

ADMINISTRATIVE SUMMARY FORM

DATE OF SUMMARY: 6/29/2023

HEARING DATE: 7/5/2023

APPLICATION REQUEST: Coastal Area Site Plan Review

ZONE: R-7.5

ADDRESS:

88 Elder Street

APPLICANT:

Howard Krieger

REPRESENTATIVE:

Peter O'Brien

REVIEWS

<u>DEPARTMENTS</u>	<u>APPROVED</u>	<u>DENIED</u>	<u>NEUTRAL</u>	<u>CONDITIONS</u>
Engineering				6/28/23
Conservation			N/A	
Fire Marshall			N/A	
Health			N/A	
Inland Wetlands			6/27/23	
Police			N/A	
Public Works			N/A	
Sewer Commission			N/A	
Tree Commission			N/A	
DEEP			N/A	
Building			N/A	
Community Dev.			N/A	

STAFF REVIEW/COMMENTS

The applicant is proposing to construct a new single-family dwelling of approximately 4,200 SF and 30 feet in height. No adverse impacts to coastal resources are anticipated. The project is substantially zoning compliant. The City Engineer is concerned about the potential for stormwater or footing discharges causing off-site issues if the plan is not implemented exactly as provided. The City Engineer's letter dated June 28, 2023, should be made a condition of approval.

Reviewer: David B. Sulkis, A.I.C.P.



City of Milford, Connecticut

Founded 1639

70 West River Street – Milford, CT 06460-3317
Tel 203-783-3245 FAX 203-783-3303

Planning and Zoning
Office

Website: www.ci.milford.ct.us
Email: dsulkis@ci.milford.ct.us

David B. Sulkis, A.I.C.P.
City Planner

PLANNING & ZONING BOARD REVIEW TRANSMITTAL

RE: 88 Elder Street

DATE: 05/31/23

TO:

<input type="checkbox"/> City Attorney	<input checked="" type="checkbox"/> City Engineer
<input type="checkbox"/> Mayor's Office	<input type="checkbox"/> Fire Marshal
<input type="checkbox"/> Conservation Commission	<input checked="" type="checkbox"/> Inland Wetlands Commission
<input type="checkbox"/> Health Administrator	<input type="checkbox"/> Open Space Agent
<input type="checkbox"/> Police Department	<input type="checkbox"/> Public Works Director
<input checked="" type="checkbox"/> Sewer Commission	<input type="checkbox"/> South Central Regional
<input checked="" type="checkbox"/> DEEP – CAM Report	<input type="checkbox"/> Tree Commission (203-878-4895)
Mail to: John Gaucher, DEEP	<input type="checkbox"/> Resource Report
79 Elm Street	<input type="checkbox"/> Community Development
Hartford, CT 06106	<input type="checkbox"/> Building Department
<input type="checkbox"/> DEEP Permitting	<input checked="" type="checkbox"/> Planning & Zoning Office (3 Sets)
Mail to: Sue Jacobson, DEEP	

SUBJECT: Coastal Area Management Review (CAM)

ADDRESS OF PROPERTY: 88 Elder Street

MAP: 035 **BLOCK:** 429 **PARCEL:** 3 **ZONE:** R7.5

APPLICANT/AGENT: Alan Shepard, Novakowski, O'Bymachow, Kane & Associates

PHONE: 203-924-7745 **EMAIL:** Kareno.nok@gmail.com

PROPERTY OWNER: Howard and Stephanie Kreiger

PLAN TITLE: Prepared for Howard & Stephanie Kreiger 88 Elder Street

PREPARED BY: Novakowski, O'Bymachow, Kane & Associates

DATE OF PLANS: 5/23/23 unsigned

DATE RECEIVED BY PLANNING & ZONING: 5/30/23

PLANNING & ZONING CONTACT: David B. Sulkis

These plans/documents have been received and are transmitted to your office for review prior to the submission of a Coastal Area Management Review to the Planning & Zoning Board

ALL COMMUNICATIONS REGARDING THE REVIEW SHALL BE DIRECTED TO THE APPLICANT/AGENT WITH A COPY TO THE PLANNING & ZONING OFFICE

10 Sets of plans will be required for the Planning & Zoning Board Distribution.

*These commission reviews must be returned within 10 working days.



MILFORD PLANNING AND ZONING BOARD
APPLICATION FOR COASTAL SITE PLAN REVIEW - PAGE 1 of 9

(CLICK THE GRAY BOX TO MAKE A SELECTION OR BEGIN TYPING)

Received by Planning Office
Milford DPLU
6/26/2023

REVISED

APPLICANT Howard & Stephanie Kreiger

SITE PLAN REVIEW X

AMENDMENT TO SITE PLAN REVIEW

TO ESTABLISH OR CONSTRUCT Single Family Residence

ON THE FOLLOWING PROPERTY (ADDRESS) 88 Elder Street

OWNER OF RECORD Howard & Stephanie Kreiger

ASSESSOR'S MAP 035

BLOCK 429

PARCEL 3

ZONE R7.5

TYPE OF PROJECT APPROVAL REQUESTED:

SITE PLAN REVIEW [X]

SPECIAL PERMIT []

SUBDIVISION []

VARIANCE []

TYPE OF PROJECT OR ACTIVITY
(CHECK ONE OR MORE)

COASTAL RESOURCES LOCATED WITHIN THE
PROJECT OR WHICH THE PROJECT WILL AFFECT:

AREA

Sq. Ft. & Acres

- a. Subdivision (type of use - residential, Commercial, etc.)
[X] b. Single family residential
c. Multi-family residential (No. of units)
d. Condominium (No. of units)
e. Commercial - sq. ft.
f. Industrial - sq. ft.
g. Mixed residential/commercial (# units /sq. ft.)
h. Marina - sq. ft.
i. Commercial Port Facility - sq. ft.
j. Sewer Line - Capacity
k. Water Line - Capacity
l. Other - PLEASE SPECIFY:

- a. bluffs or escarpments
b. rocky shorefront
c. beaches and dunes
d. intertidal flats
e. tidal wetlands
f. freshwater wetlands
g. estuarine embayments
h. coastal flood hazard area
i. coastal erosion hazard area
j. developed shorefront
k. islands
l. coastal waters
[X] m. shorelands 8,437
n. shellfish concentration areas

PROPERTY OWNER:

NAME Howard & Stephanie Kreiger

SIGNATURE

MAILING ADDRESS 88 Elder Street Milford, CT 06460

PHONE NO. 203-996-7675

IF APPEARING BY ATTORNEY OR AGENT:

NAME Alan Shepard

SIGNATURE

MAILING ADDRESS 415 Howe Avenue Shelton, CT 06484

PHONE NO. 203-924-7745

PROFESSIONAL ENGINEER - DESIGNER/ARCHITECT - LAND SURVEYOR:

NAME Alan Shepard

SIGNATURE

MAILING ADDRESS 415 Howe Ave

PHONE NO. 203-924-7745

FEE - SEE SCHEDULE OF ZONING FEES (Payable by Check Only)

RECEIVED OF DATE
RECEIVED BY AMOUNT RECEIPT NO.

APPLICATION FILED APPLICATION CERTIFIED PUBLIC HEARING DATE

CSPR (REV. 3/96; REFORMAT 12/14) DATE BOARD ACTION APPROVED DENIED

Municipal Coastal Site Plan Review Form

For Projects Located Fully or Partially Within the Coastal Boundary

Please complete this form in accordance with the attached instructions (CSPR-INST-11/99) and submit it with the appropriate plans to the Planning & Zoning Department.

Section I: Applicant Identification

Applicant:	<i>Howard & Stephanie Kreiger</i>	Date:	5/23/23		
Address:	88 Elder Street Milford, CT 06460	Phone Number:	203-996-7675		
Project Address or Location:	88 Elder Street Milford, CT 06460				
Interest in Property:	<input checked="" type="checkbox"/> fee simple <input type="checkbox"/> option <input type="checkbox"/> lessee <input type="checkbox"/> easement <input type="checkbox"/> other (specify):				
List primary contact for correspondence if other than applicant:					
Name:	Alan Shepard				
Address:	415 Howe Avenue				
City/Town:	Shelton	State:	CT	Zip Code:	06484
Business Phone:	203-924-7745				
e-mail:	johnmiles801@gmail.com				

Section II: 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 grading
- 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 treatment practices
- Ownership and type of use on adjacent properties
- Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)

Section III: Written Project Information

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

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

Part I: Site Information

1. Street Address or Geographical Description:

88 Elder Street

City or Town: Milford

2. Is project or activity proposed at a waterfront site (includes tidal wetlands frontage)? YES NO

3. Name of on-site, adjacent or downstream coastal, tidal or navigable waters, if applicable:

Quinnipiac River, Long Island Sound

4. Identify and describe the existing land use on and adjacent to the site. Include any existing structures, municipal zoning classification, significant features of the project site:

Single Family Residential, Zone R-7.5

5. Indicate the area of the project site: 0.19 acres **or** square feet

6. Check the appropriate box below to indicate total land area of disturbance of the project or activity (please also see Part II.B. regarding proposed stormwater best management practices):

- Project or activity will disturb 5 or more total acres of land area on the site. It may be eligible for registration for the Department of Environmental Protection's (DEP) General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities
- Project or activity will disturb one or more total acres but less than 5 total acres of land area. A soil erosion and sedimentation control plan must be submitted to the municipal land use agency reviewing this application.
- Project or activity will not disturb 1 acre total of land area. Stormwater management controls may be required as part of the coastal site plan review.

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

Part II.A.: 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):

Proposal consists of demolition of an existing single-family house, grading and installation of new retaining walls, construction of new house and garage including a front deck, and installation of sidewalk on the subject lot.

Minimal grading will be in accordance with site plan.

Project construction is anticipated to begin in Spring 2023 and complete in Summer 2024.

Part II.B.: 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):

Proposal calls for storage of required Water Quality Volume in 20 linear feet of 4x4 galleries. The soil on the lot is composed of Charlton soil which is accepting of ground water.

State soil and erosion control measures will be adhered to. Silt fence and construction debris containment measures shall be installed.

Refer to Erosion and Sediment Control Plan for more details.

Part III: 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	Off-site but within the influence of project			
	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)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beaches & Dunes - Definition: CGS Section 22a-93(7)(C); Policies: CGS Sections 22a-92-(b)(2)(C) and 22a-92(c)(1)(K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bluffs & Escarpments - Definition: CGS Section 22a-93(7)(A); Policy: CGS Section 22a-92(b)(2)(A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Developed Shorefront - Definition: CGS Section 22a-93(7)(I); Policy: 22a-92(b)(2)(G)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Freshwater Wetlands and Watercourses - Definition: CGS Section 22a-93(7)(F); Policy: CGS Section 22a-92(a)(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Intertidal Flats - Definition: CGS Section 22a-93(7)(D); Policies: 22a-92(b)(2)(D) and 22a-92(c)(1)(K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Islands - Definition: CGS Section 22a-93(7)(J); Policy: CGS Section 22a-92(b)(2)(H)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rocky Shorefront - Definition: CGS Section 22a-93(7)(B); Policy: CGS Section 22a-92(b)(2)(B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shellfish Concentration Areas - Definition: CGS Section 22a-93(7)(N); Policy: CGS Section 22a-92(c)(1)(I)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shorelands - Definition: CGS Section 22a-93(7)(M); Policy: CGS Section 22a-92(b)(2)(I)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* General Coastal Resource policy is applicable to all proposed activities

Part IV: Consistency with Applicable Coastal Resource Policies and Standards

Describe the location and condition of the coastal resources identified in Part III above 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 Part VII.A below (attach additional pages if necessary):

Subject lot is within the Shorelands as shown on Coastal Resources Map (CRM). Additionally, the FEMA AE(11) line crosses a small section of the subject site. All development will be above the flood elevation.

Across the street (30') from the subject site, adjacent lots are within the Coastal 'Flood' Hazard Area, Regulated Tidal Wetlands, and Coastal Boundary as shown on the CRM. There are no proposed disturbances.

Part V: 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:

- 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.

Part VI: 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 Part V. **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 Part VII.B below (attach additional pages if necessary):

This proposal does not change the current use of the lot and includes measures to ensure the construction process does not adversely affect any adjacent areas.

Part VII.A.: Identification of Potential Adverse Impacts on Coastal Resources

Please complete this section 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 Part VIII 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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Degrading visual quality through significant alteration of the natural features of vistas and view points - CGS Section 22a-93(15)(F)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Part VII.B.: Identification of Potential Adverse Impacts on Water-dependent Uses

Please complete the following two sections **only if the project or activity is proposed at a waterfront site**:

1. 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 Part VIII 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)	<input type="checkbox"/>	<input type="checkbox"/>
Replacing an existing water-dependent use with a non-water-dependent use - CGS Section 22a-93(17)	<input type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input type="checkbox"/>

2. 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.):

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

Part VIII: 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 Part VII have been avoided, eliminated, or minimized (attach additional pages if necessary):

The proposal to demolish and construct a new single-family residence at 88 Elder Street will not change or impact the surrounding community. There is no change to the use of the lot from its current state and it is within a well defined residential area.

Part IX: 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 is no proposed change to the current conditions related to the Coastal Resources in the area as the proposed project is consistent with the existing development.

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

95 Silo Drive * Rocky Hill * Connecticut * 06067 * (203) 272-7837 * ssesinc@yahoo.com

WETLANDS/WATERCOURSES AND SOIL REPORT

Mary Jane Gleason
79 Elder Street
Milford, CT 06460

SSES Job No: 2018-43-CT-MIL
Client Job No:
Site Inspection Date: May 15, 2018

PROJECT TITLE AND LOCATION: 79 Elder Street, Milford, CT

IDENTIFICATION OF WETLANDS AND WATERCOURSES RESOURCES

WETLANDS AND WATERCOURSES PRESENT ON PROPERTY: Yes XX No _____

Wetlands: Inland Wetlands XX **Watercourses:** Streams _____
Tidal Wetlands XX Waterbodies _____

Remarks: _____

VEGETATION COMMUNITIES PRESENT IN WETLANDS

Forest _____ Sapling/Shrub XX Wet Meadow _____ Marsh XX Field/Lawn _____

SOIL MOISTURE CONDITION

Dry _____
Moist XX
Wet _____

WINTER CONDITIONS

Frost Depth: _____ inches
Snow Depth: _____ inches

The classification system of the National Cooperative Soil Survey, USDA, Natural Resources Conservation Service and the State Soil Legend were used in this investigation. The investigation was conducted by the undersigned Registered Soil Scientist. A sketch map showing wetland boundaries and the numbering sequence of wetland markers, watercourses and soil types in both wetland and non-wetlands are included with this report. After the wetland boundary and/or watercourse flags have been located/plotted by the surveyor, it is recommended that a copy of the survey map be sent to our firm for review. All wetland boundary lines established by the undersigned Registered Soil Scientist are subject to change until officially adopted by local, state or federal regulatory agencies.

Respectfully Submitted by

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

Scott D. Stevens

Scott D. Stevens
Registered Professional Soil Scientist

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

95 Silo Drive * Rocky Hill * Connecticut * 06067 * (203) 272-7837 * ssesinc@yahoo.com

WETLANDS/WATERCOURSES AND SOIL REPORT

PROJECT TITLE AND LOCATION: 79 Elder Street, Milford, CT

NUMBERING SEQUENCE OF WETLAND BOUNDARY LINE MARKERS:

CT Inland Wetland flags numbered CT#1 thru 4 5 thru 8

Tidal Wetland flags numbered Tidal #1 thru 8

SOILS SECTION:

Soil Legend: State Soil Number/County Soil Symbol, Soil Series Name, Taxonomic Class & Brief Description.

WETLAND SOILS

Aq Aquents - This is a poorly to very poorly drained, disturbed soil where two or more feet of the original soil surface has been altered by filling, excavation and/or grading. Aquents are characterized by a seasonal to prolonged high groundwater table at or near the ground surface. Aquents are capable of supporting a prevalence of hydrophytic plants.

12 Raypoil silt loam (Aeric Endoaquepts)- This is a deep, poorly drained, friable, loamy textured soil that developed over sandy and gravelly, glacial outwash. Outwash soils occur in valleys, outwash plains and terraces.

98 Westbrook mucky peat (Terric Sulphihemists) – This is a deep, very poorly drained, peats and mucks, organic soil that developed over loamy mineral materials. Depth of the peats and mucks is 16 to 51 inches. Westbrook mucky peat soils occur in estuaries near mouths of rivers or major streams or in salt marshes which are subject to tidal inundation twice daily and they are generally strongly saline.

NON-WETLAND SOILS

260 Charlton-Urban land complex - This complex consists of well drained Charlton soils and areas of urban land. The Charlton is a friable, coarse-loamy textured, glacial till soil. Urban land consists of areas covered by streets, parking lots and buildings. The Charlton-Urban land complex occurs on side slopes and crests of glacial uplands in densely populated areas of the state. The complex consists of about 40% Charlton soils, 30% Urban land and 30% other soils.

306 Udorthents-Urban land complex This map unit consists of extensive areas where soils have been disturbed from land development along with large areas of impervious surfaces associated with streets, parking lots, buildings and other structures.

308 Udorthents, smoothed This is a well drained to moderately well drained soil area that has had two or more feet of the original soil surface altered by filling, excavation or grading activities. Udorthents, smoothed soils commonly occur on leveled land and fill landforms.

Note: On May 15, 2018, SS&ES, Inc. conducted a site inspection of the property to identify any regulated wetlands or watercourses existing on-site. Scott Stevens, Registered Professional Soil Scientist and Jennifer Beno, Biologist/Wetland Scientist performed the inspection. The study site presently contains a residential dwelling with a paved driveway. A tidal wetland with Westbrook mucky peat soils exists to the north of the site. A narrow fringe of CT Inland wetlands exists just upslope of the tidal wetland boundary in two areas along the property boundary. The tidal wetland line was determined based on tidal wetland plants identified and physical markings of the tidal wrackline observed. Tidal wetland species identified along the tidal wetland boundary included phragmites and saltwater cordgrass. The Coastal Jurisdiction Line (CJL) for Milford has been established at elevation 4.7'

**DEFINITIONS AND METHODOLOGY FOR IDENTIFICATION OF
STATE REGULATED WETLANDS & WATERCOURSES**

Wetlands and watercourses are regulated in the State of Connecticut by the Connecticut General Statutes, Chapter 440, sections 22a-28 to 22a-45. The Statutes are divided into the Inland Wetlands and Watercourses Act (sections 22a-36 to 22a-45) and the Tidal Wetlands Act (sections 22a-28 to 22a-35).

Inland Wetlands "means land, including submerged land, not regulated pursuant to sections 22a-28 to 22a-35, inclusive, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture" section 22a-38(15).

Watercourses "means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private which are contained within, flow through or border upon this state or any portion thereof, not regulated pursuant to sections 22a-28 to 22a-35, inclusive. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation" section.22a-38(16).

Tidal Wetlands are defined as "those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marsh, swamps, meadows, flats, or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing some, but not necessarily all of the following:" (includes plant list) section 22a-29(2).

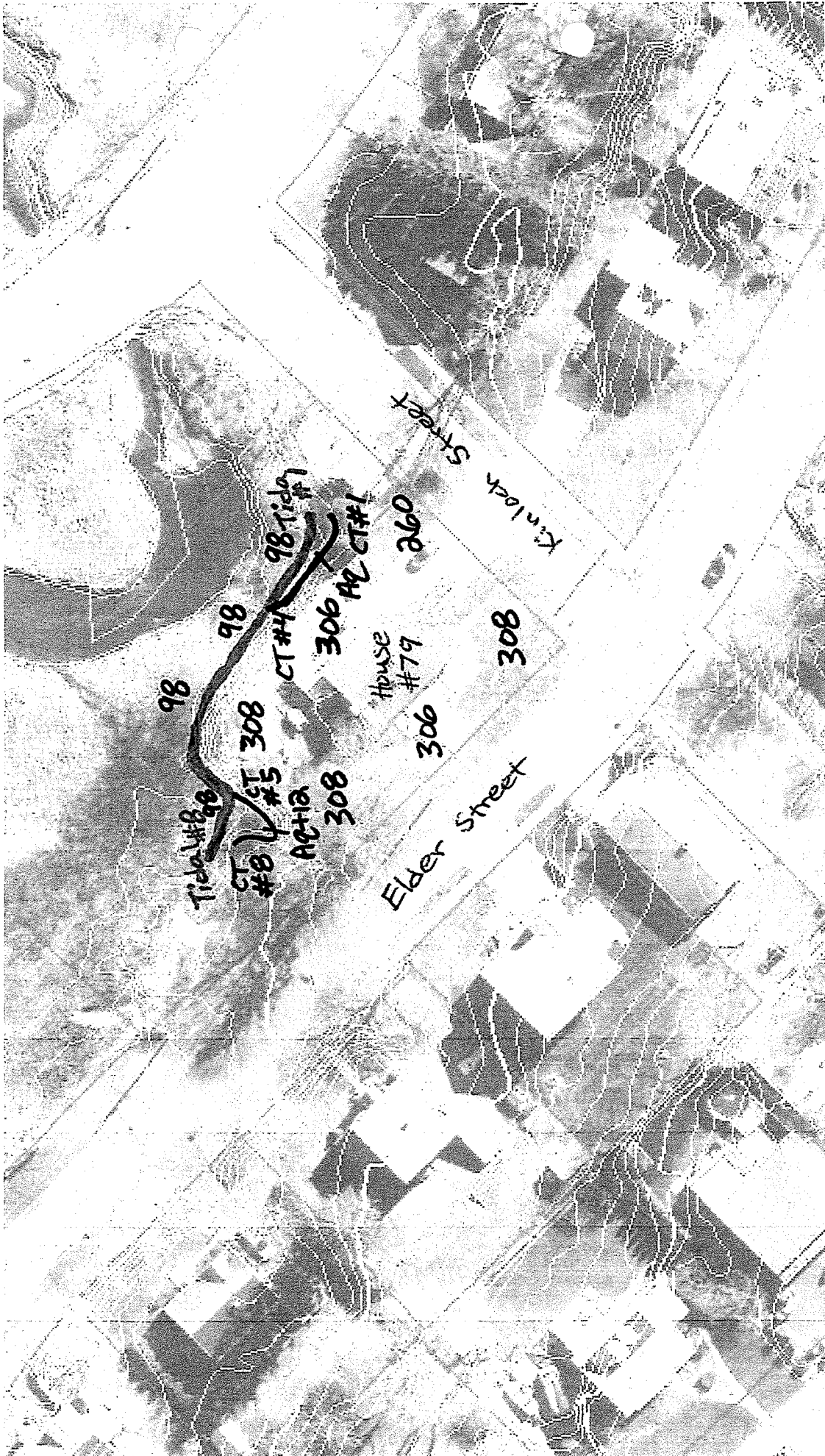
METHODOLOGY FOR IDENTIFICATION OF SOILS, WETLANDS & WATERCOURSES

1) **SOILS IDENTIFICATION**: Soils are investigated by digging test holes with a spade and auger. Test holes are typically dug to depths of between 15 and 40 inches. Based on soil features, including coloration patterns, texture and depths to restrictive layers, the soils are identified by soil series name utilizing the classification system of the National Cooperative Soil Survey. Soil series map numbers correspond with the State Soil Map Legend established by USDA, NRCS in the State of Connecticut Soil Survey. For further soils information, refer to the NRCS website for CT: www.ct.nrcs.usda.gov

2) **INLAND WETLAND DELINEATION**: Soil test holes and borings are made in selected areas in order to determine the lateral extent of Inland Wetlands. The boundaries of the Inland Wetlands are identified in the field and delineated with consecutively numbered survey tapes, unless instructed by the client to only map wetland boundaries for planning purposes. The approximate locations of the wetland boundaries are hand drawn onto a map and are included with the wetlands report.

3) **IDENTIFICATION OF WATERCOURSES**: Very often the locations of ponds, streams and rivers are already shown on a survey map. If a watercourse is absent from a survey map, then survey tapes, labeled "watercourse" or "intermittent watercourse" are placed along the channel and the approximate location of the watercourse is also sketched onto the map.

4) **TIDAL WETLANDS DELINEATION**: Tidal Wetlands are identified based on a predominance of tidal wetland plants and observation of physical markings or water laid deposits resulting from tidal action. Tidal Wetland boundaries are delineated by locating the upland limits of those plants listed in section 22a-29(2) to the extent that these plants reflect inundation by tides.



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Milford DPLU

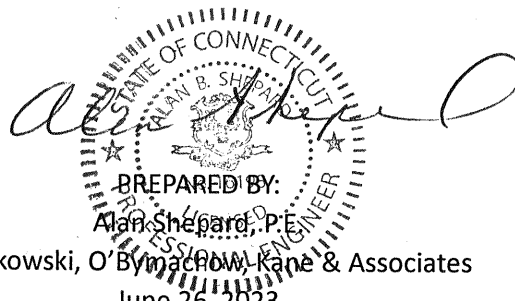
6/28/2023

DRAINAGE REPORT

HOWARD & STEPHANIE KREIGER

88 ELDER STREET

MILFORD, CONNECTICUT



Nowakowski, O'Byrne, Kane & Associates

June 26, 2023

Revised June 28, 2023

Received by Planning Office

Milford DPLU

6/28/2023

INTRODUCTION:

The proposal is to raze the existing house and construct a new single family residential house, which is slightly bigger. We are providing recharge galleries for roof drains to reduce the run-off for the 25 -year storm.

Our Pre-Development run-off of velocity for the 25-year storm was 1.1 cfs and our Post Development will be 1.11 cfs with the roof drains going to the 4'x4' galleries.

CONCLUSION:

Doing detention for the 25-year storm would be the same amount of galleries needed for storing the required water quality volume. Therefore, we would prefer to store the water quality volume as direct recharge.



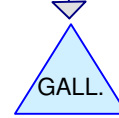
PRE-DEVELOPMENT



POST UN-CON



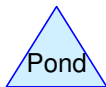
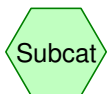
NEW HOUSE



4X4 GAL.



P.O.C.



Routing Diagram for Kreiger-88 Elder Street-Milford - 6-26-23

Prepared by N O K & Assoc, Printed 6/28/2023

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Kreiger-88 Elder Street-Milford - 6-26-23

Prepared by N O K & Assoc

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Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2 YR.	Type III 24-hr		Default	24.00	1	3.49	2
2	25 YR.	Type III 24-hr		Default	24.00	1	6.54	2

Kreiger-88 Elder Street-Milford - 6-26-23

Prepared by N O K & Assoc

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Page 3

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.522	61	>75% Grass cover, Good, HSG B (POST -UN, PRE)
0.042	98	Roofs, HSG B (POST-CON)
0.065	98	Unconnected pavement, HSG B (POST -UN)
0.089	98	Unconnected roofs, HSG B (PRE)
0.718	71	TOTAL AREA

Kreiger-88 Elder Street-Milford - 6-26-23

Prepared by N O K & Assoc

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.718	HSG B	POST -UN, POST-CON, PRE
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.718		TOTAL AREA

Kreiger-88 Elder Street-Milford - 6-26-23

Prepared by N O K & Assoc

Printed 6/28/2023

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Page 5

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.522	0.000	0.000	0.000	0.522	>75% Grass cover, Good	POST -UN, PRE
0.000	0.042	0.000	0.000	0.000	0.042	Roofs	POST-C ON
0.000	0.065	0.000	0.000	0.000	0.065	Unconnected pavement	POST -UN
0.000	0.089	0.000	0.000	0.000	0.089	Unconnected roofs	PRE
0.000	0.718	0.000	0.000	0.000	0.718	TOTAL AREA	

Kreiger-88 Elder Street-Milford - 6-26-23

Type III 24-hr 2 YR. Rainfall=3.49"

Prepared by N O K & Assoc

Printed 6/28/2023

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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

Subcatchment POST -UN: POST UN-CON Runoff Area=13,807 sf 20.50% Impervious Runoff Depth>0.75"
Flow Length=225' Tc=6.1 min UI Adjusted CN=65 Runoff=0.23 cfs 0.020 af

Subcatchment POST-CON: NEW HOUSE Runoff Area=1,836 sf 100.00% Impervious Runoff Depth>3.25"
Tc=5.0 min CN=98 Runoff=0.14 cfs 0.011 af

Subcatchment PRE: PRE-DEVELOPMENT Runoff Area=15,643 sf 24.73% Impervious Runoff Depth>0.79"
Flow Length=225' Tc=6.1 min UI Adjusted CN=66 Runoff=0.28 cfs 0.024 af

Pond GALL.: 4X4 GAL. Peak Elev=16.60' Storage=101 cf Inflow=0.14 cfs 0.011 af
Discarded=0.01 cfs 0.008 af Primary=0.08 cfs 0.003 af Outflow=0.09 cfs 0.011 af

Link 5L: P.O.C. Inflow=0.30 cfs 0.023 af
Primary=0.30 cfs 0.023 af

Total Runoff Area = 0.718 ac Runoff Volume = 0.055 af Average Runoff Depth = 0.92"
72.72% Pervious = 0.522 ac 27.28% Impervious = 0.196 ac

Summary for Subcatchment POST -UN: POST UN-CON

Runoff = 0.23 cfs @ 12.11 hrs, Volume= 0.020 af, Depth> 0.75"
 Routed to Link 5L : P.O.C.

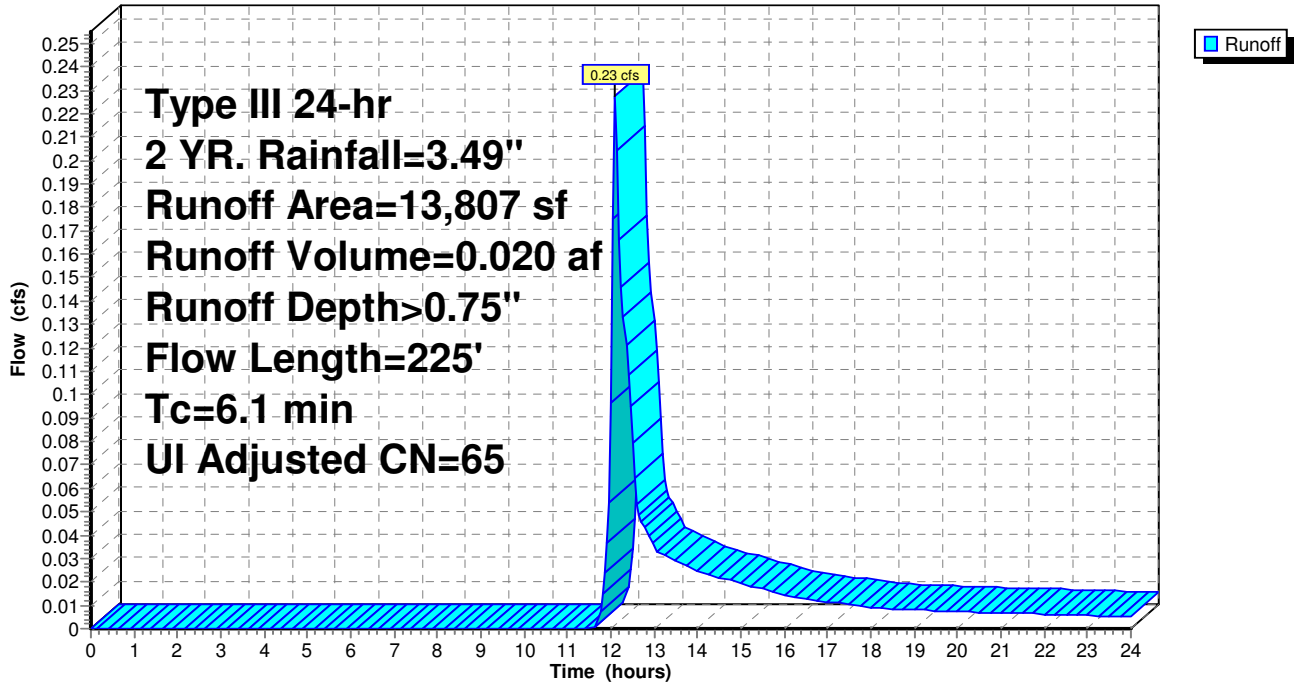
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 YR. Rainfall=3.49"

Area (sf)	CN	Adj	Description
2,830	98		Unconnected pavement, HSG B
10,977	61		>75% Grass cover, Good, HSG B
13,807	69	65	Weighted Average, UI Adjusted
10,977			79.50% Pervious Area
2,830			20.50% Impervious Area
2,830			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	100	0.0700	0.29		Sheet Flow, SHEET FLOW Grass: Short n= 0.150 P2= 3.49"
0.4	125	0.1300	5.80		Shallow Concentrated Flow, SHALLOW CON. Unpaved Kv= 16.1 fps
6.1	225	Total			

Subcatchment POST -UN: POST UN-CON

Hydrograph



Summary for Subcatchment POST-CON: NEW HOUSE

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.14 cfs @ 12.07 hrs, Volume= 0.011 af, Depth> 3.25"
 Routed to Pond GALL. : 4X4 GAL.

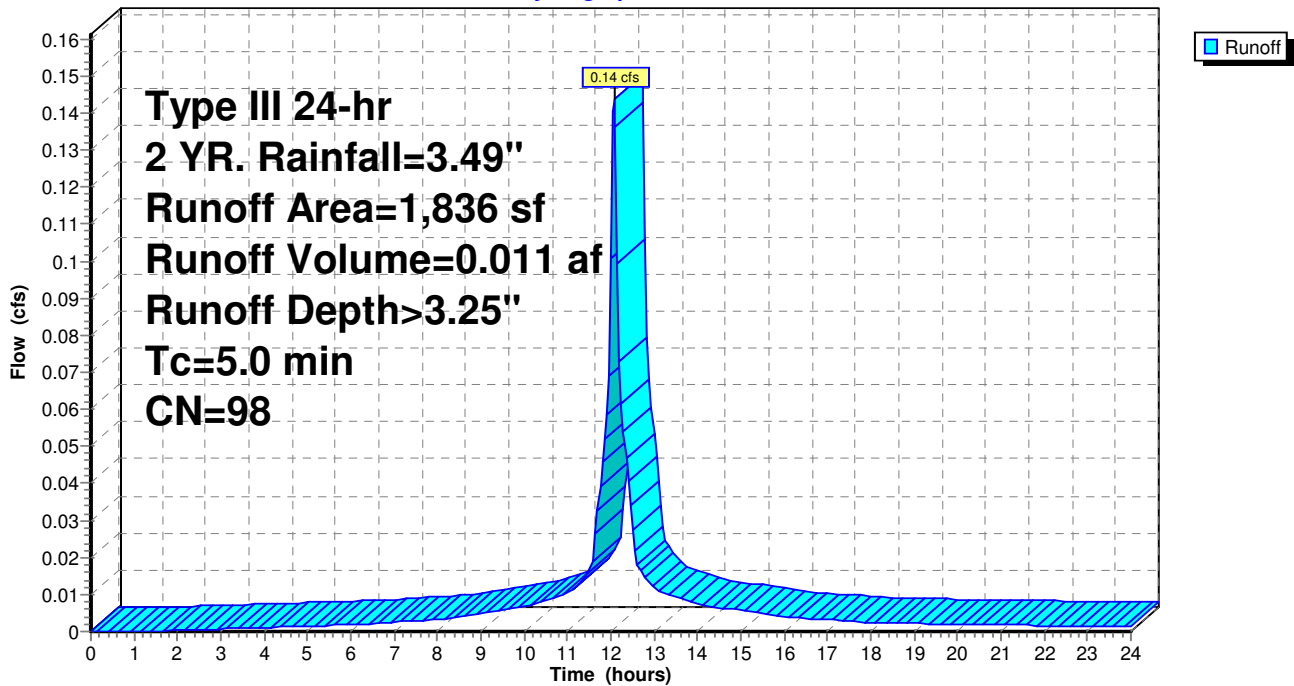
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 YR. Rainfall=3.49"

Area (sf)	CN	Description
1,836	98	Roofs, HSG B
1,836		100.00% Impervious Area

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

Subcatchment POST-CON: NEW HOUSE

Hydrograph



Summary for Subcatchment PRE: PRE-DEVELOPMENT

Runoff = 0.28 cfs @ 12.11 hrs, Volume= 0.024 af, Depth> 0.79"

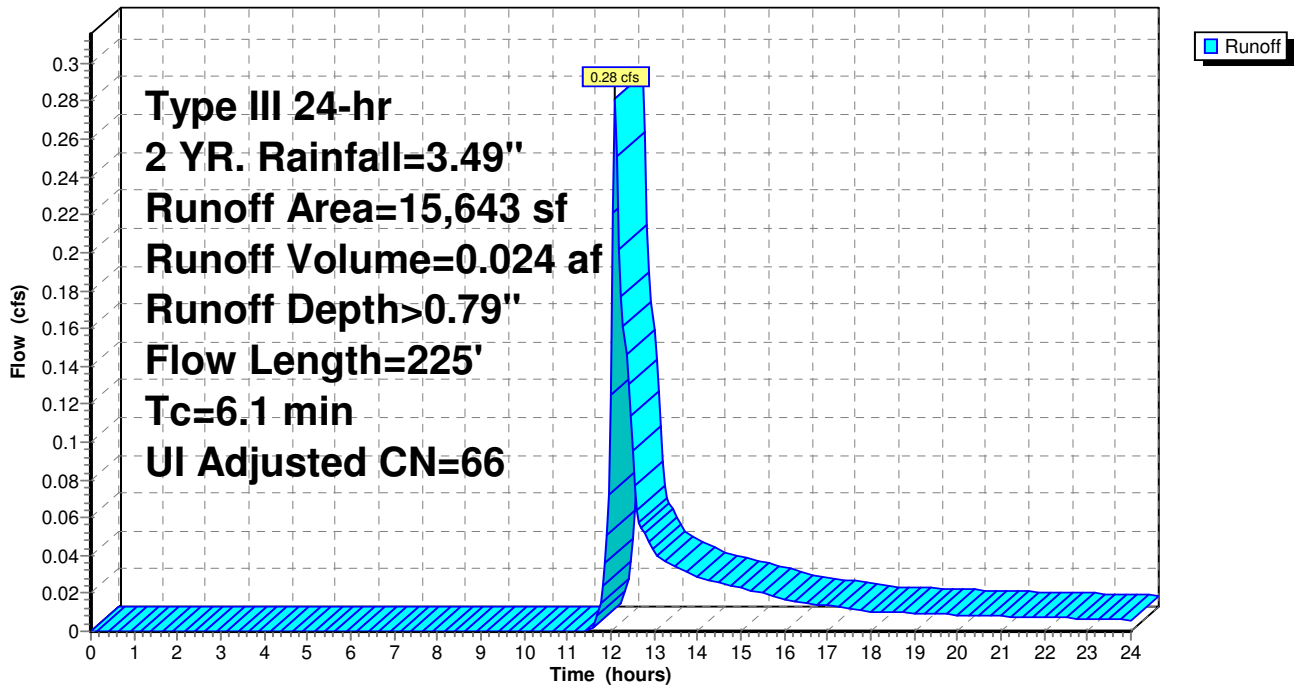
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR. Rainfall=3.49"

Area (sf)	CN	Adj	Description
3,869	98		Unconnected roofs, HSG B
11,774	61		>75% Grass cover, Good, HSG B
15,643	70	66	Weighted Average, UI Adjusted
11,774			75.27% Pervious Area
3,869			24.73% Impervious Area
3,869			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	100	0.0700	0.29		Sheet Flow, SHEET FLOW
					Grass: Short n= 0.150 P2= 3.49"
0.4	125	0.1300	5.80		Shallow Concentrated Flow, SHALLOW CON.
					Unpaved Kv= 16.1 fps
6.1	225	Total			

Subcatchment PRE: PRE-DEVELOPMENT

Hydrograph



Summary for Pond GALL.: 4X4 GAL.

Inflow Area = 0.042 ac, 100.00% Impervious, Inflow Depth > 3.25" for 2 YR. event
 Inflow = 0.14 cfs @ 12.07 hrs, Volume= 0.011 af
 Outflow = 0.09 cfs @ 12.18 hrs, Volume= 0.011 af, Atten= 41%, Lag= 6.4 min
 Discarded = 0.01 cfs @ 11.05 hrs, Volume= 0.008 af
 Primary = 0.08 cfs @ 12.18 hrs, Volume= 0.003 af
 Routed to Link 5L : P.O.C.

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 16.60' @ 12.18 hrs Surf.Area= 60 sf Storage= 101 cf

Plug-Flow detention time= 33.8 min calculated for 0.011 af (100% of inflow)
 Center-of-Mass det. time= 33.3 min (786.7 - 753.4)

Volume	Invert	Avail.Storage	Storage Description
#1	15.00'	222 cf	Concrete Galley 4x4x4 x 5 Inside= 42.0"W x 43.0"H => 12.67 sf x 3.50'L = 44.3 cf Outside= 52.8"W x 48.0"H => 14.72 sf x 4.00'L = 58.9 cf

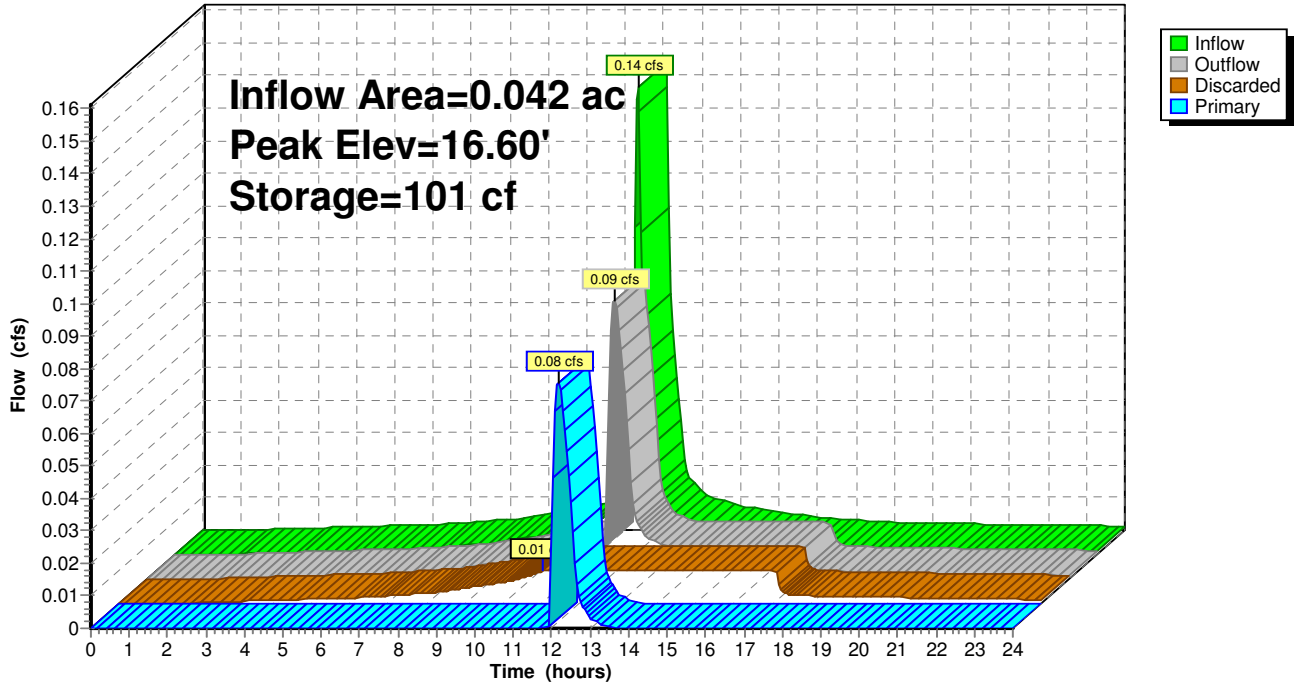
Device	Routing	Invert	Outlet Devices
#1	Primary	16.00'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Discarded	15.00'	0.01 cfs Exfiltration at all elevations

Discarded OutFlow Max=0.01 cfs @ 11.05 hrs HW=15.04' (Free Discharge)
 ↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.08 cfs @ 12.18 hrs HW=16.60' (Free Discharge)
 ↳ **1=Orifice/Grate** (Orifice Controls 0.08 cfs @ 3.44 fps)

Pond GALL.: 4X4 GAL.

Hydrograph



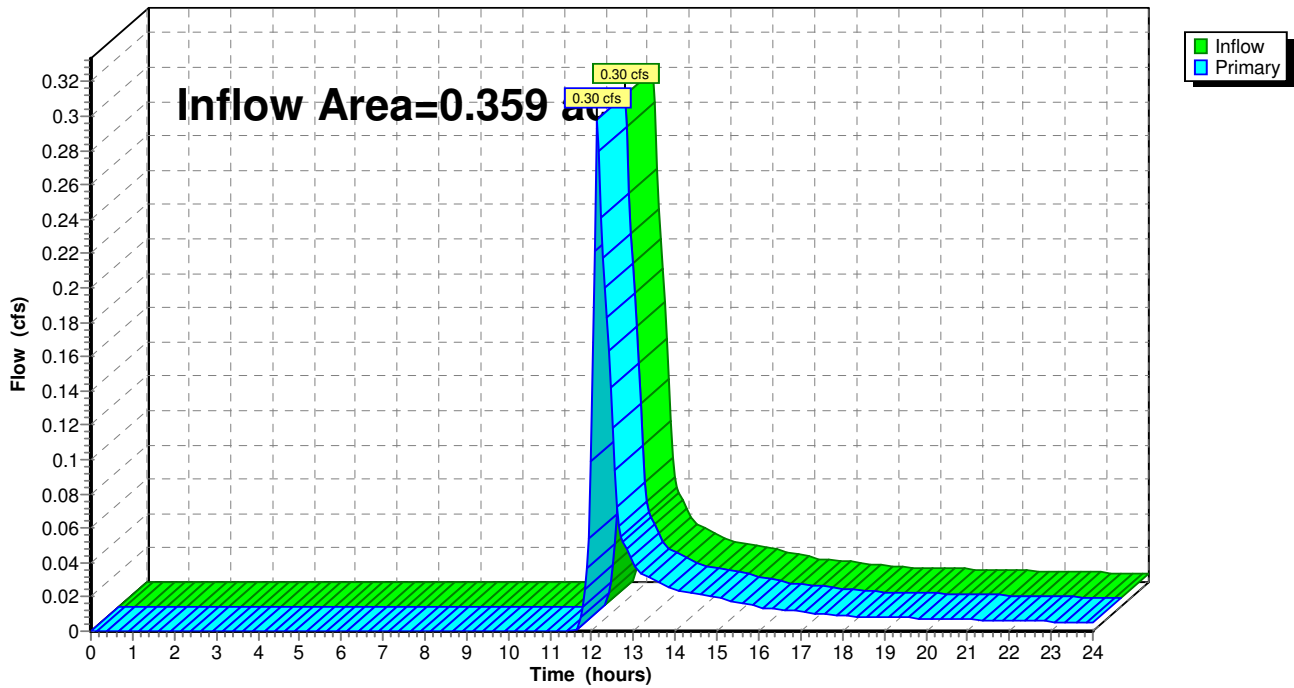
Summary for Link 5L: P.O.C.

Inflow Area = 0.359 ac, 29.83% Impervious, Inflow Depth > 0.76" for 2 YR. event
Inflow = 0.30 cfs @ 12.12 hrs, Volume= 0.023 af
Primary = 0.30 cfs @ 12.12 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 5L: P.O.C.

Hydrograph



Kreiger-88 Elder Street-Milford - 6-26-23

Type III 24-hr 25 YR. Rainfall=6.54"

Prepared by N O K & Assoc

Printed 6/28/2023

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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

Subcatchment POST -UN: POST UN-CON Runoff Area=13,807 sf 20.50% Impervious Runoff Depth>2.75"
Flow Length=225' Tc=6.1 min UI Adjusted CN=65 Runoff=0.99 cfs 0.073 af

Subcatchment POST-CON: NEW HOUSE Runoff Area=1,836 sf 100.00% Impervious Runoff Depth>6.30"
Tc=5.0 min CN=98 Runoff=0.27 cfs 0.022 af

Subcatchment PRE: PRE-DEVELOPMENT Runoff Area=15,643 sf 24.73% Impervious Runoff Depth>2.84"
Flow Length=225' Tc=6.1 min UI Adjusted CN=66 Runoff=1.16 cfs 0.085 af

Pond GALL.: 4X4 GAL. Peak Elev=17.82' Storage=176 cf Inflow=0.27 cfs 0.022 af
Discarded=0.01 cfs 0.012 af Primary=0.14 cfs 0.010 af Outflow=0.15 cfs 0.022 af

Link 5L: P.O.C. Inflow=1.11 cfs 0.082 af
Primary=1.11 cfs 0.082 af

Total Runoff Area = 0.718 ac Runoff Volume = 0.180 af Average Runoff Depth = 3.00"
72.72% Pervious = 0.522 ac 27.28% Impervious = 0.196 ac

Summary for Subcatchment POST -UN: POST UN-CON

Runoff = 0.99 cfs @ 12.10 hrs, Volume= 0.073 af, Depth> 2.75"
 Routed to Link 5L : P.O.C.

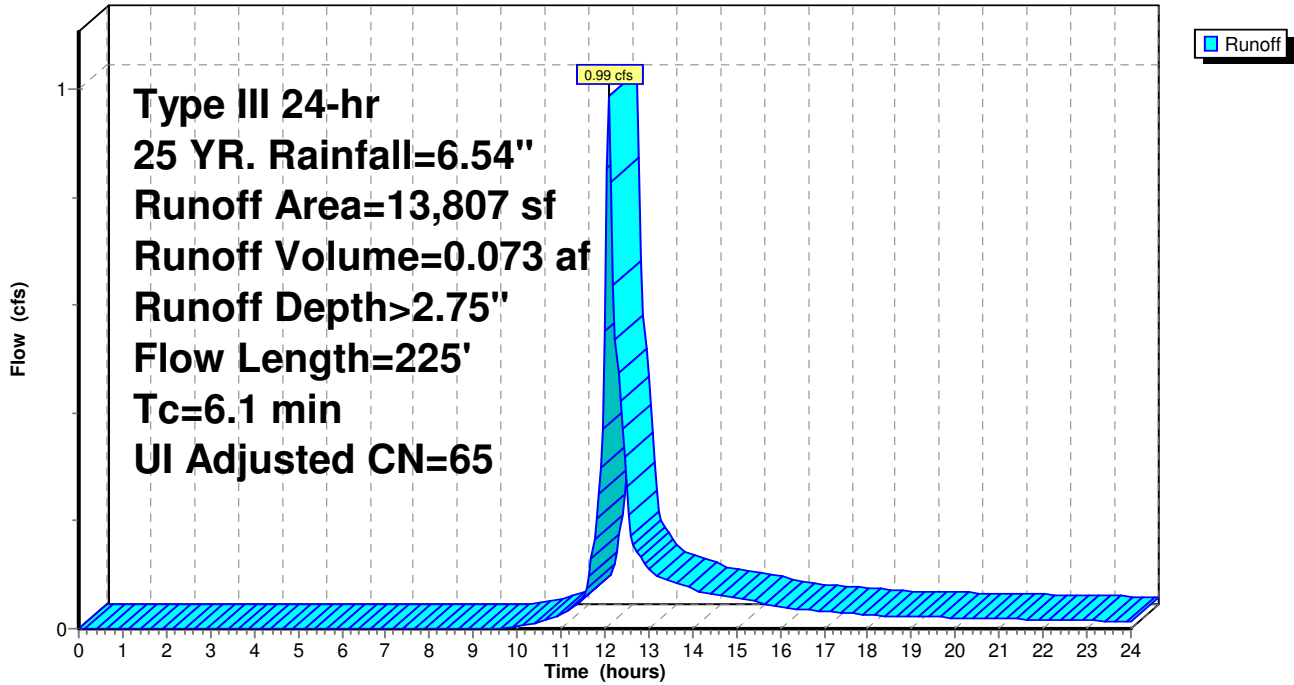
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 YR. Rainfall=6.54"

Area (sf)	CN	Adj	Description
2,830	98		Unconnected pavement, HSG B
10,977	61		>75% Grass cover, Good, HSG B
13,807	69	65	Weighted Average, UI Adjusted
10,977			79.50% Pervious Area
2,830			20.50% Impervious Area
2,830			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	100	0.0700	0.29		Sheet Flow, SHEET FLOW Grass: Short n= 0.150 P2= 3.49"
0.4	125	0.1300	5.80		Shallow Concentrated Flow, SHALLOW CON. Unpaved Kv= 16.1 fps
6.1	225	Total			

Subcatchment POST -UN: POST UN-CON

Hydrograph



Summary for Subcatchment POST-CON: NEW HOUSE

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.27 cfs @ 12.07 hrs, Volume= 0.022 af, Depth> 6.30"
 Routed to Pond GALL. : 4X4 GAL.

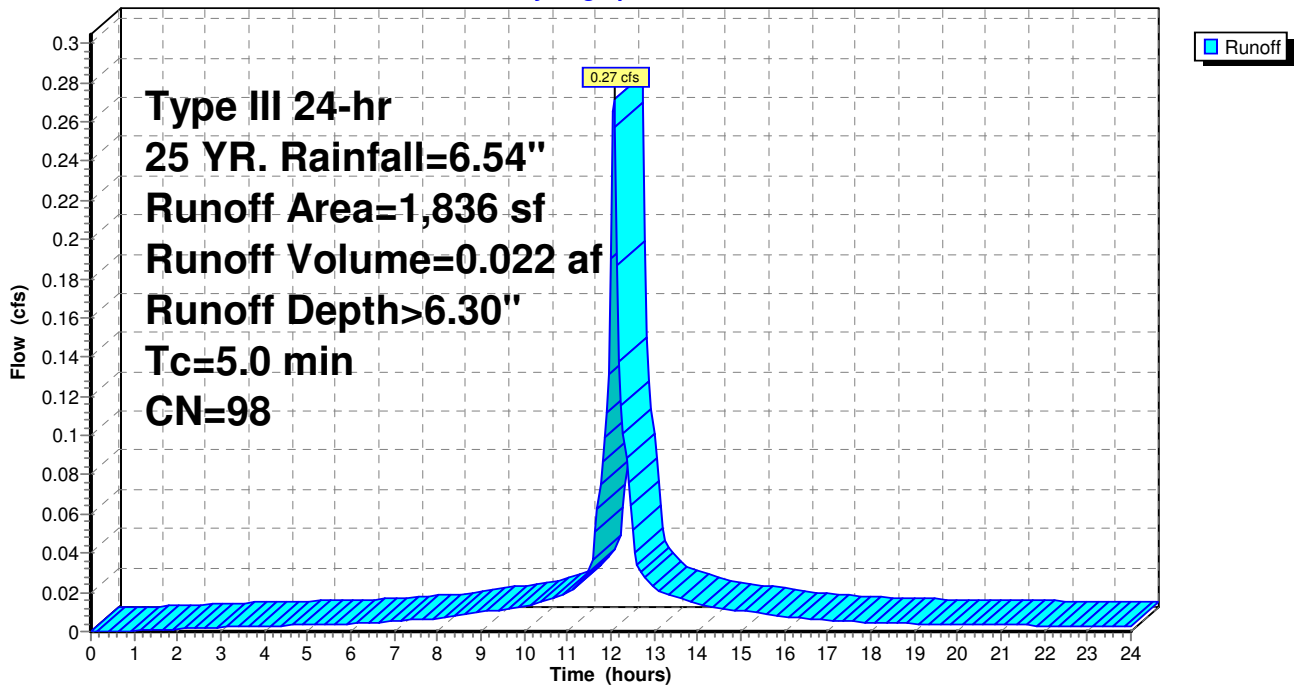
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 YR. Rainfall=6.54"

Area (sf)	CN	Description
1,836	98	Roofs, HSG B
1,836		100.00% Impervious Area

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

Subcatchment POST-CON: NEW HOUSE

Hydrograph



Summary for Subcatchment PRE: PRE-DEVELOPMENT

Runoff = 1.16 cfs @ 12.10 hrs, Volume= 0.085 af, Depth> 2.84"

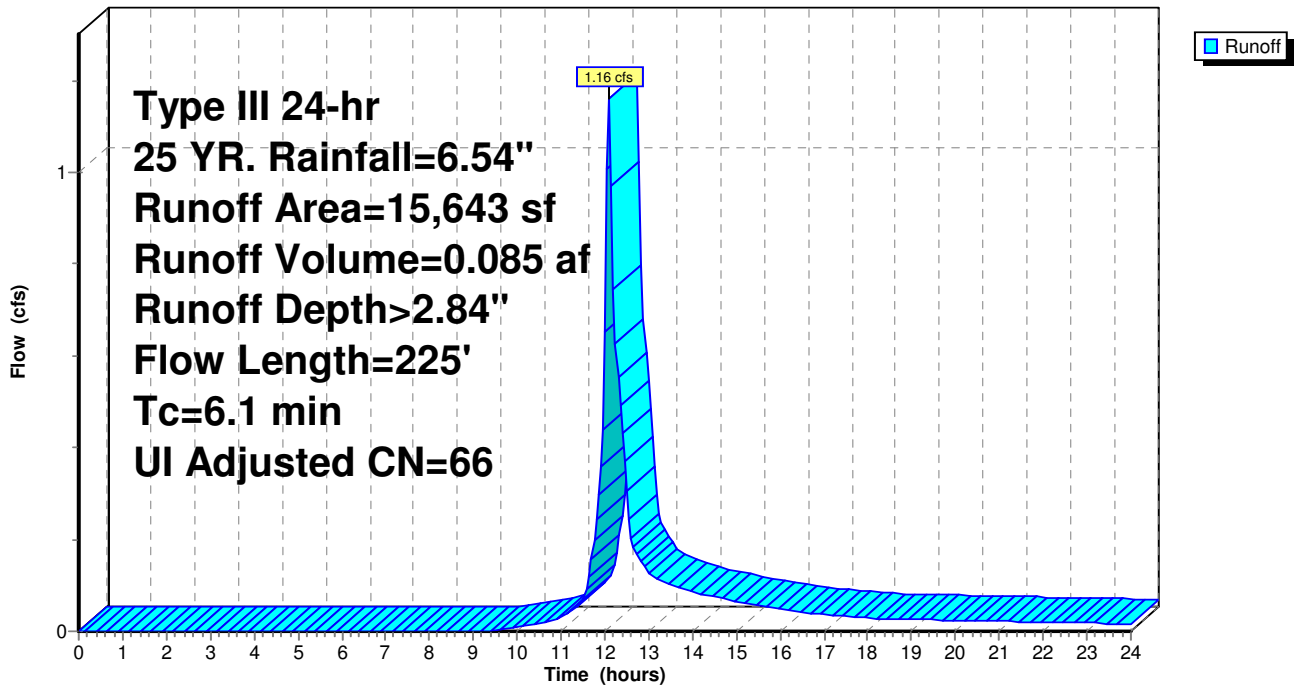
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR. Rainfall=6.54"

Area (sf)	CN	Adj	Description
3,869	98		Unconnected roofs, HSG B
11,774	61		>75% Grass cover, Good, HSG B
15,643	70	66	Weighted Average, UI Adjusted
11,774			75.27% Pervious Area
3,869			24.73% Impervious Area
3,869			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	100	0.0700	0.29		Sheet Flow, SHEET FLOW
					Grass: Short n= 0.150 P2= 3.49"
0.4	125	0.1300	5.80		Shallow Concentrated Flow, SHALLOW CON.
					Unpaved Kv= 16.1 fps
6.1	225	Total			

Subcatchment PRE: PRE-DEVELOPMENT

Hydrograph



Summary for Pond GALL.: 4X4 GAL.

Inflow Area = 0.042 ac, 100.00% Impervious, Inflow Depth > 6.30" for 25 YR. event
 Inflow = 0.27 cfs @ 12.07 hrs, Volume= 0.022 af
 Outflow = 0.15 cfs @ 12.20 hrs, Volume= 0.022 af, Atten= 45%, Lag= 7.5 min
 Discarded = 0.01 cfs @ 9.15 hrs, Volume= 0.012 af
 Primary = 0.14 cfs @ 12.20 hrs, Volume= 0.010 af
 Routed to Link 5L : P.O.C.

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 17.82' @ 12.20 hrs Surf.Area= 59 sf Storage= 176 cf

Plug-Flow detention time= 32.8 min calculated for 0.022 af (100% of inflow)
 Center-of-Mass det. time= 32.4 min (775.0 - 742.6)

Volume	Invert	Avail.Storage	Storage Description
#1	15.00'	222 cf	Concrete Galley 4x4x4 x 5 Inside= 42.0"W x 43.0"H => 12.67 sf x 3.50'L = 44.3 cf Outside= 52.8"W x 48.0"H => 14.72 sf x 4.00'L = 58.9 cf

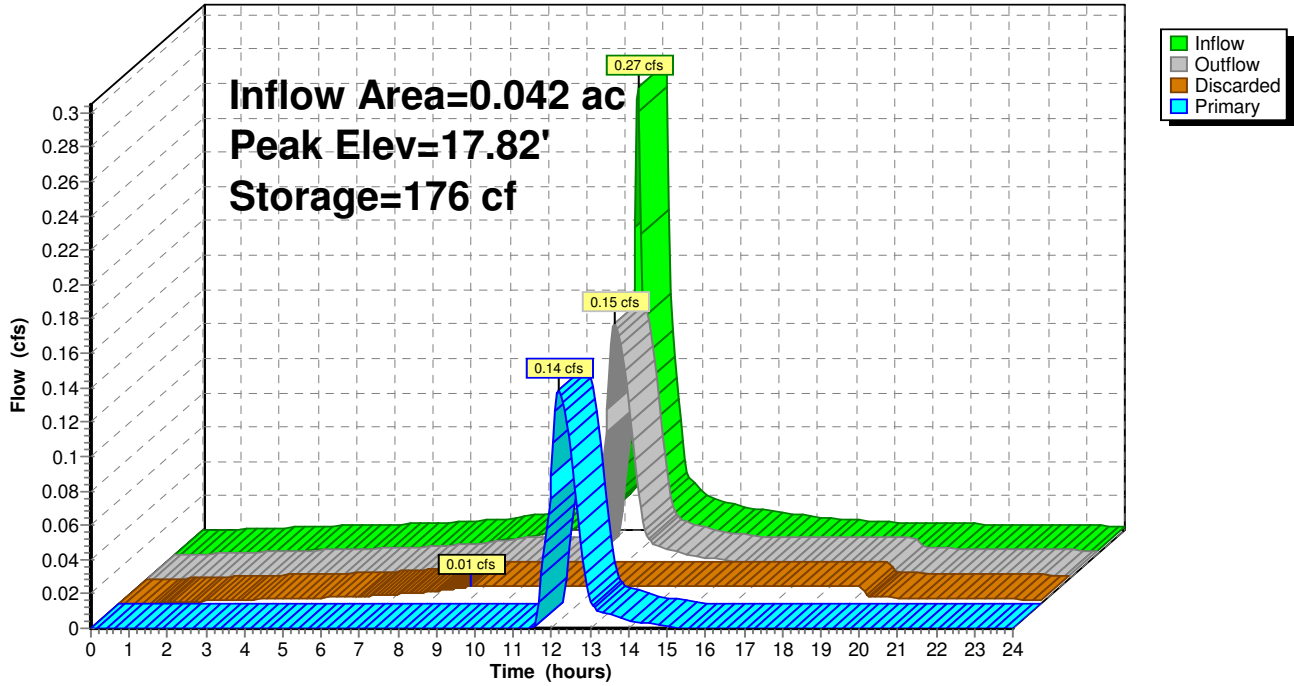
Device	Routing	Invert	Outlet Devices
#1	Primary	16.00'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Discarded	15.00'	0.01 cfs Exfiltration at all elevations

Discarded OutFlow Max=0.01 cfs @ 9.15 hrs HW=15.04' (Free Discharge)
 ↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.14 cfs @ 12.20 hrs HW=17.82' (Free Discharge)
 ↳ **1=Orifice/Grate** (Orifice Controls 0.14 cfs @ 6.34 fps)

Pond GALL.: 4X4 GAL.

Hydrograph



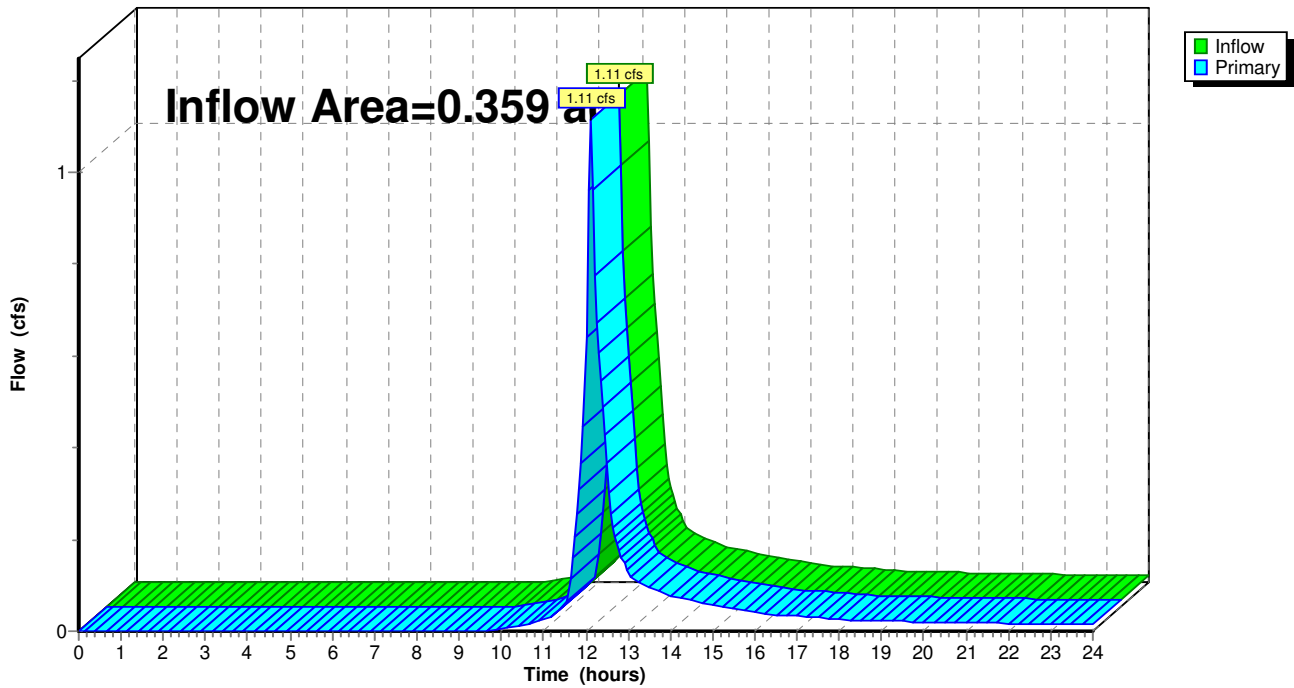
Summary for Link 5L: P.O.C.

Inflow Area = 0.359 ac, 29.83% Impervious, Inflow Depth > 2.75" for 25 YR. event
Inflow = 1.11 cfs @ 12.10 hrs, Volume= 0.082 af
Primary = 1.11 cfs @ 12.10 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 5L: P.O.C.

Hydrograph





City of Milford, Connecticut

Founded 1639
70 West River Street – Milford, CT 06460-3317
Tel 203-783-3245

Planning and Zoning
Office

Website: www.ci.milford.ct.us
Email: shharris@milfordct.gov

Stephen H. Harris
Zoning Enforcement Officer

Milford Planning and Zoning Office Zoning Compliance Review

Address: 88 Elder St.

Zone: R-7.5

Flood Zone: NA

Wetland: Tidal wetland within 100'

Date Reviewed: 6/27/23

Materials Received

Sheet	Description	Date	Revised
-	Zoning location survey	11/30/22	-
-	Site plan	5/23/23	6/20/23
A-101	Basement floor plan	4/18/23	-
A-102	First floor plan	4/18/23	-
A-103	Second floor plan	4/18/23	-
A-201	Exterior elevations	4/18/23	-
A-202	Exterior elevations	4/18/23	-
A-301	Sections	4/18/23	-
A-302	Sections	4/18/23	-
A-601	Window schedule	4/18/23	-
A-602	Door schedule	4/18/23	-

Disposition of application: Construct new single family dwelling.

1. Section 5.12.2 (5). Coastal Area Management Site Plan. Not exempt. New construction within 100' of a coastal resource; tidal wetland as shown on the City GIS.
2. Section 3.1.4.1.
 - Front Yard: 20' required, scales 29.3'. Zoning compliant.
 - Side Yards: 5'/10' required, 6'/12.5' proposed. Zoning compliant.
 - Rear Yard: 25' required, scales 36.5'. Zoning compliant
 - Height: 35' permitted, scales 29'-9" (sheet A-201). Zoning compliant.
 - Bldg Area: 40% permitted, 26.7% proposed. Zoning compliant.

- Lot Coverage: 60% permitted. 43% proposed. Zoning compliant.
3. Section 4.1.4
 - Front Projection: 16' permitted, scales 17' Zoning compliant.
 - Side Projection: 4'/8 permitted, 4' proposed easterly side. Zoning compliant.
 - Rear Projection: 21' permitted, bilco (sheet A-101) scales 28'. Zoning compliant.
 4. Section 5.8. NA
 5. Sidewalks, Gutters, Curbs. Concrete apron, concrete curb, and concrete sidewalk shown.

General Notes:

1. No filling, excavation, or change in grade is authorized unless specifically shown and approved.

Conclusion:

1. City GIS information shows new construction within 100' of a coastal resource; tidal wetlands. Confirmed by IWA officer. Coastal Area Management Site Plan is required.
2. The project is zoning compliant.

Reviewed by:

Stephen H. Harris, CZEO



City of Milford, Connecticut

- Founded 1639 -

Engineering Bureau

70 West River Street
Milford, CT 06460
Tel: (203) 783-3261
Fax: (203) 783-3676

TO: PLANNING and ZONING OFFICE
CITY OF MILFORD
70 WEST RIVER ROAD
MILFORD, CT.
06460

FROM: GREGORY H. PIDLUSKI, P.E.L.S.
CITY ENGINEER
70 WEST RIVER ROAD
MILFORD, CT.
06460

28 June 2023

Re: CAM APPLICATION
PROPERTY AT: 88 ELDER STREET
PROPERTY OF: HOWARD & STEPHANIE KREIGER

In response to my review dated 13 June 2023, I am in receipt of the following:

- 1) Drawing entitled: "Site Plan, prepared for: Howard L. & Stephanie L. Kreiger, 88 Elder Street, Milford, Connecticut", scale: 1"=10', dated May 23, 2023, revised through 6/20/23 prepared by Nowakowski, O'Bymachow, Kane, Associates.
- 2) Drawing entitled: "Drainage Report, prepared for: Howard L. & Stephanie L. Kreiger, 88 Elder Street, Milford, Connecticut", scale: 1"=10', dated June 20, 2023, revised through 6/27/23 prepared by Nowakowski, O'Bymachow, Kane, Associates.
- 3) Application for Coastal Site Plan ("CAM Report") dated 5/23/23. (Same date as original, but stamped "Revised" on the cover sheet.)
- 4) A report entitled: "Drainage Report, Howard & Stephanie Kreiger, 88 Elder Street, Milford, Connecticut., dated June 28, 2023, prepared by Nowakowski, O'Bymachow, Kane, Associates.

- 5) A letter addressed to Gregory Pidluski, dated June 26, 2023, prepared by Alan Shepard, P.E. (Nowakowski, O'Bymachow, Kane, Associates).
- 6) A letter addressed to Steven H. Harris, dated June 23, 2023, prepared by Alan Shepard, P.E. (Nowakowski, O'Bymachow, Kane, Associates).

I have performed a limited site inspection and independently researched the FEMA website, the USDA (Web soil Survey) website, the CT DEP Coastal Resources map, and the City of Milford GIS.

My observations are as follows:

- A) The Applicant is proposing to construct a single family residence to replace the pre-existing two story single family residence. (Pre-existing residence had been completely removed at the time of my inspection.)
- B) Please note that the Soils Report was prepared for a property on the opposite side of Elder Street, and is over 5 years old. As this appears to be included for the purposes of establishing the Upland Review Area, it is satisfactory for this Department. (Inland Wetlands should review independently.)
- C) Sanitary sewer lateral has been depicted on the plans provided.
- D) Underground service utilities have been depicted on the plans provided.
- E) Coastal Resources on and near site include Shorelands and Coastal Flood Hazard Areas. (A FEMA Special Flood Hazard Area, "SFHA" (AE 11) may, or may not, exist to a very small extent at the northerly corner of the subject property. The proposed residence is located, in its entirety, outside of the SFHA.
- F) The Applicant is proposing stormwater treatment and mitigation with 20 l.f. of 4'x4' concrete galleries. Based upon the stormwater mitigation calculations resulting in zero net artificial increase based upon the 25 year, 24 hour storm, and providing storage for the 1" Water Quality Volume ("WQV"), this appears to be sufficient.
- G) A concrete sidewalk has been provided.
- H) Concrete curbs have not been indicated,
- I) A concrete driveway apron has been indicated.
- J) Filter fabric fence sediment barriers and Anti-Tracking Pad Construction Entrance (as shown on previously submitted drawings) appear to be satisfactory. Please note that despite the fact that there was significant site disturbance observed at the time of my inspection, there were no soil erosion and sediment control measures in place.
- K) Footing drains are indicated as discharging in close proximity to the proposed sidewalk. The Engineer indicates in his letter (Item 4 hereinabove) that due to the soils limited flows are anticipated. While this does appear to be satisfactory, this Department reserves the right to order additional measures if it is determined that a nuisance exists at the sidewalk.

- L) The proposed driveway is rather long (35'±) and steep (11%-15%). The Applicant is proposing a "Water Break" to direct driveway runoff in a northerly direction. The Applicant has not demonstrated that the measures proposed are sufficient to eliminate runoff being discharged across the sidewalk. Appropriate measures are to be taken to ensure that the discharges do not create a nuisance at the sidewalk.
- M) Due to the slope of the subject property, appropriate measures are to be taken to ensure that roof leader drains do not create a nuisance off site. (Obligation rests with the Applicant.)
- N) The CAM Report, as revised, appears to be satisfactory.

My recommendations are as follows:

- 1) Soil Erosion and Sediment Controls, as indicated on the plans provided, are to be implemented as soon as practicable.
- 2) Additional measures may be required to ensure that stormwater and/or footing discharges do not create an offsite nuisance.
- 3) Applicant is advised that as submitted the stormwater management appears to be satisfactory. However, unforeseen conditions, or any deviation from the approved plans could result in stormwater runoff creating a nuisance at the public sidewalk. The Applicant (their successors, heirs or assigns) will be solely responsible for maintaining safe conditions at all times.

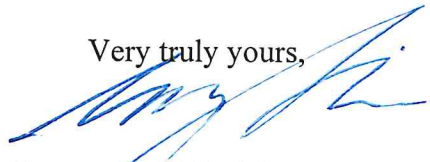
General Comments (as applicable):

- 1) This review has been prepared as a Site Plan review only. It is not a Permit and does not grant license.
- 2) The City reserves the right to make additional comments on other issues that may arise during construction.
- 3) Necessary permits from the City of Milford Engineering Department for the driveway apron and/or sidewalk/curb are to be obtained prior to construction and are to be constructed in accordance with the City of Milford Standards.
- 4) Necessary permits from the City of Milford Engineering Department for any sanitary sewer work are to be obtained prior to construction.
- 5) Developer is to take all necessary steps to protect Catch Basin(s) or other inlets (such as pipe culverts) located such that the site runoff will discharge, OR MAY DISCHARGE to any portion of the MS4 (storm sewer) system of the City of Milford. (In general, this would apply to catch basin(s) located at the subject property and the first catch basin(s) located down gradient of the subject property.) At a minimum:
 - a. Affected Catch basins are to be cleaned and proper protection (Silt Sack or approved equal, or better) is to be installed (at the Developer's sole expense) after the placement of

- required S&E Controls, prior to site disturbance. Placement of filter fabric geotextile placed between frame and grate is not acceptable.
- b. Catch Basin protection is to be inspected regularly and cleaned, repaired, replaced, etc. until final site stabilization.
 - c. Upon final site stabilization protection is to be removed in a manner specified by the manufacturer and disposed of in an appropriate off-site location.
 - d. Prior to issuance of a Certificate of Occupancy, the affected catch basins are to be inspected and cleaned, as necessary.
 - e. Records of Items 4(a)-4(d) hereinabove are to be provided to the City of Milford Engineering Department prior to issuance of a Certificate of Occupancy.
- 6) All trenching within the traveled portion of the road (if any) are to be repaired in accordance with Engineering Department Drawings and Specifications.
- 7) For all properties with frontage on State Roads, it is the obligation of the Applicant to contact the Connecticut Department of Transportation to determine what permits, if any, are required.

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

Very truly yours,



Gregory H. Pidluski, P.E.L.S.
City Engineer



City of Milford, Connecticut

- Founded 1639 -

Inland Wetlands Office
inlandwetland@milford.ct.gov

70 West River Street
Milford, CT 06460-3317
Tel 203-783-3256

June 27, 2023

Mr. Howard Kreiger
8 Spector Rd
Woodbridge, CT 06525

Re: IW-23-0042: 88 Elder St, Map 35 Block 429 Parcel 3; Mr. Howard Kreiger; Proposal to demolish existing and construct a new single family house with minor work within 150' of a watercourse in the Wepawaug River Watershed. P&Z Transmittal.

Dear Mr. Kreiger:

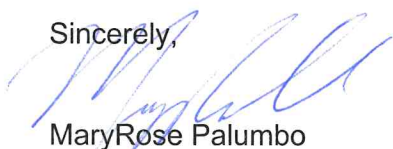
The Milford Inland Wetlands and Watercourses Agency has reviewed the Planning & Zoning Transmittal; site plans entitled "*Zoning Location Survey prepared for Howard L. & Stefanie L. Kreiger, 88 Elder St, Milford, Connecticut*" by Richard W. Plain Land Surveyors, 1 sheet dated 11/30/22; and "*Kreiger Residence 88 Elder Street, Milford, CT 06460*" by Huestis Tucker Architects, 10 sheets dated 4/18/23. A review of this information and the MIWA maps reveals minor work is proposed within 150' of a wetland or watercourse in the Wepawaug River Watershed. This proposed work does not appear to have the potential to adversely impact wetlands or watercourses if constructed appropriately with sedimentation and erosion controls and best management practices as described on the plans and in the *2002 CT DEEP Erosion & Sedimentation Control Guidelines*. Therefore, I am issuing a Jurisdictional Ruling for razing of the existing home and construction of a new home with minor work within 150' of a wetland in the Wepawaug River Watershed.

To ensure protection of natural resources on and off your property please ensure that:

- Proper Soil erosion and sedimentation controls per the site plan and the *CT DEEP 2002 Erosion and Sedimentation Control Manual* are properly installed and maintained
- Any dewatering/discharge is to be to a sedimentation basin or dirt bag and **not** directly discharged through pipe or hose to catch basins or watercourses.
- Stormwater requirements as may be required per the City Engineer.
- Construction fencing should be properly installed and maintained.
- Dumpsters should be covered at night to prevent windblown debris
- Port-o-lets should be located away from catch basins, wetlands, and watercourses

This letter applies only to the specific plans noted above. Any revision of these plans will require further review by this Agency. No fill material may be placed in wetlands or the 100' upland review area without additional permits. The applicant is responsible for all other federal Local and State permits that may be required for the site. Should you have any questions concerning this matter, please contact the Inland Wetlands Agency Office at 203-783-3256.

Sincerely,


MaryRose Palumbo
Inland Wetlands Compliance Officer

c: DPLU Director
Engineering
Planning & Zoning

Generated by eNDDDB on:
5/4/2023

Howard Kreiger
Kreiger
88 Elder St
Milford, CT 06460
hkreiger@optimum.net

Subject: Filing # 98036
88 Elder
NDDDB – New Determination Number: 202304008
88 Elder St
Milford

Expiration Date: 5/4/2025

Based on current data maintained by the Natural Diversity Database (NDDDB) and housed in the DEEP ezFile portal, negative impacts to populations of Federal or State Endangered, Threatened, or Special Concern species (RCSA Sec. 26-306) are not anticipated from the proposed Building and Infrastructure Development (including stormwater discharge associated with construction) / New Residential - single lot, 88 Elder.

This NDDDB – New determination may be utilized to fulfill the Endangered and Threatened Species requirements for state-issued permit applications, licenses, registration submissions, and authorizations. However, please be aware of the following limitations and conditions:

- This determination does not preclude the possibility that listed species may be encountered on site. Should this occur, a report must be submitted to the Natural Diversity Database promptly and additional action may be necessary to remain in compliance with certain state permits. Please fill out the [appropriate survey form](#) and follow the instructions for submittal.
- If your project involves preparing an Environmental Impact Assessment, this NDDDB consultation and determination should not be substituted for conducting biological field surveys assessing on-site habitat and species presence.
- This determination applies only to the project as described in the submission and summarized at the end of this letter. Please re-submit an updated Request for Review if the project's scope of work and/or timeframe changes, including if work has not begun by 5/4/2025.

The NDDDB – New determination for the 88 Elder at 88 Elder St, Milford as described in the submitted information and summarized at the end of this document is valid for two years from the date on this letter.

Natural Diversity Database information includes all information regarding listed species available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, land owners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Database and accessed through the ezFile portal as it becomes available.

This letter is computer generated and carries no signature. If however, any clarification is needed, or if you have further questions, please contact the following:

CT DEEP Bureau of Natural Resources
Wildlife Division
Natural Diversity Database
79 Elm Street, 6th floor
Hartford, CT 06106-5127
(860) 424-3011
deep.nddbrequest@ct.gov

Please reference the Determination Number provided in this letter when you e-mail or write. Thank you for submitting your project through DEEP's ezFile portal for Natural Diversity Database reviews.

Application Details:

Project involves federal funds or federal permit:	No
Project involves state funds, state agency action, or relates to CEPA request:	No
Project requires state permit, license, registration, or authorization:	No
DEEP enforcement action related to project:	
Project Type:	Building and Infrastructure Development (including stormwater discharge associate with construction)
Project Sub-type:	New Residential - single lot
Project Name:	88 Elder
Project Description:	

88 Elder Map



May 4, 2023

1:2,399
0 0.02 0.04 0.08 mi
0 0.0325 0.065 0.13 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community