REGULAR MEETING – PLANNING AND ZONING COMMISSION
AGENDA

MARCH 18, 2026, 6:00 PM
BY ZOOM VIRTUAL MEETING

To allow public access, anyone may access a meeting by telephone and/or Zoom, or a recording in the City of Norwalk YouTube channel. Specific instructions and links can be found at norwalkct.gov/meetings.

Members of the public may call in to participate. Callers will not be able to see the meeting participants. All participants will be muted upon entering the meeting. To speak, dial *9 on the phone and you will be called on by the host of the meeting during the public comment section. All speakers must state their name and address. Comments must be on a topic on the agenda, and are limited to three minutes. Anyone disrupting the orderly conduct of the meeting, including by using threatening, hateful, or sexually-explicit language, will be removed. Please find the information using the link above.

Members of the public who wish to provide "live comments" may also use the Zoom meeting platform. All participants will be muted upon entering the meeting. To speak, click the “raise your hand indicator” and you will be called by the host of the meeting during the public comment section. All speakers must state their name and address. Comments must be on a topic on the agenda. Anyone disrupting the orderly conduct of the meeting, including by using threatening, hateful, or sexually-explicit language, will be removed. Please find the information using the link above.

Members of the public who wish to provide public comment are encouraged to submit those via email in advance of the meeting. For these comments to be included into the record, they must be submitted by 12:00 p.m. the day of the meeting. Please email Steve Kleppin, Director of Planning & Zoning, at skleppin@norwalkct.gov with the subject line “Public Comment” to provide written public comment prior to the meeting.

I. CALL TO ORDER

II. ROLL CALL AND SEATING OF ALTERNATES

III. REVIEW AND ACTION ON APPLICATIONS

A. #2026-22 Special Appropriation - City of Norwalk - Special appropriation request to authorize Mayor Barbara Smyth to execute a sole source purchase order on behalf of the Norwalk Police Department for the purchase of one (1) armored rescue vehicle for a total not to exceed $361,000. Account #(09213610-5777 C0638) - Executive Session, report & recommended action

B. #09-11 SPR/#22-11 CAM - North Water LLC - 1 North Water Street and 20 Washington Street (District 2, Block 24, Lot 10) - Modifications to conditions of approval of mixed-use development (Ironworks) - Report & recommended action

C. #2026-20 8-24 Referral - City of Norwalk - 467 West Avenue - Acceptance of pedestrian access easement areas - Report & recommended action

D. **#2026-12 CSPR – John Hilts – 25 Commerce Street – Repair an existing Shoreline Flood and Erosion Control Structure (SFECS) - Report & recommended action**

E. #2026-09 CSPR – Kousidis Engineering, LLC – 5 Shorehaven Road – Construct additions to a single family residence, reconfigure the driveway, and relocate a storm drain pipe within fifty (50) feet of tidal wetlands - Report & recommended action

F. **#2026-07 CSPR – Tomas Builders, LLC – 30 Charles Street (District 3, Block 7, Lot 14) – Coastal site plan review application for the construction of a two-family detached dwelling - Report & recommended action**

G. **#2026-08 CSPR – Tomas Builders, LLC – 32 Charles Street (District 3, Block 7, Lot 15) – Coastal site plan review application for the construction of a two-family detached dwelling - Report & recommended action**

IV. DISCUSSION

A. **State of Connecticut House Bill No. 8002 - November Special Session, Public Act No. 25-1 - An Act Concerning Housing Growth - Discussion**

B. **Pre-Approved Accessory Dwelling Unit Plans - Discussion**

V. ACCEPTANCE OF MINUTES

A. **Regular Meeting: March 4, 2026**

VI. COMMENTS OF DIRECTOR

VII. COMMENTS OF COMMISSIONERS

VIII. ADJOURNMENT

UPCOMING MEETINGS

April 8, 2026

Spinnaker
REAL ESTATE PARTNERS, LLC

March 4, 2026

Dear Mr. Kleppin,

Thank you for meeting with us to review the Walk Bridge Project's impact on 1 North Water Street.

In connection with the project, the Connecticut Department of Transportation has imposed an access agreement and exercised eminent domain authority over a portion of our North Water Street frontage, which, unfortunately, includes the primary garage entry and loading area. The permanent closure of the North Water driveway is scheduled for April 6, 2026, and will remain in effect for the duration of construction, which is anticipated to last approximately 2.5 to 3 years.

The Walk Bridge Project is a State infrastructure initiative and is not being undertaken at our request or for the benefit of the Ironworks property. However, the required closure eliminates our primary access for garage entry, trash removal, resident move-ins and move-outs, and retail and restaurant deliveries. As a result, all vehicular operations must be redirected to the Washington Street and fountain driveway areas.

We previously obtained approval in 2018 (9-11 SPR/#22-11 CAM) to modify circulation and temporarily relocate certain parking spaces in anticipation of this closure. With construction now underway, the relocated spaces will no longer be available, and traffic in the fountain driveway will increase significantly.

To ensure safe operations, we engaged a traffic engineer to evaluate circulation and pedestrian conditions resulting from the driveway closure. The traffic analysis recommends temporarily removing the existing two-hour parking spaces adjacent to the Washington Street driveway to maintain adequate vehicular flow and protect pedestrian movement within the reconfigured driveway area. Enhanced signage, protected pedestrian pathways, bollards/planters, and pavement striping are incorporated to clearly separate vehicles and pedestrians.

Because the closure eliminates our primary garage access and loading area, requiring all vehicular activity to be redirected through this constrained area, we need to modify the Washington Street driveway to allow safe loading. This will require us to utilize the six public parking spaces adjacent to the Washington Street driveway from 7:00 AM to 7:00 PM, Monday through Saturday, for short-term loading, deliveries, tenant moves, and essential operational use. Ideally, these spaces would remain reserved for those uses 24-7; however, we recognize the competing need for public parking during peak dining hours and are willing to limit our use of the spaces so that after 7:00 PM, these spaces can revert to standard two-hour public parking.

1 N. Water Street, Suite 100, South Norwalk, CT 06854

These temporary measures are necessary to allow the garage and building to continue functioning, to accommodate required loading activity and resident moves, and to ensure safe pedestrian conditions during construction. The resulting operational disruption imposes a substantial burden on the property, and the requested adjustment is a narrowly tailored measure to mitigate those impacts. We look forward to the completion of the Walk Bridge Project so that normal access and operations may be restored.

We respectfully request the City's support of these temporary measures as we prepare for the April 6, 2026, closure and continue operating an active mixed-use property serving the South Norwalk community during construction.

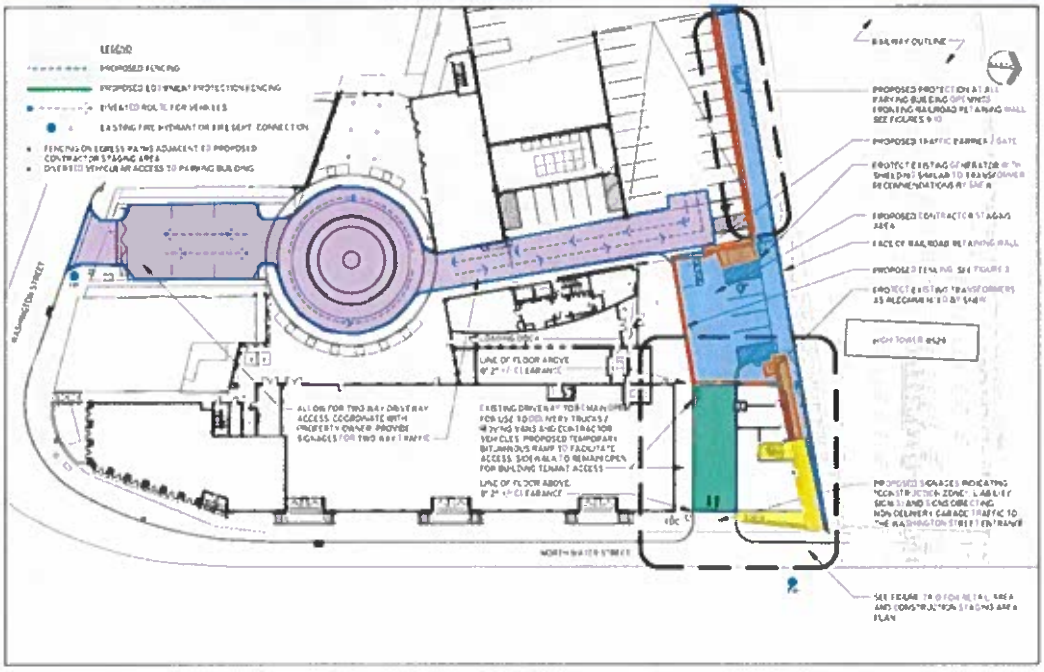
Sincerely,

Paul MacKnight, Jr.
SVP – Residential Operations
1 N. Water Street, Suite 100
South Norwalk, CT 06854
Office - 203-354-1553

Spinnaker
REAL ESTATE PARTNERS LLC

paul@spinrep.com
www.spinrep.com

Ironworks - During Construction



Site Plan

Construction Work Area

Construction Protection

Shared Access

Proposed Emergency Egress

Two-Way Access to Garage from Washington Street

Figure 6 - Ironworks Building Proposed Egress and Protection – Site Plan

CITY OF NORWALK
Norwalk Zoning Commission
125 East Avenue
PO BOX 5125
Norwalk, CT 06856-5125

June 12, 2018

Mr. Matthew Edvardsen
Spinnaker Real Estate Partners, LLC
1 North Water Street, Suite 100
South Norwalk, CT 06854

Re: **#9-11SPR/#22-11CAM** – North Water LLC - 20 N. Water/Washington St – 5 story, 133,035 sf mixed use development with 108 units, 7,768 sf retail, 7,136 sf restaurant, 6,000 sf office & related site amenities – Modify public amenity plan to change the location of 10 required public parking spaces

Dear Mr. Edvardsen:

At a meeting of the Norwalk Zoning Commission held on Wednesday, June 7, 2018, the following action was taken:

*** RESOLUTION ***

BE IT RESOLVED that the proposed modification to the approved site plan for **#9-11SPR** and coastal site plan application #22-11CAM; North Water, LLC – 20 N. Water/Washington St for a 133,035 sq. ft. mixed use development with 108 multifamily dwelling units, 7,700 sf retail, 6,000 sf office, 7,200 sf restaurant and related site amenities including 10 public parking spaces, a pedestrian plaza and a water feature as shown on a set of plans entitled "The Norwalk Company, North Water Street, Norwalk, CT." by Beinfield Architecture, PC; Rotondo Engineering, LLC; Eric Rains Landscape Architecture, LLC and related plans dated February 3, 2012 *as revised to June 7, 2018 to show the final location of the 10 public parking spaces* be approved, subject to the following conditions:

1. That a new Declaration of Covenants as revised to show the new location of the ten (10) public parking spaces be filed on the Norwalk Land Records; and
2. That the applicant ensures the continuous operation and maintenance of each of the three (3) proposed site amenities, including a 3,015 sq ft public pedestrian plaza reserved and available for public use at all times, a 1,567 sq. ft. water feature in the center of the plaza and 10 public parking spaces, which shall run with the land in perpetuity; and
3. That all other conditions of approval remain in effect; and

BE IT FURTHER RESOLVED that the effective date of this action be June 15, 2018.

The Commission approved the requested modifications to the approved plans; specifically to modify the approved public amenity plan to change the location of the 10 required public parking spaces. The proposed plan would relocate 4 spaces now located on either side of the circular courtyard and move them to the 4 surface parking spaces along the MetroNorth RR.

You must prepare a new Declaration of Covenants with a revised Exhibit A to show the new location of the ten (10) public parking spaces; once approved, this document must be filed on the Norwalk Land Records *prior to the* release of any remaining surety. A final revised As Built survey must also be submitted to this office to show the location of the 10 approved public parking spaces as per the above action.

Any further revisions to the approved plans (other than revisions approved by the Commission or the Plan Review Committee since the original approval date) will require a new submittal to the Zoning Commission for review and approval.

If you have any questions regarding the enclosed, please contact me at (203) 854-7780.

Sincerely,

Dorothy Wilson
Senior Planner

enclosures

Mitchell Traffic Engineering LLC

7 East Forest Drive
Enfield Connecticut 06082
(860) 841-1690
email: steve@mitchelltraffic.com
www.mitchelltraffic.com

February 23, 2026

Mr. Paul MacKnight, Jr.
SVP – Residential Operations
Spinnaker Real Estate
1 North Water Street
South Norwalk, CT 06854

via email to: paul@spinrep.com

RE: Iron Works Temporary Drive Closure
Walk Bridge Replacement

Dear Mr. MacKnight:

The Ironworks Development, located at the corner of North Water Street and Washington Street will have its garage access from North Water Street closed for an extended period as part of the Walk Bridge replacement project being undertaken by the Connecticut Department of Transportation (CT DOT). This is necessary due to the construction of the western approach to the bridge, which will create a conflict between the North Water Street driveway operations and the placement of construction equipment needed for the southern abutment and approach. As a result, all garage traffic will be routed to the Washington Street driveway.

Although the North Water Street drive will be closed to regular traffic, large delivery vehicles, such as moving trucks will be allowed limited access, so such vehicles will not impede street traffic or the Washington Street drive. Smaller delivery trucks, however, will not be able to use the North Water Street Driveway, so they will have to use the Washington Street driveway.

In order to accommodate all site traffic on the Washington Street driveway, several changes to the driveway and internal fountain area are proposed, including striping, signage, and the installation of planters to provide a physical barrier to separate vehicular traffic from pedestrian traffic. These modifications are shown on the layout plan included with this letter. In order to accommodate the increased vehicular traffic, minimize conflicts and/or potential blockages of the driveway by maneuvering vehicles, and provide for small delivery trucks to have loading space, it is proposed to limit the six existing parking spaces along the Washington Street Drive to loading and unloading only. These spaces will be signed and striped accordingly.

We have completed a capacity analysis of the garage traffic using only this single access point. Briefly, our methodology was as follows:

1. Existing traffic flows on Washington Street and Water Street were obtained from CT DOT Count stations NRWA-521 and NRWA-360 on Washington Street and NWA-064 on Water Street. These were used to synthesize turning movement counts at the intersection of North Water Street and Washington Street using ratios of all entering and exiting traffic.

2. These volumes were used to create an Existing Conditions computer model of Washington Street in *Synchro* to determine the current operating condition of the roadway network. The computer model includes the Washington Street drive as well as the intersection of Washington Street and Water Street, since the two intersections are so close that they influence each other's operations.

3. We identified the likely peak traffic flows into and out of the single driveway from data regarding the monthly and transient parking at the facility. The initial data sets included total parking at the facility on a daily basis for the months of January through June, 2025. From this data, it was determined that the highest parking rate was generally found on Thursdays and Fridays, and two specific dates (Thursday, January 16 and Friday February 14) were identified as the highest parking days for the entire 6 month period. More detailed data was obtained for each of these dates, where the specific entry and exit times for each vehicle were reported. These vehicular movements are summarized in the following table.

Site Traffic

Single Drive to Washington Street

	Am Peak	PM Peak
Enter	36	43
Exit	28	36
Total	64	79

4. Analyses were conducted for the morning and afternoon peak hours, which are the highest demand times for the roadways, and which correspond with the highest traffic generation periods at the garage.

5. The analysis was conducted for a driveway configuration that allowed entering traffic to come from either direction on Washington Street and exiting traffic to be restricted to right turns only. The restriction of exiting traffic to right turns only was based on the observation that the queue from the North Water Street signal would likely block the driveway traffic attempting to turn left. The results of the analyses indicate that the proposed configuration should operate well during peak times, and should therefore operate well during all hours of the day. As summarized in the following table, the exiting traffic from the drive was computed to be a LOS "B", with less than 13 seconds of average delay per vehicle at peak times and an average queue of only a single vehicle. Entering traffic in either direction will operate at LOS A.

Level of Service Summary

Intersection	Direction	Mvmt.	AM Peak Hour			PM Peak Hour		
			LOS	Delay	95% tile Queue	LOS	Delay	95% tile Queue
Water Street and Washington Street	NB	All	B	10.2	142	B	12.7	100
	SB	All	B	11.1	129	B	12.1	40
	EB	All	B	12.5	70	B	12.2	134
	WB	All	B	10.2	190	A	5.7	166
Washington Street and Site Drive	EB	LT	A	9	1	A	8.6	1
	SB	RT	B	13.4	5	B	12.1	6

Our initial recommendation was that the easternmost 4 or 5 parking spaces on the south side of Washington Street be eliminated to provide a bypass area for eastbound vehicles. However, following discussions with Benjamin Yeung, PE of the City Department of Transportation, Mobility and Parking we understand that the City would prefer to leave the parking as it currently exists, and to monitor the situation to determine if the bypass is actually required, following the modified operation of the driveway. An email from Mr. Yeung indicating his preferences is appended to this letter.

Please let us know if you require any additional information.

Very truly yours,

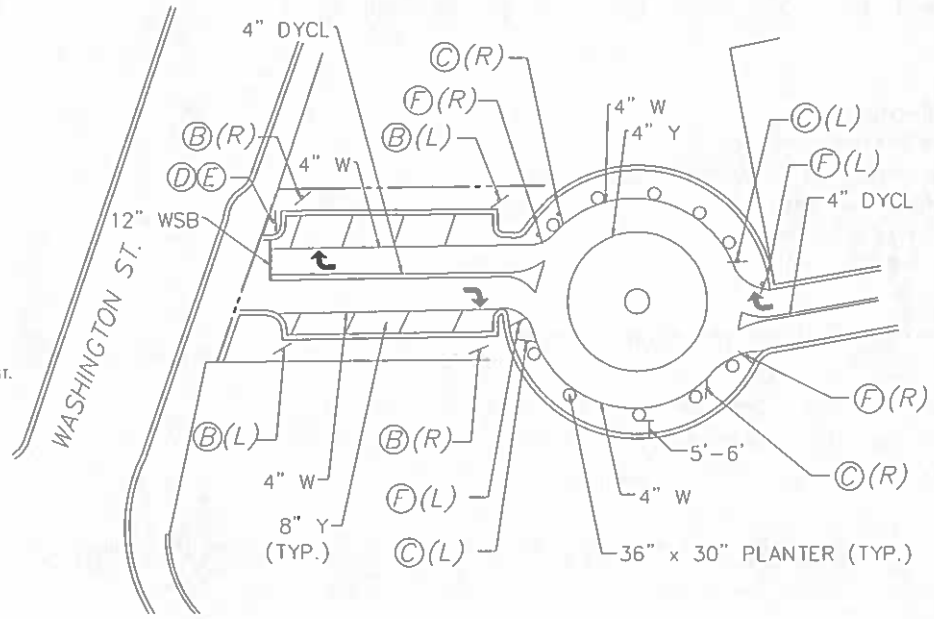
MITCHELL TRAFFIC ENGINEERING LLC



Stephen F. Mitchell, PE

SIGN LEGEND

		FED NUMBER	STATE NUMBER	SIZE INCHES
Ⓐ		R6-4	31-1138	30 X 24
Ⓑ		R7-6 R7-6-201aP	31-0607 (R) 31-0607 (L) 31-0602	12 X 18 12 X 6 12 X 6
Ⓒ		R7-4	31-0623 (R) 31-0623 (L)	12 X 18
Ⓓ		R1-1	31-0552	30 X 30
Ⓔ		R3-2	31-1603	24 X 24
Ⓔ		INSTALL SIGN AT CLOSED DRIVE ON N. WATER ST.		
Ⓕ				12 X 18



PAVEMENT MARKING LEGEND
(ALL MARKINGS REFLECTORIZED PAVEMENT MARKING TAPE)

12" WSB	12" WHITE STOP BAR
4" W	4" WHITE LINE
4" Y	4" YELLOW LINE
8" Y	8" YELLOW CROSSHATCH
4" DYCL	4" DOUBLE YELLOW CENTERLINE

F.A. Hesketh & Associates, Inc.

SIGNAGE & PAVEMENT MARKING PLAN
IRON WORKS
WASHINGTON STREET
NEW MILFORD, CONNECTICUT

PM-1

steve@mitchelltraffic.com

From: Yeung, Benjamin <BYeung@norwalkct.gov>
Sent: Thursday, November 6, 2025 2:19 PM
To: steve@mitchelltraffic.com
Cc: Morque, Kim; 'Paul MacKnight'
Subject: RE: Ironworks Drive to Washington Street

Hi Steve,

Your report and Synchro analysis has been received. Confirmed that the City would prefer to leave the on-street parking along the south side of Washington Street as existing.

Furthermore, it will be the responsibility of the property owner to install and maintain any signage or markings to help enforce the temporary right-out only restriction from the Ironworks driveway on Washington Street. The City will not be installing anything to enforce the right-out only, nor will we allow associated signage/markings to be installed within the City right-of-way (installations must be on private property).

Thanks,
Ben Yeung, P.E.
Senior Traffic Engineer
UPCOMING OUT OF OFFICE: 11/10-11/28
City of Norwalk TMP
203-854-7335 (Office)
203-818-4127 (Cell)

From: steve@mitchelltraffic.com <steve@mitchelltraffic.com>
Sent: Thursday, November 6, 2025 11:03 AM
To: Yeung, Benjamin <BYeung@norwalkct.gov>
Cc: Morque, Kim <kim@spinrep.com>; 'Paul MacKnight' <Paul@spinrep.com>
Subject: Ironworks Drive to Washington Street

You don't often get email from steve@mitchelltraffic.com. Learn why this is important
CAUTION: EXTERNAL Email: Don't open links or attachments from untrusted senders

Hi Ben –

It was good talking to you.

I am attaching a brief write-up of our analysis, along with the Synchro files for your use.

Please let me know if you need any additional information.

Regards,

Steve

TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that **TB NORWALK APARTMENTS LLC**, a Delaware limited liability company with an business address of 1140 Virginia Drive, Fort Washington, PA 19803, in the Town of Fort Washington, County of Montgomery and State of Pennsylvania, acting herein by QOF IV, LLC, its Managing Member, duly authorized (hereinafter referred to as the "Grantor") for good and valuable consideration received to its full satisfaction of the **CITY OF NORWALK**, a municipal corporation organized and existing under the laws of the State of Connecticut, (hereinafter the "Grantee"), does hereby give, grant, bargain, sell and confirm unto the said Grantee, its successors and assigns, the following permanent sidewalk easement (the "Sidewalk Easement") over, under, through and upon a certain parcel of land known as 467 West Avenue, Norwalk, CT located in the City of Norwalk, County of Fairfield and State of Connecticut, which parcel of land is more particularly described in **Schedule A** attached hereto and incorporated herein (the "Subject Property"), and shown on that certain map entitled "EASEMENT MAP DEPICTING PEDESTRIAN ACCESS EASEMENT AREAS TO BE GRANTED TO THE CITY OF NORWALK PREPARED FOR TOLL BROTHERS APARTMENT LIVING #467 WEST AVENUE, NORWALK, CT" dated _____ __, 2025 prepared by Redniss & Mead (the "Map"), said Map on file in Office of the Town Clerk of Norwalk as Map No. _____, said Sidewalk Easement dimensions totaling 17,203 square feet on the Subject Property as shown and identified therein as: (i) "Pedestrian Access Easement "A" To Be Granted To The City of Norwalk (Area = 12,954 SF); (ii) "Pedestrian Access Easement "B" To Be Granted To The City of Norwalk (Area = 4,111 SF); and (iii) "Pedestrian Access Easement "C" To Be Granted To The City of Norwalk (Area = 138 SF) (collectively the "Easement Area").

The parties agree that the Easement Area and the Subject Property are accurately and completely depicted on the above-described Map.

The Grantor hereby represents that it is well seized of the Subject Property by virtue of good and legal title.

The Sidewalk Easement, Easement Area and right-of-way are conveyed subject to the following conditions:

1. A permanent public sidewalk shall be constructed by the Grantor within the Easement Area in compliance with prevailing municipal standards and requirements and shall be made available at all times for use by the general public in perpetuity with rights in the general public to pass and repass thereon as though such Easement Area were part of the publicly owned street right-of-way.

2. The Grantee may install and maintain on the Subject Property any and all traffic signalization and signage in the locations and for the duration that Grantee deems reasonably necessary. Such installation and maintenance work shall be at Grantee's sole cost and expense, and shall neither unreasonably interrupt, disturb or diminish Grantor's access and use nor adversely impact ownership of the Easement Area in a material adverse way.

3. The Grantor shall have the obligation and responsibility of maintaining and repairing the permanent sidewalk and Easement Area so that the same is at all times safe for public passage. Notwithstanding the foregoing, Grantor may temporarily interrupt or disturb access across Easement Area, but only to such extent and for such time as is reasonably necessary to allow for such maintenance and repair. Such responsibility shall include the removal of all debris, ice and snow, in accordance with Chapter 95 of The Code of the City of Norwalk.

4. Grantor shall not do or permit anything to be done on the Subject Property that will-to any extent-adversely impact or endanger the integrity of the sidewalk or related installations in the Easement Area.

5. Grantor and any future holder of any interest in the Subject Property shall use commercially reasonable efforts to cause any lease, grant, or any other transfer of any interest in the Subject Property to include a provision expressly requiring the lessee, grantee or transferee to comply with the terms of this Easement. The failure to include such provision shall not adversely affect the validity or applicability to the Subject Property of this grant of Easement.

6. Grantor hereby expressly agrees to at all times indemnify, defend and save harmless the Grantee, and its respective officers, agents and employees, on account of any and all demands, claims, damages, losses, litigation, financial costs and expenses (including reasonable counsel's fees) ("Losses") directly or indirectly arising out of, related to or in connection with any actions or omissions in the performance of the provisions of this Easement by the Grantor, its employees, subcontractor, lessees, renters, agents, or anyone directly or indirectly employed by or on behalf of the Grantor, except to the extent such Losses are attributable to the Grantee's negligence.

7. If any court of competent jurisdiction determines that any provision of this grant of Easement is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for validity and enforceability as determined by such court. In the event that the provision invalidated is of such nature that it cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case the remaining provisions of this instrument shall remain in full force and effect.

8. All of the terms, covenants and conditions of this grant of Easement shall run with the land and be binding on the Grantor, the Grantor's successors and assigns, and each owner and any other party entitled to possession or use of the Subject Property during such period of ownership or possession.

9. **THE GRANTOR HEREBY KNOWINGLY AND VOLUNTARILY WAIVES ANY RIGHT TO COMPENSATION FOR THE RIGHTS GRANTED HEREIN**.

TO HAVE AND TO HOLD the above granted rights of way and Easement and the

rights and privileges hereinbefore described to the said **CITY OF NORWALK**, its successors and assigns forever.

Witnesses' signatures:

GRANTOR,

TB NORWALK APARTMENTS LLC,

By: QOF IV, LLC, a Delaware Limited Liability Company

_____

_____

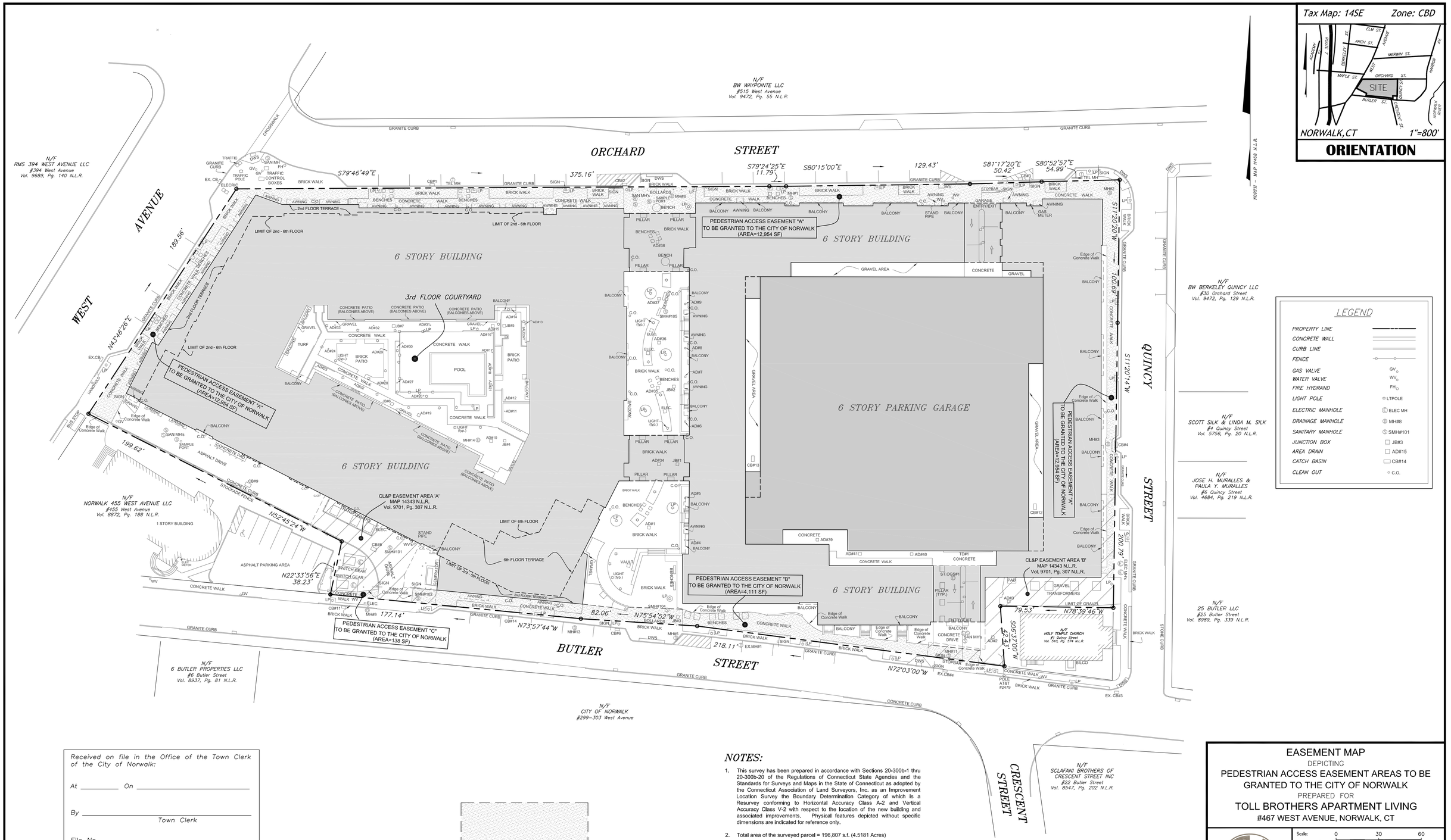
_____

Name: _____
Title: _____
Duly Authorized

STATE OF _____)
) ss. _____
COUNTY OF _____)

This __ day of _____, 2025, Personally appeared _____, who acknowledged himself/herself to be the _____ of _____, a limited liability company, and that he/she as such _____, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of _____, by himself/herself as _____, before me.

_____
Commissioner of Superior Court
Notary Public



Tax Map: 14SE Zone: CBD

NORWALK, CT 1"=800'

ORIENTATION

LEGEND

PROPERTY LINE	
CONCRETE WALL	
CURB LINE	
FENCE	-o-o-o-
GAS VALVE	GV
WATER VALVE	WV
FIRE HYDRAND	FH
LIGHT POLE	LTPOLE
ELECTRIC MANHOLE	ELEC MH
DRAINAGE MANHOLE	MH#8
SANITARY MANHOLE	SMH#101
JUNCTION BOX	JB#3
AREA DRAIN	AD#15
CATCH BASIN	CB#14
CLEAN OUT	C.O.

Received on file in the Office of the Town Clerk of the City of Norwalk:

At _____ On _____

By _____
Town Clerk

File No. _____

This survey has been prepared in accordance with the standards cited in Note 1 appearing hereon.

APPROVED for filing purposes as neither a Subdivision nor Resubdivision as defined in CGS 8-18.

On _____ By _____
Director of Planning & Zoning

EASEMENT AREA TO BE GRANTED
TOTAL AREA = 17,203 SF

NOTES:

1. This survey has been prepared in accordance with Sections 20-300b-1 thru 20-300b-20 of the Regulations of Connecticut State Agencies and the Standards for Surveys and Maps in the State of Connecticut as adopted by the Connecticut Association of Land Surveyors, Inc. as an Improvement Location Survey the Boundary Determination Category of which is a Resurvey conforming to Horizontal Accuracy Class A-2 and Vertical Accuracy Class V-2 with respect to the location of the new building and associated improvements. Physical features depicted without specific dimensions are indicated for reference only.
2. Total area of the surveyed parcel = 196,807 s.f. (4.5181 Acres)
3. Reference is made to the following Deeds of Record found in Vol. 8936 Pg. 197 & Vol. 8937 Pg.81 of the Norwalk Land Records (N.L.R.)
4. Reference is made to maps 703, 4890, 5493, 8582, 11468, 13828, 14097, 14161, 14162 & 14343 N.L.R.
5. Reference is made to the Instruments of record as labeled hereon.
6. Reference is made to FEMA Flood Insurance Rate Map (FIRM) Panel No. 531 of 626, Map No. 09001C0531G, Map Revised July 8, 2013. Subject Parcel does not lie in a Special Flood Hazard Area. It lies in Zone X.
7. Owner of Record: TB Norwalk Apartments LLC.
8. As of February 19, 2024 there are new Zoning Regulations effective for the City of Norwalk. According to them the subject property lies in Zone CD-4.

THIS IS AN ORIGINAL MYLAR PRODUCED FOR FILING ON THE LAND RECORDS
Redniss & Mead

EASEMENT MAP

DEPICTING

PEDESTRIAN ACCESS EASEMENT AREAS TO BE GRANTED TO THE CITY OF NORWALK

PREPARED FOR

TOLL BROTHERS APARTMENT LIVING

#467 WEST AVENUE, NORWALK, CT

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

Scale: 1"=30' 0 30 60

Drawn By: GS | Checked By: LWP | Date: 10/15/2025

To my knowledge and belief this map is substantially correct as noted hereon

LAWRENCE W. POSSON, JR. L.L.S. #18130

DRAWN 10/15/2025

DATE

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

Sheet No:

EASE

Comm. No.: 7439

Planning & Zoning Commission

APPLICATION FOR COASTAL SITE PLAN REVIEW

Application must be accompanied by two (2) printed and one (1) digital set of all documents, and appropriate filing fee. Filing Fee: $310.00 for single or two family use; $810.00 for all other uses.

Date Stamp

Application Completion Date: Official Receipt Date: Fee Paid:

1. Property Address: 25 Commerce Street, Norwalk, CT **2.** D/B/L/U: 1/22/6/0

3. Proposed Work: Seawall repair **4.** Zone: CBDC

5. Applicant Identification:

Applicant Name: Mr. John Hilts

Address: Post Office Box 47, Rowayton, CT 06853

Phone Number: (475) 441-1244 Email: mrhilts@erols.com

Interest in Property: ☐ fee simple ☐ option ☐ lessee ☐ easement ☑ other (specify): Agent

List primary contact for correspondence *if other than applicant* (Agent or Attorney):

Name:

Address:

Business Phone: Email:

6. Property Owner, if different than applicant:

Owner Name: Commerce Street Associates, LLC

Address: Mr. David Slapin 122 Highland Avenue Rowayton, CT 06853

Phone Number: (203) 247-3519 Email: david@crystalicecubes.com

7. Project Information:

Please check the appropriate box to identify the plan or application that has resulted in this Coastal Site Plan Review:

- ☐ Coastal Site Plan for Zoning Compliance/Zoning Permit
- ☐ Subdivision or Resubdivision Application
- ☐ Special Permit or Special Exception Application
- ☐ Site Plan Review Application
- ☐ Variance Application
- ☐ Municipal Project (CGS Section 8-24)

8. Project Site Plans:

Please provide project site plans that clearly and accurately depict the following information, and check the appropriate boxes to indicate that the plans are included in this application:

- ☑ Project location
- ☑ Existing and proposed conditions, including buildings and topography
- ☑ **All** coastal resources on and contiguous to the site
- ☑ High tide line [as defined in CGS Section 22a-359(c)] and mean high water mark elevation contours (for parcels abutting coastal waters and/or tidal wetlands only)
- ☐ Soil erosion and sediment controls
- ☐ Storm water management & treatment practices
- ☑ Ownership and type of use on adjacent properties
- ☑ Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)
- ☐ Landscaping and planting plan (existing & proposed)
- ☐ Utility Plan (existing & proposed: water, drainage, sanitary sewers, electric & gas lines)
- ☐ Easements (utility, sight preservation, conservation, pedestrian)

9. Site Information:

a) Street Address or Geographical Description:
25 Commerce Street, Norwalk, CT 06854

b) Is project or activity proposed at a waterfront site (includes tidal wetlands frontage)? ◉ YES ☐ NO

c) Name of on-site, adjacent, or downstream coastal, tidal, or navigable waters, if applicable:
Norwalk Harbor

d) Identify and describe the existing land use in and adjacent to the site. Include description of any existing structures and significant features on the project site:
The site contains a boulder seawall. There are two commercial buildings on the upland, where a commercial ice-making business operates. The lot is paved an used for parking trucks used to deliver ice.

e) Indicate the area of the project site: 0.72 acres **or** _____ square feet

f) Check the appropriate box below to indicate total land area of disturbance of the project or activity (please also see Question #9 regarding proposed stormwater best management practices):

- ☐ Project or activity will disturb five (5) or more total acres of land area on the site. *Registration for CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities required.*
- ☐ Project or activity will disturb land, but less than five (5) total acres of land area would be disturbed. *A soil erosion and sedimentation control plan must be submitted.*
- ☐ Project or activity will not disturb any land area.

g) Does the project include a shoreline flood and erosion control structure as defined in CGS section 22a-109(d)? ☐ Yes ☐ No

10. Description of Proposed Project or Activity:

Describe the proposed project or activity including its purpose and related activities such as site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover over existing conditions resulting from the project; phasing, timing and method of proposed construction; and new uses and changes from existing uses (*attach additional pages if necessary*):

Please refer to attached sheet.

11. Description of Proposed Stormwater Best Management Practices:

Describe the stormwater best management practices that will be utilized to ensure that the volume of runoff generated by the first inch of rainfall is retained on-site, especially if the site or stormwater discharge is adjacent to tidal wetlands. If runoff cannot be retained on-site, describe the site limitations that prevent such retention and identify how stormwater will be treated before it is discharged from the site. Also demonstrate that the loadings of total suspended solids from the site will be reduced by 80 percent on an average annual basis, and that post-development stormwater runoff rates and volumes will not exceed pre-development runoff rates and volumes (*attach additional pages if necessary*):

The repair of a seawall which will include granular backfill contained within a geotextile filter fabric barrier on the seawall's landward face. This will allow for retention of stormwater and natural percolation of the retained stormwater while preventing any contaminants from entering the adjacent waterway.

12. Identification of Applicable Coastal Resources and Coastal Resource Policies:

Identify the coastal resources and associated policies that apply to the project by placing a check mark in the appropriate box(es) in the following table.

Coastal Resources	On-site	Adjacent	Off-site but within the influence of project	Not Applicable
General Coastal Resources* - Definition: CGS Section 22a-93(7); Policy: CGS Section 22a-92(a)(2)	✔	✔	☐	☐
Beaches & Dunes - Definition: CGS Section 22a-93(7)(C); Policies: CGS Sections 22a-92-(b)(2)(C) and 22a-92(c)(1)(K)	☐	☐	☐	✔
Bluffs & Escarpments - Definition: CGS Section 22a-93(7)(A); Policy: CGS Section 22a-92(b)(2)(A)	☐	☐	☐	✔
Coastal Hazard Area - Definition: CGS Section 22a-93(7)(H); Policies: CGS Sections 22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), and 22a-92(c)(2)(B)	✔	✔	☐	☐
Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters - Definition: CGS Sections 22a-93(5), 22a-93(7)(G), and 22a-93(7)(K), and 22a-93(7)(L) respectively; Policies: CGS Sections 22a-92(a)(2) and 22a-92(c)(2)(A)	☐	✔	☐	☐
Developed Shorefront - Definition: CGS Section 22a-93(7)(I); Policy: 22a-92(b)(2)(G)	✔	✔	☐	☐
Freshwater Wetlands and Watercourses - Definition: CGS Section 22a-93(7)(F); Policy: CGS Section 22a-92(a)(2)	☐	☐	☐	✔
Intertidal Flats - Definition: CGS Section 22a-93(7)(D); Policies: 22a-92(b)(2)(D) and 22a-92(c)(1)(K)	☐	☐	☐	✔
Islands - Definition: CGS Section 22a-93(7)(J); Policy: CGS Section 22a-92(b)(2)(H)	☐	☐	☐	✔
Rocky Shorefront - Definition: CGS Section 22a-93(7)(B); Policy: CGS Section 22a-92(b)(2)(B)	☐	☐	☐	✔
Shellfish Concentration Areas - Definition: CGS Section 22a-93(7)(N); Policy: CGS Section 22a-92(c)(1)(I)	☐	✔	☐	☐
Shorelands - Definition: CGS Section 22a-93(7)(M); Policy: CGS Section 22a-92(b)(2)(I)	☐	☐	☐	✔
Tidal Wetlands - Definition: CGS Section 22a-93(7)(E); Policies: CGS Sections 22a-92(a)(2), 22a-92(b)(2)(E), and 22a-92(c)(1)(B)	☐	☐	☐	✔

* General Coastal Resource policy is applicable to all proposed activities

13. Consistency with Applicable Coastal Resource Policies and Standards:

Describe the location and condition of the coastal resources identified in Question #10 and explain how the proposed project or activity is consistent with all of the applicable coastal resource policies and standards; also see adverse impacts assessment in Question #14 below (*attach additional pages if necessary*):

Please refer to attached sheet.

14. Identification of Applicable Coastal Use and Activity Policies and Standards:

Identify all coastal policies and standards in or referenced by CGS Section 22a-92 applicable to the proposed project or activity:

- [x] General Development* - CGS Sections 22a-92(a)(1), 22a-92(a)(2), and 22a-92(a)(9)
- [ ] Water-Dependent Uses** - CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A); Definition CGS Section 22a-93(16)
- [ ] Ports and Harbors - CGS Section 22a-92(b)(1)(C)
- [x] Coastal Structures and Filling - CGS Section 22a-92(b)(1)(D)
- [ ] Dredging and Navigation - CGS Sections 22a-92(c)(1)(C) and 22a-92(c)(1)(D)
- [ ] Boating - CGS Section 22a-92(b)(1)(G)
- [ ] Fisheries - CGS Section 22a-92(c)(1)(I)
- [ ] Coastal Recreation and Access - CGS Sections 22a-92(a)(6), 22a-92(C)(1)(j) and 22a-92(c)(1)(K)
- [ ] Sewer and Water Lines - CGS Section 22a-92(b)(1)(B)
- [ ] Fuel, Chemicals and Hazardous Materials - CGS Sections 22a-92(b)(1)(C), 22a-92(b)(1)(E) and 22a-92(c)(1)(A)
- [ ] Transportation - CGS Sections 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and 22a-92(c)(1)(H)
- [ ] Solid Waste - CGS Section 22a-92(a)(2)
- [ ] Dams, Dikes and Reservoirs - CGS Section 22a-92(a)(2)
- [ ] Cultural Resources - CGS Section 22a-92(b)(1)(J)
- [ ] Open Space and Agricultural Lands - CGS Section 22a-92(a)(2)

* General Development policies are applicable to all proposed activities

** Water-dependent Use policies are applicable to all activities proposed at waterfront sites, including those with tidal wetlands frontage.

15. Consistency With Applicable Coastal Use Policies and Standards:

Explain how the proposed activity or use is consistent with all of the applicable coastal use and activity policies and standards identified in Question #12. **For projects proposed at waterfront sites (including those with tidal wetlands frontage)**, particular emphasis should be placed on the evaluation of the project's consistency with the water-dependent use policies and standards contained in CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A) -- also see adverse impacts assessment in Question #15 below (attach additional pages if necessary):

Coastal Structures: The seawall will be repaired in kind and in place. The repaired seawall will not alter circulation patterns, erosion and/or sedimentation patterns, water quality or flooding.

16. Identification of Potential Adverse Impacts on Coastal Resources: (*Must be completed for ALL projects.*)
Identify the adverse impact categories below that apply to the proposed project or activity.

The **'applicable'** column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(15). If an adverse impact **may result** from the proposed project or activity, please use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Coastal Resources	Applicable	Not Applicable
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)	☐	✔
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	✔
Degrading existing circulation patterns of coastal water through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours - CGS Section 22a-93(15)(B)	☐	✔
Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff - CGS Section 22a-93(15)(D)	☐	✔
Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction - CGS Section 22a-93(15)(C)	☐	✔
Degrading visual quality through significant alteration of the natural features of vistas and view points - CGS Section 22a-93(15)(F)	☐	✔
Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity - CGS Section 22a-93(15)(A)	☐	✔
Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat - CGS Section 22a-93(15)(G)	☐	✔

17. Identification of Potential Adverse Impacts on Water-dependent Uses: ***(Complete only if the project/activity is proposed at a waterfront site.)***

a) Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(17). If an adverse impact **may result** from the proposed project or activity, use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Future Water-dependent Development Opportunities and Activities	Applicable	Not Applicable
Locating a non-water-dependent use at a site physically suited for or planned for location of a water-dependent use - CGS Section 22a-93(17)	☐	☑
Replacing an existing water-dependent use with a non-water-dependent use - CGS Section 22a-93(17)	☐	☑
Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters - CGS Section 22a-93(17)	☐	☑

b) Identification of existing and/or proposed Water-dependent Uses:

Describe the features or characteristics of the proposed activity or project that qualify as water-dependent uses as defined in CGS Section 22a-93(16). If general public access to coastal waters is provided, please identify the legal mechanisms used to ensure public access in perpetuity, and describe any provisions for parking or other access to the site and proposed amenities associated with the access (e.g., boardwalk, benches, trash receptacles, interpretative signage, etc.) *:

The property supports a commercial business that includes an active driveway and is devoid of features associated with or conducive to water-dependent activities.

*If there are no water-dependent use components, describe how the project site is not appropriate for the development of a water-dependent use.

18. Mitigation of Potential Adverse Impacts:

Explain how all potential adverse impacts on coastal resources and/or future water-dependent development opportunities and activities identified in Questions #14 & #15 have been avoided, eliminated, or minimized (*attach additional pages if necessary*):

There should be no adverse impacts to coastal resources or future water-dependent development opportunities.

19. Remaining Adverse Impacts:

Explain why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated and why the project as proposed is consistent with the Connecticut Coastal Management Act (*attach additional pages if necessary*):

There should be no adverse impacts.

By signing this application, the applicant or his/her agent certifies that they are familiar with the information provided in this application and are aware of the penalties for obtaining a permit through deception or by submission of inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspection of the subject property by the Commissioners and designated staff of the Commission or consultants to the Commission, at reasonable times, during the pendency of the application.

Applicant's Signature: _____ **DATE:** _____

Agent's Signature: _____ **DATE:** 2/10/2026

COMMERCE STREET ASSOCIATES, LLC
25 COMMERCE STREET, NORWALK, CT
COASTAL SITE PLAN REVIEW APPLICATION

10. Description of Proposed Project or Activity:

Repair approximately 60 linear feet of authorized boulder seawall. Approximately 133 cubic yards of 24" – 60" stone boulders will be excavated and reused, with approximately 30 cubic yards of 1-1/4" stone, 30 cubic yards of mass concrete, and 1,250 square feet of geotextile filter fabric placed on the landward face for structural reinforcement and drainage. The repaired seawall will be capped with a concrete cap consisting of approximately 5 cubic yards of concrete.

All equipment will access the site via the upland, and will operate solely from the upland. Prior to construction, an anchored floating silt curtain will be waterward of the length of seawall to be repaired. The silt curtain will be maintained throughout the course of construction.

Working in 10' – 15' sections, approximately 240 cubic yards of existing soils will be excavated by backhoe excavator from an area of approximately 1080 square feet landward of the seawall. Soils will be stockpiled on the adjacent upland within a silt-fence and hay bale barrier. Larger stone will be reserved for reuse, while other stone and debris will be sorted for use as structural backfill. Concrete debris will be disposed of offsite at an approved upland facility.

Courses of usable larger stone will be set by backhoe, PVC-coated steel dowels will be drilled and grouted by hand into the inner face of the stone, and PVC-coated steel reinforcing bars will be wired to these. Concrete will be poured within forms set along the landward face of the seawall. Concrete will be poured at low tide and will be supplied by mixer truck staged on the adjacent upland. Forms will be removed after the concrete has set.

The area landward of the concrete will be lined with geotextile fabric to form a pocket, into which the crushed stone will be placed. Excavated soils and stones will be used to backfill the repaired seawall, and will be hydraulically compacted or compacted using the backhoe. PVC-pipe weepholes will be installed between of stones in the top course.

The remaining sections of seawall will be completed in like fashion. A formed concrete cap will be poured atop the repaired seawall. The adjacent upland will be paved to match the existing. There will be no increase in impervious surfaces.

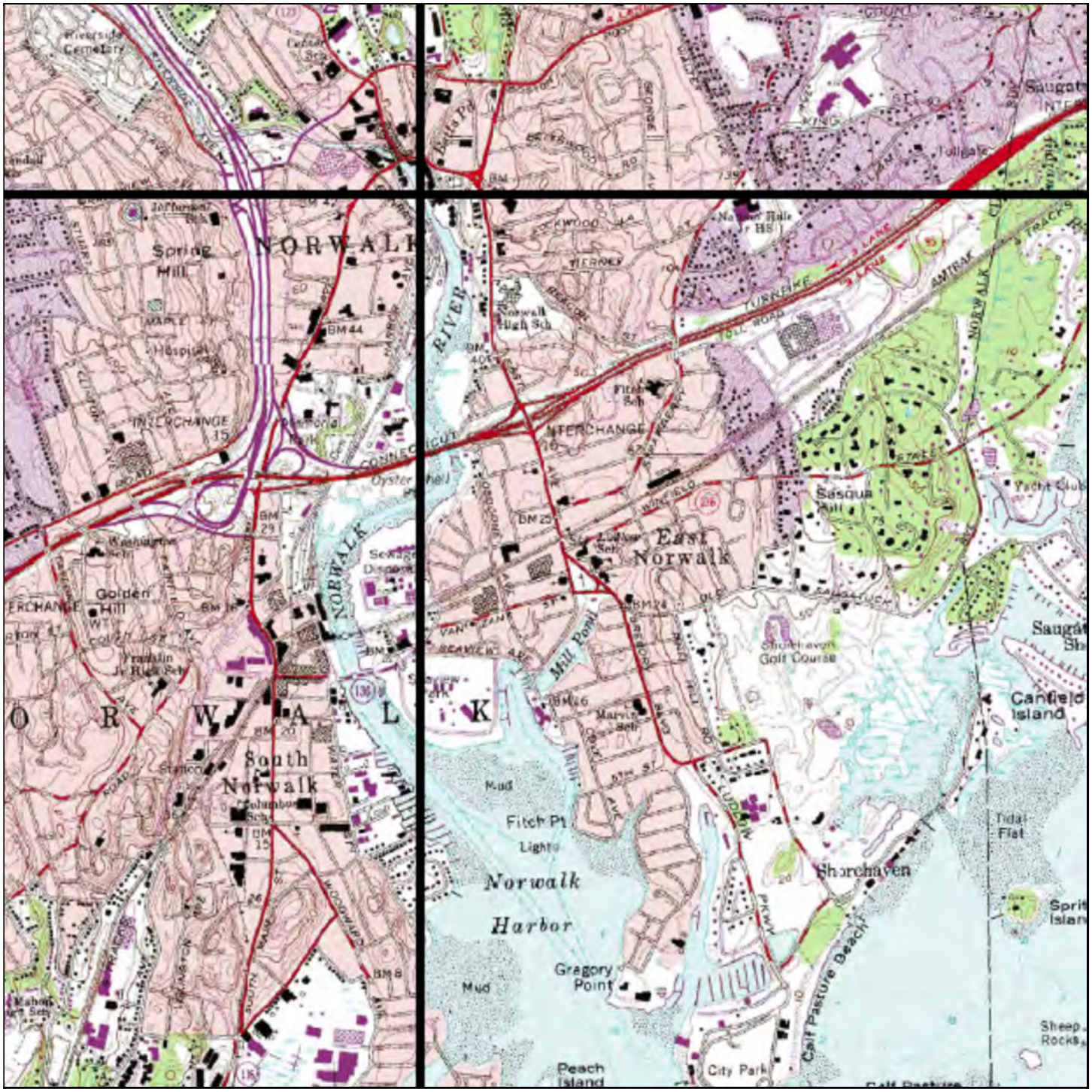
13. Consistency with Applicable Coastal Resource Policies and Standards:

Coastal Hazard Areas: The project lies within the one-hundred-year 10' flood elevation, per FEMA map panel 09001C0531G. The project is consistent with applicable policies, as the work is the repair of an existing seawall in order to protect the upland, minimizing risks to the property. There will be no change to the erosion and depositional relationships or water circulation patterns on or adjacent to the property.

Estuarine Embayment: The property is located at the head of Norwalk Harbor, an Estuarine Embayment. The project is consistent with applicable policies as it does not impact the biological productivity of the embayment nor does it alter drainage or circulation within the embayment.

Developed Shorefronts: The project is consistent with applicable polices as it does not change the land use of the property and allows continued usage of the upland activities.

Shellfish Concentration Areas: Norwalk Harbor is designated a natural shellfish bed. However, the waters at the site are categorized as Prohibited, and shellfish may not be harvested from this area. The project is consistent, as it does not impact the natural beds.



VICINITY MAP

FROM U.S.G.S. NORWALK SOUTH QUADRANGLE MAP SCALE: 1:24000

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE *DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988* *ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC* *APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853*	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT* *APPLICATION BY: COMMERCE STREET ASSOCIATES LLC* *DATE: 10/12/25 SHEET 1 OF 5 REVISION NUMBER: DATE:*

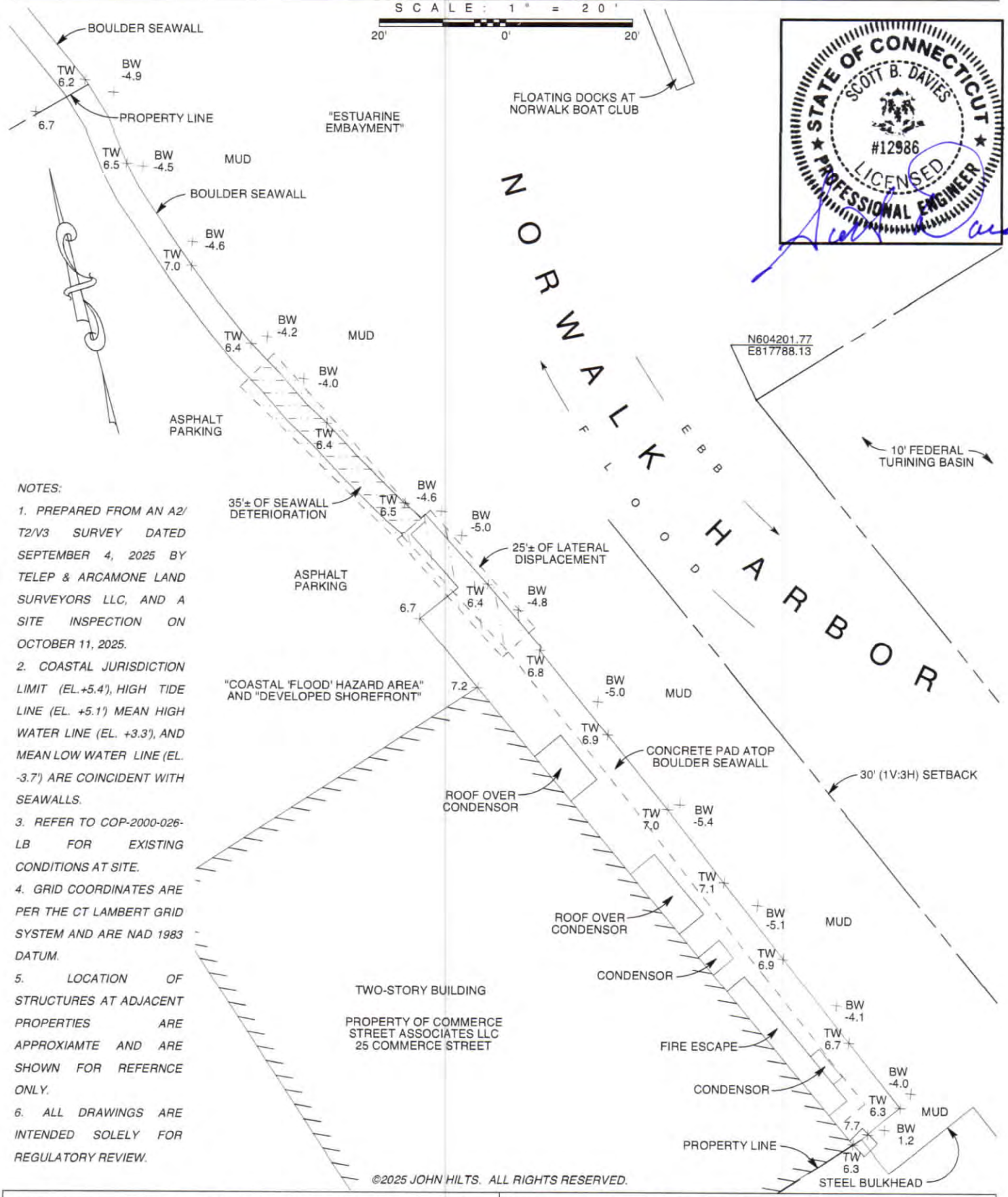


A S S E S S O R ' S M A P

FROM NORWALK G.I.S. SITE: ASSESSOR'S MAP 14NE BLOCK 22 PARCEL 6

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE *DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988* *ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC* *APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853*	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT* *APPLICATION BY: COMMERCE STREET ASSOCIATES LLC* *DATE: 10/12/25 SHEET 2 OF 5 REVISION NUMBER: DATE:*

EXISTING SITE PLAN VIEW



NOTES:

1. PREPARED FROM AN A2/ T2/V3 SURVEY DATED SEPTEMBER 4, 2025 BY TELEP & ARCAMONE LAND SURVEYORS LLC, AND A SITE INSPECTION ON OCTOBER 11, 2025.

2. COASTAL JURISDICTION LIMIT (EL.+5.4'), HIGH TIDE LINE (EL. +5.1') MEAN HIGH WATER LINE (EL. +3.3'), AND MEAN LOW WATER LINE (EL. -3.7') ARE COINCIDENT WITH SEAWALLS.

3. REFER TO COP-2000-026-LB FOR EXISTING CONDITIONS AT SITE.

4. GRID COORDINATES ARE PER THE CT LAMBERT GRID SYSTEM AND ARE NAD 1983 DATUM.

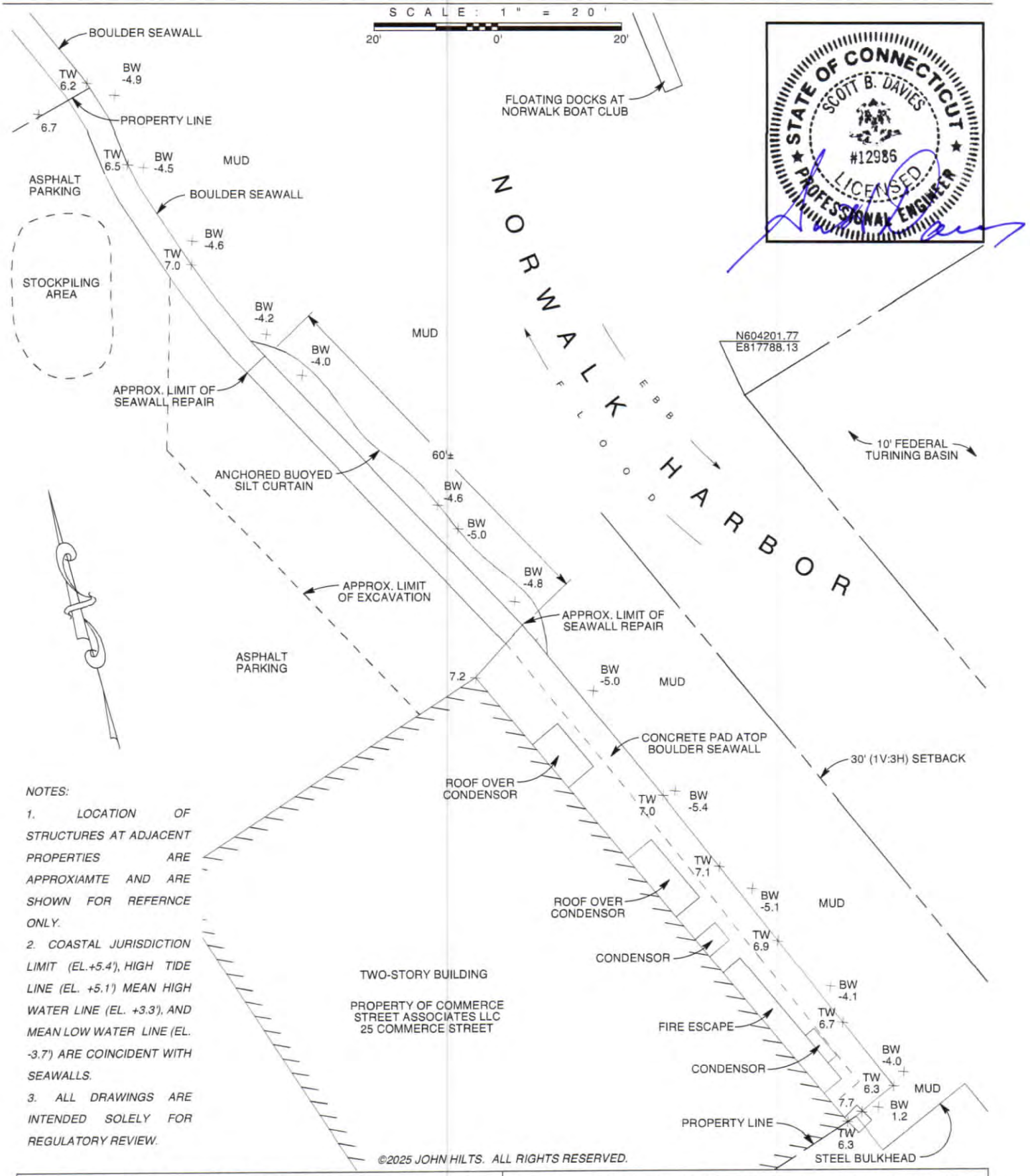
5. LOCATION OF STRUCTURES AT ADJACENT PROPERTIES ARE APPROXIAMTE AND ARE SHOWN FOR REFERNCE ONLY.

6. ALL DRAWINGS ARE INTENDED SOLELY FOR REGULATORY REVIEW.

©2025 JOHN HILTS. ALL RIGHTS RESERVED.

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT*
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988	*APPLICATION BY: COMMERCE STREET ASSOCIATES LLC*
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC	*DATE: 10/12/25 SHEET 3 OF 5 REVISION NUMBER: DATE:*
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	

PROPOSED SITE PLAN VIEW



NOTES:

1. LOCATION OF STRUCTURES AT ADJACENT PROPERTIES ARE APPROXIAMTE AND ARE SHOWN FOR REFERNCE ONLY.

2. COASTAL JURISDICTION LIMIT (EL.+5.4'), HIGH TIDE LINE (EL. +5.1') MEAN HIGH WATER LINE (EL. +3.3'), AND MEAN LOW WATER LINE (EL. -3.7') ARE COINCIDENT WITH SEAWALLS.

3. ALL DRAWINGS ARE INTENDED SOLELY FOR REGULATORY REVIEW.

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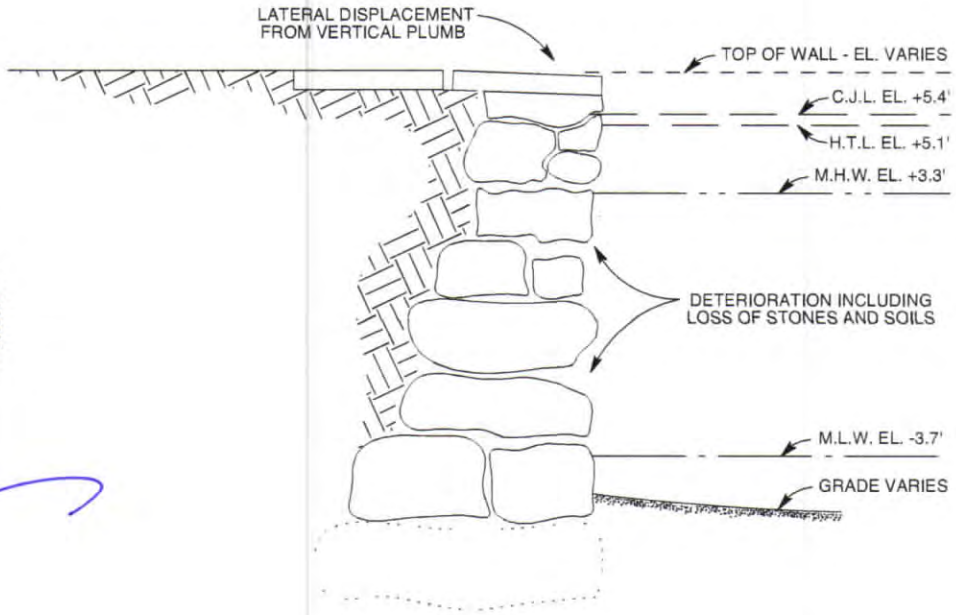
PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853

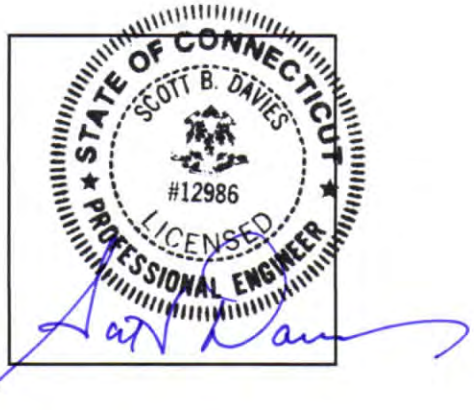
PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT
APPLICATION BY: COMMERCE STREET ASSOCIATES LLC
DATE: 10/12/25 SHEET 4 OF 5 REVISION NUMBER: DATE:

EXISTING SEAWALL SECTION

SCALE: 1" = 5'

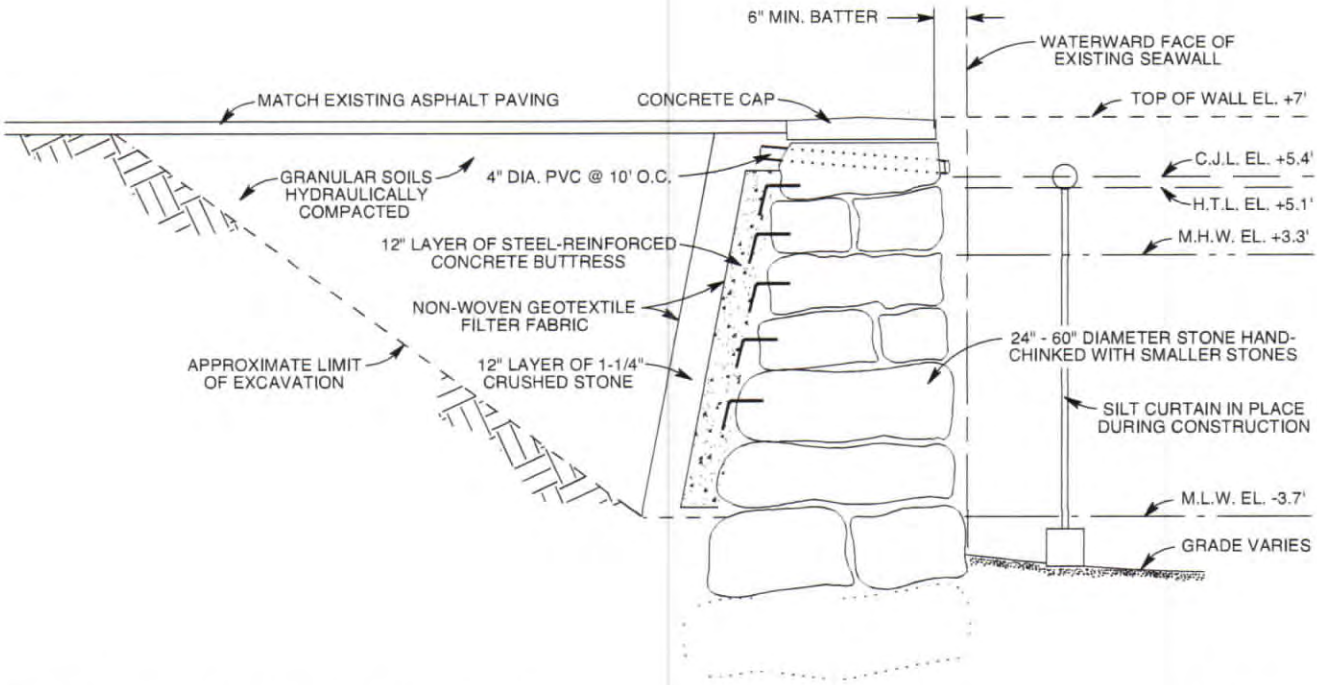
5' 0' 5'





PROPOSED SEAWALL SECTION

SCALE: 1" = 5'



NOTE: ALL DRAWINGS ARE INTENDED FOR REGULATORY REVIEW ONLY.

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PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988	APPLICATION BY: COMMERCE STREET ASSOCIATES LLC
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC	
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	DATE: 10/12/25 SHEET 5 OF 5 REVISION NUMBER: DATE:

DATA ACCUMULATION PLAN

OF PROPERTY PREPARED FOR

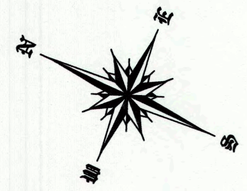
COMMERCE STREET ASSOCIATES, LLC

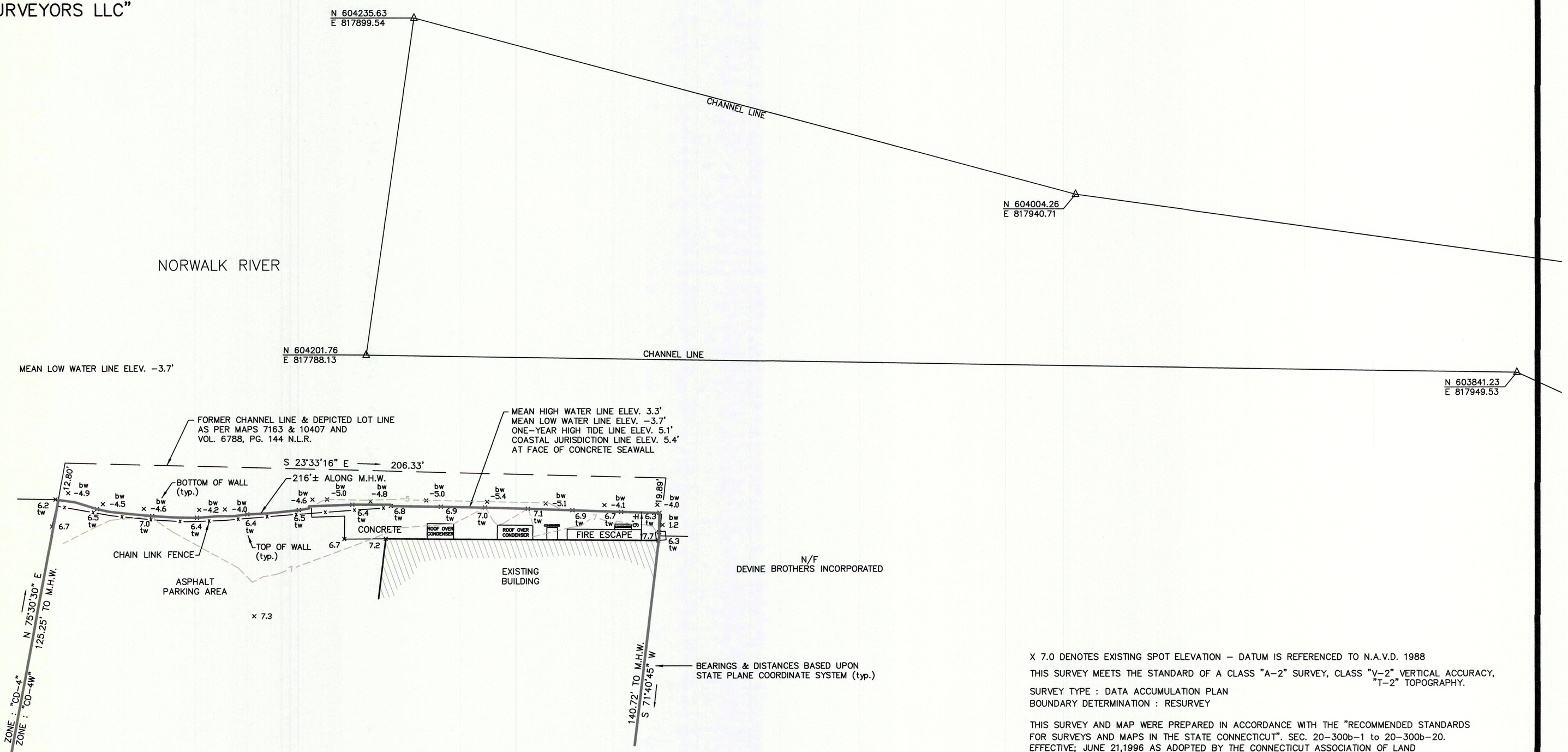
#25 COMMERCE STREET, NORWALK, CONNECTICUT

SCALE: 1" = 20' DATE: SEPT. 4, 2025

BY "TELEP & ARCAMONE LAND SURVEYORS LLC"

4 TAFT STREET, UNIT A-2B
S. NORWALK, CT. 06854
PHONE : 203-866-2058
www.ArcamoneSurveyors.com





X 7.0 DENOTES EXISTING SPOT ELEVATION – DATUM IS REFERENCED TO N.A.V.D. 1988

THIS SURVEY MEETS THE STANDARD OF A CLASS "A-2" SURVEY, CLASS "V-2" VERTICAL ACCURACY, "T-2" TOPOGRAPHY.

SURVEY TYPE : DATA ACCUMULATION PLAN
BOUNDARY DETERMINATION : RESURVEY

THIS SURVEY AND MAP WERE PREPARED IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR SURVEYS AND MAPS IN THE STATE CONNECTICUT". SEC. 20-300b-1 to 20-300b-20. EFFECTIVE; JUNE 21,1996 AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC., SEPTEMBER 26, 1996. REVISED OCTOBER 26, 2018 & ADOPTED AUGUST 29, 2019.

THE CERTIFICATION SHOWN ABOVE RUNS TO THE PERSON(S) FOR WHOM THE SURVEY WAS PREPARED AND ANY GOVERNMENTAL AGENCY, TITLE INSURANCE CO., OR LENDING INSTITUTION WHOSE NAME APPEARS ABOVE. CERTIFICATION IS NOT TRANSFERABLE & ANY UNAUTHORIZED USE IN WHOLE OR IN PART IS STRICTLY PROHIBITED.

UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS IF ANY, ARE NOT DEPICTED

WETLAND OR WETLAND SOIL TYPES IF ANY, ARE NOT DEPICTED

THIS MAP IS INVALID WITHOUT A LIVE SIGNATURE AND EMBOSSED SEAL.

REFERENCES TO THE ABOVE PROPERTY ARE MADE TO MAPS No. 7163 & 10407 N.L.R.

TAX MAP 14NE DISTRICT 1 BLOCK 22 TAX LOT 6

PROPERTY IS LOCATED IN ZONE : "CD-4W" URBAN CENTER-WATER COMMUNITY DISTRICT

F.I.R.M. ZONES: "X" & "AE" (el. 10') PANEL 531 of 626 MAP NO. 09001C0531G DATE 7/8/13

DISTANCES SHOWN +/- FROM BUILDINGS TO PROPERTY LINES ARE NOT TO BE USED TO ESTABLISH BOUNDARIES.

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

JACOB P. TELEP, LAND SURVEYOR CONNECTICUT REG # 70571

NO USE, REPRODUCTION OR DISSEMINATION MAY BE MADE OF THIS DRAWING WITHOUT THE PRIOR WRITTEN CONSENT OF ARCAMONE LAND SURVEYORS, LLC

Connecticut Department of Energy and Environmental Protection License*

Certificate of Permission

Licensee(s):	Commerce Street Associates, LLC
Licensee Address(s):	122 Highland Avenue Norwalk, CT 06853
License Number(s):	20258193-COP
Municipality:	Norwalk
Project Description:	Repair a seawall section for flood & erosion control
Project Address/Location:	25 Commerce Street
Waters:	Norwalk Harbor
Authorizing CT Statute(s) and/or Federal Law:	CGS Section 22a-359 to 363g; CGS Section 22a-90 to 112
Applicable Regulations of CT State Agencies:	
Agency Contact:	Land & Water Resources Division, Bureau of Water Protection & Land Reuse, 860-424-3019
License Expiration:	Five (5) years from the date of issuance of this license.
Project Site Plan Set:	*Proposed Repairs to Boulder Seawall in Norwalk Harbor at 25 Commerce Street, Norwalk, Fairfield County, Connecticut.* Five sheets of plans dated 10/12/2025 and signed by Scott Davies, P.E.
License Enclosures:	LWRD General Conditions; Site Plan Set; Land Record Filing; LWRD Work Commencement Form; LWRD Compliance Certification Form

*Connecticut's Uniform Administrative Procedure Act defines License to include, "*the whole or part of any agency permit, certificate, approval, registration, charter or similar form of permission required by law . . .*"

Authorized Activities:

The Licensee is hereby authorized to conduct the following work as described in application # 20258193-COP and as depicted on any site plan sheets / sets cited herein:

repair a 60 linear foot section of a 210 linear foot seawall, to a top of elevation of 7' NAVD88 by:

a. placing a turbidity curtain, to be removed upon completion of the work;
b. excavating 240 c.y. of soil in a 1,080 sq ft area landward of the existing wall;
c. restacking approximately 133 c.y. of 24" - 60" stone boulders in the seawall;
d. placing forms and rebar;
e. pouring 30 cubic yards of concrete;
f. placing 1,250 s.f. of geotextile filter fabric to contain 30 c.y. of 1¼" stone;
g. installing 4" diameter weepholes at 10' intervals;
h. backfilling landward of the seawall; and
i. installing a seawall cap consisting of 5 c.y. of concrete.

Failure to comply with the terms and conditions of this license shall subject the Licensee and / or the Licensee's contractor(s) to enforcement actions and penalties as provided by law.

This license is subject to the following Terms and Conditions:

1. **License Enclosure(s) and Conditions.** The Licensee shall comply with all applicable terms and conditions as may be stipulated within the License Enclosure(s) listed above.
2. **Equipment Restriction.** All work authorized herein shall be conducted using land-based equipment and shall be operated and stored landward of the coastal jurisdiction line.
3. **Discharge of Concrete.** At no time shall the Licensee allow concrete to discharge into Norwalk Harbor
4. **Waterward Encroachment for Walls.** There shall be no waterward encroachment of the new wall.
5. **Wall Construction Phasing.** Seawall replacement authorized herein, shall be limited to 20 foot sections. At no time shall work begin on a second section of wall without the prior section being stabilized to prevent erosion of exposed sediments into Norwalk Harbor.
6. **Height of Tide Restriction.** All work authorized herein shall be conducted during periods of lower water to minimize sedimentation.
7. **Turbidity Curtain.** Prior to the commencement of work authorized herein, the Licensee shall install turbidity curtains extending from the water surface to the substrate around the work area. Such erosion and sediment control structures shall be maintained in optimal operating condition until project completion at which time the erosion and sediment controls shall be removed to an upland location.

Issued under the authority of the Commissioner of Energy and Environmental Protection on:

November 21, 2025
Date

Brian P. Thompson
Division Director
Land & Water Resources Division

LWRD General Conditions

1. **Land Record Filing (for *Structures Dredging & Fill*, *Tidal Wetlands*, *Certificate of Permission*, and *Long Island Sound General Permit* Licenses only).** The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to DEEP.LWRDRegulatory@ct.gov no later than sixty (60) days after license issuance. If a Land Record Filing form is not enclosed and the work site is not associated with an upland property, no filing is required.

2. **Contractor Notification.** The Licensee shall give a copy of the license and its attachments to the contractor(s) who will be carrying out the authorized activities prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Licensee's contractor(s) shall conduct all operations at the site in full compliance with the license and, to the extent provided by law, may be held liable for any violation of the terms and conditions of the license. At the work site, the contractor(s) shall, whenever work is being performed, have on site and make available for inspection a copy of the license and the authorized plans.

3. **Work Commencement.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to DEEP.LWRDRegulatory@ct.gov, on the Work Commencement Form attached hereto, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.

    - For water diversion activities authorized pursuant to 22a-377(c)-1 of the Regulations of Connecticut State Agencies, the Licensee shall also notify the Commissioner in writing two weeks prior to initiating the authorized diversion.
    - For emergency activities authorized pursuant to Connecticut General Statutes Section 22a-6k, the Licensee shall also notify the Commissioner, in writing, of activity commencement at least one (1) day prior to construction and of activity completion no later than five (5) days after conclusion.
    - For reconfiguration activities authorized pursuant to……, the Licensee shall notify the Commissioner, in writing, of reconfiguration activities no later than three (3) days prior to commencing such work and of work completion no later than seven (7) days after conclusion. **Work Commencement. The Licensee shall notify the Commissioner of reconfiguration activities no later than three days prior to commencing such work. The Work Commencement Form, attached hereto, shall be completed and emailed to DEEP.LWRDRegulatory@ct.gov. The Licensee shall also notify the commissioner no later than seven days after work completion.**

- The Work Commencement condition and the need for a Work Commencement Form is not applicable to Flood Management Certification approvals.

4. **For Coastal Licenses Only - License Notice.** The Licensee shall post the first page of the License in a conspicuous place at the work area while the work authorized therein is undertaken.

5. **Unauthorized Activities.** Except as specifically authorized, no equipment or material, including but not limited to, fill, construction materials, excavated material or debris, shall be deposited, placed or stored in any wetland or watercourse on or off-site. The Licensee may not conduct work within wetlands or watercourses other than as specifically authorized, unless otherwise authorized in writing by the Commissioner. Tidal wetlands means "wetland" as defined by section 22a-29 and "freshwater wetlands and watercourses" means "wetlands" and "watercourses" as defined by section 22a-38.

6. **Management of Materials.** Any materials removed from the site shall be managed in accordance with all federal, state, and local requirements, including Chapter 446K Water Pollution Control, Chapter 445 Hazardous Waste, and Chapter 446d Solid Waste of the Connecticut General Statutes.

7. **Unconfined Instream Work.** Unless otherwise noted in a condition of the license, the following conditions apply to projects in non-coastal waters:

   - Unconfined instream work is limited to the period June 1 through September 30.
   - Confinement of a work area by cofferdam techniques using sand bag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year. The removal of such confinement devices is allowed any time of the year.
   - Once a work area has been confined, in-water work within the confined area is allowed any time of the year.
   - The confinement technique used shall completely isolate and protect the confined area from all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.

8. **For State Actions Only - Material or Equipment Storage in the Floodplain.** Unless approved by a Flood Management Exemption, the storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood is prohibited. Any other material or equipment stored at the site below said elevation by the Licensee or the Licensee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day. In accordance with the licensee's Flood Contingency Plan, the Licensee shall remove equipment and materials from the floodplain during periods when flood warnings have been issued or are anticipated by a responsible federal, state or local agency. It shall be the Licensee's responsibility to obtain such warnings when flooding is anticipated.

9. **Temporary Hydraulic Facilities for Water Handling.** If not reviewed and approved as a part of the license application, temporary hydraulic facilities shall be designed by a qualified professional and in accordance with the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, the *Connecticut Stormwater Quality Manual* as revised, or the Department of Transportation's *CTDOT Drainage Manual,* as applicable. Temporary hydraulic facilities may include channels, culverts or bridges which are required for haul roads, channel relocations, culvert installations, bridge construction, temporary roads, or detours.

10. **Excavated Materials.** Unless otherwise authorized, all excavated material shall be staged and managed in a manner which prevents additional impacts to wetlands and watercourses.

11. **Best Management Practices.** The Licensee shall not cause or allow pollution of any wetlands or watercourses, including pollution resulting from sedimentation and erosion. In constructing or maintaining any authorized structure or facility or conducting any authorized activity, or in removing any such structure or facility, the Licensee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. For purposes of the license, "pollution" means "pollution" as that term is defined by CGS section 22a-423. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, *Connecticut Stormwater Quality Manual* as revised, Department of Transportation's *CTDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.

12. **In-Water Work Vessel Staging and Storage. (for Structures Dredging & Fill, Tidal *Wetlands*, *Certificate of Permission*, and *Long Island Sound General Permit* Licenses only).** For any barge, vessel, skiff or floating work platform ("work vessels") utilized in the execution of the work authorized herein, the Licensee shall ensure that such work vessels:
    - do not rest on, or come in contact with, the substrate at any time, unless specifically authorized in the license.
    - are not stored over intertidal flats, submerged aquatic vegetation or tidal wetland vegetation or in a location that interferes with navigation. In the event any work vessel is grounded, no dragging or prop dredging shall occur to free it.

13. **Work Site Restoration.** Upon completion of any authorized work, the Licensee shall restore all areas temporarily impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.

14. **Inspection.** The Licensee shall allow any representative of the Commissioner to inspect the project location at reasonable times to ensure that work is being or has been conducted in accordance with the terms and conditions of this license.

15. **Change of Use. (Applies only if a use is specified within the License "*Project Description*")**
    a. The work specified in the license is authorized solely for the purpose set forth in the license. No change in purpose or use of the authorized work or facilities as set forth in the license may occur without the prior written approval of the Commissioner. The Licensee shall, prior to undertaking or allowing any change in use or purpose from that

which is authorized by this license, request permission from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.

b. A change in the form of ownership of any structure authorized herein from a rental/lease commercial marina to a wholly-owned common interest community or dockominium may constitute a change in purpose as specified in paragraph (a) above.

16. **De Minimis Alteration.** The Licensee shall not deviate from the authorized activity without prior written approval from the Commissioner. The Licensee may request a de minimis change to any authorized structure, facility, or activity. A de minimis alteration means a change in the authorized design, construction or operation that individually and cumulatively has minimal additional environmental impact and does not substantively alter the project as authorized.

    - For diversion activities authorized pursuant to 22a-377(c)-2 of the Regulations of Connecticut State Agencies, a de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.

17. **Extension Request.** The Licensee may request an extension of the license expiration date. Such request shall be in writing and shall be submitted to DEEP.LWRDRegulatory@ct.gov at least thirty (30) days prior to the license expiration. Such request shall describe the work done to date, what work still needs to be completed, and the reason for such extension. The Commissioner may extend the expiration date of this license for a period of up to one year, in order for the Licensee to complete the authorized activities. It shall be at the Commissioner's sole discretion to grant or deny such request. No more than three (3) one-year extensions will be granted under this license.

18. **Compliance Certification.** Not later than 90 days after completion of the authorized work, the Licensee shall prepare and submit to DEEP.LWRDRegulatory@ct.gov, the attached Compliance Certification Form. Such Compliance Certification shall be completed, signed, and sealed by the Licensee and a Connecticut Licensed Design Professional. If non-compliance is indicated on the form, or the Commissioner has reason to believe the activities and/or structures were conducted in non-compliance with the license, the Commissioner may require the Licensee to submit as-built plans as a condition of this license.

    - The Compliance Certificaton condition and the need for a Compliance Certification Form is not applicable to Flood Management Certification approvals.

19. **Maintenance.** The Licensee shall maintain all authorized structures or work in optimal condition or shall remove such structures or facility and restore the affected waters to their pre-work condition. Any such maintenance or removal activity shall be conducted in accordance with applicable law and any additional approvals required by law.

20. **No Work After License Expiration.** Work conducted after the license expiration date is a violation of the license and may subject the licensee to enforcement action, including penalties, as provided by law.

21. **License Transfer.** The license is not transferable without prior written authorization of the Commissioner. A request to transfer a license shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Licensee's obligations under the license shall not be affected by the passage of title to the license site to any other person or municipality until such time as a transfer is approved by the Commissioner.

22. **Document Submission.** Any document required to be submitted to the Commissioner under the license or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

    DEEP.LWRDRegulatory@ct.gov or

    Regulatory Section
    Land & Water Resources Division
    Department of Energy and Environmental Protection
    79 Elm Street
    Hartford, Connecticut 06106-5127
    860-424-3019

23. **Date of Document Submission.** The date of submission to the Commissioner of any document required by the license shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under the license, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in the license, the word "day" as used in the license means calendar day. Any document or action which is required by the license to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.

24. **Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under the license shall be signed by the Licensee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

25. **Accuracy of Documentation.** In evaluating the application for the license, the Commissioner has relied on information and data provided by the Licensee and on the Licensee's representations concerning site conditions, design specifications and the proposed work, including but not limited to representations concerning the commercial, public or private nature of the work or structures, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, the license may be modified, suspended or revoked, and any unauthorized activities may be subject to

enforcement action.

26. Limits of Liability. In granting the license, the Commissioner has relied on all representations of the Licensee, including information and data provided in support of the Licensee's application. Neither the Licensee's representations nor the issuance of the license shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.

27. Reporting of Violations. In the event that the Licensee becomes aware that they did not or may not comply, or did not or may not comply on time, with any provision of this license or of any document incorporated into the license, the Licensee shall immediately notify the agency contact specified within the license and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the agency contact, the Licensee shall provide, for the agency's review and written approval, a report including the following information:

a. the provision(s) of the license that has been violated;

b. the date and time the violation(s) was first observed and by whom;

c. the cause of the violation(s), if known;

d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;

e. if the violation(s) has not ceased, the anticipated date when it will be corrected;

f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented; and

g. the signatures of the Licensee and of the individual(s) responsible for actually preparing such report.

If the violation occurs outside of normal business hours, the Licensee shall contact the Department of Energy and Environmental Protection Emergency Dispatch at 860-424-3333. The Licensee shall comply with any dates which may be approved in writing by the Commissioner.

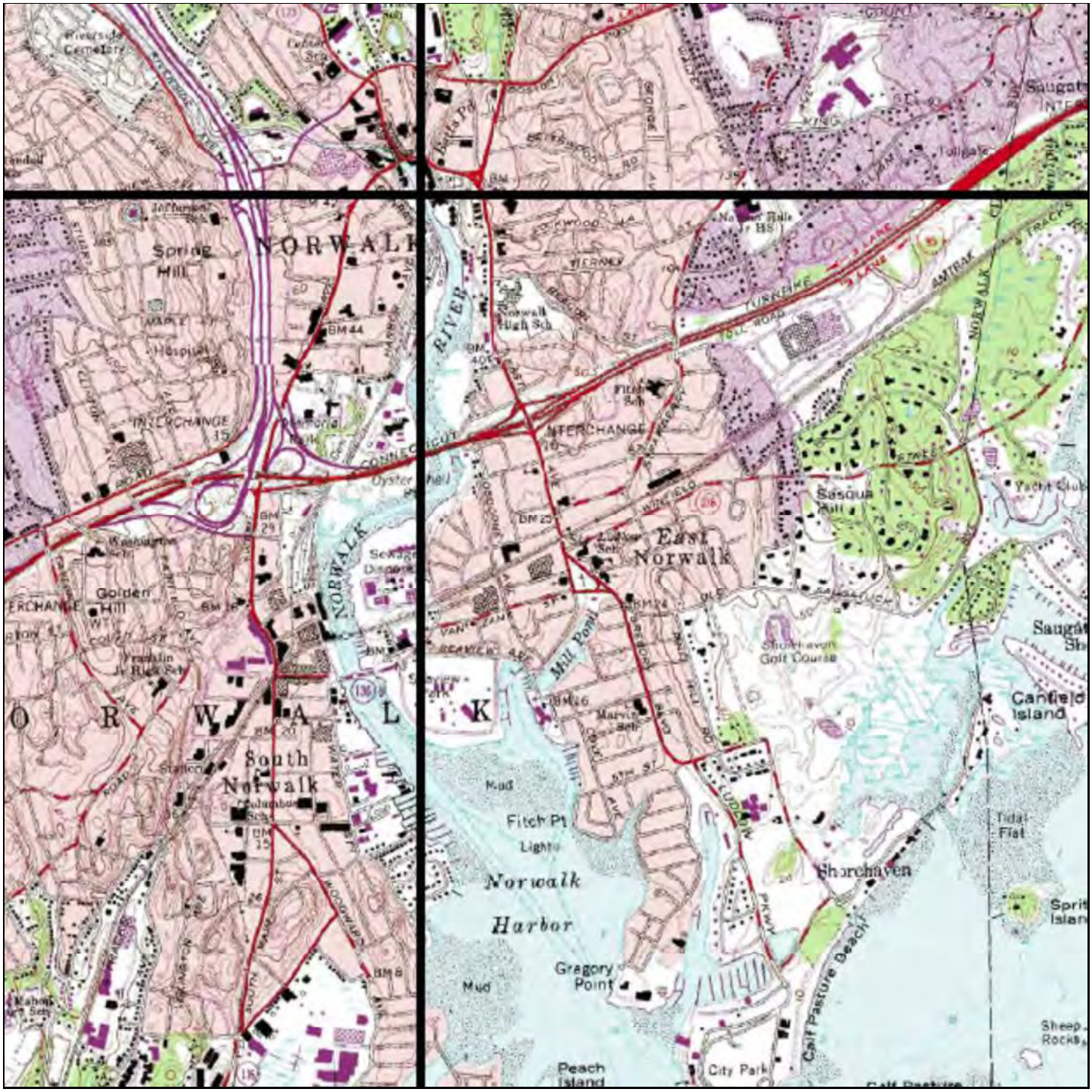
28. Revocation/Suspension/Modification. The license may be revoked, suspended, or modified in accordance with applicable law.

29. Other Required Approvals. License issuance does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, state and local law.

30. Rights. The license is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

31. Condition Conflicts. In the case where a project specific special condition listed on the license

differs from, or conflicts with, one of the general conditions listed herein, the project specific special condition language shall prevail. It is the licensee's responsibility to contact the agency contact person listed on the license for clarification if needed prior to conducting any further regulated activities.



VICINITY MAP

FROM U.S.G.S. NORWALK SOUTH QUADRANGLE MAP SCALE: 1:24000

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT APPLICATION BY: COMMERCE STREET ASSOCIATES LLC DATE: 10/12/25 SHEET 1 OF 5 REVISION NUMBER: DATE:

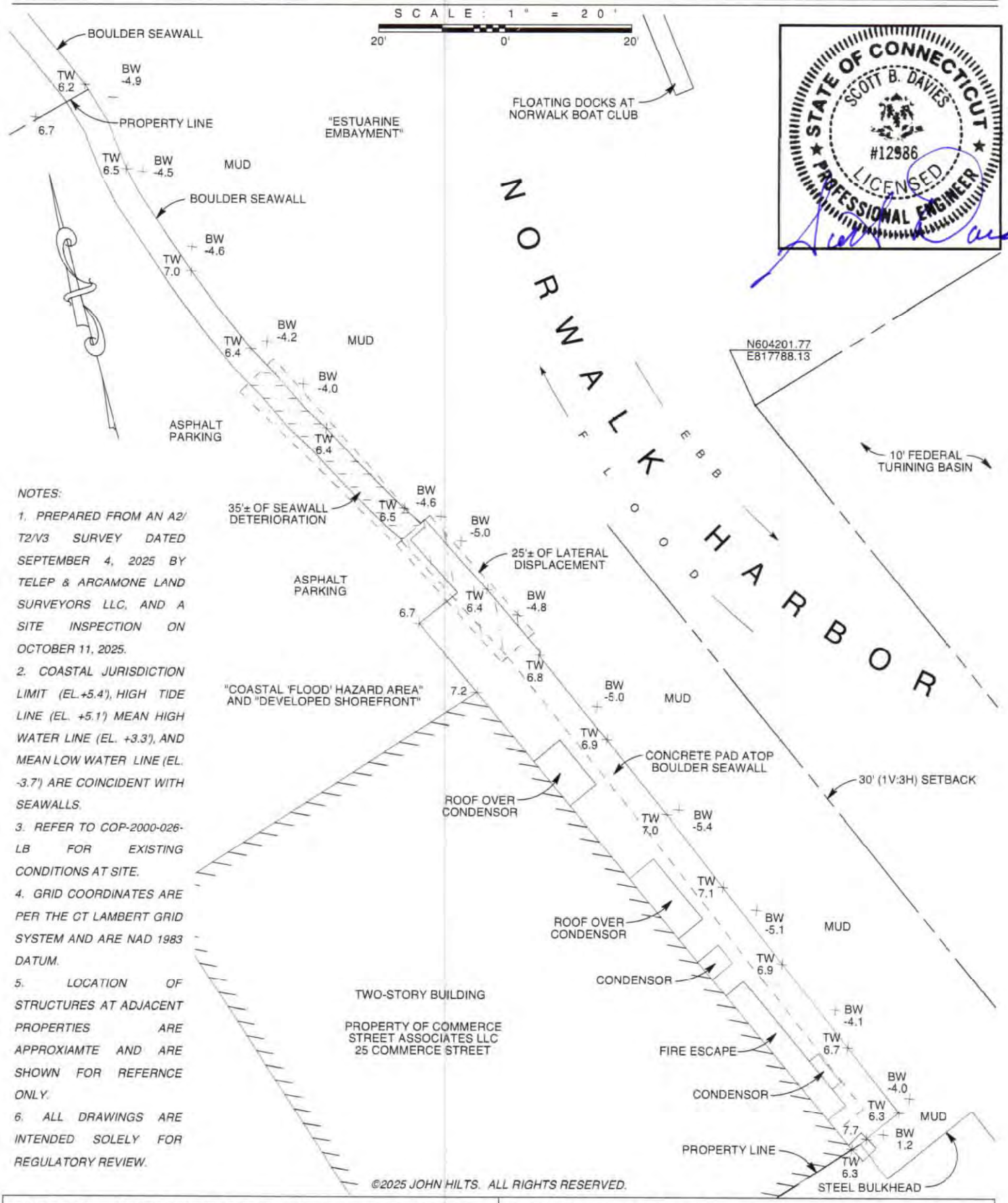


A S S E S S O R ' S M A P

FROM NORWALK G.I.S. SITE: ASSESSOR'S MAP 14NE BLOCK 22 PARCEL 6

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE *DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988* *ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC* *APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853*	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT* *APPLICATION BY: COMMERCE STREET ASSOCIATES LLC* *DATE: 10/12/25 SHEET 2 OF 5 REVISION NUMBER: DATE:*

EXISTING SITE PLAN VIEW



NOTES:

1. PREPARED FROM AN A2/T2/V3 SURVEY DATED SEPTEMBER 4, 2025 BY TELEP & ARCAMONE LAND SURVEYORS LLC, AND A SITE INSPECTION ON OCTOBER 11, 2025.

2. COASTAL JURISDICTION LIMIT (EL.+5.4'), HIGH TIDE LINE (EL. +5.1') MEAN HIGH WATER LINE (EL. +3.3'), AND MEAN LOW WATER LINE (EL. -3.7') ARE COINCIDENT WITH SEAWALLS.

3. REFER TO COP-2000-026-LB FOR EXISTING CONDITIONS AT SITE.

4. GRID COORDINATES ARE PER THE CT LAMBERT GRID SYSTEM AND ARE NAD 1983 DATUM.

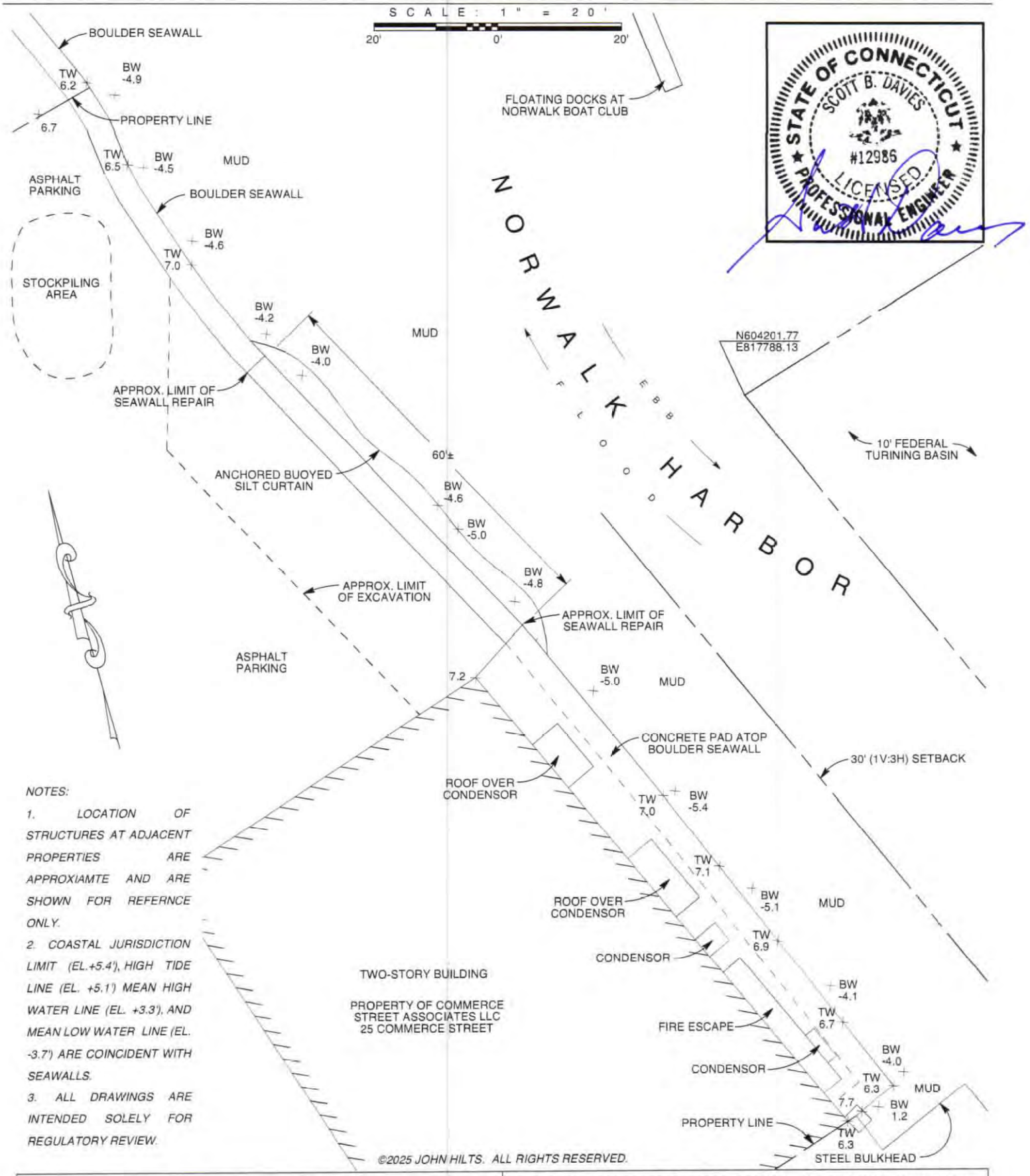
5. LOCATION OF STRUCTURES AT ADJACENT PROPERTIES ARE APPROXIAMTE AND ARE SHOWN FOR REFERNCE ONLY.

6. ALL DRAWINGS ARE INTENDED SOLELY FOR REGULATORY REVIEW.

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PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT*
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988	*APPLICATION BY: COMMERCE STREET ASSOCIATES LLC*
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC	*DATE: 10/12/25 SHEET 3 OF 5 REVISION NUMBER: DATE:*
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	

PROPOSED SITE PLAN VIEW



NOTES:

1. LOCATION OF STRUCTURES AT ADJACENT PROPERTIES ARE APPROXIAMTE AND ARE SHOWN FOR REFERNCE ONLY.

2. COASTAL JURISDICTION LIMIT (EL.+5.4'), HIGH TIDE LINE (EL. +5.1') MEAN HIGH WATER LINE (EL. +3.3'), AND MEAN LOW WATER LINE (EL. -3.7') ARE COINCIDENT WITH SEAWALLS.

3. ALL DRAWINGS ARE INTENDED SOLELY FOR REGULATORY REVIEW.

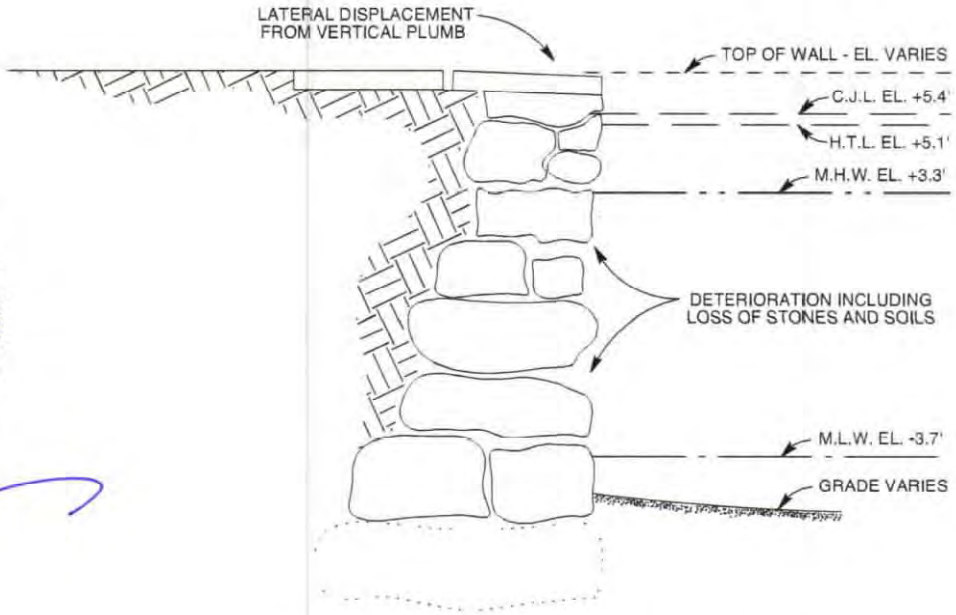
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PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT*
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988	*APPLICATION BY: COMMERCE STREET ASSOCIATES LLC*
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC	*DATE: 10/12/25 SHEET 4 OF 5 REVISION NUMBER: DATE:*
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	

EXISTING SEAWALL SECTION

SCALE: 1" = 5'

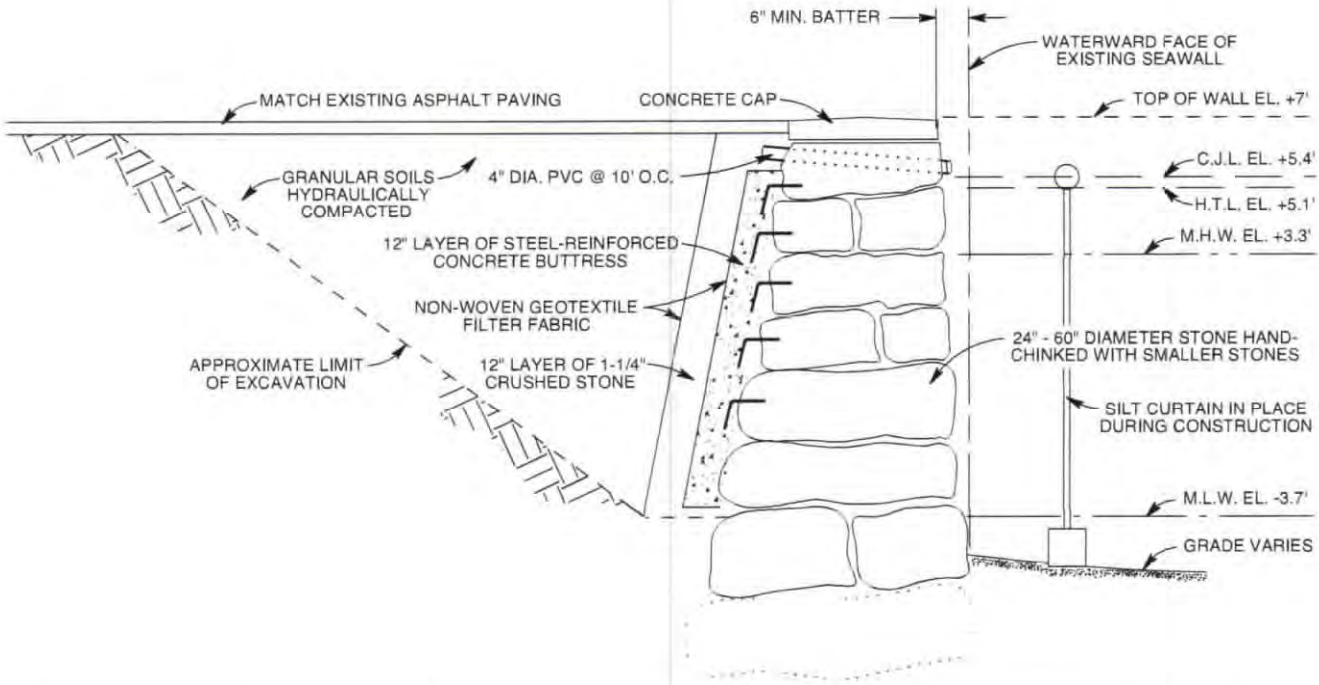
5' 0' 5'





PROPOSED SEAWALL SECTION

SCALE: 1" = 5'



NOTE: ALL DRAWINGS ARE INTENDED FOR REGULATORY REVIEW ONLY.

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PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT
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APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DISTRICT
NEW ENGLAND DISTRICT OFFICE
696 VIRGINIA ROAD
CONCORD MA 01742-2718

January 16, 2026

Regulatory Division
Connecticut & Rhode Island Section

David Slapin
Commerce Street Associates LLC
122 Highland Ave
Norwalk, Connecticut 06853
Via Email: david@crystalicecubes.com

Dear Mr. Slapin:

We have reviewed your request to the U.S. Army Corps of Engineers (USACE), New England District on October 24, 2025 for a Department of the Army general permit verification. We have assigned this project file number NAE-2025-02330, which you should reference in all correspondence with this office.

The proposed work includes the repair of 60-linear feet of boulder seawall along Norwalk Harbor in Norwalk, Fairfield County, Connecticut. The work is shown on the enclosed plans titled “Proposed Repairs to Boulder Seawall in Norwalk Harbor at 25 Commerce Street, Norwalk, Fairfield County, Connecticut”, on 5 sheets dated 10/12/2025.

Based on the information you have provided, we verify that the activity is authorized under General Permit *2, Repair or Maintenance of Existing Currently Serviceable, Authorized or Grandfathered Structures & Fill, and Removal of Structures,* of the December 15, 2021, federal permit known as the Connecticut General Permits (GPs). If the extent of the project area and/or nature of the authorized impacts to waters are modified, a revised application must be submitted to this office for written approval before work is initiated. You can find a copy of these permits at: https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/

Any deviation from the terms and conditions of the permit, or your submitted plans, may subject the permittee to the enforcement provisions of our regulations. Therefore, in the event changes to this project are contemplated, it is recommended you coordinate with this office prior to proceeding with the work. This office must approve any changes before you undertake them. You must perform this work in compliance with the terms and conditions of the GPs listed above, and also in compliance with the following special conditions:

Project Specific Special Conditions:

1. The permittee shall complete and return the enclosed Completion Certification Form to this office at least one month following the completion of the authorized work.

2. Appropriate soil erosion, sediment, and turbidity controls should be used and maintained in effective operating condition during construction to obtain dry work conditions, and all exposed soil and other fills, as well as any work below the high tide line, should be permanently stabilized at the earliest practicable date and before controls are removed.

This verification is valid until December 15, 2026. You must commence or be under contract to commence the work authorized herein by December 15, 2026 and complete the work by December 15, 2027. If not, you must contact this office to determine the need for further authorization before beginning or continuing the activity. It is recommended that you contact this office before this authorization expires to discuss if permit reissuance is a possibility.

This GP verification and any associated authorizations does not preclude the necessity to obtain any other federal, state, or local permits, licenses, and/or certifications, which may be required.

If you have any questions related to this verification or have issues accessing documents referenced in this letter, please contact Andrea Williams, Project Manager at (978) 318-8494, or by email at andrea.n.williams@usace.army.mil. This agency continually strives to improve our customer service. To better serve you, please complete the Customer Service Survey located at: https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,



Andrew Shuckhart
CT/RI Section Chief
Regulatory Division

Enclosures

Cc (w/enclosures):
John Hilts (via mrhilts@erols.com)

U.S. Army Corps of Engineers (USACE)

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.

Form Approved - OMB No. 0710-0003 Expires 2027-10-31

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PURPOSE: This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.

Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, New England District, Regulatory Office.

The certification can be submitted by email at cenae-r-ct @usace.army.mil or by mail at the below address:

U.S. Army Corps of Engineers
New England District Office
Street Address: 696 Virginia Road
City: Concord State: MA Zip Code: 01742-2718

COMPLETED BY THE CORPS

Corps Action Number: NAE-2025-02330

Permit Type: General Permit

General Permit Number and Name (*if applicable*): 2, Repair or Maintenance of Existing Currently Serviceable, Authorized or Grandfathered Structures & Fill, and Removal of Structures

Name of Permittee: David Slapin

Project Name: Commerce Street Associates LLC

Project Location (*physical address*): 25 Commerce Street
Norwalk, Connecticut

PERMITTEE'S CERTIFICATION

Date Work Started: _____

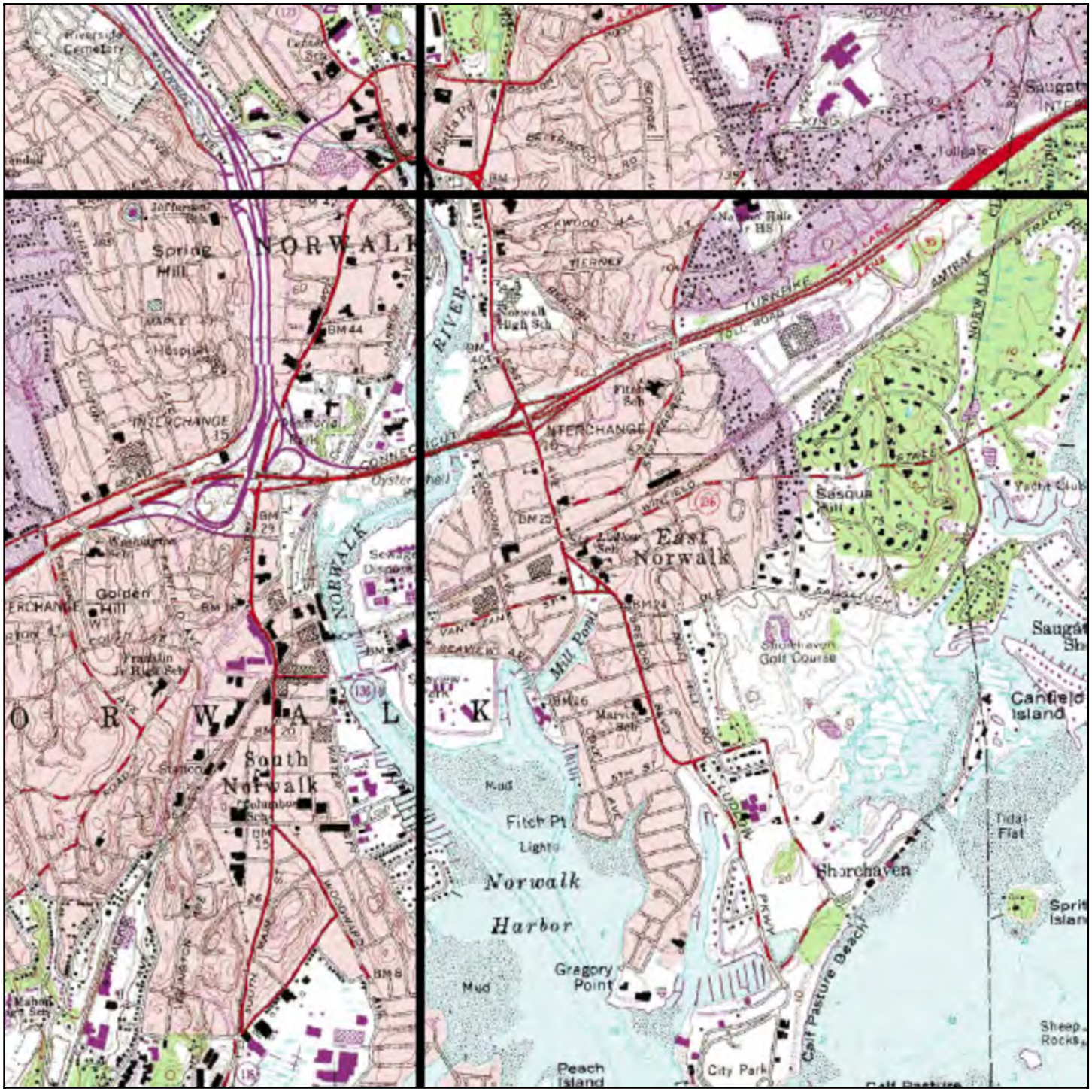
Date Work Completed: _____

Enclose photographs showing the completed project (*if available*).

I _____ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.

Name	Date	Signature

ENG FORM 6285, DEC 2024 PREVIOUS EDITIONS ARE OBSOLETE.



VICINITY MAP

FROM U.S.G.S. NORWALK SOUTH QUADRANGLE MAP SCALE: 1:24000

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT*
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988	*APPLICATION BY: COMMERCE STREET ASSOCIATES LLC*
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC	*DATE: 10/12/25 SHEET 1 OF 5 REVISION NUMBER: DATE:*
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	

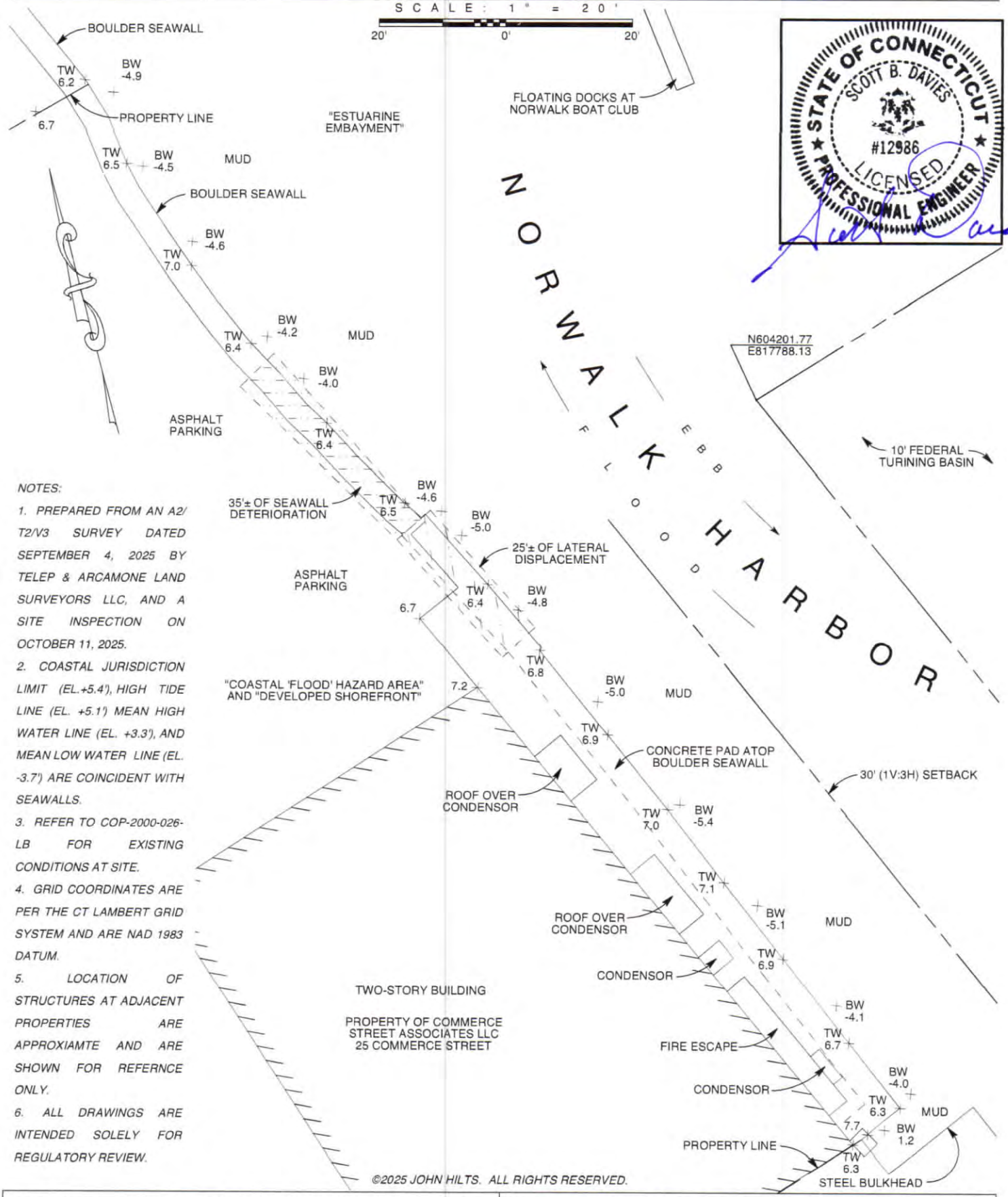


A S S E S S O R ' S M A P

FROM NORWALK G.I.S. SITE: ASSESSOR'S MAP 14NE BLOCK 22 PARCEL 6

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE *DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988* *ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC* *APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853*	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT* *APPLICATION BY: COMMERCE STREET ASSOCIATES LLC* *DATE: 10/12/25 SHEET 2 OF 5 REVISION NUMBER: DATE:*

EXISTING SITE PLAN VIEW



NOTES:

1. PREPARED FROM AN A2/ T2/V3 SURVEY DATED SEPTEMBER 4, 2025 BY TELEP & ARCAMONE LAND SURVEYORS LLC, AND A SITE INSPECTION ON OCTOBER 11, 2025.

2. COASTAL JURISDICTION LIMIT (EL.+5.4'), HIGH TIDE LINE (EL. +5.1') MEAN HIGH WATER LINE (EL. +3.3'), AND MEAN LOW WATER LINE (EL. -3.7') ARE COINCIDENT WITH SEAWALLS.

3. REFER TO COP-2000-026-LB FOR EXISTING CONDITIONS AT SITE.

4. GRID COORDINATES ARE PER THE CT LAMBERT GRID SYSTEM AND ARE NAD 1983 DATUM.

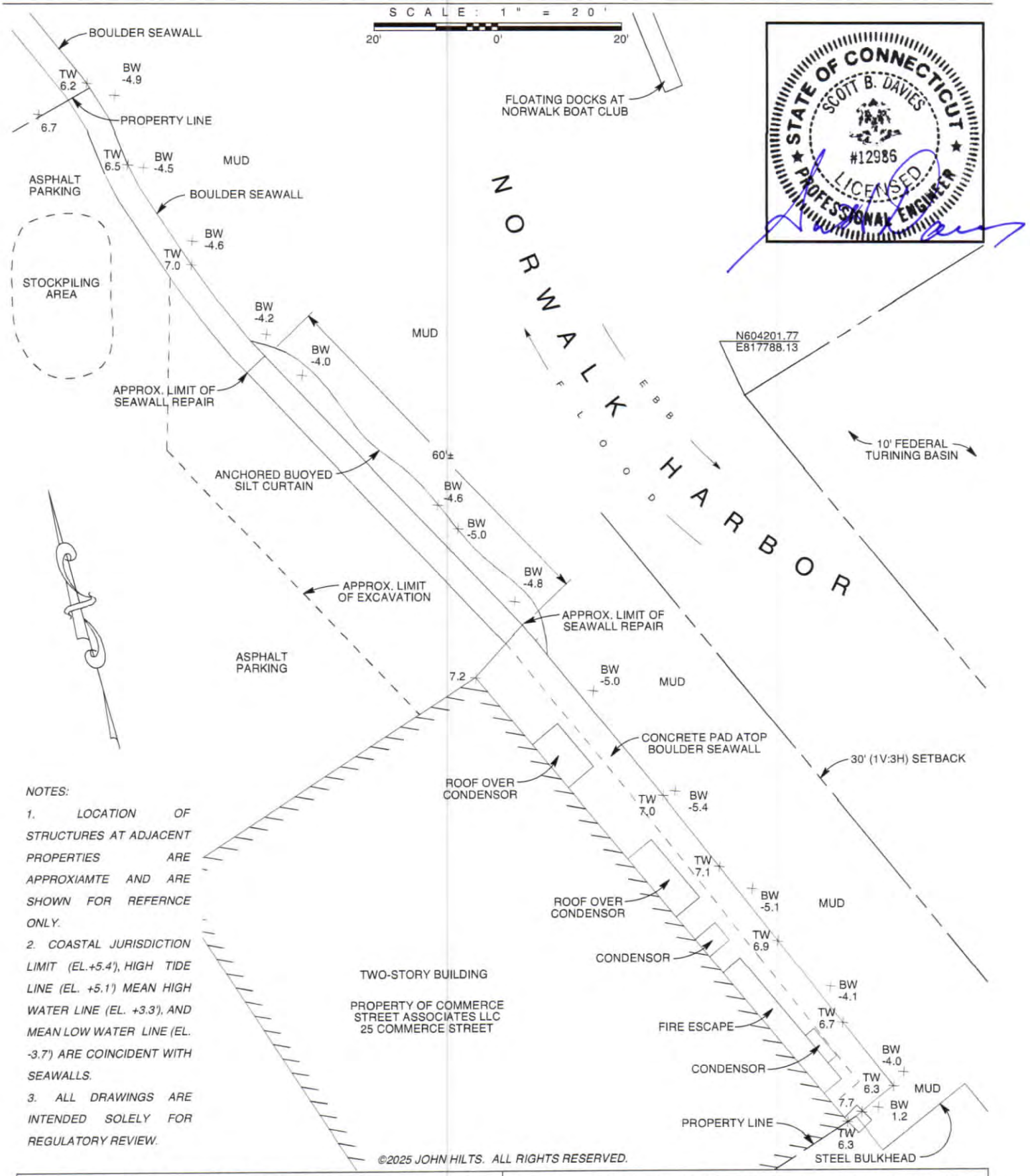
5. LOCATION OF STRUCTURES AT ADJACENT PROPERTIES ARE APPROXIAMTE AND ARE SHOWN FOR REFERNCE ONLY.

6. ALL DRAWINGS ARE INTENDED SOLELY FOR REGULATORY REVIEW.

©2025 JOHN HILTS. ALL RIGHTS RESERVED.

PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	*PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT*
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988	*APPLICATION BY: COMMERCE STREET ASSOCIATES LLC*
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC	*DATE: 10/12/25 SHEET 3 OF 5 REVISION NUMBER: DATE:*
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	

PROPOSED SITE PLAN VIEW



NOTES:

1. LOCATION OF STRUCTURES AT ADJACENT PROPERTIES ARE APPROXIAMTE AND ARE SHOWN FOR REFERNCE ONLY.

2. COASTAL JURISDICTION LIMIT (EL.+5.4'), HIGH TIDE LINE (EL. +5.1') MEAN HIGH WATER LINE (EL. +3.3'), AND MEAN LOW WATER LINE (EL. -3.7') ARE COINCIDENT WITH SEAWALLS.

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©2025 JOHN HILTS. ALL RIGHTS RESERVED.

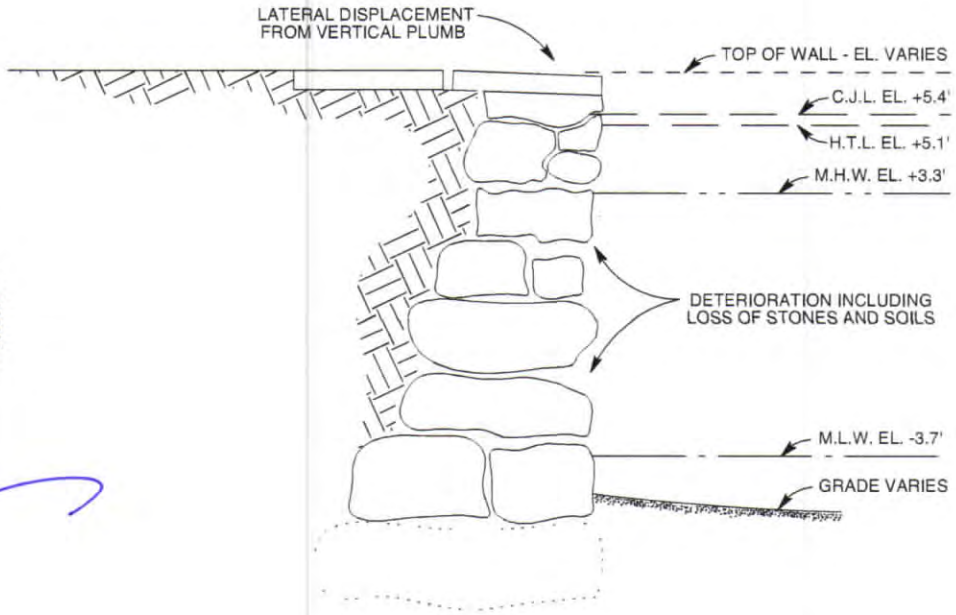
PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853

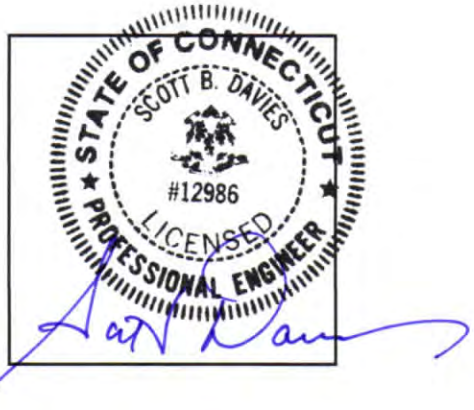
PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT
APPLICATION BY: COMMERCE STREET ASSOCIATES LLC
DATE: 10/12/25 SHEET 4 OF 5 REVISION NUMBER: DATE:

EXISTING SEAWALL SECTION

SCALE: 1" = 5'

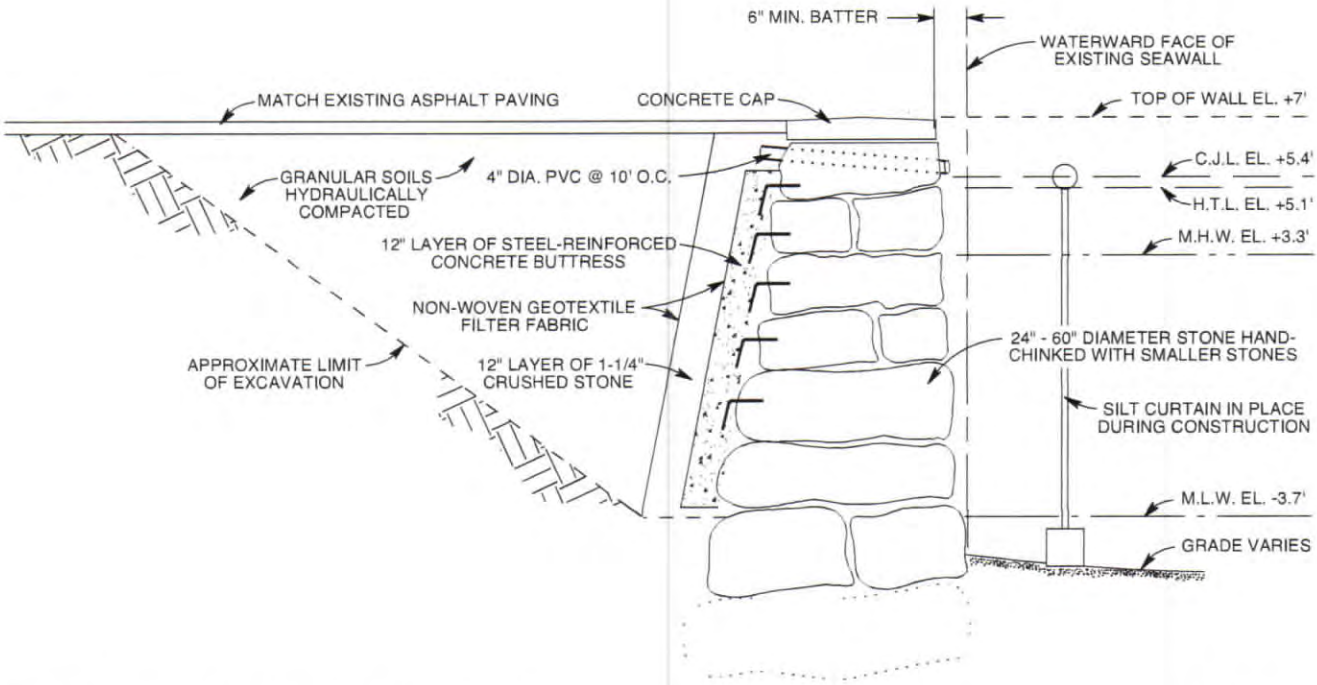
5' 0' 5'





PROPOSED SEAWALL SECTION

SCALE: 1" = 5'



NOTE: ALL DRAWINGS ARE INTENDED FOR REGULATORY REVIEW ONLY.

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PURPOSE: MAINTAIN EROSION CONTROL STRUCTURE	PROPOSED REPAIRS TO BOULDER SEAWALL IN NORWALK HARBOR AT 25 COMMERCE STREET, NORWALK, FAIRFIELD COUNTY, CONNECTICUT
DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988	APPLICATION BY: COMMERCE STREET ASSOCIATES LLC
ADJACENT OWNERS: DEVINE BROTHERS, INC., 13 COMMERCE STREET, LLC	DATE: 10/12/25 SHEET 5 OF 5 REVISION NUMBER: DATE:
APPLICATION PREPARED BY: JOHN HILTS P.O. BOX 47, ROWAYTON, CT 06853	

DATA ACCUMULATION PLAN

OF PROPERTY PREPARED FOR

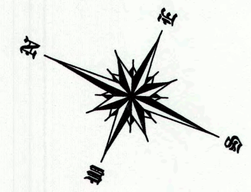
COMMERCE STREET ASSOCIATES, LLC

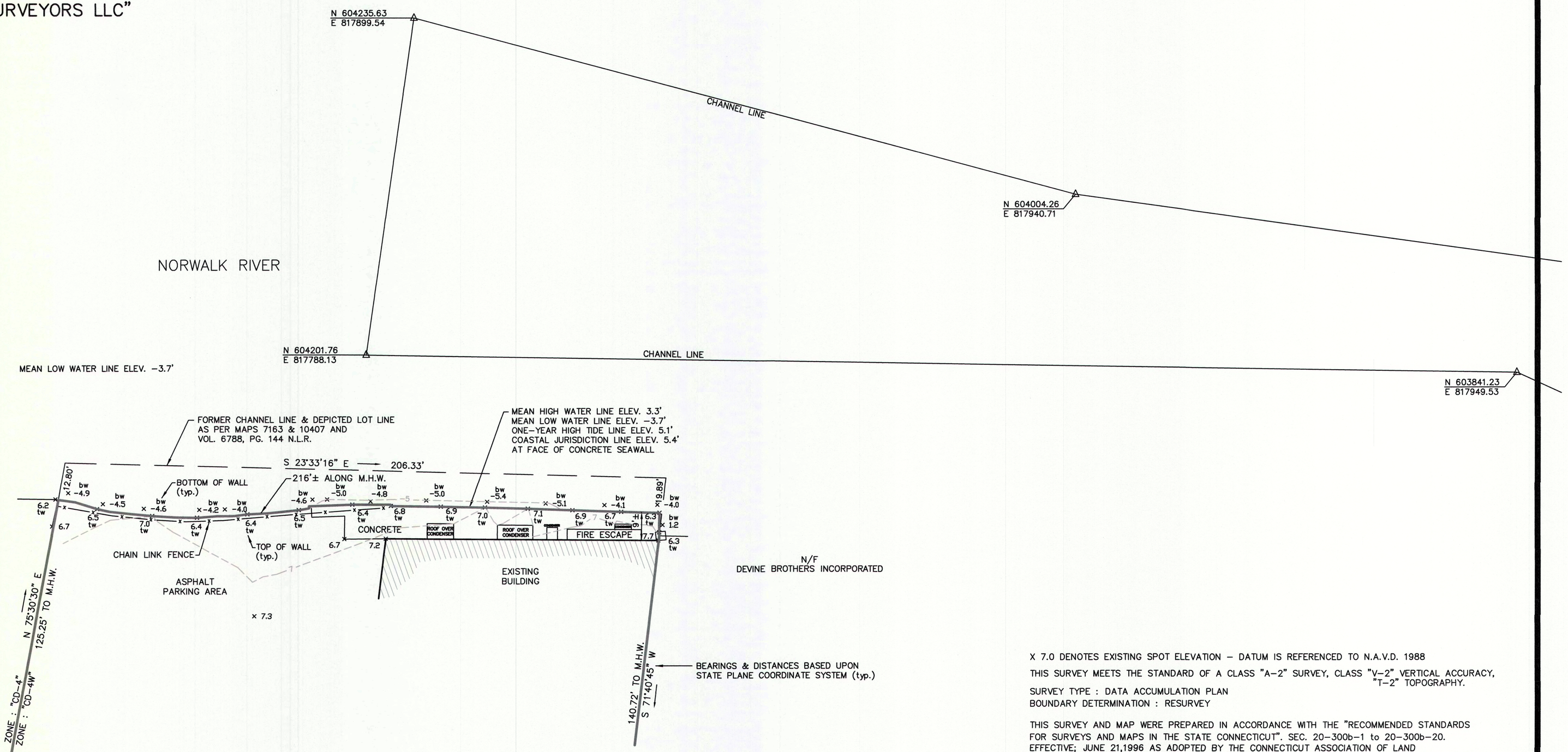
#25 COMMERCE STREET, NORWALK, CONNECTICUT

SCALE: 1" = 20' DATE: SEPT. 4, 2025

BY "TELEP & ARCAMONE LAND SURVEYORS LLC"

4 TAFT STREET, UNIT A-2B
S. NORWALK, CT. 06854
PHONE : 203-866-2058
www.ArcamoneSurveyors.com





X 7.0 DENOTES EXISTING SPOT ELEVATION – DATUM IS REFERENCED TO N.A.V.D. 1988

THIS SURVEY MEETS THE STANDARD OF A CLASS "A-2" SURVEY, CLASS "V-2" VERTICAL ACCURACY, "T-2" TOPOGRAPHY.

SURVEY TYPE : DATA ACCUMULATION PLAN
BOUNDARY DETERMINATION : RESURVEY

THIS SURVEY AND MAP WERE PREPARED IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR SURVEYS AND MAPS IN THE STATE CONNECTICUT". SEC. 20-300b-1 to 20-300b-20. EFFECTIVE; JUNE 21,1996 AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC., SEPTEMBER 26, 1996. REVISED OCTOBER 26, 2018 & ADOPTED AUGUST 29, 2019.

THE CERTIFICATION SHOWN ABOVE RUNS TO THE PERSON(S) FOR WHOM THE SURVEY WAS PREPARED AND ANY GOVERNMENTAL AGENCY, TITLE INSURANCE CO., OR LENDING INSTITUTION WHOSE NAME APPEARS ABOVE. CERTIFICATION IS NOT TRANSFERABLE & ANY UNAUTHORIZED USE IN WHOLE OR IN PART IS STRICTLY PROHIBITED.

UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS IF ANY, ARE NOT DEPICTED

WETLAND OR WETLAND SOIL TYPES IF ANY, ARE NOT DEPICTED

THIS MAP IS INVALID WITHOUT A LIVE SIGNATURE AND EMBOSSED SEAL.

REFERENCES TO THE ABOVE PROPERTY ARE MADE TO MAPS No. 7163 & 10407 N.L.R.

TAX MAP 14NE DISTRICT 1 BLOCK 22 TAX LOT 6

PROPERTY IS LOCATED IN ZONE : "CD-4W" URBAN CENTER-WATER COMMUNITY DISTRICT

F.I.R.M. ZONES: "X" & "AE" (el. 10') PANEL 531 of 626 MAP NO. 09001C0531G DATE 7/8/13

DISTANCES SHOWN +/- FROM BUILDINGS TO PROPERTY LINES ARE NOT TO BE USED TO ESTABLISH BOUNDARIES.

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

JACOB P. TELEP, LAND SURVEYOR CONNECTICUT REG # 70571

NO USE, REPRODUCTION OR DISSEMINATION MAY BE MADE OF THIS DRAWING WITHOUT THE PRIOR WRITTEN CONSENT OF ARCAMONE LAND SURVEYORS, LLC

CITY OF NORWALK
Planning & Zoning Commission
Norwalk City Hall, Room 129
125 East Avenue,
Norwalk, CT 06856-5125

MEMORANDUM March 9th, 2026

TO: Planning and Zoning Commission – Chapin Bryce, Chair

FROM: Amelia Williams, Land Use Planner

SUBJECT: #2026-12 CSPR – John Hilts – 25 Commerce Street – Repair an existing Shoreline Flood and Erosion Control Structure (SFECS).

District: 1 **Block:** 22 **Lot:** 6 **Zone:** CD-4W **Flood Zone:** AE-10

ZONING HISTORY:
This .6 acre property contains two commercial buildings associated with an ice-making business and an associated parking lot. There are existing seawalls on the property, and any activities involving SFECS are not exempt from Coastal Site Plan Review and require approval from the P&Z Commission with a referral to DEEP.

PROPOSED STRUCTURE:
The applicant proposes to repair +/- 60 linear feet of seawall. There will be approximately 133 cubic yards of stone boulders excavated and reused, and 30 cubic yards of landward fill for structural reinforcement. There will be no change in impervious surface coverage or use. Staff does not anticipate the project to have adverse impacts on coastal resources if the proposed sedimentation and erosion controls are implemented. The application appears consistent with Connecticut Coastal Management Act (CCMA) goals and policies.

SIGN-OFFS:
The Harbor Management Commission found the proposal consistent with the Harbor Management Plan and DEEP had no issues with the proposal.

VIOLATIONS:
There are no zoning violations currently on the property.

The following resolutions are offered:

DRAFT RESOLUTION TO APPROVE

BE IT RESOLVED that application #2026-12 CSPR – John Hilts – 25 Commerce Street – Repair an existing Shoreline Flood and Erosion Control Structure (SFECS) be **APPROVED** subject to the following conditions:

1. That the building and site will be occupied in accordance with the following plans:

a. Per plan set dated 10/12/2025 prepared by John Hilts, Norwalk, CT; and

2. That any modifications to the approved plan be reviewed and approved by City Staff prior to implementing; and

3. That all required soil sedimentation and erosion controls (such as turbidity curtains) are in place prior to the start of any construction; and

4. That any additional needed soil sedimentation and erosion controls be installed at the direction of the Staff; and

5. Nothing in this permit shall obviate the requirements for the applicant to obtain any other assents, permits or licenses required by law or regulation by the City of Norwalk, State of Connecticut, or the Government of the United States, including any approval required by the Connecticut Department of Environmental Protection and U.S. Army Corps of Engineers- obtaining such assents, permits or licenses is the sole responsibility of the applicant; and

BE IT FURTHER RESOLVED that this proposal complies with all applicable sections of the Zoning Regulations for the City of Norwalk; and

BE IT FURTHER RESOLVED that these preceding conditions and modifications of this application are integral to the Commission's approval because, if not for those conditions and modifications, the Commission would have denied this application.

BE IT FURTHER RESOLVED that the effective date of this approval shall be March 27th, 2026.

You must obtain a zoning approval prior to any work on the site.

Planning & Zoning Commission

APPLICATION FOR COASTAL SITE PLAN REVIEW

Application must be accompanied by two (2) printed and one (1) digital set of all documents, and appropriate filing fee. Filing Fee: $310.00 for single or two family use; $810.00 for all other uses.

Date Stamp

Application Completion Date: Official Receipt Date: Fee Paid:

1. Property Address: 5 Shorehaven Road **2.** D/B/L/U: 3/78/38/0

3. Proposed Work: Construction of a residential building addition **4.** Zone: CD-1L

5. Applicant Identification:

Applicant Name: Jim Kousidis - Kousidis Engineering, LLC

Address: 1525 Black Rock Turnpike, Fairfield, CT 06825

Phone Number: (203) 557-8943 Email: jim@kousidisengineering.com

Interest in Property: ☐ fee simple ☐ option ☐ lessee ☐ easement ☑ other (specify): Engineer

List primary contact for correspondence *if other than applicant* (Agent or Attorney):

Name: _____

Address: _____

Business Phone: _____ Email: _____

6. Property Owner, if different than applicant:

Owner Name: Hal & Betsy Kravitz

Address: 5 Shorehaven Road, Norwalk, CT 06855

Phone Number: (404) 580-2664 Email: halkrav@gmail.com

7. Project Information:

Please check the appropriate box to identify the plan or application that has resulted in this Coastal Site Plan Review:

- ☒ Coastal Site Plan for Zoning Compliance/Zoning Permit
- ☐ Subdivision or Resubdivision Application
- ☐ Special Permit or Special Exception Application
- ☐ Site Plan Review Application
- ☐ Variance Application
- ☐ Municipal Project (CGS Section 8-24)

6. Project Site Plans:

Please provide project site plans that clearly and accurately depict the following information, and check the appropriate boxes to indicate that the plans are included in this application:

- ☑ Project location
- ☑ Existing and proposed conditions, including buildings and topography
- ☑ **All** coastal resources on and contiguous to the site
- ☐ High tide line [as defined in CGS Section 22a-359(c)] and mean high water mark elevation contours (for parcels abutting coastal waters and/or tidal wetlands only)
- ☑ Soil erosion and sediment controls
- ☑ Storm water management & treatment practices
- ☑ Ownership and type of use on adjacent properties
- ☑ Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)
- ☑ Landscaping and planting plan (existing & proposed)
- ☑ Utility Plan (existing & proposed: water, drainage, sanitary sewers, electric & gas lines)
- ☑ Easements (utility, sight preservation, conservation, pedestrian)

7. Site Information:

a) Street Address or Geographical Description:
5 Shorehaven Road, Norwalk, CT

b) Is project or activity proposed at a waterfront site (includes tidal wetlands frontage)? ◉YES ○NO

c) Name of on-site, adjacent, or downstream coastal, tidal, or navigable waters, if applicable:
Long Island Sound

d) Identify and describe the existing land use in and adjacent to the site. Include description of any existing structures and significant features on the project site:
The subject property currently consists of a single-family residential building with an attached deck and pool. The property directly abuts the tidal wetlands of Long Island Sound on the North and East sides of the property. A stormwater easement and pipe exist on the southeastern portion of the property, discharging to and existing tail wall in the tidal wetlands. The entire property lies within the AE-12.0' FEMA Flood Zone.

e) Indicate the area of the project site: 1.1369 acres **or** 49,522 square feet

f) Check the appropriate box below to indicate total land area of disturbance of the project or activity (please also see Question #9 regarding proposed stormwater best management practices):

- ○ Project or activity will disturb five (5) or more total acres of land area on the site. *Registration for CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities required.*
- ⊗ Project or activity will disturb land, but less than five (5) total acres of land area would be disturbed. *A soil erosion and sedimentation control plan must be submitted.*
- ○ Project or activity will not disturb any land area.

g) Does the project include a shoreline flood and erosion control structure as defined in CGS section 22a-109(d)? ○Yes ⊗No

8. Description of Proposed Project or Activity:

Describe the proposed project or activity including its purpose and related activities such as site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover over existing conditions resulting from the project; phasing, timing and method of proposed construction; and new uses and changes from existing uses (*attach additional pages if necessary*):

The owner is proposing to construct residential additions on the northwest and southeast portions of the existing residence with reconfiguration of the driveway parking area. The existing stormwater pipe and easement will be relocated to accommodate the additional on the southeast side of the residence. No significant grading activity is proposed; no additional fill will need to be imported. All activity will take place within the AE-12 FEMA Flood Zone and will have no impact to down gradient properties, or any coastal resources, should the sediment and erosion controls be implemented and maintained through the duration of the project. The lower level of the proposed additions will be flood vented to comply with FEMA regulations and will contain no living space.

9. Description of Proposed Stormwater Best Management Practices:

Describe the stormwater best management practices that will be utilized to ensure that the volume of runoff generated by the first inch of rainfall is retained on-site, especially if the site or stormwater discharge is adjacent to tidal wetlands. If runoff cannot be retained on-site, describe the site limitations that prevent such retention and identify how stormwater will be treated before it is discharged from the site. Also demonstrate that the loadings of total suspended solids from the site will be reduced by 80 percent on an average annual basis, and that post-development stormwater runoff rates and volumes will not exceed pre-development runoff rates and volumes (*attach additional pages if necessary*):

A stormwater detention system has been proposed which have been designed to meet the City's requirement of water quality volume for the increase in impervious surface area as well as provide groundwater recharge. The roof leaders must be directed to the stormwater detention system, as depicted on the "Site Development Plan" provided by Kousidis Engineering, LLC, dated January 13, 2026.

10. Identification of Applicable Coastal Resources and Coastal Resource Policies:

Identify the coastal resources and associated policies that apply to the project by placing a check mark in the appropriate box(es) in the following table.

Coastal Resources	On-site	Adjacent	Off-site but within the influence of project	Not Applicable
General Coastal Resources* - Definition: CGS Section 22a-93(7); Policy: CGS Section 22a-92(a)(2)	☑	☐	☐	☐
Beaches & Dunes - Definition: CGS Section 22a-93(7)(C); Policies: CGS Sections 22a-92-(b)(2)(C) and 22a-92(c)(1)(K)	☐	☐	☑	☐
Bluffs & Escarpments - Definition: CGS Section 22a-93(7)(A); Policy: CGS Section 22a-92(b)(2)(A)	☐	☐	☐	☑
Coastal Hazard Area - Definition: CGS Section 22a-93(7)(H); Policies: CGS Sections 22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), and 22a-92(c)(2)(B)	☑	☐	☐	☐
Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters - Definition: CGS Sections 22a-93(5), 22a-93(7)(G), and 22a-93(7)(K), and 22a-93(7)(L) respectively; Policies: CGS Sections 22a-92(a)(2) and 22a-92(c)(2)(A)	☑	☐	☐	☐
Developed Shorefront - Definition: CGS Section 22a-93(7)(I); Policy: 22a-92(b)(2)(G)	☐	☐	☑	☐
Freshwater Wetlands and Watercourses - Definition: CGS Section 22a-93(7)(F); Policy: CGS Section 22a-92(a)(2)	☐	☐	☐	☑
Intertidal Flats - Definition: CGS Section 22a-93(7)(D); Policies: 22a-92(b)(2)(D) and 22a-92(c)(1)(K)	☑	☐	☐	☐
Islands - Definition: CGS Section 22a-93(7)(J); Policy: CGS Section 22a-92(b)(2)(H)	☐	☐	☑	☐
Rocky Shorefront - Definition: CGS Section 22a-93(7)(B); Policy: CGS Section 22a-92(b)(2)(B)	☑	☐	☐	☐
Shellfish Concentration Areas - Definition: CGS Section 22a-93(7)(N); Policy: CGS Section 22a-92(c)(1)(I)	☐	☐	☐	☑
Shorelands - Definition: CGS Section 22a-93(7)(M); Policy: CGS Section 22a-92(b)(2)(I)	☐	☐	☐	☑
Tidal Wetlands - Definition: CGS Section 22a-93(7)(E); Policies: CGS Sections 22a-92(a)(2), 22a-92(b)(2)(E), and 22a-92(c)(1)(B)	☑	☐	☐	☐

* General Coastal Resource policy is applicable to all proposed activities

11. Consistency with Applicable Coastal Resource Policies and Standards:

Describe the location and condition of the coastal resources identified in Question #10 and explain how the proposed project or activity is consistent with all of the applicable coastal resource policies and standards; also see adverse impacts assessment in Question #14 below (*attach additional pages if necessary*):

Coastal Hazard Area: The entire property is located within the Coastal Hazard Area 100-year flood plain AE-12.0' of Long Island Sound, as defined by the Federal Emergency Management Agency (FEMA).

Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters: The tidal waters of Long Island Sound are located to the north and east of the subject property.

Intertidal Flats: Intertidal flats associated with Long Island Sound are located to the north and east of the subject property.

Rocky Shorefront: Rocky shorefront lies along the tidal areas to the north and east of the subject property.

Tidal Wetlands: Tidal wetlands lie to the north and east of the subject property.

No activity is proposed withing any portion of the tidal wetlands area. Sediment and erosion control measures including a silt fence, protected stockpile areas and mud-tracking apron are proposed to mitigate impacts due to sedimentation.

12. Identification of Applicable Coastal Use and Activity Policies and Standards:

Identify all coastal policies and standards in or referenced by CGS Section 22a-92 applicable to the proposed project or activity:

- [x] General Development* - CGS Sections 22a-92(a)(1), 22a-92(a)(2), and 22a-92(a)(9)
- [ ] Water-Dependent Uses** - CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A); Definition CGS Section 22a-93(16)
- [ ] Ports and Harbors - CGS Section 22a-92(b)(1)(C)
- [ ] Coastal Structures and Filling - CGS Section 22a-92(b)(1)(D)
- [ ] Dredging and Navigation - CGS Sections 22a-92(c)(1)(C) and 22a-92(c)(1)(D)
- [ ] Boating - CGS Section 22a-92(b)(1)(G)
- [ ] Fisheries - CGS Section 22a-92(c)(1)(I)
- [ ] Coastal Recreation and Access - CGS Sections 22a-92(a)(6), 22a-92(C)(1)(j) and 22a-92(c)(1)(K)
- [ ] Sewer and Water Lines - CGS Section 22a-92(b)(1)(B)
- [ ] Fuel, Chemicals and Hazardous Materials - CGS Sections 22a-92(b)(1)(C), 22a-92(b)(1)(E) and 22a-92(c)(1)(A)
- [ ] Transportation - CGS Sections 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and 22a-92(c)(1)(H)
- [ ] Solid Waste - CGS Section 22a-92(a)(2)
- [ ] Dams, Dikes and Reservoirs - CGS Section 22a-92(a)(2)
- [ ] Cultural Resources - CGS Section 22a-92(b)(1)(J)
- [ ] Open Space and Agricultural Lands - CGS Section 22a-92(a)(2)

* General Development policies are applicable to all proposed activities

** Water-dependent Use policies are applicable to all activities proposed at waterfront sites, including those with tidal wetlands frontage.

13. Consistency With Applicable Coastal Use Policies and Standards:

Explain how the proposed activity or use is consistent with all of the applicable coastal use and activity policies and standards identified in Question #12. **For projects proposed at waterfront sites (including those with tidal wetlands frontage)**, particular emphasis should be placed on the evaluation of the project's consistency with the water-dependent use policies and standards contained in CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A) -- also see adverse impacts assessment in Question #15 below (attach additional pages if necessary):

In accordance with this policy and standard, the project is proposed in a manner that is consistent with the capability of the land and water resources to support development, preservation, and use without significantly disrupting the natural environment or sound economic growth.

14. Identification of Potential Adverse Impacts on Coastal Resources: (*Must be completed for ALL projects.*)

Identify the adverse impact categories below that apply to the proposed project or activity.

The **'applicable'** column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(15). If an adverse impact **may result** from the proposed project or activity, please use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Coastal Resources	Applicable	Not Applicable
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)	☐	☑
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	☑
Degrading existing circulation patterns of coastal water through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours - CGS Section 22a-93(15)(B)	☐	☑
Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff - CGS Section 22a-93(15)(D)	☐	☑
Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction - CGS Section 22a-93(15)(C)	☐	☑
Degrading visual quality through significant alteration of the natural features of vistas and view points - CGS Section 22a-93(15)(F)	☐	☑
Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity - CGS Section 22a-93(15)(A)	☐	☑
Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat - CGS Section 22a-93(15)(G)	☐	☑
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)	☐	☑
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	☑

15. Identification of Potential Adverse Impacts on Water-dependent Uses: ***(Complete only if the project/activity is proposed at a waterfront site.)***

a) Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(17). If an adverse impact **may result** from the proposed project or activity, use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Future Water-dependent Development Opportunities and Activities	Applicable	Not Applicable
Locating a non-water-dependent use at a site physically suited for or planned for location of a water-dependent use - CGS Section 22a-93(17)	☐	☑
Replacing an existing water-dependent use with a non-water-dependent use - CGS Section 22a-93(17)	☐	☑
Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters - CGS Section 22a-93(17)	☐	☑

b) Identification of existing and/or proposed Water-dependent Uses:

Describe the features or characteristics of the proposed activity or project that qualify as water-dependent uses as defined in CGS Section 22a-93(16). If general public access to coastal waters is provided, please identify the legal mechanisms used to ensure public access in perpetuity, and describe any provisions for parking or other access to the site and proposed amenities associated with the access (e.g., boardwalk, benches, trash receptacles, interpretative signage, etc.) *:

The proposed activity will have no impact on water-dependent uses of the subject property or to adjacent properties. No activity is proposed within or adjacent to the tidal waters of Long Island Sound or it's coastal resources. All activity is proposed within the established lawn areas surrounding the existing residence.

*If there are no water-dependent use components, describe how the project site is not appropriate for the development of a water-dependent use.

16. Mitigation of Potential Adverse Impacts:

Explain how all potential adverse impacts on coastal resources and/or future water-dependent development opportunities and activities identified in Questions #14 & #15 have been avoided, eliminated, or minimized (*attach additional pages if necessary*):

No adverse impacts to the coastal resources are anticipated within the scope of the proposed development. Temporary sediment and erosion control measures are proposed which include a silt fence along all down-gradient portions of the proposed activity to minimize sedimentation impacts to the coastal resources adjacent to the subject property. In addition, a stormwater detention system has been proposed to provide water quality volume for the increase in impervious area and provide groundwater recharge capacity. In addition, the lower level of the proposed additions will be flood vented to comply with FEMA regulations and will contain no living space.

17. Remaining Adverse Impacts:

Explain why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated and why the project as proposed is consistent with the Connecticut Coastal Management Act (*attach additional pages if necessary*):

The proposed residential additions will be constructed to meet all applicable FEMA standards. The first floor of the existing structure is elevation 13.42'+/- which is above the base flood elevation AE-12.0', with the additional proposed to match the existing floor elevations. The lower level of the proposed additions will be flood vented to comply with FEMA regulations and will contain no living space. The proposed stormwater pipe relocation and drainage system will not alter the existing grades on the property after completion of the activity.

By signing this application, the applicant or his/her agent certifies that they are familiar with the information provided in this application and are aware of the penalties for obtaining a permit through deception or by submission of inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspection of the subject property by the Commissioners and designated staff of the Commission or consultants to the Commission, at reasonable times, during the pendency of the application.

Applicant's Signature: _____ **DATE:** 01/21/2026

Agent's Signature: _____ **DATE:** 01/21/2026



30 0 15 30 60

1 inch = 30 feet

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

THIS MAP IS NOT VALID UNLESS IT BEARS THE LIVE SIGNATURE AND SEAL OF THE UNDERSIGNED LAND SURVEYOR.

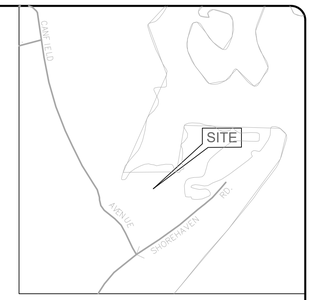
DANIEL C. LAFERRIERE
LICENSED LAND SURVEYOR, REG# 70492

NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20, AS REVISED.
2. THE TYPE OF SURVEY PERFORMED IS A LIMITED PROPERTY/BOUNDARY ZONING LOCATION SURVEY.
3. THE BOUNDARY DETERMINATION CATEGORY IS RESURVEY.
4. THIS MAP CONFORMS TO HORIZONTAL ACCURACY CLASS A-2.
5. THIS MAP CONFORMS TO VERTICAL ACCURACY CLASS V-2.
6. THIS MAP CONFORMS TO TOPOGRAPHIC ACCURACY CLASS T-2.
7. BEARINGS ON THIS MAP ARE BASED ON REF. MAP #1 BELOW.
8. ELEVATIONS ON THIS MAP ARE BASED ON NAVD 88 DATUM.
9. THE UNDERGROUND UTILITIES SHOWN ON THIS MAP HAVE BEEN LOCATED BOTH FROM FIELD SURVEY INFORMATION AND FROM EXISTING DRAWINGS NOTED HEREON. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES ON THIS MAP, EITHER CURRENT OR ABANDONED ALTHOUGH EVERY ATTEMPT WAS MADE TO ACCURATELY DEPICT ALL UNDERGROUND UTILITIES. THERE IS NO GUARANTEE TO THE EXACT LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS MAP..
10. THIS PARCEL IS KNOWN AS BLOCK 78 LOTS 38 & 40 ON ASSESSOR'S MAP 3.
11. TIDAL WETLANDS DEPICTED ON THIS PLAN IS TAKEN FROM REF. MAP #1.
12. THE PROPERTY IS IN A FLOOD ZONE "AE" WITH A BFE OF 12' AS PER FEMA FLOOD MAP 09001C0534G DATED 7/8/2013.

MAP REFERENCES:

1. "MAP OF LOTS #1, 2 AND OPEN SPACE PARCELS 1A & 2A PREPARED FOR CANFIELD DEVELOPMENT, LLC SHOREHAVEN ROAD NORWALK, CONNECTICUT" SCALE:1"=30' MAR. 8, 2000 N.L.R. #12011
2. "SUBDIVISION PLAN MAP OF RE-SUBDIVISION - LOTS 1-3 SHOREHAVEN ROAD & CANFIELD AVENUE AND SUBDIVISION OF LOT 2 SHOREHAVEN ROAD PREPARED FOR WILLIAM G. MAJOR NORWALK, CONNECTICUT" SCALE:1"=40' APR. 24, 1997 N.L.R. #11752
3. "MAP SHOWING A PROPOSED STORM DRAINAGE EASEMENT TO BE ACQUIRED BY THE CITY OF NORWALK FROM THE NORWALK JEWISH CENTER INC. AT CANFIELD AVENUE NORWALK, CONNECTICUT" SCALE:1"=40' SEPT. 13, 1979 N.L.R. #8707



LOCATION MAP
NTS

NORWALK ZONE TABLE
AAA DISTRICT

STANDARDS	REQUIRED	EXISTING
MINIMUM LOT SIZE	43,560 SF	49,522 SF
MIN. WIDTH	150'	76.88'
SETBACKS:		
FRONT YARD	40'	70.16'
SIDE YARD	15%/<30'	43.42'
AGG. SIDE	30%/<60'	N/A
REAR YARD	30%/<30'	43.80'
MAX BLDG. AREA	25%	12.5 %
DRIVE MIN. WDTH.	8'	> 8'
MAX. BLDG. HGT.	2 ½ STORIES	2 1/2 STORIES
" " " "	40' TO PEAK	40' ±

LEGEND

- PROPERTY LINE
- BUILDING SETBACK LINE
- 500 EXISTING CONTOUR
- WETLAND LINE
- EASEMENT LINE
- X X EXISTING FENCE
- IRON PIN

ZONING LOCATION SURVEY
POOL AS-BUILT
PREPARED FOR
HAL & ELIZABETH KRAVITZ
5 SHOREHAVEN ROAD
NORWALK, CONNECTICUT

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SCALE: 1" = 30' APRIL 7, 2025
PROJ. NO.: 0730

ALL SEASONS Land Surveying

LAND SURVEYING - LAND PLANNING
44 Fair Street
Wallingford, CT 06492
1 John Street
Millerton, NY 12546
Phone: (860) 274-5053
dan@allseasonslandsurveying.com
allseasonslandsurveying.com

DEEP TEST PIT LOG
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: OCTOBER 08, 2025

TEST PIT #1
00-40" TOPSOIL & MISCELLANEOUS FILL
40-48" ORIGINAL TOPSOIL
48-56" GRAY BROWN SATURATED COARSE SAND & STONE
*MOTTLES @ 48"
*GROUND WATER @ 48"
*NO LEDGE
*NO ROOTS

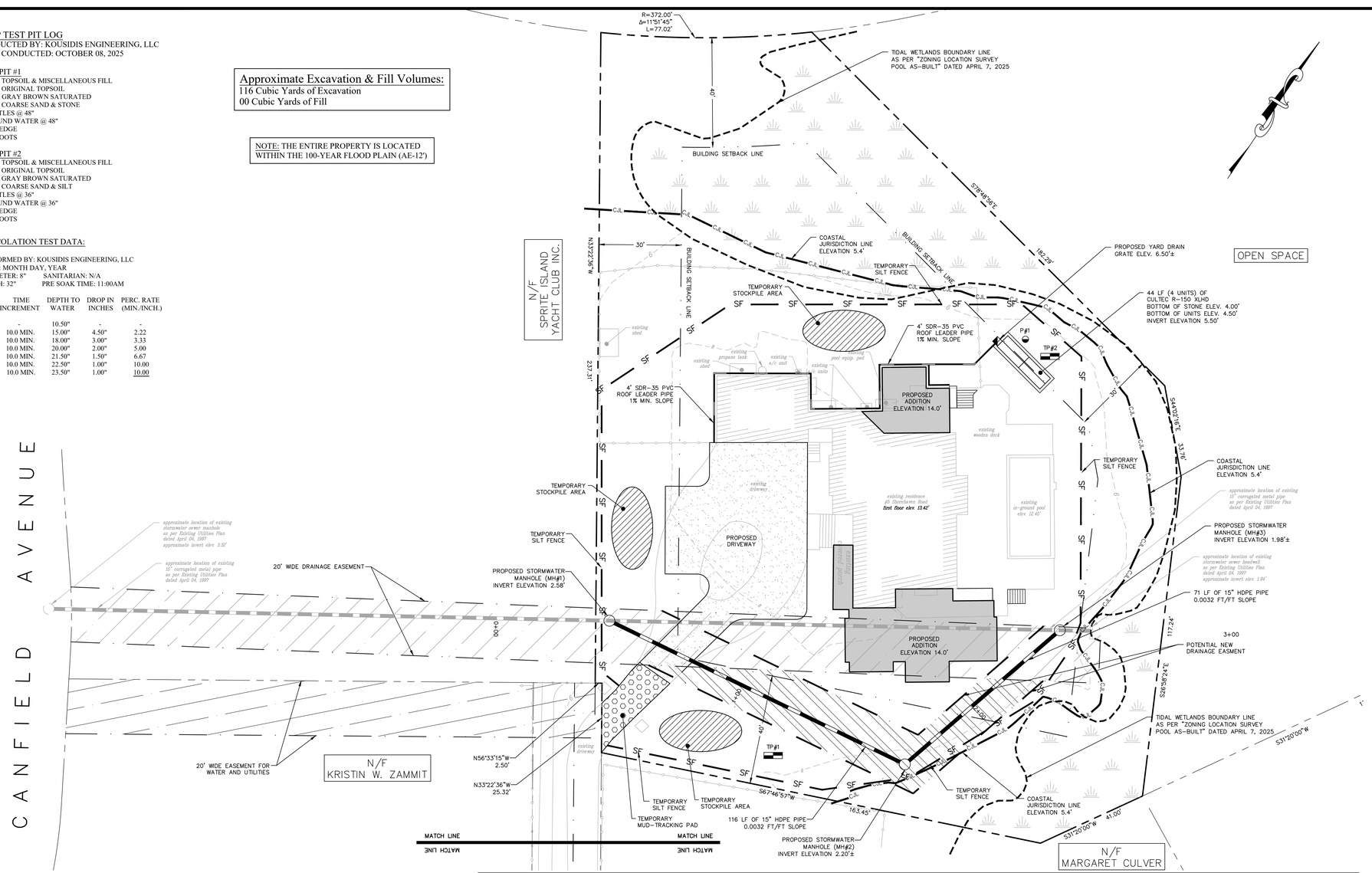
TEST PIT #2
00-20" TOPSOIL & MISCELLANEOUS FILL
20-30" ORIGINAL TOPSOIL
30-46" GRAY BROWN SATURATED COARSE SAND & SILT
*MOTTLES @ 36"
*GROUND WATER @ 36"
*NO LEDGE
*NO ROOTS

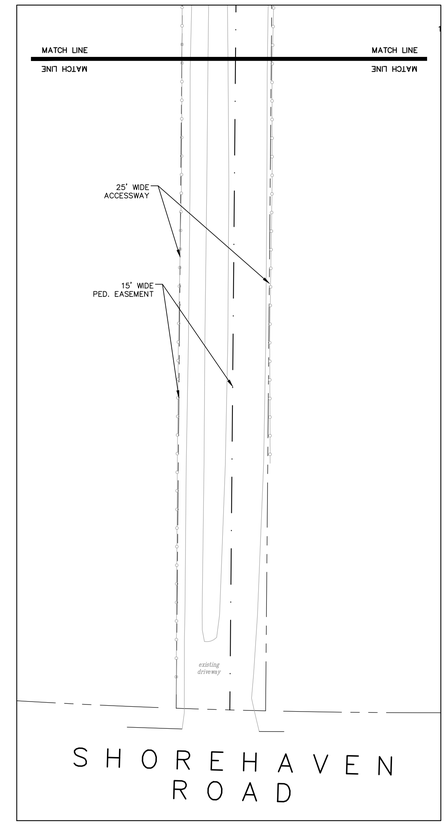
PERCOLATION TEST DATA:
P#1
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: MONTH DAY, YEAR
DIAMETER: 8" SANITARIAN: N/A
DEPTH: 32" PRE SOAK TIME: 11:00AM

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
12:00	-	10.50"	-	-
12:10	10.0 MIN.	15.00"	4.50"	2.22
12:20	10.0 MIN.	18.00"	3.00"	3.33
12:30	10.0 MIN.	20.00"	2.00"	5.00
12:40	10.0 MIN.	21.50"	1.50"	6.67
12:50	10.0 MIN.	22.50"	1.00"	10.00
01:00	10.0 MIN.	23.50"	1.00"	10.00

Approximate Excavation & Fill Volumes:
116 Cubic Yards of Excavation
00 Cubic Yards of Fill

NOTE: THE ENTIRE PROPERTY IS LOCATED WITHIN THE 100-YEAR FLOOD PLAIN (AE-12')





IMPERVIOUS SURFACES

ITEM	AREA	PERCENTAGE
BUILDING	6,175 SQ.FT.	12.5%
DRIVEWAY	3,750 SQ.FT.	7.6%
WALKWAYS	225 SQ.FT.	0.5%
DECK	2,150 SQ.FT.	4.3%
POOL	531 SQ.FT.	1.1%
TOTAL	12,831 SQ.FT.	25.9%

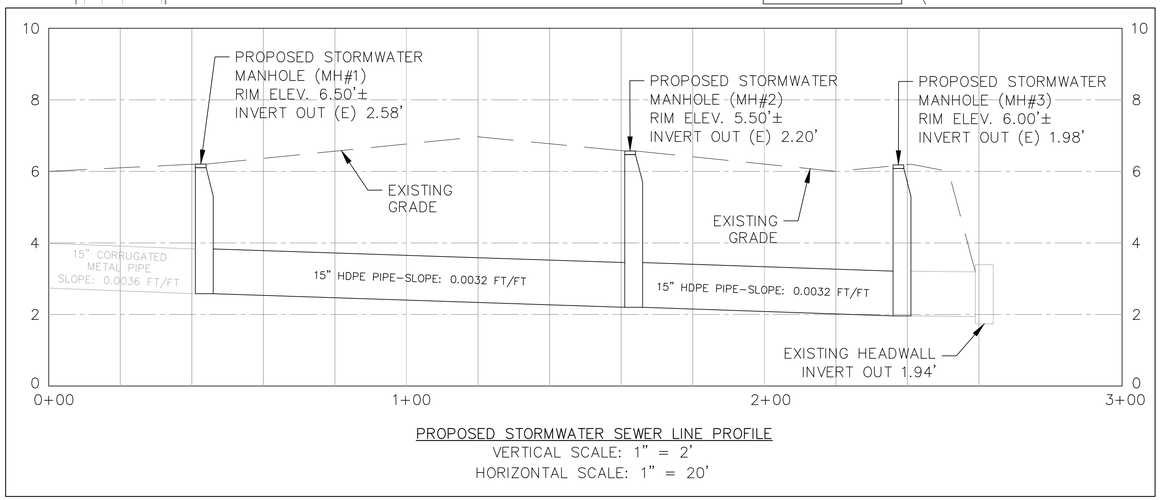
PIPE FLOW CALCULATIONS

Q=(0.463/n) (d^2.667) (S^0.5)

Corrugated Metal to High Density Polyethylene

Existing Conditions
n = 0.022
d = 0.62 ft
S = 0.0036 ft/ft
Qexist = (0.463/0.022)(0.62^2.667)(0.0036^0.5)
Qexist = 2.30 CFS

Proposed Conditions
n = 0.012
d = 0.62 ft
S = 0.0032 ft/ft
Qprop = (0.463/0.012)(0.60^2.667)(0.0032^0.5)
Qprop = 3.88 CFS



PROPOSED STORMWATER SEWER LINE PROFILE
VERTICAL SCALE: 1" = 2'
HORIZONTAL SCALE: 1" = 20'

ZONING DATA CHART
CD-1L ZONE

	REQUIRED/ALLOWED	EXISTING	PROPOSED
FRONT SETBACK	40' MIN.	70.2'±	47.1'±
REAR SETBACK	30' MIN.	43.8'±	43.8'±
SIDE SETBACK	30' MIN.	43.4'±	43.4'±
LOT WIDTH	150' MIN.	VARIES	VARIES
LOT AREA	43,560 SQ.FT. MIN.	49,522 SQ.FT.	49,522 SQ.FT.
IMPERVIOUS SURFACE COVERAGE	17,333 SQ.FT. (35%)	10,609 SQ.FT. (21%)	12,831 SQ.FT. (25.9%)
NUMBER OF STORIES	2.5 MAX.	2.5	2.5
BUILDING HEIGHT (PEAK)	40' MAX.	40'±	40'±

REVISED: 02/05/2026 - Per comments made by the City of Norwalk Planning & Zoning Department, dated February 02, 2026.
REVISED: 01/29/2026 - Added Coastal Jurisdiction Line and adjusted the proposed pipe relocation accordingly.

SITE DEVELOPMENT PLAN

5 SHOREHAVEN ROAD

NORWALK, CT

Prepared for

HAL & ELIZABETH KRAVITZ

STATE OF CONNECTICUT JIMMY KOUSIDIS LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 20' (0, 20, 40)

DATED: 01/21/2026
JOB NO: HE25-1
SHEET NO: 1 of 2

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
1525 Black Rock Turnpike, Fairfield, CT 06825 P: 203-557-8943
E: jim@kousidisengineering.com Web: www.kousidisengineering.com

DEEP TEST PIT LOG

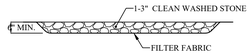
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: OCTOBER 08, 2025

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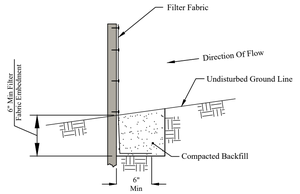
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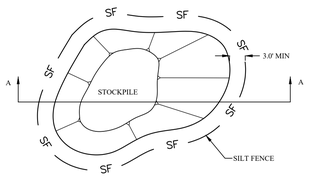
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-				
12:00	-	10.50"	-	-
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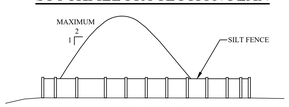
MUD-TRACKING PAD
N.T.S.



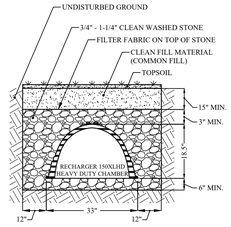
FILTER FABRIC FENCING
N.T.S.



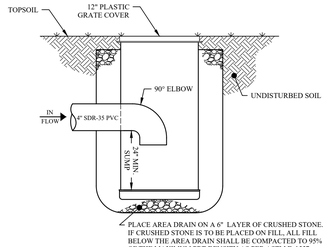
STOCKPILE PROTECTION PLAN



SECTION A
N.T.S

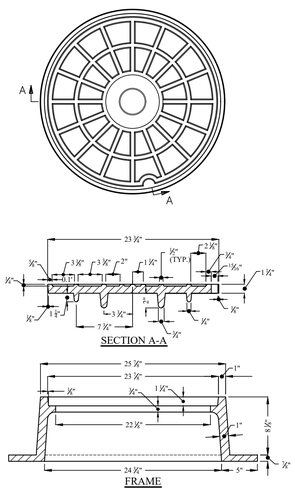


CULTEC R-150XLHD RECHARGER
N.T.S.



PLACE AREA DRAIN ON A 6" LAYER OF CRUSHED STONE. IF CRUSHED STONE IS TO BE PLACED ON FILL, ALL FILL BELOW THE AREA DRAIN SHALL BE COMPACTED TO 95% OF THE MAXIMUM PRT DENSITY AS PER ASTM D-1557. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT DOT FORM 816, ARTICLE M.01.01.

PLASTIC YARD DRAIN
N.T.S.



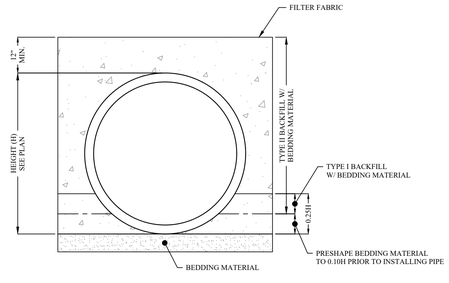
SECTION A-A

FRAME

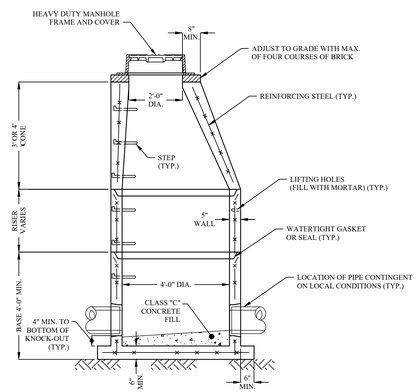
MANHOLE FRAME & COVER
N.T.S.

Approximate Excavation & Fill Volumes:
116 Cubic Yards of Excavation
00 Cubic Yards of Fill

NOTE: THE ENTIRE PROPERTY IS LOCATED WITHIN THE 100-YEAR FLOOD PLAIN (AE-12')



CULVERT TRENCH
N.T.S.



NOTES:
1. FT FT 6. FT DIAMETER PRECAST BASES MAY BE USED WHEN REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' & 6' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE 1 INCH FOR EACH 1 FOOT OF INSIDE DIAMETER INCREASE.
2. DENOTES OUTSIDE DIAMETER OF PIPE.
3. WHERE 5 FT. & 6 FT. DIA. MANHOLES ARE SHOWN ON THE PLANS, THEY SHALL BE CONSTRUCTED USING PRECAST UNITS

STANDARD MANHOLE
PRECAST CONCRETE UNITS
N.T.S.

GENERAL NOTES:

1. ALL SURVEY DATA, BOUNDARY LINES AND TOPOGRAPHY, ARE FROM A "ZONING LOCATION SURVEY POOL AS-BUILT" PREPARED FOR HAL & ELIZABETH KRAVITZ AT 5 SHOREHAVEN ROAD, NORWALK, CT, PREPARED BY ALL SEASONS LAND SURVEYING, DATED APRIL 7, 2025.
2. ALL CONSTRUCTION SHALL COMPLY WITH THE TOWN OF NORWALK REQUIREMENTS, THE STATE OF CONNECTICUT BASIC BUILDING CODE AND THE CONNECTICUT GUIDELINES FOR SOIL AND EROSION AND SEDIMENT CONTROL.
3. INFORMATION OF EXISTING UTILITIES HAS BEEN COMPILED FROM VARIOUS SOURCES INCLUDING UTILITY COMPANY RECORDS, MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES.
4. THE PROPERTY IS BEING SERVICED BY PUBLIC WATER AND MUNICIPAL SEWER SYSTEM.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, FLAGMEN, ETC., FOR TRAFFIC CONTROL AND SITE SAFETY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH OSHA REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH OSHA REQUIREMENTS.
6. REMOVE STUMPS AND BRUSH FROM SITE, OR CHIP AND USE DURING LANDSCAPING. DO NOT BURY STUMPS ON SITE.
7. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE PLANS UNLESS CHANGES HAVE BEEN APPROVED IN WRITING BY THE DESIGN ENGINEER PRIOR TO THE WORK BEING DONE.
8. ALL DISTURBED AREAS SHALL BE MULCHED AND SEEDED AS SOON AS POSSIBLE.
9. AREAS OF ASPHALT PAVEMENT THAT ARE DISTURBED BY THE CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED IN ACCORDANCE WITH THE ASPHALT TRENCH REPAIR DETAIL. THE FINISHED GRADE OF ASPHALT PAVING SHALL BLEND TO EXISTING GRADE AND THE EDGE OF THE CONCRETE PAVEMENT SMOOTHLY WITH NO SLOPES EXCEEDING 4%.
10. A MINIMUM OF 6" OF CRUSHED STONE MUST BE INSTALLED UNDER ALL EXTERIOR PORCHES AND STAIRS.

EARTHWORK & GRADING:

11. GRADE AWAY FROM BUILDING WALLS AT 2% MINIMUM (TYPICAL).
12. PROPOSED EARTH SLOPES SHALL BE NO STEEPER THAN 5:1 (HORZ.:VERT.), UNLESS OTHERWISE DEPICTED ON SITE PLAN.
13. GENERAL FILL BEYOND PAVED AREAS SHALL BE FREE OF BRUSH RUBBISH, STUMPS. FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" IN THICKNESS. THE DRY DENSITY AFTER COMPACTION SHALL NOT BE LESS THAN 95 % OF THE STANDARD PROCTOR TEST AND DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D698. AFTER COMPACTING, THE FILL SHALL BE 4" BELOW THE REQUIRED GRADE AS SHOWN ON THE PLAN.
14. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
15. FILL OR TOPSOIL SHALL NOT BE PLACED NOR COMPACTED WHILE IN A FROZEN OR MUDDY CONDITION OR WHILE SUBGRADE IS FROZEN.
16. ALL EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

STORM SEWER SYSTEMS:

17. ALL PIPE SHALL BE INSTALLED STRAIGHT AND AT THE VERTICAL AND HORIZONTAL ALIGNMENT SHOWN. NO 90° BENDS IN ALL PIPES.
18. MINIMUM COVER ON ALL PIPES SHALL BE TWO FEET (2') UNLESS OTHERWISE NOTED.
19. ALL POLY VINYL CHLORIDE PIPE (PVCP) SHALL BE SDR 35 WITH RUBBER JOINTS AND MEET THE REQUIREMENTS ASTM D3 AND D3212.
20. ALL AREA DRAINS SHALL HAVE A 2' SUMP.
21. CONTACT THE DESIGN ENGINEER THREE DAYS PRIOR TO EXCAVATING FOR THE INFILTRATION SYSTEM. DURING THE EXCAVATION, THE DESIGN ENGINEER MAY REVISE THE ELEVATIONS OF THE SYSTEM IF FIELD CONDITIONS DICTATE.
22. THE ENGINEER OF RECORD IS REQUIRED TO WITNESS THE INSTALLATION OF THE DRAINAGE SYSTEM PRIOR TO BACKFILLING.
23. DIRECT THE ROOF AREA TO THE PROPOSED DRAINAGE SYSTEM AS DEPICTED.

SEDIMENT & EROSION CONTROLS:

24. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND SHALL HAVE THEM INSPECTED AND APPROVED BY THE SITE ENGINEER PRIOR TO ANY LAND DISTURBANCE. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENT MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE SITE ENGINEER.
25. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURES WITHOUT PRIOR PERMISSION FROM THE SITE ENGINEER.
26. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC OR PRIVATE ROADS. ALL MATERIALS DEPOSITED ONTO SUCH ROADS SHALL BE REMOVED AS SOON AS POSSIBLE.
27. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY REMOVED WITH PRIOR PERMISSION FROM THE SITE ENGINEER.
28. ALL DISTURBED AREAS WITH A SLOPE STEEPER THAN 3:1 SHALL BE STABILIZED WITH SOD OR SEED AND ANCHORED STRAW MULCH OR OTHER APPROVED STABILIZATION MEASURE, AS SOON AS POSSIBLE BUT NO LATER THAN 5 CALENDAR DAYS.
29. SEDIMENT TRAPS AND BASINS SHALL NOT BE CONSTRUCTED WITHIN 25' OF AN EXISTING FOUNDATION OR ONE THAT IS UNDER CONSTRUCTION.
30. SEDIMENT REMOVED FROM TRAPS, SILTATION FENCES OR BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS BUT NOT WITHIN A FLOODPLAIN, WETLANDS OR TREE-SAVE AREAS.
31. ALL WATER REMOVED FROM EXCAVATED AREAS SHALL BE PASSED THROUGH APPROVED DEWATERING PRACTICES OR PUMPED TO A SEDIMENT BASIN PRIOR TO DISCHARGE TO A FUNCTIONAL STORM DRAIN SYSTEM OR TO STABLE GROUND SURFACE.
32. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL DISTURBED AREAS USING SOD OR AN APPROVED SIX MIXTURE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON MUST BE STABILIZED WITH PERMANENT GROWTH AS SOON AS POSSIBLE. WHEN PROPERTY IS BROUGHT TO FINISHED GRADES DURING THE WINTER MONTHS WHEN PERMANENT STABILIZATION IS IMPRACTICAL THEN AN APPROVED TEMPORARY STABILIZATION SHALL BE DONE UNTIL THE SPRING MONTHS WHERE PERMANENT STABILIZATION IS POSSIBLE.

REVISED: 02/05/2026 - Per comments made by the City of Norwalk Planning & Zoning Department, dated February 02, 2026.
REVISED: 01/29/2026 - Added Coastal Jurisdiction Line and adjusted the proposed pipe relocation accordingly.

NOTES & DETAILS

5 SHOREHAVEN ROAD

NORWALK, CT

Prepared for

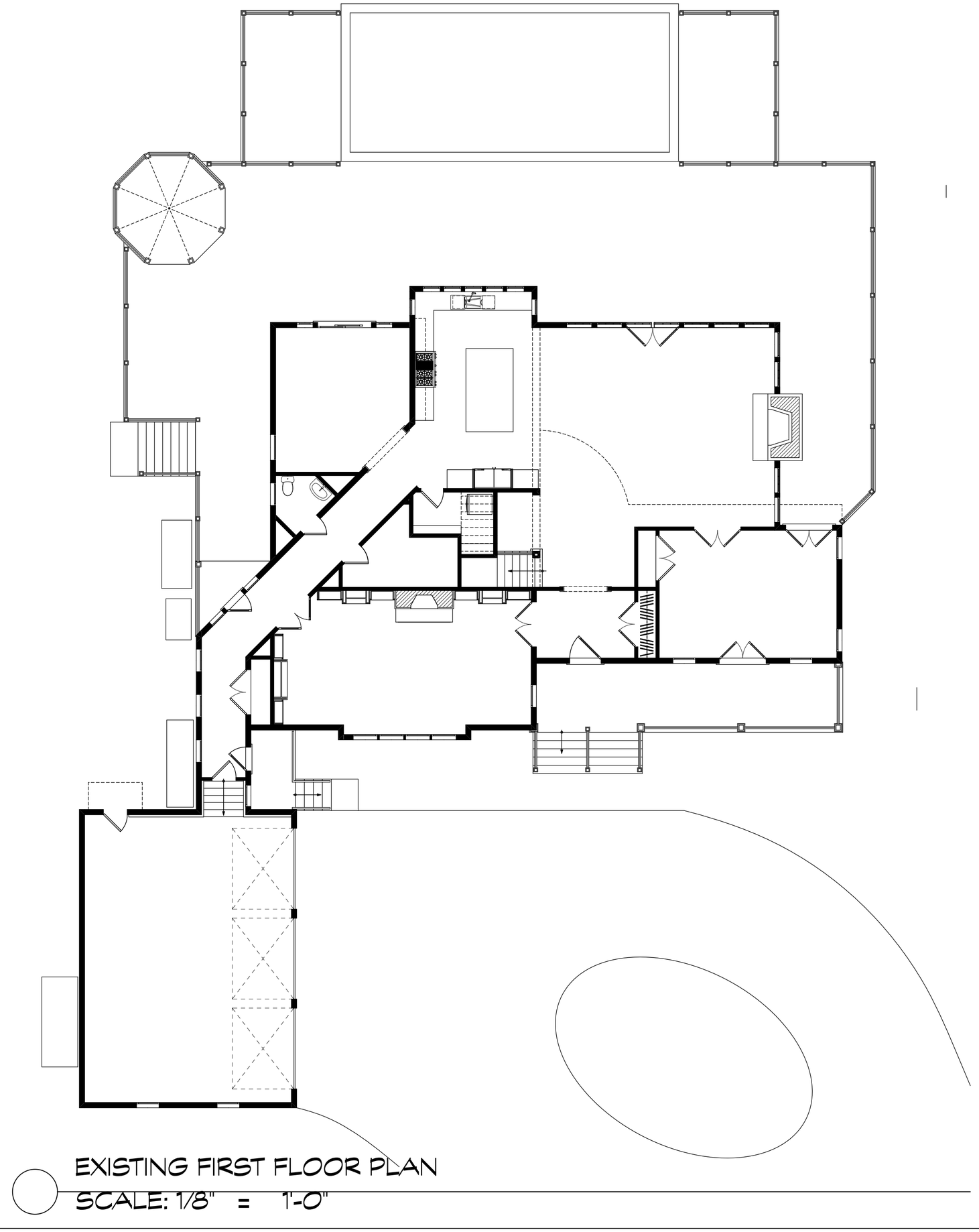
HAL & ELIZABETH KRAVITZ

STATE OF CONNECTICUT · JAMES KOUSIDIS · LICENSED PROFESSIONAL ENGINEER

SCALE: AS DEPICTED

DATED: 01/21/2026
JOB NO.: HE25-1
SHEET NO: 2 of 2

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
1525 Black Rock Turnpike, Fairfield, CT 06825 P: 203-557-8943
E: jim@kousidisengineering.com Web: www.kousidisengineering.com



EXISTING FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

REVISED:

SCALE:	AS NOTED
DATE:	1/16/26
DRAWN:	KK.RB

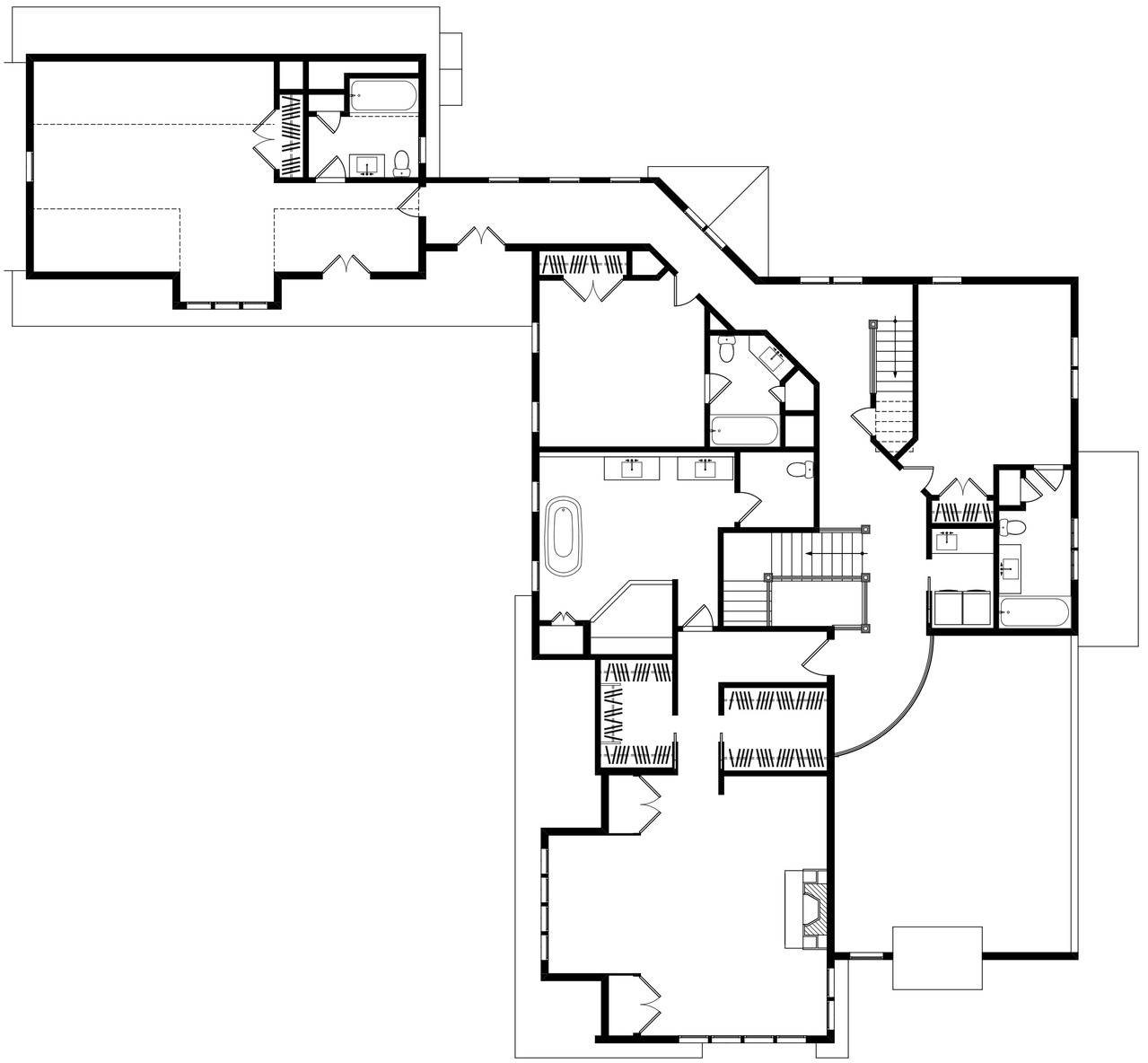
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EXISTING FIRST FLOOR PLAN

EX-1



EXISTING SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

EX-2

Kravitz Residence

5 SHOREHAVEN ROAD
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EXISTING SECOND FLOOR PLAN

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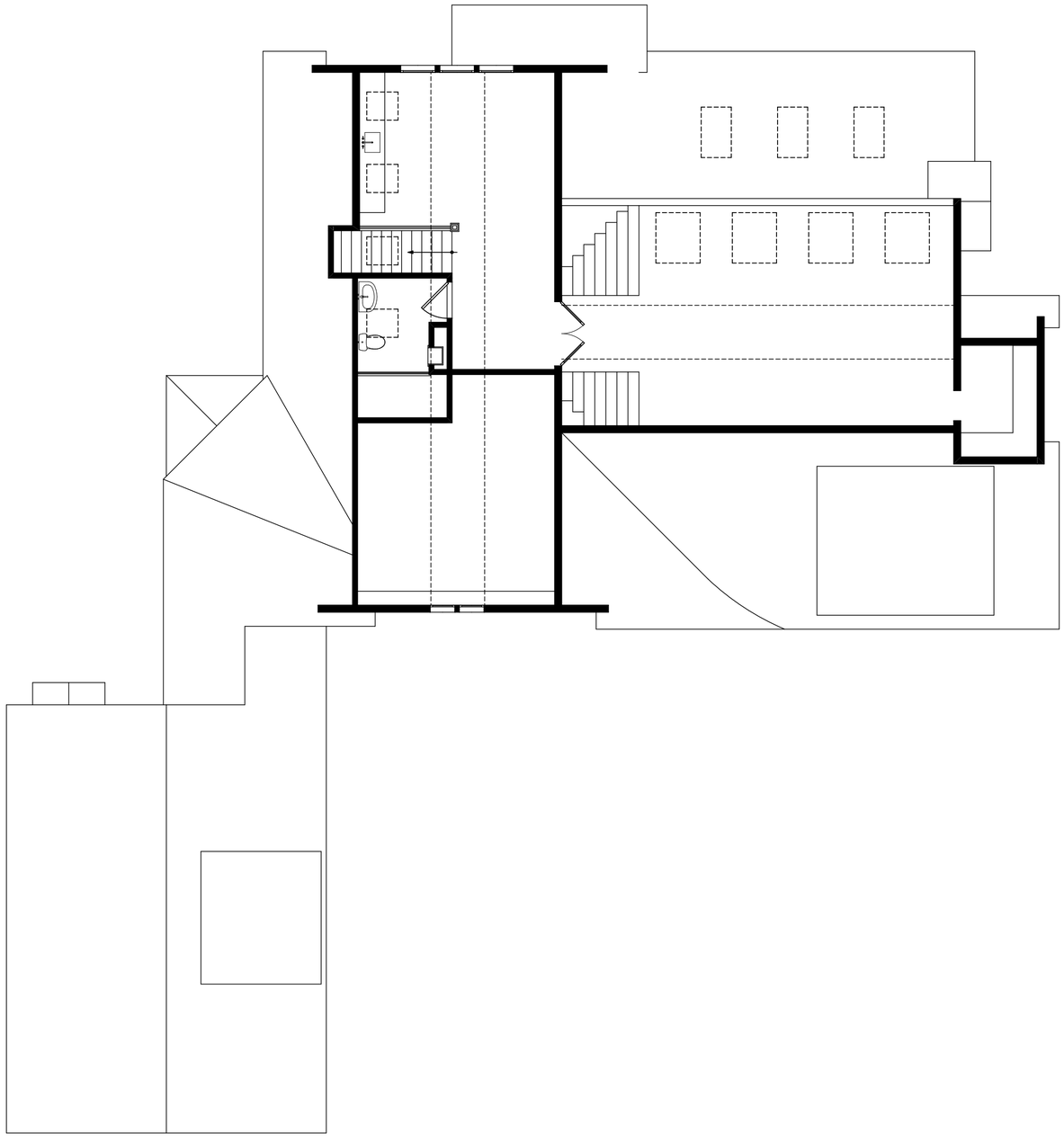
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SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

REVISED:



EXISTING ATTIC FLOOR PLAN
SCALE: 1/8" = 1'-0"

REVISED:

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK.RB

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EXISTING ATTIC FLOOR PLAN

EX-3



EXISTING WEST ELEVATION

SCALE: 1/8" = 1'-0"



EXISTING SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

REVISED:

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

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EXISTING ELEVATIONS

EX-4



EXISTING EAST ELEVATION

SCALE: 1/8" = 1'-0"



EXISTING NORTH ELEVATION

SCALE: 1/8" = 1'-0"

REVISED:

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK.RB

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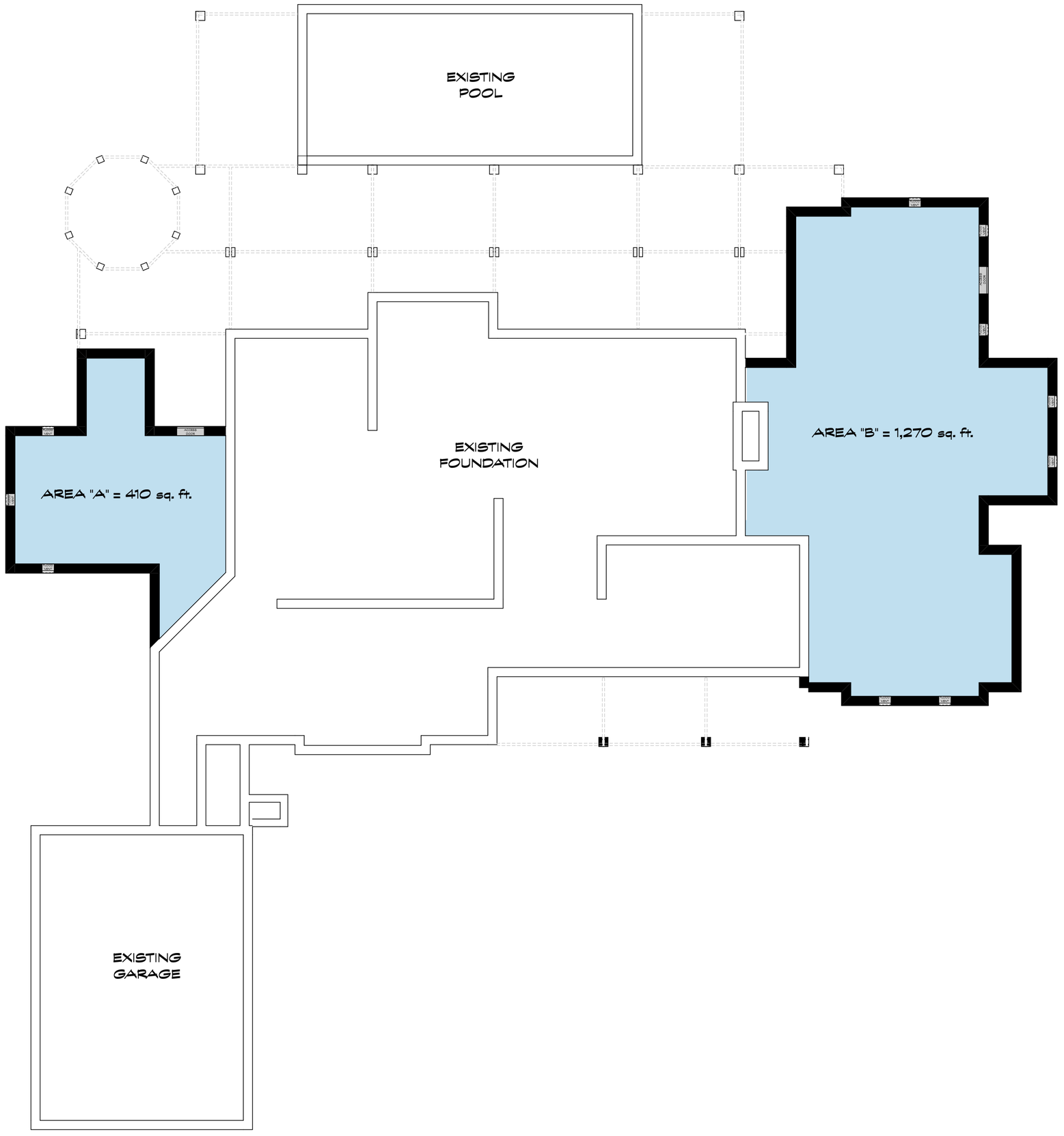
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EXISTING ELEVATIONS

EX-5



PROPOSED FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

FLOOD OPENING CALCULATIONS

Enclosed area below flood elevation Area "A"=	410 sq. ft.
Flood opening requirement = 1sq. in. per sq. ft. =	410 sq. in.
Smart Vent # 1540-520 = 200 sq. in. (see below) x 3 units =	600 sq. in.
Total clear flood opening provided for Area "A" =	**600 sq. in.**
Enclosed area below flood elevation Area "B"=	1,270 sq. ft.
Flood opening requirement = 1sq. in. per sq. ft. =	1,270 sq. in.
Smart Vent # 1540-520 = 200 sq. in. (see below) x 7 units =	1,400 sq. in.
Total clear flood opening provided for Area "B" =	**1,400 sq. in.**

Smart Vent

Model #:	1540-520
Style:	Insulated
Dimensions:	8 x 16
Rough Opening:	16¼" x 8¼" (one block, or CMU)
Installation Instructions:	PDF | DWG
Product Brochure:	1540-520 brochure



Description:

One 8" x 16" vent certified for 200 sq. ft. of enclosed area for flood. Smart VENT ® Model is certified to provide flood protection. This model is contains a 2" insulated core that has an R-value of 8.34 and the vent frame is lined with felt weather stripping, helping to keep the enclosure as insulated from the elements as possible. All Marine Grade stainless steel construction resists weather and pests.

ALL MATERIALS USED BELOW BFE SHALL MEET FEMA TSB#2: FLOOD DAMAGE-RESISTENT MATERIALS REQUIREMENTS

ALL NEW LIGHTING / ELECTRICAL / MECHANICAL / PLUMBING SHALL BE SET ABOVE BFE

REVISED:

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

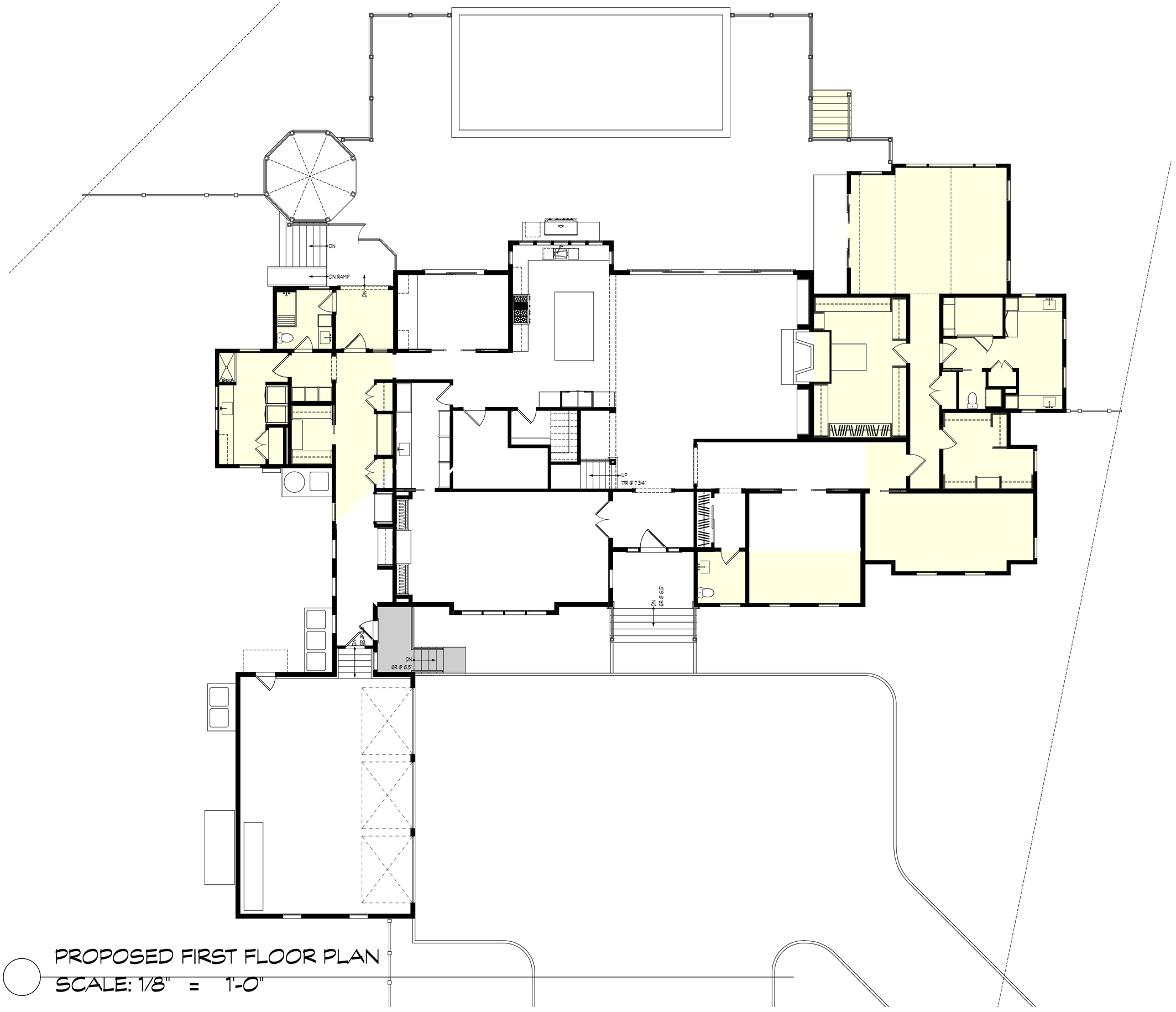
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PROPOSED FOUNDATION PLAN

Z-1



PROPOSED FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

REVISED:

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK.RB

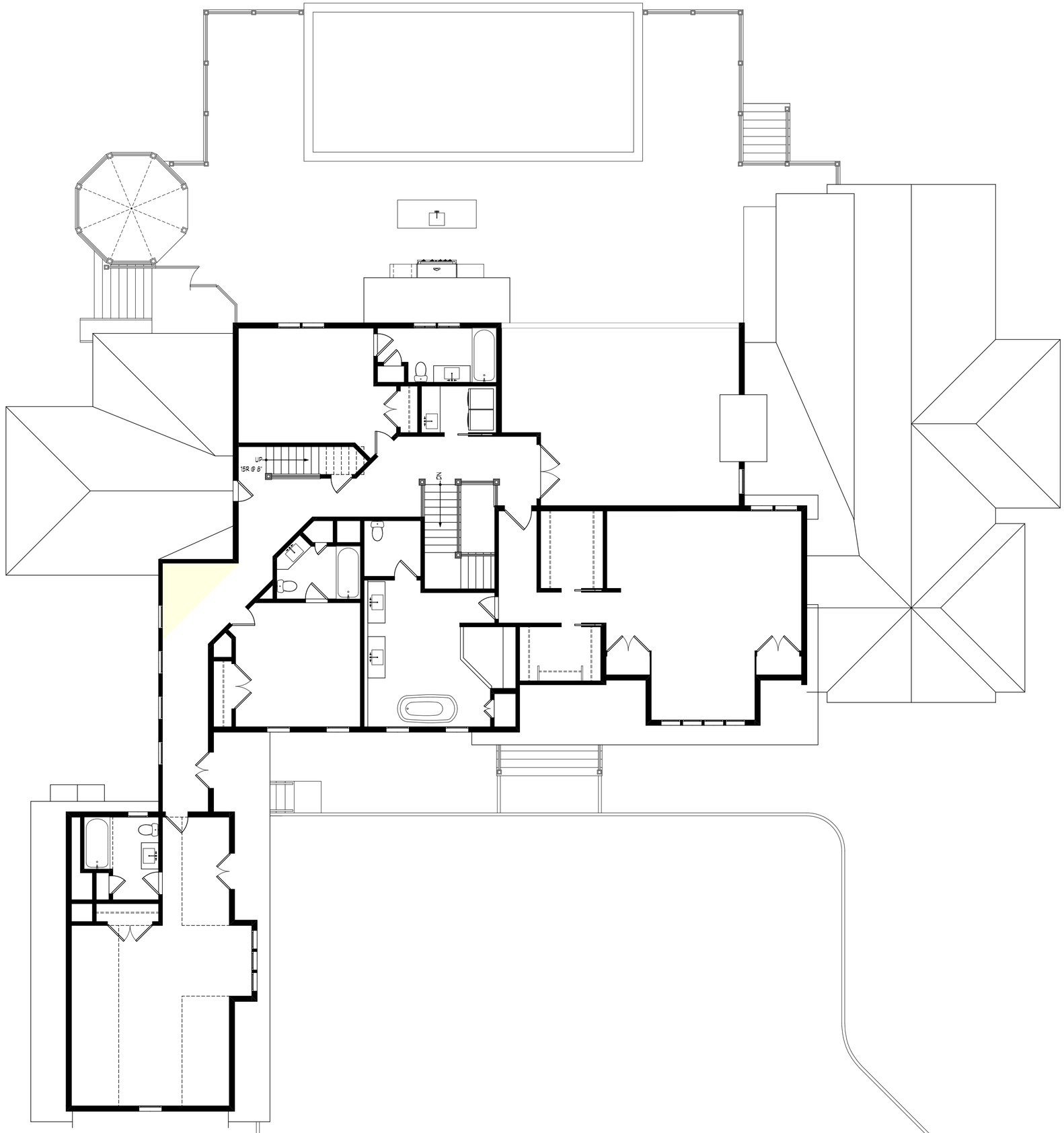
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PROPOSED FIRST FLOOR PLAN

A-2



EXISTING SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISED:

SCALE:	DATE:	DRAWN:
AS NOTED	1/16/26	KK.RB

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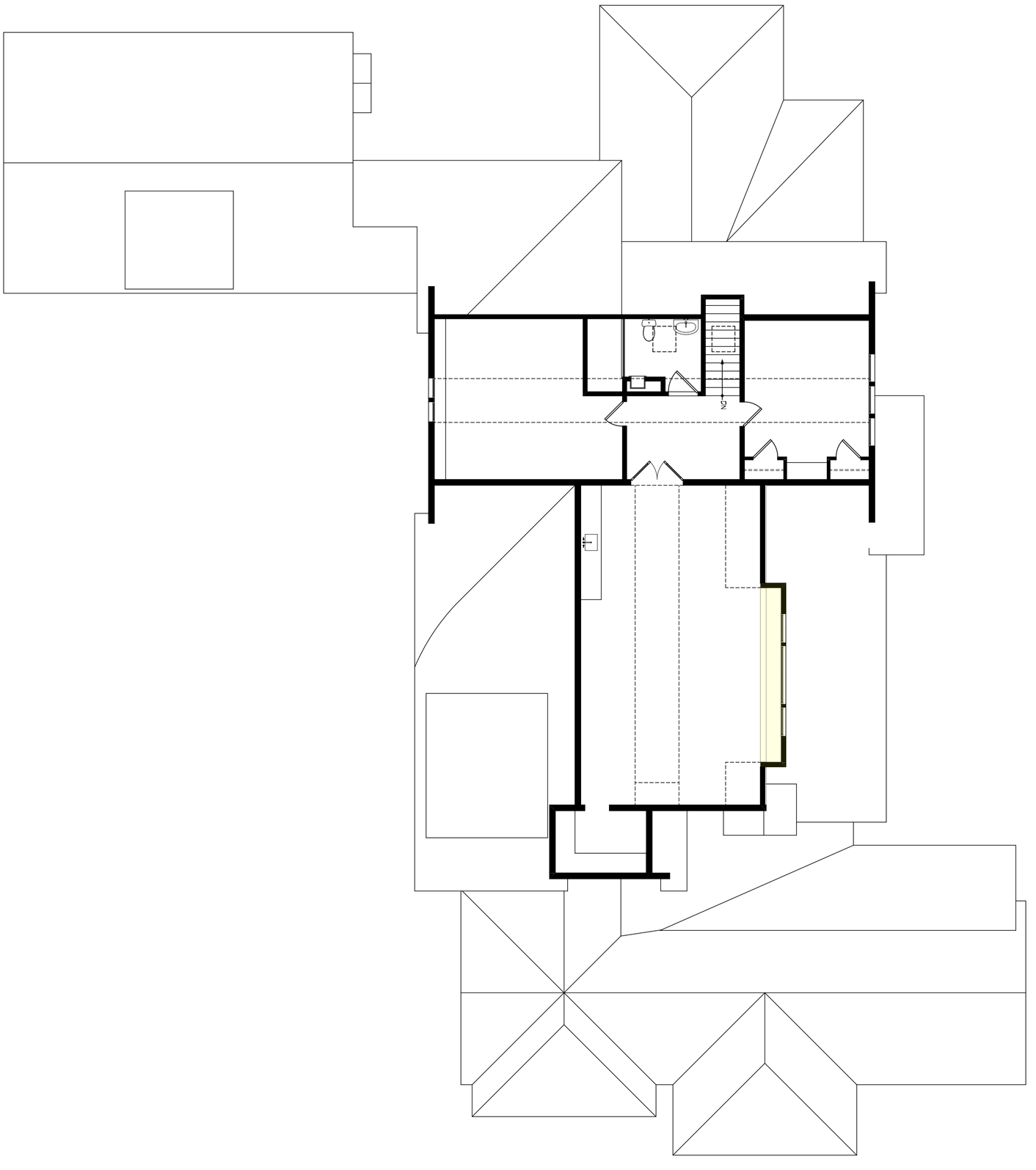
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PROPOSED SECOND FLOOR PLAN

A-3

EXISTING ATTIC FLOOR PLAN

SCALE: 1/8" = 1'-0"



Z-4

Kravitz Residence

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PROPOSED ATTIC FLOOR PLAN

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SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

REVISED:



PROPOSED WEST ELEVATION

SCALE: 1/8" = 1'-0"



PROPOSED SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

REVISED:

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK.RB

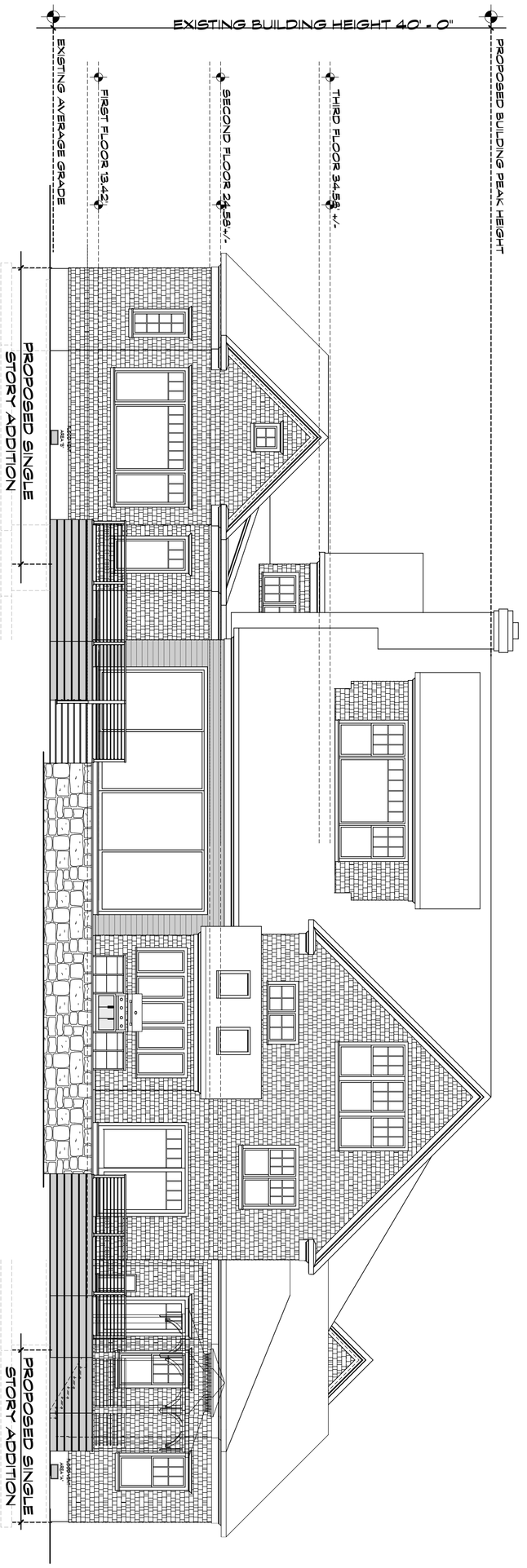
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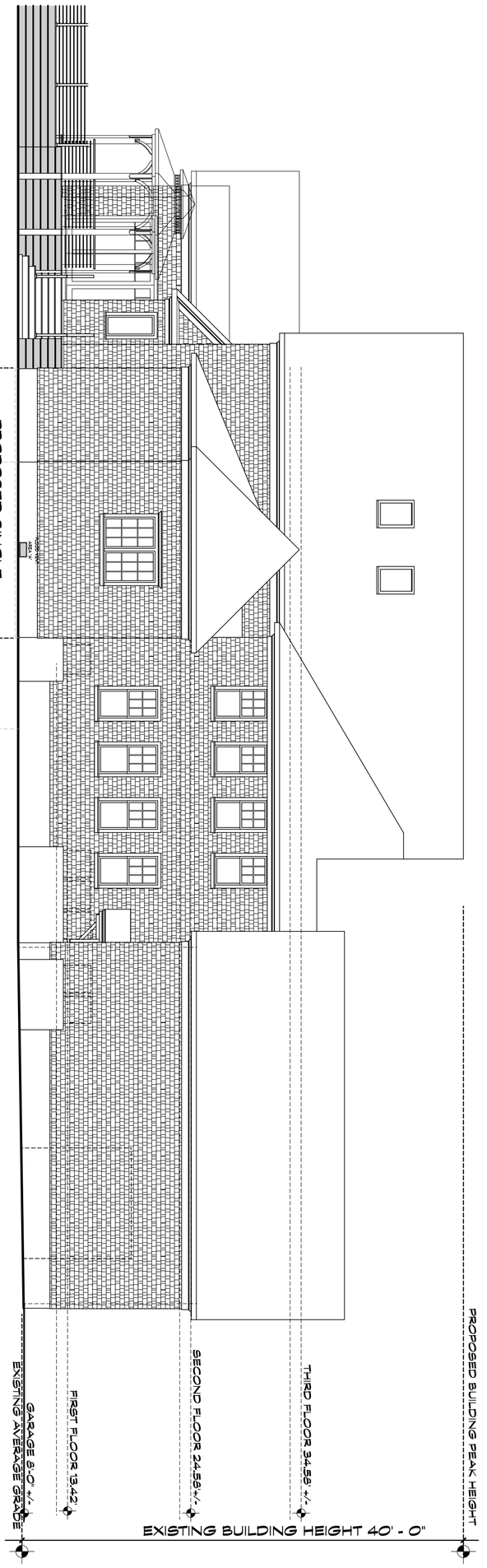
PROPOSED ELEVATIONS

Z-5



PROPOSED EAST ELEVATION

SCALE: 1/8" = 1'-0"



PROPOSED NORTH ELEVATION

SCALE: 1/8" = 1'-0"

N-6

Kravitz Residence

5 SHOREHAVEN ROAD
NORWALK, CT 06855

PROPOSED ELEVATIONS

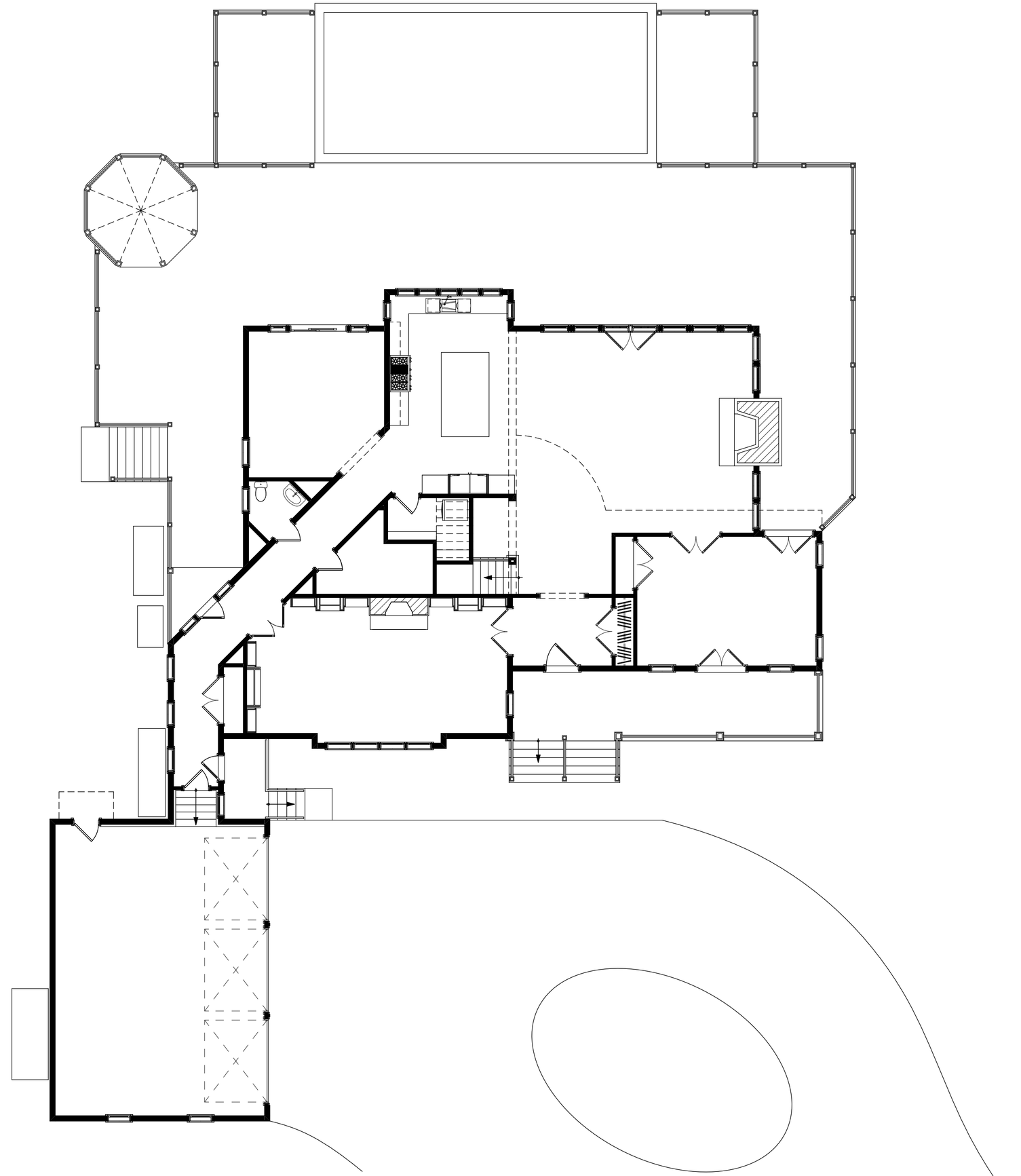
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SCALE: AS NOTED
DATE: 1/16/26
DRAWN: KK,RB

REVISED:



EXISTING FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISED:

SCALE:	DATE:	DRAWN:
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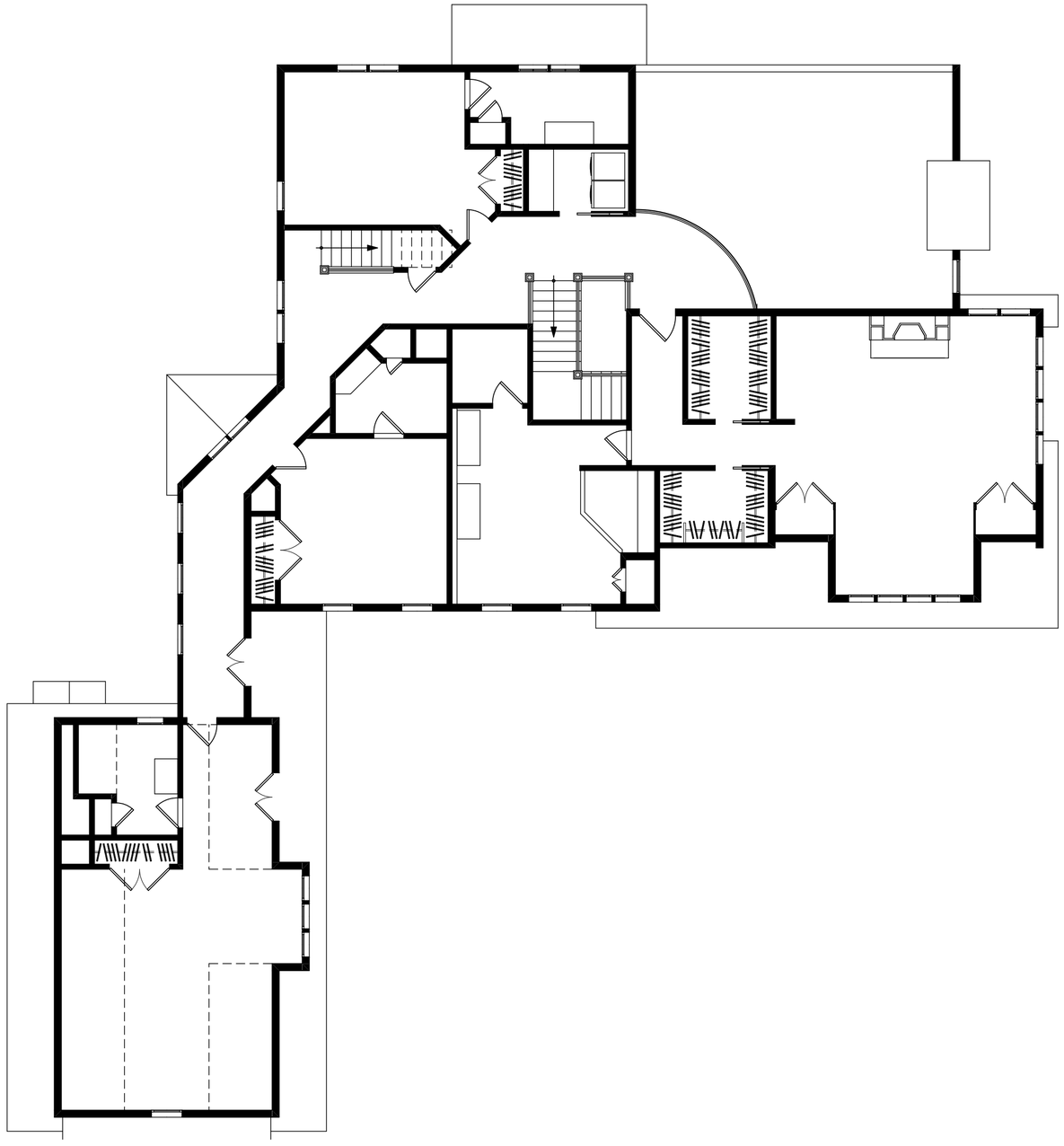
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EXISTING FIRST FLOOR PLAN

EX-1



EXISTING SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISED:

SCALE:	AS NOTED
DATE:	1/16/26
DRAWN:	KK.RB

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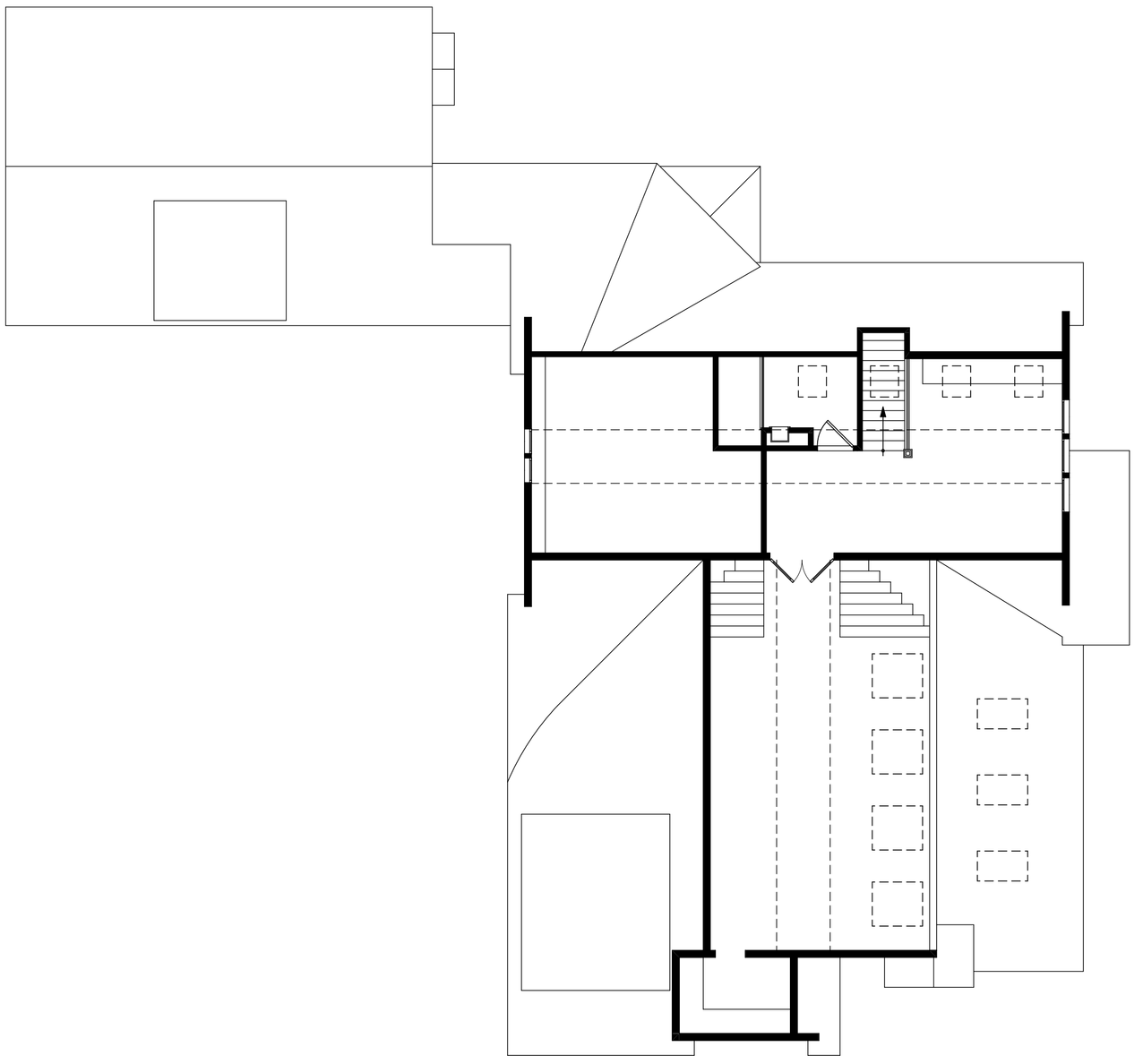
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EXISTING SECOND FLOOR PLAN

EX-2



EXISTING ATTIC FLOOR PLAN

SCALE: 1/8" = 1'-0"

EX-3

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5 SHOREHAVEN ROAD
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EXISTING ATTIC FLOOR PLAN

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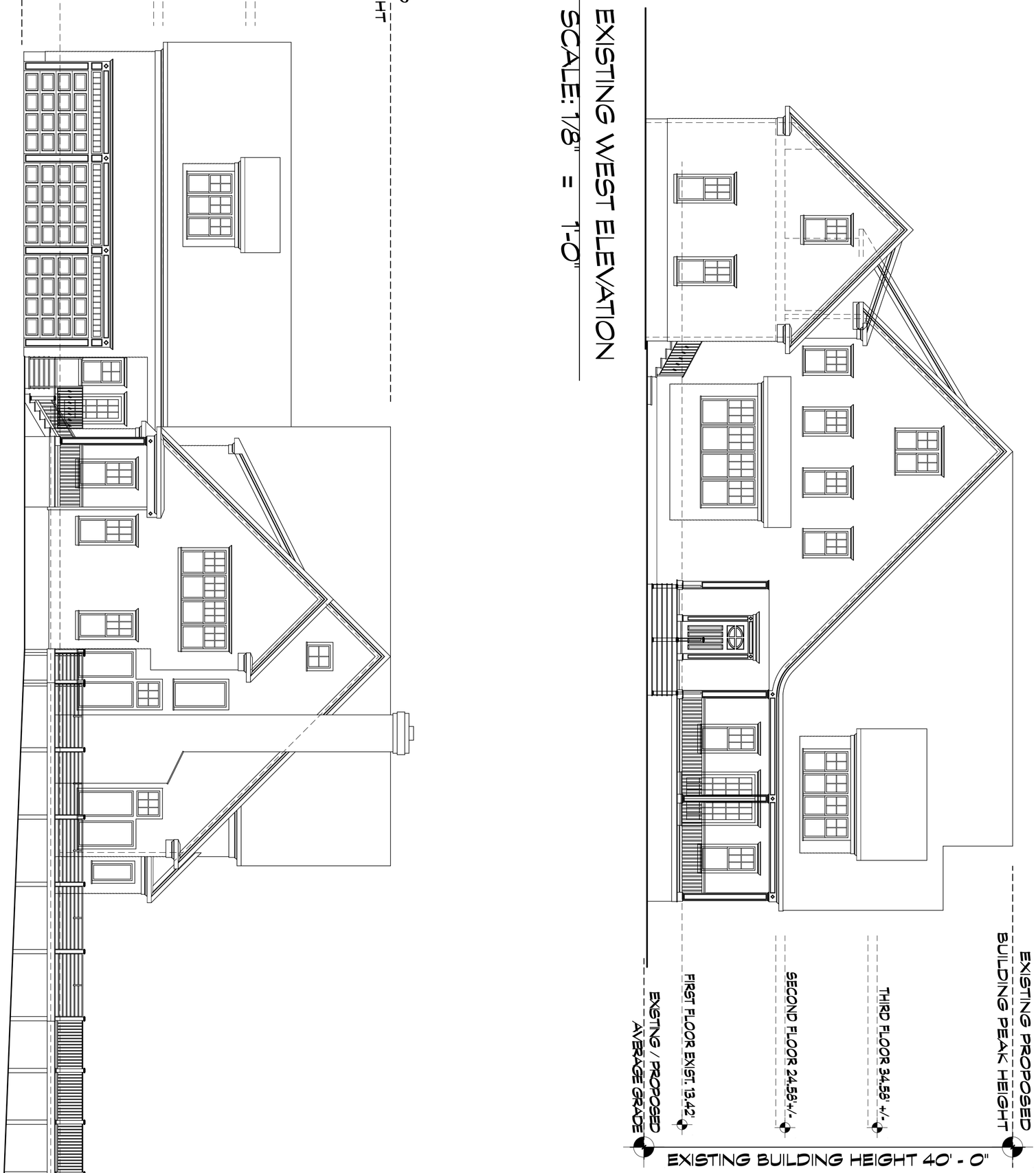
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SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

REVISED:



EXISTING SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

EXISTING WEST ELEVATION

SCALE: 1/8" = 1'-0"

EX-4

Kravitz Residence

5 SHOREHAVEN ROAD
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EXISTING ELEVATIONS

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SCALE:	AS NOTED
DATE:	1/16/26
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REVISED:	



EXISTING EAST ELEVATION

SCALE: 1/8" = 1'-0"



EXISTING NORTH ELEVATION

SCALE: 1/8" = 1'-0"

REVISED:

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK.RB

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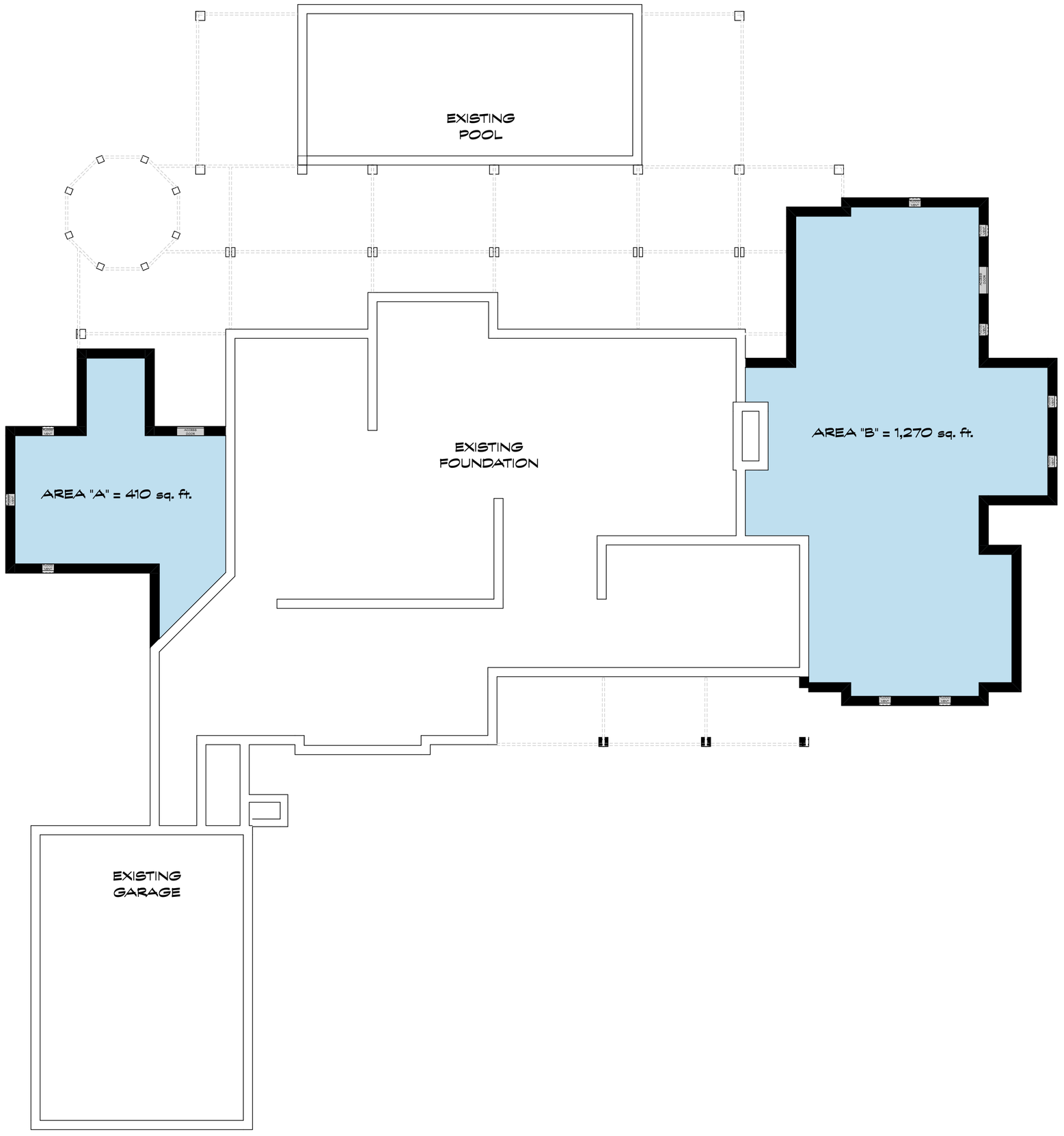
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EXISTING ELEVATIONS

EX-5



PROPOSED FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

FLOOD OPENING CALCULATIONS

Enclosed area below flood elevation Area "A"=	410 sq. ft.
Flood opening requirement = 1sq. in. per sq. ft. =	410 sq. in.
Smart Vent # 1540-520 = 200 sq. in. (see below) x 3 units =	600 sq. in.
Total clear flood opening provided for Area "A" =	**600 sq. in.**
Enclosed area below flood elevation Area "B"=	1,270 sq. ft.
Flood opening requirement = 1sq. in. per sq. ft. =	1,270 sq. in.
Smart Vent # 1540-520 = 200 sq. in. (see below) x 7 units =	1,400 sq. in.
Total clear flood opening provided for Area "B" =	**1,400 sq. in.**

Smart Vent

Model #:	1540-520
Style:	Insulated
Dimensions:	8 x 16
Rough Opening:	16¼" x 8¼" (one block, or CMU)
Installation Instructions:	PDF | DWG
Product Brochure:	1540-520 brochure



Description:

One 8" x 16" vent certified for 200 sq. ft. of enclosed area for flood. Smart VENT ® Model is certified to provide flood protection. This model is contains a 2" insulated core that has an R-value of 8.34 and the vent frame is lined with felt weather stripping, helping to keep the enclosure as insulated from the elements as possible. All Marine Grade stainless steel construction resists weather and pests.

ALL MATERIALS USED BELOW BFE SHALL MEET FEMA TSB#2: FLOOD DAMAGE-RESISTENT MATERIALS REQUIREMENTS

ALL NEW LIGHTING / ELECTRICAL / MECHANICAL / PLUMBING SHALL BE SET ABOVE BFE

REVISED: REV #1: 2/4/26

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

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PROPOSED FOUNDATION PLAN

Z-1

DN

DN RAMP

DN 1R @ 6"

14.0'

WASHER
DRYER
WASHER
DRYER

DN 1R @ 6"

UP 17R @ 7 3/4"

DN 1R @ 6"

DN 1R @ 6"

DN 1R @ 6"

DN 1R @ 6"

DN 6R @ 6.5"

DN 6R @ 6.5"

DN 6R @ 6.5"

14.0'

14.0'

PROPOSED FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISED:
REV #1: 2/4/26

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK.RB

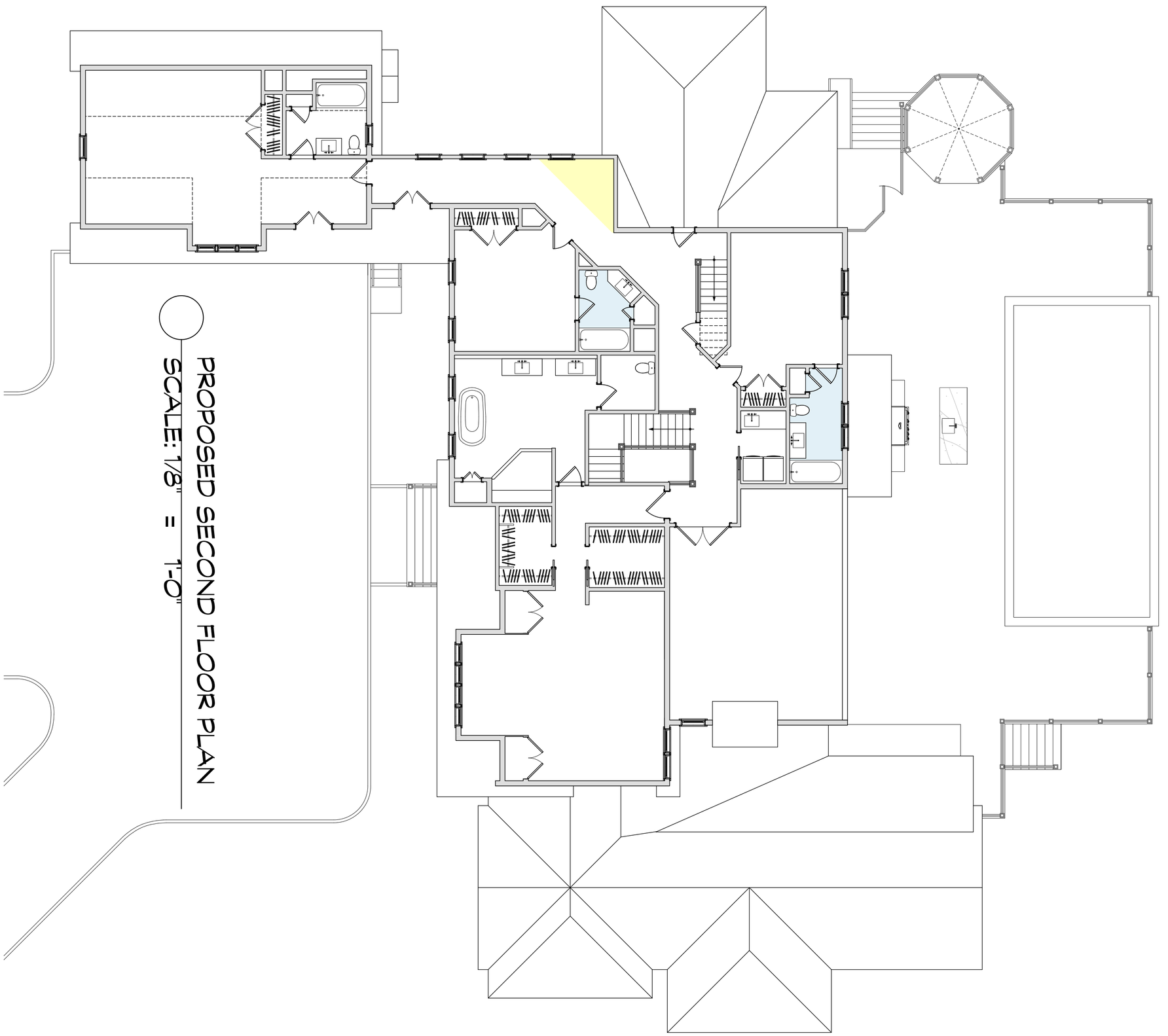
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PROPOSED FIRST FLOOR PLAN

A-2



PROPOSED SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

Z-3

Kravitz Residence

5 SHOREHAVEN ROAD
NORWALK, CT 06855

PROPOSED SECOND FLOOR PLAN

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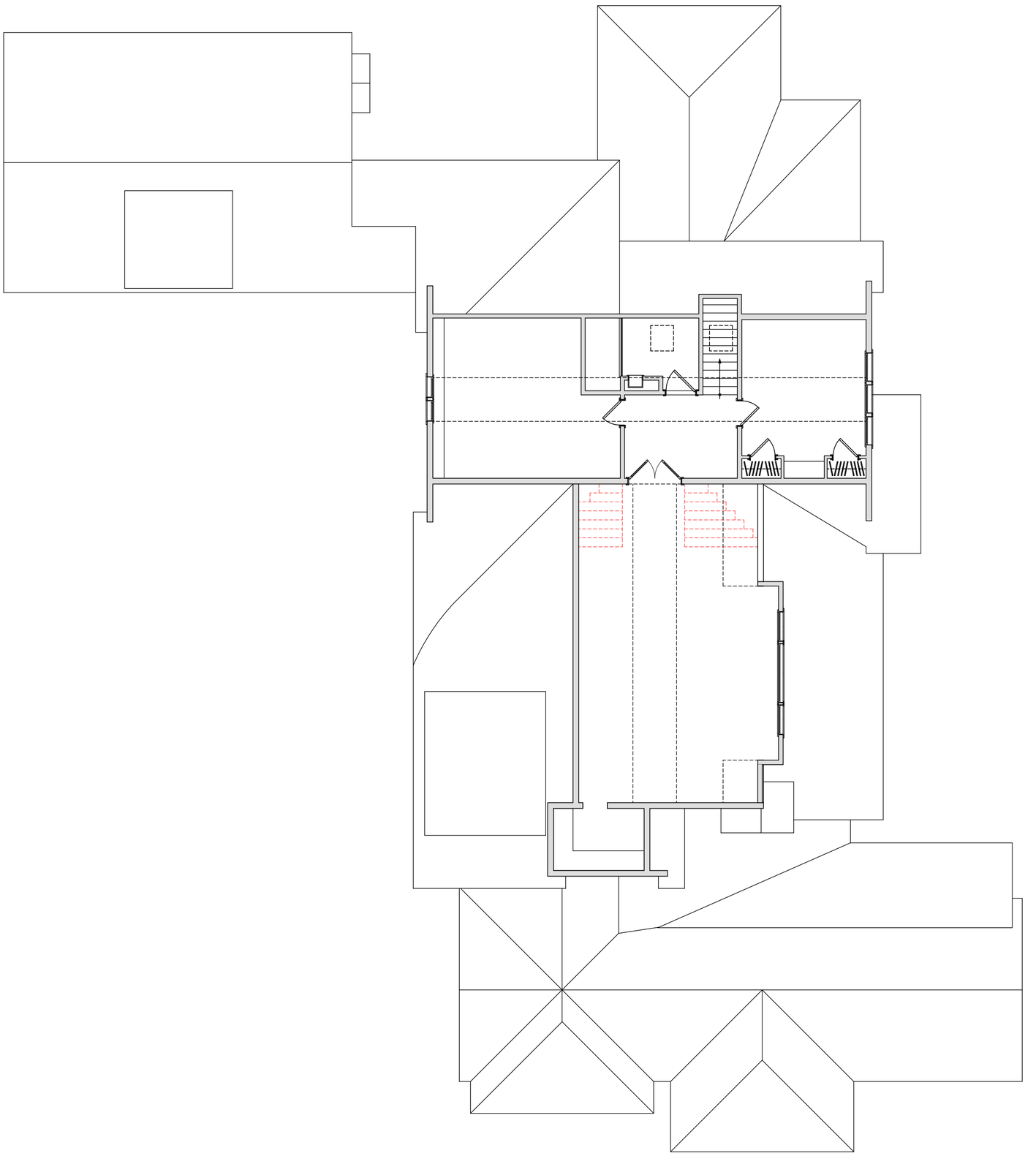
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SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

REVISED: REV #1: 2/4/26



PROPOSED ATTIC FLOOR PLAN

SCALE: 1/8" = 1'-0"

N

Kravitz Residence

5 SHOREHAVEN ROAD
NORWALK, CT 06855

PROPOSED ATTIC FLOOR PLAN

PETER CADOUX
ARCHITECTS P.C.
AIA

35 POST RD WEST
WESTPORT CT 06880
203 227-4304
CADOUXAIA.COM

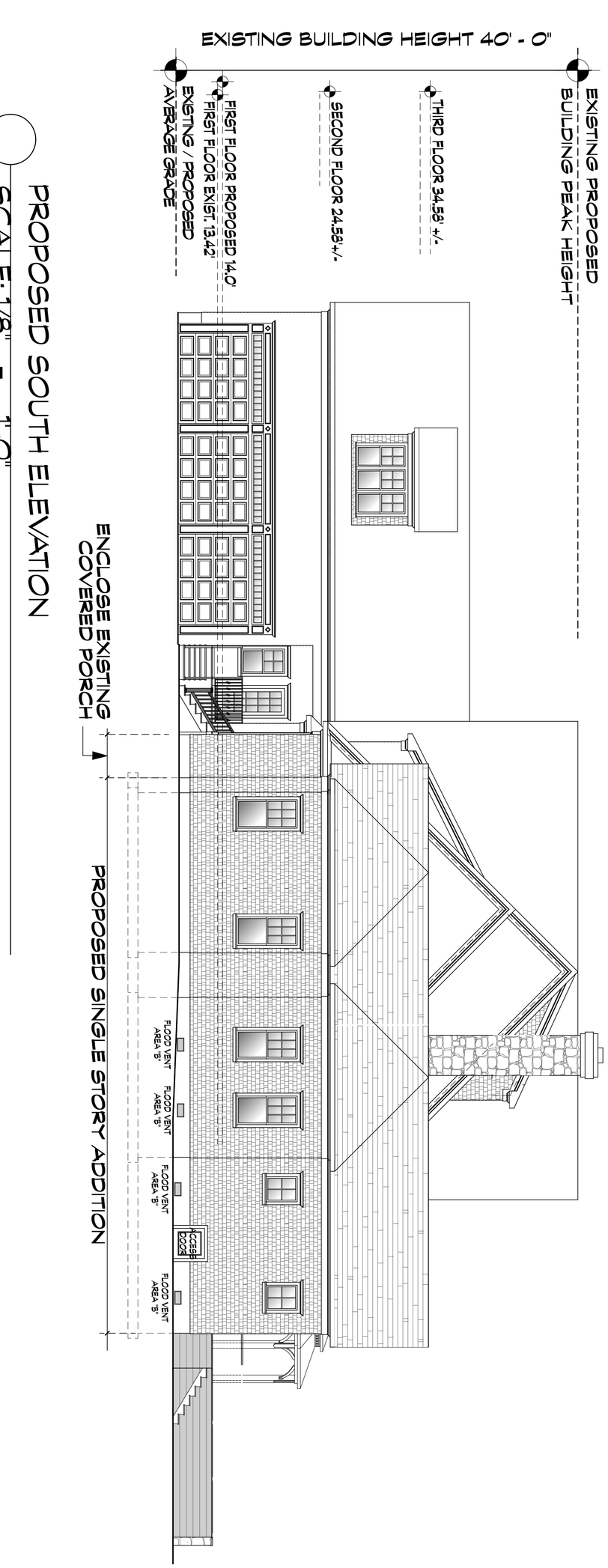
PETER CADOUX ARCHITECTS

SCALE: AS NOTED

DATE: 1/16/26

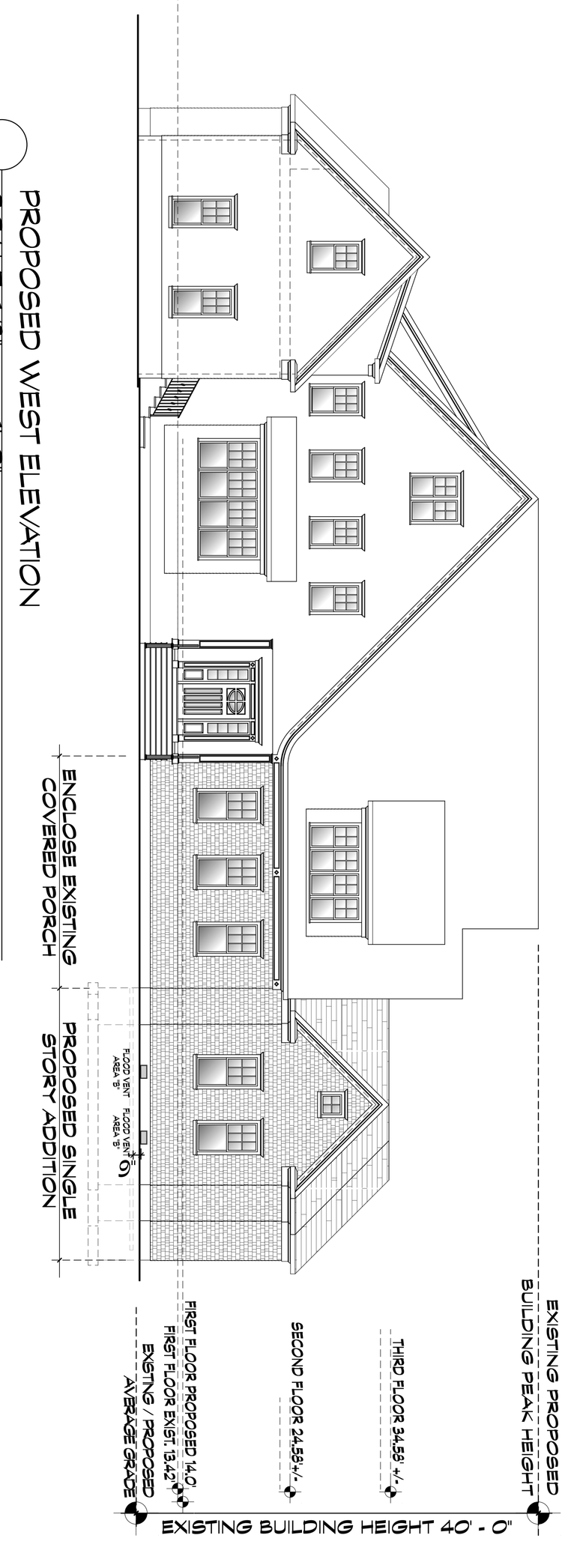
DRAWN: KK,RB

REVISED: REV #1: 2/4/26



PROPOSED SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



PROPOSED WEST ELEVATION

SCALE: 1/8" = 1'-0"

Z-5

Kravitz Residence

5 SHOREHAVEN ROAD
NORWALK, CT 06855

PROPOSED ELEVATIONS

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ARCHITECTS P.C.
AIA

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203 227-4304
CADOUXAIA.COM

PETER CADOUX ARCHITECTS

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK,RB

REVISED: REV #1: 2/4/26



PROPOSED EAST ELEVATION

SCALE: 1/8" = 1'-0"



PROPOSED NORTH ELEVATION

SCALE: 1/8" = 1'-0"

REVISED:
REV #1: 2/4/26

SCALE: AS NOTED

DATE: 1/16/26

DRAWN: KK.RB

PETER CADOUX
ARCHITECTS

PETER CADOUX ARCHITECTS P.C.
A\A
35 POST RD WEST
WESTPORT CT 06880
203 227-4304
CADOUXAIA.COM

Kravitz Residence
5 SHOREHAVEN ROAD
NORWALK, CT 06855

PROPOSED ELEVATIONS

Z-6

Operations and Maintenance Plan

5 Shorehaven Road
January 21, 2026

Scope:

The purpose of the Operations and Maintenance Plan is to ensure that the existing and proposed stormwater components installed at *5 Shorehaven Road, Norwalk, CT* are maintained in operational condition throughout the life of the project. The service procedures associated with this plan shall be performed as required by the owner/association responsible for maintenance of the property.

Recommended Frequency of Service:

As further defined below, all stormwater components should be checked on a periodic basis and kept in full working order. Ultimately, the required frequency of inspection and service will depend on runoff quantities, pollutant loading, and clogging due to debris. At a minimum, we recommend that all stormwater components be inspected and serviced twice per year, once before winter begins and once during spring cleanup.

Service Procedures:

1. **Yard Drains & Drainage Inlets:**

    a. Yard Drains and drainage inlets shall be completely cleaned of accumulated debris and sediments at the completion of construction.
    b. Any accumulated debris within the yard drains/inlets shall be removed and any repairs as required.
    c. Visual inspections shall occur twice per year, once in the spring and once in the fall, after fall cleanup of leaves has occurred.
    d. Accumulated debris within the yard drains/inlets shall be removed and repairs made as required.
    e. Accumulated sediments shall be removed at which time they are within 12 inches of the invert of the outlet pipe.
    f. Any additional maintenance required per the manufacturer's specifications shall also be completed.

2. **Storm Drainage Piping:**

    a. All storm drainage piping shall be completely flushed of debris and accumulated sediment at the completion of construction.
    b. Any additional maintenance required per the manufacturer's specifications shall also be completed.

3. **Drywells and Infiltration Systems:**

    a. All drywells/infiltrators shall be completely cleaned of accumulated debris and sediments upon the completion of construction.
    b. Any accumulated debris within the drywells/infiltrators shall be removed and any repairs made to the units as required.
    c. Visual inspection shall occur twice per year, once in the spring and once in the fall, after fall cleanup of leaves has occurred.
    d. Accumulated debris within the units shall be removed and repairs made as required.
    e. Any additional maintenance required per the manufacturer's specifications shall also be completed.

4. **Roof Gutters:**

    a. Remove accumulated debris and inspect for damage. Any damage should be repaired as required.

5. Any additional maintenance required per the manufacturer's specifications shall also be completed

Disposal of Debris and Sediment:

All debris and sediment removed from the stormwater structures shall be disposed of legally. There shall be no dumping of silt or debris into or in proximity to any inland or tidal wetlands.

Operations and Maintenance Log

Type of Inspection: ☐ Spring ☐ Fall ☐ Other

Inspector's Name:_____ Date of Inspection:_____

Affiliation:_____ Phone #:_____

Yard Drains & Drainage Inlets:

- Has accumulated debris been removed from grates? ☐ Yes ☐ No ☐ N/A
- Do any yard drains require additional repair? (identify below): ☐ Yes ☐ No ☐ N/A
- Have sumps been cleaned of sediment? ☐ Yes ☐ No ☐ N/A

Notes:

Storm Drainage Piping and Manholes/Junction Boxes:

- Has accumulated debris been removed? ☐ Yes ☐ No ☐ N/A
- Do any manholes require additional repair? (identify below): ☐ Yes ☐ No ☐ N/A
- Is there any evidence of stormwater piping failure? ☐ Yes ☐ No ☐ N/A

Notes:

Drywells and Infiltration Systems:

- Have units been cleared of debris/sediments? ☐ Yes ☐ No ☐ N/A
- Do units require additional repair? (identify below): ☐ Yes ☐ No ☐ N/A

Notes:

Please make additional notes/observations and particular concerns below. Also record any additional maintenance that has been performed:

_____ _____

Signature of Inspector: **Date:**

DRAINAGE ANALYSIS

LOCATED AT
5 SHOREHAVEN ROAD
NORWALK, CONNECTICUT

PREPARED FOR
HAL & ELIZABETH KRAVITZ

January 21, 2026

Jim Kousidis, P.E.
CT License No. 26830

KOUSIDIS ENGINEERING, LLC, 1525 Black Rock Turnpike, Fairfield, CT 06825. P: (203) 557-8943
www.kousidisengineering.com, jim@kousidisengineering.com

1. EXISTING CONDITIONS

This 49,522-sq. ft. residential property is currently developed with a single-family residence, attached garage, deck, pool and driveway. Test pits at the site indicate highly pervious soils that are adequate to accept a subsurface storm drain system. The topography of the property slopes to the north and east. According to the Web Soil Survey website (map and soil table attached) the soils in the subject area consist of Udorthents-Urban land complex, a well-drained soil with a Hydrologic Soil Group "B".

2. PROPOSED CONDITIONS

The owner is proposing to construct building additions to the existing dwelling, reconfigure the driveway area, and replace a stormwater pipe, with associated site improvements. The total proposed impervious surface is 2,204-sq.ft. A stormwater retention system will be installed to satisfy the City of Norwalk's requirement of water quality volume. A portion of the roof area must be directed to the proposed retention system.

3. DRAINAGE

The City's requirement for water quality volume is satisfied by collecting a portion of the roof area. The proposed detention system consists of 44 LF of Cultec R-150 XLHD Rechargers surrounded by 1 foot of clean crushed stone. The water quality volume calculations can be seen below. Using the State of Connecticut 2024 Stormwater Quality Manual, the required Water Quality Volume for the area directed to the drainage system is 269.1 cf. The provided storage in the detention system is 282 cf. The calculations are shown below:

Water Quality Volume :
WQV=(1.3")(R)*(A)/12*
*R=0.05+(0.009*I)*
R=volumetric runoff coefficient
I= Percent Impervious Cover (22.04%)
A= Area of Concern (10,000 sq.ft.)
*R= 0.05+(0.009*22.04)=0.2484*
*WQV = (1.3"*0.2484*10,000)/12 =269.1 C.F.*
Volume provided: ***282 C.F. > 269.1 C.F.*** *Required*

In addition to the above, the drainage system has been designed to provide groundwater recharge volume; the calculations of which can be seen below:

Groundwater Recharge Volume:
GRV=(F)(I)/12

F=target depth factor associated with each Hydrologic Soil Group = (see Table 5-2)
I=net increase in site impervious for re-development projects

Hydrologic Soil Type (B)
F = 0.10 in
I = (2,204 sf) Proposed Impervious Area

GRV = (2,204)(0.35/12) = 64.3 cf
Total Retention Volume = 282 C.F >64.3 C.F.

4. CONCLUSION

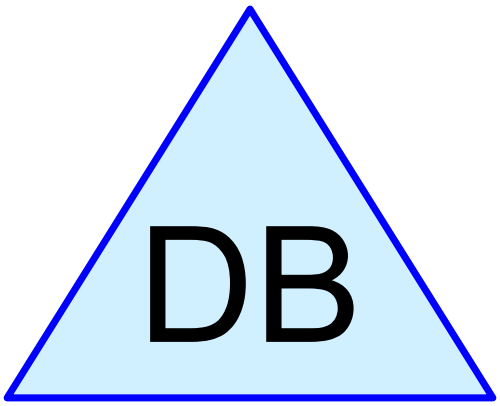
The proposed development will increase the amount of impervious area to this site, resulting in higher peak runoff rates and volumes. With the installation of the proposed stormwater retention system, the original flow patterns will be maintained, and the water quality volume for all new impervious areas will be collected. The proposed design incorporates stormwater treatment to control pollution and provide groundwater recharge capacity. The implementation of these techniques and the overall site design layout will result in a finished project that will minimize sediment and erosion impacts during construction and will have no adverse impacts to adjoining properties upon completion.

DEEP TEST PIT DATA

Conducted: October 08, 2025
by Kousidis Engineering, LLC

TEST PIT #1
00-40" TOPSOIL & MISCELLANEOUS FILL
40-48" ORIGINAL TOPSOIL
48-56" GRAY BROWN SATURATED
COARSE SAND & STONE
*MOTTLES @ 48"
*GROUND WATER @ 48"
*NO LEDGE
*NO ROOTS

TEST PIT #2
00-20" TOPSOIL & MISCELLANEOUS FILL
20-30" ORIGINAL TOPSOIL
30-46" GRAY BROWN SATURATED
COARSE SAND & SILT
*MOTTLES @ 36"
*GROUND WATER @ 36"
*NO LEDGE
*NO ROOTS



Cultec R150XLHD

Subcat Reach Pond Link

Routing Diagram for 5ShorehavenRd(01-13-26)_WQV
Prepared by Kousidis Engineering, LLC, Printed 1/21/2026
HydroCAD® 10.00-26 s/n 09068 © 2020 HydroCAD Software Solutions LLC

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Pond DB: Cultec R150XLHD Peak Elev=0.00' Storage=0 cf
Primary=0.00 cfs 0 cf

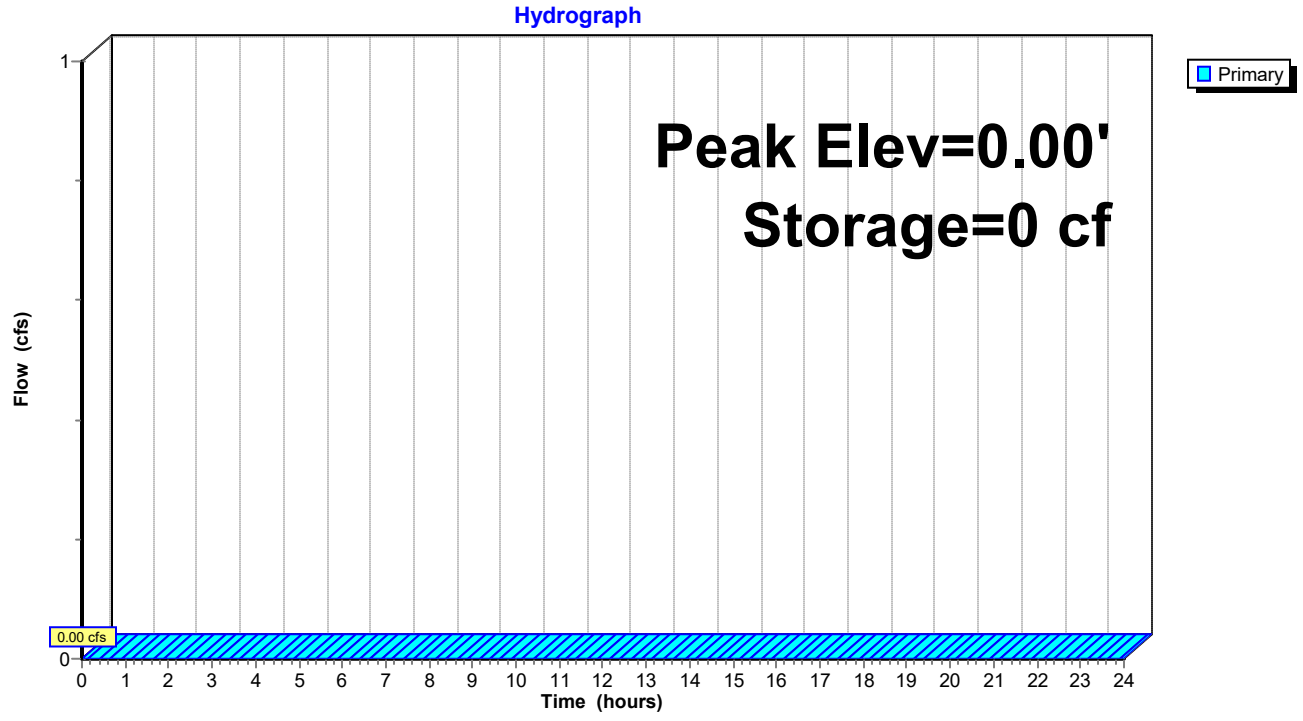
Summary for Pond DB: Cultec R150XLHD

Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	166 cf	**4.75'W x 11.00'L x 2.50'H Stone Bed** x 4 523 cf Overall - 109 cf Embedded = 414 cf x 40.0% Voids
#2	4.50'	109 cf	**Cultec R-150XLHD** x 4 Inside #1 Effective Size= 29.8"W x 18.0"H => 2.65 sf x 10.25'L = 27.2 cf Overall Size= 33.0"W x 18.5"H x 11.00'L with 0.75' Overlap
#3	4.50'	8 cf	**2.00'W x 2.00'L x 2.00'H Yard Drain**
		282 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	6.50'	**8.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

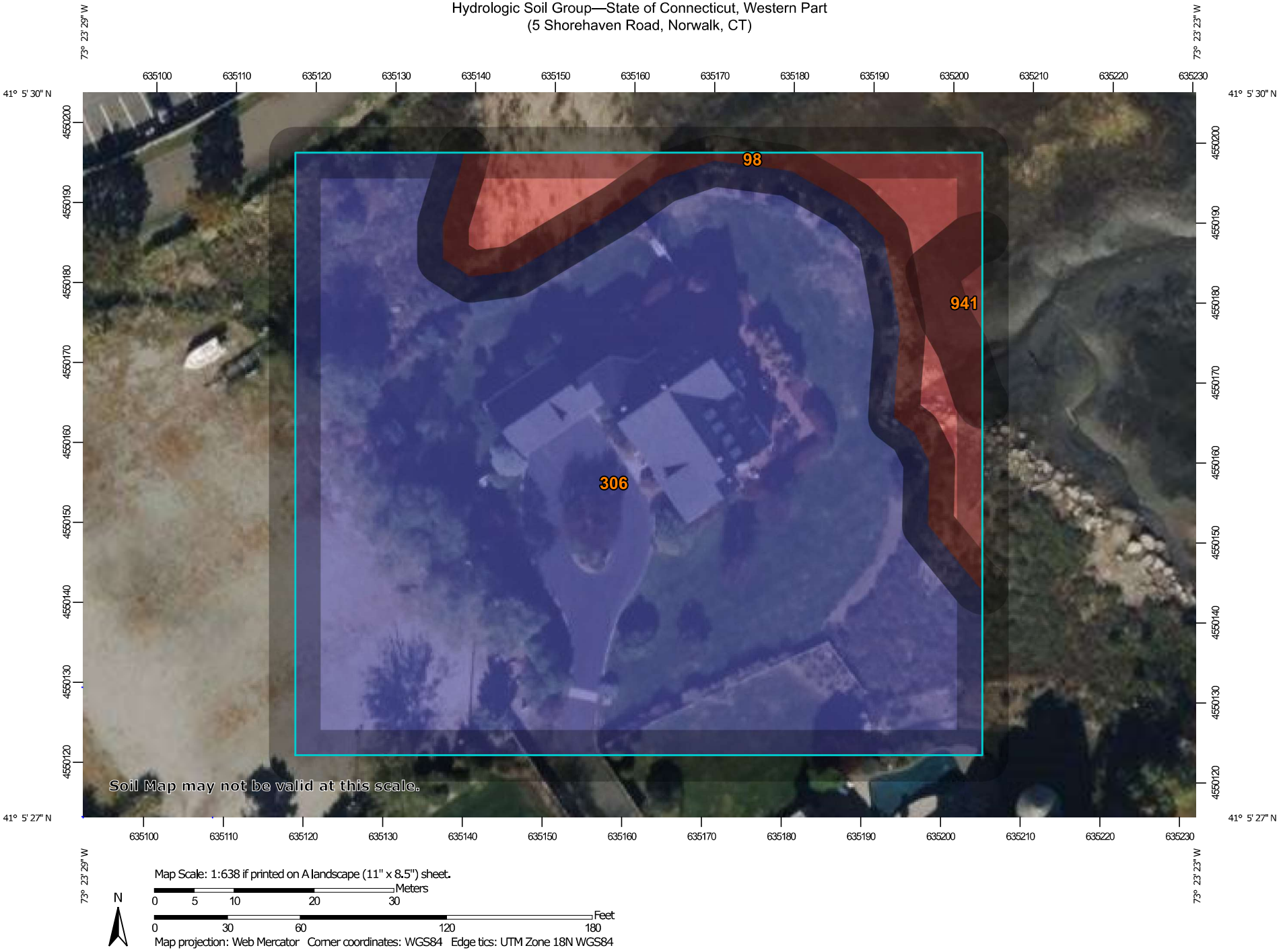
Pond DB: Cultec R150XLHD



Stage-Area-Storage for Pond DB: Cultec R150XLHD

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
4.00	0	5.04	120	6.08	245
4.02	2	5.06	123	6.10	247
4.04	3	5.08	126	6.12	249
4.06	5	5.10	129	6.14	251
4.08	7	5.12	131	6.16	252
4.10	8	5.14	134	6.18	254
4.12	10	5.16	137	6.20	256
4.14	12	5.18	140	6.22	258
4.16	13	5.20	143	6.24	259
4.18	15	5.22	145	6.26	261
4.20	17	5.24	148	6.28	263
4.22	18	5.26	151	6.30	265
4.24	20	5.28	154	6.32	266
4.26	22	5.30	156	6.34	268
4.28	23	5.32	159	6.36	270
4.30	25	5.34	162	6.38	272
4.32	27	5.36	164	6.40	273
4.34	28	5.38	167	6.42	275
4.36	30	5.40	170	6.44	277
4.38	32	5.42	172	6.46	279
4.40	33	5.44	175	6.48	280
4.42	35	5.46	178	6.50	**282**
4.44	37	5.48	180		
4.46	38	5.50	183		
4.48	40	5.52	185		
4.50	42	5.54	188		
4.52	45	5.56	190		
4.54	48	5.58	193		
4.56	51	5.60	195		
4.58	54	5.62	198		
4.60	57	5.64	200		
4.62	60	5.66	203		
4.64	62	5.68	205		
4.66	65	5.70	208		
4.68	68	5.72	210		
4.70	71	5.74	212		
4.72	74	5.76	214		
4.74	77	5.78	217		
4.76	80	5.80	219		
4.78	83	5.82	221		
4.80	86	5.84	223		
4.82	89	5.86	225		
4.84	91	5.88	227		
4.86	94	5.90	229		
4.88	97	5.92	231		
4.90	100	5.94	233		
4.92	103	5.96	235		
4.94	106	5.98	237		
4.96	109	6.00	238		
4.98	112	6.02	240		
5.00	114	6.04	242		
5.02	117	6.06	244		

Hydrologic Soil Group—State of Connecticut, Western Part
(5 Shorehaven Road, Norwalk, CT)



Map Scale: 1:638 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 30 60 120 180

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
98	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	D	0.2	12.7%
306	Udorthents-Urban land complex	B	1.4	86.2%
941	Barn Island mucky peat, 0 to 2 percent slopes, very frequently flooded	D	0.0	1.1%
Totals for Area of Interest			**1.6**	**100.0%**

DEPARTMENT OF ENGINEERING

CITY OF NORWALK
Christine Cardascia, P.E.
Assistant Engineer /
Department of Engineering
125 East Avenue
Norwalk, CT 06851
Office: (203) 854-7873
Permits: (203) 854-4161
www.norwalkct.gov
ccardascia@norwalkct.gov
dpwpermits@norwalkct.gov

March 2, 2026

Sent via email to: avind@kousidisengineering.com

Avind Baur, P.E.
Project Manager
Kousidis Engineering, LLC

RE: 5 Shorehaven Road (District 03, Block 78, Lot 38)
Proposed Single-Family Residence Addition and Drainage Easement Modifications
Department of Engineering's Plan Review Comments

Dear Mr. Baur:

The Department of Engineering has reviewed the supportive documents associated with the proposed development at the above-referenced property. The focus of our review has been to confirm the documents provided are in in conformance with the standards set forth in the City of Norwalk (City) Department of Public Works (DPW) Roadway Standards, and Standard Specifications, as amended and supplemented, Drainage Manual, as amended and supplemented, Standard Detailed Drawings, as amended and supplemented, and other applicable design standards.

The following documents were provided and included in our review:

- Site Plan titled "Site Development Plan 5 Shorehaven Road Norwalk, Ct," prepared by Kousidis Engineers L.L.C., dated 01/21/2026
- Stormwater Report titled "Drainage Analysis Located at 5 Shorehaven Road Norwalk, Connecticut," prepared by Kousidis Engineers L.L.C., dated 01/21/2026
- Engineering Report titled "Operations and Maintenance Plan," prepared by Kousidis Engineers L.L.C., dated 01/21/2026

The following are the Department of Engineering's review comments highlighting sections that will require revision or additional information prior to our departmental sign-off. **A written response addressing each comment is required as part of the resubmittal**:

1. The easement language shall be revised to reflect the proposed pipe realignment and corresponding modification to the drainage easement limits. The revised easement shall clearly grant the City rights of access for inspection, maintenance, repair, and replacement of the drainage infrastructure, and shall reference the updated bearings and legal description reflecting the adjusted alignment. Final easement documents shall be subject to review and approval by the City prior to filing on the Land Records.

2. The Site Plan and **Engineering Report** shall be **sealed** and signed by a Professional Engineer licensed in the State of Connecticut.
3. Provide revised hydraulic calculations for the proposed rerouted pipe system. The analysis shall include Manning capacity calculations for all pipe segments, friction losses associated with the increased pipe length, and minor losses at the proposed manhole. A hydraulic grade line (HGL) analysis shall be provided demonstrating that the proposed configuration provides equal or greater capacity than the existing straight alignment and does not increase upstream HGL elevations or create surcharge conditions. Revise the plans and supporting calculations accordingly. The engineer should provide:
    a. Manning capacity calculations for:
        i. Existing pipe
        ii. Each proposed pipe segment
    b. Velocity checks
    c. Friction losses for each pipe
    d. Manhole loss calculations
    e. Full HGL profile (existing vs. proposed)
4. The proposed Cultec R-150XLHD units do not appear to have the minimum required cover. Please revise the plans to provide the required cover in accordance with the manufacturer's specifications and the submitted construction detail.
5. Please confirm if any exterior utility work is proposed as part of the development. Should utility work be proposed, the plan shall be revised to include all existing and proposed utility information (i.e. pipe size, material, inverts, etc.) and proposed connection locations and abandonments along with the corresponding details.
6. Any existing trees that are to be removed within the City's right-of-way that are 8 inches or greater in caliper, will require a tree removal permit and must be posted by the City's Tree Warden at least 10 days in advance, in accordance with the City Code Chapter 112.
    a. City trees to be removed shall be replaced in accordance with City Code Chapter 112-10C.

Floodplain & Floodways:

The applicant shall ensure that the design fully complies with all applicable sections of the City of Norwalk Drainage Manual and other referenced standards. While the City has highlighted specific sections for which written confirmation is required, the applicant remains responsible for adherence to all provisions of the manual, including those not specifically referenced in these comments. Compliance with all standards is a condition of approval.

1. The applicant shall adhere to all applicable Planning & Zoning floodway and floodplain standards, as well as Department of Public Works (DPW) drainage and culvert design requirements. Where regulations or design criteria from multiple authorities apply—including FEMA, the National Flood Insurance Program (NFIP), Connecticut DEEP, and any other applicable local, state, or federal agencies—the applicant shall follow the most restrictive parameters to ensure full compliance with hydraulic, floodway, stormwater, and maintenance standards. Documentation demonstrating compliance with all applicable agencies and regulatory bodies shall be provided with the submittal.
2. Per section 1.6.2 Floodplain Management Plan of the 2017 Norwalk Drainage Manual; For any site located partially or entirely within a floodplain or floodway as designated on the Fairfield County Flood Insurance Rate Maps (https://msc.fema.gov/portal), the applicant shall prepare a report describing the existing conditions of the floodplain or floodway, proposed activities within the floodplain or floodway, and the potential impacts to flooding that may result from the project. In cases where floodplain or floodway fill is proposed, the applicant shall include hydraulic analysis

in sufficient detail to document compliance with FEMA standards. Note that for floodway fill detailed hydraulic modeling will be required.

Please note this is a preliminary review of the submitted documents. Additional comments may be forthcoming once the requested information is received.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Christine Cardascia

Christine Cardascia, P.E.
Assistant Engineer

Cc: DPW Permits
James Meehan, P.E., Principal Engineer – Department of Engineering
Wilber Giron, P.E., Permit Engineer – Department of Engineering
Ralph Kolb, P.E., Sr. Environmental Engineer – Water Pollution Control Authority
Mario Pizighelli, P.E., Stormwater Systems Manager – Water Pollution Control Authority
Garrett Bolella, P.E., Assistant Director – Transportation, Mobility and Parking
Benjamin Yeung, P.E., Senior Traffic Engineer – Transportation, Mobility and Parking
Nathan Fankhanel, Junior Engineer – Transportation, Mobility and Parking
Steven Kleppin, Director – Planning and Zoning
Bryan Baker, Principal Planner – Planning and Zoning
Michelle Andrzejewski, Senior Planner – Planning and Zoning
Amelia Williams, Land Use Planner – Planning and Zoning
Tammy Maldonado, Zoning Enforcement Officer – Planning and Zoning
Alexis Cherichetti, Senior Environmental Officer/Assistant Director – Conservation and Planning and Zoning

Kousidis Engineering, LLC
Land Development Consultants & Site Design

February 05, 2026

Amelia Williams
Land Use Planner
Planning & Zoning Department
City of Norwalk
125 East Avenue
Norwalk, CT 06851

RE: 5 Shorehaven Road,
Letter addressing comments submitted by the Planning & Zoning Department

Dear Ms. Williams,

Enclosed please find revised materials for the proposed development at the address mentioned above:

- Letter to Amelia Williams., dated February 05, 2026.
- Site Development Plan, dated January 21, 2026, revised February 05, 2026.
- Floor Plans, dated January 16, 2026, revised February 04, 2026.

This is a follow up response to the comments issued on February 02, 2026, about the Site Development Plan for a residential addition dated January 16, 2026, and further described in the Drainage Analysis. In response to the comments:

1) The proposed additions have been raised to be 2' above BFE of elevation 12.0'. A step has been added to the interior of the addition to bring the floor elevation to 14.0'
2) The drainage pipe and silt fence have bene relocated farther from the tidal wetlands area. All proposed activities have been removed from the Coastal Jurisdiction Line.
3) A stormwater detention system has been provided which collects approximately an equivalent area to the impervious area proposed. The drainage system has been designed to provide water quality volume for the increase of impervious area and provide groundwater recharge through the surrounding suitable soils.
4) All proposed improvements have been designed to meet FEMA standards for activity in the Flood Zone. The proposed additions do not contain living space below the BFE, and have been properly flood vented to minimize threats to life and property.

Please feel free to contact me directly with any questions or comments.

Sincerely,



Jim Kousidis, P.E.,
CT Lic. #26830

CITY OF NORWALK
Planning & Zoning Commission
Norwalk City Hall, Room 129
125 East Avenue,
Norwalk, CT 06856-5125

MEMORANDUM March 11th, 2026

TO: Planning and Zoning Commission – Chapin Bryce, Chair

FROM: Amelia Williams, Land Use Planner

SUBJECT: #2026-09 CSPR – Kousidis Engineering, LLC – 5 Shorehaven Road – Construct additions to a single family residence, reconfigure the driveway, and relocate a storm drain pipe within fifty (50) feet of tidal wetlands.

District: 3 **Block:** 78 **Lot:** 38 **Zone:** CD-1L **Flood Zone:** AE (EL.12)

ZONING HISTORY:
The 1.1-acre property currently consists of a single-family residence with an integral garage, in-ground pool, and recently constructed decks. There is existing vegetation and natural features that separate the limit of lawn from the tidal wetlands. No stormwater management system currently exists on site and the entire property is located within the flood zone.

PROPOSED USE/STRUCTURE:
The applicant is proposing to construct two additions, relocating a drainage pipe (and easement) to accommodate one, and reconfigure the driveway. The structure is not currently flood compliant so the cost of work will be limited to 25% of the appraised value of the structure. The new additions will be made flood compliant by being raised and flood vented. The impervious surface area is proposed to increase by 2,222 square feet.

STAFF COMMENTS:
- The applicant redesigned the additions to make them flood compliant as required and provided all necessary details to demonstrate compliance with the zoning regulations.
- The drainage pipe and associated silt fence should be relocated as far from the tidal wetlands as possible; the applicant moved them slightly in response to this recommendation.
- The impervious surface area is increasing by almost 5% (2,222 sf) with this proposal, so Staff recommended the applicant consider making the new driveway permeable.
- Staff recommended the additions, especially the one to the southeast, be reduced and the drainage pipe moved away from the wetlands.
- The Commission must consider if approving the project will result in increased exposure of life and property to flood hazards. It is not recommended to allow significant expansion of living space in flood prone areas to be consistent with CCMA flood hazard policy to minimize threats to life and property.

ZONING BOARD OF APPEALS: No variances were needed for this proposal.

SIGN-OFFS: Comments have been received from the Department of Public Works.

VIOLATIONS: There are no zoning violations currently on the property.

The following resolutions are offered:

DRAFT RESOLUTION TO APPROVE

BE IT RESOLVED that application #2026-09 CSPR – Kousidis Engineering, LLC – 5 Shorehaven Road – Construct additions to a single family residence, reconfigure the driveway, and relocate a storm drain pipe within fifty (50) feet of tidal wetlands be **APPROVED** subject to the following conditions:

1. That the building and site be developed in accordance with the following plans:

    a. Per site development plan dated 1/21/2026 and revised 2/5/2026 prepared by Kousidis Engineering, LLC, Fairfield, CT

    b. Per architectural plans dated 1/16/2026 and revised 2/4/2026 prepared by Peter Cadoux Architects, Westport, CT

2. That all department sign-offs are obtained prior to issuance of any Zoning Permit; and

3. That all required soil sedimentation and erosion controls are in place prior to the start of any construction; and

4. That any additional needed soil sedimentation and erosion controls be installed at the direction of Staff; and

5. That any changes to the plans be reviewed by Staff prior to implementation; and

6. That the applicant obtains the legal right to relocate the stormwater pipe and easement and provide Staff with the final revised easement that has been filed on the Norwalk Land Records (per DPW approval), prior to issuance of a zoning permit; and

7. That the total cost of work for the project (parts, labor, etc.) does not exceed 25% of the appraised value of the existing structure; and

8. That any utilities comply with setbacks and flood regulations; and

9. That flood certifications be submitted prior to issuance of a zoning permit and prior to obtaining a Certificate of Zoning Compliance (COZC), prepared by a CT licensed engineer or architect; and

10. Nothing in this permit shall obviate the requirements for the applicant to obtain any other assents, permits or licenses required by law or regulation by the City of Norwalk, State of Connecticut, or the Government of the United States, including any approval required by

the Connecticut Department of Environmental Protection and U.S. Army Corps of Engineers- obtaining such assents, permits or licenses is the sole responsibility of the applicant; and

BE IT FURTHER RESOLVED that this proposal complies with all applicable coastal resource and use policies and with all applicable sections of the Zoning Regulations for the City of Norwalk; and

BE IT FURTHER RESOLVED that these preceding conditions and modifications of this application are integral to the Commission's approval because, if not for those conditions and modifications, the Commission would have denied this application.

BE IT FURTHER RESOLVED that the effective date of this approval shall be March 27th, 2026.

You must obtain a zoning approval and a building permit prior to any work on the site.

DRAFT RESOLUTION TO DENY

BE IT RESOLVED that application #2026-09 CSPR – Kousidis Engineering, LLC – 5 Shorehaven Road – Construct additions to a single family residence, reconfigure the driveway, and relocate a storm drain pipe within fifty (50) feet of tidal wetlands as shown on site on the site development plan dated 1/21/2026 and revised 2/5/2026 prepared by Kousidis Engineering, LLC, Fairfield, CT and architectural plans dated 1/16/2026 and revised 2/4/2026 prepared by Peter Cadoux Architects, Westport, CT, be **DENIED** subject to the following reasons:

1.
2.

BE IT FURTHER RESOLVED that the effective date of this denial shall be March 27th, 2026.

I ♥ NORWALK

Planning & Zoning Commission

APPLICATION FOR COASTAL SITE PLAN REVIEW

Application must be accompanied by two (2) printed and one (1) digital set of all documents, and appropriate filing fee. Filing Fee: $310.00 for single or two family use; $810.00 for all other uses.

Application Completion Date: Official Receipt Date: Fee Paid:

1. **Property Address:** 30 Charles Street - East Norwalk, CT **2.** D/B/L/U: 3 /7 / 14

3. Proposed Work: Refer to Schedule A attached hereto. **4.** Zone: CD-2

5. Applicant Identification:

Applicant Name: Tomas Builders, LLC

Address: c/o E. Suchy 1055 Washington Boulevard, 4th Floor - Stamford, CT 06901

Phone Number: c/o Elizabeth A.B. Suchy, Esq. - 203-252-2656 Email: c/o Elizabeth A.B. Suchy, Esq. - esuchy@carmodylaw.com

Interest in Property: ☑ fee simple ☐ option ☐ lessee ☐ easement ☐ other (specify): _____

List primary contact for correspondence *if other than applicant* (Agent or Attorney):

Name: Elizabeth A.B. Suchy, Esq.

Address: Carmody Torrance Sandak & Hennessey LLP, 1055 Washington Boulevard, 4th Floor, Stamford, CT 06901

Business Phone: 203-252-2656 Email: esuchy@carmodylaw.com

6. Property Owner, if different than applicant:

Owner Name: JTS Charles, LLC

Address: 30 Charles Street, East Norwalk, CT

Phone Number: c/o E. Suchy 203-252-2656 Email: c/o E. Suchy esuchy@carmodylaw.com

7. Project Information:

Please check the appropriate box to identify the plan or application that has resulted in this Coastal Site Plan Review:

- ● Coastal Site Plan for Zoning Compliance/Zoning Permit
- ○ Subdivision or Resubdivision Application
- ○ Special Permit or Special Exception Application
- ○ Site Plan Review Application
- ○ Variance Application
- ○ Municipal Project (CGS Section 8-24)

6. Project Site Plans:

Please provide project site plans that clearly and accurately depict the following information, and check the appropriate boxes to indicate that the plans are included in this application:

- ☑ Project location
- ☑ Existing and proposed conditions, including buildings and topography
- ☑ **All** coastal resources on and contiguous to the site
- ☑ High tide line [as defined in CGS Section 22a-359(c)] and mean high water mark elevation contours (for parcels abutting coastal waters and/or tidal wetlands only)
- ☑ Soil erosion and sediment controls
- ☑ Storm water management & treatment practices
- ☑ Ownership and type of use on adjacent properties
- ☑ Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)
- ☑ Landscaping and planting plan (existing & proposed)
- ☑ Utility Plan (existing & proposed: water, drainage, sanitary sewers, electric & gas lines)
- ☑ Easements (utility, sight preservation, conservation, pedestrian)

7. Site Information:

a) Street Address or Geographical Description:
30 Charles Street - East Norwalk, CT 06855

b) Is project or activity proposed at a waterfront site (includes tidal wetlands frontage)? ○YES ●NO

c) Name of on-site, adjacent, or downstream coastal, tidal, or navigable waters, if applicable:
Norwalk Harbor

d) Identify and describe the existing land use in and adjacent to the site. Include description of any existing structures and significant features on the project site:
See Schedule A attached hereto and made a part hereof.

e) Indicate the area of the project site: 0.1705± acres **or** 7,429+\- square feet

f) Check the appropriate box below to indicate total land area of disturbance of the project or activity (please also see Question #9 regarding proposed stormwater best management practices):

- ○ Project or activity will disturb five (5) or more total acres of land area on the site. *Registration for CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities required.*
- ◉ Project or activity will disturb land, but less than five (5) total acres of land area would be disturbed. *A soil erosion and sedimentation control plan must be submitted.*
- ○ Project or activity will not disturb any land area.

g) Does the project include a shoreline flood and erosion control structure as defined in CGS section 22a-109(d)? ○Yes ●No

8. Description of Proposed Project or Activity:

Describe the proposed project or activity including its purpose and related activities such as site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover over existing conditions resulting from the project; phasing, timing and method of proposed construction; and new uses and changes from existing uses (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application report by Redniss & Mead, attached hereto and made a part hereof.

9. Description of Proposed Stormwater Best Management Practices:

Describe the stormwater best management practices that will be utilized to ensure that the volume of runoff generated by the first inch of rainfall is retained on-site, especially if the site or stormwater discharge is adjacent to tidal wetlands. If runoff cannot be retained on-site, describe the site limitations that prevent such retention and identify how stormwater will be treated before it is discharged from the site. Also demonstrate that the loadings of total suspended solids from the site will be reduced by 80 percent on an average annual basis, and that post-development stormwater runoff rates and volumes will not exceed pre-development runoff rates and volumes (*attach additional pages if necessary*):

See Coastal Area Management Report by Redniss & Mead, attached hereto and made a part hereof.

10. Identification of Applicable Coastal Resources and Coastal Resource Policies:

Identify the coastal resources and associated policies that apply to the project by placing a check mark in the appropriate box(es) in the following table.

Coastal Resources	On-site	Adjacent	Off-site but within the influence of project	Not Applicable
General Coastal Resources* - Definition: CGS Section 22a-93(7); Policy: CGS Section 22a-92(a)(2)	☑	☐	☐	☐
Beaches & Dunes - Definition: CGS Section 22a-93(7)(C); Policies: CGS Sections 22a-92-(b)(2)(C) and 22a-92(c)(1)(K)	☐	☐	☐	☑
Bluffs & Escarpments - Definition: CGS Section 22a-93(7)(A); Policy: CGS Section 22a-92(b)(2)(A)	☐	☐	☐	☑
Coastal Hazard Area - Definition: CGS Section 22a-93(7)(H); Policies: CGS Sections 22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), and 22a-92(c)(2)(B)	☐	☐	☐	☑
Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters - Definition: CGS Sections 22a-93(5), 22a-93(7)(G), and 22a-93(7)(K), and 22a-93(7)(L) respectively; Policies: CGS Sections 22a-92(a)(2) and 22a-92(c)(2)(A)	☐	☐	☐	☑
Developed Shorefront - Definition: CGS Section 22a-93(7)(I); Policy: 22a-92(b)(2)(G)	☐	☐	☐	☑
Freshwater Wetlands and Watercourses - Definition: CGS Section 22a-93(7)(F); Policy: CGS Section 22a-92(a)(2)	☐	☐	☐	☑
Intertidal Flats - Definition: CGS Section 22a-93(7)(D); Policies: 22a-92(b)(2)(D) and 22a-92(c)(1)(K)	☐	☐	☐	☑
Islands - Definition: CGS Section 22a-93(7)(J); Policy: CGS Section 22a-92(b)(2)(H)	☐	☐	☐	☑
Rocky Shorefront - Definition: CGS Section 22a-93(7)(B); Policy: CGS Section 22a-92(b)(2)(B)	☐	☐	☐	☑
Shellfish Concentration Areas - Definition: CGS Section 22a-93(7)(N); Policy: CGS Section 22a-92(c)(1)(I)	☐	☐	☐	☑
Shorelands - Definition: CGS Section 22a-93(7)(M); Policy: CGS Section 22a-92(b)(2)(I)	☐	☐	☐	☑
Tidal Wetlands - Definition: CGS Section 22a-93(7)(E); Policies: CGS Sections 22a-92(a)(2), 22a-92(b)(2)(E), and 22a-92(c)(1)(B)	☐	☐	☐	☑

* General Coastal Resource policy is applicable to all proposed activities

11. Consistency with Applicable Coastal Resource Policies and Standards:

Describe the location and condition of the coastal resources identified in Question #10 and explain how the proposed project or activity is consistent with all of the applicable coastal resource policies and standards; also see adverse impacts assessment in Question #14 below (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application by Redniss & Mead attached hereto and made a part hereof.

12. Identification of Applicable Coastal Use and Activity Policies and Standards:

Identify all coastal policies and standards in or referenced by CGS Section 22a-92 applicable to the proposed project or activity:

- [x] General Development* - CGS Sections 22a-92(a)(1), 22a-92(a)(2), and 22a-92(a)(9)
- [ ] Water-Dependent Uses** - CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A); Definition CGS Section 22a-93(16)
- [ ] Ports and Harbors - CGS Section 22a-92(b)(1)(C)
- [ ] Coastal Structures and Filling - CGS Section 22a-92(b)(1)(D)
- [ ] Dredging and Navigation - CGS Sections 22a-92(c)(1)(C) and 22a-92(c)(1)(D)
- [ ] Boating - CGS Section 22a-92(b)(1)(G)
- [ ] Fisheries - CGS Section 22a-92(c)(1)(I)
- [ ] Coastal Recreation and Access - CGS Sections 22a-92(a)(6), 22a-92(C)(1)(j) and 22a-92(c)(1)(K)
- [x] Sewer and Water Lines - CGS Section 22a-92(b)(1)(B)
- [ ] Fuel, Chemicals and Hazardous Materials - CGS Sections 22a-92(b)(1)(C), 22a-92(b)(1)(E) and 22a-92(c)(1)(A)
- [ ] Transportation - CGS Sections 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and 22a-92(c)(1)(H)
- [ ] Solid Waste - CGS Section 22a-92(a)(2)
- [ ] Dams, Dikes and Reservoirs - CGS Section 22a-92(a)(2)
- [ ] Cultural Resources - CGS Section 22a-92(b)(1)(J)
- [ ] Open Space and Agricultural Lands - CGS Section 22a-92(a)(2)

* General Development policies are applicable to all proposed activities

** Water-dependent Use policies are applicable to all activities proposed at waterfront sites, including those with tidal wetlands frontage.

13. Consistency With Applicable Coastal Use Policies and Standards:

Explain how the proposed activity or use is consistent with all of the applicable coastal use and activity policies and standards identified in Question #12. **For projects proposed at waterfront sites (including those with tidal wetlands frontage)**, particular emphasis should be placed on the evaluation of the project's consistency with the water-dependent use policies and standards contained in CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A) -- also see adverse impacts assessment in Question #15 below (attach additional pages if necessary):

See Schedule A and Coastal Area Management Application by Redniss & Mead attached hereto and made a part hereof.

14. Identification of Potential Adverse Impacts on Coastal Resources: (*Must be completed for ALL projects.*)
Identify the adverse impact categories below that apply to the proposed project or activity.

The **'applicable'** column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(15). If an adverse impact **may result** from the proposed project or activity, please use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Coastal Resources	Applicable	Not Applicable
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)	☐	☑
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	☑
Degrading existing circulation patterns of coastal water through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours - CGS Section 22a-93(15)(B)	☐	☑
Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff - CGS Section 22a-93(15)(D)	☐	☑
Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction - CGS Section 22a-93(15)(C)	☐	☑
Degrading visual quality through significant alteration of the natural features of vistas and view points - CGS Section 22a-93(15)(F)	☐	☑
Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity - CGS Section 22a-93(15)(A)	☐	☑
Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat - CGS Section 22a-93(15)(G)	☐	☑
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)	☐	☑
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	☑

15. **Identification of Potential Adverse Impacts on Water-dependent Uses:** ***(Complete only if the project/activity is proposed at a waterfront site.)***

a) Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(17). If an adverse impact **may result** from the proposed project or activity, use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Future Water-dependent Development Opportunities and Activities	Applicable	Not Applicable
Locating a non-water-dependent use at a site physically suited for or planned for location of a water-dependent use - CGS Section 22a-93(17)	☐	☑
Replacing an existing water-dependent use with a non-water-dependent use - CGS Section 22a-93(17)	☐	☑
Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters - CGS Section 22a-93(17)	☐	☑

b) Identification of existing and/or proposed Water-dependent Uses:

Describe the features or characteristics of the proposed activity or project that qualify as water-dependent uses as defined in CGS Section 22a-93(16). If general public access to coastal waters is provided, please identify the legal mechanisms used to ensure public access in perpetuity, and describe any provisions for parking or other access to the site and proposed amenities associated with the access (e.g., boardwalk, benches, trash receptacles, interpretative signage, etc.) *:

See Schedule A attached hereto and made a part hereof.

*If there are no water-dependent use components, describe how the project site is not appropriate for the development of a water-dependent use.

16. Mitigation of Potential Adverse Impacts:

Explain how all potential adverse impacts on coastal resources and/or future water-dependent development opportunities and activities identified in Questions #14 & #15 have been avoided, eliminated, or minimized (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application, attached hereto and made a part hereof.

17. Remaining Adverse Impacts:

Explain why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated and why the project as proposed is consistent with the Connecticut Coastal Management Act (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application by Redniss & Mead attached hereto and made a part hereof.

By signing this application, the applicant or his/her agent certifies that they are familiar with the information provided in this application and are aware of the penalties for obtaining a permit through deception or by submission of inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspection of the subject property by the Commissioners and designated staff of the Commission or consultants to the Commission, at reasonable times, during the pendency of the application.

Tomas Builders, LLC

* **Applicant's Signature:** Carmody Torrance Sandak & Hennessey LLP **DATE:** 1/26/2026

By: Carmody Torrance Sandak & Hennessey LLP, Its Attorneys

* **Agent's Signature:** Carmody Torrance Sandak & Hennessey LLP **DATE:** 1/26/2026

By: Carmody Torrance Sandak & Hennessey LLP, Its Attorneys

*See letter of consent attached hereto

TOMAS BROTHERS, LLC & JMT CHARLES, LLC
30 CHARLES STREET, EAST NORWALK, CT
APPLICATION FOR COASTAL SITE PLAN REVIEW
NARRATIVE -SCHEDULE A

I. BACKGROUND

JMT Charles, LLC ("Owner") is the owner of vacant property with the located at 30 Charles Street in East Norwalk, Connecticut. Designated as Tax Lot 14 in Block 7 of the Third Taxing District (hereinafter the "Property"), the Property is approximately 67,429± sq. ft., is zoned CD-2 and is located within the boundary of the Coastal Area Management (CAM) zone (AE 10). (Refer to "Property & Topographic Survey Depicting 65, 67, 69, 69½ Osborne Avenue and 30, 32, & 34 Charles Street Norwalk, Connecticut Prepared for Theresa Ruhland & Salvatore DiIorio Scale: 1" = 20' Date 03/08/2021" and "Zoning Site Plan Depicting 30, 32 & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers, LLC (Sheet No. ZSP-1)" dated 12/12/2025 both prepared by Redniss & Mead, attached hereto and made a part hereof). The Property is surrounded by other residentially developed properties including single-family and multi-family developments.

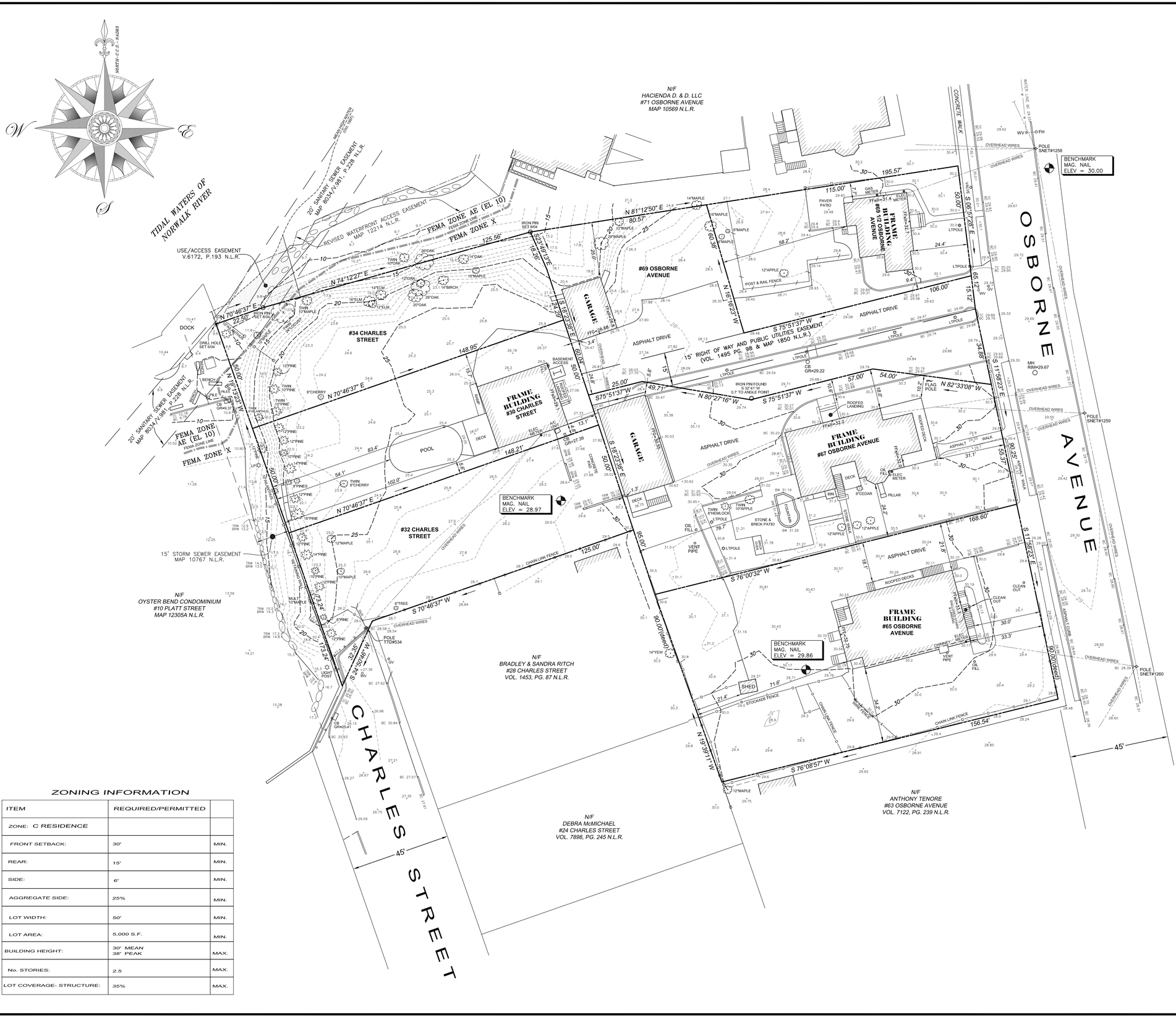
II. PROPOSAL

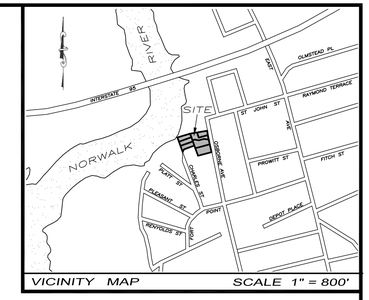
The Owner along with Tomas Brothers, LLC (collectively the "Applicant") propose the construction, use and occupancy of a two-family dwelling on the Property along with various site improvements such as stormwater management, landscaping, grading and retaining walls. Access to the parcel will be gained from an established right of way from Osborne Avenue. (Refer to "Residence for 30 Charles Street" (Sheets 1 of 3, 2 of 3 and 3 of 3), dated Jan. 5 2026, prepared by DeMasi Architects, P.C., and "Average Grade Exhibit Depicting 30 32 & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet No. AG-1)," "Site Grading Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet SE-1)," "Site Utilities Plan Depicting 30, 32 & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet No. SE-2)," "Sediment and Erosion Control Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT (Sheet No. SE-3)," "Site Removals Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet SE-4)," "Notes & Details Depicting 30, 32 & 34 Charles Street, Norwalk, CT (Sheet SE-5)," "Details Depicting 30, 32 & 34 Charles Street Norwalk, CT (Sheets SE-6, SE-7 and SE-8)" all dated December 12, 2025 prepared by Redniss & Mead, "Landscape Plan (Drawing No. LP-1)" dated December 17 2025 prepared by Environmental Land Solutions, LLC and "Project 30-32-34 Charles Street (Sheet L-1) dated 12/15/2025 prepared by Illuminate, all attached hereto ad made a part hereof).

III. COASTAL RESOURCES AND POLICIES

The Property is located within the coastal area management (CAM) zone, but no coastal resources exist on the property. The northwest corner is adjacent to the Norwalk Harbor. The Property is in Zone X as identified by the Federal Emergency Management Agency (FEMA), elevation 10. The finished first floor elevation for the proposed structure is well above 20 feet and is thereby compliant with the minimum flood elevation of 10 feet plus the additional two (2') feet required by the City of Norwalk Zoning Regulations. The only applicable coastal policies relating to this proposal are general development, and sewer and water lines.

The proposed two-family structure is consistent with uses permitted in the CD-2 zone and is representative of other uses in the neighborhood including single-, two-family and multi-family structures. Furthermore, the proposed site improvements are consistent with coastal policies outlined in the Connecticut Coastal Management Act. The proposed site improvements would occur away from sensitive coastal resources and would not impact their functions, all work would be completed within existing developed areas, and the stormwater management system on the property would be improved. No adverse impacts to coastal resources are expected, based upon information concerning coastal resources in the site vicinity and the installation of proper sediment and control measures during construction. (Refer to "Coastal Area Management Report Prepared for 30, 32 & 34 Charles Street Tomas Brothers LLC" ["CAM Report"] dated December 12, 2025, prepared by Redniss & Mead, attached hereto and made a part hereof.). ". . .[T]he proposed use is consistent with state goals and policies for coastal management and should be acceptable to the City of Norwalk." (CAM Report, p. 9).





NOTES:

1. *This survey has been prepared in accordance with Sections 20-300b-1 thru 20-300b-20 of the Regulations of Connecticut State Agencies and the Standards for Surveys and Maps in the State of Connecticut as adopted by the Connecticut Association of Land Surveyors, Inc. as a Property and Topographic Survey the Boundary Determination Category of which is a Resurvey conforming to Horizontal Accuracy Class A-2 and the locations and elevations of which conform to Topographic Accuracy Class T-2. It is intended to depict property boundaries, locations and elevations of improvements and topographic features.*

2. *Reference is hereby made to the following on file with Norwalk Land Records (N.L.R.):*
   65 OSBORNE AVENUE (District 3, Block 7, Lot 23)
   Vol. 8858, Pg. 296 - Warranty Deed
   67 OSBORNE AVENUE (District 3, Block 7, Lot 24)
   Vol. 790, Pg. 88 - Warranty Deed
   Lot labeled "Portion of Tax Lot 24", Map 9372
   69 OSBORNE AVENUE (District 3, Block 7, Lot 41)
   Vol. 8858, Pg. 300 - Warranty Deed
   Vol. 969, Pg. 31 - Sanitary Sewer Easement to the City of Norwalk
   Vol. 2338, Pg. 347 - Attachment in favor or Turcio
   Map 1850 - Right of Way
   Lot B, Map 9372
   69 1/2 OSBORNE AVENUE (District 3, Block 7, Lot 25)
   6,071 S.F. / 0.1393 Acres
   30 CHARLES STREET (District 3, Block 7, Lot 14)
   Vol. 1495, Pg. 98 - Warranty Deed
   32 CHARLES STREET (District 3, Block 7, Lot 15)
   Vol. 1495, Pg. 98 - Warranty Deed
   34 CHARLES STREET (District 3, Block 7, Lot 43)
   Vol. 1495, Pg. 98 - Warranty Deed

3. *Lot Areas:*
   65 OSBORNE AVENUE
   14,590 S.F. / 0.3349 Acres
   67 OSBORNE AVENUE
   13,388 S.F. / 0.3073 Acres
   69 OSBORNE AVENUE
   9,872 S.F. / 0.2266 Acres
   69 1/2 OSBORNE AVENUE
   6,071 S.F. / 0.1394 Acres
   30 CHARLES STREET
   7,429 S.F. / 0.1705 Acres
   32 CHARLES STREET
   7,654 S.F. / 0.1757 Acres
   34 CHARLES STREET
   6,965 S.F. / 0.1599 Acres
   TOTAL LOT AREA = 65,969 S.F. / 1.5144 Acres

4. *TOTAL Building Area = 7,952 sf / 12.1% (MAX ALLOWED = 17,192 S.F. / 26.1%)*

5. *Reference is made to Maps 49, 565, 1850, 8034, 9372, 10569, 11560, 10767, 12214 & 12710 N.L.R.*

6. *Reference is made to Access/Use Easement Vol. 6172, Pg. 193 N.L.R.*

7. *Elevations depicted hereon are based on North American Vertical Datum of 1988 (NAVD88).*

8. *Reference is made to FEMA Flood Insurance Rate Map No. 09001C0531G, Effective Date 7/8/2013. Portion of #34 Charles Street lies within Special Flood Hazard Area AE (EL 10') while the other Subject Parcels do not lie within a Special Flood Hazard Area.*

9. *Reference is made to instruments of record as labeled hereon.*

ZONING INFORMATION

ITEM	REQUIRED/PERMITTED	
ZONE: C RESIDENCE		
FRONT SETBACK:	30'	MIN.
REAR:	15'	MIN.
SIDE:	6'	MIN.
AGGREGATE SIDE:	25%	MIN.
LOT WIDTH:	50'	MIN.
LOT AREA:	5,000 S.F.	MIN.
BUILDING HEIGHT:	30' MEAN 38' PEAK	MAX.
No. STORIES:	2.5	MAX.
LOT COVERAGE- STRUCTURE:	35%	MAX.

PROPERTY & TOPOGRAPHIC SURVEY

DEPICTING

65, 67, 69 & 69½ OSBORNE AVENUE and 30, 32 & 34 CHARLES STREET

NORWALK, CONNECTICUT

PREPARED FOR

THERESA RUHLAND & SALVATORE DilORIO

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax: 203.357.1118
www.rednissmead.com

Scale: 1"=20' (0, 20, 40)

Drawn By: CJV | Checked By: LWP | Date: 03/08/2021

To my knowledge and belief this map is substantially correct as noted hereon

LAWRENCE W. POSSON, JR. CT. L.S. #18130

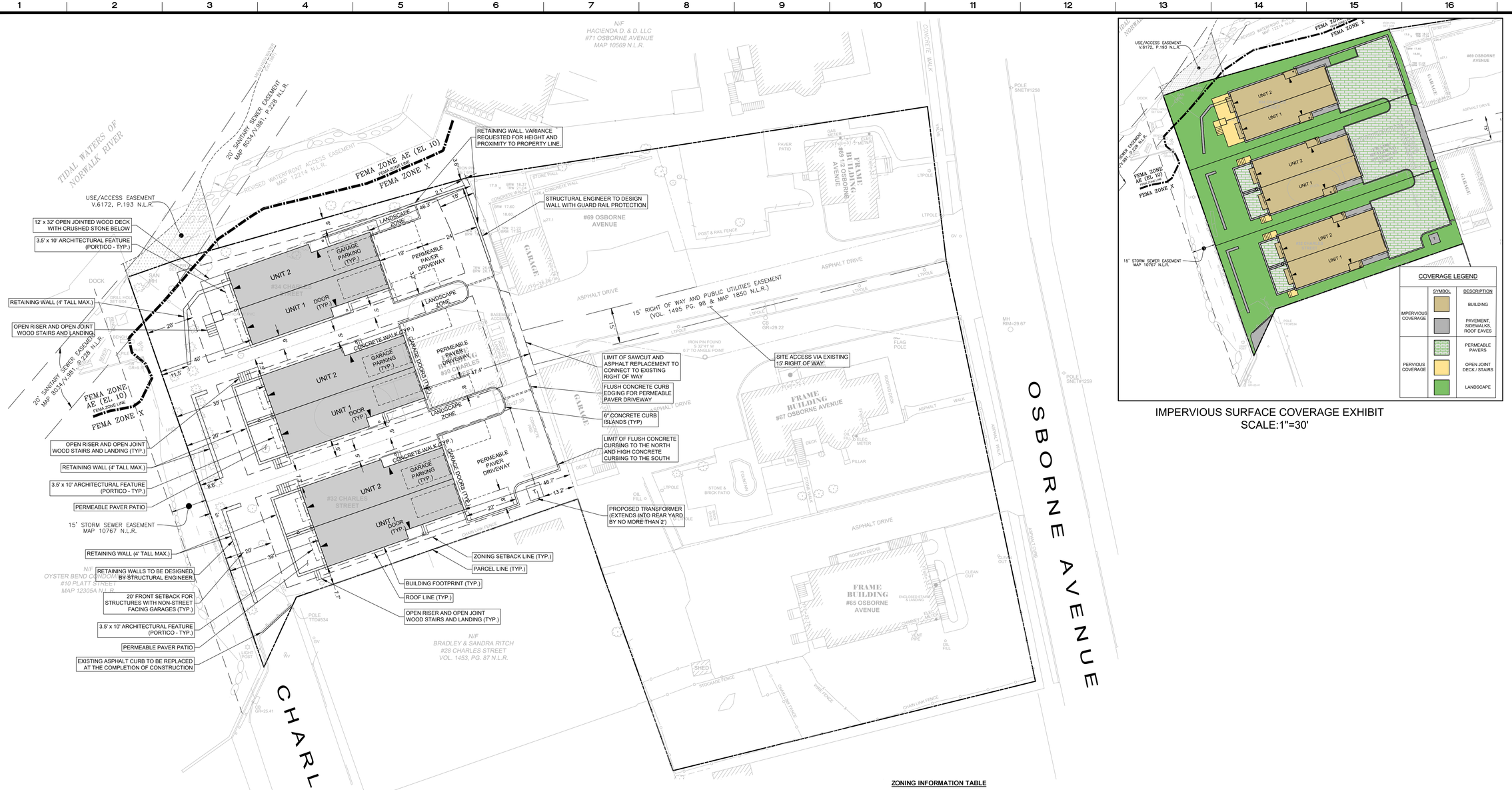
3/17/2021
DATE

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

Sheet No:

PSTS

Comm. No.: 10304-1



IMPERVIOUS SURFACE COVERAGE EXHIBIT
SCALE:1"=30'

ZONING INFORMATION TABLE
30, 32, and 34 Charles Street

12/12/2025		CD-2 Zone	Proposed Development		
			30 Charles Street	32 Charles Street	34 Charles Street
MINIMUM SIZE OF PLOT	AREA	5,000 SF	7,429± SF (0.17± acres)	7,654± SF (0.18± acres)	6,965± SF (0.16± acres)
HEIGHT	MAXIMUM	2.5 stories, Building Height: 32 ft max.; Total Building Height: 40 ft max.	2.5 stories 22.63' (To Midpoint) 30.85' (To Ridge)	2.5 stories 25.44' (To Midpoint) 30.69' (To Ridge)	2.5 stories 29.98' (To Midpoint) 35.94' (To Ridge)
MINIMUM YARDS	FRONT	20 ft min. for Dwellings with non street-facing Garage(s)	39 ft	39 ft	40 ft
	SIDE	5 feet	7.5 ft	7.3 ft	6.0 ft
	REAR	15 feet	47.4 ft	46.7 ft	46.3 ft
BUILDING TYPE			Duplex	Duplex	Duplex
USE DESIGNATION			Two-family Dwelling	Two-family Dwelling	Two-family Dwelling
RETAINING WALLS		5 ft. min. from Lot/Building Site Line and 4 ft. max. Height and in accordance with Section 4.3.16.M; except that Two-Family Detached Dwellings/Duplexes with detached Garage(s) and/or non-street-facing Garage(s) shall have 0 ft. min. from Lot/Building Site Line and 4 ft. max. Height	Distance to Lot Line Allowed 5 ft. min. 8.6 ft. = Proposed Distance to Lot Line Wall Height Allowed 4 ft. max. 4 ft.= Proposed Wall Height	Distance to Lot Line Allowed 5 ft. min. 5 ft. = Proposed Distance to Lot Line Wall Height Allowed 4 ft. max. 4.0 ft. = Proposed Wall Height	Distance to Lot Line Allowed 0 ft. min. 2.1 ft. = Proposed Distance to Lot Line Wall Height Allowed 4 ft. max. 8.8 ft. = Proposed Wall Height Note: Seeking Variance for Retaining Wall Height
IMPERVIOUS SURFACE COVERAGE		For Lot or Building Site Areas of 6,251 square feet to 12,499 square feet: a. Building Coverage is 2,186 square feet plus 20% of every additional square foot of Lot or Building Site Area greater than 6,251 square feet up to 12,499 square feet of Lot or Building Site Area. b. Impervious Surface Coverage is 50% of Lot or Building Site Area minus 1% for every additional 400 square feet of Lot or Building Site Area up to 12,499 squafe feet of Lot or Building Site Area.	Building Coverage Allowed (2,186+0.2(7,429-6,251)) = 2,421 sf allowed Impervious Coverage Allowed (50%-((7,429-6,251)/400))= 47% = 3,492 sf allowed 2,131 sf = Building Coverage Proposed 2,722 sf = Impervious Coverage Proposed 2,059sf = Permeable Surfaces	Building Coverage Allowed (2,186+0.2(7,654-6,251)) = 2,466 sf allowed Impervious Coverage Allowed (50%-((7,654-6,251)/400))= 46.5% = 3,559 sf allowed 2,131 sf = Building Coverage Proposed 2,754 sf = Impervious Coverage Proposed 1,793 sf = Permeable Surfaces	Building Coverage Allowed (2,186+0.2(6,965-6,251)) = 2,328 sf allowed Impervious Coverage Allowed (50%-((6,965-6,251)/400))= 48.2% = 3,357 sf allowed 1,945 sf = Building Coverage Proposed 2,399 sf = Impervious Coverage Proposed 1,419 sf = Permeable Surfaces
PARKING		2 spaces per unit	4 spaces	4 spaces	4 spaces

No.	Date	Revision
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ZONING SITE PLAN
DEPICTING
30, 32, & 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING
22 First Street | Stamford, CT 06905
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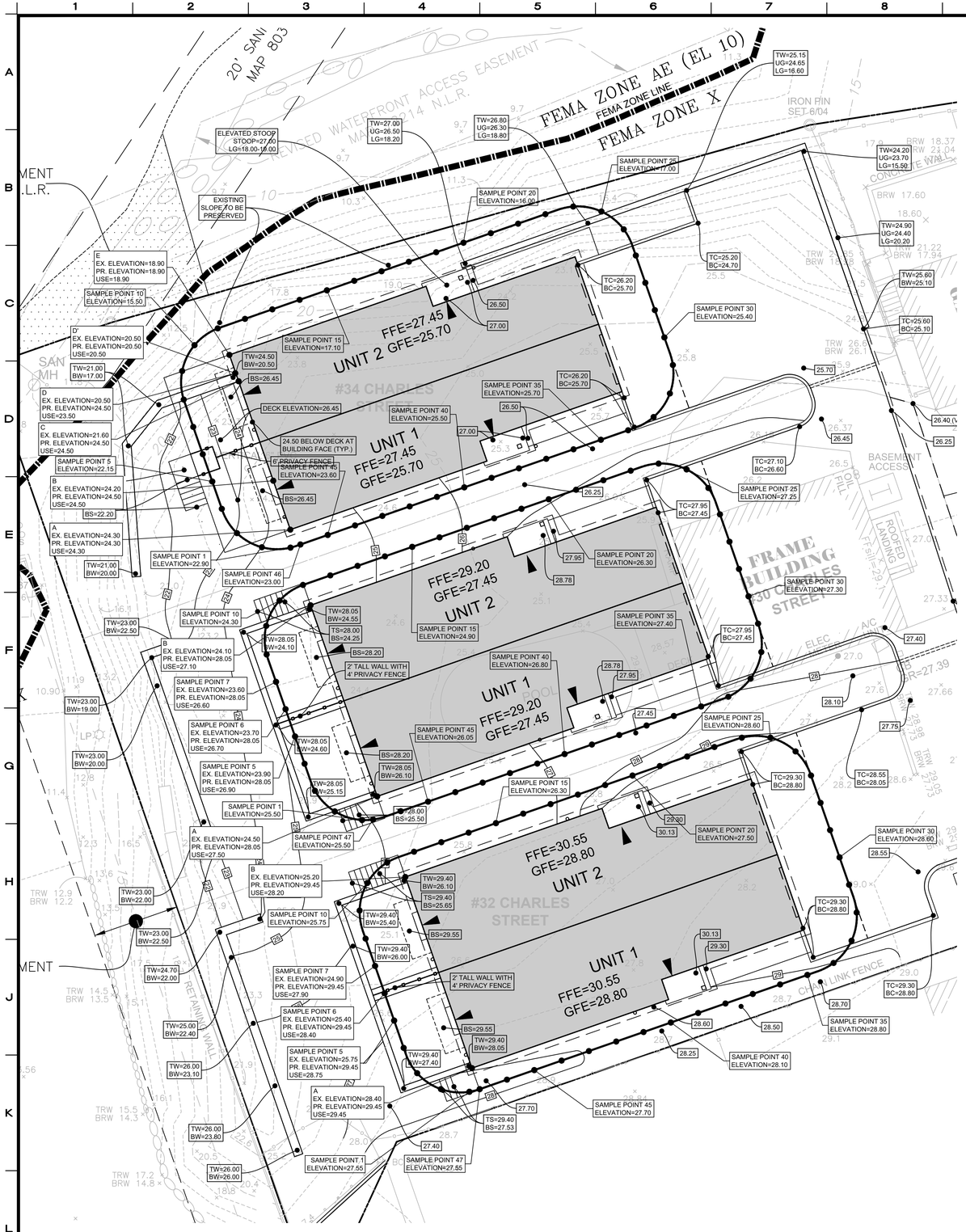
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DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT · VINCENT J. HYNES · LICENSED LAND SURVEYOR
No. 0032100
VINCENT J. HYNES CT. P.E. 32100
December 12, 2025
DATE

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Comm. No.: 10304

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PROPOSED CONDITIONS: 32 CHARLES STREET

Average Grade Calculation for Building Height

REFER TO ATTACHED EXHIBIT

Sample Point	Ground Elevation*	Notes	Sample Point	Ground Elevation*	Notes
1	27.55		31	28.60	
2	27.55		32	28.60	
3	27.55		33	28.60	
4	27.55		34	28.65	
5	28.75	Ex. + 3'	35	28.80	
6	28.40	Ex. + 3'	36	28.50	
7	27.90	Ex. + 3'	37	28.35	
8	25.75		38	28.30	
9	25.75		39	28.20	
10	25.75		40	28.10	
11	25.75		41	28.05	
12	28.80		42	27.90	
13	26.05		43	27.85	
14	26.15		44	27.75	
15	26.30		45	27.70	
16	26.50		46	27.60	
17	26.65		47	27.55	1.83 (length)
18	26.80				
19	26.95				
20	27.50				
21	28.05				
22	28.80				
23	28.60				
24	28.60				
25	28.60				
26	28.60				
27	28.60				
28	28.60				
29	28.60				
30	28.60				
Total			47	1,304.7	

Average Grade = 27.76

*Ground elevation represents lowest exterior grade within ten (10) feet of the building façade or between the building and the parcel line when the sample point is less than ten (10) feet from the building facade.

PROPOSED CONDITIONS: 34 CHARLES STREET

Average Grade Calculation for Building Height

REFER TO ATTACHED EXHIBIT

Sample Point	Ground Elevation*	Notes	Sample Point	Ground Elevation*	Notes
1	22.95		31	25.40	
2	22.50		32	25.40	
3	22.50		33	25.50	
4	22.30		34	25.60	
5	22.15		35	25.70	
6	21.90		36	26.20	
7	17.00		37	26.20	
8	15.50		38	26.10	
9	15.50		39	25.90	
10	15.50		40	25.50	
11	15.50		41	25.20	
12	15.50		42	24.90	
13	16.80		43	24.70	
14	17.90		44	24.35	
15	17.10		45	23.60	
16	16.50		46	23.05	1.80 (length)
17	16.00				
18	16.00				
19	16.00				
20	16.00				
21	16.00				
22	16.10				
23	16.50				
24	17.00				
25	17.00				
26	17.00				
27	17.90				
28	26.00				
29	25.35				
30	25.40				
Total			46	958.7	

Average Grade = 20.84

*Ground elevation represents lowest exterior grade within ten (10) feet of the building façade or between the building and the parcel line when the sample point is less than ten (10) feet from the building facade.

PROPOSED CONDITIONS: 30 CHARLES STREET

Average Grade Calculation for Building Height

REFER TO ATTACHED EXHIBIT

Sample Point	Ground Elevation*	Notes	Sample Point	Ground Elevation*	Notes
1	25.50		31	27.30	
2	25.50		32	27.35	
3	25.50		33	27.35	
4	25.50		34	27.35	
5	26.90	Ex. + 3'	35	27.40	
6	26.70	Ex. + 3'	36	27.40	
7	26.60	Ex. + 3'	37	27.25	
8	24.30		38	27.10	
9	24.30		39	26.95	
10	24.30		40	26.80	
11	24.30		41	26.65	
12	24.30		42	26.50	
13	24.50		43	26.35	
14	24.70		44	26.20	
15	24.90		45	26.05	
16	25.10		46	25.55	
17	25.40		47	25.50	1.9 (length)
18	25.75				
19	26.05				
20	26.30				
21	26.60				
22	26.95				
23	27.05				
24	27.10				
25	27.25				
26	27.25				
27	27.30				
28	27.30				
29	27.30				
30	27.30				
Total			47	1,232.9	

Average Grade = 26.23

*Ground elevation represents lowest exterior grade within ten (10) feet of the building façade or between the building and the parcel line when the sample point is less than ten (10) feet from the building facade.

PROPOSED CONDITIONS: 32 CHARLES STREET

Average Grade Calculation by Story (Frontage Grade)

REFER TO ATTACHED EXHIBIT

Elevation 1	Elevation 2	Wall Segment	Wall Length	Avg. Elev.	Product (Y)
29.5	28.2	A-B	35.0	28.8	1,008.0
Total			35.0	28.8	1,008.0

Average Grade = 28.8

PROPOSED CONDITIONS: 30 CHARLES STREET

Average Grade Calculation by Story (Frontage Grade)

REFER TO ATTACHED EXHIBIT

Elevation 1	Elevation 2	Wall Segment	Wall Length	Avg. Elev.	Product (Y)
27.5	27.1	A-B	35.0	27.3	955.5
Total			35.0	27.3	955.5

Average Grade = 27.3

PROPOSED CONDITIONS: 34 CHARLES STREET

Average Grade Calculation by Story (Frontage Grade)

REFER TO ATTACHED EXHIBIT

Elevation 1	Elevation 2	Wall Segment	Wall Length	Avg. Elev.	Product (Y)
24.3	24.5	A-B	9.0	24.4	219.6
24.5	24.5	B-C	18.2	24.5	445.9
24.5	23.5	C-D	1.5	24.0	36.0
20.5	18.9	D'-E	3.3	19.7	65.0
Total			32.0	92.6	766.5

Average Grade = 23.9

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AVERAGE GRADE EXHIBIT

DEPICTING

30, 32, & 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
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PERMITTING

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www.rednissmead.com

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STATE OF CONNECTICUT — VINCENT J. HYNES — LICENSED LAND SURVEYOR

No. 0032100
VINCENT J. HYNES CT. P.E. 32100

December 12, 2025
DATE

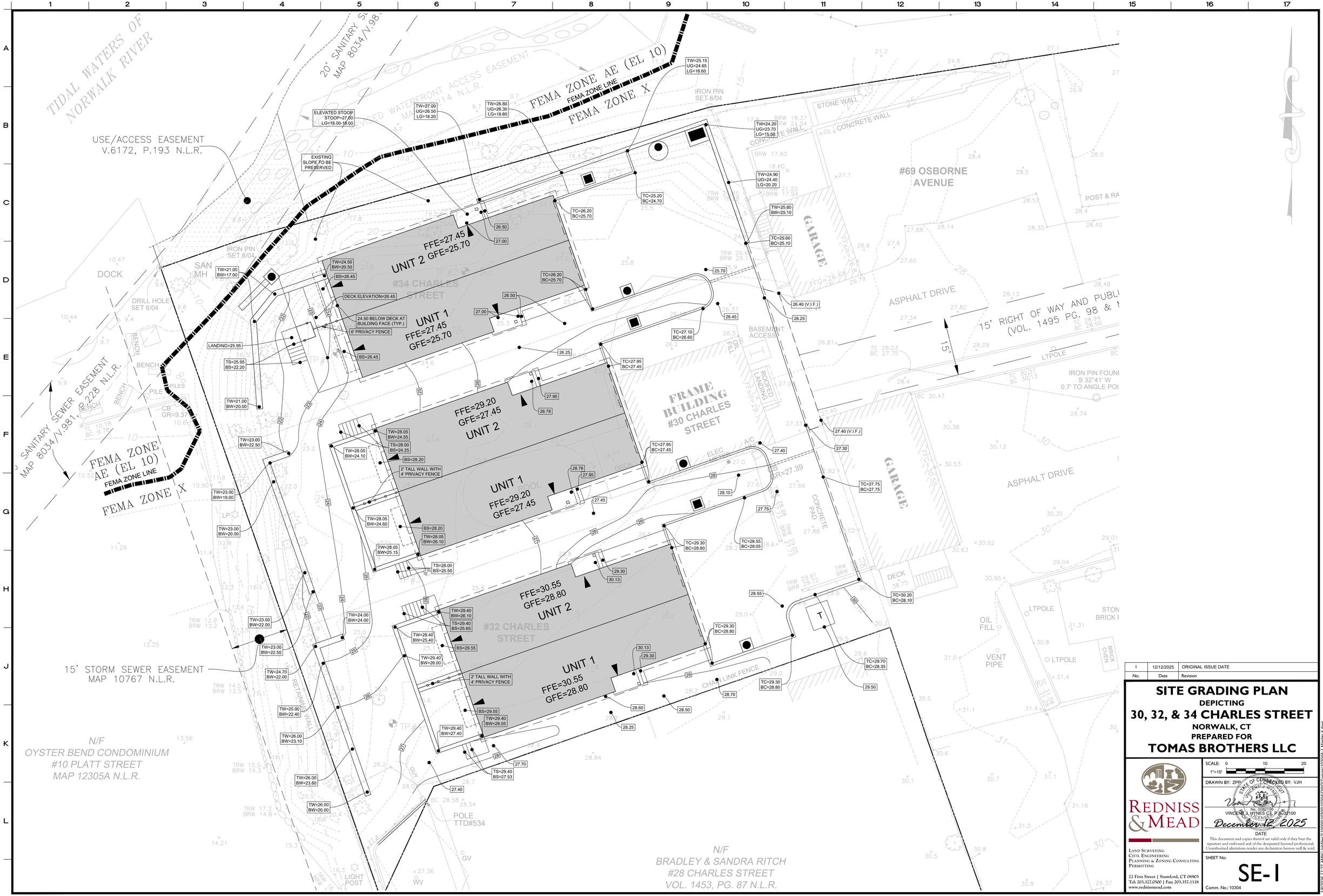
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1	12/12/2025	ORIGINAL ISSUE DATE
No.	Date	Revision

SITE GRADING PLAN

DEPICTING

30, 32, & 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

SCALE: 0 10 20
1"=10'

DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT VINCENT J. HYNES No. 25032 LICENSED PROFESSIONAL ENGINEER

No. 25032
VINCENT J. HYNES P.E. #25032
December 12, 2025
DATE

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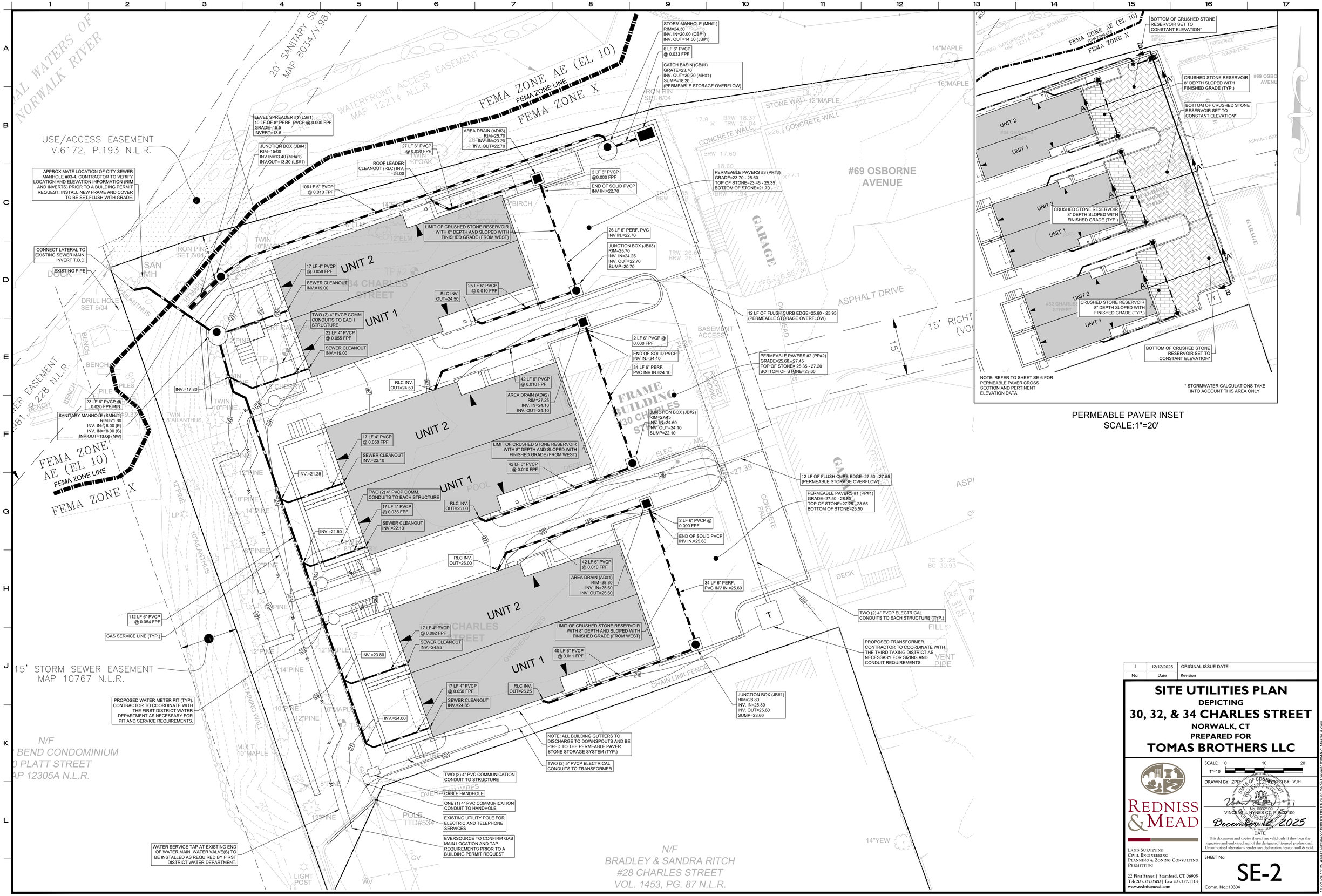
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PERMEABLE PAVER INSET
SCALE:1"=20'

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

SITE UTILITIES PLAN

DEPICTING

30, 32, & 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

SCALE: 1"=10' (0, 10, 20)

DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT — VINCENT J. HYNES — LICENSED PROFESSIONAL ENGINEER

VINCENT J. HYNES CT. P.E. No. 23100

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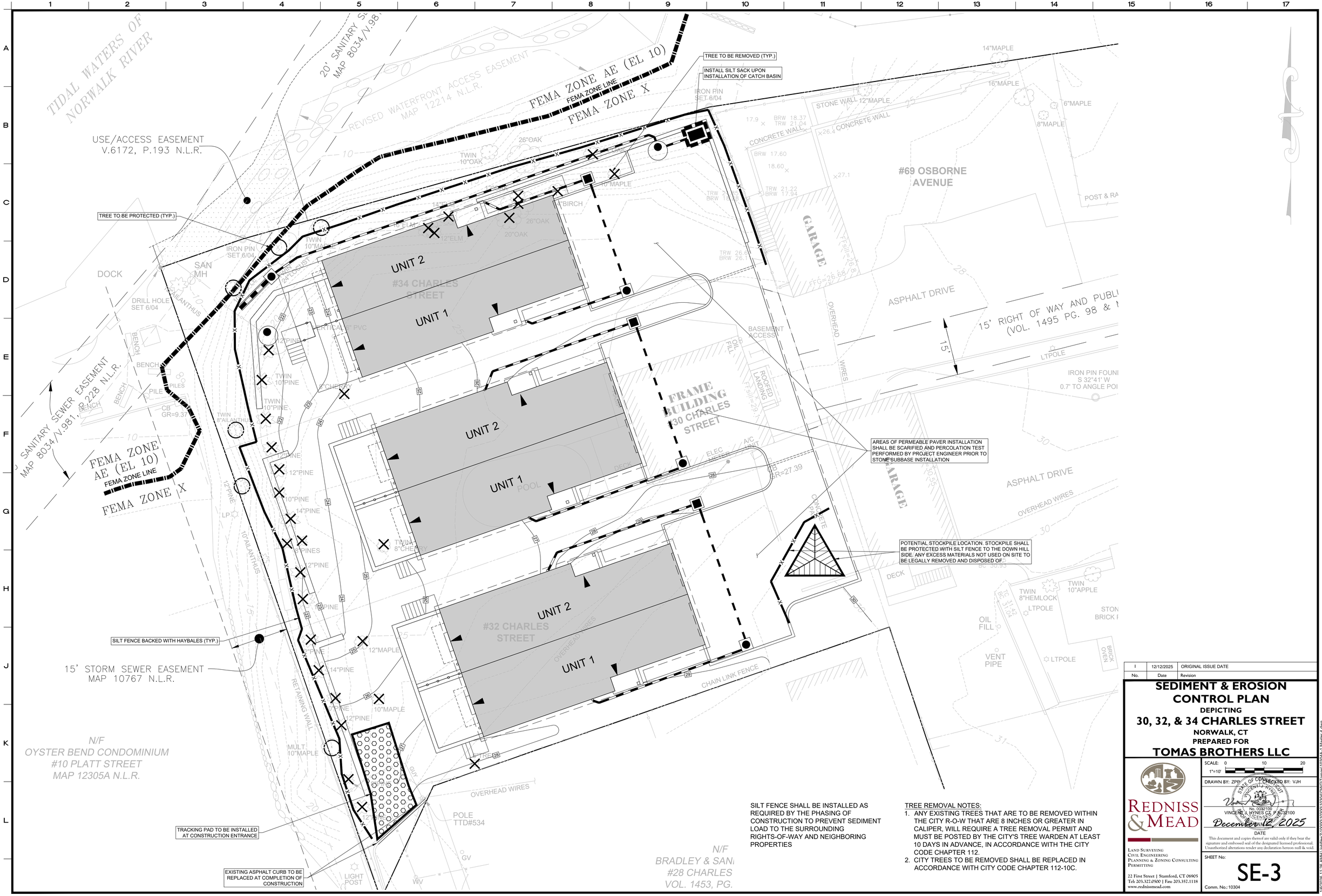
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SILT FENCE SHALL BE INSTALLED AS REQUIRED BY THE PHASING OF CONSTRUCTION TO PREVENT SEDIMENT LOAD TO THE SURROUNDING RIGHTS-OF-WAY AND NEIGHBORING PROPERTIES

TREE REMOVAL NOTES:

1. ANY EXISTING TREES THAT ARE TO BE REMOVED WITHIN THE CITY R-O-W THAT ARE 8 INCHES OR GREATER IN CALIPER, WILL REQUIRE A TREE REMOVAL PERMIT AND MUST BE POSTED BY THE CITY'S TREE WARDEN AT LEAST 10 DAYS IN ADVANCE, IN ACCORDANCE WITH THE CITY CODE CHAPTER 112.
2. CITY TREES TO BE REMOVED SHALL BE REPLACED IN ACCORDANCE WITH CITY CODE CHAPTER 112-10C.

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

SEDIMENT & EROSION CONTROL PLAN

DEPICTING

30, 32, & 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
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STATE OF CONNECTICUT · VINCENT J. HYNES · LICENSED LAND SURVEYOR · No. 0032100

VINCENT J. HYNES CT. P.E. #32100

December 12, 2025

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TIDAL WATERS OF NORWALK RIVER

20' SANITARY SEWER EASEMENT MAP 8034/V.981

REVISED WATERFRONT ACCESS EASEMENT MAP 12214 N.L.R.

FEMA ZONE AE (EL 10)

FEMA ZONE LINE

FEMA ZONE X

USE/ACCESS EASEMENT V.6172, P.193 N.L.R.

IRON PIN SET 6/04

SAN MH

DOCK

DRILL HOLE SET 6/04

BENCH

PILE

PILES

CB GR=9.37

SANITARY SEWER EASEMENT MAP 8034/V.981, R.228 N.L.R.

FEMA ZONE AE (EL 10)

FEMA ZONE LINE

FEMA ZONE X

15' STORM SEWER EASEMENT MAP 10767 N.L.R.

RETAINING WALL

LP

N/F
OYSTER BEND CONDOMINIUM
#10 PLATT STREET
MAP 12305A N.L.R.

#34 CHARLES STREET

#32 CHARLES STREET

#69 OSBORNE AVENUE

#30 CHARLES STREET

FRAME BUILDING

GARAGE

FFE=26.68

FFE=30.35

DECK

POOL

CONCRETE PAD

RAMP

ROOFED LANDING

BASEMENT ACCESS

OIL FILL

A/C UNIT

ELEC METER

CB GR=27.39

ASPHALT DRIVE

15' RIGHT OF WAY AND PUBLI
(VOL. 1495 PG. 98 & M

OVERHEAD WIRES

LTPOLE

IRON PIN FOUNI
S 32°41' W
0.7' TO ANGLE POI

STONE WALL

CONCRETE WALL

POST & RA

TC 31.25
BC 30.93

TWIN 8"HEMLOCK

TWIN 10"APPLE

VENT PIPE

BRICK OVEN

CHAIN LINK FENCE

POLE TTD#534

GUY

GV

WV

LIGHT POST

N/F
BRADLEY & SANI
#28 CHARLES
VOL. 1453, PG.

EXISTING ASPHALT TO BE REMOVED

EXISTING UTILITY EQUIPMENT TO BE REMOVED

LIMIT OF SAWCUT AND ASPHALT REPLACEMENT TO CONNECT TO EXISTING RIGHT OF WAY

EXISTING BUILDING AND ACCESSORY LANDINGS AND DECK TO BE REMOVED

EXISTING CONCRETE PAD TO BE REMOVED

EXISTING POOL TO BE REMOVED

EXISTING FENCE TO BE REMOVED

NOTES:
1. REFER TO SITE PLAN SHEETS SE-1 AND SE-2 FOR DESIGN PLAN INFORMATION AND SE-3 FOR SEDIMENT AND EROSION CONTROLS.
2. UTILITY INSTALLATION / REMOVAL SHALL BE IN ACCORDANCE TO APPLICABLE UTILITY COMPANY REQUIREMENTS.
3. EXISTING OVERHEAD AND UNDERGROUND SERVICE CONNECTIONS, INCLUDING UNDOCUMENTED SERVICE CONNECTIONS, TO BE REMOVED IN ACCORDANCE WITH APPLICABLE UTILITY COMPANY REQUIREMENTS (TYP.).

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

SITE REMOVALS PLAN
DEPICTING
30, 32, & 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

SCALE: 1"=10' 0 10 20

DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT · VINCENT J. HYNES · LICENSED PROFESSIONAL ENGINEER
No. 0032100
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GENERAL NOTES:

1. These drawings are intended only to depict the design of site grading, drainage, sanitary, utilities, and sediment & erosion controls. These drawings are for approval purposes only. No construction may begin prior to obtaining all necessary permits and approvals.
2. All survey data, boundary lines, topography, building locations and area calculations are from a survey prepared by Redniss & Mead, Inc. entitled Property & Topographic Survey dated 3/17/2021 and latest field topography from 11/13/2025. Elevations depicted or labeled are based on NAVD-88.
3. Refer to plans prepared by DeMasi Architects for information and design of the proposed buildings. These drawings depict site plans corresponding to the latest architectural plans received from DeMasi Architects received on 11/18/2025.
4. The properties are in a CD-2 zone.
5. A portion of #34 Charles lies within the FEMA AE-10 NAVD-88. Flood zones as shown on the Flood Insurance Rate Map Community No. 09001C Panel 0531 Suffix G, effective date July, 8, 2013.
6. All construction shall comply with the City of Norwalk requirements, the State of Connecticut Basic Building Code, Americans with Disabilities Act (ADA), the Connecticut Guidelines for Soil and Erosion and Sediment Control, OSHA, CT DOT Form 819 (latest edition), and FEMA Flood Regulations.
7. All development activities to be undertaken within the street right-of-way and other public lands shall comply fully with City standards unless approved deviation is specifically set forth as part of this application. All work within the State right-of-way will comply with the CT DOT Form 819 with the latest special Provisions and Typical State Standard Details.
8. Contractor shall supply complete shop drawings including manufacturer's product data sheets to the Site Engineer, for all construction material used in conjunction with these drawings. Contractor shall allow a 5 day review period, prior to fabrication and installation.
9. Information on existing utilities has been compiled from various sources including utility company records, municipal record maps and field survey and is not guaranteed to be correct or complete. The contractor is solely responsible for determining actual locations and elevations of all utilities including underground services.
10. The properties shall be served by public water and sewers.
11. Prior to any excavation the Contractor and/or Applicant, in accordance with Public Act 77-350, shall be required to contact "Call Before You Dig" at 1-800-922-4455 for mark-out of underground utilities. Dig test pit(s) at utility crossing(s) to check actual clearances with new utilities prior to construction. If conflicts are found the contractor shall notify the engineer, at which time the sewer in question shall be redesigned. If such redesign is not possible, the existing pipes or utilities shall be relocated to avoid the conflict. Such relocation shall be done with knowledge of and in accordance with the owner of the utility.
12. It shall be the responsibility of the contractor to provide any excavation safeguards, necessary barricades, flagmen, etc., for traffic control and site safety. All work shall be done in accordance with OSHA requirements. The contractor shall be responsible for compliance with OSHA requirements.
13. When preparing the existing site for the proposed development, all materials removed shall be disposed of in conformance with all governing agencies.
14. Remove stumps and brush from site, or chip and use during landscaping. Do not bury stumps on site.
15. Building elevations are subject to change and shall be finalized prior to building permit.
16. Special attention of the contractor is called to the required type and compaction of pipe bedding and backfill specified on these drawings. These requirements will be strictly enforced.
17. Prior to issuance of a Certificate of Occupancy, DPW Engineering may require a certification letter stating that the development was constructed in accordance to the approved plans, and an "as-built" drawing shall be submitted.
18. The Contractor is responsible for coordinating with a licensed surveyor to prepare an "as-built" plan. The Contractor is responsible to coordinate with a site engineer 48 hours prior to any inspections.
19. The Engineering Division of the Department of Public Works and the inspecting engineer shall be notified by the contractor three (3) days prior to the commencement of each phase of construction.
20. The work shall be done in conformance with the contract documents/plans unless changes have been approved in writing by the design engineer prior to the work being done.
21. A preconstruction meeting shall be held with the Owner, Architect and Engineer to review the scope of construction. The Contractor shall be responsible to coordinate the preconstruction meeting.

EARTHWORK & GRADING:

22. Grade away from building walls at 2% minimum (typical).
23. Earth slopes shall be no steeper than 2:1 (horz.:vert.)
24. No work shall commence until erosion controls have been inspected and approved by the City of Norwalk or their designee(s).
25. General fill beyond paved areas shall be free of brush rubbish, stumps and stones larger than 8". Fill shall be placed in compacted layers not to exceed 8" in thickness. The dry density after compaction shall not be less than 95% of the Standard Proctor Test and done in accordance with the requirements of ASTM D698. After compacting, the fill shall be 4" below the required grade as shown on the plan.
26. General fill may be till, loam, sand or gravel mixture classified as SP, SW, SM, GP, GM, ML per the United Soil Classification System. It shall have not more than 40% fines passing the #100 sieve, not more than 8% passing the #200 sieve, and no stones larger than 8".
27. Subgrade and fill shall be uniformly compacted by the use of equipment manufactured for that purpose. Rollers shall deliver a ground pressure of not less than 300 pounds per linear inch of contact width and weigh not less than 10 tons. Vibratory units shall have a static weight of not less than 4 tons. The amount of compactive effort shall be as directed by the Engineer, but in no case shall be less than 4 complete passes of the compacting equipment being used.
28. Disturbed areas shall be top soiled, seeded with grass and mulched in a manner conforming to the recommendations of the "Guidelines for Soil Erosion and Sediment Control", published by The Connecticut Council on Soil and Water Conservation, effective March 30, 2024.
29. After the areas to be topsoiled have been brought to grade, the subgrade shall be loosened by scarifying to a depth of at least 2" to ensure bonding of the topsoil and subsoil.
30. Topsoil shall be friable and loamy with high organic content. It shall be free of debris, rocks larger than 2" and roots. Topsoil shall have at least 1.5 percent by weight of fine textured stable organic material and no greater than 6 percent. Topsoil shall not have less than 20% fine textured material (passing the No. 200 sieve) and not more than 15% clay. pH range shall be 6.0-7.5 and soluble salts shall not exceed 500ppm.
31. Fill or topsoil shall not be placed nor compacted while in a frozen or muddy condition or while subgrade is frozen.
32. Excavation for pipes or concrete pavement repair may require either a braced excavation or open cut designed according to the requirements of OSHA, 29 CFR Part 1926. The lateral support systems and slopes should also be designed such that building footings, slabs on grade, adjacent pavement and existing ut ilities are protected and supported and not allowed to settle. The contractor shall be responsible for having a Professional Engineer, registered in the State of Connecticut design the excavation support method. The designs shall be submitted to the owner or his geotechnical engineer for review. The contractor shall submit plans showing the type, limits, design and sequence of construction for the lateral support system.
33. During the excavation, it is anticipated that existing utilities and sewers may be exposed. The contractor shall provide protection and support of these facilities and repair any damage caused by the work in a manner satisfactory to the owner. The condition of the existing facilities shall be observed by the owner's representative who shall determine if the facilities shall be replaced. Replacement of the facilities shall be done in a manner satisfactory to the owner and in compliance with applicable Codes.

RETAINING WALLS:

34. All retaining walls greater than three feet are required to be designed, and inspected during construction by a Professional Engineer registered in the State of Connecticut.
35. Retaining walls with a grade difference equal to or greater than 4 feet may require a safety barrier on the top of the wall. Retaining walls and barriers are to be designed by others.
36. Retaining walls are shown for schematic purposes only, and shall be designed by the structural engineer. All structural work shall conform to the requirements of the basic building code of the State of Connecticut, latest edition and the City of Norwalk requirements.
37. Refer to plans prepared by the structural engineer for information regarding the design any retaining walls.

FLOOD PROTECTION:

38. The property lies within Special Flood Hazard Area Zone AE-10. Base Flood Elevation (BFE) (100 year storm) is 10' NAVD-88 as depicted on FEMA Flood Insurance Rate Map, Panel 531 of 626, dated July 8, 2013. The proposed development activities are not located within the flood zone.
39. The construction of this development must follow the requirements set forth in the Federal Emergency Management Administration (FEMA) regulations for flood protection.
40. All utilities shall be installed per FEMA regulations for flood protection. All utilities (i.e., meters, etc.) must be set one foot above the BFE or waterproofed.

STORM AND SANITARY SEWER SYSTEMS:

41. All pipe shall be installed straight and at the vertical and horizontal alignment shown. Pipes shall have a uniform slope as specified.
42. Minimum cover on all pipes shall be two feet (2') unless otherwise noted.
43. All storm pipe specified as Poly Vinyl Chloride Pipe (PVCP) shall be SDR 35 with rubber gasketed joints and meet the requirements of ASTM D3034 and D3212.
44. All sanitary sewer pipe shall be Poly Vinyl Chloride Pipe (PVCP) and shall be Schedule 40 with solvent weld joints.
45. Dig test pits at utility and sewer crossings to check actual clearances with these facilities prior to construction. Dig test pits at the connection points to existing sanitary sewer pipes to confirm that the elevation of the proposed gravity sewer is appropriate. If conflicts are found the contractor shall notify the engineer at which time the sewer in question shall be redesigned. If such redesign is not possible, the existing pipes or utilities shall be relocated to avoid conflict.
46. All catch basins and area drains shall have a two foot (2') sump with bell traps or 90° PVC elbows.
47. Manhole diameters listed are minimum sizes and are assumed to be 4' inside diameter. If precast manholes are used, larger manholes must be used if recommended by the manufacturer.
48. All existing and proposed catch basins, manhole rims and utility facilities shall be raised or lowered to be flush with finished grade.
49. Locate and abandon existing sanitary laterals at the property line with the end capped and mortared. Other existing utilities shall be abandoned in accordance with the requirements of the utility owner(s).
50. Flow in existing sewer system must not be interrupted. Any temporary routing of this sewer flow must be done in conformance with all applicable rules and regulations.
51. Under no circumstances shall trench water be allowed to drain off through sanitary sewer lines.
52. All crushed stone shall be Gradation No. 4 as per CT DOT Form 819, Article M.01.02. Stone shall consist of sound, tough, durable particles free from soft, thin, elongated, laminated, friable, micaceous, or disintegrated pieces of mud, dirt or other deleterious material.
53. The storm and sanitary sewer shall be encased in concrete for a distance of 10 feet on either side of any intersection between the sanitary sewer and storm sewer. Where concrete encasement is required, temporarily support the pipes in place. Use sufficient concrete to encase piping not less than 6 inches at all points. The encasement shall be adequately supported with a stone base and shall be keyed into the foundation wall to prevent damage from settlement.
54. Sanitary Sewer Testing: The sanitary sewer line shall be Low Pressure Air Tested, at the expense of the contractor; Testing to be in accordance with recommended procedure in "Unibell's" "Recommended Practice for Low Pressure Air Testing of Installed Sewer Pipe" UNI B-6. The minimum starting pressure for the test is 3.5 P.S.I. (in excess of the groundwater pressure at the top of the pipe) and there shall be no more than 0.5 P.S.I. drop in five (5) minutes. Manholes to be visually inspected. Lateral plugs shall be airtight to allow proper testing. Inspecting Engineer and the Engineering Bureau shall be informed of testing schedule three days in advance so they can witness the testing.
55. At the end of construction, after the site has be fully stabilized, all new and previously existing storm sewer facilities including, but not limited to, catch basins, area drains, manholes, junction boxes, flow control structures, pipes, oil grit separators, permeable pavers and porous pavement shall be fully cleaned with equipment designed for that purpose to the satisfaction of the inspecting engineer.

UTILITIES:

56. Utilities shown on these plans are "not guaranteed" to be complete or correct. Prior to any site activities, the contractor shall be responsible for verification of clearances of proposed utilities from existing utilities. This verification shall include physical observation by means of test pits of the locations of affected utilities. The contractor shall notify the site engineer immediately of any conflict.
57. Easements may be required in favor of the various utility companies.
58. Electric, telephone, cable, gas, and water services shall be installed in conformance to the requirements of the governing utility companies.
59. It is the contractor's responsibility to install utilities as shown on this sheet. The contractor shall work with the utility companies and site engineer to insure the installation is in conformance to the requirements of the governing utility company. All conduits shall be concrete encased as may be required by the governing utility company. Proposed electric, telephone, cable, gas and water services are shown for schematic purposes only and are subject to change pending utility company review. These utilities shall be designed by others and installed in conformance to the requirements of the governing utility companies.
60. All proposed utility facilities shall be raised or lowered to be flush with finished grade.
61. Where necessary, existing utilities shall be reinstalled to meet all minimum coverage requirements.
62. Utility connections at building face shall be coordinated with the building contractors.
63. The contractor must supply and install drag lines with all conduits.
64. In general, each utility shall have a minimum clearance of three feet to any other underground utility.
65. Any and all utilities abandoned shall be capped or removed in accordance with utility companies' requirements.
66. Existing fire valves shall be cut flush to grade in accordance with First District Water Department requirements.
67. The electric transformer shall be located to meet all applicable Zoning setbacks.
68. All utilities shall be installed per FEMA regulations for flood protection. All utilities (i.e., HVAC condensers, electric transformers, etc.) must be set one foot above the Base Flood Elevation (BFE) or waterproofed.
69. Electric, telephone, cable, gas and water services shall be compliant with the City of Norwalk Zoning Regulations Flood Prone Area Regulations Section and shall be installed in conformance to the requirements of the governing utility companies.
70. Detectable Tape shall be used to mark piping listed below. The identification tape shall be buried at least 6-inches to 10-inches below final grade but no closer than 12-inches to the buried utility piping or service.

Electric	Red	Caution Electric Line Buried Below
Telephone & Control	Orange	Caution Telephone Line Buried Below
Natural Gas	Yellow	Caution Gas Line Buried Below
Water Systems	Blue	Caution Water Line Buried Below
Sewer System	Green	Caution Sewer Line Buried Below

71. Underground-Type Plastic Line Marker: Manufacturer's standard permanent, bright-colored detectable tape, continuous-printed plastic tape, intended for direct-burial service; not less than 6" wide X 4 mils thick.

PAVEMENT AND PAVEMENT MARKINGS:

72. Permeable pavers shall be installed in accordance with the details on Sheet SE-6.
73. Permeable pavers are to be Eco-Priora or equivalent as approved the site engineer.
74. Areas of asphalt pavement that are disturbed by the construction of this project shall be replaced in accordance with the asphalt pavement repair detail to City of Norwalk standards. The finished grade of asphalt paving shall blend to existing grade and the edge of the concrete pavement smoothly with no slopes exceeding 4%.
75. Existing features such as but not limited to walks, curbs, and pavement damaged by construction activities shall be repaired at no additional cost to the owner.
76. Saw cut perimeter of area to be excavated. Saw cut shall be straight and vertical.
77. Contractor is responsible to place the hot-mix asphalt mix as required in the drawings, details and the applicable Section of the CT DOT FORM 819 (latest edition).
78. Compaction shall be constructed as specified in the CT DOT FORM 819 (latest edition), Section 4.06 specification, the drawings and the details. Testing lab shall verify compaction of each course of pavement as directed by the Site Engineer.
79. After the asphalt pavement has cured sufficiently to support the weight of a water truck without marking the newly installed pavement, it shall be water tested for low spots, areas of little or no drainage, etc. A water truck shall spray a sufficient amount of water on all pavement sections to observe the drainage of water. There shall be positive drainage on all areas of the pavement. Any visible low spots where significant water (greater than or equal to 3/16" in depth) is left standing, shall be clearly marked for the Contractor to repair prior to final acceptance. These areas must be sawcut and removed down to the base course prior to replacement with asphalt mixture as per the original approved design. The base course and edges of sawcut asphalt must be treated with tack oil prior to new section of asphalt being installed. The Owner's Representative or inspecting A/E shall be notified 48 hours in advance of water test so that he may be present during the test.
80. The inspecting engineer and contractor will review the testing requirements at the preconstruction meeting. At this meeting, samples to be tested and compaction testing protocol will be discussed. Testing and approval of the subgrade, base course and asphalt layers prior to the installation of the next layer to determine if the work complies or deviates from the specified requirements. Prior to installation of the base course, contractor shall contact inspecting engineer to determine the suitability of the subgrade material, base course and asphalt. Additional excavation or base course may be required.
81. Finished paving shall be free of "bird baths" and be smooth at the slopes specified on the plans.
82. Finished grade shall be within 1/2 inch of that noted on the drawings.
83. The pavement shall be protected from vehicular traffic of any kind with the use of barricades, etc. for a minimum period of 24 hours after final rolling. Maintain and protect asphalt surface from scrapes, sears, spills, hyd raulic leaks, and any other construction damage for the remainder of construction until Owner's Representative acceptance. Contractor is responsible for clearing, repairing, seal coating, patching, and re-striping as necessary to obtain Owner's Representative's final approval/acceptance.
84. Thicknesses of all layers shown are after compaction. Compact all layers to 95% per ASTM D 1557 (Modified Proctor Method).

SEDIMENT AND EROSION CONTROL NOTES:

1. Sheet SE-3 is intended to describe the soil sediment and erosion control treatment of this site only. For other details with respect to construction, see appropriate drawings.
2. All sediment and erosion controls shall be done in conformance with the "Connecticut Guidelines for Soil Erosion and Sediment Control" effective March 30, 2024 prepared by The Connecticut Council on Soil and Water Conservation.
3. The contractor is assigned the responsibility for implementing this sediment and erosion 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 notifying the Clty of Norwalk of any transfer of this responsibility and that construction is to begin three (3) days prior to commencing work.
4. Temporary sediment control measures and tree protection must be installed in accordance with drawings and manufacturer recommendations prior to work in any upland areas.
5. No construction or construction equipment or storage of materials will be allowed on the downhill side of the silt fence or within fenced off areas, except during construction of the proposed facilities shown beyond the fences.
6. Where existing trees are to be saved, trees shall be protected with trunk armoring where shown. Tree limbs shall be trimmed as needed to protect the trees from damage by construction operations. Such trimming shall be minimized. Armoring and any limb trimming should be done before construction begins. Tree protection should be maintained during construction. Equipment Trafficking and materials storage over the tree roots shall be avoided.
7. Tracking pads shall be installed at start of construction and maintained in an effective condition throughout the duration of construction. Pads consist of 2" - 4" crushed stone, 6" minimum thickness and extend the width of the construction access. The length of the access shall be sufficient to prevent dirt from being tracked onto off site roads (minimum length of 50').
8. The location of each stockpile will vary throughout the construction period. Excavated silt and earth stockpiles shall be stored on site. Silt fence shall be placed at the base of the stockpile to prevent sediment from leaving the site and to protect storm drains, wetlands and watercourses.
9. Silt fence shall be Mirafi envirofence, Amoco siltstop or equivalent approved by Site Engineer. Filter fabric used shall be Mirafi 100x or equivalent. Install silt fence according to manufacturer's instruction, particularly, bury lower edge of fabric into ground.
10. All roof leader downspouts shall temporarily discharge onto splash pads measuring at least 8" wide by 18" long, or approved equal.
11. Land disturbance shall be kept to a minimum. All disturbed area shall be planted in where permanent plantings are called for as soon as practicable. Seed and mulch disturbed areas with grass seed where permanent plantings are not called for, as soon as practicable. Prepare seedbed (4" thick minimum) with topsoil. Seed, rake, roll, water and mulch areas according to mixes below. Water as often as necessary (up to 3 times per day) to establish cover. Mulch seeded areas at 1 to 2 tons/acre with salt hay. Maintain mulch and watering until grass is 3" high with 85% cover. Reseed or overseed if necessary.

Temporary Seed Mix:
Perennial ryegrass 40 lbs/ac. (1 lb/1000 sf.)

Permanent Lawns:
Kentucky Bluegrass 20 lbs/ac.
Creeping Red Fescue 20 lbs/ac.
Perennial Ryegrass 5 lbs/ac.
45 lbs/ac. (1 lb/1000 sf.)

Optimum Seeding Dates:
April 15 through June 15
August 15 through October 1

12. If disturbed areas can not be seeded immediately due to the time of year, mulch area until seeding can occur; remove mulch and seed and remulch when season permits.
13. Registration of a Stormwater and Dewatering Wastewaters from Construction Activities Permit will be required from the Connecticut DEEP no more than 60 days prior to construction.
14. Upon installation of each catch basin and area drain, immediately surround it with haybales as per sediment filter detail.
15. Haybales shall be new and are to be replaced whenever their condition deteriorates beyond reasonable usability.
16. Temporarily block pipes leading into the storm water infiltration system until upland areas are thoroughly stabilized. Under no circumstances shall sediment or silty water be allowed to enter the infiltration system.
17. Pavement and curbing should be placed as soon as possible after drainage is installed.
18. Loaded trucks shall be covered as required to keep down dust.
19. Affected portions of off site roads and sidewalks must be swept clean when required to keep down dust and prevent safety hazards or at least once a week during construction and as directed by Site Engineer.
20. Dust control to be achieved with watering down disturbed areas as required.
21. After each storm event or once bi-weekly, all sediment and erosion controls shall be inspected. Any corrective actions to mitigate environmental concerns will be ordered by the site engineer or environmental engineer. It is the Owner's responsibility to retain such consultant.
22. Additional sediment and erosion control measures may be installed during the construction period if found necessary by the inspecting engineer or any Governing Agency.
23. All permanent and temporary sediment control devices will be maintained in effective condition throughout the construction period until upland disturbed areas are thoroughly stabilized. Upon completion of work and stabilization of all upland areas, all temporary sediment control devices and tree protection should be removed from the site and any silt disposed of legally.
24. Excavated material from temporary silt traps must be stockpiled on uphill side of silt fence.
25. Excavated silt and earth stockpiles shall not be permitted to be stored on site. Excess material shall be disposed of legally.
26. Periodically and upon completion of the job, clean silt from any effected storm sewer systems including pipes and inlets. Use silt during final landscaping or dispose off-site legally.

Subsurface Soil Investigation
Soil Profile

Test Pit #: 1 Date: 08/14/2025
Inspector: VJH Sanitarian: N/A
Ledge at: - Mottling at: -
Water at: - Roots at: 80"

Depth: 118"	Soil Description
0"-62"	Fill / sand
62"-80"	Original Topsoil
80"-118"	Orange Brown Course Sand with silt and bank run gravel

Subsurface Soil Investigation
Soil Profile

Test Pit #: 2 Date: 08/14/2025
Inspector: VJH Sanitarian: N/A
Ledge at: - Mottling at: -
Water at: - Roots at: -

Depth: 126"	Soil Description
0"-20"	Fill / gravel
20"-86"	Orange Brown Course Sand with gravel
86"-126"	Brown Coarse Sand with bank run gravel

Subsurface Soil Investigation
Soil Profile

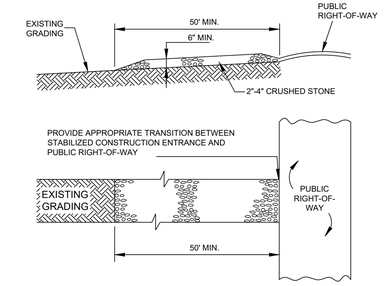
Test Pit #: 3 Date: 08/14/2025
Inspector: VJH Sanitarian: N/A
Ledge at: - Mottling at: -
Water at: - Roots at: -

Depth: 125"	Soil Description
0"-76"	Fill / sand
76"-84"	Original Topsoil
84"-125"	Orange Brown Sandy Loam and bank run gravel

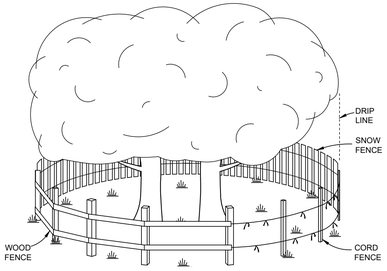
Subsurface Soil Investigation
Soil Profile

Test Pit #: 4 Date: 08/14/2025
Inspector: VJH Sanitarian: N/A
Ledge at: - Mottling at: -
Water at: - Roots at: -

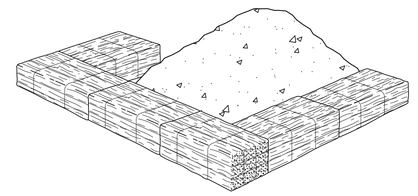
Depth: 120"	Soil Description
0"-48"	Fill / sand
48"-60"	Original Topsoil
60"-120"	Orange Brown Sandy Loam with silt and bank run gravel



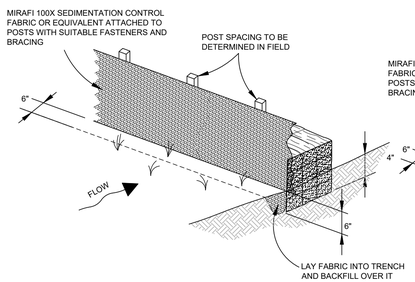
STABILIZED CONSTRUCTION ENTRANCE
(TRACKING PAD)
N.T.S.



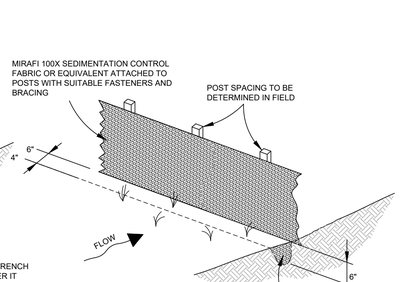
TREE PROTECTION
(SHOWING ACCEPTABLE TYPES OF FENCING)
N.T.S.



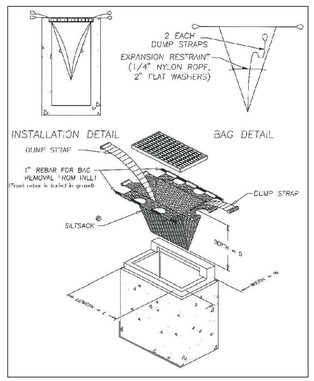
SEDIMENT FILTER FOR STOCK PILE ON PAVEMENT
N.T.S.



FABRIC & POST SILTATION BARRIER W/ HAY BALES
(SILT FENCE)
N.T.S.



FABRIC & POST SILTATION BARRIER
(SILT FENCE)
N.T.S.



INLET SEDIMENT CONTROL DEVICE
(SILT SACK)
N.T.S.

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

NOTES & DETAILS
DEPICTING
30, 32, 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

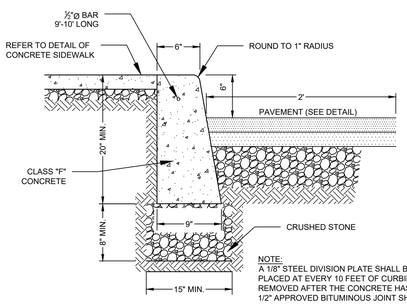
22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

SCALE: N.T.S.
DRAWN BY: ZPR CHECKED BY: VJH
STATE OF CONNECTICUT — VINCENT J. HYNES — No. 0032100 — LICENSED PROFESSIONAL ENGINEER
DATE: December 12, 2025

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

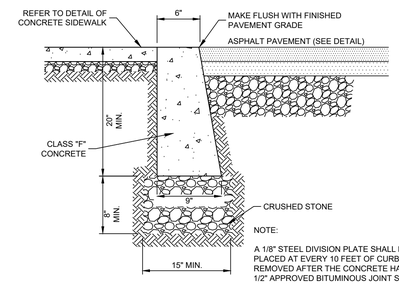
SHEET No: SE-5
Comm. No.: 10304

12/16/2025 11:53 AM/H:\Jobfiles2\10000\10300\10304\DWG\Tomas\103044-1 Notes & Details.dwg



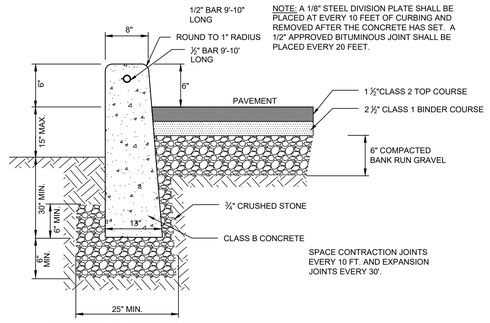
NOTE:
A 1/8" STEEL DIVISION PLATE SHALL BE PLACED AT EVERY 10 FEET OF CURBING AND REMOVED AFTER THE CONCRETE HAS SET. A 1/2" APPROVED BITUMINOUS JOINT SHALL BE PLACED EVERY 20 FEET.

CONCRETE CURB
N.T.S.

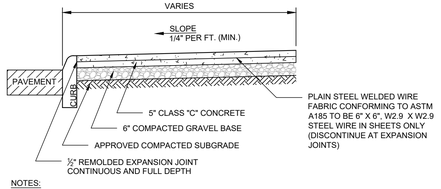


NOTE:
A 1/8" STEEL DIVISION PLATE SHALL BE PLACED AT EVERY 10 FEET OF CURBING AND REMOVED AFTER THE CONCRETE HAS SET. A 1/2" APPROVED BITUMINOUS JOINT SHALL BE PLACED EVERY 20 FEET.

FLUSH CONCRETE CURB
N.T.S.

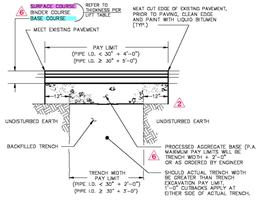


HIGH CONCRETE CURB
N.T.S.



NOTES:
1. CONCRETE TO BE CLASS 'C' CONFORMING TO CT DOT FORM 819 SECTION M.03.02.
2. GRAVEL BASE SHALL CONFORM TO GRADATION A AS DEFINED IN ConnDOT FORM 819 SECTION M. 02.01.
3. INSTALL AS PER THE AMERICAN CONCRETE INSTITUTE CODE.
4. THE AREA SHALL BE COMPACTED TO AT LEAST 95% OF THE DRY DENSITY ACHIEVED BY ASTM D1557.
5. CONTRACTION JOINTS PLACED IN A SQUARE PATTERN AS PER DETAIL.
6. DRAW A SOFT BRISTLED BROOM ACROSS FLOAT-FINISHED CONCRETE SURFACE PERPENDICULAR TO LINE OF TRAFFIC TO PROVIDE A UNIFORM, FINE LINE TEXTURE.

CONCRETE SIDEWALK
N.T.S.



	4"=STONE SIZE & (*)=LEVEL e.g. 0.50"(2)					
	0.375"(2)	0.50"(2)	1.50"(2)	0.50"(1)	1.00"(1)	P.A.B.
STATE ROAD				4" (PLACED IN 2 LIFTS)	8" (PLACED IN 2 LIFTS)	12"
MAJOR ARTERIAL				4" (PLACED IN 2 LIFTS)	8" (PLACED IN 2 LIFTS)	14"
MINOR ARTERIAL		8.5" (PLACED IN 3 LIFTS)				12"
COLLECTOR		6" (PLACED IN 3 LIFTS)				12"
LOCAL	6" (PLACED IN 2 LIFTS)					12"

PAVEMENT REPAIR TABLE
HMA (SUPERPAVE)

STONE SIZE LIFT THICKNESS	MIN.	MAX.
0.375"	1.5"	2"
0.50"	2.0"	2.5"
1.00"	3.0"	4.0"

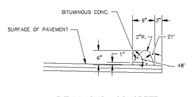
ALLOWABLE COMPACTED THICKNESS PER LIFT

	A	B	C	D
	CL 2	CL 1	CL 4	P.A.B.
MAJOR ARTERIAL	—	4"	6"	14"
MINOR ARTERIAL	—	6.5"	—	12"
COLLECTOR	—	6"	—	12"
LOCAL	3"	—	—	12"

PAVEMENT REPAIR TABLE
(MARSHALL MIX)

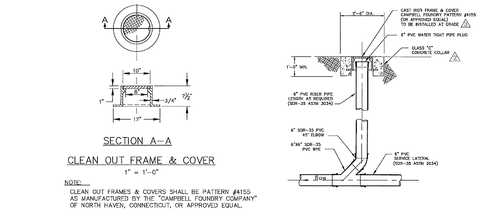
⚠ MAXIMUM ALLOWABLE COMPACTED THICKNESS PER LIFT
CLASS 2 – 2" THK.
CLASS 1 – 2 1/2" THK.
CLASS 4 – 4" THK.

PAVEMENT REPAIR DETAIL
(CITY STANDARD)
N.T.S.



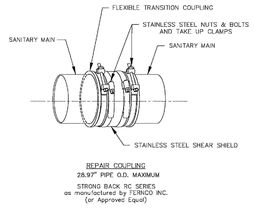
BITUMINOUS CONCRETE
LIP CURBING

BITUMINOUS CONCRETE LIP CURBING
(CITY STANDARD)
N.T.S.



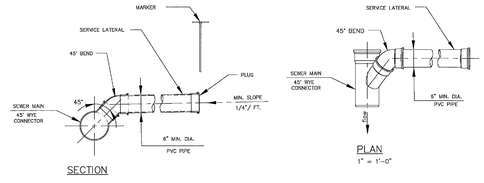
NOTE:
CLEAN OUT FRAMES & COVERS SHALL BE PATTERN #4155 AS MANUFACTURED BY THE "CAMPBELL FOUNDRY COMPANY" OF NORTH HAVEN, CONNECTICUT, OR APPROVED EQUAL.

SANITARY SEWER CLEANOUT DETAIL
(CITY STANDARD)
N.T.S.



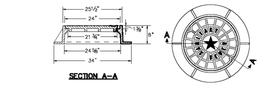
REPAIR COUPLING
28.97" PIPE O.D. MAXIMUM
STRONG BACK RC SERIES
as manufactured by FERNCO INC.
(or Approved Equal)

SANITARY COUPLING DETAIL
(CITY STANDARD)
N.T.S.

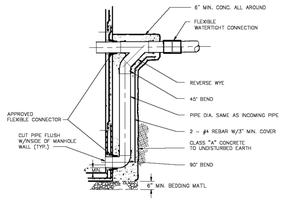


SECTION
PLAN
1" = 1'-0"

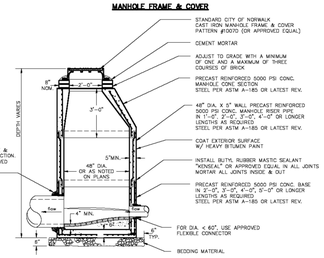
SANITARY LATERAL CONNECTION DETAIL
(CITY STANDARD)
N.T.S.



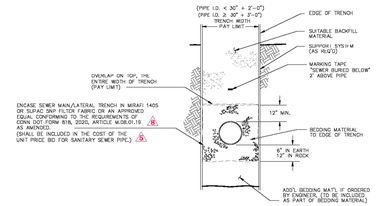
MANHOLE FRAME & COVER



DROP SANITARY MANHOLE DETAIL



SANITARY SEWER MANHOLE DETAIL
(CITY STANDARD)
N.T.S.

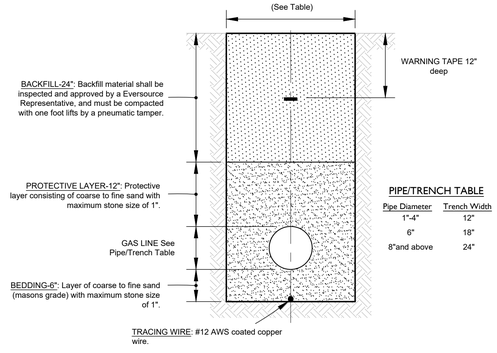


SANITARY SEWER TRENCH DETAIL
(CITY STANDARD)
N.T.S.

SANITARY LATERAL MARKER DETAIL
(CITY STANDARD)
N.T.S.

Notes:

1. A minimum of 1'0" vertical clearance and 5'0" horizontal clearance will be maintained between the gas line and all other structures.
2. Minimum cover for mains shall be 3'0" from finished grade as measured from gutter line.
   a. In the traveled portion of the road - from the top of the pipe to the top of the trench using the shallow side for measurement.
   b. Off the traveled portion when section is at a higher elevation than the traveled way - elevation to be taken from gutter line.
   c. Off the traveled portion when section is at a lower elevation than the traveled way from the top of the pipe to the top of the trench using the shallow side for measurement.
3. Minimum cover of service lines in private property shall be 2'0" only when approved by the Eversource inspector or designee.
4. The bottom of the trench must be free of rocks, debris, or water that could damage the pipe or its coating.
5. Tracing Wire is a #12 AWS coated copper tracing wire to be installed in the center of the trench prior to 6" of sand padding. (Connection will be made by a Eversource Representative).
6. Exposed piping will be backfilled with a minimum of 12" of sand prior to leaving the job site each day and witnessed by a Eversource Representative or Eversource Contractor.
7. Only personnel qualified by Eversource will be allowed to install gas lines.
8. The builder will supply a suitable location to store the pipe and materials and will be responsible for its security.



PIPE/TRENCH TABLE

Pipe Diameter	Trench Width
1"-4"	12"
6"	18"
8"and above	24"

GAS LINE TRENCH DETAIL
N.T.S.

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

DETAILS
DEPICTING
30, 32, 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING
22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

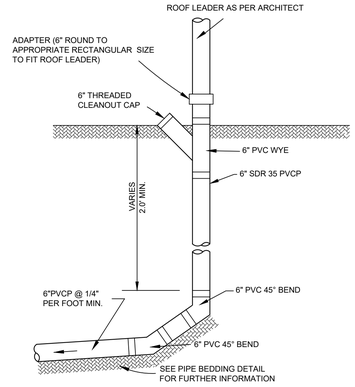
SCALE: N.T.S.
DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT
No. 0032100
VINCENT J. HYNES C.E. P.E. 32100
LICENSED PROFESSIONAL ENGINEER
December 12, 2025
DATE

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

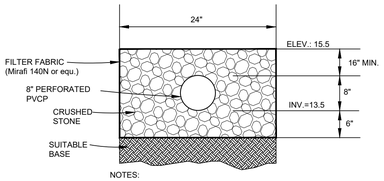
SHEET No: SE-6
Comm. No.: 10304

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ROOF LEADER CLEANOUT DETAIL

N.T.S.

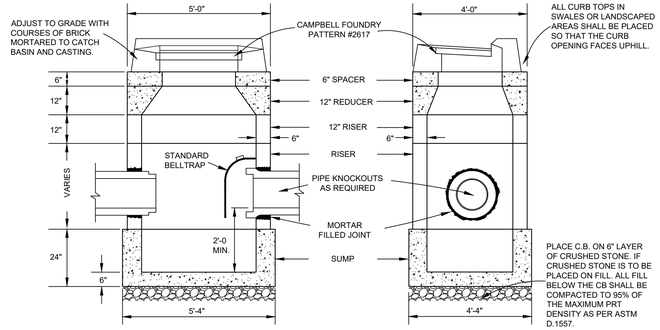


NOTES:

1. CRUSHED STONE SHALL BE GRADATION NO. 4 PER CONN. DOT, FORM 819, SECTION M01.01
2. 8" PVCP PIPE SHALL HAVE PERFORATIONS ON THE BOTTOM OF THE PIPE.

CRUSHED STONE LEVEL SPREADER

N.T.S.



NOTES:

1. ALL CATCH BASIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. CATCH BASIN SHALL CONFORM TO ASTM C478. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

CAST IRON BELL TRAP	
PIPE SIZE	CAMPBELL FOUNDRY NO.
12"	2563
15"	2564
18"	2565
21"	2566
24"	2568A

CATCH BASIN DETAIL

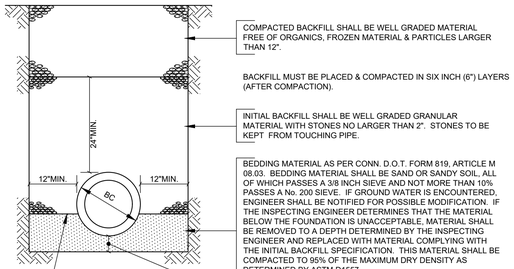
N.T.S.

WATER STOP: 10' UPSTREAM OF STRUCTURES AND WHERE SHOWN, FOUNDATION MATERIAL, BEDDING, HAUNCHING, INITIAL BACKFILL, AND THE BOTTOM FOOT OF GENERAL BACKFILL TO BE REPLACED WITH SM, SC, OR ML SOIL AS PER UNIFIED SOIL CLASSIFICATION SYSTEM" WITH MAXIMUM PARTICLE SIZE OF 1-1/2", FOR 3 LINEAR FEET OF TRENCH. WATER STOP TO BE KEYED INTO TRENCH BOTTOM AND WALLS A MINIMUM OF ONE FOOT. NO STONES LARGER THAN 6" SHALL BE WITHIN 12" OF THE PIPE.

ALL FOUNDATION, INITIAL BACKFILL & BACKFILL MATERIAL TO BE APPROVED BY THE INSPECTING ENGINEER.

ANY DEVIATION FROM THESE METHODS & MATERIALS MUST BE APPROVED IN WRITING BY THE INSPECTING ENGINEER.

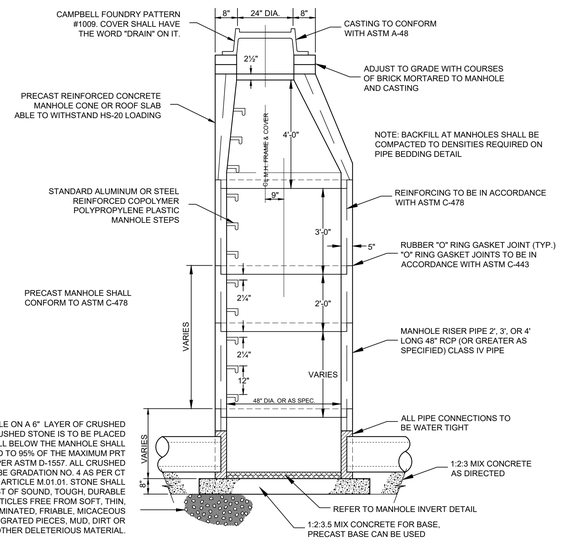
ALL MATERIAL TO BE COMPACTED TO 95% OF THE MAX. DRY DENSITY AS DETERMINED BY ASTM D1557, EXCEPT COMPACTED BACKFILL" NOT UNDER PAVEMENT WHICH SHALL BE COMPACTED TO A DENSITY AT LEAST EQUAL TO THAT OF THE ADJACENT UNDISTURBED MATERIAL.



PVC/RCP PIPE TRENCH BEDDING DETAIL

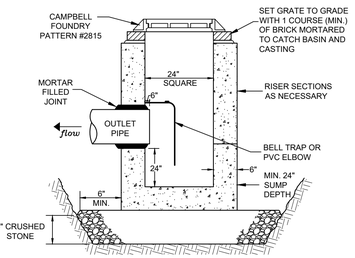
(48" DIA. & UNDER)

N.T.S.



STORM MANHOLE DETAIL

N.T.S.



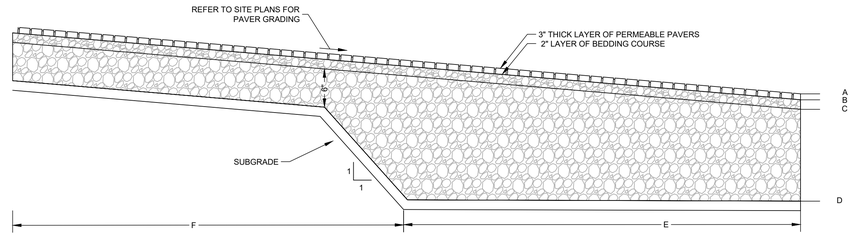
NOTES:

1. ALL CATCH BASIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. AREA DRAIN SHALL CONFORM TO ASTM C478.
4. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

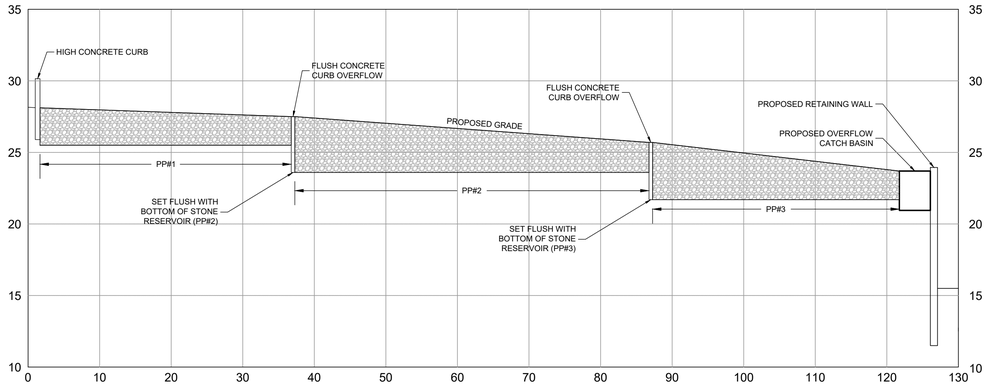
24" AREA DRAIN

N.T.S.

Type	Grade (ft) (A)	T.O. Bedding Course (B)	T.O Stone Reservoir (C)	B.O Stone Reservoir (D)	Footprint of Flat Stone Reservoir (sf) (E)	Footprint of Sloped Stone Reservoir (sf) (F)
PP#1	27.50-28.80	27.33-28.63	27.25-28.55	25.50	1,153	377
PP#2	25.60-27.45	25.43-27.28	25.35-27.20	23.60	1,418	377
PP#3	23.70-25.60	23.53-25.43	23.45-25.35	21.70	1,146	297



PERMEABLE PAVERS DRIVEWAY SECTION A-A'
N.T.S.



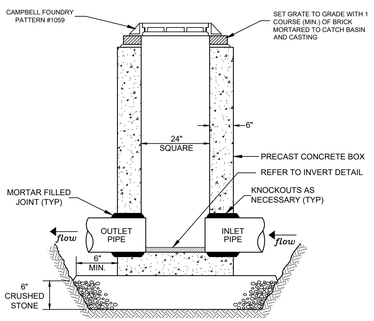
SECTION B-B'
VERTICAL SCALE: 1"=5'
HORIZONTAL SCALE: 1"=10'

NOTES:

1. PERMEABLE PAVERS SHALL BE "ECO-PRIORA" BY UNILOCK OR EQUIVALENT. COLOR AND PATTERN SHALL BE FINALIZED PRIOR TO CONSTRUCTION AND SHALL BE DETERMINED BY ARCHITECT, LANDSCAPE ARCHITECT, AND OWNER..
2. SUBGRADE MATERIAL TO BE PREPARED AND COMPACTED TO DRAIN AT A RATE OF 1 INCH PER HOUR MINIMUM TO A POINT AT LEAST 3' BELOW THE CRUSHED STONE RESERVOIR. A 10' X 10' TEST AREA IS TO BE PREPARED AND COMPACTED FOR THE DESIGN ENGINEER TO TEST AND CONFIRM.
3. BEDDING COURSE FOR PERMEABLE PAVERS SHALL CONSIST OF A 4" THICK LAYER OF CRUSHED STONE CONFORMING TO GRADATION NO. 8 OF SECTION M.01 OF CTDOT FORM 819.
4. CRUSHED STONE RESERVOIR SHALL CONSIST OF A LAYER OF CRUSHED STONE CONFORMING TO GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01..
5. ALL AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF SECTION M.02 OF CTDOT FORM 819 AND SHALL CONSIST OF SOUND, TOUGH, DURABLE BROKEN STONE THAT IS REASONABLY FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.
6. CONTRACTOR SHALL PROVIDE SITE ENGINEER WITH A SIEVE ANALYSIS OF MATERIAL USED FOR THE BEDDING COURSE PRIOR TO INSTALLATION.
7. AFTER SCREEDING THE BEDDING MATERIAL, THE PAVERS ARE PLACED ON THIS LAYER. PAVER INSTALLATION CAN BE BY HAND OR WITH MECHANICAL EQUIPMENT.
8. THE PAVER JOINTS ARE FILLED WITH ASTM NO. 9 STONE. DEPENDING ON THE PICP AREA, SPREADING AND SWEEPING CAN BE DONE WITH SHOVELS AND BROOMS, OR LARGER AREAS WITH BOBCATS AND SWEPT INTO THE PAVER JOINTS WITH POWERED BROOMS OR SWEEPERS. ONCE THE JOINTS ARE FULL (WITHIN ¼ IN. OF THE PAVER SURFACE), THE SURFACE MUST BE SWEPT CLEAN PRIOR TO COMPACTION AS LOOSE STONES ON THE SURFACE CAN MAR THE PAVERS, WHEN IN CONTACT WITH A PLATE COMPACTOR.
9. AFTER THE PICP SURFACE IS SWEPT CLEAN, IT IS COMPACTED WITH A PLATE COMPACTOR. A MINIMUM OF TWO PASSES SHOULD BE MADE WITH THE SECOND PASS IN A PERPENDICULAR DIRECTION FROM THE FIRST PASS. THE PATH OF THE PLATE COMPACTOR SHOULD OVERLAP SEVERAL INCHES. FOR PAVING UNITS 3-1/8 IN. TO 4 IN. THICK, THE PLATE COMPACTOR SHOULD EXERT A MINIMUM 5,000 LBF AT 70 TO 90 HZ.
10. COMPACTION CAN CAUSE SOME SETTLEMENT OF THE STONES INSIDE THE JOINTS. IF THE STONES ARE MORE THAN ¼ IN. FROM THE PAVER SURFACE, THEY SHOULD BE TOPPED UP TO THIS LEVEL WITH ADDITIONAL STONES. THE PAVER SURFACE SHOULD BE SWEPT CLEAN PRIOR TO OPENING THE PICP TO TRAFFIC. AGGREGATES IN THE PAVER JOINTS CAN SETTLE IN EARLY IN THE LIFE OF THE PAVEMENT. SOME SETTLEMENT CAN BE REDUCED THROUGH CONSISTENT, THROUGH COMPACTION OF THE BASE, PAVERS AND BEDDING LAYERS. HOWEVER, IT IS ADVISABLE FOR THE CONTRACTOR TO RETURN TO THE SITE AFTER SIX MONTHS, INSPECT THE JOINTS AND TOP THEM UP WITH AGGREGATE IF THEY HAVE SETTLED TO MORE THAN ¼ IN. BELOW THE PAVER SURFACE.
11. USE APPROPRIATE EQUIPMENT AND ADEQUATE NUMBERS OF SKILLED WORKERS WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK FOR PERMEABLE PAVERS AND SUBBASE MATERIAL.
12. THE ABOVE CONSTRUCTION NOTES ARE FROM THE PERMEABLE INTERLOCKING CONCRETE PAVEMENTS MANUAL BY DAVID R. SMITH - FOURTH EDITION. ADDITIONAL INFORMATION FOR THE DESIGN, SPECIFICATIONS, CONSTRUCTION, AND MAINTENANCE OF PICP ARE IN THE MANUAL.

PERMEABLE PAVERS DETAIL

N.T.S.

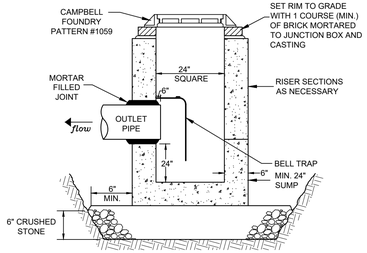


NOTES:

1. ALL COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS OF AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. JUNCTION BOXES SHALL CONFORM TO ASTM C478.
4. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

JUNCTION BOX

N.T.S.



NOTES:

1. ALL CATCH BASIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. JUNCTION BOX SHALL CONFORM TO ASTM C478.
4. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

24" JUNCTION BOX W/ SUMP

N.T.S.

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

DETAILS

DEPICTING

30, 32, 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

SCALE: N.T.S.

DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT · VINCENT J. HYNES · LICENSED PROFESSIONAL ENGINEER

No. 26292100
VINCENT J. HYNES CT. P.E. 26292100
December 12, 2025
DATE

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SHEET No: SE-7

Comm. No.: 10304

12/19/2025 11:53 AM H:\pbfiles2\10000\10300\10304\DWG\Tomas\10304A-1 Notes & Details.dwg

PREFERRED:

	DUCT BANK DIMENSIONS								
	4" DUCT			5" DUCT			6" DUCT		
FIG	W	H	S	W	H	S	W	H	S
1	14½"	10½"	1½"	16½"	11½"	1½"	19"	12½"	2"
2	14½"	16½"	1½"	16½"	18½"	1½"	19"	21"	2"
2A	26½"	10½"	1½"	30½"	11½"	1½"	36"	12½"	2"
3	14½"	22½"	1½"	16½"	25½"	1½"	19"	29½"	2"
3A	20½"	16½"	1½"	23½"	18½"	1½"	27½"	21"	2"
4	14½"	28½"	1½"	16½"	32½"	1½"	19"	38"	2"
4A	26½"	16½"	1½"	30½"	18½"	1½"	36"	21"	2"

FIG. 1
2 DUCTS

FIG. 2
4 DUCTS

FIG. 3
6 DUCTS

FIG. 4
8 DUCTS

ALTERNATE:
(SEE NOTE 3)

FIG. 2A
4 DUCTS

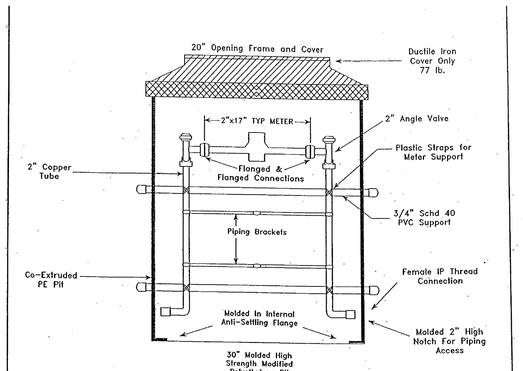
FIG. 3A
6 DUCTS

FIG. 4A
8 DUCTS

NOTES:

1. AT MANHOLES CONDUIT BANKS SHALL BE PER FIGS. 1, 2, 3 OR 4.
2. MINIMUM COVER FROM TOP OF A CONDUIT BANK TO THE PAVEMENT OR EARTH SURFACE TO BE:
   a) STATE HIGHWAYS - 36"
   b) RAILROAD TRACKS - 60"
   c) ALL OTHER AREAS - 24"
3. IN THE CONDUIT RUN BETWEEN MANHOLES IF OBSTRUCTIONS ARE ENCOUNTERED OR TO REDUCE TRENCH DEPTH, FIGS. 2A, 3A OR 4A ARE PERMISSIBLE.
4. CONCRETE SHALL BE 2500 P.S.I., 1/2" MAXIMUM STONE, 6"-9" SLUMP OF SUCH CONSISTENCY THAT SPADING WILL INSURE THE FLOW OF CONCRETE BETWEEN AND UNDER THE INDIVIDUAL DUCTS, BUT NOT SO WET AS TO FLOAT THE DUCTS. FOR TIER BUILDUP CONSTRUCTION A STIFFER CONSISTENCY SHOULD BE USED.
5. DUCTS SHALL BE SCHEDULE 40 PVC.

CONDUIT BANK CONSTRUCTION
N.T.S.



MANUFACTURER	MODEL #
Water & Sewer Specialties	AQUARSPEC2"PITCOMP
Ford – Associated Supply	PM BHC 788-36-48
Depth of Bury	52" as per drawing
Pit Size	30"
Meter Size	2"x17" typical meter can be plumbed for 1-1/2" meter
Pit Material	Co-Extruded PE Pit Black exterior with white interior UV degredation protected. Nominal wall thickness (min,) 1/2".
Meter Box Cover is Ductile Iron, 77 lb.	
Smooth wall interior/exterior. Vertical Crush exceeds 20,000 lb.	
Molded-in Internal Anti-Settling Flange	

WATER METER PIT AND ACCESS COVER DETAIL
(FIRST TAXING DISTRICT WATER DEPARTMENT)
N.T.S.

FCA243618T-00006

FIBERGLASS / POLYMER CONCRETE ASSEMBLY

24" x 36" x 18"
(For actual dimensions see drawing)

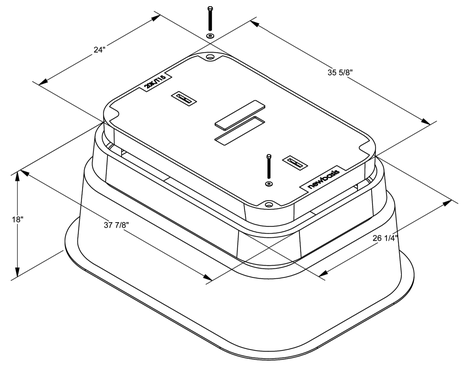
Fiberglass / Polymer Concrete Assembly, Tapered Sides, No Floor, WUC 3.6-"20K," 3/8" Hex Bolts, Standard Nameplate (Specify at time of order) Installed

LOAD RATINGS
Incidental Traffic - Parking Lot, Sidewalk
Conforms to:
- WUC 3.6
- ASTM C 857
- ANSI/SCTE 77

FEATURES:
- USDA/RUS Approved
- Drop-In nameplate
- Shipped assembled
- Skid resistant cover
- Stainless steel bolts
- Cast-in floating nut box
- Integral drain holes

Additional product information continued on the reverse

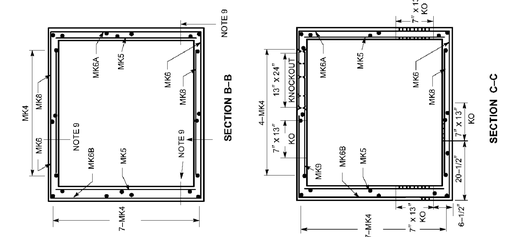
newbasis
Composites for Infrastructure
2626 Kansas Avenue
Riverside, California 92507
951.787.0600
951.787.0632 (fax)
info@newbasis.com
newbasis.com

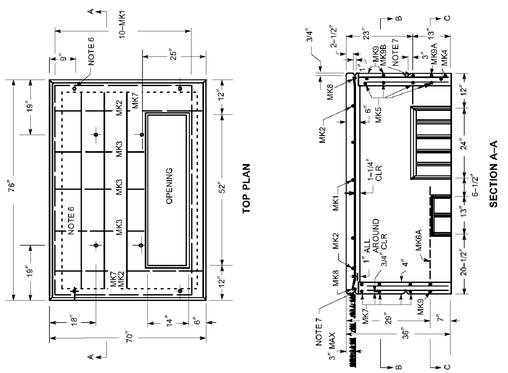


Inside Dimensions		
Length	Width	Depth
33 1/8"	22 1/2"	15"
41 7/8"	30 3/8"	

REV: A.1

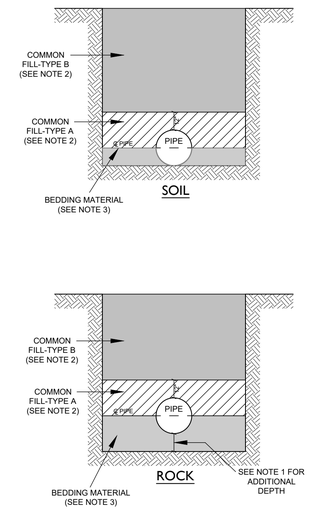
CABLE HANDHOLE DETAIL
N.T.S.





ORIGINAL 12/21/78	PAD – PRECAST CONCRETE – THREE–PHASE TRANSFORMER 500–2500 KVA–76" x 70" x 36"			
APPROVED 3/1/02	NORTHEAST UTILITIES	MATERIAL SPECIFICATION	SPC P–015	7

TRANSFORMER DETAIL
N.T.S.



NOTES:
1. THE TRENCH SHALL BE EXCAVATED TO THE DEPTH REQUIRED, SO AS TO PROVIDE A UNIFORM AND CONTINUOUS BEARING AND SUPPORT FOR THE PIPE BARREL ON SOLID AND UNDISTURBED GROUND AT EVERY POINT BETWEEN JOINTS, EXCEPT THAT IT WILL BE PERMISSIBLE TO DISTURB THE FINISHED TRENCH BOTTOM OVER A MAXIMUM LENGTH OF 16" NEAR THE MIDDLE OF EACH LENGTH OF PIPE BY THE WITHDRAWAL OF PIPE SLINGS OR OTHER LIFTING TACKLE. WHEN REQUIRED, BELL HOLES SHALL BE PROVIDED. THE FINISHED TRENCH BOTTOM SHALL BE ACCURATELY PREPARED BY MEANS OF HAND TOOLS.
2. MATERIAL FOR BACKFILLING SHALL BE EARTH MATERIALS ENTIRELY FREE FROM VEGETATION, TRASH, LUMBER, FROZEN, SOFT OR ORGANIC MATERIALS. NO STONES OR ROCK LARGER THAN THE SIZES LISTED BELOW WILL BE PERMITTED IN THE BACKFILL:

   COMMON FILL-TYPE A: NO STONES OR ROCKS LARGER THAN 1"
   COMMON FILL-TYPE B: NO STONES OR ROCKS LARGER THAN 4"

   COMMON FILL MATERIAL MAY BE OBTAINED FROM THE TRENCH EXCAVATION PROVIDED IT HAS BEEN APPROVED BY THE ENGINEER AND HAS BEEN TESTED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

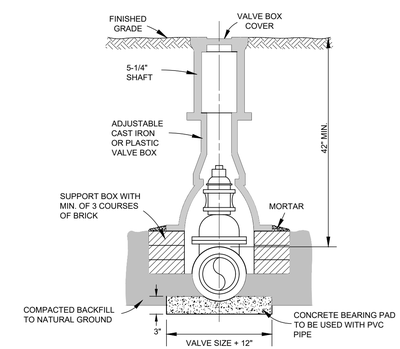
   a.a. ALL MATERIALS TO BE USED FOR BACKFILL, INCLUDING COMMON FILL AND BEDDING MATERIALS, SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACING THE MATERIALS IN THE PIPE TRENCH. ALL BACKFILL AND BEDDING MATERIALS WHETHER OBTAINED FROM THE TRENCH EXCAVATION OR FROM AN OFF-SITE SOURCE MUST BE TESTED AS DIRECTED BY THE ENGINEER.
   a.b. SAMPLES OF THE MATERIALS SHALL BE SUBMITTED TO AN APPROVED TESTING AGENCY FOR ANALYSIS. THE TEST RESULTS AND REPORT STATING THAT THE MATERIALS MEET THE REQUIREMENTS THESE SPECIFICATIONS AND THE SPECIFICATIONS OF FEDERAL, STATE AND LOCAL AUTHORITIES (WHERE APPLICABLE) SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING THE MATERIALS IN THE PIPE TRENCH.

   IF APPROVED MATERIAL OBTAINED FROM THE TRENCH EXCAVATON IS INSUFFICIENT TO COMPLETE THE BACKFILL, THE CONTRACTOR SHALL OBTAIN THE NECESSARY APPROVED COMMON FILL MATERIALS FROM AN OFF-SITE SOURCE.
3. MATERIALS USED FOR BEDDING AND THE HAUNCH AROUND THE PIPE SHALL BE A COARSE TO FINE SANDY MATERIAL WITH MAXIMUM STONE SIZE OF 1 INCH. THE MATERIAL SHALL CONFORM TO ASTM D2487 STANDARD METHOD FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES" USING THE UNIFIED SOIL CLASSIFICATION SYSTEM, EXCEPT WHERE A HIGHER STANDARD IS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS OR BY RULES OR REGULATIONS OF FEDERAL, STATE OR LOCAL GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE OF THE WORK.

   THE MATERIAL SHALL MEET A CLASS II DESIGNATION. SOIL TYPES GW, GP, SW AND SP, NON-COHESIVE, WELL GRADED AND CONTAINING SOME FINES ARE INCLUDED IN THIS CLASS. WHERE VOIDS, FINER GRAINED SOILS OR MOVEMENT MAY ALLOW MIGRATION OF THIS MATERIAL, A FILTER FABRIC AS DIRECTED BY THE ENGINEER WILL BE USED IN THE TRENCH BOTTOM AND SIDES BEFORE THE SELECT FILL BEDDING IS PLACED.

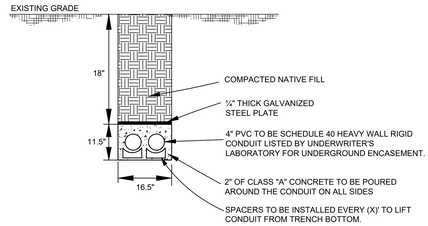
   BEDDING MATERIAL MAY BE OBTAINED FROM THE TRENCH EXCAVATION PROVIDED IT HAS BEEN TESTED IN ACCORDANCE WITH THE REQUIRE- MENTS STATED ABOVE AND APPROVED BY THE ENGINEER. IF THE APPROVED MATERIAL OBTAINED FROM THE TRENCH EXCAVATION IS INSUFFICIENT TO COMPLETE THE BEDDING, THE CONTRACTOR SHALL OBTAIN THE NECESSARY TESTED AND APPROVED BEDDING MATERIALS FROM AN OFF-SITE SOURCE.
4. REFER TO SECTION 2210 OF THE CONNECTICUT-AMERICAN WATER COMPANY SPECIFICATIONS.

WATER LINE TRENCH BACKFILL MATERIALS
N.T.S.



NOTES:
1. SIMILAR INSTALLATION FOR CURB BOX OR SERVICE LINE
2. CONTRACTOR TO VERIFY VALVE TYPE WITH FIRST DISTRICT WATER DEPARTMENT

VALVE BOX INSTALLATION (TYP.)
N.T.S.



CONDUIT TRENCH DETAIL (CONCRETE ENCASEMENT)
N.T.S

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

DETAILS
DEPICTING
30, 32, 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING
22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

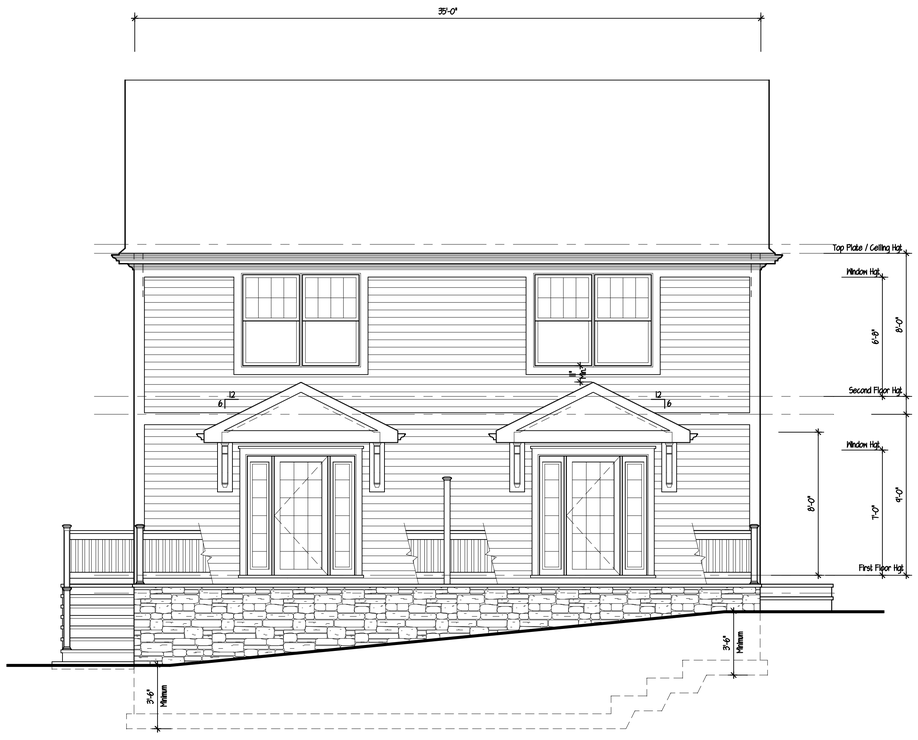
SCALE: N.T.S.
DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT LICENSED PROFESSIONAL ENGINEER No. 0032100 VINCENT J. HYNES CT. P.E. 0032100
December 12, 2025
DATE

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

SHEET No:
SE-8
Comm. No.: 10304

12/16/2025 11:53 AM\\Jobfiles2\10000\10300\10304\DWG\Tomas\10304-1 Notes & Details.dwg



Front Elevation

Scale: 1/4" = 1'-0"

Square Footage

First Floor	720 Sf
Second Floor	954 Sf
Total	1,674 Sf

Preliminary Plans Conform To Building Standards Stated In Article 4 Table 4.3.1-D Of The City Of Norwalk Zoning Regulations

Schedule For Proposed Building Material and Color Scheme

	Name:	Type:	Color:
Siding:	n/a	Vinyl	Snowscape Grey, Quarry Grey Or Cavern Steel
Windows:	Anderson	Double Hung	White
Trim:	Azek	Composite	White
Front Door:	n/a	Wood	Stained
Garage:	n/a	Wood	Stained
Rooting:	Grand Manor	Asphalt	Brownstone
Stone:	Stone Veneer	n/a	Cornish



Left Elevation

Scale: 1/4" = 1'-0"

DO NOT SCALE PRINTS THESE PLANS ARE THE PROPERTY OF THE ARCHITECT. ANY USE OR REPRODUCTION IN WHOLE OR PART WITHOUT THE WRITTEN AUTHORIZATION OF THE ARCHITECT IS PROHIBITED. ANY PERSON OR CORPORATION USING PLANS WITHOUT PROPER AUTHORIZATION SHALL BE RESPONSIBLE TO COMPENSATE THE ARCHITECT.

THESE PLANS ARE NOT VALID FOR A BUILDING PERMIT UNLESS ORIGINALLY SIGNED AND SEALED BY THE ARCHITECT AND ARE FOR THE CONSTRUCTION OF ONE SINGLE-FAMILY DWELLING BY THE PERSON WHOSE NAME APPEARS ON THE PLANS.

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING LICENSED PROFESSIONAL SHALL ATTACH TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED" FOLLOWED BY THEIR NAME AND DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DeMasi Architects P.C.
105 SMITH AVENUE, MOUNT KISCO, NEW YORK 10549
PHONE: (914) 666-3656
EMAIL: Lou@DemasiArchitects.com WEBSITE: DemasiArchitects.com

Do Not Scale Prints

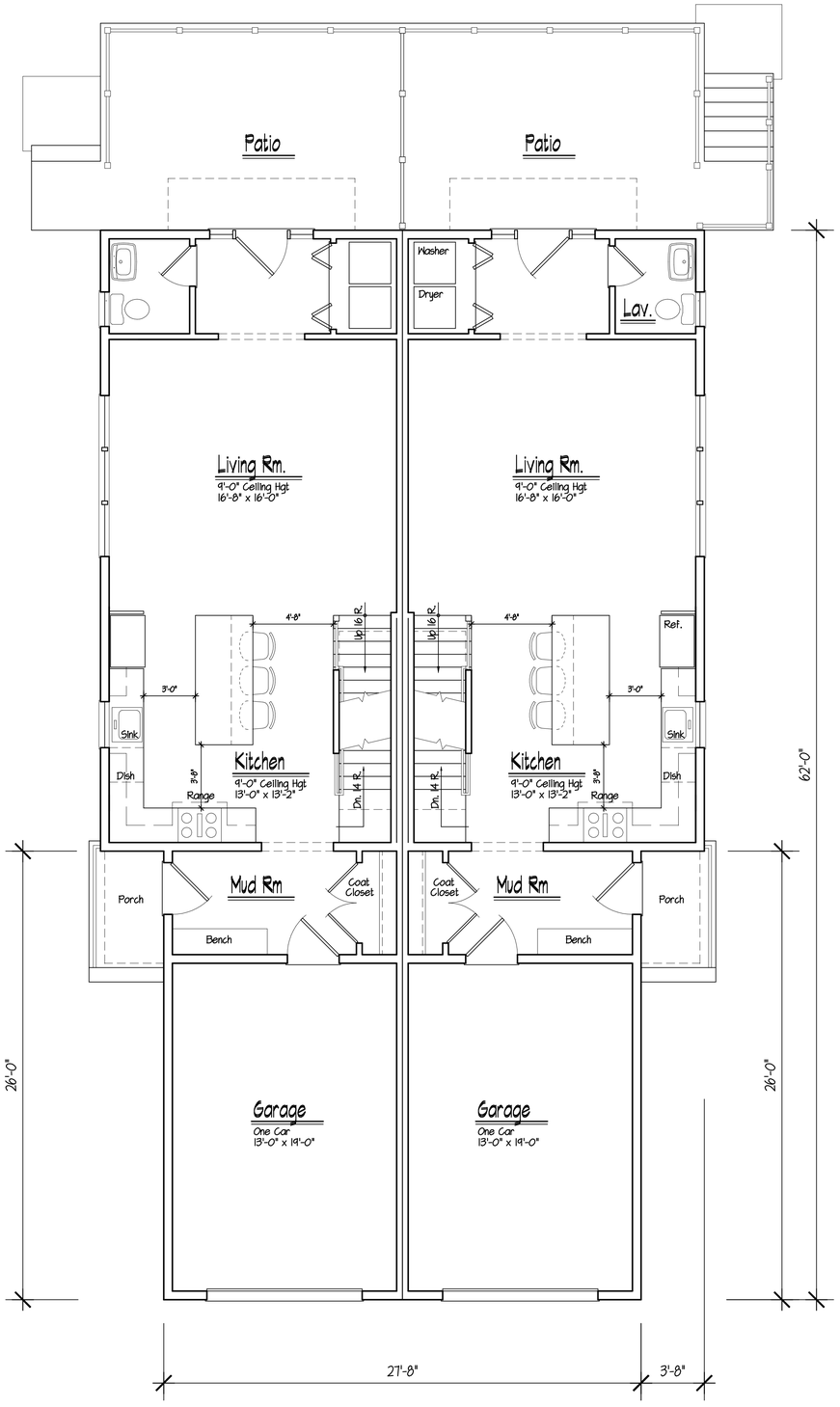
Residence For
32 Charles Street
Norwalk, Connecticut

Revision	Date

Date: Jan. 5, 2026

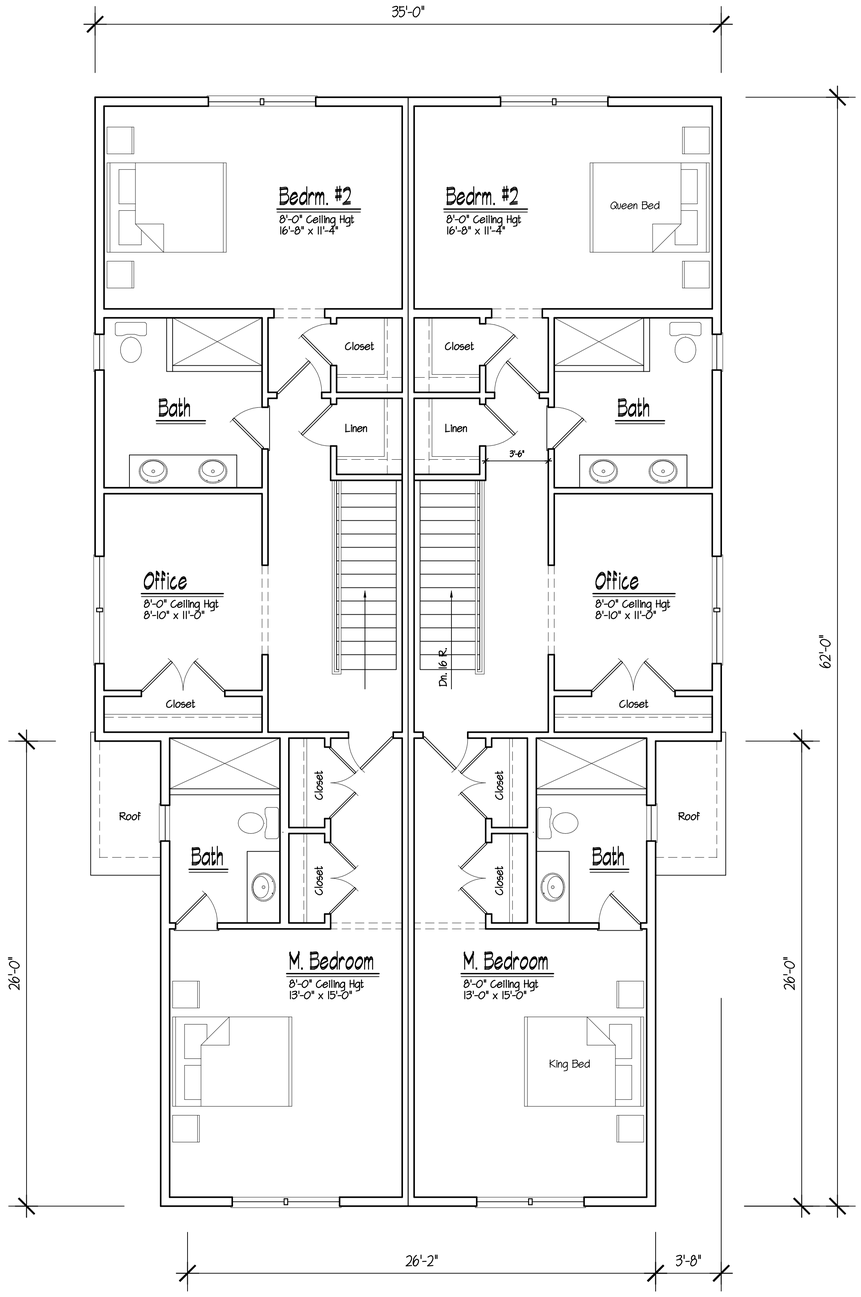
Job No: 225-119

Drawing: 3 OF 3



First Floor Plan

Scale: 1/4" = 1'-0"



Second Floor Plan

Scale: 1/4" = 1'-0"

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DeMasi Architects P.C.
105 SMITH AVENUE, MOUNT KISCO, NEW YORK 10549
PHONE: (914) 666-3656
EMAIL: Lou@DemasiArchitects.com WEBSITE: DemasiArchitects.com

Do Not Scale Prints

Residence For
32 Charles Street
Norwalk, Connecticut

Revision	Date

Date: Jan. 5, 2026

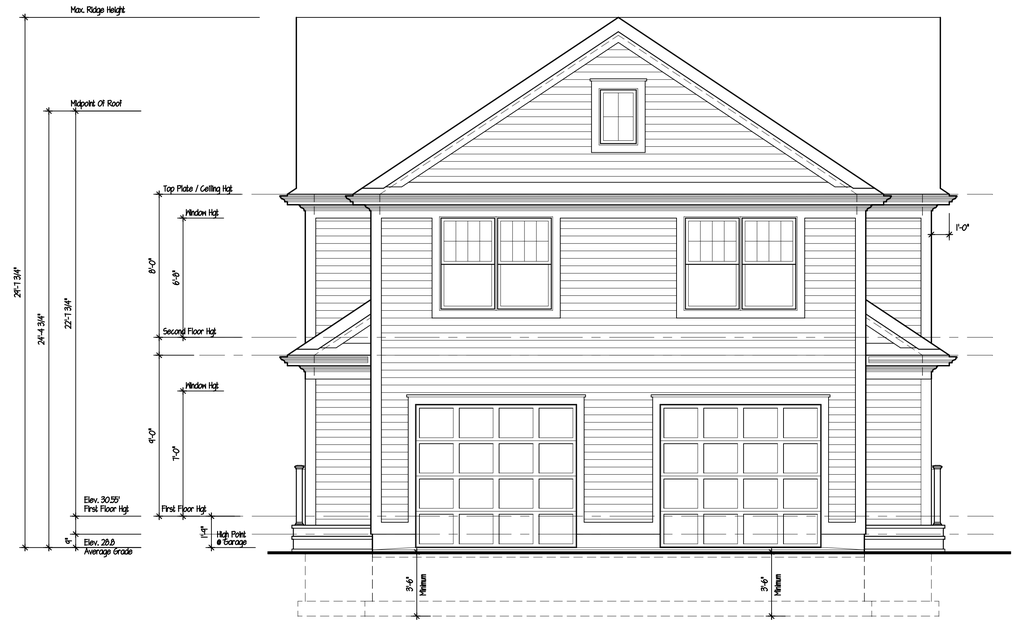
Job No: 225-119

Drawing: 2 OF 3

DO NOT SCALE PRINTS THESE PLANS ARE THE PROPERTY OF THE ARCHITECT. ANY USE OR REPRODUCTION IN WHOLE OR PART WITHOUT THE WRITTEN AUTHORIZATION OF THE ARCHITECT IS PROHIBITED. ANY PERSON OR CORPORATION USING THESE PLANS WITHOUT PROPER AUTHORIZATION WILL BE RESPONSIBLE TO COMPENSATE THE ARCHITECT.

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Rear Elevation

Scale: 1/4" = 1'-0"



Right Elevation

Scale: 1/4" = 1'-0"

DeMasi Architects P.C.
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PHONE: (914) 666-3656
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Do Not Scale Prints

Residence For
32 Charles Street
Norwalk, Connecticut

Revision	Date

Date: Jan. 5, 2026

Job No: 225-119

Drawing: 3 OF 3

COASTAL AREA MANAGEMENT REPORT

Prepared For
30, 32, & 34 Charles Street
Tomas Brothers LLC
2 Ruby Street
Norwalk, CT 06850

Prepared by
Redniss & Mead, Inc.
22 First Street
Stamford, CT
(203) 327-0500

Issued on
December 12, 2025

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1.0 - INTRODUCTION

Redniss & Mead, Inc. has prepared this Coastal Area Management (CAM) report on behalf of Tomas Brothers LLC in support of a site plan approval process for the proposed development at 30, 32, and 34 Charles Street in Norwalk, Connecticut. The properties are located within the CD-2 zoning district and are located at the north end of Charles Street bound by multi-family residential properties and the Norwalk River. The CAM Application is required as the site is located within the Coastal Area Management (CAM) zone of the City of Norwalk. The following sections of this document present a project narrative and provide information required by the CAM application.

1.1 - Project Purpose

The applicant is proposing to construct a duplex style building (two residential units) on each of the three lots for six total residential units. Each duplex will be constructed with an attached garage, permeable paver driveway with available space for the required parking, patio or deck area, and associated site improvements. Access to the site will be via an existing 15' right-of-way that connects to Osborne Avenue. Reference is made to the site and utility plans by Redniss & Mead, Inc. as well as a Site Engineering Report by Redniss & Mead, Inc.

1.2 - Existing Site Conditions

The properties at 30, 32, and 34 Charles Street are a combined 22,048 sf (0.51 acres) in size. 30 Charles Street is developed with a single-family residence, a driveway, a pool, and decks, walks and other ancillary improvements typically found on single-family properties and is accessed via a 15' right-of-way that connects to Osborne Avenue. A portion of the driveway and patio area extend to 32 and 34 Charles Street, but no other improvements are currently installed on those sites. The topography is such that the site stormwater runoff sheet flows from the site from east to west towards the Norwalk River. A portion of 34 Charles Street (northwest corner of the site) is located within the Coastal Hazard Area (FEMA Zone AE-10) as depicted on the Federal Emergency Management Agency – Flood Insurance Map Community No. 09001C0531G, effective July 8, 2013, while the remainder of the parcel and the parcels at 30 and 32 Charles Street are not located within a Special Flood Hazard Area.

The image below illustrates the location of the project site in relation to the Norwalk River, which is to the immediate west of the project area. The area indicated within the image is fully within the coastal area management boundary.

Location of Site in relation to the Coastal Boundary
Norwalk, CT



2.0 - COASTAL AND ENVIRONMENTAL RESOURCES

Redniss & Mead, Inc. conducted a review of coastal and environmental resources at the site and adjacent areas as required by the Coastal Area Management (CAM) application. This review was conducted to determine the potential for impacts associated with the proposed project and to ensure that the project design is consistent with applicable regulations and policies.

2.1 - Consistency with General Goals and Policies

The proposed project is consistent with the general goals and policies outlined in C.G.S. 22a-92(a), as follows:

(1) To insure that the development, preservation or use of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water resources to support development, preservation or use without significantly disrupting either the natural environment or sound economic growth.

The proposed project is consistent with the existing uses of the neighborhood and as allowed by the Zoning Regulations and therefore there will be no long-term disruption to the natural environment or sound economic growth of the area.

(2) To preserve and enhance coastal resources in accordance with the policies established by chapters 439, 440, 446i, 446k, 447, 474 and 477.

The proposed project will preserve and enhance the coastal resources in accordance with the policies established by the aforementioned chapters. The proposed project is consistent with the existing uses of the neighborhood and work is landward of the flood hazard area, with the exception of a sanitary sewer connection.

(3) To give high priority and preference to uses and facilities which are dependent upon proximity to the water or the shorelands immediately adjacent to marine and tidal waters.

The proposed project is consistent with the existing uses of the neighborhood and is elevated in relation to the Norwalk River and will not interfere with existing waterfront uses adjacent to the site.

(4) To resolve conflicts between competing uses on the shorelands adjacent to marine and tidal waters by giving preference to uses that minimize adverse impacts on natural coastal resources while providing long term and stable economic benefits.

Given the existing use and elevations of the site relative to the river, the proposed project will not create conflicts with competing coastal uses.

(5) To consider in the planning process the potential impact of coastal flooding and erosion patterns on coastal development so as to minimize damage to and destruction of life and property and reduce the necessity of public expenditure to protect future development from such hazards.

The development activity is located outside of the 100-year flood zone for the Norwalk River with the exception of a sanitary sewer connection to an existing sanitary sewer main. Sediment and erosion controls are proposed to be installed during construction. With proper implementation of the project plan, the project will not affect erosion patterns in the River.

(6) To encourage public access to the waters of Long Island Sound by expansion, development and effective utilization of state-owned recreational facilities within the coastal area that are consistent with sound resource conservation procedures and constitutionally protected rights of private property owners.

The proposed development will be located on private property and therefore will not adversely affect state-owned recreational facilities.

(7) To conduct, sponsor and assist research in coastal matters to improve the data base upon which coastal land and water use decisions are made.

The proposed development will not impede the goals of the State or efforts of third parties to conduct, sponsor or assist in research into coastal matters.

(8) To coordinate the activities of public agencies to insure that state expenditures enhance development while affording maximum protection to natural coastal resources and processes in a manner consistent with the state plan for conservation and development adopted pursuant to part I of chapter 297.

State funding is not proposed.

(9) To coordinate planning and regulatory activities of public agencies at all levels of government to insure maximum protection of coastal resources while minimizing conflicts and disruption of economic development.

The proposed development will not impede the duties of planning and regulatory activities of public agencies.

(10) To insure that the state and the coastal municipalities provide adequate planning for facilities and resources which are in the national interest as defined in section 22a-93 and to insure that any restrictions or exclusions of such facilities or uses are reasonable.

The proposed project will not adversely affect any facilities which are defined as 'in the national interest" in accordance with 22a-93.

2.2 - Potential Effects on Coastal Resources

The subject site is located in a developed multi-family residential neighborhood that is adjacent to Norwalk River. Based on a review of the City of Norwalk's Building Zone Map, the site is located within the Coastal Area Management Boundary. As part of this evaluation, Redniss & Mead, Inc. has reviewed available information regarding coastal resources in the vicinity of the site to determine whether they would be affected by the proposed project. In general, coastal resources include:

A. General Resources
B. Bluffs & Escarpments
C. Rocky Shorefronts
D. Beaches & Dunes
E. Intertidal Flats
F. Tidal Wetlands
G. Freshwater Wetlands
H. Coastal Hazard Areas
I. Developed Shorefront
J. Islands
K. Shorelands
L. Shellfish Concentrations
M. Coastal Waters & Embayments
N. Air Resources & Quality

Based on the Connecticut Department of Environmental Protection (CTDEP) Coastal Resources Map (dated 1979), coastal resources were not identified at the site. The sites lie along the developed shorefront of the Norwalk River and the northwest corner of 34 Charles Street is located within the regulatory floodplain of Norwalk River; the site lies within flood zone AE (El. 10) as depicted on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 09001C0531G dated July 8, 2013. Based on the City of Norwalk Inland Wetlands and Watercourses Map (dated 2009), there are no mapped inland wetlands within 50 feet of the proposed activity. As such, no adverse effects are expected regarding the resources identified above.

2.3 - Identification of Significant Natural Features

Given the existing development of the site and that proposed activities are landward of the AE zone limit, no significant natural features will be affected by the proposed development.

2.4 - Identification of Significant Historical and Cultural Resources

No significant cultural resources have been identified at the site.

2.5 - Identification of Applicable Coastal Policies Affected by Project

Redniss & Mead, Inc. has reviewed applicable coastal use policies which could be affected by the project, including:

A. General Development
B. Water and Dependent Use
C. Ports & Harbors
D. Coastal Structures & Filling
E. Dredging & Navigation
F. Boating
G. Fisheries
H. Coastal Recreation & Access
I. Sewer and Water Lines
J. Energy Facilities
K. Fuels, Chemicals, & Hazardous Material
L. Transportation
M. Solid Waste
N. Dams, Dikes & Reservoirs
O. Cultural Resources
P. Open Space & Agricultural

Given the proposed work on site is landward of the AE zone, most of these policies are not affected by the project. However, the following may be affected:

A. General Development - The proposed project is consistent with the existing uses within the neighborhood and allowed via the zoning regulations, therefore there will be no long-term disruption to the natural environment or sound economic growth of the area.

   The temporary activities of construction have the potential to produce noise, odor, fumes, and dust which will be mitigated via the prepared Sediment & Erosion Control Plan. The plan provides guidance for erosion control, dust control, and tree protection.

   The proposed development will provide additional long term Water Quality benefits as described in the Site Engineering Report prepared by Redniss & Mead, Inc.

I. Sewer and Water Lines – the proposed development activity is located in an area where municipal water and sewer lines already exist, and the project will not include extension of sewer and water lines into coastal areas. Certain upgrades to stormwater management will be incorporated into the project as proposed on the accompanying plan sets.

3.0 - SUMMARY AND CLOSING

Based on a review of the proposed development of 30, 32, and 34 Charles Street, as well as information concerning coastal resources in the site vicinity and proper sediment and erosion control during construction no adverse coastal impacts are anticipated with the project. Activities will be conducted in accordance with all local, state, and federal requirements, including those for environmental remediation and management of stormwater. For these reasons and other stated above, the proposed use is consistent with state goals and policies for coastal management and should be acceptable to the City of Norwalk.

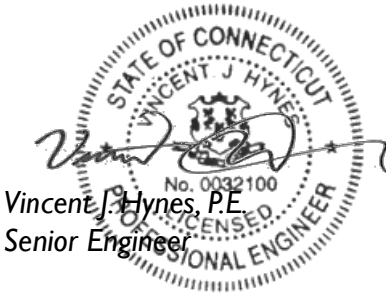
4.0 - LIMITATIONS

In completing this application, Redniss & Mead, Inc. has relied upon information provided by Tomas Brothers LLC and its subcontractors, information contained in previously prepared documents and resource maps prepared by others.

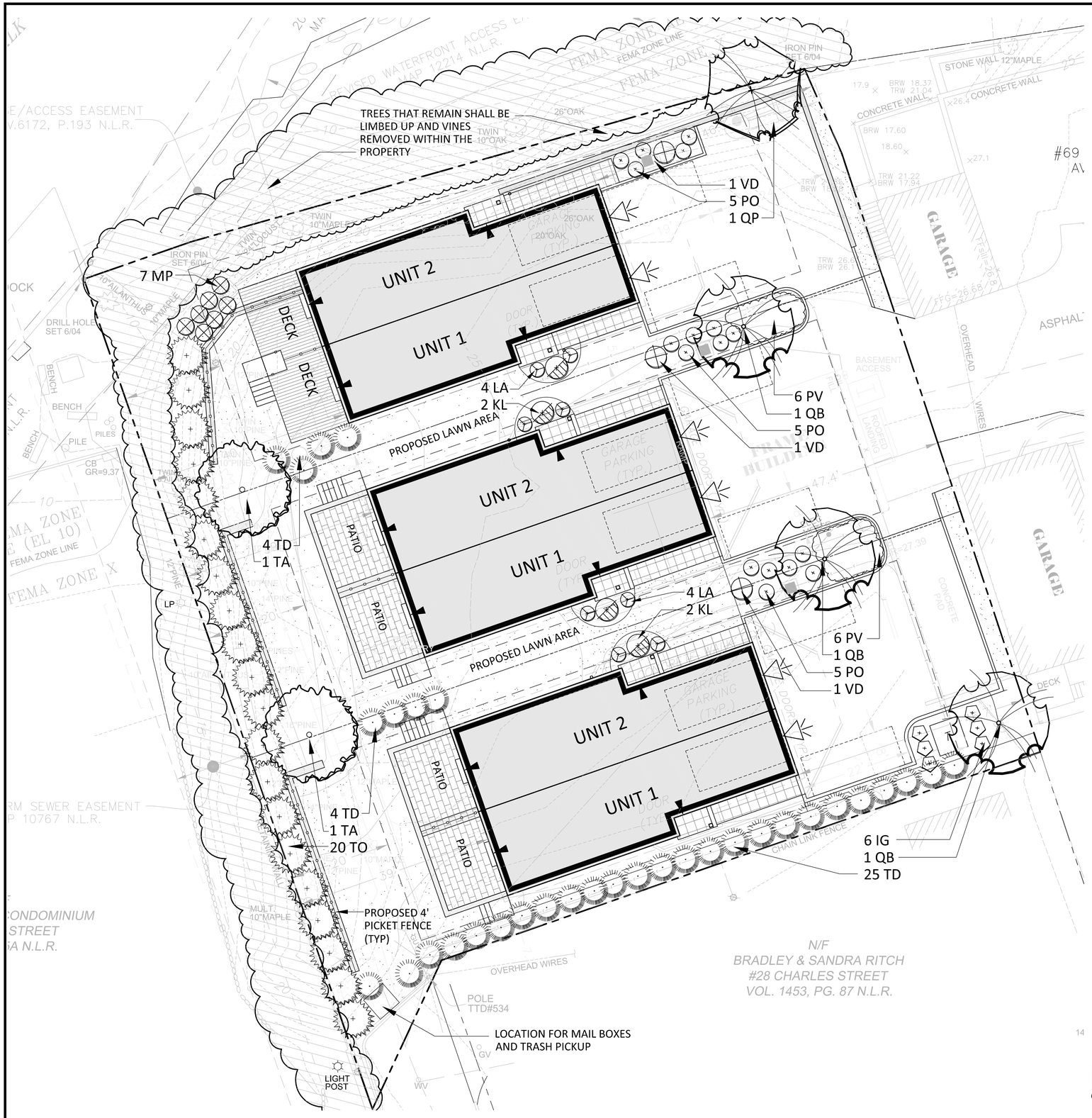
This application was prepared specifically for the City of Norwalk on behalf of Tomas Brothers LLC. No person or other body shall be entitled to rely upon or use information presented in this report without written consent of Tomas Brothers LLC and Redniss & Mead, Inc.

5.0 - SIGNATURES OF REPORT AUTHORS

This report has been prepared by Redniss & Mead, Inc. The names listed below are the principal authors of this report. Requests for information regarding the content of this report should be directed to those individuals.



Vincent J. Hynes, P.E.
Senior Engineer

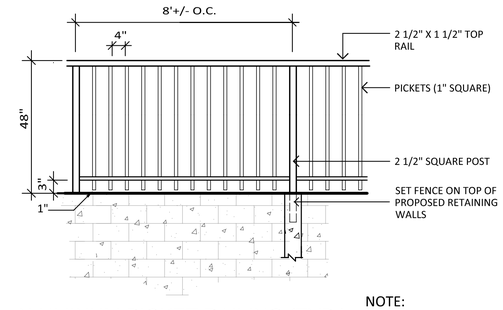


LEGEND

- PROPERTY LINE
- EXISTING CONTOUR (62)
- NEW FENCE
- EX. EVERGREEN/DECIDUOUS TREE TO REMAIN (APPROX. LOCATION)
- NEW EVERGREEN TREE
- NEW DECIDUOUS SHADE TREE
- NEW SHRUB
- NEW / EX. LAWN
- TREE LINE TO REMAIN (APPROX.)
- NEW WALL MOUNTED LIGHT FIXTURE
- NEW TRANSFORMER LOCATION
- NEW BUILDING/ADDITION
- PROPOSED CATCHBASIN

GENERAL NOTES:

1. EXISTING AND PROPOSED SITE INFORMATION TAKEN FROM A DIGITAL AUTOCADD SITE PLAN SUPPLIED BY REDNISS & MEAD.
2. CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO HAVE UNDERGROUND UTILITY LINES MARKED BY THEM PRIOR TO START OF ANY EXCAVATION WORK.
3. EXACT LOCATION OF PROPOSED PLANTINGS AND SPECIES TYPES MAY VARY FROM THIS PLAN BASED ON SITE PLAN REVISIONS AND/OR ACTUAL FIELD CONDITIONS.
4. PLANT SPECIES SUBSTITUTIONS MAY BE MADE WITH THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANTING. SUBSTITUTED PLANTS SHALL BE AT AN EQUAL OR GREATER SIZE AS NOTED USING A SIMILAR TYPE PLANT.
5. IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITIES OF PLANTS IN THE "PLANT LIST" AND THE ACTUAL QUANTITIES SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.



ALUMINUM PICKET RAILING (TYP.)

NOTE:
1. COLOR SHALL BE BLACK.

SCALE: NOT TO SCALE

PLANT LIST-BUILDING

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
TREES					
3	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2-2.5" CAL.	B&B
1	QP	QUERCUS PALUSTRIS	PIN OAK	2-2.5" CAL.	B&B
2	TA	TILIA AMERICANA 'RED REDMOND'	REDMOND LINDEN	2-2.5" CAL.	B&B
EVERGREEN					
20	TO	THUGA OCCIDENTALIS 'NIGRA'	DARK ARBORVITEA	6-7' HT.	B&B
33	TD	THUGA OCCIDENTALIS 'DEGROOTS SPRIRE'	DEGROOTS SPIRE ARBORVITEA	5-6' HT.	B&B
SHRUBS					
6	IG	ILEX GLABRA 'SHAMROCK'	COMPACT INKBERRY	30-36" HT.	CONT.
4	KL	KALMIA LATIFOLIA	MOUNTAIN LAUREL	30-36" HT.	CONT.
8	LA	LEUCOTHOE AXILLARIS	LEUCOTHOE	18-24" HT.	
7	MP	MYRICA PENNSYLVANICA	BAYBERRY	30-36" HT.	CONT.
15	PO	POTENTILLA X 'DAKOTA SUNSPOT'	YELLOW POTENTILLA	30-36" HT.	CONT.
3	VD	VIBURNUM DENTATUM 'BLUE MUFFIN'	BLUE MUFFIN ARROWWOOD	36-42" HT.	CONT.
PERENNIALS					
12	PV	PANICUM VIRGATUM 'SHENADOAH'	SHENADOAH SWITCHGRASS	1 GAL.	CONT.

PROJECT NORTH

GRAPHIC SCALE
0' 5' 10' 20'

REVISIONS:

DRAWING TITLE: LANDSCAPE PLAN

PROJECT:
TOMAS BROTHERS LLC
30, 32 & 34 CHARLES STREET
NORWALK, CONNECTICUT

ENVIRONMENTAL LAND SOLUTIONS, LLC
Landscape Architecture and Environmental Planning
8 KNIGHT STREET, SUITE 203
NORWALK, CONNECTICUT 06851
Tel: (203) 855-7879 Fax: (203) 855-7836
info@elsllc.net www.elsllc.net

SEAL:

DATE: DECEMBER 17, 2025
SCALE: 1"=10'
DRAWING NO.: LP.1



Calculation Summary							
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	Grid Height
CalcPts_1	Fc	0.18	2.7	0.0	N.A.	N.A.	0

Luminaire Schedule					
Qty	Label	Watts	Arrangement	LLF	Description
3	WP4F	24.371	Single	0.282	EXO LNC2-48L-10-3K7-4F-UNV-finish TBD

Project:
30-32-34 Charles St

Contact:
Cliff Gilbert
Specifications - Southern CT
(203) 788-0814
cgilbert@illuminatene.com

Detail: Photometric Calculation
Date: 12-15-2025
Revision:----
Scale: 1" = 20'00"
Drawn By: SB

illuminate
263 Winn Street
Burlington, MA 01803
(781) 935-8500

333 Pleasant Valley Road
South Windsor, CT 06074
(860) 282-0597

Drawing Number:

L-1

Sheet 1 of 1

EXO
OUTDOOR LIGHTING

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

LNC2

SMALL LED LITEPAK

FEATURES

- 60% more lumens and increased performance than smaller LNC models
- 3000K, 4000K and 5000K as well as Phosphor Converted Amber
- Type II, III and IV distributions available for a variety of application needs
- Quick-mount adapter allows easy installation/maintance
- 347V and 480V versions for industrial applications and Canada
- Full cut-off, neighbor friendly
- Optional photocontrol for additional energy savings



C SP® US IP65 DLC LISTED DLC LISTED PREMIUM

SERVICE PROGRAMS

QS10

CONTROL TECHNOLOGY

NX LIGHTING CONTROLS™

SPECIFICATIONS

CONSTRUCTION

- Rugged die-cast aluminum housing protects components and provides an architectural appearance
- Casting thermally conducts LED heat to optimize performance and long life
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating.
- Construction tested to ASTM B117 for 1,000 hours of salt spray.

OPTICS

- Zero uplight distributions using individual acrylic Micro Strike Optics
- LED optics provide IES type III and IV distributions. Optional (CS) acrylic diffuser available for reduced glare
- L96 at 60,000hrs (Projected per IESNA TM-21-11), see table on page 3 for all values

INSTALLATION

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box)
- Designed for direct j-box mount.
- Optional 1/2" conduit hubs available (standard for control options and battery versions)

ELECTRICAL

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option available in 25W and 35W configurations
- Minimum operating temperature is -40˚C/-40˚F
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Driver RoHS and IP66
- 10kA surge protector available as an option
- 3000K CCT nominal, 4000K CCT nominal, 5000K CCT nominal (70 CRI)

CONTROLS

- Universal button photocontrol for use with 120-277V configurations
- Occupancy sensor options available for complete on/off and dimming control
- NX Lighting Controls™ available that feature dimming and occupancy sensor
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress. Uses 15 watts of power for about 2000 lumens
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options can not be included in one fixture.

CERTIFICATIONS

- Listed to UL1598 and CSAC22.2#250.0-24 for wet locations
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations on this page are DLC Qualified. Refer to http://www.designlights.org/ for the most up-to-date list.
- Fixture is IP65 rated

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	1000-5600
Wattage Range	10-45
Efficacy Range (LPW)	108-124
Weights lbs. (kg)	9.6 (24.5)

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EXO
OUTDOOR LIGHTING

LNC2
SMALL LED LITEPAK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

ORDERING GUIDE

= Service Program
Limit of 15 luminaires
QS10

Example: LNC2-48L-25-3K7-3-UNV-DBT-PC

CATALOG #

ORDERING INFORMATION

Series		Light Engine		CCT/CRI		Distribution		Voltage	
LNC2	Small LitePak LNC2	**48L-10**	1000 lumens	**3K7**	3000K, 70 CRI	**2**	Type 2	**UNV**	120-277V
		48L-15	2000 lumens	**4K7**	4000K, 70 CRI	**3**	Type 3	**120**	120V
		48L-20	2500 lumens	**5K7**	5000K, 70 CRI	**4F**	Type 4 Forward	**208**	208V
		48L-25	3500 lumens	**AP**	Amber Phosphor Converted [11]	**4W**	Type 4 Wide	**240**	240V
		48L-35	4500 lumens					**277**	277V
		48L-45	5600 lumens					**347**	347V [7]
								480	480V [7]

Mounting		Finish		Control Options		Additional Options	
Leave blank for down		**BLT**	Black Matte Textured	**PC**	Photocontrol [4]	**F**	Fusing (specify voltage)
NV	Inverted [3]	**BLS**	Black Gloss Smooth	**BTSO12F**	"Bluetooth Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height [5, 8]	**EH**	Battery Backup Unit with Heater (-30˚C) [6, 9]
		DBT	Dark Bronze Matte Textured			**E**	Battery Backup Unit (0˚C) [6, 9]
		DBS	Dark Brone Gloss Smooth	**SCP_F**	Programmable Occupancy Sensor to Control Options Section [9, 10, 12]	**CS**	Comfort Shield (N/A with Prismatic Refractor)
		GTT	Graphite Matte Textured			**2DR**	Dual Driver [1, 2]
		LGS	Light Grey Gloss Smooth			**2PF**	Dual Power Feed [1, 2]
		PSS	Platinum Silver Smooth			**CH**	Surface Conduit Hubs [5]
		WHT	White Matte Textured			**SP**	10kA Surge Protector
		WHS	White Gloss Smooth				
		VGT	Verde Green Textured				
		Color Option					
		CC	Custom Color				

NOTES

1 Available in 25, 35 & 45W
2 Options cannot be combined with controls or PC option
3 Not available with occupancy sensor, battery backup
4 PC comes in standard housing
5 BTS and CH options come in medium back box
6 E and EH come in large back box
7 347V & 480V only available in 25 and 35W
8 Only available in 45 Watt
9 Not available in 347/480 Volt
10 Select 8 ft or 20 ft mounting height
11 Can be ordered as ETO
12 Not available with E or EH

REPLACEMENT PARTS (MADE TO ORDER) /ACCESSORIES

	Catalog Number	Description
☐	**WP-BB-XXX***	Accessory for conduit entry
☐	**LNC2-CS**	Frosted acrylic comfort shield/lens reduces glare and improves uniformity with only 15% lumen reduction

Notes:
* Replace XXX with paint color

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EXO
OUTDOOR LIGHTING

LNC2

SMALL LED LITEPAK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

ORDERING GUIDE – STOCK

STOCK ORDERING INFORMATION

Catalog Number	Lumens	Wattage	LED Count	CCT/CRI	Voltage	Distribution	Photocell	Finish
LNC2-35-4K7-3-PC	3910	35	48L	4000K/70	120-277V	3	Yes	Dark Bronze Matte Textured

PERFORMANCE DATA

Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)			4K (4000K NOMINAL 70 CRI)			3K (3000K NOMINAL 80 CRI)		
			Lumens	LPW	B-U-G	Lumens	LPW	B-U-G	Lumens	LPW	B-U-G
10W	10.6W	Type 3	1213	121	B0-U0-G0	1117	112	B0-U0-G0	1081	108	B0-U0-G0
		Type 4	1244	124	B0-U0-G0	1144	114	B0-U0-G0	1109	111	B0-U0-G0
15W	14.5W	Type 3	1820	121	B0-U0-G0	1676	112	B0-U0-G1	1622	108	B0-U0-G1
		Type 4	1868	125	B0-U0-G1	1718	115	B0-U0-G1	1663	111	B0-U0-G1
20W	20W	Type 3	2427	121	B0-U0-G1	2234	112	B0-U0-G1	2163	108	B0-U0-G1
		Type 4	2487	124	B0-U0-G1	2292	115	B0-U0-G1	2218	111	B0-U0-G1
25W	28W	Type 3	3033	121	B1-U0-G1	2793	112	B0-U0-G1	2703	108	B0-U0-G1
		Type 4	3112	124	B0-U0-G1	2862	114	B0-U0-G1	2772	111	B0-U0-G1
35W	36.4W	Type 3	4247	121	B1-U0-G1	3910	112	B1-U0-G1	3785	108	B0-U0-G1
		Type 4	4355	124	B1-U0-G2	4011	115	B1-U0-G1	3881	111	B1-U0-G1
45W	45.1W	Type 3	5466	118	B1-U0-G1	5031	112	B1-U0-G1	4871	106	B1-U0-G2
		Type 4	5604	117	B1-U0-G2	5159	108	B1-U0-G2	4995	104	B1-U0-G2

PROJECTED LUMEN MAINTENANCE

STANDARD 9, 12 AND 18L VERSIONS

Ambient Temperature	OPERATING HOURS					
	0	25,000	50,000	TM-21-11* L96 60,000	100,000	L70 (Hours)
25°C / 77°F	1	0.97	0.95	0.94	0.91	408,000
40°C / 104°F	0.99	0.96	0.94	0.93	0.89	356,000

LUMINAIRE AMBIENT TEMP FACTOR

AMB TEMP		LUMEN MULTIPLIER
0C	32F	1.03
10C	50F	1.01
20C	68F	1
25C	77F	1
30C	86F	0.99
40C	104F	0.98

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.710		

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EXO
OUTDOOR LIGHTING

LNC2

SMALL LED LITEPAK

DATE: | LOCATION:

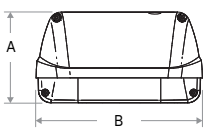
TYPE: | PROJECT:

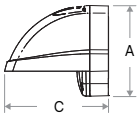
CATALOG #:

ELECTRICAL DATA

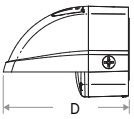
System Watts	Input Voltage	Current (AMPS)	System Power (W)
10W	120	0.09	10.6
	277	0.038	
	347	0.031	
	480	0.022	
15W	120	0.12	14.5
	277	0.07	
	347	0.04	
	480	0.03	
20W	120	0.169	20
	277	0.072	
	347	0.058	
	480	0.042	
25W	120	0.235	28
	277	0.101	
	347	0.081	
	480	0.058	
35W	120	0.305	36.4
	277	0.131	
	347	0.105	
	480	0.076	
45W	120	0.378	45.1
	277	0.163	
	347	0.13	
	480	0.094	

DIMENSIONS

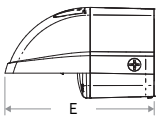




SCP HOUSING



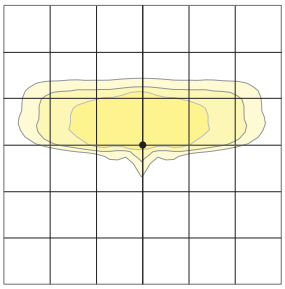
EH - BATTERY BACKUP HOUSING



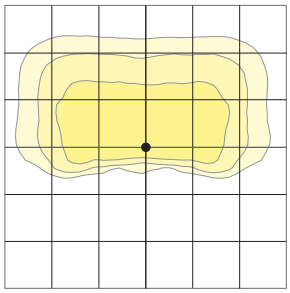
A	B	C	D	E
5.54" (141 mm)	10.16" (258 mm)	6.33" (161 mm)	7.64" (194 mm)	9.10" (231 mm)

DISTRIBUTIONS

Type 3



Type 4 Wide



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EXO OUTDOOR LIGHTING

LNC2

SMALL LED LITEPAK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

OUTDOOR LIGHTING CONTROLS OPTIONS

CONTROLS FUNCTIONALITY

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
Independent	BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	12ft		BTSMP-OMNI-O

DEFAULT SETTINGS

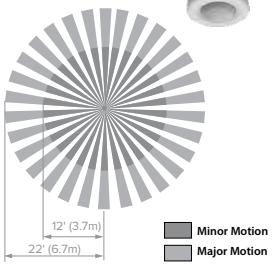
NX Wireless	**Occupancy Sensor**	Enabled
	Occupancy Sensor Sensitivity	7
	Occupancy Sensor Timeout	15 Minutes
	Occupied Dim Level	100%
	Unoccupied Dim Level	0%
	Daylight Sensor	Disabled
	Bluetooth	Enabled
	2.4GHz Wireless Mesh	On
	"Passcode Factory Passcode: HubbN3T!"	Enabled

Stand Alone	**Occupancy Sensor**	Enabled
	Occupancy Sensor Sensitivity	7
	Occupancy Sensor Timeout	8 Minutes
	Occupied Dim Level	100%
	Unoccupied Dim Level	50%
	Daylight Sensor	Disabled

NX WIRELESS COVERAGE PATTERNS

NXSMP2-OMNI





NX LIGHTING CONTROLS FREE APP

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)



The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminiares and program NX system settings.

Apple App: https://apps.apple.com/us/app/nx-lighting-controls/id962112904

Google Play: https://play.google.com/store/apps/details?id=io.cordova.NXBTR&hl=en_US&gl=US

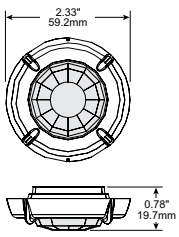
Apple App Google Play

OUTDOOR LIGHTING CONTROLS OPTIONS

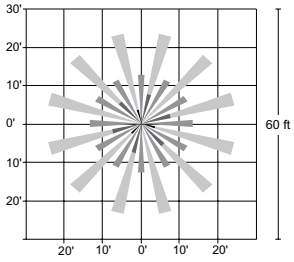
CONTROLS FUNCTIONALITY

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
Independent	SCP_F	Sensor Control Programmable, 8F or 40F	–	–	–	✓	✓	✓	✓	–	8ft or 40ft	SCP_F	

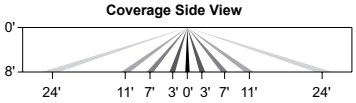
COVERAGE PATTERNS FOR SCP



Coverage Top View @ 12ft.



Coverage Side View



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LNC2

SMALL LED LITEPAK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

ADDITIONAL INFORMATION

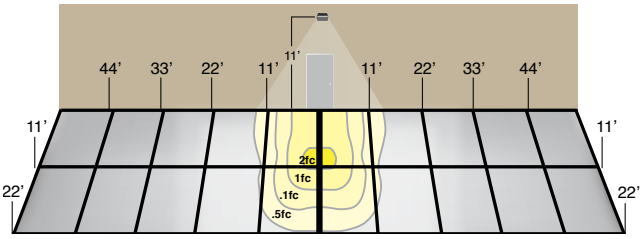
SHIPPING INFORMATION

Catalog Number	G.W(kg)/ CTN	Carton Dimensions		
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)
LNC2	14.3 (6.5)	14.5 (37)	11.4 (29)	8.4 (21.5)

CONTROL TABLE

Control Option	Sensor	Network-able	Scheduling	Occupancy	Daylight Harvesting	On/Off Control	Programming	Pair with Sensor	Sensor Mounting Height
PC	–	–	–	–	–	✔	–	–	–
BTSO12F	BTSMP-OMNI	–	–	✔	✔	with auxilary driver	–	–	12 ft
SCP_F	–	–	–	✔	–	✔	✔	–	–

LNC2 - BATTERY BACK UP



11' Mounting Height

Provides Life Safety Code average illuminance of 1.0 fc. Assumes open space with no obstructions and mounting height of 11'.

Diagrams for illustration purposes only, please consult factory for application layout.

Battery backup units consume 6 watts when charging a dead battery and 2 watts during maintenance charging. EH (units with a heater) consume up to an additional 8 watts when charging if the battery temp is lower than 10°C

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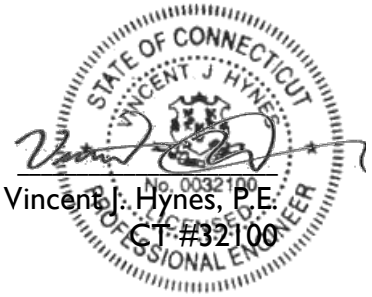
SITE ENGINEERING REPORT
30, 32, & 34 Charles Street
Norwalk, CT

Prepared For
Tomas Brothers LLC

Prepared by
Redniss & Mead, Inc.
22 First Street
Stamford, CT
(203) 327-0500

Issued on:

December 12, 2025



Vincent J. Hynes, P.E.
CT #32100

TABLE OF CONTENTS

Orientation.....1

Drainage Narrative.....2

APPENDICES

Appendix 1: Existing and Proposed On-Site Drainage Basin Maps

Appendix 2: Existing & Proposed On-Site Hydraulic Data

Appendix 3: Rainfall Intensity Data, NRCS Web Soil Survey, FEMA Firmette, & USGS Quad Map

Appendix 4: Draft Stormwater Operations and Maintenance Plan

ORIENTATION



DRAINAGE SUMMARY NARRATIVE

Introduction

The applicant (Tomas Brothers LLC) is proposing to develop the properties located at 30, 32, and 34 Charles Street, in Norwalk, CT. The development includes razing existing improvements at 30 Charles Street and construction of new duplex units with permeable paver driveways, patios, walkways, and associated site improvements on each lot. The proposal will consist of three duplex units (one per lot) and 6 total residential units; each unit will have one attached garage parking space and one surface parking space.

The combined development area is 22,048 sf (0.51 acres) and is located at the northern end of Charles Street, bound by multi-family residential parcels and the Norwalk River. The site lies within the CD-2 zoning district. A portion of the property at 34 Charles Street is located within the 100-year flood zone (AE-10) of the Norwalk River as depicted by the Federal Emergency Management Agency (FEMA) on "Flood Insurance Rate Maps" (FIRM) for Fairfield County, Community No. 09001C0531G, effective date July 8, 2013. The remainder of the parcel and the parcels at 30 and 32 Charles Street are not located within a Special Flood Hazard Area. Although the properties will remain separate zoning lots, this report studies the existing and proposed stormwater runoff from the combined development area. Reference is made to the accompanying site development plans prepared by Redniss & Mead, Inc.

Existing Conditions

The development area is approximately 0.51 acres and is currently developed with a single-family residential dwelling, driveway, pool, and patio area, all of which are primarily on 30 Charles Street. In total, there is 3,779 sf of impervious area. There are no formal stormwater facilities on-site. The topography of the site is generally sloped from southeast to northwest and the stormwater runoff is ultimately tributary to the Norwalk River as it sheet flows from the site. Refer to Appendix 1 for Existing Conditions Drainage Basin Exhibit

Proposed Conditions

The developer is seeking approval to construct three duplex units on the three parcels with associated driveways, parking, walkways and patios/decks, and other associated improvements. In total, the area of hardscape improvements increases by approximately 9,856 square feet (for a total of 13,635 square feet of hardscape improvement area). However, the new driveways and parking areas, as well as the patio areas, will be either porous asphalt or permeable pavers, both of which have crushed stone reservoirs below and do not count as impervious coverage, which will result in an effective impervious coverage of 7,911 sf. Water quality improvements are provided, and peak rates and volumes of runoff will be reduced through the use of permeable paver systems. Reference is made to the site and utility plans prepared by Redniss & Mead, Inc and to the Proposed Conditions Drainage Basin Exhibit within Appendix 1.

The proposed improvements are primarily kept upland of the flood zone, with the exception of a sanitary sewer connection for the site. The driveway and parking areas are split into three permeable paver basins (PP#1, PP#2, and PP#3)). The permeable paver system designs are as follows:

Basin PP#1 is located within the boundaries of 32 Charles Street. The tributary area consists of the site roof area, parking area, and landscaped areas (3,933 sf of total tributary area). The paver driveway will consist of two separate profiles: 1) the upper segment of pavers will consist of a 2" bedding course and a 6" crushed stone reservoir that slopes with the finished grade; and 2) the lower segment (approximately 1,150 sf) will consist of a 2" bedding course and a minimum 24" crushed stone reservoir that will have a level bottom elevation of 25.50. Roof leaders within the basin will be tributary to the system via a perforated pipe that discharges into the stone reservoir. The high overflow consists of a flush curb at the shared property boundary of 30/32 Charles Street, which provides 922 cf of water quality volume (393 cf required). Although the permeable pavers are proposed for the entirety of the driveway, the storage within the upper segment is not accounted for within this report.

Basin PP#2 is located within the boundaries of 30 Charles Street. The tributary area consists of the site roof area, parking area, and landscaped areas (4,578 sf of total tributary area), as well as the overflow from PP#1. The paver driveway will consist of two separate profiles: 1) the upper segment of pavers will consist of a 2" bedding course and a 6" crushed stone reservoir that slopes with the finished grade; and 2) the lower segment (approximately 1,420 sf) will consist of a 2" bedding course and a minimum 24" crushed stone reservoir that will have a level bottom elevation of 23.60. Roof leaders within the basin will be tributary to the system via a perforated pipe that discharges into the stone reservoir. The high overflow consists of a flush curb at the shared property boundary of 30/34 Charles Street, which provides 1,134 cf of water quality volume (434 cf required). Although the permeable pavers are proposed for the entirety of the driveway, the storage within the upper segment is not accounted for within this report.

Basin PP#3 is located within the boundaries of 34 Charles Street. The tributary area consists of the site roof area, parking area, and landscaped areas (4,057 sf of total tributary area), as well as the overflow from PP#2. The paver driveway will consist of two separate profiles: 1) the upper segment of pavers will consist of a 2" bedding course and a 6" crushed stone reservoir that slopes with the finished grade; and 2) the lower segment (approximately 1,150 sf) will consist of a 2" bedding course and a minimum 24" crushed stone reservoir that will have a level bottom elevation of 21.70. Roof leaders within the basin will be tributary to the system via a perforated pipe that discharges into the stone reservoir. The high overflow consists of a catch basin set at elevation 23.70, which provides 917 cf of water quality volume (383 cf required). Although the permeable pavers are proposed for the entirety of the driveway, the storage within the upper segment is not accounted for within this report. The overflow catch basin will be connected to an at-grade level spreader in the northwest corner of the parcel.

The remainder of the site will bypass the crushed stone reservoir systems and generally sheet flow under similar conditions to existing conditions. The bypass basin consists of patio area, deck area, walkways, and landscaped areas (9,483 sf of total tributary area). Additional water quality and groundwater recharge occurs within the bypass basin via the patio and deck areas as these areas are open jointed/permeable with crushed stone below.

Based upon test pits conducted on August 14, 2025, the soils on-site generally consist of sandy loam material and bank run gravel. This is consistent with the NRCS soils report which indicates hydrologic soil group B-type Agawam-Urban land complex soils, which are a well-drained, sandy loam material. To be conservative, an assumed rate of percolation of 0.5"/hr was used for the drainage

calculations. Please refer to the test pit data shown on sheet SE-6 and NRCS soils report in the appendix of this report for further information.

Calculations were prepared using the methodologies provided in Technical Release 55: Urban Hydrology for Small Watersheds, published by the United States Department of Agriculture National Resources Conservation Service and HydroCAD software. Note that the rainfall rates used are based upon the National Oceanic and Atmospheric Administration (NOAA) National Weather Service Hydrometeorological Design Studies Center Precipitation Frequency Data Server (PFDS) for the area. The following tables depict the existing and proposed peak flows leaving the site and their associated runoff volumes:

Table 1: Peak Rates of Runoff

z		Site Runoff Peak Flow (cfs)			
Return Period (yrs)	Rainfall Rates (in)	Ex	Pr	Change	% Change
2	3.49	0.39	0.22	-0.17	-43.6%
5	4.50	0.73	0.40	-0.33	-45.2%
10	5.33	1.04	0.56	-0.48	-46.2%
25	6.48	1.50	0.80	-0.70	-46.7%
50	7.34	1.86	1.00	-0.86	-46.2%
100	8.26	2.26	1.76	-0.50	-22.1%

Table 2: Runoff Volume

		Site Volume Runoff Volume (cf)			
Return Period (yrs)	Rainfall Rates (in)	Ex	Pr	Change	% Change
2	3.49	1,578	728	-850	-53.9%
5	4.50	2,725	1,238	-1,487	-54.6%
10	5.34	3,783	1,705	-2,078	-54.9%
25	6.48	5,372	3,129	-2,243	-41.8%
50	7.34	6,630	4,384	-2,246	-33.9%
100	8.26	8,026	5,769	-2,257	-28.1%

Water Quality

Water quality from the proposed development will be improved as compared to existing conditions. This is accomplished as follows:

1. The proposed driveway and patio areas are proposed as permeable pavers providing water quality volume and groundwater recharge for the tributary area. The overflow elevation is set to provide 100% of the water quality volume.
2. Areas not tributary to permeable paver storage consist of proposed walking paths which will be disconnected and flow to landscaped areas of the site.
3. A detailed Sediment and Erosion Control Plan is designed to minimize erosion and requires properly disposing of any accumulation of sediment during construction.

Conclusion

Based on the above information and with proper implementation of the design drawings and proper sediment and erosion controls, the proposed development will not adversely impact adjacent or downstream properties or City owned drainage facilities.

Appendix I

Existing and Proposed On-Site Drainage Basins Maps

LEGEND

PERVIOUS AREA (B-TYPE SOIL)

IMPERVIOUS AREA



EXISTING DRAINAGE BASIN EXHIBIT

30, 32, & 34 CHARLES STREET

NORWALK, CT

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax: 203.357.1118
www.rednissmead.com

COMM. NO.:	DATE:
10304	12/12/2025
	SCALE: 1"=30'

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LEGEND

- PERVIOUS AREA (B-TYPE SOIL)
- IMPERVIOUS AREA
- OPEN JOINTED / GRAVEL AREA
- PERMEABLE PAVERS



PROPOSED DRAINAGE BASIN EXHIBIT

30, 32, & 34 CHARLES STREET

NORWALK, CT

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
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22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax: 203.357.1118
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COMM. NO.:	DATE:
10304	12/12/2025
	SCALE: 1"=30'

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Appendix 2

Existing and Proposed On-Site Hydraulic Data

Water Quality Volume Calculations

Project: *30, 32, & 34 Charles Street*	**Project #:** *10304*	**Date:** *12/12/2025*
Location: *Norwalk, CT*	**By:** *ZPP*	**Checked:** *VJH*

32 Charles

Tributary Area=	0.090	acres
Impervious Area=	0.087	acres
I=	0.968	[a]
R=	0.921	[b]
WQV=	0.009	ac. ft. [c]

WQV Required=	**392.6 ft.^{3}**
WQV Provided=	**922.0 ft.^{3}**

30 Charles

Tributary Area=	0.105	acres
Impervious Area=	0.096	acres
I=	0.917	[a]
R=	0.875	[b]
WQV=	0.010	ac. ft. [c]

WQV Required=	**433.9 ft.^{3}**
WQV Provided=	**1,134.0 ft.^{3}**

34 Charles

Tributary Area=	0.093	acres
Impervious Area=	0.085	acres
I=	0.913	[a]
R=	0.872	[b]
WQV=	0.009	ac. ft. [c]

WQV Required=	**383.1 ft.^{3}**
WQV Provided=	**917.0 ft.^{3}**

[a] I=Percent Impervious Coverage

[b] R=0.05+0.009(I); Volumetric runoff Coefficient, Equation taken from 2024 Connecticut Stormwater Quality Manual chapter 4

[c] WQV=(1.3"xRxA)/12; Water Quality Volume, Equation taken from 2024 Connecticut Stormwater Quality Manual chapter 4

Note: Impervious area includes porous pavement areas.

Groundwater Recharge Volume Calculation

Project: *30, 32, & 34 Charles Street*		**Project #:**	*10304*	**Date:**	*12/12/2025*
Location: *Norwalk, CT*		**By:**	*ZPP*	**Checked:**	*VJH*

Proposed Impervious Improvements

Total Impervious Area (I) =	0.313 acres[d]	
NRCS Hydrologic Soil Group =	B [a]	
Design Rainfall =	1.0 inches	
Groundwater Recharge Depth (F) =	0.35 [b]	
Groundwater Recharge Volume (GRV)=	**0.009 ac. ft. [c]**	**397.69 ft.^{3}**

[a] From Natural Resources Conservation Service

[b] Table 1-1 from the 2017 City of Norwalk Drainage Manual Section 1.4.4

[c] GRV = F x I from the 2017 City of Norwalk Drainage Manual Section 1.4.4

[d] To be conservative, impervious area for the site includes open jointed and permeable paver areas.

Note: As the GRV is lower than the Water Quality Volumes required, the permeable systems are designed to infiltrate the larger volume.

Level Spreader Calculations

Project: *30, 32, & 34 Charles Street*		*10304*	**Date:** 12/12/2025
Location: *Norwalk, CT*	**By:** *ZPP*		**Checked:** *VJH*

Permeable Paver Overflow

Level Spreader LS#1		
Q =	**1.14 cfs**	[a]

Assumed V_{MAX} =	2.0 ft/sec	[b]
y =	0.124 ft	[c]
H =	0.186 ft	[d]
L=	4.023 Q	[e]

Length Required	4.59 ft

Length Provided	**10.00 ft**

[a] Flow derived from HydroCAD 100-Year Storm Event from Pond 3P

[b] V_{MAX} = Maximum velocity of water over weir (ft/sec)

[c] $y = V^2/g$

[d] H=3/2y

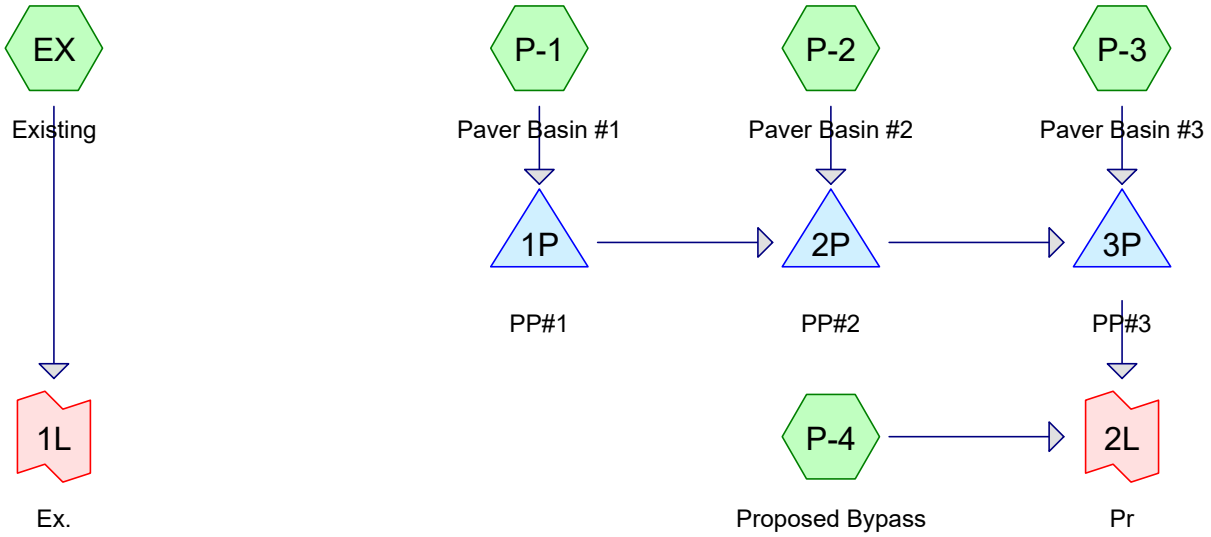
[e] Derived from Broadcrested Weir Equation: $Q = 3.09LH^{3/2}$

y = Depth of water over weir (ft)

H = Head (ft)

EXISTING CONDITIONS

PROPOSED CONDITIONS



Subcat Reach Pond Link

Routing Diagram for 10304 HydroCAD
Prepared by Redniss & Mead, Inc, Printed 12/16/2025
HydroCAD® 10.20-6a s/n 08721 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type III 24-hr		Default	24.00	1	2.87	2
2	2-Year	Type III 24-hr		Default	24.00	1	3.49	2
3	5-Year	Type III 24-hr		Default	24.00	1	4.50	2
4	10-Year	Type III 24-hr		Default	24.00	1	5.33	2
5	25-Year	Type III 24-hr		Default	24.00	1	6.48	2
6	50-Year	Type III 24-hr		Default	24.00	1	7.34	2
7	100-Year	Type III 24-hr		Default	24.00	1	8.26	2

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>0.53"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=0.21 cfs 979 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>2.51"
Tc=5.0 min CN=96.82 Runoff=0.25 cfs 822 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>2.31"
Tc=5.0 min CN=94.91 Runoff=0.28 cfs 882 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>2.30"
Tc=5.0 min CN=94.79 Runoff=0.25 cfs 777 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>0.58"
Tc=5.0 min CN=68.52 Runoff=0.13 cfs 459 cf

Pond 1P: PP#1 Peak Elev=26.31' Storage=373 cf Inflow=0.25 cfs 822 cf
Discarded=0.01 cfs 774 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 774 cf

Pond 2P: PP#2 Peak Elev=24.30' Storage=395 cf Inflow=0.28 cfs 882 cf
Discarded=0.02 cfs 876 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 876 cf

Pond 3P: PP#3 Peak Elev=22.48' Storage=356 cf Inflow=0.25 cfs 777 cf
Discarded=0.02 cfs 758 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 758 cf

Link 1L: Ex. Inflow=0.21 cfs 979 cf
Primary=0.21 cfs 979 cf

Link 2L: Pr Inflow=0.13 cfs 459 cf
Primary=0.13 cfs 459 cf

Total Runoff Area = 44,098 sf Runoff Volume = 3,920 cf Average Runoff Depth = 1.07"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>0.86"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=0.39 cfs 1,578 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>3.12"
Tc=5.0 min CN=96.82 Runoff=0.31 cfs 1,023 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>2.92"
Tc=5.0 min CN=94.91 Runoff=0.35 cfs 1,113 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>2.91"
Tc=5.0 min CN=94.79 Runoff=0.31 cfs 982 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>0.92"
Tc=5.0 min CN=68.52 Runoff=0.22 cfs 728 cf

Pond 1P: PP#1 Peak Elev=26.58' Storage=497 cf Inflow=0.31 cfs 1,023 cf
Discarded=0.01 cfs 825 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 825 cf

Pond 2P: PP#2 Peak Elev=24.54' Storage=534 cf Inflow=0.35 cfs 1,113 cf
Discarded=0.02 cfs 963 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 963 cf

Pond 3P: PP#3 Peak Elev=22.75' Storage=480 cf Inflow=0.31 cfs 982 cf
Discarded=0.02 cfs 821 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 821 cf

Link 1L: Ex. Inflow=0.39 cfs 1,578 cf
Primary=0.39 cfs 1,578 cf

Link 2L: Pr Inflow=0.22 cfs 728 cf
Primary=0.22 cfs 728 cf

Total Runoff Area = 44,098 sf Runoff Volume = 5,425 cf Average Runoff Depth = 1.48"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>1.48"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=0.73 cfs 2,725 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>4.13"
Tc=5.0 min CN=96.82 Runoff=0.41 cfs 1,352 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>3.91"
Tc=5.0 min CN=94.91 Runoff=0.46 cfs 1,492 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>3.90"
Tc=5.0 min CN=94.79 Runoff=0.41 cfs 1,318 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>1.57"
Tc=5.0 min CN=68.52 Runoff=0.40 cfs 1,238 cf

Pond 1P: PP#1 Peak Elev=27.06' Storage=720 cf Inflow=0.41 cfs 1,352 cf
Discarded=0.02 cfs 899 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 899 cf

Pond 2P: PP#2 Peak Elev=24.98' Storage=783 cf Inflow=0.46 cfs 1,492 cf
Discarded=0.02 cfs 1,056 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 1,056 cf

Pond 3P: PP#3 Peak Elev=23.23' Storage=701 cf Inflow=0.41 cfs 1,318 cf
Discarded=0.02 cfs 919 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 919 cf

Link 1L: Ex. Inflow=0.73 cfs 2,725 cf
Primary=0.73 cfs 2,725 cf

Link 2L: Pr Inflow=0.40 cfs 1,238 cf
Primary=0.40 cfs 1,238 cf

Total Runoff Area = 44,098 sf Runoff Volume = 8,125 cf Average Runoff Depth = 2.21"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>2.06"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=1.04 cfs 3,783 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>4.95"
Tc=5.0 min CN=96.82 Runoff=0.49 cfs 1,623 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>4.73"
Tc=5.0 min CN=94.91 Runoff=0.55 cfs 1,806 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>4.72"
Tc=5.0 min CN=94.79 Runoff=0.49 cfs 1,595 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>2.16"
Tc=5.0 min CN=68.52 Runoff=0.56 cfs 1,705 cf

Pond 1P: PP#1 Peak Elev=27.48' Storage=915 cf Inflow=0.49 cfs 1,623 cf
Discarded=0.02 cfs 955 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 955 cf

Pond 2P: PP#2 Peak Elev=25.37' Storage=1,003 cf Inflow=0.55 cfs 1,806 cf
Discarded=0.02 cfs 1,127 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 1,127 cf

Pond 3P: PP#3 Peak Elev=23.65' Storage=894 cf Inflow=0.49 cfs 1,595 cf
Discarded=0.02 cfs 995 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 995 cf

Link 1L: Ex. Inflow=1.04 cfs 3,783 cf
Primary=1.04 cfs 3,783 cf

Link 2L: Pr Inflow=0.56 cfs 1,705 cf
Primary=0.56 cfs 1,705 cf

Total Runoff Area = 44,098 sf Runoff Volume = 10,512 cf Average Runoff Depth = 2.86"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>2.92"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=1.50 cfs 5,372 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>6.10"
Tc=5.0 min CN=96.82 Runoff=0.59 cfs 1,998 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>5.87"
Tc=5.0 min CN=94.91 Runoff=0.68 cfs 2,241 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>5.86"
Tc=5.0 min CN=94.79 Runoff=0.60 cfs 1,981 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>3.04"
Tc=5.0 min CN=68.52 Runoff=0.80 cfs 2,404 cf

Pond 1P: PP#1 Peak Elev=27.54' Storage=942 cf Inflow=0.59 cfs 1,998 cf
Discarded=0.02 cfs 1,001 cf Primary=0.12 cfs 278 cf Outflow=0.14 cfs 1,279 cf

Pond 2P: PP#2 Peak Elev=25.69' Storage=1,187 cf Inflow=0.68 cfs 2,519 cf
Discarded=0.02 cfs 1,199 cf Primary=0.12 cfs 463 cf Outflow=0.14 cfs 1,662 cf

Pond 3P: PP#3 Peak Elev=23.71' Storage=919 cf Inflow=0.60 cfs 2,443 cf
Discarded=0.02 cfs 1,048 cf Primary=0.17 cfs 726 cf Outflow=0.19 cfs 1,774 cf

Link 1L: Ex. Inflow=1.50 cfs 5,372 cf
Primary=1.50 cfs 5,372 cf

Link 2L: Pr Inflow=0.80 cfs 3,129 cf
Primary=0.80 cfs 3,129 cf

Total Runoff Area = 44,098 sf Runoff Volume = 13,996 cf Average Runoff Depth = 3.81"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Summary for Subcatchment EX: Existing

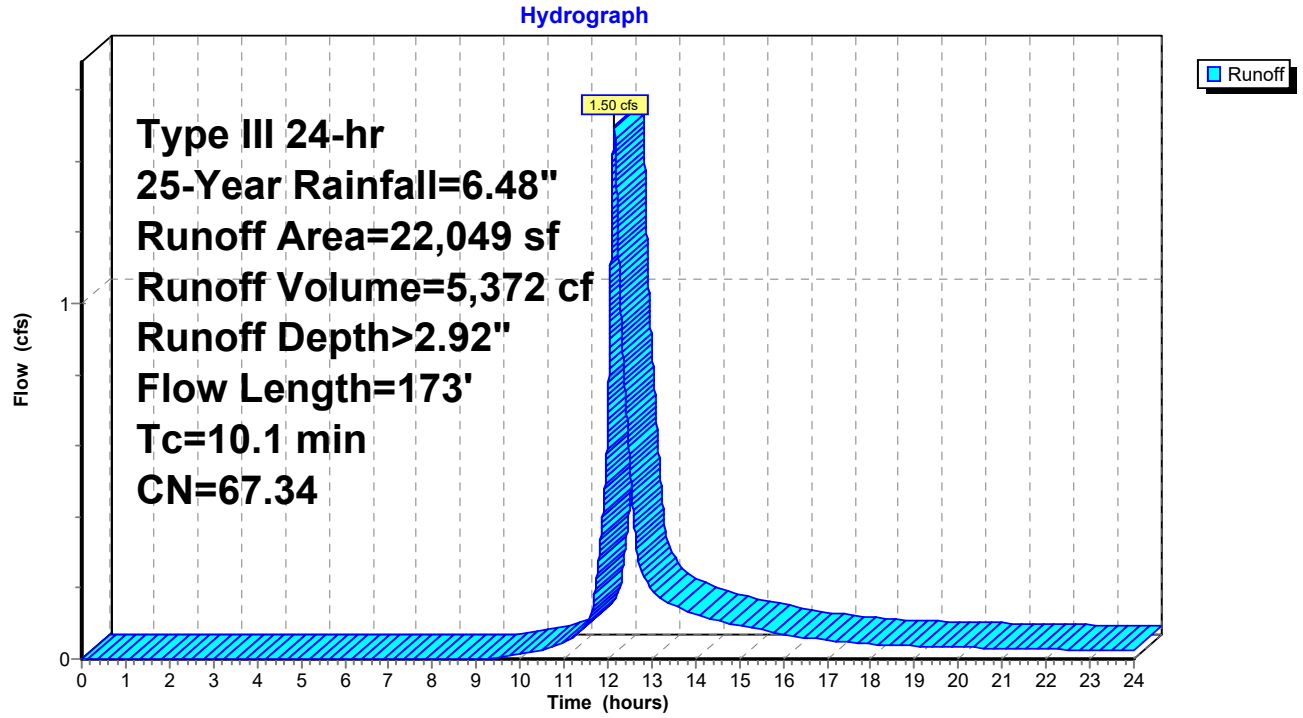
Runoff = 1.50 cfs @ 12.14 hrs, Volume= 5,372 cf, Depth> 2.92"
Routed to Link 1L : Ex.

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
*	6,875	61.00	>75% Grass cover, HSG B (32 Charles)
*	780	98.00	Paved parking, HSG B (32 Charles)
*	4,514	61.00	>75% Grass cover, HSG B (30 Charles)
*	2,915	98.00	Paved parking, HSG B (30 Charles)
*	6,881	61.00	>75% Grass cover, HSG B (34 Charles)
*	84	98.00	Paved parking, HSG B (34 Charles)
	22,049	67.34	Weighted Average
	18,270		82.86% Pervious Area
	3,779		17.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0485	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.45"
0.5	73	0.1281	2.51		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
10.1	173	Total			

Subcatchment EX: Existing



Summary for Subcatchment P-1: Paver Basin #1

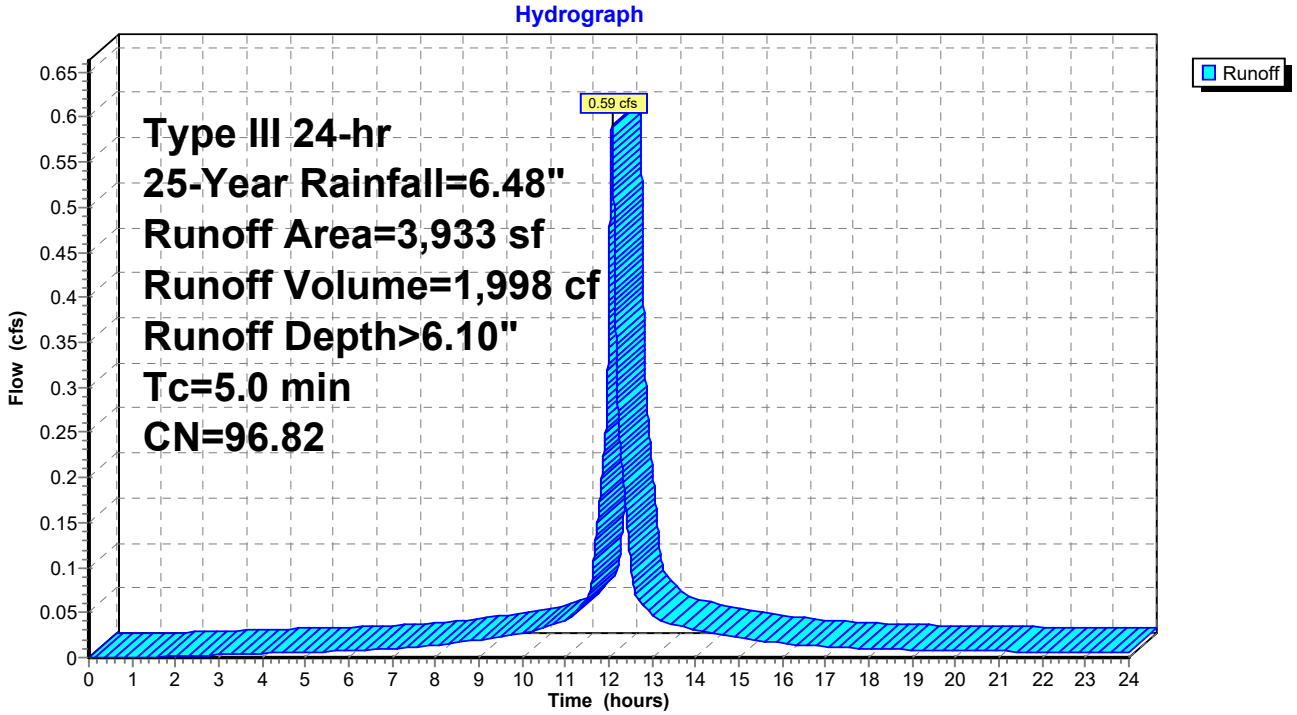
Runoff = 0.59 cfs @ 12.07 hrs, Volume= 1,998 cf, Depth> 6.10"
Routed to Pond 1P : PP#1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
	125	61.00	>75% Grass cover, Good, HSG B
	2,308	98.00	Paved parking, HSG B
*	1,500	98.00	Perm paver, HSG B
	3,933	96.82	Weighted Average
	125		3.18% Pervious Area
	3,808		96.82% Impervious Area

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

Subcatchment P-1: Paver Basin #1



Summary for Subcatchment P-2: Paver Basin #2

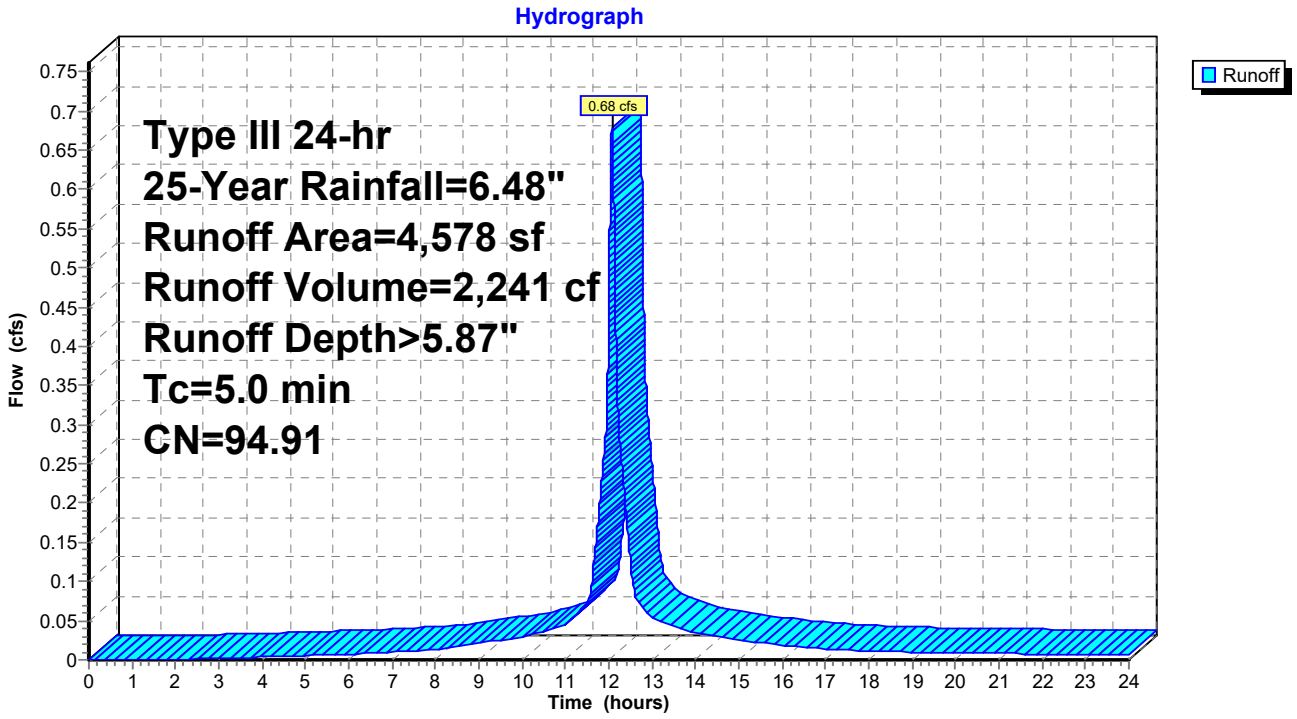
Runoff = 0.68 cfs @ 12.07 hrs, Volume= 2,241 cf, Depth> 5.87"
Routed to Pond 2P : PP#2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
*	217	61.00	>75% Grass cover, Good, HSG B - 30 Charles
	2,431	98.00	Paved parking, HSG B
*	1,765	98.00	Perm paver, HSG B
*	165	61.00	>75% Grass cover, Good, HSG B - 32 Charles
	4,578	94.91	Weighted Average
	382		8.34% Pervious Area
	4,196		91.66% Impervious Area

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

Subcatchment P-2: Paver Basin #2



Summary for Subcatchment P-3: Paver Basin #3

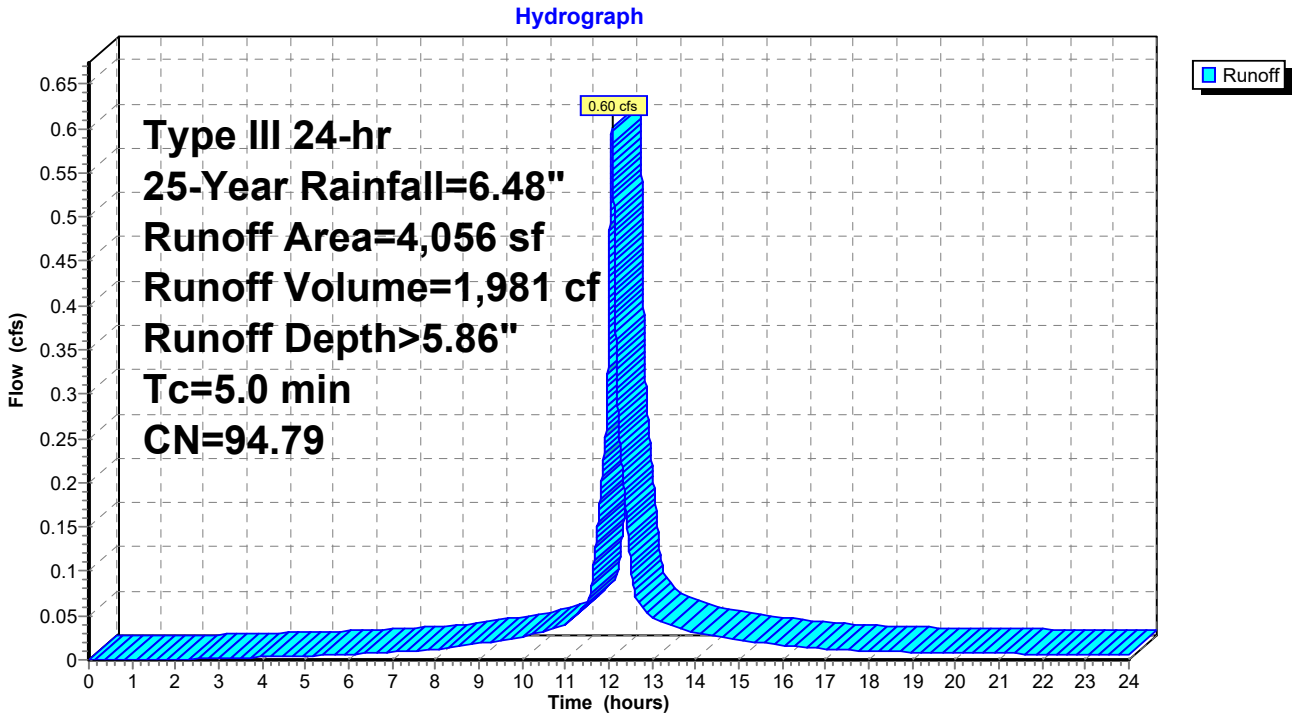
Runoff = 0.60 cfs @ 12.07 hrs, Volume= 1,981 cf, Depth> 5.86"
Routed to Pond 3P : PP#3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
	2,286	98.00	Paved parking, HSG B
*	176	61.00	>75% Grass cover, Good, HSG B - 32 Charles
*	176	61.00	>75% Grass cover, Good, HSG B - 34 Charles
*	1,418	98.00	Perm pavers, HSG B
	4,056	94.79	Weighted Average
	352		8.68% Pervious Area
	3,704		91.32% Impervious Area

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

Subcatchment P-3: Paver Basin #3



Summary for Subcatchment P-4: Proposed Bypass

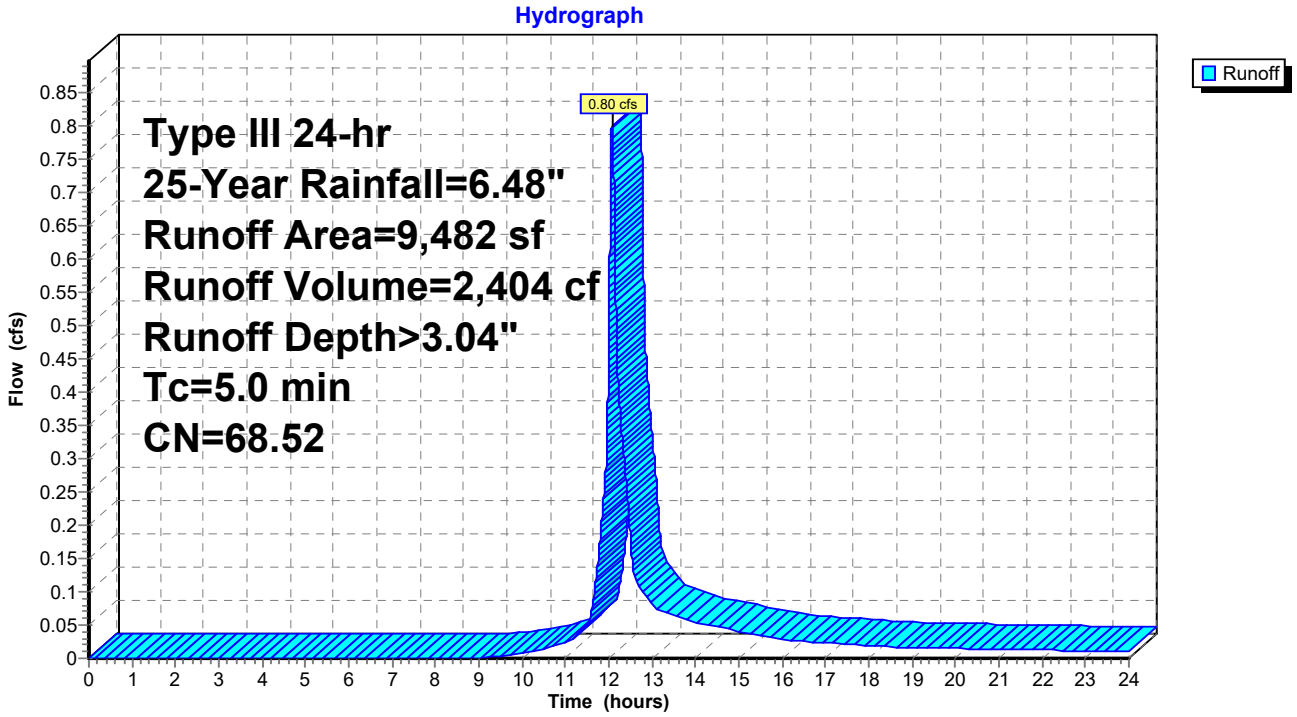
Runoff = 0.80 cfs @ 12.07 hrs, Volume= 2,404 cf, Depth> 3.04"
Routed to Link 2L : Pr

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
*	2,762	61.00	>75% Grass cover, HSG B (32 Charles)
*	446	98.00	Paved parking, HSG B (32 Charles)
*	291	98.00	Permeable pavers, HSG B (32 Charles)
*	58	98.00	Open jointed, HSG B (32 Charles)
*	2,193	61.00	>75% Grass cover, HSG B (30 Charles)
*	294	98.00	Paved parking, HSG B (30 Charles)
*	291	98.00	Permeable Pavers, HSG B (30 Charles)
*	62	98.00	Open jointed, HSG B (30 Charles)
*	2,601	61.00	>75% Grass cover, HSG B (34 Charles)
*	146	98.00	Paved parking, HSG B (34 Charles)
*	338	98.00	Open jointed, HSG B (34 Charles)
	9,482	68.52	Weighted Average
	7,556		79.69% Pervious Area
	1,926		20.31% Impervious Area

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

Subcatchment P-4: Proposed Bypass



Summary for Pond 1P: PP#1

Inflow Area = 3,933 sf, 96.82% Impervious, Inflow Depth > 6.10" for 25-Year event
Inflow = 0.59 cfs @ 12.07 hrs, Volume= 1,998 cf
Outflow = 0.14 cfs @ 12.44 hrs, Volume= 1,279 cf, Atten= 77%, Lag= 22.3 min
Discarded = 0.02 cfs @ 12.44 hrs, Volume= 1,001 cf
Primary = 0.12 cfs @ 12.44 hrs, Volume= 278 cf
Routed to Pond 2P : PP#2

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Peak Elev= 27.54' @ 12.44 hrs Surf.Area= 1,153 sf Storage= 942 cf

Plug-Flow detention time= 222.3 min calculated for 1,279 cf (64% of inflow)
Center-of-Mass det. time= 119.3 min (869.7 - 750.4)

Volume	Invert	Avail.Storage	Storage Description
#1	25.50'	1,222 cf	**Porous/Stone Storage (Prismatic)** Listed below (Recalc) 3,055 cf Overall x 40.0% Voids
#2	27.50'	749 cf	**Open Air (Prismatic)** Listed below (Recalc)
		1,972 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
25.50	1,153	0	0
27.50	1,153	2,306	2,306
28.80	0	749	3,055

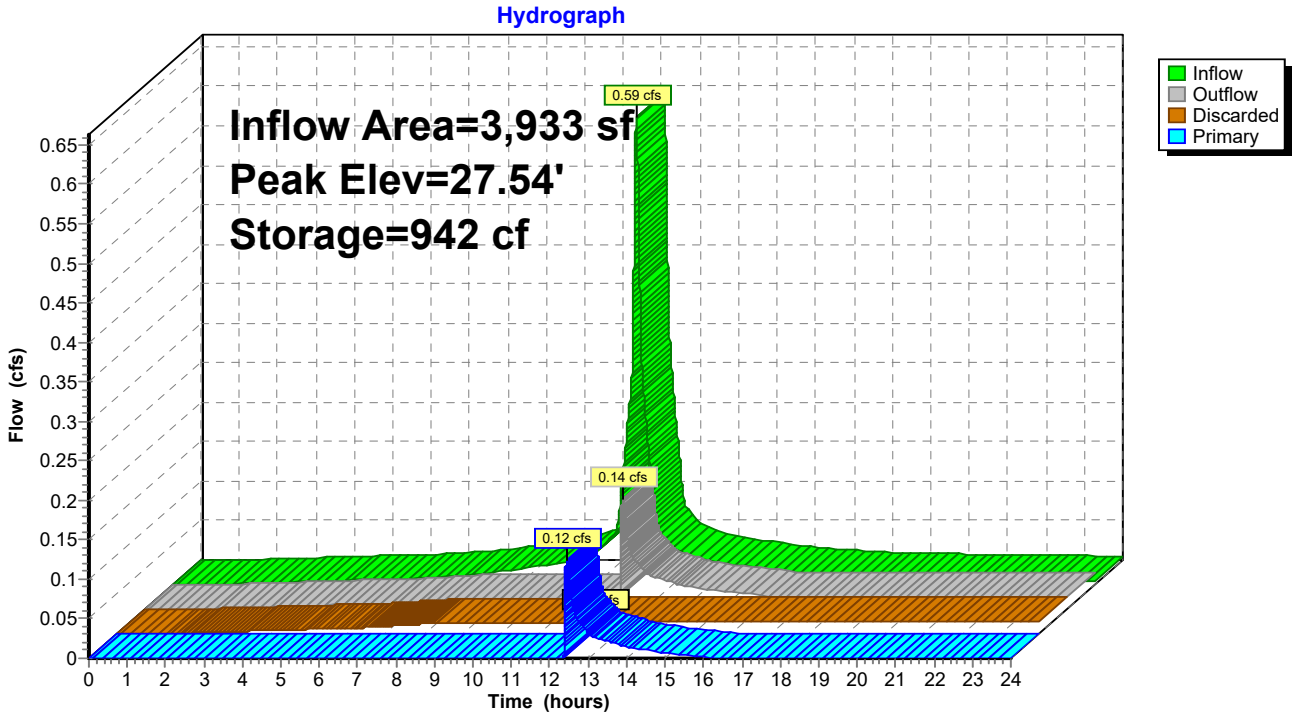
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
27.50	0	0	0
28.80	1,153	749	749

Device	Routing	Invert	Outlet Devices
#1	Primary	27.50'	**Asymmetrical Weir, C= 3.27** Offset (feet) 0.00 0.01 11.99 12.00 Elev. (feet) 28.00 27.55 27.50 28.00
#2	Discarded	25.50'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 14.50'

Discarded OutFlow Max=0.02 cfs @ 12.44 hrs HW=27.54' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.11 cfs @ 12.44 hrs HW=27.54' (Free Discharge)
↑—**1=Asymmetrical Weir** (Weir Controls 0.11 cfs @ 0.27 fps)

Pond 1P: PP#1


Hydrograph
Inflow Area=3,933 sf
Peak Elev=27.54'
Storage=942 cf
0.59 cfs
0.14 cfs
0.12 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1P: PP#1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
25.50	**1,153**	0	26.54	1,153	480
25.52	1,153	9	26.56	1,153	489
25.54	1,153	18	26.58	1,153	498
25.56	1,153	28	26.60	1,153	507
25.58	1,153	37	26.62	1,153	517
25.60	1,153	46	26.64	1,153	526
25.62	1,153	55	26.66	1,153	535
25.64	1,153	65	26.68	1,153	544
25.66	1,153	74	26.70	1,153	553
25.68	1,153	83	26.72	1,153	563
25.70	1,153	92	26.74	1,153	572
25.72	1,153	101	26.76	1,153	581
25.74	1,153	111	26.78	1,153	590
25.76	1,153	120	26.80	1,153	600
25.78	1,153	129	26.82	1,153	609
25.80	1,153	138	26.84	1,153	618
25.82	1,153	148	26.86	1,153	627
25.84	1,153	157	26.88	1,153	636
25.86	1,153	166	26.90	1,153	646
25.88	1,153	175	26.92	1,153	655
25.90	1,153	184	26.94	1,153	664
25.92	1,153	194	26.96	1,153	673
25.94	1,153	203	26.98	1,153	683
25.96	1,153	212	27.00	1,153	692
25.98	1,153	221	27.02	1,153	701
26.00	1,153	231	27.04	1,153	710
26.02	1,153	240	27.06	1,153	719
26.04	1,153	249	27.08	1,153	729
26.06	1,153	258	27.10	1,153	738
26.08	1,153	267	27.12	1,153	747
26.10	1,153	277	27.14	1,153	756
26.12	1,153	286	27.16	1,153	766
26.14	1,153	295	27.18	1,153	775
26.16	1,153	304	27.20	1,153	784
26.18	1,153	314	27.22	1,153	793
26.20	1,153	323	27.24	1,153	802
26.22	1,153	332	27.26	1,153	812
26.24	1,153	341	27.28	1,153	821
26.26	1,153	351	27.30	1,153	830
26.28	1,153	360	27.32	1,153	839
26.30	1,153	369	27.34	1,153	849
26.32	1,153	378	27.36	1,153	858
26.34	1,153	387	27.38	1,153	867
26.36	1,153	397	27.40	1,153	876
26.38	1,153	406	27.42	1,153	886
26.40	1,153	415	27.44	1,153	895
26.42	1,153	424	27.46	1,153	904
26.44	1,153	434	27.48	1,153	913
26.46	1,153	443	27.50	1,153	922
26.48	1,153	452	27.52	1,153	932
26.50	1,153	461	27.54	1,153	941
26.52	1,153	470	27.56	1,153	951

Stage-Area-Storage for Pond 1P: PP#1 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
27.58	1,153	961
27.60	1,153	971
27.62	1,153	982
27.64	1,153	992
27.66	1,153	1,003
27.68	1,153	1,014
27.70	1,153	1,025
27.72	1,153	1,037
27.74	1,153	1,048
27.76	1,153	1,060
27.78	1,153	1,072
27.80	1,153	1,085
27.82	1,153	1,097
27.84	1,153	1,110
27.86	1,153	1,123
27.88	1,153	1,136
27.90	1,153	1,149
27.92	1,153	1,163
27.94	1,153	1,177
27.96	1,153	1,191
27.98	1,153	1,205
28.00	1,153	1,220
28.02	1,153	1,234
28.04	1,153	1,249
28.06	1,153	1,264
28.08	1,153	1,279
28.10	1,153	1,295
28.12	1,153	1,311
28.14	1,153	1,327
28.16	1,153	1,343
28.18	1,153	1,359
28.20	1,153	1,376
28.22	1,153	1,392
28.24	1,153	1,409
28.26	1,153	1,427
28.28	1,153	1,444
28.30	1,153	1,462
28.32	1,153	1,479
28.34	1,153	1,498
28.36	1,153	1,516
28.38	1,153	1,534
28.40	1,153	1,553
28.42	1,153	1,572
28.44	1,153	1,591
28.46	1,153	1,610
28.48	1,153	1,630
28.50	1,153	1,650
28.52	1,153	1,670
28.54	1,153	1,690
28.56	1,153	1,710
28.58	1,153	1,731
28.60	1,153	1,752
28.62	1,153	1,773
28.64	1,153	1,794
28.66	1,153	1,815
28.68	1,153	1,837
28.70	1,153	1,859
28.72	1,153	1,881
28.74	1,153	1,903
28.76	1,153	1,926
28.78	1,153	1,949
28.80	1,153	**1,972**

Summary for Pond 2P: PP#2

Inflow Area = 8,511 sf, 94.04% Impervious, Inflow Depth > 3.55" for 25-Year event
Inflow = 0.68 cfs @ 12.07 hrs, Volume= 2,519 cf
Outflow = 0.14 cfs @ 12.63 hrs, Volume= 1,662 cf, Atten= 80%, Lag= 33.6 min
Discarded = 0.02 cfs @ 12.63 hrs, Volume= 1,199 cf
Primary = 0.12 cfs @ 12.63 hrs, Volume= 463 cf
Routed to Pond 3P : PP#3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Peak Elev= 25.69' @ 12.63 hrs Surf.Area= 1,418 sf Storage= 1,187 cf

Plug-Flow detention time= 217.4 min calculated for 1,662 cf (66% of inflow)
Center-of-Mass det. time= 125.3 min (890.1 - 764.8)

Volume	Invert	Avail.Storage	Storage Description
#1	23.60'	1,659 cf	**Porous/Asphalt Storage (Prismatic)** Listed below (Recalc) 4,148 cf Overall x 40.0% Voids
#2	25.60'	1,312 cf	**Open Air (Prismatic)** Listed below (Recalc)
		2,971 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.60	1,418	0	0
25.60	1,418	2,836	2,836
27.45	0	1,312	4,148

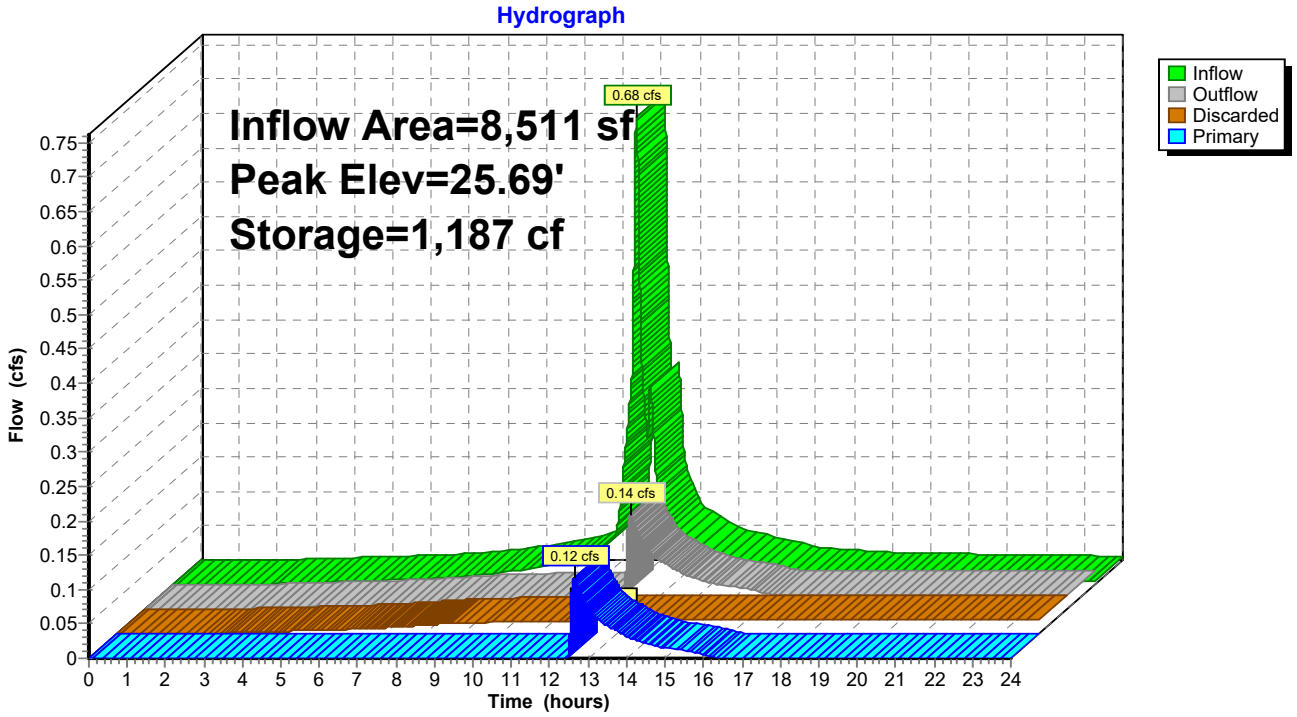
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
25.60	0	0	0
27.45	1,418	1,312	1,312

Device	Routing	Invert	Outlet Devices
#1	Primary	25.60'	**Asymmetrical Weir, C= 3.27** Offset (feet) 0.00 0.01 11.99 12.00 Elev. (feet) 26.45 25.95 25.60 26.45
#2	Discarded	23.60'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 14.50'

Discarded OutFlow Max=0.02 cfs @ 12.63 hrs HW=25.69' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.11 cfs @ 12.63 hrs HW=25.69' (Free Discharge)
↑—**1=Asymmetrical Weir** (Weir Controls 0.11 cfs @ 0.39 fps)

Pond 2P: PP#2


Hydrograph
Inflow Area=8,511 sf
Peak Elev=25.69'
Storage=1,187 cf
0.68 cfs
0.14 cfs
0.12 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 2P: PP#2

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
23.60	**1,418**	0	24.64	1,418	590
23.62	1,418	11	24.66	1,418	601
23.64	1,418	23	24.68	1,418	613
23.66	1,418	34	24.70	1,418	624
23.68	1,418	45	24.72	1,418	635
23.70	1,418	57	24.74	1,418	647
23.72	1,418	68	24.76	1,418	658
23.74	1,418	79	24.78	1,418	669
23.76	1,418	91	24.80	1,418	681
23.78	1,418	102	24.82	1,418	692
23.80	1,418	113	24.84	1,418	703
23.82	1,418	125	24.86	1,418	715
23.84	1,418	136	24.88	1,418	726
23.86	1,418	147	24.90	1,418	737
23.88	1,418	159	24.92	1,418	749
23.90	1,418	170	24.94	1,418	760
23.92	1,418	182	24.96	1,418	771
23.94	1,418	193	24.98	1,418	783
23.96	1,418	204	25.00	1,418	794
23.98	1,418	216	25.02	1,418	805
24.00	1,418	227	25.04	1,418	817
24.02	1,418	238	25.06	1,418	828
24.04	1,418	250	25.08	1,418	839
24.06	1,418	261	25.10	1,418	851
24.08	1,418	272	25.12	1,418	862
24.10	1,418	284	25.14	1,418	873
24.12	1,418	295	25.16	1,418	885
24.14	1,418	306	25.18	1,418	896
24.16	1,418	318	25.20	1,418	908
24.18	1,418	329	25.22	1,418	919
24.20	1,418	340	25.24	1,418	930
24.22	1,418	352	25.26	1,418	942
24.24	1,418	363	25.28	1,418	953
24.26	1,418	374	25.30	1,418	964
24.28	1,418	386	25.32	1,418	976
24.30	1,418	397	25.34	1,418	987
24.32	1,418	408	25.36	1,418	998
24.34	1,418	420	25.38	1,418	1,010
24.36	1,418	431	25.40	1,418	1,021
24.38	1,418	442	25.42	1,418	1,032
24.40	1,418	454	25.44	1,418	1,044
24.42	1,418	465	25.46	1,418	1,055
24.44	1,418	476	25.48	1,418	1,066
24.46	1,418	488	25.50	1,418	1,078
24.48	1,418	499	25.52	1,418	1,089
24.50	1,418	510	25.54	1,418	1,100
24.52	1,418	522	25.56	1,418	1,112
24.54	1,418	533	25.58	1,418	1,123
24.56	1,418	545	25.60	1,418	1,134
24.58	1,418	556	25.62	1,418	1,146
24.60	1,418	567	25.64	1,418	1,157
24.62	1,418	579	25.66	1,418	1,169

Stage-Area-Storage for Pond 2P: PP#2 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
25.68	1,418	1,181
25.70	1,418	1,193
25.72	1,418	1,206
25.74	1,418	1,218
25.76	1,418	1,231
25.78	1,418	1,244
25.80	1,418	1,257
25.82	1,418	1,270
25.84	1,418	1,284
25.86	1,418	1,297
25.88	1,418	1,311
25.90	1,418	1,325
25.92	1,418	1,339
25.94	1,418	1,354
25.96	1,418	1,368
25.98	1,418	1,383
26.00	1,418	1,398
26.02	1,418	1,413
26.04	1,418	1,428
26.06	1,418	1,444
26.08	1,418	1,460
26.10	1,418	1,475
26.12	1,418	1,492
26.14	1,418	1,508
26.16	1,418	1,524
26.18	1,418	1,541
26.20	1,418	1,558
26.22	1,418	1,574
26.24	1,418	1,592
26.26	1,418	1,609
26.28	1,418	1,626
26.30	1,418	1,644
26.32	1,418	1,662
26.34	1,418	1,680
26.36	1,418	1,698
26.38	1,418	1,717
26.40	1,418	1,735
26.42	1,418	1,754
26.44	1,418	1,773
26.46	1,418	1,792
26.48	1,418	1,812
26.50	1,418	1,831
26.52	1,418	1,851
26.54	1,418	1,871
26.56	1,418	1,891
26.58	1,418	1,911
26.60	1,418	1,932
26.62	1,418	1,952
26.64	1,418	1,973
26.66	1,418	1,994
26.68	1,418	2,015
26.70	1,418	2,037
26.72	1,418	2,058
26.74	1,418	2,080
26.76	1,418	2,102
26.78	1,418	2,124
26.80	1,418	2,146
26.82	1,418	2,169
26.84	1,418	2,191
26.86	1,418	2,214
26.88	1,418	2,237
26.90	1,418	2,260
26.92	1,418	2,284
26.94	1,418	2,307
26.96	1,418	2,331
26.98	1,418	2,355
27.00	1,418	2,379
27.02	1,418	2,403
27.04	1,418	2,428
27.06	1,418	2,453
27.08	1,418	2,478
27.10	1,418	2,503
27.12	1,418	2,528
27.14	1,418	2,553
27.16	1,418	2,579
27.18	1,418	2,605
27.20	1,418	2,631
27.22	1,418	2,657
27.24	1,418	2,683
27.26	1,418	2,710
27.28	1,418	2,736
27.30	1,418	2,763
27.32	1,418	2,790
27.34	1,418	2,818
27.36	1,418	2,845
27.38	1,418	2,873
27.40	1,418	2,900
27.42	1,418	2,928
27.44	1,418	**2,957**

Summary for Pond 3P: PP#3

Inflow Area = 12,567 sf, 93.16% Impervious, Inflow Depth > 2.33" for 25-Year event
Inflow = 0.60 cfs @ 12.07 hrs, Volume= 2,443 cf
Outflow = 0.19 cfs @ 12.62 hrs, Volume= 1,774 cf, Atten= 69%, Lag= 32.9 min
Discarded = 0.02 cfs @ 12.62 hrs, Volume= 1,048 cf
Primary = 0.17 cfs @ 12.62 hrs, Volume= 726 cf
Routed to Link 2L : Pr

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Peak Elev= 23.71' @ 12.62 hrs Surf.Area= 1,146 sf Storage= 919 cf

Plug-Flow detention time= 181.4 min calculated for 1,774 cf (73% of inflow)
Center-of-Mass det. time= 103.2 min (874.4 - 771.2)

Volume	Invert	Avail.Storage	Storage Description
#1	21.70'	1,375 cf	**Porous/Asphalt Storage (Prismatic)** Listed below (Recalc) 3,438 cf Overall x 40.0% Voids
#2	23.70'	1,146 cf	**Open Air (Prismatic)** Listed below (Recalc)
		2,521 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
21.70	1,146	0	0
23.70	1,146	2,292	2,292
25.70	0	1,146	3,438

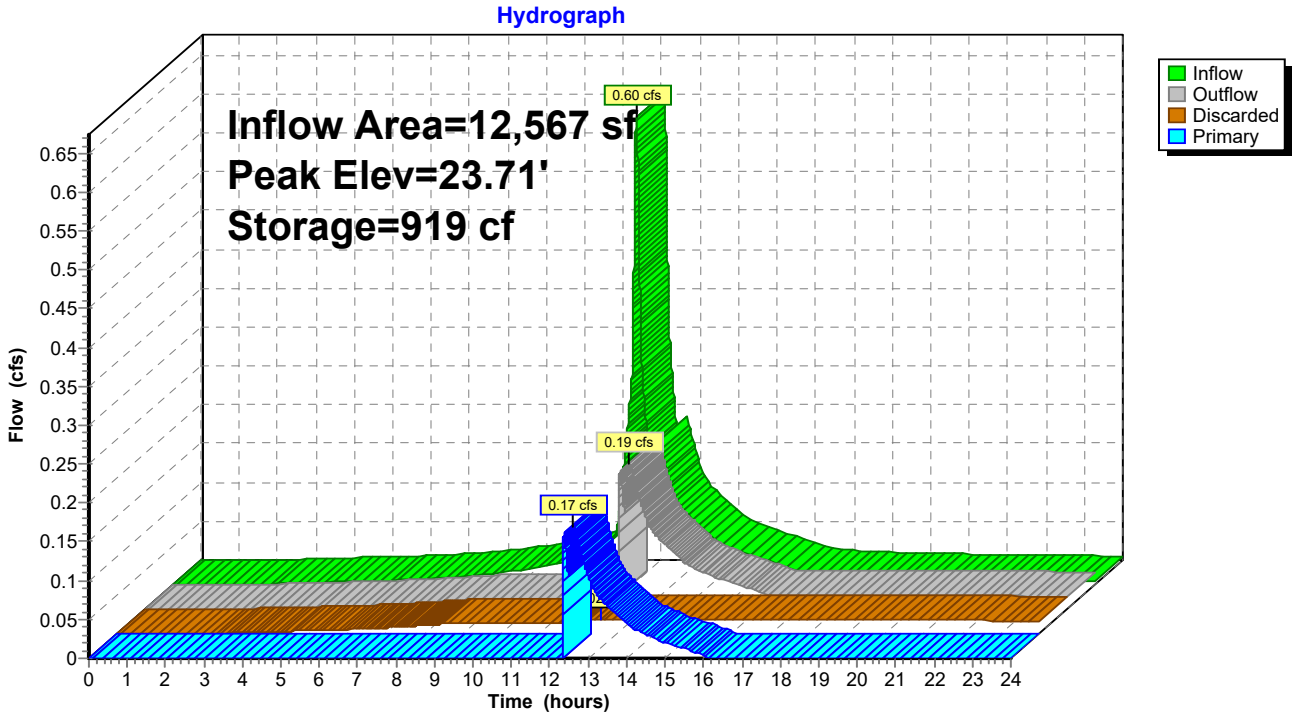
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.70	0	0	0
25.70	1,146	1,146	1,146

Device	Routing	Invert	Outlet Devices
#1	Primary	23.70'	**CB Overflow** Head (feet) 0.00 0.08 0.16 0.25 0.33 0.42 0.50 Disch. (cfs) 0.000 2.500 4.000 5.000 5.800 6.500 7.000
#2	Discarded	21.70'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 16.00'

Discarded OutFlow Max=0.02 cfs @ 12.62 hrs HW=23.71' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.17 cfs @ 12.62 hrs HW=23.71' (Free Discharge)
↑—**1=CB Overflow** (Custom Controls 0.17 cfs)

Pond 3P: PP#3


Hydrograph
Inflow Area=12,567 sf
Peak Elev=23.71'
Storage=919 cf
0.60 cfs
0.19 cfs
0.17 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 3P: PP#3

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
21.70	**1,146**	0	22.74	1,146	477
21.72	1,146	9	22.76	1,146	486
21.74	1,146	18	22.78	1,146	495
21.76	1,146	28	22.80	1,146	504
21.78	1,146	37	22.82	1,146	513
21.80	1,146	46	22.84	1,146	523
21.82	1,146	55	22.86	1,146	532
21.84	1,146	64	22.88	1,146	541
21.86	1,146	73	22.90	1,146	550
21.88	1,146	83	22.92	1,146	559
21.90	1,146	92	22.94	1,146	568
21.92	1,146	101	22.96	1,146	578
21.94	1,146	110	22.98	1,146	587
21.96	1,146	119	23.00	1,146	596
21.98	1,146	128	23.02	1,146	605
22.00	1,146	138	23.04	1,146	614
22.02	1,146	147	23.06	1,146	623
22.04	1,146	156	23.08	1,146	633
22.06	1,146	165	23.10	1,146	642
22.08	1,146	174	23.12	1,146	651
22.10	1,146	183	23.14	1,146	660
22.12	1,146	193	23.16	1,146	669
22.14	1,146	202	23.18	1,146	678
22.16	1,146	211	23.20	1,146	688
22.18	1,146	220	23.22	1,146	697
22.20	1,146	229	23.24	1,146	706
22.22	1,146	238	23.26	1,146	715
22.24	1,146	248	23.28	1,146	724
22.26	1,146	257	23.30	1,146	733
22.28	1,146	266	23.32	1,146	743
22.30	1,146	275	23.34	1,146	752
22.32	1,146	284	23.36	1,146	761
22.34	1,146	293	23.38	1,146	770
22.36	1,146	303	23.40	1,146	779
22.38	1,146	312	23.42	1,146	788
22.40	1,146	321	23.44	1,146	798
22.42	1,146	330	23.46	1,146	807
22.44	1,146	339	23.48	1,146	816
22.46	1,146	348	23.50	1,146	825
22.48	1,146	358	23.52	1,146	834
22.50	1,146	367	23.54	1,146	843
22.52	1,146	376	23.56	1,146	853
22.54	1,146	385	23.58	1,146	862
22.56	1,146	394	23.60	1,146	871
22.58	1,146	403	23.62	1,146	880
22.60	1,146	413	23.64	1,146	889
22.62	1,146	422	23.66	1,146	898
22.64	1,146	431	23.68	1,146	908
22.66	1,146	440	23.70	1,146	917
22.68	1,146	449	23.72	1,146	926
22.70	1,146	458	23.74	1,146	935
22.72	1,146	468	23.76	1,146	945

Stage-Area-Storage for Pond 3P: PP#3 (continued)

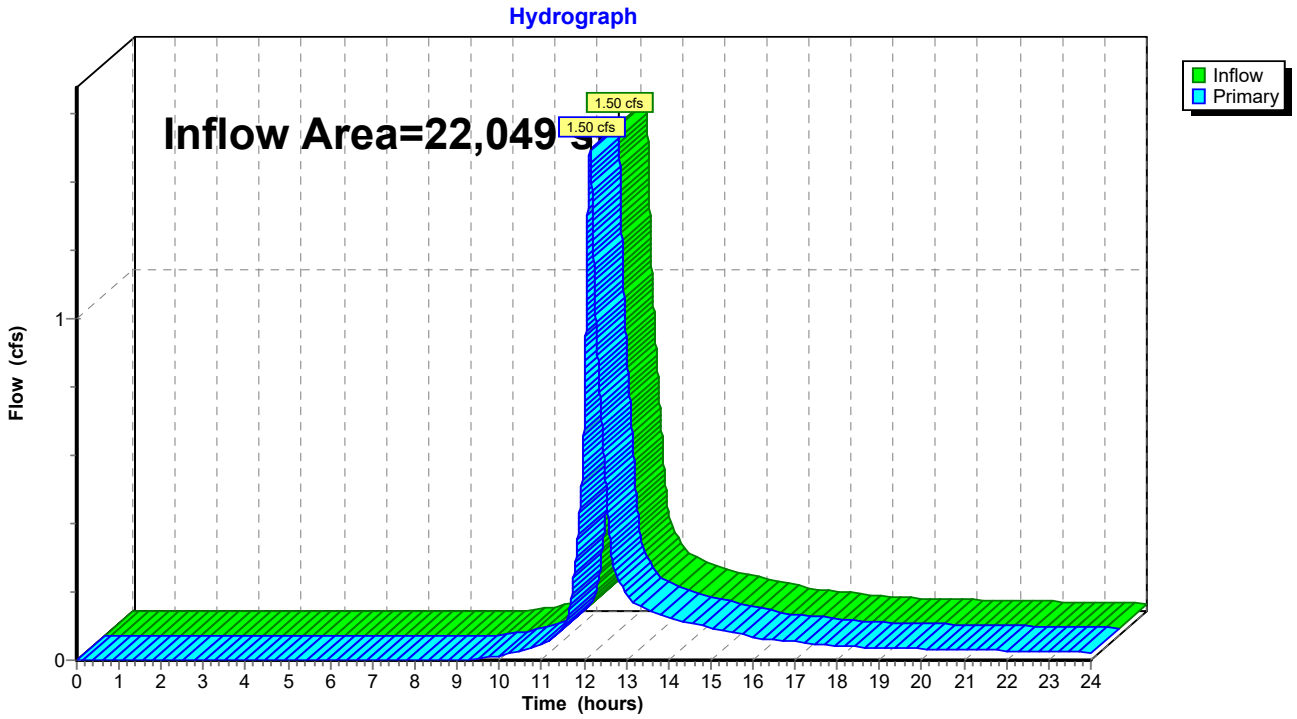
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
23.78	1,146	955
23.80	1,146	964
23.82	1,146	974
23.84	1,146	984
23.86	1,146	995
23.88	1,146	1,005
23.90	1,146	1,015
23.92	1,146	1,026
23.94	1,146	1,037
23.96	1,146	1,048
23.98	1,146	1,059
24.00	1,146	1,070
24.02	1,146	1,081
24.04	1,146	1,093
24.06	1,146	1,104
24.08	1,146	1,116
24.10	1,146	1,128
24.12	1,146	1,140
24.14	1,146	1,152
24.16	1,146	1,164
24.18	1,146	1,176
24.20	1,146	1,189
24.22	1,146	1,202
24.24	1,146	1,214
24.26	1,146	1,227
24.28	1,146	1,240
24.30	1,146	1,254
24.32	1,146	1,267
24.34	1,146	1,281
24.36	1,146	1,294
24.38	1,146	1,308
24.40	1,146	1,322
24.42	1,146	1,336
24.44	1,146	1,350
24.46	1,146	1,364
24.48	1,146	1,379
24.50	1,146	1,394
24.52	1,146	1,408
24.54	1,146	1,423
24.56	1,146	1,438
24.58	1,146	1,453
24.60	1,146	1,469
24.62	1,146	1,484
24.64	1,146	1,500
24.66	1,146	1,515
24.68	1,146	1,531
24.70	1,146	1,547
24.72	1,146	1,563
24.74	1,146	1,579
24.76	1,146	1,596
24.78	1,146	1,612
24.80	1,146	1,629
24.82	1,146	1,646
24.84	1,146	1,663
24.86	1,146	1,680
24.88	1,146	1,697
24.90	1,146	1,714
24.92	1,146	1,732
24.94	1,146	1,750
24.96	1,146	1,767
24.98	1,146	1,785
25.00	1,146	1,803
25.02	1,146	1,821
25.04	1,146	1,840
25.06	1,146	1,858
25.08	1,146	1,877
25.10	1,146	1,895
25.12	1,146	1,914
25.14	1,146	1,933
25.16	1,146	1,952
25.18	1,146	1,972
25.20	1,146	1,991
25.22	1,146	2,011
25.24	1,146	2,030
25.26	1,146	2,050
25.28	1,146	2,070
25.30	1,146	2,090
25.32	1,146	2,111
25.34	1,146	2,131
25.36	1,146	2,151
25.38	1,146	2,172
25.40	1,146	2,193
25.42	1,146	2,214
25.44	1,146	2,235
25.46	1,146	2,256
25.48	1,146	2,277
25.50	1,146	2,299
25.52	1,146	2,320
25.54	1,146	2,342
25.56	1,146	2,364
25.58	1,146	2,386
25.60	1,146	2,408
25.62	1,146	2,431
25.64	1,146	2,453
25.66	1,146	2,476
25.68	1,146	2,498
25.70	1,146	**2,521**

Summary for Link 1L: Ex.

Inflow Area = 22,049 sf, 17.14% Impervious, Inflow Depth > 2.92" for 25-Year event
Inflow = 1.50 cfs @ 12.14 hrs, Volume= 5,372 cf
Primary = 1.50 cfs @ 12.14 hrs, Volume= 5,372 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs

Link 1L: Ex.

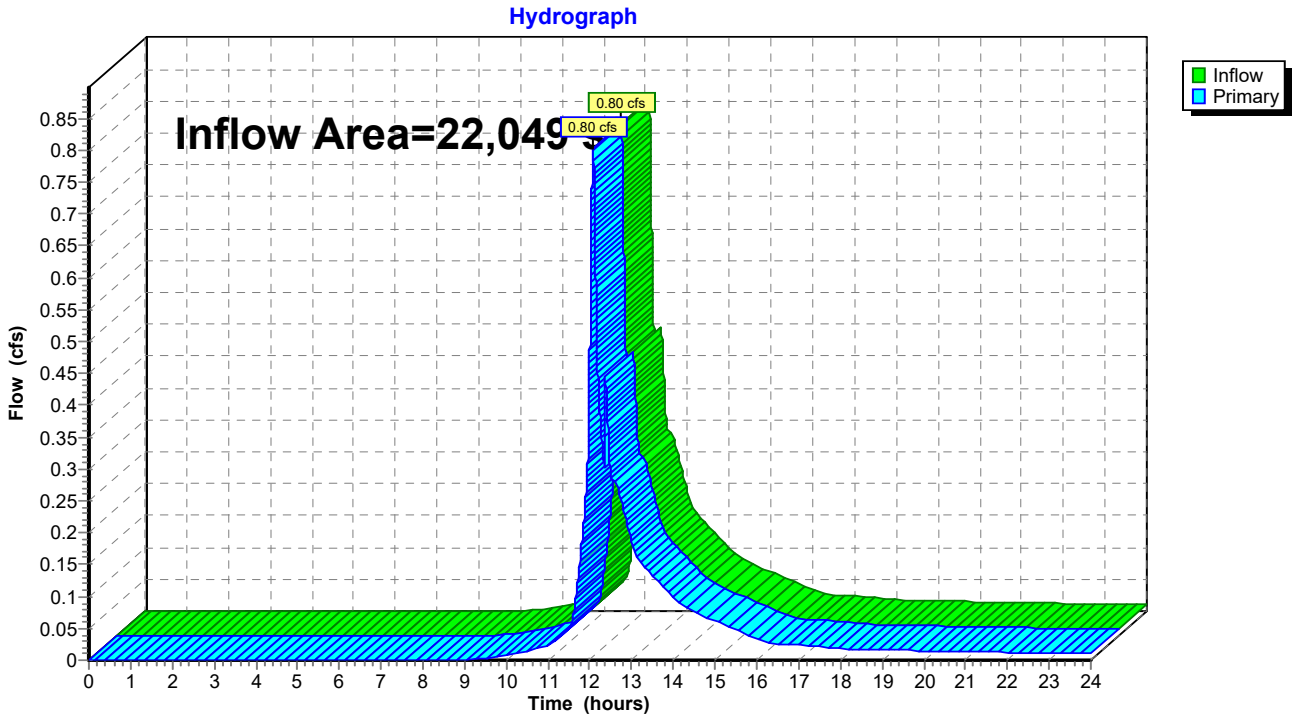


Summary for Link 2L: Pr

Inflow Area = 22,049 sf, 61.84% Impervious, Inflow Depth > 1.70" for 25-Year event
Inflow = 0.80 cfs @ 12.07 hrs, Volume= 3,129 cf
Primary = 0.80 cfs @ 12.07 hrs, Volume= 3,129 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs

Link 2L: Pr



Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>3.61"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=1.86 cfs 6,630 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>6.96"
Tc=5.0 min CN=96.82 Runoff=0.67 cfs 2,280 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>6.73"
Tc=5.0 min CN=94.91 Runoff=0.77 cfs 2,567 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>6.71"
Tc=5.0 min CN=94.79 Runoff=0.69 cfs 2,269 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>3.74"
Tc=5.0 min CN=68.52 Runoff=0.99 cfs 2,954 cf

Pond 1P: PP#1 Peak Elev=27.56' Storage=950 cf Inflow=0.67 cfs 2,280 cf
Discarded=0.02 cfs 1,029 cf Primary=0.27 cfs 502 cf Outflow=0.28 cfs 1,531 cf

Pond 2P: PP#2 Peak Elev=25.76' Storage=1,228 cf Inflow=0.77 cfs 3,069 cf
Discarded=0.02 cfs 1,235 cf Primary=0.43 cfs 940 cf Outflow=0.45 cfs 2,175 cf

Pond 3P: PP#3 Peak Elev=23.72' Storage=926 cf Inflow=0.69 cfs 3,210 cf
Discarded=0.02 cfs 1,079 cf Primary=0.63 cfs 1,430 cf Outflow=0.65 cfs 2,509 cf

Link 1L: Ex. Inflow=1.86 cfs 6,630 cf
Primary=1.86 cfs 6,630 cf

Link 2L: Pr Inflow=1.00 cfs 4,384 cf
Primary=1.00 cfs 4,384 cf

Total Runoff Area = 44,098 sf Runoff Volume = 16,701 cf Average Runoff Depth = 4.54"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>4.37"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=2.26 cfs 8,026 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>7.87"
Tc=5.0 min CN=96.82 Runoff=0.76 cfs 2,580 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>7.64"
Tc=5.0 min CN=94.91 Runoff=0.87 cfs 2,916 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>7.63"
Tc=5.0 min CN=94.79 Runoff=0.77 cfs 2,579 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>4.51"
Tc=5.0 min CN=68.52 Runoff=1.20 cfs 3,564 cf

Pond 1P: PP#1 Peak Elev=27.58' Storage=961 cf Inflow=0.76 cfs 2,580 cf
Discarded=0.02 cfs 1,057 cf Primary=0.51 cfs 747 cf Outflow=0.53 cfs 1,804 cf

Pond 2P: PP#2 Peak Elev=25.80' Storage=1,255 cf Inflow=1.15 cfs 3,664 cf
Discarded=0.02 cfs 1,269 cf Primary=0.77 cfs 1,466 cf Outflow=0.79 cfs 2,735 cf

Pond 3P: PP#3 Peak Elev=23.74' Storage=934 cf Inflow=1.15 cfs 4,045 cf
Discarded=0.02 cfs 1,109 cf Primary=1.12 cfs 2,205 cf Outflow=1.14 cfs 3,314 cf

Link 1L: Ex. Inflow=2.26 cfs 8,026 cf
Primary=2.26 cfs 8,026 cf

Link 2L: Pr Inflow=1.76 cfs 5,769 cf
Primary=1.76 cfs 5,769 cf

Total Runoff Area = 44,098 sf Runoff Volume = 19,666 cf Average Runoff Depth = 5.35"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Appendix 3

Rainfall Intensity Data
NRCS Web Soil Survey
FEMA Firmette
USGS Quad Map

NOAA Atlas 14, Volume 10, Version 3
Location name: Norwalk, Connecticut, USA*
Latitude: 41.1055°, Longitude: -73.4095°
Elevation: 27 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.366** (0.295-0.454)	**0.426** (0.343-0.529)	**0.524** (0.420-0.653)	**0.605** (0.481-0.758)	**0.716** (0.548-0.937)	**0.801** (0.598-1.07)	**0.888** (0.638-1.23)	**0.981** (0.668-1.40)	**1.11** (0.722-1.65)	**1.21** (0.766-1.84)
10-min	**0.519** (0.418-0.643)	**0.604** (0.486-0.749)	**0.742** (0.595-0.925)	**0.857** (0.682-1.07)	**1.02** (0.777-1.33)	**1.14** (0.847-1.52)	**1.26** (0.904-1.74)	**1.39** (0.946-1.99)	**1.57** (1.02-2.34)	**1.71** (1.08-2.60)
15-min	**0.611** (0.492-0.757)	**0.710** (0.571-0.881)	**0.873** (0.700-1.09)	**1.01** (0.802-1.26)	**1.19** (0.914-1.56)	**1.34** (0.997-1.79)	**1.48** (1.06-2.05)	**1.64** (1.11-2.34)	**1.85** (1.20-2.75)	**2.02** (1.28-3.06)
30-min	**0.848** (0.683-1.05)	**0.987** (0.794-1.22)	**1.21** (0.973-1.51)	**1.40** (1.12-1.76)	**1.66** (1.27-2.17)	**1.86** (1.39-2.48)	**2.06** (1.48-2.85)	**2.27** (1.55-3.25)	**2.55** (1.66-3.78)	**2.76** (1.74-4.19)
60-min	**1.09** (0.875-1.35)	**1.26** (1.02-1.57)	**1.56** (1.24-1.94)	**1.80** (1.43-2.25)	**2.13** (1.63-2.78)	**2.39** (1.78-3.18)	**2.64** (1.89-3.64)	**2.90** (1.98-4.15)	**3.24** (2.11-4.82)	**3.50** (2.22-5.32)
2-hr	**1.38** (1.12-1.70)	**1.64** (1.32-2.02)	**2.06** (1.66-2.54)	**2.40** (1.92-2.99)	**2.88** (2.22-3.75)	**3.24** (2.44-4.32)	**3.62** (2.62-5.00)	**4.03** (2.75-5.73)	**4.60** (3.00-6.79)	**5.06** (3.21-7.64)
3-hr	**1.58** (1.29-1.94)	**1.89** (1.54-2.32)	**2.40** (1.94-2.95)	**2.81** (2.26-3.49)	**3.39** (2.62-4.40)	**3.82** (2.88-5.08)	**4.28** (3.11-5.91)	**4.79** (3.28-6.78)	**5.52** (3.61-8.12)	**6.12** (3.89-9.20)
6-hr	**1.99** (1.63-2.43)	**2.40** (1.96-2.92)	**3.06** (2.49-3.74)	**3.60** (2.91-4.44)	**4.35** (3.39-5.63)	**4.92** (3.74-6.51)	**5.51** (4.05-7.60)	**6.20** (4.26-8.74)	**7.21** (4.73-10.5)	**8.05** (5.14-12.0)
12-hr	**2.47** (2.04-2.99)	**2.97** (2.45-3.60)	**3.79** (3.11-4.61)	**4.47** (3.64-5.47)	**5.41** (4.23-6.95)	**6.11** (4.67-8.03)	**6.85** (5.05-9.39)	**7.71** (5.32-10.8)	**8.98** (5.91-13.1)	**10.0** (6.43-14.9)
24-hr	**2.87** (2.38-3.45)	**3.49** (2.89-4.20)	**4.50** (3.71-5.43)	**5.33** (4.37-6.48)	**6.48** (5.11-8.28)	**7.34** (5.64-9.61)	**8.26** (6.14-11.3)	**9.34** (6.46-13.0)	**11.0** (7.23-15.8)	**12.3** (7.90-18.2)
2-day	**3.12** (2.61-3.73)	**3.88** (3.23-4.63)	**5.11** (4.24-6.13)	**6.13** (5.06-7.40)	**7.54** (5.98-9.59)	**8.58** (6.64-11.2)	**9.70** (7.27-13.2)	**11.1** (7.68-15.3)	**13.1** (8.70-18.8)	**14.9** (9.60-21.8)
3-day	**3.32** (2.78-3.95)	**4.15** (3.47-4.94)	**5.50** (4.58-6.57)	**6.62** (5.48-7.96)	**8.16** (6.50-10.4)	**9.30** (7.23-12.1)	**10.5** (7.93-14.3)	**12.0** (8.38-16.6)	**14.3** (9.51-20.5)	**16.3** (10.5-23.8)
4-day	**3.52** (2.96-4.18)	**4.40** (3.69-5.22)	**5.82** (4.87-6.93)	**7.00** (5.81-8.39)	**8.63** (6.89-10.9)	**9.83** (7.66-12.7)	**11.1** (8.38-15.1)	**12.7** (8.86-17.4)	**15.1** (10.0-21.5)	**17.1** (11.1-24.9)
7-day	**4.16** (3.51-4.90)	**5.10** (4.30-6.02)	**6.64** (5.58-7.86)	**7.92** (6.61-9.44)	**9.67** (7.75-12.1)	**11.0** (8.58-14.1)	**12.4** (9.33-16.6)	**14.0** (9.82-19.2)	**16.5** (11.0-23.4)	**18.6** (12.0-26.8)
10-day	**4.79** (4.06-5.63)	**5.78** (4.90-6.80)	**7.39** (6.24-8.73)	**8.73** (7.31-10.4)	**10.6** (8.49-13.2)	**12.0** (9.35-15.3)	**13.4** (10.1-17.8)	**15.1** (10.6-20.5)	**17.5** (11.7-24.7)	**19.6** (12.7-28.2)
20-day	**6.73** (5.75-7.85)	**7.83** (6.68-9.15)	**9.64** (8.18-11.3)	**11.1** (9.39-13.1)	**13.2** (10.6-16.2)	**14.8** (11.6-18.6)	**16.4** (12.3-21.4)	**18.1** (12.8-24.4)	**20.5** (13.7-28.6)	**22.3** (14.5-31.9)
30-day	**8.36** (7.17-9.71)	**9.55** (8.18-11.1)	**11.5** (9.80-13.4)	**13.1** (11.1-15.4)	**15.3** (12.4-18.8)	**17.0** (13.4-21.3)	**18.8** (14.1-24.2)	**20.5** (14.5-27.5)	**22.8** (15.4-31.8)	**24.6** (16.0-35.0)
45-day	**10.4** (8.96-12.0)	**11.7** (10.1-13.6)	**13.8** (11.8-16.1)	**15.6** (13.2-18.2)	**18.0** (14.6-21.8)	**19.8** (15.6-24.6)	**21.7** (16.3-27.8)	**23.5** (16.7-31.3)	**25.8** (17.4-35.7)	**27.4** (17.9-38.9)
60-day	**12.1** (10.5-14.0)	**13.5** (11.6-15.6)	**15.7** (13.5-18.2)	**17.6** (15.0-20.5)	**20.1** (16.4-24.4)	**22.2** (17.4-27.3)	**24.1** (18.1-30.7)	**25.9** (18.5-34.5)	**28.2** (19.1-39.0)	**29.8** (19.5-42.2)

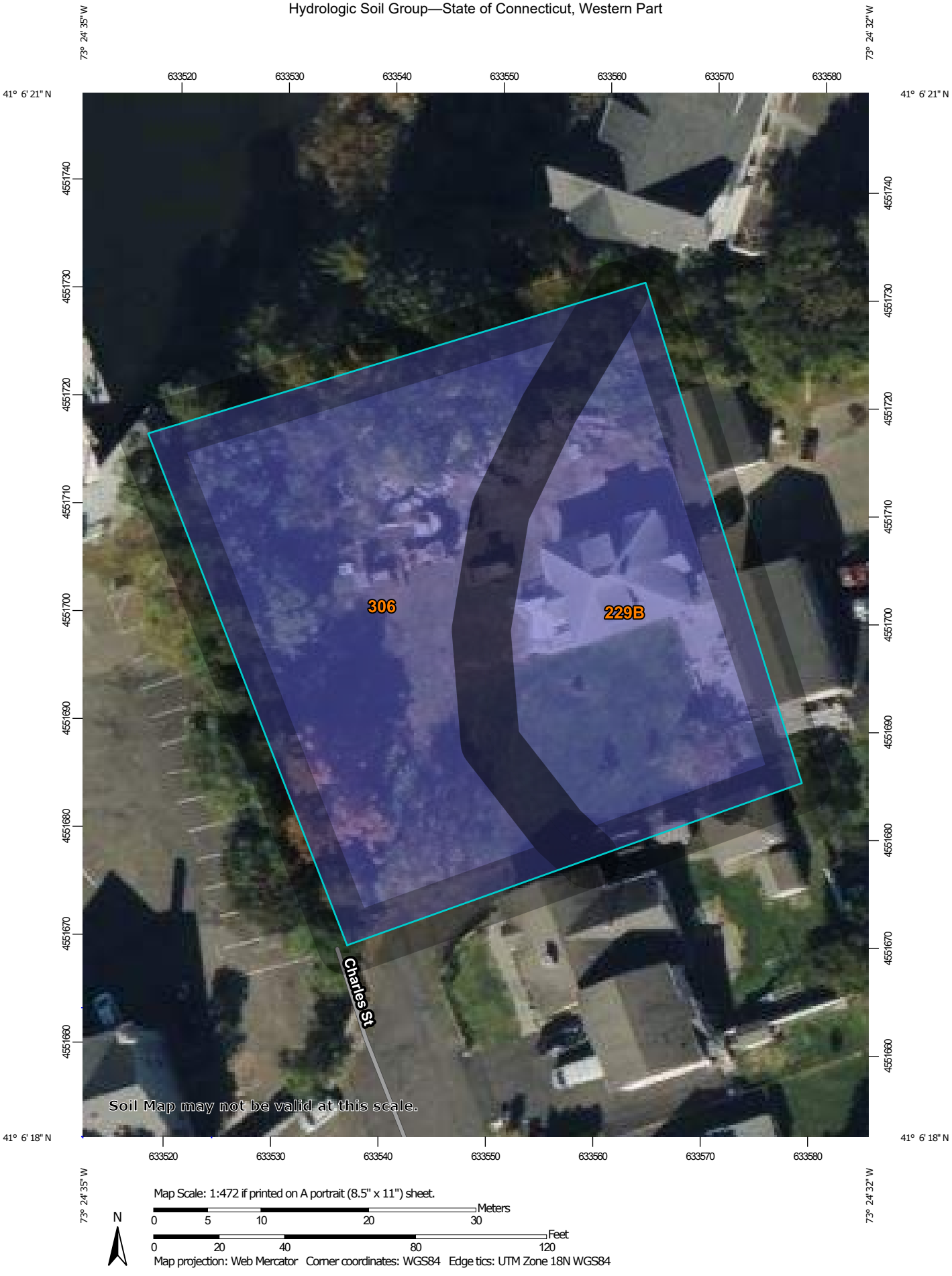
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

PF graphical


73° 24' 35" W
73° 24' 32" W
41° 6' 21" N
41° 6' 18" N
633520
633530
633540
633550
633560
633570
633580
4551740
4551730
4551720
4551710
4551700
4551690
4551680
4551670
4551660
306
229B
Charles St
Soil Map may not be valid at this scale.
Map Scale: 1:472 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 5 10 20 30
Feet
0 20 40 80 120
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: State of Connecticut, Western Part
Survey Area Data: Version 2, Aug 30, 2024

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

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
229B	Agawam-Urban land complex, 0 to 8 percent slopes	B	0.2	41.6%
306	Udorthents-Urban land complex	B	0.3	58.4%
Totals for Area of Interest			**0.6**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

National Flood Hazard Layer FIRMette

FEMA



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

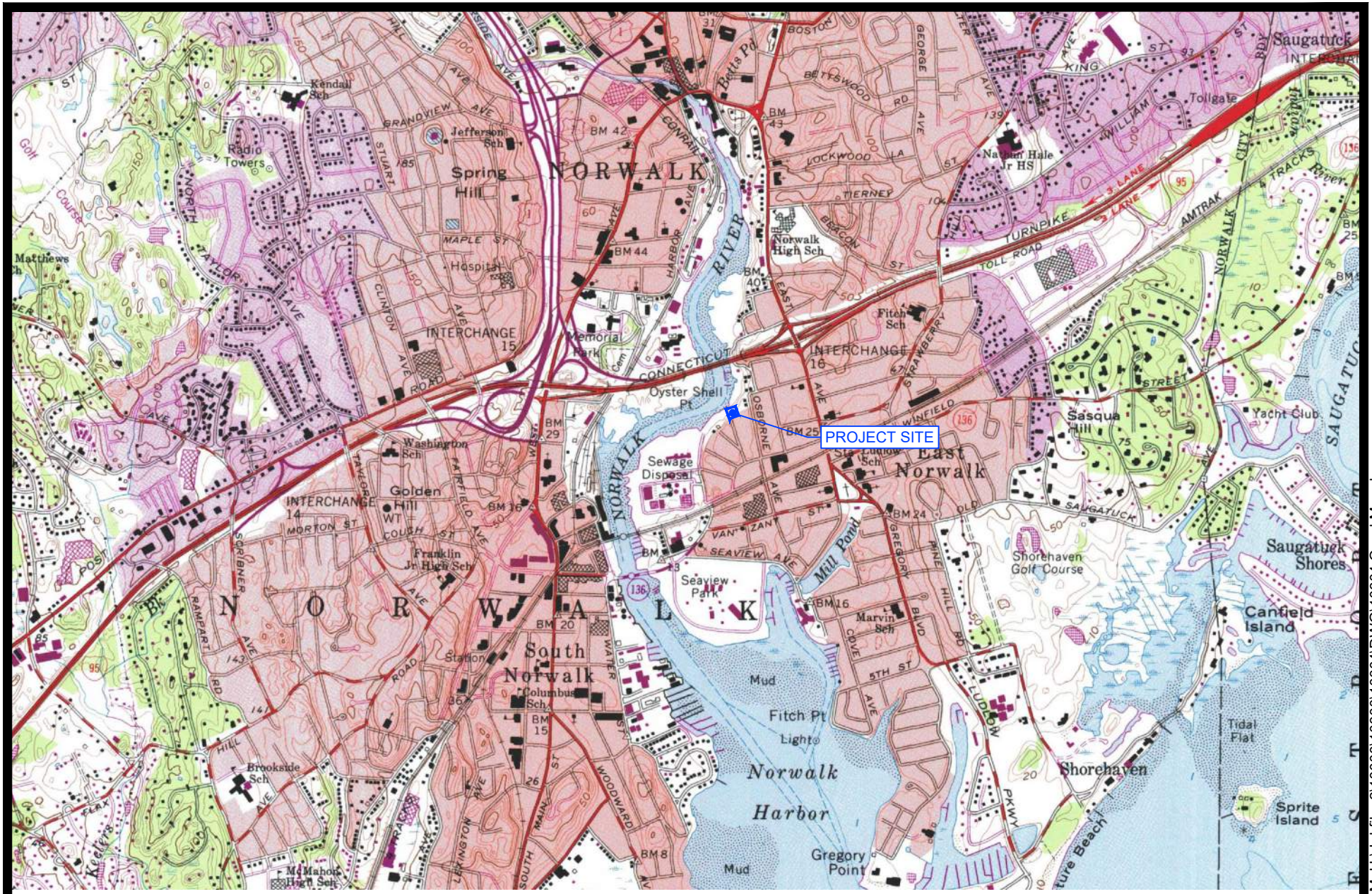
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/13/2025 at 12:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



MAP NAME: NORWALK SOUTH
MAP NUMBER: 114

USGS TOPOGRAPHIC QUAD MAP

30, 32, & 34 CHARLES STREET
NORWALK, CT

REDNISS & MEAD

COMM. NO.: 10304 DATE: 12/05/2025 SCALE: 1"=2000'

H:\Jobfiles2\10000\10300\10304\DWG\10304 Quad Map.dwg 11/26/2025 11:56 AM

Appendix 4

Draft Stormwater Operations and Maintenance Plan

DRAINAGE FACILITIES OPERATIONS AND MAINTENANCE PLAN
30, 32, & 34 Charles Street, Norwalk CT
December 12, 2025

The purpose of this Operations and Maintenance plan is to ensure that the drainage facilities proposed on site at 30, 32, and 34 Charles Street (the "Properties") shall be maintained in operational condition. While some normal wear is expected over time, the facilities must be properly maintained in order to function as designed. Please refer to the Site Utility Plan for the location of proposed drainage facilities.

Tomas Brothers LLC and its successors or assigns agree to maintain the drainage facilities in a functioning condition by following the maintenance plan described below.

Storm Drainage Maintenance and Inspection Requirements: The storm drainage system shall be inspected on a semi-annual basis for the first year to ensure that the system is functioning properly. If these inspections show that debris and sediment have accumulated, then more frequent inspections will be scheduled. Inspections should be scheduled following major storm events. If after one year there is little sediment accumulation, then inspections shall be performed on an annual basis.

Catch Basins: Structures with an open grate top intended to collect rain water and direct it into the underground drainage pipes. Note that if sediment is allowed to build up it can greatly reduce the performance of the structure.

- Inspect yearly and remove accumulated debris, trash, and sediment with a vacuum truck as needed to insure proper working order.

Storm Drainage Piping and Manholes: Pipes are located beneath the surface and are used for piping stormwater out of the site. Manholes are structures that are used as junctions for pipe intersections.

- All piping shall be completely cleaned of debris and accumulated sediment at the completion of constriction.
- Manholes shall be inspected on an annual basis. Accumulated debris shall be removed and repairs shall be conducted as necessary.
- Video inspection of the storm drainage piping shall occur once every 10 years, unless the system performance indicates an issue.

Porous Pavement (Porous Asphalt, Permeable Pavers, Etc.):

- Clean and vacuum (Regenerative Air Vacuum for Permeable Interlocking Concrete Pavers) the porous pavement upon the completion of construction.
- Check for standing water on the surface of the pavement after a precipitation event. If standing water remains within 30 minutes after rainfall had ended, cleaning of porous pavement is recommended.
- Vacuum sweeper shall be used regularly to remove sediment and organic debris on the

pavement surface. The sweeper may be fitted with water jets.

- Pavement vacuuming should occur during spring cleanup following the last snow event to remove accumulated debris, at a minimum.
- Pavement vacuuming should occur during fall cleanup to remove dead leaves, at a minimum.
- Power washing can be an effective tool for cleaning clogged areas. See manufacturer's specifications.
- Check for debris accumulating on pavement, especially debris buildup in winter. For loose debris, a power/leaf blower or gutter broom can be used to remove leaves and trash.
- In the event that the porous surface becomes clogged an engineer must be retained to determine how to restore the porous surface to its original condition.
- Any additional maintenance required per the manufacturer's specifications shall also be completed.

Disposal of Debris and Sediment: All debris and sediment removed from the storm water structures shall be disposed of legally. There shall be no dumping of silt or debris into or in proximity to any inland or tidal wetlands or the abutting river.

Maintenance Arrangements: The names of the person or party responsible for completing routine inspection and maintenance activities, pet waste management, and proper management of de-icing chemicals and snow shall be filed with the Norwalk Department of Public Works annually.

Good Housekeeping:

1. Most domestic waste will be stored inside the trash room
2. No fertilizers, pesticides, or herbicides will be stored on site
3. No vehicle washing will be permitted on site
4. Lawn and garden areas will be kept in satisfactory condition maintaining ground stabilization and the pervious nature of landscaped areas.
5. In accordance with Sec. 2a-450 of CT General Statues spills of petroleum or chemicals will be reported to the CT DEEP's Oil & Chemical Response Division at (860) 424-3338, be contained as quickly as practical, and cleaned by a licensed contractor.

DRAFT

Declaration: The Owner(s) listed below agrees to the following statements. The statements are intended to ensure that the owner agrees to install and maintain stormwater management practices on the subject property in accordance with approved plans and conditions, and to further ensure that the management practices serve the intended function in perpetuity.

1. The Owner(s) shall be solely responsible for the inspection, maintenance, and repair of the postconstruction storm water management system identified in the above sections.

2. The Owner(s) agrees in the event that the Property is sold, transferred, or leased to provide information to the new owner, operator, or lessee regarding proper inspection, maintenance and repair of the storm water management practice(s). The information shall accompany the first deed transfer and include this "Drainage Facilities Operations and Maintenance Plan". The transfer of this information shall also be required with any subsequent sale, transfer or lease of the Property.

3. The City of Norwalk or its designee is authorized to access the property as necessary to conduct inspections of the storm water management practices to ascertain compliance with the intent of this Operations and Maintenance Plan. Upon written notification by the City of Norwalk or their designee of required maintenance or repairs, the Owner(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the City of Norwalk. The Owner(s) shall be liable for the failure to undertake any maintenance or repairs so that the public health, safety, general welfare or the environment shall not be endangered.

By: _____ _____
[Owner(s)] [Date]

By: _____ _____
[Owner(s)] [Date]

DRAFT

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By: _____ _____
[Owner(s)] [Date]

By: _____ _____
[Owner(s)] [Date]

DRAFT

CITY OF NORWALK
Christine Cardascia, P.E.
Assistant Engineer /
Department of Engineering
125 East Avenue
Norwalk, CT 06851
Office: (203) 854-7873
Permits: (203) 854-4161
www.norwalkct.gov
ccardascia@norwalkct.gov
dpwpermits@norwalkct.gov

March 13, 2026

Sent via email to: esuchy@carmodylaw.com

Elizabeth A.B. Suchy, Esq
Carmody Torrance Sandak & Hennessey LLP

RE: 30 Charles Street (District 03, Block 07, Lot 14)
32 Charles Street (District 03, Block 07, Lot 15)
34 Charles Street (District 03, Block 07, Lot 43)
Proposed Two-Family Residencies
Department of Engineering's Plan Review Comments

Dear Ms. Suchy:

The Department of Engineering and the Water Pollution Control Authority (WPCA) for the City of Norwalk (City) have reviewed the supportive documents associated with the proposed development at the above-referenced property. The focus of our review has been to confirm the documents provided are in in conformance with the standards set forth in the City of Norwalk (City) Department of Public Works (DPW) Roadway Standards, and Standard Specifications, as amended and supplemented, Drainage Manual, as amended and supplemented, Standard Detailed Drawings, as amended and supplemented, DPW and WPCA Sanitary Sewer Permit Process and Sanitary Sewer Main Extension Policy and other applicable design standards.

The following documents were provided and included in our review:

- Site Plan titled "Zoning Site Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers L.L.C.," prepared by Redniss and Mead, Inc., dated 12/12/2025
- Engineering Report titled "Site Engineering Report 30, 32, & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers L.L.C.," prepared by Redniss and Mead, Inc., dated 12/12/2025
- Engineering Report titled "Drainage Facilities Operations and Maintenance Plan 30, 32, & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers L.L.C.," prepared by Redniss and Mead, Inc., dated 12/12/2025

The following are the Department of Engineering and Water Pollution Control Authorities' review comments highlighting sections that will require revision or additional information prior to our departmental sign-off. A written response addressing each comment is required as part of the resubmittal:

1. Per the City of Norwalk regulations, a single driveway may only serve a maximum of two building lots. Once a driveway provides access to three or more lots, it is classified as a Private Road and must be constructed in accordance with the City of Norwalk 2021 Roadway Standards, City of Norwalk Drainage Manual, City Standard Details, and other applicable standards. As this appears to be an existing nonconforming condition, the City may allow the shared driveway to remain provided the applicant demonstrates that there is legally established access for the benefiting properties through the 15-foot ROW easement. Please provide documentation confirming the legal access rights.
2. Please clarify the ownership and maintenance responsibility of all shared utilities within private properties. Any privately owned utilities shall be covered by appropriate access and maintenance agreements or easements.
3. The existing conditions survey shows an existing catch basin on the property. Please investigate and verify the purpose of this catch basin, confirm all connections, and clarify whether there is any existing stormwater management system on site. The calculations shall be revised as necessary to ensure all existing elements are accurately represented and properly modeled.
4. There are areas where the proposed contours are missing. Please revise the plans to include in all areas, specifically the proposed contours should be shown on the driveway.
5. The existing guide rail at the proposed construction entrance is shown to be removed. Please confirm the proposed vehicular protection will be maintained at the end of the ROW.
6. The plan shall be revised to include all existing utility information (i.e. pipe size, material, inverts) of the sewer main.
7. The plan shall depict and clarify the intend of the existing utility laterals and connections. Should the existing laterals be abandoned, then the plan shall include the proposed abandonment detail, in conformance with the City's Standard Detail Drawings.
8. The applicant shall conduct further investigation to locate the Manhole within the easement if the laterals shall be connected to the interceptor pipe.
9. The proposed sanitary sewer lateral for Lot 32 appears to cross two separate properties. Per the City of Norwalk Sewer Extension Policy, laterals should not cross abutting properties where the existing gravity sanitary sewer can be extended to serve the property. If crossing an abutting property is unavoidable, the lateral shall not cross more than one (1) property and a dedicated easement must be recorded on the Norwalk Land Records. Please revise the plans to comply with this requirement and all other requirements outlined in the City of Norwalk Sewer Extension Policy.
10. Please confirm the invert connection at the main for the proposed sanitary sewer lateral. Sanitary sewer laterals shall be installed with a minimum of 2% and a maximum of 8% slope. A sanitary sewer chimney, in compliance with the City's 2021 Standard Detail Drawings, may be utilized to help maintain sewer laterals within the City's slope standards.
11. Pools are considered pervious under the Norwalk Drainage Manual, please revise the Existing Drainage Basin Exhibit and any related calculations.
12. The proposed level spreader is located on an excessively steep slope. This slope raises significant concerns that runoff will reconcentrate immediately downslope, leading to erosion and potential off-site impacts. Please reevaluate the outlet design and provide an alternative stabilization or energy dissipation method appropriate for the existing grade. Please make sure to revise the design
13. The plan shall be revised to include the driveway sight line distance to ensure no obstruction in excess of two (2) feet high are within the sight line triangle, in conformance with the City's Roadway Standards.

14. Any existing trees that are to be removed within the City's right-of-way that are 8 inches or greater in caliper, will require a tree removal permit and must be posted by the City's Tree Warden at least 10 days in advance, in accordance with the City Code Chapter 112.
    a. City trees to be removed shall be replaced in accordance with City Code Chapter 112-10C.

Please note this is a preliminary review of the submitted documents. Additional comments may be forthcoming once the requested information is received.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Christine Cardascia

Christine Cardascia, P.E.
Assistant Engineer

Cc: DPW Permits
James Meehan, P.E., Principal Engineer – Department of Engineering
Wilber Giron, P.E., Permit Engineer – Department of Engineering
Ralph Kolb, P.E., Sr. Environmental Engineer – Water Pollution Control Authority
Mario Pizighelli, P.E., Stormwater Systems Manager – Water Pollution Control Authority
Garrett Bolella, P.E., Assistant Director – Transportation, Mobility and Parking
Benjamin Yeung, P.E., Senior Traffic Engineer – Transportation, Mobility and Parking
Nathan Fankhanel, Junior Engineer – Transportation, Mobility and Parking
Steven Kleppin, Director – Planning and Zoning
Bryan Baker, Principal Planner – Planning and Zoning
Michelle Andrzejewski, Senior Planner – Planning and Zoning
Amelia Williams, Land Use Planner – Planning and Zoning
Tammy Maldonado, Zoning Enforcement Officer – Planning and Zoning
Alexis Cherichetti, Senior Environmental Officer/Assistant Director – Conservation and Planning and Zoning

Transportation
Mobility & Parking

CITY OF NORWALK
Transportation Mobility & Parking
Norwalk City Hall
125 East Avenue, PO Box 5125
Norwalk, CT 06856-5125

Sent via email to: esuchy@carmodylaw.com

To: Elizabeth A.B. Suchy, Esq. – Carmody Torrance Sandak & Hennessey LLP

From: Benjamin Yeung, P.E., Senior Traffic Engineer – Norwalk TMP

Subject: 30 & 32 Charles Street – Proposed Multi-Family Residences – TMP Conditional Sign-Off

Date: March 10, 2026

The Transportation, Mobility, and Parking (TMP) Department has completed a preliminary review of the following documents related to the Proposed Multi-Family Residences at 30 & 32 Charles Street:

- Civil/Site Plans Drawings depicting 30, 32 & 34 Charles Street, prepared for Tomas Brothers LLC, dated December 12, 2025, prepared by Redniss & Mead.

The aforementioned document is in compliance with the current City Standards in relation to transportation, mobility, and parking. TMP takes no exception to the project moving forward, subject to the following conditions:

1. Applicant shall obtain DPW approval for use of the existing non-conforming shared driveway access from Osborne Avenue to the proposed residences.

This letter signifies final departmental conditional sign-off from TMP. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Benjamin Yeung

Benjamin Yeung, P.E., Senior Traffic Engineer - TMP

Cc: DPW Permits
Jay Habansky - Chief of Economic and Community Development
Jim Travers, Director – Norwalk TMP
Garrett Bolella, P.E., PTOE, RSP1, Assistant Director – TMP
Nathan Fankhanel, E.I.T., Junior Engineer – TMP
Vanessa Valadares, P.E., Chief of Department of Public Works
Wilber Giron, P.E., Permit Engineer – Department of Public Works
Christine Cardascia, P.E., Assistant Engineer – Department of Public Works
Steven Kleppin, Director – Planning and Zoning
Bryan Baker, Principal Planner – Planning and Zoning
Michelle Andrzejewski, Land Use Planner – Planning and Zoning
Amelia Williams, Land Use Planner – Planning and Zoning
William Ireland, Chief Building Official – Building and Code Enforcement
Leo Guerrero, Assistant Building Official – Building and Code Enforcement
Peter Kelly, Assistant Building Official – Building and Code Enforcement
Ralph Kolb, P.E., Sr. Environmental Engineer – WPCA
Mario Pizighelli, P.E., Stormwater Systems Manager - WPCA
Christopher Cavaliere, Junior Engineer – WPCA
Alexis Cherichetti, Senior Environmental Officer – Conservation Office
William Mooney, Assistant Director of Health – Health Department
Troy Donohue, Fire Marshal – Fire Department
Kirk McDonald, Assistant Fire Marshal – Fire Department

March 13, 2026

Memorandum

To: Planning & Zoning Commission – Chapin Bryce, Chair

From: Bryan Baker, AICP, Principal Planner

Re: #2026-07 CSPR – Tomas Builders, LLC – 30 Charles Street (District 3, Block 7, Lot 14) – Coastal site plan review application for the construction of a two-family detached dwelling

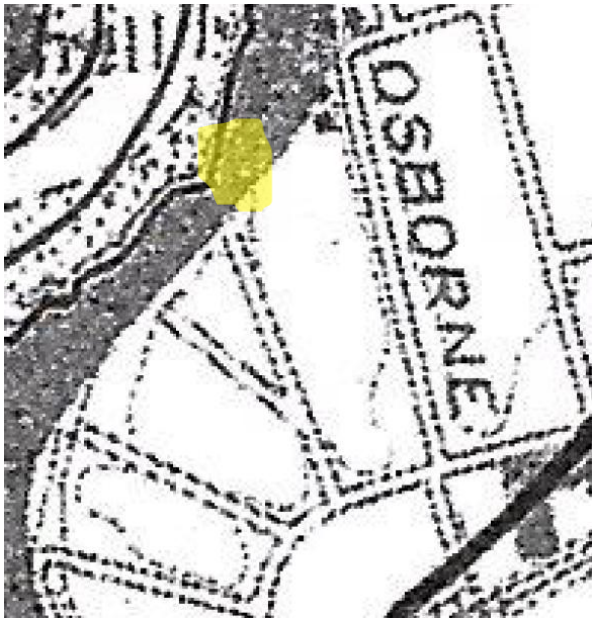
#2026-08 CSPR – Tomas Builders, LLC – 32 Charles Street (District 3, Block 7, Lot 15) – Coastal site plan review application for the construction of a two-family detached dwelling

Commissioners,

The applicant has submitted two separate coastal site plan review applications for the construction a two-family detached dwelling at 30 Charles Street and 32 Charles Street, respectively. For simplicity, this memorandum will provide Staff's review and recommended action for both applications. Please note that 32 Charles Street is the southern most parcel and 30 Charles Street is located to the north of 32 Charles Street.

In accordance with Connecticut General Statutes (CGS) Sec. 22a-105, coastal site plan reviews are required for, "activities or projects to be located fully or partially within the coastal boundary and landward of the mean high water mark," which includes, "Site plans submitted to a zoning commission in accordance with section 22a-109." Staff has prepared the following coastal site plan review to assist in your decision making for the above referenced coastal site plan review application(s).

Section 22a-106 of the (CGS) lists the criteria and process for action on coastal site plans, mainly the Commission's determination whether or not the potential adverse impacts of the proposed activity on both coastal resources and future water-dependent development activities are acceptable. To do so, an evaluation what the coastal resources are on the site as well as of the existing characteristics of the property are required.



1979 coastal resources map and approximate location of 30 & 32 Charles Street



Current aerial imagery

32 Charles Street is an undeveloped building lot and 30 Charles Street has a frame building at the rear of the property. Both properties are located entirely within the coastal boundary and the CD-2 zone. The applicant is proposing to construct a new two-family detached dwelling on each property, a use permitted as-of-right, however a coastal site plan review application is required. Per the 1979 Coastal Resources Map, 30 and 32 Charles Street appear to be located within the "Coastal 'Flood Hazard' Area," which is considered a "coastal resource," however, the most updated Flood Emergency Management Agency (FEMA) flood map shows that neither property is located within the Coastal 'Flood Hazard' Area." Because no coastal resources are located on either property it is Staff's opinion that the applications will not have an adverse impact on any coastal resources.



FEMA flood map showing 30 and 32 Charles Street, respectively, and flood zone AE (El 10)

For your reference, here is the Connecticut Coastal Management Act's (CCMA) definition of "Adverse impacts on coastal resources," of which, Staff finds that there are no such adverse impacts:

(15) "Adverse impacts on coastal resources" include but are not limited to: (A) Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity; (B) degrading existing circulation patterns of coastal waters through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours; (C) degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction; (D) degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff; (E) increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones; (F) degrading visual quality through significant alteration of the natural features of vistas and view points; (G) degrading or destroying essential wildlife, finfish or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alteration of the natural components of the habitat; and (H) degrading tidal wetlands, beaches and

dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or function;

Regarding adverse impacts on future water-dependent activities, it is important to note that the properties are zoned as CD-2 which is predominantly a residential zone with single- and two-family detached structures being permitted as-of-right. The properties are not waterfront and thus have historically not been considered for water-dependent uses and/or zoning, including during the 1988 adoption of the city's Marine Commercial zoning district and regulations, in accordance with the CCMA. Additionally, there are no recorded zoning map change applications having been submitted to re-zone the parcels to a water-dependent zone indicating a lack of historical demand for such uses. For your reference, please see the definition of "Adverse impacts on future water-dependent development opportunities," as defined within the CCMA below, of which it is Staff's opinion that there are no such adverse impacts due to this application.

(17) "Adverse impacts on future water-dependent development opportunities" and "adverse impacts on future water-dependent development activities" include but are not limited to (A) locating a non-water-dependent use at a site that (i) is physically suited for a water-dependent use for which there is a reasonable demand or (ii) has been identified for a water-dependent use in the plan of development of the municipality or the zoning regulations; (B) replacement of a water-dependent use with a non-water-dependent use, and (C) siting of a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters;

Lastly, the applicant has provided a Coastal Area Management Report prepared by Redniss & Mead, Inc. Staff has found such report to be accurate and agrees with its findings.

Staff offers the following resolutions for consideration by the Commission:

Draft resolution to approve 30 Charles Street:

THEREFORE, BE IT RESOLVED by the Norwalk Planning & Zoning Commission that application #2026-07 CSPR – Tomas Builders, LLC – 30 Charles Street (District 3, Block 7, Lot 14) – Coastal site plan review application for the construction of a two-family detached dwelling be **APPROVED** with the following finding:

1. That the Commission finds that any adverse impacts as a result of the development are limited to the greatest extent possible; and

BE IT FURTHER RESOLVED that the approval shall be subject to the following:

1. That the buildings and site will be developed in accordance with the following plans:
    a. Per site plan package entitled "Zoning Site Plan Depicting 30, 32, & 34 Charles Street," prepared by Redniss & Mead, dated 12/12/2025; and
    b. Per architectural drawings entitled "30 Charles Street Norwalk, Connecticut" prepared by DeMais Architects P.C., dated 1/5/2026; and
2. That the overhead service wires and all other utilities shall be installed underground; and
3. That a surety bond be submitted, in an amount to be determined by the Staff, to guarantee the installation of the required erosion and sediment controls prior to the issuance of a zoning permit; and
4. That all erosion and sediment controls be installed and maintained prior to the start of any construction or site work and that additional controls be installed at the direction of the Staff, as needed; and

5. That a Connecticut licensed engineer shall certify that all required improvements, including any required off-site improvements, were installed to City standards prior to the issuance of a Certificate of Zoning Compliance (COZC); and
6. That a surety bond be submitted to guarantee the completion and maintenance of the site plan and any modifications to the plan and all work required as a condition of approval under this special permit/coastal site plan review prior to the issuance of a COZC; and

BE IT FURTHER RESOLVED that this application complies with all applicable sections of the Norwalk Zoning Regulations; and

BE IT FUTHER RESOLVED that the effective date of this approval is March 27, 2026.

Draft resolution to approve 32 Charles Street:

THEREFORE, BE IT RESOLVED by the Norwalk Planning & Zoning Commission that application #2026-08 CSPR – Tomas Builders, LLC – 32 Charles Street (District 3, Block 7, Lot 15) – Coastal site plan review application for the construction of a two-family detached dwelling be **APPROVED** with the following finding:

1. That the Commission finds that any adverse impacts as a result of the development are limited to the greatest extent possible; and

BE IT FURTHER RESOLVED that the approval shall be subject to the following:

1. That the buildings and site will be developed in accordance with the following plans:
    a. Per site plan package entitled "Zoning Site Plan Depicting 30, 32, & 34 Charles Street," prepared by Redniss & Mead, dated 12/12/2025; and
    b. Per architectural drawings entitled "32 Charles Street Norwalk, Connecticut" prepared by DeMais Architects P.C., dated 1/5/2026; and
2. That the overhead service wires and all other utilities shall be installed underground; and
3. That a surety bond be submitted, in an amount to be determined by the Staff, to guarantee the installation of the required erosion and sediment controls prior to the issuance of a zoning permit; and
4. That all erosion and sediment controls be installed and maintained prior to the start of any construction or site work and that additional controls be installed at the direction of the Staff, as needed; and
5. That a Connecticut licensed engineer shall certify that all required improvements, including any required off-site improvements, were installed to City standards prior to the issuance of a Certificate of Zoning Compliance (COZC); and
6. That a surety bond be submitted to guarantee the completion and maintenance of the site plan and any modifications to the plan and all work required as a condition of approval under this special permit/coastal site plan review prior to the issuance of a COZC; and

BE IT FURTHER RESOLVED that this application complies with all applicable sections of the Norwalk Zoning Regulations; and

BE IT FUTHER RESOLVED that the effective date of this approval is March 27, 2026.

Sincerely,

Bryan Baker

Bryan Baker, AICP
Principal Planner
City of Norwalk
203-854-7705
bbaker@norwalkct.gov

I ♥ NORWALK

Planning & Zoning Commission

APPLICATION FOR COASTAL SITE PLAN REVIEW

Application must be accompanied by two (2) printed and one (1) digital set of all documents, and appropriate filing fee. Filing Fee: $310.00 for single or two family use; $810.00 for all other uses.

Application Completion Date: Official Receipt Date: Fee Paid:

1. **Property Address:** 32 Charles Street - East Norwalk, CT 06855 2. D/B/L/U: 3 /7 /15

3. Proposed Work: Refer to Schedule A attached hereto. 4. Zone: CD-2

5. **Applicant Identification:**

Applicant Name: Tomas Builders, LLC

Address: c/o E. Suchy 1055 Washington Boulevard, 4th Floor - Stamford, CT 06901

Phone Number: c/o Elizabeth A.B. Suchy, Esq. - 203-252-2656 Email: c/o Elizabeth A.B. Suchy, Esq. - esuchy@carmodylaw.com

Interest in Property: ☑ fee simple ☐ option ☐ lessee ☐ easement ☐ other (specify): _____

List primary contact for correspondence *if other than applicant* (Agent or Attorney):

Name: Elizabeth A.B. Suchy, Esq.

Address: Carmody Torrance Sandak & Hennessey LLP, 1055 Washington Boulevard, 4th Floor, Stamford, CT 06901

Business Phone: 203-252-2656 c/o E. Suchy Email: esuchy@carmodylaw.com

6. **Property Owner, if different than applicant:**

Owner Name: JMT Charles 25, LLC

Address: 32 Charles Street - East Norwalk, CT 06855

Phone Number: 203-252-2656 c/o E. Suchy Email: c/o E. Suchy esuchy@carmodylaw.com

7. **Project Information:**

Please check the appropriate box to identify the plan or application that has resulted in this Coastal Site Plan Review:

- ● Coastal Site Plan for Zoning Compliance/Zoning Permit
- ○ Subdivision or Resubdivision Application
- ○ Special Permit or Special Exception Application
- ○ Site Plan Review Application
- ○ Variance Application
- ○ Municipal Project (CGS Section 8-24)

6. Project Site Plans:

Please provide project site plans that clearly and accurately depict the following information, and check the appropriate boxes to indicate that the plans are included in this application:

- ☑ Project location
- ☑ Existing and proposed conditions, including buildings and topography
- ☑ **All** coastal resources on and contiguous to the site
- ☑ High tide line [as defined in CGS Section 22a-359(c)] and mean high water mark elevation contours (for parcels abutting coastal waters and/or tidal wetlands only)
- ☑ Soil erosion and sediment controls
- ☑ Storm water management & treatment practices
- ☑ Ownership and type of use on adjacent properties
- ☑ Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)
- ☑ Landscaping and planting plan (existing & proposed)
- ☑ Utility Plan (existing & proposed: water, drainage, sanitary sewers, electric & gas lines)
- ☑ Easements (utility, sight preservation, conservation, pedestrian)

7. Site Information:

a) Street Address or Geographical Description:
32 Charles Street - East Norwalk, CT 06855

b) Is project or activity proposed at a waterfront site (includes tidal wetlands frontage)? ○YES ●NO

c) Name of on-site, adjacent, or downstream coastal, tidal, or navigable waters, if applicable:
Norwalk Harbor

d) Identify and describe the existing land use in and adjacent to the site. Include description of any existing structures and significant features on the project site:
See Schedule A attached hereto and made a part hereof.

e) Indicate the area of the project site: ±0.175+\- acres **or** 7,654+\- square feet

f) Check the appropriate box below to indicate total land area of disturbance of the project or activity (please also see Question #9 regarding proposed stormwater best management practices):

- ○ Project or activity will disturb five (5) or more total acres of land area on the site. *Registration for CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities required.*
- ◉ Project or activity will disturb land, but less than five (5) total acres of land area would be disturbed. *A soil erosion and sedimentation control plan must be submitted.*
- ○ Project or activity will not disturb any land area.

g) Does the project include a shoreline flood and erosion control structure as defined in CGS section 22a-109(d)? ○Yes ●No

8. Description of Proposed Project or Activity:

Describe the proposed project or activity including its purpose and related activities such as site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover over existing conditions resulting from the project; phasing, timing and method of proposed construction; and new uses and changes from existing uses (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application report by Redniss & Mead, attached hereto and made a part hereof.

9. Description of Proposed Stormwater Best Management Practices:

Describe the stormwater best management practices that will be utilized to ensure that the volume of runoff generated by the first inch of rainfall is retained on-site, especially if the site or stormwater discharge is adjacent to tidal wetlands. If runoff cannot be retained on-site, describe the site limitations that prevent such retention and identify how stormwater will be treated before it is discharged from the site. Also demonstrate that the loadings of total suspended solids from the site will be reduced by 80 percent on an average annual basis, and that post-development stormwater runoff rates and volumes will not exceed pre-development runoff rates and volumes (*attach additional pages if necessary*):

See Coastal Area Management Report by Redniss & Mead, attached hereto and made a part hereof.

10. Identification of Applicable Coastal Resources and Coastal Resource Policies:

Identify the coastal resources and associated policies that apply to the project by placing a check mark in the appropriate box(es) in the following table.

Coastal Resources	On-site	Adjacent	Off-site but within the influence of project	Not Applicable
General Coastal Resources* - Definition: CGS Section 22a-93(7); Policy: CGS Section 22a-92(a)(2)	☑	☐	☐	☐
Beaches & Dunes - Definition: CGS Section 22a-93(7)(C); Policies: CGS Sections 22a-92-(b)(2)(C) and 22a-92(c)(1)(K)	☐	☐	☐	☑
Bluffs & Escarpments - Definition: CGS Section 22a-93(7)(A); Policy: CGS Section 22a-92(b)(2)(A)	☐	☐	☐	☑
Coastal Hazard Area - Definition: CGS Section 22a-93(7)(H); Policies: CGS Sections 22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), and 22a-92(c)(2)(B)	☐	☐	☐	☑
Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters - Definition: CGS Sections 22a-93(5), 22a-93(7)(G), and 22a-93(7)(K), and 22a-93(7)(L) respectively; Policies: CGS Sections 22a-92(a)(2) and 22a-92(c)(2)(A)	☐	☐	☐	☑
Developed Shorefront - Definition: CGS Section 22a-93(7)(I); Policy: 22a-92(b)(2)(G)	☐	☐	☐	☑
Freshwater Wetlands and Watercourses - Definition: CGS Section 22a-93(7)(F); Policy: CGS Section 22a-92(a)(2)	☐	☐	☐	☑
Intertidal Flats - Definition: CGS Section 22a-93(7)(D); Policies: 22a-92(b)(2)(D) and 22a-92(c)(1)(K)	☐	☐	☐	☑
Islands - Definition: CGS Section 22a-93(7)(J); Policy: CGS Section 22a-92(b)(2)(H)	☐	☐	☐	☑
Rocky Shorefront - Definition: CGS Section 22a-93(7)(B); Policy: CGS Section 22a-92(b)(2)(B)	☐	☐	☐	☑
Shellfish Concentration Areas - Definition: CGS Section 22a-93(7)(N); Policy: CGS Section 22a-92(c)(1)(I)	☐	☐	☐	☑
Shorelands - Definition: CGS Section 22a-93(7)(M); Policy: CGS Section 22a-92(b)(2)(I)	☐	☐	☐	☑
Tidal Wetlands - Definition: CGS Section 22a-93(7)(E); Policies: CGS Sections 22a-92(a)(2), 22a-92(b)(2)(E), and 22a-92(c)(1)(B)	☐	☐	☐	☑

* General Coastal Resource policy is applicable to all proposed activities

11. Consistency with Applicable Coastal Resource Policies and Standards:

Describe the location and condition of the coastal resources identified in Question #10 and explain how the proposed project or activity is consistent with all of the applicable coastal resource policies and standards; also see adverse impacts assessment in Question #14 below (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application by Redniss & Mead attached hereto and made a part hereof.

12. Identification of Applicable Coastal Use and Activity Policies and Standards:

Identify all coastal policies and standards in or referenced by CGS Section 22a-92 applicable to the proposed project or activity:

- [x] General Development* - CGS Sections 22a-92(a)(1), 22a-92(a)(2), and 22a-92(a)(9)
- [ ] Water-Dependent Uses** - CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A); Definition CGS Section 22a-93(16)
- [ ] Ports and Harbors - CGS Section 22a-92(b)(1)(C)
- [ ] Coastal Structures and Filling - CGS Section 22a-92(b)(1)(D)
- [ ] Dredging and Navigation - CGS Sections 22a-92(c)(1)(C) and 22a-92(c)(1)(D)
- [ ] Boating - CGS Section 22a-92(b)(1)(G)
- [ ] Fisheries - CGS Section 22a-92(c)(1)(I)
- [ ] Coastal Recreation and Access - CGS Sections 22a-92(a)(6), 22a-92(C)(1)(j) and 22a-92(c)(1)(K)
- [x] Sewer and Water Lines - CGS Section 22a-92(b)(1)(B)
- [ ] Fuel, Chemicals and Hazardous Materials - CGS Sections 22a-92(b)(1)(C), 22a-92(b)(1)(E) and 22a-92(c)(1)(A)
- [ ] Transportation - CGS Sections 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and 22a-92(c)(1)(H)
- [ ] Solid Waste - CGS Section 22a-92(a)(2)
- [ ] Dams, Dikes and Reservoirs - CGS Section 22a-92(a)(2)
- [ ] Cultural Resources - CGS Section 22a-92(b)(1)(J)
- [ ] Open Space and Agricultural Lands - CGS Section 22a-92(a)(2)

* General Development policies are applicable to all proposed activities

** Water-dependent Use policies are applicable to all activities proposed at waterfront sites, including those with tidal wetlands frontage.

13. Consistency With Applicable Coastal Use Policies and Standards:

Explain how the proposed activity or use is consistent with all of the applicable coastal use and activity policies and standards identified in Question #12. **For projects proposed at waterfront sites (including those with tidal wetlands frontage)**, particular emphasis should be placed on the evaluation of the project's consistency with the water-dependent use policies and standards contained in CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A) -- also see adverse impacts assessment in Question #15 below (attach additional pages if necessary):

See Schedule A and Coastal Area Management Application by Redniss & Mead attached hereto and made a part hereof.

14. Identification of Potential Adverse Impacts on Coastal Resources: (*Must be completed for ALL projects.*)

Identify the adverse impact categories below that apply to the proposed project or activity.

The **'applicable'** column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(15). If an adverse impact **may result** from the proposed project or activity, please use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Coastal Resources	Applicable	Not Applicable
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)	☐	☑
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	☑
Degrading existing circulation patterns of coastal water through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours - CGS Section 22a-93(15)(B)	☐	☑
Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff - CGS Section 22a-93(15)(D)	☐	☑
Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction - CGS Section 22a-93(15)(C)	☐	☑
Degrading visual quality through significant alteration of the natural features of vistas and view points - CGS Section 22a-93(15)(F)	☐	☑
Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity - CGS Section 22a-93(15)(A)	☐	☑
Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat - CGS Section 22a-93(15)(G)	☐	☑
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)	☐	☑
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	☑

15. Identification of Potential Adverse Impacts on Water-dependent Uses: ***(Complete only if the project/activity is proposed at a waterfront site.)***

a) Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(17). If an adverse impact **may result** from the proposed project or activity, use Question #16 to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Future Water-dependent Development Opportunities and Activities	Applicable	Not Applicable
Locating a non-water-dependent use at a site physically suited for or planned for location of a water-dependent use - CGS Section 22a-93(17)	☐	☑
Replacing an existing water-dependent use with a non-water-dependent use - CGS Section 22a-93(17)	☐	☑
Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters - CGS Section 22a-93(17)	☐	☑

b) Identification of existing and/or proposed Water-dependent Uses:

Describe the features or characteristics of the proposed activity or project that qualify as water-dependent uses as defined in CGS Section 22a-93(16). If general public access to coastal waters is provided, please identify the legal mechanisms used to ensure public access in perpetuity, and describe any provisions for parking or other access to the site and proposed amenities associated with the access (e.g., boardwalk, benches, trash receptacles, interpretative signage, etc.) *:

See Schedule A attached hereto and made a part hereof.

*If there are no water-dependent use components, describe how the project site is not appropriate for the development of a water-dependent use.

16. Mitigation of Potential Adverse Impacts:

Explain how all potential adverse impacts on coastal resources and/or future water-dependent development opportunities and activities identified in Questions #14 & #15 have been avoided, eliminated, or minimized (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application, attached hereto and made a part hereof.

17. Remaining Adverse Impacts:

Explain why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated and why the project as proposed is consistent with the Connecticut Coastal Management Act (*attach additional pages if necessary*):

See Schedule A and Coastal Area Management Application by Redniss & Mead attached hereto and made a part hereof.

By signing this application, the applicant or his/her agent certifies that they are familiar with the information provided in this application and are aware of the penalties for obtaining a permit through deception or by submission of inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspection of the subject property by the Commissioners and designated staff of the Commission or consultants to the Commission, at reasonable times, during the pendency of the application.

Tomas Builders, LLC

* **Applicant's Signature:** Carmody Torrance Sandak & Hennessey LLP **DATE:** 1/26/2026

By: Carmody Torrance Sandak & Hennessey LLP, Its Attorneys

± **Agent's Signature:** Carmody Torrance Sandak & Hennessey LLP **DATE:** 1/26/2026

By: Carmody Torrance Sandak & Hennessey LLP, Its Attorneys

*See letter of consent attached hereto

TOMAS BROTHERS, LLC & JMT CHARLES 25, LLC
32 CHARLES STREET, EAST NORWALK, CT
APPLICATION FOR COASTAL SITE PLAN REVIEW
NARRATIVE -SCHEDULE A

I. BACKGROUND

JMT Charles 25, LLC ("Owner") is the owner of vacant property with the located at 32 Charles Street in East Norwalk, Connecticut. Designated as Tax Lot 15 in Block 7 of the Third Taxing District (hereinafter the "Property"), the Property is approximately 7,654± sq. ft., is zoned CD-2 and is located within the boundary of the Coastal Area Management (CAM) zone (AE 10). (Refer to "Property & Topographic Survey Depicting 65, 67, 69, 69½ Osborne Avenue and 30, 32, & 34 Charles Street Norwalk, Connecticut Prepared for Theresa Ruhland & Salvatore DiIorio Scale: 1" = 20' Date 03/08/2021" and "Zoning Site Plan Depicting 30, 32 & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers, LLC (Sheet No. ZSP-1)" dated 12/12/2025 both prepared by Redniss & Mead, attached hereto and made a part hereof). The Property is surrounded by other residentially developed properties including single-family and multi-family developments.

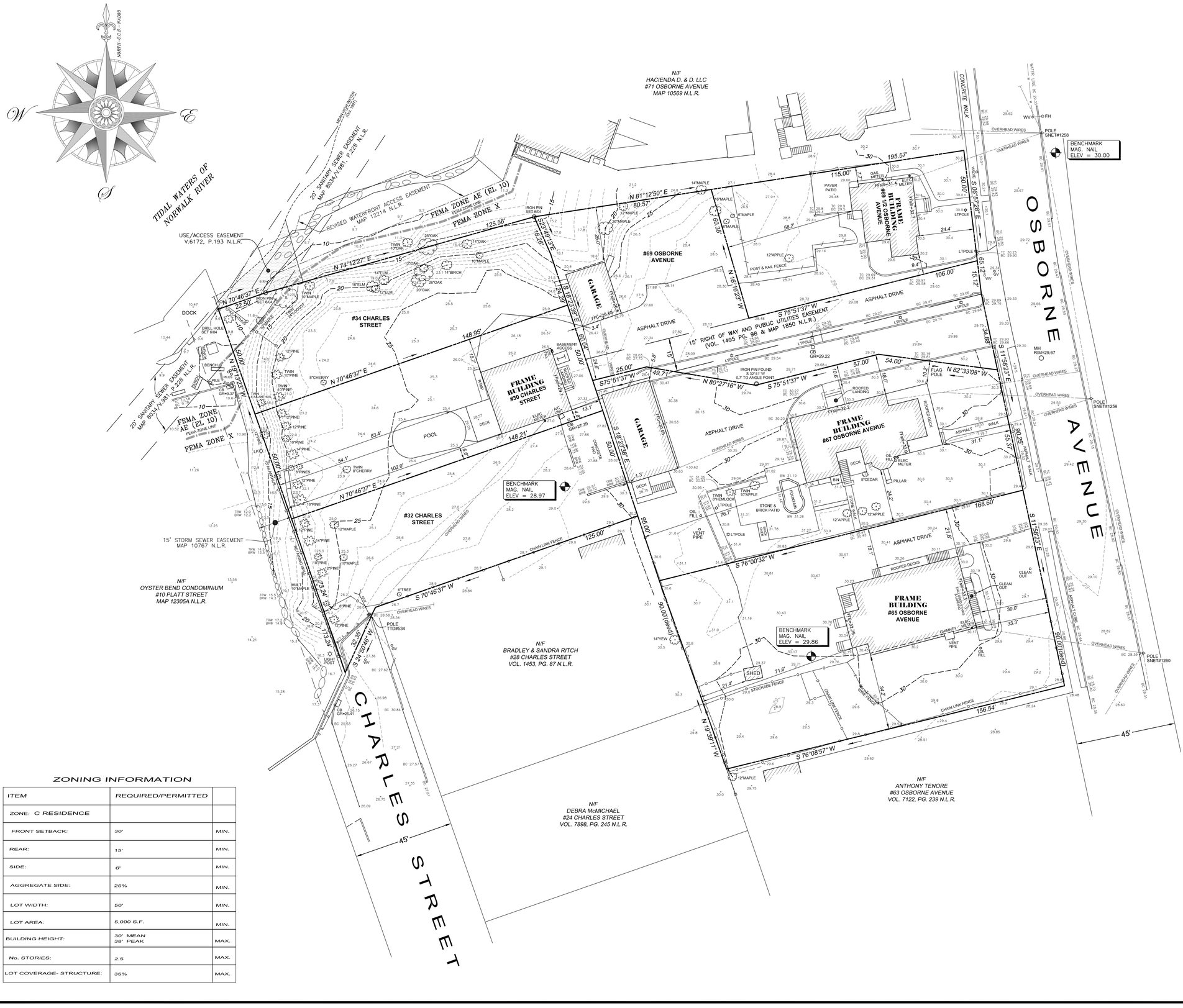
II. PROPOSAL

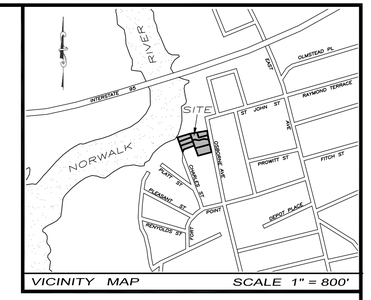
The Owner along with Tomas Brothers, LLC (collectively the "Applicant") propose the construction, use and occupancy of a two-family dwelling on the Property along with various site improvements such as stormwater management, landscaping, grading and retaining walls. Access to the parcel will be gained from an established right of way from Osborne Avenue. (Refer to "Residence for 32 Charles Street" (Sheets 1 of 3, 2 of 3 and 3 of 3, dated Jan. 5, 2026), prepared by DeMasi Architects, P.C., and "Average Grade Exhibit Depicting 30 32 & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet No. AG-1)," "Site Grading Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet SE-1)," "Site Utilities Plan Depicting 30, 32 & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet No. SE-2)," "Sediment and Erosion Control Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT (Sheet No. SE-3)," "Site Removals Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT prepared for Tomas Brothers, LLC (Sheet SE-4)," "Notes & Details Depicting 30, 32 & 34 Charles Street, Norwalk, CT (Sheet SE-5)," "Details Depicting 30, 32 & 34 Charles Street Norwalk, CT (Sheets SE-6, SE-7 and SE-8)" all dated December 12, 2025 prepared by Redniss & Mead, "Landscape Plan (Drawing No. LP-1)" dated December 17 2025 prepared by Environmental Land Solutions, LLC and "Project 30-32-34 Charles Street (Sheet L-1) dated 12/15/2025 prepared by Illuminate, all attached hereto ad made a part hereof).

III. COASTAL RESOURCES AND POLICIES

The Property is located within the coastal area management (CAM) zone but no coastal resources exist on the property. The Property is in Zone X as identified by the Federal Emergency Management Agency (FEMA)(El. 10). All of the site development is proposed within Zone X, and the finished first floor elevation for the proposed structure is well above 20 feet, thereby compliant with the minimum flood elevation of 10 feet plus the additional two (2') feet required by the City of Norwalk Zoning Regulations. The only applicable coastal policies relating to this proposal are general development, and sewer and water lines.

The proposed two-family structure is consistent with uses permitted in the CD-2 zone and is representative of other uses in the neighborhood including single-, two-family and multi-family structures. Furthermore, the proposed site improvements are consistent with coastal policies outlined in the Connecticut Coastal Management Act. The proposed site improvements would occur away from sensitive coastal resources and would not impact their functions, all work would be completed within existing developed areas, and the stormwater management system on the property would be improved. No adverse impacts to coastal resources are expected, based upon information concerning coastal resources in the site vicinity and the installation of proper sediment and control measures during construction. (Refer to "Coastal Area Management Report Prepared for 30, 32 & 34 Charles Street Tomas Brothers LLC" ["CAM Report"] dated December 12, 2025 prepared by Redniss & Mead, attached hereto and made a part hereof.). ". . .[T]he proposed use is consistent with state goals and policies for coastal management and should be acceptable to the City of Norwalk." (CAM Report, p. 9).





ZONING INFORMATION

ITEM	REQUIRED/PERMITTED	
ZONE: C RESIDENCE		
FRONT SETBACK:	30'	MIN.
REAR:	15'	MIN.
SIDE:	6'	MIN.
AGGREGATE SIDE:	25%	MIN.
LOT WIDTH:	50'	MIN.
LOT AREA:	5,000 S.F.	MIN.
BUILDING HEIGHT:	30' MEAN 38' PEAK	MAX.
No. STORIES:	2.5	MAX.
LOT COVERAGE- STRUCTURE:	35%	MAX.

NOTES:

1. *This survey has been prepared in accordance with Sections 20-300b-1 thru 20-300b-20 of the Regulations of Connecticut State Agencies and the Standards for Surveys and Maps in the State of Connecticut as adopted by the Connecticut Association of Land Surveyors, Inc. as a Property and Topographic Survey the Boundary Determination Category of which is a Resurvey conforming to Horizontal Accuracy Class A-2 and the locations and elevations of which conform to Topographic Accuracy Class T-2. It is intended to depict property boundaries, locations and elevations of improvements and topographic features.*

2. *Reference is hereby made to the following on file with Norwalk Land Records (N.L.R.):*
   65 OSBORNE AVENUE (District 3, Block 7, Lot 23)
   Vol. 8858, Pg. 296 - Warranty Deed
   67 OSBORNE AVENUE (District 3, Block 7, Lot 24)
   Vol. 790, Pg. 88 - Warranty Deed
   Lot labeled "Portion of Tax Lot 24", Map 9372
   69 OSBORNE AVENUE (District 3, Block 7, Lot 41)
   Vol. 8858, Pg. 300 - Warranty Deed
   Vol. 969, Pg. 31 - Sanitary Sewer Easement to the City of Norwalk
   Vol. 2338, Pg. 347 - Attachment in favor or Turcio
   Map 1850 - Right of Way
   Lot B, Map 9372
   69 1/2 OSBORNE AVENUE (District 3, Block 7, Lot 25)
   6,071 S.F. / 0.1393 Acres
   30 CHARLES STREET (District 3, Block 7, Lot 14)
   Vol. 1495, Pg. 98 - Warranty Deed
   32 CHARLES STREET (District 3, Block 7, Lot 15)
   Vol. 1495, Pg. 98 - Warranty Deed
   34 CHARLES STREET (District 3, Block 7, Lot 43)
   Vol. 1495, Pg. 98 - Warranty Deed

3. *Lot Areas:*
   65 OSBORNE AVENUE
   14,590 S.F. / 0.3349 Acres
   67 OSBORNE AVENUE
   13,388 S.F. / 0.3073 Acres
   69 OSBORNE AVENUE
   9,872 S.F. / 0.2266 Acres
   69 1/2 OSBORNE AVENUE
   6,071 S.F. / 0.1394 Acres
   30 CHARLES STREET
   7,429 S.F. / 0.1705 Acres
   32 CHARLES STREET
   7,654 S.F. / 0.1757 Acres
   34 CHARLES STREET
   6,965 S.F. / 0.1599 Acres
   TOTAL LOT AREA = 65,969 S.F. / 1.5144 Acres

4. *TOTAL Building Area = 7,952 sf / 12.1% (MAX ALLOWED = 17,192 S.F. / 26.1%)*

5. *Reference is made to Maps 49, 565, 1850, 8034, 9372, 10569, 11560, 10767, 12214 & 12710 N.L.R.*

6. *Reference is made to Access/Use Easement Vol. 6172, Pg. 193 N.L.R.*

7. *Elevations depicted hereon are based on North American Vertical Datum of 1988 (NAVD88).*

8. *Reference is made to FEMA Flood Insurance Rate Map No. 09001C0531G, Effective Date 7/8/2013. Portion of #34 Charles Street lies within Special Flood Hazard Area AE (EL 10') while the other Subject Parcels do not lie within a Special Flood Hazard Area.*

9. *Reference is made to instruments of record as labeled hereon.*

PROPERTY & TOPOGRAPHIC SURVEY

DEPICTING

65, 67, 69 & 69½ OSBORNE AVENUE and 30, 32 & 34 CHARLES STREET

NORWALK, CONNECTICUT

PREPARED FOR

THERESA RUHLAND & SALVATORE DilORIO

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax: 203.357.1118
www.rednissmead.com

Scale: 1"=20' (0, 20, 40)

Drawn By: CJV | Checked By: LWP | Date: 03/08/2021

To my knowledge and belief this map is substantially correct as noted hereon

LAWRENCE W. POSSON, JR. CT. L.S. #18130

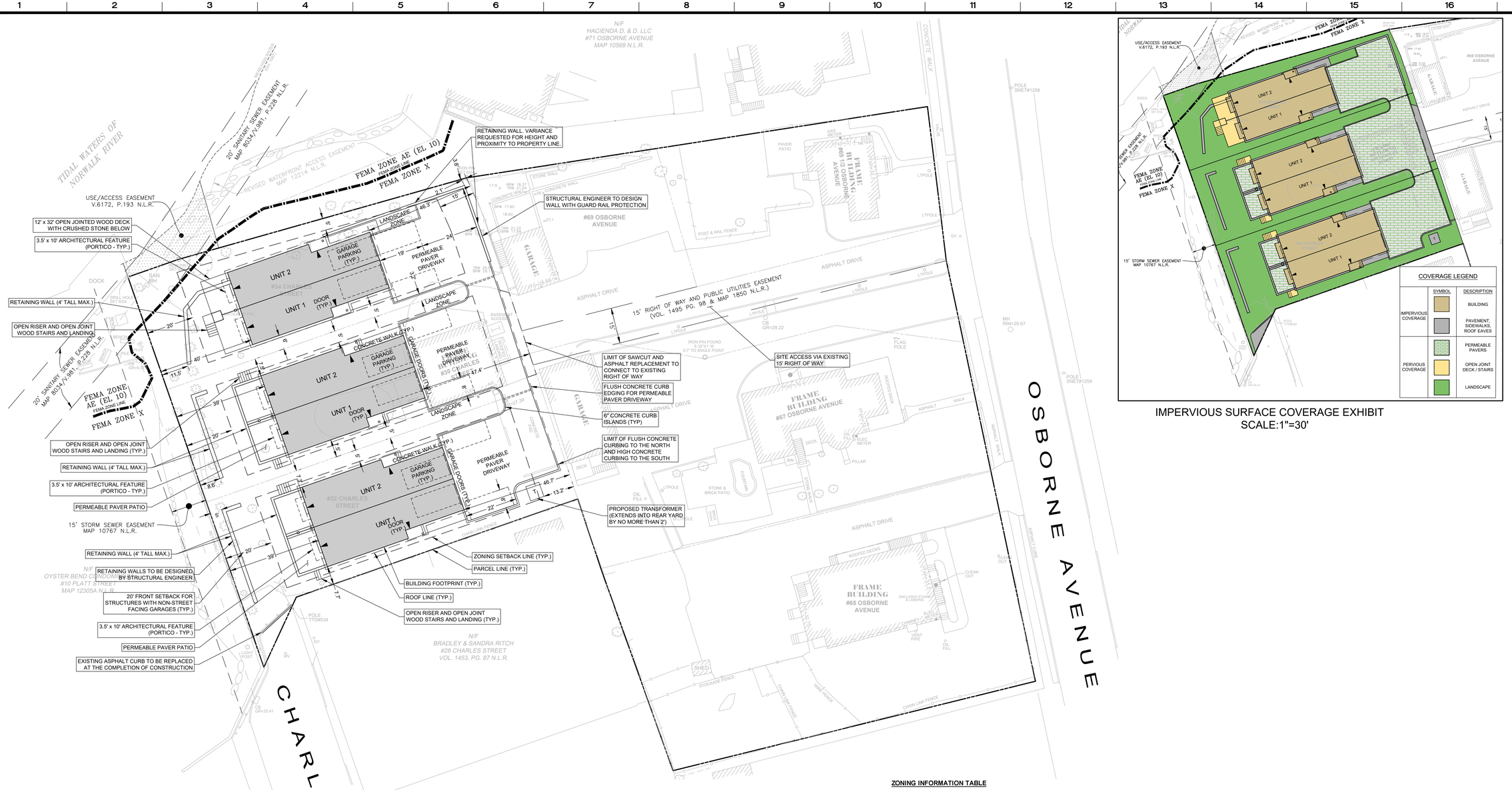
3/17/2021
DATE

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Sheet No:

PSTS

Comm. No.: 10304-1



IMPERVIOUS SURFACE COVERAGE EXHIBIT
SCALE:1"=30'

ZONING INFORMATION TABLE
30, 32, and 34 Charles Street

12/12/2025		CD-2 Zone	Proposed Development		
			30 Charles Street	32 Charles Street	34 Charles Street
MINIMUM SIZE OF PLOT	AREA	5,000 SF	7,429± SF (0.17± acres)	7,654± SF (0.18± acres)	6,965± SF (0.16± acres)
HEIGHT	MAXIMUM	2.5 stories, Building Height: 32 ft max.; Total Building Height: 40 ft max.	2.5 stories 22.63' (To Midpoint) 30.85' (To Ridge)	2.5 stories 25.44' (To Midpoint) 30.69' (To Ridge)	2.5 stories 29.98' (To Midpoint) 35.94' (To Ridge)
MINIMUM YARDS	FRONT	20 ft min. for Dwellings with non street-facing Garage(s)	39 ft	39 ft	40 ft
	SIDE	5 feet	7.5 ft	7.3 ft	6.0 ft
	REAR	15 feet	47.4 ft	46.7 ft	46.3 ft
BUILDING TYPE			Duplex	Duplex	Duplex
USE DESIGNATION			Two-family Dwelling	Two-family Dwelling	Two-family Dwelling
RETAINING WALLS		5 ft. min. from Lot/Building Site Line and 4 ft. max. Height and in accordance with Section 4.3.16.M; except that Two-Family Detached Dwellings/Duplexes with detached Garage(s) and/or non-street-facing Garage(s) shall have 0 ft. min. from Lot/Building Site Line and 4 ft. max. Height	Distance to Lot Line Allowed 5 ft. min. 8.6 ft. = Proposed Distance to Lot Line Wall Height Allowed 4 ft. max. 4 ft.= Proposed Wall Height	Distance to Lot Line Allowed 5 ft. min. 5 ft. = Proposed Distance to Lot Line Wall Height Allowed 4 ft. max. 4.0 ft. = Proposed Wall Height	Distance to Lot Line Allowed 0 ft. min. 2.1 ft. = Proposed Distance to Lot Line Wall Height Allowed 4 ft. max. 8.8 ft. = Proposed Wall Height Note: Seeking Variance for Retaining Wall Height
IMPERVIOUS SURFACE COVERAGE		For Lot or Building Site Areas of 6,251 square feet to 12,499 square feet: a. Building Coverage is 2,186 square feet plus 20% of every additional square foot of Lot or Building Site Area greater than 6,251 square feet up to 12,499 square feet of Lot or Building Site Area. b. Impervious Surface Coverage is 50% of Lot or Building Site Area minus 1% for every additional 400 square feet of Lot or Building Site Area up to 12,499 squafe feet of Lot or Building Site Area.	Building Coverage Allowed (2,186+0.2(7,429-6,251)) = 2,421 sf allowed Impervious Coverage Allowed (50%-((7,429-6,251)/400))= 47% = 3,492 sf allowed 2,131 sf = Building Coverage Proposed 2,722 sf = Impervious Coverage Proposed 2,059sf = Permeable Surfaces	Building Coverage Allowed (2,186+0.2(7,654-6,251)) = 2,466 sf allowed Impervious Coverage Allowed (50%-((7,654-6,251)/400))= 46.5% = 3,559 sf allowed 2,131 sf = Building Coverage Proposed 2,754 sf = Impervious Coverage Proposed 1,793 sf = Permeable Surfaces	Building Coverage Allowed (2,186+0.2(6,965-6,251)) = 2,328 sf allowed Impervious Coverage Allowed (50%-((6,965-6,251)/400))= 48.2% = 3,357 sf allowed 1,945 sf = Building Coverage Proposed 2,399 sf = Impervious Coverage Proposed 1,419 sf = Permeable Surfaces
PARKING		2 spaces per unit	4 spaces	4 spaces	4 spaces

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

ZONING SITE PLAN
DEPICTING
30, 32, & 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
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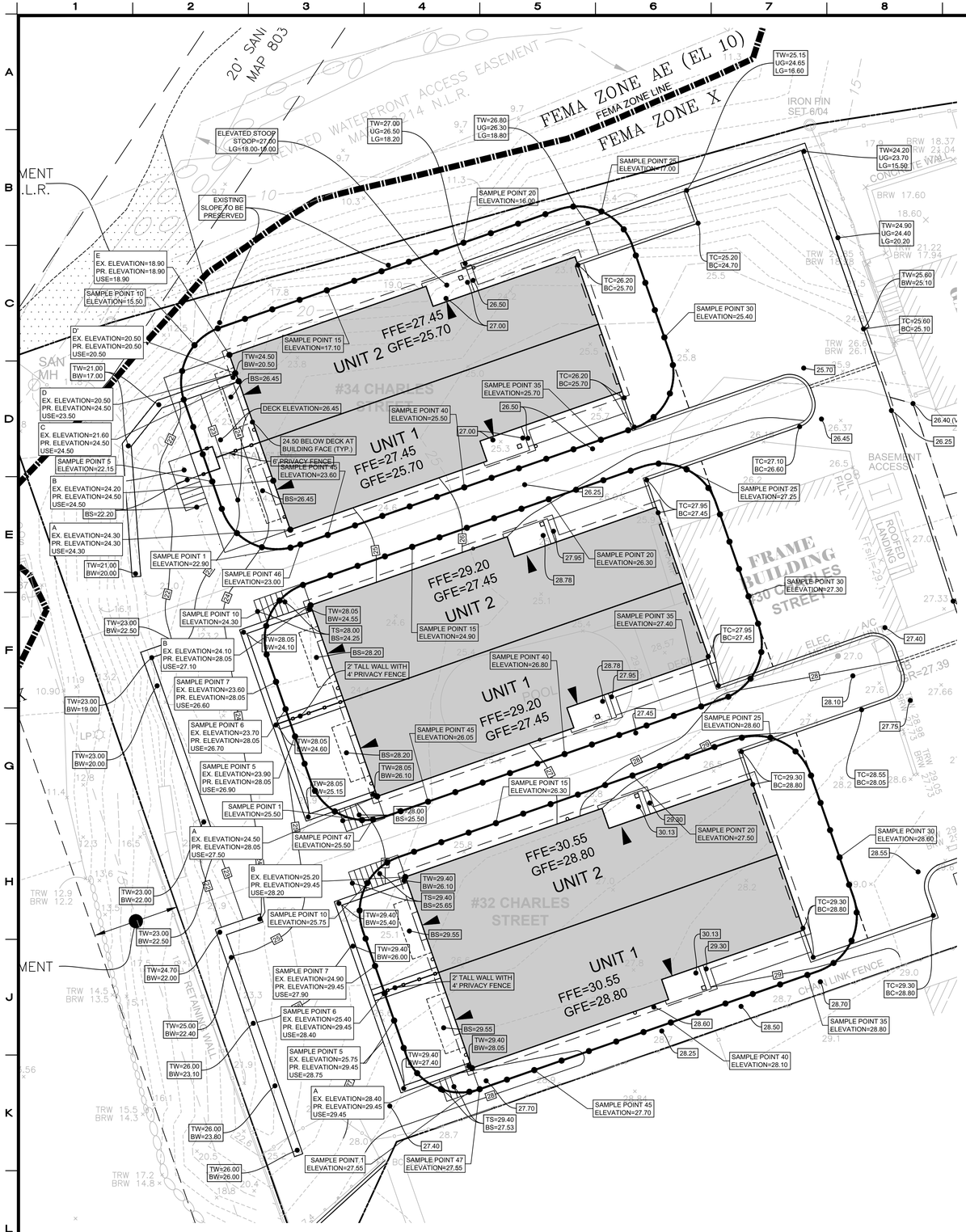
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DRAWN BY: ZPR | CHECKED BY: VJH

STATE OF CONNECTICUT · VINCENT J. HYNES · 29100 · REGISTERED LICENSED LAND SURVEYOR
No. 029100
VINCENT J. HYNES CT. P.E. 29100
December 12, 2025
DATE

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SHEET No:
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Comm. No.: 10304

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PROPOSED CONDITIONS: 32 CHARLES STREET

Average Grade Calculation for Building Height

REFER TO ATTACHED EXHIBIT

Sample Point	Ground Elevation*	Notes	Sample Point	Ground Elevation*	Notes
1	27.55		31	28.60	
2	27.55		32	28.60	
3	27.55		33	28.60	
4	27.55		34	28.65	
5	28.75	Ex. + 3'	35	28.80	
6	28.40	Ex. + 3'	36	28.50	
7	27.90	Ex. + 3'	37	28.35	
8	25.75		38	28.30	
9	25.75		39	28.20	
10	25.75		40	28.10	
11	25.75		41	28.05	
12	28.80		42	27.90	
13	26.05		43	27.85	
14	26.15		44	27.75	
15	26.30		45	27.70	
16	26.50		46	27.60	
17	26.65		47	27.55	1.83 (length)
18	26.80				
19	26.95				
20	27.50				
21	28.05				
22	28.80				
23	28.60				
24	28.60				
25	28.60				
26	28.60				
27	28.60				
28	28.60				
29	28.60				
30	28.60				
Total			47	1,304.7	

Average Grade = 27.76

*Ground elevation represents lowest exterior grade within ten (10) feet of the building façade or between the building and the parcel line when the sample point is less than ten (10) feet from the building facade.

PROPOSED CONDITIONS: 34 CHARLES STREET

Average Grade Calculation for Building Height

REFER TO ATTACHED EXHIBIT

Sample Point	Ground Elevation*	Notes	Sample Point	Ground Elevation*	Notes
1	22.95		31	25.40	
2	22.50		32	25.40	
3	22.50		33	25.50	
4	22.30		34	25.60	
5	22.15		35	25.70	
6	21.90		36	26.20	
7	17.00		37	26.20	
8	15.50		38	26.10	
9	15.50		39	25.90	
10	15.50		40	25.50	
11	15.50		41	25.20	
12	15.50		42	24.90	
13	16.80		43	24.70	
14	17.90		44	24.35	
15	17.10		45	23.60	
16	16.50		46	23.05	1.80 (length)
17	16.00				
18	16.00				
19	16.00				
20	16.00				
21	16.00				
22	16.10				
23	16.50				
24	17.00				
25	17.00				
26	17.00				
27	17.90				
28	26.00				
29	25.35				
30	25.40				
Total			46	958.7	

Average Grade = 20.84

*Ground elevation represents lowest exterior grade within ten (10) feet of the building façade or between the building and the parcel line when the sample point is less than ten (10) feet from the building facade.

PROPOSED CONDITIONS: 30 CHARLES STREET

Average Grade Calculation for Building Height

REFER TO ATTACHED EXHIBIT

Sample Point	Ground Elevation*	Notes	Sample Point	Ground Elevation*	Notes
1	25.50		31	27.30	
2	25.50		32	27.35	
3	25.50		33	27.35	
4	25.50		34	27.35	
5	26.90	Ex. + 3'	35	27.40	
6	26.70	Ex. + 3'	36	27.40	
7	26.60	Ex. + 3'	37	27.25	
8	24.30		38	27.10	
9	24.30		39	26.95	
10	24.30		40	26.80	
11	24.30		41	26.65	
12	24.30		42	26.50	
13	24.50		43	26.35	
14	24.70		44	26.20	
15	24.90		45	26.05	
16	25.10		46	25.55	
17	25.40		47	25.50	1.9 (length)
18	25.75				
19	26.05				
20	26.30				
21	26.60				
22	26.95				
23	27.05				
24	27.10				
25	27.25				
26	27.25				
27	27.30				
28	27.30				
29	27.30				
30	27.30				
Total			47	1,232.9	

Average Grade = 26.23

*Ground elevation represents lowest exterior grade within ten (10) feet of the building façade or between the building and the parcel line when the sample point is less than ten (10) feet from the building facade.

PROPOSED CONDITIONS: 32 CHARLES STREET

Average Grade Calculation by Story (Frontage Grade)

REFER TO ATTACHED EXHIBIT

Elevation 1	Elevation 2	Wall Segment	Wall Length	Avg. Elev.	Product (Y)
29.5	28.2	A-B	35.0	28.8	1,008.0
Total			35.0	28.8	1,008.0

Average Grade = 28.8

PROPOSED CONDITIONS: 30 CHARLES STREET

Average Grade Calculation by Story (Frontage Grade)

REFER TO ATTACHED EXHIBIT

Elevation 1	Elevation 2	Wall Segment	Wall Length	Avg. Elev.	Product (Y)
27.5	27.1	A-B	35.0	27.3	955.5
Total			35.0	27.3	955.5

Average Grade = 27.3

PROPOSED CONDITIONS: 34 CHARLES STREET

Average Grade Calculation by Story (Frontage Grade)

REFER TO ATTACHED EXHIBIT

Elevation 1	Elevation 2	Wall Segment	Wall Length	Avg. Elev.	Product (Y)
24.3	24.5	A-B	9.0	24.4	219.6
24.5	24.5	B-C	18.2	24.5	445.9
24.5	23.5	C-D	1.5	24.0	36.0
20.5	18.9	D'-E	3.3	19.7	65.0
Total			32.0	92.6	766.5

Average Grade = 23.9

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

AVERAGE GRADE EXHIBIT

DEPICTING

30, 32, & 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

SCALE: 1"=10' (0, 10, 20)

DRAWN BY: ZPR | CHECKED BY: VJH

STATE OF CONNECTICUT — VINCENT J. HYNES — LICENSED LAND SURVEYOR — No. 0032100

VINCENT J. HYNES CT. P.E. 32100

December 12, 2025

DATE

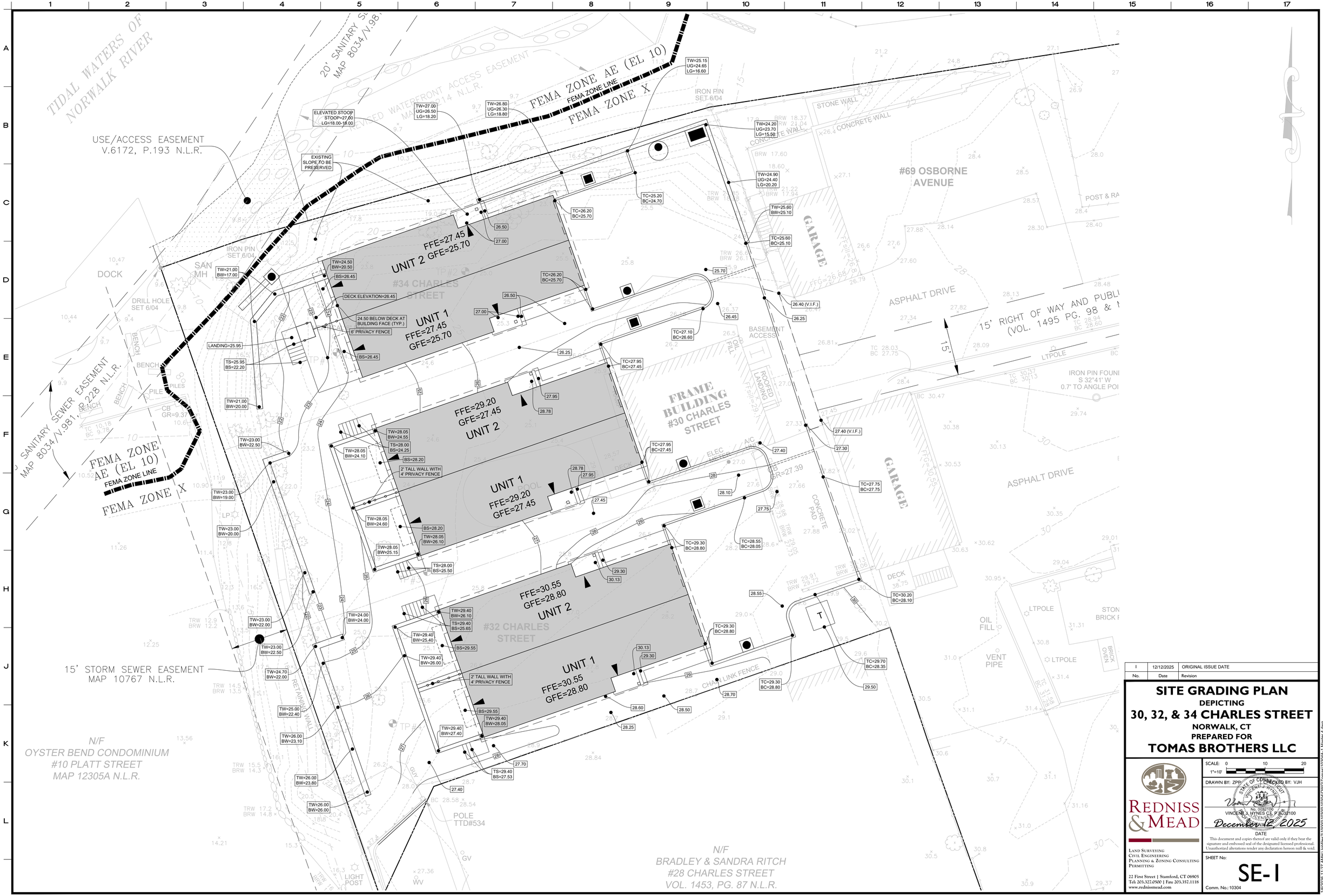
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1	12/12/2025	ORIGINAL ISSUE DATE
No.	Date	Revision

SITE GRADING PLAN

DEPICTING

30, 32, & 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

SCALE: 1"=10' (0, 10, 20)

DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT — VINCENT J. HYNES — No. 26576 — LICENSED PROFESSIONAL ENGINEER

VINCENT J. HYNES CT. P.E. #26576

December 12, 2025

DATE

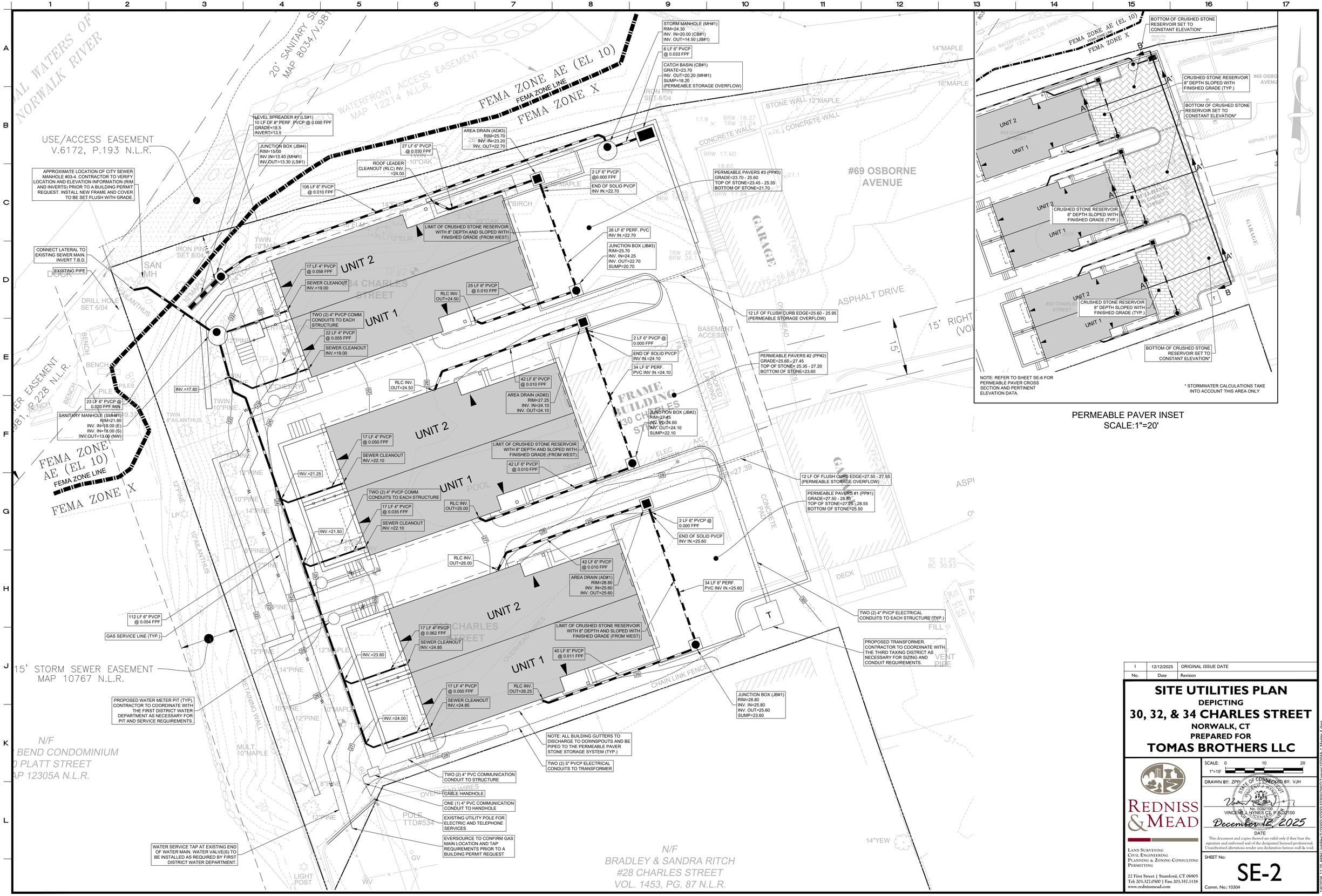
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SE-1

Comm. No.: 10304

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PERMEABLE PAVER INSET
SCALE:1"=20'

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

SITE UTILITIES PLAN
DEPICTING
30, 32, & 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING
22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.352.1118
www.rednissmead.com

SCALE: 1"=10' (0, 10, 20)
DRAWN BY: ZPR CHECKED BY: VJH
STATE OF CONNECTICUT VINCENT J. HYNES No. 0032100 REGISTERED LICENSED ENGINEER
VINCENT J. HYNES CT. P.E. #32100
December 12, 2025
DATE

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SE-2
Comm. No.: 10304

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TIDAL WATERS OF NORWALK RIVER

20' SANITARY SEWER EASEMENT MAP 8034/V.981, R.228 N.L.R.

REVISED WATERFRONT ACCESS EASEMENT MAP 12214 N.L.R.

FEMA ZONE AE (EL 10)
FEMA ZONE LINE
FEMA ZONE X

USE/ACCESS EASEMENT V.6172, P.193 N.L.R.

TREE TO BE REMOVED (TYP.)

INSTALL SILT SACK UPON INSTALLATION OF CATCH BASIN

TREE TO BE PROTECTED (TYP.)

IRON PIN SET 6/04

DOCK

SAN MH

DRILL HOLE SET 6/04

UNIT 2
#34 CHARLES STREET
UNIT 1

UNIT 2
#30 CHARLES STREET
UNIT 1

UNIT 2
#32 CHARLES STREET
UNIT 1

#69 OSBORNE AVENUE

GARAGE

FRAME BUILDING

ASPHALT DRIVE

15' RIGHT OF WAY AND PUBLI
(VOL. 1495 PG. 98 & M

IRON PIN FOUNI
S 32°41' W
0.7' TO ANGLE POI

AREAS OF PERMEABLE PAVER INSTALLATION SHALL BE SCARIFIED AND PERCOLATION TEST PERFORMED BY PROJECT ENGINEER PRIOR TO STONE SUBBASE INSTALLATION

POTENTIAL STOCKPILE LOCATION. STOCKPILE SHALL BE PROTECTED WITH SILT FENCE TO THE DOWN HILL SIDE. ANY EXCESS MATERIALS NOT USED ON SITE TO BE LEGALLY REMOVED AND DISPOSED OF.

SILT FENCE BACKED WITH HAYBALES (TYP.)

15' STORM SEWER EASEMENT MAP 10767 N.L.R.

N/F
OYSTER BEND CONDOMINIUM
#10 PLATT STREET
MAP 12305A N.L.R.

TRACKING PAD TO BE INSTALLED AT CONSTRUCTION ENTRANCE

EXISTING ASPHALT CURB TO BE REPLACED AT COMPLETION OF CONSTRUCTION

N/F
BRADLEY & SAN
#28 CHARLES
VOL. 1453, PG.

SILT FENCE SHALL BE INSTALLED AS REQUIRED BY THE PHASING OF CONSTRUCTION TO PREVENT SEDIMENT LOAD TO THE SURROUNDING RIGHTS-OF-WAY AND NEIGHBORING PROPERTIES

TREE REMOVAL NOTES:

1. ANY EXISTING TREES THAT ARE TO BE REMOVED WITHIN THE CITY R-O-W THAT ARE 8 INCHES OR GREATER IN CALIPER, WILL REQUIRE A TREE REMOVAL PERMIT AND MUST BE POSTED BY THE CITY'S TREE WARDEN AT LEAST 10 DAYS IN ADVANCE, IN ACCORDANCE WITH THE CITY CODE CHAPTER 112.
2. CITY TREES TO BE REMOVED SHALL BE REPLACED IN ACCORDANCE WITH CITY CODE CHAPTER 112-10C.

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

SEDIMENT & EROSION CONTROL PLAN

DEPICTING

30, 32, & 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

SCALE: 1"=10'

DRAWN BY: ZPR | CHECKED BY: VJH

STATE OF CONNECTICUT · VINCENT J. HYNES · LICENSED LAND SURVEYOR · No. 0032100

VINCENT J. HYNES CT. P.E. 32100

December 12, 2025

DATE

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

SHEET No:

SE-3

Comm. No.: 10304

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TIDAL WATERS OF NORWALK RIVER

20' SANITARY SEWER EASEMENT MAP 8034/V.981

REVISED WATERFRONT ACCESS EASEMENT MAP 12214 N.L.R.

FEMA ZONE AE (EL 10)
FEMA ZONE LINE
FEMA ZONE X

USE/ACCESS EASEMENT V.6172, P.193 N.L.R.

SANITARY SEWER EASEMENT MAP 8034/V.981, R.228 N.L.R.

FEMA ZONE AE (EL 10)
FEMA ZONE LINE
FEMA ZONE X

15' STORM SEWER EASEMENT MAP 10767 N.L.R.

N/F
OYSTER BEND CONDOMINIUM
#10 PLATT STREET
MAP 12305A N.L.R.

#34 CHARLES STREET

#32 CHARLES STREET

#69 OSBORNE AVENUE

FRAME BUILDING #30 CHARLES STREET

N/F
BRADLEY & SANI
#28 CHARLES
VOL. 1453, PG.

15' RIGHT OF WAY AND PUBLI
(VOL. 1495 PG. 98 & M

ASPHALT DRIVE

EXISTING ASPHALT TO BE REMOVED

EXISTING UTILITY EQUIPMENT TO BE REMOVED

LIMIT OF SAWCUT AND ASPHALT REPLACEMENT TO CONNECT TO EXISTING RIGHT OF WAY

EXISTING BUILDING AND ACCESSORY LANDINGS AND DECK TO BE REMOVED

EXISTING CONCRETE PAD TO BE REMOVED

EXISTING POOL TO BE REMOVED

EXISTING FENCE TO BE REMOVED

NOTES:
1. REFER TO SITE PLAN SHEETS SE-1 AND SE-2 FOR DESIGN PLAN INFORMATION AND SE-3 FOR SEDIMENT AND EROSION CONTROLS.
2. UTILITY INSTALLATION / REMOVAL SHALL BE IN ACCORDANCE TO APPLICABLE UTILITY COMPANY REQUIREMENTS.
3. EXISTING OVERHEAD AND UNDERGROUND SERVICE CONNECTIONS, INCLUDING UNDOCUMENTED SERVICE CONNECTIONS, TO BE REMOVED IN ACCORDANCE WITH APPLICABLE UTILITY COMPANY REQUIREMENTS (TYP.).

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

SITE REMOVALS PLAN
DEPICTING
30, 32, & 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

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22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax: 203.357.1118
www.rednissmead.com

SCALE: 1"=10'

DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT VINCENT J. HYNES LICENSED LAND SURVEYOR
No. 0008100
VINCENT J. HYNES CT LS #08100
DATE December 12, 2025

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SHEET No: SE-4

Comm. No.: 10304

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GENERAL NOTES:

1. These drawings are intended only to depict the design of site grading, drainage, sanitary, utilities, and sediment & erosion controls. These drawings are for approval purposes only. No construction may begin prior to obtaining all necessary permits and approvals.
2. All survey data, boundary lines, topography, building locations and area calculations are from a survey prepared by Redniss & Mead, Inc. entitled Property & Topographic Survey dated 3/17/2021 and latest field topography from 11/13/2025. Elevations depicted or labeled are based on NAVD-88.
3. Refer to plans prepared by DeMasi Architects for information and design of the proposed buildings. These drawings depict site plans corresponding to the latest architectural plans received from DeMasi Architects received on 11/18/2025.
4. The properties are in a CD-2 zone.
5. A portion of #34 Charles lies within the FEMA AE-10 NAVD-88. Flood zones as shown on the Flood Insurance Rate Map Community No. 09001C Panel 0531 Suffix G, effective date July, 8, 2013.
6. All construction shall comply with the City of Norwalk requirements, the State of Connecticut Basic Building Code, Americans with Disabilities Act (ADA), the Connecticut Guidelines for Soil and Erosion and Sediment Control, OSHA, CT DOT Form 819 (latest edition), and FEMA Flood Regulations.
7. All development activities to be undertaken within the street right-of-way and other public lands shall comply fully with City standards unless approved deviation is specifically set forth as part of this application. All work within the State right-of-way will comply with the CT DOT Form 819 with the latest special Provisions and Typical State Standard Details.
8. Contractor shall supply complete shop drawings including manufacturer's product data sheets to the Site Engineer, for all construction material used in conjunction with these drawings. Contractor shall allow a 5 day review period, prior to fabrication and installation.
9. Information on existing utilities has been compiled from various sources including utility company records, municipal record maps and field survey and is not guaranteed to be correct or complete. The contractor is solely responsible for determining actual locations and elevations of all utilities including underground services.
10. The properties shall be served by public water and sewers.
11. Prior to any excavation the Contractor and/or Applicant, in accordance with Public Act 77-350, shall be required to contact "Call Before You Dig" at 1-800-922-4455 for mark-out of underground utilities. Dig test pit(s) at utility crossing(s) to check actual clearances with new utilities prior to construction. If conflicts are found the contractor shall notify the engineer, at which time the sewer in question shall be redesigned. If such redesign is not possible, the existing pipes or utilities shall be relocated to avoid the conflict. Such relocation shall be done with knowledge of and in accordance with the owner of the utility.
12. It shall be the responsibility of the contractor to provide any excavation safeguards, necessary barricades, flagmen, etc., for traffic control and site safety. All work shall be done in accordance with OSHA requirements. The contractor shall be responsible for compliance with OSHA requirements.
13. When preparing the existing site for the proposed development, all materials removed shall be disposed of in conformance with all governing agencies.
14. Remove stumps and brush from site, or chip and use during landscaping. Do not bury stumps on site.
15. Building elevations are subject to change and shall be finalized prior to building permit.
16. Special attention of the contractor is called to the required type and compaction of pipe bedding and backfill specified on these drawings. These requirements will be strictly enforced.
17. Prior to issuance of a Certificate of Occupancy, DPW Engineering may require a certification letter stating that the development was constructed in accordance to the approved plans, and an "as-built" drawing shall be submitted.
18. The Contractor is responsible for coordinating with a licensed surveyor to prepare an "as-built" plan. The Contractor is responsible to coordinate with a site engineer 48 hours prior to any inspections.
19. The Engineering Division of the Department of Public Works and the inspecting engineer shall be notified by the contractor three (3) days prior to the commencement of each phase of construction.
20. The work shall be done in conformance with the contract documents/plans unless changes have been approved in writing by the design engineer prior to the work being done.
21. A preconstruction meeting shall be held with the Owner, Architect and Engineer to review the scope of construction. The Contractor shall be responsible to coordinate the preconstruction meeting.

EARTHWORK & GRADING:

22. Grade away from building walls at 2% minimum (typical).
23. Earth slopes shall be no steeper than 2:1 (horz.:vert.)
24. No work shall commence until erosion controls have been inspected and approved by the City of Norwalk or their designee(s).
25. General fill beyond paved areas shall be free of brush rubbish, stumps and stones larger than 8". Fill shall be placed in compacted layers not to exceed 8" in thickness. The dry density after compaction shall not be less than 95% of the Standard Proctor Test and done in accordance with the requirements of ASTM D698. After compacting, the fill shall be 4" below the required grade as shown on the plan.
26. General fill may be till, loam, sand or gravel mixture classified as SP, SW, SM, GP, GM, ML per the United Soil Classification System. It shall have not more than 40% fines passing the #100 sieve, not more than 8% passing the #200 sieve, and no stones larger than 8".
27. Subgrade and fill shall be uniformly compacted by the use of equipment manufactured for that purpose. Rollers shall deliver a ground pressure of not less than 300 pounds per linear inch of contact width and weigh not less than 10 tons. Vibratory units shall have a static weight of not less than 4 tons. The amount of compactive effort shall be as directed by the Engineer, but in no case shall be less than 4 complete passes of the compacting equipment being used.
28. Disturbed areas shall be top soiled, seeded with grass and mulched in a manner conforming to the recommendations of the "Guidelines for Soil Erosion and Sediment Control", published by The Connecticut Council on Soil and Water Conservation, effective March 30, 2024.
29. After the areas to be topsoiled have been brought to grade, the subgrade shall be loosened by scarifying to a depth of at least 2" to ensure bonding of the topsoil and subsoil.
30. Topsoil shall be friable and loamy with high organic content. It shall be free of debris, rocks larger than 2" and roots. Topsoil shall have at least 1.5 percent by weight of fine textured stable organic material and no greater than 6 percent. Topsoil shall not have less than 20% fine textured material (passing the No. 200 sieve) and not more than 15% clay. pH range shall be 6.0-7.5 and soluble salts shall not exceed 500ppm.
31. Fill or topsoil shall not be placed nor compacted while in a frozen or muddy condition or while subgrade is frozen.
32. Excavation for pipes or concrete pavement repair may require either a braced excavation or open cut designed according to the requirements of OSHA, 29 CFR Part 1926. The lateral support systems and slopes should also be designed such that building footings, slabs on grade, adjacent pavement and existing ut ilities are protected and supported and not allowed to settle. The contractor shall be responsible for having a Professional Engineer, registered in the State of Connecticut design the excavation support method. The designs shall be submitted to the owner or his geotechnical engineer for review. The contractor shall submit plans showing the type, limits, design and sequence of construction for the lateral support system.
33. During the excavation, it is anticipated that existing utilities and sewers may be exposed. The contractor shall provide protection and support of these facilities and repair any damage caused by the work in a manner satisfactory to the owner. The condition of the existing facilities shall be observed by the owner's representative who shall determine if the facilities shall be replaced. Replacement of the facilities shall be done in a manner satisfactory to the owner and in compliance with applicable Codes.

RETAINING WALLS:

34. All retaining walls greater than three feet are required to be designed, and inspected during construction by a Professional Engineer registered in the State of Connecticut.
35. Retaining walls with a grade difference equal to or greater than 4 feet may require a safety barrier on the top of the wall. Retaining walls and barriers are to be designed by others.
36. Retaining walls are shown for schematic purposes only, and shall be designed by the structural engineer. All structural work shall conform to the requirements of the basic building code of the State of Connecticut, latest edition and the City of Norwalk requirements.
37. Refer to plans prepared by the structural engineer for information regarding the design any retaining walls.

FLOOD PROTECTION:

38. The property lies within Special Flood Hazard Area Zone AE-10. Base Flood Elevation (BFE) (100 year storm) is 10' NAVD-88 as depicted on FEMA Flood Insurance Rate Map, Panel 531 of 626, dated July 8, 2013. The proposed development activities are not located within the flood zone.
39. The construction of this development must follow the requirements set forth in the Federal Emergency Management Administration (FEMA) regulations for flood protection.
40. All utilities shall be installed per FEMA regulations for flood protection. All utilities (i.e., meters, etc.) must be set one foot above the BFE or waterproofed.

STORM AND SANITARY SEWER SYSTEMS:

41. All pipe shall be installed straight and at the vertical and horizontal alignment shown. Pipes shall have a uniform slope as specified.
42. Minimum cover on all pipes shall be two feet (2') unless otherwise noted.
43. All storm pipe specified as Poly Vinyl Chloride Pipe (PVCP) shall be SDR 35 with rubber gasketed joints and meet the requirements of ASTM D3034 and D3212.
44. All sanitary sewer pipe shall be Poly Vinyl Chloride Pipe (PVCP) and shall be Schedule 40 with solvent weld joints.
45. Dig test pits at utility and sewer crossings to check actual clearances with these facilities prior to construction. Dig test pits at the connection points to existing sanitary sewer pipes to confirm that the elevation of the proposed gravity sewer is appropriate. If conflicts are found the contractor shall notify the engineer at which time the sewer in question shall be redesigned. If such redesign is not possible, the existing pipes or utilities shall be relocated to avoid conflict.
46. All catch basins and area drains shall have a two foot (2') sump with bell traps or 90° PVC elbows.
47. Manhole diameters listed are minimum sizes and are assumed to be 4' inside diameter. If precast manholes are used, larger manholes must be used if recommended by the manufacturer.
48. All existing and proposed catch basins, manhole rims and utility facilities shall be raised or lowered to be flush with finished grade.
49. Locate and abandon existing sanitary laterals at the property line with the end capped and mortared. Other existing utilities shall be abandoned in accordance with the requirements of the utility owner(s).
50. Flow in existing sewer system must not be interrupted. Any temporary routing of this sewer flow must be done in conformance with all applicable rules and regulations.
51. Under no circumstances shall trench water be allowed to drain off through sanitary sewer lines.
52. All crushed stone shall be Gradation No. 4 as per CT DOT Form 819, Article M.01.02. Stone shall consist of sound, tough, durable particles free from soft, thin, elongated, laminated, friable, micaceous, or disintegrated pieces of mud, dirt or other deleterious material.
53. The storm and sanitary sewer shall be encased in concrete for a distance of 10 feet on either side of any intersection between the sanitary sewer and storm sewer. Where concrete encasement is required, temporarily support the pipes in place. Use sufficient concrete to encase piping not less than 6 inches at all points. The encasement shall be adequately supported with a stone base and shall be keyed into the foundation wall to prevent damage from settlement.
54. Sanitary Sewer Testing: The sanitary sewer line shall be Low Pressure Air Tested, at the expense of the contractor; Testing to be in accordance with recommended procedure in "Unibell's" "Recommended Practice for Low Pressure Air Testing of Installed Sewer Pipe" UNI B-6. The minimum starting pressure for the test is 3.5 P.S.I. (in excess of the groundwater pressure at the top of the pipe) and there shall be no more than 0.5 P.S.I. drop in five (5) minutes. Manholes to be visually inspected. Lateral plugs shall be airtight to allow proper testing. Inspecting Engineer and the Engineering Bureau shall be informed of testing schedule three days in advance so they can witness the testing.
55. At the end of construction, after the site has be fully stabilized, all new and previously existing storm sewer facilities including, but not limited to, catch basins, area drains, manholes, junction boxes, flow control structures, pipes, oil grit separators, permeable pavers and porous pavement shall be fully cleaned with equipment designed for that purpose to the satisfaction of the inspecting engineer.

UTILITIES:

56. Utilities shown on these plans are "not guaranteed" to be complete or correct. Prior to any site activities, the contractor shall be responsible for verification of clearances of proposed utilities from existing utilities. This verification shall include physical observation by means of test pits of the locations of affected utilities. The contractor shall notify the site engineer immediately of any conflict.
57. Easements may be required in favor of the various utility companies.
58. Electric, telephone, cable, gas, and water services shall be installed in conformance to the requirements of the governing utility companies.
59. It is the contractor's responsibility to install utilities as shown on this sheet. The contractor shall work with the utility companies and site engineer to insure the installation is in conformance to the requirements of the governing utility company. All conduits shall be concrete encased as may be required by the governing utility company. Proposed electric, telephone, cable, gas and water services are shown for schematic purposes only and are subject to change pending utility company review. These utilities shall be designed by others and installed in conformance to the requirements of the governing utility companies.
60. All proposed utility facilities shall be raised or lowered to be flush with finished grade.
61. Where necessary, existing utilities shall be reinstalled to meet all minimum coverage requirements.
62. Utility connections at building face shall be coordinated with the building contractors.
63. The contractor must supply and install drag lines with all conduits.
64. In general, each utility shall have a minimum clearance of three feet to any other underground utility.
65. Any and all utilities abandoned shall be capped or removed in accordance with utility companies' requirements.
66. Existing fire valves shall be cut flush to grade in accordance with First District Water Department requirements.
67. The electric transformer shall be located to meet all applicable Zoning setbacks.
68. All utilities shall be installed per FEMA regulations for flood protection. All utilities (i.e., HVAC condensers, electric transformers, etc.) must be set one foot above the Base Flood Elevation (BFE) or waterproofed.
69. Electric, telephone, cable, gas and water services shall be compliant with the City of Norwalk Zoning Regulations Flood Prone Area Regulations Section and shall be installed in conformance to the requirements of the governing utility companies.
70. Detectable Tape shall be used to mark piping listed below. The identification tape shall be buried at least 6-inches to 10-inches below final grade but no closer than 12-inches to the buried utility piping or service.

Electric	Red	Caution Electric Line Buried Below
Telephone & Control	Orange	Caution Telephone Line Buried Below
Natural Gas	Yellow	Caution Gas Line Buried Below
Water Systems	Blue	Caution Water Line Buried Below
Sewer System	Green	Caution Sewer Line Buried Below

71. Underground-Type Plastic Line Marker: Manufacturer's standard permanent, bright-colored detectable tape, continuous-printed plastic tape, intended for direct-burial service; not less than 6" wide X 4 mils thick.

PAVEMENT AND PAVEMENT MARKINGS:

72. Permeable pavers shall be installed in accordance with the details on Sheet SE-6.
73. Permeable pavers are to be Eco-Priora or equivalent as approved the site engineer.
74. Areas of asphalt pavement that are disturbed by the construction of this project shall be replaced in accordance with the asphalt pavement repair detail to City of Norwalk standards. The finished grade of asphalt paving shall blend to existing grade and the edge of the concrete pavement smoothly with no slopes exceeding 4%.
75. Existing features such as but not limited to walks, curbs, and pavement damaged by construction activities shall be repaired at no additional cost to the owner.
76. Saw cut perimeter of area to be excavated. Saw cut shall be straight and vertical.
77. Contractor is responsible to place the hot-mix asphalt mix as required in the drawings, details and the applicable Section of the CT DOT FORM 819 (latest edition).
78. Compaction shall be constructed as specified in the CT DOT FORM 819 (latest edition), Section 4.06 specification, the drawings and the details. Testing lab shall verify compaction of each course of pavement as directed by the Site Engineer.
79. After the asphalt pavement has cured sufficiently to support the weight of a water truck without marking the newly installed pavement, it shall be water tested for low spots, areas of little or no drainage, etc. A water truck shall spray a sufficient amount of water on all pavement sections to observe the drainage of water. There shall be positive drainage on all areas of the pavement. Any visible low spots where significant water (greater than or equal to 3/16" in depth) is left standing, shall be clearly marked for the Contractor to repair prior to final acceptance. These areas must be sawcut and removed down to the base course prior to replacement with asphalt mixture as per the original approved design. The base course and edges of sawcut asphalt must be treated with tack oil prior to new section of asphalt being installed. The Owner's Representative or inspecting A/E shall be notified 48 hours in advance of water test so that he may be present during the test.
80. The inspecting engineer and contractor will review the testing requirements at the preconstruction meeting. At this meeting, samples to be tested and compaction testing protocol will be discussed. Testing and approval of the subgrade, base course and asphalt layers prior to the installation of the next layer to determine if the work complies or deviates from the specified requirements. Prior to installation of the base course, contractor shall contact inspecting engineer to determine the suitability of the subgrade material, base course and asphalt. Additional excavation or base course may be required.
81. Finished paving shall be free of "bird baths" and be smooth at the slopes specified on the plans.
82. Finished grade shall be within 1/2 inch of that noted on the drawings.
83. The pavement shall be protected from vehicular traffic of any kind with the use of barricades, etc. for a minimum period of 24 hours after final rolling. Maintain and protect asphalt surface from scrapes, sears, spills, hyd raulic leaks, and any other construction damage for the remainder of construction until Owner's Representative acceptance. Contractor is responsible for clearing, repairing, seal coating, patching, and re-striping as necessary to obtain Owner's Representative's final approval/acceptance.
84. Thicknesses of all layers shown are after compaction. Compact all layers to 95% per ASTM D 1557 (Modified Proctor Method).

SEDIMENT AND EROSION CONTROL NOTES:

1. Sheet SE-3 is intended to describe the soil sediment and erosion control treatment of this site only. For other details with respect to construction, see appropriate drawings.
2. All sediment and erosion controls shall be done in conformance with the "Connecticut Guidelines for Soil Erosion and Sediment Control" effective March 30, 2024 prepared by The Connecticut Council on Soil and Water Conservation.
3. The contractor is assigned the responsibility for implementing this sediment and erosion 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 notifying the Clty of Norwalk of any transfer of this responsibility and that construction is to begin three (3) days prior to commencing work.
4. Temporary sediment control measures and tree protection must be installed in accordance with drawings and manufacturer recommendations prior to work in any upland areas.
5. No construction or construction equipment or storage of materials will be allowed on the downhill side of the silt fence or within fenced off areas, except during construction of the proposed facilities shown beyond the fences.
6. Where existing trees are to be saved, trees shall be protected with trunk armoring where shown. Tree limbs shall be trimmed as needed to protect the trees from damage by construction operations. Such trimming shall be minimized. Armoring and any limb trimming should be done before construction begins. Tree protection should be maintained during construction. Equipment Trafficking and materials storage over the tree roots shall be avoided.
7. Tracking pads shall be installed at start of construction and maintained in an effective condition throughout the duration of construction. Pads consist of 2" - 4" crushed stone, 6" minimum thickness and extend the width of the construction access. The length of the access shall be sufficient to prevent dirt from being tracked onto off site roads (minimum length of 50').
8. The location of each stockpile will vary throughout the construction period. Excavated silt and earth stockpiles shall be stored on site. Silt fence shall be placed at the base of the stockpile to prevent sediment from leaving the site and to protect storm drains, wetlands and watercourses.
9. Silt fence shall be Mirafi envirofence, Amoco siltstop or equivalent approved by Site Engineer. Filter fabric used shall be Mirafi 100x or equivalent. Install silt fence according to manufacturer's instruction, particularly, bury lower edge of fabric into ground.
10. All roof leader downspouts shall temporarily discharge onto splash pads measuring at least 8" wide by 18" long, or approved equal.
11. Land disturbance shall be kept to a minimum. All disturbed area shall be planted in where permanent plantings are called for as soon as practicable. Seed and mulch disturbed areas with grass seed where permanent plantings are not called for, as soon as practicable. Prepare seedbed (4" thick minimum) with topsoil. Seed, rake, roll, water and mulch areas according to mixes below. Water as often as necessary (up to 3 times per day) to establish cover. Mulch seeded areas at 1 to 2 tons/acre with salt hay. Maintain mulch and watering until grass is 3" high with 85% cover. Reseed or overseed if necessary.

Temporary Seed Mix:
Perennial ryegrass 40 lbs/ac. (1 lb/1000 sf.)

Permanent Lawns:
Kentucky Bluegrass 20 lbs/ac.
Creeping Red Fescue 20 lbs/ac.
Perennial Ryegrass 5 lbs/ac.
45 lbs/ac. (1 lb/1000 sf.)

Optimum Seeding Dates:
April 15 through June 15
August 15 through October 1

12. If disturbed areas can not be seeded immediately due to the time of year, mulch area until seeding can occur; remove mulch and seed and remulch when season permits.
13. Registration of a Stormwater and Dewatering Wastewaters from Construction Activities Permit will be required from the Connecticut DEEP no more than 60 days prior to construction.
14. Upon installation of each catch basin and area drain, immediately surround it with haybales as per sediment filter detail.
15. Haybales shall be new and are to be replaced whenever their condition deteriorates beyond reasonable usability.
16. Temporarily block pipes leading into the storm water infiltration system until upland areas are thoroughly stabilized. Under no circumstances shall sediment or silty water be allowed to enter the infiltration system.
17. Pavement and curbing should be placed as soon as possible after drainage is installed.
18. Loaded trucks shall be covered as required to keep down dust.
19. Affected portions of off site roads and sidewalks must be swept clean when required to keep down dust and prevent safety hazards or at least once a week during construction and as directed by Site Engineer.
20. Dust control to be achieved with watering down disturbed areas as required.
21. After each storm event or once bi-weekly, all sediment and erosion controls shall be inspected. Any corrective actions to mitigate environmental concerns will be ordered by the site engineer or environmental engineer. It is the Owner's responsibility to retain such consultant.
22. Additional sediment and erosion control measures may be installed during the construction period if found necessary by the inspecting engineer or any Governing Agency.
23. All permanent and temporary sediment control devices will be maintained in effective condition throughout the construction period until upland disturbed areas are thoroughly stabilized. Upon completion of work and stabilization of all upland areas, all temporary sediment control devices and tree protection should be removed from the site and any silt disposed of legally.
24. Excavated material from temporary silt traps must be stockpiled on uphill side of silt fence.
25. Excavated silt and earth stockpiles shall not be permitted to be stored on site. Excess material shall be disposed of legally.
26. Periodically and upon completion of the job, clean silt from any effected storm sewer systems including pipes and inlets. Use silt during final landscaping or dispose off-site legally.

Subsurface Soil Investigation	
Soil Profile	
Test Pit #: 1	Date: 08/14/2025
Inspector: VJH	Sanitarian: N/A
Ledge at: -	Mottling at: -
Water at: -	Roots at: 80"

Depth: 118"	Soil Description
0"-62"	Fill / sand
62"-80"	Original Topsoil
80"-118"	Orange Brown Course Sand with silt and bank run gravel

Subsurface Soil Investigation	
Soil Profile	
Test Pit #: 2	Date: 08/14/2025
Inspector: VJH	Sanitarian: N/A
Ledge at: -	Mottling at: -
Water at: -	Roots at: -

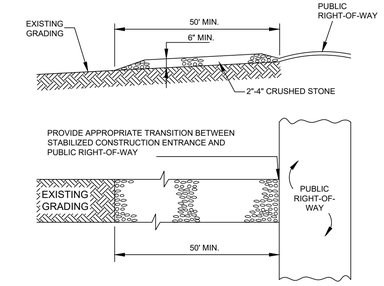
Depth: 126"	Soil Description
0"-20"	Fill / gravel
20"-86"	Orange Brown Course Sand with gravel
86"-126"	Brown Coarse Sand with bank run gravel

Subsurface Soil Investigation	
Soil Profile	
Test Pit #: 3	Date: 08/14/2025
Inspector: VJH	Sanitarian: N/A
Ledge at: -	Mottling at: -
Water at: -	Roots at: -

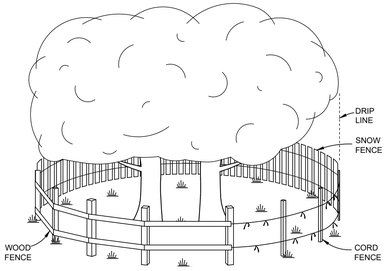
Depth: 125"	Soil Description
0"-76"	Fill / sand
76"-84"	Original Topsoil
84"-125"	Orange Brown Sandy Loam and bank run gravel

Subsurface Soil Investigation	
Soil Profile	
Test Pit #: 4	Date: 08/14/2025
Inspector: VJH	Sanitarian: N/A
Ledge at: -	Mottling at: -
Water at: -	Roots at: -

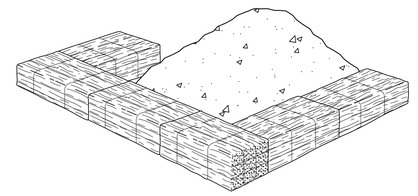
Depth: 120"	Soil Description
0"-48"	Fill / sand
48"-60"	Original Topsoil
60"-120"	Orange Brown Sandy Loam with silt and bank run gravel



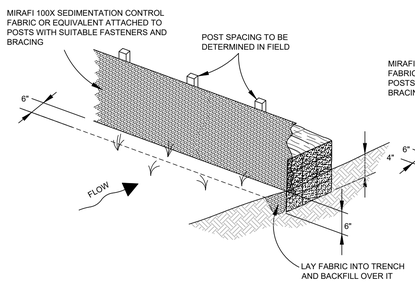
STABILIZED CONSTRUCTION ENTRANCE
(TRACKING PAD)
N.T.S.



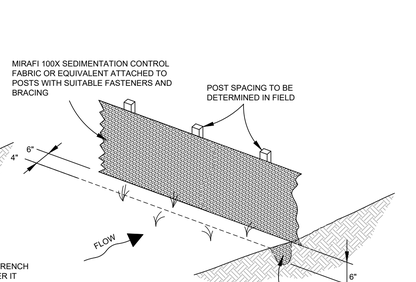
TREE PROTECTION
(SHOWING ACCEPTABLE TYPES OF FENCING)
N.T.S.



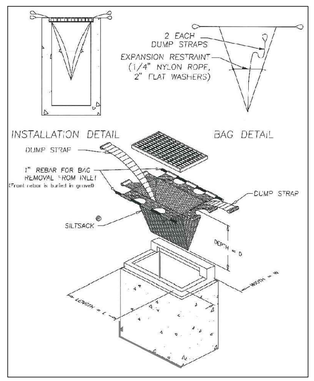
SEDIMENT FILTER FOR STOCK PILE ON PAVEMENT
N.T.S.



FABRIC & POST SILTATION BARRIER W/ HAY BALES
(SILT FENCE)
N.T.S.



FABRIC & POST SILTATION BARRIER
(SILT FENCE)
N.T.S.



INLET SEDIMENT CONTROL DEVICE
(SILT SACK)
N.T.S.

1	12/12/2025	ORIGINAL ISSUE DATE
No.	Date	Revision

NOTES & DETAILS
DEPICTING
30, 32, 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

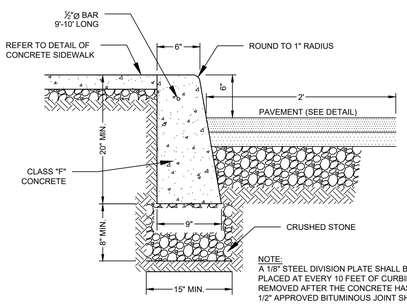
REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING
22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

SCALE: N.T.S.
DRAWN BY: ZPR CHECKED BY: VJH
STATE OF CONNECTICUT — VINCENT J. HYNES — REGISTERED PROFESSIONAL ENGINEER
No. 0032100
VINCENT J. HYNES CT. P.E. #32100
DATE: December 12, 2025

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

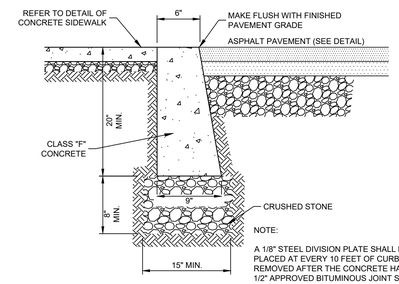
SHEET No: SE-5
Comm. No.: 10304

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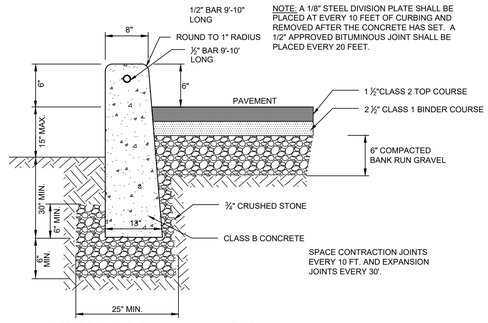
NOTE:
A 1/8" STEEL DIVISION PLATE SHALL BE PLACED AT EVERY 10 FEET OF CURBING AND REMOVED AFTER THE CONCRETE HAS SET. A 1/2" APPROVED BITUMINOUS JOINT SHALL BE PLACED EVERY 20 FEET.

CONCRETE CURB
N.T.S.

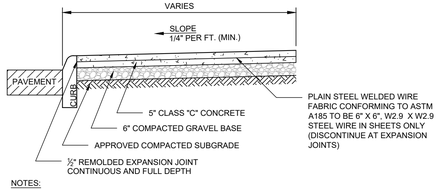


NOTE:
A 1/8" STEEL DIVISION PLATE SHALL BE PLACED AT EVERY 10 FEET OF CURBING AND REMOVED AFTER THE CONCRETE HAS SET. A 1/2" APPROVED BITUMINOUS JOINT SHALL BE PLACED EVERY 20 FEET.

FLUSH CONCRETE CURB
N.T.S.

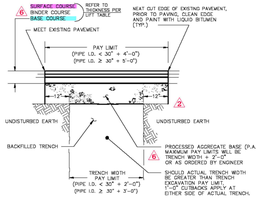


HIGH CONCRETE CURB
N.T.S.



NOTES:
1. CONCRETE TO BE CLASS 'C' CONFORMING TO CT DOT FORM 819 SECTION M.03.02.
2. GRAVEL BASE SHALL CONFORM TO GRADATION A AS DEFINED IN ConnDOT FORM 819 SECTION M. 02.01.
3. INSTALL AS PER THE AMERICAN CONCRETE INSTITUTE CODE.
4. THE AREA SHALL BE COMPACTED TO AT LEAST 95% OF THE DRY DENSITY ACHIEVED BY ASTM D1557.
5. CONTRACTION JOINTS PLACED IN A SQUARE PATTERN AS PER DETAIL.
6. DRAW A SOFT BRISTLED BROOM ACROSS FLOAT-FINISHED CONCRETE SURFACE PERPENDICULAR TO LINE OF TRAFFIC TO PROVIDE A UNIFORM, FINE LINE TEXTURE.

CONCRETE SIDEWALK
N.T.S.



4"=STONE SIZE & (*)=LEVEL e.g. 0.50"(2)						
	0.375"(2)	0.50"(2)	1.50"(2)	0.50"(1)	1.00"(3)	P.A.B.
STATE ROAD				4" (PLACED IN 2 LIFTS)	8" (PLACED IN 2 LIFTS)	12"
MAJOR ARTERIAL				4" (PLACED IN 2 LIFTS)	8" (PLACED IN 2 LIFTS)	14"
MINOR ARTERIAL		8.5" (PLACED IN 3 LIFTS)				12"
COLLECTOR		6" (PLACED IN 3 LIFTS)				12"
LOCAL	6" (PLACED IN 2 LIFTS)					12"

PAVEMENT REPAIR TABLE
HMA (SUPERPAVE)

STONE SIZE	LIFT THICKNESS	
	MIN.	MAX.
0.375"	1.5"	2"
0.50"	2.0"	2.5"
1.00"	3.0"	4.0"

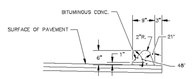
ALLOWABLE COMPACTED THICKNESS PER LIFT

	A	B	C	D
	CL 2	CL 1	CL 4	P.A.B.
MAJOR ARTERIAL	—	4"	6"	14"
MINOR ARTERIAL	—	8.5"	—	12"
COLLECTOR	—	6"	—	12"
LOCAL	3"	—	—	12"

PAVEMENT REPAIR TABLE
(MARSHALL MIX)

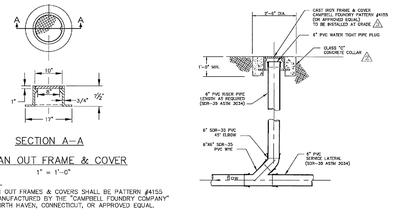
⚠ MAXIMUM ALLOWABLE COMPACTED THICKNESS PER LIFT
CLASS 2 – 2" THK.
CLASS 1 – 2 1/2" THK.
CLASS 4 – 4" THK.

PAVEMENT REPAIR DETAIL
(CITY STANDARD)
N.T.S.



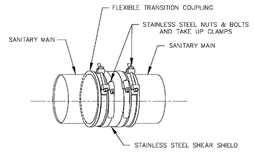
BITUMINOUS CONCRETE
LIP CURBING

BITUMINOUS CONCRETE LIP CURBING
(CITY STANDARD)
N.T.S.



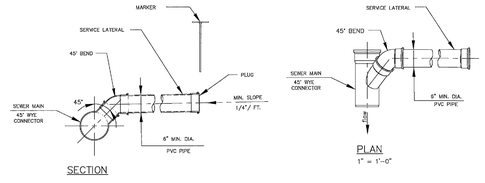
NOTE:
CLEAN OUT FRAMES & COVERS SHALL BE PATTERN #4155 AS MANUFACTURED BY THE "CAMPBELL FOUNDRY COMPANY" OF NORTH HAVEN, CONNECTICUT, OR APPROVED EQUAL.

SANITARY SEWER CLEANOUT DETAIL
(CITY STANDARD)
N.T.S.

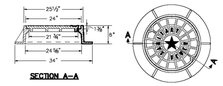


REPAIR COUPLING
28.97" PIPE O.D. MAXIMUM
STRONG BACK RC SERIES
as manufactured by FERNCO INC.
(or Approved Equal)

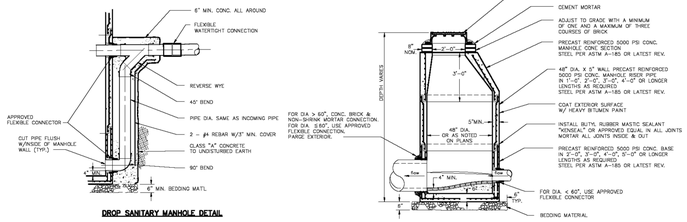
SANITARY COUPLING DETAIL
(CITY STANDARD)
N.T.S.



SANITARY LATERAL CONNECTION DETAIL
(CITY STANDARD)
N.T.S.

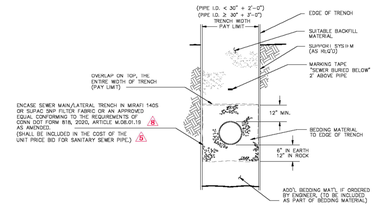


MANHOLE FRAME & COVER



DROP SANITARY MANHOLE DETAIL

SANITARY SEWER MANHOLE DETAIL
(CITY STANDARD)
N.T.S.

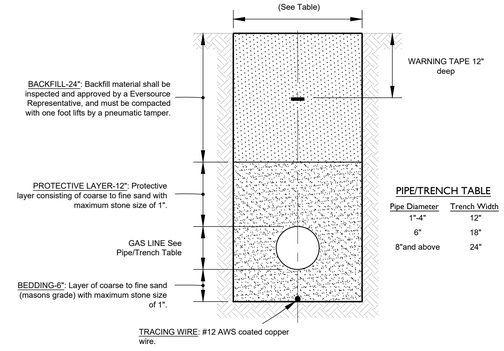


SANITARY SEWER TRENCH DETAIL
(CITY STANDARD)
N.T.S.

SANITARY LATERAL MARKER DETAIL
(CITY STANDARD)
N.T.S.

Notes:

1. A minimum of 1'0" vertical clearance and 5'0" horizontal clearance will be maintained between the gas line and all other structures.
2. Minimum cover for mains shall be 3'0" from finished grade as measured from gutter line.
   a. In the traveled portion of the road - from the top of the pipe to the top of the trench using the shallow side for measurement.
   b. Off the traveled portion when section is at a higher elevation than the traveled way - elevation to be taken from gutter line.
   c. Off the traveled portion when section is at a lower elevation than the traveled way from the top of the pipe to the top of the trench using the shallow side for measurement.
3. Minimum cover of service lines in private property shall be 2'0" only when approved by the Eversource inspector or designee.
4. The bottom of the trench must be free of rocks, debris, or water that could damage the pipe or its coating.
5. Tracing Wire is a #12 AWS coated copper tracing wire to be installed in the center of the trench prior to 6" of sand padding. (Connection will be made by a Eversource Representative).
6. Exposed piping will be backfilled with a minimum of 12" of sand prior to leaving the job site each day and witnessed by a Eversource Representative or Eversource Contractor.
7. Only personnel qualified by Eversource will be allowed to install gas lines.
8. The builder will supply a suitable location to store the pipe and materials and will be responsible for its security.



PIPE/TRENCH TABLE

Pipe Diameter	Trench Width
1"-4"	12"
6"	18"
8"and above	24"

GAS LINE TRENCH DETAIL
N.T.S.

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

DETAILS
DEPICTING
30, 32, 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING
22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
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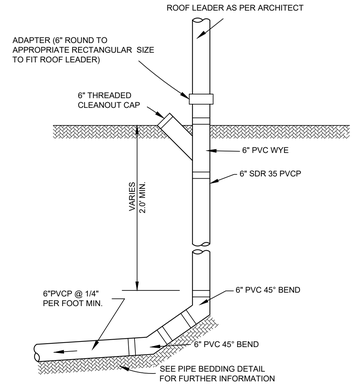
SCALE: N.T.S.
DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT
No. 0032100
VINCENT J. HYNES CT. P.E. 32100
LICENSED PROFESSIONAL ENGINEER
December 12, 2025
DATE

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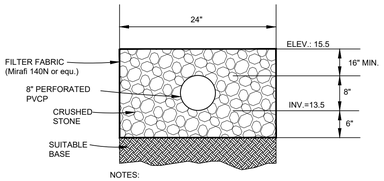
SHEET No: SE-6
Comm. No.: 10304

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ROOF LEADER CLEANOUT DETAIL

N.T.S.

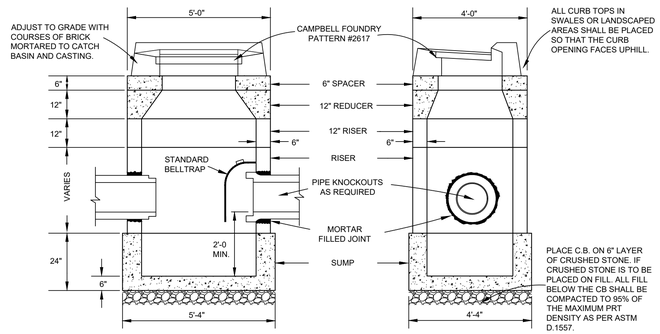


NOTES:

1. CRUSHED STONE SHALL BE GRADATION NO. 4 PER CONN. DOT, FORM 819, SECTION M01.01
2. 8" PVCP PIPE SHALL HAVE PERFORATIONS ON THE BOTTOM OF THE PIPE.

CRUSHED STONE LEVEL SPREADER

N.T.S.



NOTES:

1. ALL CATCH BASIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. CATCH BASIN SHALL CONFORM TO ASTM C478. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

CAST IRON BELL TRAP	
PIPE SIZE	CAMPBELL FOUNDRY NO.
12"	2563
15"	2564
18"	2565
21"	2566
24"	2568A

CATCH BASIN DETAIL

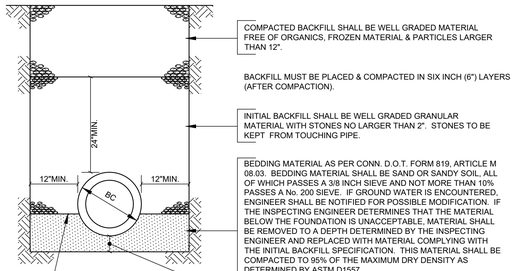
N.T.S.

WATER STOP: 10' UPSTREAM OF STRUCTURES AND WHERE SHOWN, FOUNDATION MATERIAL, BEDDING, HAUNCHING, INITIAL BACKFILL, AND THE BOTTOM FOOT OF GENERAL BACKFILL TO BE REPLACED WITH SM, SC, OR ML SOIL AS PER UNIFIED SOIL CLASSIFICATION SYSTEM" WITH MAXIMUM PARTICLE SIZE OF 1-1/2", FOR 3 LINEAR FEET OF TRENCH. WATER STOP TO BE KEYED INTO TRENCH BOTTOM AND WALLS A MINIMUM OF ONE FOOT. NO STONES LARGER THAN 6" SHALL BE WITHIN 12" OF THE PIPE.

ALL FOUNDATION, INITIAL BACKFILL & BACKFILL MATERIAL TO BE APPROVED BY THE INSPECTING ENGINEER.

ANY DEVIATION FROM THESE METHODS & MATERIALS MUST BE APPROVED IN WRITING BY THE INSPECTING ENGINEER.

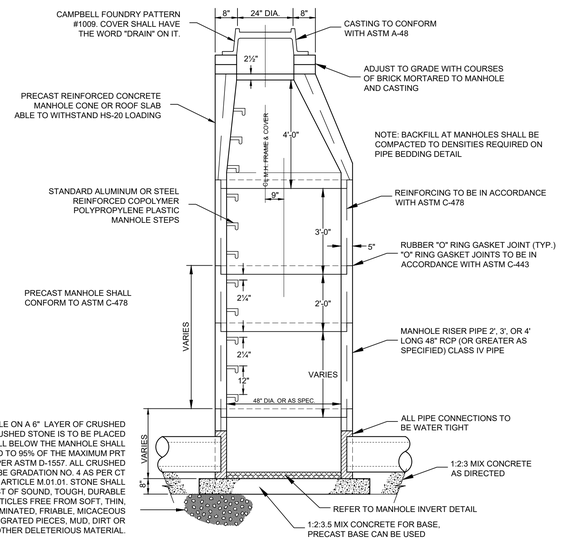
ALL MATERIAL TO BE COMPACTED TO 95% OF THE MAX. DRY DENSITY AS DETERMINED BY ASTM D1557, EXCEPT COMPACTED BACKFILL" NOT UNDER PAVEMENT WHICH SHALL BE COMPACTED TO A DENSITY AT LEAST EQUAL TO THAT OF THE ADJACENT UNDISTURBED MATERIAL.



PVC/RCP PIPE TRENCH BEDDING DETAIL

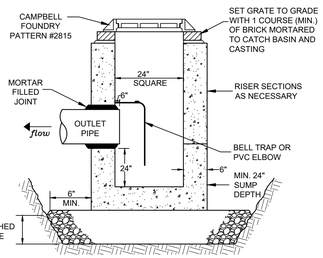
(48" DIA. & UNDER)

N.T.S.



STORM MANHOLE DETAIL

N.T.S.



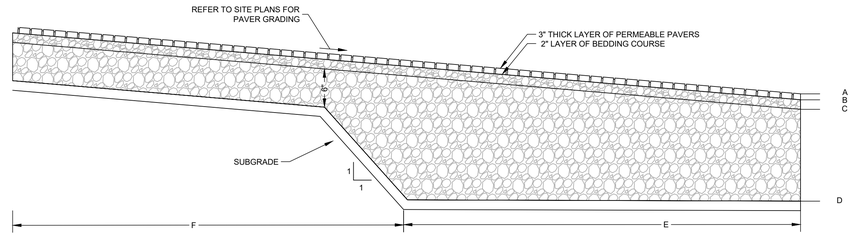
NOTES:

1. ALL CATCH BASIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. AREA DRAIN SHALL CONFORM TO ASTM C478.
4. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

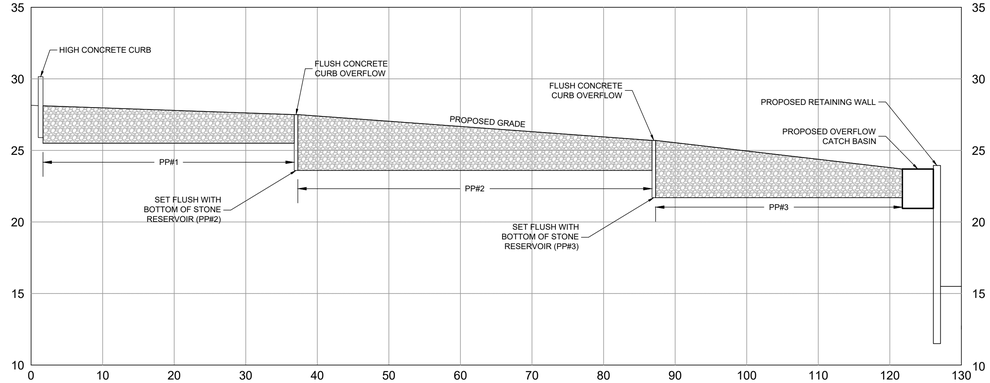
24" AREA DRAIN

N.T.S.

Type	Grade (ft) (A)	T.O. Bedding Course (B)	T.O Stone Reservoir (C)	B.O Stone Reservoir (D)	Footprint of Flat Stone Reservoir (sf) (E)	Footprint of Sloped Stone Reservoir (sf) (F)
PP#1	27.50-28.80	27.33-28.63	27.25-28.55	25.50	1,153	377
PP#2	25.60-27.45	25.43-27.28	25.35-27.20	23.60	1,418	377
PP#3	23.70-25.60	23.53-25.43	23.45-25.35	21.70	1,146	297



PERMEABLE PAVERS DRIVEWAY SECTION A-A'
N.T.S.



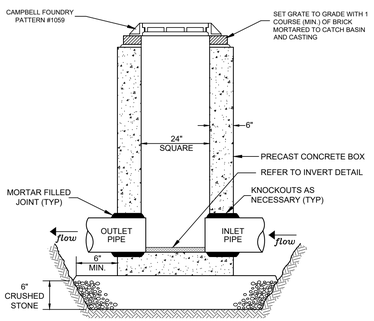
SECTION B-B'
VERTICAL SCALE: 1"=5'
HORIZONTAL SCALE: 1"=10'

NOTES:

1. PERMEABLE PAVERS SHALL BE "ECO-PRIORA" BY UNILOCK OR EQUIVALENT. COLOR AND PATTERN SHALL BE FINALIZED PRIOR TO CONSTRUCTION AND SHALL BE DETERMINED BY ARCHITECT, LANDSCAPE ARCHITECT, AND OWNER..
2. SUBGRADE MATERIAL TO BE PREPARED AND COMPACTED TO DRAIN AT A RATE OF 1 INCH PER HOUR MINIMUM TO A POINT AT LEAST 3' BELOW THE CRUSHED STONE RESERVOIR. A 10' X 10' TEST AREA IS TO BE PREPARED AND COMPACTED FOR THE DESIGN ENGINEER TO TEST AND CONFIRM.
3. BEDDING COURSE FOR PERMEABLE PAVERS SHALL CONSIST OF A 4" THICK LAYER OF CRUSHED STONE CONFORMING TO GRADATION NO. 8 OF SECTION M.01 OF CTDOT FORM 819.
4. CRUSHED STONE RESERVOIR SHALL CONSIST OF A LAYER OF CRUSHED STONE CONFORMING TO GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01.
5. ALL AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF SECTION M.02 OF CTDOT FORM 819 AND SHALL CONSIST OF SOUND, TOUGH, DURABLE BROKEN STONE THAT IS REASONABLY FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.
6. CONTRACTOR SHALL PROVIDE SITE ENGINEER WITH A SIEVE ANALYSIS OF MATERIAL USED FOR THE BEDDING COURSE PRIOR TO INSTALLATION.
7. AFTER SCREEDING THE BEDDING MATERIAL, THE PAVERS ARE PLACED ON THIS LAYER. PAVER INSTALLATION CAN BE BY HAND OR WITH MECHANICAL EQUIPMENT.
8. THE PAVER JOINTS ARE FILLED WITH ASTM NO. 9 STONE. DEPENDING ON THE PICP AREA, SPREADING AND SWEEPING CAN BE DONE WITH SHOVELS AND BROOMS, OR LARGER AREAS WITH BOBCATS AND SWEPT INTO THE PAVER JOINTS WITH POWERED BROOMS OR SWEEPERS. ONCE THE JOINTS ARE FULL (WITHIN ¼ IN. OF THE PAVER SURFACE), THE SURFACE MUST BE SWEPT CLEAN PRIOR TO COMPACTION AS LOOSE STONES ON THE SURFACE CAN MAR THE PAVERS, WHEN IN CONTACT WITH A PLATE COMPACTOR.
9. AFTER THE PICP SURFACE IS SWEPT CLEAN, IT IS COMPACTED WITH A PLATE COMPACTOR. A MINIMUM OF TWO PASSES SHOULD BE MADE WITH THE SECOND PASS IN A PERPENDICULAR DIRECTION FROM THE FIRST PASS. THE PATH OF THE PLATE COMPACTOR SHOULD OVERLAP SEVERAL INCHES. FOR PAVING UNITS 3-1/8 IN. TO 4 IN. THICK, THE PLATE COMPACTOR SHOULD EXERT A MINIMUM 5,000 LBF AT 70 TO 90 HZ.
10. COMPACTION CAN CAUSE SOME SETTLEMENT OF THE STONES INSIDE THE JOINTS. IF THE STONES ARE MORE THAN ¼ IN. FROM THE PAVER SURFACE, THEY SHOULD BE TOPPED UP TO THIS LEVEL WITH ADDITIONAL STONES. THE PAVER SURFACE SHOULD BE SWEPT CLEAN PRIOR TO OPENING THE PICP TO TRAFFIC. AGGREGATES IN THE PAVER JOINTS CAN SETTLE IN EARLY IN THE LIFE OF THE PAVEMENT. SOME SETTLEMENT CAN BE REDUCED THROUGH CONSISTENT, THROUGH COMPACTION OF THE BASE, PAVERS AND BEDDING LAYERS. HOWEVER, IT IS ADVISABLE FOR THE CONTRACTOR TO RETURN TO THE SITE AFTER SIX MONTHS, INSPECT THE JOINTS AND TOP THEM UP WITH AGGREGATE IF THEY HAVE SETTLED TO MORE THAN ¼ IN. BELOW THE PAVER SURFACE.
11. USE APPROPRIATE EQUIPMENT AND ADEQUATE NUMBERS OF SKILLED WORKERS WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK FOR PERMEABLE PAVERS AND SUBBASE MATERIAL.
12. THE ABOVE CONSTRUCTION NOTES ARE FROM THE PERMEABLE INTERLOCKING CONCRETE PAVEMENTS MANUAL BY DAVID R. SMITH - FOURTH EDITION. ADDITIONAL INFORMATION FOR THE DESIGN, SPECIFICATIONS, CONSTRUCTION, AND MAINTENANCE OF PICP ARE IN THE MANUAL.

PERMEABLE PAVERS DETAIL

N.T.S.

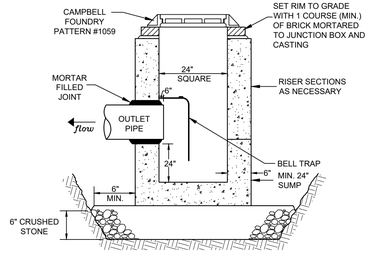


NOTES:

1. ALL COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS OF AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. JUNCTION BOXES SHALL CONFORM TO ASTM C478.
4. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

JUNCTION BOX

N.T.S.



NOTES:

1. ALL CATCH BASIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. JUNCTION BOX SHALL CONFORM TO ASTM C478.
4. ALL CRUSHED STONE SHALL BE GRADATION NO. 4 AS PER CT D.O.T. FORM 819, ARTICLE M.01.01. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES FREE FROM SOFT, THIN, ELONGATED, LAMINATED, FRIABLE, MICACEOUS OR DISINTEGRATED PIECES, MUD, DIRT OR OTHER DELETERIOUS MATERIAL.

24" JUNCTION BOX W/ SUMP

N.T.S.

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

DETAILS

DEPICTING

30, 32, 34 CHARLES STREET

NORWALK, CT

PREPARED FOR

TOMAS BROTHERS LLC

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
www.rednissmead.com

SCALE: N.T.S.

DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT VINCENT J. HYNES 25 P.E. No. 25032100 LICENSED PROFESSIONAL ENGINEER

VINCENT J. HYNES 25 P.E. No. 25032100

December 12, 2025

DATE

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SHEET No: SE-7

Comm. No.: 10304

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PREFERRED:

	DUCT BANK DIMENSIONS								
	4" DUCT			5" DUCT			6" DUCT		
FIG	W	H	S	W	H	S	W	H	S
1	14½"	10½"	1½"	16½"	11½"	1½"	19"	12½"	2"
2	14½"	16½"	1½"	16½"	18½"	1½"	19"	21"	2"
2A	26½"	10½"	1½"	30½"	11½"	1½"	36"	12½"	2"
3	14½"	22½"	1½"	16½"	25½"	1½"	19"	29½"	2"
3A	20½"	16½"	1½"	23½"	18½"	1½"	27½"	21"	2"
4	14½"	28½"	1½"	16½"	32½"	1½"	19"	38"	2"
4A	26½"	16½"	1½"	30½"	18½"	1½"	36"	21"	2"

FIG. 1
2 DUCTS

FIG. 2
4 DUCTS

FIG. 3
6 DUCTS

FIG. 4
8 DUCTS

ALTERNATE:
(SEE NOTE 3)

FIG. 2A
4 DUCTS

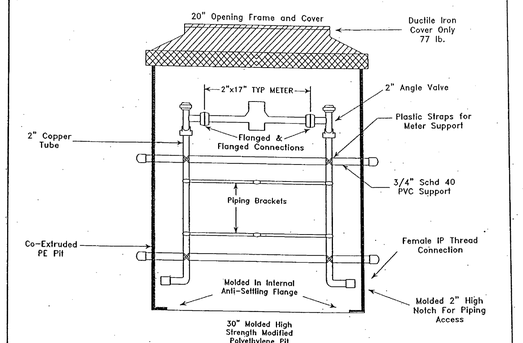
FIG. 3A
6 DUCTS

FIG. 4A
8 DUCTS

NOTES:

1. AT MANHOLES CONDUIT BANKS SHALL BE PER FIGS. 1, 2, 3 OR 4.
2. MINIMUM COVER FROM TOP OF A CONDUIT BANK TO THE PAVEMENT OR EARTH SURFACE TO BE:
   a) STATE HIGHWAYS - 36"
   b) RAILROAD TRACKS - 60"
   c) ALL OTHER AREAS - 24"
3. IN THE CONDUIT RUN BETWEEN MANHOLES IF OBSTRUCTIONS ARE ENCOUNTERED OR TO REDUCE TRENCH DEPTH, FIGS. 2A, 3A OR 4A ARE PERMISSIBLE.
4. CONCRETE SHALL BE 2500 P.S.I., 1/2" MAXIMUM STONE, 6"-9" SLUMP OF SUCH CONSISTENCY THAT SPADING WILL INSURE THE FLOW OF CONCRETE BETWEEN AND UNDER THE INDIVIDUAL DUCTS, BUT NOT SO WET AS TO FLOAT THE DUCTS. FOR TIER BUILDUP CONSTRUCTION A STIFFER CONSISTENCY SHOULD BE USED.
5. DUCTS SHALL BE SCHEDULE 40 PVC.

CONDUIT BANK CONSTRUCTION
N.T.S.



MANUFACTURER	MODEL #
Water & Sewer Specialties	AQUARSPEC2"PITCOMP
Ford – Associated Supply	PM BHC 788-36-48
Depth of Bury	52" as per drawing
Pit Size	30"
Meter Size	2"x17" typical meter can be plumbed for 1-1/2" meter
Pit Material	Co-Extruded PE Pit Black exterior with white interior UV degredation protected. Nominal wall thickness (min,) 1/2".
Meter Box Cover is Ductile Iron, 77 lb.	
Smooth wall interior/exterior. Vertical Crush exceeds 20,000 lb.	
Molded-in Internal Anti-Settling Flange	

WATER METER PIT AND ACCESS COVER DETAIL
(FIRST TAXING DISTRICT WATER DEPARTMENT)
N.T.S.

FCA243618T-00006

FIBERGLASS / POLYMER CONCRETE ASSEMBLY

24" x 36" x 18"
(For actual dimensions see drawing)

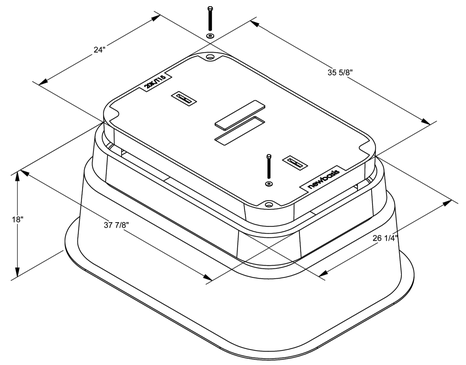
Fiberglass / Polymer Concrete Assembly, Tapered Sides, No Floor, WUC 3.6-"20K," 3/8" Hex Bolts, Standard Nameplate (Specify at time of order) Installed

LOAD RATINGS
Incidental Traffic - Parking Lot, Sidewalk
Conforms to:
- WUC 3.6
- ASTM C 857
- ANSI/SCTE 77

FEATURES:
- USDA/RUS Approved
- Drop-In nameplate
- Shipped assembled
- Skid resistant cover
- Stainless steel bolts
- Cast-in floating nut box
- Integral drain holes

Additional product information continued on the reverse

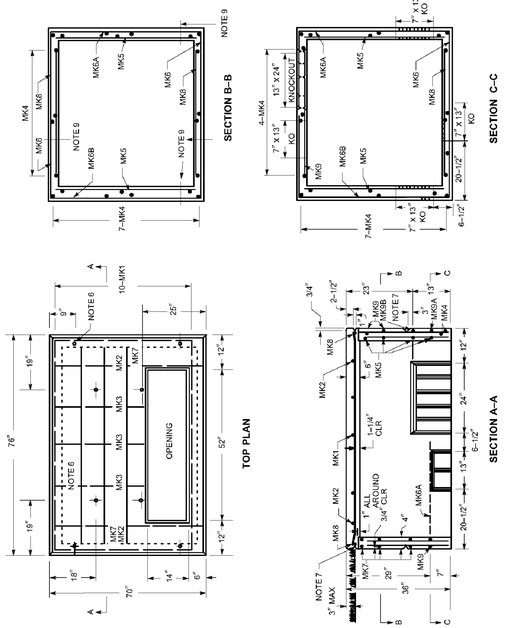
newbasis
Composites for Infrastructure
2626 Kansas Avenue
Riverside, California 92507
951.787.0600
951.787.0632 (fax)
info@newbasis.com
newbasis.com



Inside Dimensions		
Length	Width	Depth
33 1/8"	22 1/2"	15"
41 7/8"	30 3/8"	

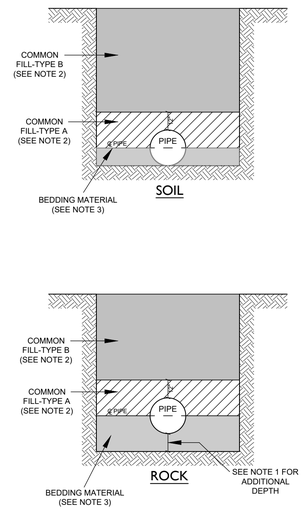
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CABLE HANDHOLE DETAIL
N.T.S.



ORIGINAL 12/21/78	PAD – PRECAST CONCRETE – THREE–PHASE TRANSFORMER 500–2500 KVA–76" x 70" x 36"			
APPROVED 3/1/02	NORTHEAST UTILITIES	MATERIAL SPECIFICATION	SPC P–015	7

TRANSFORMER DETAIL
N.T.S.



NOTES:
1. THE TRENCH SHALL BE EXCAVATED TO THE DEPTH REQUIRED, SO AS TO PROVIDE A UNIFORM AND CONTINUOUS BEARING AND SUPPORT FOR THE PIPE BARREL ON SOLID AND UNDISTURBED GROUND AT EVERY POINT BETWEEN JOINTS, EXCEPT THAT IT WILL BE PERMISSIBLE TO DISTURB THE FINISHED TRENCH BOTTOM OVER A MAXIMUM LENGTH OF 16" NEAR THE MIDDLE OF EACH LENGTH OF PIPE BY THE WITHDRAWAL OF PIPE SLINGS OR OTHER LIFTING TACKLE. WHEN REQUIRED, BELL HOLES SHALL BE PROVIDED. THE FINISHED TRENCH BOTTOM SHALL BE ACCURATELY PREPARED BY MEANS OF HAND TOOLS.
2. MATERIAL FOR BACKFILLING SHALL BE EARTH MATERIALS ENTIRELY FREE FROM VEGETATION, TRASH, LUMBER, FROZEN, SOFT OR ORGANIC MATERIALS. NO STONES OR ROCK LARGER THAN THE SIZES LISTED BELOW WILL BE PERMITTED IN THE BACKFILL:

   COMMON FILL-TYPE A: NO STONES OR ROCKS LARGER THAN 1"
   COMMON FILL-TYPE B: NO STONES OR ROCKS LARGER THAN 4"

   COMMON FILL MATERIAL MAY BE OBTAINED FROM THE TRENCH EXCAVATION PROVIDED IT HAS BEEN APPROVED BY THE ENGINEER AND HAS BEEN TESTED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

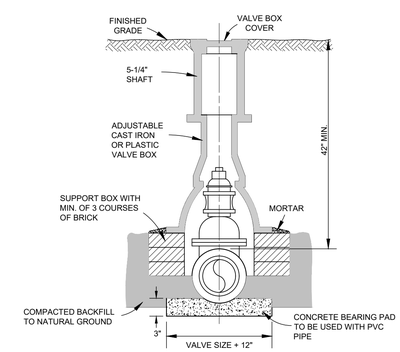
   a.a. ALL MATERIALS TO BE USED FOR BACKFILL, INCLUDING COMMON FILL AND BEDDING MATERIALS, SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACING THE MATERIALS IN THE PIPE TRENCH. ALL BACKFILL AND BEDDING MATERIALS WHETHER OBTAINED FROM THE TRENCH EXCAVATION OR FROM AN OFF-SITE SOURCE MUST BE TESTED AS DIRECTED BY THE ENGINEER.
   a.b. SAMPLES OF THE MATERIALS SHALL BE SUBMITTED TO AN APPROVED TESTING AGENCY FOR ANALYSIS. THE TEST RESULTS AND REPORT STATING THAT THE MATERIALS MEET THE REQUIREMENTS THESE SPECIFICATIONS AND THE SPECIFICATIONS OF FEDERAL, STATE AND LOCAL AUTHORITIES (WHERE APPLICABLE) SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING THE MATERIALS IN THE PIPE TRENCH.

   IF APPROVED MATERIAL OBTAINED FROM THE TRENCH EXCAVATON IS INSUFFICIENT TO COMPLETE THE BACKFILL, THE CONTRACTOR SHALL OBTAIN THE NECESSARY APPROVED COMMON FILL MATERIALS FROM AN OFF-SITE SOURCE.
3. MATERIALS USED FOR BEDDING AND THE HAUNCH AROUND THE PIPE SHALL BE A COARSE TO FINE SANDY MATERIAL WITH MAXIMUM STONE SIZE OF 1 INCH. THE MATERIAL SHALL CONFORM TO ASTM D2487 STANDARD METHOD FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES" USING THE UNIFIED SOIL CLASSIFICATION SYSTEM, EXCEPT WHERE A HIGHER STANDARD IS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS OR BY RULES OR REGULATIONS OF FEDERAL, STATE OR LOCAL GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE OF THE WORK.

   THE MATERIAL SHALL MEET A CLASS II DESIGNATION. SOIL TYPES GW, GP, SW AND SP, NON-COHESIVE, WELL GRADED AND CONTAINING SOME FINES ARE INCLUDED IN THIS CLASS. WHERE VOIDS, FINER GRAINED SOILS OR MOVEMENT MAY ALLOW MIGRATION OF THIS MATERIAL, A FILTER FABRIC AS DIRECTED BY THE ENGINEER WILL BE USED IN THE TRENCH BOTTOM AND SIDES BEFORE THE SELECT FILL BEDDING IS PLACED.

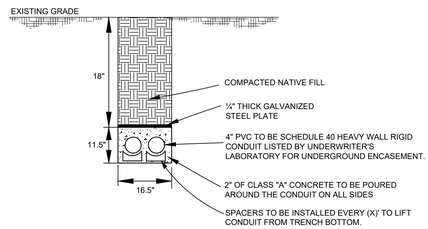
   BEDDING MATERIAL MAY BE OBTAINED FROM THE TRENCH EXCAVATION PROVIDED IT HAS BEEN TESTED IN ACCORDANCE WITH THE REQUIRE- MENTS STATED ABOVE AND APPROVED BY THE ENGINEER. IF THE APPROVED MATERIAL OBTAINED FROM THE TRENCH EXCAVATION IS INSUFFICIENT TO COMPLETE THE BEDDING, THE CONTRACTOR SHALL OBTAIN THE NECESSARY TESTED AND APPROVED BEDDING MATERIALS FROM AN OFF-SITE SOURCE.
4. REFER TO SECTION 2210 OF THE CONNECTICUT-AMERICAN WATER COMPANY SPECIFICATIONS.

WATER LINE TRENCH BACKFILL MATERIALS
N.T.S.



NOTES:
1. SIMILAR INSTALLATION FOR CURB BOX OR SERVICE LINE
2. CONTRACTOR TO VERIFY VALVE TYPE WITH FIRST DISTRICT WATER DEPARTMENT

VALVE BOX INSTALLATION (TYP.)
N.T.S.



CONDUIT TRENCH DETAIL (CONCRETE ENCASEMENT)
N.T.S

No.	Date	Revision
1	12/12/2025	ORIGINAL ISSUE DATE

DETAILS
DEPICTING
30, 32, 34 CHARLES STREET
NORWALK, CT
PREPARED FOR
TOMAS BROTHERS LLC

REDNISS & MEAD
LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING
22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax 203.357.1118
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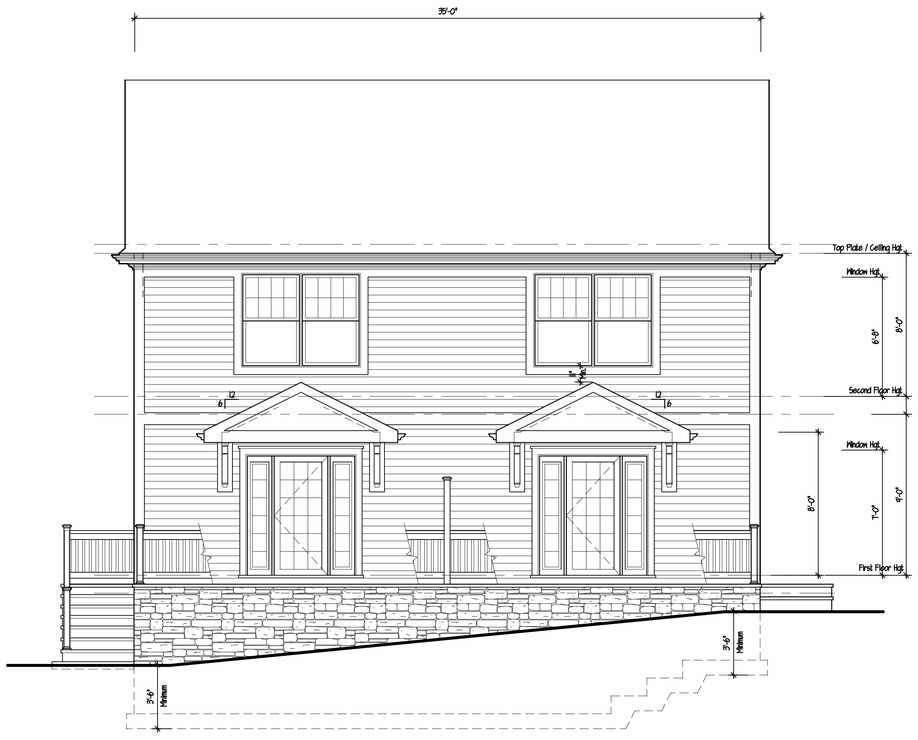
SCALE: N.T.S.
DRAWN BY: ZPR CHECKED BY: VJH

STATE OF CONNECTICUT LICENSED PROFESSIONAL ENGINEER No. 0032100 VINCENT J. HYNES CT. P.E. 0032100
December 12, 2025
DATE

This document and copies thereof are valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null & void.

SHEET No:
SE-8
Comm. No.: 10304

12/16/2025 11:53 AM\\Jobfiles2\10000\10300\10304\DWG\Tomas\10304A-1 Notes & Details.dwg



Front Elevation

Scale: 1/4" = 1'-0"

Square Footage

First Floor	720 Sf
Second Floor	954 Sf
Total	1,674 Sf

Preliminary Plans Conform To Building Standards Stated In Article 4 Table 4.3.1-D Of The City Of Norwalk Zoning Regulations

Schedule For Proposed Building Material and Color Scheme

	Name:	Type:	Color:
Siding:	n/a	Vinyl	Snowscape Grey, Quarry Grey Or Cavern Steel
Windows:	Anderson	Double Hung	White
Trim:	Azek	Composite	White
Front Door:	n/a	Wood	Stained
Garage:	n/a	Wood	Stained
Rooting:	Grand Manor	Asphalt	Brownstone
Stone:	Stone Veneer	n/a	Cornish



Left Elevation

Scale: 1/4" = 1'-0"

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IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING LICENSED PROFESSIONAL SHALL ATTACH TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED" FOLLOWED BY THEIR NAME AND DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DeMasi Architects P.C.
105 SMITH AVENUE, MOUNT KISCO, NEW YORK 10549
PHONE: (914) 666-3656
EMAIL: Lou@DemasiArchitects.com WEBSITE: DemasiArchitects.com

Do Not Scale Prints

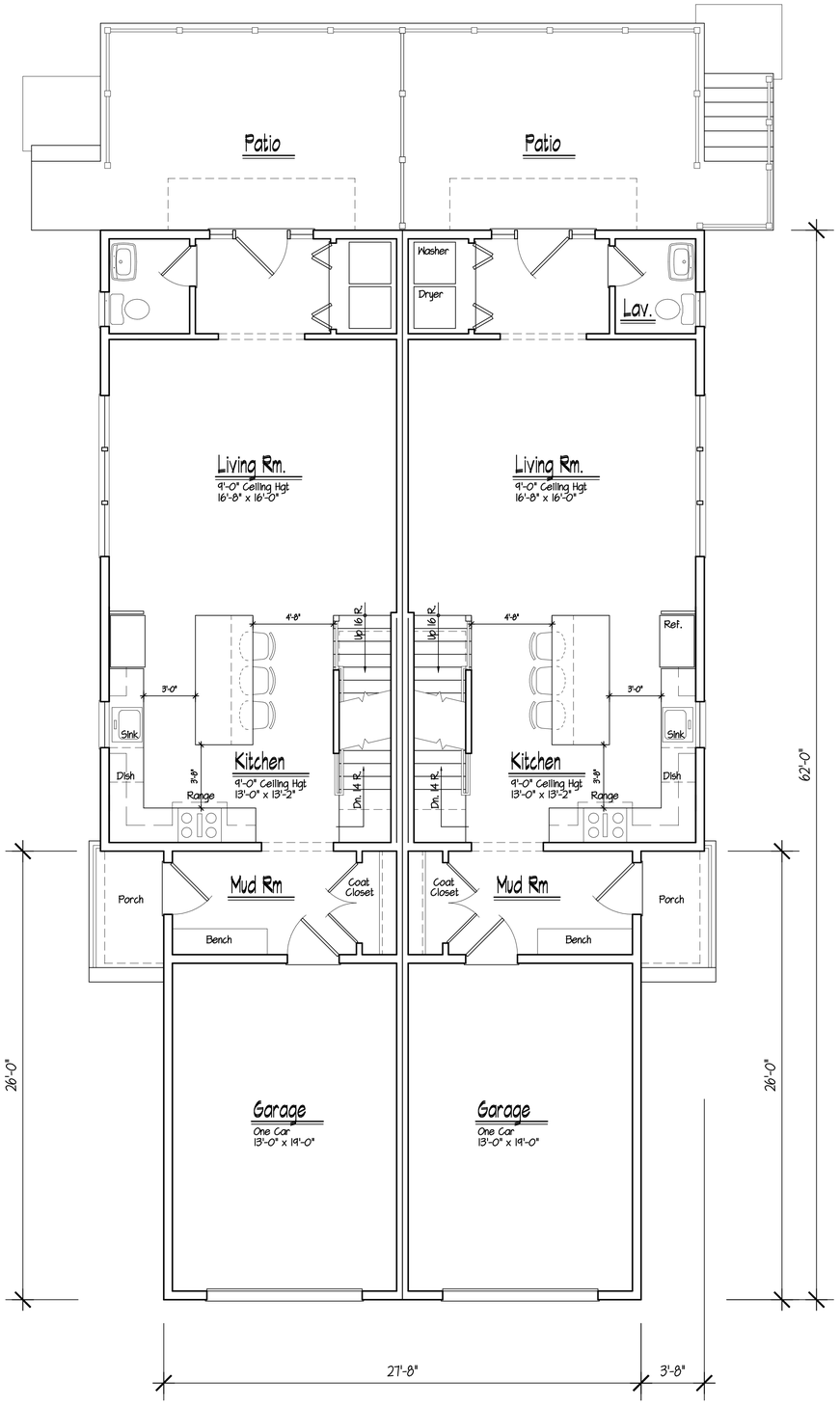
Residence For
32 Charles Street
Norwalk, Connecticut

Revision	Date

Date: Jan. 5, 2026

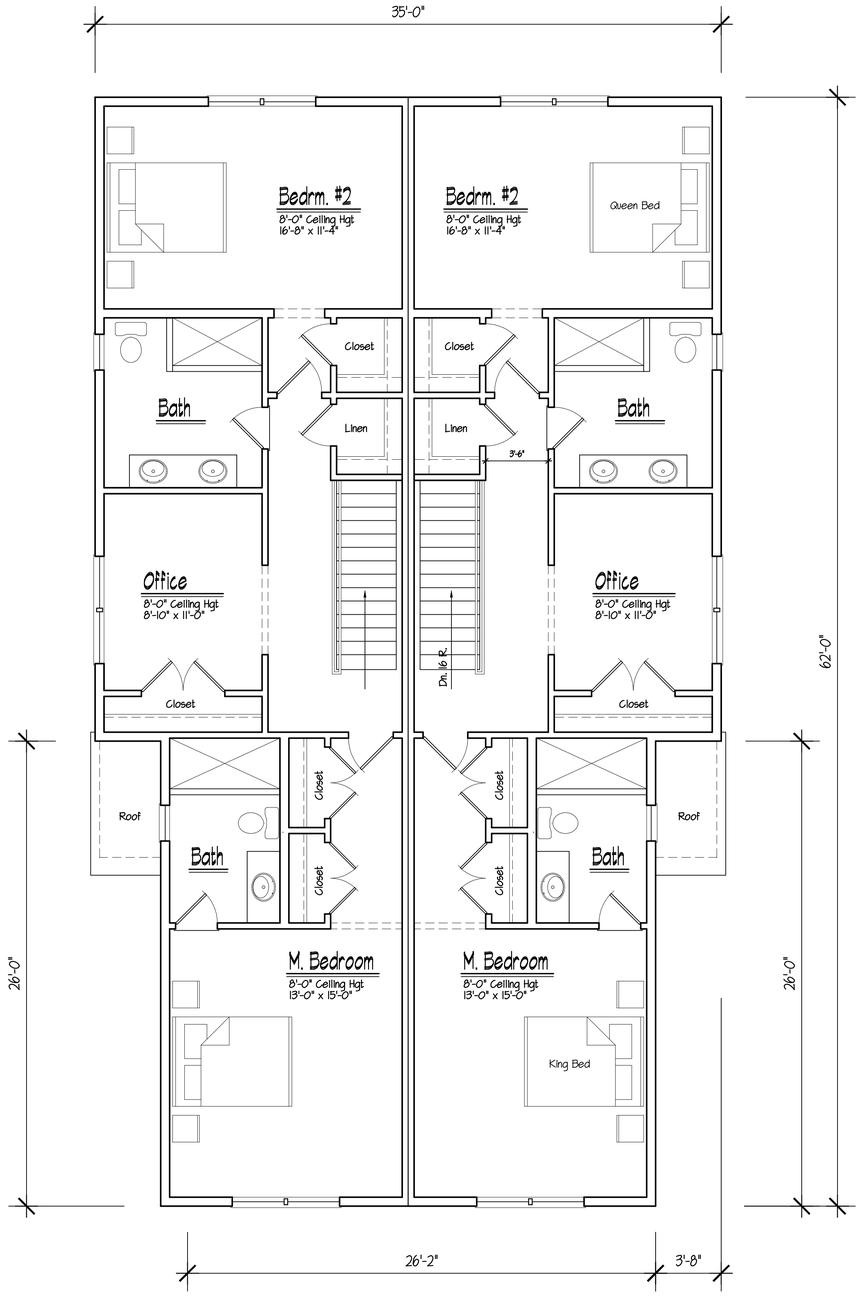
Job No: 225-119

Drawing: 3 OF



First Floor Plan

Scale: 1/4" = 1'-0"



Second Floor Plan

Scale: 1/4" = 1'-0"

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DeMasi Architects P.C.
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PHONE: (914) 666-3656
EMAIL: Lou@DemasiArchitects.com WEBSITE: DemasiArchitects.com

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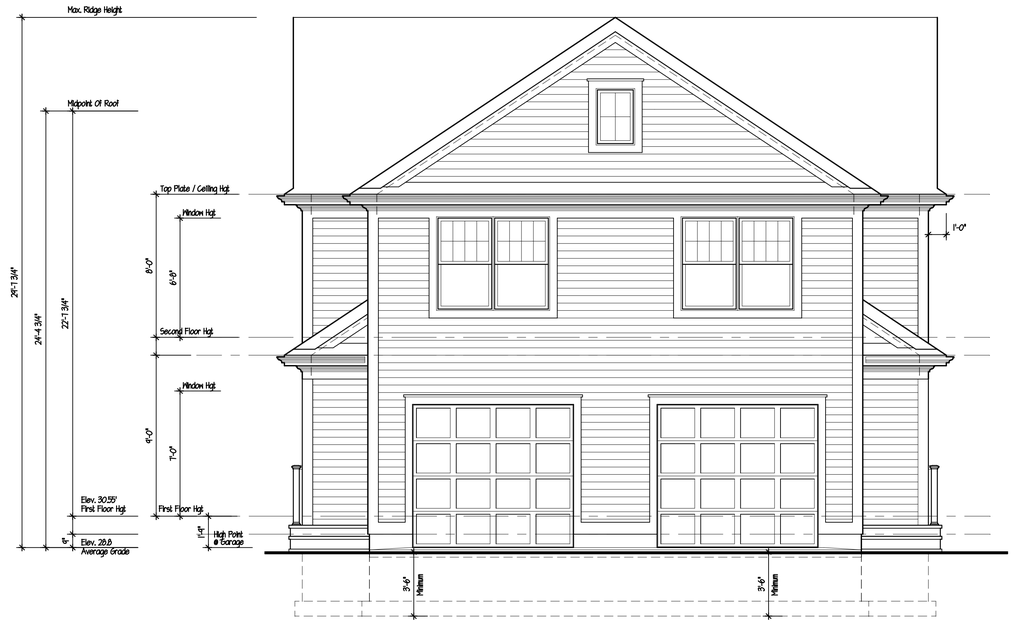
Residence For
32 Charles Street
Norwalk, Connecticut

Revision	Date

Date: Jan. 5, 2026

Job No: 225-119

Drawing: 2 OF 3



Rear Elevation

Scale: 1/4" = 1'-0"



Right Elevation

Scale: 1/4" = 1'-0"

DO NOT SCALE PRINTS THESE PLANS ARE THE PROPERTY OF THE ARCHITECT. ANY USE OR REPRODUCTION IN WHOLE OR PART WITHOUT THE WRITTEN AUTHORIZATION OF THE ARCHITECT IS PROHIBITED. ANY PERSON OR CORPORATION USING PLANS WITHOUT PROPER AUTHORIZATION WILL BE RESPONSIBLE TO COMPENSATE THE ARCHITECT.

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Do Not Scale Prints

Residence For
32 Charles Street
Norwalk, Connecticut

Revision	Date

Date: Jan. 5, 2026

Job No: 225-119

Drawing: 3 OF 3

DRAINAGE FACILITIES OPERATIONS AND MAINTENANCE PLAN
30, 32, & 34 Charles Street, Norwalk CT
December 12, 2025

The purpose of this Operations and Maintenance plan is to ensure that the drainage facilities proposed on site at 30, 32, and 34 Charles Street (the "Properties") shall be maintained in operational condition. While some normal wear is expected over time, the facilities must be properly maintained in order to function as designed. Please refer to the Site Utility Plan for the location of proposed drainage facilities.

Tomas Brothers LLC and its successors or assigns agree to maintain the drainage facilities in a functioning condition by following the maintenance plan described below.

Storm Drainage Maintenance and Inspection Requirements: The storm drainage system shall be inspected on a semi-annual basis for the first year to ensure that the system is functioning properly. If these inspections show that debris and sediment have accumulated, then more frequent inspections will be scheduled. Inspections should be scheduled following major storm events. If after one year there is little sediment accumulation, then inspections shall be performed on an annual basis.

Catch Basins: Structures with an open grate top intended to collect rain water and direct it into the underground drainage pipes. Note that if sediment is allowed to build up it can greatly reduce the performance of the structure.

- Inspect yearly and remove accumulated debris, trash, and sediment with a vacuum truck as needed to insure proper working order.

Storm Drainage Piping and Manholes: Pipes are located beneath the surface and are used for piping stormwater out of the site. Manholes are structures that are used as junctions for pipe intersections.

- All piping shall be completely cleaned of debris and accumulated sediment at the completion of constriction.
- Manholes shall be inspected on an annual basis. Accumulated debris shall be removed and repairs shall be conducted as necessary.
- Video inspection of the storm drainage piping shall occur once every 10 years, unless the system performance indicates an issue.

Porous Pavement (Porous Asphalt, Permeable Pavers, Etc.):

- Clean and vacuum (Regenerative Air Vacuum for Permeable Interlocking Concrete Pavers) the porous pavement upon the completion of construction.
- Check for standing water on the surface of the pavement after a precipitation event. If standing water remains within 30 minutes after rainfall had ended, cleaning of porous pavement is recommended.
- Vacuum sweeper shall be used regularly to remove sediment and organic debris on the

pavement surface. The sweeper may be fitted with water jets.

- Pavement vacuuming should occur during spring cleanup following the last snow event to remove accumulated debris, at a minimum.
- Pavement vacuuming should occur during fall cleanup to remove dead leaves, at a minimum.
- Power washing can be an effective tool for cleaning clogged areas. See manufacturer's specifications.
- Check for debris accumulating on pavement, especially debris buildup in winter. For loose debris, a power/leaf blower or gutter broom can be used to remove leaves and trash.
- In the event that the porous surface becomes clogged an engineer must be retained to determine how to restore the porous surface to its original condition.
- Any additional maintenance required per the manufacturer's specifications shall also be completed.

Disposal of Debris and Sediment: All debris and sediment removed from the storm water structures shall be disposed of legally. There shall be no dumping of silt or debris into or in proximity to any inland or tidal wetlands or the abutting river.

Maintenance Arrangements: The names of the person or party responsible for completing routine inspection and maintenance activities, pet waste management, and proper management of de-icing chemicals and snow shall be filed with the Norwalk Department of Public Works annually.

Good Housekeeping:

1. Most domestic waste will be stored inside the trash room
2. No fertilizers, pesticides, or herbicides will be stored on site
3. No vehicle washing will be permitted on site
4. Lawn and garden areas will be kept in satisfactory condition maintaining ground stabilization and the pervious nature of landscaped areas.
5. In accordance with Sec. 2a-450 of CT General Statues spills of petroleum or chemicals will be reported to the CT DEEP's Oil & Chemical Response Division at (860) 424-3338, be contained as quickly as practical, and cleaned by a licensed contractor.

DRAFT

Declaration: The Owner(s) listed below agrees to the following statements. The statements are intended to ensure that the owner agrees to install and maintain stormwater management practices on the subject property in accordance with approved plans and conditions, and to further ensure that the management practices serve the intended function in perpetuity.

1. The Owner(s) shall be solely responsible for the inspection, maintenance, and repair of the postconstruction storm water management system identified in the above sections.

2. The Owner(s) agrees in the event that the Property is sold, transferred, or leased to provide information to the new owner, operator, or lessee regarding proper inspection, maintenance and repair of the storm water management practice(s). The information shall accompany the first deed transfer and include this "Drainage Facilities Operations and Maintenance Plan". The transfer of this information shall also be required with any subsequent sale, transfer or lease of the Property.

3. The City of Norwalk or its designee is authorized to access the property as necessary to conduct inspections of the storm water management practices to ascertain compliance with the intent of this Operations and Maintenance Plan. Upon written notification by the City of Norwalk or their designee of required maintenance or repairs, the Owner(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the City of Norwalk. The Owner(s) shall be liable for the failure to undertake any maintenance or repairs so that the public health, safety, general welfare or the environment shall not be endangered.

By: _____ _____
[Owner(s)] [Date]

By: _____ _____
[Owner(s)] [Date]

DRAFT

COASTAL AREA MANAGEMENT REPORT

Prepared For
30, 32, & 34 Charles Street
Tomas Brothers LLC
2 Ruby Street
Norwalk, CT 06850

Prepared by
Redniss & Mead, Inc.
22 First Street
Stamford, CT
(203) 327-0500

Issued on
December 12, 2025

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1.0 - INTRODUCTION

Redniss & Mead, Inc. has prepared this Coastal Area Management (CAM) report on behalf of Tomas Brothers LLC in support of a site plan approval process for the proposed development at 30, 32, and 34 Charles Street in Norwalk, Connecticut. The properties are located within the CD-2 zoning district and are located at the north end of Charles Street bound by multi-family residential properties and the Norwalk River. The CAM Application is required as the site is located within the Coastal Area Management (CAM) zone of the City of Norwalk. The following sections of this document present a project narrative and provide information required by the CAM application.

1.1 - Project Purpose

The applicant is proposing to construct a duplex style building (two residential units) on each of the three lots for six total residential units. Each duplex will be constructed with an attached garage, permeable paver driveway with available space for the required parking, patio or deck area, and associated site improvements. Access to the site will be via an existing 15' right-of-way that connects to Osborne Avenue. Reference is made to the site and utility plans by Redniss & Mead, Inc. as well as a Site Engineering Report by Redniss & Mead, Inc.

1.2 - Existing Site Conditions

The properties at 30, 32, and 34 Charles Street are a combined 22,048 sf (0.51 acres) in size. 30 Charles Street is developed with a single-family residence, a driveway, a pool, and decks, walks and other ancillary improvements typically found on single-family properties and is accessed via a 15' right-of-way that connects to Osborne Avenue. A portion of the driveway and patio area extend to 32 and 34 Charles Street, but no other improvements are currently installed on those sites. The topography is such that the site stormwater runoff sheet flows from the site from east to west towards the Norwalk River. A portion of 34 Charles Street (northwest corner of the site) is located within the Coastal Hazard Area (FEMA Zone AE-10) as depicted on the Federal Emergency Management Agency – Flood Insurance Map Community No. 09001C0531G, effective July 8, 2013, while the remainder of the parcel and the parcels at 30 and 32 Charles Street are not located within a Special Flood Hazard Area.

The image below illustrates the location of the project site in relation to the Norwalk River, which is to the immediate west of the project area. The area indicated within the image is fully within the coastal area management boundary.

Location of Site in relation to the Coastal Boundary
Norwalk, CT



2.0 - COASTAL AND ENVIRONMENTAL RESOURCES

Redniss & Mead, Inc. conducted a review of coastal and environmental resources at the site and adjacent areas as required by the Coastal Area Management (CAM) application. This review was conducted to determine the potential for impacts associated with the proposed project and to ensure that the project design is consistent with applicable regulations and policies.

2.1 - Consistency with General Goals and Policies

The proposed project is consistent with the general goals and policies outlined in C.G.S. 22a-92(a), as follows:

(1) To insure that the development, preservation or use of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water resources to support development, preservation or use without significantly disrupting either the natural environment or sound economic growth.

The proposed project is consistent with the existing uses of the neighborhood and as allowed by the Zoning Regulations and therefore there will be no long-term disruption to the natural environment or sound economic growth of the area.

(2) To preserve and enhance coastal resources in accordance with the policies established by chapters 439, 440, 446i, 446k, 447, 474 and 477.

The proposed project will preserve and enhance the coastal resources in accordance with the policies established by the aforementioned chapters. The proposed project is consistent with the existing uses of the neighborhood and work is landward of the flood hazard area, with the exception of a sanitary sewer connection.

(3) To give high priority and preference to uses and facilities which are dependent upon proximity to the water or the shorelands immediately adjacent to marine and tidal waters.

The proposed project is consistent with the existing uses of the neighborhood and is elevated in relation to the Norwalk River and will not interfere with existing waterfront uses adjacent to the site.

(4) To resolve conflicts between competing uses on the shorelands adjacent to marine and tidal waters by giving preference to uses that minimize adverse impacts on natural coastal resources while providing long term and stable economic benefits.

Given the existing use and elevations of the site relative to the river, the proposed project will not create conflicts with competing coastal uses.

(5) To consider in the planning process the potential impact of coastal flooding and erosion patterns on coastal development so as to minimize damage to and destruction of life and property and reduce the necessity of public expenditure to protect future development from such hazards.

The development activity is located outside of the 100-year flood zone for the Norwalk River with the exception of a sanitary sewer connection to an existing sanitary sewer main. Sediment and erosion controls are proposed to be installed during construction. With proper implementation of the project plan, the project will not affect erosion patterns in the River.

(6) To encourage public access to the waters of Long Island Sound by expansion, development and effective utilization of state-owned recreational facilities within the coastal area that are consistent with sound resource conservation procedures and constitutionally protected rights of private property owners.

The proposed development will be located on private property and therefore will not adversely affect state-owned recreational facilities.

(7) To conduct, sponsor and assist research in coastal matters to improve the data base upon which coastal land and water use decisions are made.

The proposed development will not impede the goals of the State or efforts of third parties to conduct, sponsor or assist in research into coastal matters.

(8) To coordinate the activities of public agencies to insure that state expenditures enhance development while affording maximum protection to natural coastal resources and processes in a manner consistent with the state plan for conservation and development adopted pursuant to part I of chapter 297.

State funding is not proposed.

(9) To coordinate planning and regulatory activities of public agencies at all levels of government to insure maximum protection of coastal resources while minimizing conflicts and disruption of economic development.

The proposed development will not impede the duties of planning and regulatory activities of public agencies.

(10) To insure that the state and the coastal municipalities provide adequate planning for facilities and resources which are in the national interest as defined in section 22a-93 and to insure that any restrictions or exclusions of such facilities or uses are reasonable.

The proposed project will not adversely affect any facilities which are defined as 'in the national interest" in accordance with 22a-93.

2.2 - Potential Effects on Coastal Resources

The subject site is located in a developed multi-family residential neighborhood that is adjacent to Norwalk River. Based on a review of the City of Norwalk's Building Zone Map, the site is located within the Coastal Area Management Boundary. As part of this evaluation, Redniss & Mead, Inc. has reviewed available information regarding coastal resources in the vicinity of the site to determine whether they would be affected by the proposed project. In general, coastal resources include:

A. General Resources
B. Bluffs & Escarpments
C. Rocky Shorefronts
D. Beaches & Dunes
E. Intertidal Flats
F. Tidal Wetlands
G. Freshwater Wetlands
H. Coastal Hazard Areas
I. Developed Shorefront
J. Islands
K. Shorelands
L. Shellfish Concentrations
M. Coastal Waters & Embayments
N. Air Resources & Quality

Based on the Connecticut Department of Environmental Protection (CTDEP) Coastal Resources Map (dated 1979), coastal resources were not identified at the site. The sites lie along the developed shorefront of the Norwalk River and the northwest corner of 34 Charles Street is located within the regulatory floodplain of Norwalk River; the site lies within flood zone AE (El. 10) as depicted on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 09001C0531G dated July 8, 2013. Based on the City of Norwalk Inland Wetlands and Watercourses Map (dated 2009), there are no mapped inland wetlands within 50 feet of the proposed activity. As such, no adverse effects are expected regarding the resources identified above.

2.3 - Identification of Significant Natural Features

Given the existing development of the site and that proposed activities are landward of the AE zone limit, no significant natural features will be affected by the proposed development.

2.4 - Identification of Significant Historical and Cultural Resources

No significant cultural resources have been identified at the site.

2.5 - Identification of Applicable Coastal Policies Affected by Project

Redniss & Mead, Inc. has reviewed applicable coastal use policies which could be affected by the project, including:

A. General Development
B. Water and Dependent Use
C. Ports & Harbors
D. Coastal Structures & Filling
E. Dredging & Navigation
F. Boating
G. Fisheries
H. Coastal Recreation & Access
I. Sewer and Water Lines
J. Energy Facilities
K. Fuels, Chemicals, & Hazardous Material
L. Transportation
M. Solid Waste
N. Dams, Dikes & Reservoirs
O. Cultural Resources
P. Open Space & Agricultural

Given the proposed work on site is landward of the AE zone, most of these policies are not affected by the project. However, the following may be affected:

A. General Development - The proposed project is consistent with the existing uses within the neighborhood and allowed via the zoning regulations, therefore there will be no long-term disruption to the natural environment or sound economic growth of the area.

   The temporary activities of construction have the potential to produce noise, odor, fumes, and dust which will be mitigated via the prepared Sediment & Erosion Control Plan. The plan provides guidance for erosion control, dust control, and tree protection.

   The proposed development will provide additional long term Water Quality benefits as described in the Site Engineering Report prepared by Redniss & Mead, Inc.

I. Sewer and Water Lines – the proposed development activity is located in an area where municipal water and sewer lines already exist, and the project will not include extension of sewer and water lines into coastal areas. Certain upgrades to stormwater management will be incorporated into the project as proposed on the accompanying plan sets.

3.0 - SUMMARY AND CLOSING

Based on a review of the proposed development of 30, 32, and 34 Charles Street, as well as information concerning coastal resources in the site vicinity and proper sediment and erosion control during construction no adverse coastal impacts are anticipated with the project. Activities will be conducted in accordance with all local, state, and federal requirements, including those for environmental remediation and management of stormwater. For these reasons and other stated above, the proposed use is consistent with state goals and policies for coastal management and should be acceptable to the City of Norwalk.

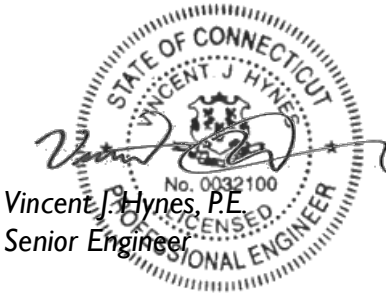
4.0 - LIMITATIONS

In completing this application, Redniss & Mead, Inc. has relied upon information provided by Tomas Brothers LLC and its subcontractors, information contained in previously prepared documents and resource maps prepared by others.

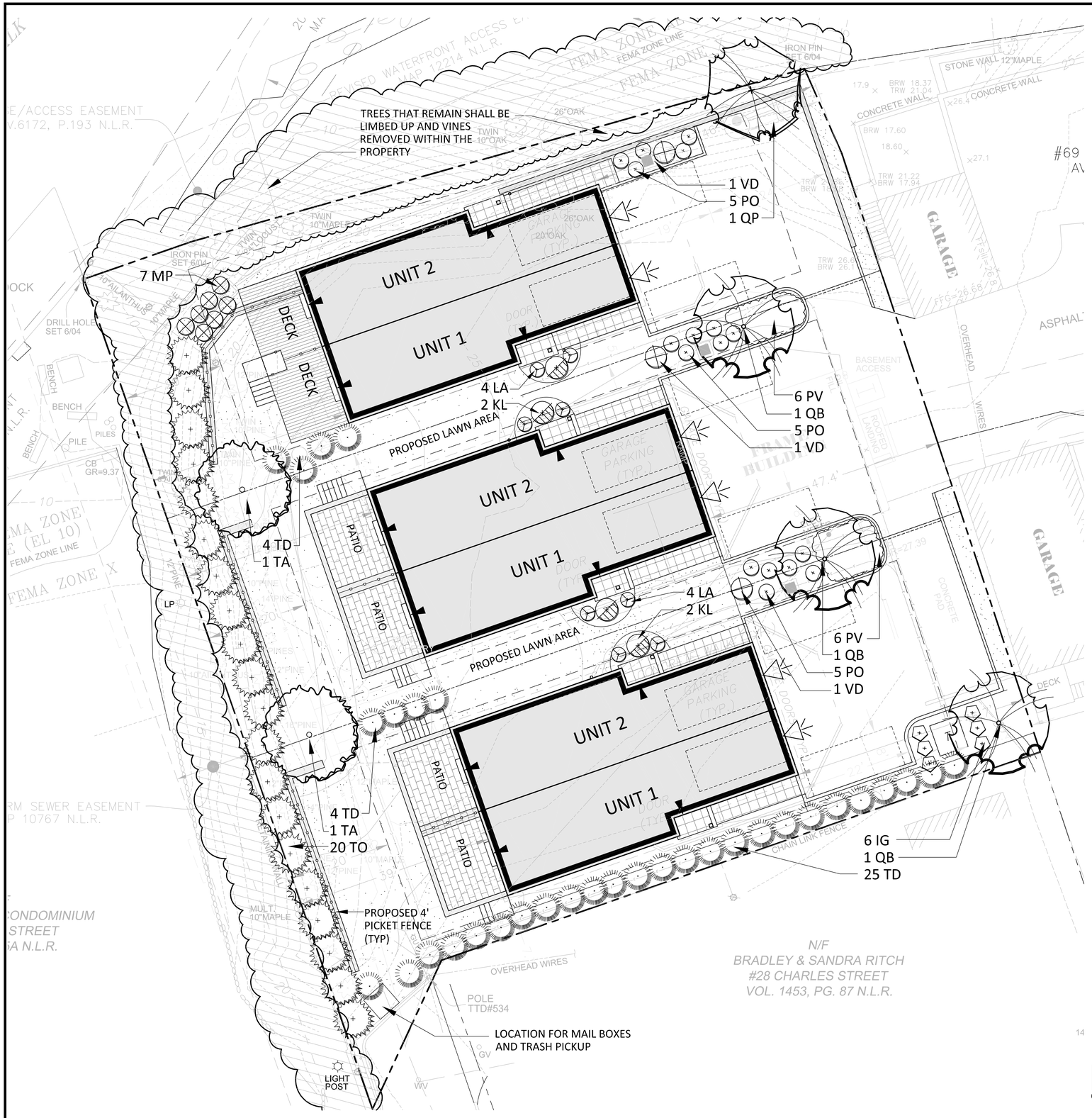
This application was prepared specifically for the City of Norwalk on behalf of Tomas Brothers LLC. No person or other body shall be entitled to rely upon or use information presented in this report without written consent of Tomas Brothers LLC and Redniss & Mead, Inc.

5.0 - SIGNATURES OF REPORT AUTHORS

This report has been prepared by Redniss & Mead, Inc. The names listed below are the principal authors of this report. Requests for information regarding the content of this report should be directed to those individuals.



Vincent J. Hynes, P.E.
Senior Engineer

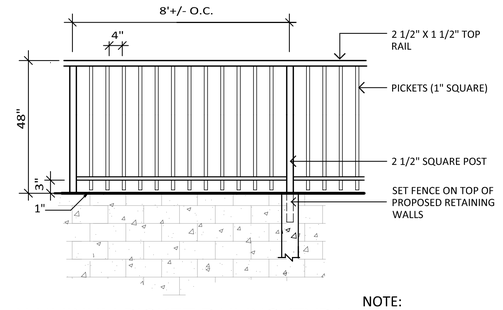


LEGEND

- PROPERTY LINE
- EXISTING CONTOUR (62)
- NEW FENCE
- EX. EVERGREEN/DECIDUOUS TREE TO REMAIN (APPROX. LOCATION)
- NEW EVERGREEN TREE
- NEW DECIDUOUS SHADE TREE
- NEW SHRUB
- NEW / EX. LAWN
- TREE LINE TO REMAIN (APPROX.)
- NEW WALL MOUNTED LIGHT FIXTURE
- NEW TRANSFORMER LOCATION
- NEW BUILDING/ADDITION
- PROPOSED CATACHBASIN

GENERAL NOTES:

1. EXISTING AND PROPOSED SITE INFORMATION TAKEN FROM A DIGITAL AUTOCADD SITE PLAN SUPPLIED BY REDNISS & MEAD.
2. CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO HAVE UNDERGROUND UTILITY LINES MARKED BY THEM PRIOR TO START OF ANY EXCAVATION WORK.
3. EXACT LOCATION OF PROPOSED PLANTINGS AND SPECIES TYPES MAY VARY FROM THIS PLAN BASED ON SITE PLAN REVISIONS AND/OR ACTUAL FIELD CONDITIONS.
4. PLANT SPECIES SUBSTITUTIONS MAY BE MADE WITH THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANTING. SUBSTITUTED PLANTS SHALL BE AT AN EQUAL OR GREATER SIZE AS NOTED USING A SIMILAR TYPE PLANT.
5. IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITIES OF PLANTS IN THE "PLANT LIST" AND THE ACTUAL QUANTITIES SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.



ALUMINUM PICKET RAILING (TYP.)

NOTE:
1. COLOR SHALL BE BLACK.

SCALE: NOT TO SCALE

PLANT LIST-BUILDING

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
TREES					
3	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2-2.5" CAL.	B&B
1	QP	QUERCUS PALUSTRIS	PIN OAK	2-2.5" CAL.	B&B
2	TA	TILIA AMERICANA 'RED REDMOND'	REDMOND LINDEN	2-2.5" CAL.	B&B
EVERGREEN					
20	TO	THUGA OCCIDENTALIS 'NIGRA'	DARK ARBORVITEA	6-7' HT.	B&B
33	TD	THUGA OCCIDENTALIS 'DEGROOTS SPRIRE'	DEGROOTS SPIRE ARBORVITEA	5-6' HT.	B&B
SHRUBS					
6	IG	ILEX GLABRA 'SHAMROCK'	COMPACT INKBERRY	30-36" HT.	CONT.
4	KL	KALMIA LATIFOLIA	MOUNTAIN LAUREL	30-36" HT.	CONT.
8	LA	LEUCOTHOE AXILLARIS	LEUCOTHOE	18-24" HT.	
7	MP	MYRICA PENNSYLVANICA	BAYBERRY	30-36" HT.	CONT.
15	PO	POTENTILLA X 'DAKOTA SUNSPOT'	YELLOW POTENTILLA	30-36" HT.	CONT.
3	VD	VIBURNUM DENTATUM 'BLUE MUFFIN'	BLUE MUFFIN ARROWWOOD	36-42" HT.	CONT.
PERENNIALS					
12	PV	PANICUM VIRGATUM 'SHENADOAH'	SHENADOAH SWITCHGRASS	1 GAL.	CONT.

PROJECT NORTH

GRAPHIC SCALE
0' 5' 10' 20'

REVISIONS:

DRAWING TITLE: LANDSCAPE PLAN

PROJECT:
TOMAS BROTHERS LLC
30, 32 & 34 CHARLES STREET
NORWALK, CONNECTICUT

ENVIRONMENTAL LAND SOLUTIONS, LLC
Landscape Architecture and Environmental Planning
8 KNIGHT STREET, SUITE 203
NORWALK, CONNECTICUT 06851
Tel: (203) 855-7879 Fax: (203) 855-7836
info@elsllc.net www.elsllc.net

SEAL:

DATE: DECEMBER 17, 2025
SCALE: 1"=10'
DRAWING NO.: LP.1



Calculation Summary							
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	Grid Height
CalcPts_1	Fc	0.18	2.7	0.0	N.A.	N.A.	0

Luminaire Schedule					
Qty	Label	Watts	Arrangement	LLF	Description
3	WP4F	24.371	Single	0.282	EXO LNC2-48L-10-3K7-4F-UNV-finish TBD

Project:
30-32-34 Charles St

Contact:
Cliff Gilbert
Specifications - Southern CT
(203) 788-0814
cgilbert@illuminatene.com

Detail: Photometric Calculation
Date: 12-15-2025
Revision:----
Scale: 1" = 20'00"
Drawn By: SB

illuminate
263 Winn Street
Burlington, MA 01803
(781) 935-8500

333 Pleasant Valley Road
South Windsor, CT 06074
(860) 282-0597

Drawing Number:

L-1

Sheet 1 of 1

EXO
OUTDOOR LIGHTING

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LNC2

SMALL LED LITEPAK

FEATURES

- 60% more lumens and increased performance than smaller LNC models
- 3000K, 4000K and 5000K as well as Phosphor Converted Amber
- Type II, III and IV distributions available for a variety of application needs
- Quick-mount adapter allows easy installation/maintance
- 347V and 480V versions for industrial applications and Canada
- Full cut-off, neighbor friendly
- Optional photocontrol for additional energy savings



C US IP65 DLC LISTED DLC LISTED PREMIUM

SERVICE PROGRAMS

QS10

CONTROL TECHNOLOGY

NX LIGHTING CONTROLS

SPECIFICATIONS

CONSTRUCTION

- Rugged die-cast aluminum housing protects components and provides an architectural appearance
- Casting thermally conducts LED heat to optimize performance and long life
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating.
- Construction tested to ASTM B117 for 1,000 hours of salt spray.

OPTICS

- Zero uplight distributions using individual acrylic Micro Strike Optics
- LED optics provide IES type III and IV distributions. Optional (CS) acrylic diffuser available for reduced glare
- L96 at 60,000hrs (Projected per IESNA TM-21-11), see table on page 3 for all values

INSTALLATION

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box)
- Designed for direct j-box mount.
- Optional 1/2" conduit hubs available (standard for control options and battery versions)

ELECTRICAL

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option available in 25W and 35W configurations
- Minimum operating temperature is -40˚C/-40˚F
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Driver RoHS and IP66
- 10kA surge protector available as an option
- 3000K CCT nominal, 4000K CCT nominal, 5000K CCT nominal (70 CRI)

CONTROLS

- Universal button photocontrol for use with 120-277V configurations
- Occupancy sensor options available for complete on/off and dimming control
- NX Lighting Controls™ available that feature dimming and occupancy sensor
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress. Uses 15 watts of power for about 2000 lumens
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options can not be included in one fixture.

CERTIFICATIONS

- Listed to UL1598 and CSAC22.2#250.0-24 for wet locations
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations on this page are DLC Qualified. Refer to http://www.designlights.org/ for the most up-to-date list.
- Fixture is IP65 rated

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	1000-5600
Wattage Range	10-45
Efficacy Range (LPW)	108-124
Weights lbs. (kg)	9.6 (24.5)

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EXO
OUTDOOR LIGHTING

LNC2
SMALL LED LITEPAK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

ORDERING GUIDE

= Service Program
Limit of 15 luminaires
QS10

Example: LNC2-48L-25-3K7-3-UNV-DBT-PC

CATALOG #

ORDERING INFORMATION

Series		Light Engine		CCT/CRI		Distribution		Voltage	
LNC2	Small LitePak LNC2	**48L-10**	1000 lumens	**3K7**	3000K, 70 CRI	**2**	Type 2	**UNV**	120-277V
		48L-15	2000 lumens	**4K7**	4000K, 70 CRI	**3**	Type 3	**120**	120V
		48L-20	2500 lumens	**5K7**	5000K, 70 CRI	**4F**	Type 4 Forward	**208**	208V
		48L-25	3500 lumens	**AP**	Amber Phosphor Converted [11]	**4W**	Type 4 Wide	**240**	240V
		48L-35	4500 lumens					**277**	277V
		48L-45	5600 lumens					**347**	347V [7]
								480	480V [7]

Mounting		Finish		Control Options		Additional Options	
Leave blank for down		**BLT**	Black Matte Textured	**PC**	Photocontrol [4]	**F**	Fusing (specify voltage)
NV	Inverted [3]	**BLS**	Black Gloss Smooth	**BTSO12F**	"Bluetooth Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height [5, 8]	**EH**	Battery Backup Unit with Heater (-30˚C) [6, 9]
		DBT	Dark Bronze Matte Textured			**E**	Battery Backup Unit (0˚C) [6, 9]
		DBS	Dark Brone Gloss Smooth	**SCP_F**	Programmable Occupancy Sensor to Control Options Section [9, 10, 12]	**CS**	Comfort Shield (N/A with Prismatic Refractor)
		GTT	Graphite Matte Textured			**2DR**	Dual Driver [1, 2]
		LGS	Light Grey Gloss Smooth			**2PF**	Dual Power Feed [1, 2]
		PSS	Platinum Silver Smooth			**CH**	Surface Conduit Hubs [5]
		WHT	White Matte Textured			**SP**	10kA Surge Protector
		WHS	White Gloss Smooth				
		VGT	Verde Green Textured				
		Color Option					
		CC	Custom Color				

NOTES
1 Available in 25, 35 & 45W
2 Options cannot be combined with controls or PC option
3 Not available with occupancy sensor, battery backup
4 PC comes in standard housing
5 BTS and CH options come in medium back box
6 E and EH come in large back box
7 347V & 480V only available in 25 and 35W
8 Only available in 45 Watt
9 Not available in 347/480 Volt
10 Select 8 ft or 20 ft mounting height
11 Can be ordered as ETO
12 Not available with E or EH

REPLACEMENT PARTS (MADE TO ORDER) /ACCESSORIES

	Catalog Number	Description
☐	**WP-BB-XXX***	Accessory for conduit entry
☐	**LNC2-CS**	Frosted acrylic comfort shield/lens reduces glare and improves uniformity with only 15% lumen reduction

Notes:
* Replace XXX with paint color

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EXO
OUTDOOR LIGHTING

LNC2

SMALL LED LITEPAK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

ORDERING GUIDE – STOCK

STOCK ORDERING INFORMATION

Catalog Number	Lumens	Wattage	LED Count	CCT/CRI	Voltage	Distribution	Photocell	Finish
LNC2-35-4K7-3-PC	3910	35	48L	4000K/70	120-277V	3	Yes	Dark Bronze Matte Textured

PERFORMANCE DATA

Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)			4K (4000K NOMINAL 70 CRI)			3K (3000K NOMINAL 80 CRI)		
			Lumens	LPW	B-U-G	Lumens	LPW	B-U-G	Lumens	LPW	B-U-G
10W	10.6W	Type 3	1213	121	B0-U0-G0	1117	112	B0-U0-G0	1081	108	B0-U0-G0
		Type 4	1244	124	B0-U0-G0	1144	114	B0-U0-G0	1109	111	B0-U0-G0
15W	14.5W	Type 3	1820	121	B0-U0-G0	1676	112	B0-U0-G1	1622	108	B0-U0-G1
		Type 4	1868	125	B0-U0-G1	1718	115	B0-U0-G1	1663	111	B0-U0-G1
20W	20W	Type 3	2427	121	B0-U0-G1	2234	112	B0-U0-G1	2163	108	B0-U0-G1
		Type 4	2487	124	B0-U0-G1	2292	115	B0-U0-G1	2218	111	B0-U0-G1
25W	28W	Type 3	3033	121	B1-U0-G1	2793	112	B0-U0-G1	2703	108	B0-U0-G1
		Type 4	3112	124	B0-U0-G1	2862	114	B0-U0-G1	2772	111	B0-U0-G1
35W	36.4W	Type 3	4247	121	B1-U0-G1	3910	112	B1-U0-G1	3785	108	B0-U0-G1
		Type 4	4355	124	B1-U0-G2	4011	115	B1-U0-G1	3881	111	B1-U0-G1
45W	45.1W	Type 3	5466	118	B1-U0-G1	5031	112	B1-U0-G1	4871	106	B1-U0-G2
		Type 4	5604	117	B1-U0-G2	5159	108	B1-U0-G2	4995	104	B1-U0-G2

PROJECTED LUMEN MAINTENANCE

STANDARD 9, 12 AND 18L VERSIONS

Ambient Temperature	OPERATING HOURS					
	0	25,000	50,000	TM-21-11* L96 60,000	100,000	L70 (Hours)
25°C / 77°F	1	0.97	0.95	0.94	0.91	408,000
40°C / 104°F	0.99	0.96	0.94	0.93	0.89	356,000

LUMINAIRE AMBIENT TEMP FACTOR

AMB TEMP		LUMEN MULTIPLIER
0C	32F	1.03
10C	50F	1.01
20C	68F	1
25C	77F	1
30C	86F	0.99
40C	104F	0.98

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.710		

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EXO
OUTDOOR LIGHTING

LNC2

SMALL LED LITEPAK

DATE: | LOCATION:

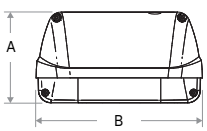
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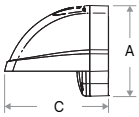
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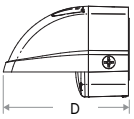
System Watts	Input Voltage	Current (AMPS)	System Power (W)
10W	120	0.09	10.6
	277	0.038	
	347	0.031	
	480	0.022	
15W	120	0.12	14.5
	277	0.07	
	347	0.04	
	480	0.03	
20W	120	0.169	20
	277	0.072	
	347	0.058	
	480	0.042	
25W	120	0.235	28
	277	0.101	
	347	0.081	
	480	0.058	
35W	120	0.305	36.4
	277	0.131	
	347	0.105	
	480	0.076	
45W	120	0.378	45.1
	277	0.163	
	347	0.13	
	480	0.094	

DIMENSIONS

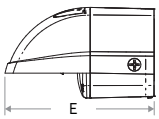




SCP HOUSING



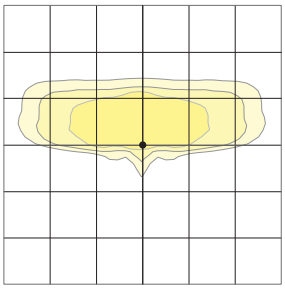
EH - BATTERY BACKUP HOUSING



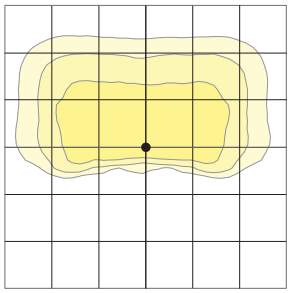
A	B	C	D	E
5.54" (141 mm)	10.16" (258 mm)	6.33" (161 mm)	7.64" (194 mm)	9.10" (231 mm)

DISTRIBUTIONS

Type 3



Type 4 Wide



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EXO
OUTDOOR LIGHTING

LNC2
SMALL LED LITEPAK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

OUTDOOR LIGHTING CONTROLS OPTIONS

CONTROLS FUNCTIONALITY

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
Independent	BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	12ft		BTSMP-OMNI-O

DEFAULT SETTINGS

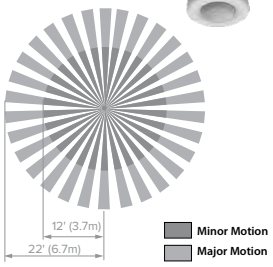
NX Wireless	**Occupancy Sensor**	Enabled
	Occupancy Sensor Sensitivity	7
	Occupancy Sensor Timeout	15 Minutes
	Occupied Dim Level	100%
	Unoccupied Dim Level	0%
	Daylight Sensor	Disabled
	Bluetooth	Enabled
	2.4GHz Wireless Mesh	On
	"Passcode Factory Passcode: HubbN3T!"	Enabled

Stand Alone	**Occupancy Sensor**	Enabled
	Occupancy Sensor Sensitivity	7
	Occupancy Sensor Timeout	8 Minutes
	Occupied Dim Level	100%
	Unoccupied Dim Level	50%
	Daylight Sensor	Disabled

NX WIRELESS COVERAGE PATTERNS

NXSMP2-OMNI





NX LIGHTING CONTROLS FREE APP

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)



The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminiares and program NX system settings.

Apple App: https://apps.apple.com/us/app/nx-lighting-controls/id962112904

Google Play: https://play.google.com/store/apps/details?id=io.cordova.NXBTR&hl=en_US&gl=US

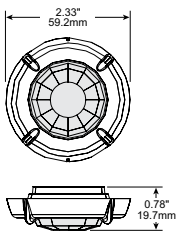
Apple App Google Play

OUTDOOR LIGHTING CONTROLS OPTIONS

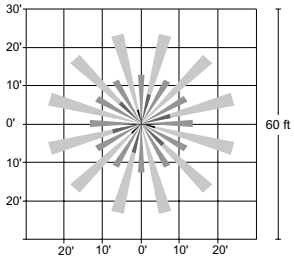
CONTROLS FUNCTIONALITY

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
Independent	SCP_F	Sensor Control Programmable, 8F or 40F	–	–	–	✓	✓	✓	✓	–	8ft or 40ft	SCP_F	

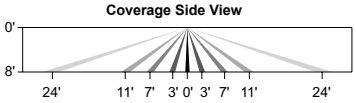
COVERAGE PATTERNS FOR SCP



Coverage Top View @ 12ft.



Coverage Side View



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EXO
OUTDOOR LIGHTING

LNC2

SMALL LED LITEPAK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

ADDITIONAL INFORMATION

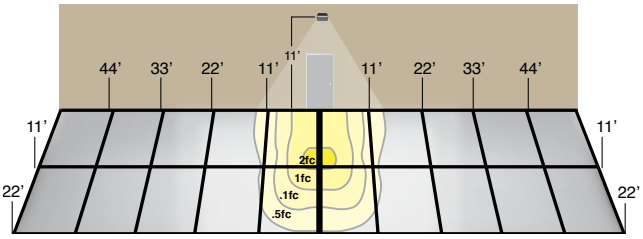
SHIPPING INFORMATION

Catalog Number	G.W(kg)/ CTN	Carton Dimensions		
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)
LNC2	14.3 (6.5)	14.5 (37)	11.4 (29)	8.4 (21.5)

CONTROL TABLE

Control Option	Sensor	Network-able	Scheduling	Occupancy	Daylight Harvesting	On/Off Control	Programming	Pair with Sensor	Sensor Mounting Height
PC	–	–	–	–	–	✔	–	–	–
BTSO12F	BTSMP-OMNI	–	–	✔	✔	with auxilary driver	–	–	12 ft
SCP_F	–	–	–	✔	–	✔	✔	–	–

LNC2 - BATTERY BACK UP



11' Mounting Height

Provides Life Safety Code average illuminance of 1.0 fc. Assumes open space with no obstructions and mounting height of 11'.

Diagrams for illustration purposes only, please consult factory for application layout.

Battery backup units consume 6 watts when charging a dead battery and 2 watts during maintenance charging. EH (units with a heater) consume up to an additional 8 watts when charging if the battery temp is lower than 10°C

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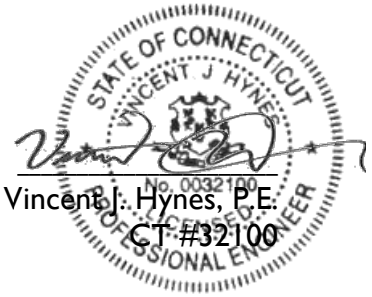
SITE ENGINEERING REPORT
30, 32, & 34 Charles Street
Norwalk, CT

Prepared For
Tomas Brothers LLC

Prepared by
Redniss & Mead, Inc.
22 First Street
Stamford, CT
(203) 327-0500

Issued on:

December 12, 2025



Vincent J. Hynes, P.E.
CT #32100

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Appendix 2: Existing & Proposed On-Site Hydraulic Data

Appendix 3: Rainfall Intensity Data, NRCS Web Soil Survey, FEMA Firmette, & USGS Quad Map

Appendix 4: Draft Stormwater Operations and Maintenance Plan

ORIENTATION



DRAINAGE SUMMARY NARRATIVE

Introduction

The applicant (Tomas Brothers LLC) is proposing to develop the properties located at 30, 32, and 34 Charles Street, in Norwalk, CT. The development includes razing existing improvements at 30 Charles Street and construction of new duplex units with permeable paver driveways, patios, walkways, and associated site improvements on each lot. The proposal will consist of three duplex units (one per lot) and 6 total residential units; each unit will have one attached garage parking space and one surface parking space.

The combined development area is 22,048 sf (0.51 acres) and is located at the northern end of Charles Street, bound by multi-family residential parcels and the Norwalk River. The site lies within the CD-2 zoning district. A portion of the property at 34 Charles Street is located within the 100-year flood zone (AE-10) of the Norwalk River as depicted by the Federal Emergency Management Agency (FEMA) on "Flood Insurance Rate Maps" (FIRM) for Fairfield County, Community No. 09001C0531G, effective date July 8, 2013. The remainder of the parcel and the parcels at 30 and 32 Charles Street are not located within a Special Flood Hazard Area. Although the properties will remain separate zoning lots, this report studies the existing and proposed stormwater runoff from the combined development area. Reference is made to the accompanying site development plans prepared by Redniss & Mead, Inc.

Existing Conditions

The development area is approximately 0.51 acres and is currently developed with a single-family residential dwelling, driveway, pool, and patio area, all of which are primarily on 30 Charles Street. In total, there is 3,779 sf of impervious area. There are no formal stormwater facilities on-site. The topography of the site is generally sloped from southeast to northwest and the stormwater runoff is ultimately tributary to the Norwalk River as it sheet flows from the site. Refer to Appendix 1 for Existing Conditions Drainage Basin Exhibit

Proposed Conditions

The developer is seeking approval to construct three duplex units on the three parcels with associated driveways, parking, walkways and patios/decks, and other associated improvements. In total, the area of hardscape improvements increases by approximately 9,856 square feet (for a total of 13,635 square feet of hardscape improvement area). However, the new driveways and parking areas, as well as the patio areas, will be either porous asphalt or permeable pavers, both of which have crushed stone reservoirs below and do not count as impervious coverage, which will result in an effective impervious coverage of 7,911 sf. Water quality improvements are provided, and peak rates and volumes of runoff will be reduced through the use of permeable paver systems. Reference is made to the site and utility plans prepared by Redniss & Mead, Inc and to the Proposed Conditions Drainage Basin Exhibit within Appendix 1.

The proposed improvements are primarily kept upland of the flood zone, with the exception of a sanitary sewer connection for the site. The driveway and parking areas are split into three permeable paver basins (PP#1, PP#2, and PP#3)). The permeable paver system designs are as follows:

Basin PP#1 is located within the boundaries of 32 Charles Street. The tributary area consists of the site roof area, parking area, and landscaped areas (3,933 sf of total tributary area). The paver driveway will consist of two separate profiles: 1) the upper segment of pavers will consist of a 2" bedding course and a 6" crushed stone reservoir that slopes with the finished grade; and 2) the lower segment (approximately 1,150 sf) will consist of a 2" bedding course and a minimum 24" crushed stone reservoir that will have a level bottom elevation of 25.50. Roof leaders within the basin will be tributary to the system via a perforated pipe that discharges into the stone reservoir. The high overflow consists of a flush curb at the shared property boundary of 30/32 Charles Street, which provides 922 cf of water quality volume (393 cf required). Although the permeable pavers are proposed for the entirety of the driveway, the storage within the upper segment is not accounted for within this report.

Basin PP#2 is located within the boundaries of 30 Charles Street. The tributary area consists of the site roof area, parking area, and landscaped areas (4,578 sf of total tributary area), as well as the overflow from PP#1. The paver driveway will consist of two separate profiles: 1) the upper segment of pavers will consist of a 2" bedding course and a 6" crushed stone reservoir that slopes with the finished grade; and 2) the lower segment (approximately 1,420 sf) will consist of a 2" bedding course and a minimum 24" crushed stone reservoir that will have a level bottom elevation of 23.60. Roof leaders within the basin will be tributary to the system via a perforated pipe that discharges into the stone reservoir. The high overflow consists of a flush curb at the shared property boundary of 30/34 Charles Street, which provides 1,134 cf of water quality volume (434 cf required). Although the permeable pavers are proposed for the entirety of the driveway, the storage within the upper segment is not accounted for within this report.

Basin PP#3 is located within the boundaries of 34 Charles Street. The tributary area consists of the site roof area, parking area, and landscaped areas (4,057 sf of total tributary area), as well as the overflow from PP#2. The paver driveway will consist of two separate profiles: 1) the upper segment of pavers will consist of a 2" bedding course and a 6" crushed stone reservoir that slopes with the finished grade; and 2) the lower segment (approximately 1,150 sf) will consist of a 2" bedding course and a minimum 24" crushed stone reservoir that will have a level bottom elevation of 21.70. Roof leaders within the basin will be tributary to the system via a perforated pipe that discharges into the stone reservoir. The high overflow consists of a catch basin set at elevation 23.70, which provides 917 cf of water quality volume (383 cf required). Although the permeable pavers are proposed for the entirety of the driveway, the storage within the upper segment is not accounted for within this report. The overflow catch basin will be connected to an at-grade level spreader in the northwest corner of the parcel.

The remainder of the site will bypass the crushed stone reservoir systems and generally sheet flow under similar conditions to existing conditions. The bypass basin consists of patio area, deck area, walkways, and landscaped areas (9,483 sf of total tributary area). Additional water quality and groundwater recharge occurs within the bypass basin via the patio and deck areas as these areas are open jointed/permeable with crushed stone below.

Based upon test pits conducted on August 14, 2025, the soils on-site generally consist of sandy loam material and bank run gravel. This is consistent with the NRCS soils report which indicates hydrologic soil group B-type Agawam-Urban land complex soils, which are a well-drained, sandy loam material. To be conservative, an assumed rate of percolation of 0.5"/hr was used for the drainage

calculations. Please refer to the test pit data shown on sheet SE-6 and NRCS soils report in the appendix of this report for further information.

Calculations were prepared using the methodologies provided in Technical Release 55: Urban Hydrology for Small Watersheds, published by the United States Department of Agriculture National Resources Conservation Service and HydroCAD software. Note that the rainfall rates used are based upon the National Oceanic and Atmospheric Administration (NOAA) National Weather Service Hydrometeorological Design Studies Center Precipitation Frequency Data Server (PFDS) for the area. The following tables depict the existing and proposed peak flows leaving the site and their associated runoff volumes:

Table 1: Peak Rates of Runoff

z		Site Runoff Peak Flow (cfs)			
Return Period (yrs)	Rainfall Rates (in)	Ex	Pr	Change	% Change
2	3.49	0.39	0.22	-0.17	-43.6%
5	4.50	0.73	0.40	-0.33	-45.2%
10	5.33	1.04	0.56	-0.48	-46.2%
25	6.48	1.50	0.80	-0.70	-46.7%
50	7.34	1.86	1.00	-0.86	-46.2%
100	8.26	2.26	1.76	-0.50	-22.1%

Table 2: Runoff Volume

		Site Volume Runoff Volume (cf)			
Return Period (yrs)	Rainfall Rates (in)	Ex	Pr	Change	% Change
2	3.49	1,578	728	-850	-53.9%
5	4.50	2,725	1,238	-1,487	-54.6%
10	5.34	3,783	1,705	-2,078	-54.9%
25	6.48	5,372	3,129	-2,243	-41.8%
50	7.34	6,630	4,384	-2,246	-33.9%
100	8.26	8,026	5,769	-2,257	-28.1%

Water Quality

Water quality from the proposed development will be improved as compared to existing conditions. This is accomplished as follows:

1. The proposed driveway and patio areas are proposed as permeable pavers providing water quality volume and groundwater recharge for the tributary area. The overflow elevation is set to provide 100% of the water quality volume.
2. Areas not tributary to permeable paver storage consist of proposed walking paths which will be disconnected and flow to landscaped areas of the site.
3. A detailed Sediment and Erosion Control Plan is designed to minimize erosion and requires properly disposing of any accumulation of sediment during construction.

Conclusion

Based on the above information and with proper implementation of the design drawings and proper sediment and erosion controls, the proposed development will not adversely impact adjacent or downstream properties or City owned drainage facilities.

Appendix I

Existing and Proposed On-Site Drainage Basins Maps

LEGEND

PERVIOUS AREA (B-TYPE SOIL)

IMPERVIOUS AREA



EXISTING DRAINAGE BASIN EXHIBIT

30, 32, & 34 CHARLES STREET

NORWALK, CT

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax: 203.357.1118
www.rednissmead.com

COMM. NO.:	DATE:
10304	12/12/2025
	SCALE: 1"=30'

12/8/2025 6:04 PM H:\Jobfiles2\10000\10300\10304\DWG\Tomas\10304A-1 Master 4.dwg

LEGEND

- PERVIOUS AREA (B-TYPE SOIL)
- IMPERVIOUS AREA
- OPEN JOINTED / GRAVEL AREA
- PERMEABLE PAVERS



PROPOSED DRAINAGE BASIN EXHIBIT

30, 32, & 34 CHARLES STREET

NORWALK, CT

REDNISS & MEAD

LAND SURVEYING
CIVIL ENGINEERING
PLANNING & ZONING CONSULTING
PERMITTING

22 First Street | Stamford, CT 06905
Tel: 203.327.0500 | Fax: 203.357.1118
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COMM. NO.:	DATE:
10304	12/12/2025
	SCALE: 1"=30'

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Appendix 2

Existing and Proposed On-Site Hydraulic Data

Water Quality Volume Calculations

Project: *30, 32, & 34 Charles Street*	**Project #:** *10304*	**Date:** *12/12/2025*
Location: *Norwalk, CT*	**By:** *ZPP*	**Checked:** *VJH*

32 Charles

Tributary Area=	0.090	acres
Impervious Area=	0.087	acres
I=	0.968	[a]
R=	0.921	[b]
WQV=	0.009	ac. ft. [c]

WQV Required=	**392.6 ft.^{3}**
WQV Provided=	**922.0 ft.^{3}**

30 Charles

Tributary Area=	0.105	acres
Impervious Area=	0.096	acres
I=	0.917	[a]
R=	0.875	[b]
WQV=	0.010	ac. ft. [c]

WQV Required=	**433.9 ft.^{3}**
WQV Provided=	**1,134.0 ft.^{3}**

34 Charles

Tributary Area=	0.093	acres
Impervious Area=	0.085	acres
I=	0.913	[a]
R=	0.872	[b]
WQV=	0.009	ac. ft. [c]

WQV Required=	**383.1 ft.^{3}**
WQV Provided=	**917.0 ft.^{3}**

[a] I=Percent Impervious Coverage

[b] R=0.05+0.009(I); Volumetric runoff Coefficient, Equation taken from 2024 Connecticut Stormwater Quality Manual chapter 4

[c] WQV=(1.3"xRxA)/12; Water Quality Volume, Equation taken from 2024 Connecticut Stormwater Quality Manual chapter 4

Note: Impervious area includes porous pavement areas.

Groundwater Recharge Volume Calculation

Project: *30, 32, & 34 Charles Street*	**Project #:** *10304*	**Date:** *12/12/2025*
Location: *Norwalk, CT*	**By:** *ZPP*	**Checked:** *VJH*

Proposed Impervious Improvements

Total Impervious Area (I) =	0.313 acres[d]
NRCS Hydrologic Soil Group =	B [a]
Design Rainfall =	1.0 inches
Groundwater Recharge Depth (F) =	0.35 [b]

Groundwater Recharge Volume (GRV)=	**0.009 ac. ft.** [c]	**397.69 ft.^{3}**

[a] From Natural Resources Conservation Service

[b] Table 1-1 from the 2017 City of Norwalk Drainage Manual Section 1.4.4

[c] GRV = F x I from the 2017 City of Norwalk Drainage Manual Section 1.4.4

[d] To be conservative, impervious area for the site includes open jointed and permeable paver areas.

Note: As the GRV is lower than the Water Quality Volumes required, the permeable systems are designed to infiltrate the larger volume.

Level Spreader Calculations

Project: *30, 32, & 34 Charles Street*		*10304*	**Date:** 12/12/2025
Location: *Norwalk, CT*	**By:** *ZPP*		**Checked:** *VJH*

Permeable Paver Overflow

Level Spreader LS#1		
Q =	**1.14 cfs**	[a]

Assumed V_{MAX} =	2.0 ft/sec	[b]
y =	0.124 ft	[c]
H =	0.186 ft	[d]
L=	4.023 Q	[e]

Length Required	4.59 ft

Length Provided	**10.00 ft**

[a] Flow derived from HydroCAD 100-Year Storm Event from Pond 3P

[b] V_{MAX} = Maximum velocity of water over weir (ft/sec)

[c] $y = V^2/g$

[d] H=3/2y

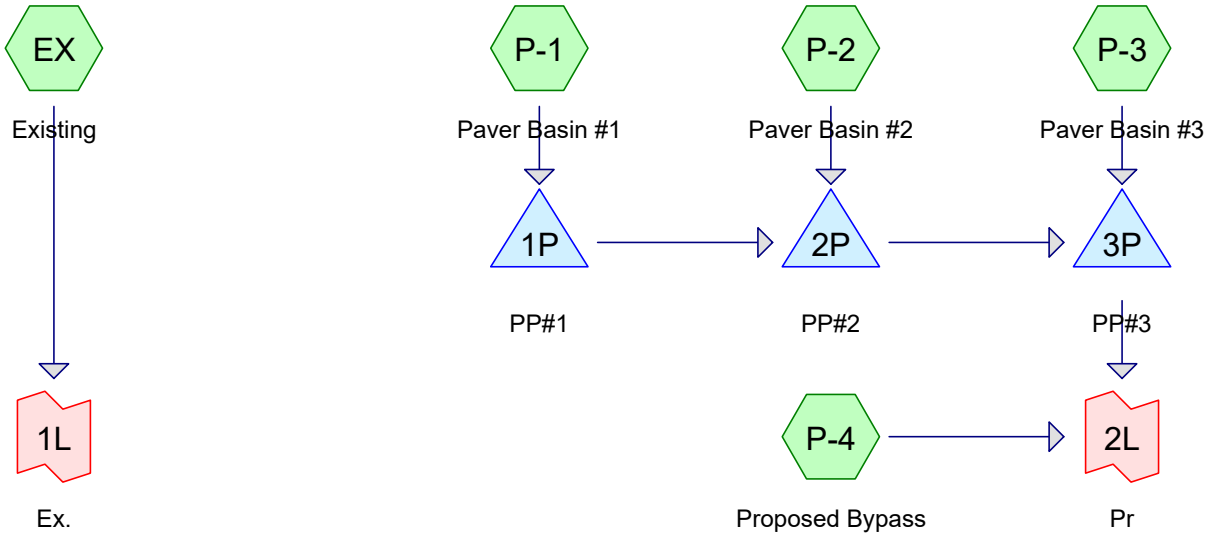
[e] Derived from Broadcrested Weir Equation: $Q = 3.09LH^{3/2}$

y = Depth of water over weir (ft)

H = Head (ft)

EXISTING CONDITIONS

PROPOSED CONDITIONS



Subcat Reach Pond Link

Routing Diagram for 10304 HydroCAD
Prepared by Redniss & Mead, Inc, Printed 12/16/2025
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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type III 24-hr		Default	24.00	1	2.87	2
2	2-Year	Type III 24-hr		Default	24.00	1	3.49	2
3	5-Year	Type III 24-hr		Default	24.00	1	4.50	2
4	10-Year	Type III 24-hr		Default	24.00	1	5.33	2
5	25-Year	Type III 24-hr		Default	24.00	1	6.48	2
6	50-Year	Type III 24-hr		Default	24.00	1	7.34	2
7	100-Year	Type III 24-hr		Default	24.00	1	8.26	2

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>0.53"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=0.21 cfs 979 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>2.51"
Tc=5.0 min CN=96.82 Runoff=0.25 cfs 822 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>2.31"
Tc=5.0 min CN=94.91 Runoff=0.28 cfs 882 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>2.30"
Tc=5.0 min CN=94.79 Runoff=0.25 cfs 777 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>0.58"
Tc=5.0 min CN=68.52 Runoff=0.13 cfs 459 cf

Pond 1P: PP#1 Peak Elev=26.31' Storage=373 cf Inflow=0.25 cfs 822 cf
Discarded=0.01 cfs 774 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 774 cf

Pond 2P: PP#2 Peak Elev=24.30' Storage=395 cf Inflow=0.28 cfs 882 cf
Discarded=0.02 cfs 876 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 876 cf

Pond 3P: PP#3 Peak Elev=22.48' Storage=356 cf Inflow=0.25 cfs 777 cf
Discarded=0.02 cfs 758 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 758 cf

Link 1L: Ex. Inflow=0.21 cfs 979 cf
Primary=0.21 cfs 979 cf

Link 2L: Pr Inflow=0.13 cfs 459 cf
Primary=0.13 cfs 459 cf

Total Runoff Area = 44,098 sf Runoff Volume = 3,920 cf Average Runoff Depth = 1.07"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>0.86"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=0.39 cfs 1,578 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>3.12"
Tc=5.0 min CN=96.82 Runoff=0.31 cfs 1,023 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>2.92"
Tc=5.0 min CN=94.91 Runoff=0.35 cfs 1,113 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>2.91"
Tc=5.0 min CN=94.79 Runoff=0.31 cfs 982 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>0.92"
Tc=5.0 min CN=68.52 Runoff=0.22 cfs 728 cf

Pond 1P: PP#1 Peak Elev=26.58' Storage=497 cf Inflow=0.31 cfs 1,023 cf
Discarded=0.01 cfs 825 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 825 cf

Pond 2P: PP#2 Peak Elev=24.54' Storage=534 cf Inflow=0.35 cfs 1,113 cf
Discarded=0.02 cfs 963 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 963 cf

Pond 3P: PP#3 Peak Elev=22.75' Storage=480 cf Inflow=0.31 cfs 982 cf
Discarded=0.02 cfs 821 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 821 cf

Link 1L: Ex. Inflow=0.39 cfs 1,578 cf
Primary=0.39 cfs 1,578 cf

Link 2L: Pr Inflow=0.22 cfs 728 cf
Primary=0.22 cfs 728 cf

Total Runoff Area = 44,098 sf Runoff Volume = 5,425 cf Average Runoff Depth = 1.48"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>1.48"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=0.73 cfs 2,725 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>4.13"
Tc=5.0 min CN=96.82 Runoff=0.41 cfs 1,352 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>3.91"
Tc=5.0 min CN=94.91 Runoff=0.46 cfs 1,492 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>3.90"
Tc=5.0 min CN=94.79 Runoff=0.41 cfs 1,318 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>1.57"
Tc=5.0 min CN=68.52 Runoff=0.40 cfs 1,238 cf

Pond 1P: PP#1 Peak Elev=27.06' Storage=720 cf Inflow=0.41 cfs 1,352 cf
Discarded=0.02 cfs 899 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 899 cf

Pond 2P: PP#2 Peak Elev=24.98' Storage=783 cf Inflow=0.46 cfs 1,492 cf
Discarded=0.02 cfs 1,056 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 1,056 cf

Pond 3P: PP#3 Peak Elev=23.23' Storage=701 cf Inflow=0.41 cfs 1,318 cf
Discarded=0.02 cfs 919 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 919 cf

Link 1L: Ex. Inflow=0.73 cfs 2,725 cf
Primary=0.73 cfs 2,725 cf

Link 2L: Pr Inflow=0.40 cfs 1,238 cf
Primary=0.40 cfs 1,238 cf

Total Runoff Area = 44,098 sf Runoff Volume = 8,125 cf Average Runoff Depth = 2.21"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>2.06"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=1.04 cfs 3,783 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>4.95"
Tc=5.0 min CN=96.82 Runoff=0.49 cfs 1,623 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>4.73"
Tc=5.0 min CN=94.91 Runoff=0.55 cfs 1,806 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>4.72"
Tc=5.0 min CN=94.79 Runoff=0.49 cfs 1,595 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>2.16"
Tc=5.0 min CN=68.52 Runoff=0.56 cfs 1,705 cf

Pond 1P: PP#1 Peak Elev=27.48' Storage=915 cf Inflow=0.49 cfs 1,623 cf
Discarded=0.02 cfs 955 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 955 cf

Pond 2P: PP#2 Peak Elev=25.37' Storage=1,003 cf Inflow=0.55 cfs 1,806 cf
Discarded=0.02 cfs 1,127 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 1,127 cf

Pond 3P: PP#3 Peak Elev=23.65' Storage=894 cf Inflow=0.49 cfs 1,595 cf
Discarded=0.02 cfs 995 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 995 cf

Link 1L: Ex. Inflow=1.04 cfs 3,783 cf
Primary=1.04 cfs 3,783 cf

Link 2L: Pr Inflow=0.56 cfs 1,705 cf
Primary=0.56 cfs 1,705 cf

Total Runoff Area = 44,098 sf Runoff Volume = 10,512 cf Average Runoff Depth = 2.86"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>2.92"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=1.50 cfs 5,372 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>6.10"
Tc=5.0 min CN=96.82 Runoff=0.59 cfs 1,998 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>5.87"
Tc=5.0 min CN=94.91 Runoff=0.68 cfs 2,241 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>5.86"
Tc=5.0 min CN=94.79 Runoff=0.60 cfs 1,981 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>3.04"
Tc=5.0 min CN=68.52 Runoff=0.80 cfs 2,404 cf

Pond 1P: PP#1 Peak Elev=27.54' Storage=942 cf Inflow=0.59 cfs 1,998 cf
Discarded=0.02 cfs 1,001 cf Primary=0.12 cfs 278 cf Outflow=0.14 cfs 1,279 cf

Pond 2P: PP#2 Peak Elev=25.69' Storage=1,187 cf Inflow=0.68 cfs 2,519 cf
Discarded=0.02 cfs 1,199 cf Primary=0.12 cfs 463 cf Outflow=0.14 cfs 1,662 cf

Pond 3P: PP#3 Peak Elev=23.71' Storage=919 cf Inflow=0.60 cfs 2,443 cf
Discarded=0.02 cfs 1,048 cf Primary=0.17 cfs 726 cf Outflow=0.19 cfs 1,774 cf

Link 1L: Ex. Inflow=1.50 cfs 5,372 cf
Primary=1.50 cfs 5,372 cf

Link 2L: Pr Inflow=0.80 cfs 3,129 cf
Primary=0.80 cfs 3,129 cf

Total Runoff Area = 44,098 sf Runoff Volume = 13,996 cf Average Runoff Depth = 3.81"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Summary for Subcatchment EX: Existing

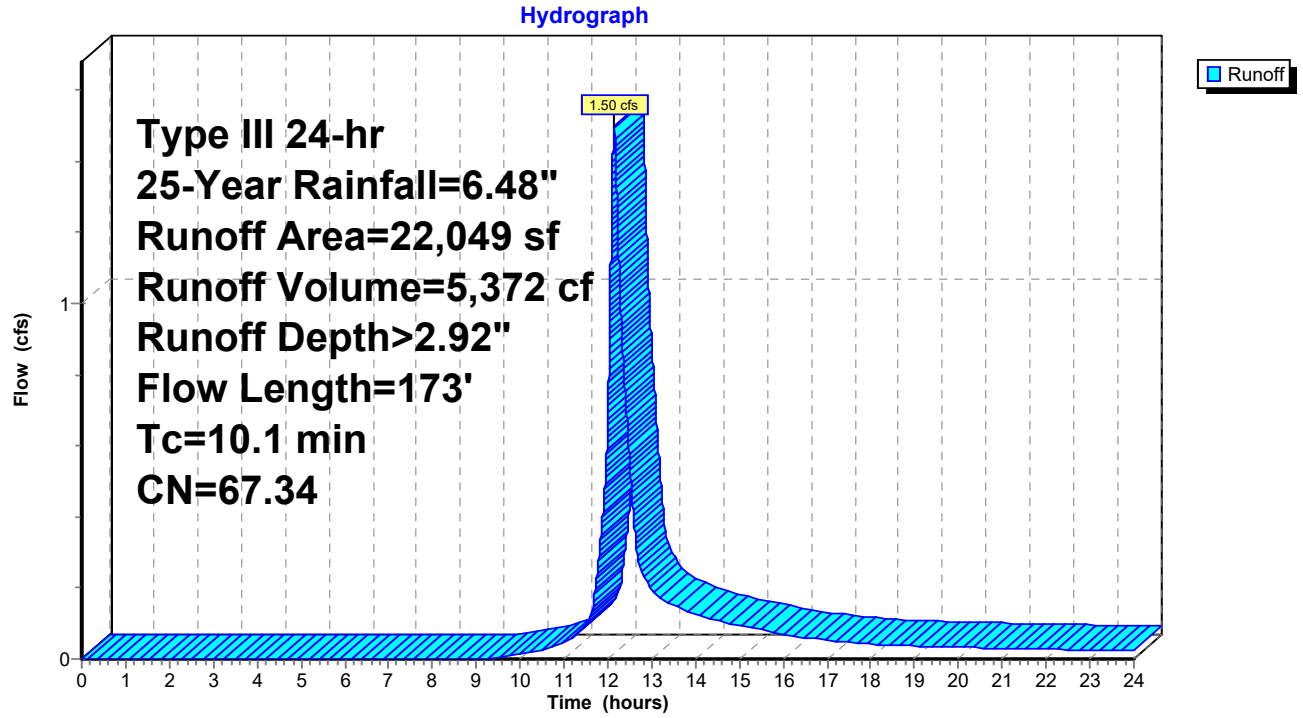
Runoff = 1.50 cfs @ 12.14 hrs, Volume= 5,372 cf, Depth> 2.92"
Routed to Link 1L : Ex.

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
*	6,875	61.00	>75% Grass cover, HSG B (32 Charles)
*	780	98.00	Paved parking, HSG B (32 Charles)
*	4,514	61.00	>75% Grass cover, HSG B (30 Charles)
*	2,915	98.00	Paved parking, HSG B (30 Charles)
*	6,881	61.00	>75% Grass cover, HSG B (34 Charles)
*	84	98.00	Paved parking, HSG B (34 Charles)
	22,049	67.34	Weighted Average
	18,270		82.86% Pervious Area
	3,779		17.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0485	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.45"
0.5	73	0.1281	2.51		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
10.1	173	Total			

Subcatchment EX: Existing



Summary for Subcatchment P-1: Paver Basin #1

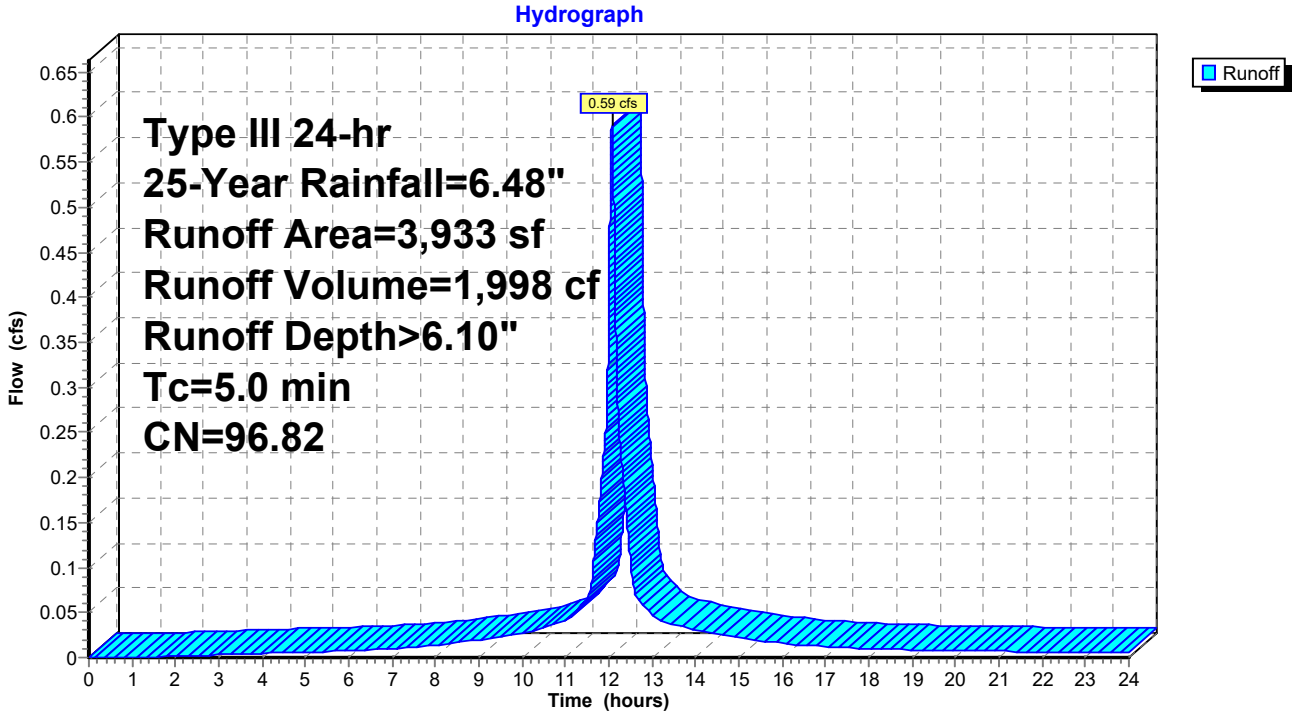
Runoff = 0.59 cfs @ 12.07 hrs, Volume= 1,998 cf, Depth> 6.10"
Routed to Pond 1P : PP#1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
	125	61.00	>75% Grass cover, Good, HSG B
	2,308	98.00	Paved parking, HSG B
*	1,500	98.00	Perm paver, HSG B
	3,933	96.82	Weighted Average
	125		3.18% Pervious Area
	3,808		96.82% Impervious Area

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

Subcatchment P-1: Paver Basin #1



Summary for Subcatchment P-2: Paver Basin #2

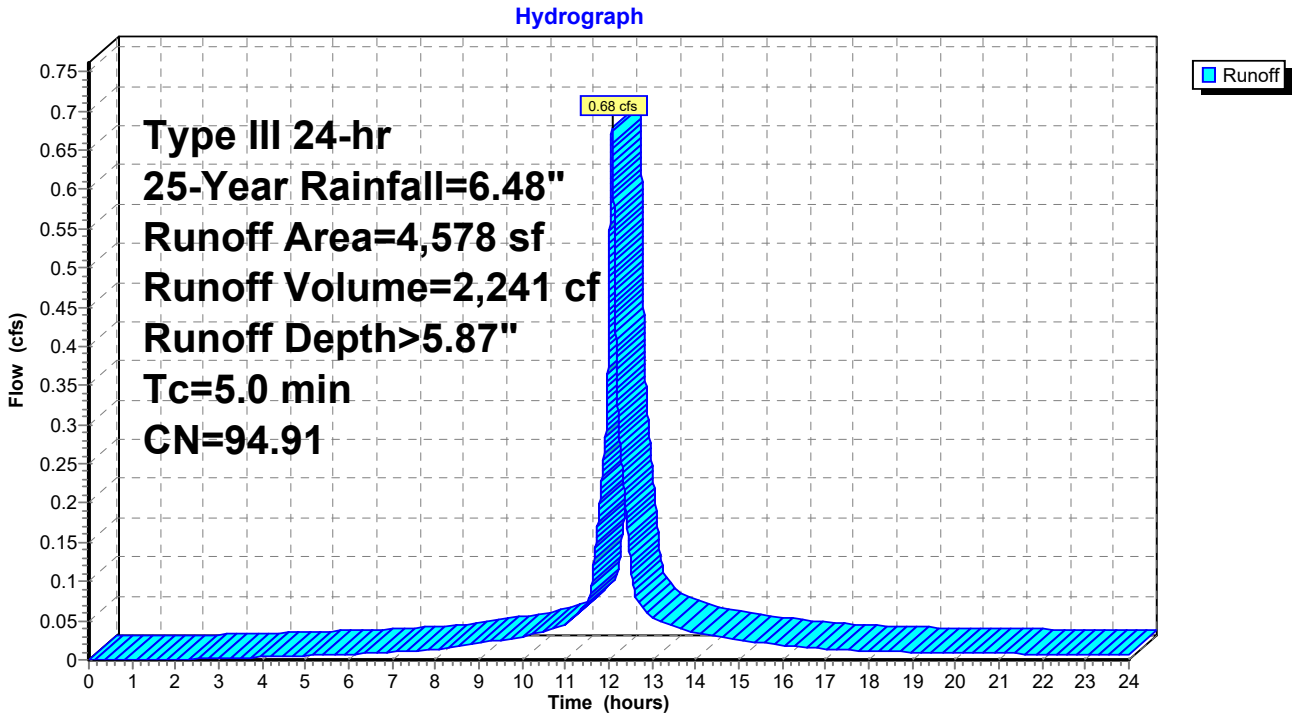
Runoff = 0.68 cfs @ 12.07 hrs, Volume= 2,241 cf, Depth> 5.87"
Routed to Pond 2P : PP#2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
*	217	61.00	>75% Grass cover, Good, HSG B - 30 Charles
	2,431	98.00	Paved parking, HSG B
*	1,765	98.00	Perm paver, HSG B
*	165	61.00	>75% Grass cover, Good, HSG B - 32 Charles
	4,578	94.91	Weighted Average
	382		8.34% Pervious Area
	4,196		91.66% Impervious Area

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

Subcatchment P-2: Paver Basin #2



Summary for Subcatchment P-3: Paver Basin #3

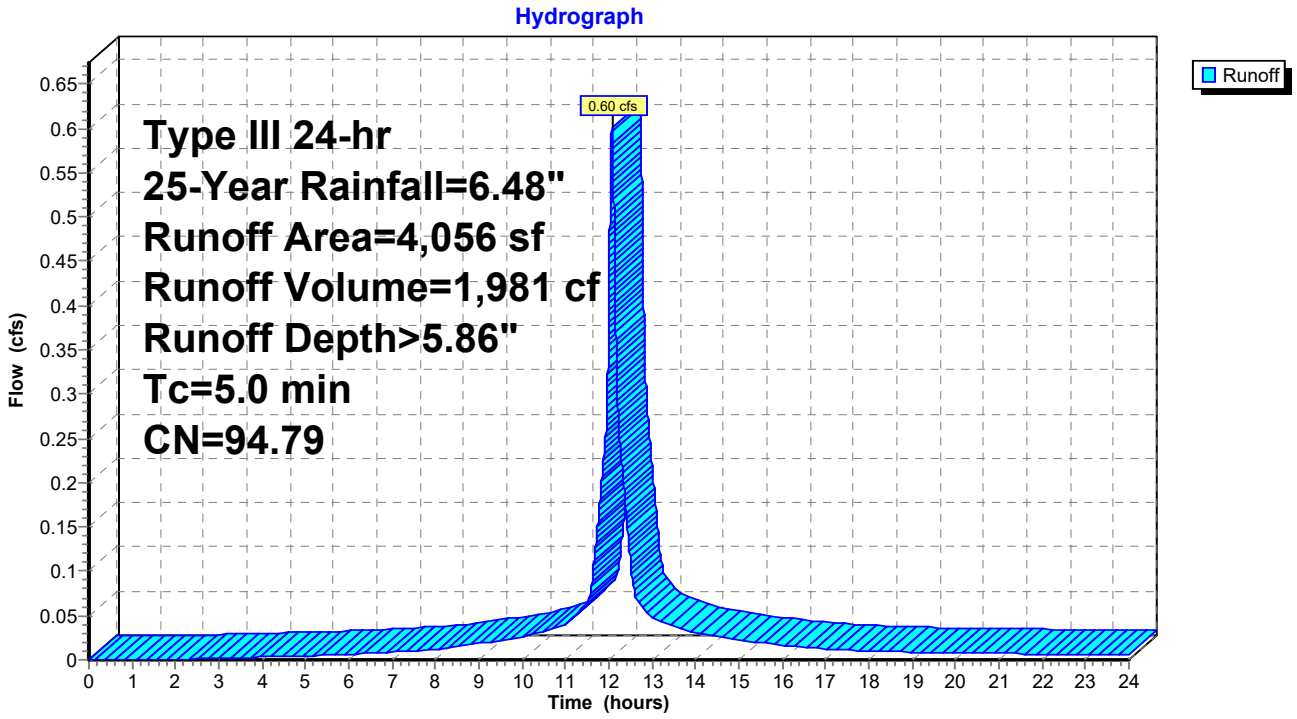
Runoff = 0.60 cfs @ 12.07 hrs, Volume= 1,981 cf, Depth> 5.86"
Routed to Pond 3P : PP#3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
	2,286	98.00	Paved parking, HSG B
*	176	61.00	>75% Grass cover, Good, HSG B - 32 Charles
*	176	61.00	>75% Grass cover, Good, HSG B - 34 Charles
*	1,418	98.00	Perm pavers, HSG B
	4,056	94.79	Weighted Average
	352		8.68% Pervious Area
	3,704		91.32% Impervious Area

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

Subcatchment P-3: Paver Basin #3



Summary for Subcatchment P-4: Proposed Bypass

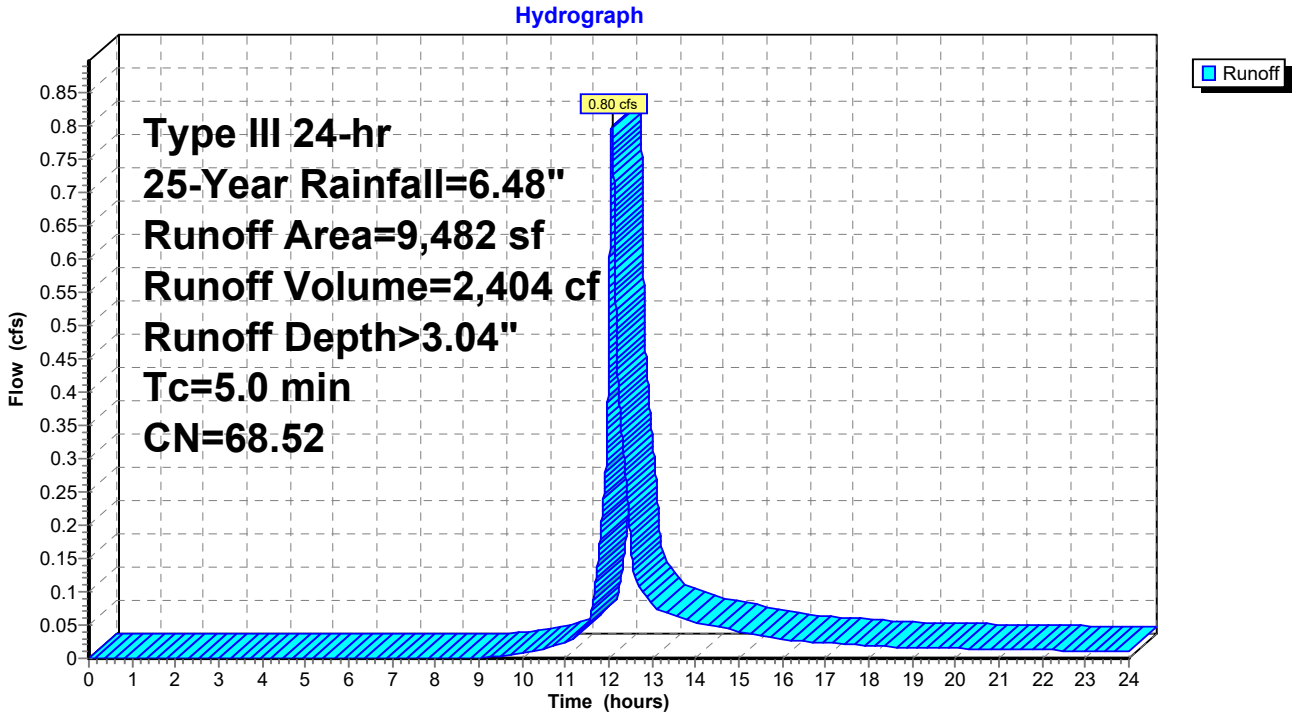
Runoff = 0.80 cfs @ 12.07 hrs, Volume= 2,404 cf, Depth> 3.04"
Routed to Link 2L : Pr

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Type III 24-hr 25-Year Rainfall=6.48"

	Area (sf)	CN	Description
*	2,762	61.00	>75% Grass cover, HSG B (32 Charles)
*	446	98.00	Paved parking, HSG B (32 Charles)
*	291	98.00	Permeable pavers, HSG B (32 Charles)
*	58	98.00	Open jointed, HSG B (32 Charles)
*	2,193	61.00	>75% Grass cover, HSG B (30 Charles)
*	294	98.00	Paved parking, HSG B (30 Charles)
*	291	98.00	Permeable Pavers, HSG B (30 Charles)
*	62	98.00	Open jointed, HSG B (30 Charles)
*	2,601	61.00	>75% Grass cover, HSG B (34 Charles)
*	146	98.00	Paved parking, HSG B (34 Charles)
*	338	98.00	Open jointed, HSG B (34 Charles)
	9,482	68.52	Weighted Average
	7,556		79.69% Pervious Area
	1,926		20.31% Impervious Area

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

Subcatchment P-4: Proposed Bypass



Summary for Pond 1P: PP#1

Inflow Area = 3,933 sf, 96.82% Impervious, Inflow Depth > 6.10" for 25-Year event
Inflow = 0.59 cfs @ 12.07 hrs, Volume= 1,998 cf
Outflow = 0.14 cfs @ 12.44 hrs, Volume= 1,279 cf, Atten= 77%, Lag= 22.3 min
Discarded = 0.02 cfs @ 12.44 hrs, Volume= 1,001 cf
Primary = 0.12 cfs @ 12.44 hrs, Volume= 278 cf
Routed to Pond 2P : PP#2

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Peak Elev= 27.54' @ 12.44 hrs Surf.Area= 1,153 sf Storage= 942 cf

Plug-Flow detention time= 222.3 min calculated for 1,279 cf (64% of inflow)
Center-of-Mass det. time= 119.3 min (869.7 - 750.4)

Volume	Invert	Avail.Storage	Storage Description
#1	25.50'	1,222 cf	**Porous/Stone Storage (Prismatic)** Listed below (Recalc) 3,055 cf Overall x 40.0% Voids
#2	27.50'	749 cf	**Open Air (Prismatic)** Listed below (Recalc)
		1,972 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
25.50	1,153	0	0
27.50	1,153	2,306	2,306
28.80	0	749	3,055

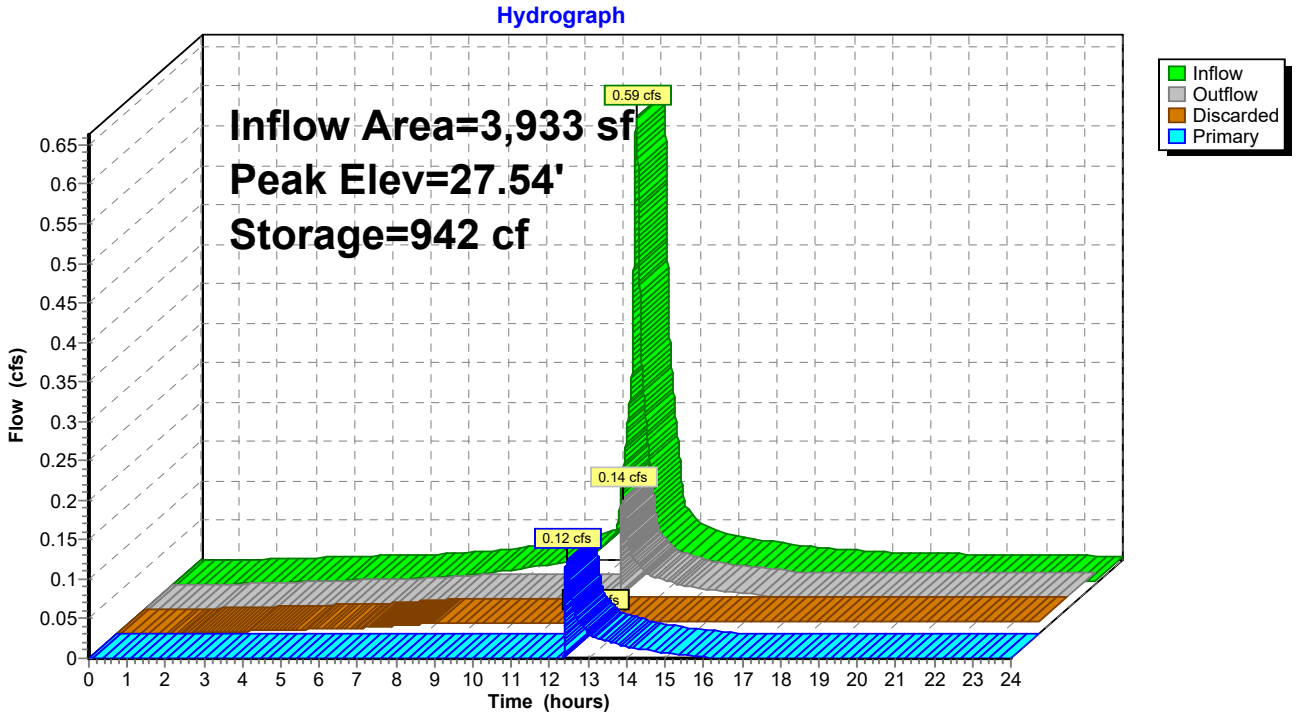
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
27.50	0	0	0
28.80	1,153	749	749

Device	Routing	Invert	Outlet Devices
#1	Primary	27.50'	**Asymmetrical Weir, C= 3.27** Offset (feet) 0.00 0.01 11.99 12.00 Elev. (feet) 28.00 27.55 27.50 28.00
#2	Discarded	25.50'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 14.50'

Discarded OutFlow Max=0.02 cfs @ 12.44 hrs HW=27.54' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.11 cfs @ 12.44 hrs HW=27.54' (Free Discharge)
↑—**1=Asymmetrical Weir** (Weir Controls 0.11 cfs @ 0.27 fps)

Pond 1P: PP#1


Hydrograph
Inflow Area=3,933 sf
Peak Elev=27.54'
Storage=942 cf
0.59 cfs
0.14 cfs
0.12 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1P: PP#1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
25.50	**1,153**	0	26.54	1,153	480
25.52	1,153	9	26.56	1,153	489
25.54	1,153	18	26.58	1,153	498
25.56	1,153	28	26.60	1,153	507
25.58	1,153	37	26.62	1,153	517
25.60	1,153	46	26.64	1,153	526
25.62	1,153	55	26.66	1,153	535
25.64	1,153	65	26.68	1,153	544
25.66	1,153	74	26.70	1,153	553
25.68	1,153	83	26.72	1,153	563
25.70	1,153	92	26.74	1,153	572
25.72	1,153	101	26.76	1,153	581
25.74	1,153	111	26.78	1,153	590
25.76	1,153	120	26.80	1,153	600
25.78	1,153	129	26.82	1,153	609
25.80	1,153	138	26.84	1,153	618
25.82	1,153	148	26.86	1,153	627
25.84	1,153	157	26.88	1,153	636
25.86	1,153	166	26.90	1,153	646
25.88	1,153	175	26.92	1,153	655
25.90	1,153	184	26.94	1,153	664
25.92	1,153	194	26.96	1,153	673
25.94	1,153	203	26.98	1,153	683
25.96	1,153	212	27.00	1,153	692
25.98	1,153	221	27.02	1,153	701
26.00	1,153	231	27.04	1,153	710
26.02	1,153	240	27.06	1,153	719
26.04	1,153	249	27.08	1,153	729
26.06	1,153	258	27.10	1,153	738
26.08	1,153	267	27.12	1,153	747
26.10	1,153	277	27.14	1,153	756
26.12	1,153	286	27.16	1,153	766
26.14	1,153	295	27.18	1,153	775
26.16	1,153	304	27.20	1,153	784
26.18	1,153	314	27.22	1,153	793
26.20	1,153	323	27.24	1,153	802
26.22	1,153	332	27.26	1,153	812
26.24	1,153	341	27.28	1,153	821
26.26	1,153	351	27.30	1,153	830
26.28	1,153	360	27.32	1,153	839
26.30	1,153	369	27.34	1,153	849
26.32	1,153	378	27.36	1,153	858
26.34	1,153	387	27.38	1,153	867
26.36	1,153	397	27.40	1,153	876
26.38	1,153	406	27.42	1,153	886
26.40	1,153	415	27.44	1,153	895
26.42	1,153	424	27.46	1,153	904
26.44	1,153	434	27.48	1,153	913
26.46	1,153	443	27.50	1,153	922
26.48	1,153	452	27.52	1,153	932
26.50	1,153	461	27.54	1,153	941
26.52	1,153	470	27.56	1,153	951

Stage-Area-Storage for Pond 1P: PP#1 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
27.58	1,153	961
27.60	1,153	971
27.62	1,153	982
27.64	1,153	992
27.66	1,153	1,003
27.68	1,153	1,014
27.70	1,153	1,025
27.72	1,153	1,037
27.74	1,153	1,048
27.76	1,153	1,060
27.78	1,153	1,072
27.80	1,153	1,085
27.82	1,153	1,097
27.84	1,153	1,110
27.86	1,153	1,123
27.88	1,153	1,136
27.90	1,153	1,149
27.92	1,153	1,163
27.94	1,153	1,177
27.96	1,153	1,191
27.98	1,153	1,205
28.00	1,153	1,220
28.02	1,153	1,234
28.04	1,153	1,249
28.06	1,153	1,264
28.08	1,153	1,279
28.10	1,153	1,295
28.12	1,153	1,311
28.14	1,153	1,327
28.16	1,153	1,343
28.18	1,153	1,359
28.20	1,153	1,376
28.22	1,153	1,392
28.24	1,153	1,409
28.26	1,153	1,427
28.28	1,153	1,444
28.30	1,153	1,462
28.32	1,153	1,479
28.34	1,153	1,498
28.36	1,153	1,516
28.38	1,153	1,534
28.40	1,153	1,553
28.42	1,153	1,572
28.44	1,153	1,591
28.46	1,153	1,610
28.48	1,153	1,630
28.50	1,153	1,650
28.52	1,153	1,670
28.54	1,153	1,690
28.56	1,153	1,710
28.58	1,153	1,731
28.60	1,153	1,752
28.62	1,153	1,773
28.64	1,153	1,794
28.66	1,153	1,815
28.68	1,153	1,837
28.70	1,153	1,859
28.72	1,153	1,881
28.74	1,153	1,903
28.76	1,153	1,926
28.78	1,153	1,949
28.80	1,153	**1,972**

Summary for Pond 2P: PP#2

Inflow Area = 8,511 sf, 94.04% Impervious, Inflow Depth > 3.55" for 25-Year event
Inflow = 0.68 cfs @ 12.07 hrs, Volume= 2,519 cf
Outflow = 0.14 cfs @ 12.63 hrs, Volume= 1,662 cf, Atten= 80%, Lag= 33.6 min
Discarded = 0.02 cfs @ 12.63 hrs, Volume= 1,199 cf
Primary = 0.12 cfs @ 12.63 hrs, Volume= 463 cf
Routed to Pond 3P : PP#3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Peak Elev= 25.69' @ 12.63 hrs Surf.Area= 1,418 sf Storage= 1,187 cf

Plug-Flow detention time= 217.4 min calculated for 1,662 cf (66% of inflow)
Center-of-Mass det. time= 125.3 min (890.1 - 764.8)

Volume	Invert	Avail.Storage	Storage Description
#1	23.60'	1,659 cf	**Porous/Asphalt Storage (Prismatic)** Listed below (Recalc) 4,148 cf Overall x 40.0% Voids
#2	25.60'	1,312 cf	**Open Air (Prismatic)** Listed below (Recalc)
		2,971 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.60	1,418	0	0
25.60	1,418	2,836	2,836
27.45	0	1,312	4,148

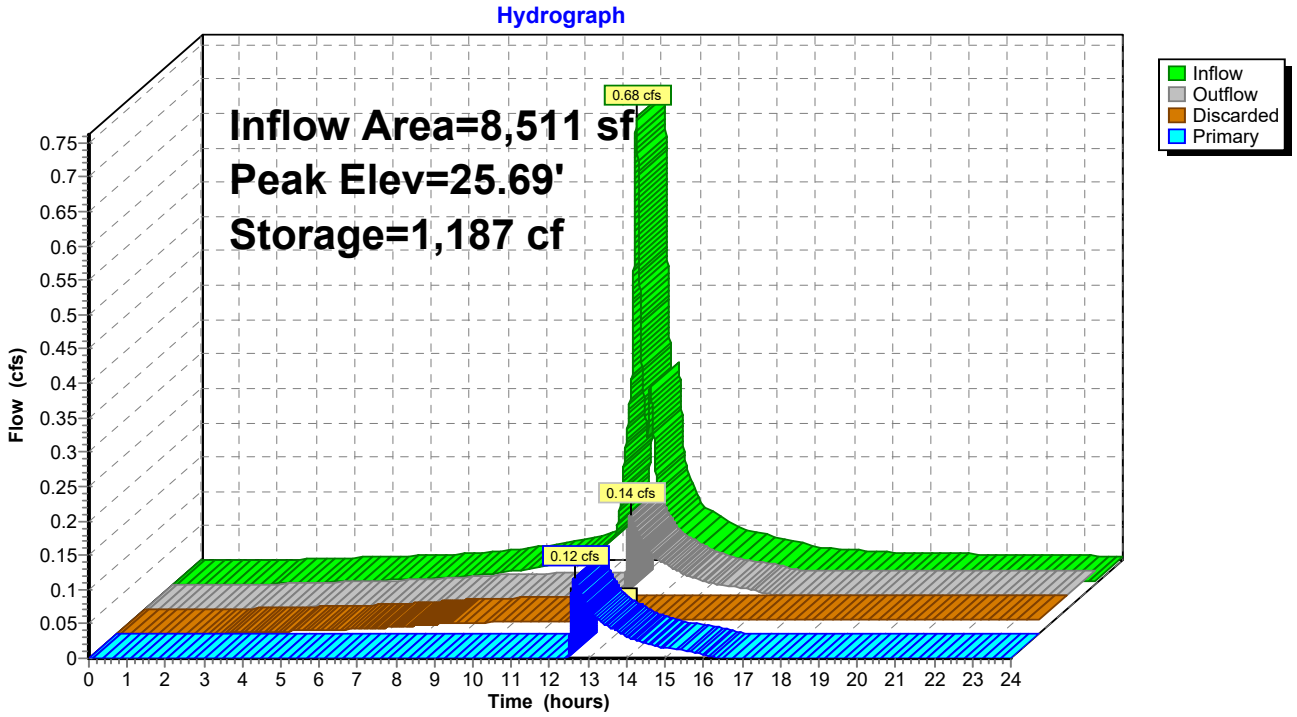
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
25.60	0	0	0
27.45	1,418	1,312	1,312

Device	Routing	Invert	Outlet Devices
#1	Primary	25.60'	**Asymmetrical Weir, C= 3.27** Offset (feet) 0.00 0.01 11.99 12.00 Elev. (feet) 26.45 25.95 25.60 26.45
#2	Discarded	23.60'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 14.50'

Discarded OutFlow Max=0.02 cfs @ 12.63 hrs HW=25.69' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.11 cfs @ 12.63 hrs HW=25.69' (Free Discharge)
↑—**1=Asymmetrical Weir** (Weir Controls 0.11 cfs @ 0.39 fps)

Pond 2P: PP#2


Hydrograph
Inflow Area=8,511 sf
Peak Elev=25.69'
Storage=1,187 cf
0.68 cfs
0.14 cfs
0.12 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 2P: PP#2

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
23.60	**1,418**	0	24.64	1,418	590
23.62	1,418	11	24.66	1,418	601
23.64	1,418	23	24.68	1,418	613
23.66	1,418	34	24.70	1,418	624
23.68	1,418	45	24.72	1,418	635
23.70	1,418	57	24.74	1,418	647
23.72	1,418	68	24.76	1,418	658
23.74	1,418	79	24.78	1,418	669
23.76	1,418	91	24.80	1,418	681
23.78	1,418	102	24.82	1,418	692
23.80	1,418	113	24.84	1,418	703
23.82	1,418	125	24.86	1,418	715
23.84	1,418	136	24.88	1,418	726
23.86	1,418	147	24.90	1,418	737
23.88	1,418	159	24.92	1,418	749
23.90	1,418	170	24.94	1,418	760
23.92	1,418	182	24.96	1,418	771
23.94	1,418	193	24.98	1,418	783
23.96	1,418	204	25.00	1,418	794
23.98	1,418	216	25.02	1,418	805
24.00	1,418	227	25.04	1,418	817
24.02	1,418	238	25.06	1,418	828
24.04	1,418	250	25.08	1,418	839
24.06	1,418	261	25.10	1,418	851
24.08	1,418	272	25.12	1,418	862
24.10	1,418	284	25.14	1,418	873
24.12	1,418	295	25.16	1,418	885
24.14	1,418	306	25.18	1,418	896
24.16	1,418	318	25.20	1,418	908
24.18	1,418	329	25.22	1,418	919
24.20	1,418	340	25.24	1,418	930
24.22	1,418	352	25.26	1,418	942
24.24	1,418	363	25.28	1,418	953
24.26	1,418	374	25.30	1,418	964
24.28	1,418	386	25.32	1,418	976
24.30	1,418	397	25.34	1,418	987
24.32	1,418	408	25.36	1,418	998
24.34	1,418	420	25.38	1,418	1,010
24.36	1,418	431	25.40	1,418	1,021
24.38	1,418	442	25.42	1,418	1,032
24.40	1,418	454	25.44	1,418	1,044
24.42	1,418	465	25.46	1,418	1,055
24.44	1,418	476	25.48	1,418	1,066
24.46	1,418	488	25.50	1,418	1,078
24.48	1,418	499	25.52	1,418	1,089
24.50	1,418	510	25.54	1,418	1,100
24.52	1,418	522	25.56	1,418	1,112
24.54	1,418	533	25.58	1,418	1,123
24.56	1,418	545	25.60	1,418	1,134
24.58	1,418	556	25.62	1,418	1,146
24.60	1,418	567	25.64	1,418	1,157
24.62	1,418	579	25.66	1,418	1,169

Stage-Area-Storage for Pond 2P: PP#2 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
25.68	1,418	1,181
25.70	1,418	1,193
25.72	1,418	1,206
25.74	1,418	1,218
25.76	1,418	1,231
25.78	1,418	1,244
25.80	1,418	1,257
25.82	1,418	1,270
25.84	1,418	1,284
25.86	1,418	1,297
25.88	1,418	1,311
25.90	1,418	1,325
25.92	1,418	1,339
25.94	1,418	1,354
25.96	1,418	1,368
25.98	1,418	1,383
26.00	1,418	1,398
26.02	1,418	1,413
26.04	1,418	1,428
26.06	1,418	1,444
26.08	1,418	1,460
26.10	1,418	1,475
26.12	1,418	1,492
26.14	1,418	1,508
26.16	1,418	1,524
26.18	1,418	1,541
26.20	1,418	1,558
26.22	1,418	1,574
26.24	1,418	1,592
26.26	1,418	1,609
26.28	1,418	1,626
26.30	1,418	1,644
26.32	1,418	1,662
26.34	1,418	1,680
26.36	1,418	1,698
26.38	1,418	1,717
26.40	1,418	1,735
26.42	1,418	1,754
26.44	1,418	1,773
26.46	1,418	1,792
26.48	1,418	1,812
26.50	1,418	1,831
26.52	1,418	1,851
26.54	1,418	1,871
26.56	1,418	1,891
26.58	1,418	1,911
26.60	1,418	1,932
26.62	1,418	1,952
26.64	1,418	1,973
26.66	1,418	1,994
26.68	1,418	2,015
26.70	1,418	2,037
26.72	1,418	2,058
26.74	1,418	2,080
26.76	1,418	2,102
26.78	1,418	2,124
26.80	1,418	2,146
26.82	1,418	2,169
26.84	1,418	2,191
26.86	1,418	2,214
26.88	1,418	2,237
26.90	1,418	2,260
26.92	1,418	2,284
26.94	1,418	2,307
26.96	1,418	2,331
26.98	1,418	2,355
27.00	1,418	2,379
27.02	1,418	2,403
27.04	1,418	2,428
27.06	1,418	2,453
27.08	1,418	2,478
27.10	1,418	2,503
27.12	1,418	2,528
27.14	1,418	2,553
27.16	1,418	2,579
27.18	1,418	2,605
27.20	1,418	2,631
27.22	1,418	2,657
27.24	1,418	2,683
27.26	1,418	2,710
27.28	1,418	2,736
27.30	1,418	2,763
27.32	1,418	2,790
27.34	1,418	2,818
27.36	1,418	2,845
27.38	1,418	2,873
27.40	1,418	2,900
27.42	1,418	2,928
27.44	1,418	**2,957**

Summary for Pond 3P: PP#3

Inflow Area = 12,567 sf, 93.16% Impervious, Inflow Depth > 2.33" for 25-Year event
Inflow = 0.60 cfs @ 12.07 hrs, Volume= 2,443 cf
Outflow = 0.19 cfs @ 12.62 hrs, Volume= 1,774 cf, Atten= 69%, Lag= 32.9 min
Discarded = 0.02 cfs @ 12.62 hrs, Volume= 1,048 cf
Primary = 0.17 cfs @ 12.62 hrs, Volume= 726 cf
Routed to Link 2L : Pr

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs
Peak Elev= 23.71' @ 12.62 hrs Surf.Area= 1,146 sf Storage= 919 cf

Plug-Flow detention time= 181.4 min calculated for 1,774 cf (73% of inflow)
Center-of-Mass det. time= 103.2 min (874.4 - 771.2)

Volume	Invert	Avail.Storage	Storage Description
#1	21.70'	1,375 cf	**Porous/Asphalt Storage (Prismatic)** Listed below (Recalc) 3,438 cf Overall x 40.0% Voids
#2	23.70'	1,146 cf	**Open Air (Prismatic)** Listed below (Recalc)
		2,521 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
21.70	1,146	0	0
23.70	1,146	2,292	2,292
25.70	0	1,146	3,438

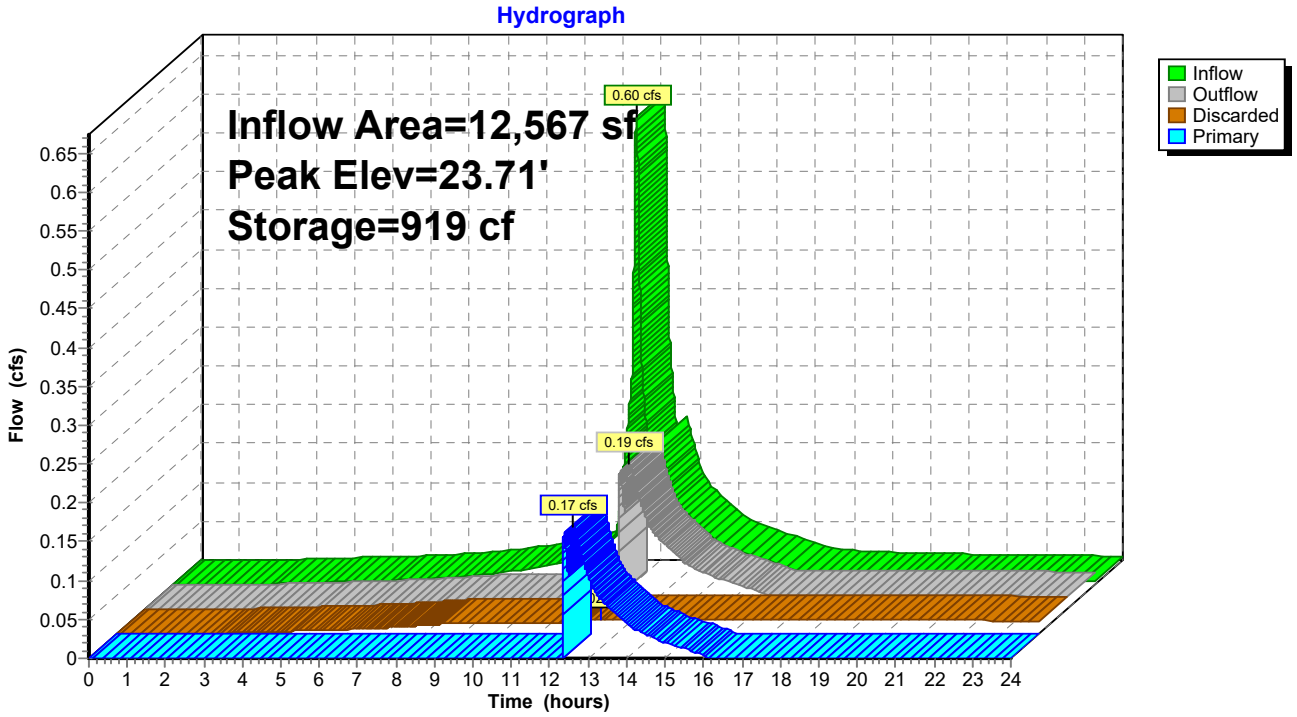
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.70	0	0	0
25.70	1,146	1,146	1,146

Device	Routing	Invert	Outlet Devices
#1	Primary	23.70'	**CB Overflow** Head (feet) 0.00 0.08 0.16 0.25 0.33 0.42 0.50 Disch. (cfs) 0.000 2.500 4.000 5.000 5.800 6.500 7.000
#2	Discarded	21.70'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 16.00'

Discarded OutFlow Max=0.02 cfs @ 12.62 hrs HW=23.71' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.17 cfs @ 12.62 hrs HW=23.71' (Free Discharge)
↑—**1=CB Overflow** (Custom Controls 0.17 cfs)

Pond 3P: PP#3


Hydrograph
Inflow Area=12,567 sf
Peak Elev=23.71'
Storage=919 cf
0.60 cfs
0.19 cfs
0.17 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
0 0.05 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65
Time (hours)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Stage-Area-Storage for Pond 3P: PP#3

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
21.70	**1,146**	0	22.74	1,146	477
21.72	1,146	9	22.76	1,146	486
21.74	1,146	18	22.78	1,146	495
21.76	1,146	28	22.80	1,146	504
21.78	1,146	37	22.82	1,146	513
21.80	1,146	46	22.84	1,146	523
21.82	1,146	55	22.86	1,146	532
21.84	1,146	64	22.88	1,146	541
21.86	1,146	73	22.90	1,146	550
21.88	1,146	83	22.92	1,146	559
21.90	1,146	92	22.94	1,146	568
21.92	1,146	101	22.96	1,146	578
21.94	1,146	110	22.98	1,146	587
21.96	1,146	119	23.00	1,146	596
21.98	1,146	128	23.02	1,146	605
22.00	1,146	138	23.04	1,146	614
22.02	1,146	147	23.06	1,146	623
22.04	1,146	156	23.08	1,146	633
22.06	1,146	165	23.10	1,146	642
22.08	1,146	174	23.12	1,146	651
22.10	1,146	183	23.14	1,146	660
22.12	1,146	193	23.16	1,146	669
22.14	1,146	202	23.18	1,146	678
22.16	1,146	211	23.20	1,146	688
22.18	1,146	220	23.22	1,146	697
22.20	1,146	229	23.24	1,146	706
22.22	1,146	238	23.26	1,146	715
22.24	1,146	248	23.28	1,146	724
22.26	1,146	257	23.30	1,146	733
22.28	1,146	266	23.32	1,146	743
22.30	1,146	275	23.34	1,146	752
22.32	1,146	284	23.36	1,146	761
22.34	1,146	293	23.38	1,146	770
22.36	1,146	303	23.40	1,146	779
22.38	1,146	312	23.42	1,146	788
22.40	1,146	321	23.44	1,146	798
22.42	1,146	330	23.46	1,146	807
22.44	1,146	339	23.48	1,146	816
22.46	1,146	348	23.50	1,146	825
22.48	1,146	358	23.52	1,146	834
22.50	1,146	367	23.54	1,146	843
22.52	1,146	376	23.56	1,146	853
22.54	1,146	385	23.58	1,146	862
22.56	1,146	394	23.60	1,146	871
22.58	1,146	403	23.62	1,146	880
22.60	1,146	413	23.64	1,146	889
22.62	1,146	422	23.66	1,146	898
22.64	1,146	431	23.68	1,146	908
22.66	1,146	440	23.70	1,146	917
22.68	1,146	449	23.72	1,146	926
22.70	1,146	458	23.74	1,146	935
22.72	1,146	468	23.76	1,146	945

Stage-Area-Storage for Pond 3P: PP#3 (continued)

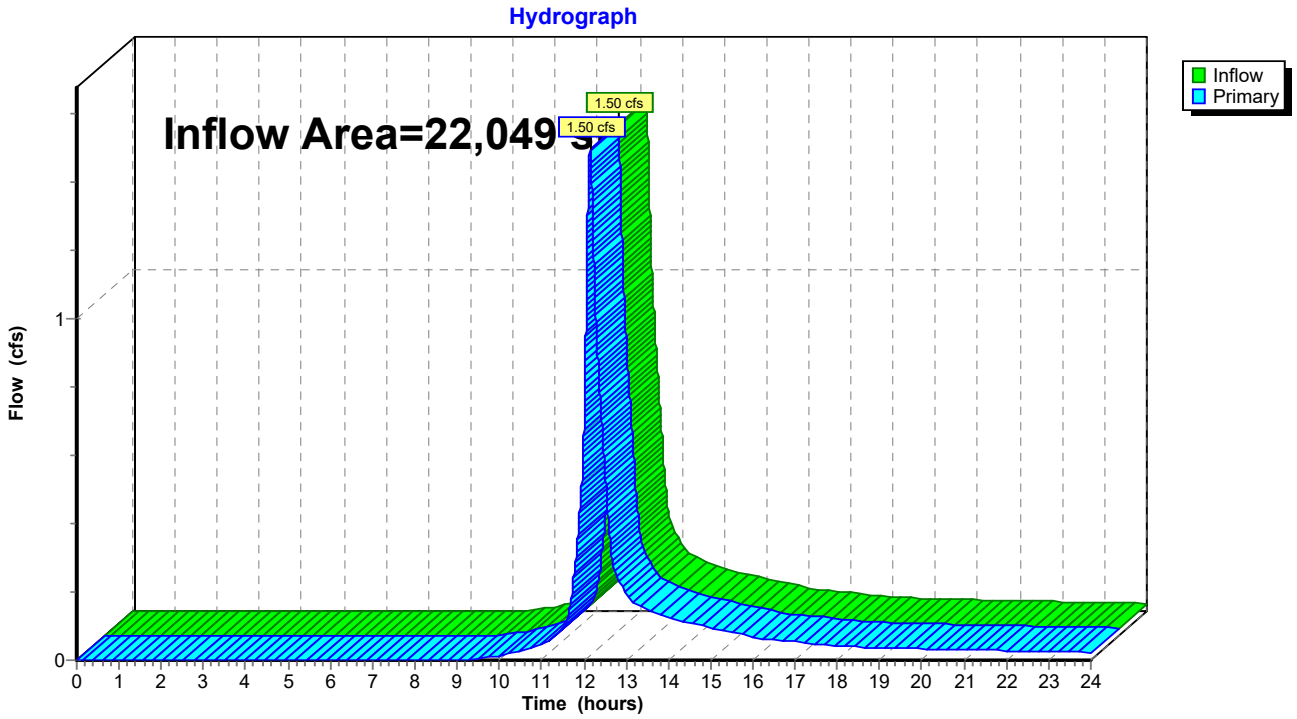
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
23.78	1,146	955
23.80	1,146	964
23.82	1,146	974
23.84	1,146	984
23.86	1,146	995
23.88	1,146	1,005
23.90	1,146	1,015
23.92	1,146	1,026
23.94	1,146	1,037
23.96	1,146	1,048
23.98	1,146	1,059
24.00	1,146	1,070
24.02	1,146	1,081
24.04	1,146	1,093
24.06	1,146	1,104
24.08	1,146	1,116
24.10	1,146	1,128
24.12	1,146	1,140
24.14	1,146	1,152
24.16	1,146	1,164
24.18	1,146	1,176
24.20	1,146	1,189
24.22	1,146	1,202
24.24	1,146	1,214
24.26	1,146	1,227
24.28	1,146	1,240
24.30	1,146	1,254
24.32	1,146	1,267
24.34	1,146	1,281
24.36	1,146	1,294
24.38	1,146	1,308
24.40	1,146	1,322
24.42	1,146	1,336
24.44	1,146	1,350
24.46	1,146	1,364
24.48	1,146	1,379
24.50	1,146	1,394
24.52	1,146	1,408
24.54	1,146	1,423
24.56	1,146	1,438
24.58	1,146	1,453
24.60	1,146	1,469
24.62	1,146	1,484
24.64	1,146	1,500
24.66	1,146	1,515
24.68	1,146	1,531
24.70	1,146	1,547
24.72	1,146	1,563
24.74	1,146	1,579
24.76	1,146	1,596
24.78	1,146	1,612
24.80	1,146	1,629
24.82	1,146	1,646
24.84	1,146	1,663
24.86	1,146	1,680
24.88	1,146	1,697
24.90	1,146	1,714
24.92	1,146	1,732
24.94	1,146	1,750
24.96	1,146	1,767
24.98	1,146	1,785
25.00	1,146	1,803
25.02	1,146	1,821
25.04	1,146	1,840
25.06	1,146	1,858
25.08	1,146	1,877
25.10	1,146	1,895
25.12	1,146	1,914
25.14	1,146	1,933
25.16	1,146	1,952
25.18	1,146	1,972
25.20	1,146	1,991
25.22	1,146	2,011
25.24	1,146	2,030
25.26	1,146	2,050
25.28	1,146	2,070
25.30	1,146	2,090
25.32	1,146	2,111
25.34	1,146	2,131
25.36	1,146	2,151
25.38	1,146	2,172
25.40	1,146	2,193
25.42	1,146	2,214
25.44	1,146	2,235
25.46	1,146	2,256
25.48	1,146	2,277
25.50	1,146	2,299
25.52	1,146	2,320
25.54	1,146	2,342
25.56	1,146	2,364
25.58	1,146	2,386
25.60	1,146	2,408
25.62	1,146	2,431
25.64	1,146	2,453
25.66	1,146	2,476
25.68	1,146	2,498
25.70	1,146	**2,521**

Summary for Link 1L: Ex.

Inflow Area = 22,049 sf, 17.14% Impervious, Inflow Depth > 2.92" for 25-Year event
Inflow = 1.50 cfs @ 12.14 hrs, Volume= 5,372 cf
Primary = 1.50 cfs @ 12.14 hrs, Volume= 5,372 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs

Link 1L: Ex.

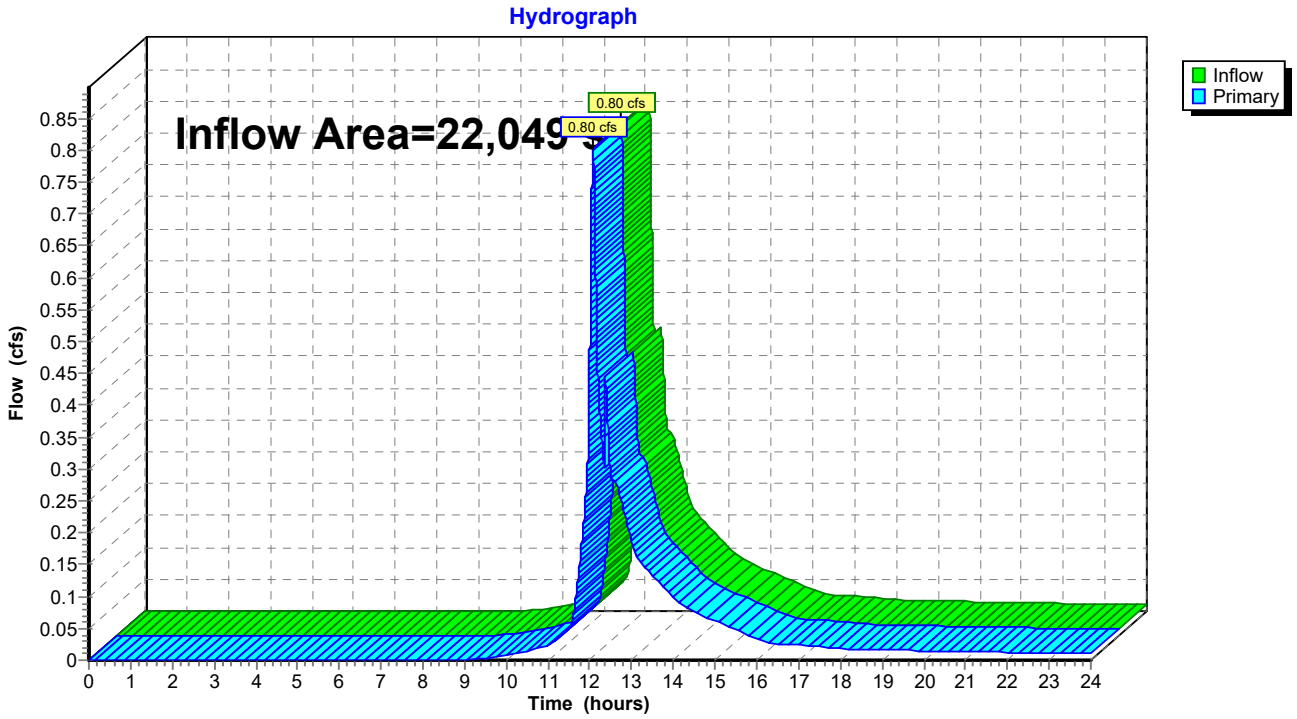


Summary for Link 2L: Pr

Inflow Area = 22,049 sf, 61.84% Impervious, Inflow Depth > 1.70" for 25-Year event
Inflow = 0.80 cfs @ 12.07 hrs, Volume= 3,129 cf
Primary = 0.80 cfs @ 12.07 hrs, Volume= 3,129 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.001 hrs

Link 2L: Pr



Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>3.61"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=1.86 cfs 6,630 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>6.96"
Tc=5.0 min CN=96.82 Runoff=0.67 cfs 2,280 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>6.73"
Tc=5.0 min CN=94.91 Runoff=0.77 cfs 2,567 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>6.71"
Tc=5.0 min CN=94.79 Runoff=0.69 cfs 2,269 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>3.74"
Tc=5.0 min CN=68.52 Runoff=0.99 cfs 2,954 cf

Pond 1P: PP#1 Peak Elev=27.56' Storage=950 cf Inflow=0.67 cfs 2,280 cf
Discarded=0.02 cfs 1,029 cf Primary=0.27 cfs 502 cf Outflow=0.28 cfs 1,531 cf

Pond 2P: PP#2 Peak Elev=25.76' Storage=1,228 cf Inflow=0.77 cfs 3,069 cf
Discarded=0.02 cfs 1,235 cf Primary=0.43 cfs 940 cf Outflow=0.45 cfs 2,175 cf

Pond 3P: PP#3 Peak Elev=23.72' Storage=926 cf Inflow=0.69 cfs 3,210 cf
Discarded=0.02 cfs 1,079 cf Primary=0.63 cfs 1,430 cf Outflow=0.65 cfs 2,509 cf

Link 1L: Ex. Inflow=1.86 cfs 6,630 cf
Primary=1.86 cfs 6,630 cf

Link 2L: Pr Inflow=1.00 cfs 4,384 cf
Primary=1.00 cfs 4,384 cf

Total Runoff Area = 44,098 sf Runoff Volume = 16,701 cf Average Runoff Depth = 4.54"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Time span=0.00-24.00 hrs, dt=0.001 hrs, 24001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX: Existing Runoff Area=22,049 sf 17.14% Impervious Runoff Depth>4.37"
Flow Length=173' Tc=10.1 min CN=67.34 Runoff=2.26 cfs 8,026 cf

Subcatchment P-1: Paver Basin #1 Runoff Area=3,933 sf 96.82% Impervious Runoff Depth>7.87"
Tc=5.0 min CN=96.82 Runoff=0.76 cfs 2,580 cf

Subcatchment P-2: Paver Basin #2 Runoff Area=4,578 sf 91.66% Impervious Runoff Depth>7.64"
Tc=5.0 min CN=94.91 Runoff=0.87 cfs 2,916 cf

Subcatchment P-3: Paver Basin #3 Runoff Area=4,056 sf 91.32% Impervious Runoff Depth>7.63"
Tc=5.0 min CN=94.79 Runoff=0.77 cfs 2,579 cf

Subcatchment P-4: Proposed Bypass Runoff Area=9,482 sf 20.31% Impervious Runoff Depth>4.51"
Tc=5.0 min CN=68.52 Runoff=1.20 cfs 3,564 cf

Pond 1P: PP#1 Peak Elev=27.58' Storage=961 cf Inflow=0.76 cfs 2,580 cf
Discarded=0.02 cfs 1,057 cf Primary=0.51 cfs 747 cf Outflow=0.53 cfs 1,804 cf

Pond 2P: PP#2 Peak Elev=25.80' Storage=1,255 cf Inflow=1.15 cfs 3,664 cf
Discarded=0.02 cfs 1,269 cf Primary=0.77 cfs 1,466 cf Outflow=0.79 cfs 2,735 cf

Pond 3P: PP#3 Peak Elev=23.74' Storage=934 cf Inflow=1.15 cfs 4,045 cf
Discarded=0.02 cfs 1,109 cf Primary=1.12 cfs 2,205 cf Outflow=1.14 cfs 3,314 cf

Link 1L: Ex. Inflow=2.26 cfs 8,026 cf
Primary=2.26 cfs 8,026 cf

Link 2L: Pr Inflow=1.76 cfs 5,769 cf
Primary=1.76 cfs 5,769 cf

Total Runoff Area = 44,098 sf Runoff Volume = 19,666 cf Average Runoff Depth = 5.35"
60.51% Pervious = 26,685 sf 39.49% Impervious = 17,413 sf

Appendix 3

Rainfall Intensity Data
NRCS Web Soil Survey
FEMA Firmette
USGS Quad Map

NOAA Atlas 14, Volume 10, Version 3
Location name: Norwalk, Connecticut, USA*
Latitude: 41.1055°, Longitude: -73.4095°
Elevation: 27 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.366** (0.295-0.454)	**0.426** (0.343-0.529)	**0.524** (0.420-0.653)	**0.605** (0.481-0.758)	**0.716** (0.548-0.937)	**0.801** (0.598-1.07)	**0.888** (0.638-1.23)	**0.981** (0.668-1.40)	**1.11** (0.722-1.65)	**1.21** (0.766-1.84)
10-min	**0.519** (0.418-0.643)	**0.604** (0.486-0.749)	**0.742** (0.595-0.925)	**0.857** (0.682-1.07)	**1.02** (0.777-1.33)	**1.14** (0.847-1.52)	**1.26** (0.904-1.74)	**1.39** (0.946-1.99)	**1.57** (1.02-2.34)	**1.71** (1.08-2.60)
15-min	**0.611** (0.492-0.757)	**0.710** (0.571-0.881)	**0.873** (0.700-1.09)	**1.01** (0.802-1.26)	**1.19** (0.914-1.56)	**1.34** (0.997-1.79)	**1.48** (1.06-2.05)	**1.64** (1.11-2.34)	**1.85** (1.20-2.75)	**2.02** (1.28-3.06)
30-min	**0.848** (0.683-1.05)	**0.987** (0.794-1.22)	**1.21** (0.973-1.51)	**1.40** (1.12-1.76)	**1.66** (1.27-2.17)	**1.86** (1.39-2.48)	**2.06** (1.48-2.85)	**2.27** (1.55-3.25)	**2.55** (1.66-3.78)	**2.76** (1.74-4.19)
60-min	**1.09** (0.875-1.35)	**1.26** (1.02-1.57)	**1.56** (1.24-1.94)	**1.80** (1.43-2.25)	**2.13** (1.63-2.78)	**2.39** (1.78-3.18)	**2.64** (1.89-3.64)	**2.90** (1.98-4.15)	**3.24** (2.11-4.82)	**3.50** (2.22-5.32)
2-hr	**1.38** (1.12-1.70)	**1.64** (1.32-2.02)	**2.06** (1.66-2.54)	**2.40** (1.92-2.99)	**2.88** (2.22-3.75)	**3.24** (2.44-4.32)	**3.62** (2.62-5.00)	**4.03** (2.75-5.73)	**4.60** (3.00-6.79)	**5.06** (3.21-7.64)
3-hr	**1.58** (1.29-1.94)	**1.89** (1.54-2.32)	**2.40** (1.94-2.95)	**2.81** (2.26-3.49)	**3.39** (2.62-4.40)	**3.82** (2.88-5.08)	**4.28** (3.11-5.91)	**4.79** (3.28-6.78)	**5.52** (3.61-8.12)	**6.12** (3.89-9.20)
6-hr	**1.99** (1.63-2.43)	**2.40** (1.96-2.92)	**3.06** (2.49-3.74)	**3.60** (2.91-4.44)	**4.35** (3.39-5.63)	**4.92** (3.74-6.51)	**5.51** (4.05-7.60)	**6.20** (4.26-8.74)	**7.21** (4.73-10.5)	**8.05** (5.14-12.0)
12-hr	**2.47** (2.04-2.99)	**2.97** (2.45-3.60)	**3.79** (3.11-4.61)	**4.47** (3.64-5.47)	**5.41** (4.23-6.95)	**6.11** (4.67-8.03)	**6.85** (5.05-9.39)	**7.71** (5.32-10.8)	**8.98** (5.91-13.1)	**10.0** (6.43-14.9)
24-hr	**2.87** (2.38-3.45)	**3.49** (2.89-4.20)	**4.50** (3.71-5.43)	**5.33** (4.37-6.48)	**6.48** (5.11-8.28)	**7.34** (5.64-9.61)	**8.26** (6.14-11.3)	**9.34** (6.46-13.0)	**11.0** (7.23-15.8)	**12.3** (7.90-18.2)
2-day	**3.12** (2.61-3.73)	**3.88** (3.23-4.63)	**5.11** (4.24-6.13)	**6.13** (5.06-7.40)	**7.54** (5.98-9.59)	**8.58** (6.64-11.2)	**9.70** (7.27-13.2)	**11.1** (7.68-15.3)	**13.1** (8.70-18.8)	**14.9** (9.60-21.8)
3-day	**3.32** (2.78-3.95)	**4.15** (3.47-4.94)	**5.50** (4.58-6.57)	**6.62** (5.48-7.96)	**8.16** (6.50-10.4)	**9.30** (7.23-12.1)	**10.5** (7.93-14.3)	**12.0** (8.38-16.6)	**14.3** (9.51-20.5)	**16.3** (10.5-23.8)
4-day	**3.52** (2.96-4.18)	**4.40** (3.69-5.22)	**5.82** (4.87-6.93)	**7.00** (5.81-8.39)	**8.63** (6.89-10.9)	**9.83** (7.66-12.7)	**11.1** (8.38-15.1)	**12.7** (8.86-17.4)	**15.1** (10.0-21.5)	**17.1** (11.1-24.9)
7-day	**4.16** (3.51-4.90)	**5.10** (4.30-6.02)	**6.64** (5.58-7.86)	**7.92** (6.61-9.44)	**9.67** (7.75-12.1)	**11.0** (8.58-14.1)	**12.4** (9.33-16.6)	**14.0** (9.82-19.2)	**16.5** (11.0-23.4)	**18.6** (12.0-26.8)
10-day	**4.79** (4.06-5.63)	**5.78** (4.90-6.80)	**7.39** (6.24-8.73)	**8.73** (7.31-10.4)	**10.6** (8.49-13.2)	**12.0** (9.35-15.3)	**13.4** (10.1-17.8)	**15.1** (10.6-20.5)	**17.5** (11.7-24.7)	**19.6** (12.7-28.2)
20-day	**6.73** (5.75-7.85)	**7.83** (6.68-9.15)	**9.64** (8.18-11.3)	**11.1** (9.39-13.1)	**13.2** (10.6-16.2)	**14.8** (11.6-18.6)	**16.4** (12.3-21.4)	**18.1** (12.8-24.4)	**20.5** (13.7-28.6)	**22.3** (14.5-31.9)
30-day	**8.36** (7.17-9.71)	**9.55** (8.18-11.1)	**11.5** (9.80-13.4)	**13.1** (11.1-15.4)	**15.3** (12.4-18.8)	**17.0** (13.4-21.3)	**18.8** (14.1-24.2)	**20.5** (14.5-27.5)	**22.8** (15.4-31.8)	**24.6** (16.0-35.0)
45-day	**10.4** (8.96-12.0)	**11.7** (10.1-13.6)	**13.8** (11.8-16.1)	**15.6** (13.2-18.2)	**18.0** (14.6-21.8)	**19.8** (15.6-24.6)	**21.7** (16.3-27.8)	**23.5** (16.7-31.3)	**25.8** (17.4-35.7)	**27.4** (17.9-38.9)
60-day	**12.1** (10.5-14.0)	**13.5** (11.6-15.6)	**15.7** (13.5-18.2)	**17.6** (15.0-20.5)	**20.1** (16.4-24.4)	**22.2** (17.4-27.3)	**24.1** (18.1-30.7)	**25.9** (18.5-34.5)	**28.2** (19.1-39.0)	**29.8** (19.5-42.2)

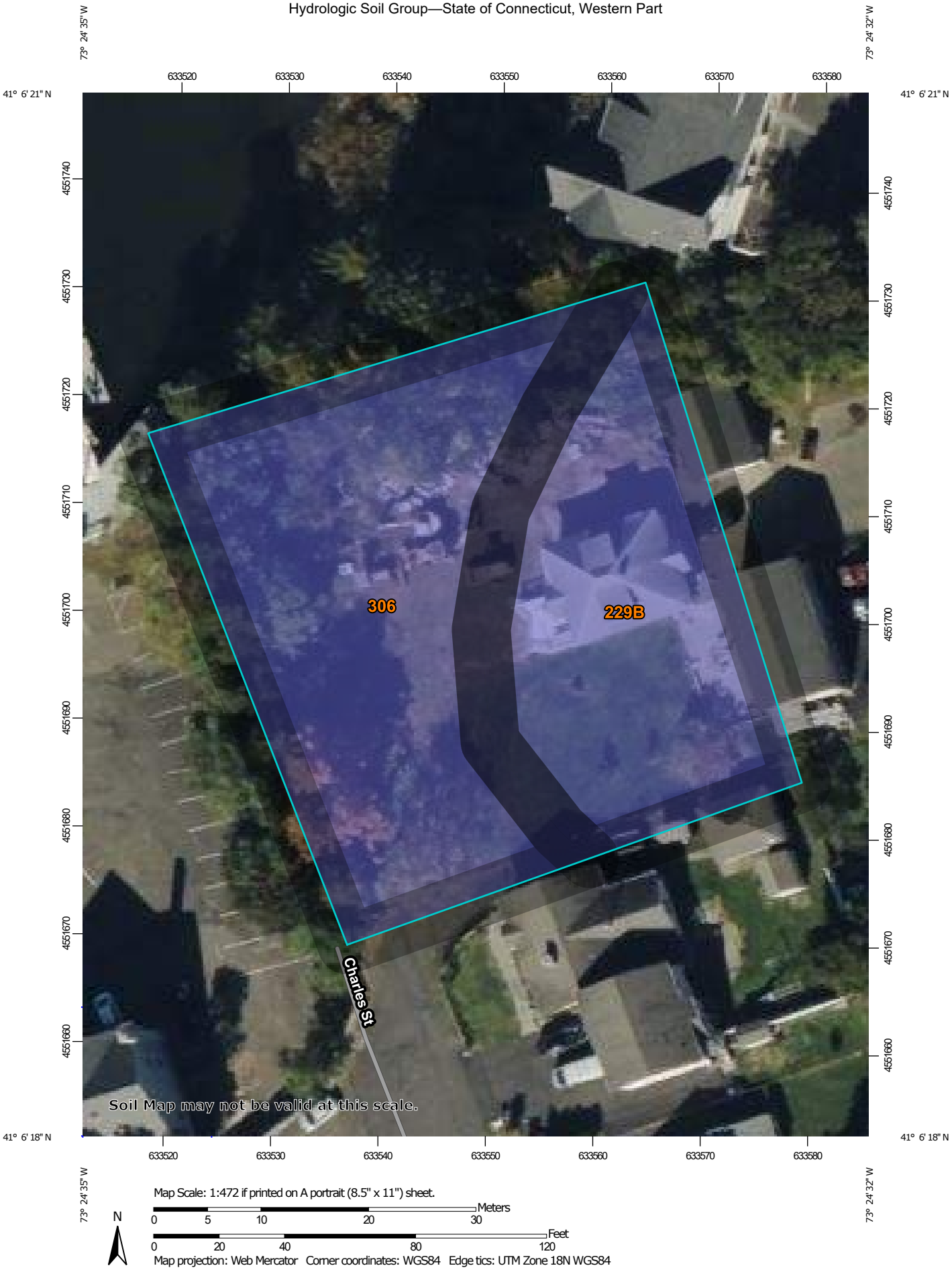
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

PF graphical


73° 24' 35" W
73° 24' 32" W
41° 6' 21" N
41° 6' 18" N
633520
633530
633540
633550
633560
633570
633580
4551740
4551730
4551720
4551710
4551700
4551690
4551680
4551670
4551660
306
229B
Charles St
Soil Map may not be valid at this scale.
Map Scale: 1:472 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 5 10 20 30
Feet
0 20 40 80 120
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: State of Connecticut, Western Part
Survey Area Data: Version 2, Aug 30, 2024

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

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
229B	Agawam-Urban land complex, 0 to 8 percent slopes	B	0.2	41.6%
306	Udorthents-Urban land complex	B	0.3	58.4%
Totals for Area of Interest			**0.6**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

National Flood Hazard Layer FIRMette

FEMA



Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

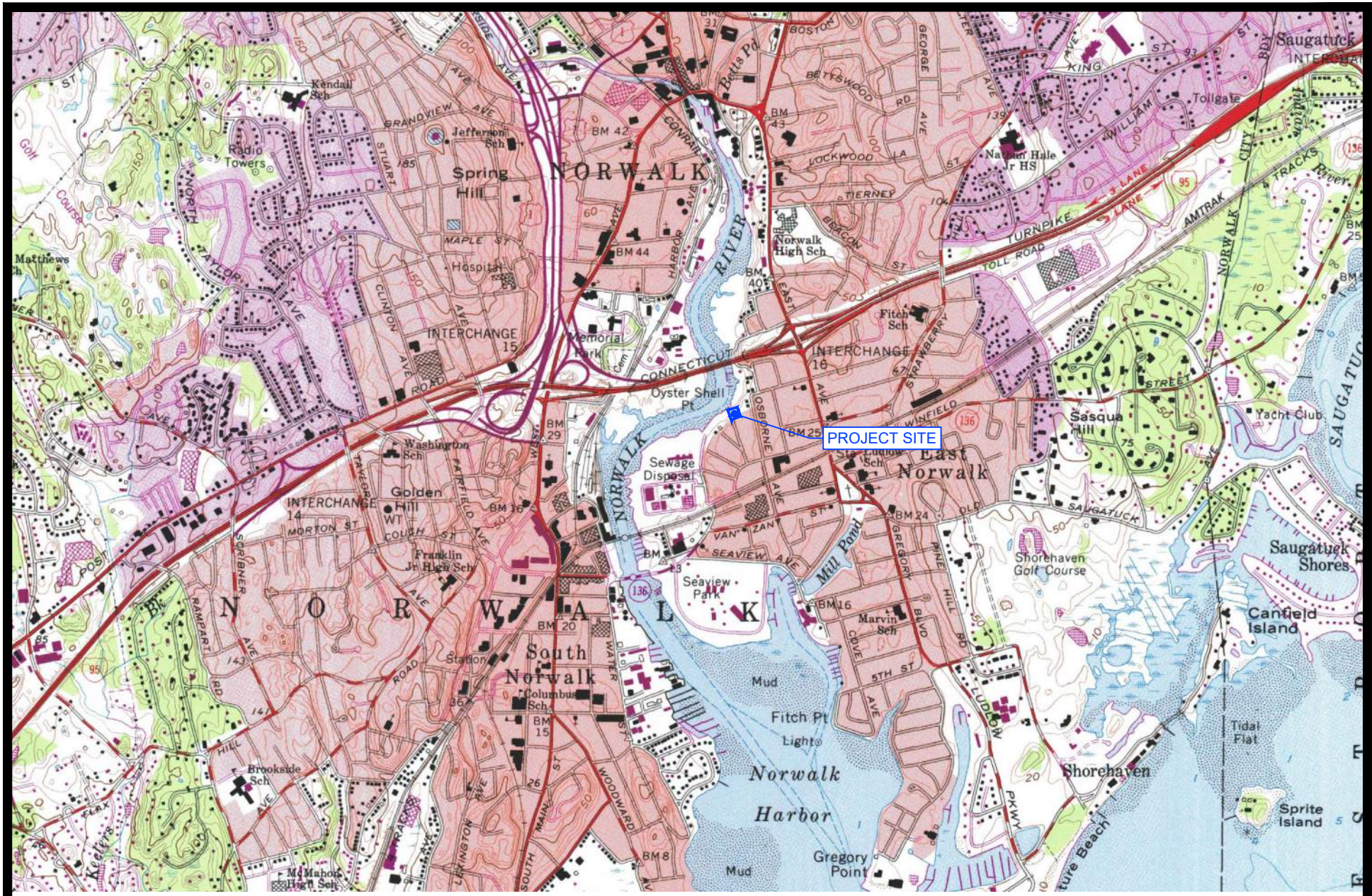
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/13/2025 at 12:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



MAP NAME: NORWALK SOUTH
MAP NUMBER: 114

USGS TOPOGRAPHIC QUAD MAP

30, 32, & 34 CHARLES STREET
NORWALK, CT

REDNISS & MEAD

COMM. NO.: 10304 DATE: 12/05/2025 SCALE: 1"=2000'

11/26/2025 11:56 AM H:\Jobfiles2\10000\10300\10304\DWG\10304 Quad Map.dwg

Appendix 4

Draft Stormwater Operations and Maintenance Plan

DRAINAGE FACILITIES OPERATIONS AND MAINTENANCE PLAN
30, 32, & 34 Charles Street, Norwalk CT
December 12, 2025

The purpose of this Operations and Maintenance plan is to ensure that the drainage facilities proposed on site at 30, 32, and 34 Charles Street (the "Properties") shall be maintained in operational condition. While some normal wear is expected over time, the facilities must be properly maintained in order to function as designed. Please refer to the Site Utility Plan for the location of proposed drainage facilities.

Tomas Brothers LLC and its successors or assigns agree to maintain the drainage facilities in a functioning condition by following the maintenance plan described below.

Storm Drainage Maintenance and Inspection Requirements: The storm drainage system shall be inspected on a semi-annual basis for the first year to ensure that the system is functioning properly. If these inspections show that debris and sediment have accumulated, then more frequent inspections will be scheduled. Inspections should be scheduled following major storm events. If after one year there is little sediment accumulation, then inspections shall be performed on an annual basis.

Catch Basins: Structures with an open grate top intended to collect rain water and direct it into the underground drainage pipes. Note that if sediment is allowed to build up it can greatly reduce the performance of the structure.

- Inspect yearly and remove accumulated debris, trash, and sediment with a vacuum truck as needed to insure proper working order.

Storm Drainage Piping and Manholes: Pipes are located beneath the surface and are used for piping stormwater out of the site. Manholes are structures that are used as junctions for pipe intersections.

- All piping shall be completely cleaned of debris and accumulated sediment at the completion of constriction.
- Manholes shall be inspected on an annual basis. Accumulated debris shall be removed and repairs shall be conducted as necessary.
- Video inspection of the storm drainage piping shall occur once every 10 years, unless the system performance indicates an issue.

Porous Pavement (Porous Asphalt, Permeable Pavers, Etc.):

- Clean and vacuum (Regenerative Air Vacuum for Permeable Interlocking Concrete Pavers) the porous pavement upon the completion of construction.
- Check for standing water on the surface of the pavement after a precipitation event. If standing water remains within 30 minutes after rainfall had ended, cleaning of porous pavement is recommended.
- Vacuum sweeper shall be used regularly to remove sediment and organic debris on the

pavement surface. The sweeper may be fitted with water jets.

- Pavement vacuuming should occur during spring cleanup following the last snow event to remove accumulated debris, at a minimum.
- Pavement vacuuming should occur during fall cleanup to remove dead leaves, at a minimum.
- Power washing can be an effective tool for cleaning clogged areas. See manufacturer's specifications.
- Check for debris accumulating on pavement, especially debris buildup in winter. For loose debris, a power/leaf blower or gutter broom can be used to remove leaves and trash.
- In the event that the porous surface becomes clogged an engineer must be retained to determine how to restore the porous surface to its original condition.
- Any additional maintenance required per the manufacturer's specifications shall also be completed.

Disposal of Debris and Sediment: All debris and sediment removed from the storm water structures shall be disposed of legally. There shall be no dumping of silt or debris into or in proximity to any inland or tidal wetlands or the abutting river.

Maintenance Arrangements: The names of the person or party responsible for completing routine inspection and maintenance activities, pet waste management, and proper management of de-icing chemicals and snow shall be filed with the Norwalk Department of Public Works annually.

Good Housekeeping:

1. Most domestic waste will be stored inside the trash room
2. No fertilizers, pesticides, or herbicides will be stored on site
3. No vehicle washing will be permitted on site
4. Lawn and garden areas will be kept in satisfactory condition maintaining ground stabilization and the pervious nature of landscaped areas.
5. In accordance with Sec. 2a-450 of CT General Statues spills of petroleum or chemicals will be reported to the CT DEEP's Oil & Chemical Response Division at (860) 424-3338, be contained as quickly as practical, and cleaned by a licensed contractor.

DRAFT

Declaration: The Owner(s) listed below agrees to the following statements. The statements are intended to ensure that the owner agrees to install and maintain stormwater management practices on the subject property in accordance with approved plans and conditions, and to further ensure that the management practices serve the intended function in perpetuity.

1. The Owner(s) shall be solely responsible for the inspection, maintenance, and repair of the postconstruction storm water management system identified in the above sections.

2. The Owner(s) agrees in the event that the Property is sold, transferred, or leased to provide information to the new owner, operator, or lessee regarding proper inspection, maintenance and repair of the storm water management practice(s). The information shall accompany the first deed transfer and include this "Drainage Facilities Operations and Maintenance Plan". The transfer of this information shall also be required with any subsequent sale, transfer or lease of the Property.

3. The City of Norwalk or its designee is authorized to access the property as necessary to conduct inspections of the storm water management practices to ascertain compliance with the intent of this Operations and Maintenance Plan. Upon written notification by the City of Norwalk or their designee of required maintenance or repairs, the Owner(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the City of Norwalk. The Owner(s) shall be liable for the failure to undertake any maintenance or repairs so that the public health, safety, general welfare or the environment shall not be endangered.

By: _____ _____
[Owner(s)] [Date]

By: _____ _____
[Owner(s)] [Date]

DRAFT

CITY OF NORWALK
Christine Cardascia, P.E.
Assistant Engineer /
Department of Engineering
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Norwalk, CT 06851
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ccardascia@norwalkct.gov
dpwpermits@norwalkct.gov

March 13, 2026

Sent via email to: esuchy@carmodylaw.com

Elizabeth A.B. Suchy, Esq
Carmody Torrance Sandak & Hennessey LLP

RE: 30 Charles Street (District 03, Block 07, Lot 14)
32 Charles Street (District 03, Block 07, Lot 15)
34 Charles Street (District 03, Block 07, Lot 43)
Proposed Two-Family Residencies
Department of Engineering's Plan Review Comments

Dear Ms. Suchy:

The Department of Engineering and the Water Pollution Control Authority (WPCA) for the City of Norwalk (City) have reviewed the supportive documents associated with the proposed development at the above-referenced property. The focus of our review has been to confirm the documents provided are in in conformance with the standards set forth in the City of Norwalk (City) Department of Public Works (DPW) Roadway Standards, and Standard Specifications, as amended and supplemented, Drainage Manual, as amended and supplemented, Standard Detailed Drawings, as amended and supplemented, DPW and WPCA Sanitary Sewer Permit Process and Sanitary Sewer Main Extension Policy and other applicable design standards.

The following documents were provided and included in our review:

- Site Plan titled "Zoning Site Plan Depicting 30, 32, & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers L.L.C.," prepared by Redniss and Mead, Inc., dated 12/12/2025
- Engineering Report titled "Site Engineering Report 30, 32, & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers L.L.C.," prepared by Redniss and Mead, Inc., dated 12/12/2025
- Engineering Report titled "Drainage Facilities Operations and Maintenance Plan 30, 32, & 34 Charles Street Norwalk, CT Prepared for Tomas Brothers L.L.C.," prepared by Redniss and Mead, Inc., dated 12/12/2025

The following are the Department of Engineering and Water Pollution Control Authorities' review comments highlighting sections that will require revision or additional information prior to our departmental sign-off. A written response addressing each comment is required as part of the resubmittal:

1. Per the City of Norwalk regulations, a single driveway may only serve a maximum of two building lots. Once a driveway provides access to three or more lots, it is classified as a Private Road and must be constructed in accordance with the City of Norwalk 2021 Roadway Standards, City of Norwalk Drainage Manual, City Standard Details, and other applicable standards. As this appears to be an existing nonconforming condition, the City may allow the shared driveway to remain provided the applicant demonstrates that there is legally established access for the benefiting properties through the 15-foot ROW easement. Please provide documentation confirming the legal access rights.
2. Please clarify the ownership and maintenance responsibility of all shared utilities within private properties. Any privately owned utilities shall be covered by appropriate access and maintenance agreements or easements.
3. The existing conditions survey shows an existing catch basin on the property. Please investigate and verify the purpose of this catch basin, confirm all connections, and clarify whether there is any existing stormwater management system on site. The calculations shall be revised as necessary to ensure all existing elements are accurately represented and properly modeled.
4. There are areas where the proposed contours are missing. Please revise the plans to include in all areas, specifically the proposed contours should be shown on the driveway.
5. The existing guide rail at the proposed construction entrance is shown to be removed. Please confirm the proposed vehicular protection will be maintained at the end of the ROW.
6. The plan shall be revised to include all existing utility information (i.e. pipe size, material, inverts) of the sewer main.
7. The plan shall depict and clarify the intend of the existing utility laterals and connections. Should the existing laterals be abandoned, then the plan shall include the proposed abandonment detail, in conformance with the City's Standard Detail Drawings.
8. The applicant shall conduct further investigation to locate the Manhole within the easement if the laterals shall be connected to the interceptor pipe.
9. The proposed sanitary sewer lateral for Lot 32 appears to cross two separate properties. Per the City of Norwalk Sewer Extension Policy, laterals should not cross abutting properties where the existing gravity sanitary sewer can be extended to serve the property. If crossing an abutting property is unavoidable, the lateral shall not cross more than one (1) property and a dedicated easement must be recorded on the Norwalk Land Records. Please revise the plans to comply with this requirement and all other requirements outlined in the City of Norwalk Sewer Extension Policy.
10. Please confirm the invert connection at the main for the proposed sanitary sewer lateral. Sanitary sewer laterals shall be installed with a minimum of 2% and a maximum of 8% slope. A sanitary sewer chimney, in compliance with the City's 2021 Standard Detail Drawings, may be utilized to help maintain sewer laterals within the City's slope standards.
11. Pools are considered pervious under the Norwalk Drainage Manual, please revise the Existing Drainage Basin Exhibit and any related calculations.
12. The proposed level spreader is located on an excessively steep slope. This slope raises significant concerns that runoff will reconcentrate immediately downslope, leading to erosion and potential off-site impacts. Please reevaluate the outlet design and provide an alternative stabilization or energy dissipation method appropriate for the existing grade. Please make sure to revise the design
13. The plan shall be revised to include the driveway sight line distance to ensure no obstruction in excess of two (2) feet high are within the sight line triangle, in conformance with the City's Roadway Standards.

14. Any existing trees that are to be removed within the City's right-of-way that are 8 inches or greater in caliper, will require a tree removal permit and must be posted by the City's Tree Warden at least 10 days in advance, in accordance with the City Code Chapter 112.
    a. City trees to be removed shall be replaced in accordance with City Code Chapter 112-10C.

Please note this is a preliminary review of the submitted documents. Additional comments may be forthcoming once the requested information is received.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Christine Cardascia

Christine Cardascia, P.E.
Assistant Engineer

Cc: DPW Permits
James Meehan, P.E., Principal Engineer – Department of Engineering
Wilber Giron, P.E., Permit Engineer – Department of Engineering
Ralph Kolb, P.E., Sr. Environmental Engineer – Water Pollution Control Authority
Mario Pizighelli, P.E., Stormwater Systems Manager – Water Pollution Control Authority
Garrett Bolella, P.E., Assistant Director – Transportation, Mobility and Parking
Benjamin Yeung, P.E., Senior Traffic Engineer – Transportation, Mobility and Parking
Nathan Fankhanel, Junior Engineer – Transportation, Mobility and Parking
Steven Kleppin, Director – Planning and Zoning
Bryan Baker, Principal Planner – Planning and Zoning
Michelle Andrzejewski, Senior Planner – Planning and Zoning
Amelia Williams, Land Use Planner – Planning and Zoning
Tammy Maldonado, Zoning Enforcement Officer – Planning and Zoning
Alexis Cherichetti, Senior Environmental Officer/Assistant Director – Conservation and Planning and Zoning

Transportation
Mobility & Parking

CITY OF NORWALK
Transportation Mobility & Parking
Norwalk City Hall
125 East Avenue, PO Box 5125
Norwalk, CT 06856-5125

Sent via email to: esuchy@carmodylaw.com

To: Elizabeth A.B. Suchy, Esq. – Carmody Torrance Sandak & Hennessey LLP

From: Benjamin Yeung, P.E., Senior Traffic Engineer – Norwalk TMP

Subject: 30 & 32 Charles Street – Proposed Multi-Family Residences – TMP Conditional Sign-Off

Date: March 10, 2026

The Transportation, Mobility, and Parking (TMP) Department has completed a preliminary review of the following documents related to the Proposed Multi-Family Residences at 30 & 32 Charles Street:

- Civil/Site Plans Drawings depicting 30, 32 & 34 Charles Street, prepared for Tomas Brothers LLC, dated December 12, 2025, prepared by Redniss & Mead.

The aforementioned document is in compliance with the current City Standards in relation to transportation, mobility, and parking. TMP takes no exception to the project moving forward, subject to the following conditions:

1. Applicant shall obtain DPW approval for use of the existing non-conforming shared driveway access from Osborne Avenue to the proposed residences.

This letter signifies final departmental conditional sign-off from TMP. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Benjamin Yeung

Benjamin Yeung, P.E., Senior Traffic Engineer - TMP

Cc: DPW Permits
Jay Habansky - Chief of Economic and Community Development
Jim Travers, Director – Norwalk TMP
Garrett Bolella, P.E., PTOE, RSP1, Assistant Director – TMP
Nathan Fankhanel, E.I.T., Junior Engineer – TMP
Vanessa Valadares, P.E., Chief of Department of Public Works
Wilber Giron, P.E., Permit Engineer – Department of Public Works
Christine Cardascia, P.E., Assistant Engineer – Department of Public Works
Steven Kleppin, Director – Planning and Zoning
Bryan Baker, Principal Planner – Planning and Zoning
Michelle Andrzejewski, Land Use Planner – Planning and Zoning
Amelia Williams, Land Use Planner – Planning and Zoning
William Ireland, Chief Building Official – Building and Code Enforcement
Leo Guerrero, Assistant Building Official – Building and Code Enforcement
Peter Kelly, Assistant Building Official – Building and Code Enforcement
Ralph Kolb, P.E., Sr. Environmental Engineer – WPCA
Mario Pizighelli, P.E., Stormwater Systems Manager - WPCA
Christopher Cavaliere, Junior Engineer – WPCA
Alexis Cherichetti, Senior Environmental Officer – Conservation Office
William Mooney, Assistant Director of Health – Health Department
Troy Donohue, Fire Marshal – Fire Department
Kirk McDonald, Assistant Fire Marshal – Fire Department

March 13, 2026

Memorandum

To: Planning & Zoning Commission – Chapin Bryce, Chair

From: Bryan Baker, AICP, Principal Planner

Re: #2026-07 CSPR – Tomas Builders, LLC – 30 Charles Street (District 3, Block 7, Lot 14) – Coastal site plan review application for the construction of a two-family detached dwelling

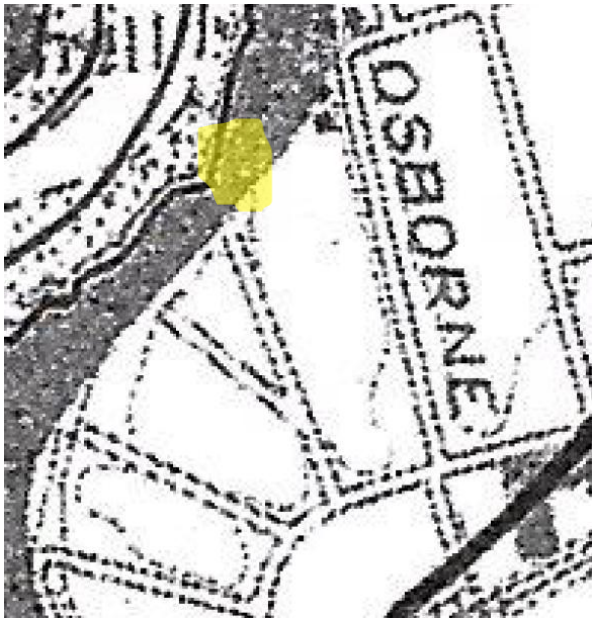
#2026-08 CSPR – Tomas Builders, LLC – 32 Charles Street (District 3, Block 7, Lot 15) – Coastal site plan review application for the construction of a two-family detached dwelling

Commissioners,

The applicant has submitted two separate coastal site plan review applications for the construction a two-family detached dwelling at 30 Charles Street and 32 Charles Street, respectively. For simplicity, this memorandum will provide Staff's review and recommended action for both applications. Please note that 32 Charles Street is the southern most parcel and 30 Charles Street is located to the north of 32 Charles Street.

In accordance with Connecticut General Statutes (CGS) Sec. 22a-105, coastal site plan reviews are required for, "activities or projects to be located fully or partially within the coastal boundary and landward of the mean high water mark," which includes, "Site plans submitted to a zoning commission in accordance with section 22a-109." Staff has prepared the following coastal site plan review to assist in your decision making for the above referenced coastal site plan review application(s).

Section 22a-106 of the (CGS) lists the criteria and process for action on coastal site plans, mainly the Commission's determination whether or not the potential adverse impacts of the proposed activity on both coastal resources and future water-dependent development activities are acceptable. To do so, an evaluation what the coastal resources are on the site as well as of the existing characteristics of the property are required.



1979 coastal resources map and approximate location of 30 & 32 Charles Street



Current aerial imagery

32 Charles Street is an undeveloped building lot and 30 Charles Street has a frame building at the rear of the property. Both properties are located entirely within the coastal boundary and the CD-2 zone. The applicant is proposing to construct a new two-family detached dwelling on each property, a use permitted as-of-right, however a coastal site plan review application is required. Per the 1979 Coastal Resources Map, 30 and 32 Charles Street appear to be located within the "Coastal 'Flood Hazard' Area," which is considered a "coastal resource," however, the most updated Flood Emergency Management Agency (FEMA) flood map shows that neither property is located within the Coastal 'Flood Hazard' Area." Because no coastal resources are located on either property it is Staff's opinion that the applications will not have an adverse impact on any coastal resources.



FEMA flood map showing 30 and 32 Charles Street, respectively, and flood zone AE (El 10)

For your reference, here is the Connecticut Coastal Management Act's (CCMA) definition of "Adverse impacts on coastal resources," of which, Staff finds that there are no such adverse impacts:

(15) "Adverse impacts on coastal resources" include but are not limited to: (A) Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity; (B) degrading existing circulation patterns of coastal waters through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours; (C) degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction; (D) degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff; (E) increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones; (F) degrading visual quality through significant alteration of the natural features of vistas and view points; (G) degrading or destroying essential wildlife, finfish or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alteration of the natural components of the habitat; and (H) degrading tidal wetlands, beaches and

dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or function;

Regarding adverse impacts on future water-dependent activities, it is important to note that the properties are zoned as CD-2 which is predominantly a residential zone with single- and two-family detached structures being permitted as-of-right. The properties are not waterfront and thus have historically not been considered for water-dependent uses and/or zoning, including during the 1988 adoption of the city's Marine Commercial zoning district and regulations, in accordance with the CCMA. Additionally, there are no recorded zoning map change applications having been submitted to re-zone the parcels to a water-dependent zone indicating a lack of historical demand for such uses. For your reference, please see the definition of "Adverse impacts on future water-dependent development opportunities," as defined within the CCMA below, of which it is Staff's opinion that there are no such adverse impacts due to this application.

(17) "Adverse impacts on future water-dependent development opportunities" and "adverse impacts on future water-dependent development activities" include but are not limited to (A) locating a non-water-dependent use at a site that (i) is physically suited for a water-dependent use for which there is a reasonable demand or (ii) has been identified for a water-dependent use in the plan of development of the municipality or the zoning regulations; (B) replacement of a water-dependent use with a non-water-dependent use, and (C) siting of a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters;

Lastly, the applicant has provided a Coastal Area Management Report prepared by Redniss & Mead, Inc. Staff has found such report to be accurate and agrees with its findings.

Staff offers the following resolutions for consideration by the Commission:

Draft resolution to approve 30 Charles Street:

THEREFORE, BE IT RESOLVED by the Norwalk Planning & Zoning Commission that application #2026-07 CSPR – Tomas Builders, LLC – 30 Charles Street (District 3, Block 7, Lot 14) – Coastal site plan review application for the construction of a two-family detached dwelling be **APPROVED** with the following finding:

1. That the Commission finds that any adverse impacts as a result of the development are limited to the greatest extent possible; and

BE IT FURTHER RESOLVED that the approval shall be subject to the following:

1. That the buildings and site will be developed in accordance with the following plans:
    a. Per site plan package entitled "Zoning Site Plan Depicting 30, 32, & 34 Charles Street," prepared by Redniss & Mead, dated 12/12/2025; and
    b. Per architectural drawings entitled "30 Charles Street Norwalk, Connecticut" prepared by DeMais Architects P.C., dated 1/5/2026; and
2. That the overhead service wires and all other utilities shall be installed underground; and
3. That a surety bond be submitted, in an amount to be determined by the Staff, to guarantee the installation of the required erosion and sediment controls prior to the issuance of a zoning permit; and
4. That all erosion and sediment controls be installed and maintained prior to the start of any construction or site work and that additional controls be installed at the direction of the Staff, as needed; and

5. That a Connecticut licensed engineer shall certify that all required improvements, including any required off-site improvements, were installed to City standards prior to the issuance of a Certificate of Zoning Compliance (COZC); and
6. That a surety bond be submitted to guarantee the completion and maintenance of the site plan and any modifications to the plan and all work required as a condition of approval under this special permit/coastal site plan review prior to the issuance of a COZC; and

BE IT FURTHER RESOLVED that this application complies with all applicable sections of the Norwalk Zoning Regulations; and

BE IT FUTHER RESOLVED that the effective date of this approval is March 27, 2026.

Draft resolution to approve 32 Charles Street:

THEREFORE, BE IT RESOLVED by the Norwalk Planning & Zoning Commission that application #2026-08 CSPR – Tomas Builders, LLC – 32 Charles Street (District 3, Block 7, Lot 15) – Coastal site plan review application for the construction of a two-family detached dwelling be **APPROVED** with the following finding:

1. That the Commission finds that any adverse impacts as a result of the development are limited to the greatest extent possible; and

BE IT FURTHER RESOLVED that the approval shall be subject to the following:

1. That the buildings and site will be developed in accordance with the following plans:
    a. Per site plan package entitled "Zoning Site Plan Depicting 30, 32, & 34 Charles Street," prepared by Redniss & Mead, dated 12/12/2025; and
    b. Per architectural drawings entitled "32 Charles Street Norwalk, Connecticut" prepared by DeMais Architects P.C., dated 1/5/2026; and
2. That the overhead service wires and all other utilities shall be installed underground; and
3. That a surety bond be submitted, in an amount to be determined by the Staff, to guarantee the installation of the required erosion and sediment controls prior to the issuance of a zoning permit; and
4. That all erosion and sediment controls be installed and maintained prior to the start of any construction or site work and that additional controls be installed at the direction of the Staff, as needed; and
5. That a Connecticut licensed engineer shall certify that all required improvements, including any required off-site improvements, were installed to City standards prior to the issuance of a Certificate of Zoning Compliance (COZC); and
6. That a surety bond be submitted to guarantee the completion and maintenance of the site plan and any modifications to the plan and all work required as a condition of approval under this special permit/coastal site plan review prior to the issuance of a COZC; and

BE IT FURTHER RESOLVED that this application complies with all applicable sections of the Norwalk Zoning Regulations; and

BE IT FUTHER RESOLVED that the effective date of this approval is March 27, 2026.

Sincerely,

Bryan Baker

Bryan Baker, AICP
Principal Planner
City of Norwalk
203-854-7705
bbaker@norwalkct.gov

PLANNING & ZONING
125 East Avenue
Norwalk, Connecticut 06851

MEMORANDUM

March 13, 2026

TO: Barbara Smyth, Mayor
Chapin Bryce, Planning & Zoning Commission Chairman
Lamond Daniels, Chief of Staff
Jay Habansky, Chief of Community & Economic Development
Mario Coppola, Corporation Counsel
Matt Sapienza, Assistant Corporation Counsel

FROM: Steve Kleppin, Planning & Zoning Director

SUBJECT: PA 25-1 (HB 8002)

Last year the state passed a comprehensive and controversial housing bill that may have significant impacts on the City, some requiring action by July 1st.

The following memo provides a high-level, P&Z Staff summary review of some of the sections of the bill and their impacts for the City, specifically as they relate to items under the purview of the Planning and Zoning Commission. *The bill contains other sections that are not necessarily relevant to the Commission's role*. It is our understanding that Corporation Counsel may also be preparing a review of the bill. We look forward to their evaluation and working with them to further our understanding.

Sections 4, 5 & 6: Housing Growth Planning:

- These sections outline the requirements for a Municipal Housing Growth Plan (MHGP) and a Regional Housing Growth Plan (RHGP).
- The Office of Policy & Management (OPM) will be establishing the program for the HGP's including Affordable Housing Goals for the state and each planning region.
- Municipals Housing Growth Plans – Due June 1, 2028 for some regions. WestCOG's and WestCOG communities plans are due no later than June 1, 2029.
- These plans must be adopted every 5 years.
- By June 1, 2027 WestCOG will establish a recommended Affordable Housing Goal for Norwalk. Within 30 days of receipt of the WestCOG recommendation the City will have to decide to accept and participate the RHGP or choose to do our own MHGP.
- If we opt-in to the RHGP, WestCOG will have to develop a regional Housing Needs Assessment (HNA). Norwalk would participate with WestCOG in the development of the HNA.

- If we opt-out, the City would have to develop our own MHGP, which would have to reviewed by WESTCog for comment and ultimately OPM, who could accept or reject the plan. If rejected, the plan must be amended by the City.
- What shall be included in a MHGP:
  - City shall adopt its own affordable housing goal. If this number is different that the number recommended by WestCOG , the City must provide written explanation to WestCOG justifying the reasons.
  - Develop Housing Growth Policies focusing on affordable units and identifying barriers to housing development
  - Must be consistent with POCD, State C&D Plan and any plan adopted by WPCA.
  - To the extent practical, identify specific zones or parcels that may be developed to meet the municipality's Affordable Housing Goal through the process of Summary Review (as-of-right, no discretionary approval); including maximum allowed density for each zone or parcels
  - Diversification of housing types (unit size, bedroom # and mix, building type, ADU's), development densities, tenure types (ownership, rental, condos, co-ops)
  - Including an inventory of developable land (as defined).
  - How it will address and implement the purposes of the Fair Housing Act.
  - Infrastructure updates needed.
  - Create a schedule for the policies, strategies and actions for the Plan.
- Elements of the RHGP will include:
  - Must be consistent with POCD, State C&D Plan and any plan adopted by WPCA.
  - To the extent practical, identify specific zones or parcels that may be developed to meet the municipality's Affordable Housing Goal through the process of Summary Review; Including maximum allowed density for each zone or parcels
  - Diversification of housing types (unit size, bedroom # and mix, building type, ADU's), development densities, tenure types (ownership, rental, condos, co-ops)
  - Including an inventory of developable land (as defined).
  - How it will address and implement the purposes of the Fair Housing Act.
  - Infrastructure updates needed.
  - Create a schedule for the policies, strategies and actions for the Plan.
  - Adjustments to municipalities with Higher equalized net grand list per capita, Higher median income, Lower percentage of its population below the federal poverty threshold, or Lower percentage of its population living in multifamily housing
- Additional elements for MHGP or RHGP to consider:
  - Rehabilitation & preservation of existing affordable units (N/A for us)
  - Development w/out Displacement (identify neighborhoods that may experience displacement & ways to preserve (already done through zoning)

  - Infrastructure needs of existing neighborhoods. May already be underway through Complete Streets & DPW improvements. Could be POCD idea?
  - Opportunities for new affordable units (already done through zoning)
- The RHGP will have to be approved by the Mayor and Planning and Zoning Commission.
- If we opt-out of the RHGP then the City will have to prepare MHGP including an affordable housing goal and explain to WestCOG why the City will not adopting the recommended affordable housing goal.
- If we choose a MHGP we must submit a draft to WestCOG prior to submission to the state.
- Annual progress report to OPM will be required for MHGP or RHGP on the status of adopting or implementation of the plans.
- Public hearings and informational meetings are optional but posting draft plans are required.
- The MHGP can be done in conjunction with the POCD.

Action Required – Opt in the RHGP or Adopt MHGP.

Timing – By June 1, 2027, WestCOG will establish a recommended Affordable Housing Goal for Norwalk. Within 30 days of receipt of this recommendation the City will have to decide to accept and join the RHGP or choose to do our own MHGP.

Staff Initial Recommendation – There is no immediate action needed regarding this. From the guidance we've seen from the state and sessions Staff has attended, there seems to be a strong push toward working through the COG's. The 30-day response window is a tight timeframe and without knowing what WestCOG will include for Norwalk's affordable housing goals we cannot provide further guidance at this time. For future consideration, I am comfortable saying that our work through the recently adopted Affordable Housing Action Plan led to a better more meaningful plan than we would have gotten through a collaborative effort with WestCog. On the flip side, I feel confident that if we worked with WestCOG on the RHGP we would be able to steer the recommendations for Norwalk so they were consistent with our policies and goals. In addition, working through WestCOG would be less expensive for the City.

Another consideration is that the City's POCD is technically due for an update in 2029, so the results of a HGP could feed directly into the POCD and we could potentially use the data from the HGP and then dig much deeper into identified areas of concentration.

Sections 8, 9 & 10: Approved Priority Housing Development Zones

- Voluntary Program that develops Priority Housing Development Zone(s)
- As-of-right multi-family (3 or more units)
- 4 units/acre for single-family
- 6 units/acre for duplexes and townhouses
- 10 units/acre for multi-family

- Shall not be less than 10% of the total land area (definition of Developable Land)
- Can be within historic districts
- What does this benefit us?
    - HUEP's towards 8-30g
- Approval from DoH required
    - May be rescinded per Sct. 10
- State will develop geospatial data regarding Developable Land

Action Required – None.

Timing – No guidance provided by the state to date.

Staff Initial Recommendation – Seems to be targeted for communities below the 8-30g threshold. Pending further guidance or revision, may be no benefit to the City, especially if we comply in many areas already.

Section 11: Qualified Transit-Oriented Community (Work Live Ride)

- Voluntary program
- May be eligible for funding from Housing Growth Program
    - Program established by 7.1.28
- To qualify must either:
    - Qualifying Transit-Oriented Community (regular bus service station or rail)
    - Establishes a TOD District
        - Include land w/in ½ mi. of any such station (statute contains criteria for exemptions)
        - Located w/in reasonable distance of any other transit service, commercial corridor or downtown
- As-Of-Right Requirements:
    - ✓ Transit Community Middle Housing (2-9 or units)
    - Developments of 10 or more units if at least 30% of units meet 8-30g.
    - 100% affordable housing development of any density on land owned by City, housing authority, non-profit or religious organization, deed restricted to 60% SMI (rent or mortgage payments do not cost more than 30% of household income)
    - Conversion of any commercial property to residential (into 1 of prior development types)
- May require ground floor commercial for developments of 10 or more units
- Can seek exemption from OPM to become a Qualified Transit Oriented Community

- Benefits:
  - Needed to establish by 1.1.26 for Housing Growth Program Funds or increased school construction reimbursement
  - Grants for infrastructure (water, sewer, pedestrian) improvements associated with developments of new dwelling units
  - Must be in compliance with Housing Growth Plan
  - No indication on potential grant amounts

Action Required – None at this time.

Timing – To date, no guidance provided by the state to date.

Staff Initial Recommendation – Potential funding source that we partially qualify for under our existing regulations in many areas. Once further guidance is provided by the state, we can evaluate in-depth. This is important since some if the qualifying criteria is ambiguous.

Section 13: Zoning for Transit-Oriented Communities

- ADU's in SFD's, except not permitted in the zone?
- Have to do if adopt a Transit Oriented District

Action Required – None at this time.

Timing – No guidance provided by the state to date.

Staff Initial Recommendation – None at this time. It's possible that we may already comply with this. Also, it seems the ADU laws are changing every session, so no initial action is recommended at this time.

Section 16 middle housing on any lot that allows for residential use or is zoned commercial or mixed-use

- Transit Community Middle Housing Development on any lot zoned multi-family, commercial or mixed-use
- Transit Community Middle Housing Development equates to 2-9 units
- Subject to "summary review", no special permit or discretionary approvals
  - Site Plan approval or Zoning Permit
- May be eligible for additional HUEP's

Action Required – We believe none based on existing zoning, but will continue to evaluate.

Timing – Must be in compliance by July 1st.

Staff Initial Recommendation – We believe no action is necessary.

Section 19 Parking Changes

- Developments < 16 units exempt from parking
- Developments 16 or units can either submit a Parking Needs Assessment (PNA) or comply with parking standards in statute
  - List criteria from statute
  - Need to clarify the review/approval of PNA. If we don't accept, allows peer review
  - New standard 1 space/studio & 1 BR, 2 spaces 2 & 2 BR 2+ BR's
  - Required parking, lesser of PNA or new standards
- Fee-in-lieu of parking only allowed on developments of 16 or more units
- We can establish 2 Conservation & Parking Management Districts (C&PMD's)
  - Each C&PMD no more than 4% of total land area (may be contiguous)
  - Properties in these areas not exempt from parking
  - No clear guidance on how the areas can be established
  - Subject to approval by the state through OPM
  - CD-2 Zone (6.8%)
  - CD-3 & CD-3W Zones (4.7% and 0.2%=4.9% total)
  - CD-4 Zone (2.9%)
  - Zone area calculations include total land area
  - Can consider adding additional land, just need to determine how to comply with statute

Action Required – Several amendments to the zoning regulations:

- Modification to the fee-in-lieu regulation
- Modification to the parking requirements for dwelling units
- Establishment of C&PMD(s)
  - If so, where and how much land?
  - Where/identify areas
  - Justification/criteria.

Timing – Must be in compliance by July 1st. Uncertainty on timing of the C&PMD.

Staff Initial Recommendation – Staff's initial recommendation is to include the CD-3 zone & possibly CD-3W zone regardless of other areas that may be considered. These areas will be highly susceptible to redevelopment and without on-site parking could overwhelm the street network.

- Can consider adding additional land, just need to determine how to comply with statute
- Staff is evaluating how to include these areas while also including other vulnerable areas
- Conversations with other City officials necessary.

Section 49 Greyfield Revitalization

- Conversion of former office space to residential
- Further research to make sure we comply
- Site Plan review = Summary review
- May be eligible for additional funding

Action Required – None at this time.

Timing – None at this time.

Staff Initial Recommendation – Await further guidance.

Next Steps

1. Coordinate/discuss with Corporation Counsel.
2. Earnest work to determine C&PMD(s) in conjunction with the Mayor and other necessary parties.
3. Adopt changes to the zoning regulations to reflect parking requirements by 7.1.26.

PLANNING & ZONING
125 East Avenue
Norwalk, Connecticut 06851

MEMORANDUM

March 13, 2026

TO: Planning & Zoning Commission; Chapin Bryce, Chairman

FROM: Steve Kleppin, Planning & Zoning Director

SUBJECT: Pre-Approved ADU Plans

The Commission has spent a lot of time and considerable thought into how to best adopt ADU regulations that make their development more streamlined and affordable, while being cognizant that the loosening of the regulations does not negatively impact any neighboring properties.

With that in mind, Staff has been researching the idea of Pre-Approved ADU Plans. It is important to note that this action is a recommendation of the Affordable Housing Action Plan, which is an adjunct to the Citywide Plan, recently approved by the Commission. Pre-approved ADU's have been implemented in numerous communities across the country. Links are provided at the end of the memo to some of the communities that have implemented these regulations.

How would it work?

- The Commission would approve plans (floor plans and elevations and potentially renderings) for the ADU's.
- Before posting any plans, the designer would need to submit construction drawings to the satisfaction of the Building Department as well.
- Those plans would be posted on the P&Z website along with detailed information on ADU's, the application process and how to access and purchase the plans (*see links at bottom of memo for examples and more detailed information*).
- Applicants would purchase and obtain stamped plans from the designer which will be submitted as part of their building permit application.
- Architectural plans must conform to the dimensional maximum's for ADU's and other applicable accessory structure requirements.
- ADU's must be located in conformance with the setback standards for the zone.
- The permit package must also include an updated A2 survey showing the location of the ADU. In addition, a Site Plan and supporting documents may be required by other reviewing City agencies may be required. Example: are there wetlands, is the site serviced be a septic system, does the development trigger drainage requirements?

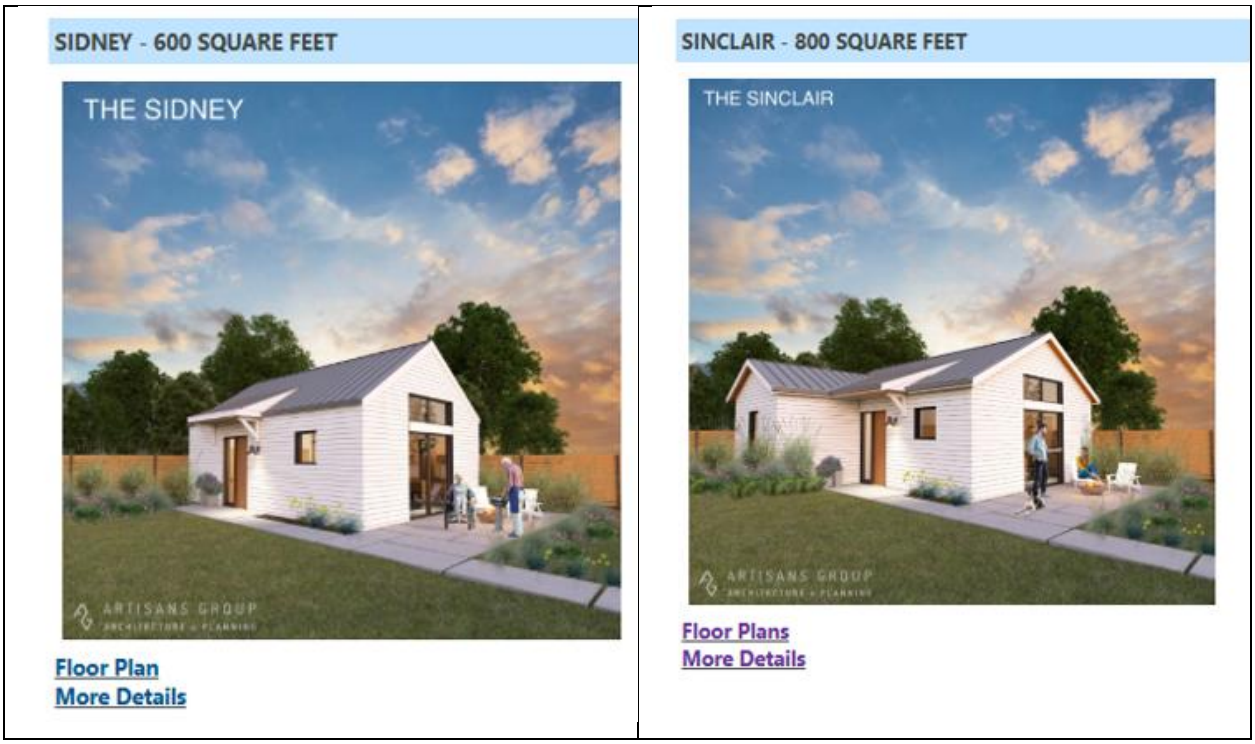
Advantage?

- The applicant/developer/homeowner would have certainty that their project would be approved.
- Lower cost for preparation of plans since plans are already prepared and the designer does not have to recreate them for each new project.
- Less review time for Zoning and Building Staff since plans have been previously vetted.
- Theoretically may lead to additional ADU development.
- Certainty for neighbors.

How plans are chosen:

A fun twist that we think will allow greater public participation and bolster trust in the process, is having a contest, where architects and designers are invited to submit floor plans, elevations and renderings for ADU's that conform to all the bulk and height requirements for ADU's and accessory structures. Once all the submittals have been received we would post the submittals without any logo or identification of the designer so there is no bias one way or the other. The public would be allowed to vote on the submittals, based on criteria we would establish in conjunction with the Commission. You could also retain the option to include submittals rejected by the polling results or potentially deny any that were viewed favorably as well. Having the public participate upfront will reduce the likelihood of conflict down the road since there will hopefully be some familiarity with the program and process.

Once the "winning" entries have been selected, they would be posted on the P&Z page, along with submittal instructions, including displaying the drawings, contact information, etc. A helpful example shown below is from Kitsap County Washington, where the building type is shown along with clickable links that provide more details on layout and unit size.



Other Considerations:

- Kitsap County Washington was seeking to promote ADU development and implemented pre-approved ADU plans. Architects and designers were selected through a Request for Proposals process and received compensation from the County for their work. Considering our budgetary needs, I don't think this option is appropriate.
- Must adhere to requirements of the applicable building code and ensure those plans are approvable prior to inclusion in the program.
- What if the applicant wishes to modify the plans? What if it is just the window location or something minor?
- Adjusted for site conditions (topography, wetlands)?
- City of Menlo Park (linked below), has established criteria for materials, windows, etc, which is consistent with how the form-based code treats developments in CD-2, mixed use and commercial zones.
- Potential considerations could be ensuring entry doors are oriented away from the closest abutting property, if applicable.

Helpful Links

https://santabarbaraca.gov/Pre-Adu

https://www.kitsap.gov/dcd/Pages/adu.aspx

https://www.nyc.gov/site/buildings/codes/types-adu.page

https://www.menlopark.gov/Government/Departments/Community-Development/Planning/Accessory-dwelling-units/Preapproved-ADUs

https://dlg.colorado.gov/providing-pre-approved-adu-plans

CITY OF NORWALK
PLANNING & ZONING COMMISSION MINUTES
March 4, 2026

PRESENT: Louis Schulman, acting as Chair until Ms. Wells arrived; Diana Lenkowsky; Tammy Langalis; Ana Tabachneck; Harvey Jones; Richard Roina; Galen Wells (arrived at 6:14 pm)

STAFF: Steve Kleppin; Bryan Baker

OTHERS: Dan Stanton; Atty Liz Suchy; David Plettner-Saunders; Atty Adam Blank; Henry Conroy; Craig Flaherty; Seelan Pather; Eric Rains; Brian Dempsey; Lynelle Jones; Braden Lynn; Tom Ryder;

I. CALL TO ORDER

Mr. Schulman called the meeting to order at 6:02 p.m. It should be noted that this meeting was held on Zoom.com with participants calling in, separately.

II. ROLL CALL & SEATING OF ALTERNATES

Mr. Kleppin called the roll.

Mr. Schulman seated both Ms. Lenkowsky and Ms. Tabachneck for this meeting. He said that Mr. Williams had not accepted re-appointment to the commission. He also explained that Mr. Bryce would not be attending the meeting and Ms. Wells would be late. He noted that the order of some items on the agenda would be changed.

III. REVIEW AND ACTION ON APPLICATIONS

A. #2026-14 8-24 Referral - City of Norwalk - 8-24 Referral to acquire drainage easement for purposes of maintaining newly installed storm drainage, per Drainage Easement Map 13 Heather Lane and Drainage Easement Map 15 Heather Lane - Report & recommended action

Mr. Schulman began with this matter. Dan Statnon, a civil engineer with DPW, began the presentation with an explanation of the easement that would be necessary for a storm drainage project on Heather Lane. The existing easement was not sufficient for the pipe.

**** MR. ROINA MOVED: THEREFORE, BE IT RESOLVED** by the Norwalk Planning and Zoning Commission, that application #2026-14 8-24 Referral - City of Norwalk - 8-24 Referral to acquire drainage easement for purposes of maintaining newly installed storm drainage, per Drainage Easement Map 13 Heather Lane and Drainage Easement Map 15 Heather Lane be **APPROVED.**

Ms. Langalis seconded.
Louis Schulman; Diana Lenkowsky; Tammy Langalis; Ana Tabachneck; Harvey Jones; Richard Roina approved.
No one opposed.
No one abstained.

B. #2024-08 SP/CAM – Harbor Ventures, LLC and Plumbing Works, LLC – 18 Harbor Avenue (District 1, Block 25, Lot 7) – Extension of time request for construction of a new building and use of the entire property as an Earth Processing and Contractor Materials Storage Yard - Report & recommended action

Atty Liz Suchy began the presentation with the introduction of the project team. She also noted that they were requesting a 2nd extension of time. She explained the application as well as why they were requesting another one. She also explained what was in process and had been worked on for the last several months. She also noted that there was still one last tenant that was in the building that they were working with. She said that they would not need a full year but were requesting one.

**** MR. ROINA MOVED: THEREFORE, BE IT RESOLVED** by the Norwalk Planning and Zoning Commission, that application #2024-08 SP/CAM – Harbor Ventures, LLC and Plumbing Works, LLC – 18 Harbor Avenue (District 1, Block 25, Lot 7) – Extension of time request for construction of a new building and use of the entire property as an Earth Processing and Contractor Materials Storage Yard for one year be **APPROVED.**

Mr. Jones seconded.
Louis Schulman; Diana Lenkowsky; Tammy Langalis; Ana Tabachneck; Harvey Jones; Richard Roina approved.
No one opposed.
No one abstained.

III. PUBLIC HEARINGS

A. #2025-91 POCD - Planning & Zoning Commission - Amendment to the 2019-2029 Plan of Conservation and Development (POCD) to adopt the Arts

and Cultural Plan, dated 2025, as an addendum to the POCD - Public hearing, report & recommended action

Mr. Schulman opened the public hearing. There was a discussion as to who would be presenting for this application. Mr. Kleppin said that since they had already seen a presentation from the applicant, they could start public comment. Mr. Schulman asked for a quick presentation from the consultant as to how the plan was developed and their recommendations.

David Plettner-Saunders, the consultant on the project, began the presentation for Norwalk's Arts and Cultural Plan. Norwalk is the only large city to receive this designation from the state, which it received in 2024. The plan would implement a provision of the Plan of Conservation and Development (POCD). They are seeking an amendment to recommend that a part of the POCD had been achieved. He then discussed that the plan had been developed in 2025 as well as how it had been developed with city residents, etc. There would be programming, support for artists including work opportunities and living spaces, marketing and branding for the district, economic development for small businesses, and connectivity of different areas of the district.

Mr. Schulman then explained how the public could make comments. There were no members of the public that spoke for or against the application.

WHEREAS, a committee to oversee the Plan was comprised of members of the Planning and Zoning Department, Common Council members, Norwalk Redevelopment Agency, industry experts and City Staff;

WHEREAS, the Plan provided recommendations on five core themes; programing & activation, artist support, marketing & branding, economic development, and connectivity & unification;

WHEREAS, the proposed amendments to the Citywide Plan were also formally referred to WestCOG on December 16th, 2025 and the Harbor Management Commission on January 29th, 2026;

WHEREAS, the proposed amendments to the Citywide Plan were formally referred to Common Council on January 21st, 2026;

WHEREAS, the Economic and Community Development Committee of Common Council approved the Plan to be amended to the Citywide Plan, on February 5th, 2026;

WHEREAS, the Common Council approved the amendment to the Citywide Plan, on February 10th, 2026;

WHEREAS, the Commission conducted a public hearing on the proposed amendment on March 4th, 2026 and considered all testimony presented;

**** MR. ROINA MOVED: THEREFORE, BE IT RESOLVED** by the Norwalk Planning and Zoning Commission, that the amendment to page 112 of the Citywide Plan be **APPROVED;** and

BE IT RESOLVED that the reasons for these actions are to implement the Citywide Plan:

1. Chapter 6, Goal A. iv. Develop a strategic plan for arts and culture that is focused on enhancing Norwalk's identity as destination for arts and culture.

2. Chapter 6 Goal B. i. Work with stakeholders, including property owners, to identify and zone an appropriate area in Norwalk Center to provide incentives for artists' studios, livework options, gallery spaces, performance spaces, and so on.

3. Chapter 6, Goal B. v. Promote arts, entertainment and cultural activities and venues to cities and towns outside of Norwalk.

BE IT FURTHER RESOLVED that the effective date of this action shall be March 14th, 2026.

Mr. Wells seconded.
Louis Schulman; Diana Lenkowsky; Tammy Langalis; Ana Tabachneck; Harvey Jones; Richard Roina; Galen Wells approved.
No one opposed.
No one abstained.

At this point, Ms. Wells became the acting chair of the commission, replacing Mr. Schulman.

B. #2026-05 SP/CAM – Spinnaker Acquisitions LLC – 108 Water Street (District 2, Block 84, Lot 18) – Special permit and coastal site plan review application for the construction of a 4.5-story mixed-use development - Public hearing, report & recommended action

Atty Adam Blank, the attorney for the applicant, began the presentation by orienting the commission as to the location of the property on an aerial map. He said that

the applicant had been before the commission in the fall for an existing approval. Now a part of the office building would become hotel rooms. He showed them some of the designs from the original presentation. The exterior is almost identical to the previous design. Since this is a new application, they would have 2 approvals for the property as they continue to look for office tenants.

Henry Conroy, the representative for Spinnaker, said that they still believed that office would work but there were concerns about the finances. The hotel concept seemed to be feasible and generated interest from hotel operators. He explained further why it was important to have the two approvals. He thought the hotel space would activate the waterfront and surrounding public spaces. He also said that they've had a lot of discussions with several potential end users for the waterfront, including the Maritime Aquarium and Manresa Island. The discussions are in the early stages. It's early for any operators to make a commitment this early. He also discussed the construction timeline.

Atty Blank noted that the conditions of approval would not be impacted by the hotel. He said that some improvements would help with flooding concerns as well as a reduction in traffic from the change to hotel use. He also asked that the hearing from the prior application be made a part of this one. They have received all department sign-offs with comments from a few. The Harbor Management Commission approved the application. They had provided the Planning & Zoning Department with the notices of the public hearing as well as posting a sign about it. He then introduced the remainder of the project team.

Craig Flaherty continued the presentation by noting that the building is fully compliant with the city's and FEMA's flood regulations. He then showed them the revised site plan. There would be two improvements in the entrances which included widening them. He noted that changes to the elevation would help during the 100 year storm. He said that the drainage had not changed. They had submitted a flood preparedness plan which had incorporated language about the hotel manager. He believed that many hotel operators had operational plans for floods, especially since they had to be responsible for their guests. He said that another part of the flood plan was to reduce nuisance flooding that occurs on Water Street. He also discussed a study that the city had commissioned several years ago that recommended that Water Street be elevated. He said that this was a city project since it could not be done, one property at a time. This property was designed so that when the elevation was done in the future, this property could be elevated.

Seelan Pather, the architect on the project, continued the presentation, by showing them the various parking levels. There would also be a grand staircase and a walking loop around the property. He noted that the plans are more detailed since they

are construction plans and described the elevations further. He explained how driveways were wider for fire trucks and that changes were made so they could reach multiple areas. He then said that the restaurant would remain unchanged and would be attached to the hotel. He showed them the elevations for the hotel as well.

There was a discussion about the restaurant operators. Mr. Conroy described it as being in partnership with the hotel and open to the public. They would like it to take advantage of the waterfront access and patio that is being created. The buildings are connected through the garage which would have separate lobbies in there. Hotel guests would be able to use some of the same amenities as the residential guests, such as the gym and the pool. The lobbies would be at street level, not the parking. Pedestrians would not see it as they were walking on the street.

There was a discussion about how many rooms there would be in the hotel as well as how it compares to the proposed hotel near the police station. Atty Blank noted that the one near the police station had been struck down by the courts so there would be a demand for hotel space. Mr. Conroy explained that there were discussions with different hotel operators but they have not made a decision yet. They would like it to be a boutique hotel, but there would be benefits to working with a larger brand, such as Hilton. The waterfront access would allow people to pull up in their boats and stay at the hotel or go to the restaurant.

Eric Rains, the landscape architect, said that the original design of the landscaping has remained the same. It had not been affected by the conversion to a hotel.

Atty Blank clarified that in their discussions with Manresa Island, there would be a boat shuttle to the Island, not buses from this site.

Brian Dempsey, the traffic engineer, said that there would be less trips with the conversion of part of the site to a hotel. He also said that there would be less demand for parking on the weekdays. There would be an increase on the weekend, but there are a sufficient number of parking spaces to handle the increase. They had also received comments from Traffic, Mobility and Parking (TMP) which they had responded to.

There was a discussion about the letter that the commission had received from the Connecticut Department of Energy and Environmental Protection (DEEP), due to the change from office to hotel. Atty Blank noted that DEEP’s concern was due to hotels being similar to residential, and residential being worse than offices in terms of safety of lives in the event of a flood event or a storm event. He disagreed with this assessment.

He described what could happen in the event of a storm from the standpoint of a hotel operator. He believed it would be easier to manage people with the hotel use.

There was a discussion about the number of apartments on the site as well as the width of the public access corridors, and what the applicant could do to improve them. Atty Blank addressed these concerns. Most of the walkways would be 6 feet. They were trying to work with the northerly neighbor to enhance that one. There was a discussion about the use of the parking for anyone who wanted to walk on the waterfront. There was also a discussion about the traffic report and whether it accounted for when the Stroffolino Bridge went up. Mr. Dempsey said that it was not in the report, since TMP had not asked for it. There was a discussion about the retail that would be in those spaces. Mr. Conroy noted that it was still early for tenants to be looking at the space.

At this point, Ms. Wells asked members of the public to make comments on this application.

Lynnelle Jones, 10 Point Road, discussed a video on the ENNA website. She noted that Westport had recently denied a waterfront plan. She asked whether it was the commission's responsibility to balance economic and community development with environmental protection and conservation. She believed that DEEP's letters were denials because the application violates the Connecticut Coastal Management Act. She criticized the lack of a dry egress at 108 Water Street and questioned the review process of the flood preparedness plan by the Harbor Management Commission. She urged the commission to consider DEEP's denials and the potential risks to public safety before approving the application.

Braden Lynn, CT DEEP, said that they had concerns about the residential units and had issued a denial in August. He said that they had issued another letter this month. He asked them to review the flood preparedness plan as to whether it mitigates the risks. He had a concern about the flood plan with people calling 911 during a flood event when emergency vehicles could not get through. He said that having residential units on this property was inconsistent with the Coastal Management Act, as well as having hotel space on the property.

Ms. Wells closed the public comment portion of the public hearing. Atty Blank then addressed comments from the public in his rebuttal including the flood preparedness plan. He said they would work with staff on the language about the hotel shutting down in a flood emergency such as a hurricane. He believed this plan was a better plan than the one for the previous approval. He also noted that the development is something that has been allowed since the regulations were adopted in 1987. He described the water infiltration systems that would improve water quality.

There was a discussion about Atty Blank continuing to work with staff on the emergency plan once they have found a hotel operator. Atty Blank asked that it be a condition of approval prior to obtaining building permits.

Mr. Roina noted that, as far as he could remember, this was the first person from DEEP that had ever commented at a Planning & Zoning Commission meeting.

**** MR. ROINA MOVED: THEREFORE, BE IT RESOLVED** by the Norwalk Planning & Zoning Commission that application #2025-51 SPR/CAM – Spinnaker Acquisitions LLC – 108 Water Street (District 2, Block 84, Lot 18) – Coastal site plan review application for the construction of a 4.5-story mixed-use development be **APPROVED** with the following findings:

1. That the Commission has found that the application is consistent with the goals of the Connecticut Coastal Management Act (CCMA); and

2. That the Commission acknowledges that per the Connecticut Department of Energy and Environmental Protection's (DEEP) memo and has found that the applicant's flood preparedness plan, installation of new drainage infrastructure, and reduction of impervious surface reduces adverse impacts as much as feasibly possible; and

BE IT FURTHER RESOLVED by the Norwalk Planning & Zoning Commission that application #2026-05 SP/CAM – Spinnaker Acquisitions LLC – 108 Water Street (District 2, Block 84, Lot 18) – Special permit and coastal site plan review application for the construction of a 4.5-story mixed-use development be APPROVED subject to the following conditions:

1. That the buildings and site will be developed in accordance with the following plans:

a. Per site plan package entitled "Zoning Site Plan Depicting 108 Water Street," prepared by Redniss & Mead, dated 1/8/2026; and

b. Per architectural drawings entitled "108 Water St," prepared by Beinfield Architecture, dated 2/27/2026; and

c. Per landscape site plans entitled "108 Water Street," prepared by Eric Rains Landscape Architecture, LLC, dated 6/13/2025; and

2. That the overhead service wires and all other utilities shall be installed underground; and

3. That prior to the issuance of a zoning permit the applicant shall provide documentation that the application complies with Section 8.4.5.N.2.g of the zoning regulations; and

4. That a water-dependent use shall be located within the portion of the building labeled as “water related use;” and

5. That the applicant shall work with Staff and revise their plans to widen the public access paths to the boardwalk and park at the rear of the property as much as feasible, including but not limited to providing different materials for the walkways and a signage plan, to improve public wayfinding; and

6. That a public right-of-way passage easement agreement shall be filed on the Norwalk Land Records for the sidewalk space needed to ensure a continuous, five-foot wide, unobstructed pedestrian access route along the frontage of the property on Water Street; and

7. That any areas open to the public as indicated on the approved site plan shall be open to the public from dawn to dusk at a minimum while the special permit and/or coastal site plan approval remains effective; and

8. That prior to the issuance of a zoning permit and per the Transportation, Mobility and Parking (TMP) Department’s August 29, 2025, memorandum, the applicant has agreed to:

a. Coordinate with TMP on a mutually agreeable plan to remove, relocate, replace and/or modify traffic signal infrastructure; and

b. Revise the site plans per comment #4 and shall incorporate the design of a new pedestrian curb ramp at the southeast corner of Water Street/Hanford Place, in addition to associated pedestrian signals, push buttons, pedestals/bases and conduit; and

c. Submit a revised signal plan to include any agreed-upon signal infrastructure changes; and

d. Install curb ramps, pavement markings, and the foundations for Rectangular Rapid Flashing Beacons (RRFBs) for a new crosswalk across Water Street in the vicinity of the north site driveway exit, in partnership with TMP, who will help determine the exact location/design of the crosswalk and install the RRFBs; and

e. Ensure that the driveway aprons shall be city standard Type B; and

f. Ensure that city standard light pole details/specifications shall be included in a detail sheet; and

9. That the applicant has agreed to pay for the reasonable design, consultant, material and applicable permit fees necessary for a duckbill backflow preventer at the city's stormwater outflow pipe located at 130 Water Street within 90 days of the applicant receiving a request from the city for payment; and

10. That the applicant, including the hotel operator, shall continue to work with Staff to finalize a flood preparedness plan(s) prior to the issuance of a Certificate of Zoning Compliance; and

11. That a final Workforce Housing Plan showing a total of three workforce housing units shall be submitted to Staff for review and approval and shall include deed restriction documents, architectural floor plans and a breakdown of the number of bedrooms for each workforce housing unit provided. All such workforce housing units shall be deed restricted in perpetuity and meet all requirements of the Workforce Housing Regulations; and

12. That a surety bond be submitted, in an amount to be determined by the Staff, to guarantee the installation of the required erosion and sediment controls prior to the issuance of a zoning permit; and

13. That all erosion and sediment controls be installed and maintained prior to the start of any construction or site work and that additional controls be installed at the direction of the Staff, as needed; and

14. That a Connecticut licensed engineer shall certify that all required improvements, including any required off-site improvements, were installed to City standards prior to the issuance of a Certificate of Zoning Compliance (COZC); and

15. That a surety bond be submitted to guarantee the completion and maintenance of the site plan and any modifications to the plan and all work required as a condition of approval under this special permit/coastal site plan review prior to the issuance of a COZC; and

BE IT FURTHER RESOLVED that this application complies with all applicable sections of the Norwalk Zoning Regulations; and

BE IT FURTHER RESOLVED that the effective date of this approval is March 13, 2026

Mr. Jones seconded.

At this point, the commissioners reviewed the resolution and made revisions.

Louis Schulman; Diana Lenkowsky; Tammy Langalis; Harvey Jones; Richard Roina; Galen Wells approved.
Ana Tabachneck opposed.
No one abstained.

IV. REVIEW AND ACTION ON APPLICATIONS

C. #2025-84 CSPR – LandTech – 163 Gregory Boulevard – Retain a Shoreline Flood and Erosion Control Structure that was built without permits and construct a new residential dock - Report & recommended action

Tom Ryder, the engineer on the project, began the presentation by noting that the commission had requested a chronology of what the owner had known about the problems with the wall. He said that the chronology had been submitted in the prior week. He then reviewed the chronology for the commissioners.

Mr. Roina believed that in this case DEEP performed two different functions, one enforcement and the other advisory. He also said that he didn't like the boulders on the property but was not concerned about them. Mr. Schulman said that Planning & Zoning bore some responsibility for not having done something about this earlier. There was a discussion about the timing of the zoning and building permits which might have caught the height of the wall issue. There was then a discussion about the proposal to reduce the height of the wall. The commissioners then discussed modifications to the draft resolution that they had received from staff. There was a discussion about lowering the height of the wall, as well as the part of the application dealing with the dock. The dock had been approved by DEEP. There was a review of the plans and pictures to discuss what the applicant was proposing, lowering the wall. Mr. Ryder discussed the types of plants that would be planted, as well.

At this point, Mr. Roina made a motion to allow the applicant to keep the wall as it is but there was no second from any of the commissioners. At this point, the commissioners discussed the three options for the applicant so that they could decide which one to approve.

**** MS. TABACHNECK MOVED: THEREFORE, BE IT RESOLVED** that application #2025 – 84 CSPR – LandTech – 163 Gregory Boulevard – Retain a Flood

and Erosion Control Structure that was constructed without permits and construct a new residential dock be **APPROVED** as modified subject to the following conditions:

1. That the building and site will be occupied in accordance with the following plans:

a. Per proposed improvement plans dated 1/8/2025 and revised 2/6/2026 prepared LandTech, Westport, CT and as modified within the plans presented by Mr. Ryder at the March 4, 2026, public hearing; and

2. That the approval is in accordance with the “Lowering the Wall” option within the “Boulder Wall Compliance Options” memorandum provided by the applicant; and

3. That any modifications to the approved plan be reviewed and approved by City Staff prior to implementing; and

4. That all required soil sedimentation and erosion controls are in place prior to the start of any construction; and

5. That any additional needed soil sedimentation and erosion controls be installed at the direction of the Staff; and

6. That nothing in this permit shall obviate the requirements for the applicant to obtain any other assents, permits or licenses required by law or regulation by the City of Norwalk, State of Connecticut, or the Government of the United States, including any approval required by the Connecticut Department of Environmental Protection and U.S. Army Corps of Engineers- obtaining such assents, permits or licenses is the sole responsibility of the applicant; and

BE IT FURTHER RESOLVED that this proposal complies with all applicable sections of the Zoning Regulations for the City of Norwalk; and

BE IT FURTHER RESOLVED that these preceding conditions and modifications of this application are integral to the Commission’s approval because, if not for those conditions and modifications, the Commission would have denied this application.

BE IT FURTHER RESOLVED that the effective date of this approval shall be March 13, 2026.

You must obtain a zoning approval prior to any work on the site.

Mr. Jones seconded.

At this point, the commissioners reviewed the resolution. Mr. Kleppin said that there were three options: to deny, remain the same, and lower the wall. There was a discussion about setting precedent for others in the future if they didn't lower the wall. Mr. Kleppin recommended the compromise of lowering the wall. Mr. Roina withdrew his earlier motion. The commissioners then reviewed the resolution that Mr. Baker had modified. There was a discussion about whether DEEP could still say that the wall was not appropriate.

Louis Schulman; Diana Lenkowsky; Tammy Langalis; Harvey Jones; Richard Roina; Galen Wells; Ana Tabachneck approved.
No one opposed.
No one abstained.

D. FY 2026-27 Capital Budget - Report and recommended action

Mr. Baker said that there would not be a formal presentation. The commission is making a finding of the Capital Budget being consistent with the POCD.

**** MR. SCHULMAN MOVED: THEREFORE, BE IT RESOLVED** by the Norwalk Planning and Zoning Commission the FY 2026-27 Capital Budget is consistent with the Plan of Conservation and Development.

Ms. Tabachneck seconded.
Louis Schulman; Diana Lenkowsky; Tammy Langalis; Harvey Jones; Galen Wells; Ana Tabachneck approved.
No one opposed.
Richard Roina abstained.

V. ACCEPTANCE OF MINUTES

A. Regular Meeting: February 18, 2026

**** MR. ROINA MOVED to approve the February 18, 2026 minutes.**
Mr. Schulman seconded.
Louis Schulman; Diana Lenkowsky; Ana Tabachneck; Harvey Jones; Richard Roina; Galen Wells approved.
No one opposed.
Tammy Langalis abstained.

VI. COMMENTS OF DIRECTOR

Mr. Kleppin said that there would not be a meeting on March 5, but rather, there would be a joint meeting on April 2, 2026. There would later be a public hearing for the POCD amendment. It would be held on Zoom but he would confirm for them.

VII. COMMENTS OF COMMISSIONERS

Ms. Tabachneck noted that the Parking Authority had begun the process for the residential parking permit program. There were sessions in February about it. They were obtaining feedback through a website. The program would be citywide but not every street would have residential parking permits. This had come up in relation to the East Norwalk corridor.

VIII. ADJOURNMENT

Ms. Tabachneck made a Motion to Adjourn.
Ms. Langalis seconded.
Louis Schulman; Diana Lenkowsky; Ana Tabachneck; Harvey Jones; Richard Roina; Galen Wells; Tammy Langalis approved.
No one opposed.
No one abstained.

The meeting was adjourned at 8:23 pm.

Respectfully submitted,

Diana Palmentiero