GCG ASSOCIATES
CIVIL ENGINEERING & LAND SURVEYING

84 Main Street
Wilmington, MA 01887
Phone: (978) 657-9714

April 11, 2024

Conservation Commission
Town of Ashland
101 Main Street
Ashland, MA 01721

RE: West Union Street – Sidewalk Improvement Project
Notice of Intent
Local Filing Fee Waiver Request

Dear Ms. Solomon:

GCG Associates, Inc. on behalf of the Town of Ashalnd, Department of Public Works (DPW) hereby submitting a Notice of Intent for the West Union Street Sidwalk Improvement project. This is a Town of Ashland public sidewalk improvement project and requesting waiver for the local Notice of Intent filing fee.

If you have any questions regarding this matter, please contact our office.

Respectfully Submitted,
GCG Associates

Michael J. Carter

Michael J. Carter, PE, PLS
Project Manager

NOTICE OF INTENT
STORMWATER MANAGEMENT REPORT

for

West Union Street Sidewalk Improvement

in

ASHLAND, MASSACHUSETTS

April 11, 2024

Prepared by
GCG ASSOCIATES, INC.
84 Main Street, Wilmington, MA 01887

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Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1705906
City/Town:ASHLAND

A.General Information

1. Project Location:

a. Street Address	WEST UNION STREET RIGHT-OF-WAY		
b. City/Town	ASHLAND	c. Zip Code	01721
d. Latitude	42.24815N	e. Longitude	71.47440W
f. Map/Plat #	19 & 23	g.Parcel/Lot #	W. UNION STREET RIGHT-OF-WAY

2. Applicant:

☐ Individual ☑ Organization

a. First Name	DOUG	b.Last Name	SMALL		
c. Organization	TOWN OF ASHLAND DEPARTMENT OF PUBLIC WORKS				
d. Mailing Address	20 PONDEROSA ROAD				
e. City/Town	ASHLAND	f. State	MA	g. Zip Code	01721
h. Phone Number	508-881-0120	i. Fax		j. Email	dsmall@ashlandmass.com

3.Property Owner:

☐ more than one owner

a. First Name	DOUG	b. Last Name	SMALL		
c. Organization	TOWN OF ASHLAND DEPARTMENT OF PUBLIC WORKS				
d. Mailing Address	20 PONDEROSA ROAD				
e. City/Town	ASHLAND	f.State	MA	g. Zip Code	01721
h. Phone Number	508-881-0120	i. Fax		j.Email	dsmall@ashlandmass.com

4.Representative:

a. First Name	MICHAEL	b. Last Name	CARTER		
c. Organization	GCG ASSOCIATES, INC.				
d. Mailing Address	84 MAIN STREET				
e. City/Town	WILMINGTON	f. State	MA	g. Zip Code	01887
h.Phone Number	978-657-9714	i.Fax		j.Email	Mike.Carter@gcgassociates.net

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

a.Total Fee Paid	0.00	b.State Fee Paid	0.00	c.City/Town Fee Paid	0.00

6.General Project Description:

CONSTRUCTION APPROXIMATELY 1,380 LINEAR FEET OF 5-FOOT WIDE SIDEWALK ALONG THE EASTSIDE OF WEST UNION STREET BETWEEN STATE PARK ROAD AND INDIAN SPRING ROAD, AND ASSOCIATED DRIVEWAY APRONS AND SIGNAGE IN THE TOWN OF ASHLAND.

7a.Project Type:

1. ☐ Single Family Home	2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing	4. ☐ Commercial/Industrial
5. ☐ Dock/Pier	6. ☐ Utilities
7. ☐ Coastal Engineering Structure	8. ☐ Agriculture (eg., cranberries, forestry)
9. ☑ Transportation	10. ☐ Other

7b.Is any portion of the proposed activity eligible to be treated as a 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:

2. Limited Project: 310 CMR 10.53.3(F) - MAINTENANCE AND IMPROVEMENT OF EXISTING PUBLIC ROADWAYS, BUT LIMITED TO WIDENING LESS THAN A SINGLE LANE, ADDING SHOULDERS, CORRECTING SUBSTANDARD INTERSECTIONS, AND IMPROVING INADEQUATE DRAINAGE SYSTEMS.

8.Property recorded at the Registry of Deeds for:

a.County: **b.Certificate:** **c.Book:** **d.Page:**

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

1.Buffer Zone & Resource Area Impacts (temporary & permanent):

☑ This is a Buffer Zone only project - 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)

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	2. square feet
	3. cubic yards dredged	
d.☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	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

1. Name of Waterway (if any)

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
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.

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)

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 Beaches	Indicate size under Coastal Beaches and/or Coatstal Dunes, below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab, crea.
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

☐ Restoration/Replacement

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 entered the additional amount here.

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

5.Projects Involves Stream Crossings

☐ Project Involves Streams Crossings

If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

a. number of new stream crossings

b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

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 of Endangered Species program (NHESP)?

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

b. Date of map:AUGUST 2021

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18)....

c. Submit Supplemental Information for Endangered Species Review * (Check boxes as they apply)

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

3.☐ Project plans for entire project site, including wetland resource areas and areas outside of wetland 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

c.☐ MESA filing fee (fee information available at: http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html)
Make check payable to "Natural Heritage & Endangered Species Fund" 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

d. 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, http://www.mass.gov/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14; 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 Number

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.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review...

2. For coastal projects only, is any portion of the proposed project located below the mean high waterline or in a fish run?
a. ☑ Not applicable - project is in inland resource area only
b. ☐ Yes ☐ No

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

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

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 S. Rodney French Blvd
New Bedford, MA 02744

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

If yes, it 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.

3. 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 DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC Name

4. 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

5. 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

6. 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, Explain why the project is exempt:

1. ☐ Single Family Home

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

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 by regular mail delivery.

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.
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. ☑

a. Plan Title:	b. Plan Prepared By:	c. Plan Signed/Stamped By:	c. Revised Final Date:	e. Scale:
TOWN OF ASHLAND, MASSACHUSETTS, WEST UNION STREET SIDEWALK IMPROVEMENT PROJECT	MICHAEL J. CARTER, P.E., P.L.S.		April 11, 2024	

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:

2. Municipal Check Number	3. Check date
4. State Check Number	5. Check date
6. Payer name on check: First Name	7. Payer name on check: Last Name

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.

Doug Small	4/11/2024
1. Signature of Applicant	2. Date
Doug Small	4/11/2024
3. Signature of Property Owner(if different)	4. Date
Mike Carter	4/11/2024
5. Signature of Representative (if any)	6. Date

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 Section C, Items 1-3, 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

WPA Form 3 - Notice of Wetland FeeTransmittal Form

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

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1705906
City/Town:ASHLAND

A. Applicant Information

1. Applicant:

a. First Name	DOUG	b.Last Name	SMALL		
c. Organization	TOWN OF ASHLAND DEPARTMENT OF PUBLIC WORKS				
d. Mailing Address	20 PONDEROSA ROAD				
e. City/Town	ASHLAND	f. State	MA	g. Zip Code	01721
h. Phone Number	5088810120	i. Fax		j. Email	dsmall@ashlandmass.com

2.Property Owner:(if different)

a. First Name	DOUG	b. Last Name	SMALL		
c. Organization	TOWN OF ASHLAND DEPARTMENT OF PUBLIC WORKS				
d. Mailing Address	20 PONDEROSA ROAD				
e. City/Town	ASHLAND	f.State	MA	g. Zip Code	01721
h. Phone Number	5088810120	i. Fax		j.Email	dsmall@ashlandmass.com

3. Project Location:

a. Street Address	WEST UNION STREET RIGHT-OF-WAY	b. City/Town	ASHLAND

Are you exempted from Fee? ☐ (YOU HAVE SELECTED 'YES')

Note: Fee will be exempted if you are one of the following:

- City/Town/County/District
- Municipal Housing Authority
- Indian Tribe Housing Authority
- MBTA

State agencies are only exempt if the fee is less than $100

B. Fees

Activity Type	Activity Number	Activity Fee	RF Multiplier	Sub Total

City/Town share of filling fee	State share of filing fee	Total Project Fee
$0.00	$0.00	$0.00

West Union Street Safety Improvement Project – Ashland, Massachusetts

Date: April 11, 2024

Project Narrative:

The West Union Street sidewalk improvement project will provide pedestrian sidewalk connection between Ashland Community Center and Ashland Middle School. The Ashland Community Center is located at the southwest corner of the State Park Road and West Union Street intersection. The Ashland Middle School is located off West Union Street approximately 450 feet north of the Indian Spring Road intersection. There is approximately a quarter mile (1,300+/- linear feet) of gap between the two facilities without sidewalk connection. This project will install approximately 1,380+/- linear feet of 5 feet wide sidewalk with granite curbing along the eastern side of West Union Street between State Park Road and Indian Spring Road.

Jurisdiction:

This section of West Union Street between State Park Road and Indian Spring Road is in the Minimal Flood Hazard Zone per FIRM map panels 25017C0626F, effective date July 7, 2014. There is bordering vegetated wetland (BVW) resource area found on the west side of West Union Street, predominately at Number 125 and Number 133, wetland boundary was delineated by Holmes Engineering on April 6, 2024, and located by this office on April 9, 2024. Wetland flags A-1 to A-10 and associated 100 feet buffer zone were identified on the plans. MassMapper/MassGIS NHESP layers show no known priority habitat of rare species nor estimated habitats of rare wildlife in the vicinity. This is not a Land Uses with Higher Potential Pollutant Loads project. The site is not near any Outstanding Resource Water and any Zone I, Zone IIs, and Interim Wellhead Protection Areas. Therefore, only the BVW (Bordering Vegetated Wetland) and its associated buffer zone is subject to M.G.L. Chapter 131 Section 14 - Wetland Protection Act and 310 CMR 10.00 Wetland Protection jurisdiction and require to filing a Notice of Intent for works performing within the buffer area.

Proposed Work:

This project proposed to construct approximately 1,380+/- linear feet of 5-foot-wide hot mix asphalt sidewalk with granite curbing along the eastern side of West Union Street. The sidewalk will connect the Ashland Community Center to the Indian Spring Road and West Union Street intersection, where an existing sidewalk on the western side of West Union Street connects to the Ashland Middle School. The sidewalk will be constructed inside the 50 feet wide West Union Street right-of-way. The existing roadway pavement is approximately 32 feet wide. The proposed pavement re-stripping will provide two 12 feet wide lanes. The new sidewalk will be installed along the edge of existing pavement. No work is proposed within the 25’ no disturb buffer zone. Proposed curbing and sidewalk work is located within the 50’ and 100’ buffer area only.

The site area consists of Narragansett silt loam soil, which rated well drain soil with Hydrologic Soil Group (HSG) ‘A’ as identified on the NRCS Web Soil Survey.

There are six (6) existing catch basins within this section of West Union Street that collects the roadway runoff and discharges to the large wetland approximately 150 feet east of West Union Street.

This project is a “re-development project” per MSH (Massachusetts Stormwater Handbook) Standard #7(1) and inland “limited project” per 310 CMR 10.53.3(F) - “Maintenance and improvement of existing public roadways, but limited to widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems, and re-paving.” This project also meets 310 CMR 10.05(6)(m).6. - “Footpaths bikepaths and other paths for pedestrian and/or nonmotorized vehicle access” status. Based on Redevelopment, Limited project, and Footpath status, the stormwater management requirements should apply to the maximum extent practicable standards.

Stormwater Management Requirements. (For Redevelopment Project, Limited Project, and Footpath/Sidewalk Project)

Standard #1 - no new outfall untreated. This project is a redevelopment project per MSH Standard 7(1), Limited Project, 310 CMR 10.53.3(F), and Footpath project, 310 CMR 10.05(6)(m).6. This project will utilize the existing catch basins system on West Union Street to provide the minimum required pretreatments for the roadway pavement runoff. Therefore, this project conforms with Standard #1 for redevelopment, limited, and footpath project.

Standards #2 – no increase of peak runoff, (maximum extent practicable for re-development project). This project maintains the existing pavement width to the maximum extent practicable and meets emergency vehicles safety access requirements. VGC (vertical granite curb) is being proposed to control the roadway surface runoff to the catch basin systems for pretreatments, which improved the runoff qualities in comparison with the existing conditions. The proposed sidewalk impervious surface will pitch toward West Union Street and is expected to increase the surface runoff peak rate. Since the site consists of well drain soil, a grass strip has been proposed, (where right-of-way width available), between the VGC and hot mix asphalt sidewalk, to allow limited vegetation filtering and exfiltration through the grass strip. Peak surface runoff increase would be limited. Hence, the project meets Standard #2 to the maximum extent practicable for redevelopment project.

Standard #3 – Groundwater Recharge, (maximum extent practicable for re-development project). Due to the limited right-of-way width restrictions. Groundwater recharge is not feasible. Therefore, the project could not meet Standard #3 requirements but comply with the maximum extent practicable standard for redevelopment project.

Standard #4 – TSS removal - as a minimum, pre-treatment should be provided for redevelopment project. The existing catch basins within West Union Street will provide the minimum required pretreatment for redevelopment project.

Standard #5 – LUHPPL. Not applicable.

Standard #6 - Zone II. Not applicable.

Standard #7 – This project is a redevelopment project and meets the stormwater management standards to the maximum extent practicable requirements.

Standard #8 - Construction period O&M plan is included in the NOI package, (copy attached).

Standard #9 - Long term O&M Plan is included in the NOI package, (copy attached). Please be aware that the Town (DPW) does not just maintain any specific project(s) but maintaining the entire Town according with the MS4 permit requirements.

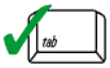
Standard #10 – No Illicit discharge – a Statement is included in the NOI package, (copy attached).

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

Michael J. Carter, P.E., P.L.S. 04/11/2024

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.

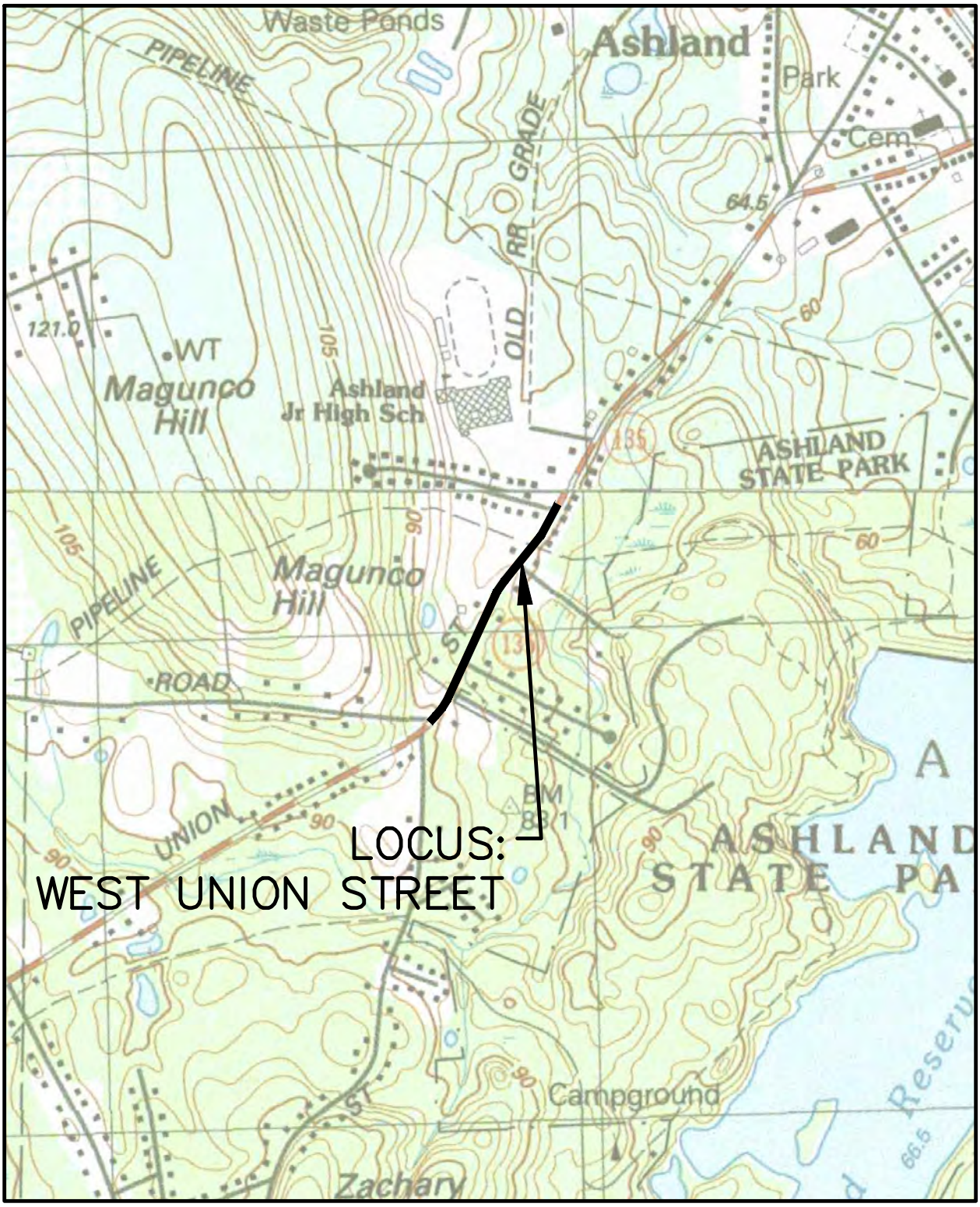
Standard 10: Prohibition of Illicit Discharges

☐ 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 A:
Project Maps



IMAGES OBTAINED FROM: "OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MASSGIS), COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS"

GCG ASSOCIATES, INC.
84 MAIN STREET
WILMINGTON,
MASSACHUSETTS
(978) 657-9714

USGS LOCUS MAP

DEPARTMENT OF PUBLIC WORKS
THE TOWN OF ASHLAND

Plan Ref.

1000 0 500 1000

Scale: 1" = 1000' SCALE IN FEET

Date: 04/2024

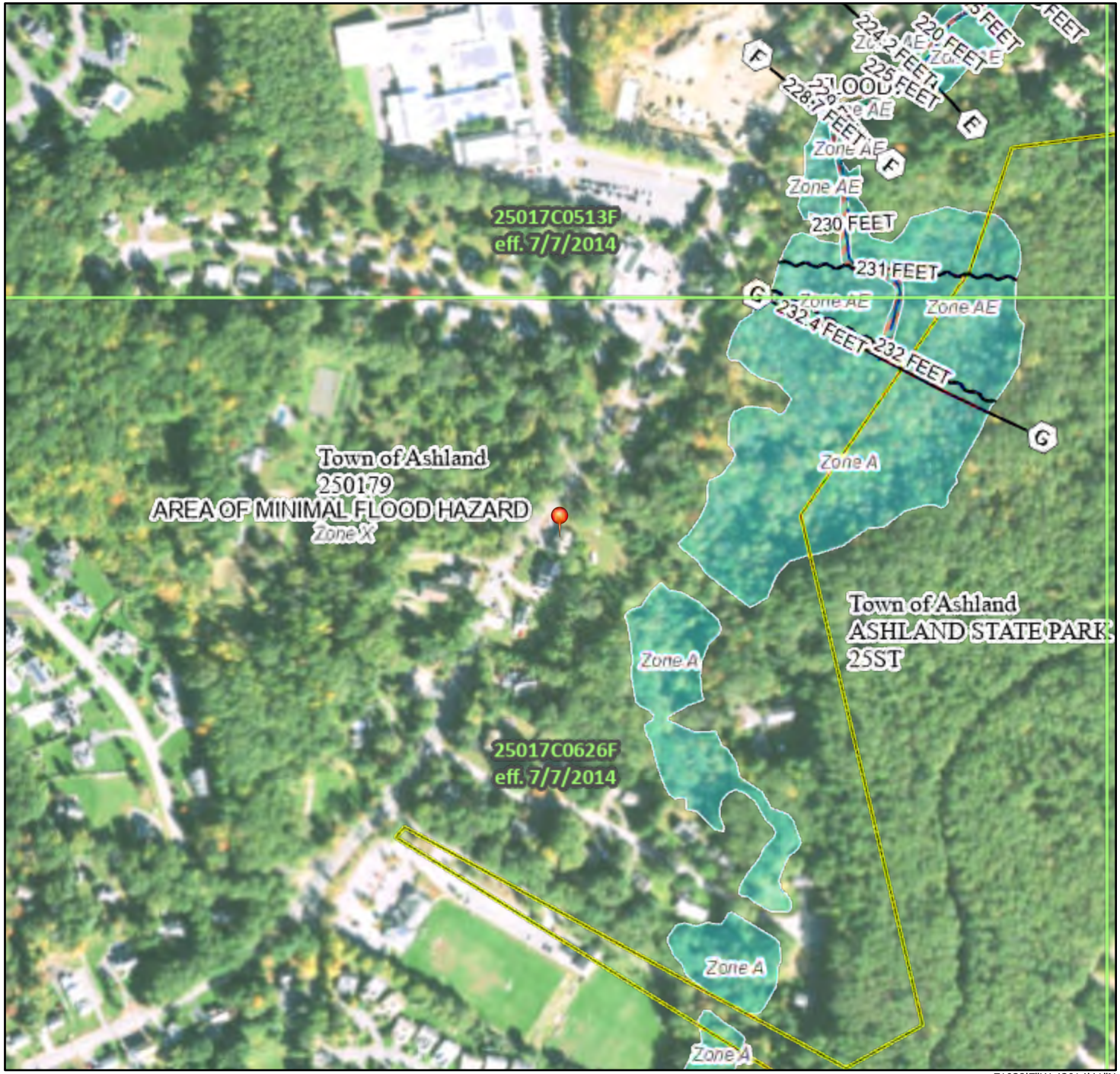
Rev:

F:\Drawing Folder\2023\2353\2353-DESIGN.dwg Saved 4/9/2024 11:37 AM Plotted: Apr 09, 2024 12:27:12pm Tab: 11x8.5P Plot Style: GCG-2018.ctb Plotted By: Rosey Tortola

National Flood Hazard Layer FIRMette

FEMA

71°28'45"W 42°15'7"N



71°28'7"W 42°14'41"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

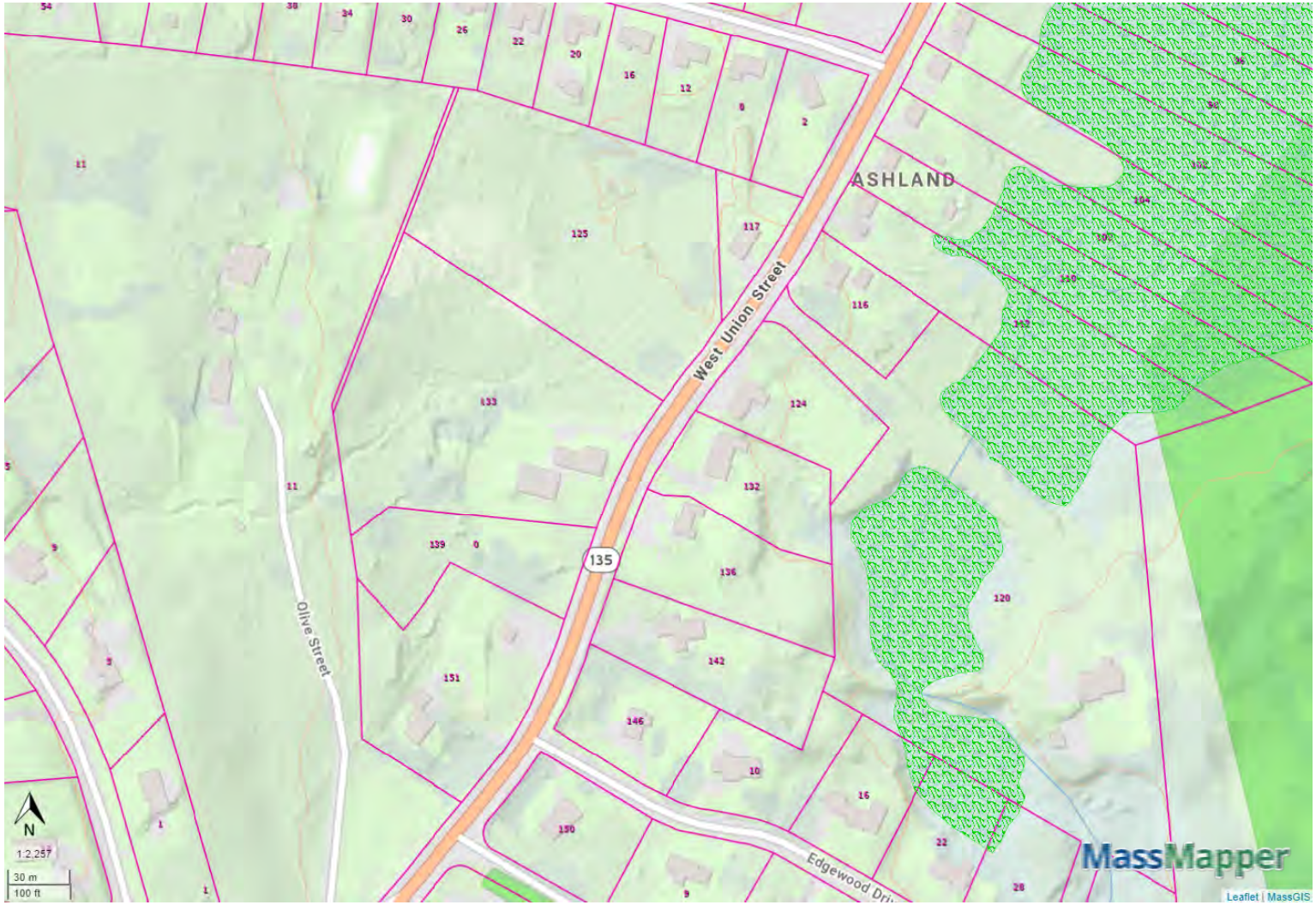
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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 4/9/2024 at 12:24 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.

West Union Street Bio Map



NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

DEP Wetlands Detailed With Outlines

- Barrier Beach System
- Barrier Beach-Deep Marsh
- Barrier Beach-Wooded Swamp Mixed Trees
- Barrier Beach-Coastal Beach
- Barrier Beach-Coastal Dune
- Barrier Beach-Marsh
- Barrier Beach-Salt Marsh
- Barrier Beach-Shrub Swamp
- Barrier Beach-Wooded Swamp Coniferous
- Barrier Beach-Wooded Swamp Deciduous
- Bog
- Coastal Bank Bluff or Sea Cliff
- Coastal Beach
- Coastal Dune
- Cranberry Bog
- Deep Marsh
- Barrier Beach-Open Water
- Open Water
- Rocky Intertidal Shore
- Salt Marsh
- Shallow Marsh Meadow or Fen
- Shrub Swamp
- Tidal Flat
- Wooded Swamp Coniferous
- Wooded Swamp Deciduous
- Wooded Swamp Mixed Trees

Property Tax Parcels

APPENDIX B:
Soil Map & Classification

Soil Map—Middlesex County, Massachusetts
(West Union Street, Ashland, MA)

Map Scale: 1:2,400 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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 23, Sep 12, 2023

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

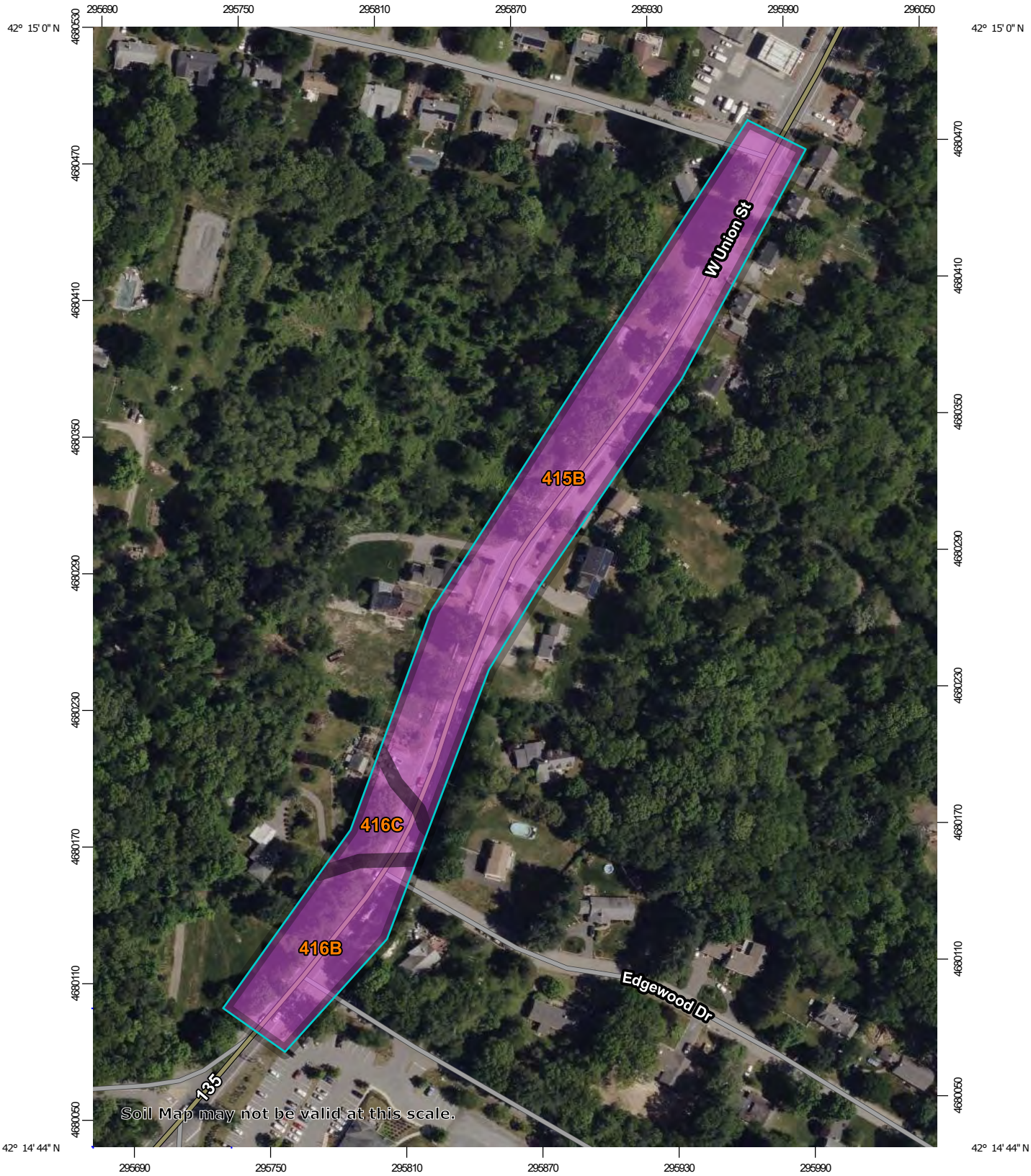
Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
415B	Narragansett silt loam, 3 to 8 percent slopes	2.8	71.7%
416B	Narragansett silt loam, 3 to 8 percent slopes, very stony	0.8	21.3%
416C	Narragansett silt loam, 8 to 15 percent slopes, very stony	0.3	7.0%
Totals for Area of Interest		**3.9**	**100.0%**

Hydrologic Soil Group—Middlesex County, Massachusetts
(West Union Street, Ashland, MA)



Map Scale: 1:2,400 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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 23, Sep 12, 2023

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

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
415B	Narragansett silt loam, 3 to 8 percent slopes	A	2.8	71.7%
416B	Narragansett silt loam, 3 to 8 percent slopes, very stony	A	0.8	21.3%
416C	Narragansett silt loam, 8 to 15 percent slopes, very stony	A	0.3	7.0%
Totals for Area of Interest			**3.9**	**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

APPENDIX C:
Stormwater Standards

STANDARD #8

CONSTRUCTION PERIOD POLLUTION PREVENTION AND
SEDIMENTATION EROSION CONTROL PLAN
WEST UNION STREET
SIDEWALK IMPROVEMENT PROJECT
ASHLAND, MASSACHUSETTS

I. INTRODUCTION

The maintenance program below provides for a general construction plan with specific requirements for the West Union Street Sidewalk Improvements Project and stormwater management controls. The program is based on the recommended standards presented in the DEP Stormwater Management Policy Handbook dated February 2008.

II. RESPONSIBILITY AND IMPLEMENTATION

The implementation and execution of this maintenance program shall be the responsibility of the construction period contractor.

Construction activities shall conform to the approved project construction plans referenced below and any other regulations or requirements of the Town of Ashland. Mulch filter tubes, silt sacks, and silt fence shall be installed prior to construction. All sediment controls shall be in place before construction shall begin and shall be properly maintained throughout the course of construction. During construction, silt laden runoff shall not be permitted.

All BMPs and sediment controls shall be inspected, by the contractor, on a weekly basis and within 24 hours of a rain event that generates more than ½" of rain in a 24-hour period.

Should any dewatering activities be required, the contractor shall make certain that all pumped water is free of sediment prior to discharging. The methods for removing any sediment shall be approved by the Town prior to any dewatering activities commencing.

III. MAINTENANCE AND INSPECTION SCHEDULE

Maintenance of Stormwater BMP's

The following temporary and permanent erosion and sediment control BMPs are to be implemented in the stormwater management system and shall be monitored and maintained to assure continuous and effective performance. All inspections shall be conducted in accordance with the required schedule indicated below. Maintenance and repair shall be performed as required or if the effectiveness of the BMP is diminished.

A. Catch Basins with Deep Sumps

Each catch basin shall be protected with silt sacks and stone, as shown on the details contained in the project plan set referenced below. All accumulated sediment, debris, etc., should be removed as necessary. All sediment and debris removed from the silt sacks or catch basins shall be properly handled and disposed of in accordance with local, state, and federal guidelines and regulations. Catch basins with deep sumps should also be inspected on monthly basis.

Any required maintenance or repairs noted during the inspection should be addressed immediately.

B. Compost Sock & Orange Construction Fence

Compost Socks shall be installed per project plan set referenced below and should be inspected regularly, as well as after each rainfall event, to ensure that they are intact and the area behind the tube is not filled with sediment. If there is excessive ponding behind the sock or accumulated sediments reach the top of the sock, an additional sock should be added on top or in front of the existing filter sock in these areas, without disturbing the soil or accumulated sediment. If the compost sock tube was overtopped during a storm event, the operator should consider installing an additional compost sock on top of the original, placing an additional compost sock further up the slope, or using an additional BMP, such as a compost blanket in conjunction with the tube(s). Construction fence shall be inspected regularly, and torn or damaged sections repaired immediately.

Maintenance requires the removal of sediment before it has accumulated to one-half of the above ground height of any perimeter control

C. 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. 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 (perform weekly if establishment is less than 80%)
b. Temporary mulching
c. Permanent seeding (perform weekly if establishment is less than 80%)
d. Placement of sod
e. Hydroseeding
f. Placement of Hay
g. Placement of Jute Netting

D. Preserve Natural Vegetation and Buffer Zones

Inspect limit of disturbance boundary for encroachment and Injury/exposure of tree roots. Inspections shall be conducted daily.

E. Dust Control

Apply/re-apply dust control measures to minimize dust from the site. Dust control activities shall be performed daily during dry weather.

Inspection Requirements

All temporary and permanent erosion and sediment controls shall be inspected by qualified personnel. Inspection Technician shall assess the conditions of the site, the effectiveness of any erosion and sediment controls and provide recommendations and directions to ensure

effective control of stormwater runoff, and suitable water quality discharge from construction activity.

Inspections shall include the entire area within the limit of disturbance of construction activity and stockpile/staging areas. A report shall be prepared identifying all areas of erosion, sediment accumulation, the condition and of all BMP's (structural and non-structural) and identify those in need of repair.

Maintenance

The site contractor is responsible for the installation and maintenance of all construction period erosion and sedimentation controls and BMP's. Prior to acceptance and approval of the completed sidewalk improvement project, the drainage catch basins shall be inspected, cleaned and silt sacks removed to ensure the system will function as designed.

If it is observed through the course of construction that modifications to the system are necessary to provide proper treatment the work shall be performed prior to the next storm event.

IV. REFERENCES

- Plan Set: West Union Street Sidewalk Improvement Project. Plans prepared by GCG Associates, Inc., and dated April 11, 2024.

STANDARD #9

STORMWATER AND DRAINAGE OPERATION AND MAINTENANCE PLAN

WEST UNION STREET
SIDEWALK IMPROVEMENT PROJECT
ASHLAND, MASSACHUSETTS

I. INTRODUCTION

The maintenance program below provides for a general construction plan with specific requirements for the West Union Street Sidewalk Improvements Project. The program is based on the recommended standards presented in the DEP Stormwater Management Policy Handbook dated February 2008.

II. RESPONSIBILITY AND IMPLEMENTATION

Owner/Operator: Ashland Department of Public Works
20 Ponderosa Road
Ashland, MA 01721

Owner Signature: Date:

The property owner is the owner of all components of the drainage system as listed in Section III below, until property ownership is transferred, at which the drainage system becomes the property of the successive owner. The implementation, execution, and financing of this maintenance program and emergency repairs shall be the responsibility of the property owner until property ownership is transferred, at which time maintenance and repairs shall be the responsibility of the successive owner.

III. MAINTENANCE AND INSPECTION SCHEDULE

A. Catch Basin with Deep Sump and Oil Hood

Catch basins with deep sumps should be inspected four (4) times per year and after every major storm event. All accumulated sediment, debris, organic matter, etc., should be removed during this time. All sediment and debris removed from the catch basins should be properly handled and disposed of in accordance with local, state, and federal guidelines and regulations. Any required maintenance or repairs noted during the inspection should be addressed immediately. During each inspection, the drains should be inspected for evidence of clogging, and if necessary, any maintenance shall be performed so that it functions as designed. The catch basin shall be cleaned twice per year, and when sediment in the bottom of the sump reaches 24 inches below the bottom of the outlet pipe. At a minimum, inspection of the catch basin shall be performed during the last week of April and the first week of October each year.

B. Grassed Slope

Grassed slope area adjacent to the roadway (where possible) should be mowed weekly between the months of May to September and a minimum of once per year in March or early April. Regular maintenance tasks include mowing, fertilizing, watering, pruning, weeding, and pest control. Maintain an average grass height of 4-6 inches to maintain the depth necessary to serve as a conveyance. Re-seed periodically to maintain the dense growth of grass vegetation.

C. Street Sweeping

Driveway, associated parking areas, and sidewalks adjacent to the roadway (where possible) should be swept by a street sweeper a minimum of twice per year. Street sweeping four times per year is recommended. Vacuum street sweepers are recommended.

IV. YEARLY MAINTENANCE BUDGET

	Activity	Cost	Frequency/year	Total
A.	Catch Basins	$100.00	6	$600.00
F.	Grassed Slope Mowing	$50.00	3	$150.00
G.	Street Sweeping	$300.00	2	$600.00
		Total	=	$1,350.00

V. This sidewalk is also part of the Town of Ashland municipal sidewalk system and maintained under the Town wide maintenance system as required by the US DEP's MS4 permit.

VI. REFERENCES

Plan Set: West Union Street – Sidewalk Improvement Project. Plans prepared by GCG Associates, Inc. and dated April 11, 2024.

Stormwater System Inspection Checklist

INSPECTOR'S NAME & DATE: NAME & ADDRESS OF FACILITY: GENERAL OBSERVATIONS (IS WATER FLOWING?): WEATHER:			
	Checked? (Y/N)	Maintenance Needed? (Y/N)	Maintenance Completed/ Observations & Remarks
Catch Basin with Deep Sump and Oil Hood • Inspect 4 times per year and after major storm events • Clean twice per year			
Look for damage or cracks to frame, grate, basin walls, or bottom. If found, repair or replace.			
Look for sediment and trash in catch basin sump. Clean out if sediment fills 60% of the sump or comes within 24" of outlet pipe.			
Look for blockages and vegetation obstructing pipe inlets and outlets. Remove blockages.			
Remove trash blocking grates or inlets; replace if broken.			
Grassed Slope • Should be mowed weekly between the months of May to September.			
Regular maintenance tasks include mowing, fertilizing, watering, pruning, weeding, and pest control. Maintain an average grass height of 4-6 inches to maintain the depth necessary to serve as a conveyance. Re-seed periodically to maintain the dense growth of grass vegetation.			
Street Sweeping • Street sweeping shall be performed at least 2 times per year.			
Remove any accumulated sediment, debris, organic matter, etc. with standard street sweeping equipment. All sweepings removed must be handled and disposed of properly according to the federal, state, and local regulations.			

Standard #10: All illicit discharges to the stormwater management system are prohibited.

I. STATEMENT

This site as shown on the plan titled “West Union Street, Sidewalk Improvement Project”, prepared by GCG Associates, Inc. and dated April 11, 2024 does not contain any illicit discharges, this was confirmed using visual screening as required by standard 10 of the “Massachusetts Stormwater Handbook” Vol. 1, Ch. 1 page 25. The project proponent, owner, or lessee (in perpetuity) must comply with local, state, and federal regulations for the discharge of illicit discharges from the site. Illicit discharges are discharges that are not entirely comprised of storm water. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities:

- Fire fighting
- Water line flushing
- Landscape irrigation
- Uncontaminated ground water
- Potable water sources
- Foundation drains
- Air conditioning condensation
- Footing drains
- Individual car washing
- Water used for street washing and water used to clean residential buildings without detergents

The project proponent, owner, or lessee (in perpetuity) shall adhere to this report on file with the Town of Ashland Conservation Commission.

APPENDIX D:
Project Abutter Information

April 9, 2024

To The Conservation Commission
West Union Street (96 to 162)
Abutters To Maps 19 and 23

PARCEL ID	PARCEL LOCATION	OWNER NAME 1	OWNER NAME 2	MAILING ADDRESS	CITY/TOWN	STATE	ZIP
014/019.0-0070-0000.0	103 WEST UNION ST	FIORENZI ANTHONY M & ALISON J	TRUSTEES OF THE FIORENZI FAMILY TRUST	43 LORRAINE DR	ASHLAND	MA	01721
014/019.0-0098-0000.0	8 INDIAN SPRING RD	BAILEY JASON R	REARDON ERIN E	8 INDIAN SPRING RD	ASHLAND	MA	01721
014/019.0-0099-0000.0	2 INDIAN SPRING RD	ANDREWS ASHLEY		2 INDIAN SPRING RD	ASHLAND	MA	01721
014/019.0-0100-0000.0	117 WEST UNION ST	LEI KUI	YANG MIN	117 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0101-0000.0	125 WEST UNION ST	TOWN OF ASHLAND		101 MAIN ST	ASHLAND	MA	01721
014/019.0-0103-0000.0	133 WEST UNION ST	TOWN OF ASHLAND		101 MAIN ST	ASHLAND	MA	01721
014/019.0-0104-0000.0	139 WEST UNION ST	TOWN OF ASHLAND		101 MAIN ST	ASHLAND	MA	01721
014/019.0-0105-0000.0	11 FRANKLAND RD	HICKS CYNTHIA O EYNON & ROBIN M	EYNON STUART B	P O BOX 294	ASHLAND	MA	01721
014/019.0-0120-0000.0	96 WEST UNION ST	BAUER JOSEPH A IV	TRUSTEE JOSEPH A BAUER IV TRUST	1018 PLEASANT ST	FRAMINGHAM	MA	01701
014/019.0-0220-0000.0	98 WEST UNION ST	DELANEY BARBARA M	MARY K DELANEY	98 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0221-0000.0	102 WEST UNION ST	PYNE DAVID P	DONNA M PYNE	102 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0222-0000.0	104 WEST UNION ST	LIMA LUIZAINE C PEREIRA	SEZINI FELIPE	104 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0223-0000.0	108 WEST UNION ST	QUIJADA MARLON ROBERTO		108 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0224-0000.0	110 WEST UNION ST	PELOSI ROBERT	TUSA-PELOSI TERRI L	110 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0225-0000.0	112 WEST UNION ST	STEPHENS CECELIA	FREEMAN THOMAS	112 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0226-0000.0	116 WEST UNION ST	KASBARIAN HENRI A	MICHELE S KASBARIAN	116 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0227-0000.0	120 WEST UNION ST	ALBERINI CHRISTOPHER E	ASHLEY K ALBERINI	120 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0228-0000.0	124 WEST UNION ST	PITARD KENNETH		124 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0229-0000.0	132 WEST UNION ST	MANNAN UMA R	BAWA D MANNAN	132 WEST UNION ST	ASHLAND	MA	01721
014/019.0-0230-0000.0	136 WEST UNION ST	VEGA ESDRAS L LOPEZ		136 WEST UNION ST	ASHLAND	MA	01721
014/023.0-0120-0000.0	151 WEST UNION ST	BLASAVAGE EDWARD S	URSALA BLASAVAGE	151 WEST UNION ST	ASHLAND	MA	01721
014/023.0-0121-0000.0	142 WEST UNION ST	KELLY JOSEPH	SARA HARDING KELLY	142 WEST UNION ST	ASHLAND	MA	01721
014/023.0-0122-0000.0	146 WEST UNION ST	DOUCETTE HAZEL E		146 WEST UNION ST	ASHLAND	MA	01721
014/023.0-0134-0000.0	150 WEST UNION ST	BROWN EDWARD		15 PLEASANT ST	SHERBORN	MA	01770
014/023.0-0135-0000.0	162 WEST UNION ST	TOWN OF ASHLAND	SENIOR/COMMUNITY CENTER	101 MAIN ST	ASHLAND	MA	01721

The above reflects the latest information available on our records.

Richard E. Ball, M.A.A.
Director of Assessing

4/10/24
Date

Town of Ashland
MASSACHUSETTS

Conservation Commission

NOTIFICATION TO ABUTTERS- Letter

A/An WPA Form 3 - NOI (Notice of Intent)
has been filed with the **Ashland Conservation Commission** pursuant to the *Wetlands Protection Act (M.G.L. c. 131 §40)*, *Wetlands Protection Act Regulations 310 C.M.R. 10.05 (4)(a)* and the *Wetlands Protection Bylaw Chapter 280 Section 9*, and/or the *Stormwater Management Regulations Chapter* 343.

The applicant is Town of Ashland, Department of Public Works

The proposed project is located at West Union Street, (from State Park Rd. to Indian Spring Rd.)

in Ashland, Massachusetts. The proposed project is:

The construction of approximately 1,380+/- linear feet of 5-foot wide sidewalk along the eastern side of West Union Street between State Park Road and Indian Spring Road, and the associated driveway aprons and signage in the Town of Ashland. Portion of the proposed work is within the 100' Bordering Vegatated Wetland (BVW) buffer area.

The filing may be examined by electronic means only. For more information, or to request a pdf filing submittal, please call 508-532-7924, and ask for the Conservation Agent.

The public hearing is scheduled for Monday, April 29, 2024
, at 7:05 p.m. (Note that all hearings are posted for 7:05 unless otherwise specified on the agenda. Hearings are taken in order of the posted agenda.). The hearing will be held using Zoom meetings, and the link for the meeting can be found on the posted agenda 48 hours before the hearing is scheduled to meet. Otherwise, further information of the public hearing can be obtained from the Ashland Conservation Commission, by calling 508-532-7924.

APPENDIX E:
Wetland Report

Holmes Engineering
Byron R. Holmes, P.E.
Civil Engineering and Consulting

622 Berkley Street
Berkley, MA 02779

Phone: 508-880-6535
Email: Holmes@holmes.net

WETLAND NARRATIVE FOR PORTION OF WEST UNION STREET - ROUTE 135 ASHLAND, MASSACHUSETTS

1. Location:

The subject parcel is a mostly residential section of West Union Street, Route 135, in Ashland, Massachusetts. This review consisted of portions of property adjacent to the paved roadway between Frankland Road to Indian Spring Road.

2. Wetlands Review:

At the request of the GCG Associates, Inc., a wetlands investigation was undertaken by David Duranleau, Wetlands Specialist and Byron Holmes, P.E. This evaluation consisted of a field reconnaissance along both sides of West Union Street.

On April 6, 2024, the property was traversed for the purpose of determining locations that would be considered resource areas under the Massachusetts Wetlands Act. Plant species that were used to delineate the wetland edge included those listed in the Massachusetts Wetlands Act, those having a wetland indicator status of Obligate (OBL), and those having a status of Facultative Wet (FACW, FACW+, FACW-) or Facultative (FAC, FAC+). Other indicators were also utilized, including water marks on vegetation, mound and pool microtopography, evidence of recent or periodic flooding, wetland drainage features, exposed or shallow root systems and water-stained leaves.

Wetlands Delineation flags were placed along the edge of the resource area found. The individual wetland flags were subsequently located by field survey and shown on a plan by GCG Associates, Inc.

Predominant species indicate plants and trees that make up over 50% of the total vegetation. Areas with over 50% wetlands vegetation are within the delineated wetland locations. Areas with less than 50% wetlands vegetation are outside the delineated wetland locations.

Indicators are from National List of Plant Species That Occur in Wetlands published by the U.S. Fish and Wildlife Service, National Wetlands Inventory.

Category	Abbreviation	Descriptor	Frequency in Wetlands
Obligate	OBL	Almost always	>99%
Facultative Wetland	FACW	Usually	67% - 99%
Facultative	FAC	Equally likely to occur	34% - 66%
Facultative Upland	FACU	Seldom	1% - 33%
Upland	UPL	Rarely	<1%

Wetlands were found in an area on the west side of West Union Street, predominately at Number 125 and Number 133. According to assessor records, both of these parcels are owned by the Town of Ashland. Wetland delineation flags numbered A-1 through A-10 were placed along the wetland edge as it runs along West Union Street. These do not encompass the entire resource area, which extends a considerable distance westerly and is fed from 133 West Union and beyond via topography and a hydraulic connection. The town drainage system along West Union Street also has a pipe that discharges directly into the wetland.

In addition to the DEP wetlands map and the USGS map, other pertinent mapping also was consulted as follows:

- 100-year flood elevation as established by the Federal Emergency Management Agency (FEMA)
- Natural Heritage and Endangered Species Program (NHESP) Estimated Habitat of Rare Wildlife
- NHESP Priority Habitat of Rare Species
- NHESP Certified Vernal Pools and Potential Vernal Pools
- Areas of Critical Environmental Concern

A data sheet with plant species for the above wetland area is presented on the following page.

WETLAND RESOURCE DATA SHEET

Wetland Resource Area: Flags A-1 through A-10

Location: West Union Street from Frankland Road to Indian Spring Road

Fed by: Stormwater runoff from surrounding topography and street drain

Predominant Wetland Species:

Common Name ***Scientific Name***	**Indicator**
Green Ash *Fraxinus pennsylvanica*	FACW
Common Greenbrier *Smilax bona-nox*	FAC
Musclewood *Carpinus caroliniana*	FAC
Yellow Birch *Betula alleghaniensis*	FAC

Standing water, plus running water from storm drain to wetland

Predominate Upland Species:

Common Name ***Scientific Name***	**Indicator**
Japanese Honeysuckly *Lonicera japonica*	FACU
Black Cherry *Prunus serotina*	FACU

Upland slope beyond wetland edge, including lawns and roadway

FEMA 100-Year Flood Elevation:	Yes __	No ✓
NHESP Estimated Habitat:	Yes __	No ✓
NHESP Priority Habitat:	Yes __	No ✓
NHESP Vernal Pools:	Yes __	No ✓
Areas of Critical Environmental Concern:	Yes __	No ✓

III REFERENCES

West Union Street Sidewalk Improvement Project Plan Set