Date: November, 2021 Project: 80 Marginal Street - Notice of Intent

# Copper Forge Partners, LLC 80 Marginal Street

# **NOTICE OF INTENT**

November, 2021



Prepared by:



50 Cross Street | Winchester, Massachusetts | 01890 | t 781.756.0001 f 781.756.000

WDG Project No.: 1679

**Project: 80 Marginal Street - Notice of Intent** 

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### 1.0 Introduction

On behalf of Copper Forge, LLC, (the "Applicant"), Waterfield Design Group, Inc. is pleased to submit this Notice of Intent (NOI) application to the City of Boston Environmental Department (BED) for an Order of Conditions authorizing the construction a condominium building at 80 Marginal Street (the "Project"). This NOI has been prepared in accordance with the Massachusetts Wetlands Protection Act (MGL C.131 §40) and Regulations (310 CMR 10.00) (the "Act") and the requirements of the City of Boston Environmental Department.

The project consists of the demolition of an existing parking area within the Land Subject to Coastal Storm Flowage (LCSF) adjacent to the Boston Inner Harbor.

## 2.0 Site Background

Per City of Boston Filing with the Boston Conservation Commission

Site: including the type and boundaries of resource areas, which must be indicated on plans and specifications as required under the Act, and

The project site is currently owned by Copper Forge, LLC. The total site consists of  $4,620\pm$  SF (*Appendix B* -USGS Site Locus Map). The site is currently almost entirely comprised of pavement. The type of resources the 100 Year FEMA Coastal Flood Plain. The entire lot is within the 100 Year Flood Plain as shown on the plans.

### 1. Project Description

The description must indicate:

1. all wetland resource areas,

The Land Subject to Coastal Storm Flowage (100 Year FEAM Coastal Flood Plain) is the only resource area the project is located in.

### 2. how the performance standards specific to those resource areas will be met,

The proposed project is in the Land Subject to Coastal Storm Flowage only. The building is designed so that all habitable space is above the Land Subject to Coastal Storm Flowage. All mechanical and electrical equipment is elevated or access is restricted to elevations above the Land Subject to Coastal Storm Flowage elevation.

3. a consideration of the effect that projected sea level rise, changes in storm intensity and frequency, and other consequences of climate change may have on the resource areas and proposed activities

Consideration of the effect of projected sea level rise, changes in storm intensity and frequency and other consequences of climate change have been taken into account in the project by locating

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the habitable space at elevation 23.85 (BCB), which is 7.39' higher that the Flood plain elevation 16.46 (BCB).

### 4. any construction equipment and material involved, and

Typical building construction equipment and material will be involved in the project: Construction Equipment: Excavators, backhoes, dump trucks, cranes, etc. Construction Materials: Steel, wood, concrete, glass

For more detail see Architectural plans Attachment B.

# 5. the measures that will be implemented to protect the wetland resource areas and mitigate impacts.

Silt sacks in the adjacent catch basins will be utilities to protect the wetland resource areas. If flood conditions are anticipated the construction site will be follow the Flood Preparation Plan detailed in the Stormwater Report.

The applicant must also include a detailed narrative of all other local permits, variances, or approvals required to be obtained with respect to the activity or work that is the subject of the application. The description must indicate which permits, variances, or approvals have been applied for or already obtained. Any information included in the application for such a permit, variance, or approval which is necessary to describe the effect of the proposed activity on the environment shall also be provided to the Commission.

The proposed project is absent of the following approvals: Conservation Commission, BPDA design review, and building permit being issued by ISD. The project will be submitted for review to BPDA design review and the building permit with ISD once the project has Conservation Commission approval to building within Land Subject to Coastal Storm Flowage.

The applicant must also include narrative on how climate change will impact the entire property regardless of whether climate change will have an immediate impact on the project in the proposal. This must include how the applicant plans to integrate climate change and adaptation planning considerations into their project to promote climate resilience to protect and promote Resource 7 Area Values and functions into the future, addressing climate equity and environmental justice, as well as an alternatives analysis describing all of the climate resiliency measures that could be taken and a reasoning as to why they are not feasible.

See Sustainability/Climate Change Approach in Appendix I and Low Impact Development Measures in Stormwater Report.

### 3.0 Site Description

The subject parcel is approximately 4,620± SF in size and located at 80 Marginal Street in Boston.

The site is a parking lot with chain link fence. The site is abutted to the east by a parking lot, to the west by a residential building, to the north by Haynes Street, and to the south by Marginal Street.

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The entire site is previously disturbed. The overall site gradient slopes from the south to north from the Marginal Street to Haynes Street.

See Attachment A - Stormwater Report.

### 4.0 Wetland Resource Areas

### 4.1 Land Subject to Coastal Storm Flowage

According to 310 CMR 10.04, Land Subject to Coastal Storm Flowage means land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater.

The entire property is within the 100-year flood elevation as defined by FEMA FIRM Map 250286 Panel 0081J. Elevation 10 NAVD (16.46 Boston City Base).

See Appendix D.

### 4.2 Natural Heritage and Endangered Species Program

No Natural Heritage or Endangered Species habitats are found at the site

### 5.0 Proposed Work

Per City of Boston Filing with the Boston Conservation Commission

"Proposed work: including all effects upon resource areas and measures and designs proposed to meet the performance standards described in the Wetlands Protection Act Regulations, 310 Code of Massachusetts Regulations (CMR) 10.00, (the Regulations) and the Local Wetlands Ordinance specific to each applicable resource area."

The applicant is proposing to remove all existing pavement from the site at 80 Marginal Street and construct a condominium building with at grade parking and 398.7 cubic feet of underground infiltration chambers and crushed stone under the at grade parking areas on site. The new buildings will have new utility hook ups from Haynes Street.

The proposed site is within the 100 Year FEMA Flood Zone. The proposed work will have all habitable space above the 100 Year Flood Zone. The at grade floor will be used for parking and access to the first floor elevated above the flood plain. There is a transformer required by the electrical company which will be located outside of the building on the lot. The transformer will be on a concrete pad which will elevate the transformer above the flood plain.

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Mechanical and electrical equipment will be located at the at grade parking floor. The mechanical and electrical equipment will be in a room with a steps to the room. The access to the room will be located above the flood plain elevation.

See Attachment A – Stormwater Report for construction sequencing.

See architectural plans in Attachment B.

### 5.1 Demolition

The applicant will remove the existing pavement at the site. Excavate for the new foundation, at grade parking, and infiltration areas.

Silt sacks will be provided in all catch basins along Haynes Street and Marginal Street.

### 5.2 Site Preparation/Stormwater Management Structures

The 398.7 underground chamber infiltration are being reviewed by BWSC, will treat the first inch of runoff and reduce the runoff from the site for up to the 100 year storm event.

See Attachment A - Stormwater Report.

## 6.0 Regulatory Compliance

Project activities will be located within previously developed Land Subject to Coastal Storm Flowage.

### 6.1 Land Subject to Coastal Storm Flowage

The entire site is within Land Subject to Coastal Storm Flowage. The building will be designed to meet the applicable building code standards regarding building design within the Land Subject to Coastal Storm Flowage. No compensatory flood storage is required for Land Subject to Coastal Storm Flowage. The mechanical and electrical rooms have access elevated above the 100 year flood elevation and therefore will be out of the Land Subject to Coastal Storm Flowage.

### 7.0 Sedimentation Controls

An erosion and sediment control program will minimize the risk of impacts to the resource areas during construction of the project. The program incorporates Best Management Practices (BMPs) specified in the guidelines developed by the DEP and complies with the requirements of

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the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from construction activities. These measures include the installation of temporary erosion and sediment controls and construction sequencing. Areas of exposed soil will be kept to a minimum. Details of the erosion and sediment control measures proposed for site preparation and development phases will are included in the attached Stormwater Report (Attachment A – Stormwater Report).

### 8.0 Construction Sequence

See Attachment A – Stormwater Report for construction sequencing.

### 9.0 Conclusion

The proposed location of the site is within Land Subject to Coastal Storm Flowage in a previously disturbed location with pavement. The proposed re-development of the site from pavement to a building with at grade parking and infiltration to treat the stormwater runoff will improve the site to a greater extent than the potential site alternatives. The project has been designed to comply with the performance standards of the City of Boston Wetland Ordinance, Massachusetts Wetland Protection Act and the requirements of the BWSC.

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# Appendix A

DEP NOI Form 3



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands

# WPA Form 3 - Notice of Intent

A. General Information

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

)	Provided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Boston

g. Zip Code

c. City/Town Fee Paid

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.

1.	Project Location (Note: electronic filers will click on button to locate project site):		
	80 Marginal Street	Boston	02128
	a. Street Address	b. City/Town	c. Zip Code
	1 - 19 1 1 1 9 1 -	42°21'59"	71°02'17"
	Latitude and Longitude:	d. Latitude	e. Longitude
		0104480000	
	f. Assessors Map/Plat Number	g. Parcel /Lot Number	
2.	Applicant:		
	Paul	Marks	
	a. First Name	b. Last Name	
	Copper Forge Partners, LLC		
	c. Organization		
	7 Columbus Terrace, Unit 2		
	d. Street Address		
	Brookline	MA	02446
	e. City/Town	f. State	g. Zip Code
	617-731-9114	PaulM@apartmentseastbo	oston.com
	h. Phone Number i. Fax Number	j. Email Address	
3.	Property owner (required if different from applic Same as Above	cant):	than one owner
	a. First Name	b. Last Name	

4. Representative (if anv):

c. Organization

d. Street Address

h. Phone Number

a. Total Fee Paid

e. City/Town

Jacob	Murray			
a. First Name	b. Last Name	b. Last Name		
The Waterfield Design Group, Inc.				
c. Company				
50 Cross Street				
d. Street Address				
Winchester	MA	01890		
e. City/Town	f. State	g. Zip Code		
781-756-0001	jmurray@wdgrp.com\$2,			
h. Phone Number i. Fax Number	j. Email address			

f. State

j. Email address

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\$512.50

b. State Fee Paid

i. Fax Number

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



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Prov	ided by MassDEP:
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	Boston
	City/Town

Α.	A. General Information (continued)				
6.	6. General Project Description:				
	Construction of a five-story condominium - with 7 units on an existing paved parking area within 100 Year Flood Zone.				
7a.	Project Type Checklist: (Limited Project Types see	Sec	ction 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)?				
	If yes, describe which limite	ed p	project applies to this project. (See 310 CMR list and description of limited project types)		
	2. Limited Project Type				
	If the proposed activity is eligible to be treated as a CMR10.24(8), 310 CMR 10.53(4)), complete and a Project Checklist and Signed Certification.				
8.	Property recorded at the Registry of Deeds for:				
	Suffolk	_			
	a. County 56436	13	Certificate # (if registered land)		
	c. Book		Page Number		
В.	Buffer Zone & Resource Area Impa	act	S (temporary & permanent)		
1.	Buffer Zone Only – Check if the project is locate				
2.	<ul> <li>Vegetated Wetland, Inland Bank, or Coastal Resource Area.</li> <li>☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).</li> </ul>				
	Check all that apply below. Attach narrative and an project will meet all performance standards for each	of '	the resource areas altered, including		

standards requiring consideration of alternative project design or location.



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

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

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	1. square feet	2. square feet		
	Waterways	3. cubic yards dredged			
Resour	rce Area	Size of Proposed Alteration	Proposed Replacement (if any)		
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 available) - spec	cify coastal or inland		
2.	2. Width of Riverfront Area (check one):				
	25 ft Designated Densely Developed Areas only				
	☐ 100 ft New agricult	ural projects only			
	☐ 200 ft All other proj	ects			
3. Total area of Riverfront Area on the site of the proposed project:					
	Square reet				
4. Proposed alteration of the Riverfront Area:					
a. total square feet between 100 ft. and 200 ft.					
5.	Has an alternatives analysi	s been done and is it attached to the	is NOI? Yes No		
6.	Was the lot where the activ	ity is proposed created prior to Aug	ust 1, 1996?		
▼ 0 1   D   (0 0.10   0.10   10   0.5   1					

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

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



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## 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.

4.

5.

Resource Area		Size of Proposed Alteration	Proposed Replacement (if any)
а. 🗌	Designated Port Areas	Indicate size under Land Und	er the Ocean, below
b. 🗌	Land Under the Ocean	1. square feet	_
		2. cubic yards dredged	
с. 🗌	Barrier Beach	Indicate size under Coastal Be	aches and/or Coastal Dunes below
d. 🗌	Coastal Beaches	1. square feet	2. cubic yards beach nourishment
е. 🗌	Coastal Dunes	1. square feet	2. cubic yards dune nourishment
		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		nks, inland Bank, Land Under the der Waterbodies and Waterways,
		1. cubic yards dredged	_
I. 🛛	Land Subject to	4,620	
	Coastal Storm Flowage	1. square feet	_
_	estoration/Enhancement	for the down on the control of the c	Lance and the second state of the second state
		f restoring or enhancing a wetland tered in Section B.2.b or B.3.h ab	
	nt here.	tered in Occion B.2.5 or B.5.11 ab	ove, prease effici the additional
a. squar	e feet of BVW	b. square feet of	Salt Marsh
☐ Pr	oject Involves Stream Cro	ssings	
a. numb	er of new stream crossings	b. number of rep	placement stream crossings



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B 4	Managebuggette Wetlands Dretection Act M.C.L. a. 121, \$40					
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40			Boston			
_	Other A cell cells Other deads and F	<b>.</b>	City/Town			
C.	Other Applicable Standards and F	kequirements				
	☐ 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).					
Str	eamlined Massachusetts Endangered Spec	ies Act/Wetlands P	rotection Act Review			
1.	Is any portion of the proposed project located in <b>E</b> st the most recent Estimated Habitat Map of State-Li Natural Heritage and Endangered Species Program Massachusetts Natural Heritage Atlas or go to <a href="http://maps.massgis.state.ma.us/PRI_EST_HAB/v">http://maps.massgis.state.ma.us/PRI_EST_HAB/v</a>	sted Rare Wetland Wild m (NHESP)? To view h	dlife published by the			
	a.  Yes No If yes, include proof of n	nailing or hand delive	ry of NOI to:			
	Online 2021 b. Date of map  Natural Heritage and E Division of Fisheries at 1 Rabbit Hill Road Westborough, MA 015		gram			
	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 Endangere	ed Species Review*				
	1. Percentage/acreage of property to be a	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					

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<sup>\*</sup> Some projects not in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/maendangered-species-act-mesa-regulatory-review).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

<sup>\*\*</sup> 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.



3.

# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands

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

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

(c) MESA filing fee (fee information available at <a href="https://www.mass.gov/how-to/how-to-file-for-">https://www.mass.gov/how-to/how-to-file-for-</a>					
Make	<u>a-mesa-project-review</u> ). Make check payable to "Commonwealth of Massachusetts - NHESP" and <i>mail to NHESP</i> at above address				
Project	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, <a href="https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat">https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat</a> ; 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.					
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 Shorthe Cape &	e - Cohasset to Rhode Island border, and Islands:	North Shore - Hull to New Hampshire border:			
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  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.					
If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).					

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

	4.	Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
Online Users: Include your document		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.
transaction number		b. ACEC
(provided on your receipt page) with all	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?
supplementary information you		a. 🗌 Yes 🔯 No
submit to the Department.	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?
		<ul> <li>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:</li> <li>1.  Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)</li> </ul>
		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.
		<b>Online Users:</b> Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.
		1. Subject to SGS 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.)

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.

2.



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands

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Prov	ided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Boston City/Town

D. Additional information toolic	D.	<b>Additional</b>	<b>Information</b>	(cont'd
----------------------------------	----	-------------------	--------------------	---------

Add	litional Information (cont'd)	
3.		ource area boundary delineations (MassDEP BVW cability, Order of Resource Area Delineation, etc.), edology.
4. 🛛	List the titles and dates for all plans and oth	ner materials submitted with this NOI.
BV	VSC Site Plan #XXXXX	
a. F	Plan Title	
Th	e Waterfield Design Group, Inc.	Craig Miller
	Prepared By	c. Signed and Stamped by
11	-3-21	1"=10'
d. F	Final Revision Date	e. Scale
f. A	dditional Plan or Document Title	g. Date
5. 📙	If there is more than one property owner, p listed on this form.	lease attach a list of these property owners not
6. 🗌	Attach proof of mailing for Natural Heritage	and Endangered Species Program, if needed.
7. 🗌	Attach proof of mailing for Massachusetts I	Division of Marine Fisheries, if needed.
в. 🛛	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 distri	ct
	of the Commonwealth, federally recognized Indian tribe housing authority, municipal hous	ing
	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:

3987 & 3988	11/3/21		
2. Municipal Check Number	3. Check date		
3989	11/3/21		
4. State Check Number	5. Check date		
RMD Management Association, LLC			
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

Provided by Mass	eDEP:
MassDEP F	
Document T Boston	ransaction Number
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

2. Date

3. Signature of Property Owner (if different)

4. Date

4. Date

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 Welland 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

A. Applicant Information

## **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





. Location of Project	il.		
80 Marginal Stree	t	Boston	
a. Street Address		b. City/Town	
		\$512.50	
c. Check number		d. Fee amount	
Applicant Mailing	Address:		
Paul		Marks	
a. First Name		b. Last Name	
Copper Forge Par	tners, LLC		
c. Organization			
7 Columbus Terra	ice, Unit 2		
d. Mailing Address			
Brookline		MA	02446
e. City/Town		f. State	g. Zip Code
617-731-9114		PaulM@apartmentseastb	oston.com
h. Phone Number	i. Fax Number	j. Email Address	
Property Owner (i	f different):		
Same as above			
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	i. Email Address	

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

### B. Fees

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
Construction of one building development	1	\$1,050	\$1,050
		otal Project Fee /Fee Payments:	
	Total	Project Fee:	\$1,050 a. Total Fee from Step 5
	State share	e of filing Fee:	\$512.50 b. 1/2 Total Fee <b>less</b> \$12.50
	City/Town shar	e of filling Fee:	City Has Own Filing Fees

# 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.

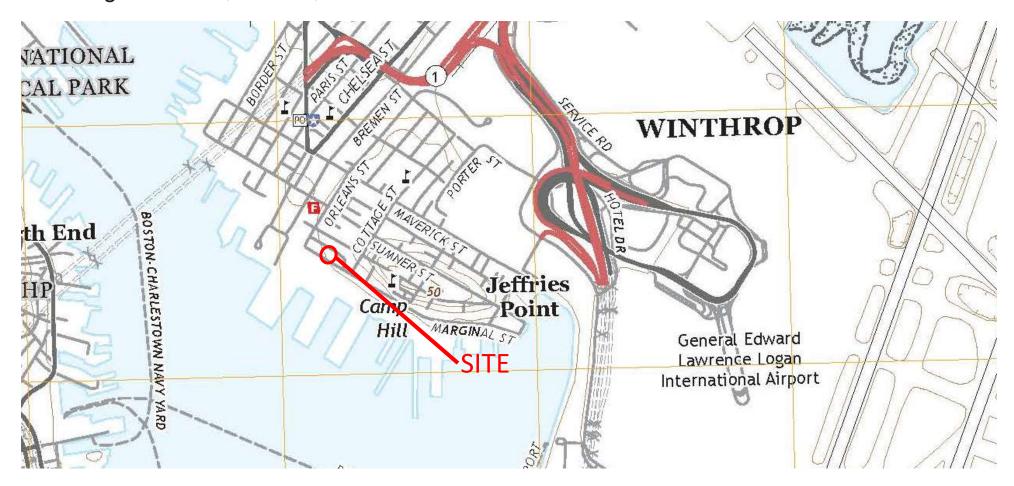
**To MassDEP Regional Office** (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

**Project: 80 Marginal Street - Notice of Intent** 

# Appendix B

USGS Site Locus Map

Regional Locus 80 Marginal Street, Boston, MA



**Project: 80 Marginal Street - Notice of Intent** 

# Appendix C

Copy of Filing Fees

**Project: 80 Marginal Street - Notice of Intent** 

# Appendix D

Abutter Notification





# AFFIDAVIT OF SERVICE FOR ABUTTER NOTIFICATION

# Under the Massachusetts Wetlands Protection Act and Boston Wetlands Ordinance

one week prior to the pub paragraph of Massachuset	_, hereby certify under pains and penalties of perjury that that at least c hearing, I gave notice to abutters in compliance with the second s General Laws Chapter 131, section 40, and the DEP Guide to Abutter 994, in connection with the following matter:
and/or the Bostor	was filed under the Massachusetts Wetlands Protection Act Wetlands Ordinance by for
	·
The Abutter Notification F attached to this Affidavit o	r, the list of abutters to whom it was given, and their addresses are Service.
 Name	





# City of Boston Mayor Kim Janey

# NOTIFICATION TO ABUTTERS BOSTON CONSERVATION COMMISSION

In accordance with the Massachusetts Wetlands Protection Act, Massachusetts General Laws Chapter 131, Section 40, and the Boston Wetlands Ordinance, you are hereby notified as an abutter to a project filed with the Boston Conservation Commission. A. \_\_\_\_\_ has filed a Notice of Intent with the Boston Conservation Commission seeking permission to alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, section 40) and Boston Wetlands Ordinance. B. The address of the lot where the activity is proposed is \_\_\_\_\_. C. The project involves \_\_\_\_\_\_. D. Copies of the Notice of Intent may be obtained by contacting the Boston Conservation Commission at CC@boston.gov. E. Copies of the Notice of Intent may be obtained from \_\_\_\_\_ by contacting them at \_\_\_\_\_, \_\_\_\_, between the hours of \_\_\_\_\_, \_\_\_\_, F. In accordance with the Commonwealth of Massachusetts Executive Order Suspending Certain Provisions of the Open Meeting Law, the public hearing will take place virtually at https://zoom.us/j/6864582044. If you are unable to access the internet, you can call 1-929-205-6099, enter Meeting ID 686 458 2044 # and use # as your participant ID. G. Information regarding the date and time of the public hearing may be obtained from the **Boston** Conservation Commission by emailing CC@boston.gov or calling (617) 635-3850 between the hours of 9 AM to 5 PM, Monday through Friday. NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in the Boston Herald. NOTE: Notice of the public hearing, including its date, time, and place, will be posted on www.boston.gov/public-notices and in Boston City Hall not less than forty-eight (48) hours in advance. If you would like to provide comments, you may attend the public hearing or send written comments to CC@boston.gov or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201 NOTE: If you would like to provide comments, you may attend the public hearing or send written comments to CC@boston.gov or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201 NOTE: You also may contact the Boston Conservation Commission or the Department of Environmental Protection Northeast Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call: the Northeast Region: (978) 694-3200.

CC@boston.gov by 12 PM the day before the hearing.

NOTE: If you plan to attend the public hearing and are in need of interpretation, please notify staff at

# NOTIFICACIÓN PARA PROPIETARIOS Y/O VECINOS COLINDANTES COMISIÓN DE CONSERVACIÓN DE BOSTON

De conformidad con la Ley de protección de los humedales de Massachusetts, el Capítulo 131, Sección 40 de las Leyes Generales de Massachusetts y la Ordenanza sobre los humedales de Boston, por la presente queda usted notificado como propietario o vecino colindante de un proyecto presentado ante la Comisión de Conservación de Boston.

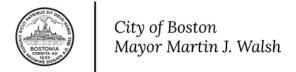
- A. **NAME OF APPLICANT** ha presentado una solicitud a la Comisión de Conservación de Boston pidiendo permiso para modificar una zona sujeta a protección en virtud de la Ley de protección de los humedales (Leyes generales, capítulo 131, sección 40) y la Ordenanza sobre los humedales de Boston.
- B. La dirección del lote donde se propone la actividad es ADDRESS OF PROJECT LOCATION.
- C. El proyecto consiste en **PROJECT DESCRIPTION**.
- D. Se pueden obtener copias del Aviso de Intención comunicándose con la Comisión de Conservación de Boston en <u>CC@boston.gov</u>.
- E. Las copias de la notificación de intención pueden obtenerse en **APPLICANT OR REPRESENTATIVE & CONTACT INFORMATION** entre las **HOURS**, **DAYS**.
- F. De acuerdo con el Decreto Ejecutivo de le Mancomunidad de Massachusetts que suspende ciertas disposiciones de la Ley de reuniones abiertas, la audiencia pública se llevará a cabo virtualmente en <a href="https://zoom.us/j/6864582044">https://zoom.us/j/6864582044</a>. Si no puede acceder a Internet, puede llamar al 1-929-205-6099, ingresar ID de reunión 686 458 2044 # y usar # como su ID de participante.
- G. La información relativa a la fecha y hora de la audiencia pública puede solicitarse a la **Comisión** de **Conservación de Boston** por correo electrónico a <u>CC@boston.gov</u> o llamando al (617) 635-4416 entre las 9 AM y las 5 PM, de lunes a viernes.

NOTA: La notificación de la audiencia pública, incluida su fecha, hora y lugar, se publicará en el **Boston Herald** con al menos cinco (5) días de antelación.

NOTA: La notificación de la audiencia pública, incluida su fecha, hora y lugar, se publicará en <a href="https://www.boston.gov/public-notices">www.boston.gov/public-notices</a> y en el Ayuntamiento de Boston con no menos de cuarenta y ocho (48) horas de antelación. Si desea formular comentarios, puede asistir a la audiencia pública o enviarlos por escrito a <a href="https://cceapston.gov">CC@boston.gov</a> o al Ayuntamiento de Boston, Departamento de Medio Ambiente, Sala 709, 1 City Hall Square, Boston, MA 02201.

NOTA: También puede comunicarse con la Comisión de Conservación de Boston o con la Oficina Regional del Noreste del Departamento de Protección Ambiental para obtener más información sobre esta solicitud o la Ley de Protección de Humedales. Para comunicarse con el DEP, llame a la Región Noreste: (978) 694-3200.





NOTA: si tiene previsto asistir a la audiencia pública y necesita servicios de interpretación, sírvase informar al personal en <a href="CC@boston.gov">CC@boston.gov</a> antes de las 12 PM del día anterior a la audiencia.



### **BABEL NOTICE**

### English:

**IMPORTANT!** This document or application contains <u>important information</u> about your rights, responsibilities and/or benefits. It is crucial that you understand the information in this document and/or application, and we will provide the information in your preferred language at no cost to you. If you need them, please contact us at <u>cc@boston.gov</u> or 617-635-3850.

Spanish:

¡IMPORTANTE! Este documento o solicitud contiene <u>información importante</u> sobre sus derechos, responsabilidades y/o beneficios. Es fundamental que usted entienda la información contenida en este documento y/o solicitud, y le proporcionaremos la información en su idioma preferido sin costo alguno para usted. Si los necesita, póngase en contacto con nosotros en el correo electrónico <a href="mailto:cœboston.gov">cœboston.gov</a> o llamando al 617-635-3850.

### Haitian Creole:

**AVI ENPÒTAN!** Dokiman oubyen aplikasyon sa genyen <u>enfòmasyon ki enpòtan</u> konsènan dwa, responsablite, ak/oswa benefis ou yo. Li enpòtan ke ou konprann enfòmasyon ki nan dokiman ak/oubyen aplikasyon sa, e n ap bay enfòmasyon an nan lang ou prefere a, san ou pa peye anyen. Si w bezwen yo, tanpri kontakte nou nan <u>cc@boston.gov</u> oswa 617-635-3850.

#### Traditional Chinese:

**非常重要!**這份文件或是申請表格包含關於您的權利,責任,和/或福利的重要信息。請您務必完全理解 這份文件或申請表格的全部信息,這對我們來說十分重要。我們會免費給您提供翻譯服務。如果您有需要 請聯糸我們的郵箱 <u>cc@boston.gov</u> 電話# 617-635-3850..

### Vietnamese:

**QUAN TRỌNG!** Tài liệu hoặc đơn yêu cầu này chứa **thông tin quan trọng** về các quyền, trách nhiệm và/hoặc lợi ích của bạn. Việc bạn hiểu rõ thông tin trong tài liệu và/hoặc đơn yêu cầu này rất quan trọng, và chúng tôi sẽ cung cấp thông tin bằng ngôn ngữ bạn muốn mà không tính phí. Nếu quý vị cần những dịch vụ này, vui lòng liên lạc với chúng tôi theo địa chỉ **cc@boston.gov** hoặc số điện thoại 617-635-3850.

#### Simplified Chinese:

**非常重要!**这份文件或是申请表格包含关于您的权利,责任,和/或福利的重要信息。请您务必完全理解这份文件或申请表格的全部信息,这对我们来说十分重要。我们会免费给您提供翻译服务。如果您有需要请联糸我们的邮箱 <u>cc@boston.gov</u> 电话# 617-635-3850.

# CITY of BOSTON

Cape Verdean Creole:

INPURTANTI! Es dukumentu ó aplikason ten informason inpurtanti sobri bu direitus, rasponsabilidadis i/ó benefísius. É krusial ki bu intendi informason na es dukumentu i/ó aplikason ó nu ta da informason na língua di bu preferênsia sen ninhun kustu pa bó. Si bu prisiza del, kontata-nu na cc@boston.gov ó 617-635-3850.

Arabic:

مهم! يحتوي هذا المستند أو التطبيق على معلومات مهمة حول حقوقك ومسؤولياتك أو فوائدك. من الأهمية أن نقهم المعلومات الواردة في هذا المستند أو التطبيق. سوف نقدم المعلومات بلغتك المفضلة دون أي تكلفة عليك. إذا كنت في حاجة إليها، يرجى الاتصال بنا على cc@boston.gov أو. 617-635

Russian:

**ВАЖНО!** В этом документе или заявлении содержится важная информация о ваших правах, обязанностях и/или льготах. Для нас очень важно, чтобы вы понимали приведенную в этом документе и/или заявлении информацию, и мы готовы бесплатно предоставить вам информацию на предпочитаемом вами языке. Если Вам они нужны, просьба связаться с нами по адресу электронной почты <u>cc@boston.gov</u>, либо по телефону 617-635-3850. Portuguese:

**IMPORTANTE!** Este documento ou aplicativo contém <u>Informações importantes</u> sobre os seus direitos, responsabilidades e/ou benefícios. É importante que você compreenda as informações contidas neste documento e/ou aplicativo, e nós iremos fornecer as informações em seu idioma de preferência sem nenhum custo para você. Se precisar deles, fale conosco: cc@boston.gov ou 617-635-3850.

French:

**IMPORTANT!** Ce document ou cette demande contient des <u>informations importantes</u> concernant vos droits, responsabilités et/ou avantages. Il est essentiel que vous compreniez les informations contenues dans ce document et/ou cette demande, que nous pouvons vous communiquer gratuitement dans la langue de votre choix. Si vous en avez besoin, veuillez nous contacter à cc@boston.gov ou au 617-635-3850.









#### CITY of BOSTON

MENU

 $(\angle)$ 

TRANSLATE O

# COVID-19 INFORMATION (HTTPS://WWW.BOSTON.GOV/NEWS/CORONAVIRUS-DISEASE-

COVID-19-BOSTON)

## **ABUTTER MAILING LIST GENERATOR**

Search for an address or enter a parcel ID below.

#### **ADDRESS SEARCH**

Search for an address.

#### PARCEL SEARCH

0104480000

SEARCH

#### SELECTED PARCEL

0104480000 - undefined

Enter a buffer distance and a the mailing list csv will appear below.

#### **BUFFER DISTANCE (FEET)**

300

**BUFFER PARCEL** 

WWW.BOSTON.GOV/3E39149D-

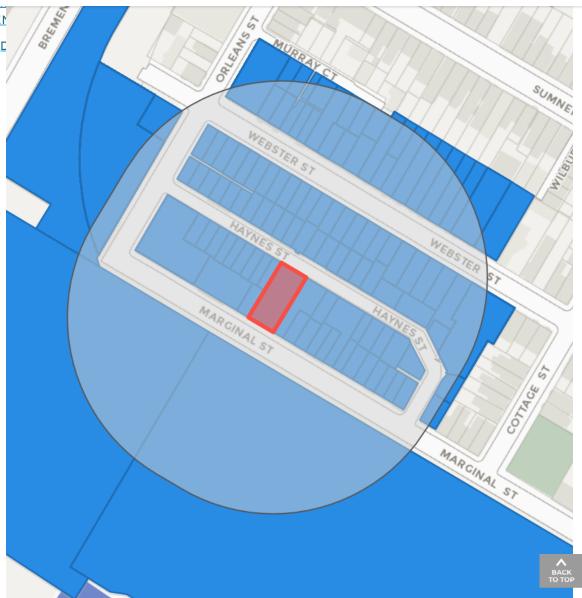
CITY of BOSTON

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ALERTS (/DEPARTMENTS/EMERGENCY-MANAGEMEN PUBLIC RECORDS (HTTPS://BOSTONMA.GOVQA.US/WEBAPP/\_RS/(S([



OBJECTID PID PID LONG GIS ID FULL ADDRESS	CITY	ZIPCODE OWNER	ADDRESSEE	MAIL ADDRESS	MAIL CS	STATE MAIL_ZIPCO	DE S	hape Area S	hape Length
127634 104490000 104490000 104490000 67 WEBSTER ST	EAST BOSTON	2128 COLLINS JR DAVID C		67 WEBSTER ST	EAST BOSTON			1079.258057	149.7207246
84637 105392000 105392022 105392000 10 ORLEANS ST 305	EAST BOSTON	2128 MACDOUGALL SARAH M	C/O SARA M MACDOUGALL	10 ORLEANS ST #305	EAST BOSTON	MA	2128	25855.17749	762.470551
91567 104839000 104839022 104839000 31 ORLEANS ST 401	EAST BOSTON	2128 BHAT ABHILASHA J		28 LANES END	NATICK	MA	1760	6568.723389	339.9375635
20991 104522000 104522000 104522000 52 HAYNES ST	EAST BOSTON	2128 NADABAN MIHAELA R		52 HAYNES ST	EAST BOSTON	MA	2128	1068.130371	137.2108769
160272 104542000 104542000 104542000 HAYNES ST	EAST BOSTON	2128 GRAZIANO PAOLO		55 WEBSTER ST	EAST BOSTON	MA	2128	841.1779785	124.5774357
117123 104493000 104493000 104493000 73 WEBSTER ST	EAST BOSTON	2128 BARIN ERKAN		73 WEBSTER ST	EAST BOSTON	MA	2128	1049.580322	148.9514243
91559 104839000 104839006 104839000 31 ORLEANS ST T3	EAST BOSTON	2128 ROSENQUIST JAMES N		31 ORLEANS ST, UNIT T3	EAST BOSTON	MA	2128	6568.723389	339.9375635
126220 104528000 104528000 104528000 30 HAYNES ST	EAST BOSTON	2128 THIRTY HAYNES ST CONDO TR	C/O RAMONA GIUFFRE	30 HAYNES ST	EAST BOSTON	MA	2128	1026.237793	138.9726701
83086 104487000 104487008 104487000 61 WEBSTER ST 4	EAST BOSTON	2128 BROWN ANDREW J	C/O ANDREW BROWN	61 WEBSTER ST #4	EAST BOSTON	MA	2128	1165.516113	154.7301316
126223 104528000 104528006 104528000 30 HAYNES ST 3	EAST BOSTON	2128 TOOLE JACOB		109 BLOOMFIELD ST #3	HOBOKEN	NJ	7030	1026.237793	138.9726701
84626 105392000 105392000 105392000 10 ORLEANS ST	EAST BOSTON	2128 HARBORVIEW CONDO TRUST		10 ORLEANS	EAST BOSTON	MA	2128	25855.17749	762.470551
92973 104457000 104457000 104457000 23 HAYNES ST	EAST BOSTON	2128 SENDER BOAZ		23 HAYNES ST	EAST BOSTON	MA	2128	825.5183105	137.9795356
47297 104448000 104448004 104448000 68 D MARGINAL ST 68D	EAST BOSTON	2128 HOLT STEPEH M JR	C/O STEPEN M HOLT JR	68 MARGINAL ST #D	EAST BOSTON	MA	2128	9217.636719	435.3535701
84646 105392000 105392040 105392000 35 WEBSTER ST 401	EAST BOSTON	2128 HIGGINS DANIEL P		35 WEBSTER ST #401	E BOSTON	MA	2128	25855.17749	762.470551
159110 104498000 104498000 104498000 83 WEBSTER ST	EAST BOSTON	2128 83 WEBSTER STREET	C/O EIGHTY THREE WEBSTER LLC	83 WEBSTER ST	EAST BOSTON	MA	2128	1199.422119	154.57406
40135 104525000 104525002 104525000 36 HAYNES ST 1	EAST BOSTON	2128 DELLOLIO DANIELLE		36 HAYNES ST #1	EAST BOSTON	MA	2128	1266.481201	155.4177865
157673 104465000 104465002 104465000 47 HAYNES ST 1	EAST BOSTON	2128 LANE TYLER		47 HAYNES ST, UNIT 1	EAST BOSTON	MA	2128	1692.69873	168.5935762
123149 104828000 104828006 104828000 82 WEBSTER ST 3	EAST BOSTON	2128 82 WEBSTER ST CONDOMINIUM TRUST	C/O 82 WEBSTER STREET LLC	36 BROMFIELD ST	BOSTON	MA		2876.603271	292.5910615
103773 104507000 104507008 104507000 109 111 WEBSTER ST 4	EAST BOSTON	2128 CHEREDDY MANUSHA		111 109 WEBSTER ST, UNIT 4	EAST BOSTON	MA	2128	10136.75415	444.5512359
116963 104446000 104446000 104446000 75 175 MARGINAL ST	EAST BOSTON	2128 MASSACHUSETTS PORT AUTH		29 MARGINAL	EAST BOSTON	MA	2128	1141383.948	4361.760851
92821 104831000 104831000 104831000 76 WEBSTER ST	EAST BOSTON	2128 MOTTOLA DOROTHY A		76 WEBSTER ST	EAST BOSTON	MA	2128	1435.953125	163.0506575
84640 105392000 105392028 105392000 35 WEBSTER ST 101	EAST BOSTON	2128 RODAS HELBERT		35 WEBSTER ST	E BOSTON	MA	2128	25855.17749	762.470551
65336 104502000 104502002 104502000 91 WEBSTER ST 1	EAST BOSTON	2128 AIGNER NICHOLAS		91 WEBSTER ST # 1	EAST BOSTON	MA	2128	1964.716064	197.294906
130932 104472000 104472000 104472000 MARGINAL ST	EAST BOSTON	2128 TAYLOR MELISSA		100 MARGINAL ST	EAST BOSTON	MA	2128	1241.425781	153.4076294
30783 104492000 104492002 104492000 71 WEBSTER ST 1	EAST BOSTON	2128 GHERINGHELLI DIANE		71 WEBSTER ST, UNIT 1	EAST BOSTON	MA	2128	1136.876221	152.0020831
111559 104534000 104534000 104534000 18 HAYNES ST	EAST BOSTON	2128 HAYNES DEVELOPMENT PARTNERS LLC	C/O HAYNES DEV PARTNERS LLC	PO BOX 1046	BROOKLINE	MA	2446	1003.071533	138.1067301
173574 104830000 104830000 104830000 80 WEBSTER ST	EAST BOSTON	2128 OROZCO GALISSIA M		80 WEBSTER ST	E BOSTON	MA	2128	1889.373047	187.4324613
138975 104842000 104842006 104842000 7 MURRAY CT 3	EAST BOSTON	2128 GREENBERG BRAD M		7 MURRAY CT, UNIT 3	EAST BOSTON	MA	2128	1533.729248	160.6292328
76714 104473000 104473000 104473000 MARGINAL ST	EAST BOSTON	2128 TAYLOR MELISSA		100 MARGINAL ST	EAST BOSTON	MA	2128	888.4282227	143.7364502
76605 104837000 104837004 104837000 62 WEBSTER ST 201	EAST BOSTON	2128 DUNTON SAMUEL		10 EMERSON PLACE APT 18F	BOSTON	MA	2114	1266.463623	160.9699461
6624 104536000 104536000 104536000 14 22 HAYNES ST	EAST BOSTON	2128 HAYNES DEVELOPMENT PARTNERS LLC	C/O PAUL MARKS	P O BOX 1046	BROOKLINE	MA	2446	960.609375	136.4414952
110883 104488000 104488006 104488000 63 WEBSTER ST 3	EAST BOSTON	2128 DREW DAVID M		63 WEBSTER ST #3	EAST BOSTON	MA	2128	1085.64502	152.1926298
91556 104839000 104839000 104839000 31 ORLEANS ST	EAST BOSTON	2128 THE ORLEANS CONDOMINIUM TRUST	C/O SBC2 PROPERTIES	28 DAMRELL ST SUITE 104	SOUTH BOSTON	MA	2127	6568.723389	339.9375635
112996 104537000 104537000 104537000 12 HAYNES ST	EAST BOSTON	2128 HAYNES DEVELOPMENT PARTNERS LLC	C/O PAUL MARKS	P O BOX 1046	BROOKLINE	MA	2446	847.2434082	124.628977
34109 104527000 104527006 104527000 32 HAYNES ST 3	EAST BOSTON	2128 DSSP INVESTORS I LLC	C/O DSSP INVESTORS LLC	370 SUMNER ST #2	EAST BOSTON	MA	2128	1090.747559	141.5866721
110880 104488000 104488000 104488000 63 WEBSTER ST	EAST BOSTON	2128 WEBSTER PL CONDO TR		63 WEBSTER ST	EAST BOSTON	MA	2128	1085.64502	152.1926298
169151 104485000 104485000 104485000 57 WEBSTER ST	EAST BOSTON	2128 SHEA HELEN		57 WEBSTER ST	EAST BOSTON	MA	2128	1074.963867	151.0751874
83083 104487000 104487002 104487000 61 WEBSTER ST 1	EAST BOSTON	2128 VINCI PATRICIA D		19 TOPHET RD	LYNNFIELD			1165.516113	154.7301316
157049 104480000 104480000 104480000 MARGINAL ST	EAST BOSTON	2128 COPPER FORGE PARTNERS LLC		PO BOX 1046	BROOKLINE	MA	2446	5089.865234	307.7094404
	EAST BOSTON	2128 LIKA DESADA		10 ORLEANS ST, UNIT 105	EAST BOSTON	MA	2128	25855.17749	762.470551
69999 104476000 104476000 104476000 91 MARGINAL ST	EAST BOSTON	2128 KENNEDY STEVE		151 APPLETON ST	CAMBRIDGE	MA	2138	992.5617676	148.5579215
26080 104825000 104825000 104825000 88 WEBSTER ST	EAST BOSTON	2128 GUNN JAMES P		88 WEBSTER ST	EAST BOSTON			2672.148438	290.0202579
	EAST BOSTON	2128 CICCIA MICHAEL		31 ORLEANS ST, UNIT 404	EAST BOSTON			6568.723389	339.9375635
	EAST BOSTON	2128 KENNEDY TIMOTHY D		109 WEBSTER ST #1	EAST BOSTON			10136.75415	444.5512359
	EAST BOSTON	2128 82 WEBSTER ST CONDOMINIUM TRUST	C/O 82 WEBSTER STREET LLC	36 BROMFIELD ST	BOSTON			2876.603271	292.5910615
	EAST BOSTON	2128 MILBURN ABIGAIL K		19 MURRAY CT #1	EAST BOSTON			1417.976563	155.057691
	EAST BOSTON	2128 HAZELTON ROBERT H JR TS	C/O ROBERT H HAZELTON JR TS	PO BOX 520188	WINTHROP			10136.75415	444.5512359
	EAST BOSTON	2128 MURRAY MELS LLC		233 HARVARD ST, UNIT SUITE 306	BROOKLINE			1099.941162	146.4380546
149 104447010 104447010 104447010 MARGINAL ST	EAST BOSTON	2128 MASSACHUSETTS PORT AUTH		MARGINAL ST	E BOSTON			254131.0181	2452.078706
	EAST BOSTON	2128 REBOUCAS BRENO		35 WEBSTER ST#202	EAST BOSTON			25855.17749	762.470551
	EAST BOSTON	2128 RECUPERO GIUSEPPE ETAL		87 WEBSTER ST	EAST BOSTON			1151.974854	153.1064449
30784 104492000 104492004 104492000 71 WEBSTER ST 2	EAST BOSTON	2128 KAVJIAN AMANDA A		71 WEBSTER ST, UNIT 2	EAST BOSTON			1136.876221	152.0020831
44824 104819000 104819000 104819000 100 WEBSTER ST	EAST BOSTON	2128 100 WEBSTER ST CONDOMINIUM TRUST		1 CURTIS ST	EAST BOSTON			5648.861816	338.7069097
142073 104523000 104523000 104523000 46 48 HAYNES ST	EAST BOSTON	2128 LYONS KARELENA		46 HAYNES	EAST BOSTON			2046.644287	190.1915556
	EAST BOSTON	2128 GUOOMIAO REALTY TRUST-2019		31 ORLEANS ST, UNIT 302	EAST BOSTON			6568.723389	339.9375635
	EAST BOSTON	2128 13 HAYNES STREET LLC		17 GODDARD STREET	QUINCY			855.3483887	137.6721648
	EAST BOSTON	2128 TINO BRIAN	C/O HAVAIEC DEVELOPMENT TO THE COLUMN	62 WEBSTER ST #301	EAST BOSTON			1266.463623	160.9699461
25259 104532000 104532000 104532000 22 HAYNES ST	EAST BOSTON	2128 HAYNES DEVELOPMENT PARTNERS LLC	C/O HAYNES DEVELOPMENT PARTNERS LLC	PO BOX 1046	BROOKLINE			924.5793457	134.7757926
	EAST BOSTON	2128 GREENE CARY		11 HAYNES ST	EAST BOSTON			949.9970703	137.9999482
83084 104487000 104487004 104487000 61 WEBSTER ST 2	EAST BOSTON	2128 PRASAD PREETI		61 WEBSTER ST #2	EAST BOSTON	MA	Z128	1165.516113	154.7301316

84632 105392000 105392012 105392000 10 ORLEANS ST 204	EAST BOSTON	2128 ANNA R DIMARIA REVOCABLE TRUST		10 ORLEANS ST #204	EAST BOSTON	MA	2128	25855.17749	762.470551
103771 104507000 104507004 104507000 109 111 WEBSTER ST 2	EAST BOSTON	2128 ALIZADEH BABAK TS		PO BOX 102	BROOKLINE	MA	2446	10136.75415	444.5512359
84644 105392000 105392036 105392000 35 WEBSTER ST 301	EAST BOSTON	2128 SCHLAEPFER MADELYN A	C/O MADELYN SCHLAEPFER	4637 MORROW RD	MODESTO	CA	95356	25855.17749	762.470551
22231 104475000 104475000 104475000 92 MARGINAL ST	EAST BOSTON	2128 MORTON CHRISTOPHER J		92 MARGINAL	EAST BOSTON	MA	2128	952.173584	146.738959
1020 104833000 104833004 104833000 70 WEBSTER ST 2	EAST BOSTON	2128 HUFF TIMOTHY S		70 WEBSTER ST #2	EAST BOSTON	MA	2128	2949.414063	280.0839417
108070 104462000 104462000 104462000 39 HAYNES ST	EAST BOSTON	2128 WEI JING YI		39 HAYNES ST	EAST BOSTON	MA	2128	778.654541	130.4605762
146891 104533000 104533000 104533000 20 HAYNES ST	EAST BOSTON	2128 HAYNES DEVELOPMENT PARTNERS LLC	C/O HAYNES DEVELOPMENT PARTNERS LLC	PO BOX 1046	BROOKLINE	MA		903.5119629	133.9497263
84638 105392000 105392024 105392000 10 ORLEANS ST 403	EAST BOSTON	2128 AMICO LISA R	e, e in titles bevees intern i native to	10 ORLEANS ST #403	EAST BOSTON	MA		25855.17749	762.470551
149284 104530000 104530000 104530000 HAYNES ST		2128 MODICA ANTONIO		24 HAYNES		MA			137.565727
	EAST BOSTON				EAST BOSTON			989.1264648	
138973 104842000 104842002 104842000 7 MURRAY CT 1	EAST BOSTON	2128 MAO CHUNMING		7 MURRAY CT, UNIT 1	EAST BOSTON	MA		1533.729248	160.6292328
91562 104839000 104839012 104839000 31 ORLEANS ST 202	EAST BOSTON	2128 GE LI		31 ORLEANS ST, UNIT 202	EAST BOSTON	MA		6568.723389	339.9375635
91568 104839000 104839024 104839000 31 ORLEANS ST 402	EAST BOSTON	2128 SWEENEY CARA		31 ORLEANS ST, UNIT 402	EAST BOSTON	MA		6568.723389	339.9375635
33460 104484000 104484000 104484000 19 ORLEANS ST	EAST BOSTON	2128 GRAZIANO FRANK		55 WEBSTER ST	EAST BOSTON	MA	2128	1124.608643	152.6238551
112833 105391000 105391000 105391000 47 51 WEBSTER ST	EAST BOSTON	2128 FRATT LLC		20 ORLEANS ST	EAST BOSTON	MA	2128	3059.653076	221.4547334
30 104521000 104521000 104521000 62 HAYNES ST	EAST BOSTON	2128 BEVERLY A SORIANO TRUST		146 CHURCH ST	WALTHAM	MA	2452	1408.174805	149.9574997
44827 104819000 104819006 104819000 100 WEBSTER ST 100-3	EAST BOSTON	2128 DIGREGORIO DUSTIN		100 WEBSTER ST, UNIT 100-3	EAST BOSTON	MA	2128	5648.861816	338.7069097
148250 104832000 104832004 104832000 74 WEBSTER ST 2	EAST BOSTON	2128 OUELLETTE MATT		74 WEBSTER ST, UNIT 2	EAST BOSTON	MA	2128	1270.312012	156.9281766
76603 104837000 104837000 104837000 62 WEBSTER ST	EAST BOSTON	2128 62 WEBSTER STREET		62 WEBSTER ST	EAST BOSTON	MA	2128	1266.463623	160.9699461
126221 104528000 104528002 104528000 30 HAYNES ST 1	EAST BOSTON	2128 GOOLTZ STEPHANIE V		30 HAYNES ST #1	E BOSTON	MA	2128	1026.237793	138.9726701
103015 104824000 104824000 104824000 90 WEBSTER ST	EAST BOSTON	2128 GAGNON JAMES E		90 WEBSTER ST	EAST BOSTON	MA		3175.028564	298.2777485
34107 104527000 104527002 104527000 32 HAYNES ST 1	EAST BOSTON	2128 32 HAYNES LLC		370 SUMNER ST #2	EAST BOSTON	MA		1090.747559	141.5866721
110881 104488000 104488002 104488000 63 WEBSTER ST 1	EAST BOSTON	2128 PELLOUX REGIS M N TS		63 WEBSTER ST, #1	EAST BOSTON	MA	2128	1085.64502	152.1926298
	EAST BOSTON	2128 DEGAETANO MICHAEL	C/O FRANK DEGAETANO	PO BOX AH	CONYNGHAM	PA		9217.636719	435.3535701
			•		EAST BOSTON			1334.791992	
12129 104838000 104838000 104838000 60 WEBSTER ST	EAST BOSTON	2128 JOSHUA STASIO REVOCABLE TRUST	C/O JOSHUA STASIO	60 WEBSTER ST		MA	_		163.0855063
68740 104478000 104478000 104478000 MARGINAL ST	EAST BOSTON	2128 LANDFALL COMMUNITY	C/O EBCDC INC	72 MARGINAL ST	E BOSTON	MA	_	1145.646729	150.2398732
165740 104538000 104538000 104538000 10 HAYNES ST	EAST BOSTON	2128 10 HAYNES STREET LLC	C/O WARSHAW, DI CARLO & ASSOCIATES, PC	77 NEWBURY ST, 4TH FLOOR	BOSTON	MA		870.1411133	125.7636381
170019 104479000 104479000 104479000 MARGINAL ST	EAST BOSTON	2128 LANDFALL COMMUNITY	C/O EBCDC INC	72 MARGINAL ST	E BOSTON	MA		3081.052246	291.9977344
84635 105392000 105392018 105392000 10 ORLEANS ST 303	EAST BOSTON	2128 HUNG LISA CHAI LAI		10 ORLEANS ST #303	EAST BOSTON	MA	2128	25855.17749	762.470551
84647 105392000 105392042 105392000 35 WEBSTER ST 402	EAST BOSTON	2128 SACHIN H JAIN NOMINEE REALTY TRUST OF 2020	C/O SACHIN JAIN	8123 JITOLA TERR	PLAYA DEL REY	CA	90293	25855.17749	762.470551
116211 104539000 104539000 104539000 8 HAYNES ST	EAST BOSTON	2128 COULDREN ANN MARIE		8 HAYNES ST	EAST BOSTON	MA	2128	842.5087891	124.4838116
79866 104468000 104468000 104468000 104 MARGINAL ST	EAST BOSTON	2128 DIGIOVANNI MARK		104 MARGINAL ST	EAST BOSTON	MA	2128	861.7404785	134.7291937
9685 104486000 104486000 104486000 59 WEBSTER ST	EAST BOSTON	2128 BUTTNER CRAIG L		59 WEBSTER ST	EAST BOSTON	MA	2128	1231.262451	156.8113424
84641 105392000 105392030 105392000 35 WEBSTER ST 102	EAST BOSTON	2128 ROSARIO ELIANA T		35 WEBSTER ST #102	EAST BOSTON	MA	2128	25855.17749	762.470551
165448 104477000 104477000 104477000 90 MARGINAL ST	EAST BOSTON	2128 VARGAS JOSE		90 MARGINAL ST	EAST BOSTON	MA		1147.450195	147.7613705
156117 104821000 104821000 104821000 96 WEBSTER ST	EAST BOSTON	2128 GABRIELLI ROBERT D		40 VIA TRANQUILLA	CONCORD	NH		2649.505127	289.9746464
84639 105392000 105392026 105392000 10 ORLEANS ST 404	EAST BOSTON	2128 MCBRIDE JAMES M		10 ORLEANS ST #404	EAST BOSTON	MA		25855.17749	762.470551
5266 104467000 104467000 104467000 106 MARGINAL ST	EAST BOSTON	2128 DIGIOVANNI MARK		176 SEA RD	KENNEBUNK	ME		1092.031738	143.6546768
30782 104492000 104492000 104492000 71 WEBSTER ST		2128 71 WEBSTER STREET CONDOMINIUM TRUST	C/O IOSEDII DONIVANI MANIACED			MA		1136.876221	
	EAST BOSTON		C/O JOSEPH DONVAN, MANAGER	50 FRANKLIN ST, UNIT SUITE 400	BOSTON				152.0020831
138974 104842000 104842004 104842000 7 MURRAY CT 2	EAST BOSTON	2128 BARRY SCOTT D	0/0 - 50 - 50 - 50 - 50 - 50 - 50 - 50 -	7 MURRAY CT #2	EAST BOSTON	MA		1533.729248	160.6292328
12405 104836000 104836000 104836000 64 WEBSTER ST	EAST BOSTON	2128 BETANCOURT LEONAL	C/O LEONEL BETANCOURT **	64 WEBSTER ST	E BOSTON	MA		937.0263672	151.6130954
91563 104839000 104839014 104839000 31 ORLEANS ST 203	EAST BOSTON	2128 LIN SANDY		31 ORLEANS ST, UNIT 203		MA		6568.723389	339.9375635
79492 104494000 104494000 104494000 75 WEBSTER ST	EAST BOSTON	2128 CERVASIO CHRISTOPHER G		75 WEBSTER ST	EAST BOSTON	MA	2128	1109.012695	151.2418649
1021 104833000 104833006 104833000 70 WEBSTER ST 3	EAST BOSTON	2128 BENGSTON ANDREA L		70 WEBSTER ST #3	EAST BOSTON	MA	2128	2949.414063	280.0839417
44828 104819000 104819008 104819000 100 WEBSTER ST 100-R	EAST BOSTON	2128 BAMANI MICHAEL		100 WEBSTER ST, UNIT 100R	EAST BOSTON	MA		5648.861816	338.7069097
91795 104524000 104524000 104524000 44 HAYNES ST	EAST BOSTON	2128 PETRILLO PASQUALINA		44 HAYNES ST	EAST BOSTON	MA	2128	1446.678223	153.5997326
91557 104839000 104839002 104839000 31 ORLEANS ST T1	EAST BOSTON	2128 ERB MICHAEL		31 ORLEANS ST #T1	BOSTON	MA	2128	6568.723389	339.9375635
148251 104832000 104832006 104832000 74 WEBSTER ST 3	EAST BOSTON	2128 SNELL BLAKE		74 WEBSTER ST, UNIT 3	EAST BOSTON	MA	2128	1270.312012	156.9281766
76604 104837000 104837002 104837000 62 WEBSTER ST 101	EAST BOSTON	2128 KRASSER SHANDRA		62 WEBSTER ST #101	EAST BOSTON	MA	2128	1266.463623	160.9699461
145157 104835000 104835000 104835000 66 WEBSTER ST	EAST BOSTON	2128 SCADUTO MARIO ETAL		66 WEBSTER	EAST BOSTON	MA	2128	908.7746582	149.2498277
110882 104488000 104488004 104488000 63 WEBSTER ST 2	EAST BOSTON	2128 NEW MELODY LLC		5 ALGONQUIN AV	ANDOVER	MA	1810	1085.64502	152.1926298
65337 104502000 104502004 104502000 91 WEBSTER ST 2	EAST BOSTON	2128 SIONNE STEPHEN M	STEPHEN SIONNE	91 WEBSTER ST # 2	EAST BOSTON	MA		1964.716064	197.294906
34108 104527000 104527004 104527000 32 HAYNES ST 2	EAST BOSTON	2128 BURRELL ROBERT JASON	5121 H211 515 H112	32 HAYNES ST #2	EAST BOSTON	MA		1090.747559	141.5866721
157291 104531000 104531000 104531000 24 HAYNES ST	EAST BOSTON	2128 MODICA DIANE J		24 HAYNES ST	E BOSTON	MA		1205.042236	153.678987
40494 104504000 104504000 104504000 95 97 WEBSTER ST	EAST BOSTON	2128 DAMORE PATRICIA JEAN		95 WEBSTER ST	EAST BOSTON	MA		1854.424072	194.5550932
3451 104526000 104526000 104526000 34 HAYNES ST	EAST BOSTON	2128 PAPPAS VOLHA V		828 EAST 5TH ST APT #5	SOUTH BOSTON			1025.084961	138.7997722
142231 104840000 104840000 104840000 1 MURRAY CT	EAST BOSTON	2128 DEMONTE BARBARA	C/O ANNI MARIE COLUESTO:	1 MURRAY CT	EAST BOSTON	MA		1208.794434	150.5925676
170498 104541000 104541000 104541000 HAYNES ST	EAST BOSTON	2128 COULDREN DAVID	C/O ANN MARIE COULDREN	8 HAYNES ST	EAST BOSTON	MA		830.5202637	124.019282
130515 104501000 104501000 104501000 89 WEBSTER ST	EAST BOSTON	2128 PEASE LINDA		89 WEBSTER ST	EAST BOSTON	MA		1143.229736	145.3603059
84630 105392000 105392008 105392000 10 ORLEANS ST 106	EAST BOSTON	2128 REED ALEXANDRA E		10 ORLEANS ST, UNIT 106	EAST BOSTON	MA		25855.17749	762.470551
159455 104455000 104455000 104455000 19 HAYNES ST	EAST BOSTON	2128 BLOSSOM VALLEY NOMINEE TRUST II	C/O JEANNE C EGAN	19 HAYNES ST	EAST BOSTON	MA	2128	915.324707	141.3003677
123147 104828000 104828002 104828000 82 WEBSTER ST 1	EAST BOSTON	2128 FRIEDMAN JESSE		82 WEBSTER ST, UNIT 1	EAST BOSTON	MA	2128	2876.603271	292.5910615

110318 104464000 104464000 104464000 43 45 HAYNES ST	EAST BOSTON	2128 CAMMARANO ALBERT TS		22 MARSHALL ST	REVERE	MA	2151	1039.813721	144.0514068
91569 104839000 104839026 104839000 31 ORLEANS ST 403	EAST BOSTON	2128 WANG SHENG		31 ORLEANS ST, UNIT 403	EAST BOSTON	MA		6568.723389	339.9375635
			C/O SUSAN CONCORA	•		MA		25855.17749	762.470551
84636 105392000 105392020 105392000 10 ORLEANS ST 304	EAST BOSTON	2128 GONGORA SUSAN D	C/O SUSAN GONGORA	10 ORLEANS ST #304	EAST BOSTON				
152802 104505000 104505000 104505000 99 101 WEBSTER ST	EAST BOSTON	2128 YANES JOSE		99 WEBSTER ST	EAST BOSTON	MA		1890.735107	195.705156
8506 104845000 104845004 104845000 19 MURRAY CT 2	EAST BOSTON	2128 HA CHENG		98 SEWALL AVE #6	BROOKLINE	MA		1417.976563	155.057691
103777 104507000 104507016 104507000 109 111 WEBSTER ST 8	EAST BOSTON	2128 HAZELTON ROBERT H JR TS	C/O ROBERT H HAZELTON JR TS	PO BOX 520188	WINTHROP	MA		10136.75415	444.5512359
161739 104499000 104499000 104499000 85 WEBSTER ST	EAST BOSTON	2128 85 WEBSTER STREET LLC	WARSHAW DI CARLO & ASSOCIATE	77 NEWBURY ST 4TH FLOOR	BOSTON	MA	2116	1284.677734	157.7395156
1018 104833000 104833000 104833000 70 WEBSTER ST	EAST BOSTON	2128 70 WEBSTER STREET		70 WEBSTER ST	EAST BOSTON	MA	2128	2949.414063	280.0839417
91566 104839000 104839020 104839000 31 ORLEANS ST 303	EAST BOSTON	2128 FORTRESS XU LLC		4 CORMIERS WAY	ANDOVER	MA	1810	6568.723389	339.9375635
106886 104823000 104823000 104823000 92 WEBSTER ST	EAST BOSTON	2128 DAMELIO RICHARD JOHN	C/O RICHARD J DAMELIO	92 WEBSTER ST	EAST BOSTON	MA	2128	2702.264893	290.3710425
113624 104470000 104470000 104470000 100 MARGINAL ST	EAST BOSTON	2128 MELISSA TAYLOR		100 MARGINAL ST	EAST BOSTON	MA	2128	992.2875977	140.5192024
148248 104832000 104832000 104832000 74 WEBSTER ST	EAST BOSTON	2128 74 WEBSTER STREET CONDOMINIUM TRUST		74 WEBSTER ST	EAST BOSTON	MA	2128	1270.312012	156.9281766
6259 104841000 104841000 104841000 5 MURRAY CT	EAST BOSTON	2128 SULLIVAN EBEN GREGORY		5 MURRAY CT	EAST BOSTON	MA	2128	598.0524902	122.4587275
4267 104503000 104503000 104503000 93 A93 WEBSTER ST	EAST BOSTON	2128 IANNELLI JOHN W ETAL		93 WEBSTER ST	EAST BOSTON	MA	2128	1839.69043	193.9658363
91560 104839000 104839008 104839000 31 ORLEANS ST T4	EAST BOSTON	2128 ROSENBLUM RACHEL		31 ORLEANS ST, UNIT T4	EAST BOSTON	MA		6568.723389	339.9375635
47295 104448000 104448000 104448000 68 68A MARGINAL ST	EAST BOSTON	2128 LANDFALL TOWNHOUSE CONDO TR		68E MARGINAL	EAST BOSTON	MA		9217.636719	435.3535701
		2128 CAMMARANO MARIA		87 WHITMAN	MALDEN	MA		1211.969971	
155187 104463000 104463000 104463000 41 HAYNES ST	EAST BOSTON								150.4316773
44825 104819000 104819002 104819000 100 WEBSTER ST 100-1	EAST BOSTON	2128 BABAT DAVID		100 WEBSTER ST, UNIT 100-1	EAST BOSTON	MA		5648.861816	338.7069097
35980 104469000 104469000 104469000 MARGINAL ST	EAST BOSTON	2128 DIGIOVANNI MARK		104 MARGINAL ST	EAST BOSTON	MA		883.5090332	135.8996921
84627 105392000 105392002 105392000 10 ORLEANS ST 103	EAST BOSTON	2128 MAILHOT CAROLINE J		10 ORLEANS ST #103	EAST BOSTON	MA		25855.17749	762.470551
90796 105381055 105381055 105381055 BREMEN ST	EAST BOSTON	2128 CITY OF BOSTON PARKS AND		BREMEN ST	E BOSTON	MA	2128	50719.73901	1529.935627
27828 104489000 104489000 104489000 65 WEBSTER ST	EAST BOSTON	2128 ANAEL WILLIAM		168 BARTLETT ROAD	WINTHROP	MA	2152	1206.400879	156.6511604
47298 104448000 104448006 104448000 68 C MARGINAL ST 68C	EAST BOSTON	2128 HOFMANN ANDREAS G		68C MARGINAL ST	EAST BOSTON	MA	2128	9217.636719	435.3535701
60039 104818000 104818000 104818000 106 106R WEBSTER ST	EAST BOSTON	2128 106 WEBSTER LLC		261 BEACON ST #21	BOSTON	MA	2116	5475.821777	336.3292242
159111 104498000 104498002 104498000 83 WEBSTER ST 1	EAST BOSTON	2128 OCONNELL KAELYN M	C/O KAELYN OCONNELL	83 WEBSTER ST #1	EAST BOSTON	MA	2128	1199.422119	154.57406
8260 104535000 104535000 104535000 16 HAYNES ST	EAST BOSTON	2128 HAYNES DEV PARTNERS LLC MASS LLC		PO BOX 1046	BROOKLINE	MA	2446	959.6682129	136.3560626
84633 105392000 105392014 105392000 10 ORLEANS ST 205	EAST BOSTON	2128 KIM MIN YOUNG		10 ORLEANS ST #205	EAST BOSTON	MA	2128	25855.17749	762.470551
87636 104495000 104495000 104495000 77 WEBSTER ST	EAST BOSTON	2128 77 WEBSTER STREET LLC		77 WEBSTER ST	EAST BOSTON	MA		1201.719238	151.1407968
86860 104506000 104506000 104506000 103 WEBSTER ST	EAST BOSTON	2128 STECZYNSKI MARIE M		103 WEBSTER ST	EAST BOSTON	MA		2651.525146	286.8394751
40136 104525000 104525004 104525000 36 HAYNES ST 2	EAST BOSTON	2128 WHITE MAUREEN		36 HAYNES ST #2	E BOSTON	MA		1266.481201	155.4177865
157674 104465000 104465004 104465000 47 HAYNES ST 2	EAST BOSTON	2128 PLANT BRADEN		47 HAYNES ST #2	EAST BOSTON	MA	2128	1692.69873	168.5935762
103774 104507000 104507010 104507000 109 111 WEBSTER ST 5	EAST BOSTON	2128 STECZYNSKI JOHN		109-111 WEBSTER ST #5	EAST BOSTON	MA		10136.75415	444.5512359
151801 104458000 104458000 104458000 31 HAYNES ST	EAST BOSTON	2128 ENG CHRISTOPHER		422 SUMNER ST	EAST BOSTON	MA		1192.475586	152.1346332
138972 104842000 104842000 104842000 7 9 MURRAY CT	EAST BOSTON	2128 SEVEN MURRAY CT CONDO TRUST	C/O AARON M DAIGNEAULT TS	7-9 MURRAY CT	EAST BOSTON	MA		1533.729248	160.6292328
65335 104502000 104502000 104502000 91 A91 WEBSTER ST	EAST BOSTON	2128 NINETY-1 WEBSTER ST CONDO	C/O JOHN H GARABEDIAN TS	91 WEBSTER ST	EAST BOSTON	MA	2128	1964.716064	197.294906
138093 104844000 104844000 104844000 17 MURRAY CT	EAST BOSTON	2128 MADDALENI ELIZABETH M TS	C/O JAMES E MADDALENI	PO BOX 557 #	EVERETT	MA	2149	1262.895752	157.5881334
112314 104529000 104529000 104529000 HAYNES ST	EAST BOSTON	2128 MARPHY MARY K		81 WEBSTER ST	EAST BOSTON	MA	2128	1126.451172	143.1941903
20847 104540000 104540000 104540000 HAYNES ST	EAST BOSTON	2128 COULDREN ANN MARIE		8 HAYNES ST	EAST BOSTON	MA	2128	892.2416992	126.8747329
91561 104839000 104839010 104839000 31 ORLEANS ST 201	EAST BOSTON	2128 ROSAL GLORIA		31 ORLEANS ST, UNIT 201	EAST BOSTON	MA	2128	6568.723389	339.9375635
103563 104834000 104834000 104834000 68 WEBSTER ST	EAST BOSTON	2128 MYBEN DEVELOPMENT LLC MASS LLC	C/O MANUEL LOPES	26 COPPERMINE RD	TOPSFIELD	MA	1983	946.201416	150.6732598
1019 104833000 104833002 104833000 70 WEBSTER ST 1	EAST BOSTON	2128 HALLIAN		70 WEBSTER ST, UNIT 1	EAST BOSTON	MA	2128	2949.414063	280.0839417
35620 104520000 104520000 104520000 MARGINAL ST	EAST BOSTON	2128 DAMORE SANDRA		370 SO ATLANTA DRIVE	VAIL	AZ		1521.816406	160.2344609
148249 104832000 104832002 104832000 74 WEBSTER ST 1	EAST BOSTON	2128 STANFIELD BRENDA		64 INMAN ST	CAMBRIDGE	MA		1270.312012	156.9281766
47296 104448000 104448002 104448000 68 E MARGINAL ST 68E	EAST BOSTON	2128 DEL RAZO JODI LYN	C/O JODI LYN DEL RAZO	68 MARGINAL ST UNIT E	EAST BOSTON	MA	2128	9217.636719	435.3535701
15669 104461000 104461000 104461000 37 HAYNES ST	EAST BOSTON	2128 PAGLIUCA ANTHONY	C/O JODI ETN DEE NAZO	37 HAYNES ST	EAST BOSTON	MA		3499.728271	314.0093371
			C/O B D'AMELIO						
25902 104827000 104827000 104827000 WEBSTER ST	EAST BOSTON	2128 DAMELIO RICHARD J	C/O R D'AMELIO	84 WEBSTER ST	EAST BOSTON	MA		1385.715088	172.9838685
18966 104843000 104843000 104843000 15 MURRAY CT	EAST BOSTON	2128 BRUNO GIANLUCA	0/0.000,000,000,000,000,000	8805 WHITEHEAD ST	MCKINNEY	TX		1282.334717	158.3554823
34106 104527000 104527000 104527000 32 HAYNES ST	EAST BOSTON	2128 THIRTY 2 HAYNES CONDOMINIUM	C/O SAVVAS GIANASMIDIS TS	95 BYNNER ST	JAMAICA PLAIN			1090.747559	141.5866721
44826 104819000 104819004 104819000 100 WEBSTER ST 100-2	EAST BOSTON	2128 SORKIN STEVEN		100 WEBSTER ST, UNIT 100-2	EAST BOSTON	MA		5648.861816	338.7069097
73948 104466000 104466000 104466000 49 HAYNES ST	EAST BOSTON	2128 EVORA ROSEMARIE		49 HAYNES ST	EAST BOSTON	MA	_	1349.715332	157.0717225
126222 104528000 104528004 104528000 30 HAYNES ST 2	EAST BOSTON	2128 HANSEN STEPHEN		30 HAYNES ST #2	E BOSTON	MA	2128	1026.237793	138.9726701
127210 104456000 104456000 104456000 21 HAYNES ST	EAST BOSTON	2128 MODICA MICHELE M		21 HAYNES ST	EAST BOSTON	MA	2128	857.7202148	139.1823769
84628 105392000 105392004 105392000 10 ORLEANS ST 104	EAST BOSTON	2128 HERRERA PAOLA R		10 ORLEANS ST #104	EAST BOSTON	MA	2128	25855.17749	762.470551
8504 104845000 104845000 104845000 19 MURRAY CT	EAST BOSTON	2128 NINTEEN MURRAY CT CONDO TR		19 MURRAY CT	EAST BOSTON	MA	2128	1417.976563	155.057691
40137 104525000 104525006 104525000 36 HAYNES ST 3	EAST BOSTON	2128 DUCEY KEITH M		36 HAYNES ST #3	EAST BOSTON	MA	2128	1266.481201	155.4177865
30891 104471000 104471000 104471000 MARGINAL ST	EAST BOSTON	2128 TAYLOR MELISSA		100 MARGINAL ST	EAST BOSTON	MA	2128	1090.28125	147.2668145
83082 104487000 104487000 104487000 61 WEBSTER ST	EAST BOSTON	2128 SIXTY 1 WEBSTER ST CONDO TR	C/O BRAUDE HUGGER CP	11 GAIL RD	WESTON	MA		1165.516113	154.7301316
92571 104482000 104482000 104482000 72 74 MARGINAL ST	EAST BOSTON	2128 LANDFALL COMMUNITY	C/O EBCDC INC	72 MARGINAL ST	E BOSTON	MA	2128	4447.11084	280.1814655
47299 104448000 104448008 104448000 68 B MARGINAL ST 68B	EAST BOSTON	2128 DEBRA R STACK REVOCABLE LIVING TRUST	-,	B 68 MARGINAL ST, UNIT 68B	EAST BOSTON	MA		9217.636719	435.3535701
14816 104450000 104450000 104450000 9 HAYNES ST	EAST BOSTON EAST BOSTON	2128 WILLIAMSON BRIAN		9 HAYNES ST	E BOSTON			950.001709	138.0000644
			C/O IPM			MA	2128		
84634 105392000 105392016 105392000 10 ORLEANS ST 206	EAST BOSTON	2128 ROBERTS LOUISE M	C/O IRM	PO BOX 53	EAST BOSTON	MA	Z1Z8	25855.17749	762.470551

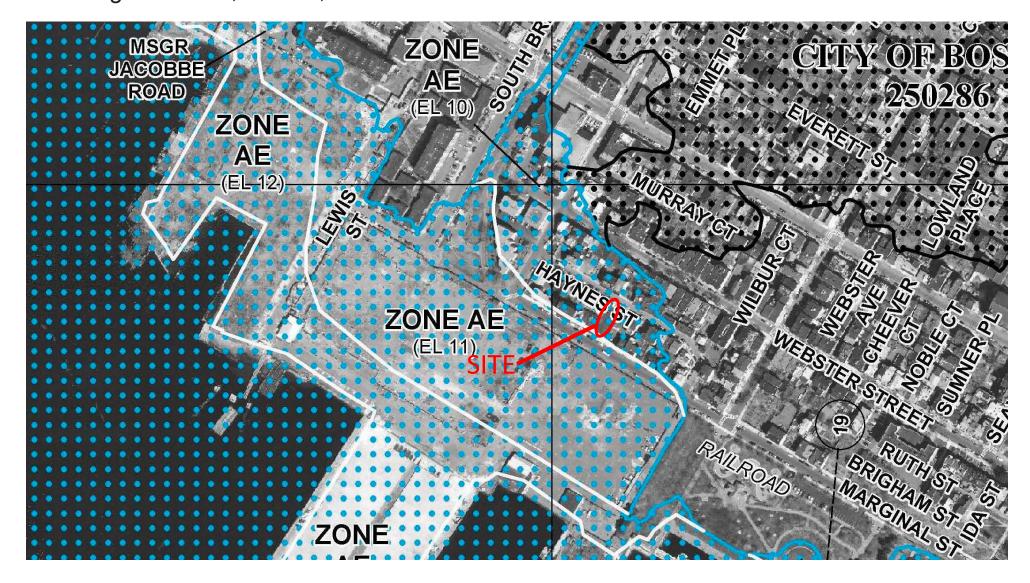
117586 104826000 104826000 104826000 84 WEBSTER ST	EAST BOSTON	2128 DAMELIO RICHARD J	C/O R D'AMELIO	84 WEBSTER ST	EAST BOSTON	MA	2128 1218.135742	157.6789568
159112 104498000 104498004 104498000 83 WEBSTER ST 2	EAST BOSTON	2128 ERACAR YONET		83 WEBSTER ST #2	EAST BOSTON	MA	2128 1199.422119	154.57406
103769 104507000 104507000 104507000 109 111 WEBSTER ST	EAST BOSTON	2128 WEBSTER GARDENS CONDO TRUST		109-111 WEBSTER ST	EAST BOSTON	MA	2128 10136.75415	444.5512359
103775 104507000 104507012 104507000 109 111 WEBSTER ST 6	EAST BOSTON	2128 VINOGRADSKAYA NINA	C/O IGOR SOKOLIK	109-111 WEBSTER ST #6	E BOSTON	MA	2128 10136.75415	444.5512359
30785 104492000 104492006 104492000 71 WEBSTER ST 3	EAST BOSTON	2128 CARRUTHERS JOSHUA		71 WEBSTER ST, UNIT 3	EAST BOSTON	MA	2128 1136.876221	152.0020831
165498 104481000 104481000 104481000 MARGINAL ST	EAST BOSTON	2128 EAST BOSTON COMMUNITY	C/O EBCDC - AL CALDARELLI	72 MARGINAL ST	EAST BOSTON	MA	2128 1176.990723	149.4340613
84642 105392000 105392032 105392000 35 WEBSTER ST 201	EAST BOSTON	2128 CARVAJAL DARIO		35 WEBSTER ST #201	E BOSTON	MA	2128 25855.17749	762.470551
18165 104822000 104822000 104822000 94 WEBSTER ST	EAST BOSTON	2128 SICILIANO KAREN H		94 WEBSTER ST	EAST BOSTON	MA	2128 2839.570313	292.9402759
92723 104491000 104491000 104491000 69 WEBSTER ST	EAST BOSTON	2128 ENG CHRISTOPHER		422 SUMNER ST	E BOSTON	MA	2128 1108.494141	150.8756433
162163 104453000 104453000 104453000 15 HAYNES ST	EAST BOSTON	2128 PARZIALE JAMES		15 HAYNES ST	EAST BOSTON	MA	2128 824.354248	136.5112922
91564 104839000 104839016 104839000 31 ORLEANS ST 301	EAST BOSTON	2128 TROVATO ROSA		31 ORLEANS ST, UNIT 301	EAST BOSTON	MA	2128 6568.723389	339.9375635
91558 104839000 104839004 104839000 31 ORLEANS ST T2	EAST BOSTON	2128 STIRLING THOMAS N		31 ORLEANS ST, UNIT T2	EAST BOSTON	MA	2128 6568.723389	339.9375635
81614 104497000 104497000 104497000 81 WEBSTER ST	EAST BOSTON	2128 MARPHY MARY K		81 WEBSTER ST	EAST BOSTON	MA	2128 1226.08667	155.4268892
71189 104449000 104449000 104449000 7 HAYNES ST	EAST BOSTON	2128 MCMASTER MICHAEL JOHN		7 HAYNES ST	EAST BOSTON	MA	2128 1100.013184	144.0006733
65338 104502000 104502006 104502000 91 WEBSTER ST 3	EAST BOSTON	2128 ERICKSON JULIAN		91 WEBSTER ST # 3	EAST BOSTON	MA	2128 1964.716064	197.294906
83085 104487000 104487006 104487000 61 WEBSTER ST 3	EAST BOSTON	2128 DIBAGLIONI ARTURO		61 WEBSTER ST # 3	EAST BOSTON	MA	2128 1165.516113	154.7301316
157672 104465000 104465000 104465000 47 HAYNES ST	EAST BOSTON	2128 FORTY 7 HAYNES STREET CONDO	C/O THOMAS C MCKENNA TS	47 HAYNES ST	EAST BOSTON	MA	2128 1692.69873	168.5935762
84631 105392000 105392010 105392000 10 ORLEANS ST 203	EAST BOSTON	2128 ARNIOTES ALEXANDER		10 ORLEANS ST, UNIT 203	EAST BOSTON	MA	2128 25855.17749	762.470551
107273 104496000 104496000 104496000 79 WEBSTER ST	EAST BOSTON	2128 WEBSTER PROPERTY LLC		44 SCHOOL ST STE 325	BOSTON	MA	2108 1240.666016	155.8480848
90559 104820000 104820000 104820000 98 WEBSTER ST	EAST BOSTON	2128 DADDIECO ANTONIO		98 WEBSTER	EAST BOSTON	MA	2128 2693.72583	290.5821762
116768 104454000 104454000 104454000 17 HAYNES ST	EAST BOSTON	2128 RESHETNYAK YULIYA		17 HAYNES ST	EAST BOSTON	MA	2128 969.3562012	141.9510758
103772 104507000 104507006 104507000 109 111 WEBSTER ST 3	EAST BOSTON	2128 WALDEN ROSA MARIA		109-111 WEBSTER ST #3	EAST BOSTON	MA	2128 10136.75415	444.5512359
84645 105392000 105392038 105392000 35 WEBSTER ST 302	EAST BOSTON	2128 ACQUAVIVA TIMOTHY		35 WEBSTER ST #302	EAST BOSTON	MA	2128 25855.17749	762.470551
123148 104828000 104828004 104828000 82 WEBSTER ST 2	EAST BOSTON	2128 DEANGELIS JUSTIN A		82 WEBSTER ST, UNIT 2	EAST BOSTON	MA	2128 2876.603271	292.5910615
40134 104525000 104525000 104525000 36 HAYNES ST	EAST BOSTON	2128 THIRTY 6 HAYNES STREET	C/O LYDIA F LEE	36 HAYNES ST	EAST BOSTON	MA	2128 1266.481201	155.4177865

**Project: 80 Marginal Street - Notice of Intent** 

# Appendix E

FEMA Regional Map

FIRM Flood Insurance Map Number 250286 Panel 0081J 80 Marginal Street, Boston, MA



**Project: 80 Marginal Street - Notice of Intent** 

# Appendix F

Climate Change Resiliency Checklist

### **Climate Resiliency Checklist**

NOTE: Project filings should be prepared and submitted using the online Climate Resiliency Checklist.

#### A.1 - Project Information

Project Name:	80 Marginal	80 Marginal Street			
Project Address:	80 Marginal	80 Marginal Street			
Project Address Additional:	Boston, MA (	Boston, MA 02128			
Filing Type (select)	Initial: Conservation Commission Filing for work within 100 Year Flood Zone Design / Building Permit (prior to final design approval), or Construction / Certificate of Occupancy (post construction completion)			, or	
Filing Contact	Name: <b>Paul</b> <b>Marks</b>	Company: Copper Forge Partners, LLC	Email: PaulM@apartmen tseastboston.com	Phone: <b>617-731-9114</b>	
Is MEPA approval required	Yes/ <b>no</b>		Date: <b>11-3-2021</b>		

#### A.3 - Project Team

Owner / Developer:	Copper Forge Partners, LLC
Architect:	Merge Architects, Inc.
Engineer:	The Waterfield Design Group, Inc.
Sustainability / LEED:	NA
Permitting:	NA
Construction Management:	NA .

#### A.3 - Project Description and Design Conditions

List the principal Building Uses:	Condominium
List the First Floor Uses:	At Grade parking – First Occupied Floor Above Flood Plain - Condominium
List any Critical Site Infrastructure and or Building Uses:	

#### Site and Building:

Site Area:	4,620 SF	Building Area:	4,347 SF
Building Height:	47.5 Ft	Building Height:	5 flrs. (1 <sup>st</sup> Story at Grade Parking) Stories
Existing Site Elevation – Low:	<b>14.88</b> Ft BCB	Existing Site Elevation – High:	<b>15.68</b> Ft BCB
Proposed Site Elevation – Low:	<b>14.57</b> Ft BCB	Proposed Site Elevation - High:	<b>15.68</b> Ft BCB
Proposed First Floor Elevation:	<b>23.85</b> Ft BCB	Below grade levels:	<b>0</b> Stories

#### Article 37 Green Building:

LEED Version - Rating System :

Proposed LEED rating:

New Construction

Certified/Silver/
Gold/Platinum

LEED Certification:

Proposed LEED point score:

l	Yes / No
	Pts.

UNKN

UNKN

#### **Building Envelope**

When reporting R values, differentiate between R discontinuous and R continuous. For example, use "R13" to show R13 discontinuous and use R10c.i. to show R10 continuous. When reporting U value, report total assembly U value including supports and structural elements.

9			
Roof:	R75	Exposed Floor:	R30
Foundation Wall:	NA	Slab Edge (at or below grade):	NA
Vertical Above-grade Assemblies (			
Area of Opaque Curtain Wall & Spandrel Assembly:		Wall & Spandrel Assembly Value:	NA
Area of Framed & Insulated / Standard Wall:	82.3%	Wall Value	R45
Area of Vision Window:	15.5%	Window Glazing Assembly Value:	U .18
		Window Glazing SHGC:	VARIES
Area of Doors:	2.2%	Door Assembly Value:	NA
Energy Loads and Performance			
For this filing – describe how energy loads & performance were determined	Not yet determined		
Annual Electric:	UNKN	Peak Electric:	UNKN
Annual Heating:	UNKN	Peak Heating:	UNKN
Annual Cooling:	UNKN)	Peak Cooling:	UNKN

Rack-up	/ Emergency	<b>Power System</b>	
Dack-up	/ ciliersency	Power System	

Energy Use - Below Mass. Code:

Below ASHRAE 90.1 - 2013:

Energy Use -

Electrical Generation Output:	UNKN	Number of Power Units:	UNKN
System Type:	UNKN	Fuel Source:	UNKN

UNKN

UNKN

**Emergency and Critical System Loads** (in the event of a service interruption)

Electric:	UNKN	Heating:	UNKN
	-	Cooling:	UNKN

Have the local utilities reviewed the

building energy performance?:

Energy Use Intensity:

#### B - Greenhouse Gas Reduction and Net Zero / Net Positive Carbon Building Performance

Reducing GHG emissions is critical to avoiding more extreme climate change conditions. To achieve the City's goal of carbon neutrality by 2050 new buildings performance will need to progressively improve to net carbon zero and positive.

B.1	- GHG	<b>Emissions</b>	- Design	Conditions
-----	-------	------------------	----------	------------

For this Filing - Annual Building GHG Emissions: UNKN

For this filing - describe how building energy performance has been integrated into project planning, design, and engineering and any supporting analysis or modeling:

Energy and Sustainability consultant has be retained as a full team member to assist in the setting of goals, design and selection of systems and products

Describe building specific passive energy efficiency measures including orientation, massing, envelop, and systems:

High performance wall assemblies, triple pane windows with orientation specific criteria, shading of south facing glazing, and all electric HVAC systems.

Describe building specific active energy efficiency measures including equipment, controls, fixtures, and systems:

UNKN

Describe building specific load reduction strategies including on-site renewable, clean, and energy storage systems:

On-site Solar is being considered to augment high performance envelope.

Describe any area or district scale emission reduction strategies including renewable energy, central energy plants, distributed energy systems, and smart grid infrastructure:

NΑ

Describe any energy efficiency assistance or support provided or to be provided to the project:

MASS SAVE New Construction Incentive Programs will be utilized.

#### **B.2 - GHG Reduction - Adaptation Strategies**

Describe how the building and its systems will evolve to further reduce GHG emissions and achieve annual carbon net zero and net positive performance (e.g. added efficiency measures, renewable energy, energy storage, etc.) and the timeline for meeting that goal (by 2050):

UNKN

#### C - Extreme Heat Events

Annual average temperature in Boston increased by about 2°F in the past hundred years and will continue to rise due to climate change. By the end of the century, the average annual temperature could be 56° (compared to 46° now) and the number of days above 90° (currently about 10 a year) could rise to 90.

C	1 _	<b>Extreme</b>	Heat	- Design	<b>Conditions</b>
v.	т –	Extreme	пеаι	- DESIRII	COHUMONS

Temperature Range - Low: NA Temperature Range - High: NA

Annual Heating Degree Days: NA Annual Cooling Degree Days NA

What Extreme Heat Event characteristics will be / have been used for project planning

Days - Above 90°:

NA

Days - Above 100°:

NA

Number of Heatwaves / Year:

NA

Average Duration of Heatwave (Days):

NA

Describe all building and site measures to reduce heat-island effect at the site and in the surrounding area:

UNKN at this time

#### C.2 - Extreme Heat - Adaptation Strategies

Describe how the building and its systems will be adapted to efficiently manage future higher average temperatures, higher extreme temperatures, additional annual heatwaves, and longer heatwaves:

UNKN

Describe all mechanical and non-mechanical strategies that will support building functionality and use during extended interruptions of utility services and infrastructure including proposed and future adaptations:

UNKN

#### D - Extreme Precipitation Events

From 1958 to 2010, there was a 70 percent increase in the amount of precipitation that fell on the days with the heaviest precipitation. Currently, the 10-Year, 24-Hour Design Storm precipitation level is 5.25". There is a significant probability that this will increase to at least 6" by the end of the century. Additionally, fewer, larger storms are likely to be accompanied by more frequent droughts.

#### D.1 - Extreme Precipitation - Design Conditions

10 Year, 24 Hour Design Storm: 1 In.

Describe all building and site measures for reducing storm water run-off:

Collection of all surfaces (roof, pavement, lawn, etc.) and collecting the first 1 inch of runoff in underground infiltration chambers as required by BWSC. Overflow at lawn area surface drain outside of the at grade parking.

#### D.2 - Extreme Precipitation - Adaptation Strategies

Describe how site and building systems will be adapted to efficiently accommodate future more significant rain events (e.g. rainwater harvesting, on-site storm water retention, bio swales, green roofs):

NA		

#### E - Sea Level Rise and Storms

Under any plausible greenhouse gas emissions scenario, sea levels in Boston will continue to rise throughout the century. This will increase the number of buildings in Boston susceptible to coastal flooding and the likely frequency of flooding for those already in the floodplain.

Is any portion of the site in a FEMA SFHA?

Yes / No

What Zone:

A, **AE**, AH, AO, AR, A99, V, VE

Current FEMA SFHA Zone Base Flood Elevation:

Ft BCB

Is any portion of the site in a BPDA Sea Level Rise - Flood Hazard Area? Use the online <a href="BPDA SLR-FHA Mapping Tool">BPDA SLR-FHA Mapping Tool</a> to assess the susceptibility of the project site.

Yes / No

If you answered YES to either of the above questions, please complete the following questions. Otherwise you have completed the questionnaire; thank you!

#### E.1 - Sea Level Rise and Storms - Design Conditions

Proposed projects should identify immediate and future adaptation strategies for managing the flooding scenario represented on the BPDA Sea Level Rise - Flood Hazard Area (SLR-FHA) map, which depicts a modeled 1% annual chance coastal flood event with 40 inches of sea level rise (SLR). Use the online <a href="BPDA SLR-FHA Mapping Tool">BPDA SLR-FHA Mapping Tool</a> to identify the highest Sea Level Rise - Base Flood Elevation for the site. The Sea Level Rise - Design Flood Elevation is determined by adding either 24" of freeboard for critical facilities and infrastructure and any ground floor residential units OR 12" of freeboard for other buildings and uses.

Sea Level Rise - Base Flood Elevation:

**19.50** Ft BCB

Sea Level Rise - Design Flood Elevation: **16.**46 Ft BCB

Site Elevations at Building:

**15.1** Ft BCB

First Floor Elevation:

23.85 Ft BCB

Accessible Route Elevation:

**15.60** Ft BCB

Describe site design strategies for adapting to sea level rise including building access during flood events, elevated site areas, hard and soft barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Mechanical and electrical equipment are located with steps above the Design Flood elevation. First floor elevation is located 5 feet above the Sea Level Rise – Base Flood Elevation.

Describe how the proposed Building Design Flood Elevation will be achieved including dry / wet flood proofing, critical systems protection, utility service protection, temporary flood barriers, waste and drain water back flow prevention, etc.:

Mechanical and electrical equipment are located with steps above the Design Flood elevation. First floor elevation is located 5 feet above the Sea Level Rise – Base Flood Elevation.

Describe how occupants might shelter in place during a flooding event including any emergency power, water, and waste water provisions and the expected availability of any such measures:

Mechanical and electrical equipment are located with steps above the Design Flood elevation. First floor elevation is located 5 feet above the Sea Level Rise – Base Flood Elevation.

Describe any strategies that would support rapid recovery after a weather event:

Mechanical and electrical equipment are located with steps above the Design Flood elevation. First floor elevation is located 5 feet above the Sea Level Rise – Base Flood Elevation.

#### E.2 - Sea Level Rise and Storms - Adaptation Strategies

Describe future site design and or infrastructure adaptation strategies for responding to sea level rise including future elevating of site areas and access routes, barriers, wave / velocity breaks, storm water systems, utility services, etc.:					
Describe future building adaptation strategies for raising the Sea Level Rise Design Flood Elevation and further protecting critical systems, including permanent and temporary measures:					

A pdf and word version of the Climate Resiliency Checklist is provided for informational use and off-line preparation of a project submission. NOTE: Project filings should be prepared and submitted using the online Climate Resiliency Checklist.

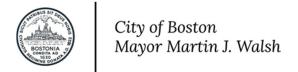
For questions or comments about this checklist or Climate Change best practices, please contact: John.Dalzell@boston.gov

**Project: 80 Marginal Street - Notice of Intent** 

# Appendix G

City of Boston NOI Filing Form





## INSTRUCTIONS FOR COMPLETING APPLICATION NOTICE OF INTENT – BOSTON NOI FORM

The Boston Notice of Intent Form is intended to be a supplement to the WPA Form 3 detailing impacts to locally designated wetland resource areas and buffer zones. Please read these instructions for assistance in completing the Notice of Intent application form. These instructions cover certain items on the Notice of Intent form that are not self-explanatory.

#### INSTRUCTIONS TO SECTION B: BUFFER ZONE AND RESOURCE AREA IMPACTS

<u>Item 1. Buffer Zone Only</u>. If you check the Buffer Zone Only box in this section you are indicating that the project is entirely in the Buffer Zone to a resource area *under both* the Wetlands Protection Act and Boston Wetlands Ordinance. If so, skip the remainder of Section B and go directly to Section C. Do not check this box if the project is within the Waterfront Area.

<u>Item 2</u>. The *boundaries of coastal resource areas* specific to the Ordinance can be found in Section II of the Boston Wetlands Regulations. You must also include the size of the proposed alterations (and proposed replacement areas) in each resource area.

<u>Item 3</u>. The *boundaries of inland resource areas* specific to the Ordinance can be found in Section II of the Boston Wetlands Regulations. You must also include the size of the proposed alterations (and proposed replacement areas) in each resource area.

#### **INSTRUCTIONS TO SECTION C: OTHER APPLICABLE STANDARDS AND REQUIREMENTS**

<u>Item 1. Rare Wetland Wildlife Habitat</u>. Except for Designated Port Areas, no work (including work in the Buffer Zone) may be permitted in any resource area that would have adverse effects on the habitat of rare, "state-listed" vertebrate or invertebrate animal species.

The most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife is published by the Natural Heritage and Endangered Species Program (NHESP). See: <a href="http://maps.massgis.state.ma.us/PRI\_EST\_HAB/viewer.htm">http://maps.massgis.state.ma.us/PRI\_EST\_HAB/viewer.htm</a> or the Massachusetts Natural Heritage Atlas.

If any portion of the proposed project is located within Estimated Habitat, the applicant must send the Natural Heritage Program, at the following address, a copy of the Notice of Intent by certified mail or priority mail (or otherwise sent in a manner that guarantees delivery within two days), no later than the date of the filing of the Notice of Intent with the Conservation Commission.

Evidence of mailing to the Natural Heritage Program (such as Certified Mail Receipt or Certificate of Mailing for Priority Mail) must be submitted to the Conservation Commission along with the Notice of Intent.

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581-3336
508.792.7270



Boston File Number **Boston Wetlands Ordinance** City of Boston Code, Ordinances, Chapter 7-1.4 MassDEP File Number

### **GENERAL INFORMATION**

**Project Location** 

80 Marginal Street	·	Boston	02128
a. Street Address		b. City/Town	c. Zip Code
		01044800	00
f. Assessors Map/F	Plat Number	g. Parcel /Lot l	Number
2. Applicant			
Paul	Marks	Copper	Forge Partners, LLC
a. First Name <b>7 Columbus</b>	b. Last Name	c. Company	7
Terrace, Unit 2			
d. Mailing Address			
Brookline		MA	02446
e. City/Town		f. State	g. Zip Code
617-731-911	.4	pmarks@ap	artmentseastboaton.com
h. Phone Number	i. Fax Number	j. Email address	
3. Property Ov	wner		
Same as above			
a. First Name	b. Last Name	c. Company	
d. Mailing Address  e. City/Town		f. State	g. Zip Code
h. Phone Number	i. Fax Number	j. Email address	
_	nore than one owner one property owner, please at	tach a list of these property ov	vners to thi <b>s form</b> .)
4. Representat	tive (if any)		
Jacob	Murray	The Waterfiel	d Design Group, Inc.
a. First Name	b. Last Name	c. Company	<del></del>
50 Cross Street			
Winchester		MA	01890
e. City/Town		f. State	g. Zip Code
781-756-0001		jmurray@w	agrp.com
h. Phone Number	i. Fax Number	j. Email address	

# City of Boston Environment

#### NOTICE OF INTENT APPLICATION FORM

Boston File Number

Boston Wetlands Ordinance City of Boston Code, Ordinances, Chapter 7-1.4

MassDEP File Number

	5.	Is any portion of the proposed project jurisdictional under the Massachusetts Wetlands Protection Act M.G.L. c. 131 §40?													
	Ify	/es, p		Yes ase 1	file t	he	WP	A Fo	orm 3 -	Notice of I	□ No f Intent with this form				
	6.	Gei	ier	al Ir	ıforı	mat	ion								
Cons	stru	<u>ction</u>	of a	<u>a fiv</u>	<u>e-stc</u>	<u>ory</u>	conc	<u>dom</u>	inium –	with seven	units or	an	ex	xisting paved parking area in 100 year Flood Zone	
•	7.	Pro	jec	t Ty	ype (	Che	ckli	ist							
		a.		ı Si	ngle	Fa	mily	л Но	me		b.		l	Residential Subdivision	
		c.		ı Li	mite	ed F	roj	ect I	Orivew	ay Crossing	d.		l	Commercial/Industrial	
		e.		ı D	ock/	/Pie	er				f.		l	Utilities	
		g.		ı Co	oast:	al E	ngi	neei	ing Str	ucture	h.		l	Agriculture – cranberries, forestry	
		i.		ı Tı	rans	por	tati	on			j.	Σ	(	Other	
	8.	Pr	оре	erty	rec	ord	ed a	it th	e Regis	try of Deed	S				
	Sı	affol	k									13	1		
	a.	Co	ınty								b.	Pag	e N	fumber	
	c. I	Book	Ę	564	ł36						<u>d.</u>	d. Certificate # (if registered land)			
	9.	Tot	al I	Fee	Paid	l									
\$1,5	00 +	- \$55	0 +	\$51	2.50	) = \$	32,5	62.5	0 \$	512.50				\$1,500 + \$550 = \$2,050	
	a. '	Total	Fee	Paid				•	b. State	Fee Paid				c. City Fee Paid	
В.		BU	FFE	R Z	ON	E &	RE	SOU	RCE A	REA IMPAC	CTS				
					-			_	ject loo ance?	cated only i	n the E	uff	er	Zone of a resource area protected by	
			Ye	:S										x No	

1. Coastal Resource Areas



Boston File Number **Boston Wetlands Ordinance** 

City of Boston Code, Ordinances, Chapter 7-1.4 MassDEP File Number

<u>Re</u>	source Area	Resource <u>Area Size</u>	Proposed <u>Alteration*</u>	Proposed <u>Migitation</u>
	Coastal Flood Resilience Zone			
		Square feet	Square feet	Square feet
	25-foot Waterfront Area			
	100 foot Calt March Area	Square feet	Square feet	Square feet
	100-foot Salt Marsh Area	Square feet	Square feet	Square feet
	Riverfront Area	, ,	, ,	, ,
	•	Square feet	Square feet	Square feet
2. <b>I</b>	nland Resource Areas			
Re	source Area	Resource	Proposed	Proposed
	<del>veneral in the second of the </del>	<u>Area Size</u>	Alteration*	<b>Migitation</b>
	Inland Flood Resilience Zone			
	I1-1-1 JAY-11 J.	Square feet	Square feet	Square feet
	Isolated Wetlands	Square feet	Square feet	Square feet
	Vernal Pool	- 1	- 1	- 1,
		Square feet	Square feet	Square feet
	Vernal Pool Habitat (vernal pool + 100 ft. upland area)			
		Square feet	Square feet	Square feet
	25-foot Waterfront Area	Square feet	Square feet	Square feet
	Riverfront Area	Squarejeer	Square jeet	Squarejeer
_		Square feet	Square feet	Square feet
c. <b>(</b>	OTHER APPLICABLE STANDARDS & REQUIREMEN	ITS		
	What other permits, variances, or approvals are require		ed activity desc	cribed
ł	nerein and what is the status of such permits, variances	s, or approvals?		
Project	is within coastal FEMA 100 year flood zone.			

C.

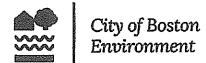


Boston File Number

Boston Wetlands Ordinance City of Boston Code, Ordinances, Chapter 7-1.4

MassDEP File Number

2.	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 <a href="http://www.mass.gov/dfwele/dfw/nhesp/nhregmap.htm">http://www.mass.gov/dfwele/dfw/nhesp/nhregmap.htm</a> .					
	□ Yes	X No				
If yes	, the project is	s subject to Massachusetts Endangered Species Act (M	IESA) review (321 CMR 10.18).			
	A. Submit	Supplemental Information for Endangered Species	Review			
		Percentage/acreage of property to be altered:				
		(1) within wetland Resource Area	percentage/acreage			
		(2) outside Resource Area	percentage/acreage			
		Assessor's Map or right-of-way plan of site				
3.	Is any portio	on of the proposed project within an Area of Critical I	Environmental Concern?			
	□ Yes	X No				
If y	ves, provide tł	ne name of the ACEC:				
4.	Is the proposition of the standards?	sed project subject to provisions of the Massachuset	ts Stormwater Management			
	X Yes. A	Attach a copy of the Stormwater Checklist & Stormwat	er Report as required.			
		Applying for a Low Impact Development (LID) site de	esign credits			
	X	A portion of the site constitutes redevelopment				
		Proprietary BMPs are included in the Stormwater M	lanagement System			
	□ No. C	theck below & include a narrative as to why the project	is exempt			
		Single-family house				
		Emergency road repair				
		Small Residential Subdivision (less than or equal to 4 than or equal to 4 units in a multifamily housing pro- Critical Areas				
5.	Is the propos	sed project subject to Boston Water and Sewer Comr	nission Review?			
	X Yes	□ No				



**Boston Wetlands Ordinance** 

City of Boston Code, Ordinances, Chapter 7-1.4

Boston File Number

MassDEP File Number

4.	Is the proposed project subject to provisions of the Massachusetts Stormwater Management
	Standards?

X	Yes. Attach a copy of	the Stormwater	Checklist &	Stormwater	Report as:	required.

- □ Applying for a Low Impact Development (LID) site design credits
- X A portion of the site constitutes redevelopment
- Proprietary BMPs are included in the Stormwater Management System
- □ No. Check below & include a narrative as to why the project is exempt
  - □ Single-family house
  - Emergency road repair
  - Small Residential Subdivision (less than or equal to 4 single family houses or less than or equal to 4 units in a multifamily housing projects) with no discharge to Critical Areas
- 5. Is the proposed project subject to Boston Water and Sewer Commission Review?

X Yes

□ No

#### D. 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 Protection Ordinance.

Signature of Applicant

Signature of Property Owner (if different)

Signature of Representative (if any)

•

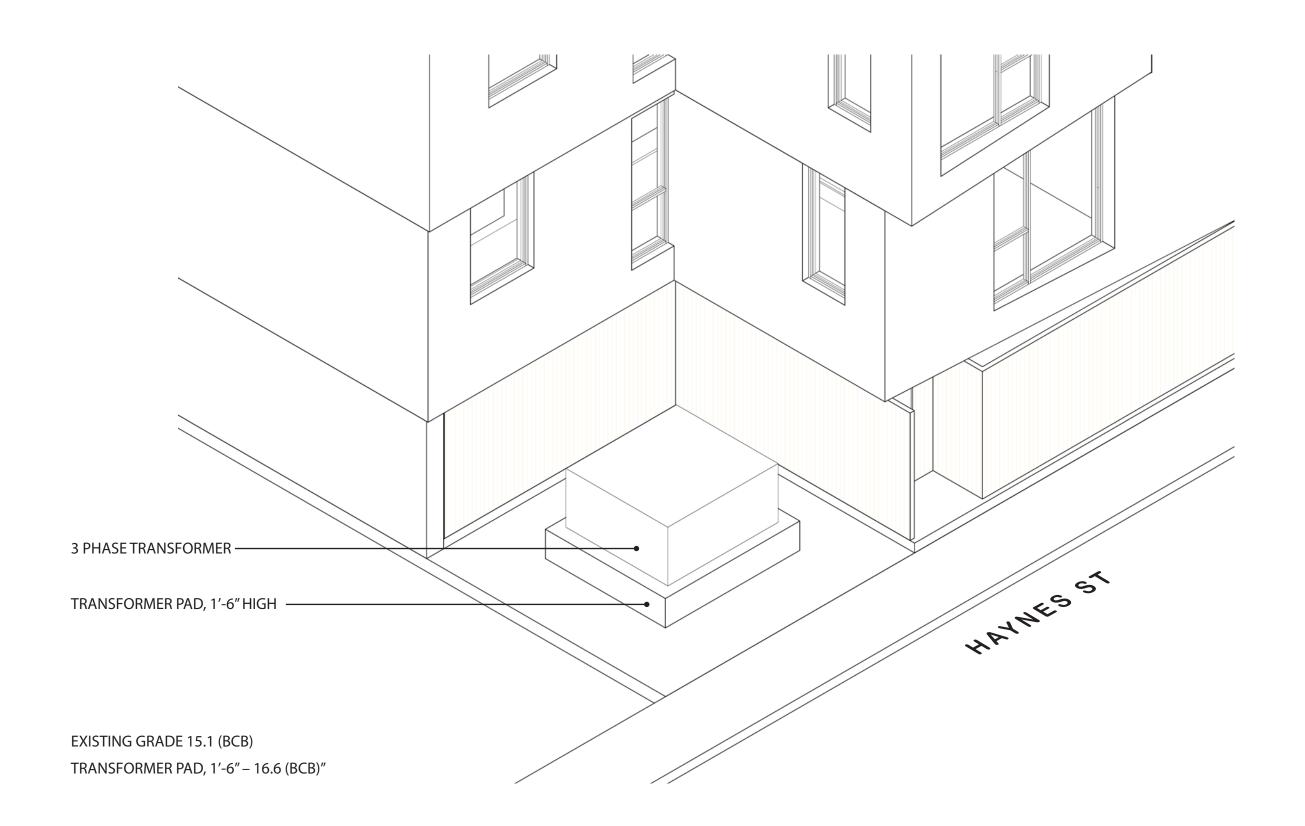
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**Project: 80 Marginal Street - Notice of Intent** 

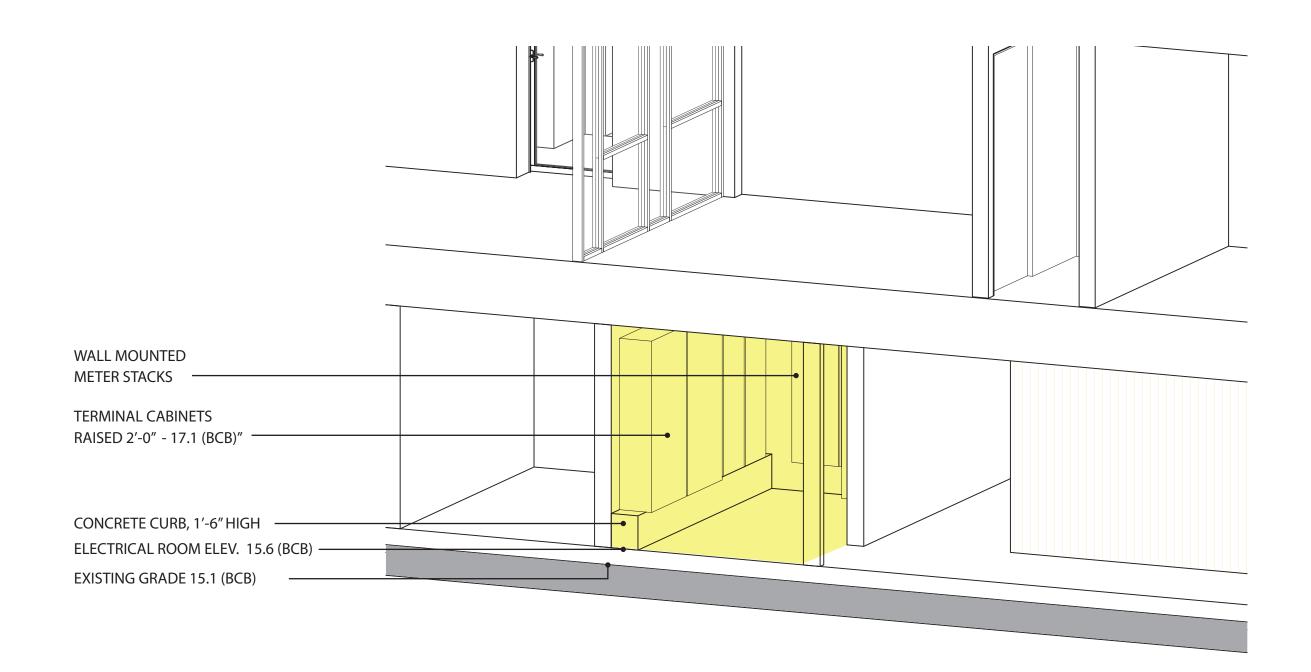
# Appendix H

Transformer & Mechanical Room Sketch

## TRANSFORMER DIAGRAM



## **ELECTRICAL ROOM DIAGRAM**



### MAIN ELECTRICAL ROOM - 1ST FLOOR

Date: November, 2021 Project: 80 Marginal Street - Notice of Intent

# Appendix I

80 Marginal Street Sustainability/Climate Change Approach



## 80 Marginal Street Sustainability/Climate Change Approach

Copper Forge Partners is committed to fully to supporting the city's sustainability, resiliency, and climate change strategies. There are two specific challenges that will make full implementation of the city's strategies difficult, but the team believes that early consideration to alternatives will offer the best opportunity to go as far as possible.

#### **Challenges to Sustainability**

**Site Location.** Located on the waterfront of East Boston, 80 Marginal Street is located within the present and future floodplain. All hydrophobic envelope, services, and system, components need to be installed with the expectation of more frequent flood events. Typical solutions need to be analyzed and new solutions investigated to minimize impacts.

**Electrical Grid Infrastructure.** The team has adopted a preliminary design goal of making the building "All Electric" with purchase options for fossil fuel appliances for minor energy end-uses. Based on initial feedback from Eversource there is only Single-Phase electric service present in the neighborhood. Preliminary estimates of energy requirements for the building suggest that this level of service may not be enough. More creative approaches to matching building requirements to electrical service provisioning need to be explored.

#### **Sustainability Strategies**

The team is utilizing the following strategies to overcome the project challenges, maximize the energy efficiency, resiliency, and durability of the building and minimize the building's lifecycle carbon footprint.

**Integrated Design Team.** At this stage of the development process most developers keep the design team small to control costs and streamline decision making. Copper Forge determined that to meet the challenges expanding the team to include both a Sustainability/Passive House design consultant and the HVAC design engineering team would best meet the objectives of both the project and the Boston Planning and Development Authority.

**Iterative Design Approach.** The expanded design team is also implementing an iterative design approach, starting with the architectural design. The iterative approach combined with the expanded team allows the team to quickly develop and select alternative approaches to meet the sustainability challenges.

**Integration of Passive House Concepts.** Reducing loads to Passive House levels provides benefits to the team and future owners of the building units on several fronts. The team was briefed on the principles of passive house design and is applying them in multiple ways. No specific decisions have been made, but the design has been analyzed and verified to be able to include key passive house attributes as the design phases continue.

Early Consideration of Advanced Construction Practices. Advances to the entire construction process are being made in all aspects of the design and construction process all over the country. The team is researching and integrating ideas that have been tested in other parts of the country to reduce costs, allow for improved sustainability performance, and faster construction. One example is using prefabricated passive house envelope components that are assembled offsite and then trucked in and put in place by trained crews. Entire buildings are being assembled in less than half of the



time, reducing the disruption to the surrounding community, in addition to, lowering project costs and risks with improve energy and sustainability performance.

As the design process continues the team will investigate other strategies and approaches to improve the building resiliency and lower the carbon footprint.

**Project: 80 Marginal Street - Notice of Intent** 

## Attachment A

Stormwater Report

**Project: 80 Marginal Street - Notice of Intent** 

# Attachment B

**Architectural Plans** 

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

# Copper Forge Partners, LLC 80 Marginal Street

## STORMWATER REPORT

November, 2021



Prepared by:



50 Cross Street | Winchester, Massachusetts | 01890 | t 781.756.0001 f 781.756.0007

WDG Project No.: 1679

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

#### Introduction:

This Stormwater Report, Erosion and Sedimentation Control Plan and Long Term Operations and Maintenance Plan have been prepared in conformance with the requirements of the 2008 Massachusetts Department of Environmental Protection (MADEP) Stormwater Handbook, the 2008 amendments to 310 CMR 10.00 et. seq. (Massachusetts Wetlands Act Regulations (MAWPA Regs)) and the City of Boston Wetland Regulations and City of Boston Ordinance Protecting Local Wetlands and Promoting Climate Change Adaptation in the City of Boston. This report is prepared to meet the requirements of MADEP Stormwater Checklist and is submitted as part of a Notice of Intent under the Massachusetts Wetlands Protection Act.

#### **Site Description:**

The proposed project site is located along Marginal Street in the City of Boston approximately 300 linear feet west of the intersection of Haynes Street and Marginal Street. The proposed project is located on land which is presently paved. The site is owned by Copper Forge Partners, LLC and is at the City of Boston's Assessor's parcel ID# 0104480000. The land on which the project is proposed is located in the Land Use Code R4. The entire site is located within the 100 year floodplain Boston Inner Harbor FEMA Map #250286 Panel 0081J dated March 16, 2016.

#### **Description of Proposed Project:**

The proposed project is for the redevelopment of an existing paved parking area to a proposed building with 398.7 cubic feet of SC-740 underground chamber storage.

New utilities will be connected to the mains in the existing Haynes Street as part of the project.

These utilities are in the process of being reviewed and approved by the Boston Water and Sewer Commission (BWSC).

#### **Existing Conditions:**

80 Marginal Street is an existing paved parking area.

Stormwater runoff from the parking area and roof sheet flows from the site to the catch basins in Haynes Street and then to the Boston Inner Harbor. There is no existing drainage system at the site.

#### **Proposed Conditions:**

The parking area at 80 Marginal Street will be replaced with a condominium building with at grade parking and the first floor elevation above the 100 Year Flood elevation. 398.7 cubic feet of SC-740 underground chamber storage. Stormwater drainage for the new building will be directed to the new infiltration areas.

The redevelopment is designed to not increase the flows from the site for up to the 100 year storm event.

#### Soils

According to the NRCS Custom Soil Resource Report, the soils on site are listed as 603 & 627 – Urban Land, wet substratum and Newport, Urban land complex (NRCS Soils Report).

Urban land consist of areas where the soil has been altered or obscured by buildings, industrial areas, paved parking lots, sidewalks, roads and railroad yards.

#### Low Impact Development (LID) Practices - Mitigation Measures

The DEP Stormwater Standards require LID measures be considered. The DEP Stormwater checklist requires that the proponent document which environmentally sensitive and LID Techniques were considered during the planning and design of the projects.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

Below are a list of environmentally sensitive and LID Techniques and how they were or were not able to be implemented into the project:

No disturbance to any Wetland Resource Areas

The proposed project is the redevelopment of an existing disturbed site. The project does not disturb any wetland resource areas.

The project improved existing conditions by reducing particle runoff from the site by replacing a broken pavement with a solid uniform roof.

Site Design Practices

The site is designed to not increase impervious area.

Minimize Disturbance to Existing Trees and Shrubs

The existing site has no significant vegetation. No new planting areas are proposed at the site.

Use of "country drainage" versus curb and gutter conveyance and pipe/vegetated filter strips

Given the heavy urban environment the site could not accommodate "country drainage".

Bioretention Cells

Bioretention cells were considered, but were not implemented for the following reasons:

- Due to high groundwater.
- Grading requirements do not allow for an underdrain outflow to be located on the property.
- During flooding events the bioretention cells would become damaged and solids would become resuspended.
- Due to the high flood elevations Bioretention cells cannot be used to attenuate peak volume and runoff as the bioretention cells would fill up with flood waters during such significant storm events.
- In addition, bioretention cells require pretreatment by sediment forebay which would have the same high groundwater, soils, and flooding issues.

#### Constructed Wetlands

The site does not have the area to accommodate Constructed Wetlands.

Treebox Filter

Treebox filters require overflow outlet pipes that are not possible at the site due to the grading constraints of the property. The MA DEP Handbook also calls for the filter to be 4 feet deep, this would put most of the filter and the underdrain pipe within the groundwater table.

Water Quality Swales & Grass Channels

The site does not have the area to accommodate Water Quality and Grass Swales.

Green Roof

Green roofs were too cost prohibitive to be used at the site.

Permeable Pavements

Permeable pavers cannot be used at the site as most of the site is covered with roof. Permeable pavers would not receive any stormwater runoff.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

Green walls & Fences

Flooding at the site will cause major damage to green wall and fence systems requiring expensive maintenance and contributing to erosion from the site.

Cisterns

Cistern and water reuse are not possible as all of the runoff is from paved areas and cannot practically be treated appropriately.

#### **Total Project Area**

Total Site Area to be Developed = 4,620 SF

Existing Impervious Area = 4,620 SF±

Proposed Impervious Area = 4,620 SF

#### Standard 1: No New Untreated Discharges

The existing disturbed site currently discharges all runoff untreated into the catch basins along Haynes Street. The site will now send all runoff to and underground infiltration areas under the proposed at grade parking area. These drainage systems were designed by Waterfield Design Group, Inc. and are currently being reviewed by the BWSC.

Since the runoff from the redeveloped impervious surfaces on the site will be not increase in accordance with the requirements of the MADEP 2008 Stormwater Handbook and Regulations the redeveloped site will not have any new untreated site runoff. Therefore, Standard 1 has been met by the proposed project.

#### Standard 2: Peak Rate Attenuation

The proposed project involves the redevelopment of the previously developed site. Since the site is almost all impervious and since the proposed impervious area is being directed to infiltration systems at the south and east sides of the site the proposed runoff will be less than the existing runoff. See attached Design Calculations.

Based on the description of the site provided above the requirements of Standard 2 have been met and the redevelopment of the site will not result in any net increase in the peak rate of runoff from the site.

#### **Standard 3: Recharge**

The proposed project involves the redevelopment of a previously developed site. The proposed site will direct the runoff to infiltration systems to recharge the runoff into the soils.

Therefore, Standard 3 has been met by the proposed project to the maximum extent practical.

#### Standard 4: Water Quality

The proposed project involves the redevelopment of a previously developed site. The proposed site will direct the runoff to infiltration systems to treat the runoff.

Therefore, Standard 4 has been met by the proposed project to the maximum extent practical.

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

The proposed project use does not constitute a Land Use with Higher Potential Pollutant Loads as defined by the 2008 MADEP Stormwater Handbook and the 2008 amendments to 310 CMR 10.00 et. seq. (MAWPA Regs).

Therefore Standard 5 has been met by the proposed project.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

#### **Standard 6: Critical Areas**

No portion of the site is in a critical area. Therefore, Standard 6 has been met by the proposed project.

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

The proposed project is a redevelopment project as defined by the 2008 MADEP Stormwater Handbook and the 2008 amendments to 310 CMR 10.00 et. seq. (MAWPA Regs). Below is a summary of how the different Standards are met for the development areas.

Standard 1 (must be met to the maximum extent practical):

Since the runoff from the redeveloped impervious surfaces on the site will be not increase in accordance with the requirements of the MADEP 2008 Stormwater Handbook and Regulations the redeveloped site will not have any new untreated site runoff. Therefore, Standard 1 has been met by the proposed project.

Standard 2 (must be met to the maximum extent practical)

Based on the description of the site provided above the requirements of Standard 2 have been met and the redevelopment of the site will not result in any net increase in the peak rate of runoff from the site.

Standard 3 (must be met to the maximum extent practical)

The proposed project involves the redevelopment of a previously developed site. The proposed site will direct the runoff to the runoff to infiltration systems to recharge the runoff.

Therefore, Standard 3 has been met by the proposed project to the maximum extent practical.

Standard 4 (must be met to the maximum extent practical)

The proposed project involves the redevelopment of a previously developed site. The proposed site will direct the runoff to the runoff to infiltration systems to treat the runoff.

Therefore, Standard 4 has been met by the proposed project to the maximum extent practical.

Standard 5 (must be met to the maximum extent practical)

The proposed project use does not constitute a Land Use with Higher Potential Pollutant Loads as defined by the 2008 MADEP Stormwater Handbook and the 2008 amendments to 310 CMR 10.00 et. seq. (MAWPA Regs).

Therefore Standard 5 has been met by the proposed project.

Standard 6 (must be met to the maximum extent practical)

No portion of the site is in a critical area. Therefore, Standard 6 has been met by the proposed project.

Standard 8 (must be met)

Standard 8 is met for the redevelopment portion as described below.

Standard 9 (must be met)

Standard 9 is met for the redevelopment portion as described below.

Standard 10 (must be met)

Standard 10 is met for the redevelopment portion as described below.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

# Standard 8: Construction Period Pollution Prevention Plan/Erosion and Sedimentation Control Plan Flood Contingency Plan

During construction the contractor shall monitor the national weather service forecast office for weather updates. The contractor shall initiate a flood contingency plan when a "Flood Watch" has been issued for the Boston Inner Harbor. Watches are issued by radio broadcast and are available via the internet at http://www.nws.noaa.gov. The contractor shall remove all construction vehicles from the floodplain area except those necessary to implement the flood contingency plan when a "Flood Watch" has been issued. The contractor shall have staff and materials available seven days a week to implement the flood contingency plan if needed. Once a "Flood Watch" has been issued contractor shall do the following within 6 hours or by the time the "Flood Watch" is to go into effect:

- 1. Notify of the environmental administrator within four (4) hours of any intended as well as completed actions described in this section.
- 2. Securely staking geotextile or jute matting over areas of exposed / unstabilized soil within the flood plain and any potential loose material.
- 3. Contractor shall have enough geotextile or jute matting to completely cover exposed / unstabilized soil within the flood plain. Geotextile or jute matting shall overlap at seams a minimum of three feet. The covering around the perimeter shall be keyed into the surrounding soil six inches. The seams and perimeter of the covering shall be covered with 3/4-inch crushed stone ballast.
- 4. The contractor shall be required to provide a enough geotextile or jute matting and crushed stone available to ballast all loose material on site at all times.
- 5. In the event of flooding, no active work will be allowed to take place within the work zone until the floodwaters have receded, and any damage to erosion control measures have been repaired.

#### **Construction Phasing Notes**

- 1. Contractor shall substantially complete and stabilize all disturbed areas in one phase of construction prior to beginning the next phase of construction.
- 2. Upon completion of a phase of construction contractor shall notify the engineer and city environmental department to review the site prior to beginning the next phase of construction.

#### **Demolition Notes**

- 1. All demolition debris shall be legally disposed of offsite and shall be considered incidental work.
- 2. The contractor shall be responsible for all permits and licenses, fees and approvals required to correctly complete the work.
- 3. The contractor shall assume complete responsibility and liability for the safety of all who will traverse through the site and the structural integrity and safety of all excavations, stored items, work and utilities to remain during construction.
- 4. Demolition, site work and landscaping shall be sequenced so as to avoid long periods of disturbance to the site.

  Construction sequencing shall be scheduled so that work progresses quickly, efficiently and with the least amount of disturbance to the site.
- 5. Contractor shall clean construction site daily to prevent dust and debris from leaving the site. Contractor shall clear debris from site at the end of each day. All potential loose material shall be secured in closed containers. Contractor shall have a water source on site to wash vehicles and spray down dust.
- 6. The contractor shall call Dig Safe (1-888-DIG-SAFE, notify private and public utility companies and receive formal clearance/verification from all affected utilities at least 72 hours prior to excavating near any utilities that may be affected by any portion of this construction. The contractor shall notify the town of Winchester at the same time Dig Safe is called.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

The contractor shall also notify the Winchester department of public works to mark out any town-owned utilities, which are not registered with Dig Safe.

- 7. The contractor shall conform with the specific requirements for excavation as set forth in Massachusetts General Law: Chapter 82, Section 40a and OSHA Regulations 29cfr1926.651(a. The contractor shall coordinate all work involving utility company facilities, whether those facilities be existing or proposed.
- 8. All trees, shrubs, grass and landscaping areas, and physical site features (buildings, fences, paving, light poles, signs etc. not included in this project; along with all other property not included in this project shall be protected during construction operations at all times. This includes abutting property as well. Any damage or loss to the above items or areas caused by the actions of the contractor shall be immediately repaired or replaced by the contractor at no cost to the owner. The contractor is also responsible for the actions of all sub-trades and subcontractors that the contractor may invite to perform the work of this contract.
- 9. The contractors shall verify all existing conditions in the field and report any discrepancies between plans and actual conditions to the engineer prior to starting work.
- 10. Install erosion control measures as indicated prior to beginning demolition activities.

#### **Erosion Control Sequencing**

With regard to work proposed on the project and erosion and siltation control, the sequence of activities will generally take place as follows:

- 1. Remove any accumulation of silt or soil build-up in siltsacks.
- 2. Throughout excavation, filling, and grading operations the Contractor shall take other necessary precautions, including installation of temporary drainage swales, siltation sumps/filtration dams, check dams, strawbales, silt fences, and temporary pipe, to direct and control drainage from disturbed areas on the site so that erosion and siltation is minimal. In addition, no erosion or discharge of silt or larger particles shall occur in areas to remain undisturbed or onto adjacent properties.
- 3. Remove all erosion control measures, including strawbales, silt fence, siltation sumps and check dams, only when construction is completed, upland surfaces are stabilized.

If the Contractor anticipates deviations from the above procedures, he shall obtain written approval from the environmental department prior to proceeding.

#### **Construction Sequencing**

- Phase 1 Demolition: Existing parking lot bituminous concrete will be removed and disposed of.
- Phase 2 Foundation Installation: Foundation installation will include excavation for the foundation and construction of the foundation and associated utilities, drainage and steel erection. Utility work shall require installation of connections to water, sewer, and fire in two location on Haynes Street.
- Phase 3 Framing Construction: Framing construction will include the construction of the interior and exterior of the building. Staging required for framing will meet all OSHA requirements.
- Phase 4 Hardscape Construction: Hardscape construction will involve the surfacing of the at grade parking location and surrounding sidewalks and onsite surfaces. All hardscape and landscape areas will be stabilized before construction can be considered complete.

#### List of Materials Available for to Stabilize Site for Storm Event

- Extra haybales and silt fences to repair broken fencing
- 3/4" Crushed stone to ballast mating

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Geotextile or jute mating to cover exposed material

#### **Erosion and Sediment Control BMP's**

The Erosion and Sediment Controls represent the suggested best management practices proposed for the project. The Contractor's approach to controlling stormwater runoff from the site may vary somewhat; however they must update the plan for the project to reflect the changes and implement appropriate corresponding erosion control measures.

The use of erosion and sediment controls are mandatory and must be employed to eliminate impacts to adjacent areas during construction. If sediment escapes the construction site, off-site accumulations of sediment must be completely removed immediately.

The control practices which are required to minimize stormwater pollution during construction must remain functional until disturbed areas have been stabilized. Erosion control products are to be installed and maintained in accordance with manufacturer's specifications and good engineering practices.

The most important aspects of controlling erosion and sedimentation are limiting the extent of drainage structures. These fundamental principles will be the key factors in the contractor's control of erosion on the project site. If appropriate, the contractor will construct temporary diversion swales and settling basins or use a settling tank. If additional drainage or erosion control measures are needed, they will be located up-gradient from the hay bales and silt fences.

The contractor is responsible for the maintenance and repair of all erosion control devices on-site. All erosion control devices will be regularly inspected. At no time will silt-laden water be allowed to enter sensitive areas (wetlands, streams, and drainage systems). Any runoff from disturbed surfaces will be directed through a sedimentation process prior to being discharged to the existing on site drainage system.

The contractor will establish a staging area off site to stockpile materials.

In the staging area, the contractor will have a stockpile of materials required to control erosion on-site to be used to supplement or repair erosion control devices. These materials will include, but are not limited to hay bales, silt fence, erosion control matting, and crushed stone. As mentioned previously, erosion and sedimentation controls will be employed to minimize the erosion and transport of sediment into resource areas during the earthwork and construction phases of the Project. Erosion and sedimentation control measures will be installed prior to site excavation or disturbance and will be maintained throughout the construction period.

The contractor is responsible for erosion control on the site and will utilize supplemental erosion control measures to supplement the erosion controls shown on the plans prepared for this project to work with his day to day operations at the site.

Primary erosion control techniques proposed include hay bale barriers, silt fence barriers, inlet sediment traps, siltation control dikes, a stabilized construction entrance, temporary diversion channels, and temporary sedimentation ponds when applicable. A detailed description of each technique is discussed below. During the growing season, slope stabilization will be achieved by applying topsoil followed by seeding and mulching as soon as final grades are achieved. Organic mulching, jute netting, geotextiles, or a combination will be used to stabilize slopes completed outside of the growing season.

#### **Best Management Practices (BMPs)**

Silt Fence Strawbale Barriers

Erosion control barriers (silt fences or strawbale dike) will be installed prior to the start of construction. These barriers will remain in place until all tributary surfaces have been fully stabilized.

Strawbale barriers will be placed to trap sediment transported by runoff before it reaches the drainage system or leaves the construction site. In areas where high runoff velocities or high sediment loads are expected, silt fencing may be installed adjacent to the strawbale barriers. This semi-permeable barrier made of a synthetic porous fabric will provide additional protection. The silt fences and hay bale barrier will be replaced as determined by periodic field inspection. The underside of hay bales will be kept in close contact with the earth and reset as necessary. Hay bale barriers and siltation fences will be maintained and cleaned until slopes have healthy stands of grass.

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#### Diversion Channels

Diversion channels may be used to intercept and divert runoff from slopes that are exposed during construction. These diversions will minimize the development of concentrated runoff down slopes, which could produce gully erosion. Diversions will also be used to collect runoff from construction areas and convey it to temporary sediment basins or traps. Temporary diversions will remain in place until slopes are stabilized or graded level. If vegetation of the diversion channel is required to avoid erosion of the channel, the channel will be temporarily stabilized to ensure viability of the grass seed.

#### Temporary Sediment Ponds

Temporary sediment ponds/basins will be constructed as necessary on the site either as excavations or bermed water detention structures, depending on grading. These temporary ponds will retain runoff for a sufficient period of time to allow suspended soil particles to settle out prior to discharge. These temporary basins will be located at low points on the site and will receive runoff from temporary diversion swales. Discharge points from sediment basins will be stabilized as necessary to minimize erosion. The bottom of sediment basins will be cleaned periodically, with the sediment removed to a secure location to prevent siltation of natural waterways.

#### **Stabilization Activities**

All disturbed surfaces will be stabilized within 14 days after construction in any portion of the project site is completed or is temporarily halted, unless additional construction is intended to be initiated within 14 days. The Contractor will not disturb more area than can be stabilized within 14 days unless the area is to remain active. The Contractor will not disturb more area than can be stabilized within the same construction season.

#### **Inspections**

The 2012 EPA Construction General Permit Conditions require routine inspections of the site and careful documentation of events and conditions. The following inspection activities will be completed by a qualified, designated site monitor.

• Erosion control, sedimentation prevention, and stormwater management measures will be inspected at least once per week throughout the construction period.

A log of inspection results will be maintained on-site and will include the name of the inspector, date, major observations, and necessary corrective measures.

Built up sediment will be removed when it has reached one-third the height of the silt fence.

All needed repairs or modifications will be reported to the contractors to permit the timely implementation of required actions. Where necessary repairs do not pose an immediate concern, repairs or modifications will be implemented within two (2) days of inspection.

The plan for the project will be modified within seven days to reflect any modifications to measures as a result of inspection.

A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken will be made and retained as part of the plan for at least three years after the date of the inspection.

Weekly reports of maintenance and inspection activities will be maintained on-site, in conformance with the NPDES permit conditions.

#### Maintenance

The following maintenance practices will be used by the Contractor to maintain erosion and sediment controls. Maintenance activities will be documented on the Inspection Report Forms.

Erosion and sediment control measures and other protective measures must be maintained in effective operating condition.

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• If site inspections indicate that BMPs are not operating effectively, maintenance must be performed as soon as possible and before the next storm event whenever practicable to maintain the continued effectiveness of the BMPs. If implementation before the next storm event is impracticable, the situation must be documented in the forms and alternative BMPs must be implemented as soon as possible.

- If existing BMPs need to be modified or if additional BMPs are necessary for any reason, implementation must be completed before next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the forms and alternative BMPs must be implemented as soon as possible.
- Pollution prevention measures must be maintained in good working order. If a repair is necessary, it will be initiated, if
  practicable, within 24 hours of report.
- Maintenance and inspection of pollution prevention measures must be continued on the site for as long as a portion of the site remains disturbed.
- Stabilization measures will be initiated as soon as practicable on portions of the site where construction has temporarily or permanently ceased. This will occur in NO CASE more than 14 days after construction activities have temporarily or permanently ceased.
- If issues are identified at hazardous materials storage areas, corrective actions will be implemented immediately. If leaks or spills are identified procedures outlined in Standard 9 will be followed.

#### **Record Keeping**

Records will be retained for a minimum period of at least 3 years after the permit is terminated. Any time the following activities occur the *Grading and Stabilization Activities Log* will be filled out:

- When major grading activities occur
- When construction activities temporarily or permanently cease on a portion of the site
- When an area is either temporarily or permanently stabilized

A copy of the Stormwater Construction Site Inspection Reports shall be submitted monthly to the Town Conservation Agent.

#### Log of Changes To The Plan

This forms must be modified as necessary to:

- Include additional or modified BMPs that correct problems identified as a result of an inspection. Revisions must be completed with seven (7) calendar days following the inspection.
- Ensure the effectiveness of the plan in eliminating or significantly minimizing pollutants from stormwater discharges from the site.
- Prevent the reoccurrence of release of a hazardous material or oil.
- Address a change in design, construction, operation, or maintenance which has or may have a significant effect on the
  potential for the discharge of pollutants.

All modifications to the plan must be recorded on the plan Amendment Log included in the plan Appendix.

#### Stockpiling

During construction materials may be stockpiled within the 100 Year Floodplain, but the contractor must have an off-site location within 5 miles of the project that the stockpiled materials can be relocated to incase of a "Flood Watch".

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#### **Training**

Training sessions must be provided by the Contractor for construction personnel. The training will review specific BMPs used in the work are as well as reporting and response measures that may be needed by either construction personnel and/or inspectors to implement the plan. Additionally, appropriate construction personnel will be trained in the operation and maintenance of equipment to prevent the discharge of oil/hazmat and spill response procedures. Training sessions will highlight known spills or releases and recently developed precautionary measures. The Training Log shall be kept up to date by the Contractor.

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### 80 Marginal Street Boston, MA

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### **Stormwater Construction Site Inspection Report**

General Information					
Project Name	80 Marginal Stre	et			
NPDES Tracking No.	MAR10????	Location		80 Marginal Street Boston, MA	
Date of Inspection		Time	Start/End		
Inspector's Name(s) & Title					
Inspector's Company					
Inspector's Contact Information					
Inspector's Qualifications					
Describe present phase of construction					
Type of Inspection: ☐ Regular ☐ Pre-s	storm event 🔲 Du	uring storm event	☐ Post-	storm event	
		Weather Inform	ation		
Has there been a storm event since the last inspection? ☐Yes ☐No  If yes, provide:  Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):					
Weather at time of this inspection?  ☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds ☐ Other: Temperature:					
Have any discharges occurred since the last inspection? □Yes □No If yes, describe:					
Are there any discharges at the time of inspection? □Yes □No If yes, describe:					

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### Site-specific BMPs

ВМР	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
Hay Bales / Silt Fence	□Yes □No	□Yes □No	
Catch Basin Protection	□Yes □No	□Yes □No	
Interior Site Erosion Controls	□Yes □No	□Yes □No	
Temporary Check Dams	□Yes □No	□Yes □No	
Diversion Channels	□Yes □No	□Yes □No	
Temporary Sediment Basins	□Yes □No	□Yes □No	
Stabilized Construction Entrance	□Yes □No	□Yes □No	
Street Sweeping / Construction Access	□Yes □No	□Yes □No	
Temp. and Permanent Slope Stabilization	□Yes □No	□Yes □No	
Dust Control	□Yes □No	□Yes □No	

#### N/A - Not Applicable

#### **Overall Site Issues**

BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
Are all slopes and disturbed areas not actively being worked properly stabilized?	□Yes □No	□Yes □No	
Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs	□Yes □No	□Yes □No	
Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	□Yes □No	□Yes □No	

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BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
Are discharge points and receiving waters free of any sediment deposits?	□Yes □No	□Yes □No	
Are storm drain inlets properly protected?	□Yes □No	□Yes □No	
Is the construction exit preventing sediment from being tracked into the street?	□Yes □No	□Yes □No	
Is trash/litter from work areas collected and placed in covered dumpsters?	□Yes □No	□Yes □No	
Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	□Yes □No	□Yes □No	
Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	□Yes □No	□Yes □No	
Are materials that are potential stormwater contaminants stored inside or under cover?	□Yes □No	□Yes □No	
Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	□Yes □No	□Yes □No	
(Other)	⊒Yes ⊒No	□Yes □No	
the event of a spill re r Spill Prevention Pla			d contact appropriate agencies. Refer to SWPPP
re sediment / pollution o No □ Yes If yes, d			

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Describe any corrective action at this time:
Non-Compliance
Describe any incidents of non-compliance not described above:
General Comments (Attached figures to show locations of concern):
Are Additional Erosion Control Measures Needed?
□ No □ Yes If yes, describe:
Notes:
Notes:

Date: November, 2021 Project: 80 Marginal Street - Notice of Intent – Stormwater Report	
CERTIFICATION STATEMENT	
"I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gathered a the information submitted. Based on my inquiry of the person or persons who manage the system, or tho directly responsible for gathering the information, the information submitted is, to the best of my knowledge true, accurate, and complete. I am aware that there are significant penalties for submitting false information the possibility of fine and imprisonment for knowing violations."	nd evaluated se persons ge and belief,
Print name and title:	
Signature:	
Date:	

\*\* A copy of this report should be placed in the Monitoring Section of the Stormwater Pollution Prevention Plan.

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# **Corrective Action Log**

Project Name: Site Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/ Responsible person

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# Site Amendment Log

Project Name: Site Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

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# **Subcontractor Certifications/Agreements**

# SUBCONTRACTOR CERTIFICATION STORMWATER POLLUTION PREVENTION PLAN

Project Number:
Project Title:
Operator(s):
As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.
Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:
I certify under the penalty of law that I have read and understand the terms and conditions of the Report for the above designated project and agree to follow the BMPs and practices described in the Report.
This certification is hereby signed in reference to the above named project:
Company:
Address:
Telephone Number:
Type of construction service to be provided:
Signature:
Title: Date:

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# Grading and Stabilization Activities Log

Project Name: Site Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

Date: November, 2021 Project: 80 Marginal Street - Notice of Intent - Stormwater Report

# Site Training Log

## **Stormwater Pollution Prevention Training Log**

Proje	ect Name:			
Proje	ect Location:			
Instr	uctor's Name(s):			
Instr	uctor's Title(s):			
Cou	rse Location:			Date:
Coui	rse Length (hours):			
Stori	mwater Training Topic: (	chec	k as appropriate)	
<b>п</b>	Erosion Control BMPs		Emergency Pro	cedures
	Sediment Control BMPs		Good Housekee	eping BMPs
	Non-Stormwater BMPs			
	cific Training Objective: ndee Roster: <i>(attach add</i>			
No.	Name of Attendee		Co	mpany
1				
2				
3				
4				
5				
1 2 3 4 5 6 7				
7				
8 0				
a				

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# **Delegation of Authority Form**

Date:

### **Delegation of Authority**

I, (name), hereby designate position below to be a duly authorized representative for t environmental requirements, including the Construction C constructior any reports, stormwater pollution prevention plans and all	he purpose of overseeing compliance with eneral Permit, at the n site. The designee is authorized to sign
	(name of person or position) (company) (address) (city, state, zip) (phone)
designee above meets the definition of a "duly authorized	
I certify under penalty of law that this document and all atterection or supervision in accordance with a system design properly gathered and evaluated the information submitted persons who manage the system, or those persons direct information, the information submitted is, to the best of my and complete. I am aware that there are significant penal including the possibility of fine and imprisonment for know	gned to assure that qualified personnel d. Based on my inquiry of the person or ly responsible for gathering the / knowledge and belief, true, accurate, ties for submitting false information,
Name:	
Company:	<u></u>
Title:	<u></u>
Signature:	

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#### Construction Phase and Long Term Operation and Maintenance Plan (Standard 9 MA DEP Handbook)

An Operation and Maintenance Plan is summarized below and will be incorporated into the construction documents for this project.

In accordance with the Stormwater Management Policy issued by the Department of Environmental Protection (DEP), Waterfield Design Group, Inc. has prepared the following Operation and Maintenance Plan for the proposed project. This plan is broken into two major sections. The first section describes construction-related controls and practices. The second section is devoted to the post-construction operation and maintenance plan.

#### **Basic Information**

Developer: RMD Management Associates, LLC

Contact: Mr. Paul Marks Address: P.O Box 1046

City: Brookline, MA 02246 Tel: (617)731-9114

#### Good Housekeeping BMP's (Construction and Post Construction Periods)

The following good housekeeping practices will be followed onsite during and after the construction project:

- An effort will be made to store only enough product required to do the job. All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacture
- Whenever possible, all of a product will be used up before disposing of the container
- Manufacturer's recommendations for proper use and disposal will be followed
- The site superintendent will inspect daily to ensure proper use and disposal of materials
- When a Flood Watch is posted for the Boston Inner Harbor all loose materials within the 100 year floodplain (everywhere lower than the first floor of the indoor soccer facility) shall be removed from the site.

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#### **CONSTRUCTION PERIOD**

#### **Material Handling And Waste Management**

#### Hazardous Products:

These practices will be used to reduce the risks associated with hazardous materials. Material Safety Data Sheets (MSDSs) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the SWPPP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product they are using, particularly regarding spill control techniques.

- Products will be kept in original containers unless they are not re-sealable
- Original labels and material safety data will be retained; they contain important product information
- If surplus product must be disposed of, manufacture's or local and State recommended methods for proper disposal will be followed

#### Hazardous Waste

All hazardous waste material will be disposed of by the Contractor in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. Site personnel will be instructed in these practices by the job site superintendent, who will also be responsible for seeing that these practices are followed.

#### Solid and Construction Wastes

All waste materials will be collected and stored in accordance with state and federal law in an appropriately covered container and/or securely lidded metal dumpster.

All trash and construction debris from the site will be deposited in the dumpster. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal.

All waste dumpsters and roll-off containers will be located in an area where the likelihood of the containers contributing to storm water discharges is negligible. If required, additional BMPs must be implemented, such as sandbags around the base, to prevent wastes from contributing to storm water discharges.

#### Sanitary Wastes

All sanitary waste will be collected from the portable units a minimum of three times per week by a licensed portable facility provider in complete compliance with local and state regulations.

All sanitary waste units will be located in an area where the likelihood of the unit contributing to storm water discharges is negligible. If required, additional BMP's must be implemented, such as sandbags around the base, to prevent wastes from contributing to storm water discharges.

#### Washout Areas

The Contractor will provide wheel wash stations and concrete washout areas at the site as described below.

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Wheel Wash Stations

The Contractor will provide wheel wash stations adjacent to the construction entrance which lead directly to a public way or portions of the site outside the limits of work

Concrete Washout

Trucks will be allowed to washout or discharge surplus concrete or drum wash water on the site, but only in specifically designated diked and impervious washout areas which have been prepared to prevent contact between the concrete wash and stormwater. Waste generated from concrete wash water shall not be allowed to flow into drainage ways, inlets, receiving waters or highway right of ways, or any location other than the designated concrete washout. Waste concrete may be poured into forms to make riprap or other useful concrete products. Proper signage designating the "concrete washout" shall be placed near the facility.

The hardened residue from the concrete washout diked areas will be disposed of in the same manner as other non-hazardous construction waste materials or may be broken up and used on site as deemed appropriate by the Contractor. Maintenance of the washout is to include removal of hardened concrete. Facility shall have sufficient volume to contain all the concrete waste resulting from washout and a minimum freeboard of 1 foot. Facility shall not be filled beyond 95% capacity and shall be cleaned out once 75% full unless a new facility is constructed.

#### Vehicle and Equipment Fueling

Areas will be designated on site, outside of any resource or buffer area, to refuel or maintain equipment used on site. Equipment fuel storage and refueling operations will be in an upland area at a horizontal distance greater than 100 feet from the boundaries of the wetland resource areas. The fueling areas will include secondary containment. The fueling areas will be inspected and cleaned weekly.

#### **Spill Prevention and Control Plan**

The Contractor will train all personnel in the proper handling and cleanup of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water. It shall be the responsibility of the job site superintendent to properly train all personnel in spill prevention and clean up procedures.

In order to minimize the potential for a spill of hazardous materials to come into contact with storm water, the following steps will be implemented:

- 1. All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete curing compounds and additives, etc.) will be stored in a secure location, with their lids on, preferably under cover, when not in use.
- 2. During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area, An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials

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- 3. The minimum practical quantity of all such materials will be kept on the job site at all times.
- 4. A spill control and containment kit (containing, for example, absorbent materials, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site. Catch basin inlet cover blankets and inflatable pipe plugs will be used to seal the openings in the outlet control structure and isolate product in the wet pond should a spill occur.
- 5. Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.

In the event of a spill, the following procedures should be followed:

- 1. All spills will be cleaned up immediately after discovery.
- 2. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with the hazardous substances.
- 3. The project manager and the Engineer of Record will be notified immediately.
- 4. Spills of toxic or hazardous materials will be reported to the appropriate federal, state, and/or local government agency, regardless of the size of the spill.
- 5. If the spill exceeds a Reportable Quantity, the SWPPP must be modified within seven (7) calendar days of knowledge of the discharge to provide a description of the release, the circumstances leading to the release, and the date of the release. The plans must identify measures to prevent the recurrence of such releases and to respond to such releases.

The job site superintendent will be the spill prevention and response coordinator. He will designate the individuals who will receive spill prevention and response training. These individuals will each become responsible for a particular phase of prevention and response. The names of these personnel will be posted in the material storage area and in the office trailer onsite.

In case of a spill the site superintendent will determine if the fire department needs to be called.

#### Allowable Non-Stormwater Discharge Management

Certain types of discharges are allowed under the NPDES General Permit for Construction Activity, and it is the intent of this Report to allow such discharges. These types of discharges will be allowed under the conditions that no pollutants will be allowed to come into contact with the water prior to or after its discharge. The control measures that have been outlined previously in this Report will be strictly followed to ensure that no contamination of these non-stormwater discharges takes place. The following non-stormwater discharges that may occur from the job site include:

- Discharges from fire-fighting activities
- Fire Hydrant flushings
- Waters used to wash vehicles where detergents are not used
- Water used to control dust in accordance with off-site vehicle tracking
- Potable water including uncontaminated water line flushings
- Routine external building wash down that does not use detergents
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used

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- Uncontaminated air conditioner compressor condensate
- Uncontaminated ground water or spring water
- Foundation or footing drains where flows are not contaminated with process materials such as solvents
- Uncontaminated excavation dewatering
- Landscape irrigation

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#### Standard 9: Long Term Operation and Maintenance Plan

#### POST CONSTRUCTION PERIOD LONG-TERM POLLUTION PREVENTION PLAN

#### Post-Construction BMP's for Water Quality

- Good housekeeping practices for long-term pollution prevention are a detailed below.
- All material and waste products used for maintaining the site shall be stored inside, outside under cover, or placed in the dumpster if it is being disposed of.
- No post-construction vehicle washing shall occur on site.
- Requirements for routine inspections and maintenance of stormwater BMPs are detailed below.
- Spill prevention and response plans are detailed below.
- Provisions for maintenance of lawns, gardens, and other landscaped areas are detailed below.
- Storage of all fertilizers, herbicides, and pesticides shall follow the material storage requirements listed above. Use of all fertilizers, herbicides, and pesticides is detailed below.
- All pet waste shall be disposed of in the dumpster facilities.
- No septic system is on site.
- Solid waste management shall be relegated to the disposal facilities placed on site. All debris and other waste shall be disposed of in the dumpster. The dumpster shall be emptied at a regularly scheduled time to be determined by the site operator. Special pick-ups shall be made before and after large events to make sure that the dumpster does not overflow. Dumpster shall be emptied if a "Flood Watch" is issued for the Aberjona River and then secured to the concrete foundation pad until flood waters have receded from the site.
- Snow disposal and plow plans are detailed below.
- Winter salt and sand use are detailed below.
- Street sweeping schedules are detailed below.
- Provisions for prevention of illicit discharges to the stormwater management system are detailed below.
- Stormwater BMPs are not near a critical area or an LUHPPL. If a spill occurs that directs contaminants to the catch basin entry points on site. Those spills shall be contained by closing the flap gates at the outfalls.
- Training of staff involved with implementing the Long-Term Pollution Prevention Plan is detailed below.
- List of Emergency contacts responsible for implementing the Long-Term Pollution Prevention Plan are listed above in the Basic Information section.

The following best management practices are specified in the proposed development program to mitigate the increase in stormwater runoff from the site.

#### BMPs Used

#### > Street Sweeping

#### Post-Development Activities

- 1. All sediments removed from the site shall be disposed of properly and in accordance with all applicable local and state regulations.
- 2. All vegetated slope areas on the site shall be stabilized following completion of construction and maintained to control erosion. Any disturbed areas shall be re-seeded and stabilized by the application of jute mesh if the slope exceeds 3 feet horizontal to 1 foot vertical.
- 3. Snow storage at the site will be managed to prevent blockage of storm runoff.
- 4. Snow shall not be dumped into any waterbody, pond, or wetland resource area.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

5. Sand and debris deposited on vegetated and paved areas at the site shall be cleared from the site and disposed of at the end of the snow season, no later than May 15.

6. Snow should be trucked off-site to an approved disposal area operated in accordance with MADEP Snow Management Standards when there is insufficient space for snow storage at the site.

All structural BMP's and maintenance responsibilities as identified on the site plans and within this document will be owned and maintained by the owner of the property and shall run with the title of the property.

#### **Annual Reporting Form**

The Owner shall keep complete records of all BMP maintenance activities using the following form which will be submitted annually to the Boston Environmental Department as part of the Order of Conditions:

**OPERATION AND MAINTENANCE PLAN** 

Project: 80 Marginal Street Location: Boston, MA

Structure or Lack	Inspection	Inspection	Inspection Performed	Method	Notes/Remarks
or details of 1 days	Schedule	Date	By:	mentod	Notestivending
Inspect Underground Infiltration Chambers	April / May			Visual Inspection	

Party responsible for O & M Plan:

Name RMD Management Associates, LLC

Address P.O. Box 1046, Brookline, MA 02446 Contact Paul Marks Phone (617) 731-9114

NOTE: This form must be submitted to the Boston Environmental Department yearly by May 1st.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

#### **Annual Operating Budget**

The estimated annual operating budget for the O & M Plan is \$1,000±.

#### **Post-Construction Snow Storage**

There should be minimum plowing at the site as most of the parking areas are under the building.

#### 80 Marginal Street Flood Preparation Plan

The site operator shall monitor the national weather service forecast office for weather updates. The operator shall initiate a flood preparation plan when a "Flood Watch" has been issued for the Boston Inner Harbor. Watches are issued by radio broadcast and are available via the internet at http://www/nws.noaa.gov. The operator shall remove all vehicles from the floodplain area. The operator shall have staff and materials available seven days a week to implement the Flood Preparation Plan if needed. Once a "Flood Watch" has been issued the plan shall include the following:

- Remove all loose materials from the floodplain area.
- Secure any equipment within the 100 year flood plain too large to move or store.
- Remove all debris and debris collection receptacles from the flood plain area. Confirm that debris collection receptacles are secured.

#### **Inspections**

The following inspection activities will be completed by a qualified, designated site operator.

- Once a Flood Watch is issued for the Boston Inner Harbor and inspection shall be made by the property manager to ensure that the proper preparations described in this manual have been made.
- After a flooding event has occurred and has been cleaned up an inspection shall be made to ensure that materials have not left the site and that materials (debris, hazardous materials, etc.) that have entered the site from the flood event have been properly removed or treated.
- Inspections to evaluate conditions within the floodplain and to improve and prevent the transmission of debris from the site during flood events shall be completed quarterly.

A log of inspection results will be maintained on-site and will include the name of the inspector, date, major observations, and necessary corrective measures.

Necessary minor modification to the site will be implemented within two (2) days of inspection.

This manual will be modified within seven days to reflect any modifications to measures as a result of inspection.

A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Manual, and actions taken will be made and retained as part of the Manual for at least three years after the date of the inspection.

After a flood event the turf manufacture shall be contacted to inspect the cleanup of the site and to test the field to ensure it continues to meet hardness and contamination safety standards. If the field does not meet safety standards, the field shall be modified as necessary and retested before play can be resumed.

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

#### **Training**

Training sessions must be provided by the Owner for property managers and operations personnel. The training will review specific procedures to be put in place in case of a Flood Watch in particulars of how to manage the synthetic turf field before and after the possible flood, maintenance of the site and stormwater structures, and reporting and response measures that may be needed by either operations personnel to implement the Operations and Maintenance plan. The Training Log shall be kept up to date by the Owner.

#### **Updating the Plan**

This plan must be modified as necessary to:

- Include additional or modified BMPs that correct problems identified as a result of an inspection. Revisions must be completed with seven (7) calendar days following the inspection.
- Ensure the effectiveness of the plan in eliminating or significantly minimizing pollutants from stormwater and flood waters discharging from the site.
- Prevent the reoccurrence of release of a hazardous material or oil.
- Address a change in design, construction, operation, or maintenance which has or may have a significant effect on the
  potential for the discharge of pollutants.

All modifications to the plan must be recorded on the Plan Amendment Log included in the Appendix.

#### Standard 10: Prohibition of Illicit Discharges

As provided for in the 2008 MADEP Stormwater Handbook and the 2008 amendments to 310 CMR 10.00 et. seq. (MAWPA Regs) the following will serve as the Illicit Discharge Compliance Statement for the project.

The existing developed site has no existing illicit discharges from the site. The new site is being designed such that there will not be any illicit discharges from the site.

Print name and ti	tle:Jacob R. Murray, PE, Senior Civil Engineer	
Signature:	\ h_/	
Date:11-5-21		

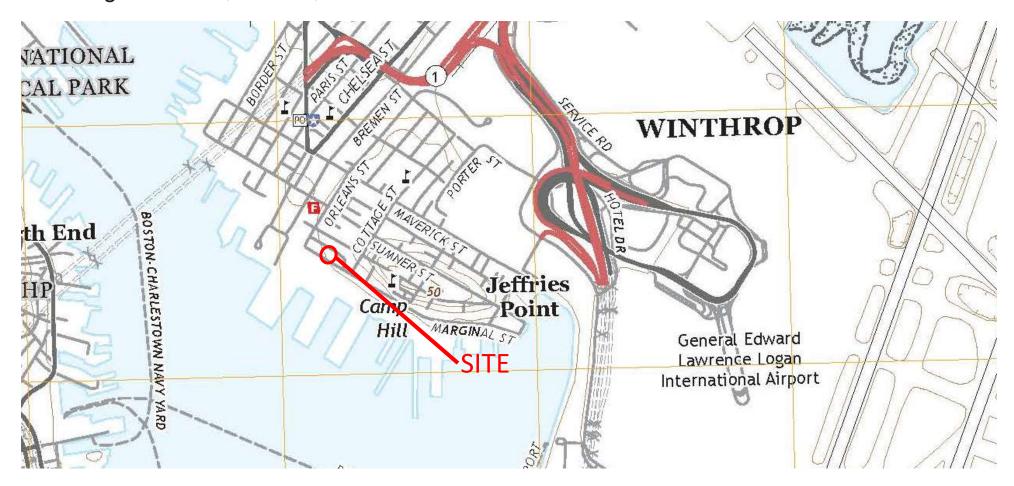
#### Conclusion

As demonstrated in this report, the construction of the proposed redevelopment project will meet the requirements of the 2008 MADEP Stormwater Handbook and the 2008 amendments to 310 CMR 10.00 et. seq. (MAWPA Regs)MADEP Stormwater Guidelines except where the proposed redevelopment site meets the regulations to the maximum extent practical where noted above.

**Project: 80 Marginal Street - Notice of Intent - Stormwater Report** 

# LOCUS MAP, GEOTECHNICAL REPORT & NRCS SOIL MAP

Regional Locus 80 Marginal Street, Boston, MA





# REVISED FOUNDATION ENGINEERING REPORT 80 MARGINAL STREET EAST BOSTON, MASSACHUSETTS

**AUGUST 10, 2021** 

#### **Prepared For:**

Copper Forge Partners, LLC c/o RMD Management Assoc., LLC P.O. Box 1046 Brookline, MA 02446

2269 Massachusetts Avenue Cambridge, MA 02140 www.mcphailgeo.com (617) 868-1420

**PROJECT NO. 6641.2.02** 



August 10, 2021

Copper Forge Partners, LLC c/o RMD Management Assoc., LLC P.O. Box 1046 Brookline, MA 02446

Attention: Mr. Paul Marks

Reference: 80 Marginal Street; East Boston, Massachusetts

Revised Foundation Engineering Report

#### Ladies and Gentlemen:

This letter report presents the results of our previous subsurface exploration program and our revised foundation design study for the proposed development to be constructed at 80 Marginal Street in East Boston, Massachusetts. Refer to the Project Location Plan (**Figure 1**) for the general site location.

This report was prepared in accordance with our proposal for supplemental geotechnical engineering services dated July 21, 2021 and the subsequent authorization of Mr. Paul Marks. These services are subject to the limitations contained in **Appendix A**. This report supersedes the recommendations previously provided in McPhail's Foundation Engineering Report dated August 31, 2018.

#### **Purpose and Scope**

The purposes of our previous subsurface exploration program and supplemental foundation design study are to assess the subsurface soil and groundwater conditions at the site as they relate to the revised project development, and based on this information, to provide safe and economic foundation design recommendations for the proposed building.

Foundation design includes foundation support of the proposed structure and its lowest level slab, treatment of the lowest level slab in consideration of groundwater, lateral earth pressures on foundation walls and cantilevered site retaining walls, and seismic design considerations in accordance with the provisions of the Ninth Edition of the Massachusetts State Building Code (Code). Foundation construction considerations relating to the recommended foundation design are also presented herein.

#### **Available Information**

Information provided to McPhail Associates, LLC (McPhail) included a set of schematic architectural drawings prepared by Merge Architects Inc. for a design meeting on July 9, 2021. The drawings presented floor plans, elevations and renderings of the proposed development. Additionally, subsurface information contained in McPhail's aforementioned Foundation Engineering Report was used in preparation of this report.



#### **Existing and Proposed Site Conditions**

The approximate 4,600 square-foot project site spans from Haynes Street to the north to Marginal Street to the south within a residential block that is bounded by Haynes Street to the east and Orleans Street to the west. A paved parking lot is present along the eastern side of the site. The western side of the site is bounded by a two-story wood-framed structure (23 Haynes Street) to the north and a landscaped area to the south. The site is currently undeveloped and utilized as a paved at-grade parking lot. The existing ground surface across the site is relatively level at about Elevation +15. Elevations as presented herein are in feet and referenced to the Boston City Base (BCB) Datum.

The revised development is understood to include the construction of an elevated four-story, residential building. The ground floor level of the building will be primarily used for at-grade parking and will also include a lobby, elevator, bike storage and a trash room. The first through the fourth floors of the proposed building are planned to contain 1- to 3-bedroom condominiums with walk-out decks and courtyards.

#### **Previous Subsurface Exploration Programs**

Previous subsurface explorations were performed at the project site in September 2015 and August 2018. On September 21, 2015, a subsurface exploration program consisting of two borings (B-1 and B-2) was completed at the project site within the existing paved parking lot. The borings were performed by Carr-Dee Corp. (Carr-Dee) of Medford, Massachusetts under contract to McPhail. To permit monitoring of the groundwater level at the site, a groundwater observation well was installed in completed borehole B-1.

On August 17, 2018, a subsurface exploration program consisting of two (2) borings (B-101 and B-102) and two (2) test pits (TP-1 and TP-2) was completed at the site. The borings and test pits were conducted by Carr-Dee and Guarino Site and Utility Contracting LLC of Saugus, Massachusetts, respectively, both under contract to Copper Forge Development. The test pits were primarily performed to assess the existing foundation conditions of the adjacent 23 Haynes Street building.

Approximate locations of the previous borings and test pits are indicated on the attached Subsurface Exploration Plan, **Figure 2**. Logs of the previous borings prepared by Carr-Dee are contained in **Appendix B**. Logs of the test pits prepared by McPhail are contained in **Appendix C**.

Installation details of the observation well are indicated on the boring log contained in **Appendix B**. A groundwater monitoring report is presented in **Appendix D**.

Both phases of subsurface explorations were observed by a McPhail field representative who performed field layout, prepared field logs, obtained and visually classified soil samples, monitored groundwater conditions in the open explorations and observation well, and



determined the required exploration depths based upon the actual subsurface conditions encountered. Field locations of the subsurface explorations were determined by taping from existing site features identified on the referenced site plan provided to us. Based upon the existing site topography, and for the purposes of this report, ground surface at the location of all explorations was assumed to be Elevation +15.

#### **Subsurface Conditions**

The following description of the subsurface conditions across the project site was developed primarily from the explorations performed at the site, but also from our knowledge of the local geology. Detailed descriptions of the conditions encountered in the borings and test pits are presented in the logs contained in **Appendix B** and **Appendix C**, respectively. Based on the above, the following is a description of the generalized subsurface conditions encountered from ground surface downward.

#### Soil and Groundwater Conditions

Underlying the approximate 6-inch thick asphalt pavement surface treatment, the explorations encountered granular fill material which generally consists of loose to compact, brown to black to gray, sand and gravel with some silt. Additionally, a 2- to 4-foot layer of cohesive fill was encountered within the fill deposit within both the borings and the test pits. The fill was also observed to contain occasional pieces of wood, cinders, ash and brick with some organic material. The fill material was observed to extend to depths of 10.5 and 14 feet below the existing ground surface. Test pits TP-1 and TP-2 were terminated within the fill deposit at depths ranging from 6.5 to 7 feet below existing ground surface.

Within borings B-1, B-2, and B-101, an organic silt deposit was encountered, which generally consists of very soft to firm, gray organic silt with some sand and trace peat fibers, was present below the fill material. The organic silt deposit was observed to extend to depths ranging from 13 to 14.5 feet below the existing ground surface.

A marine clay deposit was encountered underlying the fill and organic deposits, where encountered. The marine clay generally consists of a stiff to hard, brown-gray to gray, silty clay with some to trace gravel and trace sand varying to a sandy silty clay with some gravel. It should be noted that a 1.5-foot thick layer of compact sand was observed between the organic deposit and marine clay within boring B-1

The surface of the marine clay deposit was encountered at depths between 14 and 15 feet below the existing ground surface. The borings were terminated in the marine clay at depths ranging from 27 to 32 feet below ground surface.

Groundwater was observed in the boreholes upon the completion of drilling at a depth of 7 feet below the ground surface, corresponding to approximately Elevation +8. Following



excavation, groundwater was observed within the test pits at a depth of 6.5 feet below existing ground surface corresponding to approximately Elevation +8.5. In addition, groundwater measurements recorded in the observation well installed in previously completed boring B-1 indicate the groundwater level to range from about 4.9 to 6 feet below the existing ground surface, corresponding to between approximate Elevation +10.1 and Elevation +9. It is anticipated that future groundwater levels across the site may vary from those reported herein due to factors such as normal seasonal changes, runoff particularly during or following periods of heavy precipitation, and alterations of existing drainage patterns.

#### Adjacent Foundation Conditions

Based on our observations of test pits TP-1 and TP-2, the adjacent building located at 23 Haynes Street appears to be supported by a granite block foundation along the perimeter wall that bears in the fill deposit. Along the perimeter, the bottom of footing level was observed to range from approximately 5.3 to 6 feet below the ground surface and offset approximately 0.2-feet from the exterior face of the brick wall foundation, into the project site. Backfill around the footing and against the foundation wall was observed to consist of a granular fill material, as described above. The test pit logs documenting these observations are contained in **Appendix C**.

#### **Foundation Design Recommendations**

Based on the subsurface conditions presented herein and the revised building design, it is recommended that foundation support for the new structure extend below the unsuitable fill and compressible organic soils present across the site and be founded in the stiff to hard marine clay deposit present at depths ranging from 13 to 14.5 feet below the existing ground surface. Foundation options considered feasible to transfer the structural loads into the top of the marine clay deposit include: drilled caissons, soil improvement and helical piles. There are various advantages and disadvantages associated with each of the foundation alternatives that are discussed in further detail below.

#### **Drilled Caissons**

One potential options for foundation support consists of drilled straight-shaft and/or belled concrete-filled caissons bearing directly on the top of the stiff to hard marine clay deposit. The caissons should be designed utilizing a maximum design bearing pressure of 3.0 tons per square foot (tsf) with a maximum 2 foot undercut. A minimum shaft diameter of 36 inches is recommended. Belling should be performed entirely within the clay deposit as the overlying fill and organic deposit are not considered capable of withstanding belling operations without collapse. Further, installation of a temporary casing, sealed into the top of the clay, is required prior to commencement of belling operations.



Use of drilled caissons are considered advantageous since the installation is anticipated to produce relatively low vibrations being transferred to the adjacent 23 Haynes Street structure. It is also anticipated that lower mobilizations costs could be realized if the caissons can be drilled with a truck-mounted drill rig. The use of drilled caissons will produce soil spoils which will require disposal from the site.

#### Soil Improvement

Soil improvement methods consisting of either rigid inclusions or grouted aggregate piers are considered a feasible for the project site to allow the use of conventional spread footings as foundation support. The use of rigid inclusions or grouted aggregate piers are recommended to be used in consideration of the organic deposit that was observed to be up to 4.5 feet in thickness across the site.

Rigid inclusions and aggregate piers are typically constructed by driving or vibrating a hollow mandrel to the design depth and vertically ramming lifts of concrete or aggregate using a specially designed tamper head and high-energy impact densification equipment to create a compacted concrete base or a column of aggregate. If required, the mandrel can be raised and lowered several times, vertically ramming lifts of concrete and aggregate to create an expanded base and shaft. Grout is typically installed within the thickness of the compressible organic soil for the aggregate piers. The rigid inclusion and aggregate pier elements are typically installed in a grid pattern and are used in conjunction with an engineered granular pad (also referred to as a load transfer platform) to produce an intermediate foundation system for support of conventions spread footing foundations. The type and thickness of the engineered pad is dependent on the design bearing pressure and is designed by the rigid design-build contractor. The design-build contractor should check that the structural design of the footings (i.e., one-way shear, two-way shear, moment, etc.) based on the footing dimensions and reinforcement as shown on the Contract Drawings prepared by the project structural engineer are adequate to resist the concentrated forces from the soil improvement elements acting on the bottom of the footings.

Since soil improvement techniques are provided by a design-build contractor, detailed design calculations should be submitted to the Architect and design team for review prior to the beginning of construction. A detailed explanation of the design parameters for capacity and settlement calculations should be included in the design submittal. The design submittal should also include a testing program to demonstrate the capacity of the elements. All calculations and drawings should be prepared and sealed by a Professional Engineer who is licensed in the Commonwealth of Massachusetts and retained by the Contractor who is to perform the work.

The following general criteria should be utilized in the design of rigid inclusions:

 Rigid inclusions should extend at least to the surface of the natural inorganic marine clay deposit.



- Estimated long-term settlement for footings should be less than 1-inch.
- Estimated long-term differential settlement of adjacent footings should be less than 1/2-inch.
- A minimum of one (1) modulus load test should be performed on a rigid inclusion to 150 percent of the maximum design stress to confirm the design parameters.
   The modulus load test set-up should include installation of a tell-tale to measure the movement at the tip of the element.

The design-build consultant will determine the layout of the soil improvement elements beneath the footings based on structural loads provided by the Project Structural Engineer. The design calculations and layout submittal should be reviewed by the Geotechnical Engineer.

The installation methods associated with the soil improvement methods are anticipated to produce significant vibrations at the adjacent 23 Haynes Street structure that could result in impacts to the building including cracking and settlement. Additionally, anticipated mobilization costs associated with the soil improvement operation, as compared to the size of the project site, could reduce the economic feasibility of this foundation alternative.

#### **Helical Piles**

A helical pile is a factory-manufactured unit consisting of a central steel shaft and one or more steel, helix-shaped bearing plates welded to the lead shaft. The diameters of the helices typically range from about 6 to 14 inches. Helical piles are installed by simultaneously applying a downward force and rotating the pile into the soil using a hydraulic torque drive head mounted on an excavator. Shaft extensions are added until the helical bearing plates reach the required depth and minimum installation torque within the design bearing stratum required to support the design load. During installation, the torque should be measured using a direct in-line electronic torque meter that has been recently calibrated.

As noted previously, it is recommended that the helical piles derive their support in the natural, inorganic marine clay deposit. Each helical pile should therefore have all bearing plates fully embedded in the natural, marine clay deposit. Helical pile capacity is typically dependent on the type of soil and the size and configuration of the helical pile as installed by a specialty foundation contractor. Therefore, the helical pile design should be performed by a Professional Engineer registered in the Commonwealth of Massachusetts who is retained by the specialty foundation contractor. The helical pile design should be submitted for review to both the project structural engineer and project geotechnical engineer. Based on the observed soil conditions, it is recommended that an allowable helical pile capacity of 10 tons in compression be used for design purposes. Additionally, it is anticipated that a 3-helix lead section may be used consisting of 8-inch, 10-inch, and 12-inch diameter helices.

The helical pile lead and extension shafts should consist of round galvanized steel shafts. The interior of the pile shaft should be fully grouted. The minimum center to center



horizontal spacing between individual piles should not be less than three (3) times the diameter of the largest helix, which equates to 3 feet assuming an 8-inch, 10-inch, and 12-inch lead section. The helical piles should conform to the design and installation requirements contained within Section 1810.3.1.5, 1810.3.3.1.9 and 1810.4.11 of the Code.

In addition, a successful compression pile load test or the approval of a load test waiver for the helical pile utilized on this project will be required per the provisions of Section 1810.3.3.1 of the Code.

As with the drilled concrete caisson option, helical piles are considered advantageous since the installation is anticipated to produce relatively low vibrations being transferred to the adjacent 23 Haynes Street structure. Unlike caissons, however, helical piles are a "non-displacement" method of foundation support, so excess soil requiring off-site removal would not be generated during installation. It is also anticipated that low mobilizations costs would be associated with the helical pile option. However, since proposed column loads have not yet been estimated for the project, the number of helical piles required per each column and the related costs cannot be estimated at this time.

#### Lowest Level Floor Slab

It is understood that the proposed lowest (ground) level of the building will be utilized primarily as at-grade parking and will also include a lobby, elevator, bike storage and a trash room. Therefore, the parking area could consist of bituminous asphalt pavement, or a conventional concrete slab-on-grade, underlain by a minimum 9-inch thickness of compacted granular fill.

Prior to placing the granular fill, the exposed existing fill subgrade should be proof compacted with a minimum of six (6) passes of a large walk-behind double-drum vibratory roller. All soft, spongy or "weaving" areas observed during the proof compaction process should be cut-out and replaced with compacted granular fill. Some minor cosmetic cracking of the slab or asphalt pavement may occur with time due to the presence of the existing uncontrolled fill which will remain below the slab.

For the non-parking areas of the ground floor level, the floor slab should consist of a structurally-supported floor slab underlain by a polyethylene vapor barrier. If a soil improvement technique is utilized for this project, this area of the ground floor slab could be designed as a conventional slab-on-grade.

It is currently understood that no occupied below-grade space is planned to be constructed as part of the proposed structure. As such, it is not anticipated that a foundation drainage system will be required for the proposed building. However, all localized depressions in the lowest level slabs (such as elevator pits, etc.) should be provided with properly tied continuous waterstops in all construction joints and cementitious waterproofing to protect against groundwater intrusion.



#### **General Foundation Recommendations**

All foundations should be designed in accordance with the Ninth Edition of the Massachusetts State Building Code (Code). Perimeter foundations, pile caps, grade beams and foundations located below unheated areas should be provided with a minimum 4-foot thickness of soil cover as frost protection. Foundations at heated interior locations should be located such that the top of the foundation concrete is a minimum of 6 inches below the underside of the lowest level slab.

Lateral forces can be considered to be transmitted from the structures to the soil by passive pressure against the foundation walls utilizing an equivalent fluid density of 120 pcf providing that the walls are designed to resist these pressures.

#### **Seismic Design Considerations**

For the purposes of determining parameters for structural seismic design, this site is considered to be a Site Class D as defined in Chapter 20 of American Society of Civil Engineers (ASCE) Standard 7-10 "Minimum Design Loads for Buildings and Other Structures". Further, the bearing stratum on the proposed site is not considered to be subject to liquefaction during an earthquake based on the criterion of Section 1806.4 of the Code.

#### **Foundation Construction Considerations**

The primary foundation construction considerations are anticipated to include preexcavation of the existing fill, vibrations associated with installation of ground improvement elements (if applicable), construction dewatering, and off-site removal of excess excavated material.

Prior to the installation of caissons, soil improvement, or helical piles, it is recommended that pre-excavation at the proposed foundation element locations be conducted to reduce obstructions during foundation installation. It is anticipated that former foundations may be present across the site based on prior site development. The depth of pre-excavation should extend into the top of the organic deposit or the bottom of the fill, whichever is deeper.

It is not anticipated that ground vibrations caused by the ground improvement installation will cause significant damage to nearby structures, roadways, or utilities, however, the magnitude of vibrations may be of sufficient magnitude to cause cosmetic cracking of adjacent structures and annoyance to building occupants. Due to the proximity of the adjacent 23 Haynes Street building, if soil improvement elements are installed, it is recommended that the Owner or Contractor perform a pre-construction survey of the



adjacent building before the start of construction. This information would be useful in documenting previously existing problems with regard to responding to third-party claims.

It is recommended that the maximum allowable peak particle velocity (i.e., vibration level) resulting from ground improvement installation adjacent to the adjacent structure be limited to 2.0 inches-per-second (ips) above a frequency of 40 Hz, 1.5 ips between 30 Hz and 40 Hz, 1.0 ips between 20 Hz and 30 Hz, and 0.5 ips below 20 Hz. These criteria are intended to reduce the probability of structural damage to the adjacent structures to within generally acceptable levels. It is recommended that vibration monitoring with seismographs be performed by McPhail during the soil improvement installation (if utilized).

It is anticipated that groundwater will not significantly impact the proposed construction. However, following periods of heavy precipitation, surface water may accumulate within localized building excavations and may necessitate localized sumping. It is anticipated that dewatering by conventional sumping should suffice for groundwater control. It is anticipated that pumped groundwater can be recharged on the site.

Our scope of services to date specifically excludes geoenvironmental engineering services pursuant to the Massachusetts Oil and Hazardous Materials Release Prevention and Response Act (MGL Chapter 21E) and pursuant to the Massachusetts Contingency Plan (310 CMR 40.00). However, off-site removal of excess excavated soil from the proposed development will likely be necessary, chemical analysis of the excess soil will be required in order to conform to the regulations and policies of the Massachusetts Department of Environmental Protection (MA DEP). Chemical analysis of excess excavated material for the purpose of off-site removal would not be required if the excess excavated material remains on the site. If requested, McPhail Associates, LLC can provide these services for this project at the appropriate time based on the project schedule.

#### **Final Comments**

It is recommended that McPhail be retained to provide design assistance to the design team during the final design phase of this project. The purpose of our involvement would be to further refine the various foundation recommendations presented herein. We would also review the structural foundation drawings and foundation notes for conformance with our recommendations and generate the earthwork and specialty foundation specification sections for inclusion into the Contract Documents for construction.

It is further recommended that McPhail be retained during the construction period to observe the foundation installation. Our involvement during the construction phase of the work should minimize costly delays due to unanticipated field problems since our field engineer would be under the direct supervision of our project manager who was responsible for the subsurface exploration program and foundation design recommendations documented herein.



We trust that the above information is sufficient for your present requirements. Should you have any questions concerning the recommendations presented herein, please do not hesitate to call us.

Very truly yours,

McPHAIL ASSOCIATES, LLC

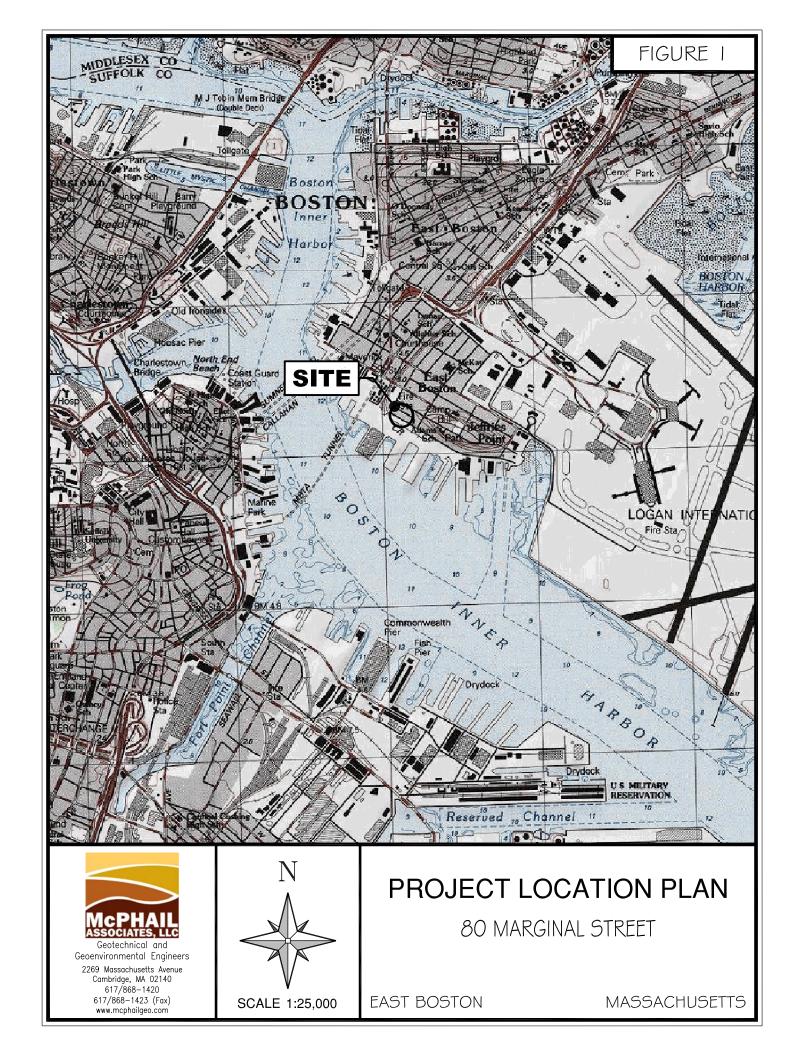
John A. Erikson, P.E.

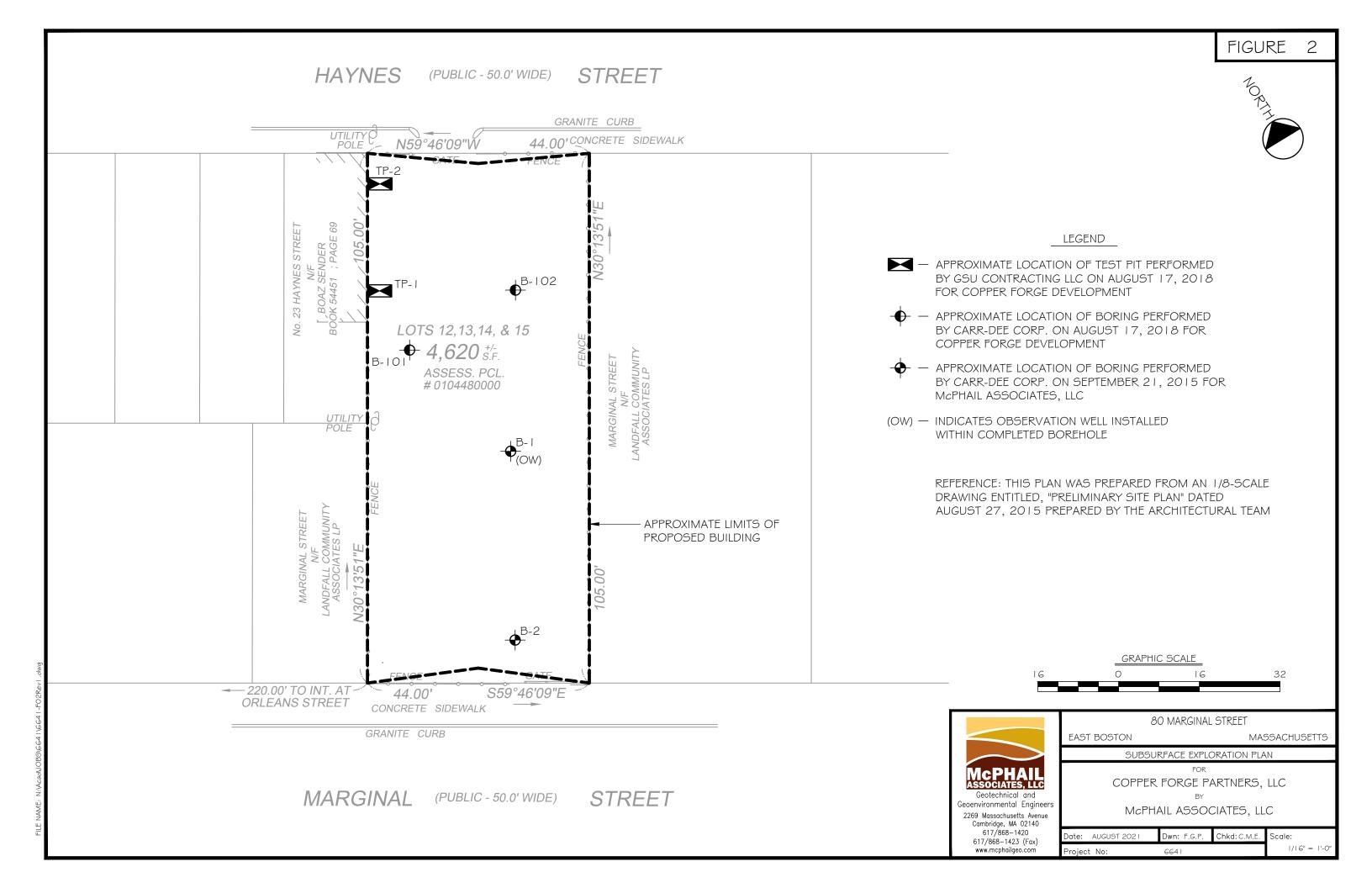
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CME/jae

mr. Land

Chris M. Erikson, P.E.







#### **APPENDIX A:**

#### **LIMITATIONS**



#### **LIMITATIONS**

This report has been prepared on behalf of and for the exclusive use of Copper Forge Partners, LLC for specific application to the proposed development to be constructed at 80 Marginal Street in East Boston, Massachusetts in accordance with generally accepted soil and geotechnical engineering practices. No other warranty, expressed or implied, is made.

In the event that any changes in nature or design of the proposed construction are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by McPhail Associates.

The analyses and recommendations presented in this report are based upon the data obtained from the subsurface explorations performed at the approximate locations indicated on the enclosed plans. If variations in the nature and extent of subsurface conditions between the widely spaced explorations become evident during the course of construction, it will be necessary for a re-evaluation of the recommendations of this report to be made after performing on-site observations during the construction period and noting the characteristics of any variations.



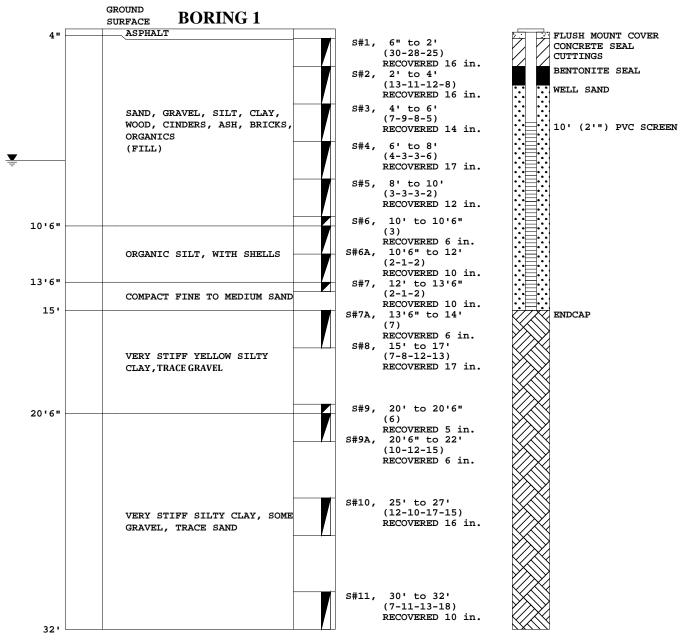
#### **APPENDIX B:**

PREVIOUS BORING LOGS
PREPARED BY CARR-DEE CORP.

37 LINDEN STREET MEDFORD, MA 02155-0001 Telephone (781) 391-4500

To: MCPHAIL ASSOC., LLC, 2269 MASS. AVE., CAMBRIDGE, MA Date: 9-23-2015 Job No.: 2015-138

Location: 74-88 MARGINAL STREET, EAST BOSTON, MA Scale: 1 in.= 5 ft.

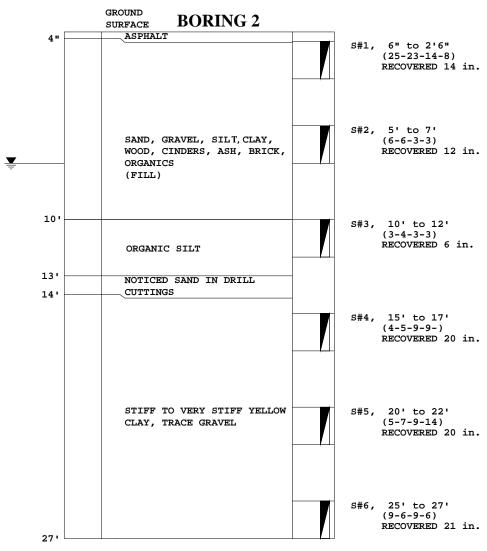


WATER LEVEL 7'
SIZE OF CASING: NW, LENGTH: 15'0"
DRILLER: G. SMITH, INSPECTOR: S. HILFIKER
DATE STARTED & COMPLETED: 9-21-2015

37 LINDEN STREET MEDFORD, MA 02155-0001 Telephone (781) 391-4500

To: MCPHAIL ASSOC., LLC, 2269 MASS. AVE., CAMBRIDGE, MA Date: 9-23-2015 Job No.: 2015-138

Location: 74-88 MARGINAL STREET, EAST BOSTON, MA Scale: 1 in.= 5 ft.

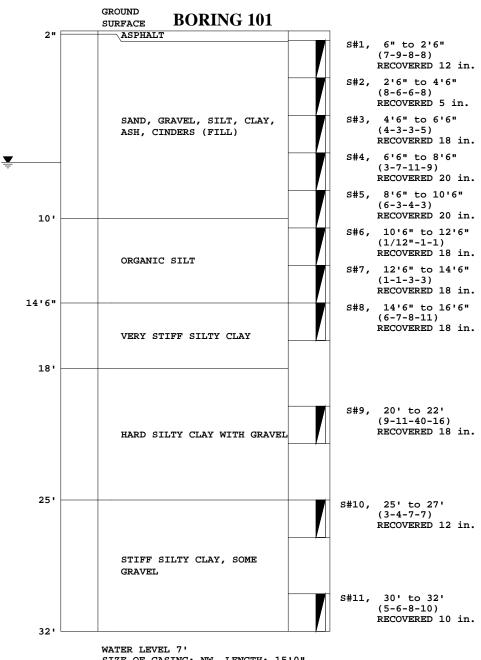


WATER LEVEL 7'
SIZE OF CASING: NW, LENGTH: 15'0"
DRILLER: G. SMITH, INSPECTOR: S. HILFIKER
DATE STARTED & COMPLETED: 9-21-2015

37 LINDEN STREET MEDFORD, MA 02155-0001 Telephone (781) 391-4500

To: COPPER FORGE DEVELOPMENT, BROOKLINE, MA Date: 8-20-2018 Job No.: 2018-143

Location: 80 MARGINAL STREET, EAST BOSTON, MA Scale: 1 in.= 5 ft.

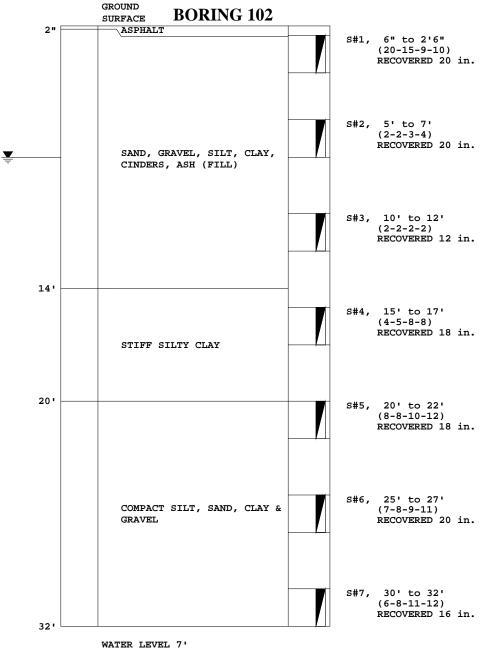


WATER LEVEL 7'
SIZE OF CASING: NW, LENGTH: 15'0"
DRILLER: S. DESIMONE, JR., INSPECTOR: C. MILLER
DATE STARTED & COMPLETED: 8-17-2018

37 LINDEN STREET MEDFORD, MA 02155-0001 Telephone (781) 391-4500

To: COPPER FORGE DEVELOPMENT, BROOKLINE, MA Date: 8-20-2018 Job No.: 2018-143

Location: 80 MARGINAL STREET, EAST BOSTON, MA Scale: 1 in.= 5 ft.



WATER LEVEL 7'
SIZE OF CASING: NW, LENGTH: 15'0"
DRILLER: S. DESIMONE, JR., INSPECTOR: C. MILLER
DATE STARTED & COMPLETED: 8-17-2018



#### **APPENDIX C:**

# TEST PIT LOGS PREPARED BY MCPHAIL ASSOCIATES, LLC

JOB 80 MARGINAL ST.	- TP-1
SHEET NO.	of2
CALCULATED BY	D8/20/18
CHECKED BY	DATE

	1/7		P(A)		
			17		
	N	APPROX. LIMIO		Notes:	
	<b>5</b> ,0'\	OF TEST PIT		0 4	ROUND WATER OBSERVED
			(3)		7 65 BELOW GROUND SORFA
					LL DIMENSIONS ARE
	4			F	PPROXIFLATE
	Z,	3.0'			
			→(A)		
		SELTION VIEW	<u>}</u>		
HALL FOUNDATING RESIDENTIAL BE		11.13	/AVaita	JO SURFALE	DEPTH
Remporacy	ACOHOL		7,230,0	H" ASPHALT	_ D.o' D.3`
	T	LOOSE, BROWN, SAN	D and GRAVEL,	K	
		Some SILT, WITH B	recks and Root		
		MATTER		APPROX, LIMIT	DF.
				1E57 717	
	41	0 0	/		35'
	T.	LOOSE, BLACK-BROWN ARANIEL SOME SILT	X\		
		Nppo, BRUK, GLA			-5 Z'
	GLENVITE BLOW			OF, BLOE-GRAY, SALVON	CLAY,
	VKII)			ome SILT.	
	VA)	) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	√ / √ 65'	LOUSE, GRATIS AND, 50M	_ 6.3' }7.0'

JOB <u>80 1</u>	JARWINAL	ST-	TP-1	
SHEET NO.	2		OF	2
CALCULATED BY_	CPM		DATE	08/20/18
CHECKED BY	2		DATE	

	SCALE	
	STOTION VIEW	
	B-B	
	3.0' , GROND SORFACE	۵.0'
	1 1 1 ASPHALT	_0.2,
	Loose, Brown. SAND and Willer	Œ,
	Some Site, North BRICKS an	
	ROOT MAYER.	
		_3.5'
TEST PIT	2004	
	LOOSE, BLACK BETON, SAND, a CLEAVEL, SOME SILT; WITH AS	
	WOOD, BRICK, GLASS.	FV 1
		_ 5.2'
	" GRANTE BLOCK 2/	
		_60
L/5' ▼	SOFT, BLUE GEAT, SANDH CLAH, SOME SILT	_6.3'
	LOSSE, LIZAY SAND, SIME GRAVEL, WITH	_7.0'
		1.0
	Borrom at 1657 PIT	

JOB 80 MARLINAL ST TP-Z	
SHEET NO	of2
CALCULATED BY CM	DATE 08/20/18
CHECKED BY	DATE

	SCALE
	PLAN VIEW
- Wall a	OF EXISTIAL RESIDENTIAL STEWNIEE Z
	0.1
	APPROX. Limite DE
	TEST PUT NOTIES:
5.0	1) GRONDWATER ORSERVED AT
	65' BELOW EROUND SORFALE.
	2) ALL DIMENSIONS ARE
	APPROXIMATE.
	ATTEREM MIZ.
	3.0
	->(A)
	SECTION VIEW
	A-A
WALL FOUNDATION ST	Llauno Sulface DEMH
EXIMAL RESIDENTIAL	4" ASPHAIT 0.3'
BUILDING	LOSSE, BEGUN, SAND and CIRAVEL,
	SOME SILT, WITH BRICKS AND 1200T
	MATTER.
	LOSSE/BLACK, SANDWITH ASH AND R CINDES. 30'
	A N
	LOSSÉ, BLACK-BROWN, SAND and APPROX. LIMITS OF
	CERANEL SOME SHIT, WHITH ASHIELDOOD THE PIT 4.5'
	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
GNANNIE BLOCK	5.3'
7497	
<del>-                                      </del>	DOET DUNE CHAY DANSON LLAY 6.3'
	- LS'
	Easton OF TEST PIT

JOB	MARLINAL ST	 17.	-2	
SHEET NO.	2	. OF	2	
CALCULATED BY	CPM	 DATE_	08/20/18	
CHECKED BY		DATE_		

SCALE	
SECTION VIEW	
B-B	
3.0' LIDONO SUEFACE	0.6
H' Asphal	_ 0.3'
LOUSE, BROWN, SAND AND CHARLE,	
Some SILT WITH BRICKS AND ROOT	
MATER.	
FERROX. LIMES OF LOOSE, BLACK, SOND, WITH ASHAND	_22
TEST POS TO LOOSE, BLACK, SAND, WITH AGHAND CINDERS.	25'
	3.D'
LOOSE BLAKE-BRAND, SAND and CERANE	L.
SOME SILT, WITH ASHIWOOD, BRILK,	н.5°
Gen TE BLOCK	
2	_ 5.3'
65 💆 63	
50FT. BUE-LIRAY SOME SILL.	_ b.5'
Borton of Test Pit	



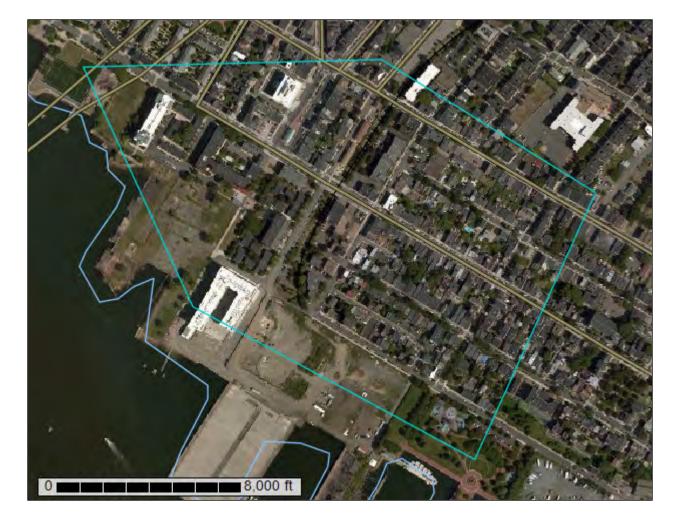
# APPENDIX D: GROUNDWATER MONITORING REPORT

GROUNDWATER MONITORING REPORT						
Well I.D.	B-1	Elevation of Road Box		Job. Info.	6013 - Marginal Street, Ea	st Boston
Date	Time	Elapsed Time	Depth of Water from Road Box	Elevation of Water	Remarks	Read By
		Days	Feet	Feet		
9/21/2015	13:00	Initial	3.7		Installed at 15'.	SGH
9/21/2015	15:00	0	4.9			SGH
10/7/2015	16:30	16	5.9			SGH
8/17/2018	8:00	1061	6.0			СРМ



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Norfolk and Suffolk Counties, Massachusetts



# **Preface**

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

#### Custom Soil Resource Report Soil Map



#### MAP LEGEND

Spoil Area

Stony Spot

Wet Spot

Other

Rails

**US Routes** 

Major Roads

Local Roads

Ŷ

Δ

**Water Features** 

Transportation

---

Background

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

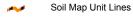
Aerial Photography

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



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

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

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: http://websoilsurvey.nrcs.usda.gov 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: Norfolk and Suffolk Counties, Massachusetts Survey Area Data: Version 12, Sep 15, 2016

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

Date(s) aerial images were photographed: Aug 10, 2014—Aug 25, 2014

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

	Norfolk and Suffolk Countie	es, Massachusetts (MA616)	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Water	0.1	0.2%
602	Urban land, 0 to 15 percent slopes	6.0	8.9%
603	Urban land, wet substratum, 0 to 3 percent slopes	30.3	44.7%
627C	Newport-Urban land complex, 3 to 15 percent slopes	12.3	18.1%
655	Udorthents, wet substratum	19.1	28.1%
Totals for Area of Interest		67.8	100.0%

# **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

#### Norfolk and Suffolk Counties, Massachusetts

#### 1—Water

#### **Map Unit Setting**

National map unit symbol: vkyp

Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 120 to 200 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### 602—Urban land, 0 to 15 percent slopes

#### **Map Unit Setting**

National map unit symbol: vkyj

Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 120 to 200 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Urban land: 99 percent Minor components: 1 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Urban Land**

#### Setting

Parent material: Excavated and filled land

#### **Minor Components**

#### **Rock outcrops**

Percent of map unit: 1 percent Hydric soil rating: Unranked

#### 603—Urban land, wet substratum, 0 to 3 percent slopes

#### **Map Unit Setting**

National map unit symbol: vkyl

Mean annual precipitation: 32 to 50 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 120 to 200 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Urban land: 85 percent
Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Urban Land**

#### Setting

Parent material: Excavated and filled land over herbaceous organic material and/or alluvium and/or marine deposits

#### **Minor Components**

#### **Udorthents**

Percent of map unit: 13 percent Hydric soil rating: Unranked

#### **Beaches**

Percent of map unit: 2 percent Hydric soil rating: Unranked

#### 627C—Newport-Urban land complex, 3 to 15 percent slopes

#### **Map Unit Setting**

National map unit symbol: vkwv

Mean annual precipitation: 32 to 54 inches
Mean annual air temperature: 43 to 54 degrees F

Frost-free period: 120 to 240 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Newport and similar soils: 70 percent

Urban land: 20 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Newport**

#### Setting

Landform: Drumlins

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Friable coarse-loamy eolian deposits over dense coarse-loamy

lodgment till derived from metamorphic rock

#### **Typical profile**

H1 - 0 to 9 inches: silt loam

H2 - 9 to 26 inches: channery silt loam H3 - 26 to 60 inches: channery silt loam

#### Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: 20 to 40 inches to densic material

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

high (0.00 to 0.20 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None Frequency of ponding: None

Available water storage in profile: Low (about 4.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B Hydric soil rating: No

#### **Description of Urban Land**

#### Setting

Parent material: Excavated and filled land

#### **Minor Components**

#### **Paxton**

Percent of map unit: 4 percent

Hydric soil rating: No

#### **Pittstown**

Percent of map unit: 4 percent

Hydric soil rating: No

#### **Udorthents**

Percent of map unit: 2 percent Hydric soil rating: Unranked

#### 655—Udorthents, wet substratum

#### Map Unit Setting

National map unit symbol: vkyd

Mean annual precipitation: 45 to 54 inches Mean annual air temperature: 43 to 54 degrees F

Frost-free period: 145 to 240 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Udorthents and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Udorthents**

#### Setting

Landform position (two-dimensional): Shoulder, footslope Landform position (three-dimensional): Riser, tread

Down-slope shape: Convex, linear Across-slope shape: Convex, linear

Parent material: Excavated and filled sandy and gravelly human transported

material over highly-decomposed herbaceous organic material

#### Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

#### **Minor Components**

#### **Urban land**

Percent of map unit: 3 percent Hydric soil rating: Unranked

#### **Ipswich**

Percent of map unit: 2 percent

Landform: Marshes Hydric soil rating: Yes

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Date: November, 2021
Project: 80 Marginal Street - Notice of Intent - Stormwater Report

# STORMWATER DESIGN CALCULATIONS

# INFILTRATION SYSTEM:

- 1. Impervious Area = 4,620 s.f.
- 2. 4,620 s.f.\* 0.0833 ft. = 385 c.f. storage required.
- 3. SC-740 Chamber Storage (4 \* 48.8 c.f.) = 195.2 c.f.
- 4. Crushed Stone Storage = 19.5' \* 12.8' \* 3.5' = 873.6 c.f. 873.6 c.f. 195.2 c.f. = 678.4 c.f. 678.4 \* 0.30 = 203.5 c.f.
- 5. Total Storage = 195.2 + 203.5 = c.f.
- 6. 398.7 c.f. > 385 c.f.

Date: November, 2021

Project: 80 Marginal Street - Notice of Intent - Stormwater Report

# CHECKLIST FOR STORMWATER REPORT



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. 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<sup>2</sup>
- 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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.



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.

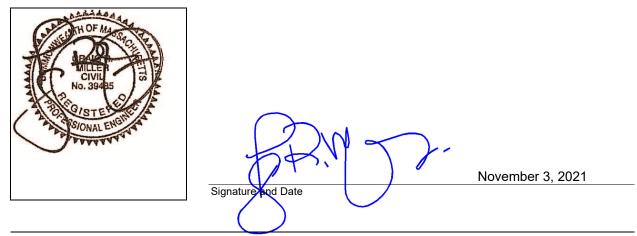
*Note:* Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that 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



#### Checklist

<b>Project Type:</b> Is the application for new development, redevelopment, or a mix of new and redevelopment?
☐ New development
□ Redevelopment
☐ Mix of New Development and Redevelopment



Bureau of Resource Protection - Wetlands Program

# **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:

$\boxtimes$	No disturbance to any Wetland Resource Areas
$\boxtimes$	Site Design Practices (e.g. clustered development, reduced frontage setbacks)
$\boxtimes$	Reduced Impervious Area (Redevelopment Only)
$\boxtimes$	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	
$\boxtimes$	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.



Bureau of Resource Protection - Wetlands Program

# **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 predevelopment 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 24hour 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<sup>1</sup> 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 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.

<sup>&</sup>lt;sup>1</sup> 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



#### **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands Program

## **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.

applicable, the 44% TSS removal pretreatment requirement, are provided.

☐ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if



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

## **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.					
Sta	ndard 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 <i>prior to</i> the discharge of stormwater to the post-construction stormwater BMPs.					
	The NPDES Multi-Sector General Permit does <i>not</i> 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 <i>not</i> 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.					
Sta	ndard 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.					



#### **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands Program

## **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 Starmwater Management Standards only to the maximum Extent

M	Practicable as a:
	☐ Limited Project
	<ul> <li>☐ 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.</li> <li>☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area</li> <li>☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff</li> </ul>
	☐ Bike Path and/or Foot Path
	Redevelopment portion of mix of new and redevelopment.
$\boxtimes$	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.



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

## **Checklist for Stormwater Report**

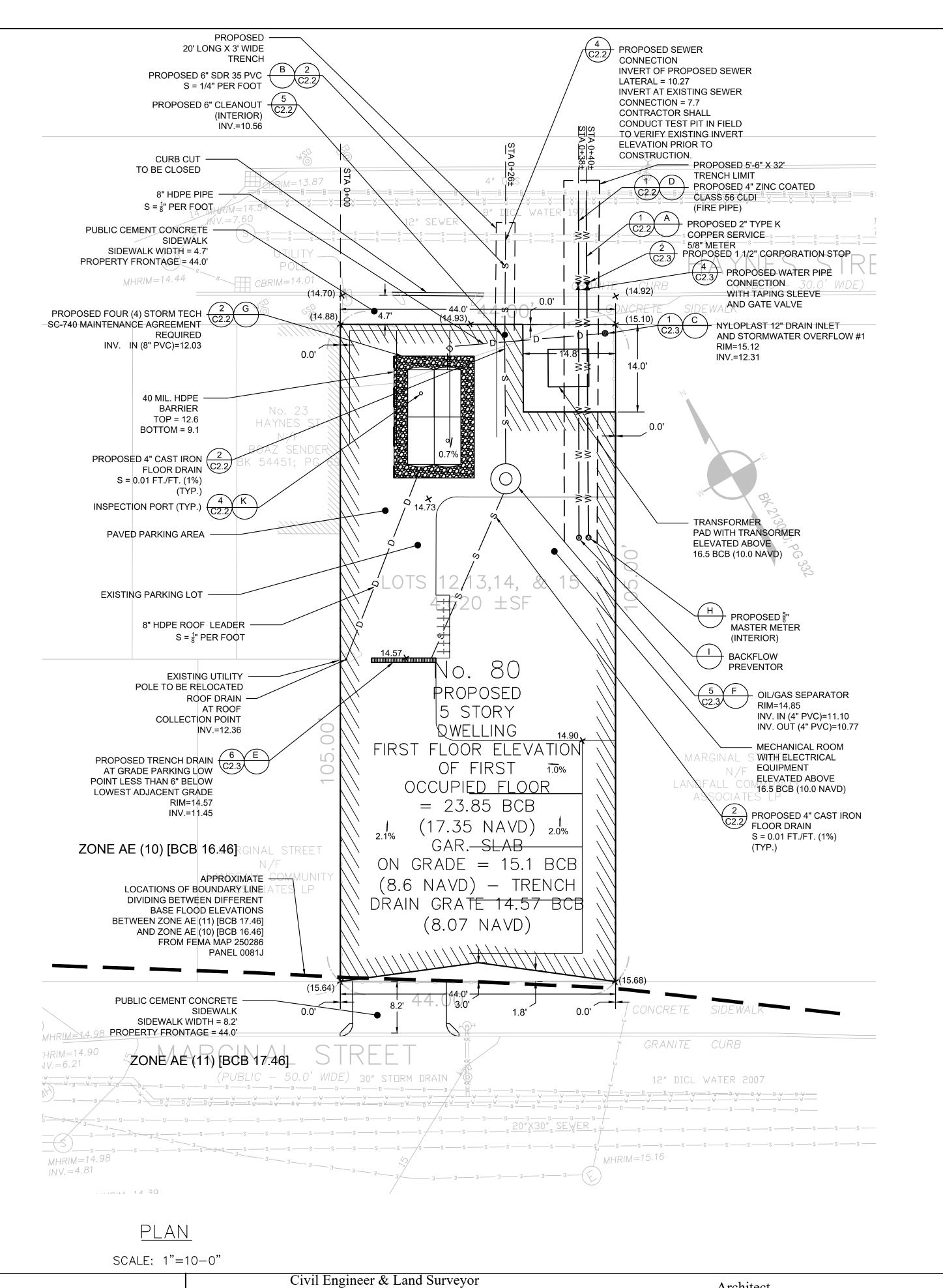
Checklist (continued)

	ndard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control ntinued)						
	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 <i>not</i> been included in the Stormwater Report but will be submitted <i>before</i> land disturbance begins.						
	The project is <i>not</i> covered by a NPDES Construction General Permit.						
The project is covered by a NPDES Construction General Permit and a copy of the SWPPR							
Stormwater Report.  The project is covered by a NPDES Construction General Permit but no SWPPP been su 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;						
	○ Operation and Maintenance Log Form.						
	The responsible party is <b>not</b> 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.						
Sta	andard 10: Prohibition of Illicit Discharges						
$\boxtimes$	The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;						
$\boxtimes$	An Illicit Discharge Compliance Statement is attached;						
	NO Illicit Discharge Compliance Statement is attached but will be submitted <i>prior to</i> the discharge of any stormwater to post-construction BMPs.						

Date: November, 2021

**Project: 80 Marginal Street - Notice of Intent - Stormwater Report** 

## **BWSC SITE PLANS**



INSPECTION NOTES:

1-1/2" TYPE "k" DOMESTIC SERVICE

INSPECTOR DATE

6" PVC SANITARY SEWER

INSPECTOR DATE

NYLOPLAST DRAIN INLET & STORMWATER OVERFLOW #1

DATE

DATE

DATE

DATE

DATE

INSPECTOR

D 4" ZINC COATED CLASS 56 CLDI FIRE PIPE

INSPECTOR DATE

TRENCH DRAIN - MINIMUM 18" SUMP REQUIRED

INSPECTOR DATE

OIL/GAS SEPARATOR

INSPECTOR

INFILTRATION SYSTEM #1

5/8" MASTER WATER METER

INSPECTOR

BACKFLOW PREVENTOR

INSPECTOR

INSPECTOR DATE

AS-BUILT PREPARATION FEE

INSPECTION PORT

INSPECTOR

INSPECTOR DATE

## **GENERAL NOTES:**

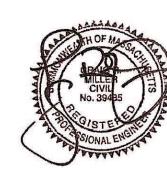
- 1. The Site Detail, Boundary Survey, And Surface Improvements
  Depicted Hereon Were Obtained From a Certified Plot PlanS Located at
  80 Marginal Street East Boston by Boston Survey, LLC dated June 18,
  2015 and July 31, 2017. Additional site and utility detail was surveyed
  by Waterfield Design Group, Inc. on June 27, 2018.
- 2. The Locus Property Depicted Is Situated In Zoning District OS—G, City Of Boston Zoning Ordinance, East Boston Neighborhood.
- 3. Vertical Datum = Boston City Base
- 4. Contractor shall, upon completion of building foundation, notify Boston Water & Sewer to schedule a rough construction inspection. BWSC shall ensure that building location is shown on approved site plan.
- 5. The property is owned by Copper Forge LLC
  Contact Person: Paul Marks
  Address: 7 Columbus Terrace Unit 2
  Brookline, MA 02446
  Phone: 617-731-9114
- 6. Water Account: None Existing
- 7. Land Use Code: "A" Residential
- 8. Minimum of 10' separation required between sewer lateral and water services
- 9. Proposed: One five—story condominium building with seven residential
- 10. COBUCS #1635870884841
- 11. The finished floor elevation (FFE) is to be higher than any adjacent sidewalk.

## SEWERAGE NOTES:

Estimated Average Daily Sewerage Flow = 1,430 Gal./Day

#### <u>INFILTRATION SYSTEM:</u>

- 1. Impervious Area = 4,620 s.f.
- 2. 4,620 s.f.\* 0.0833 ft. = 385 c.f. storage required.
- 3. SC-740 Chamber Storage (4 \* 48.8 c.f.) = 195.2 c.f.
- 4. Crushed Stone Storage =
  19.5' \* 12.8' \* 3.5' = 873.6 c.f.
  873.6 c.f. 195.2 c.f. = 678.4 c.f.
  678.4 \* 0.30 = 203.5 c.f.
- 5. Total Storage = 195.2 + 203.5 = c.f.
- 6. 398.7 c.f. > 385 c.f.



<u>PID# 0104480000</u> WARD# 1 PARCEL# FY2021

FOR BOSTON WATER & SEWER USE

DESIGN BY: JRM

CHECK BY: CRM

SHEET:

SITE PLAN

DATE BY

DATE BY

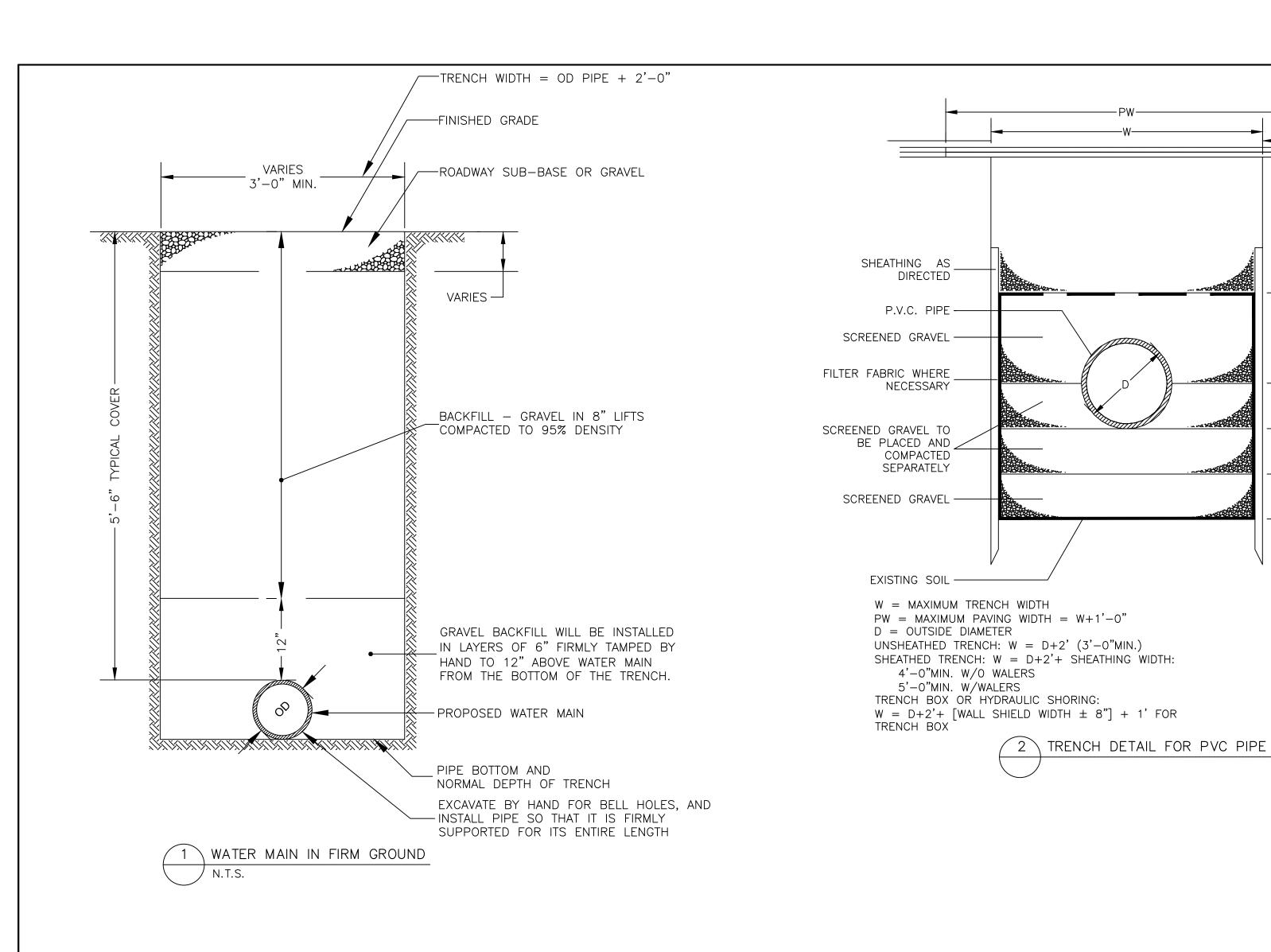


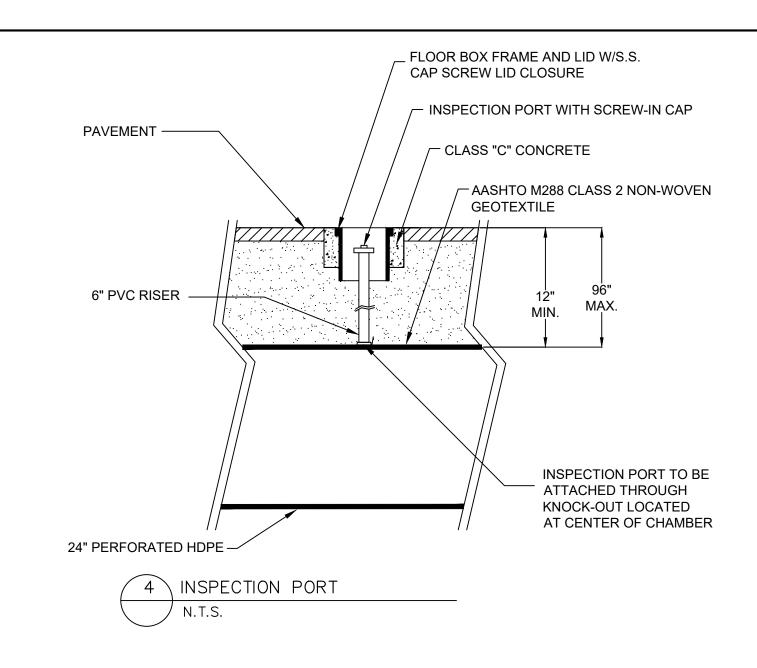
Architect
Merge Architects, Inc.
332 Congress Street
Floor 6
Boston, MA 02110
phone: 617-670-0265

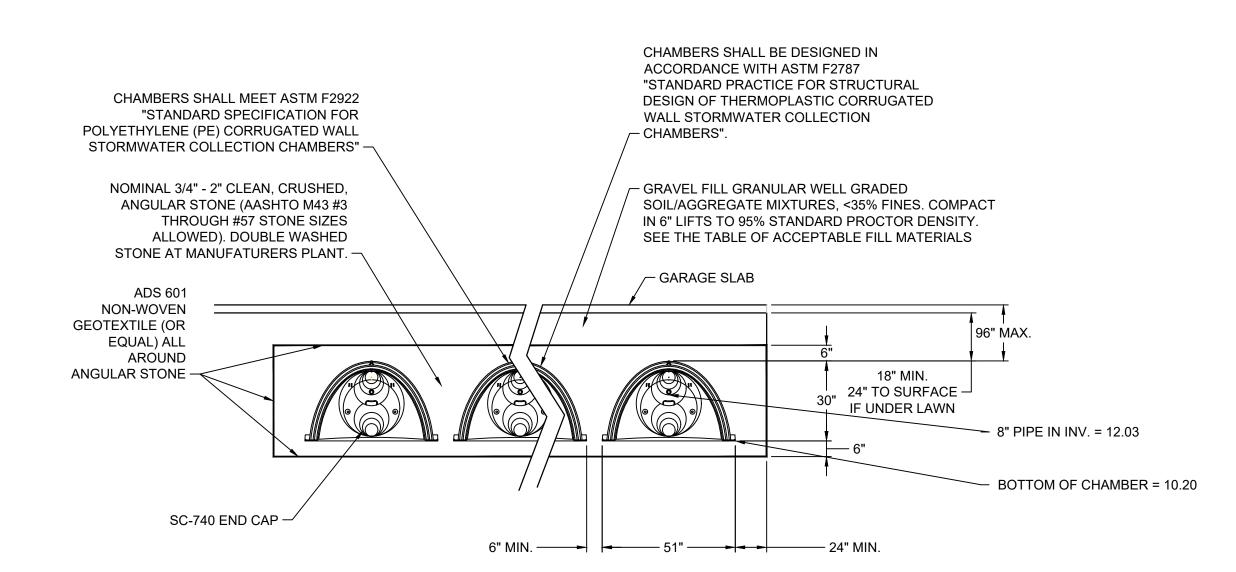
**80 Marginal Street**East Boston, Massachusetts

SITE PLAN #XXXX

Date: 3 November 2021 Scale: As Noted C 2.1

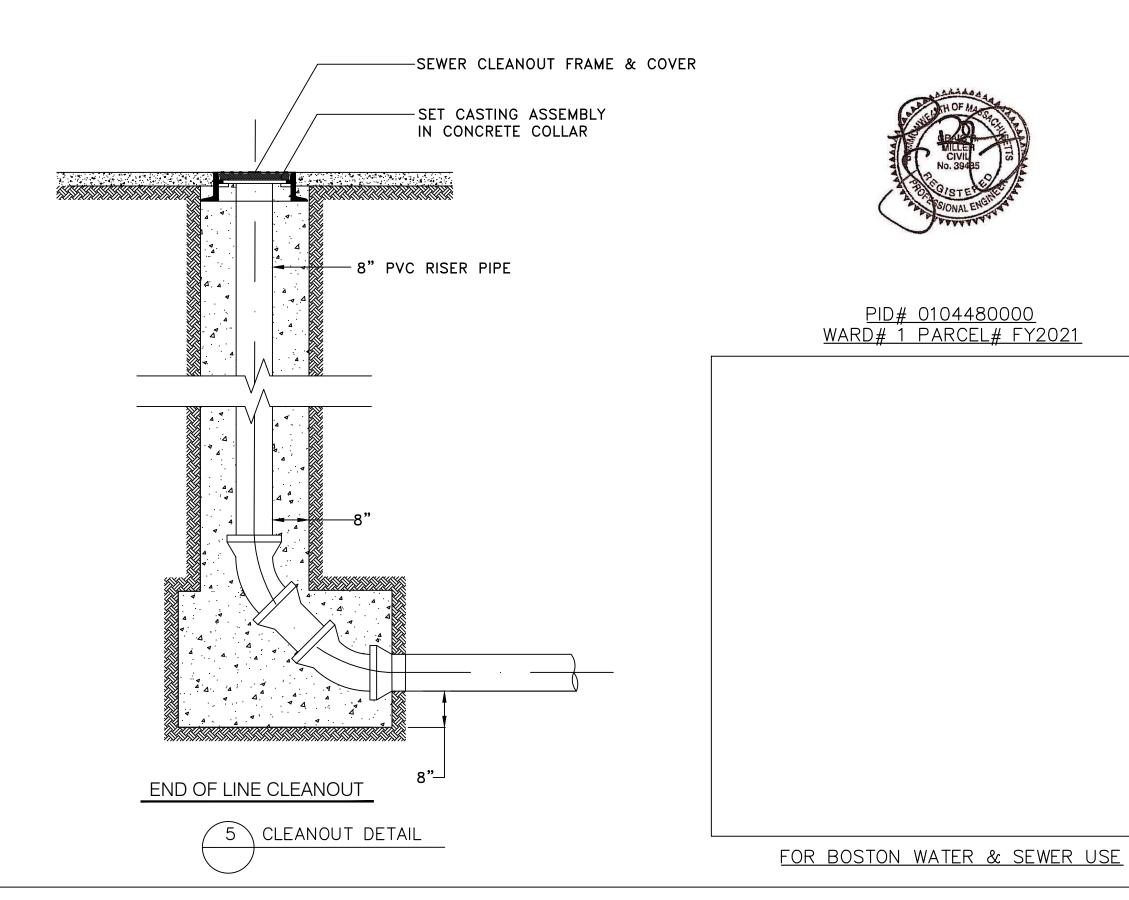






THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.

3 SC-740 UNDERGROUND INFILTRATION CHAMBERS N.T.S.



DESIGN BY: JRM

DRAWN BY: JRM

CHECK BY: CRM

DETAILS

DATE BY



Architect
Merge Architects, Inc.
332 Congress Street
Floor 6
Boston, MA 02110
phone: 617-670-0265

80 Marginal Street
East Boston, Massachusetts

(2) 1½" LAYERS OF \_\_BIT. CONC. TEMPORARY

- CONC.

GRAVEL PLACED AND
— COMPACTED TO 95% IN

- ½D HAUNCHING AREA

-6" BEDDING AREA

EXCAVATION DEPTH
— VARIES WITH SOIL

CONDITONS

8" LAYERS

— 6"+ ½D

EXIST. BIT.

ROADWAY

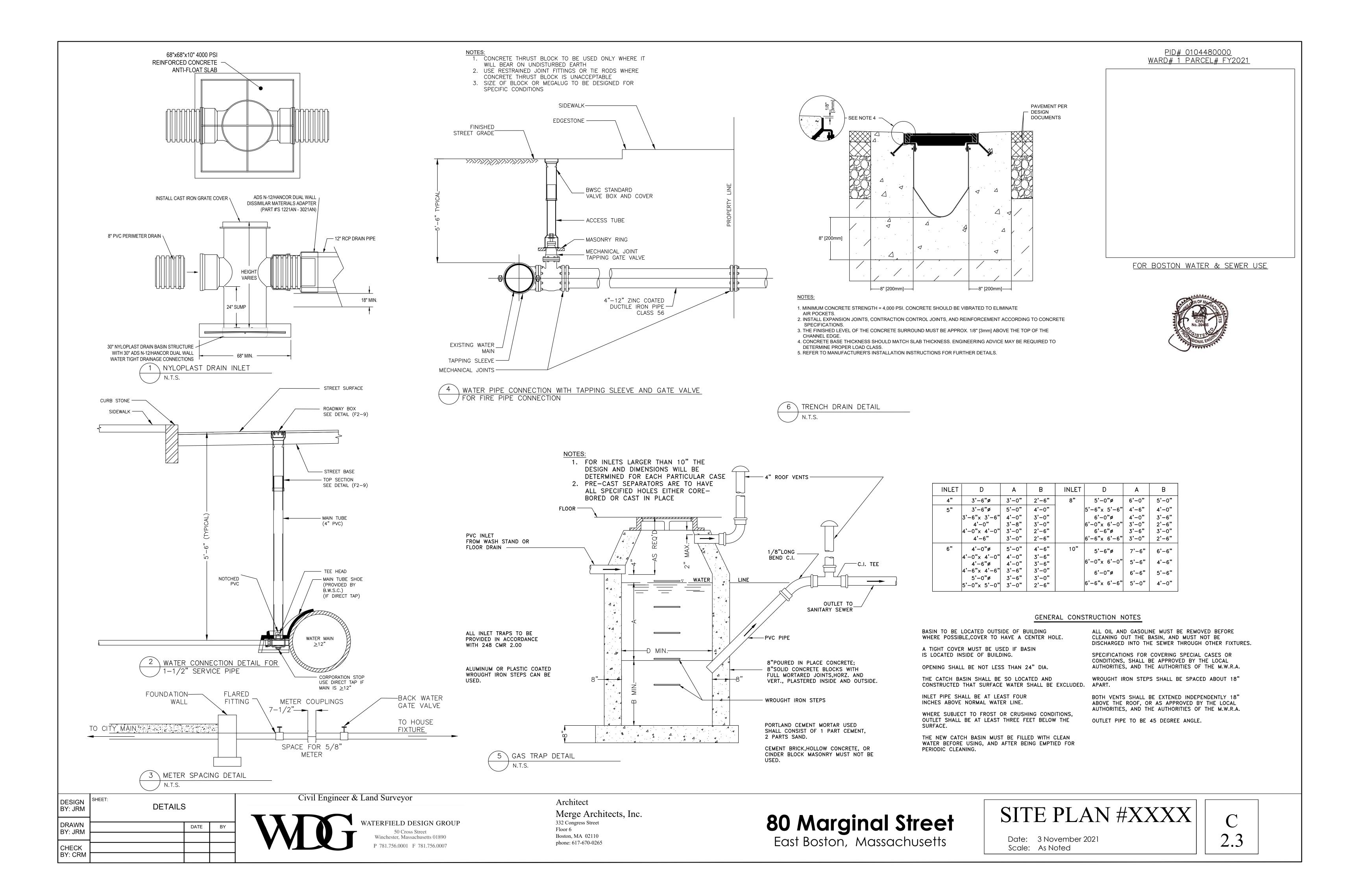
PAVEMENT.

SITE PLAN #XXXX

Date: 3 November 2021

Scale: As Noted

C 2.2







# 80 MARGINAL ST 100% SCHEMATIC DESIGN

11 OCTOBER 2021

OWNER / DEVELOPER COPPER FORGE PARTNERS, LLC P.O. BOX 1046 **BROOKLINE, MA 02446** T. 617.901.0577

MERGER ARCHITECTS, INC 332 CONGRESS ST, 6TH FL T.617.670.0265

STRUCTURAL ENGINEER RSE ASSOCIATES, INC 63 PLEASANT ST, SUITE 300, WATERTOWN, MA 02472 T.617.926.9300

MEP ENGINEER WB&A ASSOCIATES, INC 1076 WASHINGTON ST. HANOVER MA 02339 T. 781.826.4144

KALIN ASSOCIATES, INC T. 617.964.5477

SITE LOCATION MAP

1 - GENERAL

NARRATIVE

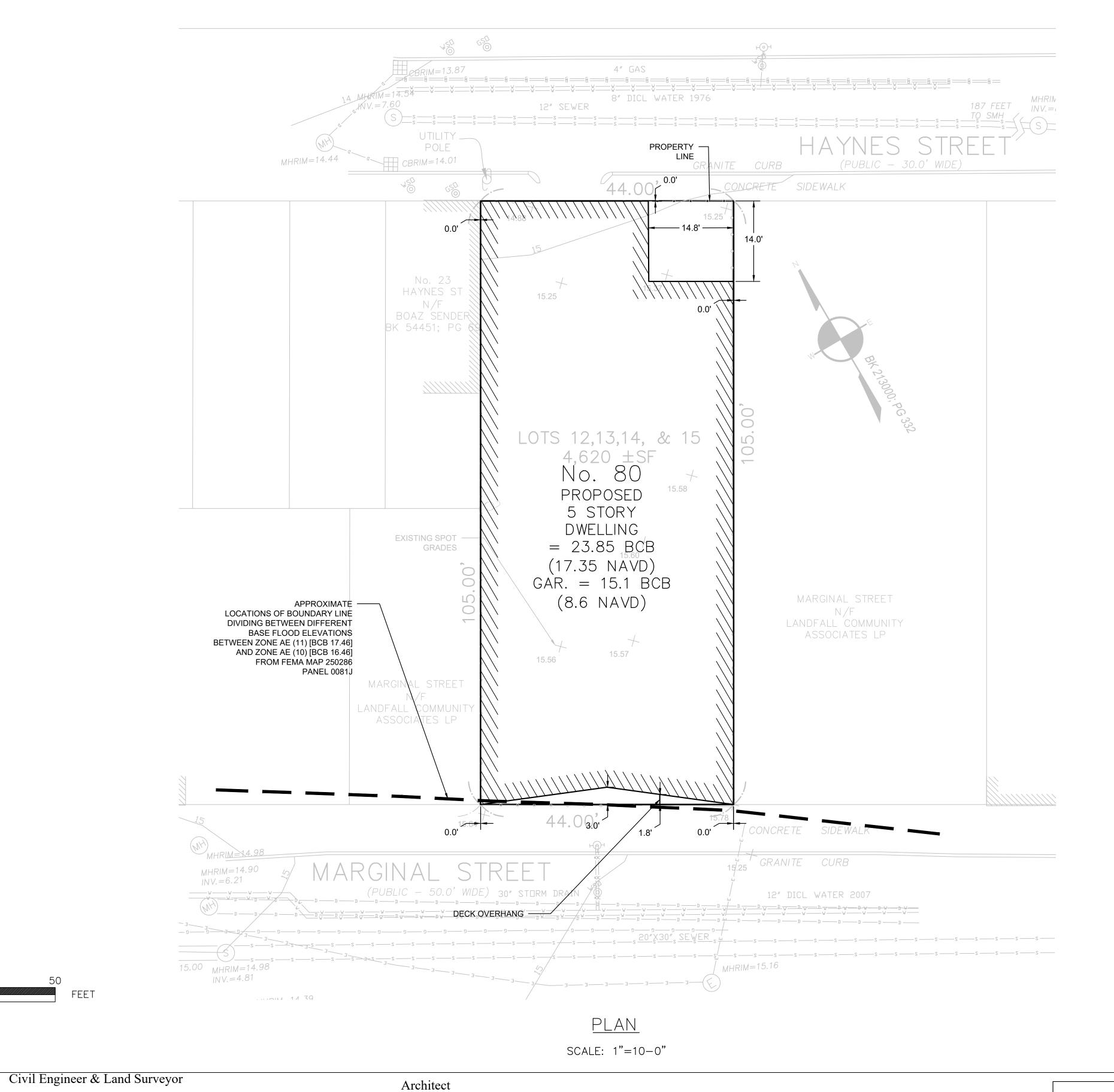
NARRATIVE

**5-TECHNICAL SPECIFICATIONS** 

**CIVIL ENGINEER** WATERFIELD DESIGN GROUP 50 CROSS ST. WINCHESTER MA 01890 T. 781.756.001

ARCHITECT **BOSTON, MA 02210** 

**SPECIFICATIONS** 1121 WASHINGTON ST. NEWTON MA 02465



# GENERAL NOTES:

 The Site Detail, Boundary Survey, And Surface Improvements Depicted Hereon Were Obtained From a Certified Plot Plans Located at 80 Marginal Street East Boston by Boston Survey, LLC dated June 18, 2015 and July 31, 2017. Additional site and utility detail was surveyed by Waterfield Design Group, Inc. on June 27, 2018.

DESIGN BY: JRM PROPOSED LAYOUT DRAWN BY: JRM CHECK BY: CRM

1"= 10'

11-10-2021

WATERFIELD DESIGN GROUP 50 Cross Street Winchester, Massachusetts 01890 P 781.756.0001 F 781.756.0007

Merge Architects, Inc.
332 Congress Street, Floor 6
Boston, MA 02110 phone: 617-670-0265

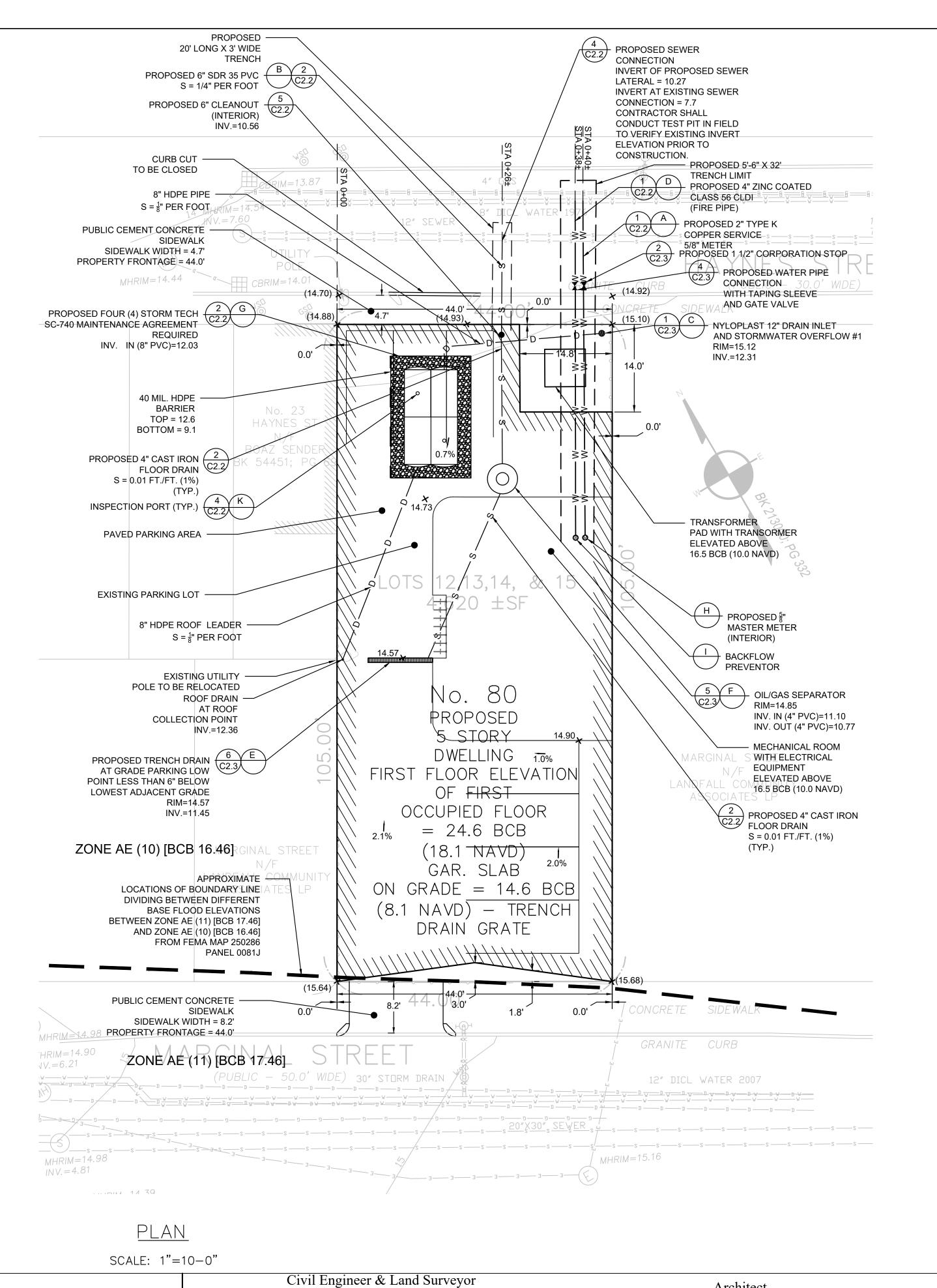
# 80 Marginal Street East Boston, Massachusetts

DI	$TO_{\lambda}$	' DI	$\Delta$	T
		1 1		N

Date: 10 November 2021 Scale: As Noted

1.0





INSPECTION NOTES:

1-1/2" TYPE "k" DOMESTIC SERVICE

INSPECTOR DATE

B) 6" PVC SANITARY SEWER

INSPECTOR DATE

DATE

DATE

DATE

DATE

DATE

DATE

NYLOPLAST DRAIN INLET & STORMWATER OVERFLOW #1

INSPECTOR

4" ZINC COATED CLASS 56 CLDI FIRE PIPE

INSPECTOR DATE

TRENCH DRAIN - MINIMUM 18" SUMP REQUIRED

INSPECTOR DATE

D OIL/GAS SEPARATOR

INSPECTOR

INSPECTOR

INFILTRATION SYSTEM #1

5/8" MASTER WATER METER

INSPECTOR

BACKFLOW PREVENTOR

AS-BUILT PREPARATION FEE

) INSPECTION PORT

INSPECTOR

INSPECTOR

INSPECTOR DATE

## **GENERAL NOTES:**

- 1. The Site Detail, Boundary Survey, And Surface Improvements
  Depicted Hereon Were Obtained From a Certified Plot PlanS Located at
  80 Marginal Street East Boston by Boston Survey, LLC dated June 18,
  2015 and July 31, 2017. Additional site and utility detail was surveyed
  by Waterfield Design Group, Inc. on June 27, 2018.
- 2. The Locus Property Depicted Is Situated In Zoning District OS—G, City Of Boston Zoning Ordinance, East Boston Neighborhood.
- 3. Vertical Datum = Boston City Base
- 4. Contractor shall, upon completion of building foundation, notify Boston Water & Sewer to schedule a rough construction inspection. BWSC shall ensure that building location is shown on approved site plan.
- 5. The property is owned by Copper Forge LLC
  Contact Person: Paul Marks
  Address: 7 Columbus Terrace Unit 2
  Brookline, MA 02446
  Phone: 617-731-9114
- 6. Water Account: None Existing
- 7. Land Use Code: "A" Residential
- 8. Minimum of 10' separation required between sewer lateral and water
- 9. Proposed: One five—story condominium building with seven residential
- 10. COBUCS #1635870884841
- 11. The finished floor elevation (FFE) is to be higher than any adjacent

## SEWERAGE NOTES:

Estimated Average Daily Sewerage Flow = 1,430 Gal./Day

### INFILTRATION SYSTEM:

- 1. Impervious Area = 4,620 s.f.
- 2. 4,620 s.f.\* 0.0833 ft. = 385 c.f. storage required.
- 3. SC-740 Chamber Storage (4 \* 48.8 c.f.) = 195.2 c.f.
- 4. Crushed Stone Storage =
  19.5' \* 12.8' \* 3.5' = 873.6 c.f.
  873.6 c.f. 195.2 c.f. = 678.4 c.f.
  678.4 \* 0.30 = 203.5 c.f.
- 5. Total Storage = 195.2 + 203.5 = c.f.
- 6. 398.7 c.f. > 385 c.f.



<u>PID# 0104480000</u> WARD# 1 PARCEL# FY2021

FOR BOSTON WATER & SEWER USE

DESIGN BY: JRM

CHECK BY: CRM

SHEET:

SITE PLAN

DATE BY

DATE BY

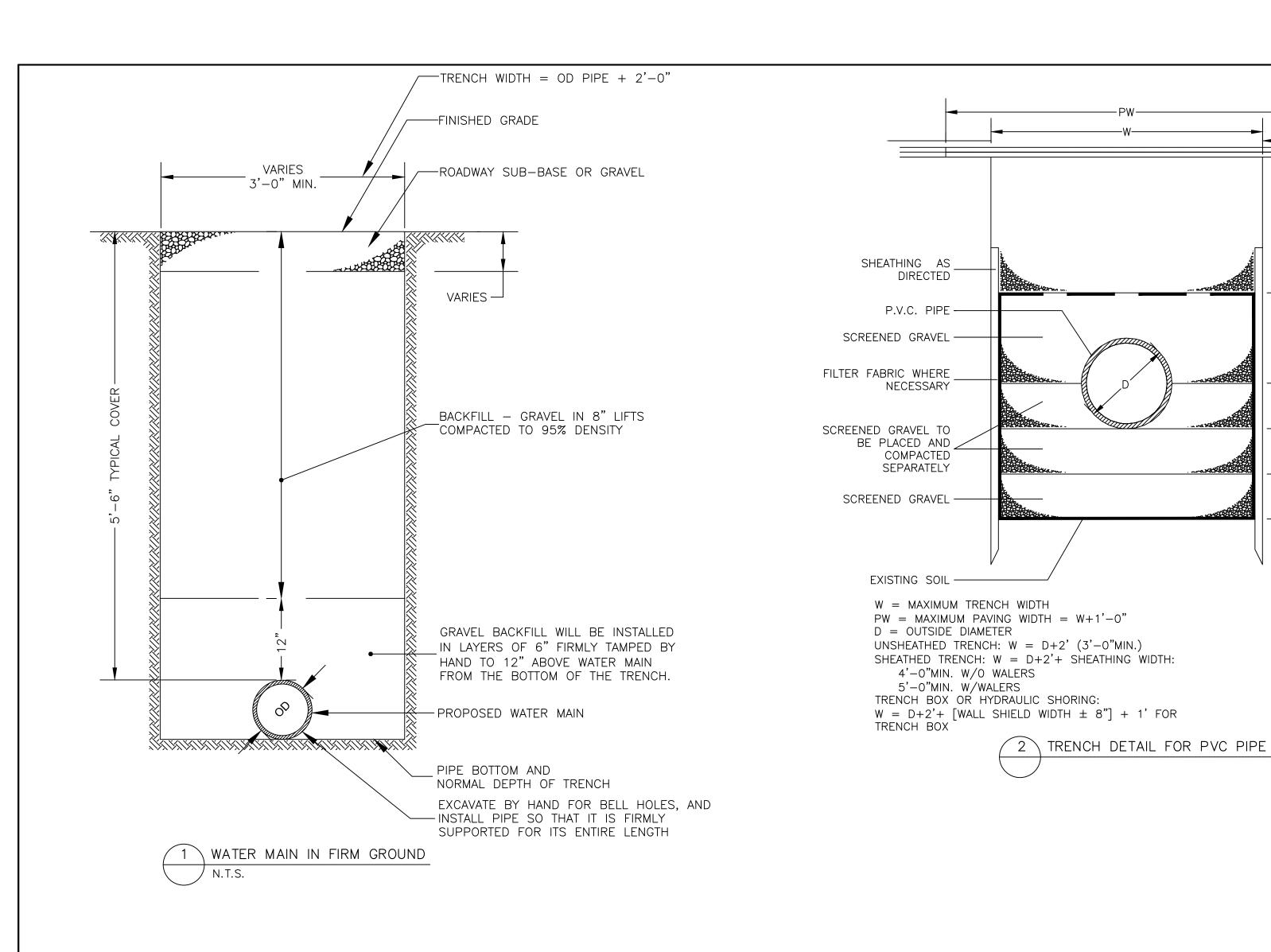


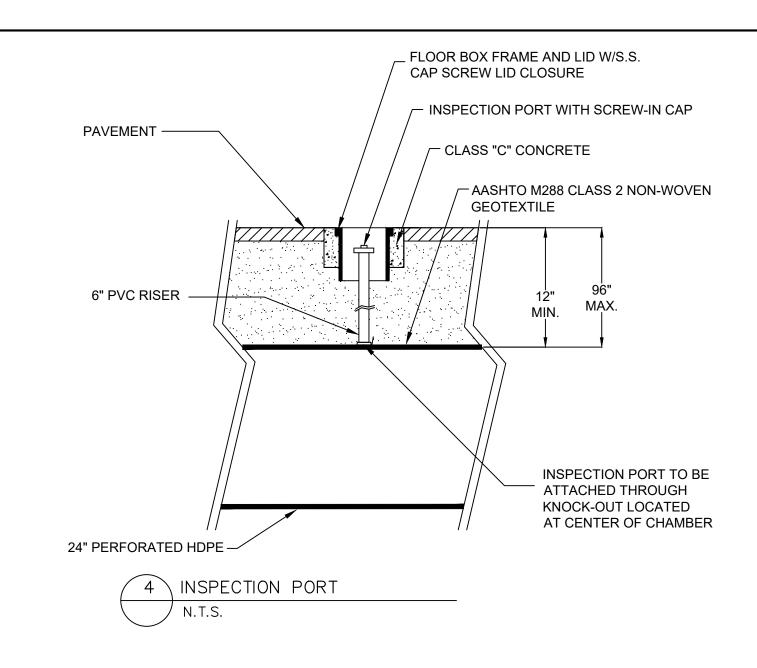
Architect
Merge Architects, Inc.
332 Congress Street
Floor 6
Boston, MA 02110
phone: 617-670-0265

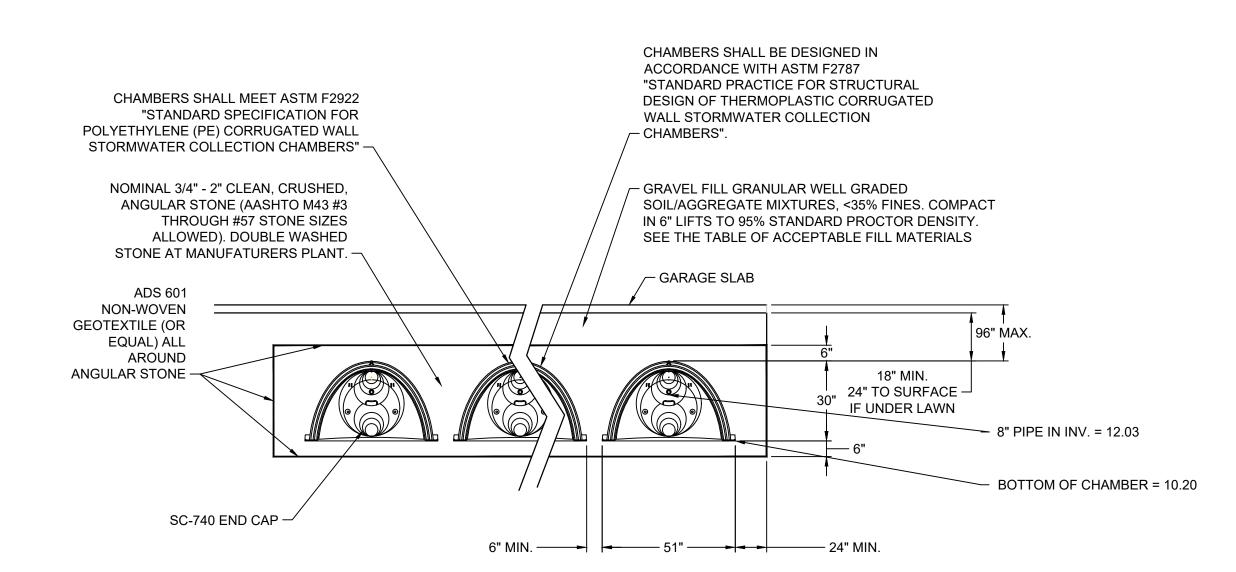
**80 Marginal Street**East Boston, Massachusetts

SITE PLAN #XXXX

Date: 3 November 2021 Scale: As Noted 2.1

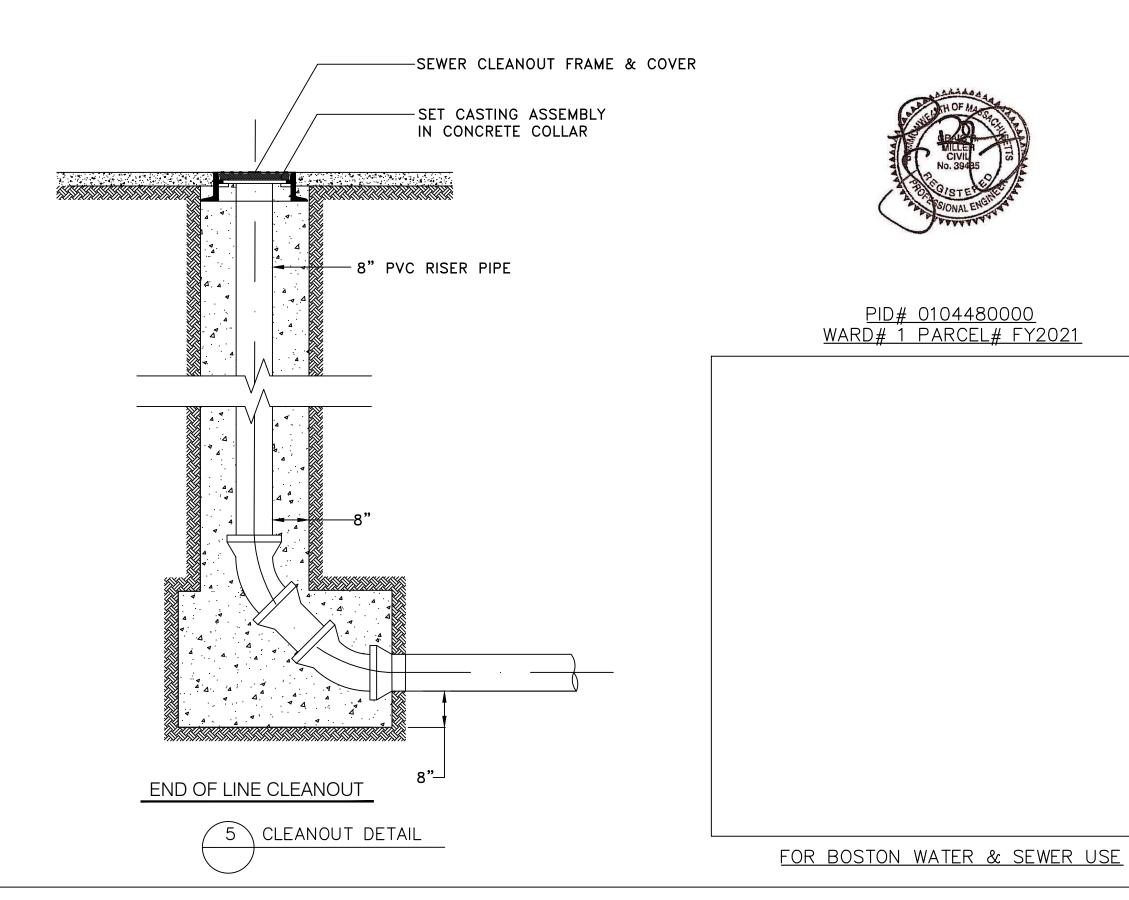






THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.

3 SC-740 UNDERGROUND INFILTRATION CHAMBERS N.T.S.



DESIGN BY: JRM

DRAWN BY: JRM

CHECK BY: CRM

DETAILS

DATE BY



Architect
Merge Architects, Inc.
332 Congress Street
Floor 6
Boston, MA 02110
phone: 617-670-0265

80 Marginal Street
East Boston, Massachusetts

(2) 1½" LAYERS OF \_\_BIT. CONC. TEMPORARY

- CONC.

GRAVEL PLACED AND
— COMPACTED TO 95% IN

- ½D HAUNCHING AREA

-6" BEDDING AREA

EXCAVATION DEPTH
— VARIES WITH SOIL

CONDITONS

8" LAYERS

— 6"+ ½D

EXIST. BIT.

ROADWAY

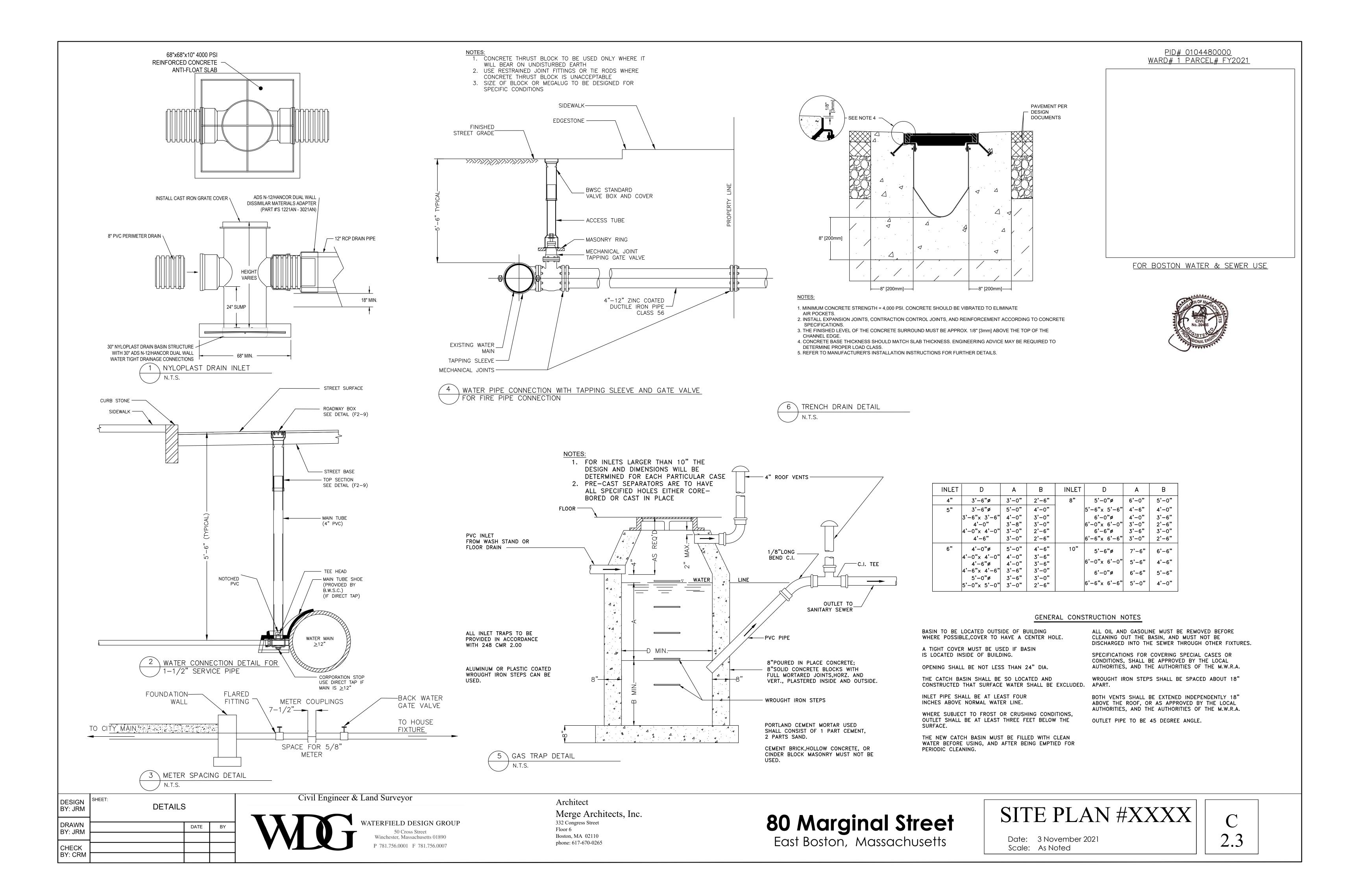
PAVEMENT.

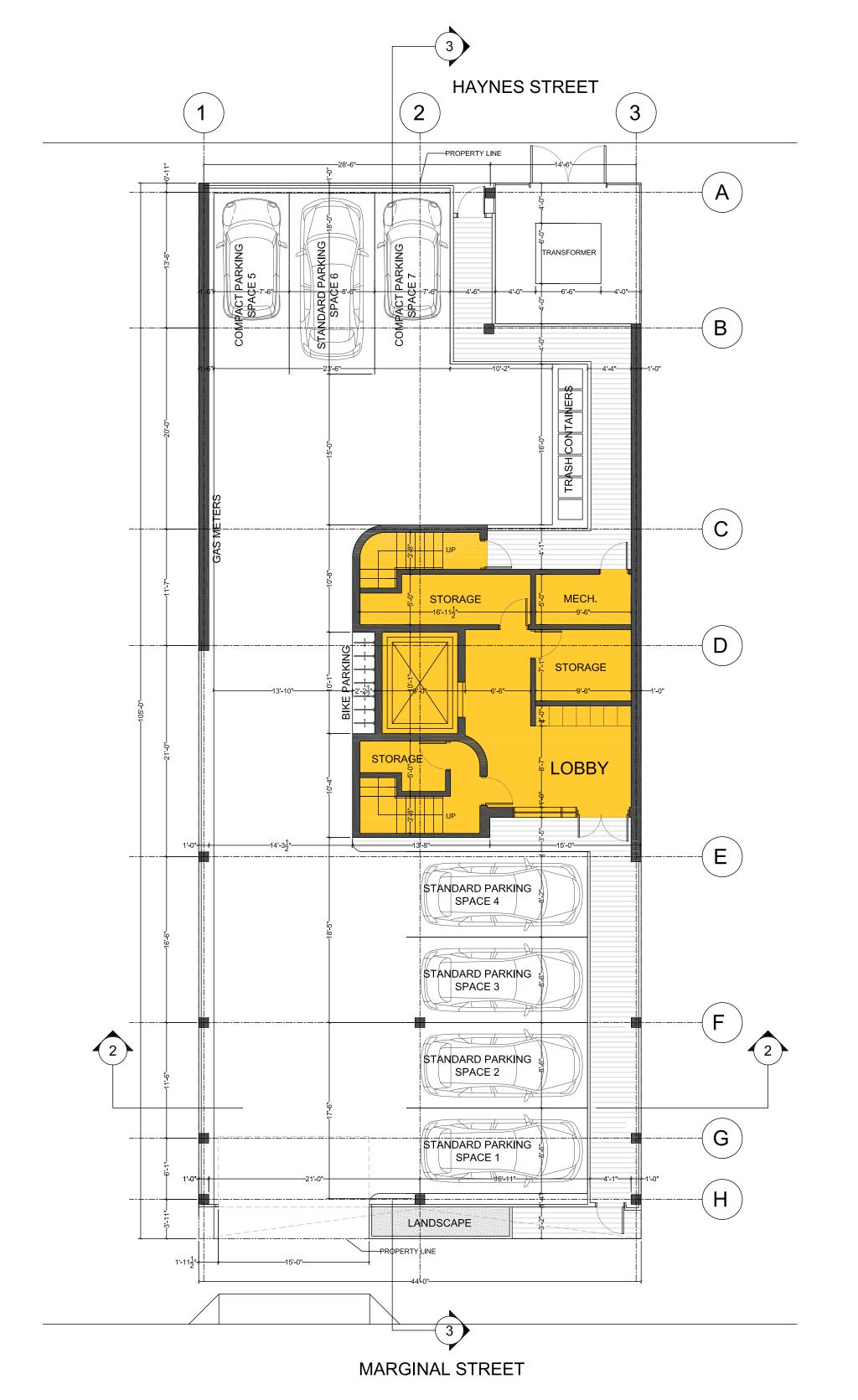
SITE PLAN #XXXX

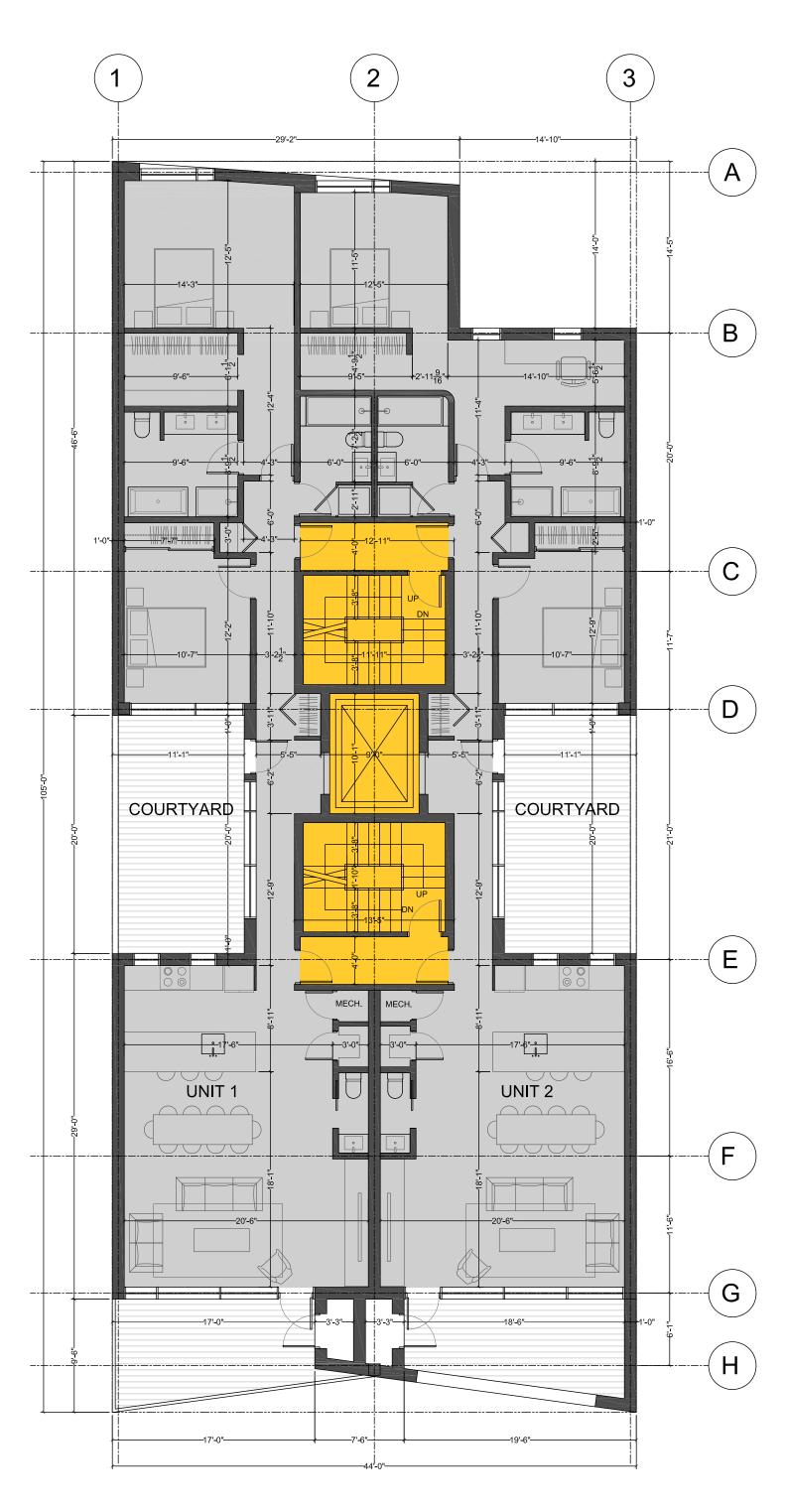
Date: 3 November 2021

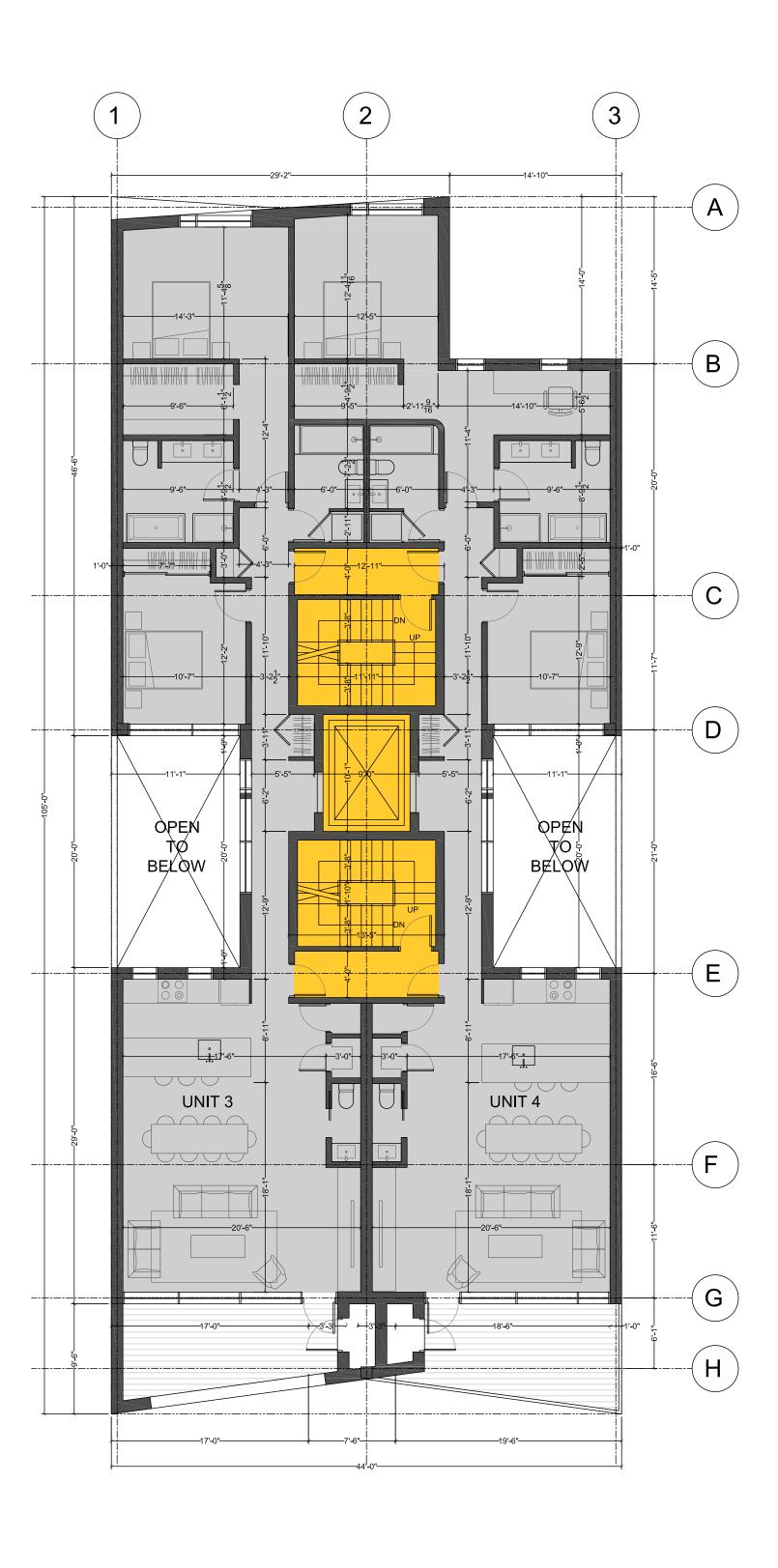
Scale: As Noted

C 2.2

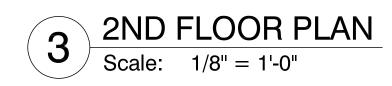








2 1ST FLOOR PLAN
Scale: 1/8" = 1'-0"





OWNER

Copper Forge Partners, LLC Brookline, MA 617.901.0577

ARCHITECT

MERGE ARCHITECTS, INC 332 CONGRESS ST. Floor 6 BOSTON, MA 02210 617.670.0265 mergearchitects.com

STRUCTURAL ENGINEER

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MEP / FP ENGINEER

Wozny / Barbar & Associated, INC. 1076 Washington St. Hanover MA 02339 781.826.4144

Hanover MA 02339 781.826.4144 wbaengineers.com

RCHITECTS

80 Marginal St. East Boston, MA 02128

THE CONTRACTOR IS RESPONSIBLE FOR MATERIALS, DETAILS AND ACCURACY, FOR ALL QUANTITIES AND DIMENSIONS, FOR SELECTING FABRICATION PROCESSES, FOR TECHNIQUES OF ASSEMBLY, FORPERFORMING WORK IN A SAFE MANNER, AND FOR COORDINATING WORK WITH THAT OF ALL TRADES

JOB NO.: **21364** 

SCALE:

MERGE,

DATE: 10/11/2021

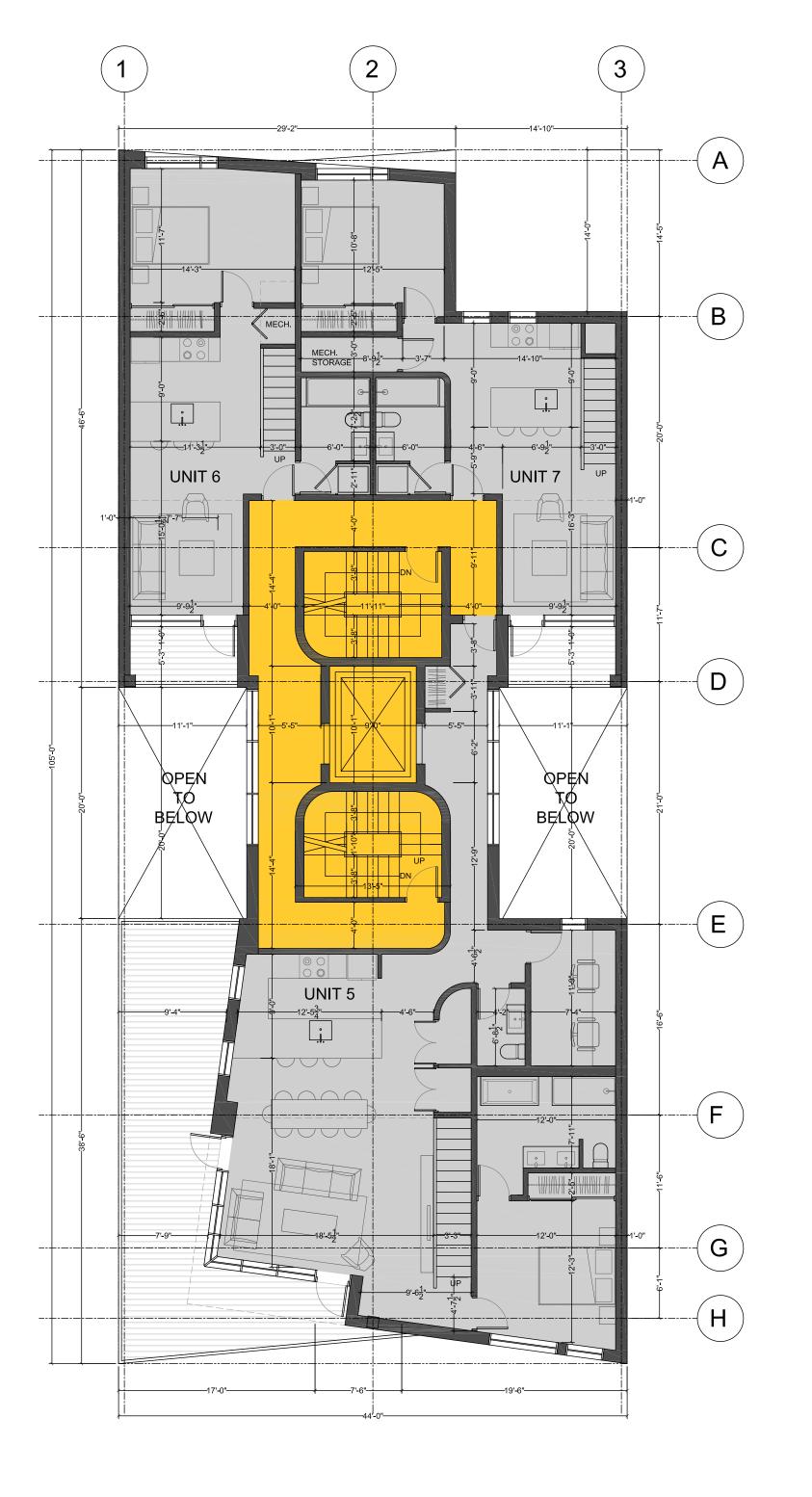
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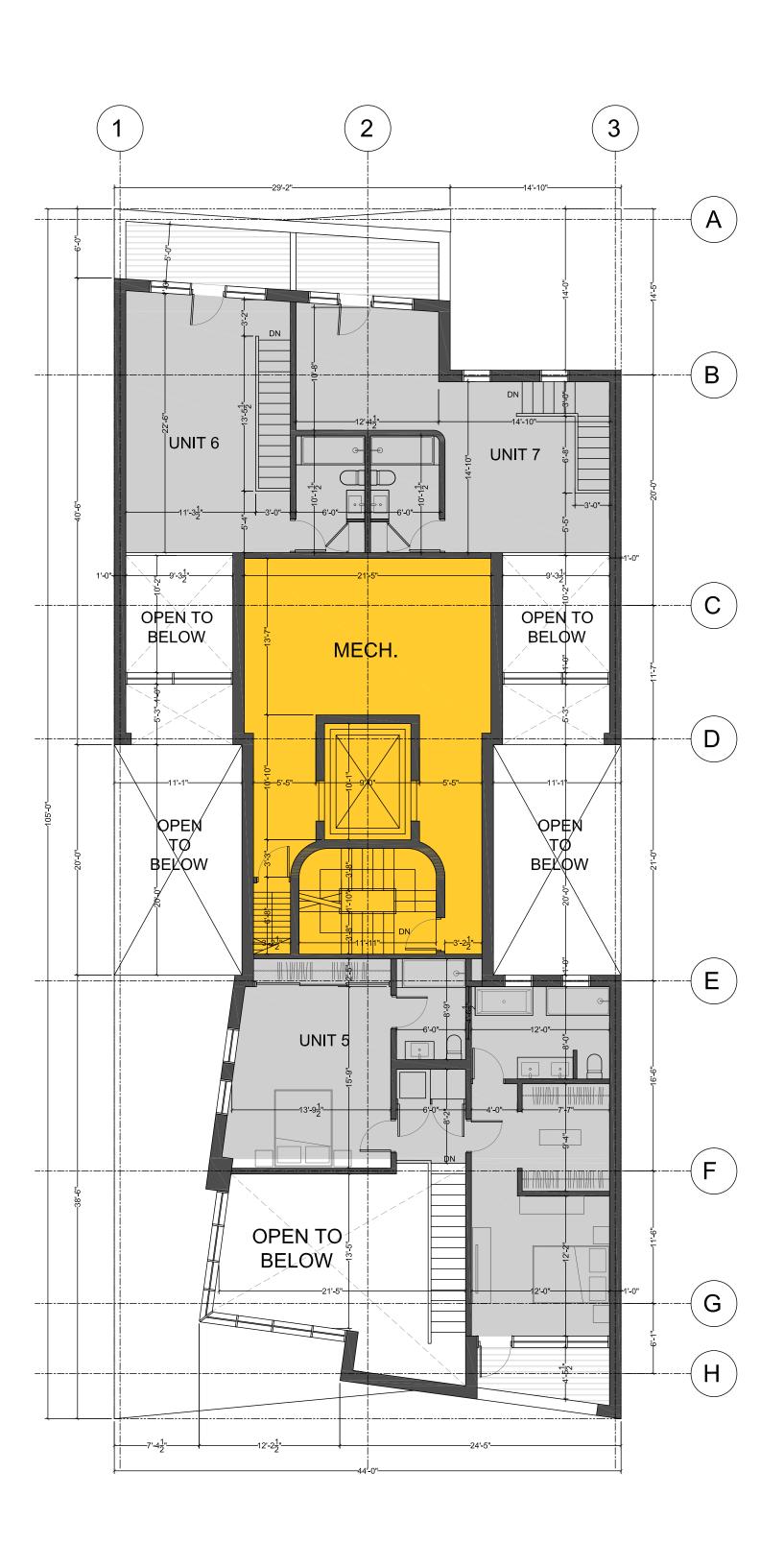
FIRST FLOOR PLAN SECOND FLOOR PLAN THIRD FLOOR PLAN

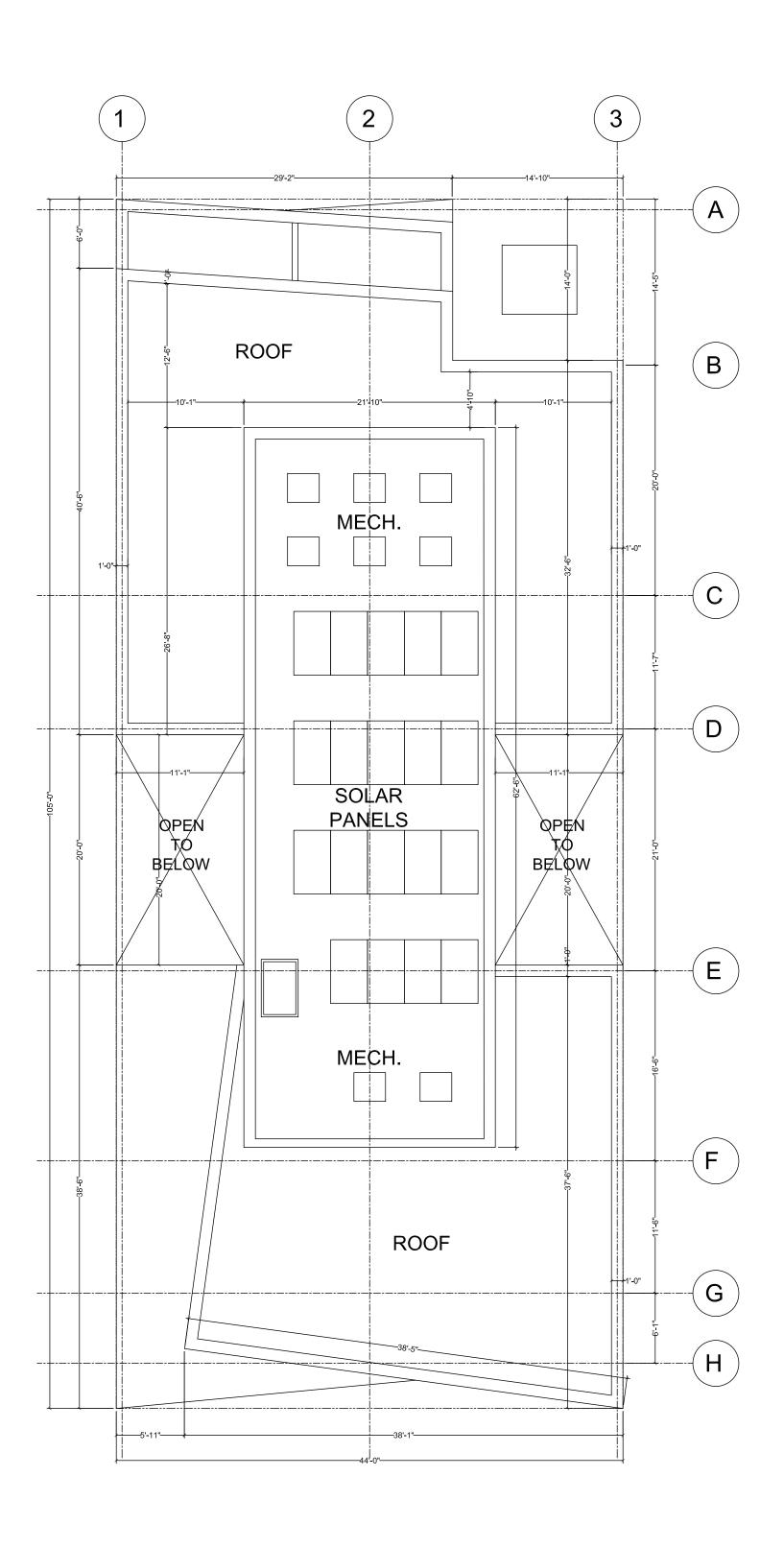
SHEET NO.

A-101

100% SCHEMATIC DESIGN SET







4TH FLOOR PLAN
Scale: 1/8" = 1'-0"

2 Scale: 1/8" = 1'-0"



**OWNER** 

Copper Forge Partners, LLC Brookline, MA 617.901.0577

**ARCHITECT** 

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**MEP / FP ENGINEER** 

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wbaengineers.com

02128 80 Marginal St. East Boston, MA

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JOB NO.: **21364** 

SCALE:

MERGE,

DATE: 10/11/2021

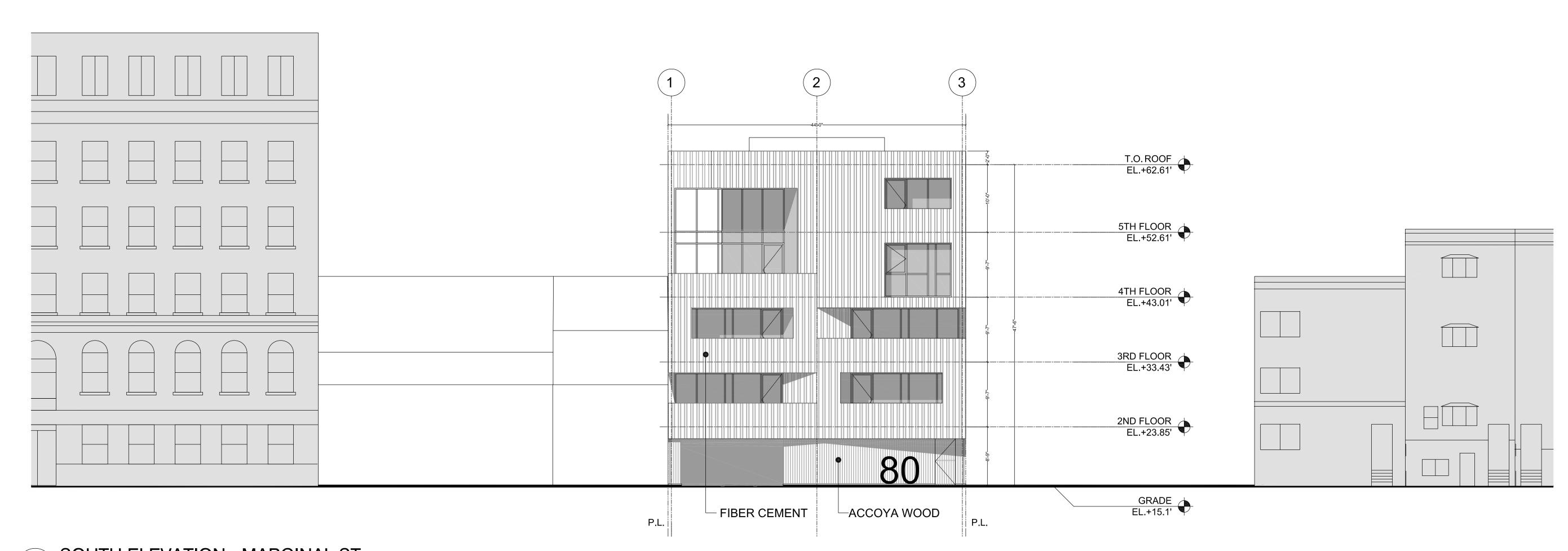
DRAWING TITLE

FOURTH FLOOR PLAN FIFTH FLOOR PLAN **ROOF PLAN** 

SHEET NO.

**A-102** 

100% SCHEMATIC DESIGN SET



SOUTH ELEVATION - MARGINAL ST



**REGISTRATION** 

OWNER

Copper Forge Partners, LLC Brookline, MA 617.901.0577

**ARCHITECT** 

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80 Marginal St. East Boston, MA ( MERGE,

02128

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JOB NO.: **21364** 

SCALE:

11/08/2021 DATE:

DRAWING TITLE

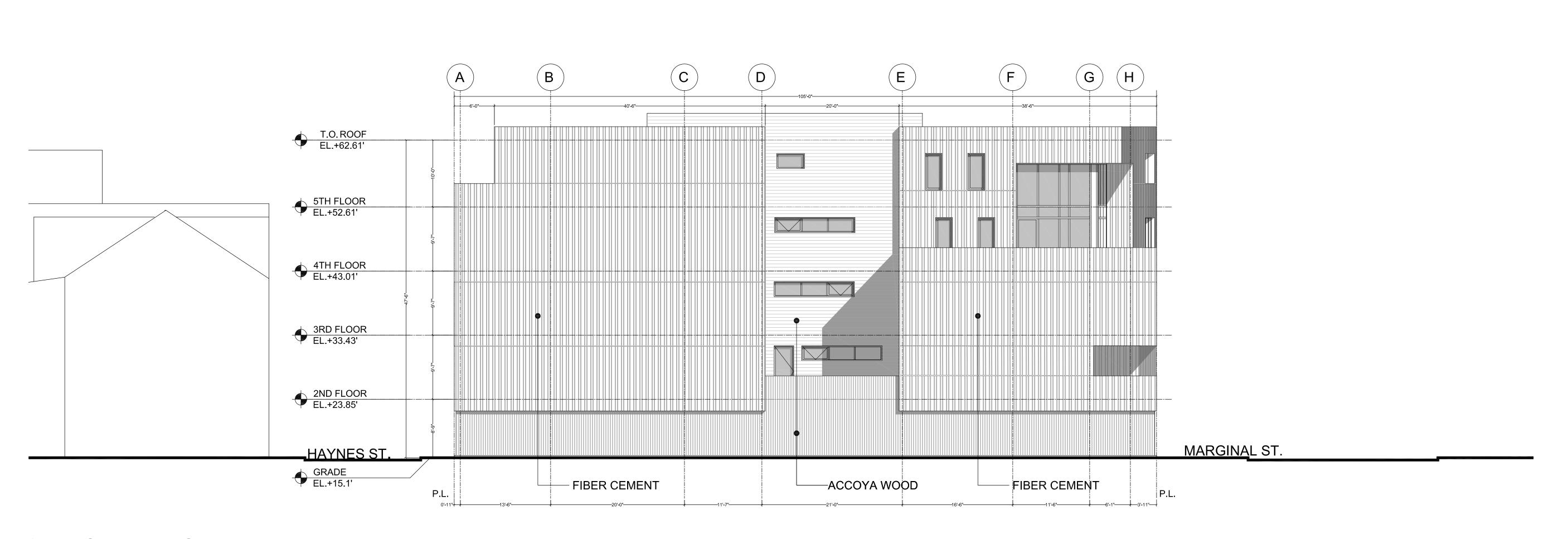
SOUTH ELEVATION NORTH ELEVATION

SHEET NO.

**A-201** 

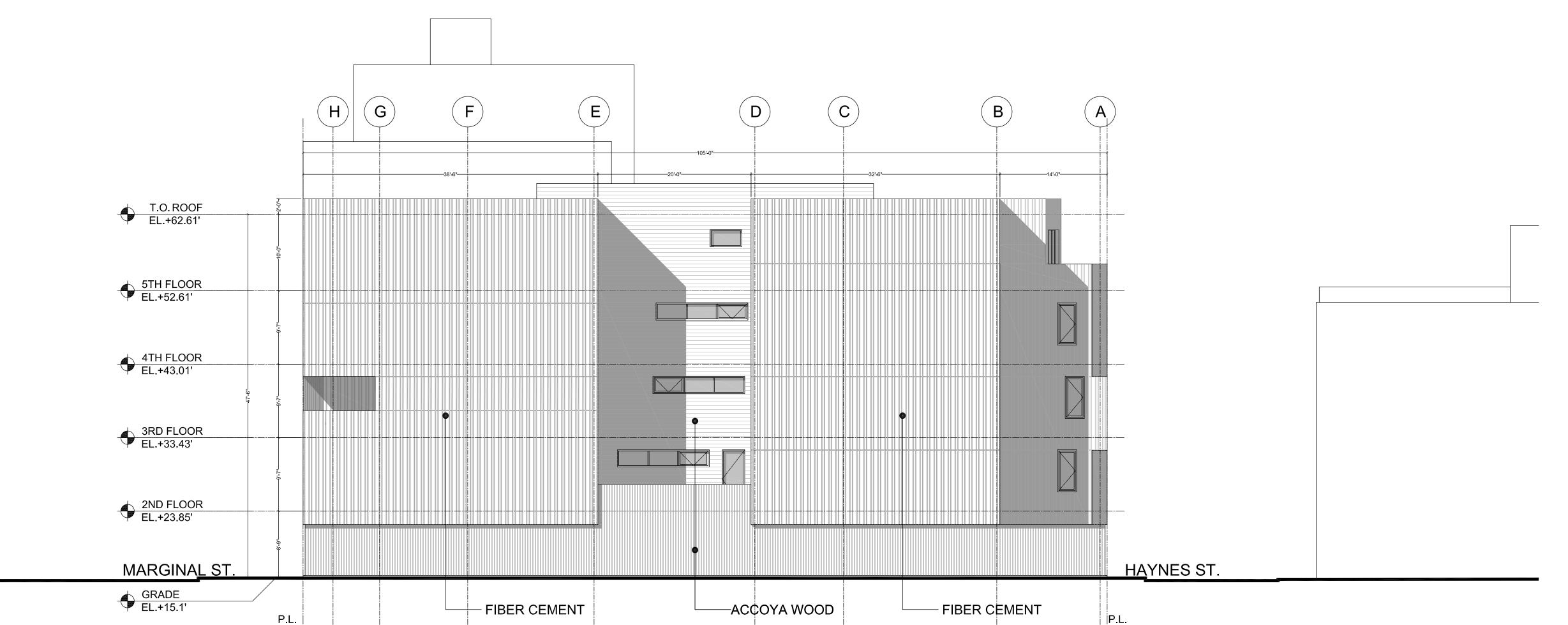
100% SCHEMATIC DESIGN SET

NORTH ELEVATION - HAYNES ST



WEST ELEVATION

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



REGISTRATION

OWNER

Copper Forge Partners, LLC Brookline, MA 617.901.0577

**ARCHITECT** 

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80 MARGINAL ST. 80 Marginal St. East Boston, MA 02128

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JOB NO.: **21364** 

SCALE:

MERGE,

DATE: 11/08/2021

DRAWING TITLE

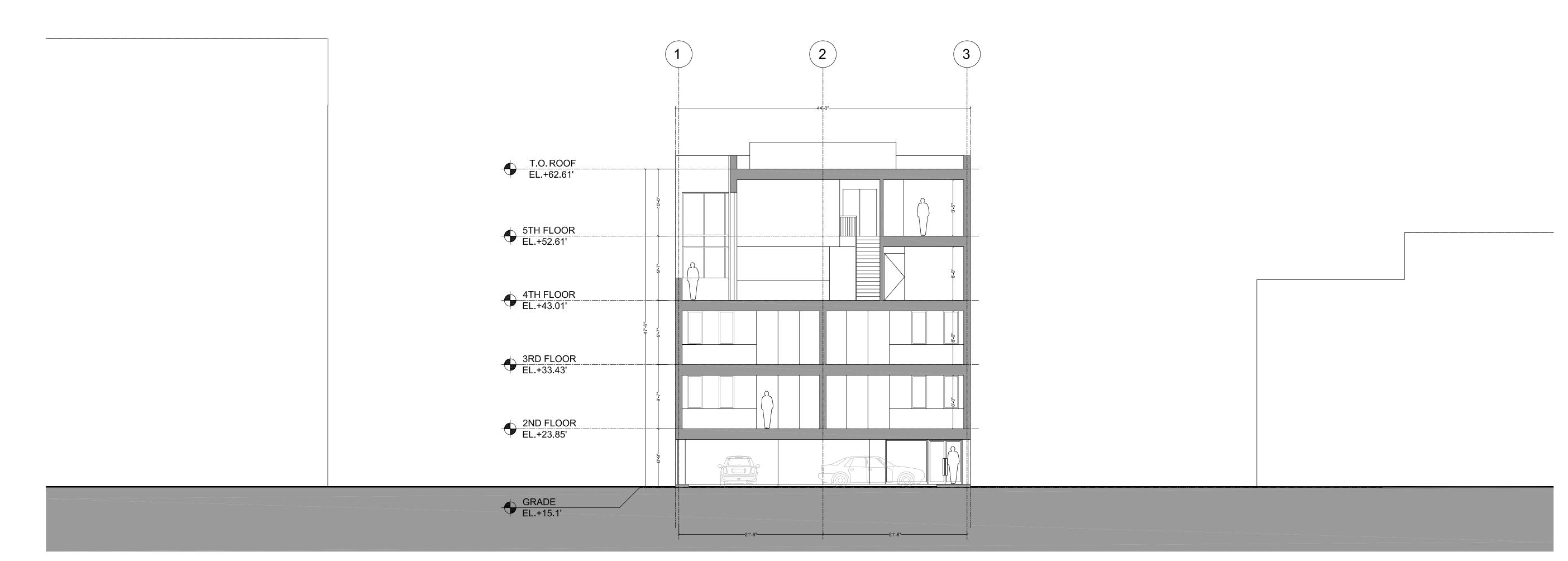
EAST ELEVATION WEST ELEVATION

SHEET NO.

**A-202** 

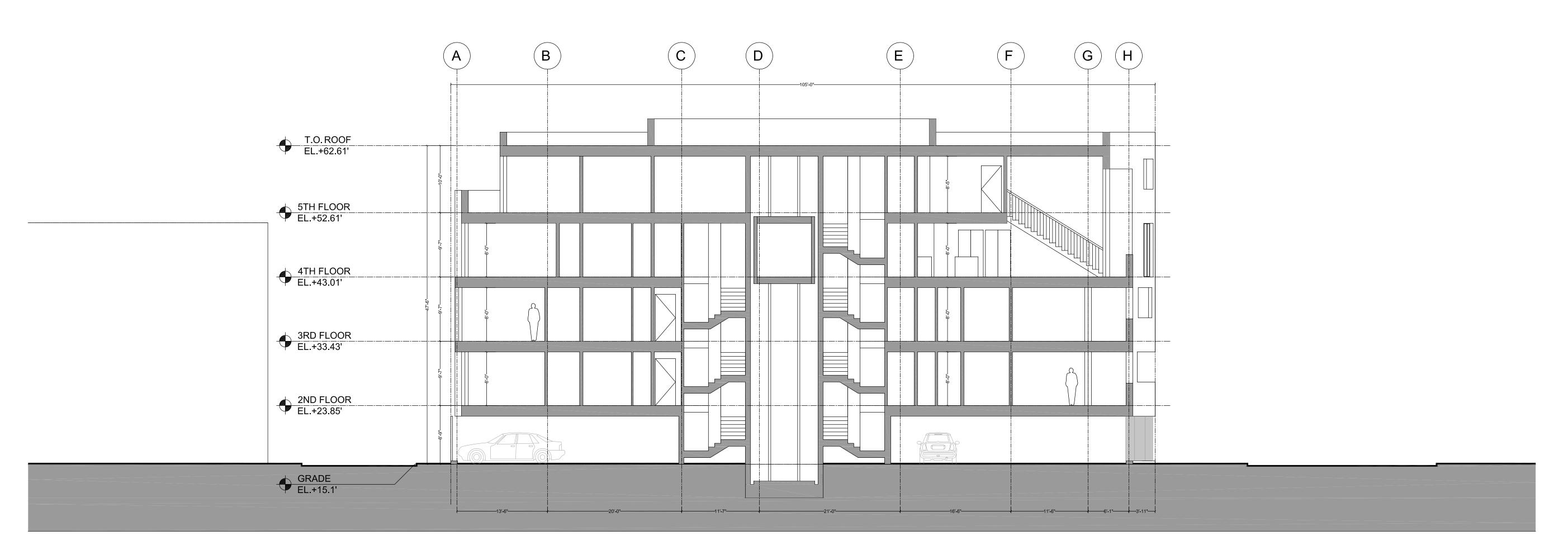
100% SCHEMATIC DESIGN SET

2 EAST ELEVATION
Scale: 1/8" = 1'-0"



BUILDING SECTION, TYP.

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



BUILDING SECTION, TYP.

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

REGISTRATION

OWNER

Copper Forge Partners, LLC Brookline, MA 617.901.0577

**ARCHITECT** 

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80 Marginal St. East Boston, MA

02128

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JOB NO.: **21364** 

SCALE:

DATE: 11/08/2021

DRAWING TITLE

EAST ELEVATION WEST ELEVATION

SHEET NO.

A-301

100% SCHEMATIC DESIGN SET

