PLANNING BOARD
PORTSMOUTH, NEW HAMPSHIRE

EILEEN DONDERO FOLEY COUNCIL CHAMBERS
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

7:00 PM Public Hearings begin **November 21, 2024**

AGENDA

REGULAR MEETING 7:00pm

I. APPROVAL OF MINUTES

A. Approval of the September 26, 2024 Work Session minutes.

B. Approval of the October 17, 2024 meeting minutes.

C. Approval of the October 24, 2024 Work Session minutes.

II. DETERMINATIONS OF COMPLETENESS

SUBDIVISION REVIEW

A. The request of **Lawrence P. Bornheimer Revocable Trust** and **Roman Catholic Bishop of Manchester (Owners),** for property located at **119 Diamond Drive** and **827 Woodbury Ave** requesting Preliminary and Final Subdivision approval for a Lot Line Revision between Map 220 Lot 31 and Map 219 Lot 39 to relocate the common boundary line to encompass existing encroachments including a fence, retaining wall and drainage features.

B. The request of **Northeast Credit Union (Owner),** and **Liberty Mutual Insurance Company (Owner),for** property located at **100 Borthwick Avenue** and **0 Borthwick Avenue requesting** Preliminary and Final Subdivision approval to adjust the boundary between Map 240 Lot 3 and Map 259 Lot 15 by adding approximately 4.88 acres to Map 240 Lot 3.

III. PUBLIC HEARINGS -- OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. POSTPONED TO JANUARY 2025 The request of **Matt Ball** and **Andrea Fershtam (Owners),** for property located at **252 Wibird Street** requesting a

Conditional Use Permit from Section 10.814 for the conversion of an existing accessory structure into a Detached Accessory Dwelling Unit (DADU) that does not conform with the dimensional requirements of the Ordinance. Said property is located on Assessor Map 149 Lot 12 and lies within the General Residence A (GRA) District. **POSTPONED TO JANUARY 2025** (LU-24-137)

IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. The request of **Port Harbor Land LLC (Owner),** for property located at **2 Russell Street requesting** Conditional Use Permit Approval to allow a 40,000 square foot building footprint within the CD5 zone as permitted under Section 10.5A43.43 and a Conditional Use Permit to provide 340 parking spaces on separate lots where 334 are required under Section 10.11112.62 of the Zoning Ordinance. Said property is located on Assessor Map 124 Lot 12 and lies within the Character District 5 (CD5) Historic and Downtown Overlay Districts. (LU-24-191)

B. The request of **Hogswave LLC (Owner),** for property located at **913 Sagamore Avenue** requesting a Wetland Conditional Use Permit from Section 10.1017.50 for 9,574 square feet of disturbance within the wetland buffer area for re-development including demolition of the existing dwelling, construction of a new dwelling, re-configuration of the gravel driveway, pervious paver patio, and deck, grading, utility connections and landscaping. Said property is located on Assessor Map 223 Lot 27 and lies within the Waterfront Business (WB) District. (LU-24-141)

C. The request of Kevin **Shitan Zeng Revocable Trust of 2017 (Owner),** for property located at **377 Maplewood Avenue** requesting a Conditional Use Permit from Section 10.814 for a Detached Accessory Dwelling Unit. Said property is located on Assessor Map 141 Lot 22 and lies within the General Residence a (GRA) and Historic Districts. (LU-24-133)

D. The request of **Lawrence P. Bornheimer Revocable Trust** and **Roman Catholic Bishop of Manchester (Owners),** for property located at **119 Diamond Drive** and **827 Woodbury Avenue** requesting Preliminary and Final Subdivision approval for a Lot Line Revision between Map 220 Lot 31 and Map 219 Lot 39 to relocate the common boundary line to encompass existing encroachments including a fence, retaining wall and drainage features. Said properties are located on Assessor Map 220 Lot 31 and Map 219 Lot 39and lies within the Single Residence B (SRB) District. (LU-24-199)

E. The request of **Northeast Credit Union (Owner),** and f **Liberty Mutual Insurance Company (Owner), f**or property located at **100 Borthwick Avenue** and **0 Borthwick Avenue requesting** Preliminary and Final Subdivision approval to adjust the boundary between Map 240 Lot 3 and Map 259 Lot 15 by adding approximately 4.88 acres to Map 240 Lot 3. Said property is located on Assessor Map 259 Lot 15 and Map 240 Lot 3 and lies within the Office Research (OR) District. (LU-24-151)

VII. CITY COUNCIL REFERRALS [NOTE: ANY REFERRALS REQUIRING PUBLIC HEARING SHOULD BE INCLUDED ABOVE]

A. Recommendation on FY2026-FY2031 Capital Improvement Plan

B. Osprey Landing Open Space

C. 27 Hancock Street

VIII. OTHER BUSINESS

A. Chairman updates and discussion items

B. Board discussion of Regulatory Amendments, Master Plan Scope & other matters

IX. ADJOURNMENT

**Members of the public also have the option to join this meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser:*

https://us06web.zoom.us/webinar/register/WN_z7f5WEo6RWWBzHZUMHPYIw

City of Portsmouth
Planning Department
1 Junkins Ave, 3rd Floor
Portsmouth, NH
(603)610-7216

Memorandum

To: Planning Board

From: Peter Stith, AICP
Planning Manager

Date: November 21, 2024

Re: Recommendations for the November 21, 2024 Planning Board Meeting

I. APPROVAL OF MINUTES

A. Approval of the September 26, 2024, October 17, 2024 and October 24, 2024 meeting minutes.

Planning Department Recommendation

1) Board members should determine if the draft minutes include all relevant details for the decision-making process that occurred at the September 26, October 17 and October 24, 2024 meetings and vote to approve meeting minutes with edits if needed.

II. DETERMINATION OF COMPLETENESS

SUBDIVISION PLAN REVIEW

A. The request of ***Lawrence P. Bornheimer Revocable Trust*** *and* ***Roman Catholic Bishop of Manchester (Owners),*** for property located at **119 Diamond Drive** and **827 Woodbury Ave** requesting Preliminary and Final Subdivision approval for a Lot Line Revision between Map 220 Lot 31 and Map 219 Lot 39 to relocate the common boundary line to encompass existing encroachments including a fence, retaining wall and drainage features.

B. The request of **Northeast Credit Union (Owner)**, for property located at **100 Borthwick Avenue** and **0 Borthwick Avenue** requesting Preliminary and Final Subdivision approval to adjust the boundary between Map 240 Lot 3 and Map 259 Lot 15 by adding approximately 4.88 acres to Map 240 Lot 3.

Planning Department Recommendation

1) Vote to determine that Items A & B are complete according to the Subdivision Review Regulations, (contingent on the granting of any required waivers under Section IV of the agenda) and to accept the applications for consideration.

III. PUBLIC HEARINGS – OLD BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. The request of Matt **Ball** and **Andrea Fershtam (Owners),** for property located at **252 Wibird Street** requesting a Conditional Use Permit from Section 10.814 for the conversion of an existing accessory structure into a Detached Accessory Dwelling Unit (DADU) that does not conform with the dimensional requirements of the Ordinance. Said property is located on Assessor Map 149 Lot 12 and lies within the General Residence A (GRA) District. (LU-24-137)

*****Application has been postponed to January 2025 meeting.*****

IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

A. The request of **Port Harbor Land LLC (Owner),** for property located at **2 Russell Street requesting** Conditional Use Permit Approval to allow a 40,000 square foot building footprint within the CD5 zone as permitted under Section 10.5A43.43 and a Conditional Use Permit to provide 340 parking spaces on separate lots where 334 are required under Section 10.11112.62 of the Zoning Ordinance. Said property is located on Assessor Map 124 Lot 12 and lies within the Character District 5 (CD5) Historic and Downtown Overlay Districts. (LU-24-191)

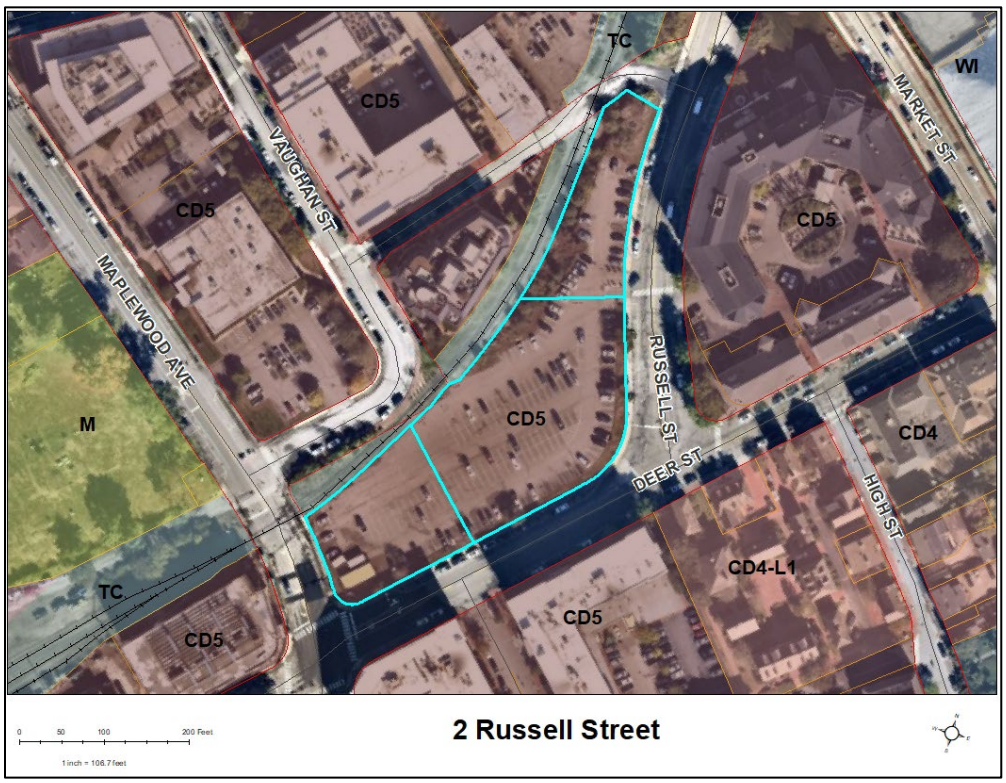
Project Background

The project was originally approved on December 15, 2022 and included lot line adjustments for three existing lots and the construction of three buildings consisting of office, retail/commercial, and residential uses. Building 1 is a proposed 4-story office building at the corner of Deer Street and Maplewood Avenue, Building 2 is a proposed 5-story mixed-use residential building at the corner of Deer Street and Russell Street with below ground parking, first floor residential lobby, commercial space and parking and 56 upper floor residential units, and Building 3 is a proposed 5-story mixed-use residential building along Russell Street with first floor residential lobby and commercial space and 24 upper floor residential units.

The subdivision/lot line adjustment plan was recorded in June 2024 and the applicant continues to work on the post approval conditions prior to getting a building permit. The site plan was extended for a second year at the Planning Board's October 17, 2024 meeting. Conditional Use Permits can only be extended one time for one year with no option for additional extensions, thus the reason the applicant is back before the Board seeking approval for the two CUPs that were originally granted in 2022.

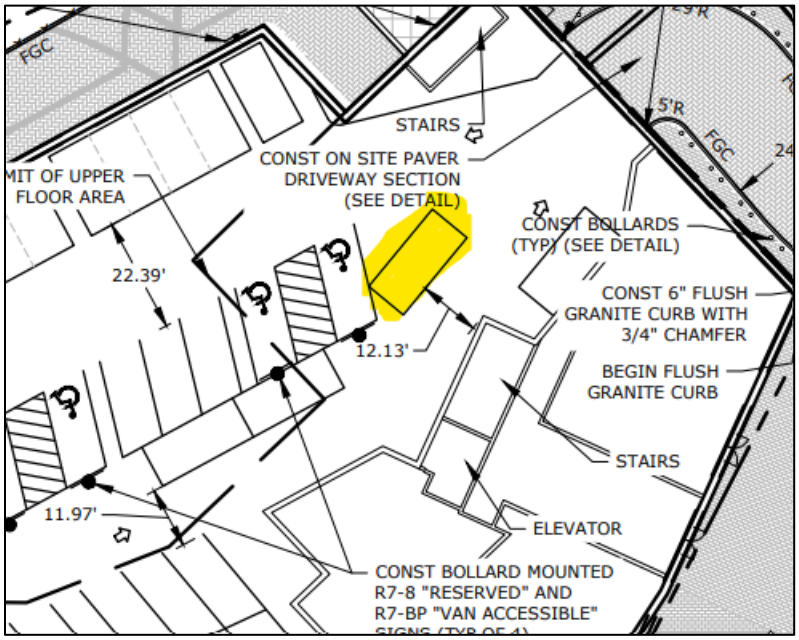
Since this project was originally approved in 2022, zoning amendments were adopted that now require workforce housing in addition to community space for incentives in the character districts, including increase in building footprint under Section 10.5A43.43. Applying the current regulations to this project, only 10% community space would be required and 10% of the units (if for sale) or 5% (if rented) to be designated as workforce housing units. This project was designed and approved under the prior ordinance and the applicant has been granted extensions as they complete their post-approval conditions prior to obtaining a building permit. The Ordinance only permits one extension for a CUP for a

period of one year. Additional extensions for site plan approval beyond one year are available and this project received a second one-year extension at the October 19, 2024 Planning Board meeting. The existing CUPs will expire on December 15, 2024 if a building permit is not issued. The applicant is working diligently on the remaining post approval conditions in order to have a building permit on or before December 15th, however if that does not happen, the CUPs will expire. The applicant is requesting new CUPs and requesting the Planning Board waive the requirement for workforce housing acknowledging the project will provide over 40% community space.



Project Review, Discussion, and Recommendations

The project was before the Zoning Board of Adjustment in October to seek dimensional relief for parking spaces and aisle widths in Building 2. The change to the parking layout increased the number of spaces by 6 and the Board granted the requested variances. The applicant was before the Technical Advisory Committee for the second site plan extension request and TAC reviewed the changes to the parking layout with no concerns other than one space shown below that appears to interfere with a vehicle parked in the adjacent handicap space.



Planning Department Recommendation

Conditional Use Permit – 10.1112.62 Shared Parking

1) Vote to find that the Conditional Use Permit application meets the criteria set forth in Section 10.1112.62 and to adopt the findings of fact as presented.

(Alt.) Vote to find that the Conditional Use Permit application meets the criteria set forth in Section 10.1112.62 and to adopt the findings of fact as amended and read into the record.

2) Vote to find that the number of off-street parking spaces provided will be adequate and appropriate for the proposed use of the property and to grant the conditional use permit as presented with the following condition:

2.1) The shared parking arrangement shall be secured by a covenant acceptable to the City and recorded at the Rockingham County Registry of Deeds.

Conditional Use Permit – 10.5A43.43 Maximum Building Footprint

1) Vote to find that the Conditional Use Permit application meets the criteria set forth in Section 10.5A43.43 and to adopt the findings of fact as presented.

(Alt.) Vote to find that the Conditional Use Permit application meets the criteria set forth in Section 10.5A43.43 and to adopt the findings of fact as amended and read into the record.

2) Vote to grant the conditional use permit to allow a building footprint up to 40,000 SF within the CD5 as permitted under 10.5A43.43 with 40.4% Community Space and no workforce housing.

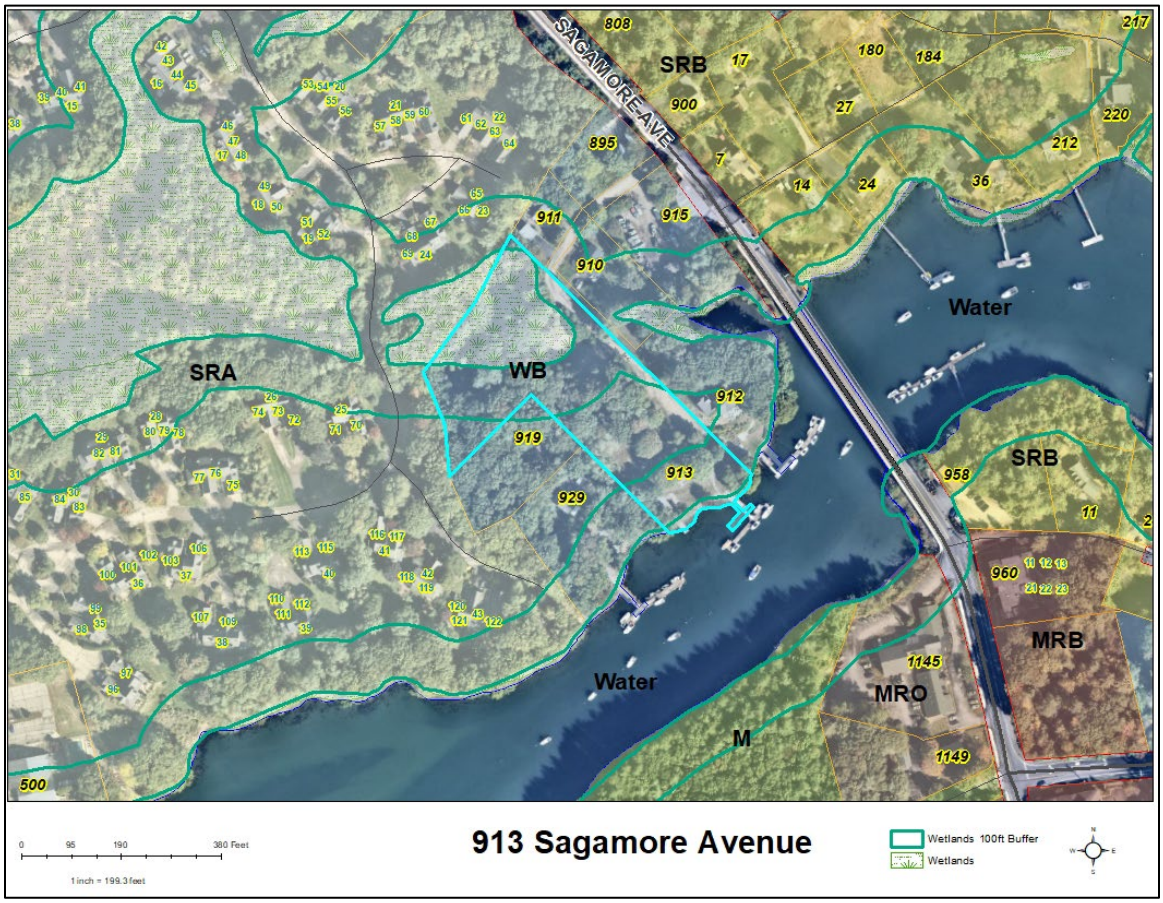
IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

B. The request of **Hogswave LLC (Owner),** for property located at **913 Sagamore Avenue** requesting a Wetland Conditional Use Permit from Section 10.1017.50 for 9,574 square feet of disturbance within the wetland buffer area for re-development including demolition of the existing dwelling, construction of a new dwelling, re-configuration of the gravel driveway, pervious paver patio, and deck, grading, utility connections and landscaping. Said property is located on Assessor Map 223 Lot 27 and lies within the Waterfront Business (WB) District. (LU-24-141)

Background

This application is for the demolition of an existing residential structure and the construction of a new home, reconfiguration of the existing gravel driveway, the addition of a pervious paver patio, deck, removal of impervious surfaces, reconstruction of a retaining wall, grading, utility connections and landscaping. The existing conditions within the 100' wetland buffer include a one-story residential structure with 1,110 s.f. of impact and approximately 900 s.f. of impervious pavement. This application proposed the removal of the 1,110 s.f. of building impact within the buffer and the removal of 914 s.f. of pavement. The applicant is proposing to permanently impact approximately 6,855 s.f. of the 100' wetland buffer, compared to the existing condition of 7,743 s.f. of permanent impact.



Staff Analysis – Wetland CUP

1. The land is reasonably suited to the use activity or alteration.

This area is a previously disturbed area within the tidal buffer with an existing residential structure. The proposal seeks to remove the old structure and construct a new, larger structure. Given the proximity to the resource and the existing runoff conditions and slope, the proposed re-grading should be performed carefully. Appropriate erosion control measures are proposed, and the monitoring of these controls should be performed regularly during the construction season. The applicant is proposing stone drip edges and crushed stone beneath the rear deck, a rip rap swale at the toe of the slope, and a large vegetative buffer to help with existing sheet flow of stormwater on the property.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

The applicant has explored an alternative location further from the wetland resource but due to ledge, it is not feasible without blasting or drilling.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.

The proposed replanting of the 25' vegetated buffer should have a positive impact on the wetland functional values on site where sheet flow over gravel previously existed. In addition, efforts to slow down and control the sheet flow onsite with a swale and drip edge should enhance existing stormwater
conditions.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.

The proposed restoration of the 25' vegetated buffer will help to protect the adjacent wetland.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

This project will be increasing the building impact within the 100' wetland buffer but the applicant is making strides to offset these impacts with stormwater filtration and vegetated buffer enhancement.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

Applicant is proposing to revegetate a large portion of the 25' buffer.

Project Review, Decisions, and Recommendations
The applicant will be before the Board of Adjustment on Tuesday, November 19, 2024 seeking variances to allow a residential use in the Waterfront Business District. The applicant was before the Conservation Commission. See below for details.

Conservation Commission
The applicant was before the Commission at its regularly scheduled meeting of Wednesday, October 9, 2024 and the Commission voted unanimously to recommend approval with the following conditions:

1. The proposed Northern Red Oaks should be at least of 2" caliper sizing.
2. The Conservation Commission recommends that the applicant follow NOFA standards on the site:
https://nofaolc.wpenginepowered.com/wpcontent/uploads/2019/10/nofa_organic_land_care_standards_6thedition_2017_opt.pdf

3. *Wetland boundary markers shall be permanently installed prior the start of construction in locations noted on plan set.*

The Conservation Commission conditions have been met and included in the Planning Board submission.

Planning Department Recommendation
Wetland Conditional Use Permit

1) Vote to find that the Conditional Use Permit Application meets the requirements set forth in Section 10.1017.50 of the Ordinance and adopt the findings of fact as presented.

(Alt.) Vote to find that the Conditional Use Permit Application meets the requirements set forth in Section 10.1017.50 of the Ordinance and adopt the findings of fact as amended.

2.) Vote to grant the Conditional Use Permit with the following condition:

> *2.1) Wetland boundary markers shall be permanently installed prior the start of construction in locations noted on plan set.*

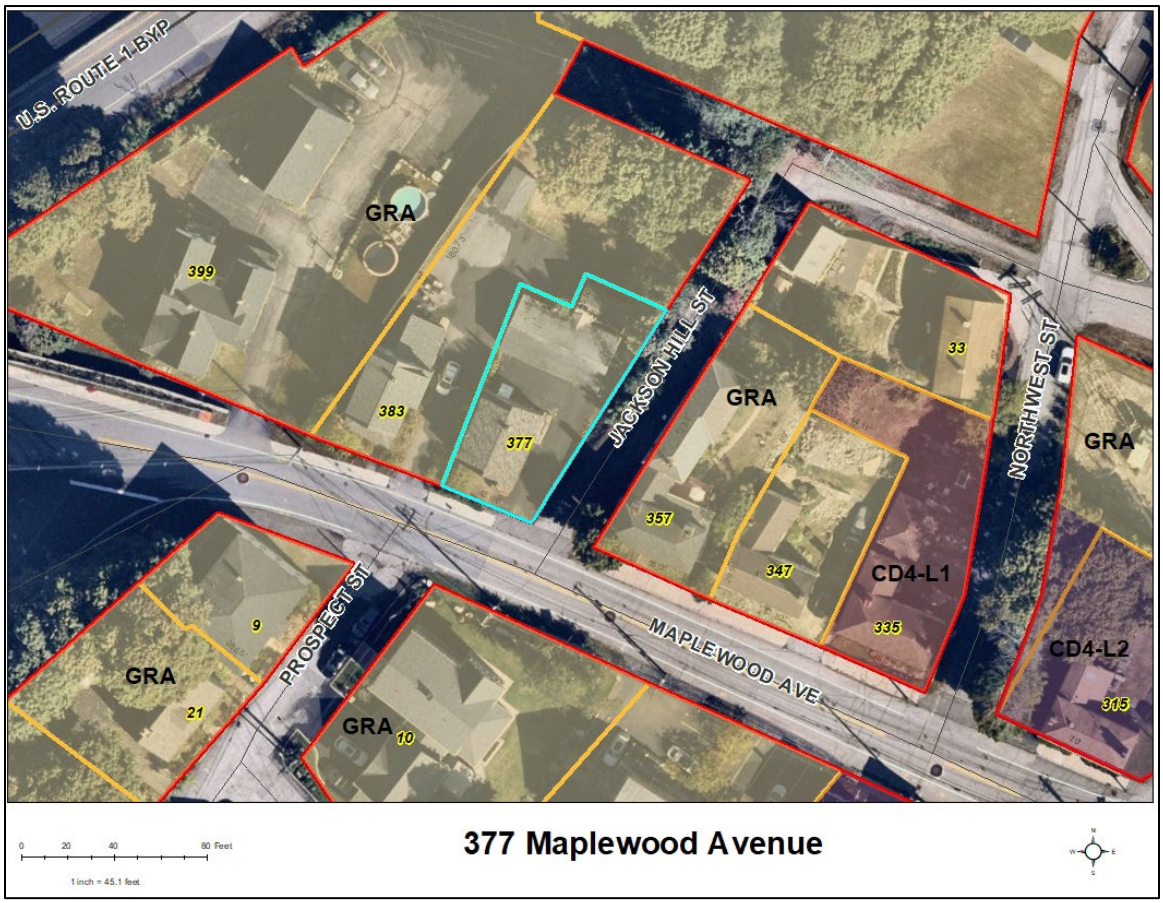
IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

C. The request of Kevin **Shitan Zeng Revocable Trust of 2017 (Owner),** for property located at **377 Maplewood Avenue** requesting a Conditional Use Permit from Section 10.814 for a Detached Accessory Dwelling Unit. Said property is located on Assessor Map 141 Lot 22 and lies within the General Residence a (GRA) and Historic Districts. (LU-24-133)

Project Background

The application for a new Detached Accessory Dwelling Unit (DADU) includes demolition of the existing dilapidated accessory structure and construction of a new DADU.



Project Review, Decisions, and Recommendations

The applicant was before the Zoning Board of Adjustment at their regularly scheduled meeting on Tuesday, September 17, 2024 and the Board voted to grant the following variances:

1) Variance from Section 10.521 to a) allow a building coverage of 37.5% where 25% is allowed; b) allow an open space of 24.5% where 30% is required; c) allow a secondary front yard setback of 6 feet where 10 feet is required; d) allow a left yard setback of 4.5 feet where 10 feet is required; e) allow a rear yard setback of 3 feet where 20 feet is required; and

2) Variance from Section 10.321 to allow a nonconforming building or structure to be extended, reconstructed or enlarged without conforming to the requirements of the Ordinance.

Per Section 10.814.63 below, the Planning Board may modify certain standards in this section except for the size and height of the ADU.

10.814.63	In granting a conditional use permit for an **accessory dwelling unit**, the Planning Board may modify a specific standard set forth in Sections 10.814.26 and 10.814.30 through 10.814.50 (except the size and height of any **ADU**), including requiring additional or reconfigured **off-street parking** spaces, provided that the Board finds such modification will be consistent with the required findings in Section 10.814.62.

The applicant is seeking one modification for the building footprint from Section 10.814.434, which limits the footprint of the building containing the DADU to 750 square feet. The proposed footprint of the building containing the DADU will be 1,104 square feet.

10.814.434	The **building footprint** of the **building** containing the **DADU** shall be no greater than 750 sq. ft.

The one-car garage is attached to the DADU, which is the main reason for the increase in the size of the footprint. The footprint of the portion of the building containing the DADU without the garage is 756 square feet, which would still require a modification, but is close to what is required under 10.814.434.

Planning Department Recommendation
Detached Accessory Dwelling Unit Conditional Use Permit

1) Vote to find that the Conditional Use Permit Application meets the requirements set

forth in Section 10.814.62 of the Ordinance and adopt the findings of fact as presented.

(Alt.) Vote to find that the Conditional Use Permit Application meets the requirements set forth in Section 10.814.62 of the Ordinance and adopt the findings of fact as amended.

2) Vote to grant the following modification:

2.1) Modification from Section 10.814.434 to allow a building footprint of 1,104 square feet.

3) Vote to grant the Conditional Use Permit with the following conditions:

3.1) Documentation of the conditional use permit approval shall be recorded at the Rockingham County Registry of Deeds, together with an affidavit that either the principal dwelling unit or the accessory dwelling unit will be occupied by the owner of the dwelling as the owner's principal place of residence, as required by Section 10.814.22.

3.2) A certificate of use issued by the Planning Department is required to verify compliance with the standards of this Section, including the owner occupancy and principal residency requirements. Said certificate shall be issued by the Planning Department upon issuance of a certificate of occupancy by the Inspection Department. A certificate of use shall not be issued prior to recording of documentation as required by this Ordinance.

3.3) The certificate of use shall be renewed annually upon submission of such documentation as the Planning Department may require to verify continued compliance with the standards of this Section. Failure to comply with this requirement shall be deemed a violation of the ordinance and may be enforced as provided in Article 2.

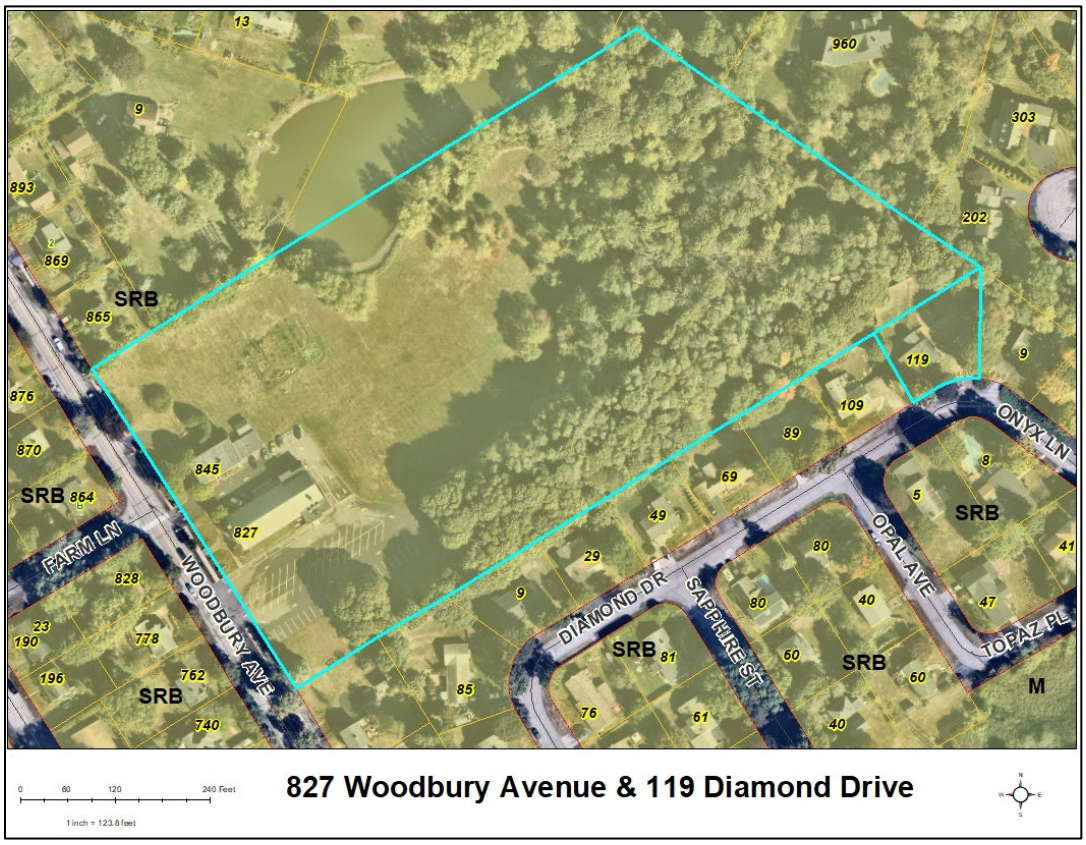
IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

D. The request of **Lawrence P. Bornheimer Revocable Trust** and **Roman Catholic Bishop of Manchester (Owners),** for property located at **119 Diamond Drive** and **827 Woodbury Avenue** requesting Preliminary and Final Subdivision approval for a Lot Line Revision between Map 220 Lot 31 and Map 219 Lot 39 to relocate the common boundary line to encompass existing encroachments including a fence, retaining wall and drainage features. Said properties are located on Assessor Map 220 Lot 31 and Map 219 Lot 39 and lie within the Single Residence B (SRB) District. (LU-24-199)

Project Background

The application for a lot line adjustment between the two properties is proposed to resolve encroachments that include a fence, retaining wall and drainage features that extend onto 827 Woodbury and benefit 119 Diamond Drive. The lot line revision will add 4,590 square feet to Lot 31 (119 Diamond), which will result in a lot area of 17,910 square feet.



The images above clearly show the encroachment from Lot 31 onto Lot 39. The top image is from the 2000 aerial imagery and the bottom photo is from 2024, evidence that these encroachments have been present for at least 24 years. This lot line adjustment did not need to go before the Technical Advisory Committee because the application did not contain any of the following:

a. Creation of a new lot;
b. Construction of a new public or private street;
c. Widening or realignment of an existing public or private street;

d. Construction of public or private water, sewer or stormwater facilities serving more than one lot;
e. Establishment of an easement over one lot for water, sewer or stormwater facilities to serve a different lot; or
f. Provision of a common driveway or access easement;

Planning Department Recommendation
Subdivision Waiver

1. *Vote to grant the requested waivers to the Subdivision Standards from Section IV.9/V.8 Requirements for Preliminary Plat and Requirements for Final Plat.* ***[NOTE: Motion maker must select one of the following options]:***

   a) Strict conformity would pose an unnecessary hardship to the applicant and waiver would not be contrary to the spirit and intent of the regulations.

   [OR]

   b) Specific circumstances relative to the subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations.

Planning Department Recommendation
Subdivision

1) *Vote to find that the Subdivision (Lot Line Revision) application meets the standards and requirements set forth in the Subdivision Rules and Regulations to adopt the findings of fact as presented.*

(Alt.) Vote to find that the Subdivision (Lot Line Revision) application meets the standards and requirements set forth in the Subdivision Rules and Regulations to adopt the findings of fact as amended and read into the record.

2) *Vote to grant Preliminary and Final Subdivision Approval with the following stipulations:*
   - *3.1) The subdivision plan, and any easement plans and deeds shall be recorded simultaneously at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.*
   - *3.2) Property monuments shall be set as required by the Department of Public Works prior to the filing of the plat;*
   - *3.3) GIS data shall be provided to the Department of Public Works in the form as required by the City;*

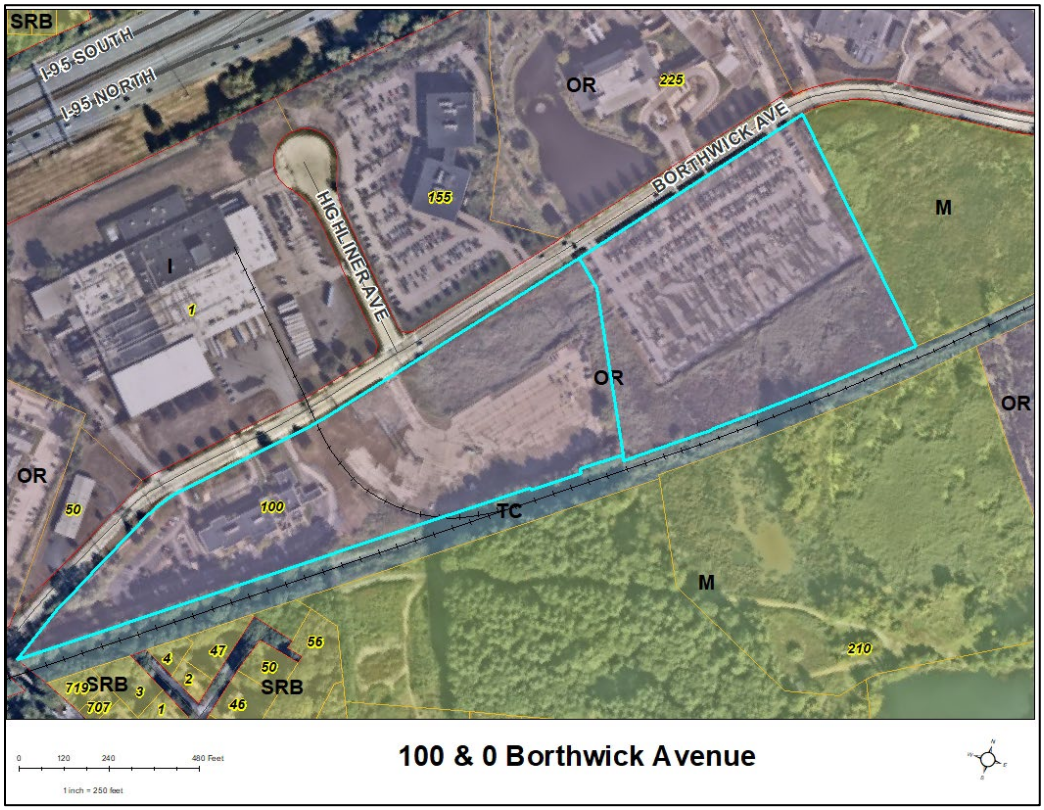
IV. PUBLIC HEARINGS – NEW BUSINESS

The Board's action in these matters has been deemed to be quasi-judicial in nature. If any person believes any member of the Board has a conflict of interest, that issue should be raised at this point or it will be deemed waived.

E. The request of **Northeast Credit Union (Owner),** and f **Liberty Mutual Insurance Company (Owner), f**or property located at **100 Borthwick Avenue** and **0 Borthwick Avenue requesting** Preliminary and Final Subdivision approval to adjust the boundary between Map 240 Lot 3 and Map 259 Lot 15 by adding approximately 4.88 acres to Map 240 Lot 3. Said property is located on Assessor Map 259 Lot 15 and Map 240 Lot 3 and lies within the Office Research (OR) District. (LU-24-151)

Project Background

The applicant is proposing a lot line adjustment between the Liberty Mutual parking lot and a portion of the adjacent property with Northeast Credit Union to add approximately 4.88 acres to the existing parking lot parcel. The adjustment will add 264 parking spaces to the Liberty Mutual lot. As stated in the application materials, Liberty Mutual constructed the parking lot on 100 Borthwick and now with North East Credit Union vacating the parcel, Liberty Mutual is seeking the lot line adjustment to incorporate all of their parking onto one lot.



Project Review, Decisions, and Recommendations

The applicant was before the Technical Advisory Committee and Zoning Board of Adjustment. See below for details.

Technical Advisory Committee

The applicant was before the Technical Advisory Committee at its regularly scheduled meeting of Tuesday, September 3, 2024 and the Committee voted unanimously to recommend approval with the following conditions:

1. *The application will only move forward if the Zoning Board of Adjustment grants approval for the current proposal.*

2. Improve sidewalk to Borthwick Ave and crossing to an ADA compliant and concrete sidewalk.

3. Drainage on site must be functioning as originally designed. If deficient make improvements.

4. The existing system should be completely cleaned (basins & pipes) and all of the outlet pipes should be found, located and dredged out as needed to confirm their adequacy and ability to continue to function for the next 20 years. The catch basins sumps are the first line of defense regarding sediments and system clogging.

5. That detention pond no longer meets standards but as a minimum; show that it can handle a 50-year storm without overtopping so please run a drainage calculation on that and provide with the results.

6. A yearly drainage maintenance plan will be necessary to confirm that the basins are being cleaned annually.

7. Boundary survey showing extent of all lots is required.

8. Variance from BOA is needed to expand the use of parking as a primary use.

9. Proposed dimensions for new lots must be included in lot line adjustment plan.

10. Existing and proposed site plans must be provided.

11. Please provide the wetland delineation from June 2024.

The TAC comments have been satisfied or included in Planning Board submission.

Board of Adjustment

The applicant was before the Zoning Board of Adjustment at its regularly scheduled meeting of Tuesday, October 15, 2024 and the Board voted unanimously to approve the variance to allow the expansion of a non-conforming use and to permit a surface parking lot as a principal use on a lot.

Planning Department Recommendation

Subdivision

1) Vote to find that the Subdivision (Lot Line Revision) application meets the standards and requirements set forth in the Subdivision Rules and Regulations to adopt the findings of fact as presented.

(Alt.) Vote to find that the Subdivision (Lot Line Revision) application meets the standards and requirements set forth in the Subdivision Rules and Regulations to adopt the findings of fact as amended and read into the record.

2) Vote to grant Preliminary and Final Subdivision Approval with the following stipulations:

3.1) The subdivision plan, and any easement plans and deeds shall be recorded simultaneously at the Registry of Deeds by the City or as deemed appropriate by the Planning Department.

3.2) Property monuments shall be set as required by the Department of Public Works prior to the filing of the plat;

3.3) GIS data shall be provided to the Department of Public Works in the form as required by the City;

V. CITY COUNCIL REFERRALS [NOTE: ANY REFERRALS REQUIRING PUBLIC HEARING SHOULD BE INCLUDED ABOVE]

A. Osprey Landing Open Space

Background

See attached memo from Director Britz and Bob Sullivan related to the property at Osprey Landing.

Planning Department Recommendation

The Planning Board recommend to the City Council that it approve the acceptance, execution and recording of the terms of a restrictive covenant agreement relating to Lot 2-1950 on a certain plan entitled, "Resubdivision Plan Osprey Landing, Shearwater Drive/Sanderling Way/Osprey Drive, Portsmouth, New Hampshire," by Costello, Lomasney & de Napoli, Inc., dated February 1999, and recorded in the Rockingham County Registry of Deeds as Plan No. D-27099, all in substantial conformance to those as presented to the Planning Board this evening.

B. 27 Hancock Street

Background

The dwelling at 27 Hancock Street encroaches into the right-of-way as shown in the survey submitted by Attorney Phoenix. This was acknowledged in a letter by Attorney Sullivan in a letter from 2006, however no action was taken by City Council at the time to allow the encroachment. The property is under agreement and the legal representative for the buyer has flagged this as a title defect. The request is for an easement from City Council to allow the minor encroachment of the dwelling into the right-of-way, which will solve the title issue.

Planning Department Recommendation

Recommend the City Council accept an easement for the encroachment at 27 Hancock Street.

C. Recommendation on FY2026-FY2031 Capital Improvement Plan

Background

Prior to this meeting, the Planning Board will have held a joint work session and public

hearing with City Council on the FY26-FY31 CIP. The Planning Board may want to entertain additional public comment at the regular meeting. If so, it would be appropriate to do so prior to making a recommendation to the Council.

Planning Department Recommendation

Vote to recommend adoption of the Capital Improvement Plan to the City Council.

VI. OTHER BUSINESS

A. Chairman's Updates and Discussion Items

B. Board Discussion of Regulatory Amendments and Other Matters

VII. ADJOURNMENT

PLANNING BOARD
WORK SESSION
PORTSMOUTH, NEW HAMPSHIRE

EILEEN DONDERO FOLEY COUNCIL CHAMBERS
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

6:00 PM Work Session begins **September 26, 2024**

MEMBERS PRESENT:	Rick Chellman, Chairman; Greg Mahanna, Vice Chair; Joseph Almeida, Facilities Manager; James Hewitt; Paul Giuliano; Andrew Samonas; and William Bowen, Alternate
ALSO PRESENT:	Peter Stith, Planning Department Manager
MEMBERS ABSENT:	Karen Conard, City Manager; City Councilor Beth Moreau; Anthony Coviello

Chair Chellman called the meeting to order at 6:00 p.m.

I. Co-Living Use

[Timestamp 6:15] Developer Mark McNabb was present to discuss his petition for co-living use. He said the intention was for a co-living building as opposed to a co-housing one and that it would provide living for about 50 percent of single individuals. He said it was not intended to be a short-term stay or overnight rental but would be a year's lease. He said it was similar to a college dorm with a common area. He said there were mostly conventional or micro apartments downtown and he wanted the flexibility to do something other than that. He said it was an inherent hardship when the City zoning had a parking requirement for downtown, and he did not have the ability to provide for parking. He said parking downtown was expensive and that statistics ran 20-30 percent showing that there were people who didn't have a car because they either didn't want one or couldn't afford it. He said he wanted to embrace that fact and give those people a place to live downtown.

[Timestamp 13:01] Chair Chellman asked what the difference was between co-living and a micro apartment. Mr. McNabb said a micro apartment was a self-contained unit with cooking, and co-living could be a self-contained unit but did not have to be. He said the kitchen could be a common area and there was flexibility for a unit to have a bedroom with its own private bath. He said parking had to be provided for a current micro apartment, which increased the square footage, but a co-living apartment had the option of having less square footage. Vice-Chair Mahanna said it seemed to be like a boarding house, with shared space and private bedrooms. It was further discussed. Vice-Chair Mahanna said having a common cooking facility could be a health liability and that someone had to be in charge of it. He noted that a boarding house had the Health Department's jurisdiction over it. Vice-Chair Mahanna said it was an issue of changing

zoning and make co-living work with conditions based on the concerns of the Planning Board. Chair Chellman agreed and said he was intrigued by the proposal but thought it was different from similar proposals because it was in an urban setting and was more complex than a boarding house. Mr. McNabb said there wasn't a boarding house in the downtown zoning, and he was trying to fill that gap. He said the pods could be limited to no more than 10 in a common area and that the property owner could be responsible for inspection.

[Timestamp 24:17] Vice-Chair Mahanna said he saw three pillars: 1) sanitation, 2) supervision, and 3) term. He said the Board had to come up with something that fit the new use, there needed to be an on-site manager, and there had to be a definition of what co-housing is so that the zoning could be changed. Mr. Samonas said the exponential increase in noise and people in the building was a constraint for him. He said the authority aspect was important to implement so that someone was involved in the day-to-day management. He said the CD4 and CD5 zones had properties that were conducive to co-living and should be reviewed as to where else they could be implemented downtown. Mr. McNabb said limits were important and thought there could be a certain number of units to begin with. It was further discussed. Chair Chellman said a land use approval ran with the land and that the building's owner would eventually not own the building. Mr. Bowen suggested that Mr. Stith to do some national research to see what the best practices were. He advised that there should be a strict set of rules relating to noise internally at night and protecting personal property, and a task list for residents to share tasks. He said other issues were selection and discrimination statutes, duration limits, and so on. He said the scale component was also important because 60 people were difficult to manage as opposed to ten. Since there was no real living space, he said the residents would be elsewhere when not sleeping, so there could be a question of neighborhood loitering. He said he'd like to keep the parking separate.

[Timestamp 38:40] Mr. Giuliano asked if Mr. McNabb saw the use as a commercial one or residential one. Mr. McNabb said it would be a residential use with longer term rentals, which was how people used to live downtown before zoning. Mr. Giuliano said there was zoning to consider and the Planning Board had to ask the City Council to approve a new use in CD4 and CD5. Mr. McNabb said it would involve a year's lease and the units would be priced less than apartments but not priced so low that it would attract undesirable tenants. He said the prices would be for service workers and professionals and would involve payroll deductions from employers. He said they could consider private refrigerators, bathrooms, a small sink, and a microwave in each room, all of which would produce benefits different from needing whole residential units. He said they would regulate the number of units, occupants, and behavior.

[Timestamp 43:14] Mr. Almeida said it sounded like a hybrid of long-term stay hotels, apartment buildings, and hostels, and he was concerned with where the building code would apply. He said the Planning Board was charged with finding more reasonable housing in Portsmouth and that co-living might be one of the many options they were trying to provide. He asked Mr. McNabb to elaborate on what he imagined the building would be like when it was up and running and who the leasers would be. Mr. McNabb said he thought half of the people he expected to lease were already living that way in conventional downtown apartments, with two or three other roommates so that it was affordable. He said co-living would normalize that and allow an individual to do it on his own and not have to have 3-4 other people to do it. He said the living areas per floor would be extensive, with flat-screen televisions and sitting areas, and each floor

would have its own laundry. He said there would be no more than 20 people on a floor, and there would be a rooftop deck for all tenants. Mr. Almeida said the zoning language and considerations changed when a complex got over a certain size. Chair Chellman said it was an issue of scale and could be an issue with the State Statute. He asked Mr. McNabb if he imagined ownership being a possibility. Mr. McNabb said he did not. Chair Chellman said Mr. McNabb would then want to prevent a condo conversion. Mr. McNabb agreed and said the co-living units would not be luxury units like a condominium. Chair Chellman said it could be done so that a condo conversion would be possible, but it would be complicated. Mr. McNabb agreed and said the rooms would have to have their own electrical meters if they became condos, but in his proposal, all utilities would be included. Mr. Hewitt said he was still confused about the difference between a boarding house and co-living and suggested that the Board see what other communities had done. Mr. Giuliano asked if the co-living would qualify as a boarding house if it didn't cap at ten people. Mr. McNabb said boarding houses were short-term stays.

[Timestamp 52:14] Vice-Chair Mahanna said it looked like an alternative to a roommate situation and thought Mr. McNabb was heading toward the idea of a high-end apartment complex, where someone would rent a studio to get the community space. He asked what the price point per bedroom would be. Mr. McNabb said it would depend on what got approved, the size, and the parking issue. Mr. Samonas asked how the waiving of a security deposit would be regulated outside of building code and occupant load per pod. Mr. McNabb said they would do credit and criminal background checks and would waive the security deposit if the tenant's employer did payroll deduction. Mr. Samonas asked if the model would work if Mr. McNabb had to do a hybrid situation with co-living on one or two floors and micro units on another floor. Mr. McNabb said he would not have all co-living in the building but a mix of co-living and micro and conventional apartments. Mr. Almeida said he didn't think that not charging a security deposit could be written in the new zoning. He asked why the City didn't allow unrelated people to live together. Mr. Stith said it was the definition of a family. It was further discussed.

[Timestamp 1:01:24] Chair Chellman said there was a lot to figure out and other information to pull from other resources. He said the Planning Board's approval would grant a maximum number of occupants in an overall urban living complex but with pod elements. Mr. McNabb said each pod would have a supervisor. He said that what he proposed existed in other urban neighborhoods and that he wanted limits on the scale, intensity, permitting, and length of stay. Chair Chellman said the Board would gather some outside information and come up with a draft of the talking points. Mr. Samonas said there had to be a preventive clause for selling the units. Chair Chellman said the Board would work with City Staff.

II. Hanover Street Zoning

[Timestamp 1:07:18] Mr. Stith reviewed some of the background of the Hanover Street zoning and said it started in 2019 when there was a citizen request to rezone some areas on Hanover Street, the Downtown Overlay District, and the North End Incentive Overlay District. He said the Planning Department brought it to the Planning Board in January 2020 and held a public hearing and then were going to schedule another meeting, but the pandemic hit. He said some of the zoning that changed over the past few years related to building height definitions, changes in building height designations for Foundry Place, and the requirement that a Conditional Use

Permit be required for the North End Incentive Overlay. He said part of the original request was to rezone properties on Hill Street from CD5 to CD4 and from CD4 to CD1, including 361 Hanover Street, but it didn't get any further from the January 20 hearing.

[Timestamp 1:09:05] Mr. Hewitt said they were dealing with a lot of old history, and he asked for a chronology of what happened on the City's end and what the residents did to request the zoning change that ended in March 2020. He said the City did things related to that zone after March 2020, and he wanted to know what those changes and the implemented dates were. Mr. Stith said the 361 Hanover Street memo had some of that information. Mr. Hewitt suggested a side-by-side comparison. Chair Chellman asked what the difference was between CD4 and CD5. Mr. Stith said it was the intensity of certain uses, and it was further discussed. Vice-Chair Mahanna asked if the current Version 2 would meet variances from CD4. Chair Chellman said he didn't know about the back. Mr. Stith said it would be fine if it were CD4 because the back of it was in the Incentive Overlay District and the height would not change because it was based on the street. Vice-Chair Mahanna asked if there was really an issue then. Chair Chellman said the proposed plan was vested, assuming that it was followed through within a year with additional work. It was further discussed.

[Timestamp 1:14:36] Mr. Giuliano asked how it would work if zoning changes were proposed on someone else's property. Chair Chellman said notice would have to be given to each property owner in the zone, but a change could be proposed with the property owner's permission. Mr. Stith said that was a slight intensity in CD5 relating to building coverage and open space, but it was similar in most respects. Chair Chellman said one thing that had changed since 2020 was what happened in the north end and that it was quite different from the west end neighborhood. He asked how that transition would be made, and it was further discussed. Mr. Bowen said the question was how one transitioned from the downtown district to a residential district. He said what they wound up with was a lower height on Hanover Street than Foundry Place, a less intense building development on Hanover Street, and then a goal of having income-based housing on the Hanover Street side. He said that didn't happen on Hanover Street but it did happen on the Foundry side. He said he thought the transition was about whether it was commercial and residential. He said originally on Hanover Street, there was going to be commercial on the ground floor Mr. Stith said a variance for that would be necessary. Chair Chellman said that, from the resident's perspective, the current proposal was more in scale than the first one, but the first one fit in more with CD5 zoning. Mr. Almeida said he wanted to see more details because the Board was considering future proposals as well.

[Timestamp 1:25:18] Robin Husslage of 27 Rock Street was present and said she lived up the street from the proposed development. She said she had worked with former Planning Director Juliet Walker and wanted transition zoning from CD5 down to where she was, which was CD4-L1. She said Ms. Walker had proposed either CD4 or CD4-W. She said the difference between CD4-W and CD4/CD5 was significant because of maximum building coverage, minimum lot area per unit, and minimum open space, and because the overlays added complexity. She said the residents had not wanted any of the overlays in that area. She said they asked for CD4-W zoning on the buildings that fronted Foundry Place and CD4-L1 on that portion of 361 Hanover Street. She said the proposal was that the front part on Hanover Street should be CDR4-L1 and the back end CD4-W, but they never had a public meeting due to COVID, after which other zoning

elements were moved forward on except for their issue. She said they were stuck with whatever 361 Hanover Street did and there were other properties that would be affected. She said the other important aspect of CD4-W was the uses that were not compatible with the hotels, conference centers, and nightclubs in the CD4 and CD5 zones. Elizabeth Bratter of 159 McDonough Street was also present to discuss the zoning.

[Timestamp 1:35:05] Shane Forsley of 361 Hanover Street was present and discussed the comparisons from the vested plan versus the alternate Conditional Use Permit Plan. He said they did the analysis of how it would match up with the CD5, CD4, and CD4-L1 zoning and that it would be a perfect match in CD4-L1 because it outlined how the three building developments on Hanover Street would be carved into a 4-unit development yet still conform to that zoning. He said the alternate Conditional Use Permit plan still required relief. Vice-Chair Mahanna said they were vested and that the Board needed to focus on the definitions of CD4, CD5, and CD4-W and ensure that the other transitional properties were treated properly. It was further discussed. Mr. Bowen said there were implications for the zoning for the other sections and how that could be done in a transitional zone, and there were some specific zoning adjustments that could be made. Chair Chellman agreed and said the other question was whether the overlays made sense to maintain or adjust. It was further discussed. Chair Chellman said he thought it made sense to adjust the zoning. Mr. Bowen asked if there was a component of architectural design in the Character District, and Chair Chellman said there wasn't one yet. He said the Board needed guidelines for downtown and the subdivisions in the outlying areas.

III. Downtown Overlay District

[Timestamp 1:43:05] Mr. Stith reviewed the 2012 map that went from the Planning Board to the City Council when they were looking at expanding a particular area to include the Downtown Overlay District due to the development that was occurring. He said the City Council only included the Connie Bean site and said they'd go back to it but never did. Mr. Hewitt asked if Mr. Stith knew why the City Council didn't approve what was proposed. Mr. Stith said he didn't know but would look into it, and it was further discussed. Mr. Almeida asked about downzoning. Chair Chellman said downzoning meant that one could do fewer things on their property, and upzoning meant that one could do more intense units. He said downzoning could be 50 units and upzoning could be 100. Mr. Stith said the original purpose of creating an overlay like that was to create economic liability and pedestrian abilities along the street as well as ground floor commercial. Chair Chellman said it tied into the Board's parking discussion. Mr. Stith said non-commercial uses did not require parking. He said his memo described it, and it was further discussed. Chair Chellman asked if it made sense to have two types of Downtown Overlay District. Vice-Chair Mahanna said it was an opportunity to introduce a transitional overlay. Mr. Almeida said he didn't see preserving residential in the Downtown Overlay as a problem. Chair Chellman said new development in downtown was a problem as well as pedestrian vibrancy. It was further discussed. Vice-Chair Mahanna said the Board should start with a concept and expand it. Mr. Bowen asked whether any change to zoning should follow the Master Plan. Chair Chellman said they could discuss changes to zoning without needing the Master Plan for guidance. Chair Chellman asked the Board to come up with some refinements to discuss in the future. Mr. Bowen said he would look through the Master Plan to see where the proposed zoning didn't conform.

IV. Parking

[Timestamp 2:01:09] Chair Chellman said there was a presentation by the parking consultants who were working on the downtown parking issue and that they had come up with several recommendations. He said they had some metrics in terms of what was available for what the downtown had for parking and how much of that parking was used. He said the downtown core was running at about 97 percent and that the parking consultant said the City was okay at 97 percent, which meant there were a few spaces, but that they were not okay because people drove around looking for spaces and it increased traffic. Chair Chellman said the main topic for zoning and parking was about taking parking out of zoning and bringing it to site plan so that it could be more adaptive. He said it was a changing topic because developers came up with new ideas, cars and parking were becoming different, and most communities had started putting parking into their site plans. He said Conditional Use Permits could be done, but that was innovative zoning that changed the whole appeal process, so it was more flexible to have it in the site plan. Mr. Hewitt said most communities had parking in their site plan requirements and preferred it. Mr. Giuliano said it was less common now for an applicant to come before the Board for parking relief, so putting it into the site plan would make it more flexible. Chair Chellman said zoning was subjected to more legal restraints that the site plan was. Mr. Bowen said Portsmouth would need a third garage downtown within ten years and thought the Board should consider where that would go. He said the consultants discussed car sharing and electronically tracking cars coming into the city to direct people to available parking spaces, but the most strategic idea to him was a third garage because downtown parking was at 97 percent capacity. He said the discussed ways to limit the duration of time allowed for people parking in neighborhoods. Vice-Chair Mahanna said parking spaces became available for the residents when the bars and restaurants closed, but early in the morning those spaces got used for a different use. He asked if changing the parking would give the Board the ability to size the parking for a project per the intensity of the use of the project versus the zoning. Chair Chellman said that could be done, and it was further discussed. Chair Chellman said the first step would be to take parking out of zoning and put it into planning, and then the Board could work on adjusting it.

V. Other Items

[Timestamp 2:17:22] Mr. Hewitt noted that there were three Planning Board meetings in November. Mr. Stith said two of the meetings were joint meetings with the City Council, a workshop on the CIP and a joint public hearing. Mr. Hewitt asked if the rezoning of Commerce Way as part of the settlement with the City over the Michael Kane issue would come before the Board. Mr. Stith said there would be a public hearing at the October 17 Planning Board meeting.

VI. Adjournment

The meeting adjourned at 8:20 p.m.

Submitted,

Joann Breault
Planning Board Minute Taker

PLANNING BOARD
PORTSMOUTH, NEW HAMPSHIRE

EILEEN DONDERO FOLEY COUNCIL CHAMBERS
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

7:00 PM Public Hearings begin **October 17, 2024**

MEMBERS PRESENT:	Rick Chellman, Chairman; Karen Conard, City Manager; Joseph Almeida, Facilities Manager; Beth Moreau, City Councilor; James Hewitt; Paul Giuliano; Andrew Samonas; Anthony Coviello; and William Bowen, Alternate
ALSO PRESENT:	Peter Stith, Planning Department Manager
MEMBERS EXCUSED:	Greg Mahanna, Vice Chair

Chair Chellman called the meeting to order at 7:00 p.m. Alternate William Bowen took a voting seat for Vice-Chair Mahanna, who was absent.

Note: Some of the agenda items were not reviewed in order. The timestamps indicate when the items were addressed.

I. APPROVAL OF MINUTES

A. Approval of the **September 19, 2024** Meeting Minutes.

*Councilor Moreau moved to **approve** the September 19 minutes as submitted, seconded by Mr. Coviello. The motion passed with all in favor, with Mr. Giuliano abstaining.*

Mr. Almeida moved to hear the Presentation from Portsmouth High School Student ACE (Architecture, Construction, Engineering) Mentorship Club (Section VI, Other Business) out of the agenda's order. Ms. Conard seconded. The motion passed with all in favor.

Ms. Conard then moved to recommend that the Board do the zoning hearing at the end of the meeting, seconded by Mr. Almeida. The motion passed with all in favor.

II. DETERMINATION OF COMPLETENESS - SITE PLAN REVIEW

A. The request of **HPII Boston Portsmouth LLC (Owner), Hammes Realty Services, LLC (Applicant),** for property located at **1900 Lafayette Road** requesting amended site plan for the addition of a new parking area with associated site improvements including storm water, landscaping and lighting. Said property is located on Assessor Map 267 Lot 8 and lies within the Gateway Corridor (G1) District. (LU-24-148)

Councilor Moreau moved that the Board determine that Item A is complete according to the Site Plan Review Regulations (contingent on the granting of any required waivers under Section IV of the agenda) and to accept the application for consideration. Ms. Conard seconded. The motion passed with all in favor.

III. PUBLIC HEARINGS -- OLD BUSINESS

A. POSTPONED TO JANUARY 2025 The request of **Matt Ball** and **Andrea Fershtam (Owners),** for property located at **252 Wibird Street** requesting a Conditional Use Permit from Section 10.814 for the conversion of an existing accessory structure into a Detached Accessory Dwelling Unit (DADU) that does not conform with the dimensional requirements of the Ordinance. Said property is located on Assessor Map 149 Lot 12 and lies within the General Residence A (GRA) District. **POSTPONED TO JANUARY 2025** (LU-24-137)

DECISION OF THE BOARD

*The Board previously **postponed** the item to the January 2025 meeting.*

IV. PUBLIC HEARINGS – NEW BUSINESS

A. The request of **HPII Boston Portsmouth LLC (Owner), Hammes Realty Services, LLC (Applicant),** for property located at **1900 Lafayette Road** requesting amended site plan for the addition of a new parking area with associated site improvements including storm water, landscaping and lighting. Said property is located on Assessor Map 267 Lot 8 and lies within the Gateway Corridor (G1) District. (LU-24-148)

SPEAKING TO THE PETITION

[Timestamp 32:34] John McTigue of TFMoran was present on behalf of the applicant and said they wanted to add 22 parking spaces. He said four parking spaces would be lost because they would shift the dumpster over. He said there would be no additional work or office space, traffic, or utilities and they would put an underground stormwater system to tie into the existing one. He said 156 parking spaces were necessary to meet the number of employees and daily patients.

[Timestamp 34:47] Councilor Moreau asked if the dumpster enclosure would also be shifted over. Mr. McTigue agreed and said it would also be surrounded by new landscaping. Chair Chellman asked if it was the maximum spaces without the Conditional User Permit, and Mr. McTigue agreed. Mr. Almeida asked about the landscaping lighting. Mr. McTigue said they were proposing an additional light in the parking area.

Chair Chellman opened the public hearing.

SPEAKING TO, FOR, OR AGAINST THE PETITION

No one spoke, and Chair Chellman closed the public hearing.

DECISION OF THE BOARD

Amended Site Plan Review

1) *Mr. Giuliano moved that the Board find that the Site Plan Application meets the requirements set forth in the Site Plan Regulations Section 2.9 Evaluation Criteria and adopt the findings of fact as presented. Mr. Almeida seconded. The motion passed with all in favor.*

2) *Mr. Giuliano moved that the Board grant Amended Site Plan Approval, seconded by Mr. Almeida. The motion passed with all in favor.*

B. Proposed Ordinance Amending Chapter 10, Article 6 - Overlay Districts, Section 10.680 – Gateway Neighborhood Overlay District, by Establishing a New Incentive Overlay District Allowing for Higher Density Housing. Affected parcels are listed on Assessor Map/Lot:

0213-0001-0000
0213-0002-0000
0213-0011-0000
0213-0012-0000
0214-0003-0000 *(portion of)*
0216-0001-0001
0216-0001-0002
0216-0001-0004
0216-0001-0005
0216-0001-0008
0216-0001-0009
0216-0001-0010
0216-0001-0011
0216-0001-008A
0217-0002-1819
0217-0002-1975

SPEAKING TO THE PROPOSAL

[Timestamp 54:54] Mr. Stith gave a presentation on the draft Gateway Neighborhood Overlay District (GNOD).

[Timestamp 1:2:44] Mr. Coviello asked if the right-of-way would be handed over to the City or a road on the development. Mr. Stith read the clause and said if the building is taller than 35 feet with a right-of-way of 60 feet or less, the building shall be set back or stepped back from the right-of-way in accordance with the figure. He said it would imply a public street, not a driveway. He said the clause was excluded, so it would not apply to the GNOD. Mr. Giuliano asked Mr. Stith to elaborate on the payment in lieu of the workforce housing and what the calculation would be and how the money would be used. Mr. Stith said there currently was no formula or calculation and that the ordinance proposed that it be established by the Fee

Committee. He said they looked at other localities that ranged from $35,00 to $100,000 per unit, but that fee had not been set yet. He said that it ideally would be per unit or a combination of units. Mr. Bowen referred to the City Council's approval on the land transfer and asked what engagement the Planning had in that process. Chair Chellman said the Board would make a recommendation and then the City Council would make a decision.

Chair Chellman opened the public hearing.

SPEAKING TO, FOR, OR AGAINST THE PROPOSAL

First Round Speakers

[Timestamp 1:07:45] Elizabeth Bratter of 159 McDonough Street presented two charts to the Board, one of which was a comparison of the National Standards of Office Research vs. the GNOD and the three different incentives that could be used. The other chart was a list of uses for Office Research vs. additional unbridled uses in GNOD. She explained how the GNOD could be used without employing any of the incentives and without negative impacts to the neighbors.

Second Round Speakers

[Timestamp 1:11:17] Elizabeth Bratter spoke again. She said the overlay was a great idea but there were concerns about how many members of the Planning Board helped write it and would be voting for something they developed. She reviewed the details of GNOD and important aspects for neighbors that she thought had not been considered. One of the points she raised was about the overlay lots going over open lands and wetlands and how much fill would be put in and if it could handle 80-ft structures. She suggested that the conversion of the two residential properties be allowed, with no increase in footprint, and any changes beyond what existed should require one of the three incentives. She asked the Board not allow GNOD with no required use of incentives.

Third Round Speakers

No one spoke, and Chair Chellman closed the public hearing.

DISCUSSION OF THE BOARD

[Timestamp 1:14:32] Mr. Hewitt referred to the Shiller properties and said there was no Waterfront Industrial zoning. He asked if the previous power plant and three boilers were all shut down. Ms. Conard said she thought there was some peak power at one of the buildings. Mr. Hewitt said there was then still an active power plant next to the property and that a good planning process was not to create a new residential area next to industrial land. He asked if the 16 properties were all zoned Office Research except for One Osprey Drive that was GRB. Mr. Stith agreed. Mr. Hewitt said One Osprey Drive was small, and if zoning were allowed there would be an 85-ft high building in the middle of the Osprey development. He thought that one

property was an issue as far as including it into all the other Office Research properties, and he asked how that zoning change related to the lawsuit with Michael Kane.

[Timestamp 1:17:00] Deputy City Attorney Trevor McCourt was present and said the zoning change started when the Housing Committee first considered rezoning many of the properties to be in the Gateway District. He said consequently the City and SoBow Square were involved in court-mandated mediation and the City Staff engaged with representatives of the Kane Company about potential rezoning of the properties using the Gateway zoning as a starting point, which modified the Gateway zoning to provide more housing opportunities in that neighborhood. He said if the City rezoned the properties in that manner, the City and SoBow Square would agree on a pre-arranged settlement agreement. Mr. Hewitt asked if the zoning would be before the Board if the City and Mr. Kane were not in a lawsuit. Attorney McCourt said it presented a good opportunity to provide a pilot ordinance to get higher density housing started and quickly progressed between the owner of many of the properties within the area and the City. He said it would not be before the Board if that had not happened, but a zoning change would be.

[Timestamp 1:19:60] Mr. Bowen said in the last few months, the Board had three circumstances where the issue was how to interface between a more dense use and a residential use. He said they had a discussion in the context of the area between Daniel and Court streets, and now they had it relative to the proposition and Osprey Landing. He asked how it would interface between more intensive use and residential and said it seemed that what came out of Hanover Street was the stepping down in height factor, breaking up the mass, and having setbacks. He said there was just flat land on the four easternmost of properties that interfaced with Osprey Landing and a ridge between Portsmouth Street and Osprey Landing and another 20 feet of height at some point. He said if they were to extend that to Osprey Landing, they could have 60-ft buildings on top of a 20-ft hill ten feet away from the homes in Osprey Landing. He said there was a set of principles that they had to deal with in terms of transitioning and following good zoning practices. Mr. Stith said there were standards for development sites that abutted residential zones, and in that scenario, they would have to have a 75-ft primitive buffer from the Mixed Residential District or CD4-L1 for residential or mixed use development. Chair Chellman said the Board's job was to make a recommendation to the City Council.

[Timestamp 1:24:35] Mr. Coviello said the abutting area between that area and Osprey Landing already had a tall hotel and that the area to the north and northwest would probably get developed in the next few years. He said he'd like the Board to focus their efforts on that. Mr. Bowen said the area northeast of the Homeward Suites was owned by Kane and was a developable piece of land. He asked what rules would be applied there and thought the Osprey Landing residents should be considered. It was further discussed. Mr. Samonas said the West End Yards served as a good litmus test and thought the Gateway District language was directed at facilitating mixed housing. He said the design discretion was that the hotel parcel would be an intermediary between Osprey Landing and whatever type of apartment or multi-family housing would go on the opposite side of Portsmouth Boulevard. Chair Chellman said it was about context. He said Hanover Street was more of an urban complex, and this was more of a suburban complex, so there was more space between the buildings and more open space. He said it was a leap to create more opportunities for higher density housing. Mr. Bowen said he was in favor of

developing the area but thought they had to be conscious of how it would interact on a big scale with the people next door. Osprey Landing was further discussed. Mr. Coviello said he would like to see Osprey Landing have codified language as one switched from Portsmouth Boulevard. He said the City had a mission to build more housing yet they handcuffed themselves to incentives, so it was difficult to try to build just market rate housing now. He said he wanted to provide more housing in the community at every level and push back on some of the additions in the area near the plant. Chair Chellman asked how Mr. Coviello felt about the base provisions to promote additional housing. Mr. Coviello said he didn't think the zoning ordinance would achieve as many units as could be comfortable on the site. He said the carrot of providing affordable housing was not achieving what the City wanted right now. It was further discussed. Mr. Coviello said he wanted something bigger than a four-story building. Councilor Moreau suggested a pilot program as a test run. Mr. Almeida said they could consider allowing construction of two- or three-story buildings within the 75-ft buffer to introduce more density and gain more housing. It was further discussed.

[Timestamp 1:44:51] Chair Chellman said the Board had to decide if they wanted to proceed with what happened next. Shared parking, assisted living, and retail sales were discussed. Mr. Coviello said mixed use on first-floor residential developments was currently empty.

Mr. Giuliano moved that the Board recommend to the City Council to hold their second reading on the proposed GNOD zoning amendments. Mr. Coviello seconded.

[Timestamp 1:54:14] There was further discussion. Mr. Giuliano said that allowing the City Council to have a second reading and give the public a chance to address the Council about their concerns might be the right next course of action. Councilor Moreau agreed and said they could see if it worked and then tweak it in the future. Mr. Almeida agreed. Mr. Samonas explained why he didn't agree, and it was further discussed. Mr. Bowen asked if child care could be added as an allowed use. He said he would also like the Board to be more specific about the protections, the step downs, and the surrounding neighborhoods. It was further discussed. Mr. Hewitt said he would not support the motion because he did not agree with how it was being done. He said City planning by lawsuit was not a good idea, noting that 10 of the 16 properties were owned by Mr. Kane and were part of a settlement. Chair Chellman explained that there had been prior discussion about it and that the issue came up with the Gateway change. Mr. Hewitt said it would set a bad precedent for the City. Attorney McCourt was the zoning change was in no way part of the settlement agreement but was something that the City had agreed to explore as the litigation was stayed. He said if it didn't pass, then litigation would resume but there would be no further damages on the part of any party.

*Mr. Giuliano **amended** his motion and moved that the Board recommend that the City Council hold a second reading on the proposed GNOD zoning amendments and to recommend adding Day Care as a permitted use. Mr. Coviello seconded. The motion **passed** by a vote of 8-1, with Mr. Hewitt voting against.*

C. The request of **Scott Rafferty (Owner),** to remove **185 Orchard Street** from The Historic District. Said property is located on Assessor Map 152 Lot 2-1 and lies within the Historic and General Residence A (GRA) Districts.

SPEAKING TO THE PETITION

[Timestamp 38:56] The applicant was not present. Mr. Stith said it was referred by the City Council and that the property owner requested it in writing. He said the property was subdivided in July and now the back property had frontage on Orchard Street and the new owner wanted it removed from the Historic District because no other property on Orchard Street was in the Historic District. Councilor Moreau said the reason for the boundary and the way it was drawn was to include the first lot all the way down the Gateway Street. She said the subdivider should have made the request at the time it was subdivided. She said it did not change the underlying zoning and that it would stay in the GRA District but would just not be subject to the Historic District Commission's approval. It was further discussed. Mr. Giuliano said he assumed that going forward, an application to subdivide, like the Board heard last July, would address the fact that the property is in the Historic District. He asked where the subdivided property would end up without the applicant requesting a change. Councilor Moreau said the Planning Board could send the Council a recommendation based off the subdivision. It was further discussed. Mr. Coviello said it would make sense to follow the property lines, but in some places the City had very small properties and there was a fear of combining lots and changing the character of the street, so the City went into more depth but that it was still cohesive what the goal was before and what they wanted in the City now. Mr. Samonas asked if the Board would set a precedent about what would happen elsewhere in the City. Chair Chellman said zoning changes should occur on rear lot lines and not across the street, and that without this change, it would be the only Historic District property fronting on Orchard Street. Mr. Almeida asked what would happen if someone made alterations to their property that had a tiny portion in the Historic District. Mr. Stith said the District had to cross the structure. Mr. Almeida said corrections should be made on lot lines to clean it up.

Chair Chellman opened the public hearing.

SPEAKING TO, FOR, OR AGAINST THE PETITION

No one was present to speak. Chair Chellman noted that the Board received public comment.

DECISION OF THE BOARD

Ms. Conard moved that the Board recommend that the City Council remove 185 Orchard Street from the Historic District, seconded by Mr. Almeida. The motion passed with all in favor.

V. CITY COUNCIL REFERRALS

A. Gateway Neighborhood Overlay District (GNOD). See above.

B. 185 Orchard Street. See above.

C. 165 & 177 Bartlett Street – Sidewalk & Temporary Construction Easements

Councilor Moreau moved that the Board recommend that the City Council accept sidewalk and temporary construction easements from property owners at 177 and 165 Bartlett Street. Ms. Conard seconded. The motion passed with all in favor. [Timestamp 41:55]

VI. OTHER BUSINESS

A. Presentation from Portsmouth High School Student ACE (Architecture, Construction, Engineering) Mentorship Club

[Timestamp 8:25] Kara Carlson, Nicholas Fischer and Seth Kozak from the Portsmouth High School Student ACE Mentorship Club presented their Sportscape Architects proposal. Mr. Kozak said it was a design for a sustainable facility built from shipping containers to better the community. They reviewed A 3D rectangular model of the exterior and interior floorplans, which included areas for rock climbing, a gym and wrap-around amenities. They said the total build time would be 6-10 months and the budget was a million dollars, which was subject to change based on the Board's input or the design requirements.

[Timestamp 19:15] Mr. Hewitt said the Community Campus was a challenging environment that did not have a lot of buildable space, and he encouraged the students to find out whether the site had wetlands. Mr. Fischer said he thought the location near a football field was a good one but that they would further research it. Councilor Moreau said there were doorways but no pathways or steps. Mr. Fischer said they did not include steps because they wanted it to be flat to the ground. Councilor Moreau asked how the walls would be insulated and if the roof would accommodate changes in weather. Mr. Fischer said the HVAC system would provide good circulation and that they planned to have ventilation fans on the roof. He said they factored in a 6-inch thickness to the shipping containers with insulation between them. Mr. Samonas asked who would have access to the building. Mr. Fischer said anyone in the community would and that they would make the cost as low as possible so that people could afford it. He said they would also do some fundraising and that it would also be a part of the Portsmouth Recreation Department. Mr. Samonas recommended that the students ask the Recreation Department how to structure the membership. Mr. Giuliano said it was a creative use of shipping containers and suggested that more light be let in. The materials for the project were further discussed. Ms. Conard asked if the students would be willing to modify their design, given that it was City property and they had the benefit of working with the City and Recreation staffs. The students agreed. Chair Chellman asked if there was a program for the number of people that the space would be provided for. Mr. Fischer explained that the architectural code had a certain requirement, so they needed to build it in a certain amount of square footage to house a certain amount of people. He said he would send the number to the Board. Chair Chellman asked if the design was a modular one that could expand on dry land. Mr. Fischer said the design was modular and could be taken apart and that shipping containers could be added.

B. 2 Russell Street – Requesting a second one-year extension of the Site Plan Approval, through December 15, 2025.

[Timestamp 49:35] Attorney John Lyons representing the developer Port Harbor Land was present and said they were requesting a second one-year extension of the Site Plan approval. He said they met all the deadlines for the original approval. He said they met with the Technical Advisory Committee (TAC) on October 8 and that TAC supported the second extension request and the application. He said there was additional planning required due to the parcel's unique nature, the realignment of Russell and Deer Streets, the relocation of the utility easement, ledge removal, and so on. He said they would also ask for a parking variance from the Board of Adjustment and would work with the City to complete the community space easement. He said they would have to apply separately for the two Conditional Use Permits later on.

Mr. Samonas confirmed that the Conditional Use Permits would expire in December.

There was no public hearing.

DECISION OF THE BOARD

Ms. Conard moved that the Board grant a second one-year extension of the site plan to December 15, 2025. Mr. Almeida seconded.

Mr. Hewitt said he would vote no like he did before because he still did not agree about allowing driveways and fire lanes for community spaces.

*The motion **passed** by a vote of 8-1, with Mr. Hewitt voting against.*

C. Chairman Updates and Discussion Items

Chair Chellman said a work session was scheduled for October 24 to continue zoning discussions. He said there were also two joint meetings scheduled for December.

D. Board Discussion of Regulatory Amendments, Master Plan Scope and Other Matters

There was no discussion.

VII. ADJOURNMENT

The meeting adjourned at 9:00 p.m.

Submitted,
Joann Breault
Planning Board Meeting Minutes Taker

PLANNING BOARD WORK SESSION
PORTSMOUTH, NEW HAMPSHIRE
Conference Room A
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

6:00 PM Work Session **October 24, 2024**

MEMBERS PRESENT:	Rick Chellman, Chairman; Greg Mahanna, Vice Chair; Beth Moreau, City Councilor; Members James Hewitt, Paul Giuliano, and William Bowen, Alternate
ALSO PRESENT:	Peter Stith, Planning Manager; Deputy City Attorney Trevor McCourt
MEMBERS EXCUSED:	Facilities Manager Joe Almeida, City Manager Karen Conard, Anthony Coviello, and Andrew Samonas

Chair Chellman called the meeting to order at 6:00 p.m. Alternate Mr. Bowen took a voting seat.

I. Co-Living Use

Developer Mark McNabb and Deputy City Attorney Trevor McCourt were present. Chair Chellman said Mr. Bowen looked at the 2017 Master Plan to see if there was support for the concept of co-living use and found support for encouraging micro units and smaller housing units that had the spirit of co-living in mind. He said the City had an ordinance about boarding houses that might also need to be modified, which Attorney McCourt would discuss. Councilor Moreau asked if boarding house licensing had to get renewed. Attorney McCourt said it was an annual renewal but minimal. He said the City Clerk handled the renewal process and that it was in the same category as hotels, inn, and transient uses. Mr. Bowen asked if there was a history of single residency occupancy (SRO) in Portsmouth and what provisions prevented SROs. Attorney McCourt said if it wasn't listed, then it was prohibited. Mr. Hewitt said he thought the only zoning that allowed boarding houses was the General Business District. It was further discussed.

[Timestamp 17:58] Attorney McCourt reviewed the list of items. He said he did some research into the previous litigation regarding boarding houses and that the nature of it was far from what co-living units were but were lessons to be learned in terms of administration and challenges. He said the issues presented to the City were all related to the tenants and the lack of City Staff's ability to get in touch with someone to remedy the related problems. He said the permitting system exists to provide a point of contact. He said one of the provisions of the consent decree with the Brewster Street boarding house was that there be someone on site 24 hours a day to act on behalf of the property owner. He said that was one issue, and he asked if there were other things the City Council wanted the City Staff to be monitoring on an ongoing basis and if they could ensure that the owner was complying with the ordinance. He said it seemed logical that it would be through a permitting system. He said there should also be ongoing compliance with the number of beds, the kitchen contents, and so on which went through more of a site plan review phase. Vice-Chair Mahanna said it was a great list. Chair Chellman said Board should get

through as much of it as they could. He noted that a lot of the items were enforced nationally, especially if there was a lot of unoccupied office space.

[Timestamp 23:20] Chair Chellman said he added other topics to discuss, such as a new label for a boarding house and its scale and location, whether it should be different if it was downtown, and the conversion of existing buildings vs. new construction. He said he thought the definition of family was outmoded and not appropriate for this type of use. Councilor Moreau said they were almost like co-habitation pods and that the Board could talk about numbers, like how many people would be sleeping in each of the bedrooms. Chair Chellman said another factor to think about was the correlation between the number of people living there and the amount of community space. In terms of a label, he said it might be a marketing consideration. He noted that citizens thought the term pods sounded like storage. Mr. McNabb said the term co-living was nationally recognized and used in other models, so he suggested sticking with that. Vice-Chair Mahanna said the number of bedrooms could be defined. Mr. McNabb said he found that having no more than 10 people in a pod sharing a kitchen was a good threshold. In terms of the number of people, he said a 120 sf lot was like having a 12'x10' room per person. He said international building codes (IBC) and fire codes regulated all that, and he recommended that a co-living plan be subject to the reviews of the international building code, fire code, and the City. He said the limiting of pods was appropriate so that there weren't 40 rooms off one kitchen, but he said the number of pods in a building should not be limited. He said existing buildings vs. new buildings was also an issue because the zoning never considered existing buildings due to their limitations. He said J. J. Newberry was a deep and long building and couldn't handle micro apartments and could only do co-living units. Chair Chellman said that was a problem was converting office space buildings because they were deep.

[Timestamp 32:36] Chair Chellman said the Board had to be more specific about the number of people, so having parameters of the number of bedrooms per kitchen made sense. Mr. McNabb agreed. He said in addition to ten people per kitchen, they also recommended no more than two occupants per bedroom and no more than 10 occupants around communal living. He said he had some information of how that was monitored in Portsmouth, noting that there was a non-compliance part to it and that every time there was a change in tenants, the owner was supposed to apply for a change in use permit, but no one did it. He said the Fire and Inspection Departments said they didn't enforce it for apartments but did for restaurants. He said there was talk of doing it every 2 or 3 years to get a permit required for residential to get the Fire and Inspection Departments into the building, and he thought that was appropriate for a pod. The topic of inspections done on a bi-annual basis was further discussed. Vice-Chair Mahanna said the inspections were expensive at $250 per year for residential buildings and that Building Inspectors could enforce codes that were already on the books. He said starting with the Fire Department inspections was a good suggestion. Mr. Hewitt said it would be great if Mr. McNabb or the City Staff could come up with a co-living ordinance that exists in another city and see what they liked or did not like about it. Mr. McNabb said he sent his suggestions to Mr. Stith. Mr. Stith said that's how they came up with specific things, like the number of people, parking, and so on. Mr. Hewitt and Vice-Chair Mahanna said they had not had enough time to look at it, and it was further discussed. Mr. McNabb said the goal should be simplicity and didn't think the City should have the requirement to have a change of use permit in the ordinance and then not enforce it. He said that should be removed from the ordinance and replaced with some level of

inspection. Mr. Bowen said the issue was in that particular area and not the whole City, and he thought an inspection could be done at some point in time to ensure that the co-living use was working and not the change in use system. He said another national study was done about economics and advocated something in line with what Mr. McNabb wanted to do. He said there were also issues like pets, storage, and closet space. He said the parking was questionable and that he hadn't see in his research that communities wanted to eliminate parking. He said other cities had parking ratios and required parking. Mr. Giuliano said inspections and permitting were things that would add costs, so he was hesitant to do it. Councilor Moreau suggested doing it every five years. She said the bigger the co-living use was, the more permitting it night need. It was further discussed. Chair Chellman said fire inspections had to be done every year and that the Board had to make sure they did not overregulate what already existed. Mr. McNabb agreed and said if the number of units was under ten, he did not think a person monitoring the place would need to live there, but if it was over ten, then a residential assembly permit and a person living there to monitor it would be necessary. It was further discussed.

[Timestamp 53:30] Chair Chellman asked if there were any highlights that the Board wanted to further discuss. Mr. Bowen asked if the on-site contact would be the same for one pod or five pods. Mr. McNabb said a certain number of units would have one facility with a complex manager living there. Vice-Chair Mahanna asked about the lease terms and whether 30 days would be viable. Mr. McNabb said he was fine with 30 days but thought the leases should be parallel construction to residential and should be whatever the ordinance requires for a one- or two-bedroom. He said he could sublease but not less than 30 days. It was further discussed and decided that it would be 30 days or more with no subleasing.

[Timestamp 57:46] More topics were discussed. Mr. Bowen referred to the plumbing aspect and said there was vagueness about the bathrooms. Mr. McNabb said some people would want a private bathroom and would pay extra for it. He said there was also a big difference between new construction and existing and that building codes limited plumbing codes. He said the most economical and ideal potential was having just a sink and a microwave but thought he would also have a few kitchenettes. The change of use permit was further discussed. Mr. McNabb said if he complied with the use table and didn't need a Conditional Use Permit, it would be just a change of use permit. He said he might decide that he did not want to max out the number of people living in a co-use building. Mr. Hewitt said it was proposed that the zoning would be in the CD4 and CD5 zones. Councilor Moreau said they should start with the office conversions because downtown had little new construction, and if it worked, they could build up. Conditional Use Permits for Gateway 1 and 2 and business use were discussed. Parking was discussed. Mr. McNabb said they didn't have to worry about parking in their downtown location. Councilor Moreau asked if the term sanitation/kitchen would mean a bathroom or a separate washing station. Attorney McCourt said the term sanitation was in the ordinance and he asked if it was just what was required by the building code or something more. Councilor Moreau said she was at the NH Housing Conference and there was a comment made about how the country spent more money on, and devoted more land to, cars than people. She said they thought if people lived downtown and close to public transportation and there were public parking spaces, there should not be parking requirements. She said they were also considering doing studies on microtransit and expanding the different types of transportation. She said in the next two years she wanted to advance public transportation regionally and not just in the City. Mr. Giuliano said

he was in favor of Mr. McNabb's suggestion to limit it for now and see how it worked out and then open it up to more areas of the City. Chair Chellman suggested that the lists be shared and people write their comments for the next work session to discuss.

[Timestamp 1:11:21] Mr. Bowen said Wells, ME and similar places had seasonal rooms for people who worked in the tourist trade, and he asked if there was any incentive for that in Portsmouth. Mr. McNabb said he kept some of his properties off the market and rented them for three months or so, but the marketplace wouldn't do that because yearly rentals were desired, so there were a lot of people living on couches and in basements. He said allowing co-living units would allow someone to have seasonal living. Leases were further discussed and it was said that J-1 (cultural exchange students) and part-time employees would benefit well from co-living uses.

II. Hanover Street Zoning

[Timestamp 1:16:43] Property owner Steve Wilson, Deputy City Attorney Trevor McCourt, and citizens Robin Husslage, Elizabeth Bratter, and Nicole LaPierre were present. Chair Chellman said Mr. Wilson's design review approval was received in July, and then Mr. Wilson filed an application for a variance because all the properties were in the Downtown Overlay District (DOD) and the plan going before the BOA had a different scale and was a better fit for the neighborhood. He said he didn't want to focus on the past but wanted to find the best solution for 2024. Mr. Stith said that it was requested at the previous work session to have a timeline and a comparison of the character district, so he provided the dimensional requirements and a max of where each of the districts were in the City. He said they had a follow-up memo from Mr. Wilson and that the variance request would be on the BOA's November agenda.

[Timestamp 1:20:45] Mr. Wilson said he owned the property and came up with a plan that illustrated the current zoning but then realized that there could be a better plan based on input from the Board and the neighbors. He said he applied for a variance to eliminate the necessity of business use on the first level, and now there were only two proposed stories in the building and a vacant parking lot in front. He said he could eliminate the commercial ground-floor commercial space if he agreed to have all residential, so he was providing all the parking on site and intended to use the ground floor for it. He explained it further and said it would allow him to go away from orientation for retail and face four of the units toward Rock Street with a better setback. He said the buildings were now two stories with a short third floor. He described the surrounding context. Attorney McCourt cautioned the Board about getting to the merits of the pending application vs. considering the zoning amendments on its merits. Mr. Stith said Mr. Wilson had not filed his site plan application for the new plan yet. Chair Chellman said there were neighbors who submitted a request to change the zoning in that area.

[Timestamp 1:34:04] Ms. Bratter said the zoning request was for the property between Hill Street and Foundry Place and that the neighbors were asking that the DOD and the North End Incentive Overlay District be removed because it was the Islington Creek area that started at Bridge Street. She said they requested CD4-W zoning, which would allow Mr. Wilson to not require as many variances for his project. Mr. Stith said he had not reviewed it under CD4-W. Ms. Bratter said the use applied because it was less intrusive on the residents. She said she didn't

know before that the CD4-W could be applied in any characteristic area and thought CD4-W should become its own zone because of the uses.

[Timestamp 1:39:22] Ms. Husslage agreed with Ms. Bratter and said continuing CD4-L1 across would also address the new design. Mr. Wilson said they would comply with either of the zones except for the minimum lot area per unit, so that would cut the size of his project in half and be more in line with the neighborhood. He said most of the houses in the neighborhood did not conform to CD4-W of CD4-L1. Ms. LaPierre said the area being improperly zoned was an injustice. She said Mr. Wilson's project was a separate issue because he was vested, and whatever he built would need variances. She said the neighbors were looking toward the future and trying to correct what was not previously corrected. She said she agreed with Ms. Bratter and Ms. Husslage but didn't think it was intended to be about Mr. Wilson. Chair Chellman said Mr. Wilson had an application that was approved at design review, so he thought it was relevant. Mr. Wilson said he intended to cooperate with the neighborhood's needs by having a new design that required new zoning. Mr. Giuliano said it sounded like the Board was facilitating the meeting of the Islington Creek neighborhood and didn't think Mr. Wilson needed the Board's input. Chair Chellman said the City Council asked the Board to look at a proposed zoning amendment for the area, and it got them away from spot zoning. He said whatever the Board made for a recommendation to the Council could be CD4-W or something new that lists the uses of CD4-W but didn't have a lot size component.

[Timestamp 1:46:06] Vice-Chair Mahanna said it could be broken down into three key things: 1) everything that went wrong in 2019 would not get corrected that night, and Mr. Wilson had already been approved to build something that the neighborhood hated; 2) the process was confusing enough for the Board without looking at it from a residential standpoint; and 3) he thought Ms. Bratter had come up with a 90 percent solution that would give the neighborhood a better product, which Mr. Wilson should consider. Ms. Bratter said the original plan included CD4-L1 because all of Hanover Street was that and the neighbors just wanted protection for the future if someone wanted to demolish a building and put something bigger because of the existing lot. It was further discussed. Chair Chellman asked if the request was for CD4-L1 or CD4-W. Ms. Bratter said CD4-W was for the back lot and everything that abuts Foundry Place, and CD4-L1 was for the front lot to match the rest of the neighborhood. Chair Chellman summarized that it would be CD4-L1 on Hanover Street, it would split zoning to CD4-W from Bridge Street to Rock Street, there would be no DOD or North End Incentive Overlay on top. It was further discussed. Chair Chellman said he didn't mind splitting zoning at the back lot lines. Councilor Moreau said it made no sense that CD5 zoning would be between Brewer and Rock Streets.. Ms. LaPierre said a major concern a lot of the neighbors had was that some of the streets didn't match the zoning.

[Timestamp 1:53:33] Mr. Giuliano asked if the zoning was articulated line by line. Mr. Stith said they didn't receive anything that mentioned CD4-W but noted that there was a July 10 letter that was referred from the Planning Board to the City Council. Chair Chellman said what was being discussed was to change a property to CD4L-1, remove the DOD and North End Incentive, and to change the CD4-W all the way to Bridge Street and move the DOD to Bridge Street. Mr. Wilson said the CD4-W was a new issue to him and didn't think it was appropriate. He said CD4 zoning was viable because the buildings next to him were all built to CD-4 zoning, and CD4-W

was out of character with what was there. He said the only property affected besides his vested property was the Plumbing Supply House that was surrounded by huge buildings. He said CD-W had significantly more restrictions, as did CD4-L1. It was further discussed.

[Timestamp 2:04:28] Chair Chellman asked if the issue was the massing of the buildings or the uses. Ms. Bratter said the most important part for the neighbors was the uses and the massing is less but in line with what was on the chart. Chair Chellman asked how much further the Board wanted to discuss the topic that evening. Vice-Chair Mahanna suggested summarizing the goal for a later discussion, and Mr. Hewitt agreed. Mr. Bowen said they were trying to accomplish a proper transition from the more dense downtown to a less residential area, and he thought the Board should end up with the decision that would have the best development of the property and the smoothest transition to the residential, which was to have it step down, have less mass and lower heights, and the proper uses. Mr. Giuliano said there was a lot of different zoning in that small area and didn't think that it necessarily made sense to do something just because it was available to plug in. Chair Chellman said he was concerned about rezoning recently-approved and under-construction buildings but thought the Board could look at the uses that could go inside those buildings and what they were approved for and could evolve into. He said that was the reason he was focusing more on the west side near Mr. Wilson's property where the one undeveloped parcel was. He said it was complex because it was a transition area. Ms. LaPierre said the issue was urgent because the development in Portsmouth was moving quickly. Chair Chellman said time was needed to get it right. Councilor Moreau suggested narrowing things down by including two options at a public hearing. It was further discussed. Chair Chellman said the Board should come up with two draft options in terms of graphics and writing and then have a public hearing at the end of the year or the first of next year.

III. Other Items

No other items were discussed.

IV. Adjournment

The meeting adjourned at 8:15 p.m.

Submitted,

Joann Breault
Planning Board Meeting Minutes Taker

Findings of Fact | Parking Conditional Use Permit
City of Portsmouth Planning Board

Date: November 21, 2024
Property Address: 2 Russell Street
Application #: LU-22-111
Decision: Approve Deny □ Approve with Conditions

Findings of Fact:
Effective August 23, 2022, amended RSA 676:3, I now reads as follows: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

Parking Conditional Use Permit
10.1112.14 The Planning Board may grant a conditional use permit to allow a building or use to provide less than the minimum number of off-street parking spaces required by Section 10.1112.30, Section 10.1112.61, or Section 10.1115.20, as applicable, or to exceed the maximum number of off-street parking spaces allowed by Section 10.1112.51.

	Parking Conditional Use Permit 10.1112.62 Requirements	**Finding** (Meets Criteria/Requirement)	**Supporting Information** (provided by applicant)
1	10.1112.61 Developments that contain a mix of uses on the same parcel shall reduce the number of off-street parking spaces in accordance with the methodology in Section 10.1112.61 (1-3)	**Meets** **Does Not Meet**	The application has been reviewed by the Technical Advisory Committee for conformance with the minimum requirements of the Site Plan Regulations. • The project meets the city's parking requirements by sharing parking between the three (3) proposed redevelopment parcels and the existing Sheraton Hotel and Deer Street condos • The project is providing a total of 340 proposed parking spaces where 334 spaces are required. The application was reviewed at the October 8, 2024 Technical Advisory Committee meeting
2	Shared parking arrangement	**Meets**	The application has been reviewed by

	Parking Conditional Use Permit 10.1112.62 Requirements	**Finding** **(Meets Criteria/Requirement)**	**Supporting Information (provided by applicant)**
	shall be secured by a covenant acceptable to the City and recorded in the Rockingham County Registry of Deeds	**Does Not Meet**	the Technical Advisory Committee for conformance with the minimum requirements of the Site Plan Regulations. • The shared parking arrangement shall be secured by a covenant acceptable to the City and recorded at the Rockingham County Registry of Deeds. The applicant understands that should the Planning Board grant the shared parking CUP, as a condition of approval the applicant will be required to record the agreement.

Findings of Fact | Building Footprint
City of Portsmouth Planning Board

Date: November 21, 2024
Property Address: 2 Russell Street
Application #: LU-24-191
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:
Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

Maximum Building Footprint Conditional Use Permit
10.5A43.43 For a building that contains ground floor parking, a parking garage or underground parking levels, and is not subject to Section 10.5A43.42, the Planning Board may grant a conditional use permit to allow a building footprint of up to 30,000 sq. ft. in the CD4 or CD4-W districts, and up to 40,000 sq. ft. in the CD5 district, if all of the following criteria are met:

1	No story above the ground floor parking shall be greater than 20,000 sq. ft. in the CD4 or CD4-W districts or 30,000 sq. ft. in the CD5 district.	**Meets** **Does Not Meet**	• The application has been reviewed by the Technical Advisory Committee for conformance with the minimum requirements of the Site Plan Regulations. The site is located within the CD5district. The footprint of the building stories above the ground floor are 29,810SF. The application was deemed complete at the October 8, 2024 Technical Advisory Committee meeting
2	All ground floor parking areas shall be separated from any public or private street by a liner building.	**Meets** **Does Not Meet**	The application has been reviewed by the Technical Advisory Committee for conformance with the minimum requirements of the Site Plan Regulations.

3	(c) At least 50% of the gross floor area of the ground floor shall be dedicated to parking.	**Meets** **Does Not Meet**	• The application has been reviewed by the Technical Advisory Committee for conformance with the minimum requirements of the Site Plan Regulations. • The total gross floor area of the ground floor dedicated to parking is 64.2%. • The application was deemed complete at the October 8, 2024 Technical Advisory Committee meeting
4	(d) For developments with more than five (5) dwelling units at least 10% of the property shall be assigned and improved as community space and comply with the workforce housing requirements listed in (e). For developments with 5 or less dwelling units, 30% of the property shall be assigned and improved as community space. Such community space shall count toward the required open space listed under Figures 10.5A41.10A-D (Development Standards) and community space required under Section 10.5A46.20. The size, location and type of the community space shall be determined by the Planning Board based on the size and location of the development, and the proposed and adjacent uses.	**Meets** **Does Not Meet**	• The proposed lot area for Map 118, Lot 28 and Map 119 Lot 4 is 57,967 SF which requires 17,391 SF of community space to meet the 30% requirement. • Proposed community space areas on Map 118, Lot 28 and Map 119 Lot 4 totals 23,446 SF or 40.4%. • See Community Space Exhibit. The applicant is requesting the Planning Board waive the workforce housing requirement since this project was approved prior to the 2023 amendments. The applicant is seeking reissuance of the CUP that was originally granted with no proposed changes because there is no additional mechanism to extend the approval.
5	(e)For developments with more than five (5) dwelling units, the dwelling units within a building shall be workforce housing units in compliance with state law for either: 1) 10% of any proposed for sale dwelling units within a development shall be workforce housing units (affordable to a household with an income of no more than 100 percent of the area median income for a 4 person household) or 2) 5% of any proposed for rent dwelling units		The applicant is requesting the Planning Board waive the workforce housing requirement since this project was approved prior to the 2023 amendments. The applicant is seeking reissuance of the CUP that was originally granted with no proposed changes because there is no additional mechanism to extend the approval.

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November 14, 2024

SUBMITTED ONLINE VIA CITY OF PORTSMOUTH – OPENGOV PORTAL

Rick Chellman
Chairman, Planning Board
1 Junkins Avenue
Portsmouth, NH 03801

RE: 2 Russell Street (LU-24-191) – Reapproval of Conditional Use Permit Applications
Proposed Mixed Use Development, Russell Street & Deer Street, Portsmouth, NH

Dear Chair Chellman,

I am providing you with this letter to supplement my Client's October 21, 2024, Application for Reapproval of the above referenced Conditional Use Permits ("CUPs").

My Client obtained HDC Approval of the 2 Russell Street Project on August 29, 2022. My Client obtained Planning Board Approval, including Approval of the CUPs, on December 15, 2022. When the Project was initially approved (*See* Section 10.5A43.43 of the Zoning Ordinance) my Client was required to assign and improve 30% of the Property as Community Space. In fact, consistent with the attached **Community Space Exhibit**, my Client provided 40.4% Community Space. At that time, there was no Workforce Housing requirement, and none was provided for.

As I set out in the original Application for Reapproval, my Client has timely met all the requirements of the Subdivision Approval prior to the June 15, 2024 deadline. However, this is a complex Project and on October 24, 2024, the Planning Board granted my Client a second one-year extension as to Site Plan Approval. This extension will allow my Client to undertake additional time in planning and design related to the realignment of Russell and Deer Streets; address issues related to the proximity to the railroad; address issues related to the relocation of utility easements; and deal with issues related to ledge removal. We are also working through the complex CMMP, and the issues related thereto involving multiple parties and a tight site in an urban environment.

I would also note that the abnormal shape of the site added time to my Client's design efforts. Specifically, the shape of Building 2 made parking layouts challenging. As a result, we applied for a Parking Variance which was granted by the Zoning Board of Adjustment on October 25, 2024. The result of the Parking Variance actually improves the parking as six (6) spaces have been added while reducing the number of less-desirable tandem spaces.

Unfortunately, there is no mechanism for us to request an additional one-year extension as to the CUPs and therefore, the only applicable process is to request the Planning Board to reapprove the CUPs. As a result, Section 10.5A43.43 of the Zoning Ordinance, as amended, now applies which requires 10% Community Space and 10% Workforce Housing.

We are respectfully requesting the Planning Board, within its authority, not require 10% Workforce Housing as part of the Reapproval of the existing CUPs, given the status of this Project and that it was originally approved by the Planning Board in December of 2022. In support of this request, I would note that under the current requirement, my Client only needs to provide 5,797 square feet of Community Space, when my Client is, in fact, providing 23,420 square feet of Community Space. I know that there is at least one Project that has been approved by the Planning Board, that in the inverse, waived the Community Space requirement based on the Workforce Housing that was being provided. We are simply asking that given the significant Community Space that is being provided, and when the Project was initially approved, that the Workforce Housing requirement not be imposed as to the Reapproval of the CUPs.

I would also reiterate the significant benefits this Project is providing to the City. Based on the three (3) Quitclaim Deeds that my Client conveyed to the City, the Deer and Russell Streets intersection will be realigned. The City will also have the ability to construct a roundabout at Russell and Market Streets in the future.

Finally, I would note that this Project consists of 3 separate buildings. Building 2 will be constructed on Map 118, Lot 28. The footprint of that building grew in order to accommodate a specific HDC request. The HDC wanted my Client to create a connection from Portwalk Place through the North End. To do that, my Client had to shift the space between the buildings toward Maplewood Avenue. This caused the footprint of Building 2 to grow and necessitated the CUP related to the maximum building footprint, which we are now asking to be reapproved.

My Client respectfully requests that the Planning Board, within your authority, grant the Reapproval of the existing CUPs, without the need to meet the Workforce Housing requirement. This request is based on all the above, and specifically that this Project will bring many benefits to the City of Portsmouth; that the Project was originally approved prior to the amendment to Section 10.5A43.43; that all other extensions have been granted; and that significant Community Space is being provided.

Thank you for your kind consideration.

Very truly yours,

John E. Lyons, Jr., Esq.

JEL/dhb

cc: Peter Britz – plbritz@cityofportsmouth.com
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Trevor McCourt – tmccourt@cityofportsmouth.com
Vincent Hayes – vjhayes@cityofportsmouth.com
Ryan D. Plummer – ryan@twointernationalgroup.com

NORTH END MIXED USE DEVELOPMENT
RUSSELL STREET & DEER STREET
PORTSMOUTH, NEW HAMPSHIRE

COMMUNITY SPACE EXHIBIT

PROPOSED COMMUNITY SPACE:

	REQUIRED	PROVIDED
WIDE SIDEWALK COMMUNITY SPACE		7,140 SF
PEDESTRIAN ALLEY COMMUNITY SPACE		21,691 SF
PARK AREA COMMUNITY SPACE		9,765 SF
TOTAL COMMUNITY SPACE AREA	25,221 SF	38,596 SF

CITY RIGHT OF WAY IMPROVEMENTS (NOT INCLUDED IN COMMUNITY SPACE CALCULATION):

PUBLIC REALM IMPROVEMENT WITHIN CITY R.O.W.	22,353 SF

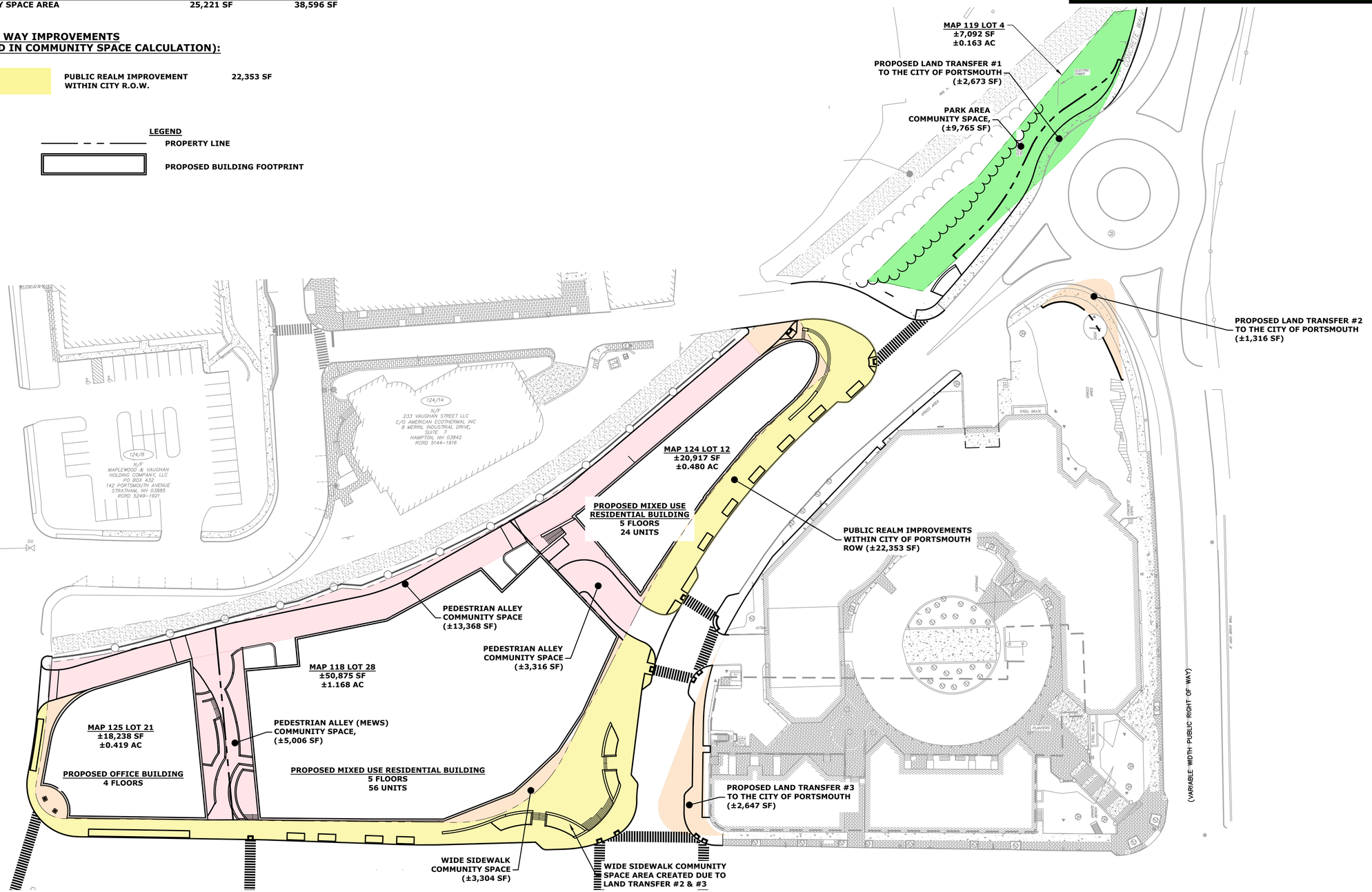
LEGEND

PROPERTY LINE

PROPOSED BUILDING FOOTPRINT

COMMUNITY SPACE:

	REQUIRED	PROPOSED
MAP 125 LOT 21		
DEVELOPMENT LOT AREA: 18,237 SF	3,647 SF, 20%	6,273 SF, 34.4%
MAP 118 LOT 28		
DEVELOPMENT LOT AREA: 50,875 SF	15,263 SF, 30%	
OFFSITE COMMUNITY SPACE AREA (MAP 119 LOT 4): 7,092 SF	2,128 SF, 30%	
MAP 118 LOT 28 TOTAL	17,391 SF, 30%	23,420 SF, 40.4%
MAP 124 LOT 12		
DEVELOPMENT LOT AREA: 20,917 SF	4,183 SF, 20%	9,002 SF, 43.0%
TOTALS	25,221 SF	38,695 SF, 39.8%



Tighe&Bond

November 23, 2022
T5037-002-C-DSGN.dwg

Last Save Date: November 21, 2022 4:08 PM By: CKRZCUIK
Plot Date: Tuesday, November 22, 2022 Plotted By: Colter Krzcuik
Plot File Location: J:\T\T5037 Two International Group\002 Russell Street Development\Drawings_Figures\AutoCAD\T5037-002-C-DSGN.dwg Layout Tab: COMM

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October 21, 2024

SUBMITTED ONLINE VIA CITY OF PORTSMOUTH – OPENGOV PORTAL

Rick Chellman
Chairman, Planning Board
1 Junkins Avenue
Portsmouth, NH 03801

RE: 2 Russell Street (LU-24-191) – Reapproval of Conditional Use Permit Applications
Proposed Mixed Use Development, Russell Street & Deer Street, Portsmouth, NH

Dear Chair Chellman,

I represent Port Harbor Land, LLC as to the development of property located at 2 Russell Street. Port Harbor Land, LLC has obtained all necessary City of Portsmouth Planning Board and Historic District Commission Approvals to construct three new buildings, containing eighty residential dwelling units, commercial space, parking, associated community space, landscaping, and other improvements.

As you know, because of the complexity of this Project, on October 17, 2024, the Planning Board was kind enough to provide my client with an additional one-year extension of Site Plan Approval through December 15, 2025. Consistent therewith, we also need to request that the Planning Board reapprove the Conditional Use Permit ("CUP") Applications previously granted to my client. To that end, I have filed the necessary Application with the City of Portsmouth as to the previously granted CUP for Shared Parking (*See* Section 10.1112.62 of the Zoning Ordinance) and the previously granted CUP for the Maximum Building Footprint (*See* Section 10.5A43.43 of the Zoning Ordinance).

In support of my client's request for reapproval of the CUPs, I attach to this letter the Tighe & Bond Report dated October 21, 2024. I also attach the Site Plan Set Revised September 24, 2024, and the Community Space Exhibit last revised November 23, 2022, as referenced in the Tighe & Bond Report. Finally, I attach the Letter of Authorization from the Owner.

Specifically, we are requesting reapproval in that there is no mechanism for us to request an additional one-year extension as to the CUPs consistent with the one-year extension the Planning Board recently granted my client as to Site Plan Approval.

I would note that my Client has timely met all the requirements of the Subdivision Approval prior to the June 15, 2024 deadline. These requirements included but were not limited to: finalizing and recording the Subdivision Plan; completion of the Certificate of Monumentation; addressing necessary sewer

easement matters; and providing the City with three Quitclaim Deeds to allow for the realignment of the Deer and Russell Streets intersection, and for the City's future construction of a roundabout at Russell and Market Streets.

While my Client has worked diligently to move the Project forward, its complexity has necessitated additional time in planning & design. The realignment of Russell and Deer Streets, the proximity to the railroad, the relocation of utility easements, and the extent of ledge removal, all contribute to additional time and effort in planning. The abnormal shape of the site also added time to my Client's design efforts. Specifically, the shape of the buildings made parking layouts challenging, as the details of my Client's building design became more evolved than it typically is at Site Plan Approval. My Client is currently in the process of requesting Approval of a Parking Variance with the Zoning Board of Adjustment related to the first and second floors of the parking garage contained within Building 2 for dimensional relief that is a result of column placements and necessary mechanical space. The result is actually an improvement to the parking as six (6) spaces have been added while reducing the number of less-desirable tandem spaces, but the Variance request was necessary due to the dimensions of a few spaces being slightly smaller than the standard. My Client is also working through the complex CMMP, and the issues related thereto involving multiple parties and a tight site in an urban environment. I would also add that my Client continues to work cooperatively to move all other outstanding issues forward with the City staff and appreciate their professionalism.

I would also note that we did have a Work Session with TAC on October 8, 2024, who supported our request for the additional one-year extension as to Site Plan Approval.

We would respectfully request this matter be scheduled for Hearing before the Planning Board at its next Meeting scheduled for November 21, 2024. Thank you for your continued assistance in this matter.

Very truly yours,

John E. Lyons, Jr., Esq.

JEL/dhb

cc: Peter Britz – plbritz@cityofportsmouth.com
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Trevor McCourt – tmccourt@cityofportsmouth.com
Vincent Hayes – vjhayes@cityofportsmouth.com
Ryan D. Plummer – ryan@twointernationalgroup.com

T5037-002
October 21, 2024

Mr. Rick Chellman, Chairman
City of Portsmouth Planning Board
1 Junkins Avenue
Portsmouth, New Hampshire 03801

Re: Conditional Use Permit Applications
Proposed Mixed Use Development, Russell & Deer Street, Portsmouth, NH

Dear Chairman Chellman,

On behalf of Port Harbor Land, LLC (owner/applicant), this letter is to request two Conditional Use Permits (CUP) be regranted by the Planning Board to allow for shared parking on separate lot and an increase in building footprint as allowed by Section 10.1112.62 and Section 10.5A43.43 respectively. We are pleased to submit one (1) set of hard copies and digital copies of the following information to support the regranting of the aforementioned Conditional Use Permits:

- One (1) full & one (1) half size copy of the Site Plan Set, last revised September 24, 2024;
- Community Space Exhibit, last revised November 23, 2022;

PROJECT SUMMARY

Local Permitting Approvals

The proposed project received the following permits from the Planning Board at its regularly scheduled meeting on December 15th, 2022;

- Site Plan Review Permit
- Lot Line Revision Permit
- Conditional Use Permit for Shared Parking on a Separate Lot
- Conditional Use Permit for Increased Building Footprint

A one-year extension for the Site Plan Approval was requested in December of 2023 in accordance with Section 2.14 of the Site Review Regulations. A second one-year extension of the Site Plan Approval was granted by the Planning Board on October 17, 2024, which extends the Site Plan Review Permit Approvals to December 15, 2025. The two Conditional Use Permits do not have another extension request available, therefore we respectfully request that the previously approved Conditional Use Permits be regranted at the next scheduled Planning Board Meeting.

Existing Conditions

The project is located at 2 Russell Street, Deer Street & 250 Market Street consisting of properties identified as Map 118 Lot 28, Map 119 Lot 1-1A, 1-1C & Lot 4, Map 124 Lot 12, and Map 125 Lot 21 on the City of Portsmouth Tax Maps which are located in the Character District 5 (CD5). The properties identified as Map 118 Lot 28, Map 124 Lot 12, and Map 125 Lot 21 (proposed redevelopment parcels) are the existing parcels proposed to be redeveloped are bound by Deer Street to the south, Maplewood Avenue to the west, the railroad to the

north and Russell Street to the east. Map 119 Lot 4 will be developed into a park area as part of the community space for the proposed project, and Map 119 Lot 1-1A & 1-1C will be part of the lot line revision application.

The proposed redevelopment of parcels lots currently consist of a large surface parking lot which is mainly used by the Sheraton Hotel. There are some small patches of gravel and grass where the site abuts the railroad property and a ledge outcropping to the north.

Proposed Redevelopment

The proposed project will include the construction of three buildings consisting of office, retail/commercial, and residential uses. Building 1 is a proposed 4-story office building at the corner of Deer Street and Maplewood Avenue, Building 2 is a proposed 5-story mixed-use residential building at the corner of Deer Street and Russell Street with below ground parking, first floor residential lobby, commercial space and parking and 56 upper floor residential units, and Building 3 is a proposed 5-story mixed-use residential building along Russell Street with first floor residential lobby and commercial space and 24 upper floor residential units.

The project also consists of significant on-site and off-site improvements including wide sidewalks, roadway improvements, community space, lighting, landscaping, and utilities. The proposed development will provide landscape improvements including an enhanced streetscape and plantings, plaza area at the redesigned intersection of Deer Street and Russell Street, and community space areas. The streetscape design includes a variety of vibrant site elements such as shade trees, public benches, and retail spill out zones. Combined, these site features will create a friendly, safe pedestrian experience and connect users with first floor programs and access to proposed on-site and off-site community space areas. In total the proposed project is providing 22,353 SF of off-site, pedestrian orientated and park space public improvements.

CONDITIONAL USE PERMITS

Shared Parking on Separate Lots

A Conditional Use Permit for parking on a separate lot as permitted under Section 10.1112.62 of the City of Portsmouth Zoning Ordinance is requested for the project. The project meets the parking requirements by sharing parking between the three (3) proposed redevelopment parcels and the existing Sheraton Hotel and Deer Street condos as shown on the enclosed Site Plans. A total of 334 parking spaces are required to meet the Zoning requirements.

The existing surface parking lot is used by the Sheraton Hotel for their valet and self-park operations. There are also an existing 82 deeded parking spaces for the Deer Street and Sheraton Condos that can be assigned to any space on either the Sheraton Lot or the redevelopment parcels. The table below identifies the required parking for the existing and proposed uses per the City of Portsmouth Ordinance. The project is providing 186 spaces within Building 2 and there are 154 existing spaces on the Sheraton lot, for a total of 340 proposed parking spaces where 334 spaces are required.

City of Portsmouth Downtown Overlay Parking Requirement	
North End Development, Portsmouth, NH	
Proposed Commercial Use Parking Requirements	No requirements 75,000 SF **0 Spaces**
Proposed Residential Use Parking Requirements	1.3 Spaces / Dwelling Unit 80 Dwelling Units **104 Spaces**
Proposed Residential Visitor Parking Requirements	1 Spaces / 5 Dwelling Unit 80 Dwelling Units **16 Spaces**
Sheraton Hotel Parking Requirements	0.75 Spaces / Hotel Room 181 Rooms **136 Spaces**
Sheraton Condo Parking Requirements	Deeded Easement for 24 Spaces 12 Dwelling Units **24 Spaces**
Deer Street Condo Parking Requirements	Deeded Easement for 58 Spaces 3-story mixed use Condos on Deer Street **58 Spaces**
Subtotal Required	**338 Spaces**
DOD Parking	**-4 Spaces**
Total Spaces Required	**334 Spaces**

Per Section 10.1112.62 (2) the shared parking arrangement shall be secured by a covenant acceptable to the City and recorded at the Rockingham County Registry of Deeds. The applicant understands that should the Planning Board grant the shared parking CUP, as a condition of approval the applicant will be required to record the agreement. The applicant will manage the parking for hotel use with a valet parking operator that will operate and manage the parking 24/7/365 to optimize the use of the available parking.

Increased Building Footprint

A Conditional Use Permit to allow a building footprint of up to 40,000 SF as permitted under Section 10.5A43.43 of the City of Portsmouth Zoning Ordinance is being requested for the project. The Planning Board may grant a Conditional Use Permit to allow a building footprint of up to 40,000 SF in the CD5 district, if all of the following criteria are met:

(a) No story above the ground floor parking shall be greater than 30,000 SF in the CD5 district.

The footprint of the building stories above the ground floor are 29,810 SF.

(b) All ground floor parking areas shall be separated from any public or private street by a liner building.

The ground floor parking areas are separated from the public street by a liner building.

(c) At least 50% of the gross floor area of the ground floor shall be dedicated to parking.

The total gross floor area of the ground floor dedicated to parking is 64.2%.

(d) At least 30% of the property shall be assigned and improved as community space.

The proposed lot area for Map 118, Lot 28 and Map 119 Lot 4 is 57,967 SF which requires 17,391 SF of community space to meet the 30% requirement. Map 124, Lot 12 and Map 125, Lot 21 also require 20% community space to be eligible for the North End Overlay Incentives. Proposed community space areas on Map 118, Lot 28 and Map 119 Lot 4 totals 23,446 SF or 40.4%. The total required community space for the project is 25,221 SF with the total proposed community space equaling 38,568 SF or 39.7%. This is shown on the enclosed Community Space Exhibit.

(e) The development shall comply with all applicable standards of the ordinance and the City's land use regulations.

The development complies with all applicable standards of the ordinance and the City's land use regulations.

We respectfully request to be placed on the Planning Board agenda for the November 21, 2024 meeting.

If you have any questions or need any additional information, please contact Neil Hansen by phone at (603) 294-9213 or by email at nahansen@tighebond.com.

Sincerely,

TIGHE & BOND, INC.

Neil A. Hansen, PE
Project Manager

Patrick M. Crimmins, PE
Vice President

Cc: Port Harbor Land, LLC (via e-mail)

NORTH END MIXED USE DEVELOPMENT

RUSSELL STREET & DEER STREET

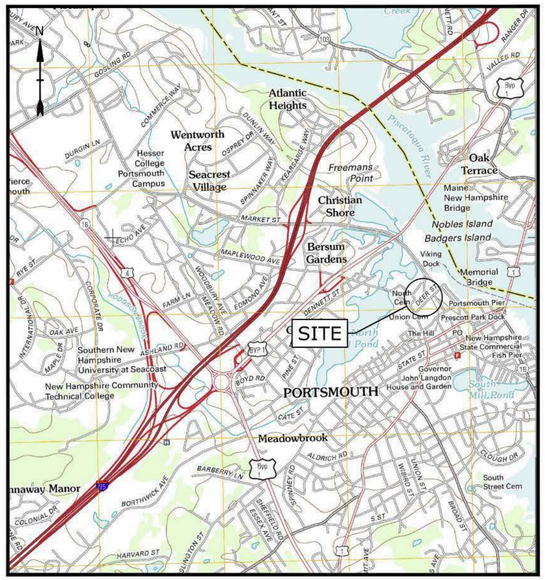
PORTSMOUTH, NEW HAMPSHIRE

MAY 24, 2022

LAST REVISED SEPTEMBER 24, 2024

LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	9/24/2024
S-1	LOT LINE RELOCATION PLAN	11/23/2022
S-2	SURVEY NOTES	11/23/2022
S-3	ACCESS EASEMENT PLAN	11/23/2022
S-4	ACCESS EASEMENT PLAN	11/23/2022
S-5	UTILITIES EASEMENT PLAN	11/23/2022
S-6	COMMUNITY SPACE EASEMENT PLAN	11/23/2022
G-100	GENERAL NOTES AND LEGEND	5/22/2023
C-101	EXISTING CONDITIONS & DEMOLITION PLAN	5/22/2023
C-102	OVERALL SITE PLAN	9/24/2024
C-102.1	SITE PLAN	9/24/2024
C-103	GRADING & DRAINAGE PLAN	9/24/2024
C-104	UTILITIES PLAN	9/24/2024
C-501	EROSION CONTROL NOTES AND DETAILS SHEET	5/22/2023
C-502	DETAILS SHEET	12/5/2022
C-503	DETAILS SHEET	12/5/2022
C-504	DETAILS SHEET	12/5/2022
C-505	DETAILS SHEET	12/5/2022
C-506	DETAILS SHEET	5/22/2023
C-507	DETAILS SHEET	5/22/2023
C-508	DETAILS SHEET	12/5/2022
C-509	DETAILS SHEET	12/5/2022
C-510	DETAILS SHEET	5/22/2023
L-100	LANDSCAPE MATERIAL PLAN, LEGEND AND NOTES	11/23/2022
L-101	LANDSCAPE SITE PLAN	11/23/2022
L-102	LANDSCAPE DETAILS	11/23/2022
L-103	LANDSCAPE DETAILS	11/23/2022
E-001	LIGHTING COVER SHEET	11/23/2022
E-100	EXTERIOR LIGHTING PLAN AND CALCULATIONS	11/23/2022
E-101	EXTERIOR LIGHTING CUTSHEETS	11/23/2022
E-102	EXTERIOR LIGHTING CUTSHEETS	11/23/2022
E-103	EXTERIOR LIGHTING CUTSHEETS	11/23/2022
E-104	EXTERIOR LIGHTING CUTSHEETS	11/23/2022
A-101	BUILDING 1 AREA PLANS	5/24/2022
A-102	BUILDING 2 AREA PLANS	5/24/2022
A-103	BUILDING 3 AREA PLANS	5/24/2022
A-201	BUILDING 1 ELEVATION	5/24/2022
A-202	BUILDING 1 ELEVATION	5/24/2022
A-203	BUILDING 2 ELEVATION	5/24/2022
A-204	BUILDING 2 ELEVATION	5/24/2022
A-205	BUILDING 2 ELEVATION	5/24/2022
A-206	BUILDING 3 ELEVATION	5/24/2022
A-207	BUILDING 3 ELEVATION	5/24/2022
A-208	GLAZING STUDY	5/24/2022

T & B PROJECT NO: T-5037-002



LOCATION MAP
SCALE: 1" = 2,000'

WILDLIFE PROTECTION NOTES:

1. ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV. EMAIL SUBJECT LINE: NHB22-2135, NORTH END MIXED USE DEVELOPMENT, WILDLIFE SPECIES OBSERVATION.
2. PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHF&G IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE;
3. IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04
4. THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

LIST OF PERMITS		
LOCAL	STATUS	DATE
SITE PLAN REVIEW PERMIT	APPROVED	12/23/2022
LOT LINE REVISION PERMIT	APPROVED	12/23/2022
CONDITIONAL USE PERMIT	APPROVED	12/23/2022
STATE		
NHDES - SEWER CONNECTION PERMIT	NOT SUBMITTED	
NHDES - ALTERATION OF TERRAIN PERMIT	APPROVED	5/25/2023

PREPARED BY:
Tighe&Bond
177 CORPORATE DRIVE
PORTSMOUTH, NEW HAMPSHIRE 03801
603-433-8818

ARCHITECT:
SGA ARCHITECTURE
200 HIGH STREET, FLOOR 2
BOSTON MA, 02110
857-300-2610

OWNER/APPLICANT:
TAX MAP 118, LOT 28
TAX MAP 119, LOT 1-1A
TAX MAP 119, LOT 1-1C
TAX MAP 119, LOT 4
TAX MAP 124, LOT 12 &
TAX MAP 125, LOT 21

PORT HARBOR LAND, LLC
1000 MARKET STREET, BUILDING ONE
PORTSMOUTH, NEW HAMPSHIRE 03801

EXTENSION REQUEST SUBMISSION

COMPLETE SET 44 SHEETS

NOTES:

1. THE PARCELS ARE LOCATED IN THE CHARACTER DISTRICT □(CD□) □ HISTORICAL DISTRICT (HD).
2. THE PARCELS SHOWN ON THE TOWN OF PORTSMOUTH ASSESSOR'S MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28, MAP 119 LOT 1-1A □ MAP 119 LOT 1-1C.
3. THE PARCELS ARE LOCATED IN □ONE X, AS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) ROC□INGHAM COUNTY, NEW HAMPSHIRE, PANEL 2□9 OF 681, MAP NUMBER 3301□C02□9F WITH AN EFFECTIVE DATE OF JANUARY 29, 2021.
4. SEE SECTION

□ OWNER OF RECORD:
MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28
PORT HARBOR LAND LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□14

MAP 119 LOT 1-1A
PH LOTS LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6130 PG□897

MAP 119 LOT 1-1C
PORT OWNER HARBOR LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□3□3

6. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
7. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED BOUNDARY LINES FOR LOT LINE RELOCATIONS FOR MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28, MAP 119 LOT 1-1A □ MAP 119 LOT 1-1C .
8. FIELD SURVEY WAS COMPLETED BY TCE ON AUGUST □ □ 17, 2019, WITH A TOPCON DS103, A TOPCON HYPER-V GPS RECEIVER, AND A TOPCON FC-□000 DATA COLLECTOR.
9. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROC□INGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
10. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MA□ES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE.
11. SEE SHEET S-2 FOR PLAN REFERENCES, EASEMENTS □ RESTRICTIONS, ENCROACHMENTS AND LINE □ CURVE TABLES.

EXISTING AREA TABLE

MAP	LOT	S.F.	ACRES
118	28	48,417	1.11□
119	1-1C	86,031	1.97□
119	1-1A	2,640	0.0610
119	4	9,76□	0.22
124	12	19,0□□	0.4374
12□	21	22,□□9	0.□179

PROPOSED AREA TABLE

MAP	LOT	S.F.	ACRES
118	28	□0,87□	1.1679
119	1-1C	84,604	1.9420
119	1-1C REMAINING	1,427	0.033
119	1-1A	2,640	0.0610
119	4	7,092	0.1600
119	4 REMAINING	2,673	0.0600
124	12	20,918	0.4802
12□	21	18,237	0.4187

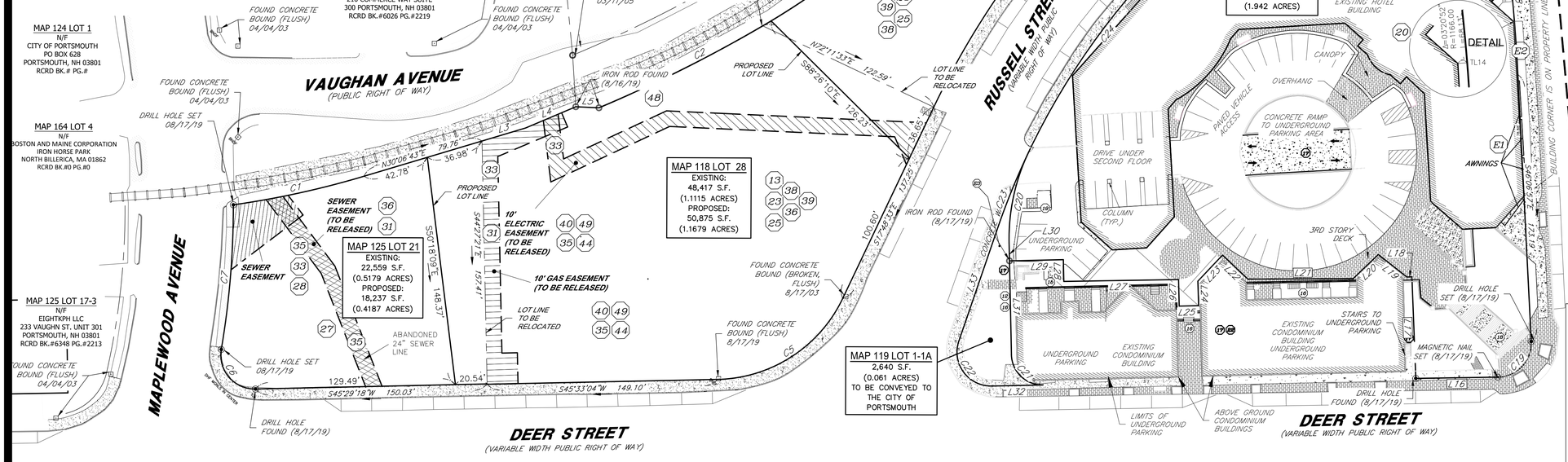
PURSUANT TO NEW HAMPSHIRE REVISED STATUTES ANNOTATED 676:18, II, III AND IV AND 672:14:

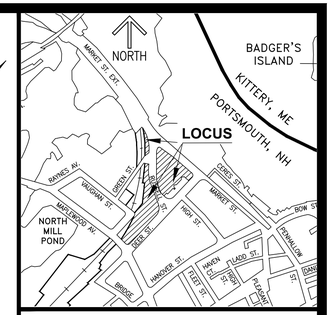
I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN AUGUST 2019. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS.
I FURTHER CERTIFY THAT THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

DRAFT

LICENSED LAND SURVEYOR _____ DATE _____

DIG SAFE
MA ME NH RI VT
UTILITIES UNDER GROUND PLANT DAMAGE PREVENTION SYSTEM
CALL 811 TOLL FREE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION





LOCATION PLAN

LOT LINE RELOCATION PLAN
NORTH END MIXED USE
DEER ST., RUSSELL ST., MARKET ST.
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
PORT HARBOR LAND LLC, PH LOTS LLC & PORT OWNER HARBOR LLC

MAP	□	LOT
□□□		□□
□□□		□□□□□□□□□□
□□□		□□
□□□		□□

SCALE: 1" = 40' (22x34)
1" = 80' (11x17)
NOVEMBER 23, 2022

40 20 0 40
Graphic Scale in Feet

REV.	DATE	DESCRIPTION	DR	CK

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE	DR		FB		
45354-12	CK	BMK	CADFILE	SEE MARGIN	S-1

Nov 23, 2022 - 10:0□am
F:\MSC Projects\4□3□4 - Mar□et Street - Portsmouth\4□3□4-12 Port Harbor Land, LLC - 2□0 Mar□et St\Carlson Survey\Dwgs\4□3□4-12 Lot Line Revision Easement Plans-R1.dwg

EASEMENTS □ RESTRICTIONS:

PARCEL I (MAP 119-1-1C/PARCEL 1C)

(10) ITEM #10 – RIGHTS, RESTRICTIONS AND EASEMENTS RESERVED BY BOSTON & MAINE RAILROAD AND WESTERN UNION TELEGRAPH COMPANY IN AN INDENTURE TO ROSE R. WOLFSON DATED JULY 20, 1954 AND RECORDED IN RCRD IN BOOK 1324 PAGE 40 AND DESCRIBED IN A DEED OF WOLFSON TO PORTSMOUTH HOUSING AUTHOURITY RECORDED IN RCRD IN BOOK 1936 PAGE 113. (TO ENTER, REPAIR, RENEW AND REMOVE A GATE BOX, ETC.). OFF-SITE

(11) ITEM #11 – RIGHTS, RESTRICTIONS AND EASEMENTS RESERVED BY ROBERT W. MESERVE AND BENJAMIN H. LACY, AS TRUSTEE OF BOSTON & MAINE CORPORATION IN A DEED TO PORTSMOUTH HOUSING AUTHORITY DATED JULY 15, 1975 AND RECORDED IN THE RCRD IN BOOK 2241 PAGE 836. (TO INSPECT, REPAIR, RENEW, MAINTAIN, RELAY AND REMOVE TRACTS AND SECTIONS OF SIDETRACK AND UNDERGROUND FACILITIES).

(12) ITEM #12 – TERMS AND CONDITIONS OF THE EASEMENT FROM SHELTER GROUP, INC. TO HARBORSIDE ASSOCIATES DATED AUGUST 30, 1985 AND RECORDED IN THE RCRD IN BOOK 2561 PAGE 487. THIS EASEMENT GRANTS THE RIGHT TO PASS & REPASS BY FOOT & VEHICLE, AND TO INSTALL IMPROVEMENTS ETC. EASEMENT NOT DEFINED AS TO LOCATION AND THEREFORE NOT PLOTTED. (SEE PLAN REFERENCE 4)

(13) ITEM #13 – TERMS AND CONDITIONS OF THE PARKING ACCESS EASEMENT FROM HARBORPARK, INC. TO HARBORSIDE ASSOCIATES DATED AUGUST 30, 1985 AND RECORDED IN THE RCRD IN BOOK 2561 PAGE 505. THIS EASEMENT GRANTS CERTAIN RIGHTS TO PASS OVER PARCELS 2 & 2C. EASEMENT NOT DEFINED AS TO SPECIFIC LOCATION AND THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN. (SEE PLAN REFERENCE 4 AND SHEET C-3)

(14) ITEM #14 – EASEMENTS GRANTED TO NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY 4 RECORDED IN THE RCRD AS FOLLOWS:
- A. FROM HARBORSIDE ASSOCIATES DATED AUGUST 1, 1986 AND RECORDED IN BOOK 2630 PAGE 1041.
- B. FROM SHELTER GROUP DATED AUGUST 15, 1986 AND RECORDED IN BOOK 2630 PAGE 1047; AND
- C. FROM HARBORPARK, INC. DATED AUGUST 1, 1986 AND RECORDED IN BOOK 2630 PAGE 1052.

EASEMENT IS FOR THE "PURPOSE OF PROVIDING TELEPHONE SERVICE TO THE BUILDINGS WHICH ARE NOW OR HEREAFTER LOCATED ON SAID PARCELS OF LAND, AND THE LOCATION OF WHICH LINES, WIRES, CABLES, CONDUITS, PIPES AND DISTRIBUTING FACILITIES SHALL BE IN AN AREA WHICH SHALL BE MUTUALLY SATISFACTORY TO GRANTOR AND GRANTEE..." EASEMENT IS THEREFORE NOT PLOTTED.

(15) ITEM #15 – SUCH STATE OF FACTS AS SHOWN ON PLAN ENTITLED, "SUBDIVISION PLAN OF LOTS 1B &1A & 1C, PORTSMOUTH, NH." DATED OCTOBER 1, 1987 BY BRIGGS ASSOCIATES, INC. AND RECORDED IN THE RCRD AS PLAN NO. D-17149, AS AMENDED BY AN AFFIDAVIT FOR CORRECTION TO SUBDIVISION PLAN DATED DECEMBER 8, 1987 AND RECORDED IN THE RCRD IN BOOK 2719 PAGE 1953. CORRECTIONS SHOWN HEREON. (SEE PLAN REFERENCE 1 AND SHEET C-3)

(16) ITEM #16 – TERMS AND CONDITIONS OF THE ACCESS EASEMENT (HARBORSIDE) FROM HARBORPARK, INC. TO HARBORSIDE ASSOCIATES DATED NOVEMBER 30, 1987 AND RECORDED IN THE RCRD IN BOOK 2719 PAGE 1973. THIS EASEMENT GRANTS PEDESTRIAN & VEHICULAR ACCESS OVER LOTS 1B & 1C. EASEMENT NOT DEFINED AS TO SPECIFIC LOCATION AND THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN. (SEE PLAN REFERENCE 5)

(17) ITEM #17 – TERMS AND CONDITIONS OF THE CONSTRUCTION, USE AND MAINTENANCE EASEMENT (HARBORSIDE) FROM HARBORPARK, INC. TO HARBORSIDE ASSOCIATES DATED NOVEMBER 30, 1987 AND RECORDED IN THE RCRD IN BOOK 2719 PAGE 1979. THIS EASEMENT GRANTS CERTAIN RIGHTS TO CONSTRUCT, USE & MAINTAIN THE UNDERGROUND PARKING FACILITY. EASEMENT NOT DEFINED AS TO LOCATION AND THEREFORE NOT PLOTTED. (SEE PLAN REFERENCE 5)

(18) ITEM #18 – ACCESS EASEMENT (HARBORPARK) FROM HARBORSIDE ASSOCIATES TO HARBORPARK, INC. DATED DECEMBER 4, 1987 AND RECORDED IN THE RCRD IN BOOK 2719 PAGE 1986. THIS EASEMENT APPLIES TO PORTIONS OF THE PREMISES "AS MAY BE REASONABLY NECESSARY", EASEMENT NOT DEFINED AS TO SPECIFIC LOCATION, THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN. (SEE PLAN REFERENCE 5)

(19) ITEM #19 – UTILITIES EASEMENT (HARBORPARK) FROM HARBORSIDE ASSOCIATES TO HARBORPARK, INC. DATED DECEMBER 4, 1987 AND RECORDED IN THE RCRD IN BOOK 2719 PAGE 1994. THIS EASEMENT GIVES THE OWNERS OF MAP 119 LOT 1B THE RIGHT "TO ENTER AT ANY AND ALL TIMES UPON THAT PORTION OF GRANTOR'S LAND AS MAY BE REASONABLY NECESSARY TO CONSTRUCT, INSTALL AND PERPETUALLY MAINTAIN, UNDER, OVER OR ACROSS GRANTOR'S LAND...", UNDERGROUND UTILITIES ARE NOT REQUIRED AS PART OF THIS SURVEY, EASEMENT NOT DEFINED AS TO SPECIFIC LOCATION, THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN. (SEE PLAN REFERENCE 5)

(20) ITEM #20 – TERMS AND CONDITIONS OF A DEED FROM HARBORSIDE ASSOCIATES TO HARBORSIDE INN, INC. DATED JUNE 6, 1988 AND RECORDED IN THE RCRD IN BOOK 2744 PAGE 1257. THIS CONVEYS THE SPACE AND AREA SHOWN AS "MARKET WHARF II, A CONDOMINIUM" LOCATED WITHIN THE EXISTING HOTEL BUILDING. NOT DEFINED AS TO SPECIFIC LOCATION, THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN (SEE PLAN REFERENCE 3)

(21) ITEM #21 – TERMS AND CONDITIONS OF EASEMENT AND BUILDING OPERATING AGREEMENT BY AND BETWEEN HARBORSIDE INN, INC. AND HARBORSIDE ASSOCIATES DATED JUNE 6, 1988 AND RECORDED IN THE RCRD IN BOOK 2744 PAGE 1261. EASEMENTS ARE NOT DEFINED AS TO EXACT LOCATION, THEREFORE ARE NOT PLOTTED.

(22) ITEM #22 – PARKING EASEMENT (MARKET WHARF II) FROM HARBORSIDE ASSOCIATES TO HARBORSIDE INN, INC. DATED MAY 12, 1988 AND RECORDED IN THE RCRD IN BOOK 2744 PAGE 1307. SPACES ARE NOT ENUMERATED AND ARE SUBJECT TO CHANGE THEREFORE EASEMENT IS NOT PLOTTED.

(23) ITEM #23 – PARKING EASEMENT (MARKET WHARF II: SECOND) FROM HARBORSIDE ASSOCIATES TO HARBORSIDE INN, INC. DATED MAY 12, 1988 AND RECORDED IN THE RCRD IN BOOK 2744 PAGE 1317. SPACES ARE NOT ENUMERATED AND ARE SUBJECT TO CHANGE, THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN. (SEE SHEET C-3)

(24) ITEM #24 – CABLE TELEVISION INSTALLATION AND SERVICE AGREEMENT BY AND BETWEEN CONTINENTAL CABLEVISION OF NEW ENGLAND, INC., AND HARBORSIDE ASSOCIATES DATED DECEMBER 29, 1994 AND RECORDED IN THE RCRD IN BOOK 3096 PAGE 854. OWNER GRANTS TO OPERATOR THE RIGHT TO OWN, OPERATE AND MAINTAIN A CABLE TELEVISION DISTRIBUTION SYSTEM... EASEMENT IS NOT PLACEABLE AND THEREFORE NOT PLOTTED.

(25) ITEM #25 – PARKING EASEMENT RIGHTS RESERVED IN A DEED FROM HARBORSIDE ASSOCIATES TO SHELTER GROUP, INC., DATED MAY 6, 1988 AND RECORDED IN THE RCRD IN BOOK 2744 PAGE 1247. THIS EASEMENT GRANTS THE RIGHT TO USE PARKING SPACES ACROSS RUSSELL STREET. EASEMENT NOT DEFINED AS TO SPECIFIC LOCATION, THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN (SEE PLAN REFERENCE 4 AND SHEET C-3).

(26) ITEM #26 – SUCH MATTERS AND STATE OF FACTS AS ARE SHOWN ON THE FOLLOWING PLANS RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS:
- A. "SUBDIVISION PLAN OF PARCELS 1 & 2 IN PORTSMOUTH, NH" DATED JUNE 25, 1985, RECORDED AS PLAN NO. D-13798 (2 SHEETS) [SEE PLAN REFERENCE 2]
- B. "THE HARBORSIDE PORTSMOUTH NEW HAMPSHIRE," DATED JULY 16, 1985, RECORDED AS PLAN NO. C-14042 (2 SHEETS) [SEE PLAN REFERENCE 6]
- C. "SURVEY OF HARBORSIDE & HARBORPARK LAND IN PORTSMOUTH, N.H." DATED AUGUST 13, 1985 AND REVISED AUGUST 27, 1985, RECORDED AS PLAN NO. D-14043 (2 SHEETS) [SEE PLAN REFERENCE 4]
- D. "SUBDIVISION PLAN OF LOTS 1B & 1C & 1A IN PORTSMOUTH, N.H." DATED OCTOBER 1, 1987, RECORDED AS PLAN NO. D-17149 (SEE PLAN REFERENCE 1)
- E. "HARBORSIDE AND HARBORPARK – EASEMENT PLAN PARCEL 1" DATED OCTOBER 22, 1987, RECORDED AS PLAN NO. D-17413 (SEE PLAN REFERENCE 5)
- F. "MARKET WHARF II A CONDOMINIUM SITE AND FLOOR PLANS" DATED APRIL 11, 1988, RECORDED AS PLAN NO. D-18097 (7 SHEETS) [SEE PLAN REFERENCE 3]

EASEMENTS □ RESTRICTIONS CONTINUED:

PARCELS 2, 2A, 2B & 2C (MAP 119 LOT 4/PARCEL 2B, MAP 124 LOT 12/PARCEL 2A, MAP 118 LOT 28/PARCEL 2 & MAP 125 LOT 21/PARCEL 2C)

(27) ITEM #27 – RIGHTS AND EASEMENTS FROM THE BOSTON AND MAINE RAILROAD TO THE CITY OF PORTSMOUTH DATED JANUARY 31, 1936 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 917 PAGE 10. 10' SEWER EASEMENT ON PARCEL 2C AND SHOWN ON PLAN REFERENCES 18 & 19. PLOTTED HEREON.

(28) ITEM #28 – EASEMENT GRANTED TO THE CITY OF PORTSMOUTH, RECORDED IN SAID REGISTRY AT BOOK 2245 PAGE 328. SEWER EASEMENT ON PARCEL 2C (SEE PLAN REFERENCE 20). PLOTTED HEREON.

(29) ITEM #29 – RIGHTS, RESTRICTIONS AND EASEMENTS RESERVED BY BOSTON & MAINE RAILROAD AND WESTERN UNION TELEGRAPH COMPANY IN AN INDENTURE TO ROSE R. WOLFSON DATED JULY 20, 1954 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 1324 PAGE 40 AND DESCRIBED IN A DEED OF WOLFSON TO PORTSMOUTH HOUSING AUTHORITY RECORDED IN BOOK 1936 PAGE 113 TO ENTER, REPAIR, RENEW, AND REMOVE A GATE BOX, ETC. ON PARCEL 2B. EASEMENT NOT DEFINED AS TO LOCATION AND THEREFORE NOT PLOTTED.

(30) ITEM #30 – RIGHTS AND EASEMENTS RESERVED IN A DEED FROM THE BOSTON AND MAINE RAILROAD TO ALL STATE REALTY CORPORATION DATED OCTOBER 16, 1961 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 1606 PAGE 198, AS AFFECTED BY RELEASES TO THE PORTSMOUTH HOUSING AUTHORITY DATED DECEMBER 19, 1972 AND RECORDED IN BOOK 2196 PAGE 1018, AND DATED JANUARY 5, 1973 AND RECORDED IN BOOK 2196 PAGE 1022 TO ENTER, MAINTAIN, REPAIR, RENEW , RELAY AND REMOVE AND USE SIGNAL FACILITIES, AUTOMATIC HIGHWAY CROSSING PROTECTION FACILITIES, PIPES, POLES, WIRES AND UNDERGROUND FACILITIES ON PARCEL 2C (SEE PLAN REFERENCE 18). EASEMENT NOT DEFINED AS TO LOCATION AND THEREFORE NOT PLOTTED.

(31) ITEM #31 – RIGHTS AND EASEMENTS FROM PORTSMOUTH HOUSING AUTHORITY TO ALLIED GAS DIVISION OF NORTHERN UTILITIES, INC. AS SET FORTH IN AN INSTRUMENT DATED MARCH 8, 1974 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 2218 PAGE 306 ON PARCELS 2 AND 2C FOR TO INSTALL, REPAIR, MAINTAIN, ALTER AND OPERATE A GAS TRANSMISSION LINE, PLOTTED HEREON; AND SUBJECT TO AN EASEMENT GRANTED TO NEW ENGLAND TELEPHONE AND TELEGRAPH DATED MAY 19, 1974 AND RECORDED AT BOOK 2218 PAGE 957 ON PARCEL 2B. EASEMENT NOT DEFINED AS TO LOCATION AND THEREFORE NOT PLOTTED.

(32) ITEM #32 – RIGHTS, RESTRICTIONS AND EASEMENTS RESERVED BY ROBERT W. MESERVE AND BENJAMIN H. LACY, AS TRUSTEE OF BOSTON & MAINE CORPORATION IN A DEED TO PORTSMOUTH HOUSING AUTHORITY DATED JULY 15, 1975 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 2241 PAGE 836 TO INSPECT, REPAIR, RENEW, MAINTAIN, RELAY AND REMOVED TRACKS AND SECTIONS OF SIDETRACK AND UNDERGROUND FACILITIES. EASEMENT NOT DEFINED AS TO LOCATION AND THEREFORE NOT PLOTTED.

(33) ITEM #33 – SUCH STATE OF FACTS AS SHOWN ON PLAN ENTITLES "SUBDIVISION PLAN OF PARCELS 1 & 2 IN PORTSMOUTH, NH FOR THE CITY OF PORTSMOUTH" DATED AUGUST 1, 1984 AND REVISED JUNE 25, 1985, SHEETS 1 & 2 BY BRIGGS ASSOCIATES, INC. AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS PLAN NO. D-13798. SEWER, GAS & ELECTRIC EASEMENTS PLOTTED HEREON.

(34) ITEM #34 – SUCH STATE OF FACTS AS SHOWN ON PLAN ENTITLED "SHELTER GROUP HARBORSIDE AND HARBORPARK EASEMENT PLAN PARCEL TWO" BY LANE, FRENCHMAN AND ASSOCIATES, DATED JULY 16, 1986 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS PLAN NO. C-14042. NO EASEMENTS SHOWN THEREON.

(35) ITEM #35 – SUCH STATE OF FACTS AS SHOWN ON A PLAN ENTITLED "SURVEY OF HARBORSIDE AND HARBORPARK LAND IN PORTSMOUTH, N.H." DATED AUGUST 13, 1985, REVISED AUGUST 27, 1985 BY BRIGGS ASSOCIATES, INC. AND RECORDED IN THE ROCKINGHAM COUNTY REGISTER OF DEEDS AS PLAN NO. D-14043. SEWER, GAS & ELECTRIC EASEMENTS PLOTTED HEREON.

(36) ITEM #36 – SUBJECT TO AND WITH BENEFIT TO THE TERMS AND CONDITIONS OF A PARKING ACCESS EASEMENT BY AND BETWEEN HARBORPARK, INC. AND HARBORSIDE ASSOCIATES DATED AUGUST 30, 1985 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 2561 PAGE 505. THIS EASEMENT GRANTS CERTAIN RIGHTS TO PASS OVER PARCELS 2 & 2C (SEE PLAN REFERENCE 4). EASEMENT NOT DEFINED AS TO SPECIFIC LOCATION AND THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN.

(37) ITEM #37 – EASEMENTS GRANTED TO NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS FOLLOWS:
- A. FROM HARBORSIDE ASSOCIATES DATED AUGUST 1, 1986 AND RECORDED IN BOOK 2630 PAGE 1041. (PARCELS 2 AND 2A)
- B. FROM SHELTER GROUP DATED AUGUST 15, 1986 AND RECORDED IN BOOK 2630 PAGE 1047 (PARCEL 2B); AND
- C. FROM HARBORPARK, INC. DATED AUGUST 1, 1986 AND RECORDED IN BOOK 2630 PAGE 1052. (PARCEL 2C)

EASEMENTS NOT DEFINED AS TO LOCATION AND THEREFORE NOT PLOTTED.

(38) ITEM #38 – PARKING EASEMENT RIGHTS RESERVED IN A DEED FROM HARBORSIDE ASSOCIATES TO SHELTER GROUP, INC. DATED MAY 6, 1988 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 2744 PAGE 1247 ON PARCELS 2 & 2A. EASEMENTS NOT DEFINED AS TO SPECIFIC LOCATION AND THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN.

(39) ITEM #39 – PARKING EASEMENT (MARKET II: SECOND) FROM HARBORSIDE ASSOCIATES TO HARBORSIDE INN, INC. DATED JUNE 6, 1988 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 2744 PAGE 1317 ON PARCELS 2 & 2A. EASEMENTS NOT DEFINED AS TO SPECIFIC LOCATION AND THEREFORE ONLY GENERAL LOCATIONS ARE SHOWN.

(40) ITEM #40 – SUCH STATE OF FACTS AS SHOWN ON A PLAN ENTITLED "LOT LINE RELOCATION PLAN, MAP 124, LOTS 12 & 13, MAP 118 LOT 28 PROPERTY OF HARBORCORP, LLC AND BOSTON AND MAINE CORPORATIONS" DATED MARCH 14, 2005 (MAY 5, 2005 REVISED) BY AMES MSC ARCHITECTS AND ENGINEERS AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS PLAN NO. D-32675 (PLAN REFERENCE 16). GAS & ELECTRIC EASEMENTS SHOWN HEREON.

(41) ITEM #41 – TERMS AND CONDITIONS OF AN ASSUMPTION AGREEMENT BETWEEN INTREPID FINANCIAL GROUP, INC. HARBORCORP, LLC, LODGESYS INC. AND HARBORSIDE INN, INC. DATED APRIL 12, 1999 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 3383 PAGE 1579, AS AFFECTED BY A SUBORDINATION AGREEMENT DATED SEPTEMBER 23, 2013 AND RECORDED IN SAID REGISTRY IN BOOK 5484 PAGE 770 REGARDING PARCELS 2, 2A, 2B & 2C. NOT A SURVEY MATTER AND THEREFORE NOT PLOTTED.

(42) ITEM #42 – SUBORDINATION AND STANDSTILL AGREEMENT BY AND AMONG HARBORCORP LLC, HARBOSIDE ASSOCIATES LP AND CW CAPITAL LLC DATED NOVEMBER 30, 2005 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 4588 PAGE 1774 REGARDING PARCELS 2 & 2A. NOT A SURVEY MATTER, THEREFORE NOT PLOTTED.

(43) ITEM #43 – TERMS, CONDITIONS, PROVISIONS, COVENANTS, RESTRICTIONS, PROHIBITED USES AND RIGHTS OF PARTIES UNDER LEASE BETWEEN HARBORCORP, LLC, A MAINE LIMITED LIABILITY COMPANY (LANDLORD) AND WHOLE FOODS MARKET GROUP, INC., A DELAWARE CORPORATION, DATED OCTOBER 30, 2013, AS EVIDENCED BY MEMORANDUM OF LEASE DATED OCTOBER 30, 2013, RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BOOK 5494 PAGE 1401 (NOTE: EXHIBIT A MISSING). THIS MEMORANDUM RESTRICTS THE USES FOR WHICH THE LOTS CAN BE USED FOR, THEREFORE, IS NOT PLOTTABLE.

(44) ITEM #44 – SUCH STATE OF FACTS AS SHOWN ON A PLAN ENTITLED "LOT LINE RELOCATION PLAN, MAP 124, LOTS 12 & 13, MAP 11 LOT 28 PROPERTY OF HARBORCORP, LLC AND BOSTON AND MAINE CORPORATION" DATED APRIL 24, 2014 BY MSC CIVIL ENGINEERS & LAND SURVEYORS, INC. AND RECORDED JUNE 4, 2014 IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS PLAN NO. D-38256 (REFERENCE PLAN 17). GAS & SEWER EASEMENT PLOTTED HEREON.

(45) ITEM #45 – TERMS, CONDITIONS, PROVISIONS, COVENANTS, RESTRICTIONS AND RIGHTS OF PARTIES UNDER THAT CERTAIN PARKING LOT LEASE DATED MAY 1, 2003 BETWEEN HARBORCORP LLC, AS LANDLORD, AND HARBORSIDE ASSOCIATES, LP, AS TENANT. NOT A SURVEY MATTER, THEREFORE NOT PLOTTED.

(46) ITEM #46 – SUCH STATE OF FACTS AS SHOWN ON PLAN ENTITLED "STATION MAP-LANDS BOSTON & MAINE R.R. OPERATED BY THE BOSTON AND MAINE R.R. STATION 2966+0V3NH/SL55" DATED JUNE 30, 1914. (RAILROAD PARCEL ONE AND TWO) [AFFECTS PARCEL II]

(47) ITEM #47 – TERMS AND CONDITIONS, RIGHTS AND EASEMENT SET FORTH IN A DEED FROM THE BOSTON AND MAINE CORPORATION TO HARBORCORP, LLC DATED APRIL 15, 2005 AND RECORDED AT BOOK 4486 PAGE 1583. (RAILROAD PARCEL ONE) RESERVATIONS, CONDITIONS, COVENANTS AND AGREEMENTS ARE NOT DEFINED AS TO LOCATION AND THEREFORE ARE NOT PLOTTED, EXCEPT #7 REGARDING THE MAINTENANCE OF FENCES ALONG COMMON BOUNDARIES WITH THE GRANTOR, WHERE ONLY GENERAL LOCATIONS ARE SHOWN.

(48) ITEM #48 – TERMS AND CONDITIONS, RIGHTS AND EASEMENT SET FORTH IN A DEED FROM THE BOSTON AND MAINE CORPORATION TO HARBORCORP, LLC DATED MAY 9, 2014 AND RECORDD AT BOOK 5536 PAGE 2828. (RAILROAD PARCEL TWO) RESERVATIONS, CONDITIONS, COVENANTS AND AGREEMENTS ARE NOT DEFINED AS TO LOCATION AND THEREFORE ARE NOT PLOTTED, EXCEPT #7 REGARDING THE MAINTENANCE OF FENCES ALONG COMMON BOUNDARIES WITH THE GRANTOR, WHERE ONLY GENERAL LOCATIONS ARE SHOWN.

(49) ITEM #49 – ELECTRIC UTILITY EASEMENT AND GAS MAIN EASEMENT AS SHOWN ON PLAN ENTITLED "ELECTRIC UTILITY EASEMENT PARCEL 2" DATED JANUARY 1974, BY ANDERSON – NICHOLS & CO., INC., AND RECORDED MARCH 18, 1974, 2014 IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS PLAN NO. B-4337 (PLAN REFERENCE 8). PLOTTED HEREON.

(50) ITEM #50 – VARIATIONS BETWEEN THE DESCRIPTIONS CONTAINED BETWEEN THE DESCRIPTION OF RAILROAD PARCEL ONE AND TWO, AS SET FORTH IN BOOK 5569 PAGE 2553 AND THE DESCRIPTIONS OF SAID PARCELS IN PLAN NO. D-38256 (REFERENCE PLAN 17). RAILROAD PARCEL TWO NOT SHOWN ON SAID PLAN.

ENCROACHMENTS:

(E5) ON THE WEST, UTILITY TOWER OVER RECORD LINE;

(E6) ON THE EAST, ELECTRIC PEDESTAL OVER THE RECORD LINE, WITHOUT AN EASEMENT;

(E7) ON THE NORTHEAST, SEWER MANHOLE OVER RECORD LINE, WITHOUT AN EASEMENT;

(E8) ON THE SOUTHEAST, SIGNAL BOX OVER RECORD LINE, WITHOUT AN EASEMENT.

PLAN REFERENCES:

1. "SUBDIVISION PLAN OF LOTS 1B & 1C & 1A IN PORTSMOUTH, N.H." BY BRIGGS ASSOCIATES, INC., DATED OCTOBER 1, 1987. RCRD PLAN #D-17149.
2. "SUBDIVISION PLAN OF PARCELS 1 & 2 IN PORTSMOUTH, N.H." BY BRIGGS ASSOCIATES, INC., DATED AUGUST 1, 1984, REV. JUNE 25, 1985. RCRD PLAN #D-13798.
3. "MARKET WHARF II, A CONDOMINIUM SITE PLAN, PORTSMOUTH, N.H." BY BRIGGS ASSOCIATES, DATED APRIL 11, 1988. RCRD PLAN #D-18097.
4. "SURVEY OF HARBORSIDE & HARBORPARK LAND IN PORTSMOUTH, N.H." BY BRIGGS ASSOCIATES, INC., DATED AUGUST 13, 1985 REVISED AUGUST 27,1985. RCRD PLAN #D-14043.
5. "HARBORSIDE AND HARBORPARK-EASEMENT PLAN-PARCEL 1, PORTSMOUTH, NEW HAMPSHIRE" BY RAYMOND F. CORMIER, DATED OCTOBER 22, 1987. RCRD PLAN #D-17413.
6. "THE HARBORSIDE, PORTSMOUTH, NEW HAMPSHIRE-HARBORSIDE AND HARBORPARK-EASEMENT PLAN-PARCEL 1" BY SHELTER GROUP, INC., LANE FRENCHMAN & ASSOCIATES, INC., DATED 16 JULY 86. RCRD PLAN #C-14042.
7. "MARKET WHARF I, A CONDOMINIUM SITE PLAN, HARBORPARK INC., PORTSMOUTH, N.H." BY BRIGGS ASSOCIATES, DATED NOVEMBER 1987. RCRD PLAN #D-17417.
8. "VAUGHAN STREET URBAN RENEWAL PROJECT N.H. R-10, PORTSMOUTH, NEW HAMPSHIRE, ELECTRIC UTILITY EASEMENT, PARCEL 2" BY ANDERSON-NICHOLS & CO., INC., DATED JAN. 1974. RCRD PLAN #B-4337.
9. "PORTSMOUTH HOUSING AUTHORITY, PORTSMOUTH, NEW HAMPSHIRE, ROCKINGHAM COUNTY, VAUGHAN STREET PROJECT, PROJECT NO. N.H. R-10, FIRE ALARM SYSTEM AND ELECTRICAL DISTRIBUTION PLAN" BY METCALF & EDDY ENGINEERS-PLANNERS, DATED MAY 5, 1966. RCRD PLAN #D-2420.
10. "VAUGHAN STREET URBAN RENEWAL PROJECT N.H. R-10, PORTSMOUTH, NEW HAMPSHIRE, APPROVED AS SHOWING VAUGHAN STREET URBAN RENEWAL PROJECT BOUNDARIES AND AREA ONLY, CONDEMNATION MAP" BY ANDERSON-NICHOLS & CO., INC., DATED FEB. 1971. RCRD PLAN #D-2425.
11. "LAND IN PORTSMOUTH, N.H., BOSTON AND MAINE RAILROAD FOR ROSE R. WOLFSON" DATED JUNE 1954. RCRD BK. 1324 PG. 45.
12. "PORTSMOUTH HOUSING AUTHORITY, PORTSMOUTH, NEW HAMPSHIRE, ROCKINGHAM COUNTY, VAUGHAN STREET PROJECT, PROJECT NO. N.H. R-10, RIGHT OF WAY ADJUSTMENTS PLAN" BY METCALF & EDDY ENGINEERS-PLANNERS, DATED MAY 5, 1966. RCRD PLAN #D-2413.
13. "STATION MAP-LANDS, CONCORD AND PORTSMOUTH R.R. OPERATED BY THE BOSTON MAINE R.R., STATION 0+0 TO STATION 33+0" BY THE OFFICE OF VALUATION ENGINEER, DATED JUNE 30, 1914. NOT RECORDED.
14. "STATION MAP-LANDS, BOSTON AND MAINE R.R., OPERATED BY THE BOSTON MAINE R.R., STATION 2966+20 TO STATION 3019+0" BY THE OFFICE OF VALUATION ENGINEER, DATED JUNE 30, 1914. NOT RECORDED.
15. "ALTA/ACSM LAND TITLE SURVEY FOR HARBORSIDE ASSOCIATES, MARKET, DEER & RUSSEL STREETS, COUNTY OF ROCKINGHAM, PORTSMOUTH, NH" BY MILLETTE, SPRAGUE & COLWELL, INC., DATED FEBRUARY 24, 1999, LAST REVISED 04-09-99. NOT RECORDED.
16. "LOT LINE RELOCATION PLAN, MAP 124, LOTS 12 & 13, MAP 118 LOT 28 PROPERTY OF HARBORCORP, LLC AND BOSTON AND MAINE CORPORATIONS" BY AMES MSC ARCHITECTS AND ENGINEERS DATED MARCH 14, 2005 WITH REVISION DATE OF 05/03/05. RCRD PLAN #D-32675.
17. "LOT LINE RELOCATION PLAN, MAP 124, LOTS 12 & 13, MAP 118 LOT 28 PROPERTY OF HARBORCORP, LLC AND BOSTON AND MAINE CORPORATIONS" BY MSC CIVIL ENGINEERS AND LAND SURVEYORS, INC. DATED APRIL 24, 2014 WITH REVISION 2 DATED 05/19/14. RCRD PLAN #D-38256.
18. "LAND IN PORTSMOUTH, N.H. BOSTON AND MAINE RAILROAD TO RAYLEN REALTY COMPANY" BY ASST. CHIEF ENG'R, DATED APRIL, 1961. RCRD PLAN #03226.
19. "EASEMENT FOR SEWER PORTSMOUTH, N.H." BY ASST. CHIEF ENG'R, DATED DEC. 1936. RCRD #0802.
20. "VAUGHAN STREET URBAN RENEWAL PROJECT N.H. R-10 REVISED DISPOSITION PLAN PARCEL 2C" BY ANDERSON-NICHOLS & CO., INC., DATED JULY 1974. RCRD PLAN #C-4701.
21. "LAND IN PORTSMOUTH, N.H. BOSTON AND MAINE RAILROAD TO ROSE R. WOLFSON" BY ENGR. OF DESIGN, DATED JUNE 1954. RCRD PLAN #02282 (SEE ALSO RCRD BK.1324 PG.45).
22. "ALTA□NSPS LAND TITLE SURVEY SHERATON HOTEL 2□0 MAR□ET STREET PORTSMOUTH NEW HAMPSHIRE" BY TFMORAN, INC. DATED: AUGUST 19, 2019. PLAN NOT RECORDED.

CURVE TABLE					
CURVE #	RADIUS	LENGTH	DELTA	CHORD DIRECTION	CHORD LENGTH
C1	314.78'	37.73'	006°52'04"	N69°03'21"W	37.71'
C2	85.89'	19.43'	012°57'53"	N77°45'26"W	19.39'
C3	25.65'	37.98'	084°51'04"	S52°17'04"W	34.61'
C4	32.44'	9.97'	017°36'58"	N20°48'51"W	9.93'
C5	34.15'	12.97'	021°45'55"	N01°07'24"W	12.90'
C6	1597.18'	35.54'	001°16'29"	N10°23'48"E	35.54'
C7	81.65'	34.67'	024°19'36"	N03°28'19"W	34.41'
C8	946.81'	30.66'	001°51'18"	N19°05'26"W	30.65'
C9	199.38'	46.93'	013°29'06"	N09°32'02"W	46.82'
C10	200.00'	125.82'	036°02'43"	S16°17'04"E	123.76'
C11	913.00'	118.72'	007°27'01"	N20°09'36"E	118.63'
C12	130.50'	60.68'	026°38'29"	S31°07'41"E	60.13'
C13	20.00'	31.42'	090°00'42"	S89°27'17"E	28.29'
C14	466.04'	52.88'	006°30'04"	N21°03'29"W	52.85'
C15	22.00'	42.27'	110°04'43"	N79°25'08"W	36.06'
C16	478.00'	97.46'	011°40'56"	N10°28'31"E	97.29'
C17	21.96'	38.67'	100°53'46"	N84°03'49"W	33.86'
C18	155.00'	29.99'	011°05'14"	N06°01'30"E	29.95'
C19	92.00'	101.74'	063°21'37"	S13°52'16"W	96.63'
C20	12.01'	18.12'	086°29'05"	N85°30'22"E	16.45'
C21	577.73'	86.66'	008°35'41"	N34°24'34"E	86.58'
C22	554.00'	94.15'	009°44'14"	N38°29'03"W	94.04'
C23	534.00'	205.20'	022°01'03"	S06°48'01"E	203.94'
C24	1166.00'	102.56'	005°02'23"	S48°38'08"E	102.53'
C25	60.00'	39.79'	037°59'48"	N23°12'24"E	39.06'
C26	22.00'	35.33'	092°00'43"	N00°06'36"W	31.65'
C27	466.00'	179.07'	022°01'01"	N06°47'56"W	177.97'

LINE TABLE		
LINE #	BEARING	DISTANCE
L3	N30°06'43"E	29.46'
L4	N23°49'32"E	35.29'
L5	N49°22'32"E	14.99'
L6	N36°49'15"E	32.96'
L7	S76°41'17"E	45.40'
L8	S04°12'30"W	20.87'
L9	N38°50'13"E	16.55'
L10	S34°18'26"E	11.30'
L11	S57°39'20"W	26.00'
L12	S51°44'07"W	16.92'
L13	N90°00'00"W	3.94'
L14	N01°08'07"E	28.72'
L15	N64°03'45"E	4.11'
L16	S45°53'01"W	53.10'
L17	N45°26'23"W	65.85'
L18	S44°33'38"W	3.23'
L19	S84°58'06"W	23.59'
L20	S02°54'59"W	22.54'
L21	S46°27'39"W	68.16'
L22	N89°54'52"W	22.65'
L23	S00°09'11"W	23.20'
L24	S44°57'01"E	15.90'
L25	S45°28'33"W	12.57'
L26	N44°34'09"W	17.21'
L27	S45°48'55"W	74.29'
L28	N44°32'08"W	14.09'
L29	S45°27'52"W	34.90'
L30	S44°26'56"E	11.60'
L31	S44°26'56"E	60.82'
L32	S45°33'00"W	33.19'
L33	N24°18'31"W	77.63'
L34	S38°50'40"W	1.30'
L35	N86°45'30"W	2.15'

PURSUANT TO NEW HAMPSHIRE REVISED STATUTES ANNOTATED 676:18, II, III AND IV AND 672:14:

I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN AUGUST 2019. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS.
I FURTHER CERTIFY THAT THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

DRAFT

LICENSED LAND SURVEYOR ____________ DATE ____________

TAX MAPS 119, 124, 118, 125 LOTS 4, 12, 28 & 21

NOTES

NORTH END MIXED USE

DEET ST., RUSSELL ST., MARKET ST.

PORTSMOUTH, NEW HAMPSHIRE

COUNTY OF ROCKINGHAM

OWNED BY

PORT HARBOR LAND LLC, PH LOTS LLC & PORT OWNER HARBOR LLC

SCALE: NO SCALE

NOVEMBER 23, 2022

REV.	DATE	DESCRIPTION	DR	CK

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE	45354-11	DR	EJS	FB	559	S-2
		CK	JCC	CADFILE		

Nov 23, 2022 - 10:06am
F:\MSC Projects\4□3□4 - Mar□et Street - Portsmouth\4□3□4-12 Port Harbor Land, LLC - 2□0 Mar□et St\Carlson Survey\Dwgs\4□3□4-12 Lot Line Revision Easement Plans-R1.dwg

NOTES:

1. THE PARCELS ARE LOCATED IN THE CHARACTER DISTRICT □(CD□) □ HISTORICAL DISTRICT (HD).
2. THE PARCELS SHOWN ON THE TOWN OF PORTSMOUTH ASSESSOR'S MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28, MAP 119 LOT 1-1A □ MAP 119 LOT 1-1C.
3. THE PARCELS ARE LOCATED IN □ONE X, AS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) ROC□INGHAM COUNTY, NEW HAMPSHIRE, PANEL 2□9 OF 681, MAP NUMBER 3301□C02□9F WITH AN EFFECTIVE DATE OF JANUARY 29, 2021.
4. SEE SECTION
□ OWNER OF RECORD:
MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28
PORT HARBOR LAND LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□14

MAP 119 LOT 1-1A
PH LOTS LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6130 PG□897

MAP 119 LOT 1-1C
PORT OWNER HARBOR LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□3□3
6. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
7. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED EASEMENTS FOR MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28, MAP 119 LOT 1-1A □ MAP 119 LOT 1-1C .
8. FIELD SURVEY WAS COMPLETED BY TCE ON AUGUST □□ 17, 2019, WITH A TOPCON DS103, A TOPCON HYPER-V GPS RECEIVER, AND A TOPCON FC-□000 DATA COLLECTOR.
9. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROC□INGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
10. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MA□ES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE.
11. SEE SHEET S-2 FOR PLAN REFERENCES, EASEMENTS □ RESTRICTIONS, ENCROACHMENTS AND LINE □ CURVE TABLES.

DIG SAFE
MA ME NH RI VT
CALL 811 TOLL FREE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

PURSUANT TO NEW HAMPSHIRE REVISED STATUTES ANNOTATED 676:18, II, III AND IV AND 672:14:

I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN MONTH, YEAR. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS.
I FURTHER CERTIFY THAT THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

DRAFT

LICENSED LAND SURVEYOR _____ DATE _____

ACCESS EASEMENTS:

(1) ACCESS EASEMENT ON MAP 125, LOT 21 TO BENEFIT MAP 118, LOT 28 & MAP 124, LOT 12.

(2) ACCESS EASEMENT ON MAP 118, LOT 28 TO BENEFIT MAP 125, LOT 21 & MAP 124, LOT 12.

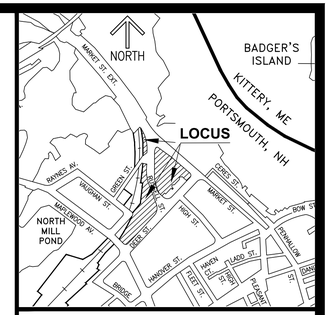
(3) ACCESS EASEMENT ON MAP 124, LOT 12 TO BENEFIT MAP 118, LOT 28 & MAP 125, LOT 21.

(4) ACCESS EASEMENT ON MAP 124, LOT 12 TO BENEFIT MAP 118, LOT 28.

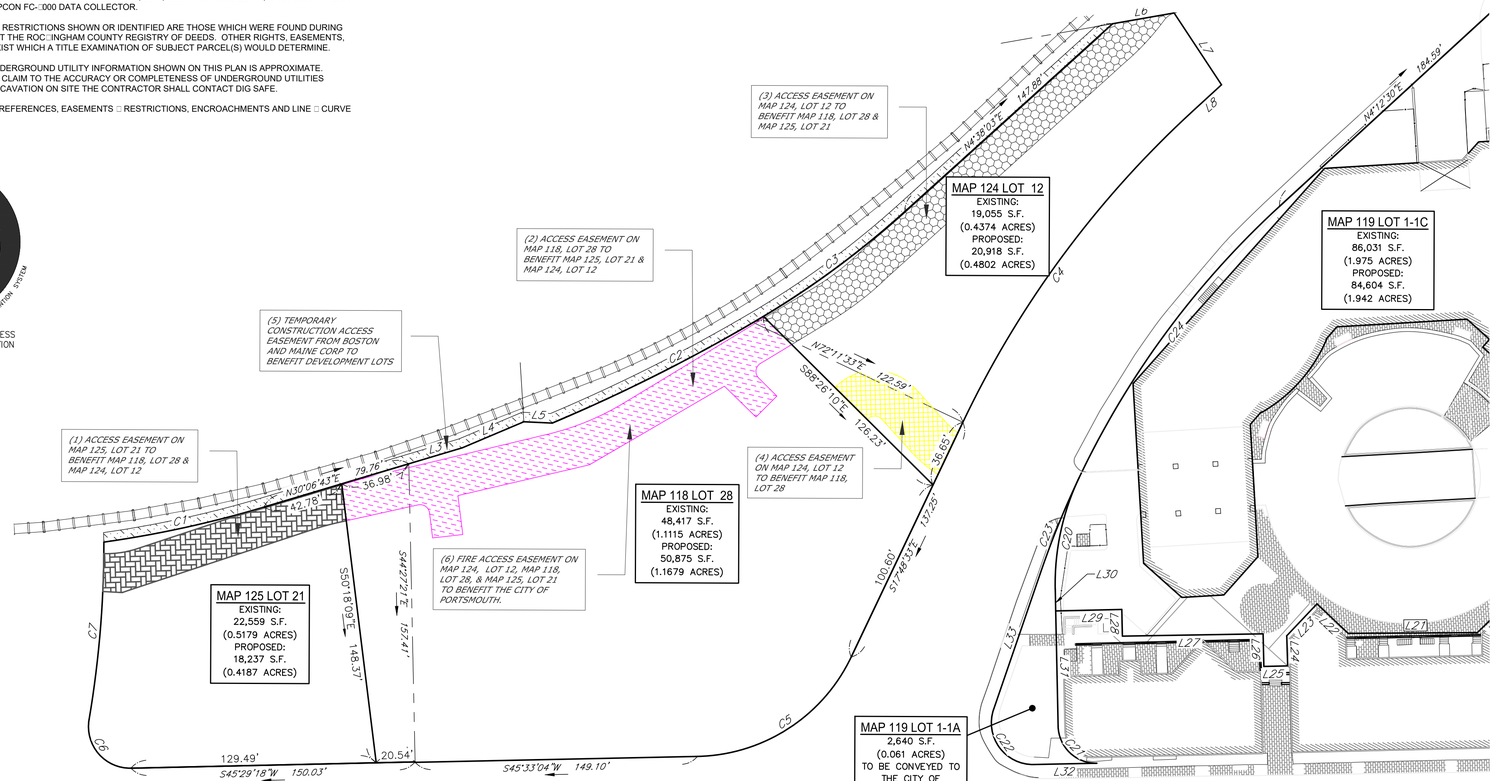
(5) TEMPORARY CONSTRUCTION ACCESS EASEMENT FROM BOSTON AND MAINE CORP TO BENEFIT DEVELOPMENT LOTS.

(6) FIRE ACCESS EASEMENT ON MAP 124, LOT 12, MAP 118, LOT 28, & MAP 125, LOT 21 TO BENEFIT THE CITY OF PORTSMOUTH.

REFERENCE PLAN #XXX



LOCATION PLAN



Graphic Scale in Feet: 40 20 0 40

REV.	DATE	DESCRIPTION	DR	CK

ACCESS EASEMENT PLAN
NORTH END MIXED USE
DEER ST., RUSSELL ST., MARKET ST.
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
PORT HARBOR LAND LLC, PH LOTS LLC & PORT OWNER HARBOR LLC

MAP	□	LOT
□□□		□□
□□□		□□□□□□A□□
□□□		□□
□□□		□□

SCALE: 1" = 40' (22x34)
1" = 80' (11x17)
NOVEMBER 23, 2022

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE	45354-12	DR		FB		S-3
		CK	BMK	CADFILE	SEE MARGIN	

Nov 23, 2022 - 10:2:am
F:\MSC Projects\4 :3:4 - Mar□et Street - Portsmouth\4 :3:4-12 Port Harbor Land, LLC - 2 :0 Mar□et St\Carlson Survey\Dwgs\4 :3:4-12 Lot Line Revision Easement Plans-R1.dwg

NOTES:

1. THE PARCELS ARE LOCATED IN THE CHARACTER DISTRICT □(CD□) □ HISTORICAL DISTRICT (HD).
2. THE PARCELS SHOWN ON THE TOWN OF PORTSMOUTH ASSESSOR'S MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28, MAP 119 LOT 1-1A □ MAP 119 LOT 1-1C.
3. THE PARCELS ARE LOCATED IN □ONE X, AS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) ROC□INGHAM COUNTY, NEW HAMPSHIRE, PANEL 2□9 OF 681, MAP NUMBER 3301□C02□9F WITH AN EFFECTIVE DATE OF JANUARY 29, 2021.
4. SEE SECTION

□. OWNER OF RECORD:
MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28
PORT HARBOR LAND LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□14

MAP 119 LOT 1-1A
PH LOTS LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6130 PG□897

MAP 119 LOT 1-1C
PORT OWNER HARBOR LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□3□3

6. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
7. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED EASEMENTS FOR MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28, MAP 119 LOT 1-1A □ MAP 119 LOT 1-1C .
8. FIELD SURVEY WAS COMPLETED BY TCE ON AUGUST □□ 17, 2019, WITH A TOPCON DS103, A TOPCON HYPER-V GPS RECEIVER, AND A TOPCON FC-□000 DATA COLLECTOR.
9. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROC□INGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
10. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MA□ES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE.
11. SEE SHEET S-2 FOR PLAN REFERENCES, EASEMENTS □ RESTRICTIONS, ENCROACHMENTS AND LINE □ CURVE TABLES.

DIG SAFE
MA ME NH RI VT
CALL 811 TOLL FREE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

PURSUANT TO NEW HAMPSHIRE REVISED STATUTES ANNOTATED 676:18, II, III AND IV AND 672:14:

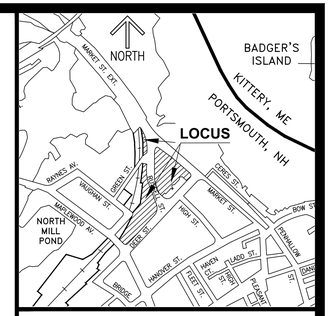
I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN MONTH, YEAR. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS.
I FURTHER CERTIFY THAT THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

DRAFT

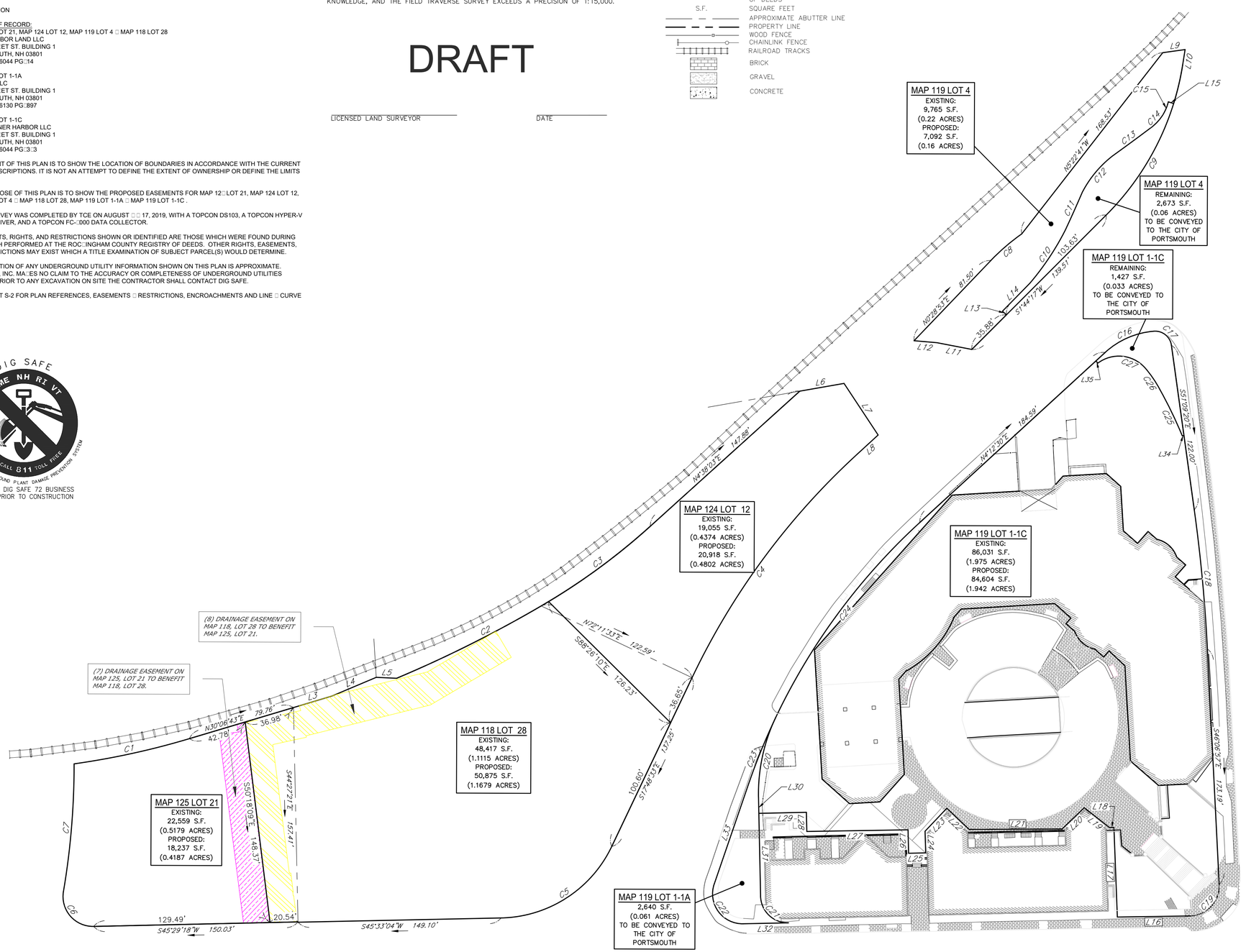
LICENSED LAND SURVEYOR _____ DATE _____

LEGEND

BK./PG.	BOOK / PAGE
Δ	DELTA
R	RADIUS
L	LENGTH OF CURVE
N/F	NOW OR FORMERLY
ELEV.	ELEVATION
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
S.F.	SQUARE FEET
	APPROXIMATE ABUTTER LINE
	PROPERTY LINE
	WOOD FENCE
	CHAINLINK FENCE
	RAILROAD TRACKS
	BRICK
	GRAVEL
	CONCRETE



LOCATION PLAN



DRAINAGE EASEMENTS:

(7) DRAINAGE EASEMENT ON MAP 125, LOT 21 TO BENEFIT MAP 118, LOT 28.

(8) DRAINAGE EASEMENT ON MAP 118, LOT 28 TO BENEFIT MAP 125, LOT 21.

40 20 0 40
Graphic Scale in Feet

REV.	DATE	DESCRIPTION	DR	CK

ACCESS EASEMENT PLAN
NORTH END MIXED USE
DEER ST., RUSSELL ST., MARKET ST.
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
PORT HARBOR LAND LLC, PH LOTS LLC & PORT OWNER HARBOR LLC

MAP	LOT
□□□	□□
□□□	□□C,□□□A,□□
□□□	□□
□□□	□□

SCALE: 1" = 40' (22x34)
1" = 80' (11x17)
NOVEMBER 23, 2022

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE	DR		FB		
45354-12	CK	BMK	CADFILE	SEE MARGIN	S-4

Nov 23, 2022 - 10:24am
F:\MSC Projects\4 :3 :4 - Mar□et Street - Portsmouth\4 :3 :4-12 Port Harbor Land, LLC - 2□0 Mar□et St\Carlson Survey\Dwgs\4 :3 :4-12 Lot Line Revision Easement Plans-R1.dwg

NOTES:

1. THE PARCELS ARE LOCATED IN THE CHARACTER DISTRICT □(CD□) □ HISTORICAL DISTRICT (HD).
2. THE PARCELS SHOWN ON THE TOWN OF PORTSMOUTH ASSESSOR'S MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28, MAP 119 LOT 1-1A □ MAP 119 LOT 1-1C.
3. THE PARCELS ARE LOCATED IN □ONE X, AS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) ROC□INGHAM COUNTY, NEW HAMPSHIRE, PANEL 2□9 OF 681, MAP NUMBER 3301□C02□9F WITH AN EFFECTIVE DATE OF JANUARY 29, 2021.
4. SEE SECTION
5. OWNER OF RECORD:
   MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28
   PORT HARBOR LAND LLC
   1000 MAR□ET ST. BUILDING 1
   PORTSMOUTH, NH 03801
   RCRD B□□6044 PG□14

   MAP 119 LOT 1-1A
   PH LOTS LLC
   1000 MAR□ET ST. BUILDING 1
   PORTSMOUTH, NH 03801
   RCRD B□□6130 PG□897

   MAP 119 LOT 1-1C
   PORT OWNER HARBOR LLC
   1000 MAR□ET ST. BUILDING 1
   PORTSMOUTH, NH 03801
   RCRD B□□6044 PG□3□3
6. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
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DRAFT

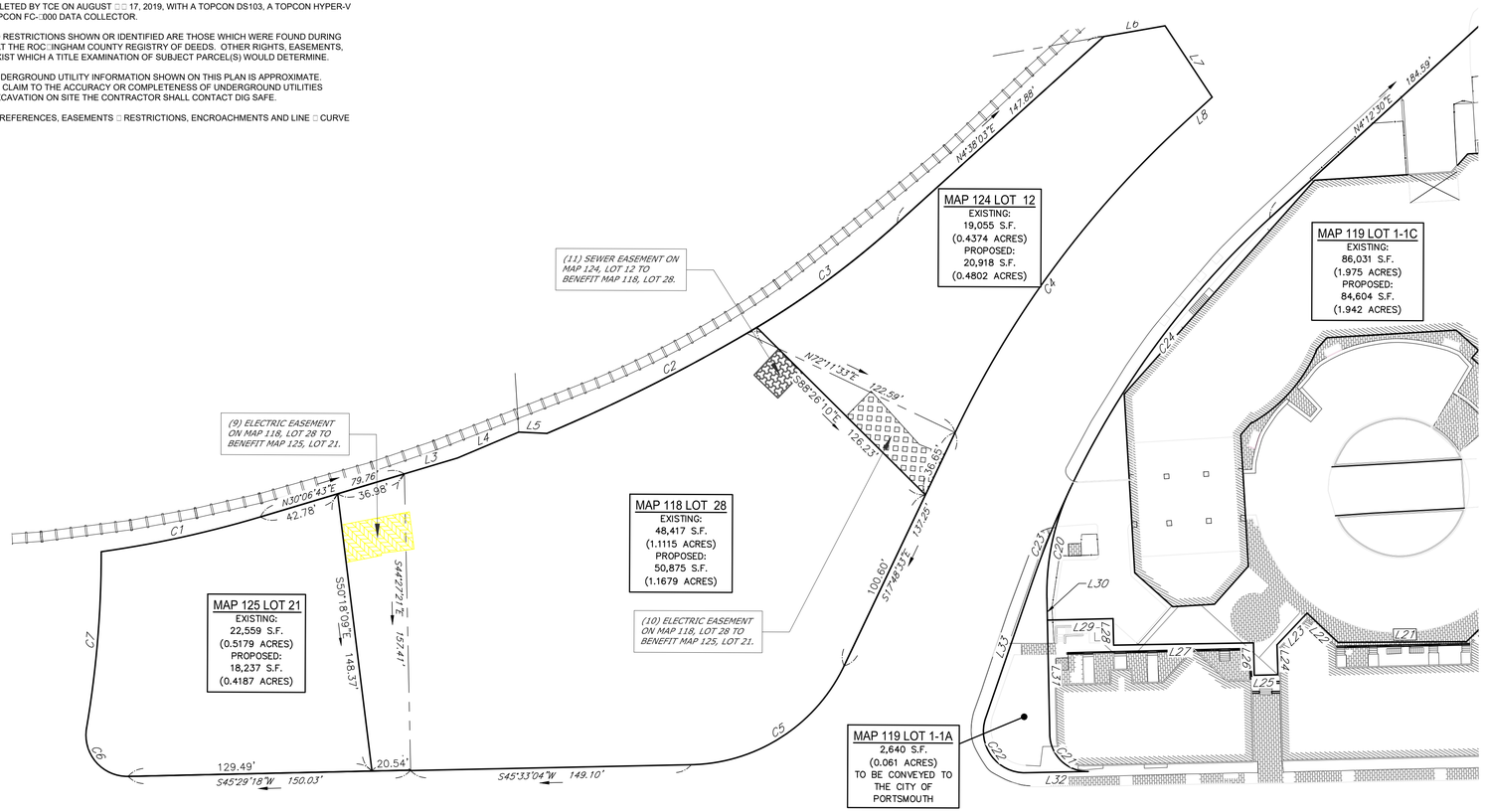
LICENSED LAND SURVEYOR _____ DATE _____

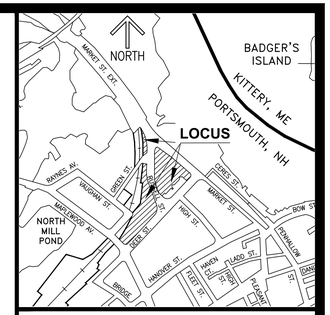
UTILITIES EASEMENTS:

(9) ELECTRIC EASEMENT ON MAP 118, LOT 28 TO BENEFIT MAP 125, LOT 21.

(10) ELECTRIC EASEMENT ON MAP 118, LOT 28 TO BENEFIT MAP 124, LOT 12.

(11) SEWER EASEMENT ON MAP 124, LOT 12 TO BENEFIT MAP 118, LOT 28.





LOCATION PLAN

DIG SAFE
MA ME NH RI VT
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CALL 811 TOLL FREE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

UTILITIES EASEMENT PLAN
NORTH END MIXED USE
DEER ST., RUSSELL ST., MARKET ST.
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
PORT HARBOR LAND LLC, PH LOTS LLC & PORT OWNER HARBOR LLC

MAP □	LOT
□□□	□□
□□□	□□□,□□□,□□
□□□	□□
□□□	□□

SCALE: 1" = 40' (22x34)
1" = 80' (11x17)

NOVEMBER 23, 2022

40 20 0 40
Graphic Scale in Feet

REV.	DATE	DESCRIPTION	DR	CK

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
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Portsmouth, NH 03801
Phone (603) 431-2222
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FILE	DR		FB		
45354-12	CK	BMK	CADFILE	SEE MARGIN	S-5

Nov 23, 2022 - 10:23am
F:\MSC Projects\4:3:4 - Mar:ket Street - Portsmouth\4:3:4-12 Port Harbor Land, LLC - 2:0 Mar:ket St\Carlson Survey\Dwgs\4:3:4-12 Lot Line Revision Easement Plans-R1.dwg

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MAP 12□LOT 21, MAP 124 LOT 12, MAP 119 LOT 4 □ MAP 118 LOT 28
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1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□14

MAP 119 LOT 1-1A
PH LOTS LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6130 PG□897

MAP 119 LOT 1-1C
PORT OWNER HARBOR LLC
1000 MAR□ET ST. BUILDING 1
PORTSMOUTH, NH 03801
RCRD B□□6044 PG□3□3

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DRAFT

LICENSED LAND SURVEYOR _____ DATE _____

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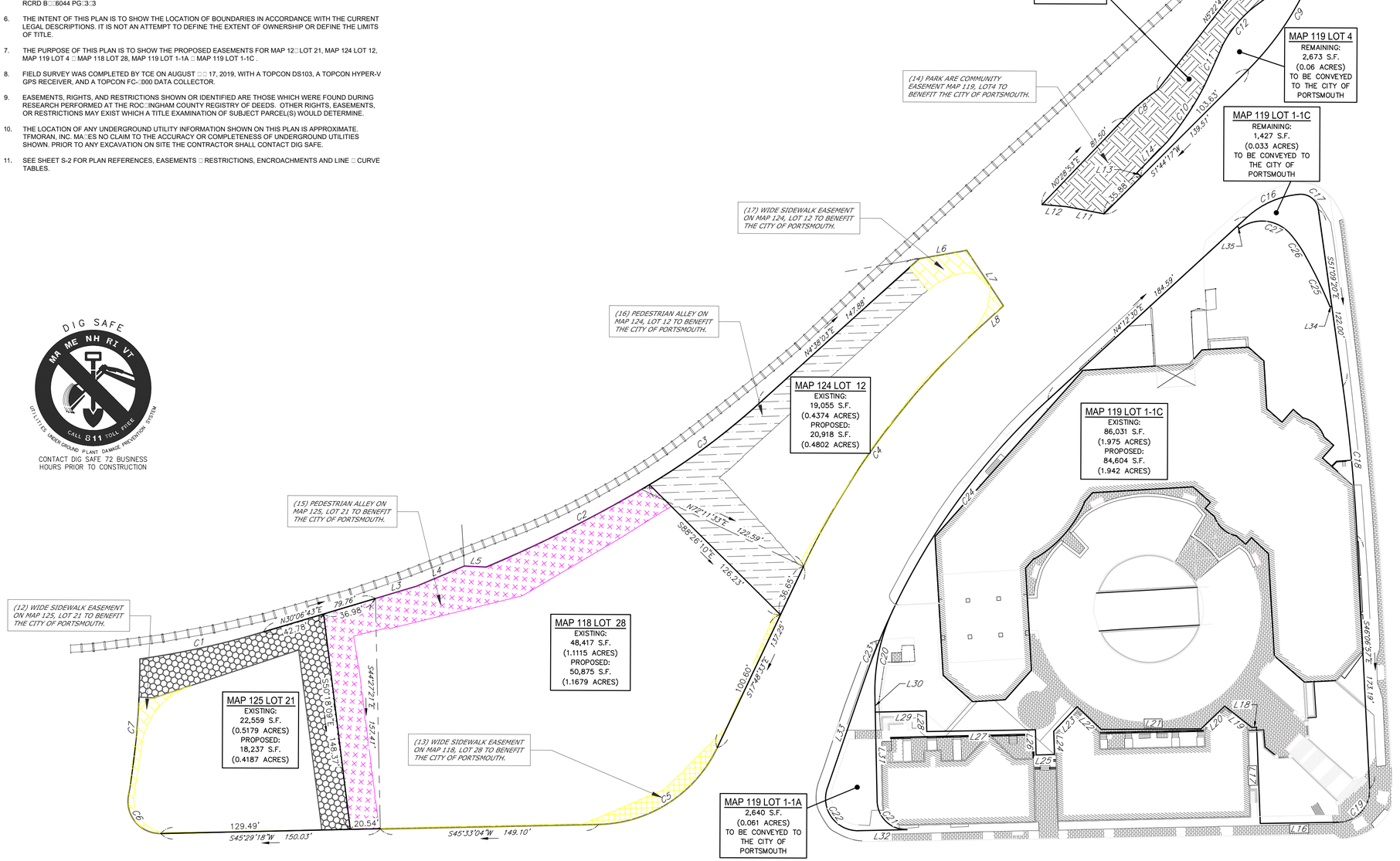

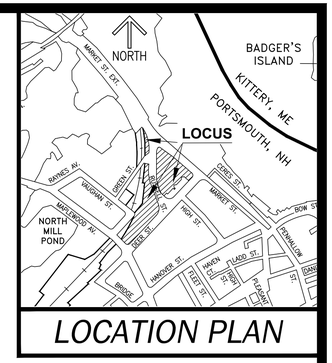

LOCATION PLAN

COMMUNITY SPACE EASEMENTS:

(12) WIDE SIDEWALK EASEMENT ON MAP 125, LOT 21 TO BENEFIT THE CITY OF PORTSMOUTH.
(13) WIDE SIDEWALK EASEMENT ON MAP 118, LOT 28 TO BENEFIT THE CITY OF PORTSMOUTH.
(14) WIDE SIDEWALK EASEMENT ON MAP 124, LOT 12 TO BENEFIT THE CITY OF PORTSMOUTH.
(15) PEDESTRIAN ALLEY ON MAP 125, LOT 21 TO BENEFIT THE CITY OF PORTSMOUTH.
(16) PEDESTRIAN ALLEY ON MAP 118, LOT 28 TO BENEFIT THE CITY OF PORTSMOUTH.
(17) PEDESTRIAN ALLEY ON MAP 124, LOT 12 TO BENEFIT THE CITY OF PORTSMOUTH.
(18) PARK ARE COMMUNITY EASEMENT MAP 119, LOT 4 TO BENEFIT THE CITY OF PORTSMOUTH.

40 20 0 40
Graphic Scale in Feet

REV.	DATE	DESCRIPTION	DR	CK

COMMUNITY SPACE EASEMENT PLAN
NORTH END MIXED USE
DEER ST., RUSSELL ST., MARKET ST.
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
PORT HARBOR LAND LLC, PH LOTS LLC & PORT OWNER HARBOR LLC

MAP	□	LOT
□□□		□□
□□□		□□□□A□□
□□□		□□
□□□		□□

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FILE	45354-12	DR		FB		S-6
		CK	BMK	CADFILE	SEE MARGIN	

Nov 23, 2022 - 10:23am
F:\MSC Projects\4 :3:4 - Mar..et Street - Portsmouth\4 :3:4-12 Port Harbor Land, LLC - 2 :0 Mar..et St\Carlson Survey\Dwgs\4 :3:4-12 Lot Line Revision Easement Plans-R1.dwg

GENERAL NOTES:

1. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
2. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH.
3. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND GRADES.
4. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES AND COMPLY WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR AND COMPLY WITH ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES & SPECIFICATIONS.
9. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
10. CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.
11. CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
12. SEE EXISTING CONDITIONS PLAN FOR BENCH MARK INFORMATION.
13. APPLICANT SHALL SUBMIT, AS PART OF THE FINAL POST APPROVAL PROCEDURES, RELEVANT PTAP INFORMATION USING THE MOST RECENT ONLINE DATA PORTAL CURRENTLY MANAGED BY THE UNH STORMWATER CENTER. THE PLANNING DEPARTMENT SHALL BE NOTIFIED AND COPIED OF THE PTAP DATA SUBMITTAL.
14. A VIDEO INSPECTION OF THE EXISTING SEWER AND DRAIN LINES ON MAPLEWOOD AVENUE, DEER STREET AND RUSSELL STREET SHALL BE COMPLETED AND PROVIDED TO PORTSMOUTH DPW BOTH BEFORE AND AFTER CONSTRUCTION.
15. CONTRACTOR SHALL INSTALL INTERSECTION VIDEO DETECTION FOR MAPLEWOOD AVENUE AND DEER STREET INTERSECTION. COORDINATE WITH THE CITY OF PORTSMOUTH TRAFFIC DEPARTMENT.

DEMOLITION NOTES:

1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
2. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
3. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
4. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
7. ALL UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY AND CITY OF PORTSMOUTH STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
9. PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
10. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, UTILITIES AND PAVEMENT WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT, CURBS, LIGHTING, MANHOLES, CATCH BASINS, UNDER GROUND PIPING, POLES, STAIRS, SIGNS, FENCES, RAMPS, WALLS, BOLLARDS, BUILDING SLABS, FOUNDATION, TREES AND LANDSCAPING.
11. REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
12. CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.
13. PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS/CURB INLETS WITHIN CONSTRUCTION LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INLET PROTECTION BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE "HIGH FLOW SILT SACK" BY ACF ENVIRONMENTAL OR EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN EVENT OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED OR SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE BARRIER.
14. THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.
15. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
16. THE CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING GRANITE CURB FOR REUSE.

SITE NOTES:

1. PAVEMENT MARKINGS SHALL BE INSTALLED AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, FIRE LANES, CROSS WALKS, ARROWS, LEGENDS AND CENTERLINES. ALL MARKINGS EXCEPT CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING WHITE PAVEMENT MARKINGS. ALL THERMOPLASTIC PAVEMENT MARKINGS INCLUDING LEGENDS, ARROWS, CROSSWALKS AND STOP BARS SHALL MEET THE REQUIREMENTS OF AASHTO M249. ALL PAINTED PAVEMENT MARKINGS INCLUDING CENTERLINES, LANE LINES AND PAINTED MEDIANS SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F".
2. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST EDITIONS.
3. SEE DETAILS FOR PAVEMENT MARKINGS, ADA SYMBOLS, SIGNS AND SIGN POSTS.
4. CENTERLINES SHALL BE FOUR (4) INCH WIDE YELLOW LINES.
5. PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE LINES.
6. STOP BARS SHALL BE EIGHTEEN (18) INCHES WIDE, WHITE THERMOPLASTIC AND CONFORM TO CURRENT MUTCD STANDARDS.
7. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
8. CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS HAVE BEEN STRIPPED. COORDINATE WITH BUILDING CONTRACTOR.
9. ALL LIGHT POLE BASES NOT PROTECTED BY A RAISED CURB SHALL BE PAINTED YELLOW.
10. COORDINATE ALL WORK ADJACENT TO BUILDING WITH BUILDING CONTRACTOR.
11. SEE ARCHITECTURAL/BUILDING DRAWINGS FOR ALL CONCRETE PADS & SIDEWALKS ADJACENT TO BUILDING.
12. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
13. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
14. THE APPLICANT SHALL HAVE A SITE SURVEY CONDUCTED BY A RADIO COMMUNICATIONS CARRIER APPROVED BY THE CITY'S COMMUNICATIONS DIVISION. THE RADIO COMMUNICATIONS CARRIER MUST BE FAMILIAR AND CONVERSANT WITH THE POLICE AND RADIO CONFIGURATION. IF THE SITE SURVEY INDICATES IT IS NECESSARY TO INSTALL A SIGNAL REPEATER EITHER ON OR NEAR THE PROPOSED PROJECT, THOSE COSTS SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE OWNER SHALL COORDINATE WITH THE SUPERVISOR OF RADIO COMMUNICATIONS FOR THE CITY.
15. ALL TREES PLANTED ARE TO BE INSTALLED UNDER THE SUPERVISION OF THE CITY OF PORTSMOUTH DPW USING STANDARD INSTALLATION METHODS.
16. A TEMPORARY SUPPORT OF EXCAVATION (SOE) PLAN SHALL BE PREPARED BY THE APPLICANT'S CONTRACTOR TO CONFIRM ANY TEMPORARY ENCUMBRANCES OF THE CITY'S RIGHT-OF-WAY. IF LICENSES ARE REQUIRED FOR THE SOE, THE APPLICANT WILL BE REQUIRED TO OBTAIN THESE FROM THE CITY PRIOR TO CONSTRUCTION.
17. THE PROPERTY MANAGER WILL BE RESPONSIBLE FOR TIMELY SNOW REMOVAL FROM ALL PRIVATE SIDEWALKS, DRIVEWAYS, AND PARKING AREAS. ALL SNOW REMOVAL WILL BE HAULED OFF-SITE AND LEGALLY DISPOSED OF.
18. THE STREET LIGHTING TYPE TO BE HISTORIC STYLE FIXTURES AND POLE TO MATCH EXISTING LIGHTING ON SOUTH SIDE OF DEER STREET.
19. CONSTRUCTION SEQUENCING OF NORTH COMMUNITY PARK SHALL BE COORDINATED WITH MARKET STREET AND RUSSELL STREET INTERSECTION CONSTRUCTION. NORTH COMMUNITY PARK SHALL NOT BE CONSTRUCTED UNTIL THE INTERSECTION ROUNDABOUT HAS BEEN CONSTRUCTED.
20. THE PROPOSED LOADING ZONE SHALL BE REVIEWED BY THE PARKING & TRAFFIC SAFETY COMMITTEE FOR RECOMMENDATION TO CITY COUNCIL.
21. THE APPLICANTS CONTRACTOR SHALL PREPARE A CONSTRUCTION MANAGEMENT AND MITIGATION PLAN (CMMP) FOR REVIEW AND APPROVAL BY THE CITY'S LEGAL AND PLANNING DEPARTMENTS.
22. THE FINAL STYLE AND COLOR OF THE RRFB POLES SHALL BE APPROVED BY PORTSMOUTH DPW PRIOR TO CONSTRUCTION.
23. THE FINAL LOCATION OF THE RRFB SHALL BE DETERMINED IN FIELD.

GRADING AND DRAINAGE NOTES:

1. COMPACTION REQUIREMENTS:

BELOW PAVED OR CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREAS	90%

* ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.

2. ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL) UNLESS OTHERWISE SPECIFIED.
3. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
4. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO THE BUILDING.
5. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.
6. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NHDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
7. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.

EROSION CONTROL NOTES:

1. SEE SHEET C-501 FOR GENERAL EROSION CONTROL NOTES AND DETAILS.

UTILITY NOTES:

1. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
   - NATURAL GAS - UNITIL
   - WATER/SEWER - CITY OF PORTSMOUTH
   - ELECTRIC - EVERSOURCE
   - COMMUNICATIONS - COMCAST/CONSOLIDATED COMMUNICATIONS/FIRST LIGHT
2. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE.
3. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT.
4. ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
5. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
6. CONNECTION TO EXISTING WATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH STANDARDS.
7. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE DEPARTMENT OF PUBLIC WORKS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
8. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
9. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES.
10. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
11. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
12. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
13. A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
14. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN
15. HYDRANTS, GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF PORTSMOUTH.
16. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH.
17. ALL SEWER PIPE WITH LESS THAN 6' OF COVER IN PAVED AREAS OR LESS THAT 4' OF COVER IN UNPAVED AREAS SHALL BE INSULATED.
18. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
19. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER.
20. CONTRACTOR SHALL CONSTRUCT ALL UTILITIES AND DRAINS TO WITHIN 10' OF THE FOUNDATION WALLS AND CONNECT THESE TO SERVICE STUBS FROM THE BUILDING.
21. FINAL LOCATIONS OF ALL UTILITY LINES SHALL BE APPROVED BY THE CITY OF PORTSMOUTH DPW PRIOR TO CONSTRUCTION.
22. CONTRACTOR SHALL PERFORM TEST PITS TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION AND SHALL NOTIFY ENGINEER IF LOCATIONS DIFFER FROM PLAN.
23. CONTRACTOR SHALL COMPLETE PRE AND POST BLAST SURVEY AND MONITORING OF THE EXISTING SEWER LINE ALONG DEER STREET.

LANDSCAPE NOTES:

1. SEE SHEET L-100 FOR LANDSCAPE NOTES.

EXISTING CONDITIONS PLAN NOTES:

1. EXISTING CONDITIONS ARE BASED ON A FIELD SURVEY PERFORMED BY MSC CIVIL ENGINEERS & LAND SURVEYORS, INC., SEE REFERENCE PLAN #1.

REFERENCE PLANS:

1. "EXISTING FEATURES PLAN MAP 118 LOT 28, MAP 119 LOT 4, MAP 124 LOT 12 AND MAP 125 LOT 21" PREPARED BY MSC CIVIL ENGINEERS AND LAND SURVYORS, INC., DATED JANUARY 16, 2015.

ABBREVIATIONS

TBR	TO BE REMOVED
BLDG	BUILDING
TYP	TYPICAL
COORD	COORDINATE
30'R	CURB RADIUS
SSWL	SINGLE SOLID WHITE LINE
DSYL	DOUBLE SOLID YELLOW LINE
VGC	VERTICAL GRANITE CURB
SGC	SLOPED GRANITE CURB
FGC	FLUSH GRANITE CURB
TC	TOP OF CURB
BC	BOTTOM OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
TS	TOP OF STEP
BS	BOTTOM OF STEP
HDPE	HIGH-DENSITY POLYETHYLENE
FF	FINISH FLOOR
VIF	VERIFY IN FIELD

LEGEND

PROPOSED SAWCUT
LIMIT OF WORK
PROPOSED SILT SOCK
APPROXIMATE LIMIT OF PAVEMENT TO BE REMOVED
PROPOSED CONSTRUCTION EXIT
PROPERTY LINE
PROPOSED PROPERTY LINE
PROPOSED EDGE OF PAVEMENT
PROPOSED CURB
PROPOSED BUILDING
PROPOSED PAVEMENT SECTION
PROPOSED MILL AND OVERLAY SECTION
PROPOSED CONCRETE SIDEWALK
PROPOSED BRICK SIDEWALK
PROPOSED BOLLARD
PROPOSED MAJOR CONTOUR LINE (20)
PROPOSED MINOR CONTOUR LINE (22)
PROPOSED DRAIN LINE (TYP)
INLET PROTECTION SILT SACK
PROPOSED CATCHBASIN
PROPOSED DRAIN MANHOLE
PROPOSED YARD DRAIN
EXISTING STORM DRAIN (D)
EXISTING SANITARY SEWER (S)
EXISTING SANITARY SEWER TO BE REMOVED (S)
EXISTING UNDERGROUND TELECOMMUNICATION (T)
EXISTING WATER (W)
EXISTING GAS (G)
EXISTING UNDERGROUND ELECTRIC (E)
EXISTING OVERHEAD UTILITY (OHW)
PROPOSED SANITARY SEWER (PS)
PROPOSED WATER (PW)
PROPOSED GAS (G)
PROPOSED UNDERGROUND ELECTRIC
PROPOSED UNDERGROUND TELECOMMUNICATION (COM)
EXISTING CATCHBASIN
EXISTING DRAIN MANHOLE
EXISTING SEWER MANHOLE
EXISTING WATER VALVE
EXISTING HYDRANT
EXISTING ELECTRIC MANHOLE
EXISTING TELEPHONE MANHOLE
PROPOSED SEWER MANHOLE
PROPOSED WATER VALVE
PROPOSED HYDRANT
PROPOSED GAS VALVE
PROPOSED ELECTRIC MANHOLE
PROPOSED LIGHT POLE BASE
PROPOSED SPOT GRADES (14.50)
EXISTING SPOT GRADES (14.50)

Tighe&Bond

STATE OF NEW HAMPSHIRE – PATRICK CRIMMINS – No. 12378 – LICENSED PROFESSIONAL ENGINEER
05/23/2023

STATE OF NEW HAMPSHIRE – NEIL A. HANSEN – No. 15227 – LICENSED PROFESSIONAL ENGINEER
5/23/23

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
I	5/22/2023	AoT Resubmission
H	12/5/2022	AoT Submission
G	11/23/2022	PB Submission
F	11/18/2022	Traffic Peer Review
E	10/20/2022	TAC Resubmission
D	9/28/2022	Intersection Realignment
C	9/22/2022	TAC Resubmission
B	8/25/2022	TAC Resubmission
A	7/21/2022	TAC Resubmission

PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DSGN.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

GENERAL NOTES AND LEGEND

SCALE: AS SHOWN

G-100

Last Saved: 5/19/2023
Printed: May 24, 2023 - 9:37am By: CKrzcuik
Tighe & Bond: J:\T\T5037 Two International Group\002 Russell Street Development\Drawings. Figures\AutoCAD\T5037-002-C-DSGN.dwg

EXISTING DRAINAGE SCHEDULE

ECB1
RIM=15.36
INV. OUT=11.88 (ED1)

ECB2
RIM=15.31
INV. OUT= 12.11 (ED2)

ECB3
RIM=13.39
INV. OUT=8.69 (ED4)

ECB4
RIM=13.91
INV. OUT=9.59 (ED5)

ECB5
RIM=13.73
INV. OUT=10.42 (ED7)

ECB6
RIM=14.06
INV. OUT=9.42 (ED10)

ECB7
RIM=14.48
INV. OUT=10.26 (ED9)

ECB8
RIM=16.49
INV. OUT=12.74 (ED12)

ECB9
RIM=15.78
INV. OUT=13.15 (ED13)

ECB10
RIM=22.49
INV. OUT=19.39 (ED15)

ECB11
RIM=22.51
INV. OUT=19.46 (ED16)

ECB12
RIM=15.69
INV. OUT=12.39 (ED21)

ECB13
RIM=15.76
INV. OUT=12.52 (ED20)

ECB14
RIM=10.43
INV. OUT=6.97 (ED26)

ECB15
RIM=10.00
INV. OUT=6.74 (ED24)

ECB16
RIM=9.82
INV. OUT=6.80 (ED23)

ECB17
RIM=23.85
INV. OUT=20.21 (ED27)

EDMH1
RIM=15.59
INV. IN=11.17 (ED1)
INV. IN=11.33 (ED2)
INV. OUT=8.65 (ED3)

EDMH2
RIM=14.00
INV. IN=6.67 (ED3)
INV. IN=8.79 (ED5)
INV. IN=8.80 (ED4)
INV. OUT=6.64 (ED6)

EDMH3
RIM=13.91
INV. IN=6.41 (ED6)
INV. IN=10.43 (ED7)
INV. OUT=6.35 (ED8)

EDMH4
RIM=14.12
INV. IN=6.26 (ED8)
INV. IN=9.25 (ED10)
INV. IN=10.12 (ED9)
INV. OUT=6.24 (ED11)

EDMH5
RIM=16.60
INV. IN=12.98 (ED12)
INV. IN=12.50 (ED13)
INV. IN=5.74 (ED11)
INV. 12" OUT (SW)=5.64

EDMH6
RIM=25.21
INV. IN(SE)=19.93
INV. OUT=19.97 (ED14)

EDMH7
RIM=22.94
INV. IN=19.49 (ED16)
INV. IN=19.19 (ED15)
INV. IN=18.78 (ED17)
INV. IN=18.13 (ED14)
INV. OUT=18.18 (ED18)

EDMH8
RIM=15.58
INV. IN=12.26 (ED20)
INV. IN=12.28 (ED21)
INV. IN=9.80 (ED19)
INV. OUT=9.97 (ED22)

EDMH9
RIM=11.06
INV. IN=6.50 (ED26)
INV. IN=5.14 (ED25)
INV. IN=5.54
INV. OUT=3.70

EDMH10
RIM=16.89
INV. IN=10.43 (ED18)
INV. OUT=10.51 (ED19)

EDMH11
RIM=10.14
INV. IN=6.96 (ED23)
INV. IN(N)=6.74 (ED24)
INV. IN=5.94 (ED22)
INV. OUT=5.94(ED25)

EDMH12
RIM=11.55
INV. IN=3.81 (ED27)
INV. OUT=3.71(ED28)

EDMH13
RIM=11.45
INV. IN=2.37 (ED29)
INV. OUT=2.27 (ED30)

EXISTING DRAINAGE PIPE SCHEDULE			
LINES	LENGTH	TYPE	SLOPE
ED1	9'	12" CONC	S=0.078
ED2	38'	12" CONC	S=0.0205
ED3	62'	12" CONC	S=0.0319
ED4	10'	12" CONC	S=-0.011
ED5	39'	12" CONC	S=0.0205
ED6	45'	12" CONC	S=0.004
ED7	9'	12" CONC	S=-0.001
ED8	32'	12" CONC	S=0.0228
ED9	18'	12" PVC	S=0.0077
ED10	27'	12" CONC	S=0.0062
ED11	116'	12" CONC	S=0.0043
ED12	44'	12" CONC	S=-0.005
ED13	30'	12" CMP	S=0.0216
ED14	202'	12" CONC	S=0.0091
ED15	33'	12" CONC	S=0.006
ED16	32'	12" CONC	S=0.0009
ED17	186'	6" PVC	UNKNOWN
ED18	210'	12" CONC	S=0.0369
ED19	38'	12" CONC	S=0.0186
ED20	47'	12" CONC	S=0.0055
ED21	7'	12" CONC	S=0.0157
ED22	223'	12" CONC	S=0.0180
ED23	59'	12" CONC	S=0.0145
ED24	6'	12" CONC	S=0.0000
ED25	52'	12" CONC	S=0.0153
ED26	34'	12" CONC	S=0.0138
ED27	241'	12" CONC	S=0.0076
ED28	161'	48" CONC	S=0.0047
ED29	104'	48" CONC	S=0.0047
ED30	252'	48" CONC	S=0.0047

EXISTING SEWER SCHEDULE

ESMH1
RIM=16.09
INV. IN(NW)=1.18
INV. OUT=1.10 (ES1)

ESMH2
RIM=15.13
FROZEN

ESMH3
RIM=14.18
INV. IN=0.56 (ES1)
INV. OUT=0.34 (ES2)

ESMH4
RIM=14.16
INV. IN=0.19 (ES2)
INV. OUT=0.09 (ES3)

ESMH5
RIM=16.43
INV.(SW)=-1.00
INV. IN=-0.22 (ES3)
INV. OUT=-1.17 (ES4)

ESMH6
RIM=22.60
INV. IN(SE)=15.24
INV. IN(SW)=15.20
INV. OUT=15.20 (ES10)

ESMH7
RIM=14.05
INV. IN(E)=8.00
INV. IN=7.87 (ES10)
INV. OUT=7.92 (ES11)

ESMH8
RIM=10.96
INV. IN=3.82 (ES11)
INV. OUT=3.89 (ES12)

ESMH9
RIM=20.88
CHANNEL=-1.07
INV. IN 8"=13.60

ESMH10
RIM=24.86
INV.(E)=17.22
INV.(SE)=17.16
INV. OUT=17.03 (ES9)

ESMH11
RIM=24.39
INV. IN=16.27 (ES9)
INV. OUT=16.08 (ES8)

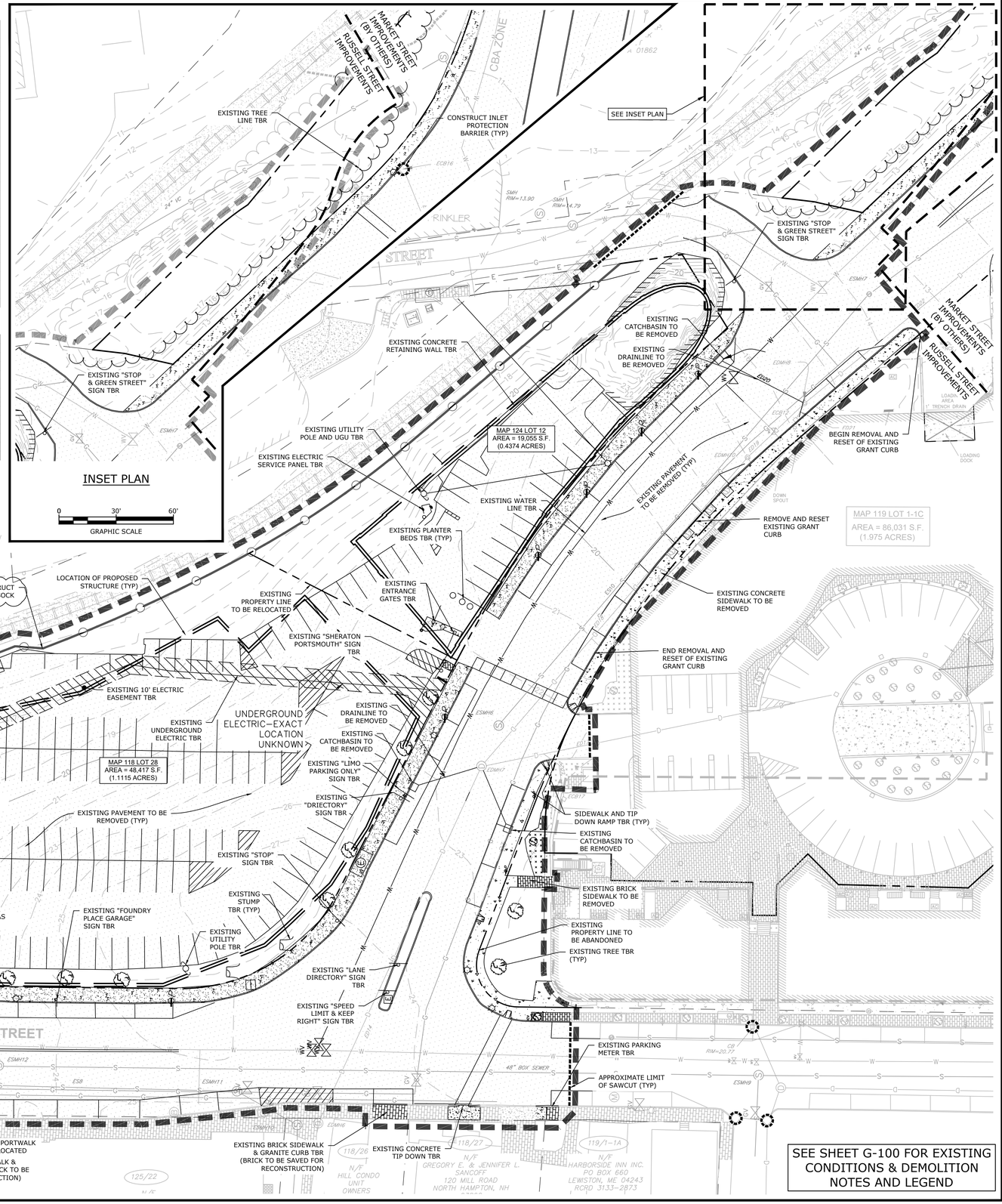
ESMH12
RIM=23.25
INV. IN=-0.89 (ES6)
INV. OUT(NE)=-0.97

ESMH13
RIM=19.42
INV.4"C(NW)=13.69
INV.6"(N)=7.87
INV.6"VC(NE)=12.25
INV.6"VC(E)=12.40
INV.IN=-1.20 (ES5)
INV.OUT=-1.44 (ES6)

ESMH14
RIM=18.09
INV. IN=-0.80 (ES7)
INV. IN=-1.33 (ES4)
INV. OUT=UNKNOWN (ES5)

ESMH15
RIM=18.23
INV.8"VC=9.83 (ES8)
INV.6"VC(SE)=10.06
INV.6"VC(NW)=10.02
INV. OUT 8"VC=9.84 (ES7)

EXISTING SEWER PIPE SCHEDULE			
LINES	LENGTH	TYPE	SLOPE
ES1	153'	24" RCP	S=0.0035
ES2	66'	24" RCP	S=0.0022
ES3	116'	24" RC	S=0.0026
ES4	82'	48" BOX	S=0.0019
ES5	47'	48" BOX	UNKNOWN
ES6	109'	48" BOX	S=-0.005
ES7	7'	8" VC	S=0.0228
ES8	276'	8" VC	S=0.0226
ES9	33'	8" VC	S=0.0230
ES10	294'	8" AC	S=0.0249
ES11	170'	8" AC	S=0.0241
ES12	47'	8" AC	UNKNOWN



Tighe&Bond

STATE OF NEW HAMPSHIRE – PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER – 05/23/2023

STATE OF NEW HAMPSHIRE – NEIL A. HANSEN No. 15227 LICENSED PROFESSIONAL ENGINEER – 5/23/23

0 30' 60'
GRAPHIC SCALE

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
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PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DSGN.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN

SCALE: AS SHOWN

C-101

Last Saved: 5/19/2023
Printed: May 24, 2023 @ 8:38am By: CKrzsiak
Tighe & Bond J:\T\T5037 Two International Group\002 Russell Street Development\Drawings, Figures\AutoCAD\T5037-002-C-DSGN.dwg

SITE DATA:

LOCATION: TAX MAP 118 LOT 28, TAX MAP 119 LOT 1-1A, TAX MAP 119 LOT 1-1C, TAX MAP 119 LOT 4, TAX MAP 124 LOT 12, TAX MAP 125 LOT 21

OWNER: PORT HARBOR LAND LLC, 1000 MARKET ST, BUILDING ONE, PORTSMOUTH, NH 03801

ZONING DISTRICT: CHARACTER DISTRICT 5 (CD5), DOWNTOWN OVERLAY DISTRICT, NORTH END INCENTIVE OVERLAY DISTRICT, HISTORIC DISTRICT

PROPOSED USE: MIXED USE, RESIDENTIAL, RETAIL

DEVELOPMENT STANDARDS

BUILDING PLACEMENT (PRINCIPAL BUILDING):	REQUIRED	PROPOSED MAP 125 LOT 21	MAP 118 LOT 28	MAP 124 LOT 12
MAXIMUM PRINCIPAL FRONT YARD:	5 FT	6 FT(1)	9 FT(1)	10 FT(1)
SIDE YARD:	NR			
MINIMUM REAR YARD:	5 FT	20 FT	22 FT	20 FT
FRONT LOT LINE LENGTH:	NR			
MINIMUM FRONT LOT LINE BUILDOUT:	80%	81%	100%	84%

BUILDING AND LOT OCCUPATION:	REQUIRED	PROPOSED MAP 125 LOT 21	MAP 118 LOT 28	MAP 124 LOT 12
MAXIMUM BUILDING BLOCK LENGTH:	225 FT	107 FT	104 FT	225 FT
MAXIMUM FACADE MODULATION LENGTH:	100 FT	<100 FT	<100 FT	<100 FT
MAXIMUM ENTRANCE SPACING:	50 FT	<50 FT	<50 FT	<50 FT
MAXIMUM BUILDING COVERAGE:	95%	65%	74%	58%
MAXIMUM BUILDING FOOTPRINT:	40,000 SF(2)	11,950 SF	39,255 SF	11,210 SF
MINIMUM LOT AREA:	NR			
MINIMUM OPEN SPACE:	5%	33%	26%	42%
MAXIMUM GROUND FLOOR GFA PER USE:	15,000 SF	7,975 SF	10,419 SF	8,067 SF

BUILDING FORM (PRINCIPAL BUILDING):	REQUIRED	PROPOSED MAP 125 LOT 21	MAP 118 LOT 28	MAP 124 LOT 12
BUILDING HEIGHT:	2-4 STORIES 60 FT	4 STORIES 57 FT	5 STORIES(3) 60 FT	5 STORIES(3) 60 FT
MAXIMUM FINISHED FLOOR SURFACE OF GROUND FLOOR ABOVE SIDEWALK GRADE:	36 IN	0 IN	0 IN	0 IN
MINIMUM GROUND STORY HEIGHT:	12 FT	16.5 FT	14.0 FT	13.0 FT
MINIMUM SECOND STORY HEIGHT:	10 FT	13 FT	10.5 FT	10.5 FT
FACADE GLAZING: SHOP FRONT	70% MIN.	75%	73%	71%
ALLOWED ROOF TYPES: FLAT, GABLE, HIP, GAMBREL, MANSARD		FLAT	FLAT	FLAT

OFF-STREET PARKING REQUIREMENTS

PARKING SPACES REQUIRED:		
COMMERCIAL: NO REQUIREMENT IN DOD		0 SPACES
DWELLING UNITS: OVER 750 SF, 1.3 SPACES PER UNIT	80 UNITS	104 SPACES
VISITOR SPACES: 1 SPACE PER 5 DWELLING UNITS	80 UNITS	16 SPACES
EXISTING HOTEL: 0.75 SPACES PER GUEST ROOM	181 ROOMS	136 SPACES
EXISTING DEEDED CONDO SPACES: SHERATON CONDOS		24 SPACES
DEER STREET CONDOS		58 SPACES
DOWNTOWN OVERLAY DISTRICT		-4 SPACES
TOTAL MINIMUM PARKING SPACES REQUIRED =		334 SPACES

TOTAL PARKING SPACES PROVIDED	
EXISTING SHERATON HOTEL PARKING	154 SPACES
ON SITE SURFACE PARKING	186 SPACES
TOTAL SPACES PROVIDED	340 SPACES

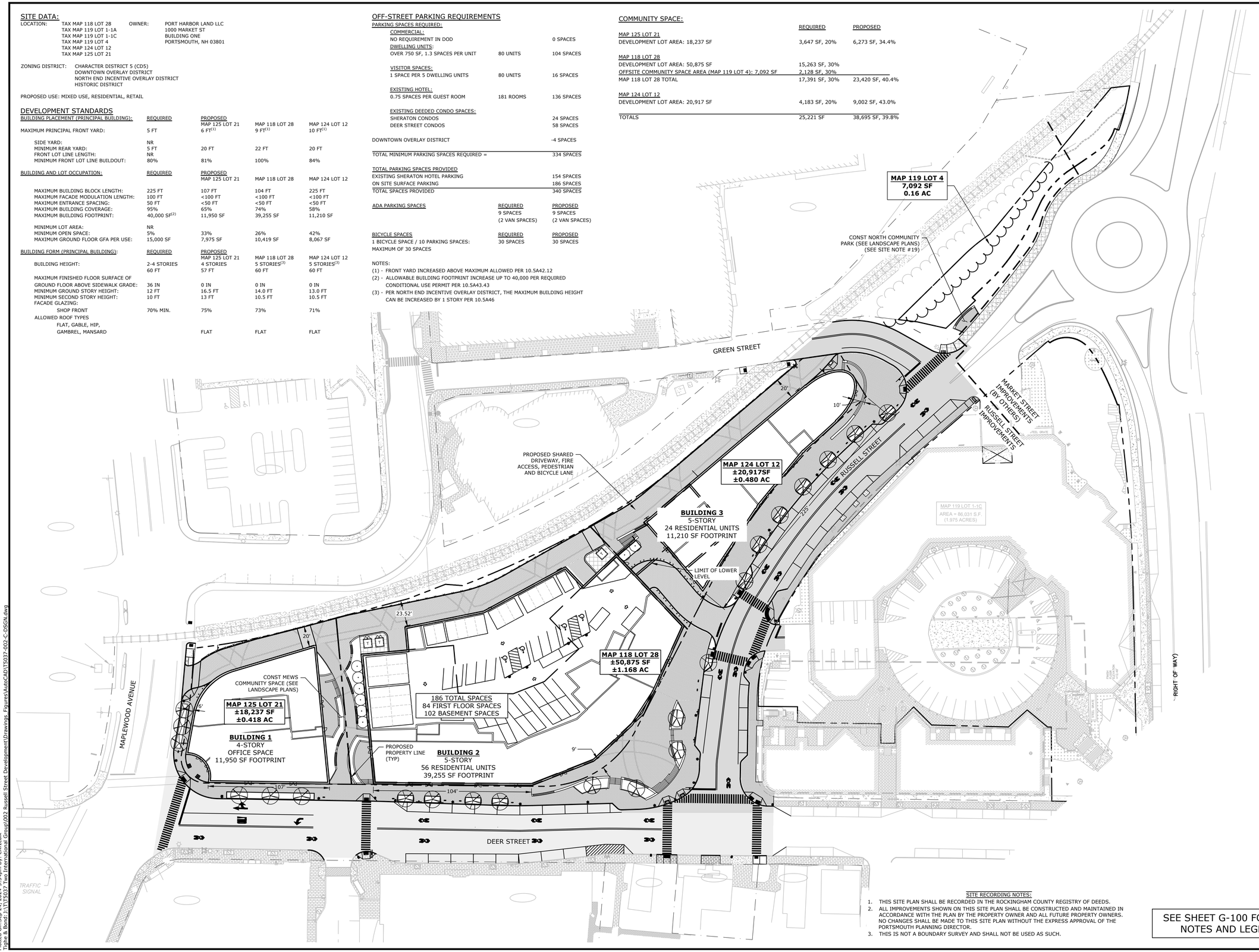
ADA PARKING SPACES	REQUIRED	PROPOSED
	9 SPACES (2 VAN SPACES)	9 SPACES (2 VAN SPACES)

BICYCLE SPACES	REQUIRED	PROPOSED
1 BICYCLE SPACE / 10 PARKING SPACES: MAXIMUM OF 30 SPACES	30 SPACES	30 SPACES

NOTES:
(1) - FRONT YARD INCREASED ABOVE MAXIMUM ALLOWED PER 10.5A42.12
(2) - ALLOWABLE BUILDING FOOTPRINT INCREASE UP TO 40,000 PER REQUIRED CONDITIONAL USE PERMIT PER 10.5A43.43
(3) - PER NORTH END INCENTIVE OVERLAY DISTRICT, THE MAXIMUM BUILDING HEIGHT CAN BE INCREASED BY 1 STORY PER 10.5A46

COMMUNITY SPACE:

	REQUIRED	PROPOSED
MAP 125 LOT 21		
DEVELOPMENT LOT AREA: 18,237 SF	3,647 SF, 20%	6,273 SF, 34.4%
MAP 118 LOT 28		
DEVELOPMENT LOT AREA: 50,875 SF	15,263 SF, 30%	
OFFSITE COMMUNITY SPACE AREA (MAP 119 LOT 4): 7,092 SF	2,128 SF, 30%	
MAP 118 LOT 28 TOTAL	17,391 SF, 30%	23,420 SF, 40.4%
MAP 124 LOT 12		
DEVELOPMENT LOT AREA: 20,917 SF	4,183 SF, 20%	9,002 SF, 43.0%
TOTALS	25,221 SF	38,695 SF, 39.8%



SITE RECORDING NOTES:
1. THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
2. ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
3. THIS IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED AS SUCH.

SEE SHEET G-100 FOR SITE NOTES AND LEGEND

0 40' 80'
GRAPHIC SCALE

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
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PROJECT NO:	T5037-002
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FILE:	T5037-002-C-DSGN.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

OVERALL SITE PLAN

SCALE: AS SHOWN

C-102

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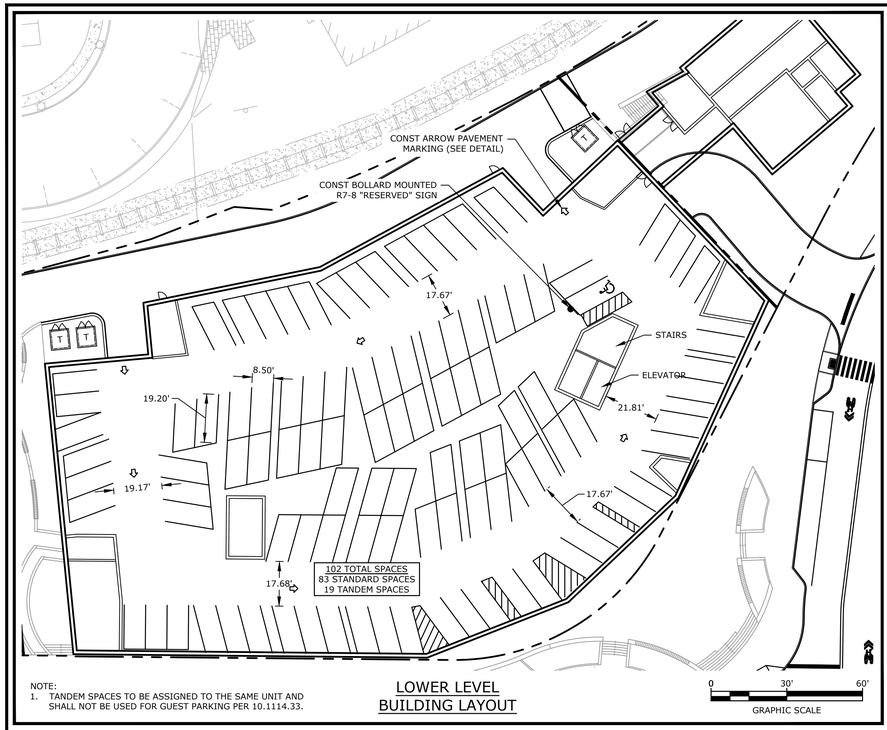
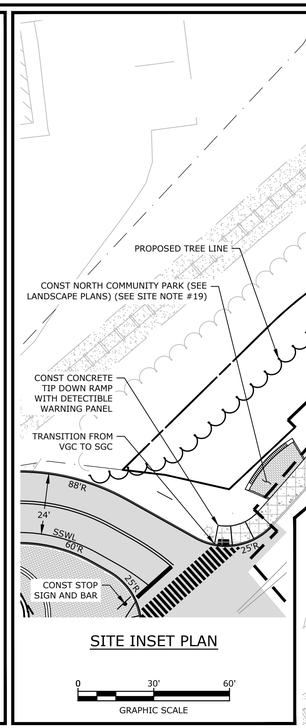


NOTE:
1. TANDEM SPACES TO BE ASSIGNED TO THE SAME UNIT AND SHALL NOT BE USED FOR GUEST PARKING PER 10.1114.33.

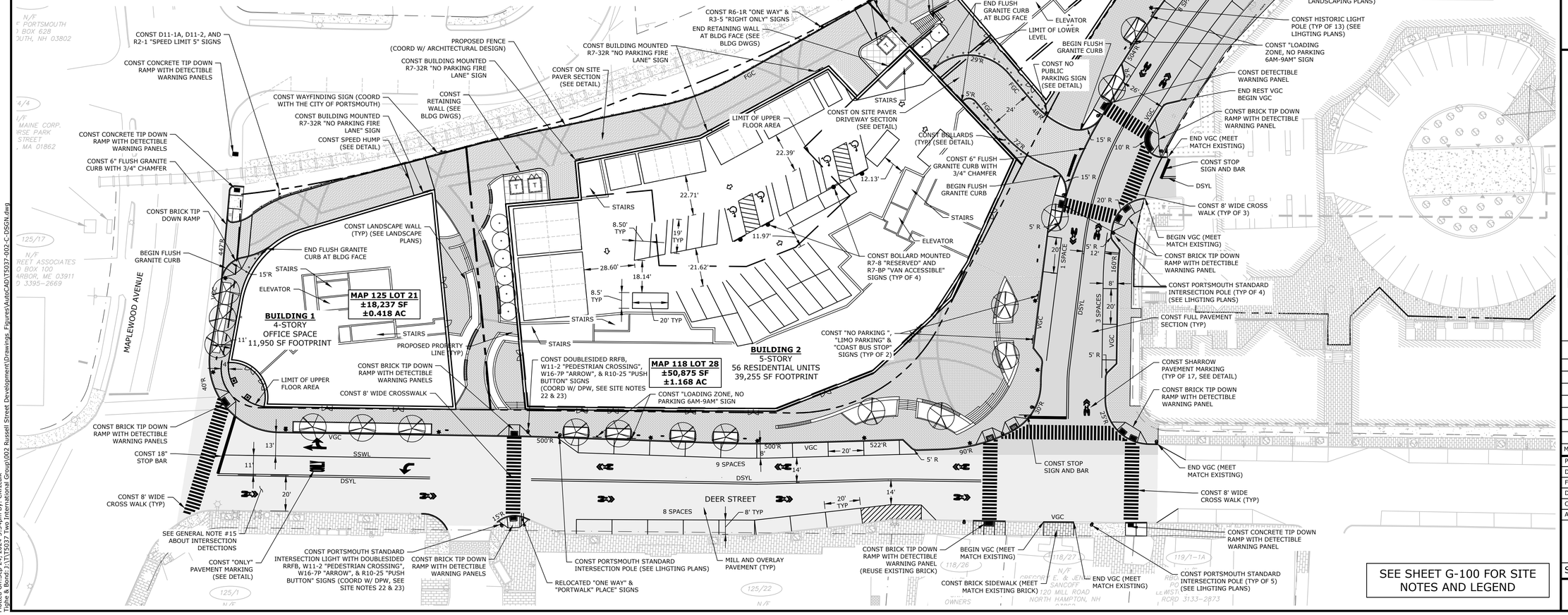
LOWER LEVEL
BUILDING LAYOUT

0 30' 60'
GRAPHIC SCALE



SITE INSET PLAN

0 30' 60'
GRAPHIC SCALE



SEE SHEET G-100 FOR SITE NOTES AND LEGEND

0 30' 60'
GRAPHIC SCALE

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SITE PLAN

SCALE: AS SHOWN

C-102.1

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EXISTING DRAINAGE SCHEDULE

ECB1
RIM=15.36
INV. OUT=11.88 (ED1)

ECB2
RIM=15.31
INV. OUT= 12.11 (ED2)

ECB3
RIM=13.39
INV. OUT=8.69 (ED4)

ECB4
RIM=13.91
INV. OUT=9.59 (ED5)

ECB5
RIM=13.73
INV. OUT=10.42 (ED7)

ECB6
RIM=14.06
INV. OUT=9.42 (ED10)

ECB7
RIM=14.48
INV. OUT=10.26 (ED9)

ECB8
RIM=16.49
INV. OUT=12.74 (ED12)

ECB9
RIM=15.78
INV. OUT=13.15 (ED13)

ECB10
RIM=22.49
INV. OUT=19.39 (ED15)

ECB11
RIM=22.51
INV. OUT=19.46 (ED16)

ECB12
RIM=15.69
INV. OUT=12.39 (ED21)

ECB13
RIM=15.76
INV. OUT=12.52 (ED20)

ECB14
RIM=10.43
INV. OUT=6.97 (ED26)

ECB15
RIM=10.00
INV. OUT=6.74 (ED24)

ECB16
RIM=9.82
INV. OUT=6.80 (ED23)

ECB17
RIM=23.85
INV. OUT=20.21 (ED27)

EDMH1
RIM=15.59
INV. IN=11.17 (ED1)
INV. IN=11.33 (ED2)
INV. OUT=8.65 (ED3)

EDMH2
RIM=14.00
INV. IN=6.67 (ED3)
INV. IN=8.79 (ED5)
INV. IN=8.80 (ED4)
INV. OUT=6.64 (ED6)

EDMH3
RIM=13.91
INV. IN=6.41 (ED6)
INV. IN=10.43 (ED7)
INV. OUT=6.35 (ED8)

EDMH4
RIM=14.12
INV. IN=6.26 (ED8)
INV. IN=9.25 (ED10)
INV. IN=10.12 (ED9)
INV. OUT=6.24 (ED11)

EDMH5
RIM=16.60
INV. IN=12.98 (ED12)
INV. IN=12.50 (ED13)
INV. IN=5.74 (ED11)
INV. 12" OUT (SW)=5.64

EDMH6
RIM=25.21
INV. IN(SE)=19.93
INV. OUT=19.97 (ED14)

EDMH7
RIM=22.94
INV. IN=19.49 (ED16)
INV. IN=19.19 (ED15)
INV. IN=18.78 (ED17)
INV. IN=18.13 (ED14)
INV. OUT=18.18 (ED18)

EDMH8
RIM=15.58
INV. IN=12.26 (ED20)
INV. IN=12.28 (ED21)
INV. IN=9.80 (ED19)
INV. OUT=9.97 (ED22)

EDMH9
RIM=11.06
INV. IN=6.50 (ED26)
INV. IN=5.14 (ED25)
INV. IN=5.54
INV. OUT=3.70

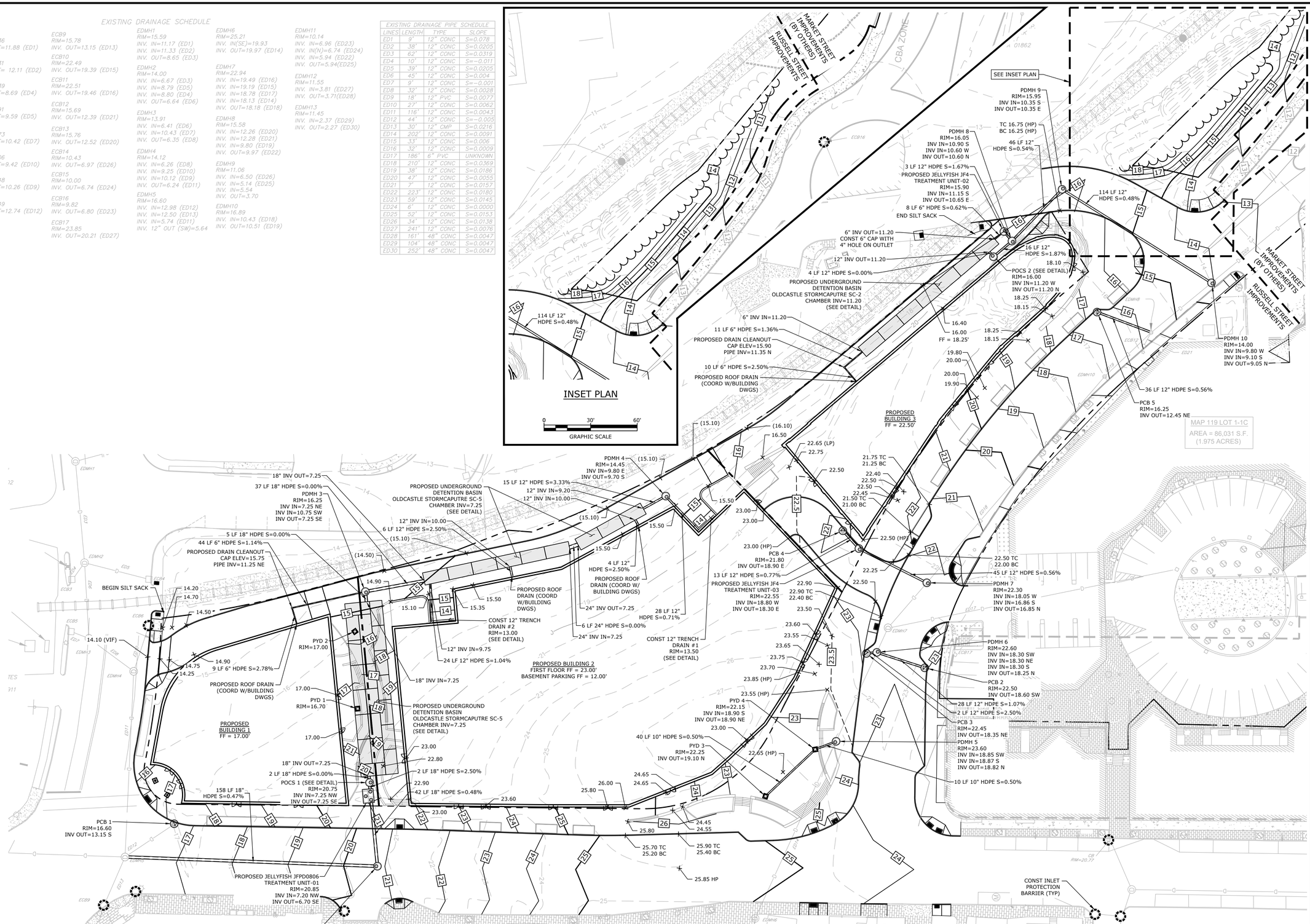
EDMH10
RIM=16.89
INV. IN=10.43 (ED18)
INV. OUT=10.51 (ED19)

EDMH11
RIM=10.14
INV. IN=6.96 (ED23)
INV. IN(N)=6.74 (ED24)
INV. IN=5.94 (ED22)
INV. OUT=5.94(ED25)

EDMH12
RIM=11.55
INV. IN=3.81 (ED27)
INV. OUT=3.71(ED28)

EDMH13
RIM=11.45
INV. IN=2.37 (ED29)
INV. OUT=2.27 (ED30)

EXISTING DRAINAGE PIPE SCHEDULE			
LINES	LENGTH	TYPE	SLOPE
ED1	9'	12" CONC	S=0.078
ED2	38'	12" CONC	S=0.0205
ED3	62'	12" CONC	S=0.0319
ED4	10'	12" CONC	S=-0.011
ED5	39'	12" CONC	S=0.0205
ED6	45'	12" CONC	S=0.004
ED7	9'	12" CONC	S=-0.001
ED8	32'	12" CONC	S=0.0028
ED9	18'	12" PVC	S=0.0077
ED10	27'	12" CONC	S=0.0062
ED11	116'	12" CONC	S=0.0043
ED12	44'	12" CONC	S=-0.005
ED13	30'	12" CMP	S=0.0216
ED14	202'	12" CONC	S=0.0091
ED15	33'	12" CONC	S=0.006
ED16	32'	12" CONC	S=0.0009
ED17	186'	6" PVC	UNKNOWN
ED18	210'	12" CONC	S=0.0369
ED19	38'	12" CONC	S=0.0186
ED20	47'	12" CONC	S=0.0055
ED21	7'	12" CONC	S=0.0157
ED22	223'	12" CONC	S=0.0180
ED23	59'	12" CONC	S=0.0145
ED24	6'	12" CONC	S=0.0000
ED25	52'	12" CONC	S=0.0153
ED26	34'	12" CONC	S=0.0138
ED27	241'	12" CONC	S=0.0076
ED28	161'	48" CONC	S=0.0047
ED29	104'	48" CONC	S=0.0047
ED30	252'	48" CONC	S=0.0047



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CHECKED:	NAH
APPROVED:	PMC

GRADING & DRAINAGE PLAN

SCALE: AS SHOWN

C-103

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EXISTING SEWER SCHEDULE

ESMH1
RIM=16.09
INV. IN(NW)=1.18
INV. OUT=1.10 (ES1)

ESMH2
RIM=15.13
FROZEN

ESMH3
RIM=14.18
INV. IN=0.56 (ES1)
INV. OUT=0.34 (ES2)

ESMH4
RIM=14.16
INV. IN=0.19 (ES2)
INV. OUT=0.09 (ES3)

ESMH5
RIM=16.43
INV.(SW)=-1.00
INV. IN=-0.22 (ES3)
INV. OUT=-1.17 (ES4)

ESMH6
RIM=22.60
INV. IN(SE)=15.24
INV. IN(SW)=15.20
INV. OUT=15.20 (ES10)

ESMH7
RIM=14.05
INV. IN(E)=8.00
INV. IN=7.87 (ES10)
INV. OUT=7.92 (ES11)

ESMH8
RIM=10.96
INV. IN=3.82 (ES11)
INV. OUT=3.89 (ES12)

ESMH9
RIM=20.88
CHANNEL=-1.07
INV. IN 8"=13.60

ESMH10
RIM=24.86
INV.(E)=17.22
INV.(SE)=17.16
INV. OUT=17.03 (ES9)

ESMH11
RIM=24.39
INV. IN=16.27 (ES9)
INV. OUT=16.08 (ES8)

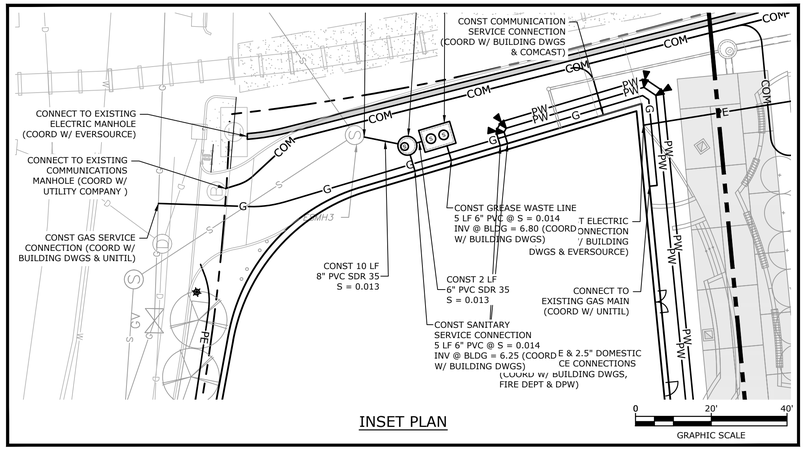
ESMH12
RIM=23.25
INV. IN=-0.89 (ES6)
INV. OUT(NE)=-0.97

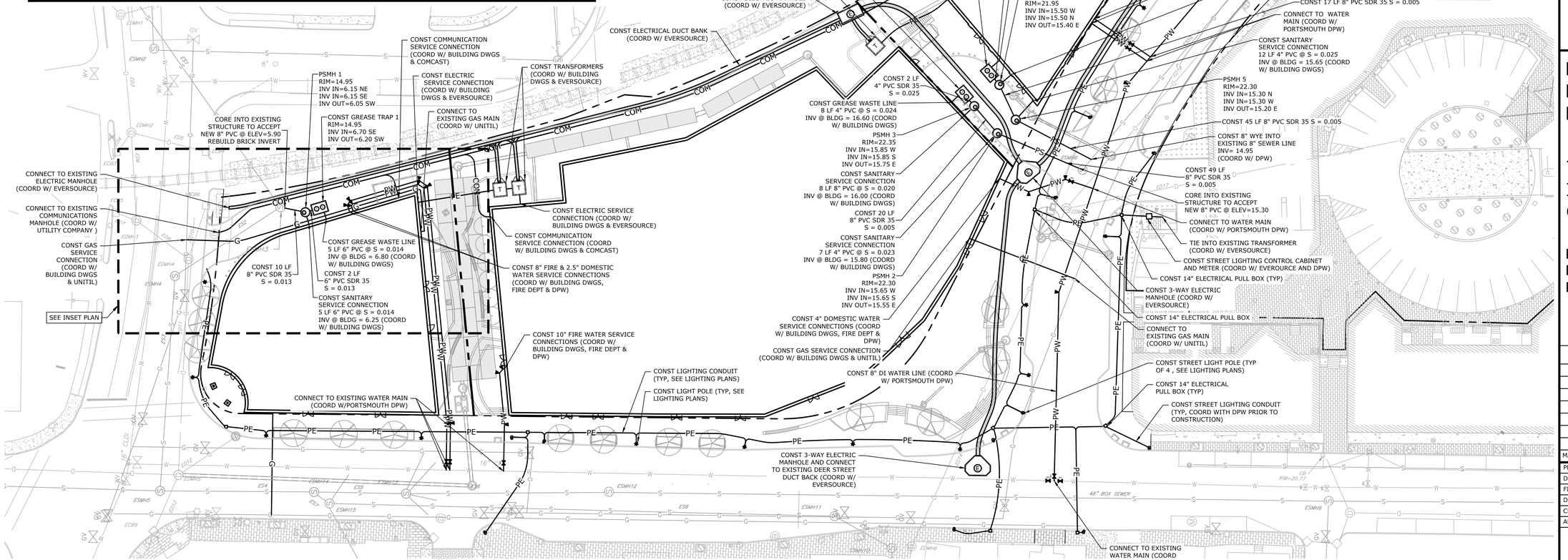
ESMH13
RIM=19.42
INV.4"CI(NW)=13.69
INV.6"(N)=7.87
INV.6"VC(NE)=12.25
INV.6"VC(E)=12.40
INV.IN=-1.20 (ES5)
INV.OUT=-1.44 (ES6)

ESMH14
RIM=18.09
INV. IN=-0.80 (ES7)
INV. IN=-1.33 (ES4)
INV. OUT=UNKNOWN (ES5)

ESMH15
RIM=18.23
INV.8"VC=9.83 (ES8)
INV.6"VC(SE)=10.06
INV.6"VC(NW)=10.02
INV. OUT 8"VC=9.84 (ES7)

EXISTING SEWER PIPE SCHEDULE			
LINES	LENGTH	TYPE	SLOPE
ES1	153'	24" RCP	S=0.0035
ES2	66'	24" RCP	S=0.0022
ES3	116'	24" RC	S=0.0026
ES4	82'	48" BOX	S=0.0019
ES5	47'	48" BOX	UNKNOWN
ES6	109'	48" BOX	S=-0.005
ES7	7'	8" VC	S=0.0228
ES8	276'	8" VC	S=0.0226
ES9	33'	8" VC	S=0.0230
ES10	294'	8" AC	S=0.0249
ES11	170'	8" AC	S=0.0241
ES12	47'	8" AC	UNKNOWN





SEE SHEET G-100 FOR UTILITIES NOTES AND LEGEND

Tighe&Bond

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APPROVED:	PMC

UTILITIES PLAN

SCALE: AS SHOWN

C-104

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GENERAL PROJECT INFORMATION

PROJECT APPLICANT: PORT HARBOR LAND, LLC
1000 MARKET STREET, BUILDING ONE
PORTSMOUTH, NH 03801
PROJECT NAME: PROPOSED MIXED USE DEVELOPMENT
PROJECT MAP / LOT: MAP 118 / LOT 28
MAP 119 / LOT 1-1A
MAP 119 / LOT 1-1C
MAP 119 / LOT 4
MAP 124 / LOT 12
MAP 125 / LOT 21
PROJECT ADDRESS: RUSSELL STREET & DEER STREET
PORTSMOUTH, NH 03801
PROJECT LATITUDE: 43°-04'-43" N
PROJECT LONGITUDE: 70°-45'-41" W

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF AN OFFICE BUILDING AND TWO MIXED USE RESIDENTIAL BUILDINGS WITH ASSOCIATED SITE IMPROVEMENTS.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 2.1 ACRES.

SOIL CHARACTERISTICS

BASED ON THE USCS WEB SOIL SURVEY THE SOILS ON SITE CONSIST OF URBAN LAND WHICH IS EXCESSIVELY DRAINED SOILS WITH A HYDROLOGIC SOIL GROUP RATING OF A.

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA A CLOSED DRAINAGE SYSTEM TO THE CITY OF PORTSMOUTH'S CLOSED DRAINAGE SYSTEM WHICH ULTIMATELY FLOWS TO NORTH MILL POND THEN TO THE PISCATAQUA RIVER OR DIRECTLY TO THE PISQUATAQUA RIVER.

CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

1. CUT AND CLEAR TREES.
2. CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
   - NEW CONSTRUCTION
   - CONTROL OF DUST
   - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
3. ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING RUNOFF TO THEM.
4. CLEAR AND DISPOSE OF DEBRIS.
5. CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
6. GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
8. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
9. SEDIMENT TRAPS AND/OR BASINS SHALL BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
10. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
11. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
12. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
13. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

1. THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.
2. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.
2. PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
3. CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALES, SILT FENCES, MULCH BERMS, SILT SACKS AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
4. SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.
5. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
6. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
7. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.
8. INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
9. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

STABILIZATION:

1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.;
   E. IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
2. WINTER STABILIZATION PRACTICES:
   A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
   B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
   C. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
3. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
   A. TEMPORARY SEEDING;
   B. MULCHING.
4. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
5. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
6. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

DUST CONTROL:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

STOCKPILES:

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

OFF SITE VEHICLE TRACKING:

1. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

VEGETATION:

1. TEMPORARY GRASS COVER:
   A. SEEDBED PREPARATION:
      a. APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE;
   B. SEEDING:
      a. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE;
      b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED;
      c. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING;
   C. MAINTENANCE:
      a. TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
2. VEGETATIVE PRACTICE:
   A. FOR PERMANENT MEASURES AND PLANTINGS:
      a. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5;
      b. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER;
      c. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH;
      d. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH;
      e. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE;
      f. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED;
      g. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED;
      h. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

SEED MIX	APPLICATION RATE
CREEPING RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
REDTOP	2 LBS/ACRE

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.

3. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL):
   A. FOLLOW PERMANENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

CONCRETE WASHOUT AREA:

1. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
   A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
   B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
   C. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
   D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

1. FIRE-FIGHTING ACTIVITIES;
2. FIRE HYDRANT FLUSHING;
3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
4. WATER USED TO CONTROL DUST;
5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
7. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
9. UNCONTAMINATED GROUND WATER OR SPRING WATER;
10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
11. UNCONTAMINATED EXCAVATION DEWATERING;
12. LANDSCAPE IRRIGATION.

WASTE DISPOSAL:

1. WASTE MATERIAL:
   A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
   B. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
   C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE:
   A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER;
   B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE:
   A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION:

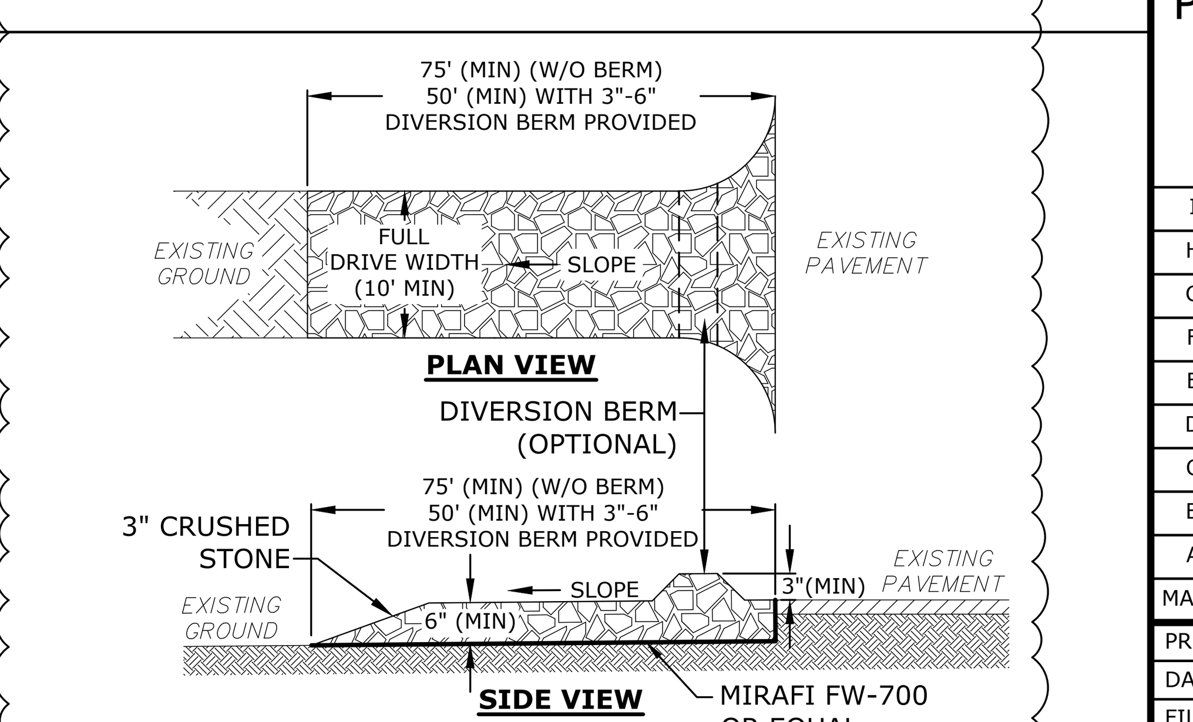
1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
2. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
   A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
      a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
      b. ALL REGULATED MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE, ON AN IMPERVIOUS SURFACE;
      c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
      d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS;
      e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
      f. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
      g. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
   B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
      a. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
      b. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
      c. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
   C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
      a. PETROLEUM PRODUCTS:
      i. ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE;
      ii. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
      iii. SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
      iv. INSPECT FUEL STORAGE AREAS WEEKLY;
      v. WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS;
      vi. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
      vii. SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.
      viii. THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
         (1) EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
         (2) PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
         (3) HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;
         (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES;
         (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
      ix. FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT.
      HTTPS://WWW.DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF
      b. FERTILIZERS:
      i. FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
      ii. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER;
      iii. STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
      c. PAINTS:
      i. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE;
      ii. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
      iii. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
      a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES;
      b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE;
      c. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
      d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
      e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
      f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
   E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
      a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY;
      b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
      c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED;
      d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
      e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
      f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES

1. THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.
2. THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT:
   A. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER;
   B. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR;
   C. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES;
   D. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

BLASTING NOTES:

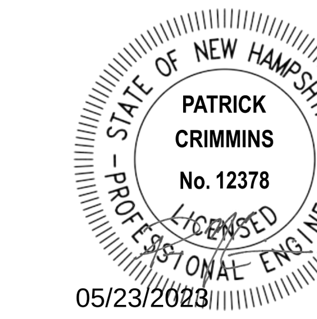
1. CONTRACTOR SHALL CONTACT THE NHDES PRIOR TO COMMENCING ANY BLASTING ACTIVITIES
2. FOR ANY PROJECT FOR WHICH BLASTING OF BEDROCK IS ANTICIPATED, THE APPLICANT SHALL SUBMIT:
   A. A BLASTING PLAN THAT IDENTIFIES:
      a. WHERE THE BLASTING ACTIVITIES ARE ANTICIPATED TO OCCUR;
      b. THE ESTIMATED QUANTITY OF BLAST ROCK IN CUBIC YARDS; AND
      c. SITE-SPECIFIC BLASTING BEST MANAGEMENT PRACTICES.
3. IF MORE THAN 5000 CUBIC YARDS OF BLAST ROCK WILL BE GENERATED AND THERE ARE ONE OR MORE PUBLIC DRINKING WATER WELLS WITHIN 2000 FEET OF THE BLASTING ACTIVITIES, A PLAN TO MONITOR GROUNDWATER TO DETECT ANY CONTAMINATION IN SUFFICIENT TIME TO PROTECT THE WATER SUPPLY WELLS SHALL BE PROVIDED TO THE NHDES. THE GROUNDWATER MONITORING PLAN SHALL INCLUDE:
   A. MONITORING FOR NITRATE AND NITRITE EITHER IN THE DRINKING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA:
      a. THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY THE NHDES.
   B. THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
      a. LOADING PRACTICES - THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
   - DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWATER CONDITIONS;
   - EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL;
   - SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL;
   - LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED;
   - LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT;
   - EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.
      b. EXPLOSIVE SELECTION - THE FOLLOWING BMPS SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED:
   - EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION;
   - EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER
   - PREVENTION OF MISFIRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.
   - MUCK PILES MANAGEMENT - MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
   - REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE;
   - MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.
   C. SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT DURING BLASTING OPERATIONS. THE MEASURES TO PREVENT SUCH RELEASES SHALL BE DETAILED IN THE GROUNDWATER MONITORING REPORT AND COMPLY WITH THE MEASURES AND BEST MANAGEMENT PRACTICES LISTED ON THIS SHEET.



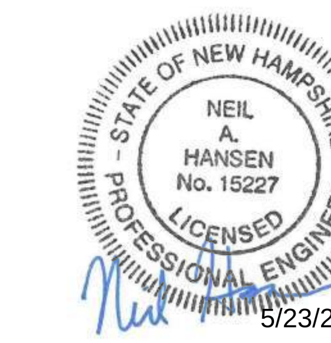
NOTE:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT FROM THE SITE. WHEN WASHING IS REQUIRED, IT SHALL BE DONE SO RUNOFF DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS

STABILIZED CONSTRUCTION EXIT
NO SCALE

Tighe&Bond



05/23/2023



5/23/23

North End Mixed Use Development

Two International Group

Russell Street &
Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
I	5/22/2023	AoT Resubmission
H	12/5/2022	AoT Submission
G	11/23/2022	PB Submission
F	11/18/2022	Traffic Peer Review
E	10/20/2022	TAC Resubmission
D	9/28/2022	Intersection Realignment
C	9/22/2022	TAC Resubmission
B	8/25/2022	TAC Resubmission
A	7/21/2022	TAC Resubmission

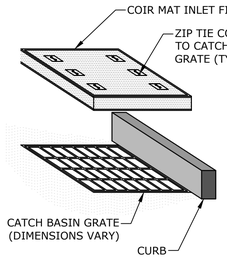
PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DTLS.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

EROSION CONTROL NOTES AND DETAILS SHEET

SCALE: AS SHOWN

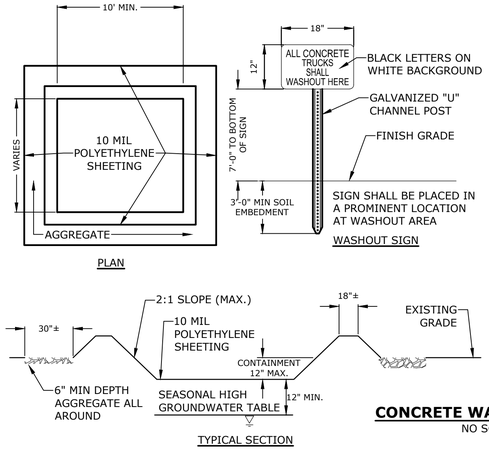
C-501

Last Saved: 5/19/2023
Plotted On:May 22, 2023-9:25am By: CKrzcuik
Tighe & Bond:J:\T\T5037 Two International Group\002 Russell Street Development\Drawings_Figures\AutoCAD\T5037-002-C-DTLS.dwg



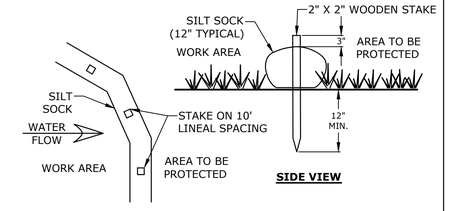
NOTES:
1. COIR MAT INLET FILTER SHALL BE STORM WATER INLET FILTER BY BLOCKSOM & CO. OR APPROVED EQUAL.
2. INSTALL AND MAINTAIN INLET PROTECTION IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

INLET PROTECTION
NO SCALE



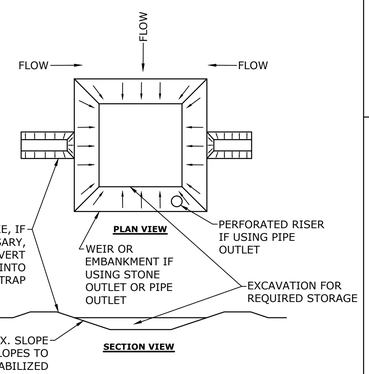
NOTES:
1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

CONCRETE WASHOUT AREA
NO SCALE



NOTES:
1. SILT SOCK SHALL BE SILT SOXX BY FILTREXX OR APPROVED EQUAL.
2. INSTALL SILT SOCK IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SILT SOCK
NO SCALE

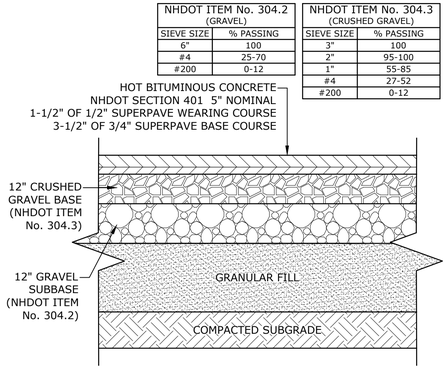


NOTES:
1. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE.
2. THE MAXIMUM CONTRIBUTING AREA TO A SINGLE TRAP SHALL BE LESS THAN 5 ACRES.
3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
4. TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP.
5. TRAP SHALL DISCHARGE TO A STABILIZED AREA.
6. TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED.
7. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.
8. SEDIMENT TRAPS MUST BE USED AS NEEDED TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.

SEDIMENT TRAP
NO SCALE

NHDOT ITEM No. 304.2 (GRAVEL)	
SIEVE SIZE	% PASSING
6"	100
#4	25-70
#200	0-12

NHDOT ITEM No. 304.3 (CRUSHED GRAVEL)	
SIEVE SIZE	% PASSING
3"	100
2"	95-100
1"	55-85
#4	27-52
#200	0-12

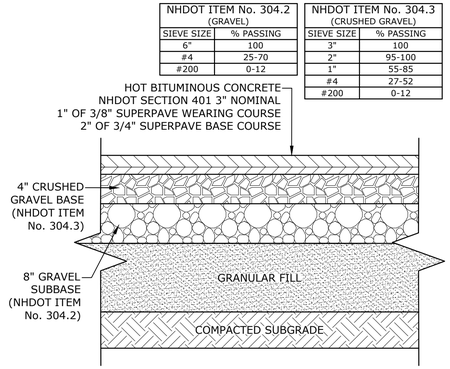


NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
4. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.

CITY RIGHT-OF-WAY PAVEMENT SECTION
NO SCALE

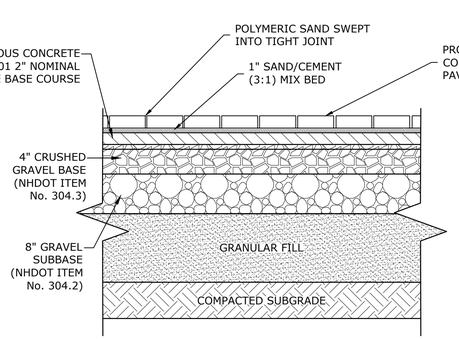
NHDOT ITEM No. 304.2 (GRAVEL)	
SIEVE SIZE	% PASSING
6"	100
#4	25-70
#200	0-12

NHDOT ITEM No. 304.3 (CRUSHED GRAVEL)	
SIEVE SIZE	% PASSING
3"	100
2"	95-100
1"	55-85
#4	27-52
#200	0-12



NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
4. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.

ON-SITE PAVEMENT SECTION
NO SCALE

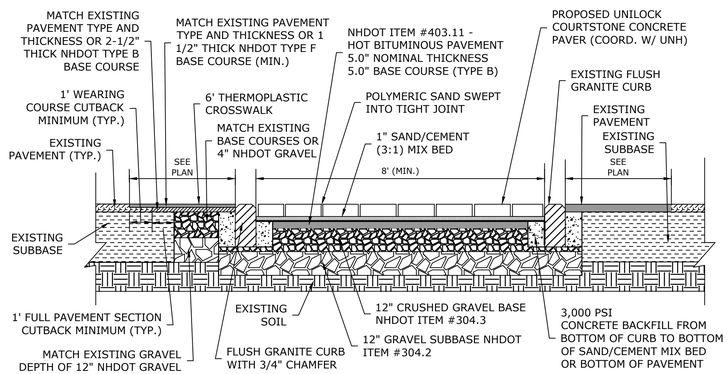


NOTES:
1. SEE SITE PLAN FOR PAVERS WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.

NHDOT ITEM No. 304.2 (GRAVEL)	
SIEVE SIZE	% PASSING
6"	100
#4	25-70
#200	0-12

NHDOT ITEM No. 304.3 (GRAVEL)	
SIEVE SIZE	% PASSING
3"	100
2"	95-100
1"	55-85
#4	27-52
#200	0-12

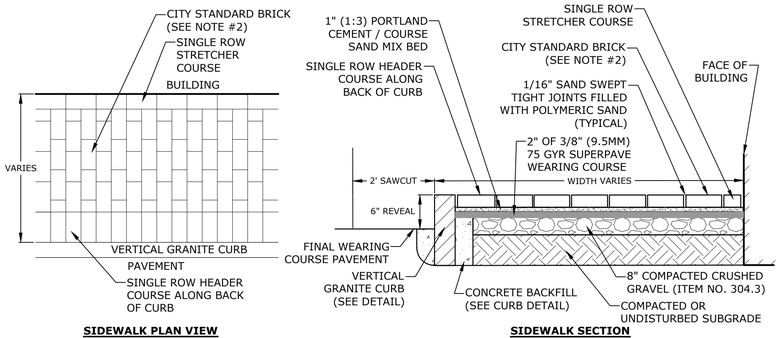
ON-SITE PAVERS SECTION
NO SCALE



SECTION VIEW

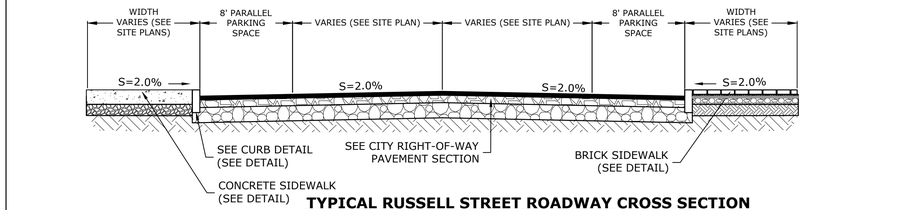
NOTES:
1. FINAL COLOR AND PATTERN OF **UNILOCK COURTSTONE** CONCRETE PAVERS TO BE COORDINATED WITH DPW. CONTRACTOR SHALL PROVIDE SAMPLES TO THE GROUP PRIOR TO ORDERING MATERIALS.
2. BEDDING MATERIAL SHALL BE A SAND/CEMENT MIX THAT IS 3 PARTS SAND AND 1 PART CEMENT. SAND SHALL CONFORM WITH ASTM C33 AND CEMENT SHALL BE PORTLAND CEMENT TYPE I/TYPE II.

DEER STREET PAVER CROSSWALK
NO SCALE

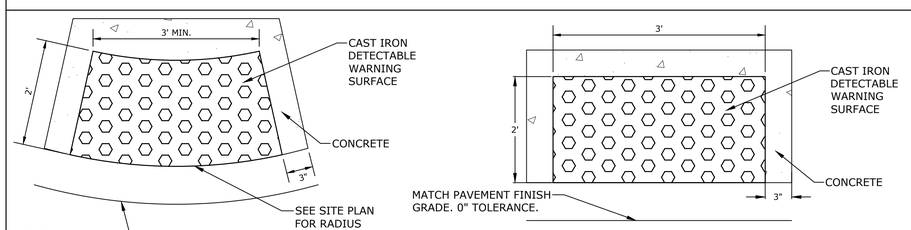


NOTES:
1. BRICK SIDEWALK SHALL BE INSTALLED AS DETAILED AND PER CITY OF PORTSMOUTH REQUIREMENTS/SPECIFICATIONS AND SHALL INCLUDE A CONTINUOUS APPROVED PAVER EDGE RESTRAINT SYSTEM AT ALL LOCATIONS NOT ADJACENT TO CURB OR BUILDINGS.
2. CITY STANDARD BRICK SHALL BE TRADITIONAL EDGE, PATHWAY, FULL RANGE 2.25"X4"X8" PAVER, BY PINE HALL BRICK, INC. BRICK MATERIAL SAMPLES SHALL BE PROVIDED TO DPW PRIOR TO INSTALLATION FOR REVIEW AND APPROVAL.
3. BEDDING MATERIAL SHALL BE A PORTLAND CEMENT / COURSE SAND MIX THAT IS 1 PART PORTLAND CEMENT AND 3 PARTS COURSE SAND. SAND SHALL CONFORM WITH ASTM C-33 AND CEMENT SHALL BE PORTLAND CEMENT TYPE I/TYPE II.

BRICK SIDEWALK
NO SCALE



TYPICAL RUSSELL STREET ROADWAY CROSS SECTION
NO SCALE



NOTES:
1. DETECTABLE WARNING SURFACE SHALL BE 2' X 3' CAST IRON PANEL SET IN CONCRETE.
2. DETECTABLE WARNING SURFACE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

CAST IRON DETECTABLE WARNING SURFACE
NO SCALE

Tighe&Bond

STATE OF NEW HAMPSHIRE – PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER
12/5/22

STATE OF NEW HAMPSHIRE – NEIL A. HANSEN No. 15227 LICENSED PROFESSIONAL ENGINEER
12/5/22

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
H	12/5/2022	AoT Submission
G	11/23/2022	PB Submission
F	11/18/2022	Traffic Peer Review
E	10/20/2022	TAC Resubmission
D	9/28/2022	Intersection Realignment
C	9/22/2022	TAC Resubmission
B	8/25/2022	TAC Resubmission
A	7/21/2022	TAC Resubmission

PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DTLS.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

DETAILS SHEET

SCALE: AS SHOWN

C-502

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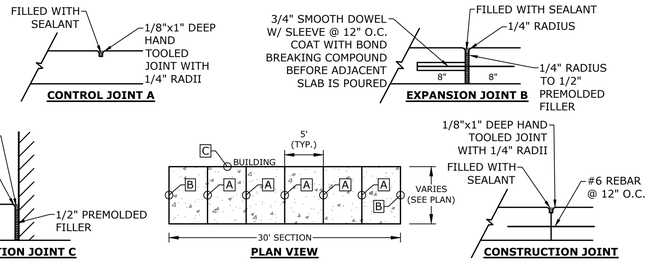
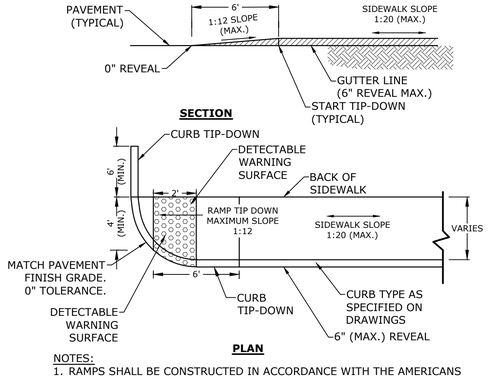
Printed: Dec 05, 2022 - 9:45am By: CKrzcuik
Tighe & Bond: J:\T\T5037 Two International Group\002 Russell Street Development\Drawings, Figures\AutoCAD\T5037-002-C-DTLS.dwg



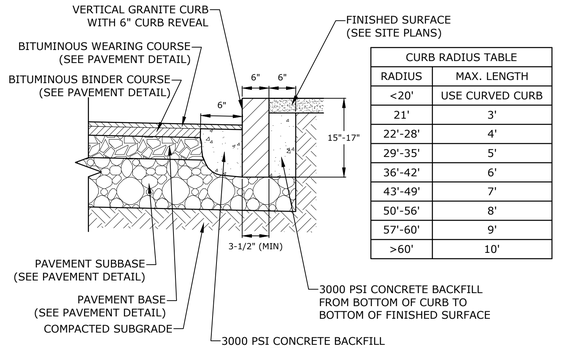
NOTES:
1. SEE SITE PLAN FOR SIDEWALK WIDTH AND LOCATIONS.
2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR WALK AND SIDE SLOPE GRADES.
3. ISOLATION JOINTS ADJACENT TO BUILDING SHALL BE COORDINATED WITH BUILDING DRAWINGS.

CONCRETE SIDEWALK WITH GRANITE CURB
NO SCALE



NOTES:
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
2. PROVIDE 8" COMPACTED CRUSHED GRAVEL BASE BENEATH RAMPS.
3. DETECTABLE WARNING STRIP SHALL BE ADA SOLUTIONS, INC. CAST IN PLACE RAMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

CONCRETE SIDEWALK TIP-DOWN RAMP WITH DETECTABLE WARNING PANEL
NO SCALE

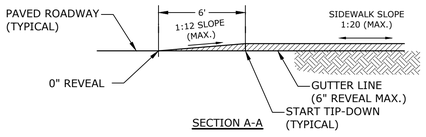


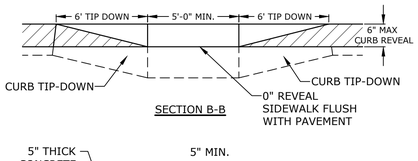
CURB RADIUS TABLE	
RADIUS	MAX. LENGTH
<20'	USE CURVED CURB
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
>60'	10'

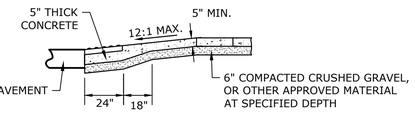
NOTES:
1. SEE SITE PLAN(S) FOR LIMITS OF VERTICAL GRANITE CURB (VGC).
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
6. ALL RADII 20 FEET AND SMALLER SHALL BE CONSTRUCTED USING CURVED SECTIONS.
7. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.

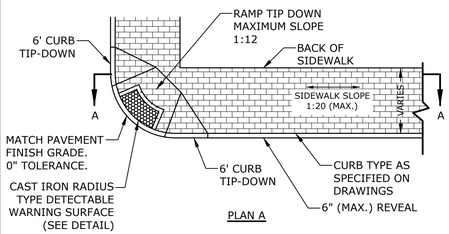
VERTICAL GRANITE CURB
NO SCALE

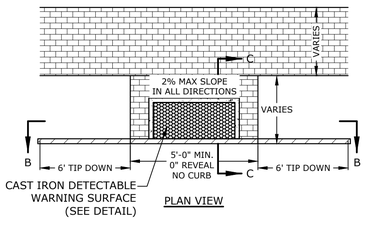
NHDOT ITEM No. 304.3 (CRUSHED GRAVEL)	
SIEVE SIZE	% PASSING
3"	100
2"	95-100
1"	55-85
#4	27-52
#200	0-12





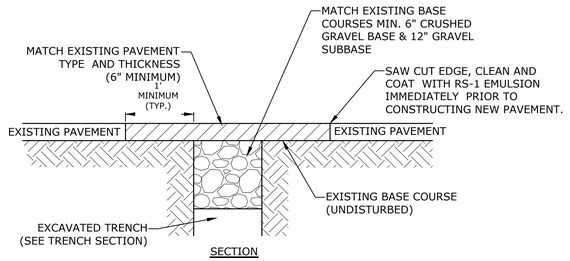


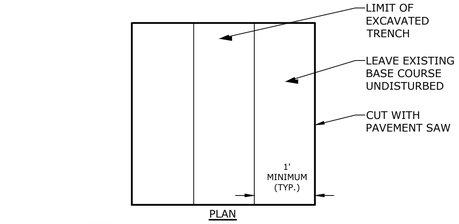




NOTES:
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
2. A 6" COMPACTED CRUSHED GRAVEL BASE (NHDOT ITEM No. 304.3) SHALL BE PROVIDED BENEATH RAMPS.
3. DETECTABLE WARNING PANEL SHALL BE CAST IRON SET IN CONCRETE (SEE DETAIL.)
4. PROVIDE DETECTABLE WARNING SURFACES ANYTIME THAT A CURB RAMP, BLENDED TRANSITION, OR LANDING CONNECTS TO A STREET.
5. LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF THE CURB ALONG THE EDGE OF THE LANDING.
6. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1, THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
7. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMPS SHALL BE A MAXIMUM OF 5% (FULL WIDTH) FOR A DISTANCE OF 2 FT. FROM THE ROADWAY CURBLINE.
8. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING, EXCLUSIVE OF THE FLARED SIDES, SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK MARKINGS.
9. DETECTABLE WARNING PANELS SHALL BE A MINIMUM OF 2 FEET IN DEPTH. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP, BLENDED TRANSITION, OR LANDING AND THE STREET.
10. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST CONTRAST VISUALLY WITH THE SURROUNDING SURFACES (EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT).

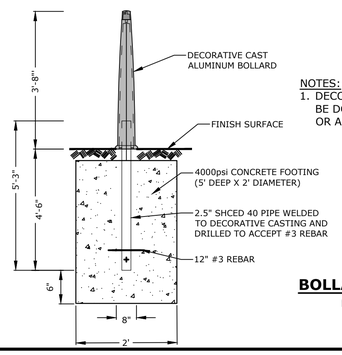
CONCRETE WHEELCHAIR ACCESSIBLE RAMP
NO SCALE





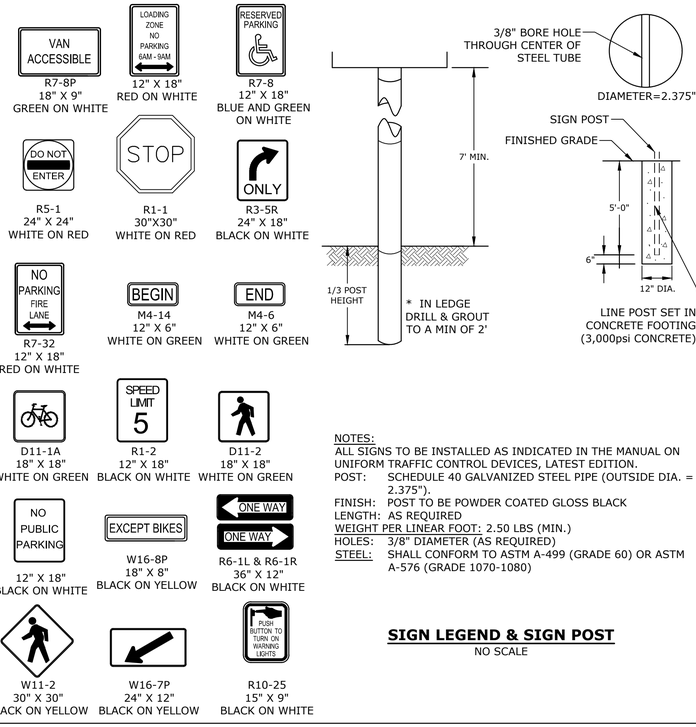
NOTE:
1. COORDINATE AND OBTAIN APPROVAL FOR ALL TRENCHING AND PATCHING WITHIN CITY RIGHT OF WAY WITH CITY OF PORTSMOUTH DPW PRIOR TO COMMENCING WORK.

ROADWAY TRENCH PATCH
NO SCALE



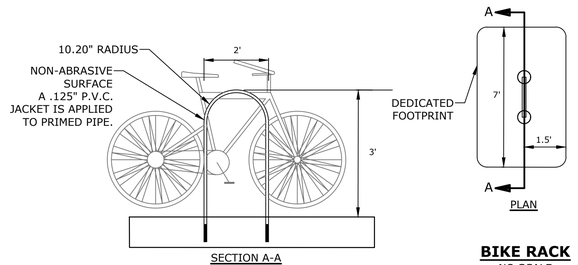
NOTES:
1. DECORATIVE CAST BOLLARD TO BE DG4 BY URBAN ACCESSORIES OR APPROVED EQUAL

BOLLARD DETAIL
NO SCALE



NOTES:
ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
POST: SCHEDULE 40 GALVANIZED STEEL PIPE (OUTSIDE DIA. = 2.375").
FINISH: POST TO BE POWDER COATED GLOSS BLACK
LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER (AS REQUIRED)
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070-1080)

SIGN LEGEND & SIGN POST
NO SCALE



BIKE RACK
NO SCALE

Tighe&Bond

PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
12/5/22

NEIL A. HANSEN No. 15227 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
12/5/22

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
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C	9/22/2022	TAC Resubmission
B	8/25/2022	TAC Resubmission
A	7/21/2022	TAC Resubmission

PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DTLS.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

DETAILS SHEET

SCALE: AS SHOWN

C-503

Last Saved: 12/5/2022
Printed: Dec 05, 2022 - 9:45am By: CKrzcuik
Xrefs: T:\T5037 Two International Group\002 Russell Street Development\Drawings, Figures\AutoCAD\T5037-002-C-DTLS.dwg
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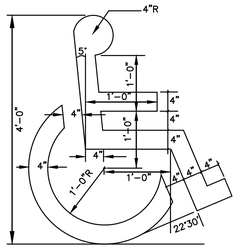
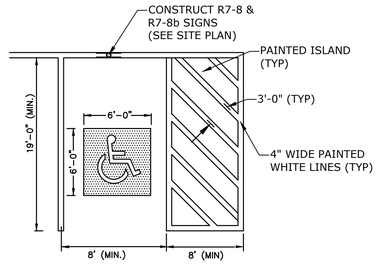


NOTES:
1. SYMBOL SHALL BE CONSTRUCTED IN ALL ACCESSIBLE SPACES USING WHITE THERMOPLASTIC, REFLECTORIZED PAVEMENT PARKING MATERAL MEETING THE REQUIREMENTS OF ASTM D 4505.
2. SYMBOL SHALL BE CONSTRUCTED TO THE LATEST ADA, STATE AND LOCAL REQUIREMENTS.

ACCESSIBLE SYMBOL

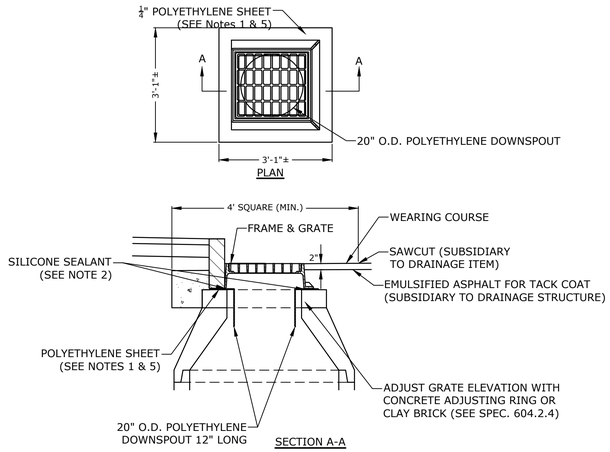
NO SCALE



NOTES:
1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.
2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN W/DISABILITIES ACT.

ACCESSIBLE PARKING STALL

NO SCALE



NOTES:
1. POLYETHYLENE LINER (ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
2. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT (SUBSIDIARY TO ITEM 604.0007) BETWEEN FRAME AND POLYETHYLENE SHEET.
3. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF THE GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE).
4. USE ON DRAINAGE STRUCTURES 4' MIN. DIAMETER ONLY.
5. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH 3-FLANGE FRAME AND CURB).
6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 6" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.
7. PLACED ONLY IN DRAINAGE STRUCTURES IN PAVEMENT.
8. SEE NHDOT DR-04, "DI-DB, UNDERDRAIN FLUSHING BASIN AND POLYETHYLENE LINER DETAILS", FOR ADDITIONAL INFORMATION.
9. CATCHBASINS WITHIN CITY RIGHT OF WAY SHALL HAVE A POLYETHYLENE LINER

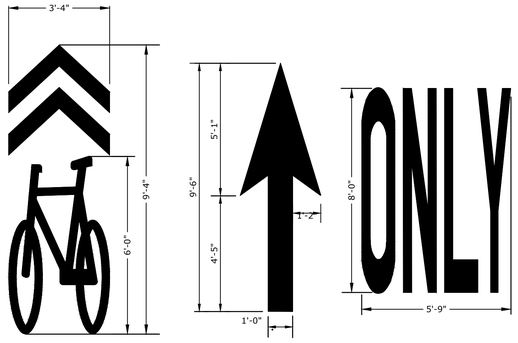
POLYETHYLENE LINER

NO SCALE

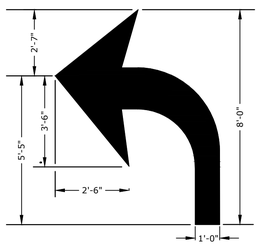
Tighe&Bond

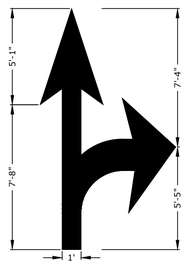
12/5/22

12/5/22



SHARROW **STRAIGHT ARROW** **ONLY**



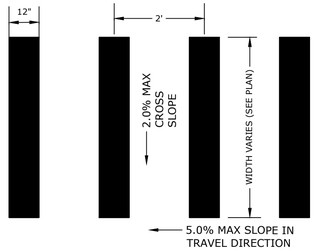


TURN ARROW **COMBINATION ARROW**

NOTES:
1. ALL WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST VERSION OF THE MUTCD.
2. MULTI-WORD MESSAGES SHALL READ "UP"; THAT IS, THE FIRST WORD SHALL BE NEAREST THE APPROACHING DRIVER.
3. THE WORD "ONLY" SHALL NOT BE USED WITH THROUGH OR COMBINATION ARROWS, AND SHALL NOT BE USED ADJACENT TO A BROKEN LANE LINE. A WORD/SYMBOL SHALL PRECEED THE WORD "ONLY".
4. COMBINATION ARROWS MAY BE COMPRISED OF 2 SINGLE ARROWS (e.g. TURN AND THROUGH ARROWS). HOWEVER, THE SHAFTS OF THE ARROWS SHALL COINCIDE AS SHOWN.
5. PREFORMED WORDS AND SYMBOLS SHALL BE PRE-CUT BY THE MANUFACTURER.
6. WRONG-WAY ARROWS SHALL NOT BE SUBSTITUTED FOR THROUGH ARROWS.
7. ALL STOP BARS, WORDS, SYMBOLS AND ARROW SHALL BE THERMOPLASTIC.

PAVEMENT MARKINGS

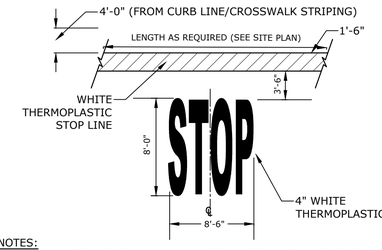
NO SCALE



NOTE:
1. STRIPING SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

CROSSWALK STRIPING

NO SCALE

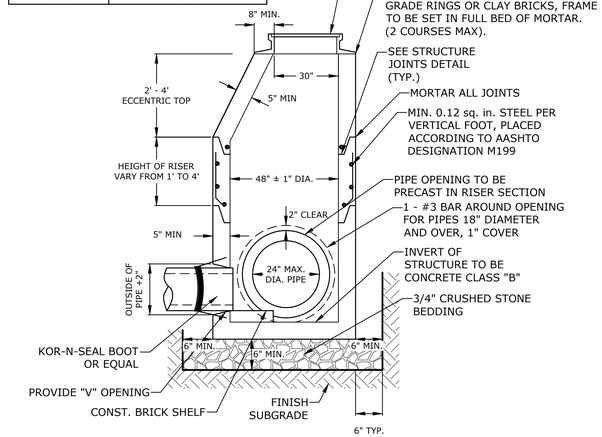


NOTES:
1. PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS AS SHOWN ON SITE PLAN.
2. STRIPING SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

STOP BAR AND LEGEND

NO SCALE

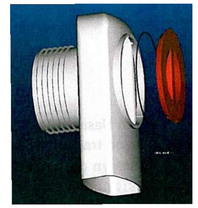
NHDOT ITEM No. 304.4 (CRUSHED STONE - FINE)	
SIEVE SIZE	% PASSING
2"	100
1-1/2"	85-100
3/4"	45-75
#4	10-45
#200	0-5



NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
7. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
8. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
10. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZNTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.

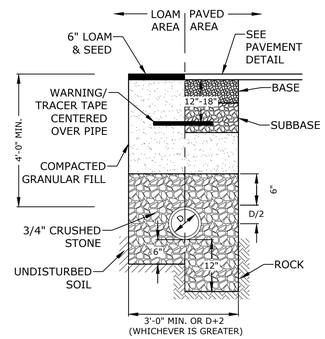
4' DIAMETER DRAIN MANHOLE

NO SCALE



NOTES:
1. ALL CATCH BASIN OUTLETS TO HAVE "ELIMINATOR" OIL AND FLOATING DEBRIS TRAP MANUFACTURED BY KLEANSTREAM (NO EQUAL)
2. INSTALL DEBRIS TRAP TIGHT TO INSIDE OF STRUCTURE.
3. 1/4" HOLE SHALL BE DRILLED IN TOP OF DEBRIS TRAP

"ELIMINATOR" OIL FLOATING DEBRIS TRAP



NOTES:
1. CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 6" ABOVE TOP OF PIPE.
2. ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF PORTSMOUTH.

STORM DRAIN TRENCH

NO SCALE

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

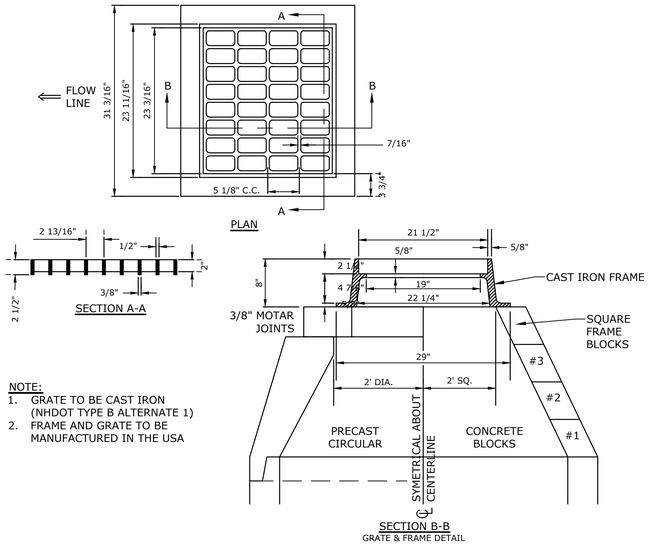
MARK	DATE	DESCRIPTION
H	12/5/2022	AoT Submission
G	11/23/2022	PB Submission
F	11/18/2022	Traffic Peer Review
E	10/20/2022	TAC Resubmission
D	9/28/2022	Intersection Realignment
C	9/22/2022	TAC Resubmission
B	8/25/2022	TAC Resubmission
A	7/21/2022	TAC Resubmission

PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DTLS.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

DETAILS SHEET

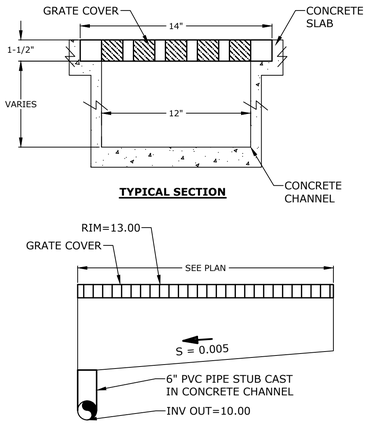
SCALE: AS SHOWN

C-504



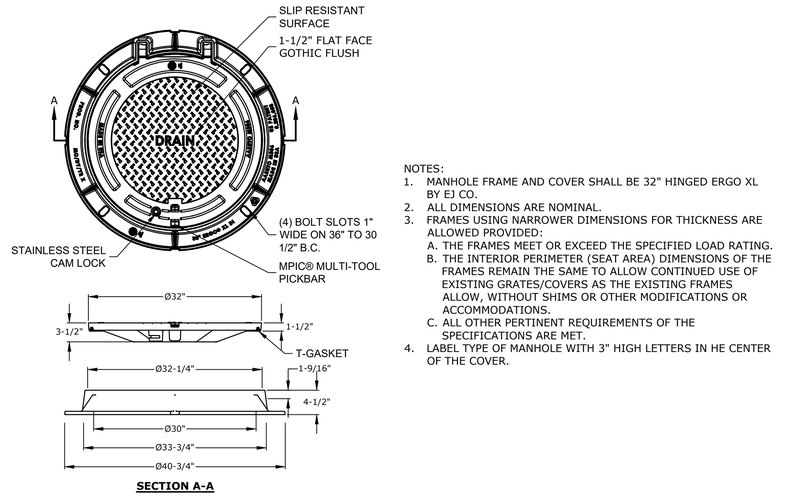
NOTE:
1. GRATE TO BE CAST IRON (NHDOT TYPE B ALTERNATE 1)
2. FRAME AND GRATE TO BE MANUFACTURED IN THE USA

CATCH BASIN FRAME & GRATE
NO SCALE



NOTES:
1. TRENCH DRAIN FRAME AND GRATE SHALL BE MULTIDRAIN ECONODRAIN SERIES #12 OR EQUAL.

TRENCH DRAIN
NO SCALE



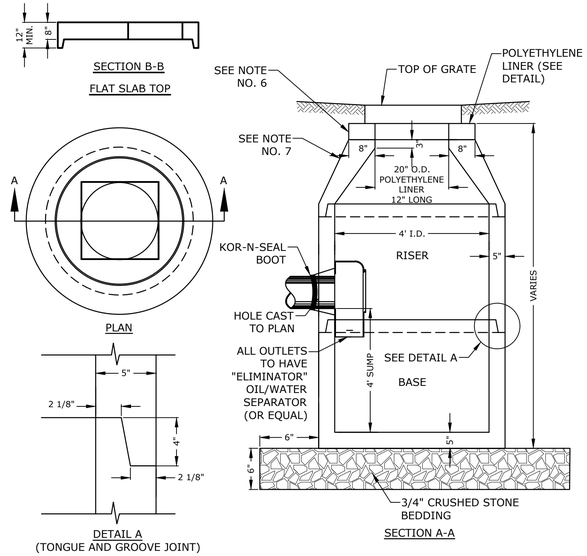
NOTES:
1. MANHOLE FRAME AND COVER SHALL BE 32" HINGED ERGO XL BY EJ CO.
2. ALL DIMENSIONS ARE NOMINAL.
3. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
4. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN HE CENTER OF THE COVER.

DRAIN MANHOLE FRAME & COVER
NO SCALE

Tighe&Bond

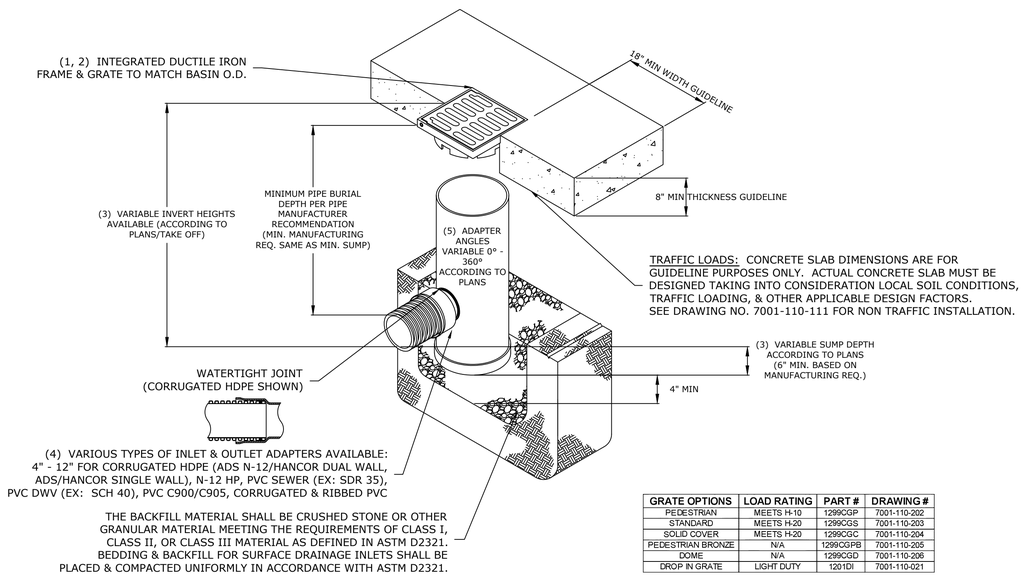
STATE OF NEW HAMPSHIRE
PATRICK CRIMMINS
No. 12378
LICENSED
PROFESSIONAL ENGINEER
12/5/22

STATE OF NEW HAMPSHIRE
NEIL A. HANSEN
No. 15227
LICENSED
PROFESSIONAL ENGINEER
12/5/22



NOTES:
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. FITTING FRAME TO GRADE MAY BE DONE WITH PREFABRICATED ADJUSTMENT RINGS OR CLAY BRICKS (2 COURSES MAX.).
7. CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC, OR FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED.
8. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
9. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
10. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
11. THE TONGUE AND GROVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
12. "ELIMINATOR" OIL/WATER SEPARATOR SHALL BE INSTALLED TIGHT TO INSIDE OF CATCHBASIN.

4' DIAMETER CATCHBASIN
NO SCALE

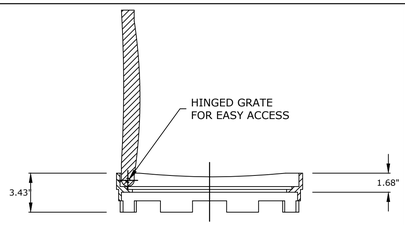


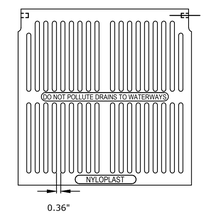
GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	1299CGP	7001-110-202
STANDARD	MEETS H-20	1299CGS	7001-110-203
SOLID COVER	MEETS H-20	1299CGC	7001-110-204
PEDESTRIAN BRONZE	N/A	1299CGPB	7001-110-205
DOME	N/A	1299CGD	7001-110-206
DROP IN GRATE	LIGHT DUTY	1201DI	7001-110-021

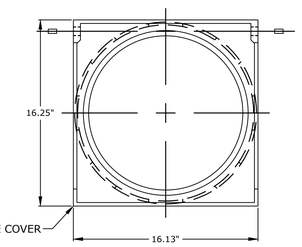
TYPICAL SECTION

NOTES:
1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

YARD DRAIN
NO SCALE







NOTES:
1. NYLOPLAST MODEL 1299CGPBL OR EQUAL.

YARD DRAIN FRAME AND GRATE
NO SCALE

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
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PROJECT NO:	T5037-002
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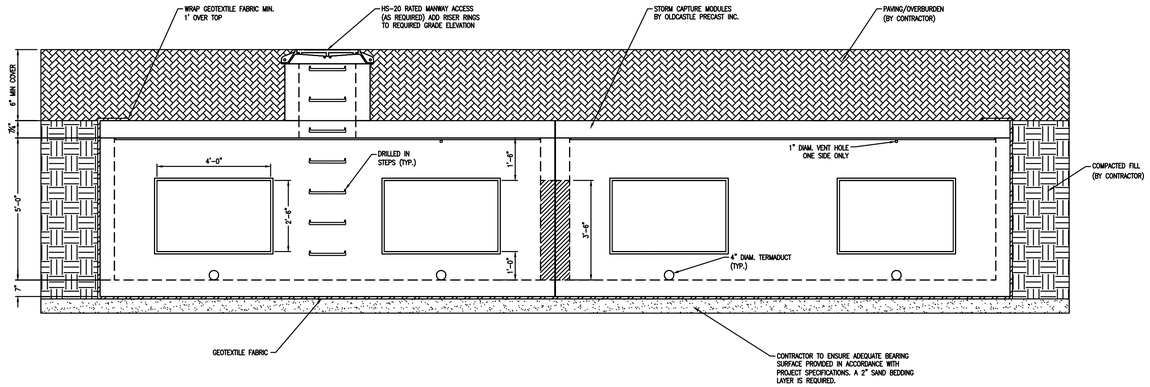
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

DETAILS SHEET

SCALE: AS SHOWN

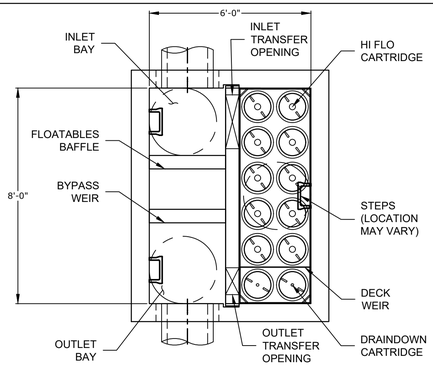
C-505



TYPICAL SECTION

NOTES:
1. UNDERGROUND DETENTION SYSTEM TO BE OLDCASTLE STORMCAPTURE SC-5 DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT BASIN SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR APPROVAL.
2. MANUFACTURER TO SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
3. A QUALIFIED ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS PER THE REQUIREMENTS OF THE ALTERATION OF TERRAIN PERMIT. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE UNDERGROUND DETENTION BASINS.

OLDCASTLE SC-5 DETAIL
NO SCALE



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)

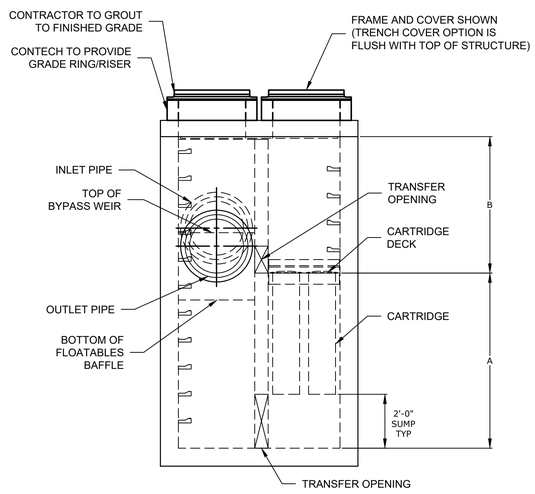
JELLYFISH JFPD0806 - DESIGN NOTES				
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD CARTRIDGE SELECTION				
CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	1.96	1.47	0.98	0.54
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00

SITE SPECIFIC DATA REQUIREMENTS	
STRUCTURE ID	JF-1
MODEL SIZE	JFPD0806
WATER QUALITY FLOW RATE (cfs)	0.59
PEAK FLOW RATE (cfs)	1.45
RETURN PERIOD OF PEAK FLOW (yrs)	25
# OF CARTRIDGES REQUIRED (HF / DD)	3/1
CARTRIDGE SIZE	54"

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 3', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
E. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3318.

NOTE:
1. A QUALIFIED ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS PER THE REQUIREMENTS OF THE ALTERATION OF TERRAIN PERMIT. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE UNDERGROUND FILTRATION UNITS.

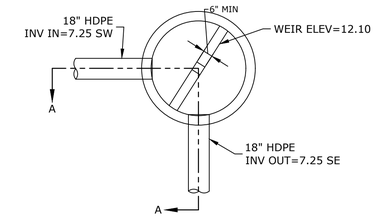


ELEVATION VIEW

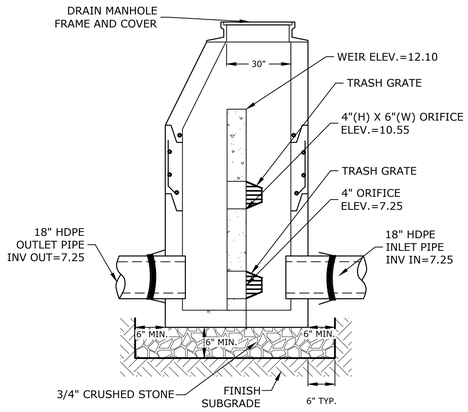
CONTECH JELLYFISH STORMWATER FILTER (JFPD0806)
NO SCALE

Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,726, 8,221,618 & US 8,123,935. OTHER INTERNATIONAL PATENTS PENDING

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX



PLAN VIEW



NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE (TYPE II CEMENT).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER OF THE THIRD WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. ALL JOINTS ON THE STRUCTURE AND PIPING SHALL BE WATERTIGHT.

POS-01
NO SCALE

Tighe&Bond

PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
05/23/2023

NEIL A. HANSEN No. 15227 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
5/23/23

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
I	5/22/2023	AoT Resubmission
H	12/5/2022	AoT Submission
G	11/23/2022	PB Submission
F	11/18/2022	Traffic Peer Review
E	10/20/2022	TAC Resubmission
D	9/28/2022	Intersection Realignment
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B	8/25/2022	TAC Resubmission
A	7/21/2022	TAC Resubmission

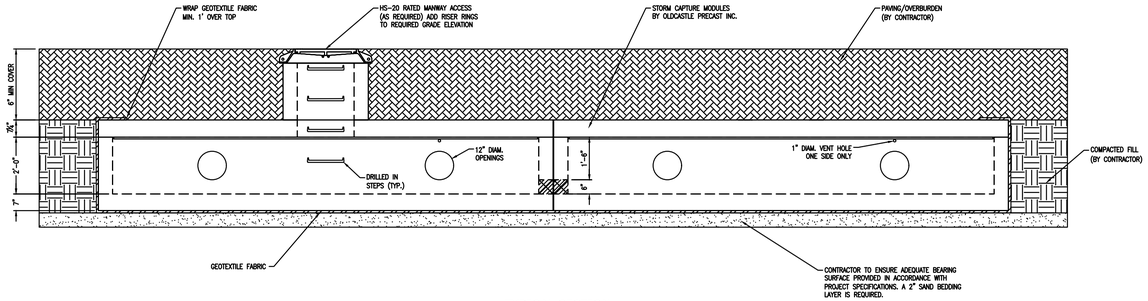
PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DTLS.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

DETAILS SHEET

SCALE: AS SHOWN

C-506

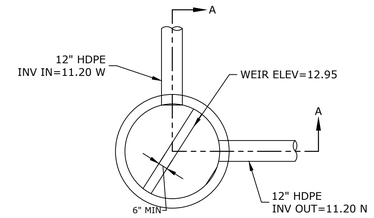
Last Saved: 5/19/2023
Plotted: May 23, 2023 - 9:25am By: CKrzcuik
Tighe & Bond: J:\T\T5037 Two International Group\002 Russell Street Development\Drawings_Figures\AutoCAD\T5037-002-C-DTLS.dwg



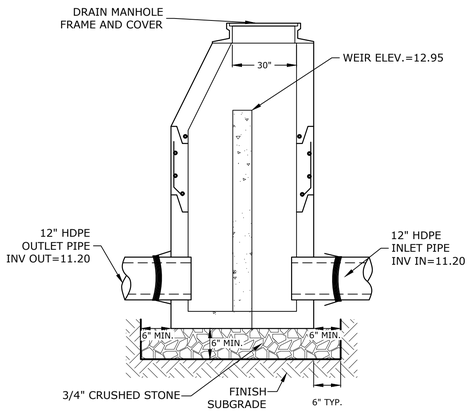
TYPICAL SECTION

NOTES:
1. UNDERGROUND DETENTION SYSTEM TO BE OLDCASTLE STORMCAPTURE SC-2 DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT BASIN SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR APPROVAL.
2. MANUFACTURER TO SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
3. A QUALIFIED ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS PER THE REQUIREMENTS OF THE ALTERATION OF TERRAIN PERMIT. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE UNDERGROUND DETENTION BASINS.

OLDCASTLE SC-2 DETAIL
NO SCALE

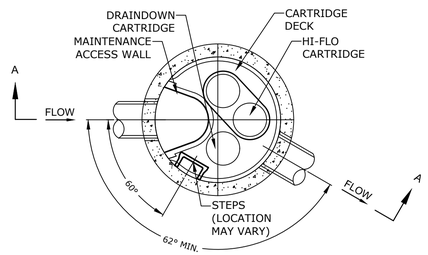


PLAN VIEW

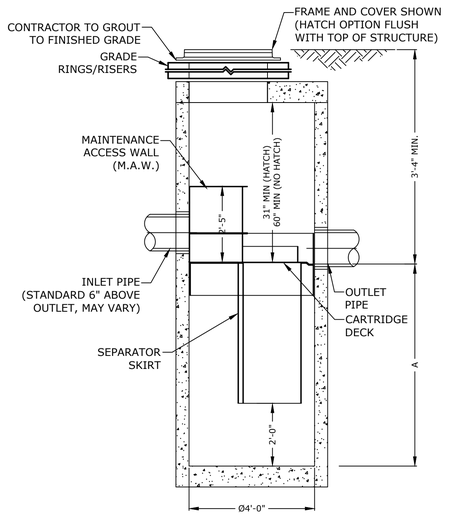


NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE (TYPE II CEMENT).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER OF THE THIRD WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. ALL JOINTS ON THE STRUCTURE AND PIPING SHALL BE WATERTIGHT.

POS-02
NO SCALE



PLAN VIEW



SECTION A-A

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN. Ø48" MANHOLE JELLYFISH PEAK TREATMENT CAPACITY IS 0.45 CFS. IF THE SITE CONDITIONS EXCEED 0.45 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.	
CARTRIDGE SELECTION	
CARTRIDGE DEPTH	54"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-5"
FLOW RATE HIGH-FLO / DRAINDOWN (cfs) (per cart)	0.18 / 0.09
MAX. CARTS HIGH-FLO / DRAINDOWN	2 / 1

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	2	3
WATER QUALITY FLOW RATE (cfs)	0.26	0.05
# OF CARTRIDGES REQUIRED (HF / DD)	(2/1)	(1/1)
CARTRIDGE SIZE	54"	54"

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 3', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
E. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3318.

NOTE:
1. A QUALIFIED ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS PER THE REQUIREMENTS OF THE ALTERATION OF TERRAIN PERMIT. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE UNDERGROUND FILTRATION UNITS.

CONTECH JELLYFISH (JF4)
NO SCALE

Tighe&Bond

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

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SCALE: AS SHOWN

C-507

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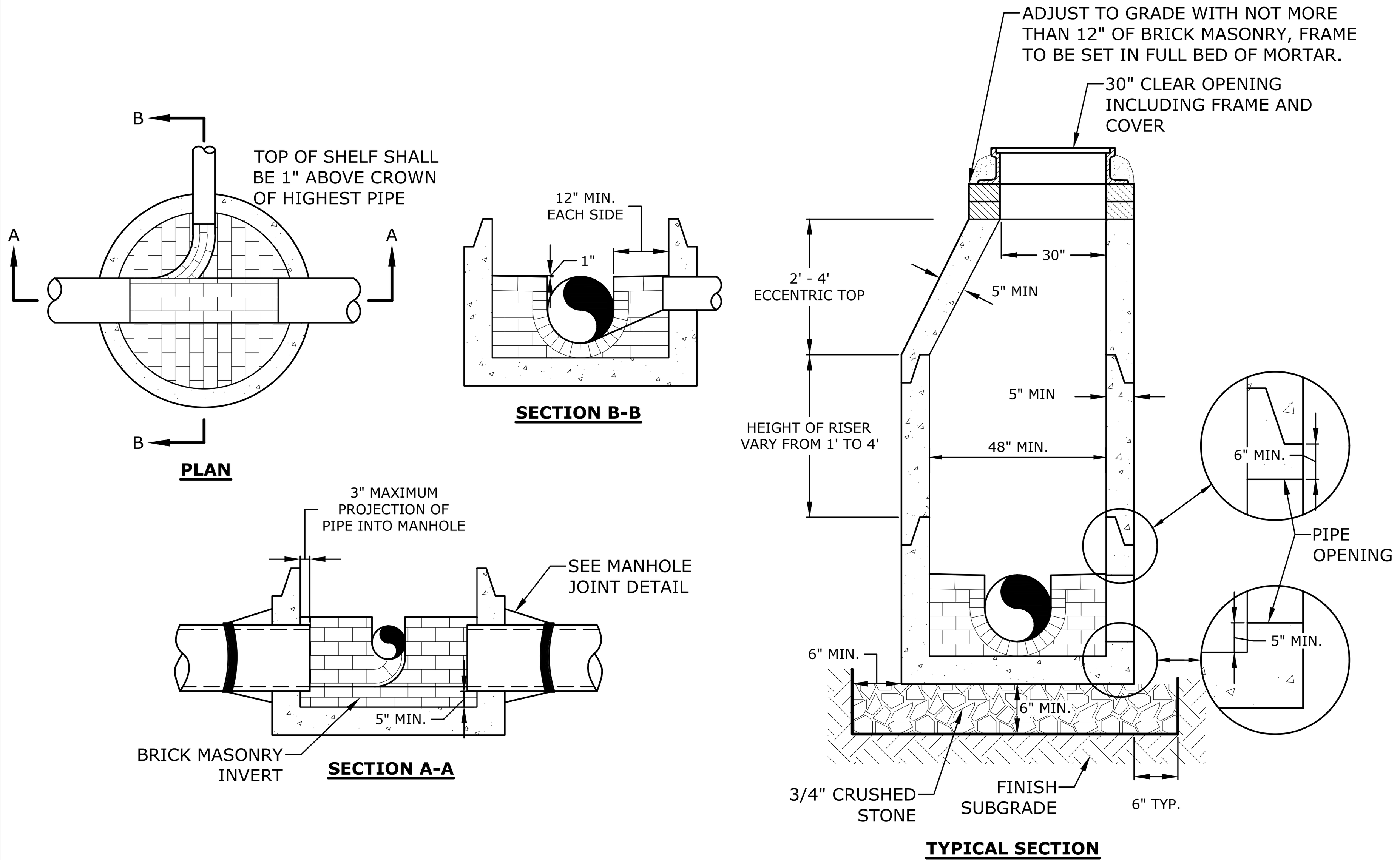
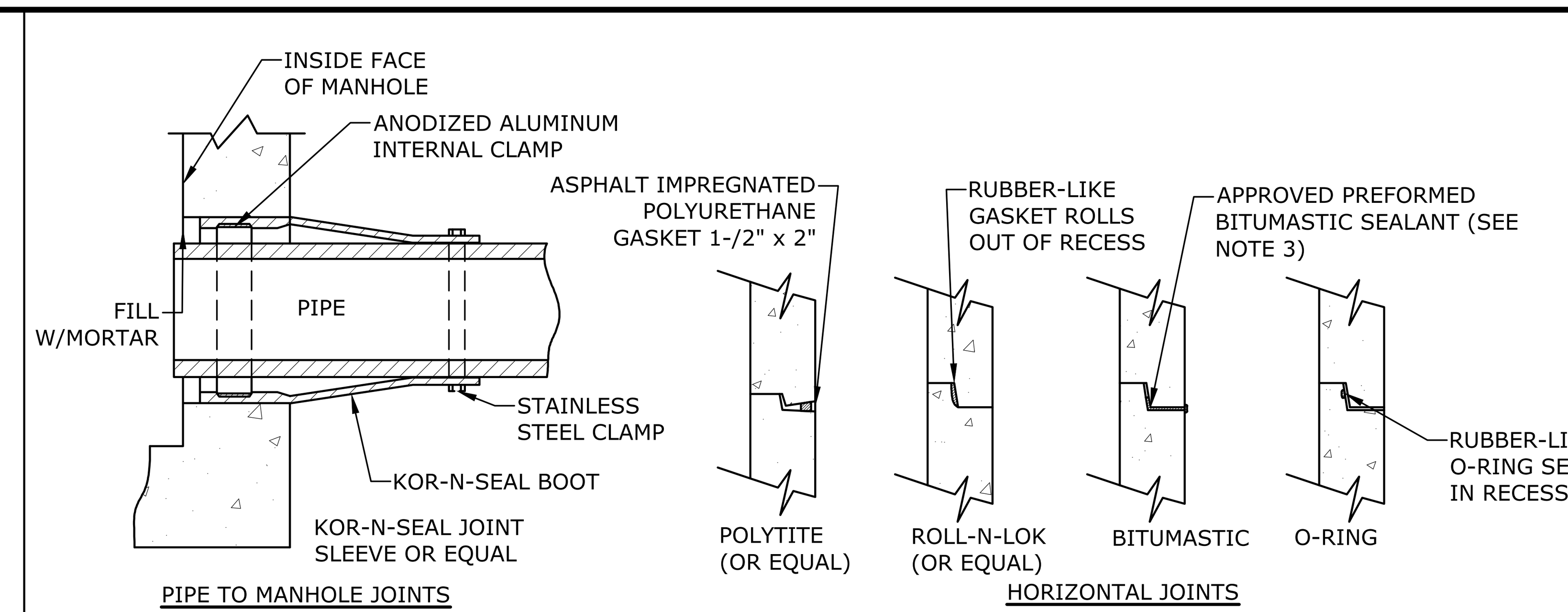


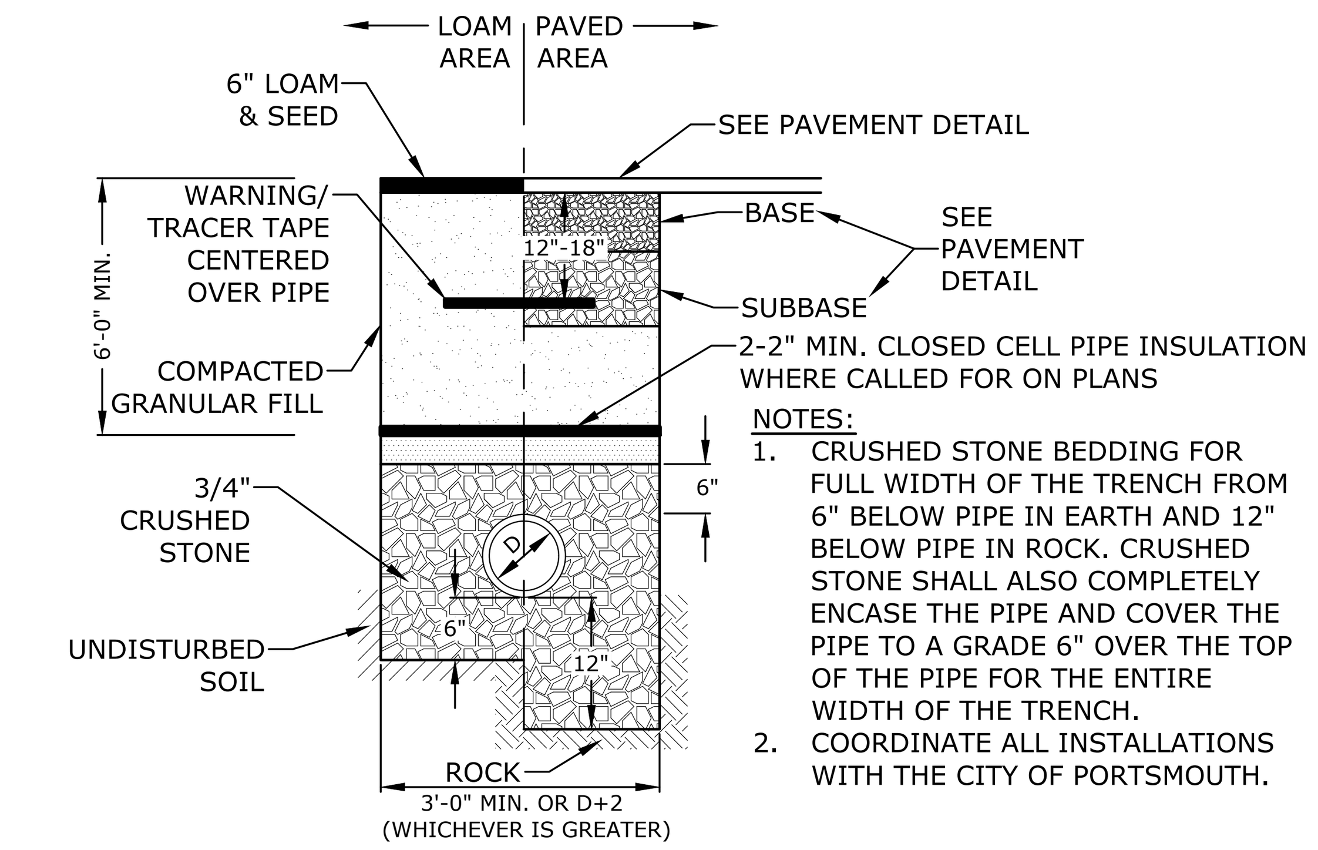
NOTES:
1. INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
3. INVERT BRICKS SHALL BE LAID ON EDGE.
4. TWO (2) COATS OF BITUMINOUS WATERPROOF COATING SHALL BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
5. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS WITHIN CITY RIGHT OF WAY SHALL BE CITY STANDARD HINGE COVERS MANUFACTURED BY EJ. FRAMES AND COVERS WILL BE PURCHASED FROM THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS. ALL OTHER MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
6. HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
7. BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H20 LOADING, AND CONFORMING TO ASTM C478-06.

SEWER MANHOLE
NO SCALE



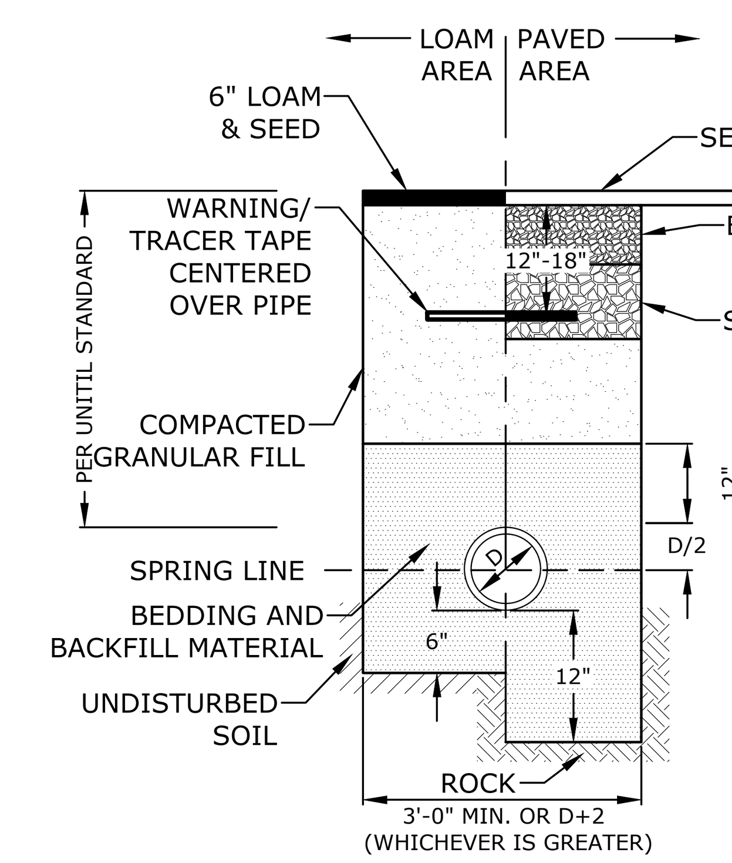
NOTES:
1. HORIZONTAL JOINTS BETWEEN THE SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE PER CITY OF PORTSMOUTH DPW STANDARD AND SHALL BE SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW ELASTOMERIC OR MASTIC-LIKE GASKET.
2. PIPE TO MANHOLE JOINTS SHALL BE PER CITY OF PORTSMOUTH STANDARD.
3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
4. ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

MANHOLE JOINTS
NO SCALE



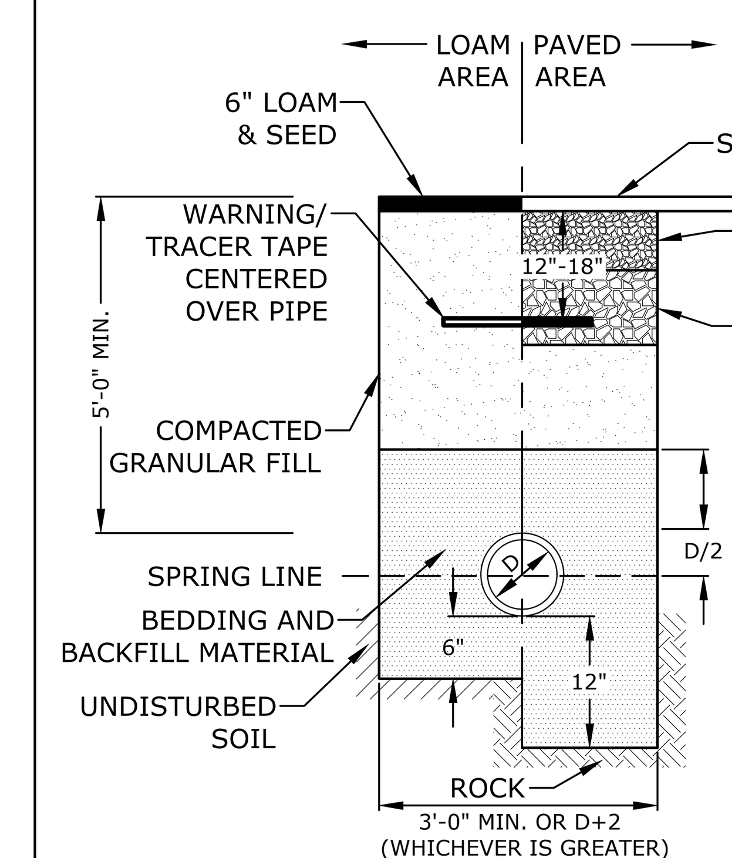
NOTES:
1. CRUSHED STONE BEDDING FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK. CRUSHED STONE SHALL ALSO COMPLETELY ENCASE THE PIPE AND COVER THE PIPE TO A GRADE 6" OVER THE TOP OF THE PIPE FOR THE ENTIRE WIDTH OF THE TRENCH.
2. COORDINATE ALL INSTALLATIONS WITH THE CITY OF PORTSMOUTH.

SEWER SERVICE TRENCH
NO SCALE



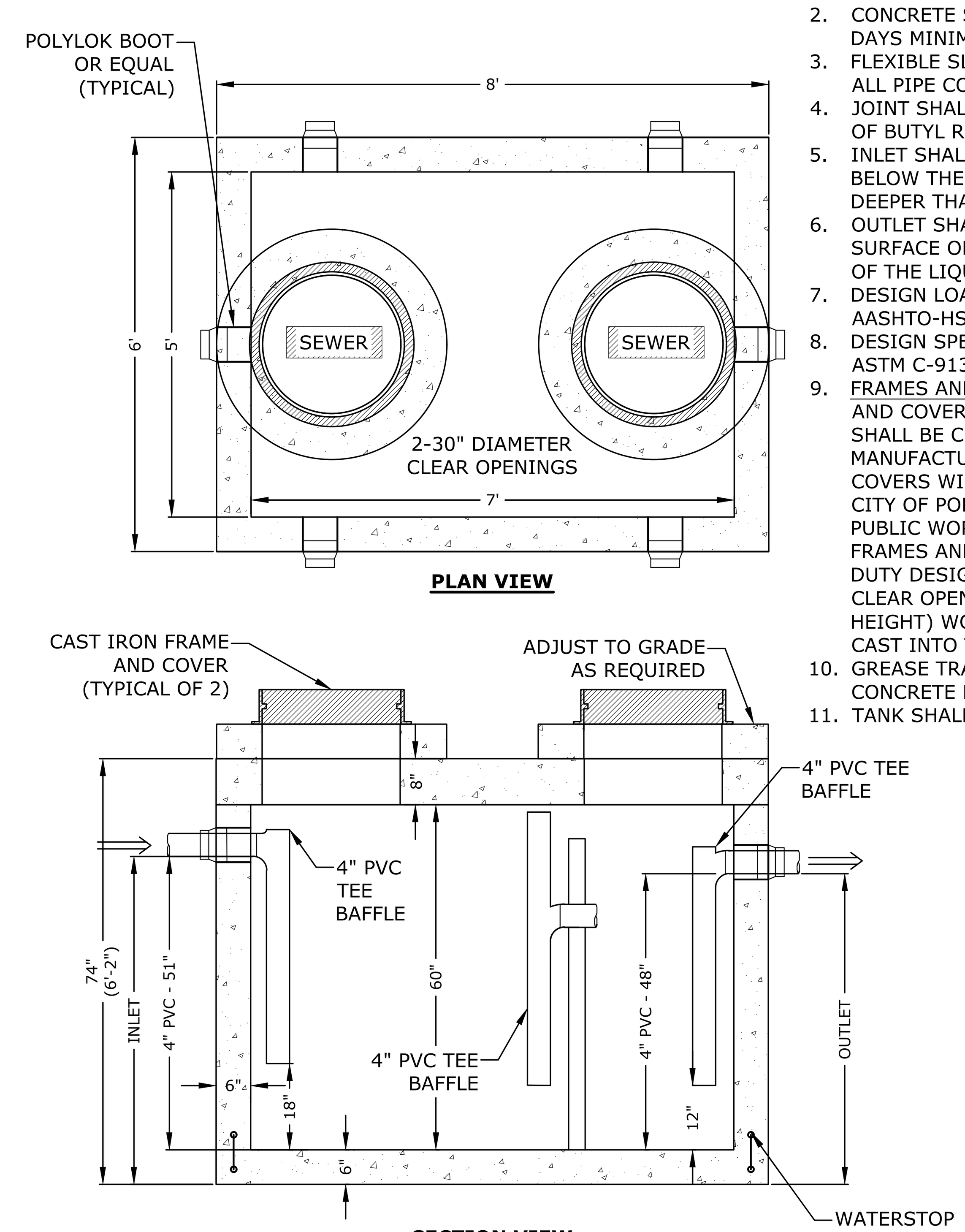
NOTE:
1. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. GAS SHALL BE INSTALLED PER UNITIL STANDARDS. COORDINATE ALL INSTALLATIONS WITH UNITIL AND THE CITY OF PORTSMOUTH.

GAS TRENCH
NO SCALE



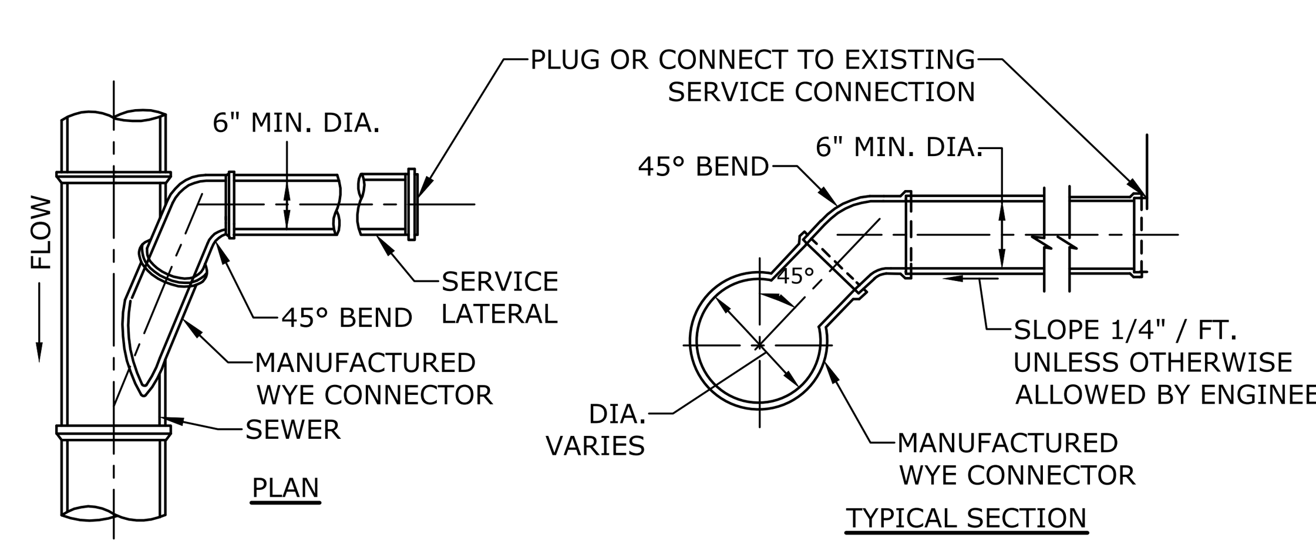
NOTES:
1. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. WATER MAIN SHALL BE INSTALLED PER CITY OF PORTSMOUTH STANDARDS. COORDINATE ALL INSTALLATIONS WITH THE CITY OF PORTSMOUTH.

WATER TRENCH
NO SCALE

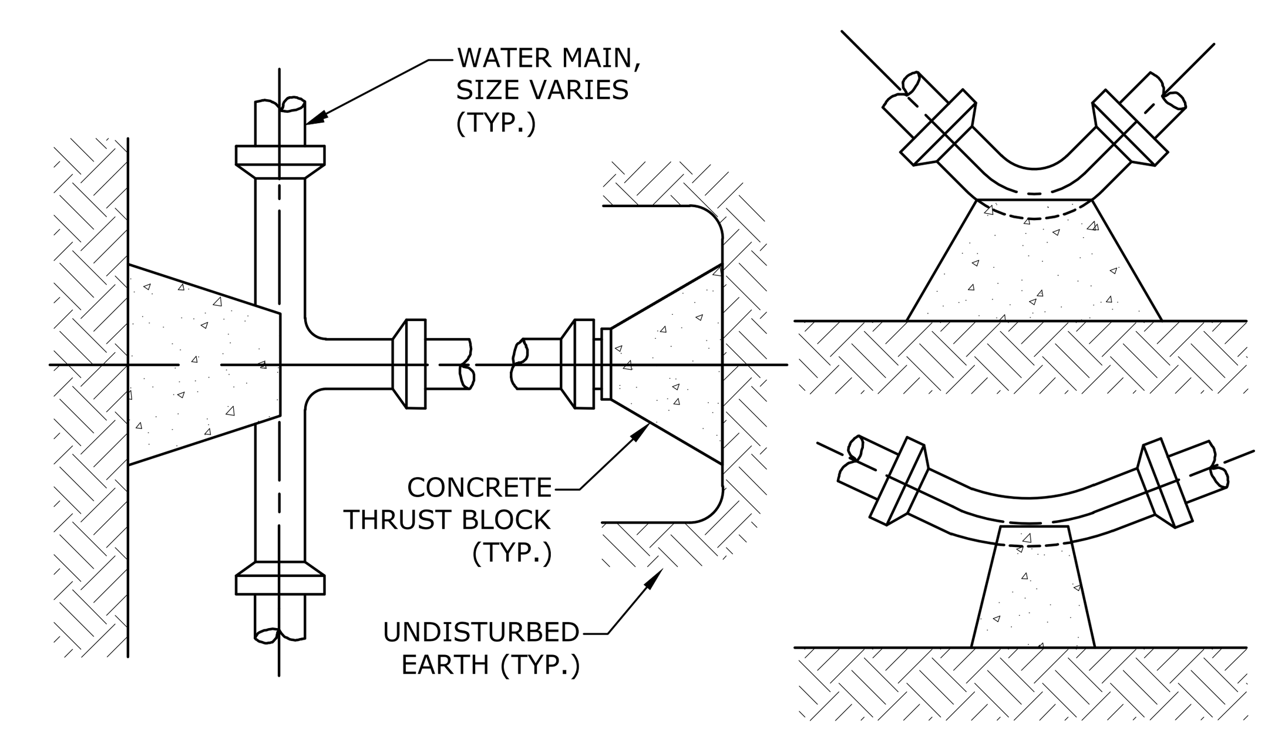


NOTES:
1. STEEL REINFORCEMENT SHALL CONFORM TO LATEST ASTM SPECIFICATIONS: ASTM-A615 GRADE 60 REBAR.
2. CONCRETE SHALL BE F_C=5,000 PSI @ 28 DAYS MINIMUM.
3. FLEXIBLE SLEEVES SHALL BE PROVIDED ON ALL PIPE CONNECTIONS.
4. JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
5. INLET SHALL PENETRATE AT LEAST 9" BELOW THE LIQUID LEVEL, BUT NOT DEEPER THAN THE OUTLET BAFFLE.
6. OUTLET SHALL EXTEND BELOW THE SURFACE OF THE LIQUID EQUAL TO 40% OF THE LIQUID DEPTH (19").
7. DESIGN LOADING SHALL BE: AASHTO-HS20-44, ASTM C-890-06.
8. DESIGN SPECIFIED AS: ASTM C-1227-08, ASTM C-913-08.
9. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS WITHIN CITY RIGHT OF WAY SHALL BE CITY STANDARD HINGE COVERS MANUFACTURED BY EJ. FRAMES AND COVERS WILL BE PURCHASED FROM THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS. ALL OTHER MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
10. GREASE TRAP SHALL BE PHOENIX PRECAST CONCRETE P/N: C-6420 OR EQUAL.
11. TANK SHALL BE PUMPED AS NEEDED.

1,000 GALLON GREASE TRAP
NO SCALE



STANDARD SERVICE LATERAL CONNECTION
NO SCALE



TEST PRESSURE = 200psi	SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL					
	REACTION TYPE	PIPE SIZE				
		4"	6"	8"	10"	12"
	A 90°	0.89	2.19	3.82	11.14	17.24
	B 180°	0.65	1.55	2.78	8.38	12.00
	C 45°	0.48	1.19	2.12	6.02	9.32
	D 22-1/2°	0.25	0.60	1.06	3.08	4.74
	E 11-1/4°	0.13	0.30	0.54	1.54	2.38

NOTES:
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.
5. INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE WITH CITY OF PORTSMOUTH WATER DEPARTMENT STANDARDS.

THRUST BLOCKING DETAIL
NO SCALE

Tighe&Bond

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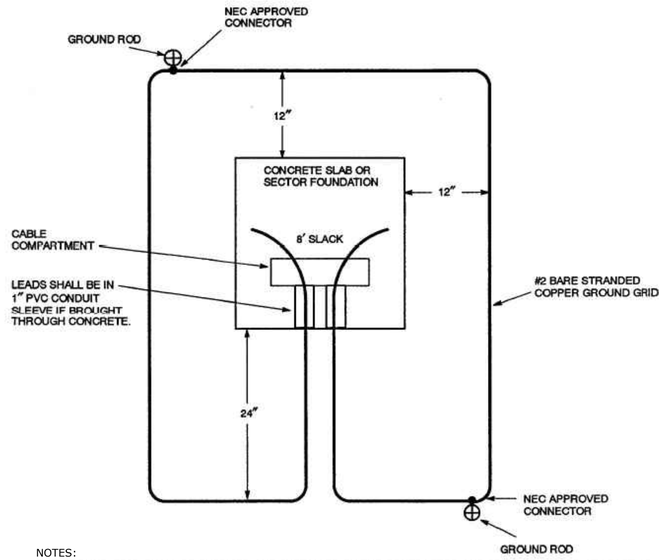
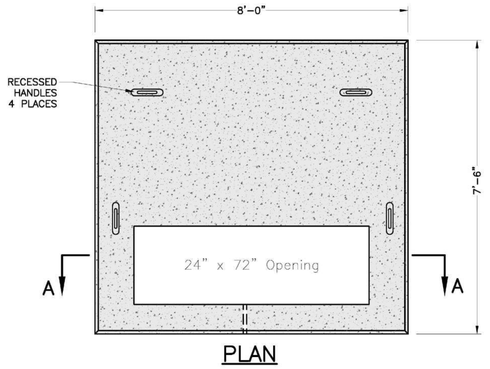
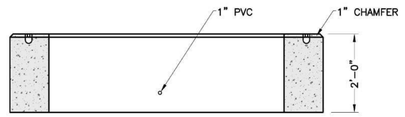


NOTES:
THE GROUND GRID SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AND IS TO BE BURIED AT LEAST 12 INCHES BELOW GRADE. EIGHT FEET OF EXTRA WIRE FOR EACH GROUND GRID LEG SHALL BE LEFT EXPOSED IN THE CABLE COMPARTMENT TO ALLOW FOR THE CONNECTION TO THE TRANSFORMER. THE TWO 8-FOOT GROUND RODS MAY BE EITHER GALVANIZED STEEL OR COPPERWELD AND THEY SHALL BE CONNECTED TO THE GRID WITH NEC APPROVED CONNECTORS.

PAD-MOUNTED EQUIPMENT GROUNDING GRID DETAIL
NO SCALE



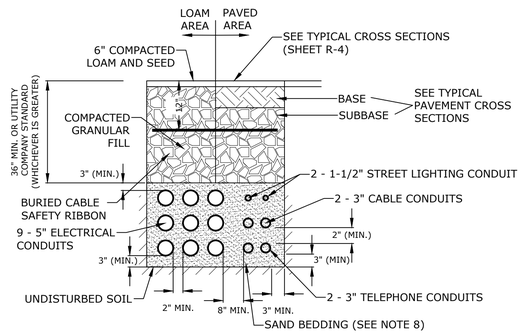
PLAN



SECTION A–A

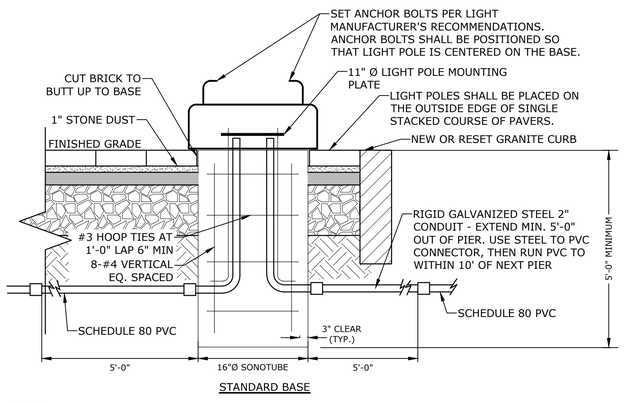
NOTES:
1. DIMENSIONS SHOWN REPRESENT TYPICAL REQUIREMENTS. MANHOLE LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED WITH EVERSOURCE PRIOR TO CONSTRUCTION
2. CONCRETE MINIMUM STRENGTH - 4,000 PSI @ 28 DAYS
3. STEEL REINFORCEMENT - ASTM A615, GRADE 60
4. PAD MEETS OR EXCEEDS EVERSOURCE SPECIFICATIONS

3-PHASE TRANSFORMER PAD
NO SCALE



NOTES:
1. NUMBER, MATERIAL, AND SIZE OF UTILITY CONDUITS TO BE DETERMINED BY LOCAL UTILITY OR AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO BUILDING.
2. DIMENSIONS SHOWN REPRESENT OWNERS MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN.
3. NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
4. A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
5. UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
6. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND, WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
7. ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH RADIUS.
8. SAND BEDDING TO BE REPLACED WITH CONCRETE ENCASEMENT WHERE COVER IS LESS THAN 3 FEET, WHEN LOCATED BELOW PAVEMENT, OR WHERE SHOWN ON THE UTILITIES PLAN.

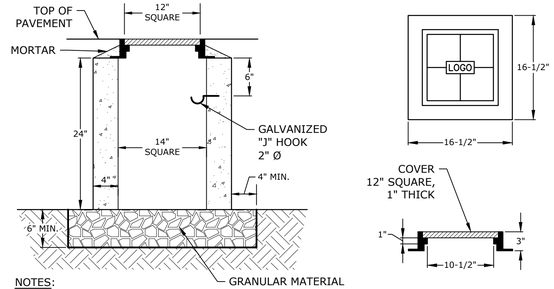
ELECTRICAL AND COMMUNICATION CONDUIT
NO SCALE



STANDARD BASE

NOTES:
1. REFER TO ELECTRICAL PLANS FOR WIRING DETAILS.
2. CONCRETE: 4000 PSI, AIR ENTRAINED STEEL: 60 KSI
3. LIGHT POLE FOUNDATIONS SHALL BE PLACED PRIOR TO INSTALLATION OF BRICK PAVERS.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL, TO INCLUDE PERFORMANCE SPECIFICATIONS, CALCULATIONS AND NH LICENSED STRUCTURAL ENGINEER'S STAMP FOR LIGHT POLE FOUNDATION.
5. STANDARD BASE SHALL BE CONSTRUCTED UNLESS THERE IS CONFLICT WITH THE EXISTING DUCT BANK. SPREAD FOOTING BASE SHALL BE USED IN LIEU OF STANDARD BASE IN LOCATIONS WHERE TOP OF DUCT BANK ELEVATION WILL CONFLICT WITH STANDARD POLE BASE DEPTH. CONTRACTOR SHALL VERIFY LOCATIONS WHERE SPREAD FOOTINGS ARE REQUIRED PRIOR TO CONSTRUCTION. SEE NOTE#4 FOR SUBMITTAL REQUIREMENTS.

HISTORIC LIGHT FIXTURE BASE
NO SCALE



NOTES:
1. 14" X 14" CONCRETE PULL BOX, NHDOT ITEM 614.511

CONCRETE PULL BOX
NO SCALE

Tighe&Bond

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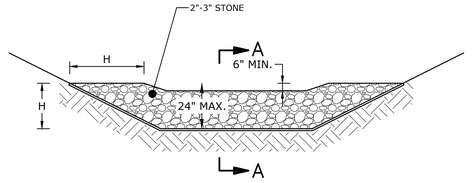
PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-C-DTLS.DWG
DRAWN BY:	CJK
CHECKED:	NAH
APPROVED:	PMC

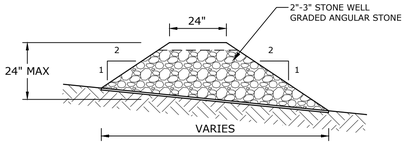
DETAILS SHEET

SCALE: AS SHOWN

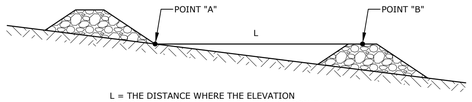
C-509



BERM STONE SIZE	
SIEVE DESIGNATION (US CUSTOMARY)	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
12 IN	100
6 IN	84-100
3 IN	68-83
1 IN	42-55
NO. 4	8-12



SECTION A-A

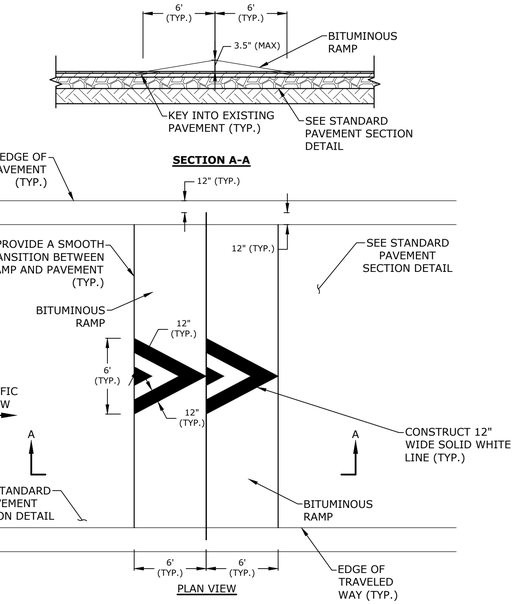


L = THE DISTANCE WHERE THE ELEVATION OF POINT "A" EQUALS THE ELEVATION OF POINT "B"

STONE CHECK DAM SPACING

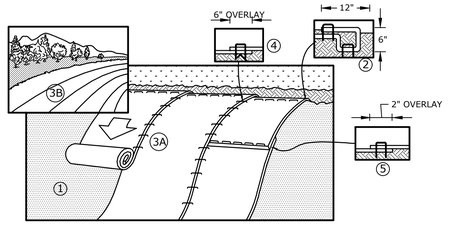
NOTES:
1. CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE DAM SHOULD BE LESS THAN ONE ACRE.
3. THE CHECK DAM SHOULD NOT BE USED IN A FLOWING STREAM.
4. CHECK DAMS SHOWN ON THE DRAWINGS SHALL BE LEFT IN PLACE PERMANENTLY.
5. CHECK DAMS INSTALLED AS PART OF TEMPORARY EROSION CONTROL MEASURE SHALL BE REMOVED ONCE THE SWALE OR DITCH HAS BEEN STABILIZED:
   a. IN TEMPORARY DITCHES AND SWALES, CHECK DAMS SHOULD BE REMOVED AND THE DITCH FILLED IN WHEN IT IS NO LONGER NEEDED
   b. IN PERMANENT STRUCTURES, CHECK DAMS SHOULD BE REMOVED WHEN PERMANENT LINING HAS BEEN ESTABLISHED. IF THE PERMANENT LINING IS VEGETATION, THEN THE CHECK DAM SHOULD BE RETAINED UNTIL THE GRASS HAS MATURED TO PROTECT THE DITCH OR SWALE. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL.

STONE CHECK DAM
NO SCALE



NOTE:
1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER.

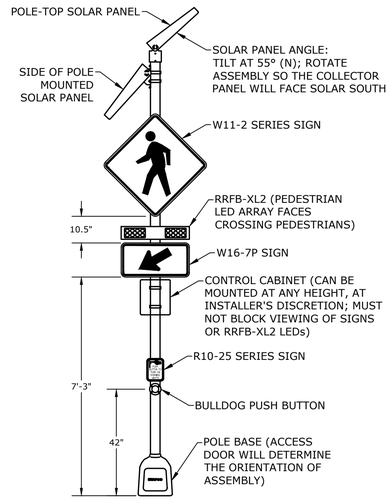
SPEED HUMP CROSS SECTION
NO SCALE



NOTES:
1. EROSION CONTROL BLANKET SHALL BE AN ALL NATURAL PRODUCT WITH NO PHOTO DEGRADABLE COMPONENTS, NORTH AMERICAN GREEN SC150BN OR APPROVED EQUAL.
2. STAKES SHALL BE BIODEGRADABLE BIOSTAKES OR ALL NATURAL WOOD ECOSTAKES OR APPROVED EQUAL. THE LENGTH OF STAKES SHALL BE BASED OFF OF THE MANUFACTURERS RECOMMENDATION.
3. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, COMPOST AND SEED.
4. BEGIN AT THE TOP OF THE SLOPE, 36" OVER THE GRADE BREAK, BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UPSLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAKES IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAKES ACROSS THE WIDTH OF THE BLANKET.
5. ROLL THE BLANKETS DOWN THE SLOPE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAKES IN APPROPRIATE LOCATIONS AS SHOWN ON THE MANUFACTURERS PATTERN GUIDE.
6. THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED.

EROSION CONTROL BLANKET

NO SCALE



RAPID RECTANGULAR FLASHING BEACON (RRFB)
NO SCALE

Tighe&Bond

05/23/2023

5/23/23

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
I	5/22/2023	AoT Resubmission
H	12/5/2022	AoT Submission
G	11/23/2022	PB Submission
F	11/18/2022	Traffic Peer Review
A	10/20/2022	TAC Resubmission

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CHECKED:	NAH
APPROVED:	PMC

DETAILS SHEET

SCALE: AS SHOWN

C-510

Last Saved: 5/19/2023
Plotted: Tuesday, May 23, 2023 - 9:26am By: CKrzoiuk
Tighe & Bond: J:\T\T5037 Two International Group\002 Russell Street Development\Drawings, Figures\AutoCAD\T5037-002-C-DTLS.dwg

PLANT SCHEDULE

Symbol	Quantity	*Botanical Name*	Common Name	Size	Spacing	Notes
TREES						
AC BO	7	*Acer rubrum 'Bowhall'*	Bowhall Maple	4-5" Cal.		Single-stem, matched
CA CA	6	*Carpinus caroliniana*	American Hornbean	4-5" Cal.		Single-stem, matched
CO SP	2	*Cornus 'Rutgan' Stellar Pink*	Stellat Pink Dogwood	3-4" Cal.		B&B; matched
Gl Bl	4	*Ginkgo biloba 'Magyar'*	Magyar Ginkgo	5-6" Cal.		B&B; matched
Ll WO	5	*Liquidambar styraciflua 'Worplesdon'*	Worplesdon Sweetgum	4-5" Cal.		B&B; matched
QU RP	6	*Quercus x warei 'Long' Regal Prince*	Regal Prince Oak	4-5" Cal.		B&B; matched
SHRUBS						
Co Pe		*Comptonia peregrina*	Sweet Fern	#3 Container	36" O.C.	
Co Ra		*Cornus sericea 'Cardinal'*	Cardinal Red Twig Dogwood	#5 Container	36" O.C.	
De Gr		*Deutzia gracilis 'Nikko'*	Nikko Deutzia	#3 Container	30" O.C.	
Fo Ga		*Fothergilla gardenii 'Mount Airy'*	Mount Airy Fothergilla	#5 Container	36" O.C.	
Hy Qu		*Hydrangea quercifolia 'Pee Wee'*	Oakleaf Hydrangea	#5 Container	48" O.C	
Li Be		*Lindera Benzoin*	Spice Bush	#5 Container	36" O.C.	
Ix Gl		*Ilex glabra 'Shamrock'*	Shamrock Inkberry	#5 Container	36" O.C.	
Il Ji		*Ilex verticillata 'Jim Dandy'*	Jim Dandy Winterberry	#5 Container	48" O.C	
Il Ve		*Ilex verticillata 'Red Sprite'*	Red Sprite Winterberry	#5 Container	48" O.C	
My Pe		*Myrica pensylvanica*	Northern Bayberry	#5 Container	48" O.C.	
Rh Gl		*Rhus aromatica 'Gro-Low'*	Fro-Low Fragrant Sumac	#3 Container	30" O.C.	
Rh Mh		*Rhododendron x 'Marie Hoffman'*	Mare Hoffman Azalea	#5 Container	48" O.C.	
Sp To		*Spiraea tomentosa*	Steeplebush	#3 Container	30" O.C.	
PERENNIALS						
am hu		*Amsonia x 'Blue Ice'*	Blue Star Flower	#2 Container	18" O.C.	
as ob		*Aster oblongifolius 'Raydon's Favorite'*	Raydon's Favorite Aster	#2 Container	24" O.C.	
ba bi		*Baptisia australis*	Blue False Indigo	#3 Container	30" O.C.	
ga od		*Galium odoratum*	Sweet Woodruff	#2 Container	12" O.C.	
ge ro		*Geranium x 'Rozanne'*	Rozanna Cranesbill	#2 Container	18" O.C.	
he vi		*Heuchera villosa 'Autumn Bride'*	Autumn Bride Coral Bells	#2 Container	18" O.C.	
he hr		*Hemerocallis 'Happy Returns'*	Happy Returns Daylily	#2 Container	24" O.C.	
li sp		*Liriope spicata*	Lilyturf	4" Container	10" O.C.	
os ci		*Osmundastrum cinnamomeum*	Cinnamon Fern	#2 Container	30" O.C.	
po od		*Polygonatum odoratum var. pluriflorum 'Variegatum*	Variegated Solomon's Seal	#2 Container	15" O.C.	
ti co		*Tiarella cordifolia*	Foamflower	#2 Container	15" O.C.	
va an		*Vaccinium angustifolium*	Lowbush Blueberry	#2 Container	15" O.C.	
ORNAMENTAL GRASSES						
bo cu		*Bouteloua curtipendula*	Side Oats Grama	#2 Container	30" O.C.	
ca pe		*Carex pennsylvania*	Pennsylvania Sedge	#2 Container	30" O.C.	
ca ac		*Calamagrostis acutiflora 'Karl Foerster'*	Feather Reed Grass	#3 Container	30" O.C.	
de ce		*Deschampsia cespitosa 'Pixie Fountain'*	Tufted Hair Grass	#2 Container	30" O.C.	
mi si		*Miscanthus sinensis 'Adagio'*	Dwarf Silver Grass	#2 Container	30" O.C.	
pe al		*Pennisetum alopecuroides 'Hamelin'*	Hameln Dwarf Fountain Grass	#2 Container	24" O.C.	
SEED MIXES						
Buffer Seed Mix		*Ernst Seed Fescue Mix composed of 45% Creeping Red Fescue/ 27.5% Hard Fescue 'Minimus' / 27.5% Hard Fescue 'Beacon'*				

PLANTING NOTES

1. LANDSCAPE ARCHITECT TO APPROVE PLANT MATERIAL PRIOR TO DELIVERY TO SITE.

2. PLANT MATERIAL SHALL CONFORM TO "THE AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.

3. NO SUBSTITUTIONS OF PLANT SPECIES WITHOUT LANDSCAPE ARCHITECT'S WRITTEN APPROVAL.

4. SUBSTITUTIONS OF PLANT SPECIES SHALL BE A PLANT OF EQUIVALENT OVERALL FORM, HEIGHT AND BRANCHING HABIT, FLOWER, LEAF AND FRUIT, COLOR AND TIME OF BLOOM, AS APPROVED BY LANDSCAPE ARCHITECT.

5. LOCATE AND VERIFY UTILITY LINE LOCATIONS PRIOR TO STAKING AND REPORT CONFLICTS TO LANDSCAPE ARCHITECT.

6. PLANTING DEMOLITION DEBRIS, GARBAGE, LUMPS OF CONCRETE, STEEL AND OTHER MATERIALS DELETERIOUS TO PLANT'S HEALTH AS DETERMINED BY LANDSCAPE ARCHITECT SHALL BE REMOVED FROM ALL PLANTING AREAS.

7. NO PLANTING TO BE INSTALLED BEFORE ACCEPTANCE OF ROUGH GRADING.

8. ALL PROPOSED TREE LOCATIONS SHALL BE STAKED OR LAID OUT IN THEIR APPROXIMATE LOCATION BY THE CONTRACTOR. REFER TO LAYOUT AND PLANTING SHEETS FOR LAYOUT INFORMATION. THE CONTRACTOR SHALL ADJUST THE LOCATIONS AS REQUESTED BY THE LANDSCAPE ARCHITECT TO ACCOUNT FOR SUBSURFACE UTILITIES AND OTHER FIELD CONDITIONS. FINAL LOCATIONS OF ALL PLANTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.

9. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH FINISHED GRADE. IMMEDIATELY REPLANT PLANTS THAT SETTLE OUT OF PLUMB OR BELOW FINISHED GRADE.

10. PLANT UNDER FULL TIME SUPERVISION OF CERTIFIED ARBORIST, NURSERYMAN, OR LICENSED LANDSCAPE ARCHITECT. PROVIDE WRITTEN VERIFICATION OF CERTIFICATION AND/OR LICENSE FOR LANDSCAPE ARCHITECT'S APPROVAL.

11. WATER PLANTS THOROUGHLY AFTER INSTALLATION, A MINIMUM OF TWICE WITHIN THE FIRST 24 HOURS.

12. REPAIR DAMAGE DUE TO OPERATIONS INSIDE AND OUTSIDE OF LIMIT OF WORK

13. SOAK ALL PERENNIALS FOR 24 HOURS PRIOR TO INSTALLATION

14. BUFFER SEED MIX AREA TO BE WATERED AND MONITORED DURING ESTABLISHMENT TO ENSURE SEED COVERAGE AND ESTABLISHMENT IS UNIFORM AND HEALTHY AND UNTIL ACCEPTANCE.

15. MOWING OF THE BUFFER SEED MIX AREA FOLLOWING ESTABLISHED AND ACCEPTANCE SHALL OCCUR TWICE A YEAR - IN SPRING PRIOR TO NEW GROWTH AND THE AUTUMN AFTER DORMANCY. MOWING IS NOT TO OCCUR IN THE HEAT OF SUMMER. MOWING ENCOURAGES ESTABLISHMENT VIA ROOT SYSTEM GROWTH AND MITIGATES GROWTH OF WEEDS, UNDESIRABLE AND INVASIVE SPECIES.

16. MOWING HEIGHT TO BE NOT LESS THAN 3".

Tighe&Bond

North End Mixed Use Development

Two International Group

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FILE:	T5037-002-L-DSGN-WORKING.DWG
DRAWN BY:	OS
CHECKED:	RU
APPROVED:	RU

LANDSCAPE MATERIAL PLAN, LEGEND AND NOTES

SCALE: AS SHOWN

L-100

LEGEND

- PLANTING BED
- SEASONAL GRASSES & PERENNIALS
- EXISTING INVASIVES TO BE MITIGATED & REPLANTED WITH NATIVE MEADOWGRASS
- EXISTING VEGETATED BUFFER TO REMAIN
- DECIDUOUS TREE

MAP 119 LOT 4
AREA = 9,765 S.F.
(0.22 ACRES)

BUILDING 1

BUILDING 2

BUILDING 3

PROPERTY LINE
CONNECT TO EXISTING SIDEWALK
EXISTING VEGETATED BUFFER TO REMAIN
EXISTING INVASIVES TO BE MITIGATED, REGRADED AND REPLANTED WITH NATIVE MEADOWGRASS
SEASONAL GRASSES AND PERENNIALS
BRICK PAVING
WOOD MOUNTED BENCH
SHRUBS, PERENNIALS & ORNAMENTAL GRASS
CAST-IN-PLACE CONCRETE SIDEWALK
WELCOME GRANITE STAIRS & HANDRAILS
1 AC BO
5 LI WO
CITY STANDARD HISTORIC LIGHT FIXTURE & POLE
BIKE PARKING, TYP.
RAISED STREETSCAPE TREE PLANTER
CITY STANDARD BRICK PAVING
2 CO SP
SEATING AREA
BOLLARDS
RAISED PEDESTRIAN CROSSING WITH VEHICULAR UNIT PAVING
WOOD MOUNTED BENCH
GRANITE STAIRS WITH HANDRAILS
SHARED PATH WITH DECORATIVE PAVING BANDING & VEHICULAR UNIT PAVING
CITY STANDARD BRICK PAVING
AT GRADE STREETSCAPE TREE PLANT BED
3 QU RP
SHRUBS, PERENNIALS & ORNAMENTAL GRASS
SHRUBS, PERENNIALS & ORNAMENTAL GRASS SLOPED WALK & STEPS
CATENARY LIGHTING
SPILL OUT SEATING ZONE
WOOD MOUNTED BENCH, TYP.
6 CA CA
CITY STANDARD BRICK PAVING WOOD MOUNTED BENCH, TYP. PLANTER CURB
SPILL OUT SEATING ZONE
WALL WITH PLANT BED
GRANITE STAIRS WITH HANDRAILS
WOOD MOUNTED BENCH
CITY STANDARD HISTORIC LIGHT FIXTURE & POLE
1 AC BO
CITY STANDARD BRICK PAVING
2 GI BI
PLANTER CURB
DECORATIVE PAVING BANDING
WOOD MOUNTED BENCH
PUBLIC GATHERING SPACE
GRANITE STAIRS WITH HANDRAILS
3 QU RP
DECORATIVE PAVING BANDING
4 AC BO
RAISED STREETSCAPE TREE PLANTER
BIKE PARKING, TYP.
SEAT WALL
PLANTER CURB
2 GI BI
SHRUBS, PERENNIALS & ORNAMENTAL GRASS
GRANITE STAIRS WITH HANDRAILS
WOOD MOUNTED BENCH

MAPLEWOOD AVENUE
VAUGHAN STREET (PUBLIC RIGHT OF WAY)
GREEN STREET
RUSSELL STREET
DEER STREET
MARKET STREET (TY WIDE PUBLIC RIGHT OF WAY)

0 40' 80'
GRAPHIC SCALE

Tighe&Bond

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APPROVED:	RU

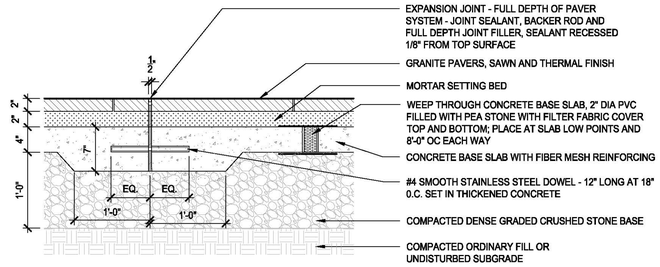
LANDSCAPE SITE PLAN

SCALE: AS SHOWN

L-101

Last Saved: 11/21/2022
Printed: Nov 21, 2022 - 10:32am By: CKrzcuik
Tighe & Bond: J:\T\T5037 Two International Group\002 Russell Street Development\Drawings, Figures\AutoCAD\T5037-002-L-DSGN-Working.dwg

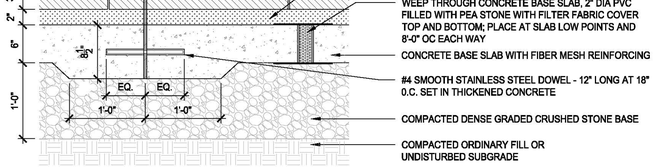
NOTE:
1. ALIGN EXPANSION JOINT WITH PAVER JOINT.
2. PROVIDE EXPANSION JOINTS AT 20' ON CENTER OR AS SHOWN ON DRAWINGS.
3. PROVIDE CAULKED CONSTRUCTION JOINT WHERE PAVING ABUTS VERTICAL SURFACE.
4.THE JOINTS BETWEEN GRANITE PAVER PIECES TO BE 1/4" MORTAR JOINTS.



1 GRANITE PAVERS ON CONCRETE BASE - PEDESTRIAN

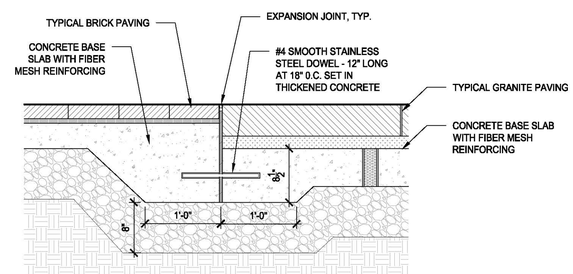
SCALE: 1"=1'-0"

NOTE:
1. ALIGN EXPANSION JOINT WITH PAVER JOINT.
2. PROVIDE EXPANSION JOINTS AT 20' ON CENTER OR AS SHOWN ON DRAWINGS.
3. PROVIDE CAULKED CONSTRUCTION JOINT WHERE PAVING ABUTS VERTICAL SURFACE.
4. THE JOINTS BETWEEN GRANITE PAVER PIECES TO BE 1/4"MORTAR JOINTS.



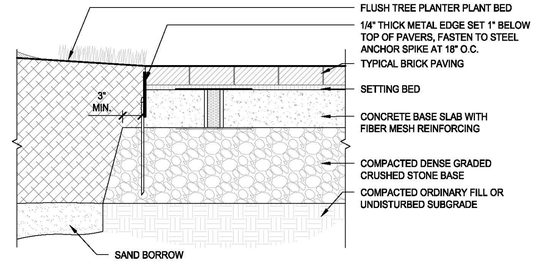
2 GRANITE PAVERS ON CONCRETE BASE - VEHICULAR

SCALE: 1"=1'-0"



3 GRANITE TO BRICK PAVING TRANSITION

SCALE: 1"=1'-0"



4 METAL EDGE AT BRICK PAVING ABUTTING PLANTING BED

SCALE: 1" = 1'-0"

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LANDSCAPE DETAILS

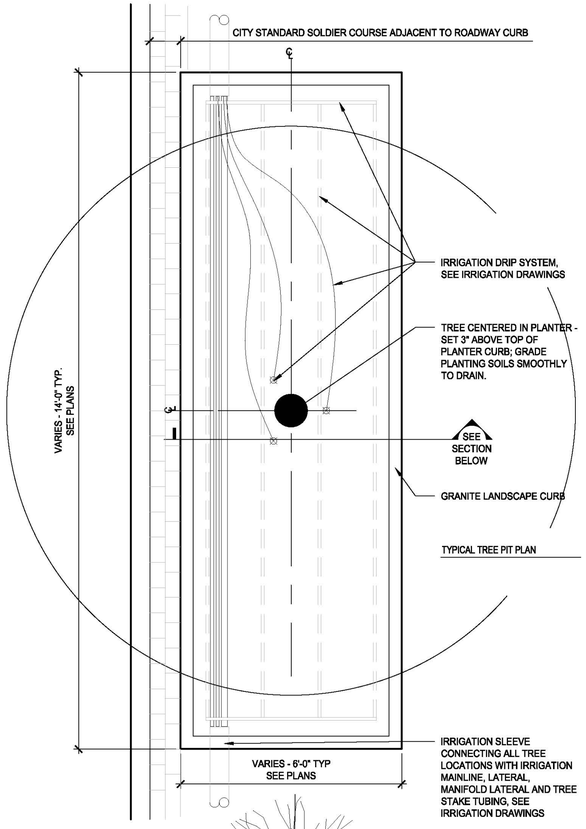
SCALE: AS SHOWN

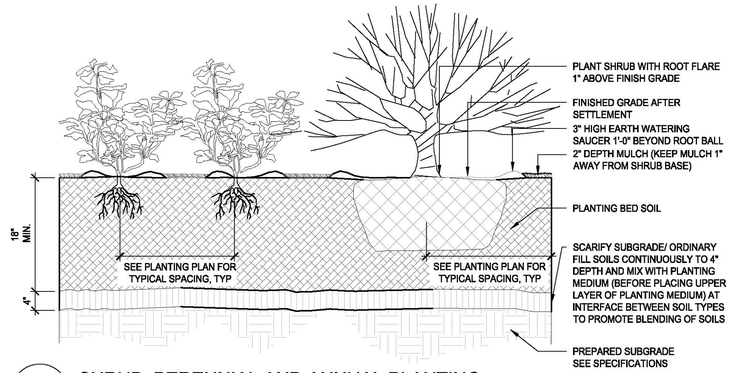
L-102

CITY OF PORTSMOUTH TREE PLANTING REQUIREMENTS

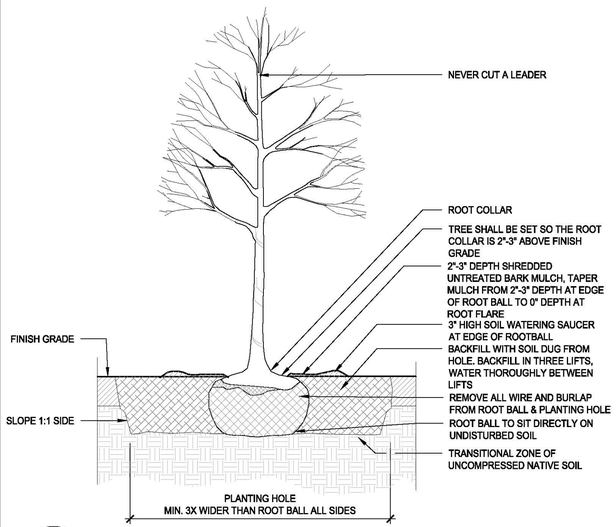
THE BASE OF THE CITY OF PORTSMOUTH TREE PLANTING REQUIREMENTS IS THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPLANTING. ANSI A300 PART 6 LAYS OUT TERMS AND BASIC STANDARDS AS SET FORTH BY INDUSTRY BUT IT IS NOT THE 'END ALL' FOR THE CITY OF PORTSMOUTH. THE FOLLOWING ARE THE CITY OF PORTSMOUTH, NH TREE PLANTING REQUIREMENTS THAT IN ADDITION TO OR THAT GO BEYOND THE ANSI A300 PART 6.

1. ALL PLANTING HOLES SHALL BE DUG BY HAND- NO MACHINES. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE NEW PLANTING PITS, PLANTING BEDS WITH GRANITE CURBING, AND PLANTING SITES WITH SILVA CELLS ARE BEING CREATED. IF A MACHINES USED TO DIG ANY OF THESE SITUATIONS AND PLANTING DEPTH NEEDS TO BE RAISED THE MATERIAL IN THE BOTTOM OF THE PLANTING HOLE MUST BE FIRMED WITH MACHINE TO PREVENT SINKING OF THE ROOT BALL.
2. ALL WIRE AND BURLAP SHALL BE REMOVED FROM THE ROOT BALL AND PLANTING HOLE.
3. THE ROOT BALL OF THE TREE SHALL BE WORKED SO THAT THE ROOT COLLAR OF THE TREE IS VISIBLE AND NO GIRDLING ROOTS ARE PRESENT.
4. THE ROOT COLLAR OF THE TREE SHALL BE 2"-3" ABOVE GRADE OF PLANTING HOLE FOR FINISHED DEPTH.
5. ALL PLANTINGS SHALL BE BACKFILLED WITH SOIL FROM THE SITE AND AMENDED NO MORE THAN 20% WITH ORGANIC COMPOST. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE ENGINEERED SOIL IS BEING USED IN CONJUNCTION WITH SILVA CELLS AND WHERE NEW PLANTING BEDS ARE BEING CREATED.
6. ALL PLANTINGS SHALL BE BACKFILLED IN THREE LIFTS AND ALL LIFTS SHALL BE WATERED SO THE PLANTING WILL BE SET AND FREE OF AIR POCKETS- NO EXCEPTIONS.
7. AN EARTH BERM SHALL BE PLACED AROUND THE PERIMETER OF THE PLANTING HOLE EXCEPT WHERE CURBED PLANTING BEDS OR PITS ARE BEING USED.
8. 2"-3" OF MULCH SHALL BE PLACED OVER THE PLANTING AREA.
9. AT THE TIME THE PLANTING IS COMPLETE THE PLANTING SHALL RECEIVE ADDITIONAL WATER TO ENSURE COMPLETE HYDRATION OF THE ROOTS, BACKFILL MATERIAL AND MULCH LAYER.

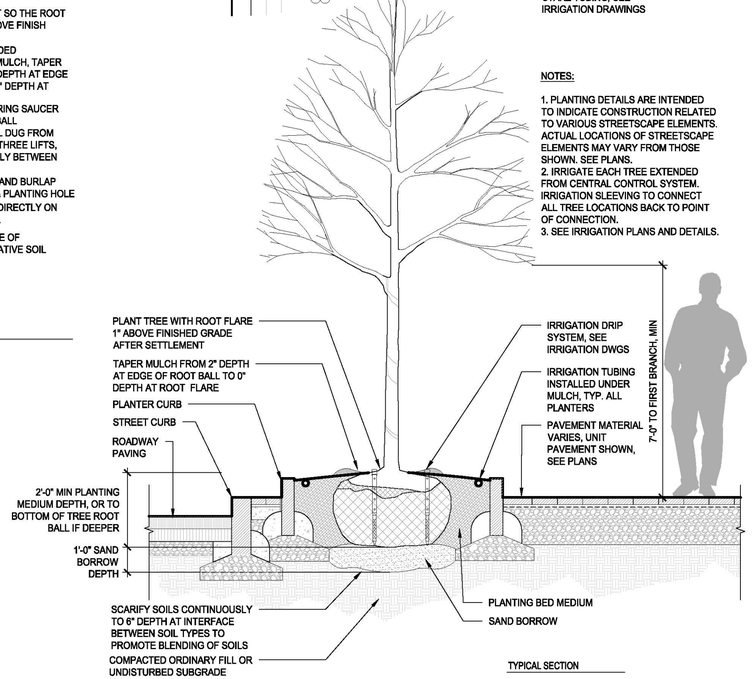




1 SHRUB, PERENNIAL AND ANNUAL PLANTING
SCALE: 3/4"=1'-0"

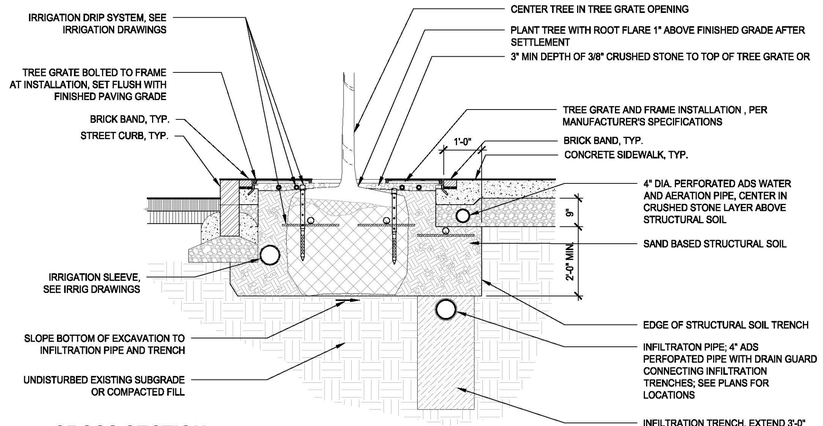


2 TREE PLANTING DETAIL
SCALE: 3/8"=1'-0"



3 TREE PLANTING IN RAISED LANDSCAPE CURB PLANTER
SCALE: 1/2" = 1'-0"

PLAN: WATER AND AERATION SYSTEM IN STREETSCAPE LAYOUT



CROSS SECTION

NOTES:
1. PLANTING DETAILS ARE INTENDED TO INDICATE CONSTRUCTION RELATED TO VARIOUS STREETSCAPE ELEMENTS. ACTUAL LOCATIONS OF STREETSCAPE ELEMENTS MAY VARY FROM THOSE SHOWN. SEE PLANS.
2. FINISHED GRADE OF TREE GRATES AND FRAMES SHALL BE FLUSH WITH SURROUNDING PAVEMENT.
3. PROVIDE AUTOMATIC IRRIGATION SYSTEM TO IRRIGATE EACH TREE EXTENDED FROM CENTRAL CONTROLS SYSTEM. IRRIGATION SLEEVING TO CONNECT ALL TREE LOCATIONS BACK TO POINT OF CONNECTION.
4. LIMB BRANCHES TO PROVIDE CLEAR PEDESTRIAN ZONE TO 7'-0" ABOVE FINISH GRADE.
5. SCARIFY ALL SOIL MARGINS TO DEPTH OF 6".
6. SEE IRRIGATION PLANS AND DETAILS.

4 TREE PLANTING IN TREE GRATE OVER SAND-BASED STRUCTURAL SOIL
SCALE: 1/2"=1'-0"

Tighe&Bond

North End Mixed Use Development

Two International Group

Russell Street & Deer Street
Portsmouth, NH

MARK	DATE	DESCRIPTION
F	11/23/2022	PB Submisison
E	10/20/2022	TAC Resubmission
D	9/28/2022	Intersection Realignment
C	9/22/2022	TAC Resubmission
B	8/25/2022	TAC Resubmission
A	7/21/2022	TAC Resubmission

PROJECT NO:	T5037-002
DATE:	May 24, 2022
FILE:	T5037-002-L-DSGN-WORKING.DWG
DRAWN BY:	OS
CHECKED:	RU
APPROVED:	RU

LANDSCAPE DETAILS

SCALE: AS SHOWN

L-103

NORTH END MIXED USE DEVELOPMENT
RUSSELL STREET & DEER STREET
PORTSMOUTH, NEW HAMPSHIRE

COMMUNITY SPACE EXHIBIT

PROPOSED COMMUNITY SPACE:

	REQUIRED	PROVIDED
WIDE SIDEWALK COMMUNITY SPACE		7,140 SF
PEDESTRIAN ALLEY COMMUNITY SPACE		21,691 SF
PARK AREA COMMUNITY SPACE		9,765 SF
TOTAL COMMUNITY SPACE AREA	25,221 SF	38,596 SF

CITY RIGHT OF WAY IMPROVEMENTS (NOT INCLUDED IN COMMUNITY SPACE CALCULATION):

PUBLIC REALM IMPROVEMENT WITHIN CITY R.O.W.	22,353 SF

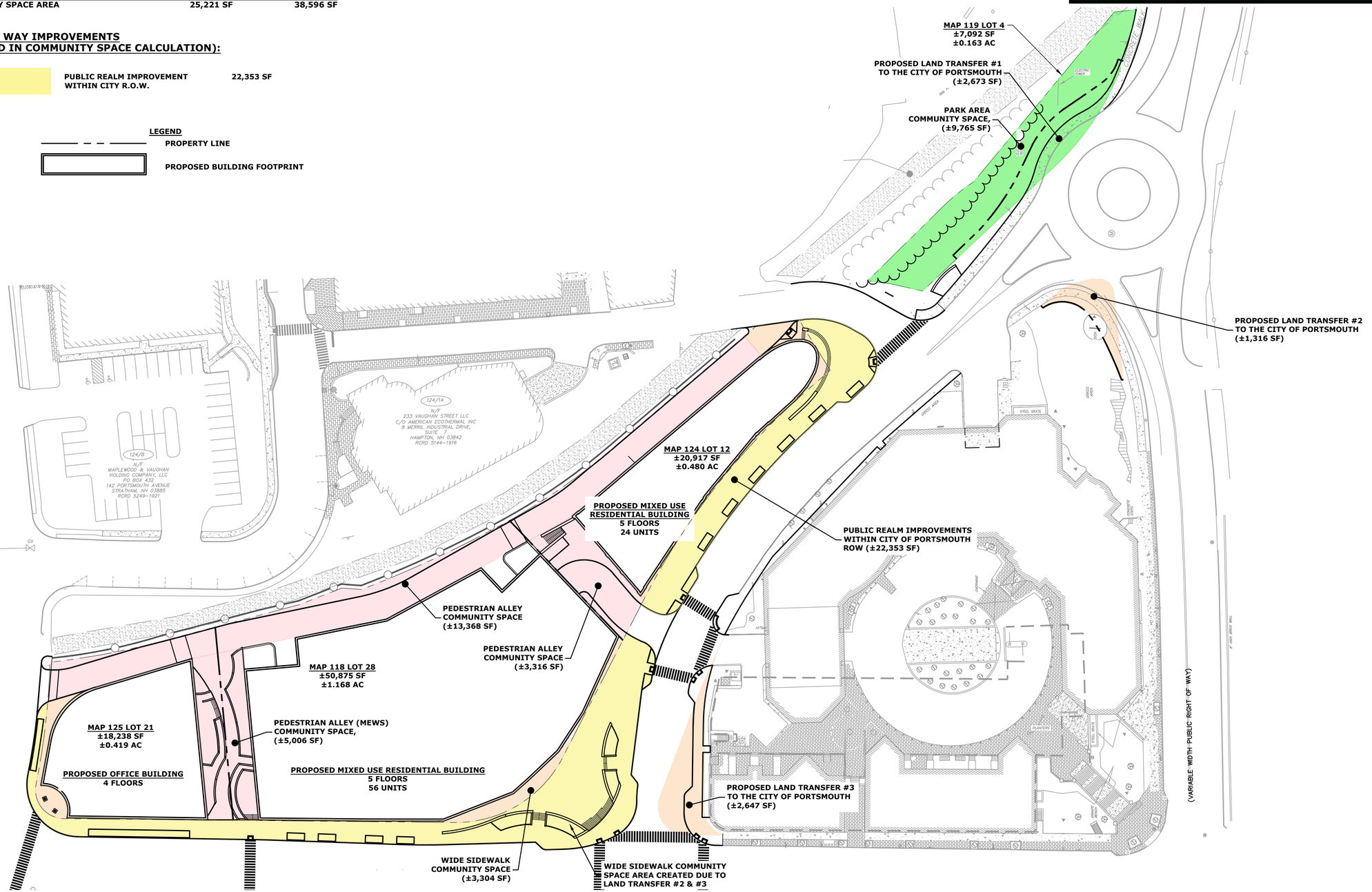
LEGEND

PROPERTY LINE

PROPOSED BUILDING FOOTPRINT

COMMUNITY SPACE:

	REQUIRED	PROPOSED
MAP 125 LOT 21		
DEVELOPMENT LOT AREA: 18,237 SF	3,647 SF, 20%	6,273 SF, 34.4%
MAP 118 LOT 28		
DEVELOPMENT LOT AREA: 50,875 SF	15,263 SF, 30%	
OFFSITE COMMUNITY SPACE AREA (MAP 119 LOT 4): 7,092 SF	2,128 SF, 30%	
MAP 118 LOT 28 TOTAL	17,391 SF, 30%	23,420 SF, 40.4%
MAP 124 LOT 12		
DEVELOPMENT LOT AREA: 20,917 SF	4,183 SF, 20%	9,002 SF, 43.0%
TOTALS	25,221 SF	38,695 SF, 39.8%



Tighe&Bond

November 23, 2022
T5037-002-C-DSGN.dwg

Last Save Date: November 21, 2022 4:08 PM By: CKRZCUIK
Plot Date: Tuesday, November 22, 2022 Plotted By: Colter Krzcuik
Plot File Location: J:\T\T5037 Two International Group\002 Russell Street Development\Drawings_Figures\AutoCAD\T5037-002-C-DSGN.dwg Layout Tab: COMM

October 21, 2024

Rick Chellman
Chairman, Planning Board
1 Junkins Avenue
Portsmouth, NH 03801

Re: *2 Russell Street Development*
Request for Reapproval of Conditional Use Permits

Dear Chairperson Chellman,

On behalf of Port Harbor Land LLC, the Owner of the property located at 2 Russell Street, City of Portsmouth, County of Rockingham, State of New Hampshire, Attorney John E. Lyons, Jr. is fully authorized to file the Land Use Application for Reapproval of the Conditional Use Permits being submitted herewith.

Thank you.

PORT HARBOR LAND LLC

10-21-24
Date:

By: Ryan D. Plummer,
Duly Authorized Agent

Findings of Fact | Wetland Conditional Use Permit
City of Portsmouth Planning Board

Date: November 21, 2024
Property Address: 913 Sagamore Avenue
Application #: LU-24-141
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of all conditions necessary to obtain final approval.

In order to grant Wetland Conditional Use permit approval, the Planning Board shall find the application satisfies criteria set forth in the Section 10.1017.50 (Criteria for Approval) of the Zoning Ordinance.

	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	**Finding** (Meets Criteria for Approval)	**Supporting Information**
1	*1. The land is reasonably suited to the use activity or alteration.*	**Meets** **Does Not Meet**	Given that the existing lot currently contains a residential structure and provides residential use, and the proposed structure is not located in the Special Flood Hazard Area, the land is reasonably suited to the use, activity, or alteration.
2	2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*	**Meets** **Does Not Meet**	Due to the configuration of the lot, the location of nearby wetlands and buffers, and the presence of exposed or shallow depth to bedrock, there does not exist an area to propose the building location and achieve reasonable use while avoiding the 100' City of Portsmouth Wetland Buffer.
3	*3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.*	**Meets** **Does Not Meet**	We believe the proposal will not significantly impact the existing wetland resource located adjacent to the site, and the resource functions and values. The proposed project removes impervious surfaces within the wetland buffer, provides pervious technology for the proposed patio, proposes stone drip aprons which will serve to improve stormwater quality, treatment, and infiltration on the subject parcel.

	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	Finding (Meets Criteria for Approval)	Supporting Information
4	*4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*	**Meets** **Does Not Meet**	The proposed project does not include alteration of any naturally vegetated area to accommodate the construction of the new home.
5	*5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.*	**Meets** **Does Not Meet**	The project represents the alternative with the least adverse impacts to areas and environments while allowing reasonable use of the property. The proposal avoids the wetland buffer to the greatest extent practicable, and avoids bedrock removal to accommodate construction while providing a reasonable use for the property owner.
6	*6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.*	**Meets** **Does Not Meet**	There are no areas within the 25-foot vegetated buffer strip that will be impacted or altered by this project, other than areas being planted.
7	**<u>Other Board Findings:</u>**		

29 October 2024

Rick Chellman, Chair
City of Portsmouth Planning Board
1 Junkins Avenue
Portsmouth, NH 03801

Re: City of Portsmouth Wetland Conditional Use Permit Request for Hogswave, LLC, Tax Map 223, Lot 27, 913 Sagamore Avenue, Portsmouth, New Hampshire

Dear Mr. Chellman:

On behalf of Hogswave LLC, we hereby submit a City of Portsmouth Wetland Conditional Use Permit request for 9,574 square feet (2,719 Temporary – 6,855 Permanent) of disturbance within the 100' City of Portsmouth Wetland Buffer for residential re-development at the property. The property currently contains a single-family residential structure, a detached garage, a detached boat house / workshop, a tidal docking structure and associated site improvements. The proposal includes demolition of the existing residential structure, construction of a new residential structure, re-configuration of the existing gravel driveway, new patio and deck, new walkways, the removal of impervious surfaces, and the associated grading, utility connections and landscaping, including new buffer plantings. The proposed construction is detailed on the attached plan set.

The stormwater technology being used for the construction of the proposed site improvements include a pervious patio, stone drip aprons, impervious surface removal, riprap diversion swale, and proposed buffer plantings. Those improvements will allow for collection and infiltration of stormwater providing a stormwater treatment component that does not exist under current conditions. It is also worth noting that the project does not increase the impervious surface within the 100' wetland buffer.

Per the City of Portsmouth Zoning Ordinance **Article 10.1017.22 (3)**, approximately 18% (3,579 sq. ft.) of the 20,255 sq. ft. wetland buffer area that occurs on the subject lot is vegetated and occurs in a natural state. The plan Impervious Surface Area Table (within the 100-foot TBZ) on Sheet C 102 details the surfaces in the buffer area. The 100-foot Sagamore Creek wetland buffer in this area is generally characterized as maintained lawn, slope protection, structures, pavement, ledge, and gravel drive. Along the river and behind the garage, trees were identified including green ash (Fraxinus pennsylvanica) red oak (Quercus rubra) and black locust (Robinia pseudoacacia). Honeysuckle (Lonicera sp.) was also identified along the shore. Many species of honeysuckle are noted as invasive throughout New England, but only fly honeysuckle (Lonicera xylosteum) is noted on the NH Invasive Species Watch List. Black locust is also noted on the NH Invasive Species Watch List. We do not anticipate that this project will provide opportunities for the spread of these invasive trees. In the proposed condition a significant amount of the 50-foot buffer will be returned to buffer plantings.

200 GRIFFIN RD. UNIT 14, PORTSMOUTH, NH 03802 603.430.9282 | HALEYWARD.COM

Also, per the City of Portsmouth Zoning Ordinance **Article 10.1017.24** the application shall include removal of impervious surfaces at least equal in area to the area of impervious surface impact. The proposed project proposes a slight 15 sq. ft. decrease of impervious surface within the City wetland buffer. Although not required under Article 10.1017.24, the project also includes 2,737 sq. ft. as well as 586 sq. ft. wetland buffer enhancement areas, located directly adjacent to Sagamore Creek which includes the planting of native shrubs and trees to provide a naturally vegetated buffer where one does not currently exist. Please refer to the Buffer Planting Area and Buffer Planting Schedule on Permit Plan-Sheet C104. In addition to the Buffer Planting Area, the plan also provides for a stabilization component to areas where impervious surfaces will be removed.

Per the City of Portsmouth Zoning Ordinance, **Article 10.1017.25 (2)**, where the vegetated buffer strip contains grass or non-native plantings, or is otherwise not intact, the priority of the **wetland buffer** enhancement plan shall include revegetation of the vegetated buffer strip with native, low-maintenance shrubs and other woody vegetation. A portion of the existing vegetated buffer strip currently **does not** exist in a natural vegetated state (see attached photo log). The proposed 460 sq. ft. buffer planting area is located in an area that is currently maintained lawn, directly adjacent to Sagamore Creek.

According to the City of Portsmouth Zoning Ordinance **Article 10.1017.50 Criteria for Approval**, the proposal shall comply with the following criteria:

1. **The land is reasonably suited to the use, activity or alteration.**

The proposal is to construct a new home on the existing lot where a residential structure currently exists. Site improvements include re-configuration of the existing gravel driveway, new patio and deck, new walkways, the removal of impervious surfaces, and the associated grading, utility connections and landscaping, including new buffer plantings. Only a portion of the proposed structure and landscape components are located within the 100' City of Portsmouth Wetland Buffer. The NHDES Impact Plan shows the area in the City of Portsmouth Buffer (State Tidal Buffer Zone) and the area in the NHDES Shoreland Protection Zone. Given that the existing lot currently contains a residential structure and provides residential use, and the proposed structure is not located in the Special Flood Hazard Area, the land is reasonably suited to the use, activity, or alteration.

2. **There is no alternative location outside of the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.**

Due to the configuration of the lot, the location of nearby wetlands and buffers, and the presence of exposed or shallow depth to bedrock, there does not exist an area to propose the building addition and achieve reasonable use while avoiding the 100' City of Portsmouth Wetland Buffer. Locating the proposed home further north on the lot would require significant removal of bedrock to accommodate construction. In general, the lot slopes from north to south and contains a "bluff" approximately at elevation 20. However,

this bluff exists as exposed and/or shallow depth to bedrock, and the existing home was placed in accordance with the most suitable location. We believe the most reasonable use is to construct the proposed home in a location where it fits best into the existing landscape while using a portion of the bluff and utilizing the existing foundation hole for most of the proposed home. The application material includes a "Ledge Exhibit" which highlights the presence of ledge in the vicinity of the proposed home. The proposed home, if expanded further away from the wetland resource would require the removal of existing ledge and result in a cumulative impact associated with additional disturbance that would be detrimental to the wetland buffer. We believe that the proposed new home, in the proposed location, provides reasonable use and minimizes cumulative impacts to the wetland buffer and the overall property.

3. **There will be no adverse impact on the wetland functional values of the site or surrounding properties.**

We believe the proposal will not significantly impact the existing wetland resource located adjacent to the site, and the resource functions and values. The proposed project removes impervious surfaces within the wetland buffer, provides pervious technology for the proposed patio, proposes stone drip aprons which will serve to improve stormwater quality, treatment, and infiltration on the subject parcel. Lastly, the project also provides a buffer planting area and additional tree plantings which will increase function the wetland buffer on the lot providing additional protections that do not currently exist on the site. With the above measures being taken, it is our belief that the above project will improve water quality entering the nearby resource, and therefore have no adverse impact on the functional values of the resource or the surrounding properties.

4. **Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.**

The proposed project does not include alteration of any naturally vegetated area to accommodate the construction of the new home.

5. **The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.**

The project represents the alternative with the least adverse impacts to areas and environments while allowing reasonable use of the property. The proposal avoids the wetland buffer to the greatest extent practicable, and avoids bedrock removal to accommodate construction while providing a reasonable use for the property owner. The project also provides numerous components which will serve to improve stormwater quality, treatment, and infiltration on the subject parcel.

6. **Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.**

There are no areas within the 25-foot vegetated buffer strip that will be impacted or altered by this project, other than areas being planted.

The project was unanimously recommended for approval at the October 9, 2024, Conservation Commission meeting. The recommended approval included the following stipulations that the applicant has considered and submit the following comments with the stipulation repeated and a response in **bold** text:

1. The proposed Northern Red Oaks should be at least of 2" caliper sizing. **This has been noted in the Buffer Planting Schedule on Sheet C 104.**
2. The Conservation Commission recommends that the applicant follow NOFA standards on the site: https://nofaolc.wpenginepowered.com/wp-content/uploads/2019/10/nofa_organic_land_care_standards_6thedition_2017_opt.pdf **This has been noted in the Vegetative Practice Section on Sheet C 501.**
3. Wetland boundary markers shall be permanently installed prior to the start of construction in locations noted on plan set. **The marker locations have been noted on Sheets C 101 & C 104.**

Please find included in this submission: Conservation Commission Recommendation, a Functions and Values Assessment of the property, Wildlife Habitat Research, Natural Heritage Breau review, Stormwater Inspection and Maintenance Plan, Photo Log, Ledge Impact Plan, and the Buffer Zone Impact Plan.

We look forward to an in-person presentation at your next Planning Board meeting. Please contact me if you have any questions or concerns regarding this submission. Approval of the CUP Application is hereby requested.

Respectfully submitted,

John Chagnon, PE
Project Manager

P:\NH\5010372-Hogswave\3116-913 Sagamore Ave., Portsmouth-SDR\2024 Permitting\Applications\City of Portsmouth CUP\Planning Board CUP Letter 10-29-24.docx

CITY OF PORTSMOUTH

Planning Department
1 Junkins Avenue
Portsmouth, New
Hampshire 03801

(603) 610-7216

CONSERVATION COMMISSION

October 11, 2024

Hogswave LLC.
912 Sagamore Avenue
Portsmouth, New Hampshire 03801

RE: Wetland Conditional Use Permit application for property located at 913 Sagamore Avenue, Portsmouth, NH. (LU-23-141)

Dear Property Owner:

The Conservation Commission, at its regularly scheduled meeting of **Wednesday, October 9, 2024**, considered your application for a Wetland Conditional Use Permit for the demolition of an existing residential structure and the construction of a new home, reconfiguration of the existing gravel driveway, the addition of a pervious paver patio, deck, removal of impervious surfaces, reconstruction of a retaining wall, grading, utility connections and landscaping. The existing conditions within the 100' wetland buffer include a one-story residential structure with 1,110 s.f. of impact and approximately 900 s.f. of impervious pavement. This application proposes the removal of the 1,110 s.f. of building impact within the buffer and the removal of 900 s.f. of pavement. The applicant is proposing to permanently impact approximately 7,727 s.f. of the 100' wetland buffer, compared to the existing condition of 7,743 s.f. of permanent impact.. Said property is shown on Assessor Assessor Map 223 Lot 27 and lies within the Waterfront Business (WB). As a result of said consideration, the Commission voted to **recommend approval** of this application to the Planning Board with the following stipulations:.

1. The proposed Northern Red Oaks should be at least of 2" caliper sizing.
2. The Conservation Commission recommends that the applicant follow NOFA standards on the site: https://nofaolc.wpenginepowered.com/wp-content/uploads/2019/10/nofa_organic_land_care_standards_6thedition_2017_opt.pdf
3. Wetland boundary markers shall be permanently installed prior the start of construction in locations noted on plan set.

This matter will be placed on the agenda for the Planning Board meeting scheduled for **Thursday, December 19, 2024**. One (1) hard copy of any revised plans and/or exhibits as well as an updated electronic file (in a PDF format) must be filed in the Planning Department and uploaded to the online permit system no later than Wednesday, November 27, 2024.

The minutes and audio recording of this meeting are available by contacting the Planning Department.

Very truly yours,

Barbara McMillan

Barbara McMillan, Vice-Chair
Conservation Commission

cc:

John Chagnon, Project Manager, Haley Ward

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

WETLAND FUNCTIONS AND VALUES ASSESSMENT

FOR HOGSWAVE, LLC
Map 223, Lot 27 | Portsmouth, NH

Applicant:
HOGSWAVE, LLC
912 Sagamore Avenue | Portsmouth, NH 03801

July 30, 2024
JN: 5010372

Prepared By:
Haley Ward, Inc.
200 Griffin Rd., Unit 14 | Portsmouth, New Hampshire 03801

Corporate Office
One Merchants Plaza
Suite 701
Bangor, ME 04401
T: 207.989.4824
F: 207.989.4881

HALEYWARD.COM

TABLE OF CONTENTS

APPENDICES

INTRODUCTION

The applicant is proposing residential re-development including demolition of the existing residential structure, construction of a new home, re-configuration of the existing gravel driveway, pervious paver patio, deck, removal of impervious surfaces, grading, utility connections and associated landscaping. The project site is identified on Portsmouth Tax Map 223 as Lot 27 and is approximately 3.1 acres in size. As currently designed, the proposed project would require impacts to the 100' previously developed Tidal Buffer Zone (TBZ).

The purpose of this report is to present the existing functions and values of the tidal wetlands and to assess any impacts the proposed project may have on their ability to continue to perform these functions and values. The tidal wetlands being impacted were assessed with consideration to their association with Sagamore Creek and the larger marine ecosystem and was not limited to the tidal wetlands immediately on-site.

METHODS

DATA COLLECTION

The tidal wetlands associated with this project area were identified and characterized through field surveys and review of existing information. Haley Ward conducted site visits in July of 2024 to characterize the tidal wetlands and collect the necessary information to complete a functions and values assessment. In addition, Haley Ward contacted the New Hampshire Natural Heritage Bureau (NHB) regarding existing information of documented rare species or natural communities within the vicinity of the project site.

WETLAND FUNCTIONS AND VALUES ASSESSMENT

Haley Ward assessed the ability of the tidal wetlands to provide certain functions and values and analyzed the potential effects the proposed project may have on their ability to continue to provide those functions and values. Wetland functions and values were assessed using the *Highway Methodology Workbook, Wetland Functions and Values: A Descriptive Approach*. This method bases function and value determinations on the presence or absence of specific criteria for each of the 13 wetland functions and values (see definitions below). These criteria are assessed through direct field observations and a review of existing resource maps and databases. As part of the evaluation, the most important functions and values associated with the on-site wetlands are identified. In addition, the ecological integrity of the wetlands is evaluated based on the existing levels of disturbance and the overall significance of the wetlands within the local watershed.

- **Groundwater Interchange (Recharge/Discharge)**

This function considers the potential for the project area wetlands to serve as groundwater recharge and/or discharge areas. It refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.

° **Floodwater Alteration (Storage and Desynchronization)**
This function considers the effectiveness of the wetlands in reducing flood damage by attenuating floodwaters for prolonged periods following precipitation and snow melt events.

° **Fish and Shellfish Habitat**
This function considers the effectiveness of seasonally or permanently flooded areas within the subject wetlands for their ability to provide fish and shellfish habitat.

° **Sediment/Toxicant Retention**
This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland to function as a trap for sediments, toxicants, or pathogens, and is generally related to factors such as the type of soils, the density of vegetation, and the position in the landscape.

° **Nutrient Removal/Retention/Transformation**
This wetland function relates to the effectiveness of the wetland to prevent or reduce the adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

° **Production Export (Nutrient)**
This function relates to the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

° **Sediment/Shoreline Stabilization**
This function considers the effectiveness of a wetland to stabilize stream banks and shorelines against erosion, primarily through the presence of persistent, well-rooted vegetation.

° **Wildlife Habitat**
This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered.

° **Recreation (Consumptive and Non-Consumptive)**
This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities.

° **Educational/Scientific Value**
This value considers the effectiveness of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.

° **Uniqueness/Heritage**
This value relates to the effectiveness of the wetland or its associated water bodies to provide certain special values such as archaeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geologic features.

° **Visual Quality/Aesthetics**
This value relates to the visual and aesthetic qualities of the wetland.

° **Endangered Species Habitat**
This value considers the suitability of the wetland to support threatened or endangered species.

FUNCTIONS AND VALUES ASSESSMENT

Results of the wetland functions and values assessment are presented below. This assessment includes a discussion of potential changes to existing wetland functions and values that may occur as a result of the proposed project:

Groundwater Interchange (Recharge/Discharge)
Because there is no identified sand and gravel aquifer underlying the project area, and the wetlands are not underlain by sands or gravel, it is unlikely that significant groundwater recharge is occurring within the tidal wetlands.

Floodwater Alteration (Storage and Desynchronization)
The tidal wetland and Sagamore Creek receive floodwaters from the surrounding watershed and connected waterways; therefore, is considered a principal function considering the large size of the combined waterways.

Fish and Shellfish Habitat
The tidal wetland does provide fish and shellfish habitat, is associated with Sagamore Creek and the Atlantic Ocean; therefore, is considered a principal function.

Sediment/Toxicant Retention
The greater tidal wetland contains dense vegetation and a significant source of sediments or toxicants; therefore, is considered a principal function.

Nutrient Removal/Retention/Transformation
The greater tidal wetland contains dense vegetation and a significant source of sediments or toxicants; therefore, is considered a principal function.

Production Export (Nutrient)
Production export is a wetland function that typically occurs in the form of nutrient or biomass transport via watercourses, foraging by wildlife species, and removal of timber and other natural products. Because the tidal wetland provides fish and wildlife habitat, commercial and recreational fisheries opportunities, and nutrients are transferred over several trophic levels in the marine ecosystem, this is considered a principal function.

Sediment/Shoreline Stabilization
Due to the tidal nature of this wetland; sediment/shoreline stabilization is considered a principal function.

Wildlife Habitat
The greater tidal wetland and Sagamore Creek provide a variety of coastal and marine habitat, therefore would be considered a principal function.

Recreation (Consumptive and Non-Consumptive)
The greater tidal wetland and Sagamore Creek provide a variety of consumptive and non-consumptive recreational opportunities including hunting, fishing and bird watching; therefore, would be considered a principal function.

Education/Scientific Value
The tidal wetland and Sagamore Creek are part of a larger marine ecosystem with multiple areas of public access making this a principal value.

Uniqueness/Heritage
The tidal wetland and Sagamore Creek are unique to the seacoast area. Additionally, there are pre and post-colonial historical components associated with Sagamore Creek and the surrounding areas making this a principal value.

Visual Quality/Aesthetics
Sagamore Creek provides aesthetically pleasing coastal views that are viewable from surrounding uplands as well as from the water, making this a principal value.

Endangered Species Habitat
An online inquiry with the NH Natural Heritage Bureau resulted in occurrences of sensitive species near the project area although NHB determined that impacts to these sensitive species are not expected as a result of the project. Given the above factors in regards to threatened or endangered species, this is not considered a capable function.

PROPOSED IMPACTS

This report is accompanying a New Hampshire Department of Environmental Services (NHDES) Minor Impact Wetland Permit Application request to permit 2,719 sq. ft. of permanent impact and 5,269 sq. ft. of temporary construction impact to the previously developed 100' Tidal Buffer Zone for residential re-development.

SUMMARY AND CONCLUSIONS

The jurisdictional tidal wetland associated with the project site is part of a large marine system and provides eleven principal functions and values when evaluated as a whole. These functions and values include: floodflow alteration, fish and shellfish habitat, production export, sediment/shoreline stabilization, nutrient removal/retention, sediment/toxicant retention, wildlife habitat, recreation, education/scientific value, uniqueness/heritage, and visual quality aesthetics. While the entire marine system provides these principal functions and values, the proposed impacts associated with the site re-development will not have any effect on its ability to continue to provide them. As the proposed project will reduce impervious surface on the lot and the area within the previously developed 100' Tidal Buffer Zone, provides for the installation of stone drip aprons to collect and treat stormwater from the roof of the home, includes the installation of a buffer planting plan and the use of pervious technology for the proposed patio, stormwater quality leaving the site will be improved and there are no anticipated impacts to the current functions and values.

The proposed impacts have been minimized to the greatest extent practicable, while allowing reasonable use of the property. The project will not contribute to additional storm water or pollution. It is anticipated that there will be no effect on any fish or wildlife species that currently use the site for food, cover, and/or habitat. The project will not impede tidal flow or alter hydrology, it will not deter use by wildlife species that currently use the wetland area, and it will not impede any migrational fish movement.

The proposed project removes a significant amount of impervious surfaces within the wetland buffer, provides a pervious technology for the proposed patio, proposes stone drip aprons which will serve to improve stormwater quality, treatment, and infiltration on the subject parcel. Lastly, the project also provides a buffer planting area and additional tree plantings which will increase function within the wetland buffer on the lot and provides additional protections that do not currently exist on the site. With the above measures being taken, we believe that the above project will improve water quality entering the nearby wetland resource, and therefore have no adverse impact on the wetland functional values and the surrounding properties.

APPENDIX A

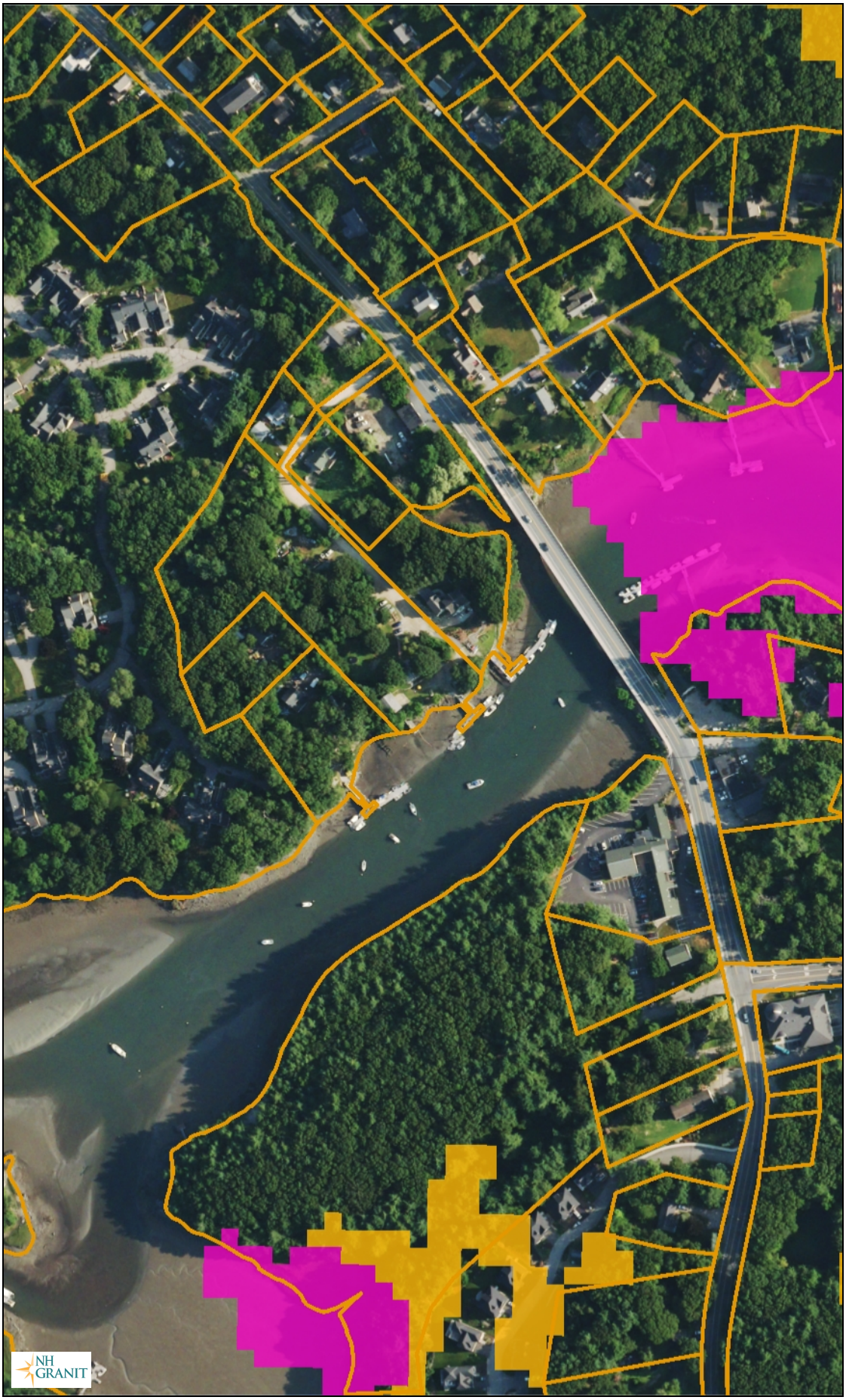
WETLAND FUNCTION - VALUE EVALUATION FORM

Wetland Function – Value Evaluation Form

Wetland Description: Wetland A is an un-named tidal wetland hydrologically connected to Sagamore Creek.	**File number**: 5010372
	Wetland identifier: Wetland A
	Latitude:X:1,229,314.04 Longitude:Y:203,350
	Preparer(s): Ambit Engineering, Inc.
	200 Griffin Road
	Date: July 26, 2024

Function/Value	Capability Y	Capability N	Summary	Principal Yes/No
Groundwater Recharge/Discharge		X	This wetland does not possess the characteristics needed to provide this function as there are no identified underlying sand or gravel aquifers.	—
Floodwater Alteration	X		The tidal wetland and Sagamore Creek do receive floodwater from the surrounding watershed and connected waterways; therefore, this would be considered a principal function.	Y
Fish and Shellfish Habitat	X		The tidal wetland and Sagamore Creek are part of a larger coastal marine system and provide both fish and shellfish habitat. This is considered a Principal Function.	Y
Sediment/Toxicant Retention	X		The immediate tidal wetland contains dense vegetation and a source of sediments and toxicants, therefore a principal function.	Y
Nutrient Removal	X		The immediate tidal wetland contains dense vegetation and a source of nutrients, therefore a principal function.	Y
Production Export	X		Because the tidal wetland provides fish and wildlife habitat, commercial and recreational fishing opportunities, and nutrients are transferred over several trophic levels in the marine ecosystem, this is considered a principal function.	Y
Sediment/Shoreline Stabilization	X		Due to the tidal nature of this wetland; sediment/shoreline stabilization is considered a principal function. The project proposes to stabilize the shoreline with a more structurally stable design.	Y
Wildlife Habitat	X		The greater tidal wetland and Sagamore Creek provides a variety of coastal and marine habitat, therefore would be considered a principal function.	Y
Recreation	X		The adjacent tidal wetland provides a variety of consumptive and non-consumptive recreational opportunities including hunting, fishing and bird watching; therefore, would be considered a principal function.	Y
Education/Scientific Value	X		The tidal wetland and Sagamore Creek are part of a larger marine ecosystem with multiple areas of public access making this a principal value.	Y
Uniqueness/Heritage	X		The tidal wetland and Sagamore Creek are unique to the seacoast area. Additionally, there are pre and post-colonial historical components associated with Sagamore Creek and the surrounding areas making this a principal value.	Y
Visual Quality/Aesthetics	X		Sagamore Creek provides aesthetically pleasing coastal views that are seeable from surrounding uplands as well as from the water, making this a principal function.	Y
ES Endangered Species Habitat		X	An online inquiry with the NH Natural Heritage Bureau has been performed and NHB determined that although there was a sensitive species located near the project, impacts as a result of the project are not anticipated.	—
Other				

Map by NH GRANIT



Legend

- Parcels
- State
- County
- City/Town

WAP 2020: Highest Ranked Wildlife Habitat

- 1 Highest Ranked Habitat in NH
- 2 Highest Ranked Habitat in Regior
- 3 Supporting Landscape

Coastal 2019 1-foot RGB

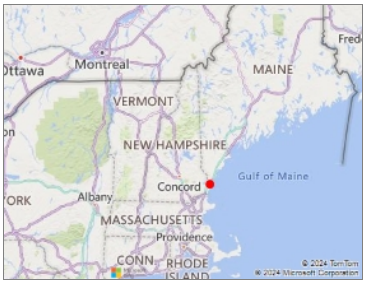
Map Scale

1: 3,247

Map Generated: 7/26/2024

Notes

Highest Ranked Wildlife Habitat



New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

To: John Chagnon, Ambit Engineering, Inc.
200 Griffin Road
Unit 3
Portsmouth, NH 03801

From: NH Natural Heritage Bureau
Date: 7/3/2024 (valid until 7/3/2025)
Re: Review by NH Natural Heritage Bureau of request submitted 6/26/2024
Permits: NHDES - Standard Dredge & Fill - Minor

NHB ID: **NHB24-2017** **Applicant:** Steven Riker

Location: Portsmouth
913 Sagamore Avenue

Project Description: The project proposes re-development of the property including the demolition of the existing residential structure, construction of a new home with attached garage and deck, associated driveway, removal of existing impervious (pavement & compacted gravel), installation of pervious paver patio, construction of a retaining wall, utility connections, grading and associated landscaping.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 6/26/2024 9:36:21 AM, and cannot be used for any other project.

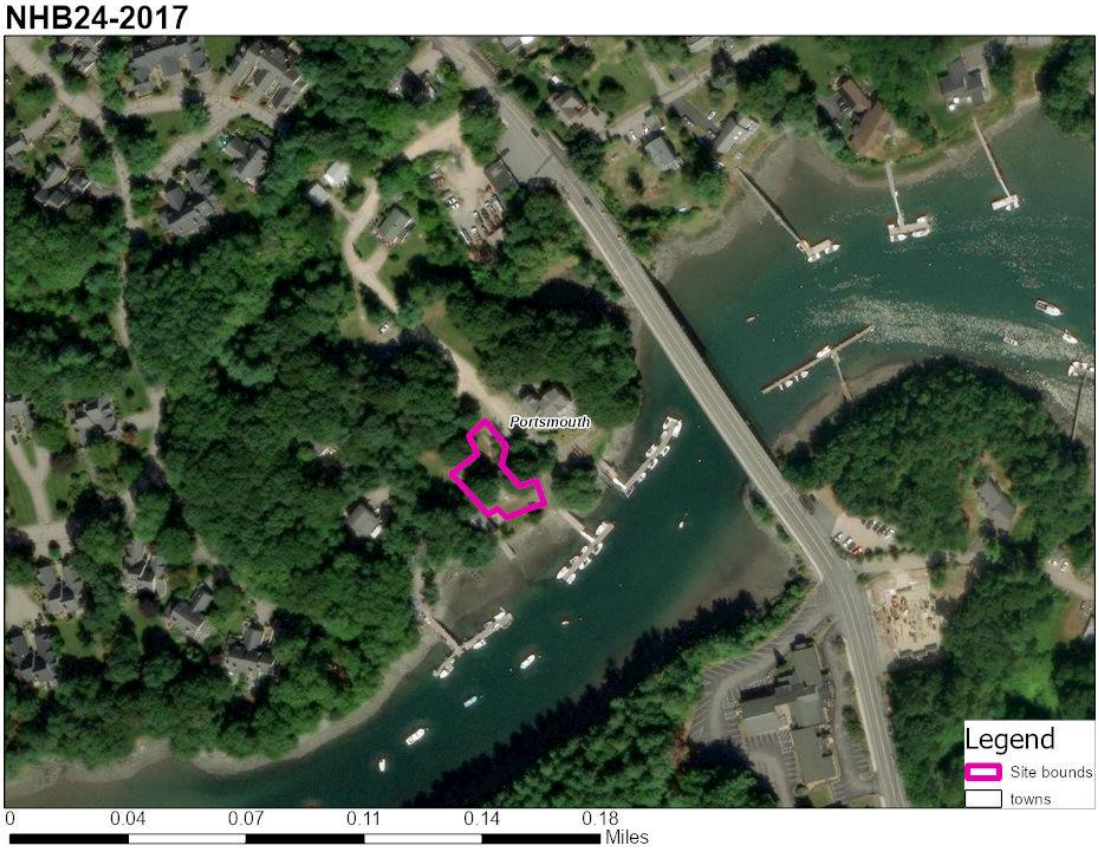
Based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: **NHB24-2017**



Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

STORMWATER MANAGEMENT
INSPECTION & MAINTENANCE PLAN
FOR
Hogswave LLC
PROPERTY LOCATED AT
913 Sagamore Avenue, Portsmouth, NH
October 8, 2024

Introduction

The intent of this plan is to provide Hogswave LLC, owner of property located at 913 Sagamore Avenue, Portsmouth, NH, with a list of procedures that cover the inspection and maintenance requirements of the stormwater management components for the proposed construction at the site.

The following inspection and maintenance program is necessary to keep the stormwater management system functioning properly. These measures will also help minimize potential environmental impacts. By following the enclosed procedures, Hogswave LLC will be able to maintain the functional design of the stormwater management components and maximize their ability to remove sediment and other contaminants from site generated stormwater runoff.

Stormwater Management System Components

The Stormwater Management System design components are Stone Drip Aprons, Pervious Paver Patio and Buffer Planting Areas.

The project proposes residential re-development including demolition of the existing residential structure, construction of a new home, re-configuration of the existing gravel driveway, pervious paver patio, deck, removal of impervious surfaces, grading, utility connections and associated landscaping. Since a portion of the construction is within the City of Portsmouth's 100-foot wetland buffer, the proposed stormwater structures will provide treatment for the proposed improvements under this application.

The Stone Drip Aprons will capture runoff from the proposed residential structure. The Pervious Paver Patio will capture runoff and provide percolation into the soil, and the Buffer Planting Area will serve as a natural vegetative filtration component that will improve stormwater quality leaving the site and entering the adjacent wetland resource.

Inspection & Maintenance Checklist/Log

The following pages contain maintenance specifications, a Stormwater Management System Inspection & Maintenance Checklist, and a blank copy of the Stormwater Management System Inspection & Maintenance Log. The forms are provided to

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Hogswave LLC and should be transferred to future homeowners and will serve as a guideline for performing the inspection and maintenance of the Stormwater Management System. This is a guideline and should be periodically reviewed for conformance with current practice and standards.

Stone Drip Apron Design

The intent of the Stone Drip Apron is to provide for storage and percolation of roof runoff from the proposed residential structure. Stone Drip Aprons are meant to provide a porous medium (stone, 12" depth) that can withstand water velocity from the roof above, eliminating erosion at the point of contact. The base (24"-36" depth) of the drip edge is backfilled with coarse sand or gravel which allows the stormwater to quickly infiltrate into the ground where it is stored and slowly percolated into the surrounding subsoil. Stone Drip Aprons typically extend 2 feet from the edge of the building foundation to effectively capture runoff from the roof edge above.

Stone Drip Apron Maintenance

In order to keep the Stone Drip Aprons functioning properly, it is important to keep the filter surface porous and unplugged by debris.

Remove any debris that may clog the stone surface.

After leaf fall (i.e. in November), remove large accumulations of leaves. It is not necessary to remove every leaf but at the same time it is not desirable to have the stone surface completely covered with leaves to the point of plugging the stone surface.

Replace the stone surface with new stone as needed. Ponding water on the surface of the drip apron would indicate that the stone needs to be replaced.

Pervious Paver Patio Maintenance

In order to keep the pervious paver surface functioning properly, it is important to keep the surface porous and unplugged by debris. After installation of the pervious pavers, perform the following inspections on a semi-annual basis:

Monitor for excessive or concentrated accumulations of debris, or excessive erosion. Remove debris as required.

Remove debris from the paver void space twice annually. This will remove organic buildup within the void space and restore/maintain permeability. Replace void space aggregate as needed.

Buffer Planting Area Design

The intent of the buffer planting area is to provide a vegetative matrix that will aid in the filtering of nutrients, sediments, and toxicants before they enter an adjacent wetland

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resource. Root structures of the native plants not only provide excellent stabilization for the surrounding soils, but also provide a natural filtration mechanism for stormwater as it passes through the buffer planting area. The buffer planting area will be planted with native salt tolerant shrubs.

Buffer Planting Area Maintenance

All planting and landscaping shall be monitored bi-monthly during the first year to insure viability and vigorous growth. Replace dead or dying vegetation with new stock and make adjustments to the conditions that caused the dead or dying vegetation. Make the necessary adjustments to ensure long-term health of the vegetation covers, i.e. provide more permanent vegetative matting or other means of protection. Also monitor the planting areas for signs of invasive species growth. If caught early enough, their eradication is much easier. The most likely places where invasions start are in wetter, disturbed soil. Species such as phragmites and purple loose strife are common invaders in the wetter areas. Keep an eye out for invasive tree species. Young shoots of invasive species can physically be pulled by hand as a method of control. The planting areas should be inspected monthly during the growing season for the presence of invasive species. The planting areas should not be mowed and allowed to grow naturally, increasing their function.

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Stormwater Management System
Hogswave, LLC

Inspection & Maintenance Checklist

BMP/System Component	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance/Cleanout Threshold
Stone Drip Aprons	Twice Yearly	*Remove leaves / debris from surface*	*Clean and/or replace stone as needed*
Planting Areas	Bi-Monthly during first growing season (Apr-Oct). Routinely after heavy rain	*Inspect for damage and erosion.* *Inspect for viability and growth.* *Inspect for invasive species, pull young shoots by hand and dispose in household trash bags.*	Replace topsoil and vegetative matting as needed. Replace dead or dying plants with new stock. Make adjustments to conditions to promote plant growth.
Pervious Paver Patio/Walkways	Twice annually	Monitor for excessive accumulation of debris and remove as needed.	Replace void space aggregate as needed.

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BMP/System Component	Date Inspected	Inspector	Cleaning/Repair Needed *(List Items/Comments)*	Date of Cleaning/Repair	Performed By

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913 Sagamore Avenue
Portsmouth, NH

Photo No. 1 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing southerly along existing gravel driveway toward existing home. **Photo By:** SDR	

Photo No. 2 **Photo Date:7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing southwesterly toward existing home. **Photo By:** SDR	

Photo No. 3 **Photo Date: 7/26/24** 4/19/2024 **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing southerly down existing paved area toward Sagamore Creek. **Photo By:** SDR	

Photo No. 4 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing westerly toward existing home. **Photo By:** SDR	

Photo No. 5 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing southerly toward existing tidal docking structure and Sagamore Creek. **Photo By:** SDR	

Photo No. 6 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing westerly toward existing home and detached garage. **Photo By:** SDR	

Photo No. 7 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing southwesterly toward existing detached garage and Sagamore Creek. **Photo By:** SDR	

Photo No. 8 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing northwesterly toward existing home and detached garage. **Photo By:** SDR	

Photo No. 9 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing northerly toward existing home and detached garage. **Photo By:** SDR	

Photo No. 10 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing northerly toward tree to be removed and exposed bedrock. **Photo By:** SDR	

Photo No. 11 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing northeasterly toward existing gravel driveway. **Photo By:** SDR	

Photo No. 12 **Photo Date: 7/26/24** **Site Location:** 913 Sagamore Avenue, Portsmouth, NH **Description:** Facing easterly toward existing home. **Photo By:** SDR	

LEGEND	
SYMBOL	DESCRIPTION
L11	LEDGE AT ELEVATION 11
L12	LEDGE AT ELEVATION 12
L18	LEDGE AT ELEVATION 18
L20	LEDGE AT ELEVATION 20
L22	LEDGE AT ELEVATION 22
L25	LEDGE AT ELEVATION 25
L27	LEDGE AT ELEVATION 27

TP #	DEPTH TO LEDGE
1	5'
2	4'
3	2'
4	9'
5	7'

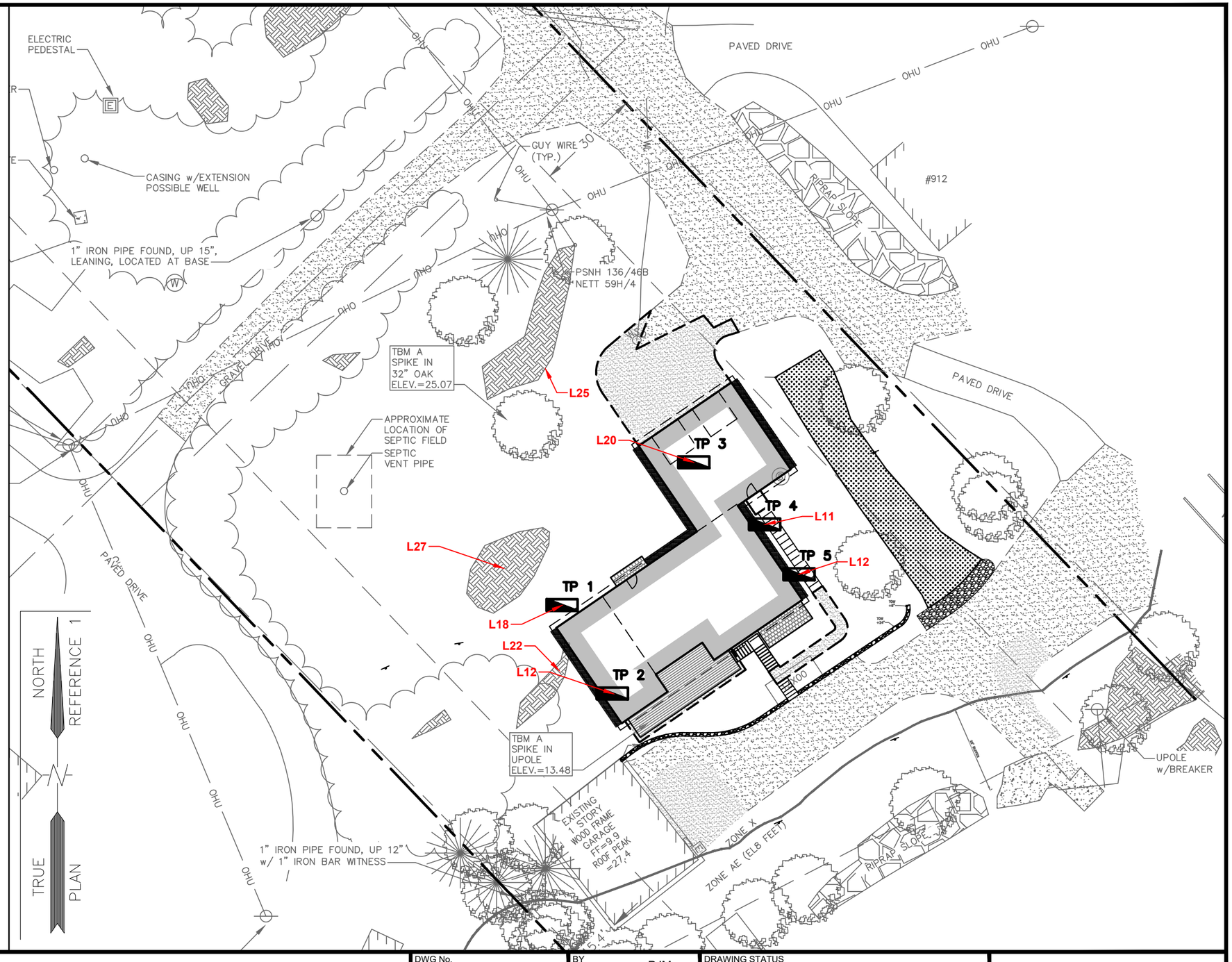
OWNERS OF RECORD:

HOGSWAVE, LLC
912 SAGAMORE AVENUE
PORTSMOUTH, NH 03801
6053/421

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)
1 inch = 10 ft.



PROJECT: **HOGSWAVE, LLC REDEVELOPMENT** **913 SAGAMORE AVENUE, PORTSMOUTH, NH**	DWG No. 1	BY PJM DATE 10/01/24	DRAWING STATUS: **PERMIT EXHIBIT**
TITLE: **LEDGE EXHIBIT**	JN 5010372.3116 SCALE N.T.S.	REV. REV. DATE	HALEY WARD ENGINEERING | ENVIRONMENTAL | SURVEYING

P:\NH\5010372-HOGSWAVE\3116-913 SAGAMORE AVE., PORTSMOUTH-SDR\02-CAD_FILES\CIVIL\5010372.3116-913-C-SP.DWG

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR
No. 738
JOHN R. CHAGNON
SIGNATURE

NHDES IMPACT AREAS
IN S.F.

	IMPACT TYPES	IMPACT AREAS
100' PREVIOUSLY DEVELOPED TIDAL BUFFER ZONE	PERMANENT	2719
100' PREVIOUSLY DEVELOPED TIDAL BUFFER ZONE	TEMPORARY	6855
250' PROTECTED SHORELAND ZONE	PERMANENT	2274
250' PROTECTED SHORELAND ZONE	TEMPORARY	3172
	TOTAL:	15020

OWNERS OF RECORD:

HOGSWAVE, LLC
912 SAGAMORE AVENUE
PORTSMOUTH, NH 03801
6053/421

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)
1 inch = 30 ft.

PROJECT: **HOGSWAVE, LLC REDEVELOPMENT** 913 SAGAMORE AVENUE, PORTSMOUTH, NH	DWG No. 1	BY PJM	DRAWING STATUS: **PERMIT PLAN**
		DATE 2024.07.29	
TITLE: **NHDES IMPACT EXHIBIT**	JN 5010372.3116	REV. 1	
	SCALE 1"=30'	REV. DATE 10/29/24	

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

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\\SVRPSM-FS01\Portsmouth-SDR\02-CAD_FILES\CIVIL\5010372.3116-913-C-VP PERMIT PLAN.DWG

PROPOSED STRUCTURE REPLACEMENT

912 SAGAMORE AVENUE, PORTSMOUTH, NEW HAMPSHIRE

SITE PLAN

OWNER/APPLICANT:
HOGSWAVE, LLC
912 SAGAMORE AVENUE
PORTSMOUTH, N.H. 03801
TEL: (603) 234-9932

CIVIL ENGINEER & LAND SURVEYOR:
HALEY WARD, INC.
200 GRIFFIN ROAD, UNIT 14
PORTSMOUTH, N.H. 03801
TEL. (603) 430-9282
FAX (603) 436-2315

SCALE: NTS

DIG SAFE
ME - NH - RI - VT
1-888-344-7233
CALL TOLL FREE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

INDEX OF SHEETS

UTILITY CONTACTS

ELECTRIC:
EVERSOURCE
1700 LAFAYETTE ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 436-7708, Ext. 555.5678
ATTN: MICHAEL BUSBY, P.E. (MANAGER)

NATURAL GAS:
UNITIL
325 WEST ROAD
PORTSMOUTH, N.H. 03801
TEL. (603) 294-5144
ATTN: DAVE BEAULIEU

CABLE:
XFINITY BY COMCAST
180 GREENLEAF AVE.
PORTSMOUTH, N.H. 03801
Tel. (603) 266-2278
ATTN: MIKE COLLINS

SEWER & WATER:
PORTSMOUTH DEPARTMENT OF PUBLIC WORKS
680 PEVERLY HILL ROAD
PORTSMOUTH, N.H. 03801
TEL. (603) 427-1530
ATTN: JIM TOW

COMMUNICATIONS:
CONSOLIDATED COMMUNICATIONS
1575 GREENLAND ROAD
GREENLAND, N.H. 03840
Tel. (603) 427-5525
ATTN: JOE CONSIDINE

LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
11/21	MAP 11/LOT 21
IR FND	IRON ROD FOUND
IP FND	IRON PIPE FOUND
IR SET	IRON ROD SET
DH FND	DRILL HOLE FOUND
DH SET	DRILL HOLE SET
	GRANITE BOUND w/IRON ROD FOUND

EXISTING	PROPOSED	
FM	FM	FORCE MAIN
S	S	SEWER PIPE
SL	SL	SEWER LATERAL
G	PG	GAS LINE
D	D	STORM DRAIN
FD	FD	FOUNDATION DRAIN
W	W	WATER LINE
FS	FS	FIRE SERVICE LINE
UE	UGE	UNDERGROUND ELECTRIC SUPPLY
		UNDERGROUND ELECTRIC SERVICE
OHW	OHW	OVERHEAD ELECTRIC/WIRES
		RETAINING WALL
		EDGE OF PAVEMENT (EP)
100	100	CONTOUR
97x3	98x0	SPOT ELEVATION
		UTILITY POLE
E	E	ELECTRIC METER
		TRANSFORMER ON CONCRETE PAD
		WATER SHUT OFF/CURB STOP
C.O.	C.O.	PIPE CLEANOUT
	GV	GATE VALVE
	HYD	HYDRANT
CB	CB	CATCH BASIN
S	SMH	SEWER MANHOLE
D	DMH	DRAIN MANHOLE
W	WMH	WATER METER MANHOLE
#5		TEST BORING
TP 1		TEST PIT
LA		LANDSCAPED AREA
CI	CI	CAST IRON PIPE
COP	COP	COPPER PIPE
CMP	CMP	CORRUGATED METAL PIPE
DI	DI	DUCTILE IRON PIPE
PVC	PVC	POLYVINYL CHLORIDE PIPE
RCP	RCP	REINFORCED CONCRETE PIPE
HYD	HYD	HYDRANT
℄	℄	CENTERLINE
EP	EP	EDGE OF PAVEMENT
EL.	EL.	ELEVATION
FF	FF	FINISHED FLOOR
INV	INV	INVERT
TBM	TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL
TBR	TBR	TO BE REMOVED

PROPOSED STRUCTURE REPLACEMENT
912 SAGAMORE AVENUE
PORTSMOUTH, N.H.
SITE PLAN

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

PLAN SET SUBMITTAL DATE: 29 OCTOBER 2024

5010372 3116

P:\JobS\5010372-Hogsware\3116-913 Sagamore Ave, Portsmouth (SDR)\02 Permitting\Plans & Specs\Site\5010372 Cover 3116.dwg, 10/29/2024 8:48:33 PM, Adobe PDF

WETLAND NOTES:

1) HIGHEST OBSERVABLE TIDE LINE & WETLAND LINE DELINEATED BY STEVEN D. RIKER, CWS ON 7/26/24 IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
   - A) U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. TECHNICAL REPORT Y-87-1 (JAN. 1987), AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012.
   - B) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8.2, USDA-NRCS, 2018 AND (FOR DISTURBED SITES) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4. NEIWPCC WETLANDS WORK GROUP (2019).
   - C) NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST (REGION 1). USFWS (MAY 1988).
   - D) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFW MANUAL FWS/OBS-79/31 (1997).
   - E) "IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE" (1997). NEW HAMPSHIRE FISH AND GAME DEPARTMENT.

2) WETLAND FLAGS WERE FIELD LOCATED BY HALEY WARD, INC.

PLAN REFERENCES:

1) DIVISION OF LAND, PORTSMOUTH, N.H. FOR HARRISON H. & FRANCIS E. WORKMAN. PREPARED BY JOHN W. DURGIN ASSOCIATES. DATED DECEMBER 1953, REVISED MARCH 1979. NOT RECORDED.

2) PLAN OF LOTS, PORTSMOUTH, N.H. FOR GARLAND W. PATCH, JR. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. DATED MAY 1963. NOT RECORDED.

3) BOUNDARY SURVEY LOCATED IN PORTSMOUTH, NH PREPARED FOR TIDEWATCH ASSOCIATES INC. PREPARED BY KIMBALL CHASE COMPANY, INC. DATED MARCH 13, 1986. R.C.R.D. PLAN D-14771.

4) SUBDIVISION PLAN FOR HARRISON & FRANCES WORKMAN PORTSMOUTH, N.H. PREPARED BY BARRY W. KIMBALL, LAND SURVEYOR. DATED SEPTEMBER 1979. R.C.R.D. PLAN C-9014.

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 223 AS LOT 27.

2) OWNERS OF RECORD:
   HOGSWAVE, LLC
   912 SAGAMORE AVENUE
   PORTSMOUTH, NH 03801
   6053/421

3) PORTIONS OF THE PARCEL ARE IN A SPECIAL FLOOD HAZARD AREA, ZONE AE(EL. 9) AS SHOWN ON FIRM PANEL 33015C0270E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREA:
   135,427± S.F. TO MEAN HIGH WATER
   3.1090± ACRES TO MEAN HIGH WATER

5) PARCEL IS LOCATED IN THE WATERFRONT BUSINESS (WB) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA:		20,000 S.F.
FRONTAGE:		100 FEET
DEPTH:		100 FEET
SETBACKS:	FRONT	30 FEET
	SIDE	30 FEET
	REAR	20 FEET
MAXIMUM STRUCTURE HEIGHT:		35 FEET
MAXIMUM BUILDING COVERAGE:		30%
MINIMUM OPEN SPACE:		20%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULTS OF A STANDARD BOUNDARY AND TOPOGRAPHIC SURVEY OF ASSESSOR'S MAP 223 LOT 27 IN THE CITY OF PORTSMOUTH AND THE PROPOSED DEMOLITION ASSOCIATED WITH THE REPLACEMENT OF THE RESIDENTIAL STRUCTURE..

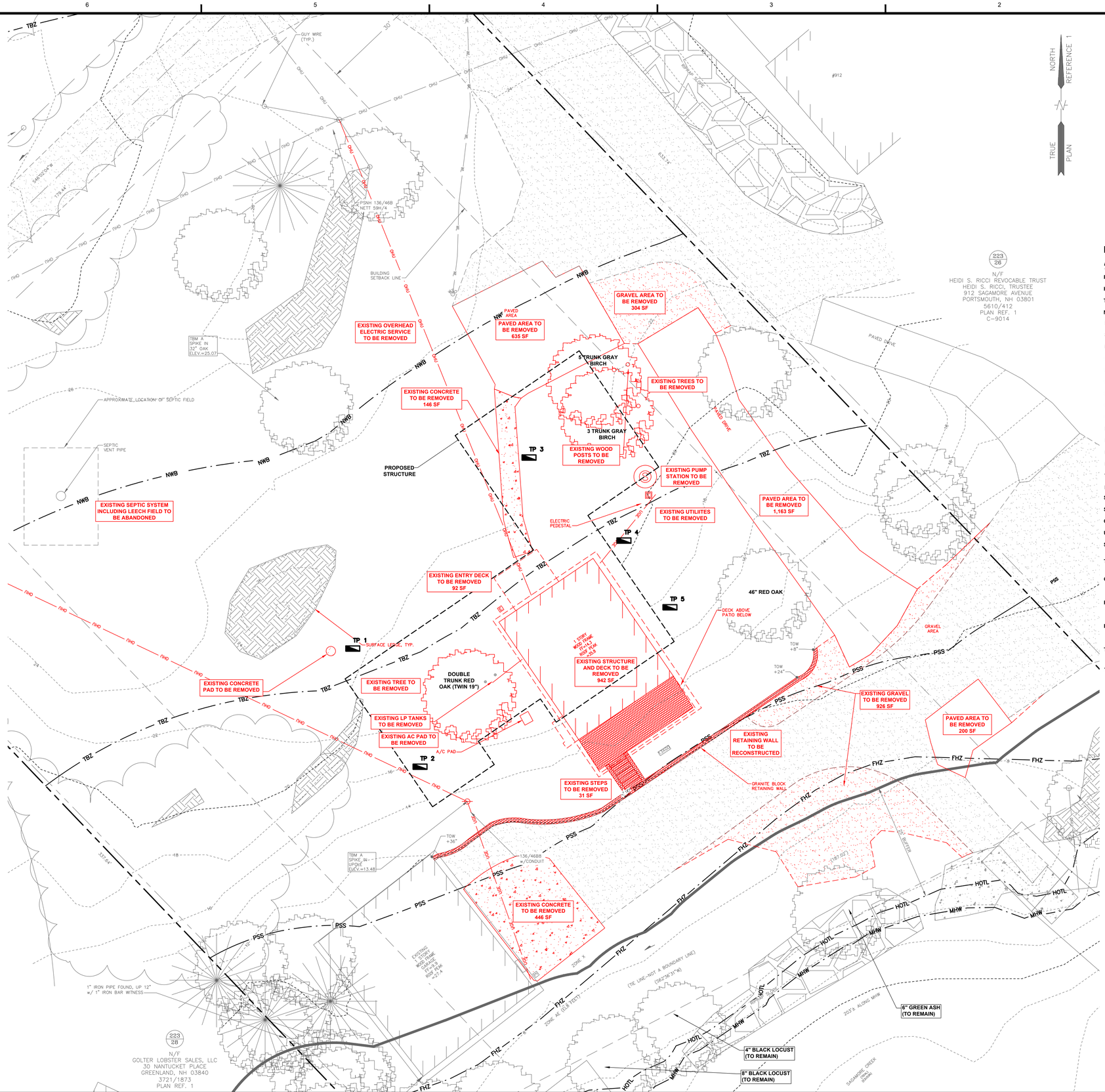
8) VERTICAL DATUM IS MEAN SEA LEVEL NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GPS OBSERVATIONS (±0.2').

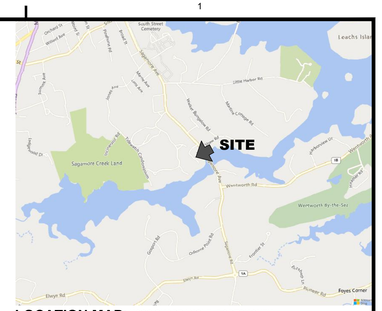
9) MEAN HIGH WATER LINE SHOWN AT ELEVATION 3.81 PER NOAA STATION 8419870 SEAVEY ISLAND, PORTSMOUTH HARBOR.

10) PROPERTY IS SUBJECT TO AND BENEFITS FROM A 25 FOOT WIDE RIGHT-OF-WAY IN COMMON WITH OTHERS FROM SAGAMORE AVENUE.

11) PROPERTY IS SUBJECT TO A 25 FOOT WIDE RIGHT-OF-WAY FOR THE BENEFIT OF ASSESSOR'S MAP 223 LOTS 28 & 29.

TP #	DEPTH TO LEDGE
1	5'
2	4'
3	2'
4	9'
5	7'





LOCATION MAP: USGS QUADRANGLE: PORTSMOUTH
SCALE: 1"=2000'
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WWW.MAPTECH.COM/TOPO

LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
HIGHEST OVBSERVABLE TIDE	HOTL	
TIDAL BUFFER ZONE	TBZ	
NATURAL WOODLAND BUFFER	NWB	
BENCHMARK		
SURVEY STATION		
MANHOLE	S	S
UTILITY POLE		
WELL	W	W
WATER VALVE	WV	
SIGN		
CATCH BASIN		
HYDRANT		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATERLINE	W	W
FORCE MAIN	FM	FM
STORM DRAIN	SD	SD
SANITARY SEWER	SS	SS
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
SILTSOXX FENCE		X
TREE LINE		
GRAVEL SURFACE		
PAVED SURFACE		
BUILDING		
TREE		
TEST PIT/ LEDGE PROBE		

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)
1 inch = 10 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
2	10/01/24	PER CONSERVATION COMMITEEE COMMENTS	PJM	JRC
1	08/27/24	ADD TEST PIT/ LEDGE PROBES	SJR	SDR

DRAWING ISSUE STATUS

PERMIT PLAN

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 3
Portsmouth, NH 03801
603.430.9282

PROJECT

HOGSWAVE, LLC REDEVELOPMENT
913 SAGAMORE AVENUE, PORTSMOUTH, NH

TITLE

EXISTING CONDITIONS AND DEMOLITION PLAN

STATE OF NEW HAMPSHIRE — No. 738 JOHN R. CHAGNON — LICENSED LAND SURVEYOR

DATE	SCALE
2024.07.31	1"=10'

DRAWN BY	DESIGNED BY	CHECKED BY
PJM	PJM	SDR

PROJECT No. 5010372.3116

DRAWING No. **C100** REV. **2**

FILE LOCATION: P:\HH\5010372\HOGSWAVE\3116\13 SAGAMORE AVE - PORTSMOUTH-5GRID2-CAD_FILES\CIVIL\5010372.3116-913-C-SP.DWG, 2024.10.01, 4:58 PM

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 223 AS LOT 27.

2) OWNERS OF RECORD:
HOGSWAVE, LLC
912 SAGAMORE AVENUE
PORTSMOUTH, NH 03801
6053/421

3) PORTIONS OF THE PARCEL ARE IN A SPECIAL FLOOD HAZARD AREA, ZONE AE(EL. 9) AS SHOWN ON FIRM PANEL 33015C0270E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREA:
135,427± S.F. TO MEAN HIGH WATER
3.1090± ACRES TO MEAN HIGH WATER

5) PARCEL IS LOCATED IN THE WATERFRONT BUSINESS (WB) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA:		20,000 S.F.
FRONTAGE:		100 FEET
DEPTH:		100 FEET
SETBACKS:	FRONT	30 FEET
	SIDE	30 FEET
	REAR	20 FEET
MAXIMUM STRUCTURE HEIGHT:		35 FEET
MAXIMUM BUILDING COVERAGE:		30%
MINIMUM OPEN SPACE:		20%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED RE-DEVELOPMENT OF ASSESSOR'S MAP 223 LOT 27 IN THE CITY OF PORTSMOUTH AND SITE IMPROVEMENTS.

8) VERTICAL DATUM IS MEAN SEA LEVEL NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GPS OBSERVATION (± 0.2').

9) MEAN HIGH WATER LINE SHOWN AT ELEVATION 3.81 PER NOAA STATION 8419870 SEAVEY ISLAND, PORTSMOUTH HARBOR.

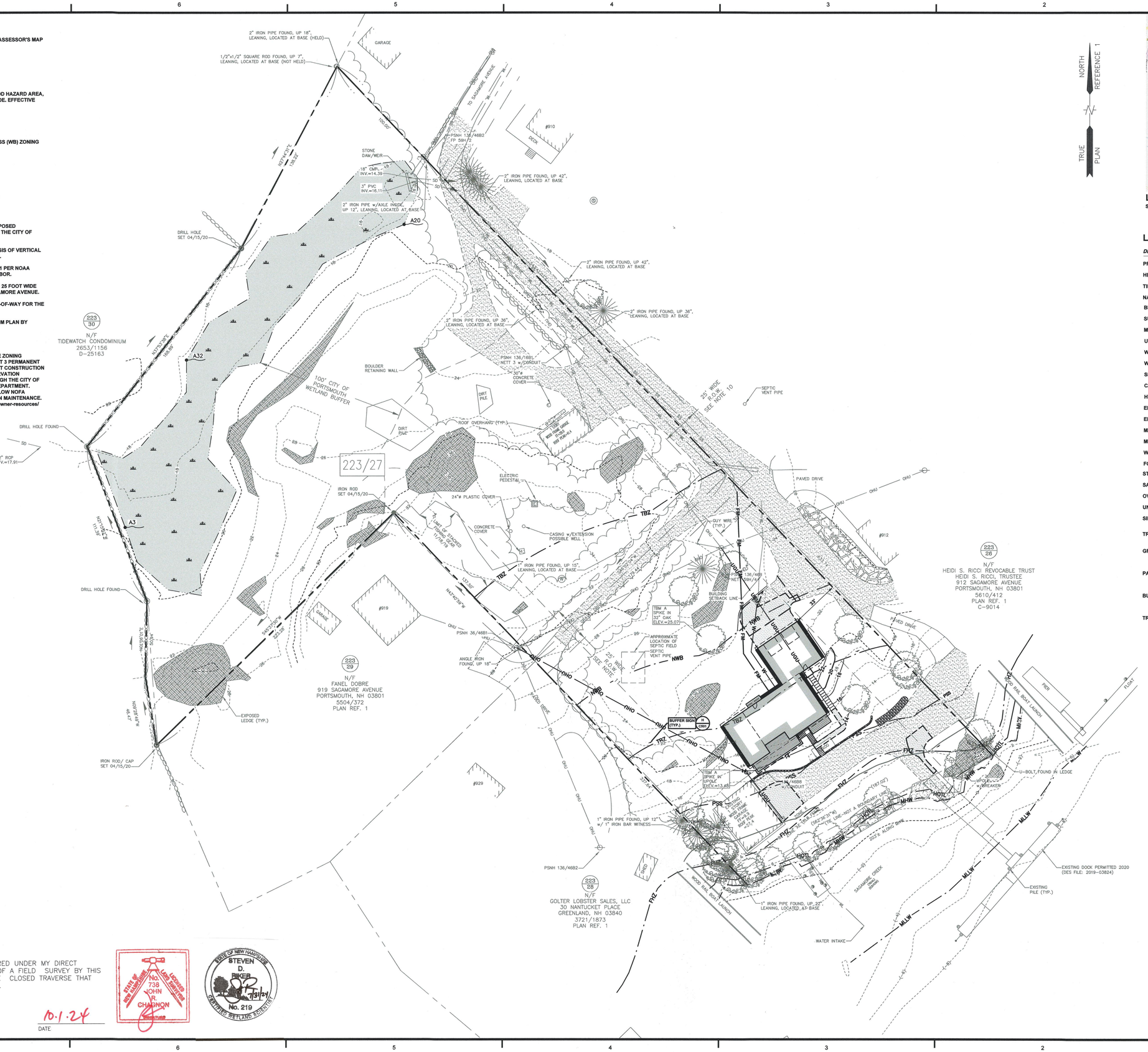
10) PROPERTY IS SUBJECT TO AND BENEFITS FROM A 25 FOOT WIDE RIGHT-OF-WAY IN COMMON WITH OTHERS FROM SAGAMORE AVENUE.

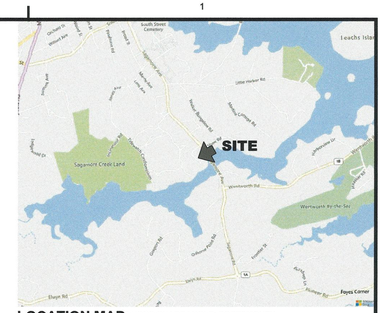
11) PROPERTY IS SUBJECT TO A 25 FOOT WIDE RIGHT-OF-WAY FOR THE BENEFIT OF ASSESSOR'S MAP 223 LOTS 28 & 29.

12) PROPOSED RESIDENTIAL STRUCTURE DESIGN FROM PLAN BY ABRIGO HOME DATED JUNE 7, 2024.

CONDITIONS OF APPROVAL:

1. IN ACCORDANCE WITH SECTION 10.1018.40 OF THE ZONING ORDINANCE, APPLICANT SHALL INSTALL AT LEAST 3 PERMANENT WETLAND BOUNDARY MARKERS DURING PROJECT CONSTRUCTION IN THE LOCATIONS DISCUSSED WITH THE CONSERVATION COMMISSION. THESE CAN BE PURCHASED THROUGH THE CITY OF PORTSMOUTH PLANNING AND SUSTAINABILITY DEPARTMENT.
2. APPLICANT AND PROPERTY OWNERS SHALL FOLLOW NOFA STANDARDS FOR ORGANIC LAND CARE FOR LAWN MAINTENANCE. PLEAS VISIT https://nofa.organiclandcare.net/homeowner-resources/ FOR DETAILS.





LOCATION MAP: USGS QUADRANGLE: PORTSMOUTH
SCALE: 1"=2000'
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WWW.MAPTECH.COM/TOPO

LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
HIGHEST OVBSERVABLE TIDE	HOTL	
TIDAL BUFFER ZONE	TBZ	
NATURAL WOODLAND BUFFER	NWB	
BENCHMARK		
SURVEY STATION		
MANHOLE	S	S
UTILITY POLE		
WELL	W	W
WATER VALVE	WV	
SIGN		
CATCH BASIN		
HYDRANT		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATERLINE	W	W
FORCE MAIN	FM	FM
STORM DRAIN	SD	SD
SANITARY SEWER	SS	SS
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
SILTSOXX FENCE		X
TREE LINE		
GRAVEL SURFACE		
PAVED SURFACE		
BUILDING		
TREE		

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)
1 inch = 30 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
2	10/01/24	PER CONSERVATION COMMITEEE COMMENTS	PJM	JRC
1	08/27/24	ADD TEST PIT/ LEDGE PROBES	SJR	SDR

DRAWING ISSUE STATUS

PERMIT PLAN

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 3
Portsmouth, NH 03801
603.430.9282

PROJECT

HOGSWAVE, LLC REDEVELOPMENT
913 SAGAMORE AVENUE, PORTSMOUTH, NH

TITLE

OVERALL SITE PLAN

DATE	SCALE
2024.07.31	1"=30'

DRAWN BY	DESIGNED BY	CHECKED BY
PJM	PJM	SDR

PROJECT No. 5010372.3116

DRAWING No. C101 REV. 2

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000.

JOHN R CHAGNON, LLS 738 — DATE 10.1.24

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — NO. 738 — JOHN R. CHAGNON — SIGNATURE

STATE OF NEW HAMPSHIRE — STEVEN D. DIKER — 7/31/24 — No. 219 — CERTIFIED WETLAND SCIENTIST

FILE LOCATION: P:\#HSO\5010372-HOGSWAVE\3116-913 SAGAMORE AVE, PORTSMOUTH\ISSR\DGN\CAD_FILES\CIVIL\5010372.3116-913-C-SP.DWG, 2024.10.01, 4:58 PM

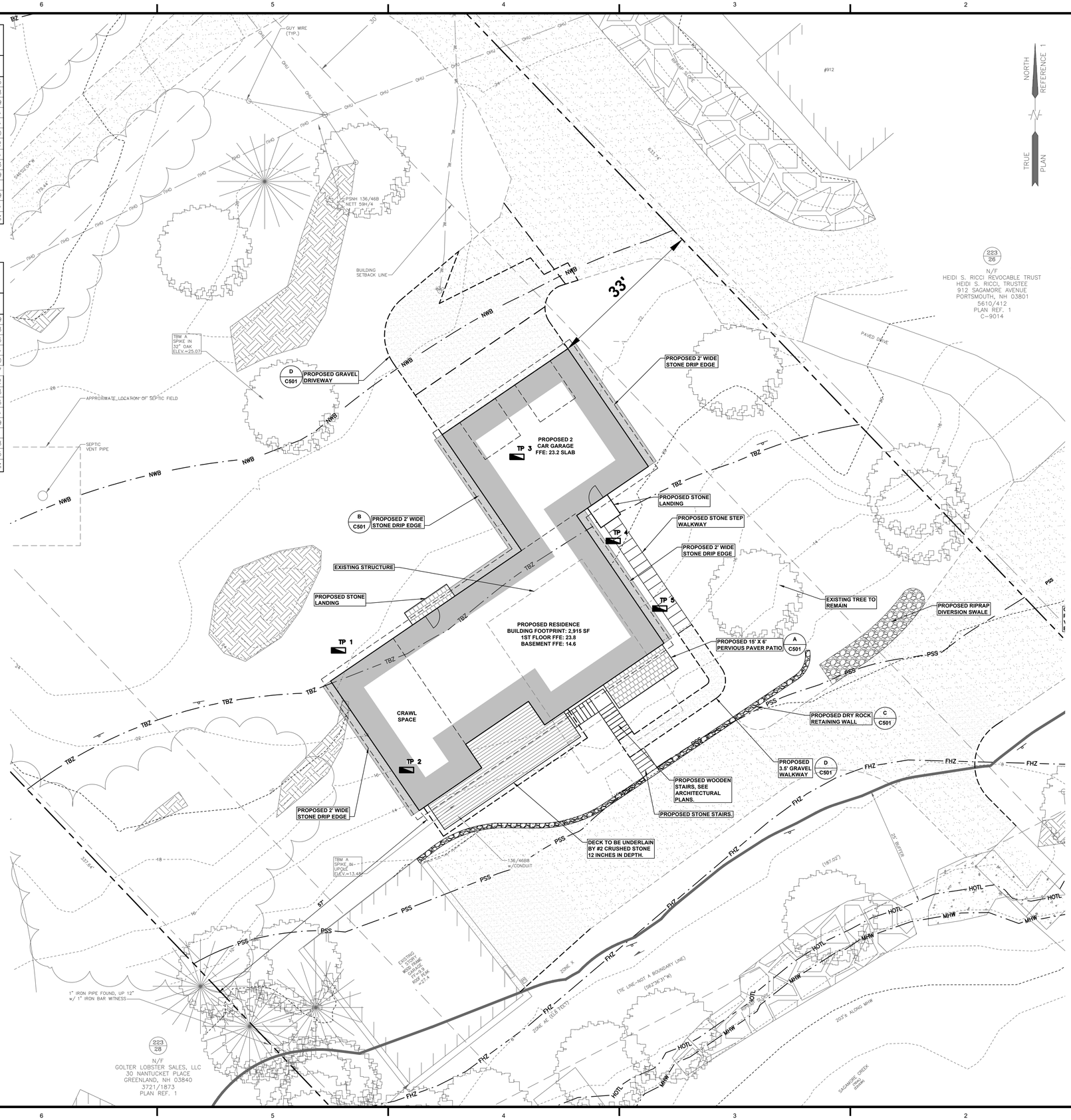
IMPERVIOUS SURFACE AREAS
(WITHIN THE 250' SWQPA ZONE)

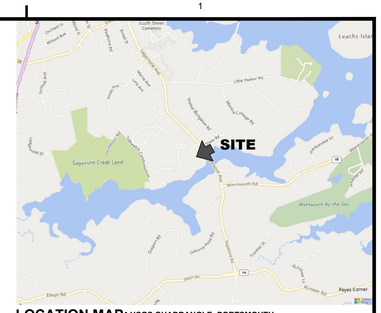
STRUCTURE	PRE-CONSTRUCTION IMPERVIOUS (S.F.)	POST-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	942	2915
GARAGE	1,098	1098
DECK	92	439
STEPS	48	154
PAVEMENT	2,332	334
GRAVEL	7,817	8330
CONCRETE/PADS/LIDS	698	252
WALKWAY	146	134
RETAINING WALLS	93	93
WOOD STAIRWAY	0	59
TOTAL	13,266	13749
AREA WITHIN 250' SWQPA	48,844	48844
% LOT COVERAGE	27.2%	28.1%

IMPERVIOUS SURFACE AREAS
(WITHIN THE 100' TIDAL BUFFER ZONE)

STRUCTURE	PRE-CONSTRUCTION IMPERVIOUS (S.F.)	POST-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	942	1729
GARAGE	1,098	1,098
DECK	53	316
STEPS	48	154
PAVEMENT	914	0
GRAVEL	3,780	3,767
CONCRETE/PADS/LIDS	698	262
RETAINING WALLS	94	93
PIER	116	116
WALKWAY	0	134
WOOD STAIRWAY	0	59
TOTAL	7,743	7728
AREA WITHIN 100' TBZ	20,255	20255
% LOT COVERAGE	38.2%	38.2%

TP #	DEPTH TO LEDGE
1	5'
2	4'
3	2'
4	9'
5	7'





LOCATION MAP: USGS QUADRANGLE: PORTSMOUTH
SCALE: 1"=2000'
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LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
HIGHEST OVBSERVABLE TIDE	HOTL	
TIDAL BUFFER ZONE	TBZ	
NATURAL WOODLAND BUFFER	NWB	
BENCHMARK		
SURVEY STATION		
MANHOLE	S	S
UTILITY POLE		
WELL	W	W
WATER VALVE	WV	
SIGN		
CATCH BASIN		
HYDRANT		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
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WATERLINE	W	W
FORCE MAIN	FM	FM
STORM DRAIN	SD	SD
SANITARY SEWER	SS	SS
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
SILTSOXX FENCE		X
TREE LINE		
GRAVEL SURFACE		
PAVED SURFACE		
BUILDING		
TREE		

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)
1 inch = 10 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
3	2024.10.09	STAFF REVIEW CHANGES	PJM	JRC
2	10/01/24	PER CONSERVATION COMMITEEE COMMENTS	PJM	JRC
1	08/27/24	ADD TEST PIT/ LEDGE PROBES	SJR	SDR

DRAWING ISSUE STATUS

PERMIT PLAN

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 3
Portsmouth, NH 03801
603.430.9282

PROJECT

HOGSWAVE, LLC REDEVELOPMENT
913 SAGAMORE AVENUE, PORTSMOUTH, NH

TITLE

DETAILED SITE PLAN

DATE: 2024.07.31
SCALE: 1"=10'
DRAWN BY: PJM
DESIGNED BY: PJM
CHECKED BY: SDR
PROJECT No.: 5010372.3116
DRAWING No.: C102
REV.: 3

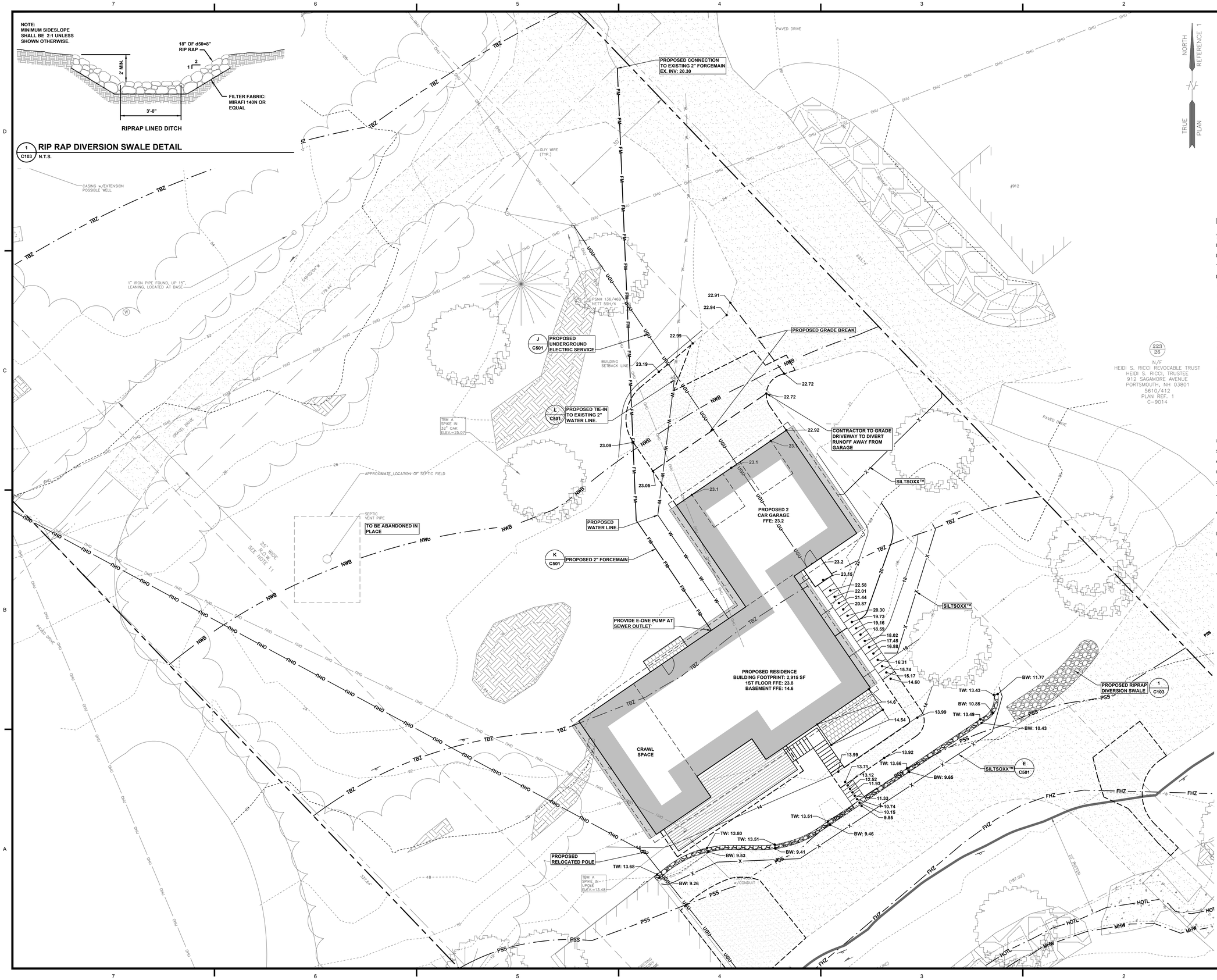
STATE OF NEW HAMPSHIRE - JOHN R. CHAGNON No. 7381 - LICENSED PROFESSIONAL ENGINEER

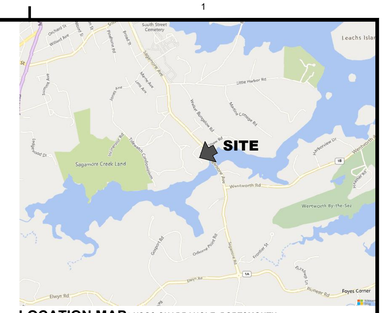
STATE OF NEW HAMPSHIRE No. 738 JOHN R. CHAGNON LICENSED LAND SURVEYOR

NOTE:
MINIMUM SIDESLOPE SHALL BE 2:1 UNLESS SHOWN OTHERWISE.

RIPRAP LINED DITCH

1 / C103 **RIP RAP DIVERSION SWALE DETAIL**
N.T.S.





LOCATION MAP: USGS QUADRANGLE: PORTSMOUTH
SCALE: 1"=2000'
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LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
HIGHEST OVBSERVABLE TIDE	HOTL	
TIDAL BUFFER ZONE	TBZ	
NATURAL WOODLAND BUFFER	NWB	
BENCHMARK		
SURVEY STATION		
MANHOLE	S	D
UTILITY POLE		
WELL	W	W
WATER VALVE	WV	
SIGN		
CATCH BASIN		
HYDRANT		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATERLINE	W	W
FORCE MAIN	FM	FM
STORM DRAIN	SD	SD
SANITARY SEWER	SS	SS
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
SILT SOXX FENCE		X
TREE LINE		
GRAVEL SURFACE		
PAVED SURFACE		
BUILDING		
TREE		

GRAPHIC SCALE

10 0 5 10 20 30
(IN FEET)
1 inch = 10 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
2	10/01/24	PER CONSERVATION COMMITEEE COMMENTS	PJM	JRC
1	08/27/24	ADD TEST PIT/ LEDGE PROBES	SJR	SDR

DRAWING ISSUE STATUS

PERMIT PLAN

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 3
Portsmouth, NH 03801
603.430.9282

PROJECT

HOGSWAVE, LLC REDEVELOPMENT
913 SAGAMORE AVENUE, PORTSMOUTH, NH

TITLE

GRADING AND UTILITY PLAN

STATE OF NEW HAMPSHIRE — JOHN R. CHAGNON No. 7651 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2024.07.31	1"=10'

DRAWN BY	DESIGNED BY	CHECKED BY
PJM	PJM	SDR

PROJECT No. 5010372.3116

DRAWING No. **C103** REV. **2**

FILE LOCATION: P:\NH\5010372\HOGSWAVE\03116\913 SAGAMORE AVE - PORTSMOUTH-5DR02\CAD_FILES\CIVIL\5010372.03116-913-C-GP.DWG, 2024.10.01, 4:58 PM

BUFFER PLANTING SCHEDULE

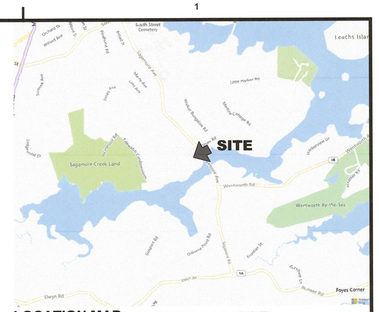
SYMBOL	ITEM	SIZE	QTY
	CREEPING JUNIPER JUNIPERUS HORIZONTALIS	1 GALLON	10
	LOW BUSH BLUEBERRY VACCINIUM ANGUSTIFOLIUM	1 GALLON	14
	NORTHERN BAYBERRY MYRICA PENNSYLVANIA	2 GALLON	7
	NORTHERN RED OAK QUERCUS RUBRA	2"	8
	WITCH HAZEL HAHAMELIS VIRGINIANA	3 GALLON	13
	SERVICEBERRY AMALANCHIER SPP.	3 GALLON	16

NOTES:

1. PLANT SPECIES CAN ONLY BE SUBSTITUTED WITH APPROVAL FROM THE CITY OF PORTSMOUTH.
2. BUFFER PLANTING MATRIX PROVIDES A GENERAL SPATIAL REPRESENTATION OF A WELL DISTURBED BUFFER AREA, EXACT LOCATION OF PLANTINGS CAN BE ADJUSTED AT TIME OF INSTALLATION.
3. EROSION CONTROL MATTING SHALL BE USED IN BUFFER PLANTING AREA TO PREVENT EROSION UNTIL PLANTS AND VEGETATION BECOME ESTABLISHED. DURING CONSTRUCTION, INSPECT BUFFER PLANTING AREA EVERY TWO WEEKS AND AFTER SIGNIFICANT RAIN EVENTS.
4. PROPOSED BUFFER PLANTING AREAS TO BE SEEDED WITH RIPARIAN BUFFER MIX (OR EQUIVALENT) SPACED THROUGHOUT. SEED MIX CAN BE OBTAINED FROM PIERSON NURSERIES, INC., 24 BUZZELL ROAD, BIDDEFORD, ME 04005. 207-499-2994. WWW.PIERSONNURSERIES.COM.
5. IMPERVIOUS SURFACE AREA TO BE REMOVED AS SHOWN WILL BE LOAMED AND SEEDED UNLESS OTHERWISE NOTED.
6. COMPLIANCE WITH PORTSMOUTH ZONING
   6.1. 10.1018.24 & 10.1018.25 IS REQUIRED
7. APPLICANT SHALL PROVIDE A REPORT BACK TO THE PLANNING AND SUSTAINABILITY DEPARTMENT ONE YEAR AFTER THE PROPOSED LANDSCAPING AREA HAS BEEN PLANTED, DEMONSTRATING AT LEAST AN 80% SURVIVAL RATE OF NEW PLANTINGS WITHIN THE PLANTING AREAS.

NORTH REFERENCE 1

TRUE PLAN



LOCATION MAP: USGS QUADRANGLE: PORTSMOUTH
SCALE: 1"=2000'
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LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
HIGHEST OVBSERVABLE TIDE	HOTL	
TIDAL BUFFER ZONE	TBZ	
NATURAL WOODLAND BUFFER	NWB	
BENCHMARK		
SURVEY STATION		
MANHOLE	S	S
UTILITY POLE		
WELL	W	W
WATER VALVE	WV	
SIGN		
CATCH BASIN		
HYDRANT		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATERLINE	W	W
FORCE MAIN	FM	FM
STORM DRAIN	SD	SD
SANITARY SEWER	SS	SS
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
SILTSOXX FENCE		X
TREE LINE		
GRAVEL SURFACE		
PAVED SURFACE		
BUILDING		
TREE		

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)
1 inch = 10 ft.

REV.	DATE	DESCRIPTION	BY	CHK
4	2024.10.29	RED OAK CALIPER	EDS	JRC
3	2024.10.09	STAFF REVIEW CHANGES	PJM	JRC
2	10/01/24	PER CONSERVATION COMMITEEE COMMENTS	PJM	JRC
1	08/27/24	ADD TEST PIT/ LEDGE PROBES	SJR	SDR

DRAWING ISSUE STATUS

PERMIT PLAN

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 3
Portsmouth, NH 03801
603.430.9282

PROJECT

HOGSWAVE, LLC REDEVELOPMENT
913 SAGAMORE AVENUE, PORTSMOUTH, NH

TITLE

LANDSCAPE PLAN

STATE OF NEW HAMPSHIRE — No. 738 — JOHN R. CHAGNON — LICENSED LAND SURVEYOR — SIGNATURE

DATE	SCALE
2024.07.31	1"=10'

DRAWN BY	DESIGNED BY	CHECKED BY
PJM	PJM	SDR

PROJECT No. 5010372.3116

DRAWING No. **C104** REV. **4**

EROSION CONTROL NOTES

CONSTRUCTION SEQUENCE

DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

IF REQUIRED THE CONTRACTOR SHALL OBTAIN AN NPDES PHASE II STORMWATER PERMIT AND SUBMIT A NOTICE OF INTENT (N.O.I) BEFORE BEGINNING CONSTRUCTION AND SHALL HAVE ON SITE A STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) AVAILABLE FOR INSPECTION BY THE PERMITTING AUTHORITY DURING THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT THE S.W.P.P.P. AND INSPECTING AND MAINTAINING ALL BMP'S CALLED FOR BY THE PLAN. THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (N.O.T.) FORM TO THE REGIONAL EPA OFFICE WITHIN 30 DAYS OF FINAL STABILIZATION OF THE ENTIRE SITE OR TURNING OVER CONTROL OF THE SITE TO ANOTHER OPERATOR.

INSTALL PERIMETER CONTROLS, i.e., SILTSOXX AROUND THE LIMITS OF DISTURBANCE BEFORE ANY EARTH MOVING OPERATIONS. THE USE OF HAYBALES IS NOT ALLOWED.

CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.

CUT AND GRUB ALL TREES, SHRUBS, SAPLINGS, BRUSH, VINES AND REMOVE OTHER DEBRIS AND RUBBISH AS REQUIRED.

PERFORM DEMOLITION.

BULLDOZE TOPSOIL INTO STOCKPILES, AND CIRCLE WITH SILT FENCING OR SILTSOXX. IF EROSION IS EXCESSIVE, THEN COVER WITH MULCH.

INSTALL FOUNDATION

LAYOUT AND INSTALL ALL BURIED UTILITIES AND SERVICES UP TO 10' OF THE PROPOSED BUILDING FOUNDATIONS. CAP AND MARK TERMINATIONS OR LOG SWING TIES.

CONSTRUCT SITE IMPROVEMENTS

AFTER BUILDING IS COMPLETED, FINISH ALL REMAINING LANDSCAPED WORK.

REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

GENERAL CONSTRUCTION NOTES

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE". THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

DUST CONTROL: IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

SILT FENCES AND SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT FENCES AND SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVES AND PARKING AREAS.

ADDITIONAL TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS--CONSTRUCT SILT FENCE OR SILTSOXX AROUND TOPSOIL STOCKPILE.

AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. STUMPS SHALL BE DISPOSED OF IN AN APPROVED FACILITY.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED.

FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE INCORPORATED INTO FILLS.

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL.

THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.

ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
- BASE COURSE GRAVELS HAVE BEEN INSTALLED ON AREAS TO BE PAVED
- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
- A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
- EROSION CONTROL BLANKETS HAVE BEEN INSTALLED

VEGETATIVE PRACTICE

FOR PERMANENT MEASURES AND PLANTINGS:
APPLY NOFA STANDARDS

SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO
THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE:

SEED WITH BUFFER PLANTING FROM PIERSON NURSERIES (207) 499-2994

FOR TEMPORARY PROTECTION OF DISTURBED AREAS:
MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:
PERENNIAL RYE: 0.7 LBS/1,000 S.F.
MULCH: 1.5 TONS/ACRE

MAINTENANCE AND PROTECTION

THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH. ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED, LIMED AND FERTILIZED, AND RESEEDED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.

TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.

SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.

THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

THE SILT FENCE OR SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

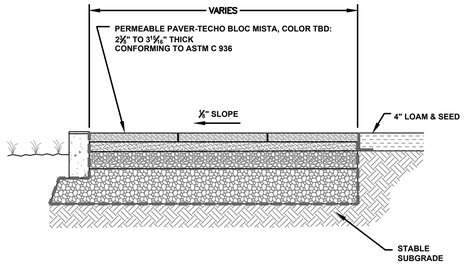
SILT FENCING AND SILTSOXX SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SILT FENCE AND SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDED.

WINTER NOTES

ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

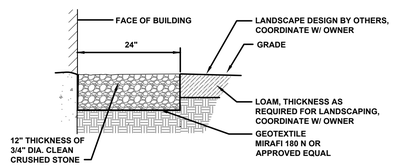
ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

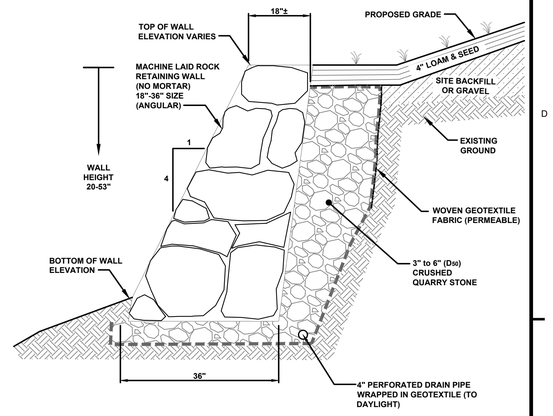


NOTES:
1) TECHO-BLOC (OR APPROVED EQUAL).
2) INSTALLED PER MANUFACTURERS INSTRUCTIONS.
3) PEDESTRIAN TRAFFIC ONLY.

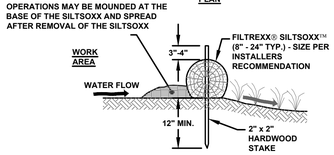
A C102 TECHNO-BLOC® POROUS PATIO/WALKWAY
NTS
HARDSCAPE DESIGN & INSTALLATION
1-410-969-9260



B C102 DRIP EDGE DETAIL
NTS



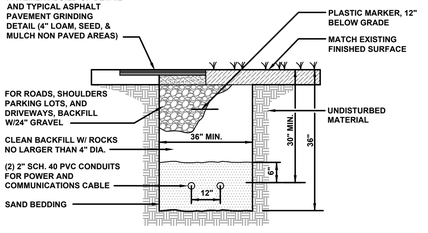
C C102 DRY ROCK RETAINING WALL DETAIL
NTS



D C102 TYPICAL GRAVEL BUILDUP DETAIL
N.T.S.

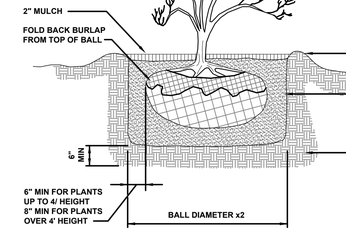
NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

E C103 FILTREXX® SILTSOXX™ DETAIL
N.T.S.

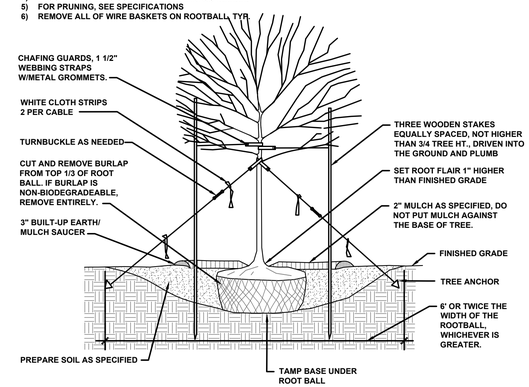


NOTES:
1. SIZE, NUMBER, MATERIAL, AND ARRANGEMENT OF CONDUIT SHALL BE COORDINATED WITH INDIVIDUAL UTILITIES.
2. ALL ELECTRICAL CONDUIT AND STRUCTURES SHALL BE WATER TIGHT.
3. CONDUITS SHALL EXCLUSIVELY SERVE EITHER POWER OR COMMUNICATIONS.

J C103 TYPICAL UNDERGROUND UTILITY TRENCH DETAIL
N.T.S.



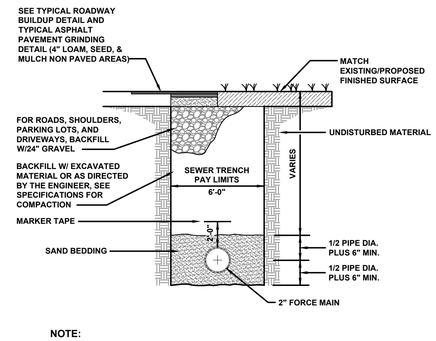
F C102 SHRUB PLANTING DETAIL
NTS



G C102 TREE PLANTING DETAIL
SCALE: NTS

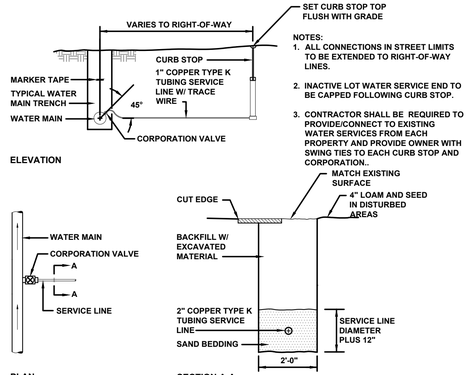
H C101 WETLAND BUFFER SIGN
NTS

WETLAND BUFFER



NOTE:
1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

K C103 TYPICAL FORCE MAIN TRENCH DETAIL
SCALE: NTS



L C103 TYPICAL WATER SERVICE DETAIL
NTS

REV.	DATE	DESCRIPTION	BY	CHK.
2	10/01/24	PER CONSERVATION COMMITEEE COMMENTS	PJM	JRC
1	08/27/24	ADD TEST PIT/ LEDGE PROBES	SJR	SDR

DRAWING ISSUE STATUS

PERMIT PLAN

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 3
Portsmouth, NH 03801
603.430.9282

PROJECT

HOGSWAVE, LLC REDEVELOPMENT
913 SAGAMORE AVENUE, PORTSMOUTH, NH

TITLE

SITE DETAILS

JOHN R. CHAGNON No. 9851 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

DATE	SCALE
2024.07.31	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
PJM	PJM	SDR

PROJECT No. 5010372.3116

DRAWING No. **C501** REV. **2**

Findings of Fact | Detached Accessory Dwelling Unit
City of Portsmouth Planning Board

Date: November 21, 2024
Property Address: 377 Maplewood
Application #: LU-24-133
Decision: Approve Deny Approve with Conditions

Findings of Fact:
Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

1	10.814.621 The ADU complies with all applicable standards of this Section 10.814 or as may be modified by the conditional use permit.	**Meets** **Does Not Meet**	The design plans and written narrative/statement submitted by the Applicant demonstrate that the ADU complies with the standards set forth in 10.814 with the proposed modification to Section 10.814.434 to allow the building footprint to exceed 750 sq. ft.
2	10.814.622 The exterior design of the ADU is architecturally consistent with or similar in appearance to the existing principal dwelling on a lot.	**Meets** **Does Not Meet**	The proposed ADU is designed to have the appearance of a utilitarian out-building with simple exterior trim elements to make it appear subservient to the principal structure. It has a gabled roof, materials, trim and windows that are reflective of the principal residence.
3	10.814.623 The site plan provides adequate and appropriate open space and landscaping for both the ADU and the principal dwelling unit and complies with the off-street parking requirements of 10.814.26.	**Meets** **Does Not Meet**	The proposed improvements to the property will result in a 4% increase in open space and 7.8% less building coverage. The property is mostly developed in its existing condition. The existing landscaping will be retained with the site improvements. The site plan allows for compliant off-street parking and improved, safer vehicular access to the Property.

	Section 10.814.62	Finding (Meets Requirement/ Criteria)	Supporting Information
4	10.814.624 The ADU will maintain a compatible relationship with the character of adjacent and neighborhood properties in terms of location, design, and off-street parking layout, and will not significantly reduce the privacy of adjacent properties.	**Meets** **Does Not Meet**	The proposed ADU is consistent in design and appearance to the principal residence on the Property and other similar structures in the surrounding area. The ADU will replace a dilapidated building that constitutes an eyesore for adjacent properties and the neighborhood. The ADU site plan calls for greater open space, less building coverage, and greater overall setback compliance than what exists. In addition, the existing landscaping on the Property will be retained. The privacy that adjacent properties currently enjoy will not be diminished from what exists.
5	**<u>Other Board Findings</u>:** The proposed modification from Section 10.814.434 of the Ordinance is justified to allow the building footprint to exceed 750 sq. ft. The footprint and size of the proposed building is smaller than what exists today. The garage associated with the DADU will occupy space on the Property that would otherwise be occupied by a vehicle if the modification is not granted. The proposed garage will be situated in the northeast corner of the Property where there is a hill and trees that will buffer it from the closest abutting structure. This lessens the impact that the proposed garage would otherwise have and further speaks to the unique circumstances that apply to the Property.		

DURBIN LAW

Derek R. Durbin, Esq.
603.287.4764
derek@durbinlawoffices.com

BY: VIEWPOINT & HAND DELIVERY

October 29, 2024

City of Portsmouth
Attn: Peter Stith, Planner
Planning Board
1 Junkins Avenue
Portsmouth, NH 03801

RE: DADU CUP Application of Kevin Shitan Zeng, Trustee of the Kevin Shitan Zeng Revocable Trust of 2017
377 Maplewood Avenue, Portsmouth (Tax Map 141, Lot 22)

Dear Peter,

Please find a copy of the following materials associated with the above referenced DADU CUP application:

1. Landowner Authorization Form;
2. Written Narrative/Statement;
3. Existing and Proposed Conditions Plans;
4. Architectural Floor Plans and Renderings; and
5. Photographs.

A copy of the above application materials is being delivered to the Planning Department today. Should you have any questions or concerns regarding the enclosed application materials, do not hesitate to contact me at your convenience.

Sincerely,

Derek R. Durbin, Esq.

LANDOWNER LETTER OF AUTHORIZATION

Kevin Shitan Zeng, Trustee of The Kevin Shitan Zeng Revocable Trust of 2017, owner of property located at 377 Maplewood Avenue, identified on Portsmouth Tax as Map 141, Lot 22 (the "Property), hereby authorizes **Durbin Law Offices, PLLC, Brendan McNamara, and TFMoran,** to file any zoning board, planning board, historic district commission or other municipal permit applications with the City of Portsmouth for said Property and to appear before its land use boards. This Letter of Authorization shall be valid until expressly revoked in writing.

Kevin Zeng
Kevin Zeng (Apr 24, 2024 08:03 EDT)

April 23, 2024

Kevin Shitan Zeng, Trustee

Landowner Authorization Form -4-23-2024

Final Audit Report 2024-04-24

Created:	2024-04-23
By:	Derek Durbin (derek@durbinlawoffices.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAx9l4SAUtdmbM-8_VfxidkKmCi6TMyAxv

"Landowner Authorization Form -4-23-2024" History

Document created by Derek Durbin (derek@durbinlawoffices.com)
2024-04-23 - 2:12:43 PM GMT- IP address: 108.36.120.94

Document emailed to Kevin Zeng (kevin158499@gmail.com) for signature
2024-04-23 - 2:12:46 PM GMT

Email viewed by Kevin Zeng (kevin158499@gmail.com)
2024-04-24 - 12:03:20 PM GMT- IP address: 174.212.38.33

Document e-signed by Kevin Zeng (kevin158499@gmail.com)
Signature Date: 2024-04-24 - 12:03:42 PM GMT - Time Source: server- IP address: 174.212.38.33

Agreement completed.
2024-04-24 - 12:03:42 PM GMT

CITY OF PORTSMOUTH
PLANNING BOARD
DADU CUP APPLICATION NARRATIVE

Kevin Shitan Zeng, Trustee
The Kevin Shitan Zeng Revocable Trust of 2017
377 Maplewood Avenue
Portsmouth, NH 03801
(Owner/Applicant)

DADU PROJECT SUMMARY

Kevin Shitan Zeng is the owner of the property located at 377 Maplewood Avenue, identified on Portsmouth Tax Map 141 as Lot 22 (the "Property"). The Property is zoned General Residence A ("GRA") and lies within the Historic District. It is a 5,277 square foot parcel of land that contains a two-story single-family home. Just to the rear of the existing home, there is a detached, wood-framed, single-story building that was built in the early 1900s and has been used for different purposes over the years. This building has fallen into significant disrepair. It is missing portions of the exterior walls and floor and is unsafe to enter. It has been determined, in consultation with the City's Historic District Commission ("HDC") that it would be infeasible to rehabilitate the building which does not have any unique architectural features.

Mr. Zeng would like to demolish the building in the rear of the Property and replace it with one (1) bedroom one (1) bathroom detached accessory dwelling unit ("DADU") with attached one-car garage. The DADU would be occupied initially by Mr. Zeng's elderly mother, who provides daily childcare for him while he operates a full-time business (Pink Bamboo) in downtown Portsmouth.

In conjunction with the construction of the DADU, the Applicant intends to improve rehab and improve the existing single-family home. The proposed DADU is designed in the Carriage House style, with historic type trim detailing and windows and doors. The Applicant held a work session with the HDC on June 12, 2024. The HDC had only favorable comments for the proposal and supports the demolition of the existing structure.

DADU ORDINANCE CRITERIA

All accessory dwelling units shall comply with the following standards:

10.814.21 The principal dwelling unit and the accessory dwelling unit shall not be separated in ownership (including by condominium ownership).

The proposed DADU will comply with the requirement. No condominium use of the property is proposed or contemplated.

10.814.22 Either the principal dwelling unit or the accessory dwelling unit shall be occupied by the owner's principal place of residence. The owner shall provide documentation demonstrating compliance with this provision to the satisfaction of the City.

The owner of the property, Kevin Zeng, occupies the existing residence on the Property. The plan is for the owner's mother to occupy the DADU.

10.814.221 When the property is owned by an entity, one of the dwelling units shall be the principal place of residence of one or more principals of that entity, such as a member or beneficiary.

See response to 10.814.22 above, which is incorporated by reference.

10.814.23 Accessory dwelling units shall not have more than two bedrooms.

The proposed DADU will comply with the requirement. Only one bedroom is proposed for the DADU. Note that the Applicant's site plan has a note that two bedrooms are included in the DADU. That notation is incorrect. The floor plans are correct and show only 1 bedroom. A prior proposal for the property involved a 2-bedroom free standing dwelling (as opposed to a DADU).

10.814.24 Neither the principal dwelling unit nor the accessory dwelling unit shall be used for any business, except that the property owner may have a home occupation use in the unit that he or she occupies as allowed or permitted elsewhere in this Ordinance.

No business use of the property is proposed or contemplated as part of the DADU.

10.814.25 Where municipal sewer service is not provided, the septic system shall meet NH Water Supply and Pollution Control Division requirements for the combined system demand for total occupancy of the premises.

The property is serviced by municipal sewer and water.

10.814.26 1 off-street parking space shall be provided for an ADU in addition to the spaces that are required for the principal single-family dwelling.

The proposed DADU will have one dedicated parking space within an attached garage, as more specifically depicted on the site plan and floor plans submitted with the CUP application.

10.814.40 Additional Standards for Detached Accessory Dwelling Units:

10.814.41 The DADU shall not be larger than 750 sq. ft. in gross living area.

The DADU will have 698 sq. ft. of "gross living area" as that term is defined by Section 10.1530.

10.814.411 A DADU that is created from an existing accessory building that does not comply with its minimum yard requirements shall not exceed 750 sq. ft. in gross living area.

N/A.

10.814.42 A DADU that is created from an existing accessory building that does not comply with its minimum yard requirements shall comply with the following additional requirements:

N/A.

10.814.43 The DADU shall be subordinate to the principal single-family dwelling in scale, height and appearance as follows:

10.814.431 The front wall of a DADU that is not created within an existing accessory building shall be set back at least 10 feet further from the front lot line than the existing front wall of the principal dwelling unit.

The proposed DADU complies with the requirement.

10.814.432 The building height of the building containing the DADU shall be no greater than 22 feet.

The proposed DADU complies with the requirement. The proposed building height of the DADU is 22'.

10.814.433 When the building containing the DADU is taller than the principal building, its required setback from all property lines shall be increased by the difference in building height between the DADU and the principal building.

The building containing the DADU will not be taller than the principal building on the Property.

10.814.434 The building footprint of the building containing the DADU shall be no greater than 750 sq. ft.

The building footprint of the building containing the DADU will be 1,104 sq. ft. (+/-); therefore, a modification is being requested from this provision of the Zoning Ordinance. The additional area is needed to accommodate an attached single-car garage, as more specifically explained in the written narrative associated with the modification request.

10.814.435 The gross floor area of the building containing the DADU shall be no greater than 1,600 sq. ft. gross floor area or 75 percent of the gross floor area of the principal dwelling unit, whichever is less.

The proposed DADU will comply with the requirement. The approximate gross floor area of the principal dwelling is 1,480 sq. ft, whereas the gross floor area of the proposed DADU is 1,104 sq. ft. (74.6%)

Article 8 Supplemental Use Standards:

10.814.436 The DADU may include roof dormers provided they are located outside the required setbacks from all property lines and occupy no greater than 33% of any individual roof plane.

No dormers are proposed as part of the DADU design.

10.814.437 The DADU shall comply with the drainage requirements of this Ordinance.

The conditions of the property will be improved from the existing condition with an overall reduction in impervious surface coverage. To the extent required, a drainage plan will be submitted with the building permit application.

10.814.438 The DADU shall comply with the lighting requirements of this Ordinance.

The proposed DADU will comply with any lighting requirements set forth in the Ordinance and will not create any light intrusion into abutting properties.

10.814.44 A newly constructed DADU shall be separated no less than 5 feet from the principal structure or as required by the Building Code, whichever is greater.

The proposed DADU will be separated from the principal building by approximately 18.9' at its closest point.

10.814.50 Architectural Design Standards -

Where the creation of an accessory dwelling unit involves the construction of a new building or an addition to or expansion of an existing building, the exterior design shall be architecturally consistent with or similar in appearance to the principal building using the following design standards:

10.814.51 The new building, addition or expansion shall be architecturally consistent with or similar in appearance to the existing principal building with respect to the following elements:

• Massing, including the shape and form of the building footprint, roof or any projecting elements;

• Architectural style, design, and overall character;

• Roof forms, slopes, and projections;

• Siding material, texture, and profile;

• Window spacing, shapes, proportions, style and general detailing;

• Door style, material and general detailing;

• Trim details, including window and door casings, cornices, soffits, eaves, dormers, shutters, railings and other similar design elements;

• Exposed foundation materials and profiles.

The new building proposed is in the appearance of a secondary, utilitarian, out-building, with simpler, exterior trim elements. This makes the building subservient to the principal structure. Much as the existing structure has been.

The proposed DADU is designed to have the appearance of a utilitarian out-building with simple exterior trim elements. It is designed to appear subservient to the principal structure.

It matches the principal building in that it has a gable roof and has an architectural style reflective of this. This is reinforced with the choice of materials, trim and windows as shown in the elevations provided with the CUP application.

10.814.52 If provided, the following elements shall be architecturally consistent with or similar in appearance to the corresponding elements on the principal building in terms of proportions, materials, style and details:

• Projections such as dormers, porticos, bays, porches and door canopies;

• Chimneys, balconies, railings, gutters, shutters and other similar design elements.

None of the above design elements have been contemplated with the proposed DADU.

10.814.53 If provided, all street-facing garage doors shall be limited to 9 feet in width.

The proposed DADU will comply with the requirement.

PROPOSED ORDINANCE MODIFICATION
Section 10.814.434

Because the footprint of the building is 1,104 sf., a modification from Section 10.814.434 is required. The gross floor area ("GFA") of the accessory dwelling itself is 749 sf., but the attached garage results in the GFA of the building being 1,104 sf., above what is permitted by the Ordinance. Based on the City's assessing records, the DADU building would comply with Section 10.814.435 of the Ordinance, as the GFA of the principal dwelling is at least 1,480 sf. (75% = 1,110 sf.), so the overall size of the building is consistent with what the Ordinance allows for.

The proposed DADU replaces an accessory building on the Property that is much larger. It has a larger building footprint and greater GFA than what is proposed. The DADU will result in the Property being brought into greater conformance with the dimensional requirements of the Zoning Ordinance, as shown on the table below.

Non-Conformity	Requirement	Existing Condition	Proposed Condition
Building Coverage	25% (maximum)	45.3%	37.5%
Open Space	30% (minimum)	20.5%	24.5%
Rear Setback	20'	2.2'	3.2'
Secondary Front Yard	10'	0.2'	6.1'
Left Side Setback	10'	4.5'	4.5'

In addition, the Property does not allow for safe vehicular egress. Vehicles are routinely forced to back into the public ROW to exit the Property due to the existing topography (hill to the East) and how the buildings are situated in relation to the driveway and parking area. This is demonstrated on the plans and photographs submitted herewith. The proposed DADU with attached garage will remedy this situation so that vehicles can properly exit the Property.

Section 10.5B74.30 allows for modification of the standards provided that the "Planning Board finds such modification will promote design flexibility and overall project quality…[.]"

The footprint and size of the proposed building is smaller than what exists today. The garage associated with the DADU will occupy space on the Property that would otherwise be occupied by a vehicle if the modification is not granted. The proposed garage will be situated in the northeast corner of the Property where there is a hill and trees that will buffer it from the closest abutting structure. This lessens the impact that the proposed garage would otherwise have and further speaks to the unique circumstances that apply to the Property.

In theory, the Applicant could construct a detached garage in approximately the same location on the Property without needing a modification, although Mr. Zeng does not believe it makes logical sense aesthetically or functionally. The modification allows for cohesive, high functioning DADU design that resembles the utilitarian architecture of the existing "historic" building while bringing the Property into greater conformance with the Ordinance. As stated above, the HDC informally endorsed the design of the DADU at a Work Session in June. The modification will allow the Applicant to have covered parking for one vehicle and some additional storage space where such space is scarce given the constraints of the Property. The principal dwelling on the Property has very little accessory space that can be used for storage of personal belongings. Mr. Zeng's elderly mother, who will be occupying the DADU, will also be able to access the garage directly from her living space. Allowing the modification results in a higher quality project with a greater aesthetic and functional benefit for the Property overall.

Mr. Zeng received several dimensional variances from the Zoning Board of Adjustment ("ZBA") on September 17, 2024 to allow the DADU to be built in the proposed location. As part of its decision, the Board found that the proposed DADU would be consistent with the spirit and intent of the Ordinance.

Mr. Zeng understands that the Planning Board disfavors GFA-related modifications. However, for the reasons outlined above, there are special conditions that apply to Mr. Zeng's Property that distinguish his request from other similar requests that have been brought before the Board.

Respectfully Submitted,

Dated: October 30, 2024

Kevin Shitan Zeng, Trustee

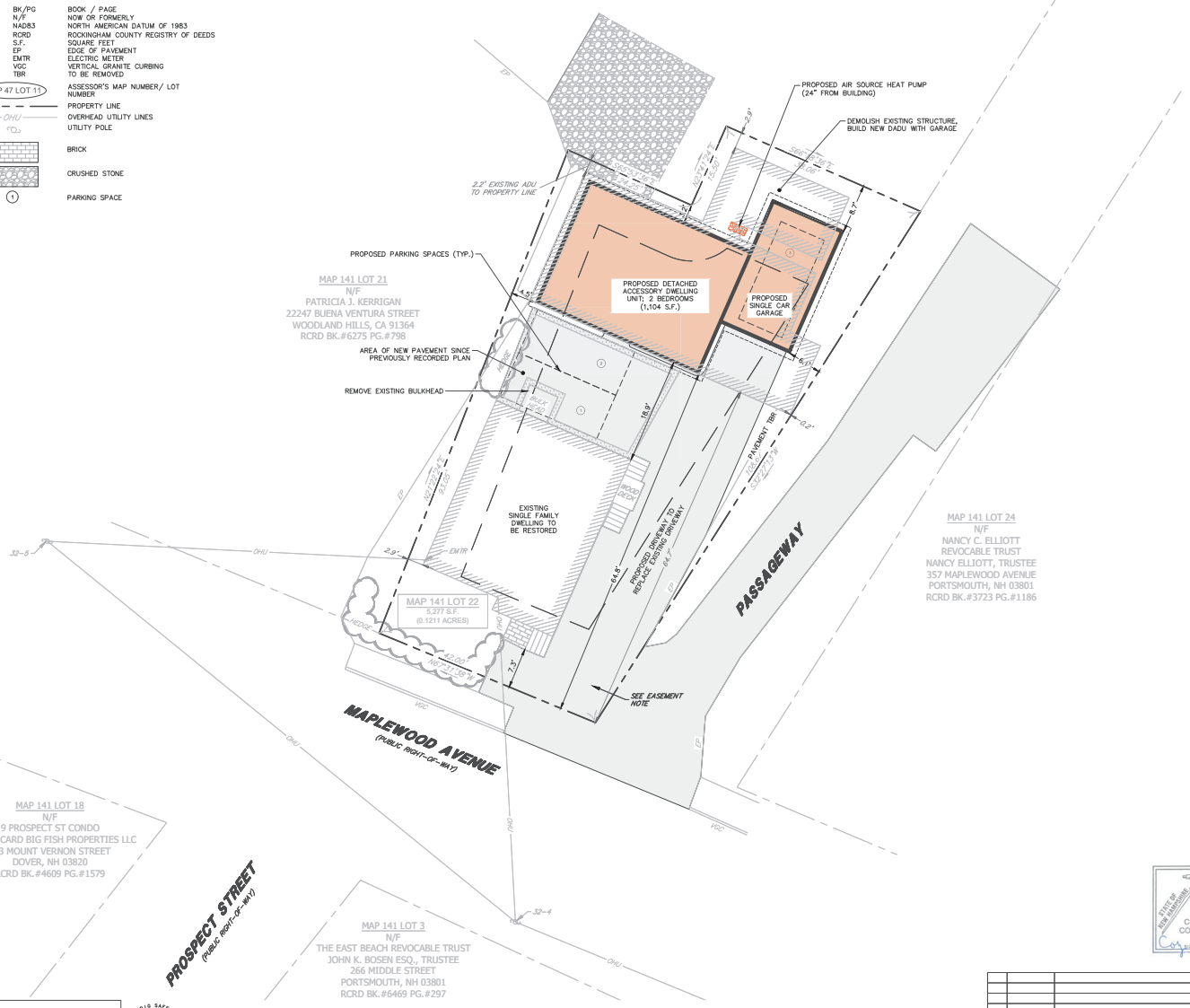
By and Through His Attorneys,
Durbin Law Offices PLLC

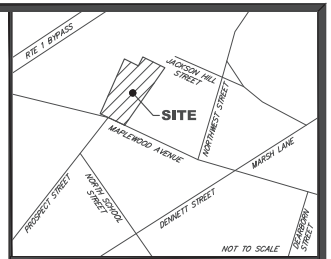
By: Derek R. Durbin, Esq.
144 Washington Street
Portsmouth, NH 03801
(603)-287-4764
derek@durbinlawoffices.com

LEGEND:

BK/PG	BOOK / PAGE
N/F	NOW OR FORMERLY
NAD83	NORTH AMERICAN DATUM OF 1983
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
S.F.	SQUARE FEET
EP	EDGE OF PAVEMENT
EMTR	ELECTRIC METER
VGC	VERTICAL GRANITE CURBING
TBR	TO BE REMOVED
MAP 47 LOT 11	ASSESSOR'S MAP NUMBER/ LOT NUMBER
	PROPERTY LINE
OHU	OVERHEAD UTILITY LINES
	UTILITY POLE
	BRICK
	CRUSHED STONE
1	PARKING SPACE

N
NAD 83





LOCATION PLAN

SITE DATA

OWNER OF RECORD OF MAP 141 LOT 22: KEVIN SHITAN ZENG REVOCABLE TRUST OF 2017
DEED REFERENCE TO PARCEL IS BK 5881 PG 2630
AREA OF PARCEL = 5,277± SF OR 0.1211± ACRES

ZONED: GENERAL RESIDENCE A
EXISTING USE: SINGLE FAMILY DWELLING
PROPOSED USE: SINGLE FAMILY DWELLING WITH DETACHED ACCESSORY DWELLING UNIT

THE PURPOSE OF THIS PLAN IS TO DEPICT THE LOCATION OF A DETACHED ACCESSORY DWELLING UNIT. ASSOCIATED IMPROVEMENTS INCLUDE AND ARE NOT LIMITED TO ACCESS AND PARKING.

DIMENSIONAL REQUIREMENTS FOR ACCESSORY DWELLING UNIT (CURRENT ZONING)

	REQUIRED:	EXISTING:	PROPOSED (FOR DADU):
MINIMUM LOT DIMENSIONS:			
LOT AREA	7,500 SF (0.172± AC)	5,277 SF (0.1211± AC)	5,277 SF (0.1211± AC)
LOT FRONTAGE	100 FT	42.00 FT	42.00 FT
DEPTH	70 FT	108.67 FT	108.67 FT
MINIMUM YARD DIMENSIONS:			
FRONT	15 FT	64.7 FT	64.8 FT
SIDE	10 FT	0.2 FT	4.5 FT
REAR	20 FT	2.2 FT	3.2 FT
MAXIMUM STRUCTURE DIMENSIONS:			
STRUCTURE HEIGHT	35 FT	<35 FT	22 FT
ROOF APPURTENANCE HEIGHT	8 FT	0 FT	0 FT
BUILDING COVERAGE	25%	45.3%	37.5%
MINIMUM OPEN SPACE	30%	20.5%	24.5%

PARKING REQUIREMENTS

PARKING SPACES (SEE CALCULATION)	3 SPACES	3 SPACES
PARKING SPACE SIZE	8.5 FT X 19 FT	8.5 FT X 19 FT

PARKING CALCULATIONS

REQUIRED PARKING RATIO:
RESIDENTIAL: 1.3 SPACES PER UNIT > 750 S.F.

TOTAL REQUIRED = 2 UNITS >750 S.F. * 1.3 SPACES/UNIT = 2.6 SPACES
TOTAL PROVIDED = 3 SPACES

EASEMENT NOTE:

PARCEL IS SUBJECT TO AN EASEMENT TO THE NEW HAMPSHIRE GAS AND ELECTRIC COMPANY AS DESCRIBED IN BK.#974 PG.#269. SAID EASEMENT IS BASED ON THE LOCATION OF A UTILITY POLE AND ANCHOR THAT NO LONGER EXIST, AND THEREFORE, IS NOT PLOTTABLE. SEE PLAN REFERENCE #4.

HORIZONTAL SCALE 1"=10'
10 5 0 10

REV	DATE	DESCRIPTION	DR	CK
1	7/19/2024	ADDITION OF AIR SOURCE HEAT PUMP	JKC	JCC

VARIANCE PLAN

TAX MAP 141 LOT 22

VARIANCE PLAN

PROPOSED ACCESSORY DWELLING UNIT

377 MAPLEWOOD AVENUE
PORTSMOUTH, NEW HAMPSHIRE

OWNED BY AND PREPARED FOR
KEVIN SHITAN ZENG

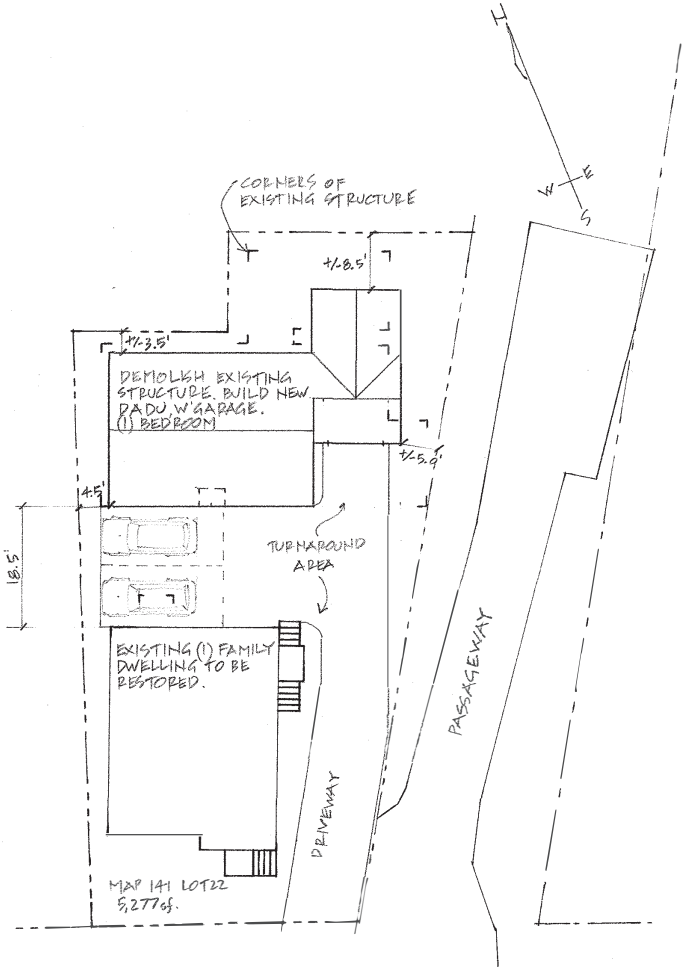
1"=20' (11"X17")
SCALE: 1"=10' (22"X34") JUNE 19, 2024

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 844 COREY COLWELL

DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE	DR	JKC	FB	–	
45926.21	CK	JCC	CADFILE	45926-21 SITE PLAN	C-01



PROPOSED SITE PLAN 1"=20'

NEW ADU AT REAR OF 377 MAPLEWOOD AVE, PORTSMOUTH, NH

TITLE: PROPOSED SITE PLAN + EXISTING PHOTOGRAPH

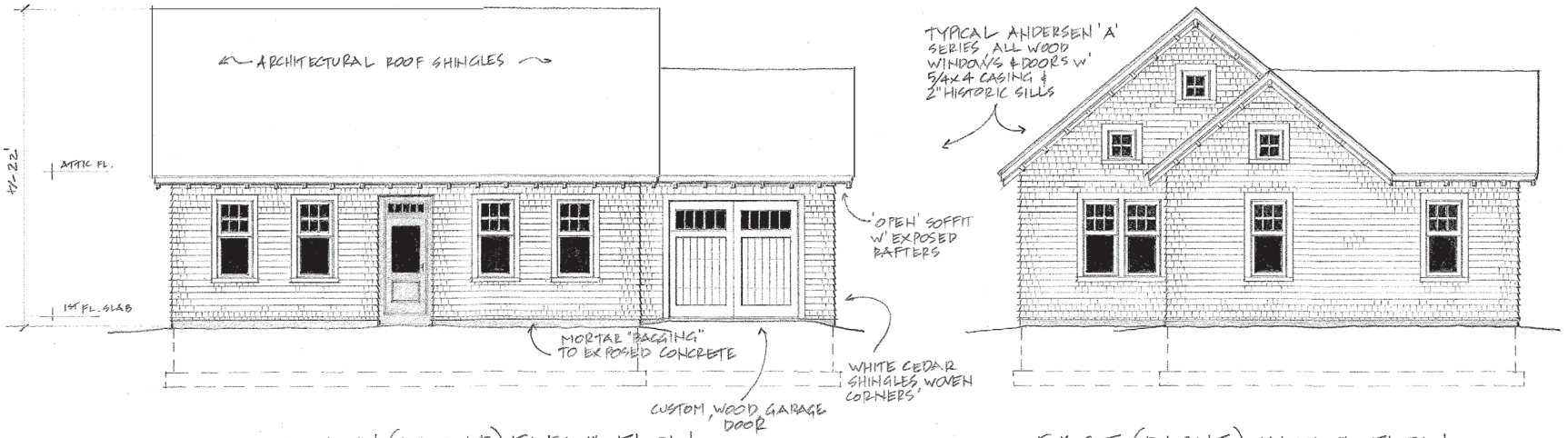
SCALE: 1"=20'

DATE: 4.22.2024

PAGE A1

Brendan McNamara
RESIDENTIAL ARCHITECTURE

603 682 1105 brenmcnamara@comcast.net



SOUTH (FRONT) ELEVATION

EAST (RIGHT) ELEVATION

TITLE: PROPOSED SOUTH + EAST ELEVATIONS

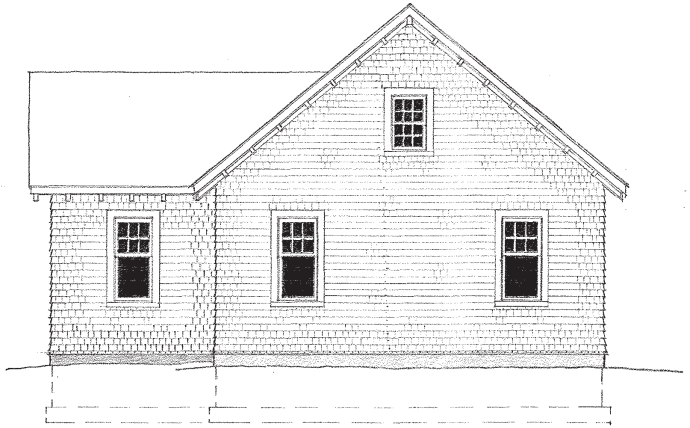
SCALE: 1/8"=1'0"

DATE: 4.22.2024

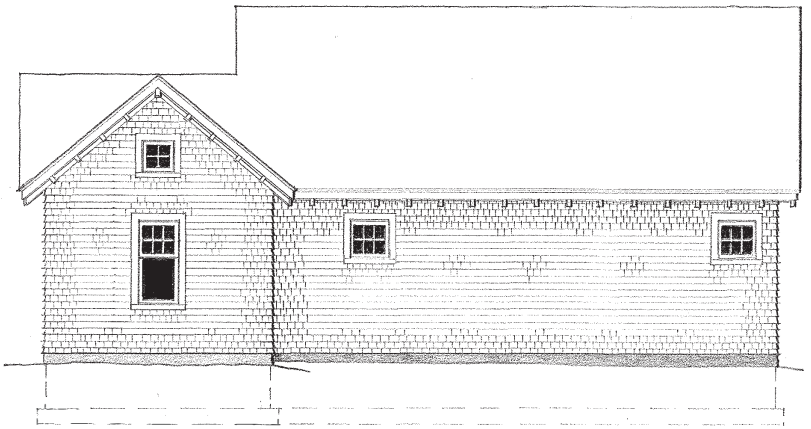
NEW ADU AT REAR OF 377 MAPLEWOOD AVE., PORTSMOUTH, NH

Brendan McNamara
RESIDENTIAL ARCHITECTURE

603 682 1105 brenmcnamara@comcast.net



WEST (LEFT) ELEVATION



NORTH (REAR) ELEVATION

NEW ADU AT REAR OF 377 MAPLEWOOD AVE., PORTSMOUTH, NH

TITLE: PROPOSED WEST + NORTH ELEVATIONS

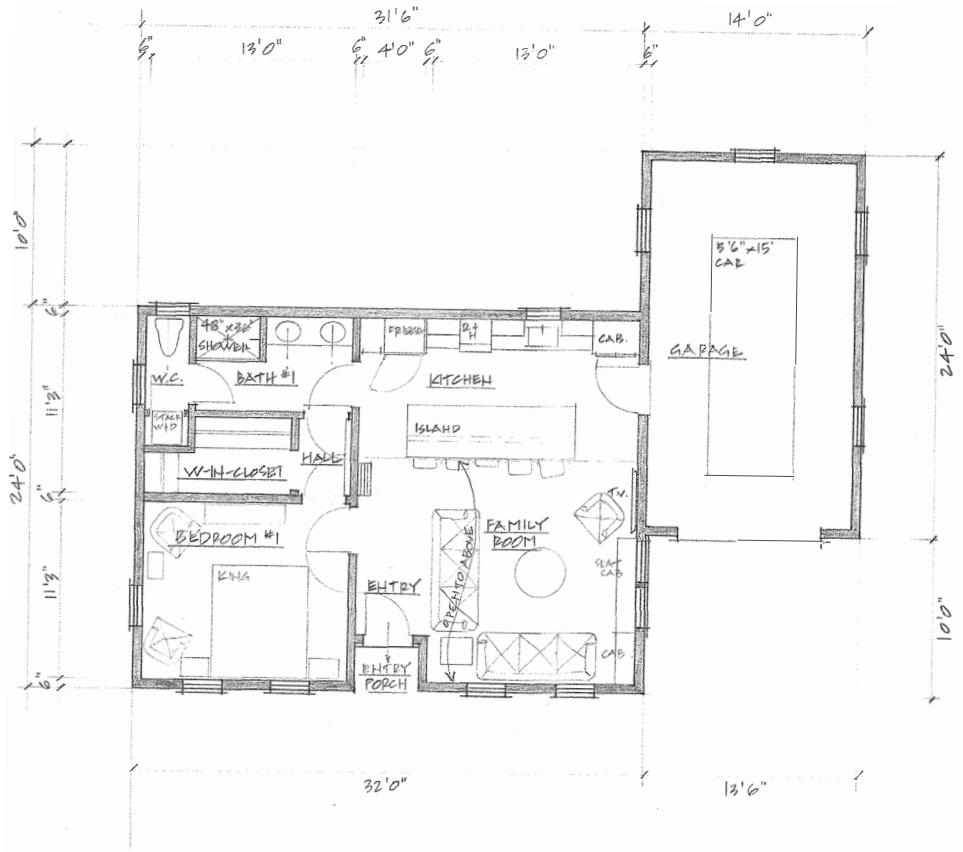
SCALE: 1/8"=1'-0"

DATE : 4.22.2024

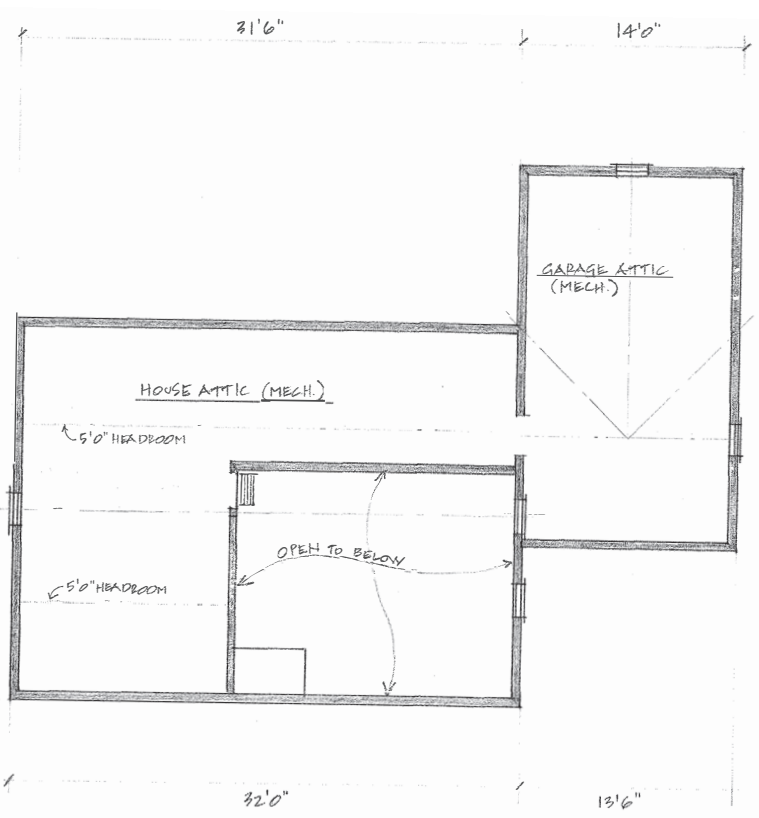
PAGE A3

Brendan McNamara
RESIDENTIAL ARCHITECTURE

603 682 1105 brenmcnamara@comcast.net



FIRST FLOOR PLAN (SLAB)



ATTIC FLOOR PLAN

Brendan McNamara
RESIDENTIAL ARCHITECTURE

603 682 1105 brenmcnamara@comcast.net

NEW ADU AT REAR OF 377 MAPLEWOOD AVE., PORTSMOUTH, NH

TITLE: PROPOSED FLOOR PLANS

SCALE: 1/8"=1'0"

DATE: 4.22.2024

Accessory Building (Front View)

Accessory Building (Rear View)

Accessory Building

Accessory Building

Accessory Building – Interior

Accessory Building – Interior

Accessory Building – Interior

Accessory Building – Interior

House and Accessory Building – Front / Right Side View

Findings of Fact | Subdivision Rules and Regulations
City of Portsmouth Planning Board

Date: 2024-11-11
Property Address: 119 Diamond Drive
Application #: LU-24-199
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:
Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

	Subdivision Review Criteria	Finding (Meets Standards/ Requirements)	Supporting Information
1	Subdivision Rules and Regulations III. D. 1 The Board shall act to deny any application which is not in compliance with Section IV or V as appropriate. **SECTION IV - REQUIREMENTS FOR PRELIMINARY PLAT**	**Meets** **Does Not Meet**	All applicable requirements are shown on sheet S-1 with the exception of Section IV.9/V.8 requiring wetlands be shown, see waiver request.
2	**SECTION V - REQUIREMENTS FOR FINAL PLAT**	**Meets** **Does Not Meet**	All applicable requirements are shown on sheet S-1 with the exception of Section V.8 requiring wetlands be shown, see waiver request.
3	**SECTION VI - GENERAL REQUIREMENTS**	**Meets** **Does Not Meet**	The application has been reviewed by the Technical Advisory Committee (TAC) for conformance with the General Requirements. • N/A per Section III.B.1
4	**SECTION VII - DESIGN STANDARDS**	**Meets**	The application has been reviewed by the Technical Advisory Committee (TAC) for conformance with these minimum requirements.

	Subdivision Review Criteria	Finding (Meets Standards/ Requirements)	Supporting Information
		Does Not Meet	• N/A per Section III.B.1
5	**Other Board Findings:** **There is no proposed construction or site improvements as a part of this application. This lot line adjustment will make Map 220 Lot 31 conform to the minimum lot area requirement of 15,000 sf for the Single Residence B (SRB) zoning district.**		

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

NEW HAMPSHIRE 200

October 30, 2024

Peter Stith, Planning Manager
City of Portsmouth, Planning Department
1 Junkins Avenue, 3rd Floor
Portsmouth, NH 03801

Via: View Point Cloud

RE: Lot Line Revision Application
119 Diamond Drive & 827 Woodbury Avenue –
Lawrence P. Bornheimer Revocable Trust & Roman Catholic Bishop of Manchester –
Tax Map 220 Lot 31 & Tax Map 219 Lot 39
TFM Project #46077-100

Dear Mr. Stith:

On behalf of our client, Lawrence P. Bornheimer, please find a Lot Line Revision Application submission relative to the above-referenced project. The following materials are included in this submission:

- **Check for Planning Board Fee Paid to "City of Portsmouth" ($250);**
- **Letter of Authorization – Map 220 Lot 31;**
- **Letter of Authorization – Map 219 Lot 39;**
- **Lot Line Revision Application Checklist (1 copy);**
- **Abutter's List (1 copy);**
- **Abutter's List (3 set of labels); and**
- **Plan entitled "Tax Map 220 Lot 31 & Map 219 Lot 39, Lot Line Adjustment Plan, 119 Diamond Drive & 827 Woodbury Avenue, Portsmouth, New Hampshire", prepared by TFMoran, Inc., dated October 25, 2024, (1 copy at 22"x34").**

Project Description

The project includes relocating the common boundary line between Map 220 Lot 31 and Map 219 Lot 39 to encompass existing encroachments of Map 220 Lot 31 within Map 219 Lot 39. The existing Tax Map 220 Lot 31 is approximately 13,320 sf and currently contains one single-family dwelling. The existing Tax Map 219 Lot 39 is approximately 444,353 sf and contains the Corpus Christi Parish Gathering Hall & Meeting Center. The proposed lot line revision is to convey a 4,590 sf portion of Map 219 Lot 39 to Map 220 Lot 31. This portion of land currently contains a portion of the rear yard of Map 220 Lot 31, including a fence, retaining wall and drainage features.

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

Lot Line Revisions Application **October 30, 2024**
119 Diamond Drive & 827 Woodbury Avenue – Tax Map 220 Lot 31 & Tax Map 219 Lot 39
TFM Project #46077-100

Based on our review of the City of Portsmouth Subdivision Regulations, we are requesting relief in the form of a waiver from the following section as part of this submission.

Waiver Request

Requirement: Subdivision Regulations Section IV.9/V.8: Location of significant physical features, including bodies of water, watercourses, wetlands, railroads, important vegetation, stonewalls, and soil types.

Reason for Waiver:

Because there is no proposed construction as a part of this lot line revision, we feel the location of these features is not necessary.

We appreciate your consideration of these matters and look forward to presenting this project to you in the near future.

We respectfully request that we be placed on the upcoming agenda for the Planning Board meeting on November 21, 2024.

If you have any questions or concerns, please do not hesitate to contact us.

Respectfully,
TFMoran, Inc.

Brenda Kolbow

Brenda Kolbow, LLS
Survey Department Manager

BMK/ghb

cc: Lawrence P. Bornheimer
Diocese of Manchester

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

Letter of Authorization

I, Lawrence Bornheimer, trustee of Bornheimer Revocable Trust, 119 Diamond Drive, Portsmouth, NH, hereby authorize TFMoran, Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, to act on my behalf concerning property owned by Bornheimer Revocable Trust, 119 Diamond Drive, Portsmouth, NH, known as Tax Map 220, Lot 31.

I hereby appoint TFMoran, Inc. as my agent to act on my behalf in the review process, to include any required signatures.

DocuSigned by:
F99F4CDDF95C408...

Client Name

2024-10-30
Date

Witness

Date

TFMoran, Inc.
48 Constitution Drive, Bedford, NH 03110
T(603) 472-4488 www.tfmoran.com

TFMoran, Inc. Seacoast Division
170 Commerce Way–Suite 102, Portsmouth, NH 03801
T(603) 431-2222

Letter of Authorization

In accordance with the terms of a Purchase And Sale Agreement by and between Roman Catholic Bishop of Manchester, a corporation sole, whose address is 153 Ash Street, Manchester, New Hampshire 03104 (hereinafter "**Seller**") and Lawrence P. Bornheimer, Trustee of the Lawrence P. Bornheimer Revocable Trust of 2020, 119 Diamond Drive Portsmouth, New Hampshire (hereinafter "**Buyer**"), dated September 11, 2024 as amended by an Amendment dated October 28, 2024 (collectively the "**Agreement**"), **for a lot line adjustment between the Seller and Buyer, the undersigned on behalf of the Roman Catholic Bishop of Manchester, a corporation sole, hereby authorizes TF Moran, Inc.**, of 170 Commerce Way, Suite 102, Portsmouth, to:

(i) file the survey plan entitled "Tax Map 220 Lot 31 & Map 219 Lot 39 Lot Line Adjustment Plan 119 Diamond Drive and 827 Woodberry Avenue, Portsmouth, New Hampshire County of Rockingham Owned By Lawrence P. Bornheimer Revocable Trust (Map 220 Lot 31) Roman Catholic Bishop Manchester (Map 219 Lot 39)" dated October 25, 2024 (herein the "**Survey Plan**") with the City of Portsmouth in order to obtain final approval of said Survey Plan, and lot line adjustment between the Seller and Buyer.

(ii) Further in accordance with the terms, conditions and limitations of said Agreement (including, but not limited to Section 7.03 "Buyer's Subdivision Approval") the undersigned on behalf of the Roman Catholic Bishop of Manchester, a corporation sole, as owner of 827 Woodberry Ave., Portsmouth, NH, Tax Map 219, Lot 39, hereby authorizes TF Moran, Inc. to act as agent on behalf of the Seller in the review process of the Survey Plan, to include any required signatures, provided the same remains at no cost or expense to the Seller.

This authorization being limited to approval of the Survey Plan and lot line adjustment between the Seller and Buyer only and shall automatically expire as of December 31, 2024 without further act.

Signed to be in effect October 30, 2024

Seller:

Roman Catholic Bishop of Manchester, a corporation sole:

By: + Peter A. Libasci
Name: PETER A. LIBASCI
Title: Roman Catholic Bishop of Manchester

City of Portsmouth, New Hampshire

Subdivision Application Checklist

This subdivision application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all subdivision review requirements. Please refer to the Subdivision review regulations for full details.

Applicant Responsibilities (Section III.C): Applicable fees are due upon application submittal along with required number of copies of the Preliminary or final plat and supporting documents and studies. Please consult with Planning staff for submittal requirements.

Owner: Bornheimer Revocable Trust Date Submitted: 2024-10-30

Applicant: TFMoran, Inc. - Corey Colwell

Phone Number: 603-431-2222 E-mail: ccolwell@tfmoran.com

Site Address 1: 119 Diamond Drive Map: 220 Lot: 31

Site Address 2: 827 Woodbury Avenue Map: 219 Lot: 39

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
✔	Completed Application form. **(III.C.2-3)**	View Point	N/A
✔	All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF) on compact disc, DVD or flash drive. **(III.C.4)**	View Point	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
✔	Name and address of record owner, any option holders, descriptive name of subdivision, engineer and/or surveyor or name of person who prepared the plat. **(Section IV.1/V.1)**	Sheet S-1, Note 5 & Title Block	☑ Preliminary Plat ☑ Final Plat	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
✔	**Preliminary Plat** Names and addresses of all adjoining property owners. **(Section IV.2)** **Final Plat** Names and addresses of all abutting property owners, locations of buildings within one hundred (100) feet of the parcel, and any new house numbers within the subdivision. **(Section V.2)**	Sheet S-1, Abutters List Table	☑ Preliminary Plat ☑ Final Plat	N/A
✔	North point, date, and bar scale. **(Section IV.3/V3)**	Required on all Plan Sheets	☑ Preliminary Plat ☑ Final Plat	N/A
✔	Zoning classification and minimum yard dimensions required. **(Section IV.4/V.4)**	Sheet S-1, Note 4	☑ Preliminary Plat ☑ Final Plat	N/A
✔	**Preliminary Plat** Scale (not to be smaller than one hundred (100) feet = 1 inch) and location map (at a scale of 1" = 1000'). **(Section IV.5)** **Final Plat** Scale (not to be smaller than 1"=100'), Location map (at a scale of 1"=1,000') showing the property being subdivided and its relation to the surrounding area within a radius of 2,000 feet. Said location map shall delineate all streets and other major physical features that my either affect or be affected by the proposed development. **(Section V.5)**	Sheet S-1	☑ Preliminary Plat ☑ Final Plat	N/A
✔	Location and approximate dimensions of all existing and proposed property lines including the entire area proposed to be subdivided, the areas of proposed lots, and any adjacent parcels in the same ownership. **(Section IV.6)**	Sheet S-1	☑ Preliminary Plat ☑ Final Plat	
✔	Dimensions and areas of all lots and any and all property to be dedicated or reserved for schools, parks, playgrounds, or other public purpose. Dimensions shall include radii and length of all arcs and calculated bearing for all straight lines. **(Section V.6/ IV.7)**	Sheet S-1	☑ Preliminary Plat ☑ Final Plat	N/A
✔	Location, names, and present widths of all adjacent streets, with a designation as to whether public or private and approximate location of existing utilities to be used. Curbs and sidewalks shall be shown. **(Section IV.8/V.7)**	Sheet S-1	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☐	Location of significant physical features, including bodies of water, watercourses, wetlands, railroads, important vegetation, stone walls and soils types that my influence the design of the subdivision. **(Section IV.9/V.8)**	See Cover Letter	☑ Preliminary Plat ☑ Final Plat	Yes
☐	**Preliminary Plat** Proposed locations, widths and other dimensions of all new streets and utilities, including water mains, storm and sanitary sewer mains, catch basins and culverts, street lights, fire hydrants, sewerage pump stations, etc. **(Section IV.10)** **Final Plat** Proposed locations and profiles of all proposed streets and utilities, including water mains, storm and sanitary sewer mains, catchbasins and culverts, together with typical cross sections. Profiles shall be drawn to a horizontal scale of 1"=50' and a vertical scale of 1"=5', showing existing centerline grade, existing left and right sideline grades, and proposed centerline grade. **(Section V.9)**	N/A	☑ Preliminary Plat ☑ Final Plat	
☐	When required by the Board, the plat shall be accompanied by profiles of proposed street grades, including extensions for a reasonable distance beyond the subject land; also grades and sizes of proposed utilities. **(Section IV.10)**	N/A	☑ Preliminary Plat ☑ Final Plat	
☐	Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)**	N/A	☑ Preliminary Plat ☑ Final Plat	
☐	For subdivisions of five (5) lots or more, or at the discretion of the Board otherwise, the preliminary plat shall show contours at intervals no greater than two (2) feet. Contours shall be shown in dotted lines for existing natural surface and in solid lines for proposed final grade, together with the final grade elevations shown in figures at all lot corners. If existing grades are not to be changed, then the contours in these areas shall be solid lines. **(Section IV.12/ V.12)**	N/A	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☐	Dates and permit numbers of all necessary permits from governmental agencies from which approval is required by Federal or State law. **(Section V.10)**	N/A	☐ Preliminary Plat ☑ Final Plat	
☐	For subdivisions involving greater than five (5) acres or fifty (50) lots, the final plat shall show hazard zones and shall include elevation data for flood hazard zones. **(Section V.11)**	N/A	☐ Preliminary Plat ☑ Final Plat	
☑	Location of all permanent monuments. **(Section V.12)**	Sheet S-1	☐ Preliminary Plat ☑ Final Plat	

General Requirements[1]			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	**1. Basic Requirements: (VI.1)**	Sheet S-1	
☑	a. Conformity to Official Plan or Map		
☐	b. Hazards		
☐	c. Relation to Topography		
☐	d. Planned Unit Development		
☑	**2. Lots: (VI.2)**	Sheet S-1	
☑	a. Lot Arrangement		
☑	b. Lot sizes		
☐	c. Commercial and Industrial Lots		
☑	**3. Streets: (VI.3)**	Sheet S-1	
☑	a. Relation to adjoining Street System		
☑	b. Street Rights-of-Way		
☑	c. Access		
☐	d. Parallel Service Roads		
☐	e. Street Intersection Angles		
☐	f. Merging Streets		
☐	g. Street Deflections and Vertical Alignment		
☐	h. Marginal Access Streets		
☐	i. Cul-de-Sacs		
☐	j. Rounding Street Corners		
☐	k. Street Name Signs		
☐	l. Street Names		
☐	m. Block Lengths		
☐	n. Block Widths		
☐	o. Grade of Streets		
☐	p. Grass Strips		
☐	**4. Curbing: (VI.4)**	N/A	
☑	**5. Driveways: (VI.5)**	Sheet S-1	
☐	**6. Drainage Improvements: (VI.6)**	N/A	
☐	**7. Municipal Water Service: (VI.7)**		
☐	**8. Municipal Sewer Service: (VI.8)**		
☐	**9. Installation of Utilities: (VI.9)**	N/A	
☐	a. All Districts		
☐	b. Indicator Tape		
☐	**10. On-Site Water Supply: (VI.10)**	N/A	
☐	**11. On-Site Sewage Disposal Systems: (VI.11)**	N/A	
☐	**12. Open Space: (VI.12)**	N/A	
☐	a. Natural Features		
☐	b. Buffer Strips		
☐	c. Parks		
☐	d. Tree Planting		
☐	**13. Flood Hazard Areas: (VI.13)**	N/A	
☐	a. Permits		
☐	b. Minimization of Flood Damage		
☐	c. Elevation and Flood-Proofing Records		
☐	d. Alteration of Watercourses		
☐	**14. Erosion and Sedimentation Control (VI.14)**	N/A	

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
☐ ☐ ☐	**15. Easements (VI.15)** a. Utilities b. Drainage	N/A	
☑	**16. Monuments: (VI.16)**	Sheet S-1	
☐	**17. Benchmarks: (VI.17)**	N/A	
☑	**18. House Numbers (VI.18)**	Sheet S-1	

Design Standards			
	Required Items for Submittal	**Indicate compliance and/or provide explanation as to alternative design**	**Waiver Requested**
☐	**1. Streets have been designed according to the design standards required under Section (VII.1).** a. Clearing b. Excavation c. Rough Grade and Preparation of Sub-Grade d. Base Course e. Street Paving f. Side Slopes g. Approval Specifications h. Curbing i. Sidewalks j. Inspection and Methods	N/A	
☐	**2. Storm water Sewers and Other Drainage Appurtenances have been designed according to the design standards required under Section (VII.2).** a. Design b. Standards of Construction	N/A	
☐	**3. Sanitary Sewers have been designed according to the design standards required under Section (VII.3).** a. Design b. Lift Stations c. Materials d. Construction Standards	N/A	
☐	**4. Water Mains and Fire Hydrants have been designed according to the design standards required under Section (VII.4).** a. Connections to Lots b. Design and Construction c. Materials d. Notification Prior to Construction	N/A	

Applicant's/Representative's Signature:_____ **Date:** 2024-10-30

[1] See City of Portsmouth, NH Subdivision Rules and Regulations for details.

TFM Since 1968

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

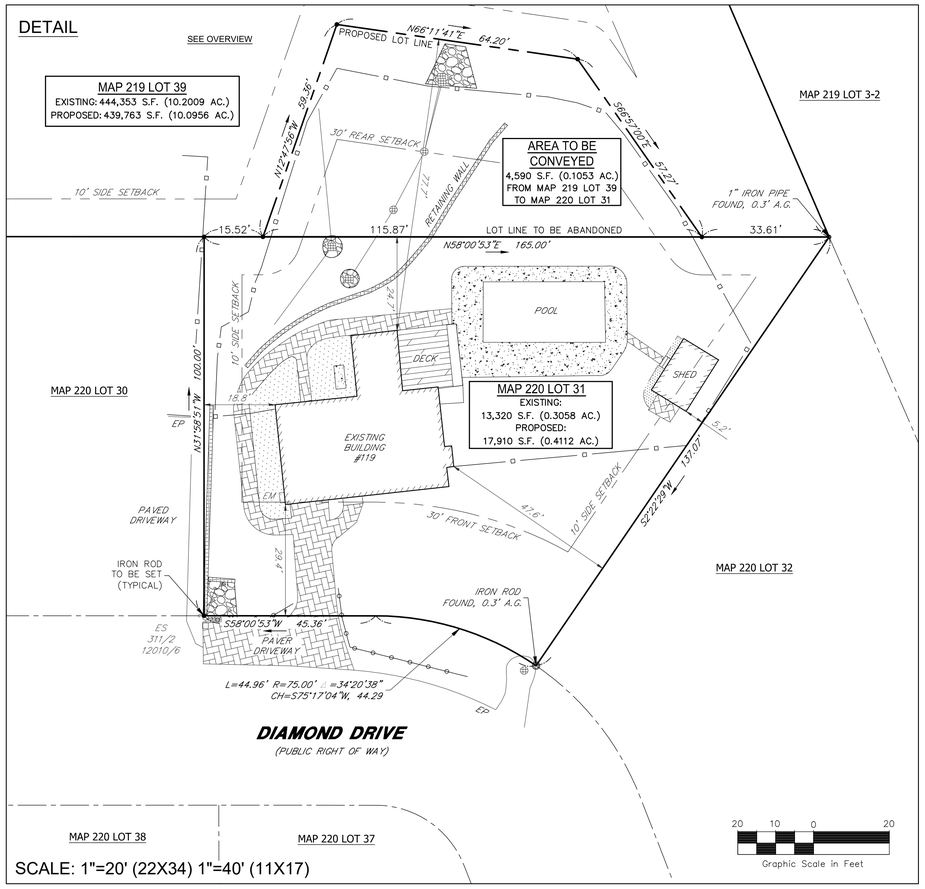
Abutters List

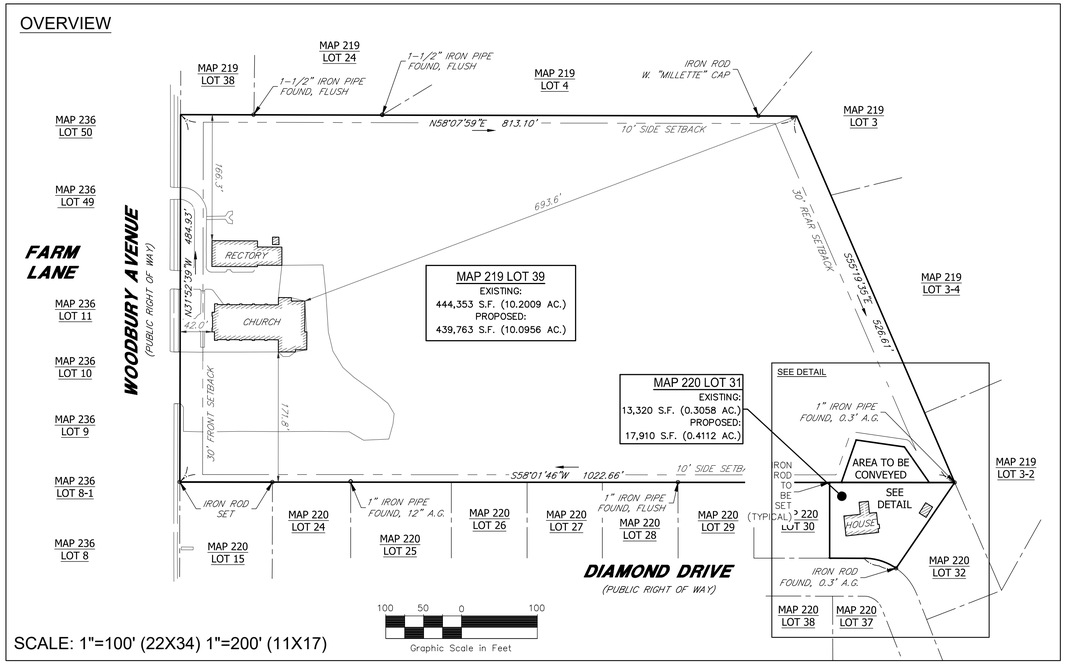
BORNHEIMER REVOCABLE TRUST
119 DIAMOND DR & 827 WOODBURY AVE, PORTSMOUTH
October 30, 2024
46077-100

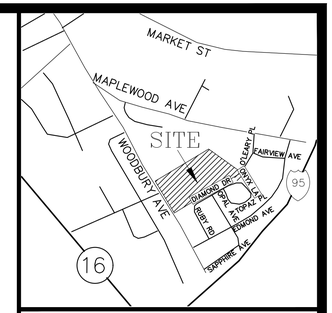
Assessors Map		Abutter Name	Mailing Address
Map	Lot		
LOCUS 219	39	ROMAN CATHOLIC BISHOP OF MANCHESTER ST. CATHERINE OF SIENA CHURCH	153 ASH STREET MANCHESTER, NH 03104
LOCUS 220	31	LAWRENCE P. BORNHEIMER REVOCABLE TRUST LAWRENCE P. BORNHEIMER, TRUSTEE	119 DIAMOND DR PORTSMOUTH, NH 03801
219	3	JOSHUA M. CYR REVOCABLE TRUST & JENNIFER S. CYR REVOCABLE TRUST	990 MAPLEWOOD AVE PORTSMOUTH, NH 03801
219	3-2	PHILIP L. & HEATHER PETTIS	202 OLEARY PL PORTSMOUTH, NH 03801
219	3-4	PHOENIX REVOCABLE TRUST OF 2016 T.J. & A.T. MACCANNELL, TRUSTEES	960 MAPLEWOOD AVE PORTSMOUTH, NH 03801-3545
219	4	CHINBURG DEVELOPMENT	3 PENSTOCK WAY NEWMARKET, NH 03857
219	24	BARBARA A. WILLER REVOCABLE TRUST BARBARA A. WILLER, TRUSTEE	9 FAIRVIEW DR PORTSMOUTH, NH 03801
219	38	ROBERT F. HOGAN & SHERRY H. BRANDSEMA	865 WOODBURY AVE PORTSMOUTH, NH 03801
220	15	ANNE L. & DAVID W. PERKINS	759 WOODBURY AVE PORTSMOUTH, NH 03801
220	24	NATHANIEL J. LISTER REVOCABLE TRUST NATHANIEL J. LISTER, TRUSTEE	85 RUBY RD PORTSMOUTH, NH 03801
220	25	OCONNELL LANGS FAMILY REVOCABLE TRUST S. LANGS & K. OCONNELL LANGS, TRUSTEES	9 DIAMOND DR PORTSMOUTH, NH 03801
220	26	PHYLLIS OCONNELL & ESTATE OF JOHN T. OCONNELL JR.	29 DIAMOND DR PORTSMOUTH, NH 03801
220	27	CHRISTOPHER ALDEN & BETRIZ C. BERMUDEZ	49 DIAMOND DR PORTSMOUTH, NH 03801
220	28	LISTER FAMILY TRUST ROBERT J. & CYNTHIA A. LISTER, TRUSTEES	69 DIAMOND DR PORTSMOUTH, NH 03801
220	29	RICHARD K. & KERSTIN E. MATZ	89 DIAMOND DR PORTSMOUTH, NH 03801
220	30	BRIANNA S. & JAMES L. CONNOLLY	109 DIAMOND DR PORTSMOUTH, NH 03801
220	32	GERRY WESTGATE REVOCABLE TRUST ROGER A. GERRY & GREGORY B. WESTGATE,	9 ONYX LN PORTSMOUTH, NH 03801
220	37	KATHRYNE A. OCONNELL REVOCABLE TRUST KATHRYNE A. OCONNELL, TRUSTEE	8 ONYX LN PORTSMOUTH, NH 03801
220	38	MARIE L. LYFORD	5 OPAL AVE PORTSMOUTH, NH 03801
236	8	MARK M. & MOLLY PENNER	710 WOODBURY AVE PORTSMOUTH, NH 03801

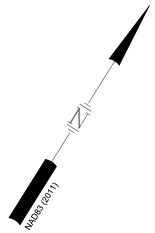
236	8-1	IIRO LEHTINEN & PIRJO ANNELI HEELS	740 WOODBURY AVE PORTSMOUTH, NH 03801
236	9	KATHRYN M. BEBE	762 WOODBURY AVE PORTSMOUTH, NH 03801
236	10	RICHARD JR. & MARITA HAYNES	778 WOODBURY AVE PORTSMOUTH, NH 03801
236	11	LENORE W. BRONSON	828 WOODBURY AVE PORTSMOUTH, NH 03801
236	49	JENNIFER HAWES & MICHAEL BARTLETT	864 WOODBURY AVE PORTSMOUTH, NH 03801
236	50	ERIC & KATHLEEN PEARCE	PO BOX 933 RYE, NH 03870-0933
236	51	ERIC S. & KATHLEEN H. PEARCE	PO BOX 933 RYE, NH 03870-0933

Civil Engineers / Surveyor	TFMoran, Inc.	170 Commerce Way - Suite 102 Portsmouth, NH 03801
Environmental / Wetlands Scientist		
Architect		









NOTES:

1. THE PARCELS ARE LOCATED IN THE SINGLE RESIDENCE B (SRB) ZONING DISTRICT.
2. THE PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 220 AS LOT 31 AND MAP 219 AS LOT 39.
3. THE PARCELS ARE LOCATED IN ZONE X, "AREA OF MINIMAL FLOOD HAZARD", AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM (NFIP), FLOOD INSURANCE RATE MAP (FIRM) ROCKINGHAM COUNTY, NEW HAMPSHIRE, PANEL 259 OF 681, MAP NUMBER 33015C0259F, MAP REVISED JANUARY 29, 2021.
4. DIMENSIONAL REQUIREMENTS:

	REQUIRED:
MINIMUM LOT SIZE:	15,000 S.F.
LOT FRONTAGE:	100'
LOT DEPTH:	100'
MINIMUM YARD DIMENSIONS:	
FRONT:	30'
SIDE:	10'
REAR:	30'
MAXIMUM STRUCTURE DIMENSIONS:	
BUILDING HEIGHT:	35'
BUILDING COVERAGE:	20%
MIN. OPEN SPACE:	40%

5. OWNER OF RECORD:

MAP 220 LOT 31:	MAP 219 LOT 39:
LAWRENCE P. BORNHEIMER REVOCABLE TRUST	ROMAN CATHOLIC BISHOP OF MANCHESTER
119 DIAMOND DRIVE	153 ASH STREET
PORTSMOUTH, NH 03801	MANCHESTER, NH 03104
RCRD BK#6103 PG#1836	RCRD BK#2222 PG#275

6. PARCEL AREA:

MAP 220 LOT 31:		MAP 219 LOT 39:
13,320 S.F. (0.3058 AC.)	EXISTING	444,353 S.F. (10.2009 AC.)
17,910 S.F. (0.4112 AC.)	PROPOSED	439,763 S.F. (10.0956 AC.)

7. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
8. THE PURPOSE OF THIS PLAN IS TO SHOW A LOT LINE ADJUSTMENT BETWEEN MAP 220 LOT 31 AND MAP 219 LOT 39.
9. FIELD SURVEY COMPLETED BY TCE IN OCTOBER 2024 USING A LEICA TS-16 TOTAL STATION & GS-16, GS-18 GPS RECEIVERS AND CARLSON DATA COLLECTION SOFTWARE.
10. HORIZONTAL DATUM IS NAD83 (2011) PER REDUNDANT NETWORK RTK GPS OBSERVATIONS. THE VERTICAL DATUM IS NAVD88 PER REDUNDANT NETWORK RTK GPS OBSERVATIONS.
11. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
12. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE.
13. MAP 220 LOT 31 IS SUBJECT TO RESTRICTIVE COVENANTS AS RECORDED IN RCRD BK.2152 PG.45.

PLAN REFERENCES:

1. "LOT LINE RELOCATION PLAN FOR DAVID W. & ANNE L. PERKINS AND ROMAN CATHOLIC BISHOP MANCHESTER, 827 & 759 WOODBURY AVENUE, COUNTY OF ROCKINGHAM, PORTSMOUTH, NH" PREPARED BY MILLETTE, SPRAGUE & COLWELL, INC. DATED NOVEMBER 20, 2003. RECORDED AT THE RCRD AS PLAN D-31322.
2. "PLAN OF LOTS, PLAN "B", WOODBURY HEIGHTS, PORTSMOUTH, N.H. FOR E.A. RICCI" PREPARED BY JOHN W. DURGIN. DATED APRIL 1965. RECORDED AT THE RCRD AS PLAN D-2056.
3. "SUBDIVISION PLAN FOR LESLIE CLOUGH & ROBERT PALLESCHI, FAIRVIEW AVENUE, COUNTY OF ROCKINGHAM, PORTSMOUTH, NH" PREPARED BY RICHARD MILLETTE AND ASSOCIATES. DATED MAY 1987, REVISION 1: JUNE 19, 1987. RECORDED AT THE RCRD AS PLAN D-16778.
4. "PLAN OF LOTS, PLAN "A", WOODBURY HEIGHTS, PORTSMOUTH, N.H. FOR E.A. RICCI" PREPARED BY JOHN W. DURGIN. DATED NOVEMBER 1960. RECORDED AT THE RCRD AS PLAN D-03098.

ABUTTERS LIST:

TAX MAP & LOT | OWNER | ADDRESS | RCRD BK & PG

MAP 219 LOT 3 | JOSHUA M. CYR REVOCABLE TRUST & JENNIFER S. CYR REVOCABLE TRUST | 990 MAPLEWOOD AVE, PORTSMOUTH, NH 03801 | RCRD BK 5542 PG 1506
MAP 219 LOT 3-2 | PHILIP L. & HEATHER PETTIS | 202 OLEARY PL | PORTSMOUTH, NH 03801 | RCRD BK 5990 PG 1811
MAP 219 LOT 3-4 | PHOENIX REVOCABLE TRUST OF 2016, T.J. & A.T. MACCANNELL, TRUSTEES | 960 MAPLEWOOD AVEPORTSMOUTH, NH 03801-3545 | RCRD BK 5736 PG 2650
MAP 219 LOT 4 | CHINBURG DEVELOPMENT | 3 PENSTOCK WAY | NEWMARKET, NH 03857 | RCRD BK 5836 PG 2730
MAP 219 LOT 24 | BARBARA A. WILLER REVOCABLE TRUST, BARBARA A. WILLER, TRUSTEE | 9 FAIRVIEW DR | PORTSMOUTH, NH 03801 | RCRD BK 6548 PG 548
MAP 219 LOT 38 | ROBERT F. HOGAN & SHERRY H. BRANDSEMA | 865 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 4972 PG 0629
MAP 220 LOT 15 | ANNE L. & DAVID W. PERKINS | 759 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 4246 PG 0144
MAP 220 LOT 24 | NATHANIEL J. LISTER REVOCABLE TRUST, NATHANIEL J. LISTER, TRUSTEE | 85 RUBY RD | PORTSMOUTH, NH 03801 | RCRD BK 6533 PG 107
MAP 220 LOT 25 | OCONNELL LANGS FAMILY REVOCABLE TRUST, S. LANGS & K. OCONNELL LANGS, TRUSTEES | 9 DIAMOND DR | PORTSMOUTH, NH 03801 | RCRD BK 6412 PG 681
MAP 220 LOT 26 | PHYLLIS OCONNELL & ESTATE OF JOHN T. OCONNELL JR. | 29 DIAMOND DR | PORTSMOUTH, NH 03801 | RCRD BK 2020 PG 0213
MAP 220 LOT 27 | CHRISTOPHER ALDEN & BETRIZ C. BERMUDEZ | 49 DIAMOND DR | PORTSMOUTH, NH 03801 | RCRD BK 5361 PG 1623
MAP 220 LOT 28 | LISTER FAMILY TRUST, ROBERT J. & CYNTHIA A. LISTER, TRUSTEES | 69 DIAMOND DR | PORTSMOUTH, NH 03801 | RCRD 3547 PG 2943
MAP 220 LOT 29 | RICHARD K. & KERSTIN E. MATZ | 89 DIAMOND DR | PORTSMOUTH, NH 03801 | RCRD BK 5863 PG 0250
MAP 220 LOT 30 | BRIANNA S. & JAMES L. CONNOLLY | 109 DIAMOND DR | PORTSMOUTH, NH 03801 | RCRD BK 5929 PG 2782
MAP 220 LOT 32 | GERRY WESTGATE REVOCABLE TRUST, ROGER A. GERRY & GREGORY B. WESTGATE, TRUSTEES | 9 ONYX LN | PORTSMOUTH, NH 03801 | RCRD BK 4851 PG 2432
MAP 220 LOT 37 | KATHRYNE A. OCONNELL REVOCABLE TRUST, KATHRYNE A OCONNELL, TRUSTEE | 8 ONYX LN | PORTSMOUTH, NH 03801 | RCRD BK 5530 PG 2410
MAP 220 LOT 38 | MARIE L. LYFORD | 5 OPAL AVE | PORTSMOUTH, NH 03801 | RCRD BK 3248 PG 2204
MAP 236 LOT 8 | MARK M. & MOLLY PENNER | 710 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 6048 PG 2577
MAP 236 LOT 8-1 | IIRO LEHTINEN & PIRJO ANNELI HEELS | 740 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 5784 PG 1910
MAP 236 LOT 9 | KATHRYN M. BEBE | 762 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 5766 PG 2699
MAP 236 LOT 10 | RICHARD JR. & MARITA HAYNES | 778 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 2798 PG 2797
MAP 236 LOT 11 | LENORE W. BRONSON | 828 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 3071 PG 2619
MAP 236 LOT 49 | JENNIFER HAWES & MICHAEL BARTLETT | 864 WOODBURY AVE | PORTSMOUTH, NH 03801 | RCRD BK 6482 PG 183
MAP 236 LOT 50 | ERIC & KATHLEEN PEARCE, PO BOX 933 | RYE, NH 03870-0933 | RCRD BK 3513 PG 0206
MAP 236 LOT 51 | ERIC S. & KATHLEEN H. PEARCE, PO BOX 933 | RYE, NH 03870-0933 | RCRD BK 3338 PG 1049
MAP 236 LOT 52 | DALE T. & ERIN J. WHITAKER, 880 WOODBURY AVENUE | PORTSMOUTH, NH 03801 | RCRD BK 6006 PG 496

LEGEND:

MAP 137 LOT 11	ASSESSORS MAP / LOT NUMBER
A.G.	ABOVE GRADE
BK. PG.	BOOK/PAGE
CONC.	CONCRETE
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
IRF	IRON ROD FOUND
N/F	NOW OR FORMERLY
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
S.F	SQUARE FEET
	IRON PIPE/ROD FOUND
	GUY WIRE
	UTILITY POLE W/LIGHT
	CATCH BASIN
	CATCH BASIN ROUND
	STOCKADE FENCE
	APPROXIMATE ABUTTER LINE
	BOUNDARY LINE
	SETBACK LINE
	CONCRETE
	CRUSHED STONE
	RIPRAP
	PAVER WALK
	WOOD DECK
	RETAINING WALL

PURSUANT TO NEW HAMPSHIRE REVISED STATUTES ANNOTATED 672:14 THIS SURVEY PLAT IS A SUBDIVISION THAT REQUIRES PLANNING BOARD APPROVAL: SEE PLANNING BOARD SIGNATURE BLOCK HEREON.

PURSUANT TO NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES LAN 503.09(24): I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN OCTOBER 2024. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

STATE OF NEW HAMPSHIRE — NO. 01037 — BRENDA M. KOLBOW — LICENSED LAND SURVEYOR

BRENDA M. KOLBOW
SIGNATURE

LICENSED LAND SURVEYOR

2024-10-30
DATE

CITY OF PORTSMOUTH PLANNING BOARD

CHAIRPERSON

DATE

DIG SAFE
NH ME MA RI VT
811 TOLL FREE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

REV.	DATE	DESCRIPTION	DR	CK

TAX MAP 220 LOT 31 & MAP 219 LOT 39

LOT LINE ADJUSTMENT PLAN

119 DIAMOND DRIVE & 827 WOODBURY AVENUE

PORTSMOUTH, NEW HAMPSHIRE

COUNTY OF ROCKINGHAM

OWNED BY

LAWRENCE P. BORNHEIMER REVOCABLE TRUST (MAP 220 LOT 31)
ROMAN CATHOLIC BISHOP OF MANCHESTER (MAP 219 LOT 39)

SCALE: 1" = 20' (22x34) : 1" = 100' (22x34)
1" = 40' (11x17) : 1" = 200' (11x17) **OCTOBER 25, 2024**

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE	46077-100	DR	PJT	FB	606	S-1
		CK	BMK	CADFILE	SEE MARGIN	

Oct 30, 2024 - 1:48pm
\\TFM-BEDFORD4\Projects\Civil-Survey\MSC Projects\46077 - Woodbury Ave - Portsmouth\46077-100 - Bornheimer Rev Trust 827 Woodbury Ave\Carlson Survey\Dwgs\46077-100 Survey.dwg

Findings of Fact | Subdivision Rules and Regulations
City of Portsmouth Planning Board

Date: 11/13/2024
Property Address: 100 Borthwick Ave, Portsmouth, NH 03801
Application #: LU-24-151
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:
Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of the all conditions necessary to obtain final approval.

	Subdivision Review Criteria	Finding (Meets Standards/ Requirements)	Supporting Information
1	Subdivision Rules and Regulations III. D. 1 The Board shall act to deny any application which is not in compliance with Section IV or V as appropriate. **SECTION IV - REQUIREMENTS FOR PRELIMINARY PLAT**	**Meets** **Does Not Meet**	
2	**SECTION V - REQUIREMENTS FOR FINAL PLAT**	**Meets** **Does Not Meet**	
3	**SECTION VI - GENERAL REQUIREMENTS**	**Meets** **Does Not Meet**	The application has been reviewed by the Technical Advisory Committee (TAC) for conformance with the General Requirements. •

			The application was recommended for approval on November 21, 2024 at the Technical Advisory Committee Meeting.
4	**SECTION VII - DESIGN STANDARDS**	**Meets** **Does Not Meet**	The application has been reviewed by the Technical Advisory Committee (TAC) for conformance with these minimum requirements. • The application was recommended for approval on November 21, 2024 at the Technical Advisory Committee Meeting.
5	**<u>Other Board Findings:</u>**		

FIRST REVIEW – RESPONSE LETTER **Apex Design Services, P.C.**

DATE: October 30, 2024

REFERENCE #: LU-24-151

PROJECT: 100 Borthwick Avenue / 0 Borthwick Avenue, Porthsmouth, NH

This letter addresses plan review comments received on September/06/2024 from the City of Porthsmouth, NH.

- **COMMENTS**

COMMENT #1

The application will only move forward if the Zoning Board of Adjustment grants approval of the current proposal.

RESPONSE #1: This has been completed as of the October 15, 2024 ZBA Meeting.

COMMENT #2

Improve sidewalk to Borthwick Ave. and crossing to an ADA complaint and concrete sidewalk.

RESPONSE #2: Per conversations with Eric Eby at TAC, this was to be looked at if utilization would still occur for access, and if not, no improvements would be required. It is not expected that this portion of the parking lot will be utilized for Staff or Patients alike, and thus we will not be utilizing the crosswalk and will not need to update as a result.

COMMENT #3

Drainage on site must be functioning as originally designed. If deficient make improvements.

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9550 W Higgins Road, Ste. 170, Rosemont, IL 60018
apexdesignbuild.net | 847.288.0100

RESPONSE #3: Drainage on site functions as designed (with cleanout of the system); there will be ongoing future maintenance which will be needed on the Storm Water System as defined by the Maintenance Plan provided, and that will ensure ongoing compliance with design.

COMMENT #4

The existing system should be completely cleaned (basins & pipes) and all of the outlet pipes should be found, located and dredged out as needed to confirm their adequacy and ability to continue to function for the next 20 years. I agree regarding salt pollution, change of use, etc. but the major pollutant that I think is a concern here is sediment and the heavy metals present on the sediments. The catch basins sumps are the first line of defense regarding sediments and system clogging.

RESPONSE #4: This will be resolved through the Maintenance Plan provided.

COMMENT #5

That detention pond no longer meets standards but as minimum I would like to see that it can handle a 50 year storm without overstopping so please run a drainage calculation on that and provide me with results.

RESPONSE #5: We will address with the Planning Board at the November meeting for further clarification.

COMMENT #6

A yearly drainage maintenance plan will be necessary to confirm that the basins are being cleaned annually.

RESPONSE #6: This has been included with the submitted documents.

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apexdesignbuild.net | 847.288.0100

COMMENT #7

Boundary survey showing extent of all lots is required.

RESPONSE #7: This has been included with submitted documents.

COMMENT #8

Variance from BOA is needed to expand the use of parking as a primary use.

RESPONSE #8: Variance was granted as of October 15, 2024.

COMMENT #9

Proposed dimensions for new lots must be included in lot line adjustment plan.

RESPONSE #9: This has been included with submitted documents.

COMMENT #10

Existing and proposed site plans must be provided.

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RESPONSE #10: As discussed with TAC, we have included as part of the submittals, a full survey of the 100 Borthwick Ave has been included which depicts the Site Plan.

COMMENT #11

Please provide the wetland delineation from June 2024.

RESPONSE #11: This delineation is shown in the submitted documents and has been stamped by the Wetland Scientist.

Sincerely,

Apex Design Build /
Apex Design Services, P.C.

apex | DESIGN › BUILD
9550 W Higgins Road, Ste. 170, Rosemont, IL 60018
apexdesignbuild.net | 847.288.0100

August 19, 2024

Portsmouth Technical Advisory Committee
Attn: Peter Stith
1 Junkins Avenue, Suite 3rd Floor
Portsmouth, NH 03801

RE: Lot Line Adjustment – 100 Borthwick Ave, Portsmouth, NH

Dear Mr. Peter Stith:

On behalf of the Applicant, Stonefish, LLC, Apex Design Build respectfully submits an application to the adjust of the Lot-Line between the existing neighbor (Liberty Mutual) to the north and 100 Borthwick Ave, Portsmouth, NH. The Applicant is proposing this adjustment as part of the sale of an existing parking lot which features an addition of (264) parking spots for Liberty Mutual. This parking lot was previously designed, permitted, and constructed by Liberty Mutual as part of an agreement between NECU and Liberty Mutual. Now that NECU is relocating their corporate headquarters to Dover, NH, this presents a viable opportunity to Liberty Mutual to purchase the aforementioned parking lot which has been leased back to them for 5+ years. As a result of this lot-line adjustment, there will be no change in usage, no change in surface drainage, and the existing infrastructure complies with required runoff rates employed by Portsmouth. Additionally, all current needs of the site remain in compliance for the intended mixed-use tenancy at 100 Borthwick Ave and associated parking requirements.

This Lot-Line Adjustment will ensure that Liberty Mutual continues to provide a strong presence in Portsmouth for their Corporate Headquarters, and will also be a strong advocate for continuing that presence for the foreseeable future. This, in turn, will continue to solidify thousands of local employment opportunities for the Portsmouth, NH area.

Should there be any questions or concerns about the aforementioned application, please feel free to contact me directly.

Sincerely,

Jeff Kilburg

Project Director

Encl: Application Materials

Authorization Form

This Authorization Form (this "Authorization"), effective upon the date of signature below (the "Effective Date"), is by and among Northeast Credit Union dba Lighthouse Credit Union and its successors or assigns ("Lighthouse"), Apex Design Build ("Apex") and Allen & Major Associates, Inc. (collectively with Apex, the "ATDG Borthwick Team"), to act as an agent on behalf of Lighthouse for the purposes and upon the limitations listed herein:

Effective upon the Effective Date, this Authorization, relative strictly to Lighthouse's property located at 100 Borthwick Avenue, Portsmouth, New Hampshire 03801 (the "Property") and the ATDG Borthwick Team's ongoing project on behalf of ATDG, LLC at the Property (the "Project"), is limited to: 1) permitting and land use matters relative to the Project that are before governing boards, committees or other authority bodies or individuals authorized and acting on behalf of the City of Portsmouth, New Hampshire or the State of New Hampshire (collectively, the "Project Governmental Bodies") and 2) authorizes the ATDG Borthwick Team to: a) apply for and sign permits and ancillary documents relative to the Project as needed from the Project Governmental Bodies and to b) speak with and appear before Project Governmental Bodies and individuals working on behalf of the same, as representative of Lighthouse in conjunction with the Project. This Authorization is contingent upon copy of all applications and submissions relative to the Project that are submitted to the Project Governmental Bodies being sent to Lighthouse, contemporaneously with or before their time of submission, as follows:

Lighthouse Credit Union
Attn: Lee Schafer, SVP, General Counsel & Chief Operating Officer
Via email to: lschafer@lighthousecu.org &
Neil Gordon, SVP & Chief Financial Officer
Via email to: ngordon@lighthousecu.org

With a copy to

Sheehan Phinney Bass & Green, PA
Attn: Eric T. Kilchenstein, Esq.
Via email to: ekilchenstein@sheehan.com

This Authorization is fully revocable without cause and upon written notice from Lighthouse.

[Signature Page Follows]

Northeast Credit Union dba Lighthouse Credit Union

8/19/2024

By: Neil Gordon,
Title: SVP and Chief Financial Officer
Duly Authorized

Date:

[Signature Page to Authorization Form]

City of Portsmouth, New Hampshire

Subdivision Application Checklist

This subdivision application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all subdivision review requirements. Please refer to the Subdivision review regulations for full details.

Applicant Responsibilities (Section III.C): Applicable fees are due upon application submittal along with required number of copies of the Preliminary or final plat and supporting documents and studies. Please consult with Planning staff for submittal requirements.

Owner: Northeast Credit Union & ATTN: Accounting Date Submitted: 08/19/2024

Applicant: Raquelle Kemnitz - Apex Design Build

Phone Number: 847-288-0100 E-mail: raquellek@apexdesignbuild.net

Site Address 1: 100 Borthwick Ave, Portsmouth, NH 03801 Map: 259 Lot: ____

Site Address 2: _____ Map: ____ Lot: ____

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
☑	Completed Application form. **(III.C.2-3)**	Separate Form	N/A
☑	All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF) on compact disc, DVD or flash drive. **(III.C.4)**	All documents to be submitted via the Portsmouth online portal	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	Name and address of record owner, any option holders, descriptive name of subdivision, engineer and/or surveyor or name of person who prepared the plat. **(Section IV.1/V.1)**	See title block for owner name and address, subdivision name, and surveyor/company.	☑ Preliminary Plat ☑ Final Plat	N/A

Requirements for Preliminary/Final Plat				
☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Required for Preliminary / Final Plat	Waiver Requested
✔	**Preliminary Plat** Names and addresses of all adjoining property owners. **(Section IV.2)** **Final Plat** Names and addresses of all abutting property owners, locations of buildings within one hundred (100) feet of the parcel, and any new house numbers within the subdivision. **(Section V.2)**		☑ Preliminary Plat ☑ Final Plat	N/A
✔	North point, date, and bar scale. **(Section IV.3/V3)**	Required on all Plan Sheets	☑ Preliminary Plat ☑ Final Plat	N/A
✔	Zoning classification and minimum yard dimensions required. **(Section IV.4/V.4)**		☑ Preliminary Plat ☑ Final Plat	N/A
✔	**Preliminary Plat** Scale (not to be smaller than one hundred (100) feet = 1 inch) and location map (at a scale of 1" = 1000'). **(Section IV.5)** **Final Plat** Scale (not to be smaller than 1"=100'), Location map (at a scale of 1"=1,000') showing the property being subdivided and its relation to the surrounding area within a radius of 2,000 feet. Said location map shall delineate all streets and other major physical features that my either affect or be affected by the proposed development. **(Section V.5)**		☑ Preliminary Plat ☑ Final Plat	N/A
✔	Location and approximate dimensions of all existing and proposed property lines including the entire area proposed to be subdivided, the areas of proposed lots, and any adjacent parcels in the same ownership. **(Section IV.6)**		☑ Preliminary Plat ☑ Final Plat	
✔	Dimensions and areas of all lots and any and all property to be dedicated or reserved for schools, parks, playgrounds, or other public purpose. Dimensions shall include radii and length of all arcs and calculated bearing for all straight lines. **(Section V.6/ IV.7)**		☑ Preliminary Plat ☑ Final Plat	N/A
✔	Location, names, and present widths of all adjacent streets, with a designation as to whether public or private and approximate location of existing utilities to be used. Curbs and sidewalks shall be shown. **(Section IV.8/V.7)**		☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
✔	Location of significant physical features, including bodies of water, watercourses, wetlands, railroads, important vegetation, stone walls and soils types that my influence the design of the subdivision. **(Section IV.9/V.8)**		☑ Preliminary Plat ☑ Final Plat	
✔	**Preliminary Plat** Proposed locations, widths and other dimensions of all new streets and utilities, including water mains, storm and sanitary sewer mains, catch basins and culverts, street lights, fire hydrants, sewerage pump stations, etc. **(Section IV.10)** **Final Plat** Proposed locations and profiles of all proposed streets and utilities, including water mains, storm and sanitary sewer mains, catchbasins and culverts, together with typical cross sections. Profiles shall be drawn to a horizontal scale of 1"=50' and a vertical scale of 1"=5', showing existing centerline grade, existing left and right sideline grades, and proposed centerline grade. **(Section V.9)**	No proposed new streets / utilities.	☑ Preliminary Plat ☑ Final Plat	
✔	When required by the Board, the plat shall be accompanied by profiles of proposed street grades, including extensions for a reasonable distance beyond the subject land; also grades and sizes of proposed utilities. **(Section IV.10)**	No proposed new streets / utilities	☑ Preliminary Plat ☑ Final Plat	
✔	Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)**	No BFE within the parcel or vicinity.	☑ Preliminary Plat ☑ Final Plat	
✔	For subdivisions of five (5) lots or more, or at the discretion of the Board otherwise, the preliminary plat shall show contours at intervals no greater than two (2) feet. Contours shall be shown in dotted lines for existing natural surface and in solid lines for proposed final grade, together with the final grade elevations shown in figures at all lot corners. If existing grades are not to be changed, then the contours in these areas shall be solid lines. **(Section IV.12/ V.12)**	Not applicable. This is a two lot subdivision.	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☐	Dates and permit numbers of all necessary permits from governmental agencies from which approval is required by Federal or State law. **(Section V.10)**	N/A	☐ Preliminary Plat ☑ Final Plat	
☑	For subdivisions involving greater than five (5) acres or fifty (50) lots, the final plat shall show hazard zones and shall include elevation data for flood hazard zones. **(Section V.11)**	No BFE within the parcel or vicinity	☐ Preliminary Plat ☑ Final Plat	
☑	Location of all permanent monuments. **(Section V.12)**		☐ Preliminary Plat ☑ Final Plat	

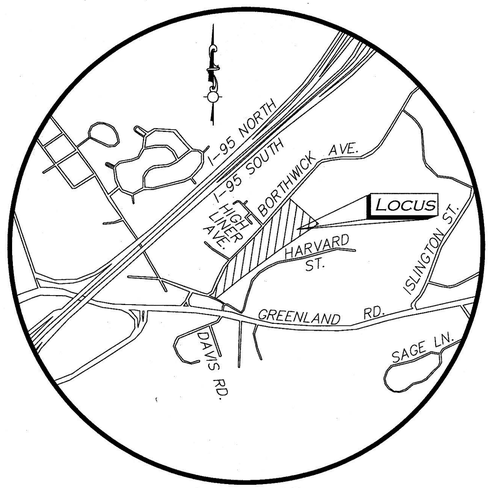
General Requirements[1]			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	**1. Basic Requirements: (VI.1)** a. Conformity to Official Plan or Map b. Hazards c. Relation to Topography d. Planned Unit Development	Not applicable, this is a two lot subdivision of previously developed area using existing frontage.	
☑	**2. Lots: (VI.2)** a. Lot Arrangement b. Lot sizes c. Commercial and Industrial Lots		
☑	**3. Streets: (VI.3)** a. Relation to adjoining Street System b. Street Rights-of-Way c. Access d. Parallel Service Roads e. Street Intersection Angles f. Merging Streets g. Street Deflections and Vertical Alignment h. Marginal Access Streets i. Cul-de-Sacs j. Rounding Street Corners k. Street Name Signs l. Street Names m. Block Lengths n. Block Widths o. Grade of Streets p. Grass Strips	Some items are not applicable. No new right-of-way is proposed. Lots will use existing frontage.	
☐	**4. Curbing: (VI.4)**	Not applicable, no new street proposed	
☐	**5. Driveways: (VI.5)**	Existing driveways are maintained	
☐	**6. Drainage Improvements: (VI.6)**	Existing drainage to remain.	
☐	**7. Municipal Water Service: (VI.7)**	Existing water service to remain	
☐	**8. Municipal Sewer Service: (VI.8)**	Existing sewer service to remain	
☐	**9. Installation of Utilities: (VI.9)** a. All Districts b. Indicator Tape	No new utilities proposed	
☐	**10. On-Site Water Supply: (VI.10)**	No new on-site water supply proposed.	
☐	**11. On-Site Sewage Disposal Systems: (VI.11)**	No on-site sewage disposal proposed/required	
☐	**12. Open Space: (VI.12)** a. Natural Features b. Buffer Strips c. Parks d. Tree Planting	No changes proposed to existing site	
☐	**13. Flood Hazard Areas: (VI.13)** a. Permits b. Minimization of Flood Damage c. Elevation and Flood-Proofing Records d. Alteration of Watercourses	No BFE on the parcel or within the vicinity	
☐	**14. Erosion and Sedimentation Control (VI.14)**	No site work proposed	

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
☑	**15. Easements (VI.15)**	Existing easements are shown. Proposed access easement is	
☐	a. Utilities		
☐	b. Drainage		
☑	**16. Monuments: (VI.16)**		
☐	**17. Benchmarks: (VI.17)**	No site work is proposed	
☑	**18. House Numbers (VI.18)**	Existing address to remain.	

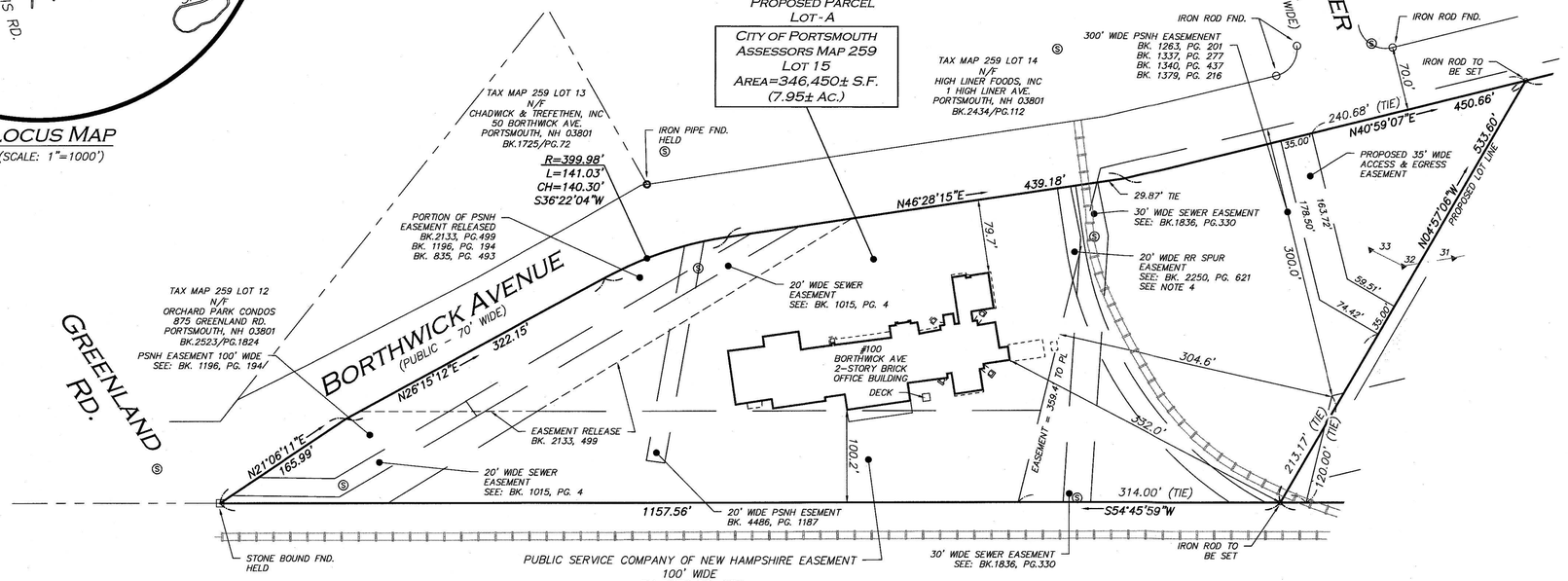
Design Standards			
	Required Items for Submittal	**Indicate compliance and/or provide explanation as to alternative design**	**Waiver Requested**
☐	**1. Streets have been designed according to the design standards required under Section (VII.1).** a. Clearing b. Excavation c. Rough Grade and Preparation of Sub-Grade d. Base Course e. Street Paving f. Side Slopes g. Approval Specifications h. Curbing i. Sidewalks j. Inspection and Methods	No new streets are proposed.	
☐	**2. Storm water Sewers and Other Drainage Appurtenances have been designed according to the design standards required under Section (VII.2).** a. Design b. Standards of Construction	No new storm water or drainage work is proposed. Existing drainage is to remain.	
☐	**3. Sanitary Sewers have been designed according to the design standards required under Section (VII.3).** a. Design b. Lift Stations c. Materials d. Construction Standards	No new sanitary sewer work is proposed. Existing sewer is to remain.	
☐	**4. Water Mains and Fire Hydrants have been designed according to the design standards required under Section (VII.4).** a. Connections to Lots b. Design and Construction c. Materials d. Notification Prior to Construction	No new water mains or hydrants are proposed. Existing water is to remain.	

Applicant's/Representative's Signature: _____ **Date:** 08/19/2024

[1] See City of Portsmouth, NH Subdivision Rules and Regulations for details.



LOCUS MAP
(SCALE: 1"=1000')



ZONING TABLE - OFFICE/RESEARCH DISTRICT

ITEM	REQUIRED	EXISTING	PROPOSED 259–15
LOT AREA (MIN)	3 Ac.	12.83	7.95 AC.
LOT FRONTAGE (MIN)	300'	1848.44'	1519.01'
LOT DEPTH (MIN)	300'	337' AVG.	337' AVG.
FRONT YARD SETBACK (MIN)	50'	79.7'	79.7'
SIDE YARD SETBACK (MIN)	75'	829'	332'
REAR YARD SETBACK (MIN)	50'	100.2'	100.2'
OPEN SPACE (MIN)	30%	48%	45%
BUILDING COVERAGE (MAX)	30%	4%	6.3%
BUILDING HEIGHT (MAX)	60'	72'	72'

CITY OF PORTSMOUTH, NH PLANNING BOARD APPROVAL

CHAIRMAN DATE

HURLEY ENVIRONMENTAL & LAND PLANNING, LLC
P.O. BOX 356
EPSOM, NH 03234
(603) 583-1745

THE WETLAND DELINEATION WAS PERFORMED BY HURLEY ENVIRONMENTAL & LAND PLANNING, LLC. JUNE 2024, UTILIZING THE FOLLOWING STANDARDS:

1. REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS MANUAL: NORTH CENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.2. UNITED STATES DEPARTMENT OF AGRICULTURE(2018).
3. NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2019 VERSION 4, FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
4. NATIONAL WETLAND PLANT LIST, VERSIONS 3.5 (2020).

STATE OF NEW HAMPSHIRE LUKE HURLEY 7/11/24 No. 232 CERTIFIED WETLAND SCIENTIST

NOTES CONT. FROM PG. 2

SEE SHEET 2 FOR LEGEND, REFERENCES, AND NOTES.

11. SEE: BOOK 488, PAGE 429 AND PAGE 431, DRAINAGE RIGHTS TO PROPRIETORS OF THE PORTSMOUTH AQUEDUCT CORPORATION. NO RELINQUISHMENT WAS EVER FOUND.
12. SEE: BOOK 551, PAGE 18, RIGHT TO TRENCH OR DITCH TO FRANK JONES. NO RELINQUISHMENT WAS EVER FOUND.
13. SEE: BOOK 598, PAGE 14 POLE RIGHTS TO ROCKINGHAM COUNTY LIGHT & POWER CO.
14. SEE: BOOK 984, PAGE 378 TO THE CITY OF PORTSMOUTH 20' WIDE SEWER PIPE LINE.
15. SEE: BOOK 1015, PAGE 14 TO THE CITY OF PORTSMOUTH 20' WIDE SEWER PIPE LINE.

GRAPHIC SCALE
80 0 40 80 160 320
(IN FEET)
1 inch = 80 ft.

R:\PROJECTS\3250-02\SURVEY\DRAWINGS\CURRENT\S-3250-02-LLA.DWG

THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN JUNE 14, 2024 AND OCTOBER 01, 2024 AND HAD AN ERROR OF CLOSURE OF NO GREATER THAN 1/10,000.

THE SUBJECT PREMISES IS LOCATED IN FLOOD ZONE X – "AREA OF MINIMAL FLOOD HAZARD" AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF PORTSMOUTH NEW HAMPSHIRE ROCKINGHAM COUNTY COMMUNITY PANEL NUMBER 33015C0270F HAVING AN EFFECTIVE DATE OF JANUARY 1, 2021.

ALLEN & MAJOR ASSOCIATES, INC.

STATE OF NEW HAMPSHIRE No. 908 JAMES P SMITH SIGNATURE LICENSED LAND SURVEYOR

JAMES P. SMITH NH LLS #908 — 10-10-24 DATE

REV	DATE	DESCRIPTION

APPLICANT:
STONEFISH, LLC
875 GREENLAND RD. UNIT C8
PORTSMOUTH, NH 03801

OWNER:
NORTH EAST CREDIT UNION
PO BOX 1240
PORTSMOUTH, NH 03802

LIBERTY MUTUAL INSURANCE CO.
C/O TYLER MUNGER
175 BERKELEY STREET
BOSTON, MA. 02117

PROJECT:
TM 259 LOT 15
100 BORTHWICK AVE.
PORTSMOUTH, NH

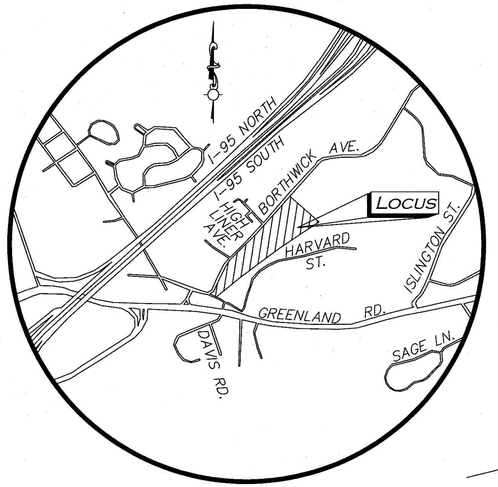
TM 240 LOT 3
BORTHWICK AVE.
PORTSMOUTH, NH

PROJECT NO.	3250-02	DATE:	10/09/2024
SCALE: 1" = 80'		DWG. NAME:	S-3250-02-LLA
DRAFTED BY:	CTP	CHECKED BY:	JPS

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
400 HARVEY ROAD
MANCHESTER, NH 03103
TEL: (603) 627-5500
FAX: (603) 627-5501
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

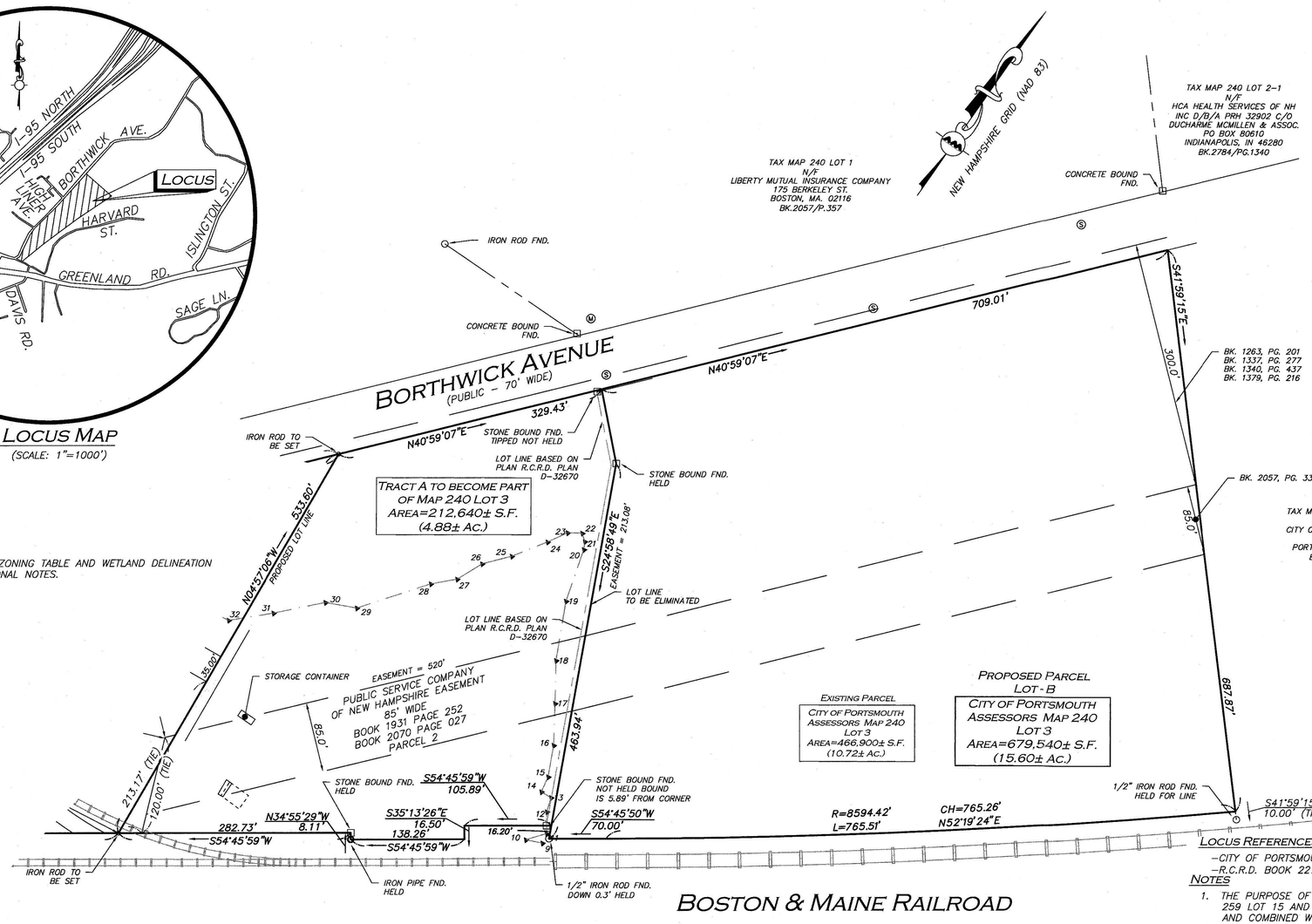
DRAWING TITLE: LOT LINE ADJUSTMENT PLAN

SHEET No. 1



LOCUS MAP
(SCALE: 1"=1000')

NOTES
1. SEE SHEET 1 FOR ZONING TABLE AND WETLAND DELINEATION NOTES, AND ADDITIONAL NOTES.



LEGEND

STONE BOUND FND.	⊡
IRON PIPE (IP)	o
IRON ROD (IR)	○
WETLAND FLAG	▶A31
PROPERTY LINE	———
ABUTTERS LINE	— — —
STONE BOUND W/DRILL HOLE	SB/DH
CONC. BOUND W/DRILL HOLE	CB/DH
FOUND	FND
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.
BUILDING HEIGHT	BH
SEWER MAN HOLE	Ⓢ

PLAN REFERENCES
- –PLAN ENTITLED, "PLAN OF A PORTION OF BORTHWICK INDISTRIAL PARK PORTSMOUTH, N.H", SCALE 1"=60', DATED DECEMBER 1975, PREPARED BY JOHN W. DURGIN, AND ON FILE AT THE R.C.R.D. AS PLAN NO. D–5695.
- –PLAN ENTITLED, "SITE PLAN OF ORCHARD PARK CONDOMINIUMS", SCALE 1"=40', DATED OCTOBER 10, 1985, PREPARED BY KIMBALL CHASE COMPANY, INC, AND ON FILE AT THE R.C.R.D. AS PLAN NO. D–14238.
- –PLAN ENTITLED, "PLAN OF LAND MAP 240, LOTS 1 & 3 PORTSMOUTH, NEW HAMPSHIRE", SCALE 1"=60', DATED JUNE 13, 2005, PREPARED BY VHB, AND ON FILE AT THE R.C.R.D. AS PLAN NO. D–33833.
- –PLAN ENTITLED, "SUBDIVISION PLAN FOR NATIONAL SEA PRODUCTS INCORPORATED HIGHLINER AVENUE/ BORTHWICK AVENUE COUNTY OF ROCKINGHAM PORTSMOUTH, N.H., SCALE 1"=100', DATED OCTOBER JUNE 25, 1997, PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES, AND ON FILE AT THE R.C.R.D. AS PLAN NO. D–25842.
- –PLAN ENTITLED, "REVISED PLAN OF BORTHWICK INDUSTRIAL PARK PORTSMOUTH, N.H." SCALE 1"=60', DATED AUGUST 31, 1966, PREPARED BY JOHN W. DURGIN AND ON FILE AT THE R.C.R.D. AS PLAN #770.
- –PLAN ENTITLED, "PLAN OF BORTHWICK INDUSTRIAL PARK PORTSMOUTH, N.H." SCALE 1"=60', DATED JANUARY, 1964, PREPARED BY JOHN W. DURGIN AND ON FILE AT THE R.C.R.D. AS PLAN NO. 262.
- –PLAN ENTITLED, "STANDARD BOUNDARY SURVEY" DATED JUNE 2004, PREPARED BY AMBIT ENGINEERING, INC. CIVIL ENGINEERS & LAND SURVEYORS AND RECEIVED ON JUNE 17, 2024.
- –PLAN ENTITLED, "EASEMENT PLAN MAP 259–LOT 15 NORTHEAST CREDIT UNION TO PSNH" DATED MARCH 2005, PREPARED BY AMBIT ENGINEERING, INC. CIVIL ENGINEERS & LAND SURVEYORS AND ON FILE AT R.C.R.D AS PLAN NO. D–32670.
- –PLAN ENTITLED, "HIGH TENSION TRANSMISSION LINE NEW HAMPSHIRE GAS & ELEC. CO. PORTSMOUTH AND AMESBURY DATED: 1927, SCALE: 1"=200'," AND ON FILE AT R.C.R.D. AS PLAN NO. 0516.

ZONING TABLE - OFFICE/RESEARCH DISTRICT

ITEM	REQUIRED	EXISTING	PROPOSED 240–03
LOT AREA (MIN)	3 Ac.	10.72 AC.	15.60 AC.
LOT FRONTAGE (MIN)	300'	709.01'	1038.44'
LOT DEPTH (MIN)	300'	625' AVG.	599' AVG.
FRONT YARD SETBACK (MIN)	50'	–	–
SIDE YARD SETBACK (MIN)	75'	–	–
REAR YARD SETBACK (MIN)	50'	–	–
OPEN SPACE (MIN)	30%	–	–
BUILDING COVERAGE (MAX)	30%	0%	0%
BUILDING HEIGHT (MAX)	60'	–	–

CITY OF PORTSMOUTH, NH PLANNING BOARD APPROVAL

CHAIRMAN DATE

LOCUS REFERENCES
- –CITY OF PORTSMOUTH TAX MAP 259, LOT 15, TAX MAP 240 LOT 03
- –R.C.R.D. BOOK 2270, PAGE 345, BOOK 2057, PAGE 357

NOTES
1. THE PURPOSE OF THIS PLAN IS TO ADJUST THE LOT LINE BETWEEN MAP 259 LOT 15 AND MAP 240 LOT 3. PROPOSED TRACT A WILL BE ANNEXED AND COMBINED WITH MAP 240 LOT 3.
2. NORTH ARROW IS BASED ON NEW HAMPSHIRE GRID COORDINATE SYSTEM (NAD 83).
3. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM THE ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BRENTWOOD, NH
4. WETLANDS DELINEATED BY LUKE HURLEY, NH WETLAND SCIENTIST.
5. RAILROAD SPUR WAS CONSTRUCTED OUTSIDE OF RECORD EASEMENT.
6. SEE EXISTING CONDITIONS PLAN SET, PREPARED BY ALLEN & MAJOR ASSOCIATES, INC. WITH THE SAME DATE. ONLY THIS PLAN TO BE USED FOR SUBDIVISION RECORDING PURPOSES.
7. SEE: BK. 4486, PG. 2595 EASEMENT TO CITY OF PORTSMOUTH FOR GROUNDWATER MONITORING.
8. SEE: BK. 1372, PG. 148 AND BK. 1374, PG. 142 35' WIDE EASEMENT TO ALLIED NH GAS COMPANY. SPECIFIC LOCATION NOT IDENTIFIED, BLANKET IN NATURE.
9. SEE: BK. 835, PG. 493 FOR EASEMENT TO NH GAS & ELECTRIC COMPANY. BELIEVED TO BE AN OVERLAPPING EASEMENT THAT WAS DISCONTINUED IN BK. 2133, PG. 499.
10. RECORD SURVEYS FOR MAP 259 LOT 15 AND MAP 240 LOT 03 CREATED A 5–6' GAP BETWEEN THE SUBJECT PARCELS. THEY ALSO CREATED A JOG INTO BORTHWICK AVENUE, AT THE COMMON CORNER, AT THE ROAD. BOTH DEEDS CALL FOR EACH OTHER AS THE ABUTTER. DETERMINATION WAS MADE BY HOLDING THE SURVEY FOR MAP 240 LOT 03 AS THE COMMON LINE. I HELD BORTHWICK AVE. AS 70' WIDE AND BEST FIT USING MONUMENTS FOUND. IN DOING SO THE ANGLE POINT IN BORTHWICK ALONG MAP 259 LOT 15, IS NOW IN A NEW LOCATION OF 439.18' FROM THE CURVE. RECORD DIMENSION FROM THE CURVE TO THE ROAD ANGLE POINT IS 423.41'

GRAPHIC SCALE
80 0 40 80 160 320
(IN FEET)
1 inch = 80 ft.

R:\PROJECTS\3250–02\SURVEY\DRAWINGS\CURRENT\S–3250–02–LLA.DWG

THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN JUNE 14, 2024 AND OCTOBER 01, 2024 AND HAD AN ERROR OF CLOSURE OF NO GREATER THAN 1/10,000.

THE SUBJECT PREMISES IS LOCATED IN FLOOD ZONE X – "AREA OF MINIMAL FLOOD HAZARD" AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF PORTSMOUTH NEW HAMPSHIRE ROCKINGHAM COUNTY COMMUNITY PANEL NUMBER 3301500270F HAVING AN EFFECTIVE DATE OF JANUARY 1, 2021.

ALLEN & MAJOR ASSOCIATES, INC.

STATE OF NEW HAMPSHIRE No. 908 JAMES P. SMITH LAND SURVEYOR
SIGNATURE

JAMES P. SMITH NH LLS #908 — 10-10-24 DATE

REV	DATE	DESCRIPTION

APPLICANT:
STONEFISH, LLC
875 GREENLAND RD. UNIT C8
PORTSMOUTH, NH 03801

OWNER:
NORTH EAST CREDIT UNION
PO BOX 1240
PORTSMOUTH, NH 03802

LIBERTY MUTUAL INSURANCE CO.
C/O TYLER MUNGER
175 BERKELEY STREET
BOSTON, MA. 02117

PROJECT:
TM 259 LOT 15
100 BORTHWICK AVE.
PORTSMOUTH, NH

TM 240 LOT 3
BORTHWICK AVE.
PORTSMOUTH, NH

PROJECT NO. 3250-02	DATE: 10/09/2024
SCALE: 1" = 80'	DWG. NAME: S-3250-02-LLA
DRAFTED BY: CTP	CHECKED BY: JPS

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
400 HARVEY ROAD
MANCHESTER, NH 03103
TEL: (603) 627-5500
FAX: (603) 627-5501
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:
LOT LINE ADJUSTMENT PLAN

SHEET No. 2

400 Harvey Road, Manchester, NH 03103 | T (603) 627-5500 | F (603) 627-5501
allenmajor.com

ALLEN & MAJOR ASSOCIATES, INC.

October 10, 2024

John Kilburg
Project Director
Apex Design Build
9550 W. Higgins Road, Ste. 170
Rosemont, IL 60018

A&M Project #: 3250-02
Re: 100 Borthwick Avenue
Portsmouth, NH
Existing Detention Pond
Drainage Analysis

Dear Mr. Kilburg,

Allen & Major Associates, Inc. (A&M) is pleased to provide this drainage summary for the existing detention basin located to the northeast of the existing 100 Borthwick Avenue building. The attached Watershed Plan and HydroCAD Report will outline the contributing areas flowing to the existing basin and model how the basin performs for the 2-, 10-, 25-, & 50-year design storm events.

The 100 Borthwick Avenue property is currently occupied by a 2-story, brick office building and associated parking to the southwest. The northeast of the property is developed with a large parking area and associated drainage network for the impervious parking surface. An existing detention basin exists along the northeastern property line. The stormwater flows within the eastern portion of the site are captured through an existing drainage network and routed to the detention basin before discharging to the adjacent wetland. The existing topography on site slopes from the southwest to northeast, ranging from elevation 53± adjacent to Borthwick Avenue to elevation 28± at the detention basin's floor.

HydroCAD Analysis

An existing watershed was mapped and processed to discover the associated flow being routed to the basin for the 2-, 10-, 25-, & 50-year design storm events. A&M had utilized topography information from a field survey completed in June of 2024 to model the existing detention basin volume. The basin's outlet pipe was modeled from the "Proposed Parking Expansion" plan prepared by Kimball Chase, July 17th, 1995. See the table below showing the basin's peak elevation in relation to the flood elevation (top of berm, referenced from survey topography) for each of the design storm events.

Peak Elevation Analysis				
As-Built – Existing Detention Basin, Top of Berm Elevation (TOB) = **32.50**				
	2-Year	10-Year	25-Year	50-Year
Peak Elevation (PE)	30.72	32.34	32.90	33.02
Freeboard (PE-TOB)	**-1.78**	**-0.16**	**+0.40**	**+0.52**

In summary, the basin as it currently exists, overtops for storms greater than the 10-year storm.

Additionally, A&M had modeled the detention basin as designed by Kimball Chase on the "Proposed Parking Expansion" plan. See the table below showing the basin's peak elevation in relation to the flood elevation (top of berm, referenced from plan) for each of the design storm events.

Peak Elevation Analysis				
1995 Design – Detention Basin, Top of Berm Elevation (TOB) = **34.00**				
	2-Year	10-Year	25-Year	50-Year
Peak Elevation (PE)	29.95	32.04	33.50	34.08
Freeboard (PE-TOB)	**-4.05**	**-1.96**	**-0.50**	**+0.08**

In summary, the basin does not over-top as designed in 1995 for the 2-, 10- & 25-year design storms but does over-top for the 50-year design storm.

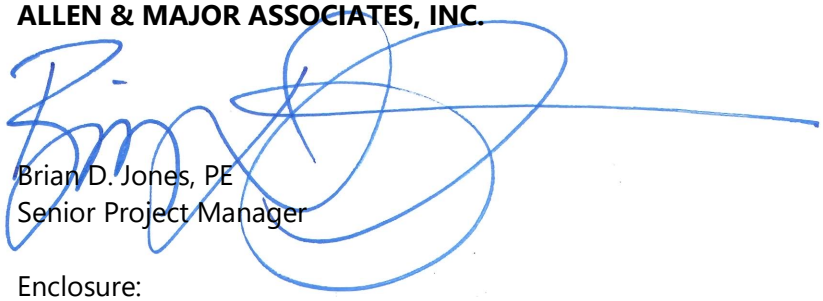
A&M had completed a proposed analysis utilizing a 24" HDPE outlet and modeled a design condition that will handle all the flow routed to the detention basin without overtopping for all design storm events. See the table below with results.

Peak Elevation Analysis				
New 24" Outlet - Existing Detention Basin, Top of Berm Elevation (TOB) = **32.50**				
	2-Year	10-Year	25-Year	50-Year
Peak Elevation (PE)	30.07	30.80	31.42	31.98
Freeboard (PE-TOB)	**-2.43**	**-1.70**	**-1.08**	**-0.52**

In conclusion of the proposed analysis, A&M is recommending to remove the existing basin's outlet pipe (it is our understanding it is currently buried) and installing a new 24" HDPE outlet pipe with headwall to handle the amount of runoff reaching this area. This upgrade will ensure the detention basin drains adequately without overtopping for all design storm events.

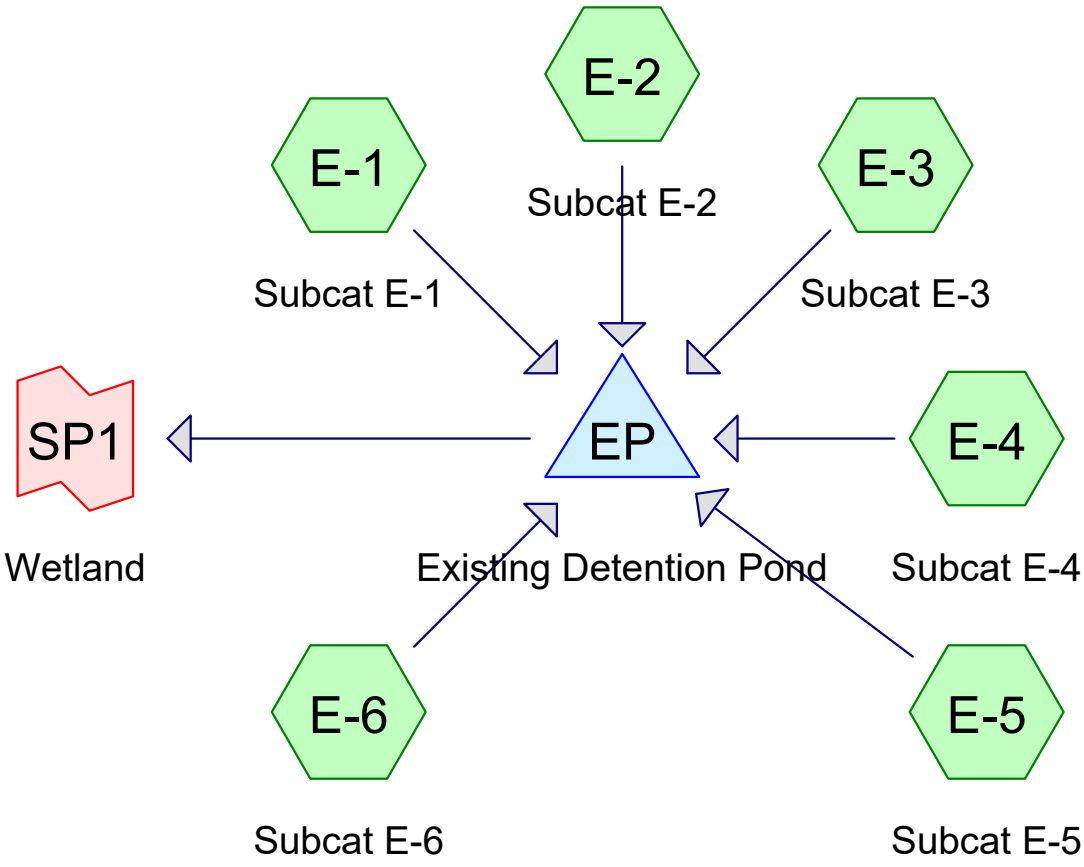
Very Truly Yours,

ALLEN & MAJOR ASSOCIATES, INC.



Brian D. Jones, PE
Senior Project Manager

Enclosure:
1. HydroCAD Reports (3) – As-Built, 1995 Design, Proposed Design
2. Watershed Plan, WS-1 & Proposed Grading & Drainage Plan, C-103
3. Proposed Parking Expansion Plan, prepared by Kimball Chase, July 17, 1995.
4. Operation & Maintenance Letter
5. Extreme Precipitation Tables
6. NRCS Soil Report



Subcat Reach Pond Link

Routing Diagram for 3250-02_Existing HydroCAD - As-Built
Prepared by Allen & Major Associates, Inc, Printed 9/12/2024

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	4.11	2
2	10-year	Type III 24-hr		Default	24.00	1	6.37	2
3	25-year	Type III 24-hr		Default	24.00	1	8.18	2
4	50-year	Type III 24-hr		Default	24.00	1	9.89	2

Summary for Subcatchment E-1: Subcat E-1

Runoff = 2.25 cfs @ 12.09 hrs, Volume= 7,493 cf, Depth= 3.33"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 0.93 cfs @ 12.12 hrs, Volume= 3,196 cf, Depth= 1.61"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 5.19 cfs @ 12.14 hrs, Volume= 18,412 cf, Depth= 2.47"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 4.08 cfs @ 12.09 hrs, Volume= 13,913 cf, Depth= 3.54"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 0.79 cfs @ 12.10 hrs, Volume= 2,615 cf, Depth= 1.34"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 5.33 cfs @ 12.09 hrs, Volume= 19,149 cf, Depth= 3.87"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 2.88" for 2-year event
Inflow = 18.20 cfs @ 12.10 hrs, Volume= 64,778 cf
Outflow = 8.50 cfs @ 12.31 hrs, Volume= 64,811 cf, Atten= 53%, Lag= 12.8 min
Discarded = 1.24 cfs @ 12.31 hrs, Volume= 4,163 cf
Primary = 7.26 cfs @ 12.31 hrs, Volume= 60,648 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 30.72' @ 12.31 hrs Surf.Area= 5,759 sf Storage= 7,931 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 4.4 min (793.8 - 789.4)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=1.24 cfs @ 12.31 hrs HW=30.71' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 1.24 cfs)

Primary OutFlow Max=7.25 cfs @ 12.31 hrs HW=30.71' (Free Discharge)
└**2=Culvert** (Barrel Controls 7.25 cfs @ 9.24 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 2.69" for 2-year event
Inflow = 7.26 cfs @ 12.31 hrs, Volume= 60,648 cf
Primary = 7.26 cfs @ 12.31 hrs, Volume= 60,648 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment E-1: Subcat E-1

Runoff = 3.65 cfs @ 12.09 hrs, Volume= 12,495 cf, Depth= 5.55"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 2.03 cfs @ 12.11 hrs, Volume= 6,758 cf, Depth= 3.40"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 9.40 cfs @ 12.13 hrs, Volume= 33,894 cf, Depth= 4.54"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 6.49 cfs @ 12.09 hrs, Volume= 22,716 cf, Depth= 5.78"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 1.85 cfs @ 12.09 hrs, Volume= 5,869 cf, Depth= 3.00"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 8.30 cfs @ 12.09 hrs, Volume= 30,302 cf, Depth= 6.13"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 4.97" for 10-year event
Inflow = 31.14 cfs @ 12.10 hrs, Volume= 112,035 cf
Outflow = 10.75 cfs @ 12.41 hrs, Volume= 112,035 cf, Atten= 65%, Lag= 18.8 min
Discarded = 2.18 cfs @ 12.41 hrs, Volume= 10,642 cf
Primary = 8.57 cfs @ 12.41 hrs, Volume= 101,393 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 32.34' @ 12.41 hrs Surf.Area= 10,135 sf Storage= 20,995 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 10.6 min (789.8 - 779.2)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=2.18 cfs @ 12.41 hrs HW=32.34' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 2.18 cfs)

Primary OutFlow Max=8.56 cfs @ 12.41 hrs HW=32.34' (Free Discharge)
└**2=Culvert** (Barrel Controls 8.56 cfs @ 10.90 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 4.50" for 10-year event
Inflow = 8.57 cfs @ 12.41 hrs, Volume= 101,393 cf
Primary = 8.57 cfs @ 12.41 hrs, Volume= 101,393 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment E-1: Subcat E-1

Runoff = 4.75 cfs @ 12.09 hrs, Volume= 16,534 cf, Depth= 7.34"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 2.96 cfs @ 12.11 hrs, Volume= 9,884 cf, Depth= 4.97"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 12.78 cfs @ 12.13 hrs, Volume= 46,756 cf, Depth= 6.27"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 8.39 cfs @ 12.09 hrs, Volume= 29,797 cf, Depth= 7.58"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 2.79 cfs @ 12.09 hrs, Volume= 8,797 cf, Depth= 4.50"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 10.68 cfs @ 12.09 hrs, Volume= 39,240 cf, Depth= 7.94"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 6.70" for 25-year event
Inflow = 41.62 cfs @ 12.10 hrs, Volume= 151,008 cf
Outflow = 45.58 cfs @ 12.20 hrs, Volume= 151,008 cf, Atten= 0%, Lag= 5.9 min
Discarded = 2.23 cfs @ 12.15 hrs, Volume= 13,181 cf
Primary = 43.35 cfs @ 12.20 hrs, Volume= 137,827 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 32.90' @ 12.20 hrs Surf.Area= 10,369 sf Storage= 22,657 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 10.3 min (783.9 - 773.6)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=2.23 cfs @ 12.15 hrs HW=32.59' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 2.23 cfs)

Primary OutFlow Max=41.38 cfs @ 12.20 hrs HW=32.88' (Free Discharge)
├**2=Culvert** (Barrel Controls 8.96 cfs @ 11.41 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 32.41 cfs @ 1.81 fps)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 6.12" for 25-year event
Inflow = 43.35 cfs @ 12.20 hrs, Volume= 137,827 cf
Primary = 43.35 cfs @ 12.20 hrs, Volume= 137,827 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment E-1: Subcat E-1

Runoff = 5.79 cfs @ 12.09 hrs, Volume= 20,361 cf, Depth= 9.04"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 3.86 cfs @ 12.11 hrs, Volume= 12,960 cf, Depth= 6.52"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 15.96 cfs @ 12.13 hrs, Volume= 59,094 cf, Depth= 7.92"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 10.19 cfs @ 12.09 hrs, Volume= 36,497 cf, Depth= 9.29"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 3.70 cfs @ 12.09 hrs, Volume= 11,712 cf, Depth= 6.00"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 12.92 cfs @ 12.09 hrs, Volume= 47,686 cf, Depth= 9.65"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 8.36" for 50-year event
Inflow = 51.54 cfs @ 12.10 hrs, Volume= 188,312 cf
Outflow = 58.15 cfs @ 12.14 hrs, Volume= 188,312 cf, Atten= 0%, Lag= 2.6 min
Discarded = 2.23 cfs @ 12.10 hrs, Volume= 15,240 cf
Primary = 55.92 cfs @ 12.14 hrs, Volume= 173,071 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 33.02' @ 12.14 hrs Surf.Area= 10,369 sf Storage= 22,657 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 9.5 min (779.1 - 769.5)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

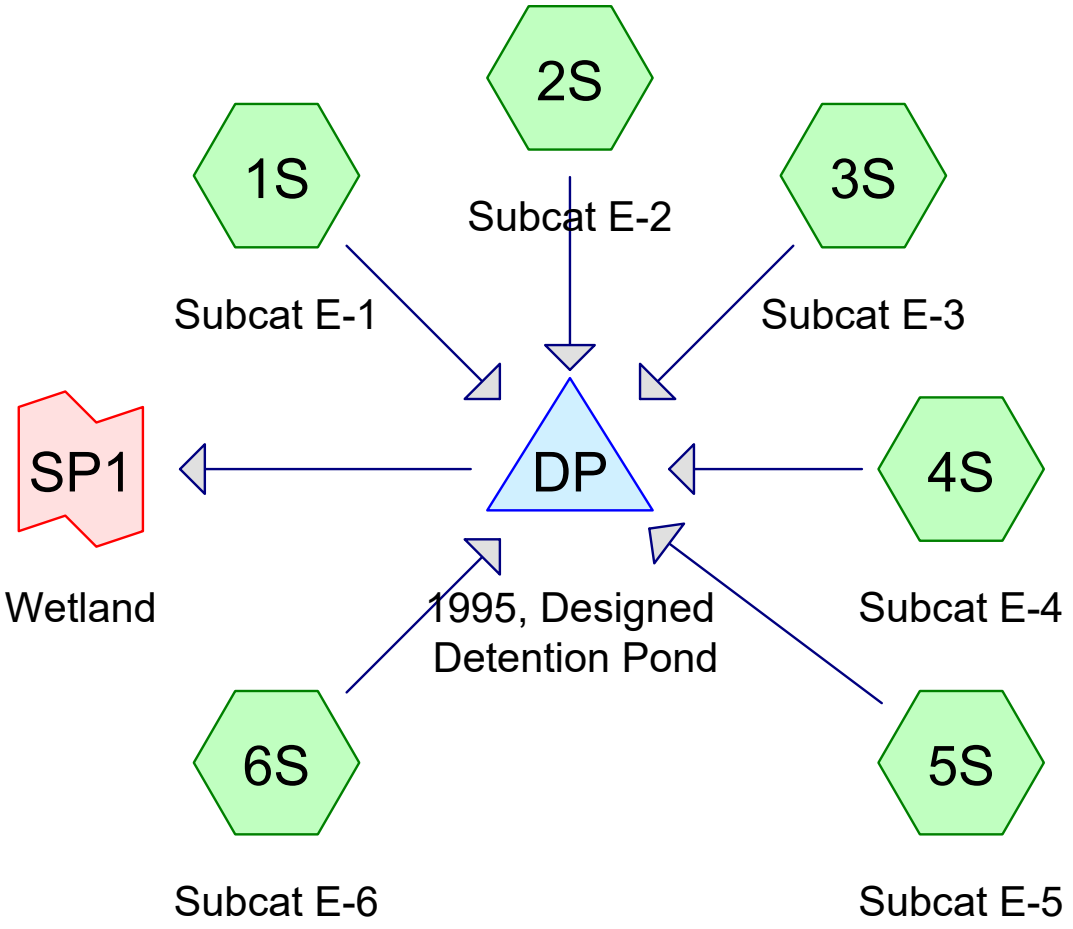
Discarded OutFlow Max=2.23 cfs @ 12.10 hrs HW=32.83' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 2.23 cfs)

Primary OutFlow Max=52.20 cfs @ 12.14 hrs HW=32.98' (Free Discharge)
├**2=Culvert** (Barrel Controls 9.04 cfs @ 11.50 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 43.16 cfs @ 2.00 fps)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 7.68" for 50-year event
Inflow = 55.92 cfs @ 12.14 hrs, Volume= 173,071 cf
Primary = 55.92 cfs @ 12.14 hrs, Volume= 173,071 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



Subcat Reach Pond Link

Routing Diagram for 3250-02_1995 Design HydroCAD
Prepared by Allen & Major Associates, Inc, Printed 9/12/2024

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	4.11	2
2	10-year	Type III 24-hr		Default	24.00	1	6.37	2
3	25-year	Type III 24-hr		Default	24.00	1	8.18	2
4	50-year	Type III 24-hr		Default	24.00	1	9.89	2

Summary for Subcatchment 1S: Subcat E-1

Runoff = 2.25 cfs @ 12.09 hrs, Volume= 7,493 cf, Depth= 3.33"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 2S: Subcat E-2

Runoff = 0.93 cfs @ 12.12 hrs, Volume= 3,196 cf, Depth= 1.61"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment 3S: Subcat E-3

Runoff = 5.19 cfs @ 12.14 hrs, Volume= 18,412 cf, Depth= 2.47"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment 4S: Subcat E-4

Runoff = 4.08 cfs @ 12.09 hrs, Volume= 13,913 cf, Depth= 3.54"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 5S: Subcat E-5

Runoff = 0.79 cfs @ 12.10 hrs, Volume= 2,615 cf, Depth= 1.34"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 6S: Subcat E-6

Runoff = 5.33 cfs @ 12.09 hrs, Volume= 19,149 cf, Depth= 3.87"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond DP: 1995, Designed Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 2.88" for 2-year event
Inflow = 18.20 cfs @ 12.10 hrs, Volume= 64,778 cf
Outflow = 7.62 cfs @ 12.35 hrs, Volume= 64,778 cf, Atten= 58%, Lag= 15.1 min
Discarded = 1.08 cfs @ 12.35 hrs, Volume= 9,377 cf
Primary = 6.54 cfs @ 12.35 hrs, Volume= 55,401 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 29.95' @ 12.35 hrs Surf.Area= 5,613 sf Storage= 9,160 cf
Flood Elev= 34.00' Surf.Area= 10,363 sf Storage= 41,030 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 6.2 min (795.6 - 789.4)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	41,030 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	3,842	413.0	0	0	3,842
34.00	10,363	666.0	41,030	41,030	25,805

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**8.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	33.90'	**90.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Discarded OutFlow Max=1.08 cfs @ 12.35 hrs HW=29.95' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 1.08 cfs)

Primary OutFlow Max=6.54 cfs @ 12.35 hrs HW=29.95' (Free Discharge)
├**2=Culvert** (Barrel Controls 6.54 cfs @ 8.33 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 2.46" for 2-year event
Inflow = 6.54 cfs @ 12.35 hrs, Volume= 55,401 cf
Primary = 6.54 cfs @ 12.35 hrs, Volume= 55,401 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1S: Subcat E-1

Runoff = 3.65 cfs @ 12.09 hrs, Volume= 12,495 cf, Depth= 5.55"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 2S: Subcat E-2

Runoff = 2.03 cfs @ 12.11 hrs, Volume= 6,758 cf, Depth= 3.40"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment 3S: Subcat E-3

Runoff = 9.40 cfs @ 12.13 hrs, Volume= 33,894 cf, Depth= 4.54"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment 4S: Subcat E-4

Runoff = 6.49 cfs @ 12.09 hrs, Volume= 22,716 cf, Depth= 5.78"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 5S: Subcat E-5

Runoff = 1.85 cfs @ 12.09 hrs, Volume= 5,869 cf, Depth= 3.00"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 6S: Subcat E-6

Runoff = 8.30 cfs @ 12.09 hrs, Volume= 30,302 cf, Depth= 6.13"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond DP: 1995, Designed Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 4.97" for 10-year event
Inflow = 31.14 cfs @ 12.10 hrs, Volume= 112,035 cf
Outflow = 9.85 cfs @ 12.44 hrs, Volume= 112,035 cf, Atten= 68%, Lag= 20.4 min
Discarded = 1.51 cfs @ 12.44 hrs, Volume= 16,441 cf
Primary = 8.34 cfs @ 12.44 hrs, Volume= 95,594 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 32.04' @ 12.44 hrs Surf.Area= 7,880 sf Storage= 23,172 cf
Flood Elev= 34.00' Surf.Area= 10,363 sf Storage= 41,030 cf

Plug-Flow detention time= 13.7 min calculated for 111,957 cf (100% of inflow)
Center-of-Mass det. time= 13.7 min (792.9 - 779.2)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	41,030 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	3,842	413.0	0	0	3,842
34.00	10,363	666.0	41,030	41,030	25,805

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**8.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	33.90'	**90.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Discarded OutFlow Max=1.51 cfs @ 12.44 hrs HW=32.03' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 1.51 cfs)

Primary OutFlow Max=8.34 cfs @ 12.44 hrs HW=32.03' (Free Discharge)
├**2=Culvert** (Barrel Controls 8.34 cfs @ 10.61 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 4.24" for 10-year event
Inflow = 8.34 cfs @ 12.44 hrs, Volume= 95,594 cf
Primary = 8.34 cfs @ 12.44 hrs, Volume= 95,594 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1S: Subcat E-1

Runoff = 4.75 cfs @ 12.09 hrs, Volume= 16,534 cf, Depth= 7.34"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 2S: Subcat E-2

Runoff = 2.96 cfs @ 12.11 hrs, Volume= 9,884 cf, Depth= 4.97"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment 3S: Subcat E-3

Runoff = 12.78 cfs @ 12.13 hrs, Volume= 46,756 cf, Depth= 6.27"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment 4S: Subcat E-4

Runoff = 8.39 cfs @ 12.09 hrs, Volume= 29,797 cf, Depth= 7.58"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 5S: Subcat E-5

Runoff = 2.79 cfs @ 12.09 hrs, Volume= 8,797 cf, Depth= 4.50"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 6S: Subcat E-6

Runoff = 10.68 cfs @ 12.09 hrs, Volume= 39,240 cf, Depth= 7.94"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond DP: 1995, Designed Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 6.70" for 25-year event
Inflow = 41.62 cfs @ 12.10 hrs, Volume= 151,008 cf
Outflow = 11.26 cfs @ 12.48 hrs, Volume= 151,008 cf, Atten= 73%, Lag= 22.9 min
Discarded = 1.86 cfs @ 12.48 hrs, Volume= 22,662 cf
Primary = 9.39 cfs @ 12.48 hrs, Volume= 128,346 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 33.50' @ 12.48 hrs Surf.Area= 9,700 sf Storage= 36,024 cf
Flood Elev= 34.00' Surf.Area= 10,363 sf Storage= 41,030 cf

Plug-Flow detention time= 19.8 min calculated for 150,903 cf (100% of inflow)
Center-of-Mass det. time= 19.8 min (793.4 - 773.6)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	41,030 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	3,842	413.0	0	0	3,842
34.00	10,363	666.0	41,030	41,030	25,805

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**8.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	33.90'	**90.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Discarded OutFlow Max=1.86 cfs @ 12.48 hrs HW=33.50' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 1.86 cfs)

Primary OutFlow Max=9.39 cfs @ 12.48 hrs HW=33.50' (Free Discharge)
├**2=Culvert** (Barrel Controls 9.39 cfs @ 11.96 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 5.70" for 25-year event
Inflow = 9.39 cfs @ 12.48 hrs, Volume= 128,346 cf
Primary = 9.39 cfs @ 12.48 hrs, Volume= 128,346 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1S: Subcat E-1

Runoff = 5.79 cfs @ 12.09 hrs, Volume= 20,361 cf, Depth= 9.04"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 2S: Subcat E-2

Runoff = 3.86 cfs @ 12.11 hrs, Volume= 12,960 cf, Depth= 6.52"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment 3S: Subcat E-3

Runoff = 15.96 cfs @ 12.13 hrs, Volume= 59,094 cf, Depth= 7.92"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment 4S: Subcat E-4

Runoff = 10.19 cfs @ 12.09 hrs, Volume= 36,497 cf, Depth= 9.29"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 5S: Subcat E-5

Runoff = 3.70 cfs @ 12.09 hrs, Volume= 11,712 cf, Depth= 6.00"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment 6S: Subcat E-6

Runoff = 12.92 cfs @ 12.09 hrs, Volume= 47,686 cf, Depth= 9.65"
Routed to Pond DP : 1995, Designed Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond DP: 1995, Designed Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 8.36" for 50-year event
Inflow = 51.54 cfs @ 12.10 hrs, Volume= 188,312 cf
Outflow = 28.34 cfs @ 12.29 hrs, Volume= 188,312 cf, Atten= 45%, Lag= 11.3 min
Discarded = 1.99 cfs @ 12.25 hrs, Volume= 27,120 cf
Primary = 26.35 cfs @ 12.29 hrs, Volume= 161,191 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 34.08' @ 12.29 hrs Surf.Area= 10,363 sf Storage= 41,030 cf
Flood Elev= 34.00' Surf.Area= 10,363 sf Storage= 41,030 cf

Plug-Flow detention time= 20.8 min calculated for 188,181 cf (100% of inflow)
Center-of-Mass det. time= 20.8 min (790.3 - 769.5)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	41,030 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	3,842	413.0	0	0	3,842
34.00	10,363	666.0	41,030	41,030	25,805

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**8.290 in/hr Exfiltration over Surface area**
#2	Primary	26.00'	**12.0" Round Culvert** L= 75.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 26.00' / 25.60' S= 0.0053 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#3	Primary	33.90'	**90.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

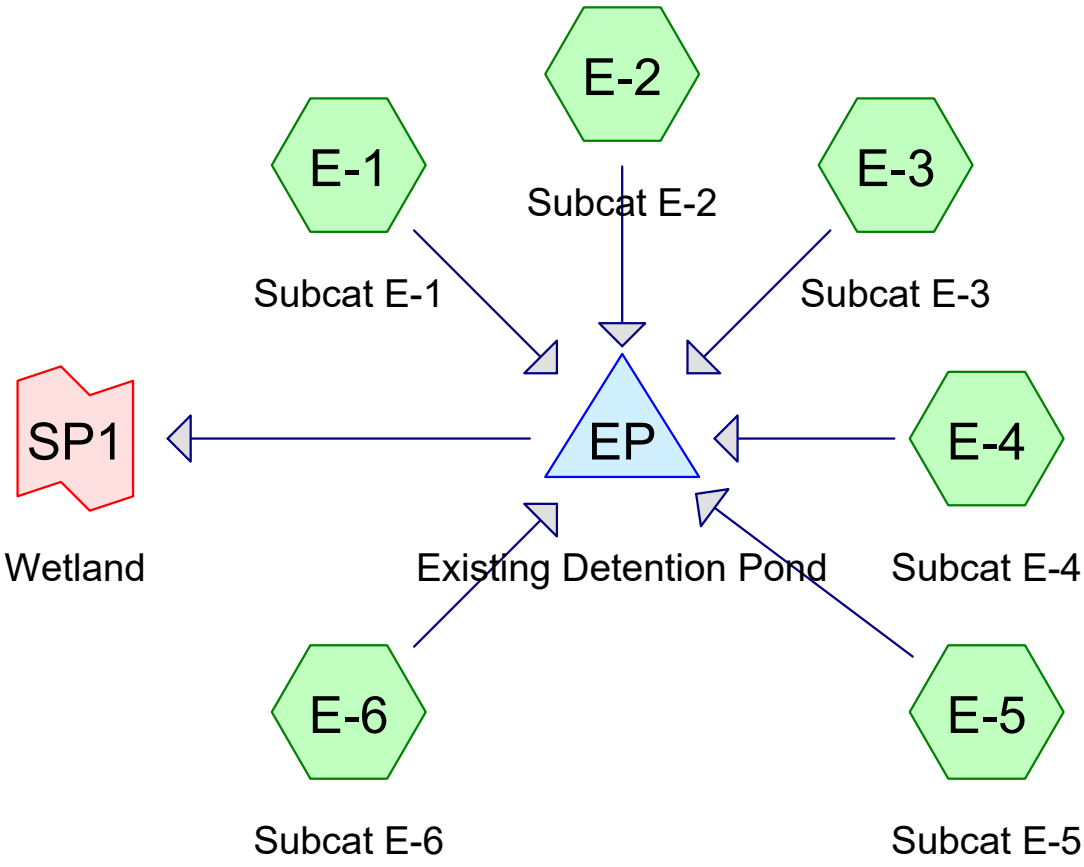
Discarded OutFlow Max=1.99 cfs @ 12.25 hrs HW=34.05' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 1.99 cfs)

Primary OutFlow Max=24.95 cfs @ 12.29 hrs HW=34.07' (Free Discharge)
├**2=Culvert** (Barrel Controls 9.77 cfs @ 12.44 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 15.18 cfs @ 1.00 fps)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 7.16" for 50-year event
Inflow = 26.35 cfs @ 12.29 hrs, Volume= 161,191 cf
Primary = 26.35 cfs @ 12.29 hrs, Volume= 161,191 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



Subcat Reach Pond Link

Routing Diagram for 3250-02_Proposed HydroCAD
Prepared by Allen & Major Associates, Inc, Printed 10/10/2024

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	4.11	2
2	10-year	Type III 24-hr		Default	24.00	1	6.37	2
3	25-year	Type III 24-hr		Default	24.00	1	8.18	2
4	50-year	Type III 24-hr		Default	24.00	1	9.89	2

Summary for Subcatchment E-1: Subcat E-1

Runoff = 2.25 cfs @ 12.09 hrs, Volume= 7,493 cf, Depth= 3.33"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 0.93 cfs @ 12.12 hrs, Volume= 3,196 cf, Depth= 1.61"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 5.19 cfs @ 12.14 hrs, Volume= 18,412 cf, Depth= 2.47"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 4.08 cfs @ 12.09 hrs, Volume= 13,913 cf, Depth= 3.54"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 0.79 cfs @ 12.10 hrs, Volume= 2,615 cf, Depth= 1.34"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 5.33 cfs @ 12.09 hrs, Volume= 19,149 cf, Depth= 3.87"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=4.11"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 2.88" for 2-year event
Inflow = 18.20 cfs @ 12.10 hrs, Volume= 64,778 cf
Outflow = 15.28 cfs @ 12.16 hrs, Volume= 64,778 cf, Atten= 16%, Lag= 3.8 min
Discarded = 0.93 cfs @ 12.16 hrs, Volume= 21,571 cf
Primary = 14.35 cfs @ 12.16 hrs, Volume= 43,207 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 30.07' @ 12.16 hrs Surf.Area= 4,315 sf Storage= 4,700 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= 11.0 min calculated for 64,733 cf (100% of inflow)
Center-of-Mass det. time= 11.0 min (800.4 - 789.4)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	28.50'	**24.0" Round Culvert** L= 25.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 28.50' / 27.75' S= 0.0300 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.92 cfs @ 12.16 hrs HW=30.06' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.92 cfs)

Primary OutFlow Max=14.18 cfs @ 12.16 hrs HW=30.06' (Free Discharge)
├**2=Culvert** (Barrel Controls 14.18 cfs @ 7.42 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 1.92" for 2-year event
Inflow = 14.35 cfs @ 12.16 hrs, Volume= 43,207 cf
Primary = 14.35 cfs @ 12.16 hrs, Volume= 43,207 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment E-1: Subcat E-1

Runoff = 3.65 cfs @ 12.09 hrs, Volume= 12,495 cf, Depth= 5.55"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 2.03 cfs @ 12.11 hrs, Volume= 6,758 cf, Depth= 3.40"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 9.40 cfs @ 12.13 hrs, Volume= 33,894 cf, Depth= 4.54"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 6.49 cfs @ 12.09 hrs, Volume= 22,716 cf, Depth= 5.78"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 1.85 cfs @ 12.09 hrs, Volume= 5,869 cf, Depth= 3.00"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 8.30 cfs @ 12.09 hrs, Volume= 30,302 cf, Depth= 6.13"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=6.37"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 4.97" for 10-year event
Inflow = 31.14 cfs @ 12.10 hrs, Volume= 112,035 cf
Outflow = 24.59 cfs @ 12.17 hrs, Volume= 112,035 cf, Atten= 21%, Lag= 4.5 min
Discarded = 1.28 cfs @ 12.17 hrs, Volume= 27,105 cf
Primary = 23.31 cfs @ 12.17 hrs, Volume= 84,930 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 30.80' @ 12.17 hrs Surf.Area= 5,957 sf Storage= 8,408 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= 9.3 min calculated for 111,957 cf (100% of inflow)
Center-of-Mass det. time= 9.4 min (788.6 - 779.2)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	28.50'	**24.0" Round Culvert** L= 25.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 28.50' / 27.75' S= 0.0300 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=1.27 cfs @ 12.17 hrs HW=30.78' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 1.27 cfs)

Primary OutFlow Max=23.04 cfs @ 12.17 hrs HW=30.78' (Free Discharge)
└**2=Culvert** (Barrel Controls 23.04 cfs @ 8.07 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 3.77" for 10-year event
Inflow = 23.31 cfs @ 12.17 hrs, Volume= 84,930 cf
Primary = 23.31 cfs @ 12.17 hrs, Volume= 84,930 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment E-1: Subcat E-1

Runoff = 4.75 cfs @ 12.09 hrs, Volume= 16,534 cf, Depth= 7.34"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 2.96 cfs @ 12.11 hrs, Volume= 9,884 cf, Depth= 4.97"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 12.78 cfs @ 12.13 hrs, Volume= 46,756 cf, Depth= 6.27"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 8.39 cfs @ 12.09 hrs, Volume= 29,797 cf, Depth= 7.58"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 2.79 cfs @ 12.09 hrs, Volume= 8,797 cf, Depth= 4.50"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 10.68 cfs @ 12.09 hrs, Volume= 39,240 cf, Depth= 7.94"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=8.18"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 6.70" for 25-year event
Inflow = 41.62 cfs @ 12.10 hrs, Volume= 151,008 cf
Outflow = 29.55 cfs @ 12.20 hrs, Volume= 151,008 cf, Atten= 29%, Lag= 5.9 min
Discarded = 1.66 cfs @ 12.20 hrs, Volume= 30,698 cf
Primary = 27.89 cfs @ 12.20 hrs, Volume= 120,310 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 31.42' @ 12.20 hrs Surf.Area= 7,725 sf Storage= 12,632 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= 8.8 min calculated for 150,903 cf (100% of inflow)
Center-of-Mass det. time= 8.8 min (782.4 - 773.6)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	28.50'	**24.0" Round Culvert** L= 25.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 28.50' / 27.75' S= 0.0300 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=1.66 cfs @ 12.20 hrs HW=31.42' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 1.66 cfs)

Primary OutFlow Max=27.86 cfs @ 12.20 hrs HW=31.42' (Free Discharge)
└**2=Culvert** (Barrel Controls 27.86 cfs @ 8.87 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 5.34" for 25-year event
Inflow = 27.89 cfs @ 12.20 hrs, Volume= 120,310 cf
Primary = 27.89 cfs @ 12.20 hrs, Volume= 120,310 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Subcatchment E-1: Subcat E-1

Runoff = 5.79 cfs @ 12.09 hrs, Volume= 20,361 cf, Depth= 9.04"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
3,912	61	>75% Grass cover, Good, HSG B
23,114	98	Paved parking, HSG B
27,026	93	Weighted Average
3,912		14.48% Pervious Area
23,114		85.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-2: Subcat E-2

Runoff = 3.86 cfs @ 12.11 hrs, Volume= 12,960 cf, Depth= 6.52"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
16,141	61	>75% Grass cover, Good, HSG B
7,726	98	Paved parking, HSG B
23,867	73	Weighted Average
16,141		67.63% Pervious Area
7,726		32.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.6	50	0.0450	0.23		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
4.2	136	0.0060	0.54		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.8	186	Total			

Summary for Subcatchment E-3: Subcat E-3

Runoff = 15.96 cfs @ 12.13 hrs, Volume= 59,094 cf, Depth= 7.92"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
33,300	61	>75% Grass cover, Good, HSG B
56,212	98	Paved parking, HSG B
89,512	84	Weighted Average
33,300		37.20% Pervious Area
56,212		62.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0180	0.16		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 4.11"
0.6	41	0.0260	1.13		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	169	0.0230	3.08		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
1.9	111	0.0200	0.99		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.9	139	0.0160	2.57		**Shallow Concentrated Flow, E-F** Paved Kv= 20.3 fps
9.5	510	Total			

Summary for Subcatchment E-4: Subcat E-4

Runoff = 10.19 cfs @ 12.09 hrs, Volume= 36,497 cf, Depth= 9.29"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
4,028	61	>75% Grass cover, Good, HSG B
43,139	98	Paved parking, HSG B
47,168	95	Weighted Average
4,028		8.54% Pervious Area
43,139		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-5: Subcat E-5

Runoff = 3.70 cfs @ 12.09 hrs, Volume= 11,712 cf, Depth= 6.00"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
4,842	98	Paved parking, HSG B
18,600	61	>75% Grass cover, Good, HSG B
23,442	69	Weighted Average
18,600		79.35% Pervious Area
4,842		20.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Subcatchment E-6: Subcat E-6

Runoff = 12.92 cfs @ 12.09 hrs, Volume= 47,686 cf, Depth= 9.65"
Routed to Pond EP : Existing Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 50-year Rainfall=9.89"

Area (sf)	CN	Description
59,301	98	Paved parking, HSG B
3	61	>75% Grass cover, Good, HSG B
59,304	98	Weighted Average
3		0.00% Pervious Area
59,301		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min.**

Summary for Pond EP: Existing Detention Pond

Per the NRCS Soil Report, the underlying soil in the detention basin area is Hoosic gravelly fine sandy loam. The Saturated Hydraulic Conductivity (Ksat) value for this soil is 116.98 micrometers/second = 16.58 in/hr. A 2x factor of saefety is applied to derive the infiltration rate for the basin, 8.29 in/hr.

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 8.36" for 50-year event
Inflow = 51.54 cfs @ 12.10 hrs, Volume= 188,312 cf
Outflow = 34.24 cfs @ 12.21 hrs, Volume= 188,312 cf, Atten= 34%, Lag= 6.7 min
Discarded = 2.06 cfs @ 12.21 hrs, Volume= 33,775 cf
Primary = 32.19 cfs @ 12.21 hrs, Volume= 154,537 cf
Routed to Link SP1 : Wetland

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 31.98' @ 12.21 hrs Surf.Area= 9,569 sf Storage= 17,416 cf
Flood Elev= 32.50' Surf.Area= 10,369 sf Storage= 22,657 cf

Plug-Flow detention time= 8.6 min calculated for 188,312 cf (100% of inflow)
Center-of-Mass det. time= 8.6 min (778.1 - 769.5)

Volume	Invert	Avail.Storage	Storage Description
#1	28.00'	22,657 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
28.00	449	350.0	0	0	449
29.00	2,241	607.0	1,231	1,231	20,027
30.00	4,161	635.0	3,152	4,383	22,863
31.00	6,456	735.0	5,267	9,650	33,787
32.00	9,655	711.0	8,002	17,652	36,641
32.50	10,369	718.0	5,005	22,657	37,514

Device	Routing	Invert	Outlet Devices
#1	Discarded	28.00'	**9.290 in/hr Exfiltration over Surface area**
#2	Primary	28.50'	**24.0" Round Culvert** L= 25.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 28.50' / 27.75' S= 0.0300 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Primary	32.40'	**37.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

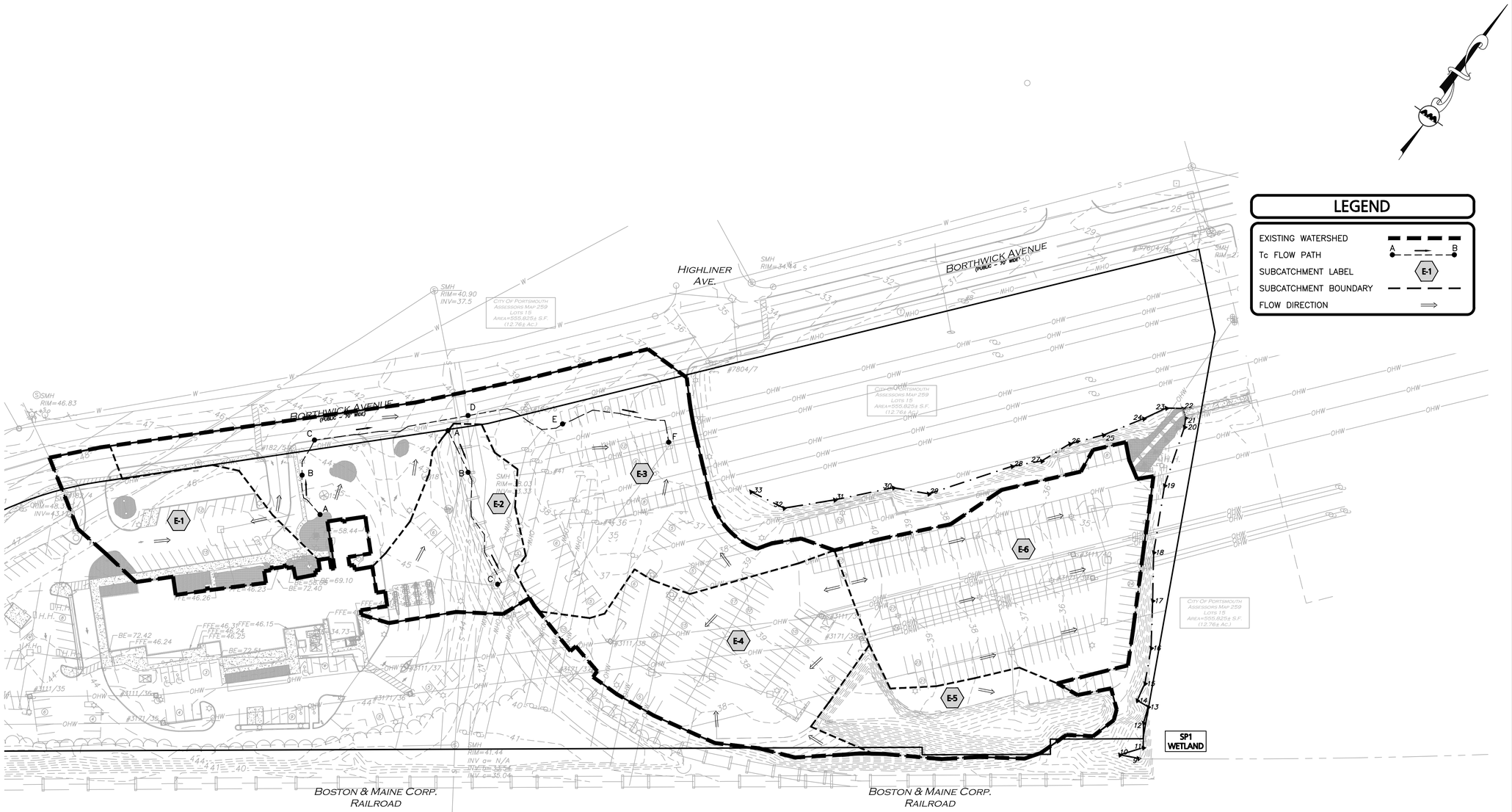
Discarded OutFlow Max=2.05 cfs @ 12.21 hrs HW=31.96' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 2.05 cfs)

Primary OutFlow Max=32.08 cfs @ 12.21 hrs HW=31.96' (Free Discharge)
└**2=Culvert** (Barrel Controls 32.08 cfs @ 10.21 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 270,318 sf, 71.89% Impervious, Inflow Depth = 6.86" for 50-year event
Inflow = 32.19 cfs @ 12.21 hrs, Volume= 154,537 cf
Primary = 32.19 cfs @ 12.21 hrs, Volume= 154,537 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



LEGEND

- EXISTING WATERSHED
- Tc FLOW PATH (A — B)
- SUBCATCHMENT LABEL (E-1)
- SUBCATCHMENT BOUNDARY
- FLOW DIRECTION

DIG SAFE

BEFORE YOU DIG
CALL 811 OR
1-888-DIG-SAFE
1-888-344-7233

PLAN NOTES:

1. EXISTING CONDITIONS WERE COMPILED FROM AN ON THE GROUND SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES, INC. IN JUNE OF 2024, AS WELL AS AVAILABLE RECORD PLANS OBTAINED FROM THE CITY OF PORTSMOUTH AND OTHER SOURCES.
2. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

ISSUED FOR REVIEW
OCTOBER 10, 2024

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:

APEX DESIGN BUILD
9550 W. HIGGINS ROAD, STE 170
ROSEMONT, IL 60018

PROJECT:

100 BORTHWICK AVENUE
PORTSMOUTH, NH

PROJECT NO.	3250-02	DATE:	10-10-24
SCALE:	1" = 60'	DWG. NAME:	C3250-02
DESIGNED BY:	JRG	CHECKED BY:	BDJ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
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environmental consulting ◆ landscape architecture
www.allenmajor.com
400 HARVEY ROAD
MANCHESTER, NH 03103
TEL: (603) 627-5500
FAX: (603) 627-5501
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

EXISTING WATERSHED PLAN

SHEET No.

WS-1

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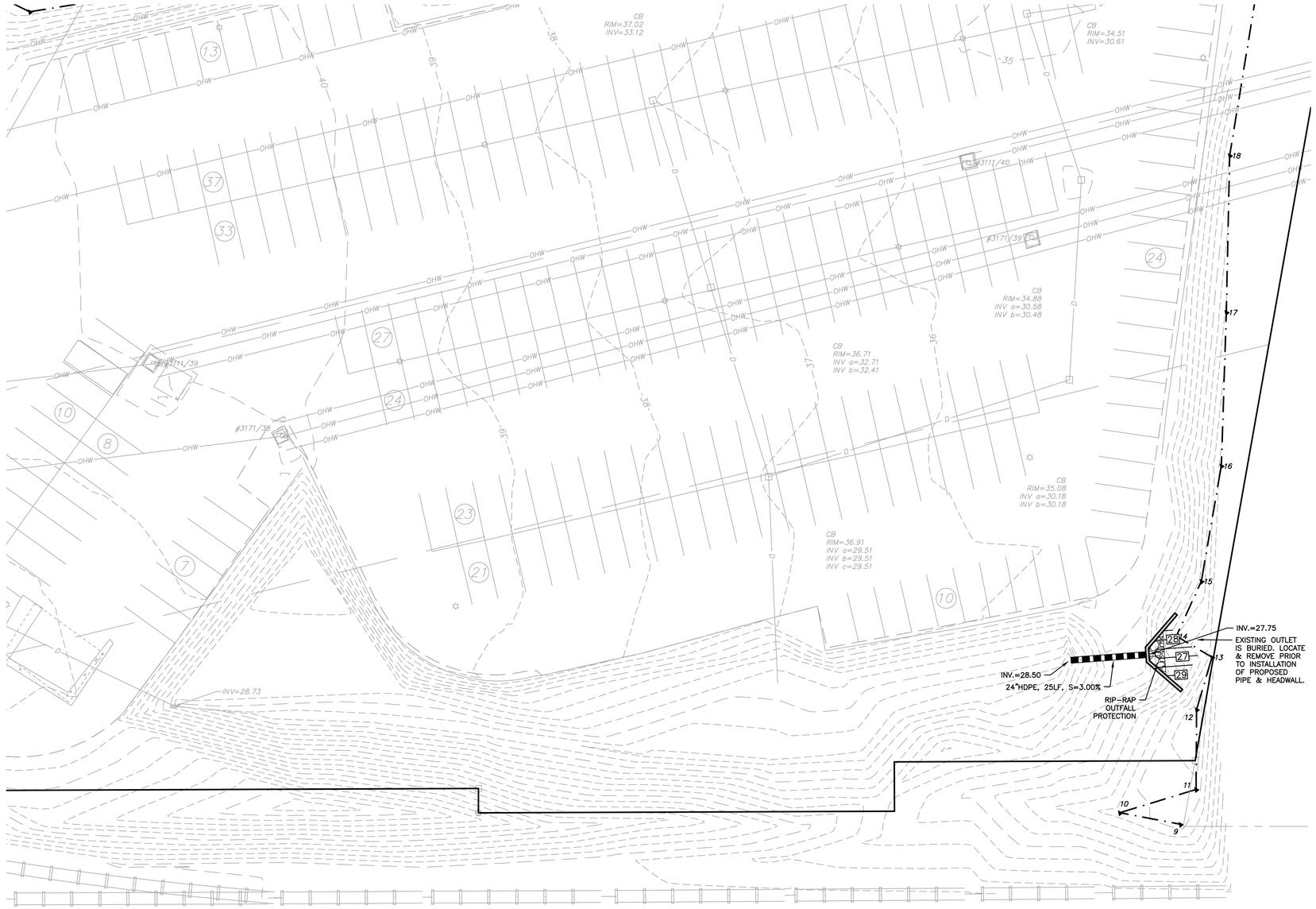

LEGEND

RIPRAP OUTFALL	
5' CONTOUR	3000
1' CONTOUR	2940
HEADWALL	
DRAIN LINE	

BOSTON & MAINE CORP.
RAILROAD

DIG SAFE

BEFORE YOU DIG
CALL 811 OR
1-888-DIG-SAFE
1-888-344-7233

PLAN NOTES:

1. EXISTING CONDITIONS WERE COMPILED FROM AN ON THE GROUND SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES, INC. IN JUNE OF 2024, AS WELL AS AVAILABLE RECORD PLANS OBTAINED FROM THE CITY OF PORTSMOUTH AND OTHER SOURCES.
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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

ISSUED FOR REVIEW
OCTOBER 10, 2024

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:

APEX DESIGN BUILD
9550 W. HIGGINS ROAD, STE 170
ROSEMONT, IL 60018

PROJECT:

100 BORTHWICK AVENUE
PORTSMOUTH, NH

PROJECT NO.	3250-02	DATE:	10-10-24
SCALE:	1" = 20'	DWG. NAME:	C3250-02
DESIGNED BY:	JRG	CHECKED BY:	BDJ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
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400 HARVEY ROAD
MANCHESTER, NH 03103
TEL: (603) 627-5500
FAX: (603) 627-5501
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

GRADING & DRAINAGE PLAN

SHEET No.

C-103

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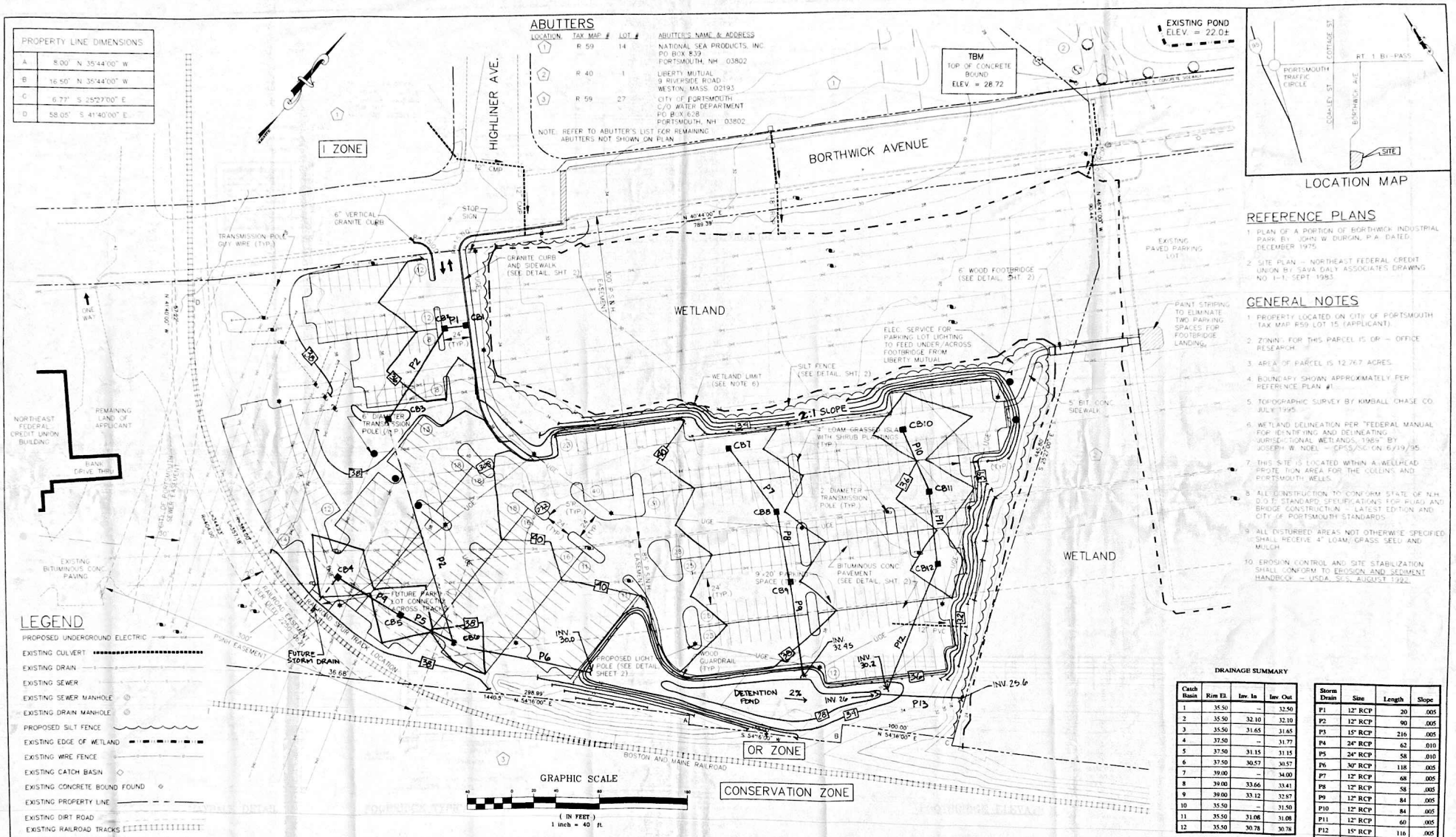


LOCATION MAP

REFERENCE PLANS

1. PLAN OF A PORTION OF BORTHWICK INDUSTRIAL PARK BY JOHN W. DURGIN, P.A. DATED: DECEMBER 1975.
2. SITE PLAN – NORTHEAST FEDERAL CREDIT UNION BY SAVA DALY ASSOCIATES, DRAWING NO. 1-1, SEPT. 1983.

GENERAL NOTES

1. PROPERTY LOCATED ON CITY OF PORTSMOUTH TAX MAP R59 LOT 15 (APPLICANT).
2. ZONING FOR THIS PARCEL IS: OR – OFFICE RESEARCH.
3. AREA OF PARCEL IS 12.767 ACRES.
4. BOUNDARY SHOWN APPROXIMATELY PER REFERENCE PLAN #1.
5. TOPOGRAPHIC SURVEY BY KIMBALL CHASE CO. JULY 1995.
6. WETLAND DELINEATION PER "FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS, 1989" BY JOSEPH W. NOEL – EPSS/SCS ON 6/29/95.
7. THIS SITE IS LOCATED WITHIN A WELLHEAD PROTECTION AREA FOR THE COLLINS AND PORTSMOUTH WELLS.
8. ALL CONSTRUCTION TO CONFORM STATE OF N.H. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, N. – LATEST EDITION AND CITY OF PORTSMOUTH STANDARDS.
9. ALL DISTURBED AREAS NOT OTHERWISE SPECIFIED SHALL RECEIVE 4" LOAM, GRASS SEED AND MULCH.
10. EROSION CONTROL AND SITE STABILIZATION SHALL CONFORM TO EROSION AND SEDIMENT HANDBOOK – USDA, SCS, AUGUST 1992.

LEGEND

- PROPOSED UNDERGROUND ELECTRIC
- EXISTING CULVERT
- EXISTING DRAIN
- EXISTING SEWER
- EXISTING SEWER MANHOLE
- EXISTING DRAIN MANHOLE
- PROPOSED SILT FENCE
- EXISTING EDGE OF WETLAND
- EXISTING WIRE FENCE
- EXISTING CATCH BASIN
- EXISTING CONCRETE BOUND FOUND
- EXISTING PROPERTY LINE
- EXISTING DIRT ROAD
- EXISTING RAILROAD TRACKS
- EXISTING OVERHEAD ELECTRIC

DRAINAGE SUMMARY

Catch Basin	Rim El.	Inv. In	Inv. Out
1	35.50	--	32.50
2	35.50	32.10	32.10
3	35.50	31.65	31.65
4	37.50	--	31.77
5	37.50	31.15	31.15
6	37.50	30.57	30.57
7	39.00	--	34.00
8	39.00	33.66	33.41
9	39.00	33.12	32.87
10	35.50	--	31.50
11	35.50	31.08	31.08
12	35.50	30.78	30.78

Storm Drain	Size	Length	Slope
P1	12" RCP	20	.005
P2	12" RCP	90	.005
P3	15" RCP	216	.005
P4	24" RCP	62	.010
P5	24" RCP	58	.010
P6	30" RCP	118	.005
P7	12" RCP	68	.005
P8	12" RCP	58	.005
P9	12" RCP	84	.005
P10	12" RCP	84	.005
P11	12" RCP	60	.005
P12	15" RCP	116	.005
P13	12" RCP	75	.005

REV.	DATE	STATUS	BY	CHKD	APPD

DESIGNED BY: ST
DRAWN BY: AW
CHECKED BY: CTO
APPROVED BY: ST
DATE: 7/17/95

Kimball Chase
Engineering • Surveying • Land Planning and Design
One Cate Street, Portsmouth, NH 03801 • (603)431-2520
Bath, ME • Andover, MA

CLIENT: LIBERTY MUTUAL, 9 RIVERSIDE ROAD, WESTON, MASS. 02193

APPLICANT TO CITY: NORTHEAST FEDERAL CREDIT UNION, P.O. BOX 1304, PORTSMOUTH, N.H. 03802

PROJECT: PROPOSED PARKING EXPANSION

TITLE: SITE PLAN

SCALE: 1"=40'
PROJECT NO.: 95-5400
DRAWING NO.: OVERALL
SHT.: 1 of 2
REV.:

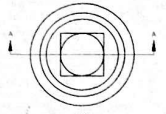
Parking allowed Available
834 - current
100 - Shared

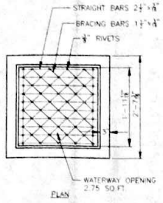
Parking Needed
1250 Capacity
+ 60 Steeroom
50 Visitors, Trainees
1360 x 80% = 1088
834
254

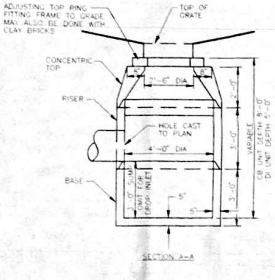
25 23
40 32
31 26
28 30F
25
25
23
12

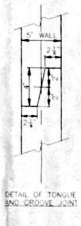
NOTES:

1. All sections to be concrete Class AA (4000 PSI) (4000 PSI).
2. Circumferential reinforcement shall be .0.12 sq.in. per linear foot in all sections and shall be in the center of the wall.
3. The tongue or the groove of the joint shall contain one line of circumferential reinforcement equal to 0.12 sq.in. per linear foot.
4. Risers of 12", 3" and 4" can be used to reach desired depth.
5. Frame and grate shall be NHDOT Type B.

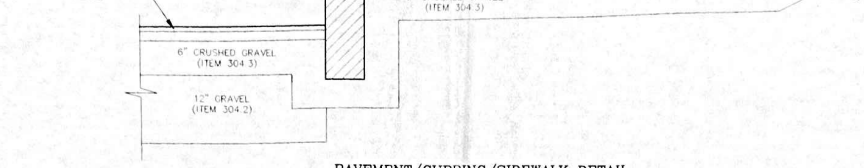




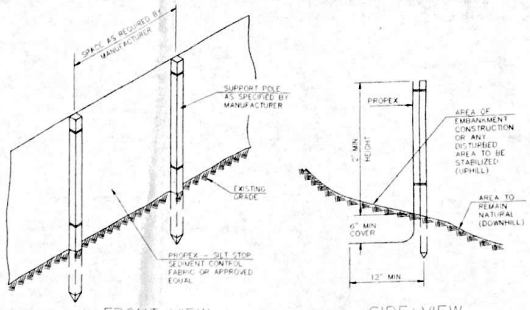




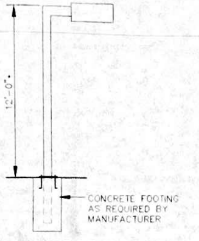
CATCH BASIN
N.T.S.



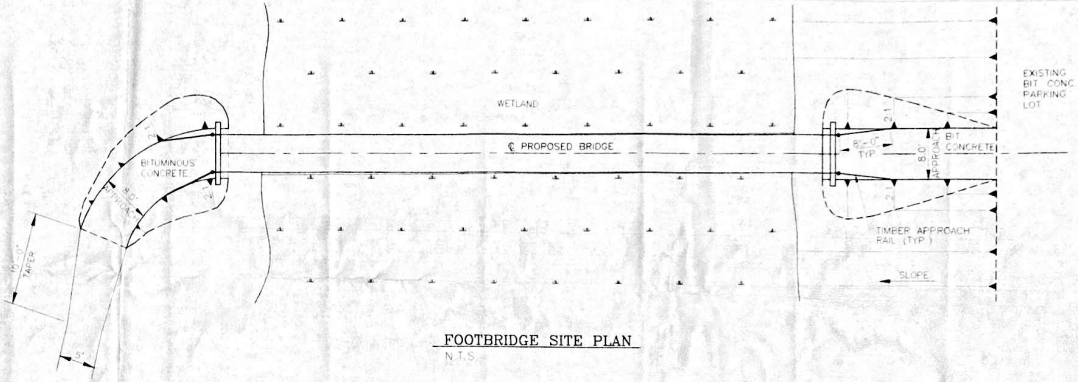
PAVEMENT/CURBING/SIDEWALK DETAIL
N.T.S.



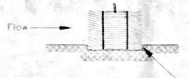
SILT FENCE DETAIL
N.T.S.



LIGHT POLE
N.T.S.

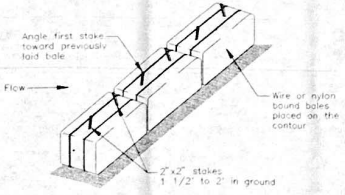


FOOTBRIDGE SITE PLAN
N.T.S.

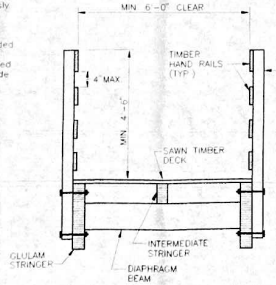


CONSTRUCTION DETAIL:

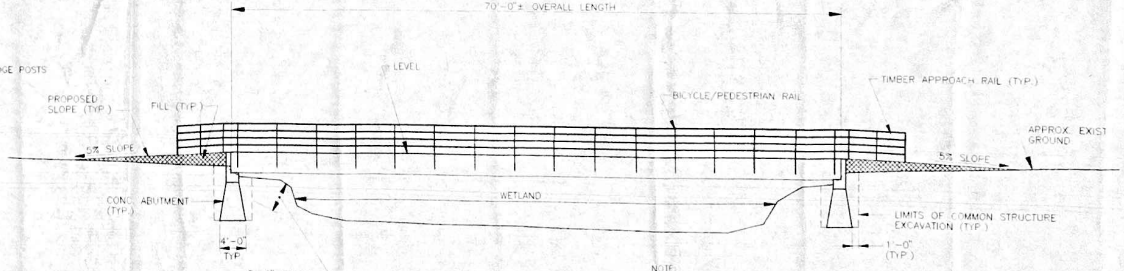
1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.



HAYBALE DETAIL
N.T.S.



FOOBRIDGE TYPICAL CROSS SECTION
N.T.S.



NOTE:
1. BRIDGE MANUFACTURER TO SUBMIT CERTIFIED DESIGN PLANS, DETAILS AND CALCULATIONS FOR APPROVAL BY ENGINEER.

FOOTBRIDGE ELEVATION
N.T.S.

REV.	DATE	STATUS	BY	CHK'D	APP'D

THE STATE OF NEW HAMPSHIRE — STEPHEN JOHN TOWNE NO. 5010 LICENSED PROFESSIONAL ENGINEER

DESIGNED BY:	ST
DRAWN BY:	AW
CHECKED BY:	CTO
APPROVED BY:	ST
DATE:	7/17/95

Kimball Chase
Engineering • Surveying • Land Planning and Design
One Cate Street, Portsmouth, NH 03801 • (603)431-2520
Bath, ME • Andover, MA

CLIENT: LIBERTY MUTUAL, 9 RIVERSIDE ROAD, WESTON, MASS. 02193	PROJECT: PROPOSED PARKING EXPANSION	SCALE: N.T.S.	
		PROJECT NO.: 95-5400	
APPLICANT TO CITY: NORTHEAST FEDERAL CREDIT UNION, P.O. BUX 1304, PROTSMOUTH, N.H. 03802	TITLE: SITE DETAILS	DRAWING NO.: DETAILS	
		SHT.: 2 of 2	REV.

400 Harvey Road, Manchester, NH 03103 | T (603) 627-5500 | F (603) 627-5501
allenmajor.com

ALLEN & MAJOR ASSOCIATES, INC.

October 10, 2024

John Kilburg
Project Director
Apex Design Build
9550 W. Higgins Road, Ste. 170
Rosemont, IL 60018

A&M Project #: 3250-02
Re: 100 Borthwick Avenue
Portsmouth, NH
Existing Detention Pond
Operation & Maintenance

Dear Mr. Kilburg,

Allen & Major Associates, Inc. (A&M) is pleased to prepare the below operation and maintenance summary for the existing detention basin and drainage infrastructure located at 100 Borthwick Avenue in Portsmouth, NH.

Detention Basin:

It is our understanding that the existing detention basin on site is overgrown with various trees, brush, and vegetation. For immediate action, A&M recommends clearing out the entire basin by removing all trees, brush, and vegetation within it and along its embankments. Once fully grubbed, the basin shall be maintained at least semi-annually (twice per year) to be mowed, remove any accumulated sediments, and ensure inlet & outlet structures are unobstructed.

Maintenance Requirements:

- Periodic mowing of embankments.
- Removal of woody vegetation from embankments.
- Removal of debris from outlet structures.
- Removal of accumulated sediment.
- Inspection and repair of embankments, inlet and outlet structures, and appurtenances.

Deep Sump Catch Basin:

The existing catch basins and drain manholes on site should also be inspected to ensure proper performance. Each inspection shall include the removal of accumulated sediment in the sump as well as ensuring the structure's inlet and outlet pipes are not obstructed. Catch basins and drain manholes on site shall be checked and maintained at least semi-annually (twice per year).

Maintenance Requirements:

- It is recommended that catch basins be inspected at least twice annually, once following snow-melt and once following leafdrop, and cleaned as indicated by inspection.
- Sediment should be removed when it approaches half the sump depth.

- If floating hydrocarbons are observed during an inspection, the material should be removed immediately by skimming, absorbent materials, or other method and disposed in conformance with applicable state and federal regulations.
- Cleaning may require Vacuum-truck instead of “clam-shell” to avoid damage to hood.

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point

Smoothing	Yes
State	
Location	
Latitude	43.060 degrees North
Longitude	70.795 degrees West
Elevation	10 feet
Date/Time	Tue Sep 10 2024 10:43:53 GMT-0400 (Eastern Daylight Time)

Add 15% multiplier for areas within the Great Bay region.

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.82	1.04	**1yr**	0.70	0.98	1.21	1.56	2.03	2.67	2.93	**1yr**	2.36	2.81	3.22	3.94	4.56	**1yr**
2yr	0.32	0.50	0.62	0.81	1.02	1.30	**2yr**	0.88	1.18	1.52	1.94	2.49	3.22	3.57	**2yr**	2.85	3.44	3.94	4.69	5.33	**2yr**
5yr	0.37	0.58	0.73	0.97	1.24	1.60	**5yr**	1.07	1.46	1.88	2.43	3.14	4.08	4.59	**5yr**	3.61	4.41	5.05	5.94	6.71	**5yr**
10yr	0.41	0.65	0.82	1.11	1.45	1.89	**10yr**	1.25	1.72	2.23	2.89	3.75	4.88	5.54	**10yr**	4.32	5.33	6.09	7.12	8.00	**10yr**
25yr	0.48	0.76	0.96	1.33	1.77	2.33	**25yr**	1.52	2.14	2.77	3.62	4.74	6.19	7.11	**25yr**	5.48	6.84	7.81	9.04	10.08	**25yr**
50yr	0.53	0.85	1.09	1.53	2.06	2.75	**50yr**	1.78	2.52	3.28	4.32	5.67	7.41	8.60	**50yr**	6.56	8.27	9.44	10.84	12.01	**50yr**
100yr	0.59	0.96	1.24	1.76	2.40	3.24	**100yr**	2.07	2.97	3.89	5.15	6.77	8.88	10.40	**100yr**	7.86	10.00	11.40	13.00	14.33	**100yr**
200yr	0.67	1.09	1.42	2.03	2.81	3.82	**200yr**	2.42	3.50	4.60	6.12	8.09	10.65	12.58	**200yr**	9.42	12.10	13.77	15.59	17.09	**200yr**
500yr	0.79	1.30	1.70	2.47	3.45	4.74	**500yr**	2.98	4.36	5.74	7.69	10.23	13.53	16.19	**500yr**	11.98	15.57	17.70	19.84	21.59	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.23	0.36	0.44	0.59	0.73	0.89	**1yr**	0.63	0.87	0.92	1.32	1.66	2.22	2.53	**1yr**	1.97	2.44	2.86	3.15	3.88	**1yr**
2yr	0.32	0.49	0.60	0.81	1.00	1.19	**2yr**	0.86	1.16	1.37	1.82	2.34	3.06	3.47	**2yr**	2.71	3.33	3.83	4.56	5.08	**2yr**
5yr	0.35	0.54	0.67	0.92	1.17	1.40	**5yr**	1.01	1.37	1.61	2.12	2.74	3.80	4.22	**5yr**	3.37	4.06	4.73	5.56	6.27	**5yr**
10yr	0.39	0.59	0.74	1.03	1.33	1.60	**10yr**	1.15	1.57	1.81	2.40	3.07	4.39	4.90	**10yr**	3.89	4.71	5.48	6.45	7.24	**10yr**
25yr	0.44	0.67	0.83	1.19	1.56	1.90	**25yr**	1.35	1.86	2.10	2.77	3.55	4.70	5.96	**25yr**	4.16	5.73	6.72	7.86	8.75	**25yr**
50yr	0.48	0.74	0.92	1.32	1.77	2.17	**50yr**	1.53	2.12	2.35	3.09	3.95	5.30	6.90	**50yr**	4.69	6.63	7.83	9.14	10.11	**50yr**
100yr	0.54	0.81	1.02	1.47	2.02	2.48	**100yr**	1.74	2.42	2.63	3.44	4.38	5.95	7.98	**100yr**	5.27	7.67	9.13	10.64	11.67	**100yr**
200yr	0.60	0.90	1.14	1.65	2.29	2.82	**200yr**	1.98	2.76	2.94	3.81	4.84	6.66	9.23	**200yr**	5.90	8.88	10.65	12.39	13.50	**200yr**
500yr	0.69	1.03	1.33	1.93	2.74	3.38	**500yr**	2.36	3.30	3.41	4.36	5.53	7.74	11.19	**500yr**	6.85	10.76	13.05	15.19	16.35	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.54	0.72	0.89	1.08	**1yr**	0.77	1.06	1.26	1.74	2.21	3.00	3.15	**1yr**	2.66	3.03	3.59	4.38	5.06	**1yr**
2yr	0.34	0.52	0.64	0.86	1.06	1.27	**2yr**	0.92	1.24	1.48	1.96	2.51	3.44	3.70	**2yr**	3.04	3.55	4.08	4.84	5.65	**2yr**
5yr	0.40	0.61	0.76	1.05	1.33	1.62	**5yr**	1.15	1.58	1.88	2.53	3.24	4.34	4.95	**5yr**	3.84	4.76	5.38	6.36	7.14	**5yr**
10yr	0.47	0.72	0.89	1.24	1.60	1.97	**10yr**	1.38	1.93	2.27	3.10	3.93	5.35	6.17	**10yr**	4.73	5.94	6.77	7.82	8.73	**10yr**
25yr	0.57	0.87	1.08	1.55	2.04	2.56	**25yr**	1.76	2.50	2.94	4.05	5.11	7.84	8.28	**25yr**	6.94	7.97	9.05	10.30	11.37	**25yr**
50yr	0.67	1.01	1.26	1.82	2.44	3.11	**50yr**	2.11	3.04	3.58	4.97	6.26	9.83	10.37	**50yr**	8.70	9.97	11.29	12.67	13.91	**50yr**
100yr	0.78	1.18	1.48	2.14	2.94	3.78	**100yr**	2.53	3.70	4.35	6.12	7.67	12.31	12.97	**100yr**	10.90	12.47	14.08	15.61	17.02	**100yr**
200yr	0.91	1.38	1.74	2.52	3.52	4.61	**200yr**	3.04	4.51	5.30	7.53	9.41	15.47	16.25	**200yr**	13.69	15.63	17.57	19.22	20.83	**200yr**
500yr	1.13	1.68	2.17	3.15	4.48	5.98	**500yr**	3.86	5.85	6.88	9.94	12.35	20.92	21.89	**500yr**	18.51	21.05	23.56	25.32	27.23	**500yr**

Powered by ACIS Northeast Regional Climate Center

United States Department of Agriculture

NRCS

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 Rockingham County, New Hampshire

September 11, 2024

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 (https://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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Contents

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 Scale: 1:3,850 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

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

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 26, Aug 22, 2023

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
299	Udorthents, smoothed	7.6	45.1%
314A	Pipestone sand, 0 to 5 percent slopes	0.8	4.8%
495	Natchaug mucky peat, 0 to 2 percent slopes	0.7	4.5%
510B	Hoosic gravelly fine sandy loam, 3 to 8 percent slopes	1.4	8.5%
599	Urban land-Hoosic complex, 3 to 15 percent slopes	0.8	4.7%
699	Urban land	5.4	32.4%
Totals for Area of Interest		**16.7**	**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.

Rockingham County, New Hampshire

299—Udorthents, smoothed

Map Unit Setting

National map unit symbol: 9cmt
Elevation: 0 to 840 feet
Mean annual precipitation: 44 to 49 inches
Mean annual air temperature: 48 degrees F
Frost-free period: 155 to 165 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Properties and qualities

Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

314A—Pipestone sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 9cn2
Elevation: 0 to 2,100 feet
Mean annual precipitation: 28 to 55 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 100 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Pipestone and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pipestone

Setting

Landform: Outwash terraces

Typical profile

H1 - 0 to 6 inches: sand
H2 - 6 to 33 inches: sand
H3 - 33 to 60 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F144AY027MA - Moist Sandy Outwash
Hydric soil rating: Yes

Minor Components

Chocorua

Percent of map unit: 5 percent
Landform: Bogs
Hydric soil rating: Yes

Not named wet

Percent of map unit: 5 percent
Landform: Outwash terraces
Hydric soil rating: Yes

Squamscott

Percent of map unit: 5 percent
Landform: Marine terraces
Hydric soil rating: Yes

Scarboro

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Deerfield

Percent of map unit: 5 percent
Hydric soil rating: No

495—Natchaug mucky peat, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2w691
Elevation: 0 to 910 feet
Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 145 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Natchaug and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Natchaug

Setting

Landform: Depressions, depressions, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Moderately decomposed organic material over loamy glaciofluvial deposits and/or loamy glaciolacustrine deposits and/or loamy till

Typical profile

Oe1 - 0 to 12 inches: mucky peat
Oe2 - 12 to 31 inches: mucky peat
2Cg1 - 31 to 39 inches: silt loam
2Cg2 - 39 to 79 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 14.17 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 14.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w
Hydrologic Soil Group: B/D
Ecological site: F144AY042NY - Semi-Rich Organic Wetlands
Hydric soil rating: Yes

Minor Components

Walpole

Percent of map unit: 4 percent
Landform: Outwash terraces, depressions, outwash plains, depressions, deltas
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Scarboro

Percent of map unit: 4 percent

Landform: Outwash deltas, drainageways, outwash terraces, depressions
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Maybid

Percent of map unit: 2 percent
Landform: Depressions, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

510B—Hoosic gravelly fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9cp4
Elevation: 100 to 1,100 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 190 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hoosic and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hoosic

Setting

Parent material: Outwash

Typical profile

H1 - 0 to 8 inches: gravelly fine sandy loam
H2 - 8 to 15 inches: very gravelly fine sandy loam
H3 - 15 to 60 inches: very gravelly coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Not named

Percent of map unit: 10 percent
Hydric soil rating: No

599—Urban land-Hoosic complex, 3 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9cpg
Elevation: 90 to 1,100 feet
Mean annual precipitation: 30 to 55 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 120 to 190 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 55 percent
Hoosic and similar soils: 25 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hoosic

Setting

Parent material: Outwash

Typical profile

H1 - 0 to 8 inches: gravelly fine sandy loam
H2 - 8 to 15 inches: very gravelly fine sandy loam
H3 - 15 to 60 inches: very gravelly coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Udorthents

Percent of map unit: 4 percent
Hydric soil rating: No

Scitico

Percent of map unit: 4 percent
Landform: Marine terraces
Hydric soil rating: Yes

Eldridge

Percent of map unit: 4 percent
Hydric soil rating: No

Squamscott

Percent of map unit: 4 percent
Landform: Marine terraces
Hydric soil rating: Yes

Newfields

Percent of map unit: 4 percent
Hydric soil rating: No

699—Urban land

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Not named

Percent of map unit: 15 percent
Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Physical Properties

Soil Physical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

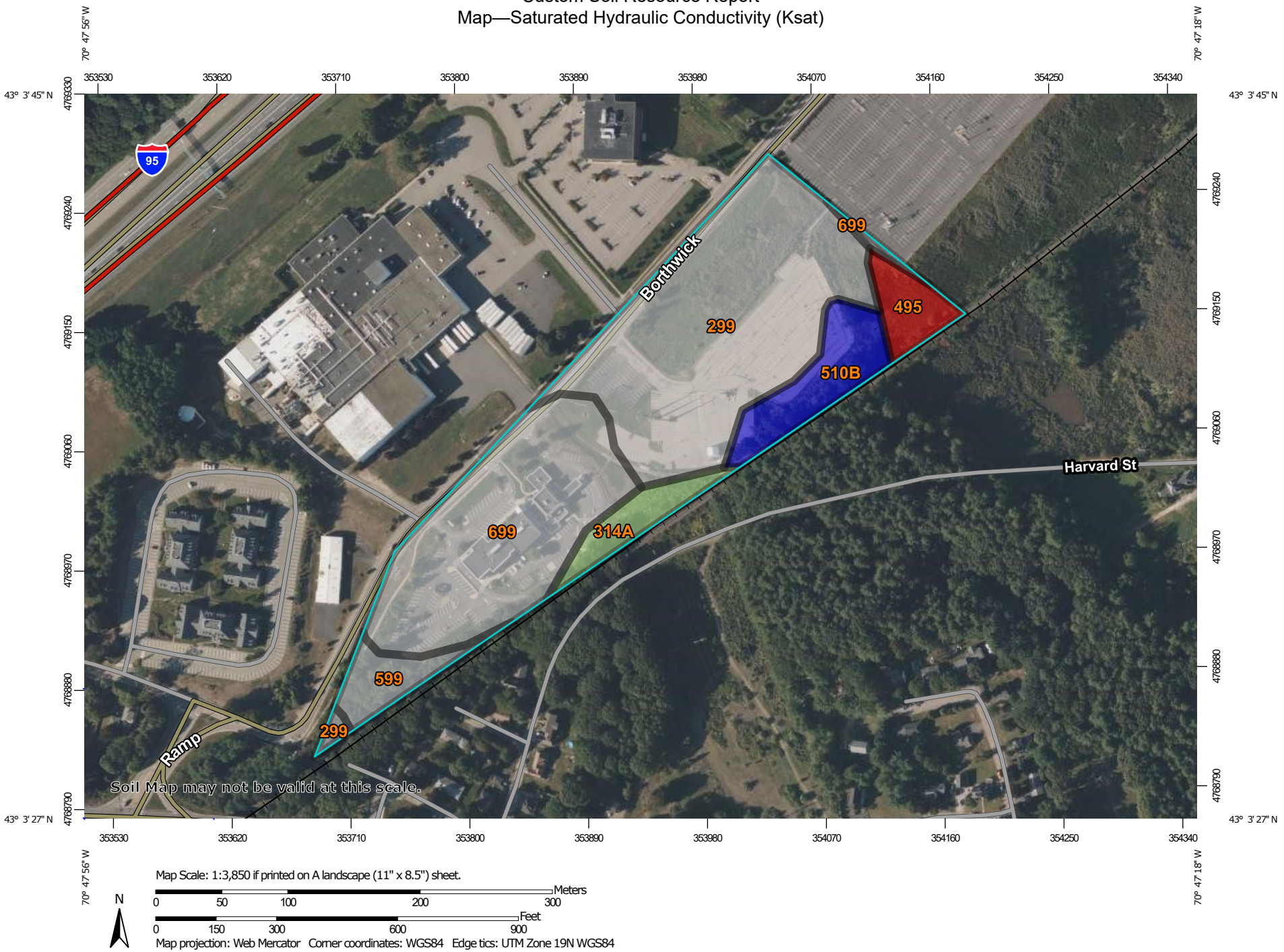
Saturated Hydraulic Conductivity (Ksat)

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Custom Soil Resource Report
Map—Saturated Hydraulic Conductivity (Ksat)



Map Scale: 1:3,850 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

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

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

<= 9.1000

> 9.1000 and <= 91.7222

> 91.7222 and <= 116.9811

Not rated or not available

Soil Rating Lines

<= 9.1000

> 9.1000 and <= 91.7222

> 91.7222 and <= 116.9811

Not rated or not available

Soil Rating Points

<= 9.1000

> 9.1000 and <= 91.7222

> 91.7222 and <= 116.9811

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

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

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 26, Aug 22, 2023

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

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.

Table—Saturated Hydraulic Conductivity (Ksat)

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
299	Udorthents, smoothed		7.6	45.1%
314A	Pipestone sand, 0 to 5 percent slopes	91.7222	0.8	4.8%
495	Natchaug mucky peat, 0 to 2 percent slopes	9.1000	0.7	4.5%
510B	Hoosic gravelly fine sandy loam, 3 to 8 percent slopes	116.9811	1.4	8.5%
599	Urban land-Hoosic complex, 3 to 15 percent slopes		0.8	4.7%
699	Urban land		5.4	32.4%
Totals for Area of Interest			**16.7**	**100.0%**

Rating Options—Saturated Hydraulic Conductivity (Ksat)

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 100

Units of Measure: Centimeters

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

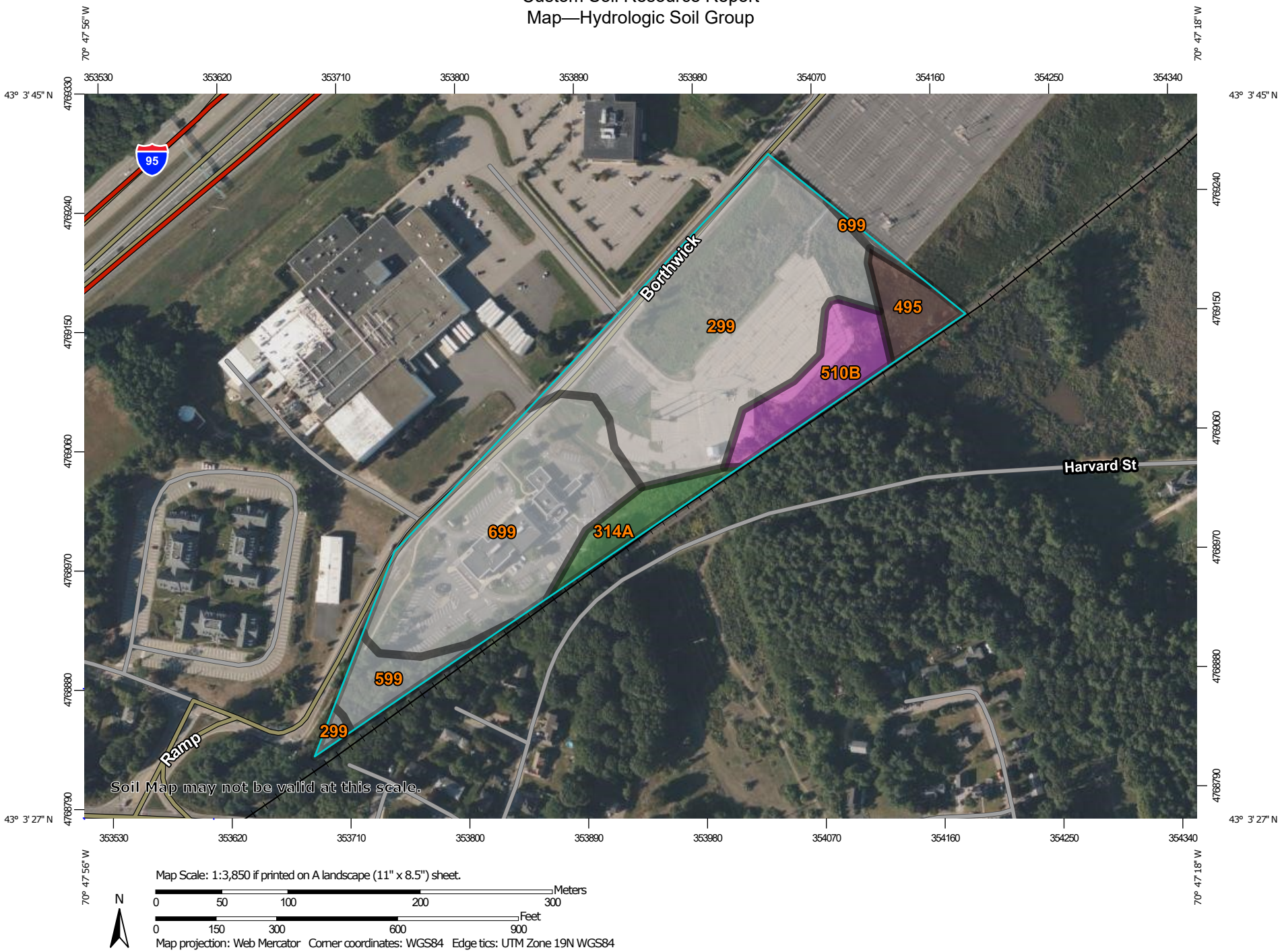
Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report
Map—Hydrologic Soil Group



Map Scale: 1:3,850 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

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

MAP LEGEND

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

Soils

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

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

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

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
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- Aerial Photography

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Table—Hydrologic Soil Group

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299	Udorthents, smoothed		7.6	45.1%
314A	Pipestone sand, 0 to 5 percent slopes	A/D	0.8	4.8%
495	Natchaug mucky peat, 0 to 2 percent slopes	B/D	0.7	4.5%
510B	Hoosic gravelly fine sandy loam, 3 to 8 percent slopes	A	1.4	8.5%
599	Urban land-Hoosic complex, 3 to 15 percent slopes		0.8	4.7%
699	Urban land		5.4	32.4%
Totals for Area of Interest			**16.7**	**100.0%**

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

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DRAFT 5 – 10-31-2024

CITY OF PORTSMOUTH

LEGAL DEPARTMENT

MEMORANDUM

DATE: November 4, 2024~~October 31, 2024~~

TO: PORTSMOUTH PLANNING BOARD

FROM: PETER BRITZ, DIRECTOR – PLANNING AND SUSTAINABILITY
AND ROBERT P. SULLIVAN, OF COUNSEL

RE: OPEN SPACE IN OSPREY LANDING

Some months ago, we were approached by John C. Madden, the principal of the entities which redeveloped the former Mariner's Village into the current Osprey Landing over 20 years ago. Mr. Madden has a long history of successful cooperation with the City on a variety of matters related to Osprey Landing. He now wishes to know if the City would be interested in serving in the role of preserving a lot located near the entrance of Osprey Landing from Market Street for open space purposes. We envisioned that the land would essentially serve as a public park.

While the City anticipated that the lot in question would be conveyed to the City subject to use restrictions, such as those in Prescott Park, Mr. Madden for his own business-related reasons prefers an alternate approach. His desire is to maintain ownership of the lot but provide the City with an enforceable right to compel the compliance with certain listed restrictions aimed at protecting open space. Ultimately, negotiations produced the deed and set of restrictions which are attached to this memo. Also attached is a lot plan showing the land in question.

If accepted by the City Council, executed and recorded, the effect of the deed from Bantry Bay Associates, L.L.C., to Inishmaan Associates Limited Partnership (two entities controlled by Mr. Madden) subject to the restrictive covenant agreement between Bantry Bay Associates, L.L.C. in the City of Portsmouth would create the open space which Mr. Madden desires to protect and allow its use for the public. The property would be in the ownership of Inishmaan, but the City can assure that it remain open space.

The use of the property in the future shall be maintained as open space available for recreational activities such as walking, hiking, organized activities recreational activities and non-motorized activities that do not materially alter the landscape nor degrade environmental quality or involve commercial recreational use. Specifically prohibited on the property would be construction of permanent buildings or structures and temporary buildings except those used by the City in connection with events being conducted at the site. Use of the property for residential, commercial or industrial purposes would be prohibited. The list of restrictions is located on page one of the attached Restrictive Covenant Agreement.

The City would have the right, but not the obligation, to enforce the provisions contained in the list of restrictions on future use of the land.

The City would also have the rights, but not the obligation to maintain the property in a manner suitable for park use purposes, if that becomes necessary.

We feel that the maintenance of the property as open space is of value, not only to the residents of Osprey Landing, but also to the City as a whole. We also believe that the obligations imposed upon the City in enforcing the restrictions would be minimal.

Therefore, because the City Council will be required to secure the recommendation of the Planning Board prior to accepting the arrangement proposed by Mr. Madden, that the following motion would be appropriate for adoption by the Planning Board, if the Board is in agreement.

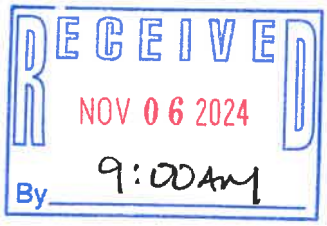
MOVED: That the Planning Board recommend to the City Council that it approve the acceptance, execution and recording of the terms of a restrictive covenant agreement relating to Lot 2-1950 on a certain plan entitled, “Resubdivision Plan Osprey Landing, Shearwater Drive/Sanderling Way/Osprey Drive, Portsmouth, New Hampshire,” by Costello, Lomasney & de Napoli, Inc., dated February 1999, and recorded in the Rockingham County Registry of Deeds as Plan No. D-27099, all in substantial conformance to those as presented to the Planning Board this evening.

cc: Karen S. Conard, City Manager
John C. Madden
John Sullivan, Esquire

· HOEFLE, PHOENIX, GORMLEY & ROBERTS, PLLC
ATTORNEYS AT LAW
127 Parrott Avenue | Portsmouth, NH, 03801
Telephone: 603.436.0666 | Facsimile: 603.431.0879 | www.hpgrlaw.com

November 6, 2024

HAND DELIVERED



Kelli Barnaby, City Clerk
Peter Stith, Principal Planner
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for Easement
Jonathan and Paige Trace
Joshua Wentworth House
27 Hancock Street, Portsmouth NH 03801

Dear Ms. Barnaby and Mr. Stith:

On behalf of Jonathan and Paige Trace ("Trace"), originals of this letter and exhibits are provided to each of you, requesting assistance/approval of the City Council and Planning Board respectively, for City Council execution of a minor easement requested as a result of a very slight encroachment of the Trace home into the Hancock Street public right-of-way.

EXHIBITS

1. 8/16/06 Subdivision Plan-17 Hancock St. Owner Strawbery Banke, Inc., by James Verra and Associates, Inc. Rockingham County Registry of Deeds Plan Number D-34172.
2. 7/13/06 Letter, City Attorney Robert P Sullivan to Lawrence Yerdon, President, Strawbery Banke.
3. Corrective Deed, Strawbery Banke, Inc., to Jonathan Trace and Susan Paige Trace recorded Rockingham County Registry of Deeds 11/19/08, Book 4963 Page 2254
4. Tax Card, 27 Hancock Street, Tax Map 103 Lot 100
5. City of Portsmouth, NH Ordinances, Article VI: Referrals to Planning Board, Sections 11.601, 11.602
6. Proposed Encroachment Easement Deed

The Joshua Wentworth House is a historic Portsmouth home, formerly part of "Strawbery Banke." The home was relocated to the existing lot many years ago. In or about 2006, Strawbery Banke made the decision to convey the property to private owners. In furtherance of that

decision, the lot was surveyed as part of a subdivision plan. (**Exhibit 1**). It was then discovered that very small portions of the front corners of the home, together with the entry steps, very slightly encroach into the Hancock Street right-of-way. *Id* . The minor encroachment was brought to the attention of City Attorney Robert Sullivan, who penned the July 13, 2006 letter to Strawbery Banke President Lawrence Yerdon, acknowledging that the house had been relocated to the present site in or about 1973. Noting that the situation was a "nominal encroachment," City Attorney Sullivan advised that "this is not a situation in which it would be appropriate for the city to take any action against either Strawbery Banke or the property" and that "the Joshua Wentworth house may remain as it is currently located on its lot without interference from the city." (**Exhibit 2**)

Upon the above facts and conditions, Strawbery Banke conveyed the property to Trace in 2007. Trace is now under agreement to convey the property. Movers and alternate living arrangements are imminent. Late last week, the buyer's legal representatives raised the encroachment as a title defect, deeming Attorney Sullivan's 2006 letter insufficient to remedy the defect. The buyer's position is that remedying the defect requires an easement from the City to permanently allow the minor encroachments to remain. As such, and given the imminency of the Trace's moving and new living arrangements, swift City Council approval and execution of an easement as proposed in **Exhibit 6** is respectfully requested.

The standard procedure for municipal actions relating to easements is a referral to the Planning Board for written review and report to the City Council at least 30 days before final action is taken by the Council. (**Exhibit 5** Sec.11.602:A (1)). Following such report, the City Council typically has 60 days in which to take action. *Id* Sec. 11.602:B. The lengthy standard time frame places the Trace's imminent sale and moving efforts at risk, and the claimed title defect without resolution via an easement could place sale at any time at risk.

We believe and therefore submit that there is a path for City Council approval and execution without the standard lengthy timeframe set forth above. **Exhibit 5**, Section 11.602:C provides:

> The failure to refer a matter listed herein to the planning board shall not affect the legal validity or force of any action related thereto if the planning board waives such referral.

Given: the history of this property as formerly part of Strawbery Banke; the "nominal encroachment" into the right of way which has existed since approximately 1973; Attorney Sullivan's commitment in July, 2006 that the home may remain as currently located, upon which Trace relied when purchasing the property in 2007; and the current and future potential for title defect claims absent an easement, we believe that Planning Board waiver of the requirement for review and/or compliance with Ordinance Section 11.602: A. and B. is entirely appropriate. Based upon the foregoing, we make the following request of the Planning Board and City Council in order to move this matter to conclusion as quickly as possible:

1. There is a regular City Council meeting scheduled for November 18, 2024, and a Planning Board meeting scheduled for November 21, 2024. We request inclusion on the agendas for both the City Council and Planning Board. Our proposal is to obtain City Council approval for the proposed easement on November 18, conditioned upon either waiver or recommendation by the Planning Board on November 21.

We would be happy to meet with any city representatives as deemed appropriate in advance of the foregoing.

Respectfully submitted,

R. Timothy Phoenix

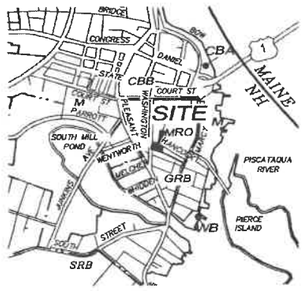
Enclosures

cc Clients
City Attorney
City Manager
Adam Dean
Matt Shoemaker, Esq.

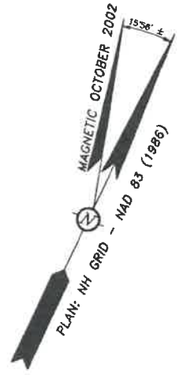
2006 SEP 22 AM 9:25 058922

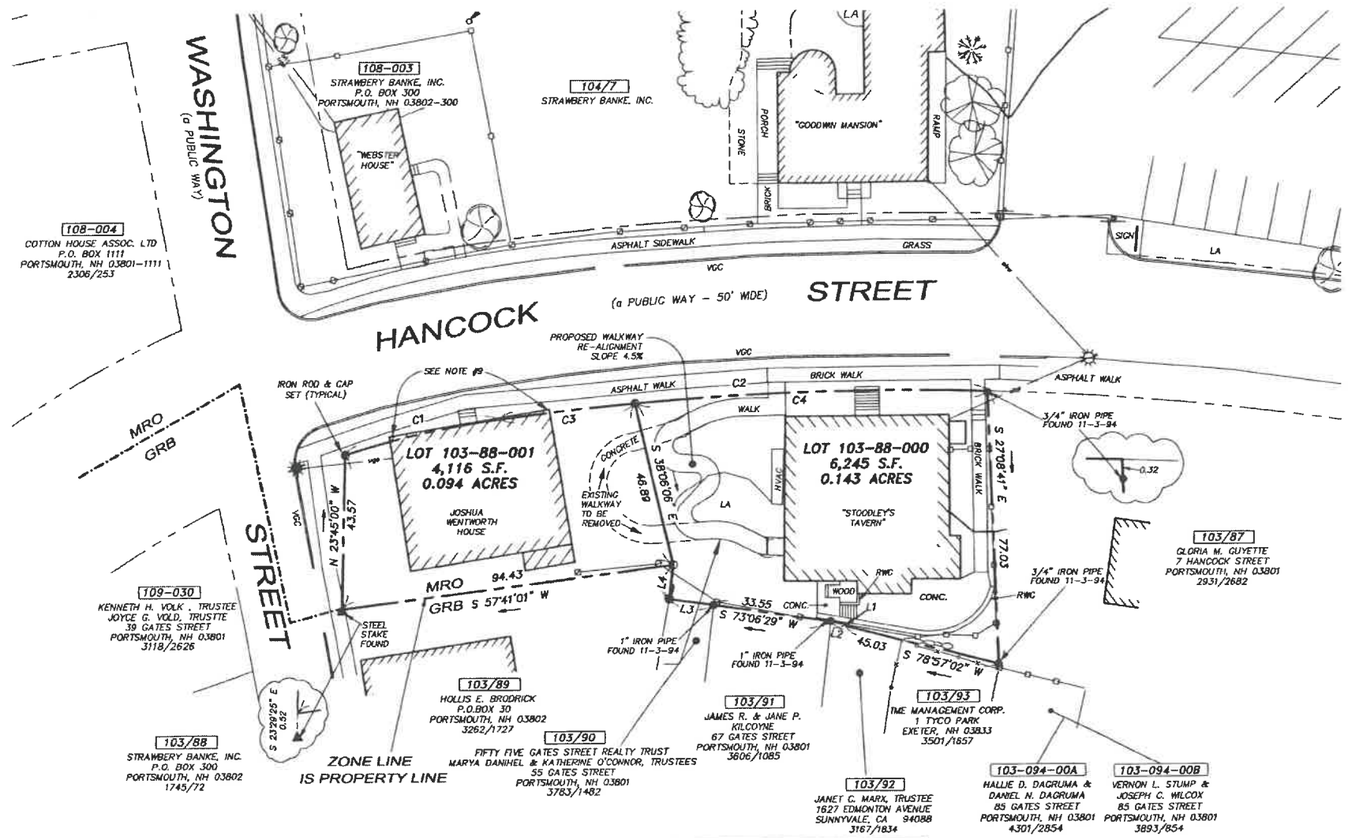
EXHIBIT

tabbies



LOCUS
(SCALE: 1"=1000±)



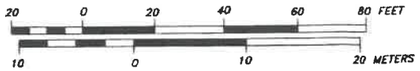


LINE	BEARING	DISTANCE
L1	N 25°37'34" W	0.75
L2	S 73°45'55" W	4.67
L3	S 73°28'25" W	12.19
L4	N 18°08'09" W	9.66

CURVE	RADIUS	DELTA	LENGTH	CHORD	DIST
C1	250.00	10°11'39"	44.48	S 52°13'32" W	44.42
C2	850.00	9°22'12"	139.01	S 62°00'38" W	138.85
C3	850.00	2°37'46"	39.01	S 58°38'25" W	39.00
C4	850.00	6°44'26"	100.00	S 63°19'31" W	99.94

LEGEND:

- ○ ..... IRON PIPE
- ◑ ..... IRON ROD
- —o—o— ..... WOOD FENCE
- ●—x—● ..... STEEL POST & WIRE FENCE
- ⌀ ..... UTILITY POLE
- ☼ ..... LIGHT POLE
- ⌀ ..... UTILITY POLE W/TRANSFORMER
- ◁◑ ..... GUY
- —ohw— ..... OVERHEAD WIRES
- RCRD ..... ROCKINGHAM COUNTY REGISTRY OF DEEDS
- VGC ..... VERTICAL FACED GRANITE CURB
- LA ..... LANDSCAPED AREA



NOTES:

1. OWNER OF RECORD..... STRAWBERY BANKE, INC.
   MAILING ADDRESS..... P.O. BOX 300, PORTSMOUTH, NH 03802-0300
   DEED REFERENCE..... 1745/72
   TAX SHEET / LOT..... 103-88
   TOTAL PARCEL AREA..... 10,361 S.F. OR 0.238 ACRES
2. ZONED:..... MIXED RESIDENTIAL OFFICE
   MINIMUM LOT AREA 7,500 S.F.
   FRONTAGE..... 100'
   OVERLAY DISTRICT: HISTORIC DISTRICT A
   FRONT YARD SETBACK.... 5'
   SIDE YARD SETBACK.....10'
   REAR YARD SETBACK.....15'
3. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.
4. THE RELATIVE ERROR OF CLOSURE WAS LESS THAN 1 FOOT IN 15,000 FEET.
5. HORIZONTAL DATUM: NAD 83 (1986) NH STATE PLANE VIA GPS OBSERVATION. PRIMARY BENCHMARK: NHDOT DISK 379-0150.
6. ELEVATION DATUM: NGVD 1929. PRIMARY BENCHMARK NHDOT DISK 379-0430 (USGS V-31-1943).
7. THIS PARCEL DOES NOT LIE IN THE 1% ANNUAL CHANCE FLOOD (100 YEAR FLOOD) ZONE. AS SHOWN ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP 33015C0259E, EFFECTIVE DATE, MAY 17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
8. ON JUNE 23, 2006, THE BOARD OF ADJUSTMENT GRANTED A VARIANCE FROM ARTICLE III, SECTION 10-303(A) TO ALLOW AN EXISTING 10,361 S.F. LOT WITH TWO BUILDINGS TO BE SUBDIVIDED WITH : a) THE JOSHUA WENTWORTH HOUSE HAVING 4,116 S.F. AND 44.5% BUILDING COVERAGE, AND b) STOODLEY'S TAVERN HAVING 6,245 S.F. WHERE 7,500 S.F. IS THE MINIMUM REQUIRED FOR EACH LOT AND 40% IS THE MAXIMUM BUIDING COVERAGE.
9. SEE LETTER OF JULY 13, 2006 FROM ROBERT P. SULLIVAN, CITY ATTORNEY TO LAWRENCE YERDON, PRESIDENT OF STRAWBERY BANKE, INC., IN WHICH HE STATES THE FOLLOWING: "PLANNING DEPARTMENT DIRECTOR DAVID HOLDEN AN I HAVE EXAMINED THE CIRCUMSTANCES SURROUNDING THE CREATION OF THE ENCROACHMENT...APPARENTLY CREATED INADVERTENTLY WHEN THAT HISTORIC BUILDING WAS RELOCATED TO ITS PRESENT SITE, 33 YEARS AGO. WE HAVE DETERMINED THAT THIS IS NOT A SITUATION IN WHICH IT WOULD BE APPROPRIATE FOR THE CITY TO TAKE ANY ACTION AGAINST EITHER STRAWBERY BANKE OR THE PROPERTY."

REFERENCE PLANS:

1. DISPOSITION MAP, PORTSMOUTH HOUSING AUTHORITY, PORTSMOUTH, NH, BY GEORGE C. BENJAMIN, C.E. REVISED JAN. 23, 1965, RCRD # 522.
2. BOUNDARY PLAN FOR STRAWBERY BANKE, INC., HANCOCK STREET, PORTSMOUTH, N.H., DATED 11/11/94, RCRD D-23909.
3. PLAN OF LAND, NO. 33-35 RICHMOND STREET, PORTSMOUTH, NH, FOR TUBBAR, INC., FILE NO. 2236, PLAN NO. 4905, DATED JULY 1983 BY JOHN W. DURGIN ASSOC., INC.
4. SUSAN J. WENTWORTH EST., PORTSMOUTH, N.H., FILE NO. 2236, DATED, MARCH 1940, BY JOHN W. DURGIN, C.E.
5. EXISTING CONDITIONS PLAN, STRAWBERY BANKE, PORTSMOUTH, NEW HAMPSHIRE, FOR STRAWBERY BANKE, DATED 10/10/02, REV. 10-29-02, PLAN NO. 21496, BY JAMES VERRA AND ASSOCIATES, INC.

APPROVED FOR THE RECORD:

CHAIRMAN PORTSMOUTH PLANNING BOARD — DATE 9.13.06

RECEIVED
NOV 06 2024
By

D-34172

REV. NO.	DATE	DESCRIPTION	APPR'D

SUBDIVISION PLAN
17 HANCOCK STREET
ASSESSORS PARCEL NO. 103-088-000
PORTSMOUTH, NEW HAMPSHIRE
Owner: STRAWBERY BANKE, INC.

JAMES VERRA and ASSOCIATES, INC.
101 SHATTUCK WAY, SUITE 8
NEWINGTON, NEW HAMPSHIRE 03801-7876
(603)436-3557

HRM — PROJECT MGR
HRM — DRAWN BY

DATE:	8-16-2006
JOB NO:	21496
SCALE:	1" = 20'
DWG NAME:	21496-2
PLAN NO:	21496-2
SHEET:	1 OF 1

CITY OF PORTSMOUTH

LEGAL DEPARTMENT

Robert P. Sullivan, City Attorney – 603-610-7204 (Direct Dial)
Kathleen M. Dwyer, Assistant City Attorney – 603-427-1338 (Phone/Fax)
Suzanne M. Woodland, Assistant City Attorney - 603-610-7240 (Direct Dial)

EXHIBIT
tabbies
2

Municipal Complex
1 Junkins Avenue
Portsmouth, NH 03801
(603) 431-2000
(603) 427-1577 (FAX)

July 13, 2006

RECEIVED
NOV 06 2024
By

Lawrence Yerdon, President
Strawbery Banke, Inc.
P.O. Box 300
Portsmouth, NH 03801

RE: Joshua Wentworth House

Dear Mr. Yerdon,

This will advise that the City has been made aware a nominal encroachment into the municipal right of way which exists in connection with the Joshua Wentworth House at the corner of Hancock and Washington Street (see attached exhibit).

Planning Department Director David Holden and I have examined the circumstances surrounding the creation of this situation, including the fact that the encroachment was apparently created inadvertently when that historic building was relocated to its present site, 33 years ago. We have determined that this is not a situation in which it would be appropriate for the City to take any action against either Strawbery Banke or the property.

Accordingly, please accept this letter as the City's representation that the Joshua Wentworth House may remain as it is currently located on its lot without interference from the City.

Sincerely,

Robert P. Sullivan
City Attorney

RPS/rao
enclosure
cc: David M. Holden, Planning Department Director
Lucy Tillman, Chief Planner
Peter J. Loughlin, Esq.
Rodney Rowland, Director of Special Projects, Strawbery Banke, Inc.

h:\rps\planning\joshua wentworth house encroachment ltr

EXHIBIT
3

After recording return to:

* RE-RECORDED TO INSERT THE CORRECT TENANCY OF GRANTEE, WHICH WAS OMITTED, IN ERROR, UPON THE ORIGINAL RECORDING.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF REVENUE ADMINISTRATION
REAL ESTATE TRANSFER TAX
4 THOUSAND 5 HUNDRED AND XX DOLLARS
12/2007 853237 $4500.00
VOID IF ALTERED

BK 4963 PG 2254

069113

2007 DEC 20 AM 10:57
ROCKINGHAM COUNTY
REGISTRY OF DEEDS

2008 NOV 19 PM 3:29
Re-Recording
053706
ROCKINGHAM COUNTY
REGISTRY OF DEEDS

CORRECTIVE* WARRANTY DEED

JOSHUA WENTWORTH-WINEBAUM HOUSE
HANCOCK STREET
PORTSMOUTH, NEW HAMPSHIRE

STRAWBERY BANKE, INC. (the "Grantor" or "Strawbery Banke"), a non-profit New Hampshire corporation with a principal place of business at 420 Court Street, Portsmouth, Rockingham County, State of New Hampshire 03108, for consideration paid, grants to Jonathan Trace and Susan Paige Trace,* of 19 Hancock Street, Portsmouth, New Hampshire 03801 (the "Grantee"), with WARRANTY COVENANTS, the land and building located at 19 Hancock Street, Portsmouth, Rockingham County, State of New Hampshire, bounded and described as follows:

*as joint tenants with rights of survivorship,

A certain tract or parcel of land and the buildings thereon lying southerly of Hancock Street, a public way, and easterly of Washington Street, a public way, in the City of Portsmouth, County of Rockingham, State of New Hampshire, said tract being shown on plan entitled "Subdivision Plan, 17 Hancock Street, Assessor's Parcel No. 103-088-000, Portsmouth, New Hampshire, Owner: Strawbery Banke, Inc..", dated 8/16/2006, recorded at the Rockingham County Registry of Deeds on 9/22/06 as Plan D-34172, said tract being shown as Lot 103-88-001 thereon, and now designated by the City of Portsmouth Assessor's office as Lot 103-0100-0000, being more particularly bounded and described as follows:

Beginning at an iron rod set at the northeast corner of the above-described parcel at the northwest corner of other land of Strawbery Banke, Inc.;

Thence by other land of said Strawbery Banke, Inc. South 38°06"06" East, NH grid azimuth – NAD 83 (1986) 46.89 feet to an iron rod set at land of Hollis E. Broderick;

Thence by land of said Broderick South 57°41'01" West 94.43 feet to a point on the easterly sideline of Washington Street, said point bears North 23°29'25" West 0.52 feet from a steel stake found;

Thence by the sideline of said Washington Street North 23°45'00" West 43.57 feet to an iron rod set on the southerly side of said Hancock Street:

Thence by said Hancock Street on the following courses:

Easterly by the arc of a non-tangent curve, concave southerly, having a radius of 250.00 feet, an arc length of 44.48 feet, the chord of said curve bears North 52°13'32" East 44.42 feet to a point of compound curvature;

Easterly by arc of a curve, concave southerly, having a radius of 850.00 feet, an arc length of 39.01 feet to the point of beginning;

Said tract contains 4,116 square feet, more or less.

Meaning and intending to convey a portion of the premises conveyed to the Grantor by Quitclaim Deed of the Portsmouth Housing Authority recorded at the Rockingham County Registry of Deeds at Book 1745, Page 72.

The property herein conveyed is SUBJECT TO the preservation restrictions attached hereto as Exhibit I and made a part hereof (the "Preservation Restrictions") which shall run with the land, and be binding upon the Grantee, its heirs, successors and assigns. The property conveyed herein is further SUBJECT TO the following:

1. Any taxes which are not yet due and payable.

2. The state of facts as shown and noted on plan of land entitled, "Subdivision Plan 17 Hancock Street assessors Parcel No. 103-088-000 Portsmouth, New Hampshire Owner: Strawbery Banke, Inc.," prepared by James Verra and Associates, Inc., dated 8-16-2006, recorded in Rockingham County Registry of Deeds as Plan No. D-34172, including, without limitation, Notes 8 and 9 on said Plan.

3. The state of facts as shown and noted on plan of land entitled, "Portsmouth Housing Authority City of Portsmouth Rockingham County New Hampshire Project No. NH R-1 Marcy – Washington Streets Project Plan Area," dated March 1, 1959, recorded in Rockingham County Registry of Deeds as Plan #77 (herein the "Redevelopment Plan").

4. Terms and conditions, as they pertain to Parcel 5 only, of a certain "Urban Renewal Plan As The Redevelopment Plan" of the Portsmouth Housing Authority, dated August 3, 1959, recorded in Rockingham County Registry of Deeds at Book 1687, Page 033.

5. Covenants, as they pertain to Parcel 5 only, as set forth in Quitclaim Deed of Portsmouth Housing Authority to Strawbery Banke, Inc., dated September 24, 1964, recorded in Rockingham County Registry of Deeds at Book 1745, Page 072.

6. Terms, covenants and conditions, as they pertain to Parcel 5 only, as set forth in a certain Disposition Contract by and between the Portsmouth Housing Authority and Strawbery Banke, Inc., dated August 14, 1964 and recorded in Rockingham County Registry of Deeds at Book 1753, Page 200.

Executed this 19th day of December, 2007.

STRAWBERY BANKE, INC.

By: Lawrence Yerdon
Name: Lawrence Yerdon
Title: President

STATE OF NEW HAMPSHIRE
COUNTY OF ROCKINGHAM

The foregoing instrument was acknowledged before me this 19 day of December, 2007 by Lawrence Yerdon, President of Strawbery Banke, Inc., on behalf of the corporation.

Notary Public
My commission expires: 9/8/09

CHRISTINE A. FOLEY NOTARY PUBLIC NEW HAMPSHIRE

The undersigned Grantee does hereby acknowledge and agree to the terms of the Preservation Restrictions attached hereto and made a part hereof.

Jonathan Trace

Susan Paige Trace

STATE OF NEW HAMPSHIRE
COUNTY OF ROCKINGHAM

The foregoing instrument was acknowledged before me this 19 day of December, 2007 by Jonathan Trace.

Notary Public
My commission expires: 9/8/09

CHRISTINE A. FOLEY NOTARY PUBLIC NEW HAMPSHIRE

STATE OF NEW HAMPSHIRE
COUNTY OF ROCKINGHAM

The foregoing instrument was acknowledged before me this 19 day of December, 2007 by Susan Paige Trace.

Notary Public
My commission expires: 9/8/09

CHRISTINE A. FOLEY NOTARY PUBLIC NEW HAMPSHIRE

EXHIBIT I

PRESERVATION RESTRICTIONS

The premises subject to these Preservation Restrictions consists of the approximately 4,116 square feet of land on the corner of Washington Street and Hancock Street, in the City of Portsmouth, County of Rockingham, State of New Hampshire, said tract being shown on plan entitled "Subdivision Plan, 17 Hancock Street, Assessor's Parcel No. 103-088-000, Portsmouth, New Hampshire, Owner: Strawbery Banke, Inc.." dated 8/16/2006, recorded at the Rockingham County Registry of Deeds 9/22/06 as Plan D-34172, said tract being shown as Lot 103-88-001 thereon, and now designated by the Assessor's office as Lot 0103-0100-0000, and the building on the Plan labeled as the Joshua Wentworth House (the "Wentworth-Winebaum House" and sometimes referred to collectively with the land as described above as the "Premises").

STATEMENTS OF GENERAL INTENT

The following Statements of General Intent and Purpose shall apply to the Preservation Restrictions:

1. The Wentworth-Winebaum House is architecturally and historically significant, and is worthy of rehabilitation. Evidence of its construction as a small four room house is preserved, although the existing appearance and configuration of the Wentworth-Winebaum House dates to its substantial enlargement around 1770. The majority of the building's eighteenth-century century interior architectural features are intact, including woodwork likely derived from the *Designs of Indigo Jones* (published by William Kent in 1727) and representing the best of Portsmouth's pre-revolutionary craftsmanship as well as some of the most significant American interpretations of English architectural fashion during the Georgian period. Originally located on Hanover Street in Portsmouth, where it was recorded by the Historic American Building Survey (HABS) in 1937, the Wentworth-Winebaum House was donated to Strawbery Banke in1973.

2. The Wentworth-Winebaum House is an important example of eighteenth century Portsmouth, New Hampshire architecture and design. Original exterior and interior architectural and design features are preserved and shall be maintained.

3. In exercising any authority created by the Preservation Restrictions, including but not limited to review any alteration, repair, restoration, rehabilitation, maintenance, construction, or reconstruction of the Wentworth-Winebaum House or Premises, or to review casualty damage or approve reconstruction of the Wentworth-Winebaum House following casualty damage, Strawbery Bank shall apply the Secretary of the Interior's Standards for the Treatment of Historic Properties, Standards for Rehabilitation, (1995), as amended from time to time.

A. GRANTEE COVENANTS

1. The Grantee shall not, without the prior written approval of Strawbery Banke, which may be given or withheld in its sole discretion, undertake any activity which in any way alters the appearance, design, materials, workmanship or structural stability of the following architectural exterior and interior features of the Wentworth-Winebaum House:

   a. Roof massing and profile, including dormers;

   b. Chimneys, including any portion that is reconstructed above the roofline;

   c. Sidewalls, including but not limited to all doors and door frames, windows and window frames, shutters, clapboards, transoms, sidelights, external lighting fixtures, cornices, moldings and all other trim elements, and any porticos, entries or steps;

   d. Room configurations, in four north rooms and stairwell, including door locations, except that certain later partition walls may be removed with Strawbery Banke's prior review and written approval, pursuant to section 2(b) below;

   e. Woodwork, in four north rooms and stairwell, including but not limited to doors, door frames, window frames, moldings, paneling, cornices, casings, shutters, mantels, mantelpieces, baseboards, and all staircases elements; or

   f. Fireplaces, including but not limited to masonry masses, fireboxes, hearths and existing iron or brass fireplace accessories.

2. The Grantee shall:

   a. Maintain, and as necessary repair, the Premises in a state of good repair, including the interior and exterior architectural features of the Wentworth-Winebaum House.

   b. Present to Strawbery Banke, within six (6) months of the date of the Warranty Deed to which these Preservation Restrictions are a part, a comprehensive written plan and schedule describing proposed restoration, repair and renovation work to be done on the Wentworth-Winebaum House. Upon approval of such plan by Strawbery Banke in writing and within thirty (30) days of receipt of said proposed plan from Grantee, Grantee shall have two (2) years to complete those portions of the plan which Strawbery Banke has approved in writing.

3. The Grantee shall not:

a. Permit or allow to occur, either through positive action or neglect, demolition of the Wentworth-Winebaum House.

b. Permit or allow to occur, the relocation of the Wentworth-Winebaum House from its present location, unless such moving is required by a taking by eminent domain.

c. Permit or allow the installation of any antenna on the Wentworth-Winebaum House without, in each instance the prior written approval of Strawbery Banke, which may be given or withheld in its sole discretion.

d. Permit or allow the installation of signs or fences on the Premises without (i) obtaining the appropriate governmental approvals, if any, and (ii) providing reasonable prior written notice of the same, describing the same in reasonable detail, to Strawbery Banke.

B. GRANTEE'S RESERVED RIGHTS

The following activities may be undertaken by the Grantee without prior notice to, or approval of, Strawbery Banke:

1. Exterior and interior painting;

2. Re-shingling roof planes using wood shingle or architectural asphalt equivalent roof coverings;

3. Installation of window-mounted air conditioners, storm windows, storm doors or window or door screens;

4. Electrical re-wiring, provided that no electrical fixtures are embedded in or attached in any manner to protected woodwork in four north rooms and stairwell.

5. Interior plastering;

6. Interior wallpapering;

7. Replacement of broken glass window lights;

8. Replacement of existing plumbing lines and plumbing fixtures;

9. Planting of trees, shrubs, grass, and annual or perennial flowers and plants, subject to section E below;

10. Parking of automobiles; and

11. Placement of lawn, garden and play equipment, clotheslines, birdhouses, and other temporary objects or artifacts

C. USE

The use of the Wentworth-Winebaum House shall be restricted to a single-family dwelling, professional offices with one (1) dwelling unit, professional offices, or a bed-and-breakfast or inn operation provided the use is permitted by local building and zoning ordinances.

D. ADDITIONAL BUILDING

Additions may be attached to the Wentworth-Winebaum House and additional ancillary buildings will be allowed on the Premises, both subject to prior design review and written approval by Strawbery Banke. Said design review shall include but not be limited to location, size, design and materials. Strawbery Banke shall review the proposal for such work, and approve, disapprove, or approve with modifications the work in writing within thirty (30) days of receipt of same. Failure of Strawbery Banke to notify Grantee of approval, disapproval, or approval with modification within thirty (30 days) shall constitute approval.

E. TOPOGRAPHY; ARCHAEOLOGY

Any digging in the ground deeper than 2 feet or any removal of soil for any reason, including placing of fences, posts, or planting of shrubs or trees, or the repair of the Wentworth-Winebaum House, provided that the Preservation Restrictions shall not apply to areas previously explored archaeologically by Strawbery Banke, within the depth of the previous exploration. Requests for approval for digging or excavation shall be made to Strawbery Banke at least one week in advance, due to the possible presence of material of archaeological interest. Strawbery Banke shall arrange and pay for any archaeological work it desires in connection with any such excavation. Any artifacts discovered shall remain the property of the Grantee, however, if Strawbery Banke desires to study such artifacts, it may retain them for up to one (1) year, and if Grantee wishes to sell or otherwise convey any such artifacts, it shall give Strawbery Banke first option to accept or purchase them.

F. SUBDIVISION; LEASE

The Premises conveyed herein shall not be subdivided for conveyance or lease, or any other purpose, provided that this section shall not be deemed to prohibit the leasing of the Premises for uses permitted by the Preservation Restrictions. The definition of "to subdivide" shall include to cause any portion of the premises less than the entirety thereof to be divided, conveyed or made conveyable (including as a condominium) as a distinct parcel or unit apart from the remainder of the land, including, to submit a plan which shows the land as other than one unitary lot for the preliminary or final approval or endorsement of any governmental authority for such a division, or to cause any such plan (whether or not approved or endorsed by a governmental authority) to be filed or recorded with any land records office or registry. Any lease or occupancy agreement of the Premises or any portion thereof shall be in writing and shall include the following notice in capitalized letters: "This Lease is subject to Preservation Restrictions held by Strawbery Banke Inc., which substantially restricts construction, alteration and redecorating activities inside and outside of the Premises subject to this Lease. Any failure to comply with such restrictions may, at Landlord's sole discretion, be deemed a default under this Lease." Grantee shall provide notice to Strawbery Banke of any and all leases or all or a portion of the property.

G. INSURANCE

1. The Grantee shall carry and maintain at all times property damage insurance on the Wentworth-Winebaum House with uncapped replacement cost coverage (and in any event in an amount not less than the actual cash value of the Wentworth-Winebaum House, defined herein as replacement value less depreciation), against loss from all perils commonly covered under the broadest standard homeowner's policy form in use from time to time. If and when the use of the Premises includes permitted non-residential use, then such policy form shall be the broadest standard from for such use or uses.

2. The Grantee shall carry and maintain at all times general liability insurance with coverage against claims for personal injury, death and property damage, identifying the Wentworth-Winebaum House as the covered premises, and for not less than one million ($1,000,000) per person per occurrence, such sum to be increased from time to time to reflect increases in the cost of living from the date hereof.

3. Grantee shall promptly provide copies of all insurance policies required by this section, and all supplements or endorsements, upon Strawbery Banke's written request.

H. CASUALTY DAMAGE

1. In the event that the Wentworth-Winebaum House suffers damage or destruction of 35% or less of said actual cash value, the proceeds of said insurance shall be used to repair or rebuild the damaged or destroyed portion of the structure in a functionally equivalent manner and in accordance with the Preservation Restrictions.

2. In the event of damage or destruction greater than 35%, but less than 75%, the Grantee in its sole discretion may use the proceeds of said insurance to repair or rebuild the damaged or destroyed portion in a functionally equivalent manner in accordance with these restrictions, with all plans subject to Strawbery Banke prior written approval or may offer the premises for sale to Strawbery Banke at fair market value as determined by appraisal, and if Strawbery Banke does not purchase the premises may sell the same to a third party subject to the Preservation Restrictions.

3. In the event of destruction equal to 75% or more of the actual cash value, the Grantee shall have all of the options listed above in sections H(1) and (2) as well as the additional option of building a new structure on the lot.

4. In the event of any destruction of the Wentworth-Winebaum House, Strawbery Banke shall have the option to acquire at fair market value any building element or architectural feature of the Wentworth-Winebaum House not used in reconstruction.

I. TAXES

The Grantee shall pay before they become overdue all state or local taxes, special assessments, water and sewer charges, and any other charges which may become liens on the Premises.

J. INDEMNIFICATION

No waiver by Strawbery Banke of any of the requirements of the Preservation Restrictions for an act of the Grantee shall affect the obligations of the Grantee to comply with the Preservation Restrictions in any other acts of the Grantee. Except for injury or damage caused by the willful or negligent acts of Strawbery Banke, its servants or agents, the Grantee shall indemnify and hold Strawbery Banke harmless from and against all claims, liability, costs, attorneys' fees, judgments or expenses resulting from actions or claims of any nature by third parties arising in connection with or out of the Preservation Restrictions.

K. ADMINISTRATION

1. Strawbery Banke shall be permitted annually, on thirty (30) days prior written notice, to inspect the Premises to ensure the Grantee's compliance with the Preservation Restrictions. During periods of repair, renovation or reconstruction, however, Strawbery Banke shall be permitted as often as is reasonably prudent, on ten (10) days notice, to inspect the Premises to ensure compliance with these Preservation Restrictions. Said inspection(s) shall be conducted during normal business hours, without undue interference with the business being conducted within the Premises, and with the Grantee agreeing to grant Strawbery Banke free access to all areas of the Premises. The failure of Strawbery Banke to exercise this right of inspection for any period of time shall under no circumstances be construed as a waiver of such right.

2. Grantee shall submit in writing at least thirty (30) days in advance of any anticipated undertaking of any work requiring the prior approval of Strawbery Banke information (including plans, specifications, and designs where appropriate) together with a specific request identifying the proposed activity. Grantee shall also submit to Strawbery Banke a timetable for the proposed activity, which is sufficient to permit Strawbery Banke to monitor such activity. Strawbery Banke shall review the proposal for work and approve, disapprove, or approve with modifications the work in writing within thirty (30) days of receipt of the Grantee's notice of proposed work. Failure of Strawbery Banke to notify Grantee of approval, disapproval, or approval with modification within thirty (30 days) shall constitute approval. Only work approved by Strawbery Banke shall be undertaken. Grantee shall not make changes or take any action subject to the approval of Strawbery Banke unless expressly authorized in writing by Strawbery Banke. In the event that the Grantee does not implement any approval granted for a period of one (1) year, such approval shall be void. Grantee may resubmit the request for approval in which event the review process as contemplated above shall begin anew.

3. Upon request by Grantee, Strawbery Banke shall within ten (10) business days, and provided Grantee has allowed Strawbery Banke an inspection, if necessary, pursuant to section K(1) above, furnish Grantee with a certification that Grantee is in compliance with the obligations of the Preservation Restrictions or that otherwise describes the status of the Preservation Restrictions to the extent of Strawbery Banke's knowledge.

4. Every notice, request, demand, consent, waiver or other communication which either party hereto may be required to give to the other party pursuant to the Premises or Preservation Restrictions shall be in writing and shall be given either by postage prepaid registered or certified U.S. mail with return receipt requested or by a national overnight delivery

service with acknowledgment of receipt required--if to Grantee, then to Grantee at the Premises, and if to Strawbery Banke then to Strawbery Banke Inc., P.O. Box 300, Portsmouth, New Hampshire 03802. Each party may change its address set forth herein by written notice to such effect to the other party. Such notice, etc., shall be deemed given as of the sooner of the date of signed receipt or the date when delivery was first attempted.

M. VIOLATION; ENFORCEMENT

In the event that a violation of the Preservation Restrictions is found, Strawbery Banke shall give Grantee written notice of such violation, establishing a reasonable time within which such violation shall be corrected. In the event that such violation is not corrected by such date, Strawbery Banke shall have the following rights and remedies:

1. Strawbery Banke may institute suit(s) to enjoin any violation of the terms of these Preservation Restrictions by ex parte, temporary, preliminary, and/or permanent injunction, including prohibitory and/or mandatory injunctive relief, and to require the restoration of the Premises and Wentworth-Winebaum House to the condition and appearance that existed prior to the violation complained of in the suit.

2. Strawbery Banke shall also have available all legal and other equitable remedies to enforce the Grantee's obligations under the Preservation Restrictions.

3. In the event Grantee is found to have materially violated any of its obligations, Grantee shall reimburse Strawbery Banke for any costs or expenses incurred in connection with Strawbery Banke's enforcement of the terms of the Preservation Restrictions, including but not limited to all reasonable court costs, and attorney's, architectural, engineering, and expert witness fees. Exercise by Strawbery Banke of one remedy hereunder shall not have the effect of waiving or limiting any other remedy, and the failure to exercise any remedy shall not have the effect of waiving or limiting the use of any other remedy or the use of such remedy at any other time.

N. BINDING EFFECT; ASSIGNMENT

1. The burden of these restrictions shall run with the land and shall be binding upon all owners of any interest therein.

2. The right of enforcement of these Preservation Restrictions by Strawbery Banke shall be as provided in New Hampshire Revised Statutes Annotated Ch. 477:45-47 (1973, c.391) and as it may be amended (the "Act"). The benefit of the Preservation Restrictions and the right to enforce them shall

not be appurtenant to any parcel of land, shall be assignable by Strawbery Banke to any governmental body or any entity whose purposes include preservation of structures or sites of historical significance and if Strawbery Banke ceases to exist without having so assigned the benefit and right to enforce the Preservation Restrictions, then a qualified successor to Strawbery Banke may be named by a New Hampshire court of competent jurisdiction.

O. AMENDMENT

For purposes of furthering the preservation of the Wentworth-Winebaum House and of furthering the other purposes of the Preservation Restrictions, and of meeting changing conditions, Strawbery Banke and Grantee are free to amend jointly the terms of the Preservation Restrictions in writing without notice to any party, and such amendment shall become effective upon recording at the Registry.

P. INTREPRETATION

The following sections shall govern the effectiveness, interpretation, and duration of the Preservation Restrictions.

1. Any rule of strict construction designed to limit the breadth of restrictions on alienation or use of property shall not apply in the construction or interpretation of this instrument or the Preservation Restrictions , which shall be interpreted broadly to effect their purposes.

2. The Preservation Restrictions herein conveyed are made pursuant to the Act, but the invalidity of such Act or any part thereof shall not affect the validity and enforceability of the Preservation Restrictions according to those terms, it being the intent of the parties to agree and to bind themselves, successors, administrators and assigns in perpetuity to each term of this instrument whether this instrument be enforceable by reason of any statute, common law, or private agreement in existence either now or hereafter. The invalidity or unenforceability of any provision of this instrument shall not affect the validity or enforceability of any other provision of this instrument or any ancillary or supplementary agreement relating to its subject matter.

3. Nothing contained in this instrument shall be interpreted to authorize or permit Grantee to violate any ordinance or regulation relating to building materials, construction methods, or use. The approval by Strawbery Banke of any action by Grantee, including without limitation, the approval of the design of any alteration or construction, shall not constitute a warranty, representation or acknowledgment that any action taken in conformity with such approval shall comply with any law, regulation, order, ordinance, code or by-law or shall be suitable for any particular

purpose, and Grantee shall be solely responsible for its own actions. In the event of any conflict between any such ordinance or regulation and the terms of this instrument, Grantee shall promptly notify Strawbery Banke of such conflict and shall cooperate with Strawbery Banke and the applicable governmental entity to accommodate the purposes of both the Preservation Restrictions and such ordinance or regulation.

1888170_1.DOC
December 19, 2007 1:09:42 PM

Property Location 27 HANCOCK ST | Map ID 0103/ 0100/ 0000/ / | Bldg Name COLONEL JOSHUA WENTW | State Use 1010
Vision ID 38784 | Account # 38784 | Bldg # 1 | Sec # 1 of 1 | Card # 1 of 1 | Print Date

CONSTRUCTION DETAIL

Element	Cd	Description
Style:	63	Antique
Model	01	Residential
Grade:	A+	A+
Stories:	2	
Occupancy	1	
Exterior Wall 1	11	Clapboard
Exterior Wall 2		
Roof Structure:	03	Gable/Hip
Roof Cover	03	Asph/F Gls/Cmp
Interior Wall 1	03	Plastered
Interior Wall 2		
Interior Flr 1	09	Pine/Soft Wood
Interior Flr 2		
Heat Fuel	03	Gas
Heat Type:	02	Warm Air
AC Type:	03	Central
Total Bedrooms	04	4 Bedrooms
Total Bthrms:	3	
Total Half Baths	1	
Total Xtra Fixtrs	0	
Total Rooms:	12	
Bath Style:	1	Avg Quality
Kitchen Style:	2	Above Avg Qual
Kitchen Gr		
WB Fireplaces	2	
Extra Openings	0	
Metal Fireplace	0	
Extra Openings	0	
Bsmt Garage		

CONSTRUCTION DETAIL (CONTINUED)

Element	Cd	Description

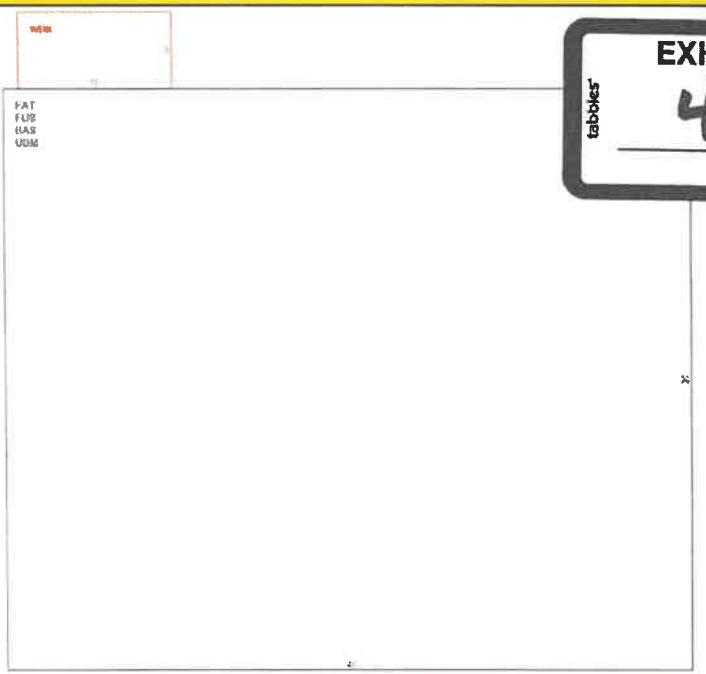
MIXED USE

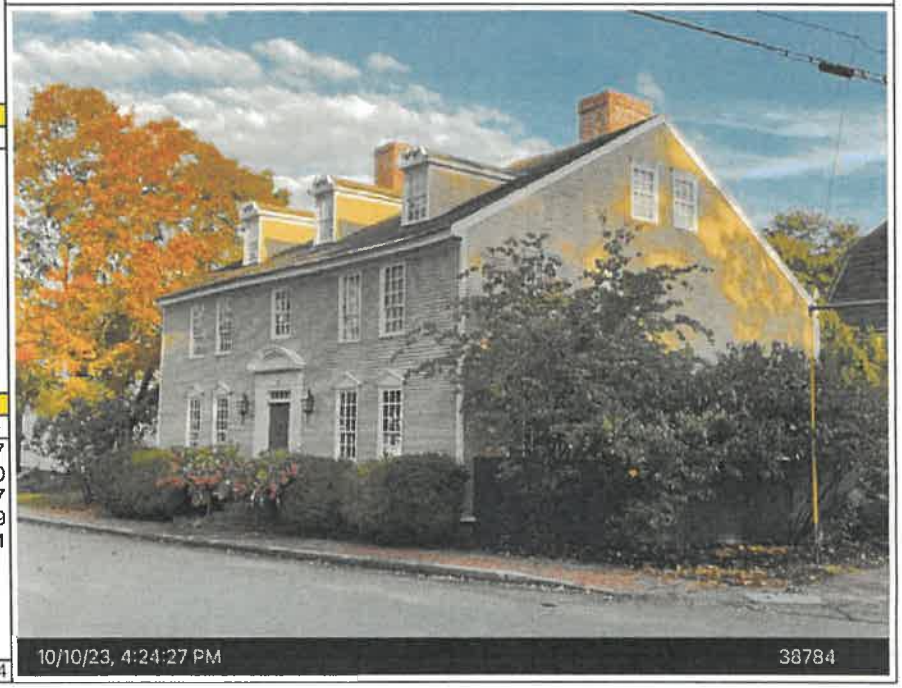
Code	Description	Percentage
1010	SINGLE FAM MDL-01	100
		0
		0

COST / MARKET VALUATION

Adj. Base Rate	232.10
Building Value New	973,674
Year Built	1770
Effective Year Built	2008
Depreciation Code	EX
Remodel Rating	
Year Remodeled	2008
Depreciation %	11
Functional Obsol	
External Obsol	
Trend Factor	1
Condition	
Condition %	
Percent Good	89
RCNLD	866,600
Dep % Ovr	
Dep Ovr Comment	
Misc Imp Ovr	
Misc Imp Ovr Comment	
Cost to Cure Ovr	
Cost to Cure Ovr Comment	

EXHIBIT 4





OB - OUTBUILDING & YARD ITEMS(L) / XF - BUILDING EXTRA FEATURES(B)

Code	Description	L/B	Units	Unit Price	Yr Blt	Cond. Cd	% Gd	Grade	Grade Adj.	Appr. Value

BUILDING SUB-AREA SUMMARY SECTION

Code	Description	Living Area	Floor Area	Eff Area	Unit Cost	Undeprec Value
BAS	First Floor	1,710	1,710	1,710	232.10	396,897
FAT	Attic	428	1,710	428	58.09	99,340
FUS	Upper Story, Finished	1,710	1,710	1,710	232.10	396,897
UBM	Basement, Unfinished	0	1,710	342	46.42	79,379
WDK	Deck, Wood	0	50	5	23.21	1,161
	Ttl Gross Liv / Lease Area	3,848	6,890	4,195		973,674

Property Location 27 HANCOCK | Map ID 0103/ 0100/ 0000/ / | Bldg Name COLONEL JOSHUA WENTW | State Use 1010
Vision ID 38784 | Account # 38784 | Bldg # 1 | Sec # 1 of 1 | Card # 1 of 1 | Print Date 4/29/2024 4:11:57 PM

CURRENT OWNER

TRACE JONATHAN
TRACE SUSAN PAIGE
PO BOX 7106
PORTSMOUTH NH 03802

TOPO	UTILITIES	STRT / ROAD	LOCATION
1 Level	1 Public Sewer	1 Paved	2 Suburban
		7 2 Off-St PKG	

SUPPLEMENTAL DATA

Alt Prcl ID 0103-0100-0000-0000	CONDO C
OLDACTN	INLAW Y/
PHOTO	LOT SPLIT
WARD	2015 Reva JM
PREC.	Ex/Cr Appli
1/2 HSE	
GIS ID 38784	Assoc Pid#

CURRENT ASSESSMENT

Description	Code	Appraised	Assessed
RESIDNTL	1010	866,600	866,600
RES LAND	1010	370,300	370,300
	Total	1,236,900	1,236,900

2229
PORTSMOUTH, NH

VISION

RECORD OF OWNERSHIP

RECORD OF OWNERSHIP	BK-VOL/PAGE		SALE DATE	Q/U	V/I	SALE PRICE	VC
TRACE JONATHAN	4963	2254	11-19-2008	U	I	0	
TRACE JONATHAN	4871	2281	12-20-2007	U	V	300,000	15

PREVIOUS ASSESSMENTS (HISTORY)

Year	Code	Assessed	Year	Code	Assessed V	Year	Code	Assessed
2022	1010	866,600	2021	1010	866,600	2020	1010	866,600
	1010	370,300		1010	370,300		1010	370,300
	Total	1,236,900		Total	1,236,900		Total	1,236,900

EXEMPTIONS

Year	Code	Description	Amount
		Total	0.00

OTHER ASSESSMENTS

Code	Description	Number	Amount	Comm Int

This signature acknowledges a visit by a Data Collector or Assessor

ASSESSING NEIGHBORHOOD

Nbhd	Nbhd Name	B	Tracing	Batch
108				

NOTES

WENTWORTH-WINEBAUM HOUSE AKA
COLONEL JOSHUA WENTWORTH HOUSE
PRESERVATION RESTRICTIONS
SEE EXHIBIT 1 OF DEED
04/10 - BP#09-321 @ 100%, FENCE INSTALL
ADD CENTRAL AC, MAPLE CABS, GRAN CT,
PINE WD FLRS
06/13- ADD WDK 5X10

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card)	866,600
Appraised Xf (B) Value (Bldg)	0
Appraised Ob (B) Value (Bldg)	0
Appraised Land Value (Bldg)	370,300
Special Land Value	0
Total Appraised Parcel Value	1,236,900
Valuation Method	C
Total Appraised Parcel Value	1,236,900

BUILDING PERMIT RECORD

Permit Id	Issue Date	Type	Description	Amount	Insp Date	% Comp	Date Comp	Comments
09-321	06-18-2009			7,500	04-21-2010	100		CONSTRUCT FENCE AROUN
3	06-13-2008			0		100		LIGHT, REBD CHI
2	06-13-2008			0		100		DOORS, STEPS, R
08-272	06-13-2008			30,000	04-17-2009	100		EXT RENOS, RERO
1	05-02-2008			0		100		FAMILY HOME
08-268	05-02-2008			550,000	04-17-2009	100		INT REHAB TO SI

VISIT / CHANGE HISTORY

Date	Id	Type	Is	Cd	Purpose/Result
08-01-2019	SS			40	Hearing No change
09-05-2017	PM			40	Hearing No change
07-10-2017	PM			FR	Field Review Stat Update
09-08-2015	RT			40	Hearing No change
04-08-2015	RT			FR	Field Review Stat Update
06-21-2013	JM			10	Measu/LtrSnt No Respons
09-29-2010	RM			HC	HEARING CHANGE INAC

LAND LINE VALUATION SECTION

B	Use Code	Description	Zone	Frontage	Depth	Land Units		Unit Price	Size Ad	Site	Cond.	ST Idx	S.I. Adj.	Notes- Adj	Special Pricing	Adj Unit P	Land Value
1	1010	SINGLE FAM M	MR			4,116	SF	33.32	1.0000	1	1.00	108	2.700		1.0000	89.97	370,300

Total Card Land Units 0 AC | Parcel Total Land Area 0 | Total Land Value 370,300

ARTICLE VI: REFERRALS TO PLANNING BOARD (Added 12/21/2009)

Section 11.601: INTENT

The intent of this Article is to ensure that proposed municipal actions relating to land acquisition, disposition or use, and to the laying out, construction or discontinuance of public streets, are considered in the context of the City's comprehensive planning.

Section 11.602: REFERRAL AND REPORT

A. The following matters shall be referred to the Planning Board in writing at least thirty (30) days before final action is taken:

(1) Any acquisition or disposition of municipal real property, including fee transfers, easements and licenses;
(2) Any plan for the construction, alteration, relocation, acceptance or discontinuance of a public way.

B. No final action on a matter listed herein shall be taken until either the Planning Board has reported to the City Council thereon in writing or sixty (60) days have elapsed since the referral without such report.

C. The failure to refer a matter listed herein to the Planning Board shall not affect the legal validity or force of any action related thereto if the Planning Board waives such referral.

ENCROACHMENT EASEMENT DEED

The **CITY OF PORTSMOUTH**, a municipal body politic, having a mailing address of 1 Junkins Avenue, Portsmouth, New Hampshire 03801 ("Grantor"), for consideration paid, grants to **JONATHAN TRACE AND SUSAN PAIGE TRACE**, a married couple, of 27 Hancock Street, Portsmouth, New Hampshire 03801 ("Grantee"), as joint tenants with rights of survivorship, with *QUITCLAIM COVENANTS*, an easement for continued encroachment as more particularly set forth herein:

1. **BENEFITTED PROPERTY:** Grantee owns a certain parcel of land, with the buildings and improvements thereon, situate in Portsmouth, Rockingham County, New Hampshire, lying southerly of Hancock Street, a public way, and easterly of Washington Street, a public way, and being shown as Lot 103-88-001 ("Benefitted Property") on a plan entitled "Subdivision Plan, 17 Hancock Street, Assessors Parcel No. 103-088-000, Portsmouth, New Hampshire, Owner: Strawbery Banke, Inc.", dated 8/16/2006 and recorded with the Rockingham County Registry of Deeds on 9/22/2006 as Plan D-34172 ("Subdivision Plan").

2. **NATURE OF ENCROACHMENT:** Situated upon the Benefitted Property is a historic structure known as the Colonel Joshua Wentworth House, which was constructed in or around the year 1770 ("Encroaching Structure"). Said Encroaching Structure was relocated to the Benefitted Property in or around the year 1973, during which process, the structure was inadvertently situated upon the lot in such a way that the structure encroaches slightly upon the Hancock Street right of way. This encroachment was not discovered until 2006, when the property was subdivided. On or around July 13, 2006, a letter was issued by Portsmouth City Attorney, Robert P. Sullivan, in which he acknowledged the inadvertent encroachment and indicated that he and Planning Department Director, David Holden, determined that it would be inappropriate for the City of Portsmouth to take action against Strawbery Banke [the owner] or the property. See Note #9 on the Subdivision Plan.

3. **GRANT OF EASEMENT:** The Grantee is hereby granted a permanent and exclusive easement for the continued encroachment of the Encroaching Structure upon the Hancock Street right of way as is depicted on the Subdivision Plan. The Grantee shall have the right to maintain, repair and/or replace any portion of the Encroaching Structure, provided that the existing footprint within the easement area shall not be expanded without the prior written consent of the Grantor, which written consent shall be duly recorded with the Rockingham County Registry of Deeds.

4. **EASEMENT TO RUN WITH LAND:** All rights and privileges, obligations and liabilities created by this instrument shall inure to the benefit of, and be binding upon, the heirs, devises, administrators, executor, successors and assignees of the Grantee and of the Grantor, the parties hereto and all subsequent owners of the Premises and shall run with the land.

EXECUTED this _____ day of November 2024.

CITY OF PORTSMOUTH

_____
By:
Title:
Duly Authorized

STATE OF NEW HAMPSHIRE
County of Rockingham

The foregoing instrument was acknowledged before me this _____ day of November 2024, by _____, duly authorized on behalf of the City of Portsmouth in his/her/their capacity as _____.

_____
Notary Public / Justice of the Peace
My Commission Expires:

HOEFLE, PHOENIX, GORMLEY & ROBERTS, PLLC
ATTORNEYS AT LAW
127 Parrott Avenue | Portsmouth, NH, 03801
Telephone: 603.436.0666 | Facsimile: 603.431.0879 | www.hpgrlaw.com

November 8, 2024

HAND DELIVERED

Kelli Barnaby, City Clerk
Peter Stith, Principal Planner
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for Easement
Jonathan and Paige Trace
Joshua Wentworth House
27 Hancock Street, Portsmouth NH 03801

Dear Ms. Barnaby and Mr. Stith:

This will add Exhibit 7 to the exhibits attached to my letter dated November 6, 2024 requesting placement on November 18, 2024 City Council Agenda, and November 21, 2024 Planning Board Agenda, in turn requesting City Council approval and execution of an easement for right-of-way encroachments by Jonathan and Paige Trace, owners of 27 Hancock St., the "Joshua Wentworth House".

The self-explanatory attached letter from then-City Attorney Robert P. Sullivan simply confirms that the City's position that it would never seek to require an owner to remove the encroachments would not only protect the then owners, but all subsequent owners.

Respectfully submitted,

R. Timothy Phoenix

Enclosure

cc Clients
City Attorney
City Manager
Adam Dean
Matt Shoemaker, Esq.

RECEIVED
NOV 08 2024
By KR 11:00

CITY OF PORTSMOUTH

LEGAL DEPARTMENT

Robert P. Sullivan, City Attorney – 603 610 7204 Direct Dial
Kathleen M. Dwyer, Assistant City Attorney – 603 427 1938 Direct Dial
Suzanne M. Woodland, Assistant City Attorney – 603 610 7240 Direct Dial
Susan G. Morrell, City Prosecutor – 603 610 7478 Direct Dial 603 427 1593 (fax)

Municipal Complex
1 Junkins Avenue
Portsmouth, NH 03801
603 427 1530
603 427 1593 Fax

EXHIBIT
tabbies
7

September 19, 2007

Rodney Rowland, Director of Special Projects
Strawbery Banke, Inc.
P.O. Box 300
Portsmouth, NH 03801

RE: Joshua Wentworth House

Dear Rodney,

You have inquired as to whether or not the content of my letter addressed to Lawrence Yeaton of June 13, 2006 regarding the captioned property will remain in effect for the benefit of subsequent owners of the Joshua Wentworth House.

Please accept this letter as my response in the affirmative.

Sincerely,

Robert P. Sullivan
City Attorney

RPS/rao

enclosure

cc: David M. Holden, Planning Department Director
Lucy Tillman, Chief Planner

memory of joshua wentworth house & its encroachment to subsequent owners

RECEIVED
NOV 08 2024
By KR