Arlington Conservation Commission

Date: Thursday, December 4, 2025
Time: 7:00 PM
Location: Conducted by Remote Participation.

Agenda

1. Administrative
    a. Review Meeting Minutes.
    b. Correspondence Received.
    c. Letters of Support for Updated WPA Regulations.
2. Discussion
    a. Enforcement Order: 66-66R Dudley Street/993 Massachusetts Avenue.
    b. Water Bodies Working Group.
    c. CPA Committee Liaison.
        - Vote on Cooke's Hollow application letter of support.
    d. Tree Committee Update.
3. Hearings

DEP #091-0375: Notice of Intent: 26 Dudley Street.

DEP #091-0375: Notice of Intent: 26 Dudley Street.
The Conservation Commission will hold a public hearing to consider a Notice of Intent to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot at 26 Dudley Street in Arlington. Areas proposed to be altered include the outer Riverfront Area associated with Mill Brook.

Notice of Intent: Winchester Country Club

Notice of Intent: Winchester Country Club
The Conservation Commission will vote to continue this hearing to the meeting on December 18, 2025.

Town of Arlington, Massachusetts

Correspondence Received.

Summary:
Correspondence Received.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Correspondence_Received_-_26_Dudley_Street_-_Alicia_Geilen_(DEP).pdf	Correspondence Received - 26 Dudley Street - Alicia Geilen (DEP)
🗋	Reference Material	Correspondence_Received_-_Elizabeth_Island_-_Mass_Audubon.pdf	Correspondence Received - Elizabeth Island - Mass Audubon

David Morgan

From: Geilen, Alicia (DEP) <Alicia.Geilen@mass.gov>
Sent: Tuesday, November 25, 2025 4:27 PM
To: Richard Kirby
Cc: Nicole Ferrara; David Morgan; Jackie Anderson
Subject: RE: MassDEP NOI File Number 26 Dudley St., Arlington

Categories: ConCom Correspondence

Hi Rich,

I am available both of those days to clarify my technical comments, except as follows:

- 12/9/25 I have a meeting from 9:30 – 11:30
- 12/10/25 I have a meeting from 10:00 – 12:00

I have copied David and Jackie in case they are able to attend as well.

In the meanwhile, if Nicole has any additional or revised materials, she is welcome to email them to me directly.

I hope you have a great vacation.

Best,

Alicia
Alicia Geilen (she/her/hers) | Wetlands Circuit Rider
Wetlands Program | Northeast Regional Office
Massachusetts Department of Environmental Protection
150 Presidential Way, Woburn, MA 01801
Mobile: 617-519-7389

From: Richard Kirby <RKirby@lecenvironmental.com>
Sent: Tuesday, November 25, 2025 3:24 PM
To: Geilen, Alicia (DEP) <Alicia.Geilen@mass.gov>
Cc: Nicole Ferrara <nferrara@lecenvironmental.com>
Subject: RE: MassDEP NOI File Number 26 Dudley St., Arlington

Hi Alicia,
Can we please spend a few minutes on the phone discussing your comments?
I disagree with your interpretation of what we are proposing in the NOI and the WPA reg requirements and compliance.

I'm leaving tomorrow for vacation and won't be returning to work until 12/8.
Our first hearing in 12/4, and Nicole Ferrara will be covering for me.
I don't anticipate closing this hearing in one night, but would definitely like to discuss prior to the following hearing.
Do you have availability Tuesday 12/9 or Wednesday 12/10?
Thanks.
Rich

I'll be on vacation and unavailable from Wednesday November 26, 2025 through Friday December 5, 2025.

In the Field with LEC! **November: Intermittent vs. Perennial Streams**

Visit our website at www.lecenvironmental.com for a full listing of our services.

Richard A. Kirby
Senior Wetland Scientist
LEC Environmental Consultants, Inc.
508-813-4129 cell
www.lecenvironmental.com

From: NERO_NOI@MassMail.state.ma.us <NERO_NOI@MassMail.state.ma.us>
Sent: Monday, November 24, 2025 4:15 PM
To: gregg@santiniinc.com; gregg@santiniinc.com; Richard Kirby <RKirby@lecenvironmental.com>
Cc: nero_noi@state.ma.us; dmorgan@town.arlington.ma.us; nero_noi@state.ma.us
Subject: MassDEP NOI File Number

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHEAST REGIONAL OFFICE
150 PRESIDENTIAL WAY, WOBURN, MA 01801 978-694-3200

Date: 11/24/2025 Municipality ARLINGTON

RE: **NOTIFICATION OF WETLANDS PROTECTION ACT FILE NUMBER**

The Department of Environmental Protection has received a Notice of Intent filed in accordance with the Wetlands Protection Act (M.G.L. c. 131, §40):

Applicant	SANTINI REALTY TRUST	**Owner**	
Address	60 DUDLEY STREET,ARLINGTON MA 02476	**Address**	60 DUDLEY STREET, ARLINGTON MA 02476

Locus	26 DUDLEY STREET , ARLINGTON MA 02476	

This project has been assigned the following file # : **NE 091-0375**

ISSUANCE OF A FILE NUMBER INDICATES ONLY COMPLETENESS OF SUBMITTAL, NOT APPROVAL OF APPLICATION

Although a file # is being issued, please note the following:

Project does not appear to meet 10.58(5) as proposed. A plan that more clearly indicator exisiting degraded and existing non-degraded areas is needed.
10.58(5)(a) - Project must include an improvement over existing conditions of the capacity of the riverfront area to protect the interests of the WPA. A reduction of 35 sf of impervious surface spread across the site does not provide a meaningful improvement. Mandatory stormwater management does not count as an improvement, because 10.58(a) is a stand-alone requirement, also discussed in 10.58(5).
10.58(5)(b) & 10.05(6)(k) - (q): A peer review of the stormwater design is recommended. No map provided to show different edrainage areas.
The infiltration unit appears to only remove 25% TSS not 80%, and requires pretreatment. The Commission should request additional information on how 80% TSS removal will be achived. Insufficient information provided on parking lot sweeping. The Stormwater Handbook states that to qualify as pre-treatment for an infiltration unit, sweeping my be "agressive" (see Vol. 2 ch 2, pg 89). For parking lot sweeping to potentially qualify for 10% TSS removal the applicant should discuss the factors listed in the Stormwater Handbok that are noted as having a major influence on the effectiveness of a street sweeping program: access, the type of sweeper, and the frequency of sweeping (Vol 2 Ch 1 pages 7 - 9). Post construction inspection schedule appears unfinished, and does not include parking lot sweeping. Soil logs were not included, so minimim separation of the bottom of the infiltration unit and the top of seasonal high groundwater could not be varified.
10.58(5)(c) and (d) Using native plants in landscaped areas does not constitute mitigation. Mandatory stormwater management does not count as mitigation, because 10.58(5)(g) states, mitigation activities must be "undertaken voluntarily by the applicant which will support a determination by the issuing authority of no significant adverse impact." The applicant could consider offsite mitigation, if the intent is to maximize the amount of degraded area on site.

Regards,

for MassDEP,

alicia.geilen@mass.gov
Alicia.Geilen@mass.gov

2025 Annual CR Monitoring Report
Arlington-01

Property Information

Name:	Arlington-01	**Last Site Visit:**	9/19/2024
Address:	Spy Pond	**Acres:**	1.75
Acquired:	4/21/2011	**Alias:**	Town of Arlington 2011 CR; Elisabeth Island

Site Visit Overview

Visit Date: 9/17/2025 **Date Report Completed:** 11/25/2025

Landowner and other contacts

Name	Phone Number	Email Address	Role
Peter Belknap		pcbelknap@verizon.net	Caretaker, Neighbor, Primary Contact
Christopher Leich		info@arlingtonlandtrust.org	Grantor, Landowner, Primary Contact
David Morgan	781-316-3012	dmorgan@town.arlington.ma.us	Co-Holder

Visit Summary

Arrived at Gould Rd and met Peter Belknap at his house, Carried the canoe down to the launching point at the end of Gould Rd. Entered canoe and paddled with Peter northwest on Spy Pond towards Elizabeth Island. Paddled towards the southwestern coastline (photopoint 1), then turned southeast and paddled counterclockwise around the island, noting a recently downed tree off the southernmost point of the island (photopoint 2). Continued paddling counterclockwise along the coastline until arriving at one of the two launch points, where we beached the canoe along the coastline and walked onto the main trail (photopoint 3), noting the stairs put in by the Appalachian Mountain Club (photopoint 4). Walked the main path to the northwest towards the northwestern coastline of the island before turning southwards along the path, noting phragmites patch and area of invasive removal (photopoint 5). Continued southeast along the path where Peter pointed out the area where he plans to expand the footpath along the shoreline (photopoint 6). Continued southeast along the main path, noting pile of branches which has been there for 4-5 years (photopoint 7). Followed path to the northwest up to the highest point on the island, where Peter pointed out an old fire ring which was dismantled and seemingly has not been used this year (photopoint 8). Continued along the path to the southwest, reaching the southeastern corner of the island and noted the second launching area on the island (photopoint 9). Followed the main path northwest back towards the other canoe launch point, where Peter and I got back into the canoe and started paddling back onto the pond, speaking briefly with another canoer before paddling northwest along the northeastern coastline of the island, noting another area of invasive removal (photopoint 10), which Peter noted has potentially been detrimental to the pond's swan population. Continued paddling up to the northernmost point of the island, where native sedge grasses were noted, with Peter noting how they have been doing very well this past year (photopoint 11). Paddled southwards along the northwestern coastline then past island back towards Gould Rd, where Petere and I returned the canoe to his house and parted ways.

Visit Observations

Landowner Questions

Who was contacted prior to the visit?

Chris Leich and Peter Belknap, Arlington Land Trust

How were they contacted?

Email, Letter

Did they attend the monitoring visit?

Peter attended

Does the owner plan to make any changes that may be relevant to the easement?

Plans to expand main trail to go along entire coastline of the island, which is allowed per reserved right #2 in the CR allowing for footpaths of 4ft or less.

Are you aware of any changes or potential changes in fee ownership?

No

Describe any other pertinent information discussed with the landowner/representative.

Discussed enforcement against people making campfires on the island, invasive removal that ALT has done which have been successful but potentially hurting the swan population in the pond.

Site Visit Observations

What Mass Audubon Staff were present for the monitoring visit?

Spencer Torres, Conservation Restriction Stewardship Specialist

List others present for the monitoring visit.

Peter Belknap, Arlington Land Trust

Weather conditions at time of visit

Sunny

Areas Visited

Interior - All, Trails/Roads - All, Boundaries - Most

Did you observe any natural changes on the property?

Invasive Species

Describe the changes

Phragmites patch noted at photopoint 5.

Did you observe any changes to infrastructure on the property?

Road or trail building

Comments on changes to infrastructure, including location and details.

Plans for expanding trails along southwestern shoreline.

Did you observe any additional human-made changes to the property?

No changes observed based on previous records

Did you observe any changes to land use or management?

Invasive species control

Describe the changes to land use or management

ALT led invasive removal noted at photpoints 5 and 10.

Did you observe or learn of any third-party activities that affect or could affect the land?

Trespassing

Describe the third-party use.

Occasional reports of people on the island starting campfires at night.

Any previously unnoted boundary evidence?

No

Did you observe any exercise of reserved rights?

Yes

Describe the exercise of reserved rights.

Expansion of footpaths noted in photopoint 6.

Did you observe (or see sign of) any notable plants or animals?

Yes

Describe the observation(s).

Great Blue Heron noted along coastline of the CR.

Follow-Up

Did you observe any issues or points of concern that may require follow up from Mass Audubon staff?

No

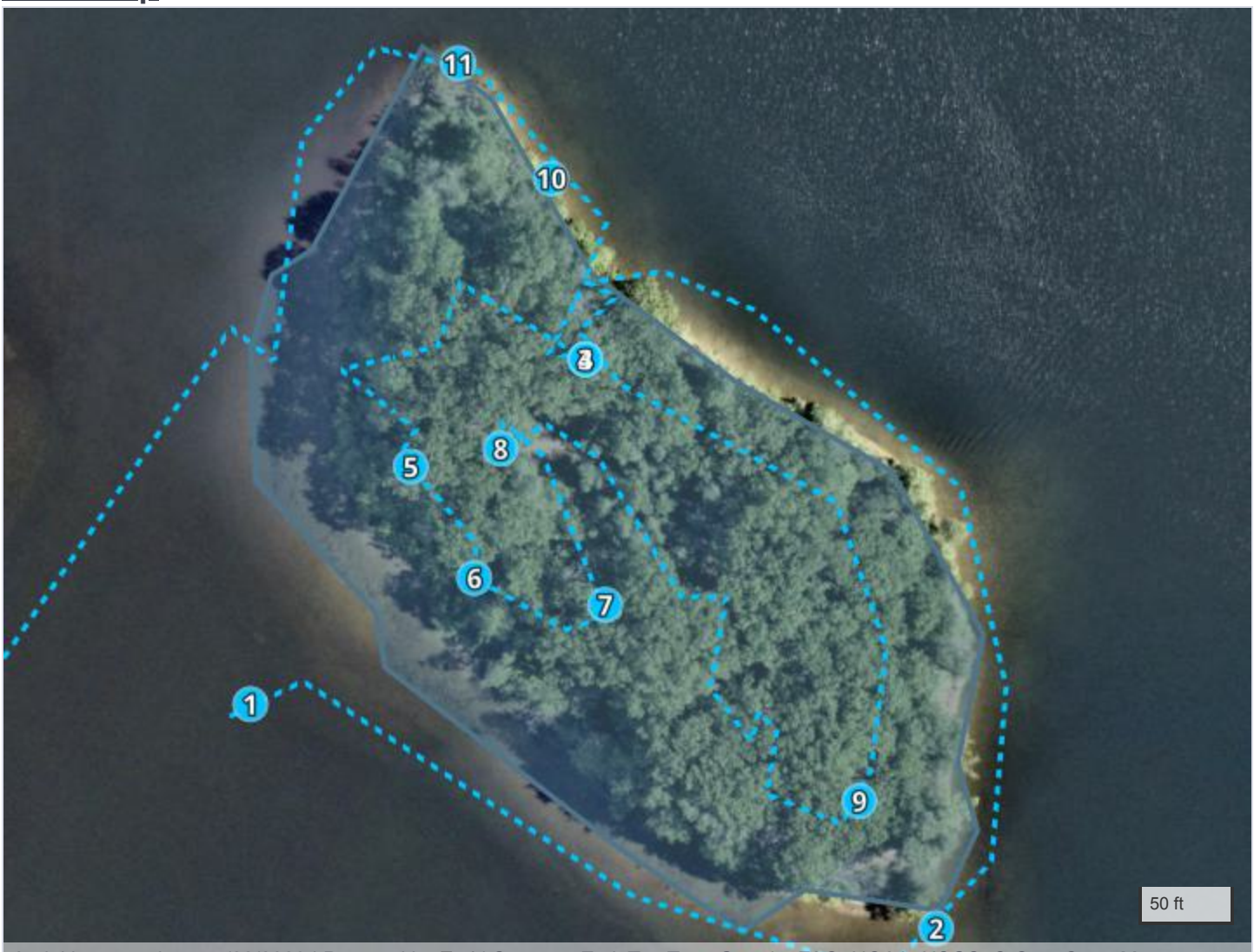
This report was completed and submitted by:

Spencer Torres Date: November 25th, 2025 at 3:37:06 PM GMT-5

Route Traveled & Waypoint Map

- Record Boundary - All Others
- Record Boundary - Active
- Record Boundary - Current Holding
- Record Boundary - Partner Holding
- Property Areas
- Property Lines
- Property Points
- Site Visit Areas
- Site Visit Lines
- Site Visit Points
- Sub-Record Boundary

Detail Map



Aerial imagery dates: 5/22/2023 | Powered by Esri | Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community | Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Photos

Photopoint 01: Taken from canoe on Spy Pond off the southern coastline of the CR, facing northeast at southwestern coastline.
Location: 42.40869, -71.15598, Facing: East-Northeast 9/17/2025

Photopoint 02: Taken from the canoe just off the southeastern coastline of the island, facing northwards. Noted the recently fallen tree.
Location: 42.40837, -71.15466, Facing: North 9/17/2025

Photopoint 03: Standing just south of the launching area along the northeastern coastline, facing southeast down walking path.
Location: 42.40918, -71.15533, Facing: South-Southeast 9/17/2025

Photopoint 04: Standing just south of the launching area along the northeastern coastline, facing southwest at AMC made wooden stairs.
Location: 42.40918, -71.15533, Facing: Southwest 9/17/2025

Photopoint 05: Standing along trail in southwestern region of CR, facing west down trail where invasive removal was done.
Location: 42.40903, -71.15567, Facing: West 9/17/2025

Photopoint 05: Standing along trail in southwestern region of CR, facing west towards thick patch of phragmites.
Location: 42.40903, -71.15567, Facing: West 9/17/2025

Photopoint 06: Standing north of southwestern shore of the island, facing southwest towards the shoreline. Thickly vegetated with plans to cut here and create a path that goes fully around the shore.
Location: 42.40887, -71.15555, Facing: South-Southwest
9/17/2025

Photopoint 07: Standing along the trail near the center of the island facing eastwards at a small pile of branches and sticks which has been here about 4-5 years.
Location: 42.40883, -71.15529, Facing: East-Northeast 9/17/2025

Photopoint 08: Standing at highest point on the island facing down at old fire ring that hasn't been used this summer.
Location: 42.40905, -71.15549, Facing: North-Northwest 9/17/2025

Photopoint 09: Standing by the southeastern corner of the island at one of the two canoe launch points, facing southeast towards the coastline.
Location: 42.40855, -71.1548, Facing: East-Southeast 9/17/2025

Photopoint 09: Standing by the southeastern corner of the island at one of the two canoe launch points, facing northwest at steps leading from canoe launch point onto island.
Location: 42.40855, -71.1548, Facing: West-Northwest 9/17/2025

Photopoint 10: Taken from canoe on Spy Pond just off the northernmost point of the island, facing northwest at area where invasive removal was done.
Location: 42.40944, -71.1554, Facing: Northwest 9/17/2025

Photopoint 11: Taken from canoe on Spy Pond just north of northernmost point of the island, facing southwards at native sedge species, which has notably taken off a lot this summer.
Location: 42.4096, -71.15558, Facing: South 9/17/2025

Date Generated: 11/25/2025

Town of Arlington, Massachusetts

Letters of Support for Updated WPA Regulations.

Summary:
Letters of Support for Updated WPA Regulations.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	MACC_Action_Alert.pdf	MACC Action Alert

David Morgan

From: Dorothy McGlincy <dorothy.mcglincy@maccweb.org>
Sent: Thursday, November 13, 2025 2:02 PM
To: David Morgan
Subject: Action Alert: Urge Governor Healey to Issue Updated Wetlands Regulations

View in browser

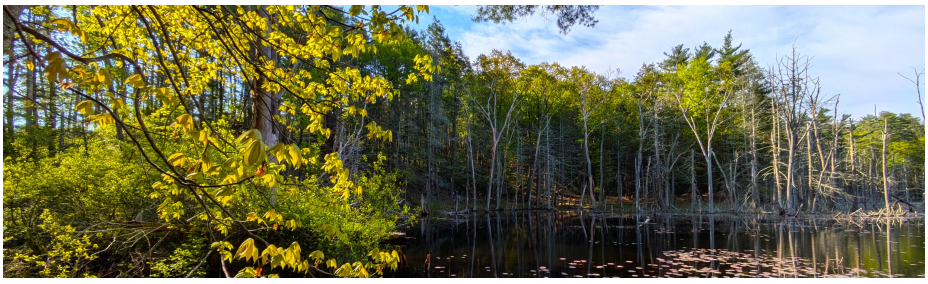
Regulatory Alert

MACC

November 2025

Protecting Massachusetts' natural resources by supporting conservation commissions through education and advocacy.

ACTION ALERT!



Dear Conservation Commissioners, Commission Staff, and Friends:

We need your help with a letter writing campaign to get the updated Wetlands Protection Act Regulations (310 CMR 10.00) issued this year.

Follow these three easy steps:

- Finalize our draft letter by adding your name and making edits as you see fit.
- Mail your letter to the governor and/or submit your letter through the Governor and Lt. Governor's online email form.

Governor Maura Healey's Office
Massachusetts State House, 24 Beacon St.

Office of the Governor, Room 280
Boston, MA 02133

Email Form >>

- Attach your letter in an email to your legislators and the EEA/MassDEP staff listed below, noting that you sent this letter to the governor. Please CC Dot McGlincy at dorothy.mcglincy@maccweb.org in your email.

  Rebecca L. Tepper, EEA, rebecca.l.tepper@mass.gov
  Bonnie Heiple, MassDEP, bonnie.heiple@mass.gov
  Kathleen Baskin, MassDEP, kathleen.baskin@mass.gov
  Timothy M. Jones, MassDEP, timothy.jones@mass.gov

Why is this important?

The current wetland regulations were enacted in 2014. MassDEP proposed updated wetland regulations in late 2023 and the comment period closed in April 2024, but the regulations have not been promulgated. The current regulations from 2014 still use outdated rainfall data for stormwater calculations based on information from 60 years ago, and no standards have ever been issued for development in the coastal floodplain despite the fact that the Wetlands Protection Act made this a protected resource decades ago.

Why is this important now?

It has been over ***18 months*** since MACC submitted comments on the proposed Wetlands Protection Act Regulations. Our initial comment letter is linked HERE. MassDEP reviewed more than 280 comments on these regulations but there is a hold up somewhere in the administration. We are concerned that if the regulations are not issued in 2025, there could be a moratorium on all regulations during the election year in 2026. We need the Healey-Driscoll Administration to issue the final Wetlands Protection Act regulation updates before the end of the year. MACC's original letter from September 30, 2025 to the Healey-Driscoll administration requesting the release of the updated regulations is available HERE. Our follow-up letter from November 13, 2025 is linked HERE.

Thank you for your help with this important issue. Call us with any questions.

- Dot McGlincy

CPA Committee Liaison.

Summary:
CPA Committee Liaison.

- Vote on Cooke's Hollow application letter of support.

Town of Arlington, Massachusetts

DEP #091-0375: Notice of Intent: 26 Dudley Street.

Summary:
DEP #091-0375: Notice of Intent: 26 Dudley Street.
The Conservation Commission will hold a public hearing to consider a Notice of Intent to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot at 26 Dudley Street in Arlington. Areas proposed to be altered include the outer Riverfront Area associated with Mill Brook.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	NOI_Application_and_Plans_26_Dudley_Street.pdf	NOI Application and Plans_26 Dudley Street
🗋	Reference Material	ATTACHMENT_STORMWATER_REPORT_26_Dudley_Street_-_Stormwater_Management_Report_11-13-25.pdf	ATTACHMENT STORMWATER REPORT 26 Dudley Street - Stormwater Management Report 11-13-25

Notice of Intent Application

November 19, 2025

Subject Property
26 Dudley Street
Parcel ID: 55-2-41
Arlington, Massachusetts

Applicant and Owner
Gregg Santini
Santini Realty Trust
60 Dudley Street
Arlington, MA 02476

LEC Environmental Consultants, Inc.
380 Lowell Street, Suite 101
Wakefield, MA 01880
781-245-2500

www.lecenvironmental.com

November 19, 2025

Hand Delivery

Arlington Conservation Commission
Arlington Town Hall Annex
730 Massachusetts Avenue
Arlington, MA 02476

Re: Notice of Intent Application [LEC File #: SRT\25-160.04]
26 Dudley Street
Parcel ID: 55-2-41
Arlington, Massachusetts

Dear Members of the Conservation Commission:

On behalf of the Applicant and Owner, Santini Realty Trust (Gregg Santini, Contact), LEC Environmental Consultants, Inc., (LEC) is filing the enclosed Notice of Intent (NOI) Application with the Arlington Conservation Commission to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot at 26 Dudley Street in Arlington, Massachusetts. The entirety of the proposed project is located within 'Previously Developed' and 'Degraded' Riverfront Area associated with Mill Brook, and portions are located within the 100-foot Buffer Zone to Bank. Erosion controls, stormwater management, and a native planting plan are proposed.

This NOI Application is being filed under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40, the *Act*) and its implementing *Regulations* (310 CMR 10.00, the *Act Regulations*), and the *Town of Arlington Wetlands Protection Bylaw* (Article 8, the *Bylaw*) and its implementing *Wetlands Protection Regulations* (March 16, 2023, the *Bylaw Regulations*).

Frederick W. Russell, PE has prepared an enclosed *Site Plan* dated November 13, 2025 depicting existing and proposed site conditions (Appendix D), and a *Stormwater Management Report* dated November 13, 2025 (Appendix C) with supporting calculations and the DEP Stormwater Checklist. Approach3 has prepared a Native Planting Plan dated November 13, 2025 (Appendix B).

Two checks made payable to the Town of Arlington in the amounts of Eight Hundred Dollars ($800.00) and One Thousand, Fifty-Six Dollars and Sixty Cents ($1,056.60) for the purpose of filing this Application under State and Local guidelines, respectively, are included herein. Payment to the Commonwealth of Massachusetts in the amount of Seven Hundred, Seventy-Five Dollars ($775.00) has been processed via eDEP.

Thank you for your consideration of this Application. We look forward to meeting with you at the December 4, 2025 Public Hearing. Should you have any questions, please do not hesitate to contact Richard Kirby or Nicole Ferrara in our Wakefield office at 781-245-2500 or at rkirby@lecenvironmental.com or nferrara@lecenvironmental.com.

Sincerely,

LEC Environmental Consultants, Inc.

Richard A. Kirby
Senior Wetland Scientist

Nicole M. Ferrara
Wetland Scientist

cc: DEP, Northeast Region
Gregg Santini
Christian Klein, Approach3
Frederick W. Russell, PE

jfr: projects\25-160.04\NOIReport.doc

Appendices

Appendix A

Locus Maps

Figure 1: USGS Topographic Quadrangle

Figure 2: FEMA Flood Insurance Rate Map

Figure 3: MassGIS Orthophoto & NHESP Estimated Habitat Map

Appendix B

Native Landscape Plan, dated November 13, 2025, prepared by Approach3

Appendix C

Site Plan, dated November 13, 2025, prepared by Frederick W. Russell, PE

Attachment

Stormwater Management Report, dated November 13, 2025, prepared by Frederick W. Russell, PE

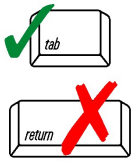
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw (Article 8)

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Arlington
City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

26 Dudley Street (a. Street Address) | Arlington (b. City/Town) | 02476 (c. Zip Code)

Latitude and Longitude: 42.42080 (d. Latitude) | -71.16565 (e. Longitude)

55-2 (f. Assessors Map/Plat Number) | 41 (g. Parcel /Lot Number)

2. Applicant:

Gregg (a. First Name) | Santini (b. Last Name)

Santini Realty Trust (c. Organization)

60 Dudley Street (d. Street Address)

Arlington (e. City/Town) | MA (f. State) | 02476 (g. Zip Code)

781-983-0465 (h. Phone Number) | N/A (i. Fax Number) | gregg@santiniinc.com (j. Email Address)

3. Property owner (required if different from applicant): ☐ Check if more than one owner

Same as Applicant (a. First Name) | (b. Last Name)

(c. Organization)

(d. Street Address)

(e. City/Town) | (f. State) | (g. Zip Code)

(h. Phone Number) | (i. Fax Number) | (j. Email address)

4. Representative (if any):

Richard (a. First Name) | Kirby (b. Last Name)

LEC Environmental Consultants, Inc (c. Company)

380 Lowell Street, Suite 101 (d. Street Address)

Wakefield (e. City/Town) | MA (f. State) | 01880 (g. Zip Code)

508-813-4129 (h. Phone Number) | N/A (i. Fax Number) | rkirby@lecenvironmental.com (j. Email address)

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$1,575.00 (a. Total Fee Paid) | $775.00 (b. State Fee Paid) | $800.00 (c. City/Town Fee Paid)

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw (Article 8)

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Arlington
City/Town

A. General Information (continued)

6. General Project Description:

The Applicant proposes to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot within 'Previously Developed' and 'Degraded' Riverfront Area and the 100-foot Buffer Zone to Bank associated with Mill Brook. Erosion controls, stormwater management, and a native planting plan are proposed.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☒ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land)
Middlesex South	
c. Book	d. Page Number
17283	502

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☒ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw (Article 8)

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Arlington
City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☒ Riverfront Area	Mill Brook (inland) 1. Name of Waterway (if available) - **specify coastal or inland**	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☒ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 12,150± (entire lot) square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
12,150±	5,330±	6,820±

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☒ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☒ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f**. above.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw (Article 8)

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Arlington
City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW | b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings | b. number of replacement stream crossings

Massachusetts Department of Environmental Protection
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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
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City/Town

C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

   a. ☐ Yes ☒ No

   If yes, include proof of mailing or hand delivery of NOI to:

   Natural Heritage and Endangered Species Program
   Division of Fisheries and Wildlife
   1 Rabbit Hill Road
   Westborough, MA 01581

   2021
   b. Date of map

   If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

   c. Submit Supplemental Information for Endangered Species Review*

      1. ☐ Percentage/acreage of property to be altered:

         (a) within wetland Resource Area _____ percentage/acreage

         (b) outside Resource Area _____ percentage/acreage

      2. ☐ Assessor's Map or right-of-way plan of site

2. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

   (a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

   (b) ☐ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/ma-endangered-species-act-mesa-regulatory-review).
Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw (Article 8)

Provided by MassDEP:
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Arlington
City/Town

C. Other Applicable Standards and Requirements (cont'd)

(c) ☐ MESA filing fee (fee information available at https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review).
Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☒ Not applicable – project is in inland resource area only b. ☐ Yes ☐ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Bourne to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

North Shore - Plymouth to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

c. ☐ Is this an aquaculture project? d. ☐ Yes ☒ No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).

Massachusetts Department of Environmental Protection
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WPA Form 3 – Notice of Intent
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw (Article 8)

Provided by MassDEP:
MassDEP File Number
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City/Town

C. Other Applicable Standards and Requirements (cont'd)

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☒ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2. ☒ A portion of the site constitutes redevelopment

3. ☐ Proprietary BMPs are included in the Stormwater Management System.

b. ☐ No. Check why the project is exempt:

1. ☐ Single-family house

2. ☐ Emergency road repair

3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☐ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
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D. Additional Information (cont'd)

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan
a. Plan Title

Frederick W. Russell, PE
b. Prepared By

Frederick W. Russell, PE
c. Signed and Stamped by

November 13, 2025
d. Final Revision Date

1" = 20'
e. Scale

Stormwater Management Report prepared by Frederick W. Russell, PE
f. Additional Plan or Document Title

November 13, 2025
g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☒ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

5226
2. Municipal Check Number

11/13/2025
3. Check date

Payment made via eDEP
4. State Check Number

5. Check date

Santini, Inc.
6. Payor name on check: First Name

7. Payor name on check: Last Name

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Arlington
City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant — 2. Date: 11.13.25

3. Signature of Property Owner (if different) — 4. Date

5. Signature of Representative (if any) — 6. Date: November 11, 2025

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

A. Applicant Information

1. Location of Project:

26 Dudley Street	Arlington
a. Street Address	b. City/Town
Payment via eDEP	$775.00
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Gregg		Santini
a. First Name		b. Last Name
Santini Realty Trust		
c. Organization		
60 Dudley Street		
d. Mailing Address		
Arlington	MA	02476
e. City/Town	f. State	g. Zip Code
781-983-0465	N/A	gregg@santiniinc.com
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

Same as Applicant		
a. First Name		b. Last Name
c. Organization		
d. Mailing Address		
e. City/Town	f. State	g. Zip Code
h. Phone Number	i. Fax Number	j. Email Address

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 3b: Commerical Building	1.5 (Riverfront area)	$1,050.00	$1,575.00

Step 5/Total Project Fee: $1,575.00

Step 6/Fee Payments:

Total Project Fee:	$1,575.00 a. Total Fee from Step 5
State share of filing Fee:	$775.00 b. 1/2 Total Fee **less $**12.50
City/Town share of filling Fee:	$800.00 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

BYLAW FILING FEES AND TRANSMITTAL FORM

Rules:

1. Fees are payable at the time of filing the application and are non-refundable.
2. Fees shall be calculated per schedule below.
3. Town, County, State, and Federal Projects are exempt from fees.
4. These fees are in addition to the fees paid under M.G.L. Ch. 131, s.40 (ACT).
5. A legal notice charge of $150 is assessed on all applications for the cost of filing the public notice.

Fee Schedule (ACC approved 1/8/15):

$	No./Area	Category
		(R1) RDA- $150 local fee, no state fee
		(N1) Minor Project - $200 (house addition, tennis court, swimming pool, utility work, work in/on/or affecting any body of water, wetland or floodplain).
		(N2) Single Family Dwelling - $600
		(N3) Multiple Dwelling Structures - $600 + $100 per unit all or part of which lies within 100 feet of wetlands or within land subject to flooding.
$906.60	$800 + (5,330 x 0.02)	**(N4) Commercial, Industrial, and Institutional Projects** - $800 + 50¢/s.f. wetland disturbed; 2¢/s.f. land subject to flooding or buffer zone disturbed.
		(N5) Subdivisions - $600 + $4/l.f. feet of roadway sideline within 100 ft. of wetlands or within land subject to flooding.
		(N6) Other Fees - copies, printouts; per public records law
		(N7) Minor Project Change - $50
		(N8) Work on Docks, Piers, Revetments, Dikes, etc - $4 per linear foot
		(N9) Resource Boundary Delineation (ANRAD) - $1 per linear foot
		(N10) Certificate of Compliance (COC or PCOC) - No charge if before expiration of Order, $200 if after that date.
		(N11) Amendments - $300 or 50% of original local filing fee, whichever is less.
		(N12) Extensions -
		a. Single family dwelling or minor project - $100.
		b. Other - $150.
		(N13) Consultant Fee -per estimate from consultant
Subtotal		
$906.60	**+ $150**	Legal Notice Charge
$1,056.60	**TOTAL**	

Note: The Notice of Intent Fee Transmittal Form is still required. Details for calculating the NOI fee are included below.

Affidavit of Service

I, Sharon A. Sullivan, being duly sworn, do hereby state as follows:

On November 20, 2025, I mailed a "Notification to Abutters" in compliance with the second paragraph of Massachusetts General Laws, Chapter 131, s.40, and the Arlington Wetlands Protection Bylaw, Title V, Article 8 of the Town of Arlington Bylaws in connection with the following matter:

Demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot at 26 Dudley Street.

The form of the notification, and a list of the abutters to whom it was provided and their addresses, are attached to this Affidavit of Service.

Signed under the pains and penalties of perjury, this 20th day of November 2025.

Sharon A. Sullivan

Sharon A. Sullivan
Permitting Technician

November 20, 2025

CERTIFIED MAIL

«Name»
«Name2»
«Address»
«City», «State» «Zip»

Re: Notice of Intent Application [LEC File #: SRT\25-160.04]
26 Dudley Street
Assessor's Parcel ID: 55-2-41
Arlington, Massachusetts

Dear Abutter:

On behalf of the Applicant, Santini Realty Trust, LEC Environmental Consultants, Inc. (LEC) has filed a Notice of Intent Application with the Arlington Conservation Commission to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot at 26 Dudley Street. Portions of the proposed activities are located within Riverfront Area and the 100-foot Buffer Zone to Bank associated with Mill Brook, as jurisdictional under the *Massachusetts Wetlands Protection Act* (the *Act*, M.G.L. c. 131, s. 40) and its implementing *Regulations* (the *Act Regulations*, 310 CMR 10.00), and the *Town of Arlington Wetlands Protection Bylaw* (Article 8, the *Bylaw*) and its *Regulations Pursuant to the Town of Arlington Regulations for Wetlands Protection* (the *Bylaw Regulations*).

The Notice of Intent Application and accompanying plans are available for review by contacting the Arlington Conservation Commission. The remote Public Hearing will be held on December 4, 2025 beginning at 7:00 p.m., in accordance with the provisions of the *Act*, *Act Regulations*, *Bylaw*, and *Bylaw Regulations*. Further information regarding this application will be published at least five (5) days in advance in *The Advocate & Star*. Notice of the Public Hearing will also be posted at the Arlington Town Hall at least 48 hours in advance. Please check the Town's website and the Board/Committee's page for any updated information on the meeting.

Please do not hesitate to review the materials and/or attend the public hearing should you have questions or concerns about the proposed project.

Sincerely,

LEC Environmental Consultants, Inc.

Richard A. Kirby
Senior Wetland Scientist

Abutter Notification

Notification to Abutters Under the

Massachusetts Wetlands Protection Act and the

Arlington Wetlands Protection Bylaw

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40 and the Arlington Wetlands Protection Bylaw, you are hereby notified of the following:

The Conservation Commission will hold a virtual public meeting using Zoom on Thursday, December 4, 2025, at 7:00 p.m. in accordance with the provisions of the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, s. 40, as amended) and the Town of Arlington Bylaws Article 8, Bylaw for Wetland Protection, and in accordance with the Governor's Order Suspending Certain Provisions of the Open Meeting Law, G. L. c. 30A, § 20 relating to the COVID-19 emergency, for a Notice of Intent Application from Santini Realty Trust to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot within Riverfront Area and the 100-foot Buffer Zone to Bank associated with Mill Brook at 26 Dudley Street (Assessor's Property Map 55-2-41). Please refer to the Commission's online meeting agenda for specific Zoom meeting access information.

A copy of the application and accompanying plans are available by request by contacting the Arlington Conservation Commission at 781-316-3012 or concomm@town.arlington.ma.us. For more information, call the Applicant's representative, LEC Environmental Consultants, Inc., at 781-245-2500 or the Arlington Conservation Commission at 781-316-3012, or the DEP Northeast Regional Office at 978-694-3200.

NOTE: Notice of the Public Hearing will be published at least five (5) business days in advance in *The Advocate & Star* and will also be posted at least 48 hours in advance in the Arlington Town Hall.

****

CERTIFIED ABUTTERS LIST
Date: November 13, 2025
Subject Property Location: 26 DUDLEY ST Arlington, MA
Subject Parcel ID: 055.0-0002-0041.0
Search Distance: 100 Feet

Parcel ID	Property Location	Owner1	Owner2	Mailing Address	City/Town, State, Zip
054.0-0001-0027.0	14 DUDLEY ST	ARLINGTON - DUDLEY REALTY LLC		59 UNION SQUARE	SOMERVILLE MA, 02143
054.0-0002-0006.0	19 DUDLEY ST	NOSTALGIA PROPERTIES LLC		39 BRIGHTON AVE	BOSTON MA, 02134
055.0-0002-0041.0	**26 DUDLEY ST**	**SANTINI MARK & GARY--TRS**	**SANTINI REALTY TRUST**	**P.O. BOX 93**	**ARLINGTON MA, 02476**
055.0-0001-0011.B	33-35 DUDLEY ST	YENRAK INVESTMENT PROPERTIES LLC		98 RICHFIELD RD	ARLINGTON MA, 02474
055.0-0001-0011.A	37 DUDLEY ST	CHILLEMI JUSTIN		39 DUDLEY ST	ARLINGTON MA, 02476
054.0-0001-0028.0	0LOT DUDLEY ST	ARLINGTON - DUDLEY REALTY LLC		59 UNION SQUARE	SOMERVILLE MA, 02143
054.0-0001-0001.0	0LOT GROVE ST	TOWN OF ARLINGTON PARK	ETHEL WELLINGTON PARK	730 MASS AVE	ARLINGTON MA, 02476
055.0-0001-0014.0	23 DUDLEY ST	MALONEY SEAN P/TRUSTEE	OXBOW REALTY TRUST	P. O. BOX 515	LEXINGTON MA, 02420
055.0-0002-0039.B	34 DUDLEY ST	PSI ATLANTIC ARLINGTON MA LLC		530 OAK CT DR; SUITE 155	MEMPHIS TN, 38117
055.0-0001-0012.A	29 DUDLEY ST	CARNEY JOHN A		98 RICHFIELD RD	ARLINGTON MA, 02474
055.0-0001-0013.A	25 DUDLEY ST	CARNEY JOHN A		98 RICHFIELD RD	ARLINGTON MA, 02474

The Board of Assessors certifies the names and addresses of requested parties in interest, all abutters to subject parcel within 100 feet.

Town of Arlington
Office of the Board of Assessors
730 Massachusetts Ave
Arlington, MA 02476
phone: 781.316.3050
email: assessors@town.arlington.ma.us


45R #3
45R #2
45R #1
41R
41A
39
37
35
33
29
25
23
19 #C
19 #B
19 #A
Dudley St
38A
34
26
Dudley Ct
Dudley Ct
Dudle
14 #1
Mill Brook
Mill Brook
Wellington Park
32 #101
38
26 #7

Notice of Intent Application

26 Dudley Street

Assessor's Parcel ID: 55-2-41

Arlington, Massachusetts

November 19, 2025

1. Introduction

On behalf of the Applicant and Owner, Santini Realty Trust (Gregg Santini, Contact), LEC Environmental Consultants, Inc., (LEC) is filing the enclosed *Notice of Intent* (NOI) Application with the Arlington Conservation Commission to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot at 26 Dudley Road in Arlington, Massachusetts. The entirety of the proposed project is located within 'Degraded' and 'Previously Developed' Riverfront Area associated with Mill Brook, and portions are located within the 100-foot Buffer Zone to Bank. Erosion controls, stormwater management, and a native planting plan are proposed.

This NOI Application is being filed under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40, the *Act*) and its implementing *Regulations* (310 CMR 10.00, the *Act Regulations*), and the *Town of Arlington Wetlands Protection Bylaw* (Article 8, the *Bylaw*) and its implementing *Wetlands Protection Regulations* (March 16, 2023, the *Bylaw Regulations*).

Frederick W. Russell, PE has prepared an enclosed *Site Plan* dated November 13, 2025 depicting existing and proposed site conditions (Appendix C), and a *Stormwater Management Report* dated November 13, 2025 (attached) with supporting calculations and the DEP Stormwater Checklist. Approach3 has prepared a *Native Landscape Plan* dated November 13, 2025 (Appendix B).

The Applicant has also filed for Environmental Design Review with the Arlington Redevelopment Board (ARB), and anticipates meeting with the ARB on December 15, 2025.

2. General Site Description

The 12,150± square foot property is located north of Massachusetts Avenue, west of Arlington High School, east of Brattle Street, and south of Summer Street, within the central portion of Arlington. Commercial and residential development generally surround the property, while forested uplands adjacent to Mill Brook also occur to the south.

Southwesterly view of brick building from Dudley Street

The property contains a 3-story, brick building situated along the south side of Dudley Street, with a detached wooden structure located south of the brick building. Paved parking and access surround the buildings and provide access through the property. A chain-link fence occurs along the southeastern property boundary. Narrow, linear strips of sparsely-vegetated 'forest floor' occur along the southeastern property boundary, and behind and along the southern and western property boundaries adjacent to the structures.

Site topography generally descends easterly through the property, while off-site wooded land to the south (owned by the Town of Arlington) descends southeasterly toward Mill Brook.

Northwesterly view of brick building from parking lot

The off-site wooded upland contains a canopy dominated by Norway maple (*Acer plantanoides*), with individuals of American elm (*Ulmus americana*) and black cherry (*Prunus serotina*). The understory contains saplings from the canopy, crab apple (*Malus sylvestris*), sapling mulberry (*Morus* sp.), Japanese knotweed (*Reynoutira japonica*), multiflora rose (*Rosa multiflora*), European buckthorn (*Rhamnus cathartica*), honeysuckle (*Lonicera periclymenum*), and patches of pokeweed (*Phytolacca americana*). The groundcover is dominated by garlic mustard (*Alliaria petiolata*), with scattered patches of dock (*Rumex* sp.) and poison ivy (*Toxicodendron radicans*). Scattered piles of landscape debris and trash occur throughout the woodland.

View of off-site wooded upland

Utilizing a hand-held, Dutch-style soil auger, LEC inspected soil conditions within the wooded upland, and observed a 20+ inch thick, silty loam topsoil (A Horizon) with a soil matrix color of 10YR 3/2. While redoximorphic concentrations were intermittently observed in the soil profile at 16 inches, these features are too deep within the soil column and the A Horizon matrix is not dark enough to render the soil as hydric according to the *Field Indicators for Identifying Hydric Soils in New England* (Version 4, April 2019, the *Field Indicators Guide*).

2.1 Natural Heritage and Endangered Species Program Designation

According to the 15th Edition of the *Massachusetts Natural Heritage Atlas* (effective August 1, 2021) published by the Natural Heritage & Endangered Species Program (NHESP), no areas of Estimated Habitats of Rare Wildlife or Priority Habitat of Rare Species, or Potential or Certified Vernal Pools exist on the site (Appendix A, Figure 3).

2.2 Floodplain Designation

According to the July 8, 2025 *Federal Emergency Management Agency Flood Insurance Rate Map* for Middlesex County, Massachusetts (Map No: 25017C0416F), the entire property is located within Zone X (not shaded): *– Areas determined to be outside the 0.2% Annual Chance Floodplain* (Appendix A, Figure 2). Off-site land adjacent to Mill Brook occurs within Zone AE: *Special Flood Hazard Areas within the 1% Annual Chance Floodplain – Base Flood Elevations Determined*. According to the FEMA FIRM, the Zone AE elevation occurs at elevation 62.4 (NAVD88) as depicted on the *Site Plan.* This off-site land extending from Mill Brook to elevation 62.4 (NADV88) is jurisdictional as Bordering Land Subject to Flooding.

3. Wetland Resource Areas

LEC conducted a site evaluation on June 6, 2025 to identify and characterize existing protectable Wetland Resource Areas located on or immediately adjacent to the site and to delineate the relevant off-site portions of Mill Brook located south of the property. The extent of Wetland Resource Areas was determined through observations of existing plant communities and hydrologic indicators in accordance with the *Act*, its implementing *Regulations*, the *Bylaw,* and the *Bylaw Regulations*.

Based on these methods and review of pertinent maps, LEC determined that the Wetland Resource Areas associated with the property are limited to Riverfront Area and the 100-foot Buffer Zone to Bank associated with Mill Brook. No Bordering Vegetated Wetlands (BVW) were observed on or within 100 feet of the subject property.

3.1 Bank-Mean Annual High Water

According to 310 CMR 10.58 (2) (a) 2., *Mean Annual High-water Line of a river is the line that is apparent from visible markings or changes in the character of soils or vegetation due to the prolonged presence of water and that distinguishes between predominantly aquatic and predominantly terrestrial land. Field indicators of bankfull conditions shall be used to determine the mean annual high-water line. Bankfull field indicators include but are not limited to: changes in slope, changes in vegetation, stain lines, top of pointbars, changes in bank materials, or bank undercuts*.

Mean Annual High Water (MAHW) is not defined in the *Bylaw* or *Bylaw Regulations.*

Mill Brook occurs off-site to the south and flows easterly toward its eventual convergence with Lower Mystic Lake. The Bank-MAHW Line was determined through observation of multiple corroborating

Westerly view of Mill Brook south of the property

Bankfull Indicators, including scouring, wrack deposition, staining, changes in vegetation, and a distinct separation between predominantly aquatic and terrestrial land.

3.2 Riverfront Area

Off-site wooded upland within the Riverfront Area to Mill Brook

According to 310 CMR 10.58 (2) (a), *A Riverfront Area is the area of land between a river's mean annual high water line and a parallel line measured horizontally. The riverfront area may include or overlap other resource areas or their buffer zones. The riverfront area does not have a buffer zone.*

According to Section 9. L. of the *Bylaw, "Riverfront Area" shall mean the area of Land between a river's mean annual high water line and a parallel line measured 200 feet horizontally landward of the mean annual high water line.*

Riverfront Area includes land within 200 feet of the Bank-MAHW line associated with Mill Brook and encompasses the entire 12,150± square-foot property. Roughly 5,330 square feet occur within the 0-100' Riverfront Area, while the balance (6,820± square feet) occurs within the 100-200' Riverfront Area. Roughly 10,915 square feet (or 89.8%) of the Riverfront Area on the property contains structure and pavement and is considered 'Degraded' and 'Previously Developed' in accordance with 310 CMR 10.58 (5). The remaining 1,235± square feet (or 10.2%) of Riverfront Area occurs as narrow strips of sparsely-vegetated 'forest floor' along the southeastern, southern, and western property boundaries.

4. Proposed Activities

The Applicant proposes to demolish the wooden structure within the southeastern portion of the property and construct two additions to the existing 3-story brick building. Re-paving and grading within the paved parking lot also is proposed.

The proposed additions are located off the western and southern building facades, and off the eastern building façade. Specifically, the larger addition proposed off the western and southern facades of the existing building measures 3,695± square feet, while the smaller, eastern addition (a new stairwell) measures 162± square feet.

The existing pavement will be removed and the parking area and access will be re-graded and re-paved to better reconcile the elevation difference between the site entrance along Dudley Street (elevation 68) and the proposed larger addition (elevation 70.65). A total of nine (9) parking spaces are proposed along the southeastern pavement edge, while a dumpster pad is proposed within the southern portion of the property, between the proposed larger addition and the southernmost parking space. A bicycle storage rack set on concrete is proposed within the northeastern corner of the property, adjacent to the single access/egress from Dudley Street, and a retaining/landscape wall is proposed along the southeastern property boundary adjacent to the parking spaces.

5. Mitigation Measures

The Applicant intends to implement erosion controls to protect adjacent properties during construction, provide stormwater management in excess of State and local requirements, and implement a Native Landscape Plan. These mitigating measures are intended to meet or exceed the regulatory requirements enumerated in the *Act Regulations* and *Bylaw Regulations*, and to promote climate resiliency in accordance with the *Bylaw Regulations.* A description of each of these mitigating measures is provided below.

5.1 Erosion and Sedimentation Control

The Applicant proposes to implement an erosion control program to protect Mill Brook and adjacent properties from sedimentation during construction activities. The plan for the control of potential impacts to the adjacent Wetland Resource Areas is based on DEP guidelines and will be comprised of staked compost filter tubes along the Limit-of-Work line. All erosion control measures will remain in place until disturbed areas are stabilized by vegetation. The location of the proposed erosion controls and a detail are shown on the *Site Plan* (Appendix C).

5.2 Stormwater Management

The Applicant proposes to install a single subsurface infiltration system to collect and infiltrate stormwater run-off from the existing structure and proposed additions. The

infiltration system is proposed within the central portion of the property and will comprise of fifteen (15) Stormtech DC-780 infiltration chambers (or equivalent) surrounded by double-washed angular stone. The *Stormwater Report* (attached) contains the DEP Stormwater Checklist, supporting calculations, and an *Operation and Maintenance Plan*, and demonstrates that peak rates and volumes of stormwater run-off for the site will be significantly reduced (by more than half) for the 2, 10, 25, and 100-year statistical storm events. The system has been designed using the NOAA Atlas 14 (Volume 10) precipitation data in an effort to promote climate resiliency associated with the project. Below is a summary table of Pre-Development and Post Development Drainage excerpted from the *Stormwater Management Report.*

	Pre-Development		Post-Development	
Storm Event	Rate (cfs)	Volume (cf)	Rate (cfs)	Volume (cf)
2	0.67	2,457	0.25	907
10	1.15	4,309	0.49	1,751
25	1.45	5,482	0.63	2,301
100	1.90	7,302	0.86	3,167

5.3 Native Landscaping Plan

While opportunities are limited on-site to provide native landscaping, the project Architect, Approach3, has prepared a *Native Landscaping Plan* (Appendix B) depicting how native landscape plants have been incorporated into the project. Native trees, shrubs, and/or groundcover plants are proposed along Dudley Street, south of the bicycle storage rack, within the southern portion of the site (south of the dumpster pad), and along the southern and western edges of the proposed larger addition. All native plants will be derived from the *Lexington Preferred Planting List* (2021).

6. Regulatory Performance Standards

The *Act Regulations* provide specific performance standards for work within Riverfront Area, and the *Bylaw Regulations* provide additional standards for climate resiliency. Citations of the pertinent performance standards are provided below, along with a description of how the project meets these standards.

6.1 Redevelopment within Previously Developed Riverfront Area

The *Act Regulations* at 310 CMR 10.58 (5) provide performance standards for work within 'Previously Developed' Riverfront Area. Below are citations of the pertinent

performance standards and an explanation of the project's compliance with the performance standards.

Redevelopment Within Previously Developed Riverfront Areas: Restoration and Mitigation. Notwithstanding the provisions of 310 CMR 10.58 (4) (c) and (d), the issuing authority may allow work to redevelop a previously developed riverfront area, provided the proposed work improves existing conditions. Redevelopment means replacement, rehabilitation, or expansion of existing structures…A previously developed riverfront area contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil…Work to redevelop previously developed riverfront area shall conform to the following criteria:

(a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c. 131, s. 40. When a lot is previously developed but no portion of the riverfront area is degraded, the requirements of 310 CMR 10.58 (4) shall be met.

The project results in an improvement to the Riverfront Area by:

- Reducing the footprint of 'Degraded' Riverfront Area;
- Setting the closest proposed addition corner farther from Mill Brook compared to the existing detached structure to be removed;
- Implementing a Native Landscape Plan; and
- Providing stormwater management in excess of the standards required under the *Act Regulations.*

(b) Stormwater management is provided according to standards established by the Department.

Stormwater management in excess of *Act Regulations* requirements is proposed, by using NOAA 14 precipitation data, and infiltrating stormwater associated with the proposed additions *and* existing structure to remain, resulting in significant decreases (by more than half) in the rates and volumes of stormwater run-off for all design storm events.

(c) Within 200-foot riverfront areas, proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less….

Under existing conditions, the parking lot measures as close as 43.5± feet from Mill Brook, and the detached structure measures as close as 60.8± feet from Mill Brook.

Under proposed conditions, the pavement edge will also measure as close as 43.5± feet from Mill Brook, and the proposed larger addition will measure as close as 64.4± feet from Mill Brook. Accordingly, the proposed pavement edge and building corner measure no closer to Mill Brook compared to existing conditions at their closest points.

(d) *Proposed work, including expansion of structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58 (5) (f) or (g).*

The new larger addition will measure 3.6± feet farther from Mill Brook compared to the existing detached structure at their respective closest points. The existing and proposed pavement edges will measure 43.5± feet from Mill Brook at their respective closest points.

(e) *The area of proposed work shall not exceed the amount of the degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58 (5) (f) or (g).*

As described in Section 3.2 above, roughly 10,915 square feet (or 89.8%) of the Riverfront Area on the property contains structure and pavement and is considered 'Degraded' and 'Previously Developed' in accordance with 310 CMR 10.58 (5). The remaining 1,235± square feet (or 10.2%) of Riverfront Area occurs as narrow strips of sparsely-vegetated 'forest floor' along the southeastern, southern, and western property boundaries. Degraded Riverfront Area will be slightly reduced as part of the project to 10,880± square feet, or 89.5%

(f) *When an Applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), and (e) at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration. Alteration not conforming to the criteria shall begin at the riverfront area boundary...*

Since the project meets the requirements of 310 CMR 10.58 (5) (a) through (e), no restoration of on-site Degraded Riverfront Area in accordance with 10.58 (5) (g) is proposed or required.

(g) When an Applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), or (e) at a ratio in square feet of at least 2:1 of mitigation area to area of alteration not conforming to the criteria or an equivalent level of environmental protection where square footage is not a relevant measure…

Since the project meets the requirements of 310 CMR 10.58 (5) (a) through (e), no restoration of off-site Degraded Riverfront Area or other mitigation in accordance with 10.58 (5) (g) is proposed or required.

6.2 Bylaw Regulations and General Climate Resiliency

The *Bylaw Regulations* (Section 32 C) states that*: The Applicants shall, to the extent practicable and applicable as determined solely by the Commission, integrate considerations of adaptation planning into their project to promote climate change resilience so as to protect and promote resource area values into the future. These considerations are especially important in Land Subject to Flooding (floodplain) and Riverfront Area and other Resource Areas which protect the interest of Flood Control and Storm Damage Prevention, including Adjacent Upland Resource Areas. These Resource Areas may be directly impacted by extreme weather events expected to be more prevalent or more intense due to climate change, in surface runoff of pollutants, and in wildlife habitat due to changes in temperature.*

Section 32E. states that: *each project shall include at least the following measures to mitigate climate change impacts and adapt to changed climatic conditions. The Applicants shall address the following in writing in their application:*

(1) Describe project design considerations and measures to limit storm and flood damage during extended periods of disruption and flooding as might be expected in extreme weather events, using the FEMA 500-year flood elevation to represent extreme weather event flood levels, depending on the size and nature of the project. Project design considerations may include but not be limited to stormwater mitigation measures sized for increased precipitation expected due to climate change, 2:1 compensatory flood storage replacement, and 2:1 or higher tree replacement/plantings, See Land Subject to Flooding Section 24, Vegetative Wetlands Section 25, Adjacent Upland Resource Area Section 26, and Stormwater Management Section 33 of these Regulations.

As descried above in Section 2.2, the entire property is located within Zone X (not shaded): – *Areas determined to be outside the 0.2% Annual Chance Floodplain* (Appendix A, Figure 2). The proposed larger addition floor (elevation 70.65) is set >8 feet above the BLSF elevation of 62.4.

(2) Calculate project stormwater surface runoff that is expected to increase due to extreme weather events using NOAA 14 Plus Plus rainfall data (see definition in Section 4) and how this will be managed and mitigated to prevent pollution (including nutrients from fertilizers, roadway runoff, etc.) from entering the resource area in the future, with consideration of eliminating or decreasing impervious surfaces as much as feasible. Project design considerations may include but not be limited to stormwater mitigation measures sized for increased precipitation expected due to climate change. See Stormwater Management Section 33 of these Regulations.

The project engineer implemented the NOAA 14 (Volume 10) precipitation data as required by Arlington Stormwater Management Requirements. While predevelopment and post development peak rates and volumes for NOAA 14++ were not calculated, the design using NOAA 14 precipitation data results in significant reductions (by more than half) of the peak rates and volumes of stormwater run-off from the site, as excerpted below from the *Stormwater Management Report.*

	Pre-Development		Post-Development	
Storm Event	Rate (cfs)	Volume (cf)	Rate (cfs)	Volume (cf)
2	0.67	2,457	0.25	907
10	1.15	4,309	0.49	1,751
25	1.45	5,482	0.63	2,301
100	1.90	7,302	0.86	3,167

(3) Describe project vegetation/planting plans and any other measures to improve the resiliency of the resource areas to provide resource area values including but not limited to wildlife habitat; that is, to enable resource areas to withstand extreme precipitation/rainfall changes (drought and excess) and extreme temperatures including extreme heat due to climate change. Project design considerations may include but not be limited to diversity and abundance of replacement plantings and consideration of shading and cooling. See Vegetation Removal and Replacement Section 25 of these Regulations.

The Applicant proposes to implement a *Native Planting Plan,* which specifies native sapling trees, shrubs, and groundcover for the proposed landscaping for the property.

(4) *Describe project considerations and measures to avoid, minimize, and mitigate for extreme heat effects in resource areas. Project design considerations may include but not be limited to reducing impervious surfaces, increasing or maintaining naturally vegetated surfaces, increasing tree canopy, consideration of shading of structures.*

Under existing conditions, much of the stormwater run-off from the site flows directly to existing stormwater infrastructure within Dudley Street, and empties into Mill Brook relatively untreated, and with little to no heat sink. While impervious area on the property will only reduce slightly, the proposed stormwater design results in a significant increase in stormwater infiltration for the property, thereby mitigating comparatively warm stormwater run-off during the summer months.

(5) *Describe any additional measures to avoid, minimize, and mitigate for climate change impacts and adapt to changed climatic conditions that are in addition to (1) through (4) above.*

No additional climate resiliency measures are proposed beyond those described above.

7. Summary

On behalf of the Applicant and Owner, Santini Realty Trust, (Gregg Santini, Contact), LEC is filing this NOI Application with the Arlington Conservation Commission under the *Act* and *Act Regulations* and *Bylaw* and *Bylaw Regulations* to demolish a detached structure, construct two additions to a commercial structure, and re-pave a parking lot at 26 Dudley Road in Arlington. The entirety of the proposed project is located within 'Degraded' and 'Previously Developed' Riverfront Area associated with Mill Brook, and portions are located within the 100-foot Buffer Zone to Bank. Erosion controls, stormwater management, and a native planting plan are proposed. The project meets the standards enumerated in the *Act Regulations* and *Bylaw Regulations* by reducing 'Degraded' Riverfront Area, setting proposed structures farther from Mill Brook compared to existing conditions, and maintaining the distance to Mill Brook with proposed pavement. Further, the project promotes climate resiliency by significantly reducing (by more than half) the peak rates and volumes of stormwater run-off for all design storms using the NOAA 14 precipitation data, and by implementing a native landscape plan. Accordingly, the Applicant respectively requests that the Conservation Commission issue an Order of Conditions approving the project as proposed herein.

Arlington Conservation Commission, *Town of Arlington Wetlands Protection Bylaw* (Article 8) and *Wetlands Protection Regulations.* Arlington Conservation Commission. Town of Arlington, Massachusetts.

Massachusetts Department of Environmental Protection, Division of Wetlands and Waterways *Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands* (Second Edition, September 2022).

Massachusetts Natural Heritage and Endangered Species Program Atlas of Estimated Habitat of State-listed Rare Wetlands Wildlife. Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife, Route 135, Westborough, MA 01581, www.state.ma.us/dfwele/dfw. August 1, 2021.

Massachusetts Wetlands Protection Act (M.G.L. c. 131, §. 40), www.state.ma.us/dep
Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00 & 310 CMR 10.58 (2) (a) 1.d.), www.state.ma.us/dep

National Flood Insurance Program, Federal Emergency Management Agency Flood Insurance Rate Map, Middlesex County, Massachusetts. July 8, 2025 (Community Panel No: 25017C0416F).

New England Hydric Soils Technical Committee, *Field Indicators for Identifying Hydric Soils in New England,* Version 4, June 2020.

NRCS Web Soil Survey. http://websoilsurvey.nrcs.usda.gov/app/websoilsurvey.aspx

The State of Massachusetts 2016 Wetland Plant List (Lichvar, R.W, et al. 2016). US Army Corps of Engineers

Appendix A

Locus Maps

Figure 1: USGS Topographic Quadrangle

Figure 2: FEMA Flood Insurance Rate Map

Figure 3: MassGIS Orthophoto & NHESP Estimated Habitat Map

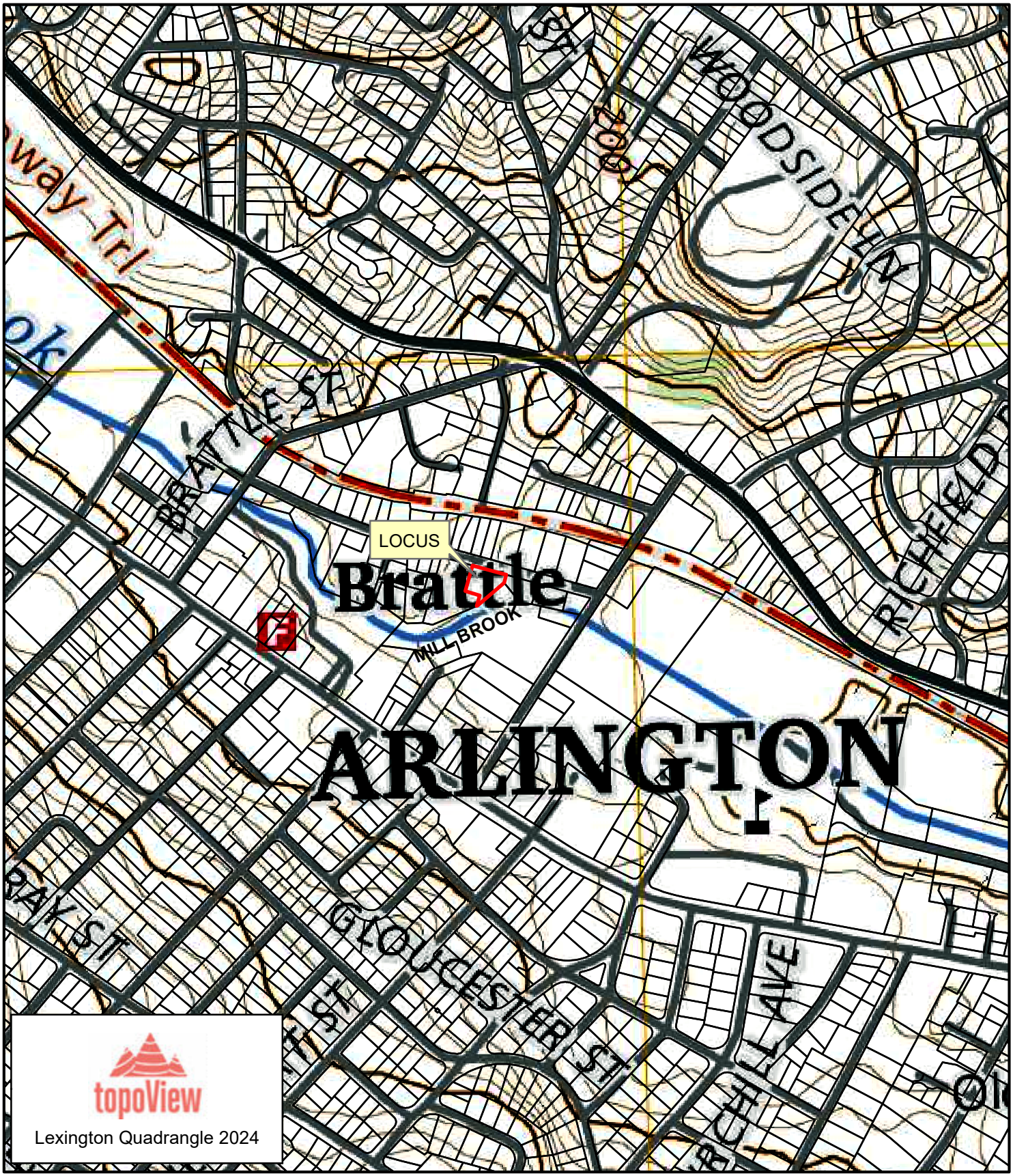

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Figure 1: USGS Topographic Map
26 Dudley Street
Arlington, MA

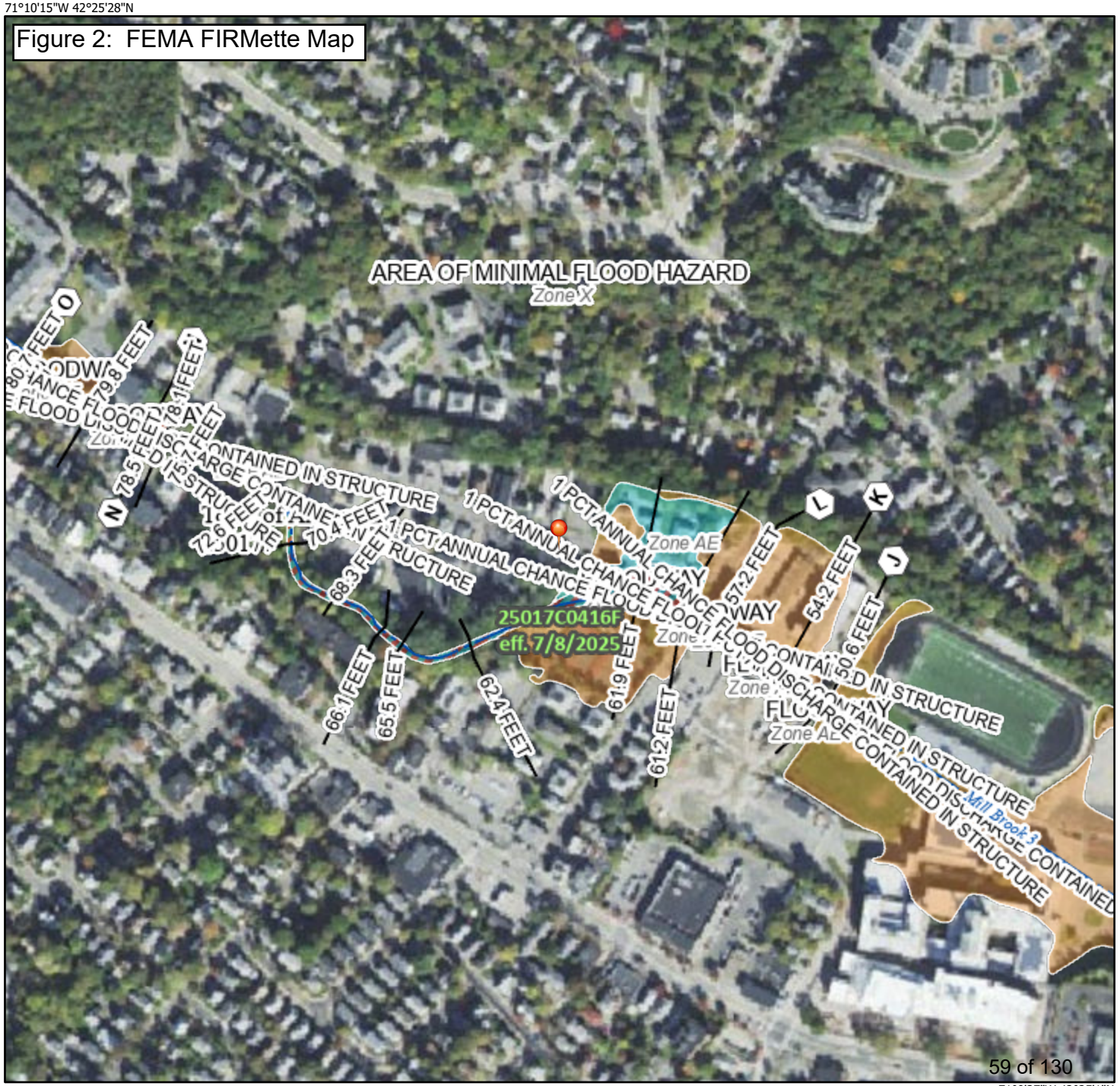
November 19, 2025

N
0 250 500 Feet

National Flood Hazard Layer FIRMette

71°10'15"W 42°25'28"N

Figure 2: FEMA FIRMette Map



71°9'37"W 42°25'1"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

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 Cross Sections with 1% Annual Chance
- 17.5 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 11/13/2025 at 7:57 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.

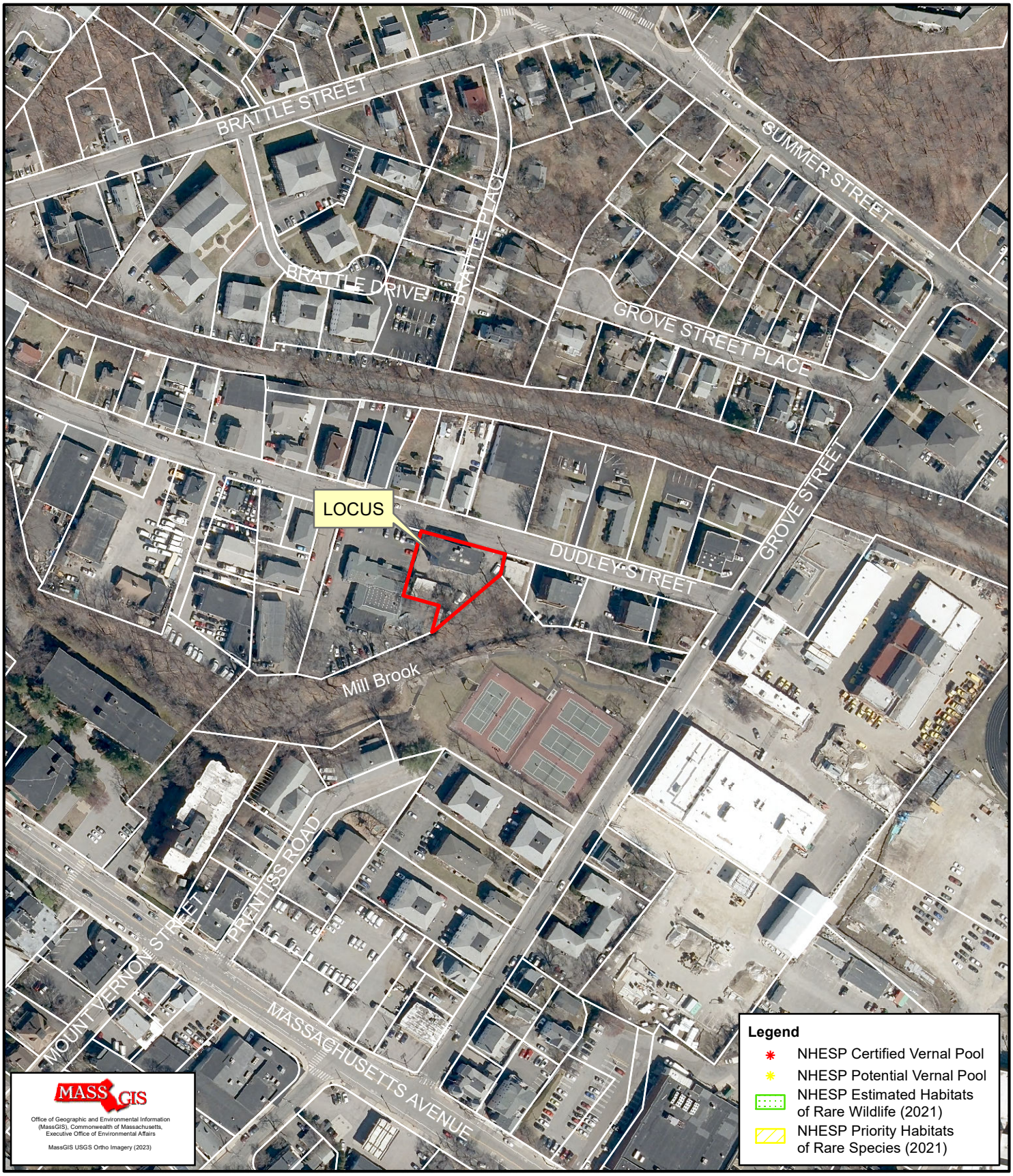


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Figure 3: MassGIS Orthophoto & NHESP Map
26 Dudley Street
Arlington, MA

November 19, 2025

N

0 100 200 Feet

Appendix B

Native Landscape Plan
dated November 13, 2025
prepared by Approach3

KEYED NOTES

1. REFER TO SHRUB PLANTING DETAIL (02/CV102)
2. REFER TO TREE PLANTING DETAIL (03/CV102)
3. REFER TO GROUNDCOVER PLANTING DETAIL (04/CV102)
4. APPLY SEED IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
5. CAUTION, POWER LINES ABOVE

SHEET NOTES:

A. PROPOSED PUBLIC STREET TREES SHALL BE SELECTED FROM THE "CONTRACTOR PLANTING LIST" PROVIDED BY THE ARLINGTON TREE WARDEN. SELECTION SHALL TAKE INTO ACCOUNT SALT TOLERANCE AND MATURE HEIGHT TO AVOID CONFLICT WITH EXISTING POWER LINES ABOVE.

B. ALL OTHER TREES, SHRUBS, GROUNDCOVER, AND OTHER PLANT MATERIALS SHALL BE SELECTED FROM THE "LEXINGTON PREFERRED PLANTING LIST" DATED SEPTEMBER 8, 2021 OR LATER.

C. ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

D. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.

E. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.

F. A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.

G. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.

H. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.

I. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY OWNER AND ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.

J. ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.

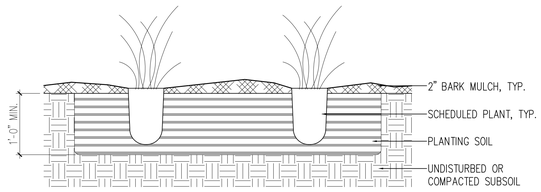
K. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR THREE YEARS FOLLOWING DATE OF FINAL ACCEPTANCE.

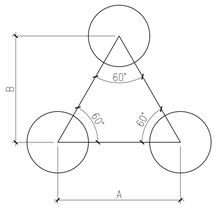
L. AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.

M. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.

N. THIS PLAN IS INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

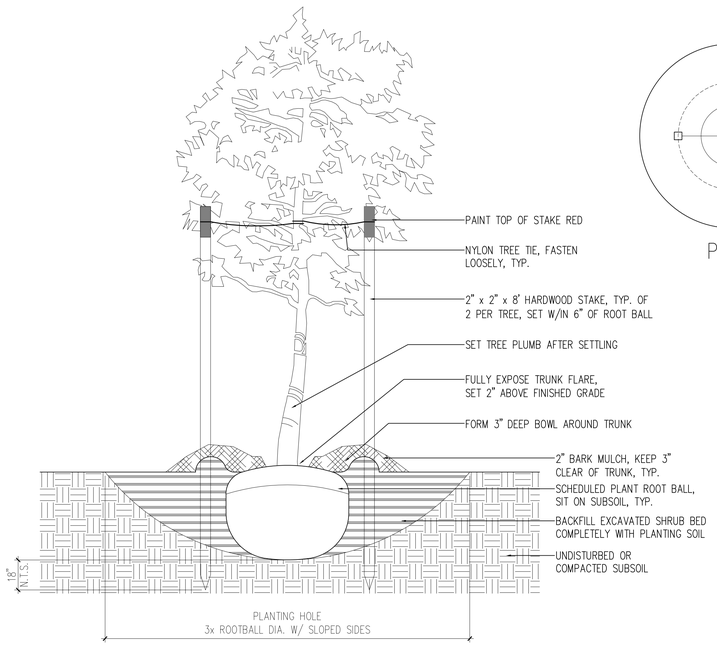
PLANT SPACING	
SPACING A	SPACING B
6 IN. O.C.	5 IN. O.C.
8 IN. O.C.	7 IN. O.C.
10 IN. O.C.	9 IN. O.C.
12 IN. O.C.	10 IN. O.C.
15 IN. O.C.	13 IN. O.C.
18 IN. O.C.	16 IN. O.C.
24 IN. O.C.	21 IN. O.C.
30 IN. O.C.	26 IN. O.C.
36 IN. O.C.	31 IN. O.C.
48 IN. O.C.	42 IN. O.C.
54 IN. O.C.	47 IN. O.C.
60 IN. O.C.	52 IN. O.C.

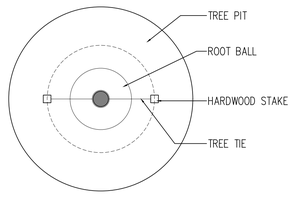




PLAN

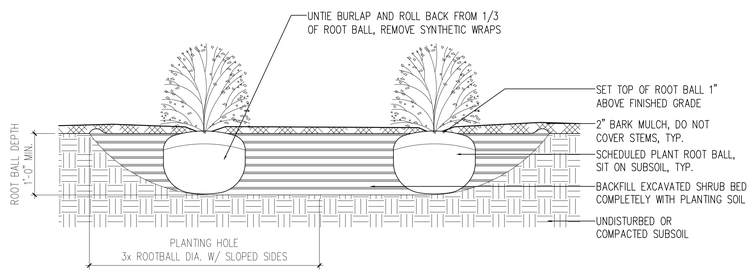
04 CV102 Typ. Groundcover Planting Detail
SCALE: 1" = 1'-0"



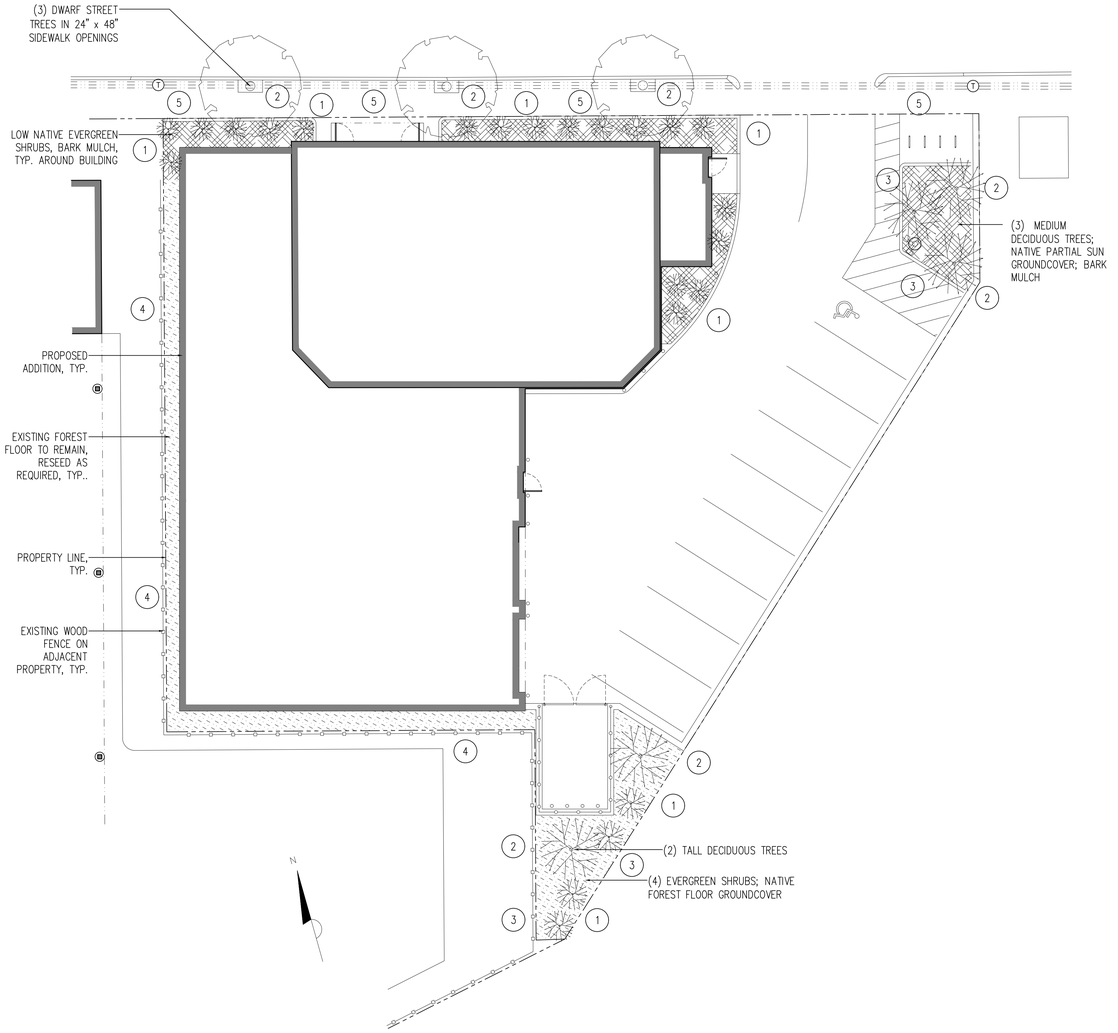


PLAN

03 CV102 Typ. Tree Planting Detail
SCALE: 1" = 1'-0"



02 CV102 Typ. Shrub Planting Detail
SCALE: 1" = 1'-0"



01 CV102 Proposed Landscape Plan
SCALE: 1" = 10'-0"

APPROACH3
ARCHITECTURE ■ CONSULTING ■ REAL ESTATE
A: 50 PINECLIFF DRIVE
MARBLEHEAD, MA 01945
O: 617.688.2407
T: WWW.APPROACH3.COM

Client:
Santini Realty, LLC
26 Dudley Street
Arlington, MA 02476

Drawing:
Native Landscape Plan and Details

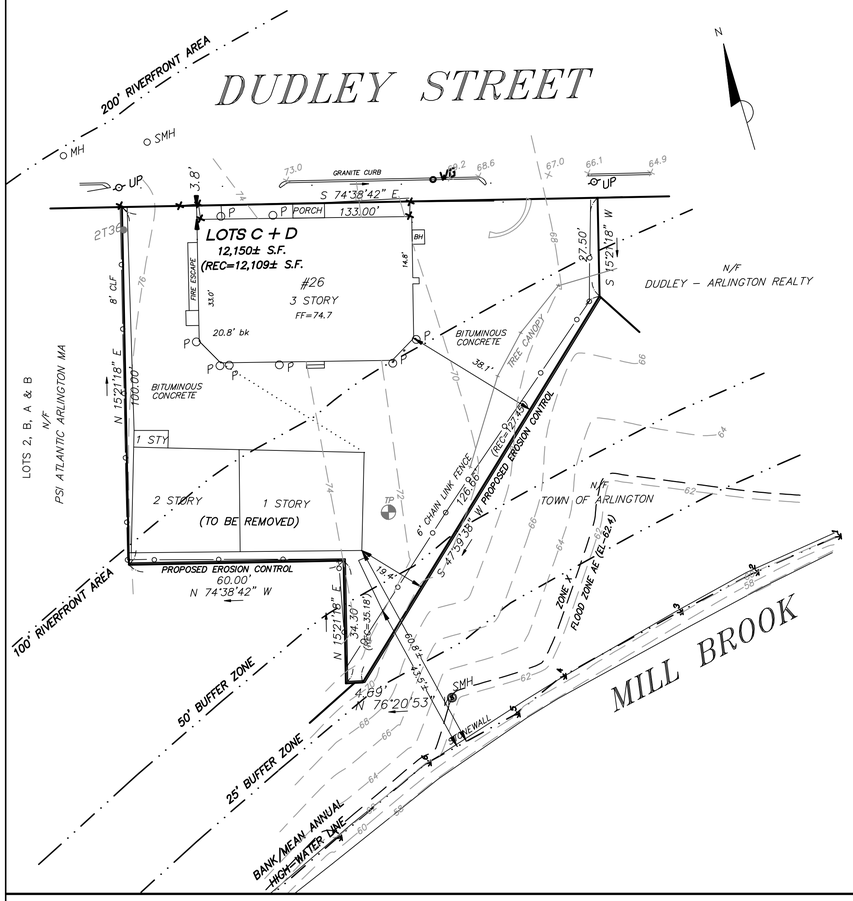
Date: 13 NOV 25
File No. 2206
Architect: CMK
Revisions:

CV102

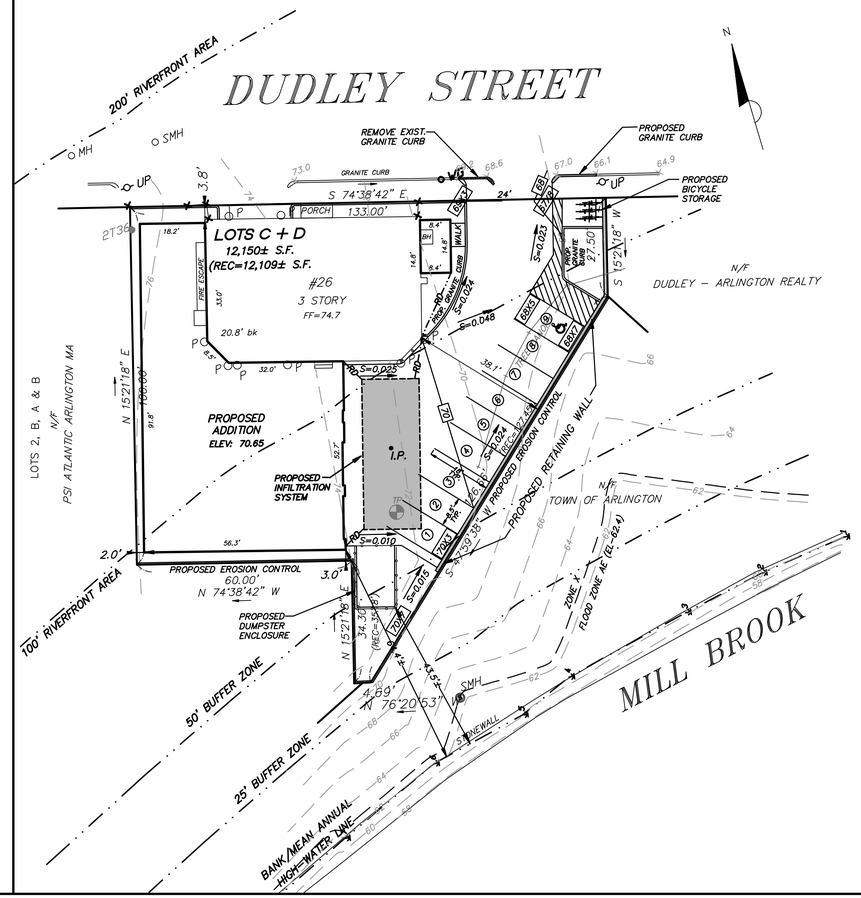
Appendix C

Site Plan
dated November 13, 2025
prepared by Frederick W. Russell, PE

EXISTING CONDITIONS



POST–DEVELOPMENT CONDITIONS



IMPERVIOUS COVERAGE	
EXISTING CONDITIONS	
ROOF AREA	4,305 SF
PARKING AREA	6,610 SF
TOTAL	10,915 SF
PROPOSED CONDITIONS	
ROOF AREA	6,225 SF
PARKING AREA	4,630 SF
WALK	25 SF
TOTAL	10,880 SF

LEGEND	
BIT.	BITUMINOUS
CB	CATCH BASIN
C.O.	CLEANOUT
I.P.	INSPECTION PORT
PVC	POLYVINYL CHLORIDE PIPE
SMH	SEWER MANHOLE
WSO	WATER SHUT OFF
— D —	DRAIN LINE
—RD—	ROOF DRAIN
— S —	SEWER LINE
— W —	WATER LINE
—70—	EXISTING CONTOUR
70	PROPOSED CONTOUR/ELEVATION
X	EXIST. TREE TO BE REMOVED

RESOURCE AREA NOTES:

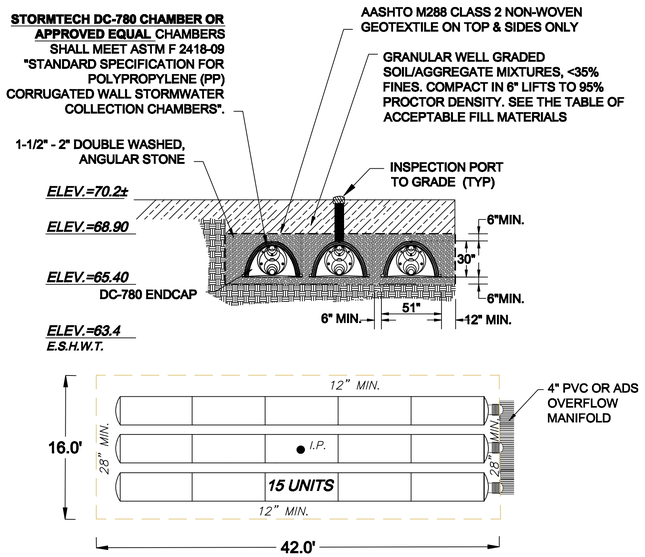
TOTAL AREA WITHIN 100 FOOT RIVERFRONT: 5,330±SF
TOTAL AREA WITHIN 200 FOOT RIVERFRONT: 12,150±SF

EXISTING IMPERVIOUS COVER WITHIN 100 FOOT RIVERFRONT (0–100'): 4,450±SF (83.5%)
PROPOSED IMPERVIOUS COVER WITHIN 100 FOOT RIVERFRONT (0–100'): 4,890±SF (91.7%)

EXISTING IMPERVIOUS COVER WITHIN 200 FOOT RIVERFRONT (0–200'): 10,915±SF (89.8%)
PROPOSED IMPERVIOUS COVER WITHIN 200 FOOT RIVERFRONT (0–200'): 10,880±SF (89.5%)

GENERAL CONSTRUCTION NOTES:

1. *EXISTING ELEVATIONS AND SITE FEATURES BASED ON A FIELD SURVEY BY ROBER SURVEY, 1072A MASSACHUSETTS AVENUE, ARLINGTON, MA.*
2. *THE CONTRACTOR SHALL COORDINATE THE FOLLOWING INSPECTIONS OF THE SUBSURFACE INFILTRATION SYSTEM WITH THE TOWN OF ARLINGTON ENGINEERING DEPARTMENT AND DESIGN ENGINEER (A) THE BOTTOM OF EXCAVATION; AND (B) SYSTEM INSPECTION AFTER INSTALLATION AND PRIOR TO BACKFILLING, AND SHALL PROVIDE 72 HOUR NOTICE PRIOR TO SCHEDULING INSPECTIONS.*
3. *CERTIFIED AS–BUILT PLAN OF THE DRAINAGE SYSTEM, INCLUDING ELEVATIONS, DIMENSIONS AND SWING TIES, AND IMPERVIOUS SURFACE AREA, SHALL BE PROVIDED TO THE ARLINGTON ENGINEERING DIVISION FOLLOWING INSTALLATION.*
4. *EROSION CONTROL SHALL BE INSTALLED PRIOR TO CONSTRUCTION. ADEQUATE MEASURES SHALL BE TAKEN AS NEEDED TO PREVENT RUNOFF SEDIMENT FROM THE SITE COLLECTING ON THE SIDEWALK, ROADWAY, OR ABUTTING PROPERTIES DURING CONSTRUCTION ACTIVITIES. SUCH MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO, ADDITIONAL SILT FENCING/HAYBALES AND SWEEPING.*
5. *THE CONTRACTOR SHOULD MONITOR AREAS OF EXPOSED SOIL TO INSURE THAT EROSION IS KEPT TO A MINIMUM AND SEDIMENT IS CONTAINED ON–SITE. ANY SEDIMENT ENTERING THE RIGHT–OF–WAY SHOULD BE REMOVED IMMEDIATELY. ROADWAY STREET SWEEPING AND/OR CLEANING SHOULD BE PERFORMED AT THE END OF EACH WORK DAY.*
6. *PROPOSED GRADING AND DOWNSPOUT OVERFLOWS SHALL NOT DIRECT RUNOFF TOWARDS ABUTTING PROPERTIES.*
7. *CONNECTION OF ANY SUMP PUMP AND/OR FOUNDATION DRAIN TO THE INFILTRATION SYSTEM IS PROHIBITED.*
8. *THE INFILTRATION SYSTEM BOTTOM OF BED SHALL BE EXCAVATED TO THE "C" HORIZON SOIL LAYER NOTED ON THE TEST PITS. IF SOIL CONDITIONS ENCOUNTERED DO NOT MATCH THE PLAN OR TEST PIT INFORMATION, (IE: LEDGE, LACK OF SOIL DEPTH, ETC.), THE CONTRACTOR SHOULD CONTACT THE DESIGNER AND ENGINEERING DIVISION.*
9. *THE TOWN OF ARLINGTON WATER AND SEWER DIVISION IS NOT PART OF DIG SAFE AND THEREFORE, MARK OUT OF WATER AND SEWER UTILITIES MUST BE REQUESTED FROM THE TOWN OF ARLINGTON WATER AND SEWER DIVISION AT 781–316–3106 AT LEAST 72 HOURS IN ADVANCE.*
10. *UTILITIES SHOWN ARE FROM FIELD INSPECTION AND PLANS OF RECORD. UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO EXCAVATION BY CALLING DIG SAFE AT 888–DIG SAFE.*
11. *ALL GUTTERS AND DOWNSPOUTS FROM PROPOSED ADDITION AND EXISTING BUILDING TO CONNECT TO THE PROPOSED INFILTRATION SYSTEM. ROOF DRAIN LOCATIONS SHOWN ARE APPROXIMATE. FINAL LOCATION OF DOWNSPOUTS AND ROOF DRAINS TO BE DETERMINED IN THE FIELD.*
12. *ADDITIONAL PERMITTING WILL BE REQUIRED THROUGH THE ARLINGTON ENGINEERING DIVISION FOR PROPOSED DRIVEWAYS AND CURB CUTS.*
13. *EXISTING WATER AND SEWER SERVICES TO BE MAINTAINED.*

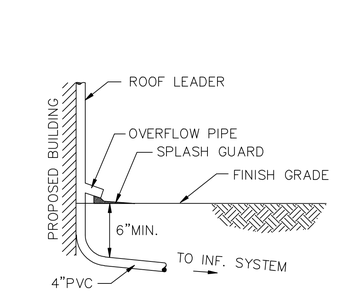


NOTES:
1. REMOVE ALL TOP, SUBSOIL AND ANY ORGANIC OR OTHERWISE UNSUITABLE MATERIAL.
2. THE BOTTOM OF THE EXCAVATION IS TO BE INSPECTED BY THE DESIGN ENGINEER PRIOR TO THE PLACEMENT OF THE STONE ENVELOPE.

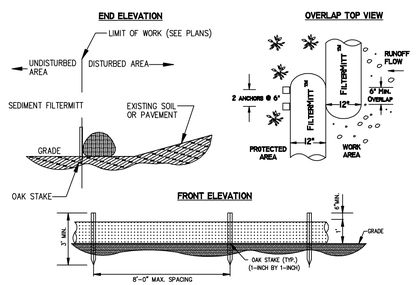
INFILTRATION SYSTEM DETAIL
NOT TO SCALE

PRE–DEVELOPMENT VS. POST–DEVELOPMENT SUMMARY TABLE

	EXISTING		POST-DEVELOPMENT	
	Rate (CFS)	Volume (CF)	Rate (CFS)	Volume (CF)
2-year storm	0.67	2,457	0.25	907
10-year storm	1.15	4,309	0.49	1,751
25-year storm	1.45	5,482	0.63	2,301
100-year storm	1.90	7,302	0.86	3,167



ROOF DRAIN OVERFLOW DETAIL
NOT TO SCALE
(INSTALLED AT LOWEST DOWNSPOUT)



EROSION CONTROL DETAIL
NOT TO SCALE

TEST PIT LOG
GR. ELEV. 72.2
BOT. ELEV. 63.4

0–17"	1	Ap–fine loamy sand 10yr 3/2
17–31"	2 3	Bw–fine loamy sand 10yr 5/6
31"–106"	4 5 6 7 8 9 10	C–medium sand w/stones 10yr 4/4
	9 10	no mottles

ESHWT: NONE
WEEP: NONE
OBS. WATER: NONE
REFUSAL: NONE

DATE: 06/13/25
TEST BY: F. RUSSELL

REVISIONS:

SITE PLAN
26 DUDLEY STREET
IN
ARLINGTON, MASSACHUSETTS

PREPARED FOR
SANTINI, INC.

SCALE: 1"=20' **DATE: NOVEMBER 13, 2025**

FEET 20 0 10 20 40 80

FREDERICK W. RUSSELL, PE
154 ALDRICH ROAD
WILMINGTON, MA 01887

SHEET No. 1 OF 1

Stormwater Management Report

26 Dudley Street
Arlington, MA

November 13, 2025

Prepared for:
Santini, Inc.
60 Dudley Street
Arlington, MA 02476

Prepared BY:
Frederick W. Russell, PE
154 Aldrich Road
Wilmington, MA 01887

Table of Contents

1.1 Storm Water Management

The stormwater management system at the site has been designed in conformance with the MA DEP Storm Water Management Policy and the requirements of the Arlington Conservation Commission and Engineering Department

1.1.1 Standard 1

Standard 1 requires that no new untreated discharges to wetlands are created and that any new discharges would not result in erosion.

The proposed development contains no new discharge points directed toward the wetland or riverfront resource areas.

Prior to construction erosion control (filtermitt silt sock) be installed at the downstream limits of work; to ensure that no activities occur closer to the wetland than approved and scouring, erosion, and discharges of sediment to the nearby wetland resource areas do not occur.

1.1.2 Standard 2

Standard 2 requires that post development peak discharge rates do not exceed pre development discharge rates.

In order to assess the impacts of the increased impervious areas at the site and to develop effective mitigation measures, hydrologic calculations were performed for the existing and post development site conditions.

Table 1 is a Comparative Hydrologic Summary that compares the post development peak runoff flow rates and runoff volumes at the two point of analysis with the pre development site conditions. As the table indicates the post development runoff rates and volumes are at or below the predevelopment conditions in all storm events analyzed.

Existing vs. Post-Development Drainage Summary Table:

	EXISTING		**POST-DEVELOPMENT**	
	Rate (CFS)	Volume (CF)	Rate (CFS)	Volume (CF)
2-year storm	0.67	2,457	0.25	907
10-year storm	1.15	4,309	0.49	1,751
25-year storm	1.45	5,482	0.63	2,301
100-year storm	1.90	7,302	0.86	3,167

1.1.3 Standard 3

Standard 3 requires that there not be a loss of annual groundwater recharge.

One infiltration BMP is proposed at the site to provide ground water recharge. The groundwater recharge calculations are based on a static analysis which simply compares the volume of recharge required to the storage volume in each recharge structure. This method does not take into consideration that recharge will actively occur during the rainfall event.

Required recharge volume for site =
= (11,110 s.f x 0.60") / 12 = 555.5 cubic feet.

Infiltration System:
Chamber Storage + Stone Storage = 1,269.3 cf

Criteria Satisfied

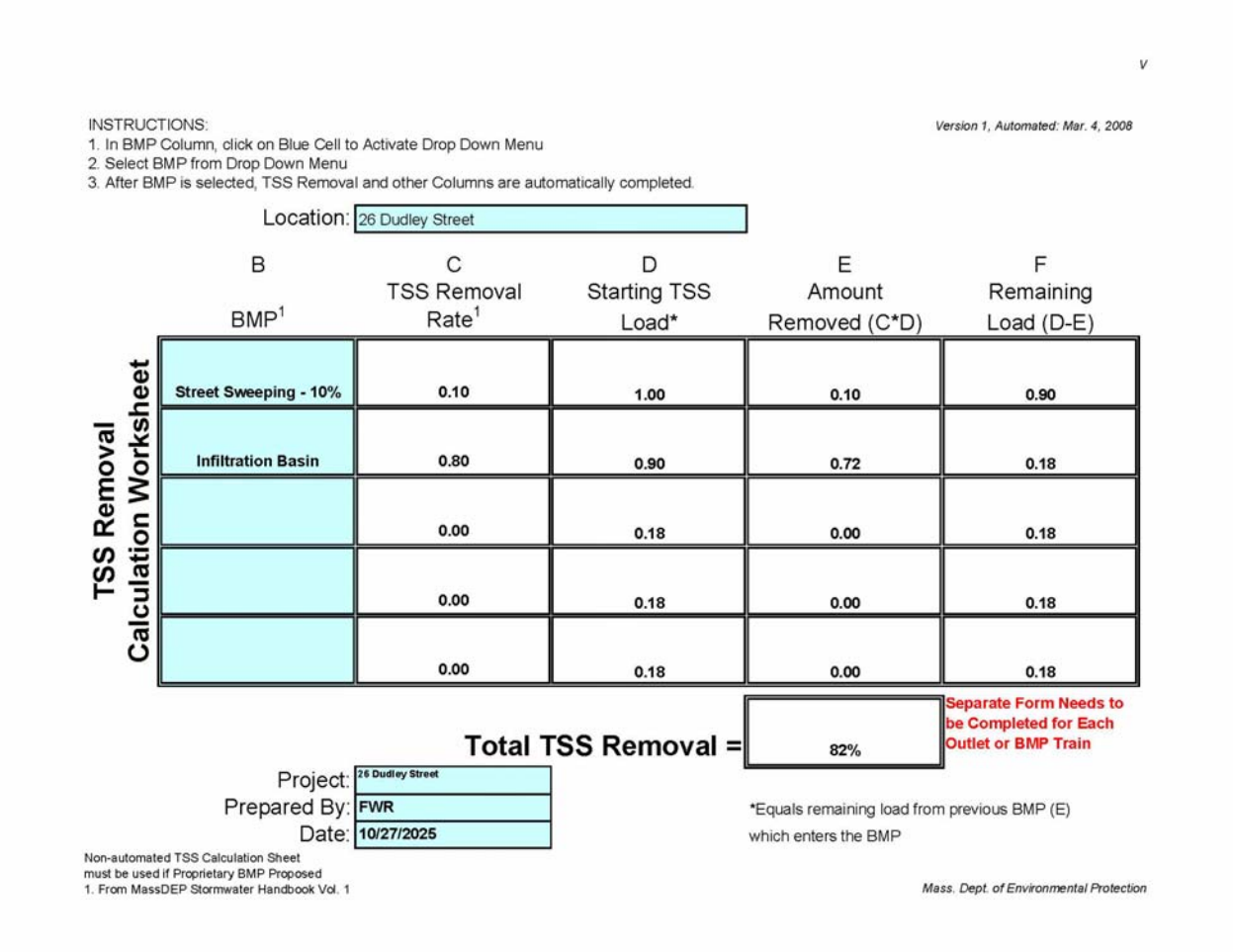
The regulations require that each infiltration BMP completely drains the required recharge volume within 72 hours. The subsurface infiltration system and the infiltration basin were designed using the dynamic in-situ method. in-field saturated hydraulic conductivity testing.

Infiltration System:
Bottom surface area=672 s.f.
Rawls saturated hydraulic conductivity: 8.27 inches per hour
Storage volume: 1,269.3 cf
Drawdown Time = (1,269.3 cf) / {(8.27 in/hr) x (1/12)}/ 672 = **2.7 hours**

Criteria Satisfied

1.1.4 Standard 4

Standard 4 requires the storm water management system to be designed to remove 80 percent of total suspended solids (TSS) from the storm water prior to discharge. This is achieved by implementing a series of Best Management Practices (BMPs) to treat the prescribed Water Quality Volume (WQV). TSS calculations were performed using the DEP TSS Removal Calculation Spreadsheet.



INSTRUCTIONS:
1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: 26 Dudley Street

TSS Removal Calculation Worksheet

B BMP[1]	C TSS Removal Rate[1]	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
Street Sweeping - 10%	0.10	1.00	0.10	0.90
Infiltration Basin	0.80	0.90	0.72	0.18
	0.00	0.18	0.00	0.18
	0.00	0.18	0.00	0.18
	0.00	0.18	0.00	0.18

Total TSS Removal = 82%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: 26 Dudley Street
Prepared By: FWR
Date: 10/27/2025

*Equals remaining load from previous BMP (E) which enters the BMP

Non-automated TSS Calculation Sheet must be used if Proprietary BMP Proposed
1. From MassDEP Stormwater Handbook Vol. 1

Mass. Dept. of Environmental Protection

1.1.5 Standard 5

Standard 5 regulates discharges from sites with higher potential pollutant loads. The site is proposed as a mixed-use development and is not expected to qualify as a Land Use with high Potential Pollutant Loads (LUHPPL).

1.1.6 Standard 6

Standard 6 regulates discharges to Outstanding Resource Waters (ORW). The site is not located within a Zone II for a public water supply, nor does runoff from the site discharge to an Outstanding Resource Water. Therefore, the design is in compliance with this standard.

1.1.7 Standard 7

Standard 7 requires that redevelopment project meet the Standards only to the extent practicable.

1.1.8 Standard 8

Standard 8 requires a plan to control construction related impacts. Erosion control features will be installed to control construction related impacts.

1.1.9 Standard 9

Standard 9 requires a long term operation and maintenance plan to ensure that the storm water management system performs as designed. The Stormwater operation and maintenance plan is included in the Stormwater Analysis.

1.1.10 Standard 10

Standard 10 prohibits any illicit discharges to the storm water management systems. There are no illicit discharges to the storm water management system proposed.

Appendix A

Locus Map

ArcGIS Web Map

10/27/2025, 8:53:07 PM

1:2,153

0 0.02 0.04 0.08 mi

0 0.03 0.06 0.12 km

Building Address

Unit Address

Parcels with Assessor Info

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

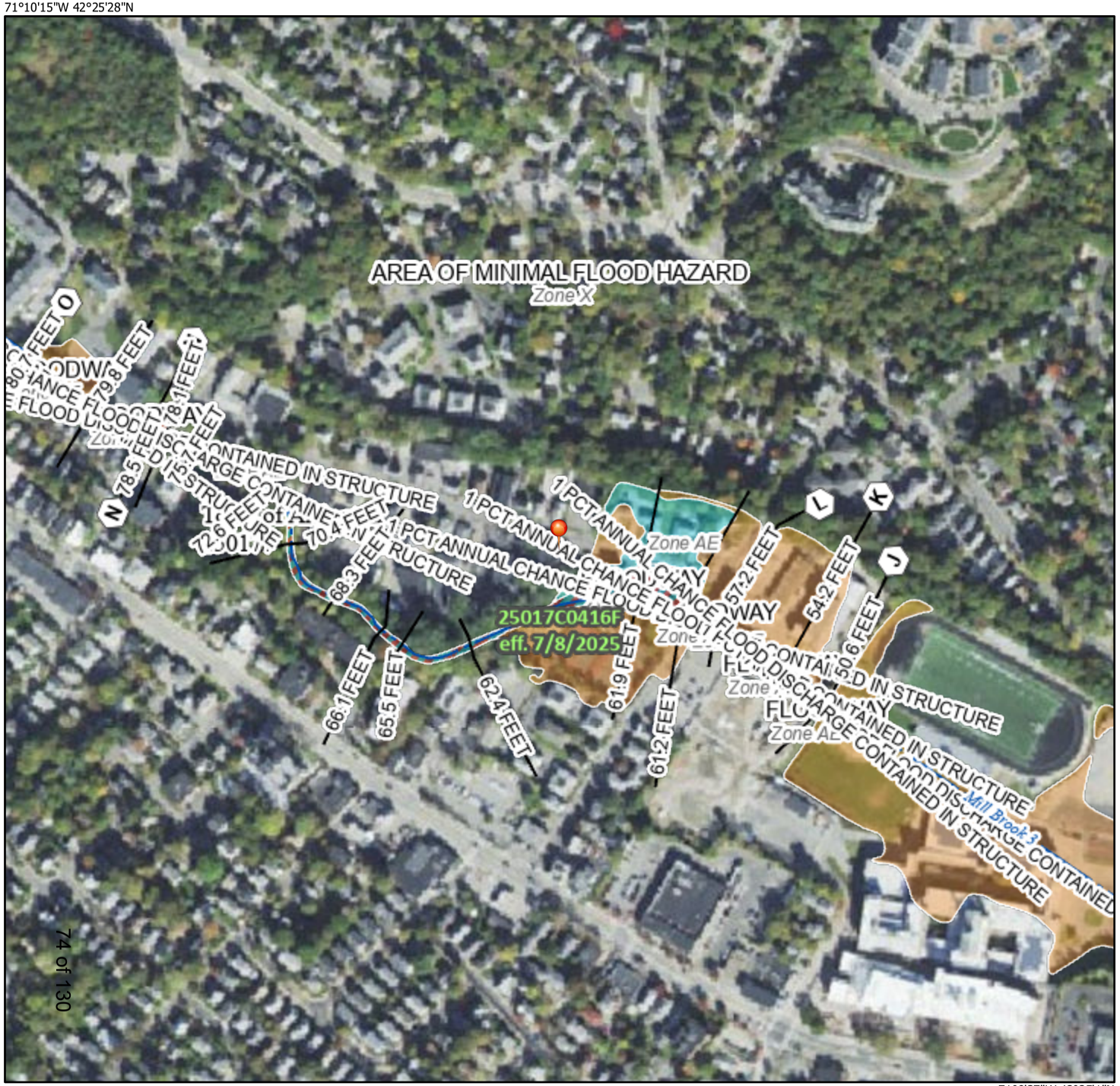
Appendix B

F.I.R.M

National Flood Hazard Layer FIRMette

FEMA

71°10'15"W 42°25'28"N



71°9'37"W 42°25'1"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

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 10/28/2025 at 12:56 AM 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.

Appendix C

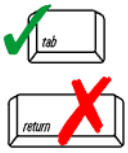
Storm Water Report Checklist

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.[1] This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8[2]
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

---

[1] The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

[2] For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

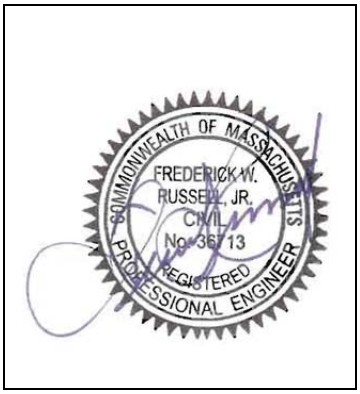
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



October 27, 2025

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

☐ New development

☒ Redevelopment

☐ Mix of New Development and Redevelopment

Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

☒ No disturbance to any Wetland Resource Areas

☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)

☐ Reduced Impervious Area (Redevelopment Only)

☐ Minimizing disturbance to existing trees and shrubs

☐ LID Site Design Credit Requested:

- ☐ Credit 1
- ☐ Credit 2
- ☐ Credit 3

☐ Use of "country drainage" versus curb and gutter conveyance and pipe

☐ Bioretention Cells (includes Rain Gardens)

☐ Constructed Stormwater Wetlands (includes Gravel Wetlands designs)

☐ Treebox Filter

☐ Water Quality Swale

☐ Grass Channel

☐ Green Roof

☐ Other (describe): _____

Standard 1: No New Untreated Discharges

☒ No new untreated discharges

☐ Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth

☒ Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.

Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.

☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.

☒ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

☒ Soil Analysis provided.

☒ Required Recharge Volume calculation provided.

☐ Required Recharge volume reduced through use of the LID site Design Credits.

☒ Sizing the infiltration, BMPs is based on the following method: Check the method used.

☒ Static ☐ Simple Dynamic ☐ Dynamic Field[1]

☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.

☒ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.

☒ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.

☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:

- ☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
- ☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
- ☐ Solid Waste Landfill pursuant to 310 CMR 19.000
- ☐ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.

☒ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.

☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

[1] 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.

Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

☒ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.

☐ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
- Provisions for storing materials and waste products inside or under cover;
- Vehicle washing controls;
- Requirements for routine inspections and maintenance of stormwater BMPs;
- Spill prevention and response plans;
- Provisions for maintenance of lawns, gardens, and other landscaped areas;
- Requirements for storage and use of fertilizers, herbicides, and pesticides;
- Pet waste management provisions;
- Provisions for operation and management of septic systems;
- Provisions for solid waste management;
- Snow disposal and plowing plans relative to Wetland Resource Areas;
- Winter Road Salt and/or Sand Use and Storage restrictions;
- Street sweeping schedules;
- Provisions for prevention of illicit discharges to the stormwater management system;
- Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
- Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
- List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.

☒ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.

☐ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:

- ☐ is within the Zone II or Interim Wellhead Protection Area
- ☐ is near or to other critical areas
- ☐ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
- ☐ involves runoff from land uses with higher potential pollutant loads.

☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.

☒ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.

Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

☒ The BMP is sized (and calculations provided) based on:

- ☒ The ½" or 1" Water Quality Volume or
- ☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.

☐ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.

☐ A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.

☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted ***prior to*** the discharge of stormwater to the post-construction stormwater BMPs.

☐ The NPDES Multi-Sector General Permit does ***not*** cover the land use.

☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.

☒ All exposure has been eliminated.

☐ All exposure has ***not*** been eliminated and all BMPs selected are on MassDEP LUHPPL list.

☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

☐ The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.

☐ Critical areas and BMPs are identified in the Stormwater Report.

Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

☒ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:

- ☐ Limited Project
- ☐ Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
- ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
- ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
- ☐ Bike Path and/or Foot Path
- ☒ Redevelopment Project
- ☐ Redevelopment portion of mix of new and redevelopment.

☐ Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.

☐ The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
- Construction Period Operation and Maintenance Plan;
- Names of Persons or Entity Responsible for Plan Compliance;
- Construction Period Pollution Prevention Measures;
- Erosion and Sedimentation Control Plan Drawings;
- Detail drawings and specifications for erosion control BMPs, including sizing calculations;
- Vegetation Planning;
- Site Development Plan;
- Construction Sequencing Plan;
- Sequencing of Erosion and Sedimentation Controls;
- Operation and Maintenance of Erosion and Sedimentation Controls;
- Inspection Schedule;
- Maintenance Schedule;
- Inspection and Maintenance Log Form.

☒ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.

Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has ***not*** been included in the Stormwater Report but will be submitted ***before*** land disturbance begins.

☐ The project is ***not*** covered by a NPDES Construction General Permit.

☒ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.

☐ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

☒ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:

- ☒ Name of the stormwater management system owners;
- ☒ Party responsible for operation and maintenance;
- ☒ Schedule for implementation of routine and non-routine maintenance tasks;
- ☒ Plan showing the location of all stormwater BMPs maintenance access areas;
- ☐ Description and delineation of public safety features;
- ☐ Estimated operation and maintenance budget; and
- ☒ Operation and Maintenance Log Form.

☐ The responsible party is ***not*** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:

- ☐ A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
- ☐ A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

☒ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;

☐ An Illicit Discharge Compliance Statement is attached;

☐ NO Illicit Discharge Compliance Statement is attached but will be submitted ***prior to*** the discharge of any stormwater to post-construction BMPs.

Appendix D

Stormwater Analysis

STORMWATER ANALYSIS

26 Dudley Street
Arlington, MA

November 13, 2025

26 Dudley Street
Drainage Summary

The Proponent is proposing to demolish an existing detached storage building and construct an addition to the existing building at 26 Dudley Street in Arlington. Rainfall data utilized in this analysis were derived from the NOAA Atlas 14 Volume 10 precipitation frequency estimates published by the National Oceanic and Atmospheric Administration (NOAA).

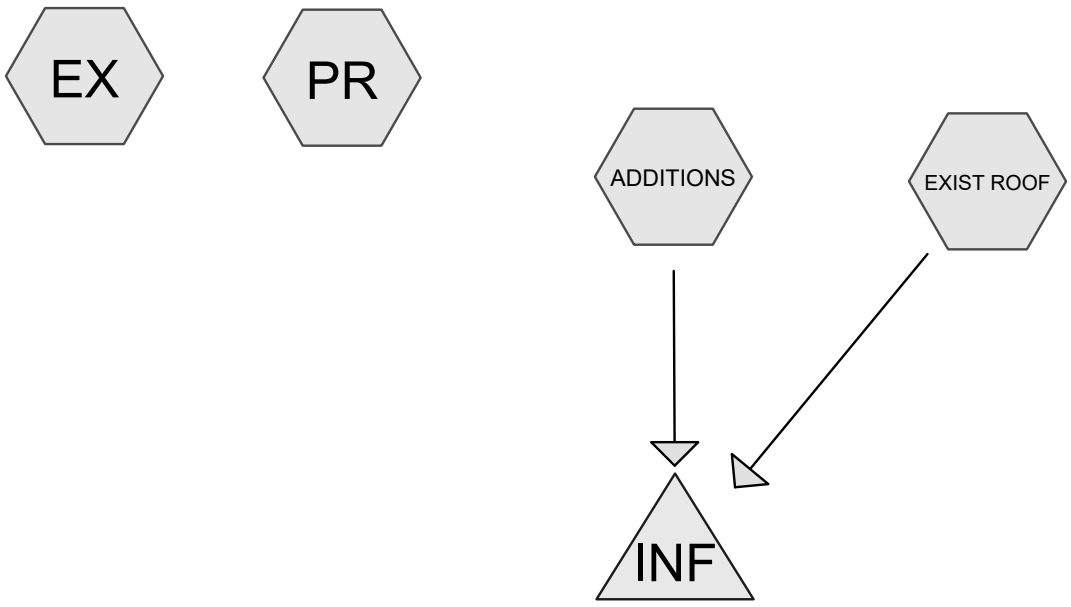
The proposed development will decrease impervious cover by approximately 35± square feet relative to existing conditions. Given the project's location within the 100-foot and 200-foot Riverfront Areas, stormwater from both the existing building and the proposed addition (6,190± square feet) will be directed to a subsurface infiltration system.

The Natural Resources Conservation Service Web Soil Survey was referenced and defines soils conditions as Merrimac Series, Hydrologic Group "A" soils, and udorthents. In addition, on-site soils investigations including one deep-hole observation to establish the estimated annual high water table and soil texture determined a "medium sand" soil exists on-site in the parent material layer that the proposed infiltration system will be located within. As a result, a Rawls infiltration rate of 8.27 inches per hour was used for design of the proposed infiltration system.

In summary by utilizing the proposed subsurface infiltration system to mitigate stormwater runoff generated by the existing building and proposed addition, peak rates and volume of runoff will be significantly reduced for post development conditions.

Pre-Development vs. Post-Development Drainage Summary Table

	Pre-Development		Post-Development	
Storm Event	**Rate (cfs)**	**Volume (cf)**	**Rate (cfs)**	**Volume (cf)**
2	**0.67**	**2,457**	**0.25**	**907**
10	**1.15**	**4,309**	**0.49**	**1,751**
25	**1.45**	**5,482**	**0.63**	**2,301**
100	**1.90**	**7,302**	**0.86**	**3,167**



Subcat Reach Pond Link

Routing Diagram for 26 Dudley Street 11-13-25
Prepared by Frederick W Russell PE, Printed 11/13/2025
HydroCAD® 10.20-7a s/n 04321 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2 yr storm	Type III 24-hr		Default	24.00	1	3.28	2
2	10 yr storm	Type III 24-hr		Default	24.00	1	5.17	2
3	25 yr storm	Type III 24-hr		Default	24.00	1	6.35	2
4	100 yr storm	Type III 24-hr		Default	24.00	1	8.17	2

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 ADDITIONS: Runoff Area=3,815 sf 100.00% Impervious Runoff Depth=3.05"
Tc=5.0 min CN=98 Runoff=0.29 cfs 969 cf

Subcatchment EX: Runoff Area=12,150 sf 89.84% Impervious Runoff Depth=2.43"
Tc=10.0 min CN=92 Runoff=0.67 cfs 2,457 cf

Subcatchment EXIST ROOF: Runoff Area=2,375 sf 100.00% Impervious Runoff Depth=3.05"
Tc=5.0 min CN=98 Runoff=0.18 cfs 603 cf

Subcatchment PR: Runoff Area=5,960 sf 78.69% Impervious Runoff Depth=1.83"
Tc=10.0 min CN=85 Runoff=0.25 cfs 907 cf

Pond INF: Peak Elev=66.21' Storage=270 cf Inflow=0.47 cfs 1,572 cf
Outflow=0.13 cfs 1,572 cf

Total Runoff Area = 24,300 sf Runoff Volume = 4,936 cf Average Runoff Depth = 2.44"
10.31% Pervious = 2,505 sf 89.69% Impervious = 21,795 sf

Summary for Subcatchment ADDITIONS:

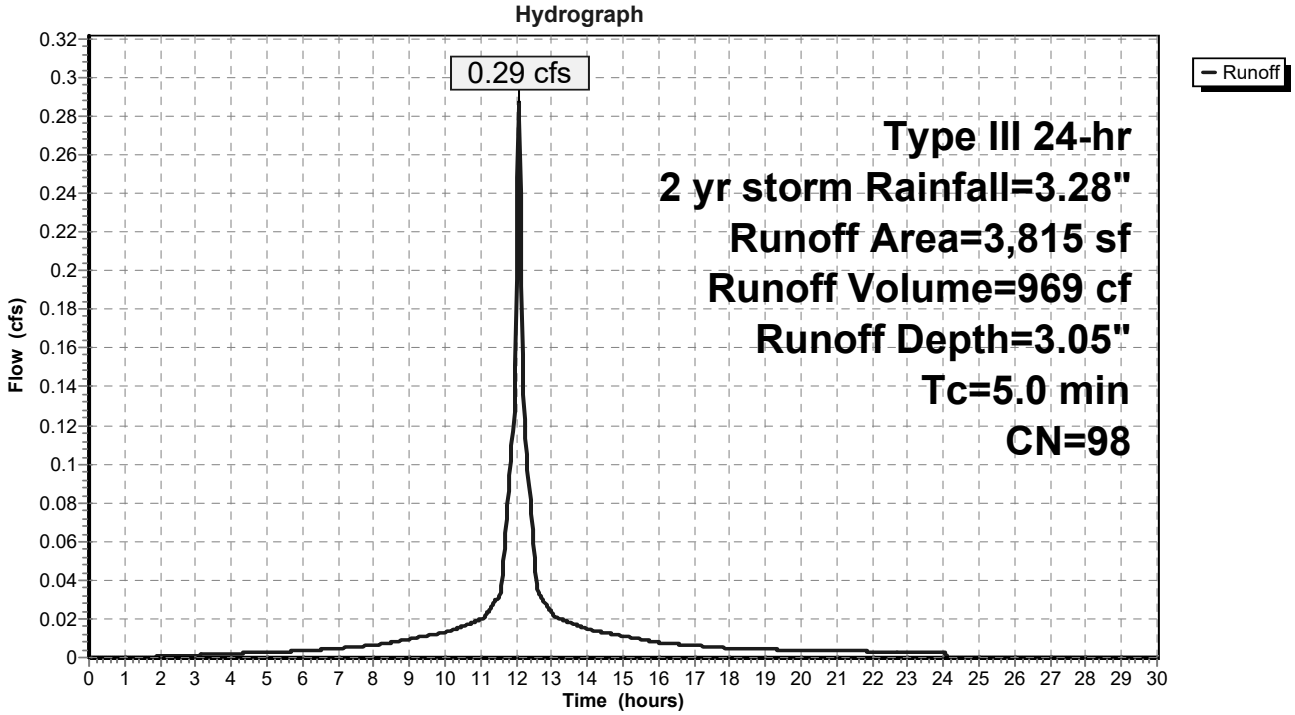
Runoff = 0.29 cfs @ 12.07 hrs, Volume= 969 cf, Depth= 3.05"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 2 yr storm Rainfall=3.28"

Area (sf)	CN	Description
3,815	98	Roofs, HSG A
3,815	98	100.00% Impervious Area

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

Subcatchment ADDITIONS:



Summary for Subcatchment EX:

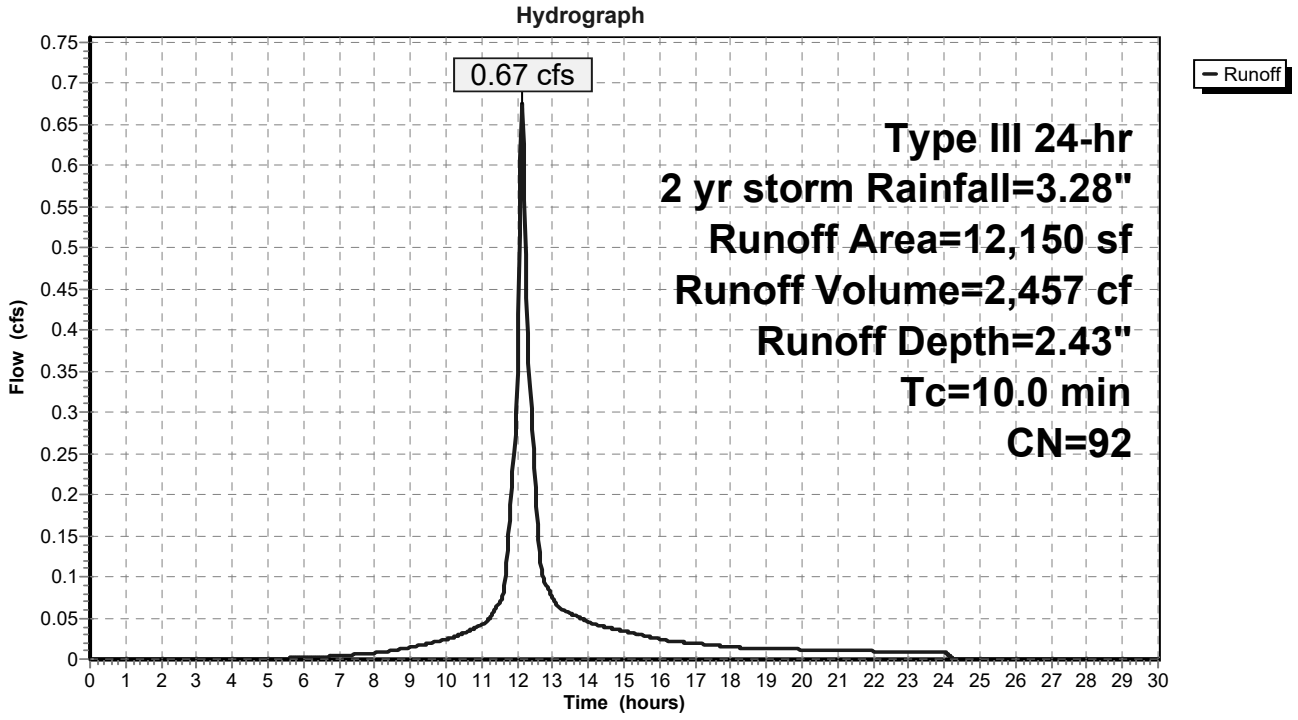
Runoff = 0.67 cfs @ 12.14 hrs, Volume= 2,457 cf, Depth= 2.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 2 yr storm Rainfall=3.28"

Area (sf)	CN	Description
4,305	98	Roofs, HSG A
6,610	98	Paved parking, HSG A
1,235	39	>75% Grass cover, Good, HSG A
12,150	92	Weighted Average
1,235	39	10.16% Pervious Area
10,915	98	89.84% Impervious Area

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

Subcatchment EX:



Summary for Subcatchment EXIST ROOF:

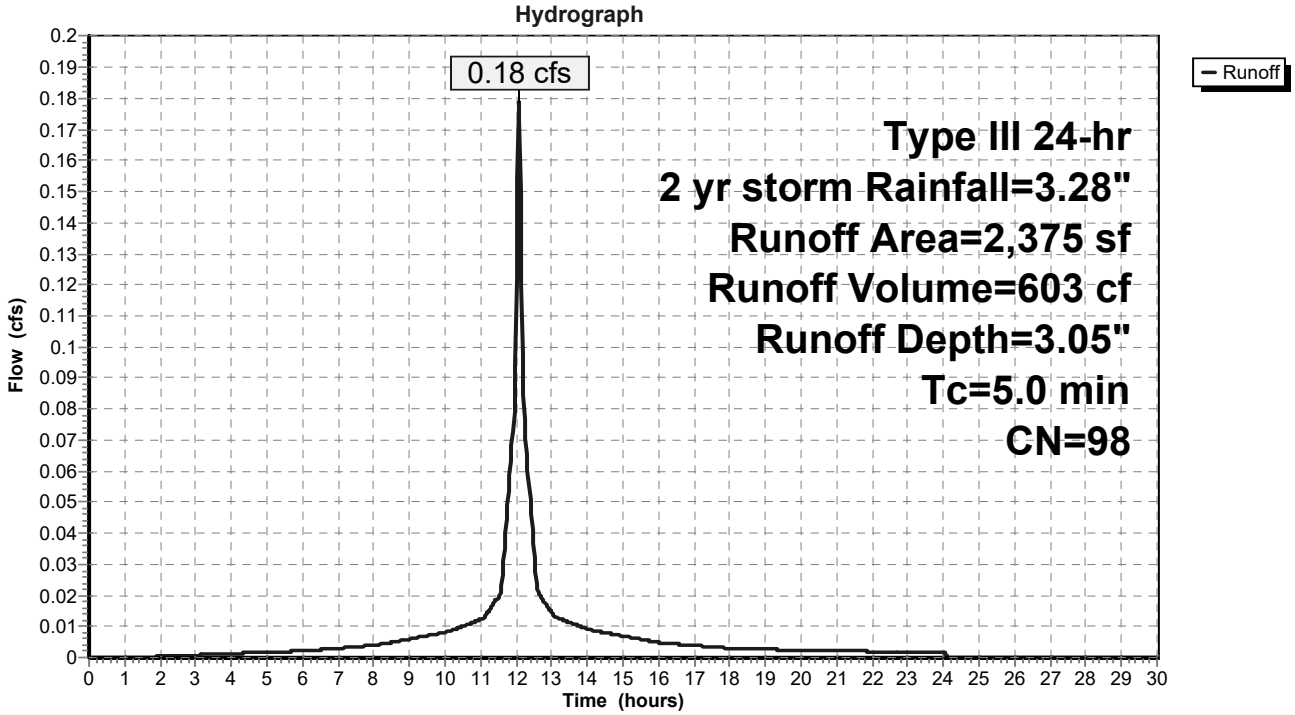
Runoff = 0.18 cfs @ 12.07 hrs, Volume= 603 cf, Depth= 3.05"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 2 yr storm Rainfall=3.28"

Area (sf)	CN	Description
2,375	98	Roofs, HSG A
2,375	98	100.00% Impervious Area

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

Subcatchment EXIST ROOF:



Summary for Subcatchment PR:

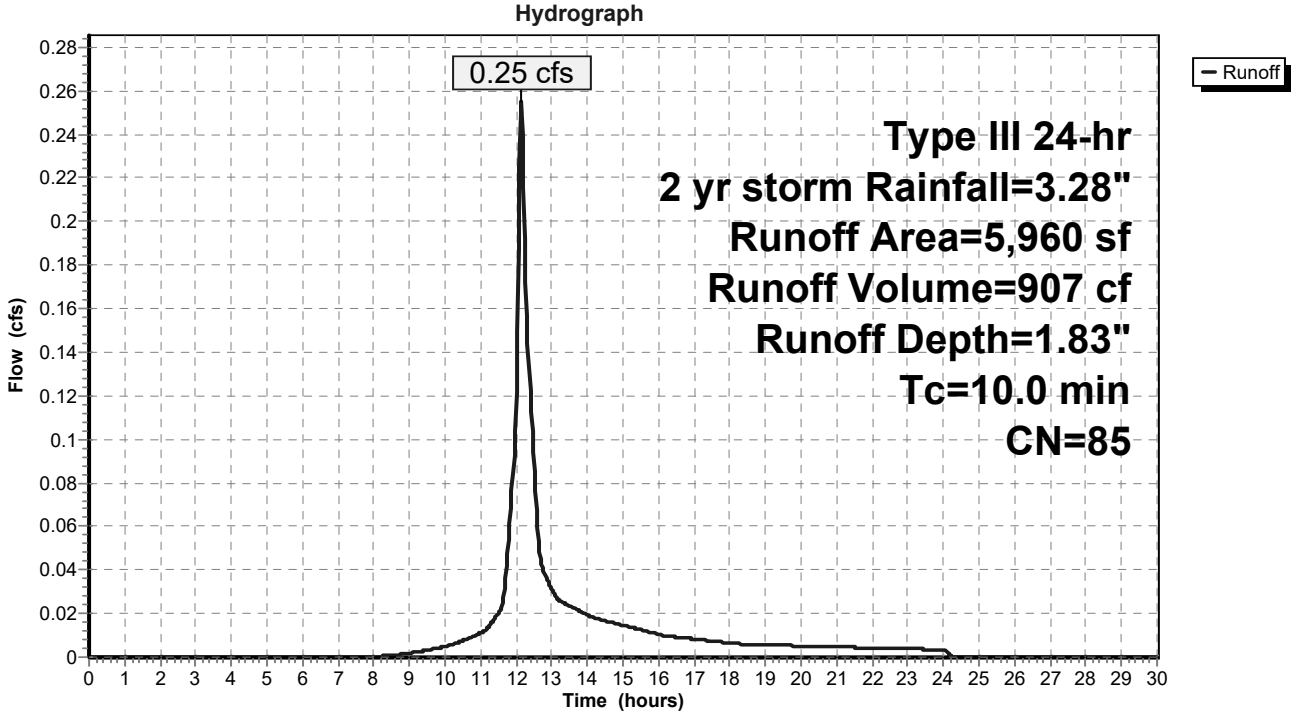
Runoff = 0.25 cfs @ 12.14 hrs, Volume= 907 cf, Depth= 1.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 2 yr storm Rainfall=3.28"

	Area (sf)	CN	Description
	35	98	Roofs, HSG A
	4,630	98	Paved parking, HSG A
*	25	98	Unconnected walk, HSG A
	1,270	39	>75% Grass cover, Good, HSG A
	5,960	85	Weighted Average
	1,270	39	21.31% Pervious Area
	4,690	98	78.69% Impervious Area
	25		0.53% Unconnected

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

Subcatchment PR:



Summary for Pond INF:

Inflow Area = 6,190 sf,100.00% Impervious, Inflow Depth = 3.05" for 2 yr storm event
Inflow = 0.47 cfs @ 12.07 hrs, Volume= 1,572 cf
Outflow = 0.13 cfs @ 11.79 hrs, Volume= 1,572 cf, Atten= 73%, Lag= 0.0 min
Discarded = 0.13 cfs @ 11.79 hrs, Volume= 1,572 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 66.21' @ 12.40 hrs Surf.Area= 660 sf Storage= 270 cf

Plug-Flow detention time= 9.8 min calculated for 1,570 cf (100% of inflow)
Center-of-Mass det. time= 9.8 min (764.7 - 755.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	65.40'	560 cf	**15.75'W x 41.88'L x 3.50'H Field A** 2,309 cf Overall - 710 cf Embedded = 1,599 cf x 35.0% Voids
#2A	65.90'	710 cf	**ADS_StormTech DC-780 b +Cap** x 15 Inside #1 Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 15 Chambers in 3 Rows Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf
		1,269 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	65.40'	**8.270 in/hr Exfiltration over Horizontal area**

Discarded OutFlow Max=0.13 cfs @ 11.79 hrs HW=65.44' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.13 cfs)

Pond INF: - Chamber Wizard Field A

Chamber Model = ADS_StormTech DC-780 b +Cap (ADS StormTech® DC-780 with cap storage)
Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

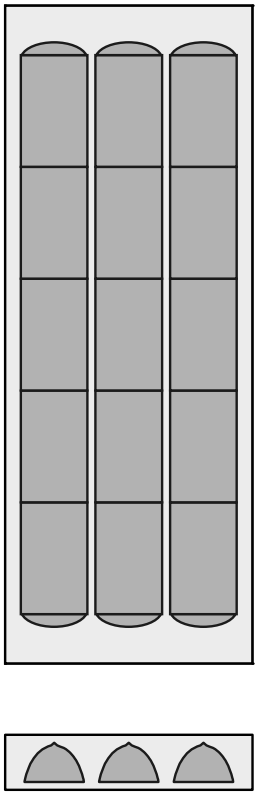
5 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 37.22' Row Length +28.0" End Stone x 2 = 41.88' Base Length
3 Rows x 51.0" Wide + 6.0" Spacing x 2 + 12.0" Side Stone x 2 = 15.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

15 Chambers x 46.2 cf + 2.7 cf Cap Volume x 2 x 3 Rows = 709.5 cf Chamber Storage

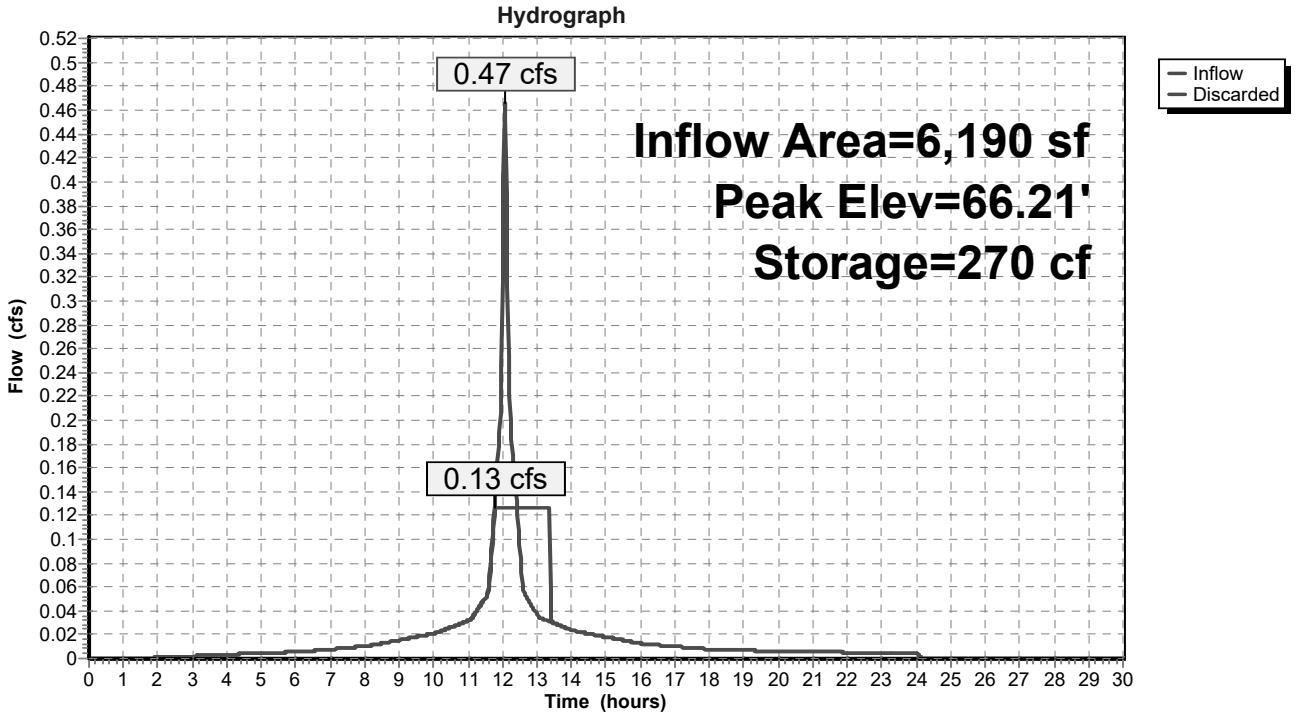
2,308.8 cf Field - 709.5 cf Chambers = 1,599.3 cf Stone x 35.0% Voids = 559.8 cf Stone Storage

Chamber Storage + Stone Storage = 1,269.3 cf = 0.029 af
Overall Storage Efficiency = 55.0%
Overall System Size = 41.88' x 15.75' x 3.50'

15 Chambers
85.5 cy Field
59.2 cy Stone



Pond INF:


Hydrograph
0.47 cfs
0.13 cfs
Inflow Area=6,190 sf
Peak Elev=66.21'
Storage=270 cf
Inflow
Discarded
Flow (cfs)
Time (hours)

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 ADDITIONS: Runoff Area=3,815 sf 100.00% Impervious Runoff Depth=4.93"
Tc=5.0 min CN=98 Runoff=0.46 cfs 1,568 cf

Subcatchment EX: Runoff Area=12,150 sf 89.84% Impervious Runoff Depth=4.26"
Tc=10.0 min CN=92 Runoff=1.15 cfs 4,309 cf

Subcatchment EXIST ROOF: Runoff Area=2,375 sf 100.00% Impervious Runoff Depth=4.93"
Tc=5.0 min CN=98 Runoff=0.28 cfs 976 cf

Subcatchment PR: Runoff Area=5,960 sf 78.69% Impervious Runoff Depth=3.53"
Tc=10.0 min CN=85 Runoff=0.49 cfs 1,751 cf

Pond INF: Peak Elev=66.97' Storage=629 cf Inflow=0.74 cfs 2,545 cf
Outflow=0.13 cfs 2,545 cf

Total Runoff Area = 24,300 sf Runoff Volume = 8,604 cf Average Runoff Depth = 4.25"
10.31% Pervious = 2,505 sf 89.69% Impervious = 21,795 sf

Summary for Subcatchment ADDITIONS:

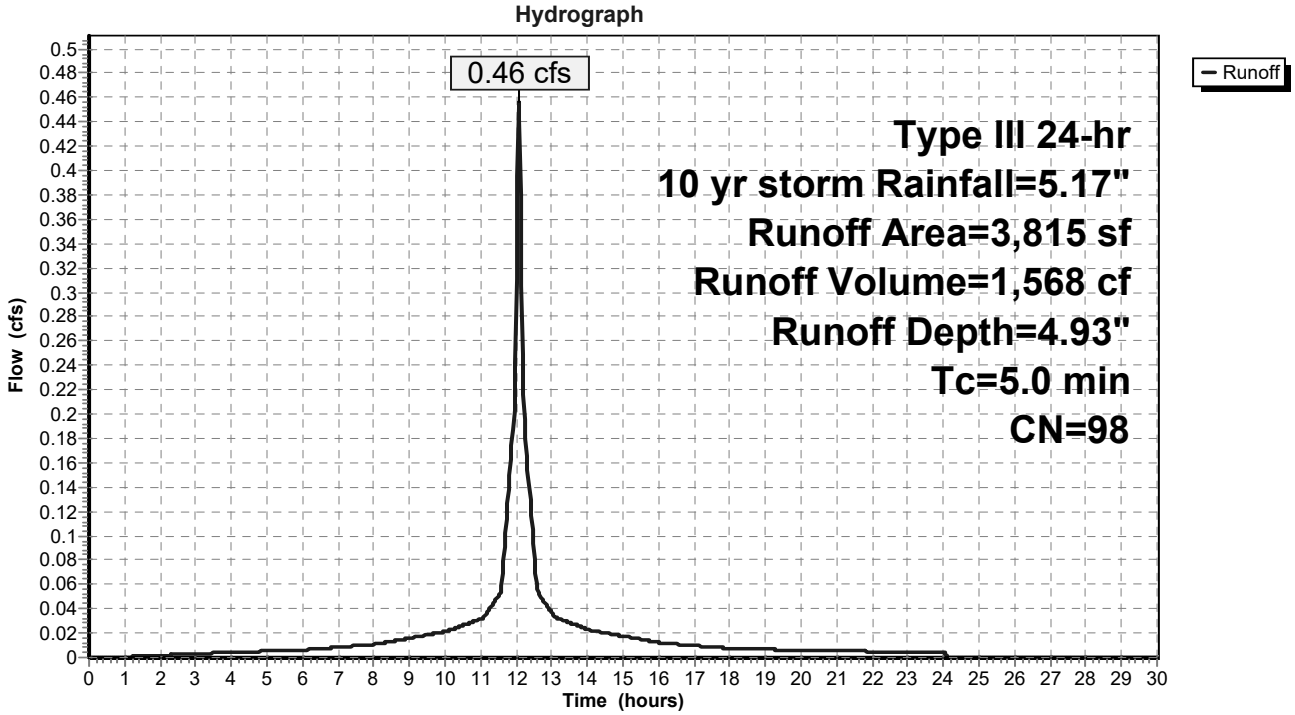
Runoff = 0.46 cfs @ 12.07 hrs, Volume= 1,568 cf, Depth= 4.93"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10 yr storm Rainfall=5.17"

Area (sf)	CN	Description
3,815	98	Roofs, HSG A
3,815	98	100.00% Impervious Area

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

Subcatchment ADDITIONS:



Summary for Subcatchment EX:

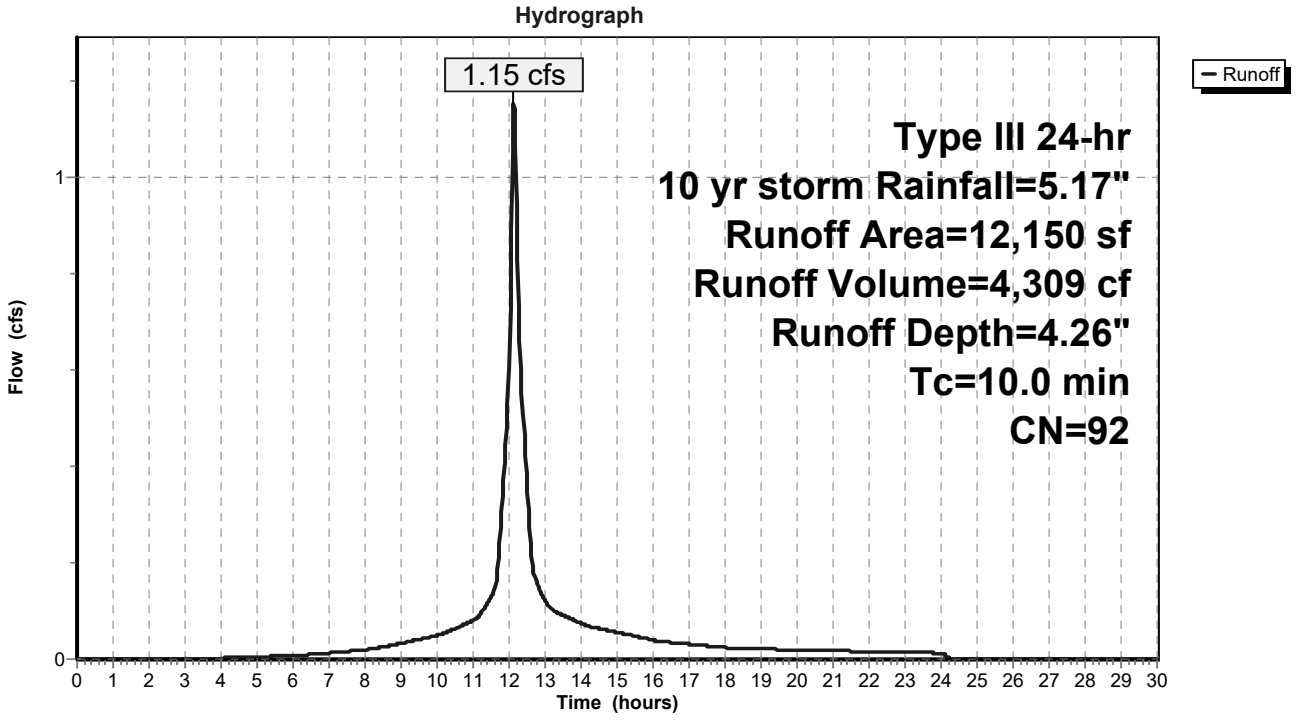
Runoff = 1.15 cfs @ 12.13 hrs, Volume= 4,309 cf, Depth= 4.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10 yr storm Rainfall=5.17"

Area (sf)	CN	Description
4,305	98	Roofs, HSG A
6,610	98	Paved parking, HSG A
1,235	39	>75% Grass cover, Good, HSG A
12,150	92	Weighted Average
1,235	39	10.16% Pervious Area
10,915	98	89.84% Impervious Area

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

Subcatchment EX:



Summary for Subcatchment EXIST ROOF:

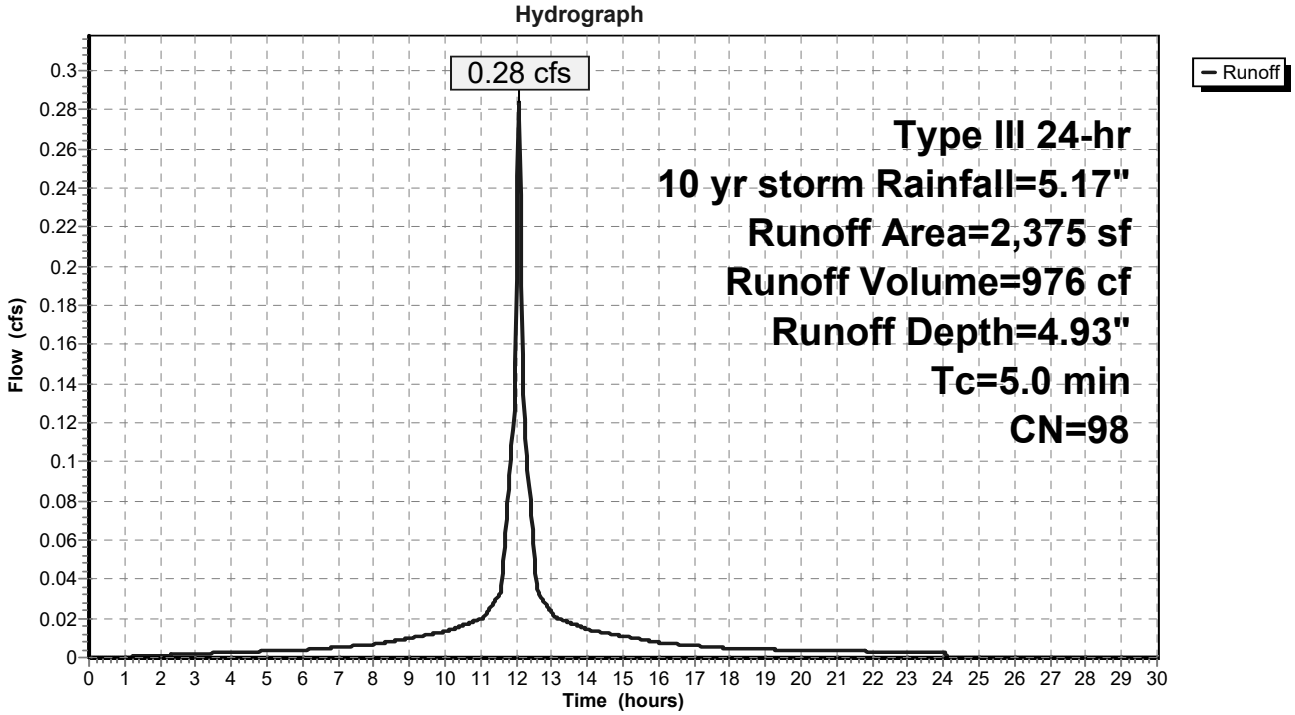
Runoff = 0.28 cfs @ 12.07 hrs, Volume= 976 cf, Depth= 4.93"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10 yr storm Rainfall=5.17"

Area (sf)	CN	Description
2,375	98	Roofs, HSG A
2,375	98	100.00% Impervious Area

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

Subcatchment EXIST ROOF:



Summary for Subcatchment PR:

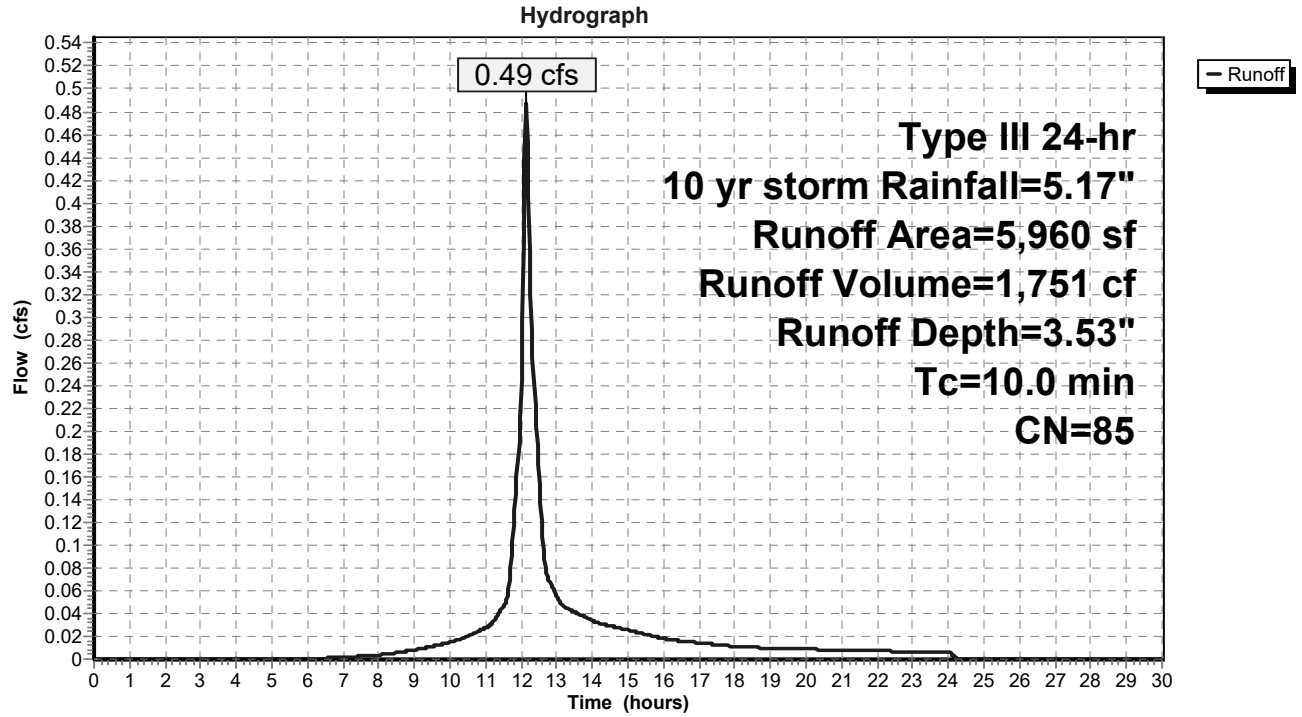
Runoff = 0.49 cfs @ 12.14 hrs, Volume= 1,751 cf, Depth= 3.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10 yr storm Rainfall=5.17"

	Area (sf)	CN	Description
	35	98	Roofs, HSG A
	4,630	98	Paved parking, HSG A
*	25	98	Unconnected walk, HSG A
	1,270	39	>75% Grass cover, Good, HSG A
	5,960	85	Weighted Average
	1,270	39	21.31% Pervious Area
	4,690	98	78.69% Impervious Area
	25		0.53% Unconnected

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

Subcatchment PR:



Summary for Pond INF:

Inflow Area = 6,190 sf,100.00% Impervious, Inflow Depth = 4.93" for 10 yr storm event
Inflow = 0.74 cfs @ 12.07 hrs, Volume= 2,545 cf
Outflow = 0.13 cfs @ 11.67 hrs, Volume= 2,545 cf, Atten= 83%, Lag= 0.0 min
Discarded = 0.13 cfs @ 11.67 hrs, Volume= 2,545 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 66.97' @ 12.52 hrs Surf.Area= 660 sf Storage= 629 cf

Plug-Flow detention time= 25.9 min calculated for 2,542 cf (100% of inflow)
Center-of-Mass det. time= 25.9 min (772.4 - 746.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	65.40'	560 cf	**15.75'W x 41.88'L x 3.50'H Field A** 2,309 cf Overall - 710 cf Embedded = 1,599 cf x 35.0% Voids
#2A	65.90'	710 cf	**ADS_StormTech DC-780 b +Cap** x 15 Inside #1 Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 15 Chambers in 3 Rows Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf
		1,269 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	65.40'	**8.270 in/hr Exfiltration over Horizontal area**

Discarded OutFlow Max=0.13 cfs @ 11.67 hrs HW=65.44' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.13 cfs)

Pond INF: - Chamber Wizard Field A

Chamber Model = ADS_StormTech DC-780 b +Cap (ADS StormTech® DC-780 with cap storage)
Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

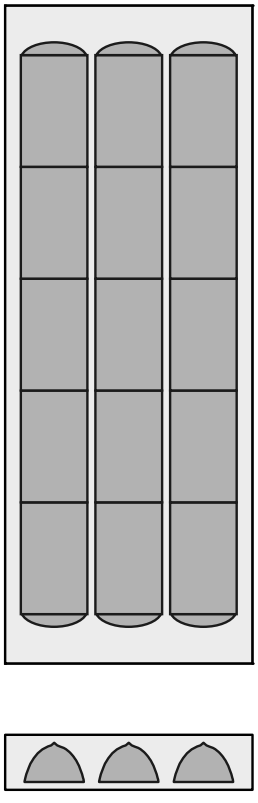
5 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 37.22' Row Length +28.0" End Stone x 2 = 41.88' Base Length
3 Rows x 51.0" Wide + 6.0" Spacing x 2 + 12.0" Side Stone x 2 = 15.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

15 Chambers x 46.2 cf + 2.7 cf Cap Volume x 2 x 3 Rows = 709.5 cf Chamber Storage

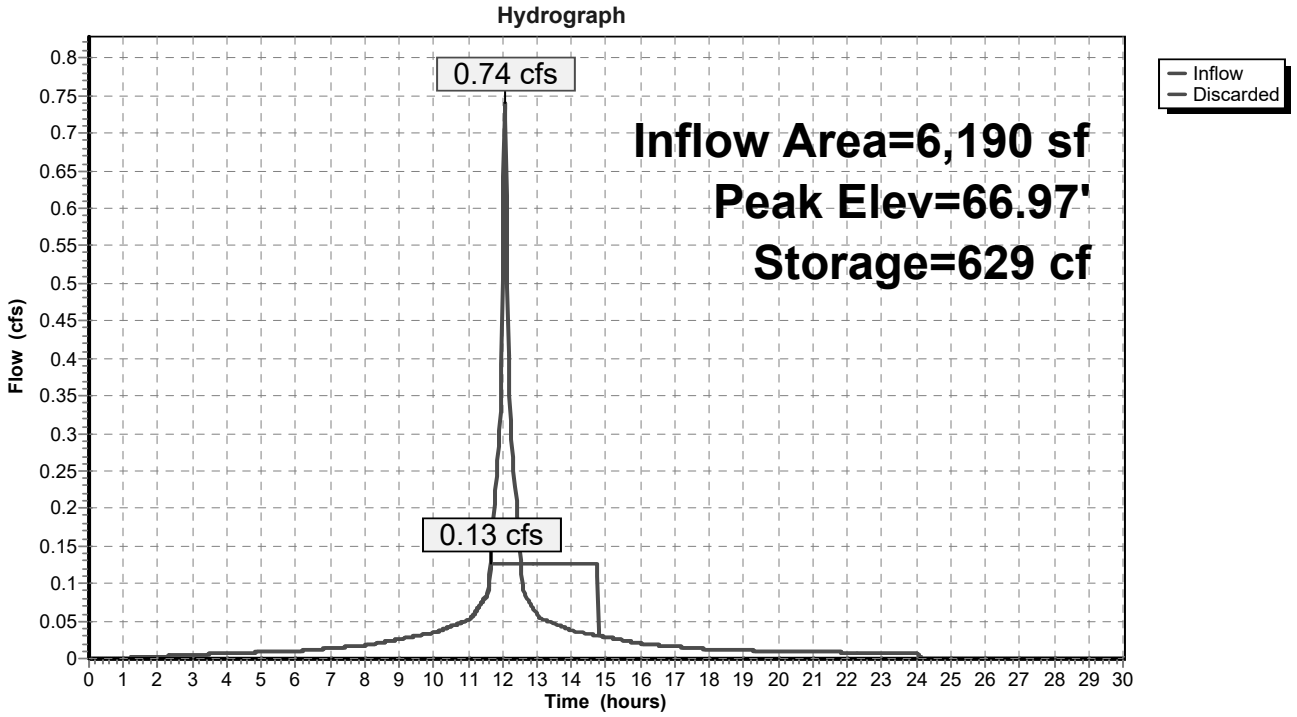
2,308.8 cf Field - 709.5 cf Chambers = 1,599.3 cf Stone x 35.0% Voids = 559.8 cf Stone Storage

Chamber Storage + Stone Storage = 1,269.3 cf = 0.029 af
Overall Storage Efficiency = 55.0%
Overall System Size = 41.88' x 15.75' x 3.50'

15 Chambers
85.5 cy Field
59.2 cy Stone



Pond INF:


Hydrograph
Inflow
Discarded
0.74 cfs
0.13 cfs
Inflow Area=6,190 sf
Peak Elev=66.97'
Storage=629 cf
Flow (cfs)
Time (hours)
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 0.7 0.75 0.8
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 25 26 27 28 29 30

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 ADDITIONS: Runoff Area=3,815 sf 100.00% Impervious Runoff Depth=6.11"
Tc=5.0 min CN=98 Runoff=0.56 cfs 1,943 cf

Subcatchment EX: Runoff Area=12,150 sf 89.84% Impervious Runoff Depth=5.41"
Tc=10.0 min CN=92 Runoff=1.45 cfs 5,482 cf

Subcatchment EXIST ROOF: Runoff Area=2,375 sf 100.00% Impervious Runoff Depth=6.11"
Tc=5.0 min CN=98 Runoff=0.35 cfs 1,210 cf

Subcatchment PR: Runoff Area=5,960 sf 78.69% Impervious Runoff Depth=4.63"
Tc=10.0 min CN=85 Runoff=0.63 cfs 2,301 cf

Pond INF: Peak Elev=67.53' Storage=869 cf Inflow=0.91 cfs 3,153 cf
Outflow=0.13 cfs 3,153 cf

Total Runoff Area = 24,300 sf Runoff Volume = 10,935 cf Average Runoff Depth = 5.40"
10.31% Pervious = 2,505 sf 89.69% Impervious = 21,795 sf

Summary for Subcatchment ADDITIONS:

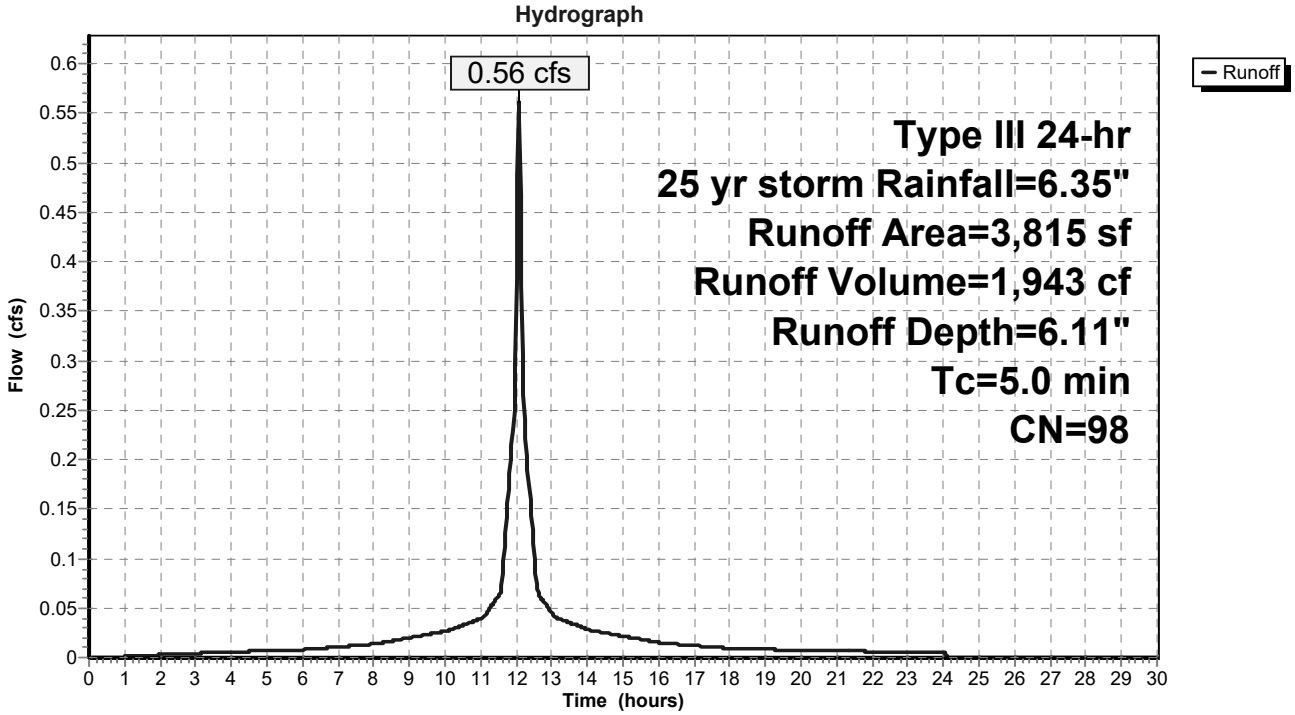
Runoff = 0.56 cfs @ 12.07 hrs, Volume= 1,943 cf, Depth= 6.11"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25 yr storm Rainfall=6.35"

Area (sf)	CN	Description
3,815	98	Roofs, HSG A
3,815	98	100.00% Impervious Area

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

Subcatchment ADDITIONS:



Summary for Subcatchment EX:

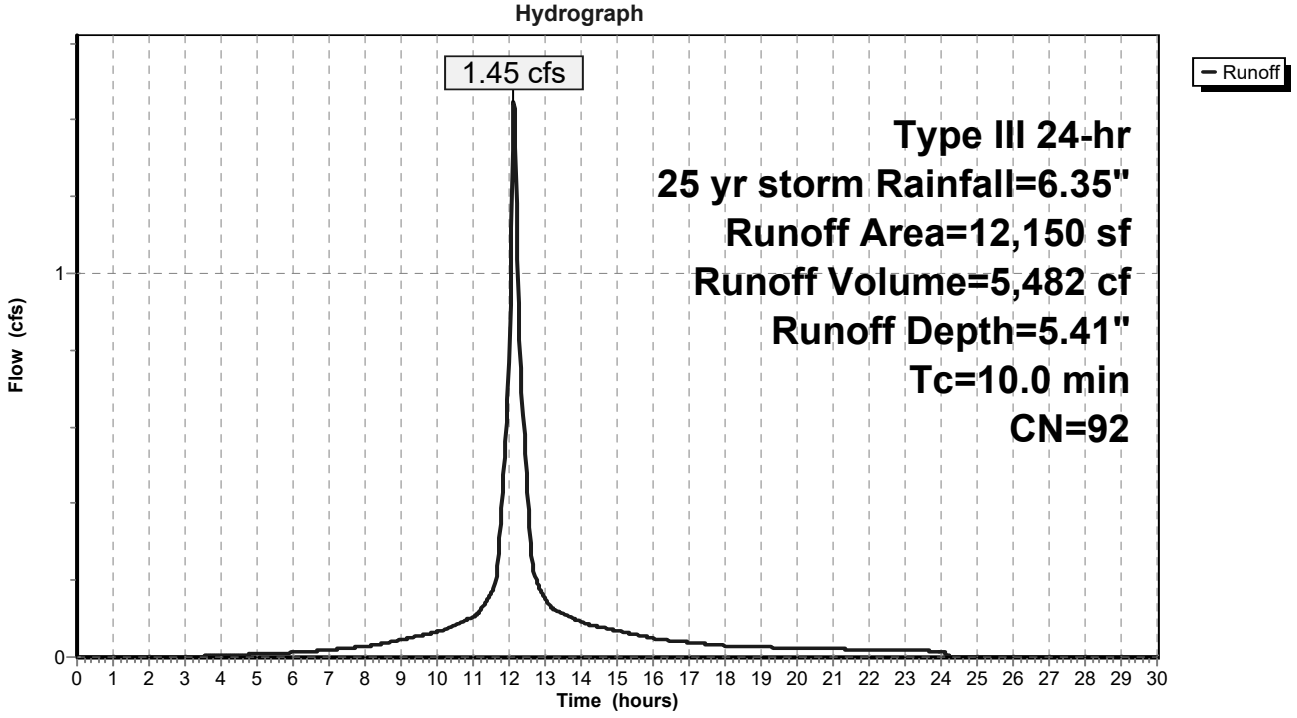
Runoff = 1.45 cfs @ 12.13 hrs, Volume= 5,482 cf, Depth= 5.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25 yr storm Rainfall=6.35"

Area (sf)	CN	Description
4,305	98	Roofs, HSG A
6,610	98	Paved parking, HSG A
1,235	39	>75% Grass cover, Good, HSG A
12,150	92	Weighted Average
1,235	39	10.16% Pervious Area
10,915	98	89.84% Impervious Area

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

Subcatchment EX:



Summary for Subcatchment EXIST ROOF:

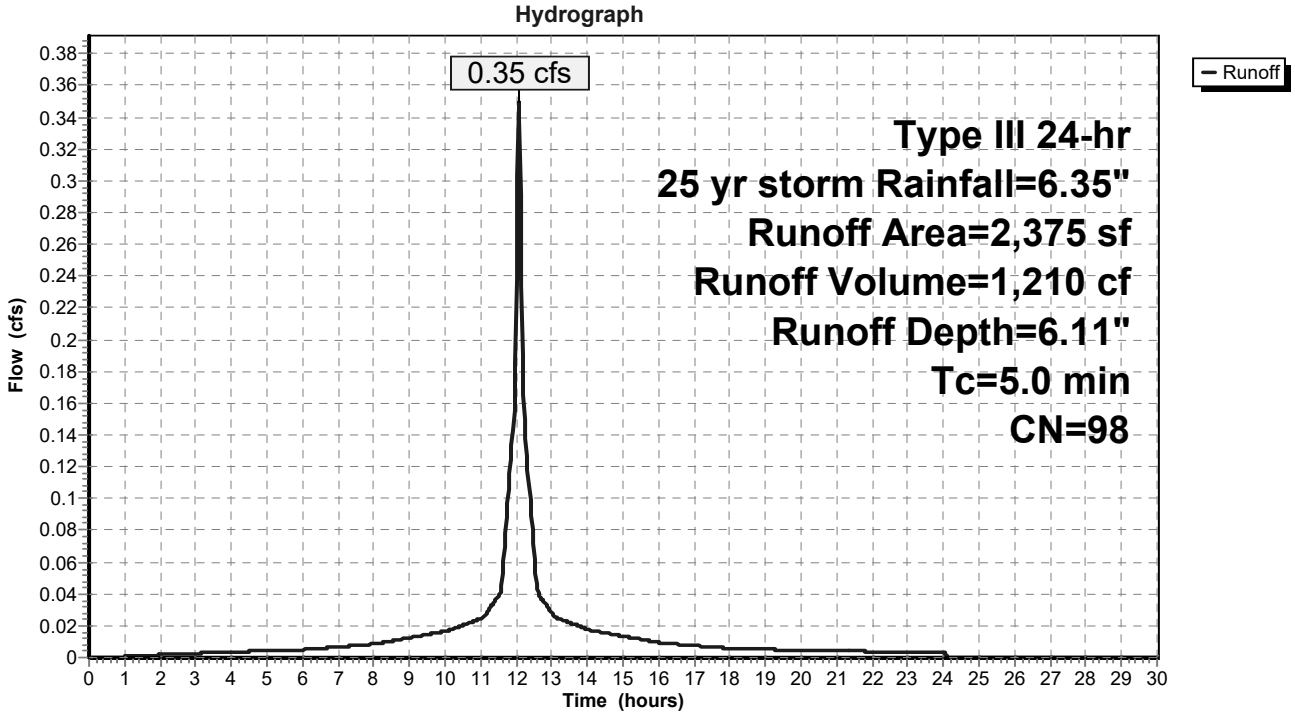
Runoff = 0.35 cfs @ 12.07 hrs, Volume= 1,210 cf, Depth= 6.11"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25 yr storm Rainfall=6.35"

Area (sf)	CN	Description
2,375	98	Roofs, HSG A
2,375	98	100.00% Impervious Area

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

Subcatchment EXIST ROOF:



Summary for Subcatchment PR:

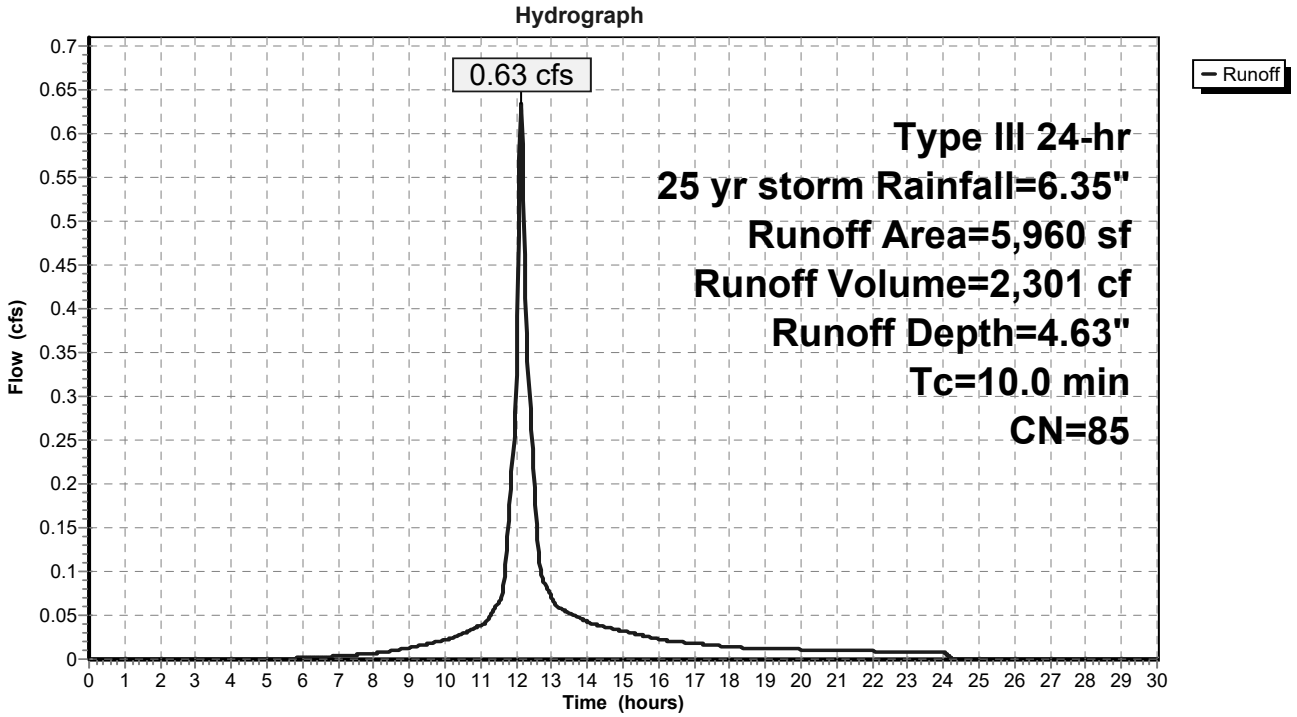
Runoff = 0.63 cfs @ 12.14 hrs, Volume= 2,301 cf, Depth= 4.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25 yr storm Rainfall=6.35"

	Area (sf)	CN	Description
	35	98	Roofs, HSG A
	4,630	98	Paved parking, HSG A
*	25	98	Unconnected walk, HSG A
	1,270	39	>75% Grass cover, Good, HSG A
	5,960	85	Weighted Average
	1,270	39	21.31% Pervious Area
	4,690	98	78.69% Impervious Area
	25		0.53% Unconnected

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

Subcatchment PR:



Summary for Pond INF:

Inflow Area = 6,190 sf,100.00% Impervious, Inflow Depth = 6.11" for 25 yr storm event
Inflow = 0.91 cfs @ 12.07 hrs, Volume= 3,153 cf
Outflow = 0.13 cfs @ 11.61 hrs, Volume= 3,153 cf, Atten= 86%, Lag= 0.0 min
Discarded = 0.13 cfs @ 11.61 hrs, Volume= 3,153 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 67.53' @ 12.56 hrs Surf.Area= 660 sf Storage= 869 cf

Plug-Flow detention time= 38.6 min calculated for 3,149 cf (100% of inflow)
Center-of-Mass det. time= 38.6 min (782.0 - 743.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	65.40'	560 cf	**15.75'W x 41.88'L x 3.50'H Field A** 2,309 cf Overall - 710 cf Embedded = 1,599 cf x 35.0% Voids
#2A	65.90'	710 cf	**ADS_StormTech DC-780 b +Cap** x 15 Inside #1 Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 15 Chambers in 3 Rows Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf
		1,269 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	65.40'	**8.270 in/hr Exfiltration over Horizontal area**

Discarded OutFlow Max=0.13 cfs @ 11.61 hrs HW=65.44' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.13 cfs)

Pond INF: - Chamber Wizard Field A

Chamber Model = ADS_StormTech DC-780 b +Cap (ADS StormTech® DC-780 with cap storage)
Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

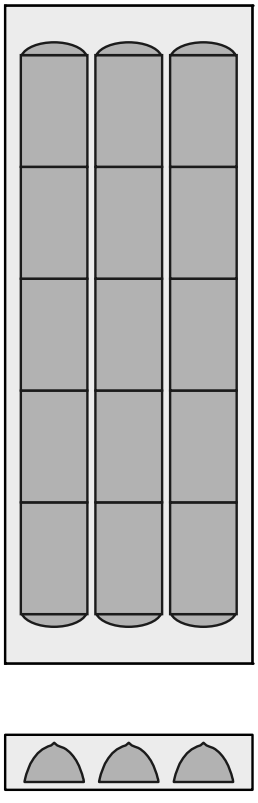
5 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 37.22' Row Length +28.0" End Stone x 2 = 41.88' Base Length
3 Rows x 51.0" Wide + 6.0" Spacing x 2 + 12.0" Side Stone x 2 = 15.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

15 Chambers x 46.2 cf + 2.7 cf Cap Volume x 2 x 3 Rows = 709.5 cf Chamber Storage

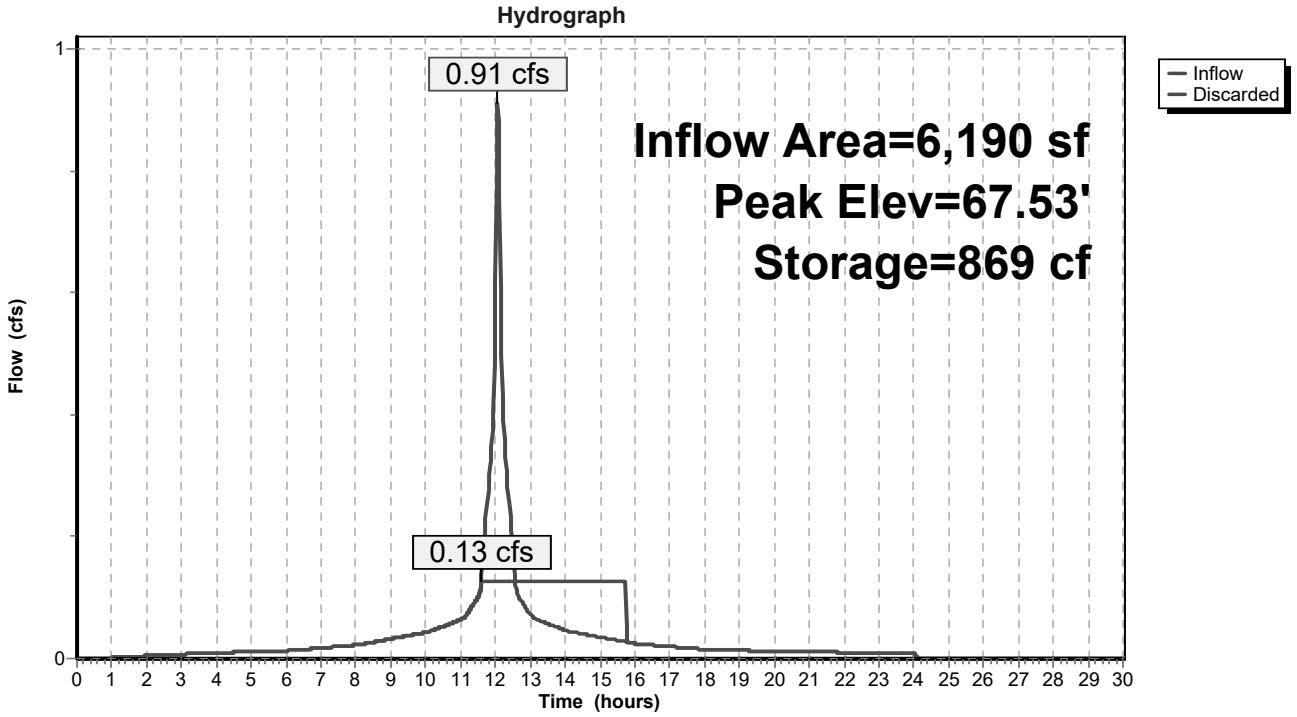
2,308.8 cf Field - 709.5 cf Chambers = 1,599.3 cf Stone x 35.0% Voids = 559.8 cf Stone Storage

Chamber Storage + Stone Storage = 1,269.3 cf = 0.029 af
Overall Storage Efficiency = 55.0%
Overall System Size = 41.88' x 15.75' x 3.50'

15 Chambers
85.5 cy Field
59.2 cy Stone



Pond INF:


Hydrograph
0.91 cfs
0.13 cfs
Inflow Area=6,190 sf
Peak Elev=67.53'
Storage=869 cf
Inflow
Discarded
Flow (cfs)
Time (hours)
0
1
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 25 26 27 28 29 30

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 ADDITIONS: Runoff Area=3,815 sf 100.00% Impervious Runoff Depth=7.93"
Tc=5.0 min CN=98 Runoff=0.72 cfs 2,521 cf

Subcatchment EX: Runoff Area=12,150 sf 89.84% Impervious Runoff Depth=7.21"
Tc=10.0 min CN=92 Runoff=1.90 cfs 7,302 cf

Subcatchment EXIST ROOF: Runoff Area=2,375 sf 100.00% Impervious Runoff Depth=7.93"
Tc=5.0 min CN=98 Runoff=0.45 cfs 1,569 cf

Subcatchment PR: Runoff Area=5,960 sf 78.69% Impervious Runoff Depth=6.38"
Tc=10.0 min CN=85 Runoff=0.86 cfs 3,167 cf

Pond INF: Peak Elev=68.84' Storage=1,256 cf Inflow=1.17 cfs 4,091 cf
Outflow=0.13 cfs 4,091 cf

Total Runoff Area = 24,300 sf Runoff Volume = 14,560 cf Average Runoff Depth = 7.19"
10.31% Pervious = 2,505 sf 89.69% Impervious = 21,795 sf

Summary for Subcatchment ADDITIONS:

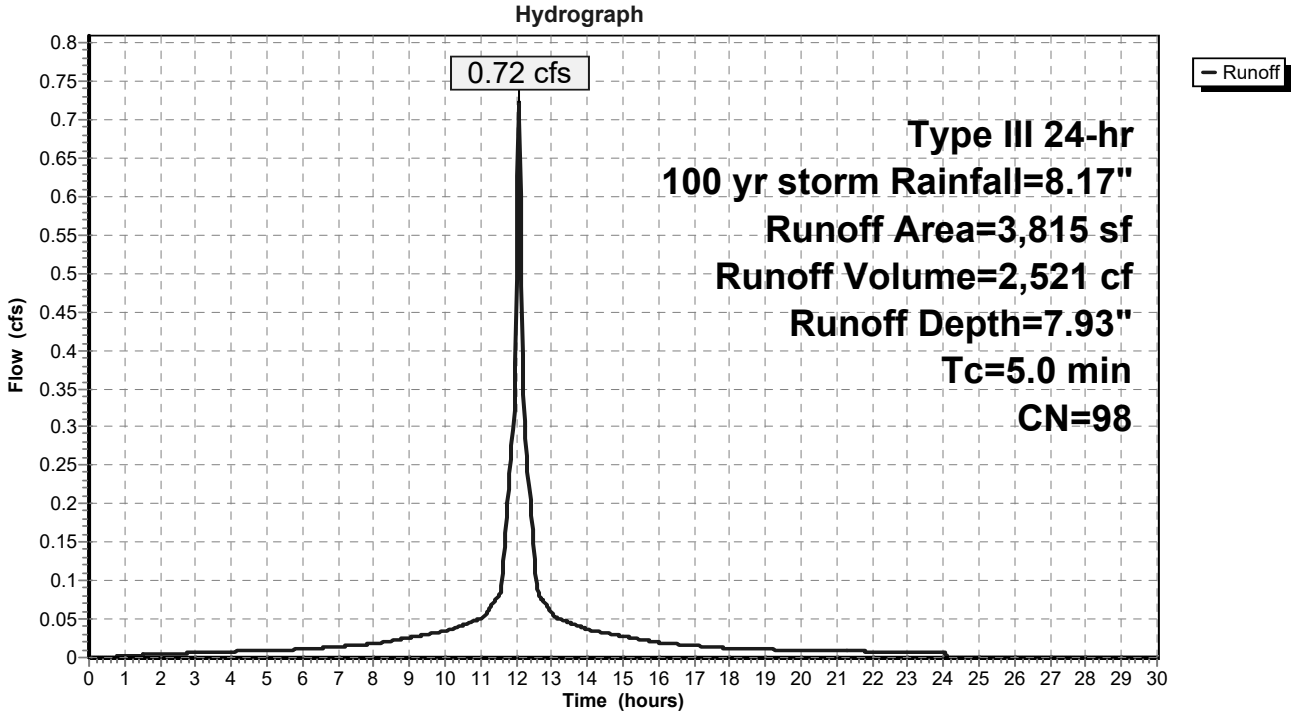
Runoff = 0.72 cfs @ 12.07 hrs, Volume= 2,521 cf, Depth= 7.93"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100 yr storm Rainfall=8.17"

Area (sf)	CN	Description
3,815	98	Roofs, HSG A
3,815	98	100.00% Impervious Area

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

Subcatchment ADDITIONS:



Summary for Subcatchment EX:

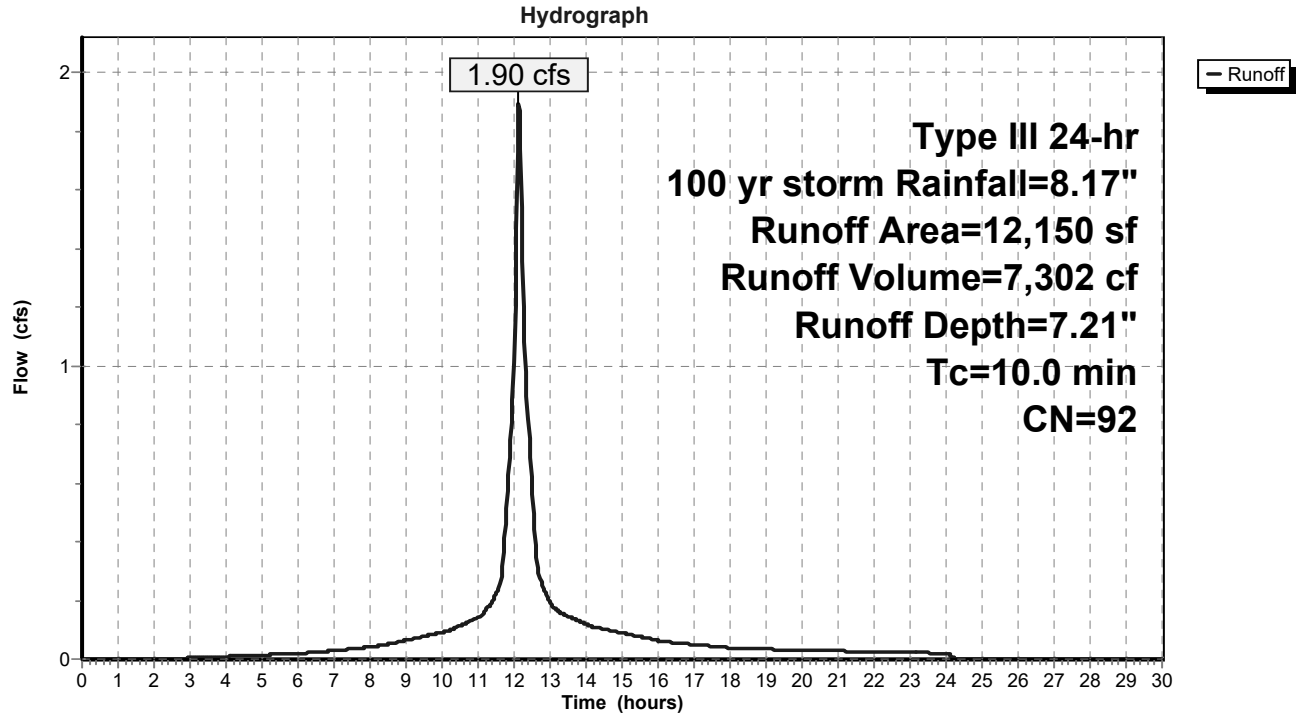
Runoff = 1.90 cfs @ 12.13 hrs, Volume= 7,302 cf, Depth= 7.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100 yr storm Rainfall=8.17"

Area (sf)	CN	Description
4,305	98	Roofs, HSG A
6,610	98	Paved parking, HSG A
1,235	39	>75% Grass cover, Good, HSG A
12,150	92	Weighted Average
1,235	39	10.16% Pervious Area
10,915	98	89.84% Impervious Area

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

Subcatchment EX:



Summary for Subcatchment EXIST ROOF:

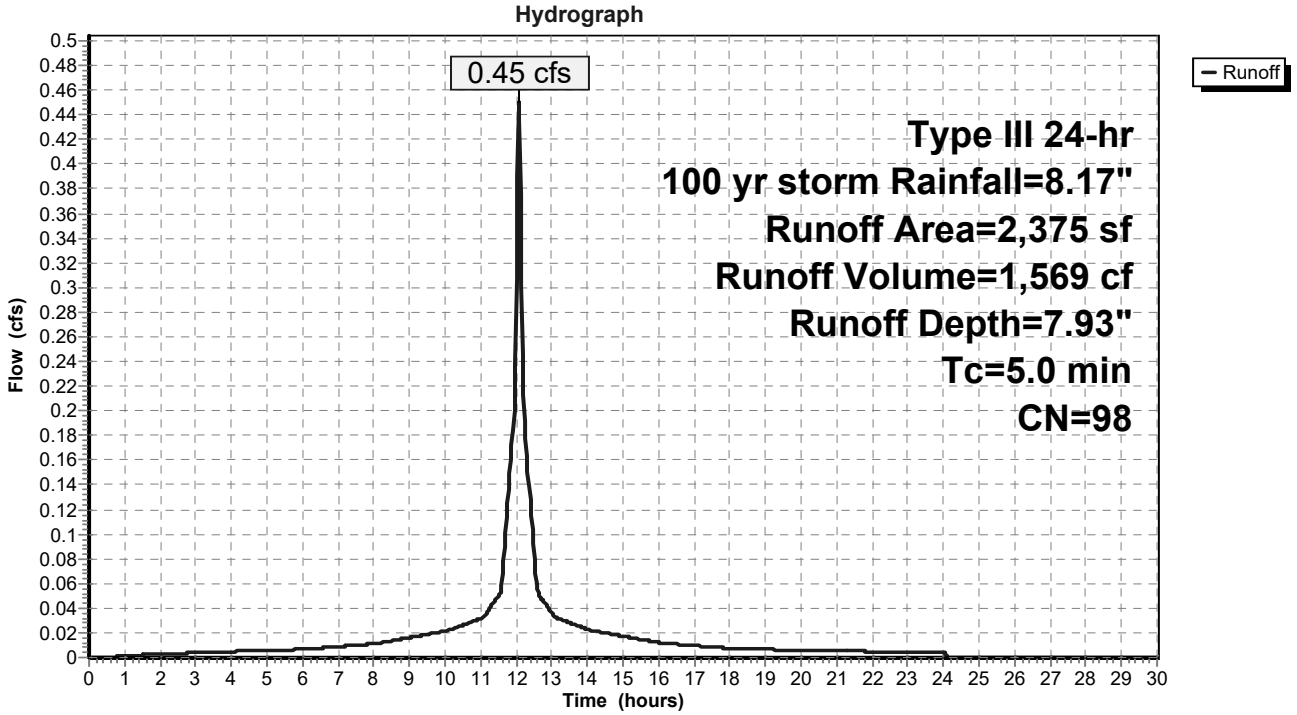
Runoff = 0.45 cfs @ 12.07 hrs, Volume= 1,569 cf, Depth= 7.93"
Routed to Pond INF :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100 yr storm Rainfall=8.17"

Area (sf)	CN	Description
2,375	98	Roofs, HSG A
2,375	98	100.00% Impervious Area

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

Subcatchment EXIST ROOF:



Summary for Subcatchment PR:

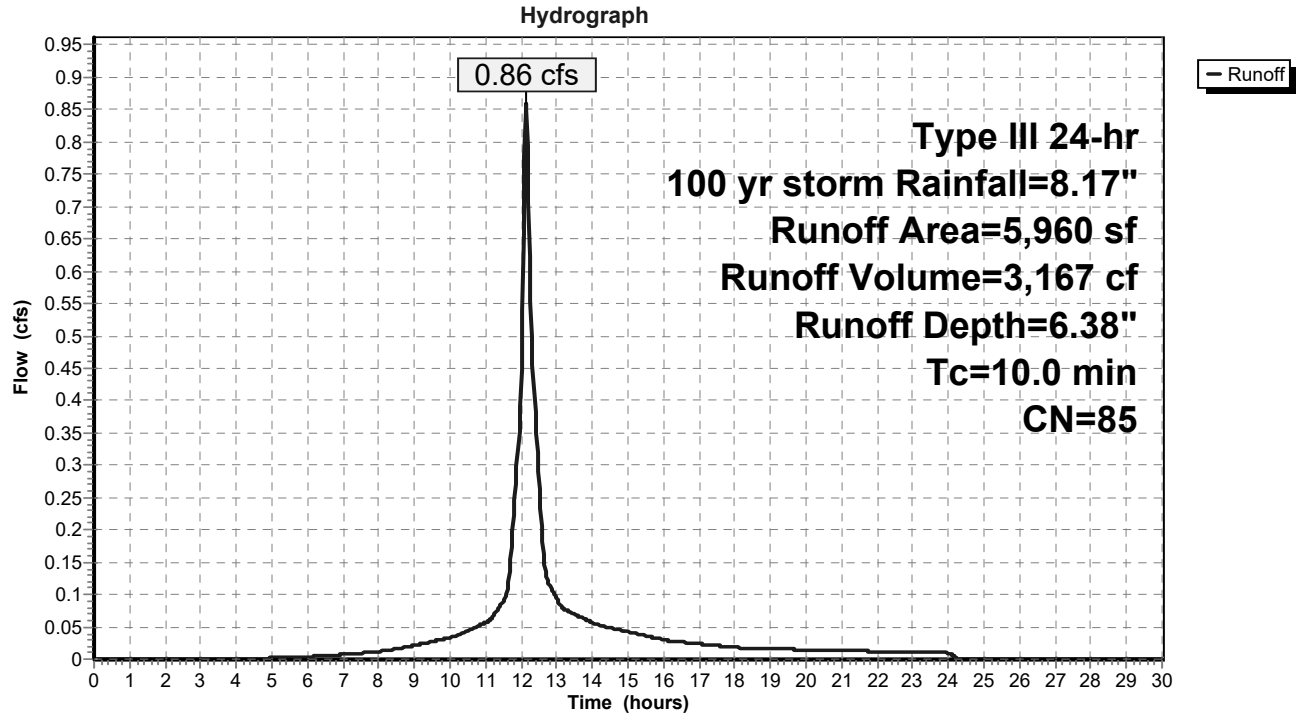
Runoff = 0.86 cfs @ 12.14 hrs, Volume= 3,167 cf, Depth= 6.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100 yr storm Rainfall=8.17"

	Area (sf)	CN	Description
	35	98	Roofs, HSG A
	4,630	98	Paved parking, HSG A
*	25	98	Unconnected walk, HSG A
	1,270	39	>75% Grass cover, Good, HSG A
	5,960	85	Weighted Average
	1,270	39	21.31% Pervious Area
	4,690	98	78.69% Impervious Area
	25		0.53% Unconnected

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

Subcatchment PR:



Summary for Pond INF:

Inflow Area = 6,190 sf,100.00% Impervious, Inflow Depth = 7.93" for 100 yr storm event
Inflow = 1.17 cfs @ 12.07 hrs, Volume= 4,091 cf
Outflow = 0.13 cfs @ 11.49 hrs, Volume= 4,091 cf, Atten= 89%, Lag= 0.0 min
Discarded = 0.13 cfs @ 11.49 hrs, Volume= 4,091 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 68.84' @ 12.70 hrs Surf.Area= 660 sf Storage= 1,256 cf

Plug-Flow detention time= 61.5 min calculated for 4,087 cf (100% of inflow)
Center-of-Mass det. time= 61.5 min (801.5 - 740.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	65.40'	560 cf	**15.75'W x 41.88'L x 3.50'H Field A** 2,309 cf Overall - 710 cf Embedded = 1,599 cf x 35.0% Voids
#2A	65.90'	710 cf	**ADS_StormTech DC-780 b +Cap** x 15 Inside #1 Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 15 Chambers in 3 Rows Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf
		1,269 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	65.40'	**8.270 in/hr Exfiltration over Horizontal area**

Discarded OutFlow Max=0.13 cfs @ 11.49 hrs HW=65.44' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.13 cfs)

Pond INF: - Chamber Wizard Field A

Chamber Model = ADS_StormTech DC-780 b +Cap (ADS StormTech® DC-780 with cap storage)
Effective Size= 45.4"W x 30.0"H => 6.49 sf x 7.12'L = 46.2 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Cap Storage= 2.7 cf x 2 x 3 rows = 15.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

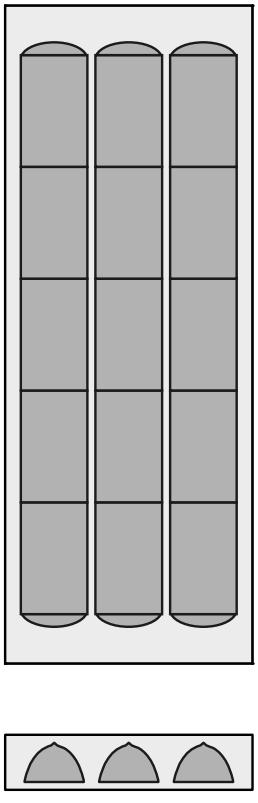
5 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 37.22' Row Length +28.0" End Stone x 2 = 41.88' Base Length
3 Rows x 51.0" Wide + 6.0" Spacing x 2 + 12.0" Side Stone x 2 = 15.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

15 Chambers x 46.2 cf + 2.7 cf Cap Volume x 2 x 3 Rows = 709.5 cf Chamber Storage

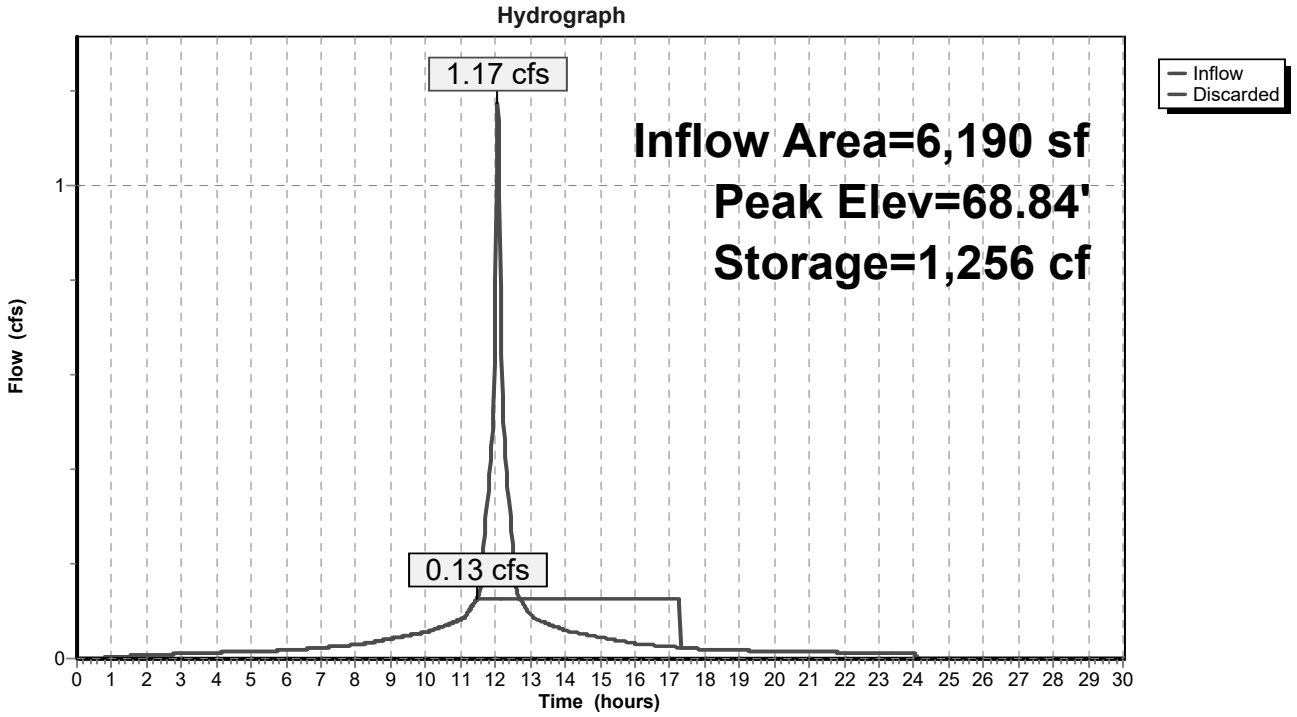
2,308.8 cf Field - 709.5 cf Chambers = 1,599.3 cf Stone x 35.0% Voids = 559.8 cf Stone Storage

Chamber Storage + Stone Storage = 1,269.3 cf = 0.029 af
Overall Storage Efficiency = 55.0%
Overall System Size = 41.88' x 15.75' x 3.50'

15 Chambers
85.5 cy Field
59.2 cy Stone



Pond INF:


Hydrograph
1.17 cfs
0.13 cfs
Inflow Area=6,190 sf
Peak Elev=68.84'
Storage=1,256 cf
Inflow
Discarded
Flow (cfs)
Time (hours)
0
1
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 25 26 27 28 29 30

26 Dudley Street

Stormwater Operation & Maintenance Plan

Owner's & Applicant's Name(s) & Responsible for Maintenance (until transfer):

Applicant/Owner:
Santini, Inc.
60 Dudley Street
Arlington, MA 02476

NOTE: The Operation & Maintenance Plan shall be required to be included in any transfer of the property in perpetuity of the system.

Stormwater System Description:
The proposed drainage system consists of one subsurface infiltration system, containing fifteen (15) Stormtech© DC-780 chambers. The infiltration system will recharge runoff generated by the existing building and proposed addition.

Planned Erosion and Sedimentation Control Measures During construction Activities

Erosion Control
Prior to construction, tubular sediment control shall consist of a 12-inch minimum diameter, 100% organic hessian fabric (burlap), filled with compost. Sediment control shall be placed along the limit of work as indicated on the plan. 1-in by 1-in by 3-ft oak stakes shall be installed at 8-ft maximum intervals. Ends of sediment control should overlap a minimum of six inches as per detail.

Drain Inlet Protection
A temporary storm inlet protection filter fabric or "silt sack" will be placed in any existing catch basin in Dudley Street within 100-feet downstream of the property during construction. The purpose of the filter fabric is to prevent the inflow of sediments into the closed drainage system. The filter fabric shall remain in place until the proposed driveway is paved and a permanent vegetative cover is established so that the transport of sediment is no longer visibly apparent. The filter fabric shall be inspected and maintained on a weekly basis.

Surface Stabilization
The surface of all disturbed areas shall be stabilized during and after construction. Temporary measures shall be taken during construction to prevent erosion and siltation. No construction sediment shall be allowed to enter the infiltration system. All disturbed slopes will be stabilized with a permanent vegetative cover. Some or all of the following measures will be utilized on this project as conditions may warrant.

a. Temporary Seeding
b. Temporary Mulching
c. Permanent Seeding
d. Placement of Sod
e. Hydroseeding
f. Placement of Hay
g. Placement of Jute Netting

Subsurface Infiltration System:

Erosion controls (such as haybales or silt fencing) and temporary swales should be installed around the perimeter of the excavation to collect and/or divert runoff containing fines and sediments from entering the infiltration system during construction. The existing subgrade under the system bed area shall not be compacted or subject to excessive construction equipment traffic. Once the site is stabilized and final grade over the system is established, ensure that proper signs and/or barricades around the system are installed to avoid compaction or vehicular traffic over the system. During construction, the infiltration system should be inspected weekly and after every major storm event (>3 inches). Ponded water inside the system (as visible from the observation wells) after several days often indicates that the bottom of the system is clogged. If a system is found to be clogged, flushing and vacuuming of the system using a sewer vacuum truck will be required (search "sewer vacuum truck services").

Long-Term Inspection and Maintenance Measures After Construction

NOTE: Documentation of required operation and maintenance inspections referenced in this document should be provided to the Arlington Engineering Division when completed.

Erosion Control

Eroded sediments can adversely affect the performance of the stormwater management system. Eroding or barren areas should be immediately re-vegetated.

Subsurface Infiltration System:

The subsurface infiltration system should be inspected after the first several rainfall events or a few months after construction, after all major storms (>3 inches), and on regular bi-annual (April and October) scheduled dates. Ponded water inside the system (as visible from the observation wells) after several days often indicates that the bottom of the system is clogged. If a system is found to be clogged, flushing and vacuuming of the system using a sewer vacuum truck will be required (search "sewer vacuum truck services").

Debris and Leaf Removal:
Roof gutters should be inspected every April and October and cleaned of any debris and leaves. Installation of "gutter guards" or similar material is recommended.

Snow Storage, Disposal and Plowing:
Snow storage shall be provided outside the 100' Riverfront area. For larger storms or consecutive storms when snow storage areas are at capacity, snow shall be transported from the site. Once snow melts all sand salt and debris shall be extracted from surface and properly disposed of.

Pavement Sweeping:
Pavement sweeping shall be conducted at a frequency of not less than two times per year. Removal of any accumulated sand, grit, and debris from the parking lot after the snow melts shall be complete shortly after snow melts for the season.

STORMWATER MANAGEMENT
CONSTRUCTION PHASE

INSPECTION SCHEDULE AND EVALUATION CHECKLIST

PROJECT LOCATION: 26 Dudlet Street, Arlington, MA **WEATHER:** _____

Inspection Date	*Inspector*	*Area Inspected*	*Required Inspection Frequency if BMP*	*Comments*	*Recommendation*	*Follow-up Inspection Required (yes/no)*
		Erosion Control	*Weekly and After Major Storm Events*			
		Infiltration System	*Weekly and After Major Storm Events*			

(1) Refer to the Massachusetts Stormwater Handbook, Volume Two: Stormwater Technical Handbook (February 2008) for recommendations regarding frequency for inspection and maintenance of specific BMP's.
(2) Inspections to be conducted by a qualified professional such as an environmental scientist or civil engineer.

Limited or no use of sodium chloride salts, fertilizers or pesticides recommended.

Stormwater Control Manager: _____

STORMWATER MANAGEMENT
AFTER CONSTRUCTION

INSPECTION SCHEDULE AND EVALUATION CHECKLIST

PROJECT LOCATION: 26 Dudley Street, Arlington, MA **WEATHER:** _____

Inspection Date	*Inspector*	*Area Inspected*	*Required Inspection Frequency if BMP*	*Comments*	*Recommendation*	*Follow-up Inspection Required (yes/no)*
		Infiltration System	*Bi-annually and After*			

(1) Refer to the Massachusetts Stormwater Handbook, Volume Two: Stormwater Technical Handbook (February 2008) for recommendations regarding frequency for inspection and maintenance of specific BMP's.
(2) Inspections to be conducted by a qualified professional such as an environmental scientist or civil engineer.

Limited or no use of sodium chloride salts, fertilizers or pesticides recommended.

Stormwater Control Manager: _____

Hydrologic Soil Group—Middlesex County, Massachusetts
(26 Dudley Street)

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 1:24,000.

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: Middlesex County, Massachusetts
Survey Area Data: Version 25, Sep 5, 2025

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

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	A	0.1	41.6%
655	Udorthents, wet substratum		0.2	58.4%
Totals for Area of Interest			**0.3**	**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