMMEDIATE CORRECTIVE ACTION SHALL BE TAKEN IF FAILURE OCCURS. ADDITIONAL EROSION CONTROL MEASURES BEYOND WHAT IS SHOWN ON THE PLAN MAY BE NECESSARY.
6. EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN STABILIZED AND VEGETATIVE COVER HAS BEEN ESTABLISHED, AT WHICH TIME THEY SHALL BE REMOVED.
7. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THIS EROSION AND SEDIMENT CONTROL PLAN.

LIGHTING NOTES

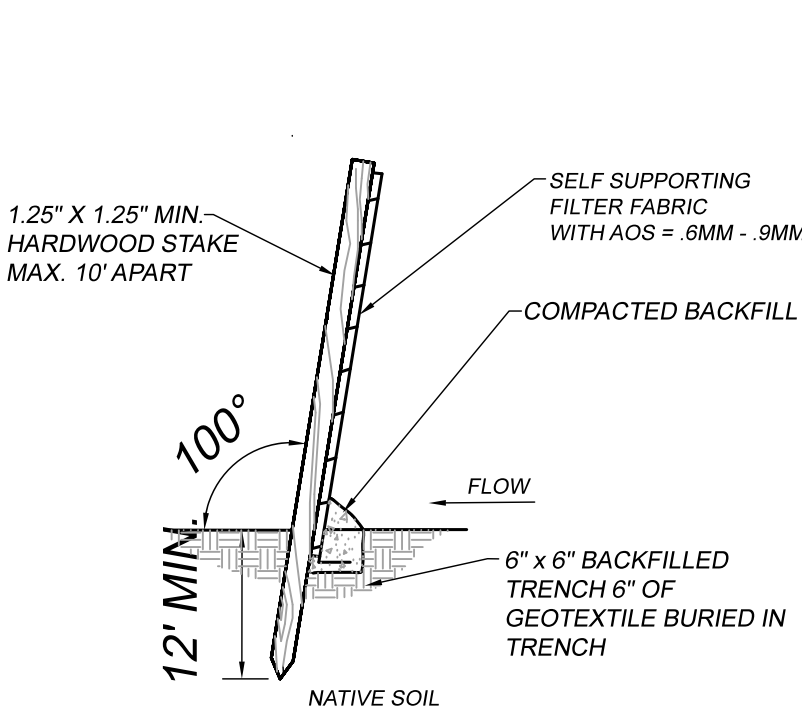
1. LAMP POSTS SHALL BE INSTALLED SOUTH OF THE PROPOSED 40 CAR PARKING LOT, AS INDICATED ON THE SITE PLANS.
2. THE SPECIFIC MANUFACTURER AND MODEL OF LIGHT IS TO BE DETERMINED. LAMP POSTS SHALL BE OF A RURAL OR RUSTIC STYLE.
3. LAMPS SHALL BE INSTALLED ON POLES 10-12 FEET TALL.
4. LAMPS SHALL BE FULL CUTOFF, WITH LED BULBS.
5. LAMP INTENSITY SHALL BE IN THE RANGE OF 8,000 - 12,000 LUMENS, OR 80-120 WATTS.
6. LAMP TEMPERATURE SHALL BE APPROXIMATELY 5,000 K.
7. ALL LAMPS SHALL CONFORM WITH THE REQUIREMENTS IN SECTION 7.G OF THE BROOKLYN ZONING REGULATIONS.
8. ALL LAMPS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
9. SUFFICIENT EXTERIOR LIGHTING EXISTS ON ALL OTHER PORTIONS OF THE SITE, SUCH AS THE BUILDINGS AND DRIVEWAY.
10. THE PROPOSED LIGHTING IS EXPECTED TO PROVIDE LESS THAN 1 FOOT-CANDLE AT THE PROPERTY LINES.



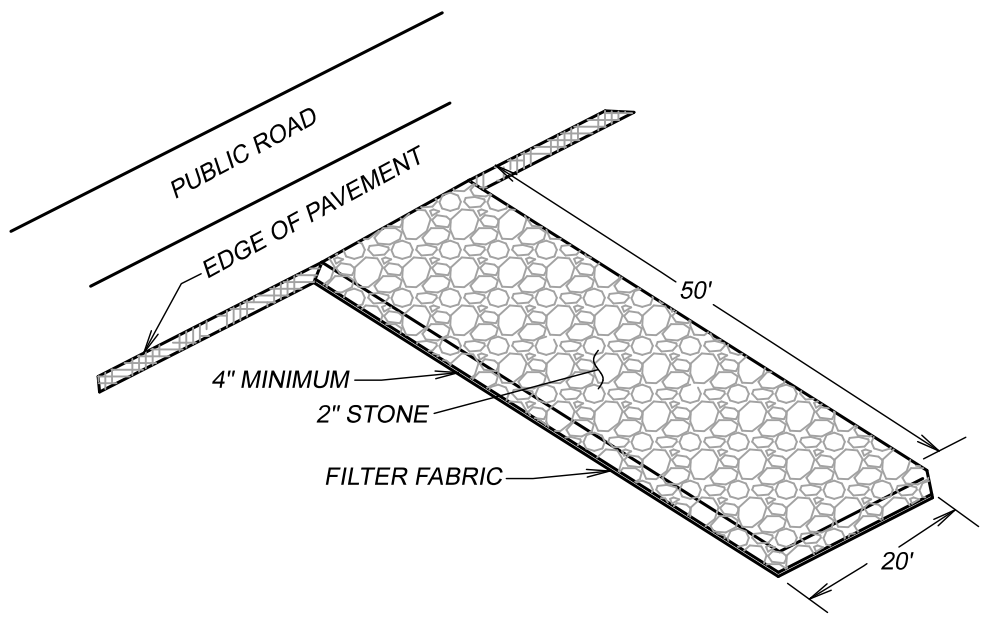
STORMWATER BASIN DETAIL
NOT TO SCALE



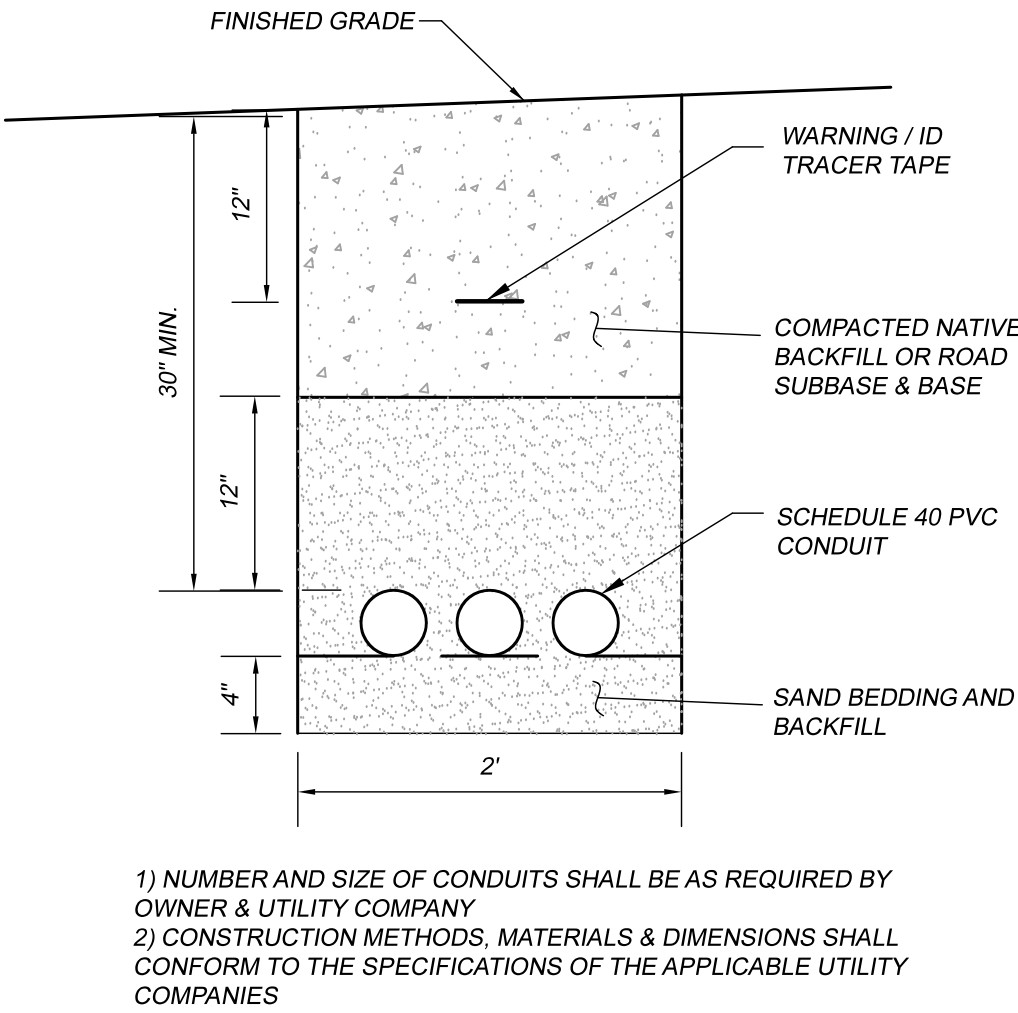
GRASS SWALE DETAIL
NOT TO SCALE



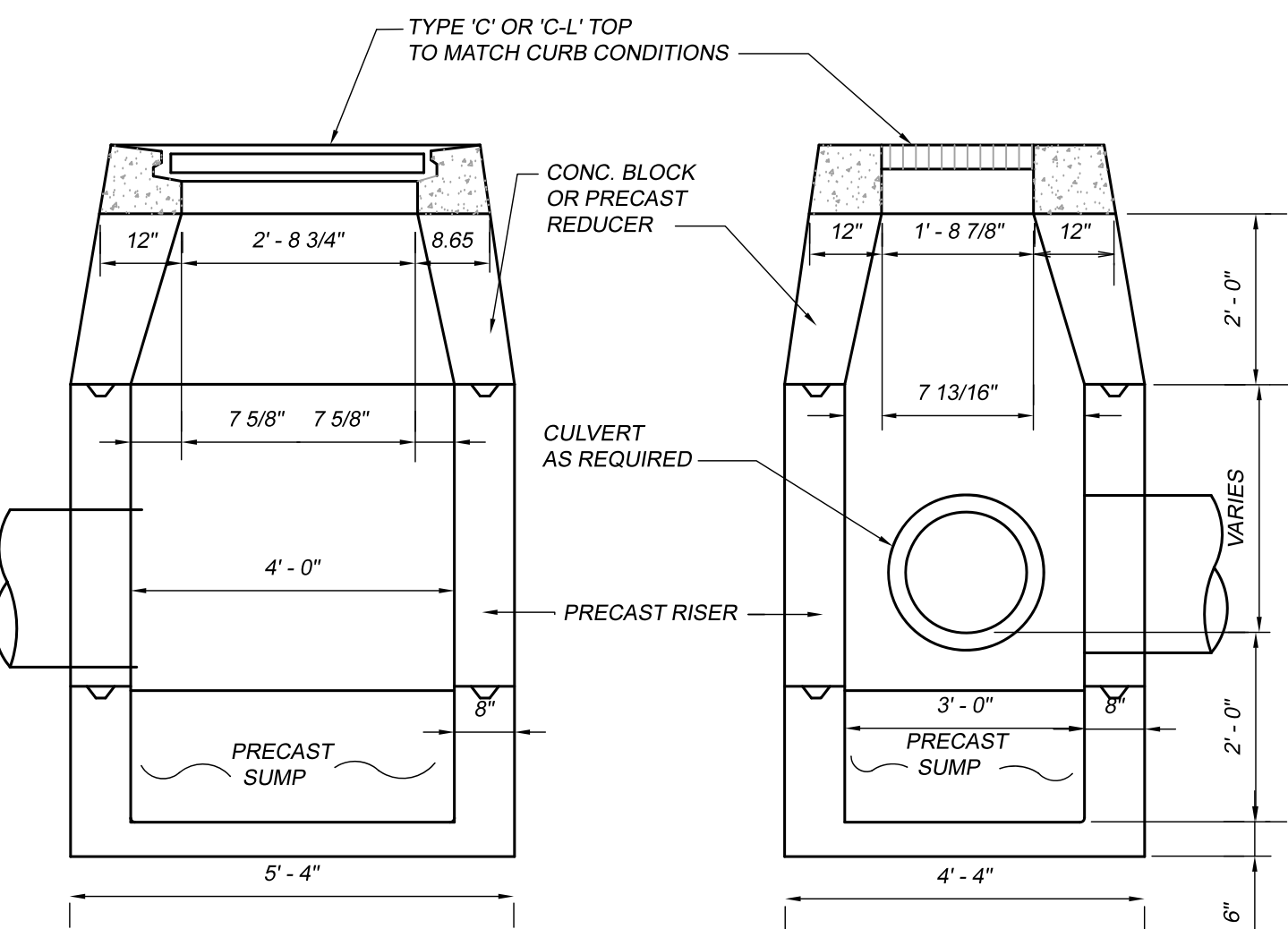
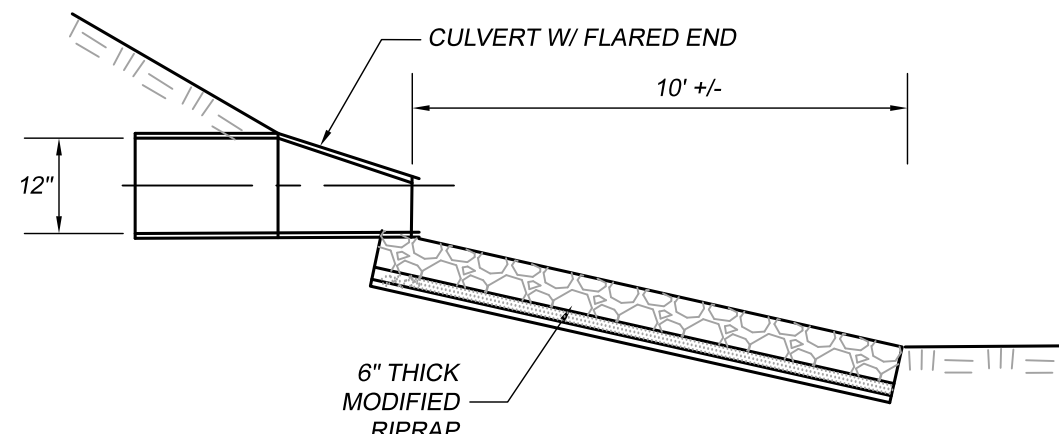
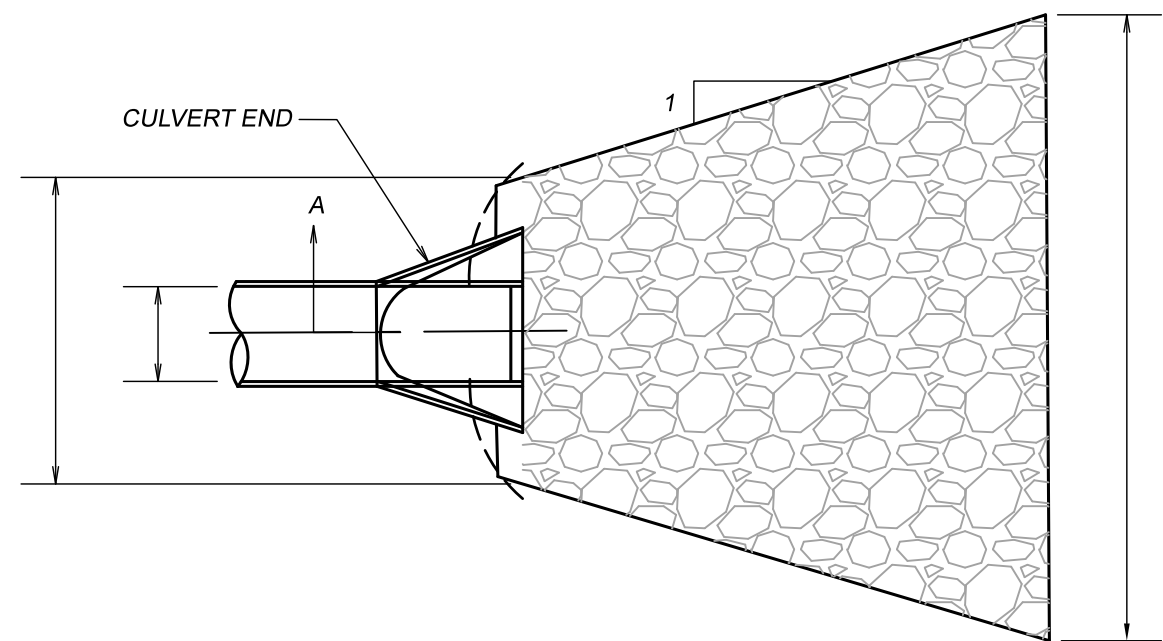
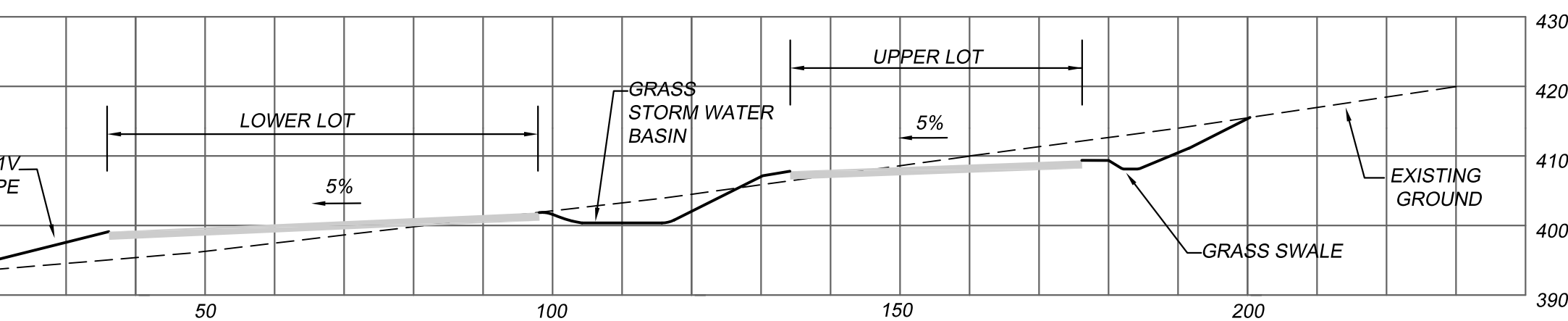
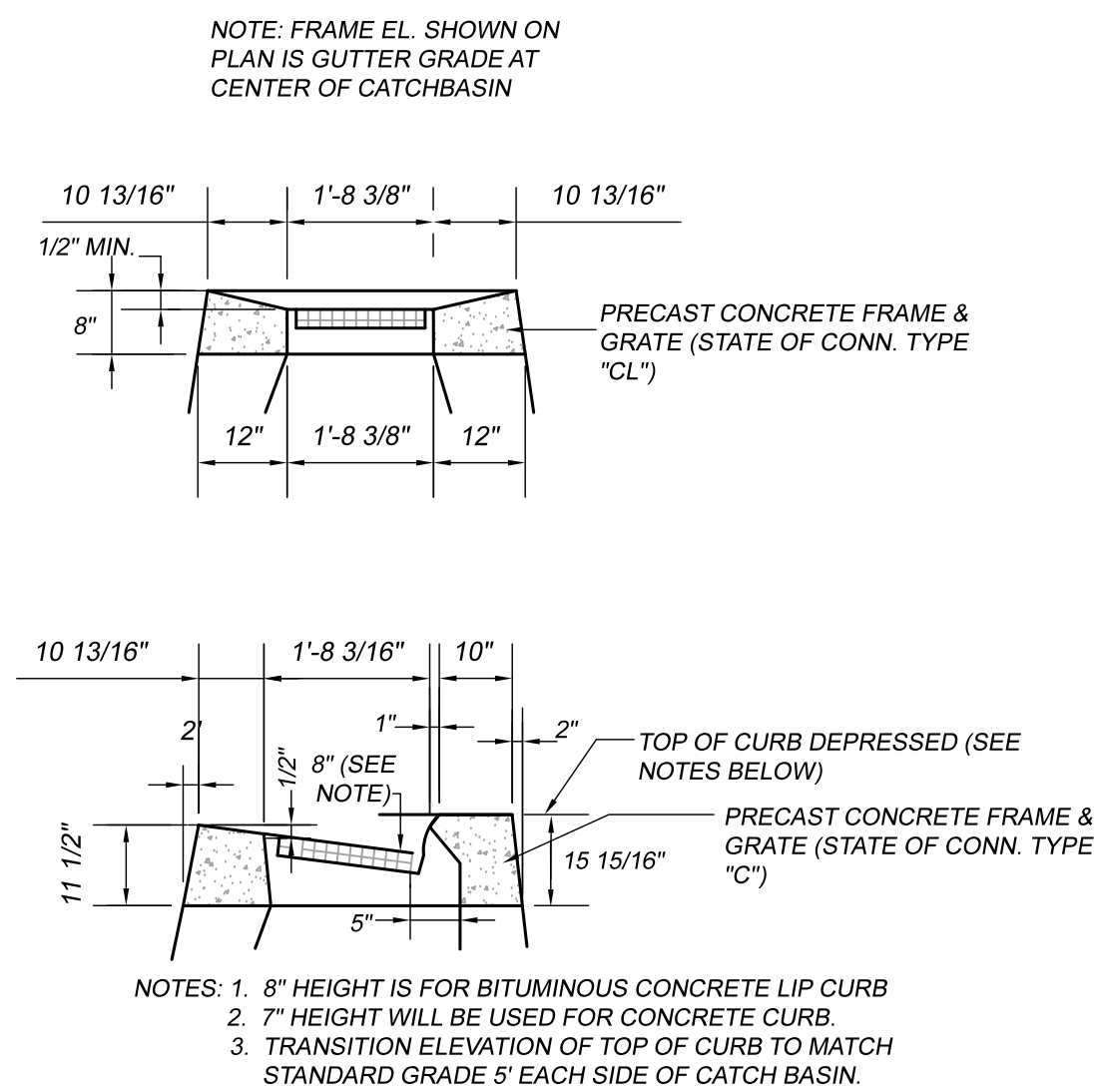
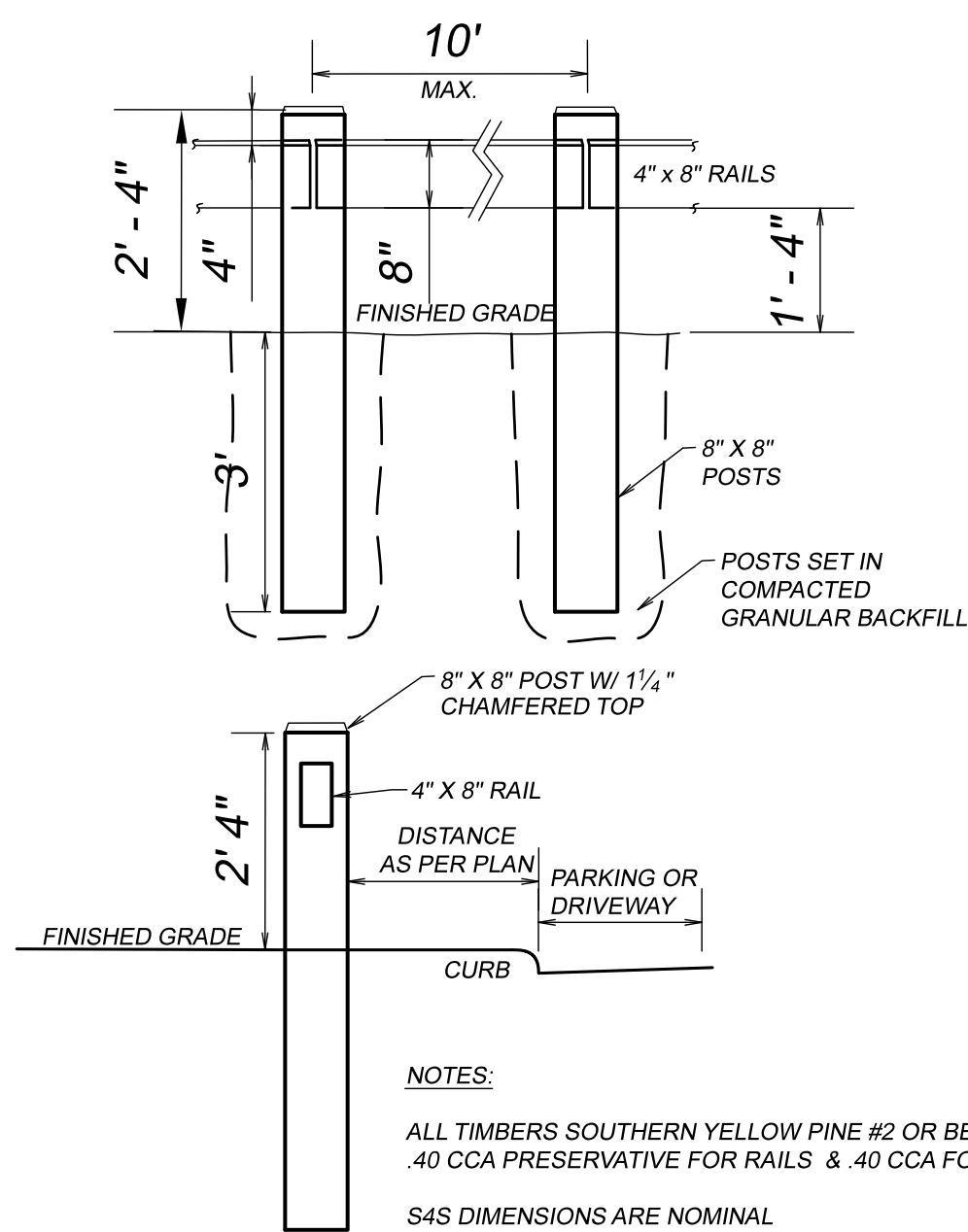
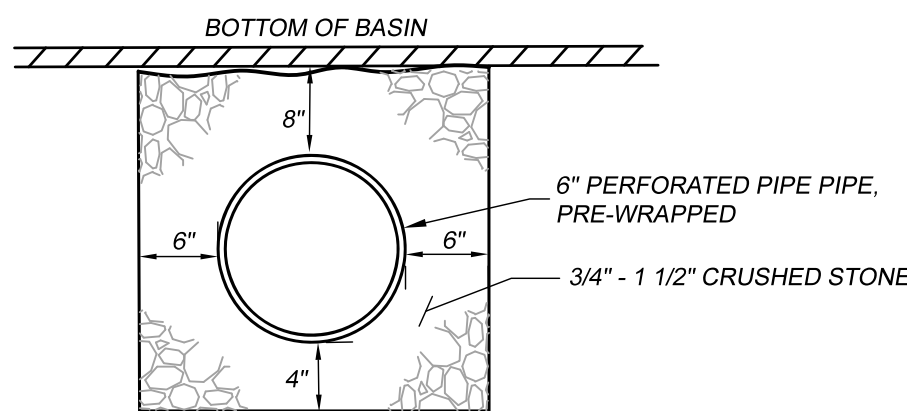
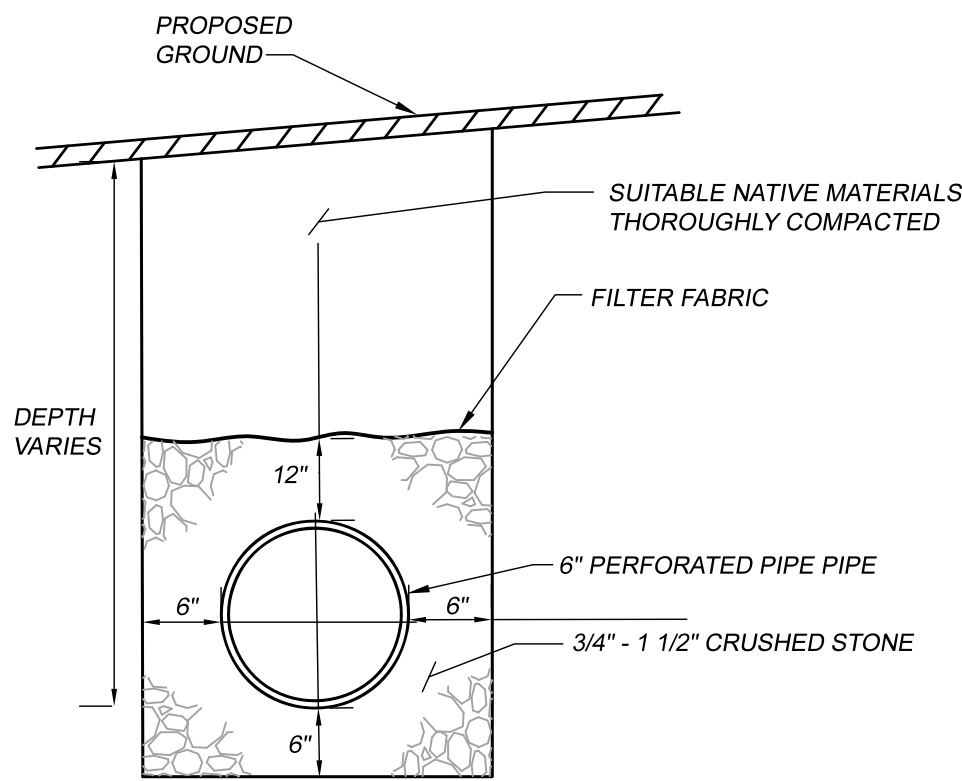
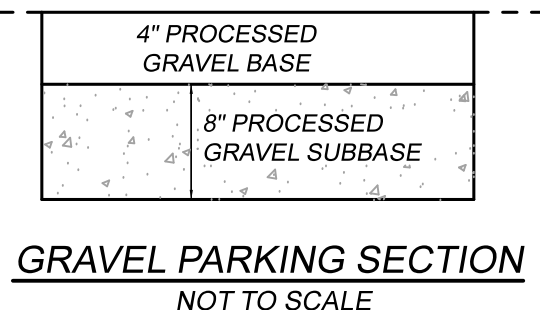
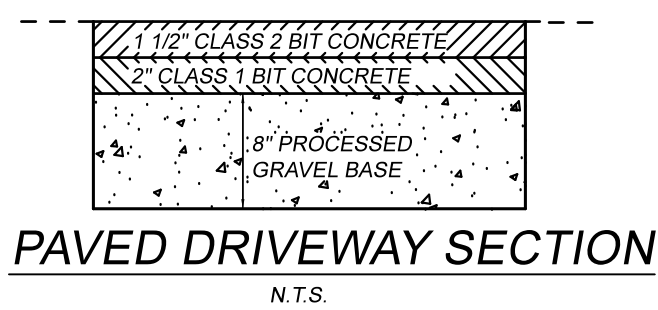
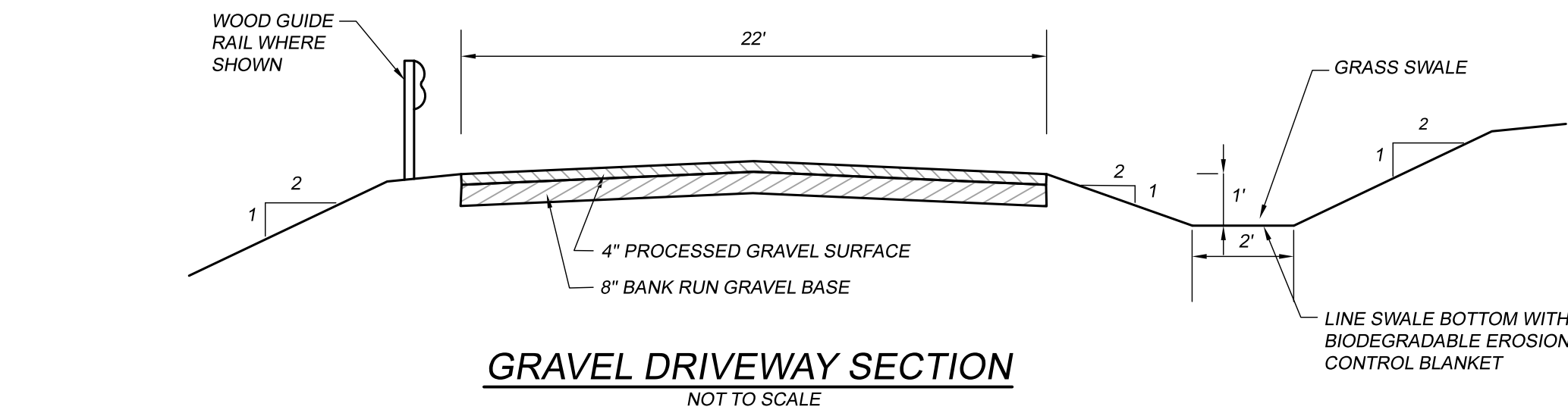
SILT FENCE INSTALLATION
NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE



TYPICAL UTILITY TRENCH DETAIL
NOT TO SCALE



- PARKING NOTES:**
1. THE SITE CURRENTLY CONTAINS PARKING FOR APPROXIMATELY 15 CARS.
 2. THE APPLICANT IS PROPOSING TO CONSTRUCT AN UPPER PARKING LOT FOR AN ADDITIONAL 40 CARS.
 3. GUESTS WILL BE ENCOURAGED TO PARK OFF SITE AT LOCAL HOTELS, AND SHALL BE TRANSPORTED TO THE SITE BY BUS OR SHUTTLE.
 4. TWO ADDITIONAL PARKING SPACES ARE PROPOSED NEAR THE BARN, FOR DELIVERIES AND DROP-OFFS.
 5. TWO HANDICAP ACCESSIBLE SPACES ARE PROPOSED NEAR THE BARN, FOR DISABLED GUESTS.
 6. THE TOTAL NUMBER OF PROPOSED PARKING SPACES IS 59.

- STRUCTURED TURF NOTES:**
1. THE PROPOSED ACCESS DRIVE BELOW THE BARN SHALL BE CONSTRUCTED FOR THE PURPOSE OF DELIVERING A BATHROOM TRAILER TO THE CEREMONY AND TENT AREA.
 2. NO OTHER VEHICLES ARE ANTICIPATED TO USE THIS DRIVEWAY.
 3. THE DRIVEWAY SHALL BE CONSTRUCTED WITH A 50-50 MIXTURE OF PROCESSED GRAVEL AND LOAM, COMPACTED, WITH A MINIMUM THICKNESS OF 12".
 4. THE DRIVEWAY SHALL BE SEEDED AS SOON AS POSSIBLE UPON COMPLETION.

- POND EXCAVATION NOTES:**
1. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO ANY EXCAVATION OR OTHER EARTHWORK.
 2. ALL PROPOSED WORK SHALL BE PERFORMED DURING THE DRY SEASON (JULY - OCTOBER) AND/OR DURING PERIODS OF DRY WEATHER.
 3. DISTURBED AREAS SHALL BE KEPT TO A MINIMUM, AND STABILIZED AS SOON AS POSSIBLE.
 4. THE DEWATERING BAG SHALL BE PLACED IN THE UPLANDS, IN THE OPEN FIELD. FOLLOW ALL MANUFACTURER'S INSTRUCTIONS REGARDING THE DEWATERING BAG, AND REPLACE AS NECESSARY.
 5. NO SATURATED SOILS OR OTHER MATERIALS SHALL BE TRANSPORTED OFF SITE UNTIL FULLY DRAINED.

NOTES AND DETAILS
PREPARED FOR
WILLOW HILL EVENTS
459 WOLF DEN ROAD, BROOKLYN, CT
MAP 15 - LOTS 15 & 15A

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: DDB
CHECKED: DRB

REVISIONS:
2023-11-05 TOWN COMMENTS

JOB NO: 22172
SCALE: 1" = 20'

DATE: SEPTEMBER 29, 2023
SHEET: 5 OF 5

J & D CIVIL ENGINEERS, LLC

401 Ravenelle Road
N. Grosvenordale, CT 06255
www.jdcivilengineers.com
(860) 923-2920

November 8, 2023

Town of Brooklyn
Planning and Zoning Department

RE: Job #22172
Response to Engineer's Review
Special Permit for
459 Wolf Den Road
Brooklyn, CT

To Whom it May Concern:

My office is assisting Nicole Wineland Thomson-Fisher and Greg Fisher with obtaining a Special Permit modification to hold weddings or other similar events at their property in Brooklyn. On November 2, 2023 we received a letter from Syl Pauly at NECCOG, dated November 1, 2023, that provides comments or questions on the application. The following constitutes a response by J&D to those comments and questions. Thank you very much for your detailed and prompt attention. We look forward to working with the Town to get this project approved.

Cover Sheet

1. A north arrow has been added.
2. The previously approved special permit included a proposed 40 car parking lot. The current site plans also propose a 40 car parking lot. The remaining spaces are existing and located within the driveway. The number of existing and proposed spaces is not changing from what was previously approved.

Driveway and Parking Lot

1. A north arrow has been added.
2. Additional wetlands have been delineated and added to the plan.
3. These pockets of wetlands do not connect, at least not within 125' of any construction.
4. Pipes with smooth interiors have been specified on the detail on Sheet 4.
5. A rip rap splash pad has been added to the site plan, and a detail has also been added. Erosion controls have been extended.
6. Dimensions have been added.
7. This issue has been addressed by specifying a larger catch basin.
8. The two storm water basins have been revised to include under drains, to intercept any groundwater that could enter the basins.
9. Erosion controls have been extended.

10. Erosion controls have been added.
11. Erosion controls have been added.
12. Erosion controls have been added.
13. The driveway entrance and associated drainage has already been approved, and is not being modified. Additionally, the hole is not four feet deep, it is just over two feet deep. A 15" diameter pipe with 12" of cover would require a depth of 2.25 feet. In my opinion, it would be better to remove this pipe and have a gentle swale in the paved apron, to mimic what currently exists on the shoulder of the road in this location. However, for the previous approval, I was instructed to specify a 15" pipe in accordance with the town's driveway details. Would the town consider allowing the applicant to specify a smaller pipe, or one with less cover? If we could reduce the cover, that would allow for a shallower hole.
14. The proposed stone walls will be dry, natural stone to match the existing stone walls nearby.
15. Does the commission have authority to waive this requirement? The applicant is hoping the commission will waive this section. In my opinion this additional island should not be required. This parking lot is not visible from the road or other properties, therefore the landscaping requirements are not applicable from visual point of view. And the parking lot is gravel, with minimal traffic, therefore the environmental benefits (shade, pervious area, etc) of this island are not applicable either.
16. Proposed grading for the tent area, to provide a flatter pad for the tent, has been added to the site plans. The "access drive" from the parking lot will be used to load and unload the tent materials. Guests will access the tent area on foot, either from the ceremony location or the barn.
17. Previously reviewed and approved landscaping plans by Verdant Landscaping describe work to be done in this area, including the removal of a stone wall and installation of stone steps and a walking path. These site plans do not propose any changes to this area.
18. All yard boxes have been replaced with type C-L catch basins.
19. A location has been added to the plans.
20. Noted.
21. Erosion controls have been added.
22. The proposed driveway above this catering tent area includes a grass swale to intercept runoff coming from the hillside above. The proposed drainage area towards the tent is approximately 5,000 square feet. Therefore we do not anticipate any significant runoff towards the tent, even during a heavy downpour.
23. The caterer vehicles will be unloaded in the two parking spaces near the handicap spaces.
24. The caterer will be responsible for removing all trash at the conclusion of each event. This was previously approved and is not being modified.
25. Guests will walk over lawn in between the barn/ceremony and tent locations. The applicants want to preserve the natural character of the site as much as possible. It should not be necessary to improve every single walking path.
26. A lamp symbol has been added to the legend.
27. Underground utilities have been added to the plans and legend.

Event Area Plan

1. A north arrow has been added.

2. Updated landscaping plans by Verdant have not been produced for this revision. The intent is to follow the previous landscaping plans exactly, with respect to the wedding location. Any landscaping in the proximity of the revised parking lot and access driveway will be substantially similar to the previously approved landscaping.

Notes and Details

1. This detail has been revised to specify a smooth interior.
2. The neighborhood agreement has already been approved and is not being modified.

Notes and Details

1. The light duty guard rail has been removed and a more robust guard rail has been specified. Due to the lower traffic speeds and volumes, we feel a 4x8 rub rail is more appropriate.
2. The yard box detail has been removed, and replaced with a catch basin detail.
3. A grass swale detail has been added. This detail was put on Sheet 4 due to space limitations on sheet 5.

Drainage Report

1. This BH Trailers designation was a typo and has been removed.
2. The revised site plans have removed the yard boxes with waffle grates and specified standard catch basins. The inlet on these catch basins is more than adequate for 12 inch and 15 inch diameter pipes. The capacity for these inlet grates would not be a limiting factor.
3. The drainage report has been updated to include a concluding statement that our site plans are meeting these standards.

Please do not hesitate to contact me with any further comments or questions. We look forward to discussing this project with the commission at the upcoming Public Hearing.

Sincerely,

Daniel Blanchette, PE
J&D Civil Engineers, LLC

Willow Hill Events Wedding/Event Venue Stormwater Management Report

459 Wolf Den Road
Brooklyn, CT

August 22, 2023

REV November 8, 2023



Prepared by:

**J & D Civil
Engineers, LLC**

401 Ravenelle Road
N. Grosvenordale, CT 06255

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- A. Project Narrative
- B. Existing Site and Hydrologic Soil Group Descriptions
- C. Methodology
- D. Results and Comparison of Existing and Proposed Flows
- E. Conclusion

Appendices

- I. Hydrologic Model
- II. Drainage Area Map

A. Project Narrative

The project consists of a wedding/event venue on a historic agricultural property. A special permit was granted for the project in March 2023. At this time the project's parking lot is being re-located to another portion of the property where it will be less visible in a wooded area and will require less grading. The surfaces of the proposed access driveway and parking lot will consist of pervious gravel.

Several LID features were incorporated into the design of the stormwater system. This included minimizing impervious area and drainage structures. The following LID elements were incorporated into the design of the project:

- Grass swale uphill of driveway
- Grass swale uphill of parking lot
- Upper stormwater basin
- Stormwater basin within parking lot
- Lower stormwater basin

These elements will trap sediment, reduce velocity of flow, promote infiltration, and capture clean runoff and direct it around graveled areas to reduce the chance of erosion.

B. Existing Site and Hydrologic Soil Group Description

The existing land cover includes woodland, pasture or lawn, and a small amount of impervious area associated with the existing buildings. The site is relatively steep, most of the property is between a 10% and 20% slope. The site drains from north to south primarily via sheet flow. Under both existing and proposed conditions, runoff from the site will enter Blackwell Brook located approximately 1000' downhill of site activities.

The soils in the area as Woodbridge fine sandy loam or Paxton/Montauk fine sandy loam. These soils belong to hydrologic group C, and have low permeability and below average capacity to absorb stormwater.

The Natural Resource Conservation Service (NRCS) groups soils into four categories according to their runoff producing characteristics. Hydrologic Soil Group A consists of soils that have a high infiltrative capacity and a low runoff potential even when saturated. Hydrologic Soil Group D soils have a very low infiltration rate and high runoff potential. The soils on the site fall with hydrologic soil group C which is on the lower end of the infiltration spectrum.

C. Methodology

The HydroCAD computer program was utilized for the drainage design of this project. This program models the hydrology and hydraulics of stormwater runoff based largely upon the methods developed by the Soil Conservation Service (now known as the

Natural Resources Conservation Service). Required input data includes the size of the contributing drainage area, curve numbers which are based upon land use and soil types, and times of concentration.

Hydrographs with peak flows determined are calculated for each drainage area based upon the SCS synthetic unit hydrograph method. The rainfall distribution used in the program was the SCS Type III storm recommended for Connecticut. Precipitation amounts were obtained for the location from NOAA.

D. Results and Comparison of Existing and Proposed Flows

Peak Flow Comparison

	Existing	Proposed
10 Year Storm	22.7 CFS	21.9 CFS
25 Year Storm	31.0 CFS	30.2 CFS
100 Year Storm	44.2 CFS	43.4 CFS

E. Conclusion

This drainage system has been designed to provide pollutant reduction, groundwater recharge and runoff volume reduction, and also peak flow control as described in the CT Stormwater Quality Manual and required in the town zoning regulations. Although the model predicts a very slight increase in peak runoff, on the order of 2-3%, this is acceptable due to the large site and significant distance to any other properties.

22172 Wineland - 2023-11-08

Prepared by J&D Civil Engineers LLC

Printed 11/9/2023

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Page 1

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	CT 10-year	Type III 24-hr		Default	24.00	1	5.19	2
2	CT 100-year	Type III 24-hr		Default	24.00	1	8.04	2
3	CT 25-year	Type III 24-hr		Default	24.00	1	6.31	2

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Drainage Model for Willow Hill

Type III 24-hr CT 10-year Rainfall=5.19"

Printed 11/9/2023

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Summary for Subcatchment 1S: Existing

Runoff = 21.93 cfs @ 12.46 hrs, Volume= 2.863 af, Depth= 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr CT 10-year Rainfall=5.19"

Area (ac)	CN	Description
0.090	98	Roofs, HSG C
0.890	96	Gravel surface, HSG C
8.160	74	Pasture/grassland/range, Good, HSG C
4.510	70	Woods, Good, HSG C
13.650	74	Weighted Average
13.560		99.34% Pervious Area
0.090		0.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.3	300	0.0400	0.20		Sheet Flow, Grass: Dense n= 0.240 P2= 3.40"
7.0	800	0.0750	1.92		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
32.3	1,100	Total			

Summary for Subcatchment A: NorthernRunoff = 6.10 cfs @ 12.53 hrs, Volume= 0.861 af, Depth= 2.43"
Routed to Pond 3P : lower basinRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr CT 10-year Rainfall=5.19"

Area (ac)	CN	Description
2.530	74	Pasture/grassland/range, Good, HSG C
1.540	70	Woods, Good, HSG C
0.180	96	Gravel surface, HSG C
4.250	73	Weighted Average
4.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.3	300	0.0200	0.15		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.5	200	0.1000	2.21		Shallow Concentrated Flow, Pasture - Flatter Short Grass Pasture Kv= 7.0 fps
2.8	750	0.0880	4.45		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
37.6	1,250	Total			

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Drainage Model for Willow Hill

Type III 24-hr CT 10-year Rainfall=5.19"

Printed 11/9/2023

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Summary for Subcatchment B: northeast

Runoff = 2.76 cfs @ 12.47 hrs, Volume= 0.364 af, Depth= 2.69"
 Routed to Reach 1R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 10-year Rainfall=5.19"

Area (ac)	CN	Description
1.500	74	Pasture/grassland/range, Good, HSG C
0.120	96	Gravel surface, HSG C
1.620	76	Weighted Average
1.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.7	300	0.0290	0.17		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
2.5	250	0.0560	1.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.9	240	0.0200	2.12		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.1	790	Total			

Summary for Subcatchment C: above lot

Runoff = 1.78 cfs @ 12.20 hrs, Volume= 0.166 af, Depth= 2.52"
 Routed to Reach 3R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 10-year Rainfall=5.19"

Area (sf)	CN	Description
8,712	74	Pasture/grassland/range, Good, HSG C
21,344	70	Woods, Good, HSG C
4,356	96	Gravel surface, HSG C
34,412	74	Weighted Average
34,412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	180	0.0800	0.24		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.7	210	0.0190	2.07		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
14.4	390	Total			

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Type III 24-hr CT 10-year Rainfall=5.19"

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Summary for Subcatchment D: upper lot

Runoff = 1.03 cfs @ 12.07 hrs, Volume= 0.072 af, Depth= 3.75"
 Routed to Pond 1P : mid lot basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 10-year Rainfall=5.19"

Area (ac)	CN	Description
0.090	74	Pasture/grassland/range, Good, HSG C
0.140	96	Gravel surface, HSG C
0.230	87	Weighted Average
0.230		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment E: Southern

Runoff = 13.71 cfs @ 12.32 hrs, Volume= 1.517 af, Depth= 2.69"
 Routed to Reach 5R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 10-year Rainfall=5.19"

Area (ac)	CN	Description
4.660	74	Pasture/grassland/range, Good, HSG C
1.250	70	Woods, Good, HSG C
0.760	96	Gravel surface, HSG C
0.090	98	Roofs, HSG C
6.760	76	Weighted Average
6.670		98.67% Pervious Area
0.090		1.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.6	300	0.0670	0.24		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.8	200	0.0700	1.85		Shallow Concentrated Flow, Pasture - Flatter Short Grass Pasture Kv= 7.0 fps
22.4	500	Total			

Summary for Reach 1R:

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 2.69" for CT 10-year event
 Inflow = 2.76 cfs @ 12.47 hrs, Volume= 0.364 af
 Outflow = 2.76 cfs @ 12.47 hrs, Volume= 0.364 af, Atten= 0%, Lag= 0.1 min
 Routed to Reach 2R : (new Reach)

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Type III 24-hr CT 10-year Rainfall=5.19"

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Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 12.94 fps, Min. Travel Time= 0.2 min

Avg. Velocity = 5.35 fps, Avg. Travel Time= 0.4 min

Peak Storage= 26 cf @ 12.47 hrs

Average Depth at Peak Storage= 0.32' , Surface Width= 0.93'

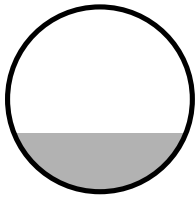
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 12.72 cfs

12.0" Round Pipe

n= 0.013 Corrugated PE, smooth interior

Length= 124.0' Slope= 0.1274 '/'

Inlet Invert= 450.30', Outlet Invert= 434.50'



Summary for Reach 2R: (new Reach)

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 2.69" for CT 10-year event

Inflow = 2.76 cfs @ 12.47 hrs, Volume= 0.364 af

Outflow = 2.76 cfs @ 12.47 hrs, Volume= 0.364 af, Atten= 0%, Lag= 0.1 min

Routed to Pond B1 : Upper Basin

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 15.18 fps, Min. Travel Time= 0.1 min

Avg. Velocity = 6.27 fps, Avg. Travel Time= 0.2 min

Peak Storage= 17 cf @ 12.47 hrs

Average Depth at Peak Storage= 0.28' , Surface Width= 0.90'

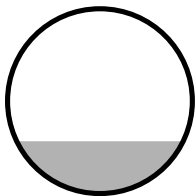
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 15.89 cfs

12.0" Round Pipe

n= 0.013 Corrugated PE, smooth interior

Length= 93.0' Slope= 0.1989 '/'

Inlet Invert= 434.50', Outlet Invert= 416.00'



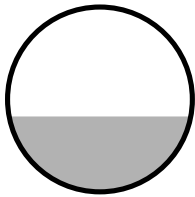
Summary for Reach 3R: (new Reach)

Inflow Area = 0.790 ac, 0.00% Impervious, Inflow Depth = 2.52" for CT 10-year event
Inflow = 1.78 cfs @ 12.20 hrs, Volume= 0.166 af
Outflow = 1.78 cfs @ 12.21 hrs, Volume= 0.166 af, Atten= 0%, Lag= 0.1 min
Routed to Reach 4R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.95 fps, Min. Travel Time= 0.2 min
Avg. Velocity= 2.32 fps, Avg. Travel Time= 0.5 min

Peak Storage= 22 cf @ 12.21 hrs
Average Depth at Peak Storage= 0.41' , Surface Width= 0.98'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 5.14 cfs

12.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 72.0' Slope= 0.0208 '/
Inlet Invert= 400.00', Outlet Invert= 398.50'

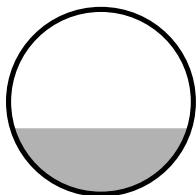
**Summary for Reach 4R: (new Reach)**

Inflow Area = 1.020 ac, 0.00% Impervious, Inflow Depth = 2.40" for CT 10-year event
Inflow = 2.14 cfs @ 12.23 hrs, Volume= 0.204 af
Outflow = 2.14 cfs @ 12.24 hrs, Volume= 0.204 af, Atten= 0%, Lag= 0.2 min
Routed to Pond 3P : lower basin

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.48 fps, Min. Travel Time= 0.3 min
Avg. Velocity= 2.15 fps, Avg. Travel Time= 0.8 min

Peak Storage= 39 cf @ 12.24 hrs
Average Depth at Peak Storage= 0.44' , Surface Width= 1.20'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 7.91 cfs

15.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 100.0' Slope= 0.0150 '/
Inlet Invert= 398.50', Outlet Invert= 397.00'



Summary for Reach 5R: (new Reach)

Inflow Area = 13.650 ac, 0.66% Impervious, Inflow Depth = 2.52" for CT 10-year event
 Inflow = 22.66 cfs @ 12.36 hrs, Volume= 2.868 af
 Outflow = 22.66 cfs @ 12.36 hrs, Volume= 2.868 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Pond 1P: mid lot basin

Inflow Area = 0.230 ac, 0.00% Impervious, Inflow Depth = 3.75" for CT 10-year event
 Inflow = 1.03 cfs @ 12.07 hrs, Volume= 0.072 af
 Outflow = 0.43 cfs @ 12.27 hrs, Volume= 0.039 af, Atten= 59%, Lag= 11.6 min
 Primary = 0.43 cfs @ 12.27 hrs, Volume= 0.039 af
 Routed to Reach 4R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 401.86' @ 12.27 hrs Surf.Area= 1,227 sf Storage= 1,513 cf

Plug-Flow detention time= 212.4 min calculated for 0.039 af (54% of inflow)
 Center-of-Mass det. time= 103.6 min (902.5 - 798.9)

Volume	Invert	Avail.Storage	Storage Description
#1	400.00'	2,610 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
400.00	400	0	0
402.00	1,290	1,690	1,690
402.50	2,390	920	2,610

Device	Routing	Invert	Outlet Devices
#1	Primary	401.80'	21.0" x 32.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.42 cfs @ 12.27 hrs HW=401.86' (Free Discharge)
 ↑1=Orifice/Grate (Weir Controls 0.42 cfs @ 0.80 fps)

Summary for Pond 3P: lower basin

Inflow Area = 5.270 ac, 0.00% Impervious, Inflow Depth = 2.43" for CT 10-year event
 Inflow = 7.26 cfs @ 12.49 hrs, Volume= 1.065 af
 Outflow = 7.25 cfs @ 12.49 hrs, Volume= 1.008 af, Atten= 0%, Lag= 0.3 min
 Primary = 7.25 cfs @ 12.49 hrs, Volume= 1.008 af
 Routed to Reach 5R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 398.14' @ 12.49 hrs Surf.Area= 2,144 sf Storage= 2,734 cf

Plug-Flow detention time= 40.3 min calculated for 1.008 af (95% of inflow)
 Center-of-Mass det. time= 11.6 min (876.8 - 865.1)

Volume	Invert	Avail.Storage	Storage Description
#1	396.00'	5,816 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
396.00	781	0	0
398.00	1,690	2,471	2,471
399.00	5,000	3,345	5,816

Device	Routing	Invert	Outlet Devices
#1	Primary	398.00'	60.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=7.22 cfs @ 12.49 hrs HW=398.14' (Free Discharge)
 1=Broad-Crested Rectangular Weir (Weir Controls 7.22 cfs @ 0.88 fps)

Summary for Pond B1: Upper Basin

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 2.69" for CT 10-year event
 Inflow = 2.76 cfs @ 12.47 hrs, Volume= 0.364 af
 Outflow = 2.76 cfs @ 12.48 hrs, Volume= 0.343 af, Atten= 0%, Lag= 0.3 min
 Primary = 2.76 cfs @ 12.48 hrs, Volume= 0.343 af
 Routed to Reach 5R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 424.07' @ 12.48 hrs Surf.Area= 990 sf Storage= 981 cf

Plug-Flow detention time= 43.7 min calculated for 0.342 af (94% of inflow)
 Center-of-Mass det. time= 12.7 min (868.8 - 856.1)

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Type III 24-hr CT 10-year Rainfall=5.19"


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Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	1,621 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	96	0	0
424.00	820	916	916
424.50	2,000	705	1,621

Device	Routing	Invert	Outlet Devices
#1	Primary	424.00'	60.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=2.75 cfs @ 12.48 hrs HW=424.07' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 2.75 cfs @ 0.64 fps)

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Drainage Model for Willow Hill

Type III 24-hr CT 100-year Rainfall=8.04"

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Summary for Subcatchment 1S: Existing

Runoff = 43.41 cfs @ 12.45 hrs, Volume= 5.644 af, Depth= 4.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr CT 100-year Rainfall=8.04"

Area (ac)	CN	Description
0.090	98	Roofs, HSG C
0.890	96	Gravel surface, HSG C
8.160	74	Pasture/grassland/range, Good, HSG C
4.510	70	Woods, Good, HSG C
13.650	74	Weighted Average
13.560		99.34% Pervious Area
0.090		0.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.3	300	0.0400	0.20		Sheet Flow, Grass: Dense n= 0.240 P2= 3.40"
7.0	800	0.0750	1.92		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
32.3	1,100	Total			

Summary for Subcatchment A: NorthernRunoff = 12.25 cfs @ 12.50 hrs, Volume= 1.716 af, Depth= 4.85"
Routed to Pond 3P : lower basinRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr CT 100-year Rainfall=8.04"

Area (ac)	CN	Description
2.530	74	Pasture/grassland/range, Good, HSG C
1.540	70	Woods, Good, HSG C
0.180	96	Gravel surface, HSG C
4.250	73	Weighted Average
4.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.3	300	0.0200	0.15		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.5	200	0.1000	2.21		Shallow Concentrated Flow, Pasture - Flatter Short Grass Pasture Kv= 7.0 fps
2.8	750	0.0880	4.45		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
37.6	1,250	Total			

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Type III 24-hr CT 100-year Rainfall=8.04"

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Summary for Subcatchment B: northeast

Runoff = 5.31 cfs @ 12.46 hrs, Volume= 0.701 af, Depth= 5.19"
 Routed to Reach 1R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 100-year Rainfall=8.04"

Area (ac)	CN	Description
1.500	74	Pasture/grassland/range, Good, HSG C
0.120	96	Gravel surface, HSG C
1.620	76	Weighted Average
1.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.7	300	0.0290	0.17		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
2.5	250	0.0560	1.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.9	240	0.0200	2.12		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.1	790	Total			

Summary for Subcatchment C: above lot

Runoff = 3.53 cfs @ 12.20 hrs, Volume= 0.327 af, Depth= 4.96"
 Routed to Reach 3R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 100-year Rainfall=8.04"

Area (sf)	CN	Description
8,712	74	Pasture/grassland/range, Good, HSG C
21,344	70	Woods, Good, HSG C
4,356	96	Gravel surface, HSG C
34,412	74	Weighted Average
34,412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	180	0.0800	0.24		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.7	210	0.0190	2.07		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
14.4	390	Total			

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Type III 24-hr CT 100-year Rainfall=8.04"

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Summary for Subcatchment D: upper lot

Runoff = 1.73 cfs @ 12.07 hrs, Volume= 0.124 af, Depth= 6.49"
 Routed to Pond 1P : mid lot basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 100-year Rainfall=8.04"

Area (ac)	CN	Description
0.090	74	Pasture/grassland/range, Good, HSG C
0.140	96	Gravel surface, HSG C
0.230	87	Weighted Average
0.230		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment E: Southern

Runoff = 26.36 cfs @ 12.31 hrs, Volume= 2.926 af, Depth= 5.19"
 Routed to Reach 5R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 100-year Rainfall=8.04"

Area (ac)	CN	Description
4.660	74	Pasture/grassland/range, Good, HSG C
1.250	70	Woods, Good, HSG C
0.760	96	Gravel surface, HSG C
0.090	98	Roofs, HSG C
6.760	76	Weighted Average
6.670		98.67% Pervious Area
0.090		1.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.6	300	0.0670	0.24		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.8	200	0.0700	1.85		Shallow Concentrated Flow, Pasture - Flatter Short Grass Pasture Kv= 7.0 fps
22.4	500	Total			

Summary for Reach 1R:

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 5.19" for CT 100-year event
 Inflow = 5.31 cfs @ 12.46 hrs, Volume= 0.701 af
 Outflow = 5.32 cfs @ 12.47 hrs, Volume= 0.701 af, Atten= 0%, Lag= 0.1 min
 Routed to Reach 2R : (new Reach)

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Type III 24-hr CT 100-year Rainfall=8.04"

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Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 15.47 fps, Min. Travel Time= 0.1 min

Avg. Velocity = 6.19 fps, Avg. Travel Time= 0.3 min

Peak Storage= 43 cf @ 12.47 hrs

Average Depth at Peak Storage= 0.45' , Surface Width= 1.00'

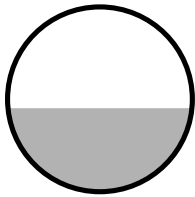
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 12.72 cfs

12.0" Round Pipe

n= 0.013 Corrugated PE, smooth interior

Length= 124.0' Slope= 0.1274 '/'

Inlet Invert= 450.30', Outlet Invert= 434.50'



Summary for Reach 2R: (new Reach)

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 5.19" for CT 100-year event

Inflow = 5.32 cfs @ 12.47 hrs, Volume= 0.701 af

Outflow = 5.32 cfs @ 12.47 hrs, Volume= 0.701 af, Atten= 0%, Lag= 0.0 min

Routed to Pond B1 : Upper Basin

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 18.22 fps, Min. Travel Time= 0.1 min

Avg. Velocity = 7.25 fps, Avg. Travel Time= 0.2 min

Peak Storage= 27 cf @ 12.47 hrs

Average Depth at Peak Storage= 0.40' , Surface Width= 0.98'

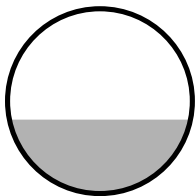
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 15.89 cfs

12.0" Round Pipe

n= 0.013 Corrugated PE, smooth interior

Length= 93.0' Slope= 0.1989 '/'

Inlet Invert= 434.50', Outlet Invert= 416.00'



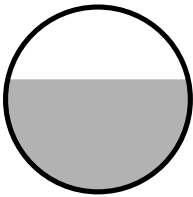
Summary for Reach 3R: (new Reach)

Inflow Area = 0.790 ac, 0.00% Impervious, Inflow Depth = 4.96" for CT 100-year event
Inflow = 3.53 cfs @ 12.20 hrs, Volume= 0.327 af
Outflow = 3.53 cfs @ 12.20 hrs, Volume= 0.327 af, Atten= 0%, Lag= 0.1 min
Routed to Reach 4R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 7.05 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 2.70 fps, Avg. Travel Time= 0.4 min

Peak Storage= 36 cf @ 12.20 hrs
Average Depth at Peak Storage= 0.61' , Surface Width= 0.98'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 5.14 cfs

12.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 72.0' Slope= 0.0208 '/
Inlet Invert= 400.00', Outlet Invert= 398.50'

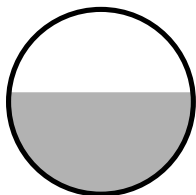
**Summary for Reach 4R: (new Reach)**

Inflow Area = 1.020 ac, 0.00% Impervious, Inflow Depth = 4.92" for CT 100-year event
Inflow = 4.65 cfs @ 12.15 hrs, Volume= 0.418 af
Outflow = 4.65 cfs @ 12.16 hrs, Volume= 0.418 af, Atten= 0%, Lag= 0.3 min
Routed to Pond 3P : lower basin

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 6.70 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 2.49 fps, Avg. Travel Time= 0.7 min

Peak Storage= 69 cf @ 12.16 hrs
Average Depth at Peak Storage= 0.69' , Surface Width= 1.24'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 7.91 cfs

15.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 100.0' Slope= 0.0150 '/
Inlet Invert= 398.50', Outlet Invert= 397.00'



Summary for Reach 5R: (new Reach)

Inflow Area = 13.650 ac, 0.66% Impervious, Inflow Depth = 5.00" for CT 100-year event
 Inflow = 44.22 cfs @ 12.34 hrs, Volume= 5.684 af
 Outflow = 44.22 cfs @ 12.34 hrs, Volume= 5.684 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Pond 1P: mid lot basin

Inflow Area = 0.230 ac, 0.00% Impervious, Inflow Depth = 6.49" for CT 100-year event
 Inflow = 1.73 cfs @ 12.07 hrs, Volume= 0.124 af
 Outflow = 1.67 cfs @ 12.09 hrs, Volume= 0.091 af, Atten= 4%, Lag= 1.3 min
 Primary = 1.67 cfs @ 12.09 hrs, Volume= 0.091 af
 Routed to Reach 4R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 401.95' @ 12.09 hrs Surf.Area= 1,267 sf Storage= 1,625 cf

Plug-Flow detention time= 148.6 min calculated for 0.091 af (73% of inflow)
 Center-of-Mass det. time= 61.7 min (845.6 - 783.9)

Volume	Invert	Avail.Storage	Storage Description
#1	400.00'	2,610 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
400.00	400	0	0
402.00	1,290	1,690	1,690
402.50	2,390	920	2,610

Device	Routing	Invert	Outlet Devices
#1	Primary	401.80'	21.0" x 32.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.66 cfs @ 12.09 hrs HW=401.95' (Free Discharge)
 ↑1=Orifice/Grate (Weir Controls 1.66 cfs @ 1.26 fps)

Summary for Pond 3P: lower basin

Inflow Area = 5.270 ac, 0.00% Impervious, Inflow Depth = 4.86" for CT 100-year event
 Inflow = 14.41 cfs @ 12.48 hrs, Volume= 2.134 af
 Outflow = 14.40 cfs @ 12.48 hrs, Volume= 2.077 af, Atten= 0%, Lag= 0.4 min
 Primary = 14.40 cfs @ 12.48 hrs, Volume= 2.077 af
 Routed to Reach 5R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 398.22' @ 12.48 hrs Surf.Area= 2,406 sf Storage= 2,914 cf

Plug-Flow detention time= 23.5 min calculated for 2.077 af (97% of inflow)
 Center-of-Mass det. time= 8.0 min (852.0 - 844.0)

Volume	Invert	Avail.Storage	Storage Description
#1	396.00'	5,816 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
396.00	781	0	0
398.00	1,690	2,471	2,471
399.00	5,000	3,345	5,816

Device	Routing	Invert	Outlet Devices
#1	Primary	398.00'	60.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=14.39 cfs @ 12.48 hrs HW=398.22' (Free Discharge)

↑1=**Broad-Crested Rectangular Weir** (Weir Controls 14.39 cfs @ 1.11 fps)

Summary for Pond B1: Upper Basin

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 5.19" for CT 100-year event
 Inflow = 5.32 cfs @ 12.47 hrs, Volume= 0.701 af
 Outflow = 5.31 cfs @ 12.47 hrs, Volume= 0.680 af, Atten= 0%, Lag= 0.1 min
 Primary = 5.31 cfs @ 12.47 hrs, Volume= 0.680 af
 Routed to Reach 5R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 424.11' @ 12.47 hrs Surf.Area= 1,083 sf Storage= 1,022 cf

Plug-Flow detention time= 26.6 min calculated for 0.680 af (97% of inflow)
 Center-of-Mass det. time= 9.1 min (846.3 - 837.3)

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Drainage Model for Willow Hill

Type III 24-hr CT 100-year Rainfall=8.04"

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Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	1,621 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	96	0	0
424.00	820	916	916
424.50	2,000	705	1,621

Device	Routing	Invert	Outlet Devices
#1	Primary	424.00'	60.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=5.29 cfs @ 12.47 hrs HW=424.11' (Free Discharge)↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 5.29 cfs @ 0.79 fps)

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Drainage Model for Willow Hill

Type III 24-hr CT 25-year Rainfall=6.31"

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Summary for Subcatchment 1S: Existing

Runoff = 30.20 cfs @ 12.45 hrs, Volume= 3.921 af, Depth= 3.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr CT 25-year Rainfall=6.31"

Area (ac)	CN	Description
0.090	98	Roofs, HSG C
0.890	96	Gravel surface, HSG C
8.160	74	Pasture/grassland/range, Good, HSG C
4.510	70	Woods, Good, HSG C
13.650	74	Weighted Average
13.560		99.34% Pervious Area
0.090		0.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.3	300	0.0400	0.20		Sheet Flow, Grass: Dense n= 0.240 P2= 3.40"
7.0	800	0.0750	1.92		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
32.3	1,100	Total			

Summary for Subcatchment A: NorthernRunoff = 8.46 cfs @ 12.53 hrs, Volume= 1.186 af, Depth= 3.35"
Routed to Pond 3P : lower basinRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr CT 25-year Rainfall=6.31"

Area (ac)	CN	Description
2.530	74	Pasture/grassland/range, Good, HSG C
1.540	70	Woods, Good, HSG C
0.180	96	Gravel surface, HSG C
4.250	73	Weighted Average
4.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.3	300	0.0200	0.15		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.5	200	0.1000	2.21		Shallow Concentrated Flow, Pasture - Flatter Short Grass Pasture Kv= 7.0 fps
2.8	750	0.0880	4.45		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
37.6	1,250	Total			

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Drainage Model for Willow Hill

Type III 24-hr CT 25-year Rainfall=6.31"

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Summary for Subcatchment B: northeast

Runoff = 3.75 cfs @ 12.47 hrs, Volume= 0.493 af, Depth= 3.65"
 Routed to Reach 1R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 25-year Rainfall=6.31"

Area (ac)	CN	Description
1.500	74	Pasture/grassland/range, Good, HSG C
0.120	96	Gravel surface, HSG C
1.620	76	Weighted Average
1.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.7	300	0.0290	0.17		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
2.5	250	0.0560	1.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.9	240	0.0200	2.12		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.1	790	Total			

Summary for Subcatchment C: above lot

Runoff = 2.45 cfs @ 12.20 hrs, Volume= 0.227 af, Depth= 3.45"
 Routed to Reach 3R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 25-year Rainfall=6.31"

Area (sf)	CN	Description
8,712	74	Pasture/grassland/range, Good, HSG C
21,344	70	Woods, Good, HSG C
4,356	96	Gravel surface, HSG C
34,412	74	Weighted Average
34,412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	180	0.0800	0.24		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.7	210	0.0190	2.07		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
14.4	390	Total			

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Drainage Model for Willow Hill

Type III 24-hr CT 25-year Rainfall=6.31"

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Summary for Subcatchment D: upper lot

Runoff = 1.30 cfs @ 12.07 hrs, Volume= 0.092 af, Depth= 4.81"
 Routed to Pond 1P : mid lot basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 25-year Rainfall=6.31"

Area (ac)	CN	Description
0.090	74	Pasture/grassland/range, Good, HSG C
0.140	96	Gravel surface, HSG C
0.230	87	Weighted Average
0.230		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment E: Southern

Runoff = 18.61 cfs @ 12.32 hrs, Volume= 2.056 af, Depth= 3.65"
 Routed to Reach 5R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr CT 25-year Rainfall=6.31"

Area (ac)	CN	Description
4.660	74	Pasture/grassland/range, Good, HSG C
1.250	70	Woods, Good, HSG C
0.760	96	Gravel surface, HSG C
0.090	98	Roofs, HSG C
6.760	76	Weighted Average
6.670		98.67% Pervious Area
0.090		1.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.6	300	0.0670	0.24		Sheet Flow, lawn Grass: Dense n= 0.240 P2= 3.40"
1.8	200	0.0700	1.85		Shallow Concentrated Flow, Pasture - Flatter Short Grass Pasture Kv= 7.0 fps
22.4	500	Total			

Summary for Reach 1R:

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 3.65" for CT 25-year event
 Inflow = 3.75 cfs @ 12.47 hrs, Volume= 0.493 af
 Outflow = 3.75 cfs @ 12.47 hrs, Volume= 0.493 af, Atten= 0%, Lag= 0.1 min
 Routed to Reach 2R : (new Reach)

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Type III 24-hr CT 25-year Rainfall=6.31"

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Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 14.09 fps, Min. Travel Time= 0.1 min

Avg. Velocity = 5.72 fps, Avg. Travel Time= 0.4 min

Peak Storage= 33 cf @ 12.47 hrs

Average Depth at Peak Storage= 0.37' , Surface Width= 0.97'

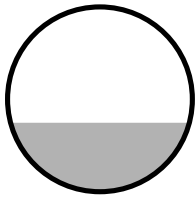
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 12.72 cfs

12.0" Round Pipe

n= 0.013 Corrugated PE, smooth interior

Length= 124.0' Slope= 0.1274 '/'

Inlet Invert= 450.30', Outlet Invert= 434.50'



Summary for Reach 2R: (new Reach)

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 3.65" for CT 25-year event

Inflow = 3.75 cfs @ 12.47 hrs, Volume= 0.493 af

Outflow = 3.75 cfs @ 12.47 hrs, Volume= 0.493 af, Atten= 0%, Lag= 0.1 min

Routed to Pond B1 : Upper Basin

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 16.55 fps, Min. Travel Time= 0.1 min

Avg. Velocity = 6.70 fps, Avg. Travel Time= 0.2 min

Peak Storage= 21 cf @ 12.47 hrs

Average Depth at Peak Storage= 0.33' , Surface Width= 0.94'

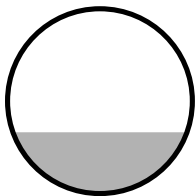
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 15.89 cfs

12.0" Round Pipe

n= 0.013 Corrugated PE, smooth interior

Length= 93.0' Slope= 0.1989 '/'

Inlet Invert= 434.50', Outlet Invert= 416.00'



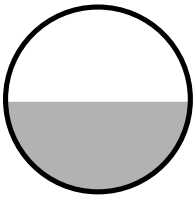
Summary for Reach 3R: (new Reach)

Inflow Area = 0.790 ac, 0.00% Impervious, Inflow Depth = 3.45" for CT 25-year event
Inflow = 2.45 cfs @ 12.20 hrs, Volume= 0.227 af
Outflow = 2.45 cfs @ 12.20 hrs, Volume= 0.227 af, Atten= 0%, Lag= 0.1 min
Routed to Reach 4R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 6.47 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 2.49 fps, Avg. Travel Time= 0.5 min

Peak Storage= 27 cf @ 12.20 hrs
Average Depth at Peak Storage= 0.49' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 5.14 cfs

12.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 72.0' Slope= 0.0208 '/
Inlet Invert= 400.00', Outlet Invert= 398.50'

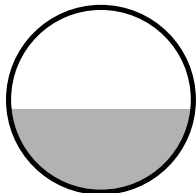
**Summary for Reach 4R: (new Reach)**

Inflow Area = 1.020 ac, 0.00% Impervious, Inflow Depth = 3.37" for CT 25-year event
Inflow = 3.29 cfs @ 12.16 hrs, Volume= 0.286 af
Outflow = 3.29 cfs @ 12.17 hrs, Volume= 0.286 af, Atten= 0%, Lag= 0.2 min
Routed to Pond 3P : lower basin

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 6.15 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 2.30 fps, Avg. Travel Time= 0.7 min

Peak Storage= 53 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.56' , Surface Width= 1.24'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 7.91 cfs

15.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 100.0' Slope= 0.0150 '/
Inlet Invert= 398.50', Outlet Invert= 397.00'



Summary for Reach 5R: (new Reach)

Inflow Area = 13.650 ac, 0.66% Impervious, Inflow Depth = 3.47" for CT 25-year event
 Inflow = 30.97 cfs @ 12.35 hrs, Volume= 3.942 af
 Outflow = 30.97 cfs @ 12.35 hrs, Volume= 3.942 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Pond 1P: mid lot basin

Inflow Area = 0.230 ac, 0.00% Impervious, Inflow Depth = 4.81" for CT 25-year event
 Inflow = 1.30 cfs @ 12.07 hrs, Volume= 0.092 af
 Outflow = 1.10 cfs @ 12.12 hrs, Volume= 0.059 af, Atten= 16%, Lag= 2.9 min
 Primary = 1.10 cfs @ 12.12 hrs, Volume= 0.059 af
 Routed to Reach 4R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 401.91' @ 12.12 hrs Surf.Area= 1,251 sf Storage= 1,579 cf

Plug-Flow detention time= 176.5 min calculated for 0.059 af (64% of inflow)
 Center-of-Mass det. time= 77.4 min (869.4 - 792.0)

Volume	Invert	Avail.Storage	Storage Description
#1	400.00'	2,610 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
400.00	400	0	0
402.00	1,290	1,690	1,690
402.50	2,390	920	2,610

Device	Routing	Invert	Outlet Devices
#1	Primary	401.80'	21.0" x 32.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.09 cfs @ 12.12 hrs HW=401.91' (Free Discharge)
 ↑1=Orifice/Grate (Weir Controls 1.09 cfs @ 1.10 fps)

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Drainage Model for Willow Hill

Type III 24-hr CT 25-year Rainfall=6.31"

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Summary for Pond 3P: lower basin

Inflow Area = 5.270 ac, 0.00% Impervious, Inflow Depth = 3.35" for CT 25-year event
 Inflow = 10.00 cfs @ 12.49 hrs, Volume= 1.472 af
 Outflow = 10.00 cfs @ 12.49 hrs, Volume= 1.415 af, Atten= 0%, Lag= 0.2 min
 Primary = 10.00 cfs @ 12.49 hrs, Volume= 1.415 af
 Routed to Reach 5R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 398.17' @ 12.49 hrs Surf.Area= 2,253 sf Storage= 2,806 cf

Plug-Flow detention time= 31.3 min calculated for 1.415 af (96% of inflow)
 Center-of-Mass det. time= 9.7 min (864.8 - 855.1)

Volume	Invert	Avail.Storage	Storage Description
#1	396.00'	5,816 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
396.00	781	0	0
398.00	1,690	2,471	2,471
399.00	5,000	3,345	5,816

Device	Routing	Invert	Outlet Devices
#1	Primary	398.00'	60.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=9.97 cfs @ 12.49 hrs HW=398.17' (Free Discharge)
 ↑1=**Broad-Crested Rectangular Weir** (Weir Controls 9.97 cfs @ 0.98 fps)

Summary for Pond B1: Upper Basin

Inflow Area = 1.620 ac, 0.00% Impervious, Inflow Depth = 3.65" for CT 25-year event
 Inflow = 3.75 cfs @ 12.47 hrs, Volume= 0.493 af
 Outflow = 3.75 cfs @ 12.47 hrs, Volume= 0.472 af, Atten= 0%, Lag= 0.2 min
 Primary = 3.75 cfs @ 12.47 hrs, Volume= 0.472 af
 Routed to Reach 5R : (new Reach)

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 424.09' @ 12.47 hrs Surf.Area= 1,028 sf Storage= 997 cf

Plug-Flow detention time= 34.7 min calculated for 0.472 af (96% of inflow)
 Center-of-Mass det. time= 10.9 min (858.2 - 847.4)

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Drainage Model for Willow Hill

Type III 24-hr CT 25-year Rainfall=6.31"

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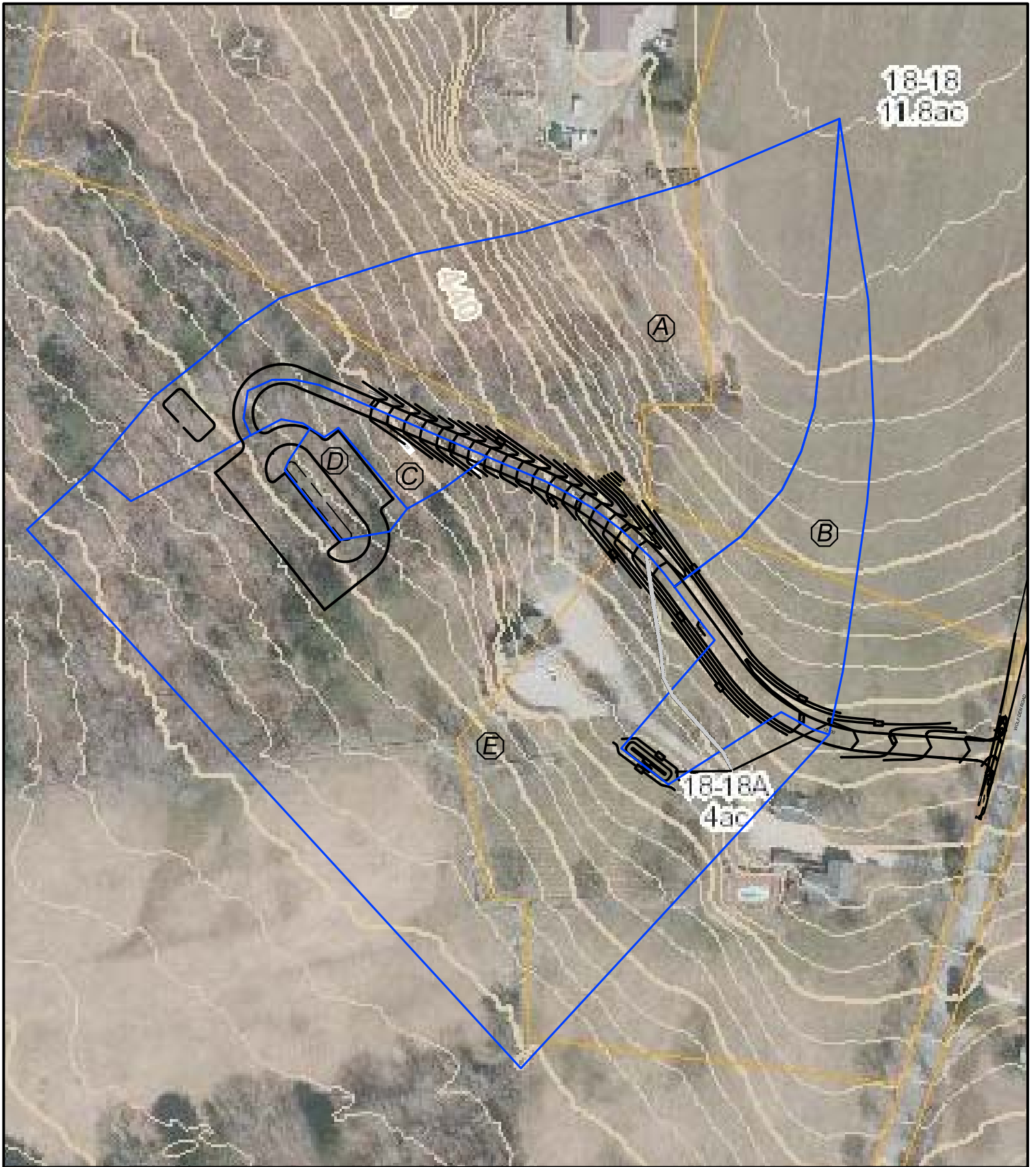
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Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	1,621 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	96	0	0
424.00	820	916	916
424.50	2,000	705	1,621

Device	Routing	Invert	Outlet Devices
#1	Primary	424.00'	60.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=3.72 cfs @ 12.47 hrs HW=424.09' (Free Discharge)↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 3.72 cfs @ 0.70 fps)



DRAINAGE AREA MAP
SCALE 1" = 150'

NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

ENGINEERING PLAN AND DRAINAGE REPORT REVIEW PERTAINING TO PROPOSED WILLOW HILL EVENTS WEDDING/EVENT VENUE (ASSESSOR'S MAP 19, BLOCK 18 - LOTS 18A & 18B) WOLF DEN ROAD BROOKLYN, CT (November 1, 2023)

The comments contained herein pertain to my review of a five (5) sheet set of plans entitled "Site Plan Modification for Special Permit #22-007 Application for Wedding/Event Venue for Willow Hill LLC, 459 Wolf Den Road, Brooklyn, Connecticut, Dated: September 29, 2023. Comments contained herein are applicable to the Brooklyn Planning and Zoning Commission and Inland Wetland and Watercourses Commission applications.

Cover Sheet – Sheet 1 of 5

1. A "north arrow" needs to be included in the "Location Plan."
2. The "Parking Spaces" in the zoning information block state that there are 59 proposed spaces. However, counting spaces on Sheet 2 of 5 reveals that there are only 44 proposed spaces, two (2) of which are ADA compliant. The missing 15 spaces need to be drawn on the plan, and if existing they should be noted as such.

Access Driveway and Parking Lot Plan - Sheet 2 of 5 (Improperly labeled 2 of 6)

1. A "north arrow" needs to be added to the plan.
2. Wetland flags are missing between lines A, B and D and need to be added to the plan in order to accurately assess the limit of the 125' Upland Review Area. Furthermore, wetland delineation needs to be identified below the "primary tent location" to the extent of the contour lines at the bottom of the plan. However, the way the wetland limits are shown on the plan, they are most likely connected and it is unacceptable not to show them that way. Additional flagging is required and noted on the plans and the soil scientists report revised accordingly and resubmitted for review.
3. It is surprising that wetland area C is not connected to line D and/or B since it is not very far away from them. It would be interesting to see soil test hole data in this area to see if, in fact, the areas are connected.
4. Corrugated pipe without smooth wall interior is unacceptable (specified as having a corrugated interior in Drainage Report). Plain interior corrugated pipe is more flexible and harder to maintain a uniform grade, has less crush resistance and it will accumulate sediment/debris more easily. Installed pipe shall consist of high density polyethylene with a smooth interior surface.
5. A riprap splash pad is needed at the outlet of the 62' length of CPP where it terminates in the small stormwater basin to reduce potential scour. The size of riprap and installation dimensions need to

be specified on the plan and a construction detail showing the profile of the pad needs to be added to Sheet 5 of 5. Additionally, the erosion control system needs to be extended approximately 30 feet in both directions to capture runoff from the proposed uphill grading.

6. Dimensions are needed for the “modified riprap apron” in the “Stormwater Basin w/Level Spreader.” A construction detail specific to the apron needs to be added to Sheet 5 of 5.
7. At the stormwater basin in the middle of the parking area, the angle and close proximity of the inlet (12”) and outlet (15”) pipes at the catch basin cannot be made without sacrificing the strength and integrity of the catch basin, which makes the design unacceptable. This needs to be redesigned.
8. Soil test pits are needed in each stormwater basin location to verify the seasonal groundwater table level. This is to verify that the basins will not be constructed in the water table, as they are to function as dry basins in accordance with the Drainage Report for this project. As can be seen on the plans, the bottoms of the basins will be 2-3 feet below existing ground and any standing water will invalidate the calculations in the Report.
9. The erosion control system needs to be extended to the stone wall at the stormwater basin with riprap apron.
10. The erosion control system needs to be extended to the stone wall and perhaps further along the downhill side of the “Structured Earth Access Drive.” It is unclear if the driveway will be extended beyond what is shown on the plan.
11. An additional erosion control system needs to be added to the plan in the area of widening the existing driveway at the 4-car garage.
12. An additional erosion control system needs to be added all along the downhill side of the proposed driveway, starting from Wolf Den Road.
13. The proposed inlet end of the 15” pipe under the proposed driveway in Wolf Den right-of-way is shown as having a deep excavation in the shoulder of the road so that stormwater runoff can enter the pipe. This deep “hole” (4’±) is a hazard introduced to the motoring public and needs to be protected from entry by an errant vehicle, e.g., guard rail. Alternatively, new catch basins can be installed at each end of the pipe and connected to the existing downhill drainage system to mitigate this hazard.
14. The stone walls at the entrance should be identified as dry or wet masonry with cut or natural stone elements.
15. Zoning Regulation 7.C.5.5. requires a landscaped island for every 15 parking spaces in a row. There is one row of parking containing 20 spaces that does not incorporate a landscaped island.
16. The existing slope across the area where the primary tent is located is approximately 6 percent. Does this present a problem for guests and will the area ultimately need to be regarded to achieve less of a slope? Additionally, how will the tent be accessed, as this is not depicted on the plan?
17. It is unclear how access to the “Ceremony” location is achieved, especially with the partial entrance walkway blocked by a stone wall. Furthermore, the slope across this area appears to be 12± percent – will this be regraded to a lesser slope?
18. “Yard Box” units are unacceptable as they do not contain sumps to trap debris, which will accumulate in the stormwater basins making them less effective in recharging groundwater.
19. The “temporary restroom” location needs to be added to the plan.
20. The “walking path” to the barn and other locations should consist of materials compatible to all types of footwear to minimize risk of injury due to unstable compatibility with said footwear.
21. Erosion and sediment controls need to be added below the proposed grading at the catering tent site.
22. What is to prevent water from inundating the “catering tent” if there is a heavy downpour during an event? There is no proposed grading to direct overland flow away from this critical function requiring strict adherence to safe food handling practices.

23. There is no loading/unloading zone designated for a food caterer's vehicles.
24. Enclosed dumpster locations need to be added to the plan, as it is unrealistic to think that holding up to 100± events per year will not generate trash on site.
25. A path leading to the "primary tent" location and its material specification needs to be added to the plan.
26. A symbol for a "proposed lamp" needs to be added to the "Legend."
27. Routing of proposed underground utilities is missing on the plans. Symbols for these need to be added to the "Legend."

Event Area Plan – Sheet 3 of 5

1. A "north arrow" needs to be added to the plan.
2. All Verdant landscape plans need to be submitted for review to see if any impact on wetland on wetland areas. Verdant plans were not made available for this review.

Notes and Details – Sheet 4 of 5

1. The pipe in the "Drainage Pipe Installation Detail" needs to be noted as having a smooth interior surface.
2. In consideration of Note 3 under "Neighborhood Agreement," would it be prudent to require "No Parking" signs on both sides of Wolf Den Road for a distance of approximately 500 feet on either side of the proposed driveway? This would reinforce any police traffic enforcement action if it should become necessary.

Notes and Details – Sheet 5 of 5

1. The structural members in the "Wood Guard Rail (Light Duty)" detail are too "light." The posts need to be at least 8"x8" with rub rail at least 4"x12" considering vehicles much larger than automobiles and light pickup trucks will be traversing the driveway. Fasteners need to be specified as stainless steel for extra corrosion resistance. Specifying copper lubricating paste applied to nuts/bolt threads would provide extra protection against galling/seizing and making future disassembly of the fastener less troublesome.
2. The "24"x24" Yard Box" is unacceptable for use in this project. It needs to be replaced with a standard CT DOT precast concrete catch basin with appropriate top with a minimum 24" deep sump.
3. A "Grass Swale" detail needs to be added to the plan.

Drainage Report

1. Most pages in the upper right hand corner of the report header identify the client as BH Trailers. This needs to be corrected if incorrect.
2. The flow capture capacity in c.f.s. of a "waffle grate" is not mentioned in the report. The report shows the pipes can handle the modeled flow but does not state how much flow the waffle grates can actually capture and flow through the pipes. An analysis is needed to evaluate the efficiency of the waffle style grate vs. the CT DOT standard grate to maximize capture. By the way, a bicycle safe grate is not needed where the catch basins are located in landscaped areas.
3. The Applicant's engineer needs to demonstrate in writing that he has complied with Section 7.H.3., Stormwater Management Requirement, of the Brooklyn Zoning Regulations.

RECOMMENDATION

The plans and drainage calculations are incomplete as submitted. Both need to be revised and/or expanded in scope and resubmitted for another review.

By: *Syl Pauley, Jr., P.E.*
Syl Pauley, Jr., P.E., NECCOG Regional Engineer

Richard Zulick R.S S.S
Soil Scientist
400 Nott Highway
Ashford, CT
06278

October 1, 2023

*Town of Brooklyn
Inland Wetlands & Watercourses Commission
Brooklyn, CT*

Re: Wetland delineation report - 459 Wolf Den Road, Brooklyn, CT

Dear Commissioners:

Project Title and Location: Access Driveway and Parking Lot Plan prepared for Willow Hill LLC 459 Wolf Den Road, Brooklyn, CT Map 18 – Lots 18 & 18A. Plan by J&D Civil Engineers and dated August 2023

Re: Wetland delineation

Methods and Definitions:

Wetlands were delineated according to the standards of the Natural Resources Conservation Services (NRCS) National Cooperative Soil Survey and the definitions of inland wetlands and watercourses in the Connecticut General Statutes, Chapter 440, Sections 22a-36 through 22a-45as amended. Wetlands, as defined by the Statute, are those soil types designated as poorly-drained, very poorly drained, floodplain or alluvial in accordance with the NRCS National Cooperative Soil Survey.

Watercourses are defined as rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the Town of Brooklyn or any portion thereof not regulated pursuant to sections 22a-28 through 22a-35, inclusive, of the Connecticut General Statutes.

Intermittent watercourses are defined permanent channel and bank and the occurrence of two or more of the following characteristics: (a) evidence of scour or deposits of recent alluvium or detritus, (b) the presence of standing or flowing water for duration longer than a particular storm incident, and (c) the presence of hydrophytic vegetation.

A wetland field survey was completed in August of 2023. . This survey was conducted to delineate on-site wetland boundaries using an auger and tile spade to examine the upper 20 inches of the soil profile. Those areas meeting the criteria noted above were marked in the field with sequentially numbered pink and blue flagging numbered WF 1A – WF 2A, WF 1B – WF 2B, WF 1C – 3C and WF 1D – WF 3D (see plan) Random soil profiles were observed across the property to verify the presence or absence of regulated wetland soil types.

On-site investigation:

The lot is generally gently sloping from east to west. The flagging shown on the Job number 22172, 40 scale plan by J&D Civil engineers shows the eastern most points of a larger wetland located to the west of the proposed activity.

The wetland soils identified on this proposed project are the poorly drained Ridgebury soil series.

Ridgebury Soil Series

The Ridgebury series consists of very deep, somewhat poorly and poorly drained soils formed in lodgment till derived mainly from granite, gneiss and/or schist. They are commonly shallow to a densic contact. They are nearly level to gently sloping soils in depressions in uplands. They also occur in drainageways in uplands, in toeslope positions of hills, drumlins, and ground moraines, and in till plains

TAXONOMIC CLASS: Loamy, mixed, superactive, acid, mesic, shallow Aeric Endoaquepts

Comments

Upon entering the property, my general impression of the area was that dense undergrowth made it very difficult to travel throughout. The vines and thorn briars are probably the result of the area being much more open in the past. These early successional growth is a result of a great deal of sun hitting the forest floor.

The larger wetland located well to the west of this proposed activity provides many values and functions and spans an area that includes a watercourse.

Conclusions

A small depression (identified by flags WF 1C – WF 3C) is proposed to be filled to allow for adequate parking area. This small depression does not function as a vernal pool and exists because of the micro topography created by the woods road to its immediate west.

In terms of my general opinion of the wetland area located to the west of the proposed activity, I feel that (with adequate erosion control devices in place) the proposed activity will not have any significant negative impact to the values and functions of this wetland and watercourse area.

If you have any questions concerning the wetland assessment or this report, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Richard Zulick'.

*Richard Zulick
Certified Forester and Soil Scientist
Member SSSSNE*

Richard Zulick R.S S.S
Soil Scientist
400 Nott Highway
Ashford, CT
06278

October 31, 2023

Town of Brooklyn
Inland Wetlands & Watercourses Commission
Brooklyn, CT

Re: Wetland delineation report - 459 Wolf Den Road, Brooklyn, CT

Dear Commissioners:

Project Title and Location: Access Driveway and Parking Lot Plan prepared for Willow Hill LLC 459 Wolf Den Road, Brooklyn, CT Map 18 - Lots 18 & 18A. Plan by J&D Civil Engineers # 22172 and dated September 29, 2023

Re: Wetland delineation

Methods and Definitions:

Wetlands were delineated according to the standards of the Natural Resources Conservation Services (NRCS) National Cooperative Soil Survey and the definitions of inland wetlands and watercourses in the Connecticut General Statutes, Chapter 440, Sections 22a-36 through 22a-45 as amended. Wetlands, as defined by the Statute, are those soil types designated as poorly-drained, very poorly drained, floodplain or alluvial in accordance with the NRCS National Cooperative Soil Survey.

Watercourses are defined as rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the Town of Brooklyn or any portion thereof not regulated pursuant to sections 22a-28 through 22a-35, inclusive, of the Connecticut General Statutes.

Intermittent watercourses are defined permanent channel and bank and the occurrence of two or more of the following characteristics: (a) evidence of scour or deposits of recent alluvium or detritus, (b) the presence of standing or flowing water for duration longer than a particular storm incident, and (c) the presence of hydrophytic vegetation.



A wetland field survey was completed in August of 2023 and additional work was conducted on October 28, 2023. This survey was conducted to delineate on-site wetland boundaries using an auger and tile spade to examine the upper 20 inches of the soil profile. Those areas meeting the criteria noted above were marked in the field with sequentially numbered pink and blue flagging numbered WF 1C – WF 3C and WB 1 – WB 49 (see plan) Random soil profiles were observed across the property to verify the presence or absence of regulated wetland soil types.

On-site investigation:

The lot is generally gently sloping from east to west. The flagging shown on the Job number 22172, 40 scale plan by J&D Civil engineers shows the eastern most points of wetland fingers located to the west of the proposed activity. The two fingers are defined by wetland flag numbers WB 26-33 and WB 34-49. These two wetland fingers extend to the west and downslope but do not connect within the scope of our investigation, which included everything within 125 feet of the proposed activity indicated on the latest plan.

Four additional wetland pockets were defined by Flagging WF 1C – 3C, WB 1 – 4, WB 5-10 and WB 11-26.

The wetland soils identified on this proposed project are the poorly drained Ridgebury soil series.

Ridgebury Soil Series

The Ridgebury series consists of very deep, somewhat poorly and poorly drained soils formed in lodgment till derived mainly from granite, gneiss and/or schist. They are commonly shallow to a densic contact. They are nearly level to gently sloping soils in depressions in uplands. They also occur in drainageways in uplands, in toeslope positions of hills, drumlins, and ground moraines, and in till plains

TAXONOMIC CLASS: Loamy, mixed, superactive, acid, mesic, shallow Aeric Endoaquepts

Comments

Upon entering the property, my general impression of the area was that dense undergrowth made it impossible to travel throughout. The vines and thorn briars are probably the result of the area being much more open in the past. Our assumption was that the three wetland areas identified originally connected fairly near (west of) the existing woods road but we were unable to penetrate the area to determine if our assumption was correct. A small machine was utilized to open pathways through the thorny thicket of multiflora rose and barberry. These pathways were necessary to access the wetland edges within the wooded area. To minimize disturbance, only areas near the proposed activity were

impacted. The thickets were as high as 12 feet in height and not possible to penetrate with the standard machetes commonly used.

Upon further investigation we determined that the wetland fingers are relatively narrow and do not connect anywhere near the proposed activity (if at all).

Conclusions

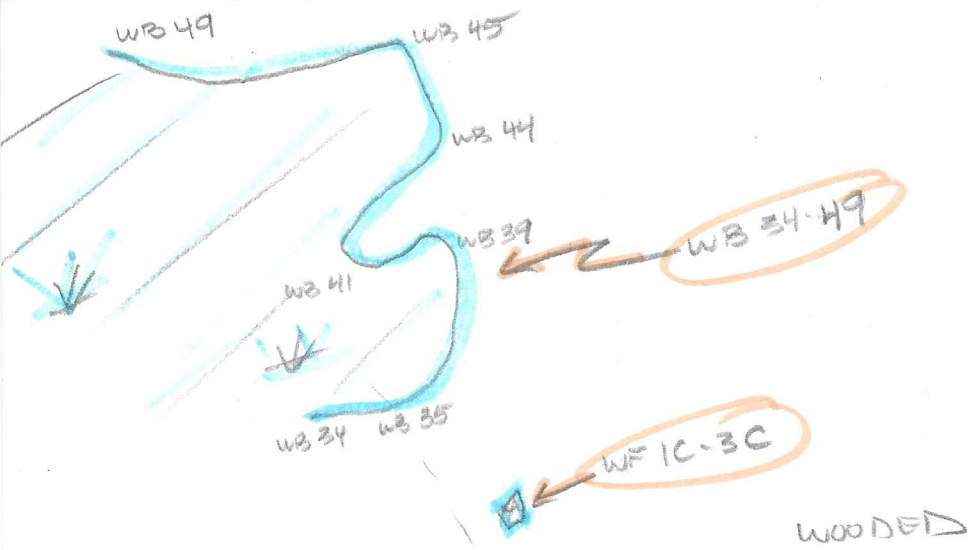
In terms of my general opinion of the wetland area on this property, I feel that (with adequate erosion control devices in place) the proposed activity will not have any significant negative impact to the values and functions of these wetland area.

If you have any questions concerning the wetland assessment or this report, please feel free to contact me.

Sincerely,



Richard Zulick
Certified Forester and Soil Scientist
Member SSSSNE



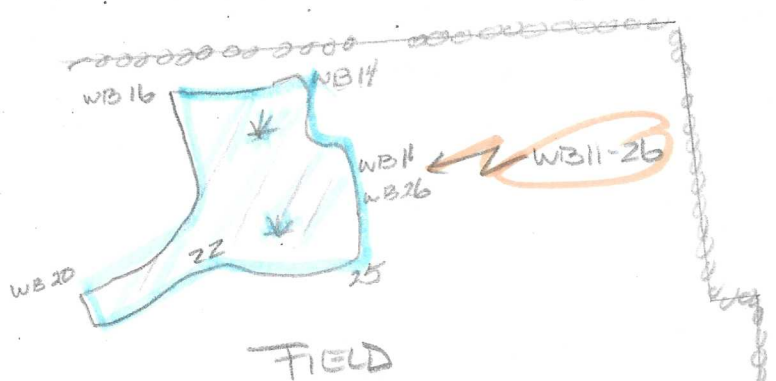
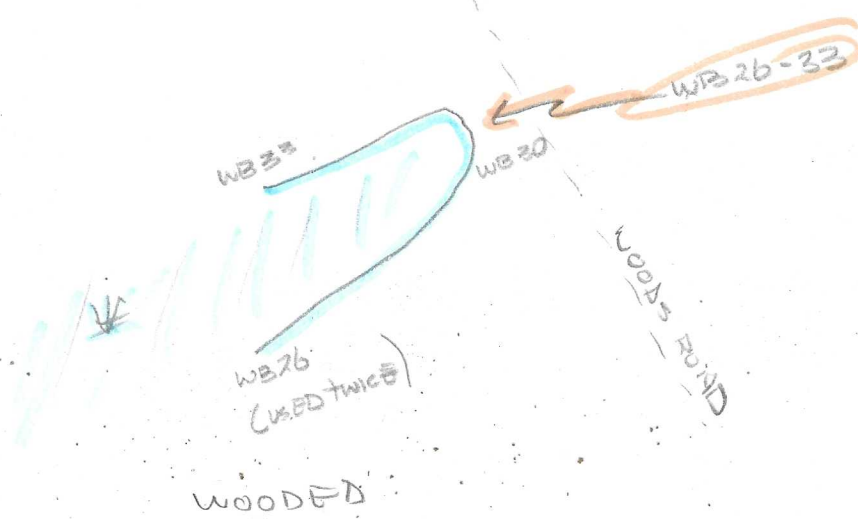
459 WOLF DEN RD
BROOKLYN, CT
WILLOW HILL LLC

North

DELIVERATION BY
RICHARD ZULICK RES
400 NOTH HILL
ASHFORD, CT 06278
(860) 429-1918

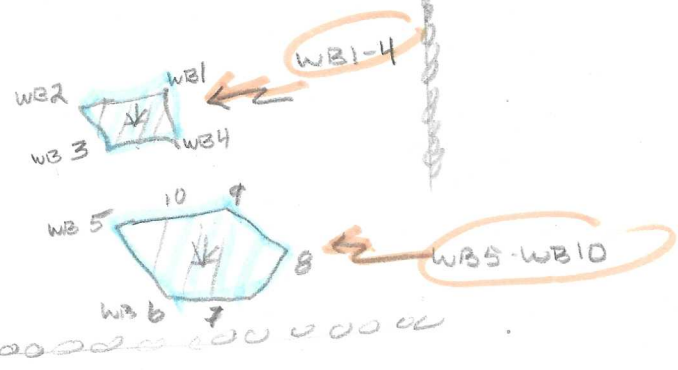
10/30/23

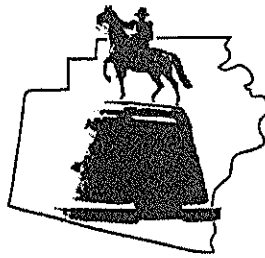
SKETCH NOT TO
SCALE



- LINES
- WB 1-4
 - WB 5-10
 - WB 11-26
 - WB 26-33
 - WF 1C-3C
 - WB 34-49

TOTAL 53 FLAGS





Brooklyn Land Use Department

69 South Main Street
Brooklyn CT 06234
(860) 779-3411 x 31

Inland Wetlands ☒ Zoning Enforcement _____ Blight Enforcement _____

SITE INSPECTION NUMBER

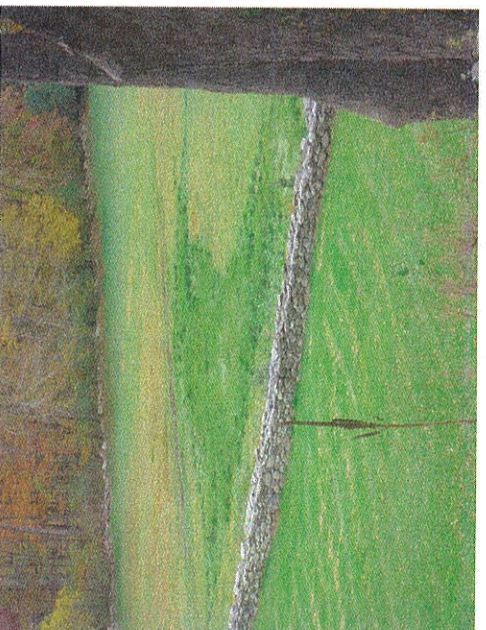
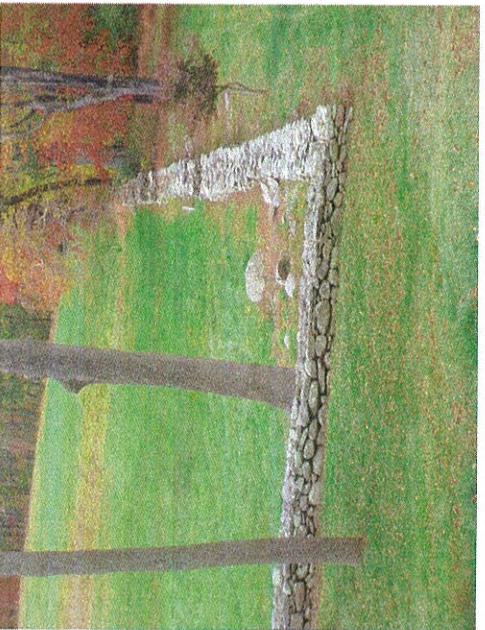
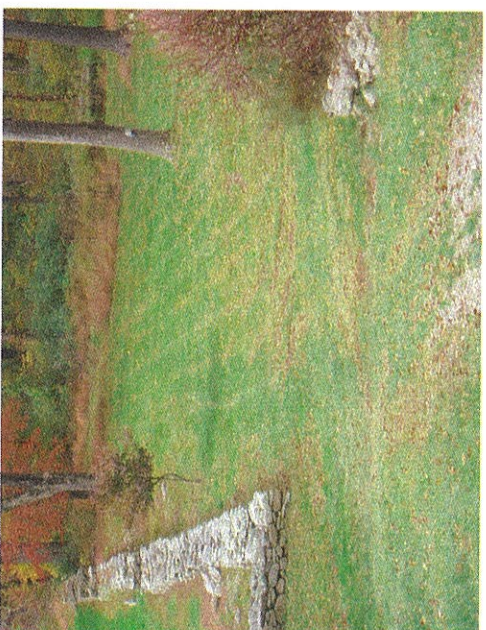
1 2 3 4 5

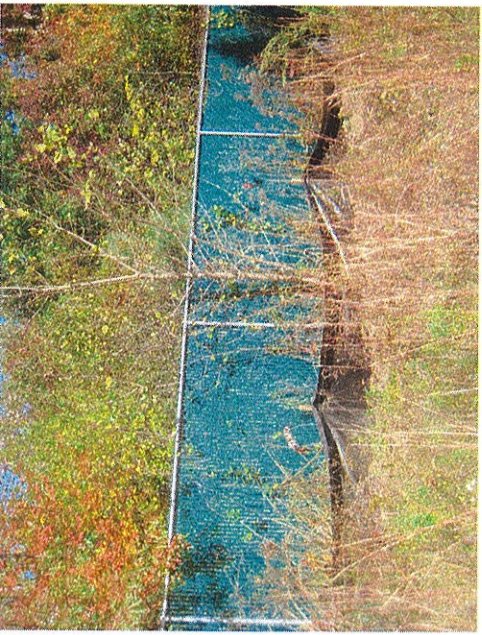
Willow Hill
459 + 481 Wolf Den Rd. 10/19/23
Address Date

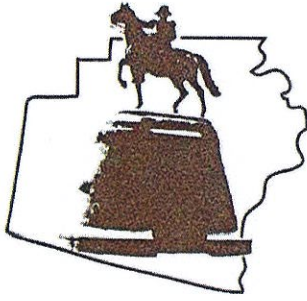
I met Daniel Blanchette, inspected and took photos. We discussed the comments I had regarding the version 1 site plan. Daniel explained that the vegetation is dense and thorny; that is why not all the wetlands were delineated. In proposed tent and ceremony locations, sediment controls will be extended and any grading will be shown. Sediment controls will be shown downslope of access road grading. The small wetlands to be filled will be shown as requested. CT DEEP reporting forms and Verdant Landscape Architecture Plans will be submitted with revised plans by 11/4/23. I will defer to the commission regarding not showing all the wetlands within 125' of proposed grading. This would set a new precedent; others will want to do this.

Commission Representative M. Washburn

Owner or Authorized Signature _____







TOWN OF BROOKLYN
Land Use Department
69 South Main Street • Suite 22
BROOKLYN, CONNECTICUT 06234
860-779-3411 Ext. 12

MEMO

October 16, 2023

To: Daniel Blanchette, J&D Civil Engineers

Re: IWWC plan review comments - 459 Wolf Den Rd. – Willow Hill

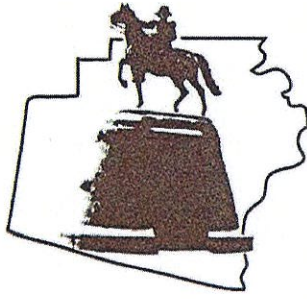
From: Margaret Washburn, ZEO/WEO/Blight Enforcement Officer

1. All wetlands within 125' of proposed earth disturbance should be delineated and shown on the plan.
2. If grading will take place in proposed tent and ceremony locations, show the grading, extend the wetlands delineation accordingly if within 125' and extend sediment controls accordingly.
3. Extend delineation and sediment controls downslope of grading for proposed access drive.
4. Show outline of small wetlands to be filled, crosshatch inside outline, label it with an arrow and indicate the number of sf of wetlands to be filled.
5. Reference is made to plans by Verdant Landscape Architecture. I was unable to find these plans.
6. Please submit a CT DEEP reporting form. Please submit 5 hard copies of all revised documents as well as pdfs by 11/6/23.
7. I propose to do a site visit at 1:00 pm on Thursday 10/19 at 1:00 p.m. Can someone be there to discuss the plans please?

Margaret Washburn

Margaret Washburn
ZEO/WEO/Blight Enforcement Officer
69 South Main Street, Suite 23
Brooklyn, CT 06234
(860) 779-3411 ext. 31
Mon. – Thurs. 8:00 am – 3:30 pm
m.washburn@brooklynct.org

CC: file



TOWN OF BROOKLYN
Land Use Department
69 South Main Street • Suite 22
BROOKLYN, CONNECTICUT 06234
860-779-3411 Ext. 12

MEMO

November 13, 2023

To: Daniel Blanchette, J&D Civil Engineers

Re: Revised IWWC plan review comments - 459 Wolf Den Rd. – Willow Hill

From: Margaret Washburn, ZEO/WEO/Blight Enforcement Officer

1. Extend sediment controls downslope of grading to the end of the proposed access drive, *south of the stone wall. (The plan shows a dot but not a dash in this area.)*
2. Reference is made to plans by Verdant Landscape Architecture. *I was unable to find these plans in the revised submission.*
3. Please submit a CT DEEP reporting form. *I was unable to find this in the revised submission.*
4. The application form needs to be revised to list the additional amount of proposed wetlands alteration.
5. Where are the soils from the pond excavation to be spread?
6. I am requesting permission to do another site visit at 10:00 am on Tuesday 11/14. I want to take photos of the area where the pond is proposed. Please let me know before 3:30 today if I can go there at that time.
7. Rick Zulick's letter is dated 10/31. He did not address the issue of the pond. The letter references the plans dated 9/29/23.

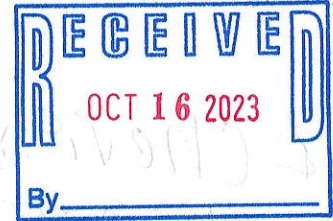
Margaret Washburn

Margaret Washburn
ZEO/WEO/Blight Enforcement Officer
69 South Main Street, Suite 23
Brooklyn, CT 06234
(860) 779-3411 ext. 31
Mon. – Thurs. 8:00 am – 3:30 pm
m.washburn@brooklynct.org

CC: file

TOWN OF BROOKLYN

ZONING/WETLANDS COMPLAINT FORM



Date of Complaint: 10-12-2023

Wetlands: ✓ Zoning: _____

Complaint: DR22-001 - Jared Chvick witnessed

(5-6 pm) on his 4-wheeler ~~entering~~ enter property

~~Wetland~~ was charged with protecting wetland, water courses

Complainant: Shaun Hawes Phone: 860 933 3482 Anonymous: (Over)

Received By: _____

Phone: _____ Letter: _____ Appeared: _____

Location/Address of Complaint: 196 Brown Road Map 34 lot 31

Property Owner: Jared Chvick

Site Inspection Date: _____ Inspector: _____

Site Inspection Report: _____

Violation: Yes _____ No _____

Action Taken:

None Required: _____ Reason: _____

Verbal Notice: _____ Warning Letter: _____ Cease & Desist Order: _____

Appeared before: PZC Date _____ IWWC _____ Date _____

Additional Actions: _____

Date Complaint Resolved: _____

Resolution: _____

Land Use Administrator: _____

Enclosed are items to review by Enforcement
officers. Access to ~~you~~ ^{property} has been denied.

by Mr. Chevich. Also scope of application
submitted inaccurate. If your hands
are tied and unable to do your job,
I violates numerous state, town
federal ~~law~~ laws. I have more documents
I can add if needed. Please help or
find someone that can.

Please excuse handwriting. Eye Surgery
yesterday... Call or email if not able
to read

Thank you for time..

Sham Haws

INLAND WETLANDS & WATERCOURSES COMMISSION
TOWN OF BROOKLYN, CONNECTICUT

Date 2-28-22

Application # DR22-001

APPLICATION -- INLAND WETLANDS & WATERCOURSES

APPLICANT Jared Chviek MAILING ADDRESS 95 Wauregan Rd Brooklyn, CT
APPLICANT'S INTEREST IN PROPERTY owner PHONE _____ EMAIL _____

PROPERTY OWNER IF DIFFERENT same PHONE 860-617-6542
MAILING ADDRESS same EMAIL justcalljaredchviek@gmail.com

ENGINEER/SURVEYOR (IF ANY) N/A
ATTORNEY (IF ANY) N/A

PROPERTY LOCATION/ADDRESS Map 34 Lot 31 Brown Road
MAP # 34 LOT # 31 ZONE RA TOTAL ACRES 27.35 ACRES OF WETLANDS ON PROPERTY _____

PURPOSE AND DESCRIPTION OF THE ACTIVITY Create pasture for grazing cows. Timber harvest to remove trees killed by gypsy moths. Firewood for personal use and for sale. Cutting and chipping brush for pasture. Electric fence and solar charger. Water will be hauled in for cows to drink from a tank.

WETLANDS EXCAVATION AND FILL:

FILL PROPOSED 0 CUBIC YDS 0 SQ. FT. 0
EXCAVATION PROPOSED 0 CUBIC YDS 0 SQ. FT. 0
LOCATION WHERE MATERIAL WILL BE PLACED: ON SITE N/A OFF SITE N/A
TOTAL REGULATED AREA ALTERED: SQ. FT. _____ ACRES 1.0

EXPLAIN ALTERNATIVES CONSIDERED (REQUIRED): put pigs there

MITIGATION MEASURES (IF REQUIRED): WETLANDS/WATERCOURSES CREATED: CY _____ SOFT _____ ACRES 1.0
INVASIVE SPECIES REMOVAL IS PLANNED - Barberry, Bittersweet, etc.
IS PARCEL LOCATED WITHIN 500 FT OF AN ADJOINING TOWN? NO IF YES, WHICH TOWN(S) N/A
IS THE ACTIVITY LOCATED WITHIN THE WATERSHED OF A WATER COMPANY AS DEFINED IN CT GENERAL STATUTES 25-32A? _____

THE OWNER AND APPLICANT HEREBY GRANT THE BROOKLYN IWWC, THE BOARD OF SELECTMAN AND THEIR AUTHORIZED AGENTS PERMISSION TO ENTER THE SUBJECT PROPERTY FOR THE PURPOSE OF INSPECTION AND ENFORCEMENT OF THE IWWC REGULATIONS OF THE TOWN OF BROOKLYN. IF THE COMMISSION DETERMINES THAT OUTSIDE REVIEW IS REQUIRED, APPLICANT WILL PAY CONSULTING FEE.

NOTE: DETERMINATION THAT THE INFORMATION PROVIDED IS INACCURATE MAY INVALIDATE THE IWWC DECISION AND RESULT IN ENFORCEMENT ACTION.

APPLICANT: [Signature] DATE 2-28-22

OWNER: [Signature] DATE 2-28-22

Revised 10/16/10

FEB 28 2022

 Alexa Lyn replied · 1 reply

Dianna DiRocco-Robichaud

Yikes.


on Thu Like Reply More

Facebook

Jared Chviek

Thank to the many people with kind words. I was fortunate enough to have purchased the "land" in question. I live on 205 in Brooklyn. I have been in Brooklyn since 1985 at the age of 4. I love Brooklyn an that is y I have chosen to raise my children here. I bought the land to expand my farming capacities. Yes there will be cows from time to time an I would like to put in some hay field. I'm also excited to see my young children have a place to ride their four wheelers, play in the brook an stretch their legs. If I do decide to build it won't be for at least 10 or so years if I ever do an it will be a single family home not 50 condominiums. Sorry in advance but I no I can't please everyone in this town an I'm fine with that.

on Thu Like Reply More

 Magen Audet replied · 44 replies

Steve Osterlund

Welcome and well put.

on Thu Like Reply More

May C+D

and this is only as much as the agricultural agency.

out. Mr. Sorrenti
Mr. Chviek's state

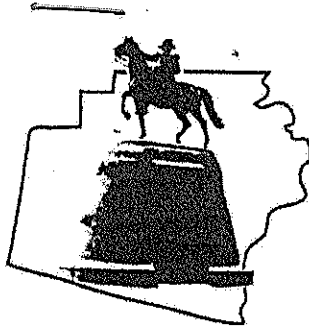
Chairman Arends asked Ms. Washburn how this came before the Commission. Ms. Washburn commented a complaint came in from Mrs. Hawes. Ms. Hawes was concerned that Mr. Chviek would make trails for motorized vehicles. Ms. Washburn stated Creamery Brook runs through the property, and most of the property is wet. The access point is in the wetlands. There are uplands on site where an entrance point can be made to establish the pasture. Utilizing the uplands on site to start would be easier and not necessarily a regulated activity. Ms. Washburn would like Mr. Chviek to tell the Commission what his plans are and keep them informed with what he wishes to do to alleviate the concerns with complaints. The Commission is charged with protecting resources. Discussion ensued.

Mr. Chviek has had problems with the neighbor trespassing on his property. Discussion ensued.

Mr. Sorrentino suggests that Mr. Chviek come up with a plan and submit to Ms. Washburn so there is an idea what areas are proposed to be cleared. Mr. Paquin suggests to Mr. Chviek to show what the intent is and advise the Commission. Mr. Paquin would like to lift the cease-and-desist order at this time. Mr. Paquin advises Mr. Chviek as he progresses with the project that advise the Commission of the plan. Chairman Arends agrees.

Chairman Arends asked that wood chips not be put into wetlands, move them out to upland or truck them out. Ms. Washburn stated driving motorized equipment will make a mess.

Chairman Arends moved the meeting to 1:00 p.m. for the next meeting.



TOWN OF BROOKLYN

Land Use Department
69 South Main Street • Suite 22
BROOKLYN, CONNECTICUT 06234
860-779-3411 Ext. 12

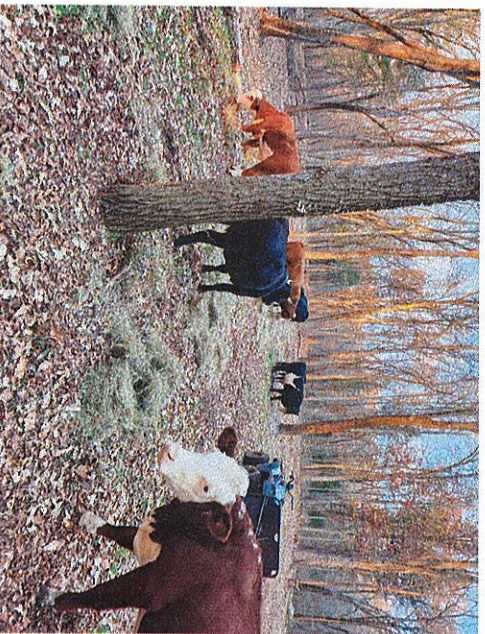
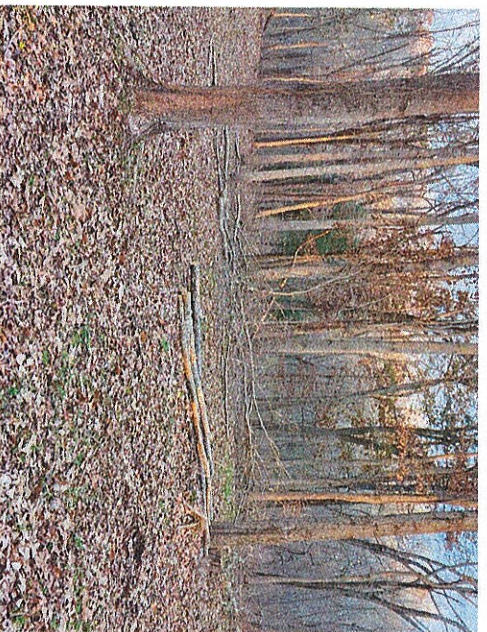
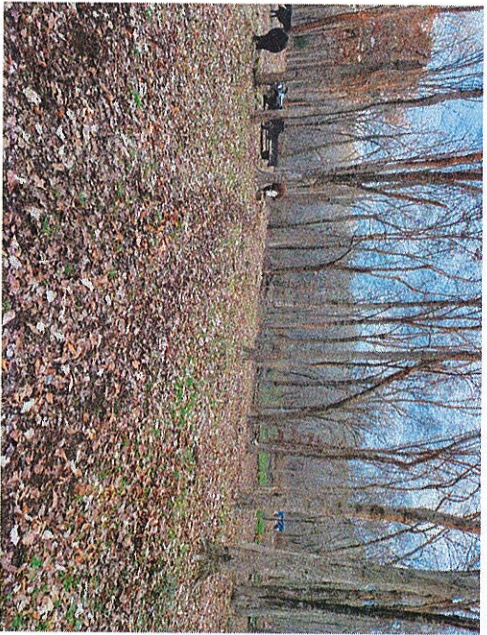
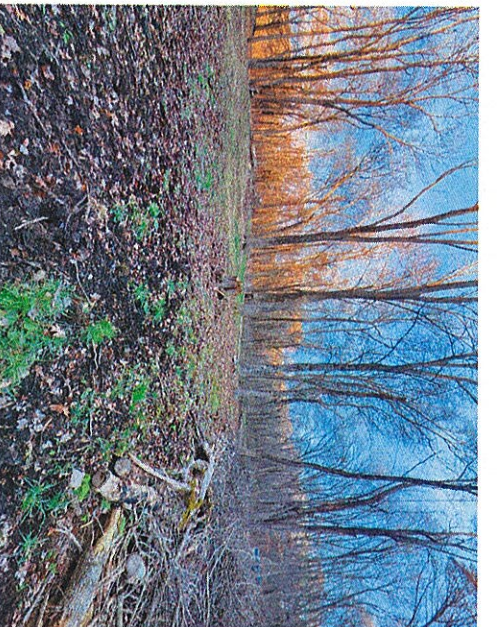
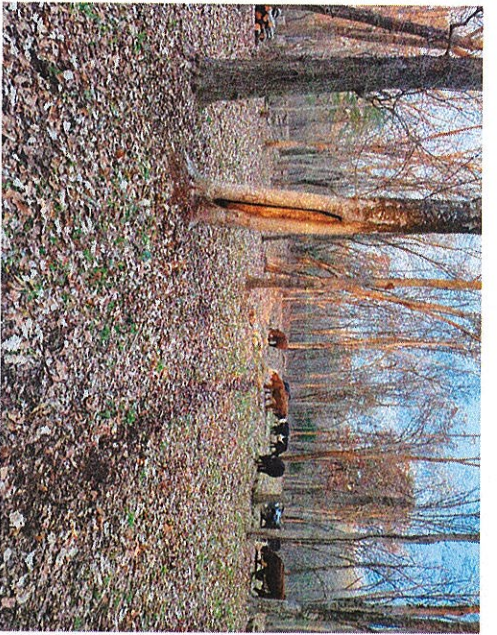
TOWN OF BROOKLYN INLAND WETLAND WATERCOURSE COMMISSION

SITE WALK
FRIDAY, May 13, 2022

5:30 p.m.
Starting at Paradise Drive Map 14 Lot 6

6:30 p.m.
Starting at 14 Darby Road Map 36 Lot 15

Note: The walk is intended to help Inland Wetlands and Watercourse Commissioners understand the proposed regulated activities on the subject property. Members of the public are allowed to attend, but no testimony or discussion will be allowed during the site walk.



RECEIVED
NOV 06 2023
By _____

INLAND WETLANDS & WATERCOURSES COMMISSION
TOWN OF BROOKLYN, CONECTICUT

Date 11/1/2023

Application # IWWC 23-012

APPLICATION -- INLAND WETLANDS & WATERCOURSES

APPLICANT VACHON BROOKLYN, LLC MAILING ADDRESS 957 WASHINGTON ST, ATTLEBORO MA
APPLICANT'S INTEREST IN PROPERTY OWNER PHONE: CELL 401-692-1459 HOME: _____
E-MAIL _____

PROPERTY OWNER IF DIFFERENT Same PHONE: CELL: 401-692-1459 HOME: _____
MAILING ADDRESS _____ EMAIL _____

ENGINEER/SURVEYOR (IF ANY) KILLINGLY ENGINEERING ASSOCIATES, LLC
ATTORNEY (IF ANY) _____

PROPERTY LOCATION/ADDRESS) 512 PROVIDENCE ROAD (ROUTE 6)

MAP # 41 LOT # 13A/14 ZONE PC TOTAL ACRES 10.53 ACRES OF WETLANDS ON PROPERTY 3.96

PURPOSE AND DESCRIPTION OF THE ACTIVITY

INSTALLATION OF FENCING & BOLLARDS AROUND DUMPSTERS & AN ABOVE GROUND PROPANE TANK IN THE UPLAND REVIEW AREA. CONSTRUCTION OF A CONCRETE PAD FOR THE DUMPSTER ENCLOSURE.

WETLANDS EXCAVATION AND FILL:

FILL PROPOSED 0 CUBIC YDS 0 SQ FT 0

EXCAVATION PROPOSED 0 CUBIC YDS 0 SQ FT 0

LOCATION WHERE MATERIAL WILL BE PLACED: ON SITE N/A OFF SITE N/A

TOTAL REGULATED AREA ALTERED: SQ FT 700 ACRES 0.016

EXPLAIN ALTERNATIVES CONSIDERED (REQUIRED):

NO ALTERNATIVES WERE CONSIDERED - NO DISTURBANCE OF WETLANDS IS PROPOSED

MITIGATION MEASURES (IF REQUIRED): WETLANDS/WATERCOURSES CREATED: CY 0 SQ FT 0 ACRES 0

IS PARCEL LOCATED WITHIN 500FT OF AN ADJOINING TOWN? No IF YES, WHICH TOWN(S) _____

IS THE ACTIVITY LOCATED WITHIN THE WATERSHED OF A WATER COMPANY AS DEFINED IN CT GENERAL STATUTES 25-32A? No

THE OWNER AND APPLICANT HEREBY GRANT THE BROOKLYN IWWC, THE BOARD OF SELECTMAN AND THEIR AUTHORIZED AGENTS PERMISSION TO ENTER THE SUBJECT PROPERTY FOR THE PURPOSE OF INSPECTION AND ENFORCEMENT OF THE IWWC REGULATIONS OF THE TOWN OF BROOKLYN. IF THE COMMISSION DETERMINES THAT OUTSIDE REVIEW IS REQUIRED, APPLICANT WILL PAY CONSULTING FEE.

NOTE: DETERMINATION THAT THE INFORMATION PROVIDED IS INACCURATE MAY INVALIDATE THE IWWC DECISION AND RESULT IN ENFORCEMENT ACTION.

APPLICANT: VACUON BROOKLYN, LLC c/o JOE SIMON DATE 11/1/23

OWNER: [Signature] DATE 11/1/23

REQUIREMENTS

☒ STANDARD APPLICATION FEE \$ (\$150) ☒ STATE FEE (\$60) ☒ CHECK # _____

☒ NOTICE OF ACTION PUBLICATION FEE \$ 50.00 CHECK # _____

_____ PUBLIC HEARING PUBLICATION FEE (\$100) \$ _____ (SUBJECT TO CHANGE DEPENDING ON PAPER) CHECK# _____

_____ SIGNIFICANT ACTIVITY FEE (PUBLIC HEARING) (\$250) \$ _____ CHECK # _____

☒ COMPLETION OF CT DEEP REPORTING FORM

_____ ORIGINAL PLUS COPIES OF ALL MATERIALS REQUIRED - NUMBER TO BE DETERMINED BY STAFF

☒ PRE-APPLICATION MEETING WITH THE WETLANDS AGENT IS RECOMMENDED TO EXAMINE THE SCOPE OF THE ACTIVITY

☒ SITE PLAN SHOWING LOCATION OF THE WETLANDS WITH EXISTING AND PROPOSED CONDITIONS.
APPLICANT MAY BE REQUIRED TO HAVE A CERTIFIED SOIL SCIENTIST IDENTIFY THE WETLANDS.

_____ COMPLIANCE WITH THE CONNECTICUT EROSION & SEDIMENTATION CONTROL MANUAL

_____ IF THE PROPOSED ACTIVITY IS DEEMED TO BE A "SIGNIFICANT IMPACT ACTIVITY" A PUBLIC HEARING IS REQUIRED ALONG WITH THE FOLLOWING INFORMATION:

- NAMES AND ADDRESSES OF ABUTTING PROPERTY OWNERS
- ADDITIONAL INFORMATION AS CONTAINED IN IWWC REGULATIONS ARTICLE 7.6

ADDITIONAL INFORMATION/ACTION NEEDED:

OTHER APPLICATIONS MAY BE REQUIRED. CONTACT THESE AGENCIES FOR FURTHER INFORMATION:
APPLICATION TO STATE OF CONNECTICUT DEEP

INLAND WATER RESOURCES DIVISION
79 ELM ST.
HARTFORD, CT. 06106
1-860-424-3019

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MA. 01742
1-860-343-4789

STAFF USE ONLY:

_____ DECLARATORY RULING: AS OF RIGHT & NON-REGULATED USES (SEE IWWC REGULATIONS SECTION 4)

_____ PERMIT REQUIRED:

Revised 7/20/22

_____ AUTHORIZED BY STAFF/CHAIR (NO ACTIVITY IN WETLANDS/WATERCOURSE AND MINIMAL IMPACT)

_____ CHAIR, BROOKLYN IWWC

_____ WETLANDS OFFICER

_____ AUTHORIZED BY IWWC

_____ SIGNIFICANT ACTIVITY/PUBLIC HEARING

_____ NO PERMIT REQUIRED

_____ OUTSIDE OF UPLAND REVIEW AREA

_____ NO IMPACT

_____ CHAIR, BROOKLYN IWWC

_____ WETLANDS OFFICER

_____ TIMBER HARVEST



Statewide Inland Wetlands & Watercourses Activity Reporting Form

Please complete and mail this form in accordance with the instructions on pages 2 and 3 to:

DEEP Land & Water Resources Division, Inland Wetlands Management Program, 79 Elm Street, 3rd Floor, Hartford, CT 06106

Incomplete or incomprehensible forms will be mailed back to the inland wetlands agency.

PART I: Must Be Completed By The Inland Wetlands Agency

1. DATE ACTION WAS TAKEN: year: _____ month: _____

2. ACTION TAKEN (see instructions, only use one code): _____

3. WAS A PUBLIC HEARING HELD (check one)? yes ☐ no ☐

4. NAME OF AGENCY OFFICIAL VERIFYING AND COMPLETING THIS FORM:

(print name) _____ (signature) _____

PART II: To Be Completed By The Inland Wetlands Agency Or The Applicant

5. TOWN IN WHICH THE ACTION IS OCCURRING (print name): BROOKLYN

does this project cross municipal boundaries (check one)? yes ☐ no ☒

if yes, list the other town(s) in which the action is occurring (print name(s)): _____

6. LOCATION (see instructions for information): USGS quad name: BROOKLYN or number: 43

subregional drainage basin number: 3700

7. NAME OF APPLICANT, VIOLATOR OR PETITIONER (print name): VACHTON BROOKLYN, LLC

8. NAME & ADDRESS / LOCATION OF PROJECT SITE (print information): 512 PROVIDENCE ROAD

briefly describe the action/project/activity (check and print information): temporary ☐ permanent ☒ description: _____

INSTALLATION OF FENCING, BOLLARDS & A CONCRETE PAD

9. ACTIVITY PURPOSE CODE (see instructions, only use one code): D

10. ACTIVITY TYPE CODE(S) (see instructions for codes): 12

11. WETLAND / WATERCOURSE AREA ALTERED (must provide acres or linear feet):

wetlands: 0 acres open water body: 0 acres stream: 0 linear feet

12. UPLAND AREA ALTERED (must provide acres): 0 acres

13. AREA OF WETLANDS / WATERCOURSES RESTORED, ENHANCED OR CREATED (must provide acres): 0 acres

DATE RECEIVED:

PART III: To Be Completed By The DEEP

DATE RETURNED TO DEEP:

FORM COMPLETED: YES NO

FORM CORRECTED / COMPLETED: YES NO

PROPOSED PARKING EXPANSION

"VACHON CHEVROLET"

512 PROVIDENCE ROAD (ROUTE 6)
BROOKLYN, CONNECTICUT

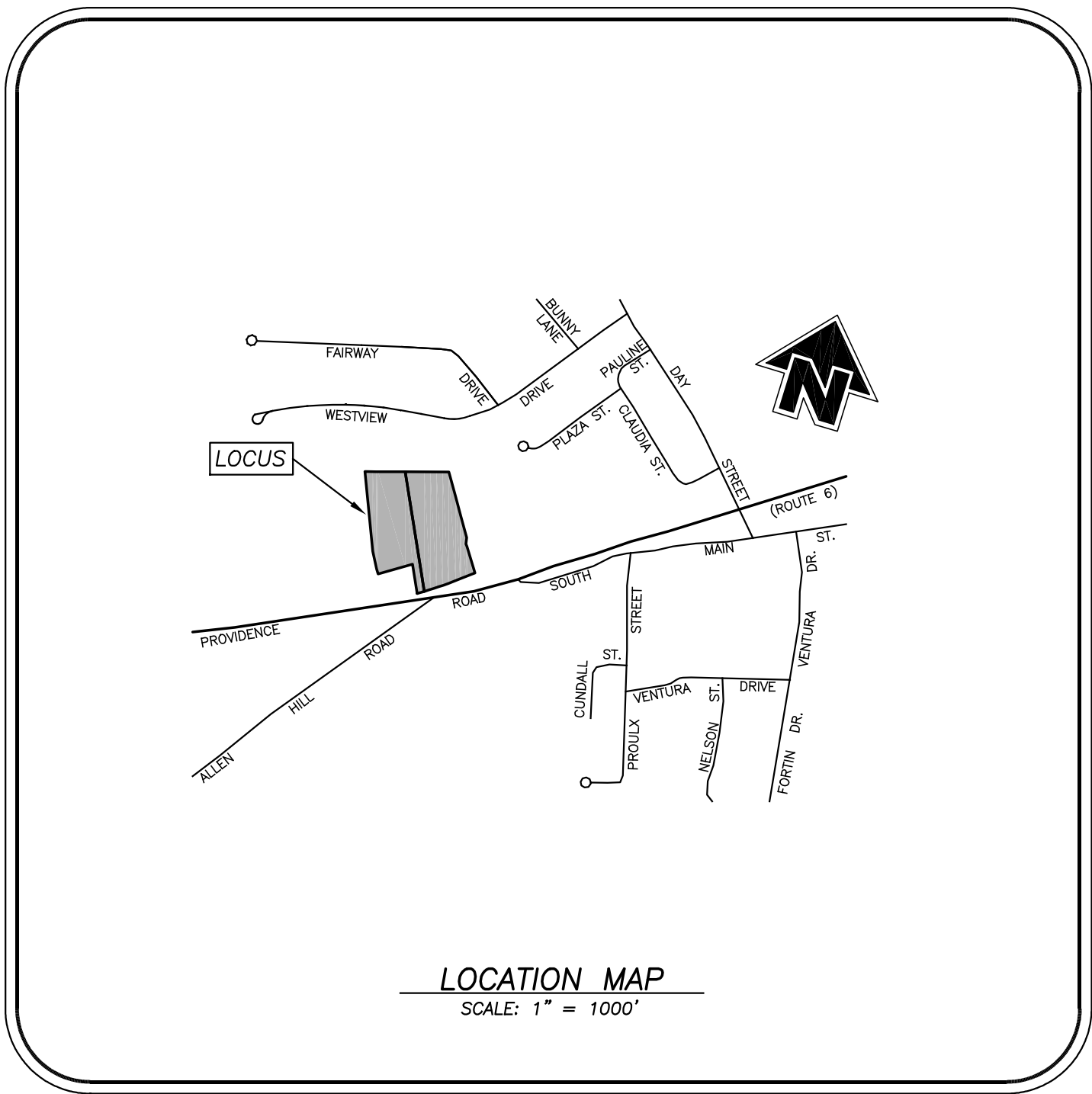
PREPARED FOR:
VACHON BROOKLYN, LLC

INDEX TO DRAWINGS

TITLE	SHEET No.
COVER SHEET	1 OF 5
EXISTING CONDITIONS MAP	2 OF 5
SITE DEVELOPMENT PLAN 1	3 OF 5
SITE DEVELOPMENT PLAN 2	4 OF 5
DETAIL SHEET	5 OF 5

LEGEND

●	IRON PIN TO BE SET
○	IRON PIN FOUND
□	CONCRETE MONUMENT FOUND
CHD PNT	CHD MONUMENT POINT
+	SIGN
Ø	UTILITY POLE
CB	CATCH BASIN
MH	MANHOLE
SMH	SANITARY SEWER MANHOLE
W	INLAND WETLANDS FLAG
- - - 100 - - -	EXISTING CONTOURS
100	PROPOSED CONTOURS
-----	SILT FENCE



CONSTRUCTION NOTES/GENERAL PROVISIONS

- The locations of existing utilities are based upon visible field observations, record mapping and interviews with the property owner and abutting property owners. They are shown for informational purposes only. Contractor shall coordinate exploratory test hole excavation with the Engineer if necessary to verify and/or determine actual locations of some utilities & structures. It is the responsibility of the contractor to verify the location and elevation of all utilities. Contact "CALL BEFORE YOU DIG" at 1-800-922-4455, and obtain all applicable permits, prior to any excavation around utilities.
- All existing site features not scheduled to remain shall be removed and disposed of in a proper manner, by the contractor.
- All Materials and methods of construction shall conform to "State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 816", and supplements thereto.
- The Contractor shall obtain copies of all regulatory agency permits from the Owner prior to any site disturbance.
- Unless otherwise noted on the plans, the contractor shall use the geometry provided on the construction plans. Benchmark information shall be provided to the contractor by the Owner or the Owner's surveyor. Any discrepancies between field measurements and construction plan information shall be brought to the attention of the Engineer or Surveyor immediately.
- The Contractor shall not revise elevations or locations of items shown on the plans without written consent of the project Engineer or Surveyor.
- The Contractor shall protect benchmarks, property corners, and other survey monuments from damage or displacement. If a marker needs to be removed, it shall be referenced by a licensed land surveyor and replaced as necessary by the same.
- The Contractor shall be responsible for preparing and compacting base for proposed pavement. Owner shall provide general fill to establish subgrade - contractor shall spread and compact. Contractor shall provide, spread and compact required processed aggregate
- The entire project site shall be thoroughly cleaned at the completion of the work. Clean all installed paved areas, accumulated silt and sediment, plus all adjacent areas affected by the construction activities as directed by the Owner or the jurisdictional Agency.

PREPARED BY:

REVISIONS	
DATE	DESCRIPTION
3/10/2020	PER SOIL SCIENTIST & STAFF
3/31/2020	PER NECCOG REVIEW
10/07/2020	PER PLANNER REVIEW
3/09/2021	PER TOWN REVIEW
10/20/2023	BUILDING ADDITION ADDED



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

JANUARY 2020

**BEFORE YOU DIG
CALL BEFORE YOU DIG**
AT LEAST TWO FULL BUSINESS DAYS
BEFORE DIGGING OR DISTURBING EARTH
DIAL 811 OR 1-800-922-4455

APPROVED BY THE BROOKLYN
PLANNING AND ZONING COMMISSION

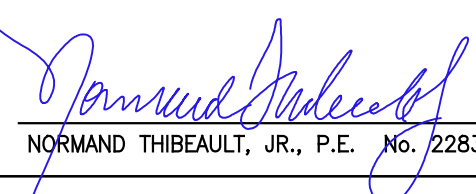
CHAIRMAN _____ DATE _____

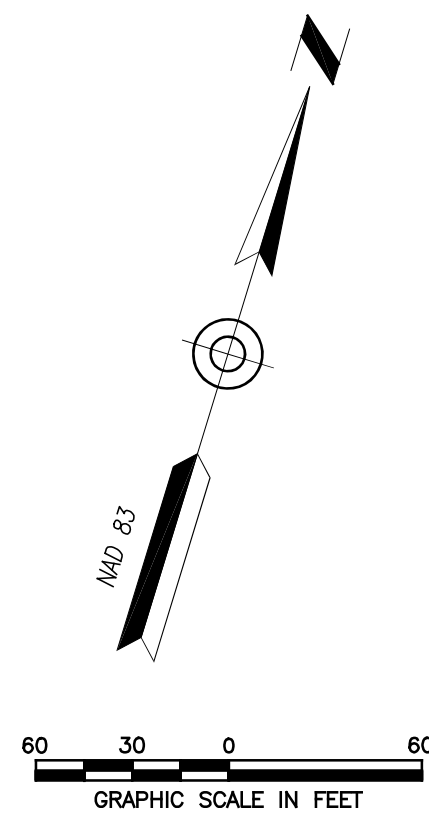
Expiration date per Sec. 8.26C,
Connecticut General Statutes: _____

ENDORSED BY THE BROOKLYN INLAND
WETLANDS COMMISSION

CHAIRMAN _____ DATE _____




NORMAND THIBAUT, JR., P.E. No. 22834 DATE 11/01/2025



CURVE DATA		
C1	C2	C3
R = 5680.00'	R = 5680.00'	R = 5680.00'
D = 1°45'30"	D = 0°30'33"	D = 2°15'41"
L = 174.32'	L = 50.48'	L = 224.18'
CH = S 71°56'28" W 174.32'	CH = S 73°04'30" W 50.48'	CH = S 74°27'37" W 224.16'

LINE DATA	
L1	N 14°49'40" W 34.19'
L2	S 06°00'57" W 43.34'
L3	S 23°24'09" E 17.56'
L4	S 68°21'47" W 89.41'

MAP REFERENCES:

- "Connecticut State Highway Department - Right of Way Map - Town of Brooklyn - Brooklyn-Danielson Road - From the Old Pomfret Road - Easterly About 12,000 Feet - Route U.S.6. - Scale: 1" = 40', Date: June 29, 1934 - Number 19-06 - Sheet No. 4 of 4."
- "Town of Brooklyn - Map Showing Land & Easement Acquired By - The State of Connecticut - From - Mildred Chase Hopkins - Relocation of Route U.S. 6 - Scale: 1" = 40' - Date: June 1953 - Town No. 19 - Project No. 43 - Serial No. 1 - Sheet 1 of 1 - Prepared by: Ernest T. Perkins." On file in the Brooklyn Land Records as Map Book 2 Page 98.
- "Boundary Survey - property of - Stephen Castle - Route 6, Brooklyn, Conn. - Scale: 1" = 40' - Date: July 30, 1964 - Sheet 1 of 1 Prepared by: Morton S. Fine & Associates." On file in the Brooklyn Land Records as Map Book 3 Page 52.
- "Map Showing Portion of Land of - Stephen Castle - Brooklyn, Connecticut - Scale: 1" = 20' - Date: March 19, 1982 - Prepared By: Thomas A. Brennan, Jr." On file in the Brooklyn Land Records as Map Book 7 Page 18.
- "Subdivision Map - Prepared for - Gary D. Kuchy - Westview Drive Brooklyn, Connecticut - Scale: 1" = 80' - Date: June 16, 1999 Revised to: 11/1/99 - Sheet 1 of 11 - Prepared by: J&D Civil Engineers and Provost Rovero Fitzback." On file in the Brooklyn Land Records.
- "Boundary Survey - Property of Gertrude M. Markley - Providence Road - Route 6 - Brooklyn, Connecticut - Scale: 1" = 40' - Date: Nov, 2002 - Sheet No. 1 - prepared by: Archer Surveying, LLC." On file in the Brooklyn Land Records as Map Book 15 Page 90.
- "Improvement Location Survey - Prepared for - Premier Chevrolet 512 Providence Road (Route 6) - Brooklyn, Connecticut - Scale: 1" = 50' - Date: 10/12/2011 - Sheet 1 of 1 - Prepared by: Killingly Engineering Associates." On file in the Brooklyn Land Records.
- "Property Survey - Property Line Relocation - Prepared for KCTT Properties, LLC - Route #6 (Providence Road) - Brooklyn, Connecticut - Scale: 1" = 20' - Date: October 2016 - Revised to: 1/5/2017 - Sheet No. 1 of 1 - Prepared by: PC Survey Associates." On file in the Brooklyn Land Records.

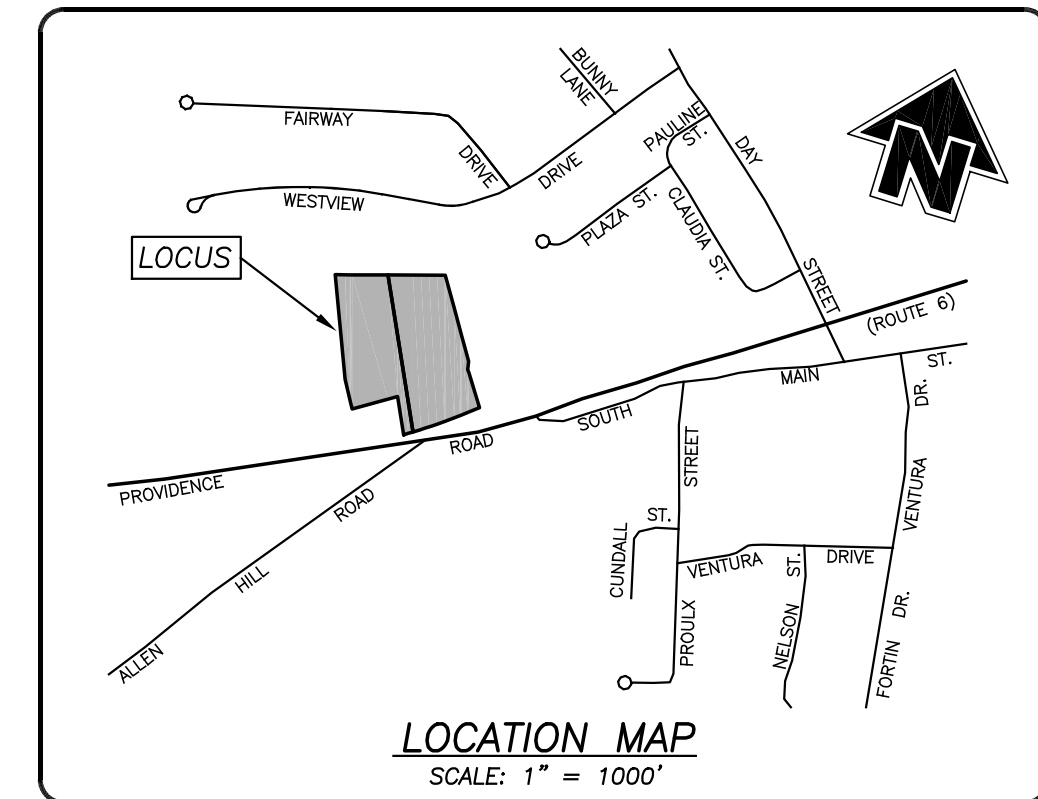
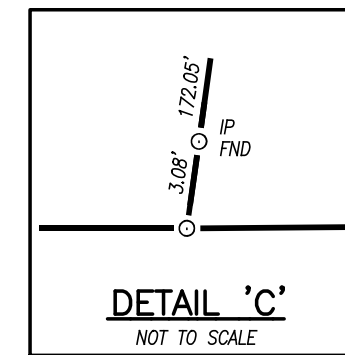
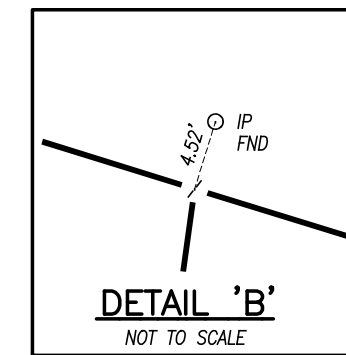
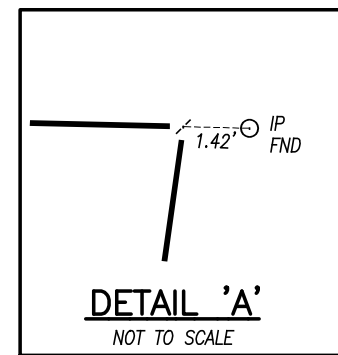
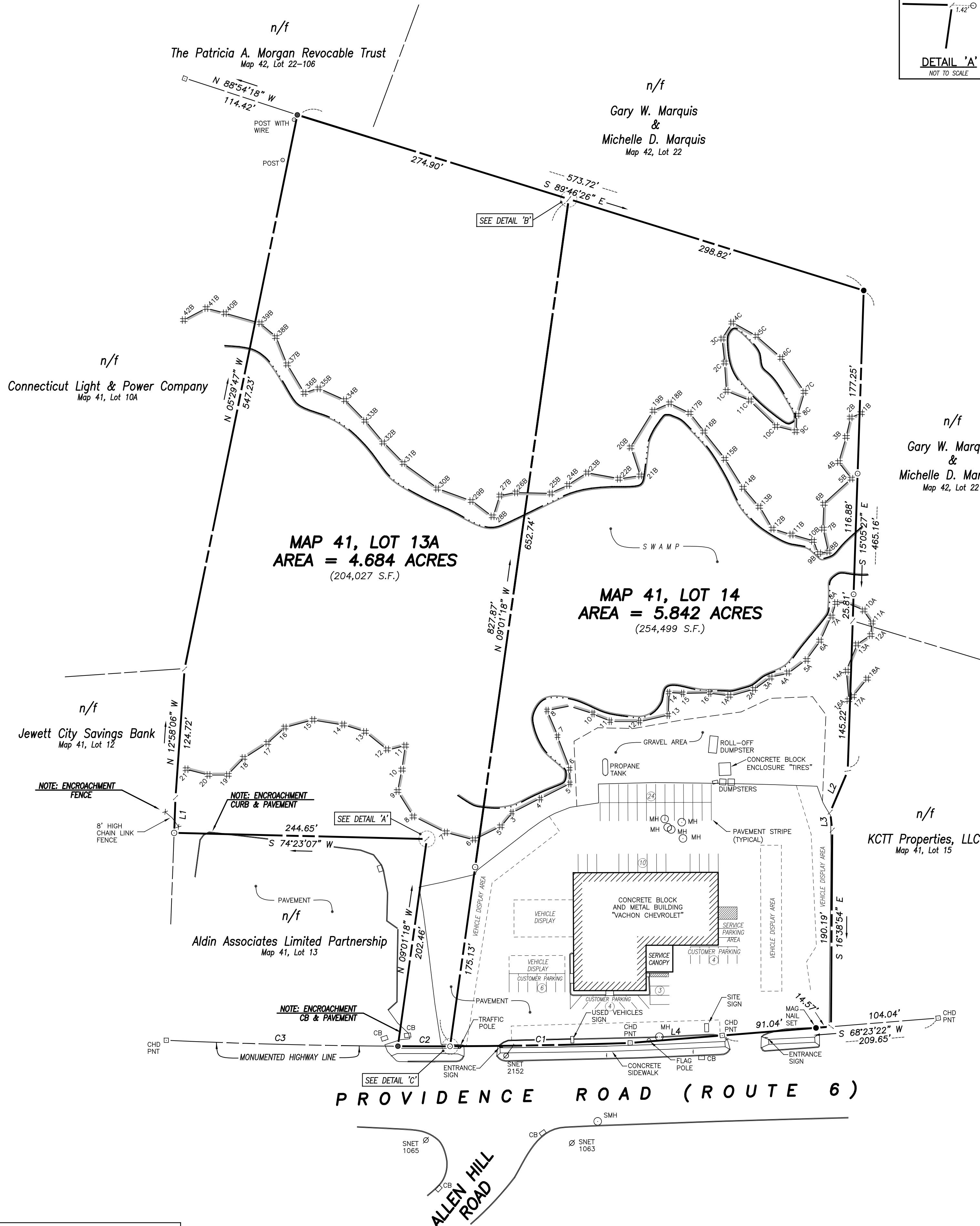
APPROVED BY THE BROOKLYN
PLANNING AND ZONING COMMISSION

CHAIRMAN _____ DATE _____

Expiration date per Sec. 8.26C,
Connecticut General Statutes: _____

ENDORSED BY THE BROOKLYN INLAND
WETLANDS COMMISSION

CHAIRMAN _____ DATE _____



LEGEND

- IRON PIN TO BE SET
- IRON PIN FOUND
- CHD PNT
- CHD MONUMENT FOUND
- CHD MONUMENT POINT
- ⊕ SIGN
- ⊕ UTILITY POLE
- ⊕ CATCH BASIN
- ⊕ CB
- ⊕ MH
- ⊕ SMH
- INLAND WETLANDS FLAG

NOTES:

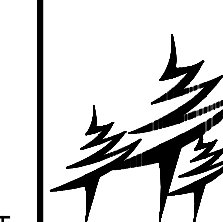
- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996;
 - This survey conforms to a Class "A-2" horizontal accuracy.
 - Survey Type: Improvement Location Survey.
 - Boundary Determination Category: Dependent Resurvey.
- Zone = PC.
- Owner of record:
 - Map 41, Lot 14 = Vachon Brooklyn, LLC
957 Washington St., Attleboro, MA 02703
Volume 620, Page 163
 - Map 41, Lot 13A = Vachon Brooklyn, LLC
957 Washington Street, Attleboro, MA 02703
Volume 632, Page 114
- Wetlands shown were delineated in the field by Joseph Theroux, Certified Soil Scientist, in September 2019.
- North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD 83) and are taken from actual field measurements of CGS Random Points B9262 and B9264.

DATE	REVISIONS
10/20/2023	BUILDING ADDITION ADDED
3/09/2021	PER TOWN REVIEW
10/07/2020	PER PLANNER REVIEW
03/31/2020	PER NECCOG REVIEW
03/10/2020	PER SOIL SCIENTIST REPORT & STAFF COMMENTS

IMPROVEMENT LOCATION SURVEY
SHOWING EXISTING CONDITIONS
PREPARED FOR

VACHON BROOKLYN, LLC

512 PROVIDENCE ROAD (ROUTE 6)
BROOKLYN, CONNECTICUT



Killingly Engineering Associates
Civil Engineering & Surveying

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

DATE: 1/07/2020	DRAWN: AMR
SCALE: 1" = 60'	DESIGN: NET
SHEET: 2 OF 5	CHK BY: GG
DWG. No: CLIENT FILE	JOB No: 19129

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

GREG A. GLAUDE, L.S. 11/01/2023
GREG A. GLAUDE, L.S. LIC. NO. 70191 DATE

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS
THE ORIGINAL SEAL AND SIGNATURE OF THE LAND SURVEYOR.

K:\19129\Drawings\2023 - Revised Plans\03-04-19129 SITE.dwg New 01, 2023 - 4:21 PM

SEE SITE DEVELOPMENT PLAN No. 2

MAP 41, LOT 13A
AREA = 4.684 ACRES
(204,027 S.F.)

MAP 41, LOT 14
AREA = 5.842 ACRES
(254,499 S.F.)
WATER ELEVATION = 482.0 (12/28/2019)

CURVE DATA		
C1 R = 5680.00' D = 1°45'30" L = 174.32' CH = S 71°56'28" W 174.32'	C2 R = 5680.00' D = 0°30'33" L = 50.48' CH = S 73°04'30" W 50.48'	C3 R = 5680.00' D = 2°15'41" L = 224.18' CH = S 74°27'37" W 224.16'

LEGEND

- IRON PIN TO BE SET
- IRON PIN FOUND
- CHD MONUMENT FOUND
- CHD MONUMENT POINT
- ⊕ SIGN
- UTILITY POLE
- CATCH BASIN
- MANHOLE
- SMH SANITARY SEWER MANHOLE
- INLAND WETLANDS FLAG
- - - 100 - - - EXISTING CONTOURS
- 100 — PROPOSED CONTOURS
- SILT FENCE

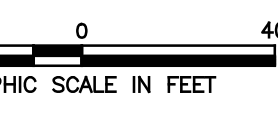
NOTES:

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996;
 - This survey conforms to a Class "A-2" horizontal accuracy.
 - Topographic features conform to a Class "I-2", "V-2" vertical accuracy.
 - Survey Type: Improvement Location Survey.
- Zone = PC.
- Owner of record:
 - Map 41, Lot 14 = Vachon Brooklyn, LLC
957 Washington St., Attleboro, MA 02703
Volume 620, Page 163
 - Map 41, Lot 13A = Vachon Brooklyn, LLC
957 Washington St., Attleboro, MA 02703
Volume 632, Page 114
- Wetlands shown were delineated in the field by Joseph Theroux, Certified Soil Scientist, in September 2019.
- North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD 83) and are taken from actual field measurements of CGS Random Points B9262 and B9264.
- Elevations shown are based on an assumed datum. Contours shown are taken from actual field survey. Contour interval = 2'.
- Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455 or 811.

10/20/2023	BUILDING ADDITION ADDED
3/09/2021	PER TOWN REVIEW
10/07/2020	PER PLANNER REVIEW
03/31/2020	PER NECCOG REVIEW
03/10/2020	PER SOIL SCIENTIST REPORT & STAFF COMMENTS
DATE	DESCRIPTION
REVISIONS	

IMPROVEMENT LOCATION SURVEY
SITE DEVELOPMENT PLAN No. 1
PREPARED FOR
VACHON BROOKLYN, LLC
512 PROVIDENCE ROAD (ROUTE 6)
BROOKLYN, CONNECTICUT

Killingly Engineering Associates Civil Engineering & Surveying	
114 Westcott Road P.O. Box 421 Killingly, Connecticut 06241 (860) 779-7299 www.killinglyengineering.com	
DATE: 1/07/2020	DRAWN: AMR
SCALE: 1" = 40'	DESIGN: NET
SHEET: 3 OF 5	CHK BY: GG
DWG. No: CLIENT FILE	JOB No: 19129



PERCOLATION TEST RESULT - November 4, 2020
Killingly Engineering Associates - Normand Thibault, P.E.

TP-1	
Depth = 28"	Rate = 6.7 min./in.
Time	Reading
8:35	4.5"
8:40	7.5"
8:45	11"
8:50	12.5"
8:55	15"
9:00	16.5"
9:05	17.25"
9:10	18"
9:15	18.75"

Soil Profile - Adjacent to perc
0-10" Organics
10"-18" Orange-Brown Sandy Loam
18"-38" Loamy Course Sand
Mottling at approximately 30"

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	MATURE HEIGHT
✱	Myrica gale	Sweetgale	12	24"	2'-4'
Low-growing, bushy shrub. Blue-green to dark green foliage has a pleasant fragrance. Nitrogen fixer. Often found in bogs and acidic wetlands.					
⊙	Lindera benzoin	Common Spicebush	12	24"	3'-4'
Medium shrub found in seasonal wetlands and moist woods. Red fruit important food source for many birds. The primary food of larval Spicebush Swallowtail butterflies. Fall foliage.					

APPROVED BY THE BROOKLYN
PLANNING AND ZONING COMMISSION

CHAIRMAN	DATE
Expiration date per Sec. 8.26C, Connecticut General Statutes:	

ENDORSED BY THE BROOKLYN INLAND
WETLANDS COMMISSION

CHAIRMAN	DATE
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BEFORE YOU DIG
CALL BEFORE YOU DIG
AT LEAST TWO FULL BUSINESS DAYS
BEFORE DIGGING OR DISTURBING EARTH
DIAL 811 OR 1-800-922-4455

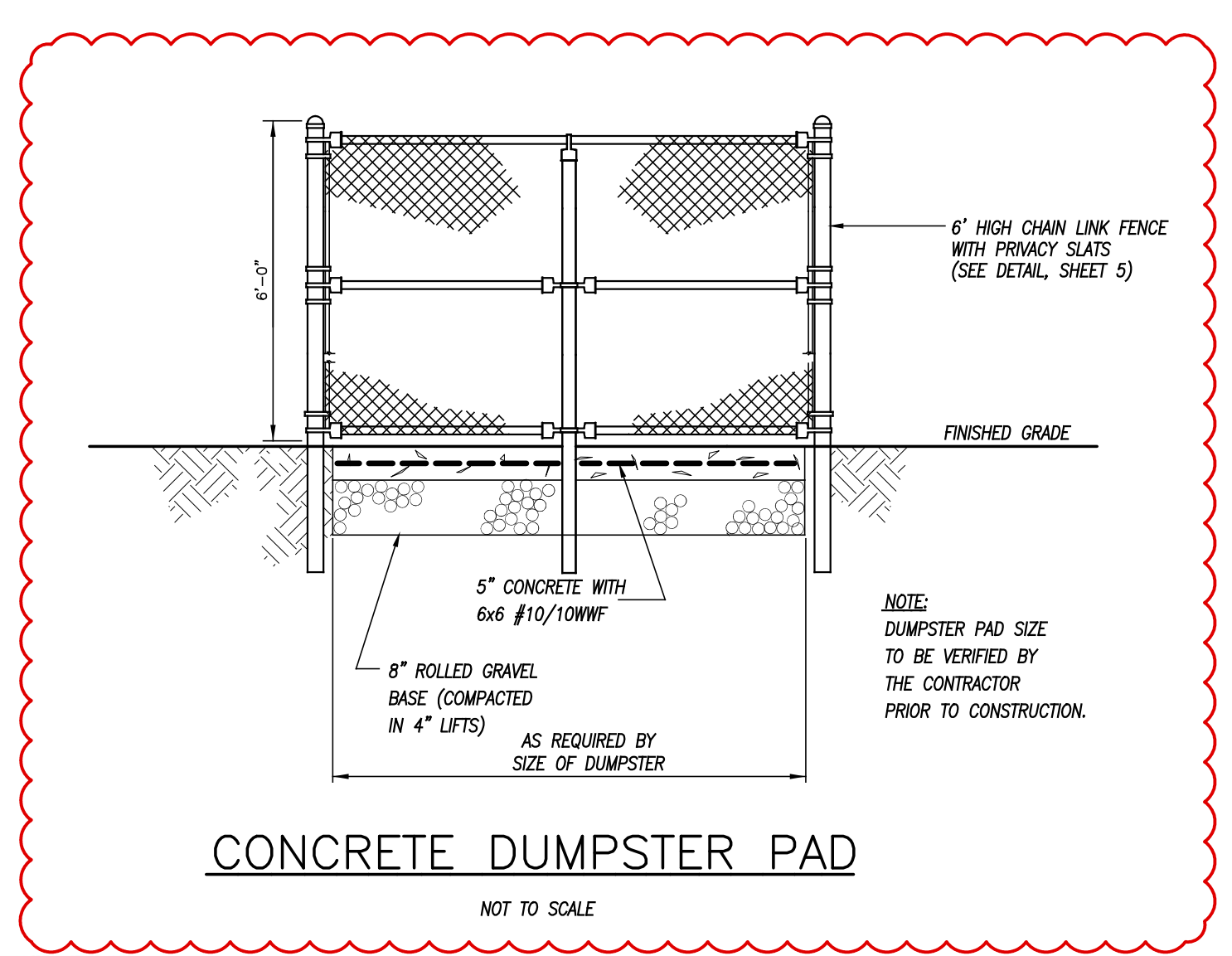


Normand Thibault, Jr., P.E.
11/01/2023
NORMAND THIBAUT, JR., P.E. No. 22834 DATE

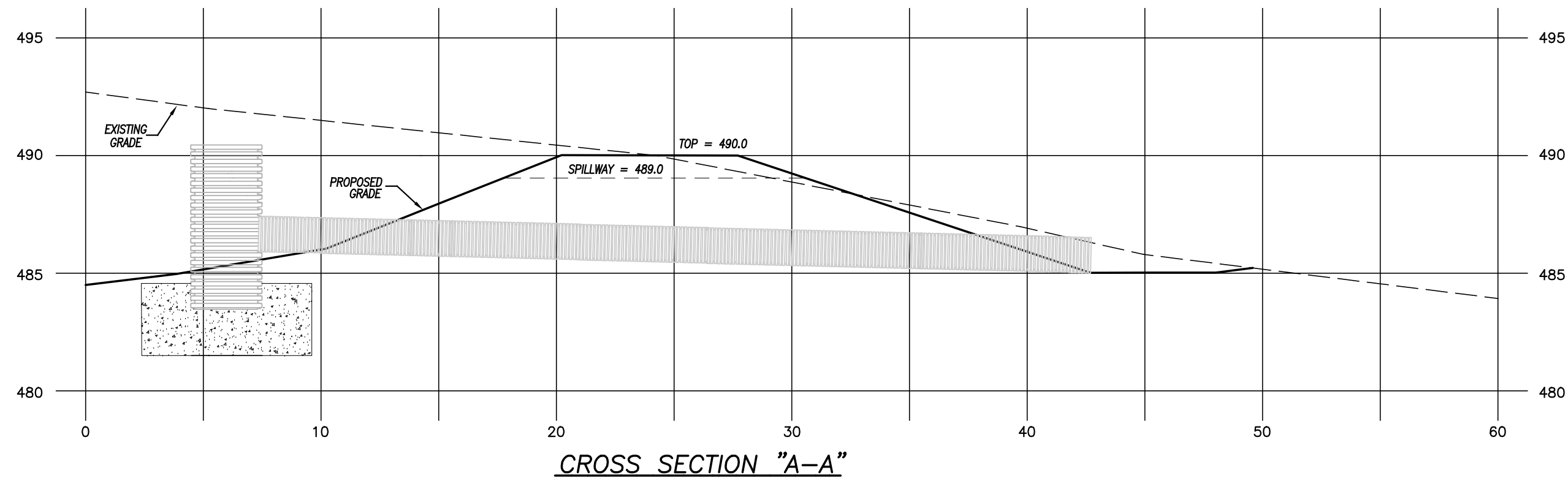
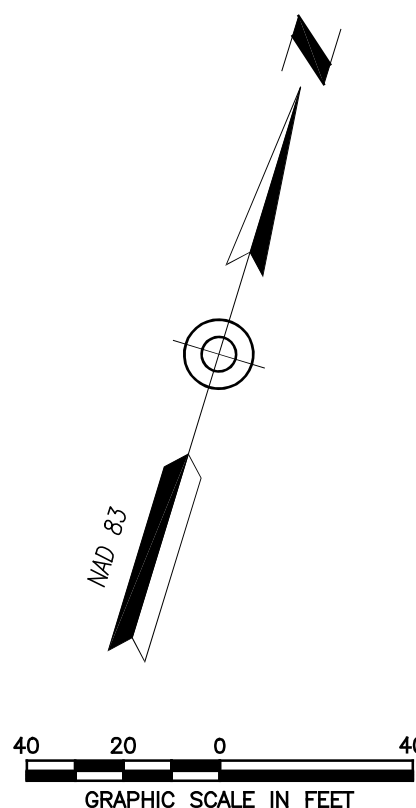
TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT
AS NOTED HEREON.

GREG A. GLAUDE, L.S. LIC. NO. 70191 DATE 11/01/2023

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS
THE ORIGINAL SEAL AND SIGNATURE OF THE LAND SURVEYOR.



K:\19129\Drawings\2023 - Revised Plans\03-04-19129 SITE.dwg New 01, 2023 - 4:21 PM



SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	MATURE HEIGHT
	<i>Juniperus scopulorum</i>	Moonglow Juniper	18	5'	16'-20'
Exceptionally showy, silvery blue foliage and broad pyramidal form makes a most attractive screen. A tough plants with dense branching that grows to 20' tall.					
	<i>Viburnum rhytidophyllum</i>	Leatherleaf Viburnum	17	3'-4'	6'-10'
This evergreen Viburnum (most are deciduous) has this olive green leaves that form a great green wall for screening. White fragrant flowers in the spring followed by red berries in the fall that provide food for birds.					
	<i>Acer rubrum</i>	Red Maple	14	3" Caliper	60'-80'

CURVE DATA		
C1	C2	C3
R = 5680.00'	R = 5680.00'	R = 5680.00'
D = 1°45'30"	D = 0°30'33"	D = 2°15'41"
L = 174.32'	L = 50.48'	L = 224.18'
CH = S 71°56'28" W 174.32'	CH = S 73°04'30" W 50.48'	CH = S 74°27'37" W 224.16'

LEGEND

- IRON PIN TO BE SET
- IRON PIN FOUND
- CHD MONUMENT FOUND
- CHD MONUMENT POINT
- ⊕ SIGN
- ∅ UTILITY POLE
- CB CATCH BASIN
- MH MANHOLE
- SMH SANITARY SEWER MANHOLE
- INLAND WETLANDS FLAG
- - - 100 - - - EXISTING CONTOURS
- 100 — PROPOSED CONTOURS
- SILT FENCE

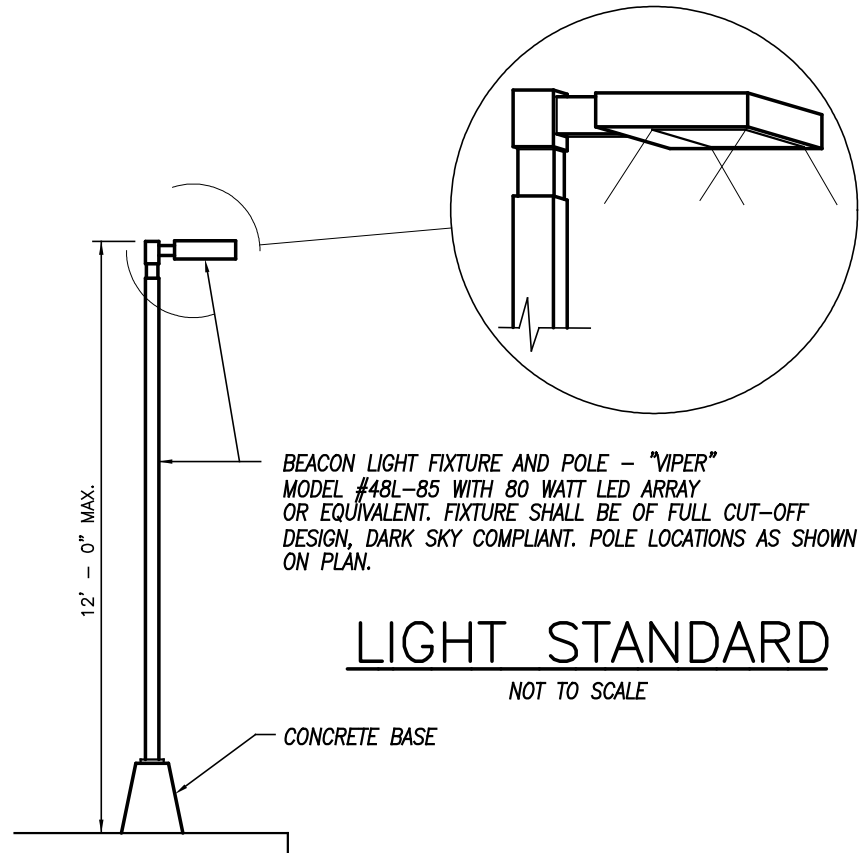
LANDSCAPING REQUIREMENTS PER SECTION 7.C.5

- 7.C.5.1 10 S.F. of interior landscaping required for each parking space*. Based upon this requirement and 10' width per parking space, 118 spaces require 1,180 S.F. of interior landscaping. Center island provides 4,532 S.F.
- 7.C.5.4 At one deciduous tree having a caliper of 2.5" measured 4' above the root crown and at least 8' in height shall be provided for each 100 S.F. of required interior landscaping. 12 required — 14 provided.

SCREENING AND BUFFERING REQUIREMENTS PER SECTION 7.C.6

- 7.C.6.3 Buffer shall have a minimum width of 20 feet. Greater than 20' provided.
- 7.C.6.4 Buffer area shall:
- Be of evergreen planting of such type, height, spacing and arrangement as in the judgement of the Commission will effectively screen the activity from the neighboring residential area.
 - At a minimum shall consist of trees 6' in height planted at intervals of 10' on center.

LIGHT STANDARD



NOTES:

- PROVIDE JUTE NETTING OVER TOPSOIL & SEED MIX IN BASIN TO STABILIZED SLOPES.
- NO SALTS OR CHEMICAL APPLICATIONS SHALL BE USED FOR SNOW AND ICE REMOVAL IN PROPOSED PARKING AREAS.

PERCOLATION TEST RESULT - November 4, 2020

Killingly Engineering Associates - Normand Thibeault, P.E.

TP-2

Depth = 30" Rate = 3 min./in.

Time	Reading
9:50	2"
9:53	6.5"
9:56	10.5"
9:59	12.5"
10:02	14.5"
10:05	16"
10:08	17"
10:11	18"

Soil Profile - Adjacent to perc

- 0"-8" Topsoil/organics
- 10"-18" Dark Brown Sandy Loam
- 18"-36" Coarse Sandy Gravel

Excavation by hand methods

TP-3

Depth = 28" Rate = < 1 min./in.

Time	Reading
9:52	2"
9:55	11.5"
9:58	19"
10:01	26.5"
10:04	Dry
Refilled hole	1"
10:07	10"
10:10	17.5"
10:13	26"
10:16	Dry
10:19	Dry

Soil Profile - Adjacent to perc

- 0"-8" Topsoil/organics
- 8"-16" Gravelly Loamy Sand
- 16"-38" Coarse Gravel

Excavation by hand methods

TP-4

*Depth = 26" Rate = < 1 min./in.

Time	Reading
10:45	0"
10:48	8"
10:51	15.5"
10:54	22.5"
10:57	Dry

Soil Profile - Adjacent to perc

- 0"-7" Topsoil/organics
- 7"-17" Gravelly Loamy Sand
- 17"-36" Coarse Gravel

Excavation by hand methods

*Rock at bottom of hole

Connecticut Light & Power Company
Map 41, Lot 10A

MAP 41, LOT 13A
AREA = 4.684 ACRES
(204,027 S.F.)

MAP 41, LOT 14
AREA = 5.842 ACRES
(254,499 S.F.)
WATER ELEVATION = 482.0 (12/28/2019)

SEE SITE DEVELOPMENT PLAN No. 1

APPROVED BY THE BROOKLYN
PLANNING AND ZONING COMMISSION

CHAIRMAN DATE

Expiration date per Sec. 8.26C,
Connecticut General Statutes:

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WETLANDS COMMISSION

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NOTES:

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996;
 - This survey conforms to a Class "A-2" horizontal accuracy.
 - Topographic features conform to a Class "I-2", "V-2" vertical accuracy.
 - Survey Type: Improvement Location Survey.
- Zone = PC.
- Owner of record:
 - Map 41, Lot 14 = Vachon Brooklyn, LLC
957 Washington St., Attleboro, MA 02703
Volume 620, Page 163
 - Map 41, Lot 13A = Vachon Brooklyn, LLC
957 Washington St., Attleboro, MA 02703
Volume 632, Page 114
- Wetlands shown were delineated in the field by Joseph Theroux, Certified Soil Scientist, in September 2019.
- North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD 83) and are taken from actual field measurements of CGS Random Points B9262 and B9264.
- Elevations shown are based on an assumed datum. Contours shown are taken from actual field survey. Contour interval = 2'.
- Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455 or 811.

10/20/2023	BUILDING ADDITION ADDED
3/09/2021	PER TOWN REVIEW
10/07/2020	PER PLANNER REVIEW
03/31/2020	PER NECCOG REVIEW
03/10/2020	PER SOIL SCIENTIST REPORT & STAFF COMMENTS
DATE	DESCRIPTION
REVISIONS	

IMPROVEMENT LOCATION SURVEY
SITE DEVELOPMENT PLAN No. 2
PREPARED FOR
VACHON BROOKLYN, LLC
512 PROVIDENCE ROAD (ROUTE 6)
BROOKLYN, CONNECTICUT

Killingly Engineering Associates
Civil Engineering & Surveying
114 Westcott Road
P.O. Box 421
Killingly, Connecticut 06241
(860) 779-7299
www.killinglyengineering.com
DATE: 1/07/2020 DRAWN: AMR
SCALE: 1" = 40' DESIGN: NET
SHEET: 4 OF 5 CHK BY: GG
DWG. No: CLIENT FILE JOB No: 19129

EROSION AND SEDIMENT CONTROL PLAN:

REFERENCE IS MADE TO:

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

DEVELOPMENT CONTROL PLAN:

- Development of the site will be performed by the Contractor, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout construction.
- The sedimentation control mechanisms shall remain in place from start of construction until permanent vegetation has been established. The representative for the Town of Brooklyn will be notified when sediment and erosion control structures are initially in place. Any additional soil & erosion control measures requested by the Town or its agent, shall be installed immediately. Once the proposed development, seeding and planting have been completed, the representative shall again be notified to inspect the site. The control measures will not be removed until this inspection is complete.
- All stripping is to be confined to the immediate construction area. Topsoil shall be stockpiled so that slopes do not exceed 2 to 1. A hay bale sediment barrier is to surround each stockpile and a temporary vegetative cover shall be provided.
- Dust control will be accomplished by spraying with water. The application of calcium chloride is not permitted adjacent to wetland resource areas or within 100' of these areas.
- The proposed planting schedule is to be adhered to during the planting of disturbed areas throughout the proposed construction site.
- Final stabilization of the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied.

SILT FENCE INSTALLATION AND MAINTENANCE:

- Dig a 6" deep trench on the uphill side of the barrier location.
- Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.
- Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
- Inspect and repair barrier after heavy rainfall.
- Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
- Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the Inland wetlands commission.
- Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because:
 - the fence has been overtopped, undercut or bypassed by runoff water,
 - the fence has been moved out of position (knocked over), or
 - the geotextile has decomposed or been damaged.

HAY BALE INSTALLATION AND MAINTENANCE:

- Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other.
- Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be wedged with straw to prevent water from passing between the bales.
- Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
- Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the Inland Wetlands Commission.
- Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because:
 - the barrier has been overtopped, undercut or bypassed by runoff water,
 - the barrier has been moved out of position, or
 - the hay bales have deteriorated or been damaged.

TEMPORARY VEGETATIVE COVER:

SEED SELECTION

Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure TS-2 in the 2002 Guidelines.

TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.

SITE PREPARATION

Install needed erosion control measures such as diversions, grade stabilization structures, sediment basins and grassed waterways.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application, and mulch anchoring.

SEEDBED PREPARATION

Loosen the soil to a depth of 3-4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, disking, harrowing, raking or dragging with a section of chain link fence. Avoid excessive compaction of the surface by equipment traveling back and forth over the surface. If the slope is tracked, the cleat marks shall be perpendicular to the anticipated direction of the flow of surface water.

If soil testing is not practical or feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10-10-10 or equivalent. Additionally, lime may be applied using rates given in Figure TS-1 in the 2002 Guidelines.

SEEDING

Apply seed uniformly by hand cyclone seeder, drill, cultipacker type seeder or hydroseeder at a minimum rate for the selected species. Increase seeding rates by 10% when hydroseeding.

MULCHING

Temporary seedings made during optimum seeding dates shall be mulched according to the recommendations in the 2002 Guidelines. When seeding outside of the recommended dates, increase the application of mulch to provide 95%-100% coverage.

MAINTENANCE

Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Repair eroded areas and install additional controls if required to prevent recurrence of erosion.

Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative cover).

PERMANENT VEGETATIVE COVER:

Refer to Permanent Seeding Measure in the 2002 Guidelines for specific applications and details related to the installation and maintenance of a permanent vegetative cover. In general, the following sequence of operations shall apply:

- Topsoil will be replaced once the excavation and grading has been completed. Topsoil will be spread at a minimum compacted depth of 4".
- Once the topsoil has been spread, all stones 2" or larger in any dimension will be removed as well as debris.
- Apply agricultural ground limestone at a rate of 2 tons per acre or 100 lbs. per 1000 s.f. Apply 10-10-10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per 1000 s.f. Work lime and fertilizer into the soil to a depth of 4".
- Inspect seedbed before seeding. If traffic has compacted the soil, retilt compacted areas.
- Apply the chosen grass seed mix. The recommended seeding dates are: April 1 to June 15 & August 15 - October 1.
- Following seeding, firm seedbed with a roller. Mulch immediately following seeding. If a permanent vegetative stand cannot be established by September 30, apply a temporary cover on the topsoil such as netting, mat or organic mulch.

DEVELOPMENT SCHEDULE/SEQUENCE OF OPERATIONS:

- Flag the limits of disturbance and schedule pre-construction meeting with Town of Brooklyn wetlands Agent.
- Install the anti-tracking construction entrance.
- Install temporary logging crossing (corduroy crossing or slash mat) in the area of the wetlands crossing to allow for logging access.
- Cut trees within the defined clearing limits and remove the cut wood.
- Install perimeter erosion and sedimentation controls in accordance with the site development plan.
- Excavate for proposed stormwater basin; area shall be utilized for a temporary sedimentation basin during construction.
- Chip brush and slash; stockpile chips for use on site or remove off site.
- When all logging activities have been completed, remove temporary crossing and install proposed pipes; counter sink pipes a minimum of 12" and fill bottoms with native material.
- Box out areas to be paved and stockpile topsoil in locations shown on the plans. Install erosion controls around stockpiles and apply temporary seeding and divert water around the perimeter of the stockpiles.
- Install and compact processed gravel for driveway and parking area base.
- Remove tree stumps and dispose of at an approved disposal site. Alternatively, stumps may be chipped in place. No stumps shall be buried on site.
- Make all required cuts and fills. Establish the subgrade for the driveway as required and install additional erosion controls as necessary and as shown on the plans.
- Inspect perimeter erosion and sedimentation controls weekly and after rain events in excess of 0.5". Repair any damaged controls and provide additional erosion control devices as necessary to address areas of concentrated runoff that may develop as a result of the construction activities. The contractor shall review discharge conditions with the design engineer or the Town of Brooklyn prior to installing additional erosion controls. Apply water as necessary for dust control.
- Install required utilities.
- Prepare sub-base for driveway and remainder of the parking areas for final grading.
- Place topsoil where required and install any proposed landscaping.
- Remove anti-tracking construction entrance and install first course of pavement.
- When the remainder of the site work is near completion, sweep all paved areas for the final course of paving. Inspect erosion controls and remove any accumulated sediment. Clean accumulate sediment from the stormwater basin, apply topsoil & seed, and cover with jute netting.
- Install final course of pavement upon the completion of the final structure.
- Fine grade, rake, seed and mulch to within 2' of the pavement.
- Remove and dispose of all silt fence and hay bales after the site has been stabilized to the satisfaction of the Town of Brooklyn.

RESPONSIBLE PARTY FOR E&S MAINTENANCE:

Joe Simon
Vachon Chevrolet
512 Providence Road
Brooklyn, CT 06234
(401) 692-1459

WETLAND SEED MIX FOR WETLANDS MITIGATION

The New England Wetmix (Wetland Seed Mix) contains a wide variety of native seeds that are suitable for most wetland restoration sites that are not permanently flooded. All species are best suited to moist ground as found in most wet meadows, scrub shrub, or forested wetland restoration areas. The mix is well suited for detention basin borders and the bottom of detention basins not generally under standing water. The seeds will not germinate under inundated conditions. If planted during the fall months, the seed mix will germinate the following spring. During the first season of growth, several species will produce seeds while other species will produce seeds after the second growing season. Not all species will grow in all wetland situations. This mix is comprised of the wetland species most likely to grow in created/restored wetlands and should produce more than 75% ground cover in two full growing seasons.

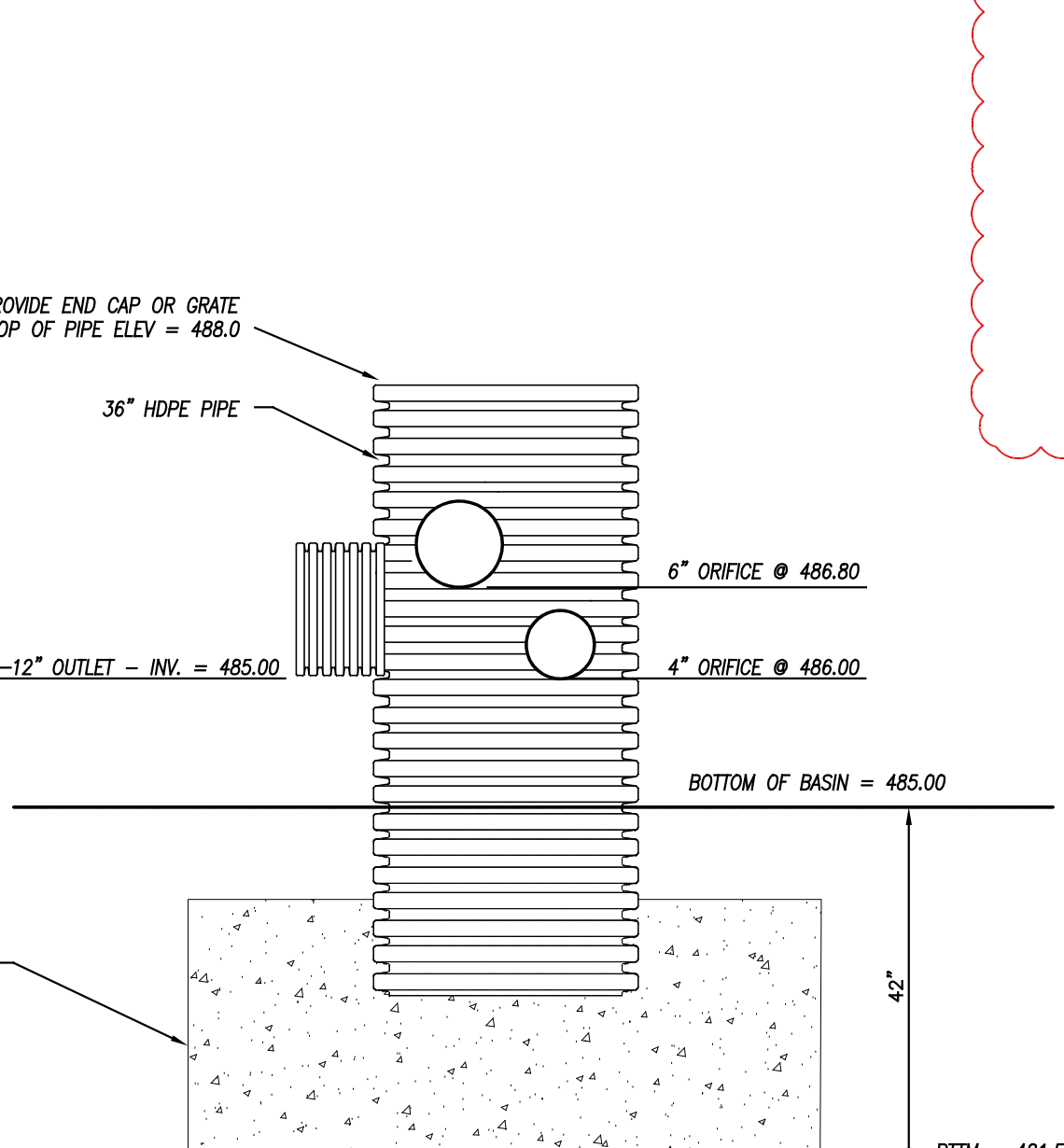
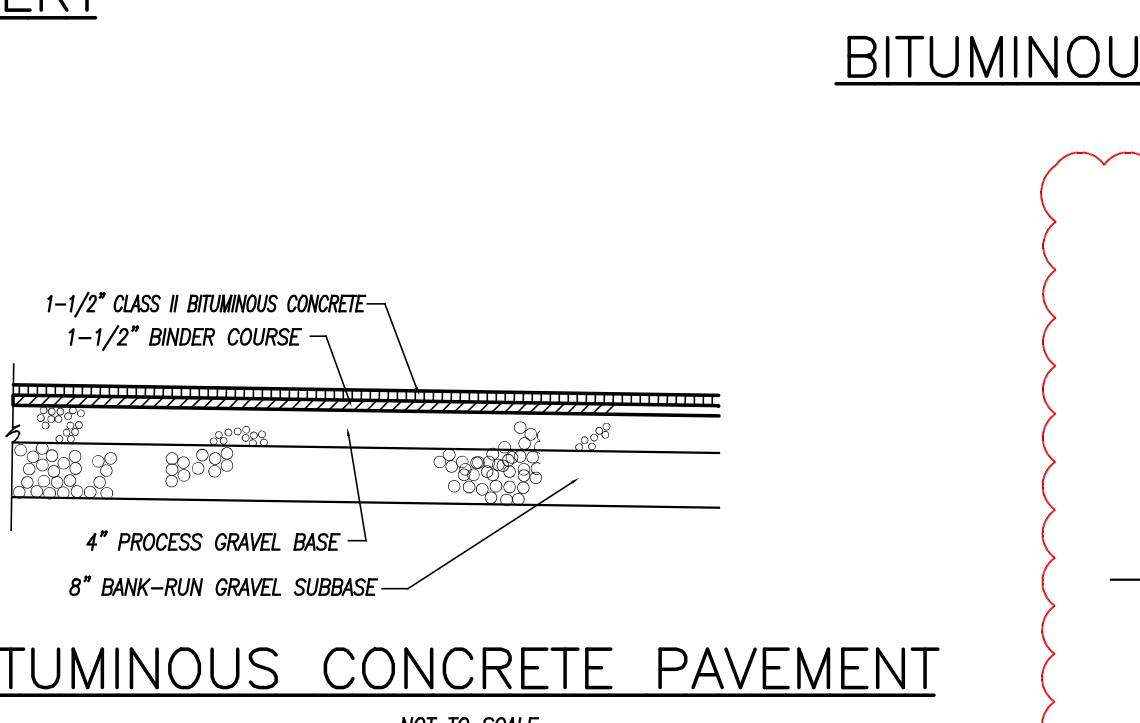
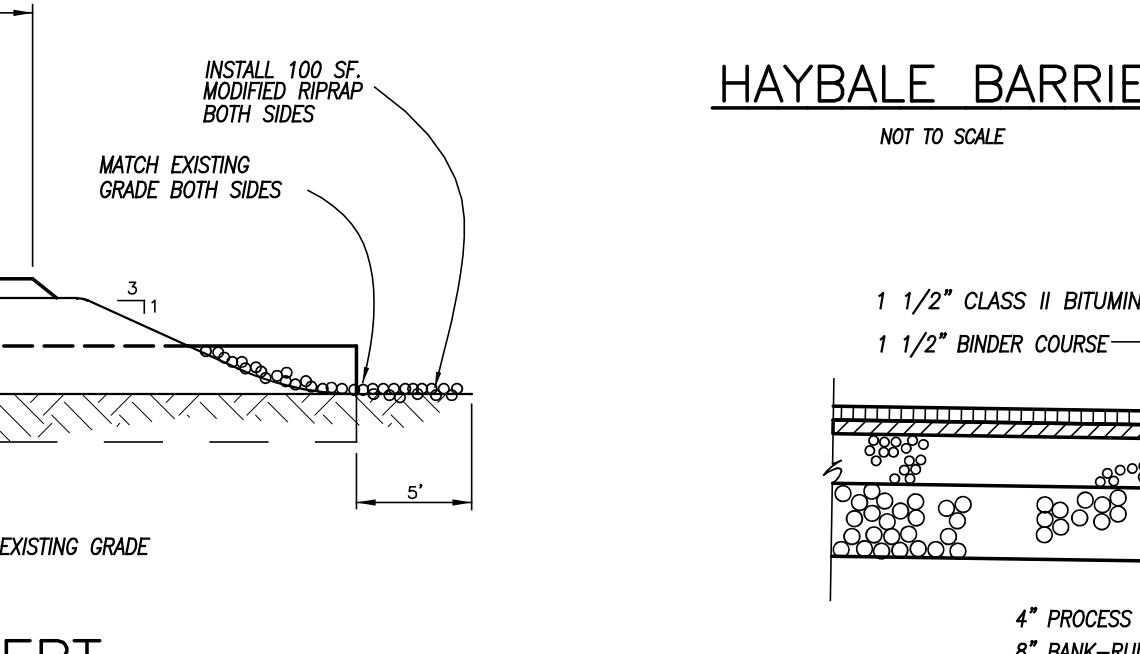
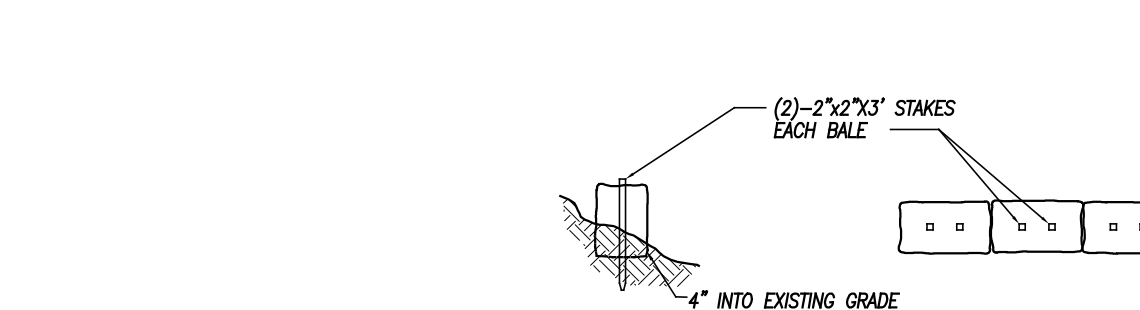
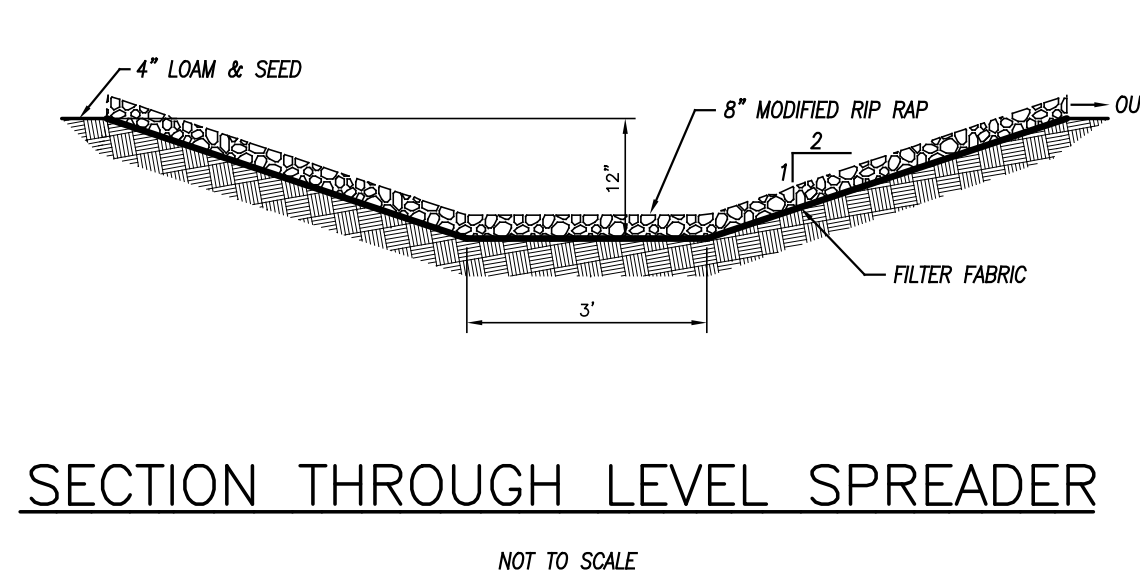
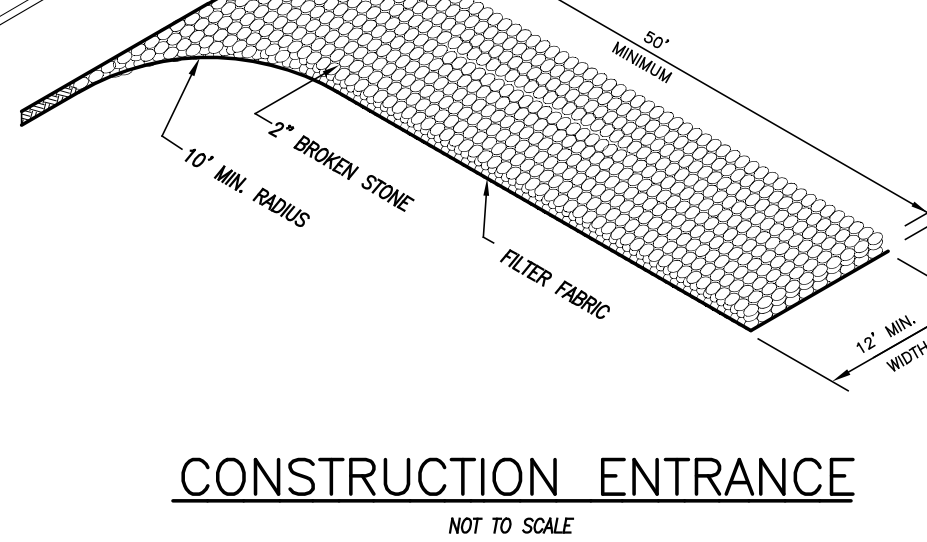
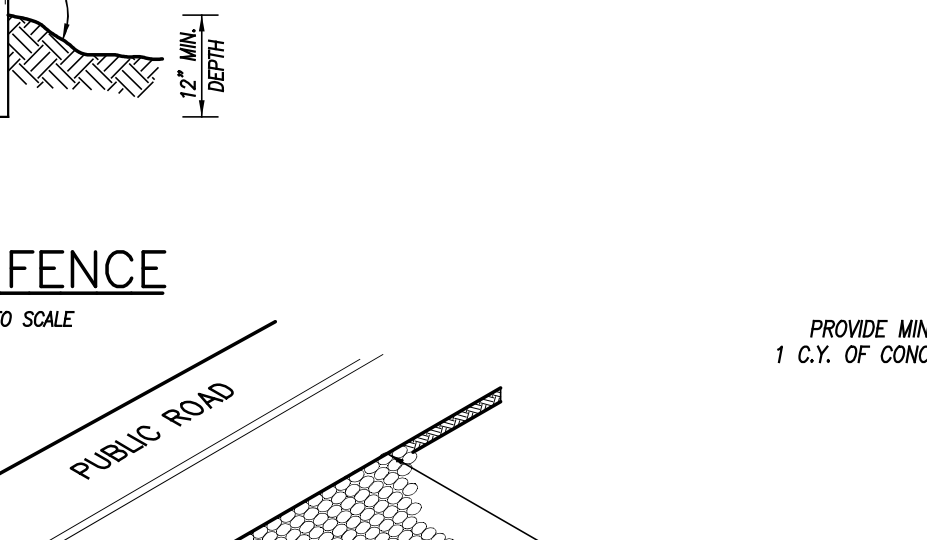
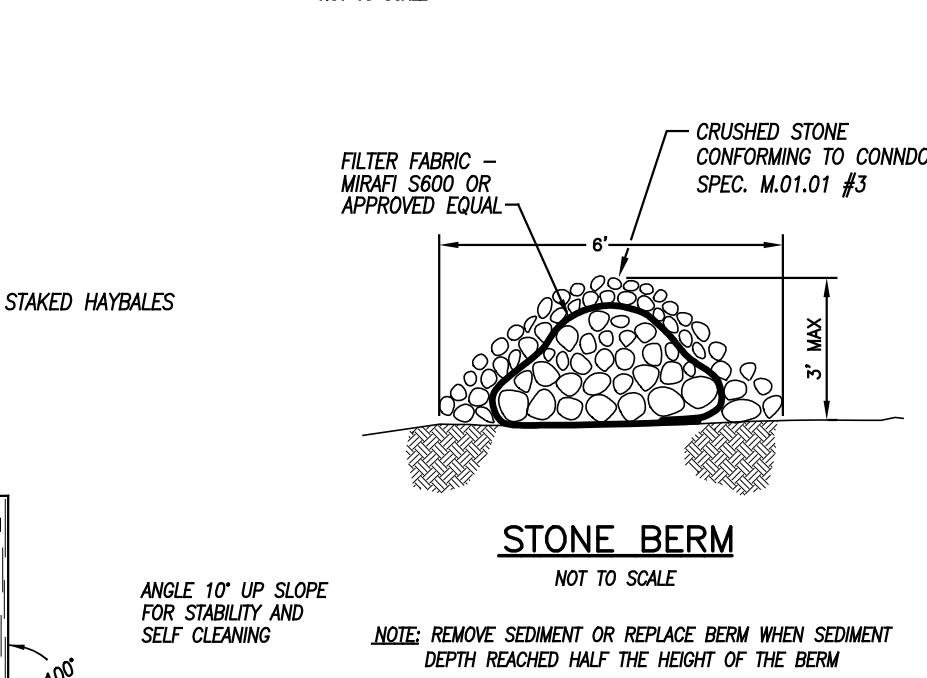
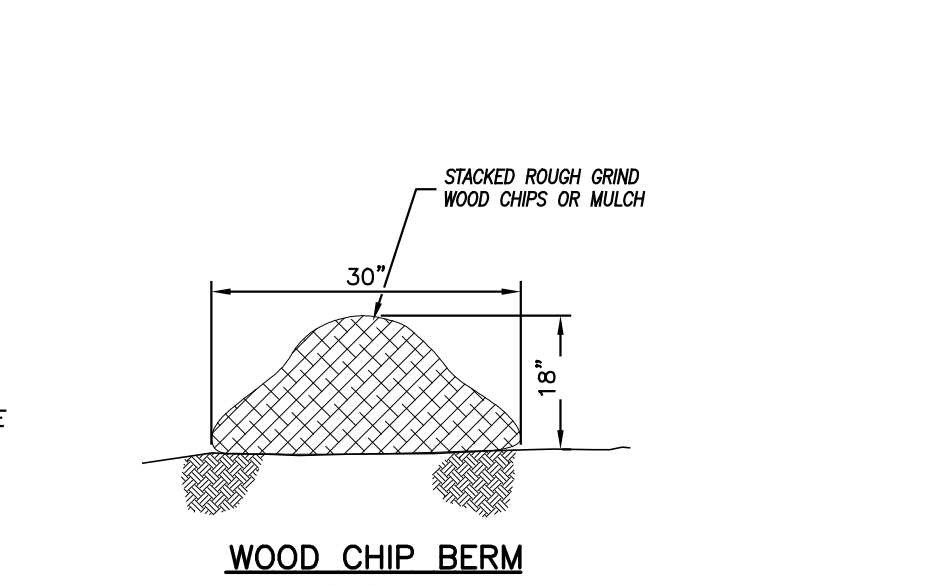
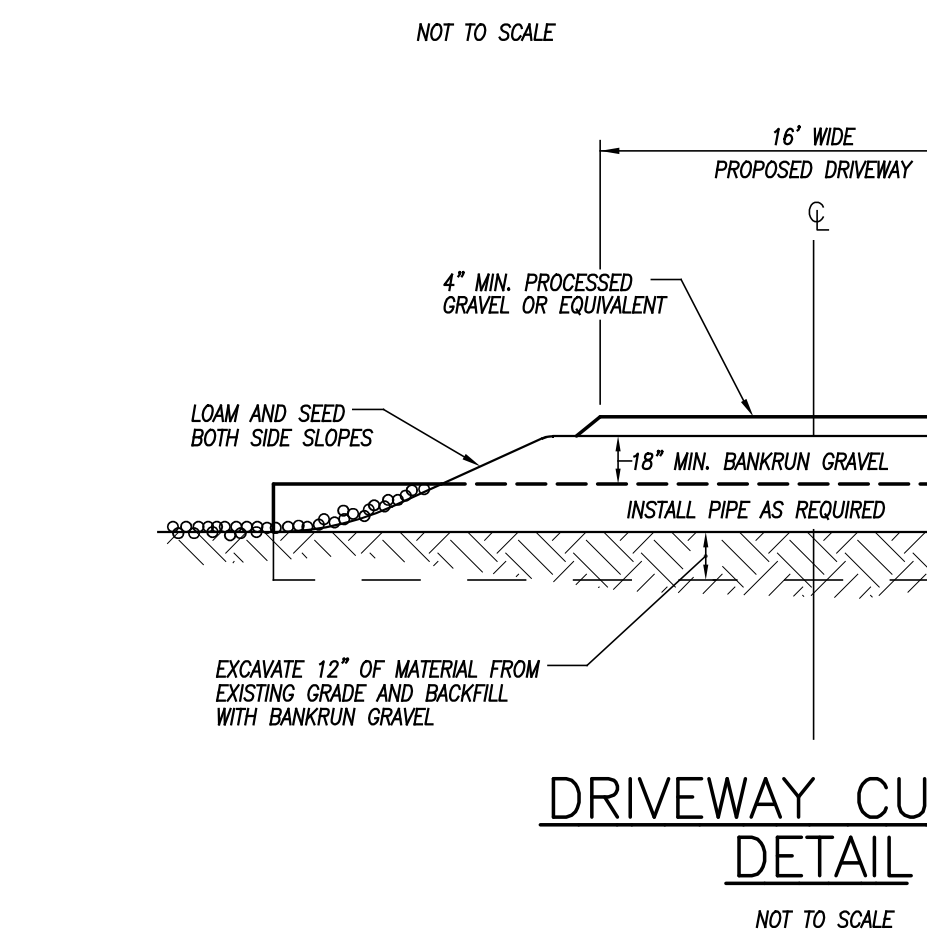
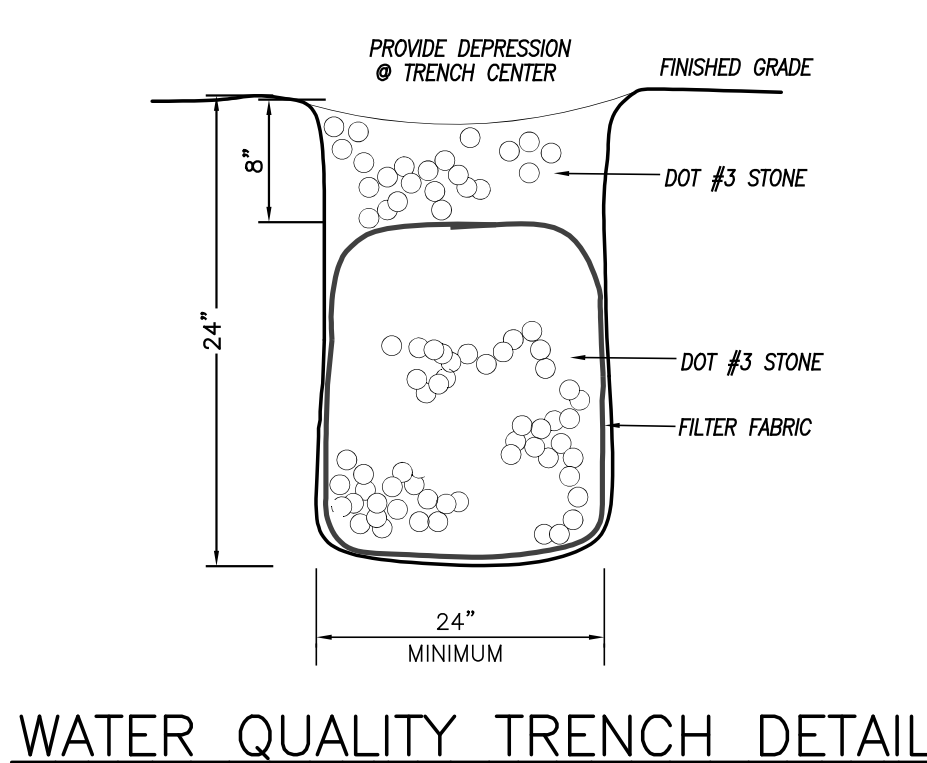
The wetland seeds in this mix can be sown by hand, with a hand-held spreader, or hydro-seeded on large or hard to reach sites. Lightly rake to insure good seed-to-soil contact. Seeding can take place on frozen soil, as the freezing and thawing weather of late fall and late winter will work the seed into the soil. If spring conditions are drier than usual watering may be required. If sowing during the summer months supplemental watering will likely be required until germination. A light mulch of clean, weed free straw is recommended.

APPLICATION RATE: 1 LB/2500 sq. ft

SPECIES: Fox Sedge, (Carex vulpinoidea), Lurid Sedge, (Carex lurida), Blunt Broom Sedge, (Carex scoparia), Sensitive Fern, (Onoclea sensibilis), Blue Vervain, (Verbena hastata), Hop Sedge, (Carex lupulina), Green Bulrush, (Scirpus atrovirens), Nodding Bur Marigold, (Bidens cer-nua), Bristly Sedge, (Carex comosa), Fringed Sedge, (Carex crinita), American Mannagrass, (Glyceria grandis), Wool Grass, (Scirpus cyperinus), Soft Rush, (Juncus effusus), Spotted Joe Pye Weed, (Eupatorium maculatum), Boneset, (Eupatorium perfoliatum), Mud Plantain, (Alisma subcordatum), New England Aster, (Aster novae-angliae), Rattlesnake Grass, (Glyceria canadensis), Purplestem aster (Aster puniceus), Soft Stem Bulrush, (Scirpus validus), Blueflag (Iris versicolor), Swamp Milkweed, (Asclepias incarnata), Monkey Flower, (Mimulus ringens). The functionality of each mix will remain unchanged, although mix composition may vary during the year.

CONSTRUCTION NOTES/GENERAL PROVISIONS

- The locations of existing utilities are based upon visible field observations, record mapping and interviews with the property owner and abutting property owners. They are shown for informational purposes only. Contractor shall coordinate exploratory test hole excavation with the Engineer if necessary to verify and/or determine actual locations of some utilities & structures. It is the responsibility of the contractor to verify the location and elevation of all utilities. Contact "CALL BEFORE YOU DIG" at 1-800-922-4455, and obtain all applicable permits, prior to any excavation around utilities.
- All existing site features not scheduled to remain shall be removed and disposed of in a proper manner, by the contractor.
- All Materials and methods of construction shall conform to "State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 817", and supplements thereto.
- The Contractor shall obtain copies of all regulatory agency permits from the Owner prior to any site disturbance.
- Unless otherwise noted on the plans, the contractor shall use the geometry provided on the construction plans. Benchmark information shall be provided to the contractor by the Owner or the Owner's surveyor. Any discrepancies between field measurements and construction plan information shall be brought to the attention of the Engineer or Surveyor immediately.
- The Contractor shall not revise elevations or locations of items shown on the plans without written consent of the project Engineer or Surveyor.
- The Contractor shall protect benchmarks, property corners, and other survey monuments from damage or displacement. If a marker needs to be removed, it shall be referenced by a licensed land surveyor and replaced as necessary by the same.
- The Contractor shall be responsible for preparing and compacting base for proposed pavement. Owner shall provide general fill to establish subgrade - contractor shall spread and compact. Contractor shall provide, spread and compact required processed aggregate.
- The entire project site shall be thoroughly cleaned at the completion of the work. Clean all installed paved areas, accumulated silt and sediment, plus all adjacent areas affected by the construction activities as directed by the Owner or the jurisdictional Agency.

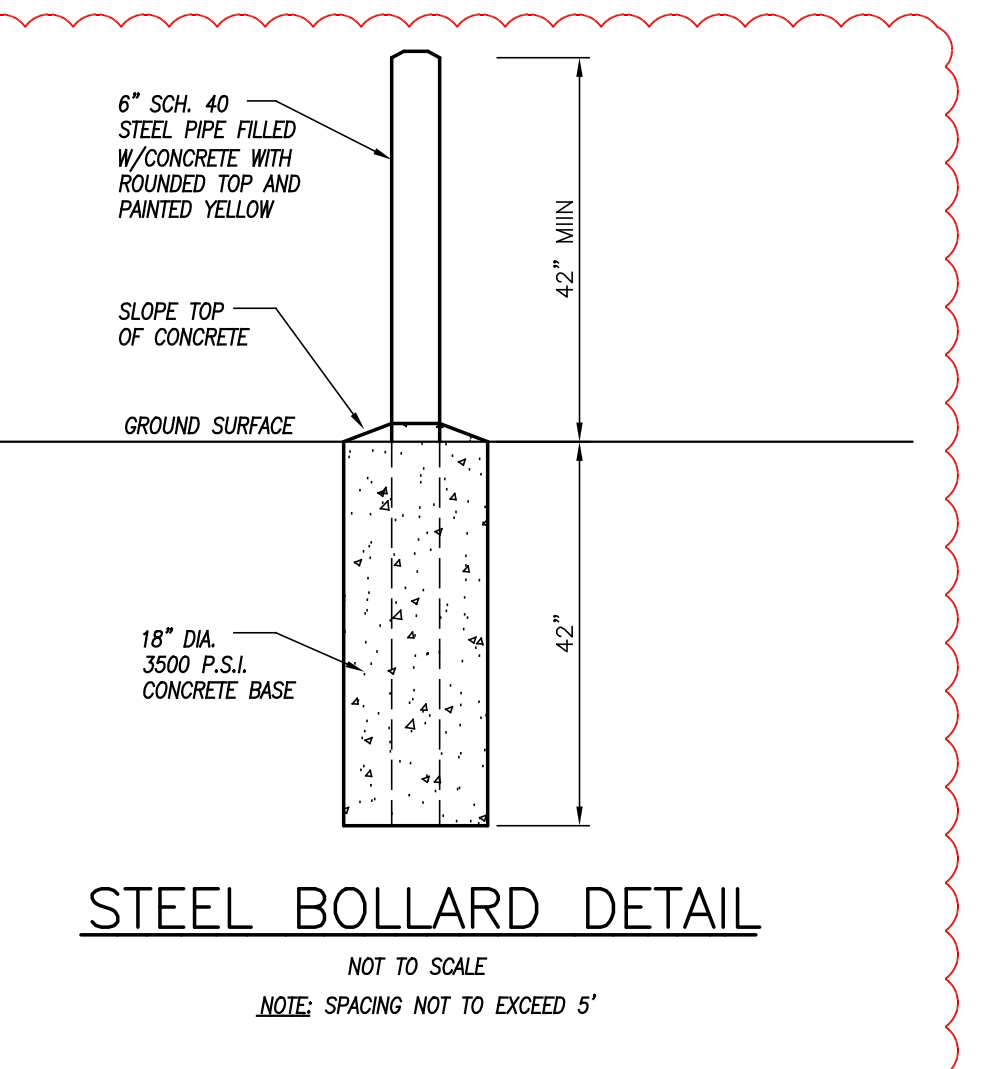
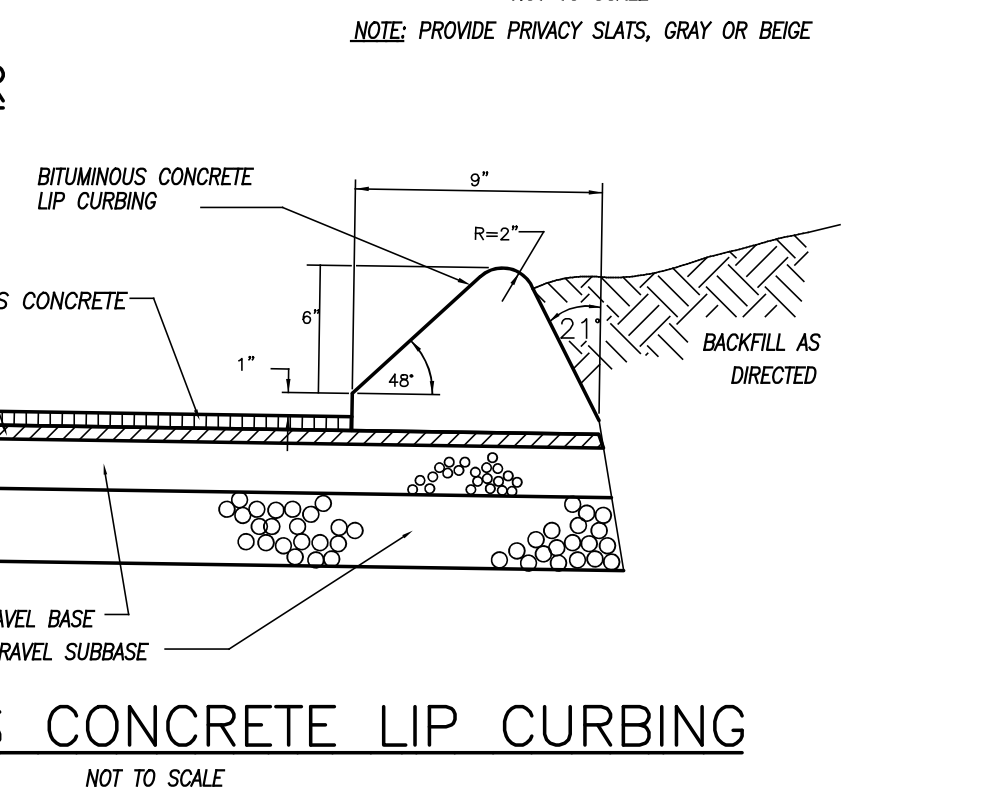
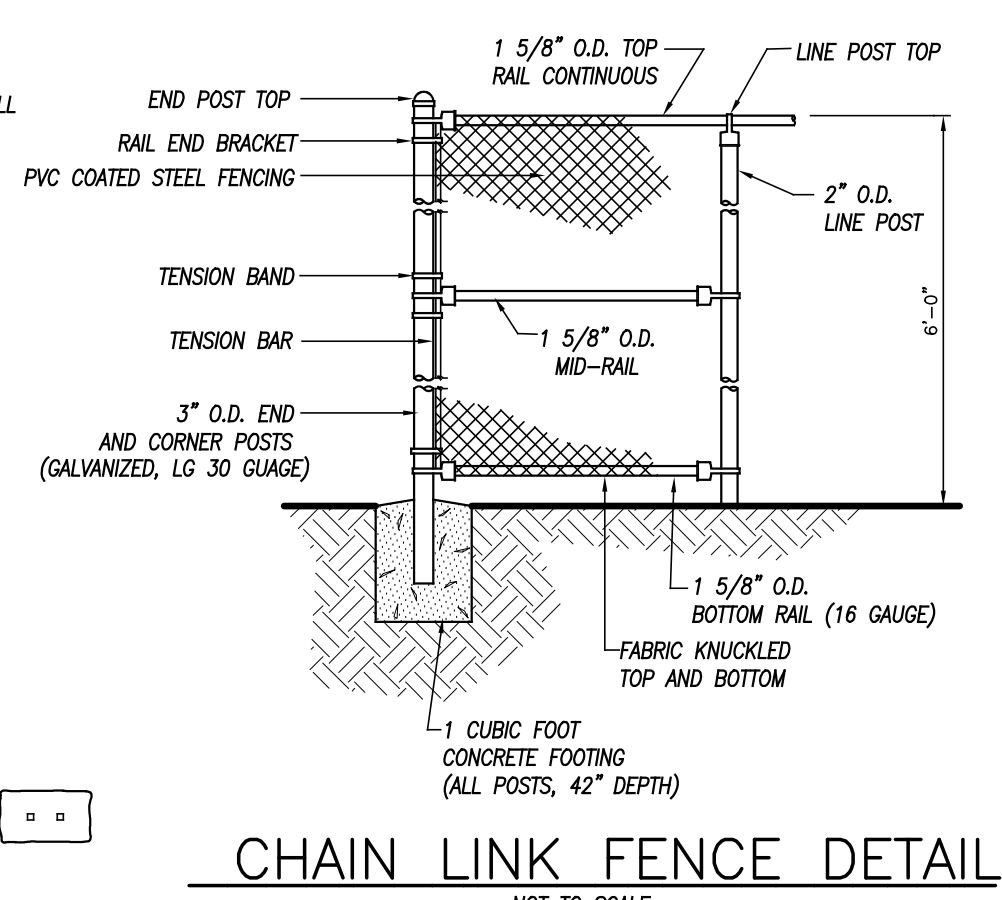


APPROVED BY THE BROOKLYN PLANNING AND ZONING COMMISSION

CHAIRMAN	DATE
Expiration date per Sec. 8.26C, Connecticut General Statutes:	

ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION

CHAIRMAN	DATE
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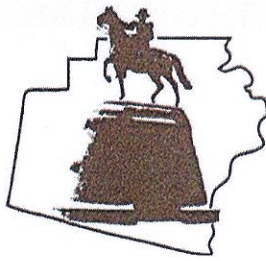


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DETAIL SHEET
PREPARED FOR
VACHON BROOKLYN, LLC
512 PROVIDENCE ROAD (ROUTE 6)
BROOKLYN, CONNECTICUT

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

DATE: 1/07/2020	DRAWN: AMR
SCALE: NOT TO SCALE	DESIGN: NET
SHEET: 5 OF 5	CHK BY: GG
DWG. No: CLIENT FILE	JOB No: 19129



Brooklyn Land Use Department

69 South Main Street
Brooklyn CT 06234
(860) 779-3411 x 31

Inland Wetlands ☒

Zoning Enforcement ☒

Blight Enforcement ☐

SITE INSPECTION NUMBER

1 2 3 4 5

512 Providence Rd.

11/1/23

Address

Date

I inspected and took photos for a
requested agent approval for

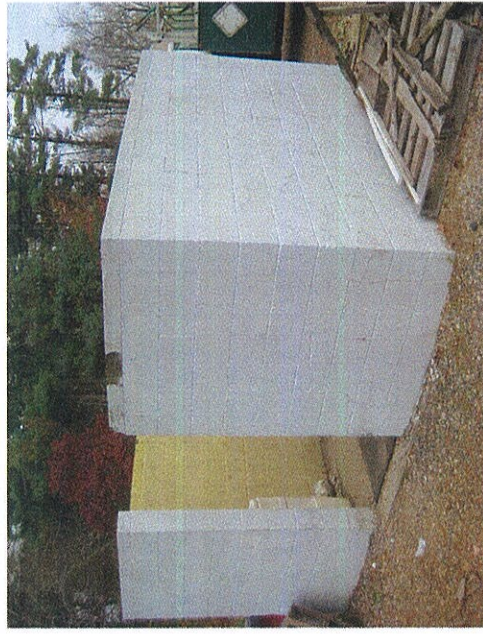
1WWC #23-012.

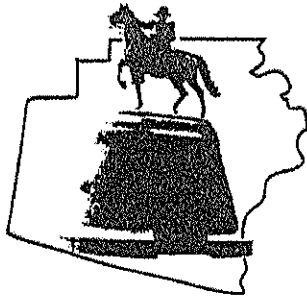
☒ Issue approval w/ special conditions.

Commission Representative

M. Washburn

Owner or Authorized Signature





TOWN OF BROOKLYN
Land Use Department
69 South Main Street • Suite 22
BROOKLYN, CONNECTICUT 06234
860-779-3411 Ext. 12

DULY AUTHORIZED AGENT APPROVAL - DECISION LETTER
IWWC #23-012 – 512 Providence Road

CERTIFIED # 7022 0410 0002 8091 6613

Vachon Brooklyn LLC
957 Washington Street
Attleboro MA 02703

November 1, 2023

Re: Approval –Application IWWC #23-012
512 Providence Road, Brooklyn, CT 06234
Map 41 Lots 13A & 14 – Vachon Brooklyn LLC, owner
Construction of a concrete pad and fencing for a dumpster enclosure and installation of fencing and bollards around an existing propane tank in the upland review area.

Dear Vachon Brooklyn LLC,

On November 1, 2023, the Brooklyn Inland Wetlands and Watercourses Authorized Agent approved application IWWC #23-012, Vachon Brooklyn LLC; Construction of a concrete pad and fencing for a dumpster enclosure and installation of fencing and bollards around an existing propane tank in the upland review area; 512 Providence Road, Brooklyn, CT 06234; Map 41 Lots 13A & 14 – Vachon Brooklyn LLC, owner; Planned Commercial Zone.

The plan approved under this Duly Authorized Agent Approval is titled “Proposed Parking Expansion Vachon Chevrolet 512 Providence Road (Route 6) Brooklyn, Connecticut prepared for Vachon Brooklyn LLC”. The plan’s last revision date is 10/20/23. The plan is stamped and sealed by Normand Thibeault, Jr., P.E.

NOTE: This letter constitutes a report to the Brooklyn Inland Wetlands and Watercourses Commission.

Special Conditions of this approval are as follows:

- 1. Within ten days of the date of this approval, the applicant, Vachon Brooklyn LLC, shall publish, at the applicant’s expense, notice of the approval in a newspaper having a general circulation in Brooklyn, CT. Publication deadline: 11/11/2023.**
- 2. This approval shall not be considered in effect until proof of publication has been received by the duly authorized agent and the appeal period has expired. Any person may appeal this decision to the Brooklyn Inland Wetlands and Watercourses Commission within fifteen days after the publication date of the notice.**

3. Sediment controls consisting of properly entrenched silt fence shall be installed between the wetlands and the proposed excavation for the bollards, fencing and concrete pad, as shown on the attached sketch titled "Required silt fence". Excavated material shall be removed off site. The silt fence shall be installed and the applicants shall call the Duly Authorized Wetlands Agent at 860-779-3411 ext. 31 for an inspection of the sediment controls before excavation or any other work can begin.

As for all approvals, the standard conditions of wetlands approvals apply to this application:

IWWC Permit Document. A copy of the IWWC approval motion and the conditions stated herein shall constitute the IWWC permit for the approved activity when the permit document is signed and dated by the IWWC Agent.

Notice of Start and Finish. Permittee shall notify the IWWC agent at least 48 hours before the approved activity commences and within 72 hours after completion of the activity.

Permit Duration. This permit is valid for a period in accordance with Section 11.6 of the Brooklyn Inland Wetlands and Watercourses Regulations and the Connecticut General Statutes. Any request to renew or extend the expiration date of a permit can be granted only as authorized by the IWWC Regulations. Expired permits may not be renewed.

Erosion and Sedimentation Controls. Permittee is responsible for implementing the approved erosion and sediment control plan. This responsibility includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan. The permittee shall inspect the erosion controls weekly and after rains and repair deficiencies within twenty-four hours. The IWWC and its staff may require additional erosion if needed to prevent erosion and sedimentation. Restabilization of the site shall take place as soon as possible.

Stockpile locations. During construction, piles of fill, erodible material and debris shall not be created within regulated areas. The locations of debris and other stockpiled materials shall be shown on the submitted plans. Any material excavated at the site shall be disposed of at upland or off-site locations reviewed and approved by staff.

Permit Transfer. The permittee shall not transfer this permit without the written permission of the IWWC.

Work in Watercourse to Occur During Low Flow. Work within a watercourse is limited to periods of low flow. Low flow periods normally occur between August and October. upon request of permittee, wetlands staff can determine if the activity can occur at other times following an on-site field investigation.

Scope of Permit. This permit is for the approved activity ONLY. Additional activity may require an additional permit. Note that if an approval or permit is granted by another agency and

(1) the approved activity will affect wetlands and/or watercourses; and/or

(2) the activity occurs within 125 feet of flagged boundaries and 175 feet from watercourses; and such activities have not been addressed by this permit, then the

applicant shall resubmit the application for further consideration by the Inland Wetlands and Watercourses Commission before any work begins.

Ongoing Compliance with Permit. The permittee shall comply at all times with the permit.

Other Approvals May be Required. Other permits may be required from Town, state or federal agencies. An Army Corps of Engineers permit may be required: U.S. Army Corps of Engineers, 424 Trapelo Rd., Waltham, MA 02254
1-800-362-4367.

This approval will be valid for a five-year period, ending on November 1, 2028. Extension of this permit will be allowed by the IWWC in accordance with state statutes.

If you have any questions, please feel free to call me at 860-779-3411 Extension 31.

Issued by:



Margaret Washburn
Zoning/Wetlands/Blight Enforcement Officer
69 South Main Street, Suite 23
Brooklyn, CT 06234
(860) 779-3411 ext. 31
Mon. – Thurs. 8:00 am – 3:30 pm
m.washburn@brooklynct.org

File/MW CC: Normand Thibeault (via e-mail), Jana Roberson (via e-mail)

Attached: Public Notice to be published by 11/11/23 at applicant's expense.

**Town of Brooklyn
Public Notice**

On November 1, 2023, the Brooklyn Inland Wetlands and Watercourses Commission Duly Authorized Agent approved application IWWC #23-012 Vachon Brooklyn LLC, owner; 512 Providence Road, Map 41, Lots 13A & 14, Planned Commercial Zone; Construction of a concrete pad and fencing for a dumpster enclosure and installation of fencing and bollards around an existing propane tank in the upland review area. Duly Authorized Agent Approval with Chairman's Approval.

REQUIRED SILT FENCE

MAP 41, AREA = 5.
(254,488)
WATER ELEVATION = 4

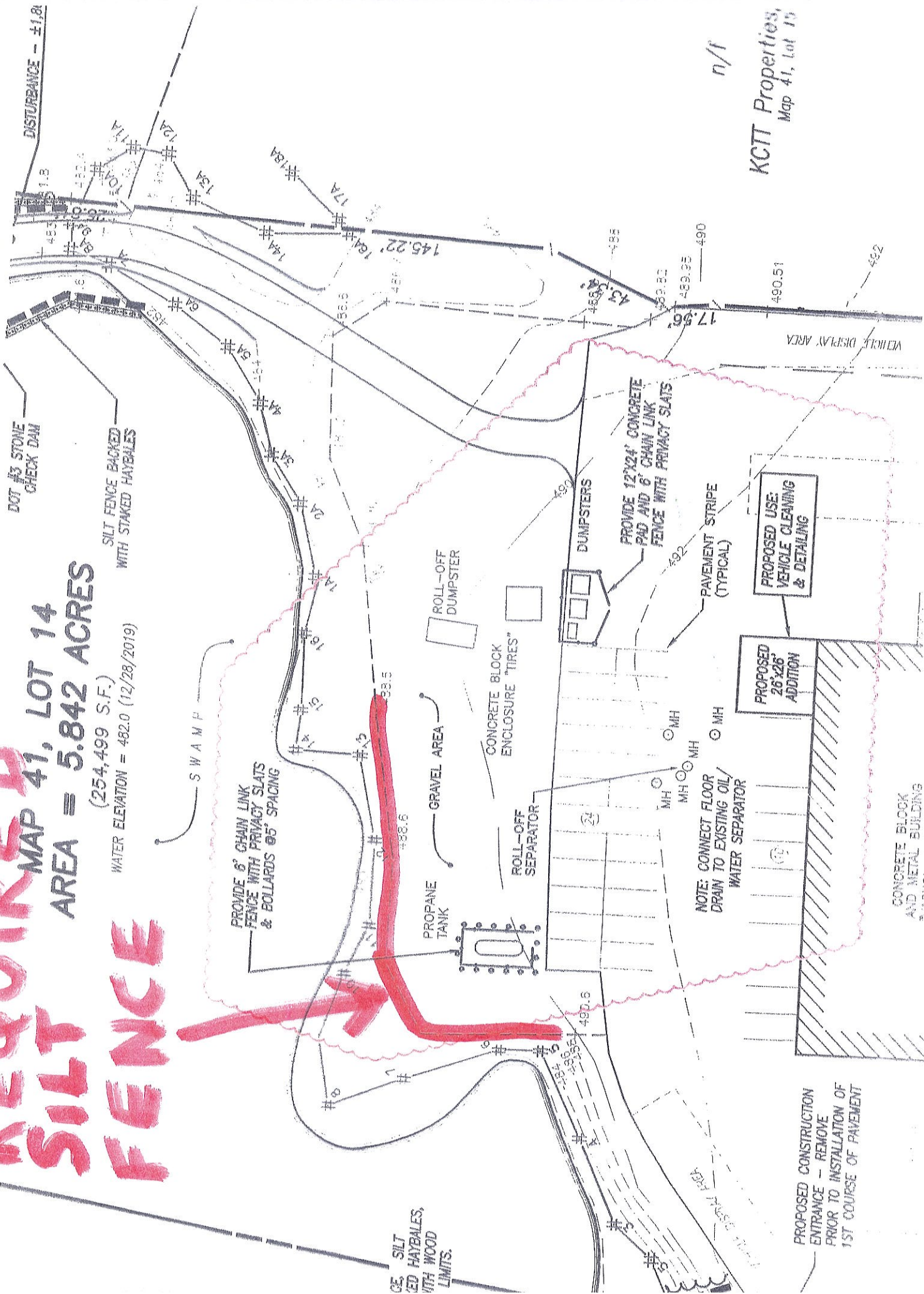
MAP 41, LOT 14
AREA = 5.842 ACRES

(254,499 S.F.)

WATER ELEVATION = 482.0 (12/28/2019)

KCTT Properties,
Map 41, Lot 10

11



Putnam, CT 06260

The Shopper-Turnpike Corp. endeavors to see that all advertising copy, neatly presented, is correctly printed. The publisher assumes no financial responsibility for typographical errors in advertising, but will gladly reprint, without charge, that part of an advertisement in which any error may occur. Advertisers must notify the Shopper-Turnpike Corp. within 24 hours for any errors in their advertising.

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Also, the publisher takes no responsibility for statements or claims made in any advertisement.

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Effective Nov. 29, 2001

BOYD'S BUYS JUNK CARS!
Top Cash Paid. Trust Your Car To
A Licensed CT Auto Recycler.
BOYD'S USED AUTO PARTS. Call
860-887-3153 YST@01-31



To jump on this incredible rate or get more information, stop by any of our branches, give us a call at 860-889-7381 or visit us online at bankeasterncnct.com.



eastern
CT savings bank
Because it matters

*Annual Percentage Yield (APY) effective 10/30/23. Minimum to open and obtain APY is \$500. Penalty for early withdrawal may apply. Rate is subject to change and offer may be withdrawn at any time. Fees may reduce earnings. Available for funds not currently on deposit only.

WE INVITE EVERYONE to come to weekly service Sundays at 10 am at the **HOPE COMMUNITY CHURCH**. Located at 25 Kennedy Dr., Putnam, Ct. www.HopeCommunityChurchAG.com or (860) 928-2794 ***ST@TF~

SAND & GRAVEL FOR SALE: Crushed Stone, Processed Gravel, Washed Sand, Screened Sand & More! Specializing in Large Quantities. Call **ED'S GARAGE, Inc.**, Canterbury. 860-546-9492 T@05-04-TF@

PROACTIVE COMPUTER SERVICES: 609 Putnam Pike, Dayville, CT. Rates are **NOW** sixty dollars per hour. Fully equipped mobile service, serving the area since 2005. 860-821-0580, 401-647-7702 ST@TF@

TOWN OF BROOKLYN PUBLIC NOTICE

On November 1, 2023, the Brooklyn Inland Wetlands and Watercourses Commission Duly Authorized Agent approved application IWWC #23-012 Vachon Brooklyn LLC, owner; 512 Providence Road, Map 41, Lots 13A & 14, Planned Commercial Zone; Construction of a concrete pad and fencing for dumpster enclosure and installation of fencing and bollards around an existing propane tank in the upland review area. Duly Authorized Agent Approval with Chairman's Approval.

OFFICE FOR RENT

• Downtown Putnam •

2nd floor on Main Street - 2 Room Office Suite
Reception Office 180 sq.ft. • Main Office 260 sq.ft.
Heat and light furnished, carpeted.
\$600.00 per month. Air conditioning available.
Main Street signage also available.

CALL (860) 928-3040

or inquire at the

Shopper's Guide Office

70 Main Street - Putnam, CT



neccog

Neccog GIS Site

HERRICK ROAD

WETLAND

25-36
55.75ac

25-35
5.1ac

25-36-2
6.76ac

25-36-1
6.1ac

1: 2,257



0.1 0 0.04 0.1 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere
© Latitude Geographics Group Ltd.

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

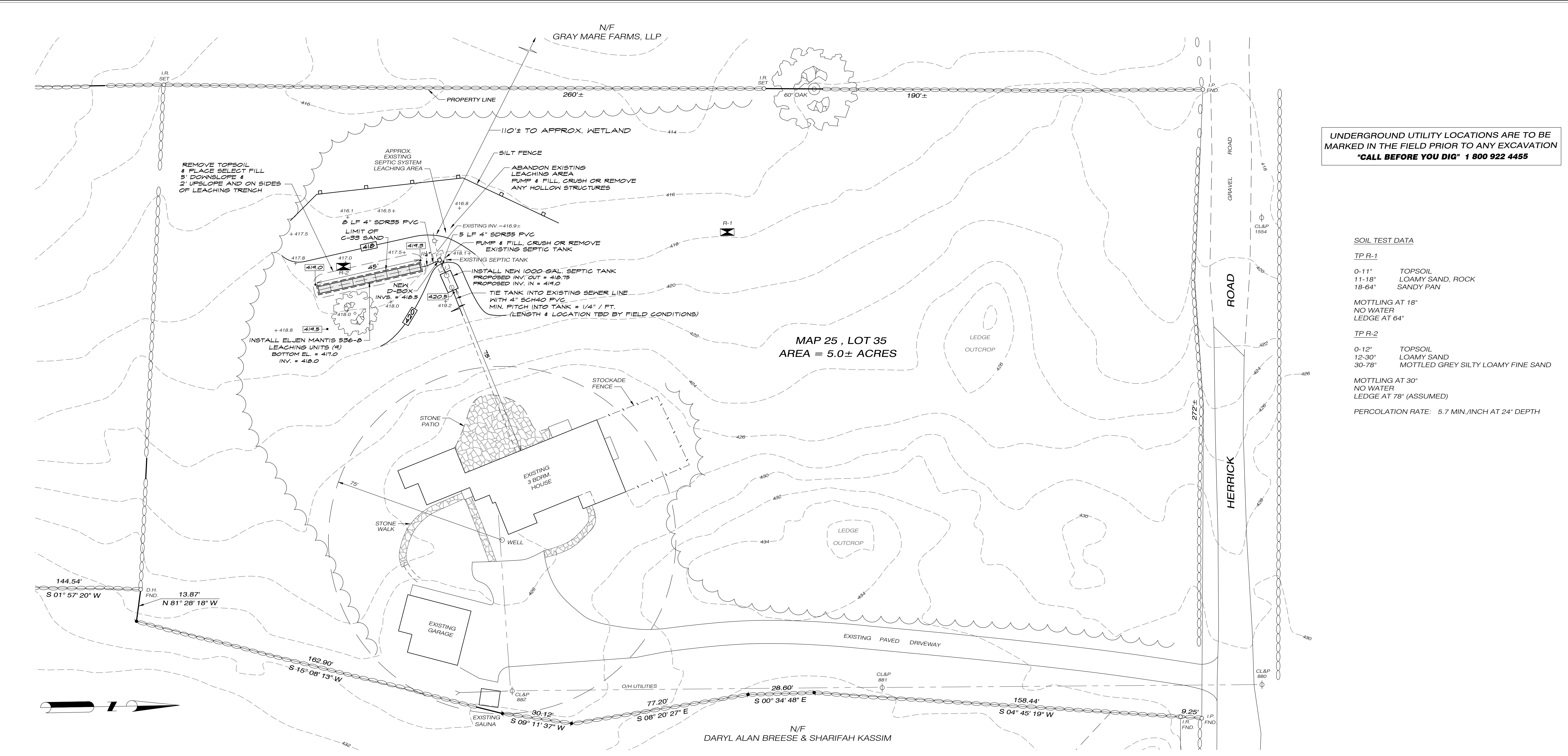


Legend

- Town
- Buildings 2012
- Parcels
- Wetlands**
 - Alluvial and Floodplain Soils
 - Poorly Drained and Very Poorly Drained

Notes

Enter Map Description



UNDERGROUND UTILITY LOCATIONS ARE TO BE MARKED IN THE FIELD PRIOR TO ANY EXCAVATION
"CALL BEFORE YOU DIG" 1 800 922 4455

SOIL TEST DATA	
TP R-1	
0-11"	TOPSOIL
11-18"	LOAMY SAND, ROCK
18-64"	SANDY PAN
MOTTLING AT 18"	
NO WATER	
LEDGE AT 64"	
TP R-2	
0-12"	TOPSOIL
12-30"	LOAMY SAND
30-78"	MOTTLED GREY SILTY LOAMY FINE SAND
MOTTLING AT 30"	
NO WATER	
LEDGE AT 78" (ASSUMED)	
PERCOLATION RATE: 5.7 MIN./INCH AT 24" DEPTH	

NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT", AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS A GENERAL LOCATION SURVEY BASED ON A RESURVEY AND ORIGINAL SURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS C. TOPOGRAPHIC FEATURES IN AREA OF SEPTIC SYSTEM CONFORM TO TOPOGRAPHIC ACCURACY CLASS T-2. TOPOGRAPHIC FEATURES SHOWN BEYOND AREA OF PROPOSED ACTIVITY WERE TAKEN FROM NOAA LIDAR DATA AND CONFORM TO TOPOGRAPHIC ACCURACY CLASS T-D. VERTICAL DATUM IS NAVD83. THIS MAP HAS BEEN PREPARED FROM OTHER MAPS, RECORD RESEARCH, LIMITED FIELD MEASUREMENTS AND OTHER SOURCES. IT IS NOT TO BE CONSTRUED AS A PROPERTY/BOUNDARY OR LIMITED PROPERTY/BOUNDARY SURVEY AND IS SUBJECT TO SUCH FACTS AS SAID SURVEYS MAY DISCLOSE. EXISTING CONDITIONS AND TOPOGRAPHIC INFORMATION AS PROVIDED BY PC SURVEY ASSOCIATES, LLC. PROPOSED SEPTIC SYSTEM INFORMATION AS PROVIDED BY LANCE SISTARE, CT SEPTIC SYSTEM INSTALLER LICENSE NO. 5920.

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

PAUL A. TERWILLIGER, L.S. NO. 70155
11/9/2023
DATE

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE EMBOSSED SEAL OF THE LAND SURVEYOR WHOSE SIGNATURE APPEARS HEREON.

SEPTIC SYSTEM NOTES

3 BEDROOM HOUSE (FF=1.5)
PERCOLATION RATE: 6.6 MIN./INCH (PF=1.0)
DEPTH TO RESTRICTIVE LAYER = 30" , SLOPE = 6.1-8.0% (HF=28)
H.F.=28 x F.F.=1.5 x P.F.=1.0 MLSS REQUIRED = 42 LF
MLSS PROVIDED = 45'
EFFECTIVE LEACHING AREA REQUIRED = 495 SF
USE (9) ELJEN MANTIS 536-B LEACHING UNITS INSTALLED TO MANUFACTURER'S SPECIFICATIONS
MAXIMUM DEPTH INTO GRADE: 12"
EFFECTIVE LEACHING AREA OF TRENCH = 11.0 SF/LF
LENGTH OF TRENCH REQUIRED = (495 SF)/(11.0 SF/LF) = 45 LF
LEACHING AREA PROVIDED = 495 SF
SEPTIC TANK: 1000 GALLON, 2 COMPARTMENT, W/ OUTLET FILTER
INSTALL RISERS TO GRADE W/ SECONDARY COVERS

LEGEND

	STONE WALL
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT GRADE
	PROPOSED SPOT GRADE

PRELIMINARY

SEPTIC INSTALLER LICENSE NO. 5920

PRELIMINARY

GENERAL LOCATION SURVEY		SURVEYING • MAPPING • PLOT PLANS	
SEPTIC SYSTEM REPAIR PLAN			
PREPARED FOR			
JAMES SALSICH		email: psurvey@csnet.net	
43 HERRICK ROAD		63 SNAKE MEADOW RD	
BROOKLYN, CONNECTICUT		KILLINGLY, CT 06239	
DATE: NOVEMBER 2023		SHEET NO: 1 OF 1	
SCALE: 1" = 20'		REVISED:	
JOB NO: 23027	F.B. NO: 233	DRAWN BY: P.A.T.	MAP NO:

Town of Brooklyn

Inland Wetlands Budget FY24

From Date: 10/1/2023

To Date: 10/31/2023

Fiscal Year: 2023-2024

☐ Subtotal by Collapse Mask

☐ Include pre encumbrance

☒ Print accounts with zero balance

☒ Filter Encumbrance Detail by Date Range

☐ Exclude Inactive Accounts with zero balance

Account Number	Description	GL Budget	Range To Date	YTD	Balance	Encumbrance	Budget Balance	% Bud
1005.41.4163.51900	Inland Wetlands-Wages-Recordin	\$1,000.00	\$87.50	\$437.50	\$562.50	\$0.00	\$562.50	56.25%
1005.41.4163.53020	Inland Wetlands-Legal Fees	\$3,500.00	\$0.00	\$0.00	\$3,500.00	\$0.00	\$3,500.00	100.00%
1005.41.4163.53200	Inland Wetlands-Professional A	\$65.00	\$0.00	\$0.00	\$65.00	\$0.00	\$65.00	100.00%
1005.41.4163.53400	Inland Wetlands-Professional S	\$500.00	\$0.00	\$0.00	\$500.00	\$0.00	\$500.00	100.00%
1005.41.4163.55400	Inland Wetlands-Advertising &	\$500.00	\$0.00	\$0.00	\$500.00	\$0.00	\$500.00	100.00%
1005.41.4163.55500	Inland Wetlands-Printing & Pub	\$120.00	\$0.00	\$0.00	\$120.00	\$0.00	\$120.00	100.00%
1005.41.4163.56900	Inland Wetlands-Other Supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
Grand Total:		\$5,685.00	\$87.50	\$437.50	\$5,247.50	\$0.00	\$5,247.50	92.30%

End of Report