CITY OF PORTLAND, MAINE
PLANNING BOARD

Maggie Stanley, Chair
Brandon Mazer, Vice Chair
Justin Barker
Marpheen Chann
Sean Murphy
David Silk
Austin Smith

AGENDA
PORTLAND PLANNING BOARD MEETING

The Planning Board or Historic Preservation Board will hold a remote meeting on **Tuesday, October 25, 2022, 4:30 p.m.** This meeting will take place remotely using Zoom pursuant to the Remote Meeting Policy adopted by the Planning Board and as authorized under 1 M.R.S. 403-B because of the existence of an emergency or urgent issue that requires the committee to meet by remote methods. Allow your computer to install the free Zoom app to get the best meeting experience.

If you are not able to attend live, a recording will be available following the meeting. For public comment, you will need to use the "raise your hand" feature. To raise your hand via the telephone, please hit *9. You will be unmuted by the host when it is time for public comment.

For more information on submitting written public comments and participating in the remote meeting, please refer to the document, A Guide to Public Comment, Remote Mtg. and Public Participation, which can be found at https://www.portlandmaine.gov/485/Development-Review. Public comments will be taken for each item on the agenda during the estimated allotted time.

Written Public Comment
Written comments received by email by 12:00 p.m. **the day before** the scheduled meeting date will be included in the agenda backup materials ("agenda packet").

Written comments received **by the aforementioned deadline** will be published in the agenda packet no later than 12:00 p.m. the day of the meeting. Written comments must be submitted to planningboard@portlandmaine.gov. If you have any questions or feedback regarding this process, please email citymanager@portlandmaine.gov

Please note that the placement of each item on the agenda is subject to change. Please check the Agenda & Minutes Center prior to the meeting for the item start time here: https://www.portlandmaine.gov/602/Agendas-Mintues.

ZOOM MEETING INSTRUCTIONS
You are invited to a Zoom webinar.
When: Oct 25, 2022 04:30 PM Eastern Time (US and Canada)
Topic: Planning Board Workshop and Public Hearing 10-25-2022

Please click the link below to join the webinar: https://portlandmaine-gov.zoom.us/j/83437429411
Or One tap mobile: US: +19292056099,,83437429411# or +13017158592,,83437429411#
Or Telephone: Dial(for higher quality, dial a number based on your current location): US: +1 929 205 6099 or +1 301 715 8592 or +1 309 205 3325 or +1 312 626 6799 or +1 646 931 3860 or +1 253 215 8782 or +1 346 248 7799 or +1 386 347 5053 or +1 564 217 2000 or +1 669 444 9171 or +1 669 900 6833 or +1 719 359 4580
Webinar ID: 834 3742 9411
International numbers available: https://portlandmaine-gov.zoom.us/u/khvFs7wvi

WORKSHOP - 4:30 PM

i. Major Site Plan and Subdivision; 385 Congress Street; Fathom Congress, LLC., Applicant. (estimated time 4:30 – 6:00 pm) The Planning board will hold a remote workshop to consider the first project phase of the Master Development Plan for 385 Congress St., approved by the Planning Board on August 9, 2022. The program for this phase includes an 11 story, 167,345 square foot building with 156 hotel rooms, nine upper-floor condominium units, structured and surface parking and a plaza for public use. The subject property is 2.26 acres and zoned B-3

Downtown Business. A project and plan summary are available for viewing on the city's CSS Portal (https://css.portlandmaine.gov/) by referencing Plan Number PL-002156-2022.

ii. Zoning Map and Text Amendment; 1 Bean Pot Circle; IDEALS (The Initiative for Digital Engineering and Life Sciences), Applicant. (estimated time 6:00 – 7:30 pm) The Planning Board will hold a remote workshop to consider a zoning map and text amendment application to facilitate the creation of an Institutional Development Plan (IDP) and Institutional Overlay Zone (IOZ) for their Portland campus, to be located at 1 Bean Pot Circle. The IOZ, if approved, will include the 13-acre property located at 1 Bean Pot Circle (parcels 447-A-001 and A-002), currently zoned I-M Moderate Impact Industrial. A related text amendment to modify Land Use Code Section 8.5.2 to add the applicant's parcels to the list of eligible IOZ areas has been provided. A project and plan summary are available for viewing on the city's CSS Portal (https://css.portlandmaine.gov/) by referencing Plan Number ZN-001934-2022.

PUBLIC HEARING - 7:30 PM

1. ROLL CALL AND DECLARATION OF QUORUM

2. COMMUNICATION AND REPORTS

ReCode Communication (estimated time 7:30 pm) Staff will provide the Planning Board with an update on ReCode Phase II.

3. REPORT OF ATTENDANCE AT THE MEETING HELD ON OCTOBER 11, 2022

Afternoon Workshop
165 Lambert Street: Barker, Mazer, Murphy, Silk, Smith, and Stanley present; Chann absent.
1 Bean Pot Circle: Barker, Mazer, Murphy, Silk, Smith, and Stanley present; Chann absent.
1772 Westbrook Street: Barker, Mazer, Murphy, Silk, Smith, and Stanley present; Chann absent.

4. REPORTS OF DECISIONS AT THE MEETING HELD ON OCTOBER 11, 2022

i. There were no public hearing items on this agenda therefore there are no decisions to document.

5. THERE ARE NO PUBLIC HEARING ITEMS TO BE PRESENTED AT THIS MEETING.

To: Chair Stanley and Members of the Portland Planning Board
From: Zach Powell, Senior Planner
Date: October 21, 2022
Re: Herald Square (Phase 1 of 385 Congress Street Master Development Plan)
Applicant: Fathom Congress, LLC
Project ID: PL-002156-2022
Meeting Date: October 25, 2022

I. INTRODUCTION

Fathom Congress, LLC has submitted an application for Major Site Plan Review and Subdivision Review to facilitate the subdivision of the subject property into three lots, demolition of two principal structures, minor modifications to the existing surface parking lot, and the construction of a mixed-use development on the southeast corner of the site. The project received Master Development Plan approval from the Planning Board on August 9, 2022. The applicant is currently seeking Major Site Plan Approval for the project's first phase. The total floor area of the proposed development is 167,345 square feet.

Figure 1: Perspective View from Congress & Exchange Street looking northwest with rendered elevations of the proposed hotel in black and brown, and the massing of future phases in light gray.

This total includes:

- 117,792 square foot hotel with 156 rooms;
- 14,918 square feet of residential (9 condominium units);
- 5,100 square foot restaurant;
- 755 square feet of retail;
- 6,493 square feet of passive recreation space (Amenity Deck);
- 27,511 square feet of structured parking (70 automobile spaces), and
- 60,511 square feet of surface parking (177 automobile spaces).

This memorandum will highlight aspects of the development about which review will be particularly focused, as well as initial staff impressions and concerns regarding the proposed development. These areas of focus include:

- Building design;
- Vehicular, bicycle, and pedestrian access to the site;
- Phasing;
- Surface parking, and
- Streetscape improvements.

The Planning and Urban Development Department mailed 104 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the October 15, 2022 edition of the *Portland Press Herald*.

Applicant: Marieke Thormann, Fathom Congress, LLC
Consultants: Daniel Riley, Sebago Technics Inc.; Gregory Lemon & Tobias Strohe, JNS Architecture and Interior Design

II. REQUIRED REVIEWS

Review	Applicable Standards
Major Site Plan Review	Section 14.6
Master Development Plan (MDP)	Section 14.7
Subdivision Review	Section 15
B-3 Design Review Standards	Design Manual & August 2, 2022 Design Memorandum (Attachment 1)
Traffic Movement Permit (TMP)	Technical Manual Section 1.1
Waivers Granted Under August 9, 2022 MDP Approval	Applicable Standard
Sec. 7.3 – Table 7-E: Mixed-Use Zone Dimensional Standards – to vary the front setbacks on Cumberland Avenue, Myrtle Street, and Pearl Street up to 22 feet.	Sec. 7.3 – The maximum permitted front setback from all street frontages in the B-3 zone is 5 feet.
Technical Standards - Sec. 14.1.2 – to construct structured parking on the portion of the site identified as Lots '2' and '3' where 96 of the total 267 spaces (±35%) will be compact parking spaces and construct structured parking on the portion of the site identified as 'Lot 1' that is 100% comprised of compact spaces.	Sec. 14.1.2 – Parking lots with greater than 10 spaces may be comprised of up to 20% compact parking spaces.
Technical Standards - Sec. 14.1.3 – to stripe parking spaces on the portion of the site identified as 'Lot 1' that have parallel valet parking spaces across the ends of double stacked, 90 degree compact spaces.	Sec. 14.1.3 – Parking lot layout shall conform to Figures I-28 thru I-32.
Technical Standards - Sec. 14.1.5 – to waive the minimum 24' drive aisle width in the garage on the portion of the site identified as 'Lot 1' to allow parallel valet parking spaces across the ends of double stacked, 90 degree compact spaces and an aisle width of 15 feet.	Sec. 14.1.5. – Vehicular access shall be provided by one or more aisles. Minimum widths of aisles are illustrated in Figures I-28 thru I-31.

III. PROJECT DATA

Existing Zoning	B-3 Downtown Business, Downtown Entertainment Overlay, PAD Encouragement Area		
Existing Use	Off-Street Parking (Surface and Structured) (141 spaces) Storage (±3,914 SF)		
Proposed Use	Hotel	117,792 SF (156 rooms)	
	Condominiums	14,918 SF (9 units)	
	Restaurant	5,100 SF (1 restaurant)	
	Retail Space	755 SF (1 unit)	
	Passive Recreation Space (Amenity Deck)	6,493 SF	
	Structured Parking	27,511 SF (70 spaces)	
	Surface Parking	60,511 SF (177 spaces)	
Property Size	98,470 SF (2.26 acres)		
	Existing	*Proposed*	*Net Change*
Building Footprint	17,322 SF	25,452 SF	+8,130 SF
Building Floor Area	17,322 SF	167,345 SF	+150,023 SF
Automobile Parking Spaces	173 spaces	247 spaces	+74 spaces
Bicycle Parking Spaces	0 spaces	0 spaces	0 spaces
Curb Cuts	7 (3 blocked)	7 (3 blocked)	0 curb cuts
Trees in Streetscape	9	16	+7

IV. EXISTING CONDITIONS

The project site occupies the entirety of a city block that is 2.26 acres in area. The site is bounded to the north by Pearl Street, to the South by Myrtle Street, to the East by Congress Street, and to the West by Cumberland Avenue. The Comprehensive Plan, *Portland 2030*, identifies Congress Street as a priority corridor. Priority corridors are key corridors that connect major nodes and neighborhoods and therefore serve as areas that can accommodate additional mixed-use, higher density growth to take advantage of the transit benefits and services that well-designed, diverse corridors can offer. The site was previously bisected by Chapel Street, which was discontinued in 1973 (Figure 2).

Previously, the site was occupied by a number of commercial and residential structures, including Payson Memorial Church. In the 1960s, a portion of the site served as the printing facilities to the Portland Press Herald. Currently, the site serves as an off-street parking (both surface and structured) for daily and monthly parking and is currently occupied by surface and structured parking, totaling 173 spaces. Additionally, the structure on the northwestern corner of the site is used for auxiliary storage. Both of the existing structures (Storage Building ±3,914 SF; Parking Structure: ±13,408 SF) are proposed to be demolished to facilitate the development of the site.

The site serves as a transitional area in a number of regards, including:

- Lots to the north with no building coverage (Top of the Old Port Parking & Lincoln Park) to lots to the south with high building coverage (City Hall, Press Hotel)
- Lower-density multi-family and smaller institutional uses from the west on Cumberland Avenue to medium-density commercial & institutional uses to the east on Congress Street
- Blocks to the west and south occupied by numerous lots to blocks to the east and north that are occupied by one lot (Central Fire Station, Top of the Old Port Parking, Lincoln Park)
- Smaller blocks and larger blocks with pedestrian access points to the south and southeast to larger blocks providing limited or no breaks for pedestrian access
- Downtown Neighborhood to Bayside Neighborhood
- Auto-centric uses & building design to the north and northeast to urban, pedestrian-centric uses to the west, south, and southeast

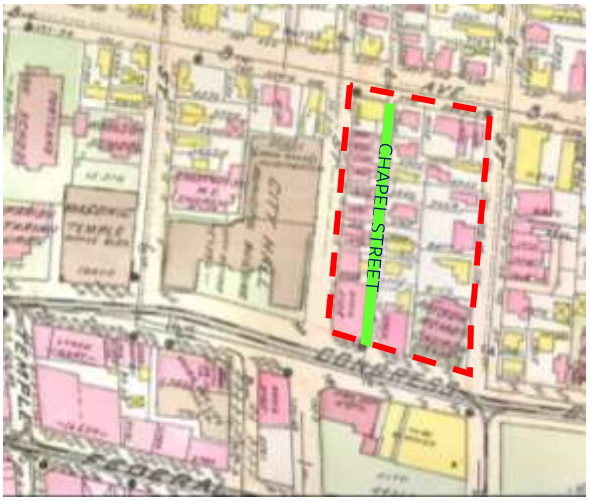


Figure 2: 1912 Sanborn Map of the subject property (outlined in red) and surrounding area. The previous bisection of the subject property by Chapel Street is shown in light green.

Figure 3: Northwest view of the subject property in 1900. Source: Maine Historical Society.

Figure 4: Western view of the subject property in 1965 showing the construction of the Portland Press Herald Printing Facility.

The subject block and immediate area is well-served by public transit. Approximately two blocks to the southwest is the METRO PULSE at Elm Street (Downtown Transportation Center), the hub for METRO where bus routes, #2, #4, #5, #7, and the Husky Line begin and end their routes. METRO bus routes #1, #7, #8, #9A, #9B and the Biddeford Saco Old Orchard Beach Transit 60 Green line can be accessed along Congress Street within one block of the site. South Portland Bus routes 21, 24A, and 24B can be accessed along Congress

Street roughly two blocks southwest of the site. METRO bus route 8 is located along Cumberland Avenue less than one block from the site.

V. RIGHT, TITLE & INTEREST

The owner of the property is 385 Congress, LLC. The owner and applicant for the construction of the hotel (The Fathom Companies d/b/a Fathom Congress, LLC) has entered into a Purchase and Sale Agreement which serves as sufficient right-title-interest documentation for The Fathom Companies for the purpose of reviewing a master development plan application.

The submitted existing conditions survey (P.22 and P.23) indicates the property has no existing easements. As noted in the Purchase and Sale Agreement and Figure 5, access and utility easements will be created to facilitate access pre- and post-construction.

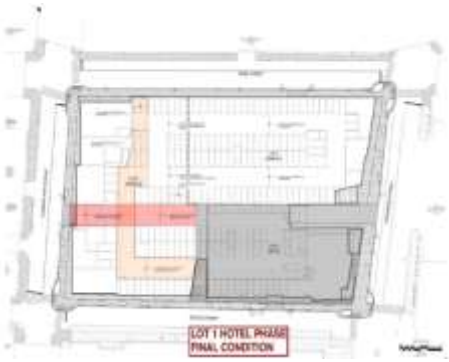


Figure 5: Phase 1 Easement Plan, with utility easements in tan and access easements in red.

VI. FINANCIAL & TECHNICAL CAPACITY

The applicant has submitted a letter of financial capacity from their financial institutions as documentation stating that the Applicant is in good standing (Attachments H and I).

VII. ZONING ANALYSIS

The site is encompassed by the B-3 Downtown Business Zone, the Pedestrian Activities District (PAD) encouragement area, and the Downtown Entertainment Overlay Zone.

The purpose statement for the B-3 zone includes the following relevant to the proposal:

- *Enhance and promote the orderly expansion of retail and service businesses downtown, satisfying the related needs of the city's resident, working and visitor populations;*
- *Encourage increased housing opportunity downtown for a diverse residential population;*
- *Enhance the pedestrian environment through the encouragement of intensive mixed-use activities, through the enhancement and maintenance of public and private open space, and through the enlivenment and increased attractiveness of the street environment;*
- *To encourage excellence in urban design;*
- *In the PAD Overlay Zone, to create continuity of pedestrian-oriented uses along streets where such uses predominate and along streets which, over time, will establish and maintain a strong retail and pedestrian-oriented use pattern.*

The zoning dimensional requirements are intentionally permissive in this urban downtown zone – in most cases the requirements are intended to create dense, taller buildings that fill the site and maintain a street wall line. Regarding height for this block, there is a 90 foot maximum street wall height along Pearl Street, 50 foot maximum street wall height along Congress and Myrtle Streets, and a maximum building height of 150 feet as per the Downtown Height Overlay map. Compliance with the B-3 dimensional requirements for all three lots post-demolition of the two existing structures is shown in Table 1. Based on the waivers granted during the review of the MDP and approval of the proposed subdivision, the submitted Major Site Plan application is mostly consistent with the zoning, including the B-3 zone purpose statement, uses, and dimensional standards, and the Downtown Height Overlay Map. Currently, the one zoning deficiency relates

the maximum permitted undifferentiated wall space. The interim conditions for the base of the podium and the Myrtle Street elevation (P. 35) exceed the maximum 30 feet, as well as the rightmost portion of the second floor on Myrtle Street & the proposed elevator tower. As further discussed in Section IX, green wall treatments or murals would provide simple solutions to address compliance with this standard.

Table 1: Compliance of Proposed Subdivision & Site Plan with B-3 Dimensional Lot Standards				
Standard	Required	Lot 1 (Hotel)	Lot 2 (Phase 2 Condos)	Lot 3 (Phase 3 & 4 Condos)
Minimum Lot Area	N/A	Complies (27,493 SF)	Complies (32,426 SF)	Complies (38,558 SF)
Minimum Street Frontage	15 feet	Complies (350.69 ft.)	Complies (407.95 ft.)	Complies (564.13 ft.)
Maximum Front Setback	5 feet	8-22 feet (Waiver Granted with MDP Approval)	N/A	N/A
Minimum Side & Rear Setbacks	N/A	Complies	Complies	Complies
Maximum length of undifferentiated blank wall	30 feet	Does Not Comply for Interim or Final Conditions.	N/A	N/A
Maximum Floor Area	15,000 square feet for each floor above 125 feet	Complies. L11 has ±8,833 square feet of floor area.	N/A	N/A
Maximum Structure Height	150 feet, with 90 foot maximum street wall height on Pearl Street and 50 foot maximum on Congress and Myrtle Streets	Complies	N/A	N/A
Maximum Lot Coverage	25% of lot area for portions of structures exceeding 125 feet in height or 10,500 square feet, whichever is more	Complies. Proposed floor area of L11 is ±10,489 square feet.	N/A	N/A

Figure 6: Rendering of Myrtle Street Elevation looking east showing the undifferentiated wall space on the second floor and the proposed retail unit that wraps around the corner of Congress & Myrtle Streets.

Downtown Urban Design Guidelines & Pedestrian Activities District (PAD) Encouragement Area: The site is required to comply with the Downtown Urban Design Guidelines. Additionally, the Congress Street frontage falls within the Pedestrian Activities District (PAD) encouragement area. This overlay zone, is intended to encourage ground floor uses that activate pedestrian spaces, creating a safe and vibrant pedestrian environment in Portland's downtown. Buildings located within the encouragement area are required to be designed and constructed to be reasonably capable of being converted to accommodate uses permitted in the PAD overlay zone and all sidewalk areas and open space shall complement the general pattern of the downtown pedestrian environment.

During the MDP review, the Applicant took steps to develop a more pedestrian-centric design by:

- Expanding the sidewalk area along Congress Street;
- Addition of a pedestrian entrance facing and visible from Congress Street;
- Inclusion of a retail unit that wraps around the corner of Congress & Myrtle Street, and
- Increased accessibility to the Amenity Deck from street level

Further discussion of compliance with the PAD Overlay & B-3 design standards is provided in Section IX of this memorandum.

VIII. TRAFFIC MOVEMENT PERMIT UPDATE

As part of the MDP application, the Applicant submitted a draft methodology (Attachment O) to City Staff for trip generation estimations and traffic counts pursuant to Traffic Movement Permit (TMP) application requirements. Upon review of these materials, City Staff recommended changing the Institute of Traffic Engineers (ITE) Land Use Codes (LUCs) to derive estimates, with these changes shown in Table 2 below.

Table 2: Changes to ITE Land Use Codes		
Use(s)	March 24, 2022 Submission	August 5, 2022 Update
Hotel & Restaurant	310- Hotel	310- Hotel
Residential & Retail	232- High-Rise Residential with 1,000-25,000 square feet of ground floor commercial	222 – Multifamily Housing (Highrise)
		932- High-Turnover (Sit-Down) Restaurant

The Applicant submitted an updated and expanded TMP application on September 6, 2022 (Attachment N) that included:

- Updated base data to reflect changes in programming made during the MDP review, including:
  - Decrease in the number of residential units,
  - Increase in the number of hotel units, and
  - Increase in the amount of retail square footage for the project.
- Results from a June 7, 2022 Traffic Study
- Level of Service (LOS), queuing, and auxiliary turn lane warrant analyses for proposed intersections as shown in Figure 6, and
- Analysis of high crash intersections with recommendations for updated sidewalks around the perimeter of the site and pedestrian signal phasing at the intersection of Cumberland & Pearl Streets.

Prior to the submission of this major site plan application, the Applicant submitted a de minimis request (Attachment HH) to change the proposed lower garage curb cut access point from mid-block on Cumberland Avenue to mid-block on Pearl Street. While City Staff support the request, updates will need to be made to the TMP application to reflect this change and better reflect elements of phasing & access management.

The TMP application is still under review by Consulting Traffic Engineer Tom Errico and Mr. Errico's comments on the TMP will be provided at a subsequent workshop.

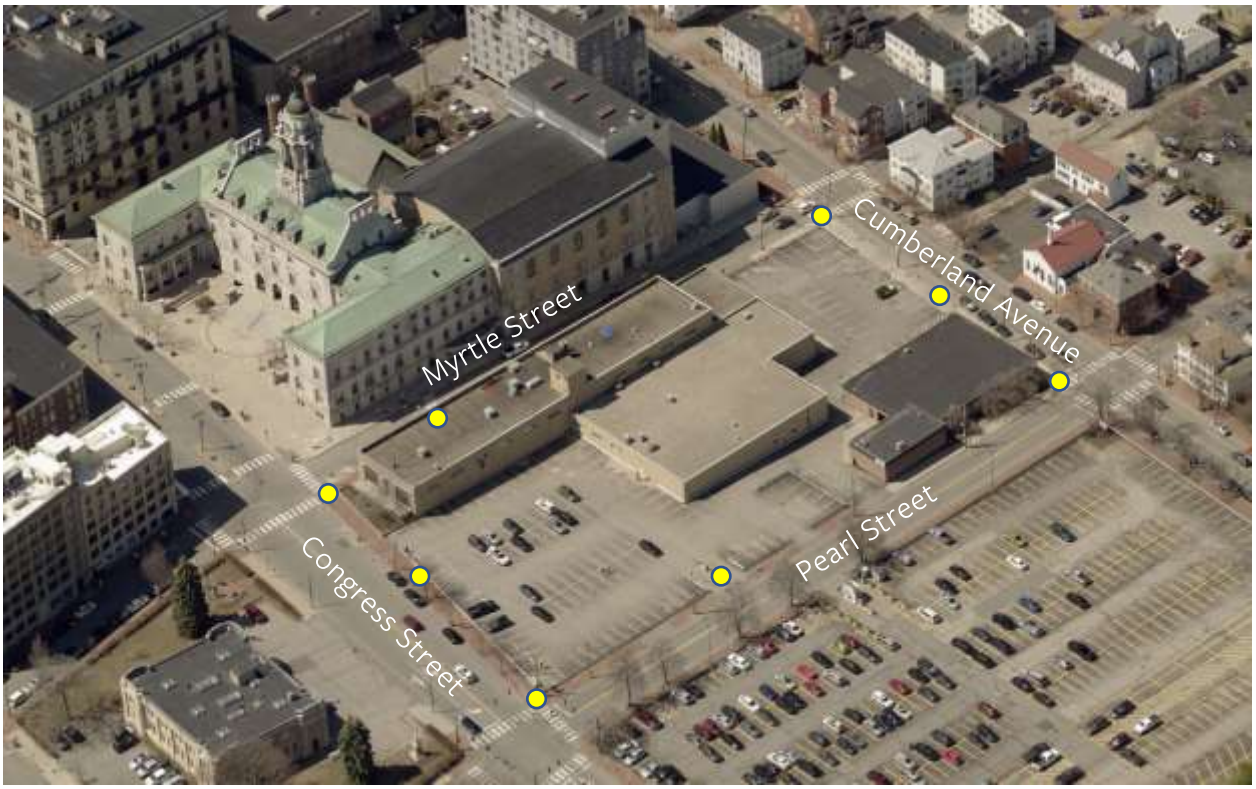


Figure 7: Project site with intersection analysis location noted with yellow circles.

IX. DESIGN REVIEW

A design review was completed on October 19, 2022, conducted by Sean King, Urban Designer, Evan Schueckler, Historic Preservation Manager, Rob Weiner, Historic Preservation Compliance Coordinator, Kevin Kraft, Deputy Director of Planning and Urban Development, and Zach Powell, Senior Planner. Key comments from the Design Review Memorandum (Attachment 3) are included below:

- Reduction in the number of proposed materials along the ground-level to create a stronger, cohesive building design by carrying a limestone masonry along the majority of the Congress Street frontage.
- Consider replacing the proposed black metal panels along the retail space on the corner of Congress and Myrtle streets with weathered metals panels or limestone finish.
- Inclusion of a horizontal belt courses and recessed elements that are consistent with historical character of surrounding buildings, delineate the change in materials, and break up the vertical scale of the building.

Figure 8: Example of a potential blank wall space treatment (A green wall) in winter conditions. Source: Sempergreen

- Creation of a unified window pattern on the ground floor through the substitution of vertical windows at ground-level along Congress Street and the interior northern elevation with storefront windows to match hotel lobby façade.
- Horizontal expansion of canopy along Congress Street as part of developing a more prominent entrance.
- Consistency in paving materials for publicly-accessible paved areas and delineating changes in material with a flush band to from the edges of paved surfaces.
- Submission of a landscape plan for Level 2 for further Staff review.
- Submission of proposed treatments for blank wall space for the Lower Garage level, proposed signage, window & door schedules, and assessment of wind impacts for further Staff review.

Figure 9: Annotated perspective from City Staff Design Memo recommending the use of horizontal building elements to delineate changes in building sections & materials, along with reduction in the number of proposed building materials to develop a more cohesive building design.

X. STAFF REVIEW

A. Site Plan Review Standards Section 14.6

Section 14.6 of the City's Land Use Code establishes standards under which Site Plan applications must be reviewed. Per this section, Site Plans shall adhere to the following requirements:

Section 14.6.1. Transportation Standards

A. **Impact on Surrounding Street Systems**
B. **Access and Circulation**
D. **Parking**

The Application was reviewed by Consulting Traffic Engineer Tom Errico, Senior Engineer Justin Pellerin, and Parking Manager John Peverada (Attachment 2). Comments from these reviewers primarily focused on the following topics: included:

- Valet operations and consideration for internal circulation solutions.
- Signal replacement at the intersection of Congress & Pearl Streets.
- The design and feasibility of proposed curb extensions and on-street parking.
- Deliveries and delivery vehicle access into the site.
- Proposed lane widths on Congress & Myrtle Street
- The Construction Maintenance Plan in relationship to Myrtle Street closures & events at Merrill Auditorium.
- Updates to material specifications and details that meet current Department of Public Works standards.

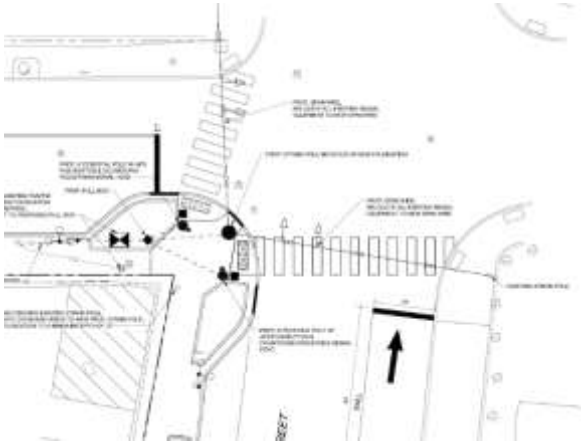


Figure 10: Proposed curb bump outs and signal improvements at the intersection of Congress & Pearl Streets.

C. Public Transit Access

Staff Comment: The site is located within ¼ of an existing transit shelter on Congress Street and is not required to provide a transit shelter on-site.

E. Transportation Demand Management

Staff Comment: The application was reviewed on October 5, 2022 by the City's Transportation Program Manager Bruce Hyman, who provided the following comments:

- *The TDM Plan includes a good overview of the TDM context of the hotel site including the downtown and the site's proximity to local and regional transit routes.*
- *The Plan includes a discussion of the parking demand/supply being provided and trip generation for the site, but clarification is needed about the parking and trip reduction targets being set.*
- *The Plan discusses TDM strategies specific to hotel guests and employees – more specificity and refinement of those strategies is needed, such as:*
    - *Will guests pay to park during their stay?*
    - *What level of transit subsidy will be provided to employees?*
    - *Will employee parking be provided?*
    - *How is TDM-related information being conveyed to employees and guests (such as adding transportation options/alternatives to the hotel's website)?*

Figure 11: Photo of existing bus shelter located within ¼ mile of the project site at Congress Street between Temple & Elm Streets.

Section 14.6.2. Environmental Quality Standards

A. Preservation of Significant Natural Features

Staff Comment: As a surface parking lot within a densely developed urban context, there are no significant natural features located on the subject property.

B. Landscape Preservation

Staff Comment: As a condition of the Master Development Plan, the Applicant is required to work with the City Arborist to evaluate the preservation of existing street trees along Congress Street. Currently in the submitted plans, the existing trees are proposed to be removed and replaced with new trees. Correspondence with City Arborist Jeff Tarling has confirmed that this consultation has not occurred as of this time. Retention of the trees will depend on the proposed removal of the existing brick pavers and if protection of the trees from construction activity is viable.

C. Site Landscaping and Buffers

Staff Comment: The site is required to provide 9 street trees for the proposed multi-family requirement (1 street tree per dwelling unit) and for the commercial uses, providing a street tree every 35-45 feet (370 feet of frontage/ 35-45 feet = 8-11 street trees). The Applicant has included 10 street trees with a spacing of one tree every 26-27 feet. As mentioned above, additional discussion with the City Arborist will need to occur to ensure that the locations, species, and spacing align with the determination of the City Arborist. If existing street trees are preserved, they will be credit towards the total.

The Application was reviewed by Senior Engineer Justin Pellerin from the Department of Public Works, who provided the following comments:

- *Raised curb tree wells shall be offset a minimum of 2 feet off the curb line in locations which abut on-street parking unless it can be demonstrated that the placement of the tree wells will not interfere with the opening of vehicle doors. Based on the proposed sidewalk width of Congress Street it appears that this can be achieved. Further analysis/information is required for the proposed tree wells on Myrtle Street. The treewell in brick sidewalk detail to specify a curb reveal of 4 to 5 inches above the proposed sidewalk grades.*

- *The Applicant is proposing to install street trees in raised curb tree wells adjacent to curb ramps at the Congress/Myrtle and Congress/Pearl intersection. DPW is requesting further information on how the locations of these trees will affect pedestrian visibility at the ramp facility.*

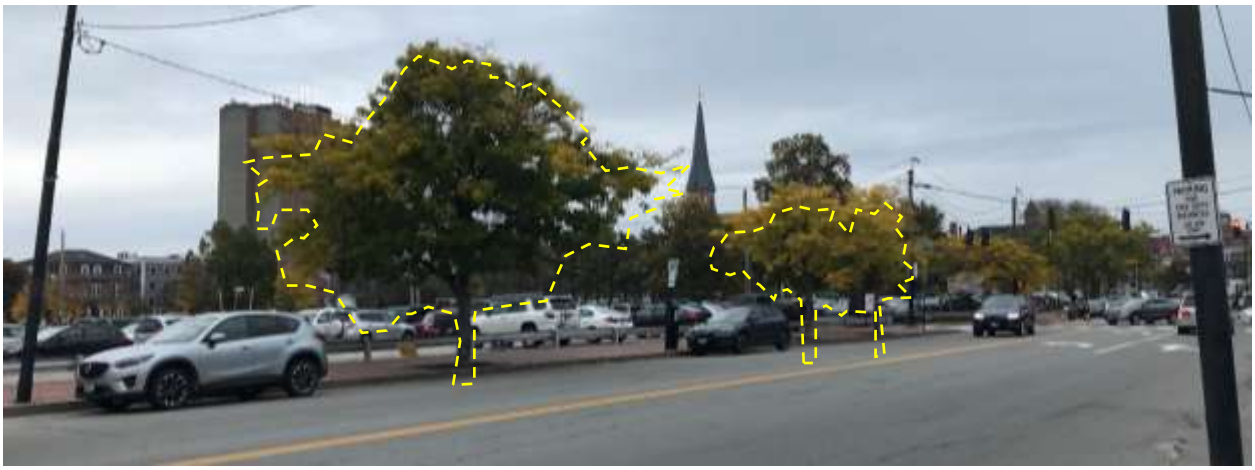


Figure 12: Photo of existing street trees (outlined in yellow) along Congress Street proposed to be removed and replaced.

D. Water Quality, Stormwater Management, and Erosion Control

Staff Comment: The Applicant has identified erosion & sediment control measures for the site and has proposed on-site detention & will reroute storm water to the combined sewer on Pearl Street in anticipation of future separation by the City and reduce impacts on the combined sewer at Myrtle Street.

Review of the application documents by Consulting Stormwater Engineer Lauren Swett noted that the location of erosion & sediment control measures should be more clearly noted in the plan set and that clarifications should be made in the utility plan related to the internal drainage management for the oil water separator in the structured parking area.

Section 14.6.3. Public Infrastructure and Community Safety Standards

A. Consistency with City Master Plans

Staff Comment: The submitted plan is consistent with City Council-approved master plans by:

- Improving transportation access to arts and cultural venues throughout the City by enhancing the connection to Merrill Auditorium via the proposed amenity deck and street level staircases (Arts District Plan, 1996),
- Proposing the construction of dense housing in Downtown and pedestrian enhancements such as curb extensions and expanded sidewalks to promote walkability and traffic calming (Peninsula Transit Plan, 2009), and
- Providing infill development within a transit-oriented location with pedestrian-oriented streets to make walking more inviting, and connection to bus routes, bike networks, and other mobility options easier to access to other parts of the city. Providing residential density as well as employment and job density that can support and drive transit ridership as well as walk to work opportunities (One Climate Future, 2021).

B. Public Safety and Fire Prevention

Staff Comment: The Application was reviewed by Fire Marshal Jason Grant, who provided the following comments:

1. *The new hydrant needs to be located on the Congress Street side of the building at the Myrtle Street corner.*
2. *The proposed building is a high-rise which requires a redundant water supply for the fire suppression systems unless the building is in a seismic zone that does not require additional water. The submitted plans only show one water supply. Confirmation should be provided with seismic zone data to support a design that does not include a redundant water supply.*

Zoning Administrator Ann Machado requested confirmation on:

1. *Whether the Applicant has contacted Charles Wordell at Public Works for establishing the E-911 Address, and*
2. *Have CBLs been developed for the proposed three parcels?*

Finally, Senior Engineer Justin Pellerin from the Department of Public Works noted that:

- *The overall site plan calls out for an existing tunnel crossing Congress Street near the intersection with Myrtle to remain. The approved MDP had a note which said the tunnel was to be removed. Further discussion with the Department of Public Works and City staff will be required regarding the outcome of this existing tunnel.*

C. Public Utilities

Staff Comment: The site currently provides electrical service underground and the proposed development continues to provide underground service.

The Applicant has coordinated with the City to address Combined Sewer Overflow (CSO) capacity issues through the use of on-site detention and rerouting of stormwater to Pearl Street. Consulting Stormwater Engineer Lauren Swett provided the following comments on the proposed on-site detention system (Stormfilter/storage system):

- *Review of the post-development HydroCAD model shows that the modeled Stormfilter does not have any outflow through the primary outlet in any of the modeled storm events. The Applicant should confirm with the manufacturer that the system has been designed according to their standards.*
- *The Inspection, Maintenance, and Housekeeping form provided for the Stormfilter should be updated with a line for inspection and replacement as required of system cartridges.*
- *With the proposed stormwater system being accessed for maintenance within the building, the Applicant should also ensure that adequate clearance is available for the vehicles that are needed to maintain both the Stormfilter and pipe storage.*

Additional comments from Ms. Swett noted potential conflicts with existing utilities based on the location of proposed street trees at Congress & Myrtle Street and street lights on Myrtle Street.

The Applicant is proposing to provide on-site trash & recycling storage interior to the building at street level next to the structured parking area, with trash receptacles being moved out to the street curb for collection.

Section 14.6.4. Site Design Standards

A. Massing, Ventilation, and Wind Impact

Staff Comment: The proposed project is the first phase of an approved Master Development Plan that will occupy the entirety of a City block and was submitted by the Applicant for this Major Site Plan Application, as well as the Applicant for the future three phases of development. Based on the submitted bulk, location, and height of the proposed buildings, along with the fact that the MDP was submitted by both proposed property owners, the building is not anticipated to result in a substantial diminution in the value of neighboring structures. More detailed information on the proposed mechanical equipment on Level 12 will need to be provided by the Applicant to confirm that no negative impacts will result based on the proposed exhaust and ventilation.

B. Shadows

Staff Comment: Not Applicable since the property is located in the B-3 zone. Shadow impacts of the proposed development were reviewed under the Master Development Plan approval and found that the proposed design would not result in significant negative impacts on adjacent open spaces (City Hall Plaza & Lincoln Park) from the hours of 10:00 AM to 2:00 PM.

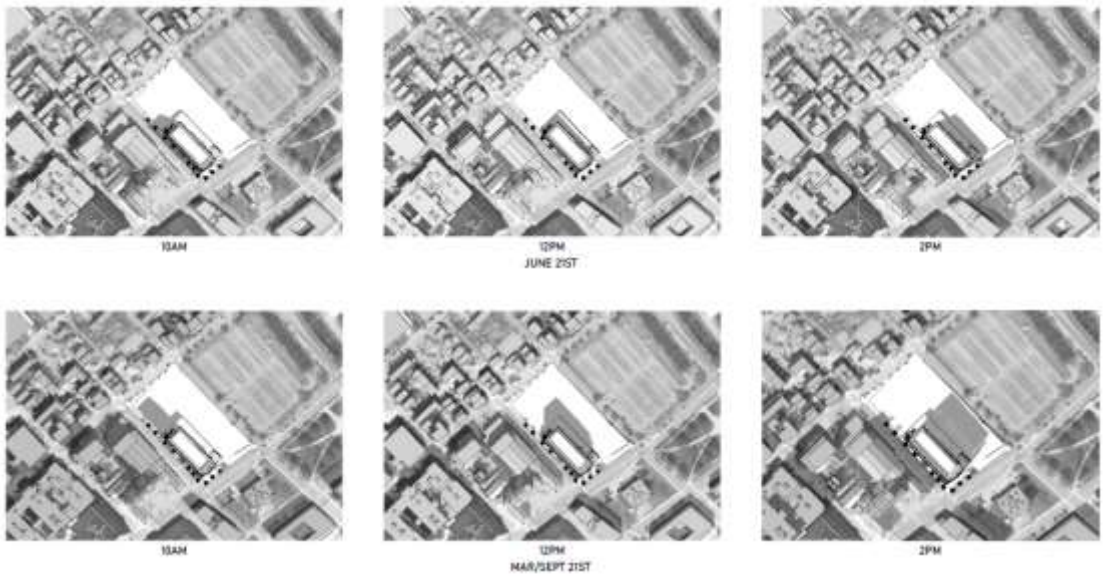


Figure 13: Shadow Study for Phase 1, which does not demonstrate any negative shadow impacts on nearby open spaces at City Hall Plaza or Lincoln Park.

C. Snow and Ice Loading

Staff Comment: The Applicant has stated that flat roofs and building setbacks on Myrtle Street will reduce negative impacts, with proposed snow removal to meet City requirements.

While the Applicant stated in their MDP application materials that snow would not be stored on-site, clarification of this should be provided in the Major Site Plan application materials.

Additionally, some of the design elements, such as the open gaps for the amenity deck over one of the street level entrances on Congress Street, staircases, and the art installation in front of the Myrtle Street entrance, require additional clarification on how negative impacts will be avoided or mitigated.

Figure 14: Rendering of enlarged building elements depicting the south facing entrance off Congress Street and the gap in the amenity deck over the entrance canopy.

D. View Corridors

Staff Comment: The project site is located adjacent to a view corridor along Congress Street. Feedback from the MDP review resulted in the Applicant matching the front setback of the building along Congress Street with City Hall to provide more consistency in the street wall, which also provides additional viewshed benefits. Given that the proposed project does not propose expanding the building footprint into the City right-of-way, the proposed building design does not substantially obstruct the public view corridor and this standard is met.

E. Historic Resources

Staff Comment: The proposed development is not located within a locally designated historic district. Since the site is adjacent to the Congress Street Historic District and local landmark City Hall, advisory historic preservation review was provided by Historic Preservation staff as part of the City design review to ensure compatibility with the neighboring district and landmarks.

F. Exterior Lighting

Staff Comment: In the application materials, the Applicant references a photometric plan that is not provided and will need to be submitted to determine compliance with site lighting and architectural and specialty lighting standards.

Figure 15: Photo of *Pamplona (2006)* in New Haven, Connecticut. An installation similar to *Pamplona* has been proposed at the base of the Myrtle Street staircase.

The Application was reviewed by Senior Engineer Justin Pellerin from the Department of Public Works, who provided the following comments (Attachment 2):

- *The site plan submission documents reference a photometric plan and fixture schedules which I could not locate in the submission materials. Please provide this information and provide further narrative describing how the proposed street lighting scheme meets requirements in Section 10 of the technical manual. The lighting plan should provide a light pole/fixture detail for the fixtures/poles specified for this project.*

- *The Applicant is proposing new street lights on Myrtle and Congress Street but has not shown how the new street lights will be fed with electricity. The Applicant should update the utility plan to show how electricity will be provided to the new street lights.*

- *The proposed street lights on Congress Street appear to be in conflict with an existing underground telecommunications system.*

- *The diameter of the light pole bases shall be specified on the project detail and shall be revised to show a 2- to 4-inch reveal above the sidewalk elevation per Section 10 Technical Manual requirements.*

- *A note should be added to the plan that all street light infrastructure to be removed shall be returned to the Traffic Operations Division of DPW.*

G. Noise and Vibration

Staff Comment: The proposed mechanical equipment will be located on Level 12 and is setback from the street frontages. Based on the proposed use of the site, it is not anticipated that the mechanical equipment would not comply with State and Federal emissions requirements.

H. Signage and Wayfinding

Staff Comment: As mentioned in the comments from the Design Review, the conceptual canopy signage for the street-level entrances do not currently fit the scale of the canopy that they are attached to. Updates to the overall size of the canopy will assist in providing a more appropriate scale for the site. As noted by Zoning Administrator Ann Machado, while the site plan takes signage into consideration, separate sign permits will need to be submitted for each proposed sign and ensure that it complies with Article 20 of the Land Use Code.

While not provided in submitted application materials, the Applicant should consider the development of conceptual wayfinding signage during the site plan review to ensure seamless pedestrian connectivity at street level and to the proposed amenity deck for future phases.

I. Design Standards

Staff Comment: Please refer to the comments in Section IX of this memorandum.

B. Subdivision Review Standards Section 15.4

Section 15.4 of the City's Land Use Code establishes standards under which Subdivision applications must be reviewed. Per this section, Subdivisions shall adhere to the following requirements:

A. Will Not Result in Undue Water or Air Pollution

Staff Comment: The proposed uses of the site would not result in undue air pollution. The Applicant has proposed the use of two on-site detention and filtration systems (1 for the first phase and a second for future phases) that are designed to mitigate undue water pollution to the City's combined sewer system. Through the submission of requested information on the system specifications mentioned earlier in comments from Consulting Stormwater Engineer Lauren Swett, the application will ensure that the subdivision will not result in undue water pollution.

B. Sufficient Water Supply

C. Unreasonable Burden on Existing Water Supply

Staff Comment: The proposed site has confirmed that water and sewer service can be provided to the site by the Portland Water District. Consultation with the Water District has identified related improvements that will need to be made to ensure that the subdivision will not result in an unreasonable burden on the existing water supply.

D. Will Not Cause Unreasonable Soil Erosion

Staff Comment: The entirety of the proposed subdivision is pre-developed and the Applicant has submitted an erosion & sediment control (ESC) plan for the first phase of development to minimize negative erosion impacts. As mentioned under the Major Site Plan review standards, additional information has been requested from Lauren Swett relating to the specific locations of ESC measures.

E. Will Not Cause Unreasonable Traffic Congestion

Staff Comment: The Traffic Movement Permit (TMP) application associated with the Master Development Plan (MDP) is still under review by Consulting Traffic Engineer Tom Errico and comments on the updated TMP application materials will be provided at a subsequent workshop.

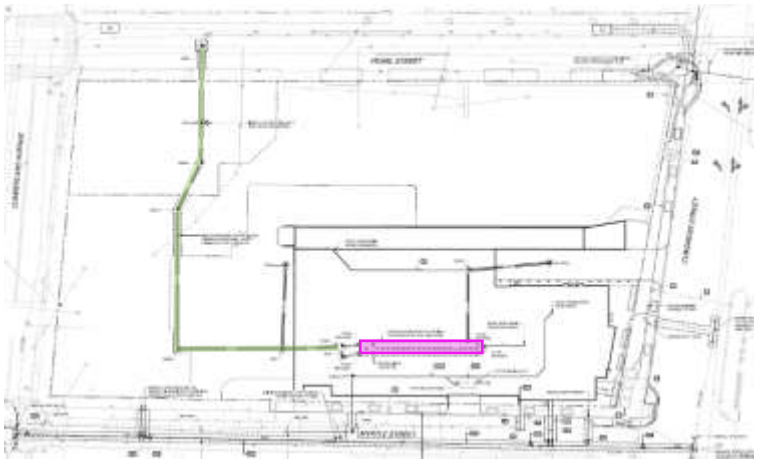


Figure 16: Utility plan sheet showing the proposed installation of an on-site detention basin (shown in magenta) and new connections to the Myrtle Street Main (shown in green).

F. Provides Adequate Sanitary Waste and Stormwater Disposal, and

G. Will Not Cause an Unreasonable Burden on Municipal Solid Waste and Sewage

Staff Comment: In consultation with City Staff, the Applicant has developed a design that reroutes stormwater to Pearl Street and sewer to Cumberland Avenue to not burden the more proximate Myrtle Street combined sewer. Through the revision of the site plan and corresponding stormwater & ESC documents to address City comments, the proposed subdivision will provide adequate sanitary waste and stormwater disposal that does not burden municipal systems.

H. Will Not Have an Undue Adverse Effect on the Scenic or Natural Beauty of the Area, Aesthetics, Historic Sites, or Significant Wildlife Habitats

Staff Comment: The project site does not include any identified scenic or natural resources, or significant wildlife habitats. For a review of the potential impacts related to historic resources, please refer to the review of compliance with Section 14.6.4.E. for the Site Plan review standards.

I. Conforms with the Comprehensive Plan

Staff Comment: The proposed subdivision aligns with these vision statements and goals by facilitating the infill of an underdeveloped site primarily used for automobile parking located at the heart of Portland's walkable downtown, proximate to some of the tallest structures in the city, with residential units, commercial uses, and publicly accessible open spaces and pedestrian connections that better reflect the downtown location.

The scale of the proposed buildings facilitate an increase in dwelling units within a walking and transit-oriented site. Along with increasing the viability of downtown, the proposed infill project potentially reduces the need for new construction in green field or outlying areas and dependency on single occupancy vehicles, which promotes more sustainable development practices.

In addition, the expanded sidewalk area along Congress Street would serve as a positive connection between adjacent open space sites (City Hall and Lincoln Park), the proposed amenity deck and retail units wrapping the corners of the site provide site permeability to enhance pedestrian connections, and overall there is an increase in the number of recreational opportunities within close proximity to the Bayside and Downtown neighborhoods.

Figure 17: Rendering of Congress Street looking south depicting the proposed expanded sidewalk area.

Vision Statements

- Sustainable: Portland has been built and rebuilt to endure; we will balance our historic fabric, sound infrastructure, and the best of new technology and design for the future.
- Sustainable: Portland will grow in order to sustain our community, infrastructure, and economy.
- Dynamic: Portland will plan for a built environment that encourages an active citizenry.
- Connected: We will enable meaningful access to the natural world and recreational opportunities as a central component of community health.

Land Use

- Reinforce the Center: Though Portland's commercial and entrepreneurial activity takes place throughout the city, downtown Portland remains at the center of the region's arts and cultural, economic, and civic health, and Portland's Plan embraces the principle that downtown should continue to be a predominant locus of activity for the broader region.

Environment

- Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation.
    - Continue to develop land use policies which support complete neighborhoods.

Figure 18: Graphic documenting the structure of *Portland 2030*.

An Enduring City – Historic Preservation

- Stabilize and enhance historic areas of the city by ensuring quality investment in existing structures and compatible infill development.
- Ensure an appropriate balance of continuity and change as Portland grows and evolves.

A Livable City: Housing

- Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents
- Encourage additional contextually appropriate housing density in and proximate to neighborhood centers, concentrations of services, and transit nodes and corridors as a means of supporting complete neighborhoods.
- Pursue policies to enable people who work in Portland to have the option to live in Portland.
- Encourage quality, sustainable design in new housing development.
    - Remove housing barriers
    - Leverage underused properties

An Active City – Recreation & Open Space

- Strengthen connections between open spaces
    - Ensure Equity
    - Improve Safety, Visibility, and Accessibility
    - Incorporate Multiple Functions
    - Connect the Chain

An Accessible City – Transportation

- Promote multi-modal accessibility, enabling residents and visitors of all ages and abilities to participate fully in the social and economic life of the community.
    - Enhance the pedestrian realm

Future Land Use

- Complete Neighborhoods
- Reinforce the Center

J. Adequate Financial and Technical Capacity

Staff Comment: As discussed in Section VI of this memorandum, the Applicant has submitted a letter of financial capacity from their financial institutions (Attachment H) as documentation stating that the Applicant is in good standing. Additionally, supporting documentation related to the technical capacity of the Applicant to complete the proposed work has been supplied in Attachment I.

K. Will Not Negatively Impact Waterbody Quality or Shoreline

Staff Comment: Not Applicable

L. Cumulative Impact of Proposed Project and Existing Activities Will Not Negatively Impact Groundwater Quality or Quantity

Staff Comment: Currently, there is no groundwater located on the site or adjacent to the site. Through modifications to the routing of stormwater and sewage from the site to minimize negative impacts on the Myrtle Street combined sewer, the contribution to outfall by the project will minimize negative impacts to groundwater quality and quantity.

M. Is or Is Not Located in a Flood-Prone Area

Staff Comment: Not Applicable

N. Supplies Adequate Stormwater Management

Staff Comment: The Applicant has coordinated with the Portland Water District to develop a system for the site plan and tentative stormwater management improvements for future phases of the Master Development Plan. Through updates to meet comments from the Consulting Stormwater Engineer, the proposed subdivision application will ensure adequate stormwater management for all three proposed parcels.

O. Lot Depth-To-Shore Ratio Less than 5-To-1

Staff Comment: Not Applicable.

P. Subdivisions Crossing Municipal Boundaries Will Not Result in Negative Impacts to Adjoining Municipalities

Staff Comment: Not Applicable.

XI. NEIGHBORHOOD MEETING & PUBLIC COMMENT

As of the writing of this memorandum, no written public comments have been received for the Major Site Plan and Subdivision Reviews. The applicant held a Neighborhood Meeting on October 6, 2022 and 2 members of the public attended (Attachment GG). Questions raised at the Neighborhood Meeting addressed the following topics:

- Security at the amenity deck;
- Phasing, and
- Retention of on-street parking.

XII. NEXT STEPS

- Address Board and Staff Comments, Including Forthcoming Comments Related to the Associated TMP
- Schedule a Subsequent Planning Board meeting.

XIII. ATTACHMENTS

Staff Attachments

1. City Staff Design Review Memorandum (August 2, 2022)
2. City Staff Comment Letter (October 21, 2022)
3. City Staff Design Review Memorandum (October 19, 2022)

Applicant's Documents

A. Cover Letter and Description
B. Major Site Plan Checklist
C. Right, Title, and Interest
D. Right, Title, and Interest – Purchase and Sale Agreement
E. Evidence of State & Federal Approvals
F. Zoning Analysis Table
G. Waiver Table
H. Financial Capacity
I. Technical Capacity
J. Impact on Surrounding Streets
K. Access and Circulation
L. Public Transit
M. Off-Street Parking
N. TDM Plan
O. Revised Trip Generation Calculation Memorandum (August 5, 2022)
P. Preservation of Natural Features
Q. Landscape Preservation
R. Site Landscaping and Buffers
S. Water Quality, Stormwater Management, and Erosion Control
T. Stormwater Management Report
U. Consistency with Master Plan
V. Public Safety and Fire Prevention
W. Availability and Adequacy of Public Utilities
X. Massing, Ventilation, and Wind Impacts
Y. Shadows
Z. Snow and Ice Loading
AA. View Corridor
BB. Historic Resources
CC. Exterior Lighting
DD. Noise and Vibration
EE. Signage and Wayfinding
FF. Zone Related Design Standards
GG. October 6, 2022 Neighborhood Meeting Minutes
HH. September 12, 2022 De Minimis Change Request

Plans

P1. Cover Sheet
P2. General Notes and Legend
P3. Subdivision Plan

P4. Demolition Plan
P5. Overall Site Plan – Street Level
P6. Grading and Drainage Plan
P7. Utility Plan
P8. Schedules
P9. Myrtle Street Plan and Profile
P10. Overall Landscape Plan – Street Level
P11. Landscape Plan – Street Level
P12. Site Plan – Interim Parking
P13. Grading Plan – Interim Parking
P14. Landscape Plan – Interim Parking
P15. Erosion Control Notes and Details
P16. Details – 1
P17. Details – 2
P18. Details – 3
P19. Details – 4
P20. Details – 5
P21. Traffic Plan
P22. Existing Conditions Plan
P23. Existing Conditions Plan – Structure Table
P24. Floor Plan – Site Plan
P25. Floor Plan – Level P1
P26. Floor Plan – Level 1
P27. Floor Plan – Level 2
P28. Floor Plan – Levels 3-4
P29. Floor Plan – Levels 5-6
P30. Floor Plan – Levels 7-8
P31. Floor Plan – Levels 9-10
P32. Floor Plan – Levels 11-12
P33. Building Materials
P34. Elevation – Congress Street
P35. Elevation – Myrtle Street
P36. Elevation – West (Site Interior)
P37. Elevation – North (Site Interior)
P38. Perspective Views
P39. Enlarged Building Elements – Hotel Entrance
P40. Enlarged Building Elements – Myrtle Street – 1
P41. Enlarged Building Elements – Myrtle Street – 2
P42. Shadow Study

Public Comment: None

Subject:	385 Congress Street – Master Development Plan
Zone:	B3
Date of Review:	Tuesday, August 2, 2022
Reviewer(s):	Sean King (Urban Designer), Zachary Powell (Senior Planner), Kevin Kraft (Deputy Director)
Project ID:	PL-001970-2022

I. INTRODUCTION

The project at 385 Congress Street is subject to the Master Development Plan Review Standards, Land Use Code section 14.7.5 Design. The project is also within 100' of a historic district and included an advisory historic preservation design review.

The proposed Master Development Plan for a mixed-use hotel and condominium is only reviewed according to the Master Development Plan criteria. The project will be subject to future staff design review subject to the design standards of the City of Portland *Design Manual* – ***[b] B-3 Downtown Business Zone, Appendix 1***. Staff recommend the MDP approval include design guidelines that will apply to all subsequent site plan applications.

Based on the revised submission from August 1, 2022 and Planning Board comments, staff have the following comments as well as recommended Design Standards to apply to future Site Plan applications.

II. DESIGN REVIEW COMMENTS:

The project at 385 Congress Street shall meet the following standards of ***Master Development Plan Review Standards, Land Use Code Section 14.7.5 Design.***

A. Creation of a cohesive identity.

A master development plan shall be designed to create a cohesive identity through building scale, massing, and articulation;

Staff comment: The proposed development program includes a hotel and condominium units to occupy the entirety of the 385 Congress Street site, bordered by Congress Street, Cumberland Avenue, Pearl and Myrtle Streets. The proposed development intends to create a cohesive identity through building scale with a 1-2 story podium level continuous at the ground-level to activate and address the neighboring context and adjacent structures, notably City Hall, a hotel with ground floor retail, residential buildings and a place of assembly. The massing defined with stepbacks for the proposed towers of the hotel and multi-phased condominium units establishes vertical scale while reducing building height towards the residential character of Cumberland Avenue. The composition and articulation of the building facades shall maintain the master development plan

approach to activate the street frontage along the ground-floor with storefronts windows materials for screening, and rhythm of fenestration; the towers shall maintain a regular rhythm of vertically proportioned windows and sculpt massing to reduce the scale with façade composition in response to the street and mid-block "no build zone" that includes the amenity terrace and site access points.

Use of quality exterior material and architectural detailing at pedestrian scale;

Staff comment: The materials proposed meet this standard that provides pedestrian scaled façade composition through building entry canopies, storefront windows, fenestration screening materials at garage facades and signage. Each phase of site plan review shall include further details for materiality, color, articulation and quality.

Consistency of design and materials for streetscape and pedestrian amenities;

Staff comment: The proposed master development plan includes activation of streetscape and pedestrian amenities along highly traversed roadways. At Congress Street, the linear park creates an expansion of the public realm to allow for trees and tree wells, lighting, outdoor seating and brick sidewalk for pedestrian access. There is a delineation of surface material for pedestrian vs. vehicular that shall be maintained. The creation of the level 2 amenity terrace includes a unique approach to create public vs private zones that shall be suddenly delineated by changes in grade to accommodate sufficient soil depth for the tree planters, along with acute materiality. Street level pedestrian public access through monumental stairs to incorporate bench terrace seating, planters and greenscreens from Congress Street and Myrtle Street shall be maintained.

Framing of outdoor open space and linkages;

Staff comment: The proposed master development plan creates layers of outdoor open space and linkages to include the Congress Street linear park, Myrtle Street-scape, Cumberland Avenue active street, Pearl Street residential lobby and level 2 amenity terrace to reinforce public activation along the surrounding streets of the site. Each phase of site plan review shall include the adjoining open space as a continuation that shall utilize similarity of material, pedestrian amenities, and pedestrian connectivity. Under future site plan reviews, the Applicant should consider how street furniture, such as permanent outdoor seating, can be incorporated within the expanded sidewalk along Congress Street.

A clear conveyance of the function and significance of various buildings, entrances, and features;

Staff comment: The hotel in Phase 1 is differentiated from the condominium units primarily through the façade composition along Congress / Myrtle Street corner with a glass façade, regularity of fenestration for the hotel rooms and deeply recessed building entries with unobstructed glass along Congress Street. The condominium units, shown as three phases are primarily distinguished from the hotel by the storefront windows for the retail program and large fenestrations along the garage façade which shall be screened with high quality material to create an activated façade. Along with the retail program, the development shall incorporate MDP design standards for signage to be reviewed at each phase of site plan review. Additionally, the

condominium buildings include balconies projections and recessions into the façade composition that reinforces private access to open space.

And to generally comply with design and development standards of the zone in which it is located. – Met. In addition to the MDP review standards, the application will be reviewed under the B-3 design guidelines.

Proposed MDP Design Standards (to be applied to subsequent Site Plan applications)

- Materials
  - Congress Street – Material placement, detail, and articulation should emphasize the established historic Congress Street patterns of massing, proportions, and façade composition regulating lines and building base. The ground floors will consider pedestrian comfort and scale, especially in the placement of doors, windows, canopies, and details in the materials and articulation. The hotel, in order to stand apart in character and use, will have a more contemporary expression but will continue the base and regulating lines found along Congress Street.

  - Quality Exterior Materials includes the detailing, articulation, transition, durability, and visual interest of the materials, not only their selection and placement. These aspects will be reviewed with special attention to the ground floors and areas most visible to pedestrians.

  - Façade composition - In Site Plan review the design shall provide depth, articulation, visual interest, and quality transitions. Historic buildings in the surrounding context should be considered precedent examples, especially on Congress Street.

  - Cumberland Avenue - The condominium buildings along Cumberland Avenue should have a cohesive visual relationship in materiality, window type and pattern, and articulation elements that activate the ground-floor. The massing and function of the podium base along Cumberland shall be pedestrian scaled that responds to the surrounding neighborhood context.

- Streetscape design
  - Congress Street / Cumberland Avenue – Establish active uses fronting the street. The sidewalk should be as wide as possible to accommodate street trees, tree wells, permanent outdoor seating, lighting and other pedestrian amenities in the furnishing zone. Planters or landscape areas should not be placed between the sidewalk and the building, with the exception of recessed building entries and/or access points. Final design shall be coordinated with City staff, especially to ensure viability of street trees and ease of maintenance.

  - Interior Passages – Internal passages should employ CPTED principles as a best practice to make spaces that are safe, active, and inviting. Material selection and design should indicate private or public access. Design shall be legible and intuitive for pedestrians and cars, especially for wayfinding.

- Signage – Signage shall be integrated into the building design and respond to the storefront façade at the ground level and be pedestrian scaled, especially along the Congress Street historic district. Final design shall be coordinated with City staff.

Arborist

- The project team should consult with the City Arborist to determine the viability of retaining the existing street trees along Congress Street.

- Confirm whether the sidewalks around the site will remain open during construction.

Design

- Please refer to the October 20, 2022 Design Review Memo for the proposed project that assesses the compliance of the project with B-3 design standards, Multi-family design standards, and the MDP Design Memorandum from August 2, 2022.

Fire

- The proposed new hydrant will need to be located on the Congress Street side of the building at the Myrtle Street corner.

- In the submitted application documents, only water supply is shown. The building is a highrise, which requires a redundant water supply for the fire suppression systems unless the building is in a seismic zone that does not require the additional water. Submit evidence that the building is located in a seismic zone or update the application materials to provide a redundant water supply.

Department of General Services

- Regarding the proposed signal modifications at the Pearl/Congress intersection: Other than the signal cabinet, which the City recently replaced and is fully compliant with our current specifications, the remaining equipment should be updated with structures, heads, pedestrian equipment and detection compliant with our Traffic Signal Policy and Guidance Manual:

  https://content.civicplus.com/api/assets/8d37f9dd-562b-4ca0-8b5e-4522c902e1fc?cache=1800.

  DPW's position on this is unchanged from previous comments provided during the project's MDP process on May 4th, 2022:

  "This project will significantly impact the intersections of Pearl with Cumberland and Congress, including traffic and pedestrian demand as well as significant changes to sidewalk and curbing. The traffic signal at Pearl and Cumberland is one of the oldest configurations in the City, and does not have pedestrian provisions or meet any current City specifications. This should be replaced and updated as part of this project. The structures and pedestrian equipment for the signal at Pearl and

Congress should also be replaced, but this location does have a new cabinet that meets City specifications."

- The Applicant shall define key features and provide further grading detail for the proposed ADA sidewalk ramps at the Pearl/Congress and Congress/Myrtle intersections to ensure the installation of an ADA-compliant landing area for each ramp. The plans should also more clearly define the dimensions of proposed tip downs, flush curbing and warning panels. As a general note, warning panels should be sized to extend the entire length of the proposed flush curbing and shall meet the material/installation requirements as depicted in the City's Technical Manual Detail (Attached).

- The overall site plan should be updated to include key dimensions including but not limited to proposed sidewalk widths, key ADA ramp dimensions and resulting street widths from the proposed curb alignment changes.

- 7 inches of curb reveal is required for all vertical granite curbing except for tip downs and flush curbing associated with pedestrian crosswalk ramps and driveways. The current design proposes several locations along Congress Street where the curb reveal is less than 7 inches.

- Curb extensions should be designed for a maximum extension width of 6 feet with 16-foot minimum transition lengths on either side of the extension. Transitions of 19-20 feet are preferred where possible.

- The Applicant shall provide truck turning templates for turning movements at each intersection which indicate what the design vehicle is for each movement.

- The curb extension on Myrtle should have inner & outer radial curb, similar to the extensions on Congress & Pearl.

- The Applicant appears to be tapering down the effective curb to curb roadway width of Congress Street from Pearl Street to Myrtle by approximately 7 feet towards the centerline near the Myrtle/Congress intersection effectively reducing the curb to curb pavement width along the entire Congress Street frontage. The resulting lane configuration appears to direct the outbound Congress Street lane directly towards a concrete center median located just southwest of the Congress/Myrtle intersection. The proposed curbing realignment of the curbline could make the implementation of bike lanes or priority transit lanes more challenging in the future. DPW is not currently supportive of the proposed curbline adjustments being proposed along the Congress Street frontage.

- The typical design of sidewalk cross slopes, ADA ramp landings, and driveway pedestrian zones should be set at 1.5% to ensure construction tolerances do not cause facilities to exceed the max ADA cross slope threshold of 2%.

- The Applicant should update the following details:

    - Vertical Granite curb,
    - Commercial Driveway Apron,
    - Brick Sidewalk,
    - Brick Driveway Apron, and
    - Detectable Warning Panel,

  with replacement details attached to this comment review document. The City is in the final stages of updating its Technical Manual and it is anticipated that this update will be approved later this fall. DPW is starting to request that these details be used to depict work within the City right of way.

- DPW is proposing to change its base gravel specification to match Maine DOT 703.06 Type 'A" material. DPW is requesting the Applicant to update its typical local and arterial roadway section to reflect this change.

- The crosswalk detail should be replaced with the City's updated standard crosswalk detail (attached to this comment letter) and should be updated to increase the typical length of a block to 8 feet to meet City technical requirements and specify that crosswalk markings located on arterial streets shall be applied with a thermoplastic material (or approved equal) meeting all manufacturer and MUTCD requirements.

- The width of the inbound Congress (northeast) left turn lane from Congress onto Pearl shall be minimized to 10 feet to maximize the space left over for the future implementation of priority transit lanes and on road bike facilities.

- DPW is of the opinion that with some adjustments to the proposed Myrtle Street cross-section, a few more feet of width can be achieved for the in-curb portion of Myrtle Street, ideally going from about 28 feet to 30 feet. The narrowness of this existing street currently presents operational challenges for City Hall and Merrill Auditorium, and DPW winter operations crews which only stands to become more challenging as a result of the additional traffic volumes and the new Hotel driveway on Myrtle Street being proposed as part of this development project

- The Applicant shall submit easement language, figures and descriptions for the proposed sidewalk easements the Applicant will be required to grant the City of Portland along Myrtle Street and Cumberland Avenue.

- Raised curb tree wells shall be offset a minimum of 2 feet off the curb line in locations which abut on-street parking unless it can be demonstrated that the placement of the tree wells will not interfere with the opening of vehicle doors. Based on the proposed sidewalk width of Congress Street it appears that this can be achieved. Further analysis/information is required for the proposed tree wells on Myrtle Street. The treewell in brick sidewalk detail to specify a curb reveal of 4 to 5 inches above the proposed sidewalk grades.

- The Applicant is proposing to install street trees in raised curb tree wells adjacent to curb ramps at the Congress/Myrtle and Congress/Pearl intersection. DPW is requesting further information on how the locations of these trees will affect pedestrian visibility at the ramp facility.

- The Applicant is proposing new street lights on Myrtle and Congress Street but has not shown how the new street lights will be fed with electricity. The Applicant should update the utility plan to show how electricity will be provided to the new street lights.

- The proposed street lights on Congress Street appear to be in conflict with an existing underground telecommunications system.

- The site plan submission documents reference a photometric plan and fixture schedules which I could not locate in the submission materials. Please provide this information and provide further narrative describing how the proposed street lighting scheme meets requirements in Section 10 of the technical manual. The lighting plan should provide a light pole/fixture detail for the fixtures/poles specified for this project.

- The diameter of the light pole bases shall be specified on the project detail and shall be revised to show a 2- to 4-inch reveal above the sidewalk elevation per Section 10 Technical Manual requirements.

- A note should be added to the plan that all street light infrastructure to be removed shall be returned to the Traffic Operations Division of DPW.

- The overall site plan calls out for an existing tunnel crossing Congress Street near the intersection with Myrtle to remain. The approved MDP had a note which said the tunnel was to be removed. Further discussion with DPW and City staff will be required regarding the outcome of this existing tunnel.

- City staff continue to review the project's construction management plan and how it impacts operations of City Hall and Merrill Auditorium. Further comment and feedback will be provided at a later date. DPW would note that Myrtle Street is closed from time to time on days when events are occurring at Merrill Auditorium. It is unclear how the proposed valet parking system will function in the event that Myrtle Street is closed for a Merrill Auditorium event. The Applicant should provide further information for review.

Housing

- The fee-in-lieu costs for 2022 for the proposed hotel is $4,289.84 per guest room. To comply with the Hotel Inclusionary Zoning Ordinance by paying the fee-in-lieu, the fee-in-lieu costs would be $669,215.04 ($4,289.84 X 156 = $669,215.04). In-lieu fees must be paid into the Housing Trust Fund prior to the issuance of a Certificate of Occupancy.

- Please note that any changes in the total number of guest rooms will necessitate a revision to the fee-in-lieu payment total.

Parking Division

- While I like the idea of adding additional on-street parking on Pearl Street, I am concerned that it will result in traffic backing up while vehicles queue to enter the Top of the Old Port Lot and cause issues for emergency vehicles.

- I am still concerned with the valet operation. I do not understand:
    - How guests of the hotel will retrieve their vehicles?
    - How will arrivals and departures work with only a one-way driveway from Congress Street (in only with no exit)
    - How will vehicles exit the garage onto Myrtle Street when Myrtle Street is closed due to events at Merrill Auditorium?

Planning

- The Applicant shall coordinate with Corporation Counsel to establish the appropriate access easements and maintenance easements for the expanded pedestrian areas along Congress Street, Myrtle Street, Cumberland Avenue, and Pearl Street.

- The Applicant shall coordinate with Corporation Counsel to establish the appropriate access easements for the proposed amenity deck, with considerations for the proposed phasing and construction impacts of the overall Master Development Plan (MDP).

- As part of the review and approval of the MDP, bicycle parking for all three phases was shown on the portion of the site for the first condominium development. The site plan for the hotel phase will need to show how required bicycle parking will be provided for in the interim between the issuance of a Certificate of Occupancy for Phase 1 and the issuance of a Certificate of Occupancy for Phase 2.

  Update the site plan to provide the required 18 bicycle parking spaces for Phase 1 (Calculations included below) to meet the requirements of §14.6.1.D.2.a. of the Land Use Code.

  Required Automobile Spaces for Hotel: 38

  Required Automobile Spaces for Ground-Floor Retail Unit: 4.2

  Required Automobile Spaces for Restaurant: 31

  Total Number of Required Commercial Automobile Spaces: 73.2 = 73

  X 20%

  = 14.64 required bicycle parking spaces for commercial uses

+ Required Bicycle Spaces for 9 Dwelling Units (9*40%= 3.6)	3.6
Total Number of Required Bicycle Spaces for Project: 18.24 =	18

- §14.6.1.D.4.a. of the Land Use Code requires that all development with five or more automobile spaces shall provide energized electrical outlets or install chargers capable of providing Level 2 EV charging or higher to 20 or parking spaces, with remaining spaces being served by sufficient conduit, wiring, and electrical service to allow for future installation of electric vehicles supply equipment.

  The submitted site plan does not provide evidence that at least 20% of the spaces (15 automobile spaces) meet this requirement.

  Update the site plan and/or floor plans to document the required 15 spaces that meet the requirements of §14.6.1.D.4.a. of the Land Use Code.

- Consult with City Arborist Jeff Tarling (jst@portlandmaine.gov) on the proposed removal of existing street trees on Congress Street and the proposed landscaping plans for Congress & Myrtle Streets.

- Interim parking plans have been provided for the proposed surface parking area. Provide confirmation that the proposed design of the parking lot islands can be designed to meet the standards for parking lot landscaping in §14.6.2.C.3. of the Land Use Code.

- Based on the current proposed design, it is unclear how negative snow and ice loading impacts related to the design of the amenity deck, public staircases, and proposed art installation will be mitigated.

  Provide additional information on the proposed maintenance of these areas to demonstrate that the proposed design will not result in significant negative impacts onto adjacent properties and public ways.

- In the submitted application documents, there are references to a photometric plan for the site, but one was not provided.

  Update the site plan set to include a sheet with the referenced photometric plan.

- On the Cover Sheet, there are references to Sheet 6 and 13 (Site Plan & Landscaping Plan – Level), that were not submitted.

  Update the site plan set to include Sheets 6 and 13.

Stormwater Management and Erosion and Sediment Control Measures

- The project is required to provide stormwater management in accordance with Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 standards. The project is required to meet the Basic and Redevelopment Standards.

    - Basic Standards – The project has provided notes and details addressing erosion and sedimentation control. Erosion and sediment control measures should also be referenced on a plan view showing proposed locations.

    - Redevelopment Standards – The project is proposing to treat the building roof using a Stormfilter system, and will be using subsurface storage to manage flows. The Applicant has coordinated with the City on stormwater connection locations to address CSO capacity issues.

- I have the following comments on the proposed Stormfilter/storage system:

    - Review of the post development HydroCAD model shows that the modeled Stormfilter does not have any outflow through the primary outlet in any of the modeled storm events. The Applicant should confirm with the manufacturer that the system has been designed according to their standards.

    - The Inspection, Maintenance, and Housekeeping form provided for the Stormfilter should be updated with a line for inspection and replacement as required of system cartridges.

    - With the proposed stormwater system to be accessed for maintenance from within the building, the Applicant should also ensure that adequate clearance is available for the vehicles that are needed to maintain both the Stormfilter and pipe storage.

- Drainage from within the parking garage is required to be collected through an oil water separator and discharged to the sewer. The architectural site plan shows floor drains, but the utility plan should address how this internal drainage will be managed.

- The proposed trees to be installed in the sidewalk are shown overlapping existing underground communication lines. Trees at the corner of Congress and Middle Streets also overlap the existing Congress Street tunnel to remain. The Applicant should evaluate utility depths to ensure there are no conflicts.

- Proposed street lights are shown on Myrtle Street. The plan does not show the connection of these street lights to the electrical utility infrastructure. These connections should be shown to evaluate

conflict with other utilities and to show the extent of required repaving of the roadway.

- The proposed detectable warning plates for the sidewalk should be consistent with the detail provided in Section 1 of the City's Technical Manual. The City standard material is cast iron.

- The City's standard for granite curb has been updated to require that curbing for streets be installed in concrete.

- The City's standard for the grading driveway aprons has been updated to require that sidewalk grades remain consistent without ramps at aprons, and curb reveal grading be accomplished with a transition at the street edge of the sidewalk. This can be a challenge with sidewalk without esplanades, and I'd recommend reviewing the layout with Public Works to ensure that the sidewalk grading approach is acceptable for this location.

Traffic and Traffic Movement Permit

- A Traffic Movement Permit Section 7 Traffic Study has been submitted in association with the Master Development Plan. That study is being reviewed and comments will be provided in the future.

- Given that vehicles will be parked by valet personnel, I support waivers from the City's Technical standards for aisle width (Due to tandem valet parallel parking), parking space size (the number of compact size spaces), and parking lot layout (parallel parking spaces at the end of 90 degree spaces).

- In conjunction with the TDM plan, the Applicant shall provide a parking demand analysis in support of the proposed parking supply.

- The Applicant should provide detailed information on the routing of valet vehicles to and from the parking levels for the project. There is a desire to minimize the magnitude of circulating vehicles on City streets and an internal circulation system that accomplishes this should be considered.

- The Applicant shall provide details on the valet queue storage area such that vehicles do not extend into the sidewalk area along Congress Street. Information of expected vehicle arrivals and departures and queue estimates shall be provided. Additionally, details on how this will be managed to avoid back-up issues shall be provided.

- The curb extension design will need to be reviewed and approved by the Department of Public Works and other City departments.

- The Applicant should provide greater detail on the frequency and times of delivery truck activity both on-street and internally. For internal truck deliveries, turning templates shall be provided for vehicles entering from Congress Street, through the garage, and exiting onto Myrtle Street.

- The Applicant proposes replacing/relocating the traffic signal support in conjunction with the curb extension improvements at the northwest corner of the Congress Street/Pearl Street intersection. Traffic mitigation requirements associated with the TMP are currently being identified and details of requirements will be provided in the future.

- I would note that the application notes that the supply of on-street parking spaces increase with the project. This is contingent on the provision of on-street parking spaces on Pearl Street and the TMP traffic analysis is being reviewed to determine feasibility.

- The Applicant shall provide a plan that details changes to on-street parking and shall note spaces that are removed, added, and regulation modifications.

Transportation Demand Management Plan

- The TDM Plan includes a good overview of the TDM context of the hotel site, including the downtown and the site's proximity to local and regional transit routes.

- The Plan includes a discussion of the parking demand/supply being provided and trip generation for the site, but clarification is needed about the parking and trip reduction targets being set.

- The Plan discusses TDM strategies specific to hotel guests and employees – more specificity and refinement of those strategies is needed, such as:

    - Will guests pay to park during their stay?
    - What level of transit subsidy will be provided to employees?
    - Will employee parking be provided?
    - How is TDM-related information being conveyed to employees and guests (such as adding Transportation Options/Alternatives to the hotel's website)?

- The Plan includes a good start for a monitoring plan that can be augmented by including the reporting of a mode share from the surveys and by what methods/data the trip and parking reduction targets will be monitored.

Zoning

- Update the floor plan set to include the floor area and lot coverage for each floor to confirm compliance with the maximum permitted floor area and lot coverage requirements of Table 7-E of the Land Use Code.

- Update the site plan set to include the grade calculations for the proposed corners of the site subdivision and provide a narrative explaining the methodology for establishing the proposed

average grade calculations.

- Confirm whether Charles Wordell (cww@portlandmaine.gov) at Public Works has been contacted to establish E-911 Addresses.

- While proposed signage is incorporated in the review of the Major Site Plan, separate site permits for each proposed sign will need to be submitted and meet the criteria of Article 20 of the Land Use Code.

- Submit anticipated CBLs for the three lots in the proposed subdivision.

GENERAL NOTES

1. DESIGN OF ACCESSIBLE RAMPS AND ASSOCIATED FACILITIES ARE GOVERNED BY THE 2010 AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN, WHICH IS DETAILED IN DOJ SECTION 28 CFR 35.151. ADDITIONAL GUIDANCE AND INFORMATION CAN BE FOUND IN THE PROPOSED PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES PUBLISHED BY THE U.S. ACCESS BOARD. IN ANY CASE WHERE THE DESIGN REQUIREMENTS ARE MORE STRINGENT BETWEEN ADA STANDARDS AND CITY REQUIREMENTS, THE ADA STANDARDS SHALL GOVERN.

2. SIDEWALKS SHALL BE CONSTRUCTED IN BRICK, CONCRETE, OR BITUMINOUS, ACCORDING TO THE SIDEWALK & DRIVEWAY APRON MATERIALS POLICY, UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER.

3. SIDEWALKS AND RAMPS SHALL BE BUILT ACCORDING TO THE FOLLOWING DIMENSIONS AND GRADES:
   SIDEWALK RUNNING SLOPE: MATCH ADJACENT STREET GRADE
   SIDEWALK CROSS SLOPE: 1.0% MINIMUM, 2.0% MAXIMUM
   SIDEWALK WIDTH: 5'-0" MINIMUM, WIDER PREFERRED
   ESPLANADE (WHERE PROVIDED) 2'-0" MINIMUM, 4'-0" OR GREATER PREFERRED IF LANDSCAPED.

4. TWO CURB RAMPS ARE REQUIRED AT EACH SIDEWALK CORNER. EACH CURB RAMP SHALL CONNECT THE PEDESTRIAN ACCESS ROUTE AT EACH PEDESTRIAN STREET CROSSING. IN ALTERATIONS WHERE PHYSICAL CONSTRAINTS PREVENT TWO CURB RAMPS FROM BEING INSTALLED AT A STREET CORNER, A SINGLE PEDESTRIAN CURB RAMP MAY BE PERMITTED.

5. OPPOSING CURB RAMPS AT A SINGLE CROSSING SHALL ALIGN TO PROVIDE A STRAIGHT PATH OF TRAVEL FROM THE TOP OF THE RAMP TO THE CURB RAMP ON THE OPPOSITE SIDE OF THE ROADWAY TO THE MAXIMUM EXTENT FEASIBLE.

6. ALL SIDEWALKS AND RAMPS SHALL DRAIN TOWARD THE STREET, DRIVEWAY, OR PARKING AREA, WITH A MAXIMUM CROSS SLOPE OF 2.0%.

7. LEVEL LANDINGS (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) AT THE BOTTOM OF PERPENDICULAR RAMPS SHALL BE WHOLLY CONTAINED WITHIN MARKED CROSSWALKS.

8. PONDING SHALL NOT BE PERMITTED WITHIN THE CURB RAMP LIMITS. RAMPS SHALL NOT ALTER ROADWAY DRAINAGE PATTERNS.

9. TRANSITION FROM RAMPS TO WALKS OR STREET SURFACE SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. PAVEMENT AT THE STREET SURFACE SHALL BE MILLED AND REPAVED TO ACHIEVE FLUSH CONDITION.

10. CURB RAMP AND FORM WORK SLOPES SHALL BE CHECKED WITH A DIGITAL LEVEL OF AN APPROPRIATE LENGTH. NO PORTION OF A RAMP RUN SHALL EXCEED THE MAXIMUM SLOPE REQUIREMENT.

11. THE COUNTER SLOPE WITHIN 2' OF THE CURB RAMP SHALL BE 5% MAXIMUM. IN ALTERATIONS, IF THE COUNTER SLOPE OF 5% MAXIMUM CANNOT BE ACHIEVED, THE SLOPE ELEVATION MAY BE ADJUSTED SO THAT THE COMBINED COUNTER SLOPE AND RAMP SLOPE DO NOT EXCEED 13.3%.

12. VERTICAL DROP-OFF EDGES TO RAMPS SHALL NOT BE BUILT UNLESS THE RAMP ABUTS AN ESPLANADE OR OTHER AREA NOT TO BE USED BY PEDESTRIANS.

13. AT MARKED CROSSWALKS, THE FULL WIDTH OF THE RAMP OR LANDING SHALL BE CONTAINED WITHIN THE PAVEMENT MARKINGS.

14. DETECTABLE WARNING PANELS SHALL BE PROVIDED ON ALL RAMPS AS PER FIGURE I-7 OF THESE STANDARD DETAILS.

15. RAMP FLARES SHOULD BE LOCATED OUTSIDE THE DIRECT LINE OF TRAVEL MOST LIKELY TO BE FOLLOWED BY THE VISUALLY IMPAIRED.

16. SIGNS, POLES, PLANTERS, MAILBOXES, ETC. SHALL NOT BE LOCATED WHERE THEY WILL INTERFERE WITH THE USE OF SIDEWALK RAMPS.

17. SIDEWALK RAMPS SHALL NOT BE LOCATED WHERE USERS MUST CROSS DROP INLET GRATES, MANHOLE COVERS, OR OTHER ACCESS LIDS. IF THIS CANNOT BE AVOIDED, THEN GRATE DESIGN AND PLACEMENT SHALL CONFORM TO ADA REQUIREMENTS.

18. THE PUBLIC SIDEWALK CURB RAMP STANDARDS DEPICTED HERE MAY NOT BE APPROPRIATE FOR ALL LOCATIONS. FIELD CONDITIONS AT INDIVIDUAL LOCATIONS MAY REQUIRE SPECIFIC DESIGNS. RAMP DESIGNS THAT ARE COMPLIANT WITH ADA BUT NOT LISTED IN THESE DETAILS MAY BE APPROVED BY THE CITY ENGINEER.

19. DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF THESE DETAILS AND TO ADA GUIDELINES TO THE MAXIMUM EXTENT FEASIBLE ON ALTERATION PROJECTS, AND WHEN STRUCTURALLY PRACTICABLE ON NEW CONSTRUCTION PROJECTS AS REQUIRED BY THE ADA ACCESSIBILITY GUIDELINES.

20. MAXIMUMS AND MINIMUMS DO NOT HAVE TOLERANCES AND ARE NOT TO BE EXCEEDED OR UNMET.

21. THE STANDARD TURNING SPACE (LEVEL LANDING) IS 4'-0" X 4'-0" SLOPING NO MORE THAN 2.0%. WHERE THE TURNING SPACE SHALL BE 4'-0" MINIMUM BY 5'-0" MINIMUM. THE 5'-0" DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

22. DETECTABLE WARNINGS SHALL BE INSTALLED AT ALL SIGNED OR SIGNALIZED INTERSECTIONS. THEY SHALL HAVE A TRUNCATED DOME SURFACE. THE DOMES SHALL BE IN A SQUARE PATTERN AND ALIGNED WITH PEDESTRIAN TRAFFIC WHERE POSSIBLE.

23. DETECTABLE WARNINGS SHALL SPAN THE WIDTH OF THE PEDESTRIAN RAMP. SEE STANDARD DETAIL FIGURE I-7.

24. ALL DETECTABLE WARNING FIELDS PLACED AT THE SAME INTERSECTION SHALL BE MADE UP OF THE SAME UNIFORM MATERIAL TYPE. DETECTABLE WARNINGS SHALL BE CONTRASTING IN COLOR TO THE ADJACENT WALKWAY.

25. A RAMP WITH A RUNNING SLOPE LESS THAN 5.0% IS DEFINED AS A "BLENDED TRANSITION". BLENDED TRANSITIONS DO NOT REQUIRE A LEVEL LANDING AT THE TOP OF THE RAMP.

26. THE RAMP LENGTH SHALL NOT EXCEED 15 FEET. ADJUST RAMP LENGTH OR SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT FEASIBLE.

27. ALL CURB RAMP JOINTS AND GRADE BREAKS SHALL BE FLUSH.

28. RAMP GRADE BREAKS SHALL BE PERPENDICULAR TO THE RUNNING SLOPE.

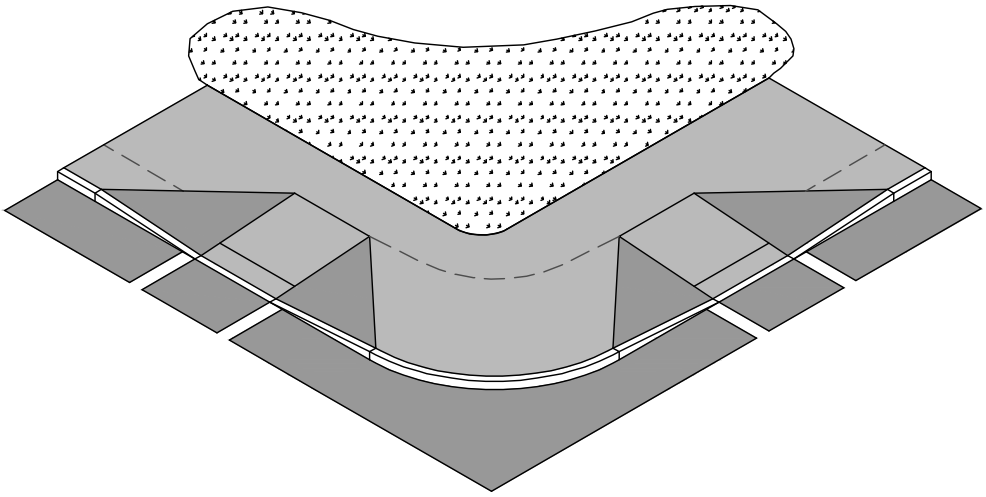
29. THERE SHALL BE A MINIMUM OF 12" AGGREGATE SUBBASE COURSE - GRAVEL UNDER THE SIDEWALK SURFACE ON PEDESTRIAN RAMPS.

30. DRAINAGE STRUCTURES, UTILITY POLES, TRAFFIC SIGNAL EQUIPMENT OR OTHER OBSTRUCTIONS SHALL NOT BE INSTALLED IN THE CURB RAMP OR TURNING SPACE AREAS.

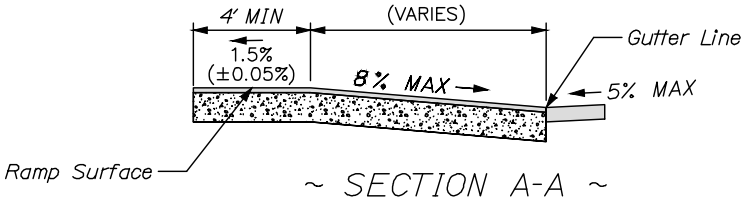
31. BEFORE RETROFITTING RAMPS, THE CONTRACTOR SHALL VERIFY REMOVAL LIMITS ARE SUFFICIENT TO PROVIDE POSITIVE DRAINAGE, MAINTAIN EXISTING DRAINAGE PATTERNS AND AVOID PONDING IN THE FINAL CONFIGURATION.

32. A TEMPORARY PEDESTRIAN ACCESS ROUTE SHALL BE PROVIDED WHENEVER THE EXISTING PEDESTRIAN ACCESS ROUTE IN THE PUBLIC RIGHT OF WAY IS BLOCKED BY CONSTRUCTION, ALTERATION, MAINTENANCE OR OTHER TEMPORARY CONDITIONS. REFER TO MUTCD FOR GUIDANCE.

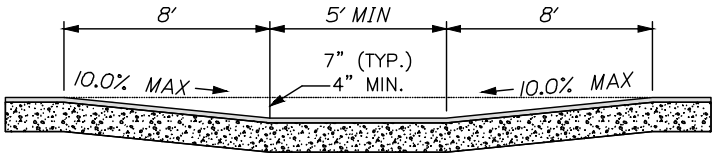
DATE: AUGUST 2022	CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL	**TRANSPORTATION DESIGN STANDARDS** SECTION I	FIGURE:
	ACCESSIBLE RAMP GENERAL NOTES		I-6



~ ISOMETRIC VIEW ~
(not to scale)



~ SECTION A-A ~
(not to scale)



~ SECTION B-B ~
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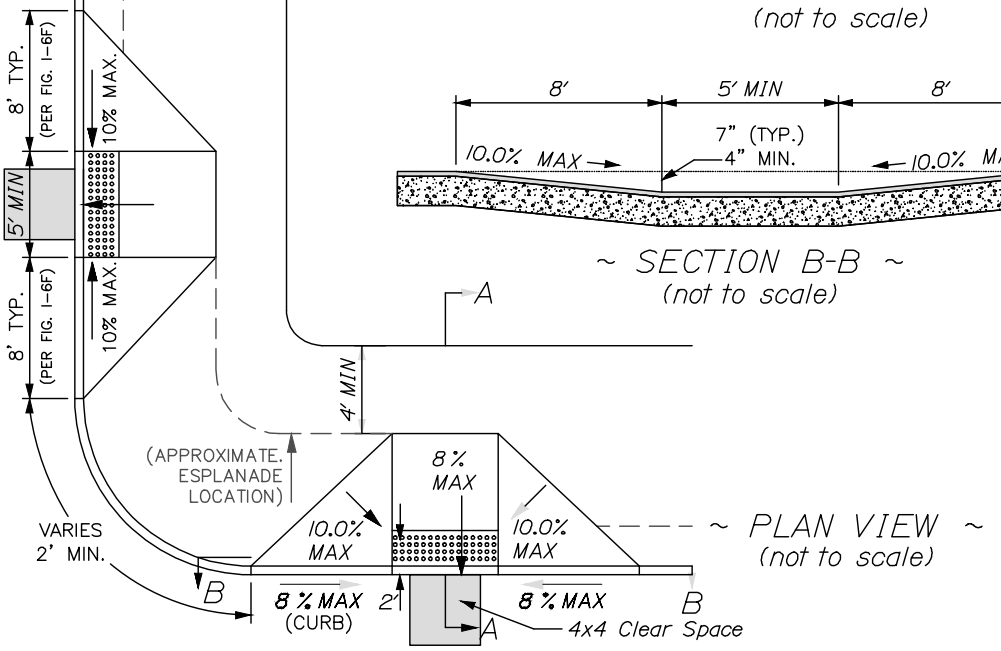


~ PLAN VIEW ~
(not to scale)

NOTES:
1. THIS DESIGN IS THE PREFERRED OPTION WHEN THE SIDEWALK WIDTH IS GREATER THAN 6.5'. USE OTHER OPTIONS ONLY WHEN REQUIRED BY DESIGN CONSTRAINTS.
2. A MINIMUM CURB REVEAL OF 4" IS REQUIRED AT THE APEX OF THE CURB RADIUS.
3. MINIMUM TERMINAL CURB LENGTH SHALL BE 4 FEET.
4. SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.

PERPENDICULAR ADA RAMP – SIDEWALK WIDTH GREATER THAN 6.5' WIDE WITH OR WITHOUT ESPLANADE

NOT TO SCALE

DATE: AUGUST 2022 REVISED:	CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL	**TRANSPORTATION DESIGN STANDARDS** SECTION I	FIGURE: I-6B
	PERPENDICULAR ADA RAMP FOR SIDEWALK GREATER THAN 6.5'		

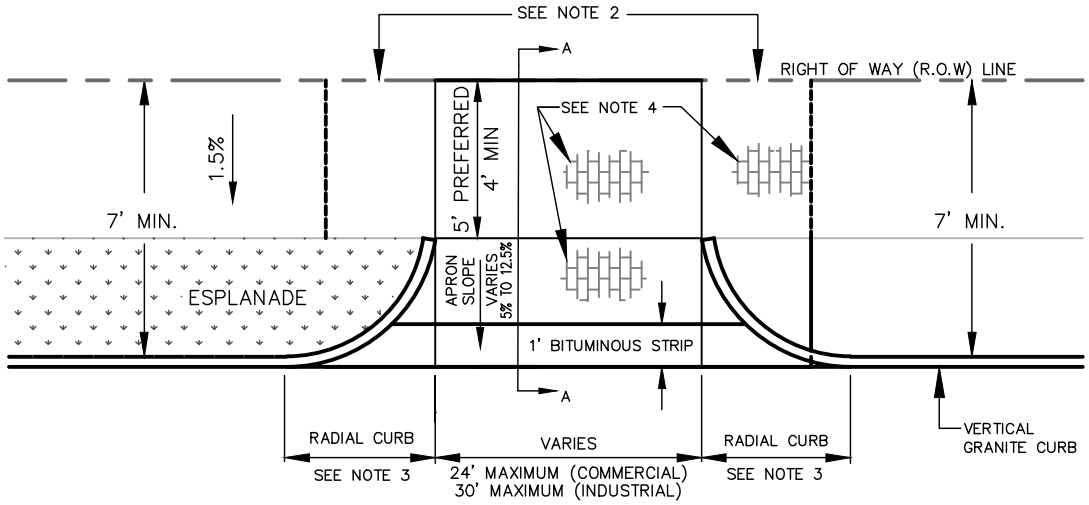
SIDEWALK RAMP DETECTABLE WARNING PANEL

NOT TO SCALE

NOTES:

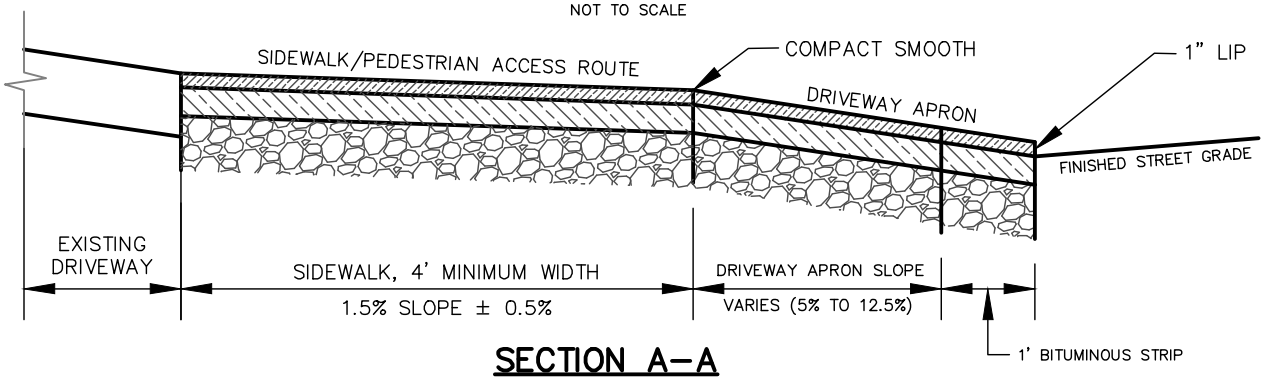
1. ALL DETECTABLE WARNING PLATES SHALL BE UNCOATED CAST IRON. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
2. CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MDOT CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
3. TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
4. SIZE: THE DETECTABLE WARNING PLATES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION TO THE STREET.
5. ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.

DATE: AUGUST 2022	CITY OF PORTLAND, MAINE	**TRANSPORTATION DESIGN STANDARDS**	FIGURE:
REVISED:	TECHNICAL STANDARDS MANUAL	SECTION I	I-7
	SIDEWALK RAMP DETECTABLE WARNING PANEL		



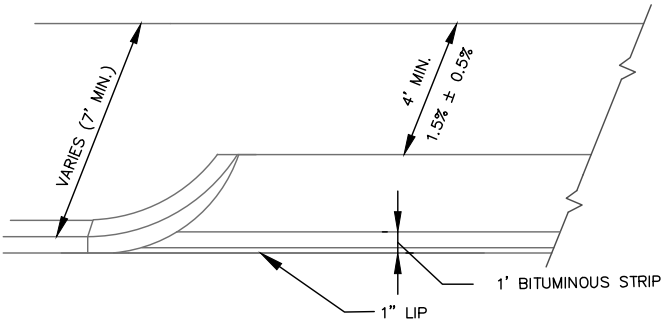
STANDARD COMMERCIAL DRIVEWAY APRON LAYOUT

NOT TO SCALE



SECTION A–A

NOT TO SCALE



NOTES:

1. MATCH EXISTING GRADE AT R.O.W LINE. WHERE REQUIRED TO MEET A.D.A. AND DRIVEWAY APRON SLOPE REQUIREMENTS, A CONSTRUCTION EASEMENT MAY BE REQUIRED.
2. IF MATCHING THE EXISTING GRADE AT ROW CAUSES APRON SLOPE TO EXCEED RECOMMENDED %, SIDEWALK TRANSITION AREAS MAY BE ADDED, BUT SHALL NOT EXCEED 8.33%.
3. DRIVEWAY CURB RADIUS SHALL NOT BE LARGER THAN REQUIRED BY THE SITE'S DESIGN VEHICLE.
4. ALL MATERIALS IN ROW TO COMPLY WITH CITY'S SIDEWALK & DRIVEWAY MATERIAL POLICY. BRICK IN DRIVEWAY APRONS, WHERE APPLICABLE, SHALL BE ORIENTED IN THE SAME WAY AS THE ADJACENT BRICK SIDEWALK..

DATE: AUGUST 2022 REVISED:	CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL	**TRANSPORTATION DESIGN STANDARDS** SECTION I	FIGURE:
	COMMERCIAL/INDUSTRIAL DRIVEWAY APRON		I-9B

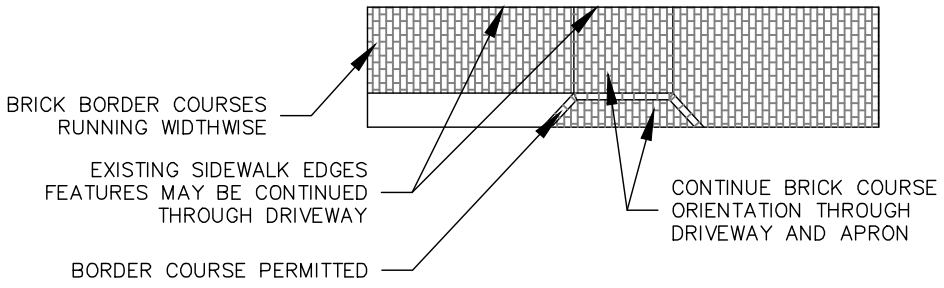
DATE: AUGUST 2022
REVISED:

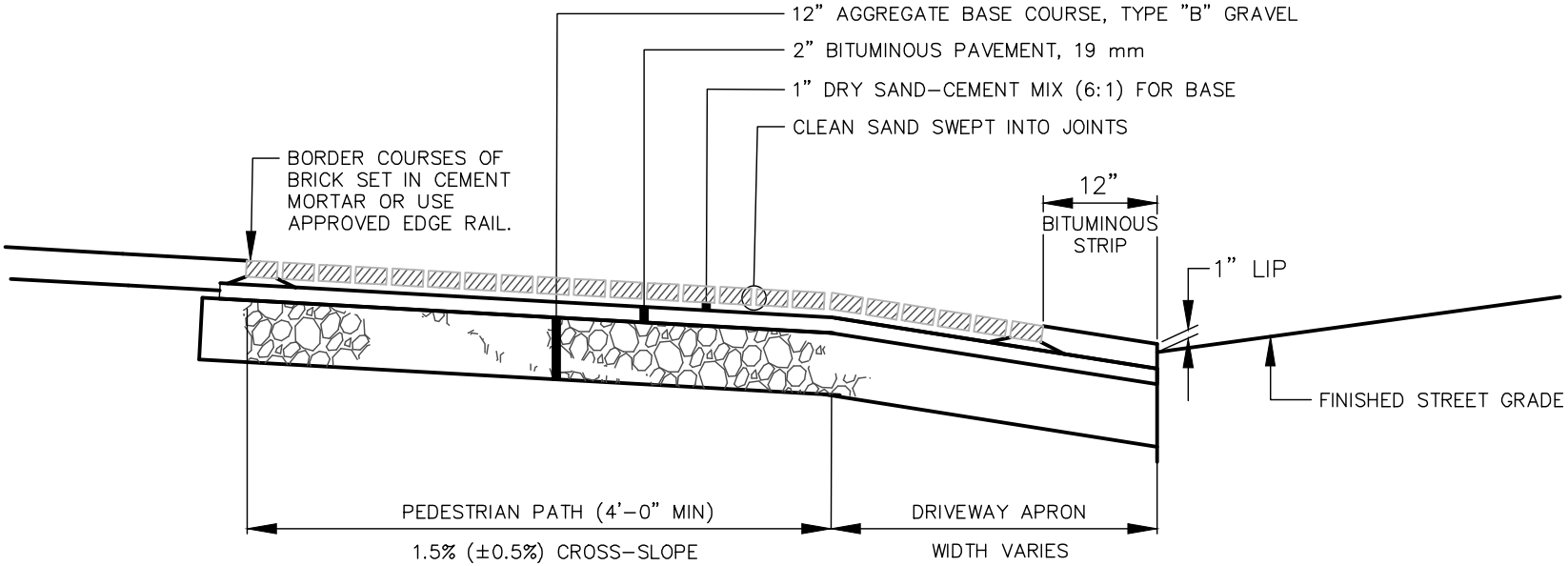
BRICKS TO BE USED:

NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA. LACHANCE ITEM # 193623, PINE HALL PATHWAY PAVER BRICK.

REPAIR /MAINTENANCE TO EXISTING BRICK SIDEWALKS: VERMONT PAVER; SUPPLIED BY GAGNE AND SONS.
SPECIFICATION NUMBER:
"VERMONT BACKER BRICK",
ITEM NUMBER # VBBB

BRICK ORIENTATION DETAIL





BRICK DRIVEWAY APRON WITH BITUMINOUS BASE

NOT TO SCALE

CITY OF PORTLAND, MAINE
TECHNICAL STANDARDS MANUAL

TRANSPORTATION DESIGN STANDARDS
SECTION I

BRICK DRIVEWAY APRON WITH BITUMINOUS BASE

FIGURE:
I-10A

BRICKS TO BE USED:

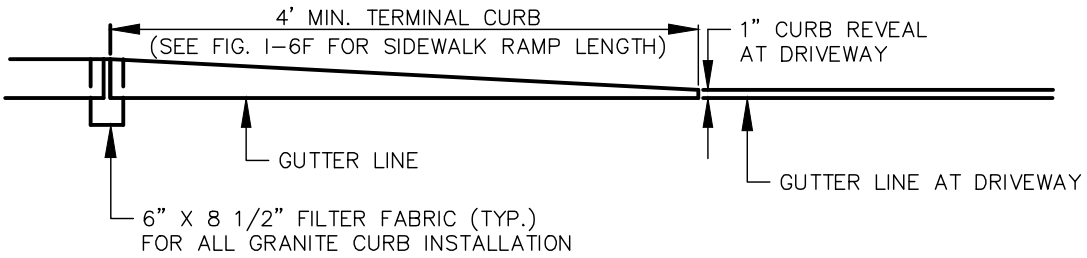
NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA, OR APPROVED EQUAL..
LACHANCE ITEM # 193623, PINE HALL PATHWAY PAVER BRICK, OR APPROVED EQUAL..

REPAIR /MAINTENANCE TO EXISTING BRICK SIDEWALKS: VERMONT PAVER; SUPPLIED BY GAGNE AND SONS.
SPECIFICATION NUMBER:
"VERMONT BACKER BRICK",
ITEM NUMBER # VBBB,
OR APPROVED EQUAL

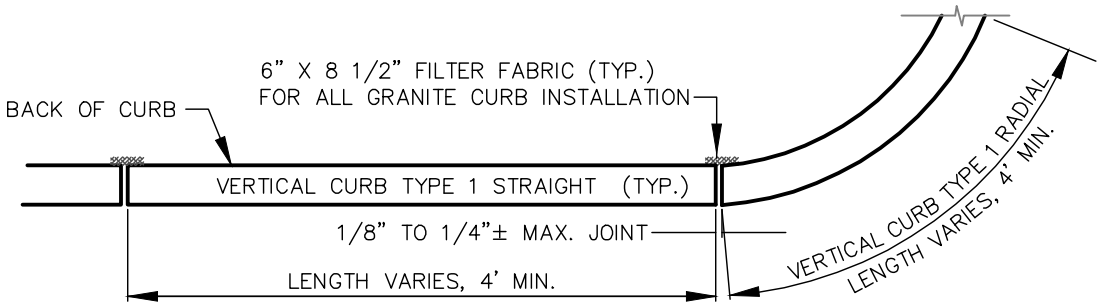
BRICK SIDEWALK WITH BITUMINOUS BASE

NOT TO SCALE

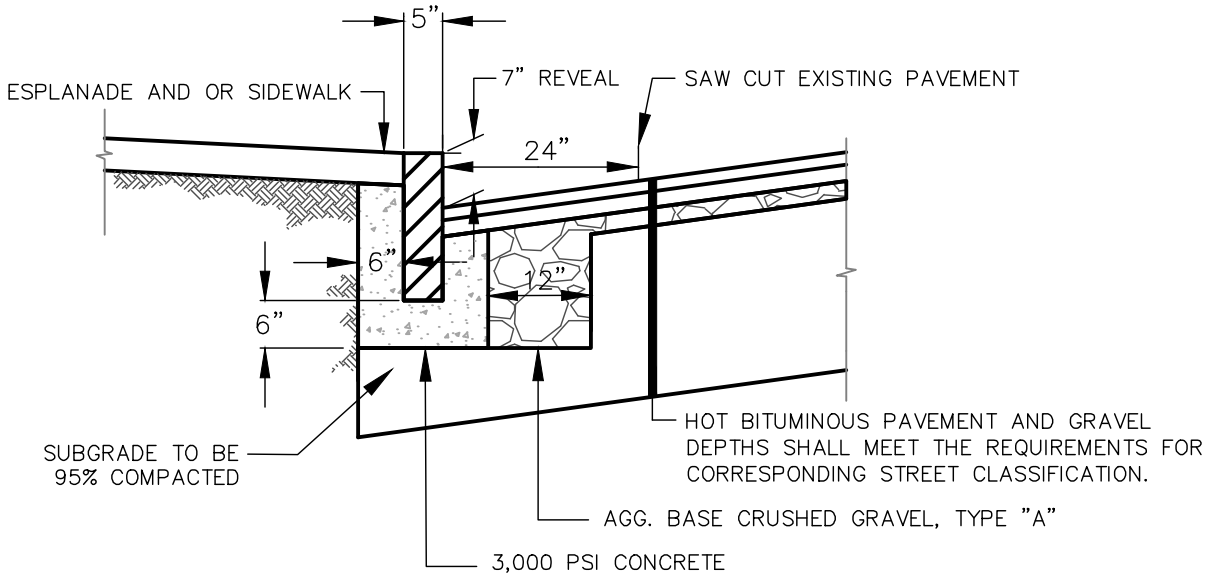
DATE: AUGUST 2022 REVISED:	CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL	**TRANSPORTATION DESIGN STANDARDS** SECTION I	FIGURE: I-11A
	BRICK SIDEWALK WITH BITUMINOUS BASE		



TERMINAL CURB PROFILE



VERTICAL GRANITE CURB PLAN VIEW



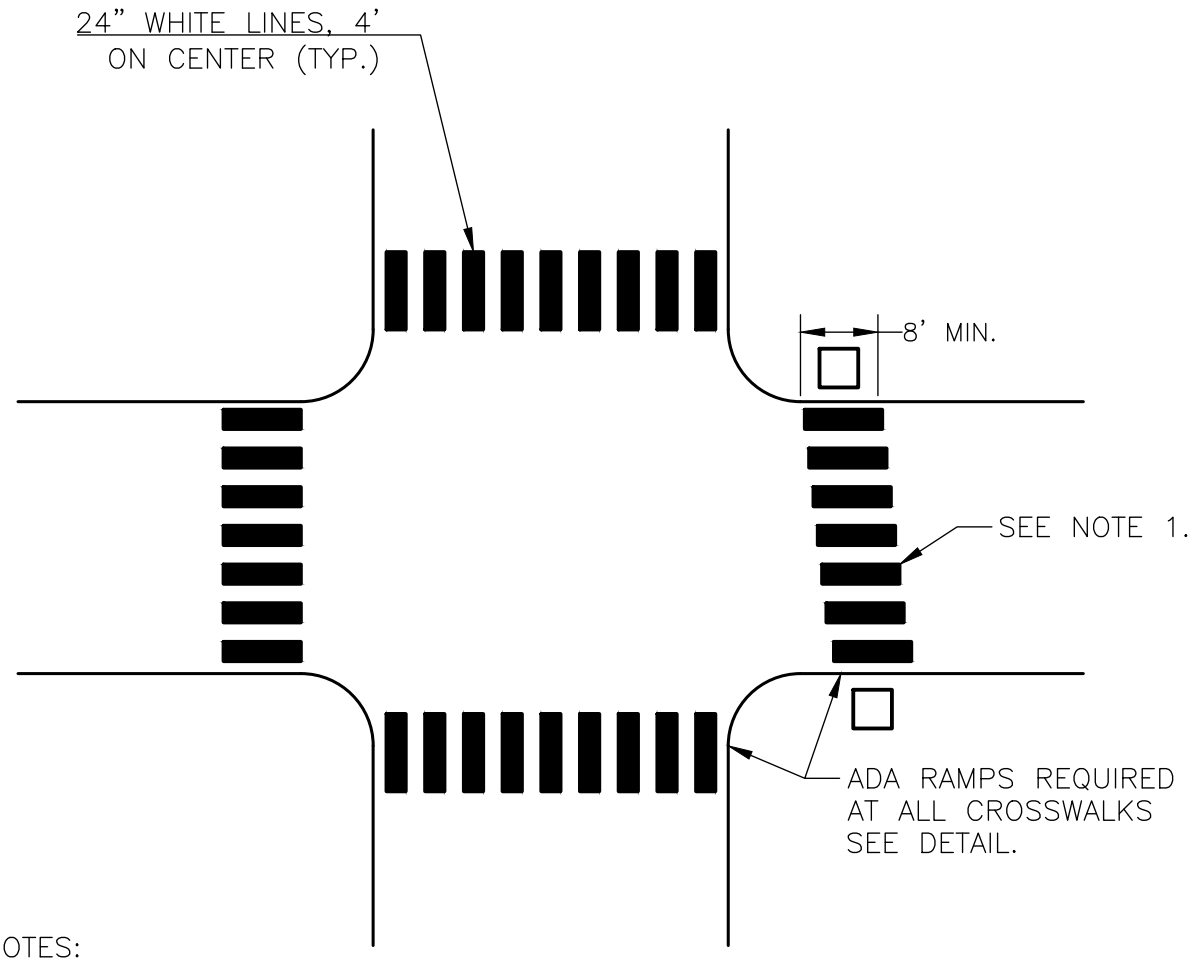
VERTICAL GRANITE CURB CROSS SECTION

NOTES:
1. INDIVIDUAL PIECES OF CURB SHORTER THAN 4 L.F. ARE NOT ALLOWED, WITH THE EXCEPTION OF RADIAL CURB.
2. THE MINIMUM HEIGHT OF THE CONCRETE BACKING SHALL BE 10-INCHES OR TO THE BOTTOM OF THE HOT MIX ASPHALT PAVEMENT, WHICHEVER IS GREATER, MEASURED FROM THE BOTTOM OF CURB.
3. CURBING SHALL BE SET IN A 6-INCH BED OF POURED IN PLACE 3,000 PSI CONCRETE MIX.
4. WOODEN SHIMS MAY BE USED TO SET CURB.

VERTICAL GRANITE CURB

NOT TO SCALE

DATE: AUGUST 2022 REVISED:	CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL	**TRANSPORTATION DESIGN STANDARDS** SECTION I	FIGURE:
	VERTICAL GRANITE CURB		I-12



NOTES:

1.) CROSSWALK BLOCKS SHALL BE STAGGERED AND REMAIN PARALLEL TO THE ROADWAY CENTERLINE AT SKEWED CROSSING LOCATIONS.

2.) CROSSWALK MARKINGS LOCATED ON ARTERIAL STREETS SHALL BE APPLIED WITH A THERMOPLASTIC MATERIAL (OR APPROVED EQUAL) MEETING ALL MANUFACTURER AND MUTCD REQUIREMENTS.

3.) THE ESTABLISHMENT PERIOD FOR CROSSWALK MARKINGS SHALL BE BASED ON MANUFACTURER'S SPECIFICATIONS AND SHALL AT A MINIMUM MEET MAINE DOT STANDARD SPECIFICATION 627.07 ESTABLISHMENT PERIOD REQUIREMENTS.

CROSSWALK MARKINGS

NOT TO SCALE

DATE: SEPT 2022	CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL	**TRANSPORTATION DESIGN STANDARDS** SECTION I	FIGURE:
REVISED:	**TYPICAL CROSSWALK MARKINGS**		I-17

Subject:	385 Congress Street – Master Development Plan
Zone:	B3
Date of Review:	Wednesday, October 19, 2022
	Design Review
Reviewer(s):	Sean King (Urban Designer), Zachary Powell (Senior Planner), Kevin Kraft (Deputy Director), Evan Schueckler (Historic Preservation Manager), Rob Wiener (Historic Preservation Compliance Officer)
Project ID:	PL-001970-2022

I. INTRODUCTION

The project at 385 Congress Street, Lot 1 for the proposed hotel and 9-unit residential condominiums is subject for review according to the approved Master Development Plan criteria, the B-3 and multi-family residential housing design standards from the City of Portland *Design Manual* as defined in the land use ordinance section 14.6.4.I.

The project is also within 100' of a historic landmark and subject to an advisory design review by Historic Preservation staff.

The built context of the surrounding area contains a variety of building types, architectural styles and mix of uses that vary in height and proximity to the street typically found throughout Portland's downtown district. Numerous locally designated historical landmarks are within 2-blocks of the proposed development, to include Portland City Hall, Masonic Temple, First Parish Church, Central Fire Station, US Courthouse and Portland High School that exhibit a variety of architectural ornamentation, materiality and form specific to the period during which these structures where built.

II. DESIGN REVIEW COMMENTS: bold text denotes recent updates met, red text denotes standards not met to require resubmission.

Master development plan (MDP) design standards, land use ordinance section 14.7.5, as adopted August 9, 2022 to be applied to subsequent major site plan applications:

A. Creation of a cohesive identity.

A master development plan shall be designed to create a cohesive identity through building scale, massing, and articulation;

Staff comment: The proposed hotel and 9-unit residential condominium in Phase 1 is consistent with the MDP to create a cohesive identity through building scale with a 1-2 story podium level continuous with activated ground-level retail and hotel lobby entrances. The massing utilizes stepbacks for the proposed towers of the hotel to reduce building height, a rhythm of fenestration

and sculpted massing to reduce the scale through façade composition and access to Level-2 amenity terrace. Met.

Use of quality exterior material and architectural detailing at pedestrian scale;

Staff comment: The exterior materials address this standard by providing pedestrian scaled façade composition through building entry canopies, storefront windows, fenestration screening materials at garage facades and signage. The applicant proposes utilizing quality exterior materials by including weathered metal panels, perforated metal fins, glazed masonry brick, terra cotta tile rainscreen, limestone masonry, and metal paneling. The proposed materials relate well to surrounding buildings, which incorporate a mix of light, tan brick, and granite materials. The proposed weathered metal relates well to the historic fabric and copper, which is used at City Hall and the Press Hotel. Staff recommends a reduction in materials along the ground-level and suggest extending the limestone masonry finish along the Congress Street frontage to create a stronger cohesive building design.

Consistency of design and materials for streetscape and pedestrian amenities;

Staff comment: The proposed hotel, lobby and retail activate the streetscape and provide pedestrian amenities through the linear park along Congress Street. The applicant has provided a graphic delineation of surface material for pedestrian sidewalk as proposed granite pavers, the applicant shall identify the proposed vehicular paving unit surface on plans that provide a clear visual distinction for vehicles. Not Met.

Additional pedestrian amenities are provided by the level 2 terrace included within Lot 1. Applicant shall submit Level-2 site, material, signage and landscape plans for staff review. In addition, the applicant shall submit consistency throughout plans that detail the publicly-accessible stairs at Congress / Myrtle Streets that incorporate bench terrace seating, planters and greenscreens for staff review. Not Met.

Framing of outdoor open space and linkages;

Staff comment: The proposed Lot 1 development frames outdoor open space consistent with the approved MDP that includes the Congress Street linear park with streetscape amenities, Myrtle Street with streetscape amenities and level 2 amenity terrace to provide linkage along the surrounding streets throughout the site.

A clear conveyance of the function and significance of various buildings, entrances, and features;

Staff comment: The Lot 1 hotel, lobby, retail and 9-unit residential condominium create differential composition in façade treatment, regularity of fenestration for the hotel rooms and articulated building entries along Congress Street. Black metal paneling frames and defines the hotel entrance along Congress Street, giving the space a distinct feel. As a way to enhance the hotel entrance's prominence, the applicant is encouraged to expand the canopy horizontally along Congress Street.

And to generally comply with design and development standards of the zone in which it is located.

Staff comment: See B-3 design standards for 385 Congress Street Lot 1 below.

Approved MDP Design Standards (to be applied to subsequent Site Plan applications):

- Materials

- *Congress Street – Material placement, detail, and articulation should emphasize the established historic Congress Street patterns of massing, proportions, and façade composition regulating lines and building base.* Staff recommends incorporating a horizontal belt course along the building's 1-2 story base to delineate change in material and articulate different components of the building such as the overall building's composition (base, middle, top) which is consistent with the historical character of surrounding buildings. *The ground floors will consider pedestrian comfort and scale, especially in the placement of doors, windows, canopies, and details in the materials and articulation,* Staff recommends substitution of narrow vertical windows with storefront windows to create a cohesive and balanced ground-level design, which would enhance views into the building. Staff recommends additional consideration for the proposed extension of the Level 2 amenity terrace that connects to the proposed egress door for the Level 2 restaurant. As currently proposed, the layering of overhead canopies at the north elevation entry creates a potential CPTED concerns to overshadow this prominent corner of the building. *The hotel, in order to stand apart in character and use, will have a more contemporary expression but will continue the base and regulating lines found along Congress Street,* Staff recommends to carry limestone masonry along base of building along Congress Street.

- *Quality Exterior Materials includes the detailing, articulation, transition, durability, and visual interest of the materials, both in their selection and placement. These aspects will be reviewed with special attention to the ground floors and areas most visible to pedestrians, The proposed weathered panels and weathered metal fins relate well to the surrounding context and provide texture to the overall building.* Staff recommends to reduce the amount of materials along the ground-level base and recommends extending the limestone masonry finish along the building's base for a stronger cohesive use of façade materials.

- *Façade composition - In Site Plan review the design shall provide depth, articulation, visual interest, and quality transitions. Historic buildings in the surrounding context should be considered precedent examples, especially on Congress Street.* The proposed façade composition is characterized through the building proportions that identify the retail frontage, curtain wall projection, textured materiality to partition the building scale and varied fenestration pattern to create visual interest. Staff recommends additional consideration for retail façade materiality that relates more closely to weathered metal panel, alignment of the curtain wall horizontal fins that closely respond to the separation of floors, continuation of limestone finish along building base along Congress Street and articulation to delineate changes in façade material. Not Met

- *Cumberland Avenue - The massing and function of the podium base along Cumberland shall be pedestrian scaled that responds to the surrounding neighborhood context.* Applicant shall submit treatment of the blank walls visible from Cumberland Avenue and Pearl Street consistent with approved MDP.

- Streetscape design

- *Congress Street / Cumberland Avenue –Lot 1 development includes appropriate sidewalk widths to accommodate street trees, tree wells, permanent outdoor seating, lighting and planters in the furnishing zone*. Met

- *Interior Passages – Internal passages should employ CPTED principles as a best practice to make spaces that are safe, active, and inviting. Material selection and design should indicate private or public access. Design shall be legible and intuitive for pedestrians and cars, especially for wayfinding.* Applicant shall submit Level-2 site, material and landscape plans along with stairs details at Congress / Myrtle Streets that incorporate bench terrace seating, planters, signage and greenscreens for staff review of publicly-accessible space in Lot 1.

- *Signage – Signage shall be integrated into the building design and respond to the storefront façade at the ground level and be pedestrian scaled, especially along the Congress Street historic district.* Applicant to submit signage details for further staff review.

The project at 385 Congress Street shall meet the following standards based on the B-3 Downtown Business Zone design standards in the City of Portland Design Manual, *Land Use Code Section 14.6.4.I Design standards.*

§(b)(1)a.1. Relationship of pedestrian environment:

- *§(b)(1)a.1.i. General: The exterior design of portions of buildings within the first thirty-five (35) feet of height shall enhance the character, attractiveness, comfort, security, and usability of the street level pedestrian environment. Factors to be considered include the design, placement, character and quality of the following:*

  Staff comment: Staff recommends a reduction in materials along the building's base and to extend the use of limestone masonry along the majority of frontage along Congress Street, consistent storefront window pattern that may require interior reconfiguration of staircase facing Congress Street, interior access to retail from lobby.

  - *§(b)(1)a.1.i.1) Storefronts and building facades, including such factors as relationship to adjacent or nearby structures or open space, pedestrian character, materials and detailing, transparency (having a visible transmittance (VT) of .7 or higher) and contemporary design;*

  Staff comment: Staff recommends to substitute vertical windows at ground-level along Congress Street for storefront windows to match hotel lobby façade. In addition, align window location and height at North elevation with Congress Street to create a unified termination at the corner.

- *§(b)(1)a.1.i.2) Building entrances, including such factors as compatibility with the building's façade, prominence along the street, access to the street, and accessibility for physically handicapped or for those with special needs;*

Staff comment: The primary building entrance along Congress Street for the hotel is recessed, articulated with a change in material and a suspended canopy that aligns with the secondary canopy proposed along the north elevation.

- *§(b)(1)a.1.i.3) Blank facades; and*

Staff comment: The podium level to accommodate for a parking garage is screened with perforated metal fins to match the proposed building materials, along with aluminum frame storefront windows at the second floor along Myrtle Street. Require additional windows to match aluminum framed storefront windows for kitchen area that meet standard for undifferentiated walls facing the street. Staff suggest incorporating metal mesh green screen to assist with blank retail façade facing Myrtle Street. Applicant shall submit temporary treatment of the blank walls visible from Cumberland Avenue and Pearl Street as visible from the public way.

- *§(b)(1)a.1.i.4) Special features, such as selective use of such features as building arcades and skywalks or elevated walkways.*

Staff comment: Not applicable. The Lot 1 development does not propose such special features.

- *§(b)(1)b. Pedestrian Activities District (PAD)*

Staff comment: Not applicable. The site is not located within the PAD overlay district. The site is located within the PAD encouragement area.

- *§(b)(1)c. Pedestrian Activities District (PAD) encouragement areas shall be designed and constructed to be reasonably capable of being converted to accommodate uses permitted in the PAD overlay zone in accordance with the factors set forth in subsection b. of this section.*

Staff comment: Not met - Staff recommends an alternative location for the interior staircase fronting Congress Street as this architectural element does not accommodate for viable pedestrian use at the street. Applicant to verify interior reconfiguration of staircase facing Congress Street, in addition to observe interior access to retail from lobby.

- *§(b)(1)d. Sidewalk areas and open space: The design of publicly accessible sidewalk areas and open space shall complement the general pattern of the downtown pedestrian environment, conform to special City of Portland streetscape programs described in the Technical Manual, and enhance the attractiveness, comfort, security, and usability of the pedestrian environment. Factors to be considered include the design, placement, character, durability, and quality of the following:*

1. *Sidewalk, crosswalk, and street paving materials;*

Staff comment: Not Met - The applicant proposes installing Portland brick pavers within the public right-of-way and granite pavers within the extended pedestrian area. Applicant shall indicate vehicular paving material at interior roadway for valet to differentiate pedestrian granite pavers proposed. Staff recommends a complementary surface paving material across the publicly-accessible paved areas (perspective views show as granite pavers) and delineate change in material with a flush band to frame edges of paved surfaces.

2. *Landscaping, planters, irrigation, and tree guards and grates;*

Staff comment: Met - Lot 1 development provides a distribution of street trees in tree wells along the property frontage on Congress Street with understory planting in bulb out planters. Additionally, distribution of street trees in tree wells along Lot 1 property frontage on Myrtle Street.

3. *Lighting;*

Staff comment: Not met - Applicant shall submit lighting fixtures to match street lighting fixture along Congress Street & Myrtle streets.

4. *Pedestrian amenities such as benches and other seating, trash receptacles, kiosks, bus shelters, artwork, directional and informational signage, fountains, and other special features; and*

Staff comment: Not Met - Lot 1 development provides granite bench seating accessible from the public right-of-way at reasonable intervals that provide access to building entries. Staff requests location of (3) trash receptacles shown on landscape plans and detailing a publicly-accessible stairs with incorporated benches as a pedestrian amenity.

5. *Sidewalk vendors and sidewalk cafes.*

Staff comment: Met - The applicant is proposing an expanded sidewalk area along Congress Street, with benches and planters. The expanded sidewalk area provides flexibility to accommodate sidewalk vendors and/or cafes.

- *§(b)(1)e. Relationship to existing development:*
    1. *General: Proposed development shall respect, enhance, and be integrated with the existing character of the general pattern of development in the downtown, surrounding building environment and streetscape, as described and illustrated in the Downtown Urban Design Guidelines (Appendix 1). Factors to be considered include the relationship to the following existing patterns:*

        i. *Street walls and building setbacks;*

Staff comment: Met - The prevailing street wall and building setbacks vary along the section of Congress Street between Franklin Arterial and Elm Street found within two blocks of the proposed hotel building. Staff finds the proposed building setback at Congress Street and linear publicly accessible plaza to reinforce the pattern set by City Hall plaza as a respite area that engages with the street. The proposed hotel's street wall along Congress Street aligns with City Hall's northern building wing establishing a visual connection between the spaces.

ii. Open space;

Staff comment: Met - Staff finds the proposed publicly accessible open space to include the linear plaza along Congress Street, streetscape and Level 2 amenity deck to be appropriate downtown.

iii. Building form, scale and massing;

Staff comment: Not met - The proposed hotel provides distinctive massing along Congress Street to reduce the scale of the building by an activated pedestrian-scaled base, a vertically segmented middle with change in materiality and projections at the corner, and a termination at the top with a stepback and roofline overhang. Staff recommends a reduction of the proposed volumes at the upper floors to create a clear repetition and hierarchy of architectural elements (columns that reinforce the fenestration pattern along Myrtle Street / Pearl Street facing façade, a distinguishable pattern of window fenestration along the Level 10-11 facades, arrange horizontal architectural elements and indication of operable openings at the upper floors).

iv. Façade proportion and composition;

Staff comment: Not met - The proposed building design begins to indicate a base, middle and top composition consistent with the surrounding buildings. Staff recommends a continuation of the base materiality proposed as limestone masonry below the curtain wall projection to respond more cohesively to the surrounding building context and create a visual anchor at the building's base to the street (see notes). Staff recommends further articulation to delineate changes in material by use of horizontal belt courses and recessed elements of 4" minimal that break up the vertical scale of the building (see notes). The applicant indicates the use of a horizontal belt course framing the base on Sheet A15.

v. Pedestrian circulation and building entrances;

Staff comment: Met - The proposed Lot 1 includes primary pedestrian circulation along existing streets reinforced by building entrances located on Congress Street.

vi. Parking

Staff comment: Met - The proposed Lot 1 includes structured parking that is screened with appropriate materials to match the building.

2. *Standards for increasing setback beyond street build-to line: A proposed development may exceed maximum setbacks:*

Staff comment: Met - The Planning Board approved the Master Plan development on August 9, 2022 to include the increase in setback beyond street build-to line of 10 feet along building frontage and recessions to sculpt the building form on Congress Street and increased setback of 4-7 feet on Myrtle Street was approved by the Planning Board on August 9, 2022

3. *Roof top appurtenances: All mechanical equipment, ventilating and air conditioning and other building systems, elevators, stairways, radio or television masts or equipment, or other rooftop elements not intended for human occupancy shall be fully enclosed in a manner consistent with the character, shape and materials of the principal building,*

Staff comment: Not Met - Staff find the perforated mechanical screen around the perimeter of the rooftop level mechanical space to be appropriate to reduce visual impact. Staff is requesting that North Elevation be revised to match Level 12 roof floor plan to indicate proposed façade treatment of mechanical room and elevator / stair overrun.

- *§(b)(1)f. Shadow impact on open space: The location, massing and orientation of portions of buildings in excess of sixty-five (65) feet in height shall be such that substantial shadow impacts on public plazas, parks, and other publicly accessible open space are avoided.*

Staff comment: The applicant has submitted shadow studies as hotel building is in excess of sixty-five feet in height that indicate there is no substantial shadow impacts on adjacent opens spaces.

- *§(b)(1)g. Wind impacts:* The location, massing, orientation and architectural design of a new building or a building addition shall be such that no significant adverse wind impacts are created.

Staff comment: Not Met - The proposed building utilizes a variety of features to break down the building's mass and height by including a number of building setbacks and site features such a perforated metal fins, awnings, and canopies. The building changes shape in a number of locations primarily along the first two stories and last two stories to break up the building's scale. These features help mitigate the potential impact of winds. The applicant shall submit architectural narrative, and/or precedent examples of a similar height to observe hotel buildings location massing, orientation and architectural design to have no significant adverse wind impacts.

- *§(b)(1)h. Setbacks for existing structures: The location and design of proposed structures shall not create a detrimental impact on the structural integrity or the safety of adjacent structures or the occupants thereof;*

Staff comment: Met - Proposed Lot 1 hotel and 9-unit residential condominiums does not pose a detrimental impact on the structural integrity of any adjacent structures as it is

standalone on a parcel bounded on all sides by public streets. Existing structures to be demolished to construct hotel and surrounding surface parking.

- *§(b)(1)i. Building tops: Buildings or structures which exceed one hundred fifty (150) feet in height shall be designed so as to provide a distinctive top to the building which visually conveys a sense of interest and vertical termination to the building.*

  Staff comment: Not applicable, building does not exceed 150 feet in height

MULTIPLE-FAMILY STANDARDS. Multiple-family shall meet the following standards:

1. *The exterior design of the proposed structure, shall be designed to complement and enhance the nearest residential neighborhood.*

   Staff comment: Met – The proposed building design is located within Portland's B-3 Downtown Business zone and is compatible with the surrounding context.

2. *The proposed development shall respect the existing relationship of buildings to public streets.*

   Staff comment: Met - The proposed Lot 1 development integrates the 9-unit residential condominium within the overall building design to support the relationship of buildings downtown.

3. *Open space on the site for all multiple-family development shall be integrated into the development site.*

   Staff comment: Met - Open space is provided for 9-unit residential condominiums through balconies as private open space.

4. *The design of proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principle living areas and shall also provide sufficient storage areas.*

   Staff comment: Not Met - Sufficient windows and interior unit storage provided at each residential unit. Staff has requested a window and door schedule to review operable windows and doors proposed.

5. *The scale and surface area of parking and driveways and paved areas are arranged and landscape to properly screen vehicles from adjacent properties and streets.*

   Staff comment: Not applicable

6. *Multiple-family dwellings shall not be converted to lodging houses unless all units in building have been vacant for at least one (1) year.*

   Staff comment: Not applicable

August 11, 2022
19371-01

City of Portland
Office of Planning and Urban Development
Congress Street
Portland, ME 04101

Level III Site Plan and Subdivision Application - 385 Congress Street Lot 1

On Behalf of the Fathom Congress, LLC, we are pleased to submit the enclosed application for a Level III Site Plan and Subdivision Application for a proposed Hotel and Condominium development at 385 Congress Street. This application represents the first phase of the redevelopment of the property which is the subject of a Master Plan of Development approved by the Planning Board on August 9, 2022.

The applicant, Fathom Congress, LLC, has entered into a purchase agreement to acquire approximately 0.63 acres of land at the corner of Congress Street and Myrtle Street for development of a site plan and subdivision to include a hotel with residential condominiums on the upper floor(s). Hotel and retail/commercial space will occupy the street level frontage of the building on Congress and Myrtle Streets.

The subject site comprises 0.63 acres within a larger 2.26 acres parcel occupying the city block bounded by Congress Street, Myrtle Street, Cumberland Avenue and Pearl Street identified as Lot 1 on the City of Portland's Tax map 27. The site is currently fully developed with buildings previously housing the Portland Press Herald's printing operations which ceased operations at this location many years ago. The site is currently used as a private parking facility.

The current land owner, 385 Congress Street, LLC will retain the remaining land on the block (identified as lands retained by owner on the plans) for the future development envisioned in the Master Plan of Development.

The massing of the site is envisioned to include the hotel and condominium tower rising from two-story pedestal incorporating structured parking and street level hotel and commercial uses as well as condominium entrances. The top of this shared pedestal will be developed as low-rooftop outdoor areas for the Hotel and adjoining a public amenity deck. The building will step back from the street line along Congress Street to create a linear plaza which extends the site lines along Congress Street from City Hall toward Lincoln Park. The proposed site plans include realigning the curb line along Congress Street and extending a semipublic outdoors space on the project's private property in front of the hotel to enhance the pedestrian experience along this section of Congress Street.

The proposed development program includes a 156-room full-service hotel with nine (9) condominium units on the corner of Myrtle and Congress Street.

The building includes two levels of structured parking which will support the valet operated parking for the hotel and condominium resident parking. The lower (P1 level) parking is below grade at Congress Street and will be accessed from the remaining land at the site via access easements presented on the subdivision plan. Condominium resident parking will be designated on this level.

The upper level (Level 1) of the parking garage and the ground floor of the Hotel will be accessed by a one way enter-only entrance from Congress Street to the Hotel valet drop-off area. The valet drop-off area is entirely on site, accessed from a mid-block curb cut which replaces/relocates an existing two-way parking lot entrance near the center of the site's frontage on Congress Street

A second entrance for 2-way traffic by valet drivers and service vehicles will access the upper level parking and loading areas from a garage entrance on Myrtle Street.

Streetscape

During the Master Development plan review, planning staff recommended the reconstruction of the site's frontage on Congress Street to create a widened linear plaza to provide a contextual setback on the street respecting of views along Congress Street between City Hall and Lincoln Park.

The proposed site design includes relocating the curb line in Congress Street and setting the proposed building back from the street line to create a widened plaza with street trees and amenities. The design creates a public space oriented toward the street that provides a visual and thematic connection from City Hall Plaza to Lincoln Park, provides opportunities for outdoor seating supporting uses on the site and events along Congress Street, and meets the contextual setback requirements for the continuation of Congress Street's Street wall.

The design proposes a one-way enter only access to the site for valet parking. The on-site valet area includes a dedicated drop off lane and a through-lane. This will allow for 8 vehicles in the outdoor valet area, with additional spaces inside the garage structure without encroachment onto the public sidewalk. A 22' wide curb cut is proposed to allow for the two-lane (entering) configuration necessary for valet controlled on site "double parking" to accommodate peak arrival times.

The design of the valet area incorporates pavers and surface materials to emphasize the area as a shared use plaza for vehicles and pedestrians, not a vehicle dominated area. The entrance plaza design will be integrated with the sidewalk and streetscape providing a clear and attractive arrival experience and presence for the face of the building on Congress Street. The sidewalk materials will continue across the driveway to reinforce this sidewalk crossing as a pedestrian dominant area.

Myrtle Street and Cumberland Avenue Access

The building includes two parking levels, one at roughly the elevation of Congress Street and one at roughly the elevation of Cumberland Street. The levels are not interconnected; each level includes its own entrances at street level. The upper-level entrances will include the hotel valet entrance on Congress Street and a 2-way, 24' wide curb cut on Myrtle Street for valets and service vehicles supporting the hotel. The revised street curb layout and striping includes provisions for two (2) on street loading spaces on Myrtle Street adjacent to this entrance for trash hauling and loading for the building. As presented in the Master Development Plan, the full build out of the site will increase on street parking on the project block.

The lower levels of the hotel parking will be accessed from existing curb cuts on the remaining land (Lot 2) on the site by agreement with the lot owner. Easements across Lot 2 for this interim access are presented on the subdivision plans. In the future, the full buildout of the project block envisioned in the Master Development plan will include a condominium building on Lot 2. When the future building is constructed, the interim easements will be converted to permanent access easements through the future building's parking areas to Cumberland Avenue.

Traffic, On-Street Parking, Striping

A Traffic Movement Permit application for the Master Development Plan for the site has been submitted and is being reviewed concurrently with the Hotel Site Plan Application. The proposed streetscape design for Congress Street includes curb extensions at the intersection of Myrtle Street at and Congress Street and Pearl Street at Congress Street. The existing traffic signal at Pearl Street is located immediately adjacent to the right of way line and will be replaced/relocated responding to the proposed curb extension and crosswalks, as enabling work for the installation of underground utilities and construction of future building foundations at the right of way line at this location.

A plan of proposed signal improvements is included in the application.

The proposed plan implements on street striping as documented in the Master Development Plan. As part of the curb extension and curb line revisions, lane striping will be revised on Pearl Street from Cumberland Avenue to Congress Street, eliminating a left turn lane into the parking lot on the north side of Pearl Street in favor of on-street parking on the south side of Pearl Street. The revised striping plan provides 12' through lanes in each direction, with parking lane on the south side of Pearl Street.

The striping along the southbound lane Congress Street from Pearl Street to Myrtle Street is to re-striped to reflect the revised curb line and linear plaza across the front of the site. The centerline of Congress Street is maintained. A 14' southbound lane will be striped, leaving a parking lane across the front of the site for public on street parking. The centerline and northbound lane widths on Congress Street are maintained. The left turn stop bar, from northbound Congress Street to westbound Pearl Street is proposed to be set back 40' from the crosswalk to accommodate right turns by trucks from Pearl Street turning southbound on Congress Street.

Stormwater Management

Stormwater drainage from Lot 1 will be conveyed within and easement across Lot 2 to Pearl Street. This approach is made at the request of the City to facilitate the City's future plans for separating the combined sewers in Pearl Street.

The project is the redevelopment of a fully developed site. As a redevelopment site, the City's standards incorporate the MDEP Chapter 500 rules and require that runoff from at least 50% of the site's redeveloped area be treated in accordance with the standards. The project proposes a subsurface filter treatment system in the lower-level garage out letting across Lot 2 to Pearl Street. The proposed system provides treatment for over 90% of the site's redeveloped area comprised nearly completely of rooftop areas.

The proposed treatment meets this individual site's Stormwater Treatment requirements and reduces flows to the maximum extent practicable during a smaller 1" rain event to advance the City's Combined Sewer Overflow (CSO) objectives for this area of the City.

Utilities

The remaining building utility services will be taken from the site's frontage.

- Sanitary sewer service is proposed to be connected to the existing sewer in Myrtle Street.
- Domestic and Fire protection water will be taken from Myrtle Street. Initial discussions with the Portland Water District indicate the District's desire to replace and upgrade the main in Myrtle Street from Cumberland Avenue to Congress Street due it is age and condition. This work is proposed as part of the hotel development with the water district participating in the cost of the upgrade.
- Gas service will be provided from the existing main in Congress Street
- Electrical service will be provided from a Central Main Power (CMP) manhole installed in Pearl Street in 2021. Primary service will be extended to a new manhole in the reconstructed Congress Street sidewalk and then extended to sidewalk transformer vaults at the corner of Congress Street and Myrtle Street.
- Telecommunications will be taken from existing manholes in Pearl Street and/or Congress Street

Building Design

The building program includes an 11 story structure with a 156 room hotel and 9 residential condominiums on the upper floors.

The building is arranged in a classic 3-part composition – base, middle and top. The base has a contemporary limestone finish to conform to the predominant limestone of adjacent buildings. Much of the middle of the elevation is brick on Myrtle and Congress, similar to the surrounding buildings. While the painted aluminum at the upper floors and curtainwall will not have the same copper green patina, the metal finishes are sympathetic to the other metal roofs. Punched windows conform to the overall aesthetic of the area and the curtainwall adds a contemporary counterpoint to the traditionalist City Hall.

The hotel lobby entrance on Congress Street is designed with differentiated materials, slightly recessed doors and a canopy above, extending 6' from the building face. This entry is fully accessible. Secondary entrances are located closer to the retail storefront at the corner of Myrtle Street and in the valet entrance off Congress Street.

The streetscape design incorporates street trees in planters along the curb line with landscaped planters with seating to the street side at the front of the hotel. The planting design and materials present a cohesive design for the space providing street activation and opportunities for outdoor seating both within the public sidewalk and the semi-public outdoor spaces on site along the Hotel and commercial uses at street level.

Thank you for your time and attention to this project through the Master Plan of Development review. We look forward to continuing the design and review of the project with staff and the Planning Board.

Sincerely,

SEBAGO TECHNICS, INC.

Daniel L. Riley, PE
Vice President, Engineering

DLR/RLG
Enc.

View Corridor 14-14.6.4 (D)

The massing, location, and height of the proposed hotel will not substantially obstruct a public view corridor identified in the Downtown Vision View Corridor Protection Plan. The proposed project area is not located within a protected view corridor; however, the site is located within an extended view corridor area.

The building design is consistent with the setbacks presented in the Master Plan of Development which evaluated views in the vicinity of the project. The project has been set back 10 feet from Congress Street property line to provide enhanced views of City Hall.

Please see view studies included in the application documents, and the Master Plan submission for additional information.

CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN
GENERAL DOCUMENT AND DRAWINGS CHECKLIST
Please submit each document as a separate PDF file.
Please confirm by electronically checking the boxes in the left-hand column.

** PLEASE FILL OUT AND UPLOAD THE ZONING ASSESSMENT TABLE AND WAIVER TABLE SEPARATELY AS NOTED BELOW **

At the time of application submission, please contact the Department of Public Works regarding E-911 addressing for your project.

GENERAL APPLICATION DOCUMENTS		
Yes ✔	NA	**Project Description** • Cover letter with detailed project description
Yes ✔	NA	**Completed Checklist** (this document)
Yes ✔	NA	**Evidence of Right, Title, and Interest** • Deeds, leases, or purchase and sales agreements
Yes	NA ✔	**Evidence of State or Federal Approvals** • Permits or letters of non-jurisdiction, if applicable
Yes ✔	NA	**Zoning Assessment** (see Zoning Assessment Table) Summary of compliance with use and dimensional standards of the land use code
Yes ✔	NA	**Site Plan Standards Assessment** (see Section 14.6 of the land use code) • Summary of project compliance with site plan standards of the land use code
Yes ✔	NA	**Summary of Existing and/or Proposed Easements or Covenants, applicable.** • Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way
Yes ✔	NA	**Waiver Requests** (see Waiver Table) • Written request for waiver describing request and compliance with applicable waiver standards
Yes ✔	NA	**Financial Capability** • Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
Yes ✔	NA	**Technical Capability** • Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

MAJOR SITE PLAN
STANDARDS AND SUBMISSION CHECKLIST

Provide assessment of compliance with standards and include supplemental documentation, as applicable.
Please submit each document as a separate PDF file.

TRANSPORTATION	
Yes ✔ NA	**Impact on Surrounding Street Systems (14-14.6.1(A))** ● Describe incremental volume of traffic impacts and mitigation measures. If needed
Yes ✔ NA	**Access and Circulation (14-14.6.1(B))** Identify and describe the following: ● Site access and internal circulation, including ADA access ● Drive-up features, if applicable ● Loading and servicing needs, routes, and geometry, providing turning templates for delivery vehicles, if applicable ● Sidewalks and condition along street frontages and internal walkways ● Engineered details for ADA ramps and public sidewalks, meeting sidewalk material policy and construction requirements (Technical Manual, Section 1)
Yes NA ✔	**Public Transit (14-14.6.1(C)), if applicable** Identify and describe the following: ● Existing available transit service and proposed transit improvements, including design details, such as easement, pad base, and shelter
Yes ✔ NA	**Off-Street Parking (14-14.6.1(D)), if applicable** Identify and describe the following: ● Proposed vehicular and bicycle parking supply (including ADA-compliant parking) in relation to applicable parking requirements in Article 19 of the land use code ● Curb cut separation and parking layout (Technical Manual, Section 1) ● Construction details for bicycle racks ● Management plan for snow storage and removal
Yes ✔ NA	**Transportation Demand Management (TDM) (14-14.6.1(E)), if applicable** ● Provide TDM plan drafted in accordance with Technical Manual Section 1 requirements

ENVIRONMENTAL	
Yes NA ✔	**Preservation of Significant Natural Features (14-14.6.2(A)), if applicable** Identify and describe the following: ● High and moderate value waterfowl and wading habitat ● Aquifers (for Casco Bay Islands) ● Waterbodies (including wetlands, watercourses, significant vernal pools and floodplains) ● Proposed preservation areas and protection measures ● Documentation from environmental compliance consultants and determinations from applicable state and federal agencies
Yes NA ✔	**Landscape Preservation (14-14.6.2(B))** Identify and describe the following: ● Measures to preserve trees, including within required zoning setbacks (Technical Manual, Section 4) ● Measures to protect existing vegetation during construction
Yes NA ✔	**Site Landscaping and Buffers (14-14.6.2(C))** Identify and describe the following: ● Overall landscaping approach and consistency with standards ● The use of screening and buffering of service areas and between non-residential and residential uses ● Existing Heritage or Feature Trees on site and measures to preserve ● Compliance with street tree requirements
Yes NA ✔	**Water Quality, Stormwater Management, and Erosion Control (14-14.6.2(D))** Identify and describe the following: ● Erosion and sedimentation control plan and measures ● Evidence of compliance with Urban Impaired Stream Standards pursuant to DEP Chapter 500 stormwater law, as applicable ● Subsurface sanitary sewage disposal and groundwater protection measures

PUBLIC INFRASTRUCTURE AND COMMUNITY SAFETY	
Yes NA ✔	**Consistency with City Master Plans (14-14.6.3(A))** ● Describe proposed easements, rights and improvements to connect or continue off-premises public infrastructure, as applicable
Yes NA ✔	**Public Safety and Fire Prevention (14-14.6.3(B))** Identify and describe the following: ● Compliance with Crime Prevention through Environmental Design (CPTED) requirements (Technical Manual, Section 3) ● Emergency vehicle access ● Consistency with public safety standards (Technical Manual, Section 3)
Yes NA ✔	**Availability and Adequacy of Public Utilities (14-14.6.3(C)) (Technical Manual, Sections 2 & 9)** Identify and describe the following: ● Electrical services, including providing underground services ● Existing and proposed connections for public utilities and required public utility upgrades ● Sewer line connections
SITE DESIGN	
Yes NA ✔	**Massing, Ventilations and Wind Impact (14-14.6.4(A))** Identify and describe the following: ● Wind and ventilation impacts on adjoining structures and/or adjacent public spaces, including wind study, if applicable ● Bulk, location, or height impacts on adjoining structures
Yes NA ✔	**Shadows (14-14.6.4(B)), if applicable** ● Provide shadow analysis of impacts on publicly accessible open space (Technical Manual, Section 11)
Yes NA ✔	**Snow and Ice Loading (14-14.6.4(C))** ● Describe building design measures to prevent snow and ice from loading or falling onto adjacent properties or public ways
Yes NA ✔	**View Corridors (14-14.6.4(D)), if applicable** ● Describe any protection of designated view corridors (Portland Design Manual, Appendix. 1)
Yes NA ✔	**Historic Resources (14-14.6.4(E)), if applicable** Identify and describe the following: ● The site's status as a designated landmark, within a historic district or historic landscape district, or within 100 feet of any designated landmark, historic district, or historic landscape district ● Compliance with standards for preservation and documentation of archaeological resources

Yes ✔ NA	Exterior Lighting (14-14.6.4(F)) ● Describe how the proposed site lighting will adhere to photometrics requirements as it relates to light trespass and full cutoff fixture design, pursuant to Technical Manual Section 12
Yes ✔ NA	Noise and Vibration (14-14.6.4(G)) ● Provide data on noise levels for HVAC and other mechanical equipment, such as design specifications, to demonstrate consistency with state and federal noise emissions requirements as well as City code
Yes ✔ NA	Signage and Wayfinding (14-14.6.4(H)), if applicable ● Provide signage plan showing the location, dimensions, height and setback of all existing and proposed signs ● Provide drawings of all commercial and directional signage on site
Yes ✔ NA	Zone-Related Design Standards (14-14.6.4(I)) ● Address any applicable design review standards by zone, including compliance with Design Manual

MAJOR SITE PLAN
DRAWINGS CHECKLIST

Please upload the following DRAWINGS with the listed details into e-Plan as separate pdfs.

All drawings must be submitted in a 24 x 36 sheet size.

BOUNDARY SURVEY (stamped by a Maine Licensed Surveyor and drawn as per Technical Manual Sec. 13)

SITE PLAN(s) (stamped by a Maine Licensed Professional Engineer) including:

All sheets – Include a title block with project title and the following information:

- Project street address
- Name and address of property owner & applicant
- Licensed design professional, incl firm that produced plans
- North arrow
- Date of preparation and revision history block
- Tax parcel (chart, block, and lot) number

Existing Conditions Plan with the following:

- Existing structures, with distance from primary building façade(s) to the property line
- Approximate location of structures on abutting properties
- All streets and intersections adjacent to the site
- Existing driveways, pedestrian ways, and bicycle infrastructure, including dimensions and materials
- Existing public transit infrastructure
- Existing vehicle & bicycle parking areas
- Existing utilities on site and within adjacent rights-of-way
- Existing grades (two-foot contours preferred)
- Location of water courses, wetlands, and vegetation, or other significant natural features
- Existing soil conditions and location of test pits and borings
- Zoning boundary lines, including overlays
- Location of all existing easements and rights-of-way

Proposed Site Plan with the following:

- Proposed structures, including distance from primary building façade(s) to property lines
- Ground floor area, and finished floor elevations for all buildings
- Any proposed geometric modifications to streets and intersections adjacent to site
- Location, dimensions and materials of all proposed driveways, vehicle, bicycle, & pedestrian access ways with corresponding curb lines
- Engineered specifications/ cross-sections for proposed driveways, sidewalks & paved areas
- Location and dimensions of proposed loading areas, including turning templates
- Proposed transit infrastructure with dimensions/ engineering specifications
- Location of vehicle and bicycle parking with dimensions and engineering specifications
- Location of all snow storage areas
- Exterior lighting (please see Technical Manual Sec. 12 for photometrics requirements)
- Location of fire hydrants

- Location of solid waste management receptacles
- Location of all proposed HVAC and mechanical equipment, including proposed screening, where applicable
- Location of proposed easements and rights-of-way, including dimensions
- Please utilize color-coding and/or hatches and shading to delineate changes between the pre and post development condition as needed

UTILITY PLAN including:

- Proposed electrical infrastructure
- Location, sizing and directional flows of all proposed sewer and stormwater infrastructure
- Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site
- Electric utility infrastructure

GRADING AND DRAINAGE PLAN including:

- Proposed grades
- Proposed stormwater management measures meeting Technical Manual (Section 5) standards
- Any proposed alteration of a watercourse or wetlands
- Any groundwater protection measures
- Proposed buffers and preservation measures for wetlands or significant natural features

LANDSCAPE PLAN including:

- Existing vegetation to be preserved and preservation measures
- Proposed landscaping, screening, and street trees, including caliper widths for trees
- Planting schedule, including street trees

ARCHITECTURAL PLANS AND RENDERINGS including:

- Exterior building elevations, color renderings, illustrations of all sides
- Axonometric and street-level views for structures greater than three stories in height
- Provide context drawings, if applicable (Design Manual, page 1)
- Floor plans

CONSTRUCTION MANAGEMENT PLAN including:

- Specifics on traffic control, sidewalk sheds, and pedestrian rerouting
- Include a drawing and written narrative

OTHER

- Details and cross-sections, as necessary

Historic Resources 14-14.6.4 (E)

1. The proposed Hotel is not located in a designated historic district.

2. The proposed development is located on Congress Street adjacent to an historically significant building (City Hall). The proposed hotel will be generally compatible with the major character-defining elements of the district in the immediate vicinity of the proposed development. The proposed development site is located in an area of the City that, like much of Portland, is a mix of modern and historic structures. Congress Street is a blend of modern and traditional architecture that are the hallmark of a vibrant City. The proposed hotel design will be compatible with the surrounding area. The proposed development has been designed to work cohesively with the historic fabric of the surrounding area. Please see the Master Development Plan which includes supportive information regarding Neighborhood Context.

3. The proposed project area is a previously developed site with no known historic or archaeological resources.

Doc#: 53773 Bk:34401 Pg: 214

MAINE REAL ESTATE TAX PAID

QUITCLAIM DEED WITH COVENANT
(Maine Statutory Short Form)

METRO MEDIA PROPERTIES LLC, a Maine limited liability company with a mailing address of 201 Old Country Road, Suite 105, Melville, NY 11747 ("Grantor"), for consideration paid, grants to **385 CONGRESS LLC,** a Maine limited liability company with mailing address of 2730 Transit Road, West Seneca, NY 14224 ("Grantee"), with QUITCLAIM COVENANT, a certain lot or parcel of land with the buildings and improvements thereon located in the City of Portland, County of Cumberland and State of Maine, described as follows:

A certain lot or parcel of land in Portland, County of Cumberland and State of Maine bounded and described generally as follows:

South: Congress Street;
East: Pearl Street;
North: Cumberland Avenue; and
West: Myrtle Street

This parcel of land is more particularly described as follows:

Beginning at the intersection of the Northerly sideline of Congress Street with the Easterly sideline of Myrtle Street;

Thence: N72° 54' E along the Northerly sideline of Congress Street approximately Two Hundred Forty Feet (240') to the intersection of the Northerly sideline of Congress Street with a Westerly sideline of Pearl Street;

Thence: N27° 21' W along the Westerly sideline of Pearl Street approximately Four Hundred Fifty Five Feet (455') to the intersection of the Westerly sideline of Pearl Street with a Southerly sideline of Cumberland Avenue;

Thence: Westerly along the Southerly sideline of Cumberland Avenue approximately One Hundred Seventy Feet (170') to a point;

Thence: Northerly to point A (point A being located at the intersection of the line of this call with the line of the next call extended N 67° 11' E);

Thence S67° 11' W approximately Sixty Feet (60') to the intersection of the Southerly sideline of Cumberland Avenue with the Easterly sideline of Myrtle Street;

Thence S26° 22' E along the Easterly sideline of Myrtle Street approximately Four Hundred Ten Feet (410') to the intersection of the Easterly sideline of Myrtle Street with the Northerly sideline of Congress Street and the point of beginning.

Also conveying the following parcel of land:

A certain lot or parcel of land with the buildings thereon situated in the City of Portland, County of Cumberland and State of Maine, bounded and described generally as follows:

Beginning at a drill hole reset marking the intersection of the northwesterly sideline of Congress Street and the northeasterly sideline of Myrtle Street;

Thence N 55°-45'-03" E, 240.31 feet by and along the northwesterly sideline of said Congress Street to a drill hole set marking the northwesterly sideline of said Congress Street and the southwesterly sideline of Pearl Street;

Thence N 44°-35'-56" W, 433.81 feet by and along the southwesterly sideline of said Pearl Street to a point at the intersection of the southwesterly sideline of Pearl Street with the southeasterly sideline of Cumberland Avenue. Said point being witnessed by a granite right-of-way monument.

Thence S 50°-25'-20" W, 230.34 feet by and along the southeasterly sideline of said Cumberland Avenue to a point at the intersection of said southeasterly sideline of Cumberland Avenue with said northwesterly sideline of Myrtle Street. Said point being witnessed by a granite right-of-way monument.

Thence S 43°-37'-52" E, 410.86 feet by and along the northeasterly sideline of said Myrtle Street to the Point of Beginning, containing 2.26 acres more or less.

Also releasing to Grantee, Grantor's right, title and interest in a certain underground tunnel that runs from the subject premises to 390 Congress Street, by virtue of a license granted pursuant to approval of the City of Portland Inspector of Buildings dated May 14, 1965.

Being the same premises described in a Quitclaim Deed with Covenant from MTM Portland Properties, LLC to Metro Media Properties, LLC dated July 10, 2009 and recorded in the Cumberland County Registry of Deeds at Book 27079, Page 160.

IN WITNESS WHEREOF, Metro Media Properties LLC has caused this instrument to be signed and sealed in its company name by George Cacoulidis, its CEO, thereunto duly authorized, this 20th day of October, 2017.

WITNESS:

Tom Hanson

METRO MEDIA PROPERTIES LLC,
a Maine limited liability company

By: _____
George Cacoulidis
Title: CEO

STATE OF MAINE
COUNTY OF CUMBERLAND, ss. October 20, 2017

Then personally appeared the above named George Cacoulidis, CEO of Metro Media Properties LLC, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of Metro Media Properties LLC.

Before me,

_____
Attorney at Law ~~Notary Public~~
Printed Name: Nicholas J. Morrill

Received
Recorded Register of Deeds
Oct 20,2017 12:19:14P
Cumberland County
Nancy A. Lane

PARID: 027 D001001 **385 CONGRESS ST**
385 CONGRESS LLC

Parcel

Parcel ID	027 D001001
Property Location	385 CONGRESS ST
Unit	
Living Unit	1
Land Use Code	32 - WAREHOUSE & STORAGE
	Verify legal use with Inspections Division
Zoning	B3
Land Area (acreage)	2.2606
Land Area (square footage)	98472
Notes	27-D-1 CONGRESS ST 371-387 CUMBERLAND AVE 240-254 MYRTLE ST 1-35 PEARL ST 98470 SF
Utilities	1 - ALL PUBLIC - -

Owners

Owner	385 CONGRESS LLC
Address	2730 TRANSIT RD
City, State, Zip	WEST SENECA NY 14224
Deed Date	10/20/2017
Book	34401
Page	214

AGREEMENT OF PURCHASE AND SALE

between

FATHOM DEVELOPMENT, LLC,

as Buyer,

and

385 CONGRESS LLC,

as Seller

December 1, 2021

385 Congress Street
Portland, Maine 04101

AGREEMENT OF PURCHASE AND SALE

BY THIS AGREEMENT OF PURCHASE AND SALE (the "Agreement") entered into this 1st day of December, 2021 ("Effective Date"), 385 CONGRESS LLC, a Maine limited liability company (hereinafter referred to as "Seller"), and FATHOM DEVELOPMENT, LLC a Maine limited liability company (hereinafter referred to as "Buyer"), hereby agree as follows:

ARTICLE I
Terms and Definitions

Section 1.1. In addition to the other terms herein defined, the following terms shall have the meanings set forth in this Article I, unless the context otherwise requires:

Additional Deposit. Defined in Section 3.1.

Approvals. Defined in Section 6.5.

Approvals Period. Defined in Section 6.4.

Buyer's Conditions Precedent. Defined in Section 6.1.

Buyer's Knowledge. Means the knowledge of James Brady based upon his historical knowledge of the Real Property and assuming a commercially reasonable level of inquiry.

Buyer Project Information. Defined in Section 6.5.4.

Buyer's Termination Notice. Defined in Section 6.2.2.

Cash Balance. Defined in Section 5.2.2.

Closing. The consummation of the purchase and sale of the Property pursuant to this Agreement.

Closing Date. Defined in Section 6.6.

Commitments. Defined in Section 14.3.

Condominium Project. Defined in Section 6.5.4.

Consideration. Defined in Section 5.1.

Construction License. Defined in Section 14.2.

Cross Easement Agreement. Defined in Section 14.3.

Deed. Defined in Section 6.1.1.

Deposit. Defined in Section 3.1.

Demolition is defined in Section 6.1.10.

Due Diligence Period. Defined in Section 6.4.12.

ESA. Defined in Section 6.4.4.

Escrow Agent. Defined in Section 3.1.

Execution Date. The date of this Agreement as hereinabove set forth.

Facilities Program. Means and refers to the facilities program set forth on Exhibit C.

Hazardous Materials. Mean any pollutants, contaminants or hazardous substances (as such terms are defined under CERCLA), pesticides (as such term is defined under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136 et seq.), solid wastes and hazardous wastes (as such terms are defined under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq.), chemicals, other hazardous, radioactive or toxic materials, oil, petroleum and petroleum products (and fractions thereof), asbestos and asbestos-containing materials, polychlorinated biphenels ("PCBs") or PCB-containing materials, or any other material (or article containing such material) listed or subject to regulation under any law, statute, rule, regulation, order, Permit, or directive due to its potential, directly or indirectly, to harm the environment or the health of humans or other living beings.

Improvements. All improvements constructed on the Real Property.

Initial Deposit. Defined in Section 3.1.

Mandatory Cure Items. Defined in Section 6.3.

Master Development. Means the Seller's development of the area shown in the Plan attached as Exhibit B as a residential condominium project.

Master Parcel. Defined in Section 6.5.6.

Monetary Liens. Defined in Section 6.3.

MP Application. Defined in Section 6.5.4.

MP Application Deadline. Defined in Section 6.5.4.

MP Application Period. Defined in Section 6.4.12.

MP Approval. Defined in Section 6.5.4 .

OFAC. Defined in Section 7.1.

Parking Agreement. Defined in Section 14.1.

Permitted Encumbrances. Defined in Section 6.3

Preliminary Title Report. The commitment for issuance of an owner's policy of title insurance issued by the Title Company.

Project. A full service hotel [redacted]

Property. The Real Property.

Purchase Price. Defined in Section 5.1.

Real Property. That portion of the real property located at 385 Congress Street, Portland, Maine, 04101, Tax Map 27, Block D, Lot 1, as more particularly depicted on Exhibit A attached hereto and by this reference made a part hereof, together with all rights in the streets lying adjacent to such land and owned by Seller, and all rights, privileges, easements and appurtenances thereto, [redacted], and including all additional rights and easements as necessary to service the Project pursuant to the Cross Easement Agreement. [redacted] The Real Property description shall be finally determined by an ALTA survey commissioned by Buyer and the Real Property shall be conveyed using that survey description, provided that the description is reasonably acceptable to Seller. The Real Property shall be configured as more particularly described herein. The illustration included in Exhibit A is for reference purposes only regarding the approximate boundaries and alleyway location, and the buildings are not necessarily indicative of the massing or design to be agreed upon by the parties as provided herein.

Seller's Conditions Precedent. Defined in Section 6.8.

Seller's Knowledge. Means the knowledge of Gordon Reger and Joseph Dasco based upon their historical knowledge of the Real Property and assuming a commercially reasonable level of inquiry.

Seller Project Information. Defined in Section 6.5.4.

Seller's Retained Land. Defined in Section 6.5.6.

Site Plan Application. Defined in Section 6.5.1

Site Plan Approval. Defined in Section 6.5.4.

Site Studies. Defined in Section 6.4.6.

SP Application Deadline. Defined in Section 6.5.4.

Subd Application. Defined in Section 6.5.4.

Subd Approval. Defined in Section 6.5.6.

Survey. Defined in Section 6.4.5.

Title Commitment. Defined in Section 6.3.

Title Company. A nationally recognized title insurance company to be selected by Buyer.

Title Inspection Period. Defined in Section 6.3.

Title Notice Deadline. Defined in Section 6.3.

[redacted]

[redacted]

Utilities. Defined in Section 6.4.7.

Zoning Confirmation. Defined in Section 6.4.3.

ARTICLE II
Purchase and Sale

Section 2.1. Purchase and Sale. Seller agrees to sell and convey to Buyer, and Buyer agrees to purchase from Seller, the Property, on all of the mutual terms, covenants and conditions hereinafter set forth. Buyer shall have the right to designate an entity organized and controlled by Buyer for purposes of taking title to the Property as provided in Section 15.3 hereof. Seller shall be permitted to reserve certain rights and easements over the Property in accordance with the terms and provisions of Section 14.3

ARTICLE III
Deposit

Section 3.1. Deposit. Upon execution hereof, Buyer shall deposit with Pierce Atwood LLP (the "Escrow Agent") the sum of [redacted] (the "Initial Deposit"). Upon completion of the Approvals Period if Buyer has not otherwise terminated this Agreement in accordance with its terms, Buyer shall deposit with the Escrow Agent the additional sum of [redacted] (the "Additional Deposit"). The Initial Deposit and the Additional Deposit are hereinafter collectively referred to as the "Deposit" and are to be held and applied as hereinafter set forth. The Deposit shall be held in a non-interest-bearing escrow account.

Section 3.2. Non-Refundable. Except as otherwise specifically set forth in this Agreement, the Initial Deposit shall be fully refundable until the completion of the Approvals Period, after which, assuming Buyer has not terminated this Agreement, it shall be non-refundable, except as otherwise specifically set forth in this Agreement. Except as otherwise specifically set forth in this Agreement, the Additional Deposit shall be non-refundable. Except as otherwise specifically set forth in this Agreement, the Deposit shall serve as Seller's liquidated damages (except for any Buyer indemnities) in the event of a breach of this Agreement by Buyer pursuant to Article IV, or shall be applied against the Purchase Price pursuant to Article V.

Section 3.3. Liability of Escrow Agent. In the event of any disagreement between the parties, Escrow Agent shall be entitled to refuse to comply with any claims or demands by either party as long as such disagreement may continue, and in so refusing, shall make no delivery or other disposition of the Deposit. Escrow Agent shall not become liable in any way for such refusal, and Escrow Agent shall be entitled to continue to refrain from acting until (a) the rights of the parties shall have been finally adjudicated in a court of competent jurisdiction, or (b) all differences shall have been settled by agreement and Escrow Agent shall have been notified in writing of such agreement signed by both parties.

ARTICLE IV
Damages

Section 4.1. Buyer's Default. In the event that this transaction does not close as a consequence of a default by Buyer, and Seller has performed or tendered performance of its obligations hereunder, Seller's sole remedy shall be to retain the Deposit as liquidated damages. The parties hereby agree that if Buyer defaults, Seller's actual damages would be difficult or impossible to determine, and thus the amount of the Deposit is the best estimate of the damage Seller would suffer. Accordingly, the Deposit shall be the total amount that Seller is entitled to receive as liquidated damages (except for any Buyer indemnities).

Section 4.2. Seller's Default. In the event Seller fails to perform any obligation of Seller under this Agreement, including without limitation the obligation to convey title to the Property to Buyer on the Closing Date, as hereinafter defined, in accordance with the provisions of this Agreement, and Buyer has performed or tendered performance of its obligations hereunder, and such failure shall remain uncured for a period of thirty (30) days following written notice thereof from Buyer to Seller, then Buyer may (a) terminate this Agreement, in which event the Deposit shall be returned to Buyer, or (b) Buyer shall be entitled to pursue specific performance of Seller's obligations hereunder.

ARTICLE V
Purchase Price

Section 5.1. Amount of Consideration. Buyer shall pay Seller consideration (the "Consideration") for the Property in the amount of [redacted] (the "Purchase Price"), subject to adjustment for credit, debits and other adjustments as expressly provided in this Agreement..

Section 5.2. Manner of Payment. Buyer shall pay and provide the Consideration to Seller at the Closing as follows:

5.2.1. Deposit. Applying the Deposit against the Consideration; and

5.2.2. Remaining Consideration. Paying the balance of the Consideration, by wire transfer to an account to be designated by Seller (the "Cash Balance").

ARTICLE VI
Conditions Precedent to Closing

Section 6.1. Buyer's Conditions Precedent. Buyer's obligation to purchase the Property from Seller is subject to the following conditions precedent (the "Buyer's Conditions Precedent"):

6.1.1. Title. At the Closing, Seller shall sell, convey, transfer and deliver the Property to the Buyer by statutory Quitclaim Deed with Covenant Buyer (the "Deed"), and the Deed shall convey to the Buyer fee title free of Monetary Liens and Mandatory Cure Items, but subject to Permitted Encumbrances.

6.1.2. Seller's Representations and Warranties. Seller's representations and warranties set forth herein shall be true and correct in all material respects at and as of the Closing as though such representations and warranties were made at and as of such date.

6.1.3. Seller's Compliance. The Seller shall have in all material respects performed and complied with all covenants, agreements and conditions required by this Agreement to be performed or complied with by it prior to or at the Closing.

6.1.4. Approvals. The Approvals shall continue in full force and effect without imposition of any amendments, alterations or conditions not requested or pursued by Buyer or its agents or contractors, since receipt of the same by Buyer.

6.1.5. Lease Termination. Delivery by Seller of evidence reasonably satisfactory to Buyer that all leases, licenses or other use agreements of all or any portion of the Property, [redacted] have been terminated at or prior to Closing, at Seller's expense, and tenants have no further right to occupancy or use of the Property thereunder.

6.1.6. Consents and Approvals. The Seller shall have obtained all consents, approvals, authorizations, exemptions and waivers from governmental authorities and third parties, if any, as shall be necessary to convey the Property to Buyer.

6.1.7. Commitments. Buyer and Seller shall have executed and delivered the Commitments, as such documents have been negotiated and agreed upon by the parties prior to expiration of the Due Diligence Period, with only such revisions to the agreed upon forms as may be required under Article XIV, as applicable.

6.1.8. No Material Adverse Changes. There shall have been no material adverse change since the date of this Agreement in the Property, except changes contemplated or required by this Agreement, including without limitation, any change in the title, physical condition (except

for the Demolition), legal status, use or possession of the Property [redacted] from the conclusion of the Approvals Period through the date of closing that would cause the Property to be unsuitable for development of the Project; the foregoing is not intended to include any changes in the national, state or local economy or capital markets or any similar change that does not involve the physical, legal or land-use status of the Property.

6.1.9. No Legal Restraints or Litigation. No statute, rule, regulation or order of any court or administrative agency shall be in effect which restrains or prohibits the Seller from consummating the transactions contemplated hereby. In addition, no action, suit, or proceeding shall be pending before any court or quasi-judicial or administrative agency of any federal, state, local, or foreign jurisdiction wherein an unfavorable injunction, judgment, order, decree, ruling, or charge would (a) prevent consummation of any of the transactions contemplated by this Agreement, or (b) result in a material adverse change in the Property or the ability to develop the Project at the Property, except for an appeal of the Approvals, which is addressed in Section 6.5.1 below.

6.1.10. Demolition. Seller shall have completed the demolition (as more particularly described in Section 14.4) prior to Closing ("Demolition").

Section 6.2. Failure of Buyer's Conditions Precedent. If, at the time of the Closing, any of the foregoing Buyer's Conditions Precedent have not been fulfilled, Buyer may, at its option, do the following:

6.2.1. Waive and Close. Waive such condition and close in accordance with this Agreement; or

6.2.2. Terminate. Terminate this Agreement by delivery of a written notice to Seller and to Escrow Agent ("Buyer's Termination Notice") and enforce any remedy afforded by Section 4.2 in the event Seller has defaulted under any of its obligations under this Agreement (provided that the mere failure of the following conditions to closing shall not constitute a Seller default: Sections 6.1.6, 6.1.8, or 6.1.9); provided, however, that, if Buyer fails to deliver Buyer's Termination Notice to Seller at or prior to the Closing, the applicable condition or conditions shall be deemed waived by Buyer.

Section 6.3. Title Examination. From the date hereof through the date of expiration of the Due Diligence Period, as hereinafter defined (the "Title Inspection Period"), Buyer shall have the opportunity to review the commitment to insure title (the "Title Commitment"), any amendments thereto issued during the Title Inspection Period, the exceptions to title disclosed in the Title Commitment, all Survey Matters and all other aspects of Seller's title to the Property. The Title Commitment shall be for the benefit of the Buyer, at customary rates, in the ALTA form currently in use, subject only to the Permitted Encumbrances (as defined below) and with such standard exceptions deleted and standard endorsements included as Buyer may, in its sole discretion, require. On or before the date of the expiration of the Title Inspection Period (the "Title Notice Deadline"), Buyer shall notify Seller in writing of any defect in title to the Property, or any other matter which is indicated on the Title Commitment or any Survey Matter to which Buyer objects except for the following: (a) liens for real estate taxes not yet due and payable or for

betterments assessed after the Effective Date, (b) other encumbrances which may be removed or satisfied by the payment of a liquidated sum of money which Seller agrees to discharge at Closing to Buyer's satisfaction and (c) such easements, restrictions and reservations of record as are acceptable to Buyer, in its discretion. If Buyer does so notify Seller of a defect in title or other matter objectionable to Buyer prior to the Title Notice Deadline, Seller shall have ten (10) business days in which to determine whether to cure the defect or other matter so objected to by Buyer and to notify Buyer of Seller's decision in this regard. If Seller does not respond within such time frame, Seller shall be deemed to have elected not to cure the defect or other matter. Seller, at its sole cost and expense, will have until the Closing to cure the title objections which Seller has elected to cure, other than the Monetary Liens (as herein defined), which (to the extent not previously removed) Seller shall remove or cure by payment of funds at Closing. Those defects that Seller gives notice will be cured on or before the Closing Date, along with discharge of Monetary Liens, are referred to herein as "Mandatory Cure Items." If Seller elects (or is deemed to elect) not to cure the defect or other matter so objected to by Buyer, Buyer shall have the right, by not later than the tenth (10th) day after the date of Seller's notice (or failure to provide notice) to either (a) waive such defect or other matter and take title to the Property without any adjustment in the Purchase Price, or (b) terminate this Agreement by giving written notice thereof to Seller. If Buyer timely gives such notice of termination, this Agreement shall terminate and the Deposit shall be returned to Buyer. If Buyer fails to give Seller a notice of termination, Buyer (a) shall no longer have an right to terminate this Agreement under this Section 6.1.1 and shall be bound to proceed to Closing and consummate the transaction contemplated hereby pursuant to the terms of this Agreement and (b) shall be deemed to have approved the state of title to the Property as it exists on the effective date of the Title Commitment, as last amended during the Title Inspection Period. Seller shall be responsible for discharging any mortgages, voluntary monetary liens or tax liens (other than municipal liens not yet due and payable), including mechanics' liens for unpaid work at the Property performed on behalf of Seller but not mechanics' lien arising from due diligence and permitting and approvals work performed for Buyer (collectively, "Monetary Liens") at or prior to Closing. "Permitted Encumbrances" shall mean all matters of record as of the Effective Date affecting the Property, including without limitation easements, covenants, restrictions and agreements, as of the Effective Date, except for (i) items to which Buyer has objected and which Seller has agreed to cure, all as provided above in this Section, and (ii) Monetary Liens. Permitted Encumbrances also shall include the Parking Agreement, the Construction License, the Cross Easement Agreement and all governmental approvals and the conditions thereof contemplated or required by this Agreement.

Section 6.4. Buyer's Due Diligence. Notwithstanding any other provision of this Agreement to the contrary, Buyer shall be entitled to undertake a thorough investigation of the Property, including without limitation such reviews, analyses and studies of the Property and the development of the Project at the Property, as Buyer may, in its sole discretion, determine to be necessary or appropriate, including without limiting the generality of the foregoing:

6.4.1. Inspection of physical condition, [redacted]

6.4.3. Evaluation by Buyer of all necessary zoning, including zoning board approvals of required variances and any other matters, required in order to develop the Project ("Zoning Confirmation").

6.4.4. A Phase I Environmental Site Assessment for the Property, together with (i) any Phase II Environmental Site Assessments or other studies or analyses as may be required based upon the Phase I Environmental Site Assessment, and (ii) a Hazardous Materials Inventory of the building on the Property (together referred to as "ESA"). Seller agrees to allow Buyer, as [redacted] to take and analyze soil borings and perform groundwater testing both from the Master Parcel at locations determined by Buyer's engineering advisors, and underneath the buildings and structures located on the Real Property, including drilling through the foundations of any buildings or structures for purposes of access for soil and groundwater testing; provided, that in the event tenant consent is needed for any of the work contemplated by this Section 6.4.4, Seller shall use commercially reasonable efforts to assist Buyer in obtaining such required consent. Any damage associated with the Buyer's testing shall be restored at Buyer's expense.

6.4.5. An ALTA/ACSM Land Title Survey of the Property certified satisfactory to Buyer, in its sole opinion, sufficient in all respects to delete the standard survey exception from Buyer's title policy, and bearing a legal description, made by a licensed surveyor, and showing, among other things, the area, dimensions and location of the Property to the nearest monuments, streets, alleys on all sides, the topography, the location of all available utilities in adjoining streets, alleys, or property, the location of all recorded and apparent easements against or appurtenant to the Property, the location of all active and abandoned sewer and storm water lines on an as built basis, certifying the applicable zoning and flood zone classifications and not disclosing any condition rendering the Property unusable, in Buyer's sole opinion, for the Project (the "Survey").

6.4.6. A geotechnical report in form satisfactory to Buyer, boring, percolation and other soil tests and feasibility, demographic, traffic pattern, and other site assessment studies ("Site Studies") as required by Buyer. In connection therewith, Buyer shall have access to the Property as required [redacted] and may conduct such tests, studies, surveys and inspections (expressly including boring, drilling and other subsurface exploration as Buyer may reasonably deem appropriate). Buyer promptly shall restore to its former condition any portion of the Property disturbed by any activity conducted under this Agreement, which shall include repaving or otherwise filling any bore holes, shall repair all damage to the Property caused thereby and shall indemnify and hold Seller harmless from and against any claims, losses, liabilities, costs, fines, penalties or expenses (including without limitation reasonable attorneys' and paralegals' fees) asserted against or incurred by Seller in connection with any such activity, it being expressly understood and agreed that the foregoing provisions shall survive the Closing or the termination of this Agreement prior thereto. Buyer agrees not to assert as a defense to the enforcement of the foregoing indemnity any workers' compensation immunity. Damages under the foregoing indemnity are not limited by any liquidated damages provision in this Agreement. In addition, Buyer shall be afforded full opportunity by Seller, without warranty or recourse, to examine the following, to the extent in the possession of Seller and/or Seller's agents or employees, including the reasonable right to make copies of such books and records: environmental and engineering reports, surveys, title reports and title insurance policies, soil studies, and any reports or analyses

regarding the Demolition and the condition of the Property following the Demolition, but excluding Seller's internal memoranda, financial projections, budgets, appraisals, accounting and tax records, attorney work product, work protected by attorney-client privilege and similar proprietary or confidential information. Buyer shall take commercially-reasonable precautions to ensure that such materials and any information contained therein are disclosed only to such of Buyer's employees, agents, consultants, attorneys, investors and lenders as have need therefor, under conditions which will prohibit any further dissemination thereof not authorized by Seller.

6.4.7. Confirmation that all utilities, including without limitation, water, gas, electric power, telephone, cable, storm water systems and sanitary sewer, necessary or appropriate for development of the Project ("Utilities"), as determined by Buyer in its sole discretion, shall be located in the public way or ways adjacent to the Property ("Utility Confirmation") which confirmation may be in such form as Buyer may require.

6.4.8. Confirmation that the Project can be integrated into the Seller's Master Development in a manner acceptable to Buyer, as determined by Buyer, in Buyer's sole discretion, including without limiting the generality of the foregoing all necessary service drives, commercial truck delivery facilities, parking improvements and valet program, footings and foundations, storm water management and Utilities. The foregoing confirmation shall include confirmation that the location of buildings and other structures on the Master Parcel satisfy the requirement that the clearance between the Project and adjacent building to be located at the corner of Pearl Street and Congress Street shall be no less than fifty-five (55) feet at hotel guest room and residence levels.

6.4.9. Such other traffic, lighting and other engineering or investigatory studies as may be necessary or appropriate, or required by planning authorities, for determining the adequacy of the Property for development of the Project.

6.4.10. Confirmation that the Property is sufficient in all respects to accommodate the full service hotel Facilities Program, including associated front of house, back of house, rooftop bar, underground garage, valet on Congress Street and residences and all associated improvements.

6.4.11. Confirmation of likely availability of all Approvals for the Project. Buyer shall have the right to contact and communicate with such governmental officials regarding the Property and the project as Buyer may deem appropriate, provided that, prior to Closing, Buyer shall make no application with the City of Portland for a permanent change in zoning or other permanent change to the land-use status of the Property.

6.4.12. Inspection by Buyer of the physical condition, title to, and other matters related to the tunnel under Congress Street.

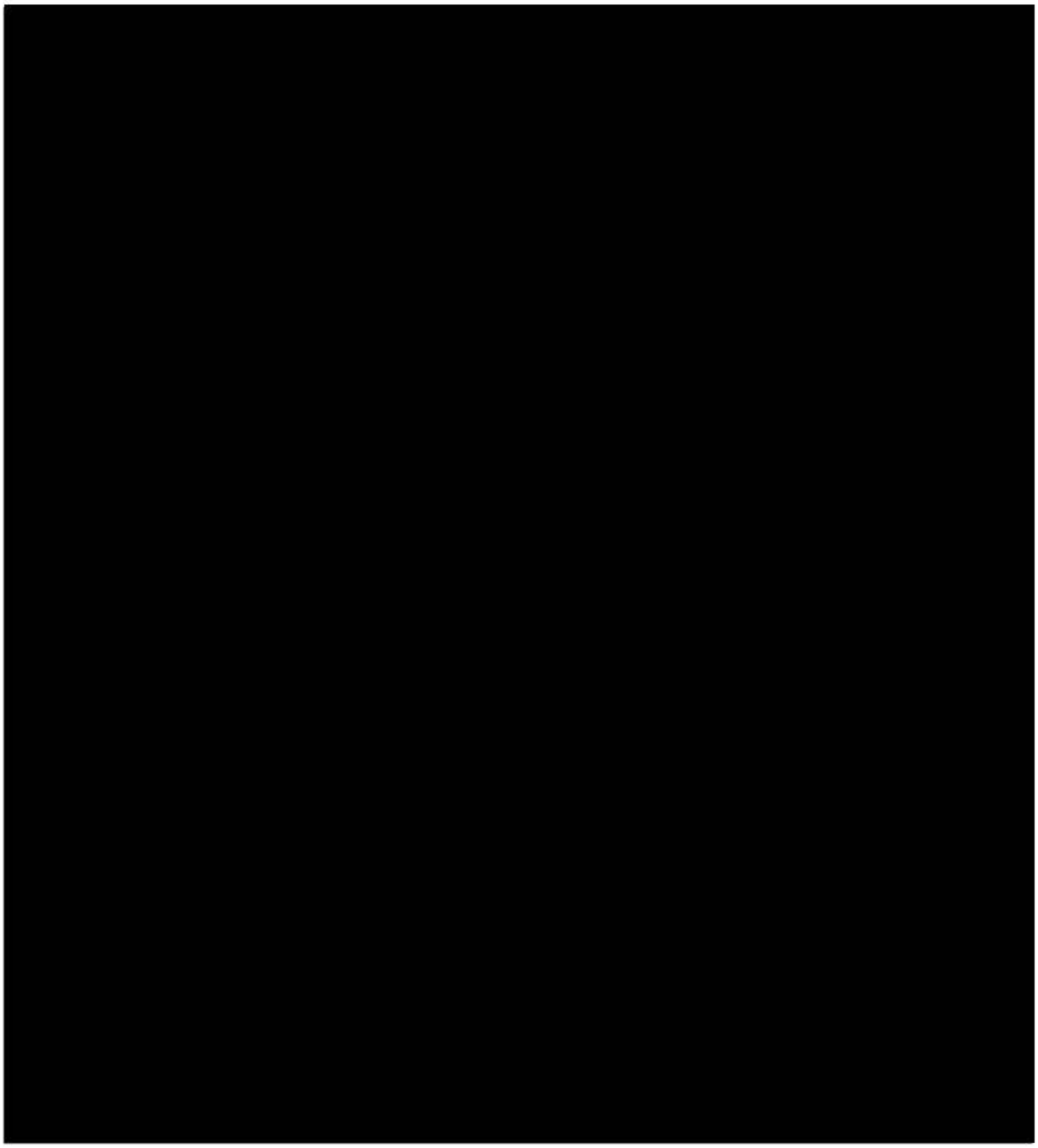
[redacted]

[redacted]

Section 6.5. Approvals. Notwithstanding any other provisions of this Agreement to the contrary, Buyer shall be entitled to apply for and obtain all necessary federal, state and local governmental land-use permits, licenses and approvals of any type or nature required, including historic preservation review, as may be necessary for the development on the Property of the Project, including without limiting the generality of the foregoing, all necessary site plan, and other governmental land-use permits, licenses, and approvals, of any type and from any necessary public or governmental authority or other party, for Buyer's development of the Project at the Property (excluding building permits and other construction related permits and approvals and hotel and restaurant operating permits and licenses).

[redacted]

6.5.3. Buyer shall have the right to apply for and pursue the Site Plan Approval on a stand-alone basis, separate from the MP Application and MP Approval, so long as such Site Plan Application and Site Plan Approval do not interfere with Seller's Master Development and have been approved in writing in advance of submission to the City of Portland by Seller, as provided in Section 6.5.4 below.



[redacted]

6.5.5. Intentionally deleted.

[redacted]

[redacted]

[redacted]

Section 6.7. Effective Termination. If this Agreement is terminated pursuant to the provisions of this Article, all other obligations of the parties hereto shall cease and this Agreement shall be void and without recourse to the parties hereto, except as otherwise expressly set forth in Article IV and Section 6.2 hereof and except for obligations that expressly survive termination.

Section 6.8. Seller's Conditions Precedent. Seller's obligation to sell the Property to Buyer is subject to the following conditions precedent (the "Seller's Conditions Precedent"):

(a) Payment by Buyer of all sums due in accordance with this Agreement;

(b) As of the Closing Date, no statute, rule, regulation or order of any court or administrative agency shall be in effect which restrains or prohibits the Seller from consummating the transactions contemplated hereby, and to that end, Seller has obtained approval from the City of Portland to subdivide the Master Parcel. In addition, no action, suit, or proceeding shall be pending before any court or quasi-judicial or administrative agency of any federal, state, local, or foreign jurisdiction wherein an unfavorable injunction, judgment, order, decree, ruling, or charge would (a) prevent consummation of any of the transactions contemplated by this Agreement, or (b) result in a material adverse change in the Master Parcel or the ability to develop the Master Parcel;

(c) All of the representations and warranties of Buyer shall be true and correct in all material respects as of the Closing, and Buyer shall deliver a separate certificate certifying to that effect;

(d) Buyer shall have performed in all material respects each of its obligations under this Agreement to be performed at or prior to the Closing; and

(e) Seller shall have received Master Development plan and Subd Approval from the City of Portland.

ARTICLE VII
Representations and Warranties

Section 7.1. Buyer's Representations and Warranties. Buyer hereby represents, warrants and covenants to Seller the following as of the date hereof and as of the Closing. The representations and warranties shall survive Closing for a period of only one (1) year from the Closing:

(a) Buyer is duly organized, validly existing and in good standing under the laws of the State of Maine. Buyer has the requisite right, power and authority to buy the Property from Seller as provided herein, and has taken all action necessary to authorize the execution, delivery and performance of this Agreement. Buyer has obtained all consents and approvals necessary for Buyer's execution, delivery and performance of this Agreement, and the performance by Buyer of

Buyer's obligations hereunder will not constitute a default under the terms and provisions of any material agreement, document or instrument to which Buyer is a party or by which Buyer is bound.

(b) This Agreement constitutes the valid and binding obligation of Buyer, enforceable against Buyer in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally.

(c) There is no suit or proceeding pending or, to Buyer's knowledge, threatened against or affecting Buyer that might affect or relate to this Agreement or the transactions contemplated hereby, in any court or before or by any federal, state, county or municipal department, commission, board, bureau, or agency or other governmental instrumentality. No order, writ, injunction, subpoena or decree has been issued by or requested of any court or government agency which is reasonably likely to result in a material adverse change in the Property or the Buyer, or which could reasonably be expected to have a material adverse effect on the transactions contemplated by this Agreement.

(d) Buyer has engaged no broker or agent in connection with the sale. Buyer shall indemnify, defend and hold Seller harmless from and against any loss, damages, liabilities, costs or expenses, including without limitation attorneys' fees and court costs, resulting from any claim for a fee or commission by any broker or finder with whom Buyer has dealt, other than Malone Commercial.

(e) Neither Buyer nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities.

Section 7.2. Authority. Each party warrants and represents that this Agreement and all other documents delivered prior to or at the Closing (a) have been or shall be duly authorized and executed and delivered by such party; (b) are legal, valid, and binding obligations of such party; and (c) neither violate any provision of any agreement to which such party is a party, nor violate any charters, bylaws, operating agreements or other organizational documents of such party.

Section 7.3. Seller's Representations and Warranties. Seller hereby represents, warrants and covenants to Buyer the following. The Seller's representations and warranties shall survive Closing for a period of only one (1) year from the Closing:

(a) Seller is duly organized, validly existing and in good standing under the laws of the State of Maine. Seller has the requisite right, power and authority to sell and convey the Property to Buyer as provided herein, and has taken all action necessary to authorize the execution,

delivery and performance of this Agreement. Seller has obtained all consents and approvals necessary for Seller's execution, delivery and performance of this Agreement, and the performance by Seller of Seller's obligations hereunder will not constitute a default under the terms and provisions of any material agreement, document or instrument to which Seller is a party or by which Seller is bound.

(b) This Agreement constitutes the valid and binding obligation of Seller, enforceable against Seller in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally.

(c) Seller has not received any written notice of any pending condemnation, expropriation, eminent domain or similar proceeding affecting all or any portion of the Property and to Seller's Knowledge, no such proceeding is contemplated.

[redacted]

(e) No written notice has been given to Seller by the holder of any mortgage on the Property, any insurance company that has issued a policy with respect to the Property, or by any board of fire underwriters (or other body exercising similar functions) claiming any material defect or deficiency or requesting the performance of any material repairs, alterations or other work to the Property.

(f) There are no management, service, equipment, supply, maintenance or concession agreements to which Seller is a party with respect to or affecting all or any portion of the Property that are not terminable by Seller by the Closing.

(g) Seller has paid or will pay in full prior to the Closing all outstanding bills and invoices for Utility charges, labor, goods, materials, and services of any kind relating to the Property incurred by or for the benefit of Seller.

(h) No work has been performed or is in progress at, and no materials have been furnished to, at the direction of or for the benefit of the Seller, the Property which, though not presently the subject of, might give rise to mechanic's, materialmen's or other liens against the Property or any portion thereof. If any lien for work performed or materials furnished prior to the Closing, in either case pursuant to a contract with Seller, is filed before or after the Closing, Seller shall promptly discharge such lien by filing the requisite bond or in any other manner allowed by applicable law.

(i) There is no suit or proceeding pending or to Seller's Knowledge, threatened against or affecting Seller or the Property that might affect or relate to this Agreement or the transactions contemplated hereby, in any court or before or by any federal, state, county or municipal department, commission, board, bureau, or agency or other governmental instrumentality. No order, writ, injunction, subpoena or decree has been issued by or requested of

any court or government agency which is reasonably likely to result in a material adverse change in the Property or the Seller, or which could reasonably be expected to have a material adverse effect on the transactions contemplated by this Agreement.

(j) Seller has received no written notice of any outstanding violation of any federal, state, county, or municipal laws, ordinances, orders, codes, rules, regulations, or requirements affecting all or any portion of the Property, including without limitation violations of the housing, building, safety, health, fire, or zoning ordinances, codes, and regulations of the municipality or county within which the Property is located, issued by any governmental or quasi-governmental authority.

(k) Seller is not in violation or default under any agreement with any third party, or under any judgment, order, decree, rule or regulation of any court, arbitrator, administrative agency or other governmental authority to which it may be subject, which violation or default will, in any one case or in the aggregate, materially and adversely affect the ownership or operation of the Property or Seller's ability to consummate the transactions contemplated hereby. To Seller's Knowledge, there are no material violations of laws, regulations, permits or approvals affecting or pertaining to the Property. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby will not (i) violate any law or any order of any court or governmental authority with proper jurisdiction and pertaining to Seller; (ii) result in a breach or default under any provision of the organizational documents of Seller; or (iii) require any consent, or approval or vote of any third person that, as of the Closing Date, has not been given or taken, and does not remain effective.

(l) There are no tax liens on any of the Property except for taxes not yet due and payable, and Seller has paid or will pay through the Closing all real estate taxes, withholdings and governmental charges due and payable with respect to the Personal Property under all applicable federal, state and local laws and regulations. To Seller's Knowledge, there are no legal, administrative or other tax proceedings currently in progress or threatened pursuant to which Seller is or could be made liable for any taxes.

[redacted]

(n) Seller is not a "foreign person" as defined in Section 1445(f)(3) of the Code.

(o) Neither Seller nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting

Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities.

Section 7.4. Waiver of Disclosure. Buyer hereby agrees that, notwithstanding the provisions of 33 M.R.S. § 193, the investigation of any and all matters relating to (i) the identification of any abandoned or discontinued town ways, public easements, or private roads located on or abutting the Property and (ii) the identification of the party or parties responsible for the maintenance of any abandoned or discontinued town way, public easement, or private road located on or abutting the Property (including any responsible road association) shall be the sole responsibility of Buyer and has been performed as part of Buyer's examination of all other matters of title respecting the Property. Buyer hereby knowingly, unconditionally, and expressly waives their right to receive a property disclosure statement from Seller pursuant to 33 M.R.S. § 193. Buyer's waiver of their right to receive a property disclosure statement from Seller pursuant to 33 M.R.S. § 193 shall not constitute a waiver of any other rights to disclosure afforded to Buyer pursuant to this Agreement or by law unless otherwise expressly provided herein. By execution of this Agreement, Buyer hereby releases Seller from and against and all claims, losses, costs, liabilities, expenses, demands, or obligations whatsoever arising from or related to (i) the identification of any abandoned or discontinued town ways, public easements, or private roads located on or abutting the Property and (ii) the identification of the party of parties responsible for the maintenance of any abandoned or discontinued town way, public easement, or private road located on or abutting the Property (including any responsible road association).

ARTICLE VIII
Disclaimer of Warranties

EXCEPT AS EXPRESSLY SET FORTH IN SECTION 7.3 AND THE DEED, IT IS UNDERSTOOD AND AGREED THAT SELLER IS NOT MAKING AND HAS NOT AT ANY TIME MADE ANY WARRANTIES OR REPRESENTATIONS OF ANY KIND OR CHARACTER, EXPRESS OR IMPLIED, WITH RESPECT TO THE PROPERTY. BUYER AGREES, ACKNOWLEDGES AND REPRESENTS THAT EXCEPT AS SPECIFICALLY SET FORTH IN THIS AGREEMENT, BUYER IS ENTERING INTO THIS AGREEMENT AND SHALL PERFORM ALL OF ITS OBLIGATIONS HEREUNDER AND CONSUMMATE THE TRANSACTION CONTEMPLATED BY THIS AGREEMENT SOLELY IN RELIANCE ON AND AS A RESULT OF BUYER'S OWN INVESTIGATIONS AND EFFORTS (INCLUDING BUYER'S INSPECTION OF THE PROPERTY AND SUCH OTHER INVESTIGATIONS, EXAMINATIONS AND INSPECTIONS AS BUYER HAS CHOSEN TO MAKE OR HAS MADE) AND AT BUYER'S SOLE RISK, COST AND EXPENSE, INCLUDING, WITHOUT LIMITATION, THE RISK THAT BUYER'S INSPECTION OF THE PROPERTY AND SUCH OTHER INVESTIGATIONS, EXAMINATIONS AND INSPECTIONS MAY NOT REVEAL ANY OR ALL ADVERSE OR EXISTING CONDITIONS, ASPECTS OR ATTRIBUTES OF THE PROPERTY. BUYER ACKNOWLEDGES THAT SELLER HAS AFFORDED, AND, DURING THE DUE DILIGENCE PERIOD, SHALL AFFORD, BUYER THE OPPORTUNITY FOR FULL AND COMPLETE INVESTIGATION, EXAMINATION AND INSPECTION OF THE PROPERTY. BUYER ACKNOWLEDGES THAT THIS PARAGRAPH WAS A NEGOTIATED PART OF THIS AGREEMENT AND SERVES AS AN ESSENTIAL COMPONENT OF CONSIDERATION FOR THE SAME. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE PARTIES SPECIFICALLY ACKNOWLEDGE THAT BUYER HAS HAD, AND, DURING THE DUE DILIGENCE PERIOD SHALL HAVE, AN OPPORTUNITY TO FULLY INSPECT THE PROPERTY,

INCLUDING, BUT NOT LIMITED TO, THE PHYSICAL CONDITION OF THE PROPERTY (INCLUDING ALL ENVIRONMENTAL CONCERNS), AND THE PURCHASE PRICE HAS BEEN NEGOTIATED TO ELIMINATE ALL CLAIMS EXCEPT THOSE ARISING UNDER REPRESENTATIONS, WARRANTIES OR AGREEMENTS CONTAINED IN THIS AGREEMENT OR OTHER AGREEMENTS OR DOCUMENTS ENTERED INTO IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED HEREIN, WHETHER KNOWN OR UNKNOWN, RELATING TO THE CONDITION OF THE PROPERTY AS OF THE DATE OF THIS AGREEMENT AND ALL ASPECTS AND ATTRIBUTES THEREOF, INCLUDING, WITHOUT LIMITATION, ALL ENVIRONMENTAL MATTERS. BUYER ACKNOWLEDGES AND AGREES THAT SELLER HAS MADE NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PROPERTY EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT.

ARTICLE IX
Risk of Loss

Section 9.1. Risk of Loss. The risk of damage to the improvements on the Property or any portion thereof prior to Closing is Buyer's risk.

Section 9.2. Condemnation. Any taking or condemnation for any public or quasi-public purpose or use by any competent authority in appropriate proceedings or by any right of eminent domain of all or any material part of the Property between the Effective Date and the time of the Closing shall, at Buyer's option, cause a termination of this Agreement. The election to terminate provided for hereby must be exercised by Buyer by written notice to Seller to such effect, which notice shall be given by Buyer on or before the thirtieth (30th) day after Buyer's receipt of written notice of such condemnation (but in any event prior to the Closing; provided, however, that Buyer shall be entitled to extend the Closing Date to a date that is two business days beyond the date that would be the thirtieth (30th) day following such notice). If Buyer shall not elect so to terminate this Agreement, Seller shall be relieved of its duty to convey title to the portion of the Property so taken or condemned, but Buyer will be entitled to receive all proceeds of any such taking or condemnation with respect to the Property only provided Buyer takes title hereunder and Seller shall make no settlement or adjustment of such proceedings with respect to the Property only without Buyer's consent, and shall take at the Closing all action necessary to assign its entire interest in any such award with respect to the Property only to Buyer.

Section 9.3. Return of Deposit. The Deposit shall be returned to Buyer immediately following termination of this Agreement by Buyer under this Article and all other obligations of the parties hereto shall cease and this Agreement shall be void and without recourse to the parties hereto subject to the provisions of Section 6.3 and except for provisions that expressly survive termination.

ARTICLE X
Operation of Property

[redacted]

[redacted]

ARTICLE XI
Closing

Section 11.1. Closing Date. The Closing shall take place at the time and place specified in Section 6.6 hereof. The Cash Balance shall be held in escrow by the Buyer's attorney pursuant to customary conveyancing practice until the Deed is recorded; provided, however, that the Deed shall be recorded no later than 3:00 P.M. on the Closing Date unless Seller's attorney has been advised of any matter of record arising after a title update performed by Buyer's counsel the morning of the Closing and preventing Seller from conveying title to the Property in accordance with the applicable provisions of this Agreement.

Section 11.2. Closing Deposits. At the Closing, Seller and Buyer shall exchange the following documents and funds:

11.2.1. Seller's Deposits. Seller shall deliver to Buyer the following:

(a) Deed. The Deed conveying the Property to Buyer subject only to Permitted Encumbrances.

(b) Non-Foreign Affidavit. A duly executed original affidavit as to Seller's non-foreign status.

(c) Authority. Such evidence as may be reasonably required by the title insurance company as to the authority of the person or persons executing documents on behalf of Seller.

(d) Affidavits. Executed affidavits and indemnifications in form and substance reasonably satisfactory to the title insurance company regarding mechanics' and materialmen's liens and parties in possession sufficient to eliminate any title insurance exceptions for these matters with respect to the Property.

(e) Executed Commitments. Executed Commitments in the form agreed to on or before the expiration of the Due Diligence Period, with only such changes as the parties may mutually agree.

(f) Additional Documents. Such other documents, including without limitation settlement statements and escrow instructions, as are required of Seller to close in accordance with this Agreement and local conveyancing practice.

11.2.2. Buyer's Deposits. Buyer shall deliver to Seller the following:

(a) Cash Balance. The Cash Balance;

(b) Closing Costs. Additional cash in the amount necessary to pay Buyer's share of closing costs, as set forth in Section 12.2.;

(c) Executed Commitments (with execution of the Cross Easement Agreement required if necessary to bind Buyer and the Property to the Cross Easement Agreement); and

(d) Additional Documents. Such other documents, including without limitation authority documents, settlement statements and escrow instructions, as are required of Buyer to close in accordance with this Agreement and local conveyancing practice.

Section 11.3. Use of Purchase Price to Clear Title. To enable Seller to make conveyance as herein provided, Seller may, at the Closing, use the Purchase Price or any portion thereof to clear title of any or all encumbrances or interests so long as Seller has obtained and furnished to Buyer at or prior to the Closing a recordable release of each such encumbrance or interest or (in the case of an institutional mortgage or other security interest) written commitment from the holder thereof to provide such release upon receipt of a sum certain.

Section 11.4. Closing Statement. The parties shall execute and deliver a Closing and Proration Statement confirming the funds flow and prorations required under Article XII hereof.

ARTICLE XII
Closing Costs, Prorations

Section 12.1. Seller's Costs. Seller shall pay (a) one-half of the transfer taxes payable upon recordation of the Deed; and (b) the costs necessary to discharge Seller's obligations under this Agreement.

Section 12.2. Buyer's Costs. Buyer shall pay (a) one-half of the transfer taxes payable upon recordation of the Deed; (b) the cost of the Preliminary Title Report; (c) all title insurance premiums; (d) the cost of recording the Commitments; and (e) all other costs required in order to close in accordance with this Agreement (except as specified in Section 12.1).

Section 12.3. Prorations. Taxes and assessments (including any business and license taxes and any other state, county or municipal assessments), utility and fuel bills and other customarily-adjusted operating expenses shall be prorated as of the Closing Date and added to or subtracted from (as the case may be) the Cash Balance. All charges accruing prior to the Closing Date shall be prorated between the parties, and all charges accruing on or after the Closing Date shall be the obligation of Buyer. If the amount of such taxes is not known on the Closing Date, such taxes shall be prorated on the basis of taxes assessed for the preceding fiscal period, subject to reapportionment as soon as the new tax rate and valuation can be ascertained. In the event of any abatement of such taxes subsequent to the apportionment thereof, the amount of such abatement, less the reasonable cost of obtaining the same, shall be prorated as of the Closing Date.

ARTICLE XIII
Notices

Section 13.1. Notices. All notices required or permitted to be given hereunder shall be in writing and sent by electronic mail, with a confirmation copy sent by a recognized overnight courier

service offering confirmation of delivery to the appropriate address indicated below or at such other place or places as either Buyer or Seller may, from time to time, respectively, designate in a written notice given to the other:

To Buyer:	Fathom Development, LLC 80 Exchange Street, Suite 400 Portland, ME 04101 Attn: James H Brady, Manager jameshbrady@gmail.com
With a copy to:	Christopher E. Howard, Esq. Pierce Atwood LLP 254 Commercial Street Portland, Maine 04101 choward@pierceatwood.com
To Seller:	385 Congress LLC 2730 Transit Road West Seneca, NY 14224 Attn: Gordon Reger joedasco@comcast.net
With a copy to:	Tom Hanson Bernstein Shur 100 Middle Street Portland, ME 04101 thanson@bernsteinshur.com

ARTICLE XIV
Additional Conditions

[redacted]

Section 14.1. Construction License. Seller shall provide Buyer with access to and right to use lay-down space for Project construction, the location of such lay-down space to be negotiated by the parties during the Due Diligence Period as provided below, and the parties shall enter into an agreement with respect to reasonable cooperation and coordination of construction activities with respect to the common boundary between the Property and Seller's Retained Land. Subject to agreement of the parties as provided below in this Section, a conditional license to use the lay-down area and for coordination of construction activities on the common boundary will be executed and delivered at Closing ("Construction License"). If the Construction License, including the

location of the lay-down space, is not finalized in a form reasonably acceptable to Buyer and Seller on or before the expiration of the Due Diligence Period, then Buyer or Seller may terminate this Agreement by giving the other party written notice thereof on or before the expiration of the Due Diligence Period, in which event the Deposit will be refunded to Buyer and this Agreement shall terminate and the parties shall have no further obligations of any nature whatsoever hereunder except those that expressly survive termination. Buyer and Seller agree to exercise reasonable good faith efforts to agree on any adjustments required in the lay-down space to accommodate the needs of both parties in the development of the Project and the Master Development as finally approved in the Site Plan Approval and the MP Approval.

[redacted]

Section 14.5. [redacted]

Section 14.6. Intentionally deleted.

Section 14.7. Recordation. The form of Deed, the Cross Easement Agreement, the Parking Agreement, the Construction License, [redacted] will be memorialized in form and substance acceptable to both Seller and Buyer, to be executed and delivered by the parties at Closing ("Commitments"). If the Commitments are not finalized in a form reasonably acceptable to Buyer on or before the expiration of the Due Diligence Period, as provided in this Article XIV, then Buyer may terminate this Agreement by giving the other party written notice thereof on or before the expiration of the Due Diligence Period, in which event the Deposit will be refunded to Buyer and this Agreement shall terminate and the parties shall have no further obligations of any nature whatsoever hereunder, except those that expressly survive termination. The Commitments shall survive the Closing and shall be memorialized in a written agreement in recordable form that will be executed and delivered by Buyer and Seller at Closing. The order of recording the Commitments shall include recording the Cross Easement Agreement before the Deed unless those documents are combined into a single instrument.

ARTICLE XV
Miscellaneous Provisions

Section 15.1. Attorneys' Fees. If any suit or action be instituted to enforce the rights of either party under this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and court costs.

Section 15.2. Further Assurances. Whenever reasonably requested to do so by the other party, Seller and Buyer shall execute, acknowledge, and deliver any and all such further reasonable conveyances, assignments, confirmations, satisfactions, releases, instruments of further assurance, approvals, consents and any and all such further instruments and documents as may be necessary in order to complete any and all conveyances, transfers, sales and assignments herein provided, and to do any and all other acts and to execute, acknowledge and deliver any and all documents as reasonably requested in order to carry out the intent and purpose of this Agreement.

Section 15.3. Buyer's Right to Assign. Buyer may, by written notice to Seller prior to the Closing Date, designate a nominee to take title to the Property and assign Buyer's interest in this Agreement in connection therewith to an entity in which the principals of Buyer own a membership or other equity interest. The named Buyer under this Agreement shall remain liable under this Agreement notwithstanding any such assignment.

Section 15.4. Successors and Assigns. Without waiver of the terms and conditions of Section 15.3, all of the rights, benefits, duties, liabilities, and obligations of the parties hereto shall inure to the benefit of, and be binding upon, their respective successors and assigns.

Section 15.5. Time. Time is of the essence of this Agreement and of every provision herein contained.

Section 15.6. Headings. The title and headings of the Sections hereof are intended solely for means of reference and are not intended to modify, explain or place any construction on any of the provisions of this Agreement.

Section 15.7. Modification. This Agreement may not be modified, amended or otherwise changed in any manner except by a writing mutually executed by both parties. To the extent there is any conflict between the terms and conditions of this Agreement and the terms and conditions of any other documents relating to the acquisition of the Property as they relate to rights and obligations between Buyer and Seller, the terms and conditions of this Agreement shall be deemed controlling.

Section 15.8. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Maine.

Section 15.9. Escrow Agent. Pierce Atwood, LLP agrees to serve as Escrow Agent as described herein pursuant to the Pierce Atwood LLP Standard Escrow Terms and conditions attached hereto as Exhibit D, which are incorporated herein by reference.

Section 15.10. Exclusivity. For so long as this Agreement remains in force, neither Seller nor any of its agents, affiliates, members, managers, subsidiaries, directors, officers or employees, will solicit, initiate, continue or participate in any discussions or negotiations with, or encourage or respond to any inquiries or proposals by, or provide any information to, or otherwise cooperate in any other way with, any corporation, company, partnership, person or other entity or group (other than Buyer and its affiliates, subsidiaries, partners, officers, directors, employees, consultants, agents, financing sources (and potential financing sources), accountants, and attorneys in connection with the development, sale, or acquisition of any interest in, the Property. Seller shall cause its agents, affiliates, members, managers, subsidiaries, directors, officers or employees, to comply with the provisions of this section.

Section 15.11. Counterparts. This Agreement may be executed in one or more counterparts, each of which when executed shall be deemed to be an original but all of which, when taken together shall constitute one and the same agreement. This Agreement may be executed by electronic or other facsimile signatures.

[*Remainder of Page Intentionally Blank – Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

FATHOM DEVELOPMENT, LLC

By: _____
Name: James Brady
Title: Manager

385 CONGRESS LLC

By: _____
Name: Joseph Dasco
Title: Authorized Agent

ESCROW AGENT: PIERCE ATWOOD LLP

By: _____
Name: Christopher E. Howard
Title: Partner

[Signature Page to 385 Congress Street Purchase and Sale Agreement]

EXHIBIT A

DESCRIPTION OF REAL PROPERTY

EXHIBIT

tabbies

A

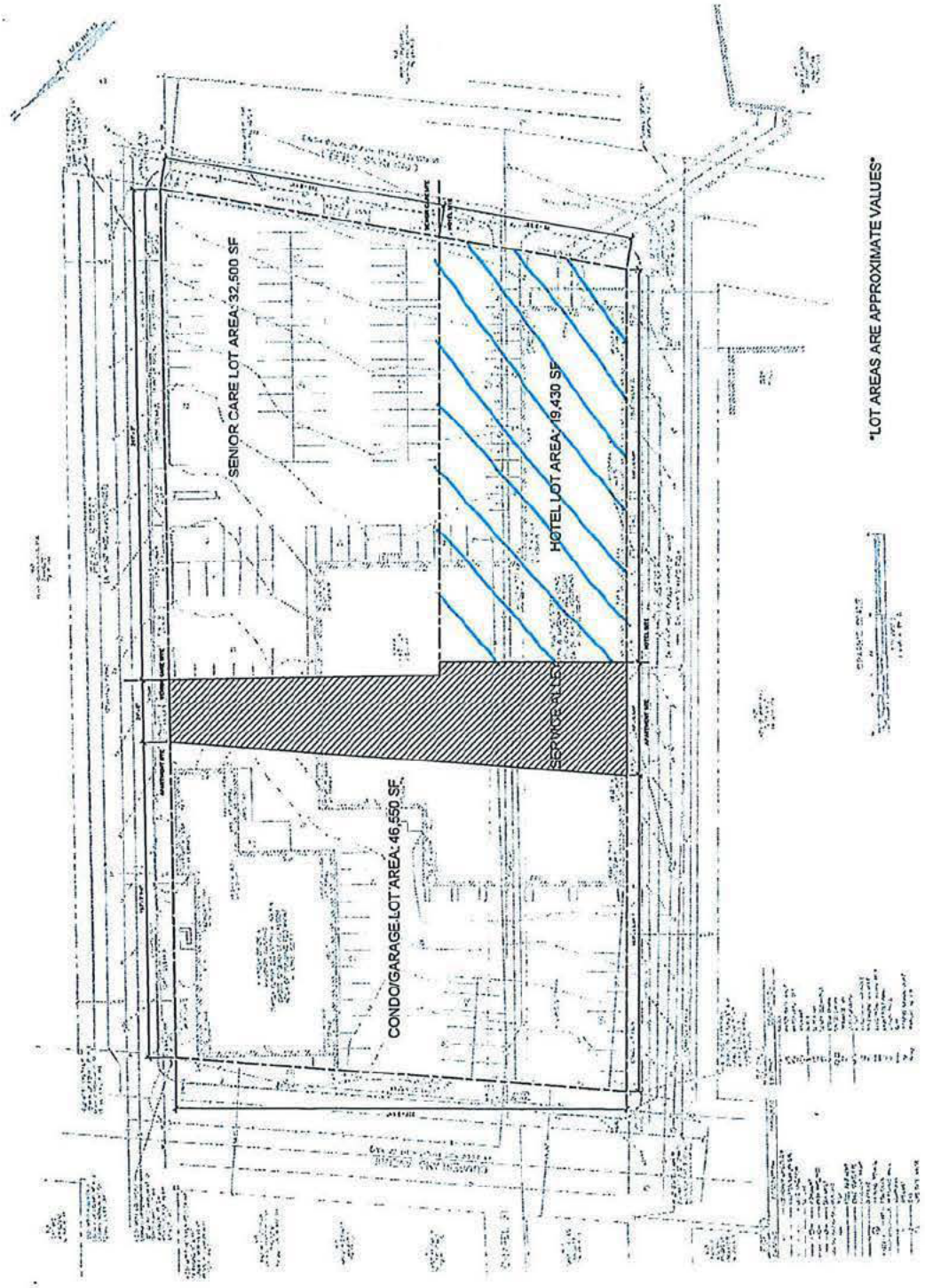


EXHIBIT B

DESCRIPTION OF MASTER DEVELOPMENT AREA

EXHIBIT

tabbies

B

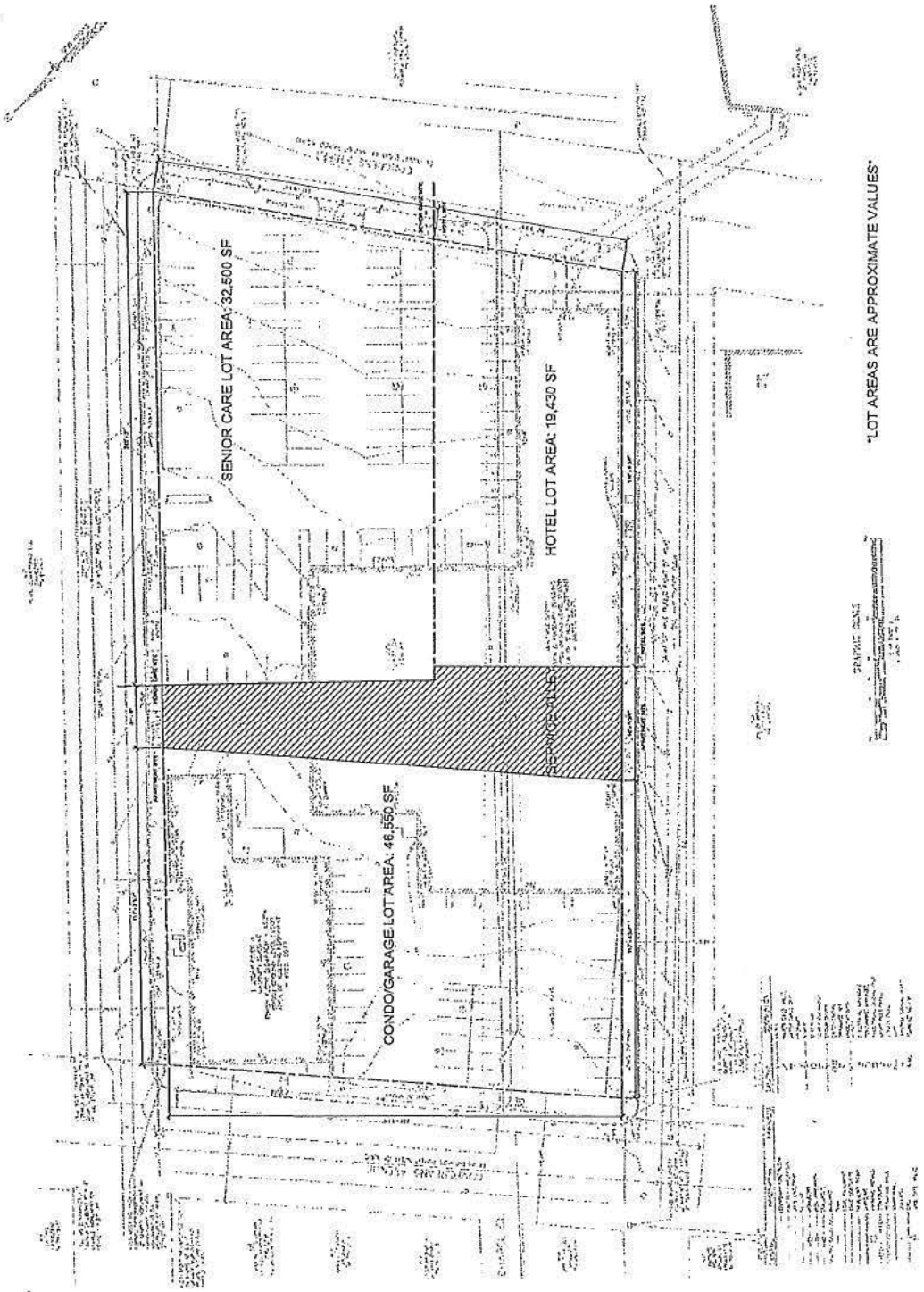


EXHIBIT C

FACILITIES PROGRAM

EXHIBIT D

PIERCE ATWOOD LLP

STANDARD ESCROW TERMS AND CONDITIONS

In consideration of Pierce Atwood LLP serving as the Escrow Agent ("Pierce Atwood" or "Escrow Agent") pursuant to that certain Purchase and Sale Agreement dated as of December 1, 2020 between 385 CONGRESS LLC, a Maine limited liability company (hereinafter referred to as "Seller"), and FATHOM DEVELOPMENT, LLC a Maine limited liability company (hereinafter referred to as "Buyer"), ("Purchase Agreement"), to which these Standard Escrow Terms and Conditions ("Escrow Terms") are attached as an Exhibit, the Seller and Buyer hereby acknowledge and agree as follows:

1. Acceptance by Pierce Atwood LLP of its duties as Escrow Agent under the Purchase Agreement to which this Exhibit is attached, is subject to the following Escrow Terms, which all parties to the Agreement hereby agree shall govern and control the rights, duties and privileges of the Escrow Agent and shall be deemed incorporated by reference into the Agreement as if set forth in full therein (the escrow provisions of the Purchase Agreement and the Escrow Terms shall together be referred to as the "Escrow Agreement").

2. The duties of the Escrow Agent are to be determined solely by the express provisions of the Escrow Agreement, and the Escrow Agent shall have no responsibilities except the performance of such duties as are specifically set forth in the Escrow Agreement. The Escrow Agent shall not be deemed to be the agent of any party hereto with respect to its duties hereunder. The Escrow Agent shall not be liable for any error of judgment, any act taken or omitted by it, or any mistake in fact or law, except for its own willful misconduct and breach of the Escrow Term. The parties acknowledge that the duties of the Escrow Agent hereunder are solely ministerial and contractual in nature and have been requested for their convenience. The Escrow Agent shall not be deemed to be the agent of any party hereto with respect to its duties hereunder. Without limiting the generality of the foregoing, the Escrow Agent shall not incur liability and shall be fully protected in respect of any action taken, omitted or suffered by it in good faith, except for a breach of the Escrow Terms.

3. The Escrow Agent shall be entitled to act on or rely upon any written notice, direction, request, waiver, consent, receipt or other document (including those transmitted by facsimile transmission, email, or other electronic transmission which is capable of producing a written record) which appears to the Escrow Agent to have been signed or presented by the party or parties entitled to execute or deliver such document, and the Escrow Agent shall have no duty to inquire of or investigate the authorization, signature or authenticity of such person or document.

4. The Funds are being deposited into a client trust account of the law firm of Pierce Atwood LLP for disbursement on behalf of the undersigned in accordance with the terms

of the Purchase Agreement of even date, to which these a copy of which is attached hereto and made a part hereof. The funds (the "Funds") shall be held in escrow by Pierce Atwood LLP in a non-interest-bearing account in accordance with the terms and conditions set forth herein. In the event of an inconsistency between the provisions of any other document and the provisions of these Escrow Terms, the provisions of these Escrow Terms shall govern. The Escrow Agent shall place any funds held in escrow in a non-interest-bearing account and shall have no duty to invest or earn interest on any such funds. The parties recognize that the amount of the funds deposited may exceed the amount of Federal Deposit Insurance Corporation or other insurance thereon and agree that the Escrow Agent shall have no responsibility for losses due to bank insolvency, whether or not the bank in which the funds are deposited was selected by it. Any payments by the Escrow Agent may be made, at the Escrow Agent's election, by check or by wire transfer.

5. The Escrow Agent may, but shall not be obligated to, in its sole and absolute discretion at any time and from time to time, for any reason or for no reason, commence an interpleader or other action, suit or proceeding for the resolution of any controversy regarding the Escrow Agreement or the subject matter of its escrow, and deposit the funds or other property held in escrow. Upon so depositing such property and filing its complaint in interpleader the Escrow Agent shall be relieved of all liability under the terms of the Escrow Agreement as to the property so deposited, and furthermore, the parties hereto for themselves, their heirs, legal representatives, successors and assigns do hereby submit themselves to the jurisdiction of said court and do hereby appoint the then Clerk or acting Clerk, of said Court as their agent for the service of all process in connection with such proceedings. The institution of any such interpleader action shall not impair the rights of the Escrow Agent hereunder.

6. The parties to the Escrow Agreement other than the Escrow Agent (collectively referred to as the "Indemnitors") jointly and severally agree to indemnify each of the Escrow Agent and its attorneys, employees and agents (collectively referred to as the "Indemnitees") against, and hold them harmless of and from, any and all loss, liability, cost, damage and expense, including reasonable counsel fees (including those of the Escrow Agent computed at its regular hourly rates), which the Indemnitees may suffer or incur by reason of any action, claim or proceeding brought or threatened to be brought, whether by any party to the Escrow Agreement or by any other person or entity, against any Indemnitee or in which any Indemnitee may become involved arising out of or relating directly or indirectly in any way to the Escrow Agreement or any transaction to which the Escrow Agreement directly or indirectly relates (including any action, claim or proceeding to enforce any indemnity obligation or any other obligation of any party to the Escrow Agreement) , excluding, however, any willful or intentional wrong doing on the part of the Escrow Agent or breach of the Escrow Terms as determined by final judgment. The provisions of this paragraph shall survive any termination of the Escrow Agreement, whether by disbursement of the property held in escrow, the resignation of the Escrow Agent or otherwise.

7. THE ESCROW AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF MAINE APPLICABLE TO

CONTRACTS MADE AND TO BE PERFORMED ENTIRELY WITHIN SUCH STATE, WITHOUT REFERENCE TO CONFLICT OF LAWS PRINCIPLES, AND THE ESCROW AGREEMENT CANNOT BE CHANGED OR TERMINATED EXCEPT BY A WRITING SIGNED BY ALL OF THE PARTIES TO THE ESCROW AGREEMENT. THE PARTIES TO THE ESCROW AGREEMENT HEREBY AGREE THAT NO ACTION, SUIT OR PROCEEDING SHALL BE COMMENCED AGAINST THE ESCROW AGENT UNLESS (A) THE ESCROW AGENT SHALL FIRST HAVE BEEN GIVEN 30 DAYS' WRITTEN NOTICE OF THE CLAIM AND (B) THE SAME IS BROUGHT IN A COURT OF COMPETENT JURISDICTION LOCATED IN THE STATE OF MAINE. THE PARTIES TO THE ESCROW AGREEMENT OTHER THAN THE ESCROW AGENT AGREE THAT IN ANY ACTION, SUIT OR OTHER PROCEEDING COMMENCED BY THE ESCROW AGENT, SERVICE BY MAIL AS PROVIDED HEREIN SHALL BE DEEMED GOOD, PROPER AND EFFECTIVE SERVICE UPON SAID PARTY, AND EACH CONSENTS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE STATE OF MAINE (OR ANY OTHER COURT SELECTED BY THE ESCROW AGENT) IN ANY ACTION, SUIT OR PROCEEDING UNDER OR IN CONNECTION WITH THE ESCROW AGREEMENT, HEREBY WAIVING ANY AND ALL RIGHT TO OBJECT TO THE JURISDICTION OR VENUE OF SAID COURT OR TO OBJECT THAT SUCH COURT IS AN INCONVENIENT FORUM.

8. If a controversy arises between one or more of the parties hereto, or between any of the parties hereto and any person not a party hereto, as to whether or not or to whom the Escrow Agent shall deliver the property held in escrow or any portion thereof, or as to any other matter arising out of or relating to the Escrow Agreement or the property held in escrow, the Escrow Agent shall not be required to make any inquiry or investigation, or make any determination as to such controversy, and need not make any delivery of such property but may retain it until the rights of the parties to the dispute shall have finally been determined by agreement in form, substance and formalities satisfactory to the Escrow Agent or by final order of a court of competent jurisdiction from which final order the time for appeal has expired without an appeal having been taken.

9. All notices, requests and other communications which may or must be given hereunder shall be in writing (including facsimile transmission, email, or other electronic transmission which is capable of producing a written record) and shall be deemed to have been duly given upon the earliest of receipt or attempted delivery or 3 days after deposit when mailed by registered or certified mail, return receipt requested, to each of the parties at their addresses set forth in the Escrow Agreement, or such other address of which notice may be given to all parties from time to time.

10. The Escrow Agreement shall be binding upon and inure to the benefit of Escrow Agent, Seller and Buyer, and their respective heirs, personal representatives, successors and permitted assigns, but not to the benefit of any third party other than the Indemnitees. The Escrow Agreement and any rights thereunder may not be assigned without the written consent of the Escrow Agent, and any

purported assignment without the Escrow Agent's written consent shall be null and void and of no effect whatsoever. The rights granted the Escrow Agent herein are cumulative and the exercise of any one or more rights hereunder shall not constitute a waiver of the Escrow Agent's right to assert all other legal and equitable remedies available to it under the circumstances. If one or more of the provisions or paragraphs of the Escrow Agreement shall be held to be illegal or otherwise void or invalid, the remainder of the Escrow Agreement shall not be affected and shall remain in full force and effect.

11. **Pierce Atwood LLP acting as Escrow Agent and is holding the Funds in its account at the request of the Seller and Buyer, and each of Seller and Buyer acknowledge that Pierce Atwood LLP represents Buyer and its Affiliates for this transaction and does not represent Seller. The Seller and Buyer both hereby confirm their consent to Pierce Atwood LLP's current and continued representation of Buyer in this transaction, any dispute, arbitration or litigation arising in connection herewith, including any dispute about the Funds, and any and all future representation of Buyer and its affiliates. In the event of a dispute between the parties, the commencement of an Interpleader action, or the resignation by Pierce Atwood LLP as Escrow Agent, Pierce Atwood LLP shall be free to continue to act as counsel for and represent Buyer, and each of Seller and Buyer hereby consent to such representation.**

12. That Pierce Atwood LLP is not liable for any portion of the Funds in excess of the limit of FDIC insurance on the account and is not liable for losses due to failure of the bank in which the account is held.

13. That Pierce Atwood LLP will not make any payment with respect to the Funds until it receives confirmation that the Funds are collected in its account.

Exterior Lighting 14-14.6.4 (F)

1. Site lighting. All proposed lighting will conform to the lighting standards of the Technical Manual.

2. Architectural and specialty lighting. Any proposed architectural or specialty lighting will conform to the lighting standards of the Technical Manual.

3. Street lighting. The proposed development site is on Congress Street, an established city street with existing lighting. Any street lighting proposed to replace or enhance the existing lighting will conform to the lighting standards of the Technical Manual.

Please see attached photometric plans for the project site, and fixture schedules. Decorative street lighting is proposed installed along the Congress Street and Myrtle Street frontages of the project site. The proposed street lights are STREET/PEDCOMBO (Figure X-5F in the Technical Manual) in Dark Green – Tiger Drlace RAL 6012

Execution Copy

AGREEMENT OF PURCHASE AND SALE

between

FATHOM DEVELOPMENT, LLC,

as Buyer,

and

385 CONGRESS LLC,

as Seller

December 1, 2021

385 Congress Street
Portland, Maine 04101

AGREEMENT OF PURCHASE AND SALE

BY THIS AGREEMENT OF PURCHASE AND SALE (the "Agreement") entered into this 1st day of December, 2021 ("Effective Date"), 385 CONGRESS LLC, a Maine limited liability company (hereinafter referred to as "Seller"), and FATHOM DEVELOPMENT, LLC a Maine limited liability company (hereinafter referred to as "Buyer"), hereby agree as follows:

ARTICLE I
Terms and Definitions

Section 1.1. In addition to the other terms herein defined, the following terms shall have the meanings set forth in this Article I, unless the context otherwise requires:

Additional Deposit. Defined in Section 3.1.

Approvals. Defined in Section 6.5.

Approvals Period. Defined in Section 6.4.

Buyer's Conditions Precedent. Defined in Section 6.1.

Buyer's Knowledge. Means the knowledge of James Brady based upon his historical knowledge of the Real Property and assuming a commercially reasonable level of inquiry.

Buyer Project Information. Defined in Section 6.5.4.

Buyer's Termination Notice. Defined in Section 6.2.2.

Cash Balance. Defined in Section 5.2.2.

Closing. The consummation of the purchase and sale of the Property pursuant to this Agreement.

Closing Date. Defined in Section 6.6.

Commitments. Defined in Section 14.3.

Condominium Project. Defined in Section 6.5.4.

Consideration. Defined in Section 5.1.

Construction License. Defined in Section 14.2.

Cross Easement Agreement. Defined in Section 14.3.

Deed. Defined in Section 6.1.1.

Deposit. Defined in Section 3.1.

Demolition is defined in Section 6.1.10.

Due Diligence Period. Defined in Section 6.4.12.

ESA. Defined in Section 6.4.4.

Escrow Agent. Defined in Section 3.1.

Execution Date. The date of this Agreement as hereinabove set forth.

Facilities Program. Means and refers to the facilities program set forth on Exhibit C.

Hazardous Materials. Mean any pollutants, contaminants or hazardous substances (as such terms are defined under CERCLA), pesticides (as such term is defined under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136 et seq.), solid wastes and hazardous wastes (as such terms are defined under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq.), chemicals, other hazardous, radioactive or toxic materials, oil, petroleum and petroleum products (and fractions thereof), asbestos and asbestos-containing materials, polychlorinated biphenels ("PCBs") or PCB-containing materials, or any other material (or article containing such material) listed or subject to regulation under any law, statute, rule, regulation, order, Permit, or directive due to its potential, directly or indirectly, to harm the environment or the health of humans or other living beings.

Improvements. All improvements constructed on the Real Property.

Initial Deposit. Defined in Section 3.1.

Mandatory Cure Items. Defined in Section 6.3.

Master Development. Means the Seller's development of the area shown in the Plan attached as Exhibit B as a residential condominium project.

Master Parcel. Defined in Section 6.5.6.

Monetary Liens. Defined in Section 6.3.

MP Application. Defined in Section 6.5.4.

MP Application Deadline. Defined in Section 6.5.4.

MP Application Period. Defined in Section 6.4.12.

MP Approval. Defined in Section 6.5.4 .

OFAC. Defined in Section 7.1.

Parking Agreement. Defined in Section 14.1.

Permitted Encumbrances. Defined in Section 6.3

Preliminary Title Report. The commitment for issuance of an owner's policy of title insurance issued by the Title Company.

Project. A full service hotel [redacted]

Property. The Real Property.

Purchase Price. Defined in Section 5.1.

Real Property. That portion of the real property located at 385 Congress Street, Portland, Maine, 04101, Tax Map 27, Block D, Lot 1, as more particularly depicted on Exhibit A attached hereto and by this reference made a part hereof, together with all rights in the streets lying adjacent to such land and owned by Seller, and all rights, privileges, easements and appurtenances thereto, [redacted], and including all additional rights and easements as necessary to service the Project pursuant to the Cross Easement Agreement. [redacted] The Real Property description shall be finally determined by an ALTA survey commissioned by Buyer and the Real Property shall be conveyed using that survey description, provided that the description is reasonably acceptable to Seller. The Real Property shall be configured as more particularly described herein. The illustration included in Exhibit A is for reference purposes only regarding the approximate boundaries and alleyway location, and the buildings are not necessarily indicative of the massing or design to be agreed upon by the parties as provided herein.

Seller's Conditions Precedent. Defined in Section 6.8.

Seller's Knowledge. Means the knowledge of Gordon Reger and Joseph Dasco based upon their historical knowledge of the Real Property and assuming a commercially reasonable level of inquiry.

Seller Project Information. Defined in Section 6.5.4.

Seller's Retained Land. Defined in Section 6.5.6.

Site Plan Application. Defined in Section 6.5.1

Site Plan Approval. Defined in Section 6.5.4.

Site Studies. Defined in Section 6.4.6.

SP Application Deadline. Defined in Section 6.5.4.

Subd Application. Defined in Section 6.5.4.

Subd Approval. Defined in Section 6.5.6.

Survey. Defined in Section 6.4.5.

Title Commitment. Defined in Section 6.3.

Title Company. A nationally recognized title insurance company to be selected by Buyer.

Title Inspection Period. Defined in Section 6.3.

Title Notice Deadline. Defined in Section 6.3.

[redacted]

[redacted]

Utilities. Defined in Section 6.4.7.

Zoning Confirmation. Defined in Section 6.4.3.

ARTICLE II
Purchase and Sale

Section 2.1. Purchase and Sale. Seller agrees to sell and convey to Buyer, and Buyer agrees to purchase from Seller, the Property, on all of the mutual terms, covenants and conditions hereinafter set forth. Buyer shall have the right to designate an entity organized and controlled by Buyer for purposes of taking title to the Property as provided in Section 15.3 hereof. Seller shall be permitted to reserve certain rights and easements over the Property in accordance with the terms and provisions of Section 14.3

ARTICLE III
Deposit

Section 3.1. Deposit. Upon execution hereof, Buyer shall deposit with Pierce Atwood LLP (the "Escrow Agent") the sum of [redacted] (the "Initial Deposit"). Upon completion of the Approvals Period if Buyer has not otherwise terminated this Agreement in accordance with its terms, Buyer shall deposit with the Escrow Agent the additional sum of [redacted] (the "Additional Deposit"). The Initial Deposit and the Additional Deposit are hereinafter collectively referred to as the "Deposit" and are to be held and applied as hereinafter set forth. The Deposit shall be held in a non-interest-bearing escrow account.

Section 3.2. Non-Refundable. Except as otherwise specifically set forth in this Agreement, the Initial Deposit shall be fully refundable until the completion of the Approvals Period, after which, assuming Buyer has not terminated this Agreement, it shall be non-refundable, except as otherwise specifically set forth in this Agreement. Except as otherwise specifically set forth in this Agreement, the Additional Deposit shall be non-refundable. Except as otherwise specifically set forth in this Agreement, the Deposit shall serve as Seller's liquidated damages (except for any Buyer indemnities) in the event of a breach of this Agreement by Buyer pursuant to Article IV, or shall be applied against the Purchase Price pursuant to Article V.

Section 3.3. Liability of Escrow Agent. In the event of any disagreement between the parties, Escrow Agent shall be entitled to refuse to comply with any claims or demands by either party as long as such disagreement may continue, and in so refusing, shall make no delivery or other disposition of the Deposit. Escrow Agent shall not become liable in any way for such refusal, and Escrow Agent shall be entitled to continue to refrain from acting until (a) the rights of the parties shall have been finally adjudicated in a court of competent jurisdiction, or (b) all differences shall have been settled by agreement and Escrow Agent shall have been notified in writing of such agreement signed by both parties.

ARTICLE IV
Damages

Section 4.1. Buyer's Default. In the event that this transaction does not close as a consequence of a default by Buyer, and Seller has performed or tendered performance of its obligations hereunder, Seller's sole remedy shall be to retain the Deposit as liquidated damages. The parties hereby agree that if Buyer defaults, Seller's actual damages would be difficult or impossible to determine, and thus the amount of the Deposit is the best estimate of the damage Seller would suffer. Accordingly, the Deposit shall be the total amount that Seller is entitled to receive as liquidated damages (except for any Buyer indemnities).

Section 4.2. Seller's Default. In the event Seller fails to perform any obligation of Seller under this Agreement, including without limitation the obligation to convey title to the Property to Buyer on the Closing Date, as hereinafter defined, in accordance with the provisions of this Agreement, and Buyer has performed or tendered performance of its obligations hereunder, and such failure shall remain uncured for a period of thirty (30) days following written notice thereof from Buyer to Seller, then Buyer may (a) terminate this Agreement, in which event the Deposit shall be returned to Buyer, or (b) Buyer shall be entitled to pursue specific performance of Seller's obligations hereunder.

ARTICLE V
Purchase Price

Section 5.1. Amount of Consideration. Buyer shall pay Seller consideration (the "Consideration") for the Property in the amount of [redacted] (the "Purchase Price"), subject to adjustment for credit, debits and other adjustments as expressly provided in this Agreement..

Section 5.2. Manner of Payment. Buyer shall pay and provide the Consideration to Seller at the Closing as follows:

5.2.1. Deposit. Applying the Deposit against the Consideration; and

5.2.2. Remaining Consideration. Paying the balance of the Consideration, by wire transfer to an account to be designated by Seller (the "Cash Balance").

ARTICLE VI
Conditions Precedent to Closing

Section 6.1. Buyer's Conditions Precedent. Buyer's obligation to purchase the Property from Seller is subject to the following conditions precedent (the "Buyer's Conditions Precedent"):

6.1.1. Title. At the Closing, Seller shall sell, convey, transfer and deliver the Property to the Buyer by statutory Quitclaim Deed with Covenant Buyer (the "Deed"), and the Deed shall convey to the Buyer fee title free of Monetary Liens and Mandatory Cure Items, but subject to Permitted Encumbrances.

6.1.2. Seller's Representations and Warranties. Seller's representations and warranties set forth herein shall be true and correct in all material respects at and as of the Closing as though such representations and warranties were made at and as of such date.

6.1.3. Seller's Compliance. The Seller shall have in all material respects performed and complied with all covenants, agreements and conditions required by this Agreement to be performed or complied with by it prior to or at the Closing.

6.1.4. Approvals. The Approvals shall continue in full force and effect without imposition of any amendments, alterations or conditions not requested or pursued by Buyer or its agents or contractors, since receipt of the same by Buyer.

6.1.5. Lease Termination. Delivery by Seller of evidence reasonably satisfactory to Buyer that all leases, licenses or other use agreements of all or any portion of the Property, [redacted] have been terminated at or prior to Closing, at Seller's expense, and tenants have no further right to occupancy or use of the Property thereunder.

6.1.6. Consents and Approvals. The Seller shall have obtained all consents, approvals, authorizations, exemptions and waivers from governmental authorities and third parties, if any, as shall be necessary to convey the Property to Buyer.

6.1.7. Commitments. Buyer and Seller shall have executed and delivered the Commitments, as such documents have been negotiated and agreed upon by the parties prior to expiration of the Due Diligence Period, with only such revisions to the agreed upon forms as may be required under Article XIV, as applicable.

6.1.8. No Material Adverse Changes. There shall have been no material adverse change since the date of this Agreement in the Property, except changes contemplated or required by this Agreement, including without limitation, any change in the title, physical condition (except

for the Demolition), legal status, use or possession of the Property [redacted] from the conclusion of the Approvals Period through the date of closing that would cause the Property to be unsuitable for development of the Project; the foregoing is not intended to include any changes in the national, state or local economy or capital markets or any similar change that does not involve the physical, legal or land-use status of the Property.

6.1.9. No Legal Restraints or Litigation. No statute, rule, regulation or order of any court or administrative agency shall be in effect which restrains or prohibits the Seller from consummating the transactions contemplated hereby. In addition, no action, suit, or proceeding shall be pending before any court or quasi-judicial or administrative agency of any federal, state, local, or foreign jurisdiction wherein an unfavorable injunction, judgment, order, decree, ruling, or charge would (a) prevent consummation of any of the transactions contemplated by this Agreement, or (b) result in a material adverse change in the Property or the ability to develop the Project at the Property, except for an appeal of the Approvals, which is addressed in Section 6.5.1 below.

6.1.10. Demolition. Seller shall have completed the demolition (as more particularly described in Section 14.4) prior to Closing ("Demolition").

Section 6.2. Failure of Buyer's Conditions Precedent. If, at the time of the Closing, any of the foregoing Buyer's Conditions Precedent have not been fulfilled, Buyer may, at its option, do the following:

6.2.1. Waive and Close. Waive such condition and close in accordance with this Agreement; or

6.2.2. Terminate. Terminate this Agreement by delivery of a written notice to Seller and to Escrow Agent ("Buyer's Termination Notice") and enforce any remedy afforded by Section 4.2 in the event Seller has defaulted under any of its obligations under this Agreement (provided that the mere failure of the following conditions to closing shall not constitute a Seller default: Sections 6.1.6, 6.1.8, or 6.1.9); provided, however, that, if Buyer fails to deliver Buyer's Termination Notice to Seller at or prior to the Closing, the applicable condition or conditions shall be deemed waived by Buyer.

Section 6.3. Title Examination. From the date hereof through the date of expiration of the Due Diligence Period, as hereinafter defined (the "Title Inspection Period"), Buyer shall have the opportunity to review the commitment to insure title (the "Title Commitment"), any amendments thereto issued during the Title Inspection Period, the exceptions to title disclosed in the Title Commitment, all Survey Matters and all other aspects of Seller's title to the Property. The Title Commitment shall be for the benefit of the Buyer, at customary rates, in the ALTA form currently in use, subject only to the Permitted Encumbrances (as defined below) and with such standard exceptions deleted and standard endorsements included as Buyer may, in its sole discretion, require. On or before the date of the expiration of the Title Inspection Period (the "Title Notice Deadline"), Buyer shall notify Seller in writing of any defect in title to the Property, or any other matter which is indicated on the Title Commitment or any Survey Matter to which Buyer objects except for the following: (a) liens for real estate taxes not yet due and payable or for

betterments assessed after the Effective Date, (b) other encumbrances which may be removed or satisfied by the payment of a liquidated sum of money which Seller agrees to discharge at Closing to Buyer's satisfaction and (c) such easements, restrictions and reservations of record as are acceptable to Buyer, in its discretion. If Buyer does so notify Seller of a defect in title or other matter objectionable to Buyer prior to the Title Notice Deadline, Seller shall have ten (10) business days in which to determine whether to cure the defect or other matter so objected to by Buyer and to notify Buyer of Seller's decision in this regard. If Seller does not respond within such time frame, Seller shall be deemed to have elected not to cure the defect or other matter. Seller, at its sole cost and expense, will have until the Closing to cure the title objections which Seller has elected to cure, other than the Monetary Liens (as herein defined), which (to the extent not previously removed) Seller shall remove or cure by payment of funds at Closing. Those defects that Seller gives notice will be cured on or before the Closing Date, along with discharge of Monetary Liens, are referred to herein as "Mandatory Cure Items." If Seller elects (or is deemed to elect) not to cure the defect or other matter so objected to by Buyer, Buyer shall have the right, by not later than the tenth (10th) day after the date of Seller's notice (or failure to provide notice) to either (a) waive such defect or other matter and take title to the Property without any adjustment in the Purchase Price, or (b) terminate this Agreement by giving written notice thereof to Seller. If Buyer timely gives such notice of termination, this Agreement shall terminate and the Deposit shall be returned to Buyer. If Buyer fails to give Seller a notice of termination, Buyer (a) shall no longer have an right to terminate this Agreement under this Section 6.1.1 and shall be bound to proceed to Closing and consummate the transaction contemplated hereby pursuant to the terms of this Agreement and (b) shall be deemed to have approved the state of title to the Property as it exists on the effective date of the Title Commitment, as last amended during the Title Inspection Period. Seller shall be responsible for discharging any mortgages, voluntary monetary liens or tax liens (other than municipal liens not yet due and payable), including mechanics' liens for unpaid work at the Property performed on behalf of Seller but not mechanics' lien arising from due diligence and permitting and approvals work performed for Buyer (collectively, "Monetary Liens") at or prior to Closing. "Permitted Encumbrances" shall mean all matters of record as of the Effective Date affecting the Property, including without limitation easements, covenants, restrictions and agreements, as of the Effective Date, except for (i) items to which Buyer has objected and which Seller has agreed to cure, all as provided above in this Section, and (ii) Monetary Liens. Permitted Encumbrances also shall include the Parking Agreement, the Construction License, the Cross Easement Agreement and all governmental approvals and the conditions thereof contemplated or required by this Agreement.

Section 6.4. Buyer's Due Diligence. Notwithstanding any other provision of this Agreement to the contrary, Buyer shall be entitled to undertake a thorough investigation of the Property, including without limitation such reviews, analyses and studies of the Property and the development of the Project at the Property, as Buyer may, in its sole discretion, determine to be necessary or appropriate, including without limiting the generality of the foregoing:

6.4.1. Inspection of physical condition, [redacted]

6.4.3. Evaluation by Buyer of all necessary zoning, including zoning board approvals of required variances and any other matters, required in order to develop the Project ("Zoning Confirmation").

6.4.4. A Phase I Environmental Site Assessment for the Property, together with (i) any Phase II Environmental Site Assessments or other studies or analyses as may be required based upon the Phase I Environmental Site Assessment, and (ii) a Hazardous Materials Inventory of the building on the Property (together referred to as "ESA"). Seller agrees to allow Buyer, as [redacted] to take and analyze soil borings and perform groundwater testing both from the Master Parcel at locations determined by Buyer's engineering advisors, and underneath the buildings and structures located on the Real Property, including drilling through the foundations of any buildings or structures for purposes of access for soil and groundwater testing; provided, that in the event tenant consent is needed for any of the work contemplated by this Section 6.4.4, Seller shall use commercially reasonable efforts to assist Buyer in obtaining such required consent. Any damage associated with the Buyer's testing shall be restored at Buyer's expense.

6.4.5. An ALTA/ACSM Land Title Survey of the Property certified satisfactory to Buyer, in its sole opinion, sufficient in all respects to delete the standard survey exception from Buyer's title policy, and bearing a legal description, made by a licensed surveyor, and showing, among other things, the area, dimensions and location of the Property to the nearest monuments, streets, alleys on all sides, the topography, the location of all available utilities in adjoining streets, alleys, or property, the location of all recorded and apparent easements against or appurtenant to the Property, the location of all active and abandoned sewer and storm water lines on an as built basis, certifying the applicable zoning and flood zone classifications and not disclosing any condition rendering the Property unusable, in Buyer's sole opinion, for the Project (the "Survey").

6.4.6. A geotechnical report in form satisfactory to Buyer, boring, percolation and other soil tests and feasibility, demographic, traffic pattern, and other site assessment studies ("Site Studies") as required by Buyer. In connection therewith, Buyer shall have access to the Property as required [redacted] and may conduct such tests, studies, surveys and inspections (expressly including boring, drilling and other subsurface exploration as Buyer may reasonably deem appropriate). Buyer promptly shall restore to its former condition any portion of the Property disturbed by any activity conducted under this Agreement, which shall include repaving or otherwise filling any bore holes, shall repair all damage to the Property caused thereby and shall indemnify and hold Seller harmless from and against any claims, losses, liabilities, costs, fines, penalties or expenses (including without limitation reasonable attorneys' and paralegals' fees) asserted against or incurred by Seller in connection with any such activity, it being expressly understood and agreed that the foregoing provisions shall survive the Closing or the termination of this Agreement prior thereto. Buyer agrees not to assert as a defense to the enforcement of the foregoing indemnity any workers' compensation immunity. Damages under the foregoing indemnity are not limited by any liquidated damages provision in this Agreement. In addition, Buyer shall be afforded full opportunity by Seller, without warranty or recourse, to examine the following, to the extent in the possession of Seller and/or Seller's agents or employees, including the reasonable right to make copies of such books and records: environmental and engineering reports, surveys, title reports and title insurance policies, soil studies, and any reports or analyses

regarding the Demolition and the condition of the Property following the Demolition, but excluding Seller's internal memoranda, financial projections, budgets, appraisals, accounting and tax records, attorney work product, work protected by attorney-client privilege and similar proprietary or confidential information. Buyer shall take commercially-reasonable precautions to ensure that such materials and any information contained therein are disclosed only to such of Buyer's employees, agents, consultants, attorneys, investors and lenders as have need therefor, under conditions which will prohibit any further dissemination thereof not authorized by Seller.

6.4.7. Confirmation that all utilities, including without limitation, water, gas, electric power, telephone, cable, storm water systems and sanitary sewer, necessary or appropriate for development of the Project ("Utilities"), as determined by Buyer in its sole discretion, shall be located in the public way or ways adjacent to the Property ("Utility Confirmation") which confirmation may be in such form as Buyer may require.

6.4.8. Confirmation that the Project can be integrated into the Seller's Master Development in a manner acceptable to Buyer, as determined by Buyer, in Buyer's sole discretion, including without limiting the generality of the foregoing all necessary service drives, commercial truck delivery facilities, parking improvements and valet program, footings and foundations, storm water management and Utilities. The foregoing confirmation shall include confirmation that the location of buildings and other structures on the Master Parcel satisfy the requirement that the clearance between the Project and adjacent building to be located at the corner of Pearl Street and Congress Street shall be no less than fifty-five (55) feet at hotel guest room and residence levels.

6.4.9. Such other traffic, lighting and other engineering or investigatory studies as may be necessary or appropriate, or required by planning authorities, for determining the adequacy of the Property for development of the Project.

6.4.10. Confirmation that the Property is sufficient in all respects to accommodate the full service hotel Facilities Program, including associated front of house, back of house, rooftop bar, underground garage, valet on Congress Street and residences and all associated improvements.

6.4.11. Confirmation of likely availability of all Approvals for the Project. Buyer shall have the right to contact and communicate with such governmental officials regarding the Property and the project as Buyer may deem appropriate, provided that, prior to Closing, Buyer shall make no application with the City of Portland for a permanent change in zoning or other permanent change to the land-use status of the Property.

6.4.12. Inspection by Buyer of the physical condition, title to, and other matters related to the tunnel under Congress Street.

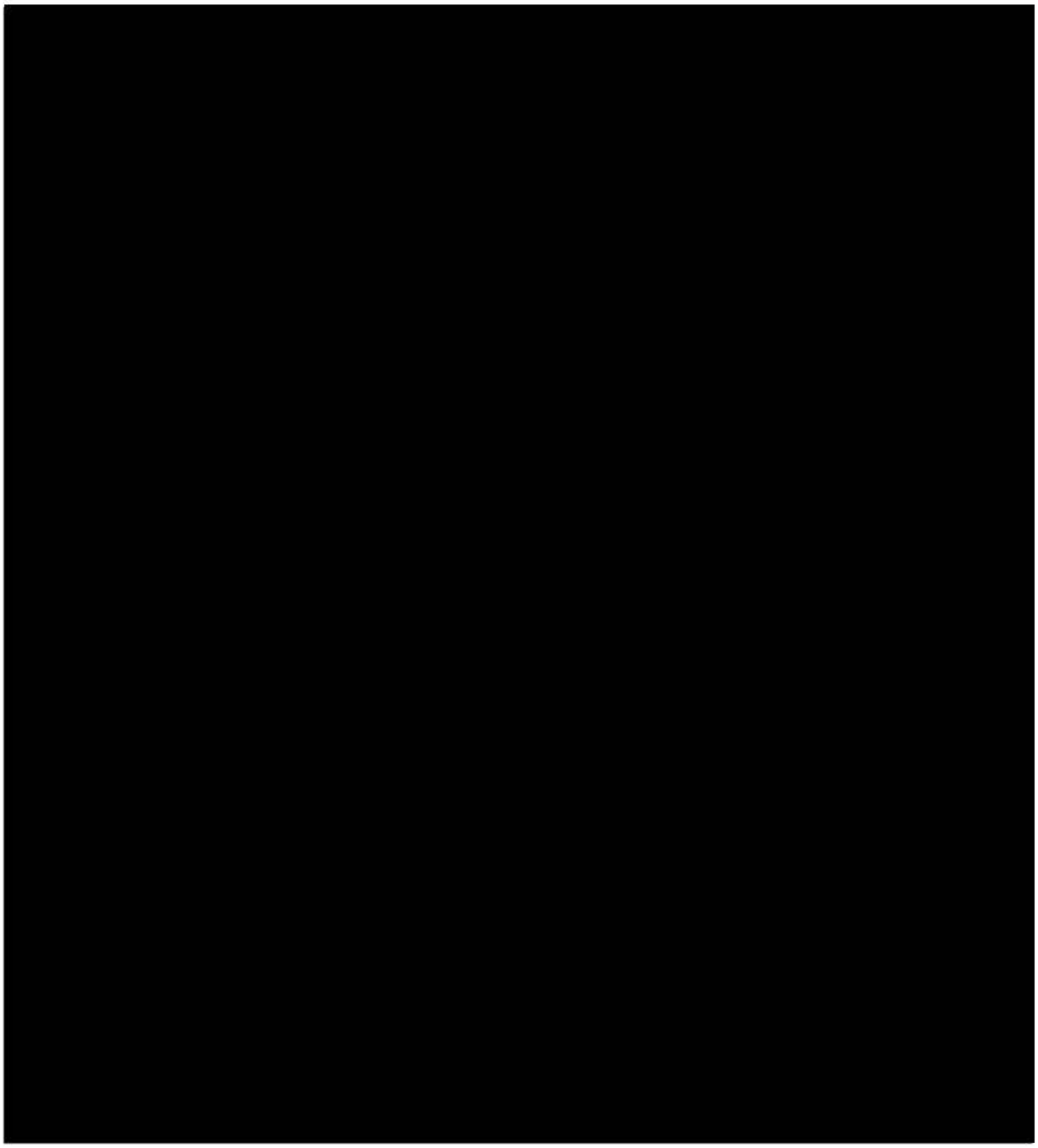
[redacted]

[redacted]

Section 6.5. Approvals. Notwithstanding any other provisions of this Agreement to the contrary, Buyer shall be entitled to apply for and obtain all necessary federal, state and local governmental land-use permits, licenses and approvals of any type or nature required, including historic preservation review, as may be necessary for the development on the Property of the Project, including without limiting the generality of the foregoing, all necessary site plan, and other governmental land-use permits, licenses, and approvals, of any type and from any necessary public or governmental authority or other party, for Buyer's development of the Project at the Property (excluding building permits and other construction related permits and approvals and hotel and restaurant operating permits and licenses).

[redacted]

6.5.3. Buyer shall have the right to apply for and pursue the Site Plan Approval on a stand-alone basis, separate from the MP Application and MP Approval, so long as such Site Plan Application and Site Plan Approval do not interfere with Seller's Master Development and have been approved in writing in advance of submission to the City of Portland by Seller, as provided in Section 6.5.4 below.



[redacted]

6.5.5. Intentionally deleted.

[redacted]

[redacted]

[redacted]

Section 6.7. Effective Termination. If this Agreement is terminated pursuant to the provisions of this Article, all other obligations of the parties hereto shall cease and this Agreement shall be void and without recourse to the parties hereto, except as otherwise expressly set forth in Article IV and Section 6.2 hereof and except for obligations that expressly survive termination.

Section 6.8. Seller's Conditions Precedent. Seller's obligation to sell the Property to Buyer is subject to the following conditions precedent (the "Seller's Conditions Precedent"):

(a) Payment by Buyer of all sums due in accordance with this Agreement;

(b) As of the Closing Date, no statute, rule, regulation or order of any court or administrative agency shall be in effect which restrains or prohibits the Seller from consummating the transactions contemplated hereby, and to that end, Seller has obtained approval from the City of Portland to subdivide the Master Parcel. In addition, no action, suit, or proceeding shall be pending before any court or quasi-judicial or administrative agency of any federal, state, local, or foreign jurisdiction wherein an unfavorable injunction, judgment, order, decree, ruling, or charge would (a) prevent consummation of any of the transactions contemplated by this Agreement, or (b) result in a material adverse change in the Master Parcel or the ability to develop the Master Parcel;

(c) All of the representations and warranties of Buyer shall be true and correct in all material respects as of the Closing, and Buyer shall deliver a separate certificate certifying to that effect;

(d) Buyer shall have performed in all material respects each of its obligations under this Agreement to be performed at or prior to the Closing; and

(e) Seller shall have received Master Development plan and Subd Approval from the City of Portland.

ARTICLE VII
Representations and Warranties

Section 7.1. Buyer's Representations and Warranties. Buyer hereby represents, warrants and covenants to Seller the following as of the date hereof and as of the Closing. The representations and warranties shall survive Closing for a period of only one (1) year from the Closing:

(a) Buyer is duly organized, validly existing and in good standing under the laws of the State of Maine. Buyer has the requisite right, power and authority to buy the Property from Seller as provided herein, and has taken all action necessary to authorize the execution, delivery and performance of this Agreement. Buyer has obtained all consents and approvals necessary for Buyer's execution, delivery and performance of this Agreement, and the performance by Buyer of

Buyer's obligations hereunder will not constitute a default under the terms and provisions of any material agreement, document or instrument to which Buyer is a party or by which Buyer is bound.

(b) This Agreement constitutes the valid and binding obligation of Buyer, enforceable against Buyer in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally.

(c) There is no suit or proceeding pending or, to Buyer's knowledge, threatened against or affecting Buyer that might affect or relate to this Agreement or the transactions contemplated hereby, in any court or before or by any federal, state, county or municipal department, commission, board, bureau, or agency or other governmental instrumentality. No order, writ, injunction, subpoena or decree has been issued by or requested of any court or government agency which is reasonably likely to result in a material adverse change in the Property or the Buyer, or which could reasonably be expected to have a material adverse effect on the transactions contemplated by this Agreement.

(d) Buyer has engaged no broker or agent in connection with the sale. Buyer shall indemnify, defend and hold Seller harmless from and against any loss, damages, liabilities, costs or expenses, including without limitation attorneys' fees and court costs, resulting from any claim for a fee or commission by any broker or finder with whom Buyer has dealt, other than Malone Commercial.

(e) Neither Buyer nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities.

Section 7.2. Authority. Each party warrants and represents that this Agreement and all other documents delivered prior to or at the Closing (a) have been or shall be duly authorized and executed and delivered by such party; (b) are legal, valid, and binding obligations of such party; and (c) neither violate any provision of any agreement to which such party is a party, nor violate any charters, bylaws, operating agreements or other organizational documents of such party.

Section 7.3. Seller's Representations and Warranties. Seller hereby represents, warrants and covenants to Buyer the following. The Seller's representations and warranties shall survive Closing for a period of only one (1) year from the Closing:

(a) Seller is duly organized, validly existing and in good standing under the laws of the State of Maine. Seller has the requisite right, power and authority to sell and convey the Property to Buyer as provided herein, and has taken all action necessary to authorize the execution,

delivery and performance of this Agreement. Seller has obtained all consents and approvals necessary for Seller's execution, delivery and performance of this Agreement, and the performance by Seller of Seller's obligations hereunder will not constitute a default under the terms and provisions of any material agreement, document or instrument to which Seller is a party or by which Seller is bound.

(b) This Agreement constitutes the valid and binding obligation of Seller, enforceable against Seller in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally.

(c) Seller has not received any written notice of any pending condemnation, expropriation, eminent domain or similar proceeding affecting all or any portion of the Property and to Seller's Knowledge, no such proceeding is contemplated.

(e) No written notice has been given to Seller by the holder of any mortgage on the Property, any insurance company that has issued a policy with respect to the Property, or by any board of fire underwriters (or other body exercising similar functions) claiming any material defect or deficiency or requesting the performance of any material repairs, alterations or other work to the Property.

(f) There are no management, service, equipment, supply, maintenance or concession agreements to which Seller is a party with respect to or affecting all or any portion of the Property that are not terminable by Seller by the Closing.

(g) Seller has paid or will pay in full prior to the Closing all outstanding bills and invoices for Utility charges, labor, goods, materials, and services of any kind relating to the Property incurred by or for the benefit of Seller.

(h) No work has been performed or is in progress at, and no materials have been furnished to, at the direction of or for the benefit of the Seller, the Property which, though not presently the subject of, might give rise to mechanic's, materialmen's or other liens against the Property or any portion thereof. If any lien for work performed or materials furnished prior to the Closing, in either case pursuant to a contract with Seller, is filed before or after the Closing, Seller shall promptly discharge such lien by filing the requisite bond or in any other manner allowed by applicable law.

(i) There is no suit or proceeding pending or to Seller's Knowledge, threatened against or affecting Seller or the Property that might affect or relate to this Agreement or the transactions contemplated hereby, in any court or before or by any federal, state, county or municipal department, commission, board, bureau, or agency or other governmental instrumentality. No order, writ, injunction, subpoena or decree has been issued by or requested of

any court or government agency which is reasonably likely to result in a material adverse change in the Property or the Seller, or which could reasonably be expected to have a material adverse effect on the transactions contemplated by this Agreement.

(j) Seller has received no written notice of any outstanding violation of any federal, state, county, or municipal laws, ordinances, orders, codes, rules, regulations, or requirements affecting all or any portion of the Property, including without limitation violations of the housing, building, safety, health, fire, or zoning ordinances, codes, and regulations of the municipality or county within which the Property is located, issued by any governmental or quasi-governmental authority.

(k) Seller is not in violation or default under any agreement with any third party, or under any judgment, order, decree, rule or regulation of any court, arbitrator, administrative agency or other governmental authority to which it may be subject, which violation or default will, in any one case or in the aggregate, materially and adversely affect the ownership or operation of the Property or Seller's ability to consummate the transactions contemplated hereby. To Seller's Knowledge, there are no material violations of laws, regulations, permits or approvals affecting or pertaining to the Property. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby will not (i) violate any law or any order of any court or governmental authority with proper jurisdiction and pertaining to Seller; (ii) result in a breach or default under any provision of the organizational documents of Seller; or (iii) require any consent, or approval or vote of any third person that, as of the Closing Date, has not been given or taken, and does not remain effective.

(l) There are no tax liens on any of the Property except for taxes not yet due and payable, and Seller has paid or will pay through the Closing all real estate taxes, withholdings and governmental charges due and payable with respect to the Personal Property under all applicable federal, state and local laws and regulations. To Seller's Knowledge, there are no legal, administrative or other tax proceedings currently in progress or threatened pursuant to which Seller is or could be made liable for any taxes.

[redacted]

(n) Seller is not a "foreign person" as defined in Section 1445(f)(3) of the Code.

(o) Neither Seller nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting

Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities.

Section 7.4. Waiver of Disclosure. Buyer hereby agrees that, notwithstanding the provisions of 33 M.R.S. § 193, the investigation of any and all matters relating to (i) the identification of any abandoned or discontinued town ways, public easements, or private roads located on or abutting the Property and (ii) the identification of the party or parties responsible for the maintenance of any abandoned or discontinued town way, public easement, or private road located on or abutting the Property (including any responsible road association) shall be the sole responsibility of Buyer and has been performed as part of Buyer's examination of all other matters of title respecting the Property. Buyer hereby knowingly, unconditionally, and expressly waives their right to receive a property disclosure statement from Seller pursuant to 33 M.R.S. § 193. Buyer's waiver of their right to receive a property disclosure statement from Seller pursuant to 33 M.R.S. § 193 shall not constitute a waiver of any other rights to disclosure afforded to Buyer pursuant to this Agreement or by law unless otherwise expressly provided herein. By execution of this Agreement, Buyer hereby releases Seller from and against and all claims, losses, costs, liabilities, expenses, demands, or obligations whatsoever arising from or related to (i) the identification of any abandoned or discontinued town ways, public easements, or private roads located on or abutting the Property and (ii) the identification of the party of parties responsible for the maintenance of any abandoned or discontinued town way, public easement, or private road located on or abutting the Property (including any responsible road association).

ARTICLE VIII
Disclaimer of Warranties

EXCEPT AS EXPRESSLY SET FORTH IN SECTION 7.3 AND THE DEED, IT IS UNDERSTOOD AND AGREED THAT SELLER IS NOT MAKING AND HAS NOT AT ANY TIME MADE ANY WARRANTIES OR REPRESENTATIONS OF ANY KIND OR CHARACTER, EXPRESS OR IMPLIED, WITH RESPECT TO THE PROPERTY. BUYER AGREES, ACKNOWLEDGES AND REPRESENTS THAT EXCEPT AS SPECIFICALLY SET FORTH IN THIS AGREEMENT, BUYER IS ENTERING INTO THIS AGREEMENT AND SHALL PERFORM ALL OF ITS OBLIGATIONS HEREUNDER AND CONSUMMATE THE TRANSACTION CONTEMPLATED BY THIS AGREEMENT SOLELY IN RELIANCE ON AND AS A RESULT OF BUYER'S OWN INVESTIGATIONS AND EFFORTS (INCLUDING BUYER'S INSPECTION OF THE PROPERTY AND SUCH OTHER INVESTIGATIONS, EXAMINATIONS AND INSPECTIONS AS BUYER HAS CHOSEN TO MAKE OR HAS MADE) AND AT BUYER'S SOLE RISK, COST AND EXPENSE, INCLUDING, WITHOUT LIMITATION, THE RISK THAT BUYER'S INSPECTION OF THE PROPERTY AND SUCH OTHER INVESTIGATIONS, EXAMINATIONS AND INSPECTIONS MAY NOT REVEAL ANY OR ALL ADVERSE OR EXISTING CONDITIONS, ASPECTS OR ATTRIBUTES OF THE PROPERTY. BUYER ACKNOWLEDGES THAT SELLER HAS AFFORDED, AND, DURING THE DUE DILIGENCE PERIOD, SHALL AFFORD, BUYER THE OPPORTUNITY FOR FULL AND COMPLETE INVESTIGATION, EXAMINATION AND INSPECTION OF THE PROPERTY. BUYER ACKNOWLEDGES THAT THIS PARAGRAPH WAS A NEGOTIATED PART OF THIS AGREEMENT AND SERVES AS AN ESSENTIAL COMPONENT OF CONSIDERATION FOR THE SAME. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE PARTIES SPECIFICALLY ACKNOWLEDGE THAT BUYER HAS HAD, AND, DURING THE DUE DILIGENCE PERIOD SHALL HAVE, AN OPPORTUNITY TO FULLY INSPECT THE PROPERTY,

INCLUDING, BUT NOT LIMITED TO, THE PHYSICAL CONDITION OF THE PROPERTY (INCLUDING ALL ENVIRONMENTAL CONCERNS), AND THE PURCHASE PRICE HAS BEEN NEGOTIATED TO ELIMINATE ALL CLAIMS EXCEPT THOSE ARISING UNDER REPRESENTATIONS, WARRANTIES OR AGREEMENTS CONTAINED IN THIS AGREEMENT OR OTHER AGREEMENTS OR DOCUMENTS ENTERED INTO IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED HEREIN, WHETHER KNOWN OR UNKNOWN, RELATING TO THE CONDITION OF THE PROPERTY AS OF THE DATE OF THIS AGREEMENT AND ALL ASPECTS AND ATTRIBUTES THEREOF, INCLUDING, WITHOUT LIMITATION, ALL ENVIRONMENTAL MATTERS. BUYER ACKNOWLEDGES AND AGREES THAT SELLER HAS MADE NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PROPERTY EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT.

ARTICLE IX
Risk of Loss

Section 9.1. Risk of Loss. The risk of damage to the improvements on the Property or any portion thereof prior to Closing is Buyer's risk.

Section 9.2. Condemnation. Any taking or condemnation for any public or quasi-public purpose or use by any competent authority in appropriate proceedings or by any right of eminent domain of all or any material part of the Property between the Effective Date and the time of the Closing shall, at Buyer's option, cause a termination of this Agreement. The election to terminate provided for hereby must be exercised by Buyer by written notice to Seller to such effect, which notice shall be given by Buyer on or before the thirtieth (30th) day after Buyer's receipt of written notice of such condemnation (but in any event prior to the Closing; provided, however, that Buyer shall be entitled to extend the Closing Date to a date that is two business days beyond the date that would be the thirtieth (30th) day following such notice). If Buyer shall not elect so to terminate this Agreement, Seller shall be relieved of its duty to convey title to the portion of the Property so taken or condemned, but Buyer will be entitled to receive all proceeds of any such taking or condemnation with respect to the Property only provided Buyer takes title hereunder and Seller shall make no settlement or adjustment of such proceedings with respect to the Property only without Buyer's consent, and shall take at the Closing all action necessary to assign its entire interest in any such award with respect to the Property only to Buyer.

Section 9.3. Return of Deposit. The Deposit shall be returned to Buyer immediately following termination of this Agreement by Buyer under this Article and all other obligations of the parties hereto shall cease and this Agreement shall be void and without recourse to the parties hereto subject to the provisions of Section 6.3 and except for provisions that expressly survive termination.

ARTICLE X
Operation of Property

[redacted]

[redacted]

ARTICLE XI
Closing

Section 11.1. Closing Date. The Closing shall take place at the time and place specified in Section 6.6 hereof. The Cash Balance shall be held in escrow by the Buyer's attorney pursuant to customary conveyancing practice until the Deed is recorded; provided, however, that the Deed shall be recorded no later than 3:00 P.M. on the Closing Date unless Seller's attorney has been advised of any matter of record arising after a title update performed by Buyer's counsel the morning of the Closing and preventing Seller from conveying title to the Property in accordance with the applicable provisions of this Agreement.

Section 11.2. Closing Deposits. At the Closing, Seller and Buyer shall exchange the following documents and funds:

11.2.1. Seller's Deposits. Seller shall deliver to Buyer the following:

(a) Deed. The Deed conveying the Property to Buyer subject only to Permitted Encumbrances.

(b) Non-Foreign Affidavit. A duly executed original affidavit as to Seller's non-foreign status.

(c) Authority. Such evidence as may be reasonably required by the title insurance company as to the authority of the person or persons executing documents on behalf of Seller.

(d) Affidavits. Executed affidavits and indemnifications in form and substance reasonably satisfactory to the title insurance company regarding mechanics' and materialmen's liens and parties in possession sufficient to eliminate any title insurance exceptions for these matters with respect to the Property.

(e) Executed Commitments. Executed Commitments in the form agreed to on or before the expiration of the Due Diligence Period, with only such changes as the parties may mutually agree.

(f) Additional Documents. Such other documents, including without limitation settlement statements and escrow instructions, as are required of Seller to close in accordance with this Agreement and local conveyancing practice.

11.2.2. Buyer's Deposits. Buyer shall deliver to Seller the following:

(a) Cash Balance. The Cash Balance;

(b) Closing Costs. Additional cash in the amount necessary to pay Buyer's share of closing costs, as set forth in Section 12.2.;

(c) Executed Commitments (with execution of the Cross Easement Agreement required if necessary to bind Buyer and the Property to the Cross Easement Agreement); and

(d) Additional Documents. Such other documents, including without limitation authority documents, settlement statements and escrow instructions, as are required of Buyer to close in accordance with this Agreement and local conveyancing practice.

Section 11.3. Use of Purchase Price to Clear Title. To enable Seller to make conveyance as herein provided, Seller may, at the Closing, use the Purchase Price or any portion thereof to clear title of any or all encumbrances or interests so long as Seller has obtained and furnished to Buyer at or prior to the Closing a recordable release of each such encumbrance or interest or (in the case of an institutional mortgage or other security interest) written commitment from the holder thereof to provide such release upon receipt of a sum certain.

Section 11.4. Closing Statement. The parties shall execute and deliver a Closing and Proration Statement confirming the funds flow and prorations required under Article XII hereof.

ARTICLE XII
Closing Costs, Prorations

Section 12.1. Seller's Costs. Seller shall pay (a) one-half of the transfer taxes payable upon recordation of the Deed; and (b) the costs necessary to discharge Seller's obligations under this Agreement.

Section 12.2. Buyer's Costs. Buyer shall pay (a) one-half of the transfer taxes payable upon recordation of the Deed; (b) the cost of the Preliminary Title Report; (c) all title insurance premiums; (d) the cost of recording the Commitments; and (e) all other costs required in order to close in accordance with this Agreement (except as specified in Section 12.1).

Section 12.3. Prorations. Taxes and assessments (including any business and license taxes and any other state, county or municipal assessments), utility and fuel bills and other customarily-adjusted operating expenses shall be prorated as of the Closing Date and added to or subtracted from (as the case may be) the Cash Balance. All charges accruing prior to the Closing Date shall be prorated between the parties, and all charges accruing on or after the Closing Date shall be the obligation of Buyer. If the amount of such taxes is not known on the Closing Date, such taxes shall be prorated on the basis of taxes assessed for the preceding fiscal period, subject to reapportionment as soon as the new tax rate and valuation can be ascertained. In the event of any abatement of such taxes subsequent to the apportionment thereof, the amount of such abatement, less the reasonable cost of obtaining the same, shall be prorated as of the Closing Date.

ARTICLE XIII
Notices

Section 13.1. Notices. All notices required or permitted to be given hereunder shall be in writing and sent by electronic mail, with a confirmation copy sent by a recognized overnight courier

service offering confirmation of delivery to the appropriate address indicated below or at such other place or places as either Buyer or Seller may, from time to time, respectively, designate in a written notice given to the other:

To Buyer:	Fathom Development, LLC 80 Exchange Street, Suite 400 Portland, ME 04101 Attn: James H Brady, Manager jameshbrady@gmail.com
With a copy to:	Christopher E. Howard, Esq. Pierce Atwood LLP 254 Commercial Street Portland, Maine 04101 choward@pierceatwood.com
To Seller:	385 Congress LLC 2730 Transit Road West Seneca, NY 14224 Attn: Gordon Reger joedasco@comcast.net
With a copy to:	Tom Hanson Bernstein Shur 100 Middle Street Portland, ME 04101 thanson@bernsteinshur.com

ARTICLE XIV
Additional Conditions

[redacted]

Section 14.1. Construction License. Seller shall provide Buyer with access to and right to use lay-down space for Project construction, the location of such lay-down space to be negotiated by the parties during the Due Diligence Period as provided below, and the parties shall enter into an agreement with respect to reasonable cooperation and coordination of construction activities with respect to the common boundary between the Property and Seller's Retained Land. Subject to agreement of the parties as provided below in this Section, a conditional license to use the lay-down area and for coordination of construction activities on the common boundary will be executed and delivered at Closing ("Construction License"). If the Construction License, including the

location of the lay-down space, is not finalized in a form reasonably acceptable to Buyer and Seller on or before the expiration of the Due Diligence Period, then Buyer or Seller may terminate this Agreement by giving the other party written notice thereof on or before the expiration of the Due Diligence Period, in which event the Deposit will be refunded to Buyer and this Agreement shall terminate and the parties shall have no further obligations of any nature whatsoever hereunder except those that expressly survive termination. Buyer and Seller agree to exercise reasonable good faith efforts to agree on any adjustments required in the lay-down space to accommodate the needs of both parties in the development of the Project and the Master Development as finally approved in the Site Plan Approval and the MP Approval.

[redacted]

Section 14.5. [redacted]

Section 14.6. Intentionally deleted.

Section 14.7. Recordation. The form of Deed, the Cross Easement Agreement, the Parking Agreement, the Construction License, [redacted] will be memorialized in form and substance acceptable to both Seller and Buyer, to be executed and delivered by the parties at Closing ("Commitments"). If the Commitments are not finalized in a form reasonably acceptable to Buyer on or before the expiration of the Due Diligence Period, as provided in this Article XIV, then Buyer may terminate this Agreement by giving the other party written notice thereof on or before the expiration of the Due Diligence Period, in which event the Deposit will be refunded to Buyer and this Agreement shall terminate and the parties shall have no further obligations of any nature whatsoever hereunder, except those that expressly survive termination. The Commitments shall survive the Closing and shall be memorialized in a written agreement in recordable form that will be executed and delivered by Buyer and Seller at Closing. The order of recording the Commitments shall include recording the Cross Easement Agreement before the Deed unless those documents are combined into a single instrument.

ARTICLE XV
Miscellaneous Provisions

Section 15.1. Attorneys' Fees. If any suit or action be instituted to enforce the rights of either party under this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and court costs.

Section 15.2. Further Assurances. Whenever reasonably requested to do so by the other party, Seller and Buyer shall execute, acknowledge, and deliver any and all such further reasonable conveyances, assignments, confirmations, satisfactions, releases, instruments of further assurance, approvals, consents and any and all such further instruments and documents as may be necessary in order to complete any and all conveyances, transfers, sales and assignments herein provided, and to do any and all other acts and to execute, acknowledge and deliver any and all documents as reasonably requested in order to carry out the intent and purpose of this Agreement.

Section 15.3. Buyer's Right to Assign. Buyer may, by written notice to Seller prior to the Closing Date, designate a nominee to take title to the Property and assign Buyer's interest in this Agreement in connection therewith to an entity in which the principals of Buyer own a membership or other equity interest. The named Buyer under this Agreement shall remain liable under this Agreement notwithstanding any such assignment.

Section 15.4. Successors and Assigns. Without waiver of the terms and conditions of Section 15.3, all of the rights, benefits, duties, liabilities, and obligations of the parties hereto shall inure to the benefit of, and be binding upon, their respective successors and assigns.

Section 15.5. Time. Time is of the essence of this Agreement and of every provision herein contained.

Section 15.6. Headings. The title and headings of the Sections hereof are intended solely for means of reference and are not intended to modify, explain or place any construction on any of the provisions of this Agreement.

Section 15.7. Modification. This Agreement may not be modified, amended or otherwise changed in any manner except by a writing mutually executed by both parties. To the extent there is any conflict between the terms and conditions of this Agreement and the terms and conditions of any other documents relating to the acquisition of the Property as they relate to rights and obligations between Buyer and Seller, the terms and conditions of this Agreement shall be deemed controlling.

Section 15.8. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Maine.

Section 15.9. Escrow Agent. Pierce Atwood, LLP agrees to serve as Escrow Agent as described herein pursuant to the Pierce Atwood LLP Standard Escrow Terms and conditions attached hereto as Exhibit D, which are incorporated herein by reference.

Section 15.10. Exclusivity. For so long as this Agreement remains in force, neither Seller nor any of its agents, affiliates, members, managers, subsidiaries, directors, officers or employees, will solicit, initiate, continue or participate in any discussions or negotiations with, or encourage or respond to any inquiries or proposals by, or provide any information to, or otherwise cooperate in any other way with, any corporation, company, partnership, person or other entity or group (other than Buyer and its affiliates, subsidiaries, partners, officers, directors, employees, consultants, agents, financing sources (and potential financing sources), accountants, and attorneys in connection with the development, sale, or acquisition of any interest in, the Property. Seller shall cause its agents, affiliates, members, managers, subsidiaries, directors, officers or employees, to comply with the provisions of this section.

Section 15.11. Counterparts. This Agreement may be executed in one or more counterparts, each of which when executed shall be deemed to be an original but all of which, when taken together shall constitute one and the same agreement. This Agreement may be executed by electronic or other facsimile signatures.

[*Remainder of Page Intentionally Blank – Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

FATHOM DEVELOPMENT, LLC

By: _____
Name: James Brady
Title: Manager

385 CONGRESS LLC

By: _____
Name: Joseph Dasco
Title: Authorized Agent

ESCROW AGENT: PIERCE ATWOOD LLP

By: _____
Name: Christopher E. Howard
Title: Partner

[Signature Page to 385 Congress Street Purchase and Sale Agreement]

EXHIBIT A

DESCRIPTION OF REAL PROPERTY

EXHIBIT

tabbies

A

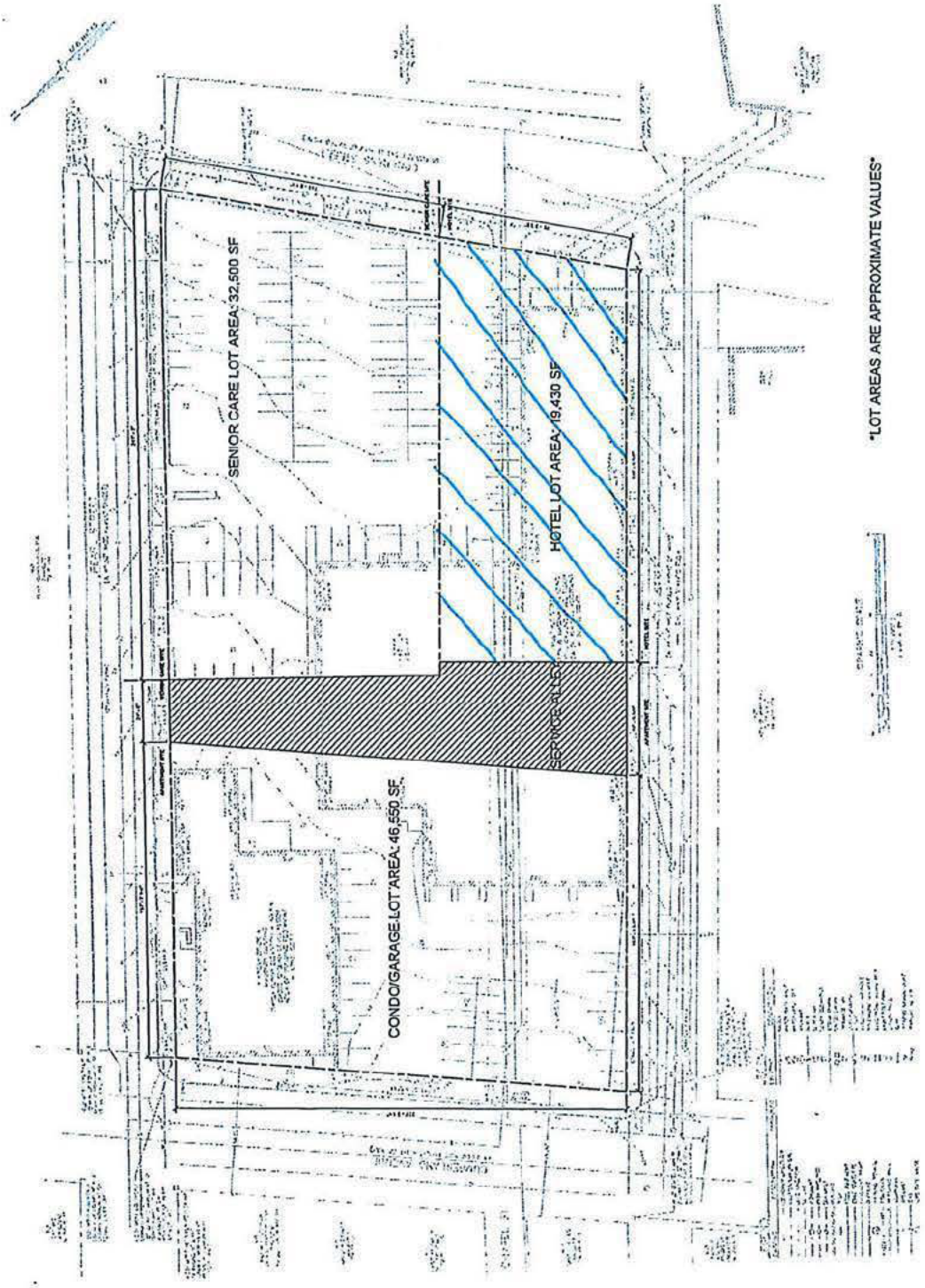


EXHIBIT B

DESCRIPTION OF MASTER DEVELOPMENT AREA

EXHIBIT

tabbies

B

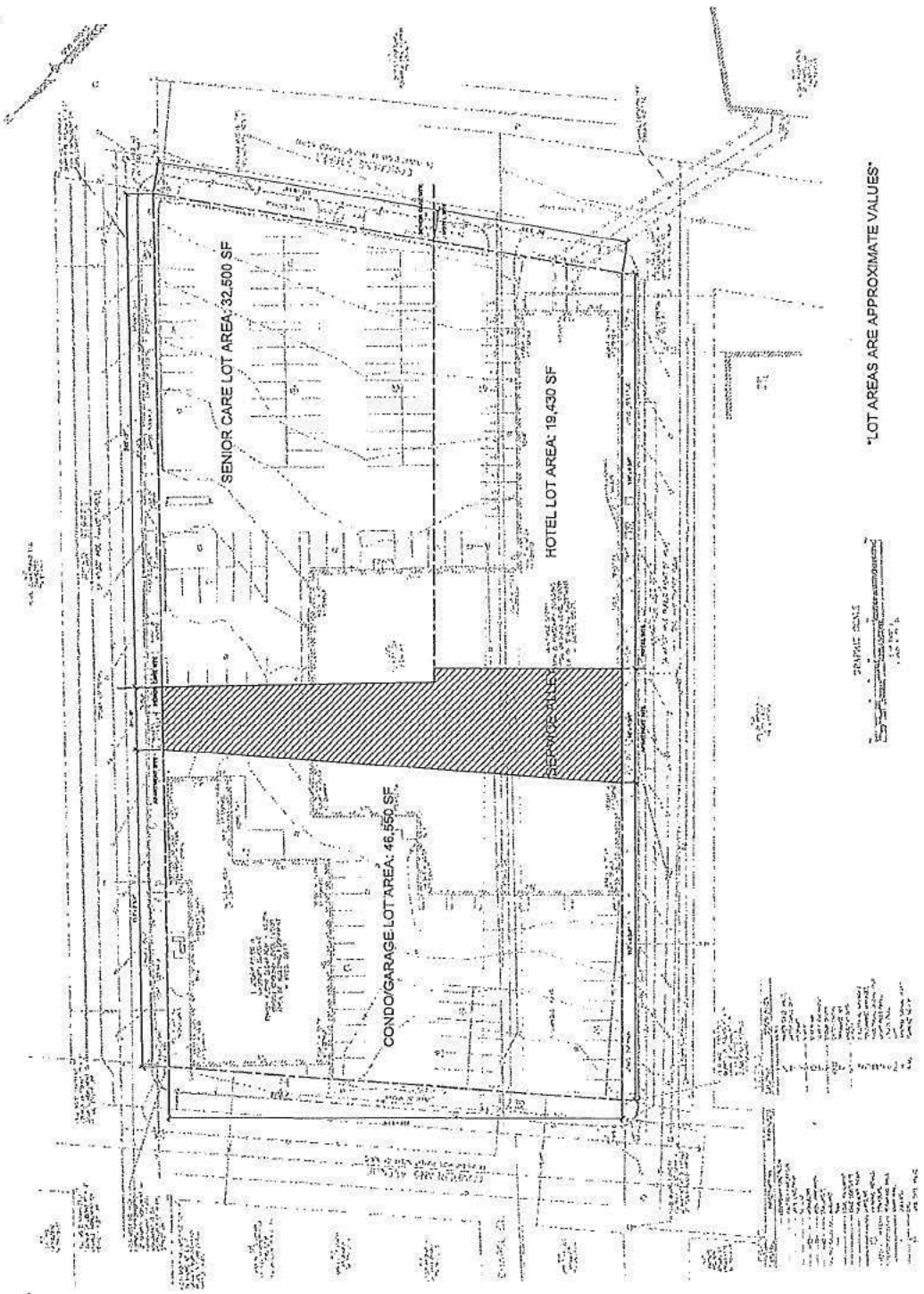


EXHIBIT C

FACILITIES PROGRAM

EXHIBIT D

PIERCE ATWOOD LLP

STANDARD ESCROW TERMS AND CONDITIONS

In consideration of Pierce Atwood LLP serving as the Escrow Agent ("Pierce Atwood" or "Escrow Agent") pursuant to that certain Purchase and Sale Agreement dated as of December 1, 2020 between 385 CONGRESS LLC, a Maine limited liability company (hereinafter referred to as "Seller"), and FATHOM DEVELOPMENT, LLC a Maine limited liability company (hereinafter referred to as "Buyer"), ("Purchase Agreement"), to which these Standard Escrow Terms and Conditions ("Escrow Terms") are attached as an Exhibit, the Seller and Buyer hereby acknowledge and agree as follows:

1. Acceptance by Pierce Atwood LLP of its duties as Escrow Agent under the Purchase Agreement to which this Exhibit is attached, is subject to the following Escrow Terms, which all parties to the Agreement hereby agree shall govern and control the rights, duties and privileges of the Escrow Agent and shall be deemed incorporated by reference into the Agreement as if set forth in full therein (the escrow provisions of the Purchase Agreement and the Escrow Terms shall together be referred to as the "Escrow Agreement").

2. The duties of the Escrow Agent are to be determined solely by the express provisions of the Escrow Agreement, and the Escrow Agent shall have no responsibilities except the performance of such duties as are specifically set forth in the Escrow Agreement. The Escrow Agent shall not be deemed to be the agent of any party hereto with respect to its duties hereunder. The Escrow Agent shall not be liable for any error of judgment, any act taken or omitted by it, or any mistake in fact or law, except for its own willful misconduct and breach of the Escrow Term. The parties acknowledge that the duties of the Escrow Agent hereunder are solely ministerial and contractual in nature and have been requested for their convenience. The Escrow Agent shall not be deemed to be the agent of any party hereto with respect to its duties hereunder. Without limiting the generality of the foregoing, the Escrow Agent shall not incur liability and shall be fully protected in respect of any action taken, omitted or suffered by it in good faith, except for a breach of the Escrow Terms.

3. The Escrow Agent shall be entitled to act on or rely upon any written notice, direction, request, waiver, consent, receipt or other document (including those transmitted by facsimile transmission, email, or other electronic transmission which is capable of producing a written record) which appears to the Escrow Agent to have been signed or presented by the party or parties entitled to execute or deliver such document, and the Escrow Agent shall have no duty to inquire of or investigate the authorization, signature or authenticity of such person or document.

4. The Funds are being deposited into a client trust account of the law firm of Pierce Atwood LLP for disbursement on behalf of the undersigned in accordance with the terms

of the Purchase Agreement of even date, to which these a copy of which is attached hereto and made a part hereof. The funds (the "Funds") shall be held in escrow by Pierce Atwood LLP in a non-interest-bearing account in accordance with the terms and conditions set forth herein. In the event of an inconsistency between the provisions of any other document and the provisions of these Escrow Terms, the provisions of these Escrow Terms shall govern. The Escrow Agent shall place any funds held in escrow in a non-interest-bearing account and shall have no duty to invest or earn interest on any such funds. The parties recognize that the amount of the funds deposited may exceed the amount of Federal Deposit Insurance Corporation or other insurance thereon and agree that the Escrow Agent shall have no responsibility for losses due to bank insolvency, whether or not the bank in which the funds are deposited was selected by it. Any payments by the Escrow Agent may be made, at the Escrow Agent's election, by check or by wire transfer.

5. The Escrow Agent may, but shall not be obligated to, in its sole and absolute discretion at any time and from time to time, for any reason or for no reason, commence an interpleader or other action, suit or proceeding for the resolution of any controversy regarding the Escrow Agreement or the subject matter of its escrow, and deposit the funds or other property held in escrow. Upon so depositing such property and filing its complaint in interpleader the Escrow Agent shall be relieved of all liability under the terms of the Escrow Agreement as to the property so deposited, and furthermore, the parties hereto for themselves, their heirs, legal representatives, successors and assigns do hereby submit themselves to the jurisdiction of said court and do hereby appoint the then Clerk or acting Clerk, of said Court as their agent for the service of all process in connection with such proceedings. The institution of any such interpleader action shall not impair the rights of the Escrow Agent hereunder.

6. The parties to the Escrow Agreement other than the Escrow Agent (collectively referred to as the "Indemnitors") jointly and severally agree to indemnify each of the Escrow Agent and its attorneys, employees and agents (collectively referred to as the "Indemnitees") against, and hold them harmless of and from, any and all loss, liability, cost, damage and expense, including reasonable counsel fees (including those of the Escrow Agent computed at its regular hourly rates), which the Indemnitees may suffer or incur by reason of any action, claim or proceeding brought or threatened to be brought, whether by any party to the Escrow Agreement or by any other person or entity, against any Indemnitee or in which any Indemnitee may become involved arising out of or relating directly or indirectly in any way to the Escrow Agreement or any transaction to which the Escrow Agreement directly or indirectly relates (including any action, claim or proceeding to enforce any indemnity obligation or any other obligation of any party to the Escrow Agreement) , excluding, however, any willful or intentional wrong doing on the part of the Escrow Agent or breach of the Escrow Terms as determined by final judgment. The provisions of this paragraph shall survive any termination of the Escrow Agreement, whether by disbursement of the property held in escrow, the resignation of the Escrow Agent or otherwise.

7. THE ESCROW AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF MAINE APPLICABLE TO

CONTRACTS MADE AND TO BE PERFORMED ENTIRELY WITHIN SUCH STATE, WITHOUT REFERENCE TO CONFLICT OF LAWS PRINCIPLES, AND THE ESCROW AGREEMENT CANNOT BE CHANGED OR TERMINATED EXCEPT BY A WRITING SIGNED BY ALL OF THE PARTIES TO THE ESCROW AGREEMENT. THE PARTIES TO THE ESCROW AGREEMENT HEREBY AGREE THAT NO ACTION, SUIT OR PROCEEDING SHALL BE COMMENCED AGAINST THE ESCROW AGENT UNLESS (A) THE ESCROW AGENT SHALL FIRST HAVE BEEN GIVEN 30 DAYS' WRITTEN NOTICE OF THE CLAIM AND (B) THE SAME IS BROUGHT IN A COURT OF COMPETENT JURISDICTION LOCATED IN THE STATE OF MAINE. THE PARTIES TO THE ESCROW AGREEMENT OTHER THAN THE ESCROW AGENT AGREE THAT IN ANY ACTION, SUIT OR OTHER PROCEEDING COMMENCED BY THE ESCROW AGENT, SERVICE BY MAIL AS PROVIDED HEREIN SHALL BE DEEMED GOOD, PROPER AND EFFECTIVE SERVICE UPON SAID PARTY, AND EACH CONSENTS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE STATE OF MAINE (OR ANY OTHER COURT SELECTED BY THE ESCROW AGENT) IN ANY ACTION, SUIT OR PROCEEDING UNDER OR IN CONNECTION WITH THE ESCROW AGREEMENT, HEREBY WAIVING ANY AND ALL RIGHT TO OBJECT TO THE JURISDICTION OR VENUE OF SAID COURT OR TO OBJECT THAT SUCH COURT IS AN INCONVENIENT FORUM.

8. If a controversy arises between one or more of the parties hereto, or between any of the parties hereto and any person not a party hereto, as to whether or not or to whom the Escrow Agent shall deliver the property held in escrow or any portion thereof, or as to any other matter arising out of or relating to the Escrow Agreement or the property held in escrow, the Escrow Agent shall not be required to make any inquiry or investigation, or make any determination as to such controversy, and need not make any delivery of such property but may retain it until the rights of the parties to the dispute shall have finally been determined by agreement in form, substance and formalities satisfactory to the Escrow Agent or by final order of a court of competent jurisdiction from which final order the time for appeal has expired without an appeal having been taken.

9. All notices, requests and other communications which may or must be given hereunder shall be in writing (including facsimile transmission, email, or other electronic transmission which is capable of producing a written record) and shall be deemed to have been duly given upon the earliest of receipt or attempted delivery or 3 days after deposit when mailed by registered or certified mail, return receipt requested, to each of the parties at their addresses set forth in the Escrow Agreement, or such other address of which notice may be given to all parties from time to time.

10. The Escrow Agreement shall be binding upon and inure to the benefit of Escrow Agent, Seller and Buyer, and their respective heirs, personal representatives, successors and permitted assigns, but not to the benefit of any third party other than the Indemnitees. The Escrow Agreement and any rights thereunder may not be assigned without the written consent of the Escrow Agent, and any

purported assignment without the Escrow Agent's written consent shall be null and void and of no effect whatsoever. The rights granted the Escrow Agent herein are cumulative and the exercise of any one or more rights hereunder shall not constitute a waiver of the Escrow Agent's right to assert all other legal and equitable remedies available to it under the circumstances. If one or more of the provisions or paragraphs of the Escrow Agreement shall be held to be illegal or otherwise void or invalid, the remainder of the Escrow Agreement shall not be affected and shall remain in full force and effect.

11. **Pierce Atwood LLP acting as Escrow Agent and is holding the Funds in its account at the request of the Seller and Buyer, and each of Seller and Buyer acknowledge that Pierce Atwood LLP represents Buyer and its Affiliates for this transaction and does not represent Seller. The Seller and Buyer both hereby confirm their consent to Pierce Atwood LLP's current and continued representation of Buyer in this transaction, any dispute, arbitration or litigation arising in connection herewith, including any dispute about the Funds, and any and all future representation of Buyer and its affiliates. In the event of a dispute between the parties, the commencement of an Interpleader action, or the resignation by Pierce Atwood LLP as Escrow Agent, Pierce Atwood LLP shall be free to continue to act as counsel for and represent Buyer, and each of Seller and Buyer hereby consent to such representation.**

12. That Pierce Atwood LLP is not liable for any portion of the Funds in excess of the limit of FDIC insurance on the account and is not liable for losses due to failure of the bank in which the account is held.

13. That Pierce Atwood LLP will not make any payment with respect to the Funds until it receives confirmation that the Funds are collected in its account.

Att. D

Noise and Vibration 14-14.6.4 (G)

All heating, ventilation, and air conditioning equipment, air handling units, emergency generators, and similar equipment shall meet applicable state and federal emissions requirements and shall be located away from abutting residential properties. The B-3 Zone Noise Standard is 60 dB during the day and evening and 55 dB at night.

HVAC, air handling units, and the emergency generator will be installed on the building rooftop. Domestic hot water boilers will be located within a mechanical room at the level 12 roof, with exterior condensers grouped on the roof behind a screen wall, approximately 8-10' back from the roof edge. The generator is enclosed in a Level 3 (highest level provided by the manufacturer) sound attenuation enclosure.

Vibration will be mitigated by locating equipment on concrete housekeeping pads with vibration isolation pads and springs.

Both vibration and noise will be reviewed by the project acoustic consultant and further mitigation will be provided as required to confirm the equipment is within code compliance.

Please see the building roof plan and aerial perspective showing rooftop mechanical enclosure.

Att. E

Evidence of State or Federal Approvals

Not Applicable. No State or Federal approvals are required for this project at this time.

The project is the first phase of development identified in the approved Master Plan of Development for 385 Congress Street approved by the Planning Board on August 9, 2020 (reference City of Portland Planning Department Project Number PL-001970-2022).

Signage and Wayfinding 14-14.6.4 (H)

1. Signage location and scale will be in compliance with the City Ordinance.
2. All on-site directional traffic signage will be sited in such a way as to not adversely affect visibility at intersections or offsite.

Valet Operations, Wayfinding and Signage

The project proposes a two- lane, one-way (entering) driveway on Congress Street for vehicles entering the hotel site.

The proposed curb cut is set at 22' wide to allow for an 11' through lane entering and an 11' wide pull off area for drop off at the onsite entrance area. This lane configuration allows for valet operators to move entering vehicles past loading vehicles in the drop off lane and into the garage structure if necessary to prevent stacking of vehicles in the entrance driveway or on the sidewalk area.

The material details for the valet entrance area have been developed to emphasize the area as a shared use space for vehicles and pedestrians, not a vehicle dominated area. The entrance plaza is designed to integrated with the monumental stair, sidewalk and streetscape providing a clear and attractive arrival experience and presence for the face of the building on Congress Street. The public sidewalk materials continue across the driveway. The design respects and reinforces the pedestrian-oriented streetscape while defining the area as an entrance to the hotel for safe and efficient valet parking.

The valet entrance area may include moveable/temporary sidewalk kiosks or signs, placed by the valet operators, to indicate valet parking locations, but no permanent valet signage is proposed. This approach is similar to other valet parking operations in the City of Portland.

There will be no self-parking in the hotel's garage by hotel guests, all guest parking will be valet parked. The revised plan provides a minimum of (4) loading spaces at the valet entrance outside of the garage for guest arrival and during peak arrival/departure times the valet operators can use both lanes of the valet entrance to accommodate up to (8) cars.

During standard operations, the second lane will remain clear to allow entering vehicles to pass loading/unloading guest vehicles and move off of the public sidewalks. During peak periods, the through lane is available for unloading while valets move vehicles into the garage.

The hotel's valet operation, similar to most valet operations at hotels in Portland, is a contracted service by a parking facility operator that has access to the both the on-site parking and other nearby offsite parking facilities. During peak periods, if the on-site garage is approaching capacity, the valets will park vehicles offsite in contracted facilities managed by the valet/parking vendor to ensure that arriving and departing vehicles are not queuing on the sidewalk or in the streets adjacent to the site. Peak periods of hotel valet operations are generally predicable at typical weekend check-in and check-out times and are staffed accordingly.

The valet service will be staffed 24 hours a day whenever the hotel is operating. The operation will be managed in the same manner as the applicants other existing hotels in Portland.

Portland, Maine Yes. Life's good here.

Planning & Urban Development Department

ZONING ANALYSIS Relevant Zone(s) B3

All Projects:

	Required	Proposed
Lot Size	none	2.26 ac
Area Per Dwelling Unit	none	none
Minimum Street Frontage	15 ft	116'
Front Yard Minimum	none	13'
Front Yard Maximum	5	107'
Rear Yard	none	none
Yard Right	none	none
Yard Left	none	none
Side Street Setback	none	none
Step Back	none	none
Maximum Lot Coverage	100%	80%
Minimum Lot Coverage	none	none
Maximum Height	150 ft	150 ft
Open Space	none	none
Maximum Impervious Area	100%	99%
Pavement Setback	none	N/A
Floor Area Ratio	none	N/A
Off Street Parking Spaces	39	72
Loading Bays	1	1
Other 1		
Other 2		
Other 3		

Zone Related Design Standards 14-14.6.4 (I)

1.a. Development in the B-3, B-5, B-5b, and B-7 zones and in the B-6 and EWPZ zones shall be designed to support the development of dense, mixed-use neighborhoods with attractive, safe, and convenient street-level pedestrian environments.

The building and site is designed to comply with the design standards of the City of Portland Design Manual Section (b) B-3 Downtown Business Zone and the Pedestrian Activities District (PAD).

The project is the first phase of a Master Development Plan (MDP) approved by the Planning Board on August 9, 2022. The approved MDP adopts design guidelines for the site outlined is a staff design review memorandum dated August 2, 2022. The following items discuss the site design with reference to applicable sections of the ordinance and design guidelines that were highlighted in the MDP review.

Additional information related to building design is shown on the architectural plans submitted with the application.

- *§(b)(1)(a)(1)(i)(2) of the Design Manual states that building entrances, including such factors as compatibility with the building's façade, prominence along the street, access to the street, and accessibility for physically handicapped or for those with special needs are factors that should be considered.*

The hotel lobby entrance has been upgraded on Congress Street, with differentiated materials, slightly recessed doors and a canopy above, extending 6' from the building face. This entry is fully accessible. A secondary entrance is located closer to the retail storefront.

- *§ (b)(1)(e)(1) of the Design Manual states that proposed development shall respect, enhance, and be integrated with the existing character of the general pattern of development in the downtown, surrounding building environment and streetscape, as described and illustrated in the Downtown Urban Design Guidelines (Appendix 1). Factors to be considered include the relationship to the following existing patterns:*

    - *Street walls and building setbacks:*

      As part of the MDP review, the Congress Street elevation was pulled 10' back from the property line, to allow for better views to City Hall. The Myrtle Street elevation was pulled back from the property line for more pedestrian room amongst the street trees. The approved MDP includes waivers of the 5' maximum setback required by ordinance. The setbacks presented in the plan set are consistent with the MDP design and the approved waiver.

- *Open space:*

  The Level 2 amenity deck has been developed as a linear space open to the public during daytime and evening hours. The area between the property line and building front on Congress Street will be developed to accommodate tables and chairs outside the retail space at the corner of Myrtle Street and Congress Street.

  The streetscape design incorporates street trees in planters along the curb line with landscaped planters with seating to the street side at the front of the hotel. The planting design and materials present a cohesive design for the space providing street activation and opportunities for outdoor seating both within the public sidewalk and the semi-public outdoor spaces on site along the Hotel and commercial uses at street level.

- *Building form, scale and massing:*

  The form, scale and massing of the building is consistent with the approved MDP for the site.

  The building elevation at Myrtle Street is set back between 4.5’ and 6.5’ along Myrtle Street, with articulation to allow more room for an expanded sidewalk pedestrians and street trees. The elevations above at Level 3 steps back almost 13’, as required at approximately 35’ above the sidewalk. The overall form of the building exemplifies a base, middle and top portion, with the top two condo floors stepping back more than the hotel part. Materials from the Myrtle Street elevation bracket the glass curtainwall on Congress Street.

- *Facade proportion and composition:*

  The building is arranged in a classic 3-part composition – base, middle and top. The base has a contemporary limestone finish to conform to the predominant limestone of adjacent buildings. Much of the middle of the elevation is brick on Myrtle and Congress, similar to the surrounding buildings. While the painted aluminum at the upper floors and curtainwall will not have the same copper green patina, the metal finishes are sympathetic to the other metal roofs. Punched windows conform to the overall esthetic of the area and the curtainwall adds a contemporary counterpoint to the traditionalist City Hall.

- *Pedestrian circulation and building entrances:*

  Pedestrians have full access to the Level 2 outdoor amenity space, via the stair or a limited use/limited access elevator mid-block on Myrtle Street, or the stair adjacent to the hotel porte cochere. ADA access from Congress will be by hotel elevator. A prominent hotel entry is located off Congress Street, with the porte cochere and

vehicle arrival point off to the side below the outdoor amenity space, from Congress Street.

- *Parking:*

Parking for the hotel will be all valet. There are 18 spaces allocated for the condo owners, which will also be part of the valet program. 11 bike spaces have been provided in the street level garage. On Myrtle Street there are 3 short-term parking loading spaces proposed at the curb adjacent to the interior the loading area. These are intended for hotel delivery and pickup.

Standard to be Waived: Cite Ordinance or Technical Manual Standard	**Cite Standard Language:** Cite specific language of applicable Ordinance or Technical Manual Standard	**Waiver Being Sought:** Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	**Justification for Waiver:** Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Land Use Ordinance Section 7.3 Table 7-E Maximum Front Setback	All buildings or structures shall be located within 5 feet of the property line	Applicant proposes varying setbacks along Congress Street and Myrtle Street	See attached narrative
Technical Standards Section 14.1.2	1.14.2. Parking spaces shall meet the following dimensional requirements: • Standard parking space: 9 feet wide by 18 feet long. • Compact parking space: 8 feet wide by 15 feet long • Motorcycle/motorized scooter parking space: 4 feet wide by 8 feet long. Any parking lot with 10 or fewer spaces shall contain standard sized parking spaces. Parking lots with greater than 10 spaces may be comprised of up to 20% compact parking spaces.	Applicant proposes that all of the valet parked spaces in the hotel's structured parking be reduced width/compact spaces	See attached narrative
Technical Standards Section 14.1.3	Parking lot layout shall conform to Figures I-28 thru I-32.	Applicant seeks a waiver to allow parallel valet parking spaces across the ends of double stacked, 90 degree compact spaces within the Hotel parking levels on Lot 1	See attached narrative
Technical Standards Section 14.1.5	Vehicular access shall be provided by one or more aisles. Minimum widths of aisles are illustrated in Figures I-28 thru I-31.	Applicant seeks a waiver of 24' drive aisle width in the Hotel garage to allow to allow parallel valet parking spaces across the ends of double stacked, 90 degree compact spaces within the Hotel parking levels on Lot 1	See attached narrative

7A Waiver Narrative

Waiver 1

Consistent with the approved Master Plan of Development 385 Congress Street (City of Portland Planning Department Project Number PL-001970-2022) The application requests increased setbacks along Congress Street and Myrtle Street. In the B-3 zone, the Zoning Ordinance Section 7.3 Table 7-E defines the maximum permitted setback from the street as 5 feet. Section §(b)(1)(e)(2) of the City's Design Manual states that a proposed development may exceed the maximum setbacks as required only when the applicant demonstrates to the Planning Board that the introduction of increased building setback at the street level:

a. *Provides substantial and viable publicly accessible open space or other amenity at the street level that supports and reinforces pedestrian activity and interest. Such amenities may include without limitation plazas, outdoor eating spaces and cafes, or wider sidewalk circulation areas in locations of substantial pedestrian congestion;*

b. *Does not substantially detract from the prevailing street wall character by introducing such additional setback at critical building locations such as prominent form-defining corners, or create a sense of discontinuity in particularly consistent or continuous settings;*

c. *Does not detract from existing publicly accessible open space by creating an excessive amount of open space in one (1) area or by diminishing the viability or liveliness of that existing open space;*

d. *The area of setback is of high quality and character of design and of acceptable orientation to solar access and wind impacts as to be attractive to pedestrian activity.*

The following narrative addresses each of the criteria identified in Section §(b)(1)(e)(2) of the Design Manual.

a. Provides substantial and viable publicly accessible open space or other amenity at the street level that supports and reinforces pedestrian activity and interest. Such amenities may include without limitation plazas, outdoor eating spaces and cafes, or wider sidewalk circulation areas in locations of substantial pedestrian congestion;

The applications seeks to widen the public sidewalk on Congress Street in response to Planning Staff comments and recommendations documented in the Master Development Plan for the site to create a linear plaza activating Congress Street and allowing the site to comply with the contextual front setback with City Hall, required by the Design Manual.

The revised design and request for additional setback on Congress Street is in direct response to this request from Planning Staff. The revised design:

- Creates a public space oriented toward the street that provides a visual and thematic connection from City Hall Plaza to Lincoln Park
- Provides opportunities for outdoor seating that can support businesses on the site and events along Congress Street;

- Meets the contextual setback requirements for the continuation of the Congress Street's Street wall;
- Provides opportunity to enhance the tree canopy along Congress Street

The proposed setbacks on Myrtle Street vary from 4' to 8' to allow for the planting of street trees with wider sidewalks in the area opposite City Hall and the Merrill Auditorium entrance enhancing the street as an active space for both the on-site retail/commercial uses and for public events associated with City Hall and the auditorium.

The proposed setback on Myrtle Street is consistent with City Hall/Merrill Auditorium's setback on this block which varies from 0' to 9'. The increased setback provides clearance for the proposed building's foundation construction from existing underground utilities in the sidewalks.

b. Does not substantially detract from the prevailing street wall character by introducing such additional setback at critical building locations such as prominent form-defining corners, or create a sense of discontinuity in particularly consistent or continuous settings;

The street setting on this section of Congress Street, and Myrtle Street are not a particularly consistent or continuous setback.

The street wall along Congress has been created to be responsive the contextual street wall considerations discussed in item a. above. The proposed street wall on Myrtle Street is reflective of City Hall and Merrill Auditorium.

c. Does not detract from existing publicly accessible open space by creating an excessive amount of open space in one (1) area or by diminishing the viability or liveliness of that existing open space;

The proposed setbacks will enhance pedestrian experiences at the building corners improving pedestrian crossing and safety and create viable space supporting business on the site at a location that has been a dominated by surface parking lot for many years. The most significant setbacks requested occur along Congress Street and have been consciously considered to provide a visual and contextual connection between public spaces at City Hall and Lincoln Park.

The setback on Myrtle Street are reflective of and responsive to the setbacks at Merrill Auditorium. The additional open space created is not excessive and does not diminish the liveliness of the street.

d. The area of setback is of high quality and character of design and of acceptable orientation to solar access and wind impacts as to be attractive to pedestrian activity.

The areas of increased setback will be constructed of City standard brick sidewalk within the right of way and a combination of brick sidewalk and with pavers on on-site areas to enhance the spaces in support of the street level uses. The design creates quality pedestrian spaces consistent with the City's standards and precedents.

The public brick sidewalk materials will extend on to the site on Myrtle Street from the right of way to the base building including the amenity deck stairs on Myrtle Street as a visual wayfinding feature visually reinforcing these features a public amenity.

The proposed buildings are to be constructed within height limits allowed by zoning and the shadow studies submitted with the application provide evidence of the availability of solar access to the extent practicable in an urban setting with buildings of the heights allowed by zoning. The northwest-southeast orientation of the block provides sunlit conditions for much of the day throughout the year.

Waiver 2

Consistent with the approved Master Plan of Development 385 Congress Street (City of Portland Planning Department Project Number PL-001970-2022), the application requests a waiver of the Technical Standards Section 14.1.2 regarding the number of compact spaces within the structured parking levels.

The language of the Ordinance is as follows:

> *Any parking lot with 10 or fewer spaces shall contain standard sized parking spaces. Parking lots with greater than 10 spaces may be comprised of up to 20% compact parking spaces.*

The waiver requests that all of the valet operated parking spaces in the Hotel's parking structure on Lot 1 be permitted as reduced width/compact spaces.

The reduced width spaces are typically 8' to 8'6" with the width narrowed to accommodate the anticipated size and spacing of columns that will be required in the hotel garage levels.

- This column condition is not unusual in parking structures below hotel and residential uses, where column spacing needs to respond to hotel room bay spacing, and has precedent in other projects in the City
- The building columns are anticipated to include fire proofing and protective encasements that may encroach into the standard 9' width.
- All of the hotel parking will be by valet, there is no self-parking by the public in the hotel
- With valet parking, the plan proposes to include double stacked space and spaces less than 9' width

The Hotel garage compact spaces will arrange generally as shown on the submitted floor plans.

We anticipate that all of the 90 degree stalls, exclusive of ADA Accessible spaces, will be compact (approximately 70-75 based on the MDP design). Widths are anticipated to vary from 8' to 8.5'. It is anticipated that the reduced width 90 degrees stalls may vary in length but will meet the City's minimum 15' length for a compact stall.

Waiver 3 and Waiver 4

Consistent with the approved Master Plan of Development 385 Congress Street (City of Portland Planning Department Project Number PL-001970-2022) The application a waiver of the Technical standards Section 14.1.3 regarding the parking space layout and Section 14.1.5 related to drive aisle width within the structured parking levels of the Hotel garage on Lot 1 to allow parallel valet parking spaces across the ends of double stacked, 90 degree compact spaces within the Hotel parking levels on Lot 1

The language of the Ordinance is as follows:

> *Section 14.1.3 Parking lot layout shall conform to Figures I-28 thru I-32.*
>
> *Section 14.1.5 Vehicular access shall be provided by one or more aisles. Minimum widths of aisles are illustrated in Figures I-28 thru I-31.*

The waiver requests double stacked 90 degrees spaces and parallel spaces generally as shown on the plans. Valet parked parallel parked vehicles may block the ends of 90 degrees spaces and be located within the 24' clear width of the drive aisles.

- All of the hotel parking will be by valet, there is no self-parking by the public in the hotel
- The column spacing will allow clear space in the drive aisle of at not less than 24'
- The use of double stacked and parallel spaces in the valet operated garage allow for efficient valet operations for uncongested operation of the site drive entrance on Congress Street

MEMORANDUM

From:	Daniel Riley, Sebago Technics	Date:	October 6, 2022
To:	City of Portland Planning Department	Project:	19371-01
Subject:	Neighborhood Meeting Summary Major Site Plan Review 385 Congress Street Lot 1 PL002156-2022		

Summary

A neighborhood information meeting for the Major Site Plan Application for 385 Congress Street Lot 1 (City application PL-002156-2022) was held a the Press Hotel at Exchange Street on Thursday, October 6, 2022, at 5:00 PM. This memorandum summarizes the meeting as required in the Land Use Ordinance Section 14.5.5

Notice

The written notice of the meeting was mailed to abutters within 500 feet of the project and to the entities on the City's interested parties list. A copy of the notice and the mailing list/labels for abutters and interested parties is attached (provided by the planning department) is attached. A total of 115 mailings were sent by US Mail on September 26, 2022.

Participants and Attendance List

One member of the public and one reporter from the Portland Press Herald attended the meeting. An attendance sign-in sheet including the public attendees and project representatives at the meeting.

Presenters and Representatives

Daniel Riley of Sebago Technics presented on behalf of the applicant.

Other project representatives attending included

Marieke Thorman, Fathom Companies

Robyn Payne, The FathomCcompanies

Content

The meeting presentation comprised a slide show presentation on a large screen television, followed by questions and discussion. A copy of the presentation materials is attached.

Dan Riley opened the presentation with introductions and a discussion of the purpose of the meeting to provide information ahead of the Planning Boards workshop scheduled for October 25, 2022. Mr. Riley briefly explained the history and status of the project, reviewing the Master Development Plan (MDP) for the site approved in August 2022.

The project site and setting were discussed with an aerial image of the existing site which was visible from the meeting room. The presentation provided four (4) slides reviewing the scope of the approved master development building scope scale and massing. This included an overview of the program for the Hotel (156 rooms and 9 condominium units) and the anticipated scope of construction in future phases envisioned in the MDP.

An overall plan of the site was presented and the program was summarized:

- 12 story building includes 11 stories above Congress street and one level of parking below grade at the elevation of Cumberland Avenue
- 156-room hotel on levels 1-9, 9 residential condominiums on levels 10-11, and rooftop mechanical space
- Driveway access on Congress and Myrtle Street, valet parking

Perspective views of the proposed lot 1 building were presented showing the scale of the adjacent City hall building for context. The anticipated building materials, as submitted for planning board review were presented, noting that materials may change through the review process.

Slides showing the elevation views of the building were presented including building heights, followed by detailed images of the current entrance designs.

The second level amenity deck was described using the slides presented to the Planning Board during the MDP review. The overall design intent is for a public space with stair access at Congress and Myrtle Streets with elevator access in the hotel and a dedicated limited use/limited access elevation at Myrtle Street for accessibility. Diagrams showing the phased construction of the second-level deck were presented.

The presentation closed with a recap of the upcoming review process and the room was opened for questions and discussion. Questions discussed included:

1. *Will there be any security at the amenity deck?*

   Yes, the hotel will have security cameras and the amenity deck will have established operating areas, anticipated to be between dawn and dusk. There will be gates at the staircase to prevent people from entering outside of operating hours.

2. *Will on-street parking on Congress be maintained?*

   Yes. Parking on street will be increased. As part of the Master Development Plan, curb extensions are proposed and Pearl Street is re-striped to add on-street parking that does not exist on Pearl Street today. At full buildout, as envisioned in the Master Plan there will be an increase in on-street parking of approximately 15 spaces based on reducing the number of curb cuts and the proposed street re-striping.

3. *How many condos are there on Lot 2?*

   The Master Development Plan anticipates 110 units on Lot 2 and 178 units on Lot 3; subject to change as site plans are developed for those future phases

4. *How do you decide which lot (Lot 1 or Lot 2) is developed first?*

   Many factors determine who will be ready to build first including design timelines, permitting, financing, construction costs, and design timeline. The projects are separate from an ownership and financing standpoint and are on separate timelines.

5. *Who owns the other lots?*

   Reger-Dasco properties, a developer of several projects in Portland including the ongoing Hobsons Landing project on Commercial Street.

6. *Will the fitness center be open to the public?*

   No, the fitness center in the hotel will be for guests and condo owners only, similar to fineness facilities and most hotels.

7. *Will you be renting out parking spots for public parking?*

   No, the parking on the site is for hotel guests and residential residents.

8. *Does the hotel have a name yet?*

   It does not.

9. *Do you want to put a price tag on development costs?*

   Not at this time.

10. *Are you aware of the tunnel under Congress Street?*

    Yes, we are. There is no plan to continue the use of the tunnel.

SEBAGO TECHNICS

40 YEARS OWNERSHIP · GROWTH

Neighborhood Meeting Sign-In Sheet

Proposed Hotel and Condominiums, 385 Congress Street

October 6, 2022 5:00 pm
Press Hotel 119 Exchange Street, Portland Maine

Applicant and Consultant Team in Attendance

Name	E-mail
1. Daniel Riley, Sebago Technics DR	driley@sebagotechnics.com
2. Nanette Thurmann, Fathom Development	nthurmann@fathomcompanies.com
3. Robyn Payne, Fathom Development	rpayne@fathomcompanies.com
4.	
5.	
6.	
7.	

Members of the Public in Attendance

NAME	Address	E-mail
Tom Sepulveres	51 143 Myrtle ST	Tsepulveres2 YAhoo.com
Dennis Hoey	Press Herald	dhoey@pressherald.com

75 John Roberts Road, Suite 4A, South Portland, Maine 04106 Best Places to Work in ME 207.200.2100 • 100% Employee-Owned • sebagotechnics.com

385 CONGRESS HOTEL | PERSPECTIVE VIEWS

AERIAL OF HOTEL ENTRANCE OFF CONGRESS AVENUE

PERSPECTIVE FROM CONGRESS AVE

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom
COMPANIES

SHEET A14

REV	BY	DATE	STATUS
A	DLR	09/02/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW
B	DLR	10/05/2022	PROGRESS PRINT

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75 John Roberts Rd.
Suite 4
South Portland, ME 04106
Tel. 207-200-2100

OVERALL SITE PLAN - STREET LEVEL
OF:
385 CONGRESS STREET - LOT 2
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE
FOR:
385 CONGRESS STREET LLC
2700 SENECA ROAD
WEST SENECA, NY 14224

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	08/17/2022
SCALE	1" = 20'
PROJECT	19371

SHEET 4 OF23

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August 9, 2022

385 CONGRESS STREET
PLANNING BOARD MEETING

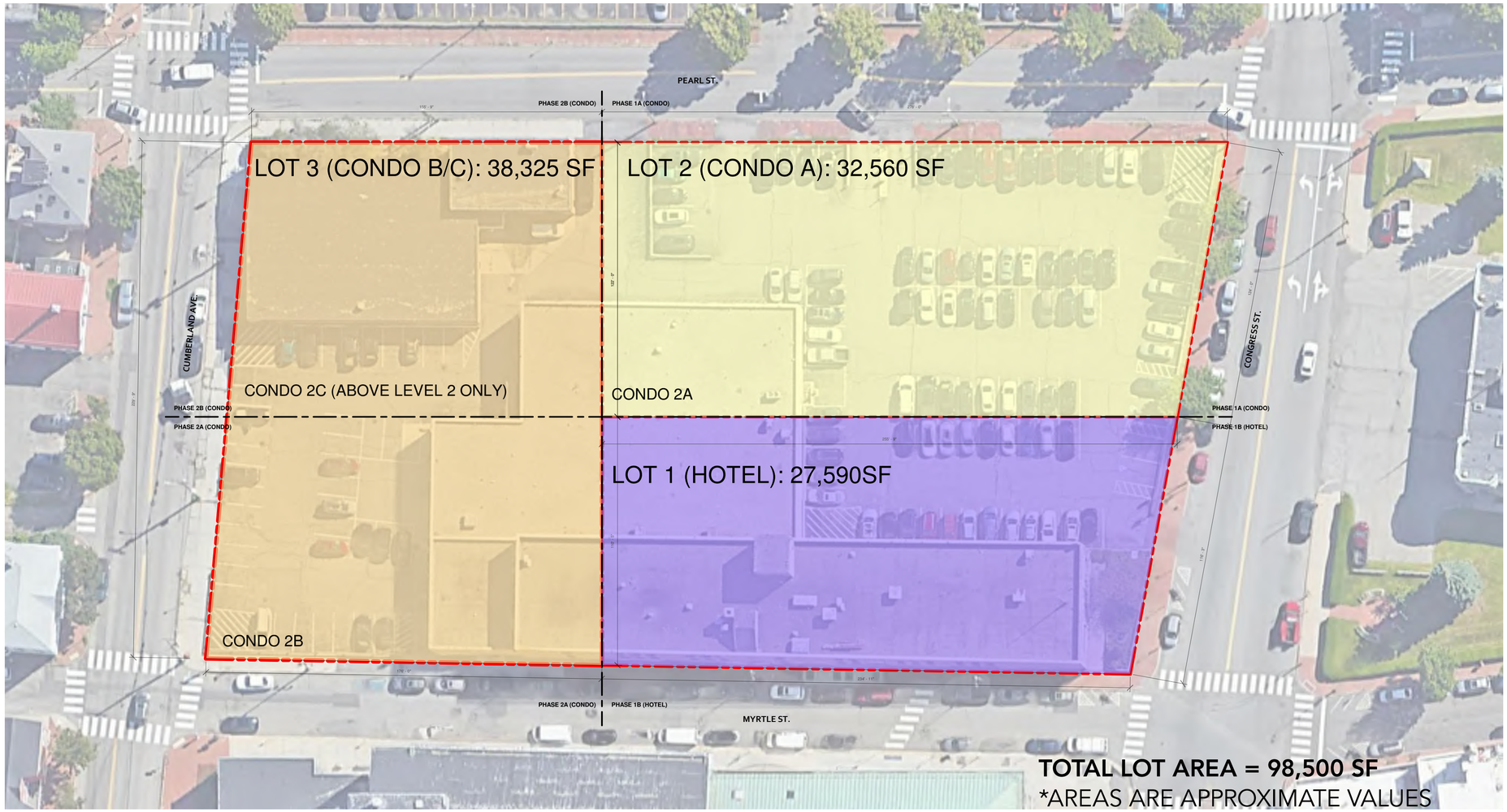
cbt REGER DASCO PROPERTIES Fathom COMPANIES SEBAGO TECHNICS

cbt

PARCEL SUBDIVISIONS

**VALUES ARE APPROXIMATE

		HOTEL SF	*KEY COUNT*	RESI SF	*UNIT COUNT*	LOBBY / AMENITY	RETAIL	HOTEL BOH / SUPPORT	MECHANICAL	CIRCULATION	PARKING	*PARKING COUNT*	GSF TOTAL
Lot 1 - Hotel	**Myrtle**	**69,300**	***156***	**13,500**	***9***	**16,660**	**-**	**7,780**	**9,880**	**13,080**	**27,400**	***70***	**157,600**
Lot 2 - Condo A	**Pearl**			**152,850**	***110***	**5,000**	**4,000**		**7,400**	**22,200**	**47,500**	***148***	**239,450**
Lot 3 - Condo B	**Cumberland S**			**96,200**	***97***	**4,100**	**6,900**		**6,000**	**21,350**	**45,500**	***119***	**180,050**
Lot 3 - Condo C	**Cumberland N**			**79,500**	***81***	**-**	**-**		**-**	**9,900**	**-**	**-**	**89,400**
GRAND TOTALS		***69,300***	***156***	***342,050***	***297***	***25,760***	***10,900***	***7,780***	***23,280***	***66,530***	***120,400***	***337***	***666,500***



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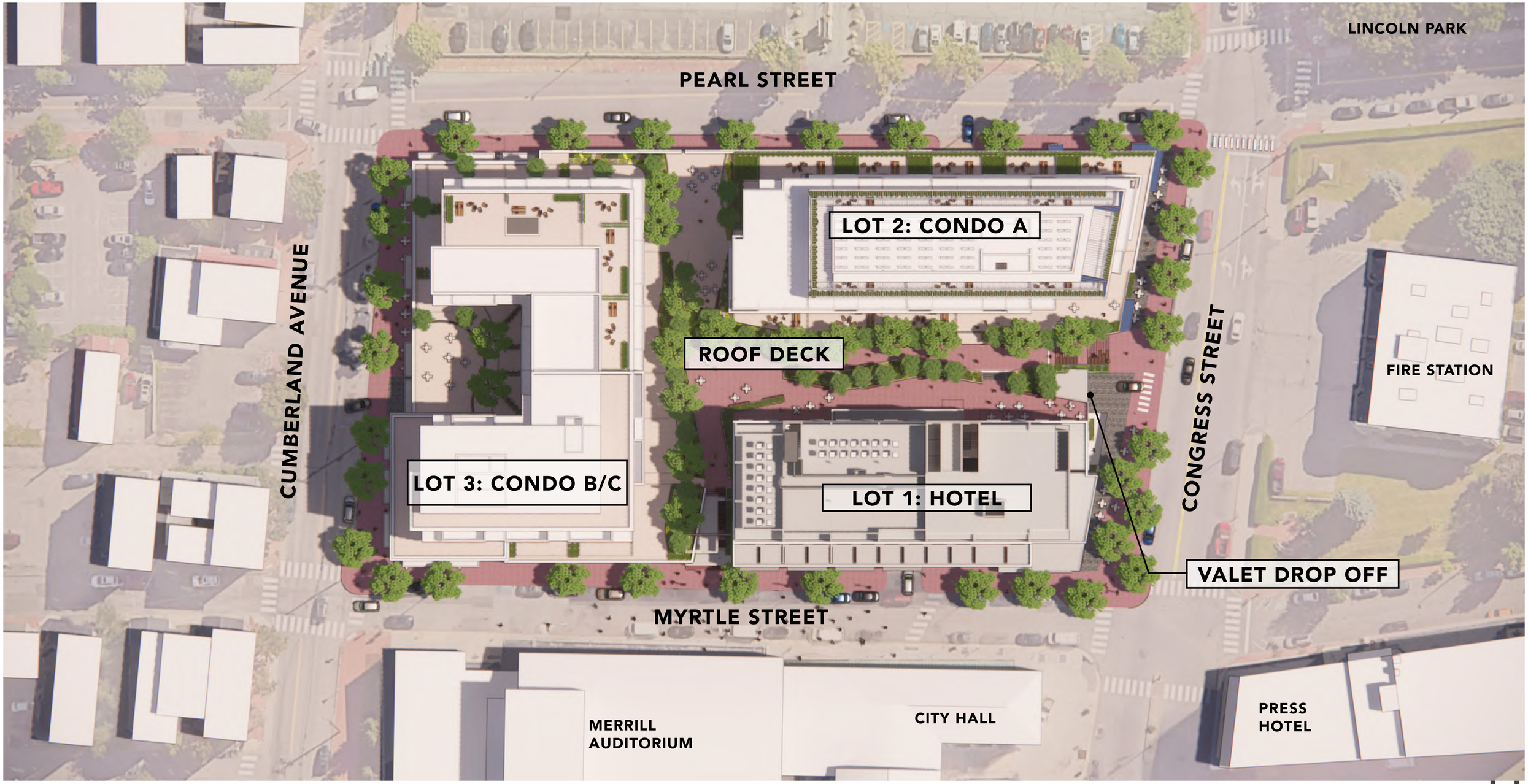
PROGRAM SUMMARY

*SEE SUBSEQUENT INDIVIDUAL SITE PLAN APPLICATIONS FOR DETAILS ON FENESTRATION, MATERIALS, AND COLOR

cbt

SITE PLAN


LINCOLN PARK
PEARL STREET
LOT 2: CONDO A
ROOF DECK
CUMBERLAND AVENUE
CONGRESS STREET
FIRE STATION
LOT 3: CONDO B/C
LOT 1: HOTEL
VALET DROP OFF
MYRTLE STREET
MERRILL AUDITORIUM
CITY HALL
PRESS HOTEL

LIGHTING FIXTURES LEGEND

= TOP: HOLOPHONE ESPL2 P20 30K XX T64
= MILD: HOLOPHONE ESL3 P20S 30K XXXXX T64

= A5: VP-2-72L-180-3K7-5QW

= B5: VP-2-72L-180-3K7-5QW

SITE PLAN KEY NOTES

1 RESET SALVAGED GRANITE CURB
2 GRANITE CURB TIP DOWN
3 FLUSH GRANITE CURB
4 2' X 6' TRUNCATED DOME PLATES
5 2' X 2' SOLID WHITE PAINT BARS, 2' APART, 8 ' WIDE
6 BRICK PAVERS
7 BRICK DRIVEWAY APRON
8 NEW TYPE 1 VERTICAL GRANITE CURB
9 LIGHT FIXTURE A - CITY STANDARD FIGURE X - SF
10 LIGHT FIXTURE B - CITY STANDARD FIGURE X - 6B
11 ASPHALT PAVING
12 CITY OF PORTLAND STANDARD MOTORCYCLE PARKING STRIPING
13 REGRADE WITH GRAVEL IN DEMOLISHED BUILDING AREAS
14 12" SOLID WHITE PAINTED STOP BAR
15 RAISED GRANITE CURB TREE WELL
16 MYRTLE STREET = ONE WAY SIGN
17 1 HOUR PARKING SIGN
18 NOT USED
19 NOT USED
20 2 HOUR PARKING SIGN
21 NO PARKING SIGN + LEFT ARROW
22 NOT USED
23 PASSENGER LOADING ZONE SIGN + RIGHT ARROW
24 PASSENGER LOADING ZONE SIGN + LEFT ARROW
25 GRANITE BLOCK SEAT WALL
26 BOLLARD

PEARL STREET
CUMBERLAND AVENUE
CONGRESS STREET
MYRTLE STREET
LIMIT OF SIDEWALK CONSTRUCTION
NEW GALVANIZED W-BEAM GUARDRAIL TO MATCH EXISTING, TYP.
EXISTING GALVANIZED W-BEAM GUARDRAIL TO REMAIN
(26) 9'X18' PARKING SPACES
(14) 9'X18' PARKING SPACES
(20) 9'X18' PARKING SPACES
(11) 9'X18' PARKING SPACES
(14) 9'X18' PARKING SPACES
(19) 9'X18' PARKING SPACES
(5) 9'X18' PARKING SPACES
(11) 9'X15' COMPACT SPACES
(12) 9'X18' PARKING SPACES
(12) 9'X18' PARKING SPACES
(16) 9'X18' PARKING SPACES
BENCHES 16" WIDE (TYP.)
LOT 1
PROPOSED HOTEL
BUILDING
MODULAR BLOCK RETAINING WALL WITH PEDESTRIAN GUARDRAIL
EXISTING TUNNEL I/ER TO REMAIN
DYCL
SWALL

GRAPHIC SCALE
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

PRELIMINARY

DANIEL L RILEY PE 9967

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

SITE PLAN - INTERIM PARKING
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST, SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 20'
PROJECT	19371-01

SHEET14 OF23

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385 CONGRESS HOTEL | PERSPECTIVE VIEWS

AERIAL OF HOTEL ENTRANCE OFF CONGRESS AVENUE

PERSPECTIVE FROM CONGRESS AVE

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SHEET A14

385 CONGRESS HOTEL | BUILDING MATERIALS

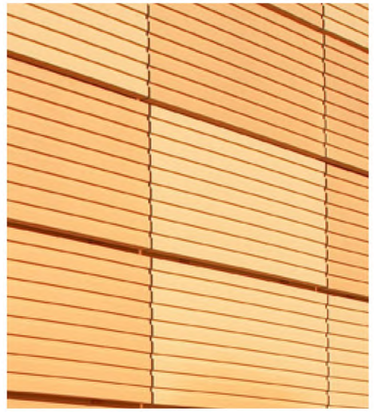
MASONRY DETAIL

BR-01 GLAZED MASONRY BRICK

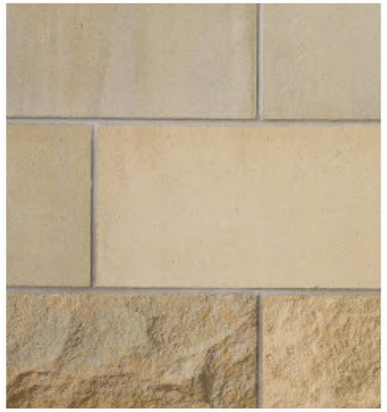
CURTAIN WALL

MTL-02 METAL PANEL

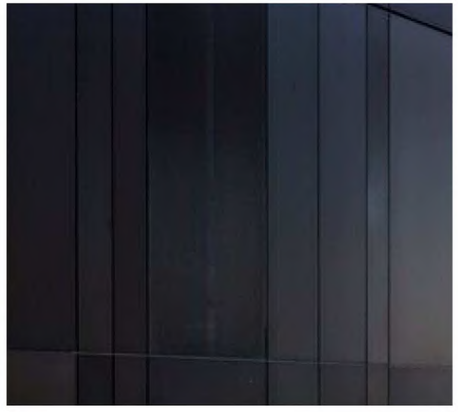
MTL-03 METAL FINS
PERFORATED METAL



TC-01 TERRA COTTA
TILE RAINSCREEN



ST-01 LIMESTONE MASONRY
ARRISCRAFT OAKRIDGE



MTL-01 METAL PANEL

ART INSTALLATION

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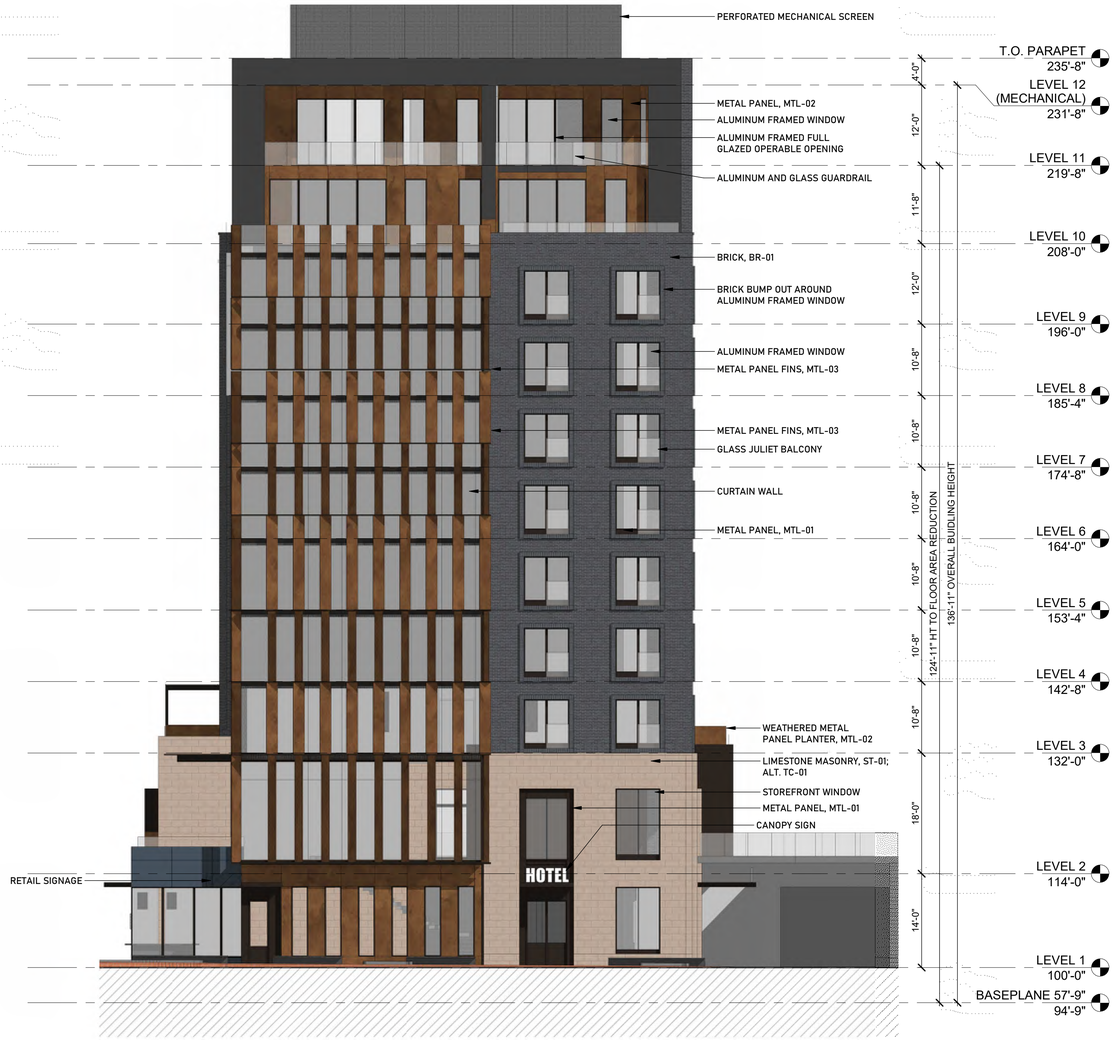
385 CONGRESS HOTEL | BUILDING ELEVATION



EAST ELEVATION - CONGRESS AVENUE

3/32" = 1'-0"

0' 2' 5' 10' 20' 40'

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Denver, Colorado 80202

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SHEET A10

385 CONGRESS HOTEL | BUILDING ELEVATION

SOUTH ELEVATION - MYRTLE STREET

3/32" = 1'-0"

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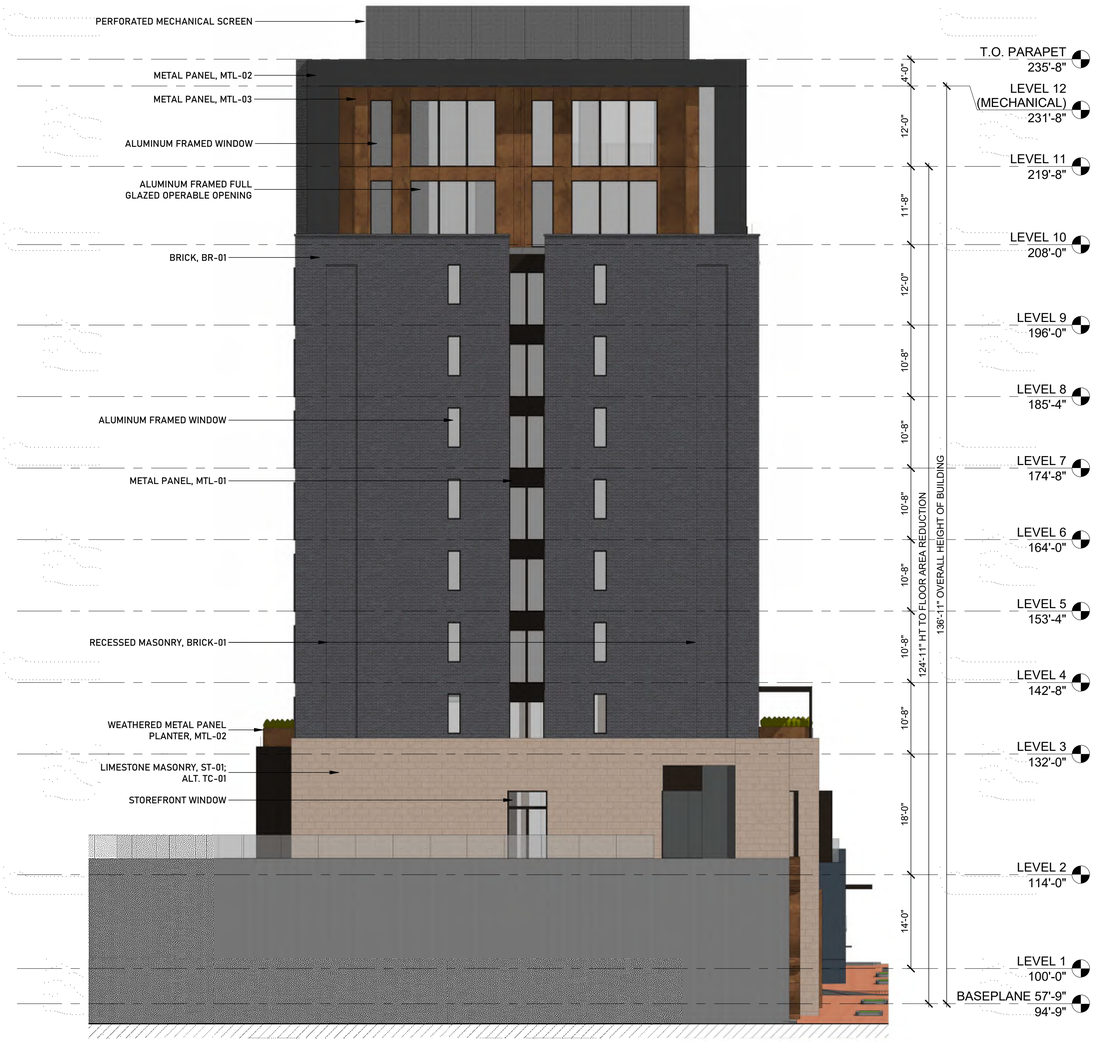
0' 2' 5' 10' 20' 40'

SHEET A11

385 CONGRESS HOTEL | BUILDING ELEVATION



WEST ELEVATION - SITE INTERIOR

3/32" = 1'-0"

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0' 2' 5' 10' 20' 40'

SHEET A12

385 CONGRESS HOTEL | BUILDING ELEVATION

NORTH ELEVATION - SITE INTERIOR

3/32" = 1'-0"

0' 2' 5' 10' 20' 40'

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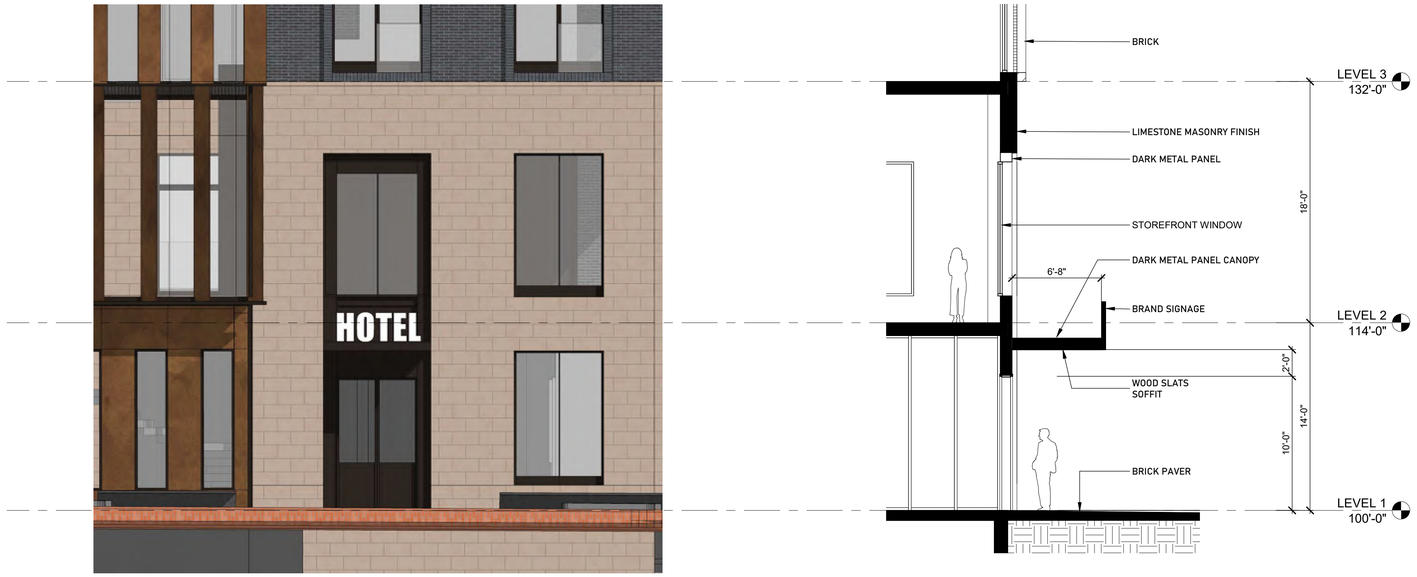
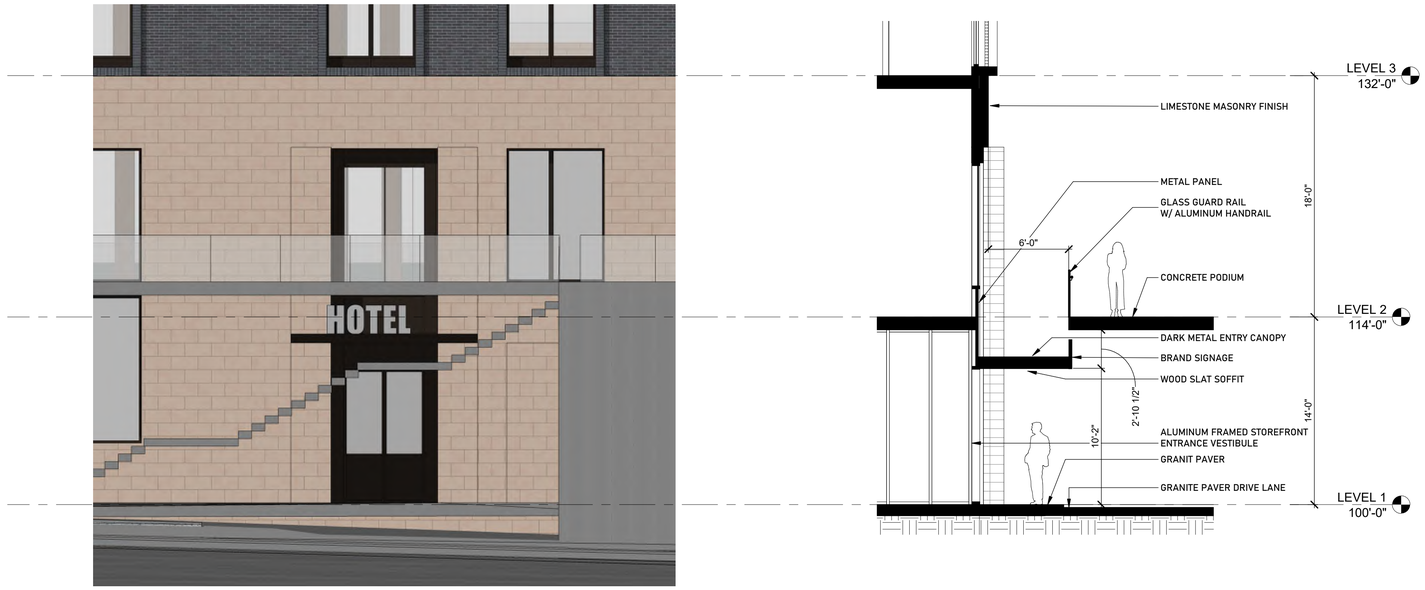
SHEET A13

385 CONGRESS HOTEL | ENLARGED BUILDING ELEMENTS - HOTEL ENTRANCE



HOTEL ENTRANCE FROM CONGRESS
3/16" = 1'-0"



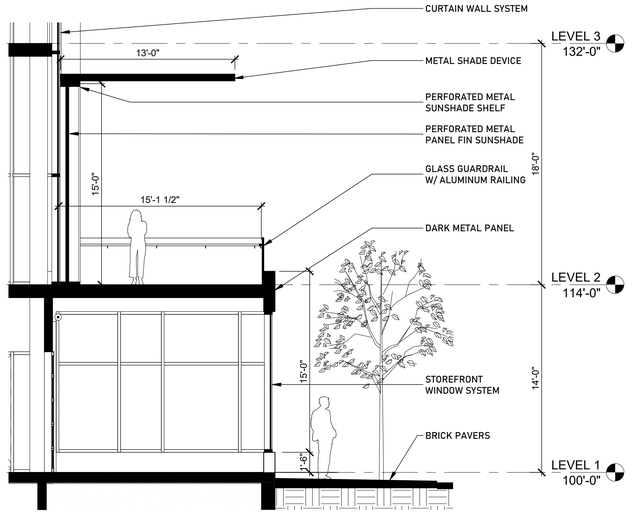
HOTEL ENTRANCE FROM VALET PARKING
3/16" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

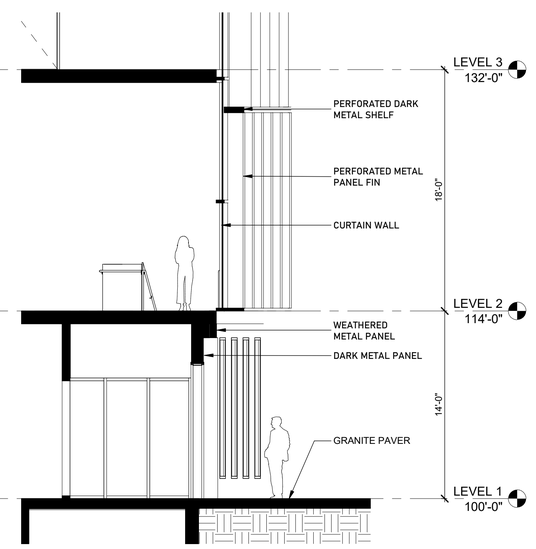
Fathom
COMPANIES

SHEET A15

385 CONGRESS HOTEL | BUILDING ELEMENTS - MYRTLE STREET



MYRTLE STREET RETAIL
3/16" = 1'-0"



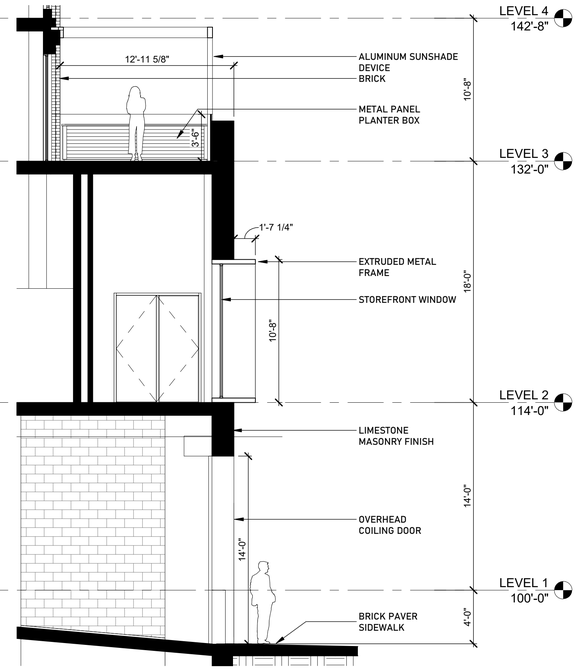
RETAIL ENTRANCE - CONGRESS STREET
3/16" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom
COMPANIES

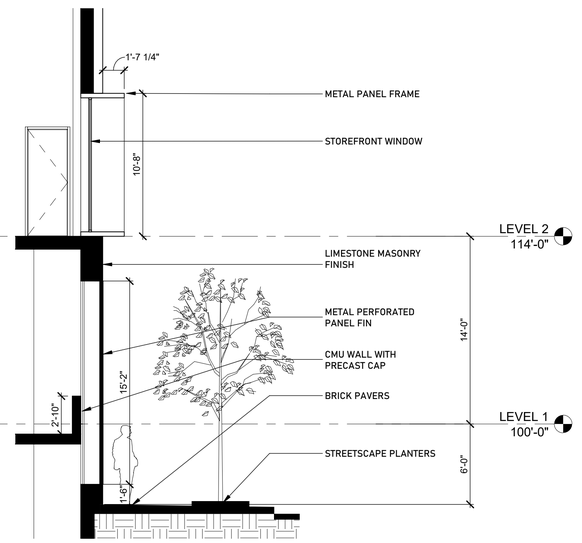
SHEET A16

385 CONGRESS HOTEL | BUILDING ELEMENTS - MYRTLE STREET



PARKING GARAGE ENTRANCE FROM MYRTLE

3/16" = 1'-0"



PARKING GARAGE FROM MYRTLE

3/16" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom COMPANIES

SHEET A17

LIGHTING FIXTURES LEGEND

= TOP: HOLOPHONE ESPL2 P20 30K XX T64
= MID: HOLOPHONE ESL3 P20S 30K XXXXX T64

= A5: VP-2-72L-180-3K7-5QW

= B5: VP-2-72L-180-3K7-5QW

SITE PLAN KEY NOTES

1 RESET SALVAGED GRANITE CURB
2 GRANITE CURB TIP DOWN
3 FLUSH GRANITE CURB
4 2' X 6' TRUNCATED DOME PLATES
5 2' X 2' SOLID WHITE PAINT BARS, 2' APART, 8 ' WIDE
6 BRICK PAVERS
7 BRICK DRIVEWAY APRON
8 NEW TYPE 1 VERTICAL GRANITE CURB
9 LIGHT FIXTURE A - CITY STANDARD FIGURE X - SF
10 LIGHT FIXTURE B - CITY STANDARD FIGURE X - 6B
11 ASPHALT PAVING
12 CITY OF PORTLAND STANDARD MOTORCYCLE PARKING STRIPING
13 REGRADE WITH GRAVEL IN DEMOLISHED BUILDING AREAS
14 12" SOLID WHITE PAINTED STOP BAR
15 RAISED GRANITE CURB TREE WELL
16 MYRTLE STREET = ONE WAY SIGN
17 1 HOUR PARKING SIGN
18 NOT USED
19 NOT USED
20 2 HOUR PARKING SIGN
21 NO PARKING SIGN + LEFT ARROW
22 NOT USED
23 PASSENGER LOADING ZONE SIGN + RIGHT ARROW
24 PASSENGER LOADING ZONE SIGN + LEFT ARROW
25 GRANITE BLOCK SEAT WALL
26 BOLLARD

PEARL STREET
DYCL
LIMIT OF SIDEWALK CONSTRUCTION
(26) 9'X18' PARKING SPACES
NEW GALVANIZED W-BEAM GUARDRAIL TO MATCH EXISTING, TYP.
EXITING GALVANIZED W-BEAM GUARDRAIL TO REMAIN
(11) 9'X18' PARKING SPACES
(14) 9'X18' PARKING SPACES
(20) 9'X18' PARKING SPACES
(14) 9'X18' PARKING SPACES
(19) 9'X18' PARKING SPACES
(5) 9'X18' PARKING SPACES
EXISTING GALVANIZED W-BEAM GUARDRAIL TO REMAIN
BENCHES 16" WIDE (TYP.)
(11) 9'X15' COMPACT SPACES
(12) 9'X18' PARKING SPACES
(12) 9'X18' PARKING SPACES
(16) 9'X18' PARKING SPACES
CUMBERLAND AVENUE
CONGRESS STREET
LOT 1
PROPOSED HOTEL
BUILDING
MODULAR BLOCK RETAINING WALL WITH PEDESTRIAN GUARDRAIL
MYRTLE STREET
EXISTING TUNNEL I/ER TO REMAIN

GRAPHIC SCALE
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

PRELIMINARY

DANIEL L RILEY PE 9967

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

SITE PLAN - INTERIM PARKING
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST, SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 20'
PROJECT	19371-01

SHEET14 OF23

F:\Projects\19000\19371\DWG\Design\Lot 11\19371 - S_P1.dwg - 8/11/2022 8:17 AM - DAVID BLANCHARD

AMENITY TERRACE PHASING

PHASE 1 (LOT 1 HOTEL)

cbt

AMENITY TERRACE PHASING

PHASE 1 ALT (LOT 2 CONDO A)

TEMPORARY GARAGE SCREENING PROVIDES OPPORTUNITY FOR ARTWORK

cbt

AMENITY TERRACE PHASING

PHASE 2 (LOT 2 CONDO A)

TEMPORARY GARAGE SCREENING PROVIDES OPPORTUNITY FOR ARTWORK

cbt

AMENITY TERRACE PHASING

PHASE 3&4 (LOT 3 CONDO B/C)

September 26, 2022
19371-01

Dear Neighbor:

Please join us for a virtual neighborhood meeting to discuss The Fathom Companies' proposed hotel development at 385 Congress Street; located at the corner of Congress Street and Myrtle Street in Portland.

The proposed development plan anticipates a 152-room full-service hotel with nine (9) condominium units on the corner of Myrtle and Congress Street and is the first phase of a Master Plan of Development approved by the City of Portland Planning Board in August 2022.

The City of Portland Land Use Code requires that neighboring property owners within 500 feet of the site and residents on an "interested parties list" be invited to participate in this neighborhood meeting. Attendance will be recorded and minutes of the meeting will be taken. Both the attendance list and minutes will be submitted to the Planning Department.

Meeting Date: **Thursday, October 6, 2022**
Meeting Time: **5:00 PM**
Meeting Location**: The Press Hotel 119 Exchange St, Portland, ME 04101**

If you have any questions, please call or email Daniel Riley at Sebago Technics, Inc. (207) 200-2080, driley@sebagotechnics.com.

Should you wish to offer additional comments on this proposed development, you may forward them by e-mail to planning@portlandmaine.gov or by mail to the Planning and Urban Development Department, Planning Division, 4th Floor, 389 Congress Street Portland, ME 04101

Sincerely,

SEBAGO TECHNICS, INC.

Daniel L. Riley, P.E.
Vice President, Engineering

DLR:

141 PLEASANT STREET, LLC

307 MAIN ST
HANOVER, MA 02339

150 PEARL STREET, LLC

PO BOX 4271
PORTLAND, ME 04101

150 PEARL STREET, LLC

225 CUMBERLAND AVE
PORTLAND, ME 04101

161 PEARL STREET, LLC

161 PEARL ST # 2
PORTLAND, ME 04101

223 CUMBERLAND AVENUE, LLC

225 CUMBERLAND AVE
PORTLAND, ME 04101

227 CUMBERLAND AVENUE, LLC

PO BOX 4271
PORTLAND, ME 04101

385 CONGRESS, LLC

2730 TRANSIT RD
WEST SENECA, NY 14224

41 CHESTNUT, LLC

PO BOX 805
BRUNSWICK, ME 04011

42 WILMOT STREET, LLC

225 CUMBERLAND AVE
PORTLAND, ME 04101

50-52 WILMOT STREET, LLC

PO BOX 4271
PORTLAND, ME 04101

54 CHESTNUT STREET, LLC

460 BAXTER BLVD
PORTLAND, ME 04103

56 WILMOT STREET, LLC

PO BOX 4271
PORTLAND, ME 04101

57 CHESTNUT STREET, LLC

460 BAXTER BLVD
PORTLAND, ME 04103

EVAN ANDERSON
21 CHESTNUT ST # 2W
PORTLAND, ME 04101

APOSTOLIC FAITH ASSEMBLY

331 CONGRESS ST
PORTLAND, ME 04101

ASHBY TEAM, LLC

415 CONGRESS ST STE 204
PORTLAND, ME 04101

AVESTA UNITY VILLAGE LP

307 CUMBERLAND AVE
PORTLAND, ME 04101

PIERRE AVIGNON
723 ISLAND AVE
LONG ISLAND, ME 04050

DONALD BAILEY
21 CHESTNUT ST # 406
PORTLAND, ME 04101

PRUDENCE BARRY
21 CHESTNUT ST # 6W
PORTLAND, ME 04101

BAYSIDE CONDO

164 PEARL ST
PORTLAND, ME 04101

BOODILLY, LLC

158 WOODVILLE RD
FALMOUTH, ME 04105

TANIA BOWEN
164 PEARL ST # B
PORTLAND, ME 04101

LEAH BURKE
237 CUMBERLAND AVE # 2
PORTLAND, ME 04101

PETER BUSQUE
21 CHESTNUT ST # 08W
PORTLAND, ME 04101

CASTANEA PRIME, LLC

PO BOX 24
FRIENDSHIP, ME 04547

CHESTNUT STREET GARAGE, LLC

120 EXCHANGE ST
PORTLAND, ME 04101

CHESTNUT STREET LOFTS

21 CHESTNUT ST
PORTLAND, ME 04101

CHESTNUT STREET LOFTS, LLC

58 HANNAFORD COVE RD
CAPE ELIZABETH, ME 04107

CHESTNUT STREET PARKING CONDO

134 LANCASTER ST
PORTLAND, ME 04101

LOUIS CHRISTEN
239 CUMBERLAND AVE
PORTLAND, ME 04101

STEPHANIE COTSIRILOS
21 CHESTNUT ST # 8N
PORTLAND, ME 04101

BRUCE COULLARD
110 MARGINAL WAY # 241
PORTLAND, ME 04101

CUMBERLAND COUNTY OF

142 FEDERAL ST
PORTLAND, ME 04101

CUMBERLAND PEARL CONDO

241 CUMBERLAND AVE
PORTLAND, ME 04101

TERESA CURTIN
21 CHESTNUT ST # 5W
PORTLAND, ME 04101

EMILY DEGRAY
172 BOYCE ST
AUBURN, MA 01501

ALBERT DELANEY
140 OXFORD ST APT 1
PORTLAND, ME 04101

DOWTOWN LODGING, LLC

PO BOX 10250
PORTLAND, ME 04104

ERGUN DUNDAR
21 CHESTNUT ST # 2NW
PORTLAND, ME 04101

EARLE W NOYES & SONS

PO BOX 938
PORTLAND, ME 04104

AVNER EISENBERG
29 CITY POINT RD
PEAKS ISLAND, ME 04108

FEDERAL STREET PHOENIX, LLC

PO BOX 15372
PORTLAND, ME 04112

FIRST ASSEMBLY OF GOD CHURCH

243 CUMBERLAND AVE
PORTLAND, ME 04101

FIRST PARISH IN PORTLAND TRUSTEE

427 CONGRESS ST
PORTLAND, ME 04101

DANIEL FITZPATRICK
PO BOX 143
WESTBROOK, ME 04098

ROSEMARY FLACH
45 EASTERN PROMENADE # BG
PORTLAND, ME 04101

LORINDA FRAZER
123 HOPE RD
LINCOLNVILLE, ME 04849

GIOVANNI FRISONE
22 LANCESTER RD
CROMWELL, CT 06416

JULIA GAULKE
60 BOLTON ST
PORTLAND, ME 04102

JULIE GOFF
136 OXFORD ST
PORTLAND, ME 04101

MICHAEL GUIGLI
21 CHESTNUT ST # 701
PORTLAND, ME 04101

HAIR ETC, LLC

705 WEBBS MILLS RD
RAYMOND, ME 04071

LARRY HAMM
11800 SUNSET HILLS RD # 820
RESTON, VA 20190

ALICIA HARDING
21 CHESTNUT ST
PORTLAND, ME 04101

HELM PROPERTY GROUP LLC

4420 GIBBONS ST # D
VANCOUVER, WA 98661

ANGELA HENRY
239 CUMBERLAND AVE
PORTLAND, ME 04101

ADAM HILL
PO BOX 4242
PORTLAND, ME 04101

HOWLES CORPORATION

PO BOX 938
PORTLAND, ME 04104

HTLV PORTLAND, LLC

101 CALIFORNIA ST STE 980
SAN FRANCISCO, CA 94111

CURTIS HUSSEY
147 SAWYER ST
SOUTH PORTLAND, ME 04106

CARA JORDAN
9 MITCHELLWOOD DR
FALMOUTH, ME 04105

CHARLES KAUFMANN
21 CHESTNUT ST # 4S
PORTLAND, ME 04101

MARILYN KELLY
21 CHESTNUT ST # 702
PORTLAND, ME 04101

KINGSLEY ENTERPRISES

225 CUMBERLAND AVE
PORTLAND, ME 04101

CONOR MAHON
21 CHESTNUT ST # 5SE
PORTLAND, ME 04101

MAINESCAPE PROPERTIES LLC

92 EXCHANGE ST 2ND FLOOR
PORTLAND, ME 04101

MASONIC TRUSTEES OF PORTLAND

415 CONGRESS ST
PORTLAND, ME 04101

JAMES MCDONALD
696 QUAKER RIDGE RD
CASCO, ME 04015

THOMAS MICHAUD
50 MYRTLE ST
PORTLAND, ME 04101

MOJO PROPERTIES, LLC

536 WASHINGTON AVE
PORTLAND, ME 04103

VICTOR MORREL
21 CHESTNUT ST # 202
PORTLAND, ME 04101

JEAN MURPHY
PO BOX 10045
PORTLAND, ME 04104

MUNIRA NAQUI
203 SHERIDAN ST
PORTLAND, ME 04101

DANTON NYGAARD
21 CHESTNUT ST # 401
PORTLAND, ME 04101

ONETEN EXCHANGE, LLC

254 COMMERCIAL ST STE 118
PORTLAND, ME 04101

JESSICA OUELLETTE
164 PEARL ST # A
PORTLAND, ME 04101

JOSEPH PALACCI
102 EXCHANGE ST
PORTLAND, ME 04101

PEARL CUMBERLAND, LLC

ONE CITY CENTER 4TH FLOOR
PORTLAND, ME 04101

PEARL MANOR, LLC

225 CUMBERLAND AVE
PORTLAND, ME 04101

PO SQUARE BUILDING, LLC

120 EXCHANGE ST
PORTLAND, ME 04103

MICHAEL POLLASTRI
235 POND ST
COHASSET, MA 02025

PORTLAND BOYS CLUB ASSOC

277 CUMBERLAND AVE
PORTLAND, ME 04101

PORTLAND HOUSING AUTHORITY

14 BAXTER BLVD
PORTLAND, ME 04101

REDFERN DOWNTOWN, LLC

PO BOX 8816
PORTLAND, ME 04104

RICH BUILDING, LLC

104 EXCHANGE ST
PORTLAND, ME 04101

JESSE SAWYER
21 CHESTNUT ST # 302
PORTLAND, ME 04101

JAMES SCHWELLENBACH
21 CHESTNUT ST # 602
PORTLAND, ME 04101

AURELIA SCOTT
21 CHESTNUT ST # 6N
PORTLAND, ME 04101

STEPHEN SEARS
95 AMBROSE COVE
BELGRADE, ME 04917

THOMAS SEPULVERES
51 MYRTLE ST
PORTLAND, ME 04101

THOMAS SEPULVERES
43 MYRTLE ST
PORTLAND, ME 04101

DOUGLAS SMITH
21 CHESTNUT ST # 2N
PORTLAND, ME 04101

AARON STEPHAN
142 PEARL ST
PORTLAND, ME 04101

GARRETT TILTON
21 CHESTNUT ST # 3N
PORTLAND, ME 04101

JEFFREY TITCOMB
PO BOX 835
FRYEBURG, ME 04037

TOP OF EXCHANGE, LLC

42 MARKET ST
PORTLAND, ME 04101

TRIPOD HOLDINGS, LLC

1 DANA ST
PORTLAND, ME 04101

JOHN VANHOEWYK
21 CHESTNUT ST # 301
PORTLAND, ME 04101

WARDS CAPITAL, LLC

973 FOREST AVE STE 2
PORTLAND, ME 04103

JAN WILLIAMS
21 CHESTNUT ST # 8S
PORTLAND, ME 04101

SARA YINDRA
21 CHESTNUT ST # 5N
PORTLAND, ME 04101

JOHN YORK
58 WILMOT ST
PORTLAND, ME 04101

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,

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Anthony Donovan
27 Riverview Street
Portland, ME 04102

Barbara Wood
125 Emery Street
Portland, ME 04102

David Nowlin
215 Oxford Street
Portland, ME 04102

Deb Keenan
28 Dorothy Street
Portland, ME 04103

Devon Platte
26 North Street, 33
Portland, ME 04101

Edward Suslovic
46 Kenwood Street
Portland, ME 04103

Janice Carpenter
9 W. Commonwealth Drive
Portland, ME 04103

Jennifer Munson
389 Congress Street, 4th Floor
Portland, ME 04101

Kaplan Thompson Architects
Jesse Thompson
100 Exchange Street
Portland, ME 04103

Lynn Clarkson
145 Marlborough Road
Portland, ME 04103

Mary Griffity
6 E. Prom, Unit 2
Portland, ME 04103

Nancy Bartlett
PO Box 7965
Portland, ME 04112

Pam Burnside
64 Lester Drive
Portland, ME 04103

Paul Dubois
1915 Congress Street
Portland, ME 04102

Peggy Morin
66 Farnham Street
Portland, ME 04101

Philip Haughey
1660 Soldiers Field Road
Boston, MA 02135

Priscilla LaVallee
190 US Route 1, Unit 2
Falmouth, ME 04105

Waste Management of Maine
Rebecca Halla
2000 Forest Avenue
Portland, ME 04103

Glenn Cummings
24 Nevens Street
Portland, ME 04103

Robert Hains
250 Holm Avenue
Portland, ME 04102-1208

Financial Capability

The proposed project is part of a larger development. This portion of the project which involves the construction of a hotel will be developed and financed by The Fathom Companies (dba Fathom Congress, LLC).

Attached please find the following letter as proof of financial capability:

- Letter dated February 1, 2022 from Mascoma Bank for Fathom Congress LLC.

SENT VIA EMAIL

February 1, 2022

City of Portland
Planning Board
385 Congress Street
4th Floor
Portland, Maine 04101

Re: Statement of Financial Capacity: Fathom Congress, LLC, as part of Fathom Development, LLC, and Mr. James Brady.

To Whom It May Concern,

We are pleased to confirm that Fathom Congress, LLC, as part of Fathom Development, LLC, and Mr. James Brady possess the full financial capacity and experience to successfully finance the proposed development to be located at 385 Congress Street, Portland, Maine 04101.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Tad Atwell
Tad.Atwell@MascomaBank.com
Senior Vice President
48 Free Street, Portland, Maine

Att. HH

Zachary Powell <zpowell@portlandmaine.gov>

FW: Garage Entry Study

joedasco@comcast.net <joedasco@comcast.net> Mon, Sep 12, 2022 at 12:26 PM
To: Kevin Kraft <kkraft@portlandmaine.gov>, zpowell@portlandmaine.gov

Kevin/Zach,

We have been working on our plans for the Condo Building on the corner of Pearl and Congress and want to make a minor change as compared to the Master Plan as it relates to the access to the lower level of the garage. The change we would like to submit has the access coming off of Pearl Street (please see attached and below) vs. from Cumberland as approved. This has the following advantages:

Cumberland is a much busier street and this would relieve any potential back up as owners and or the hotel guests wait for a gate or door to open.

This change would also keep additional space available for retail/commercial opportunities along Cumberland which is a more appropriate and desirable location.

This condition would alleviate the problem of temporary access to the lower level during the build out of the Cumberland phase of the project.

The only disadvantage is that we lose approximate 4 parking spaces but we still meet the zoning requirements.

It is my understanding that Staff can approve minor changes to the master plan if that is even required since site plans are allowed to deviate from master plans. Please see the attached plans and elevation to get a better understanding of what we are looking to do .

Can you please let me know how you would like us to approach this change as we are getting ready to submit our site plan application for this phase of the project.

Thank you,

Joe

Joseph Dasco

Reger Dasco Properties

383 Commercial Street, Suite D

Portland, ME 04101

413-244-9092

From: Dylan Dasco
Sent: Wednesday, August 24, 2022 3:37 PM
To: Joe Dasco <joedasco@comcast.net>; Henry Weinberg <weinberg@cbtarchitects.com>; 'Dan Riley' <driley@sebagotechnics.com>
Cc: Jim Monteverde <Monteverde@CBTarchitects.com>; 185010@cbtarchitects.tonicdm.com; Christopher Hill <Hill@CBTarchitects.com>; kevin.kelly@atlasboston.com
Subject: Garage Entry Study

Here is an updated version of the new garage entry study. I modified some of the slopes so that the entry ramp was not too steep.

I also included the driveway separation chart from the Technical Design Manual on the level 1 plan. As long as the speed limit on Pearl St. is not greater than 30mph we should be fine with this entry meeting the separation requirement. I assume within the city it's all 25mph. There is a sign at the corner of Cumberland that says 25pmh. Also, the curb cut is shown as 20' wide which also is below the max allowable of 24'. I also included a rendered elevation of this façade for reference.

Let me know if we should add or change anything to this package before speaking with the city.

Dylan Dasco RA

Associate

617.646.5116

cbt

One Constitution Road, Suite 200
Boston, MA 02129

cbtarchitects.com

Please note that our address has changed

Virus-free.www.avast.com

2022_08_24_385-Congress_Garage-Study.pdf
3162K

8/24/2022 3:06:27 PM

cbt

LEVEL 0 - PLAN

PORTLAND - 385 CONGRESS STREET

8/11/22 1" = 20'-0"

0' 10' 20' 40'

N

Speed Limit (mph)	Minimum Separation* (feet)
25 or less	100
30	125
35	150
40	185
45	230

PEARL ST.

MYRTLE ST.

CUMBERLAND AVE.

CONGRESS ST.

PHASE 3 (CONDO B)

PHASE 3 (CONDO A)

PHASE 2 (CONDO A)

PHASE 1 (HOTEL)

PHASE 3 (CONDO B)

PHASE 1 (HOTEL)

140' - 0"

2BR

2BR

1BR

1BR

1BR

1BR

0BR

2BR

BOH

3BR

2BR

STORAGE

OPEN TO BELOW

PARKING

PARKING

PARKING

PARKING

2.68%

2.68%

10.53%

62' - 0"

62' - 0"

62' - 0"

62' - 0"

62' - 0"

63' - 4"

59' - 0"

59' - 0"

59' - 0"

61' - 0"

61' - 0"

62' - 0"

63' - 0"

58' - 0"

PACKAGE ROOM

LOADING/TRASH

FIRE COMMAND

RETAIL

RETAIL

RETAIL

STORAGE

LOBBY/
AMENITIES

ELEVATOR LOBBY

LOADING/TRASH

RETAIL

20' - 0"

28' - 0"

24' - 0"

177' - 8"

109' - 8"

LEVEL 1 - PLAN

PORTLAND - 385 CONGRESS STREET

8/11/22 1" = 20'-0"

0' 10' 20' 40'

N

cbt

8/24/2022 3:06:39 PM

385

Technical Capability

There is a highly qualified team of developer, architects, and engineers that have been compiled for the proposed project.

The proposed hotel is to be developed by Fathom Companies (dba Fathom Congress, LLC). The Fathom Companies is a fully integrated real estate development, management, and investment company based in Falmouth Maine. Fathom has developed and currently operates several hotel and commercial properties in Portland including the Press Hotel, 80 Exchange Street and Canopy by Hilton Waterfront Hotel

Architect
Architectural services for the hotel are to be provided by Johnson Nathan Strohe.

Johnson Nathan Strohe (JNS) is a Denver Colorado base architectural firm with over 26 years of experience. Theirs is a diverse team comprised of architects and designers that have competed a wide range of projects across the country. Please see the additional information included as part of this exhibit for additional qualification information.

Civil/Survey/Permitting
Civil engineering, surveying, and permitting services are being provided by Sebago Technics.

Sebago Technics, Inc. (STI) is a multi-disciplined engineering firm with 40 years of experience, that offers a wide range of services specializing in land development, planning, permitting and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general civil engineering, road and utility infrastructure design, construction management, permitting, landscape architecture, soil science, wetlands science, land surveying, and environmental engineering.

Please see the attached STI resumes for Steve Doe, RLA, Dan Riley, P.E.

Completed Portfolio Fall 2021

info@fathomcompanies.com

www.fathomcompanies.com

207.808.8787

Fathom Companies is a fully integrated real estate development, management, and investment company focusing on exceptional properties in secondary and tertiary markets. We seek to add value to mixed-use, office, retail and hospitality facilities through thoughtful design and fastidious attention to detail. Our hospitality management branch brings decades of experience with some of the most successful brands in the industry. We aim to foster an environment of empowerment, creativity and teamwork.

The Press Hotel

Portland, Maine

- Historic Rehabilitation Adaptive Reuse

- Former Newspaper Headquarters of the Portland Press Herald

- 110 Guest Room Boutique Hotel with 100 Seat Restaurant

- Ranked #1 and RevPAR leader in the market

- Opened May 2015

The opening marked the City of Portland's first lifestyle boutique hotel, breathing new life into a cherished, historic city landmark.

Design & Construction Team:

- Architype Architect
- Wright Ryan Construction

The Press Hotel

80 Exchange Street

Portland, Maine

- Historic Rehabilitation
- 15,000 Square Feet
- 4 Story Retail and Class A Office Space
- Opened January 2019

The project set out to bring back the once glorious building and restore its place in the urban fabric as a good neighbor and leader in design, and community development.

4th Floor Fathom Office at 80 Exchange Street

Design & Construction Team:

- Briburn Architects
- Warren Construction

Canopy by Hilton Portland Waterfront Hotel

Portland, Maine

- Ground Up Construction
- Canopy Lifestyle Brand by Hilton
- 135 Guestroom Lifestyle Hotel with indoor/outdoor rooftop bar and restaurant overlooking Casco Bay.
- Opened June 2021

Design & Construction Team:

- HKS Architects
- Baskervill Architects
- Cianbro Construction

Luna Rooftop Bar at Canopy Portland Waterfront Hotel

JOHNSON NATHAN STROHE

PRAGMATIC BEAUTY

ARCHITECTURE QUALIFICATIONS

HOSPITALITY

JOHNSON NATHAN STROHE

is a Denver-based architectural and interior design firm that specializes in delivering integrated solutions for hospitality, multifamily and mixed-use projects, from ground-up to historic preservation, renovation and adaptive reuse.

Over the last 26 years, our diverse team of architects and designers has completed hundreds of projects across the country with an equal focus on creativity, context, budget and program. The result is award-winning spaces that deliver unique and inspiring experiences, support the end user and deliver a return for the investor.

PRAGMATIC BEAUTY™

Our design philosophy blends creativity and practicality to deliver compelling environments that are both aesthetically striking and thoroughly functional for their intended use. It's what we call Pragmatic Beauty™. We use this philosophy as a guiding principle that allows us to innovate through challenges, work collaboratively with the teams and optimize pragmatism and beauty.

HOSPITALITY EXPERIENCE

Our niche expertise in hospitality fosters responsive, creative design solutions that meet both schedule and budget demands through a fully integrated service model. Through our context-based design process, we consider the project's long-term impact on the community and environment, creating added value for clients and residents alike. By establishing close relationships with partners, we remain keenly focused on every phase of the project in order to ensure it meets our rigorous quality and client service expectations.

Our expert team has designed more than 80 boutique and corporate-branded hotels across the country, including award-winning projects like The Crawford Hotel at Denver Union Station, The Perry Hotel Key West and The Maven Hotel at Dairy Block (Denver).

PROFESSIONAL SERVICES INCLUDE:

Programming | Historic Preservation | Entitlement Leadership | Complete Architectural Services | Sustainable / LEED Certified Design
Interior Design | Feasibility and Yield Studies | Construction Value Strategies | Construction Administration | Post-Construction Services

NICOLE NATHAN

AIA | NCARB | LEED AP

PARTNER

Nicole Nathan is a creative visionary with more than 20 years of experience as a design architect creating some of the most dynamic spaces in Denver and across the country. As a Partner at JNS, Nicole leads the firm's architectural and interior design studios, focusing on hospitality, urban mixed-use and housing projects. Nicole's leadership throughout her 19 years with the firm has helped grow JNS into a top architecture and interior design firm in the region.

NATIONAL COUNCIL OF ARCHITECTURAL REGISTRATION BOARDS (NCARB)

U.S. GREEN BUILDING COUNCIL

URBAN LAND INSTITUTE (ULI)

LICENSED ARCHITECT
Licensed in 6 States

MASTER OF ARCHITECTURE
University of Illinois
at Urbana-Champaign

BACHELOR OF ENVIRONMENTAL DESIGN
University of Colorado at Boulder

TOBIAS STROHE

AIA | LEED AP

PARTNER

As a Partner at JNS, Tobias Strohe contributes to the firm's technical and creative direction. Tobias, who has 25 years of professional experience, ensures projects meet JNS' high standards, collaborating with all partners and teams to create pragmatically beautiful solutions. His expertise spanning the entire spectrum of the architectural industry is balanced with an acute attention to detail.

DOWNTOWN DENVER PARTNERSHIP
Leadership Program

U.S. GREEN BUILDING COUNCIL

AIA HISTORIC RESOURCES COMMITTEE

CLEWORTH ARCHITECTURAL LEGACY

LICENSED ARCHITECT
Colorado | California

MASTER OF ARCHITECTURE
Technical University | Dresden, Germany

ERASMUS PROGRAM, EU
Technical University | Vienna, Austria

BACHELOR'S DEGREE
Technical University, Germany

LIZ MCDONALD

AIA | NCARB | LEED AP

PRINCIPAL

Liz McDonald is a dynamic leader known for designing spaces that achieve the perfect balance of creativity and practicality. As the firm's youngest Principal, Liz oversees JNS' multifamily division, leading projects at the forefront of housing trends. Over the last 14 years, Liz has honed her design skills, while her strong project management skills and meticulous attention to detail have earned her a reputation for delivering truly memorable spaces for clients.

NATIONAL COUNCIL OF ARCHITECTURAL REGISTRATION BOARDS (NCARB)

U.S. GREEN BUILDING COUNCIL

URBAN LAND INSTITUTE (ULI)

LICENSED ARCHITECT
Colorado

BACHELOR OF ARCHITECTURE
University of Kansas
School of Architecture

PROJECT LIST

FULL PORTFOLIO CAN BE SEEN ON
JNS.DESIGN

Hilton Garden Inn, Union Station - Denver, Colorado
Aspen St. Regis Resort - Aspen, Colorado
Blackstone Hotel - Chicago, Illinois
Canary Hotel - Santa Barbara, California
AC Hotel - Clayton, Missouri
Westin DIA - Denver, Colorado
Double Tree Cherry Creek - Denver, Colorado
Embassy Suite - Boulder Colorado
Double Tree at Lincoln Park - Greeley, Colorado
Halcyon Hotel Cherry Creek - Denver, Colorado
Hilton Charlotte Downtown - Charlotte, North Carolina
Hilton Garden Inn - Boulder, Colorado
Hotel Colorado - Glenwood Springs, Colorado
Hotel Monaco - Denver, Colorado
Hotel Monaco - Salt Lake City, Utah
Hyatt Centric Downtown - Denver, Colorado
Magnolia Hotel - Denver, Colorado
Magnolia Hotel - Omaha, Nebraska
Metro State Hotel & Learning Center, Springhill Suites - Denver, Colorado
Moxy Cherry Creek - Denver, Colorado
Springhill Suites - Oceanside, California
One York, AC Hotel - St Louis, Missouri
Oxford Hotel - Denver, Colorado
Renaissance Hotel Downtown - Pittsburgh, Pennsylvania
Marriott Courtyard Downtown - San Diego, California
Marriott Gaslamp Quarter - San Diego, California
Scioto Peninsula Hotel - Columbus, Ohio
Sheraton Downtown - Albuquerque, New Mexico
Sheraton Downtown - Denver, Colorado
The Crawford Hotel at Union Station - Denver, Colorado
The Maven Hotel at Dairy Block - Denver, Colorado
The Mercantile Residence Inn - Missoula, Montana
The Nines Hotel - Portland, Oregon
The Ramble Hotel - Denver, Colorado
The Vail Cascade - Vail, Colorado
Wine Country Inn - Palisades, Colorado

Introduction to Sebago Technics, Inc.

Year Established: 1981 (38 years in business)

About Us: Sebago Technics, Inc. (STI) is a consulting firm of more than 70 design professionals and technical staff providing services throughout New England. From the start, our business plan was simple: "to provide quality, cost-effective civil engineering services that are responsive to a customer's goals, schedule and budget." Our One Company capabilities and resources provide clients with experience and solutions to respond to their planning, permitting and design needs.

Structure: Employee-owned since 1998

Services: Civil, environmental, transportation & traffic engineering; municipal engineering; local/state/federal permitting and planning; land surveying & laser scanning; GIS; landscape architecture; environmental services; and natural resources.

Employee Disciplines:
Professional Engineers, Civil Engineers, Transportation Engineers, Landscape Architects, Professional Land Surveyors, Survey Technicians, CADD Designers, Wetland Scientist, Soil Scientist, Construction Inspectors, Community Planner, Environmental Scientists, GIS Professionals, Marketing, Administrative & Financial

Professional Focus: Sebago Technics provides engineering and planning services to both public and private sector clients. In the municipal and government sectors we have provided multiple discipline services through General Services Contracts (GSC) and project specific contracts. A few examples include the Portland Jetport, City of Portland Public Services, City of South Portland, City of Lewiston, City of Westbrook and several smaller communities. Our municipal sector work includes street and utility infrastructure design, municipal facility planning and specialty work such as Island marine and solid waste planning & engineering.

Location: South Portland, ME

Primary Geographic Service Area: Maine, New Hampshire, Vermont, Massachusetts

Web Site: www.sebagotechnics.com

75 JOHN ROBERTS ROAD, SUITE 4A, SOUTH PORTLAND, MAINE 04106-6963 · SEBAGOTECHNICS.COM

STEPHEN G. DOE, RLA, LEED-AP

Senior Landscape Architect

When Mr. Doe joined Sebago Technics, Inc. in 1988, he brought with him a versatile and highly proficient background in land planning, site development, landscape architecture and graphic presentation, and construction. With a fine understanding for detail and construction practices, he has continually proven his ability to prepare functional, yet aesthetically pleasing land development programs and Site Plans for both public and private sector clients. He is proficient in combining his technical knowledge with highly skilled graphic communications to prepare all levels of plan documents from Conceptual Site Plans to complete construction documents and specifications. His strong public presentation skills and attention to detail in preparing and administering Site Plan Applications with state and local regulators has proven beneficial to clients in receiving timely approvals and respect within their communities.

EXPERIENCE

Boothbay Harbor Country Club, Boothbay, Maine – Steve was Sebago's Project Manager and Lead Site Designer for this complete renovation of the Boothbay Harbor Country Club. Working in collaboration with Knickerbocker Group, Steve prepared the master plan, detailed site plan, landscaping and grading plan for this new world class country club and was fully involved in the construction administration of the entire project. This $21M rebuild broke ground in 2013 and opened in 2016. The landscape planting budget alone exceeded $1.2M and included the installation of 8 inch caliper trees along a boulevard entry drive. The golf course itself underwent a $14M renovation during the same time frame as the clubhouse.

Boothbay Harbor Country Club Fitness Pavilion, Boothbay, Maine – Continuing with the BHCC and the Knickerbocker Group, Sebago completed the site design, engineering and permitting for an expansion to the campus by designing a fitness pavilion with an outdoor pool and spa. This development included a separate entry drive to the campus from the Boothbay Village Common. This design process started in 2014 and opened in Spring 2018.

Route 27 Street Improvement Project, Boothbay, Maine – Steve was the Project Landscape Architect for this upgrade and street improvement project in the heart of Boothbay Village. The design included landscaped median islands, central round-about, new street lights, signage and redevelopment of several properties, including the Town hall and Village Market that conflicted with street re-alignments. Steve also worked with the Town's Landscape Committee to collaborate with them on the landscape design and plant selection. Steve performed construction administration and inspections of the landscape installation. Project was completed in July 2018.

Kennebunkport Resort Collection- Various Properties, Kennebunk and Kennebunkport, Maine - Steve is the Lead Site Planner and Permitting Specialist for the entire holdings of the Kennebunkport Resort Collection. This group owns and operates numerus high-end hotels throughout the Kennebunk's. Sebago has been involved with KRC since its inception in 2015. These properties include: Hidden Pond and Earth Restaurant, The Tides Beach Club, Cabot Cove Cottages, The Grand, The Yachtsman, The Boathouse, The Lodge on the Cove, The Arundel Inn and The Old Fort Inn.

Residential Properties, Kennebunk, Kennebunkport, Maine- As a resident of Kennebunkport, Steve has developed a solid reputation with the Town Planning and Code Enforcement offices in these communities and consequently has received numerous referrals from the officials to assist homeowners, developers and architects with design, engineering and permitting for their projects. He is familiar with the regulations and permitting process in these Towns and has developed a respect with the Planning Boards in providing quality engineering and land planning work that complies with local codes.

EDUCATION

Ohio State University - Columbus, OH
Bachelor of Science, Landscape Architecture, 1986

Architectural Technical Institute, Ohio State University - Wooster, OH
Associated Degree in Applied Science, 1980

MEMBERSHIPS

Sigma Lambda Alpha Honor Society for Landscape Architects

National Landscape Architecture Honor Society

Town of Kennebunkport Shade Tree Committee Member

REGISTRATIONS

Registered Landscape Architect: Maine #131

LEED Accredited Professional
CLARB Certified

SEBAGO TECHNICS

DANIEL L. RILEY, PE, CFM

Vice President, Engineering

Mr. Riley is a Senior Project Manager and Vice President of Engineering with over 25 years of experience in the civil engineering field on projects for the private sector, as well as federal and municipal clients. He has a diverse background in civil engineering, site design, residential and commercial development and permitting.

He is experienced and well versed in presenting complex, controversial and publicly sensitive issues to a variety of audiences. Since 2008, Mr. Riley has been the Contract Manager and lead engineer for Sebago Technics' General Engineering Services Contract with the City of South Portland. In that role, he is responsible for coordinating the firm's services and providing engineering support for City Departments including Planning and Development, Bus/Transportation and Waterfront, Public Works, and Parks and Recreation.

Prior to joining Sebago Technics, Mr. Riley worked as a professional engineer in Colorado specializing in water resources engineering. In that role, he managed projects for federal and municipal clients, including stormwater master planning and floodplain studies and assisted communities with the implementation of Stormwater Management Utilities. He maintains status as an ASFPM Certified Floodplain Manager.

EXPERIENCE

City of South Portland Maine Engineering Services
Mr. Riley has been the Contract Manager and lead engineer for Sebago Technics' General Engineering Services Contract with the City of South Portland since 2009. In that role, he is responsible for coordinating the firm's services and providing engineering support for City Departments including Planning and Development, Bus/Transportation and Waterfront, Public Works, and Parks and Recreation. Since 2012 his focus for South Portland has been combined sewer separation projects. Notable projects include:

- Knightville Sewer Separation and Street Improvements Phases 1 and 2
- Thornton Heights Improvements Project Phases 1-3
- Pleasantdale Sewer Separation Project
- SWMM Model updates, Greenbelt Trunkline, West High Pump Station and Pearl street Pumps Station Service areas.
- Greenbelt Sewer Replacement Project

City of Portland Combined Sewer Separation Projects
Mr. Riley has been the Project Manager for several of Sebago Technics' Sewer Separation contracts with the City of Portland since 2010. Notable Relevant Projects include:

- Fall Brook Watershed Study- City of Portland Public Services Department
- Woodford Street and Melrose Street: Design and Inspection Services 2016-2017
- Forest Avenue, Deering Street and Ocean Avenue: Design and Inspection Services 2017-2018
- Mackworth-Ocean and Walnut Street: Design Services 2018-2019 for construction in 2020-2021

EDUCATION

Villanova University, Villanova, PA
Bachelor of Science, Civil Engineering
1991

REGISTRATIONS

Professional Engineer:
Maine #9967
Colorado: #32176

Certified Floodplain Manager
#32249

MEMBERSHIPS

Chi Epsilon, National Civil Engineering Honor Society

Association of State Floodplain Managers (ASFPM)

SEBAGO TECHNICS

Impact on Surrounding Street Systems 14-14.6.1 (A)

The proposed project will not create or aggravate any significant hazard to safety on the surrounding street network nor will it substantially increase congestion on any street which is already at a level of service below Level "D". In designing the proposed layout of the project considerable attention has been placed on the vehicular circulation and possible impacts to the surrounding area.

A traffic Movement Permit application for the Master Development Plan for the site has been submitted and is being reviewed concurrently with this Hotel Site Plan Application. The proposed streetscape design for Congress Street includes curb extensions at the intersection of Myrtle and Congress Street and Pearl Street and Congress Street. The existing traffic signal pole at Pearl Street is located immediately adjacent to the right of way line and will be replaced/relocated as part of the Master Development Plan responding to the proposed curb extension and crosswalks and as enabling work for the installation of underground utilities and for construction of future building foundations at the right of way line at this location.

A plan of proposed signal improvements at this location is included as part of the Master Development Plan application.

The proposed plan implements street striping documented in the Master Development Plan for the site. As part of the curb extension and curb line revisions, lane striping will be revised on Pearl Street from Cumberland Avenue to Congress Street, eliminating a left turn lane into the parking lot on the north side of Pearl Street in favor of on-street parking on the south side of Pearl Street. The revised striping plan provides 12' through lanes in each direction, with a parking lane on the south side of Pearl Street.

As part of the Master Development Plan, the striping along the southbound lane on Congress Street from Pearl Street to Myrtle Street is to be re-striped to reflect the revised curb line and linear plaza across the front of the site. The centerline of Congress Street is maintained. A 14' southbound lane will be striped, leaving a parking lane across the front of the site for public on street parking. The centerline and northbound lane widths on Congress Street are maintained. The left turn stop bar, from northbound Congress Street is proposed to be set back 40' from the crosswalk to accommodate right turns by trucks from Pearl Street turning southbound on Congress Street. In the existing condition, trucks making this turn encroach on this left turn lane. The necessary setback to avoid this condition is not changed in the proposed condition.

Access and Circulation 14-14.6.1 (B)

1. *In general*

a. The proposed project involves the re-development of fully a developed property currently used for parking. Internal vehicular circulation will be entirely on site and within the proposed parking garage.

The project proposes a two- lane, one-way (entering) driveway on Congress Street for vehicles entering the hotel site.

The proposed curb cut is set at 22' wide to allow for an 11' through lane entering and an 11' wide pull off area for drop off at the onsite entrance area. This lane configuration allows for valet operators to move entering vehicles past loading vehicles in the drop off lane and into the garage structure if necessary to prevent queuing of vehicles in the entrance driveway or on the sidewalk area.

The entrance materials and details have been developed to respect and reinforce the pedestrian-oriented streetscape while defining the area as an entrance to the hotel for safe and efficient valet parking.

The valet parking may include moveable/temporary sidewalk kiosks or signs, placed by the valet operators, to indicate valet parking locations, but no permanent valet signage is proposed. This approach is similar to other valet parking operations in the City of Portland.

There will be no self-parking in the hotel's garage by hotel guests, all guest parking will be valet parked. The revised plan provides a minimum of (4) loading spaces at the valet entrance outside of the garage for guest arrival and during peak arrival/departure times the valet operators can use both lanes of the valet entrance to accommodate up to (8) cars.

During standard operations, the second lane will remain clear to allow entering vehicles to pass loading/unloading guest vehicles to avoid impacting any public sidewalks. During peak periods, the through lane is available for unloading while the valet operators moves vehicles into the garage. The entrance off Congress Street for the hotel will only be utilized for valet parking.

The hotel's valet operation, similar to most valet operations at hotels in Portland, is a contracted service by a parking facility operator that has access to the both the on-site parking and other nearby offsite parking facilities. During peak periods, if the on-site garage is approaching capacity, the valets will park vehicles offsite in contracted facilities managed by the valet/parking vendor to ensure that arriving and departing vehicles are not queuing on the sidewalk or in the streets adjacent

to the site. Peak periods of hotel valet operations are generally predicable at typical weekend check-in and check-out times and are staffed accordingly.

The valet service will be staffed 24 hours a day whenever the hotel is operating. The operation will be managed in the same manner as the applicants other existing hotels in Portland.

b. The proposed development site is comprised of a portion of a developed City block with sidewalks. The proposed project will result in improvements to the existing sidewalk and provide for better pedestrian circulation along Congress Street. The building includes continuous connection to the adjoining public sidewalks across its entire frontage.

c. All points of access and egress to the site have been located to avoid conflicts with existing turning movements and traffic flows.

2. *Loading and servicing*

The proposed project has been designed to provide safe access for delivery vehicles servicing the site. Consistent with developments in similar settings in Portland, loading and service vehicle access is proposed internal to the building, accessed from the site entrances on the street. The plan proposed includes two new on-street temporary loading spaces on Myrtle Street for service vehicles that cannot use the interior loading facilities.

Similar to other developments in the urban areas of the City of Portland peninsula, hotel services will generally be provided by small box trucks familiar with servicing urban businesses. Loading and servicing access will not impede vehicle circulation, bicycle or pedestrian movement, or parking. Reference the plan set for loading area placement.

3. *Curb and sidewalks*

The proposed project site has existing city sidewalks on its street frontages. These sidewalks will be improved and widened as part of the project. All proposed public sidewalk improvements will be designed based to the standards of the City Technical Manual.

All street curbing will consist of new or reset existing granite curb installed in accordance with the details found in the City Technical Manual.

Public Transit 14-14.6.1(C)

1. A transit shelter is not required.

   The site is located along an existing public transit route with a transit shelter located on Congress Street between Temple Street and Elm Street, less than ¼ mile from the site. It is the applicants understanding that no future transit shelters will be placed by the City of Portland on Congress Street between Myrtle and Pearl Streets given the significant impact to the hotel and linear pedestrian park included in the design.

   The site is nearby to a number of public transit bus lines. The project is located on Congress Street, with direct access to METRO Bus routes 1, 2, 4, 5, 7, 8, 9a & 9b and South Portland Bus Service routes 21, 24a & 24b. The nearest METRO Bus stops on Congress Street are adjacent to the site on Congress Street at City Hall.

2. Not applicable

Off-Street Parking 14-14.6.1 (D)

1. *Vehicular Parking:* The proposed project includes parking garage which will provide 70 parking spaces. All parking will be designed in accordance with the requirements outlined in the city code, subject to waivers approved in the Master Development Plan related to compact spaces and drive aisle width on double stacked spaces. Please refer to the building plans for parking layout information.

2. *Bicycle Parking:* Bicycle parking racks will be located within the garage level of the site. Please see the plan set for the proposed location of the bicycle parking.

3. *Snow Storage:* There are no snow storage areas on site for the proposed project. Sidewalks and outdoor common areas will be cleared of snow in accordance with the City of Portland ordinance.

4. *Electric Vehicle charging:* The proposed project adheres to the applicable EV standards as outlined in the City Technical Manual.

Traffic Demand Management (TDM) 14-14.6.1 (E)

1. The following types of development shall design and implement a Transportation Demand Management (TDM) plan:

a. All major site plan triggering development in the B-7 zone.

b. All commercial, institutional, or mixed-use developments of 50,000 square feet or more total floor area.

c. All commercial or institutional uses designed to accommodate 100 or more employees or, for educational institutions, 100 or more students.

2. The TDM Plan shall comply with the transportation systems and street design standards of the Technical Manual.

A Traffic Demand Management Plan is attached

Transportation Demand Management Plan (TDM)
385 Congress Street, Portland, Maine
Lot 1 Hotel

Transportation Narrative

The proposed project is to consist of hotel, with associated retail and food service uses and residential condominiums. The site is located at the corner or Myrtle Street and Congress Street adjacent to Portland City Hall..

The proposed development includes a 156-room full-service hotel with associated food service and retail space and nine (9) residential condominiums on the upper floors. The building includes structured parking for 72 vehicles on two garage levels. All parking is valet operated. There is no self-parking for hotel guests, residents, or the public.

The building includes an enter-only driveway on Congress Street where the valet service will be located for all hotel guests, residents and visitors. A two-way entrance on Myrtle Street to the upper level of the garage and a two-way entrance on Cumberland Avenue for the lower level of the garage will be used by valets to manage parking in the building.

The location of the hotel on Congress Street allows vehicular traffic to access to a number of major routes in and out of Portland. The majority of site generated traffic is expected to travel to and from the north via Franklin Street. Other traffic will access the site via Congress Street, Cumberland Avenue, and Pearl Street.

The hotel's location on the east side of the Downtown District and north of the Old Port District will promote walking and biking as a predominant mode of transportation for guests. The close proximity to shops, restaurants, and other attractions will lessen the need for guests to use a vehicle after arrival at the Hotel.

The subject block and immediate area is well-served by public transit. Approximately two blocks to the southwest is the METRO PULSE at Elm Street (Downtown Transportation Center), the hub for METRO where bus routes, #2, #4, #5, #7, and the Husky Line begin and end their routes. METRO bus routes #1, #7, #8, #9A, #9B and the Biddeford Saco Old Orchard Beach Transit 60 Green line can be accessed along Congress Street within one block of the site. South Portland Bus routes 21, 24A, and 24B can be accessed along Congress Street roughly two blocks southwest of the site. METRO bus route 8 is located along Cumberland Avenue less than one block from the site

TDM Coordinator

The hotel will designate a full-time employee as their TDM Coordinator. This employee will actively promote and educate on alternative forms of transportation for both guests and employees. The coordinator will be responsible for monitoring and updating the TDM Plan.

Employee and Customer Survey

The hotel's TDM Plan will include a transportation survey prior to implementation and on an annual basis. The survey will consist of questions to gain an understanding of employee/guest commuting means and effectiveness of the TDM strategies. The survey will include questions such as:

- Mode of transportation (car, bus, walking, taxi/rideshare, bicycle, etc.) to travel to and from the hotel
- Reason for selected transportation mode
- Ease of use of selected transportation mode
- Concerns with using other transportation modes
- Use of personal vehicle during stay (hotel guests only)

This survey will be conducted annually for employees and hotel guests and will be electronically tabulated. This information will be used to develop specific strategies and adjust the TDM plan as needed.

Parking and Trip Reduction Target

As part of the Applicant's traffic study for this development, trip generation was estimated using the ITE Trip Generation Manual 11th Edition. The tables below show the estimated trip generation.

Table 1 – Trip Generation
Land Use Code 310 – Hotel – Dense Multi-Use Urban
152 Rooms

Time Period	Trip Rate per Room	Total Trips	Entering %	Exiting %	Entering Trips	Exiting Trips
AM Peak Hour of Adjacent Street	0.31	47	39%	61%	18	29
PM Peak Hour of Adjacent Street	0.21	32	44%	56%	14	18
AM Peak Hour of Generator	0.33	50	51%	49%	25	25
PM Peak Hour of Generator	0.34	52	30%	70%	16	36

Table 2 – Trip Generation
Land Use Code 222 – Multifamily Housing (High-Rise) – Dense Multi-Use Urban
9 Dwelling Units

Time Period	Trip Rate per DU	Total Trips	Entering %	Exiting %	Entering Trips	Exiting Trips
AM Peak Hour of Adjacent Street	0.24	2	41%	59%	1	1
PM Peak Hour of Adjacent Street	0.20	2	50%	50%	1	1
AM Peak Hour of Generator	0.26	2	10%	90%	0	2
PM Peak Hour of Generator	0.15	1	66%	34%	1	0

Table 3 – Trip Generation Summary

Time Period	Total Trips	Entering Trips	Exiting Trips
AM Peak Hour of Adjacent Street	49	19	30
PM Peak Hour of Adjacent Street	34	15	19
AM Peak Hour of Generator	52	25	27
PM Peak Hour of Generator	53	17	36

The hotel is expected to generate 52 trips during the AM Peak Hour and 53 trips during the PM Peak Hour. The hotel includes a total of 70 parking spaces. Based on this allotment, it is proposed to have 0.46 parking spaces per hotel room. The ITE Parking Generation Study, 4th Edition suggests an average of 0.64 spaces per a hotel room in an urban environment. Thus, this project proposes a decrease of 27 parking spaces as compared to the national average for hotels in an urban environment.

In order to set an appropriate reduction target, it is necessary to first complete the initial survey period and observe the patterns of travel to and from the hotel and the amount of parking usage. In the absence of this information, it is believed a 10% reduction in trips over the rates estimated by ITE can be achieved through the implementation of a thorough TDM Plan.

Customize Parking and Trip Reduction Strategies

The strategy to reduce parking and trip demand will be aimed at both hotel employees and guests.

Employee strategies will seek to reducing employee vehicle trips to the site, especially during normal peak traffic hours. Ridesharing will be coordinated and promoted amongst employees. Information regarding the METRO and the South Portland Bus Service and discounted passes will be made available to employees. Bicycle parking will also be provided inside of the parking garage to encourage bicycle commuting to the hotel.

For guests, strategies will focus on both initially travelling to the hotel without a vehicle and limiting the use of vehicles once guests are on site. The hotel will market ways to reach the hotel including intercity bus and train via the Portland Transportation Center. Once on site, information will be readily available regarding desirable walking routes to transit and nearby attractions.

Education

Transit Maps and Schedules:

The METRO has bus stops on the adjacent block at City Hall. South Portland Bus lines have a stop a third of a mile from the hotel at the intersection of Congress Street and Elm Street. Information on routes, schedules, and payment methods for buses will be available for guests via a kiosk in the hotel lobby and with front desk staff. Information will also be posted on the services available at the Portland Transportation Center which include the Amtrak Downeaster and Concord Coach Bus Lines for intercity service.

Suggestions for the most convenient pedestrian routes to relevant local bus stops will be made available. The nearest sheltered public transit facility is located on Elm Street between Congress Street and Cumberland Avenue approximately three (3) blocks from the site. This shelter serves the METRO routes along Congress Street. To reach this shelter from the hotel, users would walk along Congress Street which has wide sidewalks in good condition. All intersection crossings along the route have crosswalks and include pedestrian signals at signalized intersections.

Employee orientation will include information related to discounted METRO and South Portland Bus Service passes which will be made available to employees.

Ridesharing:

The TDM Coordinator will actively promote and coordinate ridesharing amongst employees. This can be done through employee area bulletin boards and employee email lists. Employees who actively rideshare/carpool will be recognized for their efforts on newsletter announcements and/or bulletin board postings in the employee areas.

Monitoring

The TDM Plan will be monitored over time to determine its ongoing effectiveness. The TDM Coordinator will be responsible for this monitoring and making changes as necessary to better meet the TDM goals.

After an initial startup period, the Applicant, through the TDM Coordinator, will submit a status report to the City of Portland containing the following information:

- Hotel occupancy figures
- Measured parking usage for hotel guests/employees
- Summary and analysis of completed TDM Surveys
- Comparison to previous surveys (after initial survey)
- Proposed changes to TDM Plan

Because hotel demand is expected to be seasonal, this will be completed after the first full summer season of operation. The TDM Coordinator will thereafter prepare an annual report and submit to the City of Portland.

Project Specific Standards

Infrastructure

The following onsite infrastructure improvements are currently proposed:

- Bicycle parking racks will be located within the garage level. Number of spaces will meet minimum according to Article 14 of the Land Use Code.
- A TDM kiosk will be provided in the main lobby area of the hotel. A separate bulletin board will also be provided within an employee area. The employee and public information areas will contain the relevant information to each. The TDM Coordinator will be responsible for keeping material current and available.
- Reconstruction of brick sidewalks per the City Technical Standards, as well as adding street lighting on surrounding streets will be completed.
- Congress Street sidewalks are to be widened into the street and onto the site to create a linear public plaza allowing pedestrian space away from a generally busy street. This space also provides access to stairs and elevators to the public amenity deck on the hotel's second level and on future adjacent residential developments as part of a proposed Master Plan of Development for the site's block.

Incentives

The following incentives will be provided to employees and guests to encourage the active participation in the TDM plan:

- Discounted bus passes will be provided to employees to encourage the use of public transportation.
- As an incentive for participating in the annual TDM survey, hotel guests would receive a $5.00 gift certificate to a local restaurant or retail establishment.

Att. O

SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

Memorandum

19371

To: **Tom Errico, P.E.**
TY Lin

From: **Derek Caldwell, P.E., PTOE**
Sebago Technics, Inc

Date: **August 5, 2022**

Subject: **Revised Trip Generation Calculation**
385 Congress Street Development
Portland, Maine

The follow revised trip generation calculation provides a follow up to our previous correspondence dated June 28, 2022 and the subsequent comments provided by the City. It was requested to modify the trip generation calculation to consider the currently unprogrammed retail/commercial space as a "high-turnover sit down restaurant." As you will recall, previously the trip generation of this space was accounted for by using Land Use Code Land Use Code 231 – Mid-Rise Residential with Residential w/ Ground-Floor Commercial GFA (1-25K), as this land use had a significant number of studies associated with the published data. The development program has been revised slightly since the time of the last correspondence and is now proposed to be as follows. at the scoping meeting for 385 Congress Street, we have reevaluated the trip generation for the project specifically as it relates to the proposed residential uses with ground-floor commercial space. The proposed building program, which will be utilized for the upcoming Section 7 Traffic study, is as follows:

Table 1: Development Program Summary

Building	Number of Levels	Number of Residential Units	Number of Hotel Rooms	Commercial Square Footage
Pearl St Tower	12	110	--	4,000
Myrtle St Tower	12	9	156	660
Cumberland Ave Tower	12	179	--	6,900
Total		297	156	11,560

Trip generation for the proposed 12-story residential high-rises are calculated using LUC 222 – Multi-Family Housing (Highrise).

Table 2 – Trip Generation
Land Use Code 222 – Multi-Family Housing (Highrise)
Dense Multi-Use Urban
297 Dwelling Units

Time Period	Trip Rate per DU	Total Trips	Entering %	Exiting %	Entering Trips	Exiting Trips
AM Peak Hour of Adjacent Street	0.24	71	41%	59%	29	42
PM Peak Hour of Adjacent Street	0.2	59	50%	50%	30	29
AM Peak Hour of Generator	0.26	77	10%	90%	8	69
PM Peak Hour of Generator	0.15	45	66%	34%	30	15

Additionally, the trip generation for the proposed hotel was done using LUC 310- Hotel with the Dense Multi-Use Urban setting/location.

Table 3 – Trip Generation
Land Use Code 310 – Hotel
Dense Multi-Use Urban
156 Rooms

Time Period	Trip Rate per RM	Total Trips	Entering %	Exiting %	Entering Trips	Exiting Trips
AM Peak Hour of Adjacent Street	0.31	48	39%	61%	19	29
PM Peak Hour of Adjacent Street	0.21	33	44%	56%	15	18
AM Peak Hour of Generator	0.33	51	51%	49%	26	25
PM Peak Hour of Generator	0.34	53	30%	70%	16	37

As requested, the unprogrammed commercial space was calculated for using LUC 932 – High Turnover Sit Down Restaurant.

Table 4– Trip Generation
Land Use Code 932 – High-Turnover Sit Down Restaurant
General Urban/Suburban
11,056 KSF

Time Period	Trip Rate per 1,000 SF	Total Trips	Entering %	Exiting %	Entering Trips	Exiting Trips
AM Peak Hour of Adjacent Street*	0.00	0	55%	45%	0	0
PM Peak Hour of Adjacent Street	9.05	105	61%	39%	64	41
AM Peak Hour of Generator	13.68	158	57%	43%	90	68
PM Peak Hour of Generator	16.35	189	51%	49%	96	93

*It is assumed that if the commercial space is programmed as high-turnover sit down restaurant(s) that they would be closed in the AM Peak Hour of the Adjacent Street.

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Based on the above calculated trip generation, considering the unprogrammed space as high-turnover restaurant would provide a conservative approach. The land use description within the ITE Trip Generation Manual states "*This type of restaurant is usually moderately priced, frequently belongs to a restaurant chain, and is commonly referred to as casual dining."* This description would indicate the typical restaurant associated with this use would be a more suburban chain restaurant in nature, compared to the dense downtown setting of the proposed development. Patrons visiting the proposed commercial space would be more likely to be in the downtown area already staying at hotels or other accommodations, in addition to those who may drive.

This resulting in a total unadjusted trip generation for the development was as follows:

Table 5 –Unadjusted Total Trip Generation

Sections 1-6	Total Trips	Entering Trips	Exiting Trips
AM Peak Hour of Adjacent Street	119	48	71
PM Peak Hour of Adjacent Street	197	109	88
AM Peak Hour of Generator	286	124	162
PM Peak Hour of Generator	287	142	145

As this development contains a mix of land uses, we have calculated the internal capture based on the methods and rates outlined in NCHRP 684. Note that under previous calculations internal capture was not utilized as the land use code considering residential over first floor commercial would integrate this in the published data. The results of the internal capture calculations are shown below in Table 6. The detailed calculation sheets using the NCHRP 684 methodology are attached.

Table 6 –Internal Capture Summary

	AM Peak Hour Adjacent Street			PM Peak Hour of Adjacent Street		
Internal	**TOTAL**	**ENTERING**	**EXITING**	**TOTAL**	**ENTERING**	**EXITING**
Restaurant	0	0	0	17	9	8
Residential	0	0	0	12	5	7
Hotel	0	0	0	7	4	3
Total	**0**	**0**	**0**	**36**	**18**	**18**
	0.00%			**18.27%**		

In addition to the above internal capture calculations, a portion of the trips generated by the commercial uses of the development would be considered pass-by in nature. A 43% pass-by trip rate as

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listed in the ITE Trip Generation Handbook 3rd Edition for LUC 932 was utilized. The calculated pass-by trips are shown in Table 7.

Table 7 –Pass-By Trips

	AM Peak Hour Adjacent Street			PM Peak Hour of Adjacent Street		
	TOTAL	ENTERING	EXITING	TOTAL	ENTERING	EXITING
Restaurant	0	0	0	37	19	18
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
Total	**0**	**0**	**0**	**37**	**19**	**18**

Table 8 shows the calculated primary trips, found by subtracting the above calculated pass-by trips from the overall calculated external trips. For comparison purposes, the previously calculated trip generation as shown in the above referenced June 28th Memorandum are included on the last row of the below table. As can be seen the new calculation results in a reduction in trip generation in the AM Peak Hour of the Adjacent Street, assuming a proposed restaurant would be closed in the AM Peak Hour, and an increase of 11 ***primary*** trips in the PM Peak Hour of the Adjacent Street. However, once distributed across the roadway network, these additional trips would not exceed thresholds whereas additional intersections would be needed to be added to the study area.

Table 8 – Primary Trips

	AM Peak Hour Adjacent Street			PM Peak Hour of Adjacent Street		
	TOTAL	ENTERING	EXITING	TOTAL	ENTERING	EXITING
Restaurant	0	0	0	51	36	15
Residential	71	29	42	47	25	22
Hotel	48	19	29	26	11	15
Total	**119**	**48**	**71**	**124**	**72**	**52**
Previous Trip Gen.	*122*	*47*	*75*	*113*	*54*	*59*

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NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Congress/Pearl Block	**Organization:**	Sebago Technics
Project Location:	385 Congress Street, Portland	**Performed By:**	GRS
Scenario Description:		**Date:**	7/20/2022
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour - Adj. Street**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant	932	12	KSF	0	0	0
Cinema/Entertainment				0		
Residential	222	297	Units	71	29	42
Hotel	310	156	Rooms	48	19	29
All Other Land Uses[2]				0		
				119	48	71

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	119	48	71
Internal Capture Percentage	0%	0%	0%
External Vehicle-Trips[5]	119	48	71
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Congress/Pearl Block
Analysis Period:	**AM Street Peak Hour - Adj Street**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	29	29	1.00	42	42
Hotel	1.00	19	19	1.00	29	29

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	8	0		0
Hotel	22	4	3	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	1	0
Restaurant	0	0		0	1	1
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	29	29	29	0	0
Hotel	0	19	19	19	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	42	42	42	0	0
Hotel	0	29	29	29	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Congress/Pearl Block	**Organization:**	Sebago Technics
Project Location:	385 Congress Street, Portland	**Performed By:**	GRS
Scenario Description:		**Date:**	7/20/2022
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour - Adj. Street**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant	932	12	KSF	105	64	41
Cinema/Entertainment				0		
Residential	222	297	Units	59	30	29
Hotel	310	156	Rooms	33	15	18
All Other Land Uses[2]				0		
				197	109	88

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	5	3
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	6	0		1
Hotel	0	0	3	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	197	109	88
Internal Capture Percentage	18%	17%	20%
External Vehicle-Trips[5]	161	91	70
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	14%	20%
Cinema/Entertainment	N/A	N/A
Residential	17%	24%
Hotel	27%	17%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Congress/Pearl Block
Analysis Period:	**PM Street Peak Hour - Adj Street**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	64	64	1.00	41	41
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	30	30	1.00	29	29
Hotel	1.00	15	15	1.00	18	18

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	1	17		3	7	3
Cinema/Entertainment	0	0	0		0	0
Residential	1	12	6	0		1
Hotel	0	3	12	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	1	0	1	0
Retail	0		19	0	14	3
Restaurant	0	0		0	5	11
Cinema/Entertainment	0	0	2		1	0
Residential	0	0	9	0		2
Hotel	0	0	3	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	9	55	64	55	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	25	30	25	0	0
Hotel	4	11	15	11	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	8	33	41	33	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	7	22	29	22	0	0
Hotel	3	15	18	15	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	20.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	26.0%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	42.0%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	8.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	10.0%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%

Preservation of Significant Natural Features 14-14.6.2(A)

The proposed project area is a previously developed, urban parcel. The project area comprises a portion of a city block that is bounded by Cumberland Avenue on the northwest, Myrtle Street on the southwest, Congress Street on the southeast, and Pearl Street on the northeast. There are two buildings on-site, as well as paved parking areas and concrete sidewalks. Vegetation is limited to small amounts of landscaping. There are no natural waterways or wetlands on or within proximity of the project site.

Please see the plan set for the existing conditions plan.

Att. Q

Landscape Preservation 14-14.6.2 (B)

1. The proposed project site is a previously developed, urban parcel currently used for surface parking there are no significant trees or landscaped areas on the site and no trees or landscaping is proposed for preservation. The proposed project has a comprehensive landscaping plan including a program of new street trees within the right of way along the lot's frontages on Congress Street and Myrtle Street; plantings in fixed and movable planters, on the project site at street level along Congress Street and planting and landscaping on the Hotel's second level including hotel program spaces and the public amenity deck.

   Proposed removals are identified on the site demolition drawings and new plantings are presented on the landscape plans.

   Where applicable, measures outlined in the standards of the City Technical Manual will be utilized to protect vegetation to be preserved from construction impacts.

2. There are no trees 10 inches DBH or greater within the project setbacks requiring preservation. This provision of the Ordinance is not applicable to the site.

Please see the plan set for the proposed landscaping plans.

Site Landscaping and Buffers 14-14.6.2(C)

The proposed project has been designed to be in compliance with the applicable landscape and buffering requirements of the City Ordinance. The project is located in the B-3 zone where there is no required setback.

1. Landscaping. This provision of the ordinance does not apply at this site.

   A landscape plan has been provided within the plan set identifying proposed plantings at street level including street trees in curbed tree wells; and curbed planters for landscaping at the curb extensions proposed at Myrtle and Congress Street and Peal Street at Congress Street. Landscaping has been provided as outlined in the City of Portland zoning requirements.

   The site plan includes the use of raised planters on site along the hotel frontage to enhance seating opportunities for outdoor dining and seating for the hotel development.

   The plans include landscaping along the proposed amenity deck stairs on Myrtle Street and Congress Street and the second level hotel deck and amenity deck

   Please see the Landscape plans.

2. Buffers.
   a. Loading and service areas, including trash service areas, are internal to the building behind doors. No site screening for these features is required or proposed.

      There are no ground mounted utility structures proposed. The building's mechanical systems are roof mounted and screened. Please refer to the building plans and elevations.

   b. The project does not abut a residential zone. This provision of the ordinance is not applicable.

      The project is a hotel with upper story condominium units in a no-setback zone. Screening the residential units from existing surrounding development is not required or proposed.

3. Parking and vehicle display lot landscaping.
   a. The proposed hotel project does not include surface lot parking. Parking for the hotel site will be in a parking garage to be constructed as part of the development.
   b. The project is subject to a Master Plan of Development approval which allows the remaining land on Lot 2, an existing surface parking lot, to remain in its current condition for up to two years. In the event that a follow-on phase of construction does not submit a Site Plan application within a two-year grace period, the parking

area will be improved with revised striping, curbed and landscaped islands meeting the City's standard. A plan of this potential interim parking condition is included in the plan set. The interim parking plan for the remaining land on Lot 2 that addresses this provision of the Ordinance.

4. Street Trees. The residential component of the project includes nine (9) units requiring nine (9) Street trees. The proposed project proposes planting 14 street trees along Congress and Mrytle Street. The trees are generally spaced at 30'-45' except where driveways, pedestrian access, street lighting and underground utilities require addition spacing. Please see the Landscape plan for additional information.

Water Quality, Stormwater Management, and Erosion Control 14-14.6.2(D)

1. The subject site is a fully developed city block. The proposed redevelopment plan has been designed to meet the applicable City standards for stormwater management to minimize to the extent practicable the total area of impervious surface on site, as well as the volume and rate of runoff from the lot.

   Based on consultation with City staff the drainage plan includes directing the proposed site's runoff to the existing combined sewer in Pearl Street in anticipation of a future City project to separate the combined sewer in this street. This reduces runoff entering the City's combined sewer in Myrtle Street. The proposed design does not increase runoff in the City's combined sewer in Pearl Street system in the 1-inch 24-hour rainfall event associated with the City's CSO control plans. There are minimal increases in runoff in the Pearl Street combined sewer during the 2-, 10- and 25-year storm events. The increases do not exceed the capacity of the system at the study point. Please see the stormwater management plan.

2. The proposed project has been designed to be in compliance with the stormwater management standards of the City Technical Manual. Please see the stormwater management plan.

3. The proposed development does not propose any stormwater infiltration or other practices that would be expected to pose a risk of groundwater contamination either during or post-construction. Please see the plan set and the stormwater management plan.

Att. T

SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

STORMWATER MANAGEMENT REPORT

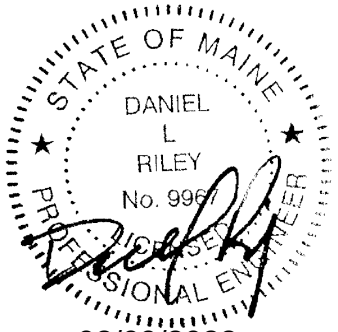
For

385 CONGRESS STREET, LOT 1
PORTLAND, MAINE

Prepared for

Fathom Companies
80 Exchange Street, Suite 400
Portland, Maine 04101

August 10, 2022



08/09/2022

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Appendix 2A: Hydrologic Modeling – Existing Conditions (HydroCAD) Summary
Appendix 2B: Hydrologic Modeling – Proposed Conditions (HydroCAD) Summary
Appendix 2C Hydraulic Modeling -- Pipe Sizing Calculations and Model Summary
Appendix 3: Inspection, Maintenance and Housekeeping Plan
Appendix 4: Subsurface Investigations
Appendix 5: Flood Insurance Rate Map
Appendix 6: Stormwater Management Plans

STORMWATER MANAGEMENT REPORT
385 CONGRESS STREET, LOT 1
PORTLAND, MAINE

1. Introduction

This Stormwater Management Plan and Report presents analyses performed to address stormwater management associated with the proposed development of Lot 1 385 Congress Street. The stormwater management controls that are outlined in this report have been designed to suit the proposed development and to comply with applicable state and local regulatory requirements.

The project is comprised of a proposed Lot 1 occupying 0.63 acres located at the corner of Myrtle Street and Congress Street in Portland. The proposed lot is a portion of a larger 2.26-acre parcel bounded by Congress Street, Myrtle Street, Cumberland Avenue and Pearl Street. The project is the first phase of a Master Plan of Development for this larger site. The proposed master plan envisions the construction of a hotel with below grade parking on Lot 1 and future condominium buildings to be constructed in phases on the remaining land; identified as Lot 2 on the attached plans.

Development of the site is subject to the City of Portland's post construction stormwater management standards, which adopt the MDEP Chapter 500 Basic, General, and Flooding standards, including the redevelopment standards, as incorporated into the City of Portland Land Use Ordinance and Site Plan review regulations.

The site is located in an area served by a combined sewer system where the City of Portland seeks to mitigate and reduce combined sewer overflow (CSO) events. The design storm event for CSO evaluation is a 1" rainfall, 24-hour design storm (CSO Storm).

Based on discussions with the City staff, the stormwater analysis and the proposed detention/treatment system has been designed to reduce the rate of runoff from the project site to the greatest extent practicable during this 1" CSO Storm event.

The project site and the remaining land is fully developed with two buildings and surface parking. The site generally slopes from east (Congress Street) toward Cumberland Avenue with an approximately 12' change in grade along Myrtle Street and Pearl Street. The existing site includes a system of catch basins that connect into the City's combined sewer in the surrounding streets, ultimately discharge to the west along Myrtle Street and Pearl Street toward Marginal Way.

The City is undertaking a study for the future construction of storm drainage and sanitary sewer separation along Pearl Street from Marginal Way to Congress Street. In anticipation of future offsite improvements, Staff have requested that the projects associated with the Master Plan of Development for the property:

- Separate their sanitary sewer and storm drainage on site prior to connection into the City system;
- Direct as much of the storm drainage from the project site (and remaining land, Lot 2) to the combined sewer in Pearl Street, with a connection near Cumberland Avenue to facilitate future separation, and;
- Detain and reduce the peak rate of runoff from the redeveloped areas of the site to the extent practicable during a 1-inch, 24-hour rainfall event to reduce flows during the City's CSO storm event

The proposed erosion controls, inspection and maintenance criteria, and the proposed stormwater management systems have been designed to meet MDEP and City of Portland requirements.

The proposed design includes a StormFilter treatment system with subsurface detention; a Best Management Practice (BMP) which has been designed to meet the system sizing and treatment requirements for the new building's redevelopment project standard.

The proposed design meets the applicable standards for treatment volume and reduces the peak rate of runoff from the Lot 1 site and decreases the peak rate of runoff in the Myrtle Street System during all storm events. However, to meet the City's request, runoff from the site is re-directed to Pearl Street, reducing the drainage area tributary to the Myrtle Street combined sewer and shifting (increasing) the area tributary to the Pearl Street combined sewer. The hotel project will construct a new storm drain outfall across Lot 2. Existing catch basins on the undeveloped areas of Lot 2, upgradient of the outfall in the areas of the future condominium development envisioned in the Master Plan will be connected to the outfall, existing catch basins down gradient of the outfall will maintain their existing connections to the street, until the future condominium phases are constructed.

As a result, the project on Lot 1 will meet all of the treatment and flooding standards required.

- Peak rates of runoff in the Myrtle Street combined sewer are reduced in all storm events.
- Peak rates of runoff in a 1-Inch storm are maintained in Pearl Street;
- Due to the requested redirection of tributary areas from Myrtle Street to Pearl Street, minor increases in peak rates occur at the Pearl Street/Cumberland Avenue point of analysis.
    - The increased runoff does not exceed the capacity of the combined sewer in the 2-, 10- or 25-year storm events.
    - The further redevelopment of Lot 2 as envisioned in the master plan will include a second treatment and detention system. This system has been sized and analyzed to demonstrate that upon construction, peak rates in all storm events will be reduced in Pearl Street.

2. Existing Conditions

The City's off site drainage system trains via a combined sewer to an overflow location at the Back Cove which outlets into Casco Bay base flow in the system is conveyed to the Portland wastewater treatment plant. This site is not tributary to any urban impaired streams or significant pond or lake watersheds per Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations.

The proposed development area of the site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map for the City of Portland, Community Panel 2300510013B dated July 17, 1986. A copy of the Flood Insurance Rate Map is attached in appendix 5.

3. Soils

Soil information for the site was obtained from the USGS United States Department of Agriculture and Natural Resource Conservation Service's Web Soil Survey site. Boring logs from the site's geotechnical exploration reports indicate a groundwater depth of approximately 15 feet. The Hydrologic Groups (HSG) of the soils on site as classified by the Soil Conservation Service is as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
HIB	Hinckley loamy sand	3-8	A

Hydrologic Soil Group boundaries are delineated on the Watershed Map. A copy of the Medium Intensity Soil Survey is included as Appendix 4.

4. Proposed Site Improvements

The proposed development will consist of a subdivision to create Lot 1 which will be redeveloped as a Hotel with residential condominiums on its upper floor(s). Lot 2 constitutes remaining land retained by the owner for future development consisting of residential condominiums in three phases. A common structured parking garage will be constructed at the Cumberland Avenue and Congress Street levels of the Hotel on Lot 1 and the future condominiums on Lot 2.

5. Hydrologic Modeling

In order to evaluate drainage characteristics as a result of the proposed development, a quantitative analysis was performed to determine peak runoff rates in the pre-development and post-development conditions. The evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

The peak runoff rates were calculated using a 24-hour duration storm event with a Type III rainfall distribution. The rainfall amounts for Cumberland County have recently been updated and the following 24-hour duration rainfall amounts were used for this report:

Storm Frequency	24-hr Duration Rainfall (in.)
CSO Storm	1.0
2-yr	3.1
10-yr	4.6
25-yr	5.8

6. Existing Conditions Model

The pre-development watershed plan consists of four subcatchments labeled 1.1S through 2.2S in the HydroCAD model. Two locations are identified as Points of Analysis (POA) for comparing peak runoff rates. These two POAs represent flows in the existing combined sewers in Pearl Street at Cumberland Avenue (POA-1) and Myrtle Street at Cumberland Avenue (POA-2).

POA-1 is located at the northerly (plan northwest) corner of the larger project site where runoff from the site is tributary to the 18" diameter combined sewer in Pearl Street at Cumberland Avenue. Subcatchments 1.1S represents on-site areas tributary to POA-1 and Subcatchment 1.2S represents offsite areas to the northeast contributing runoff to this point of analysis. The total modeled drainage area tributary to POA-1 in the pre-development condition is approximately 4.04 acres.

POA-2 is located at the westerly (plan southwest) corner of the larger project site where runoff from the site is tributary to the combined sewer in Myrtle Street at Cumberland Avenue. Subcatchments 2.1S and 2.2S represent on-site and offsite areas tributary to POA-2 contributing runoff to this point of analysis. The total modeled drainage area tributary to POA-2 in the pre-development condition is approximately 1.54 acres.

7. Proposed Conditions Model

The post-development watershed presents a consistent overall drainage area tributary to the points of analysis; subdividing the area into its anticipated post development subcatchments that will result from the proposed redevelopment of the site.

POA-1:

In the Post-development model, subcatchment 10.1S represents offsite areas draining to POA-1 and is unaffected by the proposed development.

Subcatchment 10.2S represents the proposed development of Lot 1.

Subcatchments 10.3S and 10.4S represent the remaining land on Lot 2 that is to be developed in the future as part of the Master Plan of Development. As part of the current Site Plan application for Lot, this area will be minimally improved. Draining generally in its existing condition revised with connections to the proposed storm drain serving lot 1.

The proposed development of Lot 1 will include a system comprised of a StormFilter treatment system by Contech Engineered solutions with 27" filter cartridges. Detention to store the required Stormwater Quality (WQv)treatment volume and to provide peak runoff control is provided by a corrugated metal pipe (CMP) detention system. Low flow discharge for the system is provide through the filters with a bypass weir within a separate manhole impounding the water quality volume and providing flooding control. This Best Management Practice has been designed and sized in accordance with MDEP BMP standards contained within Chapter 500 and the BMP Manual. Sizing calculations can be found in Appendix 1.

The overall post development tributary area tributary to POA-1 is 4.45 acres; an increase of 0.41 acres due to the location of the discharge point as requested by the City.

The future development of Lot 2 is expected to include a similar treatment and detention system comprised of a StormFilter unit with subsurface detention. A preliminary design of the full build out condition is included in the analysis. Upon installation of this future system, peak flows at POA-1 are reduced to pre-development levels addressing the shift in tributary area from POA -2 to POA-1 that has been requested by the City.

POA-2:

In the Post-development model subcatchments 20.1S and 20.2S represent on-site and offsite areas draining the to the Myrtle Street combined sewer. The post development area tributary area associated with POA-2 is 1.13 acres, a reduction of 0.41 acres compared to pre-development conditions, reflecting the shift in tributary area requested by the City.

8. Stormwater Management

Municipal Requirements

The City of Portland Technical Manual Chapter 5 section II.D outlines the requirements for redevelopment projects in the City of Portland. The city standards state that a project which require a Site Location of Development review but creates impervious area greater than 5,000 square-feet is required to provide stormwater treatment for no less than 50% of the redeveloped impervious area.

The City of Portland Technical Manual Section II-C states that all Level III site plans are required to meet the Maine DEP Chapter 500 flooding standard.

Since the existing parcel area of this project is 0.63 (and the larger site proposed as part of the Master Plan of Development is 2.26 acres) the project will create less than 3.0 acres of

impervious area, it is not subject to Site Location of Development review. The General Standards are only applicable as modified above.

Basic Standard - Chapter 500, Section 4(B)

Since the project will disturb more than one (1) acre of land area, MDEP Basic Standards apply, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. We have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 3) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines.

General Standard - Chapter 500, Section 4(C)

The MDEP General Standards apply, as modified for redevelopment and required by the City of Portland Technical Standards.

Redevelopment Standards -Chapter 500, Section (C)(2)(d)

The project proposes to redevelop approximately 0.63 acres of a larger 2.26 acres site.

Calculations that follow procedures outlined in §4.C(2)(d) of Chapter 500 indicate that the ranked impact change due to redevelopment of Lot 1 is –1.3; indicating improved conditions resulting from the redevelopment of paved impervious parking areas with rooftops. Typically, no treatment would be required; however, the City of Portland Standards supersede the Chapter 500 rules and require 50% of the redeveloped area to be treated. The proposed stormwater management system provides treatment for all of Lot 1's redeveloped area, See Table 1 of Appendix 1 for additional information.

Stormwater runoff from the building, its valet area on congress will be routed to a proposed StormFilter treatment unit located below the parking garage floor slab. The Water Quality Volume (WQv) and any bypass flow will drain in a new storm drain, within an easement on Lot 2 to the City's system in Pearl Street.

The Stormfilter is comprised of a precast vault that houses rechargeable, media-filled cartridges. The number of cartridges required is based upon water quality/channel protection volume which is equal to 1.0-inch times the subcatchment's impervious area and 0.4–inch times the subcatchment's tributary landscaped areas. The system is designed to drain completely within 24 to 72 hours after the storm.

BMP sizing and treatment calculations are provided as Appendix 1.

Flooding Standard - Chapter 500, Section 4(F)

The City of Portland Technical Manual Section II-C states that all Level III site plans are required to meet the Maine DEP Chapter 500 flooding standard.

The Flooding Standard requires a project's stormwater management system detain, retain, or result in the infiltration of stormwater from 24-hour storms of the 2, 10, and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. Minor increases that do not exceed the capacity of existing systems may be approved on a case-by-case basis.

To address this standard, a runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

Since this project will be developed in multiple phases, it is anticipated that Lot 1 will be developed first and will include a Stormfilter Treatment unit designated in the model as "Stormfilter 1" Unit with a 48" diameter CMP detention system to meet the treatment standards as a standalone project.

The remaining land will be developed at a later date with a second treatment and detention system. This system has been preliminarily designed to include "Stormfilter 2" and a 60" diameter CMP detention system.

Runoff curve numbers were determined for each of the watersheds by measuring the area of each hydrologic soil group within each type of land cover. Pre development land cover was determined based on survey data, field reconnaissance and aerial photography. Post development land cover is passed on the proposed construction.

Times of concentration were determined from site topographic maps in accordance with SCS procedures, with a minimum of 6 minutes (0.1 hour).

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for Cumberland County (Southeast) are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Cumberland County (Southeast)	
2-year	3.1
10-year	4.6
25-year	5.8

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions upon completion of the Lot 1 development. These results assume that the remaining land on Lot 2 drains in its pre-development condition.

Peak Runoff Rate Summary Table			
Analysis Point	**Storm Event**	**Existing Conditions (cfs)**	**Proposed Conditions (cfs)**
POA-1	1-Inch	3.3	3.4
	2-year	11.9	12.9
	10-year	18.0	19.8
	25-year	22.8	25.0
POA-2	1-Inch	1.3	1.0
	2-year	4.6	3.4
	10-year	6.9	5.1
	25-year	8.7	6.4

The results of the analysis indicate minor increases in the peak rate of runoff at, POA-1 in the proposed conditions when compared to pre-development rates during the CSO, 2, 10, and 25-year events when the proposed development of Lot 1 is considered in isolation, prior to future development on Lot 2.

This increase is due to the location of the proposed outfall at Pearl Street, requested by the City to facilitate its CSO program goals. The redirection of on-site runoff from Lot 1 and Lot 2 from POA-2 at Myrtle Street to POA-1 at Pearl Street results in minor increases in flow at POA-1 and a corresponding decrease in runoff at POA-2. This increase is minor (approximately 10% of pre-development flow) and does not exceed the capacity of the 18” sewer at POA-1.

Lot 1 when considered in isolation meets the applicable standards; and if its outfall were to follow the pre-development patterns and be connected to the Myrtle Street at POA-2, there is no increase in post development runoff rates as a result of the Lot 1 development.

The increase in peak rates at POA-1 are expected to be mitigated in the future with the construction of a second detention system on Lot 2 as envision in the Master Development Plan for the larger site.

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions upon the construction of the future Lot 2 development and its drainage system.

Peak Runoff Rate Summary Table			
Analysis Point	**Storm Event**	**Existing Conditions (cfs)**	**Proposed Conditions (cfs)**
POA-1	1-Inch	3.3	2.8
	2-year	11.9	10.7
	10-year	18.0	17.1
	25-year	22.8	22.3
POA-2	1-Inch	1.3	1.0
	2-year	4.6	3.4
	10-year	6.9	5.1
	25-year	8.7	6.4

The HydroCAD calculations for this analysis are appended to this report (Appendix 2) along with the Stormwater Management Plans (Appendix 6).

9. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP and meeting the applicable City of Portland Stormwater Management Standards. Stormwater BMP's provide treatment to 100% (50% required) of impervious areas on Lot 1, and 94% (50% required) of the total developed area. Peak rates in all storm events are reduced below pre-development conditions for the 2, 10, and 25-year storm events at Point of Analysis 2.

Minor increases in the peak rate of runoff occur at Point of Analysis POA-1 due to changes in drainage patterns and tributary areas. Runoff has been redirected from POA-2 to POA-1 to facilitate the City's future CSO separation goals. Erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

Prepared by:

SEBAGO TECHNICS, INC.

Dan L. Riley, P.E.
Vice President, Engineering

STATE OF MAINE
DANIEL
L
RILEY
No. 9967
LICENSED
PROFESSIONAL ENGINEER

08/09/2022

Dylan J. Stuart
Civil Engineer

Appendix 1

Stormwater Quality Calculations

Table 1: MDEP GENERAL STANDARD CALCULATIONS

Job # 19371-01

AREA ID	WATERSHED SIZE (S.F.)	EXISTING IMPERVIOUS AREA TO REMAIN (S.F.)	NEW IMPERVIOUS AREA (S.F.)	EXISTING LANDSCAPED AREA TO REMAIN (S.F.)	NEW LANDSCAPED AREA (S.F.)	NET NEW DEVELOPED AREA (S.F.)	NET EXISTING DEVELOPED AREAS (S.F.)	TREATMENT PROVIDED?	IMPERVIOUS AREA TREATED (S.F.)	LANDSCAPED AREA TREATED (S.F.)	DEVELOPED AREA TREATED (S.F.)	TREATMENT BMP
10.1S	101,068	100,438	0	112	518	518	100,550	NO	0	0	0	None
10.2S	23,617	0	23,617	0	0	23,617	0	YES	23,617	0	23,617	SF-1
10.3S	32,101	32,101	0	0	0	0	32,101	NO	0	0	0	None
10.4S	36,870	36,079	0	0	791	791	36,079	NO	0	0	0	None
20.1S	1,685	1,685	0	0	0	0	1,685	NO	0	0	0	None
20.2S	47,451	47,200	0	0	251	251	47,200	NO	0	0	0	None
TOTAL (S.F.)	**242,792**	**217,503**	**23,617**	**112**	**1,560**	**25,177**	**217,615**		**23,617**	**0**	**23,617**	

TOTAL NEW IMPERVIOUS AREA (S.F.)	**23,617**	**TOTAL DEVELOPED AREA (S.F.)**	**25,177**
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT (S.F.)	**23,617**	**TOTAL AREA RECEIVING TREATMENT (S.F.)**	**23,617**
% OF IMPERVIOUS AREA RECEIVING TREATMENT	**100.00%**	**% OF AREA RECEIVING TREATMENT**	**93.80%**

SEBAGO TECHNICS, INC.
75 John Roberts Road Suite 4A
South Portland, Maine 04106
Tel. (207) 200-2100

JOB	19371-01													
SHEET NO.	1			OF	1									
CALCULATED BY	DJS			DATE	8/8/2022									
FILE NAME	19371_WQC LOT 1.xlsx			PRNT DATE	8/9/2022									

CONTECH STORMFILTER AND 48" CMP DETENTION SYSTEM

Task: Calculate water quality volume per MDEP chapter 500 regulations

References: 1. Maine DEP Chapter 500, Section 4.C.(3)(b)

"must detain a runoff volume equal to 1.0 inch times the subcatchment's impervious area plus 0.4 inch times the subcatchment's landscaped area"

Tributary to Subsurface Sand Filter: SF-1

Landscaped Area	0.00	SF		
Impervious Area	23,617.00	SF		

Treatment Volume

Required: (0.4" X Landscaped + 1.0" X Impervious)

Landscaped Area	0.00	SF	Volume	0.0	
Impervious Area	23,617.00	SF	Volume	1,968.1	

Treatment Volume Required	1,968.1	CF	0.045	AF
Provided Treatment Volume and Elevation	1,974.0	CF	48.01	FT

MDEP Redevelopment Land Use
Job #19371-01

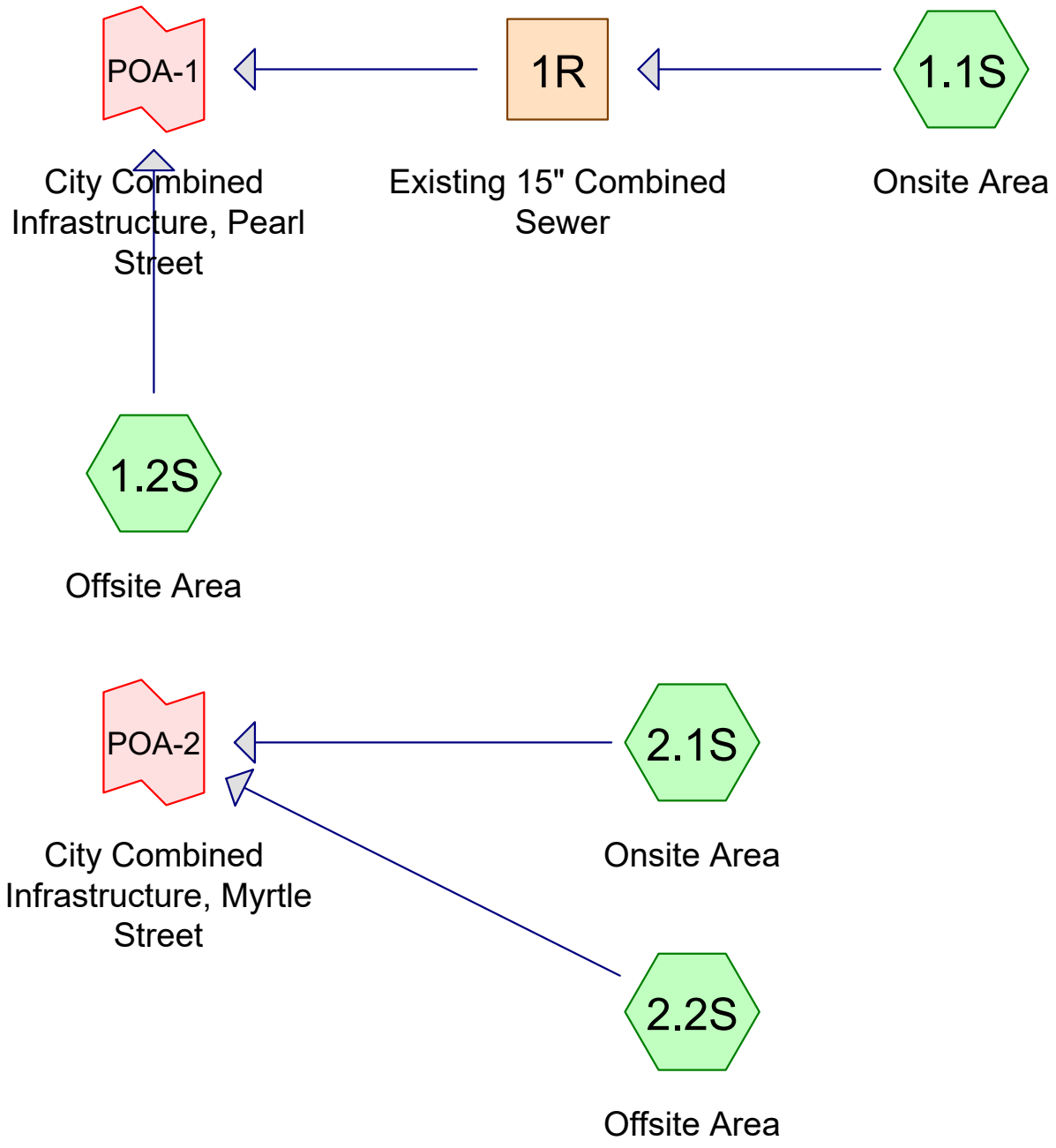
Land Use (Pollutant Ranking)	Existing Conditions (SF)	Existing Condition Pollutant Ranking	Existing Condition Weighted Average	Proposed Conditions (SF)	Proposed Condition Pollutant Ranking	Proposed Condition Weighted Average
High use parking lots	0.00	5	0.00	0.00	5	0.00
Medium use parking lots	0.22	4	0.88	0.00	4	0.00
Flat asphalt roof, roof on industrial facility, other parking lots	0.39	3	1.18	0.00	3	0.00
Other rooftops, landscape areas, walkways	0.02	2	0.03	0.63	2	1.26
Non-grassed landscape areas	0.00	1	0.00	0.00	1	0.00
Woods	0.00	0	0.00	0.00	0	0.00
Total (SF)	**0.63**			**0.63**		
		Total Existing Impact Rating	**2.09**		**Total Proposed Impact Rating**	**1.26**

Existing Impact Rating /Total Redevelopment Acres	**3.322**
Proposed Impact Rating /Total Redevelopment Acres	**2.000**
Ranked Impact Change due to Redevelopment	**-1.322**

Treatment Levels for Redevelopment Projects	
Ranked Impact Change Due to Redevelopment (Item E)	**Percentage of Developed Area that Must be Treated**
0.0 or less	**0% (Stormwater projects)**
	50% (Site projects, Stormwater projects per City Requirements)
≤ 0.0 to ≥ 1.0	**60%**
> 1.0 to ≥ 2.0	**70%**
> 2.0 to ≥ 3.0	**80%**
> 3.0	**Same treatment level as for new development**

Appendix 2A

Hydrologic Modeling - Existing Conditions (HydroCAD) Summary



Subcat Reach Pond Link

Routing Diagram for 19371 PRE
Prepared by Sebago Technics, Inc., Printed 8/9/2022
HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.063	39	>75% Grass cover, Good, HSG A (1.1S, 1.2S, 2.1S)
5.511	98	Paved parking & Roofs (1.1S, 1.2S, 2.1S, 2.2S)
5.574	**97**	**TOTAL AREA**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.1S: Onsite Area Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=0.63"
Tc=6.0 min CN=96 Runoff=1.3 cfs 0.093 af

Subcatchment1.2S: Offsite Area Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.0 cfs 0.149 af

Subcatchment2.1S: Onsite Area Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=0.71"
Tc=6.0 min CN=97 Runoff=0.4 cfs 0.029 af

Subcatchment2.2S: Offsite Area Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.9 cfs 0.069 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.30' Max Vel=5.79 fps Inflow=1.3 cfs 0.093 af
15.0" Round Pipe n=0.013 L=83.0' S=0.0260 '/' Capacity=10.4 cfs Outflow=1.3 cfs 0.093 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=3.3 cfs 0.242 af
Primary=3.3 cfs 0.242 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=1.3 cfs 0.098 af
Primary=1.3 cfs 0.098 af

Total Runoff Area = 5.574 ac Runoff Volume = 0.340 af Average Runoff Depth = 0.73"
1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.1S: Onsite Area Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=2.65"
Tc=6.0 min CN=96 Runoff=5.1 cfs 0.391 af

Subcatchment1.2S: Offsite Area Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=6.8 cfs 0.542 af

Subcatchment2.1S: Onsite Area Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=2.76"
Tc=6.0 min CN=97 Runoff=1.5 cfs 0.113 af

Subcatchment2.2S: Offsite Area Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.1 cfs 0.250 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.62' Max Vel=8.46 fps Inflow=5.1 cfs 0.391 af
15.0" Round Pipe n=0.013 L=83.0' S=0.0260 '/' Capacity=10.4 cfs Outflow=5.1 cfs 0.391 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=11.9 cfs 0.933 af
Primary=11.9 cfs 0.933 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=4.6 cfs 0.363 af
Primary=4.6 cfs 0.363 af

Total Runoff Area = 5.574 ac Runoff Volume = 1.295 af Average Runoff Depth = 2.79"
1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.1S: Onsite Area Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=4.14"
Tc=6.0 min CN=96 Runoff=7.8 cfs 0.610 af

Subcatchment1.2S: Offsite Area Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.2 cfs 0.825 af

Subcatchment2.1S: Onsite Area Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=4.25"
Tc=6.0 min CN=97 Runoff=2.2 cfs 0.174 af

Subcatchment2.2S: Offsite Area Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.7 cfs 0.380 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.81' Max Vel=9.31 fps Inflow=7.8 cfs 0.610 af
15.0" Round Pipe n=0.013 L=83.0' S=0.0260 '/' Capacity=10.4 cfs Outflow=7.8 cfs 0.610 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=18.0 cfs 1.435 af
Primary=18.0 cfs 1.435 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=6.9 cfs 0.554 af
Primary=6.9 cfs 0.554 af

Total Runoff Area = 5.574 ac Runoff Volume = 1.988 af Average Runoff Depth = 4.28"
1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.1S: Onsite Area Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=5.33"
Tc=6.0 min CN=96 Runoff=9.9 cfs 0.786 af

Subcatchment1.2S: Offsite Area Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=12.9 cfs 1.051 af

Subcatchment2.1S: Onsite Area Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=5.44"
Tc=6.0 min CN=97 Runoff=2.8 cfs 0.223 af

Subcatchment2.2S: Offsite Area Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=5.9 cfs 0.484 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.98' Max Vel=9.66 fps Inflow=9.9 cfs 0.786 af
15.0" Round Pipe n=0.013 L=83.0' S=0.0260 '/' Capacity=10.4 cfs Outflow=9.9 cfs 0.786 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=22.8 cfs 1.837 af
Primary=22.8 cfs 1.837 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=8.7 cfs 0.707 af
Primary=8.7 cfs 0.707 af

Total Runoff Area = 5.574 ac Runoff Volume = 2.544 af Average Runoff Depth = 5.48"
1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac

Summary for Subcatchment 1.1S: Onsite Area

Runoff = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af, Depth= 5.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	74,829	98	Paved parking & Roofs
	2,256	39	>75% Grass cover, Good, HSG A
	77,085	96	Weighted Average
	2,256		2.93% Pervious Area
	74,829		97.07% Impervious Area

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

Summary for Subcatchment 1.2S: Offsite Area

Runoff = 12.9 cfs @ 12.08 hrs, Volume= 1.051 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	98,565	98	Paved parking & Roofs
	231	39	>75% Grass cover, Good, HSG A
	98,796	98	Weighted Average
	231		0.23% Pervious Area
	98,565		99.77% Impervious Area

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

Summary for Subcatchment 2.1S: Onsite Area

Runoff = 2.8 cfs @ 12.08 hrs, Volume= 0.223 af, Depth= 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	21,146	98	Paved parking & Roofs
	246	39	>75% Grass cover, Good, HSG A
	21,392	97	Weighted Average
	246		1.15% Pervious Area
	21,146		98.85% Impervious Area

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

Summary for Subcatchment 2.2S: Offsite Area

Runoff = 5.9 cfs @ 12.08 hrs, Volume= 0.484 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	45,519	98	Paved parking & Roofs
	45,519		100.00% Impervious Area

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

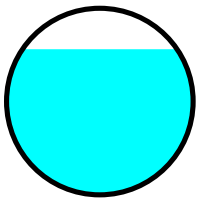
Summary for Reach 1R: Existing 15" Combined Sewer

Inflow Area = 1.770 ac, 97.07% Impervious, Inflow Depth = 5.33" for 25-YEAR event
Inflow = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af
Outflow = 9.9 cfs @ 12.09 hrs, Volume= 0.786 af, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 9.66 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 3.44 fps, Avg. Travel Time= 0.4 min

Peak Storage= 85 cf @ 12.09 hrs
Average Depth at Peak Storage= 0.98'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 10.4 cfs

15.0" Round Pipe
n= 0.013
Length= 83.0' Slope= 0.0260 '/'
Inlet Invert= 39.62', Outlet Invert= 37.46'



Summary for Link POA-1: City Combined Infrastructure, Pearl Street

Inflow Area = 4.038 ac, 98.59% Impervious, Inflow Depth = 5.46" for 25-YEAR event
Inflow = 22.8 cfs @ 12.08 hrs, Volume= 1.837 af
Primary = 22.8 cfs @ 12.08 hrs, Volume= 1.837 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

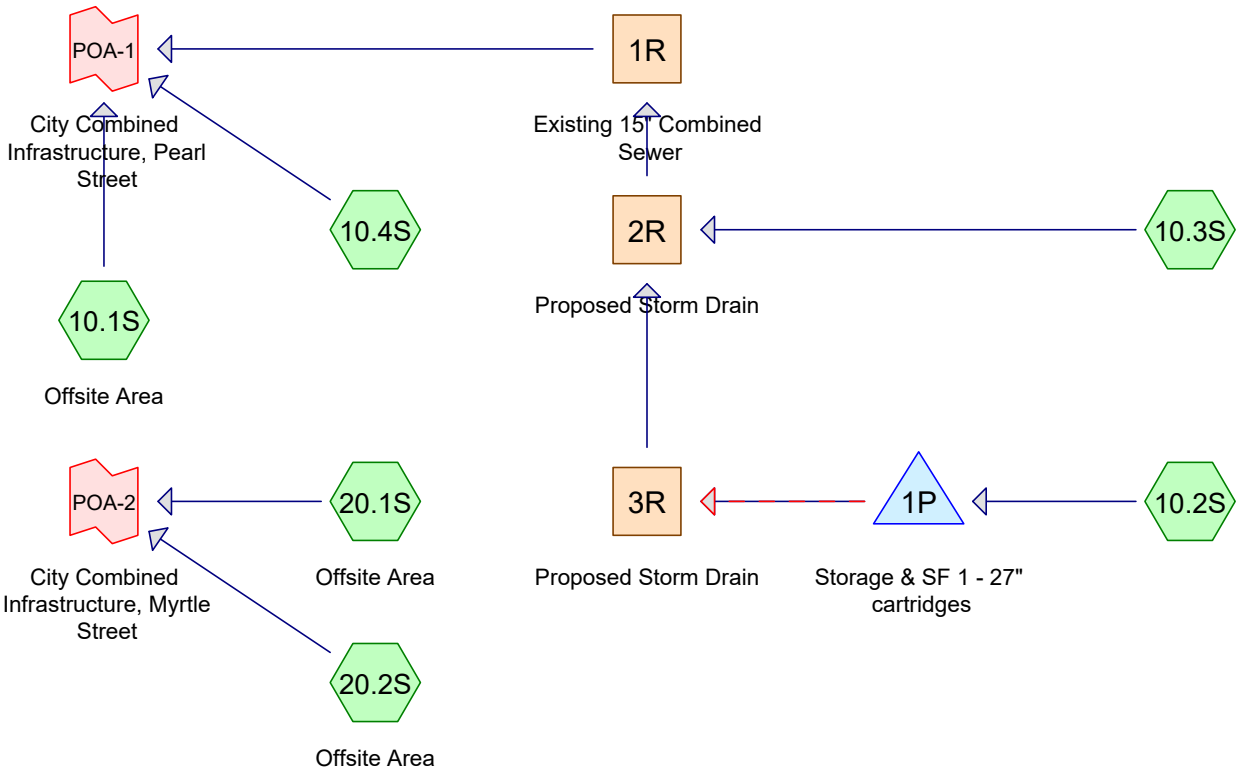
Summary for Link POA-2: City Combined Infrastructure, Myrtle Street

Inflow Area = 1.536 ac, 99.63% Impervious, Inflow Depth = 5.52" for 25-YEAR event
Inflow = 8.7 cfs @ 12.08 hrs, Volume= 0.707 af
Primary = 8.7 cfs @ 12.08 hrs, Volume= 0.707 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Appendix 2B

Hydrologic Modeling - Proposed Conditions (HydroCAD) Summary



Subcat Reach Pond Link

Routing Diagram for 19371-01 POST LOT 1
Prepared by Sebago Technics, Inc., Printed 8/9/2022
HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.038	39	>75% Grass cover, Good, HSG A (10.1S, 10.4S, 20.2S)
5.535	98	Paved parking & Roofs (10.1S, 10.2S, 10.3S, 10.4S, 20.1S, 20.2S)
5.574	**98**	**TOTAL AREA**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.1 cfs 0.153 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.5 cfs 0.036 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.7 cfs 0.049 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=0.71"
Tc=6.0 min CN=97 Runoff=0.7 cfs 0.050 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.0 cfs 0.003 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=1.0 cfs 0.072 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.21' Max Vel=4.71 fps Inflow=0.7 cfs 0.080 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=0.7 cfs 0.080 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=0.29' Max Vel=2.75 fps Inflow=0.7 cfs 0.080 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=0.7 cfs 0.080 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.04' Max Vel=0.82 fps Inflow=0.0 cfs 0.032 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=0.0 cfs 0.032 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=46.56' Storage=1,138 cf Inflow=0.5 cfs 0.036 af
Primary=0.0 cfs 0.032 af Secondary=0.0 cfs 0.000 af Outflow=0.0 cfs 0.032 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=3.4 cfs 0.283 af
Primary=3.4 cfs 0.283 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=1.0 cfs 0.074 af
Primary=1.0 cfs 0.074 af

Total Runoff Area = 5.574 ac Runoff Volume = 0.361 af Average Runoff Depth = 0.78"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=7.0 cfs 0.555 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=1.6 cfs 0.130 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=2.2 cfs 0.176 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=2.76"
Tc=6.0 min CN=97 Runoff=2.5 cfs 0.194 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=0.1 cfs 0.009 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.3 cfs 0.260 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.51' Max Vel=7.69 fps Inflow=3.6 cfs 0.305 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=3.6 cfs 0.305 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=0.71' Max Vel=4.44 fps Inflow=3.7 cfs 0.305 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=3.6 cfs 0.305 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.45' Max Vel=3.84 fps Inflow=1.6 cfs 0.129 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=1.5 cfs 0.129 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=48.23' Storage=2,178 cf Inflow=1.6 cfs 0.130 af
Primary=0.0 cfs 0.073 af Secondary=1.6 cfs 0.056 af Outflow=1.6 cfs 0.129 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=12.9 cfs 1.054 af
Primary=12.9 cfs 1.054 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=3.4 cfs 0.270 af
Primary=3.4 cfs 0.270 af

Total Runoff Area = 5.574 ac Runoff Volume = 1.324 af Average Runoff Depth = 2.85"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.4 cfs 0.844 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=2.4 cfs 0.197 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=3.3 cfs 0.268 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=4.25"
Tc=6.0 min CN=97 Runoff=3.8 cfs 0.300 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.2 cfs 0.014 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.9 cfs 0.396 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.66' Max Vel=8.61 fps Inflow=5.7 cfs 0.464 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=5.6 cfs 0.464 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=0.93' Max Vel=4.93 fps Inflow=5.7 cfs 0.464 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=5.7 cfs 0.464 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.58' Max Vel=4.31 fps Inflow=2.4 cfs 0.196 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=2.4 cfs 0.196 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=48.30' Storage=2,203 cf Inflow=2.4 cfs 0.197 af
Primary=0.0 cfs 0.076 af Secondary=2.4 cfs 0.120 af Outflow=2.4 cfs 0.196 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=19.8 cfs 1.607 af
Primary=19.8 cfs 1.607 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=5.1 cfs 0.410 af
Primary=5.1 cfs 0.410 af

Total Runoff Area = 5.574 ac Runoff Volume = 2.019 af Average Runoff Depth = 4.35"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=13.2 cfs 1.075 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=3.1 cfs 0.251 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=4.2 cfs 0.342 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=5.44"
Tc=6.0 min CN=97 Runoff=4.8 cfs 0.384 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.2 cfs 0.018 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=6.2 cfs 0.505 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.77' Max Vel=9.09 fps Inflow=7.2 cfs 0.592 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=7.2 cfs 0.592 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=1.10' Max Vel=5.15 fps Inflow=7.2 cfs 0.592 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=7.2 cfs 0.592 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.66' Max Vel=4.58 fps Inflow=3.1 cfs 0.250 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=3.0 cfs 0.250 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=48.35' Storage=2,219 cf Inflow=3.1 cfs 0.251 af
Primary=0.0 cfs 0.078 af Secondary=3.0 cfs 0.172 af Outflow=3.1 cfs 0.250 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=25.0 cfs 2.051 af
Primary=25.0 cfs 2.051 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=6.4 cfs 0.523 af
Primary=6.4 cfs 0.523 af

Total Runoff Area = 5.574 ac Runoff Volume = 2.575 af Average Runoff Depth = 5.54"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Summary for Subcatchment 10.1S: Offsite Area

Runoff = 13.2 cfs @ 12.08 hrs, Volume= 1.075 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	100,438	98	Paved parking & Roofs
	630	39	>75% Grass cover, Good, HSG A
	101,068	98	Weighted Average
	630		0.62% Pervious Area
	100,438		99.38% Impervious Area

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

Summary for Subcatchment 10.2S:

Runoff = 3.1 cfs @ 12.08 hrs, Volume= 0.251 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	23,617	98	Paved parking & Roofs
	23,617		100.00% Impervious Area

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

Summary for Subcatchment 10.3S:

Runoff = 4.2 cfs @ 12.08 hrs, Volume= 0.342 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	32,101	98	Paved parking & Roofs
	32,101		100.00% Impervious Area

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

Summary for Subcatchment 10.4S:

Runoff = 4.8 cfs @ 12.08 hrs, Volume= 0.384 af, Depth= 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	36,079	98	Paved parking & Roofs
	791	39	>75% Grass cover, Good, HSG A
	36,870	97	Weighted Average
	791		2.15% Pervious Area
	36,079		97.85% Impervious Area

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

Summary for Subcatchment 20.1S: Offsite Area

Runoff = 0.2 cfs @ 12.08 hrs, Volume= 0.018 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	1,685	98	Paved parking & Roofs
	1,685		100.00% Impervious Area

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

Summary for Subcatchment 20.2S: Offsite Area

Runoff = 6.2 cfs @ 12.08 hrs, Volume= 0.505 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	47,200	98	Paved parking & Roofs
	251	39	>75% Grass cover, Good, HSG A
	47,451	98	Weighted Average
	251		0.53% Pervious Area
	47,200		99.47% Impervious Area

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

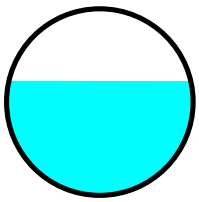
Summary for Reach 1R: Existing 15" Combined Sewer

Inflow Area = 1.279 ac,100.00% Impervious, Inflow Depth > 5.55" for 25-YEAR event
Inflow = 7.2 cfs @ 12.09 hrs, Volume= 0.592 af
Outflow = 7.2 cfs @ 12.10 hrs, Volume= 0.592 af, Atten= 0%, Lag= 0.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 9.09 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 2.11 fps, Avg. Travel Time= 1.2 min

Peak Storage= 124 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.77'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 10.3 cfs

15.0" Round Pipe
n= 0.013
Length= 158.0' Slope= 0.0256 '/'
Inlet Invert= 41.50', Outlet Invert= 37.46'



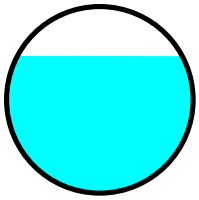
Summary for Reach 2R: Proposed Storm Drain

Inflow Area = 1.279 ac,100.00% Impervious, Inflow Depth > 5.55" for 25-YEAR event
Inflow = 7.2 cfs @ 12.09 hrs, Volume= 0.592 af
Outflow = 7.2 cfs @ 12.09 hrs, Volume= 0.592 af, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.15 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.23 fps, Avg. Travel Time= 0.7 min

Peak Storage= 71 cf @ 12.09 hrs
Average Depth at Peak Storage= 1.10'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 8.1 cfs

18.0" Round Pipe
n= 0.013
Length= 51.0' Slope= 0.0059 '/'
Inlet Invert= 41.90', Outlet Invert= 41.60'



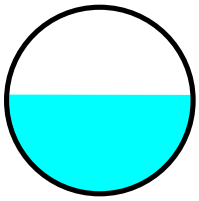
Summary for Reach 3R: Proposed Storm Drain

Inflow Area = 0.542 ac,100.00% Impervious, Inflow Depth > 5.53" for 25-YEAR event
Inflow = 3.1 cfs @ 12.09 hrs, Volume= 0.250 af
Outflow = 3.0 cfs @ 12.10 hrs, Volume= 0.250 af, Atten= 1%, Lag= 0.8 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.58 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 1.11 fps, Avg. Travel Time= 4.3 min

Peak Storage= 189 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.66'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 5.5 cfs

15.0" Round Pipe
n= 0.013
Length= 285.0' Slope= 0.0072 '/'
Inlet Invert= 44.05', Outlet Invert= 42.00'



Summary for Pond 1P: Storage & SF 1 - 27" cartridges

Inflow Area = 0.542 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 3.1 cfs @ 12.08 hrs, Volume= 0.251 af
Outflow = 3.1 cfs @ 12.09 hrs, Volume= 0.250 af, Atten= 0%, Lag= 0.4 min
Primary = 0.0 cfs @ 11.06 hrs, Volume= 0.078 af
Secondary = 3.0 cfs @ 12.09 hrs, Volume= 0.172 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 48.35' @ 12.09 hrs Surf.Area= 314 sf Storage= 2,219 cf

Plug-Flow detention time= 351.7 min calculated for 0.250 af (99% of inflow)
Center-of-Mass det. time= 348.2 min (1,093.8 - 745.7)

Volume	Invert	Avail.Storage	Storage Description
#1	44.55'	2,262 cf	**48.0" Round Pipe Storage** x 2 L= 90.0'

Device	Routing	Invert	Outlet Devices (Turned on 2 times)
#1	Primary	44.05'	**Tube/Siphon/Float Valve X 3.00** 0.380" Diameter, C= 0.600, 0.263" Trickle Diameter Starts@46.80' Breaks@44.92'
#2	Secondary	44.55'	**12.0" Round Culvert** L= 4.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 44.55' / 44.43' S= 0.0300 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#3	Device 2	48.02'	**5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=0.0 cfs @ 11.06 hrs HW=48.05' TW=44.13' (Dynamic Tailwater)
└─**1=Tube/Siphon/Float Valve** (Orifice Controls 0.0 cfs @ 9.54 fps)

Secondary OutFlow Max=3.0 cfs @ 12.09 hrs HW=48.35' TW=44.71' (Dynamic Tailwater)
└─**2=Culvert** (Passes 3.0 cfs of 6.9 cfs potential flow)
└─**3=Sharp-Crested Rectangular Weir** (Weir Controls 3.0 cfs @ 1.88 fps)

Summary for Link POA-1: City Combined Infrastructure, Pearl Street

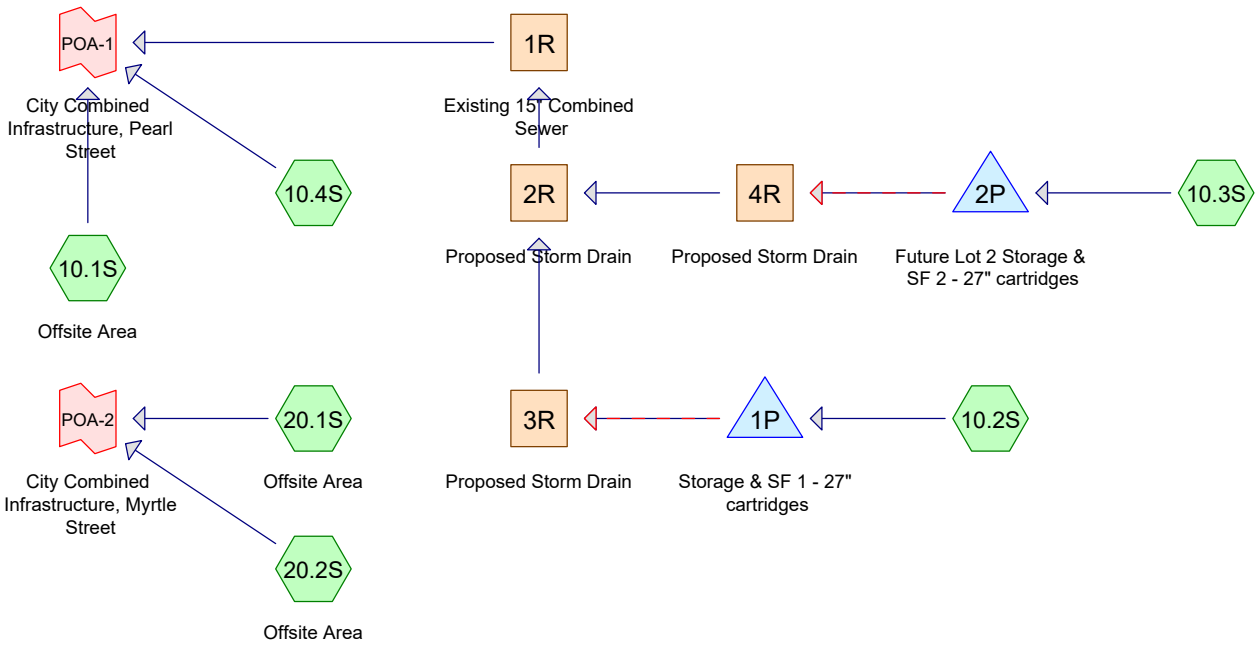
Inflow Area = 4.446 ac, 99.27% Impervious, Inflow Depth > 5.54" for 25-YEAR event
Inflow = 25.0 cfs @ 12.09 hrs, Volume= 2.051 af
Primary = 25.0 cfs @ 12.09 hrs, Volume= 2.051 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Summary for Link POA-2: City Combined Infrastructure, Myrtle Street

Inflow Area = 1.128 ac, 99.49% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 6.4 cfs @ 12.08 hrs, Volume= 0.523 af
Primary = 6.4 cfs @ 12.08 hrs, Volume= 0.523 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs



Subcat Reach Pond Link

Routing Diagram for 19371-01 POST LOT 1
Prepared by Sebago Technics, Inc., Printed 8/9/2022
HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.038	39	>75% Grass cover, Good, HSG A (10.1S, 10.4S, 20.2S)
5.535	98	Paved parking & Roofs (10.1S, 10.2S, 10.3S, 10.4S, 20.1S, 20.2S)
5.574	**98**	**TOTAL AREA**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.1 cfs 0.153 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.5 cfs 0.036 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.7 cfs 0.049 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=0.71"
Tc=6.0 min CN=97 Runoff=0.7 cfs 0.050 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.0 cfs 0.003 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=1.0 cfs 0.072 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.04' Max Vel=1.62 fps Inflow=0.0 cfs 0.071 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=0.0 cfs 0.071 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=0.05' Max Vel=0.95 fps Inflow=0.0 cfs 0.071 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=0.0 cfs 0.071 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.04' Max Vel=0.82 fps Inflow=0.0 cfs 0.032 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=0.0 cfs 0.032 af

Reach 4R: Proposed Storm Drain Avg. Flow Depth=0.04' Max Vel=0.83 fps Inflow=0.0 cfs 0.040 af
15.0" Round Pipe n=0.013 L=72.0' S=0.0063 '/' Capacity=5.1 cfs Outflow=0.0 cfs 0.040 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=46.56' Storage=1,138 cf Inflow=0.5 cfs 0.036 af
Primary=0.0 cfs 0.032 af Secondary=0.0 cfs 0.000 af Outflow=0.0 cfs 0.032 af

Pond 2P: Future Lot 2 Storage & SF 2 - 27" Peak Elev=44.52' Storage=1,582 cf Inflow=0.7 cfs 0.049 af
Primary=0.0 cfs 0.040 af Secondary=0.0 cfs 0.000 af Outflow=0.0 cfs 0.040 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=2.8 cfs 0.274 af
Primary=2.8 cfs 0.274 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=1.0 cfs 0.074 af
Primary=1.0 cfs 0.074 af

Total Runoff Area = 5.574 ac Runoff Volume = 0.361 af Average Runoff Depth = 0.78"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=7.0 cfs 0.555 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=1.6 cfs 0.130 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=2.2 cfs 0.176 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=2.76"
Tc=6.0 min CN=97 Runoff=2.5 cfs 0.194 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=0.1 cfs 0.009 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.3 cfs 0.260 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.35' Max Vel=6.29 fps Inflow=1.8 cfs 0.299 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=1.8 cfs 0.299 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=0.48' Max Vel=3.66 fps Inflow=1.8 cfs 0.299 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=1.8 cfs 0.299 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.45' Max Vel=3.84 fps Inflow=1.6 cfs 0.129 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=1.5 cfs 0.129 af

Reach 4R: Proposed Storm Drain Avg. Flow Depth=0.27' Max Vel=2.68 fps Inflow=0.5 cfs 0.171 af
15.0" Round Pipe n=0.013 L=72.0' S=0.0063 '/' Capacity=5.1 cfs Outflow=0.5 cfs 0.171 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=48.23' Storage=2,178 cf Inflow=1.6 cfs 0.130 af
Primary=0.0 cfs 0.073 af Secondary=1.6 cfs 0.056 af Outflow=1.6 cfs 0.129 af

Pond 2P: Future Lot 2 Storage & SF 2 - 27" Peak Elev=46.28' Storage=4,160 cf Inflow=2.2 cfs 0.176 af
Primary=0.0 cfs 0.097 af Secondary=0.5 cfs 0.073 af Outflow=0.5 cfs 0.171 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=10.7 cfs 1.048 af
Primary=10.7 cfs 1.048 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=3.4 cfs 0.270 af
Primary=3.4 cfs 0.270 af

Total Runoff Area = 5.574 ac Runoff Volume = 1.324 af Average Runoff Depth = 2.85"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.4 cfs 0.844 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=2.4 cfs 0.197 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=3.3 cfs 0.268 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=4.25"
Tc=6.0 min CN=97 Runoff=3.8 cfs 0.300 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.2 cfs 0.014 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.9 cfs 0.396 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.47' Max Vel=7.37 fps Inflow=3.1 cfs 0.457 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=3.1 cfs 0.457 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=0.65' Max Vel=4.27 fps Inflow=3.1 cfs 0.457 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=3.1 cfs 0.457 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.58' Max Vel=4.31 fps Inflow=2.4 cfs 0.196 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=2.4 cfs 0.196 af

Reach 4R: Proposed Storm Drain Avg. Flow Depth=0.41' Max Vel=3.40 fps Inflow=1.2 cfs 0.262 af
15.0" Round Pipe n=0.013 L=72.0' S=0.0063 '/' Capacity=5.1 cfs Outflow=1.2 cfs 0.262 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=48.30' Storage=2,203 cf Inflow=2.4 cfs 0.197 af
Primary=0.0 cfs 0.076 af Secondary=2.4 cfs 0.120 af Outflow=2.4 cfs 0.196 af

Pond 2P: Future Lot 2 Storage & SF 2 - 27" Peak Elev=47.61' Storage=5,719 cf Inflow=3.3 cfs 0.268 af
Primary=0.0 cfs 0.101 af Secondary=1.2 cfs 0.161 af Outflow=1.2 cfs 0.262 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=17.1 cfs 1.601 af
Primary=17.1 cfs 1.601 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=5.1 cfs 0.410 af
Primary=5.1 cfs 0.410 af

Total Runoff Area = 5.574 ac Runoff Volume = 2.019 af Average Runoff Depth = 4.35"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10.1S: Offsite Area Runoff Area=101,068 sf 99.38% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=13.2 cfs 1.075 af

Subcatchment10.2S: Runoff Area=23,617 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=3.1 cfs 0.251 af

Subcatchment10.3S: Runoff Area=32,101 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=4.2 cfs 0.342 af

Subcatchment10.4S: Runoff Area=36,870 sf 97.85% Impervious Runoff Depth=5.44"
Tc=6.0 min CN=97 Runoff=4.8 cfs 0.384 af

Subcatchment20.1S: Offsite Area Runoff Area=1,685 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.2 cfs 0.018 af

Subcatchment20.2S: Offsite Area Runoff Area=47,451 sf 99.47% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=6.2 cfs 0.505 af

Reach 1R: Existing 15" Combined Sewer Avg. Flow Depth=0.72' Max Vel=8.89 fps Inflow=6.6 cfs 0.585 af
15.0" Round Pipe n=0.013 L=158.0' S=0.0256 '/' Capacity=10.3 cfs Outflow=6.5 cfs 0.585 af

Reach 2R: Proposed Storm Drain Avg. Flow Depth=1.03' Max Vel=5.08 fps Inflow=6.6 cfs 0.585 af
18.0" Round Pipe n=0.013 L=51.0' S=0.0059 '/' Capacity=8.1 cfs Outflow=6.6 cfs 0.585 af

Reach 3R: Proposed Storm Drain Avg. Flow Depth=0.66' Max Vel=4.58 fps Inflow=3.1 cfs 0.250 af
15.0" Round Pipe n=0.013 L=285.0' S=0.0072 '/' Capacity=5.5 cfs Outflow=3.0 cfs 0.250 af

Reach 4R: Proposed Storm Drain Avg. Flow Depth=0.79' Max Vel=4.53 fps Inflow=3.7 cfs 0.335 af
15.0" Round Pipe n=0.013 L=72.0' S=0.0063 '/' Capacity=5.1 cfs Outflow=3.7 cfs 0.335 af

Pond 1P: Storage & SF 1 - 27" cartridges Peak Elev=48.35' Storage=2,219 cf Inflow=3.1 cfs 0.251 af
Primary=0.0 cfs 0.078 af Secondary=3.0 cfs 0.172 af Outflow=3.1 cfs 0.250 af

Pond 2P: Future Lot 2 Storage & SF 2 - 27" Peak Elev=47.85' Storage=5,862 cf Inflow=4.2 cfs 0.342 af
Primary=0.0 cfs 0.103 af Secondary=3.6 cfs 0.232 af Outflow=3.7 cfs 0.335 af

Link POA-1: City Combined Infrastructure, Pearl Street Inflow=22.3 cfs 2.044 af
Primary=22.3 cfs 2.044 af

Link POA-2: City Combined Infrastructure, Myrtle Street Inflow=6.4 cfs 0.523 af
Primary=6.4 cfs 0.523 af

Total Runoff Area = 5.574 ac Runoff Volume = 2.575 af Average Runoff Depth = 5.54"
0.69% Pervious = 0.038 ac 99.31% Impervious = 5.535 ac

Summary for Subcatchment 10.1S: Offsite Area

Runoff = 13.2 cfs @ 12.08 hrs, Volume= 1.075 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	100,438	98	Paved parking & Roofs
	630	39	>75% Grass cover, Good, HSG A
	101,068	98	Weighted Average
	630		0.62% Pervious Area
	100,438		99.38% Impervious Area

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

Summary for Subcatchment 10.2S:

Runoff = 3.1 cfs @ 12.08 hrs, Volume= 0.251 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	23,617	98	Paved parking & Roofs
	23,617		100.00% Impervious Area

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

Summary for Subcatchment 10.3S:

Runoff = 4.2 cfs @ 12.08 hrs, Volume= 0.342 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	32,101	98	Paved parking & Roofs
	32,101		100.00% Impervious Area

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

Summary for Subcatchment 10.4S:

Runoff = 4.8 cfs @ 12.08 hrs, Volume= 0.384 af, Depth= 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	36,079	98	Paved parking & Roofs
	791	39	>75% Grass cover, Good, HSG A
	36,870	97	Weighted Average
	791		2.15% Pervious Area
	36,079		97.85% Impervious Area

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

Summary for Subcatchment 20.1S: Offsite Area

Runoff = 0.2 cfs @ 12.08 hrs, Volume= 0.018 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	1,685	98	Paved parking & Roofs
	1,685		100.00% Impervious Area

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

Summary for Subcatchment 20.2S: Offsite Area

Runoff = 6.2 cfs @ 12.08 hrs, Volume= 0.505 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

	Area (sf)	CN	Description
*	47,200	98	Paved parking & Roofs
	251	39	>75% Grass cover, Good, HSG A
	47,451	98	Weighted Average
	251		0.53% Pervious Area
	47,200		99.47% Impervious Area

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

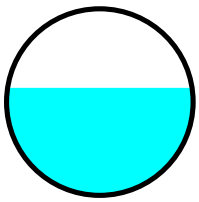
Summary for Reach 1R: Existing 15" Combined Sewer

Inflow Area = 1.279 ac,100.00% Impervious, Inflow Depth > 5.49" for 25-YEAR event
Inflow = 6.6 cfs @ 12.13 hrs, Volume= 0.585 af
Outflow = 6.5 cfs @ 12.14 hrs, Volume= 0.585 af, Atten= 1%, Lag= 0.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 8.89 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 2.25 fps, Avg. Travel Time= 1.2 min

Peak Storage= 116 cf @ 12.14 hrs
Average Depth at Peak Storage= 0.72'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 10.3 cfs

15.0" Round Pipe
n= 0.013
Length= 158.0' Slope= 0.0256 '/'
Inlet Invert= 41.50', Outlet Invert= 37.46'



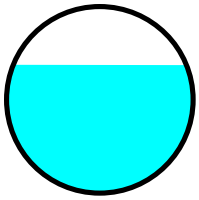
Summary for Reach 2R: Proposed Storm Drain

Inflow Area = 1.279 ac,100.00% Impervious, Inflow Depth > 5.49" for 25-YEAR event
Inflow = 6.6 cfs @ 12.13 hrs, Volume= 0.585 af
Outflow = 6.6 cfs @ 12.13 hrs, Volume= 0.585 af, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.08 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.31 fps, Avg. Travel Time= 0.6 min

Peak Storage= 66 cf @ 12.13 hrs
Average Depth at Peak Storage= 1.03'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 8.1 cfs

18.0" Round Pipe
n= 0.013
Length= 51.0' Slope= 0.0059 '/'
Inlet Invert= 41.90', Outlet Invert= 41.60'



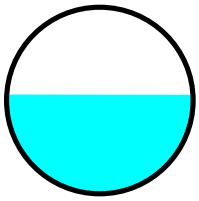
Summary for Reach 3R: Proposed Storm Drain

Inflow Area = 0.542 ac,100.00% Impervious, Inflow Depth > 5.53" for 25-YEAR event
Inflow = 3.1 cfs @ 12.09 hrs, Volume= 0.250 af
Outflow = 3.0 cfs @ 12.10 hrs, Volume= 0.250 af, Atten= 1%, Lag= 0.8 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.58 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 1.11 fps, Avg. Travel Time= 4.3 min

Peak Storage= 189 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.66'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 5.5 cfs

15.0" Round Pipe
n= 0.013
Length= 285.0' Slope= 0.0072 '/'
Inlet Invert= 44.05', Outlet Invert= 42.00'



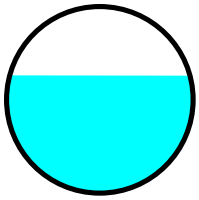
Summary for Reach 4R: Proposed Storm Drain

Inflow Area = 0.737 ac,100.00% Impervious, Inflow Depth > 5.45" for 25-YEAR event
Inflow = 3.7 cfs @ 12.13 hrs, Volume= 0.335 af
Outflow = 3.7 cfs @ 12.13 hrs, Volume= 0.335 af, Atten= 0%, Lag= 0.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.53 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 1.16 fps, Avg. Travel Time= 1.0 min

Peak Storage= 59 cf @ 12.13 hrs
Average Depth at Peak Storage= 0.79'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 5.1 cfs

15.0" Round Pipe
n= 0.013
Length= 72.0' Slope= 0.0063 '/'
Inlet Invert= 42.45', Outlet Invert= 42.00'



Summary for Pond 1P: Storage & SF 1 - 27" cartridges

Inflow Area = 0.542 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 3.1 cfs @ 12.08 hrs, Volume= 0.251 af
Outflow = 3.1 cfs @ 12.09 hrs, Volume= 0.250 af, Atten= 0%, Lag= 0.4 min
Primary = 0.0 cfs @ 11.06 hrs, Volume= 0.078 af
Secondary = 3.0 cfs @ 12.09 hrs, Volume= 0.172 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 48.35' @ 12.09 hrs Surf.Area= 314 sf Storage= 2,219 cf

Plug-Flow detention time= 351.7 min calculated for 0.250 af (99% of inflow)
Center-of-Mass det. time= 348.2 min (1,093.8 - 745.7)

Volume	Invert	Avail.Storage	Storage Description
#1	44.55'	2,262 cf	**48.0" Round Pipe Storage** x 2 L= 90.0'

Device	Routing	Invert	Outlet Devices (Turned on 2 times)
#1	Primary	44.05'	**Tube/Siphon/Float Valve X 3.00** 0.380" Diameter, C= 0.600, 0.263" Trickle Diameter Starts@46.80' Breaks@44.92'
#2	Secondary	44.55'	**12.0" Round Culvert** L= 4.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 44.55' / 44.43' S= 0.0300 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#3	Device 2	48.02'	**5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=0.0 cfs @ 11.06 hrs HW=48.05' TW=44.13' (Dynamic Tailwater)
└**1=Tube/Siphon/Float Valve** (Orifice Controls 0.0 cfs @ 9.54 fps)

Secondary OutFlow Max=3.0 cfs @ 12.09 hrs HW=48.35' TW=44.71' (Dynamic Tailwater)
└**2=Culvert** (Passes 3.0 cfs of 6.9 cfs potential flow)
└**3=Sharp-Crested Rectangular Weir** (Weir Controls 3.0 cfs @ 1.88 fps)

Summary for Pond 2P: Future Lot 2 Storage & SF 2 - 27" cartridges

Inflow Area = 0.737 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.2 cfs @ 12.08 hrs, Volume= 0.342 af
Outflow = 3.7 cfs @ 12.13 hrs, Volume= 0.335 af, Atten= 12%, Lag= 2.7 min
Primary = 0.0 cfs @ 12.10 hrs, Volume= 0.103 af
Secondary = 3.6 cfs @ 12.13 hrs, Volume= 0.232 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 47.85' @ 12.13 hrs Surf.Area= 421 sf Storage= 5,862 cf

Plug-Flow detention time= 411.0 min calculated for 0.335 af (98% of inflow)
Center-of-Mass det. time= 398.2 min (1,143.9 - 745.7)

Volume	Invert	Avail.Storage	Storage Description
#1	42.95'	5,890 cf	**60.0" Round Pipe Storage** x 2 L= 150.0'

Device	Routing	Invert	Outlet Devices (Turned on 1 times)
#1	Secondary	42.95'	**12.0" Round Culvert** L= 4.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 42.95' / 42.93' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Primary	42.45'	**Tube/Siphon/Float Valve X 4.00** 0.387" Diameter, C= 0.600, 0.263" Trickle Diameter Starts@45.20' Breaks@43.32'
#3	Device 1	45.50'	**5.0" Vert. Orifice WQV** C= 0.600
#4	Device 1	47.55'	**5.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)

Primary OutFlow Max=0.0 cfs @ 12.10 hrs HW=47.75' TW=42.99' (Dynamic Tailwater)
└─**2=Tube/Siphon/Float Valve** (Orifice Controls 0.0 cfs @ 10.50 fps)

Secondary OutFlow Max=3.6 cfs @ 12.13 hrs HW=47.85' TW=43.23' (Dynamic Tailwater)
└─**1=Culvert** (Passes 3.6 cfs of 7.9 cfs potential flow)
  ├─**3=Orifice WQV** (Orifice Controls 1.0 cfs @ 7.04 fps)
  └─**4=Sharp-Crested Vee/Trap Weir** (Weir Controls 2.7 cfs @ 1.79 fps)

Summary for Link POA-1: City Combined Infrastructure, Pearl Street

Inflow Area = 4.446 ac, 99.27% Impervious, Inflow Depth > 5.52" for 25-YEAR event
Inflow = 22.3 cfs @ 12.12 hrs, Volume= 2.044 af
Primary = 22.3 cfs @ 12.12 hrs, Volume= 2.044 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Summary for Link POA-2: City Combined Infrastructure, Myrtle Street

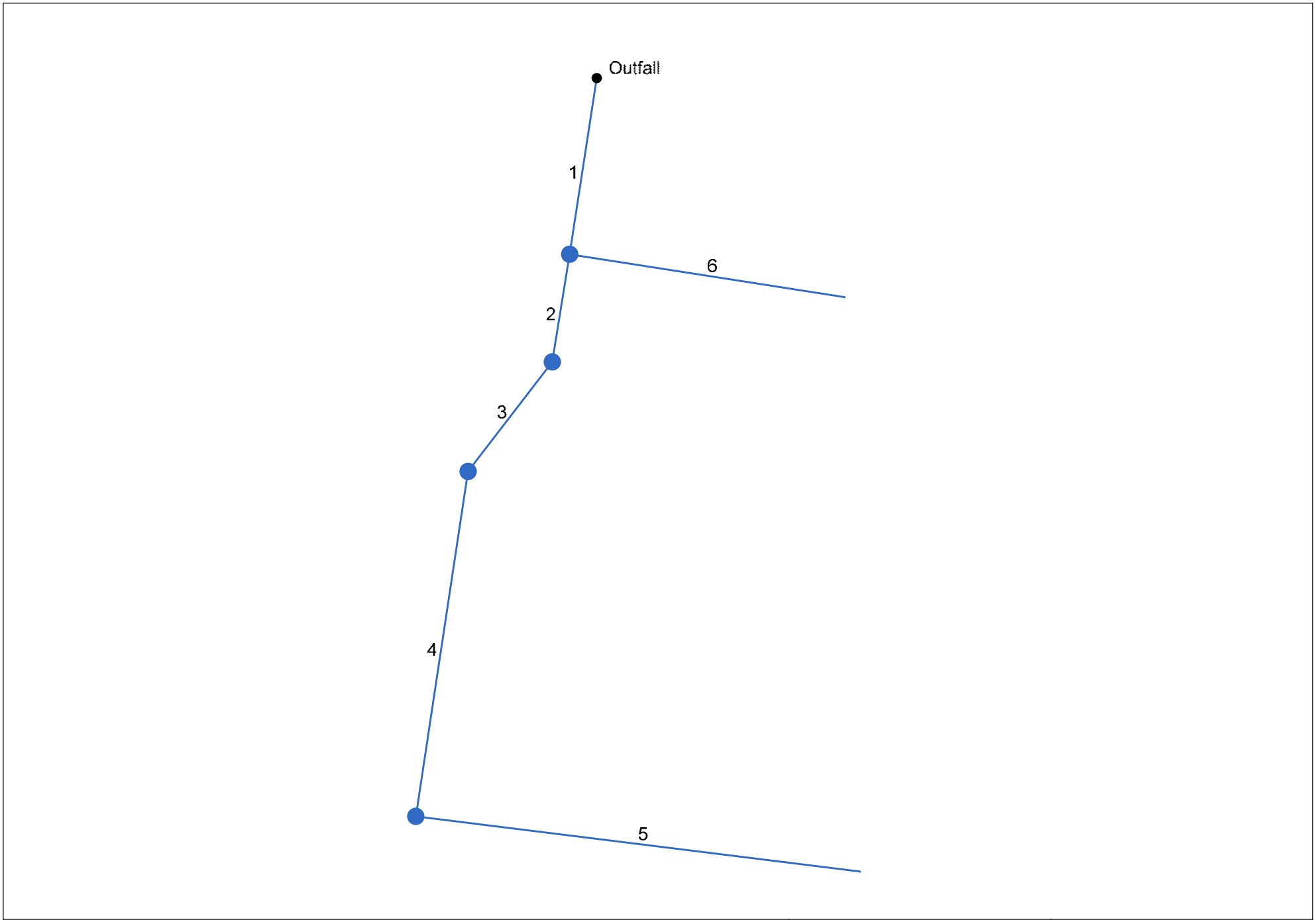
Inflow Area = 1.128 ac, 99.49% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 6.4 cfs @ 12.08 hrs, Volume= 0.523 af
Primary = 6.4 cfs @ 12.08 hrs, Volume= 0.523 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Appendix 2C

Hydrologic Modeling - Pipe Sizing Calculations And Model Summary

Hydraflow Storm Sewers Extension for Autodesk® AutoCAD® Civil 3D® Plan



Project File: 19371 SSA.stm	Number of lines: 6	Date: 7/21/2022

Storm Sewers v12.00

Storm Sewer Inventory Report

Line No.	Alignment				Flow Data				Physical Data								Line ID
	Dnstr Line No.	Line Length (ft)	Defl angle (deg)	Junc Type	Known Q (cfs)	Drng Area (ac)	Runoff Coeff (C)	Inlet Time (min)	Invert El Dn (ft)	Line Slope (%)	Invert El Up (ft)	Line Size (in)	Line Shape	N Value (n)	J-Loss Coeff (K)	Inlet/ Rim El (ft)	
1	End	51.308	97.874	MH	4.00	0.00	0.00	0.0	41.35	0.58	41.65	18	Cir	0.012	1.00	50.00	SD-1
2	1	31.419	0.527	MH	0.00	0.00	0.00	0.0	42.00	0.60	42.19	15	Cir	0.012	0.50	50.00	SD-1.1
3	2	38.311	26.089	MH	0.00	0.00	0.00	0.0	42.29	0.55	42.50	15	Cir	0.012	0.51	50.00	SD-2
4	3	100.458	-26.722	MH	0.00	0.00	0.00	0.0	42.60	0.48	43.08	15	Cir	0.012	1.00	50.00	SD-3
5	4	116.027	-89.871	None	0.90	0.00	0.00	0.0	43.18	0.58	43.85	15	Cir	0.012	1.00	0.00	SD-4
6	1	72.173	-87.999	None	2.50	0.00	0.00	0.0	42.00	0.62	42.45	15	Cir	0.012	1.00	0.00	SD-5

Project File: 19371 SSA.stm | Number of lines: 6 | Date: 7/21/2022

Structure Report

Struct No.	Structure ID	Junction Type	Rim Elev (ft)	Structure			Line Out			Line In		
				Shape	Length (ft)	Width (ft)	Size (in)	Shape	Invert (ft)	Size (in)	Shape	Invert (ft)
1	DMH-1	Manhole	50.00	Cir	4.00	4.00	18	Cir	41.65	15 15	Cir Cir	42.00 42.00
2	DMH-1B	Manhole	50.00	Cir	4.00	4.00	15	Cir	42.19	15	Cir	42.29
3	DMH-2	Manhole	50.00	Cir	4.00	4.00	15	Cir	42.50	15	Cir	42.60
4	DMH-3	Manhole	50.00	Cir	4.00	4.00	15	Cir	43.08	15	Cir	43.18
5	Null Structure	None	0.00	n/a	n/a	n/a	15	Cir	43.85			
6	Null Structure	None	0.00	n/a	n/a	n/a	15	Cir	42.45			

Project File: 19371 SSA.stm | Number of Structures: 6 | Run Date: 7/21/2022

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	SD-1	7.40	18	Cir	51.308	41.35	41.65	0.585	42.40	42.72	0.47	43.19	End	Manhole
2	SD-1.1	0.90	15	Cir	31.419	42.00	42.19	0.605	43.19	42.56	n/a	42.56	1	Manhole
3	SD-2	0.90	15	Cir	38.311	42.29	42.50	0.548	42.64	42.87	n/a	42.87	2	Manhole
4	SD-3	0.90	15	Cir	100.458	42.60	43.08	0.478	42.97	43.45	n/a	43.45	3	Manhole
5	SD-4	0.90	15	Cir	116.027	43.18	43.85	0.577	43.53	44.22	n/a	44.22	4	None
6	SD-5	2.50	15	Cir	72.173	42.00	42.45	0.624	43.19	43.08	n/a	43.08	1	None

Project File: 19371 SSA.stm | Number of lines: 6 | Run Date: 7/21/2022

NOTES: Return period = 10 Yrs.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1	DMH-1	4.00*	0.00	0.00	4.00	MH	0.0	2.00	0.00	2.00	0.00	0.000	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
2	DMH-1B	0.00	0.00	0.00	0.00	MH	0.0	2.00	0.00	2.00	0.00	0.000	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
3	DMH-2	0.00	0.00	0.00	0.00	MH	0.0	2.00	0.00	2.00	0.00	0.000	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
4	DMH-3	0.00	0.00	0.00	0.00	MH	0.0	2.00	0.00	2.00	0.00	0.000	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
5	Null Structure	0.90*	0.00	0.00	0.90	None	0.0	0.00	0.00	0.00	0.00	0.000	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
6	Null Structure	2.50*	0.00	0.00	2.50	None	0.0	0.00	0.00	0.00	0.00	0.000	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off

Project File: 19371 SSA.stm | Number of lines: 6 | Run Date: 7/21/2022

NOTES: Inlet N-Values = 0.016; Intensity = 32.56 / (Inlet time + 8.60) ^ 0.70; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf		Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf	Ave Sf	Enrgy loss		
	(in)	(cfs)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(%)	(ft)	(K)	(ft)
1	18	7.40	41.35	42.40	1.05	1.33	5.58	0.48	42.89	0.599	51.308	41.65	42.72	1.07	1.35	5.47	0.47	43.19	0.570	0.585	0.300	1.00	0.47
2	15	0.90	42.00	43.19	1.19	0.31	0.75	0.13	43.32	0.000	31.419	42.19	42.56	0.37**	0.31	2.94	0.13	42.70	0.000	0.000	n/a	0.50	n/a
3	15	0.90	42.29	42.64	0.35*	0.28	3.17	0.13	42.78	0.000	38.311	42.50	42.87	0.37**	0.31	2.94	0.13	43.01	0.000	0.000	n/a	0.51	n/a
4	15	0.90	42.60	42.97	0.37*	0.30	3.01	0.13	43.10	0.000	100.458	43.08	43.45	0.37**	0.31	2.94	0.13	43.59	0.000	0.000	n/a	1.00	n/a
5	15	0.90	43.18	43.53	0.35*	0.28	3.22	0.13	43.66	0.000	116.027	43.85	44.22	0.37**	0.31	2.94	0.13	44.36	0.000	0.000	n/a	1.00	n/a
6	15	2.50	42.00	43.19	1.19	0.62	2.08	0.25	43.44	0.000	72.173	42.45	43.08	0.63**	0.62	4.01	0.25	43.33	0.000	0.000	n/a	1.00	n/a

Project File: 19371 SSA.stm | Number of lines: 6 | Run Date: 7/21/2022

Notes: * depth assumed; ** Critical depth. ; c = cir e = ellip b = box

Appendix 3

Inspection, Maintenance and Housekeeping Plan

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

For:
Lot 1 385 Congress Street
Portland, Maine

By:
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures and stormwater management facilities for the project. This plan outlines housekeeping requirements that shall be followed during and after construction. These procedures shall be followed in order to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

During Construction

1. **Inspection:** During construction, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event (0.5" of rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (0.5" of rainfall).

3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed

to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event (0.5" of rainfall). They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

C. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

D. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

E. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e., erosion control blankets), stone check dams may be needed to further reduce channel velocity.

F. Catch basins:

- Inspect and, if required, clean-out basins at least once a year, preferably in early spring.
- Cleaning of catch basins will be required when sediment of at least 6 inches accumulates in the sump.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.

G. Stormfilter:

- Refer to Contech – Stormfilter operation manual for guidance on required maintenance and inspection.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

A. Spill prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

B. Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to

isolate portions of the site for the purposes of storage and handling of these materials.

C. Fugitive sediment and dust: Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

E. Trench or foundation dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

Post-Construction

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner shall inspect and maintain the BMPs, including but not limited to any parking areas, catch basins, drainage swales, treatment and detention systems, pipes and related structures, in accordance with municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the local municipality in the annual report.

   A. Vegetated Areas:

   - Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains (>0.5”) to identify active or potential erosion problems.
   - Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

B. Removal of Winter Sand:

- Clear accumulations of winter sand in parking lots.
- Accumulations on pavement may be removed by pavement sweeping.

3. Documentation:

A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, as required by the local municipality, provide a completed and signed certification on a form provided by the local municipality, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.

B. A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

4. Duration of Maintenance: Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. Upon such assumption of responsibility, the association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

ATTACHMENT 1 – STORMWATER INSPECTION AND MAINTENANCE LOG

Lot 1 385 Congress Street
Portland, Maine

This log is intended to accompany the Inspection, Maintenance, and Housekeeping Plan for the development at 385 Congress Street in Portland, Maine. The following items shall be checked, cleaned, and maintained on a regular basis as specified in the Maintenance Plan and as described in the sections below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the City of Portland. Qualified personnel familiar with the drainage systems shall perform the inspections. A copy of the construction and post-construction maintenance logs are provided.

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

Site Element	Suggested Maintenance (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Vegetated Areas	Inspect Slopes/Embankments for erosion (annually)		
	Replant bare areas or areas of sparse growth (annually)		
Paved Surfaces	Clear accumulated winter sand (annually)		
	Remove sediment along edges of parking and within low spots/pockets (annually)		
Ditches/Swales	Remove obstructions/debris/sediment (monthly)		
	Inspect for erosion/repair as needed (annually)		
	Remove woody vegetation (annually)		
	Mow vegetated ditches (annually)		
Catch Basins	Remove sediment/debris from sump (annually)		
Culverts	Remove sediment/debris from inlet/outlet aprons (annually)		
	Inspect inlet/outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		
Pipe Outlets	Remove sediment/debris from outlet aprons (annually)		
	Inspect outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		

Additional Notes/Observations:

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

BMP Element	Suggested Maintenance	Observations	Inspection Notes/Recommended Action
Pretreatment			
	Sediment Depth/Removal (Annually)		
Outlet Control Structure			
	Sediment Depth (Annually)		
	Floatables/Debris (Annually)		
Discharge Pipe			
	Ground Stabilized (>1" rain, Annually)		
Subsurface Chambers			
	Sediment Depth/Removal (Annually)		

Additional Notes/Observations:

CONTECH®
ENGINEERED SOLUTIONS

StormFilter Inspection and Maintenance Procedures

The Stormwater Management StormFilter®

Maintenance Guidelines

The primary purpose of the Stormwater Management StormFilter® is to filter and prevent pollutants from entering our waterways. Like any effective filtration system, periodically these pollutants must be removed to restore the StormFilter to its full efficiency and effectiveness.

Maintenance requirements and frequency are dependent on the pollutant load characteristics of each site. Maintenance activities may be required in the event of a chemical spill or due to excessive sediment loading from site erosion or extreme storms. It is a good practice to inspect the system after major storm events.

Maintenance Procedures

Although there are many effective maintenance options, we believe the following procedure to be efficient, using common equipment and existing maintenance protocols. The following two-step procedure is recommended::

1. **Inspection**
   - Inspection of the vault interior to determine the need for maintenance.
2. **Maintenance**
   - Cartridge replacement
   - Sediment removal

Inspection and Maintenance Timing

At least one scheduled inspection should take place per year with maintenance following as warranted.

First, an inspection should be done before the winter season. During the inspection the need for maintenance should be determined and, if disposal during maintenance will be required, samples of the accumulated sediments and media should be obtained.

Second, if warranted, a maintenance (replacement of the filter cartridges and removal of accumulated sediments) should be performed during periods of dry weather.

In addition to these two activities, it is important to check the condition of the StormFilter unit after major storms for potential damage caused by high flows and for high sediment accumulation that may be caused by localized erosion in the drainage area. It may be necessary to adjust the inspection/ maintenance schedule depending on the actual operating conditions encountered by the system. In general, inspection activities can be conducted at any time, and maintenance should occur, if warranted, during dryer months in late summer to early fall.

Maintenance Frequency

The primary factor for determining frequency of maintenance for the StormFilter is sediment loading.

A properly functioning system will remove solids from water by trapping particulates in the porous structure of the filter media inside the cartridges. The flow through the system will naturally decrease as more and more particulates are trapped. Eventually the flow through the cartridges will be low enough to require replacement. It may be possible to extend the usable span of the cartridges by removing sediment from upstream trapping devices on a routine as-needed basis, in order to prevent material from being re-suspended and discharged to the StormFilter treatment system.

The average maintenance lifecycle is approximately 1-5 years. Site conditions greatly influence maintenance requirements. StormFilter units located in areas with erosion or active construction may need to be inspected and maintained more often than those with fully stabilized surface conditions.

Regulatory requirements or a chemical spill can shift maintenance timing as well. The maintenance frequency may be adjusted as additional monitoring information becomes available during the inspection program. Areas that develop known problems should be inspected more frequently than areas that demonstrate no problems, particularly after major storms. Ultimately, inspection and maintenance activities should be scheduled based on the historic records and characteristics of an individual StormFilter system or site. It is recommended that the site owner develop a database to properly manage StormFilter inspection and maintenance programs..

Inspection Procedures

The primary goal of an inspection is to assess the condition of the cartridges relative to the level of visual sediment loading as it relates to decreased treatment capacity. It may be desirable to conduct this inspection during a storm to observe the relative flow through the filter cartridges. If the submerged cartridges are severely plugged, then typically large amounts of sediments will be present and very little flow will be discharged from the drainage pipes. If this is the case, then maintenance is warranted and the cartridges need to be replaced.

Warning: In the case of a spill, the worker should abort inspection activities until the proper guidance is obtained. Notify the local hazard control agency and Contech Engineered Solutions immediately.

To conduct an inspection:

Important: Inspection should be performed by a person who is familiar with the operation and configuration of the StormFilter treatment unit and the unit's role, relative to detention or retention facilities onsite.

1. If applicable, set up safety equipment to protect and notify surrounding vehicle and pedestrian traffic.
2. Visually inspect the external condition of the unit and take notes concerning defects/problems.
3. Open the access portals to the vault and allow the system vent.
4. Without entering the vault, visually inspect the inside of the unit, and note accumulations of liquids and solids.
5. Be sure to record the level of sediment build-up on the floor of the vault, in the forebay, and on top of the cartridges. If flow is occurring, note the flow of water per drainage pipe. Record all observations. Digital pictures are valuable for historical documentation.
6. Close and fasten the access portals.
7. Remove safety equipment.
8. If appropriate, make notes about the local drainage area relative to ongoing construction, erosion problems, or high loading of other materials to the system.
9. Discuss conditions that suggest maintenance and make decision as to whether or not maintenance is needed.

Maintenance Decision Tree

The need for maintenance is typically based on results of the inspection. The following Maintenance Decision Tree should be used as a general guide. (Other factors, such as Regulatory Requirements, may need to be considered).

Please note Stormwater Management StormFilter devices installed downstream of, or integrated within, a stormwater storage facility typically have different operational parameters (i.e. draindown time). In these cases, the inspector must understand the relationship between the retention/detention facility and the treatment system by evaluating site specific civil engineering plans, or contacting the engineer of record, and make adjustments to the below guidance as necessary. Sediment deposition depths and patterns within the StormFilter are likely to be quite different compared to systems without upstream storage and therefore shouldn't be used exclusively to evaluate a need for maintenance.

1. Sediment loading on the vault floor.
   a. If >4" of accumulated sediment, maintenance is required.
2. Sediment loading on top of the cartridge.
   a. If >1/4" of accumulation, maintenance is required.
3. Submerged cartridges.
   a. If >4" of static water above cartridge bottom for more than 24 hours after end of rain event, maintenance is required. (Catch basins have standing water in the cartridge bay.)
4. Plugged media.
   a. While not required in all cases, inspection of the media within the cartridge may provide valuable additional information.
   b. If pore space between media granules is absent, maintenance is required.
5. Bypass condition.
   a. If inspection is conducted during an average rain fall event and StormFilter remains in bypass condition (water over the internal outlet baffle wall or submerged cartridges), maintenance is required.
6. Hazardous material release.
   a. If hazardous material release (automotive fluids or other) is reported, maintenance is required.
7. Pronounced scum line.
   a. If pronounced scum line (say ≥ 1/4" thick) is present above top cap, maintenance is required.

Maintenance

Depending on the configuration of the particular system, maintenance personnel will be required to enter the vault to perform the maintenance.

Important: If vault entry is required, OSHA rules for confined space entry must be followed.

Filter cartridge replacement should occur during dry weather. It may be necessary to plug the filter inlet pipe if base flows is occurring.

Replacement cartridges can be delivered to the site or customers facility. Information concerning how to obtain the replacement cartridges is available from Contech Engineered Solutions.

Warning: In the case of a spill, the maintenance personnel should abort maintenance activities until the proper guidance is obtained. Notify the local hazard control agency and Contech Engineered Solutions immediately.

To conduct cartridge replacement and sediment removal maintenance:

1. If applicable, set up safety equipment to protect maintenance personnel and pedestrians from site hazards.
2. Visually inspect the external condition of the unit and take notes concerning defects/problems.
3. Open the doors (access portals) to the vault and allow the system to vent.
4. Without entering the vault, give the inside of the unit, including components, a general condition inspection.
5. Make notes about the external and internal condition of the vault. Give particular attention to recording the level of sediment build-up on the floor of the vault, in the forebay, and on top of the internal components.
6. Using appropriate equipment offload the replacement cartridges (up to 150 lbs. each) and set aside.
7. Remove used cartridges from the vault using one of the following methods:

Method 1:

A. This activity will require that maintenance personnel enter the vault to remove the cartridges from the under drain manifold and place them under the vault opening for lifting (removal). Disconnect each filter cartridge from the underdrain connector by rotating counterclockwise 1/4 of a turn. Roll the loose cartridge, on edge, to a convenient spot beneath the vault access.

   Using appropriate hoisting equipment, attach a cable from the boom, crane, or tripod to the loose cartridge. Contact Contech Engineered Solutions for suggested attachment devices.

B. Remove the used cartridges (up to 250 lbs. each) from the vault.

Important: Care must be used to avoid damaging the cartridges during removal and installation. The cost of repairing components damaged during maintenance will be the responsibility of the owner.

C. Set the used cartridge aside or load onto the hauling truck.

D. Continue steps a through c until all cartridges have been removed.

Method 2:

A. This activity will require that maintenance personnel enter the vault to remove the cartridges from the under drain manifold and place them under the vault opening for lifting (removal). Disconnect each filter cartridge from the underdrain connector by rotating counterclockwise 1/4 of a turn. Roll the loose cartridge, on edge, to a convenient spot beneath the vault access.

B. Unscrew the cartridge cap.

C. Remove the cartridge hood and float.

D. At location under structure access, tip the cartridge on its side.

E. Empty the cartridge onto the vault floor. Reassemble the empty cartridge.

F. Set the empty, used cartridge aside or load onto the hauling truck.

G. Continue steps a through e until all cartridges have been removed.

8. Remove accumulated sediment from the floor of the vault and from the forebay. This can most effectively be accomplished by use of a vacuum truck.
9. Once the sediments are removed, assess the condition of the vault and the condition of the connectors.
10. Using the vacuum truck boom, crane, or tripod, lower and install the new cartridges. Once again, take care not to damage connections.
11. Close and fasten the door.
12. Remove safety equipment.
13. Finally, dispose of the accumulated materials in accordance with applicable regulations. Make arrangements to return the used **empty** cartridges to Contech Engineered Solutions.

Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads.

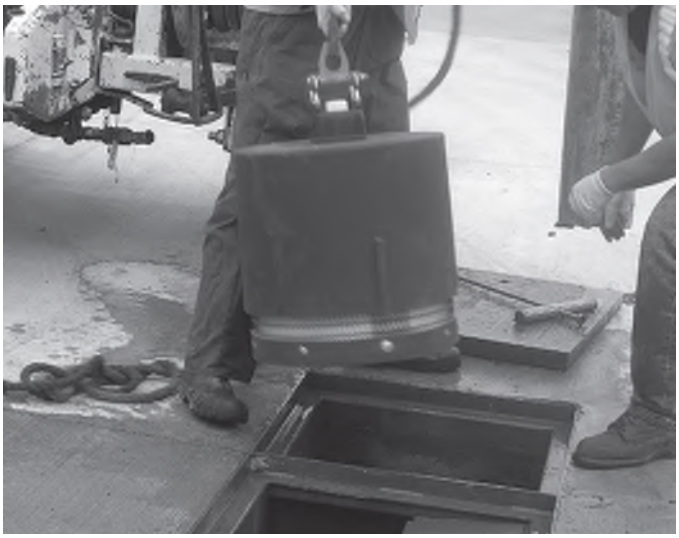
Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

Related Maintenance Activities - Performed on an as-needed basis

StormFilter units are often just one of many structures in a more comprehensive stormwater drainage and treatment system.

In order for maintenance of the StormFilter to be successful, it is imperative that all other components be properly maintained. The maintenance/repair of upstream facilities should be carried out prior to StormFilter maintenance activities.

In addition to considering upstream facilities, it is also important to correct any problems identified in the drainage area. Drainage area concerns may include: erosion problems, heavy oil loading, and discharges of inappropriate materials.



Inspection Report

Date: _____ Personnel: _____

Location: _____ System Size: _____ Months in Service: _____

System Type: Vault ☐ Cast-In-Place ☐ Linear Catch Basin ☐ Manhole ☐ Other: _____

Sediment Thickness in Forebay: _____ Date: _____

Sediment Depth on Vault Floor: _____

Sediment Depth on Cartridge Top(s): _____

Structural Damage: _____

Estimated Flow from Drainage Pipes (if available): _____

Cartridges Submerged: Yes ☐ No ☐ Depth of Standing Water: _____

StormFilter Maintenance Activities (check off if done and give description)

☐ Trash and Debris Removal: _____

☐ Minor Structural Repairs: _____

☐ Drainage Area Report _____

Excessive Oil Loading: Yes ☐ No ☐ Source: _____

Sediment Accumulation on Pavement: Yes ☐ No ☐ Source: _____

Erosion of Landscaped Areas: Yes ☐ No ☐ Source: _____

Items Needing Further Work: _____

Owners should contact the local public works department and inquire about how the department disposes of their street waste residuals.

Other Comments:

_____

_____

_____

_____

_____

_____

_____

_____

Review the condition reports from the previous inspection visits.

StormFilter Maintenance Report

Date: _____ Personnel: _____

Location: _____ System Size: _____

System Type: Vault ☐ Cast-In-Place ☐ Linear Catch Basin ☐ Manhole ☐ Other: _____

List Safety Procedures and Equipment Used: _____

_____

_____

System Observations

Months in Service: _____

Oil in Forebay (if present): Yes ☐ No ☐

Sediment Depth in Forebay (if present): _____

Sediment Depth on Vault Floor: _____

Sediment Depth on Cartridge Top(s): _____

Structural Damage: _____

Drainage Area Report

Excessive Oil Loading: Yes ☐ No ☐ Source: _____

Sediment Accumulation on Pavement: Yes ☐ No ☐ Source: _____

Erosion of Landscaped Areas: Yes ☐ No ☐ Source: _____

StormFilter Cartridge Replacement Maintenance Activities

Remove Trash and Debris: Yes ☐ No ☐ Details: _____

Replace Cartridges: Yes ☐ No ☐ Details: _____

Sediment Removed: Yes ☐ No ☐ Details: _____

Quantity of Sediment Removed (estimate?):

Minor Structural Repairs: Yes ☐ No ☐ Details: _____

Residuals (debris, sediment) Disposal Methods: _____

Notes:

_____

_____

_____

_____

_____

_____

_____

RECYCLED PAPER

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Support

- Drawings and specifications are available at www.conteches.com.
- Site-specific design support is available from our engineers.

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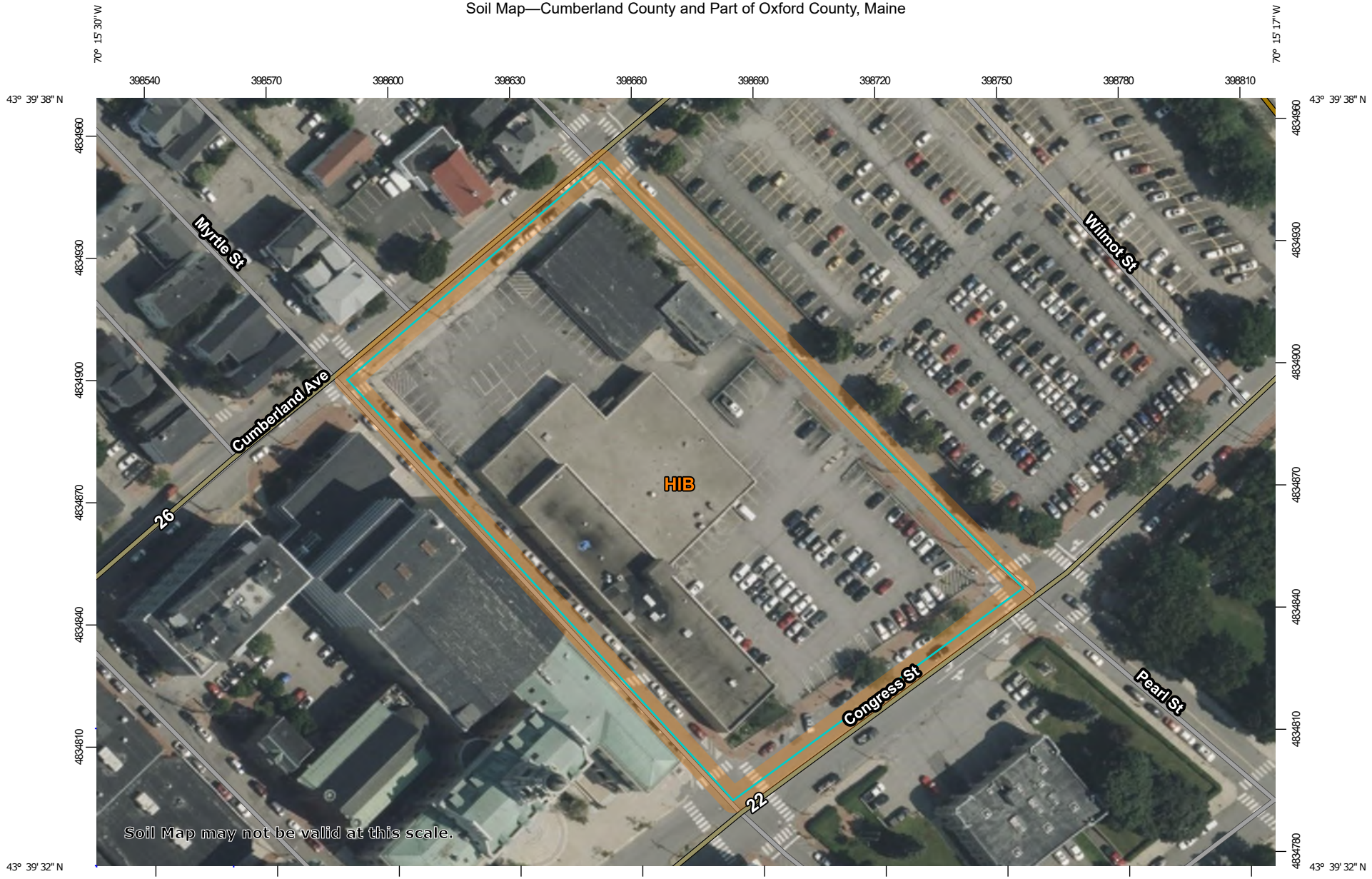
Appendix 4

Subsurface Investigations



Map Scale: 1:1,330 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

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: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 18, Aug 31, 2021

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

Date(s) aerial images were photographed: Jul 22, 2021—Oct 7, 2021

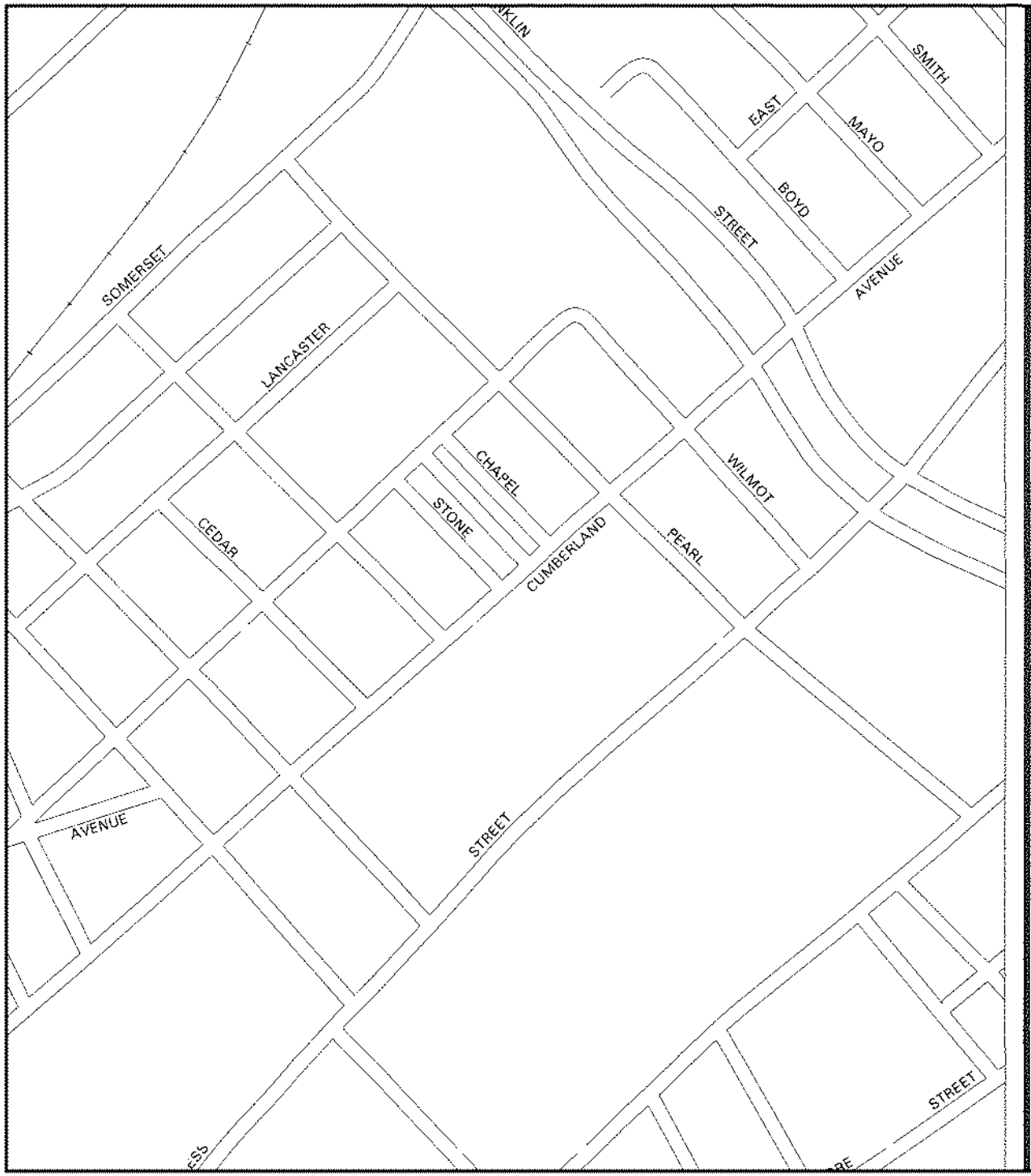
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HIB	Hinckley loamy sand, 3 to 8 percent slopes	3.0	100.0%
Totals for Area of Interest		**3.0**	**100.0%**

Appendix 5

Flood Insurance Rate Map



APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

CITY OF
PORTLAND, MAINE
CUMBERLAND COUNTY

PANEL 13 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230051 0013 B

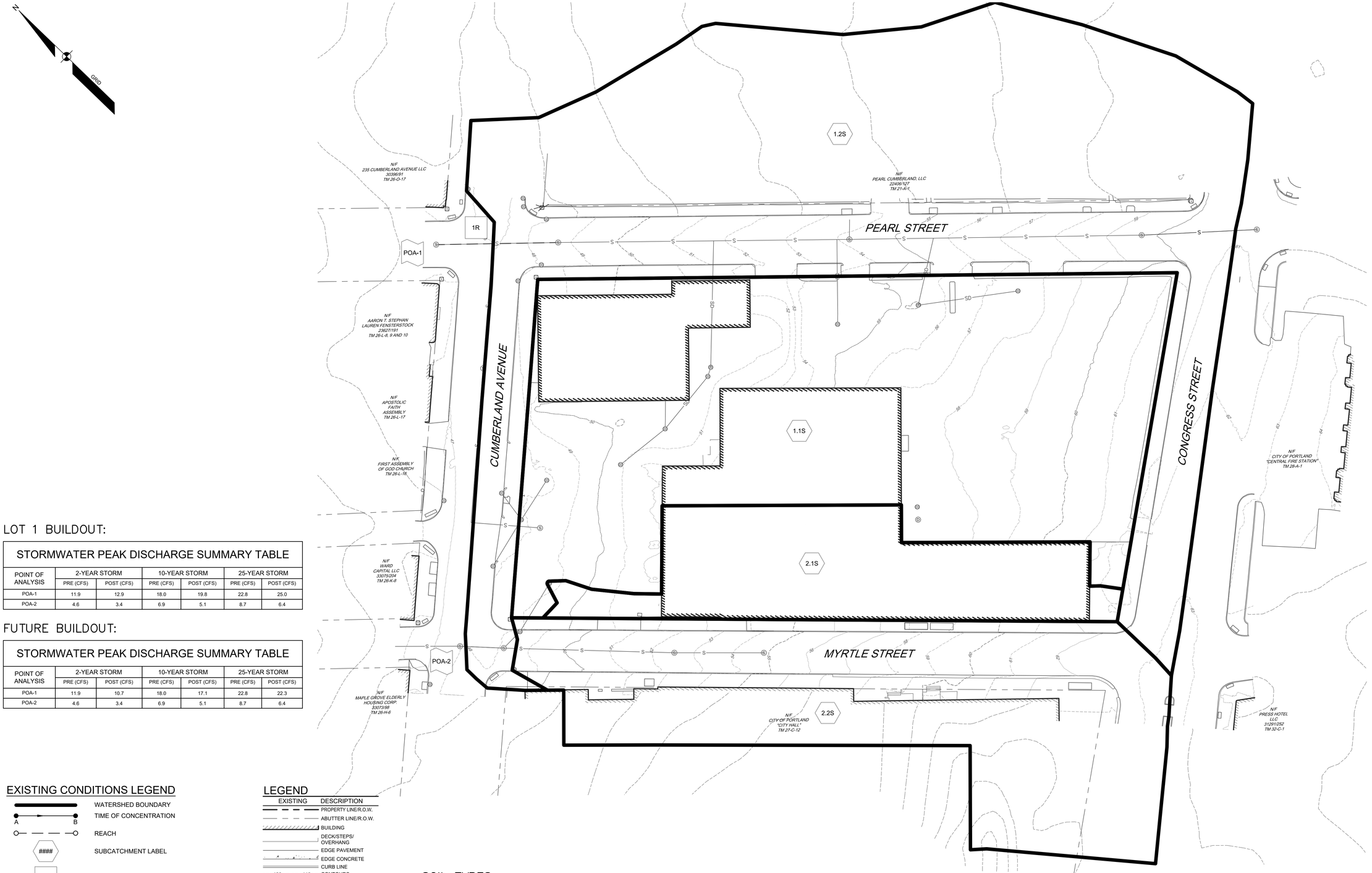
EFFECTIVE DATE:
JULY 17, 1986

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Appendix 6

Stormwater Management Plans



LOT 1 BUILDOUT:

STORMWATER PEAK DISCHARGE SUMMARY TABLE						
POINT OF ANALYSIS	2-YEAR STORM		10-YEAR STORM		25-YEAR STORM	
	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)
POA-1	11.9	12.9	18.0	19.8	22.8	25.0
POA-2	4.6	3.4	6.9	5.1	8.7	6.4

FUTURE BUILDOUT:

STORMWATER PEAK DISCHARGE SUMMARY TABLE						
POINT OF ANALYSIS	2-YEAR STORM		10-YEAR STORM		25-YEAR STORM	
	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)
POA-1	11.9	10.7	18.0	17.1	22.8	22.3
POA-2	4.6	3.4	6.9	5.1	8.7	6.4

EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A — B)
- REACH
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

LEGEND

EXISTING	DESCRIPTION
	PROPERTY LINE/R.O.W.
	ABUTTER LINE/R.O.W.
	BUILDING
	DECK/STEPS/ OVERHANG
	EDGE PAVEMENT
	EDGE CONCRETE
	CURB LINE
120 118	CONTOURS
S	SANITARY SEWER
Ⓢ	SANITARY MANHOLE
SD	STORM DRAIN
Ⓓ	DRAINAGE MANHOLE
	CATCH BASIN

SOIL TYPES

SYMBOL	SOIL SERIES	PHASE	SLOPE	HSG	DRAINAGE CLASS
HIB	HINCKLEY	LOAMY SAND	3–8%	A	EXCESSIVELY DRAINED

NOTES:

1. EXISTING CONDITIONS INFORMATION IS BASED ON AN ELECTRONIC SURVEY FILE PREPARED BY SEBAGO TECHINCS, INC. IN DECEMBER 2019. TOPOGRAPHIC INFORMATION IS BASED ON A COMBINATION OF SURVEYED DATA WITHIN THE LIMITS OF PROPOSED WORK.
2. ON-SITE SOIL INFORMATION IS BASED ON THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) CUSTOM SOIL RESOURCE REPORT FOR CUMBERLAND COUNTY, MAINE, DATED MAY 26, 2022.

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

DANIEL L. RILEY, PE 9987

STATE OF MAINE
DANIEL L. RILEY
No. 9987
REGISTERED PROFESSIONAL ENGINEER
08/09/2022

REV.:	BY:	DATE:	STATUS:
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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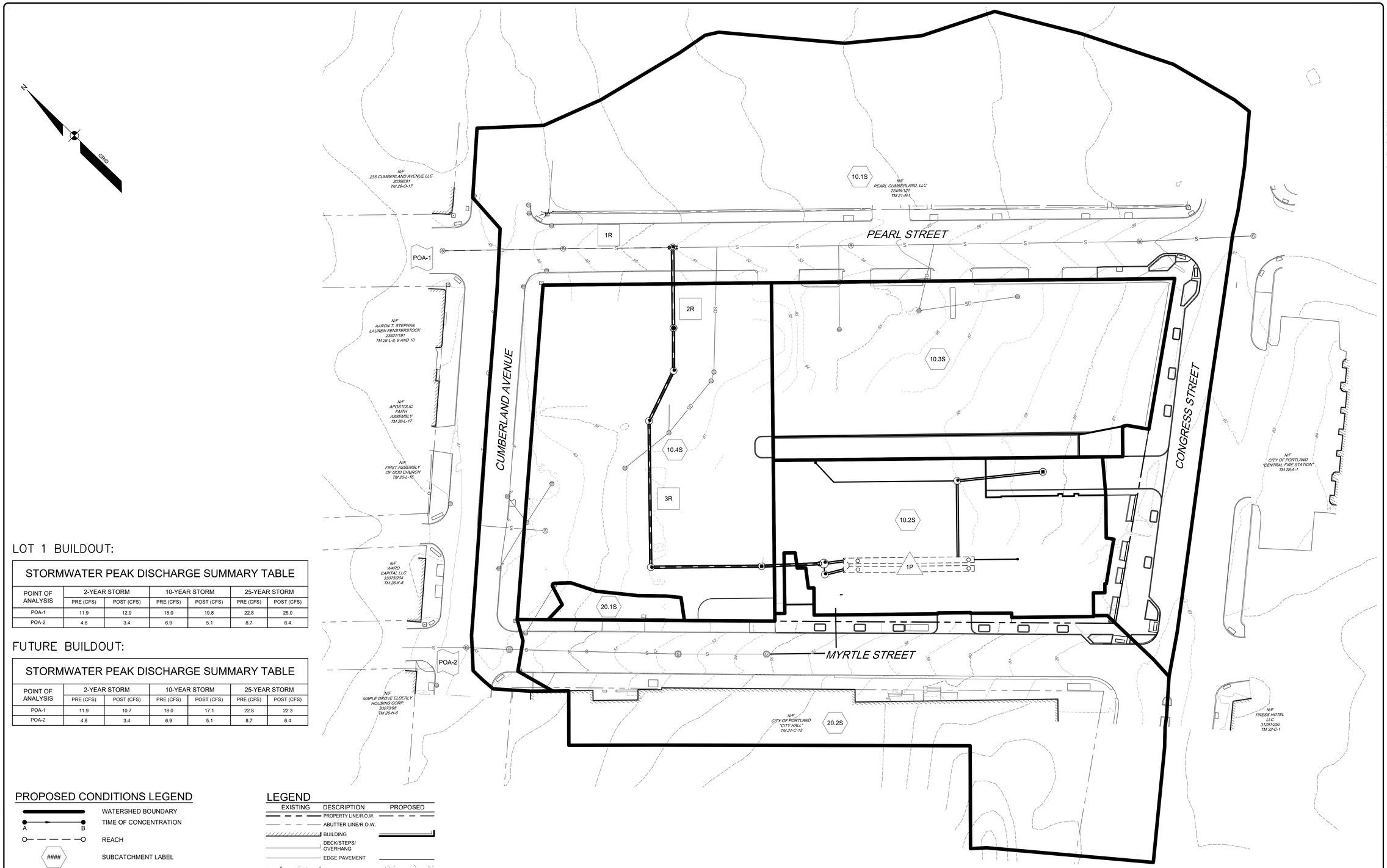
SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

EXISTING CONDITIONS SWM PLAN
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE 04101
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DJS
CHECKED	DLR
DATE	03/31/20
SCALE	1" = 30'
PROJECT	19371

SHEET 1 OF 2

19371 - SWP - P1.dwg, TAB:PRE



LOT 1 BUILDOUT:

STORMWATER PEAK DISCHARGE SUMMARY TABLE						
POINT OF ANALYSIS	2-YEAR STORM		10-YEAR STORM		25-YEAR STORM	
	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)
POA-1	11.9	12.9	18.0	19.8	22.8	25.0
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STORMWATER PEAK DISCHARGE SUMMARY TABLE						
POINT OF ANALYSIS	2-YEAR STORM		10-YEAR STORM		25-YEAR STORM	
	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)
POA-1	11.9	10.7	18.0	17.1	22.8	22.3
POA-2	4.6	3.4	6.9	5.1	8.7	6.4

PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- A — B : TIME OF CONCENTRATION
- REACH
- #### : SUBCATCHMENT LABEL
- #### : REACH
- #### : POINT OF ANALYSIS
- #### : STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # : SOILS BOUNDARY

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER LINE/R.O.W.	
	BUILDING	
	DECK/STEPS/ OVERHANG	
	EDGE PAVEMENT	
	EDGE CONCRETE	
	CURB LINE	
120 118	CONTOURS	120
SD	STORM DRAIN	SD
Ⓓ	DRAINAGE MANHOLE	
	CATCH BASIN	

SOIL TYPES

SYMBOL	SOIL SERIES	PHASE	SLOPE	HSG	DRAINAGE CLASS
HIB	HINCKLEY	LOAMY SAND	3–8%	A	EXCESSIVELY DRAINED

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(IN FEET)
1 INCH = 30 FT.

DANIEL L. RILEY, PE 9987
STATE OF MAINE — DANIEL L. RILEY — No. 9987 — REGISTERED PROFESSIONAL ENGINEER
08/09/2022

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PROPOSED CONDITIONS SWM PLAN

OF:

385 CONGRESS STREET - PHASE 1 HOTEL

CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE 04101

FOR:

THE FATHOM COMPANIES
80 EXCHANGE ST, SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DJS
CHECKED	DLR
DATE	03/31/20
SCALE	1" = 30'
PROJECT	19371

SHEET 2 OF 2

19371 - SWP - P1.dwg, TAB:POST

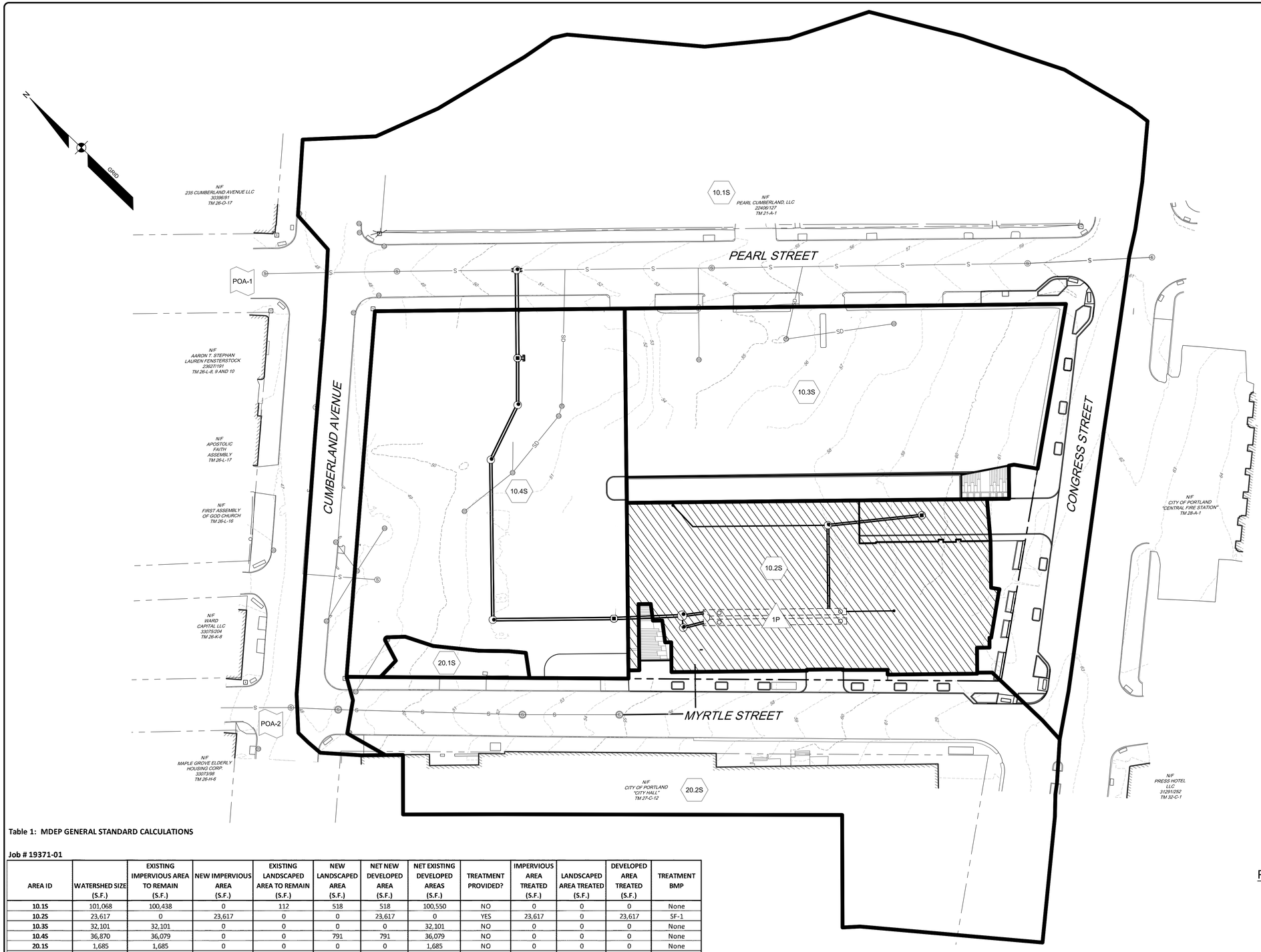

Table 1: MDEP GENERAL STANDARD CALCULATIONS

Job # 19371-01

AREA ID	WATERSHED SIZE (S.F.)	EXISTING IMPERVIOUS AREA TO REMAIN (S.F.)	NEW IMPERVIOUS AREA (S.F.)	EXISTING LANDSCAPED AREA TO REMAIN (S.F.)	NEW LANDSCAPED AREA (S.F.)	NET NEW DEVELOPED AREA (S.F.)	NET EXISTING DEVELOPED AREAS (S.F.)	TREATMENT PROVIDED?	IMPERVIOUS AREA TREATED (S.F.)	LANDSCAPED AREA TREATED (S.F.)	DEVELOPED AREA TREATED (S.F.)	TREATMENT BMP
10.1S	101,068	100,438	0	112	518	518	100,550	NO	0	0	0	None
10.2S	23,617	0	23,617	0	0	23,617	0	YES	23,617	0	23,617	5F-1
10.3S	32,101	32,101	0	0	0	0	32,101	NO	0	0	0	None
10.4S	36,870	36,079	0	0	791	791	36,079	NO	0	0	0	None
20.1S	1,685	1,685	0	0	0	0	1,685	NO	0	0	0	None
20.2S	47,451	47,200	0	0	251	251	47,200	NO	0	0	0	None
TOTAL (S.F.)	**242,792**	**217,503**	**23,617**	**112**	**1,560**	**25,177**	**217,615**		**23,617**	**0**	**23,617**	

TOTAL NEW IMPERVIOUS AREA (S.F.)	**23,617**	**TOTAL DEVELOPED AREA (S.F.)**	**25,177**
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT (S.F.)	**23,617**	**TOTAL AREA RECEIVING TREATMENT (S.F.)**	**23,617**
% OF IMPERVIOUS AREA RECEIVING TREATMENT	**100.00%**	**% OF AREA RECEIVING TREATMENT**	**93.80%**

STORMFILTER #1

PROPOSED CONDITIONS LEGEND

WATERSHED BOUNDARY

SUBCATCHMENT LABEL

POINT OF ANALYSIS

STORMWATER TREATMENT/DETENTION POND

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

DANIEL L. RILEY, PE 9987
STATE OF MAINE DANIEL L. RILEY No. 9987 REGISTERED PROFESSIONAL ENGINEER
08/09/2022

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TREATMENT PLAN
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE 04101
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

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PROJECT	19371

SHEET 1 OF 1

19371 - SWP - P1.dwg - TAB: TREATMENT

Consistency with City Master Plans 14-14.6.3 (A)

1. The proposed project has been designed to be consistent with the City Master Plans. The proposed development has been reviewed as part of the Larger 385 Congress Street Master Plan of Devolvement (MDP) approved by the Planning Board on August 9, 2022. In its review the City found that the MDP, including the Hotel development on lot 1 is consistent with the Council approved masterplans by:
   - Improving transportation access to arts and cultural venues throughout the City by enhancing the connection to Merrill Auditorium via the proposed amenity deck and street level staircases (Arts District Plan, 1996); and
   - Proposing the construction of dense housing in Downtown and pedestrian enhancements such as curb extensions and expanded sidewalks to promote walkability and traffic calming (Peninsula Transit Plan, 2009);
   - Providing infill development within a transit-oriented location with pedestrian-oriented streets to make walking more inviting, and connection to bus routes, bike networks, and other mobility options easier to access to other parts of the city. Providing residential density as well as employment and job density that can support and drive transit ridership as well as walk to work opportunities (One Climate Future, 2021).

   The Comprehensive Plan, Portland's Plan 2030 goals and policies (state and local) relevant to the proposed plan were reviewed in the MDP. The plan aligns with these vision statements and goals by infilling an underdeveloped site primarily used for automobile parking located at the heart of Portland's walkable downtown, proximate to some of the tallest structures in the city, with residential units, commercial uses, and publicly accessible open spaces and pedestrian connections that better reflect the downtown location.

   The scale of the proposed building facilitates an increase in dwelling units within a walking and transit-oriented site. Along with increasing the viability of downtown, the proposed infill project potentially reduces the need for new construction in green field or outlying areas and dependency on single occupancy vehicles, which promotes more sustainable development practices.

   In addition, the expanded sidewalk area along Congress Street serves as a positive connection between adjacent open space sites (City Hall and Lincoln Park), the proposed amenity deck and retail space wrapping the corner of the site provides site permeability to enhance pedestrian connections, and overall, there is an increase in the number of recreational opportunities within close proximity to the Bayside and Downtown neighborhoods.

   The hotel has been designed to allow for safe and efficient circulation of vehicles; to provide improved pedestrian conditions; and to be aesthetically pleasing addition to the area.

2. There is no existing off premises public infrastructure that requires easements across the property. The proposed subdivision plan provides for easement on the site to allow public sidewalks to extend to the building line.

Please see the plan set and the Master Plan for additional information regarding compliance the City Master Plans.

Public Safety and Fire Prevention 14-14.6.3 (B)

1. The proposed project has been designed following public safety principles for Crime Prevention through Environmental Design:

   a. The proposed building design provides natural surveillance that promotes visibility of public spaces and areas. The public entrances to the hotel are located at the center of the site in a well-lit and visible area along Congress Street, a minor arterial. The Hotel is staffed 24 hours per day including a 24-hour valet service at the site entrance.

      The proposed stairs accessing the public amenity deck are similarly lit and visible. The facility has been designed with plantings that will complement the site but will not provide concealment for illegal activities.

      The public areas of the amenity deck abut active hotel program space and are overlooked by the hotel guest rooms, condominiums and the future condominium development envisioned in the Master Development plan for the site.

   b. The proposed development has been designed with security access control measures to prevent unauthorized access to the site. The Hotel entrances are staffed 24 hours per day with full time valet service from the hotel lobby. The parking structure garage doors on both Congress and Myrtle Street will be equipped with security systems to control access.

      The proposed amenity deck will have established hours of operation and include security gating to prevent unauthorized access when not in operation.

   c. The site has been designed with the appropriate territorial reinforcements to promote a sense of ownership and responsibility. The site design includes varying materials on the public streets to provide visual identification of the fully public right of way and sidewalks and the semi-public outdoor plaza areas and spaces.

      On the amenity deck level, changes in materials elevations and landscaping will similarly delineate the public amenity spaces and the semi-public hotel outdoor program spaces. The public areas of the deck abuts areas of active hotel programming. In the future the public amenity space will abut private open areas associated with future condominiums on Lot 2 as well. The amenity deck will be owned and maintained by the hotel and residential condominium associations who will be responsible for the maintenance of the space.

2. The proposed project has been designed to provide adequate emergency vehicle access to the site as outlined in the Technical Manual.

Please see the plan set for the site plans, building plans and landscape plans detailing the site features related to his subject.

Availability and Adequacy of Public Utilities 14-14.6.3 (C)

1. The development will not overburden sanitary sewers and storm drains, water lines, or other public infrastructure and utilities.

   The proposed project is part of a larger project with an approved Master Plan of Development (MDP). A Sewer capacity application for the entire development, including the Lot 1 hotel site, was included in that review.

   The Portland Water District has been consulted related to service to the Hotel site. A formal request for capacity confirmation has been submitted to the District and will be provided when it is received. The site is located on a block with access to existing water mains in Myrtle Street, Cumberland Avenue and Congress Street, including a 16" main in Congress Street. In its initial review the District has indicated that upgrades to replace the main in Myrtle Street are required due to the age and condition of this main; and that the District will participate in the cost of making those improvements. The proposed work is included in the project plan set and is being reviewed by the water district.

   Included in the application is a Stormwater Management Plan detailing the proposed site drainage improvements and stormwater treatment proposed.

2. Electrical service is to be provided underground, taken from a Central Main Power manhole installed in Pearl Street and Congress Street in 2020.

3. All proposed sanitary sewers, storm drains, water lines or other utilities are designed and are to be constructed in accordance with the applicable provisions of the City Technical manual. Please see the utility plan and details.

4. The proposed development will be connected to the exiting public sanitary system per City requirements. Please see the utility plan.

5. The proposed project has been designed to provide temporary storage for trash and recyclables within the building with contracted curbside disposal. There is no outdoor storage of trash or recyclables proposed. Please refer to the building plans.

Please see the site and building plans for additional information.

Massing, Ventilations and Wind Impact 14-14.6.4 (A)

A t t : X

1. The bulk, location, or height of the proposed building shall not result in health or safety problems from a reduction in ventilation to abutting structures or changes to the existing wind climate that would result in unsafe wind conditions for users of the site and/or adjacent public spaces.
2. The bulk, location, or height of the proposed building will not result in any substantial diminution in the value or utility of neighboring structures.
3. The proposed development will locate all HVAC venting mechanisms to direct exhaust away from public spaces and residential properties adjacent to the site.

The building massing is consistent with the approved Master Plan of Development for 385 Congress Street. The building height, setbacks and lot coverage conforms with the Zoning standards or has received setback waivers consistent with the Land Use Ordinance criteria and will not result in health or safety problems from reductions in ventilation to abutting structures or create unsafe wind conditions.

The building is located on a site that is currently used for surface and indoor parking. The developments are not expected to diminish the value of nearby structures.

HVAC equipment is proposed on the building rooftop or within the structure and is design in accordance with applicable Land Use Ordinance requirements and applicable building codes.

Shadows 14-14.6.4 (B)

The proposed project is located in the B3 zone. The proposed hotel will not result in adverse impacts of shadows on publicly accessible open space.

As directed, the shadow study shows shadows cast from the hotel on June 21 at 10 am, noon and 2 pm; and on March/September 21 at 10 am, noon and 2 pm. It also shows shadows cast from the existing buildings.

Please see the shadow study plan in the overall drawing set, and the Master Development Plan shadow study.

Snow and Ice Loading 14-14.6.4 (C)

The proposed project will not result in the accumulation of significant amounts of snow and ice from loading or falling offsite. The building is designed with flat roofs with architectural designs consistent with building code requirements, to prevent snow and ice from falling onto adjacent properties or public ways. The building steps back on the Myrtle Street side at the 3rd floor level. Level 10 also features nominal setbacks, to moderate snow falling from surfaces above that.

Snow will be removed from the onsite driveways, public sidewalks abutting the site in accordance with City Ordinances. Snow will be removed from the amenity deck.

Please refer to building plans and elevations.

385 CONGRESS STREET - PHASE 1 HOTEL

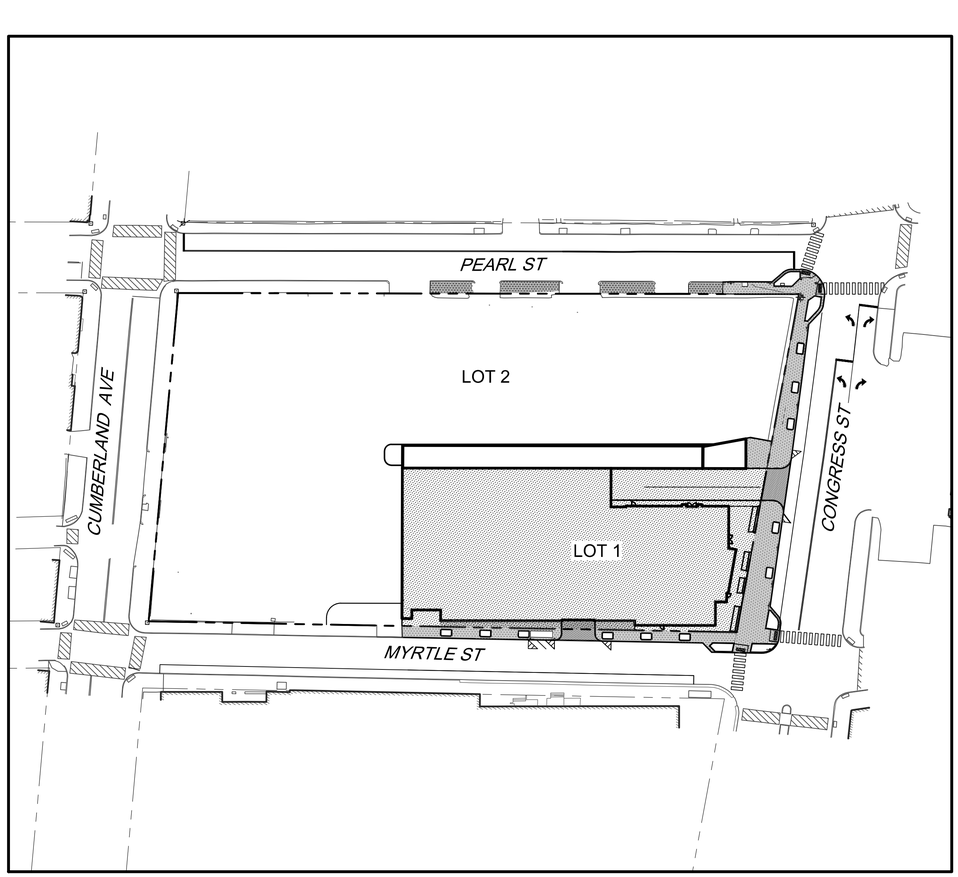
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE

APPLICANT:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

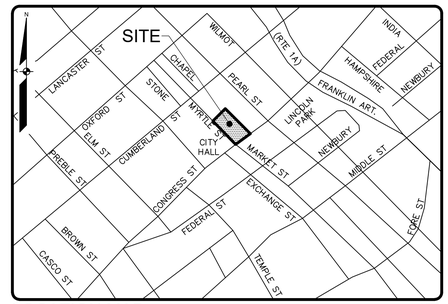
ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

PROJECT ARCHITECT:
JNS ARCHITECTURE
AND INTERIOR DESIGN
1600 WYNKOOP STREET
DENVER, CO 80202



SCALE: 1" = 50'



LOCATION MAP NTS

Sheet List Table

Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES AND LEGEND
3	SUBDIVISION PLAN - SHEET 1
4	DEMOLITION PLAN
5	OVERALL SITE PLAN - STREET LEVEL
6	SITE PLAN - LEVEL 2
7	GRADING AND DRAINAGE PLAN
8	UTILITY PLAN
9	SCHEDULES
10	MYRTLE STREET PLAN AND PROFILE
11	OVERALL LANDSCAPE PLAN - STREET LEVEL
12	LANDSCAPE PLAN - STREET LEVEL
13	LANDSCAPE PLAN - LEVEL 2
14	SITE PLAN - INTERIM PARKING
15	GRADING PLAN - INTERIM PARKING
16	LANDSCAPE PLAN - INTERIM PARKING
17	EROSION CONTROL NOTES AND DETAILS
18	DETAILS
19	DETAILS
20	DETAILS
21	DETAILS
22	DETAILS
23	TRAFFIC PLAN
1 OF 2	EXISTING CONDITIONS
2 OF 2	EXISTING CONDITIONS - TABLES

NOT FOR CONSTRUCTION

DANIELL RILEY PE 9967

STATE OF MAINE ★ DANIEL RILEY No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	AS NOTED
PROJECT	19371-01

SHEET 1 OF23

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LEGEND

EXISTING		PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER LINE/R.O.W.	
	DEED LINE/R.O.W.	
	TIE LINE	
	SETBACK	
	EASEMENT	
	BUFFER	
	FLOODPLAIN	
	FLOODWAY	
	CENTERLINE	
⊡	MONUMENT	■
◎	IRON PIPE/ROD	●
◎	DRILL HOLE	◉
C1/L1	DEED CALL	
C1/L1	CURVE/LINE NO.	C1/L1
	SOILS	
	ZONE LINE	
	ZONE LINE ON PL	
BENCHMARK DESCRIPTION WITH ELEVATION	BENCHMARK	
	SURVEY CONTROL	
TP-1	TEST PIT	
MW MW-1	MONITORING WELL	
B-1	BORING	
	BUILDING	
	DECK/STEPS/ OVERHANG	
	EDGE WETLAND	
	WETLANDS	
	UPLANDS	
	STREAM	
	LEDGE	
	EDGE PAVEMENT	
	PAVEMENT SAWCUT	
	EDGE CONCRETE	
	PAVEMENT PAINT	
	EDGE GRAVEL	
	CURB LINE	
	EDGE OF WATER	
	TREELINE	
120 118	CONTOURS	120
×120.00	SPOT GRADE	+120.00
	CHAIN LINK FENCE	
X	BARB WIRE FENCE	X
	STOCKADE FENCE	
	GUARD RAIL	
	STONE WALL	
	RETAINING WALL	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	BOLLARD	●
	SIGN	
	RAILROAD	
G	GAS	G
	GAS GATE VALVE	
GM	GAS METER	
G	GAS MANHOLE	
W	WATER	W
	WATER GATE VALVE	
	WATER SHUT OFF	
	HYDRANT	
W	WATER MANHOLE	
W	WELL	W
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
S	SANITARY MANHOLE	●
SD	STORM DRAIN	SD
UD	UNDER DRAIN	UD
D	DRAINAGE MANHOLE	●
	CATCH BASIN	■
OHU	OVERHEAD UTILITY	OHU
UGU	UNDERGROUND UTILITY	UGU
T	TRANSFORMER PAD	T
E	ELECTRICAL MANHOLE	E
EM	ELECTRIC METER	
H	HVAC UNIT	
T	TELEPHONE MANHOLE	
	LIGHT POLE	
	UTILITY POLE	
	GUY WIRE	
	DRAINAGE DITCH	
	EROSION CONTROL BLANKET	
	FILTER BARRIER	FB
	RIPRAP	
	CHECK DAM	
	INLET PROTECTION	
	BOULDER	
	STREAM	

LANDSCAPE LEGEND

LARGE SHADE TREES	×
STREET TREES	×
ORNAMENTAL TREES	×
LANDSCAPE PLANTING BEDS	
CITY SIDEWALK BRICK	
DRIVEWAY BRICK	
BENCHES	

STRIPING LEGEND

SINGLE WHITE LANE LINE	SWLL
DOUBLE YELLOW CENTERLINE	DYCL
WHITE CROSSWALK STRIPING	
WHITE STOP BAR STRIPING	
WHITE NO PARKING STRIPING	

GENERAL NOTES

1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

MINIMUM LOT SIZE:	N/A
MINIMUM STREET FRONTAGE:	15 FEET
MINIMUM FRONT YARD:	N/A
MINIMUM SIDE YARD:	N/A
MINIMUM REAR YARD:	N/A
MAXIMUM BUILDING HEIGHT:	150 FEET
MAXIMUM LOT COVERAGE:	100%

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

4. TOTAL AREA OF PARCEL IS APPROXIMATELY 2.26 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 6F. TOPOGRAPHIC INFORMATION SHOWN HEREON. SEBAGO TECHNICS INC. UPDATED RECORDS RESEARCH FROM 2009 TO DATE REGARDING THE BOUNDARY INFORMATION.
6. IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. OCTOBER , 2019.
7. PLAN REFERENCES:
1. PLAN OF CITY BUILDING LOT, PORTLAND, ME, DATED AUGUST 1908 BY THE CITY OF PORTLAND ENGINEER, AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   A. PORTLAND DEPARTMENT OF PUBLIC WORKS STREET WORKSHEETS AND BLUESHEETS FOR STREETS BOUNDING THE LOCUS PARCEL AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   B. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, DATED JULY 1964 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 663/2.
   C. NEW MECHANICAL BUILDING, GUY GANNETT PUBLISHING COMPANY, PORTLAND, ME, TUNNEL PLAN AND SECTIONS BY LOCKWOOD, GREENE ENGINEERS, INC, REVISED THROUGH MAY 12, 1965 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 203/2.
   D. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   E. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
   F. F. ALTA/NSPS LAND TITLE SURVEY OF CONGRESS/PEARL BLOCK CONGRESS STREET AND PEARL STREET , PORTLAND, ME DATED FEBRUARY 11, 2022 BY SEBAGO TECHNICS, INC. FOR FATHOM COMPANIES PROJECT NUMBER 19371-02
8. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST & GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
9. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET ``RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET' BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61. PUBLIC AND PRIVATE RIGHTS MAY EXIST FOR PUBLIC HIGHWAY AND UTILITIES THAT STILL LIE WITHIN THE LIMITS OF CHAPEL STREET. SEBAGO TECHNICS, INC. SUGGEST LEGAL COUNSEL BE SOUGHT TO CLARIFY THE INTEREST OF OTHERS IN THESE RIGHTS.
10. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
11. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
12. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051 0013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
13. BENCHMARK: BM-1EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)
16. PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR ANY PHASE OF THE SUBDIVISION A PERFORMANCE GUARANTEE MUST BE SUBMITTED TO AND APPROVED BY THE CITY OF PORTLAND.
17. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
18. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
19. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
20. PROVIDE ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
21. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL, ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
22. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
23. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
24. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
25. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPS" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
26. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (811) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
27. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
28. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
29. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
30. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
31. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
32. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
33. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
34. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
35. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGEMENT OF SEBAGO TECHNICS, INC.
36. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
37. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
38. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
39. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
40. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.
41. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGH THE PIPE. ON PIPE RUNS 50 FEET OR LESS, THE THE CONTRACTOR SHALL REQUEST ENGINEER'S APPROVAL TO USE A GROUND LASER.
42. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW THROUGH THE EXISTING CLOSED STORM DRAINAGE SYSTEM DURING CONSTRUCTION AND SHALL SUBMIT A WORK PLAN FOR APPROVAL BY THE DESIGN ENGINEER.

UTILITY DEMOLITION NOTES

1. PROTECT EXISTING BOUNDARY LINE MONUMENTATION. IF DISTURBED, EXISTING MONUMENTATION TO BE RESET BY A PROFESSIONAL LAND SURVEYOR.
2. DEMOLITION OF UTILITIES REQUIRING TREE REMOVAL SHALL BE COORDINATED WITH THE OWNER AND IN ACCORDANCE WITH PROJECT PLANS.
3. UTILITY DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION.
4. EXISTING SEWER AND STORM DRAINAGE INFRASTRUCTURE TO REMAIN ACTIVE DURING CONSTRUCTION AND UPON COMPLETION OF PROJECT. DEMOLITION/CONSTRUCTION ACTIVITIES SHALL NOT INTERFERE OR IMPEDE EXISTING FLOWS. CONTRACTOR SHALL PROVIDE BYPASS PUMPING AS REQUIRED DURING SEWER AND STORM DEMOLITION AND NEW CONSTRUCTION. DAMAGE TO EXISTING SEWER INFRASTRUCTURE SHALL BE REPAIRED BY CONTRACTOR AT THEIR EXPENSE.
5. PROTECT EXISTING UTILITIES NOT CALLED OUT TO BE REMOVED DURING CONSTRUCTION.
6. DEMOLITION SHOWN IS FOR MAJOR SITE ELEMENTS TO BE DEMOLISHED. OTHER MINOR DEMOLITION MAY BE REQUIRED AS PART OF CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. COORDINATE ALL DEMOLITION WORK WITH SITE AND BUILDING DRAWINGS.
7. PRIOR TO ANY DEMOLITION, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF DEMOLITION PLANS TO THE OWNER. THIS PLAN SHALL DEPICT LOCATIONS OF PROPOSED TERMINATIONS AND ANY TEMPORARY SERVICES THAT WILL BE NEEDED.
8. CONTRACTOR REQUIRED TO CONFIRM/MAINTAIN BENCHMARKS. IF IMPACTED CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION/RELOCATION AND COORDINATION WITH PROJECT TEAM.

GRADING & EROSION NOTES

1. SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THIS PLAN. ALL SIDESLOPES STEEPER THAN 3:1 (H: V) SHALL BE LINED WITH EROSION CONTROL BLANKET, OR ADDITIONAL MEASURES AS INDICATED.
2. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPS" MANUAL PUBLISHED BY BUREAU OF LAND AND WATER QUALITY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
3. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED PER DETAIL.
4. SEE UTILITY DRAWINGS FOR PIPE AND STRUCTURE DATA TABLES.

CONSTRUCTION PLAN

1. PROVIDE EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
2. GRADING AND CLEARING LIMITS SHALL NOT ENCROACH ON ADJACENT PROPERTIES UNLESS NOTED OTHERWISE ON THE PLANS.
3. OPEN AREAS SHALL BE LIMITED TO AREAS BEING WORKED IN. THE AREA STRIPPED OF EXISTING VEGETATION AT ANY GIVEN TIME SHALL BE MINIMIZED AND BE PHASED WHERE PRACTICAL SO THAT AREAS ARE REVEGETATED AND PERMANENTLY STABILIZED BEFORE ADDITIONAL AREAS ARE STRIPPED OF EXISTING VEGETATION. STABILIZE CONSTRUCTION AREAS BY USE OF RIPRAP, SEED, MULCH, OR OTHER GROUND COVER WITHIN ONE WEEK FROM THE TIME IT WAS ACTIVELY WORKED. SURFACES SHALL BE STABILIZED PRIOR TO DIRECTING STORMWATER RUNOFF TOWARD STORMWATER BMPS. PLEASE REFER TO DRAINAGE PLANS FOR WATERSHED AREAS.

LANDSCAPE NOTES

1. PLANT QUANTITIES SHOWN ON PLANT LISTS ARE FOR CONVENIENCE TO THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANT MATERIAL INSTALLATION AS SHOWN ON PLANS.
2. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF "U.S.A. STANDARD FOR NURSERY STOCK," BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
3. ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.
4. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING, STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE BY THE OWNER.
5. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BY THE CONTRACTOR AND A PERIOD OF TWO YEARS THEREAFTER BY THE OWNER FROM DATE OF INSTALLATION, DURING THE ONE YEAR GUARANTEE PERIOD, DEAD PLANT MATERIAL SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE ONE YEAR PERIOD, THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
6. ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.
7. EXISTING TREES TO BE PRESERVED WILL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF THE UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, PAVING, WALKS, CURBING, ETC. DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER.
9. ALL SHRUB BEDS SHALL BE MULCHED WITH 3" CLEAN SHREDDED DARK BROWN BARK MULCH.
10. THE CONTRACTOR SHALL PROVIDE 4" LOAM FOR ALL AREAS TO BE SODDED OR SEEDED. PLANTING AREAS SHALL RECEIVE 12" ROLLED THICKNESS OF LOAM. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.
11. ANY DEVIATION FROM THE LANDSCAPE PLAN, INCLUDING PLANT LOCATION, SELECTION, SIZE, QUANTITY OR CONDITION SHALL BE REVIEWED AND APPROVED BY THE OWNER AND LANDSCAPE ARCHITECT (AND MUNICIPAL AUTHORITY, IF APPLICABLE) PRIOR TO INSTALLATION ON SITE.
12. WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR PERENNIAL AND ANNUAL FLOWER BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPHAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.
13. DURING CLEANING OF SITE AND PRIOR TO TREE AND SHRUB INSTALLATION, CONTRACTOR SHALL REMOVE INVASIVE PLANTS. AREAS WHERE INVASIVE PLANTS ARE REMOVED AND NO OTHER PLANTING IS PROPOSED, AREA SHALL BE LOAM AND SEEDED.

UTILITY NOTES

1. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PROTECT EXISTING ONSITE SEWER PIPE AND ADJUST MANHOLE RIMS TO GRADE WHERE APPLICABLE.
2. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGH THE PIPE. ON PIPE RUNS 50 FEET OR LESS, THE CONTRACTOR SHALL REQUEST ENGINEER'S APPROVAL TO USE OR NOT USE A GROUND LASER.
3. MAINTAIN MINIMUM 5'-6" OF COVER ABOVE TOP OF WATER SERVICE PIPE.
4. MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES. MAINTAIN MINIMUM 18 INCHES VERTICAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES.
5. LOWER OR RAISE WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES. WATER SERVICES CROSSING SEWERS SHALL MAINTAIN 12 INCH MINIMUM SEPARATION BETWEEN THE BOTTOM OF WATER LINE AND TOP OF SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
6. PIPE:
   - SEWER PIPE SHALL BE SDR 35 PVC OR APPROVED EQUAL.
   - FORCEMAIN PIPE SHALL BE DR-11 HDPE OR APPROVED EQUAL.
   - STORMDRAIN SHALL BE ADS N-12 DUAL WALL HDPE PIPE WITH SMOOTH-WALLED INTERIOR OR APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE UTILITY PLANS.
   - WATER PIPE AND FITTINGS SHALL CONFORM TO PORTLAND WATER DISTRICT WATER PIPING SPECIFICATIONS. MAIN WATER SERVICE PIPE SHALL BE DUCTILE IRON, CLASS 52 PUSH-ON PIPE MEETING THE REQUIREMENTS OF AWWA/ANSI C-111/A21.11 (LATEST REVISION). PIPE SHALL BE CEMENT-LINED AWWA/ANSI C104/A21.4 WITH LINING TWICE THE THICKNESS SPECIFIED, AND COATED TWICE WITH A BITUMINOUS SEAL COATING. PROVIDE THRUST BLOCKS AT ALL WATER SERVICE BENDS.
7. COORDINATE FOUNDATION UNDERDRAIN LOCATIONS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
8. COORDINATE GREASE INTERCEPTOR LOCATIONS WITH ARCHITECTURAL & PLUMBING DRAWINGS.
9. COORDINATE UTILITY INVERTS AT BUILDING WITH ARCHITECTURAL, STRUCTURAL AND PLUMBING DRAWINGS.
10. COORDINATE LOCATION OF SEWER, WATER, GAS, FOUNDATION DRAINS AND ROOF DRAIN INVERTS AT THE BUILDING WITH ARCHITECTURAL DRAWINGS.
11. WATER SERVICE ENTRANCE DESIGNS TO INCLUDE METERS AND BACKFLOW PREVENTERS TO MEET ALL STANDARDS AND REQUIREMENTS OF THE PORTLAND WATER DISTRICT.
12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
13. UTILITIES WITHIN 5 FEET FROM FACE OF BUILDING ARE COORDINATED ON RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL COORDINATE INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
14. CONTRACTOR SHALL FURNISH AND INSTALL TRENCHING, MATERIALS AND BACKFILL FOR ALL UTILITIES. ELECTRICAL AND TELECOM/DATA PROVIDERS WILL PULL PRIMARY SERVICE TO TRANSFORMER AND PANEL. CONTRACTOR RESPONSIBLE FOR TIMING AND COORDINATION WITH UTILITIES AND DRAWINGS. COORDINATE WITH ELECTRICAL DRAWINGS FOR CONDUIT SCHEDULE, TYPE AND SIZES.
15. COORDINATE ALL WATER RELATED WORK WITH PORTLAND WATER DISTRICT.
16. UTILITY CONTACTS:

ELECTRIC:
CENTRAL MAINE POWER (CMP)
JAMIE COUGH, ENERGY SERVICES ADVISOR
(207) 629-1489
ACCOUNT # 10300876197

WATER:
PORTLAND WATER DISTRICT
ROBERT BARTELS, ENGINEER
(207) 774-5961

TELECOMMUNICATIONS
FAIRPOINT
PATRICK MORRISON
(207) 535-4271

NATURAL GAS
UNITL
TBD

TYPICAL ABBREVIATIONS

AC	ACRE
AFG	ABOVE FINISH GRADE
APPROX.	APPROXIMATELY
BC	BOTTOM OF CURB
BCC	BITUMINOUS CONCRETE CURB
BIT	BITUMINOUS
BLDG	BUILDING
BW	BOTTOM OF WALL
CB	CATCH BASIN
CONC	CONCRETE
CONT	CONTINUOUS
DI	DUCTILE IRON
DIA	DIAMETER
DMH	DRAIN MANHOLE
E.W.	EACH WAY
ELEV	ELEVATION
FFE	FINISH FLOOR ELEVATION
FIN. GR.	FINISH GRADE
FTG	FOOTING
HDPE	HIGH DENSITY POLYETHYLENE
HGT	HEIGHT
HMA	HOT MIX ASPHALT
INV.	INVERT
LF	LINEAR FEET
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
PWD	PORTLAND WATER DISTRICT
R	RADIUS
R.O.W.	RIGHT OF WAY
S.F.	SQUARE FEET
SCH	SCHEDULE
SCSC	SLIPFORM CONCRETE SLOPED CURB
SCVC	SLIPFORM CONCRETE VERTICAL CURB
SD	STORM DRAIN
SGC	SLOPED GRANITE CURB
SMH	SEWER MANHOLE SPECS SPECIFICATIONS
SS	SANITARY SEWER
SSGC	SALAVAGED SLOPED GRANITE CURB
SVGC	SALAVAGED VERTICAL GRANITE CURB
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
VGC	VERTICAL GRANITE CURB
VIF	VERIFY IN FIELD

PARKING SUMMARY

LOT 1		
REQUIRED PARKING		
CONDOMINIUM		9
PARKING REQUIRED (ZONING)	1 per Unit	9
BIKE PARKING REQUIRED (ZONING)	2 per 5 Units	4
HOTEL		156
PARKING REQUIRED (ZONING)	.25 per key	39
BIKE PARKING REQUIRED (ZONING)	2 per 10 cars	8
PROPOSED PARKING GARAGE		
	LEVEL 1	30
	LEVEL 0	40
TOTAL PARKING LOT 1		70

TOTAL PARKING PROPOSED:	70	DELTA
PARKING REQUIRED (ZONING)	48	+22
BIKE PARKING REQUIR

GENERAL NOTES:

1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

MINIMUM LOT SIZE:	N/A
MINIMUM STREET FRONTAGE:	15 FEET
MINIMUM FRONT YARD:	N/A
MINIMUM SIDE YARD:	N/A
MINIMUM REAR YARD:	N/A
MAXIMUM BUILDING HEIGHT:	150 FEET
MAXIMUM LOT COVERAGE:	100□

□SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

4. TOTAL AREA OF PARCEL IS APPROXIMATELY 2.26 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 7F. SEBAGO TECHNICS INC. UPDATED RECORDS RESEARCH FROM 2009 TO DATE REGARDING THE BOUNDARY INFORMATION.
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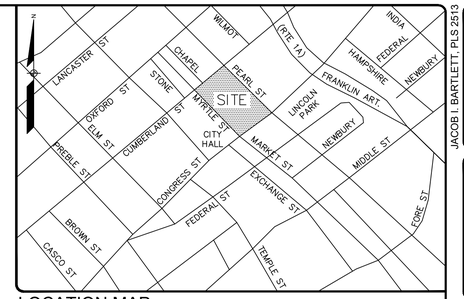
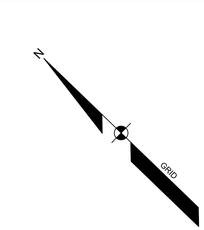
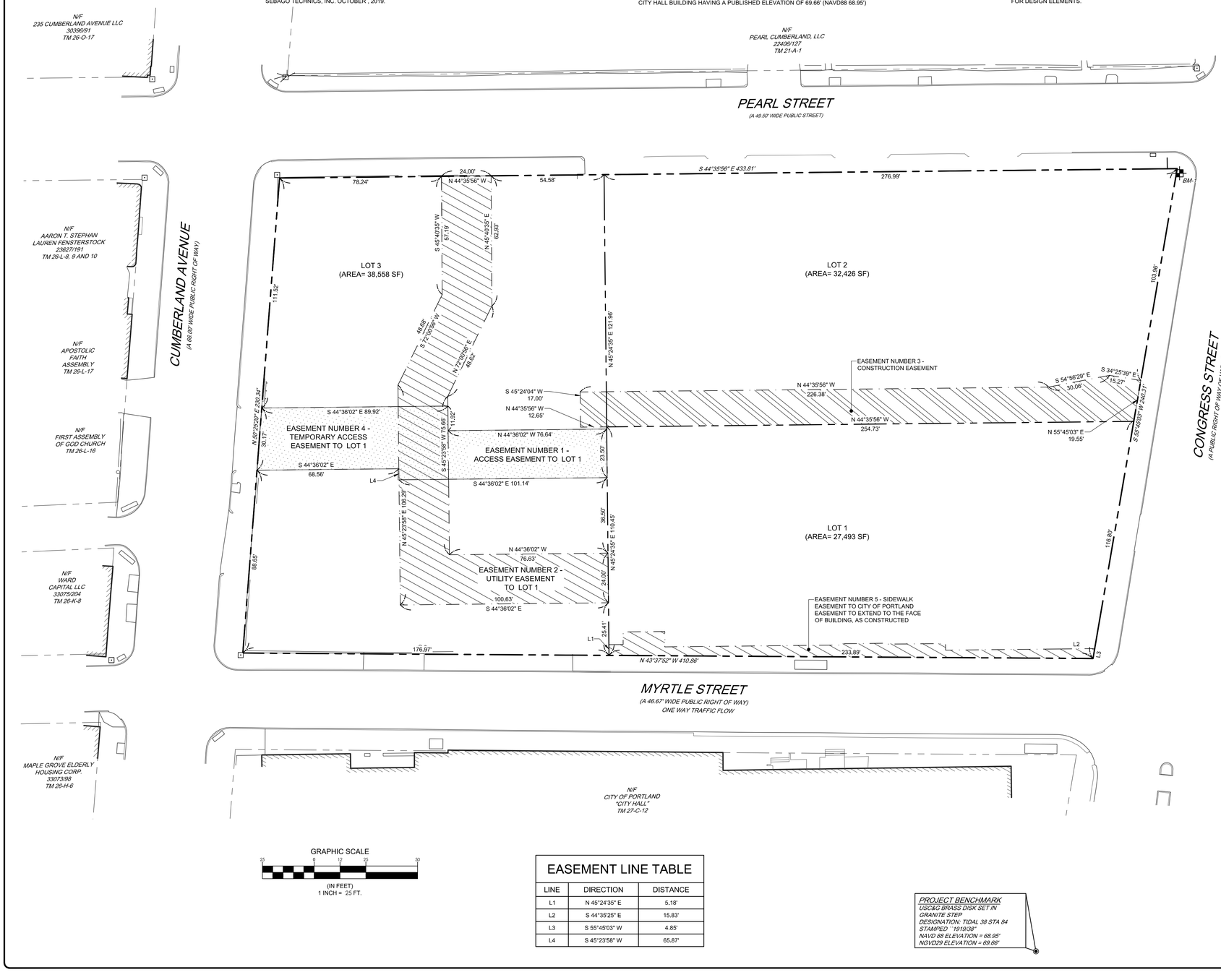
   E. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. □E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   F. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
8. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST □ GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
9. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET □RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET" BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61. PUBLIC AND PRIVATE RIGHTS MAY EXIST FOR PUBLIC HIGHWAY AND UTILITIES THAT STILL LIE WITHIN THE LIMITS OF CHAPEL STREET. SEBAGO TECHNICS, INC. SUGGEST LEGAL COUNSEL BE SOUGHT TO CLARIFY THE INTEREST OF OTHERS IN THESE RIGHTS.
10. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
11. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF □UALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
12. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 2300510013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
13. BENCHMARK:
    BM-1 EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)
14. SITE FEATURES SHOWN HEREON ARE PROPOSED . SEE FULL PLAN SET OF 385 CONGRESS STREET FOR DESIGN ELEMENTS.



LOCATION MAP N.T.S.

JACOB I. BARTLETT, PLS 2513





LEGEND

EXISTING

- PROPERTY LINE/R.O.W.
- ABUTTER LINE/R.O.W.
- DEED LINE/R.O.W.
- N/F NOW OR FORMERLY
- BUILDING
- DECK/STEPS/ OVERHANG
- EDGE PAVEMENT
- EDGE CONCRETE
- PAVEMENT PAINT
- CURB LINE
- 120 118 CONTOURS
- DECIDUOUS TREE
- SHRUB
- BOLLARD
- SIGN
- GAS GATE VALVE
- GM GAS METER
- W WATER
- WATER GATE VALVE
- HYDRANT
- S SANITARY SEWER
- (S) SANITARY MANHOLE
- (U) UNKNOWN MANHOLE
- (D) DRAINAGE MANHOLE
- CATCH BASIN
- OHU OVERHEAD UTILITY
- UGU UNDERGROUND UTILITY
- (E) ELECTRICAL MANHOLE
- EM ELECTRIC METER
- C COMMUNICATIONS BOX
- (T) TELEPHONE MANHOLE
- LIGHT POLE
- UTILITY POLE
- GUY WIRE
- BM-1 BENCHMARK
- FC FIRE DEPARTMENT HOOKUP
- GRANITE MONUMENT

GRAPHIC SCALE
25 0 12 25 50
(IN FEET)
1 INCH = 25 FT.

EASEMENT LINE TABLE

LINE	DIRECTION	DISTANCE
L1	N 45°24'35" E	5.18'
L2	S 44°35'25" E	15.83'
L3	S 55°45'03" W	4.85'
L4	S 45°23'58" W	65.87'

PROJECT BENCHMARK
USC&G BRASS DISK SET IN GRANITE STEP
DESIGNATION: TIDAL 38 STA 84
STAMPED "1919/38"
NAVD 88 ELEVATION = 68.95'
NGVD29 ELEVATION = 69.66'

APPROVAL-
CITY OF PORTLAND
PLANNING BOARD

_____ DATE

_____ CHAIRPERSON

IN ACCORDANCE WITH TITLE 33 MRSA 652, SECTION 3, THE PROFESSIONAL SIGNATURE BELOW WILL BE ADDED AFTER THE PLANNING BOARD HAS SIGNED, AS AN ORIGINAL SIGNATURE, FOR RECORDING STANDARDS.

_____

SURVEYOR'S STATEMENT

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

_____
JACOB I. BARTLETT, PLS 2513 7/22/2022

STATE OF MAINE, CUMBERLAND COUNTY SS, REGISTRY OF DEEDS

RECEIVED _____, 20____
AT ____H ____M _____M AND
RECORDED IN
PLAN BOOK _____ PAGE _____
ATTEST: _____ REGISTER

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 25'
PROJECT	19371-01

SHEET 3 OF23

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

THIS PLAN SHALL NOT BE USED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel. 207-200-2100

SUBDIVISION PLAN
OF:
385 CONGRESS STREET
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST, SUITE 400
PORTLAND, ME 04101

RECORD OWNER:
385 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

F:\Projects\19300\19371\DWG\Design\Lot 1\19371 - SB - P1.dwg, SUBDIVISION PLAN, 8/26/2022 2:55:18 PM

DEMOLITION KEY

S1. SAWCUT PAVEMENT
S2. REMOVE ASPHALT PAVEMENT
S3. REMOVE BRICK PAVERS / SALVAGE FOR RE-USE
S4. REMOVE CONCRETE PAVEMENT
S5. REMOVE STREET TREE
S6. REMOVE EXISTING GUARDRAIL
S7. EXISTING GRANITE CURBING TO REMAIN
S8. REMOVE GRANITE CURB / SALVAGE FOR RE-USE
S9. REMOVE STREET SIGN
S10. REMOVE CONCRETE RETAINING WALL
S11. VEHICLE GUARDRAIL AND FENCING TO REMAIN
S12. CONCRETE PAVEMENT TO REMAIN
S13. ASPHALT PAVEMENT TO REMAIN
S14. REMOVE TACTILE WARNING PANEL
S15. ADA TACTILE WARNING PANEL TO REMAIN
S16. SEAL COAT OVER EXISTING PAINT STRIPING
S17. BRICK PAVERS TO REMAIN
S18. REMOVE EXISTING BUILDING
S19. REMOVE EXISTING CHAIN LINK FENCE
S20. REMOVE EXISTING BOLLARD

D1. EXISTING CATCH BASIN TO REMAIN
D2. NOT USED
D3. EXISTING STORM DRAIN TO REMAIN
D4. REMOVE EXISTING CATCH BASIN
D5. REMOVE EXISTING DRAIN MANHOLE
D6. NOT USED
SS1. EXISTING SANITARY MANHOLE TO REMAIN
SS2. REMOVE EXISTING SANITARY SEWER, CAP AND ABANDON AT MANHOLE.
SS3. SANITARY SEWER TO REMAIN
E1. ELECTRICAL MANHOLE TO REMAIN
E2. REMOVE UTILITY POLE
E3. REMOVE OVERHEAD UTILITY
E4. ELECTRICAL VAULT TO REMAIN
E5. REMOVE EXISTING ELECTRICAL VAULT
E6. REMOVE ELECTRICAL/TELECOM SERVICES
E7. RELOCATE EXISTING UTILITY POLE
G1. REMOVE EXISTING GAS MAIN, COORDINATE WITH GAS COMPANY
L1. EXISTING STREET LIGHTING TO REMAIN
L2. REMOVE STREET LIGHT AND BASE
L3. UNDERGROUND LIGHTING CONDUIT TO REMAIN
W1. FIRE HYDRANT TO REMAIN
W2. REMOVE EXISTING HYDRANT
W3. REMOVE WATER SERVICE - TERMINATE AT MAIN PER PWD STANDARDS
W4. REMOVE EXISTING WATER MAIN. CAP AND ABANDON AT MAIN

DEMOLITION NOTES

1. CONTRACTOR SHALL NOTIFY DIGSAFE FOR UTILITY LOCATIONS PRIOR TO EXCAVATION.
2. EXISTING MATERIALS TO BE SALVAGED AND RE-USED SHALL BE STORED AND PROTECTED DURING CONSTRUCTION.
3. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE TO ALL APPLICABLE CODES AND REGULATIONS.
4. REMOVE ALL BUILDING FOOTINGS, ELECTRICAL AND MISCELLANEOUS MATERIALS.

PEARL STREET
CUMBERLAND AVENUE
MYRTLE STREET
CONGRESS STREET

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967
STATE OF MAINE ★ DANIEL L RILEY ★ No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV.	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

DEMOLITION PLAN
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 20'
PROJECT	19371-01

SHEET 4 OF23

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LIGHTING FIXTURES LEGEND

= TOP: HOLOPHONE ESPL2 P20 30K XX T64
= MILD: HOLOPHONE ESL3 P20S 30K XXXXX T64

= A5: VP-2-72L-180-3K7-5QW

= B5: VP-2-72L-180-3K7-5QW

SITE PLAN KEY NOTES

1 RESET SALVAGED GRANITE CURB
2 GRANITE CURB TIP DOWN
3 FLUSH GRANITE CURB
4 2' X 6' TRUNCATED DOME PLATES
5 2' X 2' SOLID WHITE PAINT BARS, 2' APART, 8 ' WIDE
6 BRICK PAVERS
7 BRICK DRIVEWAY APRON
8 NEW TYPE 1 VERTICAL GRANITE CURB
9 LIGHT FIXTURE A - CITY STANDARD FIGURE X - 5F
10 LIGHT FIXTURE B - CITY STANDARD FIGURE X - 6B
11 ASPHALT PAVING
12 CITY OF PORTLAND STANDARD MOTORCYCLE PARKING STRIPING
13 REGRADE WITH GRAVEL IN DEMOLISHED BUILDING AREAS
14 12" SOLID WHITE PAINTED STOP BAR
15 RAISED GRANITE CURB TREE WELL
16 MYRTLE STREET + ONE WAY SIGN
17 1 HOUR PARKING SIGN
18 NOT USED
19 NOT USED
20 2 HOUR PARKING SIGN
21 NO PARKING SIGN + LEFT ARROW
22 NOT USED
23 PASSENGER LOADING ZONE SIGN + RIGHT ARROW
24 PASSENGER LOADING ZONE SIGN + LEFT ARROW
25 GRANITE BLOCK SEAT WALL
26 BOLLARD

PEARL STREET
CUMBERLAND AVENUE
MYRTLE STREET
CONGRESS STREET
LOT 1 PROPOSED HOTEL BUILDING
LOT 2 EXISTING PARKING AREA TO REMAIN
LIMIT OF SIDEWALK CONSTRUCTION
LIMIT OF SIDEWALK RECONSTRUCTION
SAWCUT AND REMOVE PAVEMENT
NEW GALVANIZED W-BEAM GUARDRAIL TO MATCH EXISTING, TYP.
EXITING GALVANIZED W-BEAM GUARDRAIL TO REMAIN
EXISTING GALVANIZED W-BEAM GUARDRAIL TO REMAIN
EXISTING TUNNEL TO REMAIN
(7) AT 7' ON CENTER
(6) AT 7' ON CENTER
DYCL
TYP.
STAIR
SWK1
5'R
22'
23'
14'
12'
13'
40'
17'
6'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

DANIELL RILEY PE 9967

STATE OF MAINE ★ DANIEL RILEY No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV.	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
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Tel. 207-200-2100

OVERALL SITE PLAN - STREET LEVEL
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 20'
PROJECT	19371-01

SHEET 5 OF23

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NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967

STATE OF MAINE ★ DANIEL L RILEY No. 9967 ★ PROFESSIONAL ENGINEER

08/11/2022

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

THIS PLAN SHEET IS NOT TO BE ALTERED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

GRADING AND DRAINAGE PLAN
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 20'
PROJECT	19371-01

SHEET 7 OF23

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

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UTILITY PLAN KEY NOTES

DRAINAGE:
- D1 CATCH BASIN (CB)
- D2 DRAIN MANHOLE (DMH)
- D3 STORM DRAIN MAIN (SD

ELECTRICAL:
- E1 6' X 12' SUBMERSIBLE TRANSFORMER
- E2 (3) 5" PVC AND (2) 4" PVC CONDUITS
- E3 REMOVE EXISTING UTILITY POLE
- E4 EXISTING OVERHEAD ELECTRIC LINE TO BE SWAPPED TO UNDERGROUND ELECTRIC
- E5 6' X 12' ELECTRICAL MANHOLE

GAS:
- G1 TAP EXISTING NATURAL GAS MAIN
- G2 NEW NATURAL GAS SERVICE
- G3 NATURAL GAS METER

LIGHTING:
- L1 STREET LIGHT AND OVERHEAD SERVICE TO BE REMOVED
- L2 EXISTING STREET LIGHT TO BE REMOVED

SANITARY:
- SS1 SEWER MANHOLE (SMH)
- SS2 8" SEWER MAIN (S)
- SS3 1500 GALLON GREASE TRAP

TELECOM:
- T1 5' X 7' TEL/ DATA VAULT

TRAFFIC SIGNAL:
- TS1 RELOCATE EXISTING TRAFFIC SIGNAL WIRES TO NEW STRAINPOLE
- TS2 TRAFFIC SIGNAL POLE TO REMAIN
- TS3 NEW TRAFFIC SIGNAL STRAIN POLE. INSTALL NEW OR RELOCATED PEDESTRIAN SIGNAL HEADS
- TS4 RELOCATE EXISTING TRAFFIC CONTROL CABINET TO NEW FOUNDATION
- TS5 NEW PEDESTRIAN SIGNAL/BUTTON POLE

WATER:
- W1 NEW 8" WATER LINE
- W2 NEW 4" WATER LINE
- W3 NEW 12" WATER LINE
- W4 WATER GATE VALVE

PEARL STREET
CUMBERLAND AVENUE
CONGRESS STREET
MYRTLE STREET
DMH-1
DMH-2
DMH-3
DMH-4
DMH-5
CB-1
CB-2
CB-3
CB-4
OCS-1
SMH-1
SMH-2
SMH 2041
SMH 2048
SMH 2076
SMH-2081
SD-1
SD-2
SD-3
SD-4
SD-5
SD-5.1
SD-5.2
SD-6
SD-7
SD-8
SD-9
S-1
INSTALL 2' STUB AT INV.=42.11 FOR FUTURE CONNECTION
NEW STORM DRAIN TO PASS BELOW EXISTING STORM DRAIN. NOTIFY ENGINEER OF ANY CONFLICTS.
HOTEL PLAZA DRAIN DOWN FROM ABOVE
HOTEL ROOF DRAIN DOWN FROM ABOVE
HOTEL SEWER DOWN FROM ABOVE
CONTECH SUBSURFACE DETENTION, TWO ROWS OF 48" CMP, SEE DETAIL
12" SD INV=44.55
12" SD INV=46,75
12" SD INV.=46,75
30" DIA. RISER, SEE DETAIL
6" PVC INV. IN=47,13
6" PVC INV. OUT=46,88
EXISTING SERVICES TO BE RETIRED DURING RENEWAL OF MAIN
INSTALL 12"X6" AND 12"X4" TEE. INSTALL D.I. SERVICES TO CURB LINE. INSTALL MJ CAP FOR FUTURE USE
INSTALL 8" SLEEVE
INSTALL 8"X4" MJ TEE
INSTALL 4" SLEEVE
REPLACE 8"X8" MJ TEE WITH 8"X12" MJ TEE. SLEEVE IN 8" DI MAIN. SHUTDOWN REQUIRED, COORDINATE SHUTDOWN WITH PWD.
RENEW WATER MAIN WITH 12" DI MAIN
CORE EXISTING STRUCTURE, INV. = 45.70
EXISTING UNDERGROUND UTILITY VAULTS TO BE REUSED OR REMOVED. DESIGN IS PENDING REVIEW FROM CENTRAL MAINE POWER.
RE-FEED POWER TO TRAFFIC SIGNAL BOX, SEE TRAFFIC SIGNAL PLAN
SEE TRAFFIC SIGNAL PLAN FOR PROPOSED PEDESTRIAN SIGNAL LAYOUT
INSTALL NEW HYDRANT
RETURN EXISTING HYDRANT TO PWD
REMOVE GATE VALVE
RETIRE PER PWD STANDARDS. CUT OUT TEE, SLEEVE IN 16" DI MAIN. SHUTDOWN REQUIRED, COORDINATE SHUTDOWN WITH PWD.
INSTALL 16" SLEEVE
REPLACE 16"X8" MJ TEE WITH 16"X12" MJ TEE. SLEEVE IN 16" DI MAIN. SHUTDOWN REQUIRED, COORDINATE SHUTDOWN WITH PWD.
INSTALL 16" SLEEVE
8" CI 1936
8" CI 1885
8" CI 1965
0+00
1+00
2+00
3+00
4+00
5+00
5+30

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967
STATE OF MAINE DANIEL RILEY No. 9967 REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

UTILITY PLAN
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 20'
PROJECT	19371-01

19371 - U - P1.dwg, TAB:8 UTILITY PLAN

SHEET 8 OF23

STRUCTURE TABLE

POINT #	STRUCTURE TYPE	RIM EL.	INV.	INV. EL.	SIZE	TYPE	LOCATION (N=12)	COMMENTS
2041	SMH	54.78	IN	49.43	12	VIT CLAY	3	
			IN	49.49	4	VIT CLAY	6	
			IN	46.39	10	VIT CLAY	4	
			IN	45.56	UNK	UNK	5	FULL OF SEDIMENT
			OUT	45.34	UNK	UNK	11	FULL OF SEDIMENT
			SHELF	45.81				
2048	SMH	52.54	IN	42.99	18	VIT CLAY	4	
			IN	35.70	UNK	UNK	4	
			IN	36.23	8	VIT CLAY	3	
			IN	26.54	UNK	UNK	7	TOP OF PIPE
			IN	25.79	UNK	UNK	4	
			OUT	25.69	UNK	UNK	4	
2061	CBR	48.09	OUT	44.12	8	PVC	7	HOOD
			SUMP	42.12				
2065	CBR	48.25	IN	44.81	8	VIT CLAY	8	
			OUT	44.71	8	UNK	2	
			SUMP	40.71				
2076	SMH	48.19	IN	41.34	12	VIT CLAY	3	
			IN	25.03	UNK	UNK	4	
			OUT	24.99	UNK	UNK	10	
2081	SMH	47.90	IN	38.77	18	VIT CLAY	4	
			IN	24.67	18	VIT CLAY	4	
			OUT	24.67	18	VIT CLAY	10	
			SHELF	25.77				
2106	CBR	47.27	OUT	43.46	UNK	UNK	10	HOOD
			SUMP	40.26				
2124	CBR	47.00	IN	44.75	12	VIT CLAY	6	
			OUT	47.05	0	NONE	NONE	NO OUT VISIBLE
			SUMP	40.05				
2126	SMH	47.80	IN	39.41	12	VIT CLAY	8	
			OUT	39.32	12	VIT CLAY	2	
			SHELF	40.03				
2143	CBR	47.40	OUT	45.27	10	VIT CLAY	3	
			SUMP	45.17				
2145	CBR	47.95	IN	44.48	8	VIT CLAY	9	
			OUT	43.78	12	VIT CLAY	12	
			SUMP	42.98				
2150	MH	47.77	IN	37.46	18	VIT CLAY	4	
			OUT	37.21	18	VIT CLAY	10	
			SHELF	38.11				
2161	CBR	47.77	OUT	43.36	12	UNK	8	
			SUMP	40.76				
2164	CBR	47.54	IN	44.26	8	VIT CLAY	4	
			IN	44.19	8	VIT CLAY	2	
			OUT	43.49	12	UNK	9	
			SUMP	40.09				
2166	CBR	47.59	OUT	44.42	8	VIT CLAY	8	
			SUMP	44.02				
2223	SMH	48.67	IN	39.72	15	VIT CLAY	4	
			OUT	39.62	15	VIT CLAY	10	
			SHELF	40.77				
2386	SMH	54.12	IN	44.67	15	VIT CLAY	4	
			OUT	44.62	15	VIT CLAY	10	
			SHELF	45.69				

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-1	49.90	42.11 (SD-2) 42.11 (2' STUB)	41.86 (SD-1)	48"
CB-1.1	54.10	43.00 (SD-1.2)	42.66 (SD-1.1)	48"
CB-1.2	53.90		43.40 (SD-1.2)	48"
CB-2	49.70	43.67 (SD-6) 43.82 (SD-3.1)	43.57 (SD-5)	48"
CB-3	49.80		44.50 (SD-3.1)	48"
CB-4	62.50		47.55 (SD-5.2)	48"
DMH-1	50.95	41.60 (SD-1) 41.60 (EX. SD)	41.50 (EX. SD)	48"
DMH-2	50.60	42.34 (SD-3)	42.24 (SD-2)	48"
DMH-3	50.30	42.61 (SD-4)	42.51 (SD-3)	48"
DMH-4	52.05	43.20 (SD-5)	43.10 (SD-4)	48"
DMH-5	50.00	47.20 (SD-5.2) 47.43 (RD)	47.10 (SD-5.1)	48"
OCS-1	50.25	43.97 (SD-7) 44.43 (SD-9)	43.87 (SD-6)	60"
SF-1	50.25	44.49 (SD-8)	43.99 (SD-7)	48"

SANITARY SEWER STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
SMH-1	56.70	46.08 (S-2)	45.98 (S-1)	48"
SMH-2	50.25	46.42 (S-3)	46.32 (S-2)	48"

SANITARY SEWER PIPE DATA

NAME	SIZE	LENGTH	SLOPE
S-1	8"	45'	0.63%
S-2	8"	36'	0.66%

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-1	18"	51'	0.51%
SD-2	15"	25'	0.51%
SD-3	15"	34'	0.50%
SD-3.1	12"	57'	1.20%
SD-4	15"	96'	0.51%
SD-5	15"	72'	0.51%
SD-5.1	12"	50'	0.70%
SD-6	15"	38'	0.52%
SD-7	8"	3'	0.65%
SD-8	12"	11'	0.54%
SD-9	12"	11'	1.10%

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967

STATE OF MAINE DANIEL L RILEY No. 9967 REGISTERED PROFESSIONAL ENGINEER 08/11/2022

REV:	BY:	DATE:	STATUS:
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

SCHEDULES
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	N.T.S.
PROJECT	19371-01

SHEET 9 OF23

19371 - U - P1.dwg, TAB:9 SCHEDULES

UTILITY PLAN KEY NOTES

DRAINAGE:
- D1 CATCH BASIN (CB)
- D2 DRAIN MANHOLE (DMH)
- D3 STORM DRAIN MAIN (SD

ELECTRICAL:
- E1 6' X 12' SUBMERSIBLE TRANSFORMER
- E2 (3) 5" PVC AND (2) 4" PVC CONDUITS
- E3 REMOVE EXISTING UTILITY POLE
- E4 EXISTING OVERHEAD ELECTRIC LINE TO BE SWAPPED TO UNDERGROUND ELECTRIC
- E5 6' X 12' ELECTRICAL MANHOLE

GAS:
- G1 TAP EXISTING NATURAL GAS MAIN
- G2 NEW NATURAL GAS SERVICE
- G3 NATURAL GAS METER

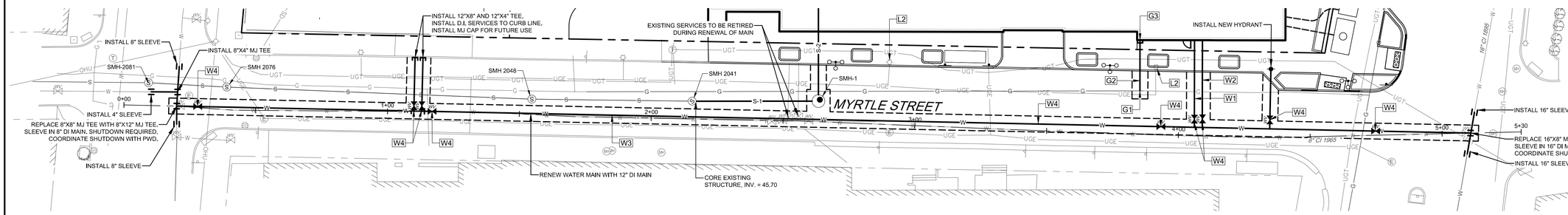
LIGHTING:
- L1 STREET LIGHT AND OVERHEAD SERVICE TO BE REMOVED
- L2 EXISTING STREET LIGHT TO BE REMOVED

SANITARY:
- SS1 SEWER MANHOLE (SMH)
- SS2 8" SEWER MAIN (S)
- SS3 1500 GALLON GREASE TRAP

TELECOM:
- T1 5' X 7' TEL/ DATA VAULT

TRAFFIC SIGNAL:
- TS1 RELOCATE EXISTING TRAFFIC SIGNAL WIRES TO NEW STRAINPOLE
- TS2 TRAFFIC SIGNAL POLE TO REMAIN
- TS3 NEW TRAFFIC SIGNAL STRAIN POLE. INSTALL NEW OR RELOCATED PEDESTRIAN SIGNAL HEADS
- TS4 RELOCATE EXISTING TRAFFIC CONTROL CABINET TO NEW FOUNDATION
- TS5 NEW PEDESTRIAN SIGNAL/BUTTON POLE

WATER:
- W1 NEW 8" WATER LINE
- W2 NEW 4" WATER LINE
- W3 NEW 12" WATER LINE
- W4 WATER GATE VALVE



GRAPHIC SCALE
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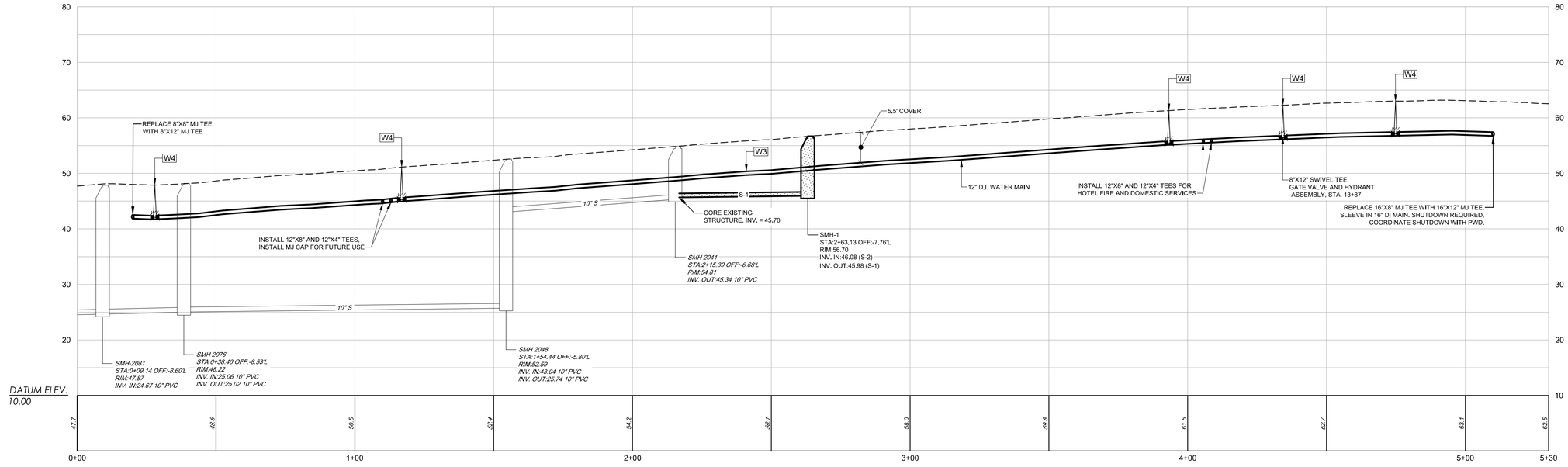
(IN FEET)
1 INCH = 20 FT.



MYRTLE STREET WATERLINE

SCALE:
1" = 20' H
1" = 10' V

NOTES:

1. DEPTH OF EXISTING ELECTRICAL, COMMUNICATION, AND GAS UTILITIES ARE UNKNOWN. CONTRACTOR SHALL VERIFY DEPTHS PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE COMMUNICATED TO ENGINEER.

NOT FOR CONSTRUCTION

DANIELL RILEY PE 9967

STATE OF MAINE DANIEL RILEY No. 9967 REGISTERED PROFESSIONAL ENGINEER 08/11/2022

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WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

MYRTLE STREET PLAN AND PROFILE
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
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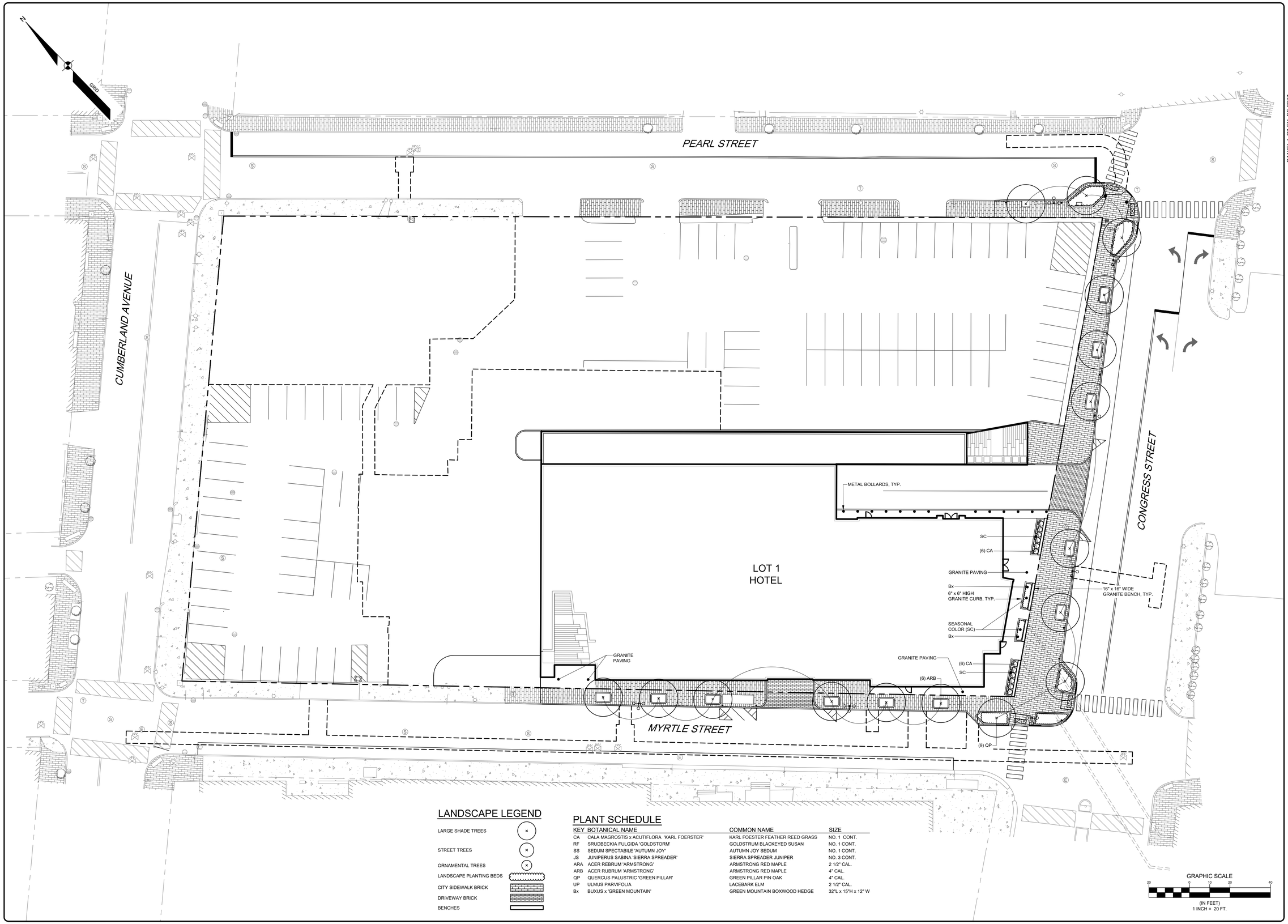
PROJECT	19371-01

SHEET10 OF23

19371 - U - P1.dwg, TAB:10 MYRTLE STREET PLAN AND PROFILE



LANDSCAPE LEGEND

- LARGE SHADE TREES
- STREET TREES
- ORNAMENTAL TREES
- LANDSCAPE PLANTING BEDS
- CITY SIDEWALK BRICK
- DRIVEWAY BRICK
- BENCHES

PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE
CA	CALA MAGROSTIS x ACUTIFLORA 'KARL FOERSTER'	KARL FOESTER FEATHER REED GRASS	NO. 1 CONT.
RF	SRUDBECKIA FULGIDA 'GOLDSTORM'	GOLDSTRUM BLACKEYED SUSAN	NO. 1 CONT.
SS	SEDUM SPECTABILE 'AUTUMN JOY'	AUTUMN JOY SEDUM	NO. 1 CONT.
JS	JUNIPERUS SABINA 'SIERRA SPREADER'	SIERRA SPREADER JUNIPER	NO. 3 CONT.
ARA	ACER REBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	2 1/2" CAL.
ARB	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	4" CAL.
QP	QUERCUS PALUSTRIC 'GREEN PILLAR'	GREEN PILLAR PIN OAK	4" CAL.
UP	ULMUS PARVIFOLIA	LACEBARK ELM	2 1/2" CAL.
Bx	BUXUS x 'GREEN MOUNTAIN'	GREEN MOUNTAIN BOXWOOD HEDGE	32"L x 15"H x 12" W

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967

STATE OF MAINE ★ DANIEL L RILEY No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER
08/11/2022

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75 John Roberts Rd.
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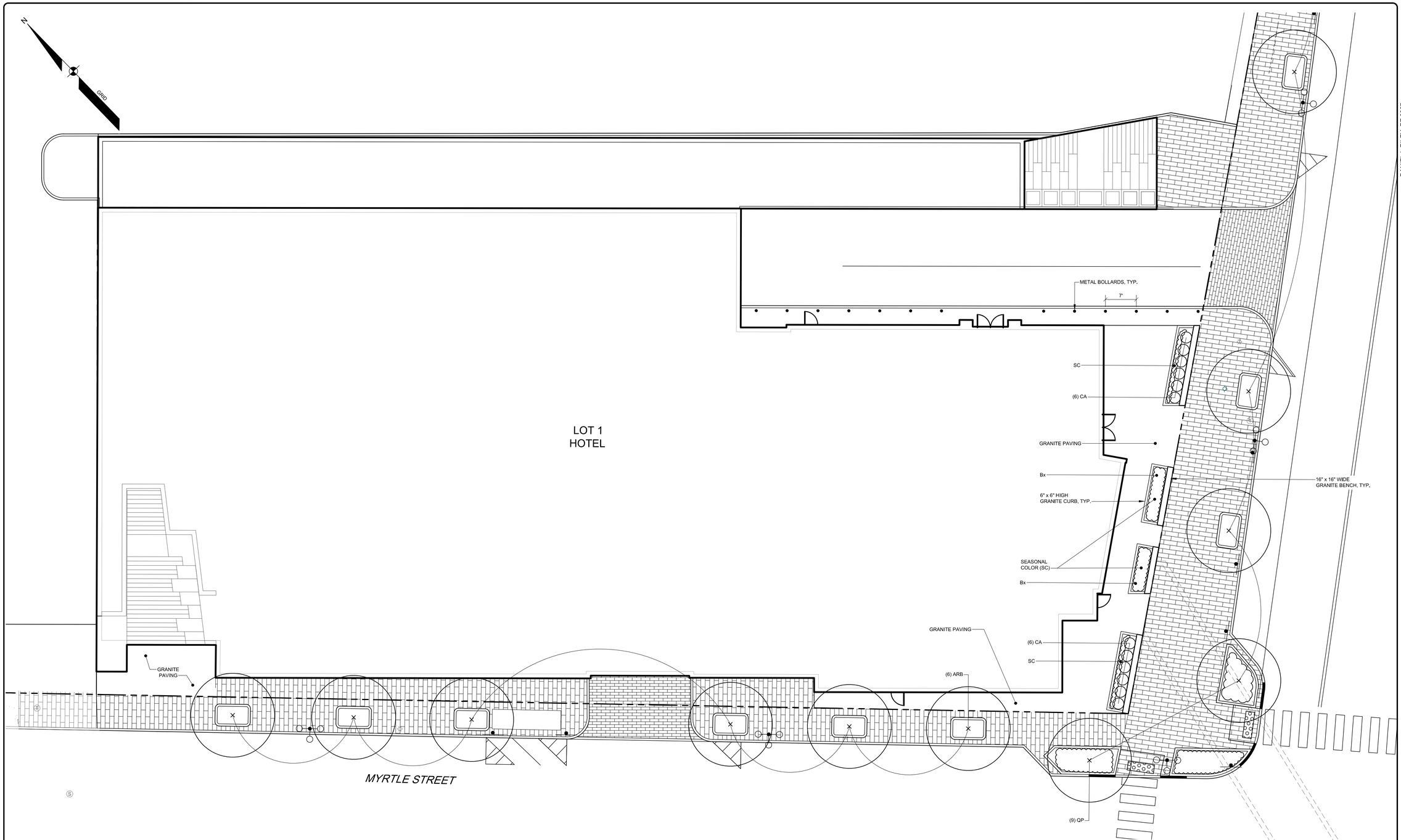
Tel. 207-200-2100

OVERALL LANDSCAPE PLAN - STREET LEVEL
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 20'
PROJECT	19371-01

SHEET11 OF23



LANDSCAPE LEGEND

- LARGE SHADE TREES
- STREET TREES
- ORNAMENTAL TREES
- LANDSCAPE PLANTING BEDS
- CITY SIDEWALK BRICK
- DRIVEWAY BRICK
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PLANT SCHEDULE

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Bx	BUXUS x 'GREEN MOUNTAIN'	GREEN MOUNTAIN BOXWOOD HEDGE	32"L x 15"H x 12" W

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 INCH = 10 FT.

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967

STATE OF MAINE
DANIEL L RILEY
No. 9967
REGISTERED PROFESSIONAL ENGINEER
08/11/2022

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75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel. 207-200-2100

LANDSCAPE PLAN - STREET LEVEL
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	1" = 10'
PROJECT	19371-01

SHEET12 OF23

LIGHTING FIXTURES LEGEND

= TOP: HOLOPHONE ESPL2 P20 30K XX T64
= MILD: HOLOPHONE ESL3 P20S 30K XXXXX T64

= A5: VP-2-72L-180-3K7-5QW

= B5: VP-2-72L-180-3K7-5QW

SITE PLAN KEY NOTES

1 RESET SALVAGED GRANITE CURB
2 GRANITE CURB TIP DOWN
3 FLUSH GRANITE CURB
4 2' X 6' TRUNCATED DOME PLATES
5 2' X 2' SOLID WHITE PAINT BARS, 2' APART, 8 ' WIDE
6 BRICK PAVERS
7 BRICK DRIVEWAY APRON
8 NEW TYPE 1 VERTICAL GRANITE CURB
9 LIGHT FIXTURE A - CITY STANDARD FIGURE X - 5F
10 LIGHT FIXTURE B - CITY STANDARD FIGURE X - 6B
11 ASPHALT PAVING
12 CITY OF PORTLAND STANDARD MOTORCYCLE PARKING STRIPING
13 REGRADE WITH GRAVEL IN DEMOLISHED BUILDING AREAS
14 12" SOLID WHITE PAINTED STOP BAR
15 RAISED GRANITE CURB TREE WELL
16 MYRTLE STREET + ONE WAY SIGN
17 1 HOUR PARKING SIGN
18 NOT USED
19 NOT USED
20 2 HOUR PARKING SIGN
21 NO PARKING SIGN + LEFT ARROW
22 NOT USED
23 PASSENGER LOADING ZONE SIGN + RIGHT ARROW
24 PASSENGER LOADING ZONE SIGN + LEFT ARROW
25 GRANITE BLOCK SEAT WALL
26 BOLLARD

GRID

PEARL STREET

DYCL

LIMIT OF SIDEWALK CONSTRUCTION

(26) 9'X18' PARKING SPACES

NEW GALVANIZED W-BEAM GUARDRAIL TO MATCH EXISTING, TYP.

EXITING GALVANIZED W-BEAM GUARDRAIL TO REMAIN

(11) 9'X18' PARKING SPACES

(14) 9'X18' PARKING SPACES

(20) 9'X18' PARKING SPACES

(14) 9'X18' PARKING SPACES

(19) 9'X18' PARKING SPACES

EXISTING GALVANIZED W-BEAM GUARDRAIL TO REMAIN

(8) 9'X18' PARKING SPACES

CUMBERLAND AVENUE

(15) 9'X18' PARKING SPACES

(11) 9'X15' COMPACT SPACES

(12) 9'X18' PARKING SPACES

(12) 9'X18' PARKING SPACES

(16) 9'X18' PARKING SPACES

LOT 1
PROPOSED HOTEL
BUILDING

CONGRESS STREET

SWK1

MODULAR BLOCK RETAINING WALL WITH PEDESTRIAN GUARDRAIL

MYRTLE STREET

EXISTING TUNNEL TO REMAIN

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

DANIELL RILEY PE 9967

STATE OF MAINE ★ DANIEL RILEY No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER
08/11/2022

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75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel. 207-200-2100

SITE PLAN - INTERIM PARKING
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
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PROJECT	19371-01

SHEET14 OF23

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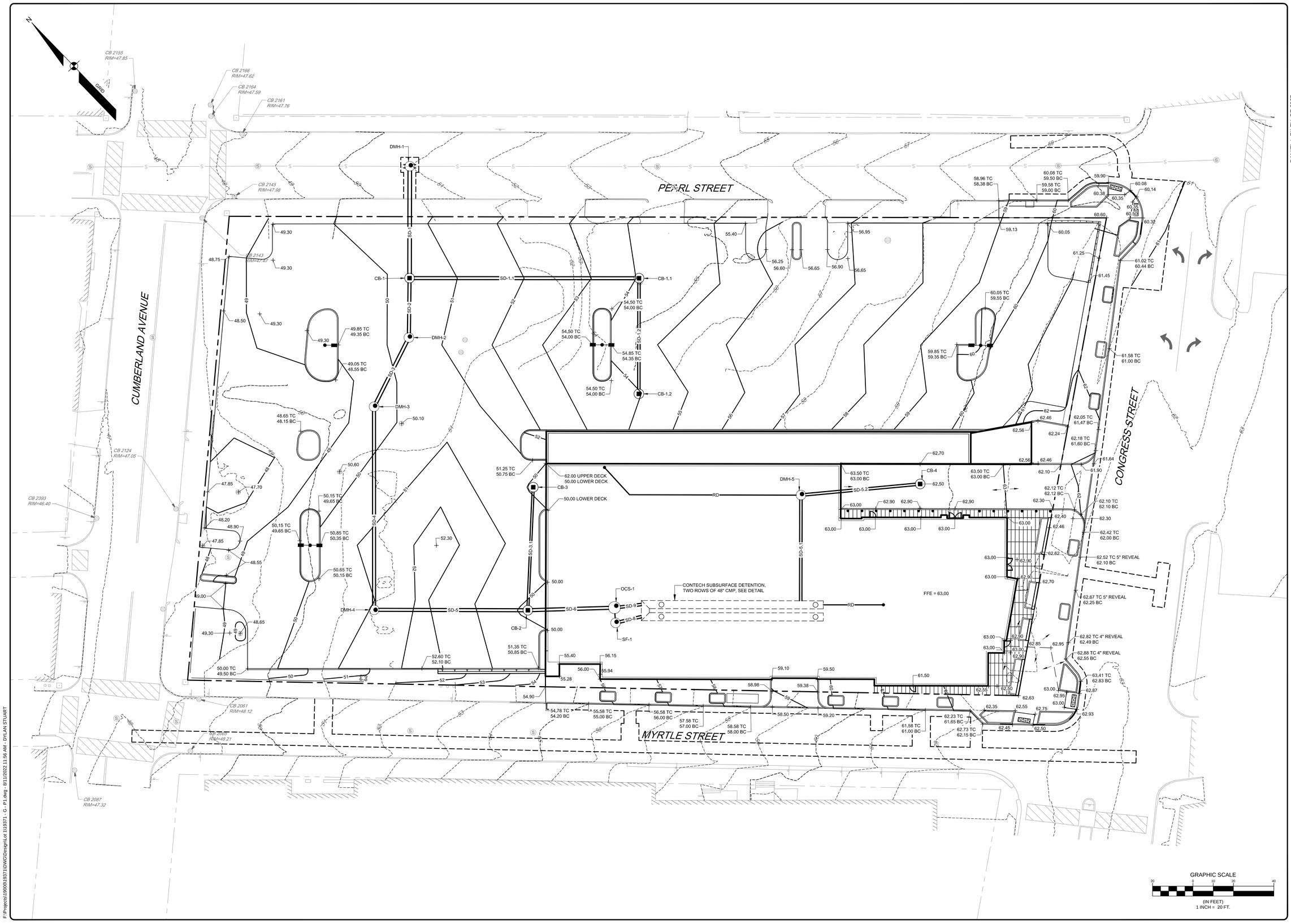

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967

STATE OF MAINE ★ DANIEL RILEY No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER
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75 John Roberts Rd.
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GRADING PLAN - INTERIM PARKING
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

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SCALE	1" = 20'
PROJECT	19371-01

SHEET15 OF23

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PEARL STREET

CUMBERLAND AVENUE

MYRTLE STREET

CONGRESS STREET

LOT 1
HOTEL

(17) RF
(7) CA
(1) UP
(7) JS
(4) CA
(8) RF
(8) SS
(1) JS
(10) JS
(10) RF
(2) ARA
(7) CA
(5) RF
(4) CA
(5) RF
(1) JS
(9) RF
(1) ARA
(3) JS
(11) CA
(6) JS
(3) JS
(4) RF
(4) SS
(3) CA
(4) CA
(10) RF
(7) CA
(7) JS
(3) RF
(5) CA
(3) RF
STONE
(4) CA
(8) RF
(8) SS
(11) SS
(8) RF
(15) RF
(8) RF
(18) CA
(7) RF
(9) CA
(13) RF
(15) CA
(1) UP
(9) JS
(25) SS
(8) RF
(6) JS
(7) JS
(14) SS
(9) RF
GRANITE PAVING
SC
(6) CA
GRANITE PAVING
Bx
6" x 6" HIGH
GRANITE CURB, TYP.
16" x 16" WIDE
GRANITE BENCH, TYP.
SEASONAL
COLOR (SC)
Bx
GRANITE PAVING
(6) CA
SC
(6) ARB
(9) QP

LANDSCAPE LEGEND

- LARGE SHADE TREES
- STREET TREES
- ORNAMENTAL TREES
- LANDSCAPE PLANTING BEDS
- CITY SIDEWALK BRICK
- DRIVEWAY BRICK
- BENCHES

PLANT SCHEDULE

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GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967

STATE OF MAINE
DANIEL L RILEY
No. 9967
REGISTERED PROFESSIONAL ENGINEER
08/11/2022

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LANDSCAPE PLAN - INTERIM PARKING
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST., SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
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PROJECT	19371-01

SHEET16 OF23

EROSION CONTROL MEASURES

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF CONSTRUCTION AND COMPLETION. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD, SUCH AS ACTIVE EXCAVATION AND ACTIVE GRADING. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS ACTIVELY OCCURRING OR CAN BE MULCHED IN THE SAME DAY. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN SEVEN (7) DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100 FEET OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES
THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS, WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).
TYPES OF MULCH:

HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

EROSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILE.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1 OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4 OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETERIORATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX: SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER. EROSION CONTROL MIX BERMS SHALL NOT BE USED AT THE BOTTOM OF STEEP SLOPES (>8%) OR SLOPES WITH FLOWING WATER.

CONTINUOUS CONTAINED BERM: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 2 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALE ARE ESTABLISHED WITH AT LEAST 90% OF VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: STONE DAMS SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

HAY BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.

6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEPT TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. THE TERM "SWEEP" IS UNDERSTOOD TO MEAN REMOVAL AND RECOVERY OF TRACKED SEDIMENT WITH A STREET SWEEPER, NOT BRUSHING THE MATERIAL INTO SWALES OR STRUCTURES WITH A MECHANICAL BROOM. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFFSITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUALS FOR CONTRACTORS AND ENGINEERS, 2016 OR LATEST REVISION. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR, PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDBED PREPARATION:

A. FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

B. SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.

APPLICATION OF SEED:

A. SEEDING: SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (CONSERVATION MIX)

SEED TYPE	APPLICATION RATE
FESCUE, FAWN	0.34 LBS/1,000 S.F. (15 LBS/ACRE)
BIRD'S FOOT TREFOIL, VARIETY NOT STATED	0.28 LBS/1,000 S.F. (12 LBS/ACRE)
ANNUAL RYEGRASS	0.18 LBS/1,000 S.F. (8 LBS/ACRE)
TIMOTHY, CLIMAX	0.18 LBS/1,000 S.F. (8 LBS/ACRE)
ALSIKE CLOVER	0.11 LBS/1,000 S.F. (5 LBS/ACRE)
REDTOP	0.05 LBS/1,000 S.F. (2 LBS/ACRE)
TOTAL	1.14 LBS/1,000 S.F. (50 LBS/ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 2016 OR LATEST REVISION.

B. HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SODDING:
FOLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN. WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

A. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C.) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D.) OF THIS STANDARD.
B. STABILIZE THE SLOPE WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
C. STABILIZE THE SLOPE WITH WOOD WASTE COMPOST -- THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
D. STABILIZE THE SLOPE WITH STONE RIPRAP -- THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS -- BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

A. STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C.) OF THIS STANDARD.
B. STABILIZE THE SOIL WITH SOD -- THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
C. STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

1. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, AND AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY, TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS.

2. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

HOUSEKEEPING:

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

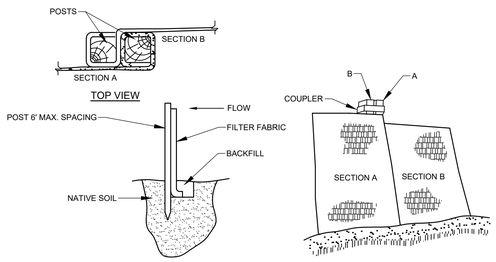
2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL. BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

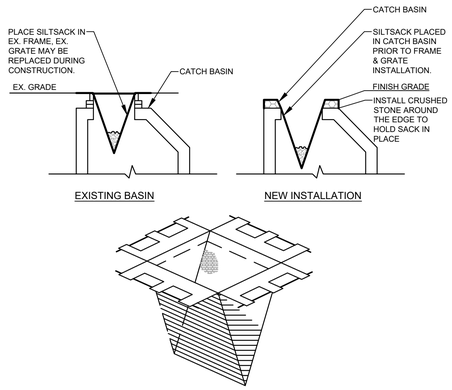
6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
A. DISCHARGES FROM FIREFIGHTING ACTIVITY;
B. FIRE HYDRANT FLUSHINGS;
C. VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMIS



INSTALLATION:

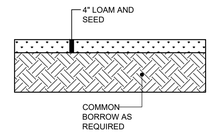
1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
5. JOIN SECTION AS SHOWN ABOVE.
6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

FILTER BARRIER
NOT TO SCALE

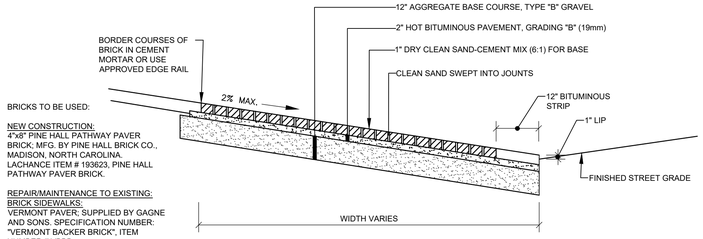


NOTES:
PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGIN A CATCH BASIN INSERT (SUCH AS A SILT SACK OR A DANDY BAG II) MUST BE INSTALLED IN EACH BASIN PER MANUFACTURES INSTRUCTIONS. HAY BALES SHOULD BE REMOVED ONCE INSERTS ARE INSTALLED.

CATCH BASIN PROTECTION DETAIL (FOR PAVED AREAS)
NOT TO SCALE



LOAM & SEED SECTION
NOT TO SCALE

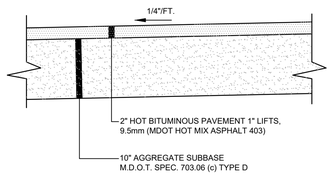


BRICKS TO BE USED:

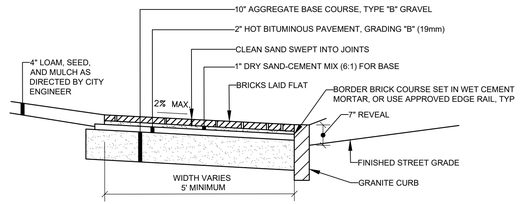
NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER BRICK, MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA. LACHANCE ITEM # 193623, PINE HALL PATHWAY PAVER BRICK.

REPAIR/MAINTENANCE TO EXISTING:
BRICK SIDEWALKS:
VERMONT PAVER; SUPPLIED BY GAGNE AND SONS. SPECIFICATION NUMBER: "VERMONT BACKER BRICK", ITEM NUMBER # VBBB

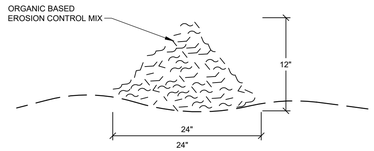
BRICK DRIVEWAY APRON WITH BITUMINOUS BASE
NOT TO SCALE



BITUMINOUS SIDEWALK
NOT TO SCALE



BRICK SIDEWALK WITH BITUMINOUS BASE
NOT TO SCALE



COMPOSITION:

EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

INSTALLATION:

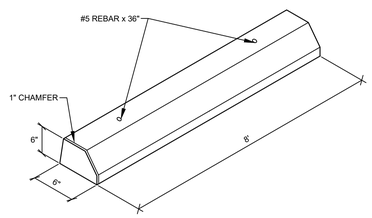
1. THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.

2. EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER

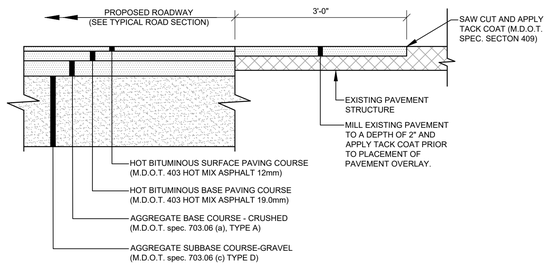
3. THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.

4. EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

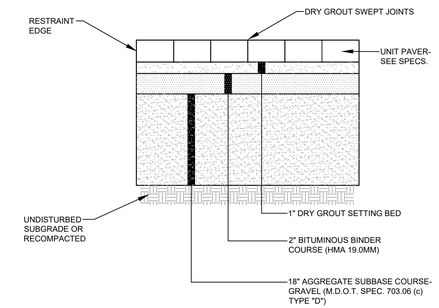
EROSION CONTROL MIX BERM
NOT TO SCALE



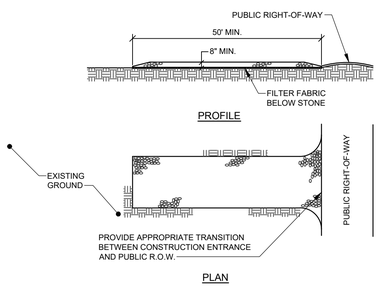
CONCRETE WHEEL STOP
NOT TO SCALE



PAVEMENT JOINT
NOT TO SCALE

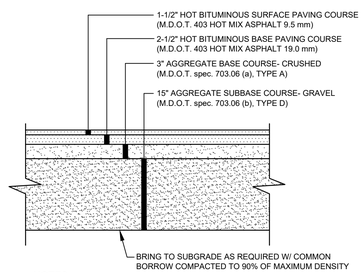


UNIT PAVER
NOT TO SCALE



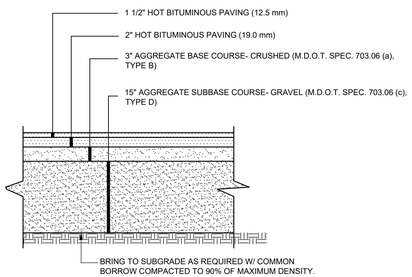
NOTES:
1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
5. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



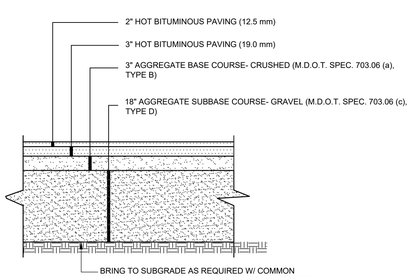
NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
3. CONTRACTOR MAY REPLACE BITUMINOUS PAVING SECTION WITH TWO (2) 1-1/2" LIFTS OF 12.5mm SUPERPAVE MIX. SUBMIT PAVEMENT MIX DESIGN PRIOR TO CONSTRUCTION.

TYP. PAVED PARKING LOT SECTION
NOT TO SCALE



NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

TYPICAL ROADWAY SECTION - MYRTLE & PEARL STREET
NOT TO SCALE



NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

TYPICAL ROADWAY SECTION - CONGRESS STREET & CUMBERLAND AVENUE
NOT TO SCALE

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967
STATE OF MAINE DANIEL L RILEY No. 9967 REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

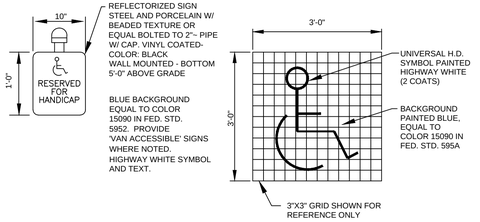
THIS PLAN IS NOT TO BE USED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PROVIDED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite A4
South Portland, ME 04106
Tel. 207-200-2100

DETAILS
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	N.T.S.
PROJECT	19371-01

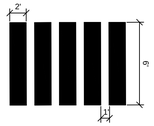
SHEET18 OF23



STRIPING DETAIL

HANDICAP SIGNS AND STRIPING

NOT TO SCALE

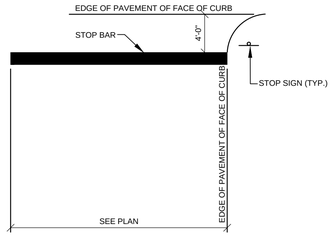


PAVEMENT MARKING NOTES

1. ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, U.S. DOT, FHWA, LATEST EDITION.
2. ALL PAVEMENT MARKING LINES SHALL BE PAINT AND 4" WIDE, EXCEPT FOR:
   SWSL-12"
   SYCL-12"
   CROSSWALK BARS - 24"
3. PAVEMENT WORD AND SYMBOL MARKINGS SHALL BE WHITE PAINT.
4. SOLID WHITE STOP LINE SHALL BE A MINIMUM OF 4' BEHIND THE EDGE OF CROSSWALK.

CROSSWALK DETAIL

NOT TO SCALE

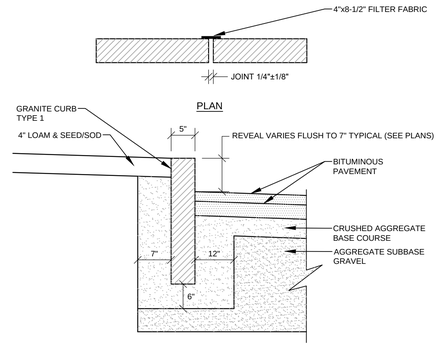


NOTE:

1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.

STOP BAR

NOT TO SCALE

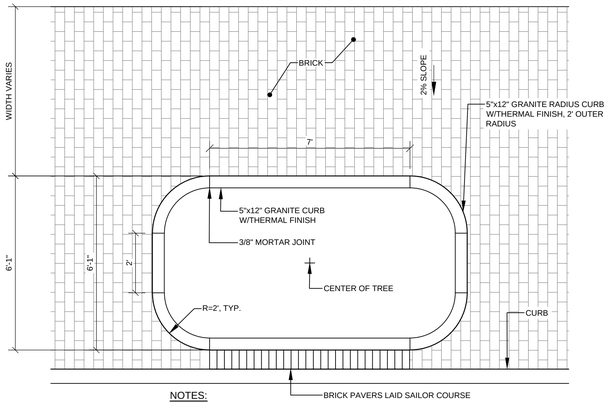


NOTES:

1. EXCAVATION INCIDENTAL TO TO COST OF CURB
2. SUBBASE SHALL BE COMPACTED TO A FIRM EVEN SURFACE PRIOR TO SETTING OF CURB

VERTICAL GRANITE CURB

NOT TO SCALE

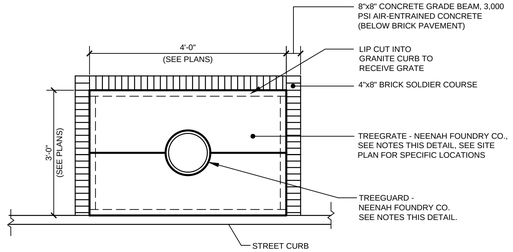


NOTES:

1. ALL TREE WELLS SHALL COMPLY WITH CITY TECHNICAL STANDARDS AND MUST BE APPROVED BY THE CITY ARBORIST: JEFF TARLING (207) 808-5400.
2. SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.
3. NEW CONSTRUCTION:
   4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA. LACHANCE ITEM #193623, PINE HALL PATHWAY PAVER BRICK.

TREEWELL IN BRICK SIDEWALK

NOT TO SCALE

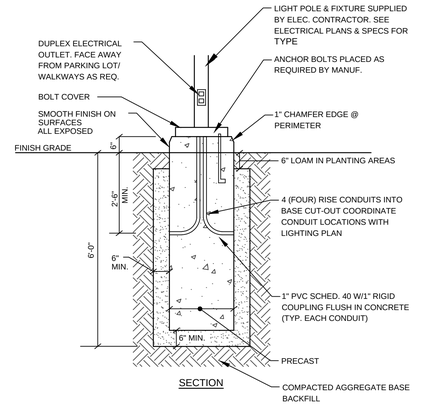


NOTES:

1. USE R-8808 W/ 12" EXPANDABLE OPENING FOR TREE GRATE #1.
2. USE R-8802-4 W/ 18" EXPANDABLE OPENING FOR TREE GRATE #2.

TREE GRATE DETAIL

NOT TO SCALE

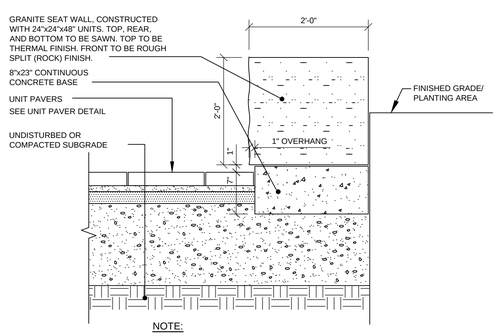


NOTES:

1. CONCRETE f'c=5000 psi. @ 28 DAYS WITH STEEL REINFORCEMENT.
2. CONDUIT AND ANCHOR BOLTS PLACED AS REQUIRED PROVIDED BY ELECTRICAL CONSTRACTOR.
3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.

STANDARD LIGHT POLE BASE

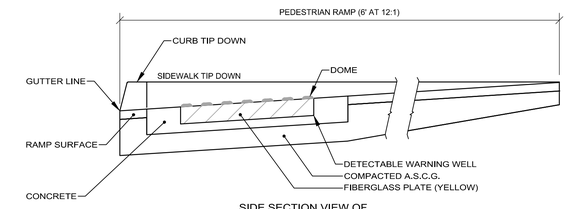
NOT TO SCALE



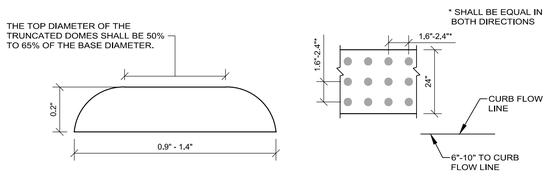
NOTE:
PLACE GRANITE UNITS WITH BUTT JOINTS (1/4" MAX. SEPARATION).

GRANITE SEAT WALL

NOT TO SCALE



SIDE SECTION VIEW OF
DETECTABLE WARNING, WELL, CURB AND GUTTER

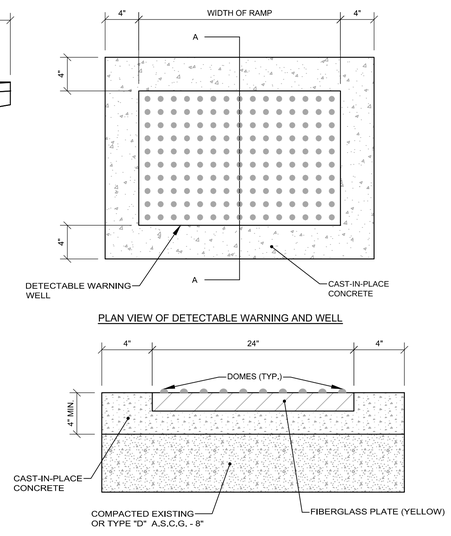


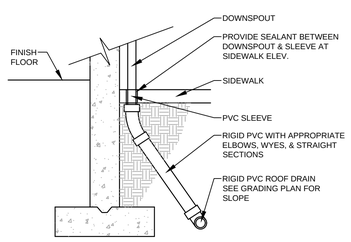
DOME AND DETECTABLE WARNING DETAILS

NOTE: ALL DETECTABLE WARNING AREAS SHALL START 6" - 10" FROM THE FLOW LINE OF THE CURB, BE 24" IN DEPTH, AND COVER THE COMPLETE WIDTH OF THE RAMP AREA ONLY.

TRUNCATED DOME PAVING

NOT TO SCALE





NOTE:
1. SEE PLANS FOR DOWNSPOUT AND ROOF DRAIN LEADER SIZES..

ROOF DRAIN CONNECTOR

NOT TO SCALE

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967
STATE OF MAINE DANIEL L RILEY No. 9967 REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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DETAILS
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST, SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	N.T.S.
PROJECT	19371-01

SHEET19 OF23

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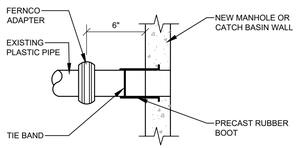
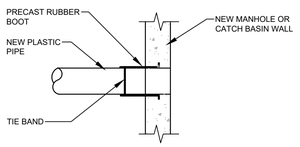
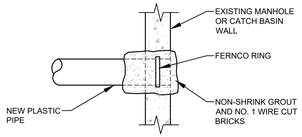


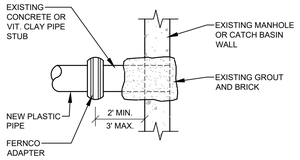
METHOD 1- EXISTING PIPE INTO NEW STRUCTURE



METHOD 2- NEW CONSTRUCTION

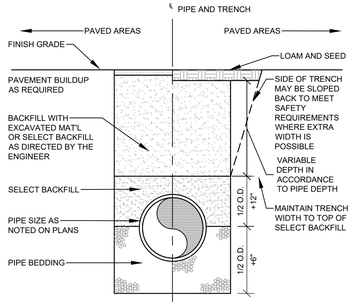


METHOD 3- NEW PIPE INTO EXISTING STRUCTURE



METHOD 4- NEW PIPE INTO EXISTING STUB

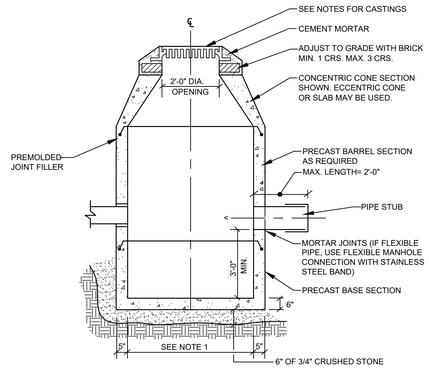
PLASTIC PIPE CONNECTIONS
NOT TO SCALE



TRENCH BACKFILL SCHEDULE		
PIPE TYPE	PIPE BEDDING MATERIAL	SELECT BACKFILL
CORRUGATED METAL DUCTILE IRON REINFORCED CONCRETE	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.13 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL, OR MDOT 703.13 3/4" CRUSHED STONE
PERFORATED PVC-SDR 35 HDPE	MDOT 703.13 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL, OR MDOT 703.13 3/4" CRUSHED STONE

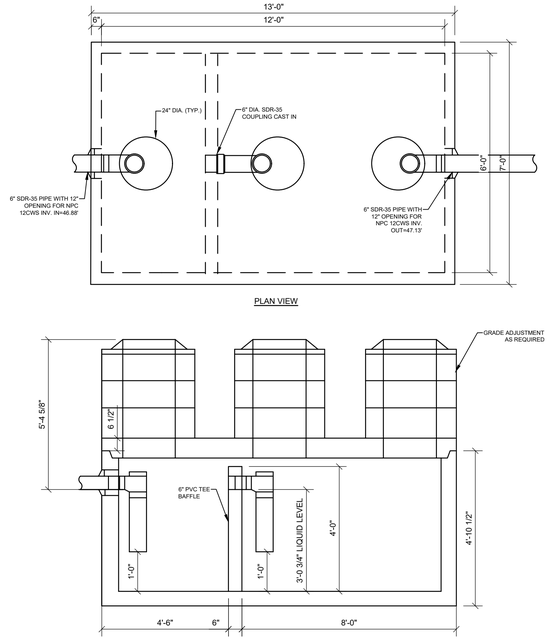
NOTE:
ALL BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL MEET ALL STATE AND O.S.H.A. SAFETY STANDARDS.

TRENCH SECTION
NOT TO SCALE



NOTES:
1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
4. CATCH BASIN FRAME AND GRATE TO BE NEENAH FOUNDRY R-2554, OR APPROVED EQUAL.
5. INSTALL OUTLET HOODS (CASCO TRAP) ON CATCH BASINS WHERE INDICATED ON THE PLANS.

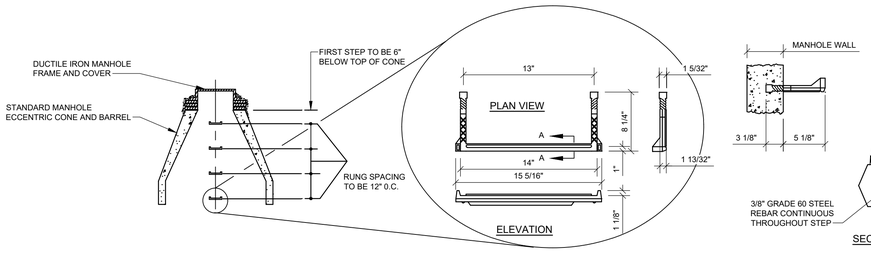
TYPICAL CATCH BASIN
NOT TO SCALE



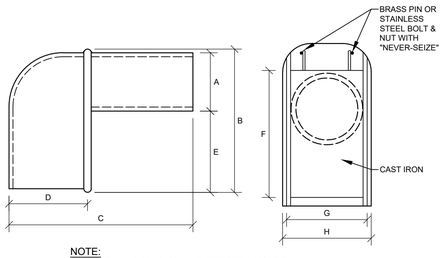
1500 GALLON GREASE TRAP
NOT TO SCALE

CONCRETE SPECIFICATIONS:
1. 5000 PSI @ 28 DAYS
2. REINFORCING TO BE GRADE 60, BLACK.
3. JOINTS SEALED WITH BUTYL RUBBER JOINT SEALANT. AASHTO M-19.
4. VAULT TO BE RATED FOR H-20 LOADING.
5. INTERIOR PIPING BY OTHERS.
6. DAMP PROOF EXTERIOR COATING.
7. INTERIOR TO BE COATED WITH DURALKOTE 240 EPOXY COATING.

GREASE TRAP INFORMATION:
1. TANKS SHOULD BE PUMPED AS NEEDED
2. ACCESS COVERS SHOULD HAVE RISERS TO BEING COVER ACCESS TO GRADE.
3. TANKS CAN BE VACUUM TESTED AT AN ADDITIONAL COST.



PLASTIC MANHOLE STEPS
NOT TO SCALE

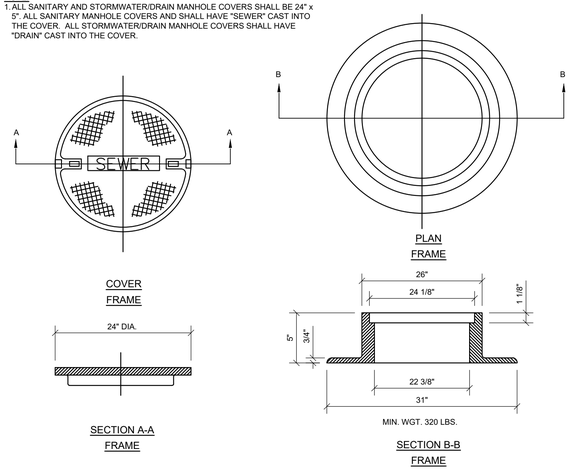


NOTE:
BOLT AND NUT REQUIRED WHERE HOOD WILL NOT OPEN COMPLETELY.

SIZE	A	B	C	D	E	F	G	H
6 IN.	5 -1/2"	13 3/8"	13 3/4"	5 3/8"	5 7/8"	11 5/8"	6 1/2"	7 1/4"
8 IN.	7 1/2"	15"	15 3/8"	5 1/2"	5 3/8"	13 3/4"	8 3/4"	9 3/8"
10 IN.	9 1/2"	16"	16 1/4"	6"	4 1/2"	14 1/8"	11 1/2"	12 3/8"
12 IN.	11 1/2"	17"	22"	8"	3 1/2"	17"	12 1/2"	13 3/8"
15 IN.	14 1/2"	22 1/2"	23"	10 1/4"	5 3/4"	21"	14 1/4"	15 3/4"

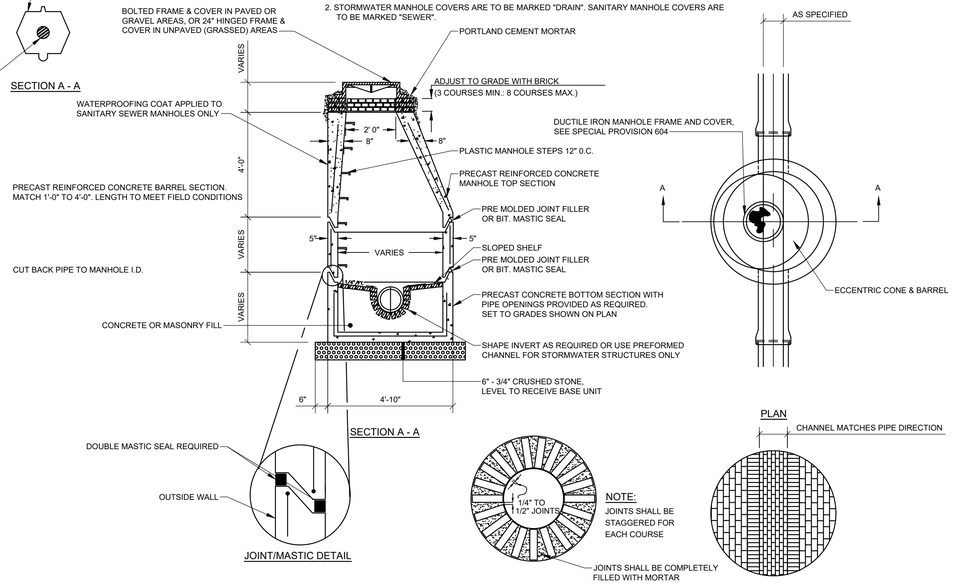
CASCO TRAP
NOT TO SCALE

NOTE:
1. ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS SHALL BE 24" x 5". ALL SANITARY MANHOLE COVERS AND SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.



CAST IRON MANHOLE FRAME AND COVER
NOT TO SCALE

NOTE:
1. MANHOLE CHANNELS REQUIRING CHANGE OF ALIGNMENT, TO BE BUILT ON SMOOTH RADIUS. CHANNEL TO BE SHAPED TO ACCEPT ADDITIONAL INLET PIPES.
2. STORMWATER MANHOLE COVERS ARE TO BE MARKED "DRAIN". SANITARY MANHOLE COVERS ARE TO BE MARKED "SEWER".



PRECAST CONCRETE MANHOLE TYPE "A"
NOT TO SCALE

NOT FOR CONSTRUCTION

DANIELL RILEY PE 9967

STATE OF MAINE ★ DANIEL RILEY ★ No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV.:	BY:	DATE:	STATUS:
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

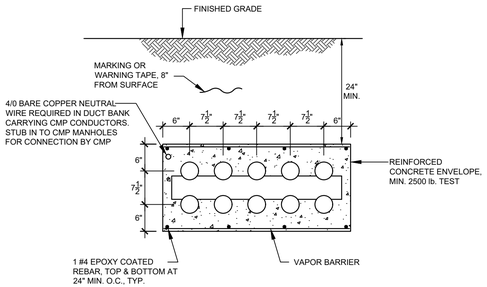
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS INDICATED BY OTHERS, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

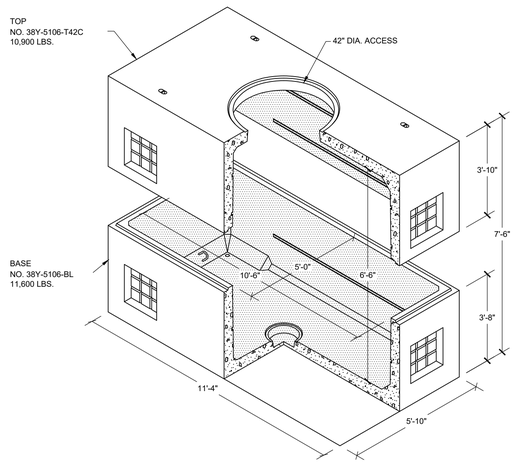
DETAILS
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

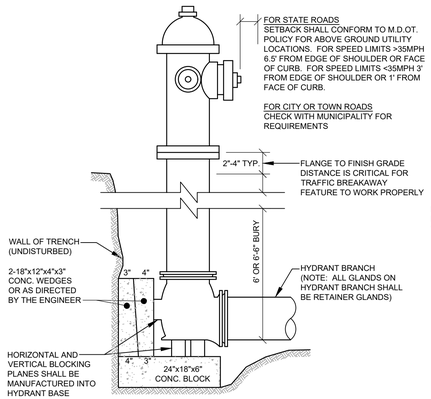
DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	N.T.S.
PROJECT	19371-01

SHEET20 OF23

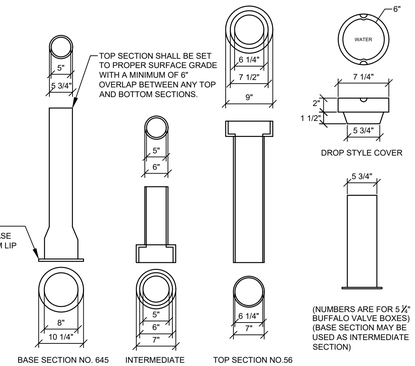


TYPICAL DUCT BANK CROSS-SECTION
NOT TO SCALE

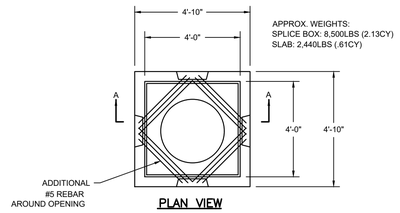




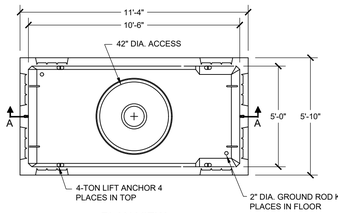
HYDRANT INSTALLATION
NOT TO SCALE



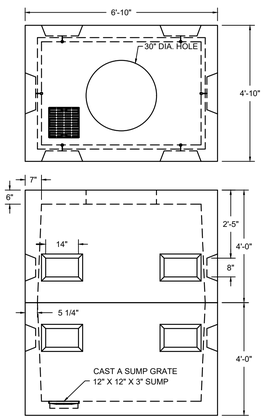
VALVE BOX & COVER
NOT TO SCALE

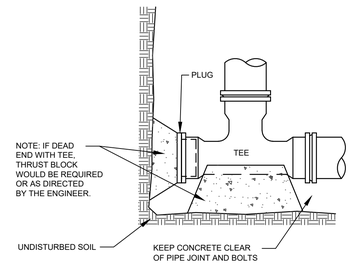


PLAN VIEW

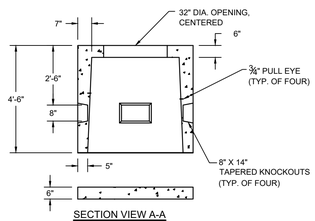


PLAN VIEW

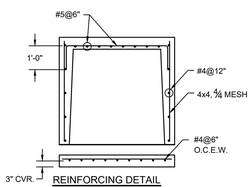




STANDARD TEE BLOCKING
NOT TO SCALE



SECTION VIEW A-A



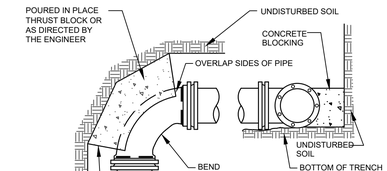
REINFORCING DETAIL

NOTES:
1. FURNISH AND INSTALL 32" DIA X 6" H-20 RATED FRAME AND MANHOLE COVER LETTERED "COMMUNICATIONS".
2. FURNISH AND INSTALL RISER RINGS AND MASONRY TO ACHIEVE REQUIRED DEPTH AND ALLOW FOR FUTURE ADJUSTMENT TO GRADE.
3. CONCRETE TO BE 5,000 PSI AT 28 DAYS.
4. VAULT TO BE RATED FOR H-20 LOADING.
5. REINFORCING STEEL TO BE GRADE 60, BLACK.

4x4 UTILITY SPLICE BOX
NOT TO SCALE

NOTES:
1. FURNISH AND INSTALL 32" DIA X 6" H-20 RATED FRAME AND MANHOLE COVER LETTERED "COMMUNICATIONS".
2. FURNISH AND INSTALL RISER RINGS AND MASONRY TO ACHIEVE REQUIRED DEPTH AND ALLOW FOR FUTURE ADJUSTMENT TO GRADE.
3. CONCRETE TO BE 5,000 PSI AT 28 DAYS.
4. VAULT TO BE RATED FOR H-20 LOADING.

TELECOMMUNICATION MANHOLE
NOT TO SCALE

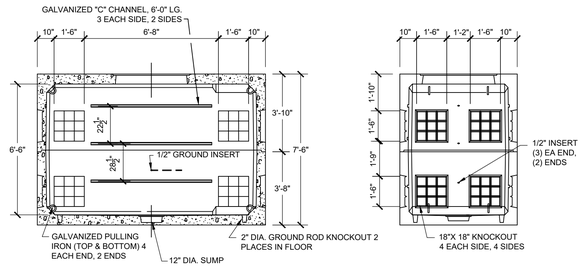


TOP VIEW

END VIEW

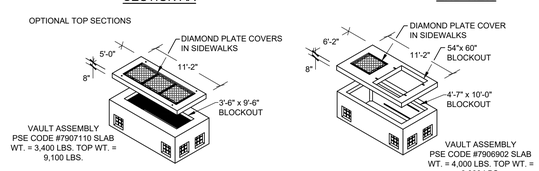
NOTE: SEE THRUST/ RETAINER GLAND SCHEDULE FOR TYPE OF BLOCKING TO BE USED ON BENDS

STANDARD BEND BLOCKING
NOT TO SCALE



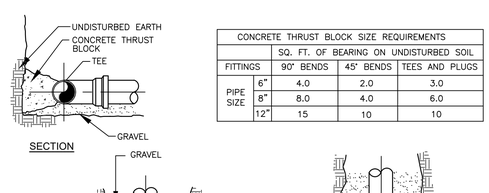
SECTION AA

END VIEW



NOTE:
1. FURNISH AND INSTALL 42" FRAME, MANHOLE COVER PER CMP STANDARDS.
2. FURNISH AND INSTALL RISER RINGS AND MASONRY TO ACHIEVE REQUIRED DEPTH AND ALLOW FOR FUTURE ADJUSTMENT TO GRADE.
3. BASIS OF DESIGN IS 3CY MANHOLE BY OLD CASTLE PRECAST MANHOLES SHALL MEET UTILITY OWNERS SPECIFICATIONS.
4. INSTALL GROUNDING RODS OR GROUNDING GRID, SEE ELECTRICAL PLANS & SPECIFICATIONS FOR GROUNDING REQUIREMENTS.

ELECTRICAL MANHOLE
NOT TO SCALE



CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
		SQ. FT. OF BEARING ON UNDISTURBED SOIL		
FITTINGS		90° BENDS	45° BENDS	TEES AND PLUGS
PIPE SIZE	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	10	10

TEE AND BEND DETAIL
NOT TO SCALE

NOT FOR CONSTRUCTION

DANIELL RILEY PE 9967

STATE OF MAINE ★ DANIEL J. RILEY No. 9967 ★ REGISTERED PROFESSIONAL ENGINEER 08/11/2022

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385 CONGRESS STREET - PHASE 1 HOTEL
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FOR:
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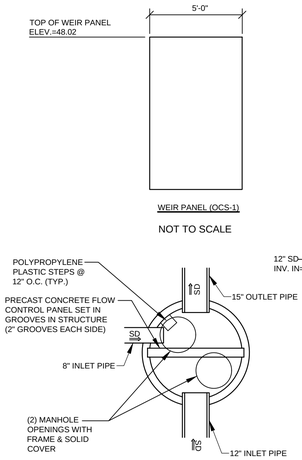
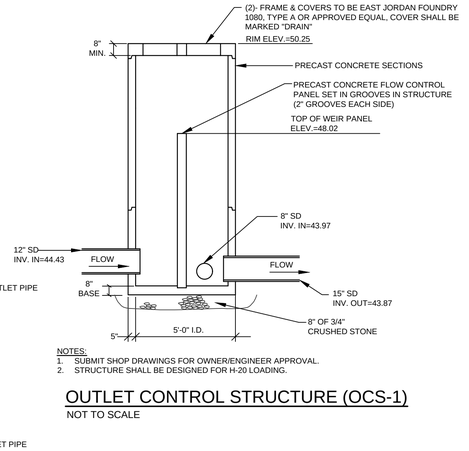
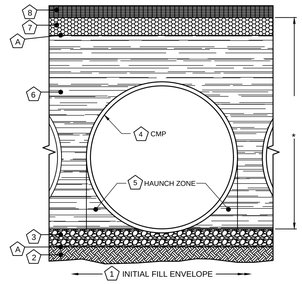
SHEET21 OF23





NOTES:
1. SUBMIT SHOP DRAWINGS FOR OWNER/ENGINEER APPROVAL.
2. STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING.

OUTLET CONTROL STRUCTURE (OCS-1)
NOT TO SCALE



DETENTION SYSTEMS - CMP DETENTION / CMP DRAINAGE			
Material Location	Description	Material Designation	Designation
8	Rigid or Flexible Pavement (if applicable)		
7	Road Base (if applicable)		
A	Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types
6	Backfill	Well graded granular material which may contain small amounts of silt or clay.	AASHTO M 145- A-1, A-2, A-3	Placed in 8" +/- loose lifts and compacted to 90% Standard Proctor Per AASHTO T 99
	Bedding Stone	Well graded granular bedding material w/maximum particle size of 3"	AASHTO M43 - 3,357,4,467, 5, 56, 57	Engineer to determine if bedding is required. Pipe may be placed on the trench bottom of a relatively loose, native suitable well graded & granular material. For Arch pipes it is recommended to be shaped to a relatively flat bottom or fine-grade the foundation to a slight v-shape. Unsuitable material should be over-excavated and re-placed with a 4"-6" layer of well graded & granular stone per the material designation. See AASHTO 26.3.8.1 / 26.5.3 Bedding info.
3				
A	Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types
*	*Note: Backfill using controlled low-strength material (CLSM, "flash fill" or "flowable fill") when the spacing between the pipes will not allow for placement and adequate compaction of the backfill.*			

1. MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT

FOUNDATION/BEDDING PREPARATION

2. PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER.

5. HAUNCH ZONE MATERIAL SHALL BE PLACED AND UNIFORMALLY COMPACTED WITHOUT SOFT SPOTS.

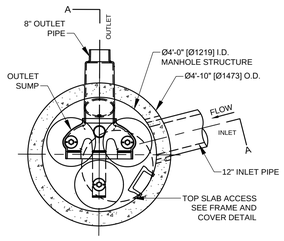
BACKFILL

WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

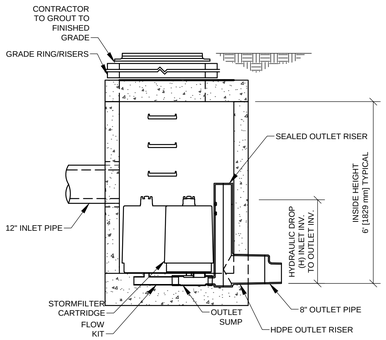
OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.

TYPICAL SECTION VIEW - 48" CMP DETENTION SYSTEM
NOT TO SCALE

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



PLAN VIEW
FLOWKIT: 40A

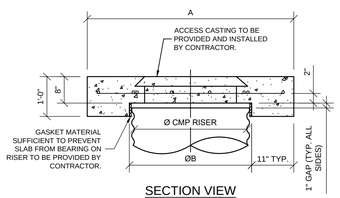


SECTION A-A

INSTALLATION:

1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
3. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET PIPE(S).
5. CONTRACTOR TO PROVIDE AND INSTALL CONNECTOR TO THE OUTLET RISER STUB. STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. IF OUTLET PIPE IS LARGER THAN 8 INCHES [200 MM], CONTRACTOR TO REMOVE THE 8 INCH [200 MM] OUTLET STUB AT MOLDED-IN CUT LINE. COUPLING BY FERNCO OR EQUAL AND PROVIDED BY CONTRACTOR.
6. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

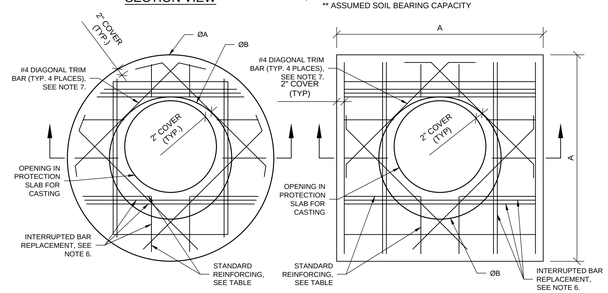
CONTECH STORM FILTER-1
NOT TO SCALE



SECTION VIEW

REINFORCING TABLE				
Ø CMP RISER	A	Ø B	REINFORCING	**BEARING PRESSURE (PSF)
24"	Ø 4' 4'X4'	26"	#5 @ 12" OCEW #5 @ 12" OCEW	2,410 1,780
30"	Ø 4'-6" 4'-6" X 4'-6"	32"	#5 @ 12" OCEW #5 @ 12" OCEW	2,120 1,530
36"	Ø 5' 5' X 5'	38"	#5 @ 10" OCEW #5 @ 10" OCEW	1,890 1,350
42"	Ø 5'-6" 5'-6" X 5'-6"	44"	#5 @ 10" OCEW #5 @ 9" OCEW	1,720 1,210
48"	Ø 6' 6' X 6'	50"	#5 @ 9" OCEW #5 @ 8" OCEW	1,600 1,100

** ASSUMED SOIL BEARING CAPACITY



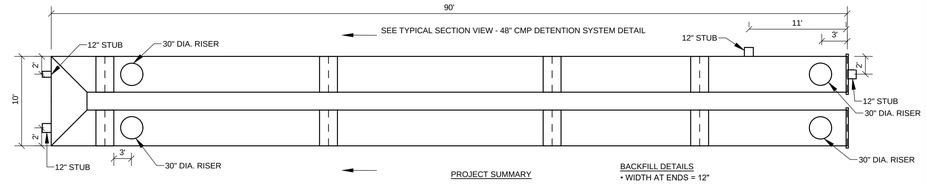
ROUND OPTION PLAN VIEW

SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 3,500 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.

MANHOLE CAP DETAIL
NOT TO SCALE



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

PROJECT SUMMARY

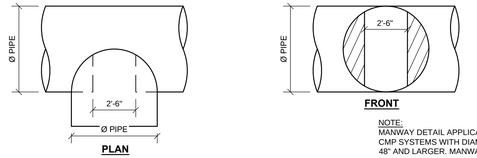
CALCULATION DETAILS
- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 180 LF

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 1,968 CF
- PIPE STORAGE VOLUME = 2,262 CF
- BACKFILL STORAGE VOLUME = 0 CF
- TOTAL STORAGE PROVIDED = 2,262 CF

BACKFILL DETAILS
- WIDTH AT ENDS = 12"
- ABOVE PIPE = 0"
- WIDTH AT SIDES = 12"
- BELOW PIPE = 0"

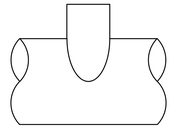
PIPE DETAILS
- DIAMETER = 48"
- CORRUGATION = 2 2/3x1/2
- GAGE = 16
- COATING = ALT2
- WALL TYPE = SOLID
- BARREL SPACING = 24"

CONTECH 48" CMP DETENTION SYSTEM
NOT TO SCALE

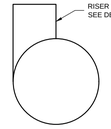


NOTE:
MANWAY DETAIL APPLICABLE FOR CMP SYSTEMS WITH DIAMETERS 48" AND LARGER. MANWAYS MAY BE REQUIRED ON SMALLER SYSTEMS DEPENDING ON ACTUAL SITE SPECIFIC CONDITIONS.

TYPICAL MANWAY DETAIL
NOT TO SCALE



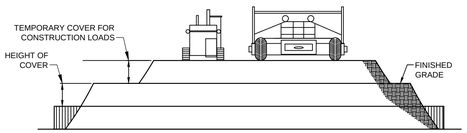
ELEVATION



END

NOTE:
LADDERS ARE OPTIONAL AND ARE NOT REQUIRED FOR ALL SYSTEMS.

TYPICAL RISER DETAIL
NOT TO SCALE



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

SPECIFICATION FOR DESIGNED DETENTION SYSTEM:

SCOPE
THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

MATERIAL
THE MATERIAL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-274 OR ASTM A-92.

THE GALVANIZED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-218 OR ASTM A-929.

THE POLYMER COATED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-246 OR ASTM A-742.

THE ALUMINUM COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-197 OR ASTM B-744.

CONSTRUCTION LOADS
CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPA GUIDELINES.

NOTE:
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

PIPE
THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2: AASHTO M-36 OR ASTM A-760

GALVANIZED: AASHTO M-36 OR ASTM A-760

POLYMER COATED: AASHTO M-245 OR ASTM A-762

ALUMINUM: AASHTO M-196 OR ASTM B-745

HANDLING AND ASSEMBLY
SHALL BE IN ACCORDANCE WITH NCSP'S (NATIONAL CORRUGATED STEEL PIPE ASSOCIATION) FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL. SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR ALUMINUM PIPE.

INSTALLATION
SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II DIVISION II OR ASTM A-798 (FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL) OR ASTM B-788 (FOR ALUMINUM PIPE) AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

NOT FOR CONSTRUCTION

DANIEL L RILEY PE 9967
STATE OF MAINE
DANIEL L RILEY
No. 9967
REGISTERED PROFESSIONAL ENGINEER
08/11/2022

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

THIS PLAN SHEET IS NOT TO BE ALTERED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PERMITTED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

DETAILS
OF:
385 CONGRESS STREET - PHASE 1 HOTEL
CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE
FOR:
THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DJS
DRAWN	DAB
CHECKED	DLR
DATE	05/25/2022
SCALE	N.T.S.
PROJECT	19371-01

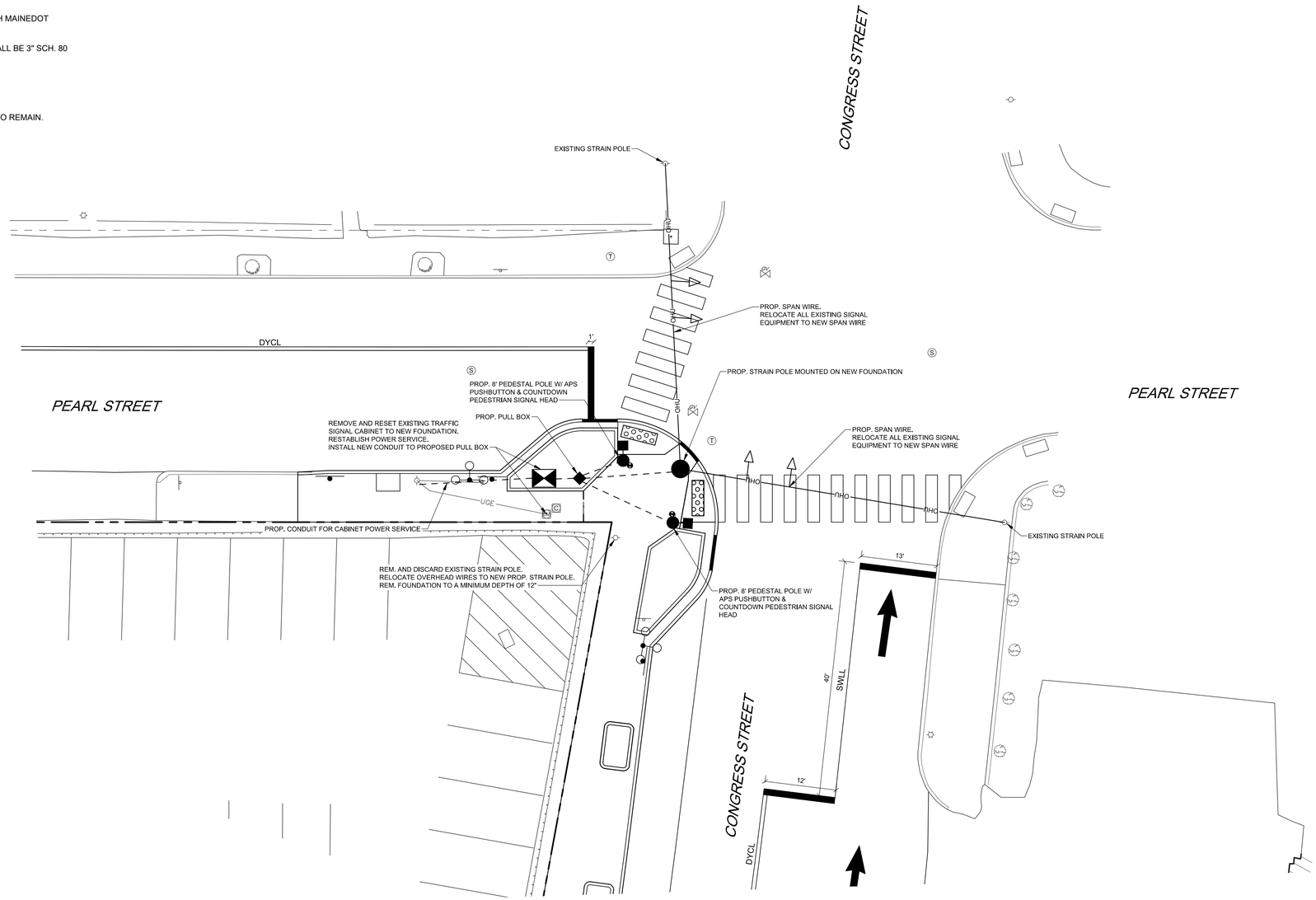
SHEET22 OF23

TRAFFIC SIGNAL NOTES

1. ALL WORK TO BE GOVERNED BY THE "STATE OF MAINE, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, REVISION 2020" AND "STANDARD DETAILS REVISION OF 2020" INCLUDING THE LATEST UPDATES.
2. ALL WORK, INCLUDING MAINTENANCE OF TRAFFIC, SHALL BE PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
3. STRAIN POLE SHALL BE GALVANIZED STEEL PAINTED BLACK.
4. NEW FOUNDATION DESIGN FOR STRAIN POLE TO BE PROVIDED WITH FINAL PLAN FOR CONSTRUCTION.
5. PEDESTAL POLES SHALL BE SINGLE PIECE CONSTRUCTED PAINTED BLACK.
6. FOUNDATIONS FOR PEDESTAL POLES SHALL BE 20" DIAMETER.
7. ALL PULL BOX COVERS SHALL BE LABELED "TRAFFIC".
8. PEDESTRIAN SIGNAL HEADS SHALL BE ONE-WAY ONE SECTION 16"X18" LED HAND/MAN WITH COUNTDOWN MODULE.
9. PEDESTRIAN SIGNAL HEADS SHALL BE CONSTRUCTED OF POLYCARBONATE MATERIAL WITH BLACK FACES.
10. INSTALL ACCESIBLE PEDESTRIAN SIGNAL (APS) PUSH BUTTONS WITH R10-3e PUSH BUTTON SIGNS. SIGNS SHALL BE POSTED AT EACH PROPOSED APS PUSHBUTTON.
11. ALL CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH MAINEDOT STANDARD DETAIL 626(05).
12. ALL CONDUIT, WITH EXCEPTION OF POWER SERVICE, SHALL BE 3" SCH. 80 PVC.
13. CONDUIT FOR POWER SERVICE SHALL BE 2" METALLIC.
14. EXISTING SIGNAL TIMINGS/PHASING TO BE MAINTAINED.
15. EXISTING SIGNAL HEADS FOR ALL OTHER APPROACHES TO REMAIN.

LEGEND

- CONDUIT
- TRAFFIC SIGNAL CABINET
- PULL BOX
- PEDESTAL POLE W/ PEDESTRIAN SIGNAL AND APS PUSHBUTTON
- STRAIN POLE



PROGRESS PRINT

DANIEL L RILEY PE 9967

STATE OF MAINE · DANIEL L RILEY · No. 9967 · REGISTERED PROFESSIONAL ENGINEER · 08/11/2022

REV	BY	DATE	STATUS
A	DLR	08/10/2022	ISSUED FOR LEVEL III SITE PLAN REVIEW

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

TRAFFIC PLAN

OF:

385 CONGRESS STREET - PHASE 1 HOTEL

CONGRESS STREET AND MYRTLE STREET
PORTLAND, MAINE

FOR:

THE FATHOM COMPANIES
80 EXCHANGE ST. SUITE 400
PORTLAND, ME 04101

DESIGNED	DHC
DRAWN	DAB
CHECKED	DLR
DATE	08/10/22
SCALE	1" = 10'
PROJECT	19371-01

SHEET23 OF23

19371 - TrafficPlan.dwg, TAB:23 TRAFFIC PLAN

F:\Projects\19000\19371\DWG\Design\Lot 11\19371 - TrafficPlan.dwg - 8/10/2022 11:38 AM - DYLAN STUART

GENERAL NOTES:

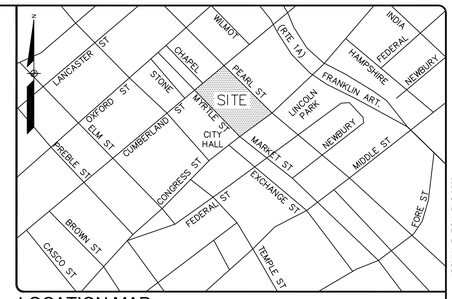
1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

MINIMUM LOT SIZE:	N/A
MINIMUM STREET FRONTAGE:	15 FEET
MINIMUM FRONT YARD:	N/A
MINIMUM SIDE YARD:	N/A
MINIMUM REAR YARD:	N/A
MAXIMUM BUILDING HEIGHT:	150 FEET
MAXIMUM LOT COVERAGE:	100%

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

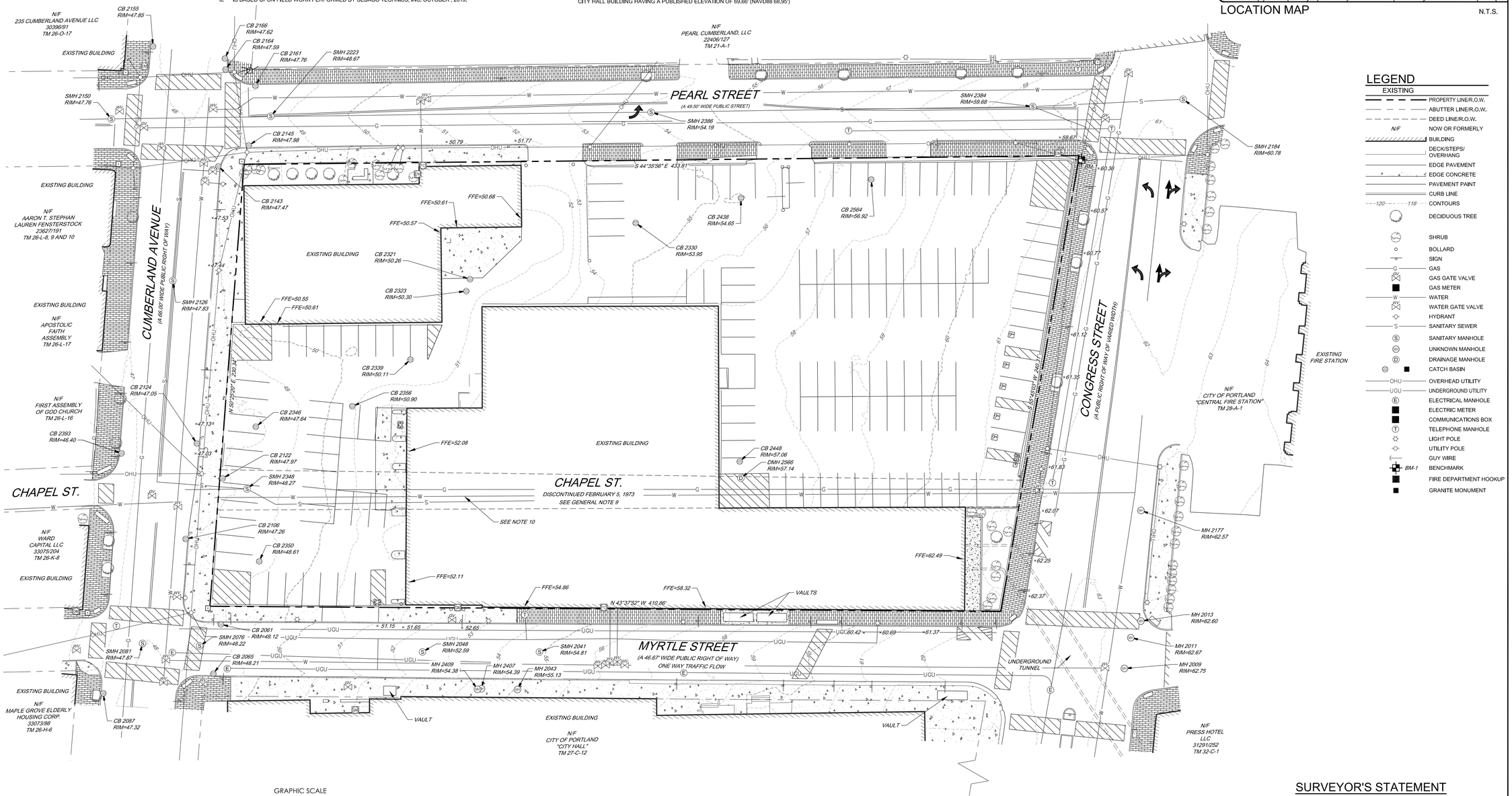
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 2.26 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 6F. TOPOGRAPHIC INFORMATION SHOWN HEREON. SEBAGO TECHNICS INC. UPDATED RECORDS RESEARCH FROM 2009 TO DATE REGARDING THE BOUNDARY INFORMATION.
6. IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. OCTOBER , 2019.
7. PLAN REFERENCES:
   - A. PLAN OF CITY BUILDING LOT, PORTLAND, ME, DATED AUGUST 1908 BY THE CITY OF PORTLAND ENGINEER, AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   - B. PORTLAND DEPARTMENT OF PUBLIC WORKS STREET WORKSHEETS AND BLUESHEETS FOR STREETS BOUNDING THE LOCUS PARCEL AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   - C. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, DATED JULY 1964 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 663/2.
   - D. NEW MECHANICAL BUILDING, GUY GANNETT PUBLISHING COMPANY, PORTLAND, ME, TUNNEL PLAN AND SECTIONS BY LOCKWOOD, GREENE ENGINEERS, INC, REVISED THROUGH MAY 12, 1965 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 203/2.
   - E. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   - F. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
8. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST & GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
9. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET ''RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET'' BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61, PUBLIC AND PRIVATE RIGHTS MAY EXIST OR PUBLIC HIGHWAY AND UTILITIES THAT STILL LIE WITHIN THE LIMITS OF CHAPEL STREET. SEBAGO TECHNICS, INC. SUGGEST LEGAL COUNSEL BE SOUGHT TO CLARIFY THE INTEREST OF OTHERS IN THESE RIGHTS.
10. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
11. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
12. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051 0013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
13. BENCHMARK:

BM-1 EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)



LOCATION MAP N.T.S.

JOSHUA R. EON, PLS 2558



LEGEND

EXISTING

- PROPERTY LINE/R.O.W.
- ABUTTER LINE/R.O.W.
- DEED LINE/R.O.W.
- N/F NOW OR FORMERLY
- BUILDING
- DECK/STEPS/ OVERHANG
- EDGE PAVEMENT
- EDGE CONCRETE
- PAVEMENT PAINT
- CURB LINE
- 120 118 CONTOURS
- DECIDUOUS TREE
- SHRUB
- BOLLARD
- SIGN
- G GAS
- GAS GATE VALVE
- GAS METER
- W WATER
- WATER GATE VALVE
- HYDRANT
- S SANITARY SEWER
- SANITARY MANHOLE
- UNKNOWN MANHOLE
- D DRAINAGE MANHOLE
- CATCH BASIN
- OHU OVERHEAD UTILITY
- UGU UNDERGROUND UTILITY
- E ELECTRICAL MANHOLE
- ELECTRIC METER
- COMMUNICATIONS BOX
- T TELEPHONE MANHOLE
- LIGHT POLE
- UTILITY POLE
- GUY WIRE
- BM-1 BENCHMARK
- FIRE DEPARTMENT HOOKUP
- GRANITE MONUMENT

GRAPHIC SCALE

25 0 12 25 50

(IN FEET)
1 INCH = 25 FT.

PROJECT BENCHMARK
USC&G BRASS DISK SET IN GRANITE STEP.
DESIGNATION: TIDAL 38 STA 84
STAMPED ''1919/38''
NAVD 88 ELEVATION = 68.95'
NGVD29 ELEVATION = 69.66'

SURVEYOR'S STATEMENT

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

JOSHUA R. EON, PLS 2558 12/16/2019

REV:	BY:	DATE:	STATUS:
A.	JRE	12/16/2019	ISSUED TO CLIENT FOR REVIEW
B.	JRE	1/09/2020	CORRECTED SPACE AND BULK CRITERIA PER PM REQUEST
C.	JRE	1/20/2020	MINOR DRAFTING REVISIONS PER PM REQUEST
D.	JRE	2/7/2020	MINOR DRAFTING REVISIONS PER PM REQUEST, ADDED NOTE 9
E.	JRE	2/10/2020	ADDED NOTE 10
F.	JRE	2/20/2020	ADDED STRUCTURE INFO AND MINOR DRAFTING REVISIONS

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

EXISTING CONDITIONS PLAN
OF:
CONGRESS / PEARL BLOCK
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE 04101
FOR RECORD OWNER:
385 CONGRESS STREET, LLC.
2730 TRANSIT ROAD
WEST SENECA, NY 14224

DESIGNED	-
DRAWN	RHS/TSL
CHECKED	JRE/CDM
DATE	12/16/19
SCALE	1" = 25'
PROJECT	19371

SHEET 1 OF 2

19371EC.dwg TABEC1

STRUCTURE TABLE

POINT #	STRUCTURE TYPE	RIM EL.	INV.	INV. EL.	SIZE	TYPE	LOCATION (N=12)	COMMENTS
2041	SMH	54.78	IN	49.43	12	VIT CLAY	3	
			IN	49.49	4	VIT CLAY	6	
			IN	46.39	10	VIT CLAY	4	
			IN	45.56	UNK	UNK	5	FULL OF SEDIMENT
			OUT	45.34	UNK	UNK	11	FULL OF SEDIMENT
			SHELF	45.81				
2048	SMH	52.54	IN	43.04	18	VIT CLAY	5	
			IN	35.36	UNK	UNK	5	
			IN	36.34	10	PVC	3	
			IN	36.39	UNK	STEEL	4	TOP OF PIPE
2061	CBR	48.09	OUT	44.12	8	PVC	7	HOOD
			SUMP	42.12				
2065	CBR	48.25	IN	44.81	8	VIT CLAY	8	
			OUT	44.71	8	UNK	2	
			SUMP	40.71				
2076	SMH	48.19	IN	41.31	12	VIT CLAY	4	
			IN	40.94	8	VIT CLAY	8	
			IN	48.22	0	NONE	NONE	2 INVERTS & SHELF FURTHER THAN 25'
2081	SMH	47.90	IN	38.77	18	VIT CLAY	4	
			IN	24.67	18	VIT CLAY	4	
			OUT	24.67	18	VIT CLAY	10	
			SHELF	25.77				
2106	CBR	47.27	OUT	43.46	UNK	UNK	10	HOOD
			SUMP	40.26				
2124	CBR	47.00	IN	44.75	12	VIT CLAY	6	
			OUT	47.05	0	NONE	NONE	NO OUT VISIBLE
			SUMP	40.05				
2126	SMH	47.80	IN	39.41	12	VIT CLAY	8	
			OUT	39.32	12	VIT CLAY	2	
			SHELF	40.03				
2143	CBR	47.40	OUT	45.27	10	VIT CLAY	3	
			SUMP	45.17				
2145	CBR	47.95	IN	44.48	8	VIT CLAY	9	
			OUT	43.78	12	VIT CLAY	12	
			SUMP	42.98				
2150	MH	47.77	IN	37.46	18	VIT CLAY	4	
			OUT	37.21	18	VIT CLAY	10	
			SHELF	38.11				
2161	CBR	47.77	OUT	43.36	12	UNK	8	
			SUMP	40.76				
2164	CBR	47.54	IN	44.26	8	VIT CLAY	4	
			IN	44.19	8	VIT CLAY	2	
			OUT	43.49	12	UNK	9	
			SUMP	40.09				
2166	CBR	47.59	OUT	44.42	8	VIT CLAY	8	
			SUMP	44.02				
2223	SMH	48.67	IN	39.72	15	VIT CLAY	4	
			OUT	39.62	15	VIT CLAY	10	
			SHELF	40.77				
2386	SMH	54.12	IN	44.67	15	VIT CLAY	4	
			OUT	44.62	15	VIT CLAY	10	
			SHELF	45.69				

JOSHUA R. EON, PLS 2558

REV.	BY	DATE	STATUS
E.	JRE	2/10/2020	ADDED NOTE 10
D.	JRE	2/7/2020	MINOR DRAFTING REVISIONS PER PM REQUEST, ADDED NOTE 9
C.	JRE	1/20/2020	MINOR DRAFTING REVISIONS PER PM REQUEST
B.	JRE	1/08/2020	CORRECTED SPACE AND BULK CRITERIA PER PM REQUEST
A.	JRE	12/16/2019	ISSUED TO CLIENT FOR REVIEW

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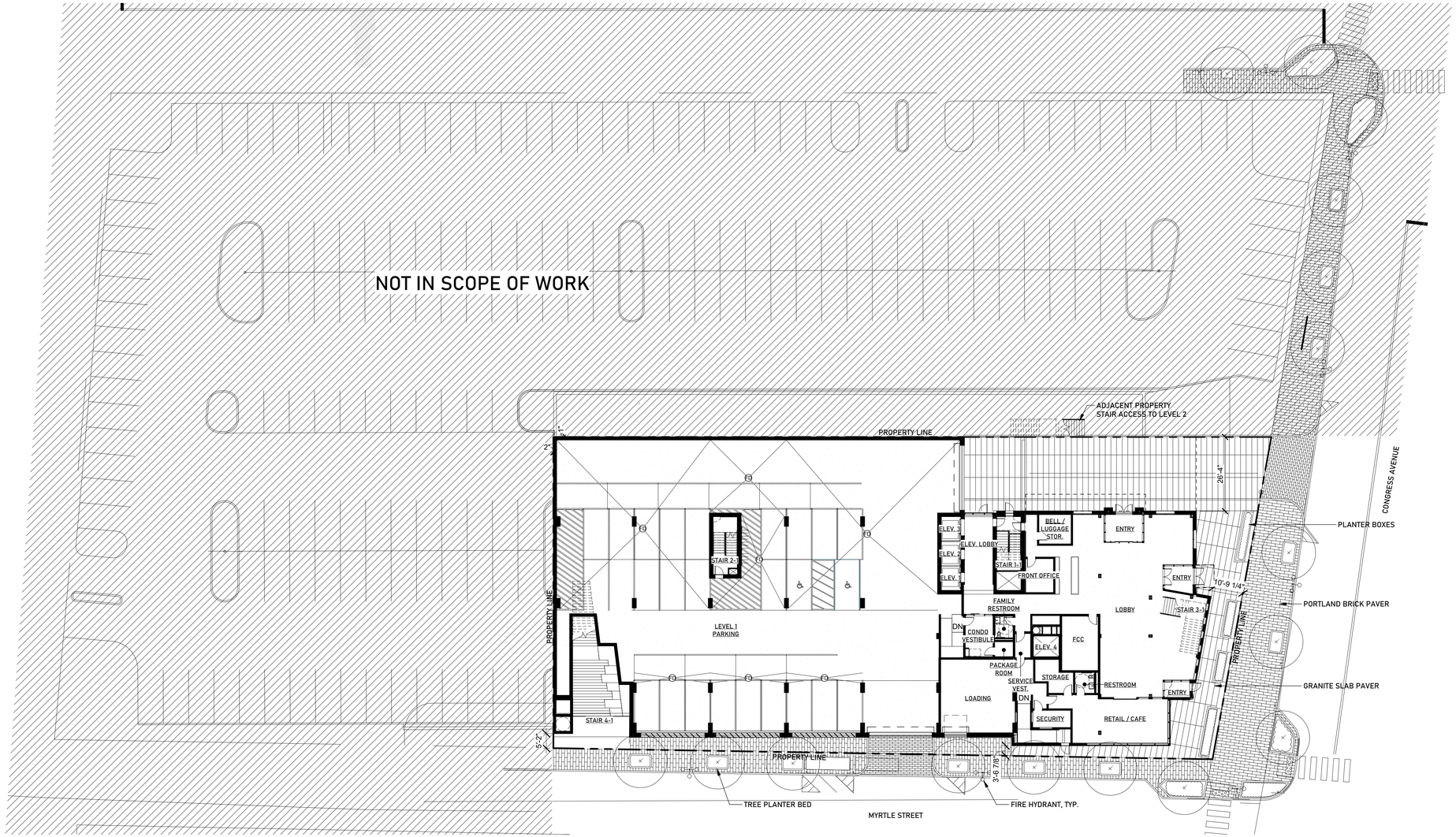
STRUCTURE TABLE
OF:
CONGRESS / PEARL BLOCK
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE 04101
FOR RECORD OWNER:
385 CONGRESS STREET, LLC.
2720 TRANSIT ROAD
WEST SENECA, NY 14224

DESIGNED	-
DRAWN	RHS/TSL
CHECKED	JRE/CDM
DATE	12/16/19
SCALE	1" = 25'
PROJECT	19371

SHEET 2 OF 2

19371EC.dwg, TAB:EC2

385 CONGRESS HOTEL | SITE PLAN



SITE PLAN
1" = 20'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

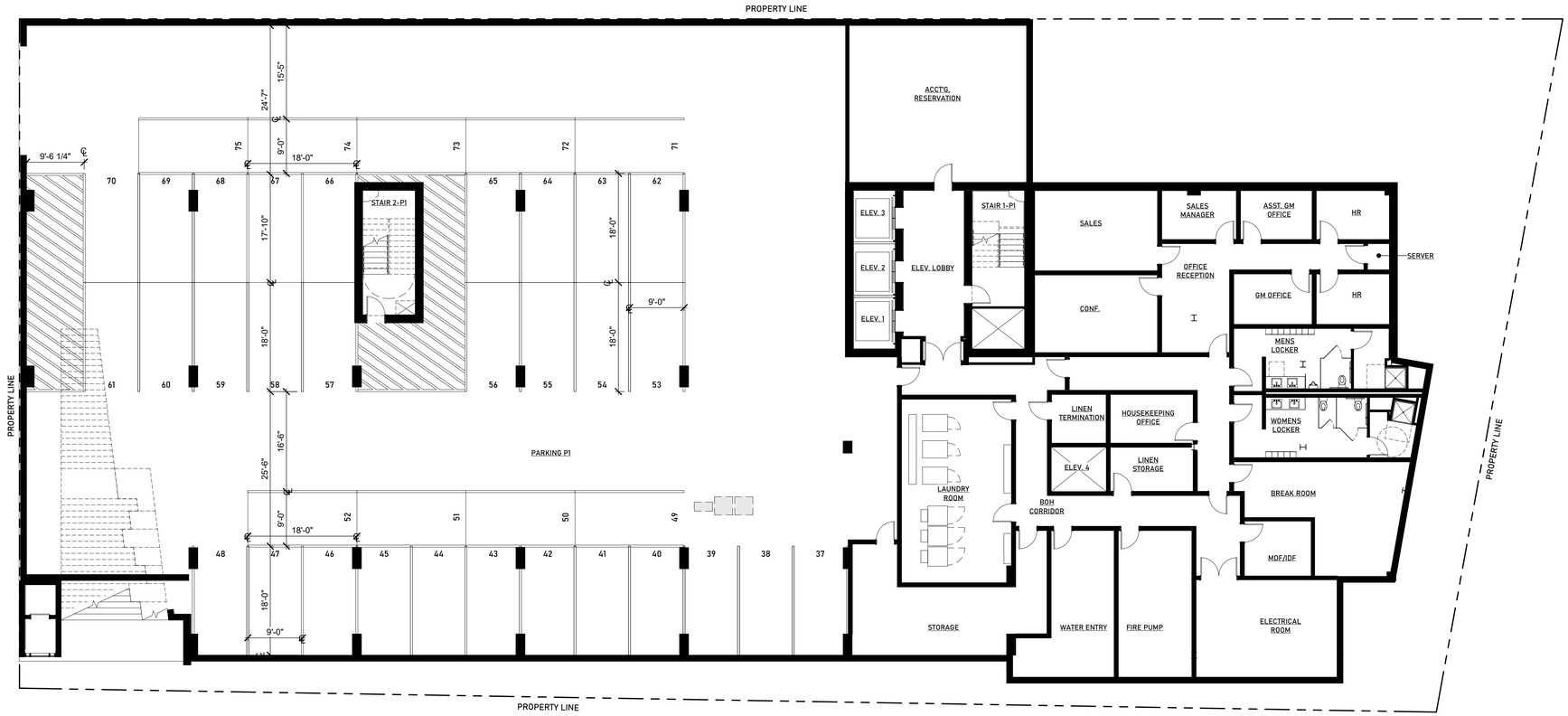
Fathom COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A00

385 CONGRESS HOTEL | LEVEL P1 PLAN



LEVEL P1
3/32" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

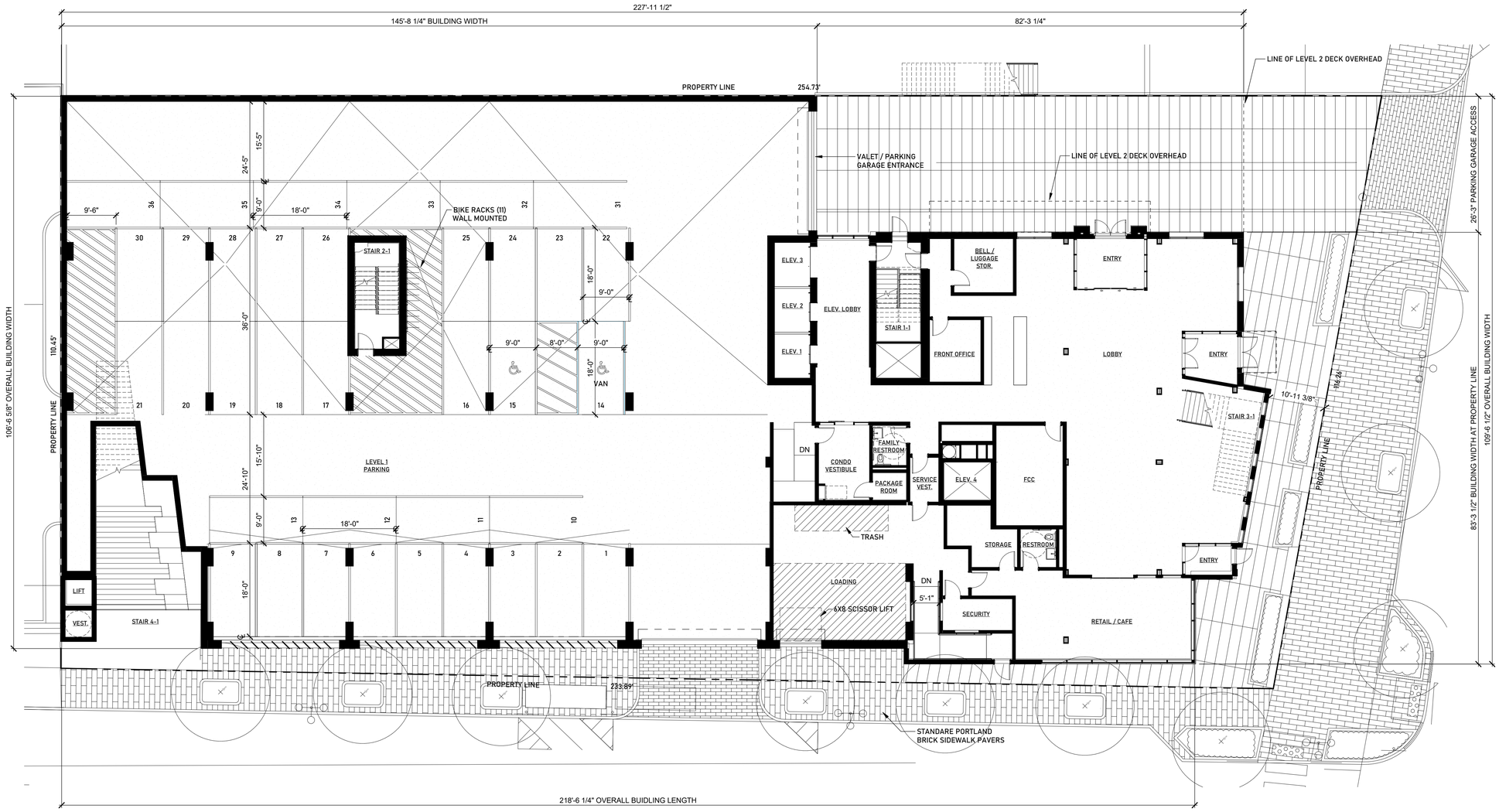
Fathom COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A01

385 CONGRESS HOTEL | LEVEL 1 PLAN



LEVEL 1
3/32" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

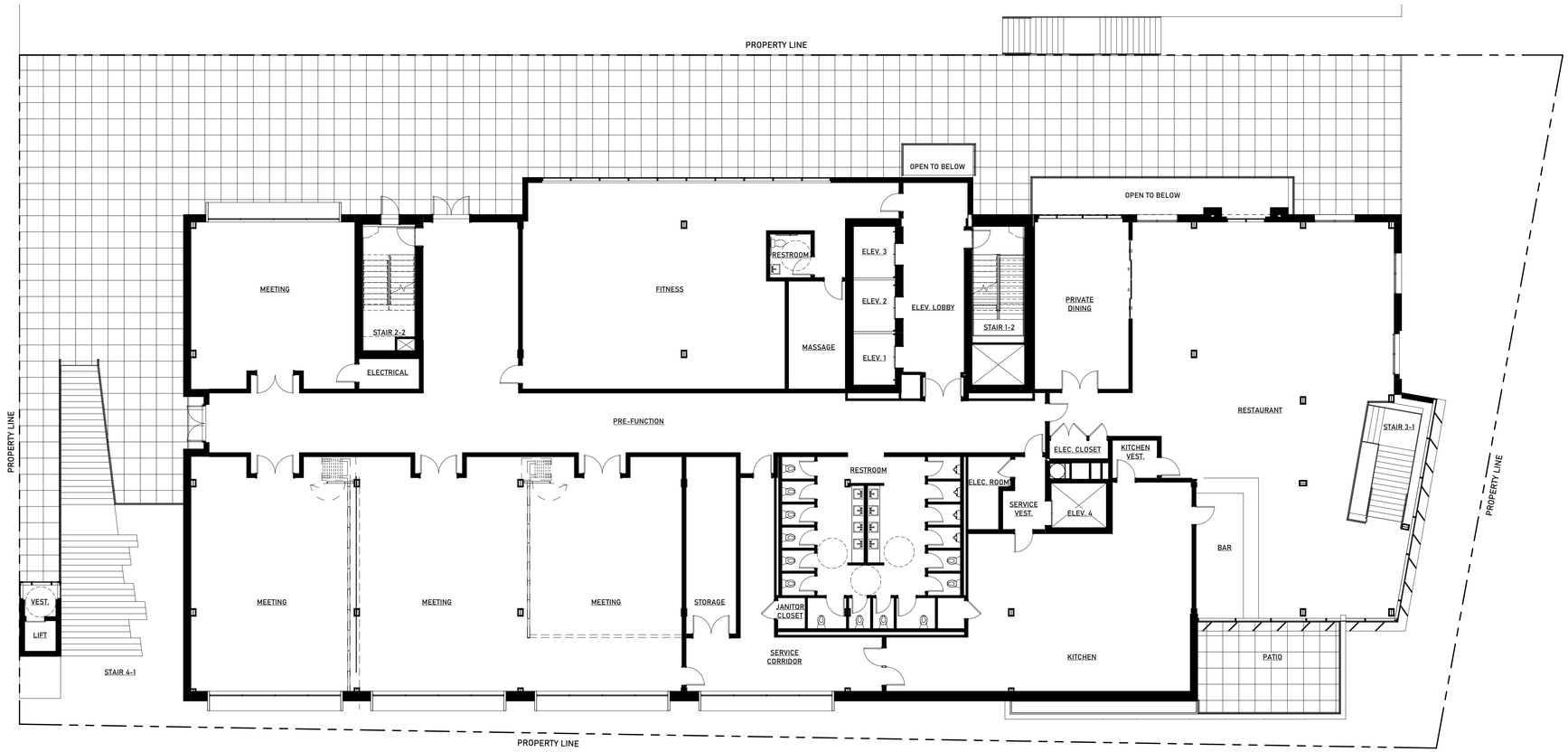
Fathom COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A02

385 CONGRESS HOTEL | LEVEL 2 PLAN



LEVEL 2
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ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A03

385 CONGRESS HOTEL | LEVEL 3 & 4 PLANS

LEVEL 4
3/32" = 1'-0"

LEVEL 3
3/32" = 1'-0"

JNS
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Denver, Colorado 80202

Fathom
COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A04

385 CONGRESS HOTEL | LEVEL 5 & 6 PLANS

LEVEL 6
3/32" = 1'-0"

LEVEL 5
3/32" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
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Denver, Colorado 80202

Fathom
COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A05

385 CONGRESS HOTEL | LEVEL 7 & 8 PLANS

LEVEL 8
3/32" = 1'-0"

LEVEL 7
3/32" = 1'-0"

JNS
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Denver, Colorado 80202

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COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A06

385 CONGRESS HOTEL | LEVEL 9 & 10 PLANS

LEVEL 10
3/32" = 1'-0"

LEVEL 9
3/32" = 1'-0"

JNS
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1600 Wynkoop St. #100
Denver, Colorado 80202

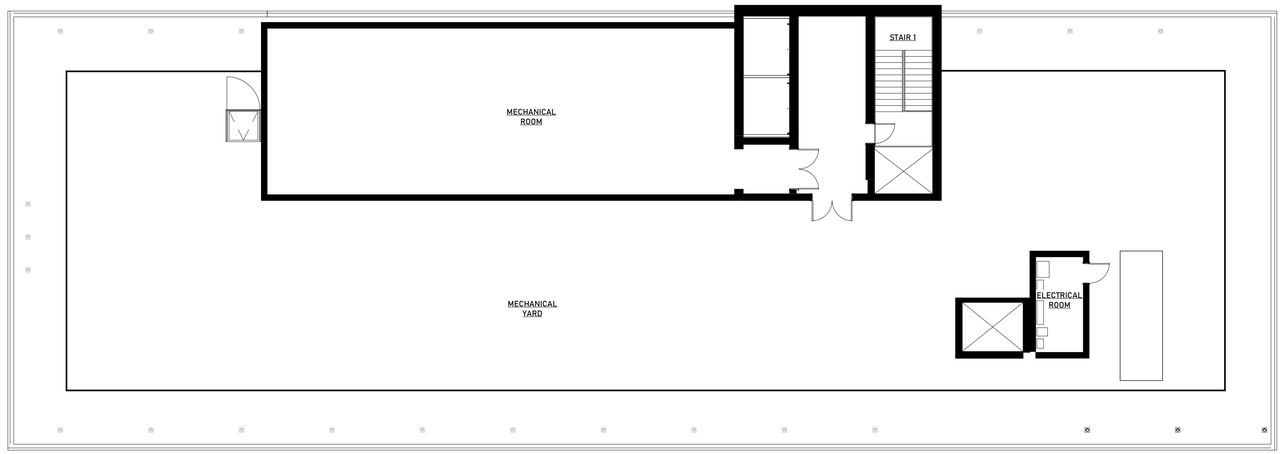
Fathom COMPANIES

0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A07

385 CONGRESS HOTEL | LEVEL 11 & 12 PLANS



LEVEL 12 MECHANICAL
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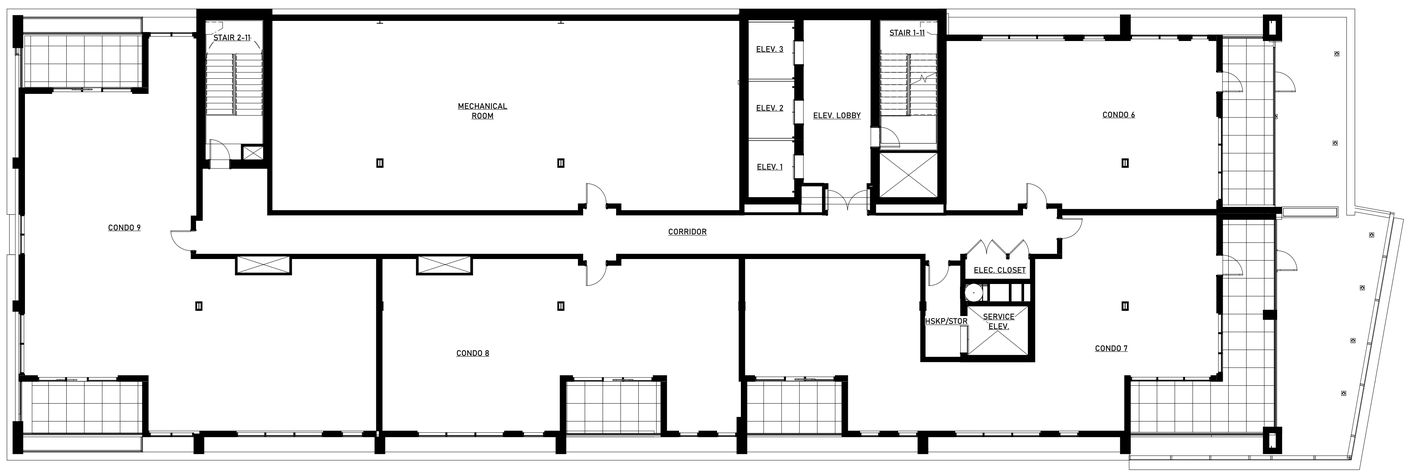


LEVEL 11
3/32" = 1'-0"

ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom COMPANIES

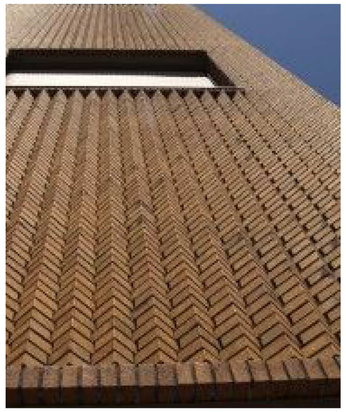
0' 2' 5' 10' 20' 40'

TRUE NORTH

SHEET A08

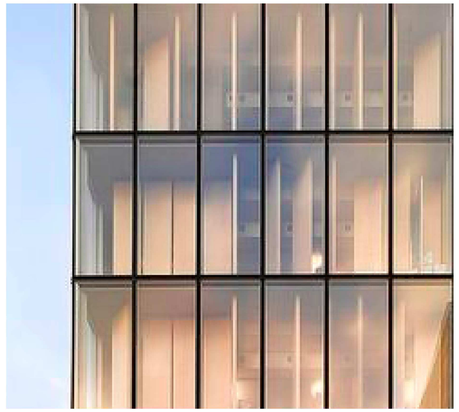
385 CONGRESS HOTEL | BUILDING MATERIALS

MASONRY DETAIL



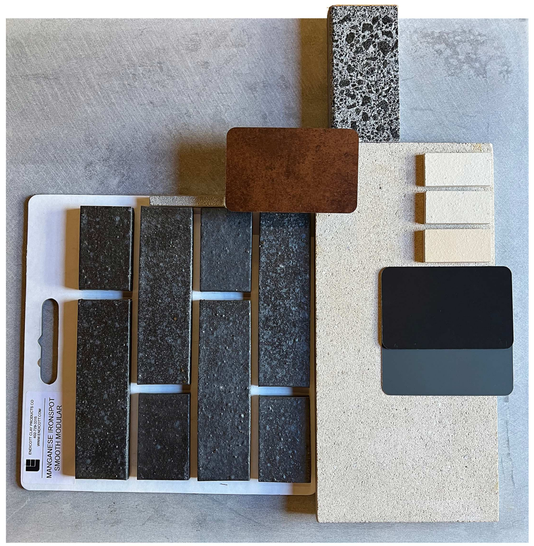
BR-01 GLAZED MASONRY BRICK

CURTAIN WALL

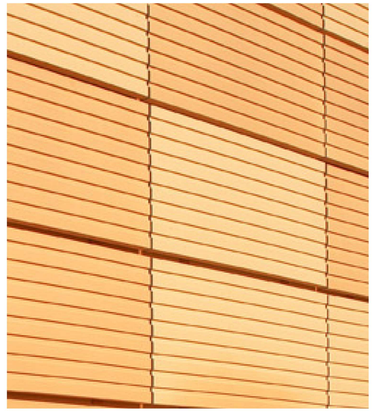


MTL-02 METAL PANEL

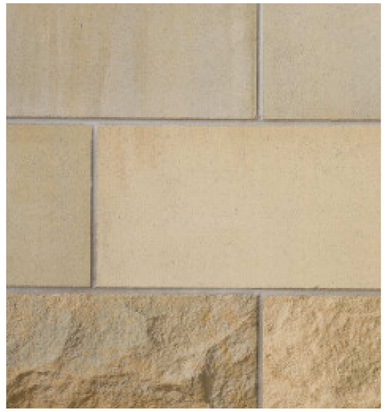
MTL-03 METAL FINS
PERFORATED METAL



TC-01 TERRA COTTA
TILE RAINSCREEN



ST-01 LIMESTONE MASONRY
ARRISCRAFT OAKRIDGE



MTL-01 METAL PANEL

ART INSTALLATION

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1600 Wynkoop St. #100
Denver, Colorado 80202

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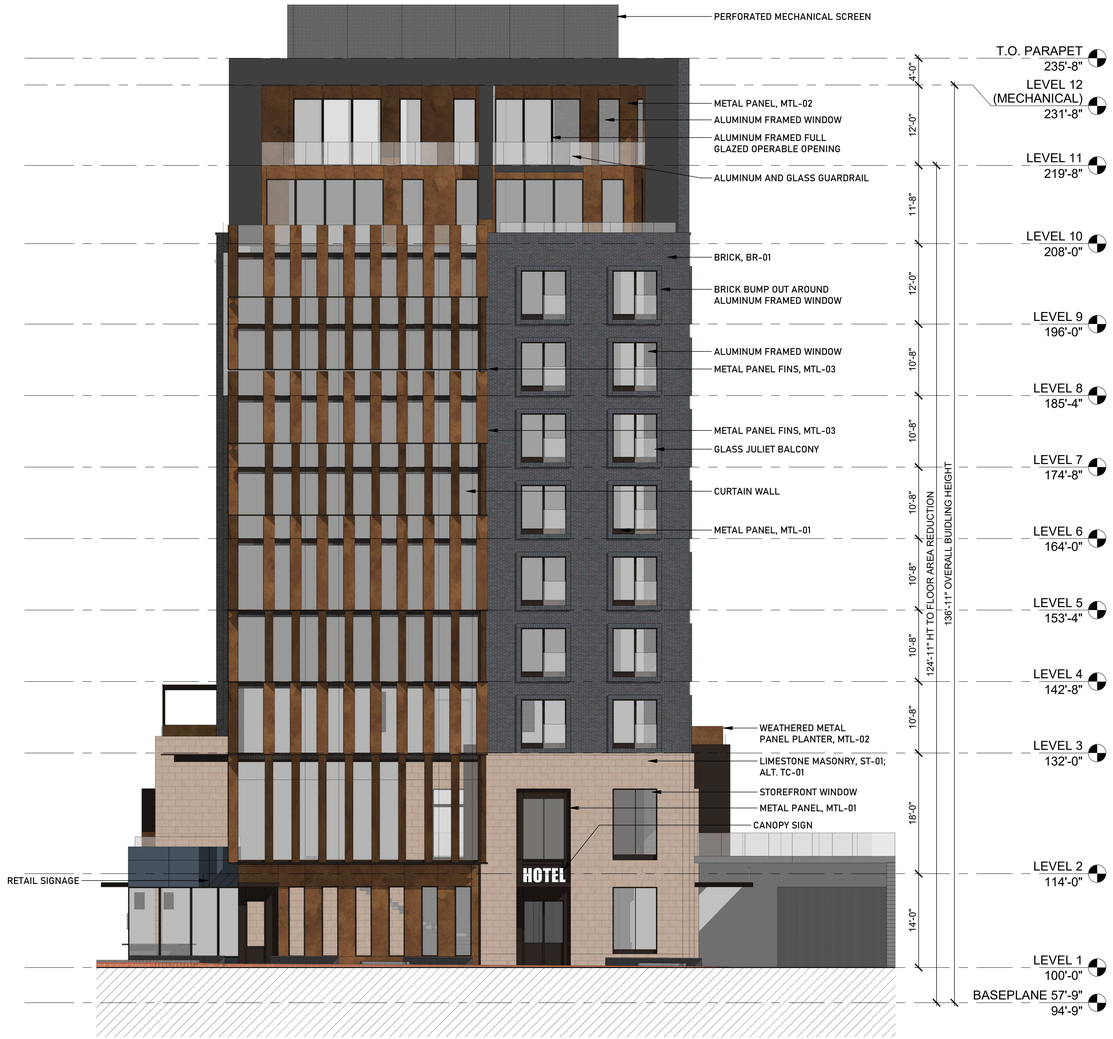
SHEET A09

385 CONGRESS HOTEL | BUILDING ELEVATION



EAST ELEVATION - CONGRESS AVENUE

3/32" = 1'-0"

JNS ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom COMPANIES

0' 2' 5' 10' 20' 40'

SHEET A10

385 CONGRESS HOTEL | BUILDING ELEVATION

SOUTH ELEVATION - MYRTLE STREET

3/32" = 1'-0"

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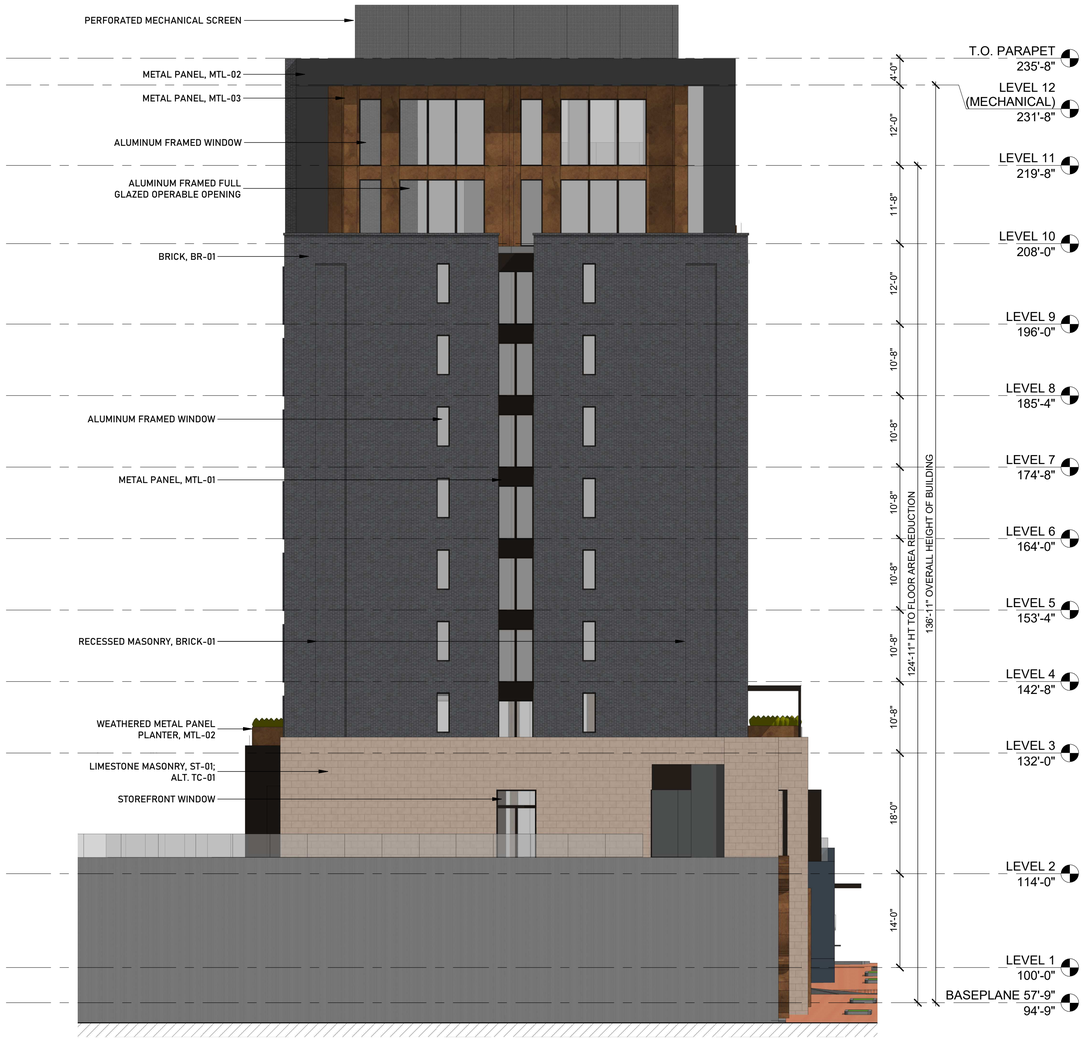
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom COMPANIES

0' 2' 5' 10' 20' 40'

SHEET A11

385 CONGRESS HOTEL | BUILDING ELEVATION



WEST ELEVATION - SITE INTERIOR

3/32" = 1'-0"

ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom COMPANIES

0' 2' 5' 10' 20' 40'

SHEET A12

385 CONGRESS HOTEL | BUILDING ELEVATION

NORTH ELEVATION - SITE INTERIOR

3/32" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

Fathom COMPANIES

0' 2' 5' 10' 20' 40'

SHEET A13

385 CONGRESS HOTEL | PERSPECTIVE VIEWS

AERIAL OF HOTEL ENTRANCE OFF CONGRESS AVENUE

PERSPECTIVE FROM CONGRESS AVE

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Denver, Colorado 80202

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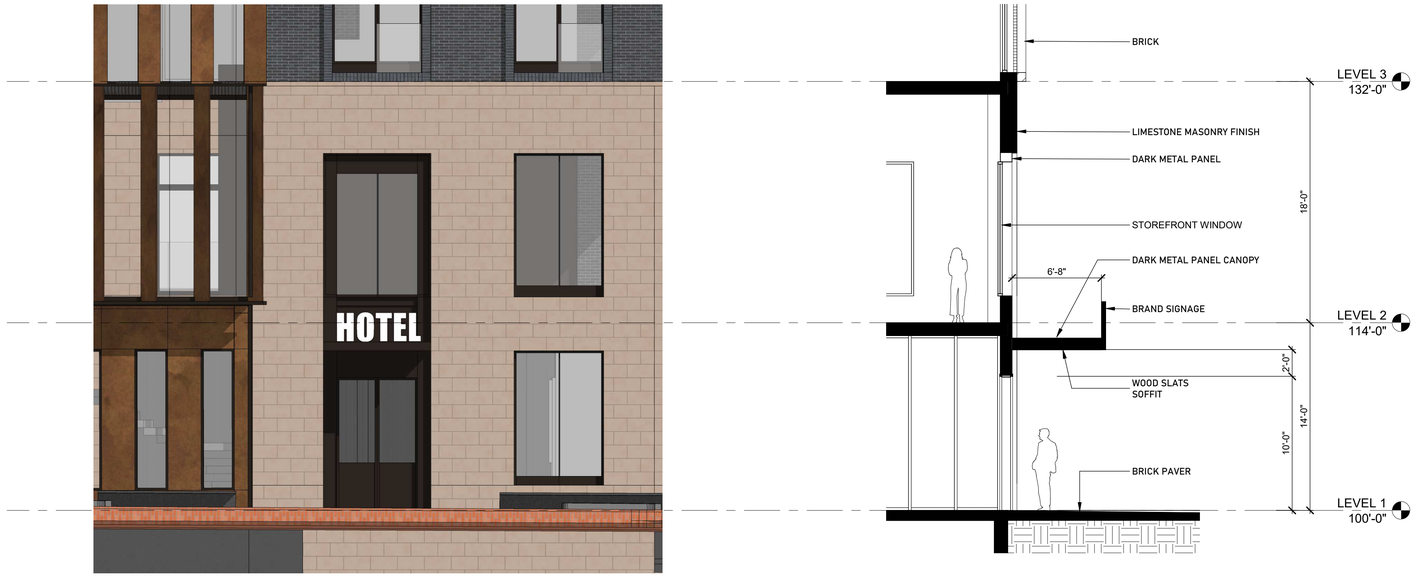
COMPANIES

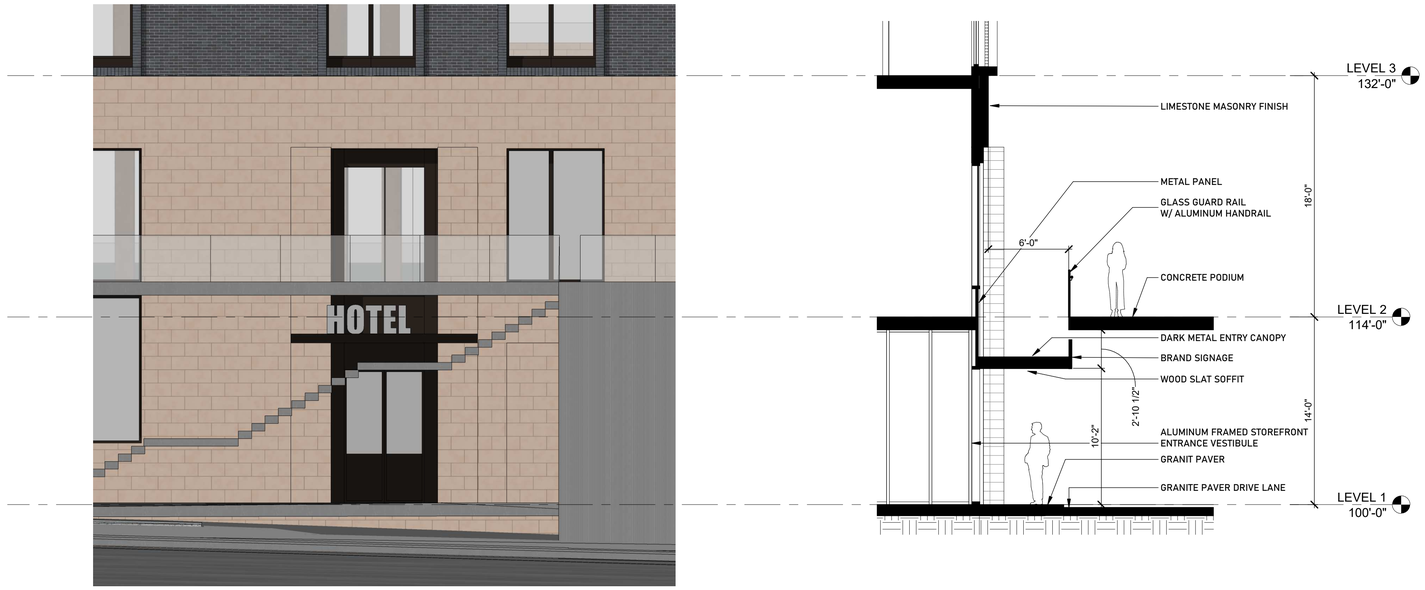
SHEET A14

385 CONGRESS HOTEL | ENLARGED BUILDING ELEMENTS - HOTEL ENTRANCE



HOTEL ENTRANCE FROM CONGRESS

3/16" = 1'-0"



HOTEL ENTRANCE FROM VALET PARKING

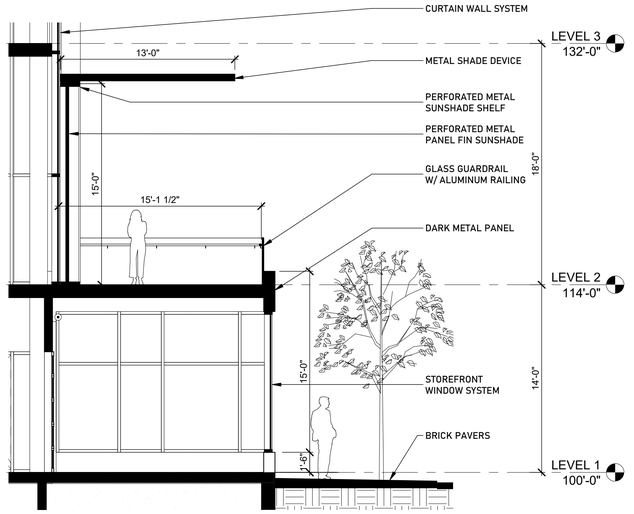
3/16" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
1600 Wynkoop St. #100
Denver, Colorado 80202

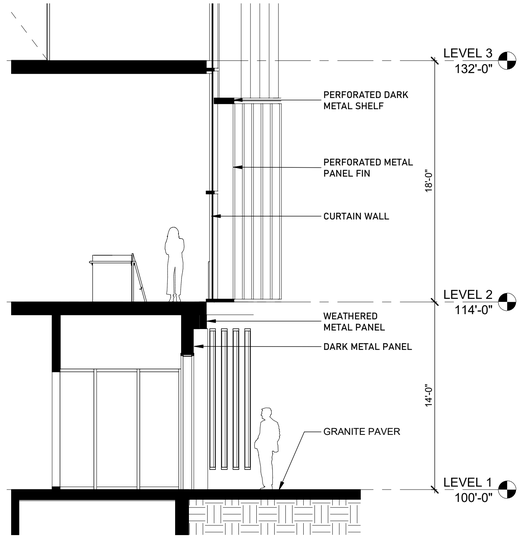
Fathom
COMPANIES

SHEET A15

385 CONGRESS HOTEL | BUILDING ELEMENTS - MYRTLE STREET



MYRTLE STREET RETAIL
3/16" = 1'-0"



RETAIL ENTRANCE - CONGRESS STREET
3/16" = 1'-0"

JNS
ARCHITECTURE + INTERIOR DESIGN
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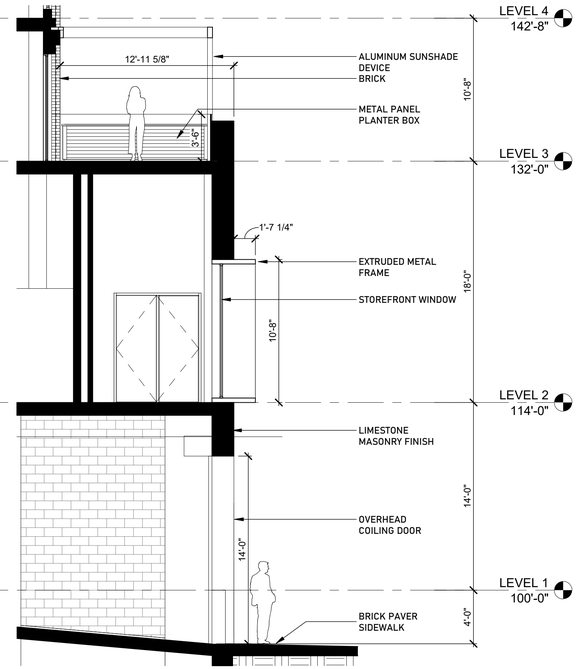
Denver, Colorado 80202

Fathom
COMPANIES

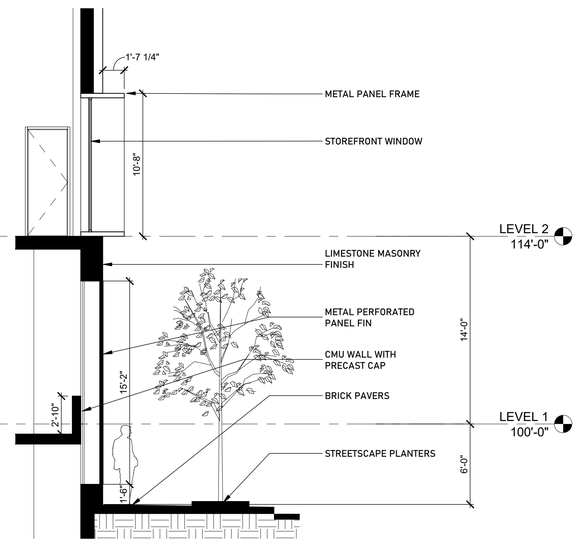
SHEET A16

385 CONGRESS HOTEL | BUILDING ELEMENTS - MYRTLE STREET



PARKING GARAGE ENTRANCE FROM MYRTLE

3/16" = 1'-0"



PARKING GARAGE FROM MYRTLE

3/16" = 1'-0"

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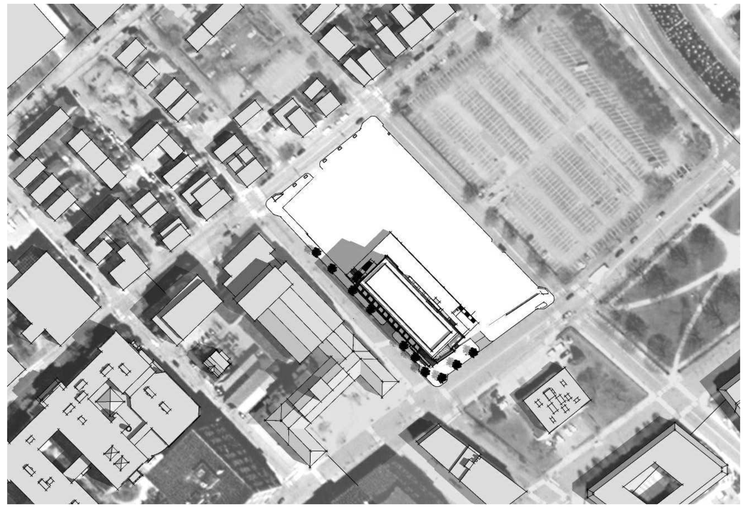
COMPANIES

SHEET A17

385 CONGRESS HOTEL | SHADOW STUDY



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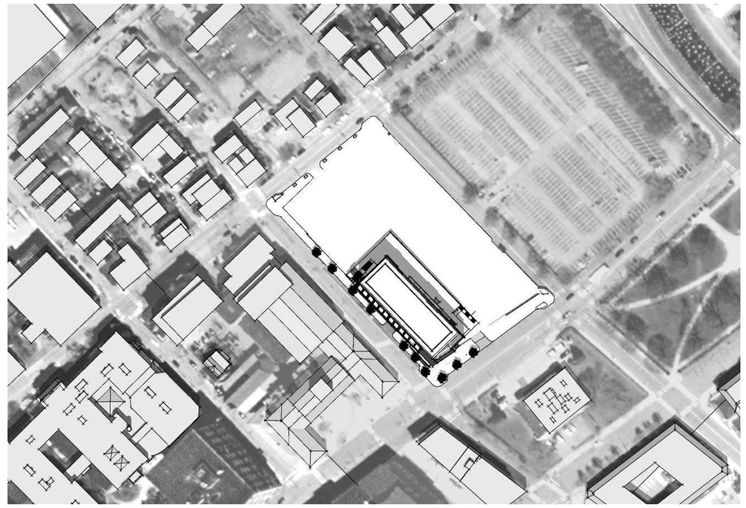
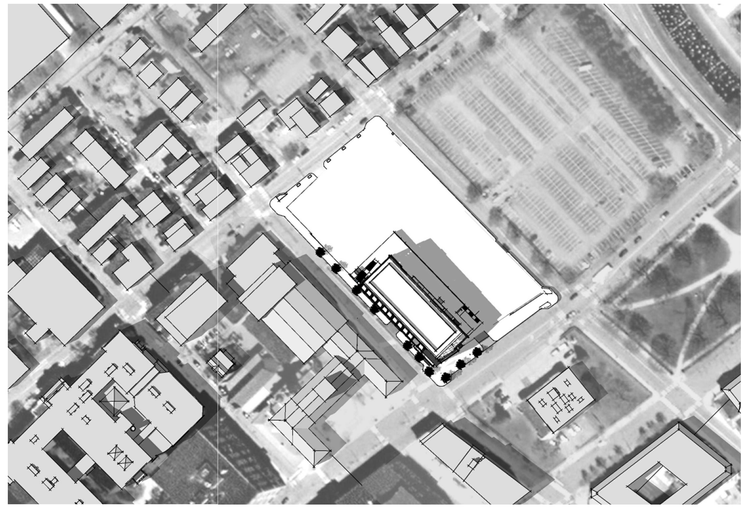


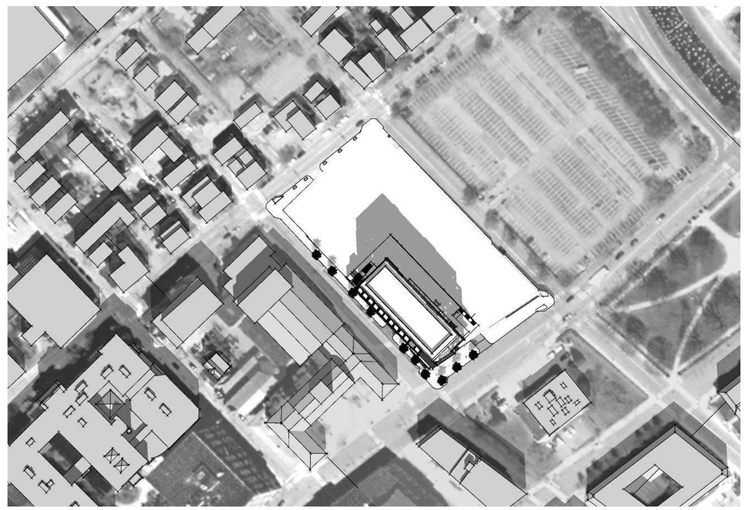
12PM

JUNE 21ST



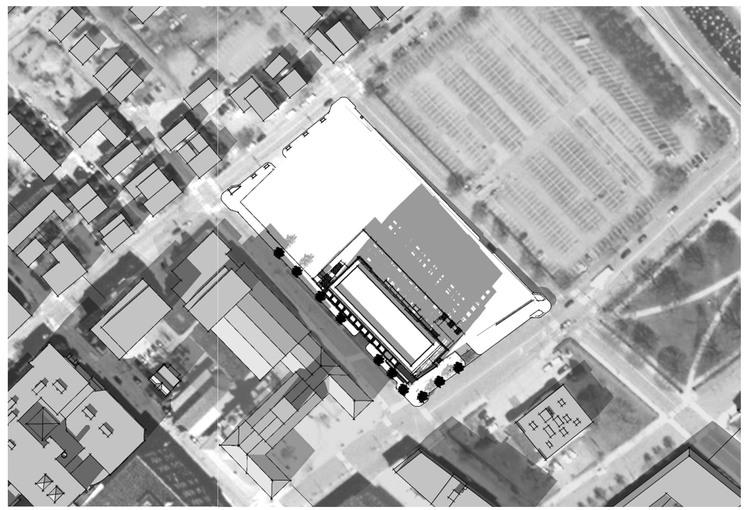
2PM

10AM



12PM

MAR/SEPT 21ST



2PM

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Denver, Colorado 80202

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COMPANIES

SHEET A18

To: Chair Stanley and Members of the Portland Planning Board
From: Zach Powell, Senior Planner
Date: October 21, 2022
Re: Institutional Overlay Zone, Map and Text Amendment: Roux Institute/IDEALS
Applicant: IDEALS/Roux Institute
Project ID: ZN-001934-2022
Meeting Date: October 25, 2022

I. INTRODUCTION

Figure 1: Artist rendering of Campus. View from I-295 NB

The Initiative for Digital Engineering and Life Sciences (IDEALS) has submitted a zoning map and text amendment application on behalf of The Roux Institute at Northeastern University to amend the existing Institutional Overlay Zone (IOZ) regulations to permit The Roux Institute at Northeastern University to pursue an IOZ as an identified major City institution, change the underlying zoning of the site from I-M to B-5, and adopt a new IOZ for this property. The requested actions would facilitate the future development of a mixed-use campus for The Roux Institute, including academic buildings, office, lab, and incubator space, retail, hotel, and housing as well as publicly accessible open space.

The process for designation of an IOZ requires the institution to prepare an Institutional Development Plan (IDP), which is a proactive planning document for identifying and addressing anticipated change and growth by an institution. The IOZ also requires that a Regulatory Framework be submitted, to be included in the Land Use Code, which identifies the land area to be included on the zoning map as the Institutional Overlay Zone along with associated use, dimensional and design requirements. The Planning Board reviews and recommends to City Council the Regulatory Framework and the IOZ boundaries.

Review of the IOZ has spanned across three Planning Board Workshops, serving as an opportunity to provide a comprehensive overview of the project (June 14, 2022), phasing, design, and height (August 9, 2022), and transportation (October 11, 2022). The fourth workshop on October 25th will focus on:

- Infrastructure
- Community engagement
- Proposed rezoning of the base zones to B-5
- A summary of revisions informed from previous workshop appearances

For a comprehensive overview of the project, please refer to the memorandum prepared for the first workshop at the following link: https://portlandme.civicclerk.com/Web/GenFile.aspx?ar=2161

For an overview of the design elements of the project, please refer to the memorandum prepared for the second workshop at the following link: https://portlandme.civicclerk.com/Web/Player.aspx?id=2769&key=-1&mod=-1&mk=-1&nov=0

For an overview of the transportation elements of the project, please refer to the memorandum prepared for the third workshop at the following link: https://portlandme.civicclerk.com/Web/Player.aspx?id=2769&key=-1&mod=-1&mk=-1&nov=0

The Planning and Urban Development Department mailed 153 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the October 15, 2022 edition of the *Portland Press Herald*.

II. INFRASTRUCTURE

Given the site's prior industrial use, there is substantial utility infrastructure already in place to service this development. The IDP provides information on the existing utility service, which includes water, wastewater, stormwater, electricity, telephone & data, and natural gas. As described by the applicant, the majority of improvements associated with utility infrastructure relate to the reconfiguration of the site, and the need to relocate existing infrastructure, as opposed to requiring capacity upgrades.

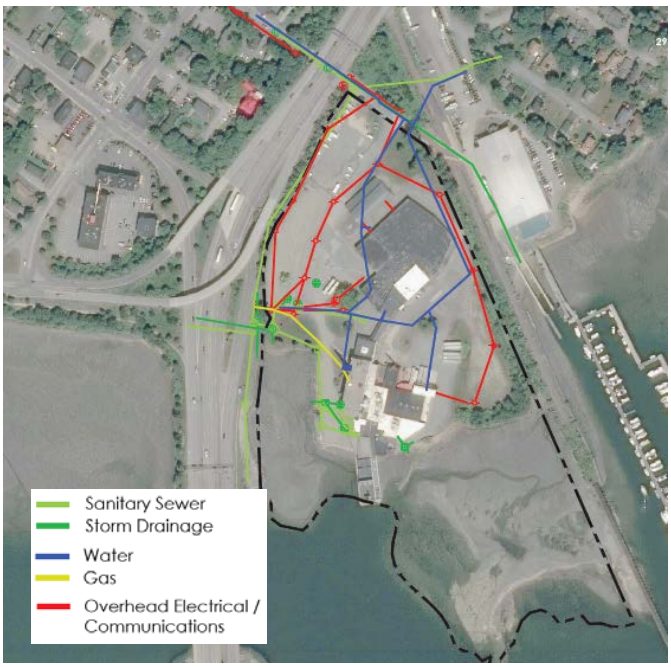


Figure 2: Map of Existing Utility Connections

Improvements cited include the employment of low-impact development (LID) techniques to further improve water quality and the use of green development techniques to reduce energy consumption and further sustainability goals. The Applicant has been in the process of developing a charter to guide future infrastructure installations to meet the sustainable goals of the campus and institution. At this time, a copy of the charter has not been provided to City Staff.

As discussed in previous meetings, the Applicant is also intending to:

- Replace, as necessary, the existing rip rap along the shoreline;
- Improve Sherwood Street to provide facilities for bicycle and pedestrians, with the potential of a shared facility under Interstate 295;
- Demolition and reconstruction of the pier;
- Provide shared-use facilities on-site with opportunities for future connections to other modes of transportation, and
- Design a shared use path connection under Tukey's Bridge to connect to the existing Tukey's Bridge western shared-use facility.

As part of the development of the IDP, the Applicant is required to provide information on:

- Sec. 8.5.4.C.2.ii.b.: ***An analysis of projected energy consumption****, hazardous materials generation, noise generation, and similar issues as relevant.*
- Sec. 8.5.4.C.2.iii.a: ***An analysis of projected public utility demand and the capacity of associated infrastructure.***
- Section 8.5.4.C.2.iii. b.: **An analysis of projected public safety needs and projected impacts to the capacity of these services.**
- Section 8.5.4.C.2.iii. c.: ***An infrastructure plan, representing the synthesis of the analysis and including a proposed program of set of guidelines to support sustainable growth.***

While the Applicant mentions in the IDP that the previous industrial use at the site required and provided a significant level of service, the current IDP has not provided the additional information listed above. City Staff requests that this information be provided in the subsequent draft of the IDP, with the opportunity for the proposed charter to also serve as the infrastructure plan for the site. City Staff also is looking to confirm with the Planning Board on whether any additional information related to infrastructure needs to be provided to satisfy the IDP review standards, given that the majority of infrastructure discussions are finalized during site plan and traffic movement permit reviews.

III. COMMUNITY ENGAGEMENT

A. NEIGHBORHOOD MEETINGS & APPLICANT RESPONSE

As part of the IOZ application process, two public meetings are required to be held with one before (November 18, 2021) and one after submission of an application (April 6, 2022). The Applicant has satisfied the minimum required number of public meetings and a summary of those meetings can be found in Attachment A. Topics from the 42 comments provided included:

- **Traffic Impacts (11 Comments)**
- **Hotel & Campus Programming (8 Comments)**
- **Building & Site Design (4 Comments)**
- **Campus Integration (4 Comments)**
- **Property Management & Acquisition (4 Comments)**
- Baseline Data (3 Comments)
- Construction Impacts (3 Comments)
- Rail Connection (3 Comments)
- Comment of Support (2 Comments)
- Completeness of Application (2 Comments)
- Multi-Use Path Connections (2 Comments)
- Portland Identity (2 Comments)
- Waterfront Access (2 Comments)
- Brownfield Potential (1 Comment)
- Community Benefits (1 Comment)
- Housing (1 Comment)
- Infrastructure (1 Comment)
- Job Creation (1 Comment)
- Lighting (1 Comment)

In response to these topics, the Applicant has provided the following information in response to these larger topics:

- **Traffic Impacts**: The Applicant submitted a transportation memorandum with trip generation estimates, likely impacts, and potential mitigation measures. Comments from the Board, Members of the Public, and City Staff are currently being incorporated to respond to requests

for more complete analyses to justify proposed mode share assumptions, analyze the impacts of potential non-motorized connections, and align proposed streetscape improvements with future City streetscape improvement projects. Updates have also been made to the IDP and Regulatory Framework to incorporate information from the Transportation Memorandum, develop standards that promote a more comfortable pedestrian experience for connections to and from the site and near active construction areas, and authorize the site to be used for snow emergency parking for nearby residents.

The Applicant has also expressed support of developing a residential permit parking program in the area to limit students parking off-site and walking to campus vs. parking on-campus or utilizing other modes of transportation. Initial comments from City Staff have noted that the designation process for residential permit parking requires further discussions and review that would likely start after the review of the IOZ.

- **Hotel & Campus Programming:** As part of a larger discussion related to the scale and massing of the site, the Applicant has made updates to the Regulatory Framework to limit the number of stories and rooms that can be provided in the proposed hotel, and lowered the permitted height of the zone where the hotel will be located. The applicant's proposed limit on the number of hotel rooms more restrictive then would be permitted under the proposed B-5 zone, where there is no cap on the number of rooms that can be provided in a hotel.

Square Footage Reduction

Building Program	Previous → Updated Long Term (20 Years +)		Change
Roux Institute at Northeastern University	4,500 Students 350,000 sf.	4,500 Students 372,000 sf.	22,000 sf.
Office / Lab Partners	500,000 sf.	200,000 sf.	(300,000 sf.)
Business Incubation	50,000 sf.	40,000 - 50,000 sf.	
Residential	500 – 800 Units 700,000 sf.	525 – 650 Units 450,000 – 550,000 sf.	(150,000 sf.)
Hotel	90,000 sf.	90,000 sf.	
Retail (Restaurant, Café, Market, Kayak, etc.)	65,000 sf.	25,000 sf.	(40,000 sf.)

468,000 sf. Reduction = 27% less

Figure 3: Screenshot of Slide from Applicant's June 14, 2022 Presentation showing the proposed reduction in square footage by building program use.

As part of the larger discussion of campus programming, the Applicant has discussed the benefits of the site incorporating a mix of uses for reducing the number of vehicular trips to and from the site, encouraging opportunities for collaboration, providing opportunities for community amenities through the waterfront and supporting retail & restaurant businesses, and developing a site that can support the future residents and faculty of the Roux Institute.

- **Building & Site Design:** Based on feedback from the April neighborhood meeting, the Applicant revised the design of the site to reduce the overall square footage of the campus buildings by 27% at full build out (1.755 million square feet to 1.287 million square feet = 468,000 square foot reduction) and decreased the proposed maximum heights by 19% (210 feet to 170 feet) to

respond to comments on the scale and integration of the campus within the East Deering Neighborhood. The taller heights of building originally planned for the western perimeter along Interstate 295 were also relocated to the center of the site to reduce visual and shadow impacts on nearby properties. At the October 25, 2022 workshop, the Applicant intends to recap the development of the IDP and Regulatory Framework, along with walking through the methodology that balances elements such as open space, uses on the site, building heights, and community access in developing the proposed building designs and height map.

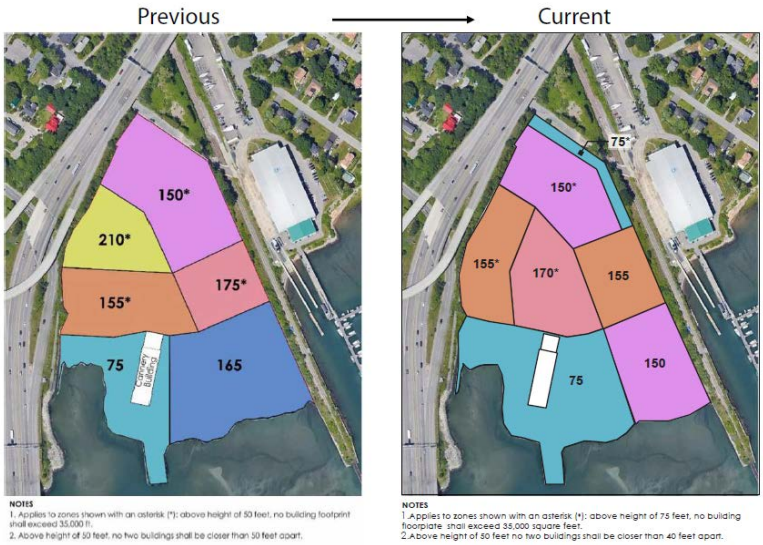


Figure 4: Screenshot of Slide from Applicant's June 14, 2022 Presentation showing the proposed reduction in maximum permitted heights in the Regulatory Framework Height Map.

- **Campus Integration:** Along with the updates made in response to the building and site design, the Applicant has started the process of identifying potential multi-modal connections in and around the site, updated the IDP & Regulatory Framework to better ensure more seamless transitions around the perimeter of the site into the neighborhood, meet with community advocacy groups, and developed a community engagement framework that will be discussed later in this memorandum.

- **Property Management & Acquisition**: At the beginning of the IDP, the Applicant states that while the current Roux Institute leases space at 100 Fore Street, all operations of the Roux Institute are intended to transition to 1 Bean Pot Circle. However, the IDP does not indicate at what phase all operations will relocate to 1 Bean Pot Circle. No other properties beyond 1 Bean Pot Circle have been identified as part of the Roux Institute's new campus.

Comments from these two meetings and from public comment at the Planning Board meetings expressed support for shuttle service to a satellite lot to mitigate negative transportation impacts on the site. At the October 11, 2022 Planning Board meeting, Transportation Engineer Jenn Connelly from VHB, which represents the Applicant, has stated that this option has not been pursued based on the request from METRO so that a shuttle service would not cannibalize any proposed fixed-route service near and to the site.

Ms. Connelly also noted that a shuttle service would not eliminate transportation impacts to and from the site, but would just relocate a portion of them to another part of the City. As part of the Applicant's approach to develop a more pedestrian-centric campus, updates to the IDP & Regulatory Framework are focusing on transportation improvements that reduce Single Occupancy Vehicle (SOV) trips, as opposed to relocating them.

Figure 5: Photo of presentation boards from September 6, 2022 open house. Source: WGME.

Along with the statutorily required two neighborhood meetings, an additional four public meetings (aka Roux Roundtable) meetings were held to gain additional feedback (Attachment B), as well as an open house on September 6th for members of the public to view the campus. As mentioned at the beginning of this memorandum, three Planning Board workshops have also been held, with a fourth workshop scheduled for October 25, 2022, each providing a public comment period. 40 comments have been provided during public comment periods and 58 written comments have been submitted.

Finally, additional informal focus groups has held ongoing meetings with community members from the East Deering Neighborhood and with bicycle and pedestrian advocacy organizations to better understand relevant topics in and around the site.

B. PROPOSED NEIGHBORHOOD ENGAGEMENT

Building from the comments received during this process from the Board, members of the public, community organizations, and City Staff, the Applicant submitted updates to the Neighborhood Engagement sections of the IDP and Regulatory Framework (Attachments C and D). Table 1 below provides a summary of the different methods of neighborhood engagement proposed for future phases of development, along with City Staff comments on the proposed engagement methods.

Table 1: Neighborhood Engagement Methods

Method	Description of Method	City Staff Comment(s)
Personnel	**Community Contact (IDP) or Community Liaison (Regulatory Framework)**: Works closely with stakeholders to solicit ideas and feedback and respond to comments **Construction Point of Contact:** Serves as public interface for construction-related comments and questions and provides updates at all Advisory Group Meetings and Neighborhood Forums.	▪ Recommend aligning the term for the Community Contact or Liaison between the IDP and Regulatory Framework. ▪ May want to specify if there is potential for the Community Contact/Liaison and Construction Point of Contact could be the same individual or change over time.

Meetings	**Regular Neighborhood Forums**: Forum between Northeastern University, IDEALS, and community members on project-related topics and updates. Interested parties can sign up to receive monthly written project updates. **Development Advisory Group:** Quarterly meetings for seeking input from stakeholder representatives and distribution of information to networks.	▪ There may be opportunities to connect the Regular Neighborhood Forums with the Development Advisory Group to enhance efficiency & connections between the two functions. ▪ There appears to be overlap in the functions of the Development Advisory Group members and the Construction Point of Contact. Formalized responsibilities should shift to the Construction Point of Contact to prevent attrition of Advisory Group members.
Methods of Communication	▪ Dedicated Construction Webpage ▪ In-person meetings ▪ Phone Calls & Texts ▪ Social Media ▪ Email (info@rouxcampusportland.org)	▪ May want to clarify whether there is any distinction in the information provided on the dedicated construction webpage as compared to the monthly written updates that interested parties can sign up for through the regular neighborhood forums. ▪ IDP review standards require the inclusion of strategies for assuring communication related to property acquisition and disposition. Currently, the communication strategies listed in the IDP relate solely to construction impacts. References to property acquisition and disposition should be added as a potential topic of communication.
Planning Documents	▪ **Construction Schedule**: Provided at the beginning of each project phase with regular updates throughout construction ▪ **Construction Management Plan**: Submitted as part of the site plan review application ▪ **Master Project Schedule**: Prepared at the onset of each stage of construction, with distinct project schedules developed over the course of construction ▪ **Site Logistics Plan**: Plan to address truck routes and timing, along with signage and street closures	▪ Some of the plans are clearer than others on the point of application submission and the geographies that they encompass. Additional specificity of submission dates and graphics and clearer terminology will likely resolve current questions/ambiguity. ▪ Reference to campus monitoring will help reemphasize that the phased approach will lead to improved, iterative plans.
Workforce Development	During construction, the Roux Institute will provide opportunities and set goals for: ▪ Outreach to local schools ▪ Apprentice Program Development with subcontractors, and	▪ The Community Benefits section later goes on to talk about the work related to Diversity, Equity, and Inclusion (DEI), but only starts to connect with the goals for workforce development. Additional connections and goals

	▪ Local Worker Preference	should be set to ensure positive DEI outcomes for all workforce development strategies. ▪ While public schools, trade schools, and community colleges are mentioned as opportunities for workforce development, there are natural opportunities to also include Northeastern students by utilizing their STEM and program management backgrounds to develop campus solutions/mitigation measures based on campus monitoring and experience as users of the campus.
Community Benefits	Section discussing the current work of the Roux Institute and impact of work on the community.	

The Applicant is currently in the process of updating the IDP & Regulatory Framework and will present updated content at the October 25, 2022 workshop.

IV. REZONING OF BASE I-M & B-3 ZONING TO B-5

In addition to the development of the IDP & Regulatory Framework for the IOZ, the applicant has requested that the subject property be rezoned from Moderate Impact Industrial (I-M) and Residential (R-3) to Urban Commercial (B-5) mixed-use zone. The approval on an IOZ allows modifications to the base zoning related to uses and dimensional requirements, while also addressing any campus-specific considerations, such as mitigation measures.

While the Application could have been submitted without the requested change to the base zoning, the requested rezoning to B-5 is beneficial and aligns with the Land Use Code by:

- Selecting a base zoning classification that provides a strong foundation for the campus and minimizes the deviation of the IOZ from the base zone, which reinforces its use as a zoning supplement (Overlay) as opposed to a base zone, and
- Provides better alignment in the event that only a portion of the proposed IOZ development program is constructed and future development cannot utilize IOZ allowances and must comply with all B-5 requirements.

The following section walks through the purpose of the B-5 zone, how it compares to the primary existing zoning for the site (I-M), how the rezoning aligns with the Comprehensive Plan, and recommended modifications to the proposed B-5 rezoning boundary.

A. B-5 PURPOSE STATEMENT

The purpose of the B-5 is:

"To provide for areas of the peninsula near the downtown where a mixture of uses, including marine, industrial, commercial, and residential uses are encouraged. The B-5 and B-5b is typically characterized by larger underdeveloped lots with potential for denser, clustered, urban mixed-use development and more efficient use of existing land and building. It is anticipated that the dense, mixed-uses of the B-5 will rely on a shared infrastructure system, including service alleys, parking lots, public transportation facilities, stormwater management, and driveways"

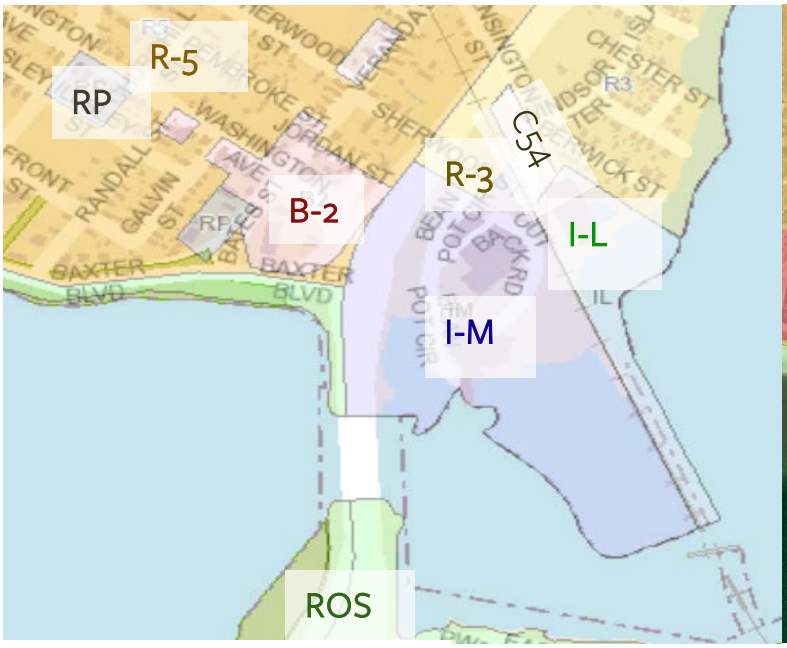


Figure 6: Map of the current zoning.

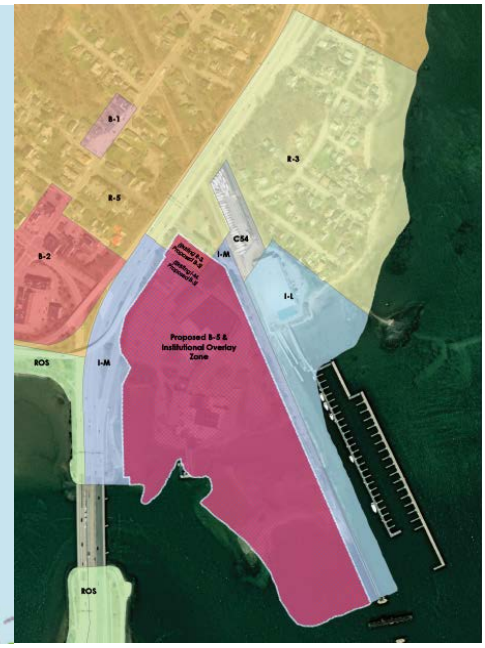


Figure 7: Map of proposed B-5 zoning (in purple).

The Roux Campus as proposed is consistent with this purpose statement by:

- The B-5 zones is applied to various peninsula and near-peninsula areas of the city with industrial pasts that are transitioning to mixed-use.
- Proximate to Downtown Portland being located a little over a mile from the B-3 zone;
- Proposes a mixture of marine, industrial, commercial, and residential uses;
- Is a larger underutilized former industrial lot that is proposed to be redeveloped for denser, clustered, urban mixed-use development, and
- Reconfigures the site to provide shared parking facilities & utilities, proposes to increase the building square footage, and diversifies the number of uses on-site from the previous operator.

B. COMPARISON OF I-M & B-5 ZONES

When comparing the B-5 with the I-M zone, the most notable distinctions include use provisions and dimensional standards. Key differences are provided in the tables below.

Table 2: List of Permitted and Conditional Uses

Uses	I-M	B-5
Single-Family Residential		P
Two-Family Dwellings		P
Multi-Family Dwellings		P
Handicapped Family Units		P
Combined Living and Working Spaces		P
Lodging Houses		P
Clinics		P
Cultural Facilities		P
Schools		P
Emergency Shelters	C	C
Government Uses		P
Places of Assembly (All)		P
Pre-School Facilities	P	P
Post-Secondary Schools		P
Intermediate Care Facilities	P	
Auto Service Stations		P
Bars		P
Exhibition, Meeting, Convention Hall		P
General Offices (All)	P	P
General Services (All)		P
Hostels		P
Hotels		P
Recreation and Amusement Centers	P	P
Restaurants		P
Retail (All)		P
Theaters and Performance Halls		P
Communication Studios		P
Intermodal Transportation Facilities	P	P
Low Impact Industrial (<10,000 SF)	P	P
Low Impact Industrial (>10,000 SF)	P	C
Laboratory & Research Facilities	P	
Lumberyard	P	
Marijuana Cultivation (<7,000 SF)	P	
Marijuana Manufacturing Facility	P	
Marijuana Testing Facility	P	
Printing & Publishing	P	P
Recycling and Solid Waste Disposal	P	
Repair Services	P	P
Construction & Engineering Services	P	
Dairies	P	
Food and Seafood Processing, Packaging and Distribution	P	

Studios for Artists & Crafts People	P	P
Warehousing, Storage & Distribution	P	P
Telecommunications Tower	P	
Tow Lots	P	
Correctional Pre-Release Facilities	P	
Marine Uses		P
Off-Street Parking		P
Parks & Open Spaces		P
Solar Energy Systems (Minor)	P	P
Solar Energy Systems (Major)	P	
Utility Substations	P	P
Wind Energy System (Minor)	P	C
Wind Energy System (Major)	P	

As can clearly be seen in the use table above, the two zones have different purposes with use provisions reflective of their stated purpose. The I-M zone is geared toward traditional low to moderate impact industrial uses, which frequently rely upon convenient automobile & truck access to regional transportation infrastructure, benefit from regulations which account for the need to store materials and equipment outdoors dealt with through appropriate performance measures, and necessitate buffers between residential and/or other sensitive uses.

Conversely, the B-5 zone, as can be seen in the uses listed above, is among the more permissive mixed-use zones, anticipating scenarios such as that of the proposed development, in which large, underutilized properties are redeveloped at a higher intensity, supporting both job generating uses and residential uses. As might be expected, this zone broadly permits residential, office, retail, restaurant, low-impact industrial uses <10,000 square feet, and other service-based uses. In addition, the zone permits a range of institutional uses, as well as some light industrial and transportation related uses, reflective of the types of redevelopment envisioned and alluded to within the zone's purpose statement.

Similar to use standards, both zones differ in their regulation of dimensional requirements, as seen below:

Table 3: Dimensional Standards by Zone		
Dimensional Standard	I-M	B-5
Street Frontage	60 Ft.	
Front Setback	1 Ft. for each Ft. of building height	
Rear Setback	1 ft. for each ft. of building height up to 25 ft., except 35 ft. when abutting residential zone	
Side Setback	1 ft. for each ft. of building height up to 25 ft., except 35 ft. when abutting residential zone	
Structure Height	75 Ft	65 Ft
Impervious Surface Ratio	75%	
Pavement Setback	10 Ft.	

Both zones are fairly permissive in terms of dimensional standards, however the I-M zone exhibits restrictions intended to buffer industrial uses from abutters, while also requiring minimum frontage, and

limiting the amount of impervious surface. The B-5 anticipates a truly high-density urban form, and aside from limits on building heights, does not generally restrict uses or development dimensionally. In this instance, the I-M does permit taller buildings, however through the established Regulatory Framework would permit taller heights for this property.

Staff agree that the proposed program of uses for the Roux Institute appear to better align with the purpose of the B-5 zone as compared with the I-M zone.

Building Height:
The maximum permitted height in the B-5 zone is 65 feet and up to 120 feet on Thompson's Point. In addition to the base B-5 height, the applicant proposes a height overlay map as part of the Regulatory Framework. The proposed height overlay map is geographically limited to the Roux Institute site and is tied to development by the Roux Institute.

The subject parcel is bounded by ±106-foot-wide Interstate 295 to the west, the St. Lawrence and Atlantic Railway and Maine Yacht Center to the north and Casco Bay to the east and south. The surrounding area includes an I-L (Industrial Low-Impact) zone and Contract Zone 54 for the Maine Yacht Center, which is currently improved with a 35-foot tall, 35,000 square foot building for boat storage, workshop space, offices, and accessory uses and operates as a full-service marina and boatyard facility and is permitted to have open air/outdoor storage of boats up to 90 feet in height. Beyond the St. Lawrence and Atlantic Railway and Maine Yacht Center is a residential neighborhood zoned R-3 (Residential), characterized by single-family homes. To the west, beyond Interstate 295 is zoned B-2 (Community Business) and is characterized by a mix of commercial retail and offices as well as residential uses. The B-2 zone permits building heights up to 45 feet, except 50 feet if the first floor is in commercial use. B-2 zones are eligible for affordable housing density bonuses ranging between 10 and 25 feet and therefore allow buildings up to a maximum height of 75 feet.

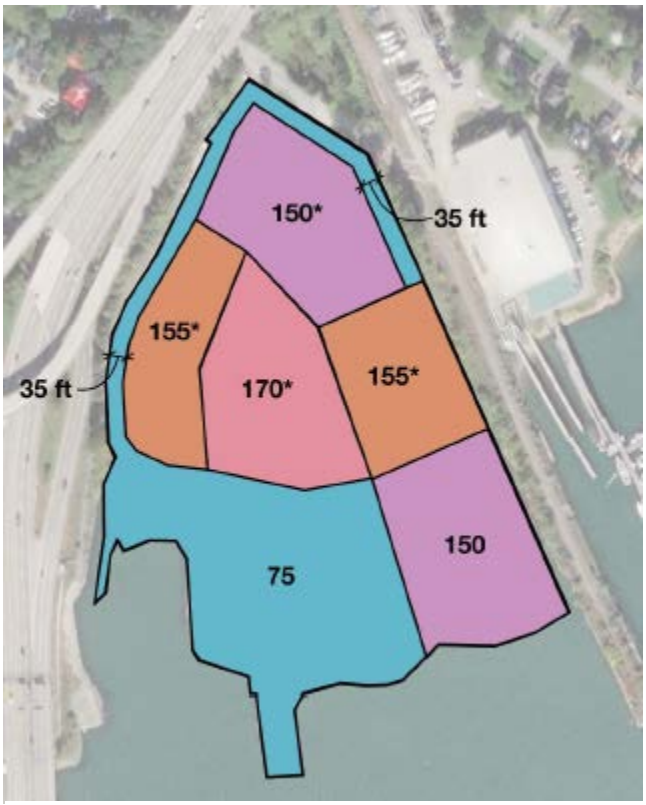


Figure 8: Proposed Height Map from Regulatory Framework.

As part of the regulatory framework, the Applicant proposes a height overlay map which includes heights ranging from 75 feet, 150 feet, 155 feet, and 170 feet for portions of the site (Figure 8). The applicant's approach is to create transitions from the surrounding context by creating a 75-foot maximum height buffer along the site's edges and stepping up and directing taller buildings to appropriate locations within

the interior of the site and towards Interstate 295 and Casco Bay. Furthermore, the applicant proposes restricting floorplate sizes in specific locations to a max of 35,000 square feet for portions of buildings above 75 feet, which will shape the bulk and scale of larger buildings.

The allowance for greater heights on the parcel has raised some concerns for compatibility with the East Deering contexts and has received support from others. Currently, height maximums are highly variable within Portland's higher density urban zones mapped across the city. While the B-3, B-6, and B-7 zones as well as USM Overlay and Maine Med IOZ utilize building height overlay maps, the B-1, B-2, and B-5 zones have maximum building heights in addition to each having geographically or use specific modifications to increase buildings heights. Furthermore, B-1/B-1b, B-2/B-2b.B-2c, B-3/B-3b/B-3c, B-5, R-7, and R-P zones are eligible for affordable housing height bonuses ranging between 10 and 25 feet.

Planning staff believes that the proposed heights as shown on the submitted height overlay map is appropriate. The proposed site is uniquely situated, with Casco Bay bordering the site to the south and east, ±106—foot-wide Interstate 295 bordering the site to the west and the St. Lawrence and Atlantic Railway and Maine Yacht Center to the north. The Roux site relates strongly to the Interstate 295 corridor, is isolated from surrounding neighborhoods, and has a history of dense, intensive industrial development and use.

The site is accessible to public transit and offers opportunities for multi-modal access and walkability with connections to various trail networks including Back Cove Trail, Eastern Promenade Trail, and Bayside Trail. The site is within an approximately 15-minute bicycle ride of City Hall via Back Cove Trail and Bayside Trail and an approximately 40-minute walk.

Planning Staff believes that the proposed overlay map is responsive to the surrounding context by arranging and distributing heights that will shape future buildings bulk and scale in manner that accommodates the proposed density. The proposed heights are designed to adjust to the context. At the site's northern most point, nearest to the Maine Yacht Center and the St. Lawrence and Atlantic Railway beyond which is a lower-scale residential neighborhood and along the site's western most point adjacent to Interstate 295, the Applicant proposes maintaining a maximum height of 75 feet to a depth of 35 feet, preserving the current maximum height allowed on the site. In addition, a 75 foot maximum height is mapped for the majority of the sites waterfront, preserving key views into the site from Tukey's Bridge/Interstate 295 and maintaining a similar scale to the B&M building, a locally designated historic landmark, to ensure compatibility with future designs. Beyond the 75 foot maximum height buffer, building heights transition and increase ranging between 150 and 155 feet before establishing a maximum building height of 170 feet located at the center of the site. Planning Staff believes that the manner in which the building form will come together will effectively establish a transition to the medium-rise contextual neighborhoods of East Deering to the north and west and the waterfront to the south and east.

Past practice has demonstrated the wisdom of applying building heights that reflect the geography and development context of particular sites. Policies promoting urban scaled density can be implemented while neighboring properties can be best protected when topography, view corridors, street hierarchy, and other context specific issues are reflected in the zoning. Akin to these past practices, Portland has precedent for high-density buildings adjacent to a low- to medium-density context. The Maine Medical

Center IOZ regulates building heights via a height overlay map and utilized a similar approach by focusing taller heights, ranging from 125 feet to 200 feet, towards the interior of the site and transitioning down in scale, ranging between 70 feet and 85 feet, to the surrounding neighborhood context, which includes smaller scale single, two-family, and multi-family buildings. A similar condition also exists where both the B7 and B3 zones abut low-to-mid density neighborhoods.

Planning Staff believes that the proposed development as contemplated would fulfill multiple public policy objectives, including: the future construction of a higher education institution, research, lab, and office space, retail, housing, and publicly accessible open space, which further supports goals identified in *Portland's Plan 2030*, including: supporting sustainable growth in our educational, medical, and cultural institutions; valuing innovation and creativity as cornerstones of the local economy and as central to Portland's uniqueness and diversity; investing in, attracting, and retaining human capital to support a growing economy; respecting that our unique quality of place is key to our future economic success as well as valuing and nurturing Portland-based businesses; and reinforcing the waterfront as a key component of Portland's economic health, balancing traditional and emerging industries with tourism and recreation.

Furthermore, the contemplated heights would allow for a proposed development that supports the City's housing and recreation and open space policies, including: encouraging additional contextually appropriate housing density to support complete neighborhoods and pursuing policies to enable people who work in Portland to have the option to live in Portland as well as encouraging quality, sustainable design in new housing development Furthermore, permitting additional height on the site creates opportunities for additional open space supporting the state goals such as promoting and protecting the availability of outdoor recreation opportunities for all Maine citizens, including access to surface water, and local goals, including sustaining our system of parks, trails, and open spaces; strengthening connections between open spaces and providing high-quality, well-designed, well-maintained, safe, and integrated parks, trails, public open spaces and recreational opportunities accessible to all residents.

The proposed development at the contemplated heights would create a dense concentration of uses, adjacent to existing and future multi-modal transit options, including railroad corridors, promotes walkability, and aligns with the goals to create complete neighborhoods. Situating this type of density adjacent to an array of transit options and creating a mix of uses on site is emblematic of sustainable land use planning and has the opportunity to support future trail connections and public transit such as buses and/or passenger train service.

C. REZONING AND COMPREHENSIVE PLAN

Maine law requires that zoning enactments and amendments, to be valid, must be "pursuant to and consistent with [the municipal] comprehensive plan." 30-A M.R.S. 4352. Zoning is "consistent" with a comprehensive plan when it is "in basic harmony" with some (though not necessarily all) portion of it.

The majority of strategies in *Portland's Plan 2030* are tied to development, infrastructure, and policy implementation. As part of reviewing what strategies are being met through the rezoning of the base zone, City Staff are assessing the impact that the B-5 zone facilitates as part of the overall development. The

following list includes the major categories of the Comprehensive Plan, along with each of the strategies being met:

Environment

- Minimize impacts to the City's waterways by reducing combined sewer overflows and implementing stormwater best practices.
- Incorporate additional Low Impact Development (LID) standards into City codes.

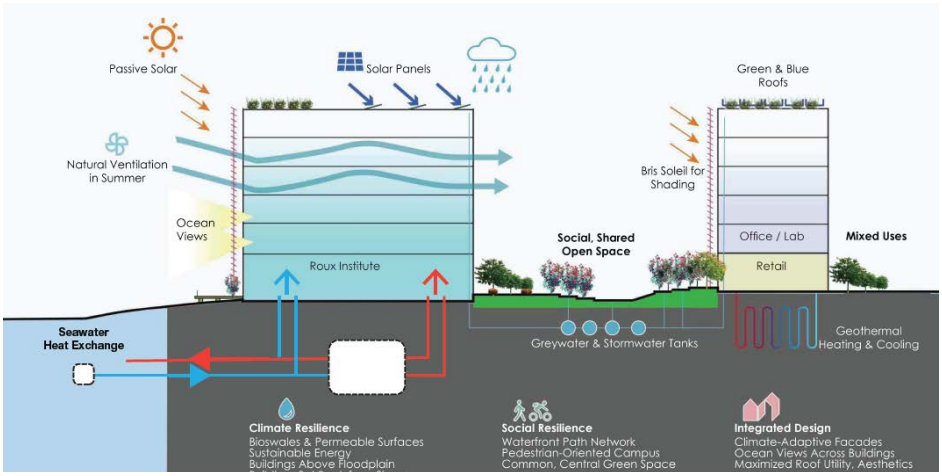


Figure 9: Diagram from the IDP illustrating potential alternative energy and sustainable building practices for the campus.

- Support reduction in impervious surfaces and implementation of green infrastructure through local codes and incentives, and in infrastructure investments where appropriate.
- Reduce city-wide nonrenewable energy consumption through policies that support public and private investments in alternative energy sources.
- Encourage commercial entities to reduce fossil fuel use through expanded benchmarking, incentives for improved lighting and heating efficiencies and purchase of electric vehicles.
- Encourage fossil-free transport through support for electric vehicles, electric public transit, dedicated bicycle lanes, and vehicle exclusion zones.
- Ensure that all municipal decisions take into account the necessity of essentially eliminating carbon dioxide emissions within 30 years.
- Coordinate future land use policy changes with long-range regional transportation planning, including planning for transit, pedestrian, and bicycle improvements, to reduce local regional vehicle miles traveled.
- Continue to develop land use policies which support complete neighborhoods.
- Encourage landowners and developers to incorporate sustainable design, materials, and practices in rehabilitation of historic resources and new construction.

Historic Resources

- Document and designate resources of historic, architectural, and/or cultural significance, based on survey findings and input from applicable stakeholders, to encourage thoughtful building rehabilitation, deter demolition, and support neighborhood revitalization.
- Expand interpretative signage programs for historic parks and selected sites.
- Accommodate multiple objectives, such as improved accessibility, improved energy efficiency, or climate change adaptation, in alterations to historic structures while adhering to preservation objectives.

Waterfront

- **Expand waterfront access for the public** where possible and appropriate.
- **Integrate best practices for adaptive waterfront strategies**, including adaptive construction techniques, stormwater infrastructure and utilities, site protection, floodproofing, and risk avoidance **into the City's** technical standards and **land use code.**

Figure 10: Artist interpretation from the IDP of the proposed waterfront shared-use path and potential uses.

Economy

- **Prepare** our current and future **residents to compete in a**n increasingly **knowledge-based economy**.
- **Invest in educational institutions** and training **as a means of attracting, developing, and retaining an educated workforce**.
- **Evaluate zoning** and the condition of existing infrastructure in priority areas – downtown, in identified neighborhood nodes and **along transit corridors – to ensure that employment and housing growth can be supported**.

- Modify ordinances and make strategic investments to better promote business development and job creation in priority areas.
- Promote the orderly expansion of institutional uses, such as educational, cultural, and hospital campuses, which are central to workforce development, employment, and the health of the local and regional economies.

Figure 11: Long-Term Campus Concept Plan from IDP.

- Ensure that the growth of Portland's educational, medical, and cultural institutions is integrated into Portland's urban fabric through the use of high-quality design, management of impacts, community partnerships, and innovative planning.
- Sustain and strengthen relationships between local organizations and our anchor institutions to capitalize on their unique value to the well-being and future success of Portland and the region.
- Support policies that foster innovation, entrepreneurship, and the creative economy,
- Capitalize on emerging open data trends to encourage transparency, test ideas, and develop solutions for urban issues.
- Recognize the role of the transportation system in the current and future economic health of the City.

Housing

- Evaluate whether current zoning allows for new development consistent with historic patterns of form, density, and/or use, as well as whether it allows for priority growth areas.
- Encourage energy efficiency in new construction and rehabilitation of our housing stock.
- Encourage housing that is resilient in the face of climate change, severe weather events, and storm surges, especially in vulnerable low-lying areas.
- Pursue new opportunities for increased energy efficiency, increased densities, mixed incomes, and greater connectivity to surrounding neighborhoods.

Recreation & Open Space

- Expand safe, well-lit walking and cycling routes to open spaces, including crosswalks, sidewalks, and bike lanes.
- Improve the utility of existing spaces by developing and programming parks and open spaces for diverse, simultaneous, complementary uses.

- Pursue opportunities for **optimizing green infrastructure** and **enhancing** the **existing stormwater management and flood storage** functions **of** the City's **open spaces** where appropriate and practicable.
- **Encourage physical and visual access to Portland's waterfront** – **Casco Bay, Back Cove**, and the Stroudwater, Presumpscot, and Fore Rivers – **as** a "blueway" network and **an extension of public space for local and regional recreation and transportation needs.**
- **Prioritize open space** acquisition and **programming toward creating linkages where there are gaps in the network, particularly between** Stroudwater and the Fore River, Evergreen Cemetery and the Presumpscot River, Portland Transportation Center and Bayside, **Martin's Point and the Back Cove**, and the Western Waterfront and the Fore River.

Figure 12: Map of Proximate Open Spaces from IDP.

Facilities & Services

- **Leverage** State, local, and **private funding** to allow a **comprehensive approach** to **sustain excellence in the school system**.
- Continue to **provide** continuing education and **job training for adults and new residents**.
- Pursue public/private partnerships to fund needed projects and services

Transportation

- **Monitor** indicators such as **mode share, multi-modal levels of service, and levels of active transportation**, particularly **on key transportation corridors.**
- **Benchmark existing conditions** and **set targets for** specific **future** years.
- Make **improve**ments to the **transportation system** to improve **equity, sustainability, and accessibility** for all ages and abilities.
- **Address existing High Crash Locations**, improve ADA accessibility, **and ensure pedestrian access to transit stops** and along Safe Routes to School Routes.
- **Support the vision of large, transformative projects** such as the redesign of Franklin Street, the transformation of Forest Avenue, and others, as well as future studies through strategic, cost effective, and incremental actions.
- **Minimize the impact of highway infrastructure, such as ramps** and overpasses, **on City streets and neighborhoods**.
- **Identify and plan for parking needs, particularly** downtown, **on the waterfront, and in conjunction with larger institutions.**

- Develop robust, integrated parking management strategies to reduce parking demand.
- **Invest in** a walkable city through sidewalk maintenance, **accessibility improvements, trail and path connections,** snow clearance, **lighting, landscaping, traffic calming, enhanced street crossing, strong urban design, artistic elements, and wayfinding.**
- **Complete** and maintain the **City's system of shared use pathways**, neighborhood byways, and **protected/enhanced bike lanes in a** legible and **continuous network**, **and develop** the **complementary infrastructure**, such as bicycle parking and wayfinding, **to support it**.
- **Explore** potential **locations for separated bike infrastructure**.
- **Expand** Transportation Demand Management (**TDM**) **initiatives for large development sites and institutions**, building upon the recent implementation of TDM plans for individual employers and sites.
- Support initiatives to strategically **increase the frequency and span of service,** on-time reliability, **and geographic scope of transit service.**
- **Develop transit centers,** enhance bus stops, **and improve transit stop and transit corridor operations and accessibility.**
- **Plan for multi-modal trip connections** through bike storage, timetable coordination, or other measures **that facilitate ease of transitions between modes of travel.**
- Support the waterfront as a signature transportation resource.
- Enhance regional trail connections.

Figure 13: Map of Existing and Potential Routes for Different Modes of Transportation from IDP.

In concert with the proposed building and site design, IDP & Regulatory Framework, associated text amendments, and future TMP & site plan reviews, the proposed B-5 facilitates the achievement of a significant number of Comprehensive Plan goals. City Staff support the proposed rezoning of the project site to B-5 and in the following section will recommend a proposed expansion of the B-5 zone (Figure 14) to achieve similar goals of the Comprehensive Plan.

D. RECOMMENDED ADDITION TO PROPOSED B-5 ZONING MAP AMENDMENT

In the submitted application, the Applicant proposed to solely rezone 1 Bean Pot Circle as B-5. Based on conversations during previous Planning Board workshops, additional properties & right-of-way owned by Maine DOT were identified as potential candidates for inclusion. Upon review of these properties, City Staff primarily noted the benefits for:

- Simplification of the zoning map in an area with a significant number of differing, oddly shaped districts, and
- Providing opportunities for complementary development in the future at 43 Sherwood Street such as a multi-modal center and supporting retail, which is not currently allowed under the current R-3 zoning.

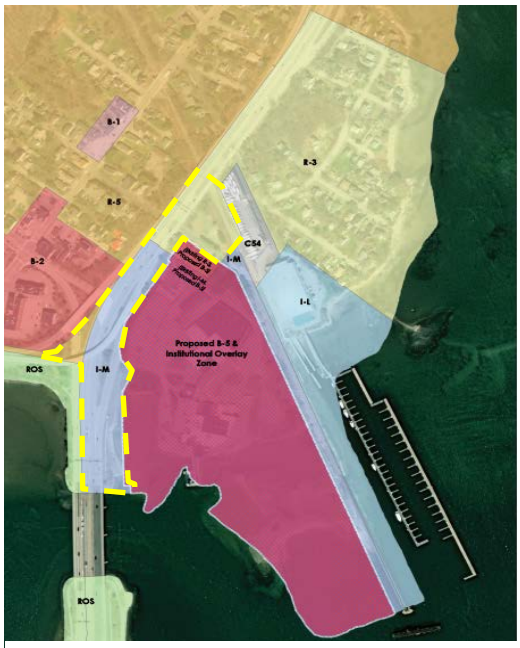


Figure 14: Map of proposed zoning with City Staff recommended area for inclusion in B-5 rezoning outlined in yellow.

Figure 15: C&O Station in Muncie, IN. The Station is bounded by an active freight line and the Cardinal Greenway and currently serves as offices for the Cardinal Greenway. A similarly scaled building could provide retail, restaurant, and/or commercial support for a multi-modal station at 43 Sherwood Street under a B-5 zoning designation, but not under the current R-3 zoning.

Since the majority of this area is currently exists as right-of-way for Interstate 295 or rail right-of-way, the projected impact to include the right-of-way parcels is none or very limited. While 43 Sherwood Street is not right-of-way, it is also under the ownership of the State of Maine and given the site constraints, presents limited concern for negative impacts related to future development. Furthermore, the extension of the B-5 zone to include these additional parcels would be subject to the underlying B-5 zone dimensional standards. The proposed height overlay map as part of the Roux Institute IOZ would not be applicable.

Based on the limited potential for negative impacts, Staff recommend the inclusion of the additional area solely for the rezoning to B-5.

V. REVIEW OF INSTITUTIONAL DEVELOPMENT PLAN

Table 4 provides a summary view of IDEALS' IDP content review, with the 'Requirements' column, simplified and consolidated to include one or more sub-requirements of the IOZ ordinance. For a complete list of IOZ content requirements, please see Section 8.5.4.C in the Land Use Code.

Table 4: Required Content of the IDP (8.5.4.C)		
Requirements	**Provided**	**Notes**
Mission Statement	Yes	The IDP clearly identifies the mission statement and vision of the University, and how future development furthers these aims.
Baseline Institutional Data	Partial	The majority of the required baseline institutional data has been provided. The Applicant is in the process of updating the list of relevant municipal plans, projects, and studies to complete the required list of baseline information.
Institutional Characteristics	Yes	Updated data on student mode share and trip assignment at the current Roux Campus has been provided to support more appropriate trip generation estimates. As discussed above, references to previous feasibility studies will assist in establishing the context of the site.
Summary of Public Involvement	Partial	Staff requests that meeting minutes be provided for all required neighborhood meetings and additional 'Roux Roundtable' meetings to be included in the public record, along with including a summary of public involvement and comments in the IDP.
Identify Institutional Needs	Partial	As further discussed in the following three categories, additional information on the required infrastructure, potential mitigation measures, and thresholds for improvements/modifications will need to be submitted to provide a framework that guides future site plan and TMP reviews.
Transportation & Access	Partial	Based on the discussion at the October 11, 2022 workshop, the Applicant is in the process of revising application materials to address Staff and Board comments, specifically related to the assessment of and thresholds for potential mitigation strategies, mode share assumptions, and identification of points in the development program where TMP application will need to or likely will be submitted.
Environmental Impacts	Partial	The Applicant has referenced a proposed environmental charter which would outline the proposed standards and energy generation for the site. The framework for this charter, along with baseline and projected information about energy usage will need to be provided for the IDP to address all required information on environmental impacts.

Infrastructure	Partial	As mentioned in Sec. II of this memorandum, additional information still needs to be provided on the existing infrastructure usage, the projected infrastructure usage, and if there is any additional infrastructure needs related to the proposed alternative energy sources sought by the Applicant.
Design	Partial	The Applicant is in the process of working with City Staff to align the proposed Design Principles of the IDP with the Design Guidelines of the Regulatory Framework to provide tangible, enforceable standards. It is anticipated that the majority of these concerns will be resolved promptly.
Neighborhood Engagement	Yes	The Applicant has submitted an updated Neighborhood Engagement section in the IDP and Regulatory Framework. Through the inclusion of the recommended staff comments in Sec. III (B) of this memorandum and updating through the remainder of the IOZ review process, the proposed neighborhood engagement section will provide all of the required content of the IDP.

A. Institutional Development Plan Review Standards

The IDP is subject to 13 separate review standards, each of which are intended to ensure first that the IDP contains sufficient information to provide a reasonable, well-calculated depiction of what campus growth will look like in the subsequent 20-year period, providing a strong foundation and basis for the Regulatory Framework. The second principal element of the IDP is to accurately project impacts before development occurs, so as to facilitate timely and strategic improvements to minimize or mitigate those impacts.

1. *Address all content requirements, unless explicitly modified by the planning authority or planning board.*

   Staff Comment: The IDP will need to be revised to incorporate staff's feedback listed under the preceding 'Content' section of this memorandum, and as needed to address future Board and staff comments.

2. *Reflect the issues/topics identified in the required public process.*

   Staff Comment: As discussed in Sec. III(A) of this memorandum, the Applicant has identified and updated the application to address the key issues identified in the required neighborhood meetings, which were also reiterated in public testimony and written comment for Planning Board workshops. As the review of the application continues, updates to the IDP should continue to be made to ensure that the primary comments in all Planning Board workshops are addressed as well prior to a hearing for the application.

3. *Demonstrate consistency with the city's comprehensive plan and the purpose of this ordinance.*

   Staff Comment: While Sec. IV(C) of this memorandum discussed the proposed rezoning of the base zone to B-5, the assessment of alignment with the comprehensive plan took into consideration what the B-5

zoning would facilitate as part of the larger project. As demonstrated in the list of applicable strategies, the submitted IDP supports and furthers a significant number of the goals of *Portland's Plan 2030*. The proposed base rezoning and IOZ meet the purpose of the ordinance by proactively planning for the future of the site and supporting the development of a mixed-use, multi-modal site. As mentioned throughout this memorandum, additional information and updates continue to be provided to ensure that the application is meeting all of the IDP and Regulatory Framework content requirements.

4. ***Demonstrate how the property ownership, proposed growth, and requested regulatory framework relate to the institution's mission.***

Staff Comment: The IDP establishes a clear mission for both Northeastern University and the Roux Institute, which together serve to create a collaborative, mutually supportive space for both their private, public, and non-profit partners and the Roux Institute to further the fields of artificial intelligence, computer and data sciences, digital engineering, advanced life sciences, and medicine, fill existing talent gaps within these areas, and support Maine's economy. As part of this campus, the IDP stresses the people-centric design that will result in a 37% reduced parking demand and high non-motorized mode shares making external trips to the site. Feedback from the previous Design Workshop has instilled design elements that will result in successful connections between buildings and the shared use paths on-site. The Applicant is still in the process of working with City Staff to align the design principles of the IDP with the guidelines of the Regulatory Framework to promote an active, pedestrian-centric campus.

Figure 16: Artist interpretation of the proposed central open space and shared use pathways.

Based on feedback from Staff, additional information should be provided on the thresholds and guidelines for sustainable, resilient development methods that are part of the mission of the campus and the institution.

5. ***Demonstrate that traffic and parking impacts have been anticipated and that the proposed parking provision is justified as based on an assessment of options for reducing traffic and parking demands.***

Staff Comment: The Applicant has provided additional information on how trip generation and mode share for the site is calculated, mode splits by use, and anticipated mitigation measures for anticipated declines in LOS. Questions still remain on how the Applicant anticipates the target mode share will be

achieved for non-motorized modes with the proposed connections and what thresholds will dictate increases in the amount of surface parking provided on-site. While the IDP does not need to finalize all of this information, additional assessment of particular bicycle & pedestrian improvements on mode share and metrics that could inform future needs and thresholds to expand automobile & bicycle parking.

6. *Outline an approach to open space, natural, and historic resources that supports preservation and enhancement*

Staff Comment: The IDP includes design guidelines that stress the importance of wayfinding, shared use paths connections to the Bean Building and Waterfront, and ensuring barrier free access to all members of the public. Overall, the inclusion of these principles will lead to more successful outcomes for open space & enjoyment of natural & historic resources.

7. *Demonstrate that potential cumulative environmental impacts have been anticipated and can be minimized or satisfactorily mitigated.*

Staff Comment: Through the use of sustainable design, removal of impervious surfaces, raising of on-site grades, restoration of the shoreline, and introduction of low impact development techniques, the net change in environmental impact from its current state to proposed condition will likely be very positive. Additional review and establishment of thresholds will need to be provided for a number of topic areas to ensure that negative impacts in the short-, mid-, and long-term will be minimized and satisfactorily mitigated.

8. *Demonstrate that utility impacts have been anticipated and can be minimized or satisfactorily mitigated.*

Staff Comment: At the beginning of this memorandum, City Staff identified that baseline and projected utility usage at the site has not been provided, or identification of any infrastructural needs related to the proposed alternative energy generation. These pieces of information will need to be provided to address required IDP content.

9. *Reflect a comprehensive design approach that ensures appropriate transitions with the existing or future scale and character of the neighboring urban fabric.*

Staff Comment: Language related to circulation and building design have also taken steps to improve connections between buildings and the public realm, recognized differing needs for pedestrian-oriented design based on the proximity to automobile access on the perimeter of the site, and how functions of the site will differ based on the anticipated site users (e.g., public vs. semi-public, waterfront vs. Roux Institute facilities). Recognized public access and invitation to the waterfront have assisted in strengthening connections to the rest of the City. As mentioned at the previous workshop, consideration of modes other than single occupancy vehicle (SOV) will continue to help provide easier transitions.

Mode	AM	PM	Portland Plan City Wide	Portland Based Campus
Drove Alone	67%	66%	68%	71%
Transit	10%	10%	3%	18%
Non-Motorized	18%	19%	14%	5%
Carpool	5%	5%	8%	6%
Telework/Other	0%	0%	7%	%

Figure 17: Table from Applicant's September 27, 2022 Transportation Memorandum comparing the proposed campus mode shares to the City mode shares from 2014 (noted as *Portland Plan City Wide*) and the current mode share for USM (noted as *Portland Based Campus*).

10. *Promote compatibility with existing or future uses in adjacent neighborhoods, maintain housing, and support local amenities.*

Staff Comment: With the separation from adjacent neighborhoods by DOT right-of-ways and the waterfront, the site has unique considerations in providing compatible uses. As compared to other IOZs, there is physical separation that reduces the impact of the more institutional uses being located near residential zones. The scale of the institutional uses will increase the amount of traffic in the surrounding area, but it is not immediately clear whether particular uses are more or less likely to experience negative impacts from this increase.

IDEALS has indicated that they'd like to foster a close relationship with the neighborhood and are strengthening physical connections with the surrounding neighborhoods, through extension of the Back Cove Trail, potential improvements to Sherwood Street, and the potential for connections for rail or rail trail along the existing rail right-of-way. The site will be open to the public and will feature new public open space, including areas along the waterfront. Additionally, a Stakeholder Advisory Group will be established that features a number of transportation advocacy stakeholders to inform future development.

The proposed development does not eliminate any existing housing and includes the construction of up to 650 units at the completion of the long-term phase. With an expected enrollment of ± 4,500 students, the site is expected to include amenities and services (restaurants, small grocery retail, improved waterfront and trail connections) that are anticipated to reduce the number of trips off-site and can connect to existing trail networks. With the anticipated increase in usage of shared use facilities, assessments may be warranted on not only if new connections should be established, but if existing facilities may need to be modified or expanded to meet capacity.

11. *Anticipate future off-site improvements that would support the integration of the institution into the community and citywide infrastructure.*

Staff Comment: At the previous October 11, 2022 workshop, the Applicant presented on materials submitted in a transportation memorandum on potential mitigation measures that will be required to support the integration of the institution. Staff and Board comments indicated that additional assessment should be provided for non-motorized modes of transportation to ensure the necessary infrastructure will be provided to meet the proposed mode shares.

Figure 18: Conceptual Buffering Landscape Plan from the IDP.

The Applicant has provided information about the current service to the property, noting that the service has a higher capacity given the previous industrial use. Additional information has been requested by City Staff to better understand if any additional off-site modifications will be needed for future phases, as well as the proposed alternative energy generation.
Additionally, the communication methods submitted for the October 25 workshop will help provide increased transparency and communication so that proposed improvements can successfully integrate into the East Deering Neighborhood.

12. *Conform with the standards of Article 17 for designated landmarks or for properties within designated historic districts or designated historic landscapes, if applicable. When proposed adjacent to or within 100 feet of designated landmarks, historic districts, or historic landscapes, the IDP shall be generally compatible with the major character-defining elements of the landmark or portion of the district in the immediate vicinity.*

Staff Comment: The Cannery Building was designated as a local historic landmark on October 17, 2022 under Order 86-22/23. Future phases of development will be subject to HP review within the designated area shown in Figure 19, in the case of work proposed on the Cannery Building itself. The local landmark designation includes language that limits Historic Preservation review to only the portions of the site

Figure 19: Designation boundaries for the Cannery Building and area immediately surrounding the Building.

designated as a local landmark, without 100 foot advisory review. The IDP identifies that the Cannery Building will be prominently featured on the site, with other development set back and limited in height within close proximity of the Cannery Building. Any new improvements within the designation boundaries shown in Figure 19 will need to comply with Article 17 of the Land Use Code.

13. Incorporate strategies to support clear communication and ongoing public engagement between institutions and nearby neighbors.

Staff Comment: IDEALS has developed a variety of strategies to engage members of the community in on-going planning work. This includes semi-regularly scheduled 'Roux Campus Roundtable' meetings, which are to be periodically scheduled during active phases of the project development cycle. In addition, IDEALS maintains a website, www.rouxcampusportland.org, where relevant project information is regularly updated, with opportunities to take surveys, provide feedback, or contact a representative to ask questions. Additionally, IDEALS has designated a community contact who serves as direct liaison between IDEALS and members of the public. As mentioned and going forward, the Stakeholder Advisory Group will assist in providing additional opportunities for communication and transparency in future development. The staff recommendations in Table 1 will assist in meeting IDP requirements and promote better integration of the site into the East Deering Neighborhood.

VI. REVIEW OF REGULATORY FRAMEWORK

Table 5 includes a summary of the required content for the regulatory framework, along with the current compliance with those submittal standards:

Table 5: Required Content of the Regulatory Framework (8.5.5.D.)

Requirements	Provided	Notes
Zoning boundary of the IOZ	Yes	The zoning boundary is clearly defined in a map on the first page.
Phasing and schedules	Yes	Details relating to amendment thresholds and provisions for open space & ensuring a pleasant pedestrian experience have been provided to address staff comments. Coordination between the monitoring reports, phasing, and associated plans should be considered to inform mitigation measures and thresholds, discussed in a later section of the Regulatory Framework.
Uses	Yes	Expansion of permitted uses have been provided and takes into consideration the institutional purpose and viability of the site.

Dimensional requirements	Partial	The Applicant has provided a height map that has been refined based on feedback from the Board, Members of the Public, and City Staff. Additional identification of transition areas on the height map should be added to the Regulatory Framework. The Applicant is anticipated to present additional information on the methodology for how the building and site design were determined at the October 25 workshop. Elements of that content may want to be located in the Regulatory Framework or IDP to inform future site plan reviews.
Transportation	Partial	The Transportation section has been expanded to include considerations related to the design for proposed bicycle and pedestrian networks, which will help promote pedestrian-scale design. Additional information is still needed for parking ratios, as well as thresholds for access improvements.
Environment	Partial	The Regulatory Framework provides clarification on how and when open space will be provided during the first phase of construction. Additionally, more specificity has been provided on how the development intends to be constructed using sustainable and resilient building practices. Additional information should be provided on the how the proposed Sustainability Charter will be implemented and thresholds for sustainable improvements.
Mitigation measures	Partial	The Regulatory Framework does include a broad approach on identifying mitigation measures. Additional information on thresholds to address deficiencies and goals for preservation/protection still need to be included and may be informed by other larger review topics presented at the October 25 workshop.
Design	Partial	The submitted design section provides design guidelines that more clearly translate the design principles into enforceable standards. As mentioned in the review of dimensional requirements, additional information on treatments for transition zones will help support the justification for the context of the site. Staff is continuing to work with the Applicant to align the design guidelines with the design principles to ensure that the proposed principles are implementable and easily enforceable.
Neighborhood integration	Yes	The Regulatory Framework has begun to discuss outreach strategies as part of neighborhood integration, with the creation of a Stakeholder Advisory Group consisting of community stakeholders, as well as a community liaison. Additionally, the phasing section of the Regulatory Framework states that pedestrian linkages and safety will be addressed during the first site plan review, and includes requirements for a pleasant pedestrian experience during construction phases. Additional discussions at the October 11 workshop & October 25 workshop on Community Engagement and Benefits will help finalize any additional strategies and requirements to address community concerns.

Monitoring	Yes	The Regulatory Framework has identified a schedule for monitoring and report submittal timeframe. The Applicant may want to consider how monitoring activities can be integrated or connected to better assess/inform mitigation measures.

B. Regulatory Framework Review Standards

The Regulatory Framework is subject to 4 separate review standards, each of which are intended to ensure, consistent, and measureable zoning implementation that aligns with the goals of the Comprehensive Plan. These standards of the Regulatory Framework are anticipated to include parameters that guide the growth and change of the institution, as well as broad strategies to address potential impacts, with plans and details to be developed under site plan review.

1. Be consistent with the Comprehensive Plan and the Institutional Development Plan

Staff Comment: The submitted Regulatory Framework is consistent with the Comprehensive Plan. Overall, the connections between the elements in the IDP and the guidelines in the Regulatory Framework are strong. City Staff has recommended some additional information related to mitigation measures and improved connections between the design guidelines and principles. Additional modifications may arise based on feedback from the Board, members of the public, and City Staff at the October 25th workshop.

2. Provide a clear zoning framework, using graphics and tables as appropriate, to apply to future site plan reviews.

Staff Comment: Based on previous edits made during the discussion of design elements on the project, the Regulatory Framework has been updated to provide more detailed guidance to thoughtfully plan the site based on access, different modes of transportation, and wayfinding/transitions in and off the site. Additional discussion will take place at the October 25 workshop related to the proposed rezoning of the base zone to B-5 to ensure alignment with the purpose of the zone and the documents related to the IOZ. As mentioned above, revisions are being coordinated with the Applicant to ensure that design elements are easily implementable in future site plan reviews.

3. Provide specific regulatory statements as appropriate that respond to concerns raised during the required public involvement.

Staff Comment: Based on comments received during the Roux Roundtable discussion and Planning Board public comments, the Applicant has included the provision for a Stakeholder Advisory Group, allowance for snow ban parking on the site for neighboring residents, and developed design elements that will promote more thoughtful transitions in and around the site. As the discussion continues on Community Engagement at the October 25 workshop, additional revisions may be necessary to address new areas of concern.

4. Outline measurable goals and thresholds for improvements or other actions identified in the IDP to be advanced in subsequent site plan applications.

Staff Comment: As mentioned in previous sections of this memorandum, measurable goals and thresholds for transportation improvements have not been provided. Given the variability that the 20-year timeframe presents, inclusion of a framework and thresholds will strike an appropriate balance that provides the site flexibility to modify to meet current conditions/trends, while providing members of the public and City reviewers a level of consistency between reviews in the short-, mid-, and long-term phases.

VII. NEXT STEPS

At the October 25 workshop, staff is seeking guidance on any remaining information or updates should be made by the Applicant prior to a hearing.

VIII. ATTACHMENTS

Staff Attachments

1. Recommended B-5 Rezoning Boundaries

Applicants Submittal

A. June 6 Summary of Required Neighborhood Meetings
B. October 6 Summary of Overall Public Outreach & Engagement
C. October 19 Institutional Development Plan
D. October 19 Regulatory Framework

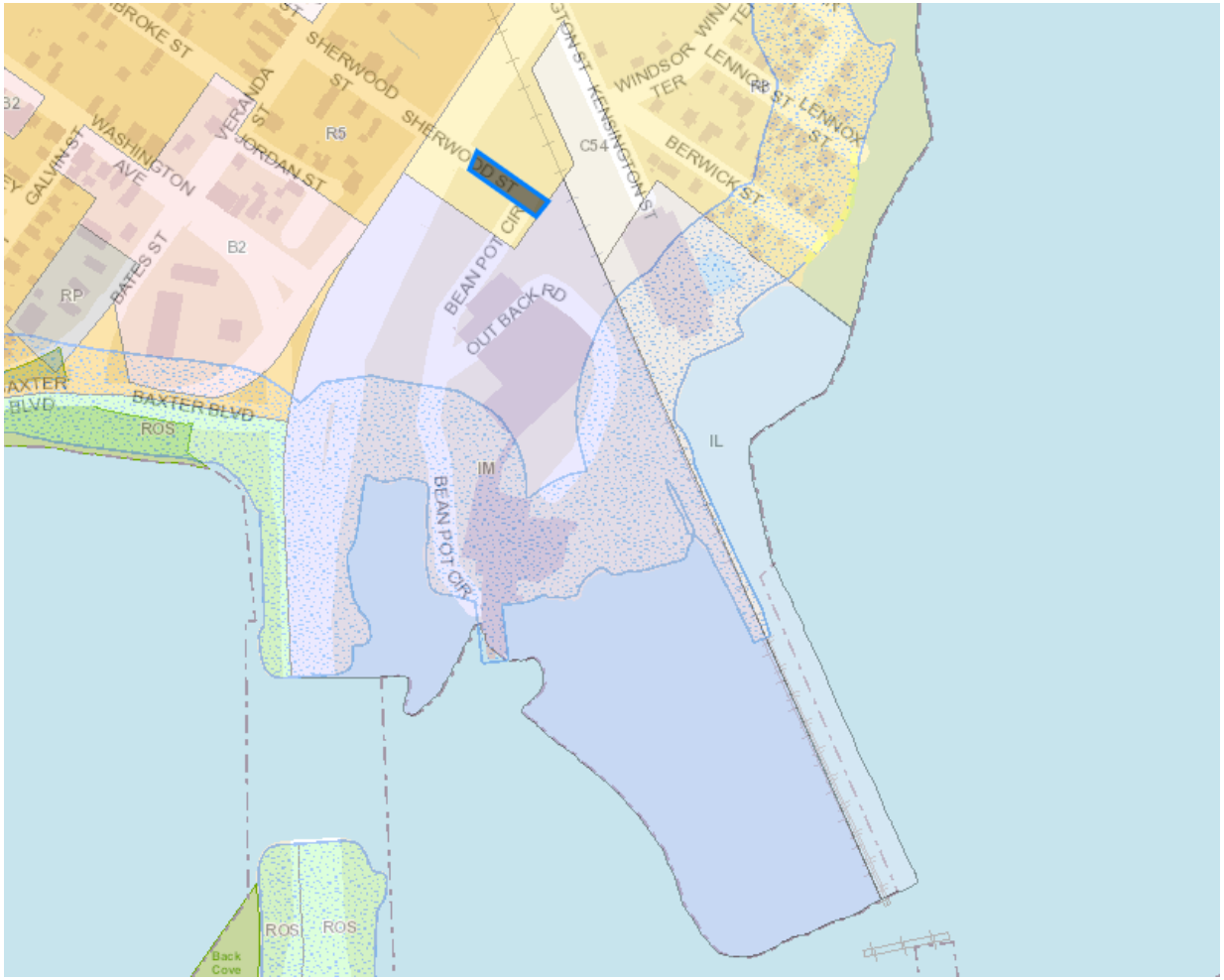
Public Comment

a. PC1: Christian MilNeil
b. PC2: Zack Barowitz
c. PC3: Cheryl Ann Leeman
d. PC4:East Deering Neighbors
e. PC5: Allison Brown
f. PC6: East Deering Neighbors

List of Portions of Properties Proposed to be Included in B-5 Rezoning

CBL	Owner	Current Zoning Classifications	Proposed Zoning Classifications	Property Size (Square Feet)	Approximate Area of Property to be Rezoned (Square Feet)
PART OF ROW 10 (Sherwood Street)	CITY OF PORTLAND	R-3, I-M	B-5; I-M	12,870	10,765
429 E003 (43 Sherwood Street)	STATE OF MAINE	R-3	B-5	14,810	14,810
PART OF 430 X002	STATE OF MAINE (Rail ROW)	R-3, I-M, C54	B-5; I-M; C54	216,137	25,836
PART OF 429 X001001	STATE OF MAINE (I-295 ROW)	ROS, R-3, R-5, B-2, I-M	ROS; R-5; B-2; B-5; I-M	382,825	218,422
PART OF 440 X001	STATE OF MAINE (I-295 ROW)	ROS, I-M	ROS; B-5	680,347	98,891
Approximate Total Area of Property to be Rezoned					368,724

Part of ROW (Sherwood Street)



Owner: City of Portland

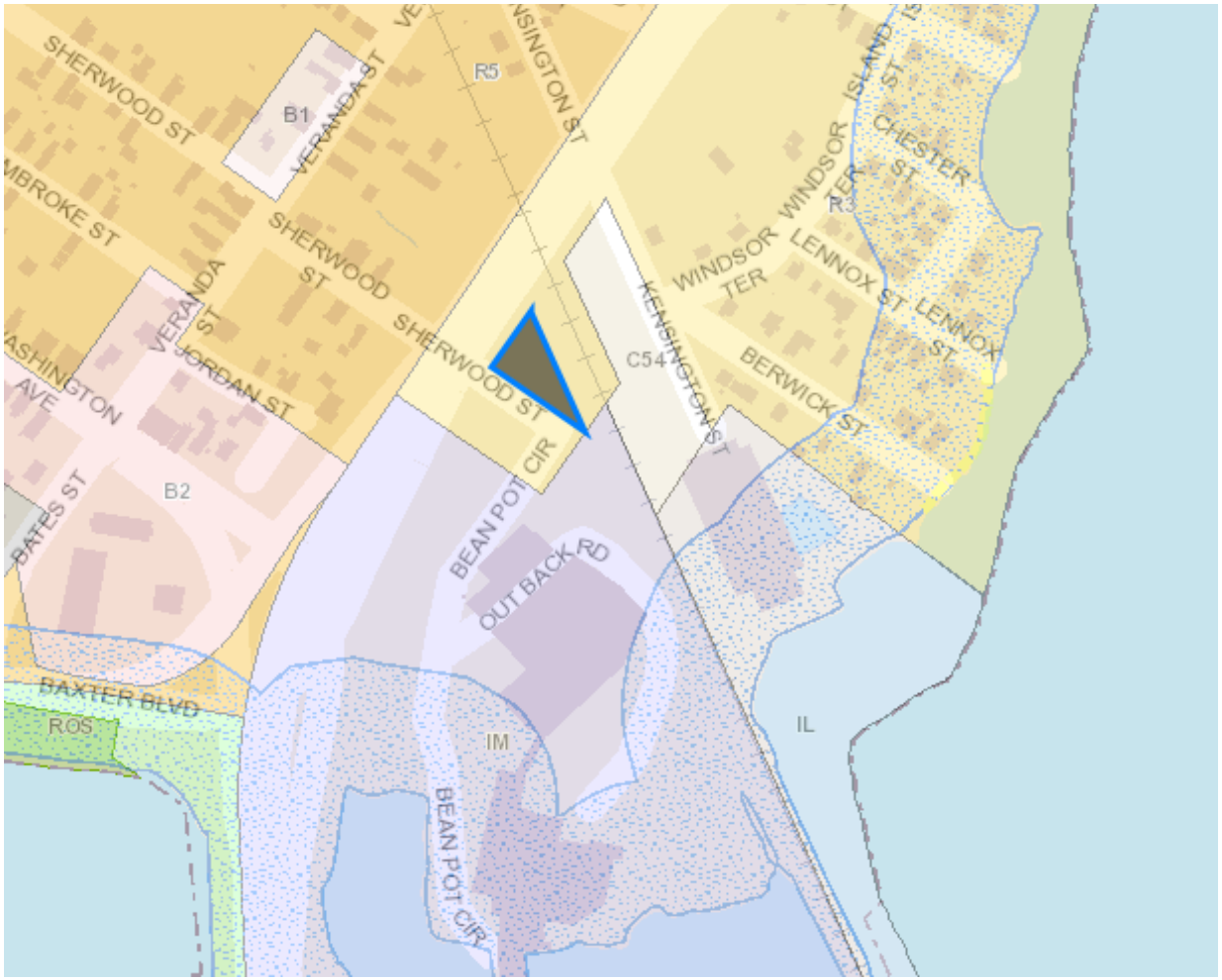
Current Zoning Classifications: R-3; I-M

Proposed Zoning Classifications: B-5; I-M

Property Size : 12,870 square feet

Area of Property to be Rezoned: 10,675 square feet

43 Sherwood Street (429 E003)



Owner: State of Maine

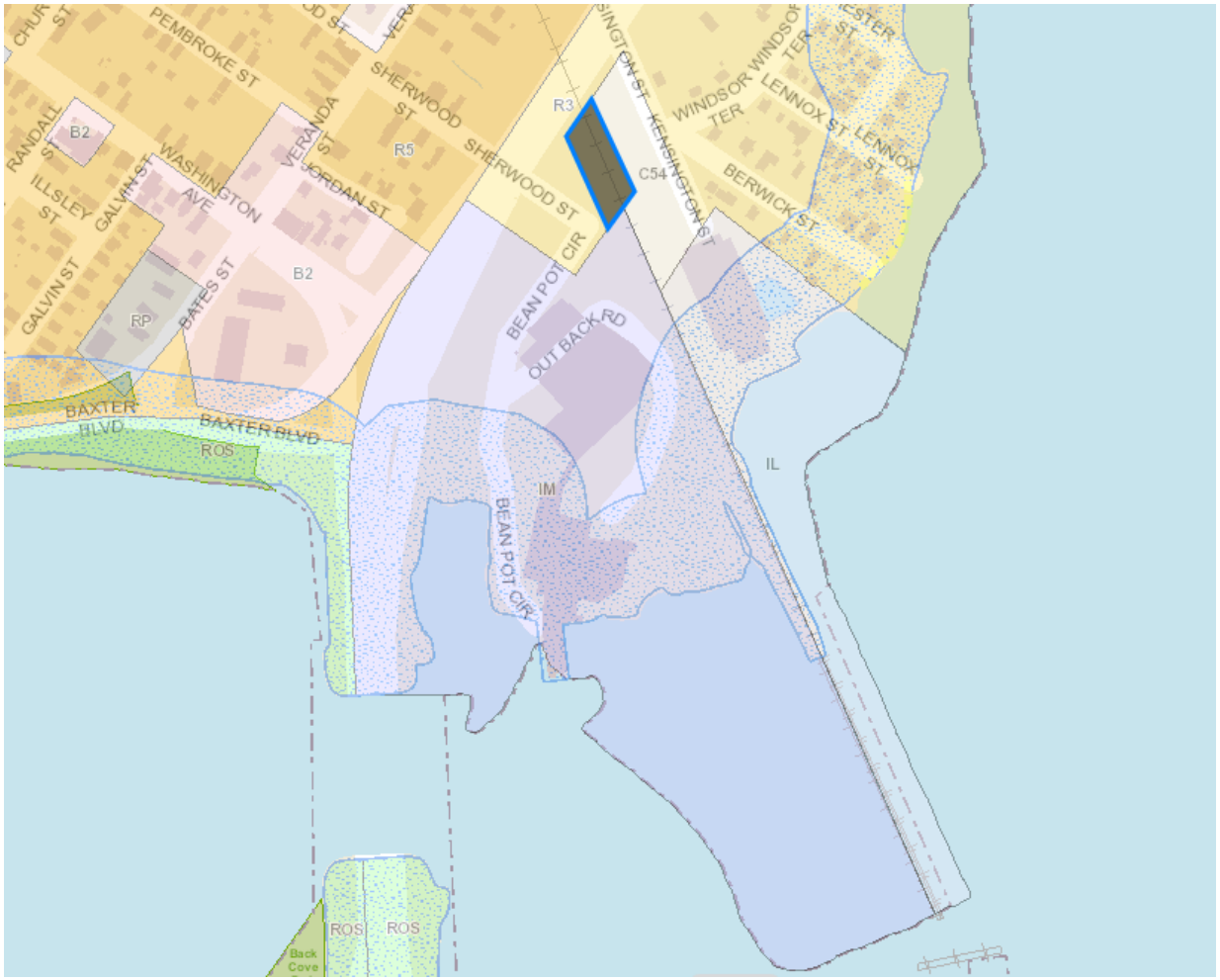
Property Size : 14,810 square feet

Current Zoning Classifications: R-3; I-M

Area of Property to be Rezoned: 14,810 square feet

Proposed Zoning Classifications: B-5

PART OF 430 X002



Owner: State of Maine (Rail ROW)

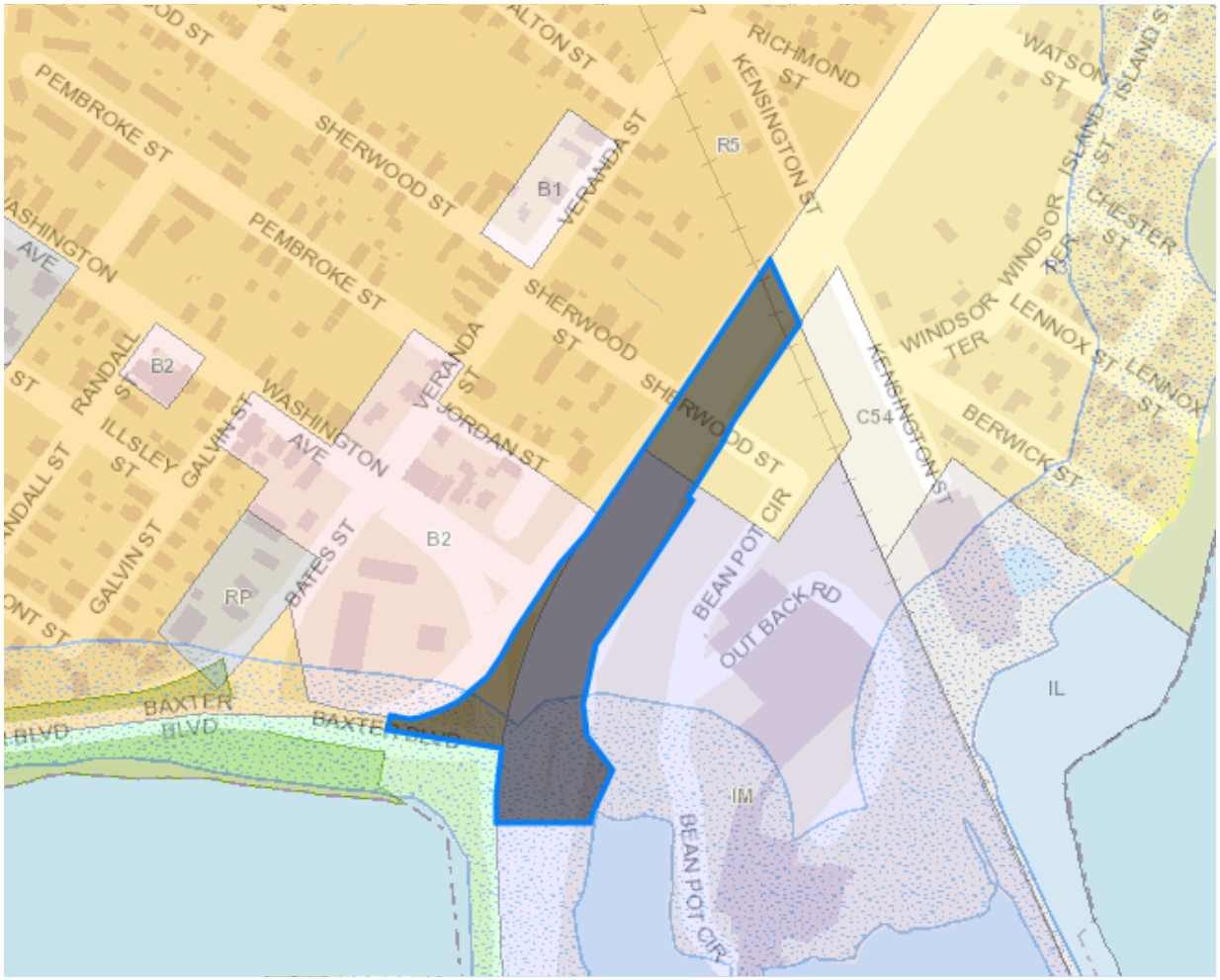
Current Zoning Classifications: R-3; I-M; C54

Proposed Zoning Classifications: B-5; I-M; C54

Property Size : 216,137 square feet

Area of Property to be Rezoned: 25,836 square feet

PART OF 429 X001001



Owner: State of Maine (I-295 ROW)

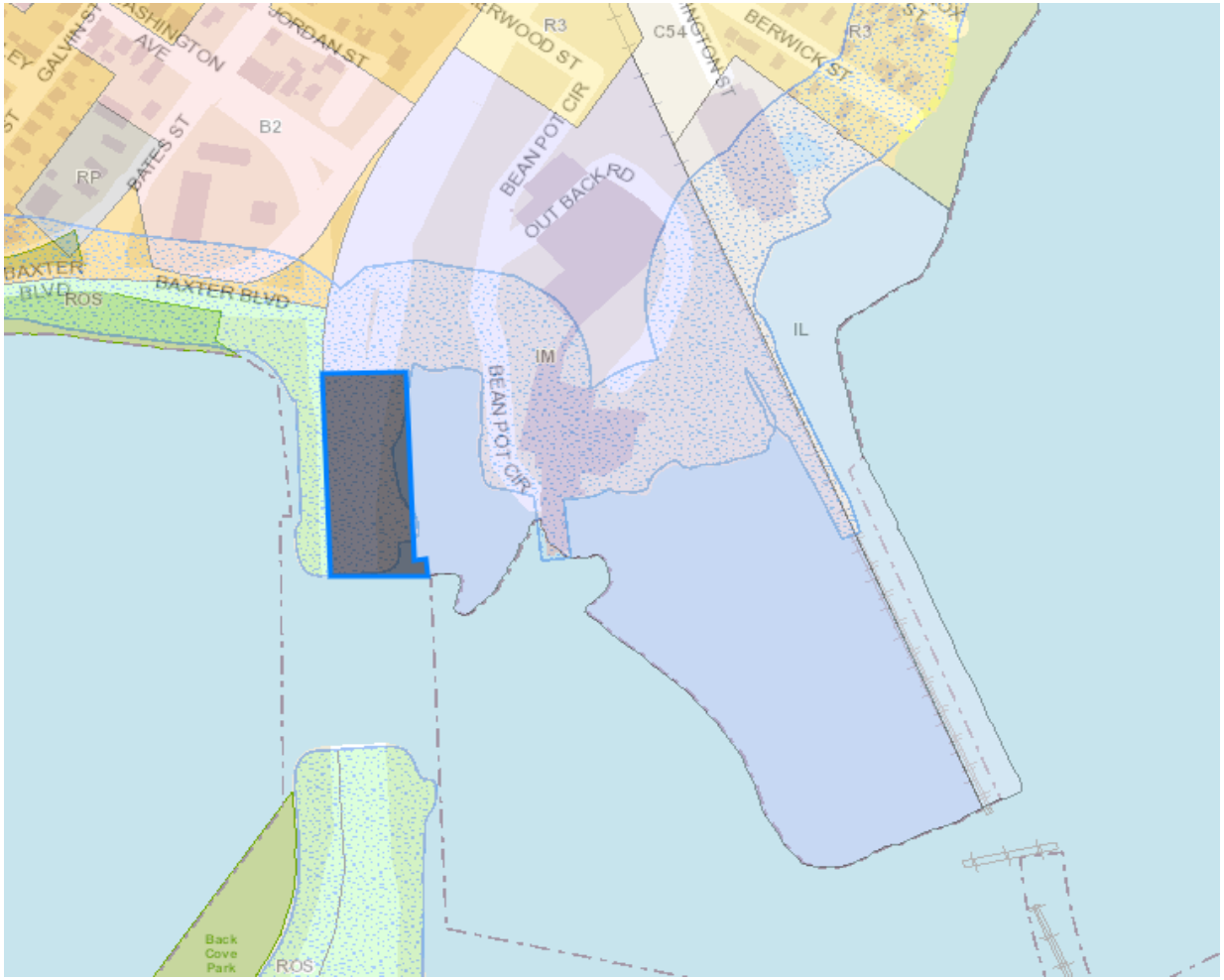
Property Size : 216,137 square feet

Current Zoning Classifications: ROS; R-3; R-5; B-2; I-M

Area of Property to be Rezoned: 25,836 square feet

Proposed Zoning Classifications: ROS; R-5; B-2; B-5; I-M

PART OF 440 X001



Owner: State of Maine (I-295 ROW)

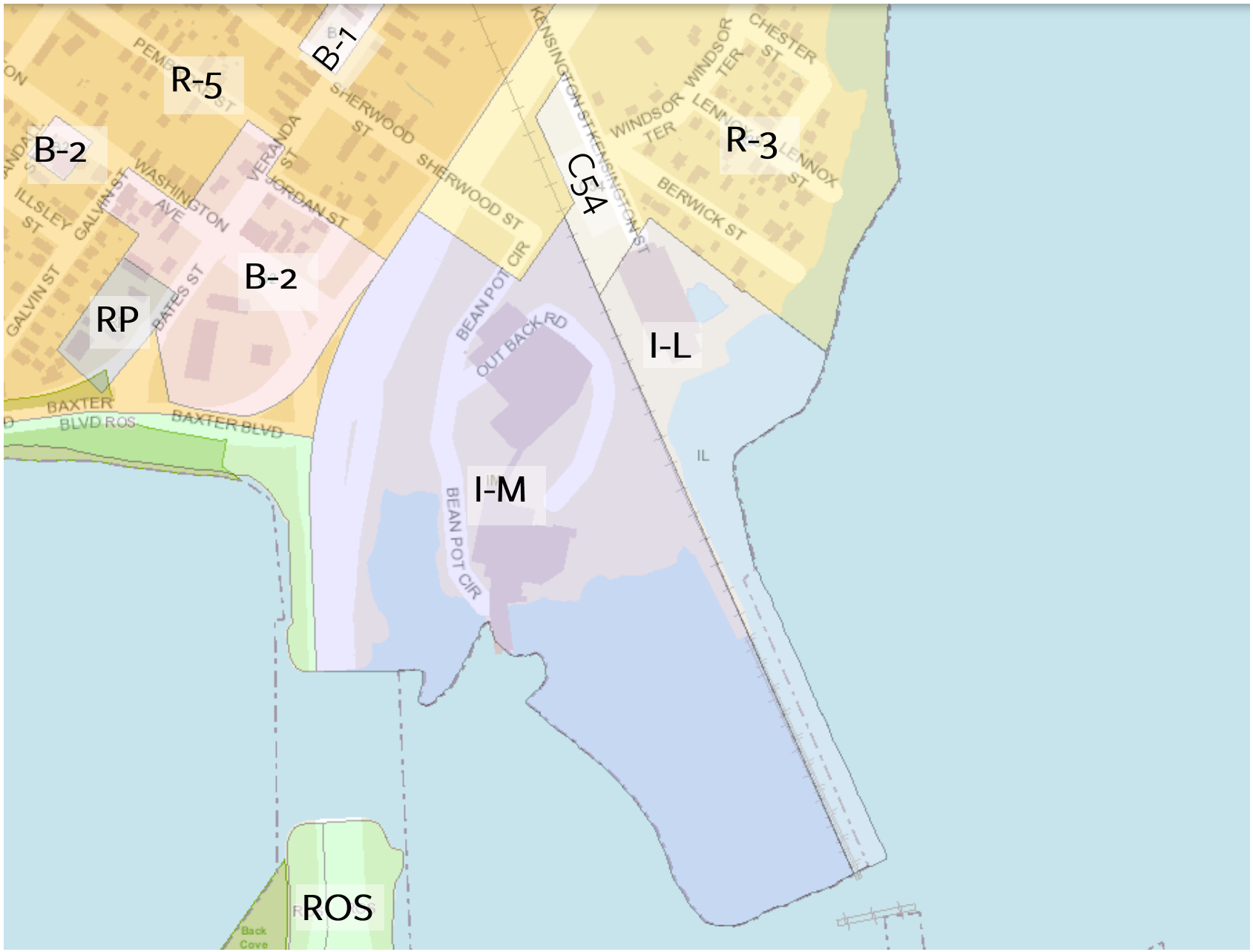
Current Zoning Classifications: ROS; I-M

Proposed Zoning Classifications: ROS; B-5

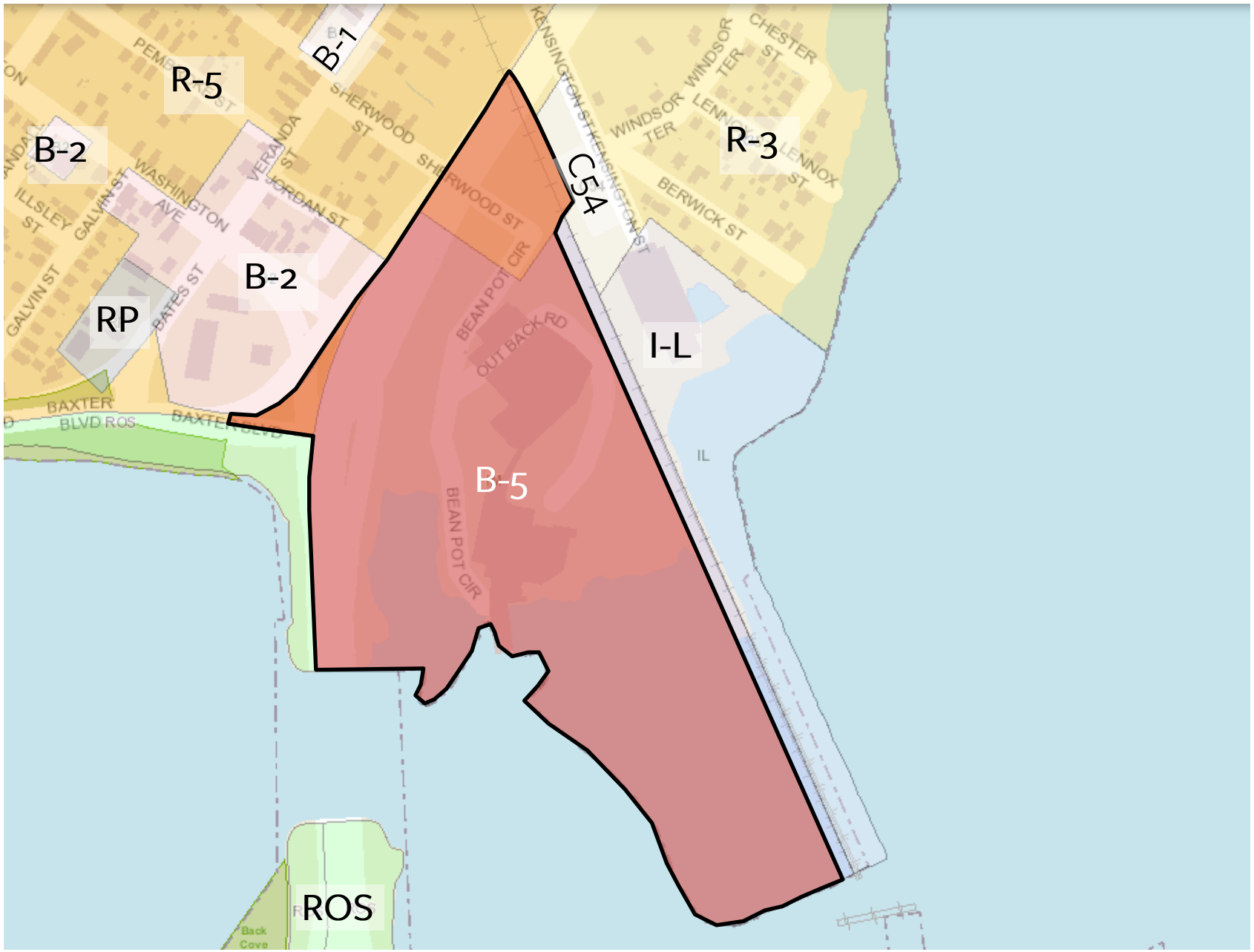
Property Size : 680,347 square feet

Area of Property to be Rezoned: 98,891 square feet

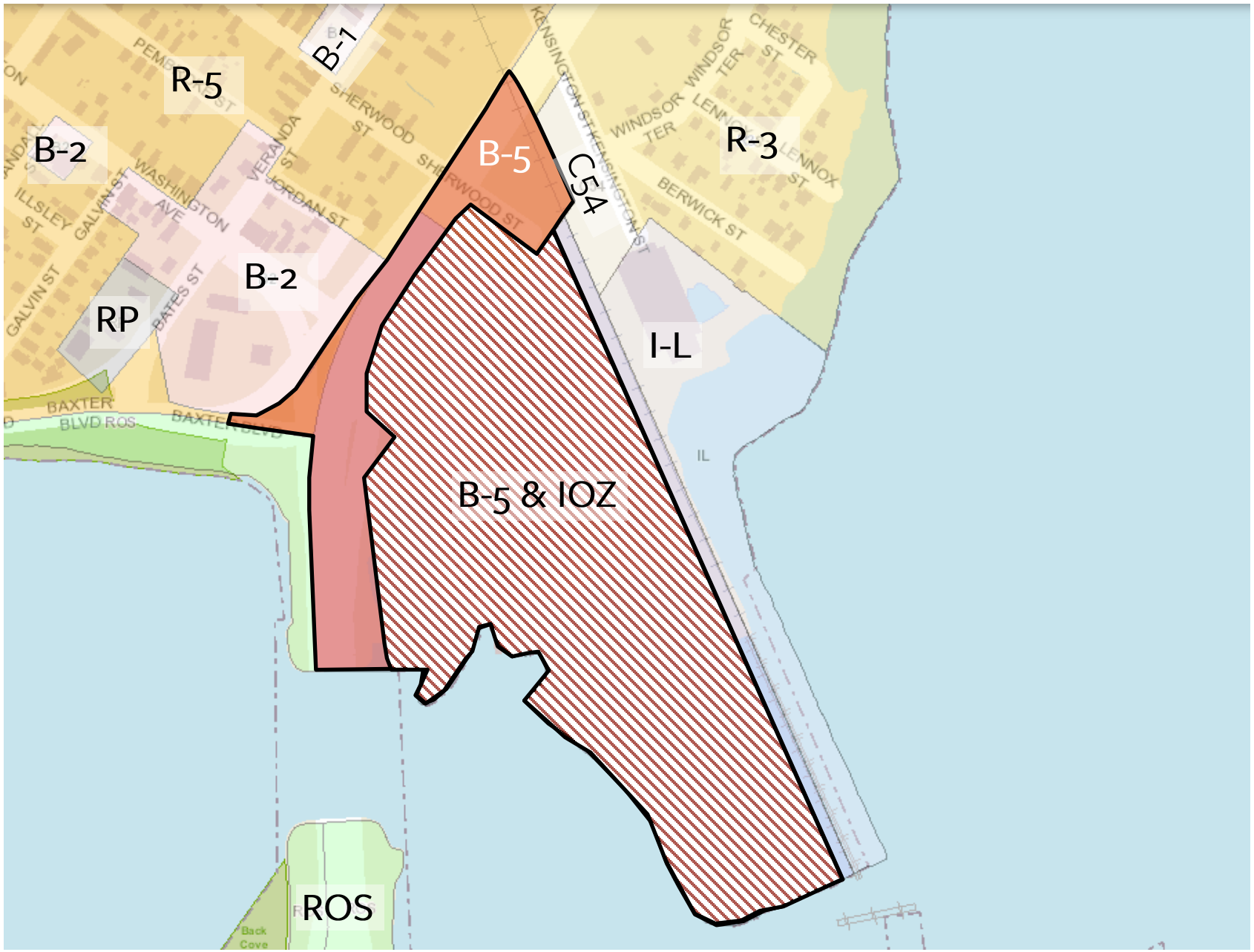
Current Zoning



Proposed Zoning (Not Including IOZ)



Proposed Zoning (Including IOZ)



Proposed B-5 without IOZ

Proposed B-5 & IOZ

IDEALS
Initiative for Digital Engineering and Life Sciences

Charles E. Hewett, Ph.D.
Executive Director

chuck.hewett@ideals.org
207.664.3427 cell

Att. A

June 6, 2022

Zachary Powell, Planner
City of Portland
389 Congress St.
Portland, ME 04101

RE: The Initiative for Digital Engineering and Life Sciences
Neighborhood Meeting Information

Dear Zach:

On behalf of The Initiative for Digital Engineering and Life Sciences (IDEALS), I have enclosed the required information pertaining to our two formal Neighborhood Meetings held prior to and following submission of our application in accordance with Section 8.5.3(B) of the Land Use Code. The meetings were held on November 18, 2021 (23 attendees) and April 6, 2022 (47 attendees). Although the Code only requires that abutters within 500 feet of the project be notified of the public meeting, we expanded that radius for the second meeting and mailed over 1700 meeting notices.

In addition to the required neighborhood meetings, we have also held informal meetings with the neighborhood that we have called "Roux Campus Round Tables." These meetings were each also noticed to over 1,000 property owners and tenants. To date, we have held four Round Table meetings, for a total of six public meetings regarding our application. We were able to hold the April 6th meeting in public, but the other meetings have been held via Zoom, due to public health concerns. The first Round Table was held on December 14, 2021 and we had 36 attendees from the public; the second was held on February 1, 2022 with 44 attendees from the public; the third was held on March 23, 2022 with 44 attendees; and the fourth was held on June 2, 2022 with 50 attendees.

Please let us know if you have any questions or need additional information.

Sincerely,

Charles E. Hewett, Ph.D.
Executive Director

THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES
PROPOSED INSTITUTIONAL OVERLAY ZONE FOR THE ROUX INSTITUTE
PRE-APPLICATION SUBMISSION NEIGHBORHOOD MEETING
November 18, 2021

The Neighborhood Meeting was held via Zoom Webinar, beginning at 6:30 pm and lasting approximately one hour. Twenty-three members of the public were in attendance, as well as eight representatives of the applicant, IDEALS.

The public comment and questions are summarized below. Major areas of focus included traffic, construction impacts and sustainability.

- I am with the Laborers International Union of North America. This is a big opportunity for construction in this town. I'd like to hear more about the employment opportunities for our union workforce, in terms of construction and environmental work.
- I am so excited that this institution has chosen our neighborhood. I live behind the Martins Point Bridge. We knew it would become something other than the Bean factory, and we are thrilled it's you. There is a big construction project on Veranda Street. Part of that is a multi-use pathway, from the Martins Point Bridge, possibly to connect to Back Cove. Have there been any discussions about connecting into that short span? MDOT had a plan to connect but it never came to fruition. It would be a big deal for those of us nearby.
- I was just wondering about the bridge at Kensington Street, and the rail and trails. It would be possible to have a walkway, but the trail takes a steep drop. That path is supposed to be done, but the MDOT has not completed it. As an alternative commuter, I want to know if you are invested in that? The connection to the rail/trail has not occurred.
- We own one of the two multi-families on the street from Veranda to Sherwood. We think it's wonderful to repurpose this facility. We have concerns about access on Sherwood Street, which is very narrow. And we are also concerned about the duration of construction for our tenants.
- I am a neighbor and a data scientist for one of your partner companies, and very excited about what the Roux Institute means for Portland. Veranda Street can back up a lot from Washington Ave traffic.
- I am really grateful to be a part of this conversation. I'd like to recognize that I'm most impressed that you are going above and beyond what is required for public engagement and planning the roundtables (Roux Campus Roundtables) to make sure people are heard and their input is requested. Being open and honest is very refreshing. There is a lot of excitement, about the Roux Institute potential for education and the city. Hopefully we can get as many residents and businesses as possible to participate.
- How are you going to build the physical infrastructure with respect to climate change. We all know the flood zone figures will be changing.
- What will the area lighting be? We already have the lights from Rt 295.

Neighborhood Meeting for the IDEALS Roux Campus Project
Thursday, November 18, 2021
Via Zoom

First Name	Last Name	Email	Address	City
Christopher	Bruni	chrisbruni111@gmail.com	32 Lennox street,	Portland
Nancy	Olmstead	nancy_olmstead@hotmail.com	14 Berwick St	Portland
SA	Scott	shaesby@gmail.com	100 Kensington St.	Portland
Cheryl	Leeman	cal4161@yahoo.com	37 Savoy Street	Portland
Brian.Harris		BRIAN@MAINEYACHT.COM	100 Kensington Street	PORTLAND
Denise	Kaserman	dkaserman@me.com	4 Country Lane	Falmouth
Julie	Carling	captainjulie225@gmail.com	81 Sherwood St	Portland
Jason	Shedlock	jshedlock@LNEROF.org	93 High Street #303	Portland
Jeraldine	Herrera	jeraldine.herrera@powereng.com	45 Harpswell Rd	Brunswick
Mike	McGuigan	mmcguigan@nasrcc.org	65 Rainmaker Dr	Portland
Michael	Flaherty	michaelflaherty58@yahoo.com	45 Berwick St.	Portland
John	Napolitano	johnlocal716@gmail.com	86 Walnut Hill Rd	N. Yarmouth
Justin	Desmond	jdesmond@iupatdc35.org	DC 35 Member Representative	DC 35 Member Representative
Patrick	Carroll	pcarroll@tcco.com	218 Eastern Promenade, Apt #4	Portland
Adam	Parys	aparys@tcco.com	177 Paradise Road	Bethel
Jaime	Parker	jaime@trails.org	305 Commercial St	Portland
Kathy	Spiegelman	K.Spiegelman@northeastern.edu	360 Huntington Avenue	Boston
Grant	Provost	gprovost@iwlocal7.org	131 spring streetSuite 2C	Portland
Aura	Russell-Bedder	arussellbedder@gmail.com	8 Arcadia St	Portland
Robert	Burr	r.burr@iuoelocal4.org		
cheri	juniewicz	cj@maine.rr.com	38 Bismark St	Portland
Andrew	Zarro	azarro@portlandmaine.gov	389 Congress St	Portland
Paul	Goodrich	paulgoodrich@yahoo.com		

THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES
PROPOSED INSTITUTIONAL OVERLAY ZONE FOR THE ROUX INSTITUTE
POST-APPLICATION SUBMISSION NEIGHBORHOOD MEETING
APRIL 6, 2022

The Neighborhood Meeting was held at the Ocean Avenue School, beginning at 5:30 pm and lasting approximately two and a half hours. Forty-seven members of the public were in attendance, as well as eight representatives of the applicant, IDEALS.

The public comment and questions are summarized below. Major areas of focus included traffic, parking, proposed uses, and scale and height of buildings.

- When did you first become interested in buying this property?
- When do you plan to break ground?
- Will there be blasting?
- We haven't talked about the new construction on Dalton Street, a large apartment complex with 48 units, that will empty out onto Sherwood Street. And the school is also growing, both of which will increase pedestrian and vehicular traffic. I have concerns about all the additional traffic. It's pretty heavy as it is. I want all of it to be taken into consideration.
- How would the hotel add to traffic concerns? There's one way in and out. I drive on Sherwood Street twice a day. Is there secondary access? Are there any traffic predictions?
- Do you have data about the current use of cars at the Roux Institute?
- The height and scale of the buildings do not respect the neighborhood context.
- What will stop people from parking in the neighborhood?
- There is a lot of missing information – wind studies, shadow studies. These are missing from your IDP.
- What percent on campus will be using the hotel and what will be outsiders?
- I am conflicted on this project. While it seems like just what this city needs, no one wants an industrial site in their back yard. How will it change access to the water? I am also concerned about increased traffic.
- We are concerned about traffic as there is only one egress. We think what you say you will do about the traffic (turning lane, etc.) is unrealistic. I suspect you have a backup plan we do not know about. I don't believe the traffic will only be impacted by 10
- Your plans go far beyond what is needed for an educational technology center. You are a developer. You wouldn't be developing this area if there wasn't a profit.
- I don't trust that one hotel will be enough.
- I have friends and family who have had to move out of Portland, because working class people can't afford to live here anymore. We feel you are taking something symbolic of Portland and replacing it with something that has gutted other cities.

- Maine Med has a micro bus system that maybe you could partner with. And consider a satellite parking lot.
- Do you have an estimate of trips in and out of Sherwood Street? How many cars will be coming and going?
- At the last meeting you had a drawing of ideas for Veranda Street. Do you have one for Sherwood?
- This is a nice use of the space. You guys are being considerate. However, the large scale of your plans doesn't seem appropriate for that space.
- I'm excited about your vision but I am very concerned about the traffic and the scale of the project. We have a quiet neighborhood and what you are proposing is going to completely change it. I don't know who came up with the 10% traffic increase, but if the study was done from May-October, it would be much higher. The traffic just sits there.
- We are working on bringing battery electric train power, from Portland to Lewiston. This might alleviate the serious traffic impact on not only this neighborhood, but the climate. This is a solution that is environmentally friendly and economically feasible.
- We have a number of questions that you say are in process, undetermined, etc. It makes us a little nervous that you are pursuing maximum zoning flexibility before you figure those things out.
- As a result of the study, is there a bottom line where the City says "no" to Sherwood Street, that this is not going to work for IDEALS?
- What is the tax gain for a non-profit in this location?
- What is the current waterfront access for the neighborhood? How will that be impacted? How is the neighborhood using that waterfront right now?
- What was your impression of our neighborhood when you were there? Did you notice the noise? As our neighbor, we want to know that you care about our lives and our homes.
- Human behavior being what it is, people aren't going to use public transportation. Have you considered the symbolic impact of building on this property? It represents Maine, as people drive past on I-295. What gives you the right to put the Roux Institute there?
- I want to compliment Roux for meeting with me. I'm offering an alternative for public transportation – Micro Rail. Metro has a long history of keeping people waiting. Have you looked into possible pollutants inside and outside the B&M building?
- At times it sounds like it's going to be a conference center maybe being supported by an education facility. At what point are you able to scale back the project if you're not able to overcome some of the objections? Would you continue with the project if the only thing that was approved was the Roux Institute? Would Phase 1 just be for the Roux Institute, hotel, housing, etc.? And Phase 2 would be to expand all that?
- What advantages are you going to bring to the neighborhood?
- Will you want more space than what you have right now?

- The process I have seen you display in these round tables, has been more transparent than most development projects. You're doing a good job.
- Have you guys purchased other land or intend to?
- What is the % of domestic/international learners?

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

Neighborhood Meeting Sign-In Sheet

Wednesday April 6, 2022

Ocean Avenue Elementary School - 150 Ocean Ave, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Developer and Consultant Team in Attendance:

Name:	Email:
Chuck Hewett IDEALS	
Sam Reiche IDEALS	
Elizabeth Swain IDEALS	
Jenn Conley VHB	
Mary Costigan Bernstein Shur	
Jamie Broder Bernstein Shur	
Barry Sheff Woodard & Curran	
Denise Cameron Woodard & Curran	

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IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Members of the Public in Attendance:

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IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Members of the Public in Attendance:

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IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Members of the Public in Attendance:

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Wednesday April 6, 2022

Ocean Avenue Elementary School - 150 Ocean Ave, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Members of the Public in Attendance:

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IDEALS
Initiative for Digital Engineering and Life Sciences

Charles E. Hewett, Ph.D.
Executive Director

chuck.hewett@ideals.org
207.664.3427 cell

October 6, 2022

Att. B

Zach Powell, AICP
Senior Planner
Planning & Urban Development Department
City of Portland
389 Congress Street
Portland, Maine 04101

Dear Zach:

Six public forums have been held between December 2021 and June 2022. In addition to the two required Neighborhood Meetings, representatives from the Roux Institute at Northeastern University and IDEALS conducted four neighborhood engagement forums, entitled Roux Campus Roundtables. City staff requested submission of meeting notes from these roundtable meetings. Enclosed please find meeting notes for the four Roux Campus Roundtables held to date, including sessions on December 14, 2021, February 1, 2022, March 23, 2022, and June 2, 2022.

Notices for the Roundtable meetings were sent to over 1,700 households and included both owners and tenants. Emails were regularly sent to commenters offering a personal meeting or calls to follow up on the input or questions received. It was as a direct result from public feedback received at these sessions that the project was downsized by 27%, almost 500,000 square feet, and that heights were reduced by 19%.

In addition to the Roundtable meetings, extensive effort has been made to talk to and/or meet with a wide variety of interested individuals and groups. The outreach began in the fall of 2021 after announcing the selection of the B&M project site. Neighbors, both commercial and residential, were at the top of the list with a particular focus on those neighbors closest to the project site. Soon thereafter, meetings commenced and have continued to this day with neighbors, local businesses, numerous rail and trail organizations, bike and pedestrian advocacy groups, Greater Portland METRO, recreation and parks organizations, historic preservation interests, waterfront organizations, economic development interests, state representatives, climate and sustainability organizations, and neighborhood associations across the city. The Info@rouxcampusportland.org link on the project website has also generated requests for meetings, all of which have been fulfilled.

Most recently, the project team and the Roux Institute hosted a publicly advertised Open House, where the public was invited to explore the site and see renderings and site plans in their proposed surroundings. It also provided them the opportunity to speak candidly with various project team members, faculty and staff from the Roux Institute, Roux Institute students, and other neighbors.

IDEALS
Initiative for Digital Engineering and Life Sciences

Charles E. Hewett, Ph.D.
Executive Director

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Over 130 guests came to the Open House, and there were many great discussions that enabled us to understand their ideas, and hopefully also helped them understand the project vision.

All of this input, through dozens of meetings, site visits, and the public Open House has resulted in micro and macro level changes that make the project a greater reflection of the values of the Portland community and nearby neighborhoods. We have forged relationships with interested organizations, such as bike/ped, parks/recreation, and travel/transport, that will help guide elements of development going forward. We are grateful for the time and interest so many have invested in making this the best possible campus for the Roux Institute, the neighbors, and the City of Portland, and we look forward to ongoing communications and input.

Sincerely,

Charles E. Hewett, Ph.D.

Enclosures: RCR #1 Meeting Notes – December 14, 2021
RCR #2 Meeting Notes – February 1, 2022
RCR #3 Meeting Notes – March 23, 2022
RCR #4 Meeting Notes – June 2, 2022

THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES
PROPOSED INSTITUTIONAL OVERLAY ZONE FOR THE ROUX INSTITUTE
POST-APPLICATION SUBMISSION

Roux Campus Roundtable #1

December 14, 2021

The first Roux Campus Roundtable meeting was held on December 14, 2021, via Zoom. The meeting began at 5:30 PM with a welcome from Chuck Hewett and introductions of the IDEALS team, which numbered 10, and Chris Mallett from the Roux Institute. 36 participants were in attendance at the outset.

Following a PowerPoint presentation from IDEALS, questions and discussion began at 7:00 PM, focusing largely on the site, project scale (pro and con), traffic routes, and the institution applying for an IOZ.

- I live off Veranda Street. Some of my major concerns are road access. Will the project start after the Veranda Street changes are completed by MDOT? How will your project impact local internet service and traffic? Do you see local jobs created and will this impact the rail line? B&M pays a good deal in property tax. How will this non-profit refund the city going forward?
- I work for Bates so was wondering whether the internet access might be impacted in the neighborhood. I'm also interested in local jobs, are you expecting increases?
- I support any height you want. What is the tallest height you are going to look for?
- Are you looking at potential secondary access so there is not just one road?
- It could be more than a bike path, it's a multi-modal path for bike and pedestrians. I'm involved in the city's bike and pedestrian advisory committee and will be following this project. Your proposed trail would mirror what is on the opposite side of the bridge; has there been any contemplation of hanging a multi-modal path off the south side of the bridge so you could go from one side to the other? There would be significant support for that.
- What about the railroad bridge, what is your thinking about that?
- There is a path toward Falmouth but it's so disjointed and it ends as you get to the Veranda Street off ramp. We advocated to move that off-ramp to allow for continuation of the path into a new park site created by the Veranda Street project. I hope you advocate for that to be done so you have that access between the Roux Campus and Martins Point.
- I personally support your project and look forward to working with you. We encourage not building a parking garage, but it will be well received that you will make it expensive to park and encourage other means of transport. It's good Northeastern University will subsidize METRO ridership for students. They understand the value of public transportation because they are from an urban area (Boston).

- You say you had a public meeting on November 18. I live two blocks away and received no notice, who did you notify?
  How many live within 500'?
- I can see your site from my second floor and would have appreciated notice.
- Thank you for the presentation. It looks very interesting. I realize you are in a conceptual phase. Your concept looks suburban. I have zero problem with tall buildings because you can fit more people in them, but towers in a park seems suburban. Will you have a mix of buildings, like tall buildings with shorter buildings like in the old port and other urban spaces?
- Brick is always a good way to go. Are you planning to eliminate any possibility for the rail later?
- I also support the trail across Tukey's Bridge. Many people in Portland see another trail as a necessity. Crossing Washington Ave is a challenge. On your side of Tukey's Bridge, there are still some elements of the sidewalk that could be created. The city often makes a developer contribute to traffic related improvements. Would you consider directing your financial contribution to be a bike-pedestrian trail on the other side of Tukey's bridge, the southeast or northwest side?
- I am also very happy to see the trail on the East Deering abutment of the bridge that you are planning. Your numbers of people who could arrive on foot or bike could be increased by a trail on the other side of Tukey's bridge.
- I think you have probably done a lot of viewing of the surrounding area because only inviting meeting attendees 500' from the site is a problem. This is good for Portland. I live in Windsor Heights. How do you plan on engaging neighbors in the design who are used to their quiet way of life?
- As a commercial real estate developer, I am excited about this project. I'm working on the rail project, and we want to know how you feel about the rail line. We have tried to reach out to you. I am surprised you are not considering use of the railroad to reduce car access. The rail line can help the climate – I haven't heard that word tonight. I wouldn't want to work in that neighborhood with the number of cars coming in. There is a solution and it's right on your property.
- I think the Roux Institute is doing great things. I took a class there last semester. I have a home on Veranda Street with a slight view of the water that will probably be blocked. I'm wondering how this will benefit us and our tenants?
- Change is a good thing but it's also difficult. For those who don't speak English what can you do?
- I read an article in the PPH that said East Deering should be careful because the peninsula had become so saturated and East Deering was the next popular area. I live on Randall Street so we are seeing more development, such as 18 row houses on city land. In the last three years you can't come off Randall and take a left on Washington Avenue easily. It's changed a lot. Will this be a traditional college or university campus with daytime traffic? Now I'm hearing information about bars and restaurants etc., so should this neighborhood be prepared for 24:7 type of activity? And if so, I agree with all the concerns about traffic. Light pollution will be a main concern with tall towers. I encourage you to remember that

we aren't moving the Old Port to this neighborhood and if that is the goal you can anticipate some opposition from those of us who now live here and have been paying taxes.

- I hope so too. My concern is what is in it for East Deering? I get that we are running out of space in Portland. We want to make sure we maintain that character.
- I raised my family in East Deering and was honored to serve Portland in the Legislature. I think this project is deeply out of scale with the neighborhood. It is very selfish to come in with high buildings that will impact neighbors. You should work closely with the neighbors to find something that is more appropriate. Nothing restricts you to communicating to only those within 500'. I would be very interested in understanding the financials. What is the education piece and what is not? It's odd to have faculty stay in a hotel, is that how you are paying for the hotel? Who do you work for? You say you don't work for Northeastern University. We have conflicting messages. There were criteria that led you here, so I'm feeling concern about how it's presented, like it's fully finished without adequate input.
- Are you authorized to speak on their behalf?
- It's an iconic site where people can have views and your plan will limit that, which is problematic.
- With global warming, the lower portion of the B&M factory was a concern. Is this a problem?
- Is the elevation 9' above MSL?
- Will there be any kind of tours or public access before demolition? I'm glad to see the B&M building preserved. Is that a requirement or a preference?
- As someone who was born in Portland and bought a house here, I think people will respond much more positively than what you have heard tonight. I would challenge people to think about what other use it could be, like luxury condos and we know how they are (not) concerned with public input.
- We live at the east end of Sherwood Street. I want to echo the comments that we would rather see an educational situation come here rather than luxury housing or industrial space. But I'm concerned that the Sherwood Street entrance is not a good idea. 40-80 employees use it now, but it could be over 2,000 people using it. We are only 15 – 20 car lengths from exit 8. I'm not convinced that it can handle it, despite what your consultant said. Those of us impacted on Sherwood and Veranda St would like to meet with you to map out what you are thinking. A turning lane will eliminate parallel parking that the residents depend on. This is a sleepy neighborhood; kids could play street hockey when it's not a commuting time. That is going to change. Our community is underserved by public transportation. The #7 bus goes from downtown where no one can afford to live to Falmouth, and back again. Most of your campus workers probably won't live downtown and will have to take their cars. A neighborhood meeting should be set up.
- I echo the statement about the traffic. I would love to meet and chat about this. Did you say it will be changed to a B-5 zone?

The meeting ended at 8:09 pm

THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES
PROPOSED INSTITUTIONAL OVERLAY ZONE FOR THE ROUX INSTITUTE
POST-APPLICATION SUBMISSION

Roux Campus Roundtable #2

February 1, 2022

The second Roux Campus Roundtable meeting was held on February 1, 2022, via Zoom. The meeting began at 5:30 PM with a welcome from Chuck Hewett and introductions of the IDEALS and Roux Institute team, which numbered about 15, including Chris Mallett and Margaret Angell from the Roux Institute. 44 participants were in attendance at the outset.

Following a PowerPoint presentation from IDEALS, questions and discussion began at 6:12 PM, focusing largely on project scale and traffic.

- We live on Veranda Street between Sherwood and Washington Avenue, so we will experience 100% of the traffic, including construction traffic. I'm an architect, so I understand where you are coming from. What is the gross traffic you anticipate, and how much might be shifted to alternative transportation? What requirements must you meet for your traffic and TDM report. Have you thought about an exit off Washington Avenue directly? I think you said earlier that you didn't think that would be safe, but it's the same distance to the Washington Avenue intersection.
- In terms of space for parking, there are a lot of under-utilized potential parking places, and perhaps you could consider restoring some of the rail for commuting from a satellite lot to the campus.
- It is a large site and I appreciate the need for green space and redevelopment. The ground is high on the site which will help with sea level rise. The 210' building area is a concern. The other areas are tall but reasonable. If you increase the height in the other areas, you could lower the 210'. Is the pier disappearing? I hope not. It could be a real draw for the people living there and visiting. I suggest having white roofs not black, to lower heat reflection. The railroad is not narrow gauge in that area. I had hoped for a restaurant on rail cars when I first moved here and saw the site. Overall, I am a proponent. What you are doing is wonderful, and I look forward to biking through there in the future.
- I live on Kendall Street beyond the Maine Yacht Center. I see this has great potential for East Deering, but I have concerns about the heights. Our neighborhood is zoned as R-3 "medium density development with single family homes, unless grandfathered, with structure height of 35'. Your buildings could be overwhelming and shadow our neighborhood.
- Could you give us more detailed information about the draft application? What is the zone change you are looking for and could you provide detail about the Industrial Overlay Zone? It's difficult to participate in a discussion and have to react on the spot. It would be helpful

to have that information on the website, so the neighborhood would have more transparency.

- MMC's regulatory framework is pretty specific with regard to dimensions in the IOZ. Will those types of specifics be in your application? In the code there are dimensional standards. There are not a lot of specifics in the B-5 zone. In asking for the height exception, how does that process work? I personally like the idea of developing this into an educational campus, and a home for the Roux Institute. But, I, along with neighbors have a lot of concerns about the massive scale and height of this development. There will have to be concessions to accommodate the height you want. This is not in keeping with what we have in the city on educational campuses. UNE and USM have kept their facilities in scale with the neighborhood. There must be a way to do what you want with a smaller version of your proposal. This will have a profound impact on our neighborhood. The proposed commercial uses like a hotel don't seem to fit the requirement of the IOZ, for being substantially auxiliary to the educational institution. It's hard to say a hotel is auxiliary to the Roux Institute. It's important that the information be uploaded prior to the meeting. We need more detailed information.
- I commute from Presumpscot to Veranda on out toward Falmouth. Does your project pay for improvements to the entire intersection there or are the taxpayers going to be responsible? Will you be filling in the submerged lands or building on them? Will there be any increased public hazard from the labs?
- I have a lot of questions and remain puzzled about the interplay between the Roux Institute and the entity that owns the property. What percentage of the property is dedicated to educational purposes? I remain concerned about the height and size of the buildings. Why is a waterfront property necessary for this institution? I don't get the decision to come in and propose such massive buildings in this iconic location. I am concerned about traffic. I like the idea of satellite lots. The Washington Ave exit is dangerous. Bringing in 2,000 – 4,500 students will add to that. How do you intend to work with the neighbors to design this facility?
- What percentage is dedicated to education?
- I live within the 15-minute walking distance. Will the city take into account all of the development going on in the area, from a traffic perspective? Within 1-5 years there will be a lot more pressure on Exit 8, what we locals call the luge. Also, what about dark sky impacts from the campus, and how much will it be lit at night? I fully support what you are looking to do, but have a concern about the height, and how much is pure institutional vs just developing. As a charter boat captain, I can tell you the buildings will have to be tall to be seen around the western point of the Eastern Prom.
- I have more questions, but how do we follow the rezoning process, and will Veranda Street be widened and what is the tax structure of the development?
- How will we know about the next meeting?

39 participants remained at the close of the meeting at 7:26 PM.

THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES
PROPOSED INSTITUTIONAL OVERLAY ZONE FOR THE ROUX INSTITUTE
POST-APPLICATION SUBMISSION

Roux Campus Roundtable #3

March 23, 2022

The third Roux Campus Roundtable meeting was held on March 23, 2022, via Zoom. The meeting began at 5:31 PM with a welcome from Chuck Hewett and introductions of the IDEALS and Roux Institute team. 43 members of the public were in attendance, as well as 8 representatives of the applicant, IDEALS, and 1 from the Roux Institute, in addition to those making a presentation described below.

Margaret Angell of the Roux Institute was joined by 2 students and 1 Roux Institute Partner, each of whom described their experiences at the Roux Institute.

Questions and discussion followed, focusing largely on transportation and traffic, train service, sustainability and the bean building.

- A passenger train stop could be located right where the circular drive is in front of the Roux Institute.
- Access on Washington and Sherwood are over capacity. The average daily traffic on Tukey's Bridge is the highest in the state. What plans do you have to mitigate the impact on traffic with the 2000+ students and visitors you expect on the Roux campus?
- I appreciate what you are saying, and like bike paths and pedestrian walkways. We've lived here nine years. There is no way to access Portland and points south without going on I-295. Portland has a miserable bus service.
- There is a great deal of concern over the height of the buildings. Can you explain the necessity of those building heights, what is the capacity of the parking garage and is a hotel really necessary?
- How many students are enrolled both online and in person?
- People in the neighborhood are happy you are coming but we want to be able to live together comfortably. I hope we can continue the conversation.
- I was going to ask about the Christmas tree. We've lived here for 30 years. I'm involved with the Portland Climate Action Team. We work closely with the Director of Sustainability in Portland and the Portland Sustainability and Transportation Committee. Our goal is the One Climate Future, which is a combined plan between Portland and South Portland to mitigate climate change by reducing greenhouse gasses. Can you confirm that the Roux campus will be generating its own energy?
- I understand that last 5% could be difficult but you can buy carbon credits.
- At a previous Roundtable it was mentioned there may be a water shuttle, is that still on the table.
- We are really excited you will be coming to our neighborhood, particularly given the access to trails and the water that you will provide. We are proponents of the Casco Bay Trail Alliance. The option to put bike trails on Veranda is great, but off-road options are critical. The Casco Bay Trail would provide that kind of trail access to the Roux Campus, without going on Sherwood. There is a process

at MDOT to move that forward. Have you given thought to how you would participate in that process and support the trail?

- We have reached out to Roux and will connect one of these days. We envision train service from Auburn to behind Eldridge Lumber. Would your developers be willing to meet with us to talk about a train center at the campus? Because our plans are quite advanced, we believe we have a solution to traffic, parking, congestion, climate change, and all the other problems which will certainly come from the 2,000+ parking spaces you are allocating for cars on your campus. I am an environmental warrior, and the automobile impacts from your development will be ungodly. I believe we can elevate that with the passenger train which will be electric or hybrid.
- Congratulations on being our neighbor! Regarding the previous comments, traffic is a primary concern. We live on Veranda at Ground Zero. Thank you for showing that diagram. You mentioned the 10% increase in traffic, which implies there is data being generated. Is there data you can share with us, we are hungry to see this. The scale of the traffic increase in this little neighborhood is huge! It's a mystery to us how you guys are going to be solving the traffic problem.
- You are asking for an IOZ that accommodates the full 20-year development.
- Maybe this has been answered, but do we go through this process with each phase? What about the hotel and the towers, what phase are they in? Has anything changed since your original presentation?
- Will the hotel be open to the public so I can reserve rooms for my family?
- I also want to reiterate what my neighbors said about traffic, especially to note that there are many other related projects going on in the city that will also generate new traffic.
- Regarding the history of the site, I live in west Bayside with a deck off the attic. I enjoyed seeing the smokestack, which is now gone, which the city knew about but didn't involve the public in letting it go. I hope the wharf building doesn't go. It's a critical part of why B&M chose this site, the wharf was an essential part of their operation. Some have said you can't save that wharf building. I don't like that, it feels wrong. You aren't planning on doing much on that wharf, so it doesn't need a lot to maintain the platform. The city has said they aren't going to have an independent analysis. We ask a lot of owners of historical properties, and sometimes their finances are strained. But sometimes those owners have resources, like you do. It would be a gesture of goodwill to preserve the history there, you should pull out all the stops.
- I hope everyone appreciates the irony that I had to upgrade my Zoom on a call about a graduate tech school! I was very much excited about this coming to Portland. As I read through your documents online, it doesn't sound like a plan for a graduate school campus, but like a plan for a small village, with a priority to invite the general public to come and recreate. I'm not sure why it's critical for the key players to be on site together. Other campuses function ok without a hotel. I don't see other campuses make kayak and paddleboard rentals either. Why do you need the general public so involved? Wouldn't lowering that priority solve a lot of problems. And thank you for taking my question.
- Sam just admitted that this property isn't accessible to the rest of Portland. We are in a bottleneck. What about getting Maine students into the Roux Campus. It sounds like you have at least 15 students from Maine (one from each county).

- That was a very satisfactory answer, about your work for good. There was no hiding of details, such as we are all frustrated about. I know there is survey work being done on Sherwood Street. (NOTE: IDEALS notified Ben and others in advance of the survey work.)
- I live on Berwick Street, which is the street next to the marina. I walk all over the neighborhood, including on the RR tracks. There is an osprey nest by the trestle. Do you plan on having any impact on that area?
- I contacted Audubon, and they said that development doesn't usually have much of an effect on ospreys. It would be great if that little area could stay as it is. Thank you for your answer.
- What are the options for Veranda Street? Would there be any "taking" of abutting properties, in your plan?
- Your plan didn't show the end of Sherwood.
- You're going to widen Sherwood Street, how would you do that without taking? I think you are in a bottleneck; we are looking for your projections. I want to see the problems addressed now.
- On your diagram, have you done a traffic study of increased traffic? If you need to add another lane on Veranda Street, you will take out the dining room of the Veranda Noodle Bar and the awning of Beal's Ice Cream. I wholly support what you are doing with the Roux Institute.
- Regarding scale and height – there has been a lot of talk about finding the right balance. UNE and USM fit into their neighborhoods in an appropriate way. Your rendering overwhelms the neighborhood, and even the Maine Yacht Center.
- We are happy to have you here but want you to be respectful of us neighbors.
- Thank you, Sam, Jenn, and Elizabeth for our meeting. I need to schedule my plowing around the B&M schedule now, it will be much more challenging with all the new traffic. When plowing and backing out into the traffic, I take my life in my hands.
- I am confused about Sherwood Street, is this just the side you will be on?
- Are you hoping to funnel a lot of traffic through Sherwood onto Morse to get out onto Washington Ave, to mitigate some of the traffic issues?
- Will you pay homage to the factory building? Are you going to keep Bean Pot Circle? I appreciate everyone's sensitivity to how we feel about B&M. I worked there, so did my father and uncles. There is a lot of connection. I am looking forward to the Roux. Thank you.

The meeting ended at 7:36 PM.

THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES
PROPOSED INSTITUTIONAL OVERLAY ZONE FOR THE ROUX INSTITUTE
POST-APPLICATION SUBMISSION

Roux Campus Roundtable #4

June 2, 2022

The fourth Roux Campus Roundtable meeting was held on June 2, 2022, via Zoom. The meeting began at 5:31 PM with a welcome from Chuck Hewett and introductions of the IDEALS and Roux Institute team. 41 members of the public were in attendance at the outset, as well as 12 representatives of the applicant, IDEALS, and 5 from the Roux Institute, in addition to those making a presentation described below.

Students and a faculty member from the Roux Institute shared some vignettes and personal stories for about ten minutes.

The IDEALS team presented 53 slides highlighting the changes proposed for the Roux Campus, in response to public input. Questions and discussion followed, focusing largely on transportation and traffic, sustainability measures, and visibility.

- A passenger train stop could be located at the site.
- I commend IDEALS for the changes, this is a real difference in the level and scale of the project, and I compliment the team on the details included in the presentation. Traffic will continue to be an issue. Signage encouraging people to turn in the opposite direction of where they want to go, confirms that this is anticipated to be problematic. It's encouraging to see IDEALS working on this problem and thanks to the team for sharing the traffic numbers.
- I would like to meet with the architects to discuss how to reduce carbon in the building design.
- I live in the East End. My priorities are carbon footprint, sustainability and bird-safe measures. The WEX building is one of the more lethal buildings for migratory birds and the Roux Building looks so attractive to birds.
- I encourage you to invite your community to an in-person meeting, and even better on the site. Put a tent up and show what you are planning. Some of your traffic numbers, that anticipate alternative transportation modes, are not accurate as to how people in Maine actually get places. Bicycles don't work in the winter. I think what you are doing here is amazing, I don't want to be negative, but I have massive concerns about you fitting into this neighborhood. You found other locations that didn't work out, so you ended up here. This state needs to take account of its working waterfront. The pressures will increase in downtown Portland and the B&M site could have been an alternative for the working

waterfront. This was a really nice presentation, though my Zoom was shut off during the traffic presentation. Please resend me those slides.

- There is a little inlet between the highway and the campus. Do you own that, can you put piers and ramps there? Are you going to remove the existing pier? I'm surprised you aren't building the RI over the water.
- It's great to see the vision. I live in North Deering and am concerned about the traffic. I'd love to be invited to an on-site meeting. Our neighbors in North Deering would like to be invited.
- What percent of current students and staff drive to the Roux Campus vs taking other modes of transportation? You said you would look into it. If you don't meet your goals at your existing campus, how will you meet them in the new one?
- What are the next steps to engage the public? There are so many neighbors who don't use Zoom. Could you offer a hybrid meeting?
- It's important to have the minutes of the meetings in the public record.
- I live at 45 Berwick Street, could you create a diagram looking from the end of Berwick west, to see what would be visible, protruding out from the Maine Yacht Street? You have done a good job addressing the neighbors' concerns, I think it will all work out.
- Thank you to everyone at IDEALS and the Roux Institute for being responsive. This is a massive project for the city and the impacts will extend beyond District 4 where it will live. I appreciate the neighbors working with me, and IDEALS for listening, and engaging with the community. It's been a challenging time to do that. I've been advocating for an in-person meeting on the site. It was very impactful for me when I went there. Tonight is just one step. The June 14 Planning Board meeting is important. There will be a public hearing when staff think they are ready for a vote. There will be many opportunities for all of us to connect. My role is to facilitate that connection for everyone. I am here for anyone and everyone listening. Thank you for this level of collaboration and putting your best foot forward. You don't see that often.
- Thank you, Councilor Zarro. This is an awkward format for such a meeting, and it gives you (IDEALS) an advantage, though you are a wonderful group of people. Covid has created a thing where we are so apart from each other. We need to be in a room. Don't hide behind a computer. You all are great people.
- Every commenter has traffic as an issue. Perhaps one of your traffic scenarios could do an impact analysis with the railroad coming through from Ocean Gate to Yarmouth. VHB did a study of the rail coming through to Portland from the Rock Row project. I'll be asking for that at the Planning Board.

The meeting ended at 6:52 PM.

Institutional Development Plan
Roux Campus
October 2022

Att. C

IDEALS
Initiative for Digital Engineering and Life Sciences

The Roux Institute
Northeastern University

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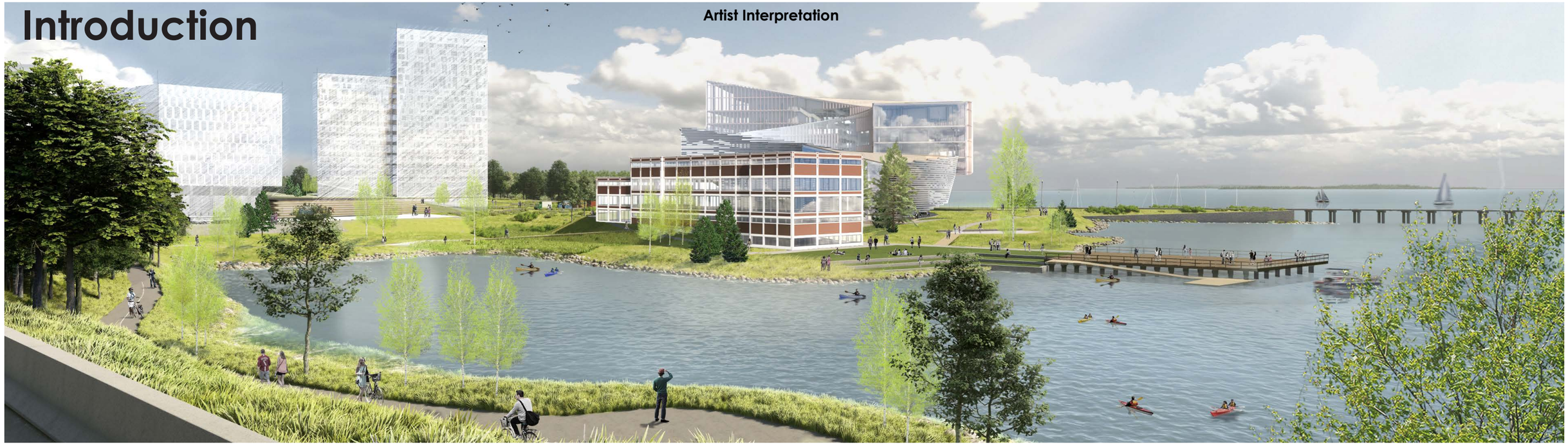
Introduction



Artist Interpretation

Northeastern University's Roux Institute represents a bold new model for learning, research, and entrepreneurship, developed from day one in partnership with industry, government, and other colleges and universities. Through the strong partnership and jointly held vision of Northeastern University leaders, Barbara and David Roux, and the Harold Alfond Foundation, The Roux Institute is delivering on the university's mission to erase the boundaries between the real world and academia.

Northeastern University founded The Roux Institute to stimulate the regional economy through the cultivation of talent and cutting-edge technology capabilities within Maine and northern New England. It achieves this goal by customizing learning programs and research initiatives to meet the needs of employers, by integrating classroom learning with professional experience, and by supporting the launch of innovative startup companies. The Roux Institute's collaborations with its employer-partners keep the institute in step with the economy's—and society's—changing needs and opportunities. They also enable The Roux Institute to identify and begin to address the state's most consequential challenges.

The Initiative for Digital Engineering and Life Sciences (IDEALS) is a Maine non-profit organization tasked with and solely committed to locating and developing a campus for the Roux Institute. Northeastern University in Portland, Maine: a space for cutting-edge educational, research, and collaborative programs in areas including artificial intelligence, computer and data sciences, digital engineering, advanced life sciences, and medicine. IDEALS was formed in 2018 with support from David Roux, a technology entrepreneur and Lewiston native, and his wife Barbara. They sought to create a graduate institute providing opportunities for Maine people to fill talent gaps for growing digital and life sciences companies while ensuring the 21st century success of greater Portland and Maine's economies. IDEALS recruited Northeastern University to establish and run the program, and the Roux Institute at Northeastern University launched in 2020. The Roux Institute now offers post-graduate degrees and certifications, conducts research, assists start-up entities, and partners with private, public, and non-profit entities to develop 21st century workforce talent and spur innovation.

The Roux Institute is temporarily located in leased space in Portland. A permanent campus for the Roux Institute is essential to fulfill its educational and economic potential. The vision for that home - the Roux Campus - is one that allows for continued growth of the education, research, entrepreneurial, and collaborative programs of the Roux Institute while providing space to support those programs and serve the community. After completing an exhaustive four-year search both on and off the Portland peninsula and its surrounding area, IDEALS acquired land formerly occupied by the B&M Baked Beans facility along the Portland waterfront.

Recognizing the prominent role that major educational and healthcare institutions play in the health and well-being of the community, the City of Portland's Land Use Code allows for the creation of Institutional Overlay Zones (IOZ) to "provide a regulatory mechanism where an improved regulatory structure is needed to facilitate a consistent, predictable, and clear growth management process." Consistent with that purpose, we seek designation of an IOZ for the Roux Campus. We will simultaneously seek to change the underlying zone to B-5 Mixed-Use Business. The IOZ designation process requires two components: an Institutional Development Plan (IDP, this document) and a regulatory framework. The purpose of this IDP is to establish baseline institutional data for existing land uses and services while also communicating planned growth; it is the basis of the proposed regulatory framework, submitted under separate cover. The regulatory framework translates the IDP into a set of clear and specific zoning requirements, which will constitute the text and map amendment to the City's Land Use Code. Unlike other institutions for which the IDP process was established, the Roux Institute is in its early years and has not established a stand-alone campus. The IDP allows Northeastern University and IDEALS to memorialize the long-term strategic plan for the Roux Campus in consultation with the Portland community at the very outset of development.

Creation of a new campus provides the opportunity to establish a people-oriented space right from the start. It will prioritize people over cars by creating a pedestrian-friendly landscape supported by multi-modal programs that provide incentives for alternative transportation options. The campus will improve site resilience and sustainability by replacing much of the existing pavement and rooftops with green space while improving coastal and upland ecology and incorporating sustainable building practices.

We intend to create a dynamic, mixed-use campus that contributes to the East Deering neighborhood without encroaching on it or burdening City resources. By providing ancillary uses on site (office and lab space for institutional partners, housing for students, faculty, and employees, a hotel for visitors to the Institute and its partners, retail, and personal services), the Roux Campus will meet demand created by the Roux Institute at Northeastern University and its collaborating partners.

1. Establishing the Context

Our Roots

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Campus will be the first of its kind in the Northeast. It will integrate graduate education in technology and science with groundbreaking research and a wide range of collaborations to spark innovation and economic development. The campus is being designed at a scale that will facilitate learning, collaboration, and research breakthroughs and innovations, encourage start-up businesses, and strengthen existing Maine businesses and institutions. Every component of the campus is directly linked to the mission of the Roux Institute, from the housing – keep students and faculty on campus to foster collaboration and reduce traffic, to the hotel – provide a convening space and accommodation for Institute guests from around the globe so that, together, they can spark new ideas. The iconic waterfront location, minutes from downtown Portland (by bike, bus, boat, car, or on foot) with striking architecture and a vibrant community, will attract talent from around the globe and spread economic advancement throughout Portland and beyond.

At the direction of Northeastern University, IDEALS will oversee the design and construction of a primary academic building housing the Roux Institute and will also seek partnerships from the private sector to construct and operate ancillary uses, such as housing, parking, a hotel, and commercial office and laboratory buildings that support the primary academic uses—all of which would be on a ground lease basis.

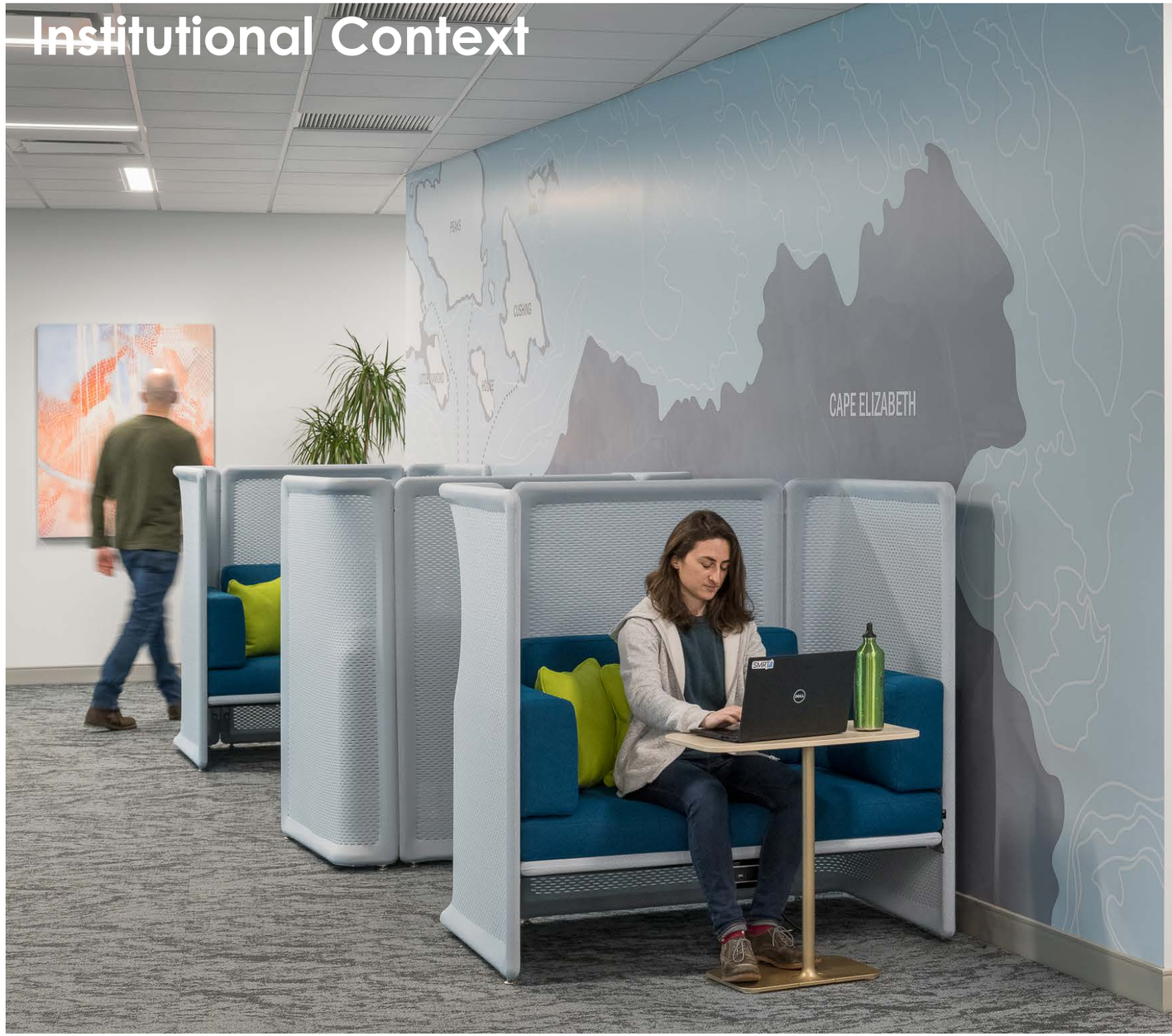
The Roux Institute
Northeastern University

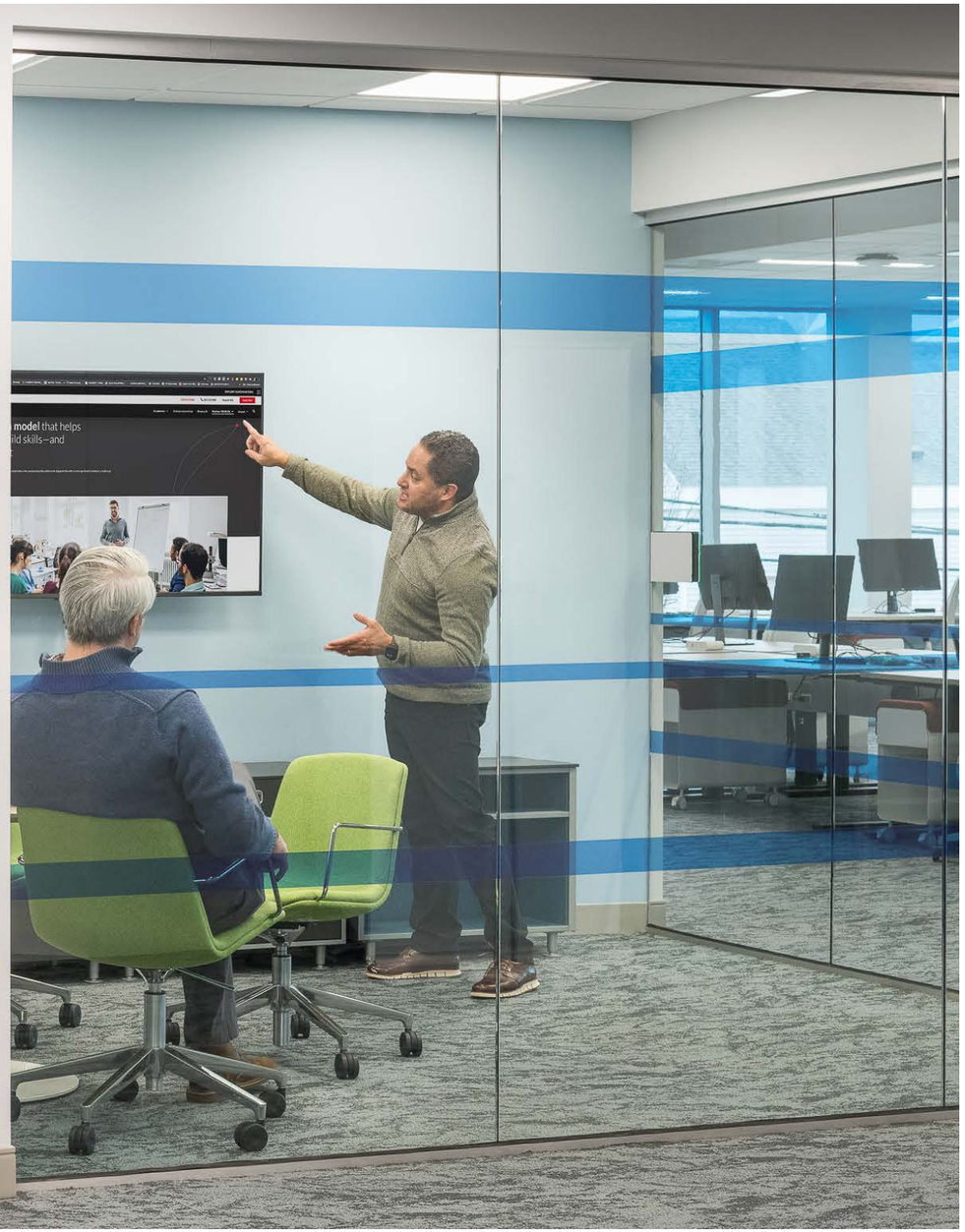
The Roux Institute at Northeastern University was established to develop talent, conduct research, and encourage innovation to support and attract businesses that will thrive in the 21st century economy.

Vision: The State of Maine will be home to a thriving, high-tech economy fueled by people and businesses leading in experiential artificial intelligence, machine learning, big data, life sciences and medicine, engineering, and data visualization. This new economy will attract people and businesses from around the world to the region and provide unprecedented opportunities for all Mainers in a manner that honors and enriches the Maine lifestyle and culture.

Mission: With a vision to enable the creation of a synergistic technology and life science-driven economy and workforce, the Roux Institute designs, curates, and integrates learning, research, and entrepreneurial solutions in collaboration with industry, academic institutions, and community organizations to catalyze talent development and economic impact throughout Maine.

Institutional Context





The Roux Institute at Northeastern University currently has 125 full-time, Maine-based employees, 55 of whom are faculty and post-doctoral staff. The Institute currently has 500 graduate students enrolled. Of Maine's 16 counties, 15 are represented in the student body. The Institute offers 17 graduate programs in computer and data science, analytics, cloud software, cybersecurity, life sciences, and project management.

These educational programs are bolstered by collaboration. The Institute's partnership ranks have grown tenfold as more than 110 Maine organizations now work with and benefit from the institute. Approximately 900 of these partners' employees have taken courses designed by the Roux Institute in concert with their employers. Additionally, 36 startup companies have worked in residence at the Roux Institute, creating 52 new Maine jobs and raising $21M in investment capital to grow their businesses.

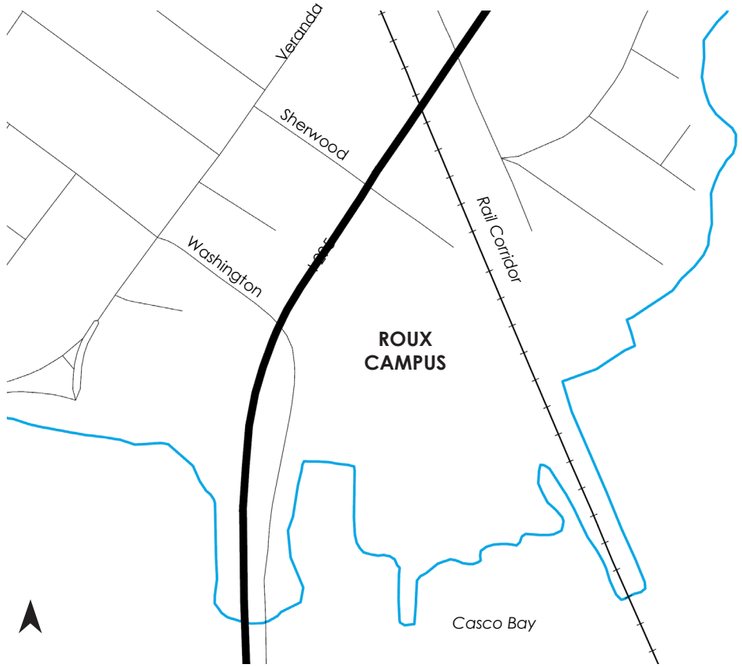
The Roux Institute at Northeastern University currently occupies 44,000 square feet of space leased at 100 Fore Street. This space enabled the Roux Institute to begin providing graduate education services in Portland, but significantly more physical space is needed to meet its Mission & Vision. In the near term (0-5 years), the Roux Institute anticipates enrollment expanding to 1,750 learners; in the medium term (10-20 years), enrollment is anticipated to grow to 2,500; and in the long term (20+ years), enrollment is projected to grow to 5,100, including on-campus, virtual, and hybrid learning settings. The Roux Institute intends to transfer all operations from 100 Fore Street to the new Roux Campus.

Neighborhood Context

The proposed Roux Campus is located within Portland's East Deering neighborhood, near a residential area of single and multi-family homes (three-story apartment buildings) and a commercial node featuring restaurants, bars, mechanics, and offices. While proximate to these areas, the site is remarkably buffered. I-295 to the west, state-owned vacant parcels to the north, a disused rail corridor and marine business to the east, and Casco Bay to the south collectively surround the property. Access to the site is via Sherwood Street at the intersection with Veranda Street, through a 40-foot-wide highway underpass.

This setting makes for a campus full of potential. Due to its relatively large 13+ acre size and existing buffers, the site lends itself to dense development. Taller buildings with smaller footprints will allow for additional public open space, a mix of landscaped and natural green space, and public waterfront access while helping to reduce impact on Portland's challenged housing stock. The Roux Campus will connect to and enhance the surrounding East Deering neighborhood while simultaneously fostering its own identity.

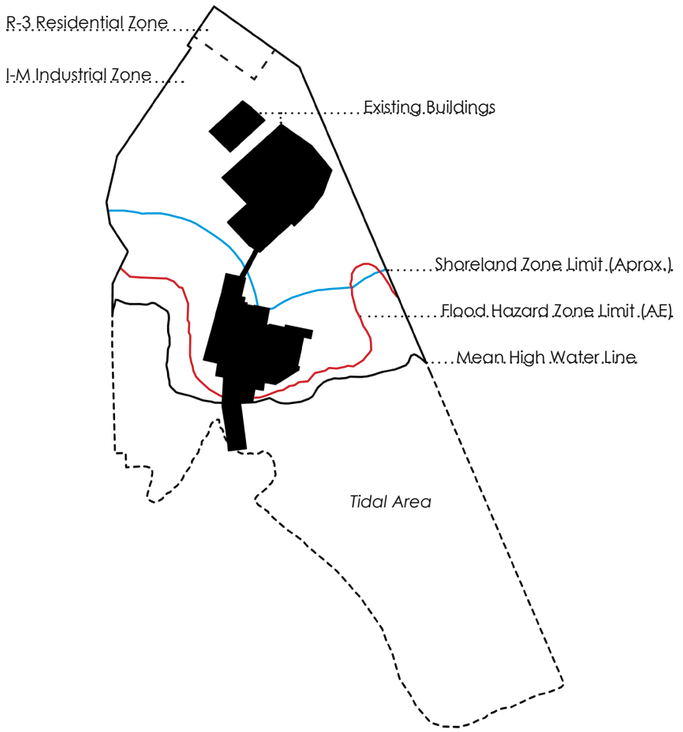
Future development will acknowledge these advantages and constraints. The site must be planned responsibly to maximize community access while minimizing off-property impacts. The creation of compelling pedestrian, bicycle, water taxi, and public transit connections to the Roux Campus and the waterfront will be particularly crucial.

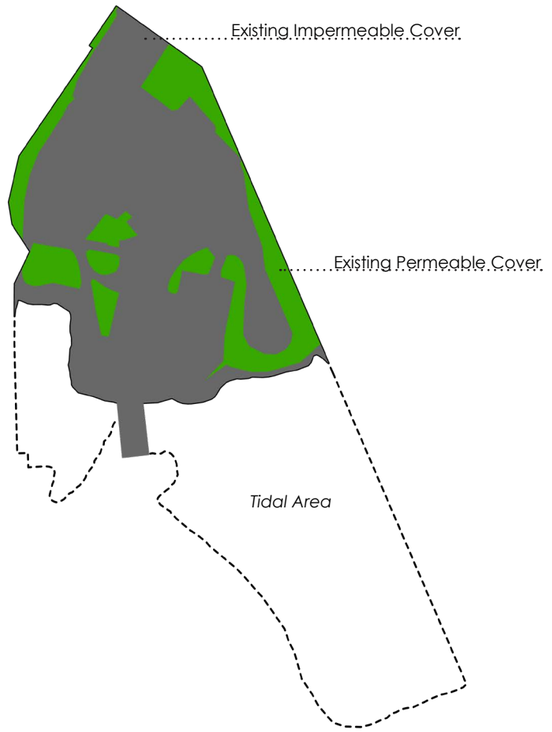


The site's current industrial use does not allow for public open space or amenities or access to considerable shoreline frontage.

The site is near several of Portland's most popular bike and pedestrian trails, including Back Cove Trail, Bayside Trail, and Eastern Prom Trail. Its redevelopment can facilitate better community access to Portland's waterfront, as public open space enhancement is a key design parameter for the Roux Institute at Northeastern University.

Site Context





Zoning
The majority of the site is currently zoned I-M Moderate-Impact Industrial, with the area immediately adjacent to and across Sherwood Street zoned R-3 Residential. Parcels adjacent to the site include I-L Low-Impact Industrial at the Maine Yacht Center to the east and R-3 Residential across the railroad tracks to the north. Parcels west of I-295 are generally zoned R-5 Residential and B-2 Mixed-Use Business.

Relationship to Water
The parcel includes approximately 13+ acres above mean high water line (the site) as well as an adjacent 11 acres of submerged lands. The site has 1,000 linear feet of waterfront, within associated Flood Hazard and Shoreland Zones.

The City of Portland designates a shoreland zone within 250 feet of tidal water bodies. Within the shoreland zone, a minimum setback of 25 feet from the normal high-water level is required for structures, roads, and driveways.

Portions of the site are delineated as Special Flood Hazard Areas according to FEMA's Flood Insurance Rate Map (FIRM). The current and effective FIRMs for Cumberland County, based upon FEMA's 1986 publication, indicate portions of the site are within the AE Zone, representing 1% annual chance of flooding. Base flood elevations range from 9 to 11 feet.

Impervious Areas
The majority of the site is developed land, with limited areas of natural vegetation. Approximately 10 acres of land above the mean high-water line are impervious (paved areas, building roofs, etc.). The remaining 2.5 acres of permeable area include lawn and approximately half an acre of vegetated, early successional non-lawn area adjacent to the rail corridor abutting the site to the east.

Not only is the site largely covered in pavement and building structures, it is also inaccessible to the public. Fencing prevents access to the waterfront and the interior of the site. This security was necessary for industrial use. However, new development can "soften" site edges and provide improved access to the waterfront.

Under current conditions, the site is inaccessible to the public.

Coastal & Natural Resources

Immediately adjacent to this highly developed site are natural resource areas including: an estuarine intertidal emergent marsh located east of the site near the rail corridor; coastal wetlands for all areas below highest annual tide; tidal waterfowl and wading bird habitat, and blue mussel habitat. Portions of the site are delineated as Special Flood Hazard Areas according to FEMA's Flood Insurance Rate Map (FIRM).

Topography of the site slopes downward from the north to the south, toward the water. The highest elevations are near Sherwood Street, at elevation 28 +/-. The lowest grades are near the loading dock at the B&M Bean Building, at elevation 8.5 +/-. These low areas are only 1-foot above Highest Astronomical Tide.

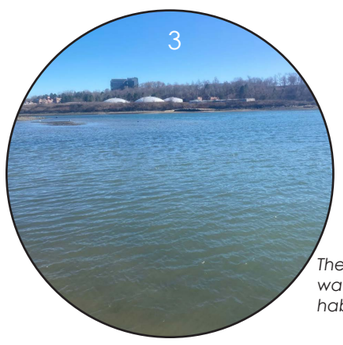
In recognition of existing vulnerabilities and future sea level rise, resiliency will be key to the Roux Campus. The redevelopment will raise site grades and incorporate infrastructure improvements to create a flood resilient landscape. It will also rehabilitate this brownfield site, enhance natural resource areas, and reduce the impacts of current impervious, industrial conditions by creating habitats that foster ecological diversity and productivity at the water's edge.

The coastal wetland includes rockweed anchored to rocks in tidal mudflat.

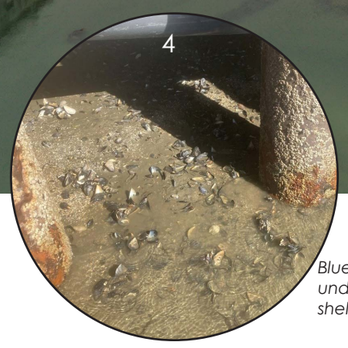
Outfall pipes drain to wetlands in the ravine.

Stormwater outfalls drain into the wetland where a scour channel cuts across the mudflat.

The ravine's slope is vegetated with native sumac and invasive Japanese knotweed.



The tidal flat is home to tidal waterfowl and wading bird habitat.



Blue mussels are abundant under the pier, where soft-shell clams also grow.

The tidal mudflat portion of the site stretches far into the inlet, resulting in dramatic daily change.

The estuarine system extends up a ravine along the site's eastern boundary.

Historic Resources

The campus was occupied by residences and a lobster cannery prior to 1913, when Burnham & Morrill (B&M) relocated its operations to the site from Franklin Street. The address of the B&M facility at that time was Water Street, which granted access from the west prior to construction of I-295. By 1913, the five-story B&M Bean Building stood on site, as well as the cod-fish building located on the pier. In the 1920s, B&M began experimenting with brick-oven baked beans in an attempt to offset declines in other product lines (canned fish, meat, and vegetables), and in the 1920s and 1930s began selling brick-oven baked beans in cans. In 1965, B&M's address was designated as 1 Bean Pot Circle. With an appreciation for the B&M history at the site, IDEALS, as the landowner, nominated the B&M Bean Building for designation as a City Historic Landmark. Following a positive recommendation from the Portland Historic Preservation Board, the Council approved the designation of the Bean Building as a historic landmark. A more extensive description of site history and the preservation of the Bean Building may be found in the Landmark Designation Report for the Burnham & Morrill Company Cannery by Heritage Consulting and Essex Preservation Consulting, dated June 2022.

Bean Building

The Bean Building was the cornerstone and flagship of the B&M food manufacturing facility. Constructed circa 1912 by Aberthaw Construction Co., Boston, MA, the building housed the baked bean manufacturing processes and the plant management offices. It is a robust five-story, reinforced-concrete building with a high live-load floor capacity. The concrete frame is exposed on the exterior of the building with brick and masonry infill walls and glass windows. The building is structurally sound with only minor structural modifications required. The main entry is on the 2nd floor level, which is at elevation 21.5', well above today's 100-year flood zone elevation of 10'.

The Bean Building as it stands today

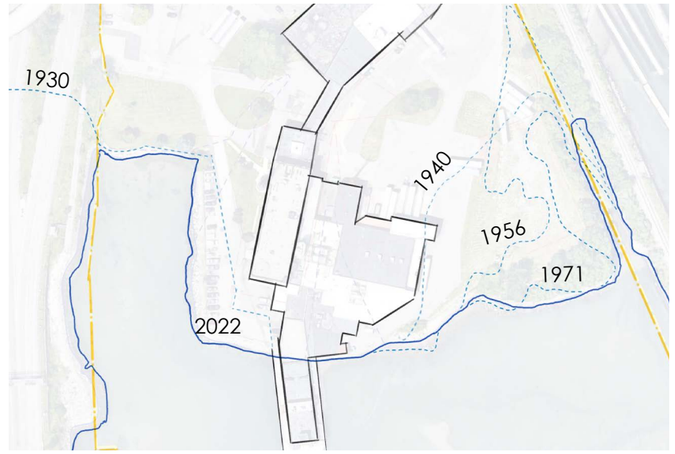
This, along with the rugged structure and historic community value, make the building an ideal candidate for reuse. A permanent exhibit of artifacts and photographs is planned for the site.

A Changing Shoreline

Buildings are not the only changes that occurred onsite over the last 100-plus years. As indicated in the diagram at right, the shoreline has significantly shifted in reach and shape across decades. Some of the shifts were caused by intentional human manipulation; others appear to have been natural changes where mud flats (with limited salt marshes) extended onto the site.

A New Perspective

The historic relationship of the East Deering neighborhood and B&M site was one of stark contrast between residential and industrial uses. Sudden transitions between residential and manufacturing zones, and from manufacturing to the sea, heightened the disparity. Construction of the Grand Trunk railroad line in the 1860s, and then of Interstate 295 in the 1960s, further isolated the campus's industrial identity. The Roux Campus presents an opportunity for new connections, public access, and thoughtful transitions from the surrounding neighborhoods into a dynamic environment built around the B&M Bean Building.



Views of the B&M campus and related infrastructure earlier in Portland's development (all images from Maine Memory Network)

Municipal Plan Context

The former B&M site is ripe for renewed use and redevelopment. The proposed campus includes adaptive re-use of the B&M Bean Building, facilitates public interaction with the waterfront, creates a new walkable core of diverse uses, and bolsters economic opportunity in East Deering, the City of Portland, and beyond.

Portland's Plan 2030 focuses primarily on eight aspects of Portland's identity and performance: environment, waterfront, transportation, housing, recreation and open spaces, facilities, historic resources, and economy. While the facilities section generally focuses on municipal operations and the waterfront section is focused on the working western, central, and eastern waterfront areas of the peninsula, the other six sections are directly relevant to the proposed plan. Excerpts relevant to the Roux Campus are provided here.

Portland's Plan 2030, adopted in 2017, is the City's comprehensive plan.

Environment
"Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation."

"Plan for the mitigation and redevelopment of brownfields to support productive uses and a healthier environment for residents."

Transportation
"Promote multi-modal accessibility, enabling residents and visitors of all ages and abilities to participate fully in the social and economic life of the community."

Housing
"Encourage additional contextually appropriate housing density in and proximate to neighborhood centers."

"Identify priority growth areas."

"Allow for a range of housing models in City codes, whether small units, co-housing, or others that may suit changing needs and demographics."

Recreation & Open Space
"Encourage physical and visual access to Portland's waterfront – Casco Bay, Back Cove, and the Stroudwater, Presumpscot, and Fore Rivers – as a "blueway" network and an extension of public space for local and regional recreation and transportation needs."

Historic Resources
"Stabilize and enhance historic areas of the city by ensuring quality investment in existing structures and compatible infill development."

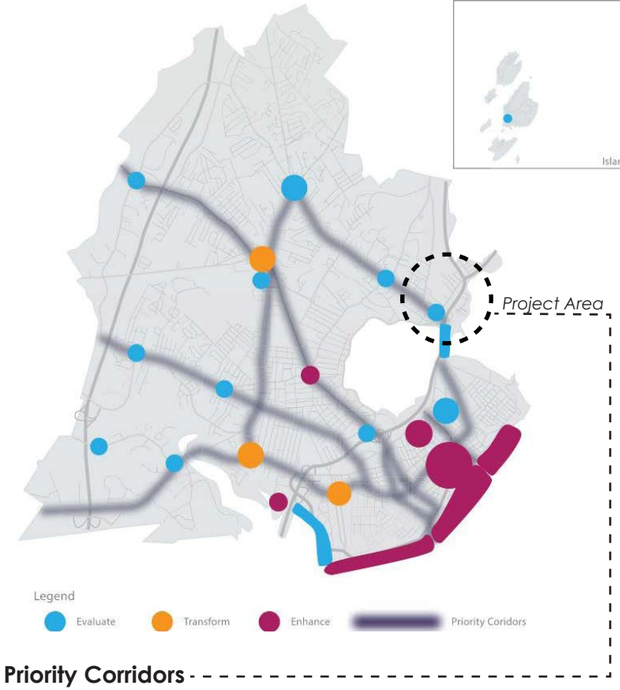
"Ensure an appropriate balance of continuity and change as Portland grows and evolves."

Economy
"Support job creation and business growth through public initiatives and private, institutional, and regional partnerships."

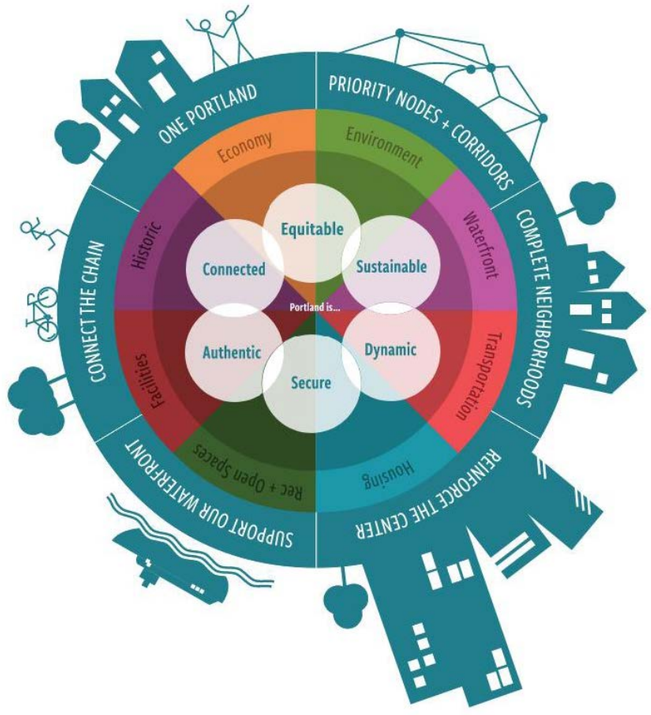
"Develop programs that support industries with high-growth / high-value potential such as life sciences, food production, information technology, and marine-related industries."

"Modify ordinances and make strategic investments to better promote business development and job creation in priority areas."

"Ensure that the growth of Portland's educational, medical, and cultural institutions is integrated into Portland's urban fabric through the use of high-quality design, management of impacts, community partnerships, and innovative planning."



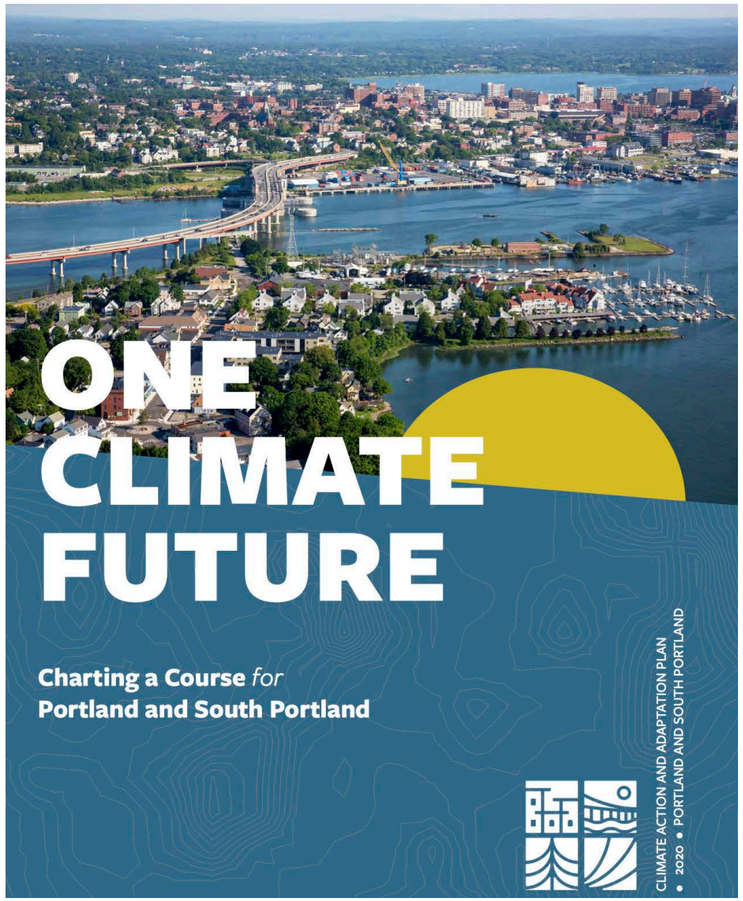
Nodes & Priority Corridors
Portland's Plan 2030 emphasizes potential evolutions in land use. Washington Avenue is identified as a priority corridor, which can provide "additional mixed-use, higher density growth to take advantage of the transit benefits and services that well-designed, diverse corridors can offer." The Washington Avenue / Veranda Street / Tukey's Bridge area is called out for evaluation: such areas "should be assessed for their ability to address neighborhood needs and serve as centers for complete neighborhoods."



One Climate Future

The Roux Campus is an opportunity to showcase sustainable buildings, fostering a resilient community across East Deering and the region of Portland. Its waterfront location demands proactive planning for extreme weather and storm surge events although it is not located within the FEMA Velocity Zone. Its location on a developed, industrial piece of land with a single point of access/egress, means that campus development must take advantage of existing infrastructure within the East Deering neighborhood, facilitating trips by active alternative, multi-modal, and mass-transit options.

In 2020, the Cities of Portland and South Portland both adopted a collaborative sustainability and resilience plan: One Climate Future. The plan addresses many challenges, priorities, and strategies for responsible climate stewardship and mitigation of climate-related public health threats. It includes great specificity and is summarized by six general action items. The following are One Climate Future's "six big moves" and discussion of their relevance to the Roux Campus.



Portland and South Portland both adopted the One Climate Future plan in 2020.

1. Build better buildings.
A new campus of higher education, research, and development deserves thoughtful design; it represents an opportunity to implement best practices for energy efficiency, healthy communities, human comfort, and interaction with the surrounding environment. Aside from the iconic B&M Bean Building, existing on-site buildings are not suitable for adaptive reuse. Much of the site will be redeveloped with new construction. In order to attract and respect climate-conscious students and corporate partners, these new buildings will be created with sustainability and resilience top-of-mind. As described in the design guidelines within this plan, Northeastern University is committed to high-performance buildings while setting a standard for design through signature architecture.

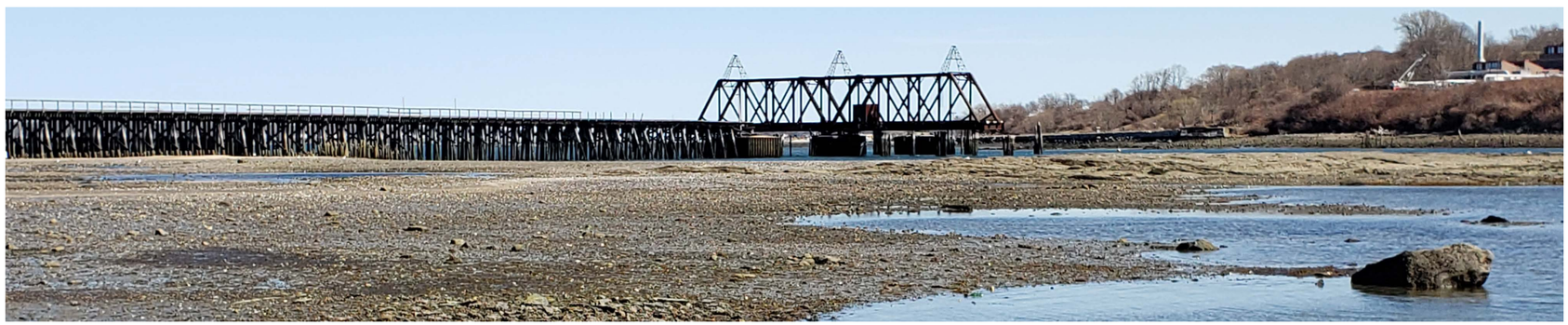
2. Connect people to places, to opportunity.
Graduate education, research, and collaboration exist in order to provide opportunity. At their best, they do this in a collaborative and social setting. The Roux Institute at Northeastern University will achieve both. The campus presents this opportunity to the nearby community, where on-site resources become local community resources, as shown on the 15-minute walkshed map. Finally, by establishing itself within and supporting existing public transportation networks, the Roux Campus will be accessible to all Portlanders as well as those in the broader greater Portland region, and beyond.

3. Power everything* with clean renewable electricity.
Electrification allows for appliances, buildings, and systems to support the shift to renewable energy in our power grid, without cementing a need for fossil fuels moving forward. This entails moving away from carbon intensive heating and energy sources, as more energy is produced by clean energy renewable sources like solar and wind. IDEALS and Northeastern University will evaluate power purchase agreements for renewable energy sourcing, incorporate passive solar and photovoltaics, consider the use of geothermal and sea water exchange heating and cooling for buildings, and encourage EV usage through on-site charging capacity.

4. Grow a circular economy.
Fostering technology knowledge and life-science research in Portland will diversify its economy and help prepare for the future. Yet workers in these fields will still rely on other, existing aspects of the regional economy. Food producers and preparers, makers and artists, essential workers, and support staff, all make the City of Portland a compelling and delightful place to live. On a small scale, the Roux Campus will facilitate a circular economy through mixed-use, neighborhood-scaled urbanism that creates a place to live, learn, work, and play. On a broader scale, it will strengthen the region through education, research, and collaboration with corporate and community partners; fueling progress through innovation.

5. Nourish ecosystems, which nourish us.
The Roux Campus' tidal waterfront location will allow it to meaningfully contribute to ecological health by designing with nature in mind. While B&M has been a steward of their property, the campus development will result in a significant reduction in impervious surfaces and yield a healthier site that protects and enhances the local ecosystem, which has been diminished through the historically industrial development of the property.

6. Build collaborative capacity to create this future.
The Roux Institute at Northeastern University will develop technology and life science talent and position Mainers, new Mainers, and international students for financially stable and personally rewarding careers. The campus will connect budding talent with existing corporate and community partners, and thus create opportunity for fresh thinking and an innovative future. The Roux Campus will catalyze tech talent and innovation in Portland.



The Roux Campus will contribute to meaningful stewardship of resources, limit energy consumption with building technologies, and help Portland prepare for climate and economic stressors.

2. Imagining the Future

Artist Interpretation

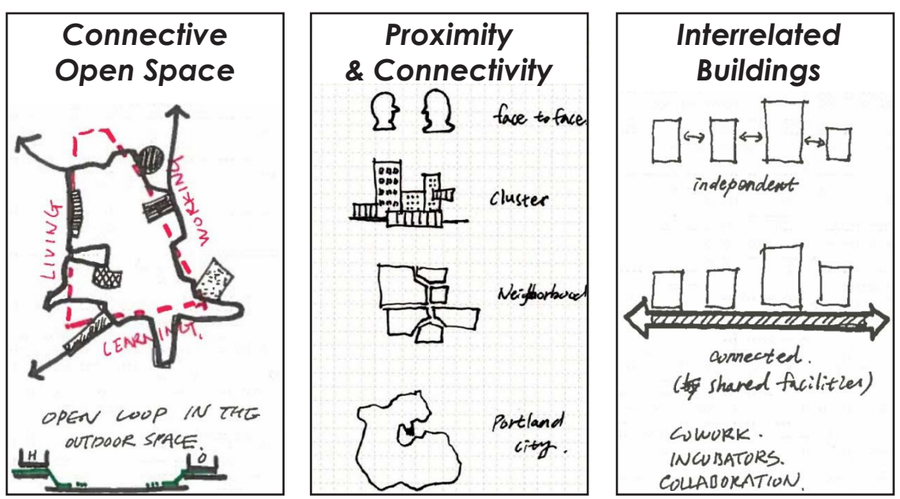
Campus Programming

The Roux Campus will encompass mixed uses regularly associated with graduate education and research: classrooms and laboratories, faculty offices, an incubator, dining areas, convening spaces, fitness centers, neighborhood retail facilities, and housing. As an essential part of the Roux Institute's graduate education programming, the campus will support collaboration with private industry, other institutions, and community organizations. This collaboration is essential to the Roux Institute at Northeastern University's approach to learning through integrated research, student-work opportunities, and entrepreneurial endeavors. Light manufacturing, research and design facilities, and other industry-oriented spaces will allow start-up businesses and established companies to contribute employment opportunities, foot traffic, and dynamism to the area. Hotel rooms will cater to prospective students, start-ups, visiting lecturers, specialists, business partner guests, and parents of students. Most importantly, the hotel will provide the opportunity for unplanned and informal interactions that are so essential to new ideas and innovation.

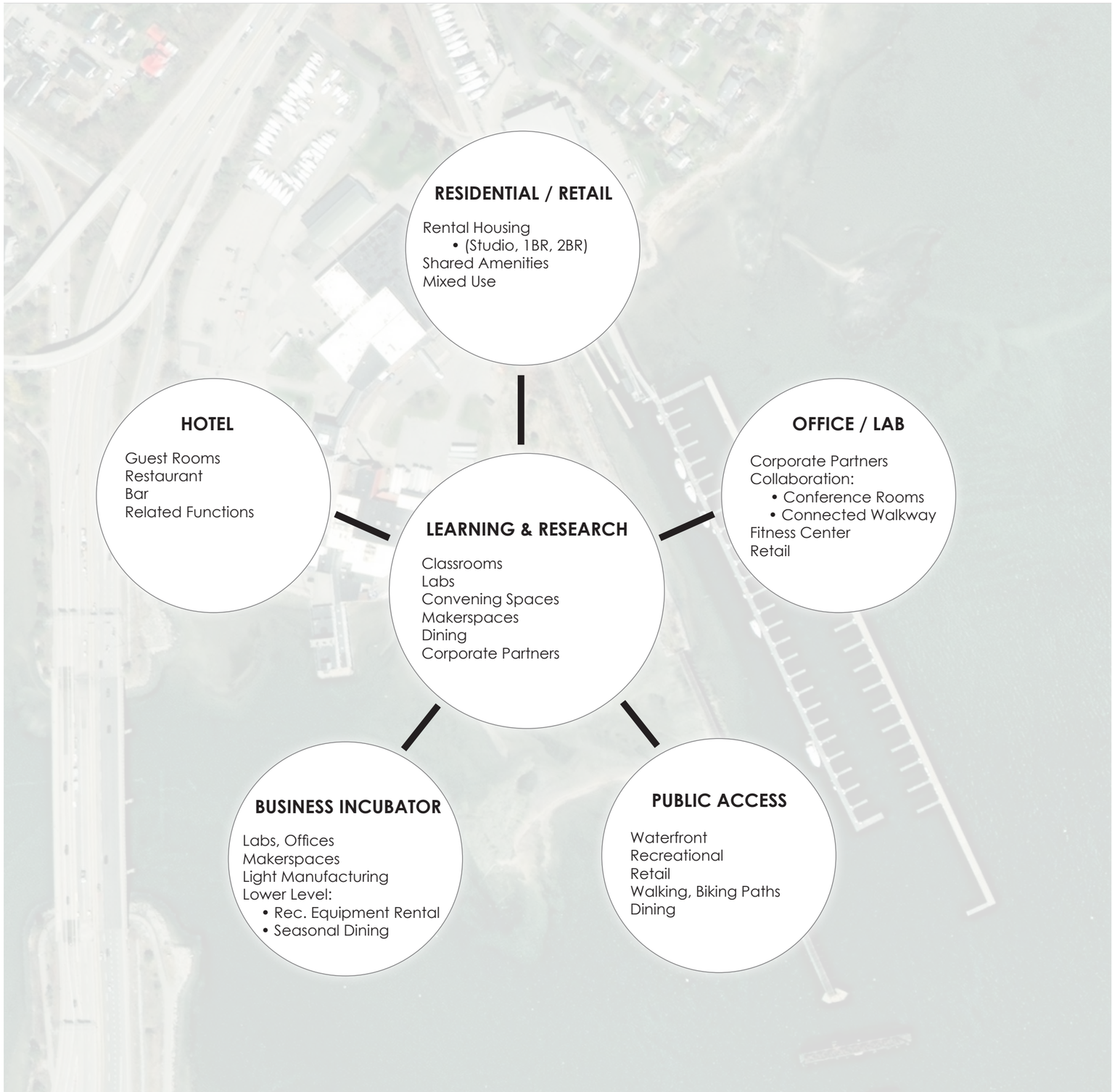
A range of rental housing options will foster community and provide on-site opportunities for students, faculty, staff, and their families. These units will ease some of the housing and traffic pressure that might otherwise result from new residents attracted to Portland by the Institute. Housing units not occupied by residents affiliated with the Roux Institute may be made available to the public to further assist in easing the housing pressure.

Public open space, including waterfront access and recreational uses, will foster a sense of community. Restaurant, neighborhood grocery, and/or other limited retail options will provide another means for welcoming the neighborhood while reducing dependence on automobiles. The Roux Institute will incentivize transportation options including buses, bikes, pedestrian access, car pooling, and water shuttle or taxi connections.

The long-term vision for the site is to maximize green space and public shoreline access. That vision includes a potential bike and pedestrian path under Tukey's Bridge and bicycle and pedestrian connections at Sherwood Street, Veranda Street, and beyond. These would link to the Back Cove, Eastern Promenade, Bayside, Martin's Point Bridge, and future trail systems.



Concept sketches by Tsoi Kobus Design display the intent to build dynamic, community-rooted space.



Phasing

Before shifts in transportation and distribution networks, the site offered a competitive location for food processing and manufacturing in the 20th century. Now, the site's many compelling attributes enable the pursuit of science, education, and entrepreneurship for the 21st century and beyond. The Roux Campus is envisioned as a hub for collaboration, innovation, and inspiration that contributes to the education of Roux Institute students, stimulates Maine's economy, and enriches the lives of Portlanders through the resources it offers.

While the proposed vision represents an ambitious undertaking, the entire endeavor is based on simple tenets of placemaking: provide a mix of uses, allow for creativity and entrepreneurship, and encourage recreation. This vision takes time to grow and develop. Understanding that institutional uses have phased planning horizons, this IDP considers near, medium, and long-term growth plans. The resulting phasing of the development is represented in the figure to the right.

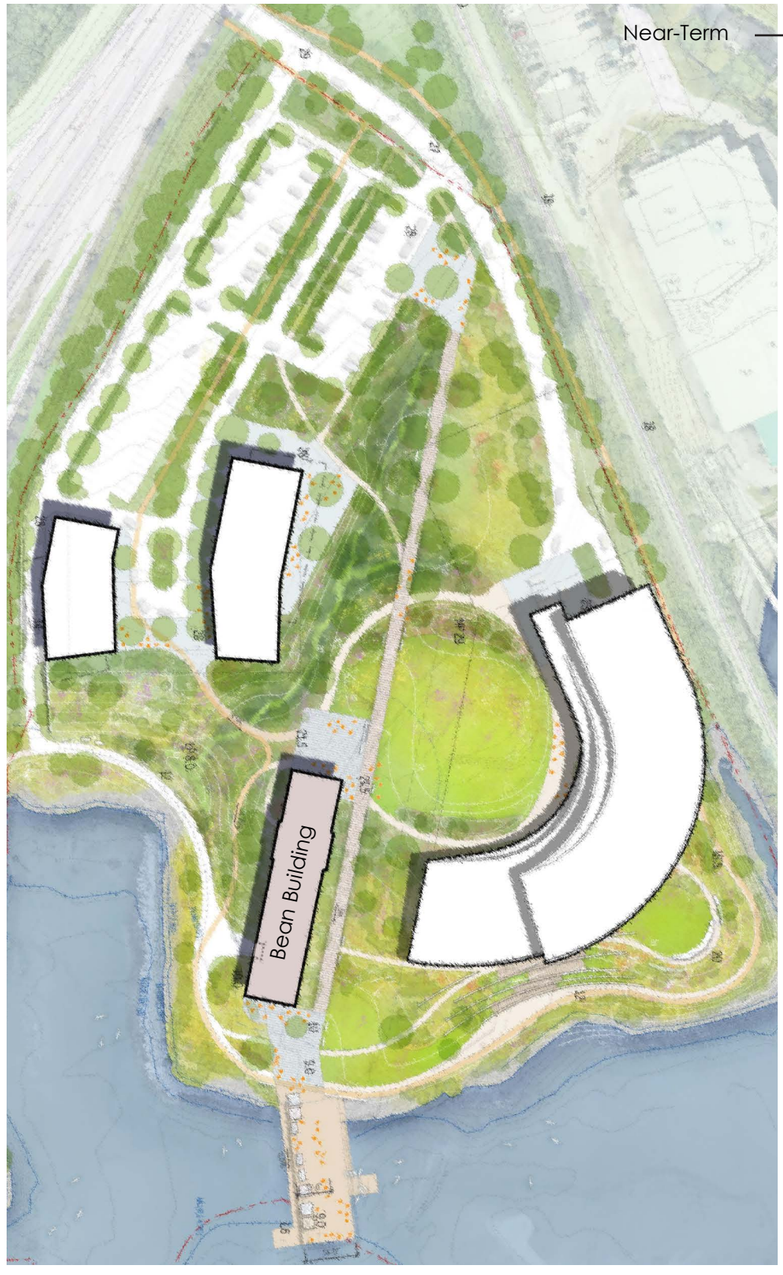
Fortunately, the nature of the Roux Institute at Northeastern University lends itself well to phasing strategies. Corporate partnerships are a core part of the Institute's educational strategy, meaning that office and laboratory partners will sit comfortably within the primary academic building during its first years, before extending outward in the longer term. As the site develops more and more students, faculty, and employees will be drawn to live and work on site. Like any new campus, as the population of students, residents, and employees grow, so will demand for limited retail and restaurants.

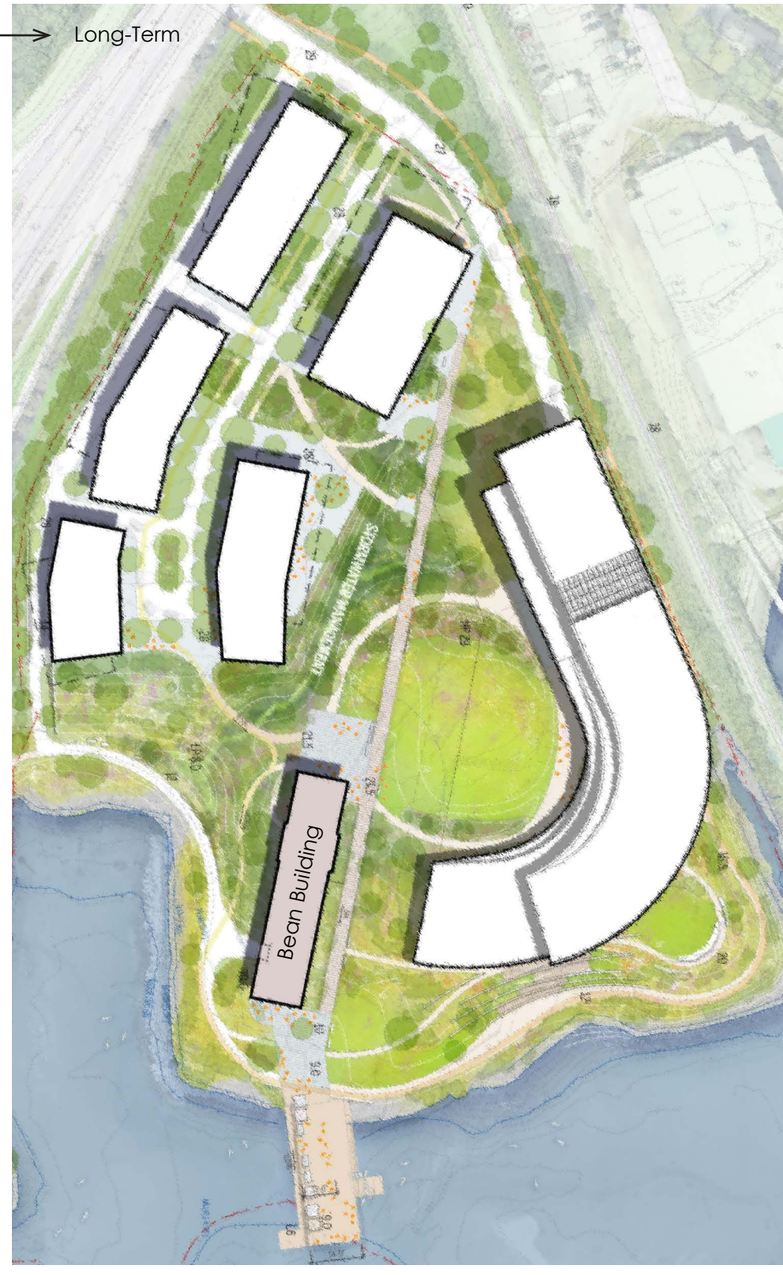
The proposed vision offers a realistic framework for flexible growth. As the Roux Campus evolves, and the world changes, new opportunities and needs may present themselves. Neighborhood feedback will also inform future growth. A core presence of educational, research, incubator, and partner space will provide the Roux Campus with a strong start, around which additional community needs and services can thrive over time.

Anticipated Phasing (Cumulative Totals)

Building Program	Near Term (0-5 Years)	Medium Term (10 Years)	Long Term (20 Years +)
Academic & Research	1,750 Students 222,000 sf.	2,500 Students 372,000 sf.	5,100 Students 372,000 sf.
Office / Lab Partners	Included in the Roux Institute	Included in the Roux Institute	200,000 sf.
Business Incubation	40,000 - 50,000 sf.	40,000 - 50,000 sf.	40,000 - 50,000 sf.
Residential	175 - 250 Units 150,000 - 200,000 sf.	350 - 425 Units 300,000 - 350,000 sf.	525 - 650 Units 450,000 - 550,000 sf.
Hotel	90,000 sf.	90,000 sf.	90,000 sf.
Retail (Restaurant, Café, Market, Kayak, etc.)	10,000 sf.	15,000 sf.	25,000 sf.

Potential Phasing





At the completion of each phase, the Roux Campus will be a model of comprehensive design. At least three acres of permanent, significant public space will be established early in the development of the campus to ensure public benefit. Interim features such as surface parking lots or construction staging areas will be designed to not detract from the pedestrian experience through planting, lighting, wayfinding, graphics, artwork, or fencing. Other interim areas of the site will be appropriately landscaped or accommodate gathering on lawns and hardscape spaces. Interim features such as parking lots may also be programmed with markets, festivals, or cultural events. Lighting and layout of these spaces will be considered to facilitate flexibility so that they can accommodate a variety of campus events.

Design Principles

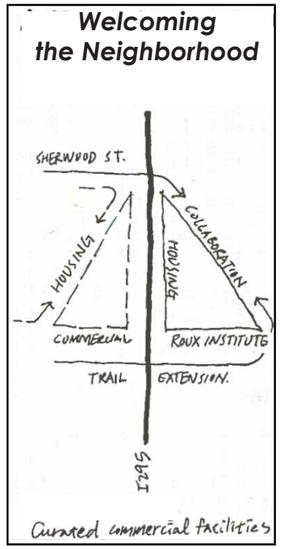
The Roux Campus will be a paradigm for 21st-century education with urban, sustainable, and resilient design. All elements of the campus will be conceived holistically to support the educational program of the Roux Institute. Near and long-term planning supports a vibrant campus environment with views and connections to the waterfront, a variety of public spaces, and site access via bike paths, walkways, and the public pier. Key principles of the design approach include:

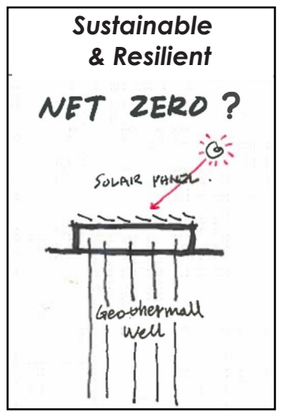
Connected to the Waterfront, Portland, & the World
- Engage the waterfront
- Promote visual and physical connectivity
- Encourage connections to the waterfront through diverse spaces
- Create a holistically built environment
- Restore, repurpose, and revitalize the Bean Building
- Create an iconic architectural expression

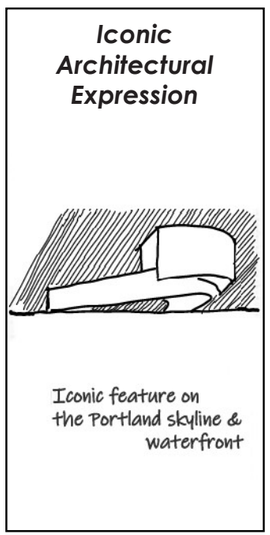
Places to Gather
- Welcome the surrounding neighborhood
- Foster community with shared spaces and interaction
- Build a strong association with the City of Portland
- Develop purpose-driven spaces that yield regular connections
- Provide public open space
- Provide spaces where neighbors can work and read while enjoying the campus's environment

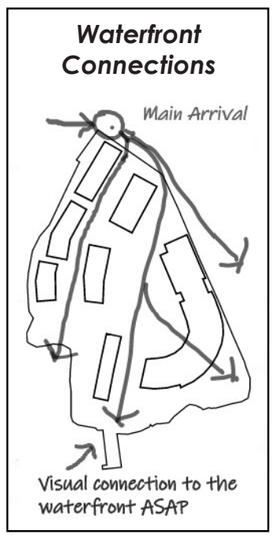
A Sustainable & Resilient Campus
- Employ sustainability benchmarking for environmental stewardship
- Incorporate state-of-the-art features, systems, and techniques
- Minimize energy consumption campus-wide
- Build for resilience; prepare for extreme weather and climate change
- Maximize green space through appropriate building height

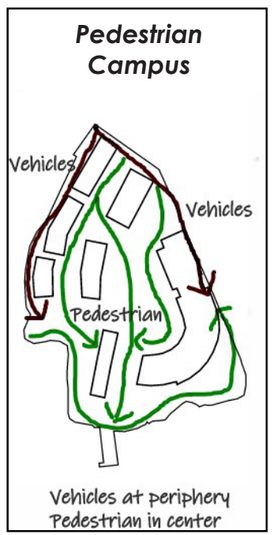
Integrated Landscape
- Enhance access through TDM and multi-modal support
- Contribute to Portland's open space network

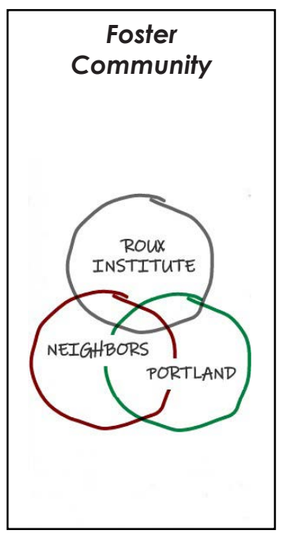












Above: Concept sketches by Cambridge Seven and Tsoi Kobus Design

Design Guidelines

① **Buildings shall:**

- be characterized by excellence in architectural design, sustainability, & craftsmanship
- incorporate materials, landscape, signage, & lighting that reflect the industrial heritage of the site as well as Portland's character yet also embrace a high-tech design aesthetic
- create a strong identity & sense of place
- vary in height, with the tallest allowable building heights located toward the center of campus
- be organized to take advantage of views, site circulation, & public space along the waterfront as well as provide views of the water from multiple vantagepoints around the campus
- be planned in a manner that preserves the historic view of the Bean Building from Tukey's Bridge
- share visual connections with other campus buildings to achieve a holistic campus appearance
- support & augment activation of public spaces and public access to the site
- be programmed for activation where they meet the pedestrian realm or feature details & activities related to the building
- respect the adjacent neighborhood & facilitate a sense of permeability & welcome
- celebrate the primary learning and research building through signature architecture
- utilize durable materials resistant to the marine climate & which contribute to an attractive public realm
- screen rooftop appurtenances & set back mechanical enclosures from roof edges to reduce shadow & visual impact
- limit sound transmission
- minimize bird strike potential
- employ sustainability benchmarking to foster environmental stewardship & resilience
- utilize building articulation & material selections to provide character and scale
- ensure permeability through & within the site for light, air, views, & access
- be appropriately scaled to support pedestrian activity, utilizing step-backs where appropriate
- be oriented toward open space at the site's center & include prominent facades with windows & entrances oriented toward travel paths
- be oriented to allow for easy pick-up & drop-off
- respect & provide a buffer from the historic B&M Bean Building

② **Campus circulation shall:**

- be bike & pedestrian-centered, with motor vehicle circulation generally at the perimeter where practicable
- serve pedestrians, bicyclists, autos, public transportation, service, & emergency vehicles at each development phase
- provide wayfinding & amenities to create a safe & welcoming environment for the community
- provide bike & pedestrian connectivity to existing ways where feasible

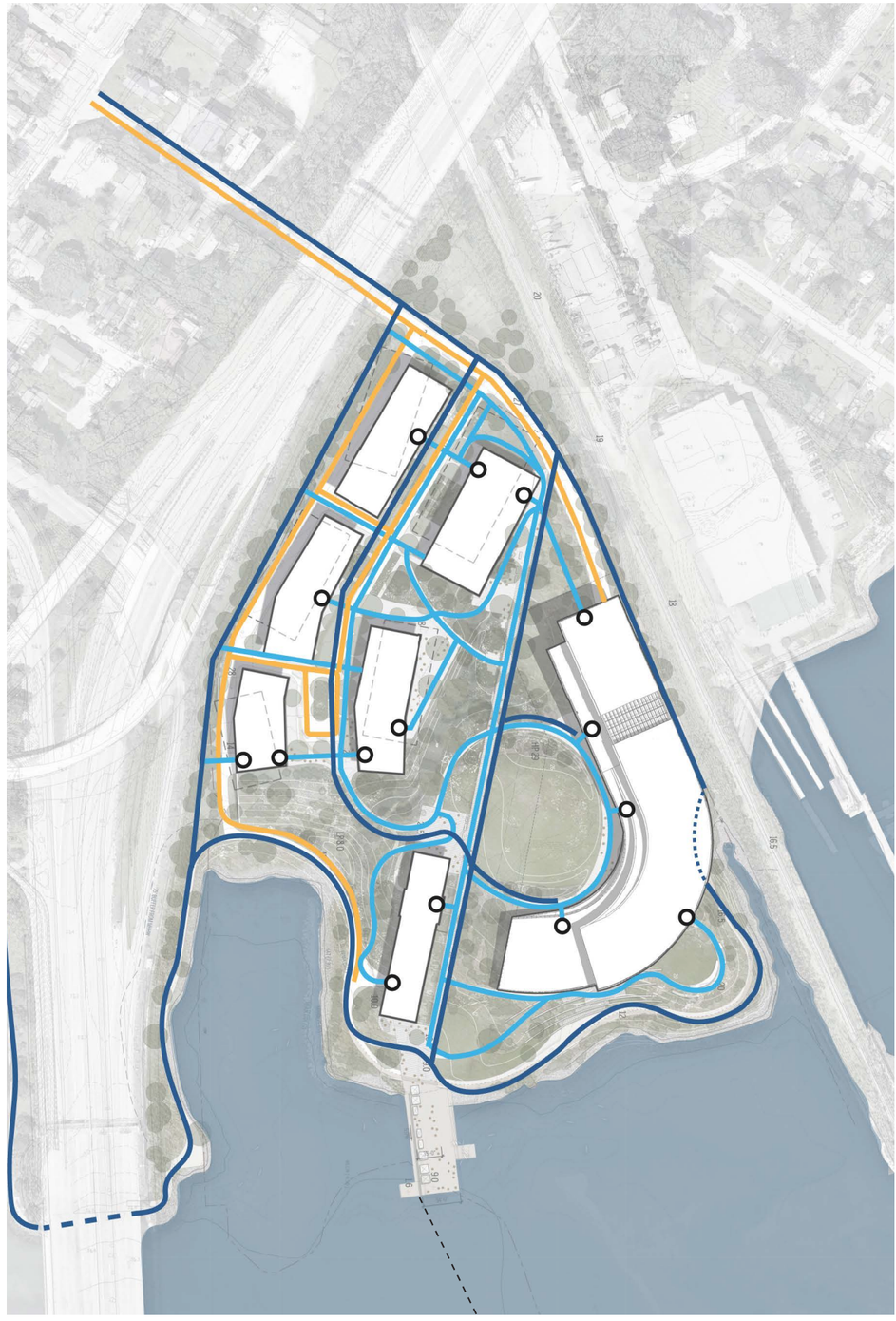
③ **Open space & public realm shall:**

- create a strong identity & sense of place
- be designed for safety, comfort, & year-round enjoyment
- enable access to building entrances
- utilize a combination of planting & hardscape
- be available to all members of the public, through inclusive and safe design, as well as support purposeful connections and transitions
- provide access & amenities to connect the public to the shoreline & ocean
- include meaningful public open space between the buildings & the water
- support site resilience in consideration of flooding from storm events & sea level rise
- support ecological functions & values
- provide an appropriate buffer adjacent to & complementing the historic B&M Bean building
- include lighting that is full-cutoff and dark sky-friendly

④ **Parking shall:**

- when above grade, be architecturally screened to blend in with surrounding buildings & minimize vehicular disturbances of light & sound
- when on surface lots, be located at the rear or side of buildings, & not along the primary facade
- not be located along the water's edge
- ensure EV charging capability meets EV demand & is scalable as demand increases
- be shared to the extent practicable
- support street activation & pedestrian scale when adjacent to public rights-of-way

Visualizing the Guidelines: Potential Long-Term Layout & Circulation



Connected to the Waterfront, Portland, & the World

Artist Interpretation

Development of a new landmark campus, with focus toward the community and the waterfront, will enhance the East Deering neighborhood. New, forward-looking campus buildings adjacent to the restored and repurposed Bean Building will update and respect its legacy. The waterfront will integrate with the entire campus through ecologically focused design. Water views from the ground and buildings will emphasize the site's uniqueness and become an integral part of the campus identity. Pedestrian / bicycle trail connections and water shuttle or taxi service will let the waterfront serve as an entrance to the campus.

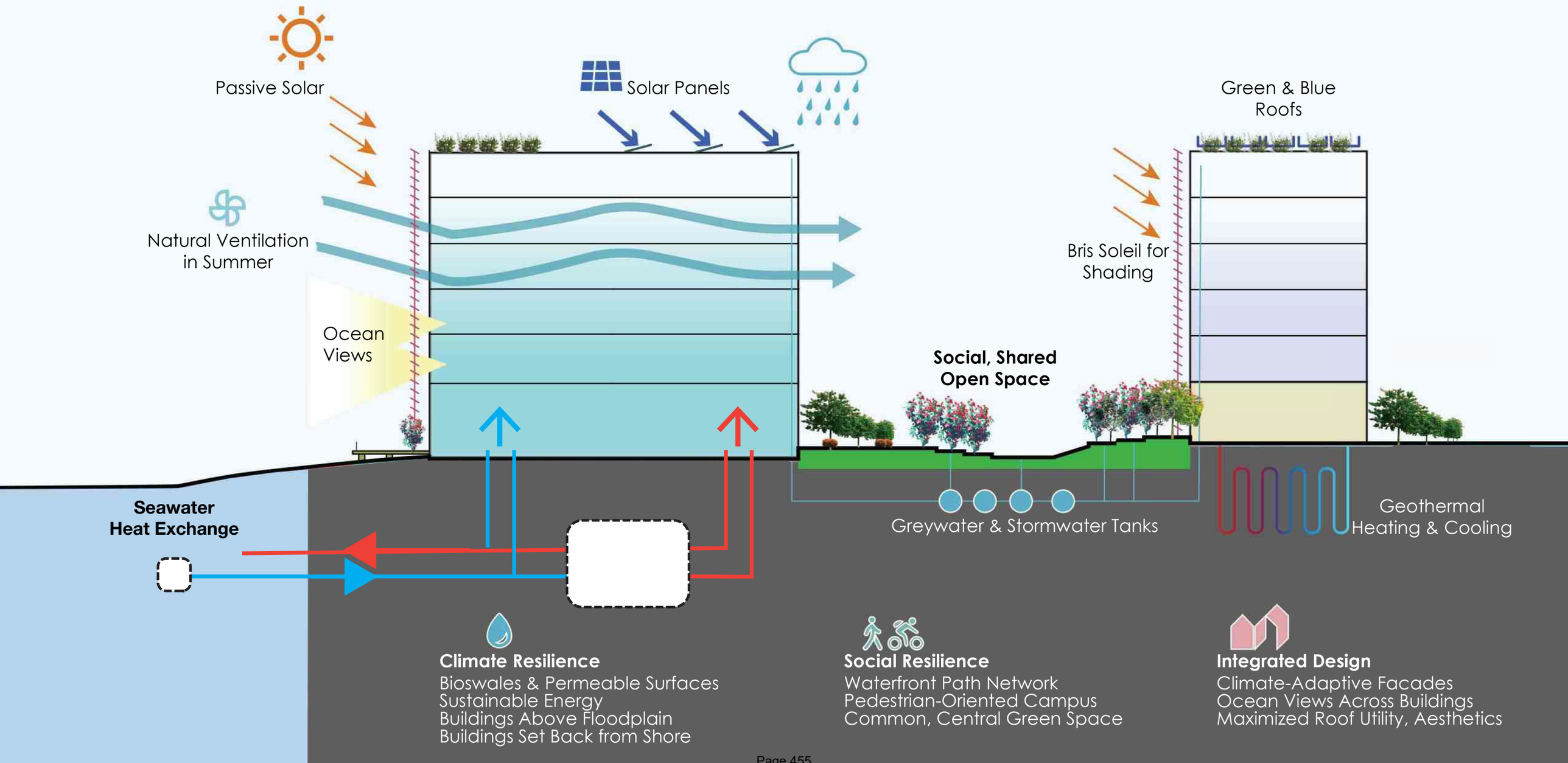
Places to Gather

Artist Interpretation

All new buildings will connect through linking landscaped terraces with a central, pedestrian-oriented green space. The campus will maximize publicly accessible open space through building height and density. This plan will foster a mixed-use environment encouraging interaction and innovation. Internal connections are echoed by external circulation and access points (pedestrian, bicycle, public transit, potential water taxi, automobile) that further strengthen the connection with neighboring communities and the City of Portland.

A Sustainable & Resilient Campus

The Roux Campus intends to incorporate state-of-the-art sustainable technologies. Examples of possible technologies (illustrated below) that will be thoroughly studied include geothermal heating and cooling, photovoltaic solar panels, high-performance building envelopes with triple glazing, green roofs, blue roofs, stormwater / greywater management, passive solar gain, sea water cooling, and natural summer ventilation. If necessary, purchase of renewable power produced off-site will supplement on-site sources. Resilience strategies like constructing buildings well above the 100-year flood zone will also be deployed to account for rising sea levels and severe weather events.



Enhance Access

The striking campus is visible from Interstate 295, as well as from its on- and off-ramps which are located nearby. US Route 1 and downtown Portland are both accessible within minutes. Via Sherwood Street, the Roux Campus will connect to the East Deering and Back Cove neighborhoods. Bus routes within easy walking distance, and waterfront pedestrian and bicycle trails (including a potential new connection under Tukey's Bridge and improvements to Sherwood and Veranda Streets) will link the Roux Campus to the neighborhood as well as to the Back Cove Trail, Bayside Trail, Eastern Promenade, and future trail networks. Within the site, ADA pathways and inclusive design principles will ensure the site benefits all users.

Adjacent to the Roux Campus (but not on its property) is the former Grand Trunk Railway line, which could one day provide a new transportation pathway. Connections to Casco Bay ensure water access to the peninsula, islands, and the entire Maine coast.

Contribute to Portland's Open Space Network

The Roux Campus will add significantly to Portland's open space network via a modern waterfront with public amenities such as lawns, a pier, plazas, and extended green space. Enhanced sidewalks and bike lanes, a potential direct connection to the Back Cove, Eastern Promenade, and Bayside trails, along with a pier for a water shuttle and / or taxi, will help the public get to the Campus. Gardens, native meadows, trees, and natural areas will offer new, calming spaces and create a variety of healthy habitats.

The primary academic building of the Roux Institute at Northeastern University will anchor a cohesive campus of learning, research, and collaboration along with residential and retail facilities that support them; natural systems will integrate with everyday life. A network of inland pathways across various landscapes will thread uses together.

The Roux Campus will transform an industrial site into an ecologically diverse, urban waterfront setting. Many existing impervious surfaces will give way to open spaces and green roofs inspired by natural landscapes from the Greater Portland area. Stormwater management strategies will further contribute to the environmental function of the site.

3. Creating the Path Forward

Artist Interpretation

Assessment of Growth

The City's Land Use Code establishes content requirements for Institutional Development Plans, including considerations of transportation, environment, infrastructure, design, and neighborhood engagement. The following pages apply these lenses to the Roux Campus, how they interact, and the opportunities they create.

Transportation
With one vehicle entry point, the development must be properly planned to minimize impacts on the surrounding street network. Reductions in trip generation through complementary on site uses, alternative modes of transportation, and transportation demand management are crucial.

Infrastructure
Any development is limited by the capacity of nearby utilities infrastructure. Fortunately, the site's previous industrial demands dovetail nicely with the needs of a mixed-use development. High-performance buildings can help reduce further infrastructure demands.

Environment
One compelling aspect of the Roux Campus is the waterfront location; yet decades of production and transportation-oriented industrial use diminished its ecological function. Thoughtful redevelopment will restore some of this function over time.

Design
While the Roux Institute at Northeastern University seeks to inspire aesthetically, the Roux Campus will be designed with neighborhood context and nature in mind. It can serve as a proving ground for best practices in ecological and urban design.

Neighborhood Engagement
The Roux Institute at Northeastern University cannot thrive without the support and goodwill of its neighbors. By establishing and maintaining community engagement, the organization will incorporate fresh ideas and build trust.

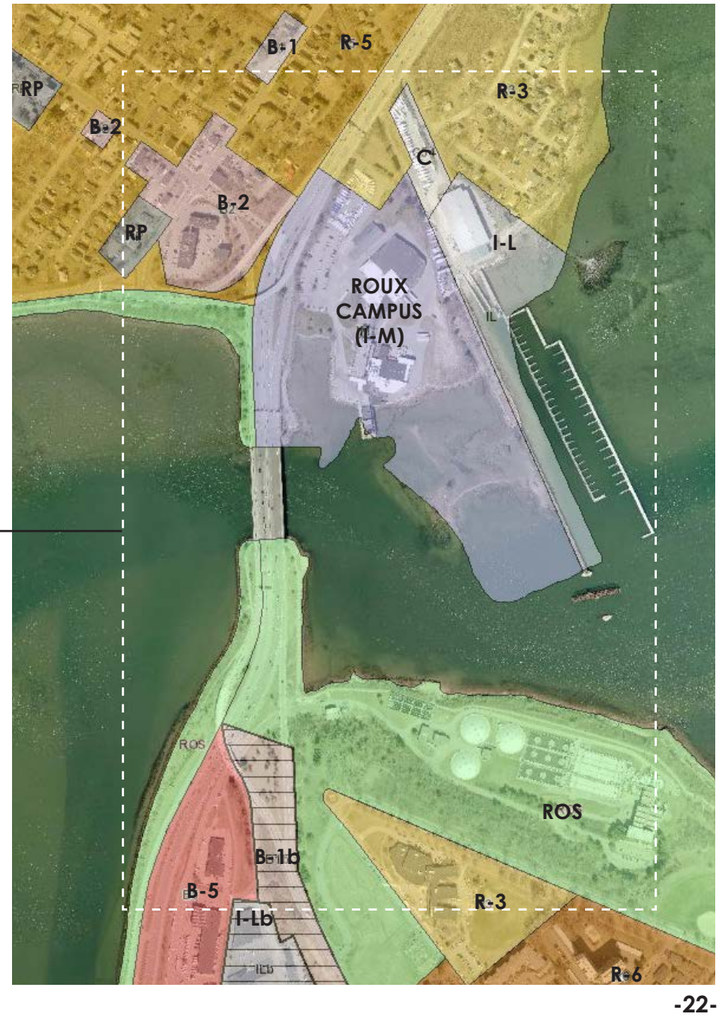
The environment of the site influences its design. That design leads to higher or lesser demands on transportation networks and utility infrastructure, which in turn impact the environment. Underlying the entire process is neighborhood engagement, without which the Roux Institute at Northeastern University cannot succeed.

Boundary of Proposed B-5 & IOZ

The proposed Roux Campus aligns well with the B-5 Mixed-Use Business zone's purpose statement in the City of Portland's Land Use Code:

"To provide areas of the peninsula* near the downtown where a mixture of uses, including marine, industrial, commercial, and residential, is encouraged. The B-5 and B-5b zones are characterized by larger underdeveloped lots with great potential for denser, clustered, urban mixed-use development and more efficient reuse of existing land and buildings. It is anticipated that the dense, mixed-uses of the B-5 and B-5b zones will rely on a shared infrastructure system, including service alleys, parking lots, public transportation facilities, stormwater management, and driveways."

**Per the City of Portland's Land-Use Code, "on-peninsula" is defined as all land south of I-295. The proposed Roux Campus is south of I-295.*



Transportation

The Roux Campus is well-situated to several major thoroughfares, including I-295, US Route 1, Washington Avenue, and Baxter Boulevard. The site has a single access point, located on Sherwood Street; that access will continue to provide vehicular access in and out of the site in the future. Access to Sherwood Street is provided via Veranda Street which connects to Washington Avenue, I-295, Baxter Boulevard, and US Route 1.

The intersection of Washington Avenue and Veranda Street is critical. Traffic from I-295, Baxter Boulevard, and Washington Avenue all travel through it to reach the site.

Washington Avenue accommodates all users, with traffic using two lanes in each direction south of Presumpscot Street, one lane in each direction north of that point, and buffered bike lanes north of Presumpscot. Bus routes run along Washington Avenue and pedestrian accommodations are present. In addition, the traffic signal system along Washington Avenue is a traffic responsive system operating with high efficiency. Intersections of Washington Avenue at Veranda Street, at Presumpscot Street, and at Ocean Avenue are each signalized intersections with pedestrians processed concurrently to traffic.

Veranda Street accommodates vehicular traffic with a single lane in each direction. Sharrows (faded) indicate that bicycles share the travel lane. Sidewalks are provided on both sides of Veranda Street and transit stops are present. Sherwood Street is a two-way roadway that is not striped and allows parking. Sherwood Street intersects Veranda Street to form a slightly offset four-way intersection. Both Sherwood Street approaches are stop-controlled at Veranda Street as well as Presumpscot Street.

Bates Street extends from the intersection of Washington Avenue and Veranda Street toward Baxter Boulevard, and consists of a vehicular traffic lane in each direction and a bike lane from Washington Avenue to Baxter Boulevard. A sidewalk runs along the west side of the street, but narrows and is periodically blocked by utility poles. A single lane in each direction at the intersection of Bates Street and Baxter Boulevard provides access north on I-295. Access south on I-295 is via a two-lane connection in each direction at the intersection of Washington Avenue at Veranda Street and Bates Street. This widens at Washington Avenue for turn lanes.

Adjusted Traffic Volumes at Washington Avenue and Veranda Street (2021)

Approach	Movement	AM Peak Hour Volume	PM Peak Hour Volume
Veranda St. Southbound	Left Through Right	130 65 50	70 95 60
Washington Ave. Eastbound	Left Through Right	35 1195 65	50 995 90
Veranda St. Northbound	Left Through Right	65 45 160	65 95 155
I-295 Exit Ramp Westbound	Left Through Right	100 650 80	150 1090 190

Several high crash locations (segments or intersections with eight or more traffic crashes and a critical rate factor exceeding 1.00 over the most recent three-year period) are located near the campus:

Intersections (with Crash Totals):
Washington Ave. at Randall St. (8)
US1 at Veranda and I-295 Ramps (14)

Segments (with Crash Totals):
Washington Ave. I-295 NB Exit 8 to Veranda St. (12)
Washington Ave. from Veranda St. to Galvin St. (11)

From 2019 to 2021, one fatal crash occurred within the study area at the HCL location of Veranda Street/US-1 with the I-295 SB On-Ramps. The crash was determined to be caused from a driver running a stop sign. Safety improvements are being made as a part of the Veranda Street Bridge Replacement project.

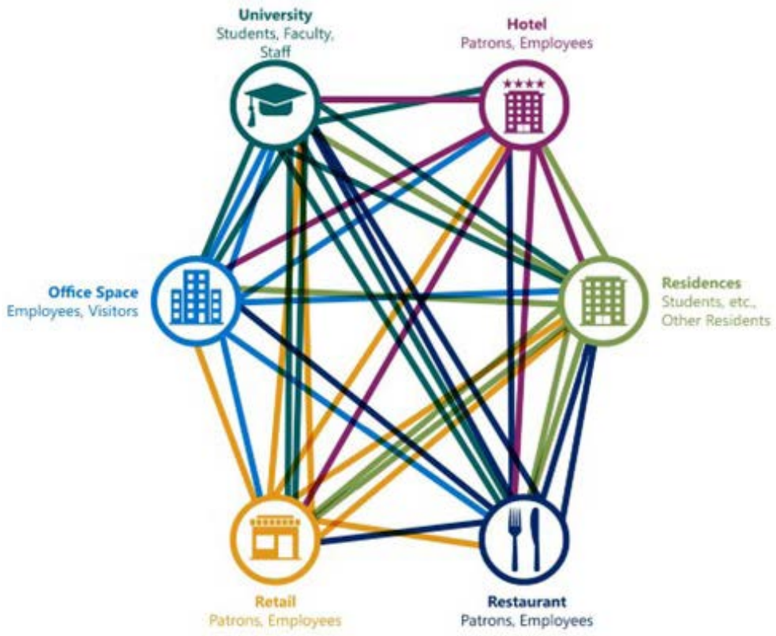
With adequate sight distance, the crashes along Washington Avenue, including at Randall Street, may be attributed to vehicles changing lanes or attempting to turn in or out of side streets where adequate gaps are not available due to congestion. There were no reported pedestrian crashes at the HCL locations. Three bicycle crashes occurred in the study area: one each at the intersections of Washington Avenue/Bates Street/ Veranda Street, Bates Street/Baxter Boulevard, and Washington Avenue/Churchill Street.

Trip Generation

Trip generation was evaluated using standard rates and Maine DOT guidance for the long-term development of the site. Trip generation rates were obtained from the Institute of Transportation Engineers Trip Generation Manual, 11th Edition, where available. Input was received from the City of Portland regarding appropriate land use codes, specifically for the restaurant component. In addition, because the land use code for university/college does not reflect the type of institution proposed here, VHB developed a trip generation methodology based on the anticipated populations at the site.

Relevant uses for the Roux Campus include general office building (LUC 710), multi-family housing mid-rise (LUC 221), high-turnover sit-down restaurant (LUC 932), strip retail plaza (LUC 822), and hotel (LUC 310). As a mixed-use development, many trips will occur between destinations on the campus. Students, faculty, and staff will eat in on-site restaurants and shop at on-site retail stores. Some students and staff will live in the residential units or work in the office space. Partner employees may travel between offices, university buildings, restaurants, and stores.

Inclusion of ancillary uses on the campus, such as housing, hotel, office space and retail, will reduce the number of external trips to the site; internal trips will not generate external traffic or impact the adjacent road network. For traffic generation purposes, internal trips are separated from total trips estimated using engineering standards.



Vehicle Trip Assignment
Vehicle trips were assigned to area roadways by estimating the proportion of trips arriving or leaving on each approach to the area. Estimates were based on data from several sources, including population density maps and US Census Journey to Work data. The process was repeated using catchment areas of various sizes, with minimal change in results. Trip distribution for people within a commuting distance of the site is shown in the adjacent top graphic.

Approximately 50 percent of trips are anticipated to travel from the south to reach the site and 15 percent are anticipated to approach from the north. (The thicknesses of arrows are scaled to indicate the share of trips that will use that route.)

Anticipated distribution of vehicular trips on neighborhood streets is shown in the adjacent bottom graphic. Almost 90 percent of trips are expected to travel through the intersection of Washington Avenue and Veranda Street. However, to access I-295 southbound, some drivers may choose instead to exit by taking a right and traveling up to the southbound on-ramp.

Additionally, approximately 20 percent of the site traffic is oriented to points west /southwest along local roadways or to and from the north on I-295; this will impact the intersection of Bates Street and Baxter Boulevard.

Mode Share
The East Deering Neighborhood is served by multiple bus routes and features a pedestrian and bicycle network. With improvements to these resources, the campus will be well suited for trips by modes other than single-occupant vehicles. We are committed to working with Portland METRO to support increased transit opportunities to and from the campus area. These factors, in addition to a Transportation Demand Management (TDM) plan, will reduce auto mode share.

A transportation engineer developed target mode shares for each envisioned Roux Campus land use, in consultation with City of Portland and Maine Department of Transportation officials. These shares were applied to external trips to determine the likely number of trips by each mode, yielding the estimates in the table at right.

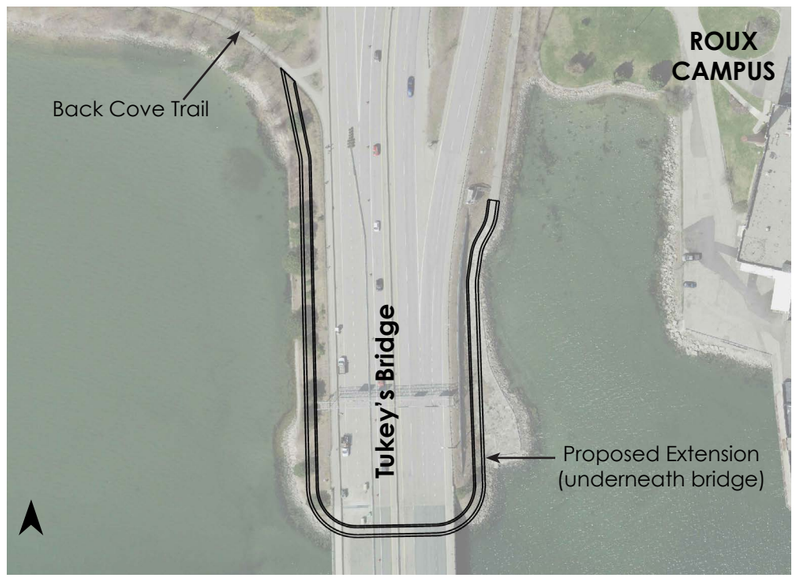
Estimated Mode Split (%)

Land Use	Transit	Ped. & Bike	Vehicle	Carpool Rider
Office	10	10	75	5
Retail	10	50	40	0
Restaurant	10	50	40	0
University	10	20	65	5
Residential	10	20	65	5
Hotel	10	10	75	5

Transportation Improvement Opportunities

Bicycle and Pedestrian Connection Opportunities
Infrastructure improvements can alleviate some neighborhood traffic impacts. These improvements include roadway reconfigurations, pedestrian and cyclist connections, and additional transit provisions. Two opportunities stand out when considering bicycle and pedestrian improvements (illustrated below and in the map at right).

Above: The Back Cove Trail connects with the Eastern Promenade Trail via Tukey's Bridge.



Above: potential extension of the existing Back Cove Trail to the Roux Campus.

The first is an improved connection between the Back Cove Trail and Washington Avenue. At present, users of the Back Cove Trail face a 90-foot mid-block crossing to reach the northwest side of Bates Street. Converting the intersection of Bates Street and sweeping right-turn maneuver would create a shorter, safer crossing. The second improvement is a direct connection from the Roux Campus to the Back Cove Trail, extending the shared-use path below and alongside Tukey's Bridge and through the site.

Parking Demand and Capacity
Parking will be built over time as part of the development program. All vehicular trips are intended to park on site. As demand increases during the phased development, parking will be introduced incrementally to avoid excess supply and inadvertent encouragement of driving to the site.

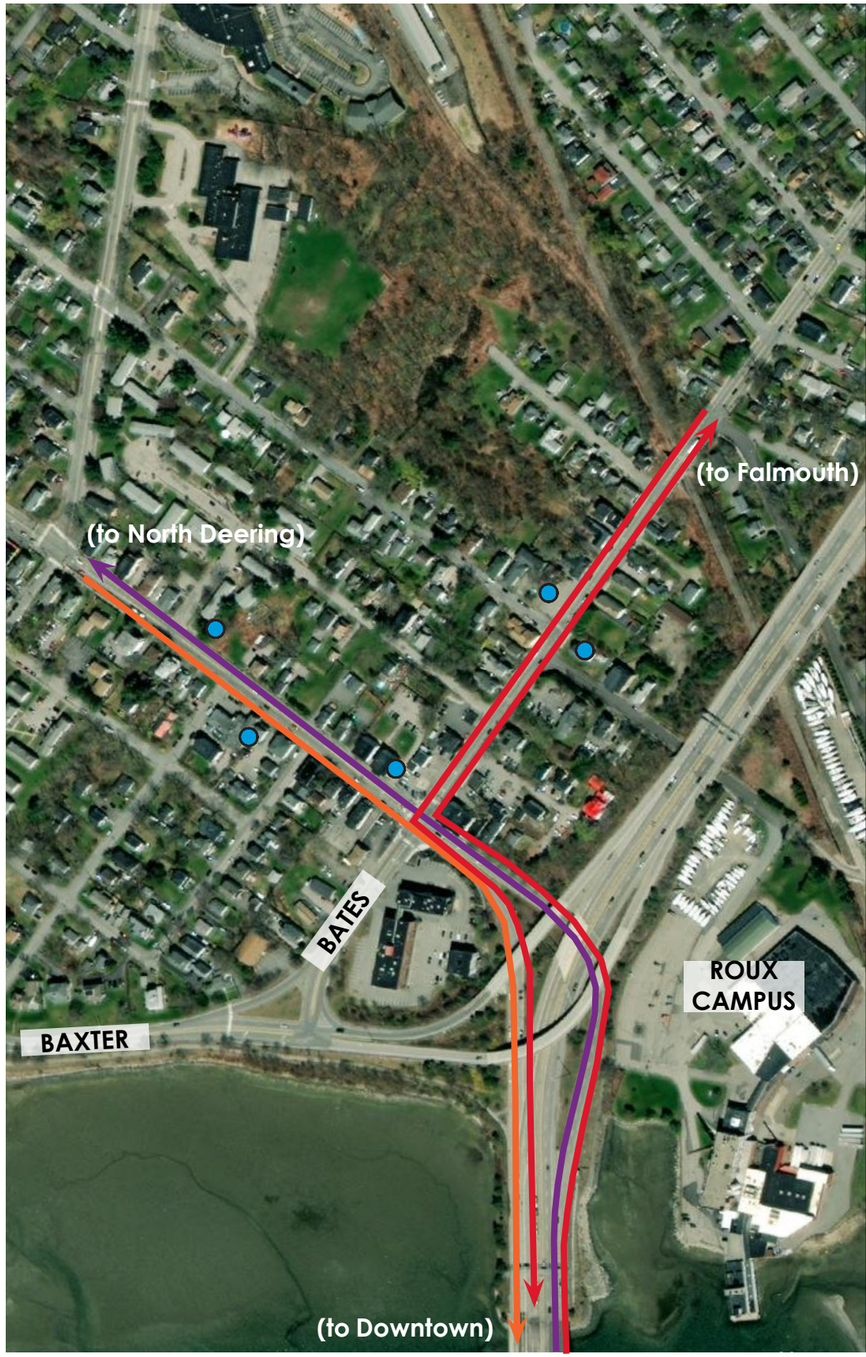
Base parking demand (calculated for each hour of the day using ITE Parking Generation Manual rates, 5th Edition, and the same land use codes as for trip generation) indicate that total parking demand across all uses on the site will peak at 11 AM. At completion of the first phase of development, parking demand is expected to be approximately 700 vehicles. Demand at full build-out could be as high as 1900 vehicles, inclusive of day users and residents. All site parking is intended to be communal; availability in the closest lot to a destination will not be guaranteed. Additionally, uses with opposing peak parking demands will be able to share parking resources.

All parking will be paid parking, and a parking office will be created to handle permitting and enforcement for the campus. Parking costs and regulations may vary between classes of users (students, staff, residents, office tenants, visitors, etc.). The Roux Campus may include on-site car share, enabling travel to and from the site using other modes, with the comfort that vehicles are available if necessary.

Public Transit
Two bus lines currently stop near the site: METRO Route 7 and METRO Routes 9A / 9B. These routes provide direct connections to the peninsula, western Portland, and Falmouth. With a transfer at the Downtown Transportation Center, riders can reach the rest of Portland and several outlying towns.

Buses run continuously throughout the day, readily accommodating the varied schedules of students and other campus users. METRO BREEZ express bus service to Yarmouth, Freeport, and Brunswick and the Husky Line to Westbrook and Gorham establish a regional footprint for transit service. Ten local and express routes connect the campus to most of the Portland area with no more than one transfer.

The Roux Institute at Northeastern University will promote and incentivize transit use. It plans to subsidize transit passes for students and will work with METRO to improve the quality and frequency of transit connections to the Roux Campus.



Other Roadway Improvement Opportunities

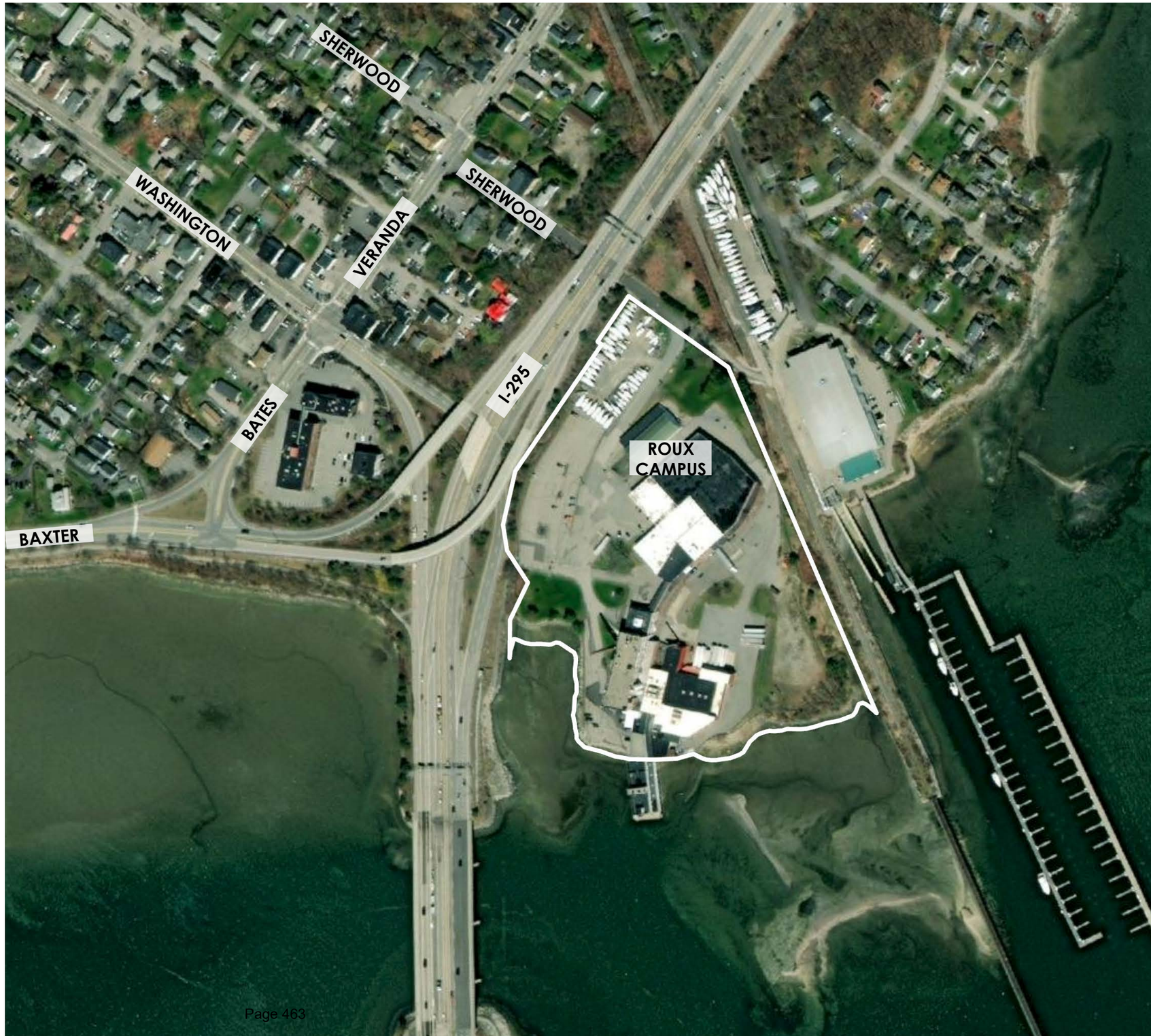
The Roux Campus is constrained on three sides by the Bay, I-295, and a rail line, leaving Sherwood Street as the only viable access road. The campus's vehicle traffic will be highly concentrated on certain streets and intersections immediately surrounding the site. Targeted roadway improvements at these locations can increase capacity and prevent excessive congestion.

These improvements are not tied to specific years or development phases. They are held out as possible mitigation measures to be considered as future traffic warrants. As development continues, the Roux Institute will apply for traffic movement permits (TMP). Potential improvements will be evaluated during the TMP process in collaboration with the Maine Department of Transportation and City of Portland.

Traffic from the campus exiting via Sherwood Street may turn right or left on Veranda Street to access I-295 South. The left turn lane from southbound Veranda Street to Washington Avenue currently has a storage length of only 130 feet. At higher traffic volumes, the line of vehicles waiting to turn left may extend beyond this length, delaying through and right turning vehicles from reaching the intersection. If this type of congestion becomes frequent, it may be mitigated by extending the left turn lane further back. This will require widening Veranda Street between Washington Avenue and Sherwood Street within the existing right-of-way. Widening on Veranda Street would also allow bicycle lanes to be added. This impact will also be reduced through use of signs indicating that I-295 South can also be readily reached by turning right and using the Veranda Street on-ramp.

With 100% of campus traffic traveling through the intersection of Sherwood Street and Veranda Street, improvements may become necessary. The intersection is currently controlled with a stop sign on Sherwood Street. To improve traffic flow, Sherwood Street could be widened at the intersection within available city right-of-way to separate outbound traffic into left and right turn lanes. A bicycle lane could also be added within this space. This would substantially increase capacity on the Sherwood Street approach. If traffic volumes eventually exceed this new capacity, a traffic signal could be installed at the intersection.

Traffic approaching the campus from I-295 southbound will exit at Baxter Boulevard and make a right onto Bates Street. There is significant unused right of way on Bates Street between Baxter Boulevard and Veranda Street that could be repurposed to increase capacity. Another northbound turn lane could be added (isolating left, through, and right movements) at the intersection as well as adding a bike lane. A bike lane would also have the benefit of completing the trail connection from the Back Cove Trail. The intersection of Washington Avenue, Veranda Street, and Bates Street may eventually need other mitigating measures to increase capacity, such as reconfiguring lanes on the I-295 exit ramp approach.



Managing Transportation Demand

Active Transportation
In addition to the transit options in the study area, the Roux Campus development will benefit from existing pedestrian and bicycle infrastructure. Sidewalks are in good condition and pedestrians are accommodated at signalized intersections with crosswalks and concurrent pedestrian signal phasing. Future visitors will benefit from upgraded pedestrian accommodation along Sherwood Street. Once on the site, pedestrian connections will link site uses and points along the waterfront.

The Roux Campus can promote human-powered trips to the site through improved connections to this infrastructure. The area is densely populated, bicycle lanes are provided along Washington Avenue and other roadways, and the Back Cove Trail is nearby. In the future, cyclists will be accommodated on Veranda Street and into the site on Sherwood Street via dedicated bicycle lanes.

Transportation Demand Management (TDM)
TDM programs seek reductions in traffic impacts by subsidizing and marketing alternative commute options. Northeastern University plans aggressive targets of non-single occupant auto trips and intends to limit on-site parking - the goal is a 37 percent reduction in automobile trips from ITE Trip Generation predictions, and a minimum of 20 percent reduction in parking demand compared to anticipated ITE Parking Generation. As mixed uses are created during development, internal trip-making will increase, and these targets may be revised.

Transportation Coordinator: Northeastern University plans to follow industry best practice by appointing a campus-wide transportation coordinator. This person will collect data on the TDM program to ensure it evolves as the site develops. Once aspects of the site are operational, they will conduct a transportation survey to establish a baseline for future trip reduction goals. They will also collect and disseminate information (including non-automobile travel options) among the employers and facility managers on site to encourage TDM participation.

Public Transit Support: Northeastern University intends to partner with Portland METRO to subsidize shorter headway service to the Roux Campus. Student subsidies will enable frequent and reliable service to and from the site.

To further support trips via public transit, the Roux Institute at Northeastern University intends to subsidize bus trips for students and employees (for employees, their purchase can also be included as a pre-tax benefit). Lease agreements will encourage transit pass subsidies by other on-site employers.

Carpools: Northeastern University will prioritize parking for carpools near building entrances. The transportation coordinator can facilitate carpools by maintaining a database of interested parties; commuters may be matched with others who live near them or can access a park-and-ride location along their route. The coordinator can also participate in the Maine DOT commuter resource program, which facilitates carpools across nearby sites and provides participants with rewards for carpooling.

Parking Fees: Paid parking is intended to be shared across uses on the Roux Campus, not guaranteed in individual lots.

Bicycle Travel: Northeastern University will support active transportation by investing in complete streets and trail connections, bike storage, and shower facilities and lockers.

Water Travel: Northeastern University plans to build a modern pier over the footprint of the current pier, in order to accommodate water shuttles and taxies.

Monitoring: Northeastern University will monitor transportation to the campus in order to ensure that mode share goals are being met and shall make adjustments as necessary to achieve such goals established in the applicable TDM or TMP.

Transitions

With I-295 to the west, state-owned vacant parcels to the north, the rail corridor and marine business to the east, and Casco Bay to the south, the Roux Campus is surrounded by existing areas of transition from the campus to the surrounding neighborhoods. In addition to the existing buffers, development will further ease the transition to and from the campus through the following design methods.

Between Site Entrance & Campus
Public open space will ease transition from the smaller scale of Sherwood Street. Views to the water and the Bean Building, and clear wayfinding and circulation of pedestrian and bicycle pathways, will welcome site visitors further into the campus. A smooth transition will also be accomplished through thoughtful facade design at the pedestrian level. Potential nuisance features like dumpsters, air handlers, and parking will be appropriately screened. Buildings will avoid blank walls to respect the adjacent neighborhood and facilitate a sense of permeability and welcome.

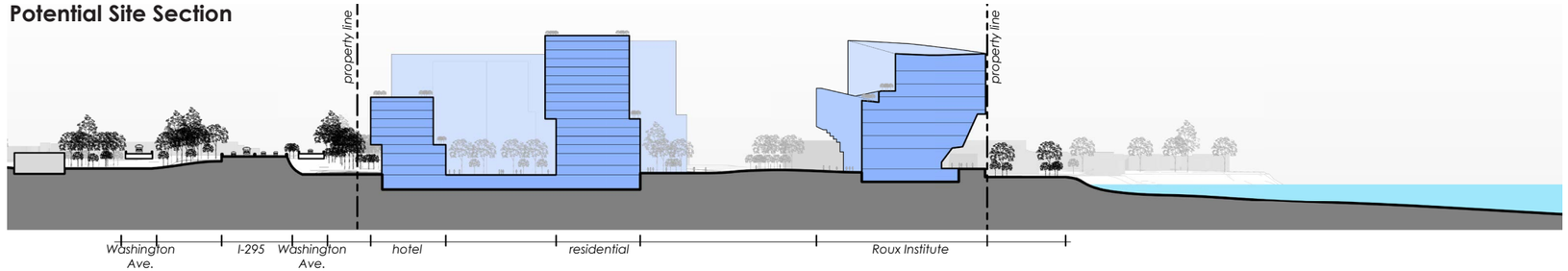
Between Buildings & Campus
Building entrances will face major public spaces or circulation paths. Lower stories will be programmed for activation where they meet the pedestrian realm or feature visually interesting details and activities related to the building. Building articulation, massing, and materials will contribute to the sense of a well-textured, connected campus.

Between Campus & Water
The shoreline area between the buildings and the water will serve as meaningful public open space. This open space will contain a combination of pedestrian and bike trails, passive and active gathering spaces, restored and ecologically improved landscape and shoreline to anchor the site's relationship with the water. Building facades facing the water will be considered public-facing, with views designed for interest from the water and Eastern Promenade Trail.

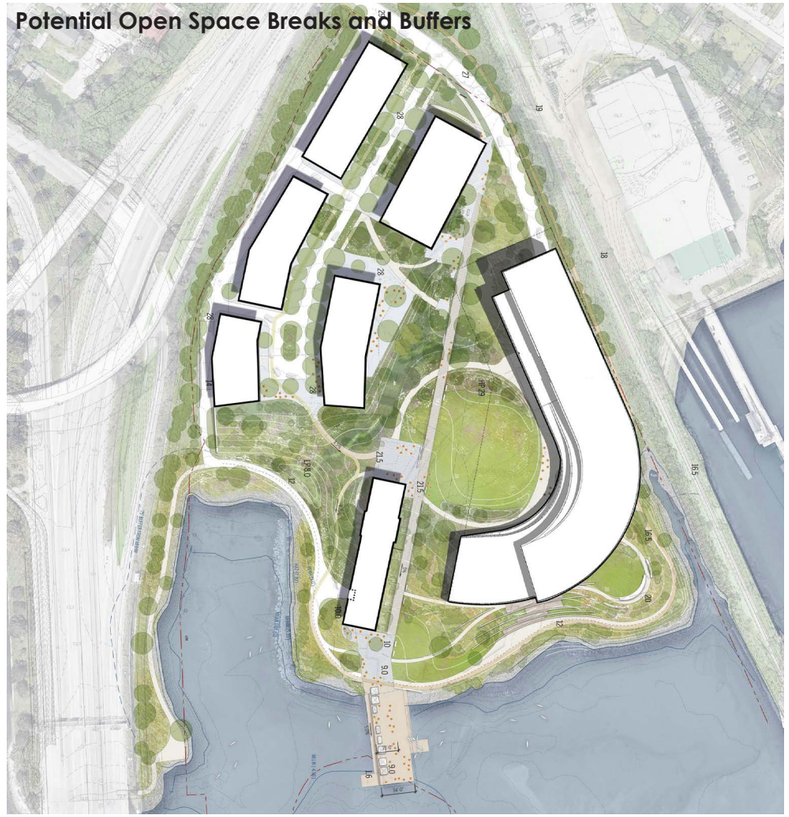
Safety / Crime Prevention Through Environmental Design (CPTED)
Key to these successful transitions is a sense of welcome, comfort, and safety. To ensure this, the campus will incorporate the following CPTED design strategies demonstrated to deter crime:

- Mixed use, multi-tenant 24-hour campus that generates "threshold capacity" for a diversity of places, people, and programs
- Ecologically restored, biophilic and publicly accessible campus connected to the wider community
- Highly durable, vandal-resistant materials in the public realm to communicate a well-maintained, clean campus
- Systematic, clear, and appropriately scaled wayfinding to guide and inform all transportation modes and user groups
- Matrix of pedestrian and bike paths connecting well-lit transit stops, bike storage areas, and parking areas to maintain clear sight lines
- Street-level building elevations designed for visibility, minimizing hidden corners and spaces
- Transparency and openness of buildings at ground levels and entrances to connect with the public realm and create pathways
- Controlled campus access points for special events or emergencies

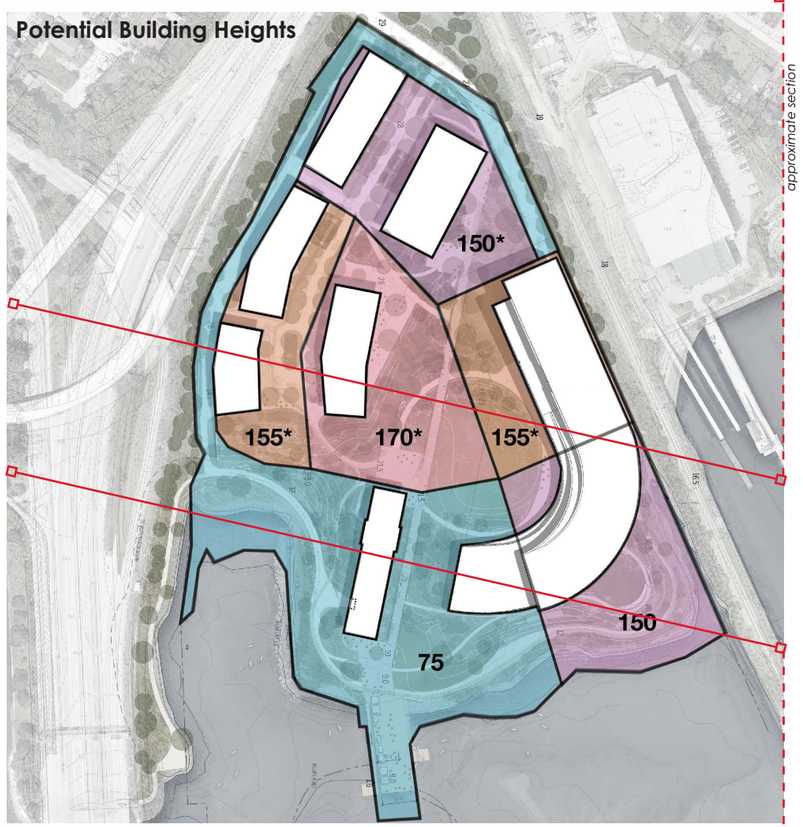
Potential Site Section



Potential Open Space Breaks and Buffers

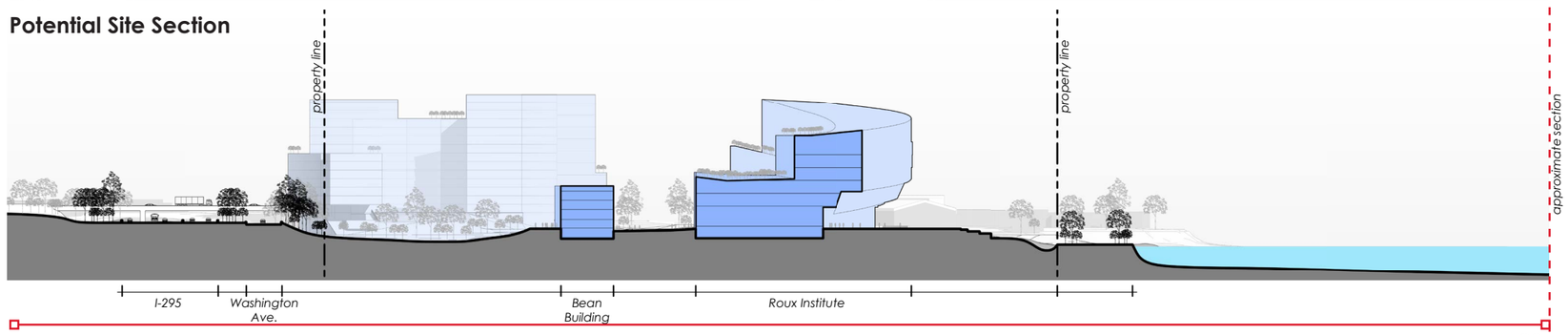


Potential Building Heights



approximate section

Potential Site Section



approximate section

Existing Infrastructure

B&M's facilities required intensive utility and infrastructure development sized appropriately for industrial use. Fortunately, this sizing translates well to re-use in a denser development, as proposed.

Water
Domestic and fire protection services are provided by Portland Water District's (PWD) infrastructure at Sherwood Street. The public water mains nearest to the site are 8-inch and 12-inch, consisting of ductile iron and cast iron. The site is, and will continue to be, serviced by a combined domestic / fire protection loop.

Wastewater
Wastewater will continue to discharge to a gravity public sewer along the I-295 corridor. Downstream of the service connection, public sewer transitions from 15-inch to 48-inch reinforced concrete gravity line conveying combined storm and sanitary sewer from the East Deering neighborhood west of I-295. The 48-inch combined sewer transitions to a 3-barrel (two 18-inch and one 30-inch) siphon along Tukey's bridge and discharges through a pumping station prior to treatment at the East End Wastewater Treatment Facility.

Wastewater is conveyed across a portion of the site near Sherwood Street and I-295 from properties to the northeast (Lennox, Berwick, and Kensington Streets) via an easement benefiting PWD. This easement will remain in place unless otherwise approved by PWD.

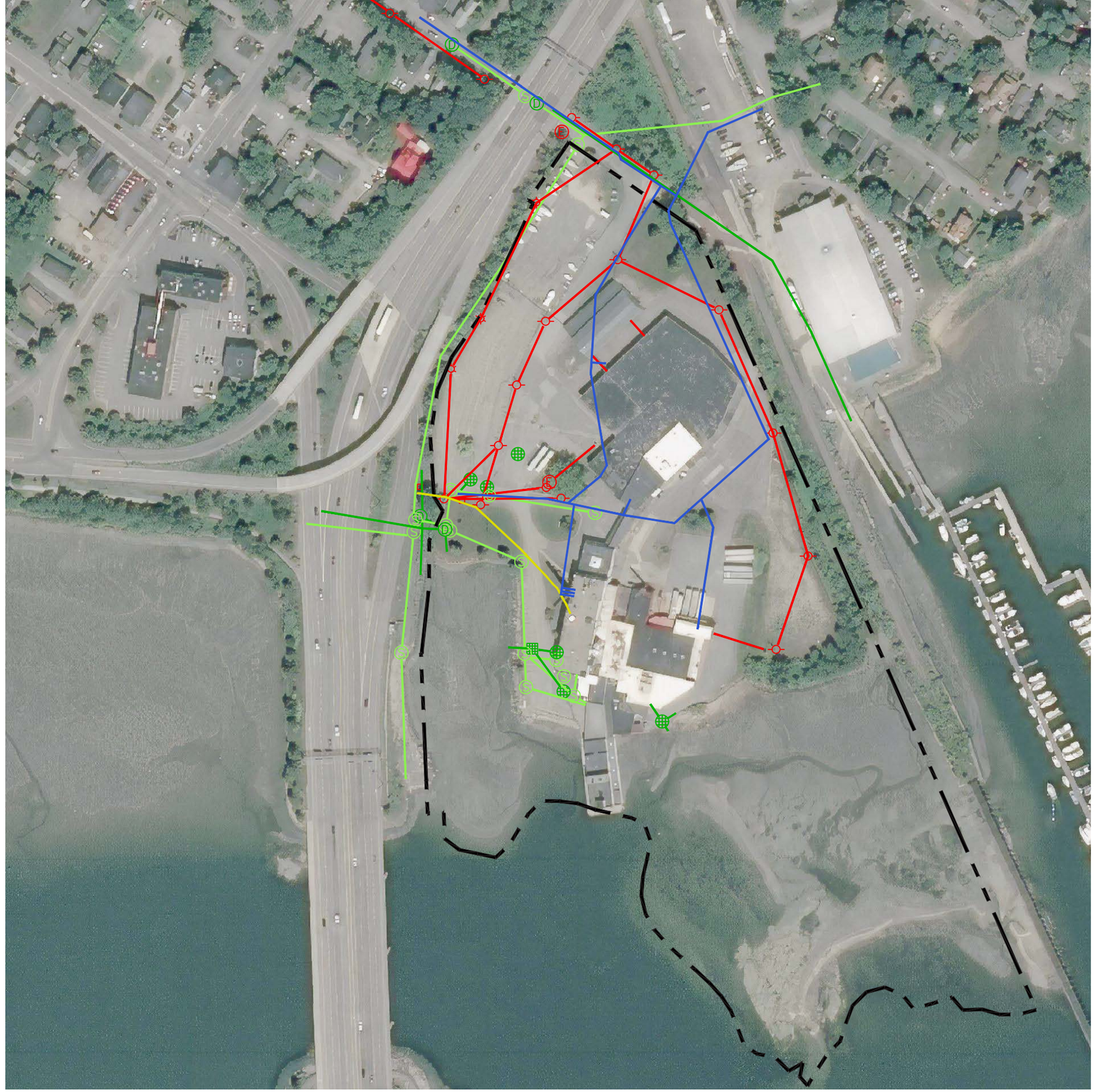
Stormwater
Stormwater runoff from the site is managed through a combination of catch basins, buried infrastructure, and overland flow, discharging via outfalls to the bay. The Roux Campus redevelopment allows for reduction of site impervious area and incorporation of low-impact development techniques; these will improve the water quality and reduce the quantity of runoff prior to its discharge into Casco Bay.

In addition to private stormwater outfalls, a public stormwater outfall is located at the site's southwest corner. This outfall will continue to convey drainage from the neighborhood west of I-295 through an easement located near the southwest corner of the site.

Electricity
Central Maine Power provides electric power via an overhead 12.47kV 3-phase distribution system. The facility has two main secondary metered services. New utility corridors will include electrical infrastructure improvements. Energy-saving technologies and renewable energy sources will be incorporated into building and campus design to reduce electricity consumption and advance sustainability goals.

Telephone & Data
Fiber-optic internet is located along Veranda Street and Sherwood Street.

Natural Gas
Unitil provides natural gas service to the site via a 6-inch diameter service. Natural gas infrastructure in the East Deering neighborhood is provided at intermediate pressure and is suitable for campus needs.



Environment

Strengthening Resilience & Ecology
Under current conditions, the site is approximately 75% impervious with approximately 10 acres of building roofs, parking areas, and loading dock space. Minimal shoreline buffer is present at the site, with pavement extending right up to the armored embankment along much of the shoreline. Existing site grades adjacent to the Bean Building are only 1-foot above highest astronomical tide. In recognition of these existing vulnerabilities and with a desire to improve ecological function for the site, the redevelopment will raise interior site grades and soften landscapes to reduce impervious area and increase flood resilience. Living shoreline techniques for landscape will enhance some of the natural resource areas along the water's edge.

Energy Consumption
The development presents an opportunity to mitigate energy consumption through high performance building envelopes, particularly with the likely southern exposure of the Institute building. Similarly, we intend to explore and hopefully incorporate renewable energy sources such as active and passive solar, sea water cooling, and / or geothermal.

Noise Generation
The proposed mixed-use academic campus is compatible in uses with the surrounding East Deering neighborhood. The Roux Campus is buffered by I-295, the abandoned Grand Trunk Railway, and adjacent marine uses. Development will adhere to City of Portland technical standards regarding noise, vibration, and other potential nuisances. Pre-development noise measurements will serve as the baseline of analysis, in order to assess noise impacts accurately and to allow improvements to baseline conditions where possible. Development will employ noise abatement techniques (screening, acoustical attenuation, landscape buffering, etc.) for the benefit of residents, students, and all users of the site.

Hazardous Materials
Use of hazardous materials, if any, will be in academic and laboratory contexts, and managed in conformance with all local, state, and federal requirements.

Heat, Glare, and Radiation
Development studies will include analysis of heat, glare, and radiation impacts in order to understand and eliminate safety hazards and lessen impacts of new development. Development will comply with all City standards regarding heat, glare, and radiation.

Wind
Wind and occupant comfort analysis will be performed during each phase of development when applicable site plans are reviewed, with design modifications as necessary to maintain acceptable conditions. The analysis will include comfort at and around buildings as well as major public spaces. Existing buffers of plantings at property lines will be maintained or replaced where appropriate. This will be coordinated with the City of Portland arborist.

Artist Interpretation

Lighting
Exterior lighting will be full cut-off and dark-sky friendly. Fixture output will comply with all City of Portland lighting regulations to avoid light spill into neighboring areas from the site. Photometric analysis at each phase of development will be used to inform lighting design in accordance with Illuminating Engineering Society of North America (IESNA) Standards.

Height and Massing
The allowable building heights on the Roux Campus are informed by the historic location and prominence of the Bean Building, the desire to create meaningful public open space while meeting all programmatic goals for the Roux Institute, resilient building design, and potential shadow and other impacts to neighboring properties. Building heights will stagger, with the greatest height at the center of campus and lower heights near the site's boundaries. Building heights around the Bean Building and within 35' of the western and northern edges of the campus will be no greater than 75'. Conceptual massing studies based on allowable building heights are attached as Appendix A.

Shadows
Height and massing will minimize shadow impacts to neighbors and avoid negative impacts to nearby existing public open spaces. The campus height map places the greatest heights to the middle of the site and progressively lower zones to the perimeter. Mechanical enclosures will be set back from roof edges to minimize impact. Conceptual shadow studies based on allowable building heights are attached as Appendix B.

Existing Condition

Neighborhood Engagement

The Roux Campus is intended to become an extension of the East Deering neighborhood, which is separated from the site by Interstate 295, the rail corridor, and Maine Yacht Services. The site will be a walkable addition to the neighborhood, with open spaces, waterfront, campus-oriented retail, and restaurant amenities, but it also represents a change. To ensure the campus is designed in a manner benefiting the neighborhood will require robust communication with interested stakeholders.

The City of Portland requires two Neighborhood Meetings related to the Institutional Overlay Zone and Institutional Development Plan processes. We have used those requirements as a starting point for ongoing dialogue. The first Neighborhood Meeting was held virtually on November 18, 2021, with 26 registered attendants and 11 attendees. The feedback was positive, and attendees expressed interest in construction job opportunities, sought additional information regarding traffic and associated transportation improvements, indicated a desire for bike/pedestrian connectivity, requested that lighting plans be considerate of adjacent neighborhoods, and asked about climate resilience and disturbance during construction. A second Neighborhood Meeting was held in person at the Ocean Avenue Elementary School on April 6, 2022. Although the City only requires that abutters within 500 feet of the campus be notified of the meeting, IDEALS and Northeastern expanded the list of invitees to include a much broader radius and mailed over 1700 meeting notices. Forty-eight people attended the meeting at the school. Many attendees expressed concerns about the scale of the proposed development, building height, and traffic. As a result, IDEALS and Northeastern reduced the planned square footage of construction by 27% and the tallest proposed building heights by 19%.

In addition to Neighborhood Meetings required by the regulatory process, IDEALS and Northeastern have hosted periodic virtual forums called Roux Campus Roundtables as a way to engage with the East Deering neighborhood and beyond on an on-going basis. The first such event occurred December 14, 2021. Additional meetings occurred on February 1, March 23, and June 2, 2022 An Open House was held at the site on September 6, 2022, with over 130 public participants.

To keep all potential stakeholders apprised of the development plans, IDEALS and Northeastern maintain a website, www.rouxcampusportland.org, to showcase up-to-date plans, present information about the Roux Institute at Northeastern University, and provide notice of upcoming events with links to meeting documents and recordings of prior forums. The site is an interactive platform with an email link for questions and a feedback section that probes for input on a wide variety of issues. This platform will also be a valuable communication tool during construction, providing a means to share information related to construction schedule, work hours, management plans, public safety, and site access.

Additionally, Northeastern University and IDEALS have a designated community contact for members of the public. This contact works closely with neighborhood and city stakeholders to solicit ideas and feedback and ensure that any concerns are dealt with promptly, whether reported in person or through the website.

Finally, members of the team are conducting regular outreach to interested stakeholders and potential partners to gain broad input into development plans. This will continue to facilitate assessment and calibration regarding how the Roux Campus can fit into the Portland landscape and ways it can best live up to its potential as a model for education, economic development, recreation, and aesthetics.

Regular Neighborhood Forums
Northeastern University and IDEALS will continue to host neighborhood forums on a quarterly basis to discuss items such as phasing plans, project impacts, construction plans and schedule, and any neighbor concerns.

Northeastern University and IDEALS will provide an estimated construction schedule at the beginning of a project and provide regular updates throughout construction.

Community Advisory Group
Northeastern University and IDEALS will create a Community Advisory Group for the purpose of sharing information on project development, planning, and seeking input. To the extent practicable, the group shall be comprised of a representative from the following categories:

- East Deering Neighborhood
- Recreation, parks, and trails
- Bicycle/pedestrian
- Rail
- Public Transit
- Portland Harbor
- Portland Public School System
- Higher Education
- Sustainability
- Business Community

The Community Advisory Group will meet quarterly and may meet more frequently as necessary. Input gathered and meeting documentation from Neighborhood Forums will be provided to the Community Advisory Group.

Construction Management Principles

A detailed Construction Management Plan will be submitted as part of the site plan review, based on the following principles:

- Open and transparent communication
- One-on-one conversations whenever possible
- Multiple channels to give and receive information
- Timely sharing of plans and considerations
- Receptivity and response to input
- Respect for affected parties

Northeastern University and IDEALS are committed to communicating early and often with neighbors and interested parties. Existing communication platforms – in-person meetings and calls; website; info@rouxcampusportland.org; and Neighborhood Forums will be supplemented with a dedicated construction webpage on the website, along with social media, texting, and a hotline to ensure the public has easy access to timely and accurate information.

Project Schedule
A Master Project Schedule will be prepared at the onset of each stage of construction, with distinct project schedules for buildings developed over the course of construction. Scheduling updates will be shared at the outset of each undertaking.

Public Safety Considerations
During construction of the initial phase, the site will be off-limits to the public. Thereafter, secured fencing and signage will be used to protect public spaces from construction areas and direct traffic flow. Pedestrian, bike, and vehicular access will be clearly marked throughout the campus. Appropriate lighting will ensure safe pedestrian routes. Where possible, buffers will be established between construction sites and vehicular and pedestrian ways. Following completion of initial phase, interim connections to bike and pedestrian ways will be provided when temporary construction impacts are necessary. All procedures will be OSHA compliant.

Construction Staging
Construction staging will occur inside the project's limit of work, as designated on the site plan submission.

Truck Routes
Truck routes and timing will be addressed in the projects's Construction Management Plan during site plan review and monitored throughout construction. In coordination with the city, wayfinding signage may be installed where specific locations are identified as no-travel zones for reasons of safety or traffic impacts. Every effort will be made to schedule construction traffic to avoid undue impacts when roadways are busy and/or queuing to gain access to the site. There will be no truck or construction-related parking within the city right-of-way.

Noise Impacts
Notwithstanding the existing buffers to the site, there will be noise impacts as a result of construction activities. For those noise events that are above the regular background level, advance notifications will be provided using the communications mechanisms described above. The City of Portland Noise Ordinance will be followed.

Air Quality Impacts
Construction Managers have a range of tools available to mitigate and manage dust and other agents effecting air quality. While the waterfront location and general westerly winds will partially alleviate these impacts, additional measures to be implemented as needed include covering loaded truck beds and soil stockpiles, use of wetting agents, and periodic cleaning of construction staging areas, roadways, and truck wheels.

Community Benefits

The Roux Institute at Northeastern University, through its programming and its publicly accessible waterfront campus, will provide numerous benefits to the residents of the City of Portland and beyond. At the core of the Roux Institute's mission is service to Portland and Maine's people by offering graduate programs in high-growth fields with generous scholarship support, launching startups and driving talent development, and supporting existing Maine businesses and institutions--all with the goal of bringing cutting edge technology capabilities to Maine through education, research, and entrepreneurship. The nearly billion-dollar investment in the Portland Campus will generate local jobs at all levels, both temporary and permanent. The very nature of an innovation hub like the Roux Institute is to create new opportunities.

Community Spaces
The Roux Institute's publicly accessible, waterfront campus will benefit the adjacent neighborhoods and greater Portland community. Some of those benefits include:

- At least three acres of open space will be built in the first phase of construction and maintained thereafter, available for use by all members of the public
- Safe public bicycle / pedestrian trails linking to the Back Cove and Eastern Promenade trails available for use by all members of the public
- Open space and a waterfront pedestrian walkway available for use by all members of the public
- Indoor spaces for use by members of the public, as available
- Convening space available for use by members of the public
- Snow ban parking for adjacent neighbors
- A pier available for public use with concessions for kayaking and paddleboarding

Workforce Development During Construction
Construction of the Roux Institute campus provides an opportunity to educate and develop our workforce for the future. The following are some examples of community benefit opportunities during the construction phase of the project:

Outreach to Local Schools - Portland Public Schools, Trade Schools and Community Colleges
- Host a Roux Campus Construction Lab, where interested parties including future and current tradespeople will be invited to come learn from the project team about construction techniques, project management strategies, and trade work on this complex and technical project. This will gain exposure for a younger population to learn about the trades and construction industry and will contribute to the advancement of Maine's existing trade workforce
- Attend and participate in training programs within each of the established educational facilities interested in participating
- Involve field supervisory staff and craft workers in establishment of a curriculum for the core skillsets anticipated for the project
- Involve staff members as part time "adjunct professors" in the interested educational facilities and work to incorporate elements of the planning of the project in curricula via:
  - » ACE Mentoring and similar programs to engage with high school students
  - » Community College and Portland area Higher Education Institutions with the goal of incorporating project specific construction scheduling, estimating, and virtual design concepts into the curriculum

Apprentice Program Development
- Encourage and educate potential subcontractors on the incorporation of apprenticeship programs in their current business / recruiting and employee retention planning
- Incorporate the evaluation of trade contractors' apprenticeship programs in the selection of the subcontractors for the project
- Evaluate the current and past performance of the apprenticeship programs when evaluating potential subcontractors
- Establish goals for apprentice participation in construction workers on site and at off-site fabrication facilities

Local Worker Preference
- Hold local job fairs prior to the start of construction and throughout the construction phase of the project to ensure that the maximum number of local workforce participation is achieved
- Set goals and measure performance of each contractor for local resident worker participation including other measures of business level participation in the project, such as:
  - » Maine Based Business participation
  - » Women Owned Business
  - » Disadvantaged Business
  - » New Mainers

Community Benefits (continued)

Northeastern University's Roux Institute is delivering on its mission to erase the boundaries between the real world and academia. It achieves this goal by customizing learning programs and research initiatives to meet the needs of employers, by integrating classroom learning with professional experience, and by supporting the launch of innovative startup companies. The Roux Institute's collaborations with its employer-partners keep the institute in step with the economy's—and society's—changing needs and opportunities. They also enable the Roux Institute to identify and begin to address the state's urgent and most consequential challenges.

Together, the Roux Institute and its partners are:

- Co-designing educational programs that prepare workforce talent for today's innovation economy, focusing on STEM fields such as artificial intelligence and the computer, data, and advanced life sciences, and by integrating classroom learning with professional experiences afforded by employer-partners
- Conducting interdisciplinary research focused on solving challenges that affect Portland, the state of Maine, and communities globally. The explicit goal is to translate findings into knowledge and activities that make a significant, measurable impact on the world. Priorities include widening access to equitable and effective healthcare; providing broader and more reliable access to technology; and devising data- and technology-driven methods to mitigate dependence on unreliable supply chains
- Attracting, supporting, and launching new businesses throughout Maine, opening new doors to opportunity and prosperity for people across the state and region

Now in its third academic year, the Roux Institute is steadily laying the groundwork for transforming Maine's economy and is securely rooted in Maine and leading important, transformational impact throughout the state. From its launch through the start of the current academic term in September 2022:

- The institute's partnership ranks have grown tenfold as more than 110 Maine organizations now work with and benefit from the institute
- Five hundred graduate students are enrolled, and more than 900 employees of partner organizations have completed custom training programs
- Thirty-six startup companies have worked in residence at the Roux Institute, creating 52 new Maine jobs and raising $21M in investment capital to grow their new businesses
- Five, robust research programs are established, led by globally recognized leaders who are pursuing substantial governmental and private funding to spur growth
- And more than 125 Mainers are employed by the institute, 25% of whom relocated to Maine to join the effort and support the institute's mission

Commitment to Diversity, Equity, and Inclusion
The COVID-19 pandemic, a heightened awareness of the devastating impact of racial and ethnic discrimination, and other global disruptions have starkly illustrated the need for a new higher education model that empowers people to navigate and solve complex problems across a multiplicity of contexts, whether geographic, political, intellectual, socioeconomic, or cultural.

To this end, Northeastern University recently unveiled *Academic Plan: Experience Unleashed*, a strategic vision that aligns learning, research, and entrepreneurship to solve urgent challenges in collaboration with partners around the world. Central to the plan is a commitment to human diversity. Throughout the university's global system, Northeastern teams are working with local partners and communities to build a diverse, equitable, and inclusive community of learners, faculty, entrepreneurs, staff, and partners. This work is based on the truth that humankind's toughest challenges are dynamic, interconnected, and affect people and communities in ways that depend upon context. To maximize our impact within diverse and rapidly evolving contexts, we must immerse learning, discovery, and innovation in real-world experience.

Enabling Access for all Mainers
Through the transformational Roux Institute's *Alfond Scholars Initiative*, the university will distribute $67 million in scholarships to Maine residents who are studying at the institute, providing unprecedented support for Mainers to pursue academic and career advancement. More than $11M in need-based scholarships have been awarded inception-to-date. The Roux Institute's *Alfond Scholars Initiative* also supports the recruitment and retention of diverse learners through its co-op and post-doctoral research programs.

Benefits to Employers and the Business Community
The Roux Institute was founded on collaboration with employer partners and higher education partners, which keep the Institute in step with the economy's—and society's—changing needs and opportunities. Twenty-three of the institute's industry partners are headquartered in Portland. Collectively, these organizations employ more than 40,000 people. Eleven Portland-based community and academic partners, who collectively employ 12,000 people, also work with the Roux Institute. These partnerships enable The Roux Institute to support Portland-based companies and the people they employ, while also identifying and beginning to address the city's most urgent and consequential challenges.

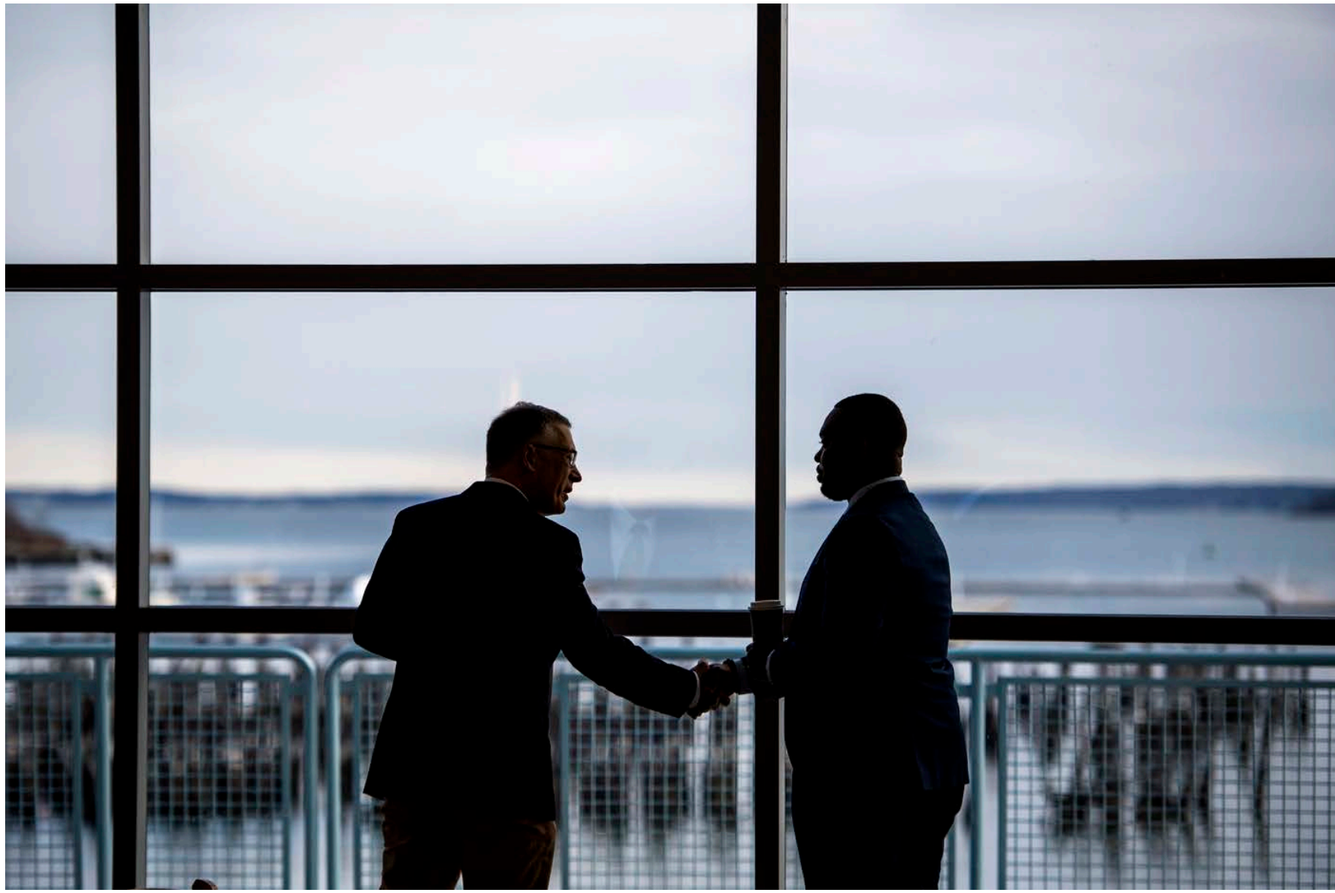
Benefits to Higher Education and Community Partners
Northeastern University, through its work at The Roux Institute, is committed to working with higher education and community partners throughout Maine to decrease the barriers of entry to high tech careers, and to bring our talent and expertise to benefit these vital organizations.

Community Benefits (continued)

The institute's work with Maine higher education partners focuses on building an ecosystem that creates clear pathways for learners to and through college and onto graduate learning, as well as building the critical R&D capacity across the city and the region. Through its fourteen higher education partnerships, the Roux Institute and its partners feature joint expertise to ensure that Maine-based learners get a robust education and can contribute effectively to workforce and research needs. For example, the institute has developed accelerated matriculation and completion pathways with five higher education partners, helping college graduates to maximize returns on both time and tuition investments, while remaining in Maine to complete master's degrees at The Roux Institute on an accelerated timeline.

The institute's various community partnerships focus on leveraging people, space, and networks to advance the work of Maine's mission-drive, community organizations. For example, Roux Institute faculty volunteer to lead computer science training for teachers in Portland schools; Casco Bay High School students complete internships at The Roux Institute; and the institute hosts Girls Who Code camps for middle and high school students from throughout Maine.

Similar, near-term events are planned as well – some of which are directly linked to the university's diversity, equity, and inclusion commitments. For example, The Third Place and The Roux Institute are partnering to host networking events to support BIPOC professionals as they connect, live, and work in Portland. The institute is committed to expanding and scaling these offerings. In the future, the institute's community engagement programs will support educators, students, and community groups that share our commitment to a diverse, equitable, and inclusive high-tech ecosystem that is a possibility for all – and benefits all.

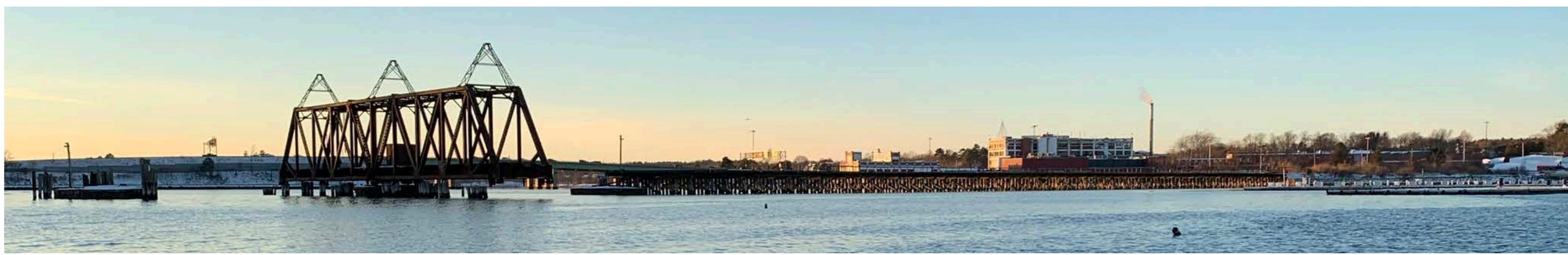


Supporting the Growth of Local Entrepreneurs

A final community benefit is the robust entrepreneurship programming supporting people to learn about business creation and supporting entrepreneurs to launch their ventures. Already, the Institute has hosted two "Maine Start Summits," which are three-day business creation hackathons and many other events for entrepreneurs, which create open and accessible on-ramps for anyone to bring an idea to life and begin to not only provide Portland with great products, but also generate more jobs and revenue at the same time.

Commitment to the City of Portland and our Region

Ultimately, the university's success will be inextricably linked to that of its faculty, graduates, and partners. Through the work of the Roux Institute and other organizations, Maine will be home to a thriving, tech-forward economy fueled by people and businesses leading innovations in realms from AI-driven healthcare to life sciences technology. This economy will attract new people and companies to the region. It will also provide unprecedented opportunities for all Mainers in a manner that honors and enriches their treasured lifestyle and culture.



Appendix A
Conceptual Massing Studies

Campus Concept | near-term

Campus Concept | near-term

Campus Concept | long-term

Campus Concept | long-term

Appendix B
Conceptual Shadow Studies

Shadow Study | December/June: 9am, 10:30am Noon, 1:30pm & 3pm, near-term & long-term

REGULATORY FRAMEWORK

8.5.7 The Roux Institute at Northeastern University Overlay Zone Regulatory Framework

A. Applicability: All development proposed by the Initiative for Digital Engineering and Life Sciences or The Roux Institute at Northeastern University within the boundary of the Roux Institutional Overlay Zone (IOZ) shall be consistent with the approved Institutional Development Plan (IDP), consistent with the Comprehensive Plan, and meet applicable standards of the Land Use Code, unless such standards are superseded by the following regulatory framework. This regulatory framework shall govern future development by IDEALS and Roux within the IOZ unless amended by the Portland City Council upon formal application of IDEALS and/or Roux. The Roux Institutional Overlay Zone shall have the boundaries depicted below and shall include the approximately thirteen-acre property located at 1 Bean Pot Circle and identified as parcels 447-A001 and A002 in the City's assessing records.

Proposed B-5 & IOZ

B. Phasing and monitoring.

1. The Roux Campus will be developed in phases, as set forth in the IDP. The IDP will be updated on a regular basis to ensure that the data is current and that the document remains accurate. Accordingly, monitoring reports will be filed every three years and shall include a summary of progress on IDP implementation and of acquisitions and divestment since the date of IDP approval. At the time of the submission of the monitoring report, any updates to the IDP shall be identified which may result from updated master planning, changes in baseline information, or changes in the adjacent neighborhood which affect the campus, to allow the IDP to remain current. Updates and minor amendments not described below shall be reviewed administratively by the Planning Authority.

2. At completion of each phase, the Roux Campus shall have the appearance of a complete and comprehensive design. Permanent and significant public space shall be established in the first phase, to ensure public benefit. Interim conditions shall be designed for a pleasant pedestrian experience through planting, lighting, wayfinding, graphics, artwork, or ornamental fencing to provide screening, buffers, and enhancement. Interim areas of the site which are not actively used for parking or construction staging will be appropriately landscaped or accommodate gathering on lawns or other aesthetically hardened spaces.

3. Minor amendments that change the approach to parking, transportation, neighborhood engagement or design shall be reviewed by the Planning Board for consistency with the objectives of the IDP. This review may occur simultaneously with the site plan review of a proposed project.

4. Major amendments shall be reviewed by the Planning Board and are required under the following circumstances:

a. A change to the regulatory framework is required.

b. The IDP is no longer representative of the institutional mission or approach to community as a result of redevelopment in the area or City upgrades to neighborhood planning (such as roadway changes, infrastructure upgrades, community design, lighting).

c. Proposed development is inconsistent with the master facility plan, transportation plan intent, design plan intent, or environment and infrastructure plan intent identified in the IDP.

5. Annual monitoring reports will be submitted for the Transportation Demand Management (TDM) Plan. TDM monitoring reports shall include a summary of progress towards targets established in the TDM Plan.

C. Uses. The Roux Campus will encompass a variety of uses to support the mission of the Roux Institute at Northeastern University to spur innovation, build talent, and drive economic growth. Partnerships with industry, academia, and government are essential components of the Institute's success. Campus uses will include classrooms and laboratories, housing, faculty offices, dining areas, convening spaces, fitness centers, retail facilities, entrepreneurial spaces, light manufacturing, incubator space, research and design facilities, hotel, and office space. The uses on the campus will support collaboration with private industry, other institutions, and community organizations, which is essential to the Roux Institute's approach to learning through integrated research, student work opportunities, and entrepreneurial endeavors. Hotel rooms will cater to prospective students, faculty and staff, visiting

lecturers, specialists, and business partner guests, providing multiple opportunities for informal and unplanned interactions and collaboration that would otherwise not be available if staying in a hotel miles away from campus. A range of rental housing options will foster community and provide on-site opportunities for students, faculty, staff, and their families. These units will ease some of the housing pressure and traffic that might otherwise result from new residents attracted to Portland by the Institute. Housing units not occupied by residents affiliated with the Roux Institute may be made available to the public to further assist in easing the housing pressure.

Recognizing the community value of a large waterfront parcel in close proximity to a primary bike and pedestrian trail system, the Roux Campus will be designed to include those uses that will welcome the neighbors to the campus, including publicly available open space, waterfront access, recreational opportunities, restaurant, dining, small neighborhood grocery, and/or other limited retail options. These uses will provide a means for serving the residents and other users of the campus, as well as welcoming the neighborhood to foster connectivity and community engagement, activating the public realm, and reducing dependence on automobiles.

1. In addition to the uses permitted in the underlying zone, the uses in Table 8-E are permitted as a matter of right. In recognition that The Roux Institute is a graduate-level educational and research institution with a number of corporate partners, and in recognition of its location outside of the downtown, the following uses and many that are permitted in the underlying zone, such as multi-family housing, hotels, offices and retail, are ancillary to and support the vision and mission of the Institution. In addition, ground floor retail, restaurant, or comparable community-oriented uses that provide services to local residents, students, faculty and staff shall be provided. Such uses are expressly permitted whether ancillary to or supporting the educational institution, and shall be open and welcoming to the general public in addition to students, faculty, staff, or visitors of The Roux Institute. All of the following uses shall be permitted in all buildings located within the IOZ that are located on land owned or leased by The Roux Institute.

Table 8-E Permitted Uses
All Uses Permitted in the Underlying B-5 Zone
Laboratory and Research Facilities
Structured Parking
Low-impact Industrial (>10,000 SF)
High-tech Manufacturing

2. Hotels shall be limited as follows:

a. No more than one hotel shall be located in the IOZ.
b. The hotel shall contain no more than 130 rooms.
c. The hotel shall be no more than eight stories in height, not including structured parking.

D. Dimensional requirements.

All buildings and structures located within the IOZ and located on land owned or leased by The Roux Institute shall be subject to the dimensional requirements of the underlying zone, except as set forth in Table 8-F.

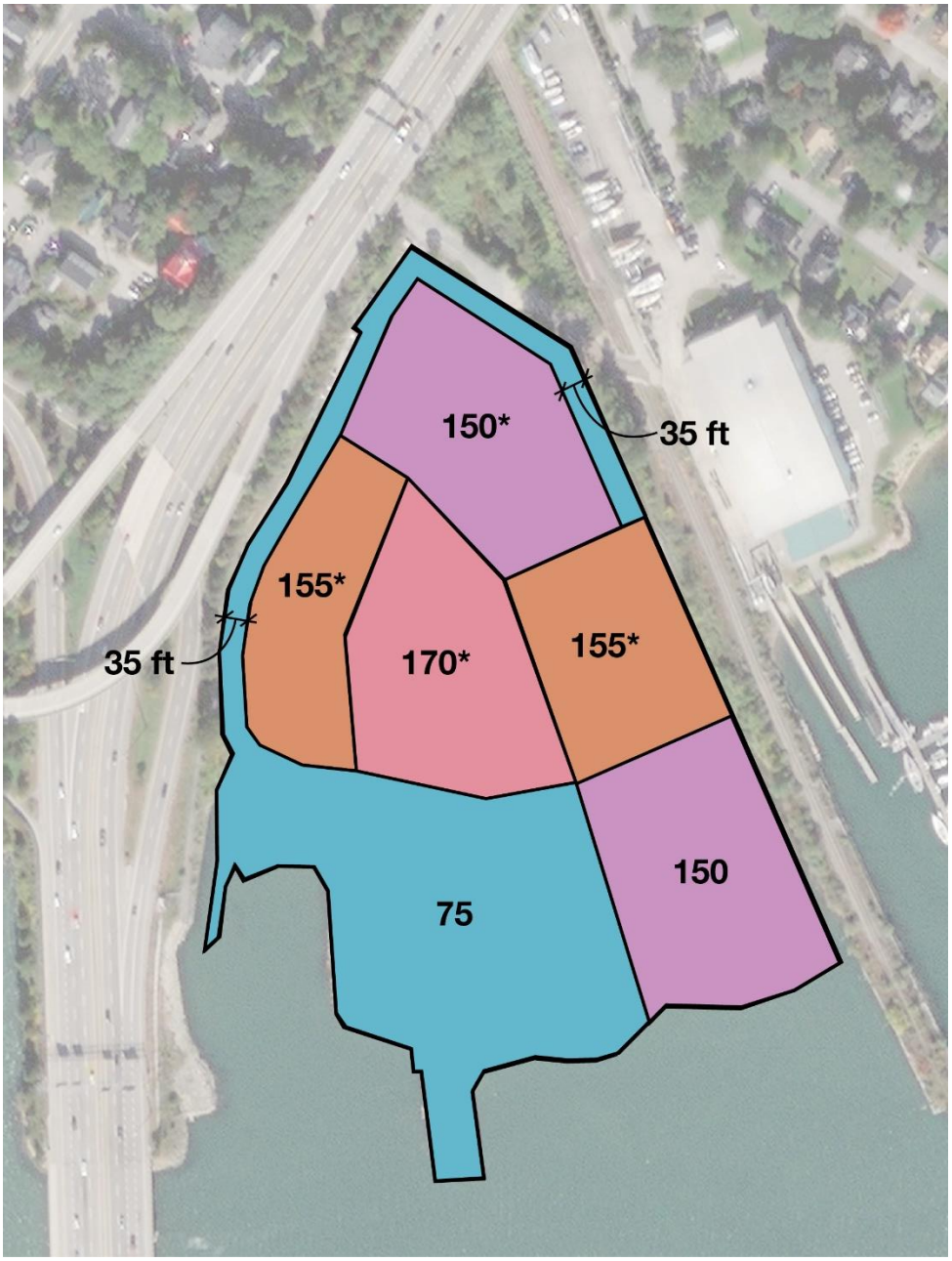
Table 8-F Dimensional Requirements	
Building Height (max.)	Maximum building heights for new buildings in the IOZ shall be governed by the Roux IOZ Height Map (Figure 8-E)

E. Transportation.

1. Transportation Demand Management (TDM)

a. At the time of the first site plan review following IDP approval, the developer shall submit a campus-wide TDM Plan substantially in accordance with those TDM objectives and strategies identified in the approved IDP. The TDM Plan may be phased into short-, mid-, and long term actions to allow for progressive implementation over time.
b. The TDM Plan shall be designed to provide transportation choice with the goal of reducing parking demand and single-occupancy vehicle trips to and from the Roux Campus by students, faculty, staff, institutional partners, and visitors.
c. The TDM Plan shall establish parking, mode share, and trip reduction targets associated with each phase of development, as well as a data collection plan.

Figure 8-E: Height Map



NOTES:

1. Applies to zones shown with an asterick (*): above height of 75 feet, no building floorplate shall exceed 35,000 square feet.
2. Above height of 50 feet, no two buildings shall be closer than 40 feet apart.
3. Building heights for buildings that span two or more height zones shall be measured by calculating the highest point (as defined in the code) of that portion of the building within a particular height zone. If the roof is sloped, height is measured at the midpoint of that portion of the slope located within the particular height zone.

2. Bicycle and Pedestrian Access and Safety.

a. At the time of the first site plan review following IDP approval, the developer shall submit a bicycle/pedestrian access plan. Where possible, the bicycle and pedestrian access routes shall connect to established accessways. The developer shall look to establish new bicycle and pedestrian accessways where feasible.

3. Parking.

a. Parking requirements in the IOZ shall be established at the time of site plan review for each phase of development based on a parking study that includes a campus-wide analysis of demand and supply. Parking studies shall integrate parking and trip reduction achievements and data contained in the TDM Plan.

4. Circulation

a. The campus shall contain a bike and pedestrian circulation network which includes a perimeter access loop, an internal system of pathways and a major campus “promenade” which serves as a walkway linking campus developments, the upland, and the waterfront.

b. The perimeter access path for bicycles and pedestrians will serve to connect the campus to primary site entry points from the community and provide a continuous recreational loop. Where appropriate, the access loop will be enhanced by wayfinding, lighting, landscaping, and safe crossings at vehicular intersections. Where possible, building facades will respond to the loop for views into the building and periodic activation to building entrances.

c. Internal campus circulation pathways will connect major open spaces, building entrances, and outdoor plazas to create a network of multiple pathways including the perimeter access path. They will be located along or oriented toward facades that have active programs, architectural articulation, appropriately scaled entrances, and windows. They will avoid traveling along stretches of undifferentiated or blank facades back doors or service areas. They will be generally lower-velocity systems than the access loop. Where appropriate, the internal pathways will be enhanced by wayfinding, lighting, landscaping, and safe crossings at vehicular intersections.

d. The campus promenade will serve as a major organizing feature connecting the upland and the water and providing access to open spaces, allowing views of principal campus of buildings, and connecting to the internal and perimeter pathway systems. The promenade will be enhanced by lighting, wayfinding, landscape buffers, major and minor open spaces. Viewsheds and topography will emphasize the Roux Institute and Bean buildings, pier and other principal buildings and spaces.

F. Environment.

1. The IOZ shall contain a minimum of three acres of public open space designed to enhance waterfront access and provide bicycle/pedestrian network connectivity. This open space requirement shall be met

at the completion of phase one and shall be maintained at all phases of development. The three acres need not be contiguous and may be provided in new and/or different locations following completion of development phases.

2. Development shall utilize critical components of industry standard benchmarking systems such as LEED, SITES, WELL, ILFI, and Passive House which will be combined in a sustainability and resilience charter to identify the specific goals and standards for the campus and its buildings. This charter will be submitted to the Planning Authority prior to submission of the site plan application for phase one.

3. Development shall utilize lighting designs required for safety and comfort and that minimize impact to the night sky in accordance with light pollution reduction standards in ANSI/ASHRAE/IESNA 90.1-2007 or its most current edition.

4. Development shall be carried out in such a way as to minimize the impacts of sea level rise, protecting infrastructure and site features by designing to a minimum of 2-feet above the Base Flood Elevation (BFE) as shown on the most current FEMA Flood Insurance Rate Map.

5. The shoreline edge and immediate adjacent upland shall be protected through shoreline armoring and vegetation to prevent erosion and enhance natural resource protection.

5. Design of exterior building envelopes will be in developed in conjunction with the American Bird Conservancy and Cornell Ornithology Lab standards to mitigate bird strikes to the extent practicable.

G. Mitigation measures.

Site plan impacts to off-premise infrastructure shall be mitigated in a manner proportionate to those impacts. Mitigation may include financial or in-kind contributions to existing or planned City projects focused on mitigating the impacts of the development. Mitigation contribution shall be determined based on the City's standard procedure in effect at the time of site plan review.

H. Design.

1. Introduction and intent.

New development in the IOZ shall adhere to the following design guidelines and the site plan standards of the City of Portland. All new development shall be designed to create a visual connection with the goal of achieving a cohesive campus appearance with a strong identity and sense of place. New development may be contemporary and forward looking in architectural style, but shall be informed by or responsive to the iconic Bean Building as an example of Portland's unique legacy of innovation, adaptation and durability. Reference to the building specifically and in general to the early 20th century industrial factory building type may inform the principles of highly functional yet articulated human-centered facades and details, a combination of local and innovative materials, use of natural daylighting, high degree of flexibility and scalability and capacity for long service life. New development shall be characterized by excellence in architectural design, craftsmanship, materials, streetscape, resilience, sustainability and landscape improvements, signage, and lighting appropriate for a campus development on a coastal site.

These principles and standards are intended to regulate the future build out of the Roux Campus while ensuring that new development is sensitive to adjacent residential neighborhoods and commercial areas and successfully integrates the existing site into the public realm while establishing a global beacon for thought leadership in artificial intelligence, computer and data sciences, digital engineering, and advanced life sciences.

2. Standards

a. Buildings shall:

i. be characterized by excellence in architectural design, sustainability, and craftsmanship
ii. incorporate materials, landscape, signage, and lighting that reflect the industrial heritage of the site as well as Portland's character yet also embrace a high-tech design aesthetic
iii. create a strong identity and sense of place
iv. vary in height, with the tallest allowable building heights located toward the center of campus
v. be organized to take advantage of views, site circulation, and public space along the waterfront as well as provide views of the water from multiple vantagepoints around the campus
vi. be planned in a manner that preserves the historic view of the Bean Building from Tukey's Bridge
vii. share visual connections with other campus buildings to achieve a holistic campus appearance
viii. support and augment activation of public spaces and public access to the site
ix. be programmed for activation where they meet the pedestrian realm or feature visually interesting details and activities related to the building
x. respect the adjacent neighborhood and facilitate a sense of permeability and welcome
xi. celebrate the primary learning and research building through signature architecture
xii. utilize durable materials resistant to the marine climate & which contribute to an attractive public realm
xiii. screen rooftop appurtenances and set back mechanical enclosures from roof edges to reduce shadow & visual impact
xiv. limit sound transmission
xv. minimize bird strike potential
xvi. employ sustainability benchmarking to foster environmental stewardship and resilience
xvii. utilize building articulation and material selections to provide character and scale
xviii. ensure permeability through and within the site for light, air, views, & access
xix. be appropriately scaled to support pedestrian activity, utilizing step-backs where appropriate
xx. be oriented toward open space at the site's center and include prominent facades with windows and entrances oriented toward travel paths
xxi. be oriented to allow for easy pick-up and drop-off
xxii. respect and provide a buffer from the historic B&M Bean Building

b. Campus circulation shall:

i. be bike and pedestrian-centered, with motor vehicle circulation generally at the perimeter where practicable
ii. serve pedestrians, bicyclists, autos, public transportation, service, and emergency vehicles at each development phase

iii. provide wayfinding and amenities to create a safe and welcoming environment for the community
iv. provide bike and pedestrian connectivity to existing ways where feasible

c. Open space and public realm shall:

i. create a strong identity and sense of place
ii. be designed for safety, comfort, and year-round enjoyment
iii. enable access to building entrances
iv. utilize a combination of planting and hardscape
v. be available to all members of the public, through inclusive and safe design, as well as support purposeful connections and transitions
vi. provide access and amenities to connect the public to the shoreline and ocean
vii. include meaningful public open space between the buildings and the water
viii. support site resilience in consideration of flooding from storm events and sea level rise
ix. support ecological functions and values
x. provide an appropriate buffer adjacent to and complementing the historic B&M cannery building
xi. include lighting that is full-cutoff and dark sky-friendly

d. Parking shall:

i. when above grade, be architecturally screened to blend in with the surrounding buildings and minimize vehicular disturbances of lights and sound
ii. when on surface lots, be located at the rear or side of buildings, & not along the primary façade
iii. not be located along the water's edge
iv. ensure EV charging capability meets EV demand & is scalable as demand increases
v. be shared to the extent practicable
vi. support street activation & pedestrian scale when adjacent to public open space or rights-of-way

I. Neighborhood integration.

1. Neighborhood Engagement:

a. For the purpose of keeping surrounding residential areas appraised of its future development plans, and to address any neighborhood issues related to the operations of the Roux Campus, IDEALS and The Roux Institute shall adhere to the ongoing neighborhood engagement principles identified in the IDP.

b. Ongoing community engagement shall be conducted, including the continuation of neighborhood forums and maintenance of the Roux Campus website.

c. A Community Advisory Group shall be created for the purpose of sharing information on project development, planning, and seeking input. To the extent practicable, the group shall be comprised of representatives of interested groups such as the East Deering Neighborhood, recreation, parks and trails, sustainability, rail, bicycle/pedestrian, public transit, Portland Harbor, Portland Public Schools, higher education, and the business community. d. A designated community liaison shall be engaged to

be the point of contact for providing information to the neighborhood and receiving feedback.

2. Construction Management

At the time of site plan review, Northeastern University shall submit a Construction Management Plan substantially in accordance with the construction management principles identified in the Institutional Development Plan for review and approval by the Planning Authority.

3. Snow Ban Parking:

When the City of Portland declares a Snow Parking Ban, Northeastern University shall make parking available to neighbors in a designated parking area on its campus upon the following condition:
The hours of snow ban parking for registered vehicles during an announced City of Portland Snow Parking Bans are 6:00pm until 6:00am. Vehicles that are not moved out of these parking areas by 6:00 each morning are subject to towing at the owner's expense.

J. Historic Preservation

The B&M Cannery Building has been designated as a local historic landmark. The area of designation includes the B&M Cannery Building, as well as the area of the former cod fish building and pier. The Historic Preservation Board's review of activity within the site of the former codfish building and pier is limited to review of any activity that would require a Certificate of Appropriateness that is proposed on a newly constructed pier. A Certificate of Appropriateness will not be required for the demolition of the codfish building or construction of a new pier and related infrastructure, including future alterations to the pier structure.

Northeastern University shall include interpretive element(s) on top of or within the surface of the new pier that convey the history and significance of the codfish building. Prior to construction of said elements, the University shall submit the proposal to the Historic Preservation Board for its review and approval. The interpretive elements shall be designed in a manner that does not interfere with the use and functionality of the pier as a marine passenger facility and for water access by the Roux Institute and the public.

Christian MilNeil <c.neal.milneil@gmail.com> Oct 11, 2022, 1:39:44 PM (21 hours ago)
to planningboard@portlandmaine.gov, Troy Moon, PBPAC@googlegroups.com

Honorable members of the Planning Board,

I'm writing with regard to the proposed Zoning Map and Text Amendment for 1 Bean Pot Circle (Roux Institute project) under discussion at a tonight's planning board workshop.

As you know, motor vehicles are our region's largest source of climate-heating pollutants, and largest source of unhealthy air pollution in general.

However, while admirable by 20th-century standards, the applicants' current Transportation Demand Management (TDM) plan doesn't go far enough to meet the city's most recent "One Climate Future" goals for shifting more trips to bikes, walking, or transit. And failing to meet those goals will put this site, and the entire East Deering neighborhood, at particular risk for increasing coastal flooding and erosion.

Page 143 of the city's One Climate Future Plan states that "the One Climate Future modeling analysis targets that by 2050, 20% of all trips originating or terminating in the cities will use public transit to meet our One Climate Future goals."

Additionally, in order for the city as a whole to hit that target, large new developments like this one will likely need to over-shoot that mark, and achieve a 25% or 35% transit mode share in order to make up for lower transit mode share in other parts of the city.

The current IDEALS TDM plan proposes that only 10% of trips to and from this site will be made by public transit – which is contrary to the city's official climate plan.

I also don't see any specifics about how much increased transit service the applicants propose to finance. In order to support 250 peak-hour bus trips for this site (consistent with a ~25% transit mode share), the 7, 9A, and 9B would all need to increase their service frequency substantially, which means hiring more drivers and acquiring more buses.

I'm heartened to see city staff voicing support for more aggressive mode shift targets for walking, biking, and transit trips to and from this site. I hope that the Planning Board will support them, and protect the city's climate policy, at tonight's workshop.

Meeting the city's climate targets won't only help protect this site and our city in general from drowning under future flooding; it will also result in a better development with happier tenants who don't have to waste hours of their valuable time stuck in traffic jams.

Christian MilNeil

Roux site needs vibrancy

0 views

Subscribe

Zack Barowitz <zbarowitz@gmail.com> Oct 11, 2022, 2:59:40 PM (19 hours ago)

to Planning Board

Chair Stanley and Honorable Members;
The Roux campus presents an incredible opportunity for Portland but only if it is done right. As we have seen with Thompson's Point the key to a successful, vibrant site is multi/model access. This cannot be achieved by adding highway infrastructure or treating it like an office park in Scarborough; but it can by better bicycle, pedestrian, trail, and transit access.
Thank you,
Zack
--

PC3

Cheryl Ann Leeman <leemanc174@gmail.com> Oct 20, 2022, 11:38:58 AM (22 hours ago)
to planning@portlandmaine.gov

TO: Chair Maggie Stanley and Planning Board Members

FROM: Cheryl Leeman, East Deering Neighborhood Association (EDNA)

DATE October 20, 2022

SUBJECT: IDEALS Request for Zoning Change

Please accept the following feedback from the EDNA regarding the proposed site development by IDEALS at the former B & M site. We have been watching the process and feel it is time to weigh in with some of our concerns. We want thank the Planning Board members for their due diligence in the review process to date.

1.) IDP Requirements, Transportation and Access

(a) "An analysis of the projected changes in parking demand, supply and impacts to the off-street and on-street parking capacity, including an explanation of the proposed parking plan"

- There is insufficient data provided regarding this requirement in the IDP and parking impact is of serious concern to the wider East Deering neighborhood given the experience with USM and UNE parking impact on those abutting neighborhoods. The East Deering neighborhood beyond the immediate site has not been discussed with regards to this issue yet the neighborhood off Presumpscot street is within easy walking distance to the site and will not doubt feel the impact of off-site parking. Why are they so reluctant to establish a shuttle service which is common place with educational institutions and would have little or not effect on Metro service?

(b.) An analysis of the projected changes in vehicular, pedestrian transit and bicycle access routes and facilities, their capacity and safety.

- The focus has been primarily on the Veranda Street and Washington Avenue traffic issues rightly so. However, the high percentage of vehicle traffic will create stacking of cars at those locations causing a major problem for the East Deering neighborhood with cut-through traffic which happens now because of frustrated drivers being delayed so they divert through the neighborhood to get to the traffic lights at Presumpscot Street and Ocean Avenue.

- The lofty goals" of using Metro, water taxi and pedestrian, bicycle means to reduce traffic doesn't pass the "straight face test" because these alternatives are based on funding sources other than the developers who is committed to these options but the funding as part of site development further, as indicated in the staff memo data to support aggressive alternatives modes to cars to support meeting the goals set forth. What other options have they made but will not fund which impact the neighborhood? Should the city and neighborhood not get something in return as part of approval?

- Infrastructure needs due to one narrow street access to the site pose additional issues such as Metro buses being able to get into and out of the site, wide radius turns required to make corners and turn around in the site and wide radius swing of larger vehicles from I95 onto Veranda which forces them into the oncoming lane of traffic

- Tukey's Bridge is a Federal Highway thus requiring a lengthy approval process for funding, permitting and implementation of an exit which is highly unlikely given current traffic condition especially level of service, capacity and backup traffic at peak traffic times.

Height of bridge overpass on Sherwood Street restrictive for fire ladder trucks that would be required given the proposed height of building if their were to be a fire.

***2.) P*urpose of the IOZ and IDP is specific as to requiring more detail than a Master Planning process, or simple rezoning request for good reason regarding analysis, addressing anticipated impacts for short to medium term (e.g. 1-5 and 5-10 years respectively) with a more "conceptual plan for the long term (e.g. 10 years or more)**

- The constant reminder from IDEALS that these plans are "conceptual" and details will be provided in the next phase does meet the requirement and expectation set forth in the IOZ and development of an IDP. Nor is it responsible to the neighborhood who will feel the major impact of this proposal.

To suggest that it will looked into in the next phase or the site plan review process does meet the specificity required in the IDP and regulatory framework for approval. Once approved, it is unrealistic to think the city would not allow further development.

3.) Height studies during my tenure on the city council and most recently stated that the height should be in the downtown "spine of the city and elsewhere in- town not off-peninsula that were recognized as important to preserve.

The height of buildings does have a correlation to impact of traffic as the taller the buildings the more people and cars will be invited to visit the site as a "fun place to go'.

Finally, there will be a significant loss of leverage by the city if approved without very detailed requirements in the IDP for approval and prior to site plan review including specific language as to funding commitments from the developer for "promised" site improvements and traffic improvements. The city should not be on the hook for making improvements such as traffic lights, street improvements, pedestrian/bicycle trails, upgrades to sewer/storm water, loss of property taxes, etc.

And community engagement has been totally lacking and the neighborhood respectfully request that an Advisory Committee be set up now not after the fact in order to have a more collaborative process. Thank you.

PC4

Zachary Powell <zpowell@portlandmaine.gov>

EDNRD Concerns over the IDEALS Development Plan Traffic Studies and Neighborhood Engagement

EastDeering Neighbors <ednfrd@gmail.com> Fri, Oct 21, 2022 at 7:49 AM
To: planningboard@portlandmaine.gov, Planning@portlandmaine.gov, Zachary Powell <zpowell@portlandmaine.gov>
Cc: allison brown <abrown125@gmail.com>, Clare Hannan & Steve Von Vogt <hannanvonvogt@gmail.com>, Justin Litchfield <justinlitchfield26@gmail.com>, James Pratt <jrpratt@hotmail.com>, Sandra Ste George <stegeorge@gwi.net>, Phillip Hoose <hoose@gwi.net>, Michelle Zichella <zichella@yahoo.com>, Sandy Comstock <sandycomstock3@gmail.com>

Dear Members of the Planning Board:

Following up on the last Planning Board meeting, EDNRD wishes to respectfully express our continued concern about the massive mixed use development impacts on traffic, appropriateness of proposed building heights, no justification for the necessity of ancillary uses to support Roux Institute, substitution of an MOU to meet title requirements and no meaningful public engagement with the neighborhood.

The presentation by IDEALS leaves us more concerned than ever about traffic impacts. Their mitigation plan relies on “lofty goals' rather than hard factual data. They keep pushing the ball down the road to get approval with “promises” to deal with the issues in the next phases of development – not acceptable nor within the requirements of the IOZ and IDP.

- Pedestrian and bicycle alternatives will not solve the problems and their commitment is connect the trail for access is not without implementation issues not really discussed - site problems, funding and seasonal use
- Metro is yet another “promise” but no firm commitment except to say they are in discussion and Metro has put into their future plans. In addition, no explanation as to infrastructure needs for a bus be able to maneuver in and out of the site.
- Pinch points at Washington and Veranda and Veranda and Sherwood not adequately addressed
- Avoidance of the question around a shuttle service
- Questions of what happens if they do not meet their mitigation goals leave us very concerned that IDEALS will simply “monitor” the situation with more “promises” for solutions

We have yet to receive a concrete understanding of the necessity of a mixed-use development of this scale as it relates to the Roux Institutional use and reasoning for an IOZ zoning rather than a simple B-5 zoning change.

- Building heights not justified for the Roux Institute's mission as educational institution (USM and UNE do NOT have these ancillary uses)

- Heights proposed are simply not in character with a highly residential off-peninsula neighborhood
- The housing component detail has not been fully explained or a commitment made to affordable or student housing
- IDEALS states that reducing heights will affect open space, etc – footprint remains the same so how does reducing building heights change design?

Neighborhood public engagement has lagged far behind that o of IDEALS outreach to outside groups who do not reside in the neighborhood

- EDNRD has from the very beginning of the process asked for a more formal framework of regular meetings as a stakeholder and a more collaborative process
- The meeting with IDEALS representatives felt like an appeasement to meet the request made by the Planning Board to have a meeting
- The suggestion that they are working on establishing a Neighborhood Advisory for inclusion in the IDP is being done without input from the neighborhood.

There is no binding agreement between IDEALS and Roux Institute that ensures that the development will be owed by Northeastern with continued academic purposes.

- Memorandum of Understanding does not legally meet the requirement of title and ownership as required
- Why is the ownership not being transferred now?

On behalf of EDNRD, we thank the Planning Board for their continued efforts to get at the answers to these questions.

Steve Von Vogt on behalf of
East Deering Neighbors for Responsible Development
Windsor Heights
Portland, ME 04103

allison brown <abrown125@gmail.com> 6:33 AM (3 hours ago)
to planning@portlandmaine.gov

To: Chair Maggie Stanley and Planning Board Members
From: Allison Brown

Following the planning board workshop on the transportation components of the IDEALS proposal, it is evident that the infrastructure necessary to support a project of this scale, in the east Deering neighborhood does not currently exist.

I 295, exits 8 and 9, and the neighborhood streets that the project will most impact are at or above capacity. IDEALS proposal does not include any mitigation or practical improvement in these areas. Existing walking paths and bicycle paths are not wide enough or well-lighted enough to accommodate a significant increase in usage. IDEALS proposes improvements and additional walking paths and bicycle paths on the site. Although essential and worthwhile additions to the East Deering neighborhood, they will do little to mitigate the increase in traffic that will inevitably come with a project of this scale. I might also add that these are the least expensive “improvements” included in the IDEALS plan.

I believe that the Roux Institute will be a benefit to Portland and the State of Maine. However, if the city wants to see the Roux Institute have its home as part of the IDEALS development, the planning board needs to insist that the project be scaled back so it can function with the infrastructure as it exists.

Thank you for your time.

Allison Brown
25 Lennox St
Portland, ME 04102

Zachary Powell <zpowell@portlandmaine.gov>

(no subject)

EastDeering Neighbors <ednfrd@gmail.com> Fri, Oct 21, 2022 at 9:53 AM
To: planningboard@portlandmaine.gov, Planning@portlandmaine.gov, Zachary Powell <zpowell@portlandmaine.gov>, Andrew Zarro - D4 <azarro@portlandmaine.gov>
Cc: allison brown <abrown125@gmail.com>, James Pratt <jrpratt@hotmail.com>, Justin Litchfield <justinlitchfield26@gmail.com>, Phillip Hoose <hoose@gwi.net>, Sandra Ste George <stegeorge@gwi.net>, Sandy Comstock <sandycomstock3@gmail.com>, Chris Briley <cbriley@briburn.com>, Michelle Zichella <zichella@yahoo.com>

Dear Planning Board Members:

Below is a copy of the Order approved by the City Council in relation to the MMC's Community Benefit Donation as part of their long-term plans for expansion and working with the neighborhood/city to improve surrounding its campus and the Western Promenade.

East Deering has yet to see any economic benefit analysis, payment in lieu of taxes due to loss of property taxes and no contributions to the amenities of trail connections, etc or the neighborhood given the profound impact of this development.

We ask that the Planning Board give serious consideration to including language regarding an economic benefit analysis, payment in lieu of taxes and a community benefit contribution from IDEALS for internal and external benefits to the city and neighborhood.

MEMORANDUM City Council Agenda Item
FROM: Jeff Levine, Director Planning & Urban Development Department DATE: February 5, 2019
SUBJECT: Order 160-18/19 Accepting the Donation of $300,000 from Maine Medical Center - Sponsored by Jon P. Jennings, City Manager SPONSOR: Planning and Urban Development Department/Department of Parks, Recreation and Facilities

SUMMARY Maine Medical Center seeks to make a Community Benefit Contribution to the City for the purpose of improving parks in neighborhoods surrounding its campus, namely Bramhall Square, Valley Street Community Garden/Dog Park, and the Western Promenade.

AGENDA DESCRIPTION In 2017, Maine Medical Center ("MMC") applied for a zone change under the Institutional Overlay Zone (IOZ) provisions of the City's land use code. Under the requirements of the code, the hospital developed a master plan, their Institutional Development Plan (IDP), which framed their short- and long-range expansion plans for the next 20 years. Over the course of the review of this IDP, and the subsequent site plan reviews, the hospital engaged with the surrounding neighborhoods to discuss neighborhood needs, the hospital neighborhood relationship, and potential areas where the goals of the hospital and its neighbors intersect.

One of the areas that emerged is in the realm of parks and recreation. The hospital's neighborhoods have long sought improvements to park and recreation facilities in their midst, recognizing the social, economic development, and environmental benefits of these resources. St. John/Valley has pursued park improvements at the Valley Street Community Garden/Dog Park for the last decade, Bramhall Square has been the source of conceptual planning for almost as long, and the Western Promenade and West End neighborhoods are currently engaged with Parks and Historic Preservation staff to develop a master plan for improvements to the Western Promenade. Park improvements have tangible value to MMC as well; research shows that the presence of parks and recreation facilities have a demonstrable effect on public health outcomes, correlating with higher rates of physical activity, lower rates of childhood obesity, and even decreased risk of cardiovascular and respiratory disease.

Realizing the potential synergy around park and recreation facilities, Maine Medical Center seeks to make a one-time $300,000 contribution to the City for the purpose of improving parks in these locations: Bramhall Square, the Valley Street Community Garden/Dog Park, and the Western Promenade. The money is to be used for capital improvements only, with the specific projects to be determined by the Department of Parks, Recreation, and Facilities with the input of the neighborhoods where the facilities are located, based on previous or ongoing planning and design work. Five affirmative votes are required for passage following public comment.

BACKGROUND In the past decade, the neighborhoods surrounding Maine Medical Center, with the City as a partner, have engaged in a number of efforts to improve their public spaces. In 2009, the St. John/Valley Neighborhood Association applied for CDBG funds to support improvements at their community garden and dog park; in 2013, Parkside collaborated on a CDBG application to implement improvements to Bramhall Square; and in 2018, the City, working with the Friends of the Western Promenade, initiated a master planning process for the Western Promenade. When Maine Medical Center began to engage neighbors around long-range plans and potential neighborhood investments in 2017, these parks emerged as a prime opportunity. Not only are they valuable community resources with potential social, economic, and environmental benefits, they clearly relate to the hospital's public health mission as well.

In an effort to capitalize on this opportunity, MMC worked with the City's Planning and Urban Development Department, Department of Parks, Recreation, and Facilities, and Corporation Counsel through late 2018 to plan a Community Benefit Contribution, a one-time investment to fund capital improvements within the three parks identified above: Bramhall Square, the Valley Street Community Garden/Dog Park, and the Western Promenade. Specific capital improvements, many of which have been identified through previous or ongoing planning, will be identified by the Parks, Recreation, and Facilities Department and implemented using the revenue from the MMC donation.

INTENDED RESULT AND/OR COUNCIL GOAL ADDRESSED The purpose of this Community Benefit Contribution is to allow a donation of funds from Maine Medical Center to the City of Portland for the improvement of the parks and facilities at Bramhall Square, the Valley Street Community Garden/Dog Park, and the Western Promenade. This contribution directly relates to goals around the City's capital improvement planning.

FINANCIAL IMPACT The Community Benefit Contribution will result in $300,000 of additional funds with which to make capital improvements to the three parks specified above, with funding to be divided equally between the three eligible parks. The Parks, Recreation and Facilities Department currently maintains these facilities and would continue to maintain them after implementation of improvements. Staff anticipates that there may be some incremental increases in maintenance cost (play space maintenance and replacement parts, maintenance of any structures added, replacement cost of dog park features), but those costs may be partially offset by cost savings due to improvements (drainage and erosion issues addressed, etc...)

STAFF ANALYSIS AND BACKGROUND n/a VII. RECOMMENDATION: The Department of Parks, Recreation, and Facilities; Corporation Counsel; and the Department of Planning and Urban Development have all reviewed the proposed Council Order and recommend that the Council vote to accept the contribution.

Order Accepting Maine Medical Center Donation 2.20.2019 Prepared by: Jeff Levine, Director Planning & Urban Development Department Date: 02/05/2019

Thank you again for your hard work on this matter.

Steve Von Vogt on behalf of
East Deering Neighbors for Responsible Development
Windsor Heights
Portland, ME 04103

Planning and Urban Development
Christine Grimando, AICP
Director

To:	Chair Stanley and members of the Portland Planning Board
From:	Christine Grimando, Director, Planning & Urban Development Nell Donaldson, Director of Special Projects
Date:	October 21, 2022
Re:	ReCode & Housing Policy Communication
Meeting Date:	October 25, 2022

In January 2022, staff from the Department of Planning & Urban Development and Camiros, the City's ReCode consultant, held a workshop with the Planning Board on ReCode Portland, the multi-phased process of rewriting Portland's land use code. The workshop included an overview of the completed Phase I of ReCode and an update of work to date for Phase II, with a focus on the first major deliverable of Phase II, the land use code evaluation. A good deal of public outreach has occurred since then, and the work of translating the code evaluation and public input into new standards is underway. As part of our communication to the Planning Board on October 25, staff will provide a brief presentation on the status of ReCode Phase II, details on related housing policy work and trends, and what's next.

For those interested in a refresher on the project prior to the meeting beyond the memos included below,, the ReCode project page is rich in background material, including an overview of the project, a short video about the Land Use Code Evaluation, and explorations of policy goals for the project.

A recent communication to the City Council on ReCode Phase II contains a summary of public engagement efforts and next steps.

For a written update on housing policy through 2021, see Part II of the 2021 Housing Report to City Council, which includes a review of 2021 trends in affordable and market rate housing.