CITY OF PORTLAND, MAINE

PLANNING BOARD

Brandon Mazer, Chair
Maggie Stanley, Vice Chair
Marpheen Chann
Sean Dundon
Bob Dunfey
David Silk
Austin Smith

AGENDA
PORTLAND PLANNING BOARD MEETING

The Portland Planning Board will hold a remote meeting on Tuesday, January 12, 2021, 4:30 p.m. This meeting will take place using Zoom.

Virtual meetings are allowed using emergency legislation approved by LD 2167; 1 M.R.S. §403¬A, that authorizes cities and towns to conduct meetings online.

Allow your computer to install the free Zoom app to get the best meeting experience.

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 un-muted by the host when it is time for public comment.

ZOOM MEETING INSTRUCTIONS
You are invited to a Zoom webinar.
When: Jan 12, 2021 04:30 PM Eastern Time (US and Canada)
Topic: Planning Board Workshop and Public Hearing 01/12/2021

Please click the link below to join the webinar:
https://us02web.zoom.us/j/87984458472

Or iPhone one-tap :
US: +13017158592,,87984458472# or +13126266799,,87984458472#

Or Telephone:
Dial(for higher quality, dial a number based on your current location):
US: +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099 or +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833

Webinar ID: 879 8445 8472
International numbers available: https://us02web.zoom.us/u/kBWoH3XEU

For more information on how to use Zoom, please go to:
https://www.portlandmaine.gov/remotePUD

Public comments will be taken for each item on the agenda and written comments should be submitted to planningboard@portlandmaine.gov

WORKSHOP - 4:30 PM

i. Level III Site Plan, Subdivision and Conditional Use; 52 Hanover Street; Tom Watson & Co., Applicant. (estimated time 4:30 – 6:00 p.m.) The Planning Board will hold a workshop to consider a proposal for a six to eight-story, 239,000 square foot mixed-use building with 171 dwelling units and ground-floor retail space at 52 Hanover Street. The subject property is 59,625 square feet in size and is zoned B-2b Community Business.

ii. Zoning Map Amendment; 99 Winter Street and 160 State Street; Thanos, LLC., Applicant. (estimated time 6:00 – 7:30 p.m.) The Planning Board will hold a workshop to consider a zoning map amendment to map an R-7 Compact Urban Residential Overlay Zone onto a parcel located at 99 Winter Street and 160 State Street. The subject property is 28,953 square feet in size and is zoned R-6.

PUBLIC HEARING - 7:30 PM

1. ROLL CALL AND DECLARATION OF QUORUM

2. COMMUNICATION AND REPORTS

3. REPORT OF ATTENDANCE AT THE MEETING HELD ON JANUARY 5, 2021

Evening Hearing
5 Portland Street: All members were present.

4. REPORTS OF DECISIONS AT THE MEETING HELD ON JANUARY 5, 2021

i. Conditional Use; 5 Portland Street; Preble Street Resource Center, Applicant. Stanley moved and Chann seconded a motion to find the proposed conditional use in accordance with Sections 14-218 and 14-474 of the Land Use Code with seven conditions of approval. Vote 7-0.

5. NEW BUSINESS

i. Election of Officers (estimated time 7:30 – 7:45 p.m.)

ii. Level III Site Plan and Subdivision; 1844 Forest Avenue; Forest 1844 LLC., Applicant. **The applicant has requested that this item be tabled to a future meeting date.**

Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

52 Hanover Street

Victoria Volent <vvolent@portlandmaine.gov> Wed, Oct 21, 2020 at 9:45 AM
To: James Dealaman <jdealaman@portlandmaine.gov>

Hi Jim,

52 Hanover Street proposes the creation of a multipurpose building including four (4) 2,000 sf commercial retail spaces and 171 apartment units.

Division 30, Section 14-487, Ensuring Workforce Housing requires at least ten percent (10%) of the dwelling units in the development shall meet the definition of Workforce Housing units for sale or for rent. The developer of 52 Hanover Street has indicated that 17 of the apartment units will be Workforce Housing Units for rent. Subsequently, the proposed project would meet the minimum requirements set forth in Section 14-487 by creating 17 workforce units and paying a fractional fee-in-lieu of $10,878 (.1 X $108,786 fee-in-lieu).

Please further note, Section 14- 488 (g) allows projects that are subject to 14-487 that choose to provide the required workforce housing units on site to increase the total permitted units by 25%. The original density is 137 units. 137 units X 1.25 percent = 171.25 units or 171 units.

If you have any questions, please let me know.

Thank you,

Victoria

Victoria Volent
Housing Program Manager
Housing and Community Development
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Att. 2

MEMORANDUM

TO: James Dealaman, Planner

FROM: Lauren Swett, PE

DATE: December 4, 2020

RE: 52 Hanover Street Level III Site Plan Peer Review

Woodard & Curran has reviewed the Level III Site Plan Application for the construction of 171 residential units and 4 retail units to redevelop the existing 52 Hanover Street site. We have reviewed the project for compliance with applicable City of Portland standards and general engineering.

Documents Reviewed by Woodard & Curran

- Site Plan Application and Stormwater Management Permit Application and attachments, dated September 8, 2020, prepared by Acorn Engineering, Inc on behalf of Tom Watson & Co., LLC.
- Site Plan Drawings, dated September 8, 2020, prepared by Acorn Engineering, Inc on behalf of Tom Watson & Co., LLC.

We provide the following comments:

- The project is required to provide stormwater management in accordance with Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 requirements for Basic, General, Flooding and Redevelopment Standards as applicable. We have the following comments:
    - Basic Standards: The Applicant has provided for erosion and sedimentation control in accordance with the Basic Standards. The Demolition and Construction management Plan includes a note that all catch basins downstream of the project have catch basin inlet protection installed. The catch basins to be protected should be identified on the plan. This should include basins in the street, as well as any basins that may be demolished during construction, but that may still remain connected to the stormdrain during a portion of construction.
    - Redevelopment Standards: The Applicant has evaluated the site based on the Maine DEP Chapter 500 Standards for redevelopment. Based on these standards no stormwater treatment is required. The Applicant should also evaluate the site using the City of Portland's standard for redevelopment which requires stormwater treatment when 5,000 square feet or more of redeveloped non-roof impervious surface area is created. If this area threshold is met, treatment should be provided for 50% of the non-roof redeveloped impervious area.
- The Applicant has evaluated utility demand for the project. An ability to serve request has been submitted for sewer, and approval is pending. The Applicant has noted that ability to serve for water service has been received from PWD. A copy of that approval for the current design should be provided.
- It is recommended that electrical infrastructure for proposed street lighting be shown on the utility plan to ensure it can be constructed without conflict with other proposed utilities and street trees.
- A catch basin is proposed at the northern corner of the project area on Hanover Street. The location of the basin conflicts with a proposed street tree.
- It is recommended that the proposed gas service in Parris Street be adjusted to provide a greater distance between the service and the proposed street tree. It is also noted that at the location

of the gas entrance, where a meter will be required on the outside of the building, bollards will likely be required by Unitil to provide protection for the meter, and should be coordinated with the landscaping.

- A tree is proposed within the landscaping area adjacent to the utility room where all water and gas utilities are proposed. It is recommended that landscaping be coordinated with the utility locations where tree roots may cause issues in the future.
- The stormdrain line from the eastern and northern sides of the site is proposed to tie into the stormdrain from the western part of the site within the Parris Street ROW. This 8" to 10" connection is proposed without a manhole or cleanout. It is suggested that this connection be made on the private property if possible and a manhole be provided to ensure for adequate ability for maintenance in the future.
- The Applicant his proposing to connect to the stormdrain in Parris Street using an existing catch basin. It is noted that connections to catch basins in the street are not allowed by the City of Portland. Additional information will be required on this connection. Evaluation of the Flooding Standard is not required for this project; however it is suggested that a stormwater analysis be completed to ensure that the proposed 10" stormdrain connection will be adequate to convey all site drainage.

Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

52 Hanover Street - Traffic Comments Status

Tom Errico <thomas.errico@tylin.com> Fri, Jan 8, 2021 at 8:19 AM
To: James Dealaman <jdealaman@portlandmaine.gov>
Cc: Michael Tremblay <mtremblay@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Bruce Hyman <bhyman@portlandmaine.gov>

Hi Jimmy – the following is a status update regarding the traffic review for the project and is primarily related to the Traffic Movement Permit process. A TMP Scoping meeting was held on November 12, 2020 with the following outcomes:

- Following guidance from MaineDOT, the 82 Hanover Street project is not considered part of "common scheme" of development and thus directed the TMP process to review this project as a standalone application.
- Based on the trip generation estimates and trip credits from the prior public works site, a traffic study evaluating roadway/intersection capacity is not required. The project will generate less than 50 trips during the weekday AM and PM peak hours and thus mobility concerns are not expected to be problematic.
- There was one High Crash Location identified in the vicinity of the project, Hanover Street between Lancaster Street and Portland Street. Nine (9) crashes were reported over the three-year period 2017 to 2019. A specific correctable crash pattern was not identified, although many occurred during the day and may have been related to public works operations. No further action was requested.
- At the scoping meeting there was discussion regarding the provision of on-street parking on the west side of Hanover Street (project side) and possible parking regulations for allowing parking during non-winter months (snow creates roadway width concerns). Since the scoping meeting, it is my understanding the Fire Department is recommending prohibition of on-street parking on the west side of Hanover Street, which is similar to the parking restriction implemented in front of 82 Hanover Street. Given this outcome no further action is required. I would note that the applicant is proposing a truck loading area on the west side of Hanover Street and Mike Tremblay is reviewing this issue.
- Given the likelihood of increased pedestrian activity and a desire to cross Hanover Street to access Lancaster Street, it was identified that a safe

formalized crossing be implemented as part of the project. Based upon a recent discussion with City staff, it appears the south side of Lancaster Street may be the best location for a crosswalk given conflicts on the north side abutting Bayside Bowl. Accordingly, the applicant shall develop plans for this crosswalk for review and approval.

- The project is proposing three driveways and therefore the applicant shall request a waiver with supporting documentation (two driveways are permitted by City Technical standards).

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE

Senior Associate

Traffic Engineering Director

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Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

52 Hanover Street - Traffic Movement Permit Status

Tom Errico <thomas.errico@tylin.com> Thu, Oct 22, 2020 at 9:44 AM
To: James Dealaman <jdealaman@portlandmaine.gov>
Cc: Mike Tremblay <mtremblay@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Bruce Hyman <bhyman@portlandmaine.gov>

Hi Jimmy – the proposed project generates in excess of 100 peak hour trips and thus requires a Traffic Movement Permit. The applicant submitted a Traffic Movement Permit Application and a scoping meeting will be scheduled in the near future. Please note the following:

- The proposed project is expected to generate 101 trips during the weekday PM peak hour, 103 trips during the Saturday peak hour and 144 trips during the Sunday peak hour.
- Access and egress to and from the project will occur via a driveway located on Hanover Street and a driveway located on Parris Street.
- The safety evaluation identified one High Crash Location, Portland Street between Lancaster Street and Portland Street. Nine (9) crashes were reported between 2017 and 2019.
- The MaineDOT Traffic Movement Permit regulations do consider common scheme of development and whether projects should account for such scenarios. 82 Hanover Street may be considered part of a common scheme scenario and thus may need to be combined with 52 Hanover Street as part of the Traffic Movement Permit process. 82 Hanover Street did obtain a Traffic Movement Permit and one possible outcome could be modifying that Permit. I am communicating with the MaineDOT State Traffic Engineer to obtain direction on this matter. I would like feedback on this issue before scheduling the scoping meeting.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE

Senior Associate

Traffic Engineering Director

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Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

52 Hanover comments and utility

Mike Tremblay <mtremblay@portlandmaine.gov> Fri, Jan 8, 2021 at 10:45 AM
To: James Dealaman <jdealaman@portlandmaine.gov>

Jimmy,

Here are my additional comments on 52 Hanover Street:

- No loading of solid waste or other loading activity shall take place in the travel ways or in locations that would inhibit access/egress to/from the site or adjacent uses. Loading should take place off of the ROW, or, if necessary, marked loading areas should be designated along the curb. On Parris Street, where parking is provided on both sides, a 1-2 foot curb cut-in to provide additional width for parallel parking of larger vehicles may be considered by DPW if proposed, provided that street trees are moved behind the property line (see below comment). It is recommended that the Applicant consult with a solid waste removal professional to determine the best location for loading area(s).

- The proposed loading zone on Hanover Street should be approved by Fire and Life Safety; it was indicated that parking was not permitted on both sides of Hanover Street, but short-term loading may be permissible. DPW will consult with Fire and Life Safety.

- If there is any possibility that the garbage chute can utilize the alley/driveway from Hanover Street, so that solid waste removal can be conducted in this alley/driveway, this is preferred; however, DPW acknowledges that 55 Portland Street holds some interest in this driveway as well.

- The sidewalk along Parris Street hosts street trees along the property line and bike racks and light fixtures along the curb. This requires pedestrians to "weave" through obstacles. If possible, the street trees should be moved partially or entirely across the property line to increase the effective width of sidewalk. Changes to the plan should be done in consultation with Jeff Tarling, the City Arborist; the final design should be one that maximizes the survivability of the trees while maintaining as wide and consistent a pedestrian path possible.

- Any proposed changes to on-street parking should be called out and summarized in a table on the site plan. This includes conversions of parking to

loading zones as discussed above. Any new signage relating to parking/curbside activity should also be shown graphically on the site plan. On-street parking signage shall be in accordance with City sign standards.

- The proposed crossing across Hanover Street does not meet ADA standards. There is no proper ramp on the east side of the crosswalk, and no detectable warning panel indicating the presence of a crossing. It is suggested that a new ramp and landing be constructed along the east-side sidewalk, south of Lancaster Street, to accommodate this crossing, as shown below. This takes the pedestrian crosswalk out of Lancaster Street as well. Note that this ramp would require accessible warning panels for both crossings (across Lancaster and Hanover streets).

Thank you,
Mike

Mike Tremblay, P.E.
Senior Engineer
Engineering Division
Department of Public Works
City of Portland, ME
mtremblay@portlandmaine.gov
P. 207.874.8881 F. 207.874.8852

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Att. 6

Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

52 Hanover - Solid Waste Removal

Mike Tremblay <mtremblay@portlandmaine.gov> Wed, Jan 6, 2021 at 10:48 AM
To: James Dealaman <jdealaman@portlandmaine.gov>

Jimmy,

As discussed, DPW is not comfortable with solid waste loading "within Parris Street", including within the Parris Street garage driveway. A designated loading area is the only way to ensure that this loading activity does not block through traffic on Parris Street and/or traffic accessing/egressing the site via the Parris Street driveway. While the proposed loading area on Hanover Street for retail uses appears acceptable (assuming it is acceptable to Fire/Life Safety), DPW feels that all garbage pick-up should occur at the same location if possible. Additionally, there is no clear location for garbage storage for these retail locations. It does not seem realistic that these retail locations will store solid waste internally between pick-ups. Finally, the applicant should clarify whether each retail space will be responsible for scheduling their own solid waste pickup or whether there will be a set schedule for when solid waste will be picked up.

Thanks,
Mike

Mike Tremblay, P.E.
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ACORN ENGINEERING, INC.

James Dealaman, Planner
Planning Division, City of Portland
389 Congress Street
Portland, ME 04101

January 6, 2021

Subject: Comment Response Letter
52 Hanover Street Redevelopment – Portland, Maine

On behalf of Tom Watson & Co., LLC and the rest of the project team, we are pleased to respond to the comments that we have received thus far.

To facilitate the review, comments are provided below in italics followed by each team's responder in a designated color:

Acorn Engineering (Sam Lebel, PE and Will Savage, PE) *Civil Engineer*
Cube 3 (Nick Griffin, AIA) *Architect*
Soren DeNoird, *Landscape Architect*

Planning and Urban Development Department – Planning Division

Design Review Comments (questions and unmet standards in bold font)

B-2b Commercial Business Zones

Comment – *Standard (1) a. Urban Street Wall – Building placement is near the property line in keeping with the established street wall with little to no front yard setback or landscape. This pattern is interrupted on the Parris Street edge which has a continuous landscape buffer between the sidewalk and building.* ***Staff do not advocate for this landscape buffer between the sidewalk and retail space. In addition, this landscape area should be protected either with a curb or planter wall. The transformer location also disrupts this street wall edge and should be reconsidered.***

Response – The edge condition along Parris Street was derived from early discussions with the Zoning Administrator prior to any submissions, design work, or pre-app meetings. Although a unique situation does occur on this site due to the ample street frontage on opposing ends, it was communicated to us early on that the front yard and rear yard were to be defined by the Applicant and that the rear yard would need to meet the 10' setback. As such, from a zoning perspective the front yard is along Hanover Street and the rear yard is along Parris Street. Consistent with the b-2b zoning district, we are holding a 10' setback on the Parris Side. Within this setback, the design team maintains a strong desire to provide plantings for multiple reasons:

- **It softens the building's façade**
- **It provides pervious area within a predominantly impervious block**
- **Feedback at the neighborhood meeting indicated a desire for green space, specifically this 10' buffer**
- **The placemaking focus is kept on the Lancaster Court area and midblock pedestrian/bicycle easement. Hardscape in the buffer would likely not be utilized; however, the potential for seating elements can be explored further.**

A 10' setback is minor and will not create a gap in the streetscape. The building will still maintain a presence and provide a street wall along Parris Street. The proposal is in compliance with the zoning regulations and provides an appropriate balance between street presence and green space at the pedestrian scale. Per request, we have added a granite curb border between the sidewalk and the planted edge.

Comment – *Standard (1) c. Building Entrances – Main building entrance faces and is directly accessible from Hanover Street. Multiple retail entrances are oriented to Lancaster Street which is a pedestrian street/passage.* ***The main residential entrance is not differentiated from the retail spaces and should be given more emphasis/prominence.***

Response – **The massing of the building has been modified to extend the residential entry out towards Hanover street. The building facade has also been modified to better differentiate between the residential entry and the retail spaces.**

Comment – *Standard (1) d. Windows – Windows are provided along all street frontages as required – however, the amount of windows is limited along Hanover and Parris streets due to the structured parking use.* ***VT of .7 or greater is required.***

Response – **The VT of .7 or greater will be provided at the glazing and screening along the street as required.**

Comment – *Standard (1) g. Building Materials –* ***More information is needed to evaluate the project.*** *The application indicates residential materials are being used. However, the specific materials and finishes are not indicated on the elevations, in renderings, or material cut sheets. The elevations imply the appearance of a* ***natural wood finish*** *for a majority of the building –* ***this would not be considered to meet the standard for materials*** *that are compatible with the residential and commercial neighbors which are predominantly brick and painted clapboard. Unfinished or natural wood is not considered compatible with the traditional, urban context.*

Response – **The building will not have natural wood as an exterior material. The proposed materials are a combination of fiber cement and composite panels/siding. The materials will be showcased in more detail on the revised elevations. The existing context of the structure is compatible with the eclectic surroundings that provide it with a familiar sense of place.**

Comment – *Standard (1) i. Landscaping and Buffers – Parking is structured and screened from neighboring properties. The transformers are enclosed with screening but placed in a prominent location next to the retail frontage –* ***this location should be reconsidered. More information***

about building lighting and mechanical systems will be needed to evaluate need for buffers.

Response – **Due to site constraints and the complexities involved in moving or rebuilding the transformers, the proposal remains the same in this respect. The design team continues to study and evaluate alternative options, but the transformers are currently planned to remain adjacent to Parris Street.**

Visuals showing the transformers transposed into the streetscape view are forthcoming and will be presented to the Planning Board at the second workshop. The approach to screening includes a design by the landscape architect and will visually interact as a necessary element of the streetscape.

The residential HVAC equipment will be within the unit or on the roof. Any rooftop equipment will be screened from view.

Comment – *Standard (4). Light and Air – All units provided with ample windows;* ***storage space is not indicated on these plans****.*

Response – **Storage space has been allocated on the revised plans.**

<u>Design</u>

Comment – *During the last planning board workshop, some of the planning board sought more information on the entrances and stated there should be more emphasis and legibility. Some comments asked for seeing the residential entrance needing to show/define distinction and identity. Please consider these comments when revisiting the design.*

Response – **The massing of the building has been modified to extend the residential entry out towards Hanover street. The building facade has also been modified to better differentiate between the residential entry and the retail spaces.**

Comment – *Additional planning board comments encouraged having street access directly to the indoor bike space to add activity to street. Can more information be shared about how/if this will interface with the street frontage, or is the bike room more of an internally accessible area.*

Response – **Bike storage location has been relocated to have access directly off Hanover Street at grade and has been designed to encourage activity on the street as a resident bike shop.**

Comment – *To ensure that the plaza/retail space is successful we strongly recommend relocating the existing and proposed transformers to the rear setback area along Parris Street or another location outside of the proposed plaza space. (Please see the attached "Urban Design Additional Comments" which supplement the design memo previously provided.)*

Response – **Due to complexities involving moving or rebuilding the transformers, the proposal remains the same. The design team continues to research and evaluate alternative options, but at this time they remain adjacent to Parris Street. Visuals**

showing the transformers transposed into the streetscape view are forthcoming and will be presented to the Planning Board at the second workshop. The approach to screening includes a design by the landscape architect and will visually interact as a necessary element of the streetscape.

Comment – ***Standard (1) e. Façade Character*** – The Lancaster façade is being treated as a front because the applicant has oriented the building in this way and is proposing to make Lancaster an active public realm. Therefore, it is critical that the Lancaster façade "front" and open spaces be successful. It is important to create a break between the retail and residential portions of the building and to create a sense of enclosure. To accomplish this consider including articulation elements along the Lancaster façade such as canopies or awnings that fit into the buildings overall design and complements the local industrial character of 82 Hanover.

Response – **The retail and residential entry portion are currently being updated in anticipation of the Planning Board workshop. Canopies will be incorporated at each entry and the texture/design will be differentiated to read differently at the residential entry vs the retail storefront.**

Comment – ***Standard (1) g. Building Materials*** – Façade materials of buildings located in the B-2b zone shall be compatible with neighborhood storefront design and materials. Rather than retail frontage that is fully glass recommend using a different material for the retail facades bulkhead to give the building more texture.

Response – **The residential entry and retail frontage will include panels of other materials along the facade to break up the glazing and give the building more texture.**

Comment – ***Standard (1) i. Landscaping and Buffers*** – *If the space is generally in shade and/or does not provide amenities that create opportunities for social interaction such as seating, enclosure, human-scale elements, then the space will not be comfortable and will not be used. Consider adding a variety of seating types and arrangements. Explore using a variation in materiality to create interest. Ensure that indoor/outdoor interaction and retail connection to plaza space is carefully explored.*

- *Inadequate access into the plaza space, consider a signature landscaping and seating node at the entrance along Hanover and Lancaster using granite block seating to fit within the landscaping.*
- ***Standard (3). Open Space –*** *Celebrate the linear open space by lining the pathway with various trees and seating. In coordination with the City's Arborist consider incorporating a variety of tree types.*

Response – **Please find attached to this letter a shadow study. During the majority of the year, the plaza will have feature strong sunlight across the 70'+ wide plaza area during times of use. Additionally, we have added some placemaking elements near the residential entrance as recommended.**

Similar to 82 Hanover which has prospered, the patio furniture and design will be left up to the individual tenant so as not to prescribe a program. The idea is that each outdoor area will remain flexible and customizable. With future visuals, we will demonstrate what this might look like; however, the plans remain a "blank slate" on the courtyard pavers because no permanent fixed features are proposed other than the trees and bollards lining the pedestrian easement to create a boulevard feel.

Planning – Preliminary Site Plan Review Comments

General

Comment – *Please provide narrative speaking to how the project is consistent with the City's Comprehensive Plan.*

Response – This part of the application was included within the last paragraph of the cover letter when stated "……. *We are excited to submit this application to the Planning Department as it falls directly in line with the comprehensive plan by providing additional housing, including construction of the 17 workforce units on site, and an active retail frontage along the reinvigorated and pedestrian-orien~~ta~~ted Lancaster Court*."

Additionally, this project meets the comprehensive plan by incorporating a mixed-use project and providing generous amenities such as a dedicated room for bicycle storage and repair which help effectively link housing, jobs, and services as we anticipate a decent bicycle ridership percentage in the warmer months. The site is also well situated to accommodate pedestrian activity including its proximity to the downtown core as well as Bayside Trail.

Comment – *Are any updates available regarding the ability to serve letters from the Portland Water District and the City Water Resources Division?*

Response – The ability to serve letter from Portland Water District has been attached to Section P, Utilities. We have not yet heard from the Water Resources Division regarding the wastewater capacity. As part of this resubmission, we note that in addition to separating out the 60,000 square foot site into dedicated municipal separate storm sewer systems (MS4's) we are also proposing a public MS4 (extension) within Parris that will now capture an additional 16,000 square feet of roadway and sidewalk runoff.

Comment – *Will 55 Portland Street's Parking need to be relocated during site work. If so where/what is this accommodation. Also, how many parking spaces exist at the rear of 55 Portland Street and what is the current use of that property?*

Response – The Applicant does anticipate providing temporary off-street parking for four vehicles at 55 Portland Street while the building foundation and shell is constructed. The Applicant owns and operates many parking spaces within the neighborhood as well as holds short term leases. As such, the Applicant has the ability to ~~easily~~ provide these four temporary parking spaces if needed by the abutter. The building at 55 Portland Street is an office use and is currently vacant/under construction.

Comment – *Please resubmit a written waiver request (to Section 1.14 of the City's Technical Manual) speaking to the correct percentage 20% (not 10%)/ maximum number of compact spaces allowed. Staff want to ensure the request is correctly indicating the maximum number of compact spaces as specified in the Technical Manual.*

Response – **We are no longer requesting a waiver for the number of compact spaces as the percentage is below 20%.**

<u>Submission Requirements</u>

Comment – *Please show the setback distance to the north west lot line.*

Response – **This line is currently shown on the plans; however, it is difficult to decipher because it falls directly on the pedestrian/bicycle easement boundary.**

Comment – *No snow storage is proposed, please ensure the site plan & subdivision plan include a note speaking to snow and ice removal being the owner's responsibility (including within the pedestrian easement area) and not storing it anywhere on property unless shown on the plan.*

Response – **The note above regarding snow and ice removal has been added to the site plan & subdivision plat. The Applicant will remove snow from the site as necessary and is well equipped to do so given Port Property Management's snow removal fleet and the many properties it manages/maintains.**

Comment – *Please confirm what stormwater structures will remain on the site (e.g. what existing catch basins are proposed for reuse), what condition are they in, and are they in good working order and any issues? Please also provide more information about what exactly connects into these structures (e.g. PVC from 55 Portland site into catch basin).*

Response – **This information is provided within the Construction Management Plan, C-03 as well as the Ground Level Grading & Drainage Plan, C-30.**

Comment – *A life safety plan for the building will be needed according to Section 3 of the Technical Manual.*

Response – **A life safety plan will be provided within the architectural plan set.**

Comment – *Please confirm the number of indoor bicycle spaces that are proposed inside the building in the designated storage area. Additionally, staff would encourage adding in a few spaces in or nearby the outdoor space. Adding racks in the vicinity of this area will help to encourage use of this space.*

Response – **A minimum of 70 bicycle spots will be provided which meets the ordinance requirements of 2 bicycle spaces per 5 vehicles spaces.**

Comment – *It appears trash and recycling storage is located within the building and then picked up/loaded routinely off of the site. Please explain the route the export of trash will follow when loaded into the hauler. Please clarify if the trash storage area is for the residential and commercial space combined?*

Response – **The residential building will collect the trash via chutes to a single storage room at the upper garage level off Parris Street. During pick-up the trash will be wheeled out the garage onto Paris Street or the garage drive aisle, depending on the**

size of the vehicle. The commercial tenants will be individually responsible for storage and removal. This may occur via a private hauler potentially in conjunction with the abovementioned process.

Comment – *Please provide more information on the location and dimensions of any existing and proposed HVAC and mechanical equipment (ex. what is the height of any transformers?) as well as any proposed screening (including on rooftop). If located on the site or attached to the building, please show on the elevations.*

Response – **The residential HVAC equipment will be within the unit and or on the roof. Any rooftop equipment will be screened from view. Ground mounted transformers are approximately 5 feet tall.**

Comment – *Please submit copies of the existing easement documents (Easements referred to as 1-4) for our reference.*

Response – **We have included these documents within the Easement Summary.**

Comment – *As described in the summary of the easement with 55 Portland Street, has an Amendment to the Easement Deed with 55 Portland Street been drafted and available for staff to reference?*

Response – **This process is underway with the neighbor. Once available, the agreement and its terms will be communicated to the Planning Dpt.**

Comment – *Please provide more information on the estimated types and quantities of solid waste to be generated by the development. For new commercial and industrial development, a description of the estimated amount and type of recyclable material to be generated.*

Response – **Government sources vary somewhat in estimated waste production. As such, the breakdown of anticipated waste generation has generally been averaged and includes:**

- **Eatery A: 215 lbs/week**
- **Eatery B: 215 lbs/week**
- **Coffee Shop: 120 lbs/week**
- **Grocer: 300 lbs/week**

Overall, with only ~6,000 total square feet of commercial space, the total solid waste generation is not anticipated to be significant.

Comment – *Please provide evidence showing the affiliation between 52 Hanover LLC, and Tom Watson & CO., LLC. (i.e. showing that documentation under the latter's name can also be used for 52 Hanover LLC.*

Response – **Section C. Right, Title, and Interest has been updated to include the affiliation between 52 Hanover LLC, and Tom Watson & CO., LLC.**

Comment – *Please provide any evidence of state and/or federal approvals that are being obtained for this project.*

Response – **The City has delegated authority to review the Stormwater Management Permit that would otherwise be required under the Maine DEP.**

A Traffic Movement Permit (TMP) is currently being pursued with the Maine DOT, which the Planning Dept and Public Works are aware of (and attended the Scoping Meeting with the City's consulting Traffic Engineer). We will forward along the approval letter once received.

There are no other State or Federal permits being pursued.

Zoning

Comment – *Zoning analysis table provided stated the B-2b can be 100% impervious. However, the code only allows for 100% impervious in the B-2B if the development is completely residential. For all other uses it's 90% impervious in the B2B. With 95 % impervious proposed please show how the 90% requirement will be met on this site.*

Response – **Based upon our meeting with Staff, the Impervious Area Memo from our office, and the resulting email from the Planning Department stating agreement with our interpretation, it is understood that the entire site is prorated based on land use. In this case, the maximum impervious area ratio is above 95% and the project complies as designed.**

Comment – *At the most recent Planning Board Workshop (held on 10/27/2020), feedback was received concerning the zoning standards requiring a 10' rear yard setback along Parris Street which would not be consistent with the existing street wall on Parris Street.*

Response – **The edge condition along Parris Street was derived from early discussions with the Zoning Administrator prior to any submissions, design work, or pre-app meetings. Although a unique situation does occur on this site due to the ample street frontage on opposing ends, it was communicated to us early on that the front yard and rear yard were to be defined by the Applicant and that the rear yard would need to meet the 10' setback. As such, from a zoning perspective the front yard is along Hanover Street and the rear yard is along Parris Street. Consistent with the B-2-B zoning district, we are holding a 10' setback on the Parris Side. The "street wall" is not anticipated to suffer given 10' is not a substantial distance. Overall, the idea of green space is welcomed by the development team and the neighbors.**

Comment – *Staff would like to raise that if the applicant is interested in pursuing/submitting a text amendment as part of the current application, that staff are generally supportive of a path forward to improve allowing buildings on lots with street frontage on both front and rear yards to have a stronger street frontage and to avoid grappling with zoning requirements where not appropriate in existing context.*

Response – **Based on the previous response, the Applicant does not wish to pursue a text amendment.**

Transportation/Traffic/Access and Circulation

Comment – *Garage Parking Regulation (as it relates to 52 Hanover Street's Uses and 82 Hanover Parking Demand) – Please provide more information regarding how parking will be regulated at each level of the parking garage (e.g. who will have access and where, what levels are intended for retail parking versus residential, and where will 82 Hanover Street's parking demands be accommodated?) In addition, what is the status of the final parking analysis for the final commercial space at 82 Hanover Street? Staff would prefer to have this information to more precisely understand the expected parking demands of 82 Hanover Street.*

Response – **A summary from Port Property Management has been developed which outlines that the spaces are decoupled from the rental spaces, see Section S. Parking Study. The garage will be leased and not available to the public. Security will be managed by a key card or similar feature.**

The parking analysis has also been revised to include the remaining 82 Hanover demand from the Batson River brewpub. It should also be noted that the 52 Hanover residential demand was altered based upon consultation with a marketing and real estate firm which projects higher parking ratios for residential than the initial Parking Analysis submitted in September which used the bare minimum ITE value. The updated analysis reflects a more realistic demand.

Comment – *Pedestrian Access to Site - In general, given the increase of residential units in the area as well as anticipated trips to the future retail uses, staff identified the site will generate a much higher intensity of pedestrian movement along the corridor between Kennebec and Portland streets. There's a general desire line between Portland and Kennebec, which will only increase as more urban uses start to occupy these spaces. At this time, staff believe that a crosswalk will likely be considered at a location (yet to be determined). A potential for situating the crosswalk will also depend on first better understanding the operations of the site as touched in other review comments provided.*

Response – **Please advise where Staff feels a crosswalk would be appropriate.**

Comment – *Please provide narrative response to City Code Section 14-526 (a)(3) regarding Public Transit Access. The narrative submitted states, "not applicable," however, please elaborate further why the requirement/criteria under this section is not applicable to the project specifically.*

Response – **The proposed development is not located along a principal or minor arterial roadway; therefore, no transit facility is required per Zoning Ordinance Sec 14.6.1.C.**

Comment – *Please ensure that each retail space will be ADA accessible*

Response – **Each retail space will have an ADA accessible entrance along the proposed plaza. Please see the Grading Plan, Sheet C-30, for more information.**

Comment – *To better understand traffic to the site, please provide additional information regarding any expected loading areas (ex. mail pick-up, trash, retail deliveries, etc.), where they occur, also expected frequency of visits to these locations and type of vehicle expected. In particular,*

the narrative spoke to delivery to retail units being accommodated within existing street parking along both frontages, however if no parking is proposed along the frontage of Hanover Street a loading area may be necessary. At this point staff seek to understand the elements/function of the site's operations better.

Response – **The solid waste loading will occur off Parris Street from a dedicated room behind the bicycle area. The refuse truck will either queue in the garage level drive aisle or within Parris Street, consistent with City garbage truck routines.**

The loading area for retail deliveries, mail, taxis, etc. is expected to occur along a 50' length between the pedestrian easement and the proposed curb cut on Hanover Street. This location makes sense because queueing will be limited to a maximum of 10 minutes and there is no on-street parking on this side of the street. This will allow delivery vehicles to be safely out of the travel way while not infringing on snow-plow operations or creating a consistent reduction in width for emergency personnel.

Fire/Life Safety

Comment – *Will this project meet the NFPA definition of a high rise building (75' or more in height from the lowest level of fire department access to the highest occupiable floor)? Please note that the access to the highest occupiable floor will be applied to the entire perimeter of the building so stepping back a floor of the building to an area of higher FD access will not exempt you from high rise requirements if applicable.*

Response – **At this time it is expected the building will meet the definition of a high rise. Accordingly, a more in-depth code review is forthcoming.**

Comment – *The Fire Department is requesting no parking along the Hanover Street side on the project. Without the parking on the Hanover Street side the additional access provided is acceptable to the Fire Department.*

Response – **'No parking' signs are proposed along the entire Hanover St frontage. Temporary loading and unloading is proposed along a short 50' segment by the courtyard in lieu of on-street parking. With 33' between curbs, this segment is still anticipated to maintain at least 16' of clear width even with a car parked on the east side of the street and a delivery vehicle queued on the west side. Overall, this proposal is preferable to many other sites and businesses in the City where delivery vehicles are forced to park in the travel way.**

Comment – *Provide more details on the minimum width and length of the access driveway from Hanover Street to the parking area in the rear of 55 Portland Street.*

Response – **The minimum width of the proposed 55 Portland Street driveway is 18' and the maximum width is 21'. The length of the driveway is approximately 110' before opening into the existing 55 Portland parking area.**

Comment – *Will or can the stairway shown on the Parris Street / Portland Street corner provide pedestrian access from Parris street to the parking area behind 55 Portland Street?*

Response – **Yes, the stairway shown along Parris Street at the driveway to the second level of the proposed 52 Hanover building will provide access to the parking area behind 55 Portland Street. We anticipate that the access will be gate controlled allowing only employees of 55 Portland St or their designees to use the stairway.**

Department of Public Works

Comment – *The Applicant should clarify how solid waste pickup will be accommodated. The submitted materials suggest that garbage will be wheeled to Hanover Street. The Applicant should identify where garbage trucks will park during this activity*

Response – **The solid waste will be loaded from the upper garage level on Parris Street. The private hauler will either queue in the garage drive aisle or within the street briefly, consistent with City garbage truck routines. Because of the curb cuts and 'No Parking' on the opposite side of the street, there is the potential that 16' of clear width to the other curbline would be available in some circumstances.**

Comment – *The Applicant should specify where loading activity, including move in/move out, package/mail delivery, and loading associated with the retail locations, will take place.*

Response – **Temporary loading and unloading is proposed along a short 50' segment by the courtyard in lieu of on-street parking. With 33' between curbs, this segment is still anticipated to maintain at least 16' of clear width even with a car parked on the east side of the street and a delivery vehicle queued on the west side. Overall, this proposal is preferable to many other sites and businesses in the City where delivery vehicles are forced to park in the travel way. Additionally, this proposal will avoid interfering with snow-plow operations or creating a consistent reduction in width for emergency personnel.**

Comment – *A total of 6 accessible parking spaces are provided. This meets the minimum requirement for parking areas between 150 and 200 spaces. However, if the parking decks have distinct user bases (e.g. retail vs. residential, or 52 Hanover vs. 82 Hanover, etc.) then the accessible parking allotment should be based on the number of spaces on each deck (4 on the ground floor and 5 on the top floor).*

Response – **We have revised the parking layout such that each level has four ADA spaces to ensure Federal regulations are being met.**

Comment – *All new and reset curbs should be set in concrete; this should be reflected in the detail sheet.*

Response – **We have revised the detail to provide a concrete haunch at the base of the granite curbing.**

Comment – *The 48" brick sewer in the Lancaster Street alleyway is not properly represented on the plans. It shows a 10" storm drain coming over top of it (on C-20 and C-30) but it's not clear if the height is taken into account with the double row of brick. Also, the inverts on the plans are close to a foot difference 8' apart. Something doesn't appear to be correct.*

Response – **We have taken into account the existing sewer main. Note the storm drain system has been redesigned and we are now proposing a public main which will also provide upstream sewer/stormwater separation (approximately 16,000 sf of public impervious area). The pipe sizing has been confirmed to be adequate within a hydrological software program for a 10-year storm.**

Comment – *48" brick sewer in the Lancaster Street alleyway will likely need some kind of a maintenance easement, if one isn't in place already.*

Response – **There currently exists a sewer easement for the discontinued portion of Lancaster Street (CCRD Book 98, Page 187) and further utility easement retained by the City as set forth in the Certificate of Discontinuance dated July 20, 2018 (CCRD Book 35051, Page 132). As stated in the Certificate of Discontinuance, the City of Portland retains the right to enter this area to maintain, repair or replace the existing sewer until said sewer is abandoned or discontinued.**

Comment – *Private development is not allowed to tie into city catch basins. The development will need to tie into the lateral.*

Response – **Please refer to the revised storm drain system.**

Comment – *That same storm drain pipe will dig through the new sidewalk and curb of the downstream development. Staff suggest bringing it to a manhole in the street for crossing over the Lancaster sewer.*

Response – **Please refer to the revised storm drain system.**

Comment – *Private development sanitary sewer connection is to the sanitary sewer main – if the sewer service is smaller than 8", it's a direct connection, if it's 8" or larger, a new manhole needs to be installed in the main to make the connection.*

Response – **The sewer connection is proposed to occur via a doghouse manhole as outlined on Sheet C-20.**

Comment – *The proposed/existing sewer lateral on Parris Street should be televised before site plan approval to confirm that the lateral will remain or will be replaced.*

Response – **The plans do not intend to reuse this pipe unless it's found to be a PVC pipe in good condition.**

Comment – *If the sewer lateral on Parris Street is to be replaced, its connection to the sewer main should be reconsidered. It looks like they are providing a new connection. The old connection will be required to be capped at the sewer main.*

Response – **The Applicant intends to replace this sewer lateral, potentially through trenchless technology as a courtesy to 55 Portland Street. As such, it would be beneficial to reuse this corridor to avoid digging in the street and at the very least to ensure the inverts work as the lateral is "chasing" the sewer main elevation. This is a beneficial approach for all parties in our opinion.**

Comment – *The Public Works department does not recommend reusing any of the existing infrastructure (manholes, catch basins or pipe) on the site that relates to sewer or storm unless thoroughly inspected to ensure it is in good and functional condition.*

Response – **In general, all utilities will be replaced or removed and relocated.**

Comment – *Attached is a Site Utilities & Layout Plan we had available in our city archives from years past, if at all useful for your team to reference.*

Response – **Thank you for providing this plan.**

Landscaping

Comment – *The narrative provided describes, "as a substitute for further trees, the development team is exploring public art, green walls, and other vertical vegetative measures to enhance the streetscape in lieu of trees." Please provide any updates regarding addressing the street tree landscaping requirements.*

Response – **Please refer to the landscape plan as well as forthcoming visuals which depict additional aesthetics. "Street art" is desired to be incorporated into the project.**

Comment – *Please also refer to Zoning comment (re: impervious surface requirement) below which is relevant to informing the landscaping on the site.*

Response – **We have replied to this comment in the above comment/responses.**

Lauren Swett, PE

Comment – *The project is required to provide stormwater management in accordance with Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 requirements for Basic, General, Flooding and Redevelopment Standards as applicable. We have the following comments:*

- *Basic Standards: The Applicant has provided for erosion and sedimentation control in accordance with the Basic Standards. The Demolition and Construction Management Plan includes a note that all catch basins downstream of the project have catch basin inlet protection installed. The catch basins to be protected should be identified on the plan. This should include basins in the street, as well as any basins that may be demolished during construction, but that may still remain connected to the stormdrain during a portion of construction.*

Response – **Downgradient catch basins which require inlet protection during construction have been identified on the Demolition and Construction Management Plan, Sheet C-03.**

Comment –

- *Redevelopment Standards: The Applicant has evaluated the site based on the Maine DEP Chapter 500 Standards for redevelopment. Based on these standards no stormwater treatment is required. The Applicant should also evaluate the site using the City of Portland's standard for redevelopment which requires stormwater treatment when 5,000 square feet or more of redeveloped non-roof impervious surface area is created. If this area threshold is met, treatment should be provided for 50% of the nonroof redeveloped impervious area.*

Response – **An exhibit has been prepared that shows the amount of redeveloped land on site per the Maine DEP definition. Please refer to this exhibit for more information. This value remains below 5,000 square feet and as such, water quality treatment is not required; however, based upon the new storm drain design, we are separating out over 75,000 square feet of impervious area and reducing the overall site's impervious area, both of which will positively contribute to Casco Bay's water quality.**

Comment – *The Applicant has evaluated utility demand for the project. An ability to serve request has been submitted for sewer, and approval is pending. The Applicant has noted that ability to serve for water service has been received from PWD. A copy of that approval for the current design should be provided.*

Response – **The ability to serve letter from PWD has been attached to section P. Utilities.**

Comment – *It is recommended that electrical infrastructure for proposed street lighting be shown on the utility plan to ensure it can be constructed without conflict with other proposed utilities and street trees.*

Response – **Proposed street lighting is shown on Sheet C-20, Utility Plan. The underground lines will eventually be shown on the plans once the electrical engineer has provided this layout to our office.**

Comment – *A catch basin is proposed at the northern corner of the project area on Hanover Street. The location of the basin conflicts with a proposed street tree.*

Response – **The conflict has been reconciled.**

Comment – *It is recommended that the proposed gas service in Parris Street be adjusted to provide a greater distance between the service and the proposed street tree. It is also noted that at the location of the gas entrance, where a meter will be required on the outside of the building, bollards will likely be required by Unitil to provide protection for the meter, and should be coordinated with the landscaping.*

Response – **Increased spacing has been provided between proposed street trees and the proposed gas service. Proposed plantings will be coordinated with required gas meter protection measures.**

Comment – *A tree is proposed within the landscaping area adjacent to the utility room where all water and gas utilities are proposed. It is recommended that landscaping be coordinated with the utility locations where tree roots may cause issues in the future.*

Response – **The conflict has been reconciled.**

Comment – *The stormdrain line from the eastern and northern sides of the site is proposed to tie into the stormdrain from the western part of the site within the Parris Street ROW. This 8" to 10" connection is proposed without a manhole or cleanout. It is suggested that this connection be made on the private property if possible and a manhole be provided to ensure for adequate ability for maintenance in the future.*

Response – **Please refer to the revised storm drain system which has removed this condition.**

Comment – *The Applicant is proposing to connect to the stormdrain in Parris Street using an existing catch basin. It is noted that connections to catch basins in the street are not allowed by the City of Portland. Additional information will be required on this connection. Evaluation of the Flooding Standard is not required for this project; however it is suggested that a stormwater analysis be completed to ensure that the proposed 10" stormdrain connection will be adequate to convey all site drainage.*

Response – **Please refer to the revised storm drain system which has removed this connection. Included within the stormwater management report is a hydrological analysis which shows the system adequately handling a 10-year storm even with the public roadway and sidewalk accounted for.**

Jeff Tarling (City Arborist)

Comment – *Trees in the plaza area should be at a minimum planted in raised granite planters to ensure the trees survive winter deicing salt and to provide the needed soil volume to successfully grow a shade tree. Tree types recommended - Honeylocust, Hackberry (like Monument Square), Pin Oak, 'Accolade' Elm would likely fare well at this site, as they would provide the size and scale appropriate and could survive in the future conditions. See recommendation on the granite planters.*

Response – **We like the deciduous tree recommendations for the plaza and will consider using the Pin Oak for its more upright habit (next to the building). See *updated* L1.0**

Because outdoor usable square footage is limited for the retail units, we would like to use a flush grate planter (not curbed) with adjacent structural soils to maximize root growth area.

Comment – *Street trees with tree grates - While we like to see new trees whenever we can, the survivability rate nearby has been slim, all 5 of the Gorham Savings bank tree grates are now empty due to deicing salt. So far the new mixed use development trees have survived, trees at Bayside Bowl are set back behind the sidewalk due to overhead utilities and one can see how well they have done away from the salt. Tree planters with landscape or seasonal flowers would be recommended. The landscape along Paris Street should wrap around the proposed electrical transformers per CMP standards. Lo-Grow sumac might be one suggestion.*

Response – **We will use raised curb tree planting beds along Parris and Hanover Street. The 10' wide planted area on the Parris Street edge of building will also have a 7" raised curb. Trees in this bed will be set back (similar to Bayside Bowl). We are considering alternate design options for the transformer screening. If there is room for a planted margin then we will use lowgrow sumac / bearberry or dwarf redtwig dogwood.**

Comment – *Street trees - The project shows trees in the current rendering at the back of sidewalk and in the sidewalk with tree grates. Due to increased ped use in the neighborhood having trees at the back of sidewalk is recommended, the street trees should be in raised planters or a hybrid low granite with a 3" lip to deflect the salt brine in the Winter season. (this is similar to upper Exchange Street treatment) Tree types - The scale of the proposed building close to the street is going to facilitate the street trees to be upright form, recommend: 'Street-Keeper' Honeylocust', 'Musashino' Zelkova or 'Regal Prince' Oak. All three of these types are working successfully in Portland's downtown and places like Fore Street parking garage, 119 Congress Street condo. In past development scenarios, the extra planter granite cost has been subtracted from the 1 tree per unit requirement.*

Response – **We will follow these recommendations and use the raised edge planter and proposed 'Regal Prince' Oak.**

Comment – *Green Rain Planter - Although covered in the stormwater section of the project, the use of rain planters into the landscape should be a consideration.*

Response – **Noted.**

Comment – *The final plan should include clear details on plant types, locations and sizes. We noted 3" caliper shade trees and 10-12' Arborvitaes proposed, these might be larger than easily established given the small root zone areas. It might be better to go with 2-2.5" shade & ornamental trees and 5-6' / 6-7'Arbs so they can adapt and establish on site. The tree planting spec shown is somewhat outdated and appears to plant the tree too deep.*

Response – **We will reduce the street tree caliper sizes to the recommended 2-2.5"...but would like to keep with the larger proposed trees sizes in the plaza and in the 10' planted area along Parris Street for a more instant planting impact since we will have more room for larger root balls.**

Comment – *In review, the proposed project is going to have a big impact in the neighborhood and extra thought should be given to include adequate tree and landscape elements. Example of creative landscape planters that could be considered.*

Response – **Looking forward to working with you on this project.**

Please let us know if you have any additional questions or comments.

Sincerely,

Samuel J. Lebel, P.E.
Project Engineer
Acorn Engineering, Inc.

William H. Savage, P.E.
Principal
Acorn Engineering, Inc.

ACORN ENGINEERING, INC.

Department of Planning & Urban Development
Attn: Jimmy Dealaman, Planner
City of Portland, Maine

December 15, 2020

Subject: Maximum Allowable Impervious Area:
Zoning Interpretation & Calculations

Jimmy,

In response to Staff comments received on December 3rd as well as a follow up meeting between Staff and the development team on December 10th, we have prepared an overview of the maximum allowable impervious area and our interpretation of how the zoning ordinance applies to this application.

The Chapter 14 Land Use Ordinance specifies the maximum impervious ratios for various zoning districts and land uses. Given the project is within the b-2b zoning district, the ratios are dependent on land use. Specifically, the code reads that if the land use is residential, there is no maximum ratio. The code further reads that for other land uses, the maximum impervious ratio is 90%.

Within the original Site/Subdivision application, it was our interpretation that because the project is primarily a residential project with 171 units (the maximum allowable including a density bonus) and the commercial spaces are ancillary to the principal use, that the project would not be subject to a maximum ratio. Further justification lies in the fact that 96% of the inhabitable floor area in the building is attributed to residential living space and amenities meaning the overall project is clearly a residential development. This approach and interpretation is consistent with other projects permitted by our office in the City of Portland within the last several years.

Although we maintain the project is residential, upon discussing this matter with Staff, we are providing an alternate interpretation of the Code where the maximum impervious area is pro-rated. This is achieved by determining a weighted average based upon the floor area associated with the residential and commercial uses and their respective maximum impervious ratios outlined above. The process for determining the weighted average includes dividing each use's floor area by the building's total inhabitable floor area (163,850 SF) and multiplying that fraction by the associated impervious ratio for each use. These two values are then summated to calculate the allowable impervious area for the overall Site.

Land Use	Floor Area	Allowable Impervious Ratio	Weighted Average
Residential	157,450 SF	100%	96.1%
Commercial	6,400 SF	90%	3.5%
Overall Allowable Maximum Site Impervious Ratio			***99.6%***

Furthermore, an alternate calculation allocates one level of parking to the residential use and the other parking level to commercial uses.

Land Use	Floor Area	Allowable Impervious Ratio	Weighted Average
Residential	195,700 SF	100%	82.1%
Commercial	42,550 SF	90%	16.1%
Overall Allowable Maximum Site Impervious Ratio			***98.2%***

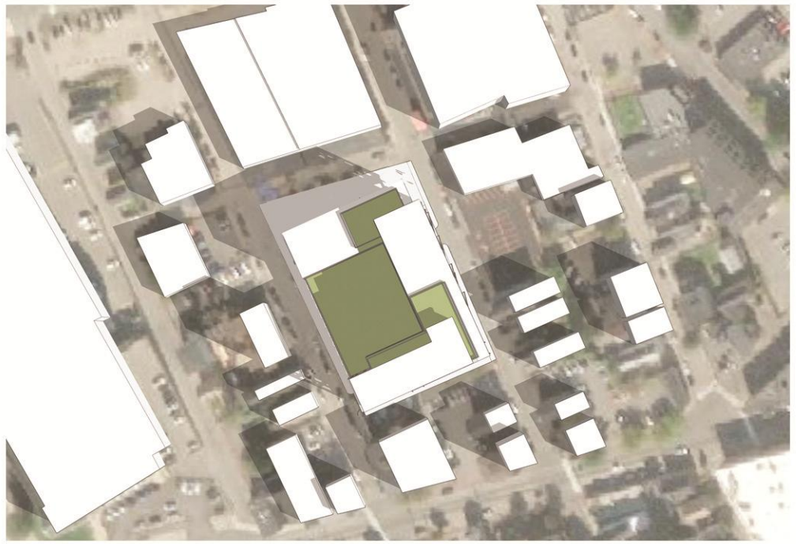
As demonstrated above, the maximum allowable impervious area is 99.6% or 98.2%, depending on if the parking levels are included in the calculation. As currently designed, the proposal includes an impervious ratio of 95%, which is in compliance with both weighted averages and also represents an improvement from the existing condition in which the Site is 100% impervious.

We trust this explanation will provide clarity with regards to the allowable impervious area associated with this Site. We look forward to progressing the project design and responding to the remaining Staff comments in a separate letter. In the meantime, please do not hesitate to reach out to us with any questions or comments.

Sincerely,

Samuel J. Lebel, E.I.
Project Engineer
Acorn Engineering, Inc.

William H. Savage, P.E.
Principal
Acorn Engineering, Inc.



MARCH 21 - 9 AM

MARCH 21 - NOON

MARCH 21 - 3 PM

JUNE 21 - 9 AM

JUNE 21 - NOON

JUNE 21 - 3 PM

52 Hanover St
Portland, ME

Shadow Study

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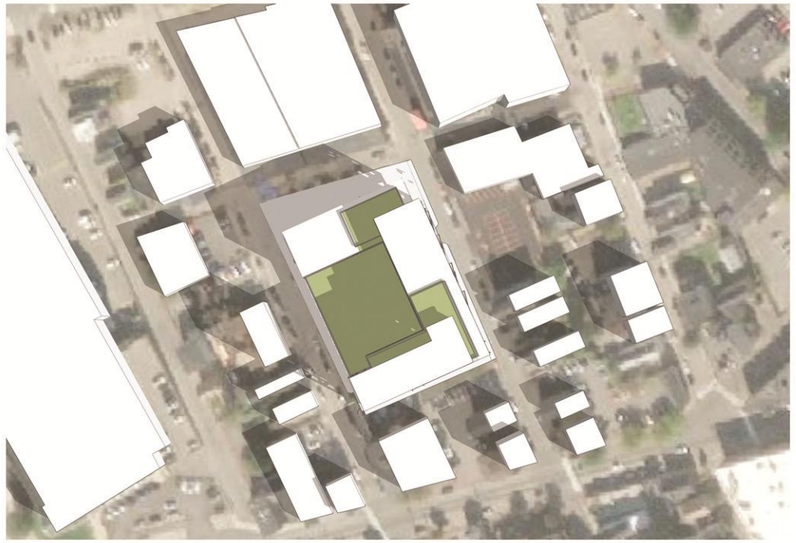
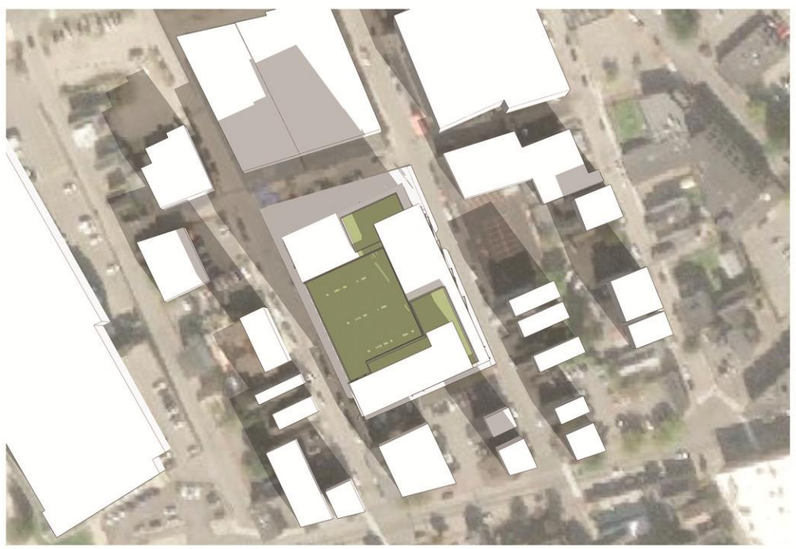


SEPTEMBER 21 - 9 AM

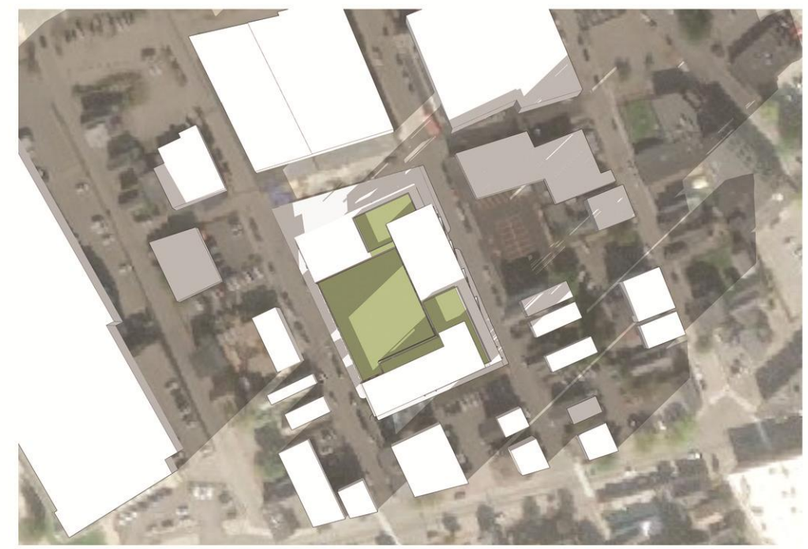
SEPTEMBER 21 - NOON

SEPTEMBER 21 - 3 PM



DECEMBER 21 - 9 AM

DECEMBER 21 - NOON



DECEMBER 21 - 3 PM

52 Hanover St
Portland, ME

Shadow Study

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Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

PL 1288-2020 - 52 Hanover Street: Preliminary Review of TDM Plan

Bruce Hyman <bhyman@portlandmaine.gov> Thu, Oct 22, 2020 at 11:17 AM
To: James Dealaman <jdealaman@portlandmaine.gov>
Cc: Tom Errico <thomas.errico@tylin.com>, Mike Tremblay <mtremblay@portlandmaine.gov>, James Rather <jrather@portlandmaine.gov>, Helen Donaldson <hcd@portlandmaine.gov>

Good morning, Jimmy,

I have had a chance to do a preliminary review of the 52 Hanover Street TDM Plan dated September 28, 2020.

In general, the Plan document is very well thought out and provides very good information related to many key elements of a TDM Plan including:

- the overall transportation context of the project and its
- ties between the pending Traffic Movement Permit/traffic and parking analysis and TDM efforts
- the proposed robust menu of TDM strategies to be employed
- the evaluation/monitoring and reporting provisions.

I will be providing detailed comments to the applicant and their TDM consultant in the next couple of weeks following the workshop. Some resolution of issues within the Traffic Movement Permit and parking demand-supply processes and guidance of the Board are needed before some details of the TDM plan can be finalized (such as trip reduction and parking reduction targets and the level of linkage to 82 Hanover Street as mentioned in Tom Errico's memo) although their proposed overall approach is sound.

Please don't hesitate to contact me if you have any questions.

Best regards,

Bruce
--
Bruce Hyman

Transportation Program Manager

Department of Planning & Urban Development
389 Congress Street
Portland, Maine 04101
(207) 874-8717 phone

bhyman@portlandmaine.gov
http://www.portlandmaine.gov/1363/Transportation-Division
http://www.portlandmaine.gov
Yes! Transportation's Good Here ....

Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

52 Hanover Street - Landscaping Comments

Jeff Tarling <jst@portlandmaine.gov> Thu, Dec 3, 2020 at 3:16 PM
To: James Dealaman <jdealaman@portlandmaine.gov>

Hi Jimmy -

In review of the proposed 52 Hanover Street project, tree & landscape review & comments:

The proposed 52 Hanover Street project along with the recent residential and mixed use development
has greatly changed this section of West Bayside, for the better. The size and scale of the proposed
development warrants a quality and noticeable tree and landscape treatment.

Recommendations include:

a) Trees in the plaza area should be at a minimum planted in raised granite planters to ensure the trees
survive winter deicing salt and to provide the needed soil volume to successfully grow a shade tree. Tree
types recommended - Honeylocust, Hackberry (like Monument Square), Pin Oak, 'Accolade' Elm
would likely fare well at this site, as they would provide the size and scale appropriate and could survive in
the future conditions. See recommendation on the granite planters.

b) Street trees with tree grates - While we like to see new trees whenever we can, the survivability rate
nearby has been slim, all 5 of the Gorham Savings bank tree grates are now empty due to deicing salt.
So far the new mixed use development trees have survived, trees at Bayside Bowl are set back behind
the sidewalk due to overhead utilities and one can see how well they have done away from the salt.
Tree planters with landscape or seasonal flowers would be recommended. The landscape along Paris

Street should wrap around the proposed electrical transformers per CMP standards. Lo-Grow sumac
might be one suggestion.

b) Street trees - The project shows trees in the current rendering at the back of sidewalk and in the sidewalk with tree grates.
Due to increased ped use in the neighborhood having trees at the back of sidewalk is recommended, the
street trees should be in raised planters or a hybrid low granite with a 3" lip to deflect the salt brine in the
Winter season. (this is similar to upper Exchange Street treatment) Tree types - The scale of the proposed
building close to the street is going to facilitate the street trees to be upright form, recommend: 'Street-Keeper'
Honeylocust', 'Musashino' Zelkova or 'Regal Prince' Oak. All three of these types are working successfully in
Portland's downtown and places like Fore Street parking garage, 119 Congress Street condo.
In past development scenarios, the extra planter granite cost has been subtracted from the 1 tree per unit
requirement.

c) Green Rain Planter - Although covered in the stormwater section of the project, the use of rain planters
into the landscape should be a consideration.

d) The final plan should include clear details on plant types, locations and sizes. We noted 3" caliper shade
trees and 10-12' Arborvitaes proposed, these might be larger than easily established given the small root zone
areas. It might be better to go with 2-2.5" shade & ornamental trees and 5-6' / 6-7' Arbs so they can adapt and
establish on site. The tree planting spec shown is somewhat outdated and appears to plant the tree too deep.

https://wwv.isa-arbor.com/education/onlineresources/cad/drawings/Planting/L_tree%20planting_24inch%20to%2036inch%20box_compacted%20soil_K.pdf

In review, the proposed project is going to have a big impact in the neighborhood and extra thought should be given
to include adequate tree and landscape elements. Example of creative landscape planters that could be considered.

Thanks,

Jeff

Jeff Tarling
City Arborist - City of Portland Maine
Parks, Recreation & Facilities Department
Forestry & Horticulture
212 Canco Road - Suite A
Portland, ME. 04103
(207) 808-5400
jst@portlandmaine.gov

[Quoted text hidden]

TreePlanter2.pdf
58K

Att. 10

Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

52 Hanover Street Comments

Jason Grant <jgrant@portlandmaine.gov> Tue, Dec 1, 2020 at 9:22 AM
To: James Dealaman <jdealaman@portlandmaine.gov>

Fire Department comments for 52 Hanover Street are as follows:

1. Will this project meet the NFPA definition of a high rise building (75' or more in height from the lowest level of fire department access to the highest occupiable floor)? Please note that the access to the highest occupiable floor will be applied to the entire perimeter of the building so stepping back a floor of the building to an area of higher FD access will not exempt you from high rise requirements if applicable.
2. The Fire Department is requesting no parking along the Hanover Street side on the project. Without the parking on the Hanover Street side the additional access provided is acceptable to the Fire Department,
3. Provide more details on the minimum width and length of the access driveway from Hanover Street to the parking area in the rear of 55 Portland Street.
4. Will or can the stairway shown on the Parris Street / Portland Street corner provide pedestrian access from Parris street to the parking area behind 55 Portland Street?

Jason Grant
NFPA Certified Fire Inspector 2 and Fire Plans Examiner
Life Safety CEO / Plan Reviewer
Permitting and Inspections Department
City of Portland
389 Congress Street Rm 315
Portland, Maine 04101
Phone:(207) 756-8187

with abutting lots and roadways. Easements for access for abutting properties and shared internal access points at property lines shall be provided where possible to facilitate present or future sharing of access and infrastructure.

b. Buildings and uses shall be located close to the street where practicable. Corner lots shall fill into the corner and shall provide an architectural presence and focus to mark the corner.

c. Buildings shall be oriented toward the street and shall include prominent facades with windows and entrances oriented toward the street. Uses that include public access to a building or commercial/office uses in mixed-use developments shall be oriented toward major streets whenever possible.

d. Parking lots shall be located to the maximum extent practicable toward the rear of the property and shall be located along property lines where joint use or combined parking areas with abutting properties are proposed or anticipated.

(d) B-1 AND B-1B NEIGHBORHOOD BUSINESS AND B-2 AND B-2B COMMERCIAL BUSINESS ZONES

(1) **STANDARDS.** Development located in the B-1, B-1b, B-2, and B-2b zones shall meet the following additional standards.

a. Urban Street Wall: In the B-1, B-1b, and B-2b zone it shall be required that buildings shall be located to create and preserve an urban street wall.

b. Mixed Uses: In B-1b zone buildings shall be multi-storied with mixed uses.

c. Building Entrances: In the B-1 and B-2b zone building entrances shall be oriented toward, located adjacent to, and directly accessible from, a sidewalk in a public right-of-way.

d. Windows: In the B-1, B-1b, B-2, and B-2b zones windows shall be required along the street frontage of a building. Windows shall be transparent (with a visible transmittance (VT) of
.7 or greater) and installed at a height to allow views into the building by passersby.

e. Facade Character: In the B-1, B-1b, B-2, B-2b zones, active and public portions of buildings (e.g. doors, windows, entries, retail displays) shall be oriented to and, where possible, be located adjacent to the public sidewalk to create an active presence along the sidewalk.

1. Where building facades situated along a public way have no interactive use or function, such facades shall be designed to provide sufficient architectural and graphic amenities to provide visual interest along the street and relate the building, and its use, to passersby.

f. Building Design: B-1, B-1b, B-2, and B-2b commercial buildings shall be designed to be compatible with their residential and commercial neighbors. In the B-1

and B-1b zones building scale, roof pitch, and fenestration shall be designed to complement surrounding residential structures.

g. Building Materials: Facade materials of buildings located in the B-1, B-1b, B-2, and B-2b zones shall be compatible with those materials of surrounding residential and commercial uses.

h. Building Scale: In the B-1 and B-1b zones building scale must relate and be compatible with surrounding residential structures.

i. Landscaping and buffers: In the B-1, B- 1b, B-2 and B-2b zones buildings and associated parking areas must be screened to buffer abutting properties. A densely planted landscape buffer and/or fencing will be required to protect neighboring properties from the impacts associated with the development, including lighting, parking, traffic, noise, odor, smoke, or other incompatible uses. Where buildings are setback from the street, a landscaped area must be planted along the front yard street line.

GUIDELINES.

Please refer to Appendix 2 of this manual, The B-1, B-1b, B-2, B-2b Design Guidelines, for applicable design guidelines for the B-1 and B-2 zones. In addition, the following design guidelines shall also apply:

1) Buildings located in the B-2 zone are specifically encouraged to adhere to the design guidelines contained in *the B-1, B-1b, B-2, B-2b Design Guidelines* (Appendix 2) of this section concerning the creation and preservation of an urban street wall.

2) In the B-1b and B-2 zones, buildings are specifically encouraged to adhere to the guidelines contained in *the B-1, B-1b, B-2, B-2b Design Guidelines* (Appendix 2) of this section concerning building entrances.

(e) UNIVERSITY OF SOUTHERN MAINE OVERLAY ZONE

(1) **STANDARDS.** All major and minor development reviewed under the provisions of the University of Southern Maine Overlay zone shall be designed to create a quality and cohesive campus environment while integrating with and respecting the residential character of surrounding neighborhoods as demonstrated by compliance with the principles and standards of the University of Southern Maine Design Standards, included as Appendix 3 of this manual.

(f) B-7 BAYSIDE MIXED USE URBAN DISTRICT ZONE

(1) **STANDARDS.** Bayside mixed use urban district zone (B-7 zone) design standards:

a. Transportation Demand Management: All major development in the B-7 shall submit and implement a Transportation Demand Management (TDM) Plan, subject to the review

greater than forty (40) feet in length shall provide variation in roof and facade character through changes in facade setback, roof configuration, and projecting or recessed building elements.

c. Recreation and open space: All open spaces on the site shall be integrated into the development and designated on the site plan. Each development shall have the following features:

1. External buffers: An effective and permanent screening from neighboring properties and roadways;

2. Internal buffers: Areas planted, maintained and located in such a manner as to provide privacy between units and buildings and paved areas and screening of parking, utilities, roadways, waste collection facilities and storage facilities;

3. Passive recreational open space: Open spaces, designated and improved with such features as gardens, picnic areas, walking trails; benches and lawn and seating areas;

4. Active recreational open space: Open spaces designated and improved for active recreational use with facilities such as tennis courts, basketball courts, multipurpose game fields, swimming pools, and children's playgrounds; and

5. Private open spaces: Open spaces designated for the individualized use of unit owners such as yards, decks and patios;

(i) TWO-FAMILY, SPECIAL NEEDS INDEPENDENT LIVING UNITS, MULTIPLE-FAMILY, LODGING HOUSES, BED AND BREAKFASTS, AND EMERGENCY SHELTERS

(1) **STANDARDS.** Two-family, special needs independent living units, multiple-family, lodging houses, bed and breakfasts, and emergency shelters shall meet the following standards:

a. Proposed structures and related site improvements shall meet the following standards:

1. The exterior design of the proposed structures, including architectural style, facade materials, roof pitch, building form and height, window pattern and spacing, porches and entryways, cornerboard and trim details, and facade variation in projecting or recessed building elements, shall be designed to complement and enhance the nearest residential neighborhood. The design of exterior facades shall provide positive visual interest by incorporating appropriate architectural elements;

2. The proposed development shall respect the existing relationship of buildings to public streets. New development shall be integrated with the existing city fabric and streetscape including building placement, landscaping, lawn areas, porch and entrance areas, fencing, and other streetscape elements;

3. Open space on the site for all two-family, special needs independent living unit, bed

and breakfast and multiple-family development shall be integrated into the development site. Such open space in a special needs independent living unit or a multiple-family development shall be designed to complement and enhance the building form and development proposed on the site. Open space functions may include but are not limited to buffers and screening from streets and neighboring properties, yard space for residents, play areas, and planting strips along the perimeter of proposed buildings;

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

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

6. Two-family or multiple-family dwellings shall not be converted to lodging houses unless all units in the building have been vacant for at least one (1) year prior to the date conversion is sought or unless the individual multiple-family units are less than one thousand (1,000) square feet in size. In no event shall any single-family dwelling in the R-5 or R-6 zone be converted in whole or in part to a lodging house.

(j) MULTIPLEX AND SMALL RESIDENTIAL LOT DEVELOPMENT LOCATED IN THE R-5 ZONE

(1) **STANDARDS.** Multiplexes and small residential lot development in the R-5 zone shall be designed to be architecturally compatible with the residential buildings in the surrounding neighborhood, as demonstrated by compliance with the R-5 Small Residential Lot Development and Multiplex Design Standards contained in Appendix 6 of this manual.

(k) SMALL RESIDENTIAL LOT DEVELOPMENT LOCATED IN THE R-6 ZONE

(1) **STANDARDS.** Small residential lot development located in the R-6 zone on lots of ten thousand (10,000) square feet or less shall provide a high degree of architectural quality and compatibility with the surrounding neighborhood as demonstrated by compliance with the principles and standards of the R-6 Infill Development Principles and Standards, promulgated by the Planning Board and contained in Appendix 7 of this manual. Any proposal required to obtain a certificate of appropriateness under Portland's historic preservation ordinance is exempt from the R-6 design review standard.

(l) INDIA STREET FORM-BASED CODE ZONE: BUILDING DESIGN STANDARDS

(1) **STANDARDS.** The IS-FBC Building Design Standards are contained in Appendix 8 of this manual and applicable to all types of development within the zone.

Planning and Urban Development Department
Planning Division

Subject: B-2b Design Review – 52 Hanover Street

Written by: Caitlin Cameron, Urban Designer

Date of Review: Thursday, January 7 2021

The project at 52 Hanover Street was preliminarily reviewed according to the *City of Portland Design Manual* standards by Caitlin Cameron, Urban Designer, against *the B2b Commercial Business Zones Standards* (Section (d) of the Design Manual) and *Multiple-Family Standards*.

Design Review Comments*: (questions and unmet standards in red)*

- More information/depiction of the materials including labels on the elevations and renderings or product specification.

(d) B-2b Commercial Business Zones

Standard (1) a. Urban Street Wall – Building placement is near the property line on Hanover Street in keeping with the established street wall with little to no front yard setback or landscape. This pattern is interrupted on the Parris Street edge which has a continuous landscape buffer between the sidewalk and building. **This landscape area is now protected with a curb.** Staff do not advocate for the landscape buffer to continue between the sidewalk and retail space – the active nature of the street-facing façade is compromised by placing this barrier between the sidewalk and the storefront in this location. To resolve this issue, the landscape area can terminate where the retail frontage begins. The transformer location also disrupts this street wall edge and should be reconsidered.

Standard (1) b. Mixed Uses – Not applicable

Standard (1) c. Building Entrances – Main building entrance faces and is directly accessible from Hanover Street. Multiple retail entrances are oriented to Lancaster Street, a pedestrian street/passage. The main residential entrance should be differentiated from the retail spaces and given more emphasis/prominence. In the current version, the type of fenestration, material palette, and canopy profile is the same throughout the building regardless of use or type of entrance.

Standard (1) d. Windows – Windows are provided along all street frontages as required – however, the amount of windows is limited along Hanover and Parris streets due to the structured parking use. VT of .7 or greater is required.

Standard (1) e. Façade Character – Building is oriented to Lancaster Street – the retail/active areas face the public sidewalk and turn the corner to also provide some transparency and activity on Parris and Hanover Streets. Unfortunately, these opportunities for the "active presence along the sidewalk" is compromised by the site design. As noted above, the extent and placement of landscape areas should be reconsidered. In several cases, the placement conflicts with the goals of the zone design standards for an active building edge. The landscape

area on Parris Street creates a barrier between the sidewalk and active retail frontage. Near the residential entrance, a landscape area and seating wall create a pinch point and does not allow for circulation from the Lancaster plaza to the sidewalk or residential entrance.

The landscape buffer, transformer location, screen around the transformers, and seat wall and landscape areas on Hanover Street all create visual and physical barriers between the sidewalk and active portions of the building. The design should be revised to take into consideration circulation patterns, accessibility, and sight lines from the public ways to the more active portions of the building. For example, hardscape between the Parris Street sidewalk and the storefront will invite pedestrians to treat it like an extended sidewalk where the natural tendency will be to follow the angle of the retail bay around the corner into the plaza space.

The majority of the facades on Parris and Hanover streets are occupied by structured parking which has limited interactive function. In this instance, the residential entrance and bike room have been oriented to Hanover Street to provide that activation. Staff have concerns that the seating wall and landscape areas create pinch points at the residential entrance and do not follow the desire lines from the sidewalk to the entrance or plaza compromising the active nature of both facades.

The remaining portions of the building use material changes, windows and doors, and planters to "provide visual interest along the street." However, landscape and plantings should not be relied upon to meet this standard to create "architectural and graphic amenity." More detail is needed to understand the façade treatments on these otherwise blank facades facing Parris and Hanover.

Standard (1) f. Building Design – Compatibility - See multi-family comments below.

Roof forms and rooftop appurtenances must be designed in a holistic way and not treated as an afterthought. Rooftop systems will be visible from long views given the location and slope of the site. More information is requested regarding these rooftop systems and how they are integrated into the overall form.

Standard (1) g. Building Materials – More information is needed to evaluate the project. The application indicates residential materials are being used. However, the specific materials and finishes are not indicated on the elevations, in renderings, or material cut sheets. The elevations imply the appearance of a natural wood finish for a majority of the building – this would not be considered to meet the standard for materials that are compatible with and relate to the residential and commercial neighbors which are predominantly brick and painted clapboard. Materials that give the appearance of unfinished or natural wood are not considered compatible with the traditional, urban context. Glass railings are also incongruous with the materiality of the neighborhood.

Standard (1) h. Building Scale – Not applicable

Standard (1) i. Landscaping and Buffers – Parking is structured and screened from neighboring properties. The transformers are enclosed with screening but placed in a prominent location next to the retail frontage – this location should be reconsidered. If the transformers must remain in this location, the screen wall as shown exacerbates the visual and physical barrier in a location that should be as penetrable and visible as possible.

(i) Two-Family, . . . Multiple-Family . . . :

Standard (1) . Exterior Design – Context currently includes few multi-family buildings of this scale (recent examples are 56 Parris Street and 178 Kennebec Street). One could argue this context is appropriate for more contemporary design and more flexibility of forms, scale, and patterns as a transitional site between small-scale, traditional vernacular residential buildings and larger, industrial buildings with flat roofs and expansive, blocked footprints. The project includes interesting forms and massing as well as articulation elements such as bays, massing variation, and material transitions to provide a visually interesting, contemporary design.

This design does not, however, refer to the existing residential patterns in form, scale, massing, material, or fenestration and façade composition. Staff observe that though building type, scale, and placement vary throughout the neighborhood, there is a consistent use of material, trim, roof overhangs, and other articulation elements to add texture, fine-grain scale, and visual interest to the buildings, even if in a vernacular way.

The Board provided feedback that this building cannot be expected to reference patterns found in smaller-scale residential architecture in the context. The applicant is then asked to comment on how this design will "complement and enhance the nearest residential neighborhood" as relates to:

- **Architectural style**
- **Façade materials**
- **Roof pitch**
- **Building form and height**
- **Window pattern and spacing**
- **Porches and entryways**
- **Cornerboard and trim details**
- **Façade variation in projecting or recessed building elements**

Standard (2). Relationship to Street – Existing neighborhood is a mix of small-scale residential and industrial building types. There are many undeveloped lots. There is not, therefore, a consistent street wall or building relationship to the street. That being said, the building placement of the proposal is consistent with the residential buildings adjacent – set at the property line with little to no yard/landscape. Building is oriented to the interior street with some active uses wrapping the corner to Parris/Hanover streets. These streets are treated as secondary and mostly inactive, however with structured parking at the pedestrian level.

Standard (3). Open Space – Open spaces provided through balconies, rooftop area. In addition, ground floor plaza/outdoor dining space at the retail level. Staff raised concerns about the amount of shadow in the open spaces – benches, amenities are best placed along those areas that will be most comfortable for use (i.e. not in shade or in constrained, high traffic areas).

Standard (4). Light and Air – All units provided with ample windows; storage space is not indicated on these plans.

Standard (5). Parking – Parking is structured; driveways are minimal; limited to no paved areas requiring screening.

Standard (6). Not applicable

ACORN ENGINEERING, INC.

Planning Division
City of Portland, Maine
389 Congress Street, 4th Floor
Portland, ME 04101

September 8, 2020

Subject: Level III Site Plan & Subdivision Application
Redevelopment of 52 Hanover Street

Dear Christine Grimando:

On behalf of Tom Watson & Co., LLC, we are pleased to submit the accompanying package of materials related to the redevelopment of 52 Hanover Street. The 1.37-acre parcel currently consists of a large garage formerly used for the storage and maintenance of Public Works vehicles. Since taking over ownership of the property, the Applicant has removed the fueling station including both 20,000-gallon underground storage tanks.

The original proposal for this property as part of the 2017 purchase and sale agreement included repurposing the existing building into "maker space" where artists and local crafters could utilize the garage bays to accommodate their spatial needs while having a place to showcase their work. While this option was studied and pursued, it is not currently feasible in today's market. In an effort to redevelop the property in the near term, the proposal now includes demolition of the existing structure and redevelopment of the site with a six-story building. 171 residential units, including 17 workforce housing units onsite, with various amenities are planned with two levels of structured parking. Additionally, four retail units with patio space are proposed on the ground level adjacent to the existing 82 Hanover patio and Lancaster Court pedestrian/bicycle easement. The change in development program has been presented to the City Council and subsequently approved.

We are excited to submit this application to the Planning Department as it falls directly in line with the comprehensive plan by providing additional housing, including construction of the 17 workforce units on site, and an active retail frontage along the reinvigorated and pedestrian-orientated Lancaster Court.

Sincerely,

William H. Savage, P.E.
Principal - Project Manager
Acorn Engineering, Inc.

The following documents and drawings will be uploaded onto the City's electronic submission site per the procedure outlined in the application:

Documents:

- Section A: Cover Letter
- Section B: Level III Final Site Plan Application & Checklist
- Section C: Right, Title, Interest
- Section D: Zoning Assessment
- Section E: Easements
- Section F: Waiver Table
- Section G: Financial Capacity
- Section H Technical Capacity
- Section I: Conformity with Land Use Ordinance
- Section J: Stormwater Management Report
- Section K: Erosion & Sedimentation Control Report
- Section L: Fire Department Letter
- Section M: Wastewater Capacity Letter
- Section N: Lighting
- Section O: Architectural Design Narrative
- Section P: Utility Cover
- Section Q: Construction Management Plan
- Section R: Solid Waste
- Section S: Parking Study
- Section T: Traffic Report
- Section U: Transportation Demand Management Report
- Section V: Traffic Movement Permit Application
- Section W: Stormwater Management Law Application

Drawings:

- Civil Site Plan Set, dated 9/25/20
- Architectural Plan Set, dated 9/16/20

ACORN ENGINEERING, INC.

52 Hanover Redevelopment
Neighborhood Meeting

Neighborhood Meeting Minutes
November 2, 2020 / 5:35 pm
Remote meeting via Zoom

Project Team Participants:

Tom Watson (TW): Developer/Presenter – (Tom Watson & Co., LLC)

Will Savage (WS): Civil Engineer/Presenter (Acorn Engineering)

Sam Lebel (SL): Civil Engineer/Note Taker (Acorn Engineering)

Nick Griffin (NG): Architect/Presenter (RSA)

Soren Deniord (SD): Landscape Architect

Meeting started at approximately 5:35 pm.

Presentation:

Tom Watson:

- Developer and Applicant
- Introduced the project
- Moved PPM to 82 Hanover from 104 Grant St
- Initial idea of maker space for 52 Hanover seemed to underutilize the site
- Goal is to promote a 24/7 sense of vibrancy and presence which lead to the development moving towards residential
- Now proposing 171 apartments and 6,000-8,000 sf of retail

Will Savage:

- Sign In sheet is available for everyone which will become public record along with the meeting minutes
- One workshop with the planning board last Tuesday, second workshop date TBD
- Introduction
    - Overview of neighborhood, abutting properties, and districts
    - Project height governed by Bayside Height Overlay
    - 1.37 acre subject site
- Overview of local roads and street parking
- Overview of grading/slopes in the vicinity
- 6 to 8 story residential building with 4 retail suites along Lancaster Court
- Project proposes 171 apartments
    - 17 workforce housing units
    - Increase the City housing stock
- Infill of street wall to create an active presence
- Increase of approximately 10 on street parking spaces by reducing curb cuts
- 4 retailers anticipated
    - Coffee shop, grocer, and two bars or restaurants expected
- Parking design based on grading of Parris and Hanover Streets
    - Accessways on both streets
    - 1st level of parking to be accessed off Hanover Street
    - 2nd level of parking to be accessed off Parris Street
- Total parking count of 194 to be provided for 52 and 82 Hanover with 24% being compact spaces
- Solid waste to be handled internally with private hauler
- Hanover street will feature large bicycle storage and repair along frontage
    - Bicycle storage will be provided publicly in addition to the interior storage
- Landscaping predominantly along Parris Street
    - Rebuilding sidewalks
    - 8 proposed streets trees
    - Proposed light fixtures matching Bayside Bowl fixtures
    - 18 public bike spaces
- Gravel parking area with old fuel station to be transformed into an outdoor area known as Lancaster Court
    - Will be turned into a dynamic space for project and nearby businesses
- Utilities to be underground
    - Includes separated stormwater
    - Proposing secondary surface transformer to be screened from public view

- Impervious area will be reduced and water quality improved
    - Land use to consist primarily of roof and a portion of greenspace
- Grades allow for efficient structure parking layout, minimize space for ramping and splits the flow of traffic
- 10% workforce units will be provided on site which results in a 25% density bonus
    - 171 units allowed with the bonus
- Pre-app meeting held with City in July
- One round of partial comments from the City has been responded to

Nick Griffin:

- Floor plan overview
    - Retail along courtyard frontage, residential units looking over courtyard
    - Prominent bike room "shop" on Hanover, active and engaging with residents
    - 3rd floor plan with double loaded corridor and amenities including outdoor area
    - 4th and 5th floor plans with C-shape looking out over the courtyard
    - 6th and 7th floors plans switched to an "L" shape
    - Top floor switched to a "line" or "bar" shape
- Tiering allows for outdoor space on lower roofs, private space for units on the upper levels
- Elevations overview with relation to floor plans
- Overview of 3d model
    - Started with massing C-shape which transfers to an L-shape with elevation
    - Focused on views looking out towards the bay
    - Angled bays, inset balconies, window patterns to break up massing
    - Texture designed to be at pedestrian scale
    - Overall design is meant to compliment the old and new architecture in the neighborhood
    - Courtyard rendering overview
        - Before and after rendering from 178 Kennebec Street
        - Before and after rendering from Port City Bike/82 Hanover on Parris Street
        - Before and after rendering from 82 Hanover/Bayside Bowl

<u>Comments, Questions & Answers:</u>

Please note that the following questions and answers were not recorded verbatim and aim to represent and summarize the actual questions, answers, and discussion that took place at the meeting.

Q: What are the plans for maintenance of existing trees? What's the plan for additional green space?

SD: We are proposing to flank the building columnar street trees to add scale to the building and break up the facade. The design along Parris is in progress, there is room to beautify the streetscape there. The Lancaster Court design will try to find balance between greenspace and usability.

WS: We are not aware of any existing trees that we would be removing.

Q: What is the timeline for the project?

WS: The exact timeline is in flux. Most likely we will be looking to start end of next summer with an approximately 15-18 month duration. The completion date would be in late 2022 or late 2023.

Q: Will there be security for garage entrances?

WS: This hasn't been nailed down yet, but there will likely be individual fob keys.

NG: There will likely be high speed garage doors with keypads.

Q: Will there be greenspace along the Parris Street setback? The neighborhood needs it and it also provides more buffer from the neighborhood homes. On the south side of the project will there be paving between 55 Portland and 52 Hanover?

WS: We will be looking to maintain the access to 55 Portland Street with an 18' driveway from Hanover and a new stairwell from Parris that provides vehicular and pedestrian access to the back of 55 Portland Street.

Q: Will the granite sloped area remain?

WS: The embankment would largely remain the same and is under site control of 55 Portland Street.

C: The bike shop is a step in the right direction along Hanover and could benefit from more retail to draw people down from Portland Street.

TW: I am interested to make it lively along Hanover with lights and material changes. I worry about commercial along Hanover Street, commercial tenants are more difficult in certain places and the grading/hill also makes it difficult. We are more confident in commercial in the courtyard.

Q; When looking up Hanover, the angled windows have an engaging look. Are they white or grey?

NG: Grey, but still nailing it down.

C: Looking at the building straight on it looks less cohesive than from the side, but I do like the angled bays. I like the wood look since it's contextual with the neighborhood.

Q: Is the plan to add brick sidewalks (similar to sidewalks outside of Bayside Bowl) around the structure? The brick sidewalks help make the area feel less industrial.

WS: The area is designated to have concrete sidewalks. The concrete is also safer in the winter. I'm unsure why Bayside Bowl has brick sidewalks.

Q: Will the green space on the upper levels be pet friendly? Will there be receptacles?

TW: I'm not a proponent of public receptacles since they will likely be abused. Would the City be open to it?

Q: What about green space or receptables on the upper levels?

NG: The upper levels won't necessarily be "green" space, so they likely won't have receptables within the common areas.

C: Comment about trash on sidewalks near project site.

TW: We can have that conversation with the City.

C: I liked the idea of maker space and I also like mixed-use. I think it's a good use of a former public building and will activate the frontage.

Q: How would you describe the neighborhood in terms of texture and how this design fits into it?

NG: You have a mix of single families, smaller multifamily, and large industrial like the post office. You also have old housing stock and newer buildings like Parris Terraces and 178 Kennebec, along with the changes in street grid. That's what we used as the starting point to cut down the massing along with the grading.

Q: How will the public and private space be differentiated?

NG: The main entry to the residential units should feel open and inviting, the development company will want that to feel as open as possible.

WS: Each tenant also helps make their own space with patio furniture.

TW: The tenants do want the general feel to be public so it's inviting. We'll work with Soren (Landscape Architect) on the fine details.

Q: Is the parking deck going to be available to the public?

WS: At this point it's for the users and residents of 52 Hanover and also some allocated to the businesses at 82 Hanover.

Q: If someone isn't a tenant or patron, could they use the garage?

WS: The management of the garage is being discussed.

Q: The courtyard is being used as parking, so where will that offset be?

TW: We have several leases and properties where some of the 82 Hanover parking is allocated. 52 Hanover will provide a substantial amount of parking for 82 Hanover.

WS: 82 Hanover also has a surface parking lot that could be opened to patrons.

Q: Bars and music at 82 Hanover have been beneficial, but there are noise complaints. The 52 building should help absorb this, but any thoughts on management/mitigation?

TW: I can connect you with the property manager to discuss further about this to understand the concerns.

WS: Any remaining questions or comments?

WS: The second workshop will likely be in December and then likely followed by a public hearing in the new year.

TW: Thank you for the dialogue. We are interested to keep discussing community concerns.

The section below consists of follow up questions and comments posted in the chat section of the video conferencing software. These conversations were taking place while the Q/A transpired.

18:01:50 From Heidi Souerwine : We can put questions here

18:03:13 From Hans Spencer : What is the timeline of the project?

18:04:47 From K. Scott Morrison : que for questions

18:05:24 From Sarah Michniewicz : Raising my hand after Scott

18:05:39 From Jason : Raising my hand

18:05:44 From Heidi Souerwine : Great, thanks!

18:06:50 From Hans Spencer : thx

18:08:55 From Jim Hall : 🤚

18:20:17 From Heidi Souerwine : The rest of the neighborhood is mostly brick sidewalks though...

18:23:16 From Sarah Michniewicz : The level of trash in this neighborhood is out of control.

Fewer receptacles has not resulted in people hanging on to their trash, they just toss it.

18:23:23 From K. Scott Morrison : We have brick sidewalk in front of our 9 Parris St. building. Whether it's rain, snow, sleet.... sidewalk is slippery and hazardous.

18:23:57 From Heidi Souerwine : Re: trash, a lot of it is from ppl visiting businesses, like Bayside Café, too, so maybe there's a way for the local commercial businesses to work on it together...

18:27:25 From Heidi Souerwine : I guess I would challenge, with that volume of ppl coming into a tiny neighborhood, there need to be bldg. solutions for that population's trash, at least.

18:35:37 From Jason : I have one more question

18:36:13 From Sarah Michniewicz : One more from me too

18:40:29 From Olivia Orr : Many, many people in my building have filed complaints about the noise

18:40:39 From Olivia Orr : I am used to running a fan on the weekends now

18:40:49 From Olivia Orr : But folks on the first floor really struggle with it

18:41:47 From Olivia Orr : my building = Parris Terraces

18:43:36 From Olivia Orr : I don't have a question - just adding to Sarah's comment

18:44:01 From K. Scott Morrison : Thank you for listening and being open to neighborhood input. Let me know if I can offer any support as you proceed.

18:44:30 From Sarah Michniewicz : Olivia email me at bnaportland@gmail.com and I'll let you know when we can meet with Amalia

18:46:06 From Sarah Michniewicz : Thank you Tom, Will, Nick, and everyone else! I look forward to hearing more about as the project progresses.

18:46:12 From Heidi Souerwine : And we are happy about all the people and dogs! We just also want our tiny areas of green to keep growing :)

18:46:20 From Heidi Souerwine : Thank you guys!!

Meeting concluded at approximately 6:45 pm.

The abovementioned material was as interpreted and recorded from handwritten notes. Please note and relay any discrepancies or disputed information in the recorded minutes to the below address so that they can be reviewed, revised, and resubmitted as necessary.

Recorded by,

Sam Lebel, E.I.
Project Engineer
Acorn Engineering, Inc.
slebel@acorn-engineering.com

CITY OF PORTLAND
Planning & Urban Development Department

LEVEL II and LEVEL III SITE PLAN
GENERAL DOCUMENT AND DRAWINGS CHECKLIST
Please submit each document as a separate PDF file
Please confirm by electronically checking the boxes to the left

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

GENERAL APPLICATION DOCUMENTS		
Yes	NA	**Project Description** • Cover Letter with detailed project description
Yes	NA	**Completed Checklist – Level I: Site Alteration** (this document)
Yes	NA	**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** • Table listing required and proposed uses and dimensional standards Zoning Assessment Table
Yes	NA	**Existing and/or Proposed Easements or Covenants, applicable.** • Evidence of existing easements and any proposed easements
Yes	NA	**Waiver Requests** • Written request for waiver describing request and reason Waiver Table
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

LEVEL II AND LEVEL III 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	**Transportation Analysis- Traffic Impact (14-526 (a) 1)** • Provisions for pedestrian, bicycle, vehicle, and loading circulation and incremental volume of traffic impacts • Traffic Impact Study (Technical Manual, Section 1) if applicable
Yes	NA	**Access and Circulation (14-526 (a) 2 a)** • Access and internal circulation, addressing ADA access • Access and egress impacts on traffic flows • Description and use of drive-up features, if applicable
Yes	NA	**Loading and Servicing (14-526 (a) 2 b)** • Loading and servicing needs, route and travel way geometrics for deliveries • Turning templates for delivery vehicles, if applicable
Yes	NA	**Sidewalks (14-526 (a) 2 c)** • Sidewalks and condition along street frontages and internal walkways • Engineered details for ADA ramps and public sidewalk details meeting sidewalk materials policy and ADA ramp construction details as applicable (Technical Manual, Section 1)
Yes	NA	**Public Transit (14-526 (a) 3), if applicable** • Existing available transit services • Proposed site plan design details, such as easement, pad base, and shelter
Yes	NA	**Off-Street Parking: Vehicle & Motorcycle/Scooter) (14-526 (a) 4 a and c)** • Expected parking demand, proposed parking supply, ADA parking, and applicable Zoning Requirements • Address Technical Manual standards (Section 1) for curb cut separation and parking lot layout and locate on site plan
Yes	NA	**Bicycle Parking (14-526 (a) 4 b)** • Address bicycle parking requirements and identify locations on-site • Construction details for bike racks (Technical Manual, Section 1)
Yes	NA	**Snow Storage (14-526 (a) 4 d)** • Management plan for snow removal and locate snow storage areas on plan
Yes	NA	**Traffic Demand Management (TDM) (14-526 (a) 5), if applicable** • Develop TDM with Trip Reduction Targets and Strategies

ENVIRONMENTAL AND LANDSCAPE FEATURES	
Yes ☐ NA ☑	**Preservation of Significant Natural Features (14-526 (b) 1), if applicable** • Trees, plants, habitats listed on State or Federal list of endangered or threatened • High and moderate value waterfowl and wading habitat • Aquifers on Casco Bay Islands • Waterbodies (including wetlands, watercourses, significant vernal pools and floodplains) • Proposed preservation areas and protection measures • Documentation from environmental consultants, determinations from applicable state agencies
Yes ☑ NA ☐	**Landscaping and Landscape Preservation (14-526 (b) 2 a)** • Preservation of trees and preservation within required zoning setbacks (Technical Manual, Section 4) • Protection measures of existing vegetation during construction • Protection measures within Shoreland Zone, if applicable
Yes ☑ NA ☐	**Site Landscaping (14-526 (b) 2 b)** • Screening and buffering of service areas and between non-residential and residential uses • Planting plans with plant schedule and sizes (Technical Manual, Section 4)
Yes ☐ NA ☑	**Parking Lot Landscaping (14-526 (b) 2 b ii), if applicable** • Landscaped islands within parking areas (Technical Manual, Section 4)
Yes ☑ NA ☐	**Street Trees (14-526 (b) 2 b iii)** • Existing Heritage or Feature Trees on site and measures to preserve • Identify street trees on the plan meeting the site plan and Technical Manual standards (Section 4) or identify alternative measures, if applicable
ENVIRONMENTAL AND STORMWATER	
Yes ☑ NA ☐	**Water Quality, Stormwater Management and Erosion Control (14-526 (b)3 a)** • Stormwater report in compliance with Section 5 of Technical Manual and DEP Chapter 500 stormwater for basic, general and flooding standards, as applicable • Erosion control plan and measures • Evidence of compliance with Urban Impaired Stream Standards pursuant to DEP Chapter 500 stormwater, as applicable • Subsurface sanitary sewage disposal and groundwater protection

PUBLIC INFRASTRUCTURE AND SAFETY	
Yes ☑ NA ☐	**Consistency with City Master Plans (14-526 (c) 1)** • Identify consistency with master plans • Proposed easements, rights and improvements to connect or continue off-premises public infrastructure, as applicable
Yes ☑ NA ☐	**Public Safety and Fire Prevention (14-526 (c))** • Address Crime Prevention through Environmental Design (CPTED) (Technical Manual, Section 3) • Emergency vehicle access • Address consistency with public safety standards (Technical Manual, Section 3) • Submit a code summary referring NFPA 1 and all Fire Department standards (Technical Manual, Section 3) – Fire Checklist
Yes ☑ NA ☐	**Availability and Adequacy of Public Utilities (14-526 (c) 3) (Technical Manual, Sections 2 & 9)** • Electrical services, including providing underground services • Identify existing and proposed connections for public utilities and required public utility upgrades • Sewer line connections are required, if there is a main within 200 feet • Proposed solid waste management facilities on-site and management for the site • Written evidence of the ability to serve from utility companies, as applicable
SITE DESIGN	
Yes ☑ NA ☐	**Massing, Ventilations and Wind Impact (14-526 (d) 1)** • Wind and ventilation impacts on adjoining structures and/or adjacent public spaces. Wind study, if applicable • Bulk, location or height impacts on adjoining structures • Identify and locate HVAC equipment and venting away from public spaces and residential properties • Identify screening and manufacturing specifications for noise, if applicable
Yes ☐ NA ☑	**Shadows (14-526 (d) 2), if applicable** • Shadow analysis of impacts on publicly accessible open space (Technical Manual, Section 11)
Yes ☑ NA ☐	**Snow and Ice Loading (14-526 (d) 3)** • Building design to prevent snow and ice from loading or falling onto adjacent properties or public ways
Yes ☑ NA ☐	**View Corridors (14-526 (d) 4), if applicable** • Protection of designated view corridors (Portland Design Manual, Appen. 1)

Yes	NA	
☐	☑	**Historic Resources (14-526 (d) 5), if applicable** • Identify developments within Historic Districts or affecting Designated Landmarks • Certificate of Appropriateness or other evidence • Identify Developments within 100 feet of Historic Districts or affecting Designated Landmarks. Advisory HP review may be required • Address preservation and documentation of Archaeological Resources
Yes	NA	
☑	☐	**Exterior Lighting (14-526 (d) 6)** • Cut sheets of on-site light fixtures and any architectural or specialty lights (Technical Manual, Section 12) • Engineered details for any lights proposed in street right-of-way (Technical Manual, Section 10)
Yes	NA	
☑	☐	**Noise and Vibration (14-526 (d) 7)** • Evidence of noise levels for equipment, such as equipment specifications, to demonstrate consistency with zoning requirements
Yes	NA	
☑	☐	**Signage and Wayfinding (14-526 (d) 8), if applicable** • Signage plan showing the location, dimensions, height and setback of all existing and proposed signs. Signs in Historic Districts are reviewed by Historic Preservation staff • Proposed commercial and directional signage on site
Yes	NA	
☑	☐	**Zone Related Design Standards (14-526 (d) 5)** • Address Historic Preservation Design Review, if applicable • Address any applicable design review standards by zone • Address submission requirements from Design Manual, page 1, addressing neighborhood context • Description of exterior materials, color, finish, and samples
Construction Management Plan		
Yes	NA	
☑	☐	**Construction Management Plan** • Construction Management Document and Plan

LEVEL II AND LEVEL III SITE PLAN
DRAWINGS CHECKLIST

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

RECENT BOUNDARY SURVEY (stamped by Maine Licensed Surveyor)

- [x] Must be in compliance with Technical Manual, Section 13

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

Existing Conditions

- [x] Approximate location of structures on abutting property
- [x] Topography
- [ ] Locate water courses
- [ ] Delineate wetlands
- [x] Zone lines

Proposed Site Plan

- [x] Ground floor area, and grade elevations for all buildings

Access, Circulation, and Parking

- [x] Streets and intersections adjacent to site, any proposed geometric modifications
- [x] Location, dimensions and materials of all existing and proposed driveways, vehicle, bicycle, & pedestrian access ways with corresponding curb lines
- [x] Engineered specifications/ cross-sections for proposed driveways, sidewalks & paved areas
- [x] Location and dimensions of proposed loading areas
- [x] Existing and proposed transit infrastructure with dimensions/ engineering specifications
- [x] Location of vehicle and bicycle parking with dimensions and engineering specifications

Site Considerations

- ☑ Identify snow storage areas
- ☑ Location of fire hydrants
- ☑ Location of solid waste management facilities

UTILITY PLAN including:

- ☑ Existing utilities on site and within public streets
- ☑ Location, sizing and directional flows of all existing and proposed utilities
- ☑ Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site
- ☑ Electric utility infrastructure

GRADING AND DRAINAGE PLAN including:

- ☑ Existing grades and drainage
- ☑ Proposed grades
- ☑ Proposed stormwater management meeting Technical Manual (Section 5), standards
- ☑ Location and proposed alteration of a water course
- ☑ Preservation or alteration of wetlands

EROSION CONTROL

- ☑ Must be in compliance with Technical Manual, Section 5

LANDSCAPE PLAN including:

- ☑ Existing vegetation to be preserved and preservation measures
- ☑ Proposed landscaping and buffers
- ☑ Planting schedule

RECORDING PLAT, if applicable
☑ If Subdivision, must be in compliance with requirements of Section 14-496 (b)
ARCHITECTURAL PLANS AND RENDERINGS including:
☑ Exterior building elevations, color renderings, illustrations of all sides ☑ Location and dimensions of all existing and proposed HVAC and mechanical equipment, all proposed screening ☑ Provide context drawings, if applicable (Design Manual, page 1) ☑ Floor plans

C. Right, Title, and Interest

Please refer to the attached deed and corresponding amendment demonstrating the Applicant's Right, Title, Interest. Reference the amendment for the affiliation between 52 Hanover LLC and Tom Watson and CO., LLC.

Also included with this section is a summary from the Applicant's attorney regarding the amended easements that will be required along the south side of the site. The existing access and utilities benefitting 55 Portland Street will be maintained as part of the amendments.

MAINE REAL ESTATE TAX PAID

QUITCLAIM DEED WITHOUT COVENANT

CITY OF PORTLAND, a body corporate and politic and Maine municipal corporation having a mailing address of 389 Congress Street, Portland, Maine 04101 ("Grantor"), FOR CONSIDERATION PAID, releases to **52 HANOVER, LLC**, a Maine limited liability company having a mailing address of 104 Grant Street, Portland, Maine 04101 ("Grantee"), certain real property, together with any improvements thereon, located on Hanover Street and Parris Street, in the City of Portland, County of Cumberland and State of Maine (the "Premises"), more particularly described on Exhibit A attached hereto and made part hereof.

Grantee covenants and agrees by acceptance of this Deed that the Premises herein conveyed is subject to the Declaration of Covenants set forth in Exhibit B attached hereto and hereby made a part hereof.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed on its behalf by Jon P. Jennings, its City Manager, duly authorized, on this 12 day of December, 2018.

WITNESS:

Sonia Bean

CITY OF PORTLAND

Jon P. Jennings
Its City Manager

STATE OF MAINE
COUNTY OF CUMBERLAND

December 12, 2018

Personally appeared the above-named Jon P. Jennings, City Manager of the City of Portland, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity, and the free act and deed of said City of Portland.

Before me,

Sonia T. Bean
~~Attorney-at-Law~~/Notary Public
Commission Expires:
Print Name:

SONIA T. BEAN
NOTARY PUBLIC
State of Maine
My Commission Expires
April 8, 2024

Exhibit A

Hanover Street and Parris Street

A certain lot or parcel of land together with the buildings thereon located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, identified as Parcel B and as depicted on a plan entitled "Plan of Subdivision Plat 52 Hanover Street Portland, Maine" dated November 29, 2017 by Titcomb Associates, revised through July 24, 2018, approved by the City of Portland Planning Board on March 22, 2018, and recorded in Cumberland County Registry of Deeds in Plan Book 218, Page 342 (the "Plan"), such lot or parcel of land being more particularly bounded and described as follows:

Beginning at an iron pin set (capped 5/8" iron) at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street, said point of beginning also being the southwesterly corner of land designated as "Parcel A" as delineated on the Plan. Thence:

1) N 72°42'45" E by said discontinued Lancaster Street and said Parcel A a distance of Two Hundred 72/100 (200.72) feet to an aluminum disk set on the southwesterly sideline of Hanover Street;

2) S 23°56'25" E by said Hanover Street a distance of Two Hundred Ninety-Seven and 02/100 (297.02) feet to an iron pin set (capped 5/8" iron) at the northerly corner of land designated as "Parcel C" as delineated on said Plan;

3) S 65°26'46" W by said Parcel C a distance of One Hundred Eighty-Six and 21/100 (186.21) feet to an aluminum disk set on the northeasterly side line of said Parris Street;

4) N 26°16'45" W by said Parris Street a distance of Three Hundred Twenty-Two and 54/100 (322.54) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.

The above described parcel contains 59,625 square feet.

This conveyance is subject to any and all easements or appurtenances of record, insofar as the same are in force and applicable to the Premises.

Reserving to the Grantor, its successors and assigns, for the benefit of the public, an approximately 5-foot-wide public pedestrian access easement (the "Public Pedestrian Easement") over a portion of a certain lot or parcel of land, located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a capped 5/8" iron pin set at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street, said point of beginning also being the southwesterly corner of land designated as "Parcel A" on the Plan. Thence:

1) N 72°42'45" E by said discontinued portion of Lancaster Street and said Parcel A a distance of Two Hundred and 72/100 (200.72) feet to an aluminum disk set on the southwesterly sideline of Hanover Street and the southeasterly corner of said Parcel A;

2) S 23°56'25" E by said Hanover Street a distance of Five and 03/100 (5.03) feet to a point;

3) S 72°42'45" W through land designated as "Parcel B" as delineated on said Plan a distance of Two Hundred and 51/100 (200.51) feet to a point on the northeasterly sideline of said Parris Street;

4) N 26°16'45" W by said Parris Street a distance of Five and 06/100 (5.06) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, West Zone, NAD83.

The above described parcel (the "Public Pedestrian Easement Area") contains 1,003 square feet lying over a portion of "Parcel B" as delineated on the Plan. By acceptance of this deed, Grantee acknowledges and agrees that the purpose of the Public Pedestrian Easement is to grant public pedestrian access on and over the Public Pedestrian Easement Area, which Grantee shall maintain as an ADA compliant area for pedestrian, bicycle, and similar non-motorized pedestrian uses. The Public Pedestrian Easement Area shall be subject to such rules or ordinances that the City of Portland may adopt from time to time in the interests of public safety, which are generally applicable to similar pedestrian easements, provided that Grantee does not waive any rights, and expressly reserves the right, to argue that any such future rules or ordinances do not apply to it on the basis that the existing conditions of the Public Pedestrian Easement Area are grandfathered and/or that such rules or ordinances cannot be retroactively applied. Notwithstanding the foregoing, wheelchair and emergency vehicles as well as snow removal equipment shall be permitted in accordance with applicable federal and/or state laws regulating accessibility for such devices, vehicles or equipment. Maintenance and repair responsibilities within the Public Pedestrian Easement Area shall belong solely to the Grantee, its successors and

assigns. Grantee shall be responsible for removal of snow and ice from the Public Pedestrian Easement Area and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice. Grantor shall have the right, but not the obligation, to repair or maintain the Public Pedestrian Easement Area, including, as reasonably necessary, any subsurface repairs or maintenance, or removal of snow or ice therefrom, when Grantor, in its sole discretion, deems such repairs, maintenance, or snow or ice removal necessary to ensure public safety and protect the public use and enjoyment of the Public Pedestrian Easement Area. No buildings or any kind of permanent structure will be erected in the Public Pedestrian Easement Area, and Grantee shall not use or authorize any use, condition or state of disrepair that would be contrary to or otherwise inhibit the public pedestrian uses of the Public Pedestrian Easement Area.

EXHIBIT B

Declaration of Covenants

1. Payment In Lieu Of Property Taxes. Grantee covenants and agrees that in the event that the Premises or any portion thereof shall become exempt from real or personal property taxes, by transfer, conversion, or otherwise, during the City's fiscal year that begins following the date of the deed to which this Declaration is attached, or in the fiscal years thereafter, then the then-owner of the exempt portion shall make annual payments to the City in lieu of taxes in the amount of the lesser of (a) the amount of property taxes that would have been assessed on the exempt portion of the real and personal property situated on the Premises had such property remained taxable, or (b) such other target percentage as may be approved as part of a City payment in lieu of taxes ("PILOT") policy that may be in effect at the time taxes are due on such property. Grantee shall possess and be vested with all rights and privileges as to abatement and appeal of valuations, rates, and the like as are accorded owners of real and personal property in Maine.

2. Environmental Indemnification. Grantee covenants and agrees to indemnify, defend, and hold the City harmless from and against any and all claims, damages, losses, liabilities, obligations, settlement payments, penalties, assessments, citations, directives, claims, litigation, demands, defenses, judgments, costs, or expenses of any kind, including, without limitation, reasonable attorneys', consultants', and experts' fees incurred in investigating, defending, settling, or prosecuting any claim, litigation or proceeding, that may at any time be imposed upon, incurred by or asserted or awarded against Grantee or Grantor and relating directly or indirectly to the violation of or compliance with any federal, state, or local environmental laws, rules, or regulations governing the release, handling or storage of hazardous wastes or hazardous materials and affecting all or any portion of the Premises, except to the extent that such a claim results directly from the Grantor's release, handling or storage of hazardous wastes or hazardous materials on the Premises.

3. The covenants and agreements set forth herein may be amended or modified in whole or in part only by written agreement of Grantee and Grantor.

4. The Covenants set forth herein are intended to be and shall be considered covenants that run with the Premises and shall bind all subsequent owners of the Premises.

5. Except as specifically set forth herein, the Covenants set forth herein shall survive a sale, transfer, foreclosure or transfer of title in lieu of foreclosure, or other disposition of the Premises.

6. The Covenants set forth herein are enforceable by Grantor as a contract and shall inure to the benefit of and be enforceable by Grantor, its successors, and assigns.

7. The validity of any clause, part or provision of the covenants, restrictions herein shall not affect the validity of the remaining portions of thereof.

Received
Recorded Register of Deeds
Dec 14,2018 01:14:27P
Cumberland County
Nancy A. Lane

Bernstein, Shur,
Sawyer & Nelson, P.A.
100 Middle Street
PO Box 9729
Portland, ME 04104-5029

T (207) 774 - 1200
F (207) 774 - 1127

Hawley Strait
Shareholder
207-228-7118 direct
hstrait@bernsteinshur.com

September 24, 2020

City of Portland, Maine
Department of Planning and Urban Development
Planning Division
389 Congress Street, 4th Floor
Portland, ME 04101

Re: 52 Hanover Street Easement Relocation

Dear Ladies and Gentlemen:

Our firm represents Tom Watson & Co., LLC and its affiliated entity 52 Hanover, LLC ("52 Hanover"), a Maine limited liability company and the owner of real property at 52 Hanover Street and a party to that certain Easement Deed from 52 Hanover, LLC to City of Portland and Agreement dated as of December 13, 2018 and recorded in the Cumberland County Registry of Deeds in Book 35353, Page 239 (the "Easement Deed"). The Easement Deed has since been assigned from the City of Portland to the current owner of the real property at 55 Portland Street, 55 Portland Preble Street, LLC ("Preble Street").

The Easement Deed provides for certain access and sewer and stormwater drainage easements (the "Easements") which burden 52 Hanover's property and benefit Preble Street's property and the current location of such Easements are described in detail in the Easement Deed. Based on the extensive language included in the Easement Deed, 52 Hanover has the right to relocate these Easements and under the terms of the Easement Deed, Preble Street cannot withhold its consent nor object to the relocation so long as it provides reasonably equivalent access to parking at the rear of Preble Street's property and certain other requirements are satisfied with the relocated easement plan.

52 Hanover has prepared a proposed relocation plan (the "Relocation Plan") for the Easements and this Relocation Plan has been presented to Preble Street for its review. The Relocation Plan relocates the Easements in order to allow 52 Hanover to re-develop its property as contemplated by the site plan application recently submitted to this Department by Tom Watson & Co., LLC and 52 Hanover. We believe that the Relocation Plan complies with the terms and conditions for relocation as provided in the Easement Deed and therefore Preble Street cannot unreasonably withhold, condition or delay its consent to this proposal. Pursuant to the Easement Deed, we will

prepare an amendment of the Easement Deed to memorialize the relocation of the Easements and we intend to work with Preble Street to finalize the terms of this amendment for execution by both 52 Hanover and Preble Street as soon as possible.

If you have any questions or need more information about the Easement Deed and the discussions with Preble Street regarding the relocation, please do not hesitate to contact me.

Sincerely,

Hawley R. Strait

NINTH AMENDMENT TO PURCHASE AND SALE AGREEMENT

THIS NINTH AMENDMENT TO PURCHASE AND SALE AGREEMENT (this "Ninth Amendment") is made and entered into as of August 12, 2020, by and between the CITY OF PORTLAND, a body politic and corporate located in Cumberland County, Maine ("Seller"), and 52 HANOVER, LLC, a Maine limited liability company ("Buyer").

WITNESSETH:

WHEREAS, reference is made to that certain Purchase and Sale Agreement dated May 14, 2018, as amended by that certain that certain First Amendment dated July 20, 2018, that certain Second Amendment also dated July 20, 2018, that certain Third Amendment dated August 20, 2018, that certain Fourth Amendment dated September 10, 2018, that certain Fifth Amendment dated October 3, 2018, that certain Sixth Amendment dated October 18, 2018, that certain Seventh Amendment dated November 2, 2018, and that certain Eighth Amendment dated November 15, 2018 (collectively, the "Agreement") by and between the CITY OF PORTLAND, as Seller, and TOM WATSON & CO., LLC, predecessor-in-interest to 52 HANOVER, LLC, as Buyer, for the purchase and sale of that certain lot or parcel of land, together with the buildings and improvements thereon, located at or near 44 Hanover Street a/k/a 52 Hanover Street in City of Portland, County of Cumberland, State of Maine and more particularly described in the Agreement (the "Premises"); and

WHEREAS, Seller transferred the Premises to Buyer by deed dated December 12, 2018 and recorded in the Cumberland County Registry of Deeds in Book 35353, Page 234;

WHEREAS, the Agreement contained certain post-closing obligations respecting Buyer's use and development of the Premises; and

WHEREAS, Buyer and Seller wish to modify and amend certain of such post-closing obligations, subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Buyer and Seller agree as follows:

AGREEMENT:

1. NINTH AMENDMENT. This Ninth Amendment is hereby incorporated into the Agreement by reference. In the event of a conflict between the terms and conditions of the Agreement and this Ninth Amendment, the terms and conditions of this Ninth Amendment shall control.

2. BUYER'S POST CLOSING OBLIGATIONS.

(a) Section 12 b. of the Agreement is hereby deleted in its entirety and the following substituted in place thereof:

On or before February 28, 2021, Buyer agrees to commence development of a project at the Premises consisting of a multipurpose building with commercial retail space and rental housing units in substantially the form described in the description of the proposed project at the Premises that is attached hereto as Exhibit B and incorporated herein by reference (the "Project"). Buyer's commencement of development of the Project shall be effected by Buyer or its successors, assigns, or transferees submitting a site plan review application

(an "Application") for the Project. The Project shall be deemed to be "in substantially the form described in Exhibit B" if it proposes to include (or is constructed to include): (i) multiple retail spaces; and (ii) an emphasis on rental housing. The Project may also be modified in a manner that is reasonably necessary for Buyer to obtain City Planning Board, City Council or any other municipal or other necessary approvals, which modifications may include, but not be limited to, reductions in the number of units for the Project or changes to the Project to account for setback requirements, height restrictions and/or agreements with any abutters, and the Project, if otherwise "in substantially the form shown in Exhibit B" shall, notwithstanding any such modifications, continue to be so considered. In addition, if Buyer determines that interest rates or community demand for the use of the Premises change or there are amendments to the Portland City Code such that Buyer wishes to make changes to the Project, or if Buyer wishes to make other changes to the Project, Buyer shall request the City's approval of such changes. Buyer further agrees that the Project shall include no less than the minimum number of workforce housing units required by Portland City Code Section 14-487 and that Buyer shall not elect to pay the fee in lieu of providing any of the workforce housing units set forth in Section 14-487(e)(4). Nothing in this Agreement shall or is intended to relieve the Buyer of any of its obligations under Section 14-487 or any other applicable provisions of the City Code or applicable laws, rules, or regulations.

(b) Sections 12(c), 12(d), and 12(e) of the Agreement are hereby deleted in their entirety. Buyer and Seller hereby agree and acknowledge that the terms and conditions of that certain escrow agreement by and between Buyer and Seller and dated December 13, 2018 (the "Escrow Agreement") shall replace and shall govern the Buyer and Seller's rights and obligations as previously described in said deleted Sections 12(c), (d) and (e).

3. USE AND DEVELOPMENT PLANS. Exhibit B to the Agreement is hereby deleted and, substituted for it for all purposes for which Exhibit B was used, referenced or included in the Agreement is the attached Substitute Exhibit B, which Substitute Exhibit B is hereby made a part of the Agreement.

4. MISCELLANEOUS. Buyer and Seller each reaffirm the Agreement as amended by this Ninth Amendment, and all terms and conditions of the Agreement, including all defined terms, except as specifically amended by this Ninth Amendment, shall have the same meaning and remain in full force and effect. This Ninth Amendment may be executed and delivered in any number of counterparts, whether delivered by electronic mail or portable document format (PDF), each of which so executed and delivered shall be deemed to be an original and all of which shall constitute one and the same instrument.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties have hereunto caused this instrument to be executed on their behalf by their duly authorized officers or representatives, as of the day and year first above written.

CITY OF PORTLAND:

By: _____
Jon P. Jennings
Its: City Manager
Dated: August 12, 2020

Approved as to form:

_____
Corporation Counsel's Office

52 HANOVER, LLC:

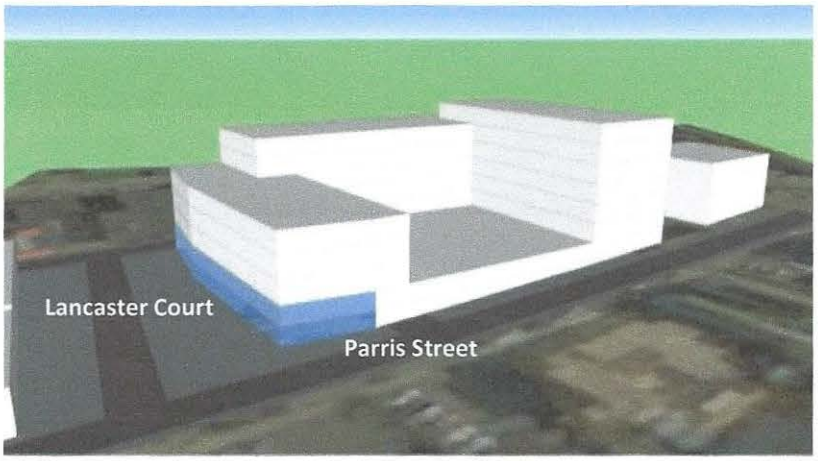
By: _____

Thomas E. Watson
Its: Manager
Dated: 8.7.20

Executive Summary

52 Hanover, LLC in partnership with Port Property Management and Tom Watson & Company (the "Sponsors"), propose to redevelop the property located at 52 Hanover Street, previously owned by the City of Portland. We are looking to create a new multipurpose building including four (4) 2,000 SF commercial retail spaces and one hundred and seventy-one (171) apartment units. Included in the 171 units would be seventeen (17) or 10% workforce rental units restricted at or below 100% of the Area Median Income (AMI) level and regulated under the City of Portland's Inclusionary Zoning. The remaining one hundred and fifty-four (154) or 90% will be traditional market rate rental units.

The Sponsors' goal for the project and new development is to create a truly unique mixed-use rental property in the City of Portland that provides a significant increase in the number of available rental units. In addition, this project continues the momentum and builds on the goals of redeveloping the Bayside neighborhood into an improved, vibrant environment for Portland citizens.



Financial Plan

The Sponsors will raise $10 million in private investment funds along with an additional $40 million in bank financing through the Department of Housing and Urban Development.

Public Benefits

Our mixed-use concept will provide a number of public benefits.

The Portland City Council cited housing as the #1 goal in their 2020 Goal Setting Summary.

> *"#1. Increase access to rental and home ownership that is safe, affordable, and accessible."*

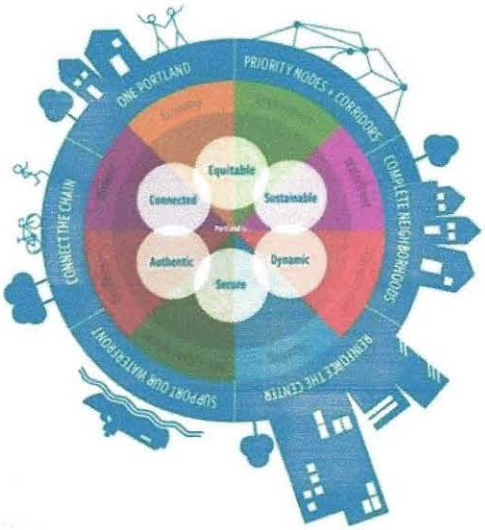
Public Benefits (con't)

Portland's Comprehensive Plan has many policy statements that support exactly this type of development. Specifically, the Plan calls for City action to produce housing and "Reinforce the Center".

Two specific goals apply:

"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 approximate to neighborhood centers, concentrations of services, and transit nodes and corridors as a means of supporting complete neighborhoods."



More specific to the Bayside neighborhood, the 2000 "New Vision for Bayside" called for additional density and housing in West Bayside:

> *"The Bayside Plan will fill in, extend and enhance the existing residential fabric with a substantial amount of new housing units."*

The following themes illustrate how this project is positioned to achieve community objectives and goals.

- ***First major residential housing project since 2017***

  The City has set a goal of constructing 256 new rental units per year. There are very few residential market rate and/or workforce apartment buildings being built in the City of Portland due to the high costs of construction. The last large apartment building project built in the City of Portland – the Hiawatha – was completed over three years ago. There are currently over 13,000 market rate rental apartments in the City of Portland, with a vacancy rate of an estimated 2%. In order to create market equilibrium, where tenants and landlords equally share in negotiating rates, the City of Portland would need its vacancy rate to reach 6% (per historic standard). To make that happen today, an additional 540 apartments would need to be built. This project is a huge step towards that equilibrium.

Public Benefits (con't)

- ***Wide-ranging mix of new apartments including 17 affordable units***

  The property will have broad appeal to tenants of various demographic and economic backgrounds. It will contain a diverse mix of apartment sizes and styles ranging from 400 square foot micro-units to 1,400 square foot townhouses. Thirty-seven (37) studios, ninety-seven (97) one-bedrooms and thirty-six (36) two-bedrooms are included in the plan. In addition to the rental units, we will be creating two (2) levels of parking with one hundred and sixty-six (166) parking spaces.

  The project will provide much-needed affordable housing in the City of Portland with its broad range of unit types and the corresponding variation in rental prices. Additionally, by adding 17 new workforce rental units this project adheres to the intent of the Inclusionary Zoning Ordinance– which was to add units, not fees in lieu. It will also be the single largest aggregation of workforce units within a market rate project in history of the City of Portland.

- ***Development of a residential presence in a commercial-heavy neighborhood***

  The Property currently sits as a large, vacant steel framed warehouse with significant updates needing to be made. The neighborhood consists of various small businesses and larger companies including Bayside Bowl and the United States Post Office.

  Housing creates a 24/7 presence in the neighborhood.

  The proposed new building will create a unique residential opportunity in this neighborhood, create a vibrant community in West Bayside, and serve as a catalyst for change in the neighborhood from primarily commercial tenants to residential living. Additionally, we anticipate a number of the 52 Hanover courtyard commercial tenants to be daytime venues (ex. Coffee shop, café, lunch spot).

- ***Development of a new "destination" in Portland with the creation of new courtyard***

  This project will create a welcoming and new courtyard space in the Bayside community between 82 Hanover and 52 Hanover. Currently 82 Hanover is 100% leased with 3 pub/eateries located on "Lancaster Court", each with substantial outdoor patio space abutting a 10' wide bike/ped running from Hanover to Parris Street. The shops at 52 Hanover will have similar sized patio spaces running from the building façade to the bike/ped path creating a vibrant walkable courtyard.

  The new commercial spaces, along with their outdoor patios, will create an inviting and exciting open community space which will spur an essential dynamic shift in the neighborhood.

Public Benefits (con't)

- ***Design for future density***

  This is a unique location in the City of Portland to develop density and increase housing. The site is 1.3 acres and is located within the Bayside Height Overlay District, allowing for increased density. In terms of accessibility, the property's location lends itself to reducing downtown traffic. Those living in this neighborhood can easily walk, bike and car share to downtown Portland for work or leisure. The property is also ideal given its proximity to 295 Northbound and Southbound.

- ***Road map of successful public/private partnership as a model for future housing development***

  This project has a strong history of partnership between the private Sponsors and the City of Portland.

  - The property was sold by the City of Portland in a public bidding process to the Sponsors for their winning bid
  - The City of Portland received over $1.2 million in market rate proceeds from the Sponsors.
  - The property was leased back to the City of Portland's DPW until its Canco Road facility was finished.
  - The Sponsors extended the lease for an additional two months at no cost to the City in order for the Portland Fire Department to host their new-recruit physical ability testing.
  - The Sponsors have devoted substantial financial resources towards the environmental clean-up of the contaminated site. Completed activities include the removal of underground gas tanks and above ground pump stations.

Next Steps

The 52 Hanover Street project represents an opportunity to take a creative and collaborative approach to a challenge we all acknowledge – housing availability.

This site is an ideal location to bring a large volume of apartments to the rental market in an expedited time frame. Excluding the renter household incomes of those in Portland already receiving housing assistance, the median renter household income is $57,022 to $61,000– often referred to as "the missing middle". The new units being proposed for 52 Hanover would serve this population. Increasing the volume of apartments in this segment of the market will have countless positive impacts including more choice for tenants and more incentives for landlords to improve the quality of their properties and services. We look forward to working with the City of Portland to continue our partnership and leverage this opportunity, and our experience, to create housing for Portland's renters.

APPENDIX A - 52 Hanover: Continuing the Evolution of West Bayside

Century Tire Plaza
Bayside Bowl
Kennebec Street
65 Hanover
Fork Food Lab
Schlotterbeck & Foss
55 Parris
195 Lancaster
82 Hanover
52 Hanover

In large part because of the City of Portland's efforts to capitalize on Bayside as an area of potential growth, including the sale of City-owned property, the Bayside neighborhood has seen significant improvements in many of its area buildings. For example:

- Schlotterbeck & Foss – This property was converted from a food production plant to 56 residential units.
- 195 Lancaster Street – A vacant, unused brick building will now be the home of Two Fat Cats bakery.
- Bayside Bowl – Previously a city works building has become a vibrant and busy bowling center and restaurant.
- Century Tire Plaza – A former auto repair show has now become home to several small business including Orange Theory and Chipotle.
- 82 Hanover – Another city works building that is fully leased to 12 commercial tenants including restaurants, breweries and office users.
- 55 Parris – A vacant parking lot is now 23 owner occupied condominiums.
- Kennebec Street – Another dirt parking lot currently being converted into 55+ housing.
- 65 Hanover – A public works building converted into shared office space and event space.
- Fork Food Labs – A vacant brick building that was made into a shared kitchen space.

APPENDIX B – Sponsor Information

Managers & Key Principals

Tom Watson is the Key Principal and Manager of 52 Hanover, LLC. and co-owner of Port Property Management.

Port Property Management

Port Property Management will manage the new development at 52 Hanover Street. Port Property is the market leader in multifamily property management. Founded in 1993, PPM is the largest market rate residential landlord in Portland and South Portland with over 1,450 apartments, 30 retail storefronts and two office buildings. For over two decades the PPM staff has engrossed itself in studying market opportunities and tenant benefits, understanding and defining unit features, finishes and building amenities that appeal to the Portland demographic.

Port Property has a long and successful history of redeveloping properties including two within Bayside, 82 Hanover Street (12 commercial/retail spaces) and 117 Preble Street (56 apartments). Its success is due to its horizontal structure. Since its founding, the company has woven together the acquisition and development team, the property management group and the construction group on every project. All have an active seat at the table during the feasibility stage, due diligence period, closing and program implementations phase. The distinct perspective and workload of each team is vital in each project.

Our Approach

Port Property Management has been part of the Portland community for over 26 years. Our goal is to purchase and develop properties in the city of Portland that are safe and well maintained, with a strong focus on quality units and exceptional management for the benefit of our tenants. Additionally, our goal is to manage and own properties for the long term. Many of the employees at Port Property Management live and work in Portland. The Port Property Management offices are located at 82 Hanover Street.

Portland, Maine — Yes. Life's good here.

Planning & Urban Development Department

ZONING ANALYSIS Relevant Zone(s) B-2b

All Projects:

	Required	Proposed
Lot Size	None	59,625 SF
Area Per Dwelling Unit	435 SF *	349 SF*
Minimum Street Frontage	20'	250'
Front Yard Minimum	None	0.25'
Front Yard Maximum	10'	5.3'
Rear Yard	10'	10.2'
Yard Right	None	24.8'
Yard Left	None	10.0'
Side Street Setback	None	N/A
Step Back	None	None
Maximum Lot Coverage	100%	95%
Minimum Lot Coverage	NA	NA
Maximum Height	85' **	85'
Open Space	0%	5%
Maximum Impervious Area	100%	95%
Pavement Setback	None	N/A
Floor Area Ratio	None	N/A
Off Street Parking Spaces	194***	194
Loading Bays	N/A	N/A
Other 1		
Other 2		
Other 3		

* See 14-488(g) and Affordable Housing Density Bonus Chart below

**See Bayside Height Overlay Map

***See Section S, Parking Study

Planned Residential Unit Developments (PRUD) Requirements

	Required	Proposed
Minimum Lot Size		
Minimum Lot Area per Dwelling		
Maximum # Units per Building		
Maximum Building Length		
Maximum Accessory Building Length		
Minimum Setbacks		
Minimum Building Separation		
Minimum Open Space		

Affordable Housing Density Bonuses (if applicable)

	Bonus Increase or Decrease	Maximum Allowable With Bonus	Proposed
Density	2.5 x base	171	171
Height			
Setback Reduction			
Recreation Space			
Maximum Accessory Building Length			
Minimum Setbacks			
Minimum Building Separation			
Minimum Open Space			
Explanatory Text 1 (optional):			
Explanatory Text 2 (optional):			
Explanatory Text 3 (optional):			

E. Summary of Written Easements

Existing easements on site as identified by Titcomb Associates include:

1. The former location of Lancaster Street is subject to a utility easement retained by the city as recorded in Cumberland County Registry of Deeds Book 35051, Page 132.
2. An approximately 5-foot wide pedestrian and bicycle easement retained by the City of Portland as recorded in Cumberland County Registry of Deeds Book 35051, Page 133.
3. Use restrictions as set forth in Cumberland County Registry of Deeds Book 16707, Page 206 and modified in Book 29610, Page 223.
4. Easement Deed from 52 Hanover, LLC to City of Portland and Agreement dated as of December 13, 2018 and recorded in the Cumberland County Registry of Deeds in Book 35353, page 239.

There are no proposed easements as part of the project.

Certificate of Discontinuance

I, Katherine L. Jones, being the Clerk of the City of Portland, Maine, hereby certify and attest that on July 16, 2018 the City Council of the City of Portland took final action approving an Order of Discontinuance of a Road/Public Easement. By finally approving the Order of Discontinuance (Council Order 13-18/19), the City has discontinued a public easement in a strip of land formerly comprising a portion of Lancaster Street. The public easement discontinued pursuant to the Order runs for a distance of approximately two hundred and one (201) feet beginning at the point of intersection of the centerline of a strip of land formerly comprising a portion of Lancaster Street with the westerly sideline of Hanover Street at a point on said westerly sideline of Hanover Street 461.67 feet northerly along said sideline from the northerly sideline of Portland Street; thence a distance of 201.30 feet to a point on the easterly sideline of Parris Street 458.81 feet northerly along said sideline from the northerly sideline of Portland Street; Said public easement being thirty (30) feet in width and lying fifteen (15) feet on either side of the above described centerline as shown more particularly on a plan titled "Lancaster Street Extension" on file at the City Engineer's Archives as Plan 182/8.

The Right to enter into this portion of Lancaster Street for the purposes of maintenance, repair or replacement of the existing sewer known as the North Side Interceptor Sewer was reserved unto the City of Portland until such time said sewer is abandoned or discontinued.

CITY OF PORTLAND

Date: 7-20-2018 Municipal Clerk Katherine L Jones

ACKNOWLEDGMENT

STATE OF MAINE
Cumberland, ss.

Date: July 20, 2018

Personally appeared the above-named Katherine L. Jones and acknowledged the above instrument to be her free act and deed.

Before me,
Carolyn M Dorr
Notary Public/Attorney
Carolyn M. Dorr
(Print Name)

CAROLYN M DORR
Notary Public
Maine
My Commission Expires 8/8/23

Received
Recorded Register of Deeds
Aug 07,2018 08:44:13A
Cumberland County
Nancy A. Lane

MAINE REAL ESTATE TAX PAID

QUITCLAIM DEED WITHOUT COVENANT

CITY OF PORTLAND, a body corporate and politic and Maine municipal corporation having a mailing address of 389 Congress Street, Portland, Maine 04101 ("Grantor"), FOR CONSIDERATION PAID, releases to **82 HANOVER, LLC**, a Maine limited liability company having a mailing address of 104 Grant Street, Portland, Maine 04101 ("Grantee"), certain real property, together with any improvements thereon, located on Hanover Street and Parris Street, in the City of Portland, County of Cumberland and State of Maine (the "Premises"), more particularly described on Exhibit A attached hereto and made part hereof.

Grantee covenants and agrees by acceptance of this Deed that the Premises herein conveyed is subject to the Declaration of Covenants set forth in Exhibit B attached hereto and hereby made a part hereof.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed on its behalf by Jon P. Jennings, its City Manager, duly authorized, on this 3rd day of August, 2018.

WITNESS:

CITY OF PORTLAND

Jon P. Jennings
Its City Manager

STATE OF MAINE
COUNTY OF CUMBERLAND

August 3, 2018

Personally appeared the above-named Jon P. Jennings, City Manager of the City of Portland, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity, and the free act and deed of said City of Portland.

SEAL

Before me,

~~Attorney at Law~~/Notary Public
Commission Expires:
Print Name:

NANCY L. ENGLISH
NOTARY PUBLIC
State of Maine
My Commission Expires
October 19, 2024

Exhibit A

A certain lot or parcel of land together with the buildings thereon located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, identified as Parcel A as depicted on a plan entitled "Subdivision Plat 52 Hanover Street Portland, Maine" dated November 29, 2017 by Titcomb Associates, revised through July 24, 2018, approved by the City of Portland Planning Board on March 22, 2018, and recorded in Cumberland County Registry of Deeds in Plan Book 218, Page 342 (the "Plan"), such lot or parcel of land being more particularly bounded and described as follows:

Beginning at a point at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street. Thence:

1) N 26°16'45" W by said Parris Street a distance of Two Hundred Seventy-Six and 69/100 (276.69) feet to a point at the proposed street right of way expansion of Kennebec Street;

2) N 11°03'49" E by said proposed street right of way expansion a distance of Seventeen and 37/100 (17.37) feet to a point;

3) N 74°18'07" E by said proposed street right of way expansion a distance of Twenty-Eight and 89/100 (28.89) feet to a point;

4) Easterly by said proposed street right of way expansion, following a non-tangent curve to the left having a radius of Two Thousand One Hundred Twenty-Five and 00/100 (2125.00) feet, an arc distance of One Hundred Thirty and 87/100 (130.87) feet to a point, said point being located N 77°04'59" E a distance of One Hundred Thirty and 85/100 (130.85) feet from the last described point;

5) N 75°34'14" E by said proposed street right of way expansion a distance of Twenty and 48/100 (20.48) feet to a point;

6) N 86°51'48" E by said proposed street right of way expansion a distance of Twelve and 47/100 (12.47) feet to a point;

7) S 58°35'15" E by said proposed street right of way expansion a distance of Nineteen and 89/100 (19.89) feet to a point on the southwesterly sideline of Hanover street;

8) S 23°56'25" E by said Hanover Street a distance of Two Hundred Thirty and 34/100 (230.34) feet to a point;

9) N 72°42'45" E by said Hanover Street a distance of Zero and 50/100 (0.50) feet to a point;

10) S 23°56'25" E by said Hanover Street a distance of Thirty and 20/100 (30.20) feet to a point on the southerly sideline of said discontinued Lancaster Street;

11) S 72°42'45" W by said discontinued Lancaster Street a distance of Two Hundred and 72/100 (200.72) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.

The above described parcel contains 57,956 square feet, more or less.

A portion of the above described parcel is subject to use restrictions as recorded in the Cumberland County Registry of Deeds in Book 23202, Page 38 as revised by releases recorded in said Registry of Deeds in Book 29610 Page 223 and Book 34671 Page 274.

This conveyance is subject to any and all easements or appurtenances of record, insofar as the same are in force and applicable to the Premises, including, without limitation a certain utility easement in the former location of Lancaster Street retained by the City of Portland as set forth in a Certificate of Discontinuance dated July 20, 2018, recorded in the Cumberland County Registry of Deeds, Book 35051, Page 132.

Reserving to the Grantor, its successors and assigns, for the benefit of the public, an approximately 5-foot-wide public pedestrian access easement (the "Public Pedestrian Easement") over a portion of the Premises located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a capped 5/8" iron pin set at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street, said point of beginning also being the northwesterly corner of land designated as "Parcel B" as delineated on the Plan. Thence:

1) N 26°16'45" W by said Parris Street a distance of Five and 06/100 (5.06) feet to a point;

2) N 72°42'45" E through land designated as "Parcel A" as delineated on said Plan a distance of Two Hundred and 92/100 (200.92) feet to a point on the southwesterly sideline of Hanover Street;

3) S 23°56'25" E by said Hanover Street a distance of Five and 03/100 (5.03) feet to an aluminum disk set on the southerly sideline of said discontinued portion of Lancaster Street and the northeasterly corner of said Parcel B;

4) S 72°42'45" W by said Parcel B and said discontinued portion of Lancaster Street a distance of Two Hundred and 72/100 (200.72) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, West Zone, NAD83.

The above described parcel (the "Public Pedestrian Easement Area") contains 1,004 square feet lying over a portion of "Parcel A" as delineated on the Plan. By acceptance of this deed, Grantee acknowledges and agrees that the purpose of the Public Pedestrian Easement is to grant public pedestrian access on and over the Public Pedestrian Easement Area, which Grantee shall maintain as an ADA compliant area for pedestrian, bicycle, and similar non-motorized pedestrian uses. The Public Pedestrian Easement Area shall be subject to such rules or ordinances that the City of Portland may adopt from time to time in the interests of public safety, which are generally applicable to similar pedestrian easements, provided that Grantee does not waive any rights, and expressly reserves the right, to argue that any such future rules or ordinances do not apply to it on the basis that the existing conditions of the Public Pedestrian Easement Area are grandfathered and/or that such rules or ordinances cannot be retroactively applied. Notwithstanding the foregoing, wheelchair and emergency vehicles as well as snow removal equipment shall be permitted in accordance with applicable federal and/or state laws regulating accessibility for such devices, vehicles or equipment. Maintenance and repair responsibilities within the Public Pedestrian Easement Area shall belong solely to the Grantee, its successors and assigns. Grantee shall be responsible for removal of snow and ice from the Public Pedestrian Easement Area and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice. Grantor shall have the right, but not the obligation, to repair or maintain the Public Pedestrian Easement Area, including, as reasonably necessary, any subsurface repairs or maintenance, or removal of snow or ice therefrom, when Grantor, in its sole discretion, deems such repairs, maintenance, or snow or ice removal necessary to ensure public safety and protect the public use and enjoyment of the Public Pedestrian Easement Area. No buildings or any kind of permanent structure will be erected in the Public Pedestrian Easement Area, and Buyer shall not use or authorize any use, condition or state of disrepair that would be contrary to or otherwise inhibit the public pedestrian uses of the Public Pedestrian Easement Area.

The easement rights, obligations and restrictions created in this deed shall be rights, obligations and restrictions running with the land and shall be binding upon and inure to the benefit of the parties hereto and their respective successors, assigns, and any other transferees.

EXHIBIT B

Declaration of Covenants, Conditions, and Restrictions

1. Payment In Lieu Of Property Taxes. Grantee covenants and agrees that in the event that the Premises or any portion thereof shall become exempt from real or personal property taxes, by transfer, conversion, or otherwise, during the City's fiscal year that begins following the date of the deed to which this Declaration is attached, or in the fiscal years thereafter, then the then-owner of the exempt portion shall make annual payments to the City in lieu of taxes in the amount of the lesser of (a) the amount of property taxes that would have been assessed on the exempt portion of the real and personal property situated on the Premises had such property remained taxable, or (b) such other target percentage as may be approved as part of a City payment in lieu of taxes ("PILOT") policy that may be in effect at the time taxes are due on such property. Grantee shall possess and be vested with all rights and privileges as to abatement and appeal of valuations, rates, and the like as are accorded owners of real and personal property in Maine.

2. Environmental Indemnification. Grantee covenants and agrees to indemnify, defend, and hold the City harmless from and against any and all claims, damages, losses, liabilities, obligations, settlement payments, penalties, assessments, citations, directives, claims, litigation, demands, defenses, judgments, costs, or expenses of any kind, including, without limitation, reasonable attorneys', consultants', and experts' fees incurred in investigating, defending, settling, or prosecuting any claim, litigation or proceeding, that may at any time be imposed upon, incurred by or asserted or awarded against Grantee or Grantor and relating directly or indirectly to the violation of or compliance with any federal, state, or local environmental laws, rules, or regulations governing the release, handling or storage of hazardous wastes or hazardous materials and affecting all or any portion of the Premises, except to the extent that such a claim results directly from the Grantor's release, handling or storage of hazardous wastes or hazardous materials on the Premises.

3. Parking Restriction in Former Location of Lancaster Street. Grantee covenants and agrees that the area depicted on the Plan as the Former Location of Lancaster Street, which area extends from Parris Street to Hanover Street (the "Restricted Parking Area") shall be subject to the use restrictions set forth in this paragraph. Use of the Restricted Parking Area shall be open space, free from permanent structures, sheds, dumpsters, and the like, and shall be for the commercial use of Grantee, its tenants, and their business invitees and customers, subject to commercially reasonable rules and regulations imposed by Grantee. Grantee, its successors and assigns shall prohibit short or long-term parking in the Restricted Parking Area at all times, provided, however, that Grantee may allow brief stopping and standing in the Restricted Parking Area for vehicles loading or unloading people or goods for commercial purposes at the Premises.

4. The covenants and agreements set forth herein may be amended or modified in whole or in part only by written agreement of Grantee and Grantor.

5. The Covenants set forth herein are intended to be and shall be considered covenants that run with the Premises and shall bind all subsequent owners of the Premises.

6. Except as specifically set forth herein, the Covenants set forth herein shall survive a sale, transfer, foreclosure or transfer of title in lieu of foreclosure, or other disposition of the Premises.

7. The Covenants set forth herein are enforceable by Grantor as a contract and shall inure to the benefit of and be enforceable by Grantor, its successors, and assigns.

8. The validity of any clause, part or provision of the covenants and restrictions herein shall not affect the validity of the remaining portions of thereof.

Received
Recorded Register of Deeds
Aug 07,2018 08:48:50A
Cumberland County
Nancy A. Lane

RELEASE DEED

PORTLAND TERMINAL COMPANY, a corporation duly organized and existing under the laws of the State of Maine, with offices at Iron Horse Park, North Billerica, Middlesex County, Massachusetts (the "PTC"), for one dollar ($1.00) and other consideration paid to it by the **STATE OF MAINE**, acting by and through its Department of Transportation, whose mailing address is State House Station #16, Augusta, Maine 04333 (the "State"), hereby grants to the State, without any warranties or covenants of title whatsoever, those certain parcels of land and interests therein, including all franchises, riparian rights, rights of entry and rights of reversion appurtenant thereto, if any, together with all buildings, bridges, bridge abutments, structures, walls, culverts, crossings thereon, if any, situated in the City of Portland, in the State of Maine (collectively, the "Premises") described as follows:

SEE "**EXHIBIT A**" AND "**EXHIBIT B**" ATTACHED HERETO
AND MADE A PART HEREOF BY REFERENCE

ALSO CONVEYING TO THE STATE OF MAINE, its successors and assigns, a permanent easement over and across the remaining land of PTC sufficient to effectuate rail ingress to and rail egress from the Premises described in said **Exhibit A** and shown on **Exhibit B** from and to the PTC's Main Line (Union Station to Portland-Falmouth Line) at a point between the northerly side of Congress Street at approximate Engineering Centerline Station 4+93.2 and a point approximately 570 feet northerly thereof at approximate Engineering Centerline Station 10+00.0. It is the intention of the parties hereto that this permanent easement is given for the purpose of providing an unhampered rail connection necessary for the sole purpose of operating trains of the National Railroad Passenger Corporation and its successors or operating passenger trains (only) of any entity other than the National Railroad Passenger Corporation and its successors between the Premises and the aforementioned Main Line owned and operated by PTC, its successors and assigns.

Together with the right to enter upon remaining land of PTC, subject to reasonable and customary terms and conditions established by PTC, its successors and assigns, for the purpose of construction, installation, repair and maintenance of trackage, track appurtenances, switches and bridge abutments to carry out the purposes of this Easement; provided, however, that with respect to the Main Line any construction, installation, repair and maintenance necessary to carry out the purposes of this Easement will be performed by PTC at the expense of the State. Said Easement shall be appurtenant to the above-conveyed premises as described on the attached **Exhibit A** and shown on **Exhibit B**.

THIS CONVEYANCE IS SUBJECT to the following reservations, conditions, covenants and agreements:

1. In addition to any conditions that may be imposed on the use of the Premises by the Maine Department of Environmental Protection, the State shall restrict the use of the Premises, or any portion thereof, to the following: commercial business uses, rail/industrial uses and/or passive recreational uses. Such uses shall not require the withdrawal of groundwater for drinking water or other uses. By this restriction the State covenants and agrees for itself, its successors and assigns, not to allow the Premises, or any portion thereof, to be used for any residential or active recreational use with the exception of paved recreational trails. Residential use includes, but is not limited to, single family dwellings, apartment houses, condominiums, hotels, motels, inns, boarding houses, multifamily dwellings and/or any use that involves a structure to be used primarily for human habitation for any extended period of time. Active Recreational use includes, but is not limited to, athletic fields, sports facilities, parks and/or any use which subjects the Premises to use by the general public for active recreational activities, except as provided herein. In addition, by this restriction the State covenants and agrees for itself, its successors and assigns, not to allow the Premises or any portion thereof to be used as a site for a hospital, nursing home, rehabilitation facility, daycare facility for persons of any age or educational facility (private or public).

In the event of any violation of the above restrictions, PTC, its successors and assigns, shall have the right to enforce the same and shall have available all remedies at law and in equity.

The provisions of this paragraph 1 are a covenant running with the land and shall be expressly included in any deed, lease or other instrument conveying or creating any interest in all or part of the Premises and shall be binding upon the State's successors and assigns therein. Notwithstanding the foregoing, the provisions of this paragraph may be extinguished by the express written consent of PTC which consent shall not be unreasonably withheld.

2. Except as otherwise provided in this Deed, and in the Terms and Conditions between the National Railroad Passenger Corporation ("Amtrak") and PTC (and PTC's affiliates) generally regarding passenger operations between Boston, Massachusetts, and Portland, Maine, this conveyance is made without granting any right of way or other rights, either by necessity or otherwise, over any remaining land or location of the PTC.

3. To the best knowledge of PTC, **Exhibit C** attached hereto and made a part hereof by reference is a complete list of all existing agreements between PTC and third parties regarding the construction, installation, operation, maintenance, modification, repair, replacement, relocation or removal of any telecommunications system related to the Premises. "Knowledge" as used in this Deed shall mean the knowledge of PTC's Vice President of Real Estate and each officer or employee who is principally responsible for property matters, after reasonable investigation. If at any time after the conveyance under this Deed, PTC discovers any other such communication agreements, PTC shall

promptly and at its own cost and expense, without any further consideration on the part of State, convey its rights and obligations under such agreements to State.

4. The PTC hereby reserves a permanent, non-exclusive easement in, over, under and through the Premises from the beginning of the "Union Branch" line at Survey Station 4+00.0 at the intersection of the southerly side of Park Avenue and the westerly side of Saint John Street, northerly to the southerly side of Forest Avenue, ten feet wide (the "Telecommunications Easement Property"), as identified in the agreements listed on the attached **Exhibit C** (the "Telecommunications Agreements"), only for the purpose of accessing, operating, maintaining, repairing, replacing and removing the fiber optics communications system described in the "Telecommunications Agreements," including existing poles, pipes, wires, fibers, fiber-optic cables, repeater stations, attachments, appurtenances, structures or other equipment and property of any description currently used to meet PTC's obligations under the Telecommunications Agreements (the "Telecommunications Easement"). The Telecommunications Easement Property boundary shall be 5 feet on both sides of the centerline of the existing fiber facilities, as shown on the as-built drawings attached hereto **Exhibit D.** PTC does further reserve a permanent limited right-of-way and right of access to the Telecommunications Easement Property over and across the Premises for the purposes of the use, enjoyment, maintenance, operation of the Telecommunications Easement to the extent necessary to comply with the Telecommunications Agreements.

The Telecommunications Easement is subject to the following additional terms and conditions:

(a) The PTC shall have no right to construct, install, modify (except to the extent required pursuant to the Telecommunications Agreements) or relocate any fiber optics communications system (including existing poles, pipes, wires, fibers, fiber-optic cables, repeater stations, attachments, appurtenances, structures or other equipment and property of any description) within the Premises.

(b) The PTC shall have no right to lease, license, mortgage, assign, pledge or otherwise alienate the Telecommunications Easement. Provided, however, that PTC shall have the right to renew the Telecommunications Agreements on substantially the same terms at the appropriate times, and shall also have the right to assign any or all of its rights to its parents, affiliates, subsidiaries and successors.

(c) The PTC shall obtain all required governmental approvals, if any, to exploit the rights reserved in the Telecommunications Easement. Prior to exercising any rights reserved pursuant to this Telecommunications Easement, PTC shall obtain at its sole expense, or cause its contractors to obtain, as applicable: (i) a policy or policies of worker's compensation insurance covering all persons exercising any rights reserved pursuant to this Telecommunications Easement, and (ii) general liability insurance naming the State as an additional insured with respect to the

exercise of such rights, and upon such terms and in such amounts as are reasonable and customary. Notwithstanding the foregoing, the PTC or its contractor shall have the right to fulfill these obligations by means of self-insurance; provided that, in the case of PTC, such self-insurance shall be the same as is applicable to all of PTC's operations.

(d) The PTC, at its sole cost and expense, shall operate, maintain, repair, replace, relocate and remove any structures, facilities and improvements hereunder so as not to injure or damage the State's transportation facilities and/or the property of the State or of any operator thereon, and so as not to interfere with any transportation operations thereon.

(e) The replacement or relocation of all structures, facilities and improvements shall be subject to the approval of the State, which approval shall not be withheld or delayed if (i) the request is in compliance with the terms and conditions of this Telecommunications Easement; and (ii) the methods and materials to be used by the PTC are in accordance with those generally accepted in the railroad industry. The State shall issue any determination pursuant to this Section within 20 days of receipt of any request for approval. In the event of a relocation of any structures, the State and PTC shall realign the easement and refile this Release Deed, at PTC's expense.

(f) The exercise of this Telecommunications Easement shall be at the sole risk of the PTC. The PTC hereby releases the State from any and all liability for costs, losses, damages, and/or harm to persons and/or to the property of the PTC arising out of or relating to the exercise of this Telecommunications Easement and PTC shall indemnify and hold the State harmless against any and all costs, losses, damages, and/or harm to any party arising out of or relating to the design, location, relocation, repair, maintenance, use, removal, or replacement of any structures, facilities, or improvements, including without limitation to the foregoing: (i) any attorney's fees incurred' (ii) any and all claims for damages, losses, or injuries resulting to the State's property, the property of PTC, or the property of others; and (iii) any and all claims for injuries or death to persons. This indemnification shall include, but shall not be limited to, any and all liability arising out of or relating to an agreement between the PTC and AT&T dated July 29, 1986 and any other fiber optics communications agreements, whether or not listed on **Exhibit C**. This indemnification shall apply without regard to whether the cost, loss, damage, harm, or other claim is incurred directly or indirectly by the State, by PTC or by third parties. This indemnification shall not apply to costs, losses, damages and/or harm that are caused solely by the negligent or intentional infliction of harm by the State, including its employees, contractors or agents. This indemnification shall exclude those ordinary and usual day-to-day administrative costs incurred by the State in reviewing requests for the approval of the location, repair and replacement of structures, facilities, or improvements pursuant to this Telecommunications Easement.

(g) The PTC at its sole cost and expense shall repair and restore the Premises subject to the Telecommunications Easement to at least the same condition as they were in prior to any work or disturbance in connection with the exercise of the rights reserved under this Telecommunications Easement.

(h) The PTC shall give the State twenty (20) days written notice before the commencement of any work on the Premises.

(i) The reservation of this Telecommunications Easement shall not affect the right of the State to use the Premises for transportation purposes, or to grant the use of the Premises to others for any purposes, including (without limitation) the transmission of telecommunications or intelligence, so long as such use(s) do not interfere with the exercise by the PTC of its rights under this Telecommunications Easement.

(j) The PTC shall be liable for the payment of any tax, assessment, or other government charge arising out of or relating to the existence or use of this Telecommunications Easement, including without limitation the existence or use of any equipment or appurtenances on the Premises. The PTC shall keep the Premises free of any mechanic's and materialmen's liens arising from the exercise of its rights under the Telecommunications Easement. The State hereby covenants with the PTC to recognize the Telecommunications Easement and, without the payment of any further consideration, to execute, acknowledge and deliver such instruments suitable for recording with the Registry of Deeds as the PTC may reasonably require to acknowledge title to the Telecommunications Easement in the PTC.

5. The several exceptions, reservations, conditions, covenants and agreements contained in this Deed shall be deemed to run with the land and be binding upon the PTC and the State forever. In addition to the acceptance and recording of this Deed, the State hereby signifies assent to the said several exceptions, reservations, conditions, covenants and agreements, by joining in its execution.

6. Except where otherwise specifically provided in this Deed, whenever used in this Deed or in any easement or right reserved under this Deed, the term "PTC" shall not only refer to the PORTLAND TERMINAL COMPANY, but also to its operating companies (including but not limited to the SPRINGFIELD TERMINAL RAILWAY COMPANY), successors, assigns and grantees; and the term "State" shall not only refer to the STATE OF MAINE acting by and through its Department of Transportation, but also to the State's successors, assigns and grantees.

TO HAVE AND TO HOLD the foregoing Premises, with all the privileges and appurtenances thereunto belonging, unto the State of Maine, its successors and assigns, forever.

IN WITNESS WHEREOF, the said Portland Terminal Company has caused this Deed to be executed in its name and its corporate seal to be hereto affixed by David A. Fink, its Chief Executive Officer, thereunto duly authorized this 4th day of September, 2001.

PORTLAND TERMINAL COMPANY

Witness

By David A. Fink
Its Chief Executive Officer

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF MIDDLESEX
September 4, 2001

Personally appeared he above-named David A. Fink, Chief Executive Officer of the Portland Terminal Company and acknowledged the execution of the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of the Portland Terminal Company.

Before me,

Notary Public
Print Name: JAMES J. STEINKRAUSS
My Commission Expires: Oct. 6, 2006
Seal:

IN WITNESS WHEREOF, the said State of Maine, acting by and through its Department of Transportation, has caused this instrument to be executed by John G. Melrose, its Commissioner, thereunto duly authorized, this 4th day of September, 2001.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Joni K Kennedy
Witness

By John G. Melrose
Its Commissioner

STATE OF MAINE
COUNTY OF KENNEBEC
September 4, 2001

Personally appeared before me the above-named John G. Melrose, Commissioner, State of Maine, Department of Transportation, and acknowledged the execution of the foregoing instrument to be his fee act and deed in his said capacity and the free act and deed of the State of Maine.

Before me,
Jean A Stewart
Notary Public
Print Name: Jean A. Stewart
My Commission Expires: August 15, 2006
Seal:

EXHIBIT "A"
Plan/description of premises

A certain strip or parcel of land ("Railroad Right-of-Way") of varying widths, with the improvements thereon, situated in the City of Portland, County of Cumberland and State of Maine and being the railroad line sometimes referred to as the "Union Branch", more particularly bounded and described as follows:

Beginning at approximate Engineering Centerline Station 4+00.0, which is at or near the southerly end of the trestle over the intersection of the southerly side of Park Avenue and the westerly side of St. John Street in said Portland, as shown on plan entitled "Right-of-Way and Track Map, Portland Terminal, Operated by Portland Terminal Company, Survey Station 0+00.0 to Station 52+80.0," Valuation Plan V1C, Sheet 1 thereof, thence continuing in a generally easterly and northerly direction to Engineering Centerline Station 134+80.9 as shown on plan entitled "Right-of-Way and Track Map, Portland Terminal, Operated by Portland Terminal Company, Station 105+60.0 to Station 134+80.9," Valuation Plan V1C, Sheet 3 thereof.

The following parcels comprising the "Union Branch" conveyed above are depicted on said Right-of-Way and Track Maps, Valuation Plan V1C, Sheets 1 through 3, copies of which are attached hereto as "Exhibit B" and made a part hereof. Said Right-of-Way and Track Maps are also on file at the Maine Department of Transportation, Child Street, Augusta, ME 04333:

Grantor: George P. Wescott
Grantee: Portland and Rochester Railroad
Instrument: Deed dated January 4,1881 Recorded: Book 481, Page 386
Map and parcel reference: Map VIC 1 Parcel 34

Grantor: William H. Conant
Grantee: Portland and Rochester Railroad
Instrument: Deed dated July 27,1881 Recorded: Book 481, Page 3I9
Map and parcel reference: Map VIC 1 Parcel 39

Grantor: William H. Conant
Grantee: Portland and Rochester Railroad
Instrument: Deed dated August 10, 1881 Recorded: Book 481, Page 382
Map and parcel reference: Map VIC I Parcel 36

Grantor: Joseph H. Ricker
Grantee: Portland and Rochester Railroad
Instrument: Deed dated August 15, 1881 Recorded: Book 489, Page 27
Map and parcel reference: Map VIC I Parcel 35

Grantor: George P. Wescott
Grantee: Portland and Rochester Railroad
Instrument: Deed dated October 31, 1881 Recorded: Book 481, Page 320
Map and parcel reference: Map VIC 1·Parcels 21 and 26

Grantor: George P. Wescott
Grantee: Portland and Rochester Railroad
Instrument: Deed dated January 10, 1882 Recorded: Book 485, Page 189
Map and parcel reference: Map VIC I Parcel 27

Grantor: George P. Wescott
Grantee: Portland and Rochester Railroad
Instrument: Deed dated January 10,1882 Recorded: Book 481, Page 321
Map and parcel reference: Map VIC I Parcels 22 and 33

Grantor: James D. Fessenden et al.
Grantee: Portland and Rochester Railroad
Instrument: Deed dated January 28, 1882 Recorded: Book 483, Page 475
Map and parcel reference: Map VIC I Parcels 18 and 33

Grantor: Edward E. Proctor
Grantee: Portland and Rochester Railroad
Instrument: Deed dated October 7, 1886 Recorded: Book 544, Page 335
Map and parcel reference: Map VIC I Parcel 1

Grantor: The Rochester Savings Bank
Grantee: Portland and Rochester Railroad
Instrument: Deed dated October 7, 1886 Recorded: Book 542, Page 280
Map and parcel reference: Map VIC 1 Parcel 11

Grantor: Edward E. Proctor
Grantee: Portland and Rochester Railroad
Instrument: Deed dated December 8, 1886 Recorded: Book 542, Page 281
Map and parcel reference: Map VIC I Parcel I

Grantor: Henry Deering, et al.
Grantee: Portland and Rochester Railroad
Instrument: Deed dated October 22, 1891 Recorded: Book 588, Page 56
Map and parcel reference: Map VIC I Parcel 23

Grantor: William H. Fessenden
Grantee: Portland and Rochester Railroad
Instrument: Deed dated February 11, 1892 Recorded: Book 588, Page 75
Map and parcel reference: Map VIC 1 Parcels 33 and 18

Grantor: City of Portland
Grantee: Portland and Rochester Railroad
Instrument: Deed dated February 8, 1893 Recorded: Book 600, Page 79
Map and parcel reference: Map VIC 1 Parcel 7

Grantor: City of Portland
Grantee: Portland and Rochester Railroad
Instrument: Deed dated January 5, 1894 Recorded: Book 609, Page 207
Map and parcel reference: Map VIC I Parcel 19

Grantor: Edward Moore
Grantee: Portland and Rochester Railroad
Instrument: Deed dated February 22, 1898 Recorded: Book 662, Page 79
Map and parcel reference: Map VIC 1 Parcel 6

Grantor: Franklin R. Redlon
Grantee: Portland Terminal Company
Instrument: Deed dated March 7, 1930 Recorded: Book 1340, Page 145
Map and parcel reference: Map VIC I Parcel 53

Grantor: City of Portland
Grantee: Portland Terminal Company
Instrument: Deed dated July 7, 1970 Recorded: Book 3134, Page 776
Map and parcel reference: Map VIC I Parcel 62

Grantor: City of Portland
Grantee: Portland Terminal Company
Instrument: Deed dated April 22, 1971 Recorded: Book 3167, Page 79
Map and parcel reference: Map VIC 1 Parcel 66

Grantor: Nathan L. Woodbury, Trustee
Grantee: Portland and Rochester Railroad Company
Instrument: Release dated June 20, 1870 Recorded: Book 378, Page 192

Grantor: Moses Gould, Paul Prince, et al.
Grantee: Portland and Rochester Railroad Company
Instrument: Award dated June 1877
County Commissioners Records, Vol. 14, Page 342, item no. 6
Map and parcel reference: Map VIC 2 Parcels 25, 26, 28, 29, 30 and 31

Grantor: George P. Wescott
Grantee: Portland and Rochester Railroad
Instrument: Deed dated January 10, 1882 Recorded: Book 481, Page 321
Map and parcel reference: Map VIC 2 Parcel 9

Grantor: James D. Fessenden et al.
Grantee: Portland and Rochester Railroad
Instrument: Deed dated January 28, 1882 Recorded: Book 483, Page 475
Map and parcel reference: Map VIC 2 Parcel 9

Grantor: William H. Fessenden
Grantee: Portland and Rochester Railroad
Instrument: Deed dated February 11, 1892 Recorded: Book 588, Page 75
Map and parcel reference: Map VIC 2 Parcel 9

Grantor: Portland and Rochester Railroad Company
Grantee: Portland and Rochester Railroad
Instrument: Deed dated March 30, 1882 Recorded: Book 486, Page 194
All property of Portland and Rochester Railroad Company

Grantor: Julia E. D. Carroll, et al.
Grantee: Portland and Rochester Railroad
Instrument: Deed dated May 10, 1883 Recorded: Book 498, Page 69
Map and parcel reference: Map VIC 2 Parcel 12

Grantor: George P. Wescott
Grantee: Portland and Rochester Railroad
Instrument: Deed dated July 16, 1887 Recorded: Book 537, Page 143
Map and parcel reference: Map VIC 2 Parcel 42

Grantor: William H. Conant
Grantee: Portland and Rochester Railroad
Instrument: Deed dated May 29, 1891 Recorded: Book 580, Page 355
Map and parcel reference: Map VIC 2 Parcel 23

Grantor: William H. Conant
Grantee: Portland and Rochester Railroad
Instrument: Deed dated June 17, 1891 Recorded: Book 580, Page 449
Map and parcel reference: Map VIC 2 Parcel 23

Grantor: George P. Wescott
Grantee: Portland and Rochester Railroad
Instrument: Deed dated June 1, 1891 Recorded: Book 580, Page 374
Map and parcel reference: Map VIC 2 Parcel 44

Grantor: John C. Schwartz et al.
Grantee: Portland and Rochester Railroad
Instrument: Deed dated November 13, 1891 Recorded: Book 587, Page 198
Map and parcel reference: Map VIC 2 Parcel 32

Grantor: Henry Deering, et al.
Grantee: Portland and Rochester Railroad
Instrument: Deed dated December 22, 1891 Recorded: Book 588, Page 57
Map and parcel reference: Map VIC 2 Parcel 40

Grantor: Lorenzo Taylor
Grantee: Portland and Rochester Railroad
Instrument: Deed dated December 30, 1899 Recorded: Book 683, Page 496
Map and parcel reference: Map VIC 2 Parcel 33

Grantor: Portland and Rochester Railroad
Grantee: Boston & Maine Railroad
Instrument: Indenture dated January 10, 1900 Recorded: Book 684, Page 285
All property of the Portland and Rochester Railroad

Grantor: Boston & Maine Railroad
Grantee: Portland Terminal Company
Instrument: Deed dated July 1,1911 Recorded: Book 881, Page 299
Includes all property of the Boston & Maine Railroad in City of Portland

Grantor: Estate of Charles H. Boyd
Grantee: Portland Terminal Company
Instrument: Deed dated December 30, 1920 Recorded: Book 1067, Page 267
Map and parcel reference: Map VIC 2 Parcel 63

Grantor: Estate of Sophia A. Gould
Grantee: Portland Terminal Company
Instrument: Deed dated January 3, 1921 Recorded: Book 1067, Page 266
Map and parcel reference: Map VIC 2 Parcel 63

Grantor: Estate of Sophia A. Gould
Grantee: Portland Terminal Company
Instrument: Deed dated June 14, 1922 Recorded: Book 1 106, Page 166
Map and parcel reference: Map VIC 2 Parcels 65 and 66

Grantor: Industries, Inc.
Grantee: Portland Terminal Company
Instrument: Deed dated December 4, 1945 Recorded: Book 1802, Page 432
Map and parcel reference: Map VIC 2 Parcel 90

Grantor: D. & E. Realty Co., Inc.
Grantee: Portland Terminal Company
Instrument: Deed dated November 26, 1945 Recorded: Book 1802, Page 47
Map and parcel reference: Map VIC 2 Parcel 88

Grantor: City of Portland
Grantee: Portland Terminal Company
Instrument: Deed dated July 19, 1972 Recorded: Book 3270, Page 323
Map and parcel reference: Map VIC 2 Parcel 116

Grantor: Wallace G. Soule et al.
Grantee: Portland Terminal Company
Instrument: Deed dated June 10, 1980 Recorded: Book 4617, Page 213
Map and parcel reference: Map VIC 2 Parcel 121

Grantor: Industries, Inc.
Grantee: Portland Terminal Company
Instrument: Deed dated December 4,1945 Recorded: Book 1802, Page 432
Map and parcel reference: Map VIC 3 Parcel 45

Easements and Street Crossing Interests:

Grantor: N. L. Woodbury
Grantee: Portland and Rochester Railroad Company
Instrument: Easement dated February 19, 1872 Recorded: Book 392, Page 253
Map and parcel reference: Map VIC 1 Parcel 38 and Map VIC 2 Parcel 1

Grantor: City of Portland
Grantee: Portland and Rochester Railroad
Instrument: Order dated July 8, 1890
Map and parcel reference: Map VIC 2 Parcel 124

Grantor: City of Portland
Grantee: Portland and Rochester Railroad
Instrument: Grant dated January 6, 1896
Map and parcel reference: Map VIC I Parcels 24 and 29

Grantor: Public Utilities Commission
Grantee: Portland Terminal Company
Instrument: Decree dated May 9, 1929
Map and parcel reference: Map VIC I Parcel 49

Grantor: Railroad Commissioners
Grantee: Boston & Maine Railroad
Instrument: Decree dated November 13, 1906
Railroad Commissioners Records docket no. 511
Map and parcel reference: Map VIC 2 Parcels 73, 74, 75 and 76

Grantor: City of Portland
Grantee: Portland Terminal Company
Instrument: Ordinance dated August 8, 1917
Map and parcel reference: Map VIC 2 Parcel 58

Grantor: State of Maine
Grantee: Portland Terminal Company
Instrument: Approval dated September 14, 1917
Map and parcel reference: Map VIC 2 Parcel 58

Grantor: City of Portland
Grantee: Portland Terminal Company
Instrument: Permit dated August 8, 1917
Map and parcel reference: Map VIC 2 Parcel 62

Grantor: City of Portland
Grantee: Portland Terminal Company
Instrument: Order dated November 19, 1945
Map and parcel reference: Map VIC 2 Parcels 91, 92, 93 and 94

Grantor: City of Portland
Grantee: Portland Terminal Company
Instrument: Order dated January 4, 1965
Map and parcel reference: Map VIC 2 Parcels 106 and 107

Grantor: Public Utilities Commission of Maine
Grantee: Portland Terminal Company
Instrument: Decree dated July 8, 1969
Public Utilities Commission of Maine records RR 3905
Map and parcel reference: Map VIC 2 Parcel 111

Grantor: Public Utilities Commission of Maine
Grantee: Portland Terminal Company
Instrument: Decree dated October 24, 1969
Public Utilities Commission of Maine records RR 3920
Map and parcel reference: Map VIC 2 Parcel 110

Grantor: Lucile Johnston
Grantee: Portland Terminal Company
Instrument: Easement with reversion rights dated February 6, 1970
Recorded: Book 3117, Page 780
Map and parcel reference: Map VIC 2 Parcel 109

Grantor: Fred L. Johnston, Inc.
Grantee: Portland Terminal Company
Instrument: Easement with reversion rights dated February 6, 1970
Recorded: Book 3117, Page 783
Map and parcel reference: Map VIC 2 Parcel 108

Grantor: H. Walker Noyes
Grantee: Portland Terminal Company
Instrument: Easement dated May 19, 1972 Recorded: Book 3270, Page 325
Map and parcel reference: Map VIC 2 Parcel 117

Grantor: State of Maine
Grantee: Portland Terminal Company
Instrument: Decree dated December 15, 1981
Map and parcel reference: Map VIC 2 Parcel 128

Rights reserved by Portland Terminal Company to construct railroad tracks and other structures over sewer pipes as set forth in an easement deed to the City of Portland dated October 16, 1964 and recorded in Cumberland County Registry of Deeds in Book 2864, Page 293.

Rights reserved by Portland Terminal Company in a deed to Wallace G. Soule, et al. dated June 06, 1980 and recorded in the Cumberland County Registry of Deeds in Book 4617, Page 210 for the perpetual right to maintain existing railroad tracks together with the right to relocate the existing railroad tracks as necessary.

Excepting and reserving from the foregoing parcels the land and interests in land more particularly described in the following instruments:

Grantor: Portland and Rochester Railroad
Grantee: Joseph W. Peters
Instrument: Deed dated December 19, 1895 Recorded: Book 632, Page 197
Map and parcel reference: Map VIC I Parcel 2

Grantor: Portland and Rochester Railroad
Grantee: City of Portland
Instrument: Award dated June 26, 1896
Map and parcel reference: Map VIC 1 Parcel 42

Grantor: Portland and Rochester Railroad
Grantee: Elbridge M. Stiles
Instrument: Deed dated August 4, 1897 Recorded: Book 873, Page 54
Map and parcel reference: Map VIC 1 Parcel 41

Grantor: Portland and Rochester Railroad
Grantee: Edward Moore
Instrument: Deed dated February 22, 1898 Recorded: Book 662, Page 82
Map and parcel reference: Map VIC 1 Parcel 4

Grantor: Boston and Maine Railroad
Grantee: City of Portland
Instrument: Deed dated January 4, 1904 Recorded: Book 747, Page 38
Map and parcel reference: Map VIC I Parcel 5

Grantor: Portland Terminal Company
Grantee: C. E. Walton & Company, Incorporated
Instrument: Deed dated June 30, 1927 Recorded: Book 1278, Page 59
Map and parcel reference: Map VIC I Parcel 50

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Deed dated May 22, 1928 Recorded: Book 1291, Page 307
Map and parcel reference: Map VIC I Parcel 48

Grantor: Portland Terminal Company
Grantee: Warren Realty Company
Instrument: Deed dated August 20, 1928 Recorded: Book 1299, Page 479
Map and parcel reference: Map VIC I Parcel 47.

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Deed dated July 1, 1929 Recorded: Book 1316, Page 336
Map and parcel reference: Map VIC I Parcel 51

Grantor: Portland Terminal Company
Grantee: Franklin R. Redlon
Instrument: Deed dated March 7, 1930 Recorded: Book 1340, Page 137
Map and parcel reference: Map VIC I Parcel 52

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Deed dated April 8, 1930 Recorded: Book 1340, Page 175
Map and parcel reference: Map VIC I Parcel 54

Grantor: Portland Terminal Company
Grantee: Royal Realty Co
Instrument: Deed dated July 19, 1933 Recorded: Book 1427, Page 152
Map and parcel reference: Map VIC 1 Parcel 56

Grantor: Portland Terminal Company
Grantee: Community Oil Company, Inc.
Instrument: Deed dated May 23, 1944 Recorded: Book 1756, Page 36
Map and parcel reference: Map VIC I Parcel 57

Grantor: Portland Terminal Company
Grantee: Deering Village Corporation
Instrument: Deed dated May 23, 1944 Recorded: Book 1763, Page 297
Map and parcel reference: Map VIC I Parcel 58

Grantor: Portland Terminal Company
Grantee: Cumberland & York Distributors
Instrument: Deed dated April 4, 1955 Recorded: Book 2224, Page 20
Map and parcel reference: Map VIC I Parcel 61

Grantor: Portland Terminal Company
Grantee: State of Maine
Instrument: Taking dated April 14, 1971 Recorded: Book 3167, Page 67
Map and parcel reference: Map VIC I Parcel 64

Grantor: Portland Terminal Company
Grantee: State of Maine
Instrument: Deed dated April 22, 1971 Recorded: Book 3167, Page 75
Map and parcel reference: Map VIC 1 Parcel 64

Grantor: Portland Terminal Company
Grantee: State of Maine
Instrument: Deed dated April 22, 1971 Recorded: Book 3167, Page 83
Map and parcel reference: Map VIC 1 Parcel 65

Grantor: Portland Terminal Company
Grantee: State of Maine
Instrument:: Deed dated August 11, 1971 Recorded: Book 3187, Page 717
Map and parcel reference: Map VIC 1 Parcel 67

Grantor: Portland Terminal Company
Grantee: Philip E. Abbott
Instrument: Deed dated July 27, 1928 Recorded: Book 1299, Page 335
Map and parcel reference: Map VIC 2 Parcel 70

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Deed dated April 8, 1930 Recorded: Book 1340, Page 175
Map and parcel reference: Map VIC 2 Parcel 71

Grantor: Portland Terminal Company
Grantee: Margaret W. Soule
Instrument: Deed dated January 15, 1937 Recorded: Book 1518, Page 58
Map and parcel reference: Map VIC 2 Parcel 72

Grantor: Portland Terminal Company
Grantee: Unity Co.
Instrument: Deed dated May 26, 1938 Recorded: Book 1549, Page 481
Map and parcel reference: Map VIC 2 Parcel 77

Grantor: Portland Terminal Company
Grantee: Unity Co.
Instrument: Deed dated March 14, 1941 Recorded: Book 1634, Page 358
Map and parcel reference: Map VIC 2 Parcels 78 and 79

Grantor: Portland Terminal Company
Grantee: H. Finkelman Inc.
Instrument: Deed dated March 21, 1941 Recorded: Book 1637, Page 413
Map and parcel reference: Map VIC 2 Parcel 81

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Deed dated December 12, 1941 Recorded: Book 1663, Page 34
Map and parcel reference: Map VIC 2 Parcel 82

Grantor: Portland Terminal Company
Grantee: Camillo Profenno Co.
Instrument: Deed dated December 11, 1941 Recorded: Book 1953, Page 46
Map and parcel reference: Map VIC 2 Parcel 80

Grantor: Portland Terminal Company
Grantee: Eastern Oil & Equipment Co.
Instrument: Deed dated April 29, 1942 Recorded: Book 1672, Page 463
Map and parcel reference: Map VIC 2 Parcel 83

Grantor: Portland Terminal Company
Grantee: Unity Co.
Instrument: Deed dated August 11, 1944 Recorded: Book 1750, Page 335
Map and parcel reference: Map VIC 2 Parcel 87

Grantor: Portland Terminal Company
Grantee: Unity Co.
Instrument: Deed dated June 5, 1944 Recorded: Book 1756, Page 158
Map and parcel reference: Map VIC 2 Parcel 86

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Deed dated November 8, 1945 Recorded: Book 1797, Page 446
Map and parcel reference: Map VIC 2 Parcel 95

Grantor: Portland Terminal Company
Grantee: Spero T. Dyer
Instrument: Deed dated March 5, 1947 Recorded: Book 1852, Page 352
Map and parcel reference: Map VIC 2 Parcel 85

Grantor: Portland Terminal Company
Grantee: Camillo Profenno Company
Instrument: Deed dated March 5, 1947 Recorded: Book 1887, Page 49
Map and parcel reference: Map VIC 2 Parcel 96

Grantor: Portland Terminal Company
Grantee: Wallace G. Soule et al.
Instrument: Deed dated February 17, 1948 Recorded: Book 1910, Page 26
Map and parcel reference: Map VIC 2 Parcel 97

Grantor: Portland Terminal Company
Grantee: Camillo Profenno Company
Instrument: Deed dated November 25, 1949 Recorded: Book 1986, Page 34
Map and parcel reference: Map VIC 2 Parcel 98

Grantor: Portland Terminal Company
Grantee: The Goodman Co.
Instrument: Deed dated October 14, 1952 Recorded: Book 2111, Page 250
Map and parcel reference: Map VIC 2 Parcel 99

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Decree dated April 17, 1957
Map and parcel reference: Map VIC 2 Parcels 100 and 101

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Decree dated November 5, 1959
Map and parcel reference: Map VIC 2 Parcel 102

Grantor: Portland Terminal Company
Grantee: Hannaford Bros. Co.
Instrument: Deed dated May 17, 1960 Recorded: Book 2540, Page 274

Map and parcel reference: Map VIC 2 Parcel 103
Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Decree dated April 30, 1962 Recorded: Book 2661, Page 207
Map and parcel reference: Map VIC 2 Parcel 104

Grantor: Portland Terminal Company
Grantee: The Goodman Co.
Instrument: Deed and Release of Option dated July 8, 1971
Recorded: Book 3179, Page 886
Map and parcel reference: Map VIC 2 Parcel 112

Grantor: Portland Terminal Company
Grantee: City of Portland
Instrument: Deed dated July 12, 1972 Recorded: Book 3270, Page 335
Map and parcel reference: Map VIC 2 Parcel 115

Grantor: Portland Terminal Company
Grantee: Berk Real Estate Inc.
Instrument: Deed dated December 18, 1972 Recorded: Book 3497, Page 176
Map and parcel reference: Map VIC 2 Parcel 114

Grantor: Portland Terminal Company
Grantee: State of Maine
Instrument: Notice of Layout and Taking dated August 8, 1979
Recorded: Book 4540, Page 291
Map and parcel reference: Map VIC 2 Parcel 119 (3 parcels)

Grantor: Portland Terminal Company
Grantee: Wallace G. Soule et al.
Instrument: Deed dated June 6, 1980 Recorded: Book 4617, Page 210
Map and parcel reference: Map VI C 2 Parcel 120

Grantor: Portland Terminal Company
Grantee: Douglas T. Cardente
Instrument: Deed dated June 5, 1984 Recorded: Book 6482, Page 56
Map and parcel reference: Map VIC 2 Parcel 127

Grantor: Portland Terminal Company
Grantee: Ross Y. Furman
Instrument: Deed dated July 28, 1994 Recorded: Book 11555, Page 314
Map and parcel reference: Map VIC 2 Parcel 129

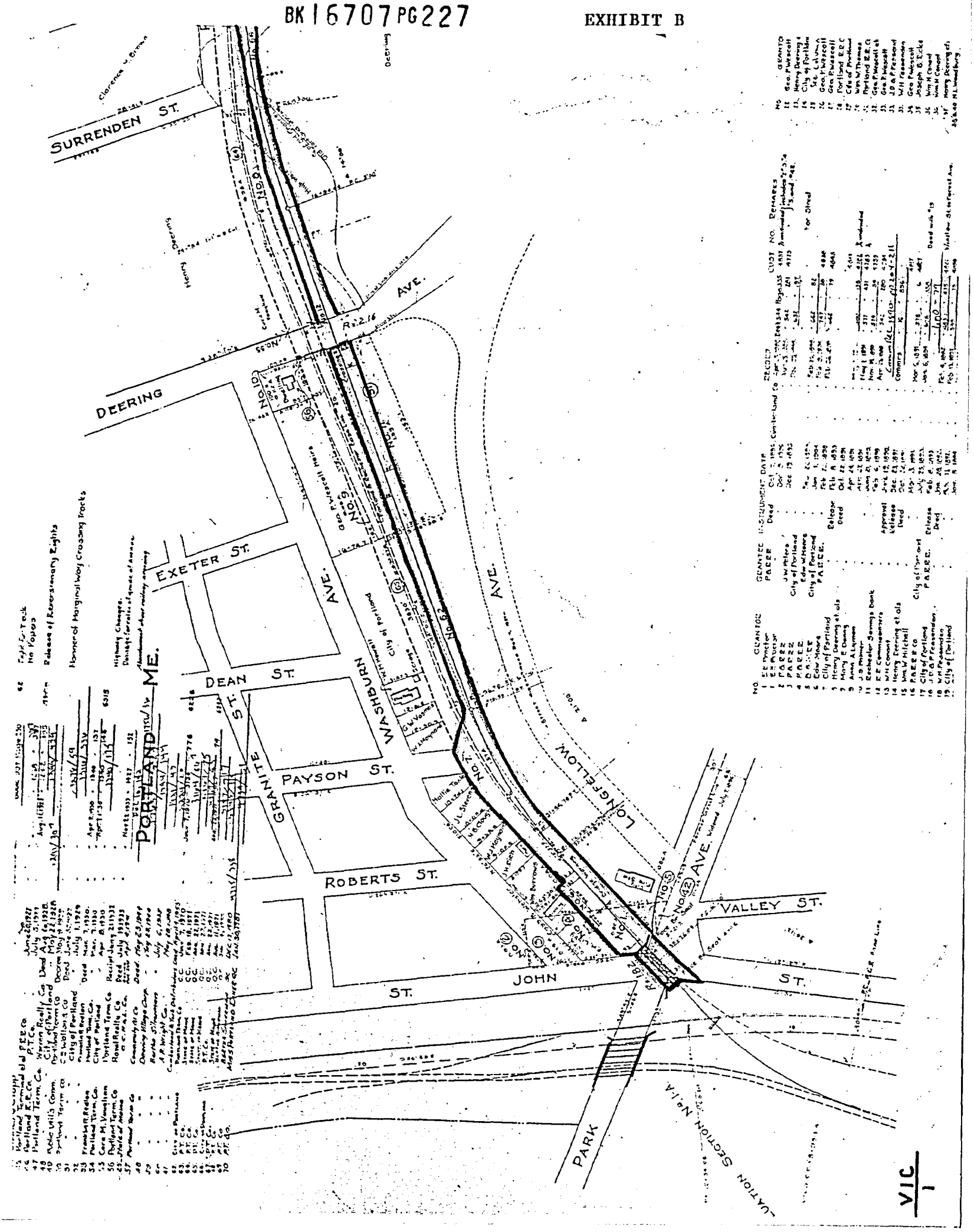
Grantor: Portland Terminal Company
Grantee: Linda A. Cardente
Instrument: Deed dated November 9, 1999 Recorded: Book 15166, Page 201

Map and parcel reference: Map VIC 2 portions of Parcel 89 and 32

Grantor: Portland Terminal Company
Grantee: Alpine Realty Corp.
Instrument: Deed dated March 17, 2000
Recorded: Book 15377, Page 156, and Book 15422, Page 179 (Corrective deed)
Map and parcel reference: Map VIC 2 so-called "Stockyard Parcel"

Grantor: Portland Terminal Company
Grantee: Ross Y. Furman
Instrument: Deed dated May 6, 1999
Unrecorded: Map and parcel reference: Map VIC 1

EXHIBIT B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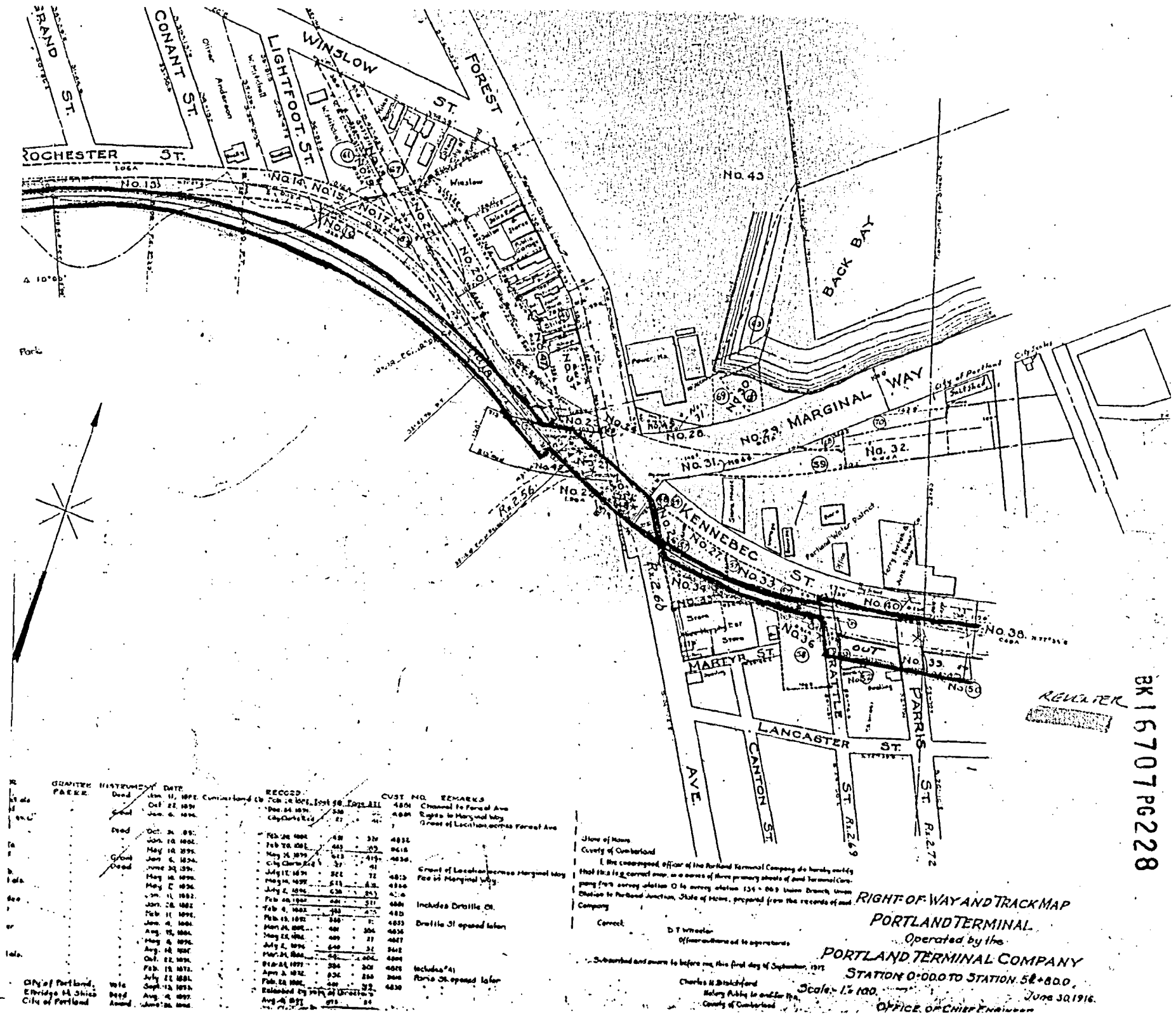

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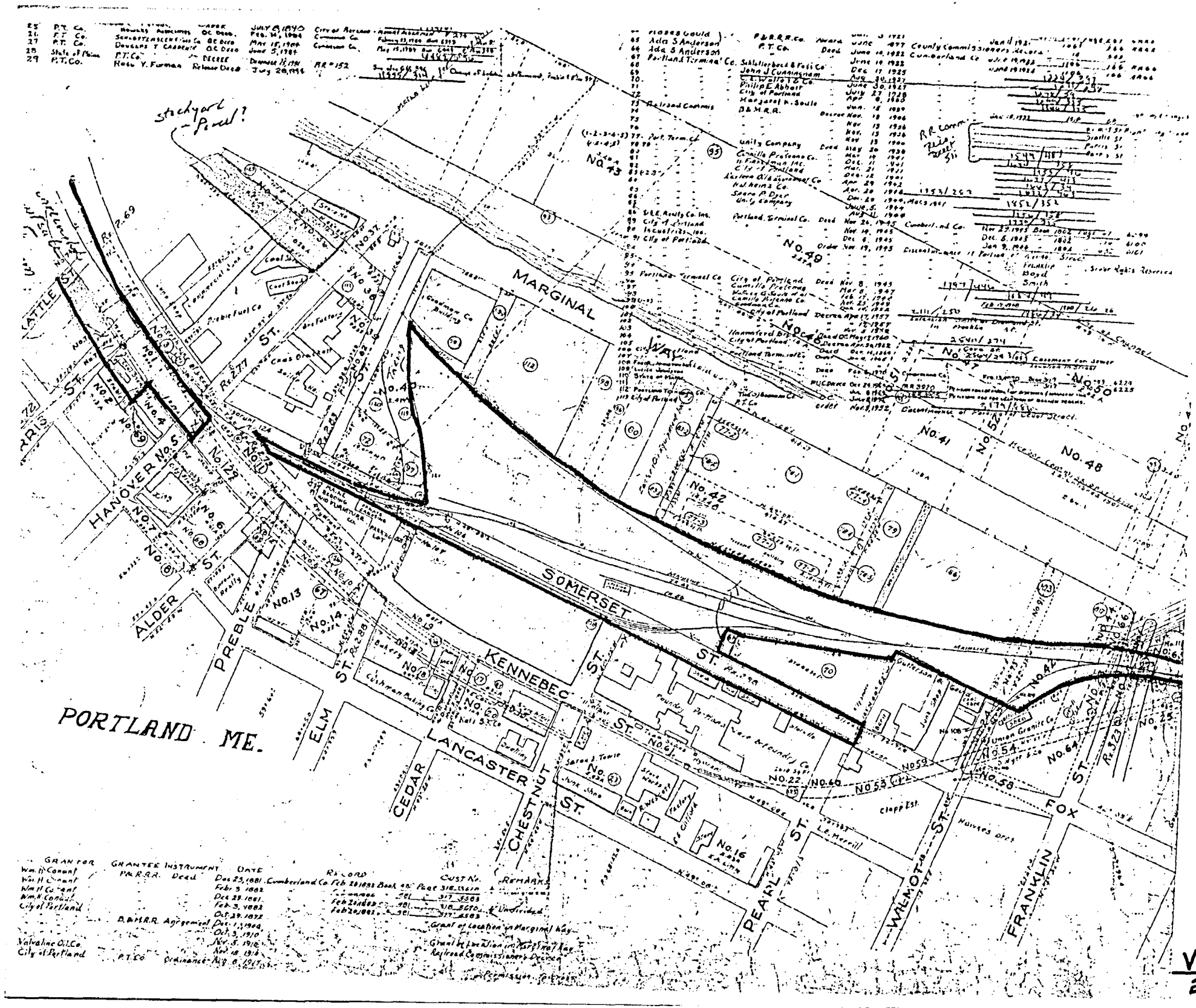

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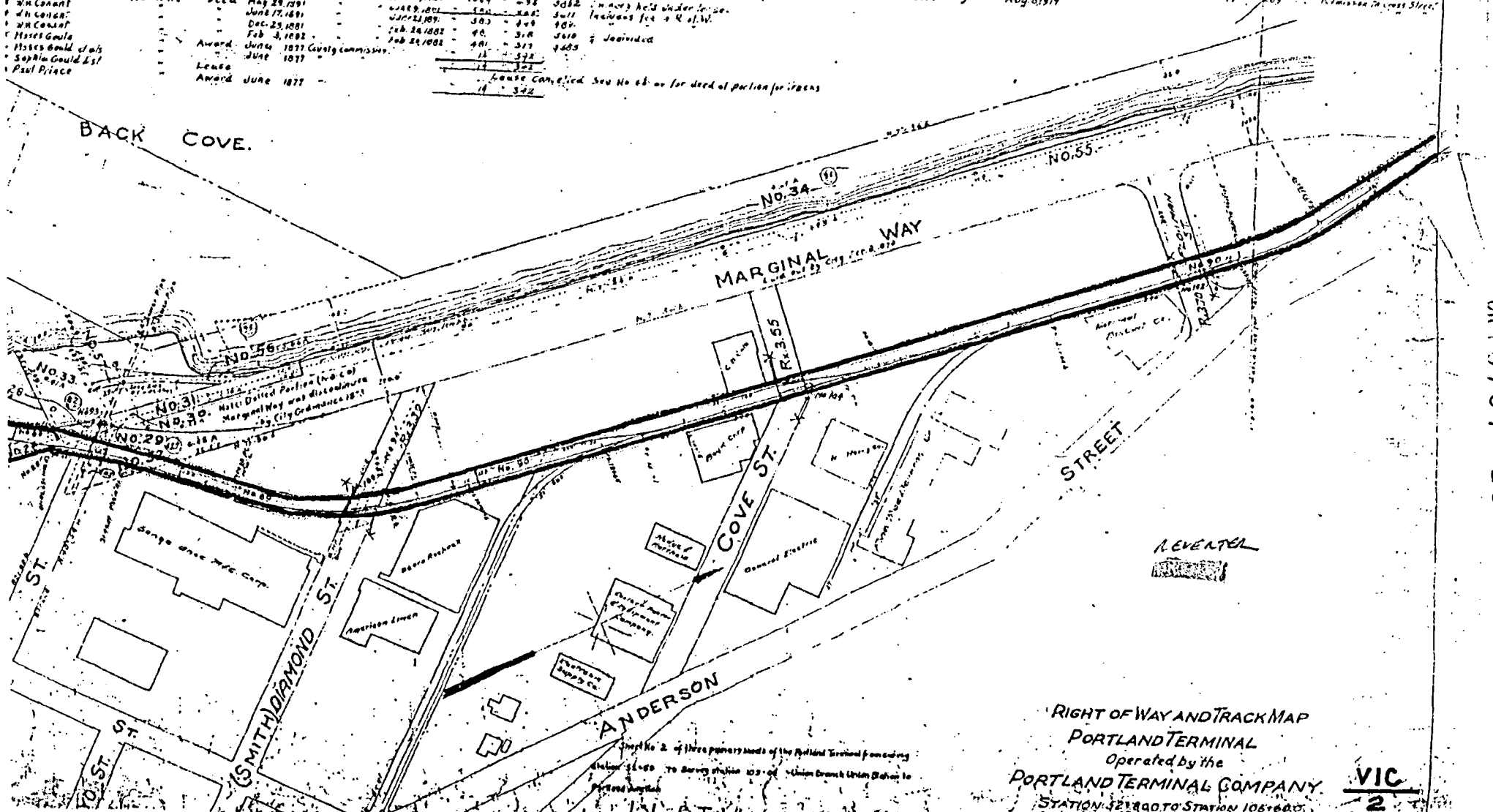
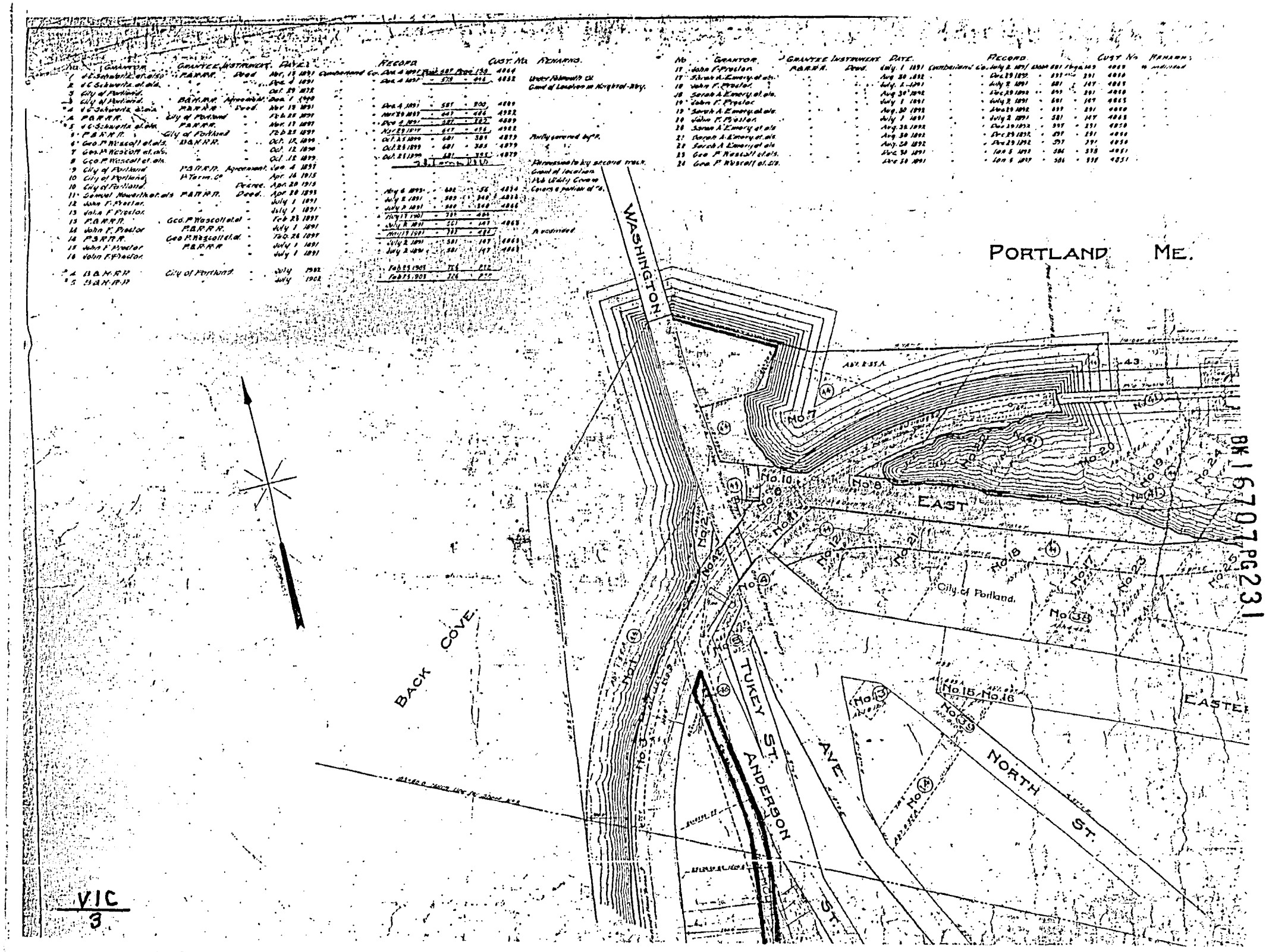
No.	GRANTOR	GRANTEE	INSTRUMENT	DATE	RECORD Book	RECORD Page	CUST. No.	REMARKS
1	[illegible]	P.B.&R.R.		Feb. 19, 1872	Cumberland Co Rec. 9 1872	Book 592 Page 255		
2	P.B.&R.R.Co.	City of Portland		July 27, 1881				
3	City of Portland	Y.N.C.H.R.Co.		Sept. 13, 1883				
4	Geo. P. Vennoff	P.B.&R.R.						
5	C.W. Clapp	Y.B.C.R.R.Co & P.B.&R.R.Co		Nov. 8, 1886				
6	Emma Green et als	P.B.&R.R.		Sept. 13, 1886				
7	Jessie Russell et als.			June 24, 1886				
8	J.&A. Russell Estate			June 23, 1886				
9	Portland Terminal Co	City of Portland		June 23, 1886				
10	Geo. M. Wescott	P.B.R.R.		July 8, 1914				
11	J.J.&E.F. Fessenden			Jan. 11, 1882				
12	W.H. Fessenden			June 8, 1882				
13	Eunice Day			Feb. 11, 1892				
14	Mary J.E. Clapp	Y.&C.R.R.Co & P.&R.R.		Aug. 27, 1863				
15	P.B.&R.R.Co.	City of Portland		June 29, 1859				
16	J.E.D. Carroll et als	P.B.R.R.		Sept. 13, 1883				
17	Franklin Fessenden			May 18, 1893				
18	Mary J.E. Clapp			June 29, 1891				
19	Chas. Q. Clapp et als	Y.&C.R.R.Co.		June 29, 1891				
20	Chas. D. Clapp et als	K.&P.R.R.Co.		Dec. 31, 1849				
21	Chas. D. Clapp et als			Dec. 10, 1850				
22	Chas. Q. Clapp et als	Y.&C.R.R.Co.		Dec. 10, 1850				
23	Chas. J. Clapp et als			Dec. 5, 1849				
24	Y.&C.R.R.Co.	C.Q. Clapp et als		May 14, 1853				
25	Y.&C.R.R.Co.	Asa W. H. Clapp		May 14, 1853				
26	Portland Terminal Co	Mary J.E. Clapp		May 10, 1888				
27	Her. J.E. Clapp	Port. Terminal Co.		Feb. 8, 1913				
28	Portland Terminal Co.			Jan. 13, 1913				
29	Y.&C.R.R.Co.	C.Q. Clapp et als		1913				
30	Portland Stove & Foundry Co	P.T.Co.		July 13, 1852				
31	W.H. Conant	P.&R.R.R.	Deed	Nov. 14, 1920				
32	W.H. Conant			May 29, 1891				
33	W.H. Conant			June 8, 17, 1891				
34	W.H. Conant			Dec. 23, 1881				
35	Hosea Gould			Feb. 3, 1882				
36	Hosea Gould et als		Award	June 1877	County Commissioners			
37	Sophia Gould Est			June 1877				
38	Paul Prince		Lease					
			Award	June 1877				

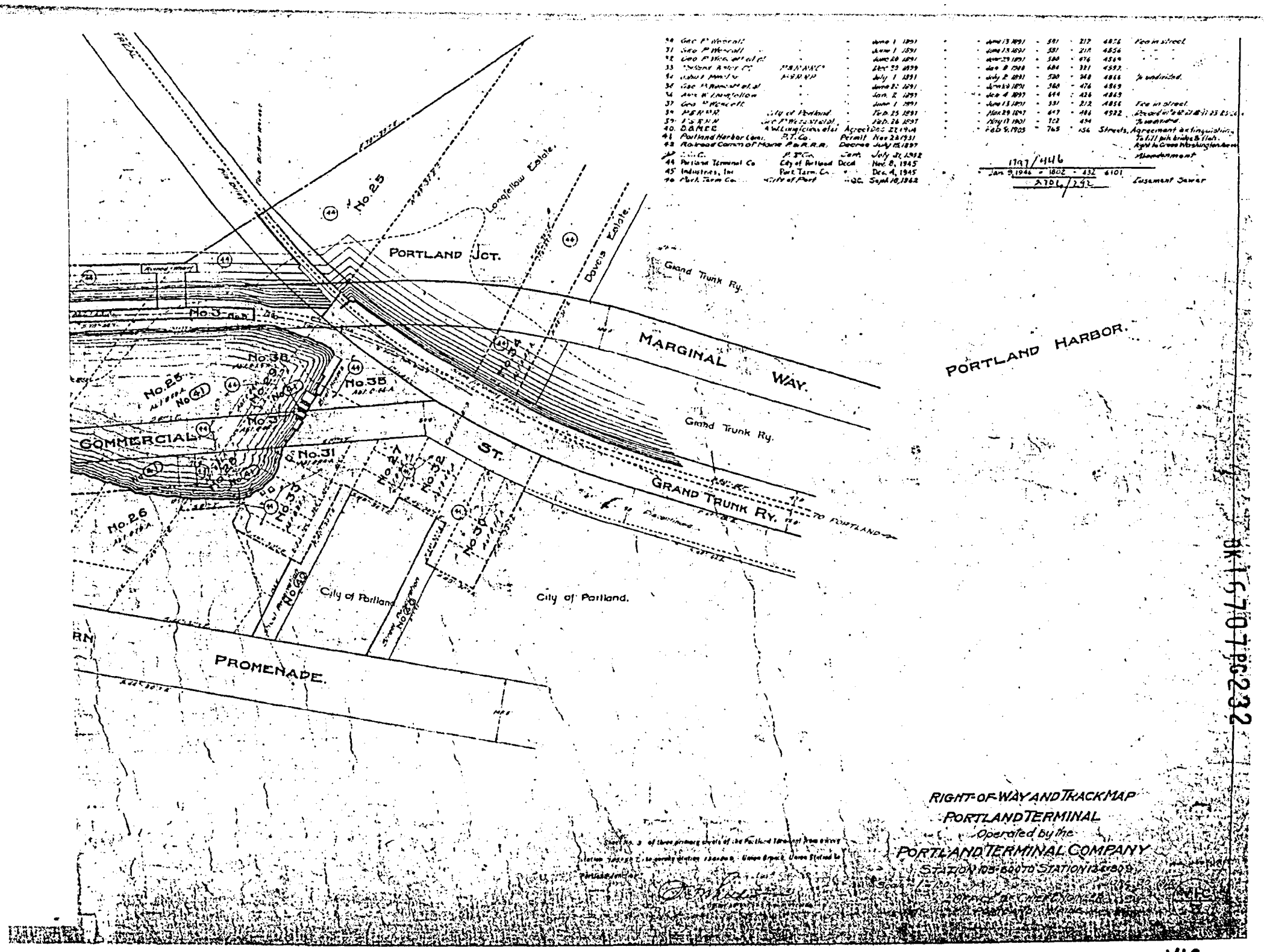
No.	GRANTOR	GRANTEE	INSTRUMENT	DATE	RECORD Book	RECORD Page	CUST. No.	REMARKS
29	J.E. McDonell	P.&R.R.R.	Award	June 1877	Cumberland Co			
30	W.H. Willard							
31	City of Portland							
32	J.C. Swarts et als.							
33	Lorenzo Taylor		Deed	Nov. 5, 1891				
34	J.C. Swarts et als			Dec. 26, 1899				
35	Geo. P. Wescott et als.			Nov. 13, 1891				
36	City of Portland			May 1, 1896				
37				Feb. 8, 1893				
38				Feb. 8, 1893				
39	John L. Brackett			Feb. 8, 1893				
40	Henry Deering et als			Feb. 11, 1893				Location on Hanover St.
41	Geo. P. Wescott			Aug. 12, 1897				
42	Geo. P. Wescott			Dec. 22, 1891				
43	Henry Deering et als.			July 16, 1897				Fee in Preble St.
44	Geo. P. Wescott			July 16, 1897				
45	State of Maine			Dec. 22, 1891				
46	Geo. P. Wescott		Location	June 1, 1891				Subject to rights of Maryland Way
47	Geo. P. Wescott		Deed					
48	Geo. P. Wescott			Sept. 17, 1890				Across Street
49	Edward Moore			Sept. 17, 1890				
50	Edward Moore			Sept. 17, 1890				
51	Edward Moore			Feb. 22, 1898				
52	Edward Moore			Feb. 22, 1898				
53	State of Maine			Feb. 22, 1898				
54			Location					
55								
56								
57	City of Portland							
58		P.T. Co.	Permit	Aug. 8, 1917				Removal in cross Street



BK 16707 PG 230



BK 16707 PG 231



30	Geo. F. Wescott			June 1 1891		June 13 1891	581	212	4856	Fee in street.
31	Geo. F. Wescott			June 1 1891		June 13 1891	581	212	4856	" " "
32	Geo. F. Wescott et al			June 20 1891		June 29 1891	588	476	4869	" " "
33	Portland & N.P.R.R. Co.	P.&N.P.R.R.Co.		Dec. 23 1899		Jan. 8 1900	684	331	4892	
34	Albert Pennell	P.&N.P.R.R.		July 1 1891		July 2 1891	530	348	4866	½ undivided.
35	Geo. F. Wescott et al			June 20 1891		June 29 1891	588	476	4869	
36	Ann W. Longfellow			Jan. 2 1891		Jan. 2 1897	644	436	4869	
37	Geo. F. Wescott			June 1 1891		June 13 1891	581	212	4856	Fee in street.
38	P.&N.P.R.R.	City of Portland		Feb. 25 1891		Mar. 29 1897	617	486	4932	Deed of 4.42 ac. in 25 & 25-A.
39	P.&N.P.R.R.	Geo. F. Wescott et al		Feb. 26 1897		May 17 1901	722	494		½ unpatented.
40.	D.&M.E.C.	A. W. Longfellow et al		Agreement Dec. 22 1904		Feb. 9, 1905	765	156		Streets, Agreement extinguishing To fill pile bridge & flats. Agrt. to Cross Washington Ave.
41	Portland Harbor Com.	P.T. Co.		Permit Nov. 28 1931						Abandonment
42	Railroad Comm. of Maine	P.&R.R.R.		Decree July 15 1897						
43	[illegible]	P.T.Co.		Cert. July 21 1942						
44	Portland Terminal Co	City of Portland	Decd	Nov. 8, 1945						
45	Industries, Inc	Port. Term. Co.	"	Dec. 4, 1945						
46	Port. Term. Co.	City of Port.	QC	Sept. 18, 1962		Jan. 9, 1946	1802	432	6101	Easement Sewer

1197/446

2704/292

RIGHT-OF-WAY AND TRACK MAP
PORTLAND TERMINAL
Operated by the
PORTLAND TERMINAL COMPANY
STATION 109+50.0 TO STATION 124+00.0

BK 16707 PG 232

VIC
3

EXHIBIT C

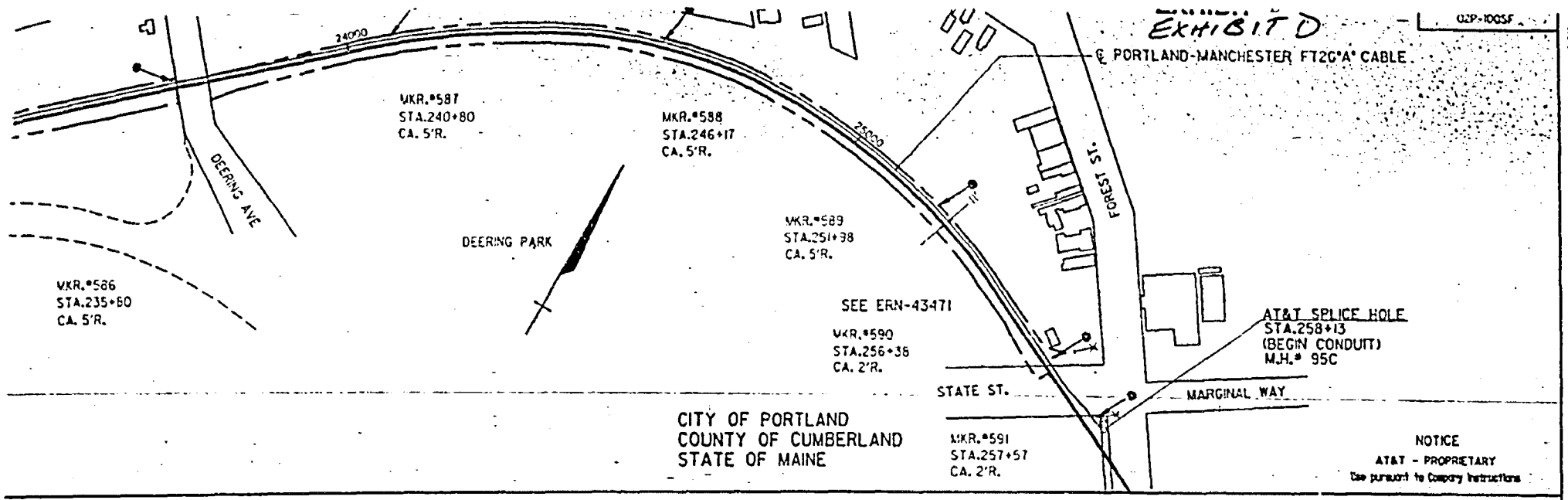
PORTLAND TERMINAL COMPANY

UNION BRANCH

INVENTORY OF AGREEMENT

Location	Name	Description	Date
Portland, Maine	American Telephone & Telegraph Company	Fiber Optic Easement	July 29, 1986

EXHIBIT D



N/A

ROAD R/W

D			E		F	
SPLICING			STATION NUMBER	EXCEPTIONS	RECORDS	
	TYPE SPLICE		FROM TO		DATE RECD	LETTER TYPE ISSUE
				FORREST AVE. & MARGINAL WAY		
				SEE ERN-43471	8-23	B
	BS					

LEGEND

MKR. POLE

CABLE MAKEUP

A/TECH 24 FIBER
SINGLE-MODE

% OWNERSHIP

ISO: 30% IXC: 70%

DRAWN BY	CHECKED BY	DATE
C.E.M.	F.E.W.	10-3-86

A T & T — FORM-M77L

REGION: EASTERN REGION NORTH

FIELD WORKING SPECIFICATIONS
PORTLAND-MANCHESTER
FT2G "A" CABLE
EST. EG76260
STA.258+13 TO STA.219+40

PREPARED BY W.J. LEONARD
APPROVED T. J. BRADY
TITLE MANAGER

SPEC. NO. ERN-20.028.0 PART NO.
NO. OF SHEETS 100 SHEET NO. 2

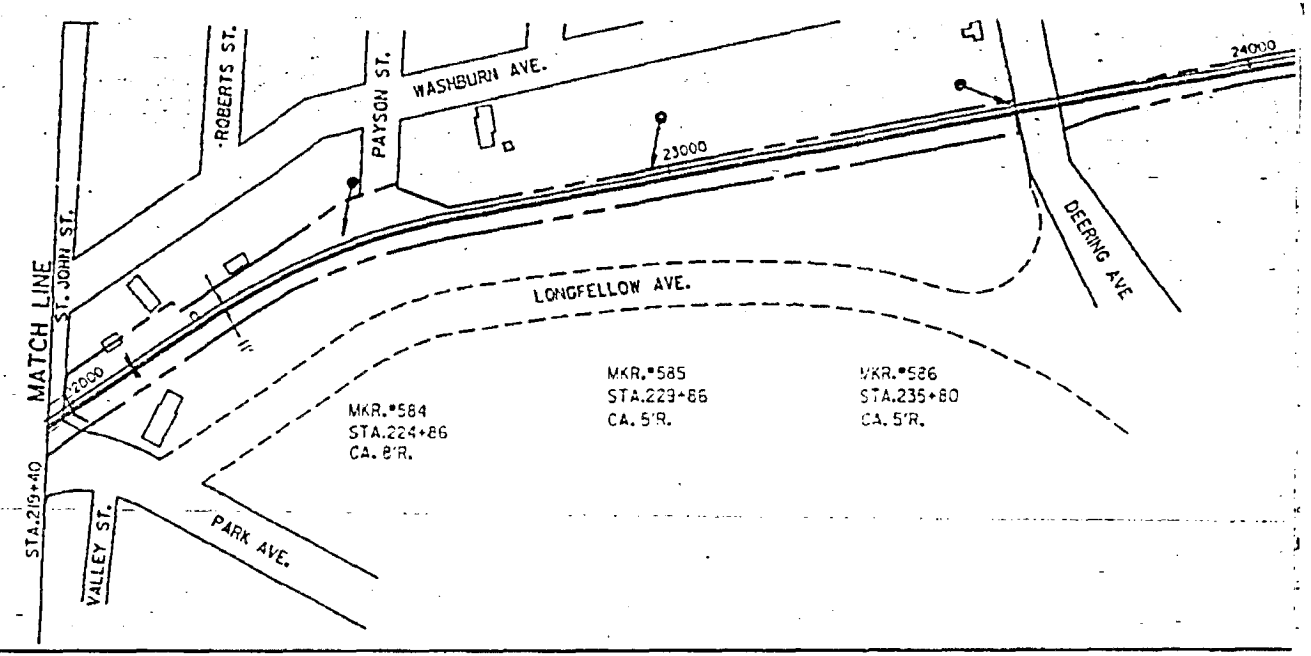
SUBMITTED FOR WORK COMPLETED
R.A. COCK FOREMAN 8-27-87 DATE

FOR OFFICE USE	DATE
CONSTRUCTION OFFICE	
ACCOUNTING OFFICE	
PLANT RECORDS	

WORK ON THIS SHEET CHARGEABLE TO:
ACCOUNT 845C AREA LBUZGAF
SCALE 1"=200' LINE CODE F2AT

ISSUE NUMBER	
AS-CONST. 9-18-87	1.
AS-BUILT 1-4-88	2.
	3.

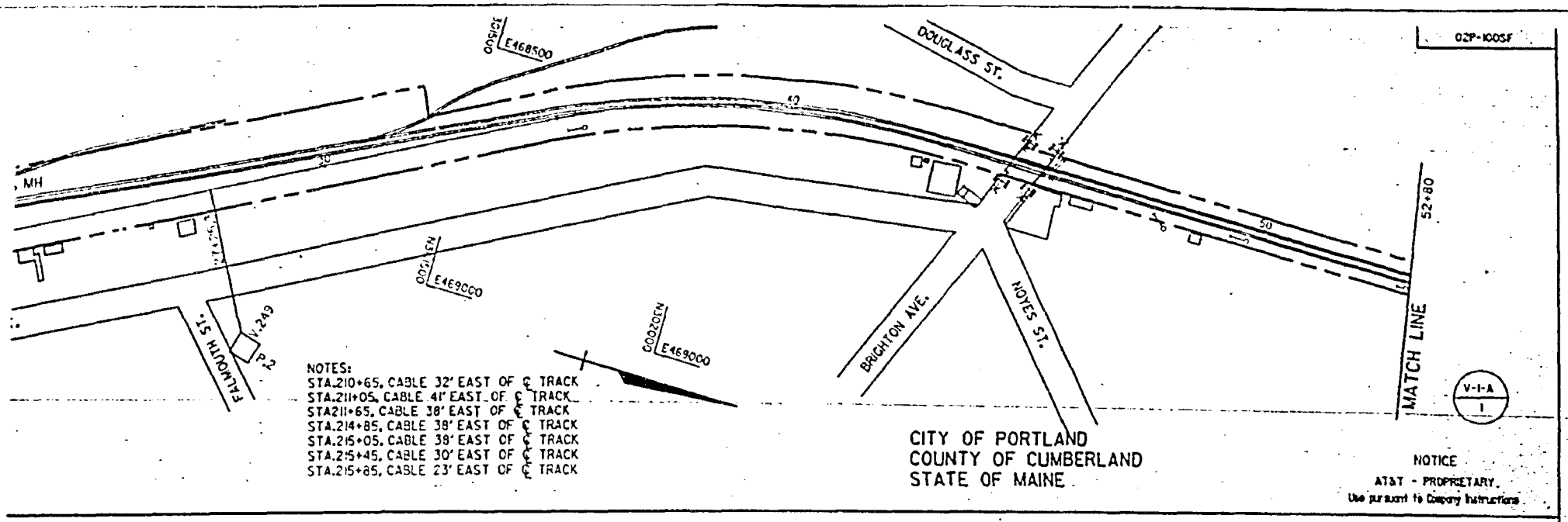
SHEET #2



TAX CODE YR. PLACED	N/A
R/W WIDTH	RAILROAD R/W

STATION NUMBER		A LENGTH	B P.V.C.			MARKERS		C PLACE FIBER CABLE						D SPLICING				STATION NUMBER	
FROM	TO	STA.- STA.	SIZE	NO.	LENGTH	@CABLE	@RAIL	TYPE PROT.	TYPE CABLE	SPLICE TO SPLICE	REEL NO.	CABLE LENGTH		MANHOLE STATION	TYPE CASE	TYPE SPLICE		FROM	TO
	258+13										4-11	9800'							
														258+13	5ID3LG2	BS			
258+13	219+40	3873	1.5"	2	3873'						SP-01	9800'							

BK16707PG236



N/A

ROAD-R/W

D		E		F	
ICING		STATION NUMBER	EXCEPTIONS	RECORDS	
TYPE SPLICE		FROM TO		DATE	LETTER
		209+93 210+63	CONGRESS ST. ERN-43469		
			1-4" GALV. STEEL PIPE		
		216+15(E) 216+15(W)	R.R. BORE 1-4" STL. PIPE	8-24	B

LEGEND

MKR. POLE

CABLE MAKEUP
A/TECH 24 FIBER
SINGLE-MODE

% OWNERSHIP
ISO: 30% IXC: 70%

DRAWN BY	CHECKED BY	DATE
G.E.W.	F.E.W.	10-3-86

A T & T — FORM M77L

REGION: EASTERN REGION NORTH

FIELD WORKING SPECIFICATIONS
PORTLAND-MANCHESTER
FT2G "A" CABLE
EST. EG76260
STA.219+40 TO STA.205+35

PREPARED BY W.J. LEONARD
APPROVED T.J. BRADY
TITLE MANAGER

SPEC. NO. ERN-20.025.0 PART NO.
NO. OF SHEETS 100 SHEET NO. 3

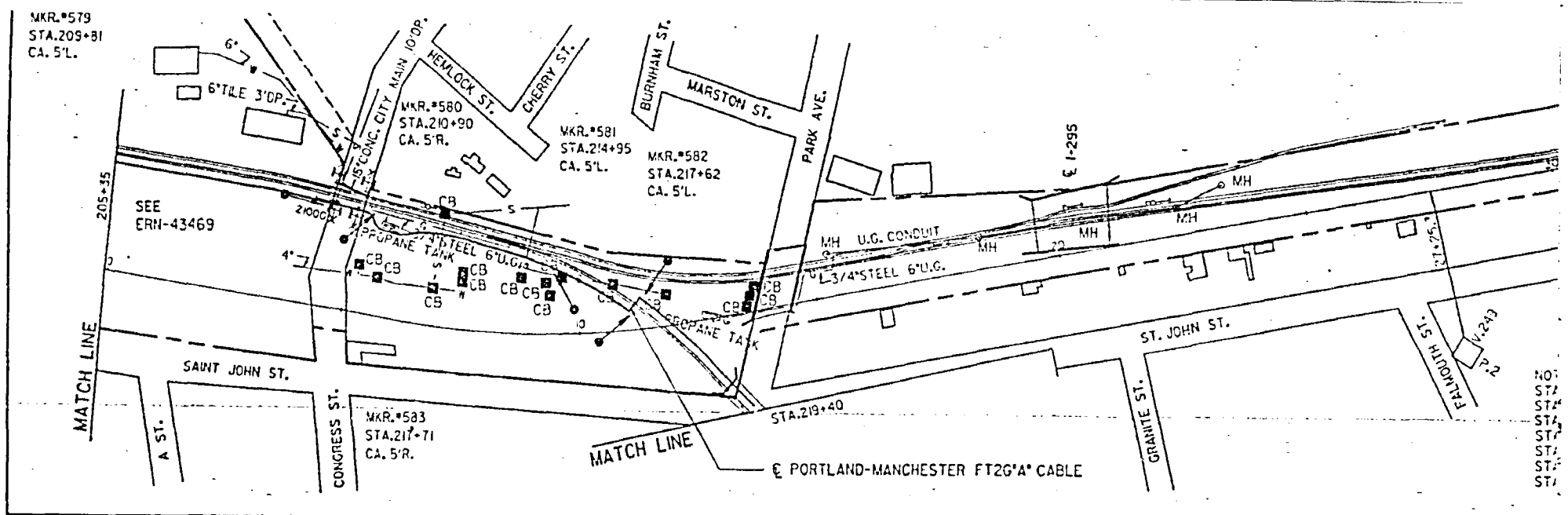
SUBMITTED FOR WORK COMPLETED
B.A. COOK 8-24-87
FOREMAN DATE

FOR OFFICE USE	DATE
CONSTRUCTION OFFICE	
ACCOUNTING OFFICE	
PLANT RECORDS	

WORK ON THIS SHEET CHARGEABLE TO:
ACCOUNT 845C AREA LOUZGAF
SCALE 1"=200' LINE CODE E297

ISSUE NUMBER	
AS-CONST. 9-13-87	1.
AS-BUILT 1-4-88	2.
	3.

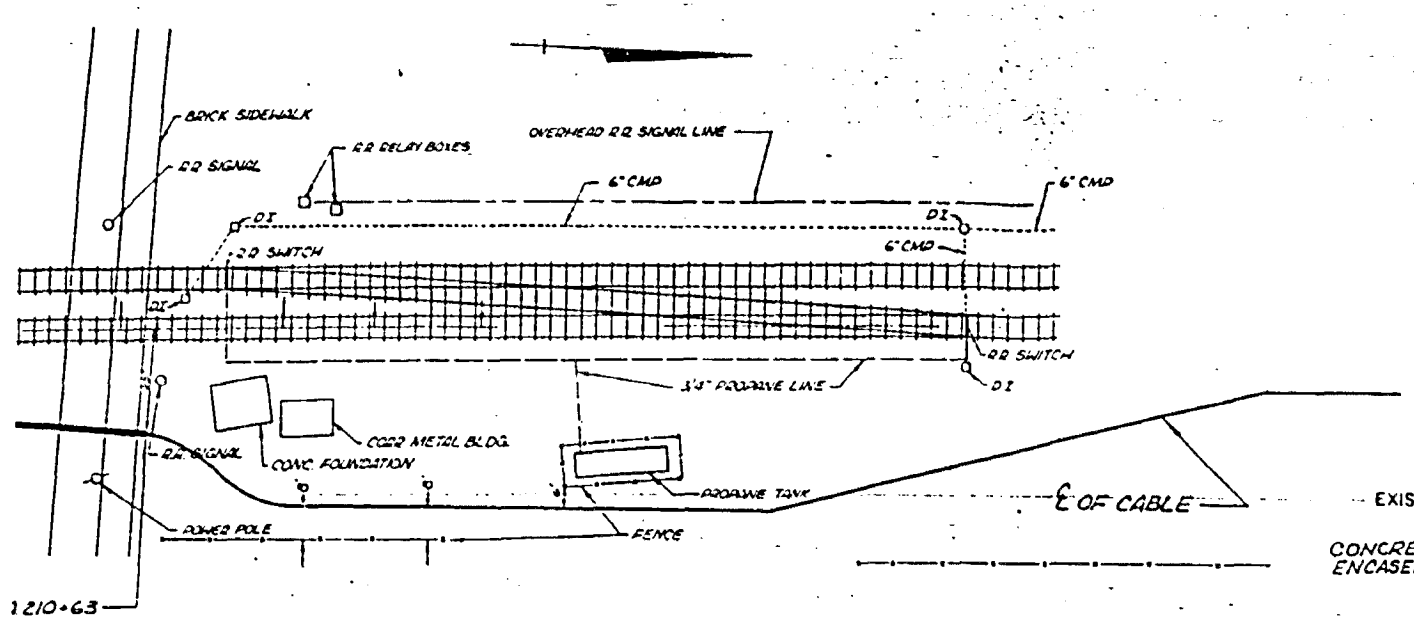
SHEET #3

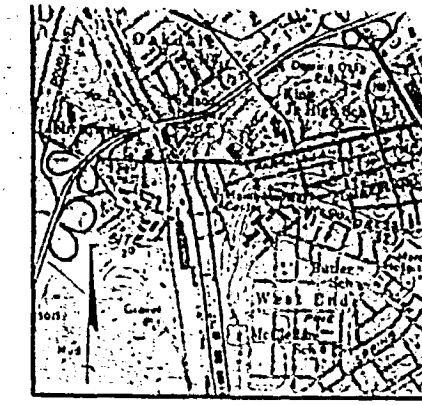


TAX CODE YR. PLACED	N/A
R/W WIDTH	RAILROAD R/W

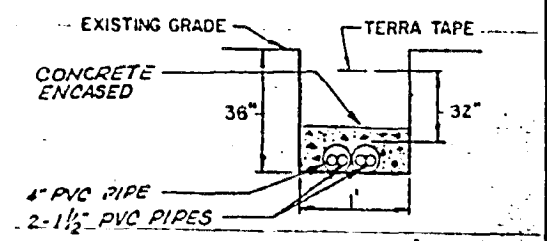
STATION NUMBER		A	B					C						D				
		LENGTH	P.V.C.			MARKERS		PLACE FIBER CABLE						SPLICING				STATION NUMBE
FROM	TO	STA.- STA.	SIZE	NO.	LENGTH	@CABLE	@RAIL	TYPE PROT.	TYPE CABLE	SPLICE TO SPLICE	REEL NO.	CABLE LENGTH		MANHOLE STATION	TYPE CASE	TYPE SPLICE		FROM
																		209+93 210+6
219+40	205+35	1405'	1.5"	2	1405'						SP-01	9800'						
																		215+15(E) 216+15

BK16707PG237





LOCATION MAP



STA. 209+93 TO STA. 210+63 (70')

REVISED 3/27/87	1
REVISED 4-30-87	2
AS CONST. 9-18-87	3
	4

NOTICE
AT&T PROPRIETARY
Use pursuant to company instructions

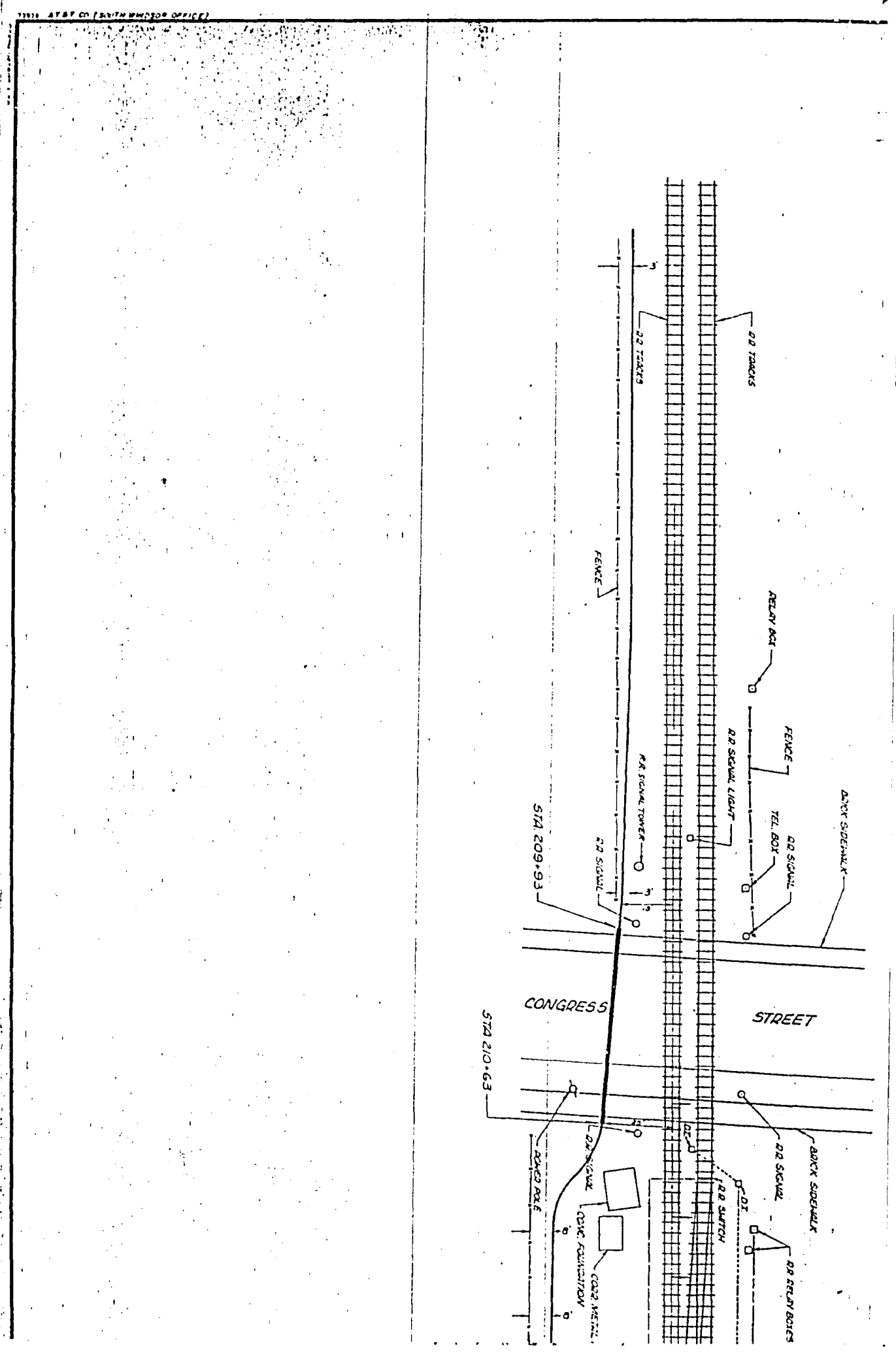
PORTLAND - MANCHESTER
FT2G "A" CABLE
CONGRESS ST.
R.R. STA. 4+86
CITY OF PORTLAND
COUNTY OF CUMBERLAND
STATE OF MAINE

WITH SPEC.	
DRAWN BY	G.E.N.
CHECKED BY	F.E.W.
DATE	1-6-87
SCALE	1" = 30'

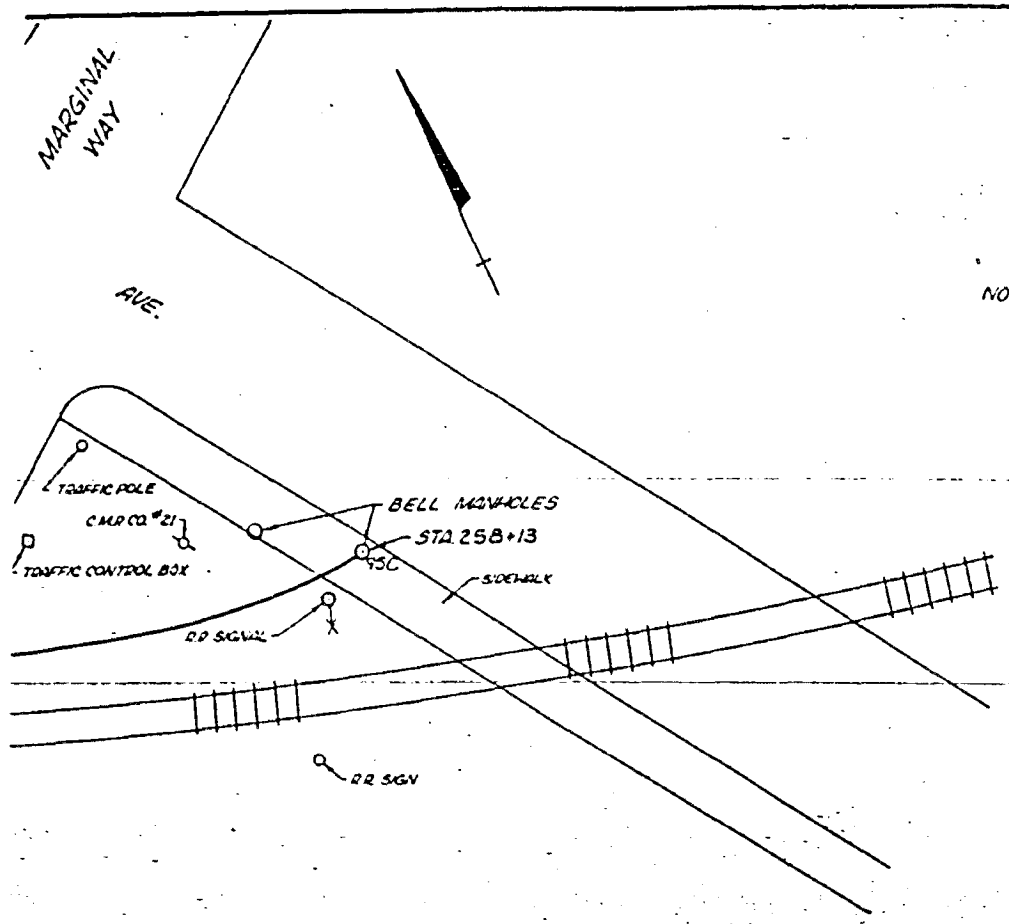
AT&T
EASTERN REGION NORTH

ERN-43469

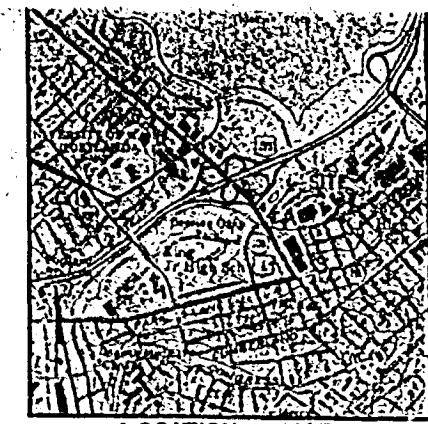
BK 16707 PG 238


AT&T CO (SOUTH WINDSOR OFFICE)
R.R. TRACKS
R.R. TRACKS
RELAY BOX
FENCE
FENCE
R.R. SIGNAL LIGHT
R.R. SIGNAL TOWER
R.R. SIGNAL
TEL. BOX
R.R. SIGNAL
BRICK SIDEWALK
STA. 209+93
CONGRESS
STREET
STA. 210+63
R.R. SIGNAL
BRICK SIDEWALK
R.R. SWITCH
D.T.
R.R. RELAY BOXES
R.R. SIGNAL
CONC. FOUNDATION
CAST METAL
POWER POLE

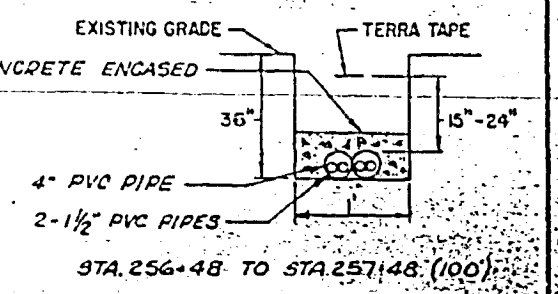
BK16707PG240



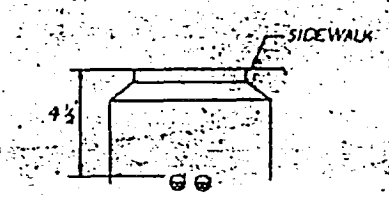
NOTE:
140' OF PVC. PIPE
100' OF CONCRETE ENCASEMENT



LOCATION MAP



STA. 256+48 TO STA. 257+48 (100')



NOTICE
AT&T PROPRIETARY
Use pursuant to company instructions

ISSUE:
REVISED 3/27/87
REVISED 4-30-87
AS CONST. 9-10-87

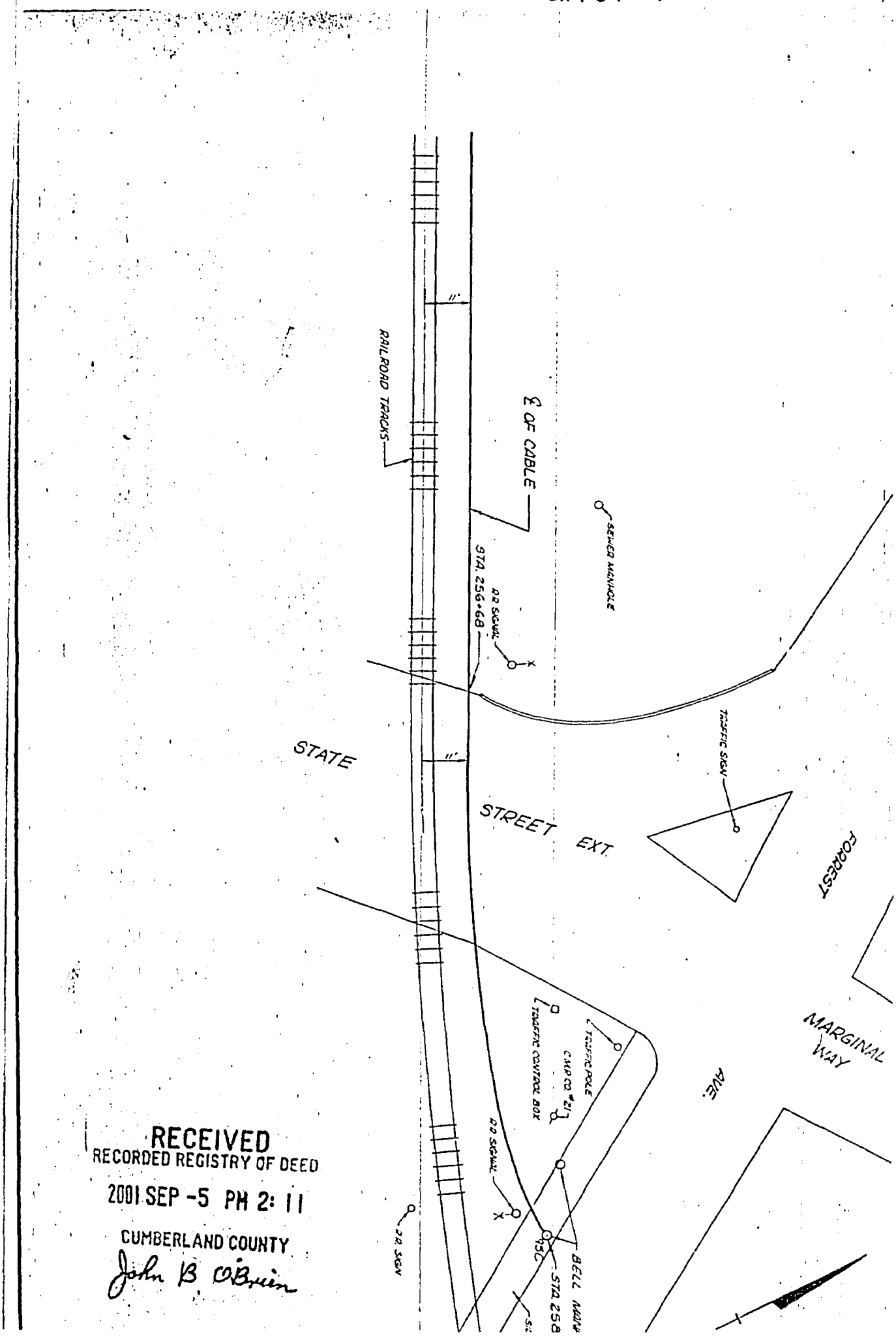
PORTLAND - MANCHESTER
FT2G "A" CABLE

FORREST AVE. & STATE ST. EXT.
R.R. STA. 3600+00

CITY OF PORTLAND
COUNTY OF CUMBERLAND
STATE OF MAINE

AT&T

WITH SPEC. ERN-20,027.0
DRAWN BY GEM
CHECKED BY FEW
DATE 1-13-87
SCALE 1"=20'
ERN-43471



RECEIVED
RECORDED REGISTRY OF DEED
2001 SEP -5 PM 2: 11
CUMBERLAND COUNTY
John B O'Brien

RELEASE OF CONDITIONS AND RESTRICTIONS AND COVENANT

KNOW ALL MEN BY THESE PRESENTS, that Portland Terminal Company, a corporation duly organized and existing under the laws of the State of Maine , with offices at Iron Horse Park, North Billerica, Middlesex County, Massachusetts ("PTC"), in consideration of One Dollar ($1.00) and other valuable consideration paid by the City of Portland, a body politic and corporate with a mailing address of 389 Congress Street, Portland, Maine, does hereby forever release and extinguish the following condition and covenant contained in a deed from Portland Terminal Company to the State of Maine dated September 4, 2001 and recorded in the Cumberland County Registry of Deeds, Book 16707 Page 206:

"In addition to any condition that may be imposed on the use of the Premises by the Maine Department of Environmental Protection, the State shall restrict the use of the Premises, or any portion thereof, to the following: commercial business uses, rail/industrial uses and/or passive recreational uses. Such uses shall not require the withdrawal of groundwater for drinking water and other uses. By this restriction, the State covenants and agrees for itself and its successors and assigns not to allow the Premises or any portion thereof to be used for any residential or active use with the exception of paved recreational trails. Residential use includes, but is not limited to, single family dwellings, apartment houses, condominiums, hotels, motels, inns, boarding houses, multifamily dwellings and/or any use that involves a structure to be used primarily for human habitation for any extended period of time. Active Recreational use includes but is not limited to, athletic fields, sports facilities, park and/or any use which subjects the Premises to use by the general public for active recreational activities, except as provided herein. In addition, by this restriction the State covenants and agrees for itself, its successors and assigns, not to allow the Premises or any portion thereof to be used as a site for a hospital, nursing home, rehabilitation facility, daycare facility for any persons of any age or educational facility (private or public).

In the event of any violation of the above restrictions, Portland Terminal Company, its successors and assigns shall have the right to enforce the same and shall have available all remedies at law and in equity."

Any and all other conditions, restrictions and covenants contained in the deed from Portland Terminal Company to the State of Maine dated September 4, 2001 remain in full force and effect.

IN WITNESS WHEREOF, the said **PORTLAND TERMINAL COMPANY** has caused this instrument to be executed in its name and its corporation seal to be hereto affixed by David A. Fink, its President, thereunto duly authorized this 12th day of January, 2012.

PORTLAND TERMINAL COMPANY

Witness

By: David A. Fink, President

SEAL

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss. January 12, 2012

On this 12th day of January, 2012, before me, the undersigned notary public, personally appeared David A. Fink, President of the **PORTLAND TERMINAL COMPANY** as aforesaid, proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Notary Public:
My Commission Expires:

ROLAND L. THERIAULT
Notary Public
Commonwealth of Massachusetts
My Commission Expires
August 5, 2016

[This section intentionally left blank.]

CONSENT OF THE STATE OF MAINE

Pursuant to the terms of a Governor's Deed from the State of Maine to the City of Portland dated March 21, 2003, and recorded in the Cumberland County Registry of Deeds in Book 19057, Page 107, which deed is contained the above noted restriction now being released by Pan Am Railways by virtue of this document, the State of Maine hereby consents to the release and extinguishment of the above noted conditions, restrictions and covenants. All other conditions, restrictions and covenants in said Governor's Deed to the City of Portland remain in full force and effect.

IN WITNESS WHEREOF, I, Paul R. LePage, Governor of the State of Maine have caused the name and great seal of the State of Maine to be hereto affixed this 11 day of May, 2012.

Witness

Paul R. Lepage, Governor

SEAL

Affixed by: _____
Secretary of State of Maine

STATE OF MAINE
COUNTY OF KENNEBEC

May 11, 2012

Personally appeared the above-named Paul R. LePage, Governor of the State of Maine, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of the State of Maine.

~~Notary Public~~/Attorney at Law
Printed Name: Jonathan Nass
My commission expires _____

Received
Recorded Register of Deeds
May 24,2012 11:58:02A
Cumberland County
Pamela E. Lovley

Easement Deed from 52 Hanover, LLC to City of Portland and Agreement

Hanover Street Access and Drainage Easements, Parcel B to C

KNOW ALL PERSONS BY THESE PRESENTS that **52 HANOVER, LLC**, a Maine limited liability company having a place of business at and mailing address of c/o Port Property Management, Inc., 104 Grant Street, Portland, Maine, its successors and assigns, (hereinafter "Parcel B Owner") in consideration of One Dollar and other good and valuable consideration, the receipt of which is hereby acknowledged, paid by **CITY OF PORTLAND**, a body corporate and politic and Maine municipal corporation having a mailing address of 389 Congress Street, Portland, Maine 04101, its successors and assigns, (hereinafter "Parcel C Owner"), does hereby GIVE, GRANT, BARGAIN, SELL and CONVEY unto the said Parcel C Owner, its successors and assigns forever, across a portion of the land delineated as Parcel B ("Parcel B") on the plan entitled "Subdivision Plat 52 Hanover Street Portland, Maine" dated November 29, 2017 by Titcomb Associates, revised through July 24, 2018, approved by the City of Portland Planning Board on March 22, 2018, and recorded in Cumberland County Registry of Deeds in Plan Book 218, Page 342 (the "Plan"), the following appurtenant rights and easements for the benefit of said Parcel C, subject to the rights of Parcel B Owner, to relocate and reconfigure such easements and modify such rights as set forth more fully in this Easement Deed:

1. **Access Easement**: Appurtenant rights and a non-exclusive easement in common with Parcel B Owner, for access by vehicles and pedestrians over the following described "Access Easement Area" (hereinafter referred to as the "Access Easement Area") to run with the land and benefit Parcel C and provide access to the existing parking area located within the northwest corner of Parcel C, which is labeled "bituminous parking area" on the Plan (the "Parking Area"). The Access Easement Area is bounded and described as follows:

A certain lot or parcel of land located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at an aluminum disk set on the northeasterly side of Parris Street, said point being the northwesterly corner of land designated as "Parcel C" as delineated on the Plan. Thence:

1) N 26°16'45" W by said Parris Street a distance of Twenty-Nine and 52/100 (29.52) feet to a point;

2) N 65°18'19" E through land designated as "Parcel B" as delineated on said Plan a distance of Seven and 00/100 (7.00) feet to a point;

3) N 26°16'45" W through said Parcel B a distance of Ninety-Three and 72/100 (93.72) feet to a point;

4) N 70°42'23" W through said Parcel B a distance of Ten and 00/100 (10.00) feet to a point on the northeasterly side of said Parris Street;

5) N 26°16'45" W by said Parris Street a distance of Twenty-Two and 86/100 (22.86) feet to a point;

The following courses through said Parcel B:

6) S 70°42'23" E a distance of Twenty-Seven and 14/100 (27.14) feet to a point;

7) S 26°16'45" E a distance of Nineteen and 00/100 (19.00) feet to a point;

8) S 19°17'37" W a distance of Two and 80/100 (2.80) feet to a point;

9) S 26°16'45" E a distance of Ninety-Two and 78/100 (92.78) feet to a point;

10) S 72°02'56" E a distance of Seven and 00/100 (7.00) feet to a point;

11) N 63°24'51" E a distance of Sixty-Five and 00/100 (65.00) feet to a point;

12) S 24°23'37" E a distance of Eight and 00/100 (8.00) feet to a point;

13) N 65°26'46" E a distance of Thirty-Four and 40/100 (34.40) feet to a point of curvature;

14) Northerly, following a curve to the left having a radius of Twenty-Four and 00/100 (24.00) feet, an arc distance of Thirty-One and 04/100 (31.04) feet to a point of tangency;

15) N 08°39'52" W a distance of Fifty-Seven and 73/100 (57.73) feet to a point;

16) N 34°28'11" E a distance of Seventeen and 00/100 (17.00) feet to a point;

17) N 75°00'00" E a distance of Thirteen and 00/100 (13.00) feet to a point on the southwesterly sideline of Hanover Street;

18) S 23°56'25" E by said Hanover Street a distance of Twenty and 25/100 (20.25) feet to a point;

19) S 75°00'00" W through said Parcel B a distance of Twenty and 00/100 (20.00) feet to a point;

20) S 08°39'52" E through said Parcel B a distance of Forty-Nine and 83/100 (49.83) feet to a point of curvature;

21) Southerly through said Parcel B, following a curve to the right having a radius of Thirty-Four and 00/100 (34.00) feet, an arc distance of Forty-Three and 98/100 (43.98) feet to a point of tangency on the northwesterly sideline of said Parcel C;

22) S 65°26'46" W by said Parcel C a distance of One Hundred Twenty and 89/100 (120.89) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, West Zone, NAD83.

The above described Access Easement Area contains 4,694 square feet and lays over a portion of Parcel B as delineated on the Plan.

Parcel B Owner, its successors and assigns shall be responsible for reasonable maintenance and repair of the Access Easement Area except to the extent damage is caused by Parcel C Owner, any of its tenants, or any of its employees or invitees or by the employees or invitees of any tenant of Parcel C Owner, in which event the cost of such repairs shall be paid by Parcel C Owner within thirty (30) days of demand by Parcel B Owner. Parcel B Owner shall also be responsible for removal of snow and ice from the Access Easement Area and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice. If Parcel B Owner fails to perform reasonable maintenance and repair of the Access Easement Area in a prompt fashion and within thirty (30) days after written request by Parcel C Owner, Parcel C Owner may, after providing two (2) business days advance written notice to Parcel B Owner, perform such reasonable repair and maintenance and shall be reimbursed by Parcel B Owner for the reasonable cost of same, in which event the reasonable cost of such repairs shall be paid by Parcel B Owner within thirty (30) days of demand by Parcel C Owner.

No building, wall, fence, or any kind of permanent structure that would impede vehicle access to and across the Access Easement Area shall be erected on the Access Easement Area, except during any period of construction, repair or maintenance work by Parcel B Owner, including, without limitation, in connection with construction on one or more new buildings, garages or other structures on site (all such construction, repair or maintenance work is hereinafter collectively referred to as "Construction Work"). In the event of any extended period of Construction Work which blocks the Access Easement for more than forty-eight (48) hours in any seven (7) day period, Parcel B Owner shall provide up to nine (9) parking spaces on Parcel B Owner's premises or within two (2) blocks of Lot C without charge to Parcel C Owner. Reserving to the Parcel B Owner, its successors and assigns the use and enjoyment of said Access Easement Area for such purposes only as will not interfere, except for periods in connection with Construction Work as set forth above or as otherwise provided in this Easement Deed, temporarily or otherwise with the use thereof by Parcel C Owner, for access to the Parking Area.

2. **Parcel B Owner's Right to Relocate Access Easement Area.**

Parcel B Owner hereby reserves the right, and shall have the right, at Parcel B Owner's sole cost and expense, to relocate and reconfigure the Access Easement Area subject to Parcel C Owner's consent, which will not be unreasonably withheld, conditioned or delayed. Parcel B Owner shall have the right to relocate and reconfigure the Access Easement Area, whether it is the owner of all or substantially all of Parcel B. In the event Parcel B Owner wishes to relocate the Access Easement Area, Parcel B Owner shall proceed as follows:

a) Parcel B Owner shall give Parcel C Owner a notice in writing that Parcel B Owner wishes to relocate or reconfigure the Access Easement Area (the "Easement Change Notice") to a location or configuration different from that of the existing Access Easement Area (the "Existing Easement") and send a plan and metes and bounds description to Parcel C Owner describing such proposed easement location to Parcel C Owner (hereinafter the "New Access Easement"), which description shall state whether the New Access Easement is one-way or two-way, state the width of the New Access Easement and whether it enters from Hanover Street, Parris Street or some other location, together with such other details as Parcel B Owner shall elect to provide. Parcel C Owner and Parcel B Owner hereby agree that Parcel C Owner shall consent to the New Access Easement unless Parcel C Owner reasonably determines the New Access Easement does not provide reasonably equivalent access to the Parking Area as defined herein ("Reasonably Equivalent Access to Parking"); Parcel C Owner hereby agrees that it has already consented to the New Access Easement as depicted on Exhibits I and II, attached hereto, and named, respectively "Site Plan Concept -1" and "Site Plan Concept - 2" Project Name: 44 Hanover Street Client: Tom Watson & Co., LLC, prepared by Acorn Engineering, Inc..

b) Parcel C Owner shall, within thirty (30) days after receipt of the Easement Change Notice, notify Parcel B Owner in writing whether Parcel C Owner consents or does not consent to the New Access Easement. If Parcel C Owner consents to the New Access Easement, then Parcel B Owner and Parcel C Owner agree that they shall execute an agreement to be recorded in the Cumberland County Registry of Deeds which depicts and describes the New Access Easement (the "New Easement Memorandum") in form to which Parcel B Owner and Parcel C Owner consent, which consent shall not be unreasonably withheld by either party, as follows:

(i) Parcel B Owner shall send the New Easement Memorandum to Parcel C Owner and Parcel C Owner agrees that it shall within ten (10) days after the New Easement Memorandum is delivered to Parcel C Owner either execute and deliver the New Easement Memorandum to Parcel B Owner or notify Parcel B Owner that it objects to the New Easement Memorandum;

(ii) If Parcel C Owner objects to the New Easement Memorandum which Parcel B Owner submitted, it shall execute and deliver to Parcel B Owner a revised version of easement memorandum in form acceptable to Parcel C Owner within said ten (10) day period; and

(iii) Upon Parcel B Owner's receipt of the revised version of easement memorandum signed by Parcel C Owner, Parcel B Owner may either (a) execute the revised version of easement memorandum sent by Parcel C Owner to be recorded as the New Easement Memorandum, or (b) if Parcel B Owner contends Parcel C Owner unreasonably withheld its consent to the New Easement Memorandum, elect to arbitrate as provided herein, or (c) reach agreement with Parcel C Owner on an alternate form of memorandum to be recorded as the New Easement Memorandum.

The relocation of the Existing Easement to the New Access Easement shall be effective upon the earlier of recording of the New Easement Memorandum or an affidavit as set forth in Section 2(g).

c) If Parcel C Owner does not consent to the New Access Easement, Parcel C Owner shall notify Parcel B Owner in writing within thirty (30) days of receipt of the Easement Change Notice that Parcel C Owner does not consent and stating: (1) how the New Access Easement does not provide Reasonably Equivalent Access to Parking and (2) the changes Parcel C Owner requests be made to the New Access Easement, which if made, would result in the New Access Easement providing Reasonably Equivalent Access to Parking.

(i) Parcel C Owner and Parcel B Owner hereby agree that Parcel C Owner shall not be entitled to withhold consent nor object to the New Access Easement based on the width of the New Access Easement if it is a two-way easement at least eighteen (18) feet wide for its entire length or if it is a one-way easement, at least twelve (12) feet wide, and that a narrower width shall be grounds for withholding consent.

(ii) Parcel C Owner and Parcel B Owner hereby agree that Parcel C Owner shall not be entitled to withhold consent nor object to the New Access Easement solely based on the distance of the entry or exit of the New Access Easement from Parcel C, provided that it does not cross the 82 Hanover Street Property, and the entry or exit does not present a safety hazard, and does not otherwise provide materially inferior access to parking on Parcel C.

(iii) Parcel C Owner and Parcel B Owner hereby agree that if the New Access Easement does not comply with all laws, ordinances, and municipal land use provisions and requirements (except for any non-compliance for which Parcel B Owner will obtain municipal approval) it shall be grounds for Parcel C Owner withholding consent, provided that Parcel C Owner at the same time Parcel C Owner states that it will not consent, shall notify Parcel B Owner of any laws, ordinances, and municipal land use provisions and requirements with which Parcel C Owner contends the New Access Easement does not comply, and how it does not comply.

d) In the event Parcel C Owner does not notify Parcel B Owner within thirty (30) days after receipt of the Easement Change Notice whether Parcel C Owner consents or does not consent to the New Access Easement, then Parcel C Owner shall be deemed to consent to the New Access Easement, in which case the Parcel B Owner may prepare an affidavit for recording in the Cumberland County Registry of Deeds stating the date(s) on which the Easement Change Notice was given to Parcel C Owner (and including evidence of the date in which it was given, calculated as set forth in Section 6 of this Easement Deed attached as an exhibit thereto together with a depiction, or metes and bounds description or both, of the location of the New Access Easement), and upon recording of such affidavit, Parcel C Owner's consent to the New Access Easement shall be fully effective;

e) If Parcel C Owner timely notifies Parcel B Owner that Parcel C Owner does not consent to the New Access Easement and specifies changes Parcel C Owner reasonably contends should be made to it, then Parcel B Owner may elect to make the changes to the New Access Easement which Parcel C Owner specifies should be made or elect to proceed to binding arbitration as set forth in this Easement Deed, including, without limitation, in Section 5 if Parcel B Owner contends Parcel C Owner unreasonably withheld its consent. If Parcel B Owner elects to revise the easement, any such revised New Access Easement shall be submitted to Parcel C Owner as provided in Section 2(a) above and Parcel C Owner agrees not to unreasonably withhold, condition or delay its consent to any such revised New Access Easement. Parcel C Owner and Parcel B Owner agree to follow the procedures as set forth in Section 2(a) – (e) with respect to any proposed revised New Access Easement as though it were the first proposed New Access Easement.

f) Parcel C Owner shall not unreasonably withhold, condition or delay its consent to any New Access Easement submitted for its consideration, whether or not it is the first one, a revised one or any other one submitted thereafter (all of the foregoing are intended to be included within the meaning of, and shall be referred to hereinafter as, the "New Access Easement").

g) The New Access Easement shall be shown on an amendment to the Plan approved by the City of Portland Planning Staff, to be obtained by Parcel B Owner, after the recording of the New Easement Memorandum or recording of the affidavit described in subparagraph (d) above.

h) Definition. "Reasonably Equivalent Access to Parking" as used herein shall mean with respect to a proposed New Access Easement, that it provides access to the Parking Area reasonably equivalent to that provided by the above described Access Easement Area..

i) If Parcel B Owner contends that Parcel C Owner's refusal to consent to any easement or easement memorandum proposed by Parcel B Owner, including without limitation, any New Access Easement or New Easement Memorandum, is not reasonable, then Parcel B Owner shall be entitled to demand that such dispute between Parcel C Owner and Parcel B Owner be submitted to binding arbitration as its sole remedy except as otherwise provided herein. For the purposes of this paragraph, "refusal to consent," shall include, without limitation, a refusal to consent to any New Access Easement, or to any New

Easement Memorandum as well as refusal to consent to or execute any document relating thereto.

j) If Parcel B Owner elects to demand arbitration, it shall so notify Parcel C Owner in writing, and Parcel C Owner, within seven (7) days from the date of such notice may, by notice in writing to Parcel B Owner, withdraw Parcel C Owner's objection(s) and consent to the New Access Easement and New Easement Memorandum submitted by Parcel B Owner or the dispute will proceed to arbitration. If Parcel C Owner does not notify Parcel B Owner in writing that it so consents within seven (7) days as set forth above, Parcel B Owner may elect to submit the dispute to binding arbitration and Parcel C Owner expressly agrees that upon such election by Parcel B Owner, that the dispute shall then be submitted to, and be arbitrated by binding arbitration as set forth in this Easement Deed, including, without limitation, in Section 5 below.

3. **Sewer and Stormwater Drainage Easement**: Parcel B Owner hereby further grants to Parcel C Owner nonexclusive, appurtenant rights and easements in common with Parcel B Owner for sewer and stormwater drainage lines and related facilities and for repair and maintenance thereof, as more fully described below (the "Sewer & Drainage Easement"), over the following described drainage easement area (hereinafter referred to as the "Sewer & Drainage Easement Area") to run with the land and benefit Parcel C and provide an area for sewer lines and stormwater drainage and related facilities to Parcel C. The Sewer & Drainage Easement Area is bounded and described as follows:

A certain lot or parcel of land located on the northeasterly side of Parris Street in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a point on the northeasterly side of Parris Street, said point being located N 26°16'45" W by said Parris Street a distance of Thirty-Four and 45/100 (34.45) feet from an aluminum disk set at the northwesterly corner of land designated as "Parcel C" on the Plan. Thence:

1) N 26°16'45" W by said Parris Street a distance of One Hundred Sixty-Six and 68/100 (166.68) feet to a point;

2) N 63°43'15" E through land designated as "Parcel B" as delineated on said Plan a distance of Four and 37/100 (4.37) feet to a point;

3) S 36°39'09" E through said Parcel B a distance of Thirty-Seven and 93/100 (37.93) feet to a point;

4) S 26°16'45" E through said Parcel B a distance of Ninety-Three and 95/100 (93.95) feet to a point;

5) S 51°01'17" E through said Parcel B a distance of Sixty-Seven and 22/100 (67.22) feet to a point;

6) N 65°26'46" E through said Parcel B a distance of One Hundred Six and 88/100 (106.88) feet to a point;

7) S 24°33'14" E through said Parcel B a distance of Ten and 00/100 (10.00) feet to a point on the northwesterly sideline of said Parcel C;

8) S 65°26'46" W by said Parcel C a distance of One Hundred Twenty-One and 09/100 (121.09) feet to a point;

9) N 61°29'04" W through said Parcel B a distance of Forty-Three and 08/100 (43.08) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, West Zone, NAD83.

The above described easement contains approximately 3,895 square feet and lays over a portion of Parcel B.

Said Sewer & Drainage Easement is for the purpose of and conveying the right, but not the obligation, to perpetually repair and maintain conduits and/or pipelines, together with all necessary fixtures and appurtenances (the "Sewer & Drainage System"), for retaining, channeling, or conveying storm water and sewer water; together with the right, but not the obligation, subject to Parcel B Owner's approval which will not be unreasonably withheld, after reasonable prior notification and coordination with Parcel B Owner, to lay, relay, replace, repair, maintain, clean, and remove said storm water and sewer water conduit and/or pipelines and related fixtures and appurtenances; together with the right, but not the obligation, at all times to make connections with said drainage system on land, other than Parcel B Owner's land, adjoining said Sewer & Drainage Easement Area by means of pipes or other services; and together with the right, but not the obligation, to trim, cut down and remove trees, bushes, and other vegetation of all kinds, to remove debris and deposits of any kind and to alter and regrade the contours of said Sewer & Drainage Easement Area to such extent as Parcel C Owner determines is reasonably necessary or appropriate for any of the above purposes provided that the ground and any affected pavement is promptly restored to good and useable condition without change in grade or type of surface or any other material change to that previously existing unless consented to by Parcel B Owner; and to enter upon said Sewer & Drainage Easement Area at any and all times for any of the foregoing purposes. Reserving to the Parcel B Owner, the use and enjoyment of said Sewer & Drainage Easement Area for such purposes only as will not interfere temporarily or otherwise with the perpetual use thereof by the Parcel C Owner, its successors and assigns for the purpose above mentioned.

In the event that Parcel C Owner or Parcel B Owner conducts any construction, excavation or maintenance on or within any part of the Sewer & Drainage Easement Area or any New Sewer & Drainage Easement Area, as defined below, it shall not interfere with the other party's use for subsurface sewer purposes or subsurface drainage purposes of the Sewer & Drainage Easement Area or the New Sewer & Drainage Easement Area, without the other party's prior written consent, which shall not be unreasonably withheld, conditioned or delayed. The party conducting such construction, excavation or maintenance shall promptly repair and restore such Sewer & Drainage Easement Area and Sewer & Drainage System to good and useable condition, including, without limitation, any necessary paving, and shall pay all costs relating thereto without change in grade or type of surface or any other material change to that previously existing unless consented to by Parcel B Owner. In the event Parcel B Owner or Parcel C Owner contends that consent has been unreasonably withheld, conditioned or delayed with respect to the consent provisions of this subparagraph, either such owner may demand arbitration of such disputes.

4. **Parcel B Owner's Right to Relocate Sewer & Drainage Easement.**

Parcel B Owner hereby reserves the right, and shall have the right, at Parcel B Owner's sole cost and expense, to relocate and reconfigure the Sewer & Drainage Easement Area subject to Parcel C Owner's consent, which will not be unreasonably withheld, conditioned or delayed. Parcel B Owner shall have the right to relocate and reconfigure the Sewer & Drainage Easement Area, whether it is the owner of Parcel B or substantially all of Parcel B. In the event Parcel B Owner wishes to relocate the Sewer & Drainage Easement Area, Parcel B Owner shall proceed as follows:

a) Parcel B Owner shall notify Parcel C Owner in writing that Parcel B Owner wishes to relocate or reconfigure the Sewer & Drainage Easement Area (the "Sewer & Drainage Easement Change Notice") to a location or configuration different from that of the existing Sewer & Drainage Easement Area (the "Existing Sewer & Drainage Easement") and submit a plan and metes and bounds description to Parcel C Owner describing such proposed easement location to Parcel C Owner (hereinafter the "New Sewer & Drainage Easement"), which description shall state the location and width of the New Sewer & Drainage Easement and whether it enters from Hanover Street, Parris Street or some other location, together with such other details as Parcel B Owner shall elect to provide. Parcel C Owner and Parcel B Owner hereby agree that Parcel C Owner shall consent to the New Sewer & Drainage Easement unless Parcel C Owner reasonably determines the New Sewer & Drainage Easement does not provide reasonably equivalent rights to those of the Sewer & Drainage Easement Area and a reasonably equivalent Drainage and Sewer System to that depicted on the Plan (all of which hereinafter is referred to as "A Reasonably Equivalent Drainage and Sewer System");

b) Parcel C Owner shall within thirty (30) days after receipt of the Sewer & Drainage Easement Change Notice notify Parcel B Owner in writing whether Parcel C Owner consents or does not consent to the New Sewer and Drainage Easement. If Parcel C Owner consents to the New Sewer and Drainage Easement, then Parcel B Owner and Parcel C Owner agree that they shall execute an agreement to be recorded in the

Cumberland County Registry of Deeds which depicts and describes the New Sewer and Drainage Easement (the "New Sewer & Drainage Easement Memorandum") in form to which Parcel B Owner and Parcel C Owner consent, which consent shall not be unreasonably withheld by either party, as follows:

(i) Parcel B Owner shall send the New Sewer & Drainage Easement Memorandum to Parcel C Owner and Parcel C Owner agrees that it shall, within ten (10) days after the New Sewer & Drainage Easement Memorandum is delivered to Parcel C Owner either execute and deliver the New Sewer & Drainage Easement Memorandum to Parcel B Owner or notify Parcel B Owner that it objects to the New Sewer & Drainage Easement Memorandum;

(ii) If Parcel C Owner objects to the New Sewer & Drainage Easement Memorandum which Parcel B Owner submitted, it shall execute and deliver to Parcel B Owner a revised version of easement memorandum in form acceptable to Parcel C Owner within said ten (10) day period; and

(iii) Upon Parcel B Owner's receipt of the revised version of easement memorandum signed by Parcel C Owner, Parcel B Owner may either (a) execute the revised version of easement memorandum sent by Parcel C Owner to be recorded as the New Sewer & Drainage Easement Memorandum, (b) if Parcel B Owner contends Parcel C Owner unreasonably withheld, conditioned or delayed its consent to the New Sewer & Drainage Easement Memorandum, elect to arbitrate as provided herein, or (c) reach agreement with Parcel C Owner on an alternate form of memorandum to be recorded as the New Sewer & Drainage Easement Memorandum.

The relocation of the Existing Easement to the New Access Easement shall be effective upon the earlier of recording of the New Sewer & Drainage Easement Memorandum or an affidavit as set forth in Section 4(d).

c) If Parcel C Owner does not consent to the New Sewer & Drainage Easement, Parcel C Owner shall notify Parcel B Owner in writing within thirty (30) days of receipt of the Sewer & Drainage Easement Change Notice that Parcel C Owner does not consent and stating: (1) how the New Sewer & Drainage Easement does not provide A Reasonably Equivalent Drainage and Sewer System and (2) the changes Parcel C Owner requests be made to the New Sewer & Drainage Easement, which if made, would result in the New Sewer & Drainage Easement providing A Reasonably Equivalent Drainage and Sewer System.

(i) Parcel C Owner and Parcel B Owner hereby agree that if the New Sewer & Drainage Easement does not comply with all laws, ordinances, and municipal land use provisions and requirements (except for any non-compliance for which Parcel B Owner will obtain municipal approval) such non-compliance shall be grounds for Parcel C Owner to withhold consent, provided that Parcel C Owner shall notify Parcel B Owner, at the same time it notifies Parcel B

Owner that it does not consent, of any laws, ordinances and municipal land use provisions and requirements with which Parcel C Owner contends the New Sewer & Drainage Easement does not comply and how it does not comply.

d) In the event Parcel C Owner does not notify Parcel B Owner within thirty (30) days after receipt of the Easement Change Notice whether Parcel C Owner consents or does not consent to the New Sewer & Drainage Easement, then Parcel C Owner shall be deemed to consent to the New Sewer & Drainage Easement, in which case the Parcel B Owner may prepare an affidavit for recording in the Cumberland County Registry of Deeds stating the date(s) on which the Sewer & Drainage Easement Change Notice was given to Parcel C Owner and including evidence of the date in which it was given, calculated as set forth in Section 6 of this Easement Deed attached as an exhibit thereto, together with a depiction, or metes and bounds description or both, of the New Sewer & Drainage Easement and upon recording of such affidavit, Parcel C Owner's consent to the New Sewer & Drainage Easement shall be fully effective;

e) If Parcel C Owner timely notifies Parcel B Owner that Parcel C Owner does not consent to the New Sewer & Drainage Easement and specifies changes Parcel C Owner reasonably contends should be made to it, then Parcel B Owner may elect to make the changes to the New Sewer & Drainage Easement Parcel C Owner specifies should be made, or elect to proceed to binding arbitration as set forth in Section 5 of this Easement Deed, if Parcel B Owner contends Parcel C Owner unreasonably withheld, conditioned or delayed its consent. If Parcel B Owner elects to revise the easement, any such revised New Sewer & Drainage Easement shall be submitted to Parcel C Owner as provided in Section 4(a) above and Parcel C Owner agrees not to unreasonably withhold its consent to any such revised New Sewer & Drainage Easement. Parcel C Owner and Parcel B Owner agree to follow the procedures as set forth in Section 4(a) – (e) with respect to any revised New Sewer & Drainage Easement as though it were the first proposed Sewer & Drainage Easement.

f) Parcel C Owner shall not unreasonably withhold, condition or delay its consent to any New Sewer & Drainage Easement submitted for its consideration, whether or not it is the first one, a revised one or any such other one submitted thereafter (all of the foregoing are intended to be included within the meaning of, and shall hereinafter be referred to as, the "New Sewer & Drainage Easement").

g) The New Sewer & Drainage Easement shall be shown on an amendment to the Plan approved by the City of Portland Planning Staff, to be obtained by Parcel B Owner, after the recording of the New Sewer & Drainage Easement Memorandum or recording of the affidavit described in subparagraph (d) above.

h) Definition: "A Reasonably Equivalent Drainage and Sewer System" as used herein shall mean with respect to a proposed New Sewer & Drainage Easement, that it provides reasonably equivalent sewerage and drainage as the above described Sewer & Drainage Easement Area to the drainage and sewer system on Parcel C depicted on the Plan (the

"Drainage and Sewer System") (such reasonably equivalent access to the Drainage and Sewer System is referred to herein as "A Reasonably Equivalent Drainage and Sewer System").

i) If Parcel B Owner contends that Parcel C Owner's refusal to consent to any easement proposed by Parcel B Owner including without limitation, any New Sewer & Drainage Easement or revised Sewer & Drainage Easement is not reasonable, then Parcel B Owner shall be entitled to demand that the dispute between Parcel C Owner and Parcel B Owner be submitted to binding arbitration as its sole remedy, except as otherwise provided herein. For the purposes of this paragraph, "refusal to consent," shall include, without limitation, a refusal to consent to any New Sewer & Drainage Easement, or to the New Sewer & Drainage Easement Memorandum as well as refusal to consent to or execute either of them or any document(s) relating thereto.

j) If Parcel B Owner elects to demand arbitration, it shall so notify Parcel C Owner in writing, and Parcel C Owner within seven (7) days from the date of such notice may, by notice in writing to Parcel B Owner, withdraw Parcel C Owner's objection(s) and consent to the New Sewer & Drainage Easement and the Sewer and Drainage Easement Memorandum or the dispute will proceed to arbitration. If Parcel C Owner does not notify Parcel B Owner in writing that it so consents within seven (7) days as set forth above, Parcel B Owner may elect to submit the dispute to binding arbitration and Parcel C Owner expressly agrees that upon such election by Parcel B Owner, that the dispute shall then be submitted to, and be arbitrated by binding arbitration as set forth herein, including, without limitation, in Section 5 of this Easement Deed, "Arbitration."

5. Arbitration

Parcel B Owner and Parcel C Owner agree that Parcel B Owner may elect to arbitrate any dispute regarding any matter for which this Easement Deed provides that consent shall not be unreasonably withheld, conditioned or delayed and regarding which Parcel B Owner contends consent has been unreasonably withheld, conditioned or delayed, including, without limitation with respect to any proposed easement, memorandum, document or other matter for which this Easement Deed provides that consent is not to be unreasonably withheld, conditioned or delayed. In the event Parcel B Owner elects to demand arbitration with respect to any such matter in this Easement Deed, the selection of the Arbitrator and the Arbitration shall proceed as follows:

a) When Parcel B Owner elects to submit the dispute to arbitration, Parcel B Owner shall notify Parcel C Owner of its selection of an arbitrator who shall be an attorney experienced in arbitration and/or mediation located in Portland, Maine ("Qualified Attorney"). Within ten (10) days of Parcel B Owner's notice, Parcel C Owner shall notify Parcel B Owner whether it consents to the attorney selected by Parcel B Owner, or if not, notify Parcel B Owner in writing of the Qualified Attorney it requests ("Parcel C Owner's Selection Notice"). In the event Parcel C Owner does not deliver Parcel C Owner's Selection Notice to Parcel B Owner within said ten (10) days, Parcel C Owner will be deemed to consent to the attorney selected by Parcel B Owner to act as arbitrator.

b) In the event Parcel C Owner and Parcel B Owner shall each select an attorney but do not agree upon one of the two selected attorneys to act as arbitrator within ten (10) days of the date of Parcel C Owner's Selection Notice, then the attorneys selected by Parcel C Owner and Parcel B Owner shall, within twenty-one (21) days of Parcel C Owner's Selection Notice, select a third Qualified Attorney to serve as sole arbitrator of the dispute between Parcel C Owner and Parcel B Owner. In the event an arbitrator is not selected within twenty-one (21) days of Parcel C Owner's Selection Notice as set forth above, Parcel C Owner and Parcel B Owner agree to work in good faith with the attorneys each of them has selected as set forth above to cause them to select a Qualified Attorney to act as sole arbitrator as soon as possible.

c) If after the expiration of thirty (30) days after the date of Parcel C Owner's Selection Notice no arbitrator has (i) been selected and (ii) agreed to serve as sole arbitrator, either Parcel C Owner or Parcel B Owner may elect to use the American Arbitration Association for arbitrator selection purposes only to select a Qualified Attorney to act as arbitrator, and once the arbitrator is selected, the arbitration shall proceed as provided in this Easement Deed.

d) As a prerequisite of a Qualified Attorney's appointment as arbitrator, the Qualified Attorney shall agree to hear and rule on the dispute (the "Easement Dispute") within thirty (30) days of his or her appointment

e) The selected arbitrator (hereinafter the "Arbitrator") shall be empowered to determine whether Parcel C Owner reasonably or unreasonably withheld, conditioned or delayed its consent to, or reasonably or unreasonably refused to execute, any easement proposed by Parcel B Owner, including, without limitation, any New Access Easement, any New Sewer & Drainage Easement, any New Access Easement Memorandum, any New Sewer & Drainage Easement Memorandum or any other document or agreement relating to any of the foregoing (all of which hereinafter are collectively referred to as the "New Easement Documents"), or any other matter for which this Easement Deed provides consent is not to be unreasonably withheld, conditioned or delayed. Parcel C Owner and Parcel B Owner agree that this paragraph shall be liberally construed to permit the Arbitrator to hear any dispute regarding Parcel C Owner's refusal to consent to or execute any easement, memorandum, agreement, document or other matter for which this Easement Deed provides consent is not to be unreasonably withheld, conditioned or delayed.

f) In the event the Arbitrator determines that Parcel C Owner unreasonably withheld, conditioned or delayed its consent to one or more of the New Easement Documents or unreasonably refused to execute one or more of the New Easement Documents, then the Arbitrator shall enter an order, including, without limitation, the following:

(i) that Parcel C Owner shall within ten (10) days of the date of the order consent to, execute and deliver to Parcel B Owner, any of the New Easement Documents which Parcel C Owner has unreasonably refused to consent to or unreasonably refused to execute, together with such other documents as shall be

specified by the Arbitrator including, without limitation, any documents necessary to give effect to the easement described in the New Easement Documents at issue in the arbitration (including, without limitation, any memoranda or agreements for recording, and Parcel C Owner hereby agrees to comply with any such order;

(ii) If such order directs Parcel C Owner to consent to and execute any New Access Easement or New Sewer & Drainage Easement, then the arbitration order shall also direct that Parcel C Owner execute and deliver to Parcel B Owner a memorandum for recording in form acceptable to Parcel B Owner, depicting and describing the New Access Easement or New Sewer & Drainage Easement, or both, as applicable;

(iii) That in the event Parcel C Owner shall not comply with any such order within (10) days, that Parcel B Owner shall be entitled to record an affidavit, in the Cumberland County Registry of Deeds, attaching a copy of the Arbitrator's order, together with a depiction, or metes and bounds description or both, of the easement or easements ruled upon by the Arbitrator and upon such recording, Parcel C Owner's consent to the New Easement Documents listed in the Arbitrator's order, shall be fully effective and the relocation of the Access Easement to the New Access Easement Location and/or the Sewer & Drainage Easement to the New Sewer & Drainage Easement location, as applicable, shall also be fully effective upon such recording;

(iv) The order shall further state that Parcel C Owner shall pay Parcel B Owner's reasonable attorneys' fees incurred in connection with the arbitration and costs of arbitration; and

(v) The order shall include such other and further matters as the Arbitrator shall determine to be appropriate, including any orders necessary to give full effect to any easements, memoranda or agreements ordered to be consented to and executed.

f) If the Arbitrator rules that Parcel C Owner reasonably withheld its consent to all of the New Easement Documents on which Parcel B Owner sought a ruling that such consent was unreasonably withheld, then, the Arbitrator shall order that Parcel B Owner shall pay Parcel C Owner's reasonable attorneys' fees incurred in connection with the arbitration and costs of arbitration.

g) Parcel C Owner and Parcel B Owner agree that the following general provisions shall apply to the arbitration:

(i) The arbitration shall be held in Portland, Maine. Parcel C Owner and Parcel B Owner each agree to cooperate with the arbitration process and arbitrate in good faith and each shall initially be responsible for paying one-half of the arbitrator's fees.

(ii) Parcel C Owner and Parcel B Owner hereby agree that: (a) with respect to any matter to be arbitrated under the terms of this Easement Deed they waive any objection to arbitration of such matters together with any right to remove or transfer any such matter to State or Federal Court; (b) they each agree to consent to a motion filed in State or Federal Court to compel arbitration of a matter or dispute which is to be arbitrated under the terms of this Easement Deed; and (c) they each waive any right to consolidate matters to be arbitrated under this Easement Deed with a proceeding in any State or Federal Court.

(iii) In the event Parcel C Owner shall object to, oppose, or refuse to arbitrate any dispute between Parcel C Owner and Parcel B Owner arising out of Parcel C Owner's withholding of consent or refusal to consent to any easement, memorandum, document or other matter for which this Easement Deed provides that consent is not be unreasonably withheld, and arbitration of such dispute does not occur within ninety (90) days of Parcel B Owner's demand for arbitration regarding such dispute, then notwithstanding anything else contained here Parcel B Owner shall be entitled to file a civil action in Maine State or Federal Court to pursue the claims it would otherwise be required to arbitrate hereunder, and if it is the prevailing party in such action, shall be entitled to be awarded its reasonable attorney's fees and costs.

(iv) The parties shall be entitled to enforce any order entered by the Arbitrator in a court of law.

h) **Mediation.** Parcel B Owner and Parcel C Owner agree to submit any dispute arising out of, relating to, or in connection with this Easement Deed from 52 Hanover, LLC to the City of Portland to non-binding mediation, as a precondition to any arbitration provided for under this Easement Deed and Agreement. Parcel B Owner and Parcel C Owner hereby agree and are bound to mediate in good faith and pay their respective mediation fees. If, following a written request to mediate, either party shall refuse to mediate then the party requesting mediation shall be entitled, at its election, to proceed to arbitration as provided under the terms of this Easement Deed & Agreement. If either party shall fail to agree that it will mediate within thirty (30) days of a written request to mediate, such failure to agree shall be deemed a refusal to mediate within the meaning of this Section.

6. Notices. Any notice, consent, approval, waiver, statement, demand, document, easement description, memorandum or other material communication provided for in this Easement Deed to be given or delivered by the Parcel B Owner or Parcel C Owner to any of the other of them shall be in writing (each a "**Notice**"). Notices shall be sent by (i) registered or certified mail, addressed to the recipient with return receipt requested, (ii) by overnight mail via a national overnight mail service such as Fedex or UPS, (iii) delivery to the recipient in person or by courier, (iv) by facsimile transmission or e-mail to the recipient which is confirmed by a Notice provided under (i), (ii) or (iii) sent that same day if telecopied or e-mailed before 5:00 p.m. Portland, Maine time on a business day, and otherwise on the next business day. The addresses used shall be as follows:

Parcel B Owner:	52 Hanover, LLC c/o Thomas E. Watson 104 Grant Street Portland, ME 04101 Facsimile: (207) 761-8048 Tom@portpropmgt.com
Copy to:	William H. Leete, Jr., Esquire Leete & Lemieux, P.A. P.O. Box 7740 Portland, ME 04112 Facsimile: (207) 879-9445 Wleete@leelem.com
Parcel C Owner:	City Manager City of Portland 389 Congress Street Portland, ME 04101
Copy to:	Office of Corporation Counsel at same address.

Notices shall be deemed given, delivered and received (x) two (2) calendar days after the date mailed by postage prepaid registered or certified mail, (y) upon delivery if delivered in hand or by courier (delivery charges prepaid) and the next business day if sent by overnight mail, or (z) that same business day if sent by facsimile transmission or via electronic mail and received by the recipient prior to 5:00 p.m. which email or facsimile transmission is confirmed as provided in this Section 6, or if the facsimile transmission or email is received after 5:00 p.m., and is confirmed as provided in this Section 6, the first business day following transmission of such facsimile or email. Any party to this Easement Deed may notify any other party of a change of address in the manner provided for Notices. Whenever any Notice is required to be given, a written waiver thereof signed by the Person entitled to Notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such Notice.

7. Section. The term "Section" as used in this Easement Deed shall refer to the applicable Section of this Easement Deed.

8. Easements and Agreements Binding. The easement rights, obligations and restrictions created in this Easement Deed shall be rights, obligations and restrictions running with the land and such easement rights, obligations and restrictions together with all agreements and terms set forth herein shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, 52 Hanover, LLC and the City of Portland have caused this Easement Deed and Agreement to be executed by their duly authorized representatives on this __ day of December, 2018.

52 HANOVER, LLC

By: Thomas E. Watson, Its Manager

STATE OF MAINE
Cumberland County, ss.

December 13 2018

Personally appeared the above named Thomas E. Watson, Manager of 52 Hanover, LLC and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of 52 Hanover, LLC.

Before me,

~~Notary Public~~/Attorney at Law
Print Name: William Leete
~~My commission expires:~~

CITY OF PORTLAND

By: _____
Jon P. Jennings
Its City Manager

STATE OF MAINE
Cumberland County, ss.

December 12, 2018

Personally appeared the above-named Jon P. Jennings, City Manager of the City of Portland, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity, and the free act and deed of said City of Portland.

Before me,

_____
~~Attorney-at-Law~~/Notary Public
Commission Expires:
Print Name:

SONIA T. BEAN
NOTARY PUBLIC
State of Maine
My Commission Expires
April 8, 2024

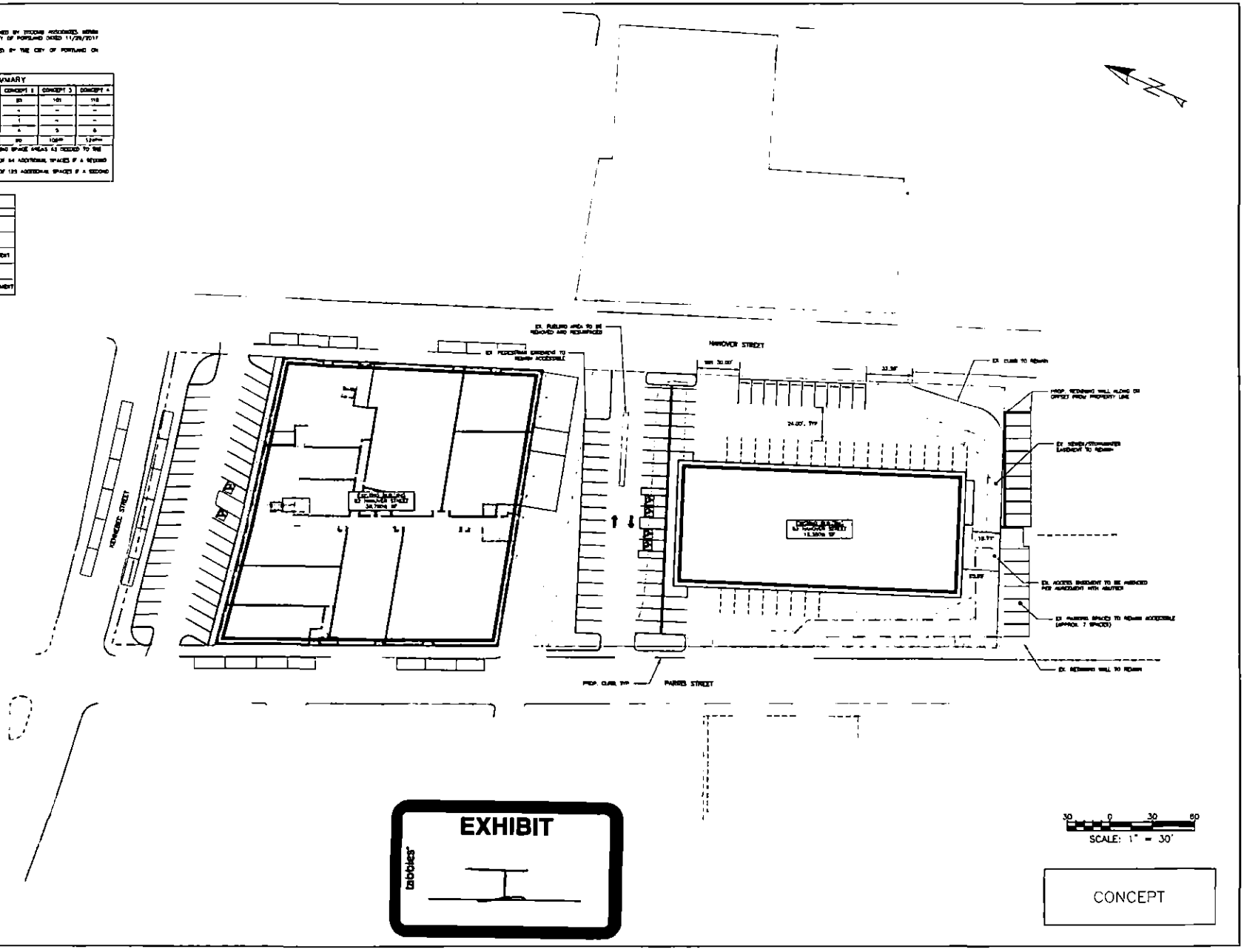
GENERAL NOTES:

1. EXISTING EASEMENTS AND EASEMENTS AS DEFINED BY RECORD RECORDED WITH THE SUBMISSION PLAT DEVELOPED FOR THE CITY OF PORTLAND DATED 11/28/2017 AND LAST REVISED 3/24/2018
2. FINAL LISTING FOR 32 HANOVER AS PERMITTED BY THE CITY OF PORTLAND ON 3/23/18 (20-4-042).

PARKING SUMMARY					
PARKING DIMENSION	EX HANOVER	CONCEPT 1	CONCEPT 2	CONCEPT 3	CONCEPT 4
STANDARD (9'X18')	18	49	89	101	118
LARGE UNIT (10'X18')		34	-	-	-
COMPACT (8'X15')	18	-	1	-	-
ADA (8'X18')	2	7	4	5	6
TOTAL SPACES*	38	77	90	106**	124***

*TOTAL SPACE COUNT EXCLUDES THE 6 & 7 PARKING SPACE AREAS AS DEEDED TO THE ABUTTING PROPERTY
**TOTAL SPACE CAN BE INCREASED BY UPWARDS OF 84 ADDITIONAL SPACES IF A SECOND STORY GARAGE IS ADDED
***TOTAL SPACE CAN BE INCREASED BY UPWARDS OF 125 ADDITIONAL SPACES IF A SECOND STORY GARAGE IS ADDED

LEGEND	
MATCH STYLE	ASSOCIATED AREAS
	BUILDING FOOTPRINT
	EX. ACCESS EASEMENT
	EX. SEWER/STORMWATER EASEMENT
	PROP. ACCESS EASEMENT
	PROP. SEWER/STORMWATER EASEMENT



ISSUED FOR	BY	DATE
CLIENT REVIEW		

REVISION	BY	DATE

SITE PLAN CONCEPT – 1

44 HANOVER STREET

TOM WATSON & CO., LLC
PORTLAND, ME

FILE: CIVIL_1093
JN: 1093
SCALE: 1"=30'
DESIGNED BY: DJD
DRAWN BY: DJD
CHECKED BY: BRG

DRAWING NO.
C-01

Doc#: 63329 Bk:35353 Pg: 257

GENERAL NOTES:

1. EXISTING CONDITIONS AND EASEMENTS AS DEPICTED BY SURVEYING ACCOMPLISHED WITHIN THE SUBDIVISION PLAT DEVELOPED FOR THE CITY OF PORTLAND DATED 11/29/2017 AND LAST REVISED 1/24/2018.
2. FINAL LAYOUT FOR 42 HANOVER AS PERMITTED BY THE CITY OF PORTLAND ON 3/13/18 (2018-0-2)

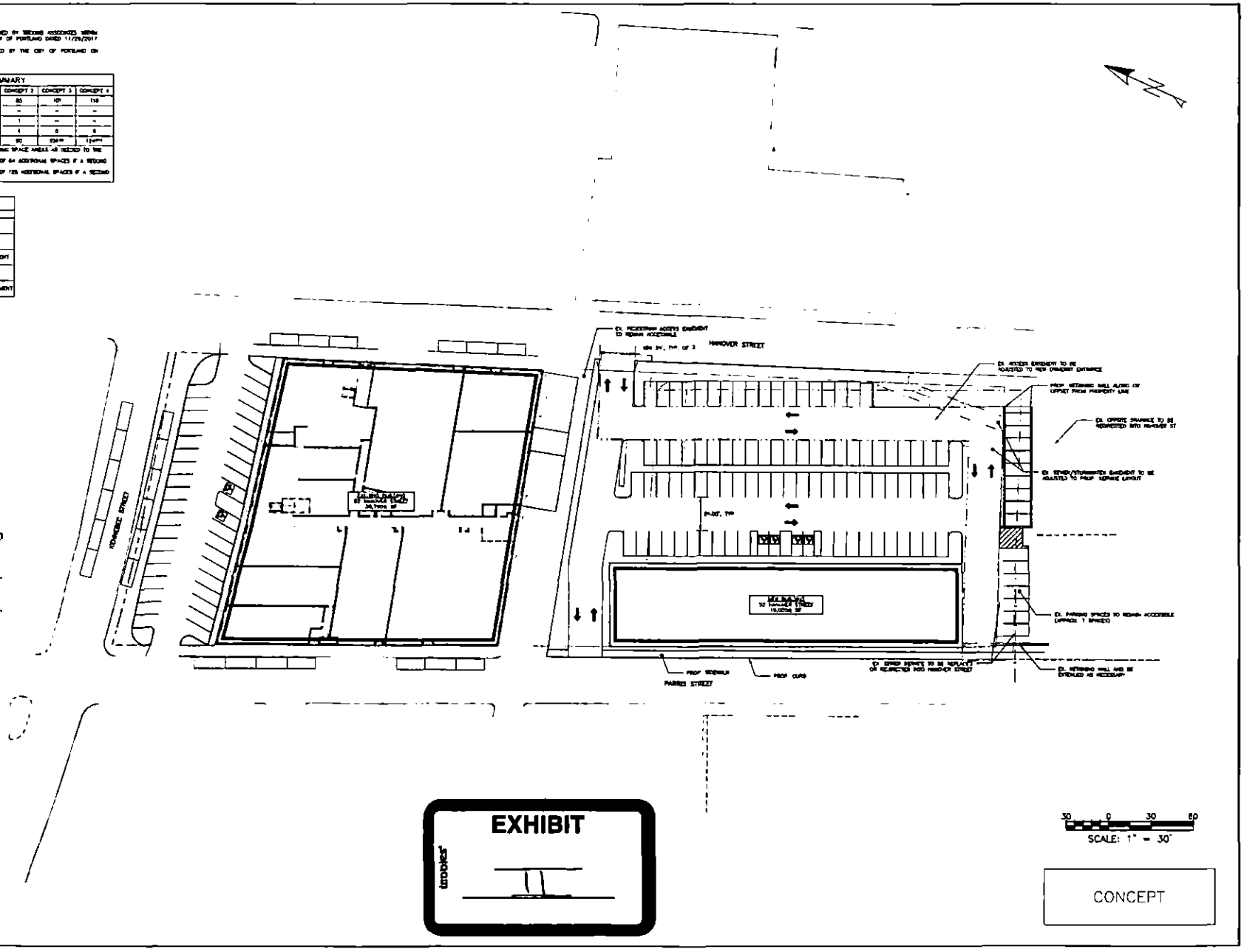
PARKING SUMMARY

PARKING DIMENSION	42 HANOVER	CONCEPT 1	CONCEPT 2	CONCEPT 3	CONCEPT 4
STANDARD (9'x18')	79	48	85	107	110
LARGE UNIT (10'x19')		24	-	-	-
COMPACT (7'x15')	18	-	1	-	-
ADA (8'x18')	2	1	4	3	6
TOTAL SPACES*	99	73	90	104**	116***

*TOTAL SPACE COUNT EXCLUDES THE 8 & 7 PARKING SPACE AREAS AS DEEDED TO THE ABUTTING PROPERTY
**TOTAL SPACE CAN BE INCREASED BY UPWARDS OF 64 ADDITIONAL SPACES IF A SECOND STORY GARAGE IS ADDED
***TOTAL SPACE CAN BE INCREASED BY UPWARDS OF 125 ADDITIONAL SPACES IF A SECOND STORY GARAGE IS ADDED

LEGEND

HATCH STYLE	ASSOCIATED AREAS
	BUILDING FOOTPRINT
	EX. ACCESS EASEMENT
	EX. SEWER/STORMWATER EASEMENT
	PROP. ACCESS EASEMENT
	PROP. SEWER/STORMWATER EASEMENT



EXHIBIT

CONCEPT

ISSUED FOR CLIENT REVIEW

REVISION

SITE PLAN CONCEPT ~ 2

44 HANOVER STREET

TOM WATSON & CO., LLC

PORTLAND, ME

DRAWING NO. C-02

FILE: CME_1093
JOB: 1093
SCALE: 1"=30'
DESIGNED BY: DJD
DRAWN BY: DJD
CHECKED BY: MHS

Received
Recorded Register of Deeds
Dec 14,2018 01:16:35P
Cumberland County
Nancy A. Lane

Doc#: 63328 Bk:35353 Pg: 259

BERN
STEIN
SHUR

Bernstein, Shur,
Sawyer & Nelson, P.A.
100 Middle Street
PO Box 9729
Portland, ME 04104-5029

T (207) 774 - 1200
F (207) 774 - 1127

Hawley Strait
Shareholder
207-228-7118 direct
hstrait@bernsteinshur.com

September 24, 2020

City of Portland, Maine
Department of Planning and Urban Development
Planning Division
389 Congress Street, 4th Floor
Portland, ME 04101

Re: 52 Hanover Street Easement Relocation

Dear Ladies and Gentlemen:

Our firm represents Tom Watson & Co., LLC and its affiliated entity 52 Hanover, LLC ("52 Hanover"), a Maine limited liability company and the owner of real property at 52 Hanover Street and a party to that certain Easement Deed from 52 Hanover, LLC to City of Portland and Agreement dated as of December 13, 2018 and recorded in the Cumberland County Registry of Deeds in Book 35353, Page 239 (the "Easement Deed"). The Easement Deed has since been assigned from the City of Portland to the current owner of the real property at 55 Portland Street, 55 Portland Preble Street, LLC ("Preble Street").

The Easement Deed provides for certain access and sewer and stormwater drainage easements (the "Easements") which burden 52 Hanover's property and benefit Preble Street's property and the current location of such Easements are described in detail in the Easement Deed. Based on the extensive language included in the Easement Deed, 52 Hanover has the right to relocate these Easements and under the terms of the Easement Deed, Preble Street cannot withhold its consent nor object to the relocation so long as it provides reasonably equivalent access to parking at the rear of Preble Street's property and certain other requirements are satisfied with the relocated easement plan.

52 Hanover has prepared a proposed relocation plan (the "Relocation Plan") for the Easements and this Relocation Plan has been presented to Preble Street for its review. The Relocation Plan relocates the Easements in order to allow 52 Hanover to re-develop its property as contemplated by the site plan application recently submitted to this Department by Tom Watson & Co., LLC and 52 Hanover. We believe that the Relocation Plan complies with the terms and conditions for relocation as provided in the Easement Deed and therefore Preble Street cannot unreasonably withhold, condition or delay its consent to this proposal. Pursuant to the Easement Deed, we will

prepare an amendment of the Easement Deed to memorialize the relocation of the Easements and we intend to work with Preble Street to finalize the terms of this amendment for execution by both 52 Hanover and Preble Street as soon as possible.

If you have any questions or need more information about the Easement Deed and the discussions with Preble Street regarding the relocation, please do not hesitate to contact me.

Sincerely,

Hawley R. Strait

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.
Technical Manual 1.14	Minimum aisle width of 24' for 90 degree parking spaces	We are requesting to reduce the minimum allowable aisle width to 22.6'.	Due to the urban environment and tendency to drive smaller, compact cars, the parking layout has been tailored to the site to provide two functional levels of covered parking.

G. Financial Capacity

Please find attached the status of good standing from the Secretary of State and letter from the Applicant's bank.

Interactive Corporate Services

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Tue Sep 15 2020 12:50:32. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
TOM WATSON & CO., LLC	20062993DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
04/11/2006	N/A	MAINE

Other Names **(A=Assumed ; F=Former)**

NONE

Clerk/Registered Agent

WILLIAM H LEETE
MITTEL ASEN, LLC
85 EXCHANGE STREET
PORTLAND, ME 04101

Back to previous screen | New Search

Click on a link to obtain additional information.

List of Filings	View list of filings	
Obtain additional information:		
Additional Addresses	Plain Copy	Certified copy
Certificate of Existence (more info)	Short Form without amendments ($30.00)	Long Form with amendments ($30.00)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files.
If you encounter problems, visit the troubleshooting page.

Get Acrobat Reader

If you encounter technical difficulties while using these services, please contact the Webmaster. If you are unable to find the information you need through the resources provided on this web site,

TD Bank
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One Portland Square
P.O. Box 9540
Portland, ME 04112-9540
T 207 761 8600
F 207 761 8660

tdbank.com

September 17, 2020

City of Portland Planning Division

389 Congress Street, 4th Floor

Portland, ME 04101

RE: 52 Hanover Project

To whom it may concern,

Tom Watson and his affiliates are well known to TD Bank, NA. Tom has been a client of TD Bank since the 1990s and we have helped finance many successful projects for him. The Bank is interested in entertaining financing for Tom Watson and, who has significant financial resources for a project of this nature. We are looking forward to more substantive conversations as this project materializes.

Please feel free to contact me should you need any additional information. I can be reached at (207) 756-6804 or colin.march@td.com.

Sincerely,

Colin March

Senior Relationship Manager

TD Bank

H. Technical Capacity

Acorn Engineering, Inc. has successfully permitted and provided civil/site engineering for over 20 Level II/III projects in Portland over the past 5 years. Some examples include:

- Eldredge Lumber
- 127 York Street – Harborside Townhomes
- Munjoy Heights
- 70 Anderson St.
- 89 Anderson St. – East Bayside Lofts
- 667 Congress St – The Hiawatha

I. Conformity with Land Use Ordinance

The following outline is made in accordance with the City of Portland Code of Ordinances, Chapter 14 Land Use, Article V Section 14-526.

OVERVIEW

The proposed mixed-use building has been designed to conform to City standards where possible, as well as improve upon existing non-conformities. This project conforms with the majority of the applicable standards of Portland's Land Use Ordinance Section 14-526 as demonstrated in the following narrative.

(a) Transportation Standards

1. Impact on Surrounding Street Systems:

   The site is located along Hanover and Parris Streets. Both streets are classified as local streets according to the City of Portland Federal Street Classification map. A moderate traffic increase is expected for this project due to the change in use of the existing building. However, the increase will be caused by standard vehicles as opposed to the current condition where large vehicles such as plow trucks and maintenance trucks utilize the property. Congestion of the intersections is not anticipated. Please refer to Section T. Traffic Memo for more information. A Traffic Movement Permit (TMP) will be filed with the City in the coming weeks due to the net increase of over 100 trips in the peak hour for the weekend condition.

2. Access and Circulation:

   a. Site Access and Circulation:

      This project conforms with the design standards of Section 14-526 as demonstrated in the following standards:

      (i) The development will provide safe access and internal circulation for both pedestrians and vehicles as seen on the Site Plan. Given the building's orientation and proximity to the public ROW, the site is ideal for pedestrian use.

      (ii) The existing parking areas can be accessed from both Hanover and Parris Streets. There are two proposed driveways to the two levels of covered parking: one from Hanover St and one from Parris St, as shown on sheet C-10, Site Plan – Ground Floor, and C-11, Site Plan – Second Floor. The functionality of all internal vehicle movements has been verified with AutoTurn, a computer program that models the turning templates and radii of various types of vehicles.

(iii) The site does not feature drive up services as mentioned in this requirement.

b. Loading and Servicing:

(i) Loading and unloading areas for the retail stores will be accommodated within the existing street parking along the project's Hanover and Parris Street frontages during off hours.

c. Sidewalks:

(i) Concrete sidewalks exist along Parris and Hanover Street. Extension of both sidewalks is proposed, as seen on the Site Plan, to connect the sidewalk network to the site.

(ii) The existing sidewalks proposed to be rebuilt will be rebuilt in conformance with City standards.

(iii) A brick patio (courtyard) proposed along the north entrance of the building (Lancaster Court) which will connect the public sidewalks along Parris and Hanover Street to the south of the 10' midblock pedestrian and bicycle easement. The existing sidewalks along Hanover and Parris Street provide access to the east and west sides of the building. Please refer to the Site Plan, Sheet C-10, for more information.

3. Public Transit Access:

a. Not applicable.

b. Not applicable.

c. Not applicable.

4. Parking:

a. Location and Required Number of Vehicle Parking Spaces:

(i) The proposed project will provide 194 parking spaces which is anticipated to meet the requirements of the proposed uses within the new building while also providing parking for the adjacent 82 Hanover development. Please refer to Section S for more information regarding the parking analysis. Consistent with the Land Use ordinance, the parking requirement will be determined by the Planning Board based upon the Applicant's analysis and the City's Transportation Engineer's review.

(ii) Although not specifically required within this zone or land use, Transportation Demand Management (TDM) strategies will be implemented as identified in Section U.

(iii) Please refer to Section S, Parking Assessment, for information on how the proposed parking meets anticipated demand.

(iv) The parking space and aisle dimensions are in conformance with the Technical Standards. Please refer to the Site Plan for more information.

(v) The driveway and parking areas will be constructed of bituminous pavement which will drain water without eroding.

b. Location and Required Number of Bicycle Parking Spaces:

(i) Approximately 80 bicycle spaces are proposed for the 171 residential units along with a bicycle repair area and extra space for strollers and other bicycle accessories. The site plan also includes a plethora of public exterior bicycle hitches along both public frontages as well as the courtyard. Please refer to the Site Plan and TDM Plan for more information.

c. Motorcycles and Scooter Parking:

(i) There are no areas specifically designated for motorcycles or scooters at this time; however, parking is available through the on-site parking stalls, flex space within the parking decks, and on-street parking.

d. Snow Storage:

(i) Due to the limited amount of space not occupied by a building within the parcel, a formal snow storage area is not proposed or necessary. The Owner will be responsible for managing snow at their discretion and/or coordinating snow removal from the site when necessary.

(ii) Not applicable.

5. Transportation Demand Management (TDM):

a. A Transportation Demand Management plan has been included with this application in Section U as a courtesy and best practice.

b. The TDM plan includes trip reduction strategies such as those identified in this section.

c. The proposed development complies with the standards identified in this section.

(b) Environmental Quality Standards

1. Preservation of Significant Natural Features:

a. Not applicable.

b. Not applicable.

2. Landscaping and Landscaping Preservation:

a. Landscape Preservation.

(i) There are no existing trees or vegetation within the project parcel.

(ii) There are no trees 10 inches DBH or greater within the property.

(iii) It is not anticipated that the project will necessitate any tree protection.

(iv) A waiver is not requested.

(v) Not applicable.

b. Site Landscaping.

(i) Landscaped Buffers:

a. All solid waste locations will be located inside the building. Furthermore, the proposed transformer and existing transformer are anticipated to be screened by a decorative fencing or screening.

b. The project has a total frontage of 619 linear feet along Hanover and Parris Streets. It is required that a minimum of six shrubs or shrub alternatives per 45 feet of frontage are planted, therefore 83 shrubs are required. Landscaping has been incorporated into the design through a combination of landscaping within the setbacks and Lancaster Court. Additionally, planter boxes will be installed along the courtyard in addition to a generous tree program. Furthermore, "green roof" plantings are proposed within the areas designed for accessible roof deck area. These measures collectively are anticipated to meet the requirement.

c. Not applicable.

d. Not applicable.

(ii) Parking Lot Landscaping:

a. Not applicable.

b. Not applicable.

c. Not applicable.

d. Not applicable.

(iii) Street Trees:

a. One street tree is to be provided per unit within the public right of way. This ratio equates to 171 trees. Given the limited frontage relative to the requirement, 19 street trees are proposed including the trees along the public pedestrian easement. As a substitute for further trees, the development team is exploring public art, green walls, and other vertical vegetative measures to enhance the streetscape in lieu of trees.

b. The Applicant is requesting that the money spend on the public art and green wall systems that will enhance Parris Street be put towards the $400 fee-in-lieu that is traditionally assigned to – in this case – the missing 152 trees as allowed in the ordinance.

3. Water Quality, Stormwater Management and Erosion Control:

a. Stormwater

(i) The site drainage will not be directed to flow or pond onto adjacent lots. The drainage patterns will largely be maintained as they currently exist. Furthermore, impervious area on the site will be decreased, reducing runoff from the site.

(ii) Any stormwater that flows onto adjacent lots will not exceed the pre-development flows.

(iii) The runoff from the site into the public way will not increase from the pre-development condition.

(iv) The runoff to the separate storm drains is anticipated to be similar or slightly less.

b. A site-specific Stormwater Management Plan has been developed for the project to show compliance with Section 5 of the Technical Manual, including the basic standards of MEDEP Chapter 500. Please refer to sections J and K, the Erosion & Sedimentation Control and Stormwater Management Plans, respectively, for more information.

c. The project is not located in a watershed of an urban impaired stream as listed by the MEDEP.

d. Not applicable.

e. The development is not anticipated to pose a contamination risk to groundwater during or after construction. The project will be serviced by a public wastewater system.

f. The development will provide for adequate and sanitary disposal of sewage in accordance with Section 2 of the Technical Manual.

(c) Public Infrastructure and Community Safety Standards

1. Consistency with City Master Plans:

   a. The project has been designed to be consistent with the City's Zoning Ordinance and off-site infrastructure.

   b. Not applicable.

2. Public Safety and Fire Prevention:

   a. The site has been designed to promote safe and inviting public access.

   b. Adequate emergency access has been provided. Fire trucks and ambulance will be able to access a minimum of three sides of the building.

   c. Two existing hydrants are located along Portland Street (at the intersections of Parris and Hanover), approximately 170' and 140' from the east and south corners of the proposed structure, respectively.

3. Availability and Adequate Capacity of Public Utilities:

   a. Ability to Serve letters have been sent to the respective companies. Responses are forthcoming.

   b. The electrical service will be wired underground via a new pad-mounted transformer as shown on the Utility Plan.

   c. The new sewer and stormwater infrastructure will meet the provisions of the Technical Manual.

   d. The project will be served by connection to the public sewer system within Parris Street.

   e. The sanitary sewer collection system meets all applicable sections of the Technical Manual. The stormwater management system is designed to meet the standards of Chapter 500.

   f. A space allocated for solid waste storage can be seen on the Site Plan – Ground Floor (C-10). The solid waste containers will be fully enclosed and screened from the public view.

(d) Site Design Standards

1. Massing, Ventilation and Wind Impact:

    a. Please refer to Section O, Architectural Design Narrative.

    b. Please refer to Section O, Architectural Design Narrative.

    c. Please refer to Section O, Architectural Design Narrative.

2. Shadows:

    a. Not applicable.

3. Snow and Ice Loading:

    a. The structure will not distribute snow and ice onto adjacent properties.

4. View Corridors:

    a. Please refer to Section O, Architectural Design Narrative.

5. Historic Resources:

    a. The development is not located in a historic district, historic landscape district or City designated landmark.

    b. The development is not located adjacent to designated landmarks, historic district, or historic landscape district.

    c. There are no known archaeological resources on the site.

6. Exterior Lighting:

    a. Site Lighting.

        (i) Exterior lighting will be designed to meet the requirements of Section 12 of the Technical Manual.

        (ii) The project parcel does not abut any residential properties.

    b. Architectural and Specialty Lighting.

        (i) No architectural or specialty lighting is proposed.

        (ii) No up-lighting is proposed.

    c. Street Lighting.

(i) No new street lights are proposed.

7. Noise and Vibration:

   a. The HVAC system will meet the applicable state and federal emissions requirements and will also be screened and directed away from abutters.

8. Signage and Wayfinding:

   a. All street and wayfinding signage shall meet the requirements of the Manual on Uniform Traffic Devices (MUTCD) and Division 22 of the City Code.

      (i) The project is not located in a historic district or subject to Article IX.

      (ii) Signage will complement the subject building and its immediate context.

      (iii) All street and wayfinding signage shall meet the requirements of the Manual on Uniform Traffic Devices (MUTCD) and Division 22 of the City Code.

9. Zoning Related Design Standards:

   a. The project has been designed to meet the standards set forth in the B-2b zone. Please refer to the Site Plan for more information on the Space & Bulk Standards.

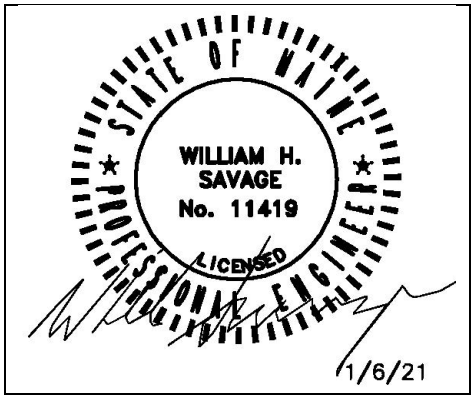
J. STORMWATER MANAGEMENT REPORT

Prepared For:

Tom Watson & Co., LLC
82 Hanover Street
Portland, Maine 04101

Prepared By:

Acorn Engineering, Inc.
65 Hanover Street
Portland, Maine 04101



January 2021

INTRODUCTION

Acorn Engineering, Inc. has been retained by Tom Watson & Co., LLC to provide civil engineering services for the proposed redevelopment of 52 Hanover Street. The proposed project includes demolition of the existing structure and redevelopment of the site with a six-story building consisting of residential units, a two-level parking structure, and ground level retail lots. The property consists of approximately 1.37 acres of land in Portland's Bayside neighborhood. The site is currently comprised of entirely impervious area. The proposed project will decrease the impervious area and improve the overall pollutant ranking. Lastly, the development will seek to redirect all surface water runoff to the separated storm drain system vs the current condition where almost all runoff enters the combined sewer system.

A stormwater analysis was prepared to demonstrate that the project will meet the requirements set forth by Maine DEP Chapter 500 General Standards and the following requirements from the City of Portland (the City):

- City of Portland Land Use Ordinance Chapter 14, Article V. Site Plan Section 14-523. Required Approvals and Applicability (F) Level III Site Plan Review.
- City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards and Maine DEP Chapter 500 Stormwater Management.

EXISTING CONDITIONS

The proposed project site is located at 52 Hanover Street in Portland at the former Public Works vehicle maintenance garage. A boundary plan has been prepared by Titcomb Associates of Falmouth, Maine Dated January 25, 2018, revised August 14, 2018.

The property is in the B-2b Community Business Zone. Abutting Uses include:

- North Commercial Space
- West Residential & Business
- South Office Space
- East Residential & Office

A large portion of the site is occupied by the existing structure. The rest of the site contains parking for the existing structure on all sides. The site is currently graded so the driveways slope away from the building and towards the abutting streets. The grades range from approximately 5 to 10% near the building. On the southeast corner of the lot there is an embankment reinforced with stone blocks that separates the lot from the southerly abutter.

The project team is not aware of the presence of any existing significant natural features located on the site. Given the urban setting and existing impervious surfaces, a field inventory of significant natural features was not undertaken. The project is not located within a watershed classified as an Urban Impaired Stream.

PROPOSED DEVELOPMENT

The proposed development includes demolition of the existing structure and redevelopment of the site with a six-story building. Approximately 171 residential units with various amenities are planned with two levels of structured parking. Additionally, multiple retail units are proposed on the ground level adjacent to the existing 82 Hanover patio and Lancaster Court pedestrian/bicycle easement. Pedestrian access to the site shall be provided off both adjacent streets.

The proposed drainage improvements include collecting runoff using field inlets on the northside of the proposed building. The field inlets would tie into a proposed manhole near the northwest corner of the building and drain to the Parris Street storm main from there. On the south side of the building, it is proposed to use the existing drainage system with a proposed catch basin to connect into the system with 8" piping. On the east side of the lot it is proposed to replace the existing drainage lines with new 8" piping.

The development will be served by the Portland Water District, CMP, Spectrum, Consolidated Communications, Unitil, and municipal sewer and storm systems. Utility mains and services have been coordinated with each respective utility company.

Water quantity has not specifically been analyzed as part of this project as one can assume the peak rates will decrease due to the same watershed area and composition containing less impervious area. Additionally, the entirety of the runoff is anticipated to be redirected from the existing combined sewer to the separated storm drain.

For an analysis on water quality, please refer to the following section.

GENERAL STANDARDS – WATER QUALITY

Given the site's existing impervious area, the redevelopment standards were applied to this project. The existing land uses and pollutant rankings are as follows:

Table 1 – Land Use and Pollutant Summary Table: Existing Conditions			
Land use	**Pollutant Ranking**	**Existing Area**	**Weighted Ave. Ranking**
Roads where idling may occur; high use parking lots	5	0	0
Other roads; medium use parking lots	4	0.929 ac.	2.71
Other parking lots and driveways;	3	0	0

flat roof asphalt rooftops **roofs on an industrial facility**			
Other rooftops; **grassed areas mowed > twice per year;** **walkways / foot-traffic-only pavement**	2	0.440 ac.	0.64
Non-grass landscaped areas; **Stormwater treatment / storage systems**	1	0	0
TOTAL		1.369 ac.	3.35

Furthermore, the proposed land use rankings are as follows:

Table 2 – Land Use and Pollutant Summary Table: Proposed Conditions			
Land use	**Pollutant Ranking**	**Proposed Area**	**Weighted Ave. Ranking**
Roads where idling may occur; **high use parking lots**	5	0.007 ac.	0.03
Other roads; **medium use parking lots**	4	0	0
Other parking lots and driveways; **flat roof asphalt rooftops** **roofs on an industrial facility**	3	0	0
Other rooftops; **grassed areas mowed > twice per year;** **walkways / foot-traffic-only pavement**	2	1.289 ac.	1.88
Non-grass landscaped areas; **Stormwater treatment / storage systems**	1	0.072 ac.	0.05

TOTAL		1.369 ac.	1.96

Corresponding pre- and post-development redevelopment maps can be viewed in Attachments 1 and 2 of this report.

From Tables 1 & 2 above, the resulting pollutant ranking for the proposed redevelopment is -1.39 (Chapter 500, Table 2). The corresponding treatment level for this ranking is 0% (Chapter 500, Table 3). However, given the proposed vegetative plantings and potential green roofs, the site will inherently provide some level of treatment greater than typical runoff from impervious areas.

SOILS

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County
- United States Department of Agriculture Web Soil Survey
- Phase II Environmental Site Assessment

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation because the waiver requirements set forth in the City of Portland Technical Manual – Section 7 – Soil Survey, Rev. 6/17/11 are met.

The area within and surrounding the project includes soil types listed in the table below. The susceptibility of soils to erosion is indicated on a relative "K" scale of values over a range of 0.02 to 0.69. Higher "K" values indicate more erodible soils.

Table 3 - "K" Value		
Soils Type	**Subsurface**	**Substratum**
Au Gres Loamy Sand	0.15	0.15
Deerfield Loamy Fine Sand	0.20	0.20

The soil "K" value for the soil, listed above, shows a low susceptibility to erosion. The site's susceptibility to erosion is from the Soil Conservation Service Medium Intensity Soil Survey for Cumberland County. Although the soil "K" value shows a low susceptibility to erosion, implementation of the proposed Erosion & Sedimentation Measures by the contractor will be of the utmost importance given the sustained slope throughout the site.

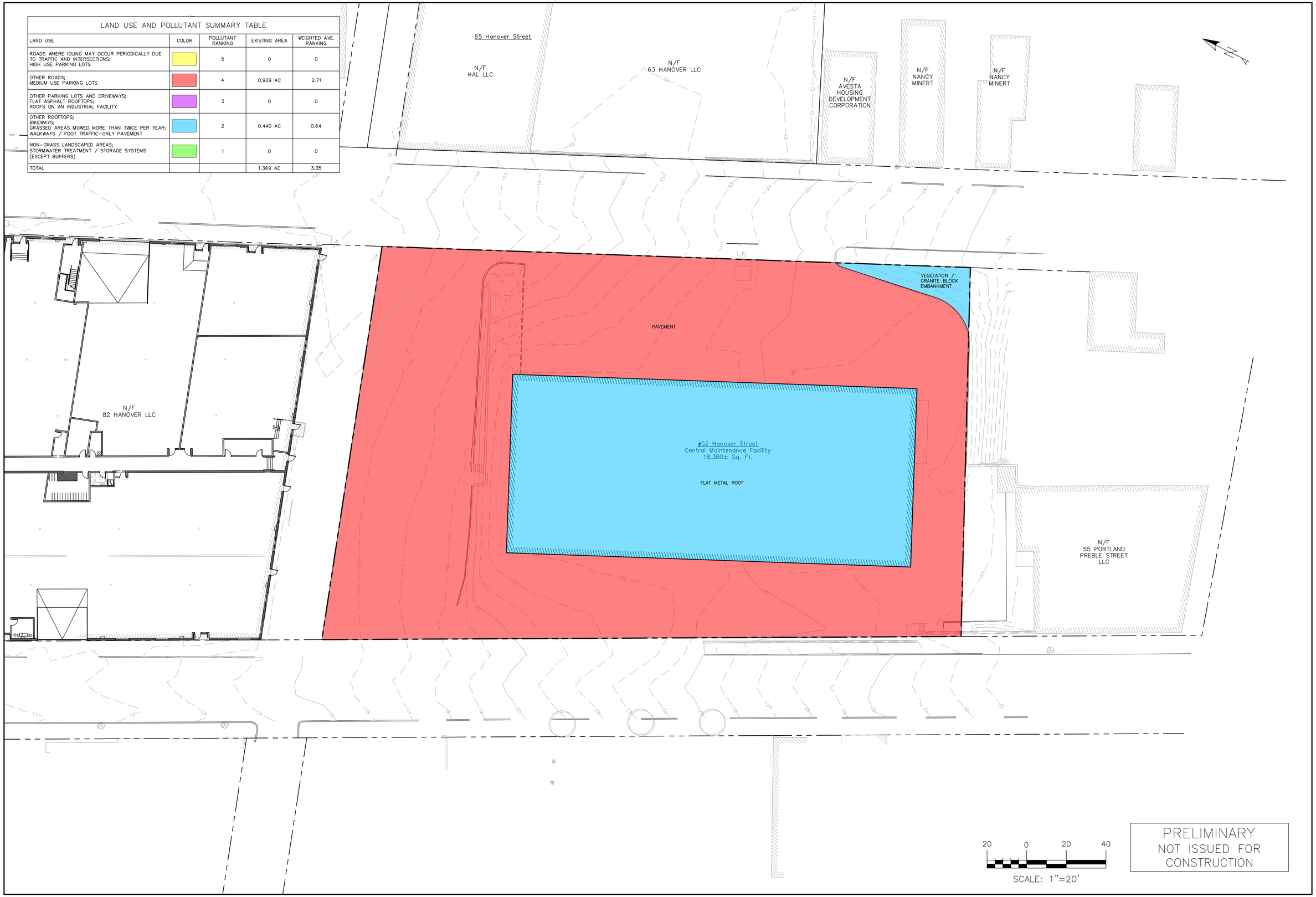
CONCLUSION

The proposed development was designed to meet the requirements implemented by the MDEP under the Stormwater Management Statute (38 M.R.S.A. § 420-D) as well as the City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards. The proposed project as designed is not anticipated to cause flooding or erosion problems within the subject site, abutters' sites, nor within the right-of-way. Overall, the project will provide an improvement to stormwater runoff and overall management from several perspective as outlined above.

ATTACHMENTS

Attachment 1: Pre-Development Redevelopment Exhibit
Attachment 2: Post-Development Redevelopment Exhibit
Attachment 3: Soils Map
Attachment 4: Redeveloped Impervious Area Exhibit
Attachment 5: Hydraflow Storm Sewers Report

LAND USE AND POLLUTANT SUMMARY TABLE				
LAND USE	COLOR	POLLUTANT RANKING	EXISTING AREA	WEIGHTED AVE. RANKING
ROADS WHERE IDLING MAY OCCUR PERIODICALLY DUE TO TRAFFIC AND INTERSECTIONS; HIGH USE PARKING LOTS		5	0	0
OTHER ROADS; MEDIUM USE PARKING LOTS		4	0.929 AC	2.71
OTHER PARKING LOTS AND DRIVEWAYS; FLAT ASPHALT ROOFTOPS; ROOFS ON AN INDUSTRIAL FACILITY		3	0	0
OTHER ROOFTOPS; BIKEWAYS; GRASSED AREAS MOWED MORE THAN TWICE PER YEAR; WALKWAYS / FOOT TRAFFIC–ONLY PAVEMENT		2	0.440 AC	0.64
NON–GRASS LANDSCAPED AREAS; STORMWATER TREATMENT / STORAGE SYSTEMS (EXCEPT BUFFERS)		1	0	0
TOTAL			1.369 AC	3.35



PRELIMINARY
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
XXXX	XXX	XX/XX/XX

DRAWING NAME: STORMWATER MANAGEMENT – EXISTING SURFACE SUMMARY

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

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DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11850
9-24-20
PROFESSIONAL ENGINEER

DRAWING NO.
PRE

LAND USE AND POLLUTANT SUMMARY TABLE

LAND USE	COLOR	POLLUTANT RANKING	EXISTING AREA	WEIGHTED AVE. RANKING
ROADS WHERE IDLING MAY OCCUR PERIODICALLY DUE TO TRAFFIC AND INTERSECTIONS; HIGH USE PARKING LOTS		5	0.007 AC.	0.03
OTHER ROADS; MEDIUM USE PARKING LOTS		4	0	
OTHER PARKING LOTS AND DRIVEWAYS; FLAT ASPHALT ROOFTOPS; ROOFS ON AN INDUSTRIAL FACILITY		3	0	
OTHER ROOFTOPS; BIKEWAYS; GRASSED AREAS MOWED MORE THAN TWICE PER YEAR; WALKWAYS / FOOT TRAFFIC-ONLY PAVEMENT		2	1.289 AC.	1.88
NON-GRASS LANDSCAPED AREAS; STORMWATER TREATMENT / STORAGE SYSTEMS (EXCEPT BUFFERS)		1	0.072 AC.	0.05
TOTAL			1.369 AC	1.96

PRELIMINARY
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
PRE APP	WHS	7/16/20

DRAWING NAME: STORMWATER MANAGEMENT – PROPOSED SURFACE SUMMARY

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

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STATE OF MAINE
WILLIAM H. SAVAGE
No. 11111
9-24-20
PROFESSIONAL ENGINEER

DRAWING NO.
POST

Soil Map—Cumberland County and Part of Oxford County, Maine
(52 han)

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 17, Jun 5, 2020

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

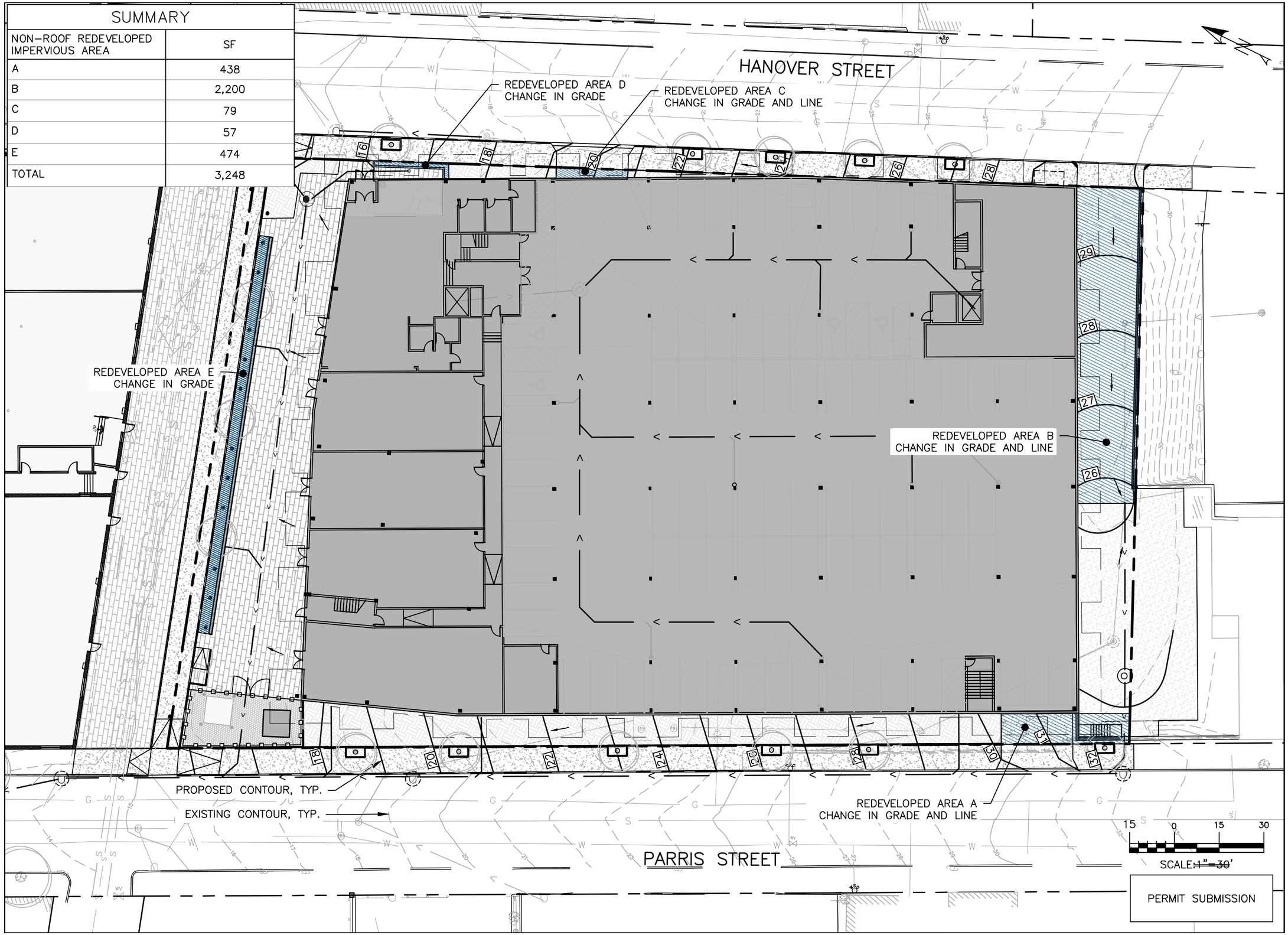
Date(s) aerial images were photographed: Data not available.

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
Au	Au Gres loamy sand	0.4	29.5%
DeB	Deerfield loamy fine sand, 3 to 8 percent slopes	1.0	70.5%
Totals for Area of Interest		**1.4**	**100.0%**

SUMMARY	
NON-ROOF REDEVELOPED IMPERVIOUS AREA	SF
A	438
B	2,200
C	79
D	57
E	474
TOTAL	3,248



PERMIT SUBMISSION

ISSUED FOR	BY / DATE
COMMENT RESPONSE	WHS 12/9/2020

DRAWING NAME: REDEVELOPED IMPERVIOUS AREA EXHIBIT

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC

65 HANOVER ST.
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FILE:	JN_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGN BY:	SJL
DRAWN BY:	NPH
CHECKED BY:	WHS

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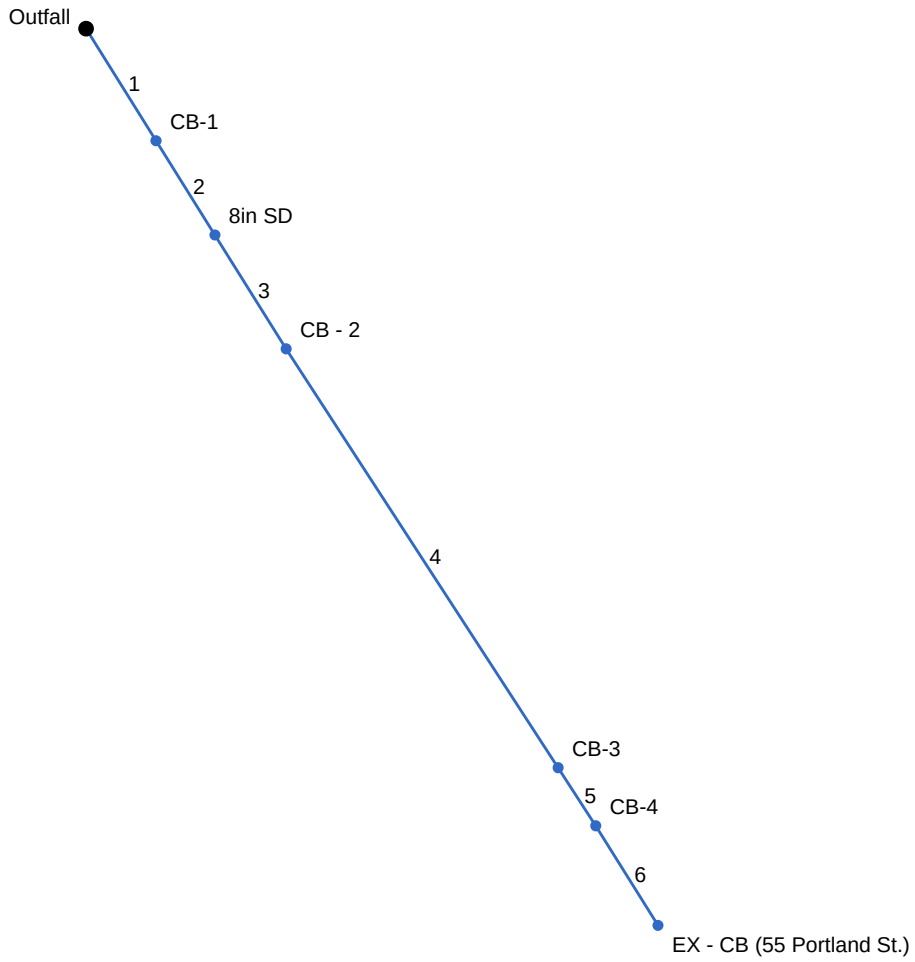
EX.

Hydraflow Storm Sewers Plan



Project File: HydraFlow 1-4-21.stm	Number of lines: 6	Date: 01-05-2021

Hydraflow Storm Sewers 2008 v12.01

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	63	58	MH	0.00	0.59	0.00	0.0	9.73	0.51	10.05	15	Cir	0.013	0.15	13.85	SD-1
2	1	53	0	MH	0.00	0.12	0.85	0.0	10.75	2.23	11.93	15	Cir	0.013	0.15	15.50	SD-2
3	2	64	0	DrCrb	0.00	0.58	0.90	6.0	11.93	2.30	13.40	15	Cir	0.012	0.50	19.00	SD-3
4	3	238	-1	DrCrb	0.00	0.49	0.90	0.0	15.40	1.91	19.95	12	Cir	0.012	0.50	31.95	SD-4
5	4	33	0	DrGrt	0.00	0.05	0.90	6.0	19.95	0.36	20.07	8	Cir	0.012	0.50	26.85	SD-5
6	5	56	1	DrGrt	0.00	0.10	0.90	6.0	20.17	0.50	20.45	8	Cir	0.012	1.00	25.90	SD-6

Project File: HydraFlow 1-4-21.stm | Number of lines: 6 | Date: 01-05-2021

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	CB-1	Manhole	13.85	Cir	4.00	4.00	15	Cir	10.05	15	Cir	10.75
2	8in SD	Manhole	15.50	Cir	4.00	4.00	15	Cir	11.93	15	Cir	11.93
3	CB - 2	DropCurb	19.00	Cir	4.00	4.00	15	Cir	13.40	12	Cir	15.40
4	CB-3	DropCurb	31.95	Cir	4.00	4.00	12	Cir	19.95	8	Cir	19.95
5	CB-4	DropGrate	26.85	Cir	4.00	4.00	8	Cir	20.07	8	Cir	20.17
6	EX - CB (55 Portland St.)	DropGrate	25.90	Cir	4.00	4.00	8	Cir	20.45			

Project File: HydraFlow 1-4-21.stm | Number of Structures: 6 | Run Date: 01-05-2021

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	7.80	15	Cir	63	9.73	10.05	0.508	10.84*	11.79*	n/a	12.31 i	End	Manhole
2	SD-2	7.84	15	Cir	53	10.75	11.93	2.226	12.31	13.04	n/a	14.36 i	1	Manhole
3	SD-3	7.22	15	Cir	64	11.93	13.40	2.297	14.36*	15.04*	n/a	15.43 i	2	DropCurb
4	SD-4	3.90	12	Cir	238	15.40	19.95	1.912	16.03	20.79	n/a	21.61 i	3	DropCurb
5	SD-5	0.92	8	Cir	33	19.95	20.07	0.364	21.61*	21.78*	0.05	21.83	4	DropGrate
6	SD-6	0.63	8	Cir	56	20.17	20.45	0.500	21.89*	22.02*	0.05	22.07	5	DropGrate

Project File: HydraFlow 1-4-21.stm | Number of lines: 6 | Run Date: 01-05-2021

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown). ; i - Inlet control.

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	63	0.59	1.93	0.00	0.00	1.20	0.0	7.8	6.5	7.80	4.60	6.56	15	0.51	9.73	10.05	10.84	11.79	12.50	13.85	SD-1
2	1	53	0.12	1.34	0.85	0.10	1.20	0.0	7.7	6.5	7.84	9.64	6.60	15	2.23	10.75	11.93	12.31	13.04	13.85	15.50	SD-2
3	2	64	0.58	1.22	0.90	0.52	1.10	6.0	7.5	6.6	7.22	10.60	5.88	15	2.30	11.93	13.40	14.36	15.04	15.50	19.00	SD-3
4	3	238	0.49	0.64	0.90	0.44	0.58	0.0	6.7	6.8	3.90	5.33	6.48	12	1.91	15.40	19.95	16.03	20.79	19.00	31.95	SD-4
5	4	33	0.05	0.15	0.90	0.05	0.14	6.0	6.5	6.8	0.92	0.79	2.64	8	0.36	19.95	20.07	21.61	21.78	31.95	26.85	SD-5
6	5	56	0.10	0.10	0.90	0.09	0.09	6.0	6.0	7.0	0.63	0.93	1.79	8	0.50	20.17	20.45	21.89	22.02	26.85	25.90	SD-6

Project File: HydraFlow 1-4-21.stm | Number of lines: 6 | Run Date: 01-05-2021

NOTES: Intensity = 88.24 / (Inlet time + 15.50) ^ 0.83; Return period = 10 Yrs. ; c = cir e = ellip b = box

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	CB-1	0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off
2	8in SD	0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	1
3	CB - 2	3.63	0.00	3.63	0.00	DrCrb	4.0	1.00	0.00	0.00	0.00	Sag	0.00	0.020	0.020	0.013	4.28	213.95	4.28	213.95	0.0	2
4	CB-3	0.00	0.00	0.00	0.00	DrCrb	4.0	1.00	2.00	2.00	2.00	Sag	2.00	0.020	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
5	CB-4	0.31	0.00	0.31	0.00	DrGrt	0.0	0.00	2.00	2.00	2.00	Sag	2.00	0.020	0.020	0.013	0.06	7.53	0.06	7.53	0.0	4
6	EX - CB (55 Portla	0.63	0.00	0.63	0.00	DrGrt	0.0	0.00	2.00	2.00	2.00	Sag	2.00	0.020	0.020	0.013	0.09	10.79	0.09	10.79	0.0	Off

Project File: HydraFlow 1-4-21.stm | Number of lines: 6 | Run Date: 01-05-2021

NOTES: Inlet N-Values = 0.016 ; Intensity = 88.24 / (Inlet time + 15.50) ^ 0.83; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Hydraflow HGL Computation Procedure

General Procedure: Hydraflow computes the HGL using the Bernoulli energy equation. Manning's equation is used to determine energy losses due to pipe friction. In a standard step, iterative procedure, Hydraflow assumes upstream HGLs until the energy equation balances. If the energy equation cannot balance, supercritical flow exists and critical depth is temporarily assumed at the upstream end. A supercritical flow Profile is then computed using the same procedure in a downstream direction using momentum principles. The computed HGL is checked against inlet control.

Col. 1 The line number being computed. Calculations begin at Line 1 and proceed upstream.

Col. 2 The line size. In the case of non-circular pipes, the line rise is printed above the span.

Col. 3 Total flow rate in the line.

Col. 4 The elevation of the downstream invert.

Col. 5 Elevation of the hydraulic grade line at the downstream end. This is computed as the upstream HGL + Minor loss of this line's downstream line.

Col. 6 The downstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 7 Cross-sectional area of the flow at the downstream end.

Col. 8 The velocity of the flow at the downstream end, (Col. 3 / Col. 7).

Col. 9 Velocity head (Velocity squared / 2g).

Col. 10 The elevation of the energy grade line at the downstream end, HGL + Velocity head, (Col. 5 + Col. 9).

Col. 11 The friction slope at the downstream end (the S or Slope term in Manning's equation).

Col. 12 The line length.

Col. 13 The elevation of the upstream invert.

Col. 14 Elevation of the hydraulic grade line at the upstream end.

Col. 15 The upstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 16 Cross-sectional area of the flow at the upstream end.

Col. 17 The velocity of the flow at the upstream end, (Col. 3 / Col. 16).

Col. 18 Velocity head (Velocity squared / 2g).

Col. 19 The elevation of the energy grade line at the upstream end, HGL + Velocity head, (Col. 14 + Col. 18) .

Col. 20 The friction slope at the upstream end (the S or Slope term in Manning's equation).

Col. 21 The average of the downstream and upstream friction slopes.

Col. 22 Energy loss. Average Sf/100 x Line Length (Col. 21/100 x Col. 12). Equals (EGL upstream - EGL downstream) +/- tolerance.

Col. 23 The junction loss coefficient (K).

Col. 24 Minor loss. (Col. 23 x Col. 18). Is added to upstream HGL and used as the starting HGL for the next upstream line(s).

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
	(in)	(cfs)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	(ft)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)	(K)	(ft)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
1	15	7.80	9.73	10.84	1.11	1.15	6.77	0.71	11.55	n/a	63	10.05	11.79	1.25	1.23	6.36	0.63	12.42i	n/a	n/a	0.241	0.15	n/a
2	15	7.84	10.75	12.31	1.25	1.15	6.39	0.63	12.94	n/a	53	11.93	13.04 j	1.11**	1.15	6.81	0.72	13.76i	n/a	n/a	n/a	0.15	n/a
3	15	7.22	11.93	14.36	1.25	1.23	5.88	0.54	14.90	n/a	64	13.40	15.04	1.25	1.23	5.88	0.54	15.58i	n/a	n/a	0.144	0.50	n/a
4	12	3.90	15.40	16.03	0.63*	0.53	7.41	0.85	16.89	n/a	238	19.95	20.79	0.84**	0.70	5.55	0.48	21.27i	n/a	n/a	n/a	0.50	n/a
5	8	0.92	19.95	21.61	0.67	0.35	2.64	0.11	21.72	0.496	33	20.07	21.78	0.67	0.35	2.64	0.11	21.89	0.495	0.496	0.164	0.50	0.05
6	8	0.63	20.17	21.89	0.67	0.35	1.79	0.05	21.94	0.229	56	20.45	22.02	0.67	0.35	1.79	0.05	22.07	0.229	0.229	0.128	1.00	0.05

Project File: HydraFlow 1-4-21.stm | Number of lines: 6 | Run Date: 01-05-2021

Notes: * Normal depth assumed.; ** Critical depth.; j-Line contains hyd. jump. ; c = cir e = ellip b = box

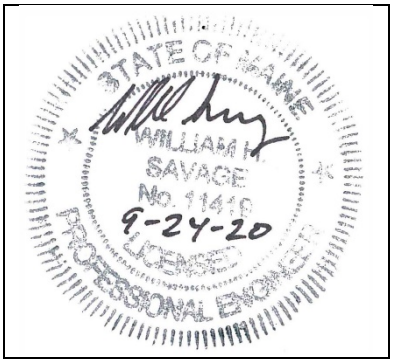
K. EROSION & SEDIMENTATION CONTROL REPORT

Prepared For:

Tom Watson & Co., LLC
82 Hanover Street
Portland, Maine 04101

Prepared By:

Acorn Engineering, Inc.
65 Hanover Street
Portland, Maine 04101



September 2020

INTRODUCTION

Acorn Engineering, Inc. has been retained by Tom Watson & Co., LLC to provide civil engineering services for the proposed mixed-use residential and retail building at 52 Hanover Street. The proposed project includes demolition of the existing structure and redevelopment of the site with a six-story building consisting of residential units, a two-level parking structure, and ground level retail lots.

The following Erosion and Sedimentation Control Report was developed in accordance with the City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards and the Maine DEP Chapter 500 Stormwater Management Appendix A and B (1), Amended August 12, 2015. This narrative also meets the standards required in the Maine DEP's Erosion & Sediment Control BMP's Manual, revised in 2016.

1.0 EXISTING CONDITIONS

The proposed project site bordered by Hanover and Parris Street. A boundary plan has been prepared by Titcomb Associates of Falmouth, Maine Dated January 25, 2018, revised August 14, 2018.

The property is in the B-2b Community Business Zone. Abutting Uses include:

- North Commercial Space
- West Residential & Business
- South Office Space
- East Residential & Office

A large portion of the site is occupied by the existing structure. The rest of the site contains parking for the existing structure on all sides. The site is currently graded so the driveways slope away from the building and towards the abutting streets. The grades range from approximately 5 to 10% near the building. On the southeast corner of the lot there is an embankment reinforced with stone blocks that separates the lot from the south abutter.

1.1 Existing Soils

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County
- United States Department of Agriculture Web Soil Survey

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation because the waiver requirements set forth in the City of Portland Technical Manual – Section 7 – Soil Survey, Rev. 6/17/11 are met.

The area within and surrounding the project includes soil types listed in the table below. The susceptibility of soils to erosion is indicated on a relative "K" scale of values over a range of 0.02 to 0.69. Higher "K" values indicate more erodible soils.

Table 1 - "K" Value		
Soils Type	**Subsurface**	**Substratum**
Au Gres Loamy Sand	.15	.15
Deerfield Loamy Fine Sand	0.20	0.20

The soil "K" value for the soil, listed above, shows a low susceptibility to erosion. The site's susceptibility to erosion is from the Soil Conservation Service Medium Intensity Soil Survey for Cumberland County. Although the soil "K" value shows a low susceptibility to erosion, implementation of the proposed Erosion & Sedimentation Measures by the contractor will be of the utmost importance given the sustained slope throughout the site.

1.2 Existing Erosion Problems

There are no signs of erosion.

1.3 Critical Areas

There are no critical areas that require special attention during construction.

1.4 Protected Natural Resource

The client is not aware of the presence of any existing significant natural features located on the site as listed in Section 14-526 (b) 1. of the Land Use Code. The project is not located within a watershed classified as an Urban Impaired Stream by the Maine DEP.

1.5 Previous Construction Activity (5 years)

Acorn Engineering, Inc. is not aware of any construction related activities within the project limits within the past 5 years.

1.6 Timber Harvesting

Acorn Engineering, Inc. is not aware of any timber harvesting within the past five years.

2.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

As part of the site development, the following temporary and permanent erosion and sedimentation control devices shall be implemented. Devices shall be installed as described in this report or within the plan set. See the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices for further reference.

2.1 Temporary Erosion Control Measures

The following temporary erosion and sedimentation control measures are planned for the project's construction period:

2.1.1 Crushed stone stabilized construction entrances shall be placed at all access points to the project site where there are disturbed areas. The following specifications shall be followed at a minimum:

- Stone size shall be 2-3 inches, or reclaimed or recycled concrete equivalent.
- The thickness of the entrance stone layer shall be no less than 6 inches.
- The entrance shall not be less than 20 feet wide, however not less than the full width of points where ingress or egress occurs. The length shall not be less than 50 feet in length.
- Geotextile fabric (woven or non-woven) shall be placed over the entire entrance area.
- The entrance/exit shall be maintained to the extent that it will prevent the tracking of sediment onto public road ways.

2.1.2 Siltation fence or erosion control berm shall be installed down gradient of any disturbed areas to trap runoff borne sediments until permanent stabilization is achieved. The silt fence or erosion control berm shall be installed per the details provided in the plan set and inspected before and immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made if there are any signs of erosion or sedimentation below the fence line or berm. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence or berm, the barrier shall be replaced with a stone check dam.

2.1.3 Hay mulch including hydro seeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed between April 15th and November 1st on slopes of less than 15 percent shall be covered by fabric netting and anchored with staples in accordance with the manufacturer's recommendation. Mulch placed between November 1st and April 15th on slopes equal to or steeper than 8 percent and equal to or flatter than 2:1 shall use mats or fabric netting and anchored with staples in accordance with the manufacturer's recommendation.

2.1.4 At any time of the year, all slopes greater than 3:1 shall be stabilized with Double Net Erosion Control Blanket Bionet SC150BN by North American

Green or Approved Equal, or Erosion Control Mix Slope Protection as detailed within the plans.

2.1.5 Parris and Hanover streets shall be swept to control mud and dust from the construction site as necessary. Add additional stone to the stabilized construction entrance to minimize the tracking of material off the site and onto the surrounding roadways.

2.1.6 During demolition, clearing and grubbing operations, stone check dams shall be installed at any areas of concentrated flow. The maximum height of the check dam shall not exceed 2 feet. The center of the check dam shall be 6 inches below the outer edges of the dam. The contractor shall mulch the side slopes and install stone check dams for all newly excavated ditch lines within 24 hours of their creation.

2.1.7 Silt fence stake spacing shall not exceed 6 feet unless the fence is supported with 14-gauge wire in which case the maximum spacing shall not exceed 10 feet. The silt fence shall be "toed" into the ground.

2.1.8 Storm drain inlet protection shall be provided to storm drains using any of the following: hay bale drop inlet structures, silt fence drop inlet sediment filter, gravel and wire mesh drop inlet sediment filter, or curb inlet sediment filter. Barriers shall be inspected after every rainfall event and repaired as necessary. Sediments shall be removed when accumulation has reached ½ the design height.

2.1.9 Dust control shall be accomplished using any of the following: water, calcium chloride, stone, or an approved MDEP product. Dust control shall be applied as needed to accomplish dust control.

2.1.10 Temporary loam, seed, and mulching shall be used in areas where no other erosion control measure is used. Application rates for seeding are provided at the end of this report.

2.1.11 Stockpiles shall be stabilized within 7 days of formation unless a scheduled rain event occurs prior to the 7-day window, in which case the stockpile shall be stabilized prior to the rain event. Methods of stabilization shall be mulch, erosion control mix, or erosion control blankets/mats. Silt fence or a wood waste compost filter berm shall be placed downhill of any soil stockpile location.

2.1.12 For disturbance between November 1 and April 15, please refer to winter stabilization plan in this report and the Maine Erosion and Sediment Control BMP manual for further information.

2.1.13 It is of the utmost importance that stormwater runoff and potential sediment from the construction site be diverted around the proposed underdrains until the trench is backfilled.

2.2 Permanent Erosion Control Measures

The following permanent erosion control measures are intended for post disturbance areas of the project.

2.2.1 All disturbed areas during construction, not subject to other proposed conditions, shall receive a minimum 4" of loam, limed, and mulched. Erosion control blankets or mats shall be placed over the mulch in areas noted in paragraph 4.1 of this report.

2.2.2 All stormwater devices shall be installed and tributary areas stabilized prior receiving stormwater.

2.2.3 Refer to the Maine Erosion and Sediment Control BMP manual for additional information.

3.0 EROSION AND SEDIMENTATION CONTROL PLAN

3.1 The Construction Management & Erosion Control Plan is included within the plan set.

4.0 DETAILS AND SPECIFICATIONS

4.1 Erosion & Sedimentation Control Details and Specifications are included in the plan set.

5.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

Winter Construction consists of earthwork disturbance between the dates of November 1 and April 15. If a construction site is not stabilized with pavement, a road gravel base, 75% mature vegetation cover or riprap by November 15, then the site shall be protected with over-winter stabilization. Any area not stabilized with pavement, vegetation, mulching, erosion control mix, erosion control mats, riprap, or gravel base on a road shall be considered open.

The contractor shall limit the work area to areas that work will occur in during the subsequent 15 days and so that it can be mulched one day prior to a snow event. The contractor shall stabilize work areas prior to opening additional work areas to minimize areas without erosion control measures.

The following measures shall be implemented during winter construction periods:

5.1 Sediment Barriers

During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.

5.2 Mulching

All areas shall be considered to be denuded until seeded and mulched. Hay and straw mulch shall be applied at a rate of 150 lb. per 1,000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 s.f. or 1.5 tons/acre) and shall be properly anchored. Erosion control mix must be applied with a minimum 4-inch thickness. Mulch shall not be spread on top of snow. The snow shall be removed down to a one-inch depth or less prior to application. After each day of final grading, the area shall be properly stabilized with anchored hay or straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched or adequately anchored so that ground surface is not visible through the mulch. Between the dates of November 1 and April 15, all mulch shall be anchored by either mulch netting, tracking or wood cellulose fiber. The cover will be considered sufficient when the ground surface is not visible through the mulch. After November 1st, mulch and anchoring of all exposed soil shall occur at the end of each final grading workday.

5.3 Soil Stockpiling

Stockpiles of soil or subsoil shall be mulched for over winter protection with hay or straw at twice the normal rate or with a four-inch layer of erosion control mix. This shall be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

5.4 Seeding

Between the dates of October 15th and April 1st, loam or seed shall not be required. During periods of above freezing temperatures finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until the final treatment can be applied. If the date is after November 1st and if the exposed area has not been loamed, final grading with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5 lbs./1,000 s.f. All areas seeded during the winter shall be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75% catch) shall be revegetated by replacing loam, seed and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

5.5 Over winter stabilization of disturbed soils

By September 15th, all disturbed soils on areas having a slope less than 15% shall be seeded and mulched. If the disturbed areas are not stabilized by this date, then one of the following actions shall be taken to stabilize the soil for late fall and winter:

- Stabilize the soil with temporary vegetation – By October 1st, seed the disturbed soil with winter rye at a seeding rate of 3lbs per 1,000 s.f., lightly mulch the seeded soil with hay or straw at 75 lbs per 1,000 s.f., and anchor the mulch with plastic netting. Monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1st, then mulch the area for over-winter protection.

- Stabilize the soil with sod – Stabilize the disturbed soil with properly installed sod by October 1st. Proper installation includes 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.

- Stabilize the soil with mulch – By November 15th, mulch the disturbed soil by spreading hay or straw at a rate of at least 150 lbs per 1,000 s.f. on the area so that no soil is visible through the mulch. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

5.6 Over winter stabilization of disturbed slopes

All stone-covered slopes shall be constructed and stabilized by November 15th. All slopes to be vegetated shall be seeded and mulched by September 1st. A slope is considered a grade greater than 15%. If a slope to be vegetated is not stabilized by September 1st, then one of the following action shall be taken to stabilize the slope for late fall and winter:

- Stabilize the soil with temporary vegetation and erosion control mats – By October 1st the disturbed slope shall be seeded with winter rye at a seeding rate of 3 lbs per 1,000 s.f. and then install erosion control mats or anchored mulch over the seeding. If the rye fails to grow at least three inches or fails to cover at least 75% of the slope by November 1st, then the contractor shall cover the slope with a layer of erosion control mix or with stone riprap.

- Stabilize the soil with sod – The disturbed slope shall be stabilized with properly installed sod by October 1st. Proper installation includes the contractor 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 contractor shall not use late-season sod installation to stabilize slopes having a grade greater than 3H:1V or having groundwater seeps on the slope face.

- Stabilize the soil with erosion control mix – Erosion control mix shall be properly installed by November 15th. The contractor shall not use erosion control mix to stabilize slopes having grades greater than 2H:1V or having groundwater seeps on the slope face.

- Stabilize the soil with stone riprap – Place a layer of stone riprap on the slope by November 15th. A registered professional engineer shall be hired to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.

6.0 INSPECTION AND MAINTENANCE

A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct periodic visual inspections of installed erosion control measures. The frequency of inspection shall occur at least once every two weeks, as well as after a "storm event". A "storm event" shall consist 0.5 inches of rain within a 24-hour period. The following Erosion and Sediment Control - Best Management Practices (BMP's) shall inspected in the manner as described.

6.1 Sediment Barriers

Hay bale barriers, silt fences and filter berms shall be inspected and repaired for the following if there are any signs of erosion or sedimentation below them. If there are signs of undercutting at the center or the edges of the barrier, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits should be removed when deposits reach approximately one-half the height of the barrier. Filter berms should 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.

6.2 Stabilized Stone Construction Entrances

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 and redistributed on site in a stable manner. The entrance should then be reconstructed. The contractor shall sweep or wash pavement at exits, which have experienced mud-tracking on to the pavement or traveled way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches, or waterways.

6.3 Mulched Areas

All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied. Nets must be inspected after rain events for dislocation or failure. If washouts or breakage occur, re-install the nets as necessary after repairing damage to the slope. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

6.4 Dust Control

When temporary dust control measures are used, repetitive treatment shall be applied as needed to accomplish control.

6.5 Stormwater Appurtenances

All underdrains, storm drains, and catch basins need to be operating effectively and free of debris.

6.6 Erosion and Sedimentation Control Inspections:

Acorn Engineering has personnel qualified to conduct Erosion and Sedimentation Control Inspections. For further information, contact:

Contact: Will Savage, PE
Telephone: (207) 775-2655

Qualifications:

- Maine Professional Engineering License #11419
- Maine DEP - Certified in Maintenance & Inspection of Stormwater BMP's Cert #14
- Certified Erosion, Sediment and Storm Water Inspector (CESSWI) Cert #0293
- Certified Professional in Erosion and Sediment Control (CPESC) Cert. #4620

The Contractor has sole responsibility for complying with the Erosion and Sedimentation Report/Plan, including control of fugitive dust. The Contractor shall be responsible for any monetary penalties resulting from failure to comply with these standards.

7.0 IMPLEMENTATION SCHEDULE

The following implementation sequence is intended to maximize the effectiveness of the above described erosion control measures. Contractors should avoid overexposing disturbed areas and limit the amount of stabilization area.

1. Install a stabilized construction entrance in all locations where construction traffic will enter and exit the site.
2. Install perimeter silt fence or erosion control berm.
3. Install all other erosion control devices as necessary throughout the remainder of this schedule.
4. Commence installation of drainage infrastructure.
5. Prioritize the downhill side to contain runoff within the site while providing an engineered outlet to the municipal storm drain system within Parris Street.
6. Commence earthwork operations, associated with the parking lot construction.
7. Commence installation of utilities.
8. Continue earthwork and grading to subgrade as necessary for construction.
9. Complete installation of drainage infrastructure, as well as other utility work.
10. Complete remaining earthwork operations.
11. Install sub-base and base gravels in paved areas.
12. Install paving, curbing and brickwork.
13. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.
14. Once the site is stabilized and mulching of landscape areas is complete, remove all temporary erosion control measures.
15. Touch up areas without a vigorous catch of grass with loam and seed.
16. Complete site signage and striping.
17. Execute proper maintenance of all temporary and permanent erosion control measures throughout the project.

The above implementation sequence should be generally followed by the site contractor. However, the contractor may construct several items simultaneously. The contractor shall submit to the owner a schedule of the completion of the work. If the contractor is to commence the construction of more than one item above, they shall limit the amount of exposed areas to those areas in which work is expected to be undertaken during the following 30 days.

The contractor shall re-vegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event. The contractor shall incorporate planned inlets and drainage systems as early as possible into the construction phase.

8.0 CONCLUSION

The above erosion control narrative is intended to minimize the development impact by implementing temporary and permanent erosion control measures. The contractor shall also refer to the Maine Erosion and Sediment Control BMP manual for additional information.

9.0 ATTACHMENTS

- Temporary Seeding Plan

TEMPORARY SEEDING PLAN

Site Preparation

The seeded areas shall be feasibly graded out to provide the use of equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. If necessary, the site may require additional temporary erosion control measures outlined in the Erosion Control report.

Seedbed Preparation

Fertilizer shall be applied to the site at a rate of 13.8 pounds per 1,000 square feet. The composition of the fertilizer shall be 10-10-10 (N-P2O5-K2O) or equivalent.

Limestone shall be applied to the site at a rate of 138 pounds per 1,000 square feet.

Seeding

The composition and amount of temporary seed applied to a site shall be determined by the following table:

Seed	Pounds / 1,000 S.F.	Recommended Seeding Dates
Winter Rye	2.57	Aug-15 to Oct-1
Oats	1.84	Apr-1 to Jul-1 Aug-15 to Sep-15
Annual Ryegrass	0.92	Apr-1 to Jul-1
Sudangrass	0.92	May-15 to Aug-15
Perennial	0.92	Aug-15 to Sep-15

Mulching

Mulch shall be applied at a rate of 70 lbs – 90 lbs per 1,000 square feet. The mulch shall be installed at a minimum depth of 4 inches. The seeded area shall be mulched immediately after seed is applied. Mulching during the winter season shall be double the normal amount.

Conclusion

Please refer to the Maine Erosion and Sediment Control BMP manual for additional information pertaining to temporary seeding and mulching.

A C O R N
ENGINEERING, INC.

Chief Keith Gautreau
City of Portland Fire Department
380 Congress St.
Portland, ME 04101

September 15, 2020

Subject: 52 Hanover Street – Fire Department Checklist
Section L of Application

On behalf of Tom Watson & Co., LLC, the design team is pleased to respond to the Portland Fire Department Site Review Checklist.

1. Name, address, telephone number of applicant

   Tom Watson & Co., LLC
   188 State Street, 3rd Floor
   Portland, Maine 04101
   (207) 252-0358

2. Name, address, telephone number of architect

   CUBE 3 Architects
   370 Merrimack St Suite 337
   Lawrence, Massachusetts 01843
   (978) 989-9900

3. Proposed uses of any structures [NFPA and IBC classification]

   NFPA: Business / Apartment Building IBC: B / R-2

4. Square footage of all structures, including decks [total and per story]

Existing Building		
1st Floor	18,000	sf
Total	**18,000**	**sf**

Proposed Building		
Ground	46,000	sf
2nd Floor	46,860	sf
3rd Floor	30,700	sf
4th Floor	30,700	sf

5th Floor	30,700	sf
6th Floor	21,400	sf
7th Floor	21,400	sf
8th Floor	11,250	sf
Total	**239,010**	**sf**

5. Elevation of all structures

   The proposed building height is 85' which is consistent with the Bayside Height Overlay allowance.

6. Proposed fire protection of all structures

   The building will be serviced by an 8" sprinkler system with additional protection per code. Fire flows and requirements for system storage or booster pumping are subject to the fire professional design which will be performed prior the request for a building permit.

7. Hydrant locations

   Two existing hydrants are located along Hanover and Parris Streets, approximately 170' and 140' from the southeast and south corners of the proposed structure. Hydrant flow data from the Portland Water District once received may be made available to the Fire Department upon request.

8. Water main size and location

   The redevelopment will be serviced by the existing water main within Parris Street. An 8" fire line, 4" domestic line, and 2" domestic line will serve the proposed development. The building is expected to have internal sprinkler risers and a Fire Department pump connection on the Hanover and Parris sides of the building.

9. Access to all structures [min. 2 sides]

   Access to the structure is provided directly on Hanover Street and Parris Street.

10. A code summary, proved by the Architect, is included in this section.

<u>NFPA 1 – Chapter 18 Fire Department Access and Water Supply</u>

18.2 Fire Department Access:

The project site is located in a densely developed area and is surrounded by two public streets. The following pavement street width is currently available:

- Hanover Street: 32 feet

- Parris Street: 30 feet
- Kennebec Street: 36 feet
  Proposed changes to Kennebec Street by others have been approved by the city. The proposed width of Kennebec Street is 38 feet.

Per NFPA 1 – Chapter 18.2.3.3.1, there will be public street access within 50 feet of at least one exterior door. Per NFPA 1 – Chapter 18.2.3.2.2.1, all first story floors shall be located not more than 450 feet from a Fire Department access road.

City of Portland Technical Manual – Section 3 Public Safety

3.4.1 Every dead-end roadway more than one hundred fifty (150') feet in length shall provide a turnaround at the closed end. Turnarounds shall be designed to facilitate future street connectivity and shall always be designed to the right (refer to Figure I-5).

Response: Not applicable

3.4.2 Where possible, developments shall provide access for Fire Department vehicles to at least two sides of all structures. Access may be from streets, access roads, emergency access lanes, or parking areas.

Response: As depicted on the site plan, the proposed building layout provides a minimum of two paved access points to the structure: one from Parris Street and one from Hanover Street.

3.4.3 Building setbacks, where required by zoning, shall be adequate to allow for emergency vehicle access and related emergency response activities and shall be evaluated based on the following factors:

- *Building Height.*
- *Building Occupancy.*
- *Construction Type.*
- *Impediments to the Structures.*
- *Safety Features Provided.*

Response: The proposed development layout has contemplated emergency access conditions and provides for safe and efficient access along the public street for emergency vehicles.

3.4.4. Fire Dept. access roads shall extend to within 50' of an exterior door providing access to the interior of the structure.

Response: The building will be provided with exterior doors that will be within 50' of a Fire Department access route.

3.4.5. Site access shall provide a minimum of nine (9) feet clearance height to accommodate ambulance access.

Response: The proposed site maintains the required clearance height of nine feet in all cases.

3.4.6. Elevators shall be sized to accommodate an 80 x 24-inch stretcher.

Response: The proposed elevator will meet this requirement.

3.4.7. All structures are required to display the assigned street number. Numbers shall be clearly visible from the public right of way.

Response: The applicant will work with the City's Public Works Division to assign street addresses and numbering to meet City Standards.

Thank you for your review. Please let me know if you have any additional questions or comments.

Sincerely,

William H. Savage, P.E.
Principal
Acorn Engineering, Inc.

BUILDING CODE SUMMARY

USE / OCCUPANCY

OCCUPANCY:

USE GROUP A-3 - ASSEMBLY (LOBBY/AMENITY/BIKESHOP)
USE GROUP B - BUSINESS (RETAIL/LEASING OFFICE)
USE GROUP S-2 - STORAGE (PARKING, MAINTENANCE, STORAGE & MEP AREAS)
USE GROUP R2 - RESIDENTIAL (DWELLING UNITS)

BUILDING CODE: 1. Maine Uniform Building and Energy Code (MUBEC)
MUBEC IS AN AMENDED VERSION OF 2015 IBC.

OTHER APPLICABLE CODES:

MRS 25	PORTLAND CITY FIRE PREVENTION REGULATIONS (ADOPTS AND AMENDS NFPA 1-2012)
MRS 32	PORTLAND CITY FUEL GAS CODE
MRS 32	PORTLAND CITY PLUMBING CODE
MRS 32	PORTLAND CITY ELEVATOR STANDARDS

NATIONAL ELEC. CODE 2017 AS ADOPTED PURSUANT TO 32 M.R.S.
AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES, 2010 EDITION
MAINE HUMAN RIGHTS ACT ADOPTED PURSUANT TO 5 M.R.S. CH. 4 FAIR HOUSING AND CH.5 PUBLIC ACCOMODATIONS

CONSTRUCTION TYPE / GENERAL BUILDING LIMITATIONS

CONSTRUCTION TYPE (503):	IA - NON-COMBUSTIBLE
1. ALLOWABLE BUILDING HEIGHT (IA) (TABLE 503, 504.1)	UNLIMITED
PROPOSED BUILDING HEIGHT (IA)	8 STORIES / 85' - 0"

NOTE 1: BUILDING HEIGHT IN FEET IS MEASURED FROM THE AVERAGE GRADE AROUND BUILDING TO THE AVERAGE HEIGHT OF THE HIGHEST ROOF SURFACE.

2. ALLOWABLE BUILDING AREA (IA) (TABLE 503, 506, 507)	UNLIMITED
PROPOSED BUILDING AREA (IA)	239,010 TOTAL GSF
GROUND FLOOR	46,000 GSF
SECOND FLOOR	46,860 GSF
THIRD FLOOR	30,700 GSF
FOURTH FLOOR	30,700 GSF
FIFTH FLOOR	30,700 GSF
SIXTH FLOOR	21,400 GSF
SEVENTH FLOOR	21,400 GSF
EIGHTH FLOOR	11,250 GSF

FIRE RESISTANCE RATINGS OF STRUCTURAL ELEMENTS

FIRE RESISTANCE RATING ELEMENT (IA):	MIN. HOURS REQUIRED
PRIMARY STRUCTURAL FRAME	3 HOURS
LOADBEARING WALL (INTERIOR OR EXTERIOR)	3 HOURS
NON-LOADBEARING WALL	0 HOURS
FLOOR CONSTRUCTION	2 HOURS
ROOF CONSTRUCTION	1 1/2 HOURS
CORRIDOR WALLS	1 HOUR
DWELLING UNIT SEPARATION WALLS	1 HOUR

FIRE EXTINGUISHER PROVIDED FOR MAXIMUM TRAVEL DISTANCE OF 75 FEET; PROVIDED AT CORRIDORS AND COMMON SPACES.
EMERGENCY RESPONDER RADIO COVERAGE
TWO-WAY ELEVATOR LOBBY COMMUNICATION
MONITORED FIRE ALARM REQUIRED
SMOKE AND CO DETEECTORS REQUIRED

MEANS OF EGRESS

FLOOR		GROSS SF	SF/OCC.	OCCUPANT LOAD
1ST FLOOR				
	Parking Garage	*36,400*	*/ 200 =*	182
	Retail	*7,600*	*/50*	152
	Assembly	*2000*	*/15=*	133
2nd FLOOR				
	Parking Garage	*37,660*	*/ 200 =*	188
	Assembly	*1,900*	*/15=*	126
	Residential	*7300*	*/ 200 =*	37
3rd FLOOR	*Residential*	*27,400*	*/ 200 =*	137
	Assembly	*3,300*	*/15=*	220
4th FLOOR	*Residential*	*30,700*	*/ 200 =*	154
5th FLOOR	*Residential*	*30,700*	*/ 200 =*	154
6th FLOOR	*Residential*	*20,700*	*/ 200 =*	104
	Assembly	*700*	*/15=*	46
7th FLOOR	*Residential*	*21,400*	*/ 200 =*	107
8th FLOOR	*Residential*	*11,250*	*/ 200 =*	56
TOTAL BUILDING OCCUPANT LOAD:				***1796***

M. Calculation of Wastewater Flowrate for 52 Hanover Redevelopment

The proposed project will include the redevelopment of a site that currently is occupied by a former garage used for the maintenance and storage of Public Works vehicles. The existing garage will be demolished and replaced with a six-story building consisting of 171 residential units, two levels of structured parking, and ground level retail units. Based upon Section 4 of the Maine Subsurface Wastewater Disposal Rules, the project anticipates the following daily flows:

Estimate of Design Flows			
Classification of Water Demand	**Number of Units**	**Gallons per Day per Unit**	**Total Gallons per Day**
Existing			
Warehouse (12 GPD per employee)	20 employees	240	240
Proposed			
Employees at place of employment with no showers (12 GPD per employee)	4 retail units (5 employees per unit)	60	240
Multiple family dwelling unit (1-bedroom)	135	120	16,200
Multiple family dwelling unit (2-bedroom)	36	180	6,480
		Total Existing	**240**
		Total Proposed	**22,680**
		Net Change	**+22,440 GPD**
*Values based on STATE OF MAINE: SUBSURFACE WASTEWATER DISPOSAL RULES, most recent edition			

Although the domestic sewer increase is notable, we are pleased to be able to separate the stormwater from the combined sewer system. Given the existing 60,000 sf site is entirely impervious and sheds the entirety of its runoff to the combined sewer, the redirection of the site's runoff to the proper channels along with a net reduction in impervious area will provide a notable improvement to combined sewer overflow events once the downstream system is completed.

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Portland Dept. of Public Works
55 Portland Street,
Portland, Maine 04101-2991

Date: September 25, 2020

Bradley Roland, P.E.
Water Resources Division
Department of Public Works
55 Portland Street
Portland, ME 04103

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 52 Hanover Street Portland, Maine 04101

Chart Block Lot Number: 33-B-008

Proposed Use: Mixed Use: Residential / Retail

Previous Use: Single-Family Residential

Existing Sanitary Flows: 240 GPD

Existing Process Flows: _____ GPD

Description and location of City sewer that is to receive the proposed building sewer lateral.
Proposed connection to the combined system within Hanover Street

Site Category		
	Commercial *(see part 4 below)*	x
	Industrial *(complete part 5 below)*	
	Governmental	
	Residential	x
	Other *(specify)*	

Clearly, indicate the proposed connections, on the submitted plans.

2. Please, Submit Contact Information.

City Planner's Name: TBD Phone: TBD

Owner/Developer Name: Tom Watson; Tom Watson & Co., LLC

Owner/Developer Address: 82 Hanover St., Portland, ME 04101

Phone: (207) 699-2219 Fax: _____ E-mail: tom@portpropmgt.com

Engineering Consultant Name: William Savage, P.E. - Acorn Engineering, Inc.

Engineering Consultant Address: 65 Hanover Street Portland, Maine 04101

Phone: (207) 775-2655 Fax: _____ E-mail: wsavage@acorn-engineering.com

Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review.

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: 22,680 GPD

Peaking Factor/ Peak Times: Diurnal Residential Flow Pattern

Specify the source of design guidelines: *(i.e.__"Handbook of Subsurface Wastewater Disposal in Maine,"* "*Plumbers and Pipe Fitters Calculation Manual,"* __ *Portland Water District Records,* __ *Other (specify)*
State of Maine Subsurface Wastewater Disposal Rules, Effective 8/3/15

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: N/A

Size of External Grease Interceptor: _____

Retention Time: _____

Peaking Factor/ Peak Times: _____

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: N/A GPD

Do you currently hold Federal or State discharge permits? Yes ____ No ____

Is the process wastewater termed categorical under CFR 40? Yes ____ No ____

OSHA Standard Industrial Code (SIC): *(http://www.osha.gov/oshstats/sicser.html)*

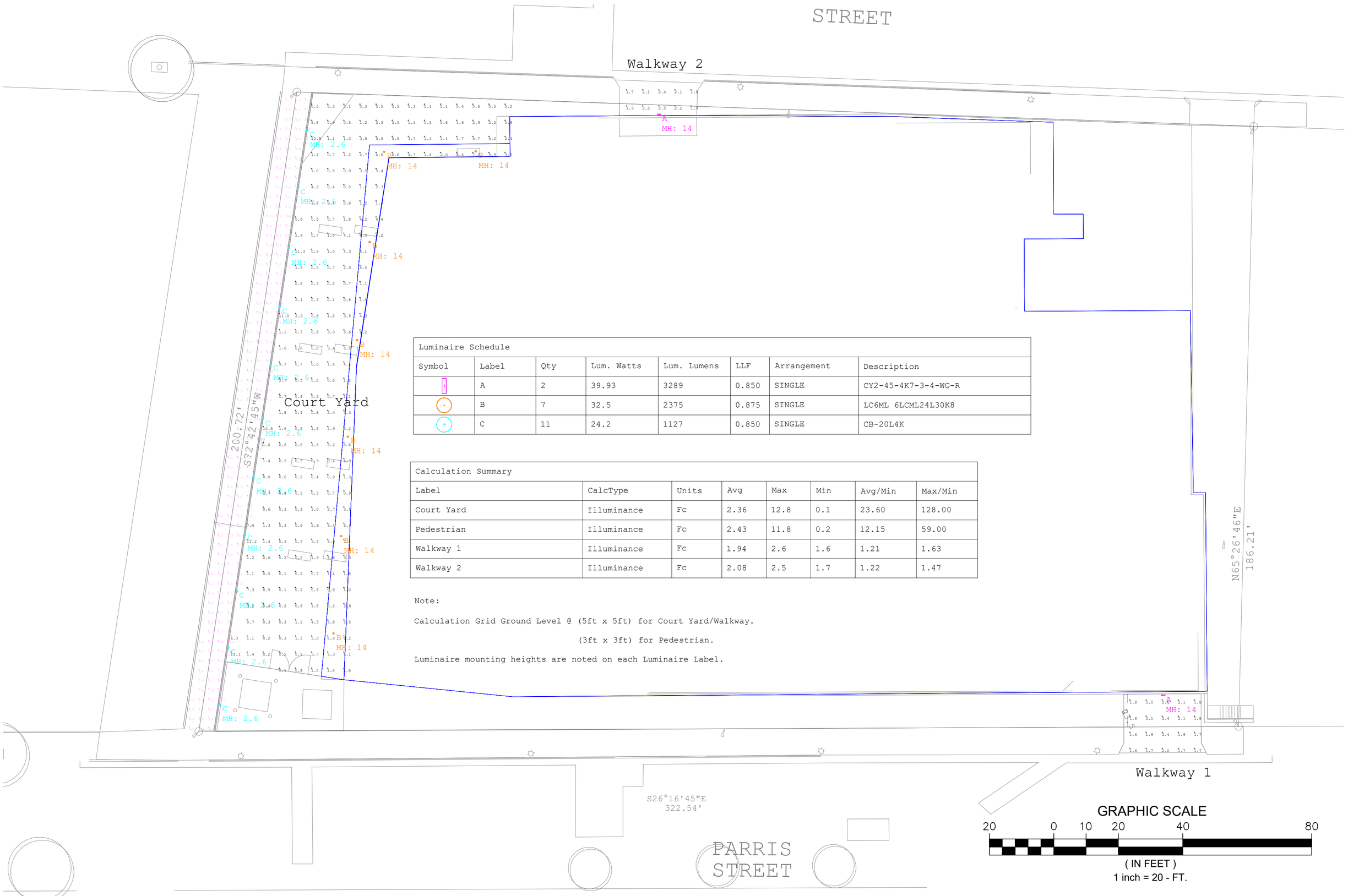
Peaking Factor/Peak Process Times: _____

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.

N. Lighting

Please find attached the cut sheets and photometric plans for the proposed site lighting. Note that the courtyard lighting may appear dimmer than in reality due to the inability to model the City-required Bayside light poles. Furthermore, it is anticipated that each tenant will have additional, unique accessory lighting.



Luminaire Schedule							
Symbol	Label	Qty	Lum. Watts	Lum. Lumens	LLF	Arrangement	Description
	A	2	39.93	3289	0.850	SINGLE	CY2-45-4K7-3-4-WG-R
	B	7	32.5	2375	0.875	SINGLE	LC6ML 6LCML24L30K8
	C	11	24.2	1127	0.850	SINGLE	CB-20L4K

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Court Yard	Illuminance	Fc	2.36	12.8	0.1	23.60	128.00
Pedestrian	Illuminance	Fc	2.43	11.8	0.2	12.15	59.00
Walkway 1	Illuminance	Fc	1.94	2.6	1.6	1.21	1.63
Walkway 2	Illuminance	Fc	2.08	2.5	1.7	1.22	1.47

Note:

Calculation Grid Ground Level @ (5ft x 5ft) for Court Yard/Walkway.

(3ft x 3ft) for Pedestrian.

Luminaire mounting heights are noted on each Luminaire Label.

1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

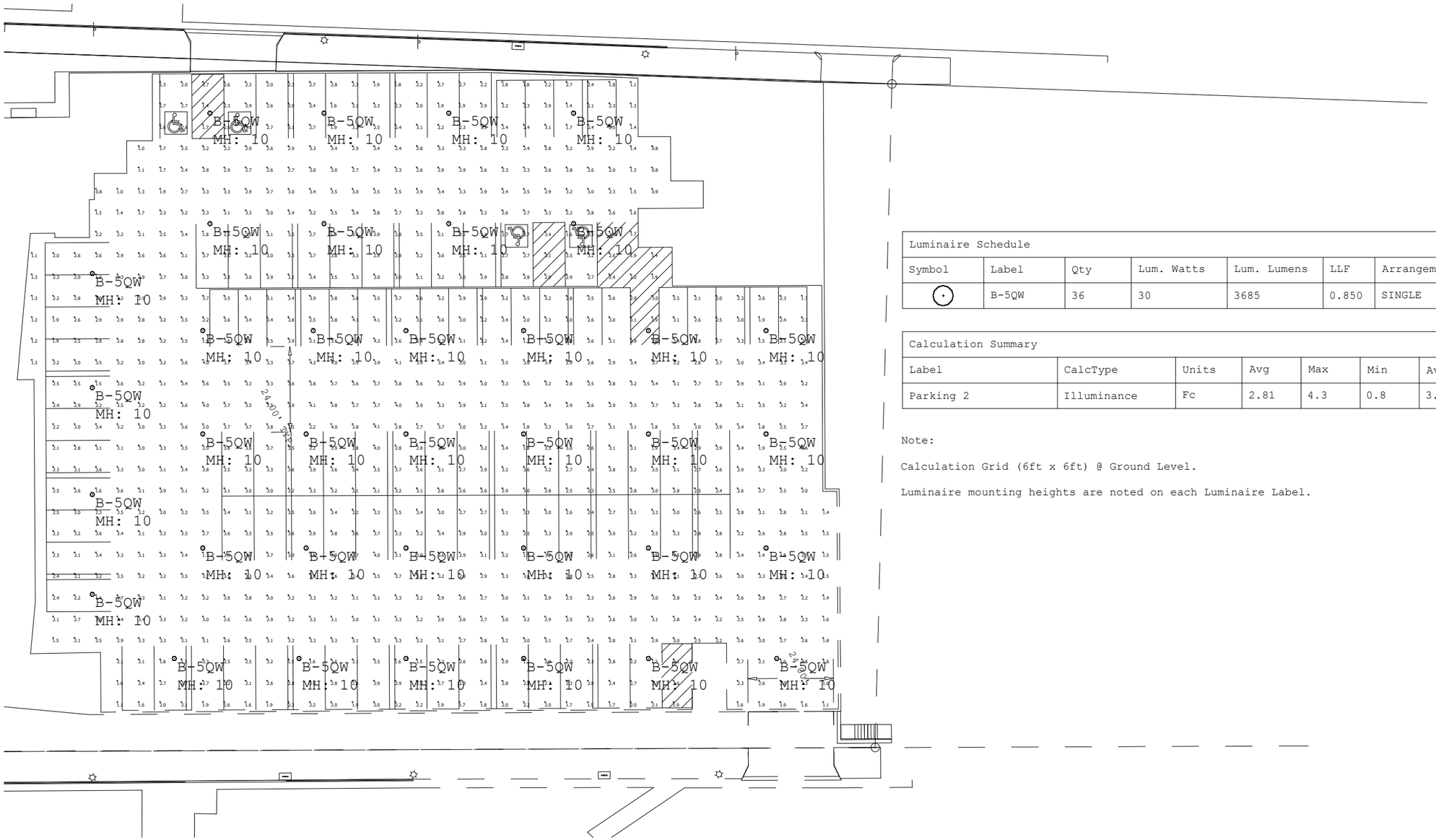
PHOTOMETRIC PLAN

52 Hanover Redevelopment

REVISED FROM DRAWING NUMBER(S):

HUBBELL®
Hubbell Lighting, Inc.
701 MILLENNIUM BLVD.
GREENVILLE, SC 29607

DN BY:	DATE:	CHK BY:
Kalyan	09-29-2020	Heath
REV. BY:	DATE:	SCALE: AS NOTED
QUOTE: N/A	DRAWING / DESIGN NO.: 20-27002C	



Luminaire Schedule							
Symbol	Label	Qty	Lum. Watts	Lum. Lumens	LLF	Arrangement	Description
	B-5QW	36	30	3685	0.850	SINGLE	SRT2-30-5K7-5QW

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking 2	Illuminance	Fc	2.81	4.3	0.8	3.51	5.38

Note:

Calculation Grid (6ft x 6ft) @ Ground Level.

Luminaire mounting heights are noted on each Luminaire Label.

1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

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3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

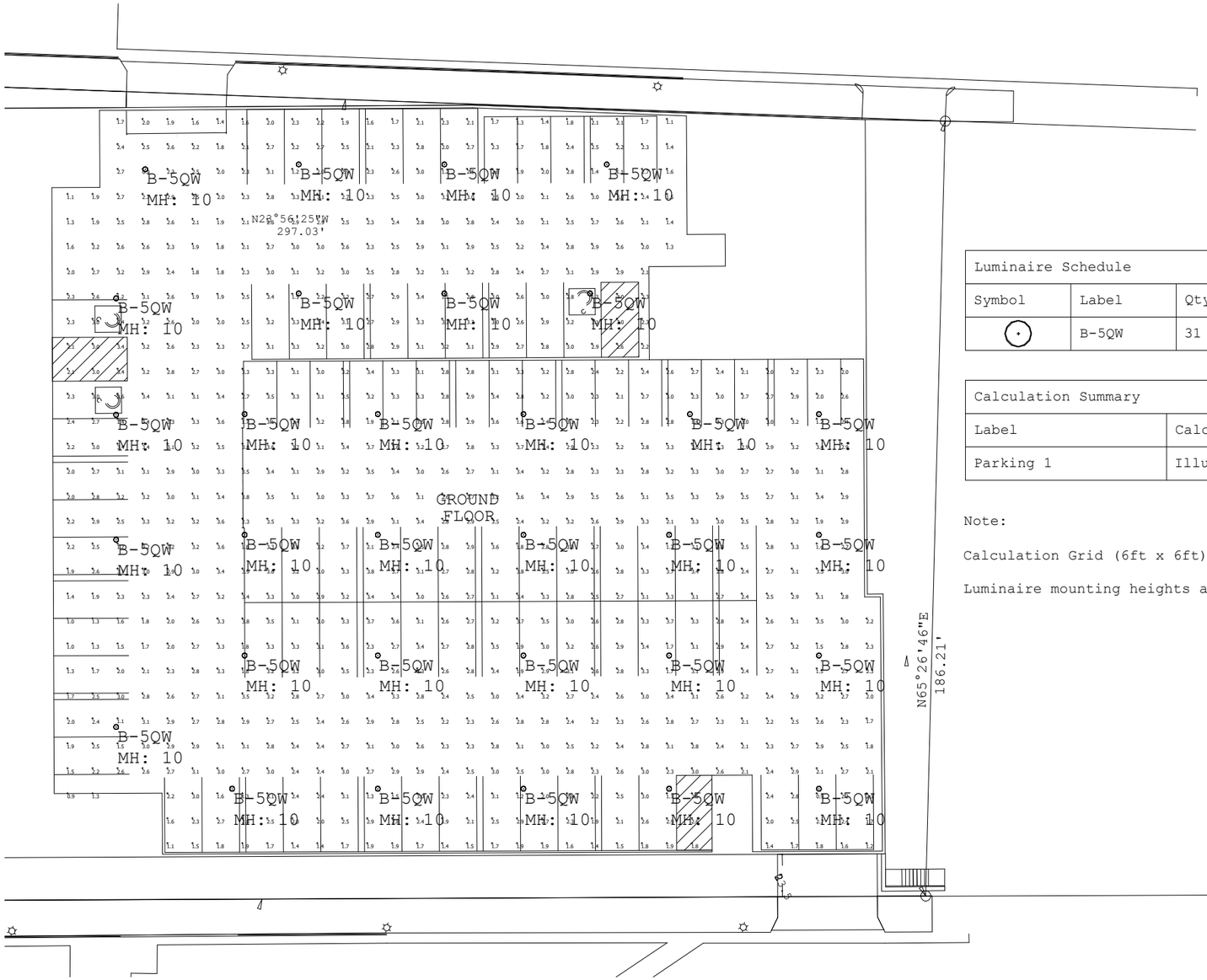
PHOTOMETRIC PLAN

52 Hanover Redevelopment

REVISED FROM DRAWING NUMBER(S): 20-27002B

HUBBELL®
Hubbell Lighting, Inc.
701 MILLENNIUM BLVD.
GREENVILLE, SC 29607

DN BY:	DATE:	CHK BY:
Kalyan	10-06-2020	Heath
REV. BY:	DATE:	SCALE: AS NOTED
QUOTE: N/A	DRAWING / DESIGN NO.: 20-27002B(R2)	



Luminaire Schedule							
Symbol	Label	Qty	Lum. Watts	Lum. Lumens	LLF	Arrangement	Description
	B-5QW	31	30	3668	0.850	SINGLE	SRT2-30-4K7-5QW

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking 1	Illuminance	Fc	2.64	3.9	0.9	2.93	4.33

Note:

Calculation Grid (6ft x 6ft) @ Ground Level.

Luminaire mounting heights are noted on each Luminaire Label.

GRAPHIC SCALE

0 15 30 60

(IN FEET)
1 inch = 30 - FT.

1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

PHOTOMETRIC PLAN

52 Hanover Redevelopment

REVISED FROM DRAWING NUMBER(S):

20-27002A

HUBBELL®

Hubbell Lighting, Inc.
701 MILLENNIUM BLVD.
GREENVILLE, SC 29607

DN BY:	DATE:	CHK BY:
Kalyan	10-06-2020	Heath
REV. BY:	DATE:	SCALE: AS NOTED
QUOTE: N/A	DRAWING / DESIGN NO.: 20-27002A(R2)	

Date: Oct 1, 2020

Swaney Lighting
PO Box 1597
Scarborough ME 04070
Phone: (207) 883-7100
Fax: (207) 885-9606

Job Name
52 HANOVER ST. REDEVELOPMENT
SLA20-46484
PORTLAND ME

Bid Date
Sep 22, 2020

Submittal Date
Oct 1, 2020

Engineer:
Acorn Engineering, Inc

Portland ME 04102

Transmittal

Swaney Lighting
PO Box 1597
Scarborough ME 04070
Phone: (207) 883-7100
From: Therese "TC" Freeman X-103

Project **52 HANOVER ST. REDEVELOPMENT**
Quote# SLA20-46484
Location PORTLAND ME
Contact:

ATTACHED WE ARE SENDING YOU 1 COPY OF THE FOLLOWING ITEM:

- ☐ Drawings
- ☐ Prints
- ☐ Plans
- ☐ Specifications
- ☐ Information
- ☒ Submittals

Other:

THESE ARE TRANSMITTED FOR:

- ☐ Prior Approval
- ☒ Approval
- ☐ Approval as Submitted
- ☐ Approval as Noted
- ☐ Resubmittal for Approval
- ☐ Corrections
- ☐ Your Use
- ☐ Review and Comment
- ☐ Record

Bids due on:
Other:

Type	MFG	Part
A5QW	BEACON PRODUCTS **Item Note:** SPECIFY FINISH	SRT2-50-4K7-5QW-UNV-***
A	Architectural Area Lighting **Item Note:** SPECIFY FINISH	CY2-45-4K7-3-4-WG-UNV-**-R-FPP
B	PRESCOLITE	LC6ML / 6LCML24L30K8
C	KIM **Item Note:** SPECIFY FINISH	CB32/20L4KUV/**

BEACON
design . performance . technology

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

SRT2 EDGE-LIT

CEILING/SURFACE/GARAGE

DRIVE EDGE-LIT

FEATURES

- Edge-lit optical assembly delivers exceptional uniformity over the entire lens with indirect illumination that reduces glare and improves visual comfort
- Low profile housing intended for 8' - 20' mounting heights for surface, trunnion/yoke or pendant mounting
- Applications include parking garage, walkway or building canopies, corridors, tunnels, large stairwells and other interior applications
- Multiple optical distributions are available making the Beacon Edge-Lit luminaire both versatile and functional
- UL/cUL listed for wet locations, IP65 and 3G vibration rated
- Ambient temperatures of up to 40°C

CONTROL TECHNOLOGY

NX DISTRIBUTED™ INTELLIGENCE wiSCAPE™

RELATED PRODUCTS

Drive Edge-Lit SRT1 | Arceos™ ARS Surface | Endura

SPECIFICATIONS

HOUSING

- Die-cast aluminum housing ensures long electrical component life and luminaire performance
- Corrosion resistant powder coat finish both protects and provides architectural appearance
- One piece molded silicone gasket ensures weather proof seal
- Thermally isolated driver mounted to dedicated bracket reduces operating temperatures and increases driver life and reliability

OPTICS

- Edge-lit acrylic light guide provides blended non-pixelated light for unprecedented visual comfort
- Choice of multiple light outputs with lumen range of 4,000–16,000
- Five distribution types: Type V Square, Type V Rectangular, Type V Concentrated, Type V Wide or Asymmetric (Type 3/4)
- Wide variety of CCT's and CRI's offered: 3000K (70CRI), 3000K (80CRI), 3500K (80CRI), 4000K (70CRI), 4000K (80CRI) or 5000K (70 CRI) CCT

ELECTRICAL

- 120V–277V 50/60Hz with 347V and 480V available
- 0-10V dimming drivers are RoHS compliant and IP66
- Surge protection – Standard 10kA with optional end of life LED indicator

INSTALLATION

- Standard quick mount plate over standard 4" square junction box or octagonal box and allows for simplified fixture installation.
- Standard luminaire accepts a rigid or free-swinging 3/4" NPT stem for pendant mount via wet location j-box (by others)
- Optional bird deterrent shroud available for field installation
- Optional trunnion/yoke mount available for field installation

OPTIONS/CONTROLS

- Standalone occupancy sensor available for on/off or dimming operation
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor
- UL924 device available for standalone and wireless control override during power interruptions
- Uplight option provides approximately 800 lumens and consumes only 8 additional watts
- Integral battery backup option available with and without heater. Rated for 0°C (without heater) and -30°C (with heater)
- Emergency lighting relay available for generator or central inverter supplied lighting
- Vandal resistant wire guard available as an option for factory installation or as an accessory for field installation

CERTIFICATIONS

- Listed to UL1598 for use in wet location, listed for -40°C to 40°C applications
- IDA approved with zero uplight for 3000K and warmer CCTs
- IP65

WARRANTY

- 5 year warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	4000–16000
Wattage Range	30–140
Efficacy Range (LPW)	110–135
Reported Life (Hours)	L70>50K
Weight lbs. (kg)	15 (5.8)

© 2019 Beacon Products, a division of Hubbell Lighting, Inc. Specifications subject to change without notice.
701 Millennium Boulevard • Greenville, SC 29607 / Tel 864.678.1000 / Website www.beaconproducts.com

HUBBELL Lighting

BEACON
design : performance : technology

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

SRT2 EDGE-LIT

CEILING/SURFACE/GARAGE

ORDERING GUIDE

Example: SRT2 30 3K7 5QW UNV GT WG

CATALOG # _____ – _____ – _____ – _____ – _____ – _____ – _____

Series		Engine		CCT		Distribution		Voltage		Color/Finish (Specify Stnd. finish)		Options	
SRT2	Edge-Lit Parking Garage Size 2	**30**	30W Nominal 4000 lm	**3K7**	3000K, 70 CRI	**5QW**	Type Square Wide[1]	**UNV**	120V-277V	**BL**	Textured Black	**CD**	Continuous Dimming[6]
		50	50W Nominal 6000 lm	**3K8**	3000K, 80 CRI	**5RW**	Type 5 Rect. Wide[1]	**120**	120V	**DB**	Textured Dark Bronze	**WG**	Wire Guard
		65	65W Nominal 8000 lm	**35K8**	3500K, 80 CRI	**5C**	Type 5 Concentrated	**208**	208V	**GT**	Graphite Textured	**UD**	Uplight Module[3]
		85	85W Nominal 10000 lm	**4K7**	4000K, 70 CRI	**5W**	Type 5 Wide[4]	**240**	240V	**GYS**	Smooth Gray	**F**	Single Fuse (120, 277, 347V)[2]
		100	100W Nominal 12000 lm	**4K8**	4000K, 80 CRI	**ASY**	Asymmetric (Type 4)[1]	**277**	277V	**PS**	Smooth Plat. Silver	**F**	Double Fuse (208, 240, 480V)[2]
		120	120W Nominal 14000 lm	**5K7**	5000K, 70 CRI			**347**	347V	**WH**	Textured White	**E**	EM Battery Pack (0°C)[2]
		140	140W Nominal 16000 lm					**480**	480V	**CC**	Custom Color	**EH**	EM Battery w/Heater (-30°C)[2]
												ELR	Emergency Lighting Relay[3]
												LD3	36" Lead Length[5]
												LD6	72" Lead Length[5]
												LD9	108" Lead Length[5]
												SP10K	10kA Surge Protection with End of Life LED Indicator
												LMB	Less Mounting Bracket

Notes:
1. Up to 85W light engines only
2. Must specify voltage, 120V or 277V for E and EH
3. Universal voltage only
4. 100–140W light engines only
5. Standard wire lead length 24"
6. Specify when using external 0-10V dimming system

Control Options

NX Standalone

NXOS-12F	NX Distributed Intelligence™, PIR Occ. Sensor, Dimming Daylight Harvesting, up to 12' MH
NXSP-30F	NX Distributed Intelligence™, PIR Occ. Sensor, Dimming Daylight Harvesting, up to 30' MH
NXOS924-12F	NX Distributed Intelligence™, PIR Occ. Sensor with UL924 dimming bypass module for controls override, up to 12' MH[3]
NXSP924-30F	NX Distributed Intelligence™, PIR Occ. Sensor, with UL924 dimming bypass module for controls override, up to 30' MH[3]

NX Networked – Wireless[1]

NXWE	NX Distributed Intelligence™ Wireless Enabled (module + radio)
NXOSW-12F	NX Distributed Intelligence™ Wireless, PIR Occ. Sensor, Dimming Daylight Harvesting, up to 12' MH
NXSPW-30F	NX Distributed Intelligence™ Wireless, PIR Occ. Sensor, Dimming Daylight Harvesting, up to 30' MH
NXWE924	NX Distributed Intelligence™ Wireless Enabled with UL924 dimming bypass module for controls override[3]
NXOSW924-12F	NX Distributed Intelligence™ Wireless, PIR Occ. Sensor with UL924 dimming bypass module for controls override, up to 12' MH[3]
NXSPW924-30F	NX Distributed Intelligence™ Wireless, PIR Occ. Sensor with UL924 dimming bypass module for controls override, up to 30' MH[3]

wiSCAPE® – Wireless[1]

WIR	Wireless Controls, wiSCAPE®
WIRSC	wiSCAPE® + occupancy sensor
WIR924	Wireless Controls, wiSCAPE® with UL924 dimming bypass module for controls override[3]
WIRSC924	wiSCAPE® + occupancy sensor with UL924 dimming bypass module for controls override[3]

Sensor Controls

SCP-8F	Remote control programmable line voltage sensor (8-12' recommended MH)
SCP-20F	Remote control programmable line voltage sensor (12-20' recommended MH)
SCP924-8F	Programmable sensor with UL924 dimming bypass module for controls override (8-12' recommended MH)[3]
SCP924-20F	Programmable sensor with UL924 dimming bypass module for controls override (12-20' recommended MH)[3]

Accessories (Order Separately)

☐	**SRT2-WG**	Wire Guard for SRT2 version
☐	**SRT-MB**	Mounting bracket for pre-installation
☐	**SRT2-BRD**	Bird deterrent shroud for SRT2 version, not available with uplight or trunnion mount
☐	**SRT2-TM**	Trunnion/Yoke accessory for SRT2 version
☐	**SCP-REMOTE**	Remote control for SCP option; order at least on per project to program and control

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HUBBELL Lighting

BEACON
design : performance : technology

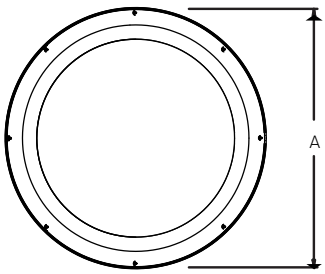
DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

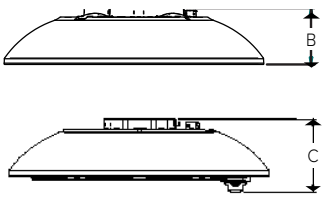
SRT2 EDGE-LIT

CEILING/SURFACE/GARAGE

DIMENSIONS

SRT2

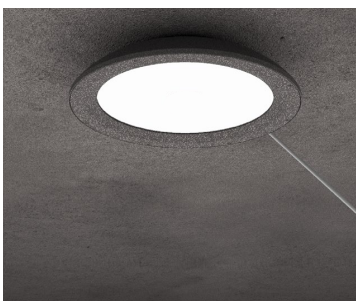




A	B	C	Weight
18.5" (469mm)	4.0" (1mm)	5.2" (132mm)	15bs (6.8kg)

ADDITIONAL INFORMATION

MOUNTING

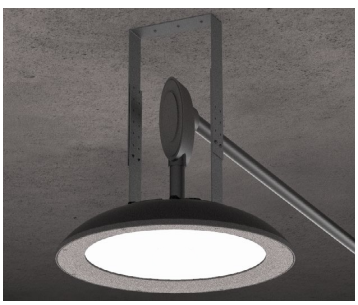


Surface Mount

Mounting plate with “quick mount” hanger for one person simple installation.

Pendant Mount

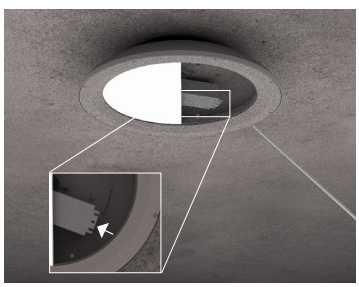
Standard 3/4" threaded entry for pendant applications.



Trunnion/Yoke Mount

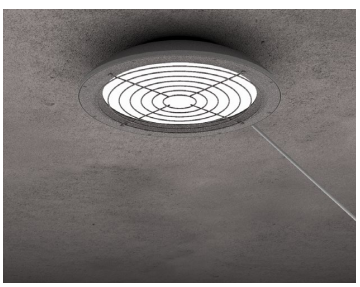
Multiple position trunnion mount adjusts 9" up and down for positioning in 1" increments.

ACCESSORIES AND SERVICES



Battery Backup

Integral battery backup option available on SRT2 version.



Wire Guard

An optional wire guard can be specified at the factory or as an accessory for field installation.

Bird Deterrent

An optional bird shroud deterrent can be specified at the factory or as an accessory for field installation.

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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

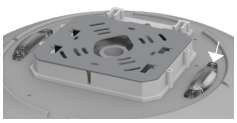
SRT2 EDGE-LIT

CEILING/SURFACE/GARAGE

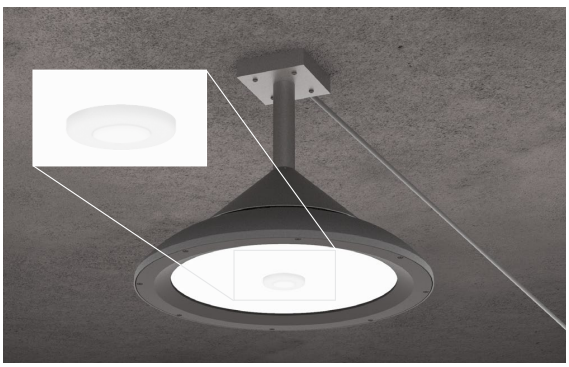
ADDITIONAL INFORMATION (CONT'D)

UPLIGHT

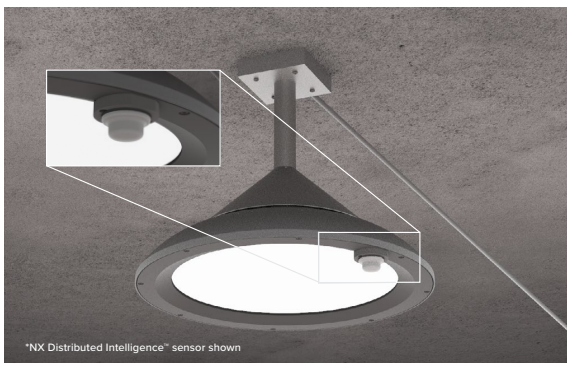
Optional uplight module provides 800 lumens of indirect illumination for improved visual quality while eliminating cave effect.



CONTROLS



Standalone Controls



Wireless Controls

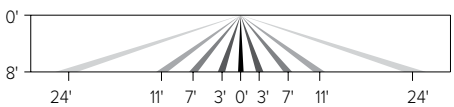
Optional passive infrared sensors are available for basic occupancy and daylight sensing. Programmable via remote or Bluetooth® phone app.

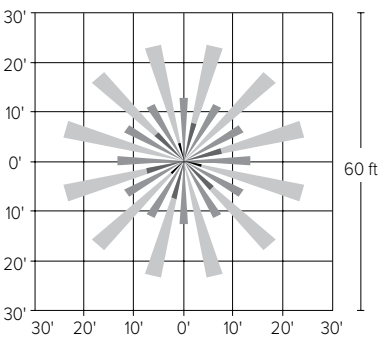
NX DISTRIBUTED™ INTELLIGENCE

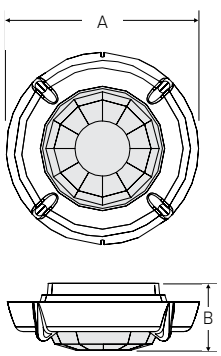
wiSCAPE™ WIRELESS OUTDOOR LIGHTING SYSTEM

Optional NX Distributed Intelligence™ and wiSCAPE® wireless controls are available for SRT2 versions (with or without occupancy sensing).

SCP-8F







A	B
2.3" (59mm)	.8" (20mm)

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TYPE:	PROJECT:
CATALOG #:	

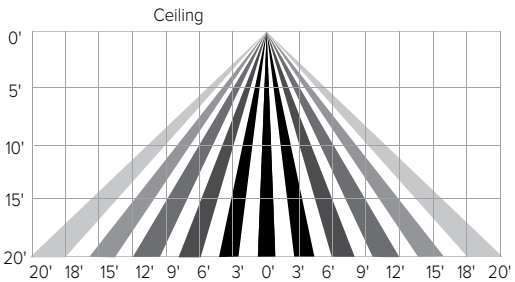
SRT2 EDGE-LIT

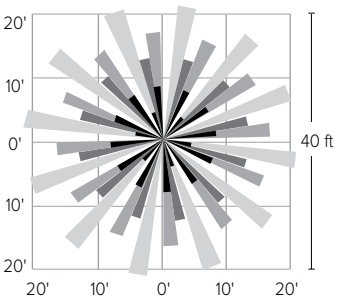
CEILING/SURFACE/GARAGE

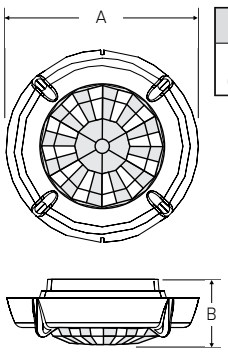
ADDITIONAL INFORMATION (CONT'D)

CONTROLS (CONT'D)

SCP-20F

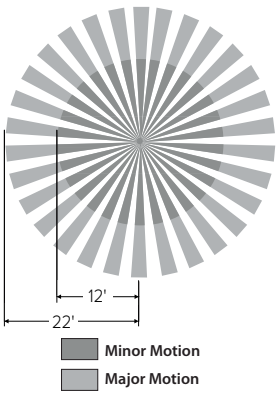




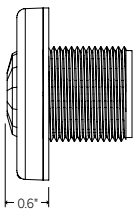


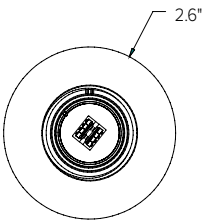
A	B
2.3" (59mm)	.8" (20mm)

NXOS12F

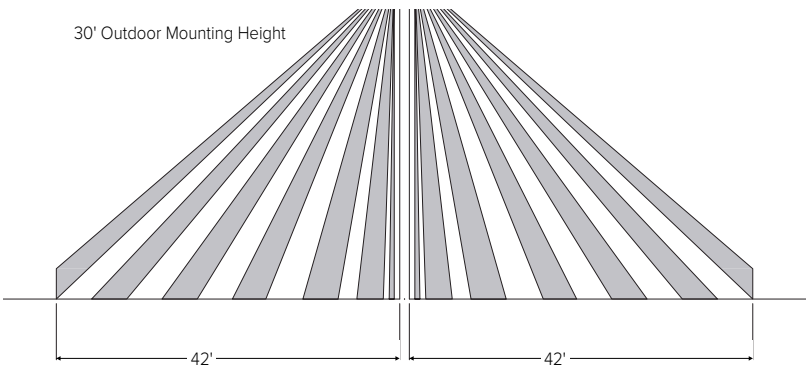


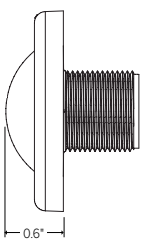
NXSMP-OMNI Range

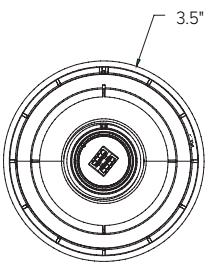




NXSP30F







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HUBBELL Lighting

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Cypher™ – CY2 Pedestrian Scale

TYPE

FEATURES

- Integral Battery Backup Option
- 360° Light Distribution
- RGBW or Static White Luminous Front Option
- IES Type I, II, III & IV Distributions
- Wall Graze, Spot and Pencil Distributions
- Multiple Fascia Options and Finishes
- 0-10V dimming
- IP-66 Housing & Optical System
- 120-277, 347 and 480V
- 3000K, 4000K & 5000K CCT
- 10kA Surge Protection
- Fascia Forms F and E are ADA compliant for use in low mounting height applications (80 inches or less)
- IDA approved, downlight only, 3000K and warmer CCTs
- Occupancy Sensor & Wireless Control Options

Downlight only, 3000K and warmer CCTs

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12
Series-Output	CCT/CRI	Model	Main Distribution	Secondary Distribution	Voltage	Housing Finish	Fascia Form	Luminous Front	Fascia Panel	Control Options	Options

SERIES-OUTPUT (Base)

CY2-25	25w, 2500 nominal lumens
CY2-35	40w, 3500 nominal lumens
CY2-45	50w, 4500 nominal lumens

CCT-CRI

27K8	2700K, 80CRI
3K7	3000K, 70CRI
3K8	3000K, 80CRI
4K7	4000K, 70CRI
4K8	4000K, 80CRI
5K7	5000K, 70CRI

MODEL (Light Engine)

1	DownLight Only
2	50/50 Down/Up, **Down/Up distributions must match**
3	90/10 Down/Up
4	25/25/25/25 Split, **Down/Up/ Side distributions must match**
5	70/10/10/10 Split, **Top/Side distributions must match**

Contact factory for custom distributions,
See Distribution Matrix on page 2 for restrictions.

MAIN DISTRIBUTION (Down)

1	IES Type I
2	IES Type II
3	IES Type III
4	IES Type IV
SP	15° Spot/Column
WG	60° Wall Graze
1D	Type 1 Diffused
2D	Type 2 Diffused
3D	Type 3 Diffused
4D	Type 4 Diffused

SECONDARY DISTRIBUTION (Up, Sides)

1	IES Type I
2	IES Type II
3	IES Type III
4	IES Type IV
SP	15° Spot/Column
WG	60° Wall Graze
PB*	Pencil Beam
1D	Type 1 Diffused

** PB distribution is available for 90/10 and 70/10/10/10 models only. Not all combinations are recommended. See Distribution Matrix on page 2 for restrictions.*

SECONDARY DISTRIBUTION (Up, Sides)

2D	Type 2 Diffused
3D	Type 3 Diffused
4D	Type 4 Diffused

** PB distribution is available for 90/10 and 70/10/10/10 models only. Not all combinations are recommended. See Distribution Matrix on page 2 for restrictions.*

VOLTAGE

UNV	120-277V
347	347V
480	480V

BASE HOUSING FINISH

Specify Stnd. finish

AGN	Antique Green
BL	Black
BLT	Matte Black
CRT	Corten
DB	Dark Bronze
DGN	Dark Green
GT	Graphite
LG	Light Grey
MAL	Matte Aluminum
MDB	Metallic Bronze
MG	Medium Grey
TT	Titanium
VBU	Verde Blue
WDB	Weathered Bronze
WH	Arctic White

Premium Colors

SFM	Seafoam
SHK	Shamrock
SPP	Salt and Pepper
WCP	Weathered Copper
RAL	Provide a RAL 4 digit color number
CUSTOM COLOR	Please provide color chip for matching

FASCIA FORM

F	Flat
R	Radius/Curved
T	Triangle/Wedge
E	Rounded Edge
C	Circle/Curved
CB	Cylinder Balanced
CT	Cylinder Tall
CBM	Custom Building Material Mount Ghost Fascia

LUMINOUS FRONT

BLANK	Standard None
RGBW	RGBW Luminous Front
LFSW	Static White Luminous Front

RGBW and LFSW luminous fronts are only available with open, four square and perforated fascia panels

FASCIA PANEL

FPP	Full Panel Painted
FPS	Full Panel Stainless Steel
FPC	Full Panel Copper
OPP	Open Panel Painted
OPS	Open Panel Stainless Steel
OPC	Open Panel Copper
4PP	4-Square Panel Painted
4PS	4-Square Panel Stainless Steel
4PC	4-Square Panel Copper
PPP	Perforated Panel Painted
PPS	Perforated Panel Stainless Steel
PPC	Perforated Panel Copper

Flat and Radius Fascia forms only. Painted panels by default match base housing finish/color. Consult factory for custom panel finishes.

CONTROL OPTIONS

PCU	Universal Button Photocell (120-277V)
SCP	Programmable Occupancy Sensor
SWP	SiteSync Wireless
SWPM	SiteSync Wireless w/Occupancy Sensor
WIR	wiSCAPE
WIRSC	wiSCAPE w/Occupancy Sensor

Occupancy sensors not available with CB, T, E or C fascia forms

OPTIONS

EM	Battery Backup Unit -20°C
SF	Single Fuse (120, 277, 347)
DF	Double Fuse (208, 240, 480)
SCB	Surface Conduit Box

Battery Backup not available with Triangle and Rounded Edge Fascia Forms.

architectural area lighting
ARCHITECTURAL AREA LIGHTING
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P 626.968.5666 | F 626.369.2695 | www.aal.net
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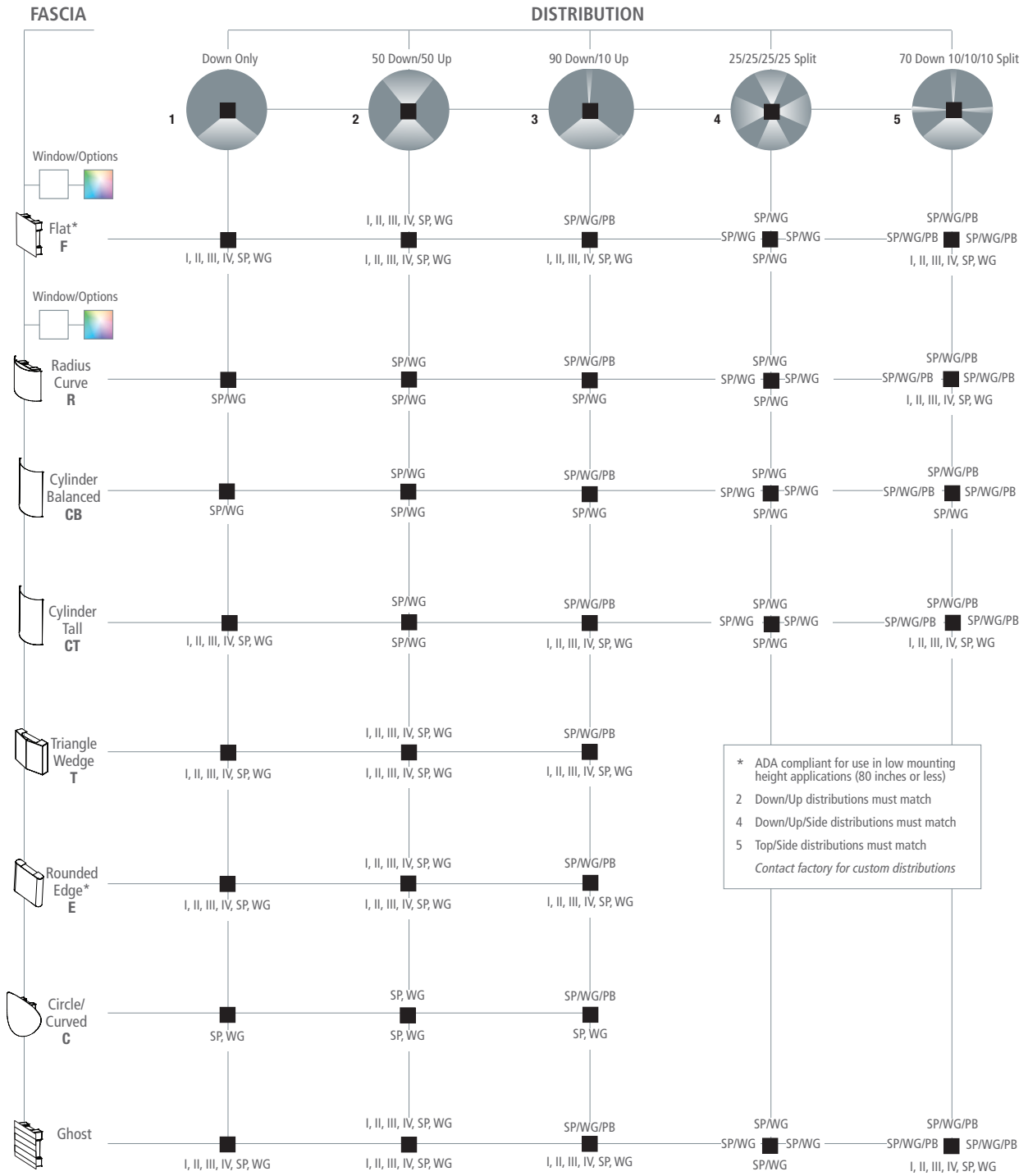
JOB
TYPE
NOTES

Cypher™ – CY2 Pedestrian Scale

TYPE

Distribution Matrix



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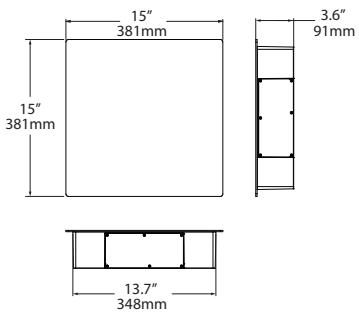
JOB
TYPE
NOTES

Cypher™ – CY2 Pedestrian Scale

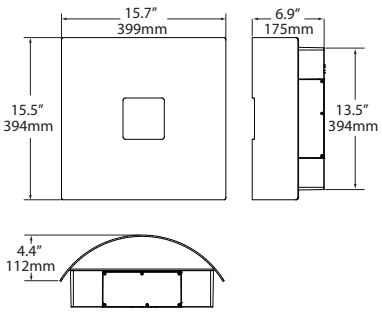
TYPE

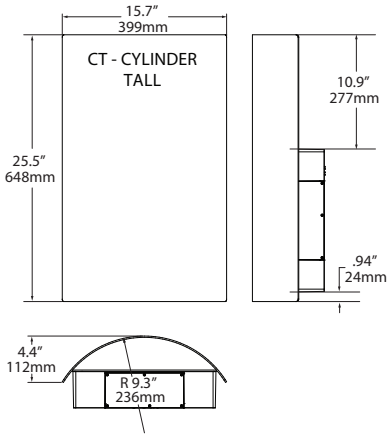
Drawings

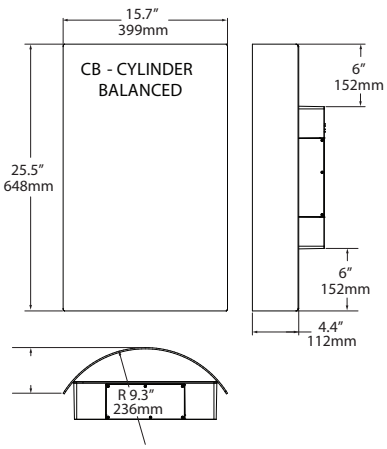
F - FLAT
ADA approved.



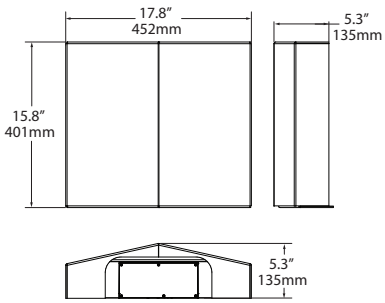
R - RADIUS/CURVED



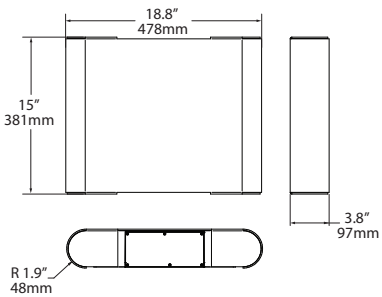




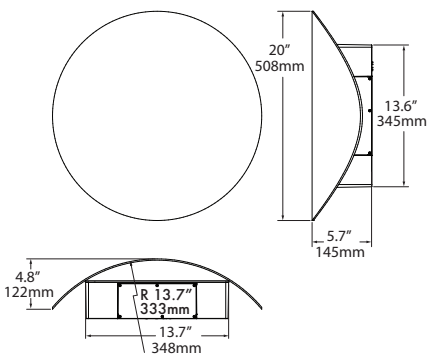
T - TRIANGLE/WEDGE



E - ROUNDED EDGE
ADA approved.



C - CIRCLE/CURVED



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JOB
TYPE
NOTES

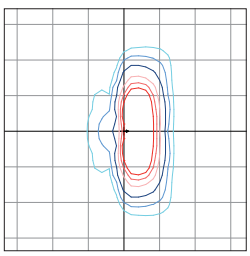
Cypher™ – CY2 Pedestrian Scale

TYPE

LUMINAIRE PERFORMANCE

Downlight only			Configuration														
			Bright White (5000K)					Neutral White (4000K)					Warm White (3000K)				
Nominal Output (Lm)	Average System Wattage	Distribution	Delivered Lumens	Efficacy (Lm/W)	BUG Rating B	BUG Rating U	BUG Rating G	Delivered Lumens	Efficacy (Lm/W)	BUG Rating B	BUG Rating U	BUG Rating G	Delivered Lumens	Efficacy (Lm/W)	BUG Rating B	BUG Rating U	BUG Rating G
			5000K 70 CRI					4000K 70 CRI					3000K 70 CRI				
2,500	26	Type 1	2836	109	0	0	0	2596	100	0	0	0	2499	96	0	0	0
		Type 2	2570	99	1	0	1	2353	90	1	0	1	2265	87	1	0	1
		Type 3	2739	107	1	0	1	2507	96	1	0	1	2413	93	1	0	1
		Type 4	2512	97	0	0	1	2299	88	0	0	1	2213	85	0	0	0
		Wall Graze	2795	107	2	0	0	2558	98	2	0	0	2462	95	2	0	0
		Spot/Column	2371	91	2	0	0	2171	83	2	0	0	2089	80	2	0	0
		Type 1 Diffused	2488	96	1	0	1	2278	88	1	0	1	2193	84	1	0	1
		Type 2 Diffused	2274	87	1	0	1	2082	80	1	0	1	2004	77	1	0	1
		Type 3 Diffused	2163	83	1	0	1	1980	76	1	0	1	1906	73	1	0	1
		Type 4 Diffused	2197	84	1	0	1	2011	77	1	0	1	1936	74	1	0	1
			5000K 70 CRI					4000K 70 CRI					3000K 70 CRI				
3,500	40	Type 1	4011	100	1	0	0	3672	92	1	0	0	3534	88	1	0	0
		Type 2	3635	91	1	0	1	3328	83	1	0	1	3203	80	1	0	0
		Type 3	3874	97	1	0	1	3546	89	1	0	1	3413	85	1	0	1
		Type 4	3553	89	1	0	1	3252	81	1	0	1	3131	78	1	0	1
		Wall Graze	3953	99	2	0	0	3618	90	2	0	0	3483	87	2	0	0
		Spot/Column	3354	84	3	0	0	3070	77	3	0	0	2955	74	3	0	0
		Type 1 Diffused	3519	88	1	0	1	3222	81	1	0	1	3101	78	1	0	1
		Type 2 Diffused	3217	80	1	0	1	2945	74	1	0	1	2835	71	1	0	1
		Type 3 Diffused	3059	76	1	0	1	2800	70	1	0	1	2695	67	1	0	1
		Type 4 Diffused	3107	78	1	0	1	2844	71	1	0	1	2738	68	1	0	1
			5000K 70 CRI					4000K 70 CRI					3000K 70 CRI				
4,500	52	Type 1	4982	97	1	0	1	4561	88	1	0	0	4390	84	1	0	0
		Type 2	4675	90	1	0	1	4280	82	1	0	1	4119	79	1	0	1
		Type 3	4812	95	1	0	1	4405	86	1	0	1	4240	82	1	0	1
		Type 4	4569	88	1	0	1	4183	80	1	0	1	4026	77	1	0	1
		Wall Graze	5083	99	3	0	0	4653	89	3	0	0	4479	86	3	0	0
		Spot/Column	4313	84	3	0	0	3948	76	3	0	0	3800	73	3	0	0
		Type 1 Diffused	4526	88	2	0	1	4143	80	1	0	1	3988	77	1	0	1
		Type 2 Diffused	4137	80	1	0	1	3787	73	1	0	1	3645	70	1	0	1
		Type 3 Diffused	3934	76	1	0	1	3601	69	1	0	1	3466	67	1	0	1
		Type 4 Diffused	3996	77	1	0	1	3658	70	1	0	1	3521	68	1	0	1

ISOLINE TEMPLATES 15' Mounting Height, 15' Grid Spacing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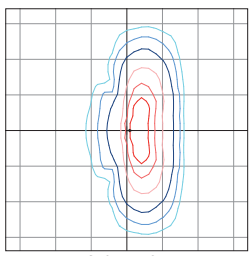
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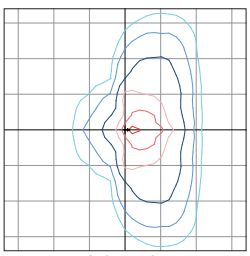
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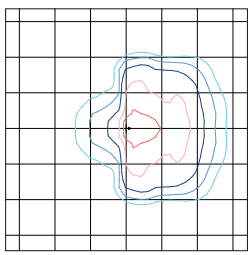
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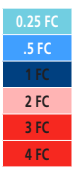

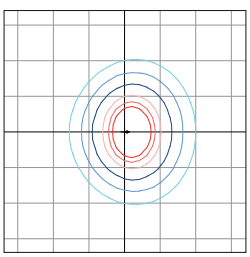
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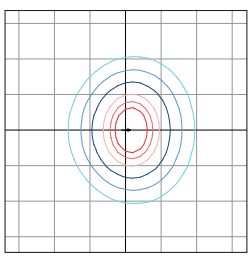
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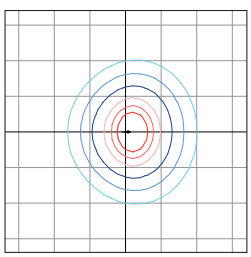
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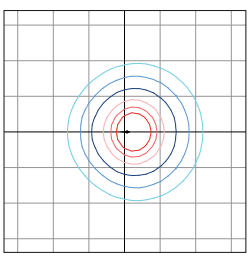
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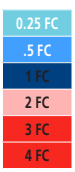

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JOB
TYPE
NOTES

Cypher™ – CY2 Pedestrian Scale

TYPE

ELECTRICAL CHARACTERISTICS

Lumen Package	System Wattage (W)	Line Voltage		Input				Min. Power Factor	Max THD (%)	Dimming Range	Source/Sink Current (mA)		Abosolute voltage range on 0-10v (+) Purple	
		VAC	Hz	120	277	347	480				Min.	Max.	Min.	Max.
2,500	26	120	50/60	0.2	0.1	0.1	0.1	>0.9	20	10% to 100%	0 mA	1 mA	0V	10V
3,500	40			0.3	0.1	0.1	0.1							
4,500	52			0.4	0.2	0.1	0.1							

TM-21 LIFETIME CALCULATION (500mA)

Lumen Package	Ambient Environment °C	Projected Lumen Maintenance (Khrs)					Reported L70
		15	25	50	60 (TM-21)	100	
4,500	**25**	95%	94%	90%	89%	83%	>60Khrs.
	40	93%	91%	84%	82%	73%	

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JOB
TYPE
NOTES

Cypher™ – CY2 Pedestrian Scale

TYPE

HOUSING

- Main housing shroud shall be of fabricated 5052-H32 aluminum alloy
- Housing mounting interface shall have a stamped silicone gasket.
- Luminaire housing shall be free of any visible heat fins, hardware or fasteners.
- Bracketry and hardware shall be stainless steel.

OPTICAL ARRAY

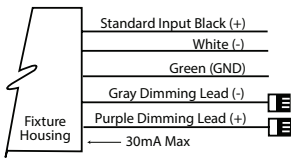
- LEDs shall be mounted to a metal printed circuit board assembly (MCPCB) with a uniform conformal coating over the panel surface and electrical features.
- Optical lenses shall be clear injection molded PMMA acrylic.
- Optical array shall be recessed in order to shield each LED optic across the length of the aperture.
- Optical array shall be sealed for IP66 rating.
- Secondary lens is impact resistant 5/32" tempered glass.

ELECTRICAL

- Drivers shall be in direct contact with the die-cast aluminum housing across the entire surface area of the widest face for maximum thermal transfer.
- "Thermal Shield", primary side, thermister provides protection for the sustainable life of LED module and electronic components.
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaires shall have integral surge protection that shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J. Surge protection device shall be wired in series.
- Drivers shall be U.L recognized.
- Drivers shall not be compatible with current sourcing dimmers, consult factory for current list of known compatible dimming systems approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV.
- Integral battery backup provides emergency path of egress lighting for the required 90 minutes for -20°C ambient environments.

SPECIFICATIONS

- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array shall have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Luminaires not configured with a control system shall be provided with 0-10 purple and gray dimming leads.



CONTROLS

- Optional universal voltage (120-277V) button photocontrol for dusk to dawn energy savings. Photocontrol is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.
- Wireless enabled fixtures shall support bi-directional radio frequency (RF) communications utilizing IEEE 802.15.4 operating in the 2.4GHZ ISM band.
- Up to 1000' wireless range may be reduced by physical obstructions between lighting fixtures.
- Occupancy Sensor shall programmable and use passive infrared (PIR) sensing technology that reacts to changes in infrared energy (moving body heat) within the coverage area. Careful consideration must be given to obstructions that may block the sensor's line of sight.
- Factory default settings for SCP option shall be:
  - High mode: 10V
  - Low mode: 1V
  - Ramp-up rate: disabled
  - Fade-down rate: disabled
  - Photocell: Off
  - Sensitivity: Full
  - Time Delay: Fade to low: 5 minutes
  - Time Delay: Fade to off: 1 hour
- The SCP enables any wall mounted luminaire, in excess of 30 watts, to meet California Title 24 requirements with integral 10KA surge protection for added reliability and serviceability.

  For more detail: http://www.aal.net/products/sensor_control_programmable
- Hubbell Control Solution's wiSCAPE™ In-Fixture Module is a bi-directional wireless RF device that allows an individual fixture to be managed, monitored and metered. The wiSCAPE In-Fixture Module communicates wirelessly over a robust 2.4GHz ISM (Industrial, Scientific and Medical) certified meshed radio signal. The wiSCAPE Fixture Module drastically simplifies control and automation of projects, especially in retrofit environments, and challenges the legacy world of wired-systems. wiSCAPE wireless control technology easily adapts to complex automation situations for quick, simple and economical commissioning. The On-Fixture Module is compatible with A-25-7H option.
- SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www.hubbelllighting.com/products/sitesync for more details.

BLUETOOTH®

- RGBW option includes integral Bluetooth module, built into driver, that permits the adjustment of luminous front color when paired with Hubbell Remote App via cellular/tablet device.
- Bluetooth Low Energy (BLE) or Bluetooth Smart compatible for both iOS (iOS8 and forward) and Android (Gingerbread and forward) handheld software applications. Compatible with phones and tablets.
- Free Bluetooth Apps are available for Apple iOS and Google Android mobile devices and are downloadable via the internet at Apple App Store or Google Play.

MOUNTING AND INSTALLATION

- JUNCTION BOX: Standard with zinc-plated, quick-mount junction box plate that mounts directly to 4" J-Box
- Mounting plate features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates.
- Fixture attaches by two Allen-head hidden fasteners for tamper resistance.
- Optional mounting arrangements utilize a die-cast mounting adaptor to allow for surface conduit and through branch wiring.

SERVICING

- Housing shall be able to hang freely in an open service position for inspection of internal wire connections. Once in service position, the housing shall be able to be removed for service by lifting the assembly up off the rear mounting plate and disconnecting the wiring plugs.
- Driver assembly shall be mounted to a prewired internal tray with quick disconnects for removal.

FUSING

SF for 120, 277, and 347 Line volts
DF for 208, 240, and 480 Line volts

High temperature fuse holders factory installed inside the fixture housing. Fuse is included.

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JOB
TYPE
NOTES

Cypher™ – CY2 Pedestrian Scale

TYPE

FINISH

- Luminaire finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish.
- Luminaire finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

CERTIFICATION

- Luminaire shall be listed with UL for outdoor, wet location use, UL1598, UL 8750 and Canadian CSA Std. C22.2 no.250.
- IP66 rated assembly
- IDA approved, 3000K and warmer CCTs only.
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.
- ANSI C136.31-2010 4G Vibration tested and compliant.
- Complies with "Americans with Disabilities Act" or "ADA" on select versions for low mounting height applications (fixtures extend maximum of 4 inches from wall for mounting heights of 80 inches or less).

WARRANTY / TERMS AND CONDITIONS OF SALE
Download:
Five year limited warranty (for more information visit: http:// www.hubbelllighting.com/resources/warranty/

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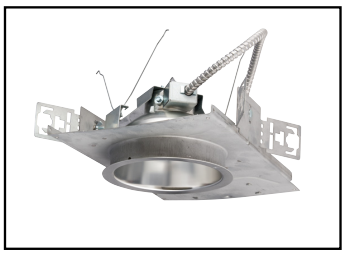
Job Name:
52 HANOVER ST. REDEVELOPMENT
Engineer: Acorn Engineering, Inc (Portland)

Catalog Number:
LC6ML / 6LCML24L30K8

Notes:

Type:
B

SLA20-46484



6" LED Downlight

LC6ML

2400 & 3000 Lumens
120V-277V, 347V
0-10V Dimming

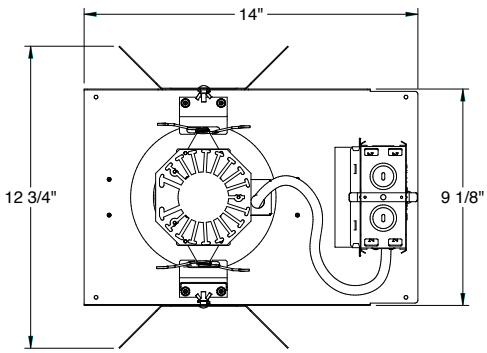
DATE: TYPE:

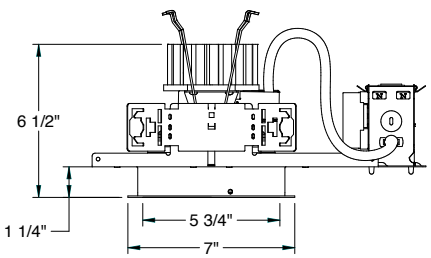
FIRM NAME:

PROJECT:

LiteFrame

Ceiling Cutout: 6¼"
Maximum Ceiling Thickness 1¼"
For conversion to millimeters, multiply inches by 25.4
Not to Scale





***See page 4 for LC6ML WWCP and EM line art**

APPLICATIONS:
LiteFrame Commercial LC6ML is a 6" commercial grade LED downlight with available outputs between 2400-3000 lumens. This is suitable to replace most CFL downlighting applications, while realizing substantial energy and maintenance savings. Rated for a minimum of 50,000 hours life (70% lumen maintenance) with ambient plenum temperatures up to 25°C. Free Air Flow around fixture is required for optimal life performance. This product is not recommended for use with 3rd party "FIREHAT" or insulation barriers.

HOUSING:
One-piece 22 gauge non-corrosive steel platform. Pre-wired J-box with snap-on cover for easy access. Snap-in connection from driver compartment allows easy installation of light engine/trim assembly and can be upgraded to accommodate technology improvements. Approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring.

REFLECTOR:
High purity aluminum, Alzak, iridescence suppressed, semi-diffuse reflector. Self-trim standard. Painted white self-trim (WT) available as option.

LED LIGHT ENGINE:
The LC6ML uses mid power Nichia LEDs, specifically mixed to provide a minimum of 80 CRI with 3 SDCM color consistency. The use of multiple mid power LEDs allows for optimal thermal management by effectively spreading the heat over a larger area and eliminating hot spots on the LEDs. A diffuse, yet highly transmissive lens obscures the view of the LEDs and creates a smooth, even look from below. The light engine is available in multiple Kelvin temperatures and the system is designed to provide optimal life and lumen maintenance (50,000 hours at 70% lumen maintenance). The reflector/light engine assembly is mechanically retained to the housing.

LED DRIVER:
The LC6ML utilizes a constant current LED driver that is capable of running both lumen outputs, resulting in a reduction of housing skus and simplified specification. The driver is UL8750, Class II compliant and universal 120V-277V.

DIMMING:
Comes standard with flicker-free 0-10V dimming to 10%. 0-10V to 1% dimming option is also available. See list of compatible dimmers on page (4). For the sizing of the control circuit, the dimming circuit may require up to 1.2mA of sink current.

INSTALLATION:
Light commercial bar hangers included (not with WWCP option). Universal adjustable mounting brackets also accept ½" EMT conduit or 1½" or ¾" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6). Wall wash orientation may be field adjusted in 90° increments to housing.

CERTIFICATIONS:
CSA certified to US and Canadian safety standards. Suitable for wet locations (EM, EMR & WW damp location).

WARRANTY:
5 year warranty. See www.prescolite.com for details.

Order housing, reflector, and accessories separately

CATALOG NUMBER: EXAMPLE: LC6MLDM1-6LCML30L35K9WH

HOUSING	DRIVER OPTIONS	VOLTAGE	HOUSING OPTION	-	TRIM APERTURE	OUTPUT	KELVIN	CRI	REF. FINISH/ COLOR OPTION	REFLECTOR OPTIONS	-	ACCESSORIES
❑ **LC6ML** Medium Lumen 0-10V Dimming to 10% 120V-277V	*Standard 0-10V 10% Dimming*	*Standard 120V-277V*	❑ **EM**[2,9] Integral Battery Pack		❑ **6LCML** Medium Lumen Clear Alzak Reflector	❑ **24L** 2400 Lumen	❑ **27K** 2700 Kelvin	❑ **8** 80+ CRI	*Standard Semi-Diffuse Clear Alzak*	❑ **WT** Painted White Flange only		❑ **B24** Set of two(2) 24" bar hangers for T-bar ceilings
	❑ **DM1** 0-10V 1% Dimming	❑ **347**[7,8] 347V	❑ **EMR**[2] Remote Battery Pack			❑ **30L** 3000 Lumen	❑ **30K** 3000 Kelvin	❑ **9**[3] 90+ CRI	❑ **WH** Painted Matte White Reflector and Flange	❑ **WF** Wide Flange		❑ **B6** Set of two (2) bar hangers for ceiling joist up to 24" centers
			❑ **CP**[4,5] Chicago Plenum				❑ **35K** 3500 Kelvin			❑ **WW**[2,7] Wall Wash		❑ **SCA6D_** Sloped ceiling adapter (see note on page 4)
			❑ **WWCP**[6] Wall Wash Chicago Plenum Housing				❑ **40K** 4000 Kelvin			❑ **CP**[4,5] Chicago Plenum		❑ **LiteGear**[1] Inverter, single phase central lighting, 125VA-250VA
							❑ **50K** 5000 Kelvin			❑ **EM**[2,9] Pre-punched reflector to accept integral test switch		❑ **LPS Series**[1] LitePower micro-inverter, 20VA-55VA

[1] See Central Inverter compatibility note and web links on page 4.
[2] Damp location only
[3] Not available in 40K or 50K
[4] CP must be selected on both housing and trim
[5] Not compatible with WW option
[6] WW must be selected on trim
[7] Not compatible with CP
[8] Not compatible with WWCP
[9] EM must be selected on both the housing and the trim, not compatible with WW trim

prescolite
A Division of Hubbell Lighting, Inc.

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.
Web: **www.prescolite.com** • Tech Support: **(888) 777-4832**

LFR-LED-043

PHOTOMETRIC DATA

LiteFrame - 6" LC6ML Downlight

DRIVER DATA	6LCML24Lxxx	6LCML30Lxxx
Input Voltage	120-277V	120-277V
Input Frequency	50/60 Hz	50/60 Hz
Input Current	0.271 (120v)	0.346 (120v)
	0.117 (277v)	0.150 (277v)
Input Power	32.5W	41.5W
Constant Current Output	675mA	675mA
Power Factor	≥0.90	≥0.90
THD	<20%	<20%
EMI Filtering	FCC 47CFR	FCC 47CFR
	Part 15, Class A	Part 15, Class A
Operating Temperature	-30°C to +35°C	-30°C to +25°C
Dimming	0-10V to 10%	0-10V to 10%

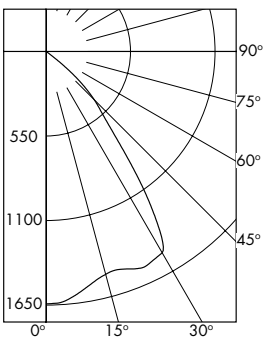
Over-voltage, over-current, short-circuit protected

Lumen Multiplier Table

Photometrics for the LC6ML are published below at a nominal 3000 Kelvin temperature. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

5000 Kelvin	1.14
4000 Kelvin	1.03
3500 Kelvin	1.00
3000 Kelvin	1.00
2700 Kelvin	0.91

LC6ML 6LCML24L30K8
LED Light Engine: 3000K, 80+ CRI
System Wattage: 32.5W
Fixture Delivered Lumens: 2375
Fixture Efficacy: 73.1
Spacing Criteria: 1.1



CANDELA DISTRIBUTION

DEG	CANDELA
0	1642
5	1621
15	1501
25	1540
35	1133
45	444
55	27
65	6
75	2
85	0
90	0

Test No. 9495
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1286	54.2
0-40	1976	83.2
0-60	2367	99.6
0-90	2375	100.0
90-180	0	0.0
0-180	2375	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

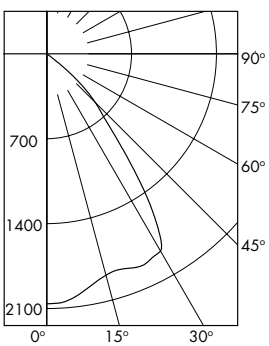
Angle in Vertical	AVERAGE
45°	37467
55°	2809
65°	847
75°	461
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																	
	80%				70%				50%			30%			10%			
	20% Effective Floor Cavity Reflectance																	
	% Wall Reflectance																	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	87	83	98	92	86	82	89	84	81	86	83	80	84	81	78
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43

LC6ML 6LCML24L30K8 Test No. 9495

LC6ML 6LCML30L30K8
LED Light Engine: 3000K, 80+ CRI
System Wattage: 41.5W
Fixture Delivered Lumens: 2993
Fixture Efficacy: 72.1
Spacing Criteria: 1.1



CANDELA DISTRIBUTION

DEG	CANDELA
0	2061
5	2040
15	1890
25	1914
35	1444
45	567
55	33
65	8
75	2
85	0
90	0

Test No. 9430
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1609	53.7
0-40	2484	83.0
0-60	2983	99.7
0-90	2993	100.0
90-180	0	0.0
0-180	2993	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	AVERAGE
45°	47846
55°	3433
65°	1130
75°	461
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																	
	80%				70%				50%			30%			10%			
	20% Effective Floor Cavity Reflectance																	
	% Wall Reflectance																	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	106	101	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	87	83	98	91	86	82	89	84	81	86	83	80	84	81	78
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65
6	83	73	66	61	82	72	66	61	71	65	61	69	64	60	68	63	60
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	52	47	43

LC6ML 6LCML30L30K8 Test No. 9430

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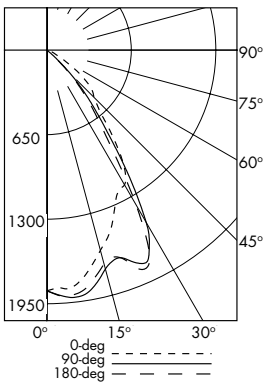
PHOTOMETRIC DATA

LiteFrame - 6" LC6ML Downlight

LC6ML 6LCML24L30K8 WW
LED Light Engine: 3000K, 80+ CRI
System Wattage: 32.4W
Fixture Delivered Lumens: 2331
Fixture Efficacy: 71.9



CANDELA DISTRIBUTION

DEG	0	90	180
0	1850	1850	1850
5	1842	1907	1894
15	1594	1742	1702
25	1261	1804	1837
35	994	936	771
45	514	261	223
55	290	9	8
65	72	3	3
75	12	2	2
85	1	0	0
90	0	0	0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	0 DEG	90 DEG	180 DEG
45°	43374	22024	18818
55°	30169	936	832
65°	10166	424	424
75°	2767	461	461
85°	685	0	0

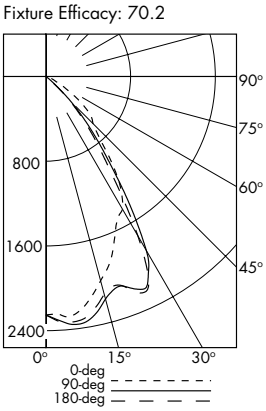
2.5′ DISTANCE FIXTURE MOUNTED OUT FROM WALLS
FOOTCANDLE DISTRIBUTION ON WALL SURFACE (Direct Only)

DISTANCE FROM CEILING IN FEET	1′	2′	3′	4′		MULTIPLE UNITS: UNITS ON 3′ CENTER			UNITS ON 4′ CENTER		
1	7	4	1	0	0	7	4	7	7	1	7
2	30	20	5	1	0	32	21	32	31	9	31
3	29	21	11	2	0	33	33	33	30	22	30
4	27	24	13	5	1	38	39	38	30	26	30
5	18	17	14	7	3	31	37	31	24	29	24
6	12	12	11	8	4	29	28	29	20	24	20
7	9	8	8	7	4	26	23	26	18	18	18
8	7	6	6	6	4	21	20	21	16	14	16
9	5	5	4	4	4	17	17	17	14	12	14

LC6ML 6LCML24L30K8 WW — Test No. 9496

Test No. 9496
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

LC6ML 6LCML30L30K8 WW
LED Light Engine: 3000K, 80+ CRI
System Wattage: 41.4W
Fixture Delivered Lumens: 2905
Fixture Efficacy: 70.2



CANDELA DISTRIBUTION

DEG	0	90	180
0	2251	2251	2251
5	2278	2341	2329
15	1997	2175	2129
25	1565	2211	2239
35	1197	1194	1007
45	630	332	293
55	354	13	11
65	92	5	4
75	15	3	3
85	1	0	0
90	0	0	0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	0 DEG	90 DEG	180 DEG
45°	53162	28016	24725
55°	36827	1352	1144
65°	12989	706	565
75°	3458	692	692
85°	685	0	0

2.5′ DISTANCE FIXTURE MOUNTED OUT FROM WALLS
FOOTCANDLE DISTRIBUTION ON WALL SURFACE (Direct Only)

DISTANCE FROM CEILING IN FEET	1′	2′	3′	4′		MULTIPLE UNITS: UNITS ON 3′ CENTER			UNITS ON 4′ CENTER		
1	9	5	1	0	0	9	5	9	9	2	9
2	37	24	6	1	0	39	26	39	37	11	37
3	36	27	14	3	1	42	41	42	37	27	37
4	32	29	16	7	2	47	48	47	36	33	36
5	22	21	17	9	4	39	46	39	29	35	29
6	15	14	14	10	5	36	35	36	25	29	25
7	11	11	10	9	5	32	29	32	22	23	22
8	8	8	7	7	5	26	25	26	20	18	20
9	6	6	6	5	5	21	22	21	17	15	17

LC6ML 6LCML30L30K8 WW — Test No. 9432

Test No. 9432
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

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PHOTOMETRIC DATA

LiteFrame - 6" LC6ML Downlight

Dimming Compatibility Table

Dimming Ballast	Manufacturer	Web Link
DM/DM1	Lutron DVTV	http://bit.ly/11jSvZg
DM/DM1	Leviton AWRMG-7xx, AWSMG-7xx, AWSMT-7xx	http://bit.ly/1BJn2R9

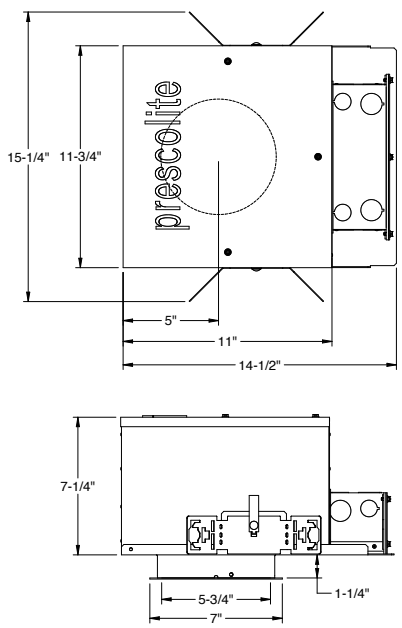
Central Inverters

For full fixture output in back-up mode, we recommend you visit www.dual-lite.com for your Central Lighting Inverter options. Please contact your local Hubbell representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

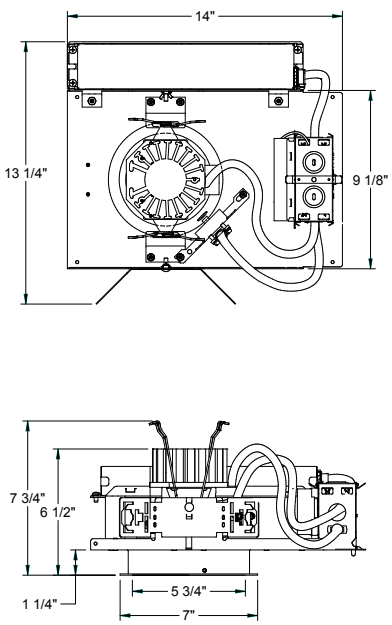
LiteGear: www.dual-lite.com/products/litegear_lg_series
LPS Series: www.dual-lite.com/products/lps

SCA6D_

When ordering a sloped ceiling adapter, specify the degree of slope in 1° increments, maximum of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



LC6ML WWCP



LC6ML EM

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KIM LIGHTING

CB LED

Compact Bollard

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Type:
Job:
Catalog number:

/ / /
Fixture | Electrical Module | Luminaire Finish | Option

See page 2

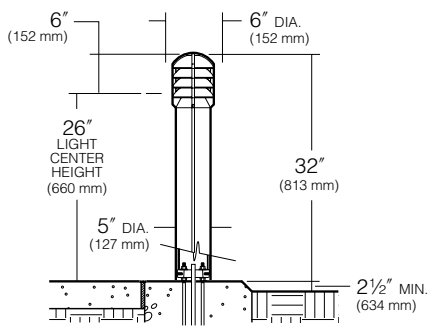
Approvals:

Date:
Page: 1 of 3

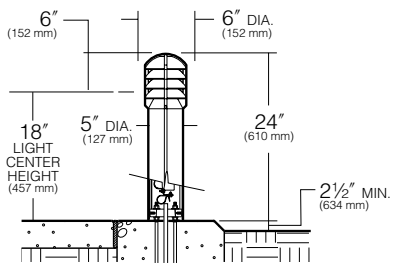
Specifications

CB Models
10 to 20 Diodes

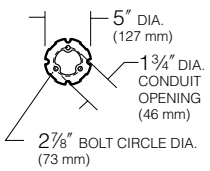
CB32
Maximum weight: 20 lb



CB24
Maximum weight: 17 lb



BASE PLAN CB



Top, Louvers: Interlocking die-cast, low-copper (<0.6% Cu) aluminum sections fasten together with concealed stainless steel screws. Louver base assembly fastens internally to riser with 4 concealed screws.

Riser: Extruded aluminum, 5″ diameter, .125″ typical wall thickness, external vertical grooves align with vertical members on louver assembly. Attaches to anchor base with 4 countersunk stainless steel flat socket head screws finished to match fixture.

Anchor Base: Heavy cast aluminum, fully concealed within riser shaft. Three ⅜″ x 10″+ 2″ zinc plated anchor bolts, each with two nuts and washers, and a rigid pressboard template.

Globe: Internally fluted, clear tempered glass, fully gasketed.

Optical Module: Each LED equipped with a directional optic for maximum beam angle projecting through louver stack spacings. LED boards to be mounted to an anodized inter-locking heat sink extrusion. (Type I) two 5-LED boards for a total of 10-LED. (Type III) three 5-LED boards for a total of 15-LED. (Type V) four 5-LED boards for a total of 20-LED. Available in 580nm Amber, 3000K, 4000K and 5000K color temperatures.

Electronic Module: All electrical components are either UL or ETL recognized, mounted on a single plate and factory prewired with quick disconnect plugs. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.

Finish: Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat finish. Standard colors include (BL) Black, (DB) Dark Bronze, (WH) White, (PS) Platinum Silver, (SG) Stealth Gray, (LG) Light Gray, and (CC) Custom Color (Include RAL#).

Listed to: UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires. RoHS compliant. Meets Buy American provisions within ARRA.

Warranty: Kim Lighting warrants Bollard LED products sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of five (5 years for exterior housing paint finish(s), (iii) a period of five (5) years for LED Light Engines and, (iv) a period of five (5) years for LED power components (driver, surge protector and LifeShield® device), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each product.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

HUBBELL
HUBBELL LIGHTING, INC.

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CB LED

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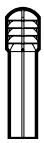


Standard and Optional Features

Fixture
Cat. No. designates fixture.

Cat. No. ☐ **CB24** Compact Bollard 24″ overall height
☐ **CB32** Compact Bollard 32″ overall height

Electrical Module
LED = Light Emitting Diode

Cat. Nos. for LED Electrical Modules available:

xL

Source:
- ☐ **10L**= 10 LED (IES Type I)
- ☐ **15L**= 15 LED (IES Type III)
- ☐ **20L**= 20 LED (IES Type V)

xK

Color Temperature:
- ☐ 2K = 580nm - Amber
- ☐ 3K = 3000K
- ☐ 4K = 4000K
- ☐ 5K = 5000K

UV

Voltage:
- ☐ **UV** Universal Voltage shall range from 120V-277V

Finish
TGIC thermoset polyester powder coat paint on fixture and shaft

Specify Stnd. finish

Color:	Black	Dark Bronze	Light Gray	Stealth Gray	Platinum Silver	White	Custom Color[1]
Cat. No.:	☐ **BL**	☐ **DB**	☐ **LG**	☐ **SG**	☐ **PS**	☐ **WH**	☐ **CC**

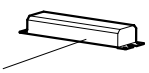
NOTE: Black and Dark Bronze colors will produce slightly less louver brightness than Light Gray or White.

[1]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____

Battery Back-up
Cat. No. ☐ **EM**
☐ **No Option**

Internal battery pack provides 90 minutes of supplemental light at 50% of initial lamp lumens.

NOTE: For CB32 only.



Battery Back-up

Optional Duplex Receptacle
Cat. No. ☐ **DR**
☐ **DR-GFI**
☐ **No Option**

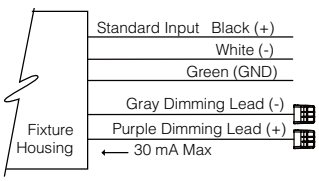
(CB32 only) Mounted 18″ from bottom of shaft, in a cast aluminum box that is internally welded and sealed with a gasketed While-In-Use cover with locking tab. Painted to match bollard.

DR weather proof duplex receptacle rated 20A, 125V.

DR-GFI weather proof duplex receptacle with ground fault circuit interrupter rated 20A, 125V.

0-10V Dimming Interface

Driver has a 0-10V dimming interface with a dimming range of 10-100%. Is compatible with most control systems including Hubbell Building Automation wiHUBB™. Approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV. Note: Not compatible with current sourcing dimmers. Controls compatible via Gray and Purple dimming lead.



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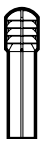

Lumen Data

Electrical Drive Current - @350mA

	Type 1		Type 3		Type 5	
Volts - AC	Amps - AC	System Watts	Amps - AC	System Watts	Amps - AC	System Watts
120	0.11	13	0.16	19	0.21	25
208	0.06	13	0.09	19	0.12	25
240	0.05	13	0.08	19	0.10	25
277	0.05	13	0.07	19	0.09	25

B.U.G. Rating (TM15) in Lumens where B = Backlight, U = Uplight, G = Glare

Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	B0 U2 G1	B0 U2 G1	B1 U3 G1
4000K	B0 U2 G1	B0 U2 G1	B1 U3 G1
5000K	B0 U2 G1	B0 U2 G1	B1 U3 G1

Absolute Lumens

Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	557	785	1099
4000K	571	805	1127
5000K	578	814	1140

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library.
For custom optics and color temperature configurations, contact factory.

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O. Architectural Design Narrative

Please find attached the design narrative completed by CUBE 3.

52 Hanover St – Portland, ME
Design Narrative

The 52 Hanover Street project is comprised of a single 8-story building encompassing most of the parcel. The majority of the program is residential units and also includes enclosed parking and retail spaces. While activated along Hanover Street with the residential lobby and bike shop, the building also frames Lancaster St. with mixed retail space to engage community and residents. This mirrors the program at 82 Hanover Street and helps to create and active pedestrian plaza between the buildings.

The residential portion contains 171 total units and is made-up of a mix of studio, one, and two-bedroom apartments. The upper floors of the building are oriented in a U-shaped configuration around a central courtyard, opening to the southwest and helping to maximize solar exposure. The building is also tiered to respond to the context and enhance the views to the bay. Ample amenity space is planned and distributed throughout the building to engage residents. There is a lobby at the ground floor that acts as the main entry and engages the street. The majority of the amenity space is located at the third floor which opens-up to the larger central courtyard. Amenity is also provided at sixth floor with complimenting outdoor deck that provides great views. Amenity program includes leasing and management offices, package storage, tenant mailboxes, fitness space, business center, games room and various lounges. Bike shop and storage will be located on the second floor for tenant use, equipped with bike fix-it station.

Overall exterior design of the building uses residential elements and materials to break down the scale and give texture to the façades. Along Hanover Street we used varying materials and angled bay windows while careful to not affect Hanover view corridor. The angled bays and randomized inset balconies create a rhythm and sense of movement along the façade which enhance visual interests and frame views to surroundings. The amenity and retail of the building consists of large glazed openings to activate street frontage. Southern façade uses different materials and feature lighting on top floor to react to the city view and advance future views.

CUBE 3 Studio LLC | 370 Merrimack Street, Suite 337 | Lawrence, MA 01843 | 978.989.9900 | cube3.com

P. Utilities

The proposed project will include installation of multiple utility services to the renovated building.

Water:

The existing service lines to the site will be retired in accordance with Portland Water District standards. It is proposed to tap an 8" fire line as well as a 4" domestic line off of the existing 8" ductile iron water main within Parris Street. Lastly, it's also proposed to provide the commercial uses with a dedicated 2" water service off of the main within Parris Street. Ability to serve confirmation has been received from PWD.

Sewer:

The existing sewer lateral to the site will be retired in accordance with the Department of Public Works. A new 10" PVC lateral will be installed within Hanover Street in conjunction with a doghouse manhole to accept the wastewater from each unit, the elevator sumps, and the garage floor drains/oil-water separator. Additionally, the existing sewer lateral that benefits 55 Portland Street and is subject to an existing sewer easement will be rerouted on site, but will maintain its existing connection into the Parris Street sewer main.

Stormwater:

There is currently a plethora of drainage structures and lines on site. As part of the redevelopment, the majority of the existing drainage infrastructure will be removed. Similarly to the sewer, an existing easement exists which benefits 55 Portland Street. This line will be rerouted along with the roof drains and courtyard drainage and piped to the separated storm drain system in Parris Street. Overall, the impervious area will decrease, effectively lowering the peak runoff. Furthermore, the relatively large amount of roof area and additional green space will result in a more favorable pollutant ranking as compared to the existing condition. Lastly, the redirection of runoff from the combined sewer to the separated storm drain will ultimately benefit the downstream treatment plant. Please refer to the Grading & Drainage plans as well as the Stormwater Management Report for more information.

Electric/Communications:

The existing building currently contains underground services off the utility poles on Hanover Street as well as an existing transformer on site. It is proposed to remove the existing lines and transformer and add a new transformer adjacent to the existing one transformer that was installed as part of the 82 Hanover Street project. The new padmount transformer is expected to be able to supply the new building with adequate power. See the Sheet C-20, Utility Plan, for more information.

The existing underground and overhead communications lines that currently service the building will be removed. New conduits are proposed for telephone, fiber, and cable

that will run down from the existing utility Pole near the former Lancaster Street as seen on C-20.

Lastly, as part of this project, a slight reconfiguration of the primary overhead utilities on Hanover Street is proposed. This reconfiguration would allow the new building to maintain adequate separation from the primary overhead utilities while maintaining service to existing customers. This proposal has been agreed to by the applicable utility companies.

Gas:

An existing abandoned gas line previously serviced the existing building from the gas main within Parris Street. It is proposed to retire this service and include a new service on the west side of the building. The new gas line will connect to the main within Parris Street and is proposed to serve the development. See Sheet C-20, Utility Plan, for more information.

Ability to serve letters have been sent out to the respective utility companies in accordance with the City of Portland Code of Ordinances Chapter 14 Land Use, Section 14-527(g)(7). Responses from the utility companies are attached.

Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

September 16, 2020

Sam Lebel
Acorn Engineering
PO Box 3372
Portland, ME 04104

Re: 52 Hanover Street, PO
Ability to Serve with PWD Water

Dear Mr. Lebel:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on August 20, 2020. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter constitutes approval of the water system as currently designed and is valid for eighteen (18) months after the date of issue. Any changes affecting the approved water system will require further review and approval by PWD.**

Conditions of Service

The following conditions of service apply:

- A new 2-inch domestic service with a 1-inch meter and a new 4-inch domestic service with a 3-inch meter may be installed from the water main in Parris Street. The service should enter through the properties frontage on Parris Street at least 10-feet from any side property lines. An approved backflow prevention device must be installed on the service line directly after the meter prior to service activation. Please note that only one meter and one bill will be associated to each domestic service line. Each meter must be located in a common space that all tenants could gain access to if necessary.
- A new 8-inch fire service may be installed from the water main in Parris Street. The service should enter through the properties frontage on Parris Street at least 10-feet from any side property lines.
- The existing building is currently served with a 2-inch domestic service and a 6-inch fire service; the location of these services does not line up with the proposed utility room for this development. These services must cutting out the section of main with the two services and installing new main. The building will be without water while the existing services are retired and the proposed services are installed.

Prior to construction, the owner or contractor will need to make an appointment to complete a service application form and pay all necessary fees. The appointment shall be requested through MEANS@pwd.org or by calling 207-774-5961 ext. 3199. Please allow (3) business days to process the service application paperwork. PWD will guide the applicant through the new development process during the appointment.

225 DOUGLASS STREET P.O. BOX 3553 PORTLAND, MAINE 04104-3553
PHONE: 207.774.5961 FAX: 207.761.8307 WEB: WWW.PWD.ORG

Existing Site Service

According to District records, the project site does currently have existing water service. A 2-inch diameter copper domestic service line and a 6-inch diameter ductile iron fire service line provide water service to the site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of this service.

Water System Characteristics

According to District records, there is an 8-inch diameter ductile iron water main in Parris Street and a public fire hydrant located approximately 300 feet from the site. The most recent static pressure reading was 95 psi on August 26, 2020.

Public Fire Protection

The installation of new public hydrants to be accepted into the District water system will most likely not be required. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project. Based on the high water pressure in this area, we recommend that you consider the installation of pressure reducing devices that comply with state plumbing codes.

Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact MEANS to request a hydrant flow test and we will work with you to get more complete data.

Should you disagree with this determination, you may request a review by the District's Internal Review Team. Your request for review must be in writing and state the reason for your disagreement with the determination. The request must be sent to MEANS@PWD.org or mailed to 225 Douglass Street, Portland Maine, 04104 c/o MEANS. The Internal Review Team will undertake review as requested within 2 weeks of receipt of a request for review.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

Robert A. Bartels, P.E.
Senior Project Engineer

Q. Construction Management Plan

Project Address: 52 Hanover Street

Project Description:

The proposed project includes the demolition of a large garage used for Public Works storage and redevelopment of the site with a 6-8 story mixed-use building with two levels of structured parking. Additionally, multiple retail units are proposed on the ground level adjacent to the existing 82 Hanover patio and Lancaster Court pedestrian/bicycle easement.

Project Team Summary:

Owner:	Tom Watson & Co., LLC
Owner's Representative:	The Congress Group
General Contractor:	TBD
Civil & Environmental Engineer:	Acorn Engineering, Inc.
Architect:	CUBE 3 Architecture
Structural Engineer:	Thornton Tomasetti
Geotechnical Engineer:	Summit Geoengineering Services

The Owner/GC and all subcontractors will work with the City of Portland and adjacent landowners to minimize any project impacts.

The GC will remain responsible for enforcement of all compliance with 1) all contract plans and specifications in their scope of work and 2) all site working conditions and safety requirements, day and night, for both persons and property, in each case for the duration of their work. These include OSHA, NIOSH, U.S. EPA, local ordinance and any other applicable governmental regulations. Both the Owner/GC and any subcontractors will remain responsible for safeguarding the general public.

The GC shall review all permits and conditions associated with the project. Refer to the Civil/Site Plan Set, Sheet C-03 Construction Management Plan for visual representation of the measures to be taken during construction.

The following outline has been developed in accordance with the City of Portland Construction Management Plan General Template and shall be referenced by the GC during construction.

A. Construction Management Principles

The control of noise, vibrations, ground movement, truck traffic, and other construction related factors will be of utmost importance. Care shall be taken to minimize these effects in the best interest of neighbors and the general public. GC to ensure that work hours conform to the City of Portland's Ordinance.

B. Development Review of Construction Management Plan

Logistics and safety program shall be submitted at or prior to the preconstruction meeting by the GC with all pertinent information required by the Maine Department of Transportation's Traffic Control Plan Standard Specification 652.3.3.

C. Performance Guarantees, Inspection Fees, Preconstruction Meeting, and Permits

Guarantees and fees will be paid at the time of the respective application. Sections 14-530 and 13-532 will be complied with all necessary permits will be obtained prior to work.

1. Street Opening and Street Occupancy Permits:

   Required permits regarding street opening and occupancy will be obtained from the Department of Public Works. The requests shall conform to the approved Construction Management Plan.

2. Blasting:

   Although not anticipated, if blasting occurs, it shall conform to Article VIII. In Chapter 14 of the City Code and Section 3.7 in the City's Technical Manual.

3. Building Code:

   Employ the best practices, as applicable, of Chapter 33 Safeguards During Construction, from the 2009 International Building Code.

D. Construction Administration and Communication

The Contractor will work closely with adjacent abutters, businesses, and all parties informed, as far in advance as possible, of scheduled work, particularly work anticipated to cause significant noise, vibrations, or dust. Communication in order to comply with all agreements, ordinances, and special permits will be of the utmost importance. Contractor and Subcontractor contact information shall be posted somewhere along the project's street frontage. Additional signage necessary for communication shall be provided but will be temporary and removed upon completion of the project.

E. Construction Schedule

The GC shall submit a construction timeline at or prior to the preconstruction meeting. Construction may occur during the daytime hours as defined in Section 17-18. Construction Activities for Building permit and City Code Section 25-129, Noise, dust and debris. Between September 1 and May 31, the following year, no person shall engage in construction activities generating noise exceeding 50 decibels, between the hours of 7 pm and 7 am of the following day within 500 feet of any buildings. From June 1 to August 31, construction activity may continue until 8 pm. No construction activity shall begin before 8 am on a Saturday, Sunday, or legal holiday. Extended hours or night work may be requested for special circumstances and street utility work

if needed. These requests will be subject to approval by the Public Works Authority. Deliveries will be scheduled between 7 am and 5 pm.

The estimated timeframe of the proposed project is outlined below:

Project Start Date:	Summer 2021
Project End Date:	Spring 2023

A more detailed work schedule shall be provided by the GC at or before the pre-construction meeting with the City.

F. Security

1. The Construction Management Plan, Sheet C-03, depicts all proposed fencing and other barriers, with the intent of separating pedestrian and vehicle circulation from the construction site. Construction entrances per detail shall be installed.

2. Structures undergoing construction, alteration, or demolition operations, including those in underground locations, shall comply with NFPA 1 Chapter 16. *Safeguarding Construction, Alteration, and Demolition Operations.*

3. Fire Safety Program: Prior to construction, an overall construction and demolition fire safety program shall be developed. Essential items to be emphasized include the following:
    - Good Housekeeping
    - On-site security
    - Installation of new fire protection systems as construction progresses
    - Preservation of existing systems during demolition
    - Organization and training of an on-site fire brigade
    - Development of a pre-fire plan with the local fire department
    - Rapid communication
    - Consideration of special hazards resulting from previous occupancies
    - Protection of existing structures and equipment from exposure fires resulting from construction, alteration, and demolition operations.

4. Blasting, if required, shall conform with all measures of Article VIII. Regulation of Explosives in the Land Use Code and Section 3.7 Standards for Blasting and Regulation of Explosives in Portland's Technical Manual.

5. Temporary security lighting shall be shown on the Construction Management Plan, and all fixtures shall be full cutoffs.

G. Construction Permitting and Traffic Control Plans

1. Construction Activity in Public Streets

   Construction activity in the public right-of-way shall be compliant with Chapter

25 Article VII of the City Code. At no time will it be permissible for construction activity including delivery vehicle to close or block streets or affect public safety access without prior notice and approval of the Department of Public Works.

2. Sewer and Stormwater

Sewer and stormwater system connections are controlled by Chapters 24 and 32 of the City code of Ordinance. Required permits for new connections and/or abandonment of existing connections are available through the Street Opening Clerk at the Department of Public Works. Rules and Regulations for these utility systems are available through the City Engineer's office of the Department of Public Works and in Section II of the Technical Manual.

3. Traffic Control Plans

Construction activity that impacts the existing public street system must be controlled to protect the safety of the construction workers and all modes of the traveling public. The contractor shall submit a satisfactory "Maintenance of Traffic" (MOT) plan prior to any street opening permit approval. This document shall contain all pertinent information from the Maine Department of Transportation's Traffic Control Plan Standard Specification 652.3.3.

The MOT will address the work required for utility connections in Hanover and Parris Street. Traffic will be channelized utilizing drums and cones. Proper signage will be installed prior to the through work zone. Alternating traffic will be controlled with flaggers. Trenches will be patched with pavement daily.

The MOT plan shall provide for the safe passage of the public through or along the construction work zone. It may be permissible to close a portion of Hanover or Parris Street during utility connections and/or detour a mode of traffic when absolutely necessary for safety. All requests shall be subject to City approval. MOT plans shall employ the appropriate techniques and devices as called for in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). In addition:

- Construction speed signing may be used as needed to slow traffic.
- Traffic Control signs shall not be placed where they would create any obstructions to bicycles or pedestrians.
- Flaggers will be utilized when necessary.

All existing modes of travel in the work zone area shall be accommodated if impacted by the activity. The safe passage of pedestrians, bicyclists, transit providers, and motorists are of equal importance when planning and laying out the work zone; no pre-existing travel mode may be eliminated without the express approval of the Department of Public Works. The MOT should also address on-street parking impacts, including deliveries and parking for adjoining businesses and property owners, analysis of roadway capacity or diversion capacity if street

closure or change to roadway capacity is required, and coordination with other on-going or future construction or utility projects in the vicinity.

- Traffic control bicycle and pedestrian facilities or routes through work zones shall be maintained until the bicycle and pedestrian facilities or routes are ready for safe operation. Traffic control will not be removed to allow auto travel at the expense of bicycle and pedestrians.
- Barrier systems utilized to separate the construction activity from the public street and /or sidewalk shall not inhibit sight distances, particularly for visibility of pedestrians and bicyclists.
- ADA compliance in all capacities shall be maintained.

Use of public parking spaces or the blockage of any portion of sidewalk for the purpose of construction activity shall require an occupancy permit and appropriate fee as assessed by the Department of Public Works.

H. Site Management and Controls

1. Regular trash and debris shall be managed appropriately, and its removal shall comply with all local, state, and federal regulations.

2. Street cleaning and sweeping shall be followed as outlined in the erosion and sedimentation control notes and report. Damage to the street shall be avoided and shall be the responsibility of the contractor.

3. Dust shall be controlled and shall comply with Section 25-129 and the erosion and sedimentation control notes, plan, and details.

4. Noise shall be controlled and shall comply with Section 17-18 and Section 25-129.

5. Rodent Control shall be provided, if applicable, by a professional exterminator and shall be consistent with Chapter 22 of the City Code.

6. Snow and Ice Removal shall be provided. Pursuant to Section 25-173, the Contractor shall ensure a safe means of travel within the work zone by the following steps:

    a. Snow/ice removal or commence automatically from 1" or greater of snow or ice
    b. Remove snow as needed within the work zone, including parking spaces. Driveways and site lines shall not be blocked by piles of snow.
    c. Clear all walks and ramps within the work zone
    d. Sand or salt as needed
    e. Clear all basin or drainage to help snow melt
    f. The above steps shall be carried out Sunday-Saturday including holidays.

I. Erosion & Sedimentation Control

1. The Contractor shall install all erosion and sedimentation controls as depicted on the approved Construction Management Plan, C-03, and the approved erosion and sedimentation control report, prior to the pre-construction meeting for inspection by the City. The Contractor shall regularly inspect the control measures, no less than weekly and after storm events (0.5" or more in 24 hours). Additionally, temporary or permanent stormwater management systems shall be inspected and maintained to ensure working order. The Contractor shall document all inspection activities and corrective actions and be prepared to provide these documents for inspection by the City, Maine Department of Environmental Protection (MDEP) or the U.S. Environmental Protection Agency (EPA) upon request.

2. Due to the existing, sparse landscaping on site, no protection during construction will be necessary.

3. Stored materials shall be identified and avoid being located under/near trees.

J. Construction Staging Area

1. The Contractor shall submit a plan with locations depicted for the location of material staging areas, the location of on-site temporary construction trailers, the location of on-site truck delivery holding areas, the location of on-site truck washing stations, masonry mixing stations, the general location of the construction security fence and the general location of temporary construction dumpsters. This plan shall be submitted at or prior to the pre-construction meeting. Any open storage areas shall be shown on the plan.

2. Delivery Truck Holding Areas On-Site: The majority of materials delivered to the site will be scheduled such that they are able to be off-loaded immediately. On days when the construction activities require multiple truck deliveries, these deliveries will be carefully scheduled so that there is always adequate on-site area for the holding of trucks until they can be unloaded. Once at the site all vehicles will be brought within the fence line and will make every attempt to avoid queuing on public streets. If, for any reason, on-site holding of trucks is not feasible, an off-site location must be designated and shown on the submitted plan referenced above in J.1.

3. All deliveries for materials shall comply with the City's noise requirements.

K. Parking During Construction

1. Adequate parking for construction workers shall be provided on site or arrangements for off-street parking at an off-site location shall be provided.

2. Truck Routes and Volumes: The following quantities are estimated as part of the reconstruction:

   - Gravel & Stone – 1,500 CY. Earthwork subcontractor(s) pit to project site.
   - Hot Mix Asphalt – 75 Tons. Paving subcontractor pit to project site.

L. Dewatering Plans

1. A basic dewatering plan for any construction work is required and shall be submitted by the Contractor. The plan must cover construction sites where groundwater is not expected but the impact of rainwater may require dewatering. The plan must include operating procedures, equipment to be used, including filters, erosion and sediment control measures, or other methods of removing sediment from approved discharges.

2. For construction work that will require frequent dewatering of groundwater from site, a dewatering plan must be prepared by the Contractor and approved by the Department of Public Works. Groundwater and/or soil testing may be required to determine course of action if treatment is necessary. Approval for all discharges to City infrastructure is required. The proposed plan must address the following:

    - Project duration, discharge location, storage equipment on-site, dewatering schematic, and emergency contact.
    - General requirements include trained staff on-site for all approve discharges and required site log for documentation of all discharges.
    - Storage and/or treatment process should include proper settling time and maintain proper use of filtering medium as required.
    - Contingency/maintenance plan for all dewatering equipment devices and filtration mediums.

    Any water that is removed from an excavation must be pumped from a perforated device buried in crush stone prior discharge and/or prior to storage and treatment. There will be no discharge allowed during precipitation events.

M. Special Measures as Necessary

No special measures are necessary for the proposed reconstruction.

R. Solid Waste Disposal

The property management company or Owner shall be responsible for locating the solid waste and recyclable material to the space allocated for solid waste storage as noted on the Site Plan – Ground Floor (C-10). The export of the solid waste to their hauler will be provided on a routine basis by rolling containers to Hanover Street for unloading.

The solid waste containers will be fully enclosed and screened from the public view.

Traffic Solutions
William J. Bray, P.E.
17 Mountview Drive
Gorham, ME 04038
(207) 400-6890
trafficsolutions@maine.rr.com

September 24, 2020

Parking Assessment

Proposed

"52 Hanover Street"

INTRODUCTION

Tom Watson & Co., Inc. are proposing to construct an 8-story mixed-use building on the former City's Public Works Vehicle Maintenance site located at 52 Hanover Street. The project site is bordered by Hanover Street, Parris Street, and the discontinued portion of Lancaster Street.

The present development plan proposes four 1,900sf commercial retail units on the ground floor of the building and 171 residential apartments on floors three through eight. The residential apartment unit mix includes 154 market rate and 17 affordable workforce units; 23 of the apartment units are studios, 112 of the apartment units are one-bedroom and the remaining units (36) are two-bedroom units.

The ground floor of the proposed building provides; in addition to the proposed commercial space, a total of 91 covered parking spaces including: 66 full-size spaces, 22 compact spaces and 3 handicapped spaces. Access to the ground floor is provided through a driveway entrance from Hanover Street. The first floor of the proposed building, which is accessed from Parris Street, provides an additional 103 parking spaces with 75 full size spaces, 25 compact car spaces and 3 handicap spaces. In total, the proposed site design provides a total of 194 on-site parking spaces.

The proposed retail units are anticipated to include one or more of the following projected tenants:

- Neighborhood Coffee Shop
- Neighborhood Grocery
- Bar/Eatery
- Bar/Eatery

The City Zoning Ordinance in Section 14-332.2. (c) states: "*Site plans over 50,000 square feet and projects in the B-6, B-7, and USM Overlay Zones: Where construction is proposed of new structures having a total floor area in excess of fifty thousand (50,000) square feet, the planning board shall establish the parking requirement for such structures. The parking requirement shall be determined based upon a parking analysis submitted by the applicant and upon the recommendation of the city transportation engineer.*

This document provides a determination of the "*average*" peak parking demand for the proposed "52 Hanover Street" building appropriately based upon national parking trends and local parking data. The analytical determination of "*average*" peak parking demand for a mixed-use development must also account for the time-of-day distribution of the actual parking demand. For example, the peak parking demand requirements of one proposed use could likely occur at 7:00 p.m.; whereas the peak parking demand of a second building use may occur at 1:00 p.m. The net result is that the parking demand of multiple land-uses may be able to use the same parking space at different times of the day; thereby, reducing the actual peak parking demand of the site. Further, the analytical process followed in forecasting the peak parking demand of the proposed site also accounts for internally captured trips; oftentimes referred to as "*shared-use*" trips. It is reasonable to expect a resident of the proposed building purchasing coffee or perhaps groceries in either the proposed neighborhood coffee and/or grocery store retail units located on the ground floor of the building. As a result, unless these internal trips are accounted for the projection of trips and ultimately parking demand requirements of the proposed project are overstated.

The parking demand requirements of the proposed 52 Hanover Street building are fully met with construction of the proposed 194 on-site parking spaces. In fact, the parking assessment report documents a balance of spaces are provided, which will be used to off-set the parking requirements of the adjoining 82 Hanover Street mixed-use building.

PARKING DEMAND

National parking demand data presented in the 5th Edition of the Institute of Transportation Engineers (ITE) **"PARKING GENERATION"** publication is typically the instrument used in estimating the actual parking demand of a development site. The 5th edition, which was published in January 2019, represents the most current copy of the noted ITE document. The ITE manual provides "*average*" peak parking demand rates for more than 100 land-use categories including: residential, lodging, recreational, institutional, medical, retail, office, services, etc. Occasionally proposed development uses are more locally specific and/or are not presently accounted for in the national parking publication. In those instances, the average peak parking demand is typically determined based upon local studies conducted at similar development uses. Parking rates are provided for both a weekday and Saturday condition.

The "*average*" peak parking demand requirements of the proposed 52 Hanover Street mixed-use building is estimated based upon the following projected site uses:

Market Rate Units
- (21) studio units
- (101) one-bedroom units
- (32) two-bedroom units

Affordable Workforce Units
- (2) studio units
- (11) one-bedroom units
- (4) two-bedroom units

Commercial Retail Units
- Neighborhood Grocery Store – 1,900sf
- Neighborhood Coffee Shop – 1,900sf
- Bar/Eatery – 1,900sf

- Bar/Eatery – 1,900sf

The peak parking demand requirements of the proposed market rate apartment units is based upon Land-Use #221- Multi-Family Housing (Mid-Rise) presented in the noted ITE parking generation publication. This land-use category is generally used for buildings between three and 10 floors in height. A peak parking rate of 0.48 spaces per bedroom was applied in calculating the peaking demand requirements of the proposed market rate units. The ITE document only provides valid parking rates for a weekday condition; therefore, a similar parking demand rate was applied for Saturday.

Similarly, the peak parking demand requirements of the proposed affordable workforce apartment units is based upon Land-Use #223 - Affordable Housing – Income Limits in the national parking document. The parking rate used in determining the peak parking demand of the 17 workforce apartment units for a weekday is 0.30 spaces per bedroom and a parking demand rate of 0.33 spaces was used for Saturday.

Parking demand requirements for the proposed neighborhood grocery store is based upon a trip generation study of a neighborhood grocery store located at the intersection of Brackett and Pine Streets. The study results, as presented below in Table A, shows less than 8% of the total combined peak hour trips generated by the Pine Street/Brackett Street grocery store are, in fact, automobile trips. Accordingly, this report assumes off-street parking is only provided for a total of five employees.

Table A
Trip Generation Summary
Neighborhood Grocery
(Brackett Street @ Pine Street)

Survey Time	Entering Trips		Exiting Trips		Total Trips	
	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips
7:30 to 7:45 AM	0	0	0	0	0	0
7:45 to 8:00 AM	0	0	0	0	0	0
8:00 to 8:15 AM	15	0	11	0	26	0
8:15 to 8:30 AM	4	1	8	1	12	2
8:30 to 8:45 AM	6	2	1	3	7	5
8:45 to 9:00 AM	11	2	9	3	20	5
AM Peak Hour Total	**36**	**5**	**29**	**7**	**65**	**12**
3:30 to 3:45 PM	5	0	7	0	12	0
3:45 to 4:00 PM	7	1	7	2	14	3
4:00 to 4:15 PM	5	0	9	0	14	0
4:15 to 4:30 PM	6	1	7	0	13	1
4:30 to 4:45 PM	12	1	10	1	22	2
4:45 to 5:00 PM	21	0	18	0	39	0
5:00 to 5:15 PM	15	1	18	1	33	2
5:15 to 5:30 PM	15	0	14	0	29	0
PM Peak Hour Total	**63**	**2**	**60**	**2**	**123**	**4**

A similar process was followed in projecting the parking requirements of the proposed neighborhood coffee shop. A traffic study was conducted at a neighborhood coffee shop located on Munjoy Hill at Congress and Atlantic Streets. Again, the results of the field survey as presented below in Table B clearly demonstrates the majority of the customers (approximately 92%) of the total recorded trips are pedestrian trips generated within the local neighborhood. It is expected that any customer arriving via automobile to the proposed 52 Hanover

site will park on-street and, as a result, off-street parking is not required. To conservatively project the parking demand of the proposed project a total of five parking spaces are reserved within the proposed building site for employees of the neighborhood coffee shop.

Table B
Trip Generation Summary
Neighborhood Coffee Shop
(Congress Street @ Atlantic Street)

Survey Time	Entering Trips		Exiting Trips		Total Trips	
	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips
8:00 to 8:15 AM	7	1	7	1	14	2
8:15 to 8:30 AM	5	2	3	2	8	4
8:30 to 8:45 AM	9	2	7	2	16	4
8:45 to 9:00 AM	12	3	8	2	20	5
9:00 to 9:15 AM	8	1	10	2	18	3
9:15 to 9:30 AM	4	1	6	1	10	2
Total Trips	**45**	**10**	**41**	**10**	**86**	**20**

Parking demand requirements of the proposed two bar/eatery commercial units are based upon parking rates presented in the ITE Parking Generation publication under Land-Use #932 – High Turnover (Sit-Down) Restaurant with Lounge/Bar. A weekday parking rate of 9.31 spaces per 1,000 GFA and a rate of 13.98 spaces per 1000 GFA for Saturday were used to calculate the peak parking demand requirements of both proposed bar/eatery tenant spaces.

Tables 1a and 1b, as follows, provides the "*average*" peak parking demand requirements for both a typical weekday and Saturday condition:

Table 1a
"Peak" Parking Demand Summary
For
"52 Hanover Street"
(Weekday Condition)

Proposed Use	Unit Size	Land-Use Code	Peak Parking Demand Rate	Parking Space Requirements
Residential Apartment (Market Rate)	186 bedrooms	LUC 221	0.48 spaces/bedroom	89 spaces
Affordable Workforce Apartment	21 bedrooms	LUC 223	0.30 spaces/bedroom	6 spaces
Neighborhood Coffee Shop	1,900 sf	Estimated	n/a	5 spaces (1)
Neighborhood Grocery	1,900 sf	Estimated	n/a	5 spaces (1)
Bar/Eatery	1,900 sf	LUC 932	9.31 spaces/1,000 GFA	18 spaces
Bar Eatery	1,900 sf	LUC 932	9.31 spaces/1,000 GFA	18 spaces
			TOTAL =	141 spaces

NOTE: Parking demand based upon estimated number of employees

Table 1b
"Peak" Parking Demand Summary
For
"52 Hanover Street"
(Saturday Conditions)

Proposed Use	Unit Size	Land-Use Code	Peak Parking Demand Rate	Parking Space Requirements
Residential Apartment (Market Rate)	186 bedrooms	LUC 221	0.48 spaces/bedroom (2)	89 spaces
Affordable Workforce Apartment	21 bedrooms	LUC 223	0.33 spaces/bedroom	7 spaces
Neighborhood Coffee Shop	1,900 sf	Estimated	n/a	5 spaces (1)
Neighborhood Grocery	1,900 sf	Estimated	n/a	5 spaces (1)
Bar/Eatery	1,900 sf	LUC 932	13.98 spaces/1,000 GFA	27 spaces
Bar Eatery	1,900 sf	LUC 932	13.98 spaces/1,000 GFA	27 spaces
			TOTAL =	160 spaces

NOTES:
(1) Parking demand based upon estimated number of employees.
(2) Parking demand rate for Saturday is the same as weekday rate. ITE publication has no valid study data for Saturday condition.

The "*average*" unadjusted peak parking demand of the proposed 52 Hanover Street building is estimated at **141** spaces for a typical weekday condition and a slightly greater total of **160** spaces for a Saturday condition.

Parking Demand Adjustments: Due to the diversity of proposed uses within the "52 Hanover Street" building, an adjustment is applied to refine the actual parking demand of the proposed building. The adjustment accounts for multi-purpose trips that occur between one or more tenant spaces within the building; often referred to as "*shared or internally captured*" trips. These trips must be accounted for or the projection of peak parking demand overstates the actual peak parking demand of a specific development site. The National Cooperative Highway Research Program's (NCHRP) 684 Internal Trip Capture Estimation Tool was utilized in calculating the number of shared or captured trips generated by the proposed site. Separate analyses were conducted for both the weekday morning and peak hour time periods and the trip rates calculated for each time period (10% AM Peak Hour and 19% PM Peak Hour) were then averaged to provide a conservative estimate of 14.5% percent. The NCHRP estimation tool is limited in calculating internal captured trips for only a weekday condition. This report has assumed the percentage of internally captured trips generated by the site on Saturday is equal to the weekday average rate of 14.5%. Copies of the NCHRP worksheets for both the weekday AM and PM peak hours are attached for reference.

Tables 2a and 2b below summarize the adjusted "*average*" peak parking demand for the proposed site for both a typical weekday and Saturday condition:

Table 2a
Adjusted Parking Demand Summary
For
"52 Hanover Street"
(Weekday Condition)

Proposed Use	Peak Parking Demand (Spaces)	Shared Trip Adjustment [1]	Adjusted Parking Demand
Residential Apartment (Market Rate)	89	-13	76
Affordable Workforce Apartment	6	-1	5
Neighborhood Coffee Shop	5	0	5
Neighborhood Grocery	5	0	5
Bar/Eatery	18	-3	15
Bar/Eatery	18	-3	15
TOTAL	**141**	**-20**	**121**

NOTE:
[1] Shared trip adjustment percentage calculated using (NCHRP) 684 program. Percent value an average of AM & PM peak shared trip percentages.

Table 2b
Adjusted Parking Demand Summary
For
"52 Hanover Street"
(Saturday Condition)

Proposed Use	Peak Parking Demand (Spaces)	Shared Trip Adjustment [1]	Adjusted Parking Demand
Residential Apartment (Market Rate)	89 spaces	-13	76
Affordable Workforce Apartment	7 spaces	-1	6
Neighborhood Coffee Shop	5 spaces	-1	4
Neighborhood Grocery	5 spaces	-1	4
Bar/Eatery	27 spaces	-4	23
Bar/Eatery	27 spaces	-4	23
TOTAL	**160 spaces**	**-24**	**136**

NOTE:
[1] Shared trip adjustment percentage calculated using (NCHRP) 684 program. Percent value is an average of weekday AM & PM peak shared trip percentages.

Hourly Parking Demand: The noted ITE Parking Generation publication provides further guidance in estimating the actual parking demand of a mixed-use or multi-use project. They state the following: *"the hourly variation in parking demand for the individual land uses can result in conditions where the parking demand for one land use is high while the demand for a different land use is low. In this situation, parking demand for both land uses may be able to use the same parking space at different times of the day. The end result can be a reduction in overall peak parking demand."*

The ITE Parking Generation manual provides time-of-day percent peak parking demand values for each land-use category for completing this determination. The actual percent values applied in completing these calculations are presented in Table 3a and 3b as follows:

Table 3a
Hourly Peak Parking Demand (percent value) Summary
For
"52 Hanover Street"
(Weekday Condition)

Time of Day	Residential Apartment (Market Rate)	Affordable Workforce Apartment (1)	Neighborhood Grocery (2)	Neighborhood Coffee Shop (2)	Bar/Eatery (3)	Bar/Eatery (3)
7:00 AM	71%	71%	100%	100%	0	0
8:00 AM	61%	61%	100%	100%	0	0
9:00 AM	55%	55%	100%	100%	5%	5%
10:00 AM	54%	54%	100%	100%	7%	7%
11:00 AM	53%	53%	100%	100%	16%	16%
12:00 PM	50%	50%	100%	100%	49%	49%
1:00 PM	49%	49%	100%	100%	39%	39%
2:00 PM	49%	49%	100%	100%	27%	27%
3:00 PM	50%	50%	50%	0	19%	19%
4:00 PM	58%	58%	50%	0	22%	22%
5:00 PM	64%	64%	50%	0	60%	60%
6:00 PM	67%	67%	50%	0	94%	94%
7:00 PM	70%	70%	50%	0	100%	100%
8:00 PM	76%	76%	50%	0	81%	81%

NOTES:
(1) Percent values for affordable workforce apartments applies same percent values presented for market rate apartments. ITE data not available for affordable units.
(2) Percent values estimated.
(3) Bar/eatery rates based on ITE 4th edition; 5th edition does not include percent values.

Table 3b
Hourly Peak Parking Demand (percent values) Summary
For
"52 Hanover Street"
(Saturday Condition)

Time of Day	Residential Apartment (Market Rate)	Affordable Workforce Apartment (1)	Neighborhood Grocery (2)	Neighborhood Coffee Shop (2)	Bar/Eatery (3)	Bar/Eatery (3)
7:00 AM	95%	95%	100%	100%	0	0
8:00 AM	88%	88%	100%	100%	0	0
9:00 AM	83%	83%	100%	100%	5%	5%
10:00 AM	75%	75%	100%	100%	7%	7%
11:00 AM	71%	71%	100%	100%	20%	20%
12:00 PM	68%	68%	100%	100%	41%	41%
1:00 PM	66%	66%	100%	100%	53%	53%
2:00 PM	70%	70%	100%	100%	46%	46%
3:00 PM	69%	69%	50%	0	38%	38%
4:00 PM	72%	72%	50%	0	63%	63%
5:00 PM	74%	74%	50%	0	80%	80%
6:00 PM	74%	74%	50%	0	100%	100%
7:00 PM	73%	73%	50%	0	93%	93%
8:00 PM	75%	75%	50%	0	70%	70%

NOTES:
(1) Percent values for affordable workforce apartments applies same percent values presented for market rate apartments. ITE data not available for affordable units.
(2) Percent values estimated.
(3) Bar/eatery rates based on ITE 4th edition; 5th edition does not include percent values.

Finally, the following Tables 4a and 4b estimate the "*average*" adjusted hourly peak parking demand requirements of the proposed project based upon the procedures described in the ITE Parking Generation publication:

Table 4a
Hourly Peak Parking Demand Summary
For
"52 Hanover Street"
(Weekday Condition)

	Residential Apartment (Market Rate)	Affordable Workforce Apartment	Neighborhood Grocery	Neighborhood Coffee Shop	Bar/Eatery	Bar/Eatery	Total
Adjusted Peak Parking Demand	**76 spaces**	**5 spaces**	**5 spaces**	**5 spaces**	**15 spaces**	**15 spaces**	**121**
Time of Day							
7:00 AM	54 spaces	4 spaces	5 spaces	5 spaces	0	0	68
8:00 AM	46 spaces	3 spaces	5 spaces	5 spaces	0	0	59
9:00 AM	42 spaces	3 spaces	5 spaces	5 spaces	1 space	1 space	57
10:00 AM	41 spaces	3 spaces	5 spaces	5 spaces	1 space	1 space	56
11:00 AM	40 spaces	3 spaces	5 spaces	5 spaces	2 spaces	2 spaces	57
12:00 PM	38 spaces	3 spaces	5 spaces	5 spaces	7 spaces	7 spaces	65
1:00 PM	37 spaces	2 spaces	5 spaces	5 spaces	6 spaces	6 spaces	61
2:00 PM	37 spaces	2 spaces	5 spaces	5 spaces	4 spaces	4 spaces	57
3:00 PM	38 spaces	3 spaces	3 spaces	0	3 spaces	3 spaces	50
4:00 PM	44 spaces	3 spaces	3 spaces	0	3 spaces	3 spaces	56
5:00 PM	49 spaces	3 spaces	3 spaces	0	9 spaces	9 spaces	73
6:00 PM	51 spaces	3 spaces	3 spaces	0	14 spaces	14 spaces	85
7:00 PM	53 spaces	4 spaces	3 spaces	0	15 spaces	15 spaces	90
8:00 PM	58 spaces	4 spaces	3 spaces	0	12 spaces	12 spaces	89

Table 4b
Hourly Peak Parking Demand Summary
For
"52 Hanover Street"
(Saturday Condition)

	Residential Apartment (Market Rate)	Affordable Workforce Apartment	Neighborhood Grocery	Neighborhood Coffee Shop	Bar/Eatery	Bar/Eatery	Total
Adjusted Peak Parking Demand	**76 spaces**	**6 spaces**	**4 spaces**	**4 spaces**	**23 spaces**	**23 spaces**	**136**
Time of Day							
7:00 AM	72 spaces	6 spaces	4 spaces	4 spaces	0	0	86
8:00 AM	67 spaces	5 spaces	4 spaces	4 spaces	0	0	80
9:00 AM	63 spaces	5 spaces	4 spaces	4 spaces	1 space	1 space	78
10:00 AM	57 spaces	5 spaces	4 spaces	4 spaces	2 spaces	2 spaces	74
11:00 AM	54 spaces	4 spaces	4 spaces	4 spaces	5 spaces	5 spaces	76
12:00 PM	52 spaces	4 spaces	4 spaces	4 spaces	9 spaces	9 spaces	82
1:00 PM	50 spaces	4 spaces	4 spaces	4 spaces	12 spaces	12 spaces	86
2:00 PM	53 spaces	4 spaces	4 spaces	4 spaces	11 spaces	11 spaces	87
3:00 PM	52 spaces	4 spaces	2 spaces	0	9 spaces	9 spaces	76
4:00 PM	55 spaces	4 spaces	2 spaces	0	14 spaces	14 spaces	89
5:00 PM	56 spaces	4 spaces	2 spaces	0	18 spaces	18 spaces	98
6:00 PM	56 spaces	4 spaces	2 spaces	0	23 spaces	23 spaces	**108**
7:00 PM	55 spaces	4 spaces	2 spaces	0	21 spaces	21 spaces	103
8:00 PM	57 spaces	5 spaces	2 spaces	0	16 spaces	16 spaces	96

Accordingly, the average adjusted peak hourly parking demand of the site (90 spaces) for a typical weekday condition occurs at 7:00 PM. The adjusted parking demand (108 spaces) on a typical Saturday occurs at 6:00 PM.

PARKING SUPPLY

The proposed 52 Hanover Street building design provides 194 covered parking spaces located on the ground and first floors of the proposed development site. The Applicant will assign a total of 90 parking spaces for all weekdays and 108 spaces on Saturday to accommodate the calculated peak parking demand requirements of the proposed mixed-use building. The remaining 104 weekday parking spaces and 86 available spaces on Saturday will be allocated to meet a portion of the parking requirements of the adjacent mixed-use building located at 82 Hanover Street.

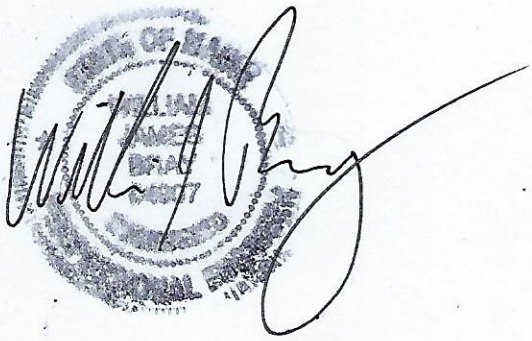
SUMMARY

- The proposed 52 Hanover Street mixed-use building includes a total of 171 residential apartment units and four (4) 1,900sf commercial retail units is projected to generate an "*average*" peak parking demand of approximately **141** spaces on a typical weekday and **160** spaces on Saturday. The estimates of peak parking demand were developed based upon national parking demand rates presented in the 5th edition of the Institute of Transportation's **Parking Generation** publication and parking data collected locally within the City of Portland.

- The determination of "*average*" peak parking demand for the proposed project includes an adjustment for "*shared-use*" trips, which account for the occurrence of multi-purpose trips between one or more tenant spaces. The noted parking adjustments reduce the "*average*" peak parking demand of the site to **121** weekday spaces and **136** spaces on a typical Saturday.

- The final step in forecasting the "*average*" peak parking demand requirements of the proposed 52 Hanover Street building considers the "*shared parking space*" benefits of a mixed-use or multi-use project. The previously referenced **Parking Generation** publication provides the following guidance: "*the hourly variation in parking demand for the individual land uses can result in conditions where the parking demand for one land use is high while the demand for a different land use is low. In this situation, parking demand for both land uses may be able to use the same parking space at different times of the day. The end result can be a reduction in overall peak parking demand.*" The parking manual provides time-of-day percent of peak parking demand values for each land-use category; whereby, the actual hourly parking demand of the project site can be calculated. The results of this final process show the "*average*" peak parking demand of the 52 Hanover Street site occurs at 7:00 p.m. on a typical weekday and at 6:00 PM on Saturday. The peak hourly parking demand for the weekday is estimated at **90** spaces and the Saturday parking space projection is **108** spaces.

- Traffic Solutions recommends a maximum number of 90 weekday spaces and 108 spaces on Saturday be reserved for building tenants to meet the estimated average "peak" parking demand of the proposed mixed-use building project. The balance of spaces (approximately 94 weekday and 86 Saturday) within the proposed 52 Hanover Street site will be used to satisfy a portion of the peak parking demand of the adjoining 82 Hanover Street mixed-use building.



T. Traffic Memo

The proposed 6-8 story mixed-use building at 52 Hanover Street includes 171 residential units with associated covered parking and 4 retail units along Lancaster Court. Access to the two covered parking decks will be available from Hanover and Parris Streets, with additional pedestrian access from Lancaster St. The access points for the parking areas have been selected to minimize impact on the surrounding streets and also take advantage of existing slopes on Hanover and Parris Streets to provide the necessary grade separation for two levels of structured parking. Furthermore, trip distribution to the surrounding street network will effectively be split by routing approximately half of the vehicles to each street/entrance.

The preliminary trip generation for the proposed project has been estimated using the Institute of Transportation Engineers (ITE) "Trip Generation" 10th Edition publication. The land uses utilized in the calculations include: Residential mid-rise apartments, Neighborhood Grocery Store, Neighborhood Coffee Shop, and two pubs/eateries. The proposed retail uses are the current targeted end users for the proposed four retailers along Lancaster Court. Additionally, the existing trips previously generated at the Site were counted as a credit, consistent with best practice. To evaluate the credited trips, studies were conducted at the new Public Works facility on Canco Road. The peak credits, although relatively insignificant, were then factored into the net increase for the site.

Accordingly, the preliminary trip analysis yields a PM peak hour increase of approximately 100 trips and an AM peak hour increase of approximately 50 trips. Further, the peak hour on the weekend is anticipated to generate approximately 150 trip ends.

Overall, a moderate traffic increase is expected for this project due to the change in use of the site. However, the increase will be caused by standard passenger vehicles as opposed to the current (historical) condition where large municipal vehicles utilized the site. Upon initial analysis, the surrounding street system is equipped to handle the increases and does not currently suffer from congestion. It should also be noted that the City continues to carry out the Kennebec Street realignment project which will eventually improve the overall street network.

Due to the increase of over 100 peak trips, the project team anticipates submitting a Traffic Movement Permit (TMP) under Maine DOT regulations. The submission is anticipated to take place during the last week of September 2020 and will be based on the above analysis. Due to the City's Delegated Review status, it's expected that the City and/or their 3rd party consultant will review the application on behalf of the State. Furthermore, as discussed at the pre-application meeting on July 17, 2020, this project is anticipated to hold two workshops with the Planning Board prior to a final hearing where the second workshop would be focused on the transportation aspect of the project.

ACORN ENGINEERING, INC.

Should there be any questions regarding this initial traffic analysis, please don't hesitate to contact us. We look forward to providing the City with the draft TMP material in the coming days and further presenting the traffic overview to the Board.

Sincerely,

Bill Bray, P.E.
Traffic Engineer
Traffic Solutions

Sam Lebel, E.I.
Project Engineer
Acorn Engineering, Inc.

Att. U

52 Hanover Street

Transportation Demand Management (TDM) Plan

September 24, 2020

Summary

52 Hanover, LLC provides this Transportation Demand Management (TDM) Plan for 52 Hanover Street, bordered by Hanover, Lancaster and Parris Streets in the B2b zone of Portland's Bayside neighborhood. The proposal is for a 6-8 story mixed-use building with 171 residential apartments and courtyard space, four small retail spaces on the public-access Lancaster Court, ground and second floor interior parking levels accessed from Hanover and Parris Streets, and four new on-street parking spaces.

This is a key opportunity for urban infill redevelopment, new housing for Peninsula employees, and alternate transportation and reverse commuting options for residents. The 52 Hanover Street TDM Plan intends to reduce parking demand and drive-alone vehicle trips to and from the site and benefit the local transportation system. This includes marketing the housing to downtown employees; providing leases exclusive of parking; offering on-site amenities; and supporting transportation alternatives such as walking, bicycling and using public transportation.

The plan sets the following TDM targets for 3 years after 52 Hanover Street is fully occupied. These targets should be reassessed after the first full year of occupancy of all tenant spaces:

- *10% reduction in resident peak hour vehicle trips and resident parking demand for the site*
- *65% resident and retail employee multimodal rate*

COVID-19 NOTE: Site occupancy is forecast for April 2023 and with an anticipated vaccine for the COVID-19 virus available within approximately the next 18 months, transportation alternatives that are currently less viable - such as transit and carpooling – are anticipated to make significant recoveries by that time. COVID-related parking demand increases to enable drive alone options are also expected to decline. In addition, TDM efforts will likely be supported by a long-term increase in telework and walkable access to the largest number of jobs in the state.

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52 Hanover Site

- 1.37-acre 6-8 story mixed-use urban infill site in the B2b Business Community district of Bayside
- Residential: 171 dwelling units, 10% at Workforce Housing rate; includes common areas, co-working space, and fitness room: 149,000 sf; approximately 250 residents
- Retail: 4 spaces on ground floor, Lancaster Street access: 8,000 sf
- Ground and second floor covered parking for residents, with access from Hanover and Parris Streets: 171 spaces, including 6 ADA accessible spaces
- 4 new on-street parking spaces

TDM Targets

- ***Trip & parking reduction target:*** a 10% reduction in resident vehicle trips and parking demand within 3 years after full occupancy - resulting from TDM program. That is, 2.6 resident weekday morning peak trips, 3.1 resident weekday evening peak trips, 7.6 residential-use spaces
- ***Multi-modal target:*** 65% of resident and retail employee trips will be on foot, by bicycle, via transit, telecommuting, or carpooling within 3 years after full occupancy
- Will reassess targets after the first full year of 52 Hanover occupancy

TDM Coordinator

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A. Property Description & Transportation Context

52 Hanover Street is a 1.37-acre parcel encompassing the north half of the block bordered by Hanover, Portland, Parris and Lancaster Streets in the B2b zone of Portland's Bayside Neighborhood. After years of service as a Department of Public Works maintenance garage, it is appropriate that the site is returning to its residential housing and small retail roots – what it was originally developed as 150 years ago, according to City records.

In *Portland's Plan 2030* (the 2017 City Comprehensive Plan), analysis showed the number of people both living and working in the city decreased between 2002 and 2014; the plan "supports the principle that all who work in Portland should have the option of living in Portland." The City set a 10-year population goal of 75% of the municipality's approximate daytime population of 96,000. New residential sites like 52 Hanover provide real opportunity to help meet this goal.

The location has a Compact Neighborhood Score of 9.5 out of 10. This scoring is based on a natural logarithm of household density, provided through the Housing + Transportation Affordability Index using U.S. Census data.

With increasing retail, office and housing development, Bayside also keeps growing in its sense of place and improved street feel. 52 Hanover will add to these enhancements and the human scale of the pedestrian environment through its active signage, windows, lighting, entrances and landscaping.

Residential Housing at 52 Hanover

Infill development of any kind contributes to single-occupancy automobile trip reduction. That much more in the case of in-town housing, which is the primary use proposed for 52 Hanover. When people move from one residence to another it provides a key opportunity and critical juncture at which to help them understand their transportation choices and the benefits of alternate transportation. Individuals are more receptive to this information as their daily living and commute patterns have changed with relocation.

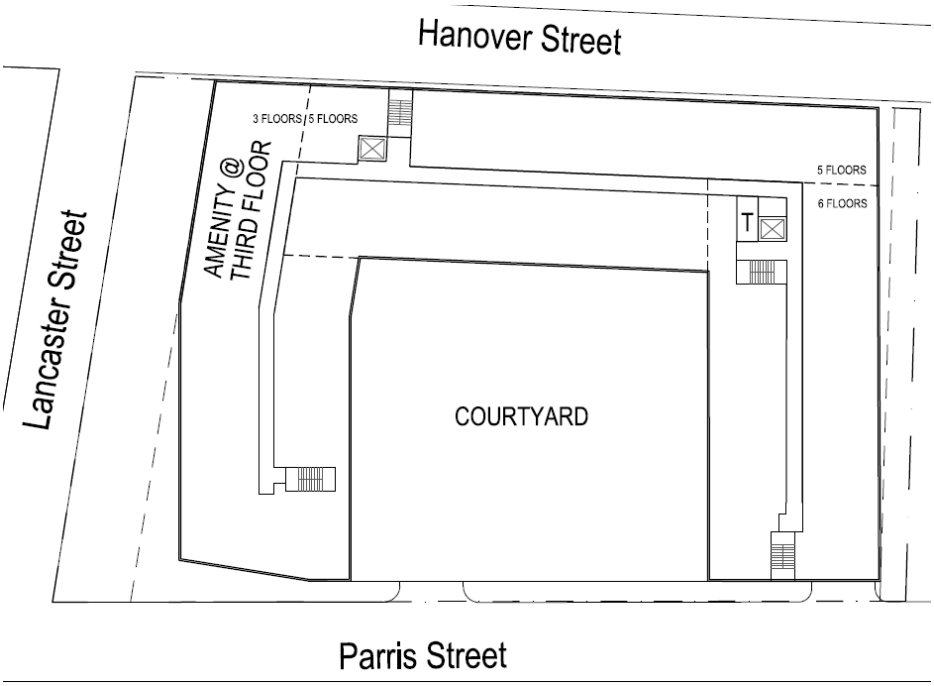
...One of the more interesting studies found in reviewing the literature was a 2003 German social science experiment conducted by three researchers (Bamberg, Rolle and Weber) where an individualized marketing intervention was used at a time of what they called a "changed decision" context, meaning immediately after relocation. The research found that if, when in a new situation, people received personally relevant and persuasive information, they were more likely to use it for making new behavioral decisions.

Portland Oregon SmartTrips Welcome Program, Tools of Change Landmark Case Study, 2012

One hundred seventy-one (171) residential units are proposed for 52 Hanover, consisting of 23 studios, 112 one-bedroom, and 36 two-bedroom apartments. Seventeen of the units will be deed-restricted as workforce rate housing. 52 Hanover, LLC will retain ownership of the building and Port Property Management will manage the building long-term.

Significant on-site and near-site amenities provide residents with a full-service living environment. People in residential settings often perceive they are dependent upon driving alone because of the number of errands and activities they must carry out in different locations. 52 Hanover will reduce this dependence through building facilities and proximity to services close to the site. Site features that encourage alternate transportation and discourage drive alone vehicle trips include:

- an indoor bicycle/stroller/carseat/ handcart storage area
- delivery location and storage for packages and other deliveries
- free wireless internet throughout the building
- communal space that can be used to do telework
- fitness room
- outdoor rooftop courtyard including congregating areas such as fire pits and a wading pool.



Small Retail at 52 Hanover

The developer is also creating four 1,900 square foot retail spaces off the public-access Lancaster Court. The leasing plans for these are:

- a neighborhood coffee shop - also with access for site residents from the building lobby
- a small grocer (i.e. Rosemont Market)
- two small eateries

The desire for a grocery retailer was expressed by neighborhood residents during the site planning review process for the adjacent 82 Hanover as well. Even short grocery runs are often taken by personal vehicle, so this would reduce some drive alone trips, too.

Parking

Per the site development agreement, 52 Hanover will build and maintain 194 interior parking spaces on the ground and second floors of the building. Access to the ground floor will be from Hanover Street and access to the second floor will be from Parris Street, thus more evenly dispersing motor vehicle trips from and to the site.

In strong support of site TDM efforts, residential and retail leases at 52 Hanover will be exclusive of parking. Parking that is unsubsidized, rented at competitive market rates, and unbundled from tenant leases is of tremendous benefit and a linchpin strategy to discourage drive alone trips and encourage the use of alternate transportation.

Parking that is shared-use also expands its efficiency and is another important TDM strategy. Based on 52 Hanover's initial parking demand analysis (further detailed in Section C) and the City land use code Section 14-332 (c), the minimum amount of required parking for the site will be determined by the developer's parking assessment and the recommendation of the city transportation engineer. Thus, the site intends maximize its parking resources by leasing spaces to tenants at 82 Hanover Street next door and sharing spaces between daytime and evening uses; e.g., with residential tenants accessing them for overnight use.

Port Property staff will actively manage the parking on site. The company will also explore the possible management of 52 Hanover and other lower Bayside parking resources through Unified Parking Partners; UPP could likely expand these resources' most strategic and effective use.

Moreover, 52 Hanover's redevelopment will enable the installation of four new on-street parking spaces, both of benefit to the neighborhood and also facilitating local traffic calming.

Occupant Demographics

The developer anticipates 52 Hanover will most likely attract singles and couples (an average of 1.5 persons per unit) interested in a highly-walkable, low-car use lifestyle and/or lowering their housing and transportation cost burden. This will include Generation Z and Millennial tenants (young professionals and students under age 40), mid-level professionals and executives, and empty-nesters. Some units may not be the tenants' primary residence, also reducing day-to-day traffic to and from the site.

Tenants will include people working downtown or in nearby neighborhoods, so as to avoid the increased highway traffic coming into the City. Downtown Portland is the largest employment center in the state and 52 Hanover has an excellent Job Access Score of 9.4 out of 10. This is based on employment location

and the variety of employment types, similarly provided through the Housing + Transportation Affordability Index (H+T Index) utilizing census data. According to the census, 37% of people living in the West Bayside neighborhood work on the Peninsula - the most common on-peninsula employment destinations being Downtown and Maine Medical Center. By increasing local housing availability, the site offers the opportunity for this percentage to grow as well.

For residents who are students, post-secondary education opportunities such as the Maine College of Art, the University of Southern Maine, and Southern Maine Community College are readily accessible from the site via public transportation.

From an equity standpoint, the site also has an enviable H+T Index rate of 37%; that is, housing (22%) and transportation (15%) costs combined are 37% of household income. Housing by itself is considered affordable if it totals 30% or less of income. Housing and Transportation Affordability (HTA) is considered to be combined housing and transportation costs equaling 45% or less of income. For comparison, the average Cumberland County household spends 52% of income on housing and transportation and the average Maine household spends 58% - both of which are well over what is considered within one's means.

Often these lower transportation costs at sites like 52 Hanover are because people don't need to own as many - or any - private vehicles. That is, vehicle ownership rates are lower for people who live in urban centers. Focusing in specifically on the 52 Hanover census tract, five-year census data analysis (2014-2018) shows that workers who live in West Bayside and commute to all jobs – including anywhere in the region:

- Own significantly fewer vehicles: .7 per household - vs. 1.4 in the city and 1.8 in the region;
- Drive alone considerably less: 37.3% in the 52 Hanover census tract - vs. 64.6% in the city and 78.4% in the region;
- Use alternate modes of transportation and/or telecommute significantly more: 61.6% in West Bayside vs. 38.8% in the city and 20.6% in the region.

This is similar to *Portland's Plan* analysis of larger Peninsula commute patterns, which found:

> *[T]he percentage of people who drive alone to work on the peninsula is as low as 36%, while the percentage of people who walk to work is in the 30% - 40% range, the percentage of people who bike to work is in the 4% - 9% range, and the percentage of people who take public transportation to work is in the 7% - 13% range. Off the peninsula, these figures shift dramatically to reflect a higher reliance on single-occupancy vehicles for commuting purposes.*

Per U.S. Census data, Generation Z and Millennials have been shown to prefer urban environments; they also tend to be more comfortable using modes other than the single-occupancy automobile for transportation. These multimodal habits were heavily influenced by the Great Recession and driving by these generations has increased slowly as the economy improved. (It is currently being impacted once again by the COVID-19 pandemic – which is negatively impacting bus and carpool rates; although it is positively impacting the number of people who walk and bicycle.) Overall, from a behavior change perspective, this familiarity with different ways of getting around will greatly facilitate these tenants' and retail employees' participation in the 52 Hanover Street TDM program.

Regarding vehicle travel and senior resident demographics, the percentage of the population that drives plateaus for the general public through the ages of 30-55 - and then starts declining after the age of 55 for women and after age 60 for men. Similarly, vehicle miles and person miles traveled per capita both fall precipitously starting at the age of 55. Car ownership has had a slight rebound since the Great Recession. However, between 2015 and 2016, the one increase in car-free living (above the margin of error) was among householders age 65 or older who rent. (Source: American Community Survey of the U.S. Census).

For residents working off the Peninsula, who may commute by single occupancy vehicle, there is also a reverse commute phenomenon. This change in the directionality of trips creates a more balanced inbound-outbound flow of vehicular traffic during the morning and evening peak travel hours.

Larger Transportation Setting

52 Hanover Street and its TDM initiatives are part of Bayside's continued renaissance. The project brings to fruition a number of the housing, mixed-use, downtown neighborhood, urban form, and transportation demand management goals of several recent and historically important Portland studies and plans. Included among them are:

- the original *A New Vision for Bayside* (2000)
- *Bayside Transportation Master Plan* (2018)
- *A Time of Change: Portland Transportation Plan* (1993)
- *Deering Oaks Master Plan* (1994)
- *Green Spaces Blue Edges* (2001)
- *Housing, Sustaining Portland's Future* (2002)
- *Portland Peninsula Transit Study* (2008)
- *Sustainable Portland* (2009)
- *Transforming Forest Avenue* (2012)
- the city's Comprehensive Plan, *Portland's Plan 2030* (2017)

LOCAL GOALS

WE WILL:

Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents.

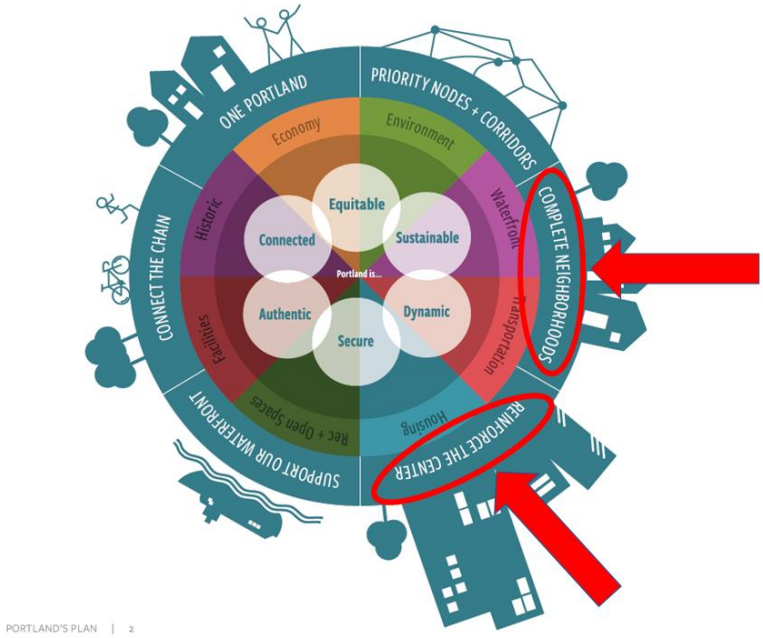
Encourage additional contextually appropriate housing density in and proximate to neighborhood centers, concentrations of services, and transit nodes and corridors as a means of supporting complete neighborhoods.

Pursue policies to enable people who work in Portland to have the option to live in Portland.

Collaborate with surrounding communities on regional housing solutions.

Encourage quality, sustainable design in new housing development.

Portland's Plan 2030 (2017 Comprehensive Plan)



For example, redevelopment of this site in the center of Portland addresses the land use diversity, housing, and downtown-strengthening outlined in *Portland's Plan* (2017) – described further as Complete Neighborhoods and Reinforce the Center.

More specifically, the *Bayside Transportation Master Plan* noted land use recommendations that 52 Hanover helps fulfill (at right).

BAYSIDE TRANSPORTATION MASTER PLAN

SECTION FIVE – ALTERNATIVE DEVELOPMENT AND RECOMMENDATIONS

5.2.6 – Land-Use

The Preble/Elm Streets focus area offers numerous adaptive reuse and infill opportunities. This is an area in transition between Marginal Way and the more established urban fabric and streets beginning at Cumberland Avenue:

- Study the build-out potential and mobility implications of Hanover Street between Kennebec Street and Marginal Way;
- Continue to target the DPW site for mixed-use urban infill;
- Inventory surface parking lots in the area and identify potential infill opportunities and triggers requiring structured parking;
- Maintain and expand both market rate and affordable housing stock; and
- Preble Street is a key gateway street to downtown. New development and redevelopment should address the street to create a pedestrian-friendly environment and maximize land values; and
- Elm Street is also a key gateway street leaving downtown. New development and redevelopment should address the street to create a pedestrian-friendly environment and increase land values.

In addition, while 52 Hanover Street is not officially within the borders of Downtown, it's near enough that its TDM efforts align well with observations from the 2017 *City of Portland Parking Study for Downtown, The Old Port, and The Eastern Waterfront*. For example, "If future residential development in the study area were to attract a higher percentage of residents who also work in the study area, and do not use their vehicle to commute to work, this would raise the internal capture rate for office parking demand. An internally captured office trip does not need an additional office parking space because the resident employee leaves their vehicle at home. In this way, a single parking space would serve either a residential purpose or an office purpose depending on the time of day. It would help lower parking demand to promote or incentivize the occupancy of new residential development with employees (of any kind) who also work in the study area."

The project location also provides nearby access to Forest Avenue connections with Interstate 295 North and South for automobile transportation.

Bicycle & Pedestrian Access

While the site is located within what has traditionally been a light industrial zone with some missing sidewalk links and crossings that aren't always ADA accessible, it is still pedestrian and bicycle-friendly. This is in part because of continued sidewalk, crossing and bike lane improvements being made in the area – including via development projects like this one - and the generally strong sidewalk network and lower-speed street grid of the Portland Peninsula.

From the perspective of residents with any mobility concerns, sidewalks on nearby Forest, Portland, Preble - and those south of Cumberland Avenue - are maintained year-round by the City and the Portland Downtown district, including the removal of snow and ice during the winter months.

52 Hanover also sits in close proximity to the:

- Bayside and Back Cove Trails
- Marginal Way, Forest Avenue, Portland Street and new Preble Street bike lanes
- Protected bicycle lanes on Park Avenue
- Proposed Bayside Trail extension, the planned Preble and Elm Street bicycle infrastructure improvements, and the eventual Deering Oaks Park section of the Neighborhood Byway network.

These are all pivotal links in Portland's alternate transportation system.

Moreover, the building is almost directly across the street from Port City Bikes, which prioritizes service for bicycle commuters.

Residential tenants working anywhere on the Peninsula will be within comfortable walking distance of their home; similarly, for retail employees and site visitors who live on the East End, West End or downtown. Those residents whose employers are located within a five-mile commute distance can also easily bike to work, especially as bicycle networks in Portland, South Portland and Falmouth continue to improve.

Significant near-site amenities and recreational facilities also provide people with a full-service living and working environment. These abound within easy walking distance of 52 Hanover Street for residential tenants, retail employees and site visitors. They include:

- Grocery stores such as Trader Joe's, Whole Foods and Hannaford Brothers; the Portland Farmer's Market at Deering Oaks; and home product suppliers such as Reny's.
- Services such as the U.S. Post Office, Port City Bikes repair shop, Enterprise Car Rental, Coastal Pharmacy & Wellness, Orange Theory and Planet Fitness gyms, and the Portland Public Library
- Open spaces and gardens such as Deering Oaks Park, the Bayside Community Garden, the Oxford Street Playground/Sprayground, and the Back Cove
- Food and entertainment venues, such as Bayside Bowl, Wilson County Barbeque, Two Fat Cats bakery, etc. – plus the property is also only two blocks from the Portland Downtown and Arts Districts, the Downtown Entertainment Overlay Zone and the Congress Street Historic District.

These Bayside and Downtown offerings also provide an attractive dual-purpose trip for 52 Hanover retail employees and site visitors who do end up driving to the site. For example, walking to run errands at neighboring businesses or meeting up with family and friends for after-hours events nearby. In addition, these internally captured trips represent no net new trip generation or parking demand beyond the original trip to the site.

Public Transportation Access

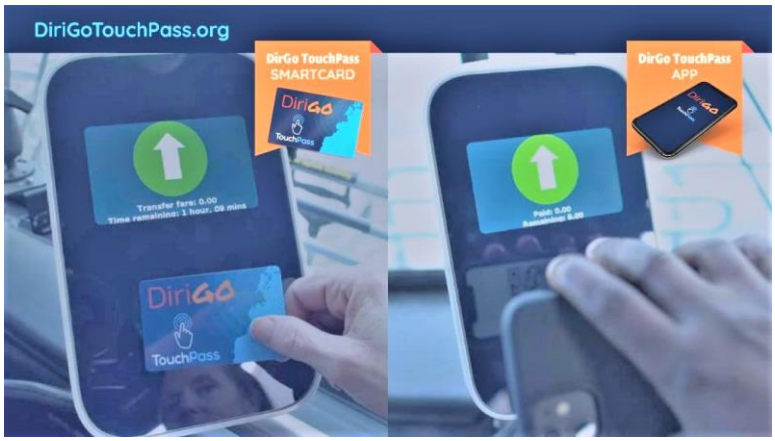
In terms of transit service, 52 Hanover is three quick blocks from the METRO Routes 2, 4 and 5 at the corner of Forest Avenue and Portland Street/Park Avenue. These serve the significant transportation corridors and residential neighborhoods off of Forest Avenue, Brighton Avenue and Outer Congress. The building is also three blocks from Congress Street with access to the South Portland, Lakes Region, Shuttlebus/ZOOM and other METRO bus routes - and a six-minute walk to the METRO Pulse transit hub on Elm Street.

At the METRO Pulse, services include ticket sales, a staffed indoor waiting room, restroom, outdoor seating and the:

- METRO Breez with service to Yarmouth, Freeport and Brunswick
- RTP Lakes Region Explorer with Route 302 service to Westbrook, Windham, Raymond, Casco, Naples and Bridgton
- Other METRO local routes – including Route 7 to Falmouth
- METRO Husky Line with express service to Westbrook and Gorham

In fact, 52 Hanover is also just a 6-minute walk to the METRO Husky Line stop at the corner of Preble and Marginal Way, with express 20-minute service to Westbrook and 30-minute service to Gorham. This is valuable for both USM students heading to the Gorham campus and also Bayside residents who work in Westbrook. According to *Portland's Plan,* since 2010 the proportion of Portland residents that commute to work in Westbrook has increased.

METRO, South Portland Bus and Casco Bay Ferry Lines all provide real-time arrival information for riders, through the Southern Maine Transit Tracker website and smartphone apps such as Google Maps, Transit and Moovit. In addition, the Lakes Region Explorer and Biddeford Saco Old Orchard Beach Transit also provide live-time bus data through the organizations' websites. All local and express buses are equipped with bicycle racks with space for 2-3 bikes. In addition, the ZOOM bus and most METRO buses and offer Wi-Fi access; some provide in-seat USB ports.



In October 2020, METRO, South Portland Bus Service and Biddeford Saco Old Orchard Beach Transit will be launching the highly desirable DiriGO TouchPass electronic fare system. This enables riders and sites like 52 Hanover to pay only for transit trips taken, versus paying for multi-ride or monthly passes that may or may not be used fully. In addition, the system caps fares, so that riders never pay more than a certain amount each day and each month; once they hit the cap, they ride free for the rest of that time period. For COVID-19 purposes, because the TouchPass is available via either a smartphone application or smart card, it is also a contactless and safe way to pay one's fare.

METRO's Peninsula Loop Reboot (delayed by COVID-19 but with a proposed new routing expected this fall, 2020) is also likely to provide more comprehensive transit service to the Bayside area. This and other transit improvement recommendations have been made in the *Bayside Transportation Master Plan*. These could enable increased ridership of Bayside and Peninsula residents and retail employees to and from 52 Hanover Street.

A visual map of the larger multi-modal context of the site can be viewed in **Appendix A** *at the end of this document.*

Shared Mobility Access

With the end of UhaulCarshare service in Portland in February 2020, 52 Hanover, LLC is exploring other carshare possibilities for 52 Hanover Street. If an option is found feasible, will offer a discount for resident carshare vehicle use for the first year of residency.

Over the past several years, the City was working on an agreement with JUMP Bikes (by Uber) – recently acquired during COVID-19 by Lime - to set up a dockless electric bikeshare system in Portland. If and when the system is launched, the developer will provide monthly bikeshare memberships for tenants.

B. 52 Hanover's TDM Coordination

52 Hanover, LLC is committed to reducing drive-alone resident, retail employee and visitor automobile trips, improving multi-modal safety, and easing traffic congestion and area parking demand near the site through its TDM efforts.

As the property manager, Port Property has experience with implementing TDM plans at 82 Hanover Street and The Linden (132 Marginal Way) - and manages other properties in the neighborhood as well. It views this plan as tied in with the company's overall Bayside TDM efforts. The business also has a wellness philosophy and encouragement program, which it sees as intrinsically beneficial to local TDM efforts.

The developer has designated Jennifer Munroe, Property Manager for 82 and 52 Hanover Street for Port Property Management, as the TDM Coordinator for the site. She is charged with coordinating the TDM plan implementation and monitoring and making any needed changes.

Highly successful TDM programs share three vital characteristics - they are:

1. Dynamic - piloting strategies, assessing impacts, and modifying tactics as needed;
2. Rigorously supported and monitored by local governing bodies, in this case, the City of Portland;
3. Managed by committed and enthusiastic staff who are responsible for overseeing, promoting and sustaining the program.

Port Property will provide the TDM Coordinator with remuneration to support the work of leading the site's ongoing TDM efforts. Acknowledging roles and responsibilities change over time in any position, the company and property manager will use the first few months of TDM implementation to enumerate the Coordinator's responsibilities in detail for any other staff to uphold the responsibility of the position.

Day-to-day operations and monitoring of the TDM plan will be conducted in-house by the TDM Coordinator. Port Property will retain the services of a TDM consultant to review initiatives, problem-solve and develop new strategies if and when necessary.

The 52 Hanover TDM Coordinator is responsible for:

- Ensuring strategic parking management and monitoring parking usage
- Coordinating tenant TDM policies and incentives
- Connecting tenants with nearby transportation resources
- Encouraging greater use of preferred modes – walking, bicycling, carpooling, taking bus or rail transit - through transportation kiosk and site-wide promotion
- Overseeing/conducting surveying of tenants
- Filing annual reports and updating the plan with the City
- Exploration of additional TDM strategies, as needed

TDM Coordinator

Jen Munroe, Property Manager
Port Property Management
82 Hanover Street, Suite 5
Portland, ME 04101
jennifer@portpropmgt.com
(207) 233-8418

C. Trip Generation & Parking Demand Projections & Targets

52 Hanover, LLC has hired Cushman Transportation Consulting, LLC (CTC) to assist with its transportation demand management process. CTC specializes in TDM efforts locally and connects with TDM research and programs across North America – including aspects of setting and managing TDM targets. This all informs the following trip reduction, parking reduction and multimodal goals.

Projected Trip Generation & Parking Demand

The development team has also hired Traffic Solutions to produce Institute for Transportation Engineers (ITE) trip generation and parking demand projections to assess the potential impact of 52 Hanover Street's redevelopment. This has included both local trip generation studies and the use of the most recent data in the 10th edition ITE *Trip Generation Manual* and the 5th edition ITE *Parking Generation Manual*, with distinctions for the multimodal context of the site.

As stated earlier, based on City land use code Section 14-332 (c), the minimum amount of required parking for the site will be determined by the developer's parking assessment and the recommendation of the city transportation engineer. In addition, as referenced in the code, "The planning board may establish a parking requirement that is less than the normally required number of spaces upon a finding of unique conditions that result in a lesser parking demand, such as housing for persons who cannot drive, housing that participates in a travel demand management program, [and] availability of transit…"

According to the traffic analysis, 52 Hanover can be expected to generate 54 total trips (including 26 residential trips) to and from the site in the weekday AM peak hour and 105 total trips (including 31 residential trips) during the weekday PM peak hour. Per the initial parking demand projection analysis, the average weekday peak hour demand for parking at the site is expected to be 121 total spaces (76 for residential use), and 136 total spaces (76 for residential use) during the Saturday peak period.

Trip Reduction Target

Given the site's multimodal accessibility and the high existing rate of alternate transportation use by those living in the area, the building's TDM efforts should enable a 10% reduction in resident drive alone vehicle trips by the end of 3 years. That is, 2.6 resident weekday morning peak trips and 3.1 resident weekday evening peak trips. The TDM team will revisit this target after the first year of full occupancy at 52 Hanover.

Parking Reduction Target

With the lower vehicle ownership rate of urban dwellers and people living in Bayside, the strong strategy of unsubsidized and unbundled parking for tenants, and the implementation of TDM incentives, it is anticipated that an achievable resident parking demand reduction is 10% by the end of 3 years; i.e., 7.6 residential spaces. The parking demand target will also be revisited after 52 Hanover is fully occupied for the first year.

TDM Targets

The TDM Plan sets the following targets:

- ***Trip & parking reduction target:*** a 10% reduction in resident vehicle trips and parking demand within 3 years after full occupancy - resulting from TDM program. That is, 2.6 resident weekday morning peak trips, 3.1 resident weekday evening peak trips, 7.6 residential-use spaces
- ***Multi-modal target:*** 65% of resident and retail employee trips will be on foot, by bicycle, via transit, telecommuting, or carpooling within 3 years after full occupancy
- Will reassess targets after the first full year of 52 Hanover occupancy

Multimodal Target

52 Hanover is setting an initial target of 65% of residents and retail employees making multimodal trips to and from the site, by 3 years after full occupancy. This includes pedestrian, bicycle, transit, telecommute, and carpool/vanpool trips or some combination of these modes. It is a complex target to set because of the current high multimodal rate already existing in the area.

The target is also different from the trip and parking reduction ones above, because it includes both residents and employees and also the diverse commuting habits of these populations at 52 Hanover. That is – with the range of potential tenants and tenant occupations (including retirees), as well as non-traditional retail work shifts - a number of these trips are likely to be outside of the morning and evening peak periods. For example, according to census data, when retired from day-to-day work, an individual's vehicle miles traveled decreases overall. 52 Hanover plans to closely monitor existing trends to attain a reasonable mode-shift goal over time.

It is most useful for 52 Hanover's TDM efforts to address the specific needs of transit users, carpoolers, bicyclists, walkers and telecommuters and set an overarching multimodal trip target for the site – versus targets for each mode. From other TDM experiments across North America, it is clear that individuals' use of various alternate modes shift over time as different residents come and go and/or their needs change. For example, a tenant who uses transit might move to another location or an employee who walks might switch primarily to bicycling. In another instance, a tenant who was able to drive may lose the ability to do so and switch to using transit or carpooling for errands.

D. Trip and Parking Reduction Strategies

In the table on the following page, 52 Hanover, LLC proposes a number of best-practice and sensible parking and trip reduction strategies for the site's TDM Plan. These are based on the development team's understanding of the transportation context, likely residents and the usefulness of various TDM efforts. For example, unsubsidized and unbundled parking will produce the strongest results for decreasing single-occupancy vehicle trips to and from the site.

In addition, the team acknowledges the various needs of different multimodal commuters. For instance, tenants who use transit, walk or bicycle are more able to do so if they have on-site, secure storage for larger commuting gear like strollers, bicycle trailers and shopping handcarts. Moreover, even if current drive-alone residents and retail commuters have to pay for parking, likely this will need to be combined with tangible financial incentives like transit pass subsidies. These are vital to encourage people to experiment with other ways of getting around.

Another critical component for the success of 52 Hanover's TDM Plan is a carefully thought-out marketing plan that engages tenants from when they first move in regarding preferred modes of transportation and provides easily accessible information and subsidies. As shared by Portland Oregon's SmartTrips Welcome program, a residential move is a unique and powerful opportunity for mode experimentation and change. This marketing also builds the site's TDM culture and the sense of multimodal travel as the social norm.

...When a person changes residence, everything changes: the way to the store, the way to work, even the steps to the fridge.

This time of change offers a unique opportunity to create new neural pathways or reinforce old ones that haven't been used for a while and make these stronger than habitual pathways.

Andrew Pelsma, SmartTrips Program Specialist, Portland, Oregon

...To us, this represents a significant number of people with an immediate gap in knowledge about their local travel options.

Linda Ginenthal, SmartTrips Program Manager

As 52 Hanover is developed and under construction, the team will design a promotion strategy that complements other Bayside area TDM work to encourage walking, bicycling, telework and teleservices, carpooling and the use of public transit.

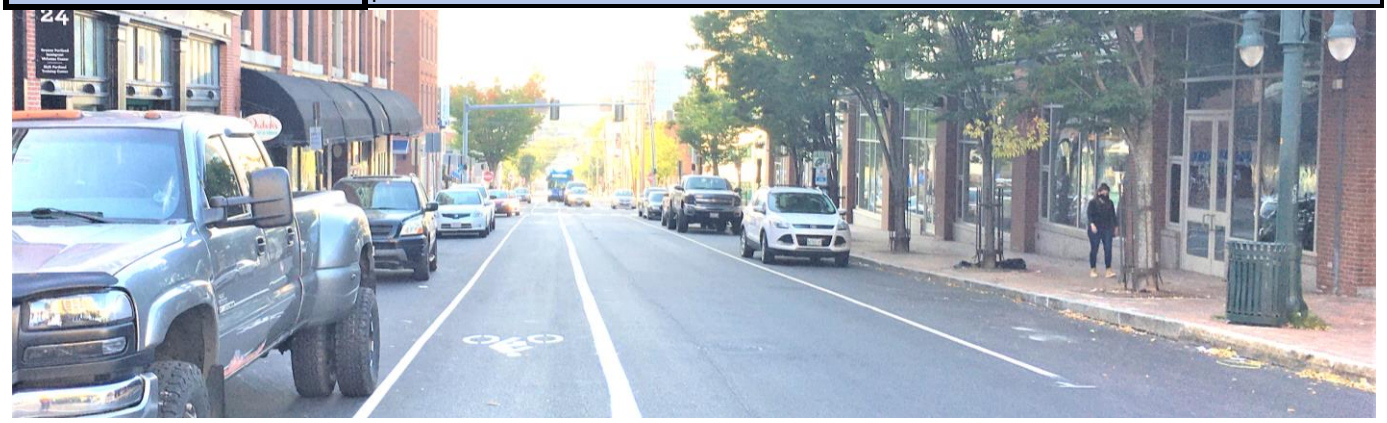
Finally, the region was recently reexamining the need for an area Transportation Management Association (TMA) to benefit sites like 52 Hanover. TMAs are generally public-private entities that assist sites with TDM implementation, outreach and monitoring; advocate for improved transit and act as brokers for services such as carshare and shuttles. 52 Hanover, LLC plans to support the development of a TMA, if found to be feasible, and have 52 Hanover Street participate as a member.

Infrastructure	
Shared-Use Parking	On-site parking will be shared and serve a dual use for overnight parking for residents and daytime parking for 52 and 82 Hanover retailers. Actively managed residential overnight parking works well with day-use visitor/employee parking locations such as these.
Transit & Other TDM Access	TDM webpage with associated physical postings in 52 Hanover resident mailroom and retail tenant employee bulletin boards. TDM webpage will include: link to live-time transit service information for routes near the site (available through Southern Maine Transit Tracker); multimodal map with nearby transit routes, bicycle routes and trails, and walk and bike distances/times; listing of bicycle facilities on site; any future carshare locations and membership information; information on GO MAINE ride-matching, rewards and Emergency Ride Home benefit for all alternate modes of transportation; all other TDM benefits available for residents; contact information for TDM Coordinator.
	Work with other DPW redevelopment sites, METRO and the City of Portland regarding proposed bus stop improvements at Forest & Park Avenue
Pedestrian, Bicycle and Carpool Access	*Sidewalks:* Reconstruction of any/all street sidewalk segments abutting development
	Multi-use path: latest iteration of path on Lancaster Court, ensuring a continued pedestrian and bicycle connection between the existing lengths of Lancaster Street
	ADA-accessible pedestrian amenities: barrier-free ramp improvements
	Crosswalks: Striping improvements, as required, for existing or proposed crosswalks
	Lighting: Street and building lighting improvements to improve sidewalk illumination
	On-street bicycle parking: 18 on-street bicycle parking spaces
	Possible bicycle corral or other parking: depending on demand, explore with City whether to install seasonal on-street bike corral in Lancaster Court for summer and shoulder seasons; Alternately, committed to meeting a higher demand for on-street bike parking if needed.
	Indoor, secure bicycle/stroller/handcart parking: for bicycles, electric bikes, cargo bikes or trailers, handcarts and strollers. Approximately 80 bicycle parking spaces per the City technical standards.
	Electric bicycle charging: 3-4 outlets for resident electric bikes in storage room; 5% of required bicycle parking spaces per standard in other jurisdictions
	Bicycle repair station: bike repair stand in storage room

Shared Mobility	*Carseat storage space:* To facilitate child carseat storage, for those commuting by carpool and otherwise sharing rides, there will be an open storage space for car seats in the indoor, secure bicycle parking room.
	Carshare possibilities: With the end of UhaulCarshare service in Portland in February 2020, site owner is exploring other carshare possibilities for 52 Hanover.
	Handcart-share: up to five collapsible shopping/utility carts available for hourly checkout in bicycle/stroller/handcart room. The number depends on space availability and sign-up will be online or via pen & paper system. Carts will have property management branding.
	Cargo bikeshare: experiment with one electric-assist cargo bicycle, available for checkout on hourly basis (e.g., pen and paper sign up system, online, etc.)
Electric Vehicle Charging Station	Provide electric car charging station(s) - for 52 Hanover; one per 50 parking spaces per standard in other jurisdictions
On-Site Amenities	*Co-working/community space:* work area and meeting space for tenants' use to encourage community-building and telecommuting
	Broadband access: hardwired infrastructure for broadband and Wi-Fi
	Gym: on-site gym to reduce vehicle trips and improve resident physical fitness for active transportation
	Grocery & Other Amenities: Seeking retail tenant(s) that offer amenities that encourage walking trips for simpler needs (e.g., grocery items such as are available at a Rosemont Market, small housewares and hardware items, etc.)
Delivery Supportive Amenities	Facilitate delivery services by providing an area for receipt of deliveries with temporary storage for package and other deliveries
General Contribution to Area Transportation Improvements	Per Chapter 14 of the City of Portland Code, the property is contributing approximately $250,000 in transportation impact fees, based on the number of residential units and square footage of the retail uses. This will improve traffic operations and transportation in and around the Peninsula.
Incentives	
Parking: Leases/Pricing/Cash Out/Incentives	*Unbundled parking:* Residential and retail tenants will be charged for parking via a separate lease from each unit rental.

Parking: Leases/Pricing/Cash Out/Incentives (continued)	*Encourage all retail tenants to employ at least one of the following strategies:* • Charge employees full monthly amount for parking space if driving alone • Offer carpooling or vanpooling employees at least a 30% discounted parking rate and possibly Preferential Parking spaces (those sharing rides would participate in the Preferential Parking program through GO MAINE: carpoolers receive special permits and are prioritized for parking spaces near entrances) • Offer Parking Cash Out: if retail tenant wants to provide a "free" parking benefit to employees, tenant would be required to offer each employee an option of a $XXX monthly parking cash out. That is, instead of the organization paying for a $1XX parking space for that employee (which would be a $XX/month savings to retail tenant). This could be executed in one of three ways: 1. Straight Cash Benefit: $XX in cash paid to employee, with $XX remaining to cover payroll tax for employer and employee, because these funds are regarded as income. This money can be used by the employee for any purpose; however, it can also be considered funds to support carpooling (e.g., vehicle maintenance or gas money), walking (e.g., gear or shoe purchase) or biking (e.g., bike shop maintenance) 2. $XXX Tax-Free Transit or Vanpool Benefit: e.g., a monthly pass for the ZOOM bus from Saco is $120 per month – so the parking cash out would cover most of that; neither the employer nor the employee are required to pay tax on those funds under the Federal Transit/Vanpool Benefit 3. Mixed Transit/Vanpool Benefit & Cash: For those who pay less for their transit passes (e.g. METRO is $45 per month), the employee can take part of the cash out funds tax-free for the pass, and then the remaining funds as cash (deducting what is required to cover payroll tax) • Offer short-term day parking provision for retail employees who use alternate transportation to reach the site: that is, provide a limited number of daily parking passes for occasional use by retail employees who are primarily multi-modal commuters; a reasonable maximum could be 20 passes/year or 2 passes/month.
Transit Subsidies	*Transit passes:* will provide transit subsidy for residents to use transit.
	Transit pass reduced payments, fare capping and processing: Explore new DiriGo TouchPass system to simplify management of transit subsidy for individual resident trips (launching in October 2020 from METRO, City of South Portland Bus Service and Biddeford Saco Old Orchard Beach Transit).
Pedestrian/Bicycling Subsidies	*Bicycle safety courses*: Reimburse residents for bicycle safety courses
	Bicycle Benefits: Purchase Bicycle Benefits memberships ($5) for residents who bicycle
Shared Mobility Subsidies	*Carshare:* Discount for resident vehicle use for first year of residency, when/if local carshare is launched
	Bikeshare: Monthly bikeshare memberships for residents when/if bikeshare starts in Portland
Targeted Promotions	*1st year Prize Drawings starting at 85%+ occupancy:* monthly prize drawing for multi-modal residents, with benefits such as movie tickets, gift cards, etc.
	Discounts and coupons to nearby businesses - ongoing: work with local businesses to offer residents discounts and coupons to downtown establishments within walking distance
TDM Coordinator	TDM Coordinator has been designated for 52 Hanover; required for plan implementation, monitoring and reporting to City. Developer will provide remuneration to support the work of this position.

Information	
Education for Travel Choice	*Webpage:* Maintain active web page on property management website for residents. Page to include same information as orientation packet below. Retailers will post and share link to this page.
	TDM orientation packets, as part of site Welcome packets: new residents and retail employees will be provided with orientation packets regarding the site's TDM program and access to site by various travel modes. Includes: (1) Map of the area, showing the destination, major streets, nearby landmarks and time to walk/bike to them, the closest bus stops and walking times, recommended cycling and walking routes, carshare locations, etc. (2) Information about transit service frequency, fares, first and last runs, and schedules if possible; plus phone numbers and web addresses for transit service providers and taxi companies. (3) How to reach the site from major transportation terminals (bus and train stations, airport, ferry terminal, etc.) (4) Access arrangements for people with disabilities; (5) Availability of bicycle facilities, including secure bike parking and bikeshare, if available; (6) Bicycle Benefits membership and bicycle safety courses; (7) Encouraging residents to become members of GO MAINE and access rewards system, carpool matching and Emergency Ride Home Benefit; (8) carshare information and automobile parking availability and price; (9) Information regarding building TDM program, webpage, and contacting the TDM Coordinator.
	Commute coaching: One-on-one transportation consultations will be available for residents upon lease of dwelling units, to explore individual transportation options. Thereafter, offered at least once annually.
	Ongoing TDM program education: 1 or more times per year, TDM Coordinator will email all residents (new and existing, including subletters) and retail tenants the same information as is in the TDM orientation packets.
	TDM surveying: Required resident and employee transportation surveys and reporting to City will also serve as education tool
Promotion of Alternate Modes	*Co-promotion with City and downtown agencies:* Work with Portland Downtown and City of Portland's Drive Less, Do More marketing campaign to promote alternatives with residents
	Social media and social proof: As part of general marketing of the property via social media, will help build social proof and social norms of the site's TDM culture. This is best done with posts of site users engaging in the desired TDM actions (e.g., posting a photo of taking the bus to work or the morning carpool, submitting a photo of walking to one of the retailers, etc.) - vs. just likes or retweets of the idea of using preferred alternate modes.

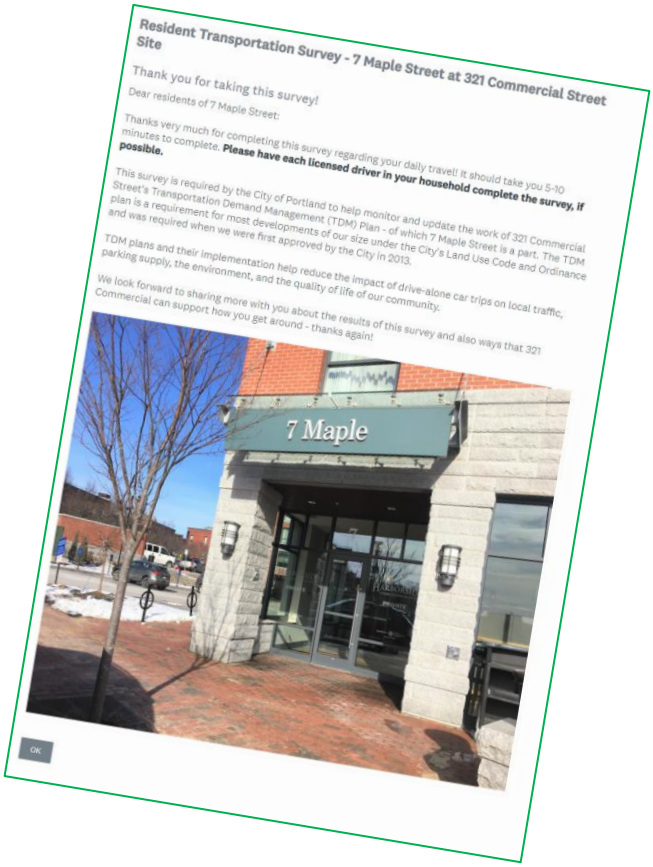


E. Plan for Monitoring, Data Collection and Reporting

Recognizing that the implementation of a TDM Plan is a dynamic process, the 52 Hanover Street TDM Coordinator will work with the City to monitor the effectiveness of the site's TDM Plan components - and to assess whether the site is achieving the trip and parking reduction and multimodal targets listed above. 52 Hanover will work with tenants to evaluate on-site parking use and incentives for preferred modes and make improvements. Another important piece will be to determine the flexibility of tenants, employees and site visitors to utilize various travel modes.

Tenant Surveys

The TDM Coordinator will conduct annual tenant surveys that provide quantitative data (e.g., trip, parking and mode split) and qualitative data (e.g., perception of alternate transportation, area parking and the site's TDM programming). The site will carry out these surveys once annually for the first three years of full occupancy and then every two years thereafter, with at least 50% tenant participation.


Resident Transportation Survey - 7 Maple Street at 321 Commercial Street Site

Thank you for taking this survey!

Dear residents of 7 Maple Street:

Thanks very much for completing this survey regarding your daily travel! It should take you 5-10 minutes to complete. **Please have each licensed driver in your household complete the survey, if possible.**

This survey is required by the City of Portland to help monitor and update the work of 321 Commercial Street's Transportation Demand Management (TDM) Plan - of which 7 Maple Street is a part. The TDM plan is a requirement for most developments of our size under the City's Land Use Code and Ordinance and was required when we were first approved by the City in 2013.

TDM plans and their implementation help reduce the impact of drive-alone car trips on local traffic, parking supply, the environment, and the quality of life of our community.

We look forward to sharing more with you about the results of this survey and also ways that 321 Commercial can support how you get around - thanks again!

OK

The survey will be developed in consultation with the city's TDM manager and conform to overall city TDM modeling and planning. Survey questions will include:

- Number of people in household
- Resident mode of travel to and from work and/or for other trips away from the site – plus frequency of use of those modes
- Retail employee mode of travel to work
- If parking personal vehicle(s), where parked
- Whether the resident or employee drives during morning or afternoon peak periods
- Use of/participation in:
    - On-site bicycle parking, stroller, hand cart storage
    - Any use of off-site future carshare and/or bikeshare
    - Any use of site TDM incentives, benefits, or programming
    - GO MAINE membership and program participation
- TDM marketing effectiveness
- Preferences, barriers or concerns with modes of travel and likelihood of changing travel behavior given specific incentives or disincentives
- Rating knowledge of walking, bicycling and using the bus in the community
- Space to add suggestions and comments

Note: the use of these survey tools will also assist 52 Hanover with its TDM education efforts. That is, the questions themselves help people think differently about their transportation behavior. The surveys will also provide a reminder of the TDM online resource center and the TDM Coordinator for options.

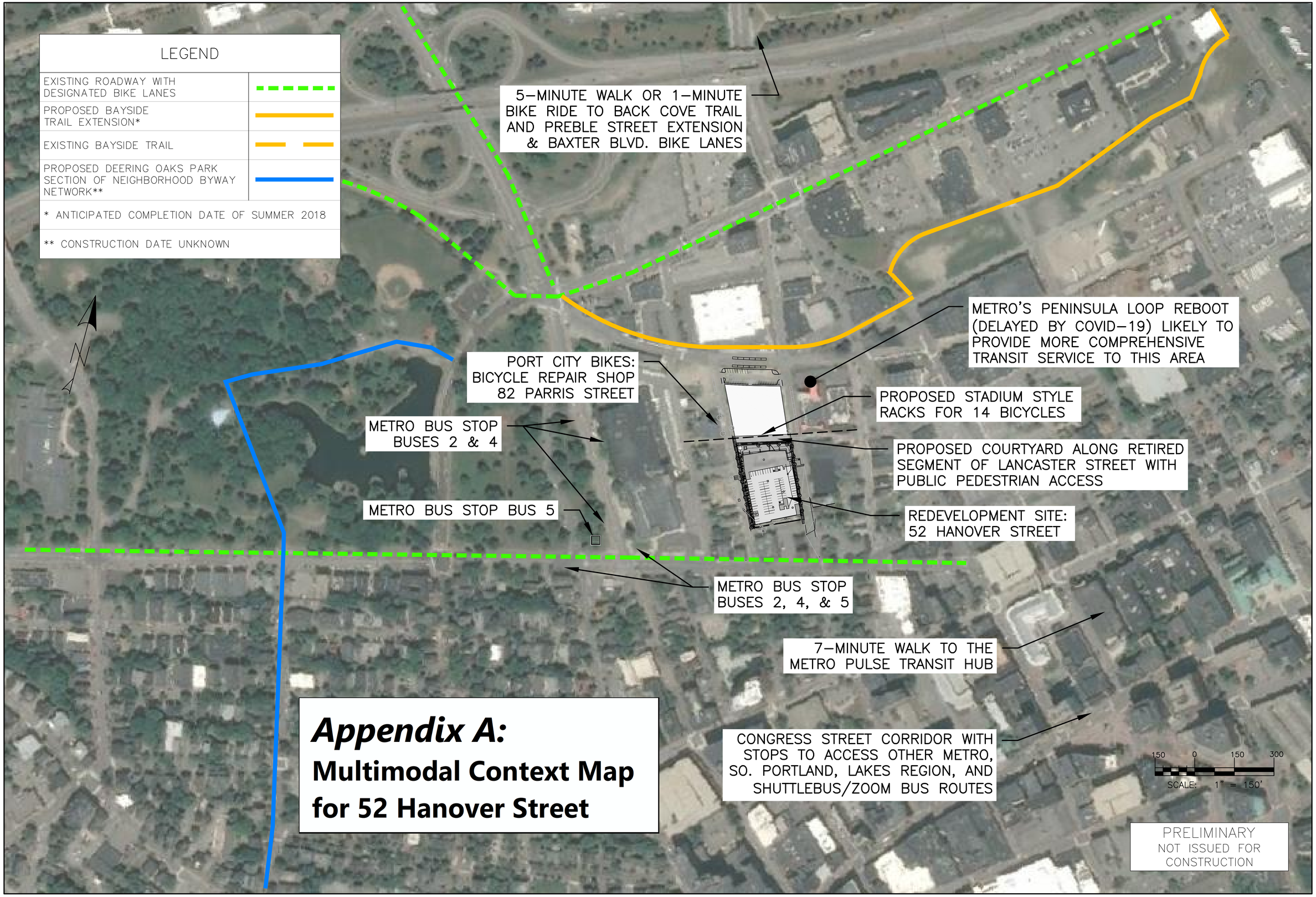
Annual Report

The TDM Coordinator will then produce an annual TDM Report to meet the City's monitoring requirements. The report will include:

a. the above survey data and percent of units occupied;
b. how the data directly relates to the plan's reduction targets;
c. details of that year's TDM operations – including management, strategies, marketing, number of contact points with residents, and any new infrastructure development;
d. lessons learned and any changes in the TDM plan during the year;
e. plans for the following year.

F. Appendices

I. *Appendix A:* Multi-modal Context Map for 52 Hanover Street



Appendix A:
Multimodal Context Map for 52 Hanover Street

ISSUED FOR	BY	DATE
PRE APP	WHS	7/16/20

DRAWING NAME: SITE PLAN – GROUND FLOOR

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THE PLANS DERIVED FROM THIS SOURCE MAY NOT BE VERIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY USE OF THE PLANS WITHOUT WRITTEN PERMISSION OR, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND CONSTITUTE A WAIVER OF ALL CLAIMS AGAINST ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
PO BOX 3271, PORTLAND, MAINE 04104
(207) 775-2655

FILE:	1093.2_CIVIL
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

DRAWING NO.
C-10

TRAFFIC MOVEMENT PERMIT APPLICATION

FOR PROPOSED

"52 Hanover Street"

Mixed-Use Project

PREPARED FOR: Tom Watson & Co. Inc.

PREPARED BY: William J. Bray, PE

October 2020

Provisionally Adopted 1/10/00

'partment of Transportation
.'raffic Engineering Division
16 State House Station
Augusta, Maine 04333
Telephone: 207-287-3775

FOR MDOT USE 1/2000
ID #

Total Fees:
Date Received:

****

PERMIT APPLICATION – TRAFFIC
TRAFFIC MOVEMENT PERMIT, 23 M.R.S.A. § 704 – A

Please type or print:

This application is for: Traffic 100-200 PCE's __X__
Traffic 200 + PC-E's _____

Name of Applicant: **Tom Watson & Co., LLC**

Address: **82 Hanover Street, Portland, Maine 04101** Telephone: **(207) 761-0832**

Name of local contact or agent: **William J. Bray, P.E., Traffic Solutions**

Address: **17 Mountview Drive, Gorham, Maine 04038**

Telephone: **(207) 400-6890**

'ame and type of development: **52 Hanover Redevelopment – Mixed-Use Project**

Location of development including road, street, or nearest route number: **52 Hanover Street**

City: **Portland,** County: **Cumberland,** Tax Map **33B** Lot **008**

Do you want a consolidated review with DEP pursuant to 23 M.R.S.A. § 704-A (7)? Yes ____ No __X__

Was this development started prior to obtaining a traffic permit? **No**

Is the project located in an area designated as a growth area (as defined in M.R.S.A. title 30 – A, chapter 187)?
Yes, __X__ No _____

Is this project located within a compact area of an urban compact municipality? Yes: __X__ No _____

Is this development or any portion of the site currently subject to state or municipal enforcement action? **No**

Existing DEP or MDOT permit number (if applicable): _____

Name(s) of DOT staff person(s) contacted concerning this application:

Name(s) of DOT staff person(s) present at the scoping meeting for 200+ applications: _____

NOTICE OF INTENT TO FILE

rlease take notice that:

Tom Watson & Co., LLC

Is intending to file a Maine Department of Transportation Traffic Movement Permit application with the City of Portland under their delegated review authority pursuant to the provisions of 23 M.R.S.A. § 704–A on or about

October 2, 2020

The application is for:

An eight-story building with 171 residential apartment units and 7,600sf of commercial space with on-site covered parking for 194 spaces. The proposed site is located at 52 Hanover Street on the former Department of Public Work's Vehicle Maintenance Facility. The proposed project will generate a total of 101 trips during the weekday PM site peak hour, 103 trips during a Saturday peak hour and 144 trips during the Sunday peak hour.

At the following location: **52 Hanover Street, Portland, Maine**

A request for a public hearing must be received by the City, in writing, no later than 20 days after the application is found by the City to be complete and is accepted for processing. Public comment on the application will be accepted throughout the processing of the application.

ıe application will be filed for public inspection at the City of Portland's Planning and Urban Development office, during normal working hours. A copy of the application may also be seen at the municipal offices in:

Written public comments may be sent to the Department of Transportation, Traffic Engineering Division, 16 State House Station, Augusta, Maine 04333.

1/2000

CERTIFICATION

The traffic engineer responsible for preparing this application and/or attaching pertinent site and traffic information hereto, by signing below, certifies that the application for traffic approval is complete and accurate to the best of his/her knowledge.

Signature: _____ Re/Cert/Lic No.: 4907

Name (print): William Bray

Date: 9-30-2020

If the signature below is not the applicant's signature, attach letter of agent authorization signed by applicant.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

_____ 10-2-20

Signature of applicant Date

September 30, 2020

City of Portland
Tom Errico, PE Traffic consultant

Mr. Errico,

Please use this letter as authorization to allow John Laliberte to sign on behalf of Thomas Watson, CEO/Owner of Port Property Management, for all documents, certificates and permits. Thank you in advance.

Sincerely,

Thomas Watson
CEO/Owner
Port Property Management
82 Hanover Street, Suite 5
Portland, ME 04101

"52 Hanover Street"

Property Abutters

55 Portland Prebble Street LLC
38 Preble Street
Portland, ME 04101

63 Hanover LLC
65 Hanover Street
Portland, ME 04101

82 Hanover LLC
82 Hanover St Suite 5
Portland, ME 04101

Arsenault Christine M
56 Parris Street
Portland, ME 04101

Avesta Housing Development Corporation
307 Cumberland Ave
Portland, ME 04101

Bartlett Stephen W & Cynthis I JTS
16 St Lawrence Street #2
Portland, ME 04101

C58Alder LLC
3375 East Maule Ave
Las Vegas, NV 89120

Forq LLC,
118 State Street, #408
Portland, ME 04101

Hal LLC
65 Hanover Street
Portland, ME 04101

Islamic Society of Portland Maine
PO Box 10294
Portland, ME 04104

Minert Nancy A
55 Tremont Street
South Portland, ME 04106

New Systems Realty LLC
PO Box 2
Portland, ME 04112

Parris Terraces Apartments
60 Parris Street
Portland, ME 04101

United States of America-Administrator of General Serv.
Portland, ME 04101

Williamson Peter C & Lynn M G Williamson JTS
11 Inverness Road
Falmouth, ME 04105

SECTION 1

A. SITE PLAN

The Applicant is proposing to construct an eight-story mixed-use building on the former Department of Public Works Vehicle Maintenance Facility. The project site, a 1.37-acre parcel, is bordered by Hanover Street, Parris Street, and the discontinued portion of Lancaster Street. The City's existing maintenance building, a 18,380 square foot metal framed building (presently vacant), will be razed with construction of the proposed eight-story building.

The present development plan proposes four 1,900sf commercial retail units on the first floor of the building, 171 residential apartment units on floors three through eight and a total of 194 covered parking spaces. The ground floor of the proposed building provides; in addition to the proposed commercial space, a total of 91 covered parking spaces and an additional 103 covered parking spaces are provided on the first floor of the building. Access to the ground floor parking is provided through a driveway entrance on Hanover Street and the first-floor parking spaces are accessed through a driveway entrance on Parris Street.

A Parking Assessment Report prepared in support of the proposed redevelopment project dated September 24, 2020, concludes the proposed redevelopment project creates an average weekday peak parking demand of 90 spaces and a peak parking demand of 108 spaces on a typical Saturday. The balance of parking spaces in the proposed building, 94 weekday and 86 Saturday, will be used to satisfy a portion of the parking demand requirements of the adjoining 82 Hanover Street mixed-use building. A copy of that report is attached as an appendix to this application.

B. EXISTING AND PROPOSED SITE USES

The Applicant is proposing to construct an eight-story mixed-use building on the former Department of Public Works Vehicle Maintenance Facility. The project site, a 1.37-acre parcel, is bordered by Hanover Street, Parris Street, and the discontinued portion of Lancaster Street. The City's existing maintenance building, a 18,380 square foot metal framed building (presently vacant), will be razed with construction of the proposed eight-story building.

The present development plan proposes four 1,900sf commercial retail units on the first floor of the building, 171 residential apartment units on floors three through eight and a total of 194 covered parking spaces. The ground floor of the proposed building provides, in addition to the proposed commercial space, a total of 91 covered parking spaces and an additional 103 covered parking spaces are provided on the first floor of the building. Access to the ground floor parking is provided through a driveway entrance on Hanover Street and the first-floor parking spaces are accessed through a driveway entrance on Parris Street.

A Parking Assessment Report prepared in support of the proposed redevelopment project dated September 24, 2020, concludes the proposed redevelopment project creates an average weekday peak parking demand of 90 spaces and a peak parking demand of 108 spaces on a typical Saturday. The balance of parking spaces in the proposed building, 94 weekday and 86 Saturday, will be used to satisfy a portion of the parking demand requirements of the adjoining 82 Hanover Street mixed-use building. A copy of that report is attached as an appendix to this application.

PARKING ASSESSMENT REPORT

"52 HANOVER STREET"

Traffic Solutions
William J. Bray, P.E.
17 Mountview Drive
Gorham, ME 04038
(207) 400-6890
trafficsolutions@maine.rr.com

September 24, 2020

Parking Assessment

Proposed

"52 Hanover Street"

INTRODUCTION

Tom Watson & Co., Inc. are proposing to construct an 8-story mixed-use building on the former City's Public Works Vehicle Maintenance site located at 52 Hanover Street. The project site is bordered by Hanover Street, Parris Street, and the discontinued portion of Lancaster Street.

ıe present development plan proposes four 1,900sf commercial retail units on the ground floor of the building and 171 residential apartments on floors three through eight. The residential apartment unit mix includes 154 market rate and 17 affordable workforce units; 23 of the apartment units are studios, 112 of the apartment units are one-bedroom and the remaining units (36) are two-bedroom units.

The ground floor of the proposed building provides; in addition to the proposed commercial space, a total of 91 covered parking spaces including: 66 full-size spaces, 22 compact spaces and 3 handicapped spaces. Access to the ground floor is provided through a driveway entrance from Hanover Street. The first floor of the proposed building, which is accessed from Parris Street, provides an additional 103 parking spaces with 75 full size spaces, 25 compact car spaces and 3 handicap spaces. In total, the proposed site design provides a total of 194 on-site parking spaces.

The proposed retail units are anticipated to include one or more of the following projected tenants:

- Neighborhood Coffee Shop
- Neighborhood Grocery
- Bar/Eatery
- Bar/Eatery

The City Zoning Ordinance in Section 14-332.2. (c) states: "*Site plans over 50,000 square feet and projects in the B-6, B-7, and USM Overlay Zones: Where construction is proposed of new structures having a total floor area in excess of fifty thousand (50,000) square feet, the planning board shall establish the parking requirement for such structures. The parking requirement shall be determined based upon a parking analysis submitted by the applicant and upon the recommendation of the city transportation engineer.*

This document provides a determination of the "*average*" peak parking demand for the proposed "52 Hanover Street" building appropriately based upon national parking trends and local parking data. The analytical termination of "*average*" peak parking demand for a mixed-use development must also account for the time-of-day distribution of the actual parking demand. For example, the peak parking demand requirements of one proposed use could likely occur at 7:00 p.m.; whereas the peak parking demand of a second building use may occur at 1:00 p.m. The net result is that the parking demand of multiple land-uses may be able to use the same parking space at different times of the day; thereby, reducing the actual peak parking demand of the site. Further, the analytical process followed in forecasting the peak parking demand of the proposed site also accounts for internally captured trips; oftentimes referred to as "*shared-use*" trips. It is reasonable to expect a resident of the proposed building purchasing coffee or perhaps groceries in either the proposed neighborhood coffee and/or grocery store retail units located on the ground floor of the building. As a result, unless these internal trips are accounted for the projection of trips and ultimately parking demand requirements of the proposed project are overstated.

The parking demand requirements of the proposed 52 Hanover Street building are fully met with construction of the proposed 194 on-site parking spaces. In fact, the parking assessment report documents a balance of spaces are provided, which will be used to off-set the parking requirements of the adjoining 82 Hanover Street mixed-use building.

PARKING DEMAND

National parking demand data presented in the 5th Edition of the Institute of Transportation Engineers (ITE) "**PARKING GENERATION**" publication is typically the instrument used in estimating the actual parking demand of a development site. The 5th edition, which was published in January 2019, represents the most current copy of the noted ITE document. The ITE manual provides "*average*" peak parking demand rates for ore than 100 land-use categories including: residential, lodging, recreational, institutional, medical, retail, ıfice, services, etc. Occasionally proposed development uses are more locally specific and/or are not presently accounted for in the national parking publication. In those instances, the average peak parking demand is typically determined based upon local studies conducted at similar development uses. Parking rates are provided for both a weekday and Saturday condition.

The "*average*" peak parking demand requirements of the proposed 52 Hanover Street mixed-use building is estimated based upon the following projected site uses:

Market Rate Units
- (21) studio units
- (101) one-bedroom units
- (32) two-bedroom units

Affordable Workforce Units
- (2) studio units
- (11) one-bedroom units
- (4) two-bedroom units

Commercial Retail Units
- Neighborhood Grocery Store – 1,900sf
- Neighborhood Coffee Shop – 1,900sf
- Bar/Eatery – 1,900sf

- Bar/Eatery – 1,900sf

:e peak parking demand requirements of the proposed market rate apartment units is based upon Land-Use ,,221- Multi-Family Housing (Mid-Rise) presented in the noted ITE parking generation publication. This land-use category is generally used for buildings between three and 10 floors in height. A peak parking rate of 0.48 spaces per bedroom was applied in calculating the peaking demand requirements of the proposed market rate units. The ITE document only provides valid parking rates for a weekday condition; therefore, a similar parking demand rate was applied for Saturday.

Similarly, the peak parking demand requirements of the proposed affordable workforce apartment units is based upon Land-Use #223 - Affordable Housing – Income Limits in the national parking document. The parking rate used in determining the peak parking demand of the 17 workforce apartment units for a weekday is 0.30 spaces per bedroom and a parking demand rate of 0.33 spaces was used for Saturday.

Parking demand requirements for the proposed neighborhood grocery store is based upon a trip generation study of a neighborhood grocery store located at the intersection of Brackett and Pine Streets. The study results, as presented below in Table A, shows less than 8% of the total combined peak hour trips generated by the Pine Street/Brackett Street grocery store are, in fact, automobile trips. Accordingly, this report assumes off-street parking is only provided for a total of five employees.

Table A
Trip Generation Summary
Neighborhood Grocery
(Brackett Street @ Pine Street)

Survey Time	Entering Trips		Exiting Trips		Total Trips	
	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips
7:30 to 7:45 AM	0	0	0	0	0	0
7:45 to 8:00 AM	0	0	0	0	0	0
8:00 to 8:15 AM	15	0	11	0	26	0
8:15 to 8:30 AM	4	1	8	1	12	2
8:30 to 8:45 AM	6	2	1	3	7	5
8:45 to 9:00 AM	11	2	9	3	20	5
AM Peak Hour Total	**36**	**5**	**29**	**7**	**65**	**12**
3:30 to 3:45 PM	5	0	7	0	12	0
3:45 to 4:00 PM	7	1	7	2	14	3
4:00 to 4:15 PM	5	0	9	0	14	0
4:15 to 4:30 PM	6	1	7	0	13	1
4:30 to 4:45 PM	12	1	10	1	22	2
4:45 to 5:00 PM	21	0	18	0	39	0
5:00 to 5:15 PM	15	1	18	1	33	2
5:15 to 5:30 PM	15	0	14	0	29	0
PM Peak Hour Total	**63**	**2**	**60**	**2**	**123**	**4**

A similar process was followed in projecting the parking requirements of the proposed neighborhood coffee shop. A traffic study was conducted at a neighborhood coffee shop located on Munjoy Hill at Congress and Atlantic Streets. Again, the results of the field survey as presented below in Table B clearly demonstrates the majority of the customers (approximately 92%) of the total recorded trips are pedestrian trips generated within the local neighborhood. It is expected that any customer arriving via automobile to the proposed 52 Hanover

site will park on-street and, as a result, off-street parking is not required. To conservatively project the parking demand of the proposed project a total of five parking spaces are reserved within the proposed building site for ıployees of the neighborhood coffee shop.

Table B
Trip Generation Summary
Neighborhood Coffee Shop
(Congress Street @ Atlantic Street)

Survey Time	Entering Trips		Exiting Trips		Total Trips	
	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips
8:00 to 8:15 AM	7	1	7	1	14	2
8:15 to 8:30 AM	5	2	3	2	8	4
8:30 to 8:45 AM	9	2	7	2	16	4
8:45 to 9:00 AM	12	3	8	2	20	5
9:00 to 9:15 AM	8	1	10	2	18	3
9:15 to 9:30 AM	4	1	6	1	10	2
Total Trips	**45**	**10**	**41**	**10**	**86**	**20**

Parking demand requirements of the proposed two bar/eatery commercial units are based upon parking rates presented in the ITE Parking Generation publication under Land-Use #932 – High Turnover (Sit-Down) Restaurant with Lounge/Bar. A weekday parking rate of 9.31 spaces per 1,000 GFA and a rate of 13.98 spaces per 1000 GFA for Saturday were used to calculate the peak parking demand requirements of both proposed bar/eatery tenant spaces.

Tables 1a and 1b, as follows, provides the "*average*" peak parking demand requirements for both a typical eekday and Saturday condition:

Table 1a
"Peak" Parking Demand Summary
For
"52 Hanover Street"
(Weekday Condition)

Proposed Use	Unit Size	Land-Use Code	Peak Parking Demand Rate	Parking Space Requirements
Residential Apartment (Market Rate)	186 bedrooms	LUC 221	0.48 spaces/bedroom	89 spaces
Affordable Workforce Apartment	21 bedrooms	LUC 223	0.30 spaces/bedroom	6 spaces
Neighborhood Coffee Shop	1,900 sf	Estimated	n/a	5 spaces (1)
Neighborhood Grocery	1,900 sf	Estimated	n/a	5 spaces (1)
Bar/Eatery	1,900 sf	LUC 932	9.31 spaces/1,000 GFA	18 spaces
Bar Eatery	1,900 sf	LUC 932	9.31 spaces/1,000 GFA	18 spaces
			TOTAL =	141 spaces

NOTE: Parking demand based upon estimated number of employees

Table 1b
"Peak" Parking Demand Summary
For
"52 Hanover Street"
(Saturday Conditions)

Proposed Use	Unit Size	Land-Use Code	Peak Parking Demand Rate	Parking Space Requirements
Residential Apartment (Market Rate)	186 bedrooms	LUC 221	0.48 spaces/bedroom [2]	89 spaces
Affordable Workforce Apartment	21 bedrooms	LUC 223	0.33 spaces/bedroom	7 spaces
Neighborhood Coffee Shop	1,900 sf	Estimated	n/a	5 spaces [1]
Neighborhood Grocery	1,900 sf	Estimated	n/a	5 spaces [1]
Bar/Eatery	1,900 sf	LUC 932	13.98 spaces/1,000 GFA	27 spaces
Bar Eatery	1,900 sf	LUC 932	13.98 spaces/1,000 GFA	27 spaces
			TOTAL =	160 spaces

NOTES:
[1] Parking demand based upon estimated number of employees.
[2] Parking demand rate for Saturday is the same as weekday rate. ITE publication has no valid study data for Saturday condition.

ıe "*average*" unadjusted peak parking demand of the proposed 52 Hanover Street building is estimated at **141** spaces for a typical weekday condition and a slightly greater total of **160** spaces for a Saturday condition.

Parking Demand Adjustments: Due to the diversity of proposed uses within the "52 Hanover Street" building, an adjustment is applied to refine the actual parking demand of the proposed building. The adjustment accounts for multi-purpose trips that occur between one or more tenant spaces within the building; often referred to as "*shared or internally captured*" trips. These trips must be accounted for or the projection of peak parking demand overstates the actual peak parking demand of a specific development site. The National Cooperative Highway Research Program's (NCHRP) 684 Internal Trip Capture Estimation Tool was utilized in calculating the number of shared or captured trips generated by the proposed site. Separate analyses were conducted for both the weekday morning and peak hour time periods and the trip rates calculated for each time period (10% AM Peak Hour and 19% PM Peak Hour) were then averaged to provide a conservative estimate of 14.5% percent. The NCHRP estimation tool is limited in calculating internal captured trips for only a weekday condition. This report has assumed the percentage of internally captured trips generated by the site on Saturday is equal to the weekday average rate of 14.5%. Copies of the NCHRP worksheets for both the weekday AM and PM peak hours are attached for reference.

Tables 2a and 2b below summarize the adjusted "*average*" peak parking demand for the proposed site for both a typical weekday and Saturday condition:

Table 2a
Adjusted Parking Demand Summary
For
"52 Hanover Street"
(Weekday Condition)

Proposed Use	Peak Parking Demand (Spaces)	Shared Trip Adjustment [1]	Adjusted Parking Demand
Residential Apartment (Market Rate)	89	-13	76
Affordable Workforce Apartment	6	-1	5
Neighborhood Coffee Shop	5	0	5
Neighborhood Grocery	5	0	5
Bar/Eatery	18	-3	15
Bar/Eatery	18	-3	15
TOTAL	141	-20	121

NOTE:
[1] Shared trip adjustment percentage calculated using (NCHRP) 684 program. Percent value an average of AM & PM peak shared trip percentages.

Table 2b
Adjusted Parking Demand Summary
For
"52 Hanover Street"
(Saturday Condition)

Proposed Use	Peak Parking Demand (Spaces)	Shared Trip Adjustment [1]	Adjusted Parking Demand
Residential Apartment (Market Rate)	89 spaces	-13	76
Affordable Workforce Apartment	7 spaces	-1	6
Neighborhood Coffee Shop	5 spaces	-1	4
Neighborhood Grocery	5 spaces	-1	4
Bar/Eatery	27 spaces	-4	23
Bar/Eatery	27 spaces	-4	23
TOTAL	160 spaces	-24	136

NOTE:
[1] Shared trip adjustment percentage calculated using (NCHRP) 684 program. Percent value is an average of weekday AM & PM peak shared trip percentages.

Hourly Parking Demand: The noted ITE Parking Generation publication provides further guidance in timating the actual parking demand of a mixed-use or multi-use project. They state the following: *"the hourly ,ariation in parking demand for the individual land uses can result in conditions where the parking demand for one land use is high while the demand for a different land use is low. In this situation, parking demand for both land uses may be able to use the same parking space at different times of the day. The end result can be a reduction in overall peak parking demand."*

The ITE Parking Generation manual provides time-of-day percent peak parking demand values for each land-use category for completing this determination. The actual percent values applied in completing these calculations are presented in Table 3a and 3b as follows:

Table 3a
Hourly Peak Parking Demand (percent value) Summary
For
"52 Hanover Street"
(Weekday Condition)

Time of Day	Residential Apartment (Market Rate)	Affordable Workforce Apartment (1)	Neighborhood Grocery (2)	Neighborhood Coffee Shop (2)	Bar/Eatery (3)	Bar/Eatery (3)
7:00 AM	71%	71%	100%	100%	0	0
8:00 AM	61%	61%	100%	100%	0	0
9:00 AM	55%	55%	100%	100%	5%	5%
10:00 AM	54%	54%	100%	100%	7%	7%
11:00 AM	53%	53%	100%	100%	16%	16%
12:00 PM	50%	50%	100%	100%	49%	49%
1:00 PM	49%	49%	100%	100%	39%	39%
2:00 PM	49%	49%	100%	100%	27%	27%
3:00 PM	50%	50%	50%	0	19%	19%
4:00 PM	58%	58%	50%	0	22%	22%
5:00 PM	64%	64%	50%	0	60%	60%
6:00 PM	67%	67%	50%	0	94%	94%
7:00 PM	70%	70%	50%	0	100%	100%
8:00 PM	76%	76%	50%	0	81%	81%

NOTES:
(1) Percent values for affordable workforce apartments applies same percent values presented for market rate apartments. ITE data not available for affordable units.
(2) Percent values estimated.
(3) Bar/eatery rates based on ITE 4th edition; 5th edition does not include percent values.

Table 3b
Hourly Peak Parking Demand (percent values) Summary
For
"52 Hanover Street"
(Saturday Condition)

Time of Day	Residential Apartment (Market Rate)	Affordable Workforce Apartment (1)	Neighborhood Grocery (2)	Neighborhood Coffee Shop (2)	Bar/Eatery (3)	Bar/Eatery (3)
7:00 AM	95%	95%	100%	100%	0	0
8:00 AM	88%	88%	100%	100%	0	0
9:00 AM	83%	83%	100%	100%	5%	5%
10:00 AM	75%	75%	100%	100%	7%	7%
11:00 AM	71%	71%	100%	100%	20%	20%
12:00 PM	68%	68%	100%	100%	41%	41%
1:00 PM	66%	66%	100%	100%	53%	53%
2:00 PM	70%	70%	100%	100%	46%	46%
3:00 PM	69%	69%	50%	0	38%	38%
4:00 PM	72%	72%	50%	0	63%	63%
5:00 PM	74%	74%	50%	0	80%	80%
6:00 PM	74%	74%	50%	0	100%	100%
7:00 PM	73%	73%	50%	0	93%	93%
8:00 PM	75%	75%	50%	0	70%	70%

NOTES:
(1) Percent values for affordable workforce apartments applies same percent values presented for market rate apartments.
ITE data not available for affordable units.
Percent values estimated.
(3) Bar/eatery rates based on ITE 4th edition; 5th edition does not include percent values.

Finally, the following Tables 4a and 4b estimate the "*average*" adjusted hourly peak parking demand requirements of the proposed project based upon the procedures described in the ITE Parking Generation publication:

Table 4a
Hourly Peak Parking Demand Summary
For
"52 Hanover Street"
(Weekday Condition)

	Residential Apartment (Market Rate)	Affordable Workforce Apartment	Neighborhood Grocery	Neighborhood Coffee Shop	Bar/Eatery	Bar/Eatery	Total
Adjusted Peak Parking Demand	**76 spaces**	**5 spaces**	**5 spaces**	**5 spaces**	**15 spaces**	**15 spaces**	**121**
Time of Day							
7:00 AM	54 spaces	4 spaces	5 spaces	5 spaces	0	0	68
8:00 AM	46 spaces	3 spaces	5 spaces	5 spaces	0	0	59
9:00 AM	42 spaces	3 spaces	5 spaces	5 spaces	1 space	1 space	57
10:00 AM	41 spaces	3 spaces	5 spaces	5 spaces	1 space	1 space	56
11:00 AM	40 spaces	3 spaces	5 spaces	5 spaces	2 spaces	2 spaces	57
12:00 PM	38 spaces	3 spaces	5 spaces	5 spaces	7 spaces	7 spaces	65
1:00 PM	37 spaces	2 spaces	5 spaces	5 spaces	6 spaces	6 spaces	61
2:00 PM	37 spaces	2 spaces	5 spaces	5 spaces	4 spaces	4 spaces	57
3:00 PM	38 spaces	3 spaces	3 spaces	0	3 spaces	3 spaces	50
4:00 PM	44 spaces	3 spaces	3 spaces	0	3 spaces	3 spaces	56
5:00 PM	49 spaces	3 spaces	3 spaces	0	9 spaces	9 spaces	73
6:00 PM	51 spaces	3 spaces	3 spaces	0	14 spaces	14 spaces	85
7:00 PM	53 spaces	4 spaces	3 spaces	0	15 spaces	15 spaces	90
8:00 PM	58 spaces	4 spaces	3 spaces	0	12 spaces	12 spaces	89

Table 4b
Hourly Peak Parking Demand Summary
For
"52 Hanover Street"
(Saturday Condition)

	Residential Apartment (Market Rate)	Affordable Workforce Apartment	Neighborhood Grocery	Neighborhood Coffee Shop	Bar/Eatery	Bar/Eatery	Total
Adjusted Peak Parking Demand	**76 spaces**	**6 spaces**	**4 spaces**	**4 spaces**	**23 spaces**	**23 spaces**	**136**
Time of Day							
7:00 AM	72 spaces	6 spaces	4 spaces	4 spaces	0	0	86
8:00 AM	67 spaces	5 spaces	4 spaces	4 spaces	0	0	80
9:00 AM	63 spaces	5 spaces	4 spaces	4 spaces	1 space	1 space	78
10:00 AM	57 spaces	5 spaces	4 spaces	4 spaces	2 spaces	2 spaces	74
11:00 AM	54 spaces	4 spaces	4 spaces	4 spaces	5 spaces	5 spaces	76
12:00 PM	52 spaces	4 spaces	4 spaces	4 spaces	9 spaces	9 spaces	82
1:00 PM	50 spaces	4 spaces	4 spaces	4 spaces	12 spaces	12 spaces	86
2:00 PM	53 spaces	4 spaces	4 spaces	4 spaces	11 spaces	11 spaces	87
3:00 PM	52 spaces	4 spaces	2 spaces	0	9 spaces	9 spaces	76
4:00 PM	55 spaces	4 spaces	2 spaces	0	14 spaces	14 spaces	89
5:00 PM	56 spaces	4 spaces	2 spaces	0	18 spaces	18 spaces	98
6:00 PM	56 spaces	4 spaces	2 spaces	0	23 spaces	23 spaces	108
7:00 PM	55 spaces	4 spaces	2 spaces	0	21 spaces	21 spaces	103
8:00 PM	57 spaces	5 spaces	2 spaces	0	16 spaces	16 spaces	96

Accordingly, the average adjusted peak hourly parking demand of the site (90 spaces) for a typical weekday condition occurs at 7:00 PM. The adjusted parking demand (108 spaces) on a typical Saturday occurs at 6:00 PM.

PARKING SUPPLY

The proposed 52 Hanover Street building design provides 194 covered parking spaces located on the ground and first floors of the proposed development site. The Applicant will assign a total of 90 parking spaces for all weekdays and 108 spaces on Saturday to accommodate the calculated peak parking demand requirements of the proposed mixed-use building. The remaining 104 weekday parking spaces and 86 available spaces on Saturday will be allocated to meet a portion of the parking requirements of the adjacent mixed-use building located at 82 Hanover Street.

SUMMARY

- The proposed 52 Hanover Street mixed-use building includes a total of 171 residential apartment units and four (4) 1,900sf commercial retail units is projected to generate an "*average*" peak parking demand of approximately **141** spaces on a typical weekday and **160** spaces on Saturday. The estimates of peak parking demand were developed based upon national parking demand rates presented in the 5th edition of the Institute of Transportation's **Parking Generation** publication and parking data collected locally within the City of Portland.

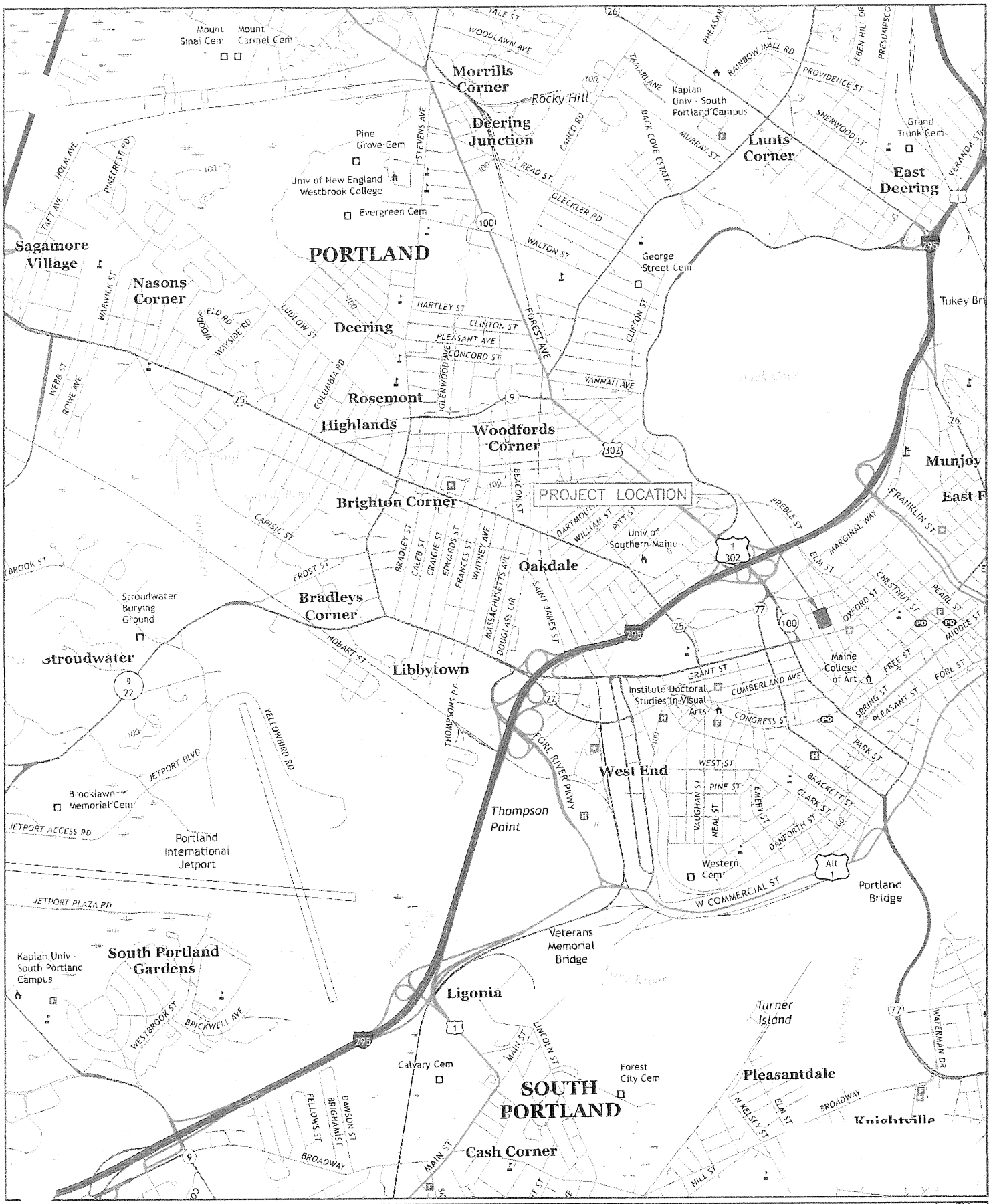
- The determination of "*average*" peak parking demand for the proposed project includes an adjustment for "*shared-use*" trips, which account for the occurrence of multi-purpose trips between one or more tenant spaces. The noted parking adjustments reduce the "*average*" peak parking demand of the site to **121** weekday spaces and **136** spaces on a typical Saturday.

- The final step in forecasting the "*average*" peak parking demand requirements of the proposed 52 Hanover Street building considers the "*shared parking space*" benefits of a mixed-use or multi-use project. The previously referenced **Parking Generation** publication provides the following guidance: "*the hourly variation in parking demand for the individual land uses can result in conditions where the parking demand for one land use is high while the demand for a different land use is low. In this situation, parking demand for both land uses may be able to use the same parking space at different times of the day. The end result can be a reduction in overall peak parking demand.*" The parking manual provides time-of-day percent of peak parking demand values for each land-use category; whereby, the actual hourly parking demand of the project site can be calculated. The results of this final process show the "*average*" peak parking demand of the 52 Hanover Street site occurs at 7:00 p.m. on a typical weekday and at 6:00 PM on Saturday. The peak hourly parking demand for the weekday is estimated at **90** spaces and the Saturday parking space projection is **108** spaces.

- Traffic Solutions recommends a maximum number of 90 weekday spaces and 108 spaces on Saturday be reserved for building tenants to meet the estimated average "peak" parking demand of the proposed mixed-use building project. The balance of spaces (approximately 94 weekday and 86 Saturday) within the proposed 52 Hanover Street site will be used to satisfy a portion of the peak parking demand of the adjoining 82 Hanover Street mixed-use building.

C. SITE AND VICINITY BOUNDARIES

The attached reginal vicinity map shows the proposed project site location in the City of Portland.



THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.	FILE: CIVIL DATE: 8/31/2020 JN: 1093.2 SCALE: NTS DESIGN BY: SJL DRAWN BY: KRB CHECKED BY: WHS	ACORN ENGINEERING, INC	DRAWING NAME: REGIONAL VICINITY MAP PROJECT NAME: 52 HANOVER STREET CLIENT: TOM WATSON & CO., LLC	ISSUED FOR: TMP	BY: WHS DATE: 8/31/20
DRAWING NO. R-1					

D. PROPOSED USES IN THE GENERAL VICINITY OF THE PROPOSED DEVELOPMENT

Performance of the required traffic assessment will account for all projects whose trips potentially impact the roadway system adjacent to the proposed site.

E. TRIP GENERATION

Site Trip Generation – Proposed Residential Apartments (171 Units): Trip generation is based upon tables presented in the tenth edition of the Institute of Transportation's Engineers "**TRIP GENERATION**" manual. The following trip rates were applied in that effort:

Land-Use #221: Multi-family Housing (Mid-Rise)

Weekday AM Peak Hour (Street)	= 0.20 trips/unit
Weekday PM Peak Hour (Street)	= 0.18 trips/unit
Weekday AM Peak Hour (Generator)	= 0.15 trips/unit
Weekday PM Peak Hour (Generator)	= 0.18 trips/unit
Saturday Peak Hour (Generator)	= 0.20 trips/unit (1)
Sunday Peak Hour (Generator)	= 0.20 trips/unit (1)

NOTE: (1) Trip rate not available for Saturday or Sunday condition. Trip rate of weekday AM peak hour was applied.

Table 1, below, provides a summary of the trip generation for the proposed 171 residential apartments units:

Table 1
Peak Hour Trip Generation Summary
(171 Residential Apartments)

Peak Hour Time Period	Peak Hour Trip Generation
AM Peak Hour (Street)	34 trips
PM Peak Hour (Street)	31 trips
AM Peak Hour (Generator)	26 trips
PM Peak Hour (Generator)	31 trips
Saturday Peak Hour (Generator)	34 trips
Sunday Peak Hour (Generator)	34 trips

Site Trip Generation – Proposed Bar/Eatery (2 Units @ 1,900sf each): Trip generation is based upon tables presented in the tenth edition of the Institute of Transportation's Engineers "**TRIP GENERATION**" manual. The following trip rates were applied in that effort:

Land-Use #932: High-Turnover (Sit-Down) Restaurant

Weekday AM Peak Hour (Street)	= closed
Weekday PM Peak Hour (Street)	= 9.97 trips/1,000sf
Weekday AM Peak Hour (Generator)	= closed
Weekday PM Peak Hour (Generator)	= 17.41 trips/1,000sf
Saturday Peak Hour (Generator)	= 11.19 trips/1,000sf
Sunday Peak Hour (Generator)	= 25.83 trips/1,000sf

Table 2, below, provides a summary of the trip generation for the proposed Bar/Eatery:

E. TRIP GENERATION (Continued)

Table 2
Peak Hour Trip Generation Summary
(Bar/Eatery 2-1,900sf Units)

Peak Hour Time Period	Peak Hour Trip Generation
AM Peak Hour (Street)	closed
PM Peak Hour (Street)	38 trips
AM Peak Hour (Generator)	closed
PM Peak Hour (Generator)	66 trips
Saturday Peak Hour (Generator)	43 trips
Sunday Peak Hour (Generator)	98 trips

Site Trip Generation – Proposed Neighborhood Grocery Store (1,900sf Retail Space): Site trip generation is developed based upon a local traffic study conducted at an existing neighborhood grocery store located at the intersection of Brackett and Pine Streets. The following Table A provides a summary of the results of that traffic survey:

Table A
Trip Generation Summary
Neighborhood Grocery
(Brackett Street @ Pine Street)

Survey Time	Entering Trips		Exiting Trips		Total Trips	
	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips
7:30 to 7:45 AM	0	0	0	0	0	0
7:45 to 8:00 AM	0	0	0	0	0	0
8:00 to 8:15 AM	15	0	11	0	26	0
8:15 to 8:30 AM	4	1	8	1	12	2
8:30 to 8:45 AM	6	2	1	3	7	5
8:45 to 9:00 AM	11	2	9	3	20	5
AM Peak Hour Total	**36**	**5**	**29**	**7**	**65**	**12**
3:30 to 3:45 PM	5	0	7	0	12	0
3:45 to 4:00 PM	7	1	7	2	14	3
4:00 to 4:15 PM	5	0	9	0	14	0
4:15 to 4:30 PM	6	1	7	0	13	1
4:30 to 4:45 PM	12	1	10	1	22	2
4:45 to 5:00 PM	21	0	18	0	39	0
5:00 to 5:15 PM	15	1	18	1	33	2
5:15 to 5:30 PM	15	0	14	0	29	0
PM Peak Hour Total	**63**	**2**	**60**	**2**	**123**	**4**

As presented in the body of Table A, the existing neighborhood grocery store located in the West End section of the City generates very few vehicle trips during either the AM or PM peak hours. In the morning peak hour, a total of 12 vehicle trips were recorded and a much lower volume of four vehicle trips were observed in the evening peak hour. Similar trip projections are applied for the proposed neighborhood grocery store. Vehicular trips generated by the proposed grocery store; albeit a very small number, are fully expected to use available on-street ›rking spaces to patronize the proposed grocery store business. In the opinion of this application, the actual ..umber of vehicular trips generated by the proposed grocery store will be far less than the estimated values presented in Table 3.

E. TRIP GENERATION (Continued)

Table 3 presents the peak hour trip projections for the proposed neighborhood grocery store:

Table 3
Peak Hour Trip Generation Summary
(Neighborhood Grocery Store)

Peak Hour Time Period	Peak Hour Trip Generation
AM Peak Hour (Street)	12 trips
PM Peak Hour (Street)	4 trips
AM Peak Hour (Generator)	12 trips (1)
PM Peak Hour (Generator)	4 trips (2)
Saturday Peak Hour (Generator)	12 trips (1)
Sunday Peak Hour (Generator)	12 trips (1)

NOTES:
(1) Trip forecast based upon AM Peak Hour (Street) data.
(2) Trip forecast based upon PM peak Hour (Street) data.

Site Trip Generation – Proposed Neighborhood Coffee Shop (1,900sf Retail Space): Site trip generation is developed based upon a local traffic study conducted at an existing neighborhood coffee shop located at the intersection of Congress and Atlantic Streets on Munjoy Hill. The following Table B provides a summary of the results of that traffic survey:

Table B
Trip Generation Summary
Neighborhood Coffee Shop
(Congress Street @ Atlantic Street)

Survey Time	Entering Trips		Exiting Trips		Total Trips	
	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips	Pedestrian Trips	Vehicle Trips
8:00 to 8:15 AM	7	1	7	1	14	2
8:15 to 8:30 AM	5	2	3	2	8	4
8:30 to 8:45 AM	9	2	7	2	16	4
8:45 to 9:00 AM	12	3	8	2	20	5
9:00 to 9:15 AM	8	1	10	2	18	3
9:15 to 9:30 AM	4	1	6	1	10	2
AM Peak Hour Total	**33**	**7**	**31**	**7**	**64**	**14**

As presented in the body of Table B, the existing neighborhood coffee shop located on Munjoy Hill generates very few vehicle trips during the AM peak hours, with a total of 14 vehicle trips recorded during the morning peak hour. A similar trip generation value is estimated for the proposed neighborhood coffee shop. Vehicular trips generated by the proposed coffee shop, albeit a very small number, are fully expected to use available on-street parking spaces to patronize the proposed coffee shop. In the opinion of this application, the actual number of vehicular trips generated will be far less than the estimated values presented in Table 4 below.

E. TRIP GENERATION (Continued)

Table 4
Peak Hour Trip Generation Summary
Neighborhood Coffee Shop

Peak Hour Time Period	Peak Hour Trip Generation
AM Peak Hour (Street)	14 trips
PM Peak Hour (Street)	closed
AM Peak Hour (Generator)	14 trips (1)
PM Peak Hour (Generator)	closed
Saturday Peak Hour (Generator)	14 trips (1)
Sunday Peak Hour (Generator)	closed

NOTES: (1) Trip estimates based upon existing AM peak hour data collected at existing Munjoy Hill site.

Table 5 presents the expected total peak hour trip generation of the proposed 52 Hanover Street Redevelopment Project:

Table 5
Peak Hour Trip Generation Summary
(The Proposed 52 Hanover Street Redevelopment Project)

Peak Hour Time Period	Peak Hour Trip Generation
AM Peak Hour (Street)	60 trips
PM Peak Hour (Street)	73 trips
AM Peak Hour (Generator)	52 trips
PM Peak Hour (Generator)	101 trips
Saturday Peak Hour (Generator)	103 trips
Sunday Peak Hour (Generator)	144 trips

Accordingly, the proposed 52 Hanover Street site is to generate approximately **60** vehicle trips during the AM peak hour of the street and an additional **101** trips in the evening peak hour of the site. The site will generate somewhat larger trip volumes during the peak hours of both weekend days with a total of **103** trips generated on Saturday and **144** trips on Sunday.

F. TRIP GENERATION CREDIT

Trip Generation Credit: MaineDOT allows a trip generation credit to be taken for on-site uses that are displaced with construction of the proposed site that were operational within the last 10 years. Portland's DPW Vehicle Maintenance Facility and fueling station were both operational for a period of time during 2019.

Traffic Solutions completed vehicle classification counts at the City's Hanover Street fueling station on Wednesday, February 20, 2019 between the hours of 7:00 a.m. to 9:00 a.m. and, again, between 3:00 p.m. and 5:30 p.m. All vehicles entering and exiting the fueling facility were recorded and classified by vehicle type and department affiliation in 15-minute intervals between the noted time periods. Table C, as follows, presents the recorded trip data:

Table C
Existing City of Portland
Hanover Street Fueling Station
Traffic Survey Summary

Time Interval	Trips Entering Facility	Trips Leaving Facility	Total Trips	Department Affiliation	Vehicle Classification
7:00 to 7:15 AM	1	1	2	Police	Jeep SUV
7:15 to 7:30	0	0	0	-	-
7:30 to 7:45	1	1	2	Parks & Rec.	Crew Cab
7:45 to 8:00	0	0	0	-	-
8:00 to 8:15	3	2	5	Trades, Parks & Rec., Public Works	Van, Pick-Up, Fuel Vehicle
8:15 to 8:30	0	1	1	Public Works	Fuel Vehicle
8:30 to 8:45	2	1	3	Police, Public Works	Unmarked Vehicle, Small dump truck
8:45 to 9:00	0	1	1	Public Works	Small dump truck
AM Peak Hour- 8:00 to 9:00	**5**	**5**	**10**		
3:00 to 3:15 PM	5	4	9	2 Police Fire, 2 Public Works	2 Police Cruisers, Ladder #6, Public Works Director vehicle, Public Works Pick-up
3:15 to 3:30	1	2	3	2 Public Works	1 Public Works Pick-Up, 1 1.5 yd Dump Truck
3:30 to 3:45	2	0	2	2 Police	2 cruisers
3:45 to 4:00	1	2	3	2 Police	1 cruiser
4:00 to 4:15	1	1	2	Golf Course Jr. Bus	Golf Course
4:15 to 4:30	4	3	7	4 police	4 Police Cruisers
4:30 to 4:45	0	1	1	Police	Police Cruiser
4:45 to 5:00	0	0	0	-	-
5:00 to 5:15	1	0	1	Fire Truck	Ladder #3
5:15 to 5:30	0	1	1	Fire Truck	Ladder #3
PM Peak Hour – 3:00 to 4:00	**9**	**8**	**17**		

F. TRIP GENERATION CREDIT (Continued)

From a summary of the traffic survey, a peak hour of traffic was determined for both the morning and afternoon travel periods. The morning peak hour falls between 8:00 and 9:00 a.m. when a total of 10 vehicles were observed either entering or exiting the fueling station and a total of 17 trips was counted in the evening peak hour, which occurs between 3:00 and 4:00 p.m.

A similar study was conducted August 11/12, 2020 at the City's Public Works Maintenance facility located on Canco Road to establish peak hour trip generation for the DPW vehicle maintenance facility. Those studies recorded a total of eight (8) passenger equivalent trips (pce) in the morning peak hour and a slightly larger volume of 11 pce trips in the afternoon peak hour.

Combined, the former DPW vehicle maintenance and adjoining fueling station generate about 18 pce trips in the morning peak hour and 28 pce trips in the evening peak hour.

Table 1 presents the adjusted peak hour trip generation of the proposed 52 Hanover Street Redevelopment site:

Table 1
"Net" Peak Hour Trip Generation Summary

Peak Hour Time Period	Existing DPW Maintenance and Fueling Station Trip Summary	Proposed 52 Hanover Street Trip Summary	Adjusted Peak Hour Trip Generation
AM Peak Hour (Street)	18 pce trips	60 trips	42 trips
PM Peak Hour (Street)	28 pce trips	73 trips	45 trips
AM Peak Hour (Generator)	18 pce trips (1)	52 trips	34 trips
PM Peak Hour (Generator)	28 pce trips (2)	101 trips	73 trips
Saturday Peak Hour (Generator)	18 pce trips (1)	103 trips	85 trips
Sunday Peak Hour (Generator)	18 pce trips (1)	144 trips	126 trips

NOTE:

(1) The prior site trip generation of the City's Vehicle Maintenance and Fueling Station uses for the weekday AM peak hour of the generator and both peak Saturday and Sunday peak periods were based upon traffic data collected during the weekday AM peak hour of the street.

(2) The prior site trip generation of the City's Vehicle Maintenance and Fueling Station uses for the weekday PM peak hour of the generator was based upon traffic data collected during the weekday PM peak hour of the street.

"Net" Change in Site Trip Generation – Peak Hour Time Periods

The 52 Hanover Street site will generate a "net" volume of **42** trips in the AM peak hour of the street, a total of **45** trips in the PM peak hour of the street and **126** trips during the Sunday peak hour of the site. The only time period meeting MaineDOT's Chapter 305 Rules and Regulations for determination of a Traffic Movement Permit is the noted peak hour of the site on Sunday.

G. TRIP ADJUSTMENTS

Vehicle Trip Composition: This report has assumed all vehicle trips generated by the proposed project are "*primary*" or "*new*" vehicle trips to the area street network.

Shared-Use Adjustment: A finite number of residents, employees of the proposed commercial spaces and/or customers of those same spaces are classified as internal or shared trips; trips that do not leave the confines of the proposed site. These multi-purpose trips, if not accounted for, overestimate the actual vehicular traffic impacts of the 52 Hanover Street site. For example, an apartment resident purchasing their morning coffee at the proposed neighborhood coffee shop doing so by simply walking from their apartment to the proposed coffee shop. Numerous other likely internal trip patterns will be generated by the proposed site and their impact must be accounted for.

The National Cooperative Highway Research Program's (NCHRP) 684 Internal Trip Capture Estimation Tool provides a process for estimating the number of shared or captured trips generated by a development project. Copies of the spreadsheets used in the analysis follow. The summarized internal capture rates, as determined from the NCHRP 684 Worksheet Section 5-A, provide the following internal capture rates (percentages) applicable to the 191 Marginal Way site development uses:

Trip Capture Percent	Total	Entering Trips	Exiting Trips
AM Peak Hour	10%	18%	7%
PM Peak Hour	19%	15%	26%

raffic Solutions, to conservatively forecast the number of internally captured or shared trips generated by the proposed 52 Hanover Street mixed-use project, has applied a 14.5% captured trip rate; which, is the average of the estimated percentage calculated for the AM and PM peak hours (The NCHRP program does not provide projections for peak hour time periods other than the weekday AM and PM peak hours for the AM peak hour).

Based upon the described methodology presented above, a total of **21** [144 trips x 14.5% = 21] internal captured or shared trips are generated by the proposed 52 Hanover Street site during the Sunday peak hour of the site. Accordingly, the proposed 52 Hanover Street site is expected to generate a total of **123** trips in the Sunday peak hour that travel onto or from the public street system.

Project Name:	52 Hanover Street
Analysis Period:	**PM Street Peak Hour**

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	2	2	1.00	2	2
Restaurant	1.00	24	24	1.00	16	16
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	22	22	1.00	9	9
Hotel	1.00	0	0	1.00	0	0

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		1	0	1	0
Restaurant	0	7		1	3	1
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	2	0		0
Hotel	0	0	0	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	0	0	1	0
Retail	0		7	0	10	0
Restaurant	0	1		0	4	0
Cinema/Entertainment	0	0	1		1	0
Residential	0	0	3	0		0
Hotel	0	0	1	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	1	1	2	1	0	0
Restaurant	3	21	24	21	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	19	22	19	0	0
Hotel	0	0	0	0	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	1	1	2	1	0	0
Restaurant	4	12	16	12	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	7	9	7	0	0
Hotel	0	0	0	0	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.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	52 Hanover Street	**Organization:**	Traffic Solutions
Project Location:	Portland, ME	**Performed By:**	MMI
Scenario Description:	PM Peak Hour	**Date:**	8/31/2020
Analysis Year:	2020	**Checked By:**	
Analysis Period:	**PM Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	850	2,000	SF	4	2	2
Restaurant	932	2,494	SF	40	24	16
Cinema/Entertainment				0		
Residential	221	171	DU	31	22	9
Hotel				0		
All Other Land Uses[2]				0		
Total				75	48	27

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% 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		1	0	0	0
Restaurant	0	1		0	3	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	2	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	75	48	27
Internal Capture Percentage	19%	15%	26%
External Vehicle-Trips[3]	61	41	20
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	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	50%	50%
Restaurant	13%	25%
Cinema/Entertainment	N/A	N/A
Residential	14%	22%
Hotel	N/A	N/A

[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]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[4]Person-Trips
*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute

Project Name:	52 Hanover Street
Analysis Period:	**AM Street Peak Hour**

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	5	5	1.00	7	7
Restaurant	1.00	8	8	1.00	8	8
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	4	4	1.00	30	30
Hotel	1.00	0	0	1.00	0	0

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	2		1	0	1	0
Restaurant	2	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	6	0		0
Hotel	0	0	0	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		2	2	0	0	0
Retail	0		4	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	2	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	5	5	5	0	0
Restaurant	3	5	8	5	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	4	4	4	0	0
Hotel	0	0	0	0	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	1	6	7	6	0	0
Restaurant	0	8	8	8	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	28	30	28	0	0
Hotel	0	0	0	0	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:	52 Hanover Street	**Organization:**	Traffic Solutions
Project Location:	Portland, ME	**Performed By:**	MMI
Scenario Description:	AM Peak Hour	**Date:**	8/31/2020
Analysis Year:	2020	**Checked By:**	
Analysis Period:	**AM Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	850	2,000	SF	12	5	7
Restaurant	932	2,494	SF	16	8	8
Cinema/Entertainment				0		
Residential	221	171	DU	34	4	30
Hotel				0		
All Other Land Uses[2]				0		
Total				62	17	45

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% 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		1	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	2	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	62	17	45
Internal Capture Percentage	10%	18%	7%
External Vehicle-Trips[3]	56	14	42
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	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	0%	14%
Restaurant	38%	0%
Cinema/Entertainment	N/A	N/A
Residential	0%	7%
Hotel	N/A	N/A

[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]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[4]Person-Trips
*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute

H. TRIP DISTRIBUTION

Site Trip Distribution: The 10th edition of the Institute of Transportation Engineers "**TRIP GENERATION**" publication provides the following trip distributions rates for a proposed multi-family residential apartment unit:

Land-Use Code #221 – Multi-family Housing (Mid-Rise) (1)

Sunday Peak Hour = 62% enter/38% exit

NOTE: (1) All distribution rates based upon "General Urban/Suburban" Data

Site Trip Distribution: The 10th edition of the Institute of Transportation Engineers "**TRIP GENERATION**" publication provides the following trip distribution rates for a proposed bar/eatery:

Land-Use Code #932 High-Turnover (Sit-Down) Restaurant
Sunday Peak Hour = 55% enter/45% exit

Site Trip Distribution – Proposed Neighborhood Grocery Store (1,900sf Retail Space): Site trip distribution rates are based upon the survey data collected at the existing neighborhood grocery store located at the intersection of Brackett and Pine Streets. The following distribution rates were applied:

Proposed Neighborhood Grocery Store
Sunday Peak Hour = 50% enter/50% exit (1)

NOTE: (1) Distribution rate based upon field data collected in PM peak hour.

Site Trip Distribution – Proposed Neighborhood Coffee Shop (1,900sf Retail Space): Site trip distribution rates are based upon the survey data collected at the existing neighborhood coffee shop located at the intersection of Congress and Atlantic Streets. The following distribution rates were applied:

Proposed Neighborhood Coffee Shop
Sunday Peak Hour = closed

Table 1 below provides a summary of the expected volume of trips entering and exiting the site during the Sunday peak hour time period.

Table 1

Site Trip Distribution
(Sunday Peak Hour)

Peak Hour Time Period	Trip Distribution Values		Total Adjusted Trips
	Entering Trips	Exiting Trips	
Sunday Peak Hour	81 trips	63 trips	144 trips

Accordingly, in the Sunday peak hour of the site the heaviest volume of trips (81 trips) enters the site and 63 trips exit.

SECTION 1

I. TRIP ASSIGNMNET

Vehicle Trip Assignment (Sunday Peak Hour of the Site): A trip assignment was prepared for the peak hour of the site on Sunday, which assumes the peak hour time period of each proposed site use occurs simultaneously during the same one-hour time period; whereas in reality, peak travel periods of dissimilar site uses do not occur during the same peak hour. For example, the peak hour of the proposed apartments likely occurs earlier in the day on a typical Sunday, whereas the peak hour of the proposed bar/eatery businesses occurs in the afternoon and early evening hours. The trip assignment information is provided to demonstrate the maximum number of trips that could potentially be generated by the proposed site during a single one-hour time period in the peak hour of a typical Sunday.

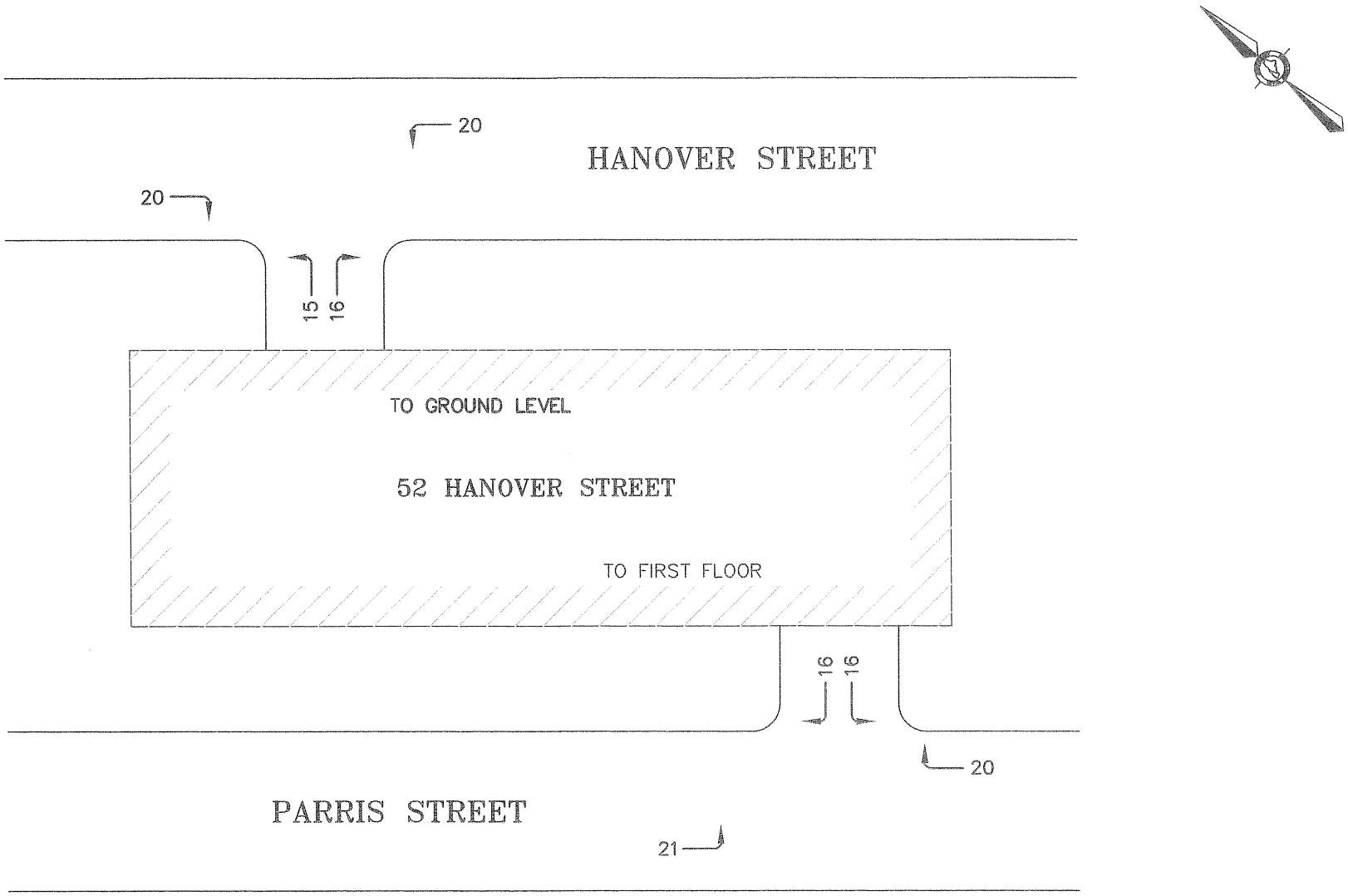
Peak hour trips forecast to enter and exit the 52 Hanover Street site in the Sunday peak hour were evenly assigned through both proposed site entrances located on Hanover and Parris Streets. Figure 1 illustratively presents the trip assignment for the Sunday peak hour of the site.

Site Trip Generation – Extra Parking Garage Trips: The proposed 52 Hanover Street project proposes to provide a total of 194 on-site parking spaces; the average peak parking demand of the proposed site on a weekend day is estimated at 108 spaces leaving a balance of 86 on-site parking spaces. Tom Watson & Co., LLC will use the balance of the parking spaces in the 52 Hanover Street building to off-set the parking requirements of the adjacent 82 Hanover Street mixed-use building. The parking requirements of the 82 Hanover Street building are currently supported through both limited on-site spaces and contractual agreements with local property owners. Motorists occupying these owned and/or leased spaces are presently existing traffic circulating through the neighborhood street system. These existing trips must be re-assigned to both proposed 52 Hanover Street site entrances located on both Hanover Street and Parris Street to establish the total volume of peak hour trips circulating through the proposed site driveways.

Trips generated by occupants of these overflow parking spaces will most likely arrive and depart the parking decks during times of the day or evening other than the peak hours. However, to project a "*worse-case*" condition, trips generated by these extra (balance) of on-site parking spaces are estimated based upon parking trends found at an existing waterfront parking garage during the weekday evening peak hour (Similar data wasn't readily available for a Sunday time period). The parking garage data shows that approximately 27% of the garage capacity enters or exits the structure in the PM peak hour with a directional split of 14% entering the garage and 86% exiting. These trip patterns were applied in estimating the existing garage trips that potentially will be generated by the extra or balance of (86) garage spaces in the 52 Hanover Street parking decks. Accordingly, the extra garage spaces can be expected to generate a total of 23 vehicle trips during the Sunday peak hour. Three (3) trips enter the garage and the remaining 20 trips will exit.

These additional trips generated by the balance of parking spaces in the 52 Hanover Street building are evenly assigned through both proposed site entrances located on Hanover and Parris Streets. Figure 2 illustratively presents the trip assignment for the Sunday peak hour of the site.

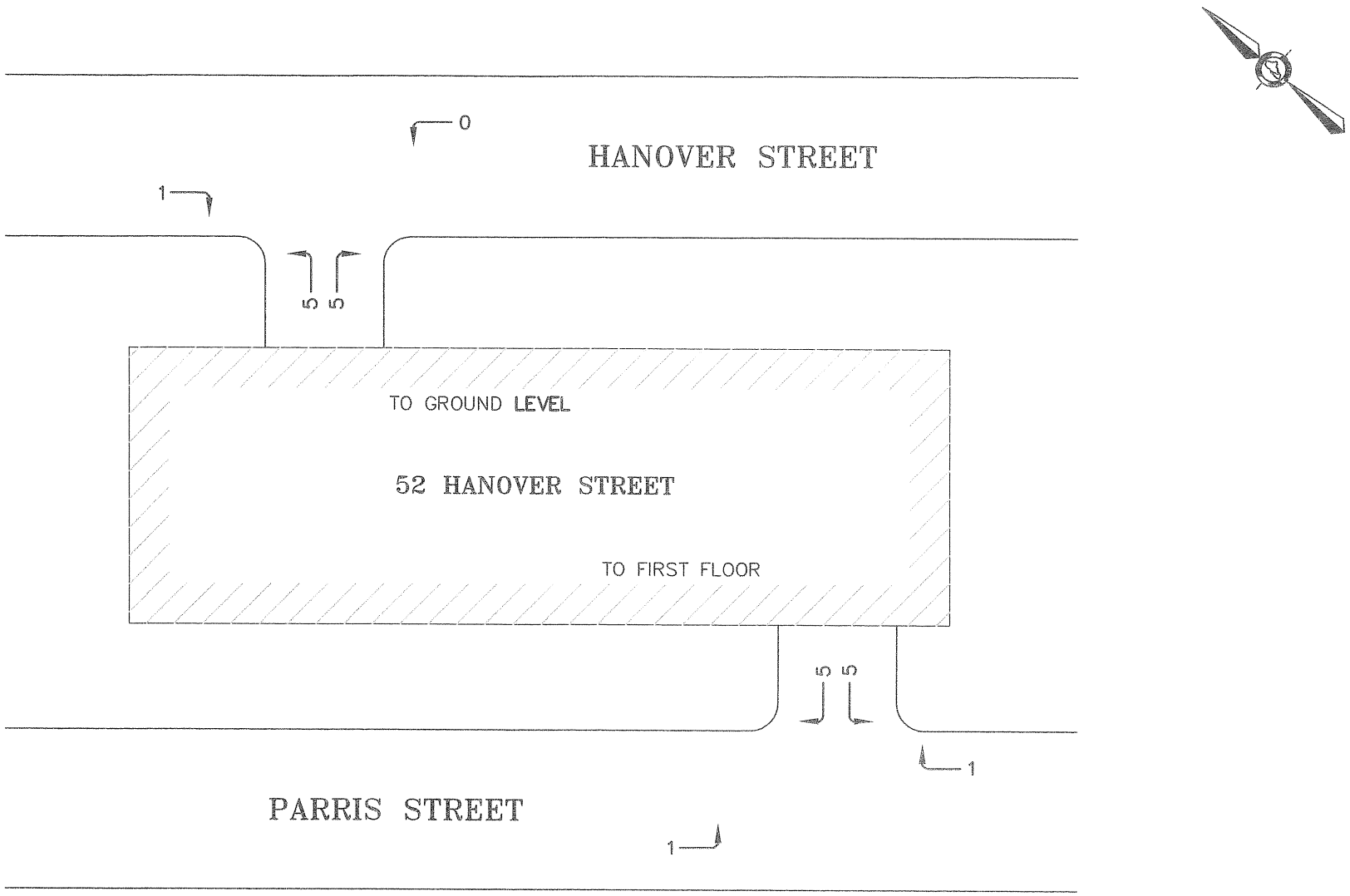
Figure 3 combines the Sunday peak hour trip assignments for the proposed 52 Hanover Street site (Figure 1) with the travel assignment generated by the balance of parking spaces in the proposed building (Figure 2).



SUNDAY PEAK HOUR TRAFFIC ASSIGNMENT
SITE GENERATED TRIPS
FIGURE 1

E:\LAND PROJECTS\34000\34399 TRAFFIC SOLUTIONS\HANOVER REDEVELOPMENT\PLANSET\HANOVER REDEVELOPMENT.DWG

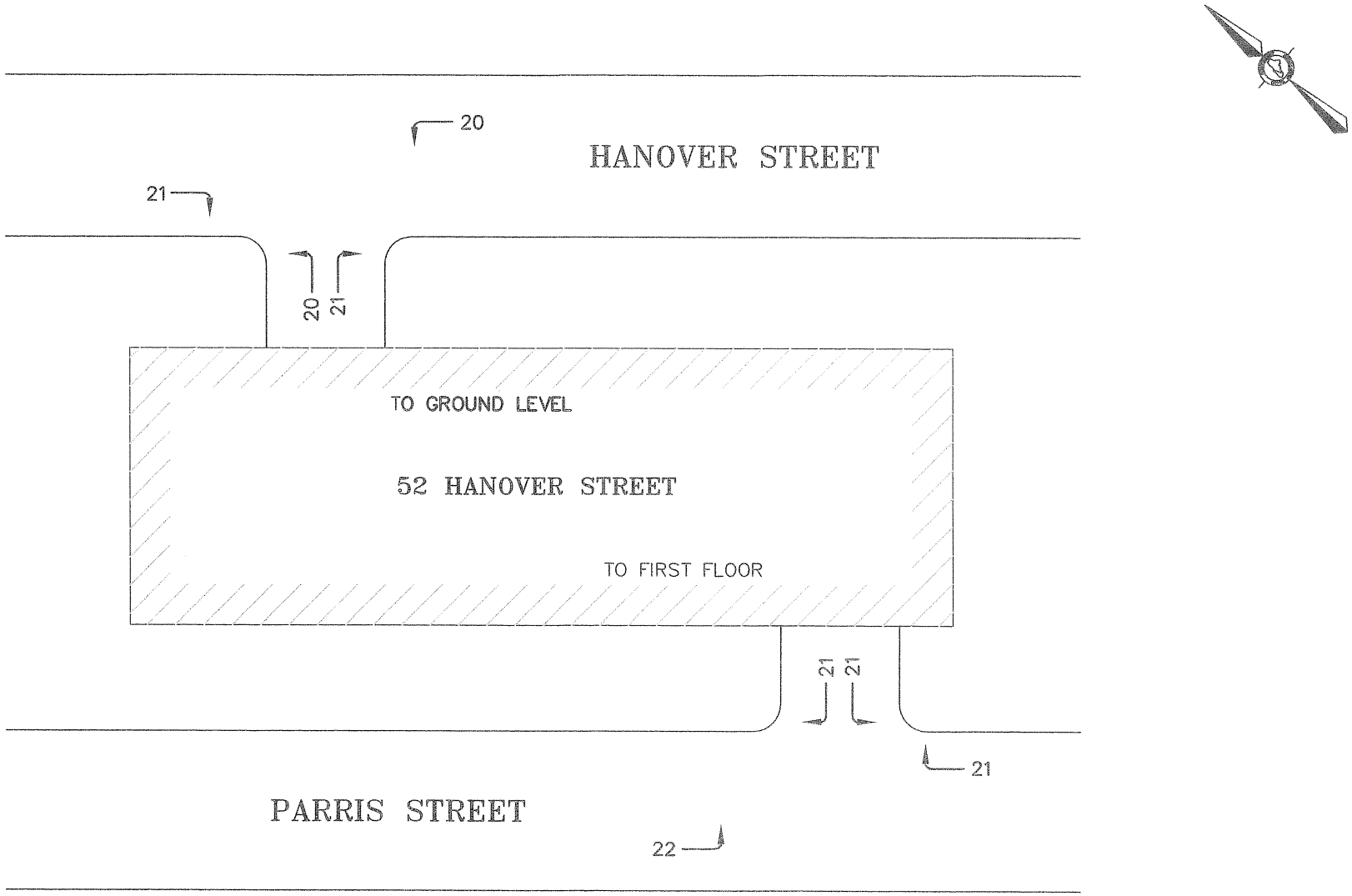
Project Name and Location: 52 HANOVER REDEVELOPMENT	TRAFFIC SOLUTIONS 17 MOUNTVIEW DRIVE, GORHAM, MAINE 04038
DATE: OCTOBER, 2020 FIGURE: 1	



SUNDAY PEAK HOUR TRAFFIC ASSIGNMENT
EXTRA GARAGE TRIPS
FIGURE 2

E:\LAND PROJECTS\34000\34399 TRAFFIC SOLUTIONS\HANOVER REDEVELOPMENT\PLANSET\HANOVER REDEVELOPMENT.DWG

Project Name and Location	
52 HANOVER REDEVELOPMENT	TRAFFIC SOLUTIONS 17 MOUNTVIEW DRIVE, GORHAM, MAINE 04038
DATE: OCTOBER, 2020 FIGURE: 2	



SUNDAY PEAK HOUR TRAFFIC ASSIGNMENT
TOTAL COMBINED DRIVEWAY TRIPS
FIGURE 3

E:\LAND PROJECTS\34000\34399 TRAFFIC SOLUTIONS\HANOVER REDEVELOPMENT\PLANSET\HANOVER REDEVELOPMENT.DWG

Project Name and Location: 52 HANOVER REDEVELOPMENT	TRAFFIC SOLUTIONS 17 MOUNTVIEW DRIVE, GORHAM, MAINE 04038
DATE: OCTOBER, 2020 FIGURE: 3	

SECTION 2

TRAFFIC ACCIDENTS

The Maine Department of Transportation's (MDOT) Accident Records Section provided the latest three-year (2017 through 2019) crash data for the section of Hanover Street between Marginal Way and Portland Street, the section of Kennebec Street between Hanover Street and Parris Street, the section of Portland Street between Parris Street and Hanover Street and the segment of Parris Street between Kennebec and Portland Streets.

MaineDOT's safety audit is summarized as follows:

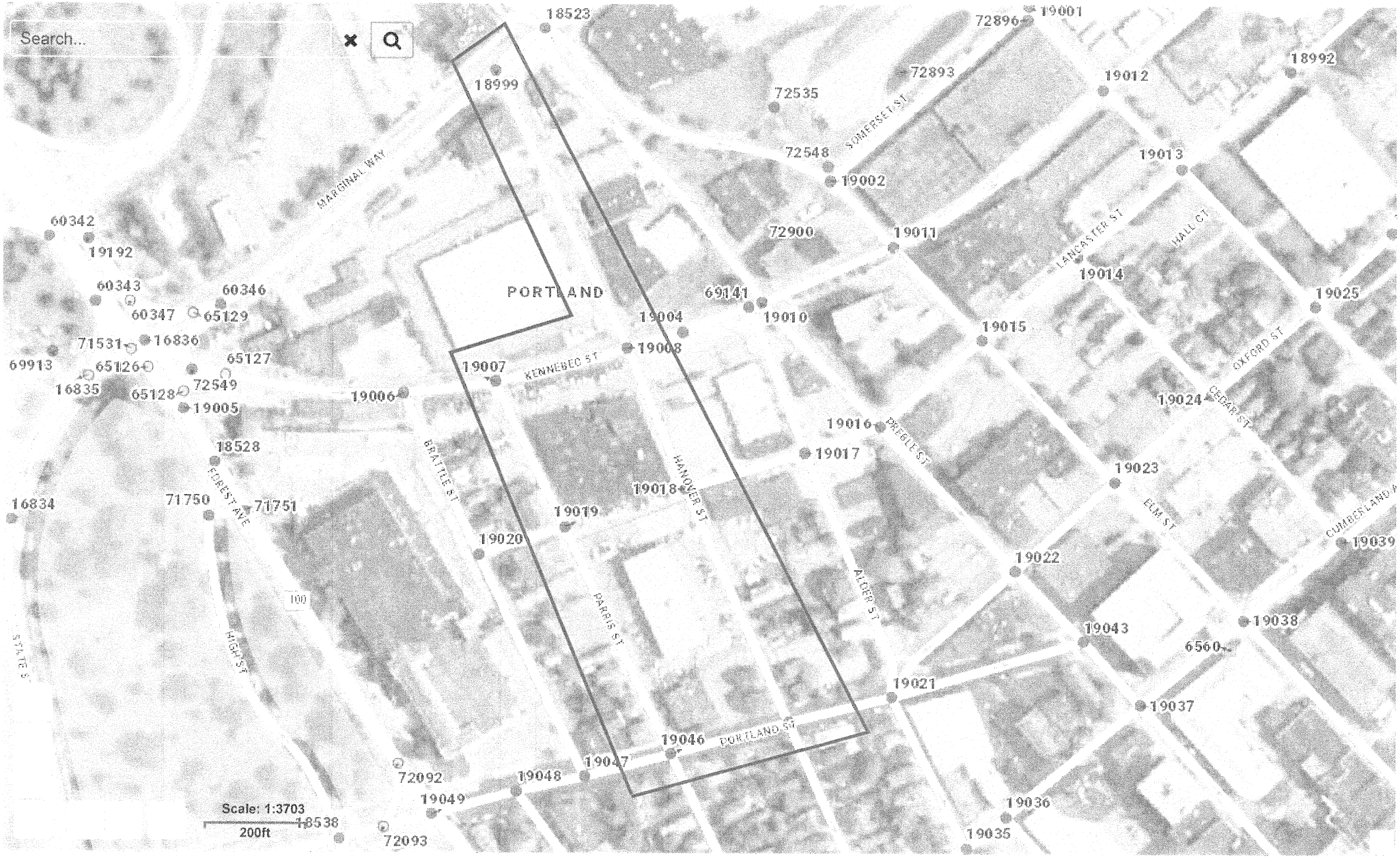
2017 -2019 Traffic Accident Summary

Location	Total Crashes	Critical Rate Factor
1. Hanover Street @ Marginal Way	2	0.40
2. Hanover Street @ Kennebec Street	1	0.51
3. Hanover Street @ Lancaster Street	1	1.22
4. Hanover Street @ Portland Street	4	1.73
5. Parris Street @ Lancaster Street	2	3.82
6. Parris Street @ Portland Street	2	0.65
7. Hanover Street btw. Marginal Way and Kennebec Street	1	0.25
8. Hanover Street btw. Kennebec Street and Lancaster Street	1	0.71
9. Hanover Street btw. Lancaster Street and Portland Street	9	7.11
10. Parris Street btw. Lancaster Street and Portland Street	4	3.38
11. Portland Street btw. Parris Street and Hanover Street	1	0.58

The MDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- ***8 or more accidents and,***
- ***A Critical Rate Factor greater than 1.00***

As the data presented in the table shows, the section of Hanover Street between Lancaster Street and Portland Street meets both of MaineDOT's criteria for identification of a high crash location, with a total of nine crashes and a corresponding critical rate factor of 7.11. MaineDOT provided a detailed vehicle collision diagram for the street segment that maps the crash patterns of each of the nine vehicle collisions. MaineDOT's crash diagram doesn't conclusively identify any single crash pattern within the road segment. The majority of the nine accidents occurred in the vicinity of the existing 52 Hanover Street site. Two crashes were "hit and run" crashes; two additional crash incidents were "vehicle backing accidents" and two of the remaining 5 crashes were "hit and run" crashes.


Search...
18523
72896
19001
18992
18999
72893
19012
72535
SOMERSET ST
72548
19002
19013
MARGINAL WAY
60342
19192
72900
19011
LANCASTER ST
HALL CT
19014
60343
60346
PORTLAND
69141
19025
60347
65129
19004
19010
19015
71531
16836
19008
OXFORD ST
69913
65126
65127
19007
KENNEBEC ST
16835
65128
72549
19006
19024
CEDAR ST
19005
19016
PREBLE ST
18528
19017
BRATTLE ST
HANOVER ST
19023
FOREST AVE
16834
71750
71751
19018
19019
ELM ST
CUMBERLAND
19020
19039
19022
100
ALDER ST
PARRIS ST
19038
STATE S
HIGH ST
19043
6560
19021
19037
19046
PORTLAND ST
19047
72092
19048
19049
19036
Scale: 1:3703
200ft
18538
19035
72093

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ Crash Summary I ☐ Section Detail ☑ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Portland: Hanover St from Marginal Way (node 18999) to Portland St (node 19045); Parris St from Kennebec St (node 19007) to Portland St (node 19046); Kennebec St from Hanover St (node 19008) to Parris St; and Portland St from Parris St to Hanover St

REPORT PARAMETERS

Year 2017, Start Month 1 through Year 2019 End Month: 12

Route: **0560345**	Start Node: **18999**	Start Offset: **0**	☐ Exclude First Node
	End Node: **19045**	End Offset: **0**	☐ Exclude Last Node
Route: **0560565**	Start Node: **19007**	Start Offset: **0**	☐ Exclude First Node
	End Node: **19046**	End Offset: **0**	☐ Exclude Last Node
Route: **0560414**	Start Node: **19008**	Start Offset: **0**	☑ Exclude First Node
	End Node: **19007**	End Offset: **0**	☑ Exclude Last Node
Route: **0560593**	Start Node: **19046**	Start Offset: **0**	☑ Exclude First Node
	End Node: **19045**	End Offset: **0**	☑ Exclude Last Node

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
19018	0560345 - 0.17	Int of HANOVER ST LANCASTER ST	2	1	0	0	0	0	1	0.0	0.401	0.83	0.68	1.22
												Statewide Crash Rate:	0.16	
19008	0560345 - 0.11	Int of HANOVER ST KENNEBEC ST	2	1	0	0	1	0	0	100.0	1.167	0.29	0.57	0.00
												Statewide Crash Rate:	0.16	
19045	0560345 - 0.26	Int of HANOVER ST PORTLAND ST	2	4	0	0	1	1	2	50.0	1.516	0.88	0.51	1.73
												Statewide Crash Rate:	0.15	
18999	0560345 - 0	Int of HANOVER ST MARGINAL WY	2	2	0	0	0	0	2	0.0	3.953	0.17	0.42	0.00
												Statewide Crash Rate:	0.16	
19007	0560565 - 0	0509427 POR,KENNEBEC,PARRIS ST.	2	1	0	0	0	0	1	0.0	0.488	0.68	0.67	1.02
												Statewide Crash Rate:	0.16	
19019	0560565 - 0.06	Int of LANCASTER ST PARRIS ST	2	2	0	0	0	0	2	0.0	0.255	2.61	0.68	3.82
												Statewide Crash Rate:	0.16	
19046	0560565 - 0.15	Int of PARRIS ST PORTLAND ST	2	2	0	0	1	1	0	100.0	2.231	0.30	0.46	0.00
												Statewide Crash Rate:	0.15	
Study Years: 3.00		NODE TOTALS:		13	0	0	3	2	8	38.5	10.011	0.43	0.33	1.33

Crash Summary I

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18999	19008	194689	0 - 0.11	0560345 - 0	0.11	2	1	0	0	0	0	1	0.0	0.00115	290.49	1158.94	0.00
Int of HANOVER ST MARGINAL WY				RD INV 05 60345											Statewide Crash Rate: 412.49		
19008	19018	5080409	0 - 0.06	0560345 - 0.11	0.06	2	1	0	0	0	0	1	0.0	0.00029	1141.84	1609.46	0.00
Int of HANOVER ST KENNEBEC ST				RD INV 05 60345											Statewide Crash Rate: 412.49		
19018	19045	5080405	0 - 0.09	0560345 - 0.17	0.09	2	9	0	1	0	1	6	25.0	0.00026	11738.33	1649.81	7.11
Int of HANOVER ST LANCASTER ST				RD INV 05 60345											Statewide Crash Rate: 412.49		
19007	19019	194701	0 - 0.06	0560565 - 0	0.06	2	0	0	0	0	0	0	0.0	0.00013	0.00	1779.50	0.00
0509427 POR,KENNEBEC,PARRIS ST.				RD INV 05 60565											Statewide Crash Rate: 412.49		
19019	19046	5080404	0 - 0.09	0560565 - 0.06	0.09	2	4	0	0	0	0	4	0.0	0.00024	5653.00	1672.67	3.38
Int of LANCASTER ST PARRIS ST				RD INV 05 60565											Statewide Crash Rate: 412.49		
19007	19008	194700	0 - 0.05	0560414 - 0.33	0.05	2	0	0	0	0	0	0	0.0	0.00025	0.00	1661.68	0.00
0509427 POR,KENNEBEC,PARRIS ST.				RD INV 05 60414											Statewide Crash Rate: 412.49		
19045	19046	3106840	0 - 0.05	0560593 - 0.09	0.05	2	1	0	0	0	0	1	0.0	0.00088	380.52	654.66	0.00
Int of HANOVER ST PORTLAND ST				RD INV 05 60593											Statewide Crash Rate: 176.79		
Study Years:	3.00			**Section Totals:**	0.51		16	0	1	0	1	13	12.5	0.00318	1675.75	786.77	2.13
				Grand Totals:	0.51		29	0	1	3	3	21	24.1	0.00318	3037.30	973.90	3.12

H. C. L.
CRASH COLLISION DIAGRAM
DATA PACKAGE

COUNTY: **CUMBERLAND** TOWN: **PORTLAND**

LOW NODE: **19018** HIGH NODE: **19045** REGION: **1** U/R: **URBAN**

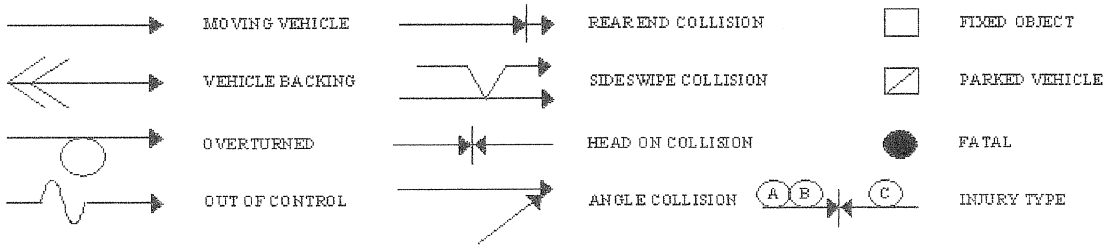
DESCRIPTION: **Hanover St from Lancaster St to Portland St**

RTE # / RD #: **0560345** DATE DRAWN: **6/23/2020** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2017** STUDY TO: **12/31/2019**

CRASH RATE: **11738.3** CRF: **7.06** % INJURY: **22.2** TOTAL CRASHES: **9**

LEGEND

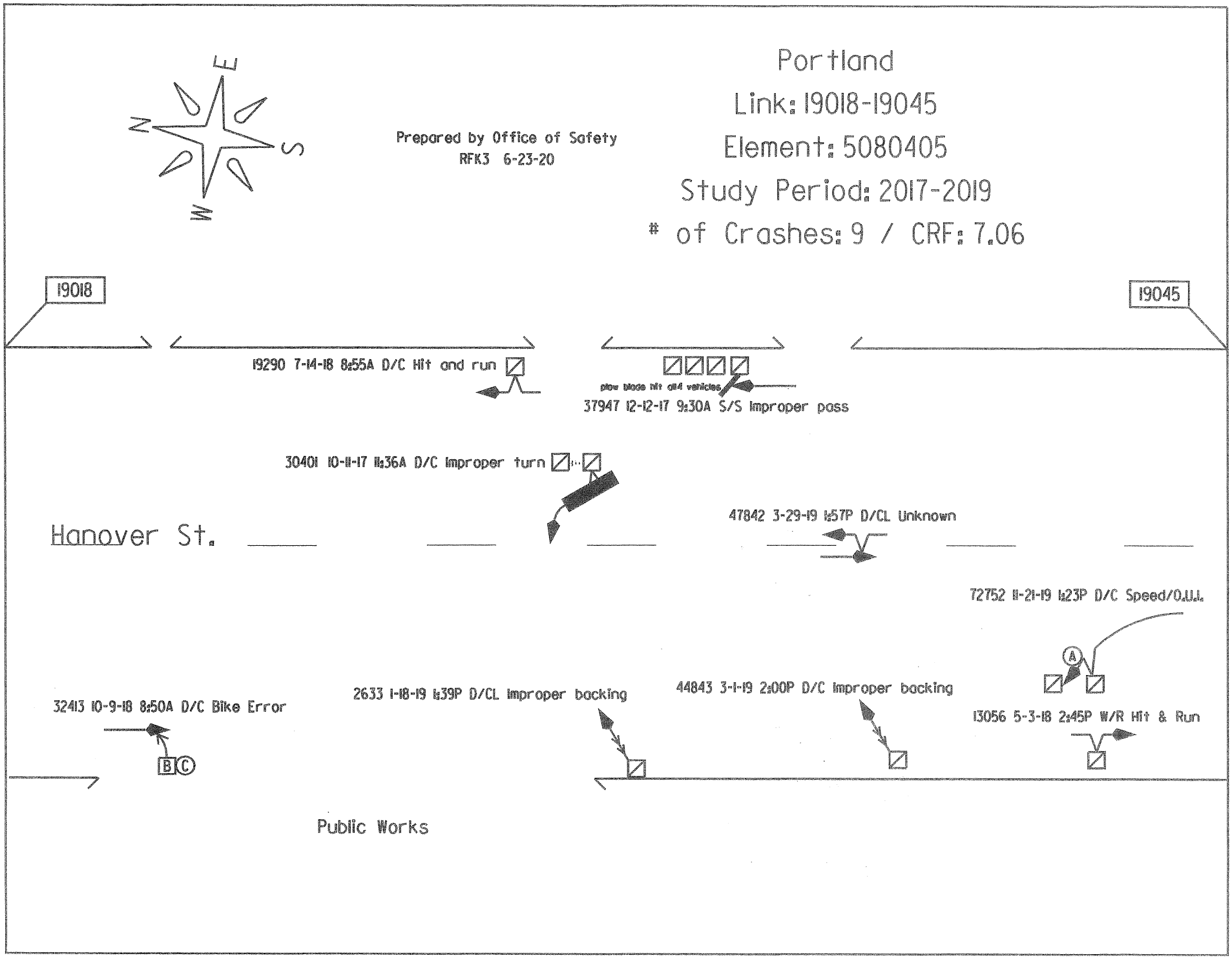


PATH OF: P PEDESTRIAN B BICYCLE A ANIMAL S SLED

PAVEMENT: D - DRY, I - ICY, W - WET, S - SNOW

WEATHER: C - CLEAR, F - FOG, R - RAIN, SL - SLEET, S - SNOW, CL - CLOUDY

TIME: A - AM, P - PM


Portland
Link: 19018-19045
Element: 5080405
Study Period: 2017-2019
# of Crashes: 9 / CRF: 7.06
Prepared by Office of Safety
RFK3 6-23-20
N
E
S
W
19018
19045
19290 7-14-18 8:55A D/C Hit and run
plow blade hit all4 vehicles
37947 12-12-17 9:30A S/S Improper pass
30401 10-11-17 11:36A D/C Improper turn
Hanover St.
47842 3-29-19 1:57P D/CL Unknown
72752 11-21-19 1:23P D/C Speed/O.U.I.
A
32413 10-9-18 8:50A D/C Bike Error
B
C
2633 1-18-19 1:39P D/CL Improper backing
44843 3-1-19 2:00P D/C Improper backing
13056 5-3-18 2:45P W/R Hit & Run
Public Works

SECTION 3

A. ENTRANCE/EXIT LOCATION

The present development plan proposes four 1,900sf commercial retail units on the first floor of the building, 171 residential apartment units on floors three through eight and a total of 194 covered parking spaces. The ground floor of the proposed eight-story mixed-use building provides, in addition to the proposed commercial space, a total of 91 covered parking spaces and an additional 103 covered parking spaces are provided on the first floor of the building. Access to the ground floor parking is provided through a driveway entrance on Hanover Street and the first-floor parking spaces are accessed through a driveway entrance on Parris Street. The proposed Hanover Street entrance is located about 110-feet south of the common property line with the adjacent 82 Hanover Street mixed-use building. Existing driveways located along this site frontage will be appropriately closed creating a single 24-foot wide driveway entrance serving the ground floor of the proposed site. The proposed driveway entrance located on the Parris Street frontage of the site providing access to the first-floor parking spaces is located at the southerly corner of the proposed property. The existing driveway apron located on this side of the proposed property will be closed with construction of new concrete sidewalks and granite curbing.

B. ENTRANCE AND EXIT PLAN VIEW

The City of Portland's Technical Standards require the following sight distance standards for a non-mobility roadway:

Sight Distance Standards

Speed Limit	Sight Distance
25 mph	200 feet
30	250
35	305
40	360
45	425
50	495
55	570

Both Parris and Hanover Streets are currently not posted with a designated speed limit; the assessment of sight distance is based upon a 25mph speed limit, which requires an unobstructed sightline of 200-feet. Acceptable sight distances are attainable in both directions of travel from the proposed centerline of the proposed driveway entrances. On-street parking adjacent to both proposed driveway entrances should be prohibited for a minimum of one-car length (20-feet) to ensure acceptable sight distance is maintained.

C. ENTRANCE/EXIT DESIGN

The proposed project, including all required off-site improvements (if applicable), will be designed and constructed as directed by the City of Portland.

SECTION 4

TITLE, RIGHT OR INTEREST

Attached is a QUITCLAIM DEED WITHOUT COVENANT, signed on December 12, 2018 that grants to 52 Hanover Street, LLC the described land for the proposed site.

MAINE REAL ESTATE TAX PAID

QUITCLAIM DEED WITHOUT COVENANT

CITY OF PORTLAND, a body corporate and politic and Maine municipal corporation having a mailing address of 389 Congress Street, Portland, Maine 04101 ("Grantor"), FOR CONSIDERATION PAID, releases to **52 HANOVER, LLC**, a Maine limited liability company having a mailing address of 104 Grant Street, Portland, Maine 04101 ("Grantee"), certain real property, together with any improvements thereon, located on Hanover Street and Parris Street, in the City of Portland, County of Cumberland and State of Maine (the "Premises"), more particularly described on Exhibit A attached hereto and made part hereof.

Grantee covenants and agrees by acceptance of this Deed that the Premises herein conveyed is subject to the Declaration of Covenants set forth in Exhibit B attached hereto and hereby made a part hereof.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed on its behalf by Jon P. Jennings, its City Manager, duly authorized, on this 12 day of December, 2018.

WITNESS:

Sonia Bean

CITY OF PORTLAND

Jon P. Jennings
Its City Manager

STATE OF MAINE
COUNTY OF CUMBERLAND

December 12, 2018

Personally appeared the above-named Jon P. Jennings, City Manager of the City of Portland, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity, and the free act and deed of said City of Portland.

Before me,

Sonia T. Bean
~~Attorney-at-Law~~/Notary Public
Commission Expires:
Print Name:

SONIA T. BEAN
NOTARY PUBLIC
State of Maine
My Commission Expires
April 8, 2024

Exhibit A

Hanover Street and Parris Street

A certain lot or parcel of land together with the buildings thereon located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, identified as Parcel B and as depicted on a plan entitled "Plan of Subdivision Plat 52 Hanover Street Portland, Maine" dated November 29, 2017 by Titcomb Associates, revised through July 24, 2018, approved by the City of Portland Planning Board on March 22, 2018, and recorded in Cumberland County Registry of Deeds in Plan Book 218, Page 342 (the "Plan"), such lot or parcel of land being more particularly bounded and described as follows:

Beginning at an iron pin set (capped 5/8" iron) at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street, said point of beginning also being the southwesterly corner of land designated as "Parcel A" as delineated on the Plan. Thence:

1) N 72°42'45" E by said discontinued Lancaster Street and said Parcel A a distance of Two Hundred 72/100 (200.72) feet to an aluminum disk set on the southwesterly sideline of Hanover Street;

2) S 23°56'25" E by said Hanover Street a distance of Two Hundred Ninety-Seven and 02/100 (297.02) feet to an iron pin set (capped 5/8" iron) at the northerly corner of land designated as "Parcel C" as delineated on said Plan;

3) S 65°26'46" W by said Parcel C a distance of One Hundred Eighty-Six and 21/100 (186.21) feet to an aluminum disk set on the northeasterly side line of said Parris Street;

4) N 26°16'45" W by said Parris Street a distance of Three Hundred Twenty-Two and 54/100 (322.54) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.

The above described parcel contains 59,625 square feet.

This conveyance is subject to any and all easements or appurtenances of record, insofar as the same are in force and applicable to the Premises.

Reserving to the Grantor, its successors and assigns, for the benefit of the public, an approximately 5-foot-wide public pedestrian access easement (the "Public Pedestrian Easement") over a portion of a certain lot or parcel of land, located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a capped 5/8" iron pin set at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street, said point of beginning also being the southwesterly corner of land designated as "Parcel A" on the Plan. Thence:

1) N 72°42'45" E by said discontinued portion of Lancaster Street and said Parcel A a distance of Two Hundred and 72/100 (200.72) feet to an aluminum disk set on the southwesterly sideline of Hanover Street and the southeasterly corner of said Parcel A;

2) S 23°56'25" E by said Hanover Street a distance of Five and 03/100 (5.03) feet to a point;

3) S 72°42'45" W through land designated as "Parcel B" as delineated on said Plan a distance of Two Hundred and 51/100 (200.51) feet to a point on the northeasterly sideline of said Parris Street;

4) N 26°16'45" W by said Parris Street a distance of Five and 06/100 (5.06) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, West Zone, NAD83.

The above described parcel (the "Public Pedestrian Easement Area") contains 1,003 square feet lying over a portion of "Parcel B" as delineated on the Plan. By acceptance of this deed, Grantee acknowledges and agrees that the purpose of the Public Pedestrian Easement is to grant public pedestrian access on and over the Public Pedestrian Easement Area, which Grantee shall maintain as an ADA compliant area for pedestrian, bicycle, and similar non-motorized pedestrian uses. The Public Pedestrian Easement Area shall be subject to such rules or ordinances that the City of Portland may adopt from time to time in the interests of public safety, which are generally applicable to similar pedestrian easements, provided that Grantee does not waive any rights, and expressly reserves the right, to argue that any such future rules or ordinances do not apply to it on the basis that the existing conditions of the Public Pedestrian Easement Area are grandfathered and/or that such rules or ordinances cannot be retroactively applied. Notwithstanding the foregoing, wheelchair and emergency vehicles as well as snow removal equipment shall be permitted in accordance with applicable federal and/or state laws regulating accessibility for such devices, vehicles or equipment. Maintenance and repair responsibilities within the Public Pedestrian Easement Area shall belong solely to the Grantee, its successors and

assigns. Grantee shall be responsible for removal of snow and ice from the Public Pedestrian Easement Area and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice. Grantor shall have the right, but not the obligation, to repair or maintain the Public Pedestrian Easement Area, including, as reasonably necessary, any subsurface repairs or maintenance, or removal of snow or ice therefrom, when Grantor, in its sole discretion, deems such repairs, maintenance, or snow or ice removal necessary to ensure public safety and protect the public use and enjoyment of the Public Pedestrian Easement Area. No buildings or any kind of permanent structure will be erected in the Public Pedestrian Easement Area, and Grantee shall not use or authorize any use, condition or state of disrepair that would be contrary to or otherwise inhibit the public pedestrian uses of the Public Pedestrian Easement Area.

EXHIBIT B

Declaration of Covenants

1. Payment In Lieu Of Property Taxes. Grantee covenants and agrees that in the event that the Premises or any portion thereof shall become exempt from real or personal property taxes, by transfer, conversion, or otherwise, during the City's fiscal year that begins following the date of the deed to which this Declaration is attached, or in the fiscal years thereafter, then the then-owner of the exempt portion shall make annual payments to the City in lieu of taxes in the amount of the lesser of (a) the amount of property taxes that would have been assessed on the exempt portion of the real and personal property situated on the Premises had such property remained taxable, or (b) such other target percentage as may be approved as part of a City payment in lieu of taxes ("PILOT") policy that may be in effect at the time taxes are due on such property. Grantee shall possess and be vested with all rights and privileges as to abatement and appeal of valuations, rates, and the like as are accorded owners of real and personal property in Maine.

2. Environmental Indemnification. Grantee covenants and agrees to indemnify, defend, and hold the City harmless from and against any and all claims, damages, losses, liabilities, obligations, settlement payments, penalties, assessments, citations, directives, claims, litigation, demands, defenses, judgments, costs, or expenses of any kind, including, without limitation, reasonable attorneys', consultants', and experts' fees incurred in investigating, defending, settling, or prosecuting any claim, litigation or proceeding, that may at any time be imposed upon, incurred by or asserted or awarded against Grantee or Grantor and relating directly or indirectly to the violation of or compliance with any federal, state, or local environmental laws, rules, or regulations governing the release, handling or storage of hazardous wastes or hazardous materials and affecting all or any portion of the Premises, except to the extent that such a claim results directly from the Grantor's release, handling or storage of hazardous wastes or hazardous materials on the Premises.

3. The covenants and agreements set forth herein may be amended or modified in whole or in part only by written agreement of Grantee and Grantor.

4. The Covenants set forth herein are intended to be and shall be considered covenants that run with the Premises and shall bind all subsequent owners of the Premises.

5. Except as specifically set forth herein, the Covenants set forth herein shall survive a sale, transfer, foreclosure or transfer of title in lieu of foreclosure, or other disposition of the Premises.

6. The Covenants set forth herein are enforceable by Grantor as a contract and shall inure to the benefit of and be enforceable by Grantor, its successors, and assigns.

7. The validity of any clause, part or provision of the covenants, restrictions herein shall not affect the validity of the remaining portions of thereof.

Received
Recorded Register of Deeds
Dec 14,2018 01:14:27P
Cumberland County
Nancy A. Lane

SECTION 5

PUBLIC OR PRIVATE RIGHTS-OF-WAY

The described property located at 52 Hanover Street includes the following public easements:

1) The former location of Lancaster Street is subject to a utility easement retained by the City as set forth in a certificate of discontinuance dated July 20, 2018.

2) The 52 Hanover Street property shares a 10-wide public pedestrian and bicycle easement retained by the City of Portland with the adjacent 82 Hanover Street property. The public easement extends from Parris Street to Hanover Street roughly along the former centerline of the discontinued portion of Lancaster Street.

3) The portion of the property described in Book 23202, page 38 is subject to use restrictions as set forth in Book 16707 page 206 and modified in Book 29610 page 223.

ACORN ENGINEERING, INC.

Maine Department of Environmental Protection
City of Portland, Maine

October 5, 2020

Subject: Delegated Review: Stormwater Management Permit
52 Hanover Street Redevelopment – Portland, Maine

To Whom It May Concern:

Acorn Engineering has been retained by Tom Watson & Co., LLC to provide civil engineering and permitting services for the proposed redevelopment of the former Public Works (PW) facility on Hanover Street in Portland. The Applicant now seeks to redevelop the 1.37-acre site into 171 residential units with four ground level retailers and two levels of covered/structured parking. On behalf of our client, we are pleased to submit a Stormwater Management Permit application for this beneficial redevelopment subject to Delegated Review by the City of Portland. Concurrently, the project is anticipated to undergo a Level III Site Plan/Subdivision review subject to approval from the Portland Planning Board.

The proposed project includes demolition of the existing structure and redevelopment of the site with a 6-8-story building consisting of 171 residential units, two levels of covered parking, ground level retail lots, and an active courtyard area contiguous with the existing 82 Hanover courtyard and 10'-wide midblock public pedestrian/bicycle easement. The existing site is entirely impervious with approximately two thirds of the area comprised of pavement whereas the proposed redevelopment includes reducing the overall impervious to area to 1.30 acres, with non-roof impervious area decreasing from 0.93 acres to 0.22 acres. In addition to net reduction in runoff and pollutant loading, there are proposed stormwater upgrades to the existing infrastructure that will improve the current state of the site, including routing all stormwater to the separated storm drain in Parris Street. Presently, nearly all runoff drains to the combined sewer mains. Lastly, it should be noted that the calculations set within this application are conservative in that a portion of the roof may include "green" roofs as an amenity, which the pollutant ranking map did not consider.

After completing the calculations under the Redevelopment Standards within Chapter 500, the Ranked Impact Change from Table 3 is less than zero due to the reduction in impervious area and land use intensity and thus the project is not required to provide water quality treatment measures. Accordingly, this application focuses on outlining the Redevelopment Standards. We look forward to your review of this project. If you have any questions regarding these materials or the completeness of the application materials, please do not hesitate to contact us.

Sincerely,

Samuel J. Lebel, E.I.
Project Engineer
Acorn Engineering, Inc.

William H. Savage, P.E.
Principal
Acorn Engineering, Inc.

ACORN ENGINEERING, INC.

The following documents and drawings are included as part of this application.

Documents:

1. Stormwater Management Law Permit Application
2. Fee Worksheet
3. Professional and Notice Certification
4. Notice of Intent to File
5. Certificate of Good Standing
6. Title, Right, or Interest
7. Photos of the Project Site
8. Basic Standards Submissions (Erosion & Sedimentation Control Report)
9. General Standards Submissions (Stormwater Management Report)

Drawings:

Civil Site Plan Set, Dated 09/25/20

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RESOURCES

FOR DEP USE
L-_____
ATS# _____
FEES PAID _____
DATE RECEIVED _____

Stormwater Application Form

PLEASE TYPE OR PRINT IN INK

This application is for (Check the one that applies):	☒ New application ☐ Amendment		
1. Name of Applicant:	Tom Watson & Co., LLC	**5. Name of Agent:**	Will Savage
2. Applicant's Mailing Address:	82 Hanover St, Portland, ME 04101	**6. Agent's Mailing Address:**	65 Hanover St., Portland, ME 04101
3. Applicant's Phone #:	207-699-2219	**7. Agent's Phone #:**	207-775-2655
4. Email address (REQUIRED-license will be sent via email:	tom@portpropmgt.com	**8.E-mail address (REQUIRED-license will be sent via email**	wsavage@acorn-engineering.com
9. Location of Project: (Road, Street, Rt.#)	52 Hanover St	**10. Town:**	Portland
		11. County:	Cumberland
12. Type of Direct Watershed: (Check all that apply)	☐ Lake not most at risk ☐ Lake most at risk ☐ Lake most at risk, severely blooming ☐ River, stream or brook ☐ Urban impaired stream ☐ Freshwater wetland ☐ Coastal wetland ☐ Wellhead of public water supply	**13. Amount of Disturbed Area:**	Total Amt.= 1.37 acres
		14. Amount of Developed Area:	☒ 1 or more acres, but less than 5 acres ☐ 5 acres or more Total Amt.= 1.37 acres
		15. Amount of Impervious Area:	☐ less than 20,000 sq. ft. ☐ 20,000 sq. ft. to 1 acre ☒ 1 to 3 acres ☐ 3 or more acres Total Amount of Impervious Acres =
16. Applicable Standards: (Check all that apply)	☐ Stormwater PBR ☒ Basic standards ☒ General standards: BMP ☐ General standards: phosphorus ☐ Flooding standard ☐ Urban impaired stream standards ☐ Other:_____	**17. Type of Stormwater Control:**	☐ Vegetative (e.g. buffers) ☐ Structural (e.g. underdrained filters, ponds, infiltration structures)

18. Exceptions &/or Waivers Requested:	**BMP Standards▼**	**Urban impaired stream standard▼**	**Flooding Standard▼**
	☐ Pretreatment measures ☐ Discharge to ocean/major river segment ☐ Linear portion of project ☐ Utility corridor ☒ Redevelopment	☐ Developed area not landscaped or impervious ☐ Redevelopment	☐ Discharge to ocean/major river segment ☐ Insignificant increase in peak flow

19. Proposed Start Date and Brief Project Description:	The proposed project includes the redevelopment of the existing Portland Public Works garage into a 8-story mixed use building. With 171 proposed residential units and 7,600 SF of retail units (4 units).				
20. Size of Lot or Parcel:	☐ ____ sq. ft., or	☒ 1.37 acres	**UTM Easting:** 2926909.91	**UTM Northing:** 301094.94	
21. Title, Right or Interest:	☒ own	☐ lease	☐ purchase option	☐ written agreement	
22. Deed Reference Numbers:	Book#: 35353	Page: 234	**24. Map and Lot Numbers:**	Map #: 33	Lot #:8B
23. DEP Staff Previously Contacted:		**25. Project started prior to application?**	☐ Yes ☒ No	**Completed?**	☐ Yes ☐ No

SIGNATURES / CERTIFICATIONS ON PAGE 2

26. Resubmission of Application?	☐ Yes➔ ☒ No	**If yes, previous application #**		**Previous project manager:**	
27. Written Notice of Violation?	☐ Yes➔ ☒ No	**If yes, name of DEP enforcement staff involved:**			
28. Detailed Directions to the Project Site:		From I-295N, take exit 7 toward Franklin St; turn right onto Marginal Way; turn left onto Hanover St.			

29. Stormwater Permit by Rule Submissions▼	**30. Stormwater Application Submissions▼**	
☐ *This form (including signature page)*	☒ This form (including signature page)	☐ Professional & Notice Certification
☐ *Fee*	☒ Fee	☒ Basic standards submissions
☐ *Topographic Map*	☒ Proof of title, right or interest	☒ General standards submissions
☐ *Plan or Drawing*	☒ Certificate of good standing (if applicable)	☐ Flooding standard submissions
☐ *Photos of Area*	☒ Photos of Area	☐ Other standard submissions
	☐ Copy of Public Notice	☐ Compensation Fee (if required)

31. FEES, Amount Enclosed:	DELEGATED REVIEW - FEE THROUGH CSS PORTAL
Does the agent have an interest in the project? If yes, what is the interest?: ☐ *Yes➔* ☒ *No*	

IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following:

CERTIFICATIONS/ SIGNATURES

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

Further, I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by

E-mailing the decision to the electronic address located on the front page of this application (see #4 for the applicant and #9 for the agent."

Signed:_____ **Title** Principal **Date:** 10.7.2020

Notice of Intent to Comply with Maine Construction General Permit	**With this Stormwater Law application form and my signature below, I am filing notice of my intent to carry out work which meets the requirements of the Maine Construction General Permit (MCGP). I have read and will comply with all of the MCGP standards.** **Signed**_____ **Date:** 10.7.2020

NOTE: If a Notice of Intent is required, you must file a Notice of Termination (attached as Form G) within 20 days of completing permanent stabilization of the project site.

ADDITIONAL SIGNATURES/CERTIFICATIONS

The person responsible for preparing this application and/or attaching pertinent site and design information hereto, by signing below, certifies that the application for stormwater approval is complete and accurate to the best of his/her knowledge.

Signature: _____

Name (print): William Savage, PE

Date: 10.7.2020

Re/Cert/Lic No: 11419

Engineer X

Geologist _____

Soil Scientist _____

Land Surveyor _____

Site Evaluator _____

Active Member of the Maine Bar _____

Professional Landscape Architect _____

FORM D 5/2017

Fee Worksheet

Use this form to help determine the permit fee. The fee is based upon the amount of disturbed area associated with the project. THE EXAMPLE BELOW IS NOT BASED ON CURRENT FEES. To determine current stormwater licensing fees, please visit the Department's website at: http://www.maine.gov/dep/permits/

NOTE: Ditches, swales, ditch turn-outs, level spreaders, and similar Best Management Practices (BMPs) used solely to convey or discharge water to a vegetated buffer are not considered, by themselves, to constitute structural BMPs, provided that the applicant assumes that all water quality treatment takes place in the buffer. If any treatment is assumed within the BMPs used to convey water to the buffer, they are treated as structural BMPs for the purposes of determining the applicable fee (and review period). "Disturbed area" and "impervious area" are defined in Chapter 500, Section 2(F) and (L).

Example (a): If solely vegetative control measures are used (e.g. buffers), using an example fee of $250.00* for up to one acre of disturbed area, plus $125.00† for each additional whole acre of disturbed area, the total fee is calculated as shown below.

Project will create 2.34 acres of disturbed area.

Fee = $250.00+ [$125.00 x (1)] = $375.00

Your fee:

Current fee from fee schedule plus		[1/2 current fee times # additional whole acres]		equals application fee
$_____	+	[$_____ X (____)]	=	$_____

Example (b): If any structural control measures are used (e.g. underdrained filters, ponds, infiltration systems), using an example fee of $500.00 for up to one acre of disturbed area, plus $250.00 for each additional whole acre of disturbed area, the total fee is calculated as shown below.

Project will create 2.34 acres of disturbed area.

Fee = $500.00 + [$250.00 x (1)]. Fee = $750.00.

Your fee:

Current fee from fee schedule	plus	[1/2 current fee times # additional whole acres]		equals application fee
$_____	+	[$_____ X (____)]	=	$_____

* The total fee for the first acre of disturbed area is obtained by combining the processing and licensing fees contained in the current fee schedule.

† The fee for each additional whole acre of disturbed area is one-half the combined processing and licensing fee.

Public Notice Filing and Certification

The DEP Rules, Chapter 2, require an applicant to provide public notice for all Stormwater Law projects with the exception of minor revisions and condition compliance applications. In the notice, the applicant must describe the proposed activity and where it is located. **"Abutter"** for the purposes of the notice provision means any person who owns property that is BOTH (1) adjoining and (2) within one mile of the delineated project boundary, including owners of property directly across a public or private right of way.

1. **Newspaper:** You must publish the Notice of Intent to File in a newspaper circulated in the area where the activity is located. The notice must appear in the newspaper within 30 days prior to the filing of the application with the Department. You may use the attached Notice of Intent to File form, or one containing identical information, for newspaper publication and certified mailing.

2. **Abutting Property Owners:** You must send a copy of the Notice of Intent to File by certified mail to the owners of the property abutting the activity. Their names and addresses can be obtained from the town tax maps or local officials. They must receive notice within 30 days prior to the filing of the application with the Department.

3. **Municipal Office:** You must send a copy of the Notice of Intent to File and a **duplicate of the entire application** to the Municipal Office.

   ATTACH a list of then names and addresses of the owners of abutting property.

CERTIFICATION

By signing below, the applicant or authorized agent certifies that:

1. A notice of Intent to File was published in a newspaper circulated in the area where the project site is located within 30 days prior to filing the application;
2. A certified mailing of the Notice of Intent to File was sent to all abutters within 30 days of the filing of the application.
3. A certified mailing of the Notice of Intent to File, and a duplicate copy of the application was sent to the town office of the municipality in which the project is located; and
4. Provided notice of, if required, and held a public informational meeting in accordance with Chapter 2. Rules Concerning the Processing of Applications, Section 14, prior to filing the application. Notice of the meeting was sent by certified mail to abutters and to the town office of the municipality in which the project is located at least ten days prior to the meeting. Notice of the meeting was also published once in a newspaper circulated in the area where the project site is located at least seven days prior to the meeting.

The Public Informational Meeting was held on NA.
Date

Approximately - members of the public attended the Public Informational Meeting.

_____ _____
Signature of Applicant or authorized agent Date

FORM B 05/06

Public Notice: Notice of Intent to File

Please take notice that

Tom Watson & Co., LLC 82 Hanover St, Portland ME, 04101

(Name, Address and Phone # of Applicant)

phone: 207-699-2219

is intending to file a Stormwater Law permit application with the Maine Department of Environmental Protection pursuant to the provisions of 38 M.R.S.A. § 420-D on or about

October 9, 2020

(anticipated filing date)

This application is for

The proposed redevelopment of an existing public works garage to a 8-story mixed use residential/commercial building.

(description of the project)

52 Hanover St, Portland, ME 04101 (Former Public Works garage)

(project location)

A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the Commissioner or Board of Environmental Protection. Public comment on the application will be accepted throughout the processing of the application.

The application will be filed for public inspection at the Department of Environmental Protection's office in *Portland, Augusta or Bangor)* (circle one) during normal working hours. A copy of the application may also be seen at the municipal

offices in Portland, Maine.
(town)

Written public comments may be sent to the regional office in Portland, Augusta, or Bangor where the application is filed for public inspection.

MDEP, Central Maine Regional Office, 17 State House Station, Augusta, Maine 04333
MDEP, Southern Maine Regional Office, 312 Canco Road, Portland, Maine 04103
MDEP, Eastern Maine Regional Office, 106 Hogan Road, Bangor, Maine 04401

5. Certificate of Good Standing

Please see the attached Certificate of Good Standing from the Department of the Secretary of State for Tom Watson & Co., LLC.

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Tue Sep 29 2020 09:51:18. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
TOM WATSON & CO., LLC	20062993DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
04/11/2006	N/A	MAINE

Other Names **(A=Assumed ; F=Former)**

NONE

Clerk/Registered Agent

WILLIAM H LEETE
MITTEL ASEN, LLC
85 EXCHANGE STREET
PORTLAND, ME 04101

Back to previous screen | New Search

Click on a link to obtain additional information.

List of Filings	View list of filings	
Obtain additional information:		
Additional Addresses	Plain Copy	Certified copy
Certificate of Existence (more info)	Short Form without amendments ($30.00)	Long Form with amendments ($30.00)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files.
If you encounter problems, visit the troubleshooting page.

Get Acrobat Reader

If you encounter technical difficulties while using these services, please contact the Webmaster. If you are unable to find the information you need through the resources provided on this web site,

please contact the Bureau's Reporting and Information Section at 207-624-7752 or e-mail or visit our Feedback page.

© Department of the Secretary of State

6. Title, Right or Interest

Please see attached for purchase agreements.

MAINE REAL ESTATE TAX PAID

QUITCLAIM DEED WITHOUT COVENANT

CITY OF PORTLAND, a body corporate and politic and Maine municipal corporation having a mailing address of 389 Congress Street, Portland, Maine 04101 ("Grantor"), FOR CONSIDERATION PAID, releases to **52 HANOVER, LLC**, a Maine limited liability company having a mailing address of 104 Grant Street, Portland, Maine 04101 ("Grantee"), certain real property, together with any improvements thereon, located on Hanover Street and Parris Street, in the City of Portland, County of Cumberland and State of Maine (the "Premises"), more particularly described on Exhibit A attached hereto and made part hereof.

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IN WITNESS WHEREOF, Grantor has caused this instrument to be executed on its behalf by Jon P. Jennings, its City Manager, duly authorized, on this 12 day of December, 2018.

WITNESS:

Sonia Bean

CITY OF PORTLAND

Jon P. Jennings
Its City Manager

STATE OF MAINE
COUNTY OF CUMBERLAND

December 12, 2018

Personally appeared the above-named Jon P. Jennings, City Manager of the City of Portland, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity, and the free act and deed of said City of Portland.

Before me,

Sonia T. Bean
~~Attorney-at-Law~~/Notary Public
Commission Expires:
Print Name:

SONIA T. BEAN
NOTARY PUBLIC
State of Maine
My Commission Expires
April 8, 2024

Exhibit A

Hanover Street and Parris Street

A certain lot or parcel of land together with the buildings thereon located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, identified as Parcel B and as depicted on a plan entitled "Plan of Subdivision Plat 52 Hanover Street Portland, Maine" dated November 29, 2017 by Titcomb Associates, revised through July 24, 2018, approved by the City of Portland Planning Board on March 22, 2018, and recorded in Cumberland County Registry of Deeds in Plan Book 218, Page 342 (the "Plan"), such lot or parcel of land being more particularly bounded and described as follows:

Beginning at an iron pin set (capped 5/8" iron) at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street, said point of beginning also being the southwesterly corner of land designated as "Parcel A" as delineated on the Plan. Thence:

1) N 72°42'45" E by said discontinued Lancaster Street and said Parcel A a distance of Two Hundred 72/100 (200.72) feet to an aluminum disk set on the southwesterly sideline of Hanover Street;

2) S 23°56'25" E by said Hanover Street a distance of Two Hundred Ninety-Seven and 02/100 (297.02) feet to an iron pin set (capped 5/8" iron) at the northerly corner of land designated as "Parcel C" as delineated on said Plan;

3) S 65°26'46" W by said Parcel C a distance of One Hundred Eighty-Six and 21/100 (186.21) feet to an aluminum disk set on the northeasterly side line of said Parris Street;

4) N 26°16'45" W by said Parris Street a distance of Three Hundred Twenty-Two and 54/100 (322.54) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.

The above described parcel contains 59,625 square feet.

This conveyance is subject to any and all easements or appurtenances of record, insofar as the same are in force and applicable to the Premises.

Reserving to the Grantor, its successors and assigns, for the benefit of the public, an approximately 5-foot-wide public pedestrian access easement (the "Public Pedestrian Easement") over a portion of a certain lot or parcel of land, located on the northeasterly side of Parris Street and the southwesterly side of Hanover Street in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a capped 5/8" iron pin set at the intersection of the northeasterly sideline of Parris Street and the southerly sideline of a discontinued portion of Lancaster Street, said point of beginning also being the southwesterly corner of land designated as "Parcel A" on the Plan. Thence:

1) N 72°42'45" E by said discontinued portion of Lancaster Street and said Parcel A a distance of Two Hundred and 72/100 (200.72) feet to an aluminum disk set on the southwesterly sideline of Hanover Street and the southeasterly corner of said Parcel A;

2) S 23°56'25" E by said Hanover Street a distance of Five and 03/100 (5.03) feet to a point;

3) S 72°42'45" W through land designated as "Parcel B" as delineated on said Plan a distance of Two Hundred and 51/100 (200.51) feet to a point on the northeasterly sideline of said Parris Street;

4) N 26°16'45" W by said Parris Street a distance of Five and 06/100 (5.06) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, West Zone, NAD83.

The above described parcel (the "Public Pedestrian Easement Area") contains 1,003 square feet lying over a portion of "Parcel B" as delineated on the Plan. By acceptance of this deed, Grantee acknowledges and agrees that the purpose of the Public Pedestrian Easement is to grant public pedestrian access on and over the Public Pedestrian Easement Area, which Grantee shall maintain as an ADA compliant area for pedestrian, bicycle, and similar non-motorized pedestrian uses. The Public Pedestrian Easement Area shall be subject to such rules or ordinances that the City of Portland may adopt from time to time in the interests of public safety, which are generally applicable to similar pedestrian easements, provided that Grantee does not waive any rights, and expressly reserves the right, to argue that any such future rules or ordinances do not apply to it on the basis that the existing conditions of the Public Pedestrian Easement Area are grandfathered and/or that such rules or ordinances cannot be retroactively applied. Notwithstanding the foregoing, wheelchair and emergency vehicles as well as snow removal equipment shall be permitted in accordance with applicable federal and/or state laws regulating accessibility for such devices, vehicles or equipment. Maintenance and repair responsibilities within the Public Pedestrian Easement Area shall belong solely to the Grantee, its successors and

assigns. Grantee shall be responsible for removal of snow and ice from the Public Pedestrian Easement Area and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice. Grantor shall have the right, but not the obligation, to repair or maintain the Public Pedestrian Easement Area, including, as reasonably necessary, any subsurface repairs or maintenance, or removal of snow or ice therefrom, when Grantor, in its sole discretion, deems such repairs, maintenance, or snow or ice removal necessary to ensure public safety and protect the public use and enjoyment of the Public Pedestrian Easement Area. No buildings or any kind of permanent structure will be erected in the Public Pedestrian Easement Area, and Grantee shall not use or authorize any use, condition or state of disrepair that would be contrary to or otherwise inhibit the public pedestrian uses of the Public Pedestrian Easement Area.

EXHIBIT B

Declaration of Covenants

1. Payment In Lieu Of Property Taxes. Grantee covenants and agrees that in the event that the Premises or any portion thereof shall become exempt from real or personal property taxes, by transfer, conversion, or otherwise, during the City's fiscal year that begins following the date of the deed to which this Declaration is attached, or in the fiscal years thereafter, then the then-owner of the exempt portion shall make annual payments to the City in lieu of taxes in the amount of the lesser of (a) the amount of property taxes that would have been assessed on the exempt portion of the real and personal property situated on the Premises had such property remained taxable, or (b) such other target percentage as may be approved as part of a City payment in lieu of taxes ("PILOT") policy that may be in effect at the time taxes are due on such property. Grantee shall possess and be vested with all rights and privileges as to abatement and appeal of valuations, rates, and the like as are accorded owners of real and personal property in Maine.

2. Environmental Indemnification. Grantee covenants and agrees to indemnify, defend, and hold the City harmless from and against any and all claims, damages, losses, liabilities, obligations, settlement payments, penalties, assessments, citations, directives, claims, litigation, demands, defenses, judgments, costs, or expenses of any kind, including, without limitation, reasonable attorneys', consultants', and experts' fees incurred in investigating, defending, settling, or prosecuting any claim, litigation or proceeding, that may at any time be imposed upon, incurred by or asserted or awarded against Grantee or Grantor and relating directly or indirectly to the violation of or compliance with any federal, state, or local environmental laws, rules, or regulations governing the release, handling or storage of hazardous wastes or hazardous materials and affecting all or any portion of the Premises, except to the extent that such a claim results directly from the Grantor's release, handling or storage of hazardous wastes or hazardous materials on the Premises.

3. The covenants and agreements set forth herein may be amended or modified in whole or in part only by written agreement of Grantee and Grantor.

4. The Covenants set forth herein are intended to be and shall be considered covenants that run with the Premises and shall bind all subsequent owners of the Premises.

5. Except as specifically set forth herein, the Covenants set forth herein shall survive a sale, transfer, foreclosure or transfer of title in lieu of foreclosure, or other disposition of the Premises.

6. The Covenants set forth herein are enforceable by Grantor as a contract and shall inure to the benefit of and be enforceable by Grantor, its successors, and assigns.

7. The validity of any clause, part or provision of the covenants, restrictions herein shall not affect the validity of the remaining portions of thereof.

Received
Recorded Register of Deeds
Dec 14,2018 01:14:27P
Cumberland County
Nancy A. Lane

7. Photos of the Project Site

Figure 1. *Facing approx. south on Hanover St.*

Figure 2. *Facing approx. north on Hanover St.*

Figure 3. *Facing approx. west while located near north edge of the site.*

Figure 4. *Facing Parris St. while standing along the west edge of the site.*

Figure 5. *Facing approx. south while located near south corner of site.*

Figure 6. *Facing approx. southeast while located near south corner of site.*

Figure 7. *Facing approx. east while located along southern edge of existing building.*

Figure 8. *Facing approx. southwest while located along southern edge of site.*

Figure 9. *Facing embankment while located along southern edge of site (embankment pictured is located on southern abutter's property).*

Figure 10. *Facing embankment while located along southern edge of site (left portion of embankment pictured is located on site).*

8. Basic Standards Submissions

Please see the attached document, Erosion and Sedimentation Control Plan, developed in accordance with the Basic Standards submission requirements.

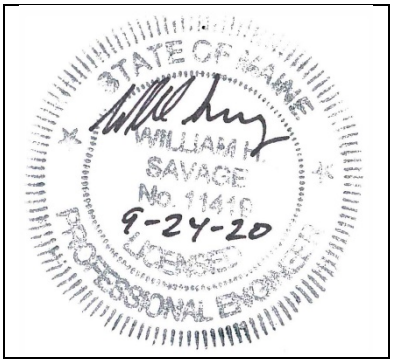
K. EROSION & SEDIMENTATION CONTROL REPORT

Prepared For:

Tom Watson & Co., LLC
82 Hanover Street
Portland, Maine 04101

Prepared By:

Acorn Engineering, Inc.
65 Hanover Street
Portland, Maine 04101



September 2020

INTRODUCTION

Acorn Engineering, Inc. has been retained by Tom Watson & Co., LLC to provide civil engineering services for the proposed mixed-use residential and retail building at 52 Hanover Street. The proposed project includes demolition of the existing structure and redevelopment of the site with a six-story building consisting of residential units, a two-level parking structure, and ground level retail lots.

The following Erosion and Sedimentation Control Report was developed in accordance with the City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards and the Maine DEP Chapter 500 Stormwater Management Appendix A and B (1), Amended August 12, 2015. This narrative also meets the standards required in the Maine DEP's Erosion & Sediment Control BMP's Manual, revised in 2016.

1.0 EXISTING CONDITIONS

The proposed project site bordered by Hanover and Parris Street. A boundary plan has been prepared by Titcomb Associates of Falmouth, Maine Dated January 25, 2018, revised August 14, 2018.

The property is in the B-2b Community Business Zone. Abutting Uses include:

- North Commercial Space
- West Residential & Business
- South Office Space
- East Residential & Office

A large portion of the site is occupied by the existing structure. The rest of the site contains parking for the existing structure on all sides. The site is currently graded so the driveways slope away from the building and towards the abutting streets. The grades range from approximately 5 to 10% near the building. On the southeast corner of the lot there is an embankment reinforced with stone blocks that separates the lot from the south abutter.

1.1 Existing Soils

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County
- United States Department of Agriculture Web Soil Survey

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation because the waiver requirements set forth in the City of Portland Technical Manual – Section 7 – Soil Survey, Rev. 6/17/11 are met.

The area within and surrounding the project includes soil types listed in the table below. The susceptibility of soils to erosion is indicated on a relative "K" scale of values over a range of 0.02 to 0.69. Higher "K" values indicate more erodible soils.

Table 1 - "K" Value		
Soils Type	**Subsurface**	**Substratum**
Au Gres Loamy Sand	.15	.15
Deerfield Loamy Fine Sand	0.20	0.20

The soil "K" value for the soil, listed above, shows a low susceptibility to erosion. The site's susceptibility to erosion is from the Soil Conservation Service Medium Intensity Soil Survey for Cumberland County. Although the soil "K" value shows a low susceptibility to erosion, implementation of the proposed Erosion & Sedimentation Measures by the contractor will be of the utmost importance given the sustained slope throughout the site.

1.2 Existing Erosion Problems

There are no signs of erosion.

1.3 Critical Areas

There are no critical areas that require special attention during construction.

1.4 Protected Natural Resource

The client is not aware of the presence of any existing significant natural features located on the site as listed in Section 14-526 (b) 1. of the Land Use Code. The project is not located within a watershed classified as an Urban Impaired Stream by the Maine DEP.

1.5 Previous Construction Activity (5 years)

Acorn Engineering, Inc. is not aware of any construction related activities within the project limits within the past 5 years.

1.6 Timber Harvesting

Acorn Engineering, Inc. is not aware of any timber harvesting within the past five years.

2.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

As part of the site development, the following temporary and permanent erosion and sedimentation control devices shall be implemented. Devices shall be installed as described in this report or within the plan set. See the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices for further reference.

2.1 Temporary Erosion Control Measures

The following temporary erosion and sedimentation control measures are planned for the project's construction period:

2.1.1 Crushed stone stabilized construction entrances shall be placed at all access points to the project site where there are disturbed areas. The following specifications shall be followed at a minimum:

- Stone size shall be 2-3 inches, or reclaimed or recycled concrete equivalent.
- The thickness of the entrance stone layer shall be no less than 6 inches.
- The entrance shall not be less than 20 feet wide, however not less than the full width of points where ingress or egress occurs. The length shall not be less than 50 feet in length.
- Geotextile fabric (woven or non-woven) shall be placed over the entire entrance area.
- The entrance/exit shall be maintained to the extent that it will prevent the tracking of sediment onto public road ways.

2.1.2 Siltation fence or erosion control berm shall be installed down gradient of any disturbed areas to trap runoff borne sediments until permanent stabilization is achieved. The silt fence or erosion control berm shall be installed per the details provided in the plan set and inspected before and immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made if there are any signs of erosion or sedimentation below the fence line or berm. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence or berm, the barrier shall be replaced with a stone check dam.

2.1.3 Hay mulch including hydro seeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed between April 15th and November 1st on slopes of less than 15 percent shall be covered by fabric netting and anchored with staples in accordance with the manufacturer's recommendation. Mulch placed between November 1st and April 15th on slopes equal to or steeper than 8 percent and equal to or flatter than 2:1 shall use mats or fabric netting and anchored with staples in accordance with the manufacturer's recommendation.

2.1.4 At any time of the year, all slopes greater than 3:1 shall be stabilized with Double Net Erosion Control Blanket Bionet SC150BN by North American

Green or Approved Equal, or Erosion Control Mix Slope Protection as detailed within the plans.

2.1.5 Parris and Hanover streets shall be swept to control mud and dust from the construction site as necessary. Add additional stone to the stabilized construction entrance to minimize the tracking of material off the site and onto the surrounding roadways.

2.1.6 During demolition, clearing and grubbing operations, stone check dams shall be installed at any areas of concentrated flow. The maximum height of the check dam shall not exceed 2 feet. The center of the check dam shall be 6 inches below the outer edges of the dam. The contractor shall mulch the side slopes and install stone check dams for all newly excavated ditch lines within 24 hours of their creation.

2.1.7 Silt fence stake spacing shall not exceed 6 feet unless the fence is supported with 14-gauge wire in which case the maximum spacing shall not exceed 10 feet. The silt fence shall be "toed" into the ground.

2.1.8 Storm drain inlet protection shall be provided to storm drains using any of the following: hay bale drop inlet structures, silt fence drop inlet sediment filter, gravel and wire mesh drop inlet sediment filter, or curb inlet sediment filter. Barriers shall be inspected after every rainfall event and repaired as necessary. Sediments shall be removed when accumulation has reached ½ the design height.

2.1.9 Dust control shall be accomplished using any of the following: water, calcium chloride, stone, or an approved MDEP product. Dust control shall be applied as needed to accomplish dust control.

2.1.10 Temporary loam, seed, and mulching shall be used in areas where no other erosion control measure is used. Application rates for seeding are provided at the end of this report.

2.1.11 Stockpiles shall be stabilized within 7 days of formation unless a scheduled rain event occurs prior to the 7-day window, in which case the stockpile shall be stabilized prior to the rain event. Methods of stabilization shall be mulch, erosion control mix, or erosion control blankets/mats. Silt fence or a wood waste compost filter berm shall be placed downhill of any soil stockpile location.

2.1.12 For disturbance between November 1 and April 15, please refer to winter stabilization plan in this report and the Maine Erosion and Sediment Control BMP manual for further information.

2.1.13 It is of the utmost importance that stormwater runoff and potential sediment from the construction site be diverted around the proposed underdrains until the trench is backfilled.

2.2 Permanent Erosion Control Measures

The following permanent erosion control measures are intended for post disturbance areas of the project.

2.2.1 All disturbed areas during construction, not subject to other proposed conditions, shall receive a minimum 4" of loam, limed, and mulched. Erosion control blankets or mats shall be placed over the mulch in areas noted in paragraph 4.1 of this report.

2.2.2 All stormwater devices shall be installed and tributary areas stabilized prior receiving stormwater.

2.2.3 Refer to the Maine Erosion and Sediment Control BMP manual for additional information.

3.0 EROSION AND SEDIMENTATION CONTROL PLAN

3.1 The Construction Management & Erosion Control Plan is included within the plan set.

4.0 DETAILS AND SPECIFICATIONS

4.1 Erosion & Sedimentation Control Details and Specifications are included in the plan set.

5.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

Winter Construction consists of earthwork disturbance between the dates of November 1 and April 15. If a construction site is not stabilized with pavement, a road gravel base, 75% mature vegetation cover or riprap by November 15, then the site shall be protected with over-winter stabilization. Any area not stabilized with pavement, vegetation, mulching, erosion control mix, erosion control mats, riprap, or gravel base on a road shall be considered open.

The contractor shall limit the work area to areas that work will occur in during the subsequent 15 days and so that it can be mulched one day prior to a snow event. The contractor shall stabilize work areas prior to opening additional work areas to minimize areas without erosion control measures.

The following measures shall be implemented during winter construction periods:

5.1 Sediment Barriers

During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.

5.2 Mulching

All areas shall be considered to be denuded until seeded and mulched. Hay and straw mulch shall be applied at a rate of 150 lb. per 1,000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 s.f. or 1.5 tons/acre) and shall be properly anchored. Erosion control mix must be applied with a minimum 4-inch thickness. Mulch shall not be spread on top of snow. The snow shall be removed down to a one-inch depth or less prior to application. After each day of final grading, the area shall be properly stabilized with anchored hay or straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched or adequately anchored so that ground surface is not visible through the mulch. Between the dates of November 1 and April 15, all mulch shall be anchored by either mulch netting, tracking or wood cellulose fiber. The cover will be considered sufficient when the ground surface is not visible through the mulch. After November 1st, mulch and anchoring of all exposed soil shall occur at the end of each final grading workday.

5.3 Soil Stockpiling

Stockpiles of soil or subsoil shall be mulched for over winter protection with hay or straw at twice the normal rate or with a four-inch layer of erosion control mix. This shall be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

5.4 Seeding

Between the dates of October 15th and April 1st, loam or seed shall not be required. During periods of above freezing temperatures finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until the final treatment can be applied. If the date is after November 1st and if the exposed area has not been loamed, final grading with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5 lbs./1,000 s.f. All areas seeded during the winter shall be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75% catch) shall be revegetated by replacing loam, seed and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

5.5 Over winter stabilization of disturbed soils

By September 15th, all disturbed soils on areas having a slope less than 15% shall be seeded and mulched. If the disturbed areas are not stabilized by this date, then one of the following actions shall be taken to stabilize the soil for late fall and winter:

- Stabilize the soil with temporary vegetation – By October 1st, seed the disturbed soil with winter rye at a seeding rate of 3lbs per 1,000 s.f., lightly mulch the seeded soil with hay or straw at 75 lbs per 1,000 s.f., and anchor the mulch with plastic netting. Monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1st, then mulch the area for over-winter protection.

- Stabilize the soil with sod – Stabilize the disturbed soil with properly installed sod by October 1st. Proper installation includes 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.

- Stabilize the soil with mulch – By November 15th, mulch the disturbed soil by spreading hay or straw at a rate of at least 150 lbs per 1,000 s.f. on the area so that no soil is visible through the mulch. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

5.6 Over winter stabilization of disturbed slopes

All stone-covered slopes shall be constructed and stabilized by November 15th. All slopes to be vegetated shall be seeded and mulched by September 1st. A slope is considered a grade greater than 15%. If a slope to be vegetated is not stabilized by September 1st, then one of the following action shall be taken to stabilize the slope for late fall and winter:

- Stabilize the soil with temporary vegetation and erosion control mats – By October 1st the disturbed slope shall be seeded with winter rye at a seeding rate of 3 lbs per 1,000 s.f. and then install erosion control mats or anchored mulch over the seeding. If the rye fails to grow at least three inches or fails to cover at least 75% of the slope by November 1st, then the contractor shall cover the slope with a layer of erosion control mix or with stone riprap.

- Stabilize the soil with sod – The disturbed slope shall be stabilized with properly installed sod by October 1st. Proper installation includes the contractor 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 contractor shall not use late-season sod installation to stabilize slopes having a grade greater than 3H:1V or having groundwater seeps on the slope face.

- Stabilize the soil with erosion control mix – Erosion control mix shall be properly installed by November 15th. The contractor shall not use erosion control mix to stabilize slopes having grades greater than 2H:1V or having groundwater seeps on the slope face.

- Stabilize the soil with stone riprap – Place a layer of stone riprap on the slope by November 15th. A registered professional engineer shall be hired to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.

6.0 INSPECTION AND MAINTENANCE

A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct periodic visual inspections of installed erosion control measures. The frequency of inspection shall occur at least once every two weeks, as well as after a "storm event". A "storm event" shall consist 0.5 inches of rain within a 24-hour period. The following Erosion and Sediment Control - Best Management Practices (BMP's) shall inspected in the manner as described.

6.1 Sediment Barriers

Hay bale barriers, silt fences and filter berms shall be inspected and repaired for the following if there are any signs of erosion or sedimentation below them. If there are signs of undercutting at the center or the edges of the barrier, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits should be removed when deposits reach approximately one-half the height of the barrier. Filter berms should 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.

6.2 Stabilized Stone Construction Entrances

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 and redistributed on site in a stable manner. The entrance should then be reconstructed. The contractor shall sweep or wash pavement at exits, which have experienced mud-tracking on to the pavement or traveled way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches, or waterways.

6.3 Mulched Areas

All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied. Nets must be inspected after rain events for dislocation or failure. If washouts or breakage occur, re-install the nets as necessary after repairing damage to the slope. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

6.4 Dust Control

When temporary dust control measures are used, repetitive treatment shall be applied as needed to accomplish control.

6.5 Stormwater Appurtenances

All underdrains, storm drains, and catch basins need to be operating effectively and free of debris.

6.6 Erosion and Sedimentation Control Inspections:

Acorn Engineering has personnel qualified to conduct Erosion and Sedimentation Control Inspections. For further information, contact:

Contact: Will Savage, PE
Telephone: (207) 775-2655

Qualifications:

- Maine Professional Engineering License #11419
- Maine DEP - Certified in Maintenance & Inspection of Stormwater BMP's Cert #14
- Certified Erosion, Sediment and Storm Water Inspector (CESSWI) Cert #0293
- Certified Professional in Erosion and Sediment Control (CPESC) Cert. #4620

The Contractor has sole responsibility for complying with the Erosion and Sedimentation Report/Plan, including control of fugitive dust. The Contractor shall be responsible for any monetary penalties resulting from failure to comply with these standards.

7.0 IMPLEMENTATION SCHEDULE

The following implementation sequence is intended to maximize the effectiveness of the above described erosion control measures. Contractors should avoid overexposing disturbed areas and limit the amount of stabilization area.

1. Install a stabilized construction entrance in all locations where construction traffic will enter and exit the site.
2. Install perimeter silt fence or erosion control berm.
3. Install all other erosion control devices as necessary throughout the remainder of this schedule.
4. Commence installation of drainage infrastructure.
5. Prioritize the downhill side to contain runoff within the site while providing an engineered outlet to the municipal storm drain system within Parris Street.
6. Commence earthwork operations, associated with the parking lot construction.
7. Commence installation of utilities.
8. Continue earthwork and grading to subgrade as necessary for construction.
9. Complete installation of drainage infrastructure, as well as other utility work.
10. Complete remaining earthwork operations.
11. Install sub-base and base gravels in paved areas.
12. Install paving, curbing and brickwork.
13. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.
14. Once the site is stabilized and mulching of landscape areas is complete, remove all temporary erosion control measures.
15. Touch up areas without a vigorous catch of grass with loam and seed.
16. Complete site signage and striping.
17. Execute proper maintenance of all temporary and permanent erosion control measures throughout the project.

The above implementation sequence should be generally followed by the site contractor. However, the contractor may construct several items simultaneously. The contractor shall submit to the owner a schedule of the completion of the work. If the contractor is to commence the construction of more than one item above, they shall limit the amount of exposed areas to those areas in which work is expected to be undertaken during the following 30 days.

The contractor shall re-vegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event. The contractor shall incorporate planned inlets and drainage systems as early as possible into the construction phase.

8.0 CONCLUSION

The above erosion control narrative is intended to minimize the development impact by implementing temporary and permanent erosion control measures. The contractor shall also refer to the Maine Erosion and Sediment Control BMP manual for additional information.

9.0 ATTACHMENTS

- Temporary Seeding Plan

TEMPORARY SEEDING PLAN

Site Preparation

The seeded areas shall be feasibly graded out to provide the use of equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. If necessary, the site may require additional temporary erosion control measures outlined in the Erosion Control report.

Seedbed Preparation

Fertilizer shall be applied to the site at a rate of 13.8 pounds per 1,000 square feet. The composition of the fertilizer shall be 10-10-10 (N-P2O5-K2O) or equivalent.

Limestone shall be applied to the site at a rate of 138 pounds per 1,000 square feet.

Seeding

The composition and amount of temporary seed applied to a site shall be determined by the following table:

Seed	Pounds / 1,000 S.F.	Recommended Seeding Dates
Winter Rye	2.57	Aug-15 to Oct-1
Oats	1.84	Apr-1 to Jul-1 Aug-15 to Sep-15
Annual Ryegrass	0.92	Apr-1 to Jul-1
Sudangrass	0.92	May-15 to Aug-15
Perennial	0.92	Aug-15 to Sep-15

Mulching

Mulch shall be applied at a rate of 70 lbs – 90 lbs per 1,000 square feet. The mulch shall be installed at a minimum depth of 4 inches. The seeded area shall be mulched immediately after seed is applied. Mulching during the winter season shall be double the normal amount.

Conclusion

Please refer to the Maine Erosion and Sediment Control BMP manual for additional information pertaining to temporary seeding and mulching.

9. General Standards Submissions

The following Stormwater Management Report and corresponding attachments have been developed in accordance with the General Standards submission requirements.

Phosphorous export calculations were not performed for the proposed redevelopment as Phosphorous Standards do not apply.

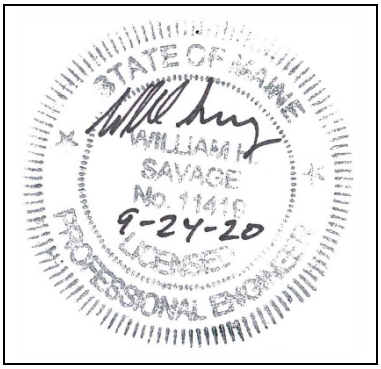
J. STORMWATER MANAGEMENT REPORT

Prepared For:

Tom Watson & Co., LLC
82 Hanover Street
Portland, Maine 04101

Prepared By:

Acorn Engineering, Inc.
65 Hanover Street
Portland, Maine 04101



September 2020

INTRODUCTION

Acorn Engineering, Inc. has been retained by Tom Watson & Co., LLC to provide civil engineering services for the proposed redevelopment of 52 Hanover Street. The proposed project includes demolition of the existing structure and redevelopment of the site with a six-story building consisting of residential units, a two-level parking structure, and ground level retail lots. The property consists of approximately 1.37 acres of land in Portland's Bayside neighborhood. The site is currently comprised of entirely impervious area. The proposed project will decrease the impervious area and improve the overall pollutant ranking. Lastly, the development will seek to redirect all surface water runoff to the separated storm drain system vs the current condition where almost all runoff enters the combined sewer system.

A stormwater analysis was prepared to demonstrate that the project will meet the requirements set forth by Maine DEP Chapter 500 General Standards and the following requirements from the City of Portland (the City):

- City of Portland Land Use Ordinance Chapter 14, Article V. Site Plan Section 14-523. Required Approvals and Applicability (F) Level III Site Plan Review.
- City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards and Maine DEP Chapter 500 Stormwater Management.

EXISTING CONDITIONS

The proposed project site is located at 52 Hanover Street in Portland at the former Public Works vehicle maintenance garage. A boundary plan has been prepared by Titcomb Associates of Falmouth, Maine Dated January 25, 2018, revised August 14, 2018.

The property is in the B-2b Community Business Zone. Abutting Uses include:

- North Commercial Space
- West Residential & Business
- South Office Space
- East Residential & Office

A large portion of the site is occupied by the existing structure. The rest of the site contains parking for the existing structure on all sides. The site is currently graded so the driveways slope away from the building and towards the abutting streets. The grades range from approximately 5 to 10% near the building. On the southeast corner of the lot there is an embankment reinforced with stone blocks that separates the lot from the southerly abutter.

The project team is not aware of the presence of any existing significant natural features located on the site. Given the urban setting and existing impervious surfaces, a field inventory of significant natural features was not undertaken. The project is not located within a watershed classified as an Urban Impaired Stream.

PROPOSED DEVELOPMENT

The proposed development includes demolition of the existing structure and redevelopment of the site with a six-story building. Approximately 171 residential units with various amenities are planned with two levels of structured parking. Additionally, multiple retail units are proposed on the ground level adjacent to the existing 82 Hanover patio and Lancaster Court pedestrian/bicycle easement. Pedestrian access to the site shall be provided off both adjacent streets.

The proposed drainage improvements include collecting runoff using field inlets on the northside of the proposed building. The field inlets would tie into a proposed manhole near the northwest corner of the building and drain to the Parris Street storm main from there. On the south side of the building, it is proposed to use the existing drainage system with a proposed catch basin to connect into the system with 8" piping. On the east side of the lot it is proposed to replace the existing drainage lines with new 8" piping.

The development will be served by the Portland Water District, CMP, Spectrum, Consolidated Communications, Unitil, and municipal sewer and storm systems. Utility mains and services have been coordinated with each respective utility company.

Water quantity has not specifically been analyzed as part of this project as one can assume the peak rates will decrease due to the same watershed area and composition containing less impervious area. Additionally, the entirety of the runoff is anticipated to be redirected from the existing combined sewer to the separated storm drain.

For an analysis on water quality, please refer to the following section.

GENERAL STANDARDS – WATER QUALITY

Given the site's existing impervious area, the redevelopment standards were applied to this project. The existing land uses and pollutant rankings are as follows:

Table 1 – Land Use and Pollutant Summary Table: Existing Conditions			
Land use	**Pollutant Ranking**	**Existing Area**	**Weighted Ave. Ranking**
Roads where idling may occur; high use parking lots	5	0	0
Other roads; medium use parking lots	4	0.929 ac.	2.71
Other parking lots and driveways;	3	0	0

flat roof asphalt rooftops **roofs on an industrial facility**			
Other rooftops; **grassed areas mowed > twice per year;** **walkways / foot-traffic-only pavement**	2	0.440 ac.	0.64
Non-grass landscaped areas; **Stormwater treatment / storage systems**	1	0	0
TOTAL		1.369 ac.	3.35

Furthermore, the proposed land use rankings are as follows:

Table 2 – Land Use and Pollutant Summary Table: Proposed Conditions			
Land use	**Pollutant Ranking**	**Proposed Area**	**Weighted Ave. Ranking**
Roads where idling may occur; **high use parking lots**	5	0.007 ac.	0.03
Other roads; **medium use parking lots**	4	0	0
Other parking lots and driveways; **flat roof asphalt rooftops** **roofs on an industrial facility**	3	0	0
Other rooftops; **grassed areas mowed > twice per year;** **walkways / foot-traffic-only pavement**	2	1.289 ac.	1.88
Non-grass landscaped areas; **Stormwater treatment / storage systems**	1	0.072 ac.	0.05

TOTAL		1.369 ac.	1.96

Corresponding pre- and post-development redevelopment maps can be viewed in Attachments 1 and 2 of this report.

From Tables 1 & 2 above, the resulting pollutant ranking for the proposed redevelopment is -1.39 (Chapter 500, Table 2). The corresponding treatment level for this ranking is 0% (Chapter 500, Table 3). However, given the proposed vegetative plantings and potential green roofs, the site will inherently provide some level of treatment greater than typical runoff from impervious areas.

SOILS

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County
- United States Department of Agriculture Web Soil Survey
- Phase II Environmental Site Assessment

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation because the waiver requirements set forth in the City of Portland Technical Manual – Section 7 – Soil Survey, Rev. 6/17/11 are met.

The area within and surrounding the project includes soil types listed in the table below. The susceptibility of soils to erosion is indicated on a relative "K" scale of values over a range of 0.02 to 0.69. Higher "K" values indicate more erodible soils.

Table 3 - "K" Value		
Soils Type	**Subsurface**	**Substratum**
Au Gres Loamy Sand	0.15	0.15
Deerfield Loamy Fine Sand	0.20	0.20

The soil "K" value for the soil, listed above, shows a low susceptibility to erosion. The site's susceptibility to erosion is from the Soil Conservation Service Medium Intensity Soil Survey for Cumberland County. Although the soil "K" value shows a low susceptibility to erosion, implementation of the proposed Erosion & Sedimentation Measures by the contractor will be of the utmost importance given the sustained slope throughout the site.

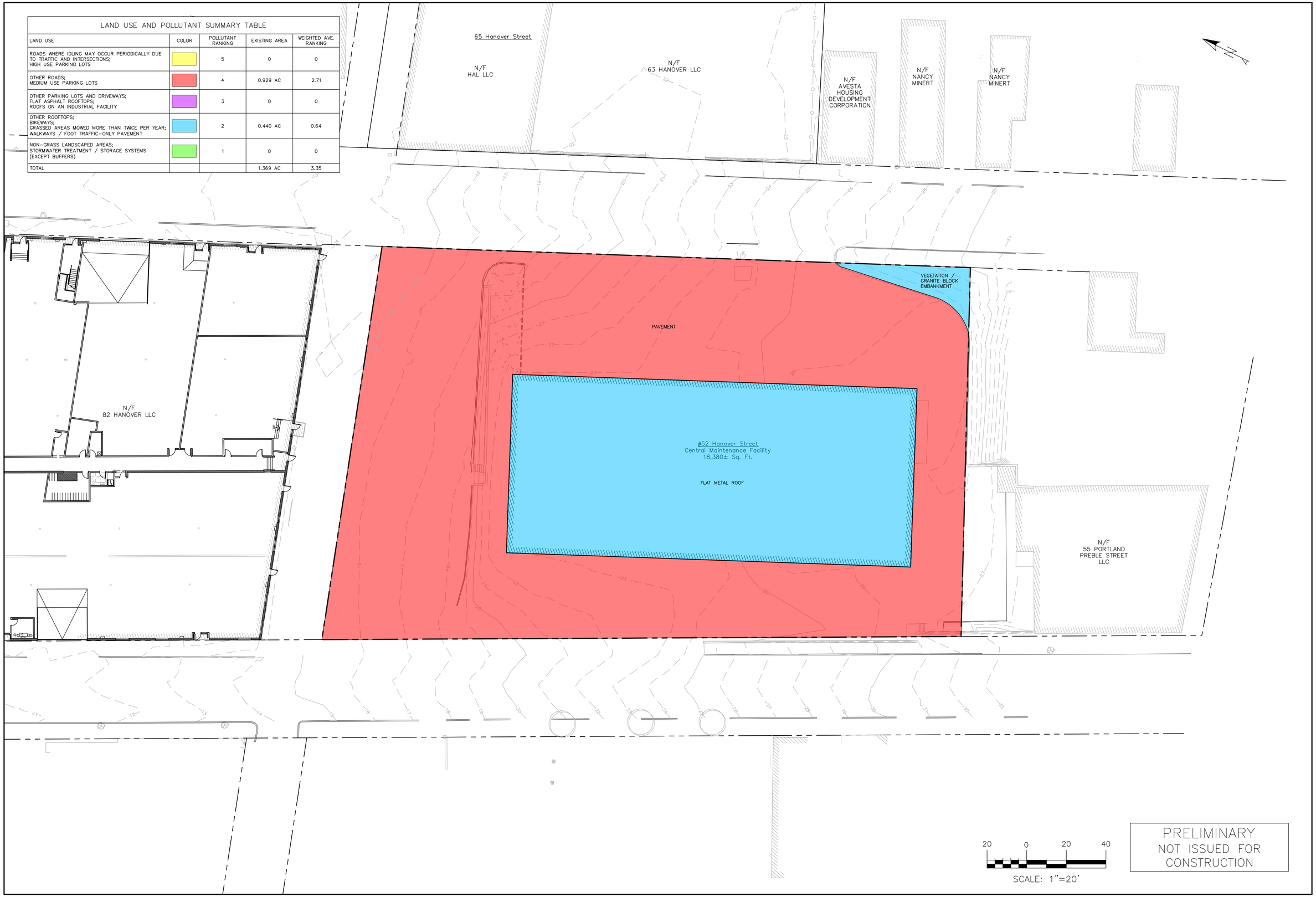
CONCLUSION

The proposed development was designed to meet the requirements implemented by the MDEP under the Stormwater Management Statute (38 M.R.S.A. § 420-D) as well as the City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards. The proposed project as designed is not anticipated to cause flooding or erosion problems within the subject site, abutters' sites, nor within the right-of-way. Overall, the project will provide an improvement to stormwater runoff and overall management from several perspective as outlined above.

ATTACHMENTS

Attachment 1: Pre-Development Redevelopment Exhibit
Attachment 2: Post-Development Redevelopment Exhibit
Attachment 3: Soils Map

LAND USE AND POLLUTANT SUMMARY TABLE				
LAND USE	COLOR	POLLUTANT RANKING	EXISTING AREA	WEIGHTED AVE. RANKING
ROADS WHERE IDLING MAY OCCUR PERIODICALLY DUE TO TRAFFIC AND INTERSECTIONS; HIGH USE PARKING LOTS		5	0	0
OTHER ROADS; MEDIUM USE PARKING LOTS		4	0.929 AC	2.71
OTHER PARKING LOTS AND DRIVEWAYS; FLAT ASPHALT ROOFTOPS; ROOFS ON AN INDUSTRIAL FACILITY		3	0	0
OTHER ROOFTOPS; BIKEWAYS; GRASSED AREAS MOWED MORE THAN TWICE PER YEAR; WALKWAYS / FOOT TRAFFIC–ONLY PAVEMENT		2	0.440 AC	0.64
NON–GRASS LANDSCAPED AREAS; STORMWATER TREATMENT / STORAGE SYSTEMS (EXCEPT BUFFERS)		1	0	0
TOTAL			1.369 AC	3.35



PRELIMINARY
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
XXXX	XXX	XX/XX/XX

DRAWING NAME: STORMWATER MANAGEMENT – EXISTING SURFACE SUMMARY

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACOR ENGINEERING, INC.

THIS DATA SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACOR ENGINEERING, INC. AND ANY USE OF THE DATA FOR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACOR ENGINEERING, INC.

ACOR ENGINEERING, INC.
PO BOX 7322 PORTLAND, MAINE 04104
(207) 775–2655

FILE:	1093.2_CIVIL
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11850
9-24-20
PROFESSIONAL ENGINEER

DRAWING NO.
PRE

LAND USE AND POLLUTANT SUMMARY TABLE

LAND USE	COLOR	POLLUTANT RANKING	EXISTING AREA	WEIGHTED AVE. RANKING
ROADS WHERE IDLING MAY OCCUR PERIODICALLY DUE TO TRAFFIC AND INTERSECTIONS; HIGH USE PARKING LOTS		5	0.007 AC.	0.03
OTHER ROADS; MEDIUM USE PARKING LOTS		4	0	
OTHER PARKING LOTS AND DRIVEWAYS; FLAT ASPHALT ROOFTOPS; ROOFS ON AN INDUSTRIAL FACILITY		3	0	
OTHER ROOFTOPS; BIKEWAYS; GRASSED AREAS MOWED MORE THAN TWICE PER YEAR; WALKWAYS / FOOT TRAFFIC-ONLY PAVEMENT		2	1.289 AC.	1.88
NON-GRASS LANDSCAPED AREAS; STORMWATER TREATMENT / STORAGE SYSTEMS (EXCEPT BUFFERS)		1	0.072 AC.	0.05
TOTAL			1.369 AC	1.96

PRELIMINARY
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
PRE APP	WHS	7/16/20

DRAWING NAME: STORMWATER MANAGEMENT – PROPOSED SURFACE SUMMARY

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THE PLAN SHALL NOT BE ADDED TO WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ADDITIONS MADE TO THE PLAN OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND BE CONSIDERED TO DIVORCE ACORN ENGINEERING, INC.

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FILE:	1093.2_CIVIL
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11111
9-24-20
PROFESSIONAL ENGINEER

DRAWING NO.
POST

Soil Map—Cumberland County and Part of Oxford County, Maine
(52 han)

Map Scale: 1:736 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 35 70 140 210

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 17, Jun 5, 2020

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

Date(s) aerial images were photographed: Data not available.

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
Au	Au Gres loamy sand	0.4	29.5%
DeB	Deerfield loamy fine sand, 3 to 8 percent slopes	1.0	70.5%
Totals for Area of Interest		**1.4**	**100.0%**

ACORN ENGINEERING, INC.

Planning Division
City of Portland, Maine
389 Congress Street, 4th Floor
Portland, ME 04101

November 12, 2020

Subject: 52 Hanover Street Neighborhood Meeting

I, Will Savage, hereby certify that a neighborhood meeting was held on November 2, 2020 remotely over a video conference at 5:35 pm.

I also certify that on October 22, 2020 invitations were mailed to the following:

1. All addresses on the mailing list provided by the Planning Division which includes property owners within 500 feet of the proposed development.

2. Residents on the "interested parties" list.

Sincerely,

William H. Savage, P.E.
Principal - Project Manager
Acorn Engineering, Inc.

Included with this certification are:

1. Copy of the invitation sent
2. Sign-in sheet
3. Meeting minutes

A C O R N
ENGINEERING, INC.

Dear Neighbor: October 22, 2020

On behalf of Tom Watson & Co., LLC, we are pleased to invite you to a neighborhood meeting to discuss plans for the proposed project at 52 Hanover St within the B2 Business Community Zoning District. The project includes the construction of a 5 to 8-story, mixed-use building, including 171 rental apartments including 17 onsite Workforce Housing Units. Additionally, four retail units with patio space are proposed on the ground level adjacent to the existing 82 Hanover patio and Lancaster Court pedestrian/bicycle easement. The proposal seeks to replace the former Portland Public Works garage with affordable housing in proximity to public transportation, goods, and services.

Meeting Location: This meeting will be available for public viewing and participation via Zoom. **For those wishing to attend this meeting, please email admin@acorn–engineering.com for a link or phone number to join the meeting.** You may also call the office line (listed below) to request this information.

Meeting Date/Time: **Monday, November 2, 2020 at 5:30 pm**

The City code requires that property owners within 500 feet of the proposed development and residents on an "interested parties list" be invited to participate in a neighborhood meeting. Both the sign-in sheet and recorded meeting minutes will be submitted to the Planning Board. The meeting is anticipated to be run similarly to previous non-virtual neighborhood meetings and the project team will give an overview of the process at the beginning of the meeting.

If you have any questions, please don't hesitate to call me at (207) 775–2655. We look forward to seeing you at the meeting.

Sincerely,

William H. Savage, P.E.
Acorn Engineering, Inc.

A C O R N Engineering, Inc. • www.acorn-engineering.com
207-775-2655 • PO Box 3372 • Portland • Maine • 04104

Sign-In Sheet

11/2/2020

Members of the Public in Attendance:

NAME	EMAIL
1. Heidi Souerwine	
2. Hans Spencer	quocketman@gmail.com
3. Scott Morrison	kscottmorrison2@gmail.com
4. Jason	
5. Jim Hall	
6. Sarah Michniewicz	
7. Olivia Orr	

Developer and Consultant Team in Attendance:

NAME	EMAIL
1. Tom Watson – Tom Watson & Co., LLC	tom@portpropmgt.com
2. Will Savage – Acorn Engineering, Inc.	wsavage@acorn-engineering.com
3. Sam Lebel – Acorn Engineering, Inc.	slebel@acorn-engineering.com
4. Nick Griffin – Cube3	ngriffin@cube3.com
5. Soren Deniord – Soren Deniord Design Studio	soren@sorendeniord.com
6. Brian Bush – Tom Watson & Co., LLC	bbush@heritageprop.net
7. Jennifer Munroe – Port Property Management	jennifer@portpropmgmt.com
8. John Laliberte – Tom Watson & Co., LLC	john@portpropmgt.com
9. Mike Barton – Congress Group	michael.corbett.barton@gmail.com

Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

FW: Support for 52 Hanover, and a B-2b setback question

James Dealaman <jdealaman@portlandmaine.gov> Tue, Oct 27, 2020 at 1:09 PM
To: James Dealaman <jdealaman@portlandmaine.gov>

From: Christian MilNeil <c.neal.milneil@gmail.com>
Sent: Sunday, October 25, 2020 9:49 PM
To: Christine Grimando <CDG@portlandmaine.gov>; William Savage <wsavage@acorn-engineering.com>
Subject: Support for 52 Hanover, and a B-2b setback question

Hi Christine and Will,

First, I'd like to express my strong support for the development concept for 52 Hanover St. – it's great to see more housing coming to Bayside, within easy walking distance of schools, grocery stores, transit, and thousands of jobs.

I have a request and a question w/r/t this proposal:

First: as a Bayside neighbor, I strongly encourage the developers and planning board to reduce the footprint and the capacity of the proposed parking garage. Building new parking infrastructure – especially in a walkable, transit-rich neighborhood like this one – only increases congestion, generates more local air pollution, increases demand for parking elsewhere in the city by bringing in more cars onto the peninsula, and undermines the efforts of METRO to grow ridership. It's also very expensive for the developers to build, and wastes valuable real estate that could be put to more valuable use for small businesses or for additional apartments.

Second, I have a question about the proposed 10' "rear setback" along Parris Street that's shown in the plans.

Can you explain why there's a "rear setback" that faces a public street? Does the B-2b zone really require a "rear" setback for a building that occupies the entire width of a city block? And if so, why is Parris the "rear"?

The setback is a waste of space, and it contradicts the B-2b zone's design guidelines (it's also not contextual – none of the proposed building's neighbors have setbacks along Parris OR Hanover).

Eliminating this setback could give the architects better options to screen the garage (which hopefully will shrink) with more active uses along the sidewalk. It would also give the developers thousands of square feet of additional leasable space for additional bedrooms and retail space.

Thanks for your work on this!

Yours,

Christian MilNeil
- - - - - - - - - - - - -

Portland Maine Yes. Google's good here.

James Dealaman <jdealaman@portlandmaine.gov>

Re: Support for 52 Hanover, and a B-2b setback question

Christian MilNeil <c.neal.milneil@gmail.com> Tue, Oct 27, 2020 at 4:49 PM
To: James Dealaman <jdealaman@portlandmaine.gov>

Thanks James, I was afraid of that. Even if this "rear setback" is required in the literal interpretation of the zone's requirements, it still clearly contradicts the design guidelines, which encourage zero setbacks along public streets.

The fact remains that this setback doesn't make much sense. Rear setbacks are intended to provide a buffer from abutters, right? But a public street is not really an abutter, and even if you made that argument, the design guidelines clearly (and accurately, in my opinion) make the case that public streets in the B-2b zone are better off with zero setbacks.

This seems to be a clunky unintended consequence of zoning language that failed to anticipate a full-block development, not a deliberate policy choice.

So, if I can add to my previous comments, I'd strongly encourage the planning board to give the applicant a waiver to the "rear" setback requirement here, and avoid the awkwardness of so much dead space along Parris Street.

Thanks for your detailed response!

Christian MilNeil
- - - - - - - - - - - - -
double u double u double u dot christianmilneil dot com

[Quoted text hidden]

> [Quoted text hidden]
>
> Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

Portland Maine | Yes. Google's good here.

Jennifer Munson <jmy@portlandmaine.gov>

Public Comment: 52 Hanover Project

George Rheault <george.rheault@gmail.com> Wed, Jan 6, 2021 at 1:23 PM
To: planningboard@portlandmaine.gov, jmy <jmy@portlandmaine.gov>, Christine Grimando <cdg@portlandmaine.gov>
Cc: Danielle West-Chuhta <dwchuhta@portlandmaine.gov>, Kate Snyder <ksnyder@portlandmaine.gov>, Pious Ali <pali@portlandmaine.gov>, Nicholas Mavodones <nmm@portlandmaine.gov>, afournier@portlandmaine.gov, mdion@portlandmaine.gov, Azarro@portlandmaine.gov, Tae Chong <tchong@portlandmaine.gov>, Spencer Thibodeau <sthibodeau@portlandmaine.gov>, Councilor Belinda Ray <bsr@portlandmaine.gov>

The Planning Board's sorrowful record in 2020 is in the history books but I am happy to let by-gones be by-gones as long as its members engage in some honest soul-searching and commit to some authentic new year resolutions regarding respecting the public's interests (including being more than mere appendages of the City Manager's office).

There is no better place to start than Tom Watson's mess on 52 Hanover Street.

1) Request for Expanded Legal Notice

In 2020, the Planning Staff established a new precedent with Preble Street's very modest (less than 8,000 square foot) shelter proposal that legal notice (including the cost of print/mailing such notices) should be DOUBLED from 500 feet to 1,000 feet in distance from the proposed site for abuttors. Since the development proposed at 52 Hanover Street will swallow up almost an entire city block with a 239,000 square foot mixed-used building with 171 dwelling units including ground-floor retail space SURELY a project of THIS scale should also require expanding public notice in the same way that 40 beds for those experiencing homelessness triggered extra special staff considerations for public engagement.

To that end, to protect the neighborhood's interests here, I hereby REQUEST postponement of this agenda item so that such expanded public notice (1,000 square foot) can be properly accomplished (it is of course too late for the October 27, 2020 workshop that has already taken place) so impacted stakeholders are made aware in a timely manner of the rescheduled workshop to be able to participate meaningfully in the Planning Board's ongoing proceedings in this matter.

2) Inclusionary-Zoning Conditional-Use Standard - 10% or 25%?

It is a known fact that the City of Portland Planning Staff impermissibly "rushed" the 52 Hanover Street site plan application onto the Planning Board docket in order to allow Tom Watson's project to get in "under the wire" to avoid being impacted by any adverse outcomes from the "Green New Deal" referendum in November 2020's election. Typically abuttors receive a separate "New Development Project" notice mailing when an applicant submits an application and then, later, when the project is placed on a meeting agenda, abuttors receive an additional notice to alert them of the meeting. This "two-step" process allows abuttors to get effective notice of a project well before they are confronted with an actual meeting date. Here of course, this "two-step" process was ignored and abuttors only learned of the project directly at the very same time they were being told to make time for workshop just a few days into the future.

This special dispensation for a heavy contributor to city politicians and one of the principal bank-rollers of the opposition to the "Green New Deal" referendum is hugely disappointing on many levels but it also puts the applicant and the City of Portland in a terrible litigation position since it is ONLY through the improper discretion and cooperation of city staff that such flagrant disregard for normal notice procedures could have occurred (the applicant NEEDED city staff to be in cahoots with them to make this happen in a way that no other applicant in recent memory has been given such preferential treatment).

It is also an outstanding (and legitimately fascinating) legal question whether the City of Portland's arbitrary inception date of December 6, 2020 for the inclusionary-zoning question is appropriate for projects that have not yet received Planning Board approvals. See here: Referenda Memo Final.pdf (portlandmaine.gov) A key issue that a court would presumably have to decide is whether Tom Watson and his business partners were on notice when they submitted their project application that a potential existed for the referendum, if passed, to impact their project and of course since the project application was deemed "complete" by staff in mid-October (allowing for the immediate scheduling of the October 27, 2020 workshop) after the referendum process was just days from a vote, then absolutely the answer is yes the applicant was on full and complete notice that his multi-family apartment project would be covered. Furthermore the applicant's heavy efforts to oppose the referendum is further evidence that the applicant absolutely knew the referendum process that began in May 2020 was aimed squarely at projects such as the one at 52 Hanover Street.

In recognition of this state of affairs, I would like to REQUEST that any and all materials (documents, emails - including text messages or other communications) between city officials (including elected officials) and representatives/affiliates of the applicant be preserved that relate to any aspect of this project as they may be relevant to the determination of the "10% or 25%" question including the timing of workshop scheduling, application "completeness", as well as ALL other aspects of this project such as proper abuttor notice and overall site plan considerations.

3) Building "Front" Determinations

Of great concern to the neighborhood is the absolutely hideous low-grade architecture that the applicant presented within the October workshop materials, specifically the fact that the building frontage on Hanover and Parris Streets are effectively ugly blank anti-people expanses - strictly utilitarian in the nature of the structured parking podium the overall building will sit upon.

One of the excuses given by the applicant for this offensive insult to what is left of our walkable 19th-century neighborhood (the part that wasn't intentionally destroyed by city officials between the Planning Board's inception in 1943 and the present) was that city policy (presumably design standards somewhere) REQUIRE the applicant to choose one of the 4 sides of a parcel to be the building "front" and THAT front gets all the design love and care and attention whereas the other 3 sides can be deemed auxiliary and diminished in importance under the city standard or even virtually ignored.

Of course here, the applicant has decided the "front" of the building is the side that matches up perfectly with HIS private street (formerly the public Lancaster Street section between Parris and Hanover which the City discontinued as a part of the initial 2017/2018 sale of the Bayside Public Works parcels) while mostly ignoring the facades the public will most directly experience and that will impact them most directly during the long expected life of this building.

In order to sort this out for the public (while the public still has time to comprehend these issues and hopefully have time to still impact the questions arising here), please address the following:

(a) Where exactly is all this "choose the front of your building" regulation language and how exactly did the applicant and city staff proceed in their interpretations to arrive at the current state of affairs? A separate memo from planning staff may be necessary to help explain this to everyone and I hereby REQUEST such an overview so it is clear for all how this is going down.

(b) To the extent that the various understandings of the applicant and staff regarding the "building front" analysis are indeed sound, is it possible for this aspect of the design standards to be waived or relaxed by the Planning Board so that a better, more hospitable design program can be explored and presented by the applicant? The Planning Board often has the ability to waive certain standards and this may be one of them but the precise process forward must be made clear to both the applicant (who presumably must want to ask for a waiver or be made to understand that a waiver request and redesign is likely necessary in order for the project to be acceptable to the Planning Board) and the public.

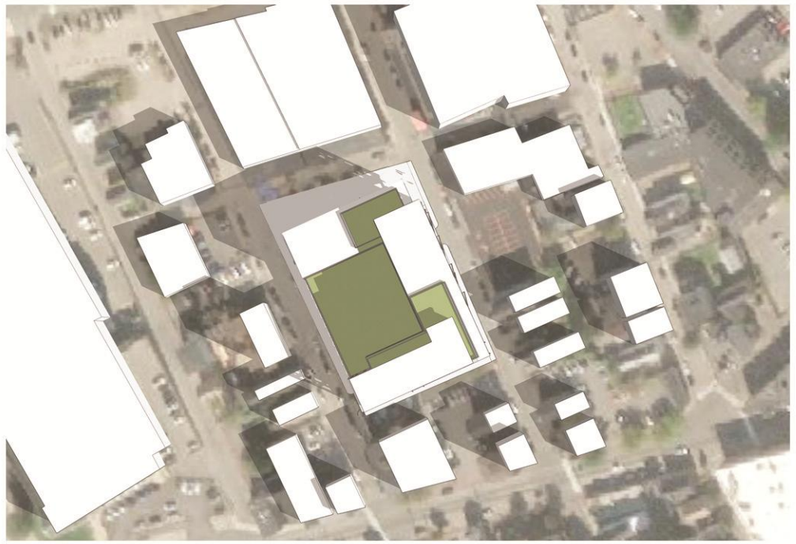
(c) Did the City Council and those city staff involved (Greg Mitchell/Mary Davis, etc.) ever discuss this crucial aspect of the project when they engaged in negotiations in 2020 to allow Tom Watson to proceed with a multi-family mixed-use residential project on this site?

It appears that Belinda Ray, as Councilor for this district, or her colleagues, including Pious Ali who lives very close to the site, made ZERO effort to publicly engage the neighborhood in anything related to the project at any point including soliciting neighborhood input regarding design questions, mass and scaling, streetscape impacts and other community benefits. The lack of such input-seeking is in great contrast to the EXTREME deference to "neighborhood character" protections that our City Council has given neighborhoods like Munjoy Hill during the last few years.

To the extent that the City Council, as part of its negotiations with Tom Watson (which could be re-opened at any time with the mutual consent of the parties), could still agree to adjust some of the relevant land-use restrictions here in order to create a better project (such as the "building front" issue), such a process should be explored, especially before much more time is expended at the Planning Board level.

The above 3 categories of issues is not an exclusive list of my concerns regarding this application - other issues (e.g. parking/traffic generation, etc.) require further comment and evaluation and I look forward to pursuing those questions at the appropriate time especially after the threshold issues set out here have been addressed.

Thank you.



MARCH 21 - 9 AM

MARCH 21 - NOON

MARCH 21 - 3 PM

JUNE 21 - 9 AM

JUNE 21 - NOON

JUNE 21 - 3 PM

52 Hanover St
Portland, ME

Shadow Study

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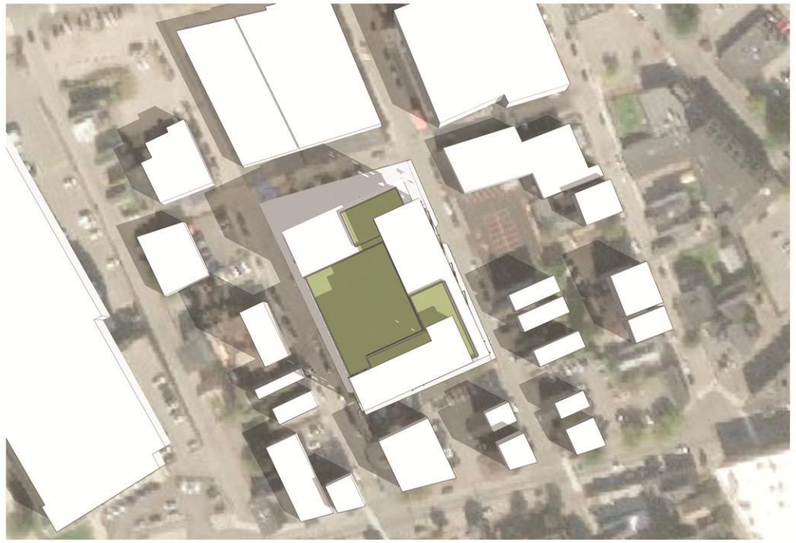

SEPTEMBER 21 - 9 AM

SEPTEMBER 21 - NOON

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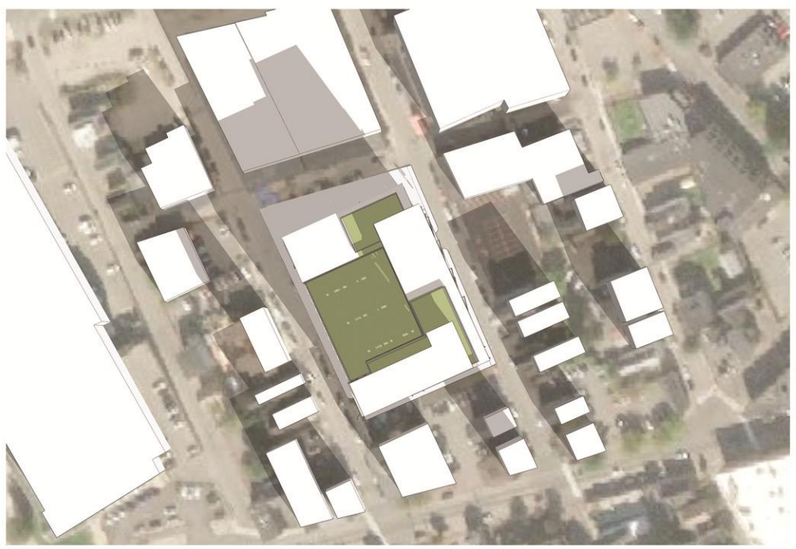
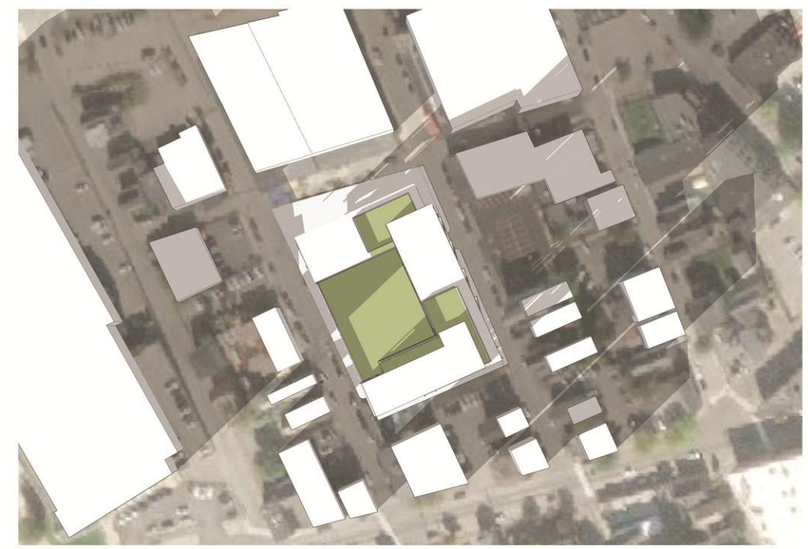


DECEMBER 21 - 9 AM

DECEMBER 21 - NOON



DECEMBER 21 - 3 PM

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Portland, ME

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52 HANOVER STREET REDEVELOPMENT

TOM WATSON & CO., LLC
PORTLAND, MAINE

LEGEND

EXISTING		PROPOSED
REFER TO THE EXISTING CONDITIONS PLAN FOR ADDITIONAL INFORMATION	UNDERDRAIN	
	GREEN SPACE	
	UTILITY PAVEMENT CUTS	
	STRIPING	
	SEDIMENTATION BARRIER	
	EDGE OF EX. PAVEMENT	
	CURB	
	SIGN	
	LAMP OR LIGHT POLE	
	UTILITY POLE	
	GUY WIRE	
	WATER VALVE	
	FIRE HYDRANT	
	SEWER MANHOLE	
	CATCH BASIN	
	DRAIN MANHOLE	
UGE — UGE	UNDERGROUND ELECTRIC LINE	UGE
OHE/T/C	OVERHEAD ELECTRIC/TELEPHONE/CABLE	OHE/T/C
UGU — UGU	UNDERGROUND TELEPHONE/CABLE	UGU — UGU
1"W — 1"W	UNDERGROUND WATER LINE	1"W — 1"W
64	MINOR CONTOURS (1 FT)	64
65	MAJOR CONTOURS (5 FT)	65
G — G	GAS LINE	G — G
> — >	STORM DRAIN LINE	> — >
SS — SS	SEWER LINE	S — S
	EXISTING/PROPOSED BUILDING	
	PROPERTY LINE	
	SETBACKS	
	BORING LOCATION	

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1–888–344–7233

UTILITIES

SEWER:

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DEPARTMENT OF PUBLIC WORKS (DPW)
250 CANCO ROAD
PORTLAND, MAINE 04101
CONTACT: KEITH GRAY, P.E.
(207) 874–8834

WATER:

PORTLAND WATER DISTRICT
225 DOUGLASS STREET
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PORTLAND, MAINE 04104
ATTN: MEANS DIVISION
(207) 774–5961

ELECTRIC:

CENTRAL MAINE POWER COMPANY (CMP)
162 CANCO ROAD
PORTLAND, MAINE 04103
CONTACT: PAUL DUPERRE
(207) 828–2882

TELEPHONE & FIBER:

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(FORMERLY FAIRPOINT)
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CONTACT: PAT MORRISON
(207) 745–9363

CABLE:

SPECTRUM CABLE
118 JOHNSON ROAD
PORTLAND, MAINE, 04102
CONTACT: MARK PELLETIER
(877) 546–0962

NATURAL GAS:

UNITIL SERVICE CORP
1075 FOREST AVENUE
PORTLAND, ME 04103
CONTACT: BRIDGET HARMON
(207) 541–2536

PROJECT TEAM

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CONTACT: TOM WATSON
(207) 699–2219

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(207) 939–5432

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(207) 775–2655

TRAFFIC ENGINEER:

TRAFFIC SOLUTIONS
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CONTACT: BILL BRAY, P.E.
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TRANSPORTATION CONSULTANT:

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(207) 200–1910

STRUCTURAL ENGINEER:

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(207) 671–9992

LANDSCAPE ARCHITECT:

SOREN DENIORD DESIGN STUDIO
PORTLAND, MAINE
CONTACT: SOREN DENIORD
(207) 400–2450

ARCHITECT:

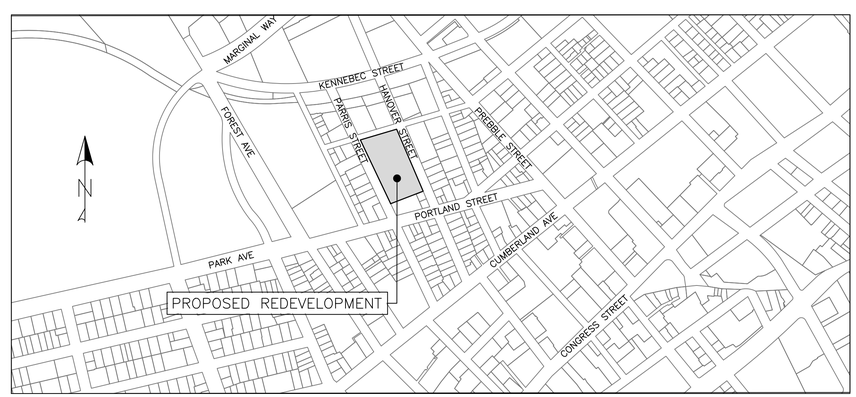
CUBE 3
LAWRENCE, MASSACHUSETTS
CONTACT: NICK GRIFFIN, AIA
(979) 989–9900

SURVEYOR:

TITCOMB ASSOCIATES
FALMOUTH, MAINE
CONTACT: REX CROTEAU, P.L.S.
(207) 797–9199

GEOTECHNICAL ENGINEER:

SUMMIT GEOENGINEERING SERVICES
LEWISTON, MAINE
CONTACT: BILL PETERLEIN, P.E.
(207) 318–7761



VICINITY MAP
NOT TO SCALE

ABBREVIATIONS

PARTIAL LIST OF ABBREVIATIONS AND THEIR CORRESPONDING MEANING. PLEASE CONTACT THE ENGINEER FOR ANY CLARIFICATION

APPROX.	APPROXIMATE
BC	BOTTOM OF CURB
BMP	BEST MANAGEMENT PRACTICE
BOT.	BOTTOM
CB	CATCH BASIN
CF	CUBIC FOOT
CIP	CAST IN PLACE
CL	CENTERLINE
CM	CONSTRUCTION MANAGER
CMP	CENTRAL MAINE POWER
CONC.	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARD
DIP	DUCTILE IRON PIPE
DIA.	DIAMETER
DIM.	DIMENSION
EA.	EACH
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EQUIV.	EQUIVALENT
EST.	ESTIMATE
EX.	EXISTING
FFE	FINISH FLOOR ELEVATION
FT.	FEET
GAL.	GALVANIZED
ID	INNER DIAMETER
IN.	INCH
INV.	INVERT
L	LENGTH
MAX.	MAXIMUM
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
M.E.P	MECHANICAL, ELECTRICAL, PLUMBING DESIGNER
MFG.	MANUFACTURED
MH	MANHOLE
MIN.	MINIMUM
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OHE/T/C	OVERHEAD ELECTRIC/TELEPHONE/CABLE
PC	PRECAST
PE	PROFESSIONAL ENGINEER
PL	PROPERTY LINE
PLS	PROFESSIONAL LAND SURVEYOR
PROP.	PROPOSED
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PWD	PORTLAND WATER DISTRICT
R	RADIUS
RD	ROOF DRAIN
RET.	RETAINING
ROW	RIGHT OF WAY
S	SLOPE
SD	STORM DRAIN
SDR	STANDARD DIMENSION RATIO
SF	SQUARE FEET
SMH	SEWER MANHOLE
SPEC.	SPECIFICATION
TC	TOP OF CURB
TW	TOP OF WALL
TYP.	TYPICAL
UD	UNDERDRAIN
UGE	UNDERGROUND ELECTRIC
VIF	VERIFY IN FIELD

PERMIT LEVEL
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
SITE PLAN	WHS	9/25/20
COMMENT RESPONSE	WHS	1/8/21

DRAWING NAME: COVER SHEET & LEGEND
PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT
CLIENT: TOM WATSON & CO., LLC, 82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY REPRODUCTION OF THIS PLAN, OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
PO BOX 3257, PORTLAND, MAINE 04104
(207) 775–2655

FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED PROFESSIONAL ENGINEER — 1/8/21

DRAWING NO.
C-01

GENERAL NOTES:

1. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION FOR UTILITIES. OTHERWISE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND LOCATE ANY POTENTIAL CONFLICTS WITH THE APPROVED PLANS PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES SHOWN ON THE PLAN. IF DEEMED NECESSARY BY THE OWNER OR OWNER'S REPRESENTATIVE (IF APPLICABLE), ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER.

3. THE CONTRACTOR SHALL PREPARE THEIR OWN MATERIAL SCHEDULE BASED ON THE PLANS AND FIELD VERIFICATION BY THE CONTRACTOR. ALL MATERIAL SCHEDULES SHOWN WITHIN THE PLAN SET ARE FOR GENERAL INFORMATION ONLY.

4. ALL CONSTRUCTION METHODS, TESTING AND MATERIALS SHALL CONFORM TO THE MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, THE CITY OF PORTLAND AND SERVICING UTILITY REQUIREMENTS, IF ANY. IN CASES WHERE THESE CONFLICT THE MOST STRINGENT SPECIFICATION SHALL APPLY AT NO ADDITIONAL COST TO THE OWNER.

5. THE SITE CONTRACTOR SHALL MAINTAIN A SET OF PAPER AND CAD DRAWINGS WHICH SHALL RECORD THE ACTUAL LOCATION, DIMENSIONS, ELEVATIONS, MATERIALS OF THEIR WORK, INDICATING THEREON ALL VARIATIONS FROM THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ONE COMPLETE SET OF REPRODUCIBLE RECORD DRAWINGS, IN .DWG FORMAT AND PAPER, STAMPED ''AS-BUILT''. IF AUTOCAD CAPABILITY IS NOT AVAILABLE, EXCLUDE FROM BID IN WRITING.

6. THE CONTRACTOR WILL REMAIN SOLELY AND COMPLETELY RESPONSIBLE FOR ENFORCEMENT OF AND COMPLIANCE WITH 1) ALL CONTRACT PLANS AND SPECIFICATIONS, 2) APPLICABLE INTERNATIONAL BUILDING CODE REQUIREMENTS, AND 3) ALL SITE WORKING CONDITIONS AND SAFETY REQUIREMENTS, DAY AND NIGHT, FOR BOTH PERSONS AND PROPERTY, IN EACH CASE BOTH BY THE CONTRACTOR AND ITS SUBCONTRACTORS. THESE INCLUDE ALL OSHA, NIOSH, U.S. EPA AND ANY OTHER APPLICABLE GOVERNMENTAL REGULATIONS.

7. EXISTING CONDITIONS, BOUNDARY SURVEY, AND TOPOGRAPHY FROM THE PLAN TITLED EXISTING CONDITIONS SURVEY BY **TITCOMB ASSOCIATES, DATED 1/25/18 AND LAST REVISED 8/14/2018.**

8. SUBSURFACE DATA HAVE BEEN OBTAINED BY **SUMMIT GEOENGINEERING SERVICES, INC AND BEACON ENVIRONMENTAL CONSULTANTS, LLC.** AND SHALL BE INCLUDED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL ALSO REVIEW THE REPORT PRIOR TO SUBMITTING A BID.

9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS TO THE SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY MARKINGS, SIGNAGE AND INCIDENTALS TO MAINTAIN A SAFE VEHICLE AND PEDESTRIAN ACCESS THOUGH THE LIFE OF THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE PORTLAND PUBLIC SAFETY DIVISION ROUTINELY REGARDING TEMPORARY IMPACTS OR CHANGES TO SITE ACCESS CONDITIONS.

10. CONTRACTOR TO DETERMINE SOIL CLASSIFICATION INDEPENDENTLY FOR TRENCH, SHORING, AND OTHER SIMILAR CONSTRUCTION MEANS AND METHODS APPLICATIONS.

11. NO HOLES, TRENCHES, OR STRUCTURES SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT IN ANY AREA ACCESSIBLE TO THE PUBLIC OR WITHIN THE PUBLIC RIGHT-OF-WAY.

12. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION SURVEY OF INTERIOR SUBGRADE AND ABOVE GRADE ACCESSIBLE WALLS, CEILINGS, FLOORS, ROOF AND VISIBLE EXTERIOR AS VIEWED FROM THE GRADE LEVEL. THIS SHALL BE COMPLETED AT A MINIMUM FOR ADJACENT STRUCTURES. A COPY OF THE SURVEY SHOULD BE PROVIDED TO THE OWNER. DOCUMENT WITH PICTURES AT A MINIMUM.

13. **THE CONTRACTOR SHALL PROVIDE A GPS MODEL OF THE PROPERTY TO PROVIDE TO ACORN ENGINEERING.**

14. THE CONTRACTOR SHALL SURVEY ROCK SURFACE PRIOR TO EXCAVATION AND DEVELOP VOLUME CALCULATIONS TO SHARE WITH THE ENGINEER, ACORN ENGINEERING INC. (ACORN), IF ANY.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE NOT TO BE REMOVED.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS. REPAIRS MAY INCLUDE OVERLAY. REMOVAL OF WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE END OF THE WARRANTY PERIOD. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

17. THE CONTRACTOR TO SUBMIT A DEWATERING PLAN FOR REVIEW AND APPROVAL TO THE DEPARTMENT OF PUBLIC WORKS PRIOR TO THE PRE-CONSTRUCTION MEETING, DURING THE BUILDING PERMIT APPLICATION PROCESS, OR PRIOR TO ADVANCED SITE WORK. CONTACT THE DEPARTMENT OF PUBLIC WORKS FOR ADDITIONAL INFORMATION AND CURRENT REGULATIONS.

CIVIL SITE NOTES:

1. THE CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO ACORN TO MODIFY THE CONTRACT DOCUMENTS.

2. ALL SHOP, ERECTION, AND CONSTRUCTION DRAWINGS SHALL BE CHECKED AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMISSION FOR ACORN'S REVIEW. ANY UNCHECKED OR NON-STAMPED SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.

3. CONTRACTOR SHALL THOROUGHLY INSPECT AND SURVEY EXISTING STRUCTURES AND SITE TO VERIFY CONDITIONS THAT AFFECT THE WORK SHOWN ON THE DRAWINGS. CONTRACTOR TO NOTIFY ACORN OF ANY DISCREPANCIES PRIOR TO PROCEEDING.

4. DETAILS SHOWN APPLY TO ALL SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED.

5. ALTHOUGH ALL DUE DILIGENCE HAS BEEN APPLIED TO MAKE THE DRAWINGS AS COMPLETE AS POSSIBLE, NOT ALL DETAILS ARE ILLUSTRATED, NOR IS EVERY EXCEPTION CONDITION ADDRESSED WITHIN THE CONTRACT DOCUMENTS.

6. ALL PROPRIETARY CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL WORK, INCLUDING DIMENSION AND LAYOUT VERIFICATION, MATERIALS COORDINATION, SHOP DRAWING REVIEW, AND THE WORK OF ANY SUBCONTRACTORS.

8. UNLESS OTHERWISE SPECIFICALLY INDICATED, THE DRAWINGS DO NOT DESCRIBE OR DIRECT MEANS OR METHODS OF CONSTRUCTION.

9. THE CONTRACTOR, IN THE PROPER SEQUENCE, SHALL PERFORM OR SUPERVISE ALL WORK NECESSARY TO ACHIEVE THE FINAL COMPLETED STRUCTURE, AND TO PROTECT THE STRUCTURE, WORKMEN, AND OTHERS DURING THE CONSTRUCTION. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR EXCAVATION, FORMWORK, SCAFFOLDING, SAFETY DEVICES AND PROGRAMS OF ALL KINDS, SUPPORT AND BRACING FOR CRANES AND OTHER ERECTION EQUIPMENT.

10. DO NOT BACKFILL AGAINST RETAINING WALLS UNTIL SUPPORTING SLABS AND FLOOR FRAMING ARE IN PLACE AND SECURELY ANCHORED, UNLESS ADEQUATE BRACING IS PROVIDED. PRIOR TO BACKFILL,, PROVIDE CURING OF CONCRETE FOR 28 DAYS OR AS DIRECTED BY MATERIALS TESTING ENGINEER.

11. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL FLOORS, WALLS, ROOFS AND OTHER SUPPORTING ELEMENTS ARE IN PLACE, IF APPLICABLE.

12. ALL PAVEMENT JOINTS SHALL BE SAWCUT AND APPLIED WITH TACK COAT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.

13. ACORN BEARS NO RESPONSIBILITY FOR THE ABOVE ITEMS, AND SITE OBSERVATION VISITS DO NOT IN ANY WAY INCLUDE INSPECTION OF THEM.

14. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBPART P OF 29 CRF PART 1926.650-.652 (CONSTRUCTION STANDARD FOR EXCAVATIONS).

15. ALL TRENCH PAVEMENT REPAIR SHALL BE COMPLETED WITH THE USE OF A STREET PAVER WITH A SCREED WIDTH CAPABLE OF SPANNING THE FULL WIDTH OF THE TRENCH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

SPECIAL INSPECTION NOTES

1. ALL SITE SOILS-RELATED WORK AND FOOTING EXCAVATIONS PRIOR TO PLACING FORMS SHALL BE REVIEWED BY THE PROJECT GEOTECHNICAL ENGINEER.

2. ALL SITE DRAINAGE-RELATED WORK SHALL BE REVIEWED BY ACORN ENGINEERING.

3. NORMAL REVIEWS BY LOCAL BUILDING DEPARTMENT. NOTIFY 48 HOURS PRIOR TO REQUIRED REVIEW.

4. REQUIRED SPECIAL INSPECTIONS PER I.B.C. SECTION 1705.6 BY AN APPROVED SPECIAL INSPECTOR RETAINED BY OWNER. CONTRACTOR TO COORDINATE SPECIAL INSPECTIONS.

5. SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

5.1. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR SHALL BE TO OBSERVE AND/OR TEST THE WORK ASSIGNED AND OUTLINE ABOVE FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.

5.2. THE SPECIAL INSPECTOR SHALL FURNISH REGULAR REPORTS TO THE BUILDING OFFICIAL, THE ARCHITECT AND ENGINEER OF RECORD, AND OTHER DESIGNATED PERSONS. PROGRESS REPORTS FOR CONTINUOUS INSPECTION SHALL BE FURNISHED WEEKLY. INDIVIDUAL REPORTS OF PERIODIC INSPECTIONS SHALL BE FURNISHED WITHIN ONE WEEK OF INSPECTION DATES. THE REPORTS SHALL NOTE UNCORRECTED DEFICIENCIES, AND NET CHANGES TO THE APPROVED CONSTRUCTION DOCUMENTS AUTHORIZED BY THE ENGINEER OF RECORD.

5.3. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT WITHIN TEN DAYS OF THE FINAL INSPECTION STATING WHETHER THE WORK REQUIRING A SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE AND BELIEF, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE. WORK NOT IN COMPLIANCE SHALL BE NOTED IN THE REPORT.

5.4. SPECIAL INSPECTOR SHALL BE EMPLOYED BY REDFERN AND COORDINATED BY THE CONTRACTOR.

LAYOUT NOTES:

1. MONUMENTS DELINEATING PROPERTY LINES OR RIGHT OF WAYS SHALL NOT BE DISTURBED DURING CONSTRUCTION OPERATIONS. IN THE CASE A MONUMENT IS DISTURBED, AT THE CONTRACTOR'S EXPENSE, THE MONUMENT SHALL BE RESET TO ITS ORIGINAL LOCATION AND ELEVATION BY A REGISTERED LAND SURVEYOR.

2. ALL DIMENSIONS ON THE FOLLOWING SHEETS TAKE PRECEDENT OVER SCALED DIMENSIONS. EACH DRAWING WITH A BAR SCALE MEANS THAT THE DRAWING/DETAIL HAS BEEN SCALED AS ACCURATELY AS POSSIBLE, AND THE BAR SCALE IS FOR GENERAL REFERENCE ONLY. IF NO BAR SCALE IS PRESENT, THEN THERE IS NO SCALE TO THAT DRAWING/DETAIL. AT NO TIME SHOULD DRAWINGS BE SCALED FROM. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, SPECIFICATIONS AND THE FIELD CONDITION SHALL BE IMMEDIATELY REPORTED TO ACORN FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.

3. SIGNAGE, STRIPING, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

4. ALL TRAFFIC CONTROL SIGNS INDICATED ON THE SITE LAYOUT PLAN ARE TO MEET ALL REQUIREMENTS & CONDITIONS OF THE CITY OF PORTLAND, MAINE DEPARTMENT OF TRANSPORTATION AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

5. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED PROFESSIONAL LAND SURVEYOR TO PROVIDE A MINIMUM OF TWO TEMPORARY BENCHMARKS WITHIN THE SITE AND TO LOCATE PROPOSED STRUCTURE CORNERS.

6. CONTRACTOR TO ENSURE THAT ACCESS, INCLUDING BUT NOT LIMITED TO WALKWAYS, DRIVEWAYS, AND MAILBOXES ADJACENT TO THE PROJECT REMAIN FUNCTIONAL AND AVAILABLE FOR USE AT ALL TIMES.

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF **SITE PLAN – LEVEL III AND SUBDIVISION PERMIT FROM THE CITY OF PORTLAND,** A MDEP STORMWATER MANAGEMENT PERMIT ADMINISTERED BY THE CITY OF PORTLAND UNDER THEIR DELEGATED REVIEW, AND A MAINE CONSTRUCTION GENERAL PERMIT.

2. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

3. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A STREET OPENING PERMIT FROM THE **CITY OF PORTLAND**. ADDITIONALLY, COORDINATE WITH THE DEPARTMENT OF PUBLIC WORKS.

GRADING AND DRAINAGE NOTES:

1. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY; NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING. DEWATERING SHALL INCLUDE TREATMENT OF SILT THROUGH THE USE OF A DIRTBAG BY ACF ENVIRONMENTAL OR APPROVED EQUIVALENT. FLOWS FROM DEWATERING ACTIVITIES SHALL NOT BE DISCHARGED INTO SANITARY SEWERS. **SEE BORING LOGS FOR ADDITIONAL INFORMATION.**

2. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY EASEMENT OR TEMPORARY CONSTRUCTION RIGHTS AS NECESSARY BY PRIVATE ADJACENT LAND OWNERS. THE CONTRACTOR SHALL NOT DISTURB ANY SOIL BEYOND THE PROPERTY LINE WITHOUT NOTIFYING AND OBTAINING SUCH EASEMENT OR TEMPORARY CONSTRUCTION RIGHT FROM THE ADJACENT LAND OWNERS. PRIOR TO THE CONTRACTOR PRICING THE WORK, THEY SHALL PROVIDE ACORN WITH PROOF OF SUCH EASEMENT OR TEMPORARY RIGHTS. SHOULD EASEMENTS OR TEMPORARY RIGHTS NOT BE AVAILABLE, THE CONTRACTOR SHALL INCLUDE COST FOR BRACING AND SHORING AS NECESSARY.

3. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. THE MINIMUM SLOPE SHALL MEET OR EXCEED 0.5% IN ALL CASES. ALL SLOPES SHALL BE AWAY FROM BUILDINGS AND TOP OF PAVEMENT SHALL BE AT OR BELOW EXISTING FINISH FLOOR ELEVATIONS.

4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST **GEOTECHNICAL REPORT PREPARED BY THE PROJECT GEOTECHNICAL ENGINEER.**

5. NO ADDITIONAL PAYMENT FOR UNSUITABLE MATERIALS.

6. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF N=0.012 OR LESS.

7. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.

8. NATIVE SOILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LIMIT THE DISTURBANCE TO SUBGRADE SOILS. SHOULD THE SUBGRADE BECOME YIELDING OR DIFFICULT TO WORK, CONTACT ACORN. THE DISTURBED AREAS SHALL BE EXCAVATED AND BACKFILLED WITH COMPACTED SELECT FILL OR CRUSHED STONE AT NO ADDITIONAL EXPENSE TO THE OWNER.

9. ALL SUBGRADE PREPARATION IS SUBJECT TO THE RECOMMENDATIONS OF THE PROJECT **GEOTECHNICAL** ENGINEER, IF APPLICABLE.

EROSION CONTROL NOTES:

1. DISTURBED AREAS ARE DEFINED AS THOSE SURFACES WHERE EXISTING VEGETATION OR STRUCTURES HAVE BEEN REMOVED, EXPOSING NATIVE SOIL TO THE ELEMENTS.

2. ALL ROUTINE WORK ACTIVITIES SHALL BE CONDUCTED IN SUCH A WAY TO LIMIT THE AMOUNT OF DISTURBED AREA AT ONE TIME TO THE EXTENT PRACTICABLE.

3. PRIOR TO THE START OF ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL APPLICABLE EROSION CONTROL DEVICES SUCH AS PERIMETER SILT FENCE, AND OTHER APPLICABLE MEASURES. IN THE EVENT THE CONTRACTOR IS NOT SURE A EROSION CONTROL MEASURE SHOULD BE IMPLEMENTED, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO CONFIRM IMPLEMENTATION OF ANY EROSION CONTROL DEVICES.

4. ALL GROUND AREAS GRADED FOR CONSTRUCTION SHALL BE GRADED, LOAMED, SEEDED AND MULCH SHALL BE APPLIED AS SOON AS POSSIBLE WITHIN 7 DAYS FOLLOWING THE COMPLETION OF ANY SOIL DISTURBANCE, AND PRIOR TO ANY STORM EVENT.

5. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED TO THE SATISFACTION OF THE CITY. THE CONTRACTOR SHALL REFERENCE THE APPROVED EROSION AND SEDIMENTATION CONTROL REPORT FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES IN ADDITION TO THE PLAN SET. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE D.E.P.'S PERMIT CONDITIONS, FINDINGS OF FACT AND ORDER (IF ANY), AND THE CURRENT MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

6. PRIOR TO PAVING, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM STORM DRAINS, CATCH BASINS, AND APPURTENANCES.

7. REFER TO THE EROSION CONTROL DETAILS & NOTES FOR ADDITIONAL INFORMATION.

UTILITY NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED UPON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TEST PIT TO DETERMINE THE EXACT LOCATION AND ELEVATION OF UTILITIES TO COORDINATE WITH THE PROPOSED CONNECTIONS OR CROSSING. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO ACORN FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.

2. CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, CONDUCT EXPLORATORY EXCAVATIONS AT LOCATIONS WHERE PROPOSED EXCAVATION WILL INTERSECT WITH EXISTING UTILITIES, PRIOR TO THE ORDERING OF STRUCTURES.

3. ALL NEW SANITARY MANHOLES SHALL BE VACUUM TESTED BEFORE BACKFILLING. TESTING SHALL BE COMPLETED IN ACCORDANCE WITH TECHNICAL REPORT #16 (TR-16): GUIDES FOR THE DESIGN OF WASTEWATER TREATMENT WORKS, PREPARED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION.

4. SEWER MANHOLES SHALL BE 4' ID UNLESS OTHERWISE STATED ON THE PLANS.

5. CONTRACTOR TO PROVIDE 5.5' OF COVER FROM TOP OF PIPE TO FINISH GRADE FOR WATER MAINS.

6. THRUST BLOCKS SHALL BE USED FOR THRUST RESTRAIN ON WATER MAINS. DETAIL AND LIMITS FOR THRUST BLOCKS ARE SHOWN WITHIN THE PLAN SET.

7. WATER INFRASTRUCTURE SHALL BE TESTED IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT DOCUMENT ''WATER AND SEWER CONSTRUCTION SPECIFICATIONS AND PROCEDURE'', MOST RECENT REVISION.

8. ALL REQUIRED FITTINGS FOR THE WATER MAIN ARE NOT SHOWN ON DRAWINGS. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FITTINGS REQUIRED TO CONSTRUCT THE WATER MAIN IN ACCORDANCE WITH CITY OF PORTLAND, STATE OF MAINE, AND AMERICAN WATER WORKS ASSOCIATION STANDARDS AND REGULATIONS.

9. CONTRACTOR SHALL COORDINATE WORK REGARDING ANY WATER MAIN CONNECTION AND WATER MAIN SHUTDOWN WITH THE PORTLAND WATER DISTRICT AT LEAST SEVEN (7) DAYS PRIOR TO CONSTRUCTION.

10. ALL WATER PIPE INSTALLATION SHALL CONFORM WITH THE PORTLAND WATER DISTRICT SPECIFICATIONS AND PROCEDURES, MOST RECENT EDITION.

11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

12. SEWER, GAS, TELEPHONE, ELECTRICITY, CABLE, WATER AND ANY OTHER UTILITY CONNECTIONS SHALL BE REVIEWED BY PLUMBING, ELECTRICAL, AND MECHANICAL DESIGNER FOR CONSISTENCY WITH THEIR PLANS PRIOR TO CONSTRUCTION.

13. COORDINATE EXIT POINT FOR SECONDARY UTILITY SERVICES WITH THE ARCHITECT/ELECTRICAL ENGINEER. SECONDARY LINE LOCATIONS NOT PROVIDED BY ACORN WITHIN THE UTILITY PLAN.

14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL THE NECESSARY PERMITS FOR THE INSTALLATION OF THE UTILITIES AND STORMDRAINS WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE CITY IN ACCORDANCE WITH THE CITY OF PORTLAND TECHNICAL MANUAL PRIOR TO ANY WORK.

15. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL AT NO EXTRA EXPENSE TO THE OWNER.

16. ALL PIPE LINES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS OR SAGS IN THE PIPING WILL BE PERMITTED. ALL HORIZONTAL AND VERTICAL BENDS IN PRESSURIZED PIPE LINES SHALL BE SUITABLY RESTRAINED WITH THRUST BLOCKS OR RETAINER GLANDS. RETAINER GLANDS ALLOWED FOR DUCTILE IRON PIPE ONLY. PROVIDE ALL BENDS, HORIZONTAL AND VERTICAL, AS REQUIRED TO MEET THE GRADES AND ALIGNMENTS INDICATED ON THE DRAWINGS.

17. ALL WASTEWATER PIPING, EXCLUDING BUILDING DRAINS, AND ALL PRESSURIZED PIPING, TO INCLUDE WATER MAINS, INSTALLED BENEATH STRUCTURES SHALL BE ENCASED IN CONCRETE.

18. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS AND ADDITIONAL PIPE AS REQUIRED TO ENSURE A COMPLETE AND PROPERLY FUNCTIONING CONNECTION. CONTRACTOR TO VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. ADAPTERS AND FITTINGS ARE INCIDENTAL TO THE PIPE INSTALLATION.

19. WHENEVER POSSIBLE, WATER LINES SHOULD BE INSTALLED OVER WASTEWATER LINES. A MINIMUM SEPARATION OF 18 INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE WASTEWATER LINE SHALL BE MAINTAINED WHERE POSSIBLE. WHERE A WATER LINE CROSSES UNDER THE WASTEWATER LINE, A FULL LENGTH OF WASTEWATER PIPE SHALL BE CENTERED ABOVE THE WATER LINE SO THAT BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE,

20. THE CONTRACTOR SHALL BE ANTICIPATE THAT THE NATIVE SILT AND CLAY SOILS WILL NOT BE SUITABLE FOR PIPE TRENCH BACKFILL IN PAVED AREAS.

21. GROUNDWATER SHALL BE CONTROLLED TO A LEVEL OF AT LEAST ONE FOOT BELOW SUBGRADE OF THE PIPE OR STRUCTURE. THE CONTRACTOR SHALL MAINTAIN THE LOWERED GROUNDWATER LEVEL UNTIL CONSTRUCTION HAS BEEN COMPLETED TO SUCH AN EXTENT THAT THE STRUCTURES OR PIPES WILL NOT BE FLOATED OR OTHERWISE DAMAGED.

22. EXCAVATION TO SUBRADE IN NATIVE SILT AND CLAY SHALL BE COMPLETED WITH A SMOOTH EDGE BUCKET TO MINIMIZE SUBGRADE DISTURBANCE.

23. ALL ADJUSTMENTS TO FINISHED GRADE ARE TO BE COMPLETED BY THE CONTRACTOR. THE CONTRACTOR SHALL CONFIRM STRUCTURES THAT REQUIRE ADJUSTMENT WITH THE ENGINEER OR OWNERS REPRESENTATIVE PRIOR TO ADJUSTING FRAMES.

DEMOLITION NOTES:

1. THE FOLLOWING ITEMS ARE TYPICAL OF MATERIAL WHICH MAY BE ON SITE:
   - ROCK AND CONCRETE FOUNDATIONS
   - CONCRETE SLABS
   - BITUMINOUS ASPHALT PAVEMENT
   - CONCRETE PADS AND BLOCKS
   - FENCE POST AND FENCING
   - UNDERGROUND UTILITY LINES
   - ABOVE AND OR BELOW FUEL OIL AND PROPANE GAS TANKS
   - STORM DRAIN PIPES AND APPURTENANCE STRUCTURES
   - OTHER TRASH & MISCELLANEOUS SOLID WASTES

2. THE CONTRACTOR IS ADVISED TO VISIT THE SITE TO CONFIRM DEMOLITION ITEMS SINCE THE LIST IS NOT INCLUSIVE OF THE SITE CONDITIONS WHICH MAY BE ENCOUNTERED

3. ALL DISPOSAL OF DEMOLITION DEBRIS OR WASTE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS. CONTRACTORS SHALL PROVIDE OWNER WITH APPROPRIATE "BILLS OF LADING" DEMONSTRATING PROPER DISPOSAL OF ALL MATERIALS.

4. **A PHASE I – ENVIRONMENTAL SITE ASSESSMENT FOR THE PROPERTY HAS BEEN COMPLETED BY CREDERE ASSOCIATES, LLC DATED, 4/5/17. A PHASE II – ENVIRONMENTAL SITE ASSESSMENT FOR THE PROPERTY HAS BEEN COMPLETED BY BEACON ENVIRONMENTAL CONSULTANTS, LLC DATED, 2/7/18.**

5. CONTRACTOR TO REFER TO VRAP LETTER AND SOIL MANAGEMENT PLAN.

PERMIT LEVEL
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
SITE PLAN	WHS	9/25/20
COMMENT RESPONSE	WHS	1/8/21

DRAWING NAME: GENERAL NOTES

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

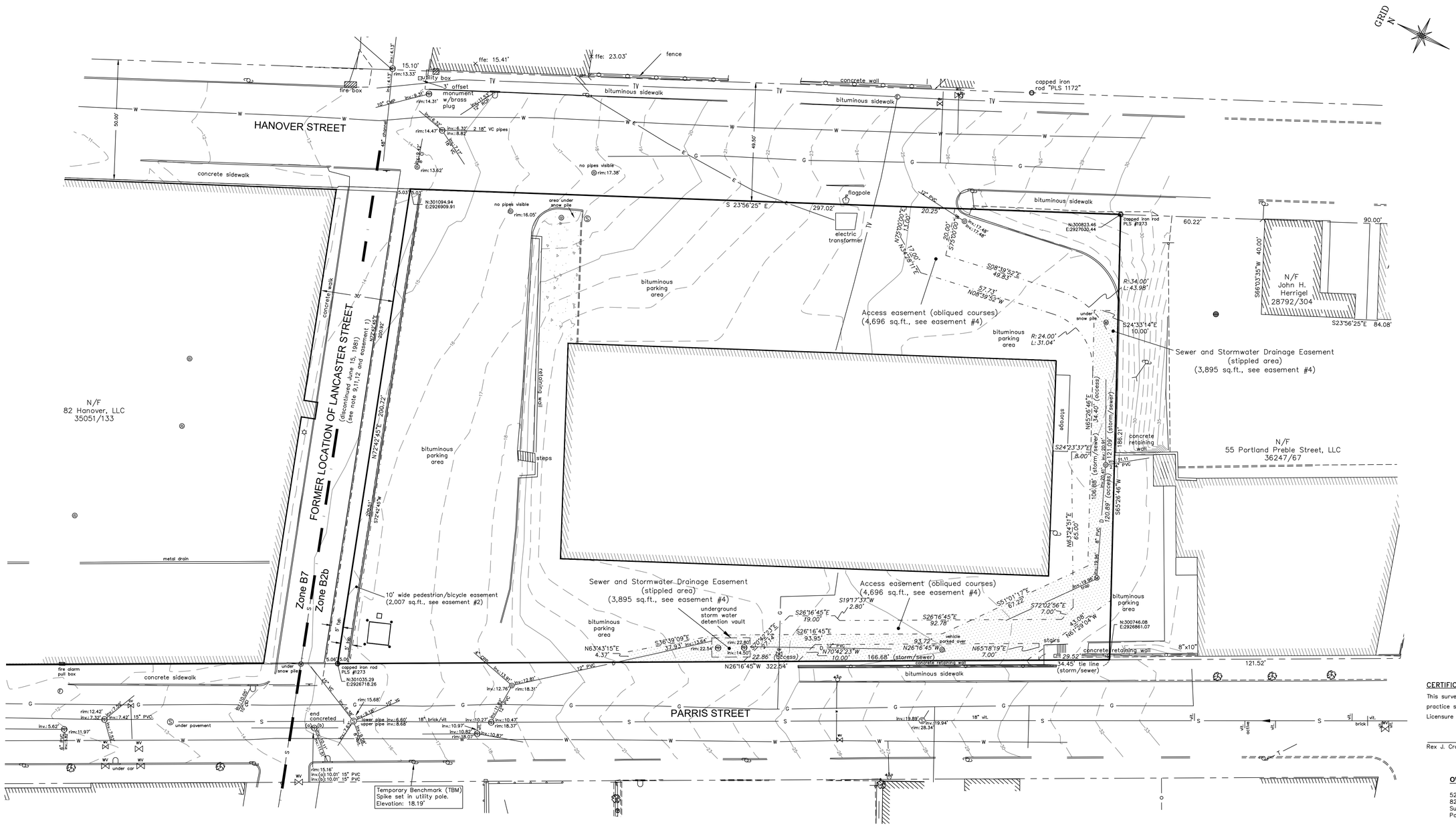
ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
PO BOX 4543, PORTLAND, MAINE 04104
(207) 775-2655

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION OF ACORN ENGINEERING, INC. ANY MODIFICATIONS, WITHOUT PERMISSION OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING.

FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11419
LICENSED
PROFESSIONAL ENGINEER
1/8/21

DRAWING NO.
C-02



NOTES

1) Book and Page references are to the Cumberland County Registry of Deeds.

2) Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone based on a digital drawing file provided by the City of Portland.

3) Elevations are based the City of Portland datum, tied to City TBM #59, "Top of granite monument @ drill hole, below iron drip box, in concrete sidewalk ramp at southwest corner Alder/Kennebec. El.=10.145'.

4) Utility information on this plan is approximate, based on location of visible features and information contained on plans and drawings provided by others. DigSafe and/or the appropriate utilities should be contacted prior to any construction.

5) Properties lie within Zone C based on FIRM Community #230051 Panel #0013-B, dated July 17, 1988. They do not lie within a special flood hazard area.

6) Boundary and right of way information shown per plan references 1, 2, & 3.

7) Project area was covered by snow and ice at the time of the survey and some features may have been obscured and not shown on this plan.

8) Right of way lines shown per electronic drawing file provided by the City of Portland Department of Engineering. See plan reference #4.

9) The portion of Lancaster Street shown was discontinued June 15, 1981, City of Portland records, Volume 98, Page 187. This discontinuance does not expressly exclude public rights over the discontinued street. According to 23 M.R.S.A. 3026(1) a street discontinuance after September 3, 1965, leaves an automatic public easement unless specific language states otherwise. As set forth in a Certificate of Discontinuance dated July 20, 2018 recorded in Book 35051, Page 132, the Portland City Council voted to extinguish the public easement within the former location of Lancaster Street as part of this subdivision.

10) The portion of the property described in Book 23202, Page 38 was conveyed to Portland and Rochester Railroad Company (Portland Terminal Company) by N. L. Woodbury in Book 392, Page 253, April 3, 1872. This conveyance is a quit claim deed that conveys a "The right of way and use for their (P&RRC) railroad". This deed ends with the statement "Meaning and intending to convey the right only to occupy the foresaid premises for the purpose of their Railroad.....". Obtaining a title opinion concerning this portion of the property is recommended.

11) A sewer easement is reserved by the City of Portland over the discontinued portion of Lancaster Street per the June 15, 1981 discontinuance found in the City of Portland records Volume 98, Page 187.

PLAN REFERENCES

1) Plan of Standard Boundary Survey, 82 Hanover Street, made for City of Portland by Titcomb Associates dated November 1, 2017.

2) Plan of Standard Boundary Survey, 52 Hanover Street, made for City of Portland by Titcomb Associates dated November 2, 2017.

3) Plan of Subdivision Plat made for City of Portland by Titcomb Associates, dated November 29, 2017 as revised through July 24, 2018, recorded in Plan Book 218, Page 342.

4) Digital Drawing File of Kennebec Street and surrounding streets provided by the City of Portland Department of Engineering.

5) City of Portland Property Plan #6.

6) City of Portland Vault Plan #195/11.

7) City of Portland Vault Plan #210/13.

8) Plan of Existing Conditions 52 & 82 Hanover Street, Portland, Maine made for Acorn Engineering, Inc. by Titcomb Associates dated January 25, 2018 and revised August 25, 2018.

9) Plan of Subdivision Plat made for City of Portland by Titcomb Associates dated November 29, 2017 revised through July 24, 2018 as recorded in Plan Book 218, Page 342.

LEGEND

- Monument – found
- Iron marker – found
- Nail w/washer – found
- Property line (locus)
- Property line (abutter)
- Right of way line
- Chain link fence
- Guard rail
- Edge of pavement
- Edge of gravel
- Curb
- Sign
- Lamp or light pole
- Utility pole
- Guy wire
- Gas valve
- Water valve
- Water shutoff
- Fire hydrant
- Sewer manhole
- Telephone manhole
- Catch basin
- Catch basin w/throat
- Drain manhole
- Manhole
- Bollard
- S — Sewer line
- D — Storm drain
- W — Underground water line
- G — Underground gas line
- E — Underground electric line
- TV — Underground communication line
- 64 — Contours (1ft)
- 65 — Contours (5ft)
- N/F — Now or formerly of
- 1234/567 — Deed reference (Book/Page)
- Existing building
- Concrete

EASEMENTS

1) The former location of Lancaster Street is subject to a utility easement retained by the City as set forth in a Certificate of Discontinuance dated July 20, 2018 recorded in Book 35051, Page 132.

2) Property is subject to a the southerly half of a 10 foot wide public pedestrian and bicycle easement retained by the City of Portland as set forth in a deed recorded in Book 35353, Page 234.

3) The portion of the property described in Book 23202, Page 38 is subject to use restrictions as set forth in Book 16707, Page 206 and modified in Book 29610, Page 223.

4) Property is subject to an Access Easement and a Sewer and Stormwater Drainage Easement conveyed to the City of Portland as set forth in a deed recorded in Book 35353, Page 239.

STATE OF MAINE
REX J. CROTEAU
2273
PROFESSIONAL LAND SURVEYOR

CERTIFICATION

This survey conforms to the current standards of practice set forth by the Maine State Board of Licensure for Land Surveyors.

Rex J. Croteau, P.L.S. #2273

OWNER OF RECORD

52 Hanover, LLC
82 Hanover Street
Suite 5
Portland, Maine

SCALE IN FEET
20 0 20 40
1" = 20'

Rev. 1		

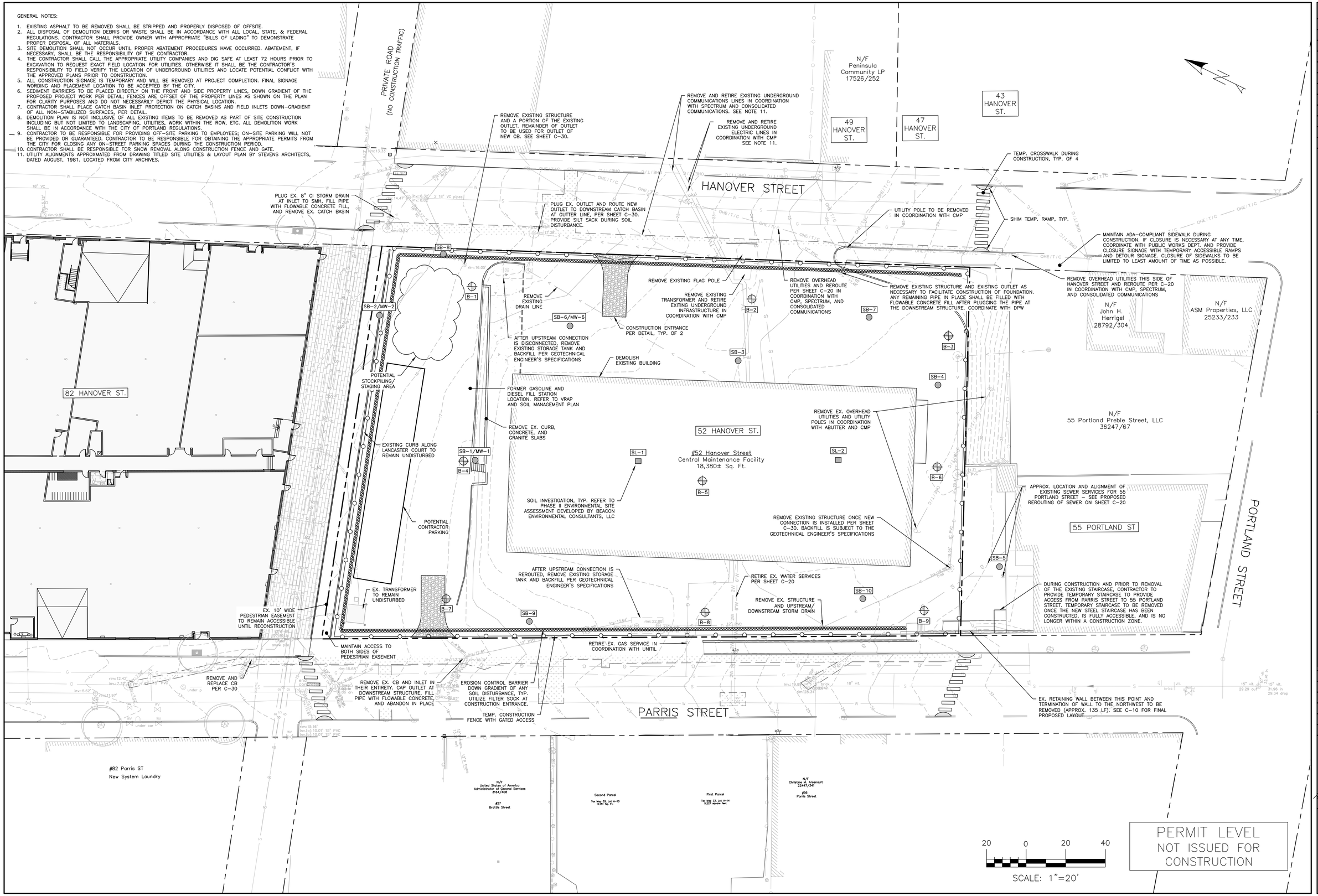
PLAN OF
Existing Conditions
52 Hanover Street — Portland, Maine

MADE FOR
Acorn Engineering, Inc.
65 Hanover Street, Suite 1 — Portland, Maine

JOB #217075	DATE: December 15, 2020	SCALE: 1" = 20'
BOOK #906	Titcomb Associates	
217075_ExC 2020.dwg	133 Gray Road, Falmouth, Maine 04105 (207)797-9199 www.titcombsurvey.com	

GENERAL NOTES:

1. EXISTING ASPHALT TO BE REMOVED SHALL BE STRIPPED AND PROPERLY DISPOSED OF OFFSITE.
2. ALL DISPOSAL OF DEMOLITION DEBRIS OR WASTE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS. CONTRACTOR SHALL PROVIDE OWNER WITH APPROPRIATE "BILLS OF LADING" TO DEMONSTRATE PROPER DISPOSAL OF ALL MATERIALS.
3. SITE DEMOLITION SHALL NOT OCCUR UNTIL PROPER ABATEMENT PROCEDURES HAVE OCCURRED. ABATEMENT, IF NECESSARY, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AND DIG SAFE AT LEAST 72 HOURS PRIOR TO EXCAVATION TO REQUEST EXACT FIELD LOCATION FOR UTILITIES. OTHERWISE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND LOCATE POTENTIAL CONFLICT WITH THE APPROVED PLANS PRIOR TO CONSTRUCTION.
5. ALL CONSTRUCTION SIGNAGE IS TEMPORARY AND WILL BE REMOVED AT PROJECT COMPLETION. FINAL SIGNAGE WORDING AND PLACEMENT LOCATION TO BE ACCEPTED BY THE CITY.
6. SEDIMENT BARRIERS TO BE PLACED DIRECTLY ON THE FRONT AND SIDE PROPERTY LINES, DOWN GRADIENT OF THE PROPOSED PROJECT WORK PER DETAIL; FENCES ARE OFFSET OF THE PROPERTY LINES AS SHOWN ON THE PLAN FOR CLARITY PURPOSES AND DO NOT NECESSARILY DEPICT THE PHYSICAL LOCATION.
7. CONTRACTOR SHALL PLACE CATCH BASIN INLET PROTECTION ON CATCH BASINS AND FIELD INLETS DOWN-GRADIENT OF ALL NON-STABILIZED SURFACES, PER DETAIL.
8. DEMOLITION PLAN IS NOT INCLUSIVE OF ALL EXISTING ITEMS TO BE REMOVED AS PART OF SITE CONSTRUCTION INCLUDING BUT NOT LIMITED TO LANDSCAPING, UTILITIES, WORK WITHIN THE ROW, ETC. ALL DEMOLITION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF PORTLAND REGULATIONS.
9. CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING OFF-SITE PARKING TO EMPLOYEES; ON-SITE PARKING WILL NOT BE PROVIDED OR GUARANTEED. CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING THE APPROPRIATE PERMITS FROM THE CITY FOR CLOSING ANY ON-STREET PARKING SPACES DURING THE CONSTRUCTION PERIOD.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR SNOW REMOVAL ALONG CONSTRUCTION FENCE AND GATE.
11. UTILITY ALIGNMENTS APPROXMATED FROM DRAWING TITLED SITE UTILITIES & LAYOUT PLAN BY STEVENS ARCHITECTS, DATED AUGUST, 1981. LOCATED FROM CITY ARCHIVES.



PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY	DATE
SITE PLAN	WHS	9/25/20
COMMENT RESPONSE	WHS	1/6/21

DRAWING NAME: **DEMOLITION & CONSTRUCTION MANAGEMENT PLAN**

PROJECT NAME: **52 HANOVER REDEVELOPMENT**

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY MODIFICATIONS, WITHOUT WRITTEN PERMISSION OR, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
P.O. BOX 3294, PORTLAND, MAINE 04104
(207) 775-2655

FILE:	1093.2_CIVIL
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED PROFESSIONAL ENGINEER — 1/6/21

DRAWING NO.
C-03

GENERAL NOTES:

1. ALL BRICK SIDEWALK AND VERTICAL GRANITE CURB TO BE REPLACED SHALL BE REBUILT TO CITY OF PORTLAND STANDARD.
2. ALL PAVEMENT STRIPING AND MARKINGS SHALL COMPLY TO CITY OF PORTLAND STANDARDS.
3. ANY ASPHALT TO BE REMOVED SHALL BE STRIPPED AND PROPERLY DISPOSED OF OFFSITE.
4. CURB TO BE REMOVED, STOCKPILED AND RESET IN ACCORDANCE WITH DETAIL. BROKEN CURB SHALL BE PROPERLY DISPOSED OF AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
5. ALL RAMPS TO CONFORM TO ADA GUIDELINES. SLOPE SHALL NOT EXCEED 1 INCH PER FOOT.
6. ALL SITE SIGNAGE TO COMPLY WITH MUTCD STANDARDS. CONTRACTOR TO COORDINATE AND INSTALL.
7. FOLLOWING COMPLETION OF CONSTRUCTION, THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND MANAGEMENT OF DRIVEWAYS, SITE LIGHTING AND TRASH REMOVAL.
8. THE OWNER SHALL BE RESPONSIBLE FOR SNOW AND ICE REMOVAL (INCLUDING WITHIN THE PEDESTRIAN EASEMENT AREA) AND NO SNOW STORAGE ON SITE UNLESS SHOWN ON THE SITE PLAN.

PARKING SUMMARY: GROUND

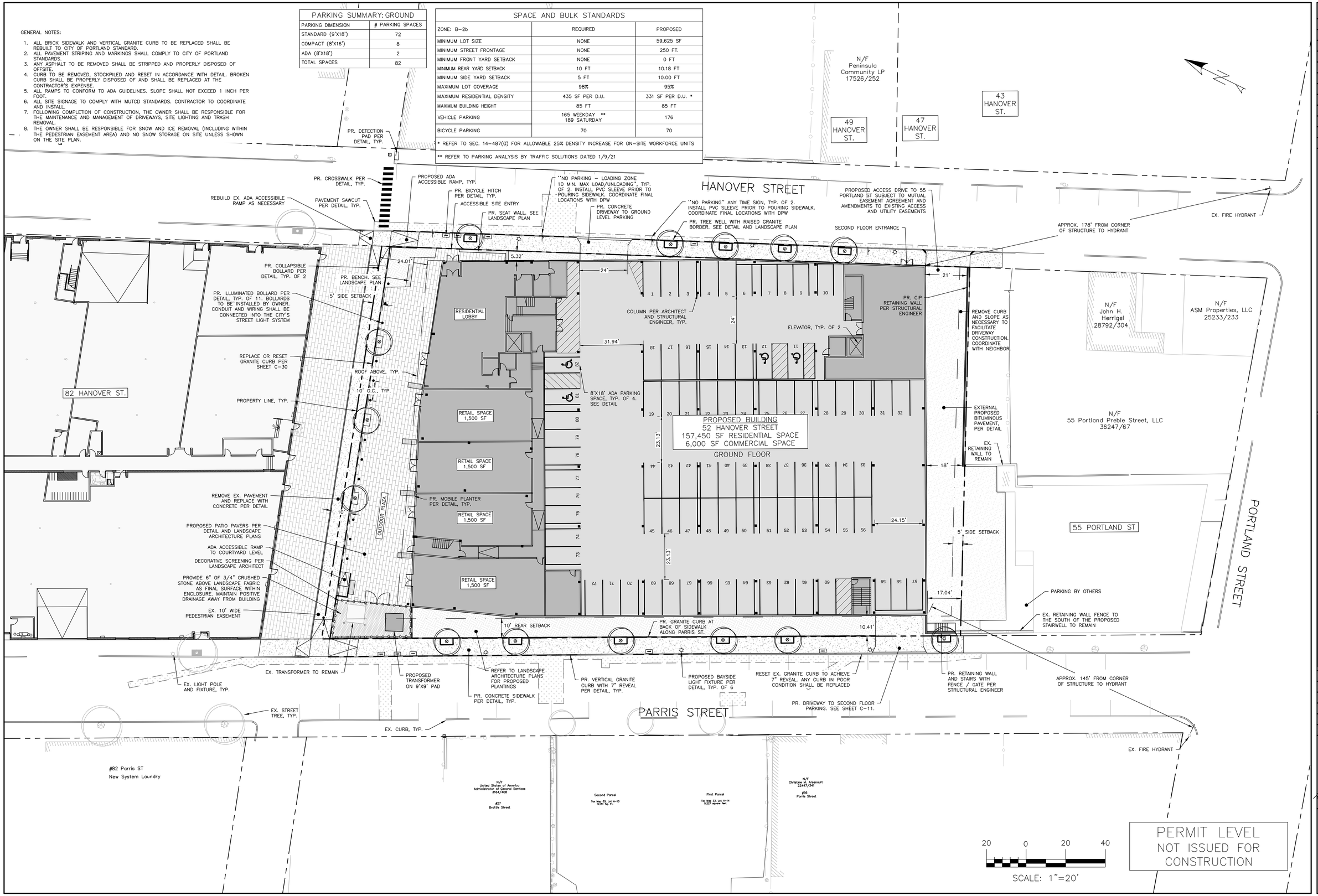
PARKING DIMENSION	# PARKING SPACES
STANDARD (9'X18')	72
COMPACT (8'X16')	8
ADA (8'X18')	2
TOTAL SPACES	82

SPACE AND BULK STANDARDS

ZONE: B-2b	REQUIRED	PROPOSED
MINIMUM LOT SIZE	NONE	59,625 SF
MINIMUM STREET FRONTAGE	NONE	250 FT.
MINIMUM FRONT YARD SETBACK	NONE	0 FT
MINIMUM REAR YARD SETBACK	10 FT	10.18 FT
MINIMUM SIDE YARD SETBACK	5 FT	10.00 FT
MAXIMUM LOT COVERAGE	98%	95%
MAXIMUM RESIDENTIAL DENSITY	435 SF PER D.U.	331 SF PER D.U. *
MAXIMUM BUILDING HEIGHT	85 FT	85 FT
VEHICLE PARKING	165 WEEKDAY ** 189 SATURDAY	176
BICYCLE PARKING	70	70

* REFER TO SEC. 14-487(G) FOR ALLOWABLE 25% DENSITY INCREASE FOR ON-SITE WORKFORCE UNITS

** REFER TO PARKING ANALYSIS BY TRAFFIC SOLUTIONS DATED 1/9/21



PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
PRE APP	WHS 7/16/20
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/6/21

DRAWING NAME: SITE PLAN – GROUND FLOOR

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC.
P.O. BOX 4592, PORTLAND, MAINE 04104
(207) 775-2655

FILE:	1093.2_CIVIL
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11419
LICENSED
1/6/21

DRAWING NO.
C-10

GENERAL NOTES:

1. ALL BRICK SIDEWALK AND VERTICAL GRANITE CURB TO BE REPLACED SHALL BE REBUILT TO CITY OF PORTLAND STANDARD.
2. ALL PAVEMENT STRIPING AND MARKINGS SHALL COMPLY TO CITY OF PORTLAND STANDARDS.
3. ANY ASPHALT TO BE REMOVED SHALL BE STRIPPED AND PROPERLY DISPOSED OF OFFSITE.
4. CURB TO BE REMOVED, STOCKPILED AND RESET IN ACCORDANCE WITH DETAIL. BROKEN CURB SHALL BE PROPERLY DISPOSED OF AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
5. ALL RAMPS TO CONFORM TO ADA GUIDELINES. SLOPE SHALL NOT EXCEED 1 INCH PER FOOT.
6. ALL SITE SIGNAGE TO COMPLY WITH MUTCD STANDARDS. CONTRACTOR TO COORDINATE AND INSTALL.
7. FOLLOWING COMPLETION OF CONSTRUCTION, THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND MANAGEMENT OF DRIVEWAYS, SITE LIGHTING, TRASH REMOVAL AND SNOW REMOVAL.
8. THE OWNER SHALL BE RESPONSIBLE FOR SNOW AND ICE REMOVAL (INCLUDING WITHIN THE PEDESTRIAN EASEMENT AREA) AND NO SNOW STORAGE ON SITE UNLESS SHOWN ON THE SITE PLAN.

PARKING SUMMARY: 2ND FLOOR

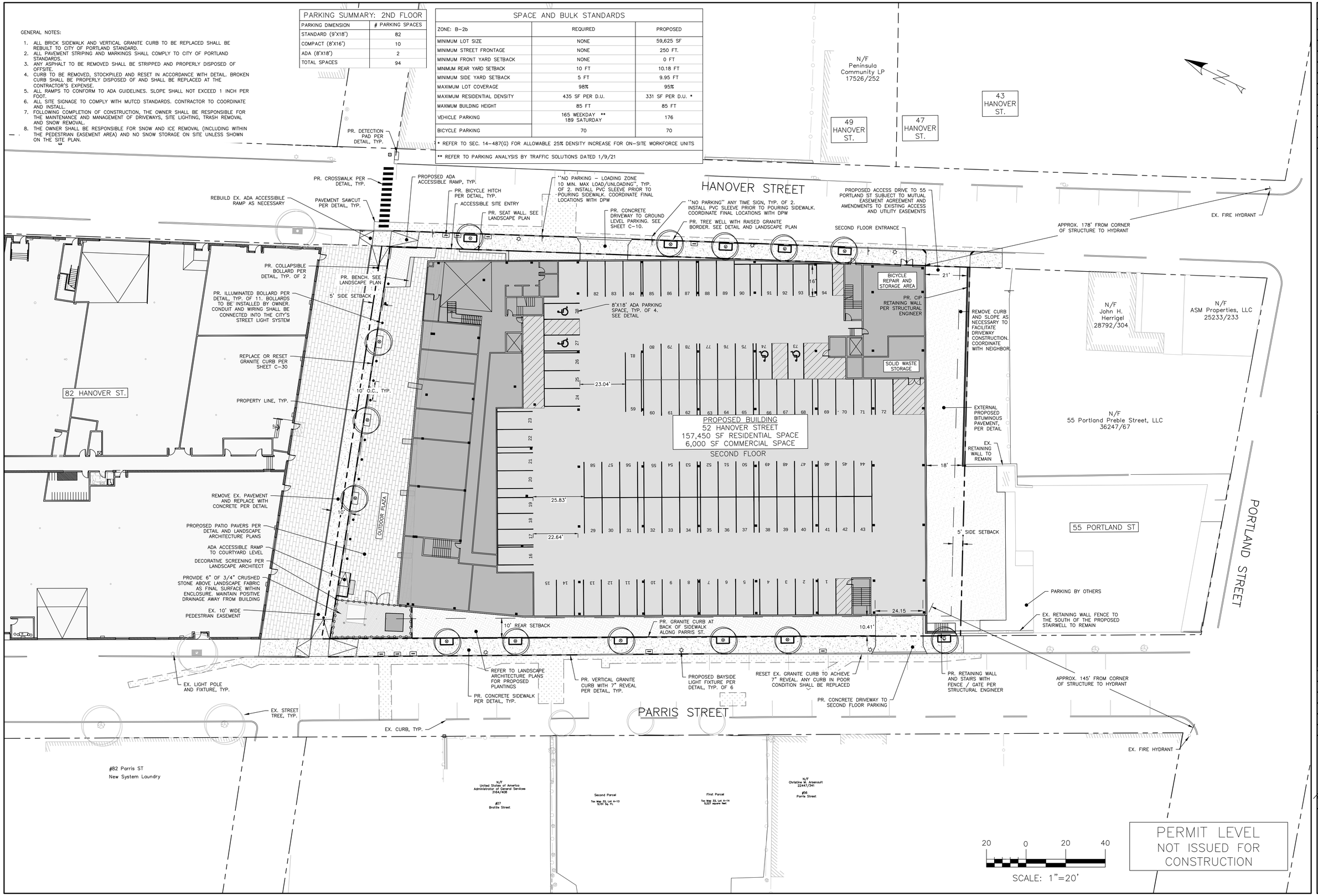
PARKING DIMENSION	# PARKING SPACES
STANDARD (9'X18')	82
COMPACT (8'X16')	10
ADA (8'X18')	2
TOTAL SPACES	94

SPACE AND BULK STANDARDS

ZONE: B-2b	REQUIRED	PROPOSED
MINIMUM LOT SIZE	NONE	59,625 SF
MINIMUM STREET FRONTAGE	NONE	250 FT.
MINIMUM FRONT YARD SETBACK	NONE	0 FT
MINIMUM REAR YARD SETBACK	10 FT	10.18 FT
MINIMUM SIDE YARD SETBACK	5 FT	9.95 FT
MAXIMUM LOT COVERAGE	98%	95%
MAXIMUM RESIDENTIAL DENSITY	435 SF PER D.U.	331 SF PER D.U. *
MAXIMUM BUILDING HEIGHT	85 FT	85 FT
VEHICLE PARKING	165 WEEKDAY ** 189 SATURDAY	176
BICYCLE PARKING	70	70

* REFER TO SEC. 14-487(G) FOR ALLOWABLE 25% DENSITY INCREASE FOR ON-SITE WORKFORCE UNITS

** REFER TO PARKING ANALYSIS BY TRAFFIC SOLUTIONS DATED 1/9/21



PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY	DATE
PRE APP	WHS	7/16/20
SITE PLAN	WHS	9/25/20
COMMENT RESPONSE	WHS	1/6/21

DRAWING NAME: SITE PLAN – SECOND FLOOR

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
PO BOX 3777, PORTLAND, MAINE 04104
(207) 775-2655

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FILE:	1093.2_CIVIL
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

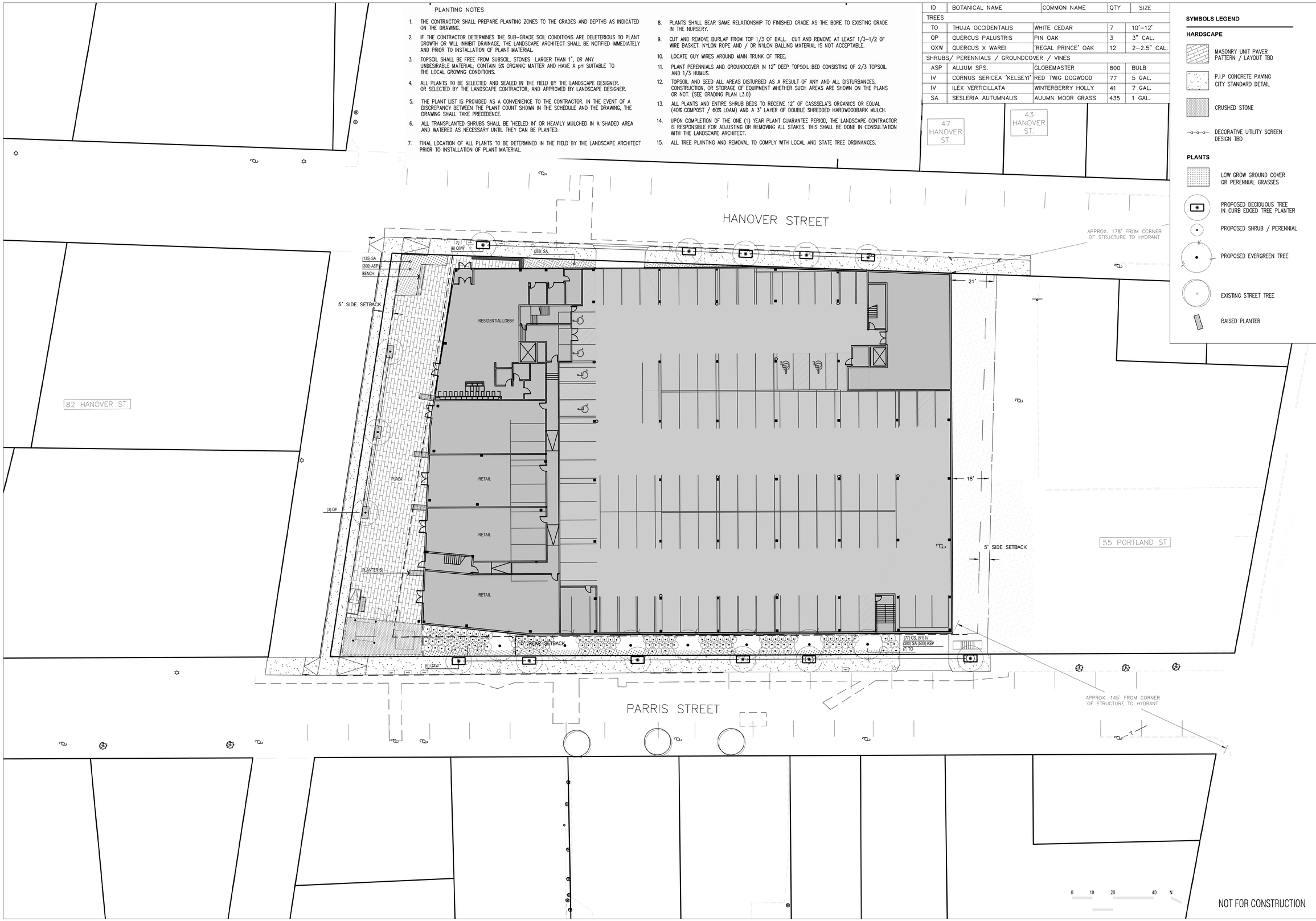
STATE OF MAINE WILLIAM H. SAVAGE No. 11419 LICENSED PROFESSIONAL ENGINEER 1/6/21

DRAWING NO.
C-11

PLANTING NOTES

1. THE CONTRACTOR SHALL PREPARE PLANTING ZONES TO THE GRADES AND DEPTHS AS INDICATED ON THE DRAWING.
2. IF THE CONTRACTOR DETERMINES THE SUB-GRADE SOIL CONDITIONS ARE DELETERIOUS TO PLANT GROWTH OR WILL INHIBIT DRAINAGE, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND PRIOR TO INSTALLATION OF PLANT MATERIAL.
3. TOPSOIL SHALL BE FREE FROM SUBSOIL, STONES LARGER THAN 1", OR ANY UNDESIRABLE MATERIAL; CONTAIN 5% ORGANIC MATTER AND HAVE A pH SUITABLE TO THE LOCAL GROWING CONDITIONS.
4. ALL PLANTS TO BE SELECTED AND SEALED IN THE FIELD BY THE LANDSCAPE DESIGNER. OR SELECTED BY THE LANDSCAPE CONTRACTOR, AND APPROVED BY LANDSCAPE DESIGNER.
5. THE PLANT LIST IS PROVIDED AS A CONVENIENCE TO THE CONTRACTOR. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANT COUNT SHOWN IN THE SCHEDULE AND THE DRAWING, THE DRAWING SHALL TAKE PRECEDENCE.
6. ALL TRANSPLANTED SHRUBS SHALL BE 'HEELED IN' OR HEAVILY MULCHED IN A SHADED AREA AND WATERED AS NECESSARY UNTIL THEY CAN BE PLANTED.
7. FINAL LOCATION OF ALL PLANTS TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIAL.
8. PLANTS SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS THE BORE TO EXISTING GRADE IN THE NURSERY.
9. CUT AND REMOVE BURLAP FROM TOP 1/3 OF BALL. CUT AND REMOVE AT LEAST 1/3–1/2 OF WIRE BASKET. NYLON ROPE AND / OR NYLON BALLING MATERIAL IS NOT ACCEPTABLE.
10. LOCATE GUY WIRES AROUND MAIN TRUNK OF TREE.
11. PLANT PERENNIALS AND GROUNDCOVER IN 12" DEEP TOPSOIL BED CONSISTING OF 2/3 TOPSOIL AND 1/3 HUMUS.
12. TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL DISTURBANCES, CONSTRUCTION, OR STORAGE OF EQUIPMENT WHETHER SUCH AREAS ARE SHOWN ON THE PLANS OR NOT. (SEE GRADING PLAN L3.0)
13. ALL PLANTS AND ENTIRE SHRUB BEDS TO RECEIVE 12" OF CASSSELA'S ORGANICS OR EQUAL (40% COMPOST / 60% LOAM) AND A 3" LAYER OF DOUBLE SHREDDED HARDWOODBARK MULCH.
14. UPON COMPLETION OF THE ONE (1) YEAR PLANT GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING OR REMOVING ALL STAKES. THIS SHALL BE DONE IN CONSULTATION WITH THE LANDSCAPE ARCHITECT.
15. ALL TREE PLANTING AND REMOVAL TO COMPLY WITH LOCAL AND STATE TREE ORDINANCES.

ID	BOTANICAL NAME	COMMON NAME	QTY	SIZE
TREES				
TO	THUJA OCCIDENTALIS	WHITE CEDAR	7	10'–12'
QP	QUERCUS PALUSTRIS	PIN OAK	3	3" CAL.
QXW	QUERCUS X WAREI	'REGAL PRINCE' OAK	12	2–2.5" CAL.
SHRUBS/ PERENNIALS / GROUNDCOVER / VINES				
ASP	ALLIUM SPS.	GLOBEMASTER	800	BULB
IV	CORNUS SERICEA 'KELSEYI'	RED TWIG DOGWOOD	77	5 GAL.
IV	ILEX VERTICILLATA	WINTERBERRY HOLLY	41	7 GAL.
SA	SESLERIA AUTUMNALIS	AUUMN MOOR GRASS	435	1 GAL.



NOT FOR CONSTRUCTION

SYMBOLS LEGEND

HARDSCAPE

- MASONRY UNIT PAVER PATTERN / LAYOUT TBD
- P.I.P CONCRETE PAVING CITY STANDARD DETAIL
- CRUSHED STONE
- DECORATIVE UTILITY SCREEN DESIGN TBD

PLANTS

- LOW GROW GROUND COVER OR PERENNIAL GRASSES
- PROPOSED DECIDUOUS TREE IN CURB EDGED TREE PLANTER
- PROPOSED SHRUB / PERENNIAL
- PROPOSED EVERGREEN TREE
- EXISTING STREET TREE
- RAISED PLANTER

Soren deNiord Design Studio
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Portland, ME
04103
T: 207-400-2450
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52 HANOVER STREET
PORTLAND MAINE

No:	Revision	Date:
1	PLANNING BOARD SUBMITTAL	21.01.06

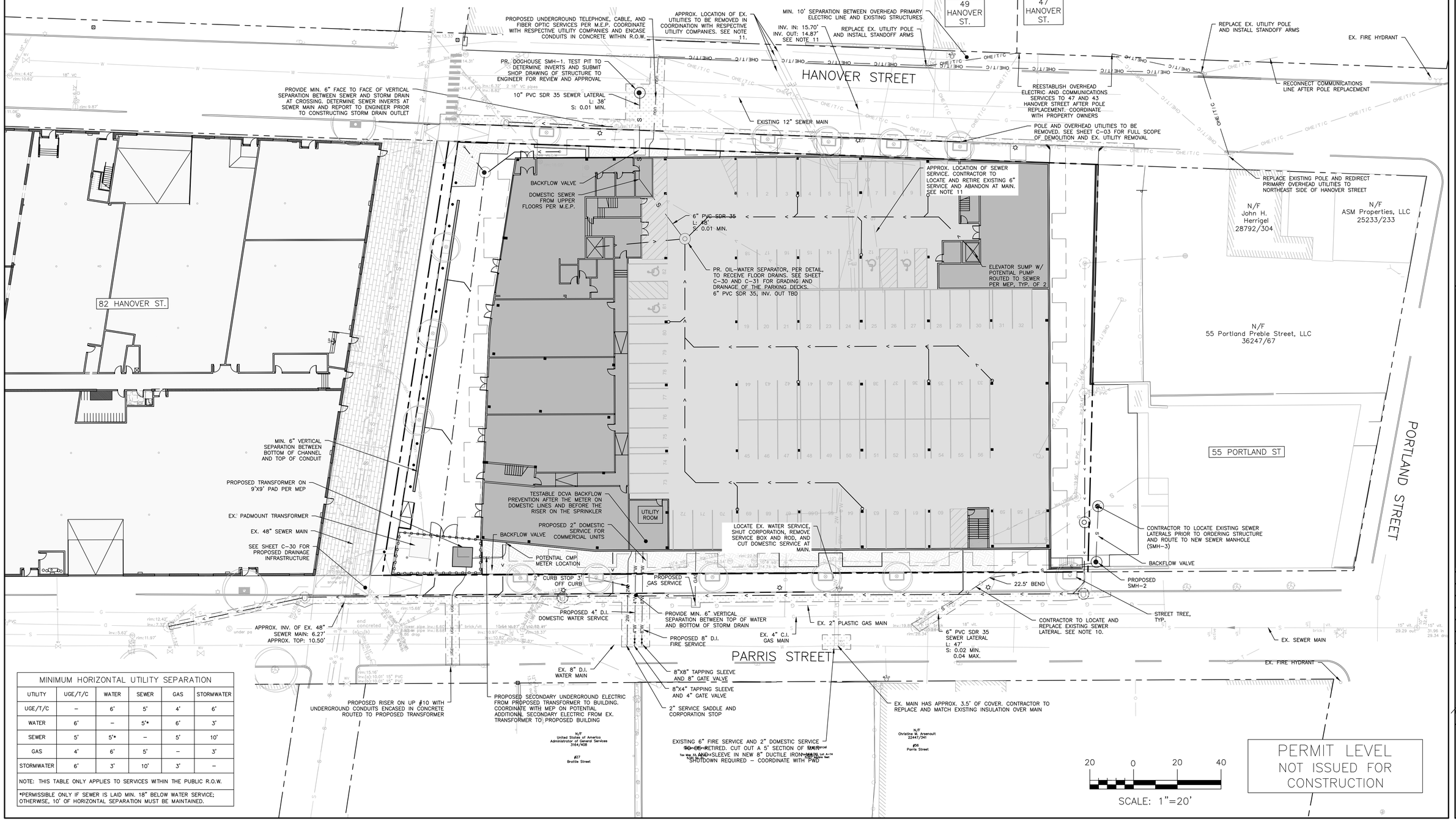
revisions:
date: SEPTEMBER 28, 2020
scale: As Noted
drawn: XX
checked: XX

L1.0

LANDSCAPE PLAN

GENERAL NOTES:

1. LOCATION OF PROPOSED CONNECTIONS ARE APPROXIMATE. CONTRACTOR TO CONTACT ENGINEER IF FIELD INFORMATION VARIES FROM INFORMATION ON PLANS.
2. CONTRACTOR IS TO BE CAUTIONED THAT CERTAIN LOCATIONS AND/OR ELEVATIONS OF EXISTING UTILITIES HAVE BEEN PROVIDED THROUGH UTILITY COORDINATION OR OTHER OBSERVATIONS. INFORMATION IS NOT TO BE RELIED UPON AS EXACT OR COMPLETE. CONTRACTOR TO FIELD VERIFY AND COORDINATE WITH UTILITY COMPANY AND DIG SAFE NO LESS THAN 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS INDICATED IN THE CONTRACT DOCUMENTS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DIFFERENTIATIONS FROM EXISTING CONDITIONS, INCLUDING UTILITY INFORMATION, PRIOR TO ANY CHANGES.
3. FOR ALL UTILITIES, ACORN ENGINEERING DESIGN LIMITS END AT EXTERIOR WALL OF BUILDING. METERING OF UTILITIES TO BE COMPLETED BY M.E.P. UNLESS SPECIFIED OTHERWISE.
4. CONTRACTOR TO COORDINATE WITH ARCHITECT ON FINAL UTILITY CONNECTIONS WITHIN THE BUILDING.
5. SEWER UTILITIES: CONTRACTOR TO COORDINATE WITH ARCHITECT FOR FINAL SERVICE CONNECTION. SEWER UTILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH CITY OF PORTLAND TECHNICAL STANDARDS. VALVE FOR BACKFLOW PREVENTION SHALL BE INSTALLED WITHIN THE THE PROPERTY LINES FOR EACH CITY SEWER CONNECTION. CONTACT ENGINEER IF INVERT FIELD CONDITIONS VARY FROM DESIGN.
6. WATER UTILITIES: FINAL PIPE SIZING PROVIDED BY M.E.P. ENGINEER AND FIRE PROTECTION DESIGNER. INTERNAL METERING, BACKFLOW PREVENTION, AND PRESSURE REDUCERS TO BE COMPLETED BY M.E.P. ENGINEER. DOMESTIC WATER PIPE SIZES WILL DETERMINE THE FINAL WATER METERING OPTIONS. METER MAY BE SMALLER THAN PROPOSED WATER MAIN. WATER METERING, PRESSURE REDUCER AND BACKFLOW PREVENTION TO BE IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT STANDARDS. CONTRACTOR TO FOLLOW METERING GUIDELINES OF THE PORTLAND WATER DISTRICT AND CITY OF PORTLAND.
   - 6.1. APPROXIMATE LOCATION OF EXISTING WATER MAIN & SERVICE OBTAINED FROM "EXISTING CONDITIONDS SURVEY" BY TITCOMB ASSOCAITES, DATED .
   - 6.2. WATER SERVICES TO COMPLY WITH THE FOLLOWING MINIMUM SEPARATION DISTANCES:
     - 6.2.1. 10' FROM PROPERTY LINES
     - 6.2.2. 10' FROM STREET TREES
     - 6.2.3. 10' FROM STREET LIGHTING
     - 6.2.4. 5' FROM EDGE OF DRIVEWAY APRON
7. GAS UTILITIES: PROJECT GAS LOAD, GAS UTILITY DESIGN, AND FINAL GAS SERVICE LOCATION AND METERS TO BE DEFINED BY M.E.P. AND IN ACCORDANCE WITH UNITIL.
8. ELECTRIC UTILITIES: ELECTRIC DESIGN TO BE FINALIZED BY M.E.P. ENGINEER. ELECTRICAL LOAD TO BE DETERMINED BY M.E.P. ENGINEER. METER LOCATION AND TRANSFORMER SIZE, IF NECESSARY DEFINED BY M.E.P. M.E.P. TO FINALIZE SERVICE CONNECTION TO BUILDING. ALL ELECTRIC CONSTRUCTION SHALL CONFORM TO CMP GUIDEBOOK OF STANDARD REQUIREMENTS, MOST RECENT EDITION. DESIGN SUBJECT TO FINAL APPROVAL FROM CMP.
9. CABLE AND TELEPHONE PULLBOXES AND PEDESTAL LOCATIONS TO BE DETERMINED BY CHARTER COMMUNICATIONS AND FAIRPOINT PRIOR TO CONSTRUCTION. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND UTILITIES WITH ALL UTILITY COMPANIES INVOLVED.
10. UNLESS THE EXISTING SEWER LATERAL SERVING 55 PORTLAND STREET CONSISTS OF 6" PVC PIPE IN GOOD CONDITION, REPLACE EX. PIPE WITH NEW 6" PVC SDR 35 SEWER LATERAL FROM PROPOSED SMH TO EXISTING SMH CONNECTION IN PARRIS STREET. TEST PITS FOR INVERTS AND ALIGNMENT SHALL OCCUR PRIOR TO ORDERING STRUCTURES.
11. UTILITY ALIGNMENTS APPROXIMATED FROM DRAWING TITLED SITE UTILITIES & LAYOUT PLAN BY STEVENS ARCHITECTS, DATED AUGUST, 1981. LOCATED FROM CITY ARCHIVES.



MINIMUM HORIZONTAL UTILITY SEPARATION					
UTILITY	UGE/T/C	WATER	SEWER	GAS	STORMWATER
UGE/T/C	–	6'	5'	4'	6'
WATER	6'	–	5'*	6'	3'
SEWER	5'	5'*	–	5'	10'
GAS	4'	6'	5'	–	3'
STORMWATER	6'	3'	10'	3'	–

NOTE: THIS TABLE ONLY APPLIES TO SERVICES WITHIN THE PUBLIC R.O.W.

*PERMISSIBLE ONLY IF SEWER IS LAID MIN. 18" BELOW WATER SERVICE; OTHERWISE, 10' OF HORIZONTAL SEPARATION MUST BE MAINTAINED.

ISSUED FOR	BY DATE
ATS	WHS 8/21/2020
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/6/21

DRAWING NAME: UTILITY PLAN

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC.
82 HANOVER STREET, PORTLAND, MAINE 04104
PO BOX 3287, PORTLAND, MAINE 04104
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FILE:	1093.2_CIVIL
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED PROFESSIONAL ENGINEER — 1/6/21

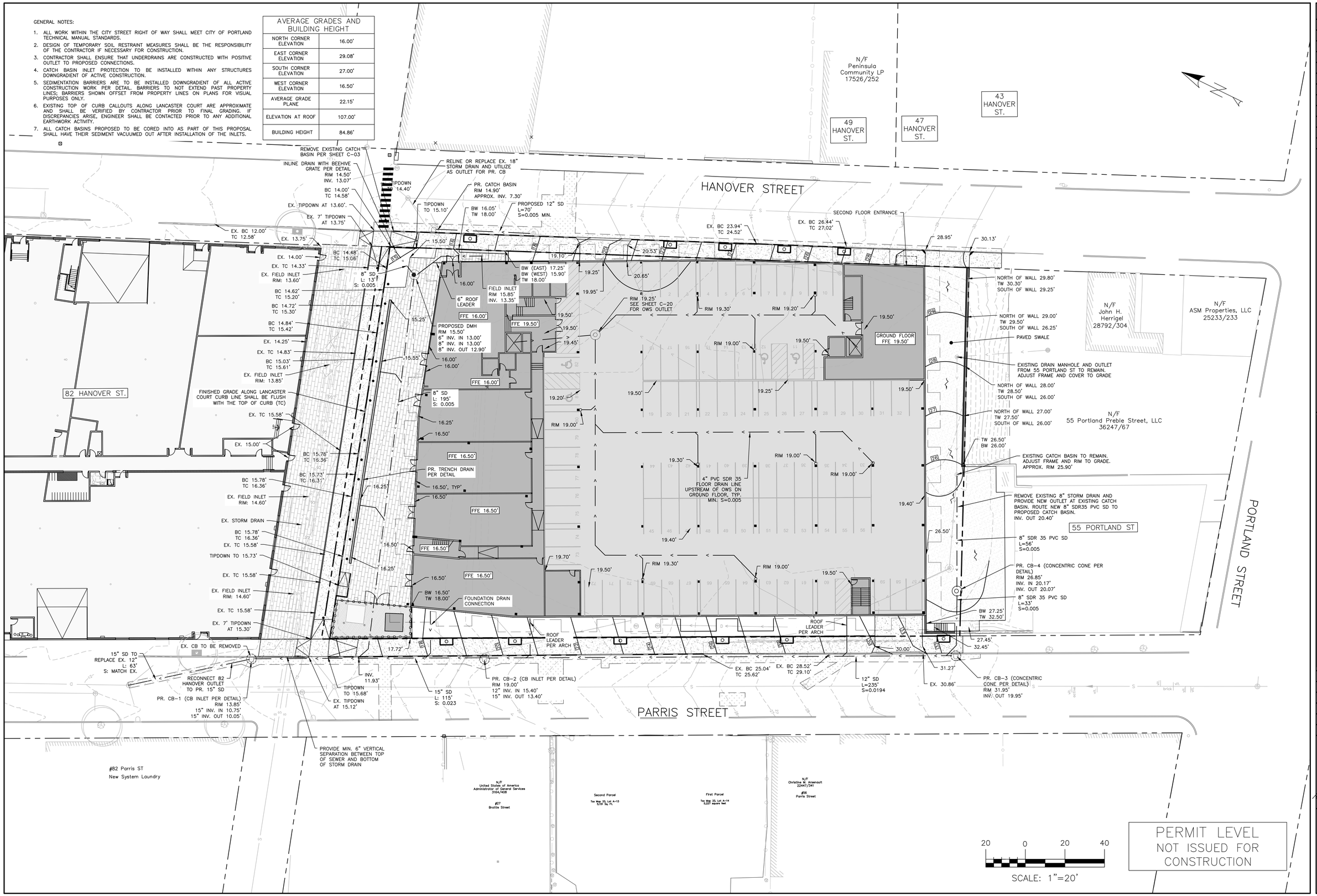
PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

DRAWING NO.
C-20

GENERAL NOTES:

1. ALL WORK WITHIN THE CITY STREET RIGHT OF WAY SHALL MEET CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.
2. DESIGN OF TEMPORARY SOIL RESTRAINT MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IF NECESSARY FOR CONSTRUCTION.
3. CONTRACTOR SHALL ENSURE THAT UNDERDRAINS ARE CONSTRUCTED WITH POSITIVE OUTLET TO PROPOSED CONNECTIONS.
4. CATCH BASIN INLET PROTECTION TO BE INSTALLED WITHIN ANY STRUCTURES DOWNGRADIENT OF ACTIVE CONSTRUCTION.
5. SEDIMENTATION BARRIERS ARE TO BE INSTALLED DOWNGRADIENT OF ALL ACTIVE CONSTRUCTION WORK PER DETAIL. BARRIERS TO NOT EXTEND PAST PROPERTY LINES; BARRIERS SHOWN OFFSET FROM PROPERTY LINES ON PLANS FOR VISUAL PURPOSES ONLY.
6. EXISTING TOP OF CURB CALLOUTS ALONG LANCASTER COURT ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO FINAL GRADING. IF DISCREPANCIES ARISE, ENGINEER SHALL BE CONTACTED PRIOR TO ANY ADDITIONAL EARTHWORK ACTIVITY.
7. ALL CATCH BASINS PROPOSED TO BE CORED INTO AS PART OF THIS PROPOSAL SHALL HAVE THEIR SEDIMENT VACUUMED OUT AFTER INSTALLATION OF THE INLETS.

AVERAGE GRADES AND BUILDING HEIGHT	
NORTH CORNER ELEVATION	16.00'
EAST CORNER ELEVATION	29.08'
SOUTH CORNER ELEVATION	27.00'
WEST CORNER ELEVATION	16.50'
AVERAGE GRADE PLANE	22.15'
ELEVATION AT ROOF	107.00'
BUILDING HEIGHT	84.86'



ISSUED FOR	BY	DATE
SITE PLAN	WHS	9/25/20
COMMENT RESPONSE	WHS	1/6/21

DRAWING NAME: GRADING & DRAINAGE PLAN – GROUND FLOOR

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

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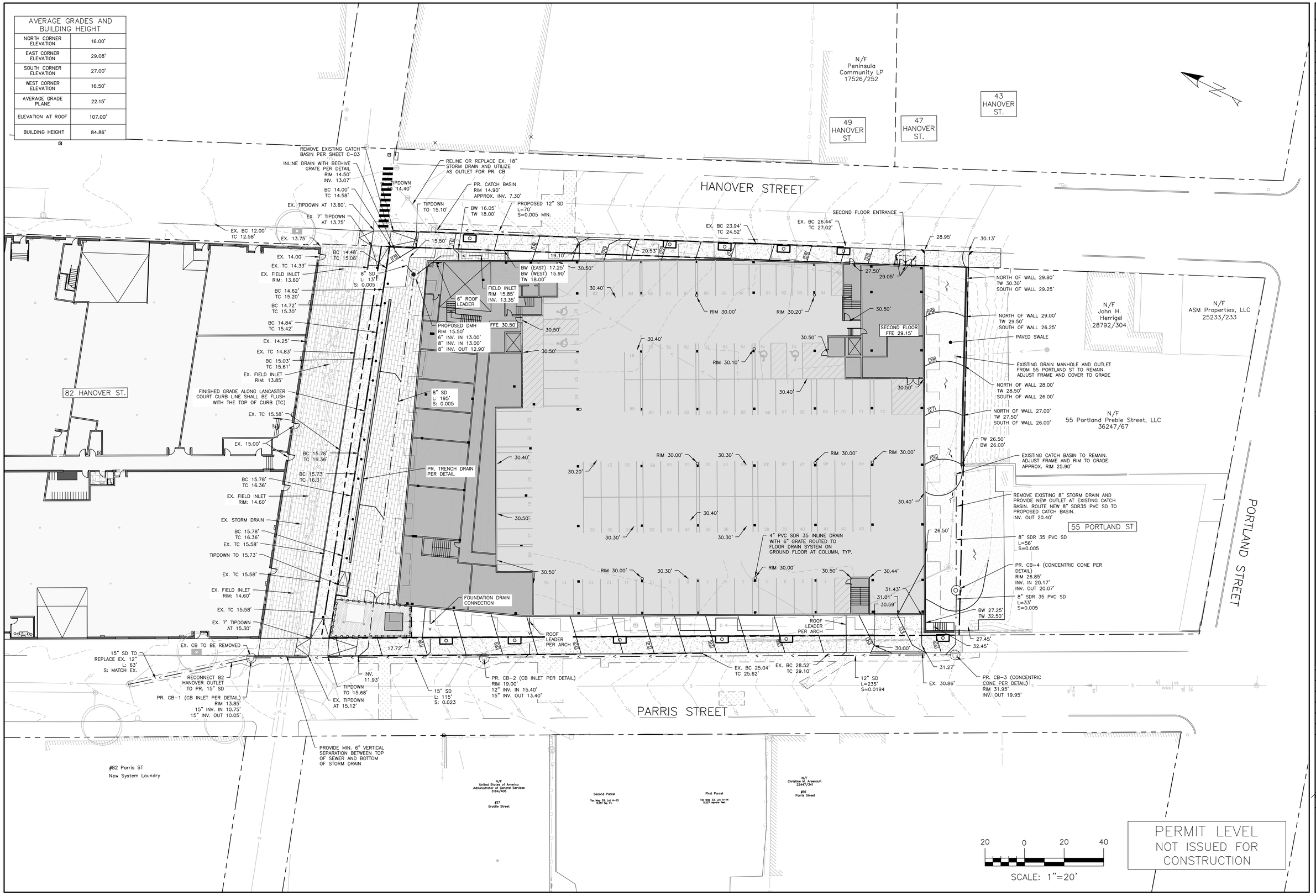
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11419
LICENSED
1/6/21

DRAWING NO.
C-30

AVERAGE GRADES AND BUILDING HEIGHT	
NORTH CORNER ELEVATION	16.00'
EAST CORNER ELEVATION	29.08'
SOUTH CORNER ELEVATION	27.00'
WEST CORNER ELEVATION	16.50'
AVERAGE GRADE PLANE	22.15'
ELEVATION AT ROOF	107.00'
BUILDING HEIGHT	84.86'



PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY	DATE
SITE PLAN	WHS	9/25/20
COMMENT RESPONSE	WHS	1/6/21

DRAWING NAME: GRADING & DRAINAGE PLAN – SECOND FLOOR

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

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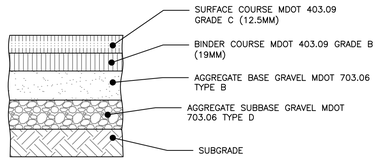
STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED PROFESSIONAL ENGINEER — 1/6/21

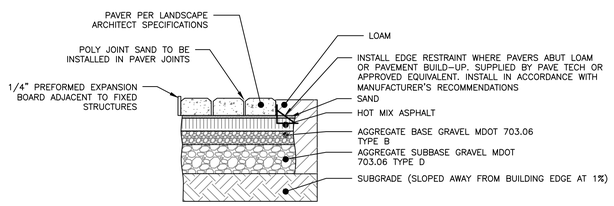
DRAWING NO.
C-31



NOTE:
COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557

THICKNESS OF LAYERS	
STANDARD	LAYERS
1-1/2"	SURFACE COURSE MDOT 403.09 GRADE C (12.5mm)
2"	BINDER COURSE MDOT 403.09 GRADE B (19mm)
3"	AGGREGATE BASE GRAVEL MDOT 703.06 TYPE B
15"	AGGREGATE SUBBASE GRAVEL MDOT 703.06 TYPE D

BITUMINOUS PAVEMENT PROFILE: PARRIS AND HANOVER
NOT TO SCALE

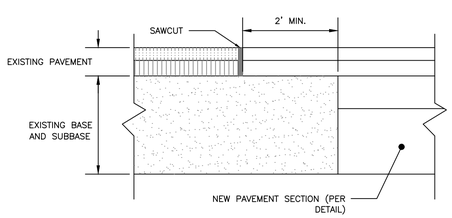


NOTES:

1. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557
2. SURFACE AND AGGREGATE MATERIALS SHALL MEET THE CITY OF PORTLAND STANDARDS IN ADDITION TO MDOT STANDARDS.
3. SAND BED AS NECESSARY TO FINISH GRADE

THICKNESS OF LAYERS	
STANDARD	LAYERS
1.5"	HOT MIX ASPHALT
3"	AGGREGATE BASE GRAVEL MDOT 703.06 TYPE B
10"	AGGREGATE SUBBASE GRAVEL MDOT 703.06 TYPE D

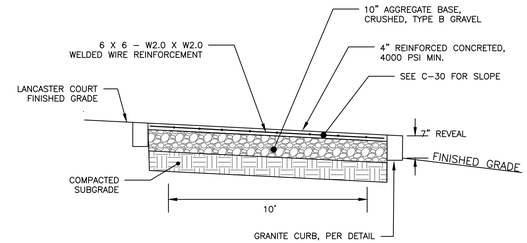
PAVER PROFILE
NOT TO SCALE



NOTES:

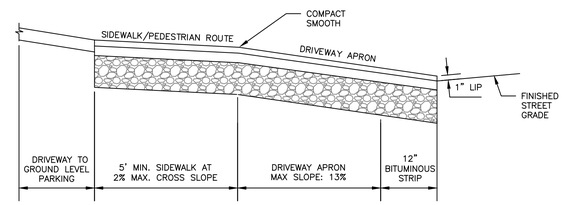
1. SAWCUT EXISTING PAVEMENT AND REMOVE 2' STRIP OF EXISTING PAVEMENT. APPLY BITUMINOUS TACK COAT PRIOR TO PLACEMENT OF NEW BITUMINOUS PAVEMENT.
2. THE NEW PAVEMENT SECTION SHALL MEET THE BITUMINOUS PAVEMENT: INTERNAL PARKING LOT DETAIL AT A MINIMUM OR THE EXISTING PAVEMENT AND AGGREGATE BASE AND SUBBASE DEPTH WHICHEVER IS GREATER.

PAVEMENT SAWCUT DETAIL
NOT TO SCALE



REINFORCED CONCRETE SIDEWALK
NOT TO SCALE

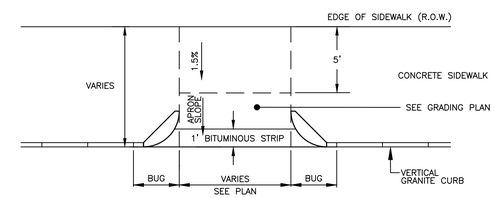
1. AT A MINIMUM, TESTING SHALL CONSIST OF ENTRAINED AIR AND SLUMP TESTS ON SITE PRIOR TO POURING THE SIDEWALKS. ENTRAINED AIR TESTS SHALL BE DONE IN ACCORDANCE WITH AASHTO T152. TEST FIRST TWO LOADS AND EVERY THIRD LOAD THEREAFTER PROVIDED CONSISTENT RESULTS ARE ACHIEVED.
2. WELDED WIRE FABRIC SHALL BE PLACED 2 INCHES ABOVE THE CRUSHED GRAVEL, AND 2 INCHES FROM ALL FINISHED EDGES, EXPANSION JOINTS AND CURBS. ALL FABRIC JOINTS SHALL BE OVERLAPPED A MINIMUM OF 1 FOOT AND BE PROPERLY TIED. IF THE CONTRACTOR ELECTS TO USE REBAR, ONLY 4-GAUGE WILL BE ACCEPTABLE. IF THE CONTRACTOR ELECTS TO USE A PRE-MIXED FIBER MESH, A SPECIFICATION SHEET MUST BE SUBMITTED AND PRE-APPROVED BY THE ENGINEER PRIOR TO ITS APPLICATION.
3. SLABS SHALL BE PLACED ALTERNATELY IN LENGTHS NOT TO EXCEED 30 FEET OR AS DIRECTED AND SHALL BE SEPARATED BY AN EXPANSION JOINT OF PREFORMED EXPANSION FILLER $\frac{1}{2}$ INCH IN THICKNESS.
4. WHEN CONSTRUCTED ADJACENT TO A BUILDING, RETAINING WALL OR OTHER FIXED STRUCTURE, A $\frac{1}{2}$ INCH THICK PREFORMED JOINT FILLER SHALL BE USED BETWEEN THE SLAB AND THE STRUCTURE.
5. THE SIDEWALK SURFACE SHALL BE SCORED INTO BLOCK UNITS NO GREATER THAN 40 SQUARE FEET AS DIRECTED. THE DEPTH OF THE SCORING SHALL BE AT LEAST ONE QUARTER OF THE THICKNESS OF THE SLAB.
6. ANY MATCHING INTO EXISTING SIDEWALKS SHALL BE DONE SO WITH A CLEAN VERTICAL FACE CONNECTION.
7. THE SURFACE SHALL BE FINISHED TO PRODUCE A BROOMLIKE "BRUSHED" PATTERN. NO PLASTERING OF THE SURFACE WITH MORTAR WILL BE PERMITTED. THE FINISH SHALL RESULT IN A SURFACE OF UNIFORM TEXTURE AND COLOR. ALL OUTSIDE EDGES OF THE SLAB AND ALL JOINTS SHALL BE ROUNDED WITH A $\frac{1}{4}$ INCH RADIUS EDGING TOOL.
8. CONCRETE SHALL BE CURED FOR 72 HOURS. CURING SHALL BE BY MEANS OF THOMPSON'S WATER SEAL AS MANUFACTURED BY E.A. THOMPSON CO., INC. OF MEMPHIS, TENNESSEE, BOILED LINSEED OIL, WHITE PIGMENTED CURING COMPOUND, OR BY OTHER APPROVED METHODS. CONCRETE SIDEWALK TO BE SEALED WITH CONSOLIDECK SALTGUARD WB OR APPROVED EQUAL 28 DAYS AFTER PLACEMENT. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION.
9. GENERAL CONTRACTOR TO COLLECT DELIVERY SLIPS AND TRANSFER TO THE OWNER.
10. REFER TO CITY OF PORTLAND CONCRETE SPECIFICATIONS SECTION 608 FOR MORE INFORMATION.



DRIVEWAY APRON SECTION
NOT TO SCALE

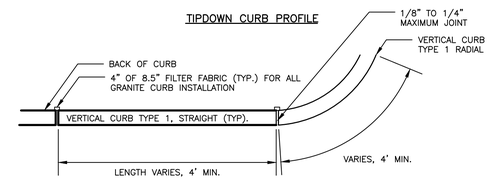
NOTES:

1. REFER TO GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR SITE GRADING
2. REFER TO DRIVEWAY APRON SECTION DETAIL FOR APRON CROSS-SECTION
3. MATERIALS/DETAILS OF DRIVEWAY APRON TO BE APPROVED BY CITY (DPW AND PLANNING) PRIOR TO IMPLEMENTATION

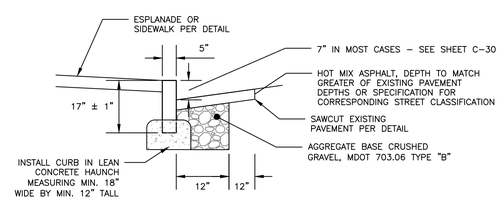


DRIVEWAY APRON LAYOUT DETAIL: 55 PORTLAND STREET DRIVEWAY
NOT TO SCALE

TIPDOWN CURB PROFILE



VERTICAL GRANITE CURB PLAN VIEW



VERTICAL GRANITE CURB CROSS SECTION

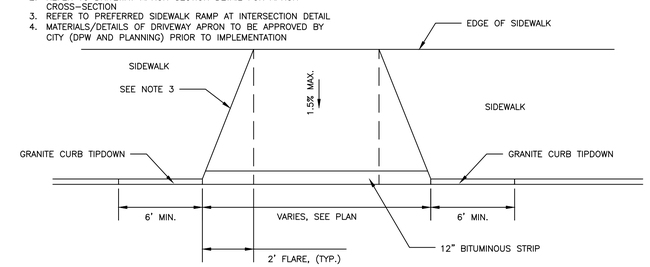
NOTES:

1. CURB SHALL BE RESET IN ACCORDANCE WITH MDOT 609.08 WITH THE EXCEPTION OF CURB SPACING TO BE INSTALLED PER DETAIL.

VERTICAL GRANITE CURB AND TIPDOWN INSTALLATION IN EXISTING STREETS DETAIL
NOT TO SCALE

NOTES:

1. REFER TO GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR SITE GRADING
2. REFER TO DRIVEWAY APRON SECTION DETAIL FOR APRON CROSS-SECTION
3. REFER TO PREFERRED SIDEWALK RAMP AT INTERSECTION DETAIL
4. MATERIALS/DETAILS OF DRIVEWAY APRON TO BE APPROVED BY CITY (DPW AND PLANNING) PRIOR TO IMPLEMENTATION



PARKING GARAGE DRIVEWAYS DETAIL
NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY / DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/8/21

DRAWING NAME: SITE DETAILS - 1

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
PO BOX 4232, PORTLAND, MAINE 04104
(207) 775-2655

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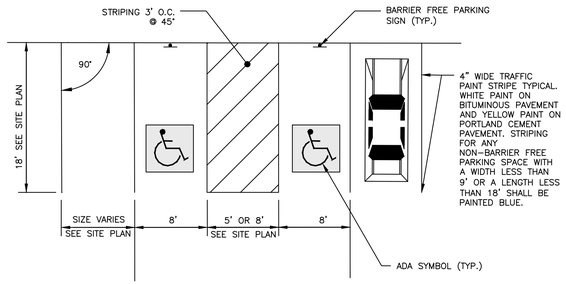
FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

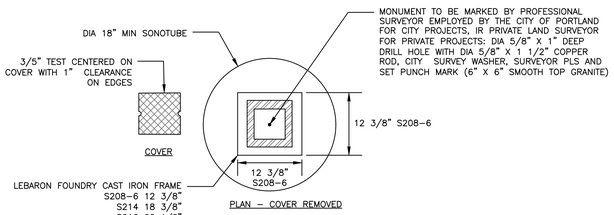
STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED PROFESSIONAL ENGINEER — 1/8/21

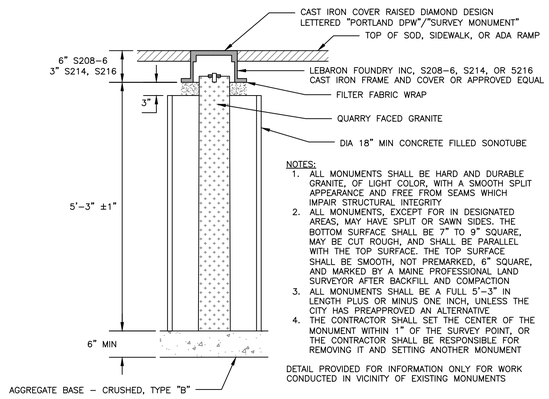
DRAWING NO.
C-40



ADA PARKING SPACE DIMENSIONS

NOT TO SCALE





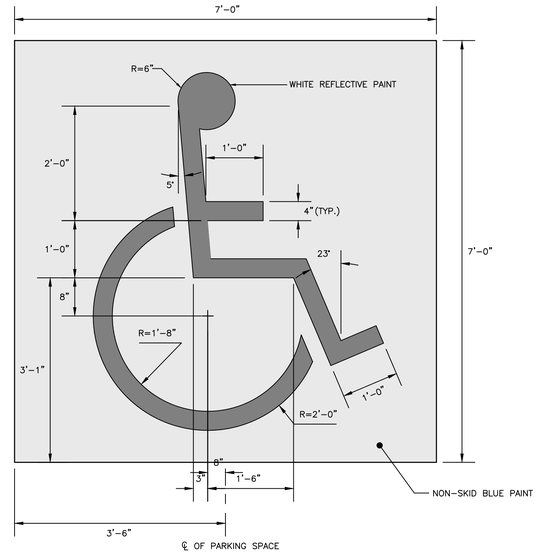
NOTES:

1. ALL MONUMENTS SHALL BE HARD AND DURABLE GRANITE, OF LIGHT COLOR, WITH A SMOOTH SPLIT APPEARANCE AND FREE FROM SEAMS WHICH IMPAIR STRUCTURAL INTEGRITY
2. ALL MONUMENTS, EXCEPT FOR IN DESIGNATED AREAS, MAY HAVE SPLIT OR SAWN SIDES. THE BOTTOM SURFACE SHALL BE 7" TO 9" SQUARE, MAY BE CUT ROUGH, AND SHALL BE PARALLEL WITH THE TOP SURFACE. THE TOP SURFACE SHALL BE SMOOTH, NOT PREMARKED, 6" SQUARE, AND MARKED BY A MAINE PROFESSIONAL LAND SURVEYOR AFTER BACKFILL AND COMPACTION
3. ALL MONUMENTS SHALL BE A FULL 5'-3" IN LENGTH PLUS OR MINUS ONE INCH, UNLESS THE CITY HAS PREAPPROVED AN ALTERNATIVE
4. THE CONTRACTOR SHALL SET THE CENTER OF THE MONUMENT WITHIN 1" OF THE SURVEY POINT, OR THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING IT AND SETTING ANOTHER MONUMENT

DETAIL PROVIDED FOR INFORMATION ONLY FOR WORK CONDUCTED IN VICINITY OF EXISTING MONUMENTS

GRANITE STREET MONUMENT

NOT TO SCALE



INTERNATIONAL BARRIER FREE SYMBOL

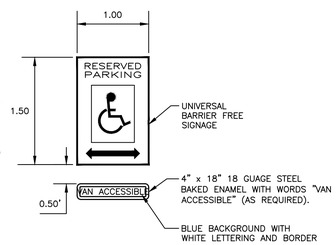
NOT TO SCALE

NOTES:

1. ALL ASPECTS OF RESERVED PARKING SIGN CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 OR MOST RECENT EDITION

2. SIGN SHALL BE CONSTRUCTED AS SIGN R7-8 UNDER THE "PARKING AND STANDING SIGNS AND PLAQUES" (R7 SERIES) WITHIN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 OR MOST RECENT EDITION. VAN ACCESSIBILITY SHALL BE CONSTRUCTED AS SIGN R7-8a OR R7-8b.

3. SIGN POST CONSTRUCTION AND MOUNTING SHALL BE IN ACCORDANCE WITH CHAPTER 2A OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 OR MOST RECENT EDITION.

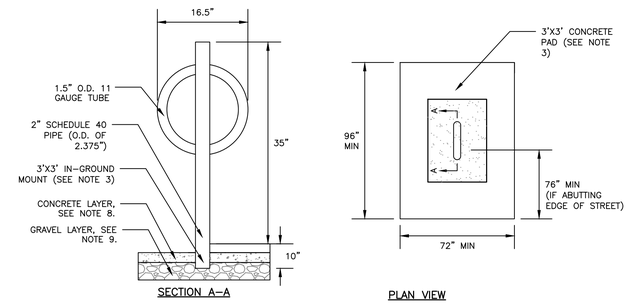


BARRIER FREE PARKING SIGN

NOT TO SCALE

NOTES:

1. BICYCLE RACK SHALL HAVE CAPACITY FOR TWO BICYCLES.
2. BICYCLE RACK PARTS SHALL BE OF UNIFORM COLOR AND SHALL BE FINISHED IN ACCORDANCE WITH PRODUCT SPECIFICATION. PER CITY OF PORTLAND TECHNICAL STANDARDS ALL BIICYCLE RACKS WITHIN THE RIGHT-OF-WAY SHALL MATCH THE FURNITURE COLOR FOR THAT LOCATION AS DESCRIBED IN THE MUNICIPAL LIGHTING STANDARDS; IF NO DESIGNATED COLOR FOR THAT AREA EXISTS, BICYCLE RACKS SHALL BE BLACK.
3. BICYCLE RACK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S MOST RECENT INSTALLATION RECOMMENDATIONS, AND SHALL BE INSTALLED WITH AN IN-GROUND MOUNT UNLESS OTHERWISE APPROVED BY ENGINEER.
4. BICYCLE RACK SHALL BE "DERO BIKE HITCH", AS MANUFACTURED BY DERO BIKE RACKS.
5. MINIMUM OFFSETS SHOWN. MANUFACTURER'S RECOMMENDED OFFSETS SHALL BE ENFORCED WHERE POSSIBLE.
6. MINIMUM DISTANCE BETWEEN BICYCLE RACKS SHALL BE 24". RECOMMENDED DISTANCE BETWEEN BICYCLE RACKS SHALL BE 38".
7. ALL OFFSETS ARE FROM OUTSIDE EDGES OF ITEMS.
8. CONCRETE SHALL BE 4000 PSI @28 DAYS. BOTTOM OF CONCRETE SHALL BE AT TOP OF SIDEWALK GRAVEL ELEVATION. DEPTH VARIES APRROX. 4"-7".
9. GRAVEL LAYER SHALL BE INSTALLED IN ACCORDANCE WITH BRICK SIDEWALK WITH BITUMINOUS BASE DETAIL, AND SHALL BE MAINEDOT 703.06 TYPE B.
10. TOP OF BRICK LAYER SHALL BE AT SAME ELEVATION IN ACCORDANCE WITH BRICK SIDEWALK DETAIL.

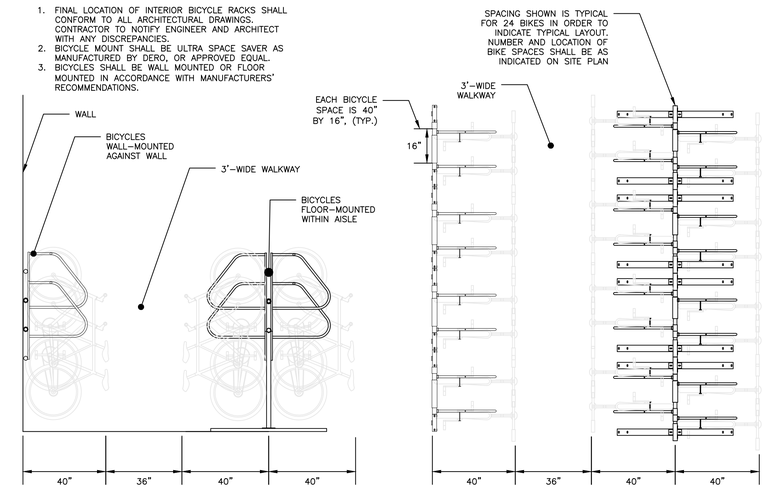


BICYCLE RACK DETAIL

NOT TO SCALE

NOTES:

1. FINAL LOCATION OF INTERIOR BICYCLE RACKS SHALL CONFORM TO ALL ARCHITECTURAL DRAWINGS. CONTRACTOR TO NOTIFY ENGINEER AND ARCHITECT WITH ANY DISCREPANCIES.
2. BICYCLE MOUNT SHALL BE ULTRA SPACE SAVER AS MANUFACTURED BY DERO, OR APPROVED EQUAL.
3. BICYCLES SHALL BE WALL MOUNTED OR FLOOR MOUNTED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.

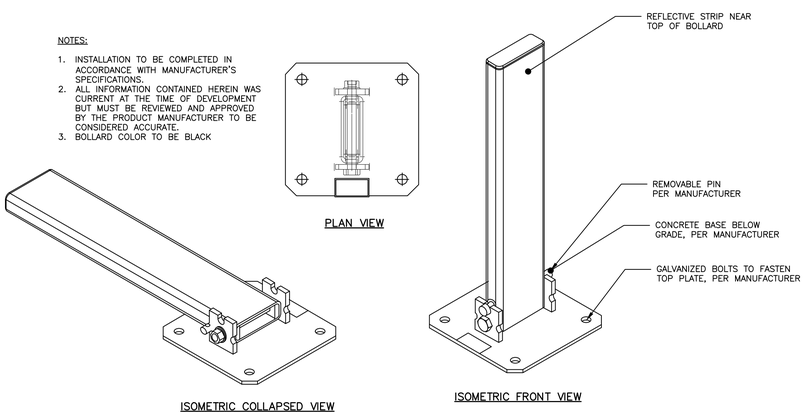


BICYCLE RACK INTERIOR

NOT TO SCALE

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
3. BOLLARD COLOR TO BE BLACK

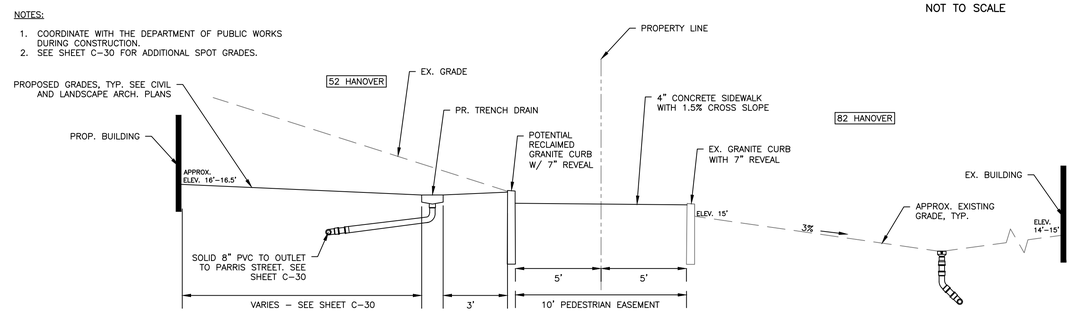


TWO-WAY COLLAPSIBLE BOLLARD 30"

NOT TO SCALE

NOTES:

1. COORDINATE WITH THE DEPARTMENT OF PUBLIC WORKS DURING CONSTRUCTION.
2. SEE SHEET C-30 FOR ADDITIONAL SPOT GRADES.



SECTION AA - LANCASTER COURT

NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY	DATE
SITE PLAN	WHS	9/25/20
COMMENT RESPONSE	WHS	1/8/21

DRAWING NAME: SITE DETAILS - 2

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC.
PO BOX 3422, PORTLAND, MAINE 04104
(207) 775-2655

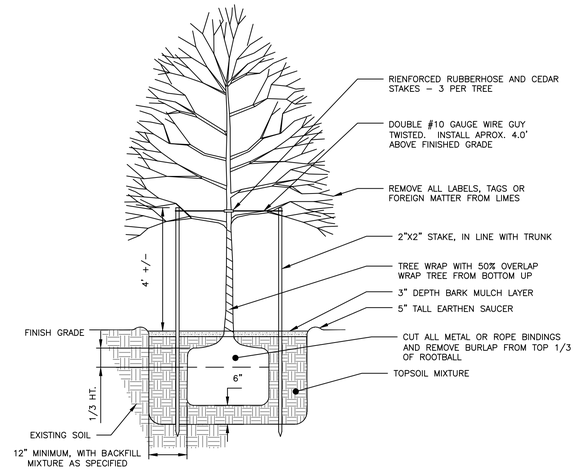
FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED — 1/8/21

DRAWING NO.
C-41

PLANTING NOTES:

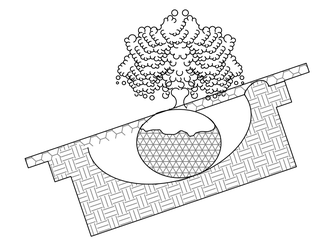
1. ALL PLANT SELECTION AND INSTALLATION WILL BE IN COMPLIANCE WILL THE CITY OF PORTLAND TECHNICAL MANUAL (SECTION 4).
2. CONTRACTOR TO VERIFY ALL UTILITIES ON PROPERTY AND TO PROTECT ALL UTILITIES DURING EXCAVATION FOR PLANTS.
3. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER OF PLANTS SHOWN IN PLANT LIST (IF ANY), THE NUMBER OF PLANTS SHOWN ON PLAN WILL TAKE PRECEDENCE.
4. ALL MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMAN.
5. ALL DISTURBED AREAS NOT TO BE PAVED OR PLANTED SHALL BE LOAMED AND SEEDED AS SHOWN. THE SEED MIX SPECIFICATIONS ARE AS FOLLOWS: LESCO FINE FESCUE LINKS BLEND OF 35% HARD FESCUE, 35% CREEPING RED FESCUE, 20% CHEWINGS FESCUE AND 10% SHEEP FESCUE. ADD 5% LITTLE BLUESTEM AND 5% NORTHEAST WILDFLOWER SEED MIXTURE BY WEIGHT TO THE LINKS BLEND.
6. FOR PRICING PURPOSES, PROVIDE A PER TREE UNIT COST FOR STAKING AND GUYING. IF STAKING AND GUYING IS REQUIRED, REMOVE TREE WRAP, STAKES, AND GUY WIRES AT END OF FIRST GROWING SEASON.
7. FOR TREE PLANTING IN LAWN AREAS, ANY DISTURBED LAWN SHALL BE LOAMED AND SEEDED AS NECESSARY.
8. NEW TREES TO BE INSTALLED WITH A SLOW RELEASE WATERING BAG.
9. CONTRACTOR TO BE HELD RESPONSIBLE FOR THE WATERING AND MAINTENANCE OF ALL PLANT MATERIAL AND LANDSCAPING IMPROVEMENTS FOR AT LEAST 30 DAYS FOLLOWING INSTALLATION. FOLLOWING THIS PERIOD, THE LANDOWNER OR PROPERTY MANAGEMENT SHALL BE RESPONSIBLE FOR CONTINUED WATERING AND MAINTENANCE. CONTRACTOR TO MAINTAIN A ONE YEAR WARRANTY ON ALL PLANTINGS FOLLOWING FINAL INSTALLATION.
10. ALL PROPOSED PLANTS SHALL BE LOCATED AS SHOWN ON THE PLANS. CONTRACTOR TO NOTIFY ENGINEER WHEN PLANTINGS HAVE BEEN MOBILIZED ON SITE. ENGINEER TO INSPECT AND ACCEPT OR REJECT ANY SPECIMENS ON THE BASIS OF APPARENT HEALTH, HARDINESS, AND CONFORMANCE WITH THE PLANTING SCHEDULE. REJECTED SPECIMENS ARE TO BE REPLACED BY THE CONTRACTOR AT NO ADDED COST TO THE OWNER. ACCEPTANCE DOES NOT WAIVE THE REQUIRED ONE YEAR PLANTING WARRANTY.



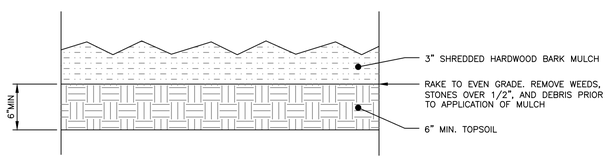
TREE PLANTING DETAIL
NOT TO SCALE

NOTES:

1. DIG HOLE AT LEAST 2 TIMES THE DIAMETER OF THE ROOT BALL AND AS DEEP AS THE ROOT BALL (NO DEEPER). SET ROOT BALL CENTERED, WITH THE TOP AT DOWNHILL EDGE OF THE HOLE.
2. TOPSOIL BACKFILL SHALL BE NATURAL FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING THE CHARACTERISTICS OF TOPSOIL IN THE VICINITY WHICH PRODUCE A HEAVY GROWTH. TOPSOIL SHALL CONTAIN NOT LESS THAN 6% NOR MORE THAN 20% ORGANIC MATTER. TOP SOIL SHALL HAVE A pH VALUE OF NOT LESS THAN 5.5 NOR MORE THAN 7.0.
3. CONTAINER GROWN STOCK – REMOVE CONTAINER PROTECTING THE ROOT BALL. GENTLY COMB OUT THE ROOTS. PRUNE DAMAGED ROOTS.
4. BACKFILL THE HOLE WITH TOPSOIL TO A DEPTH NOT TO EXCEED 8" THEN WATER SUFFICIENTLY TO SETTLE TOPSOIL. REPEAT SOIL BACKFILL, WATER, DRAIN. TOPSOIL SHALL BE TAMPED UNDER EDGES OF THE BALLED PLANTS. BACKFILL TO FINISH GRADE AND CREATE AN EARTHEN SAUCER. SOAK PLANTS TWICE WITHIN THE FIRST TWENTY–FOUR HOURS OF PLANTING.



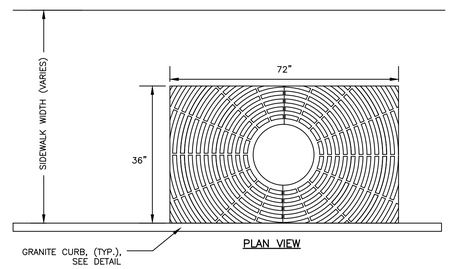
TYPICAL PLANTING
NOT TO SCALE



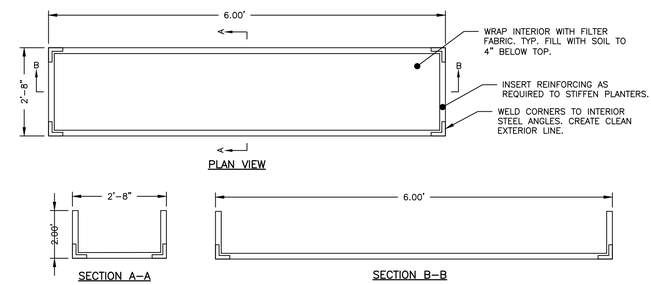
BARK MULCH DETAIL
NOT TO SCALE

NOTES:

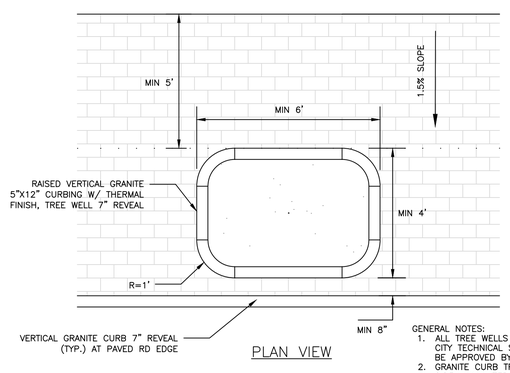
1. 16" EXPANDABLE TREE OPENING; .25" SLOT OPENINGS.
2. SIDEWALK MATERIAL PER PLAN.
3. WHEN INSTALLED IN A BRICK SIDEWALK, GRATE REQUIRES A FRAME TO BE INSTALLED TO HOLD GRATE IN PLACE.



EXPANDABLE TREE GRATE
NEENAH MODEL R–8884
NOT TO SCALE



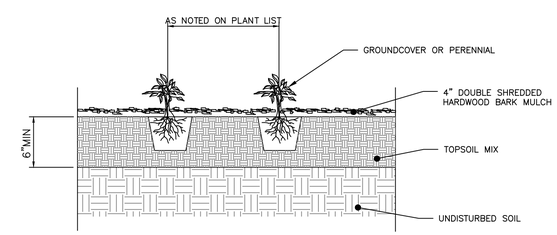
WEATHERING STEEL OR WOOD PLANTER BOX
NOT TO SCALE



GENERAL NOTES:

1. ALL TREE WELLS SHALL COMPLY WITH CITY TECHNICAL STANDARDS AND MUST BE APPROVED BY THE CITY ARBORIST
2. GRANITE CURB TREE WELL SHALL BE SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY

TREEWELL IN BRICK SIDEWALK
NOT TO SCALE



PERENNIAL PLANTING DETAIL
NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY / DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/8/21

DRAWING NAME: LANDSCAPING DETAILS

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC.
PO BOX 3422, PORTLAND, MAINE 04104
(207) 775-2655

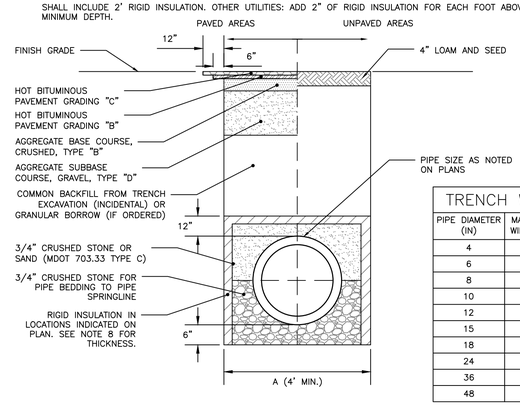
FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11419
LICENSED
PROFESSIONAL ENGINEER
1/8/21

DRAWING NO.
C-42

NOTES:

1. ANY ALTERNATE TRENCHING METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
2. ALL CONSTRUCTION METHODS SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL STANDARDS FIGURE II–2.
3. BRACING & SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. WHERE APPLICABLE, PERFORATIONS IN STORM DRAIN (PERF.SD) SHALL BE ORIENTED UP.
5. ALL STORM DRAINS SHALL BE PVC SDR 35 MIN PS–46 RATING OR OR IN ACCORDANCE WITH CITY OF PORTLAND TECHNICAL MANUAL , SECTION 2 – SANITARY SEWER AND STORM DRAIN – PART 2.5.2
6. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
7. THIS DETAIL SHALL BE APPLIED ONLY TO PIPE TRENCHES WITHIN OF THE CITY OF PORTLAND ROW.STORM DRAIN COVER BETWEEN 2' AND 3' SHALL INCLUDE 4" OF RIGID INSULATION. COVER BETWEEN 3' AND 4' SHALL INCLUDE 2' RIGID INSULATION. OTHER UTILITIES: ADD 2" OF RIGID INSULATION FOR EACH FOOT ABOVE MINIMUM DEPTH.



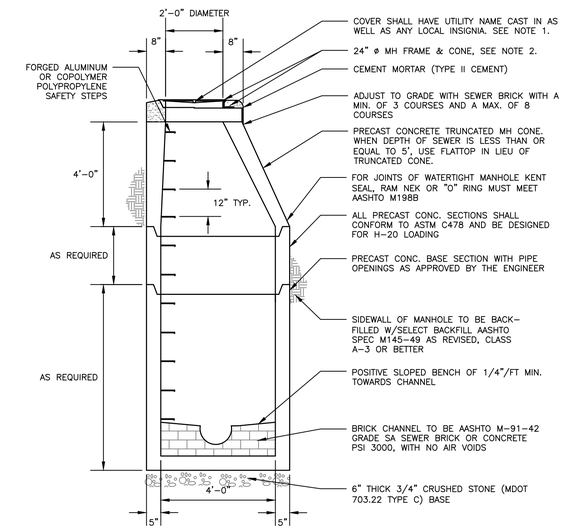
TRENCH WIDTH	
PIPE DIAMETER (IN)	MAX. TRENCH WIDTH, A (FT)
4	4
6	4
8	4
10	4
12	5
15	5
18	5
24	6
36	6
48	7

CITY OF PORTLAND TYPICAL PIPE TRENCH DETAIL

NOT TO SCALE

NOTES:

1. MANHOLE COVER FOR SEWER MANHOLE SHALL BE ENGRAVED "SEWER", AND SHALL BE EITHER ITEM # 2160A AS MANUFACTURED BY EAST JORDAN CO. OR ITEM # 14960002 AS MANUFACTURED BY NEENAH FOUNDRY. MANHOLE COVER FOR STORM SEWER SHALL BE ENGRAVED "DRAIN", AND SHALL BE EITHER ITEM # 2160A AS MANUFACTURED BY EAST JORDAN CO. OR ITEM # 14960003 AS MANUFACTURED BY NEENAH FOUNDRY.
2. MANHOLE FRAME SHALL BE EITHER ITEM # 14960001, AS MANUFACTURED BY NEENAH FOUNDRY, OR ITEM # 1960Z, AS MANUFACTURED BY EAST JORDAN CO.
3. WITHIN CITY OF PORTLAND ROW, STORM DRAIN MANHOLE SHALL CONFORM WITH "STANDARD PRECAST SEWER MANHOLE DETAIL", WITH THE EXCEPTION THAT THE COVER SHALL BE MARKED AS "DRAIN". REFER TO CITY OF PORTLAND TECHNICAL MANUAL, SECTION 2 – SANITARY SEWER AND STORM DRAIN, FIGURE II–1
4. SUBMITTAL REQUIRED FOR MANHOLES, MANHOLE FRAMES & MANHOLE COVERS

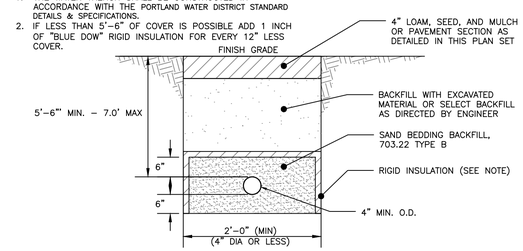


STANDARD PRECAST SEWER MANHOLE

NOT TO SCALE

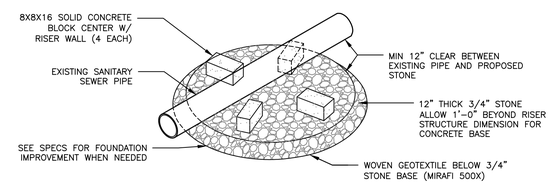
NOTES:

1. THE WATER TRENCH SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT STANDARD DETAILS & SPECIFICATIONS.
2. IF LESS THAN 5'–6" OF COVER IS POSSIBLE ADD 1 INCH OF "BLUE DOW" RIGID INSULATION FOR EVERY 12" LESS COVER.

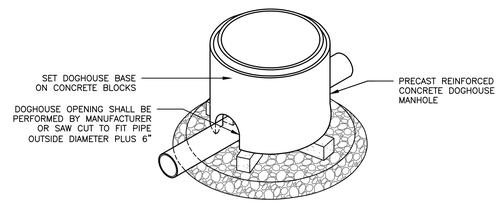


WATER SERVICE TRENCH SECTION DETAIL

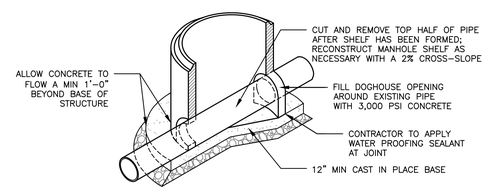
NOT TO SCALE



BASE ISOMETRIC VIEW



RISER ISOMETRIC VIEW



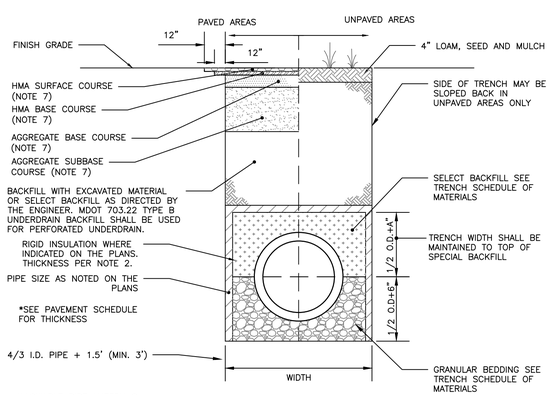
FOUNDATION SECTION VIEW

NOTES:

1. UNLESS OTHERWISE SPECIFIED, CONCRETE SHALL BE 4000 PSI @28 DAYS.
2. RECONSTRUCT INTERIOR MANHOLE INVERT AS NECESSARY TO ACCOMMODATE NEW PIPE.
3. THIS DETAIL IS INTENDED TO PROVIDE ADDITIONAL INFORMATION TO THE CONTRACTOR IN REGARDS TO THE CONNECTION OF THE DOGHOUSE MANHOLE BASE TO THE EXISTING SANITARY SEWER SYSTEM.
4. MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
5. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C–478.
6. ALL MANHOLE RISERS SHALL BE ETHERIDGE 24" OR APPROVAL EQUAL.
7. ALL SANITARY MANHOLES SHALL HAVE A WATERPROOFING COATING APPLIED TO THE EXTERIOR SURFACE.
8. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48–CLASS 35.

DOGHOUSE MANHOLE DETAIL

NOT TO SCALE



ALLOWABLE PIPE MATERIALS:
- REINFORCED CONCRETE PIPE (RCP) MIN. STRENGTH OF CLASS III
- PVC RING TYPE SEWER (SDR 35) OR EQUIVALENT, MIN PS–46 RATING
- PVC RING TYPE SEWER PIPE MEETING ASTM F 789
- DUCTILE IRON PIPE (DIP)
- ADS N–12 HP TRIPLE–WALL MIN PS–46 RATING
- ADS SANITITE HP MIN. PS–46

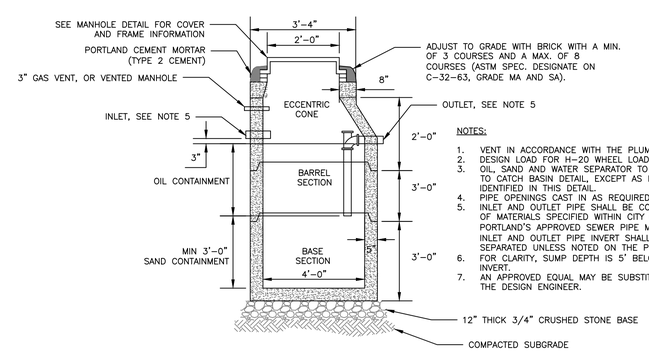
SCHEDULE OF MATERIALS		
TYPE OF PIPE	GRANULAR BEDDING	SELECT BACKFILL
CMP DUCTILE IRON RCP	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC/HDPE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL
CMP	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE

NOTES:

1. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. PIPE COVER BETWEEN 2' AND 3' SHALL INCLUDE 4" THICK OF RIGID INSULATION. COVER BETWEEN 3' AND 4' SHALL INCLUDE 2" THICK RIGID INSULATION. OTHER UTILITIES: ADD 2" OF RIGID INSULATION FOR EACH FOOT OF COVER LESS THAN THE MINIMUM DEPTH. WIDTH OF INSULATION SHALL BE FOUR TIMES THE DIAMETER OF THE PIPE WITH A MINIMUM WIDTH OF 30".
3. INSTALL WARNING TAPE DIRECTLY ABOVE UTILITIES AT THE TOP OF SUBGRADE.
4. MINIMUM COVER
   4.1. 2'–0" – STORM DRAIN
   4.2. 5'–0" – SEWER
5. NO TREES SHALL BE PLANTED WITHIN 5' OF A SEWER PIPE OR SERVICE
6. THIS DETAIL SHALL BE APPLIED ONLY TO DRAINAGE PIPE TRENCHES OUTSIDE OF THE CITY OF PORTLAND ROW.
7. THICKNESS AS NOTED BY SURFACE DETAILS

INTERNAL STORM DRAIN AND SEWER TYPICAL TRENCH SECTION

NOT TO SCALE



NOTES:

1. VENT IN ACCORDANCE WITH THE PLUMBING CODE.
2. DESIGN LOAD FOR H–20 WHEEL LOAD.
3. OIL, SAND AND WATER SEPARATOR TO CONFORM TO CATCH BASIN DETAIL, EXCEPT AS EXPLICITLY IDENTIFIED IN THIS DETAIL.
4. PIPE OPENINGS CAST IN AS REQUIRED.
5. INLET AND OUTLET PIPE SHALL BE CONSTRUCTED OF MATERIALS SPECIFIED WITHIN CITY OF PORTLAND'S APPROVED SEWER PIPE MATERIALS. INLET AND OUTLET PIPE INVERT SHALL BE 3" SEPARATE UNLESS NOTED ON THE PLANS.
6. FOR CLARITY, SUMP DEPTH IS 5' BELOW OUTLET INVERT.
7. AN APPROVED EQUAL MAY BE SUBSTITUTED BY THE DESIGN ENGINEER.

4'–0" DIAMETER PRECAST OIL AND WATER SEPARATOR

NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY / DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/5/21

DRAWING NAME: UTILITY DETAILS – 1

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

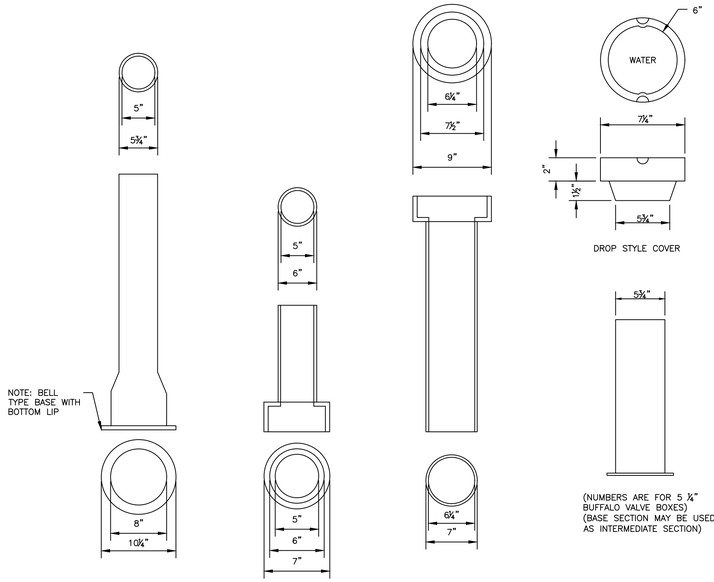
CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION OF ACORN ENGINEERING, INC. ANY MODIFICATIONS, WITHOUT WRITTEN PERMISSION OF ACORN ENGINEERING, INC., OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
PO BOX 3472 PORTLAND, MAINE 04104
(207) 775–2655

FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

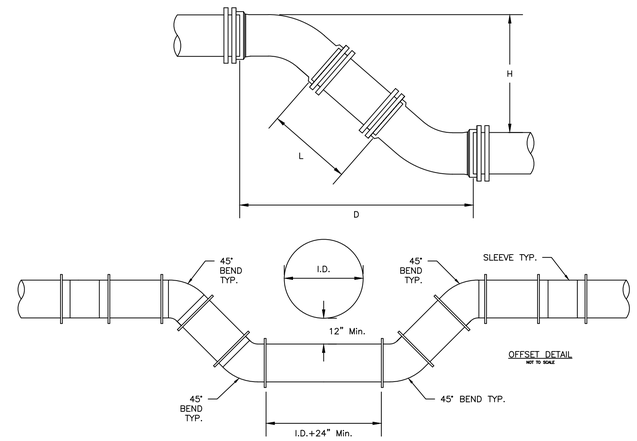
STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED — PROFESSIONAL ENGINEER — 1/8/21

DRAWING NO.
C-43



VALVE BOX & COVER

NOT TO SCALE



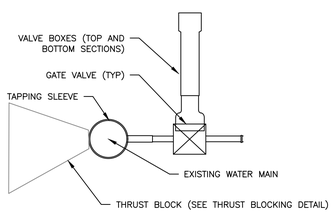
NOTES:

1. DIMENSIONS APPLICABLE FOR SIGMA COMPACT BENDS. FOR TYLER COMPACT BENDS, ADD 1/2" TO "D" DIMENSION AND SUBTRACT 1/2" FROM "L" DIMENSION.
2. FOR OTHER FITTINGS REFER TO MANUFACTURER'S RECOMMENDATIONS.

	6" PIPE		8" PIPE		12" PIPE	
H	D	L	D	L	D	L
12"	1' 6-1/2"	0' 10-1/2"	1' 7-1/2"	0' 9-1/2"	1' 11-1/2"	0' 5-1/2"
13"	1' 7-1/2"	0' 11-7/8"	1' 8-1/2"	0' 10-7/8"	2' 0-1/2"	0' 6-7/8"
14"	1' 8-1/2"	1' 1-5/16"	1' 9-1/2"	1' 0-5/16"	2' 1-1/2"	0' 8-5/16"
15"	1' 9-1/2"	1' 2-11/16"	1' 10-1/2"	1' 1-11/16"	2' 2-1/2"	0' 9-11/16"
16"	1' 10-1/2"	1' 4-1/8"	1' 11-1/2"	1' 3-1/8"	2' 3-1/2"	0' 11-1/8"
17"	1' 11-1/2"	1' 5-9/16"	2' 0-1/2"	1' 4-9/16"	2' 4-1/2"	1' 0-9/16"
18"	2' 0-1/2"	1' 6-15/16"	2' 1-1/2"	1' 5-15/16"	2' 5-1/2"	1' 1-15/16"
19"	2' 1-1/2"	1' 8-3/8"	2' 2-1/2"	1' 7-3/8"	2' 6-1/2"	1' 3-3/8"
20"	2' 2-1/2"	1' 9-13/16"	2' 3-1/2"	1' 8-13/16"	2' 7-1/2"	1' 4-13/16"
21"	2' 3-1/2"	1' 11-3/16"	2' 4-1/2"	1' 10-3/16"	2' 8-1/2"	1' 6-3/16"
22"	2' 4-1/2"	2' 0-5/8"	2' 5-1/2"	1' 11-5/8"	2' 9-1/2"	1' 7-5/8"
23"	2' 5-1/2"	2' 2"	2' 6-1/2"	2' 1"	2' 10-1/2"	1' 9"
24"	2' 6-1/2"	2' 3-7/16"	2' 7-1/2"	2' 2-7/16"	2' 11-1/2"	1' 10-7/16"
25"	2' 7-1/2"	2' 4-7/8"	2' 8-1/2"	2' 3-7/8"	3' 0-1/2"	1' 11-7/8"
26"	2' 8-1/2"	2' 5-1/4"	2' 9-1/2"	2' 5-1/4"	3' 1-1/2"	2' 1-1/4"
27"	2' 9-1/2"	2' 7-11/16"	2' 10-1/2"	2' 6-11/16"	3' 2-1/2"	2' 2-11/16"
28"	2' 10-1/2"	2' 9-1/8"	2' 11-1/2"	2' 8-1/8"	3' 3-1/2"	2' 4-1/8"
29"	2' 11-1/2"	2' 10-1/2"	3' 0-1/2"	2' 9-1/2"	3' 4-1/2"	2' 5-1/2"
30"	3' 0-1/2"	2' 11-15/16"	3' 1-1/2"	2' 10-15/16"	3' 5-1/2"	2' 6-15/16"
31"	3' 1-1/2"	3' 1-5/16"	3' 2-1/2"	3' 0-5/16"	3' 6-1/2"	2' 8-5/16"
32"	3' 2-1/2"	3' 2-3/4"	3' 3-1/2"	3' 1-3/4"	3' 7-1/2"	2' 9-3/4"
33"	3' 3-1/2"	3' 4-3/16"	3' 4-1/2"	3' 3-3/16"	3' 8-1/2"	2' 11-3/16"
34"	3' 4-1/2"	3' 5-9/16"	3' 5-1/2"	3' 4-9/16"	3' 9-1/2"	3' 0-9/16"
35"	3' 5-1/2"	3' 7"	3' 6-1/2"	3' 6"	3' 10-1/2"	3' 2"
36"	3' 6-1/2"	3' 8-7/16"	3' 7-1/2"	3' 7-7/16"	3' 11-1/2"	3' 3-7/16"
37"	3' 7-1/2"	3' 9-13/16"	3' 8-1/2"	3' 8-13/16"	4' 0-1/2"	3' 4-13/16"
38"	3' 8-1/2"	3' 11-1/4"	3' 9-1/2"	3' 10-1/4"	4' 1-1/2"	3' 6-1/4"
39"	3' 9-1/2"	4' 0-11/16"	3' 10-1/2"	3' 11-11/16"	4' 2-1/2"	3' 7-11/16"
40"	3' 10-1/2"	4' 2-1/16"	3' 11-1/2"	4' 1-1/16"	4' 3-1/2"	3' 9-1/16"
41"	3' 11-1/2"	4' 3-1/2"	4' 0-1/2"	4' 2-1/2"	4' 4-1/2"	3' 10-1/2"
42"	4' 0-1/2"	4' 4-7/8"	4' 1-1/2"	4' 3-7/8"	4' 5-1/2"	3' 11-7/8"
43"	4' 1-1/2"	4' 6-5/16"	4' 2-1/2"	4' 5-5/16"	4' 6-1/2"	4' 1-5/16"
44"	4' 2-1/2"	4' 7-3/4"	4' 3-1/2"	4' 6-3/4"	4' 7-1/2"	4' 2-3/4"
45"	4' 3-1/2"	4' 9-1/8"	4' 4-1/2"	4' 8-1/8"	4' 8-1/2"	4' 4-1/8"
46"	4' 4-1/2"	4' 10-9/16"	4' 5-1/2"	4' 9-9/16"	4' 9-1/2"	4' 5-9/16"
47"	4' 5-1/2"	4' 11-15/16"	4' 6-1/2"	4' 10-15/16"	4' 10-1/2"	4' 6-15/16"
48"	4' 6-1/2"	5' 1-3/8"	4' 7-1/2"	5' 0-3/8"	4' 11-1/2"	4' 8-3/8"
49"	4' 7-1/2"	5' 2-13/16"	4' 8-1/2"	5' 1-13/16"	5' 0-1/2"	4' 9-13/16"
50"	4' 8-1/2"	5' 4-3/16"	4' 9-1/2"	5' 3-3/16"	5' 1-1/2"	4' 11-3/16"
51"	4' 9-1/2"	5' 5-5/8"	4' 10-1/2"	5' 4-5/8"	5' 2-1/2"	5' 0-5/8"
52"	4' 10-1/2"	5' 7-1/16"	4' 11-1/2"	5' 6-1/16"	5' 3-1/2"	5' 2-1/16"
53"	4' 11-1/2"	5' 8-7/16"	5' 0-1/2"	5' 7-7/16"	5' 4-1/2"	5' 3-7/16"
54"	5' 0-1/2"	5' 9-7/8"	5' 1-1/2"	5' 8-7/8"	5' 5-1/2"	5' 4-7/8"
55"	5' 1-1/2"	5' 11-5/16"	5' 2-1/2"	5' 10-5/16"	5' 6-1/2"	5' 6-5/16"

TYPICAL MAIN OFFSET

NOT TO SCALE

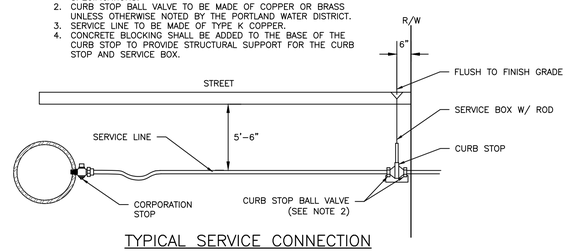


TAPPING SLEEVE AND VALVE

NOT TO SCALE

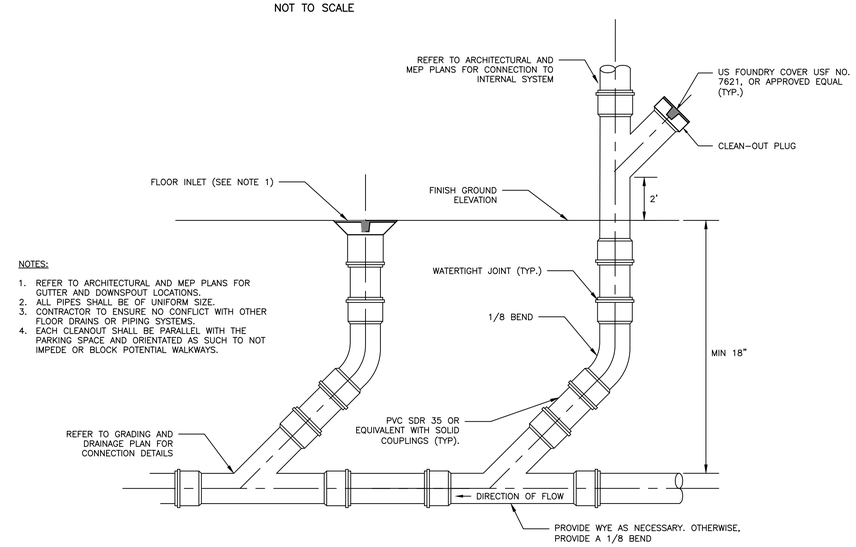
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES MUST COMPLY WITH THE CITY OF PORTLAND WATER DISTRICT (PWD) SPECIFICATIONS.
2. CURB STOP BALL VALVE TO BE MADE OF COPPER OR BRASS UNLESS OTHERWISE NOTED BY THE PORTLAND WATER DISTRICT.
3. SERVICE LINE TO BE MADE OF TYPE K COPPER.
4. CONCRETE BLOCKING SHALL BE ADDED TO THE BASE OF THE CURB STOP TO PROVIDE STRUCTURAL SUPPORT FOR THE CURB STOP AND SERVICE BOX.



TYPICAL SERVICE CONNECTION

NOT TO SCALE

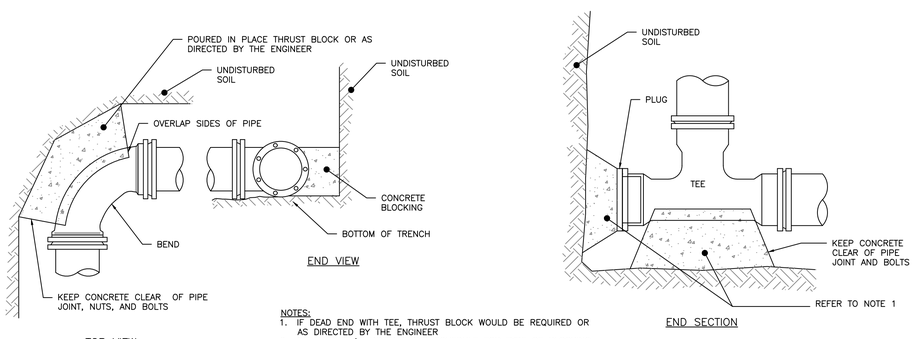


NOTES:

1. REFER TO ARCHITECTURAL AND MEP PLANS FOR GUTTER AND DOWNSPOUT LOCATIONS.
2. ALL PIPES SHALL BE OF UNIFORM SIZE.
3. CONTRACTOR TO ENSURE NO CONFLICT WITH OTHER FLOOR DRAINS OR PIPING SYSTEMS.
4. EACH CLEANOUT SHALL BE PARALLEL WITH THE PARKING SPACE AND ORIENTATED AS SUCH TO NOT IMPEDE OR BLOCK POTENTIAL WALKWAYS.

FLOOR DOWNSPOUT WITH CLEANOUT AND FLOOR DRAIN CONNECTION DETAIL

NOT TO SCALE

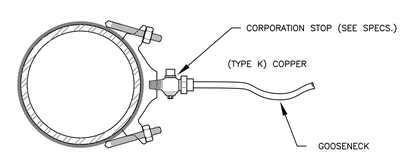


NOTES:

1. IF DEAD END WITH TEE, THRUST BLOCK WOULD BE REQUIRED OR AS DIRECTED BY THE ENGINEER
2. SEE THRUST/RETAINER GLAND SCHEDULE FOR TYPE OF BLOCKING TO BE USED ON BENDS

THRUST BLOCKING: REGULAR BEND

NOT TO SCALE



SERVICE SADDLE: 1-1/2" AND 2" C.C. THREAD

NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/8/21

DRAWING NAME: UTILITY DETAILS – 2

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
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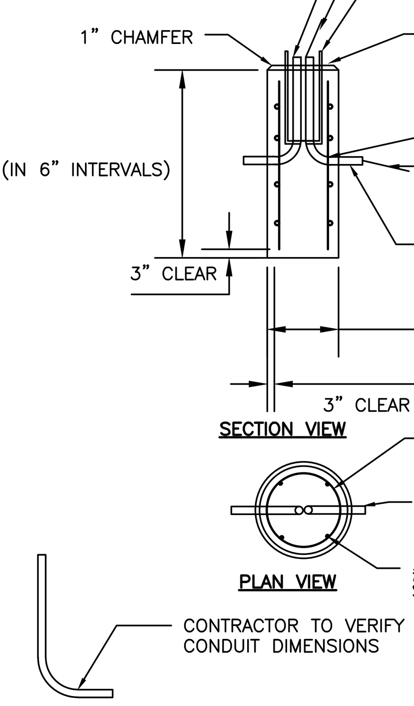
ACORN ENGINEERING, INC.
PO BOX 3422, PORTLAND, MAINE 04104
(207) 775-2655

FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

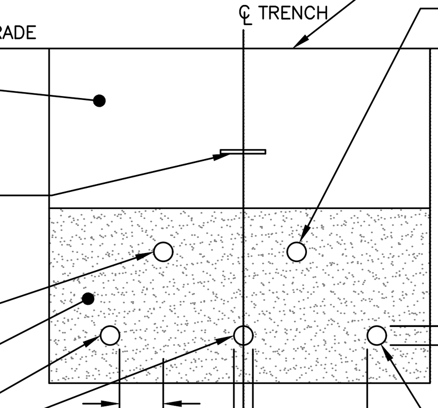
STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED — PROFESSIONAL ENGINEER — 1/8/21

DRAWING NO.
C-44

NOTES:
1. CONCRETE: 5000 PSI @ 28 DAYS
2. CEMENT: TYPE III PER ASTM C150-81
3. LIGHT POLE BASE SHALL BE AS SUPPLIED BY GEORGE R. ROBERTS CO., OR APPROVED EQUAL
4. DIAMETER TBD BASED UPON THE MANUFACTURER'S RECOMMENDATION.



LIGHT POLE BASE
NOT TO SCALE

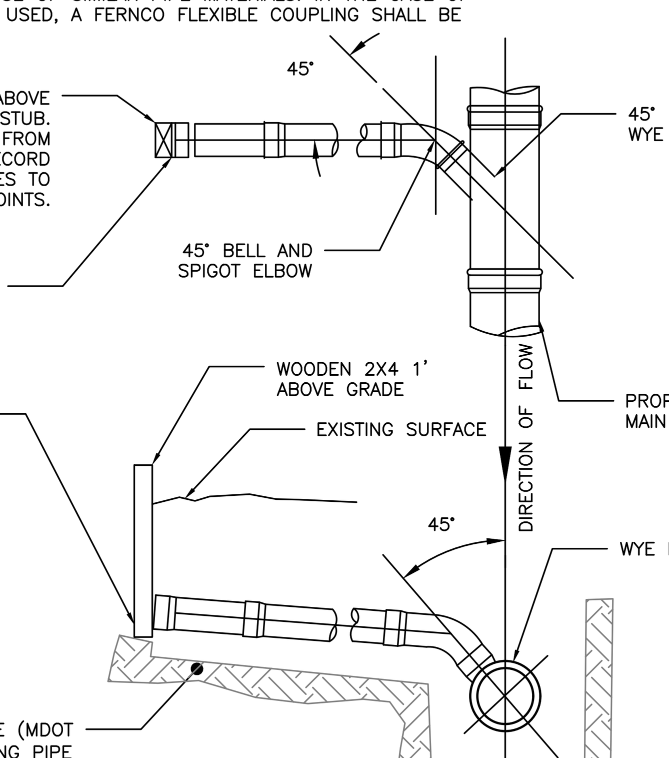


CONDUIT TYPE				
SERVICE	CONDUIT SIZE	GRASS AND PAVED AREAS	UTILITY	REMARKS
A	5"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
B	5"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
C	2-4"	SCHEDULE 40 PVC	COMMUNICATION	-
D	5"	SCHEDULE 40 PVC ELECTRICAL GRADE	SPARE	SEE NOTE 1
E	2-4"	SCHEDULE 40 PVC	CABLE	-

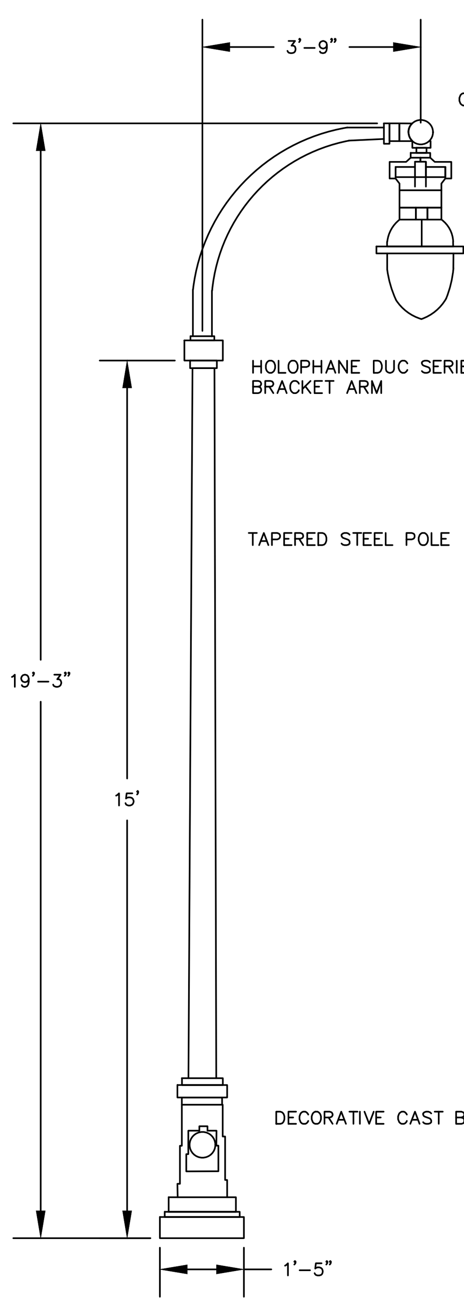
NOTES:
1. ONE CONDUIT CAPPED FOR SPARE, PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10" ABOVE GRADE AT POLE WITH STAND-OFF BRACKETS.
2. MINIMUM SEPARATION OF 24 INCHES BETWEEN PRIMARY CABLE/CONDUIT AND GAS LINES SHALL BE MAINTAINED.
3. CONDUITS WITHIN THE CITY RIGHT-OF-WAY SHALL BE ENCASED IN CONCRETE.
4. FINAL SIZE OF CONDUITS TO BE SPECIFIED BY MEP, ELECTRICIAN, OR DESIGN/BUILD ELECTRICAL CONTRACTOR.

UTILITY TRENCH - PRIMARY AND SECONDARY POWER, TELEPHONE, AND CABLE
NOT TO SCALE

NOTES:
1. LOCATION WITH WARNING TAPE SHALL BE INSTALLED OVER CENTERLINE OF PIPE AT A MAXIMUM OF 24 INCHES BELOW FINISH GRADE.
2. SITE CONTRACTOR TO COORDINATE CONNECTION OF SEWER LATERAL TO STRUCTURE PLUMBING WITH ARCHITECTURAL CONTRACTOR.
3. CONNECTION OF PROPOSED SEWER LATERAL TO STRUCTURE PLUMBING SHOULD INCORPORATE USE OF SIMILAR PIPE MATERIALS. IN THE CASE OF DISSIMILAR PIPES BEING USED, A FERNCO FLEXIBLE COUPLING SHALL BE USED.



SEWER TEE/WYE CONNECTION DETAIL
NOT TO SCALE



BAYSIDE DISTRICT MEDIUM SCALE LIGHT
NOT TO SCALE

NOTES:
1. LUMINAIRE
HOLOPHANE LIGHTING MODEL ESU175MH12A4-PR CAST ALUMINUM HOUSING WITH STAINLESS STEEL HARDWARE. DROPPED REFRACTOR SHALL BE THERMAL RESISTANT BOROSILICATE GLASS. INTERNAL REFLECTOR AND PRISMATIC DIFFUSER SHALL PROVIDE AN IES TYPE III DISTRIBUTION PATTERN ACCORDING TO THE MANUFACTURER'S PHOTOMETRIC TEST # 47384. LUMINAIRE SHALL INCLUDE AN INTEGRAL BALLAST WITH MODULAR WIRING CONNECTORS AND MULTI-VOLTAGE TAPS (FACTORY WIRED FOR 120VAC). PROVIDE AN INFERNAL RECEPTACLE TYPE PHOTOCELL CONTROL.
2. LAMP
HOLOPHANE LIGHTING MODEL OUC ½" BY 8" 6063-T6 ALUMINUM CORSSARM WITH A POST-TOP FITTING FOR A 3-TENON.
3. SLIP FITTER
HOLOPHANE LIGHTING MODEL BHLF200-SCA/AS (BOSTON HARBOR SERIES) 2-3/8" O.D. WITH SWIVEL CAST FITTER.
4. LIGHTING POLE
TAPERED STEEL PALE SHAFF RATED FOR A 90 MPH WIND LOAD WITH A 1.3 GUST FACTOR. POLE SHALL BE PRE-GALVANIZED. PROVIDE FOUR HOT-DIPPED GALVANIZED STEEL L-TYPE ANCHOR BOLTS.
5. DECORATIVE POLE BASE
HOLOPHANE MODEL CAMBRIDGE SERIES CLAMSHELL CAST ALUMINUM BASE. HARDWARE SHALL BE STAINLESS STEEL
6. LIGHTS SHALL BE IN BLACK COLOR, LED 3000K.
7. BASE REVEAL SHALL BE 2"-4"

DEVELOPERS ARE RESPONSIBLE FOR PURCHASING AND INSTALLING ALL STREET LIGHTING, INCLUDING LIGHT POLES, BRACKETS, SLIP FITTERS, BASES AND ALL ELECTRICAL WIRING AND CONDUIT. THE NEW STREET LIGHTING SHALL BE CONNECTED TO EITHER AN EXISTING METERED SERVICE, UNLESS OTHERWISE DIRECTED BY THE CITY. ONCE INSTALLED AND OPERATIONAL, AND UPON ACCEPTANCE BY THE CITY, STREET LIGHTING LOCATED IN THE CITY RIGHT OF WAY SHALL BECOME THE PROPERTY OF THE CITY OF PORTLAND.

CONSTRUCTION CONTRACTOR RESPONSIBILITIES:

1. THE CONSTRUCTION CONTRACTOR SHALL FURNISH AND INSTALL AS PART OF THE CONSTRUCTION SCOPE STREET LIGHTING LUMINAIRES, STREET LIGHTING POLES, BRACKET ARMS, POLE ACCESSORIES, AND DECORATIVE BASE ENCLOSURES ALL AS STIPULATED BY THE CITY ACCORDING TO THE CITY STANDARDS FOR THE GIVEN PROJECT LOCATION.

2. THE CONSTRUCTION CONTRACTOR SHALL FURNISH AND INSTALL AS PART OF THE CONSTRUCTION SCOPE CONCRETE FOUNDATION BASES FOR NEW STREET LIGHTING POLES. POLES SHALL BE MOUNTED ON REINFORCED CONCRETE POLE BASES WITH AT LEAST 2" BUT NO MORE THAN 4" REVEAL ABOVE GRADE, WITH 4 BOLTS PER POLE. THE INSTALLATION OF THE FOUNDATION BASES SHALL BE COORDINATED WITH SIDEWALK DETAILS AND REQUIREMENTS AS STIPULATED BY THE CITY OF PORTLAND DEPARTMENT OF PUBLIC WORKS.

3. THE CONSTRUCTION CONTRACTOR SHALL FURNISH AND INSTALL AS PART OF THE CONSTRUCTION SCOPE UNDERGROUND CONDUIT AND WIRE BETWEEN STREET LIGHTING POLE FOUNDATION BASES. IN ADDITION, UNDERGROUND CONDUIT AND WIRE SHALL BE PROVIDED TO AN ELECTRICAL SERVICE PANELBOARD AND METER, AS WELL AS TO AN EXISTING POINT OF SERVICE CONNECTION.

4. THE CONSTRUCTION CONTRACTOR SHALL FURNISH AND INSTALL AS PART OF THE CONSTRUCTION SCOPE WIRING TO BE INSTALLED WITHIN EACH STREET LIGHTING POLE AND SHALL BE EXTENDED AT THE POLE TOP (OR BRACKET ARM), WITH CONNECTION TO THE STREET LIGHTING LUMINAIRE(S).

5. UPON COMPLETION OF THE ERECTION OF THE PROJECT STREET LIGHTING, INCLUDING THE INSTALLATION OF ALL LIGHTING POLES AND CONDUIT/WIRE, THE CONSTRUCTION CONTRACTOR SHALL NOTIFY THE CITY THAT THE SYSTEM IS READY FOR OPERATION. THE LUMINAIRES SHALL BE ENERGIZED PRIOR TO THE CONSTRUCTION CONTRACTOR'S REQUEST FOR A CITY CERTIFICATE OF OCCUPANCY.

6. IT SHALL BE THE CONSTRUCTION CONTRACTOR'S RESPONSIBILITY TO PAY ALL COSTS ASSOCIATED WITH THE PROVISION OF REQUIRED STREET LIGHTING INCLUDING COSTS ASSOCIATED WITH STREET LIGHTING LUMINAIRES, STREET LIGHTING POLES, BRACKETS, BASES, CONDUIT, AND WIRE, PANELBOARDS AND METERING EQUIPMENT.

CITY OF PORTLAND RESPONSIBILITIES:

1. TO APPROVE THE PROPOSED POINT OF CONNECTION FOR ELECTRICAL SERVICE FOR NEW MUNICIPAL STREET LIGHTING WHERE A NEW METERED SERVICE IS PROVIDED.

2. CONNECTION OF THE CONSTRUCTION CONTRACTOR'S SECONDARY SERVICE CONDUCTORS AT AN EXISTING SERVICE POINT, WHERE A NEW SERVICE IS PROVIDED.

3. TO REVIEW AND APPROVE THE LOCATION OF THE STREET LIGHT FIXTURES WITHIN THE PUBLIC RIGHT-OF-WAY.

1. NEW METERED SERVICES FOR LIGHT FIXTURES

2. ANY LIGHT FIXTURE INSTALLED IS NOT TO BE TIED TO THE EXISTING POWER UTILITY LEASED LIGHTING SYSTEM.

3. EACH NEW LIGHT FIXTURE IS TO BE PROVIDED WITH A NEMA 7-PIN RECEPTACLE FOR FUTURE CONNECTION TO THE CITY OF PORTLAND LIGHTING CONTROL SYSTEM.

4. EACH NEW LIGHT FIXTURE IS TO BE SPECIFIED WITH A COLOR TEMPERATURE OF 3000K.

5. THE DEVELOPER IS TO PROVIDE A NEW METERED ELECTRICAL SERVICE IN AN APX OUTDOOR RATED ENCLOSURE (SEE SECTION 10.3.1 FOR UNIT SPECIFICATION), PREVENTING ANY NEW FIXTURES FROM BEING DIRECTLY CONNECTED TO THE POWER UTILITY.

6. THE DEVELOPER WILL BE REQUIRED TO:

A) PROVIDE AN ASTRONOMICAL TIMECLOCK INSIDE THE ELECTRICAL ENCLOSURE (SEE SECTION 10.3.1 FOR UNIT SPECIFICATION) TO CONTROL LIGHT FIXTURES OR

B) PROVIDE A STANDARD PHOTOCELL FOR EACH FIXTURE, TO BE USED UNTIL LIGHTING CONTROL MODULE IS INSTALLED.

WIRING & ELECTRICAL

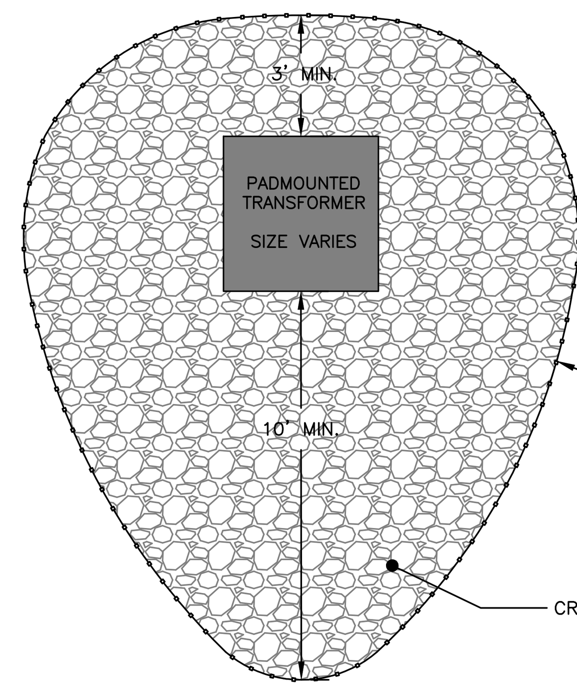
1. 2" INCH CONDUIT (MINIMUM) UNDERGROUND IN LIGHT POLE BASES AND CABINET BASE.

2. EACH LIGHT FUSED INDIVIDUALLY AT BASE FUSE HOLDER TYPE IS A (BUCHANAN 65 KIT CAT # 65U)

3. REGULAR OUTLET ON EACH POLE JUST BELOW THE FIXTURE TO BE FUSED AT THE BOTTOM OF THE POLE BASE WITH THE SAME FUSE KIT AS LISTED ABOVE.

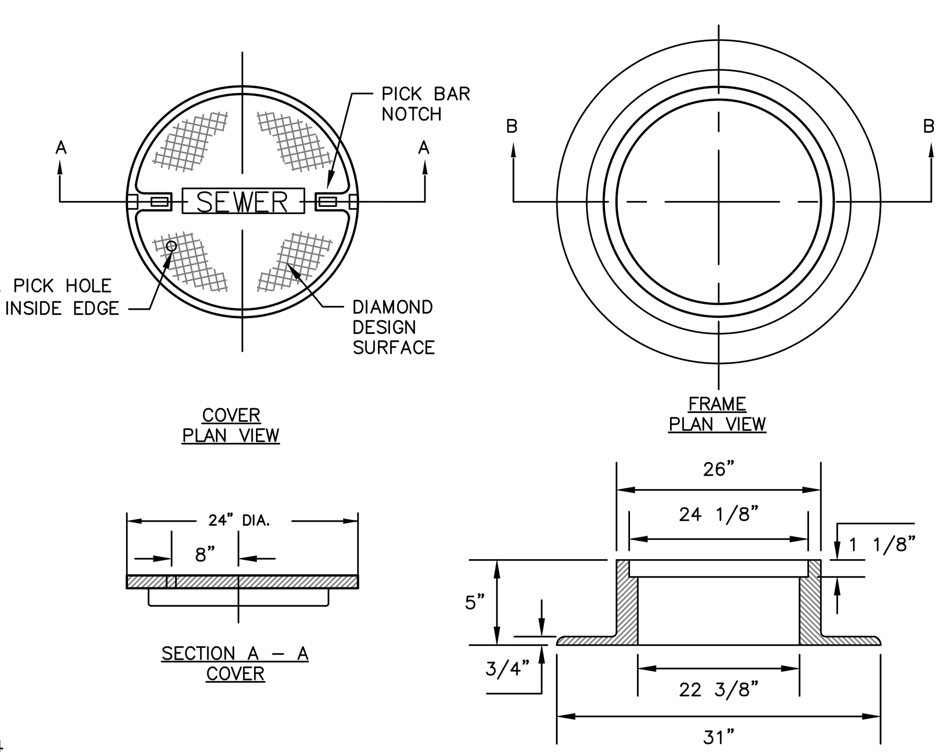
4. SINGLE PHOTO CELL CONTROL FOR ALL LIGHTS SHALL BE IN THE CABINET, RATED FOR THE CIRCUIT. THIS MAY REQUIRE AN ALL-PURPOSE CONTACTOR.

5. WIRE SIZE AND CIRCUIT SIZE SHALL BE CALCULATED BY THE DESIGN ENGINEER AND INSPECTED BY THE CITY INSPECTOR TO MAKE SURE IT IS CORRECT. THIS WOULD BE DONE ON A CASE BY CASE BASIS BECAUSE NOT ALL CIRCUITS, LIGHTS AND SYSTEMS ARE THE SAME.



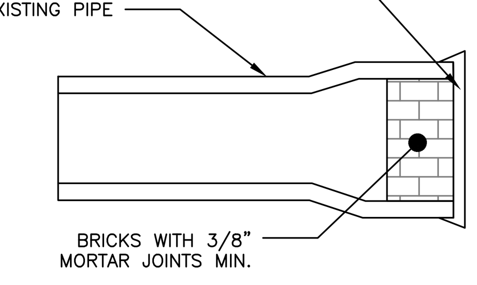
NOTES:
1. WHERE DANGER OF PLOW OR TRAFFIC DAMAGE EXISTS, BARRIERS CONSISTING OF CONCRETE FILLED 6 INCH IPS STEEL POSTS SET 4 FEET DEEP SHALL BE PROVIDED FOR PROTECTION (PRESSURE TREATED 6X6 INCH MIN. TIMBER POSTS MAY BE SUBSTITUTED IN RESIDENTIAL AREAS). POSTS SHALL NOT INTERFERE WITH TRANSFORMER ACCESS. GENERALLY THE POSTS SHALL BE LOCATED NEAR THE CORNERS OF THE TRANSFORMERS.
2. THE SETBACKS DEPICT CLEARANCES FROM OBSTRUCTIONS INCLUDING TREES, SHRUBS, AND FENCES.
3. THERE SHALL BE NO OPENINGS IN THE BUILDING WALL IN BACK OF, BESIDE, OR OVER THE TRANSFORMER UNLESS THE TRANSFORMER IS A MIN. OF 10 FEET FROM THE BUILDING.
4. SIDE CLEARANCES FROM DOORS OR WINDOWS SHALL NOT BE LESS THAN 10 FEET.
5. THERE SHALL BE A MIN. OF 10 FEET BETWEEN THE TRANSFORMER AND ANY GAS METER/REGULATOR, GAS RELIEF VALVE, GAS VENT DISCHARGE, GAS FILLING CONNECTION, OR PROPANE TANK. SOME INSURANCE COMPANIES MAY REQUIRE INCREASED CLEARANCES.
6. TRANSFORMER SHALL BE LOCATED FAR ENOUGH AWAY FROM BUILDING OVERHANGS SO THAT THEY WILL NOT BE SUBJECT TO DAMAGE BY FALLING ICE AND SNOW.
7. IF TRANSFORMER IS NOT INSTALLED IMMEDIATELY UPON THE INSTALLATION OF THE CABLE IN THE PAD, THE CONTRACTOR SHALL PROVIDE AND INSTALL A CMP APPROVED CONCRETE, STEEL, OR FIBERGLASS COVER OVER THE PAD OPENING TO ELIMINATE EXPOSURE OF THE CABLE.

CMP TRANSFORMER SETBACKS
NOT TO SCALE



NOTES:
1. ALL MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE, LOCATED 8" FROM THE CENTER OF THE COVER
2. ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS SHALL BE 24" x 5".
3. ALL SANITARY MANHOLE COVERS AND SHALL HAVE "SEWER" CAST INTO THE COVER.
4. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
5. APPROVED MANHOLE FRAMES:
5.1. EAST JORDAN = 1690Z
5.2. NEENAH = R-1496
5.3. OR APPROVED EQUAL
6. APPROVED MANHOLE COVERS
6.1. EAST JORDAN = 2160A
6.2. NEENAH = R-1496
6.3. OR APPROVED EQUAL

CAST IRON MANHOLE COVER AND FRAME
NOT TO SCALE



DESIGN NOTES:
1. IT IS ASSUMED THAT THE EXISTING PIPE IS OF VITRIFIED CLAY CONSTRUCTION. USE CAP OR PLUG FOR PVC PIPE

MASONRY PLUG
NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY / DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/6/21

DRAWING NAME: UTILITY DETAILS - 3

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

A C O R N ENGINEERING, INC.

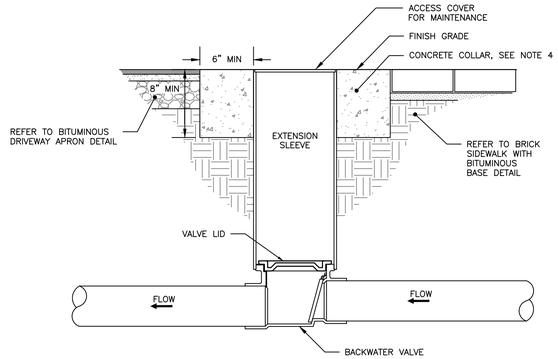
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11419
LICENSED
PROFESSIONAL ENGINEER
1/6/21

DRAWING NO.
C-45

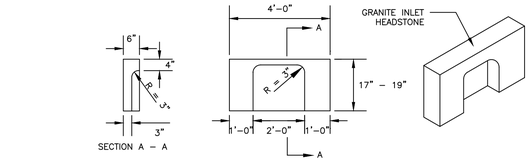


NOTES:

1. BACKFLOW VALVE TO BE PROVIDED BY AGRI DRAIN CORPORATION OR AN APPROVED EQUAL.
2. VALVE TO BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS AND COMPLY WITH RULES AND REGULATIONS AS OUTLINED IN SECTION 2 OF THE CITY OF PORTLAND TECHNICAL MANUAL.
3. VALVE SHALL BE INSTALLED WITH A VALVE BOX AND COVER TO PROVIDE EASY ACCESS AND MAINTENANCE; VALVE COVER SHALL STATE 'SEWER' ON LID FLUSH TO SURFACE. REFER TO VALVE & BOX COVER DETAIL FOR ADDITIONAL INFORMATION.
4. CONCRETE COLLAR AT A MINIMUM 24-HOUR COMPRESSIVE STRENGTH OF 3,000 PSI.

BACKFLOW VALVE ASSEMBLY

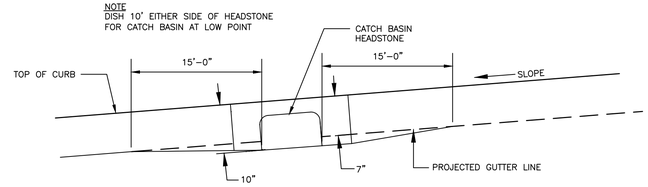
NOT TO SCALE



4' GRANITE HEADSTONE FOR CATCH BASIN INLET

NOT TO SCALE

NOTE
DISH 10' EITHER SIDE OF HEADSTONE FOR CATCH BASIN AT LOW POINT

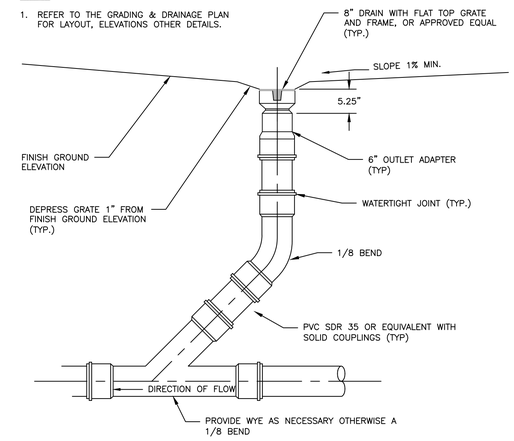


PAVEMENT GRADING ON SLOPES FOR CATCH BASIN AND INLET

NOT TO SCALE

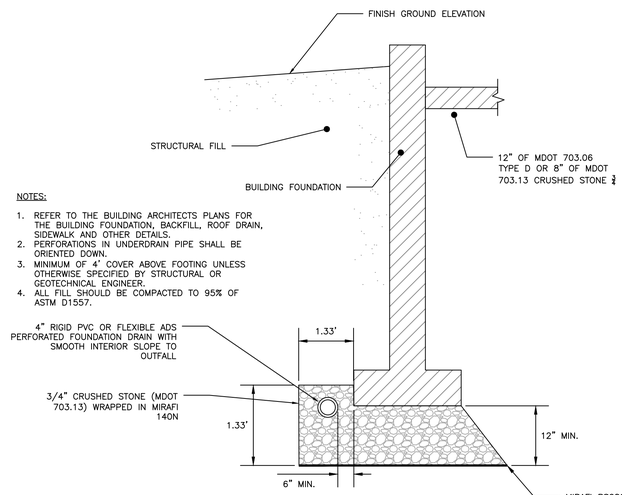
NOTES:

1. REFER TO THE GRADING & DRAINAGE PLAN FOR LAYOUT, ELEVATIONS OTHER DETAILS.



INLINE DRAIN DETAIL WITH GRATE

NOT TO SCALE

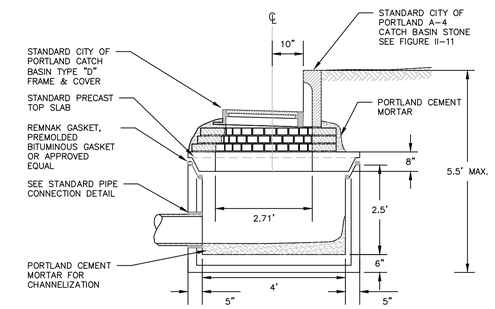


NOTES:

1. REFER TO THE BUILDING ARCHITECTS PLANS FOR THE BUILDING FOUNDATION, BACKFILL, ROOF DRAIN, SIDEWALK AND OTHER DETAILS.
2. PERFORATIONS IN UNDERDRAIN PIPE SHALL BE ORIENTED DOWN.
3. MINIMUM OF 4' COVER ABOVE FOOTING UNLESS OTHERWISE SPECIFIED BY STRUCTURAL OR GEOTECHNICAL ENGINEER.
4. ALL FILL SHOULD BE COMPACTED TO 95% OF ASTM D1557.

FOUNDATION DRAIN DETAIL

NOT TO SCALE

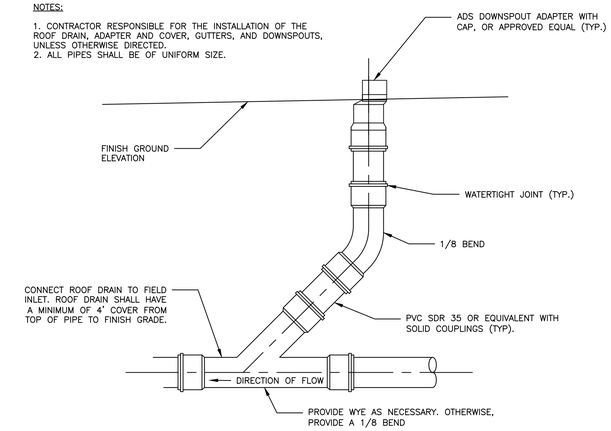


CATCH BASIN INLET

NOT TO SCALE

NOTES:

1. CONTRACTOR RESPONSIBLE FOR THE INSTALLATION OF THE ROOF DRAIN, ADAPTER AND COVER, GUTTERS, AND DOWNSPOUTS, UNLESS OTHERWISE DIRECTED.
2. ALL PIPES SHALL BE OF UNIFORM SIZE.

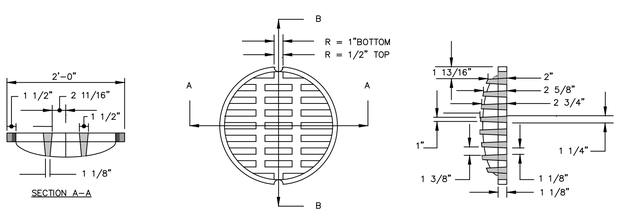


ROOF DRAIN DETAIL

NOT TO SCALE

GENERAL NOTES FOR MANHOLES AND CATCH BASINS

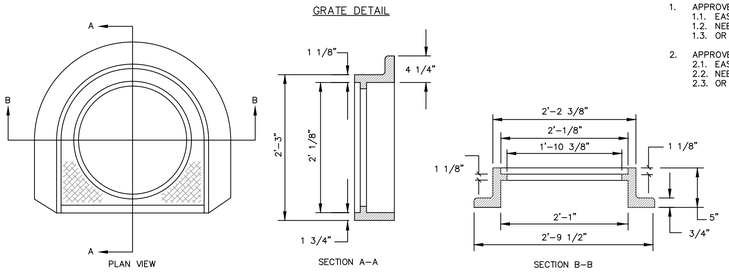
1. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 LBS. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
3. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
4. ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE ⅞" DIAMETER DRILLED PICK HOLE LOCATED 8" FROM THE CENTER OF THE COVER.
5. ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
6. ALL MANHOLE RISERS SHALL BE ETHERIDGE 24" OR APPROVAL EQUAL.
7. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
8. ALL SANITARY MANHOLES SHALL HAVE A WATERPROFFING COATING APPLIED TO THE EXTERIOR SURFACE.
9. CATCH BASIN FRAMES FOR TYPE A4 CATCH BASIN CURB INLETS SHALL BE ETHERIDGE DR5A OR APPROVED EQUAL.
10. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35.
11. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.



GRATE DETAIL

NOTES:

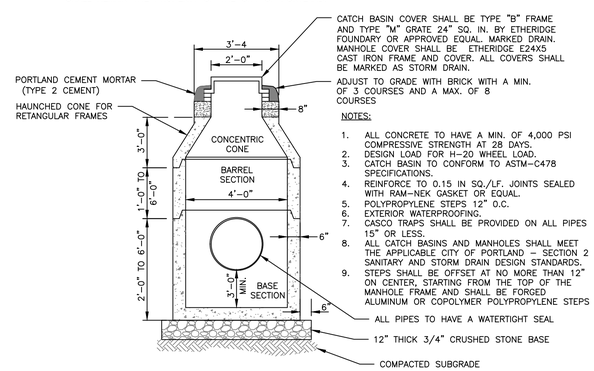
1. APPROVED CATCH BASIN FRAMES:
   1.1. EAST JORDAN = 7375Z
   1.2. NEENAH = R-3248
   1.3. OR APPROVED EQUAL
2. APPROVED CATCH BASIN GRATES
   2.1. EAST JORDAN = 2440M
   2.2. NEENAH = R-3248
   2.3. OR APPROVED EQUAL



FRAME DETAIL

CATCH BASIN FRAME & GRATE

NOT TO SCALE



NOTES:

1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.15 IN SQ./LF. JOINTS SEALED WITH RAM-NEK GASKET OR EQUAL.
5. POLYPROPYLENE STEPS 12" O.C.
6. EXTERIOR WATERPROOFING.
7. CASCO TRAPS SHALL BE PROVIDED ON ALL PIPES 15" OR LESS.
8. ALL CATCH BASINS AND MANHOLES SHALL MEET THE APPLICABLE CITY OF PORTLAND – SECTION 2 SANITARY AND STORM DRAIN DESIGN STANDARDS.
9. STEPS SHALL BE OFFSET AT NO MORE THAN 12" ON CENTER, STARTING FROM THE TOP OF THE MANHOLE FRAME AND SHALL BE FORGED ALUMINUM OR COPOLYMER POLYPROPYLENE STEPS

4'-0" DIAMETER PRECAST CATCH BASIN/MANHOLE

NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY / DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/8/21

DRAWING NAME: DRAINAGE DETAILS

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC.
PORTLAND, MAINE 04104
PO BOX 3422
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FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE — WILLIAM H. SAVAGE No. 11419 — LICENSED PROFESSIONAL ENGINEER — 1/8/21

DRAWING NO.
C-46

1.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

AS PART OF THE SITE DEVELOPMENT, THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IMPLEMENTED. DEVICES SHALL BE INSTALLED AS DESCRIBED IN THIS REPORT OR WITHIN THE PLAN SET. SEE THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES FOR FURTHER REFERENCE.

1.1 TEMPORARY EROSION CONTROL MEASURES

THE FOLLOWING TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE PLANNED FOR THE PROJECT'S CONSTRUCTION PERIOD:

1.1.1 CRUSHED STONE STABILIZED CONSTRUCTION ENTRANCES SHALL BE PLACED AT ALL ACCESS POINTS TO THE PROJECT SITE WHERE THERE ARE DISTURBED AREAS. THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED AT A MINIMUM:
- STONE SIZE SHALL BE 2–3 INCHES, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- THE THICKNESS OF THE ENTRANCE STONE LAYER SHALL BE NO LESS THAN 6 INCHES.
- THE ENTRANCE SHALL NOT BE LESS THAN 20 FEET WIDE, HOWEVER NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS. THE LENGTH SHALL NOT BE LESS THAN 50 FEET IN LENGTH.
- GEOTEXTILE FABRIC (WOVEN OR NON–WOVEN) SHALL BE PLACED OVER THE ENTIRE ENTRANCE AREA.
- THE ENTRANCE/EXIT SHALL BE MAINTAINED TO THE EXTENT THAT IT WILL PREVENT THE TRACKING OF SEDIMENT ONTO PUBLIC ROAD WAYS.

1.1.2 SILTATION FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED DOWN GRADIENT OF ANY DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL PERMANENT STABILIZATION IS ACHIEVED. THE SILT FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THE PLAN SET AND INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE LINE OR BERM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM.

1.1.3 HAY MULCH INCLUDING HYDRO SEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND NOVEMBER 1ST ON SLOPES OF LESS THAN 15 PERCENT SHALL BE COVERED BY FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. MULCH PLACED BETWEEN NOVEMBER 1ST AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT AND EQUAL TO OR FLATTER THAN 2:1 SHALL USE MATS OR FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

1.1.4 AT ANY TIME OF THE YEAR, ALL SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH DOUBLE NET EROSION CONTROL BLANKET BIONET SC150BN BY NORTH AMERICAN GREEN OR APPROVED EQUAL, OR EROSION CONTROL MIX SLOPE PROTECTION AS DETAILED WITHIN THE PLANS.

1.1.5 HANOVER STREET AND PARRIS STREET SHALL BE SWEPT TO CONTROL MUD AND DUST FROM THE CONSTRUCTION SITE AS NECESSARY. ADD ADDITIONAL STONE TO THE STABILIZED CONSTRUCTION ENTRANCE TO MINIMIZE THE TRACKING OF MATERIAL OFF THE SITE AND ONTO THE SURROUNDING ROADWAYS.

1.1.6 DURING DEMOLITION, CLEARING AND GRUBBING OPERATIONS, STONE CHECK DAMS SHALL BE INSTALLED AT ANY AREAS OF CONCENTRATED FLOW. THE MAXIMUM HEIGHT OF THE CHECK DAM SHALL NOT EXCEED 2 FEET. THE CENTER OF THE CHECK DAM SHALL BE 6 INCHES BELOW THE OUTER EDGES OF THE DAM. THE CONTRACTOR SHALL MULCH THE SIDE SLOPES AND INSTALL STONE CHECK DAMS FOR ALL NEWLY EXCAVATED DITCH LINES WITHIN 24 HOURS OF THEIR CREATION.

1.1.7 SILT FENCE STAKE SPACING SHALL NOT EXCEED 6 FEET UNLESS THE FENCE IS SUPPORTED WITH 14 GAUGE WIRE IN WHICH CASE THE MAXIMUM SPACING SHALL NOT EXCEED 10 FEET. THE SILT FENCE SHALL BE "TOED" INTO THE GROUND.

1.1.8 STORMDRAIN INLET PROTECTION SHALL BE PROVIDED TO STORMDRAINS THROUGH THE USE OF ANY OF THE FOLLOWING: HAY BALE DROP INLET STRUCTURES, SILT FENCE DROP INLET SEDIMENT FILTER, GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER, OR CURB INLET SEDIMENT FILTER. BARRIERS SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT AND REPAIRED AS NECESSARY. SEDIMENTS SHALL BE REMOVED WHEN ACCUMULATION HAS REACHED ½ THE DESIGN HEIGHT.

1.1.9 DUST CONTROL SHALL BE ACCOMPLISHED BY THE USE OF ANY OF THE FOLLOWING: WATER, CALCIUM CHLORIDE, STONE, OR AN APPROVED MDEP PRODUCT. DUST CONTROL SHALL BE APPLIED AS NEEDED TO ACCOMPLISH DUST CONTROL.

1.1.10 TEMPORARY LOAM, SEED, AND MULCHING SHALL BE USED IN AREAS WHERE NO OTHER EROSION CONTROL MEASURE IS USED. APPLICATION RATES FOR SEEDING ARE PROVIDED AT THE END OF THIS REPORT.

1.1.11 STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF FORMATION UNLESS A SCHEDULED RAIN EVENT OCCURS PRIOR TO THE 7 DAY WINDOW, IN WHICH CASE THE STOCKPILE SHALL BE STABILIZED PRIOR TO THE RAIN EVENT. METHODS OF STABILIZATION SHALL BE MULCH, EROSION CONTROL MIX, OR EROSION CONTROL BLANKETS/MATS. SILT FENCE OR A WOOD WASTE COMPOST FILTER BERM SHALL BE PLACED DOWNHILL OF ANY SOIL STOCKPILE LOCATION.

1.1.12 FOR DISTURBANCE BETWEEN NOVEMBER 1 AND APRIL 15, PLEASE REFER TO WINTER STABILIZATION PLAN IN THIS REPORT AND THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR FURTHER INFORMATION.

1.1.13 IT IS OF THE UTMOST IMPORTANCE THAT STORMWATER RUNOFF AND POTENTIAL SEDIMENT FROM THE CONSTRUCTION SITE BE DIVERTED AROUND THE PROPOSED UNDERDRAINS UNTIL THE TRENCH IS BACKFILLED.

1.2 PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES ARE INTENDED FOR POST DISTURBANCE AREAS OF THE PROJECT.

1.2.1 ALL DISTURBED AREAS DURING CONSTRUCTION, NOT SUBJECT TO OTHER PROPOSED CONDITIONS, SHALL RECEIVE A MINIMUM 4" OF LOAM AND SHALL BE LIMED, AND MULCHED.
EROSION CONTROL BLANKETS OR MATS SHALL BE PLACED OVER THE MULCH IN AREAS NOTED IN PARAGRAPH 4.2 OF THIS REPORT.

1.2.2 ALL STORMWATER DEVICES SHALL BE INSTALLED AND TRIBUTARY AREAS STABILIZED PRIOR RECEIVING STORMWATER.

1.2.3 REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

2.0 EROSION AND SEDIMENTATION CONTROL PLAN

2.1 THE EROSION AND SEDIMENTATION CONTROL PLAN IS INCLUDED WITHIN THE PLAN SET.

3.0 DETAILS AND SPECIFICATIONS

3.1 EROSION CONTROL DETAILS AND SPECIFICATIONS ARE INCLUDED IN THE PLAN SET.

4.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

WINTER CONSTRUCTION CONSISTS OF EARTHWORK DISTURBANCE BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15, THEN THE SITE SHALL BE PROTECTED WITH OVER–WINTER STABILIZATION. ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MIX, EROSION CONTROL MATS, RIPRAP, OR GRAVEL BASE ON A ROAD SHALL BE CONSIDERED OPEN.

THE CONTRACTOR SHALL LIMIT THE WORK AREA TO AREAS THAT WORK WILL OCCUR IN DURING THE SUBSEQUENT 15 DAYS AND SO THAT IT CAN BE MULCHED ONE DAY PRIOR TO A SNOW EVENT. THE CONTRACTOR SHALL STABILIZE WORK AREAS PRIOR TO OPENING ADDITIONAL WORK AREAS TO MINIMIZE AREAS WITHOUT EROSION CONTROL MEASURES.

THE FOLLOWING MEASURES SHALL BE IMPLEMENTED DURING WINTER CONSTRUCTION PERIODS:

4.1 SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

4.2 MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75–LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE–INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCHING AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

4.3 SOIL STOCKPILING

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR–INCH LAYER OF EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE–ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

4.4 SEEDING

BETWEEN THE DATES OF OCTOBER 15TH AND APRIL 1ST, LOAM OR SEED SHALL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS NOT BEEN LOAMED, FINAL GRADING WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

4.5 OVER WINTER STABILIZATION OF DISTURBED SOILS

BY SEPTEMBER 15TH, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% SHALL BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS SHALL BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION – BY OCTOBER 1ST, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3LBS PER 1,000 S.F., LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 LBS PER 1,000 S.F., AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1ST, THEN MULCH THE AREA FOR OVER–WINTER PROTECTION.
- STABILIZE THE SOIL WITH SOD – STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES 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.
- STABILIZE THE SOIL WITH MULCH – BY NOVEMBER 15TH, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 LBS PER 1,000 S.F. ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

4.6 OVER WINTER STABILIZATION OF DISTURBED SLOPES

ALL STONE–COVERED SLOPES SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15TH. ALL SLOPES TO BE VEGETATED SHALL BE SEEDED AND MULCHED BY SEPTEMBER 1ST. A SLOPE IS CONSIDERED A GRADE GREATER THAN 15%. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1ST, THEN ONE OF THE FOLLOWING ACTION SHALL BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS – BY OCTOBER 1ST THE DISTURBED SLOPE SHALL BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1,000 S.F. AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1ST, THEN THE CONTRACTOR SHALL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP.
- STABILIZE THE SOIL WITH SOD – THE DISTURBED SLOPE SHALL BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR 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 CONTRACTOR SHALL NOT USE LATE–SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 3H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SOIL WITH EROSION CONTROL MIX – EROSION CONTROL MIX SHALL BE PROPERLY INSTALLED BY NOVEMBER 15TH. THE CONTRACTOR SHALL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 2H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SOIL WITH STONE RIPRAP – PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15TH. A REGISTERED PROFESSIONAL ENGINEER SHALL BE HIRED TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

5.0 INSPECTION AND MAINTENANCE

A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT PERIODIC VISUAL INSPECTIONS OF INSTALLED EROSION CONTROL MEASURES. THE FREQUENCY OF INSPECTION SHALL OCCUR AT LEAST ONCE EVERY TWO WEEKS, AS WELL AS AFTER A "STORM EVENT". A "STORM EVENT" SHALL CONSIST 0.5 INCHES OF RAIN WITHIN A 24 HOUR PERIOD. THE FOLLOWING EROSION AND SEDIMENT CONTROL – BEST MANAGEMENT PRACTICES (BMP'S) SHALL INSPECTED IN THE MANNER AS DESCRIBED.

5.1 SEDIMENT BARRIERS

HAY BALE BARRIERS, SILT FENCES AND FILTER BERMS SHALL BE INSPECTED AND REPAIRED FOR THE FOLLOWING IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE–HALF THE HEIGHT OF THE BARRIER. FILTER BERMS SHOULD 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.

5.2 STABILIZED STONE CONSTRUCTION ENTRANCES

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 AND REDISTRIBUTED ON SITE IN A STABLE MANNER. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED. THE CONTRACTOR SHALL SWEEP OR WASH PAVEMENT AT EXITS, WHICH HAVE EXPERIENCED MUD–TRACKING ON TO THE PAVEMENT OR TRAVELED WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

5.3 MULCHED AREAS

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE–INSTALL THE NETS AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE. REPAIR AS NEEDED.

5.4 DUST CONTROL

WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

5.5 STORMWATER APPURTENANCES

ALL UNDERDRAINS, STORM DRAINS, AND CATCH BASINS NEED TO BE OPERATING EFFECTIVELY AND FREE OF DEBRIS.

5.6 EROSION AND SEDIMENTATION CONTROL INSPECTIONS:

ACORN ENGINEERING HAS PERSONNEL QUALIFIED TO CONDUCT EROSION AND SEDIMENTATION CONTROL INSPECTIONS. FOR FURTHER INFORMATION CONTACT:

CONTACT: WILL SAVAGE, PE
TELEPHONE: (207) 775–2655

QUALIFICATIONS:

- MAINE PROFESSIONAL ENGINEERING LICENSE #11419
- MAINE DEP – CERTIFIED IN MAINTENANCE & INSPECTION OF STORMWATER BMP'S CERT #14
- CERTIFIED EROSION, SEDIMENT AND STORM WATER INSPECTOR (CESSWI) CERT #0293
- CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) CERT. #4620

THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR COMPLYING WITH THE EROSION AND SEDIMENTATION REPORT/PLAN, INCLUDING CONTROL OF FUGITIVE DUST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONETARY PENALTIES RESULTING FROM FAILURE TO COMPLY WITH THESE STANDARDS.

6.0 IMPLEMENTATION SCHEDULE

THE FOLLOWING IMPLEMENTATION SEQUENCE IS INTENDED TO MAXIMIZE THE EFFECTIVENESS OF THE ABOVE DESCRIBED EROSION CONTROL MEASURES. CONTRACTORS SHOULD AVOID OVEREXPOSING DISTURBED AREAS AND LIMIT THE AMOUNT OF STABILIZATION AREA.

1. INSTALL A STABILIZED CONSTRUCTION ENTRANCE IN ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER AND EXIT THE SITE.
2. INSTALL PERIMETER SILT FENCE OR EROSION CONTROL BERM.
3. INSTALL ALL OTHER EROSION CONTROL DEVICES AS NECESSARY THROUGHOUT THE REMAINDER OF THIS SCHEDULE.
4. COMMENCE INSTALLATION OF DRAINAGE INFRASTRUCTURE.
5. PRIORITIZE THE DOWNHILL SIDE TO CONTAIN RUNOFF WITHIN THE SITE WHILE PROVIDING AN ENGINEERED OUTLET WITH SILTATION BARRIER TO THE MUNICIPAL STORMWATER SYSTEM WITHIN PARRIS STREET.
6. COMMENCE EARTHWORK OPERATIONS, WALL AND FOUNDATION INSTALLATION.
7. COMMENCE INSTALLATION OF UTILITIES.
8. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION.
9. COMPLETE INSTALLATION OF DRAINAGE INFRASTRUCTURE, AS WELL AS OTHER UTILITY WORK.
10. COMPLETE REMAINING EARTHWORK OPERATIONS.
11. INSTALL SUB–BASE AND BASE GRAVELS IN PAVED AREAS.
12. INSTALL PAVING, CURBING AND BRICKWORK.
13. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
14. ONCE THE SITE IS STABILIZED, 90% CATCH OF GRASS HAS BEEN OBTAINED, OR MULCHING OF LANDSCAPE AREAS IS COMPLETE REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
15. TOUCH UP AREAS WITHOUT A VIGOROUS CATCH OF GRASS WITH LOAM AND SEED.
16. COMPLETE SITE SIGNAGE AND STRIPING.
17. EXECUTE PROPER MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

THE ABOVE IMPLEMENTATION SEQUENCE SHOULD BE GENERALLY FOLLOWED BY THE SITE CONTRACTOR. HOWEVER, THE CONTRACTOR MAY CONSTRUCT SEVERAL ITEMS SIMULTANEOUSLY. THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE OF THE COMPLETION OF THE WORK. IF THE CONTRACTOR IS TO COMMENCE THE CONSTRUCTION OF MORE THAN ONE ITEM ABOVE, THEY SHALL LIMIT THE AMOUNT OF EXPOSED AREAS TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE FOLLOWING 30 DAYS.

THE CONTRACTOR SHALL RE–VEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT. THE CONTRACTOR SHALL INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEMS AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE.

7.0 SEEDING PLAN

7.1 SITE PREPARATION

THE SEEDED AREAS SHALL BE FEASIBLY GRADED OUT TO PROVIDE THE USE OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IF NECESSARY, THE SITE MAY REQUIRE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL REPORT.

7.2 SEEDBED PREPARATION

FERTILIZER SHALL BE APPLIED TO THE SITE AT A RATE OF 13.8 POUNDS PER 1,000 SQUARE FEET. THE COMPOSITION OF THE FERTILIZER SHALL BE 10–10–10 (N–P205–K20) OR EQUIVALENT.

LIMESTONE SHALL BE APPLIED TO THE SITE AT A RATE OF 138 POUNDS PER 1,000 SQUARE FEET.

7.3 SEEDING

THE COMPOSITION AND AMOUNT OF TEMPORARY SEED APPLIED TO A SITE SHALL BE DETERMINED BY THE FOLLOWING TABLE:

TEMPORARY SEED APPLICATION RATES

SEED	LBS / ACRE	RECOMMENDED SEEDING DATES
WINTER RYE	2.57	8/15 TO 10/1
OATS	1.84	4/1 TO 7/1 8/15 TO 9/15
ANNUAL RYGRASS	0.92	4/1 TO 7/1
SUDANGRASS	0.92	5/15 TO 8/15
PERENNIAL	0.92	8/15 TO 9/15
TOTAL	7.17 LBS/ACRE	

7.4 MULCHING

MULCH SHALL BE HARDWOOD AND APPLIED AT A RATE OF 70 LBS – 90 LBS PER 1,000 SQUARE FEET. THE MULCH SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. THE SEEDED AREA SHALL BE MULCHED IMMEDIATELY AFTER SEED IS APPLIED. MULCHING DURING THE WINTER SEASON SHALL BE DOUBLE THE NORMAL AMOUNT. REFER TO DETAIL FOR MORE INFORMATION.

8.0 CONCLUSION

THE ABOVE EROSION CONTROL NARRATIVE IS INTENDED TO MINIMIZE THE DEVELOPMENT IMPACT BY IMPLEMENTING TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

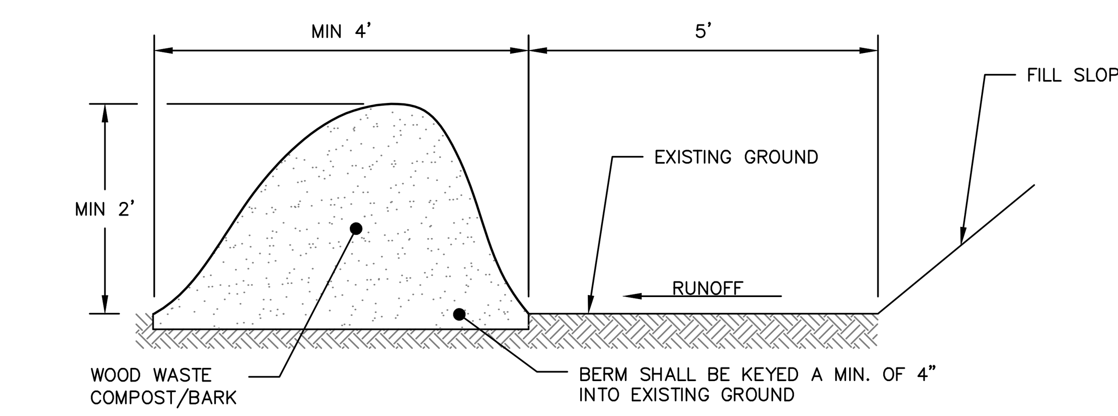
NOTES:

1. THE EROSION CONTROL MIX SHALL CONFORM TO THE FOLLOWING STANDARDS AND IN ACCORDANCE WITH THE MAINE DOT CHAPTER 700, SECTION 717.04(D):

1.1. pH BETWEEN 5.0 – 8.0
1.2. PARTICLE SIZE (BY WEIGHT):
1.2.1. 100% PASSING A 150 MM (6 IN) SCREEN
1.2.2. 75 TO 85% PASSING A 19 MM (0.75 IN) SCREEN
1.3. SOLUBLE SALTS CONTENT < 4.0 MMHOS/CM
1.4. ORGANIC MATTER 20 TO 100% , DRY WEIGHT BASIS

2. THE BERM SHOULD BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR, WHEN NECESSARY THE BERM MAY BE PLACED PERPENDICULAR TO THE SLOPE ALONG THE PROPERTY LINE TO CONTAIN THE SEDIMENT PROVIDED A BERM IS LOCATED AT THE BASE OF THE SLOPE.

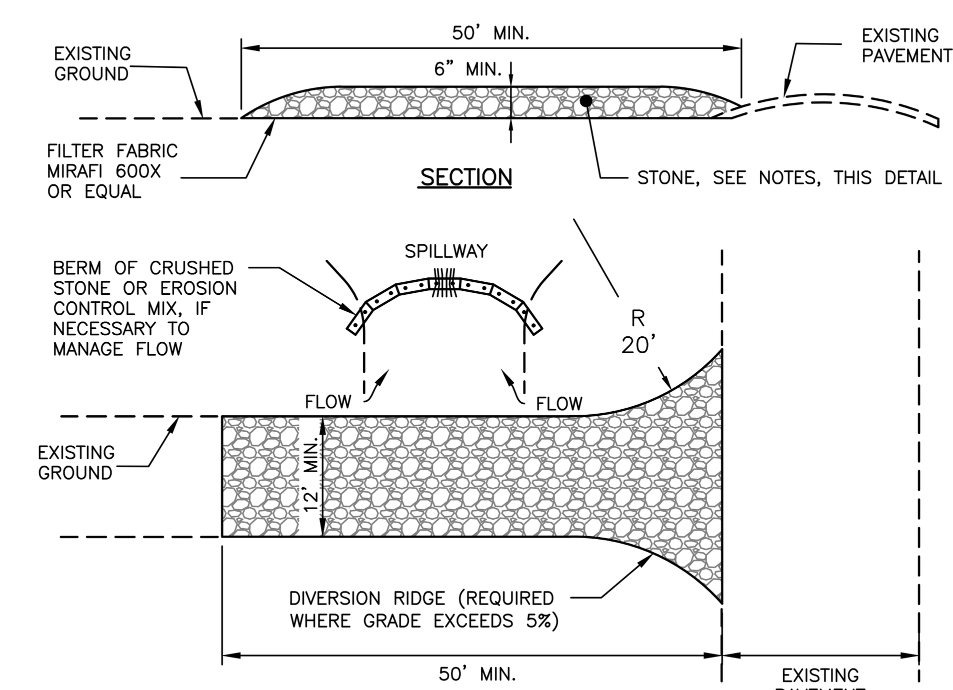
3. BERMS SHALL REMAIN IN PLACE UNTIL UPSTREAM AREA IS STABILIZED OR 90% CATCH OF VEGETATION IS ATTAINED. BERMS SHALL BE REMOVED OFFSITE OR BY SPREADING SUCH THAT NATIVE EARTH CAN BE SEEN BELOW.



EROSION CONTROL MIX BERM DETAIL
NOT TO SCALE

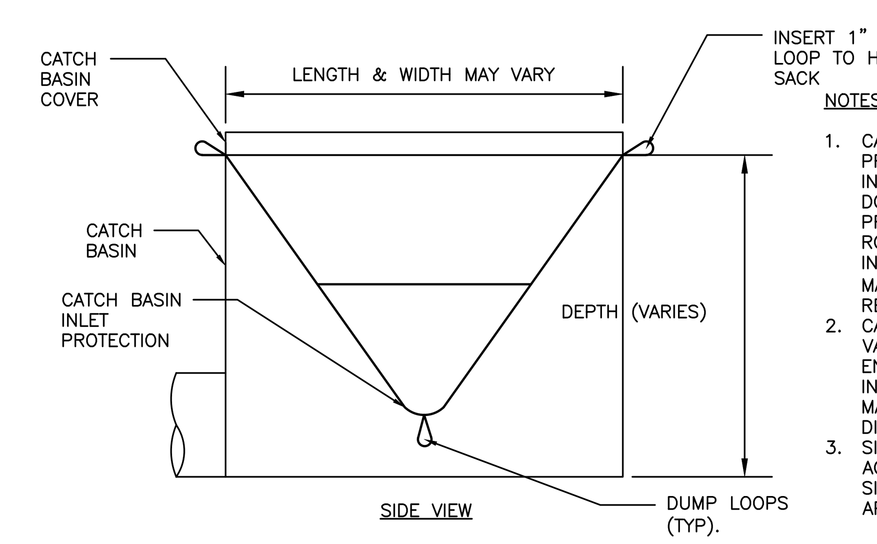
NOTES:

1. CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES
2. STONE SHALL BE 2"–3" COARSE AGGREGATE
3. BERMS MAY BE NECESSARY TO DIVERT WATER AROUND ANY EXPOSED SOIL, AND RUNOFF SHOULD BE DIRECTED TO A SEDIMENT TRAP.
4. CONSTRUCTION ENTRANCE SHALL BE GRADED TO NOT ALLOW ANY STORMWATER TO BE CONVEYED OFF SITE. IN SITUATIONS WHERE THIS IS NOT POSSIBLE, ANY STORMWATER CONVEYED OFFSITE SHALL BE TREATED OR RETAINED IN A MANNER APPROVED BY ENGINEER.
5. THE WHEELS OF CONSTRUCTION EQUIPMENT MAY BE WASHED PRIOR TO EXITING THE SITE. WASHING SHOULD BE PERFORMED IN AN AREA THAT DRAINS TO A SEDIMENT TRAP OR BASIN
6. CONSTRUCTION ENTRANCE SHALL BE GRADED IN A MANNER THAT PREVENTS TRACKING OF SEDIMENTS ONTO PUBLIC RIGHT–OF–WAY
7. TRACKED SEDIMENTS ON ADJACENT ROADWAYS SHALL BE REMOVED BY VACUMMING PRIOR TO A PREDICTED RAIN EVENT.
8. THE PAD SHOULD BE INSPECTED WEEKLY, AND BORE AND AFTER EACH STORM. THE PAD MAY HAVE TO BE REPLACED IF THE VOIDS BECOME FILLED WITH SEDIMENT. STREET SWEEPING MAY BE NECESSARY.



PLAN VIEW

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:

1. CATCH BASIN INLET PROTECTION SHALL BE INSTALLED DOWNGRADIENT OF PROPOSED PROJECT AND ROUTINELY MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
2. CATCH BASIN SIZE VARIES. CONTRACTOR TO ENSURE CATCH BASIN INLET PROTECTION MATCHES CATCH BASIN DIMENSIONS.
3. SILT SACK SHALL BE ACF ENVIRONMENTAL SILT SACK, TYPE A, OR APPROVED EQUAL.

CATCH BASIN INLET PROTECTION
NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY / DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/6/21

DRAWING NAME: EROSION & SEDIMENTATION CONTROL DETAILS & NOTES

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
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FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	KRB
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11419
LICENSED
PROFESSIONAL ENGINEER
1/6/21

DRAWING NO.
C-47

GENERAL NOTES:

1. FOR INFORMATION REGARDING PROPOSED SECOND LEVEL LAYOUT, REFER TO SITE PLAN – SECOND FLOOR, SHEET C-11, MOST RECENT VERSION.
2. FOR INFORMATION REGARDING PROPOSED UTILITIES, REFER TO THE UTILITY PLAN, SHEET C-20, MOST RECENT VERSION.
3. FOR INFORMATION REGARDING PROPOSED GRADING AND STORMWATER, REFER TO THE GRADING & DRAINAGE PLANS, SHEET C-30 AND C-31, MOST RECENT VERSION.
4. R.O.W. WIDTH FOR EXISTING SUNSET AVENUE IS 40 FEET PER BOUNDARY SURVEY & TOPOGRAPHICAL MAP WITH EXISTING CONDITIONS COMPLETED BY SEBAGO TECHNICS DATED 10-19-15. R.O.W. WIDTH FOR PROPOSED EXTENSION OF SUNSET AVENUE IS 30 FEET.
5. SITE BOUNDARIES PER BOUNDARY SURVEY & TOPOGRAPHICAL MAP WITH EXISTING CONDITIONS PROVIDED BY SEBAGO TECHNICS ON A PLAN ENTITLED EXISTING CONDITIONS SURVEY DATED 10-19-15.
6. AS OF 9/5/2019, THE SITE IS BOUNDED BY THE INR ZONE ON EAST AND SOUTH SIDES OF THE PROPERTY, BY THE A ZONE ON THE WEST SIDE OF THE PROPERTY, AND BY THE G ZONE ON THE NORTH SIDE OF THE PROPERTY PER CITY OF SOUTH PORTLAND GIS WEBSITE.
7. LOCUS PARCEL DOES NOT FALL IN A SPECIAL FLOOD HAZARD AREA PER FEMA FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 23005C0806F, INDEX DATED 4/14/2017.
8. 4" SQUARE, 4' LONG GRANITE OR CONCRETE MONUMENTS SHALL BE PLACED AT ALL PROPERTY CORNERS THAT ABUT THE PUBLIC RIGHT-OF-WAY. AT ANGLE POINTS AND POINTS OF CURVATURE AS WELL AS ALL OTHER LOT CORNERS SHALL BE MARKED WITH MINIMUM 3/4" IRON PIPE OR 5/8" STEEL REBAR A MINIMUM OF TWENTY-FOUR (24) INCHES LONG. ALL SUCH MARKERS SHALL BE SET 6" ABOVE GROUND, EXCEPT IN LAWNS, DRIVES AND PARKING AREAS WHERE THEY SHALL BE FLUSH. LOCATION AND INSTALLATION SHALL BE CONDUCTED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF MAINE.
9. EXISTING CONDITIONS AS PROVIDED BY SEBAGO TECHNICS INC. PLAN ENTITLED 'EXISTING CONDITIONS PLAN' FOR STJ, INC. PROJECT NO. 14148, DATED 10/19/15.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND VERIFYING THE EXISTING CONDITIONS INFORMATION.
11. THE OWNER SHALL BE RESPONSIBLE FOR SNOW AND ICE REMOVAL (INCLUDING WITHIN THE PEDESTRIAN EASEMENT AREA) AND NO SNOW STORAGE ON SITE UNLESS SHOWN ON THE SITE PLAN.

SURVEY NOTES:

1. BOOK AND PAGE REFERENCES ARE TO THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
2. BEARINGS ARE REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, NBAD83, WEST ZONE BASED ON A DIGITAL DRAWING FILE PROVIDED BY THE CITY OF PORTLAND.
3. ELEVATIONS ARE BASED THE CITY OF PORTLAND DATUM, TIED TO CITY TBM #59, "TOP OF GRANITE MONUMENT @ DRILL HOLE, BELOW IRON DRIP BOX, IN CONCRETE SIDEWALK RAMP AT SOUTHWEST CORNER ALDER/KENNEBEC. EL. – 10.145'.
4. UTILITY INFORMATION ON THIS PLAN IS APPROXIMATE, BASED ON LOCATION OF VISIBLE FEATURES AND INFORMATION CONTAINED ON PLANS AND DRAWINGS PROVIDED BY OTHERS. DIGSAFE AND/OR THE APPROPRIATE UTILITIES SHOULD BE CONTACTED PRIOR TO ANY CONSTRUCTION.
5. PROPERTIES LIE WITHIN ZONE C BASED ON FIRM COMMUNITY #230051 PANEL #0013-B, DATED JULY 17, 1988. THEY DO NOTE LIE WITHIN A SPECIAL FLOOD HAZARD AREA.
6. BOUNDARY AND RIGHT OF WAY INFORMATION SHOWN PER PLAN REFERENCES 1, 2, & 3.
7. PROJECT AREA WAS COVERED BY SNOW AND ICE AT THE TIME OF THE SURVEY AND SOME FEATURES MAY HAVE BEEN OBSCURED AND NOT SHOWN ON THIS PLAN.
8. RIGHT OF WAY LINES SHOWN PER ELECTRONIC DRAWING FILE PROVIDED BY THE CITY OF PORTLAND DEPARTMENT OF ENGINEERING. SEE PLAN REFERENCE #4.
9. THE PORTION OF LANCASTER STREET SHOWN WAS DISCONTINUED JUNE 15, 1981, CITY OF PORTLAND RECORDS, VOLUME 98, PAGE 187. THIS DISCONTINUANCE DOES NOT EXPRESSLY EXCLUDE PUBLIC RIGHTS OVER THE DISCONTINUED STREET. ACCORDING TO 23 M.R.S.A 3026(1) A STREET DISCONTINUANCE AFTER SEPTEMBER 3, 1965, LEAVES AN AUTOMATIC PUBLIC EASEMENT UNLESS SPECIFIC LANGUAGE STATES OTHERWISE. AS SET FORTH IN A CERTIFICATE OF DISCONTINUANCE DATED JULY 20, 2018 RECORDED IN BOOK ____, PAGE ____, THE PORTLAND CITY COUNCIL VOTED TO EXTINGUISH THE PUBLIC EASEMENT WITHIN THE FORMER LOCATION OF LANCASTER STREET AS PART OF THIS SUBDIVISION.
10. THE PORTION OF THE PROPERTY DESCRIBED IN BOOK 23202, PAGE 38 WAS CONVEYED TO PORTLAND AND ROCHESTER RAILROAD COMPANY (PORTLAND TERMINAL COMPANY) BY N.L. WOODBURY IN BOOK 392, PAGE 253, APRIL 3, 1872. THIS CONVEANCE IS A QUIT CLAIM DEED THAT CONVEYS A "THE RIGHT OF THE WAY AND USE OF THEIR (P&RRC) RAILROAD". THIS DEED ENDS WITH THE STATEMENT "MEANING AND INTENDING TO CONVEY THE RIGHT ONLY TO OCCUPY THE FORESAID PREMISES FOR THE PURPOSE OF THE RAILROAD...". OBTAINING A TITLE OPINION CONCERNING THIS PORTION OF THE PROPERTY IS RECOMMENDED.
11. A SEWER EASEMENT IS RESERVED BY THE CITY OF PORTLAND OVER THE DISCONTINUED PORTION OF LANCASTER STREET PER THE JUNE 15, 1981 DISCONTINUANCE FOUND IN THE CITY OF PORTLAND RECORDS VOLUME 98, PAGE 187.
12. PARCEL A (82 HANOVER STREET) IS SUBJECT TO A RESTRICTIVE COVENANT PERTAINING TO THE USE OF THE FORMER LANCASTER STREET RIGHT-OF-WAY AS SET FORTH IN A DEED FOR PARCEL A RECORDED IN BOOK ____, PAGE ____.
13. PLAN REFERENCES:
    - 13.1. PLAN OF STANDARD BOUNDARY SURVEY, 82 HANOVER STREET, MADE FOR CITY OF PORTLAND BY TITCOMB ASSOCIATES DATED NOVEMBER 1, 2017.
    - 13.2. PLAN OF STANDARD BOUNDARY SURVEY, 52 HANOVER STREET, MADE FOR CITY OF PORTLAND BY TITCOMB ASSOCIATED DATED NOVEMBER 2, 2017.
    - 13.3. PLAN OF SUBDIVISION PLAT MADE FOR CITY OF PORTLAND BY TITCOMB ASSOCIATES, DATED NOVEMBER 29, 2017 AS REVISED THROUGH JULY 24, 2018, RECORDED IN PLAN BOOK 218, PAGE 342.
    - 13.4. DIGITAL DRAWING FILE OF KENNEBEC STREET AND SURROUNDING STREETS PROVIDED BY THE CITY OF PORTLAND DEPARTMENT OF ENGINEERING.
    - 13.5. CITY OF PORTLAND PROPERTY PLAN #6.
    - 13.6. CITY OF PORTLAND VAULT PLAN #195/11.
    - 13.7. CITY OF PORTLAND VAULT PLAN #210/13.

EASEMENTS:

EXISTING:

1. THE FORMER LOCATION OF LANCASTER STREET IS SUBJECT TO A UTILITY EASEMENT RETAINED BY THE CITY AS SET FORTH IN A CERTIFICATE OF DISCONTINUANCE DATED JULY 20, 2018 RECORDED IN BOOK 35151, PAGE 132.
2. AN APPROXIMATELY 5 FOOT WIDE PEDESTRIAN AND BICYCLE EASEMENT RETAINED BY THE CITY OF PORTLAND AS RECORDED IN CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 38689, PAGE 133.
3. USE RESTRICTIONS AS SET FORTH IN CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 16707, PAGE 206 AND MODIFIED IN BOOK 29610, PAGE 223.
4. EASEMENT DEED FROM 52 HANOVER, LLC TO CITY OF PORTLAND AND AGREEMENT DATED AS OF DECEMBER 13, 2018 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 35353, PAGE 239.
    - 4.1. AMENDED SEWER/STORM DRAIN AND ACCESS EASEMENTS RECORDED IN CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK ____, PAGE ____.

PROPOSED:

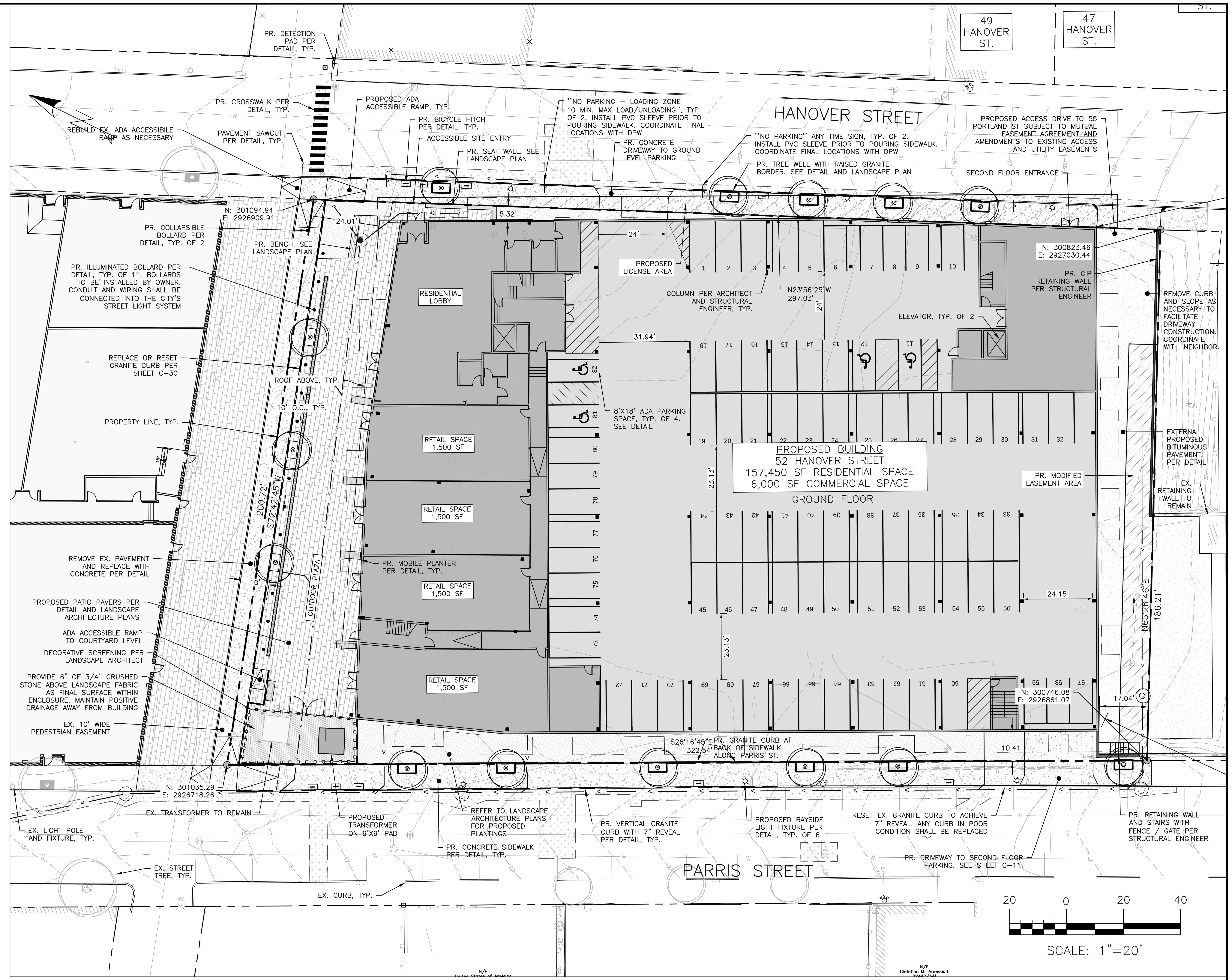
THERE ARE NO PROPOSED EASEMENTS

CONDITIONS OF APPROVAL:

TBD

WAIVERS:

TBD



SPACE AND BULK STANDARDS		
ZONE: B-2b	REQUIRED	PROPOSED
MINIMUM LOT SIZE	NONE	59,625 SF
MINIMUM STREET FRONTAGE	NONE	250 FT.
MINIMUM FRONT YARD SETBACK	NONE	0 FT
MINIMUM REAR YARD SETBACK	10 FT	10.18 FT
MINIMUM SIDE YARD SETBACK	5 FT	9.95 FT
MAXIMUM LOT COVERAGE	98%	95%
MAXIMUM RESIDENTIAL DENSITY	435 SF PER D.U.	331 SF PER D.U. *
MAXIMUM BUILDING HEIGHT	85 FT	85 FT
VEHICLE PARKING	165 WEEKDAY ** 189 SATURDAY	176
BICYCLE PARKING	70	70

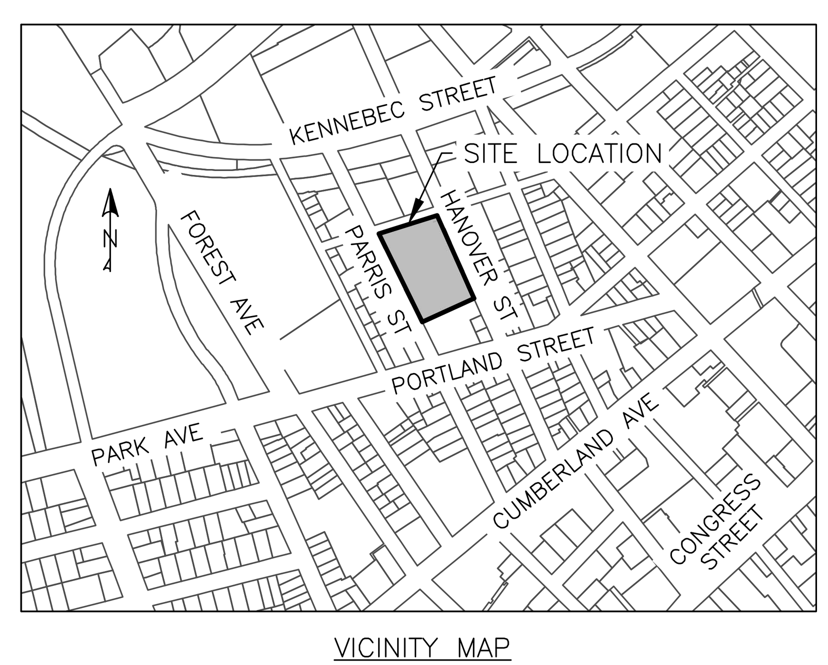
* REFER TO SEC. 14-487(G) FOR ALLOWABLE 25% DENSITY INCREASE FOR ON-SITE WORKFORCE UNITS

** REFER TO PARKING ANALYSIS BY TRAFFIC SOLUTIONS DATED 1/9/21

UNIT TABULATION	
UNIT NUMBER	SIZE (SF)*
TBD	

PARKING SUMMARY	
PARKING DIMENSION	# PARKING SPACES
STANDARD (9'X18')	141
COMPACT (8'X16')	47
ADA (9'X18')	6
TOTAL SPACES	194

PROPERTY MARKER	
PROPERTY LINE	
SETBACK	
PROPOSED BUILDING	
PAVEMENT	
CONCRETE	
LANDSCAPED AREAS	
BRICK	
CURB	
STRIPING	



VICINITY MAP
SCALE: 1:500

OWNER OF RECORD:
TOM WATSON & CO., LLC
82 HANOVER STREET
PORTLAND, MAINE
CONTACT: TOM WATSON

CIVIL/SITE ENGINEER:
ACORN ENGINEERING, INC.
65 HANOVER ST.
PORTLAND, MAINE
CONTACT: WILLIAM SAVAGE, P.E.

SURVEYOR:
TITCOMB ASSOCIATES
133 GRAY ROAD
FALMOUTH, MAINE
CONTACT: REX CROTEAU, P.L.S.

RECORDING INFORMATION
STATE OF MAINE,
CUMBERLAND COUNTY
REGISTRY OF DEEDS

RECEIVED: ____________

RECORDED IN ____________

ATTEST: ____________
REGISTRAR

THIS SURVEY CONFORMS TO THE CURRENT STANDARDS OF PRACTICE SET FORTH BY THE MAINE STATE BOARD OF LICENSURE FOR LAND SURVEYORS.

REX J. CROTEAU, MAINE P.L.S. #2273 DATE:
TITCOMB ASSOCIATES

APPROVED: PORTLAND PLANNING BOARD
CHAIRPERSON: DATE:

ISSUED FOR	BY / DATE
SITE PLAN	WHS 9/25/20
COMMENT RESPONSE	WHS 1/6/21

DRAWING NAME: SUBDIVISION PLAT – 52 HANOVER STREET

PROJECT NAME: 52 HANOVER REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

FILE: 1093.2_CIVIL
JN: 1093.2
SCALE: AS NOTED
DESIGNED BY: SJL
DRAWN BY: KRB
CHECKED BY: WHS

STATE OF MAINE – WILLIAM H. SAVAGE No. 11419 – LICENSED PROFESSIONAL ENGINEER
1/6/21

DRAWING NO.
PLAT

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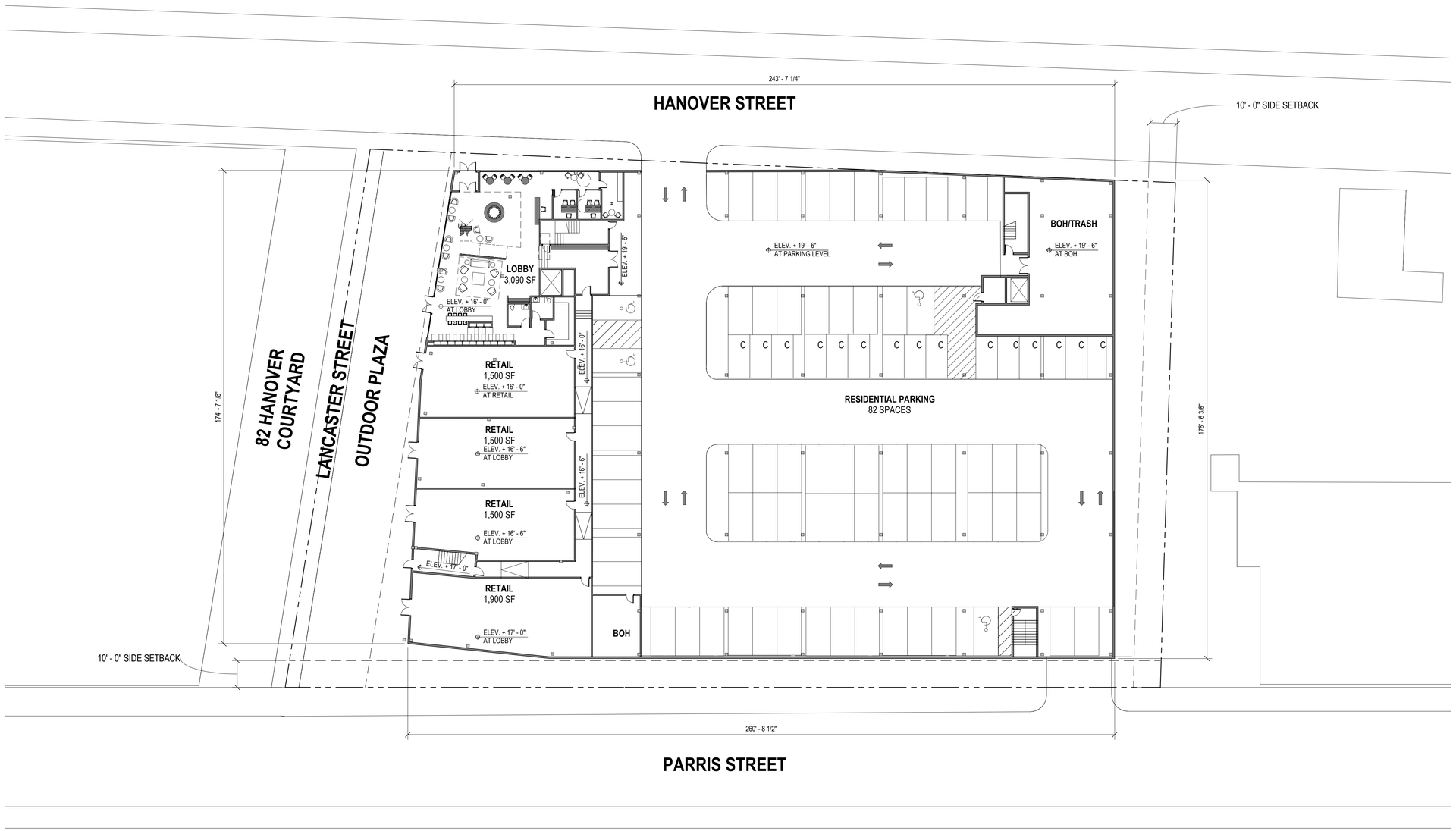
phone: 978.989.9900 www.cube3.com



P1 - First Floor Plan
1" = 20'-0"

1

project information:
52 Hanover
52 Hanover Street
Portland, ME

client information:
Tom Watson & Co., LLC
82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:
Preliminary
NOT FOR CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:
DRAFT

drawing name:
First Floor Plan

drawing number:
A-101

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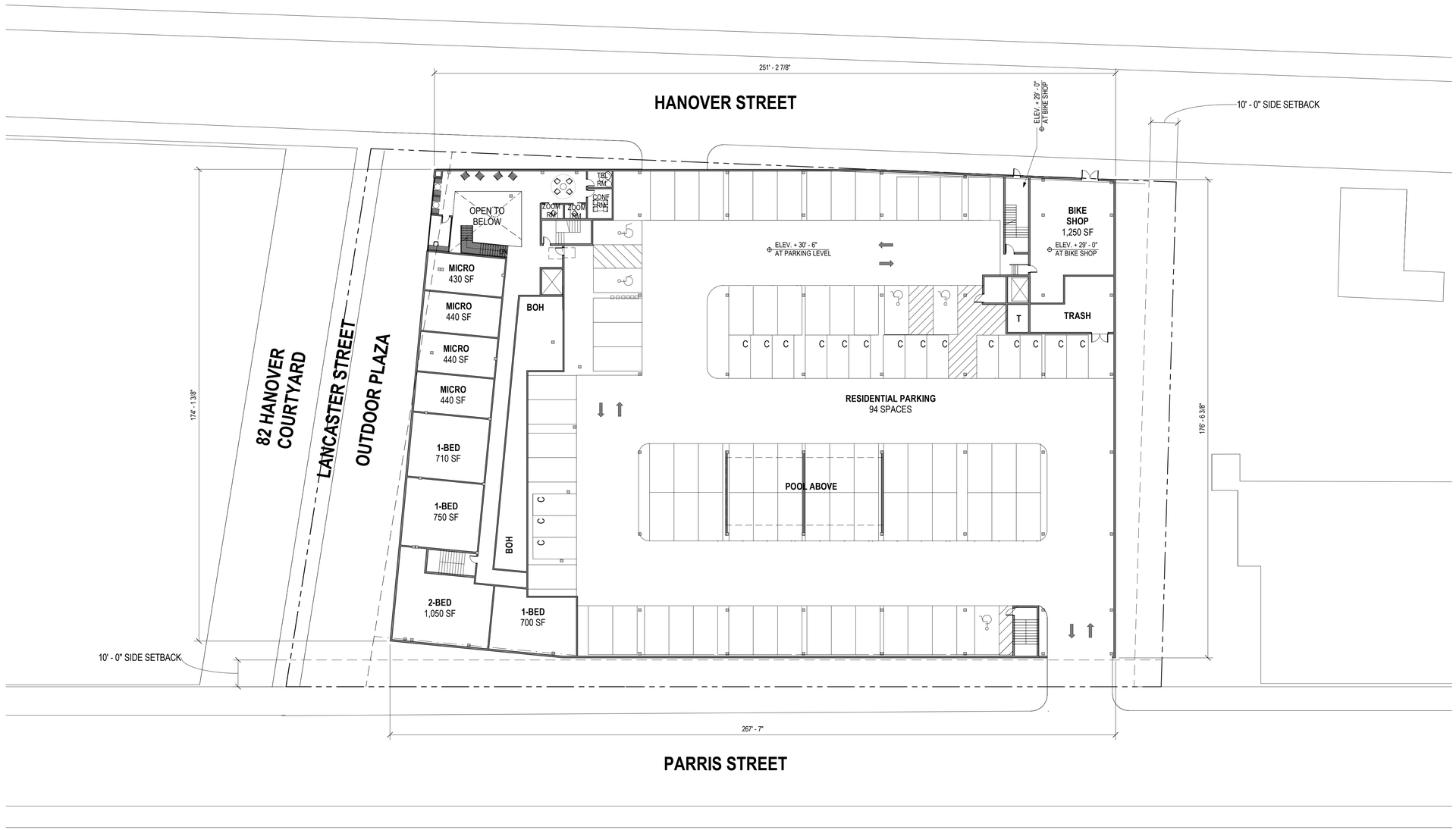

P2 - Second Floor Plan
1" = 20'-0"

1

project information:
52 Hanover
52 Hanover Street
Portland, ME

client information:
Tom Watson &
Co., LLC
82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:
Preliminary
NOT FOR
CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:
DRAFT

drawing name:
Second
Floor Plan

drawing number:
A-102

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project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson & Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

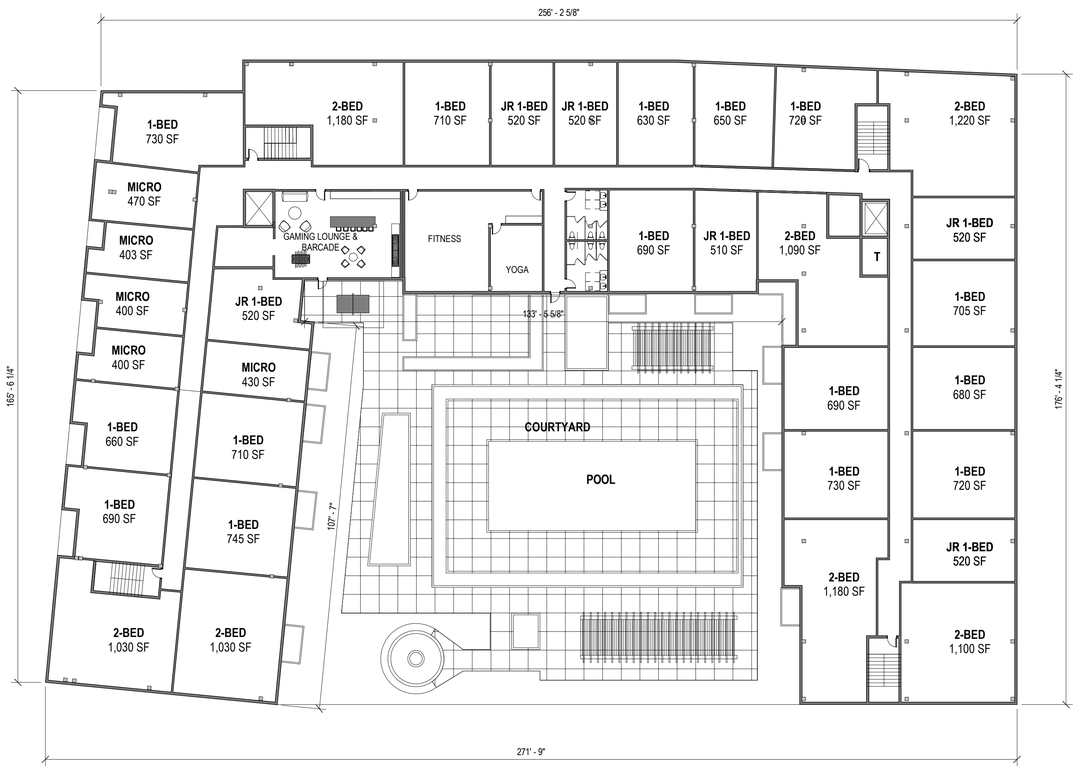
DRAFT

drawing name:

Third Floor Plan

drawing number:

A-103



P3 - Third Floor Plan
1" = 20'-0"

1

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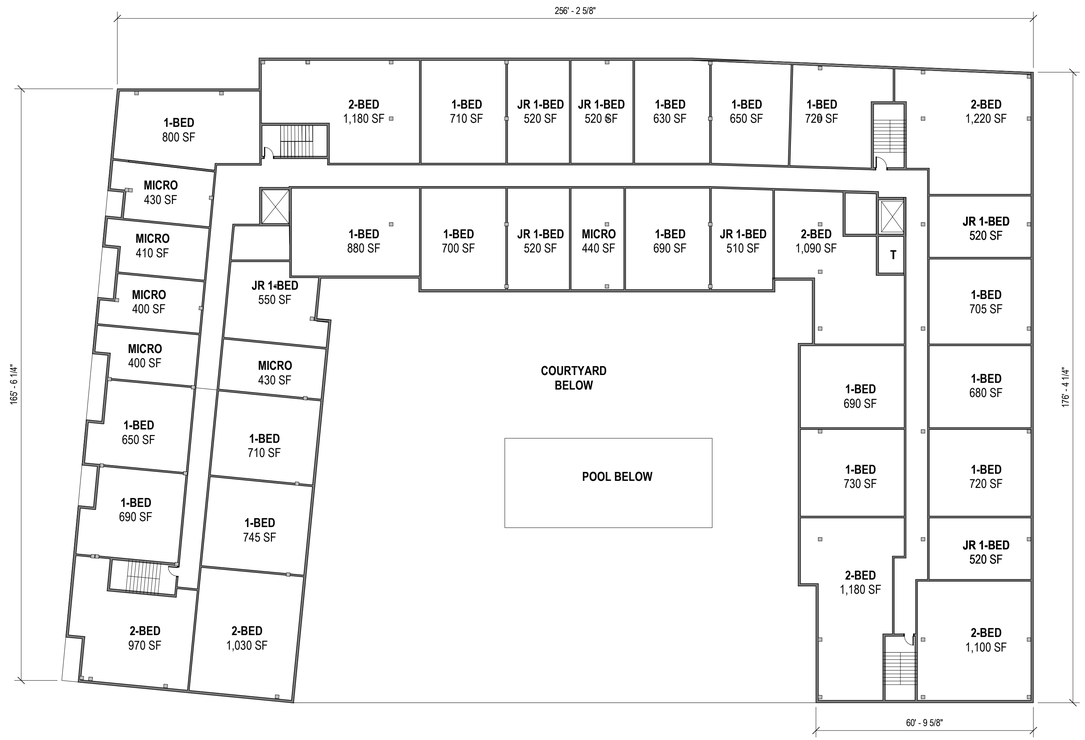

P4 - Fourth Floor Plan
1" = 20'-0"

1

project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson & Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

DRAFT

drawing name:

Fourth Floor Plan

drawing number:

A-104

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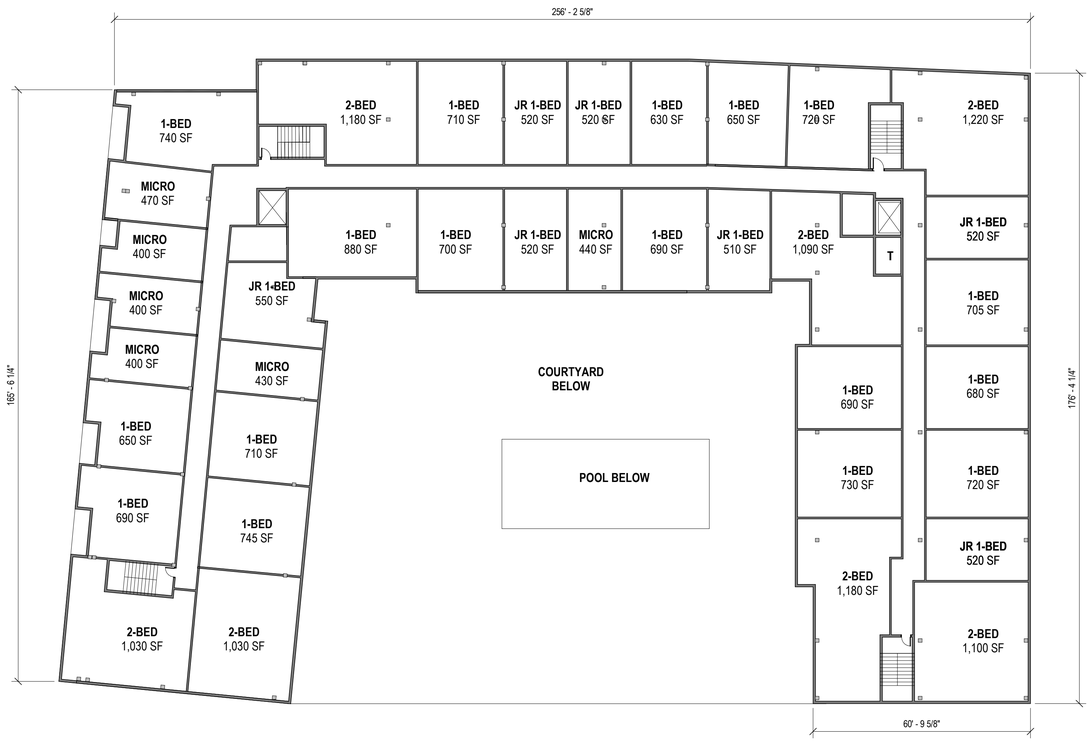

P5 - Fifth Floor Plan
1" = 20'-0"

1

project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson & Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

DRAFT

drawing name:

Fifth Floor Plan

drawing number:

A-105

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P6 - Sixth Floor Plan

1" = 20'-0"

1

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project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson & Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

DRAFT

drawing name:

Sixth Floor Plan

drawing number:

A-106

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project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson & Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR CONSTRUCTION

key plan:

P7 - Seventh Floor Plan
1" = 20'-0"

1

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

DRAFT

drawing name:

Seventh Floor Plan

drawing number:

A-107

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P8 - Eighth Floor Plan
1" = 20'-0"

1

project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson &
Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR
CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

DRAFT

drawing name:

Eighth
Floor Plan

drawing number:

A-108

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West Elevation 2
1" = 20'-0"

East Elevation 1
1" = 20'-0"

project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson & Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

DRAFT

drawing name:

Exterior Elevations

drawing number:

A-200

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South Elevation 2
1" = 20'-0"

North Elevation 1
1" = 20'-0"

project information:

52 Hanover

52 Hanover Street
Portland, ME

client information:

Tom Watson & Co., LLC

82 Hanover St.,
Portland, Maine 04101

consultant information:

issuance:

Preliminary

NOT FOR CONSTRUCTION

key plan:

drawing information:

drawing by:	ST
drawing checked by:	NG
drawing scale:	1" = 20'-0"
drawing date:	01.07.21
project number:	19255.00

drawing revisions:

No.	Description	Date

registration:

DRAFT

drawing name:

Exterior Elevations

drawing number:

A-201

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NOTES:

1. CROSS SECTION FROM CUBE3; REFER TO CUBE3 DRAWING'S FOR ADDITIONAL BUILDING DETAILS

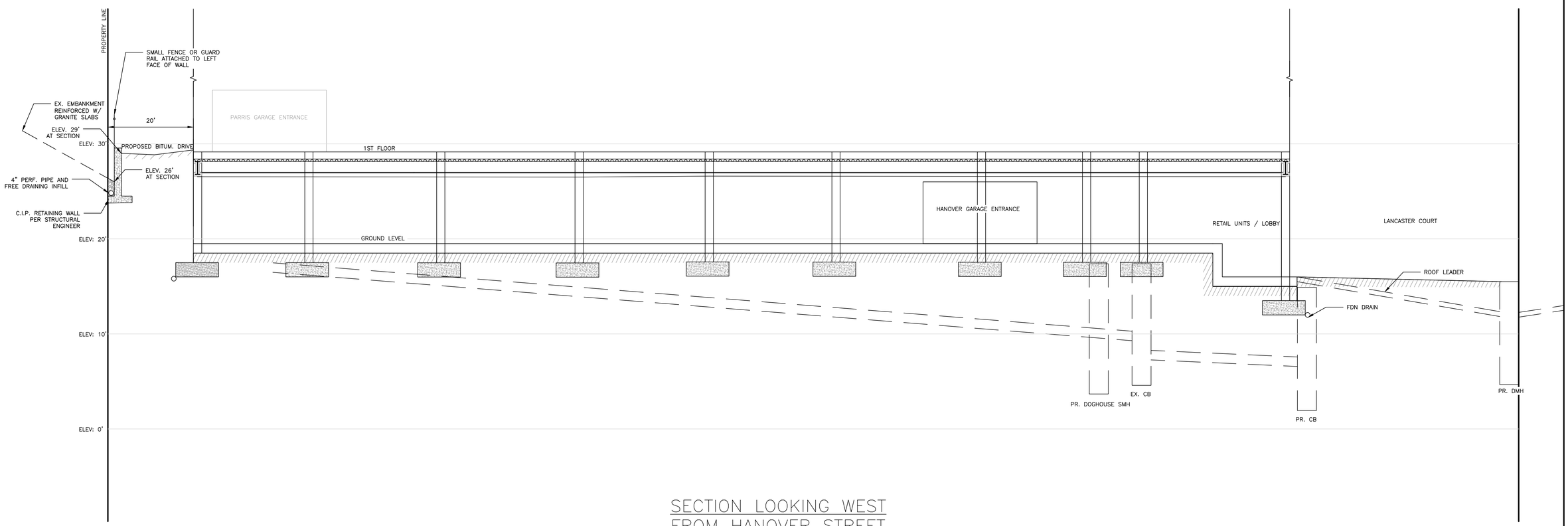
2. ARCHITECTURAL AND STRUCTURAL CROSS-SECTIONS ARE SUBJECT TO CHANGE. CONTRACTOR TO COORDINATE VARIOUS PROFESSIONAL DRAWINGS AND NOTIFY ACORN ENGINEERING ANY CONFLICTS OR DISCREPANCIES.

3. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY EASEMENT OR TEMPORARY CONSTRUCTION RIGHTS AS NECESSARY BY PRIVATE ADJACENT LAND OWNERS. DURING THE PRE-CONSTRUCTION PHASE THE CONTRACTOR SHALL NOTIFY THE OWNER SHOULD THEIR MEANS AND METHODS REQUIRE ANY EASEMENT OR TEMPORARY CONSTRUCTION RIGHTS. THE CONTRACTOR SHALL NOT DISTURB ANY SOIL BEYOND THE PROPERTY LINE WITHOUT NOTIFYING AND OBTAINING SUCH EASEMENT OR TEMPORARY CONSTRUCTION RIGHT FROM THE OWNER. PRIOR TO THE CONTRACTOR PRICING THE WORK THE CONTRACTOR SHALL REQUEST PROOF OF SUCH EASEMENT OR TEMPORARY RIGHTS. SHOULD EASEMENTS OR TEMPORARY RIGHTS NOT BE AVAILABLE THE CONTRACTOR SHALL INCLUDE COST FOR BRACING AND SHORING AS NECESSARY.

4. GEOTECHNICAL REPORT BY SUMMIT GEOENGINEERING SERVICES DATED MAY 2015 REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   - 4.1. ALL FROST WALLS SHALL EXTEND MIN 4' BELOW FINAL BASEMENT FLOOR GRADE UNLESS BEDROCK IS DETECTED THEN MIN 2' IS ACCEPTABLE; ACTUAL DEPTH TO BE DETERMINED BY STRUCTURAL ENGINEER
   - 4.2. EXPOSED, LOAD-BEARING NATIVE SOIL IS TO BE PROOFROLLED WITH A MIN 2 PASSES WITH A 5-TON VIBRATORY ROLLER IN 2 PERPENDICULAR DIRECTIONS
   - 4.3. EXPOSED, LOAD-BEARING BEDROCK IS TO BE CLEARED OF LOOSE AND WEATHERED ROCK
   - 4.4. EXPOSED RUBBLE FILL BELOW FOOTINGS IS TO BE REMOVED DOWN TO THE NATIVE GLACIAL TILL SOIL AND OUTWARDS EQUAL TO A DISTANCE OF THE FOOTING WIDTH
   - 4.5. VOIDS IN RUBBLE FILL ARE TO BE FILLED WITH ¾" CRUSHED STONE OR AN APPROVED ALTERNATIVE
   - 4.6. ROCK ANCHORS SHALL BE INSTALLED PER REPORT IF ADDITIONAL FOUNDATION UPLIFT CAPACITY IS NEEDED
   - 4.7. SLAB SUBGRADE TO BE OBSERVED BY SGS CONTRACTOR TO COORDINATE

5. MAINTAIN MIN 18" COVER ON ALL STORM DRAINS. USE OF ELBOWS TO MINIMIZE ROCK EXCAVATION IS ALLOWED FOR PRIVATE UTILITIES.

6. CONTRACTOR TO TEST PIT TO DETERMINE INVERTS OF DOGHOUSE SMH.



SECTION LOOKING WEST
FROM HANOVER STREET

NOT TO SCALE

PERMIT LEVEL
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY / DATE
COMMENT RESPONSE	WHS 1/8/21

DRAWING NAME: SITE SECTION

PROJECT NAME: 52 HANOVER STREET REDEVELOPMENT

CLIENT: TOM WATSON & CO., LLC
82 HANOVER ST., PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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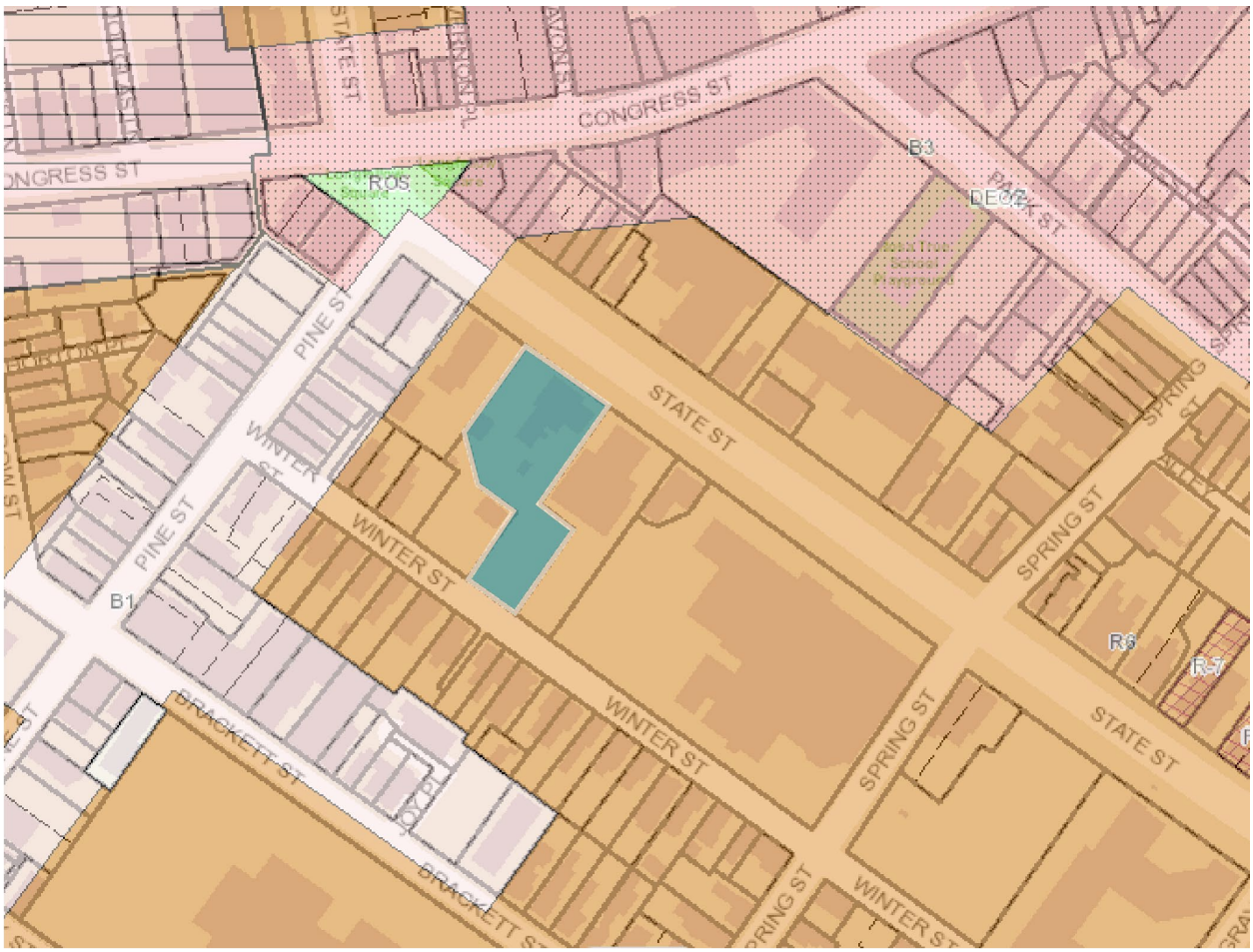
FILE:	CIVIL_1093.2
JN:	1093.2
SCALE:	AS NOTED
DESIGNED BY:	SJL
DRAWN BY:	NPH
CHECKED BY:	WHS

STATE OF MAINE
WILLIAM H. SAVAGE
No. 11419
LICENSED
PROFESSIONAL ENGINEER
1/8/21

DRAWING NO.
C-50

Memorandum
Planning and Urban Development Department

To: Chair Mazer, Members of the Planning Board
From: Andrew Tufts, Planner
Date: January 8, 2021
Re: Proposed Rezoning: 160 State Street
Project ID: ZN-001021-2020
Meeting: January 12, 2021
CBL: 045 C004



The surrounding context of 160 State Street, highlighted in blue

I. INTRODUCTION

Thanos LLC seeks a zoning map amendment to map an R-7 Compact Urban Residential Overlay at parcel 045 C004, currently addressed as 160 State and 99 Winter Street. The subject property, which is in the R-6 Residential zone, is located in between State Street (160 State Street) and Winter Street (99 Winter Street) in the West End neighborhood and is adjacent to commercial and residential uses. The existing

structure at 160 State Street was formerly operated as The Sisters of Precious Blood Convent, and received Planning Authority approval to convert the structure to a lodging house on February 7, 2020.

Owner/Applicant: Thanos, LLC
Applicant Team: Peter Heil (Applicant), Acorn Engineering; Josh Soley, Owner

II. PROJECT DATA

Current Zoning:
R-6 Residential

Proposed Zoning:
R-7 Compact Urban Residential (overlay)

Current Uses:
Lodging House (along State Street frontage)

Proposed Uses:
Multifamily Residential (along Winter Street frontage); Lodging House (along State Street frontage);

III. BACKGROUND & EXISTING CONDITIONS

a. Current Land Uses and Zoning

The site is comprised of a single parcel that is bounded by Winter and State streets. The section of parcel abutting State Street is addressed as 160 State Street while the Winter Street frontage is addressed as 99 Winter Street. The existing three-story Greek-Revival building at 160 State Street was built in 1807 as a private residence. In 1934 the building was purchased by the Bishop of Portland and operated as a nunnery for 84 years. In February of 2020, the applicant, Thanos, LLC, received a Level II Site Plan approval from the City of Portland to redevelop the former monastery into 40-room lodging house.

At the rear of the lodging house, the property connects to a large walled-garden abutting Winter Street, and is the section of the parcel being considered for redevelopment. The area of the parcel on which the future development would be constructed is roughly 9,100 square-feet, with 70 feet of frontage along Winter Street. In late 2018, the owner of the property elected to remove all trees from the Winter Street parcel. The City Council has since adopted a Heritage Tree Preservation Ordinance which added restrictions and new processes for tree removal in historic districts moving forward.

In addition to the applicant's property, the immediate vicinity includes State Street and the variety of building types it contains. State Street is a major historic thoroughfare identified as a priority corridor in the City's Comprehensive Plan, with wide sidewalks and established street trees. The buildings fronting along this street range from historic mansions converted to other uses that include a funeral home, the Portland Club, offices, and retail. Two historic landmark church complexes with garden spaces are located across the street and include community centers, day care, and places of assembly. Further down the street, the context becomes increasingly residential with a variety of scales and eras of buildings after the church properties.

Spring Street has an intact historic fabric, as does the southwest side of Winter Street. The character of Spring and Winter streets is predominantly small-scale residential, with some exceptions. Most of these

properties are protected by historic districts (see section below). A large portion on the northside of Winter Street between Spring and Pine streets is occupied by the 1943 Mercy Hospital complex and was recently the subject of a zoning map amendment (ZN-001163-2020) recommended to the City Council by the Planning Board on December 15, 2020. If approved by the City Council, the zoning map amendment and accompanying text amendments would facilitate the redevelopment of the Mercy Campus into a mixed-use development with 175 residential units, retail, office, and institutional uses. Mercy hospital will continue to operate in this location through 2022.

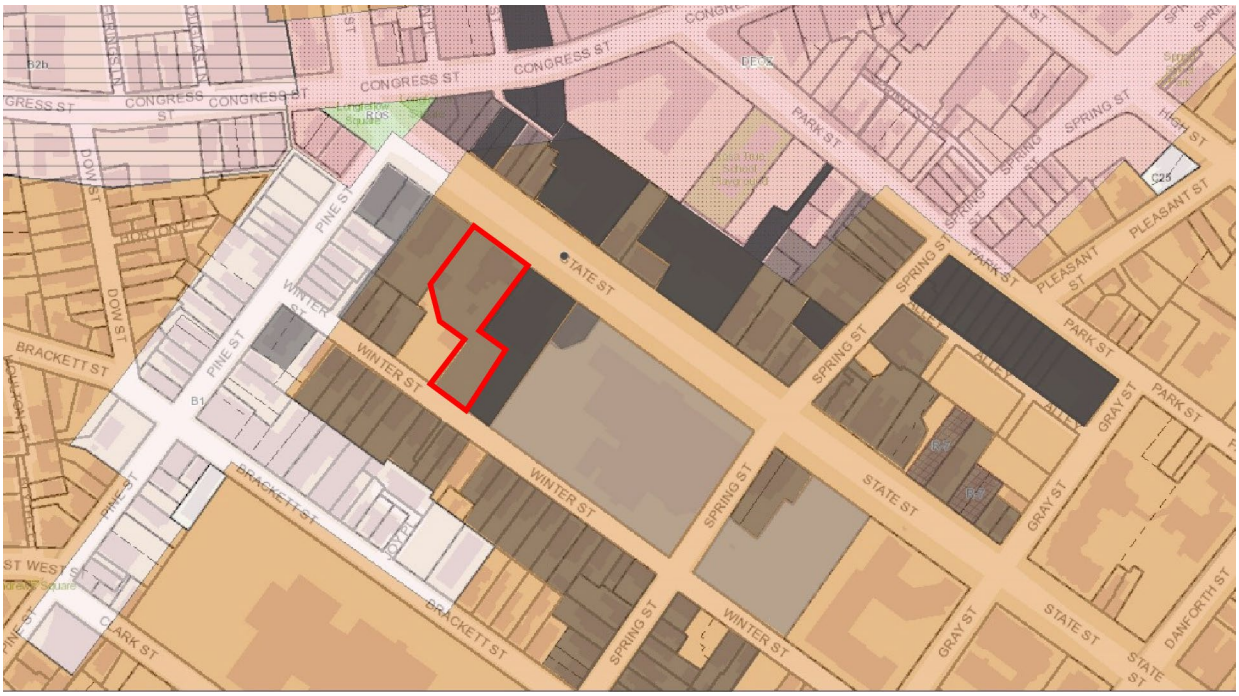
Nearby Pine and Congress streets are mapped with mixed-use B-1 and B-3 zones, respectively. Congress Street, Portland's main thoroughfare, is located one block to the north of the subject property and is lined with a mix of residential and commercial buildings ranging between two to eight stories. The majority of the West End neighborhood is zoned R-6. Some of these existing structures, especially the Mercy hospital site and churches, are legally non-conforming when it comes to the uses, height, and dimensional standards of the R-6 zone.

Existing conditions prior to tree removal- Google Streetview

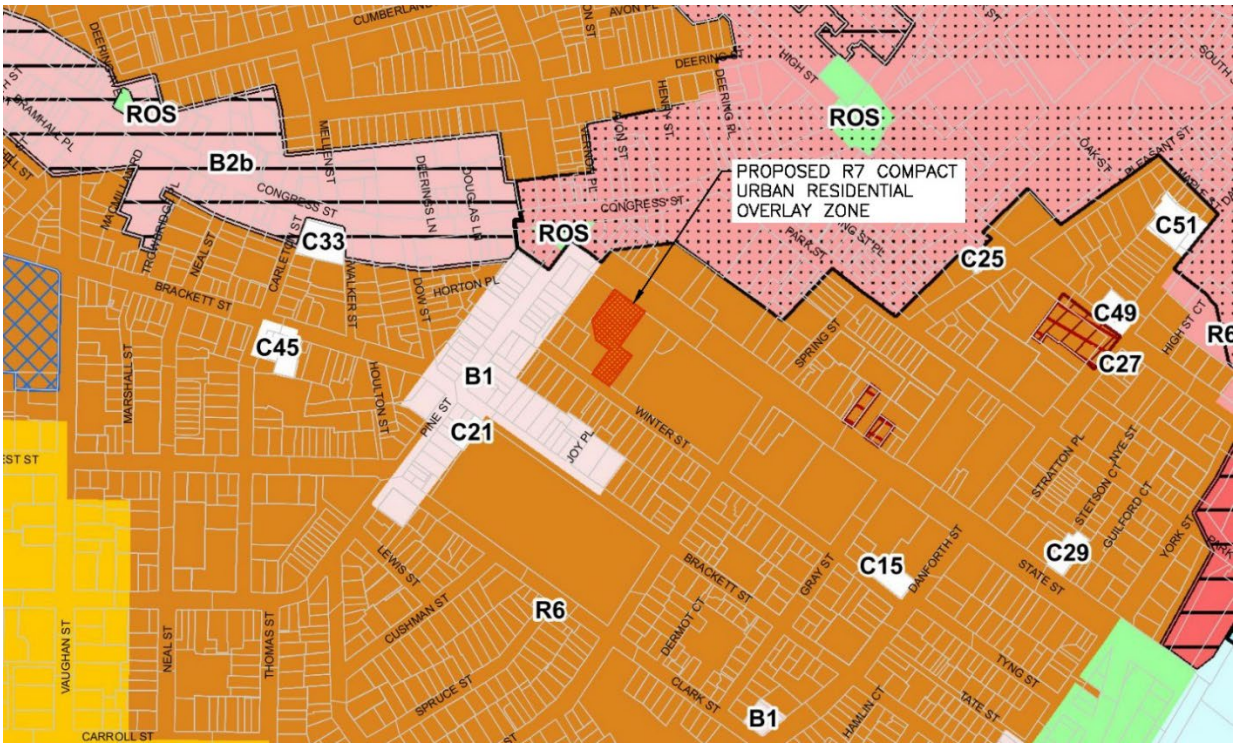
Existing conditions post tree removal

b. Historic Resources

The area under review is within the West End Historic District and is adjacent to the Congress Street Historic District. Any alterations, additions, or new construction contemplated at the subject property or adjacent sites would require staff or Board-level historic preservation review.



Historic Resources (Landmarks - dark grey, Contributing - light grey)



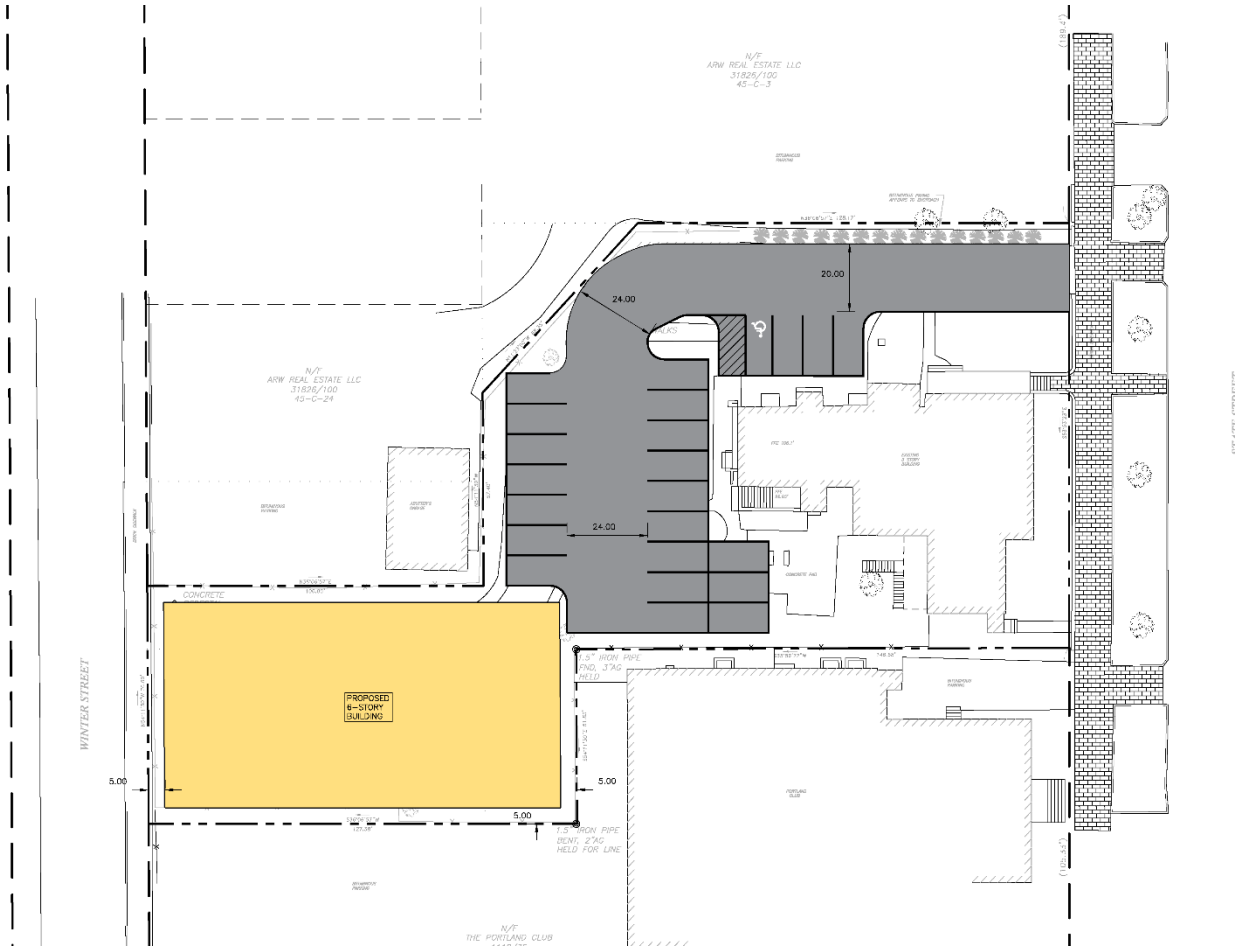
Zoning context of 160 State Street, highlighted in red

IV. PROPOSED ZONING MAP AMENDMENT

The current R-6 Residential zoning allows for high density residential development at a maximum density of 725 square feet per dwelling unit and a 45-foot height maximum. The applicant is proposing to build a new 50-unit workforce apartment building on the Winter Street portion of the property, which currently contains no structures. The portion of the lot proposed for development was designed and used as a walled-garden for the convent building. Aside from walkways, it is currently entirely porous and vegetated. In the fall of 2019, the applicant removed a number of large deciduous trees from the perimeter of the site.

By mapping the parcel with an R-7 Compact Urban Residential Overlay Zone, the project would be entitled to the following density and dimensional bonuses and reductions (see sec. V below for discussion of height bonuses:

- Reducing front yard setback from 5 feet to zero.
- Rear yard setbacks from 10 feet to 5 feet.
- Building Stepbacks above 35 feet would be removed.
- Maximum lot coverage would go from 60% to 100%.
- Max. Height from 45 feet to 60 feet.



Rough buildable area sketch and calculations for the site under R-7 zoning

V. ZONING ANALYSIS

Existing Zoning: R-6 Residential

According to Section 14-116 of the City Code, the R-6 zone allows for high-density residential development characterized by high-intensity multifamily dwellings on individual lots. R-6 zones are located primarily on-Peninsula, with one area of R-6a mapped off-peninsula.

According to the City's zoning code, the R-6 residential zone is intended to:

"To set aside areas on the peninsula for housing characterized primarily by multifamily dwellings at a high density providing a wide range of housing for differing types of households; and to conserve the existing housing stock and residential character of neighborhoods by controlling the scale and external impacts of professional offices and other nonresidential uses."

"In cases of qualifying small, vacant, underutilized lots located in the urban residential and business zone, to encourage new housing development consistent with the compact lot development pattern typically found on the peninsula."

Proposed Zoning: R-7 Compact Urban Residential

The purpose of the R-7 Compact Urban Residential Overlay Zone is to:

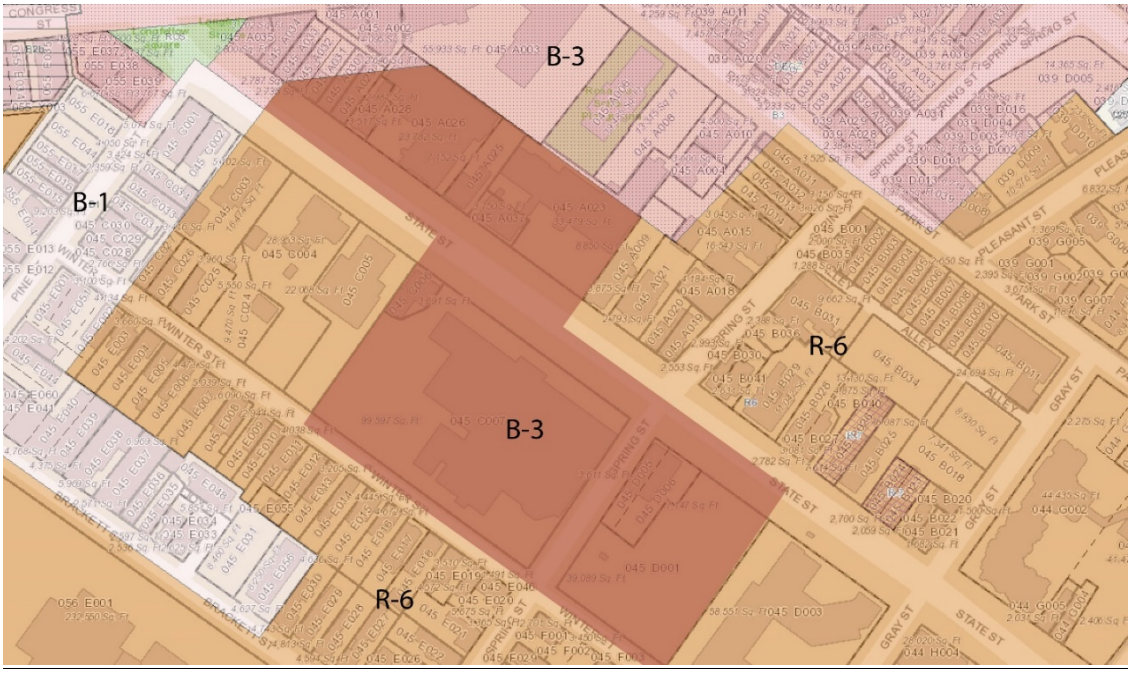
... encourage and accommodate compact residential development on appropriate locations on the Portland peninsula, pursuant to the New Vision for Bayside element of the comprehensive plan and housing plans of the City of Portland. Sites suitable for in-city living should be within walking distance of downtown or other work places, shopping and community facilities and have access to public or private offsite parking or transit service. The intent of this zone is to foster increased opportunities for compact in-city living for owners and renters representing a variety of income levels and household types.

Locations for siting the R-7 Zone are intended to be located on the peninsula of Portland, in the area encompassed in the Bayside plan, and other peninsula R-6 locations characterized by moderate to high density multi-family housing in a form and density exceeding that allowed in the R-6 Zone and where infill development opportunities exist; and areas on the peninsula with mixed business and residential zoning and uses which can accommodate higher density infill residential development without negatively impacting the existing neighborhood or adjacent properties. It may be appropriate in some cases to rezone to R-7 overlay through conditional or contract zoning to ensure that the new development is architecturally appropriate and compatible with the surrounding neighborhood.

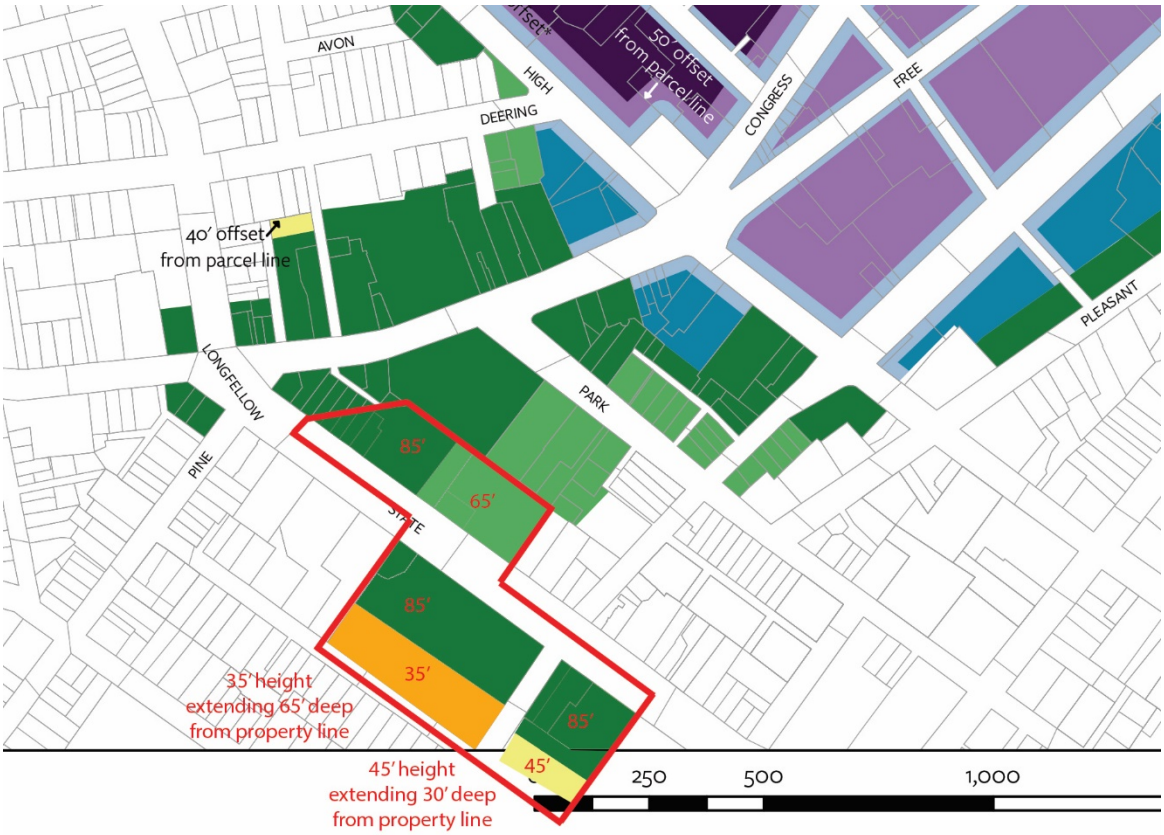
Zoning Context: B3 Downtown Business Zone

Prior to this application, on December 15, 2020, the Planning Board reviewed and approved a zoning map amendment for the nearby Mercy Hospital property, which also stretches from State to Winter streets. In that report, Planning staff presented an alternative option for Board consideration that mapped R-7 on Winter Street to a 100-foot depth, and B-3 for the remainder of the site and extending to the existing B-3 zone to the north along Congress and Park streets. After further analysis, there was agreement that the R-7 scale was not appropriate along Winter Street due to the zone's significantly more intensive dimensional standards, particularly in the context of the residential portions of the Winter Street not already occupied by hospital uses. R-7 dimensional standards allow maximum building heights of 50 feet with no stepback requirement, potentially yielding development out of context with the existing built pattern. In addition, R-7 is the only residential zone in the city that allows eligible projects to receive a height bonus up to an additional 25 feet with the provision of affordable housing. Therefore, a building may be able to achieve a maximum building height of 75 feet without a stepback.

To avoid the R-7 scale concerns along Winter Street as part of the Mercy Hospital proposal, staff recommended that the Planning Board consider rezoning the entire Mercy Hospital site B-3 and extending B-3 to the north across State Street to encompass existing properties that are legally non-conforming. In addition, due to the flexibility to control height provided by the Downtown Height Overlay Map staff recommended that the Planning Board consider adding a 35 foot and 45 foot height limit on the Winter Street frontage to a depth of 65 feet and 35 feet, respectively. This was determined to be appropriate to accommodate the repurposing of a major non-conforming institutional property of a largely residential but still mixed-use zone. Below is the B-3 zoning boundary and height overlay map as adopted by the Planning Board on December 15, 2020.



B-3 map amendment boundary approved by the Planning Board on December 15, 2020.



Downtown Height Overlay Map approved by the Planning Board on December 15, 2020.

Zoning Context: B-1 Neighborhood Business Zone

B-1 is mapped along the western edge of Winter Street and extends along Pine Street to the north, with the zoning boundary terminating at the intersection of Pine Street and State Street. As this zone is mapped along the western portion of the subject block, the below summary of B-1 has been provided.

The purpose of the B-1 neighborhood business zone (Section 14-181) is as follows:

The purpose of the B-1 neighborhood business zone is to provide limited areas for the location of small-scale commercial establishments intended to serve a local market. As a result, uses shall be complimentary, quiet and generally do not disturb the comfort and enjoyment of the adjoining neighborhood environment. Uses shall be designed for the pedestrian scale and will provide convenient access for nearby residents and workers to walk in to purchase goods and services. Buildings and uses shall be designed with attractive storefronts or similar features, with windows and doors convenient to a public sidewalk. Building additions are encouraged but not required to meet the maximum setbacks of 14-165(c)(3). This zone shall encourage mixed use buildings such as commercial first floor with residential uses above or combined retail/office uses in a multistory structure. The zone also provides the opportunity for mixed use and high residential density in on-peninsula locations.

Suitable locations for this zone may include street intersections and arterial streets with existing or proposed traditional neighborhood retail and service uses.

Zoning Context: Nearby R-7 Overlay Parcels

R-7 zones mapped proximate to the subject property (indicated in red hatching)

There are a small number of parcels in the vicinity of 160 State Street that have been rezoned to R-7 from R-6. There are several distinctions to make between these sites.

99 State Street

In 2003, the property owner of 99 State Street received Planning Board approval in order to be able to convert the brick carriage house at the rear of the property from its existing use as a garage to a single-family residential structure. The applicant requested an R-7 designation because the development did not meet the R-6 setback requirements. The rezoning allowed the carriage house to be utilized and converted to an additional unit on the site. The property could accommodate the required number of parking spaces for the four (4) residential units.

91-93 State Street

In 2013, the property owner of 91 State Street applied for a zoning map amendment to map an R-7 overlay at this site in order to allow the existing building to be converted to market-rate residential space, resulting in ten (10) residential units. R-7 designation was requested because the proposed project could not meet the R-6 minimum land area per dwelling unit and the applicant was seeking to create compact living units. The dimensional requirements in R-6 call for 725 square feet of land area per dwelling unit, thus only five residential units are allowed under the R-6 zone. The R-7 zone has a maximum residential density of 435 square feet per residential unit, permitting a maximum of twelve (12) units on this site. Additionally, the R-6 zone states that alteration to multifamily dwellings shall not result in additional dwelling units of less than 600 square feet of floor area in size. The R-7 minimum dwelling unit size is 400 square feet of habitable floor area.

Of the two sites described above, both are fundamentally distinct from 160 State Street. Both properties include existing buildings of historic significance which were not to be altered externally or effect setbacks. The changes made to 99 State Street were to bring an existing legally nonconforming structure into conformance and add housing. The changes made to 91 State Street were strictly internal and based on added density to the existing structure. In contrast, the changes proposed at 99 Winter Street involve the construction of an entirely new structure on a vacant lot abutting residential buildings of a more modest scale.

*Table 1 provides a comparison of the permitted uses for zones under consideration. Uses marked with a **'P'**, are permitted uses in the zone. A **'C'** indicates a conditional use.*

Table 2 provides a comparison of the dimensional requirements for zones under consideration.

Table 1: Permitted Uses (P=use is permitted within zone) (C = Conditional use within zone)	R-6	R-7	B-3
Single and two-family Family Residential	P	P	P
Multi-Family Residential (3-or more units)	P	P	P
Handicapped Family Units	P	P	P
Single-family Manufactured Housing	P	P	
Lodging houses	P *(*conversion of existing duplex or multi-family only)*	P *(*conversion of existing duplex or multi-family only)*	P
Live/Work			P
Cemetery	P	P	
Parks/Recreation Use	P	P	
Home Occupation	P	P	
Municipal Buildings and Uses	P	P	P *(*county/municipal)*
Governmental Offices			P

Special Needs Independent Living Units	P *(*may not include other residential or permitted uses)*	P *(*may not include other residential or permitted uses)*	
Bed and Breakfast	P *(*up to 4 guest rooms; conversion of existing building only)*	P *(*up to 4 guest rooms; conversion of existing building only)*	P
Hostels	P *(*10 guests or fewer)*	P *(*10 guests or fewer)*	P
Wind energy systems	P/C	P/C	P
Accessory uses	P	P	
Bed and Breakfast (5 to 9 guest rooms)	C *(*conversion of existing building only)*	C *(*conversion of existing building only)*	
Sheltered care group homes (up to 12 residents, 500' radius between group homes)	C	C	
Elementary, middle , and secondary	C	C	P *(*public/private school of any type)*
Intermediate care facility (13 or more persons, long-term/extended care)	C	C	
Places of assembly	C	C	P
Hospital	C	C	
College, university, trade schools	C	C	P
Utility substations	C	C	C
Professional office	C	C	P
Chancellery	C	C	
Nursery school and kindergarten	C	C	P *(*public/private school of any type)*
Off-street passenger car parking	C *(*for permitted uses)*	C *(*for permitted uses)*	P *(parking garages)*
Surface Parking (with limitations)			C
Day care facility/ Home baby-sitting services	C	C	P
Private Club			

Funeral Home			
Hostels (no more than 20 guests)	C	C	
Business services			P
Personal services			P
Offices of Building Tradesmen			P
Retail Establishments (excluding drive-through, gas station, lumber)			P
Drinking Establishment			P
Beverage dealers			
Artist Studios			P
Clinics			P
Restaurants			P *(*excludes drive-through)*
Neighborhood Center			
Billiard Parlors			P
Miscellaneous Repair (excluding auto repair)			P
Communications Studios/Broadcast Facilities			P
Health Clubs/Gymnasiums			P
Theater/Performance/Exhibition Halls			P
Convention/Meeting Facilities			P
Hotels			P
Galleries			P
Registered Dispensary			P
Marijuana Retail Store			P
Small-scale marijuana caregiver			P
Museums			P
Printing/Publishing			P
Banking Services (drive-up)			C
Light Industrial (with limitations)			C
Emergency Shelters			C
Temporary wind anemometer towers	C	C	C

Table 2: Zoning Requirements	R-6	R-7 (residential uses)	B-3
<u>Purpose</u>	To provide appropriate areas for high density residential development characterized by multifamily dwellings providing a wide range of housing for differing types of household.	To encourage and accommodate compact residential development on appropriate locations on the Portland peninsula, Intended to be located . . . peninsula R-6 locations characterized by moderate to high density multi-family housing in a form and density exceeding that allowed in the R-6 Zone and where infill development opportunities exist; and areas on the peninsula with mixed business and residential zoning and uses which can accommodate higher density infill residential development without negatively impacting the existing neighborhood or adjacent properties	Maintain and enhance the role of the downtown as the business and commercial center of the region; Preserve and capitalize on the unique character and historic fabric of the downtown through the encouragement of reuse of significant existing structures;
Lot Size (min)	Between 2,000 sf and 43,560 sf (one acre) depending on use	None	None
Density (min)	725 sf land area/du 250 sf land area/rooming unit,	435 sf land area/du	None

	intermediate care facility, hostel		
Street Frontage (min)	20’	None	15’
Front Yard (min)	5’ – principal + accessory structure	None	None
Front Yard (max)	None	None	5’ street wall build-to line
Rear Yard (min)	10’ – principal structures	5’	None
Side Yard (min)	None	5’	None
Side Yard (max)	5’ 0’ for attached townhouses on individual lots	None	None
Side Yard (Side Street, min)	None	None	None
Stepbacks	10’ side; 15’ rear above 35’ height	None	Downtown Height Overlay Map
Lot Coverage (max)	60%	100%	100%
Impervious Area (max)	n/a	n/a	n/a
Landscaped Open Space (min)	20%	n/a	n/a
Lot Width (min)	20’ 0’ for attached townhouses	n/a	None
Building Height (max)	45’	50’	Downtown Height Overlay Map
Building Height (min)	n/a	n/a	35’ within 50’ of street
Floor Area (max)	n/a	400 sf min/du	Limited for buildings 125’ in height or greater
Garage Door Opening (max)	9’ or 40% façade width, not to exceed 20’		n/a
Undifferentiated Blank Wall (max)	n/a	n/a	30’

External Effects	n/a	Design Standards	Enclosed structure, noise, vibration/heat, smoke, materials/waste
Height Bonus eligible		Y	Y

VI. POLICY ANALYSIS

Goals and policies of both the state and the city, as described in Portland's Comprehensive Plan, *Portland's Plan 2030*, relevant to the proposed map amendment have been included below.

There's much in this proposed map amendment that is supported by Portland's Plan, including an emphasis on the need for housing, and particularly affordable housing; residential density that supports walkability and transit; the proximity of the development site to the priority corridor of State Street; and, the principle of complete neighorhoods. The plan also highlights the importance of good design, contextual development, sensitivity to neighborhood context; finding the balance of those goals is where the crux of the review of this proposal will be focused. Some pertinent sections are highlighted below.

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.
- Sustainable: Growth should respect and seek to preserve our spectacular natural resources.
- Secure: We will be committed to accessible housing and healthy food for all our residents.
- Authentic: The uniqueness and integrity of our neighborhoods will be maintained and enhanced.

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.

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.

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.

Future Land Use

- Complete Neighborhoods
- Reinforce the Center

The applicant provided additional analysis of consistency with the comprehensive plan (**attachment B**).

VII Discussion

The R-7 zone has not been newly applied in the City for a number of years, and though it remains a part of the code that the applicant is free to apply for adoption of different housing policies to encourage density and affordable housing creation has reduced the need for and interest in the R-7 in recent years. These include the rewriting of the R-6 zone in 2015, precisely to allow for considerably greater neighborhood density on the peninsula than had previously been permitted, as well as modification of other dimensional standards that would allow for somewhat larger building envelopes and greater site flexibility, while still maintaining setbacks, the existing height maximum, and some open space requirements. The previous iteration of the R-6 was a clear impediment to new housing creation, and rendered nearly all R-6 parcels non-conforming. Once the revised R-6 was adopted, R-7 requests stopped, and were not generally recommended by the staff, as other tools were available. Another major change that contributed to less frequent application of the R-7 has been the adoption of affordable housing density and dimensional bonuses that also apply to the R-7, but are largely focused on the City's existing B zones, where much of the higher density housing proposals have occurred in recent years.

Even with a revised, higher density R-6 and the affordable housing bonuses in the B-zones, there's still a significant gap in what maximum densities between the City's R-zones and B zones that this R-7 proposal is seeking to fill. Though there is very strong policy support and need for additional affordable housing creation in Portland, the R-7 proposal does introduce a significant scale shift on what is, in part, a smaller scale, finer grained residential fabric. This neighborhood context is by no means uniform, and the smaller scale of much of the West End and parts of Winter Street is also accompanied by larger buildings on State Street, other B zones nearby, and an existing hospital that is soon to be repurposed.

The applicant has stated that the R-7 overlay would allow approximately 15-16 additional workforce units over the underlying R-6 zone, which would be welcome additions to the City's housing supply. The surrounding neighborhood is also well suited for walkability and access to transit service. City staff concurs. However, the R-7 deserves careful consideration before introducing another significant scale shift in setbacks, in height, and in lot coverage on Winter Street, which would bring an even more significant change than the B-3 rezoning that was recommended by the Planning Board for the Mercy hospital site. Also for consideration is the implications for the integration of green space on that portion of Winter Street if an R-7 were to be implemented. The benefits of the addition of housing would be offset by a fairly high impact project on the character of the residential neighborhood. It is staff's hope that a balance between housing creation, mediation of scale impacts, and loss of green space can be better balanced for this site than what is currently proposed, and looks forward to deliberations with the Board, and with the applicant, of the application.

VII. Neighborhood Outreach, Public Comment

The City mailed 196 abutter's notices for this workshop to property owners within 500 feet of the subject property. A legal advertisement for the meeting ran on December 12, 2020 and January 1, 2021. At the time of this writing, the Planning Department received thirteen public comments against the proposed rezoning.

The applicant held a virtual neighborhood meeting on Tuesday, June 2, 2020, via Zoom. Approximately 33 members of the public were in attendance. Project team attendees included:

- Jessica James (JJ): Communications/Presenter – (Longfellow)
- Peter Heil (PH): Civil Engineer/Presenter (Acorn Engineering)
- Zachary Stevens (ZS): Civil Engineer/Note Taker (Acorn Engineering)
- Harry Hepburn (HH): Architect/Presenter (Briburn)
- Dan Soley (DS): Owner/Applicant (Thanos LLC)
- Josh Soley (JS): Owner/Applicant (Thanos LLC)

The meeting began at 5:30 pm. Peter Heil, Jessica James, and Harry Hepburn provided an overview of the project, highlighting the proposed dimensional changes from the R-6 to R-7. A variety of public comments were provided including:

- *When the City revised the R-6 zoning, though it was to increase density. It seemed like the purpose was to stop the R-7 zone from becoming out of control.*
- *My concern is the scale, height and over shadowing of the Portland Club from the project. We know there is a need for housing, and caution that this needs to be done in a reasonable space & development. I strongly encourage balance, responds to the historic district and not maximizing profit.*
- *What is the difference in terms of capacity / number of people of proposed units and bedroom counts between the two zones? Applicant Response: We would have approximately 33 units with the R-6 zone and a minimum of 40 units with the capacity of 48-49 units in the R-7 zone.*
- *There are a few parking lots along the State Street and Winter Street corridor; is there opportunity for a shared parking facility with adjacent properties potentially underground that would allow for development above?*
- *We have an active Winter Street group and we work very hard to increase the number of street trees. Would like to be notified of meetings.*
- *There are a lot of neighbors that are devastated that trees are being cut down. I live two houses down the from 160 State Street (project location) and I feel that it is irresponsible to make assumptions and cut down all these trees and request no green space. Portland is too small to be removing historic trees. The Tree ordinance works through zoning. We desire balance in design. Winter Street is full of potholes, concerned regarding increased activity on Winter Street.*
- *I urge the project team to contact the neighborhood association so we can get alerts on the project, if any.*

IX. Next Steps

Staff are seeking Planning Board feedback regarding the appropriateness for the mapping of an R-7 overlay at the subject property. Any proposed rezoning would need to be recommended by the Planning Board at a future public hearing, then approved by City Council vote.

Report Attachments

Public Comment

Applicant Submittals

A. Cover Letter
B. Map Amendment Application Checklist
C. Consistency with Comprehensive Plan
D. Proposed Amendment Memo with Attached Presentation
E. Civil Plan Set
F. Right, Title, and Interest
G. Vicinity Map
H. Zoning Map Amendment

ACORN ENGINEERING, INC.

Planning and Urban Development Department
Planning Division
City of Portland, Maine
389 Congress Street, 4th Floor
Portland, ME 04101

February 18, 2020

Subject: Map Amendment Application
99 Winter Street / 160 State Street

To Whom It May Concern,

On behalf of Thanos, LLC (c/o Josh Soley & Dan Soley), we are pleased to submit the accompanying package of submission materials for the proposed rezoning of the property located at 99 Winter Street / 160 State Street. The property is located in the R6 Residential Zoning District and proposes the designation of the R7 Compact Urban Residential Overlay Zone to the parcel.

The proposed project site is comprised of a single parcel, Chart 45, Block C, Lot 4, bounded by Winter & State Streets. The site has frontage on both State St & Winter St. The use of the existing convent building to a lodging house along State Street recently received Level II Site Plan approval. The 99 Winter Street project proposes to build a new 50-unit workforce apartment building on the Winter Street portion of the property, which currently contains no structures. The property has been surveyed by Spurwink Surveying and the project team.

The City's Code of Ordinances, Division 30, Affordable Housing, states the division's purpose is to promote an adequate supply of affordable housing for the city's residents. The purpose of this division is to offer incentives to developers to include units of affordable housing within development projects, thereby mitigating the impact of market rate housing construction, or the demonstrated increase in affordable housing needs resulting from the creation of new lower-income jobs, on the limited supply of available land for suitable housing, and helping to meet the housing needs of all economic groups within the city. By proposing workforce apartments, the project meets this divisions goals and assist in meeting the city's comprehensive goals for affordable housing, in the prevention of overcrowding and deterioration of the limited supply of affordable housing.

Per the City Ordinance, within the R6 Zone, the parcel is currently subject to the following dimension requirements (complete list requirements per City Ordinance are not provided):

R6 Dimension Requirements	
Min. Front Yard Setback	5 ft
Min. Rear Yard Setback	10 ft
Min. Side Yard Setback	5 ft
Structure Stepbacks above 35 ft	10 ft - side / 15 ft - rear
Max. Lot Coverage	60%
Max. Height	45 ft
Landscaped Open Space	20%

This application proposes is to re-zone the parcel to include the R-7 Compact Urban Residential Overlay Zone. The change in zoning would allow development within the parcel to maximize building potential to accommodate compact residential development and to foster increased opportunities for compact in-city living representing a variety of income levels and household types and would reflect Comprehensive Plan's current goals related to housing production. The attached Consistency with Comprehensive Plan narrative further describes the project's conformance with the Comprehensive Plan.

If permitted, the R7 Dimension Requirements are:

R7 Dimension Requirements	
Min. Front Yard Setback	None
Min. Rear Yard Setback	5 ft
Min. Side Yard Setback	5 ft (no change)
Structure Stepbacks above 35 ft	N/A
Max. Lot Coverage	100%
Max. Height	50 ft
Landscaped Open Space	N/A

By designating the parcel with the R7 Compact Urban Residential Overlay Zone, the project would also be eligible to the density, parking and dimensional bonuses and reductions, as specified in the Code, Section 14-488. Specifically, by providing a minimum 60% workforce units encouraged in the designated growth areas, the project would be eligible for the bonuses associated with having a minimum 60% workforce units, including 1.3 x base density and additional 10-foot height permitted (up to 60 feet).

This submission package is intended to meet the City's Submission Requirements as outlined in the Map Amendment Checklist and corresponding application. The following documents and drawings are to be uploaded onto the City's electronic submission site per the procedure outlined in the application:

<u>Documents:</u>

- A. Zoning Map Amendment Application
- B. Map Amendment Checklist
- C. Consistency with Comprehensive Plan
- D. Right, Title, and Interest

<u>Drawings:</u>

- E. Vicinity Map
- F. Proposed Map Amendment
- G. Civil Site Plan, Dated 1/31/20

Thanos, LLC and the design team look forward to your review of this project. If you have any questions regarding these materials or the completeness of the application materials, please contact us within the next five (5) days.

Sincerely,

Peter F. Heil, P.E., CPESC
Project Manager
Acorn Engineering, Inc.

Attachment B
Map Amendment Checklist

CITY OF PORTLAND
Planning & Urban Development Department

MAP AMENDMENT SUBMISSION CHECKLIST Please submit each document as a separate PDF file Please confirm by electronically checking the boxes to the left	
GENERAL APPLICATION DOCUMENTS	
☑	Project Description • Cover Letter with detailed project description
☑	Consistency with Comprehensive Plan • Analysis of the consistency of the zone change request with the goals, policies and land use plan of Portland's Comprehensive Plan.
☑	Completed Checklist – Map Amendment Application (this document)
☑	Right, Title and Interest • Deeds, leases, or purchase and sales agreements
PLANS	
☑	Vicinity Map
☑	Proposed Map Amendment (please use the Portland zoning map as a reference)
☑	Site Plan (if applicable) Provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries.

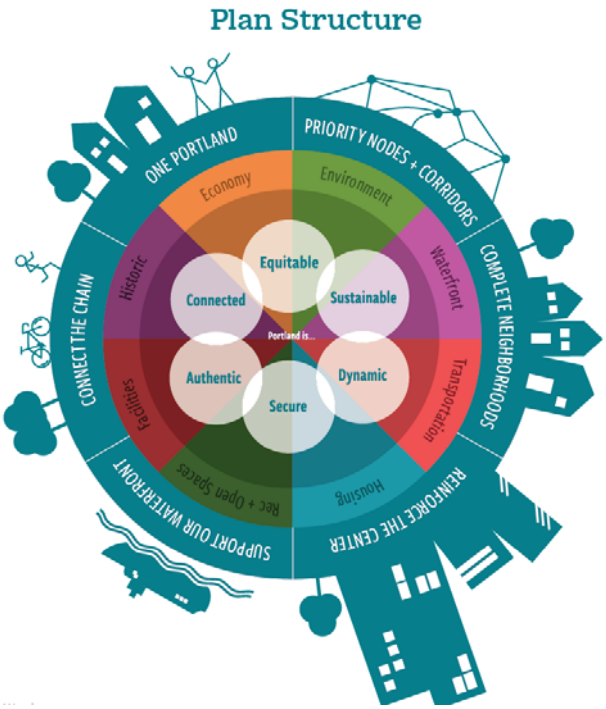
Attachment C
Consistency with Comprehensive Plan

COMPRHENSIVE PLAN REVIEW

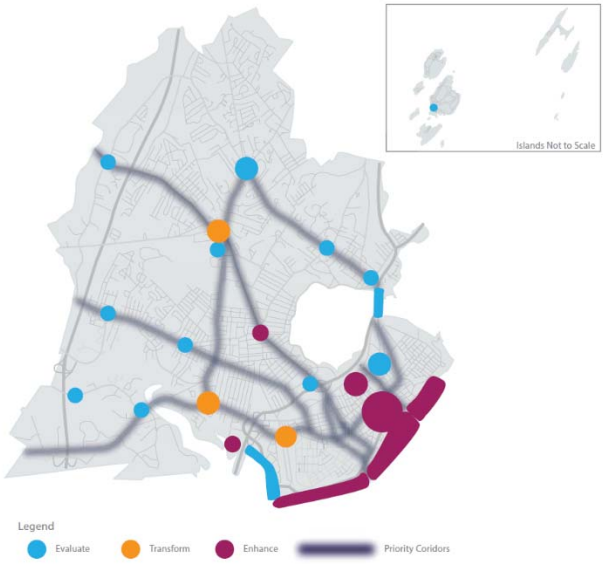
The 2017 Comprehensive Plan has a number of policy goals related to sustainable development and housing. This request to revise the dimensional requirements in this location on the peninsula helps meet those goals.

The Plan's Executive Summary emphasizes the need to "Reinforce the Center" through better housing and transportation. This location, on the peninsula, is extremely well located for housing that takes advantage of multimodal transportation options. By locating housing near job opportunities and other commercial activities, it also emphasizes downtown walkability. This strategy is emphasized later in the Future Land Use section as well.

This proposal also meets specific goals in the Plan's policy guides.



MEETING THE CITY'S HOUSING PRODUCTION GOALS



At the core of Portland's Plan is housing production. The plan references the zoning ordinance amendments to allow for greater residential density in various zones, expand applicability of an existing 25% density bonus, increase allowable heights in some parts of downtown, reduce parking requirements to eliminate barriers to development, and incentivize residential and mixed-use development. Other recent changes to the ordinance have spoken directly to affordability: mandating the inclusion of affordable workforce housing within all residential development projects of 10 or more units. The Plan calls for production of a variety of housing types and locations, with a focus on key nodes and corridors. The largest node of development is Downtown Portland. The Plan further sets a specific, but achievable, goal of reaching a population of 72,000 by 2027. That target will require production of 2,557 housing units, or almost 300 per year. While a change in the dimensional requirements in this location will not meet that goal by itself, it is part of an overall strategy to produce housing in a sustainable way that supports this primary development node.

OTHER POLICY GOALS

Economy: A Vibrant City
The Economy Policy Guide says that the City actions should: *"Evaluate zoning and the condition of existing infrastructure in priority areas — downtown, identified neighborhood nodes, and along transit corridors — to ensure that employment and housing growth can be supported."*

The current zoning in this area, while allowing for some density, falls a little short of the requirements needed to make housing developments viable with private financing. By reducing/eliminating the setback requirements, maximizing coverage and allowing additional height, the economics of a project change and a significant housing development can be supported.

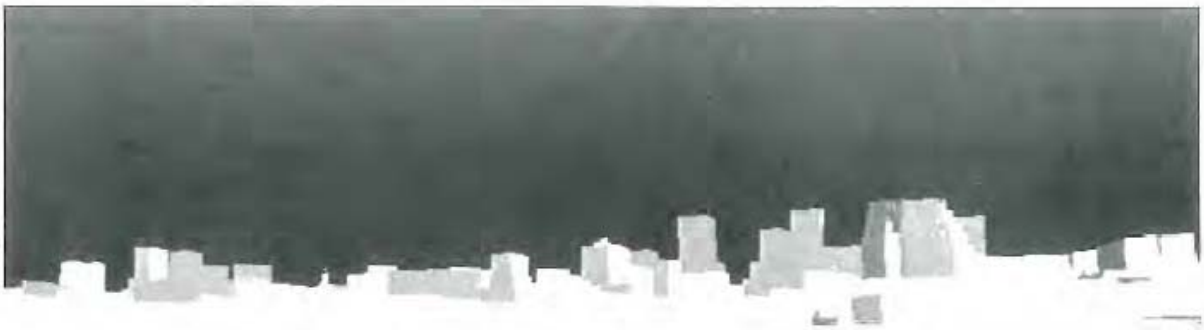
Housing: A Livable City

The Housing Policy Guide similarly calls for City actions to: *"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."* In order to support the priority growth area of downtown Portland with private financing, some additional density is needed. This policy guide also states that those who work in Portland should be able to live in Portland. Production of housing at this location will make this goal economically feasible by allowing for production of new units immediately downtown, near employment opportunities.

OTHER PLANS

The requested map change is also generally consistent with planning related to dimensional requirements in downtown and the inner ring neighborhoods, including the West End.

The R-7 Compact Urban Residential Overlay Zone encourages compact residential development on appropriate locations on the Portland peninsular, pursuant to the New Vision for Bayside element of the comprehensive plan and housing plans of the City of Portland. As desired in the Code, the site is a prime example for in-city living within walking distance of downtown and other workplaces, shopping and community facilities and have access to public or private off-site parking or transit service.



25 Projected Skyline with Recommended Height Limits

Additionally, the R-7 Zone is intended to be located on the peninsula, including existing R-6 locations characterized by moderate to high density multi-family housing in a form and density exceeding that allowed in the R-6 Zone and where infill development opportunities exist. The difference in the variations between the R-6 and R-7 zones are minor but have a significant impact on the development potential for the site.

Attachment G
Proposed Map Amendment

NOTES:

1. ZONING INFORMATION OBTAINED FROM CITY OF PORTLAND ZONING MAP, ADOPTER 1/17/01, LAST REV. 2/12/19.

PROPOSED R7 COMPACT URBAN RESIDENTIAL OVERLAY ZONE

ISSUED FOR	BY DATE
MAP AMENDMENT	WHS 10/30/19
	REV. DATE:

DRAWING NAME: PROPOSED MAP AMENDMENT

PROJECT NAME: 99 WINTER STREET

CLIENT: THANOS, LLC

ACORN ENGINEERING, INC

ACORN ENGINEERING, INC. P.O. BOX 3372 PORTLAND, MAINE 04104 (207) 775-2655

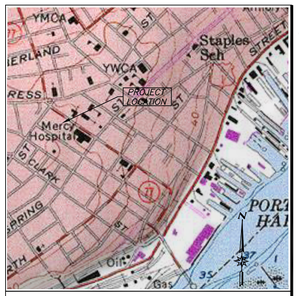
FILE:	200 FEDERAL
DATE:	10/30/2019
JN:	200 FEDERAL
SCALE:	1":500'
DESIGN BY:	KRB
DRAWN BY:	KRB
CHECKED BY:	WHS

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

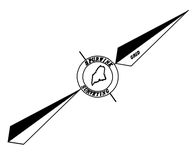
DRAWING NO.

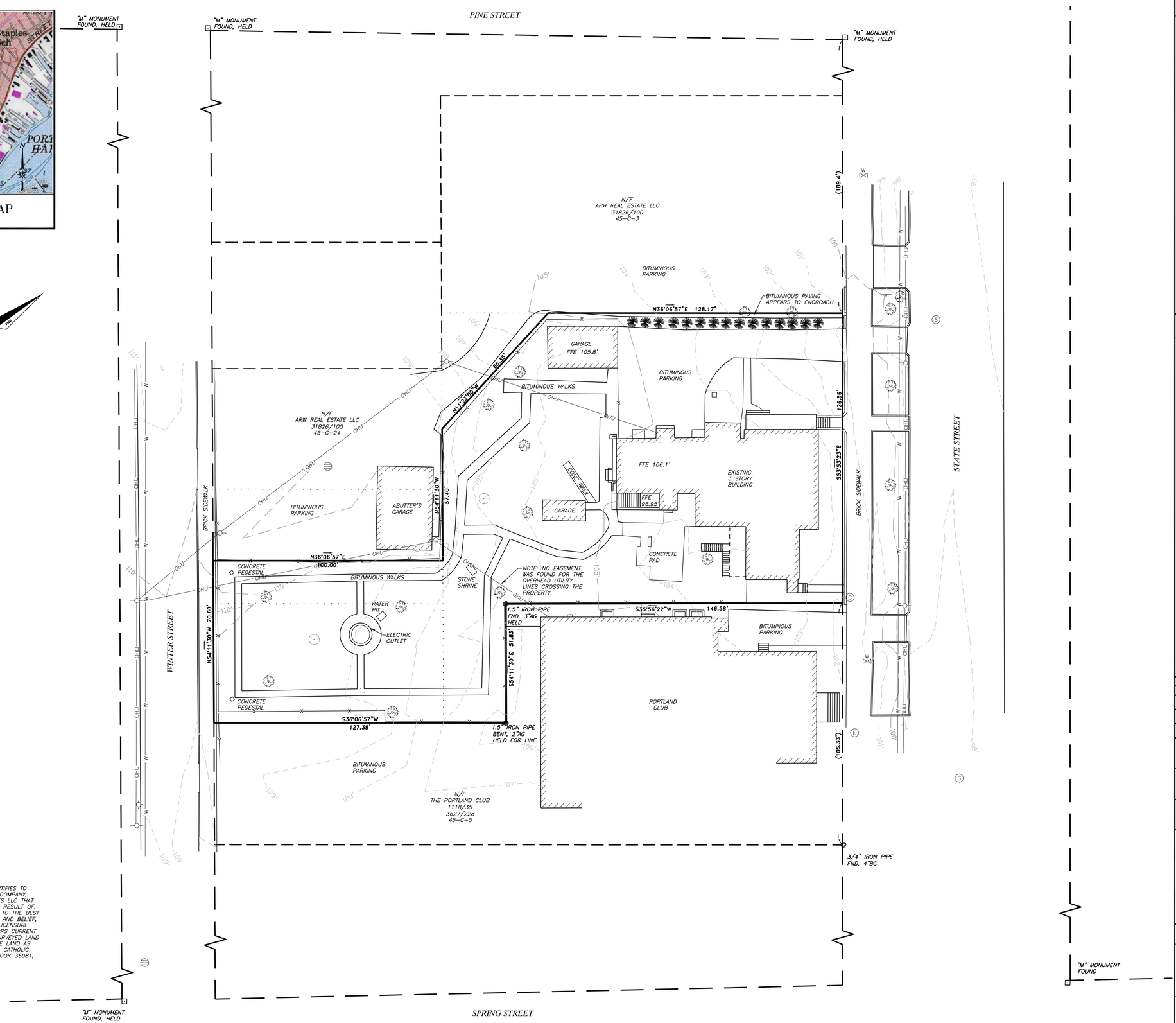
EX-2

Attachment H
Civil Site Plan



VICINITY MAP
N.T.S.





LEGEND

●	#5 REBAR WITH PLASTIC CAP STAMPED P.L.S. #2028
	FOUND IRON PIPE (SIZE & TYPE AS NOTED)
	FOUND IRON ROD
	FOUND CAPPED IRON ROD (NUMBER AS NOTED)
	UTILITY POLE (NUMBER AS NOTED)
	FOUND TREE
	FIRE HYDRANT
	CATCH BASIN
D	DRAIN MANHOLE
S	SEWER MANHOLE
	GUY
	BOUNDARY LINE
	EDGE OF PAVEMENT
	RIGHT-OF-WAY LINE
	SETBACK LINE
	INTERIOR LOT LINE
	ABUTTER LINE
OHU	OVERHEAD UTILITY
	STOCKADE FENCE
	CHAIN LINK FENCE
N/F	NOW OR FORMERLY OWNED BY
1234/567	DEED BOOK AND PAGE (CCRD)
12-3-45	TAX MAP-BLOCK-LOT
(123.45')	PARENTHESIS DENOTE RECORD DATA

NOTES

1. THE BASIS OF BEARING FOR THIS SURVEY IS MAINE STATE COORDINATE SYSTEM, WEST ZONE. CONTOURS AND ELEVATIONS ARE REFERENCED TO NGVD1929.
2. DEED AND PLAN BOOK REFERENCES ARE TO THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
3. RECORD OWNERSHIP OF THE PARCEL SURVEYED CAN BE FOUND IN A DEED FROM SISTERS OF THE PRECIOUS BLOOD OF PORTLAND, MAINE TO ROMAN CATHOLIC BISHOP OF PORTLAND DATED AUGUST 13, 2018 AND RECORDED IN DEED BOOK 35081, PAGE 287.
4. REFERENCE IS MADE TO THE FOLLOWING PLANS:
   a. "PLAN OF LAND IN SOUTH PORTLAND, MAINE MADE FOR JOHN C. JACOBSON" BY RALPH P. CUMMINGS, C.E. RECORDED AT CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 23, PAGE 55.
   b. VARIOUS STREET LINE SHEETS AND UTILITY PLANS ON FILE AT CITY OF PORTLAND ENGINEERING OFFICE.
5. THE SURVEYED PARCEL CONTAINS 29,333 SQUARE FEET OR 0.67 ACRES.
6. THE SURVEYED PARCEL APPEARS ON FEMA FLOOD MAP 230051 0013 B AND IS NOT IN A FLOOD HAZARD ZONE.
7. THE UTILITIES SHOWN ON THIS PLAN WERE FROM FIELD OBSERVATION ONLY. THERE MAY BE OTHER UTILITIES EXISTING THAT ARE NOT SHOWN. CONTACT DIG-SAFE (888)DIG-SAFE PRIOR TO ANY EXCAVATION WORK.

Revision:	By:	Date:	Change:

PROJECT: 2019016	PROJECT NAME: 160 STATE STREET.DWG	
DATE: APRIL 22, 2019	SCALE: 1"=20'	FB # 13 E. FB Y
FIELDED BY: J.A.M. & J.B.P.	FIELD DATE: APRIL. 2019	DRAWN BY: J.A.M.

Drawing Name and Location:
BOUNDARY SURVEY/EXISTING CONDITIONS PLAN
160 STATE PORTLAND, MAINE

Owner:
ROMAN CATHOLIC BISHOP OF PORTLAND
510 OCEAN AVENUE, PORTLAND, MAINE 04103

Prepared For:
THANOS LLC & STARK INDUSTRIES LLC
100 COMMERCIAL STREET, PORTLAND, MAINE 04101

SURVEYING LAND PLANNING
Spurwink Surveying
182 SPURWINK ROAD, SCARBOROUGH, MAINE
tel 207.799.2654 cell 207.321.8966 e-mail spurwinksurveying@gmail.com

0 20' 40' 80'

STAMP AND SIGNATURE

James A. Mullen APRIL 30, 2019
JAMES A. MULLEN DATE
MAINE P.L.S. No. 2028

STATE OF MAINE
JAMES A. MULLEN
PLS 2028
PROFESSIONAL LAND SURVEYOR

IF THIS PLAN DOES NOT CONTAIN AN EMBOSSED SEAL, IT IS NOT AN ORIGINAL AND MAY BE VOID.
EMBOSSED SEAL ABOVE

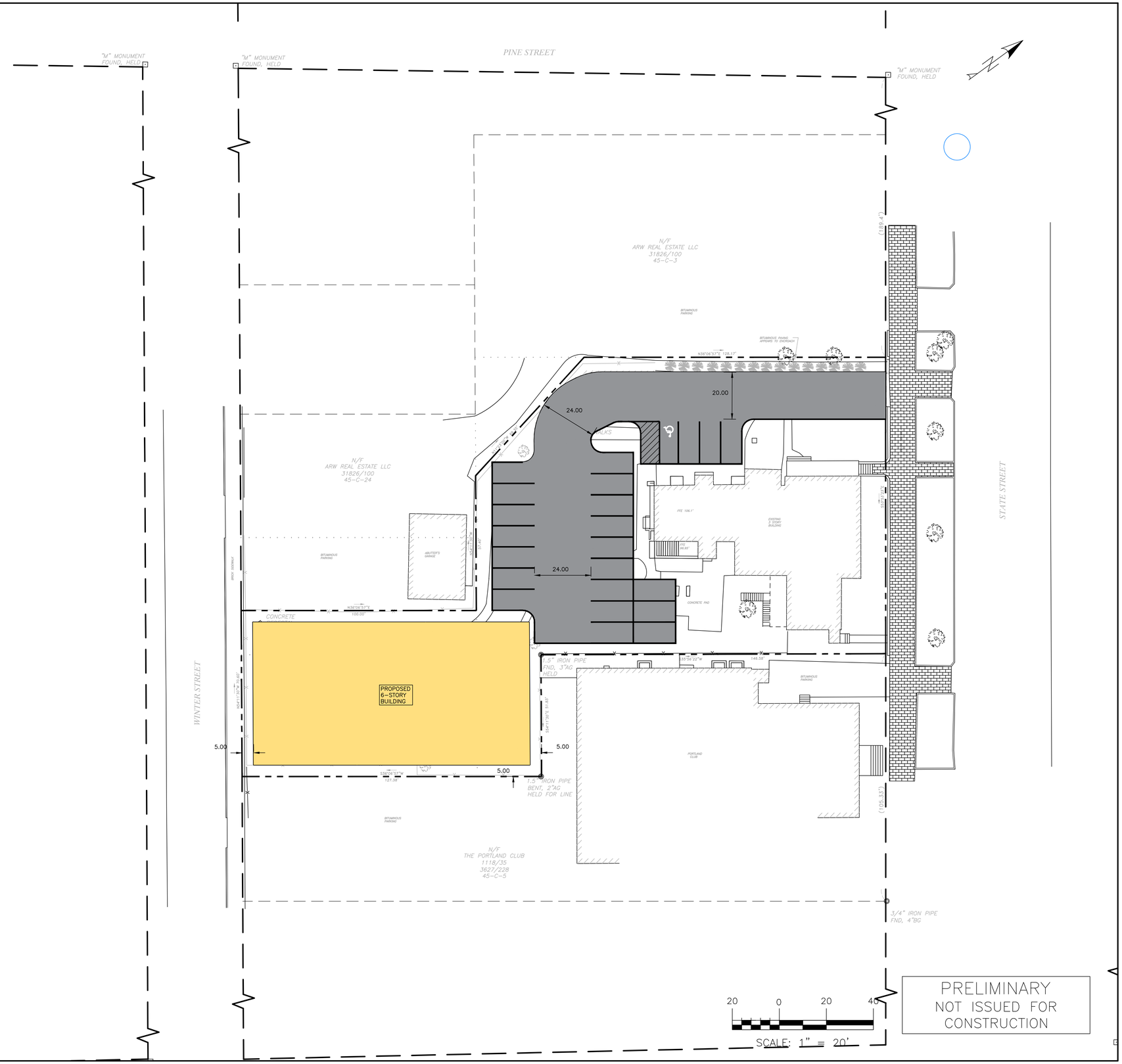
CERTIFICATION

SPURWINK SURVEYING HEREBY CERTIFIES TO FIRST AMERICAN TITLE INSURANCE COMPANY, THANOS LLC AND STARK INDUSTRIES LLC THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND SURVEY AND TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT PRACTICE AND STANDARDS. THE SURVEYED LAND AS DEPICTED HEREON IS THE SAME LAND AS DESCIBED IN THE DEED TO ROMAN CATHOLIC BISHOP OF MAINE RECORDED IN BOOK 35081, PAGE 287.

SPACE AND BULK STANDARDS		
R–6 ZONE	EXISTING	ALLOWED
MNIMUM LOT SIZE	29,333 SF	2,000 SF
MINIMUM LOT AREA/LODGING HOUSE ROOMING UNIT	733 SF	250 SF*
STREET FRONTAGE	STATE ST – 126' WINTER ST – 70'	20'
MINIMUM FRONT YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	10.5'	5'
MINIMUM REAR YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	10'	10'
MINIMUM SIDE YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	4.5'	5'
MAXIMUM LOT COVERAGE	37%	60%
MINIMUM LOT WIDTH	71'	20'
MAXIMUM HEIGHT, PRINCIPAL AND ATTACHED ACCESSORY STRUCTURE	<45'	45'
MAXIMUM HEIGHT, DETACHED ACCESSORY STRUCTURE	<18'	18'
LANDSCAPED OPEN SPACE REQUIRED		20%
OFF–STREET PARKING	4	1 SPACE FOR EACH 5 ROOMING UNITS = 8 SPACES
* 29,333 SF LOT SIZE / 250 SF/ROOMING UNIT = 117 ROOMING UNITS ALLOWED		

SPACE AND BULK STANDARDS			
R–7 ZONE	EXISTING	PROPOSED	ALLOWED
MNIMUM LOT SIZE	29,333 SF	29,333 SF	NONE
MINIMUM LOT AREA/LODGING HOUSE ROOMING UNIT (250 SF/ROOMING UNIT)	40 ROOMING UNITS	40 ROOMING UNITS	117 ROOMING UNITS
MAX. RESIDENTIAL DENSITY/DWELLING UNIT (435 SF/DWELLING UNIT)	NA	50 DWELLING UNITS	87 DWELLING UNITS*
STREET FRONTAGE	STATE ST – 126' WINTER ST – 70'	STATE ST – 126' WINTER ST – 70'	NONE
MINIMUM FRONT YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	NA	0'	NONE
MINIMUM REAR YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	NA	5'	5'
MINIMUM SIDE YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	NA	5'	5'
MAXIMUM LOT COVERAGE	NA	< 100%	100%
MINIMUM LOT WIDTH	NA	STATE ST – 32' WINTER ST – 71'	20'
MAXIMUM HEIGHT, PRINCIPAL AND ATTACHED ACCESSORY STRUCTURE	<45'	<60'	60'**
MAXIMUM HEIGHT, DETACHED ACCESSORY STRUCTURE	<18'	<18'	18'
LANDSCAPED OPEN SPACE REQUIRED	NA		NA
OFF–STREET PARKING	4	23***	1 SPACE FOR EACH 5 ROOMING UNITS = 8 SPACES 1 SPACE FOR EACH DWELLING UNIT = 50 SPACES TOTAL = 58 SPACES
* 1.3 X 67 (BASE) DENSITY PERMITTED PER SEC. 14–488 W/ 60% WORKFORCE HOUSING			
** 50' MAX. BUILDING HEIGHT IN R7 + ADDITIONAL 10' PERMITTED PER SEC. 14–488 W/ 60% WORKFORCE HOUSING			
*** SEC. 14–332.2 (b): PLANNING BOARD MAY ESTABLISH A PARKING REQUIREMENT FOR AFFORDABLE HOUSING UNITS FOR RENT OR SALE WITHIN AN ELIGIBLE PROJECT THAT IS LESS THAN ONE (1) PARKING SPACE PER AFFORDABLE HOUSING UNIT, REGARDLESS OF THE SIZE OF THE STRUCTURE.			

PARKING SUMMARY	
	# PARKING SPACES
EXISTING	4
STANDARD (9'X18')	22
ADA (8'X18')	1
TOTAL PROPOSED SPACES	23



PRELIMINARY
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
ATTORNEY REVIEW	MPB	05/14/19

DRAWING NAME: PHASE II CONCEPT

PROJECT NAME: 160 STATE STREET / 99 WINTER STREET

CLIENT: JOSH SOLEY
100 COMMERCIAL STREET, SUITE 214

ACORN ENGINEERING, INC.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY MODIFICATIONS MADE WITHOUT WRITTEN PERMISSION OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
65 HANOVER ST, PORTLAND, MAINE 04101
(207) 775–2655

FILE:	1123.1_CIVIL
JN:	1123.1
SCALE:	AS NOTED
DESIGNED BY:	WHS
DRAWN BY:	ZMS
CHECKED BY:	WHS

DRAWING NO.
EX-1

Attachment D
Right, Title & Interest

MAINE REAL ESTATE TAX-Paid

DLN: 1001940060328

KNOW ALL BY THESE PRESENTS,

THAT, the **Roman Catholic Bishop of Portland**, a body politic and corporation sole, created and existing under the laws of the State of Maine, and having its chancery in Portland, County of Cumberland and State of Maine, in consideration of One Dollar ($1.00) and other valuable considerations paid by Thanos LLC, a Maine limited liability company with an address of 100 Commercial Street, Suite 214, Portland, Maine 04101 , the receipt of which consideration it does hereby acknowledge, does hereby remise, release, and convey, and forever quit-claim unto the said **Thanos LLC**, with Quitclaim Covenant, the following described real estate:

See attached Exhibit A.

To have and to hold the same, together with all the privileges and appurtenances thereunto belonging to the said Grantee, its successors and assigns forever.

In Witness Whereof, the said Roman Catholic Bishop of Portland, a body politic and corporation sole, has caused this instrument to be sealed with its corporate seal and signed in its corporate name by Robert P. Deeley, Roman Catholic Bishop of Portland, thereunto duly authorized, according to the discipline and government of the Roman Catholic Church and the laws of the State of Maine, this 7 day of June, in the year of our Lord Two Thousand and Nineteen.

SIGNED, SEALED AND DELIVERED IN PRESENCE OF

ROMAN CATHOLIC BISHOP OF PORTLAND

By: Robert P. Deeley

Robert P. Deeley
Roman Catholic Bishop of Portland

STATE OF Maine
County of Cumberland, ss.

June 7, 2019

Personally appeared the above named Robert P. Deeley in his capacity as the Roman Catholic Bishop of Portland, a corporation sole, and acknowledged the above instrument to be his free act and deed in his said capacity and the free act and deed of said corporation sole.

Before me,

Christine T. Pitteroff
Notary Public

CHRISTINE T. PITTEROFF
Notary Public - Maine
My Commission Expires
April 17, 2026

Exhibit A

All that certain parcel of land, with the buildings thereon, situated on the Southwesterly side of State Street in said Portland, bounded southerly by land formerly of George F. Shepley; Easterly by said State Street; Northerly by land formerly of E. A. Norton, and Westerly by a line one hundred (100) feet from and parallel with Winter Street as it existed March 12, 1897.

EXCEPTING from the above described parcel that portion conveyed to CON-TUL, Inc., by deed of Sisters of the Precious Blood of Portland, Maine, dated October 31, 1974 and recorded in Cumberland County Registry of Deeds in Book 3618, Page 78.

Being a portion of the premises conveyed to Sisters of the Precious Blood of Portland, Maine by deeds of The King's Academy dated August 10, 1960 and recorded in Cumberland County Registry of Deeds in Book 2556, Page 401; and dated September 22, 1963 and recorded in said Registry of Deeds in Book 2918, Page 327.

Also, a certain lot or parcel of land with the buildings thereon situated on the Northeasterly side of Winter Street, in the City of Portland, in the County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the Westerly corner of land conveyed by Nehemiah Cram to Ether Shepley by deed dated October 17, 1837, and recorded in Cumberland County Registry of Deeds, in Book 155, Page 484; thence Southwesterly by land now or formerly of the Roman Catholic Bishop of Portland and land formerly of Heller M. Manning 7 rods 17 links to the Northeasterly side line of Winter Street; thence Southeasterly by Winter Street fifty-three (53) feet, more or less, to the Westerly corner of land conveyed by Nehemiah Cram to Lorenzo D. Mason by deed dated August 31, 1844, and recorded in said Registry of Deeds, in Book 187, Page 373; thence Northeasterly by said Mason land 7 rods 17 links to the Southwesterly side line of said Shepley land, now or formerly of The Portland Club; thence Northwesterly by The Portland Club land fifty (50) feet, more or less, to the point of beginning.

Being the premises conveyed to Sisters of the Precious Blood of Portland, Maine by Mercy Hospital by deed dated April 8, 1971 and recorded in Cumberland County Registry of Deeds in Book 3165, Page 771.

Also, a certain lot or parcel of land situated on the northerly side of Winter Street in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning on said northerly sideline of Winter Street at the most southerly corner of the parcel of land conveyed by the Roman Catholic Bishop of Portland to Con-Tul, Inc., by deed dated April 10, 1964, and recorded in Cumberland County Registry of Deeds in Book 2815, Page 75; thence by said northerly sideline of Winter Street N 40° 10' 30" W twenty (20) feet to a point;

thence through land now or formerly of Con-Tul, Inc., N 49° 49' 30" E one hundred (100) feet to land now or formerly of Sisters of the Precious Blood of Portland, Maine; thence by land now or formerly of Sisters of the Precious Blood of Portland, Maine S 40° 10' 30" E twenty (20) feet to land formerly of the Mercy Hospital and now or formerly of Sisters of the Precious Blood of Portland, Maine; thence by said land now or formerly of Sisters of the Precious Blood of Portland, Maine, S 49° 49' 30" W one hundred (100) feet to the point of beginning.

The area of the above described parcel being two thousand (2,000) square feet.

The above described courses being magnetic and of the year 1957.

That certain easement for use of an adjacent parking lot on land now or formerly of Con-Tul, Inc., for purposes of ingress and egress, which easement is expressly set forth in Quitclaim Deed with Covenant from the Sisters of the Precious Blood of Portland, Maine to Roman Catholic Bishop of Portland, dated August 13, 2018, and recorded in the Cumberland County Registry of Deeds at Book 35081, Page 287, has terminated and is not conveyed hereby.

Being the premises conveyed to Sisters of the Precious Blood of Portland, Maine by Con-Tul, Inc., by deed dated October 21, 1974 and recorded in Cumberland County Registry of Deeds in Book 3618, Page 56.

FOR SOURCE OF TITLE, reference may be had to Quitclaim Deed with Covenant from the Sisters of the Precious Blood of Portland, Maine to Roman Catholic Bishop of Portland, dated August 13, 2018, and recorded in the Cumberland County Registry of Deeds at Book 35081, Page 287.

The above-described premises are conveyed SUBJECT to the restrictions that the Grantee, Grantee's successors and assigns, shall not use the premises in any way relating to: 1) counseling regarding or performance of abortions; 2) sale of pornographic materials; or 3) erotic displays or activities. The burden of this restriction shall run with the land conveyed hereby to the Grantee. The benefit of this restriction is held by the Roman Catholic Bishop of Portland, corporation sole, its successors and assigns.

Attachment F
Vicinity Map

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.	FILE: 1123.1_CIVIL DATE: 2/17/20 JN: 1123.1 SCALE: 1"=2,000' DESIGN BY: PFH DRAWN BY: PFH CHECKED BY: WHS	ACORN ENGINEERING, INC ACORN ENGINEERING, INC. P.O. BOX 3372 PORTLAND, MAINE 04104 (207) 775-2655	DRAWING NAME: VICINITY MAP PROJECT NAME: 99 WINTER STREET CLIENT: THANOS, LLC	ISSUED FOR / BY / DATE CITY REVIEW / PFH / 2/17/20 REV. DATE
DRAWING NO. EX-01				

Attachment A
Zoning Map/Text Amendment Application

Zoning Map/Text Amendment Application
Portland, Maine

Planning and Urban Development Department
Planning Division and Planning Board

Portland's Planning and Urban Development Department coordinates the development review process for requests for zoning map amendments, zoning text amendments and contract or conditional re-zoning. The Division also coordinates site plan, subdivision and other applications under the City's Land Use Code. The **Application Process for a Zone Change** is summarized below under Section I and the associated costs for reviews are found under Section II, **Development Review Fees, Public Notices and Guarantees,** and are listed on the fee structure sheet.

I. APPLICATON SUBMITTAL

Pre-application meeting

Prior to submitting a zoning amendment application, the Planning Division recommends that the applicant or the designated representative schedule a pre-application meeting to discuss the review process and applicable standards for a proposal. Please contact Barbara Barhydt, Development Review Services Manager at 874-8699 to schedule a meeting.

Zoning Amendment Application

All plans and written application materials must be uploaded to a website for review. At the time of application, instructions for uploading the plans will be provided to the applicant. One paper set of the plans, written materials and application fee must be submitted to the Planning Division Office to start the review process.

- Submit one (1) complete paper set of the zoning amendment application with a concept plan and a written narrative. Contract and conditional rezoning applications must include site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood. Applications may be submitted between 8 a.m. and 4:30 p.m. Monday through Friday at the Planning Division on the 4th floor of City Hall, 389 Congress Street, Portland.
- All applications are processed in the order in which they are received.
- In order for the Planning Division's Administrative Staff to accept and log-in an application, the application form must be complete, it shall be signed by the applicant's or the applicant's designated representative, and all applicable fees paid at the time of submittal.
- The Land Use Code is available on the City's website at www.portlandmaine.gov.
- If the application is found to be incomplete, the applicant will be informed in writing of the required plans and materials.

II. DEVELOPMENT REVIEW FEES, PUBLIC NOTICES AND GUARANTEES

Zoning Application Fees

- Each application must be submitted with the applicable fees as listed in the fee structure on page 4. The fees cover general administrative processing costs.
- Application fees may be paid in cash or by check (addressed to the City of Portland).
- An application will not be processed without the required application fees.

Fee for City Review Services

- The City of Portland charges fees for service to cover the cost of reviews by Planning and Legal staff members. The charges will be billed at an hourly rate and will be invoiced monthly for reimbursement.
- Current billing rates: Planning services, $40.00/ hour and Legal services: $75.00/hour.

Fee for Third Party Review

- Portland contracts with local engineering firms to conduct engineering reviews of development proposals. The direct cost of all engineering services or third-party consultant reviews, such as the civil engineering review of stormwater management plans, traffic impact reviews and such other reviews as required under the City's Ordinances, will be included in the monthly invoices for reimbursement.

Public Notices

- Public notices must be sent to property owners within 500 for all proposals at the time an application is received. Zoning map amendments for Industrial zones require notices to be sent to property owners within 1,000 feet.
- In advance of a Planning Board workshop or public hearing, public notices for projects must be sent to property owners and are posted in a legal ad in the Portland Press Herald and on the City's web site.
- In addition, zoning map amendments, text amendments and conditional rezoning agreements require individual notices to be posted in the Portland Press Herald.
- The Planning Division mails public notices and posts notices in the newspaper. The applicant will be billed for actual or apportioned costs for advertising and sending mailed notices.
- The applicant is required to hold a neighborhood meeting under the City's regulations for zone change requests. The mailing labels must be purchased from the Planning Division for the neighborhood meeting invitation. A request for labels requires a minimum of two business days to generate the mailing labels and a charge of $1.00 per sheet will be payable upon receipt of the labels.

Third Party Review Fees

- Engineer and Third Party Review Fees - The fees are assessed by the Consulting Engineers and Third Party Reviewers.
- Inspection Fee - This fee is 2% of the Performance Guarantee or as assessed by Planning or Public Works Engineer with $300.00 being the minimum.

Noticing/Advertisements Planning Board/City Council Review

- Legal Advertisement: Percent of total bill
- Notices: .75 cents each
  (notices are sent to neighbors upon receipt of an application, workshop and public hearing meetings for Planning Board and public hearing meeting for City Council)

Planning Division	**Office Hours**
Fourth Floor, City Hall	Monday thru Friday
389 Congress Street	8:00 a.m. – 4:30 p.m.
(207) 874-8721 or 874-8719	

PROJECT ADDRESS: 99 Winter Street

CHART/BLOCK/LOT: 45/C/4

DESCRIPTION OF PROPOSED ZONE CHANGE AND PROJECT:

Proposed R7 Compact Urban Residential Overlay Zone to parcel ID 045 C004001 (160 State St/99 Winter St), currently in R6 Zone.

CONTACT INFORMATION:

	Applicant's Contact for electronic plans Name: e-mail Address work #
Applicant – must be owner, Lessee or Buyer Name: Josh Soley & Dan Soley Business Name, if applicable: Thanos, LLC Address: 100 Commercial Street, Suite 202 City/State : Portland, ME Zip Code: 04101	**Applicant Contact Information** Work # 207-744-3084, Ext. 301 Home# Cell # Fax# e-mail: josh@mainerealtyadvisors.com
Owner – (if different from Applicant) Name: Same as applicant Address: City/State : Zip Code:	**Owner Contact Information** Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Address: City/State : Zip Code:	**Agent/Representative Contact information** Work # Cell # e-mail:
Billing Information Name: Same as applicant Address: City/State : Zip Code:	**Billing Information** Work # Cell # Fax# e-mail:
Engineer Name: Peter F. Heil, PE, CPESC - Acorn Engineering Address: P.O. Box 3372 City/State : Portland, ME Zip Code: 04101	**Engineer Contact Information** Work # 207-775-2655 Cell # 802-238-7409 Fax# e-mail: pheil@acorn-engineering.com

Surveyor	Surveyor Contact Information
Name: James Mullen, PLS - Spurwink Surveying	Work # 207-799-2654
Address: 182 Spurwink Road	Cell # Fax#
City/State : Scarborough, ME Zip Code: 04074	e-mail: spurwinksurveying@gmail.com
Architect	**Architect Contact Information**
Name: Lucas Greco, RA - Briburn	Work # 207-774-8482
Address: 28 Maple Street, Suite 202	Cell # 918-261-3002 Fax#
City/State : Portland, ME Zip Code: 04101	e-mail: lgreco@briburn.com
Attorney	**Attorney Contact Information**
Name: Mary Costigan - Bernstein Shur	Work # 207-228-7147
Address: 100 Middle Street, PO Box 9729	Cell # Fax# 207-774-1127
City/State : Portland, ME Zip Code: 04101	e-mail: mcostigan@bernsteinshur.com

Right, Title, or Interest: Please identify the status of the applicant's right, title, or interest in the subject property:

The applicant is the current owner of the property.

Provide documentary evidence, attached to this application, of applicant's right, title, or interest in the subject property. (For example, a deed, option or contract to purchase or lease the subject property.)

Vicinity Map: Attach a map showing the subject parcel and abutting parcels, labeled as to ownership and/or current use. (Applicant may utilize the City Zoning Map or Parcel Map as a source.)

Existing Use: Describe the existing use of the subject property:

The use of the existing convent building to a lodging house along State Street recently received Level II Site Plan approval. The Winter Street portion of the property currently contains no structures.

Current Zoning Designation(s):

R-6 Residential Zone

Proposed Use of Property: Please describe the proposed use of the subject property. If construction or development is proposed, please describe any changes to the physical condition of the property.

The project proposes to build a new 50 unit workforce apartment building on the Winter Street portion of the property.

Site Plan: On a separate sheet, please provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries. This may be a professionally drawn plan, or a carefully drawn plan, to scale, by the applicant. (Scale to suit, range from 1" = 10' to 1' = 50'.) Contract and conditional rezoning applications may require additional site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood.

APPLICATION FEE:

Check the type of zoning review that applies. Payment may be made in cash or check payable to the City of Portland.

Zoning Map Amendment _X_ $2,000.00 (from _R6_ zone to _R7_ zone)	**Fees Paid** (office use) ___	The City invoices separately for the following: • Notices ($.75 each) (notices are sent to neighbors upon receipt of an application, workshop and public hearing meetings for Planning Board and public hearing meeting for City Council) • Legal Ad (% of total Ad) • Planning Review ($40.00 hour) • Legal Review ($75.00 hour) Third party review is assessed separately.
Zoning Text Amendment ___ $2,000.00 (to Section 14- _____) (For a zoning text amendment, attach on a separate sheet the exact language being proposed, including existing relevant text, in which language to be deleted is depicted as crossed out (~~example~~) and language to be added is depicted as underline (example)	___	
Combination Zoning Text Amendment and Zoning Map Amendment ___ $3,000.00	___	
Conditional or Contract Zone ___ $3,000.00 (A conditional or contract rezoning map be requested by an applicant in cases where limitations, conditions, or special assurances related to the physical development and operation of the property are needed to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood. Please refer to Division 1.5, Sections 14-60 to 62.)	___	

Signature of Applicant:	**Date:** 2/19/2020

Further Information

In the event of withdrawal of the zoning amendment application by the applicant, a refund of two-thirds of the amount of the zone change fee will be made to the applicant as long as the request is submitted to the Planning Division prior to the advertisement being submitted to the news paper.

A Guide to Holding Neighborhood Meetings
Portland, Maine

Planning and Urban Development Department
Planning Division and Planning Board

In order to improve communication between development applicants and neighbors, the City of Portland requires applicants, proposing certain types of projects, to hold a neighborhood meeting.

What type of development proposal requires a neighborhood meeting?
Neighborhood meetings, organized and hosted by the applicant, are required for the following development proposals:

- Proposed zone changes, contract zones and zoning text amendments that would result in major development;
- Subdivisions of five or more units or lots; and
- Level III site plan proposals for preliminary or final site plans:
    - Portland's new site plan ordinance went into effect in August, 2010. It now includes provisions for preliminary and final plans. Neighborhood meetings are to be held three weeks after submitting a preliminary plan or within two weeks of submitting a final plan, if a preliminary plan was not submitted.

Who must be invited to a neighborhood meeting?
Property owners within 500 feet of the proposed development (1000 feet for proposed industrial subdivisions and zone changes) as well as those people on a list of interested citizens and neighborhood groups must be invited to the planned neighborhood meeting.

The Planning Division provides the mailing labels for the neighborhood meeting invitation. We require at least 48 hours notice to generate the mailing labels and a charge of $1.00 per sheet will be payable upon receipt of the labels.

When and where must the neighborhood meeting be held?
The neighborhood meeting must be held within three weeks of submitting a preliminary site plan. If an applicant chooses only to submit a final site plan, then the neighborhood meeting must be held within two weeks of submitting the final plan and not less than seven days prior to the Planning Board public hearing.

The meeting should be held in the evening, during the week, at a convenient location within the Portland neighborhood surrounding the proposed site. Community meeting spaces at libraries, schools or other places of assembly are recommended. Neighborhood schools are usually available for evening meetings.

Meetings should not be held on the same day as scheduled Planning Board or City Council meetings. The City Council generally meets on the first and third Monday of each month and the Planning Board generally meets on the second and fourth Tuesday of each month; however additional meetings may be scheduled. An updated schedule may be found on the City's website: www.portlandmaine.gov

When must invitations be sent?
Invitations to a neighborhood meeting must be sent no less than ten days (to include weekends) prior to the neighborhood meeting. If the notice is for a final site plan, then the neighborhood meeting must be held no less than seven days (to include weekends) prior to the public hearing. Notices may be sent by regular mail and do not need to be sent by certified mail.

What information should the invitation include?
A recommended invitation format is included in this packet of material.

Sign-up Sheets and Meeting Minutes
At the meeting, the applicant must circulate a sign-up sheet for those in attendance. The applicant must also keep accurate minutes of the meeting.

After holding the neighborhood meeting, the applicant must submit the sign-up sheet and meeting minutes to the Planning Division. The meeting minutes and sign-up sheet will be attached to the Planning Board report. A public hearing will not be scheduled until the meeting minutes and sign-up sheet are submitted to the Planning Division.

Certification
Included with this packet is a Certification to be completed and signed by the applicant. The applicant is required to certify when the invitations were sent out.

Please call the Planning Division at 874-8721 or 874-8719 if you have any questions.

Attachments
1. Neighborhood Meeting Invitation Format
2. Neighborhood Meeting Certification

~Applicant/Consultant: Please include all of the information listed below in the notice sent to neighbors~

Neighborhood Meeting Invitation Format

Applicant/Consultant
Letterhead

(Date)

Dear Neighbor:

Please join us for a neighborhood meeting to discuss our plans for a (development proposal) located at (location/number and street address).

Meeting Location: _____
Meeting Date: _____
Meeting Time: _____

The City code requires that property owners within 500 feet of the proposed development and residents on an "interested parties list", be invited to participate in a neighborhood meeting. A sign-in sheet will be circulated and minutes of the meeting will be taken. Both the sign-in sheet and minutes will be submitted to the Planning Board.

If you have any questions, please call (telephone number of applicant or consultant).

Sincerely,

(Applicant)

Note:
Under Section 14-32(C) and 14-525 of the City Code of Ordinances, an applicant for a Level III development, subdivision of over five lots/units, or zone change is required to hold a neighborhood meeting within three weeks of submitting a preliminary application or two weeks of submitting a final site plan application, if a preliminary plans was not submit. The neighborhood meeting must be held at least seven days prior to the Planning Board public hearing on the proposal. Should you wish to offer additional comments on this proposed development, you may contact the Planning Division at 874-8721 or send written correspondence to the Planning and Urban Development Department, Planning Division 4th Floor, 389 Congress Street Portland, ME 04101 or by email: to bab@portlandmaine.gov

Neighborhood Meeting Certification

I, (applicant/consultant) hereby certify that a neighborhood meeting was held on (date) at (location) at (time).

I also certify that on (date at least seven days prior to the neighborhood meeting), invitations were mailed to all addresses on the mailing list provided by the Planning Division, including property owners within 500 feet of the proposed development or within 1000 feet of a proposed industrial subdivision or industrial zone change and the residents on the “interested parties” list.

Signed,

_____ _____ (date)

Attached to this certification are:

1. Copy of the invitation sent
2. Sign-in sheet
3. Meeting minutes

Letter to the Planning Board Re: 99 Winter Street/ 160 State

Amy Grommes Pulaski <amygrommes@gmail.com> Jun 17, 2020 9:21 AM
Posted in group: **Planning Board**

Hello Andrew,

I am submitting to you, and the members of the planning board, a letter on behalf of the residents and neighbors of Winter Street regarding the zone change request for 99 Winter Street/ 160 State Street.

Please share with members of the planning board.

Also, when will this item be on the agenda?

Thank you.

Amy Grommes Pulaski
68 Winter Street

City of Portland
Planning Board
389 Congress Street
Portland, ME 04101

June 16, 2020

RE: 99 Winter Street Development

To the City of Portland Planning Board members:
Chair Brandon Mazer, Vice Chair Maggie Stanley, Marpheen Chann, Sean Dundon, Bob Dunfrey, David Silk, and Austin Smith.

Cc: Andrew Tufts, of the Planning Department

We, the neighbors of Winter Street, are aware of a zoning overlay request before you regarding 99 Winter Street. ***We request that the development adhere to the R-6 residential zone and reflect the design and scale of Winter Street, and that the R-7 overlay request be denied,*** for the following reasons.

- The "yellow zone" or urban core contains the Old Port and extends toward the West End but ends at State Street. The State street side of the property could handle increased density, typical of the R-7 zone. However, the Winter Street side of the property is smaller and residential in nature. The large developments that do exist on Winter Street – 100 State Street and Mercy Hospital - have design qualities that are consistent with the R-6 zone. Namely, these properties do not exceed the 45' height requirement of R-6, and are considerably stepped back from the edge of the street. The new building, under the R-7 overlay zone, would both exceed 45' height required of R-6, and, without required setback of the R-6 zone, would likely be located at/ on the sidewalk. This scale of development in the R-7 zone would be inconsistent with what currently exist on Winter Street.
- A notable concern between R-6 and R-7 is a significant change in lot coverage from 80% in R-6, to 100% in R-7. This too, is inconsistent with the current design and scale of Winter Street.
- The R-6 zone has setback requirements that are appropriate to the scale on Winter Street for larger developments, the R-7 zone does not require setbacks.
- The existing housing heights on Winter street are up to 3.5 stories in height, or less than 45', also consistent with the R-6 zone. If the R-7 overlay zone is approved, and the project pursues affordable housing as intended, and receives the density bonus allowed, the project could be allowed additional 25' in height. Buildings heights of 65' to 70' are not consistent with the current design and scale of the Winter Street streetscape.
- A density bonus, allowed under affordable housing developments, could allow up to 49 units in the R-6 zone, or 166 in R-7, depending on how deep the subsidy, would seem to overwhelm the site and the neighborhood.

THE RESIDENTS AND NEIGHBORS OF WINTER STREET

Additionally, at the neighborhood meeting, the developers shared that they would have more design opportunities under the R-7 that would be constrained under the R-6. However, within any guidelines, skilled architects (such as the ones hired for this project) have endless options as to what the final design can and will be. It's simply not true that one set of guidelines (R-7) allows for more creative solutions over any other set of guidelines (R-6), as put forth by the developers in the neighborhood meeting.

We appreciate your work in ensuring consistency with Portland's Comprehensive Plan. We welcome a discussion and open dialogue on this development, and other developments on Winter Street. Thank you for your time and consideration of our request.

Submitted on behalf of,

The residents and neighbors of Winter Street, including:

1. Suzanne Hunt, 36 Winter St
2. Chrystal Wing, 36 Winter Street
3. Elizabeth Parsons, 44 Winter Street
4. Amy Grommes Pulaski, 68 Winter Street
5. Michael Pulaski, 68 Winter Street
6. Lauren Guite , 70 Winter St.
7. Regan Sweeney, 70 Winter St.
8. Katherine Gilbert, 92 Winter Street
9. Charles Morris, 92 Winter Street
10. Nathan Kimble, 100 Winter Street
11. David Shedd, 104 Winter St
12. Rose Marasco, 108 Winter Street
13. Honour Mack, 112 Winter Street
14. David Marsden, 112 Winter Street

THE RESIDENTS AND NEIGHBORS OF WINTER STREET

15. Seth White, 113 Winter St.

16. Luette Saul, 113 Winter Street

17. Jennifer Rosenthal, 116 Winter Street

18. Casey Rosenthal, 116 Winter Street

19. Mary Clews, 117 Winter Street

20. Jennifer Defilipp, 119 Winter

21. Marc Smith, 119 Winter.

22. Heather Carlisle, 22 Pine Street # 1

23. Bob Brittingham, 22 Pine Street # 2

24. Pam Brittingham, 22 Pine Street # 2

25. Brooke Porter, 22 Pine Street # 4

26. Karen Farrell, 22 Pine St. #5

27. Maya Burton, 22 Pine St, #6

28. Sarah S Saul, Danforth Street

29. Mark Rossnagel, 766 Congress St. #11

30. Trisha Cobb as President of The Portland Club, 156 State Street

31. Laurence Reinhartsen, 59 State Street # 3

32. Gretchen Langner, 59 State Street # 3

David Shedd
P. O. Box 11375
Portland, ME 04104
(207) 838-1068
portlandmerentals@gmail.com

April 24, 2020

Brandon Mazer, Chair
Planning Board City of Portland
389 Congress Street
Portland, Maine 04101

Dear Mr. Mazer:

I have looked carefully at the documents submitted by: Thanos, LLC. re: the proposed application of changes to 160 State Street and 99 Winter Street.

I have a number of concerns about the submitted proposal and the developer which I would like you to evaluate and consider. With Mercy Hospital leaving and with the significant changes to this site and the neighborhood, we're looking at significant changes to an historic district. The city allowed buildings to be razed to create parking lots in that district, and that blighted the neighborhood for decades. These two projects will change this block as well…we need to make sure that we don't create MORE problems.

I purchased 104 Winter St. in 2002. At that point, it was a near-derelict that had been a known crack house a number of years earlier. Over the last 18 years, I have done major renovations and improvements to the house and grounds, and developed great tenants in an open, welcoming neighborhood. That has included installing and reworking a fence to remove a "corridor" from Brackett Street to Winter Street that had people sleeping in our yards, hallways, and basements…not a nice scenario. Overall, it has been a lot of work, but worth it.

Over the last few years, our neighborhood had been working to increase the quality of the area; more trees, better lighting, better walkability. Rose Marasco (my neighbor) and Elizabeth Parsons have been leading that charge, with the goal of making the neighborhood fit in better with what the West End is trying to be…more neighborhood, less "commercial." We've had significant problems with owners/tenants of buildings on State Street, and the neighborhood organization has been in regular meetings to try to resolve the issues.

.

I know they have met several times with Jeff Tarling, who is working to get tree replacements. And then, Thanos, LLC started cutting trees without notice or discussion; not exactly the definition of "good neighbors" (although fitting, given the name). Clearly, they have little understanding of the neighborhood and the character that both exists and that we are working toward, and also clearly no interest in finding out and being part of it.

That makes their request to reduce the required landscape space to zero, from the standard 20%, even more shocking and unacceptable than it would have been. As a general practice, it's a bad idea to reward bad actors with concessions; they'll keep taking advantage, not just in this situation but in every other opportunity with the city. They tried to do much of this without approval; now they want to get approval for it. I'm sorry, but that isn't even reasonable.

Then, there is their request for a 50% height increase. My building, which is basically directly across from there, is in a historic district. I have had to work around various regulations, including paying thousands of dollars more for windows that met the district requirements…and now the goal is to have a huge, modern building directly facing it? That also makes no sense whatsoever, and would be a slap in the face to all of us who have worked hard to stay within the bounds of the district requirements.

I hope you will take my comments, as well as those of the other residents, into consideration. All of us have the good of the city in mind, not just that of our own pockets…we're trying to create "homes," not just apartments. Allowing major changes that void the work of us, and of Historic Preservation, does not move the city forward.

Sincerely,

David Shedd

CC:

Ms. Jennifer Munson, Planning Department
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Department
& the Planning Board City of Portland

Elizabeth C. Parsons
44 Winter Street
Portland, ME 04102

22 April 2020

Mr. Brandon Mazer, Chair
Planning Board c/o City of Portland
389 Congress Street
Portland, ME 04101

RE: Requested rezoning of 160 State/99 Winter; Plan Number: ZN-001021-2020

Dear Mr. Mazer:

The following concerns two points related to current zoning laws; to *Portland's Plan 2030;* and to the joint planning process: *One Climate Future*. These points support my contention that granting this request *would negatively affect the existing neighborhood and adjacent property*—something disallowed under R7 provisions. It would also *run counter to values stated in the two planning documents.*

Land use
The zoning change request from R6 to R7 involves new construction out of scale in height and width to the neighborhood's context. This envisioned size would require reducing the amount of landscaped open space on the 99 Winter plot from 20% or zero. The proposed new construction would run basically to Winter Street and lot lines on either side of the property.

This area, though bounded by a fence, has been one of the largest pieces of open space in the neighborhood for decades. In fact, it was open for so long that approximately eight trees reached maturity there. By contrast, the rest of the upper and mid-Winter blocks have lost almost all tree cover due to replacement of housing by parking lots; municipal neglect; and over salting. If you visit 99 Winter now, you will see only three or four mature trees still standing there. This is because the new owners pre-emptively felled the rest last summer until a group of neighbors intervened. Had we not done so, the other trees—including a 150+ year old sugar maple—would have come down.

This incident was the impetus for a tree protection ordinance currently wending its way through City processes. The final draft should come before the entire Council very soon. Meanwhile, the City Arborist has deemed all the remaining trees at 99 Winter healthy. But it appears unlikely any would survive if the application as presented goes forward. This is particularly disturbing since an earlier renovation request for 160 State specifically notes protective measures for the sugar maple.

As both the City Arborist and Councilor Thibodeau can attest, Winter Street neighbors have been working for over three years to improve the quality of life in an area that has come to resemble an industrial back alley to businesses and organizations fronting on State Street. One of our main

aims has been to restore drastically depleted tree canopy. Progress has been very slow for reasons I won't go into here. Meanwhile, the respite to humans and wildlife provided by the Monastery's trees has been particularly prized.

So, allowing open space loss as the envisioned project requests would represent disregard for the City's comprehensive plan and current climate action planning. See, for example:

- the statement on complete neighborhoods (comp plan, p 79)
- the statement on urban design (comp plan, p 82)
- the statement on future land use policy (comp plan, p 88)
- the list of climate vulnerabilities in relation to transportation/land use and resilience planning components (oneclimatefuture.org).

Transportation

Submitted plans also indicate the property owners intend to take advantage of provisions within the City's land use code that allow a reduced number of parking spaces for certain types of housing. Yet, the plan still calls for 23 parking spaces in an area where the sugar maple stands.

There are, however, numerous reasons for radically reducing the number of surface parking units:

- The comp plan highlights State Street as a priority corridor for enhanced public transit, access to which would be adjacent to 99 Winter.
- A chief objective of One Climate Future's transportation component is reducing single passenger car travel. Some strategies for doing so could include disincentives for driving. Reducing the parking requirement here would accord with that objective.
- Section 14-332.1 k. 3 of the City's code indicates the Board has flexible discretion to reduce parking requirements.
- It is questionable how many inhabitants of workforce housing would need or could afford private vehicles, especially as the recession we're now entering deepens.
- It is generally known that parking spaces cost developers money they'd rather not spend that way. Reducing the number of required spaces would help take pressure off the desire to build such a massive structure at 99 Winter.

So, tell the applicant "No. Figure out a way to make your project work within current regulations and visions." That's why we have these things. Grant leeway on parking requirements in favor of public transit options and open space. Specify that all mature trees remaining on the property be preserved and protected.

Sincerely,

Elizabeth Parsons

cc: Mr. Troy Moon, Sustainability Office
Ms. Jennifer Munson, Planning Dept.
Mr. Jeff Tarling, City Arborist
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Dept.

Elizabeth Parsons <ecparsons33@hotmail.com> Dec 9, 2020, 7:26:11 AM (yesterday)

to planningboard@portlandmaine.gov, Andrew Tufts

Dear Planning Board members:

Several months have passed since I wrote to you about this planned project located a block from where I live (see copy of earlier letter attached). In the intervening time, nothing has happened to change my mind about the inappropriateness of imposing a little-used zoning designation on this neighborhood.

At the time of purchase, the applicant knew this property was zoned R6. So, some creative thinking and consideration of the context could undoubtedly yield a good project that would work within the current zoning. It's been done elsewhere in this neighborhood in recent years. Avesta's Carleton Street complex is one example; the project to be built next to the former Catholic Charities building at State and Danforth is another.

I respectfully urge the Board to deny this requested rezoning.

Sincerely,
Elizabeth Parsons
44 Winter Street

proposed rezoning of 160 State Street

GABEL Landis <landis.gabel@insead.edu> Apr 24, 2020 4:57 PM
Posted in group: **Planning Board**

Dear Planning Board members,

I am writing to oppose the rezoning relevant to the proposed development of what was formerly the Precious Blood Monastery at 160 State Street.

The purpose of zoning regulations is to afford a secure barrier to the unending pressure for the sorts of development that would harm the esthetic, historic, or cultural assets of a neighborhood. That pressure is especially high in Portland now. If those responsible for zoning enforcement give way to the pressure, those values and the character of the city which drew many to it, will be irrevocably lost. It may be argued that the proposed development will contribute to the economic prosperity of the city, but that would ignore the loss of value felt by the neighborhood, both in the abstract and in terms of its property values.

I am a relatively new resident of Portland. I moved here to the West End in good part because of the very things threatened by this proposed development. It is out of scale (which is why the rezoning is needed), unattractive, and it will necessitate the removal of trees that the city needs more, not fewer, of. Indeed, there is an initiative underway to increase the tree cover within the city. This tree protection ordinance may go before the City Council in May. It would be a shame should trees be lost, including a notable old sugar maple, just as the city moves the other direction.

Thank you for considering my concern.

H. Landis Gabel

Emeritus Professor of Economics and Management

The Novartis Chair in Management and the Environment, Emeritus

INSEAD

E-mail: landis.gabel@insead.edu

Development plan for Precious Blood Monestery.

Katherine Gilbert <kittyandcharles@gmail.com> Apr 16, 2020 2:42 PM
Posted in group: **Planning Board**

Good morning Jennifer Munson and Andrew Tufts and other members of the Planning Board.

I am writing to register my concern regarding plans for the development of Precious Blood Monastery into a six-story, 50 unit, residential building with limited parking and no green space.
The height of six-stories, while even with the nearby hospital, is otherwise not in keeping with the surrounding buildings, resident or commercial. I would like to register my strong opposition to the height variance above the current 3 floors. In addition, I would ask that a minimum green space requirement be maintained in our 'Forest City'. Green space is not something we can regain once overbuilt. The green space standards are in keeping with Portland's long term goals with regard to climate maintenance. Similar variances have created darkened corridors in the East End of the City. State Street is one of Portland's Grand Boulevards. We need to consider carefully changes to this vibrant part of town and sponsor only development which enhances the city's character.

I live in a home on Winter street which has been in my husband's family for more than 100 years. My father-in-law grew up on a tree-lined street overlooking a public open space which is now a Mercy Hospital parking lot. He used to be able to see Casco Bay from third-floor Now we face the back of Mercy and the parking area. We deal with the incumbent year-round noise from the hospital's industrial ventilation, idling emergency vehicles, night gas emissions, waste removal, deliveries, and seasonal snow clearing. We often feel as if Winter Street is treated as an alley rather than as the vital residental neighborhood that it is.

Over the past several years, Winter street residents have been working together to urge our State Street neighbors to take steps to improve their appearance on our street. To this end, we have encouraged our State Street neighbors to remove waste containers and replace hurricane fencing with plantings and/or architectural enhancements more in keeping with the residential nature of our street. In addition, we have met with the city arborist and are working to restore the trees along our sidewalks.

We are not opposed to development. In fact, many of us are looking forward to the proposed conversion of Mercy Hospital to a mixed-use residential and commercial development with green space. Our neighborhood has benefitted from the addition of much-needed housing with crosswalks, and local businesses where empty lots once stood. But we have also seen an explosion in construction and are witness to some of the negative consequences as well.

We urge you to consider the impact of a six-story, shadow casting, curb hugging, 50 unit structure, with limited parking, and no green space on our neighborhood. Maintaining even one of the zoning restrictions may be enough to help the planned construction fit into our fair Forest city, Portland. Please maintain the current zoning rules.

Please keep us posted regarding future public hearing and/or options for further discussion.
Thank you for your consideration.
Be safe and stay well.

Kitty and Charles

-- Katherine Gilbert and Charles Morris
92 Winter Street
Portland. ME 04102
207-773-9009

160 State Street

Luette Saul <lmsaul@yahoo.com> Apr 20, 2020 1:24 PM
Posted in group: **Planning Board**

To whom it may concern,

I'm writing in regards to the property on 160 State Street and the requests to rezone it. We are the closest neighbors on the side of the street on which the lot is located. Affordable housing is a critical need and I support and applaud efforts to create it. However I fail to see why rezoning this particular parcel of land, on a street which will shortly be entirely residential, is a good idea. Keep the parcel zoned as it is, so that Winter Street can remain a lovely place, without a towering building looming down on the homes below, blocking the sun from our yard.

Furthermore, though this is not specifically what is being addressed, I would like to mention the nearly 200 year old maple tree that is on the 160 State Street propery. The Soleys cut down several other large canopy trees (suddenly, and without notifying the neighbors), and it was only through direct intervention that we were able to save the maple. Approving any action that would allow that maple to be cut down would be a stunning act of hypocrisy from a city claiming a 'climate action initiative' of the type detailed on your webpage.

I'm including a photo, from our living room window, of the maple as it stands now, just beginning to leaf out. 160 Staye Street, the former convent, is visible also. This is how close we are! We see squirrels nesting, and once in a while a hawk comes to sit in the branches look over the neighborhood. Some of our young daughters' first words were "big tree"!

PLEASE think this all the way through before you allow anything to happen that could affect this venerable tree.

Respectfully,

Luette Saul
lmsaul@yahoo.com
415.577.4193
113 Winter Street

Sent from Yahoo Mail on Android

May 15, 2020

Brandon Mazer, Chair
Planning Board City of Portland
389 Congress Street
Portland, Maine 04101

Re: Thanos, LLC. proposed application of changes to 160 State Street and 99 Winter Street.

Dear Mr. Mazer:

I have looked at the documents submitted by: Thanos, LLC. Im trying to keep an open mind to the project but several pieces just don't seem to be fitting…

- **39 Units at 160 State**
- **50 Units at 99 Winter**
- **Zero open space**
- **Height increase of 50%**

Placing a six story building in what is now a neighborhood of two and three stores single and multi family properties, cramming 100 plus occupants on a small lot, little parking and no open space. This really seems like trying put the square piece in the circular hole. Great idea if you're the one collecting rent, not so great for neighborhood. Winter Street is a narrow one-way road with very limited parking. I currently can't see any merit to these requests. If this is approved I will be requesting to raze my property and build a six story 50 unit with zero landscaping. There's a good reason for zoning. Let's stay with it.

Sincerely,

Nathan Kimble
100 Winter St
Portland, ME 04102
(207) 650-2487
nathankimble@gmail.com

CC:

Ms. Jennifer Munson, Planning Department
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Department
& the Planning Board City of Portland

99 Winter Street / 160 State Street Zoning Change Request

Rosanne Graef <rgraef@gwi.net> May 18, 2020 7:09 PM
Posted in group: **Planning Board**

To Whom It May Concern,

I am writing to express my opposition to the request for a change from R-6 to R-7 zoning for this parcel. Approval of this request would result in significant negative impact on the neighborhood and its residents, as well as on prospective residents of buildings to be remodeled or constructed on this lot. If you visit Winter Street, you'll be struck by the paucity of street trees and the poor condition of those few that are barely hanging on. The lot in question was graced, until last summer, by mature deciduous trees which provided summer cooling, shade, pleasant views and a welcome natural respite for those living there and in the immediate surroundings. In addition, these trees provided habitat for birds and other creatures. When the lot changed hands, one of the first acts of the new owners was the sudden, unannounced cutting down of several of these large, healthy trees. Understandably their removal led to much despair among residents who developed a resolve to try to protect the remaining trees on this lot, as well as others, from unthinking and unnecessary destruction. Over the past few months, this proposed heritage tree protection ordinance has been making its progress through the review process of the Sustainability & Transportation Committee and hopefully will be moved forward to the full City Council.

It is my belief that this zoning request should be rejected, or at least tabled, until the tree protection ordinance has been thoroughly considered and voted upon by the members of the S & T Committee and, ultimately, the City Council. With 100% lot coverage allowed in the R-7, this application is an attempt to squeeze as much out of this development as possible and will undoubtedly result in the removal of the remaining trees on the lot. Actions such as this do not square with Portland's desire to be a livable city that demonstrates concern for the environment and the overall well-being of its current and future residents. Please reject this zoning change request.

Sincerely,

Rosanne Graef
30 Salem St.

108 Winter Street
Portland, Maine 04102
April 22, 2020

Mr. Brandon Mazer, Chair
Planning Board City of Portland
389 Congress Street
Portland, Maine 04101

Dear Mr. Mazer:

I have looked carefully at the documents submitted by: Thanos, LLC. re: the proposed application of changes to 160 State Street and 99 Winter Street.

I have a number of questions and concerns on the submitted proposal which I would like you to evaluate and consider. With Mercy Hospital leaving and with the significant changes to this site, the importance of preceding slowly, carefully, and wisely with this project, is a matter of major importance. These two projects will change this block of Winter Street forever. We need to get this right.

I live on this block, at 108 Winter Street. I bought my house in 2003 on auction from Mercy Hospital. It was quite a neglected house, but the integrity of the house had not been compromised and I have enjoyed restoring it. I moved to Portland when I was 29 years old (somehow, I am now 71) to establish the photography program at the University of Southern Maine. Portland is a city I love and over the years I have served on various city committees, representing the arts and the arts district.

A few years ago, I joined with Elizabeth Parsons, who was then President of the West End Neighborhood Association (WENA), to address some of the issues on the two blocks of Winter Street (from Pine Street to Gray Street) that needed improvement. Liz and I formed a very active group of 23 participants.

The group started by advocating for trees. Since 2003, many of the Winter St. trees (some very large) have died, and/or were removed. These trees were not replaced, and the tree wells were simply bricked over.

Next, we addressed the severe blight on Winter Street. This too has gotten much worse since 2003. Several of the businesses whose property fronts on State Street, started using their backyard, if you will, (meaning the streetscape of Winter Street), for the placement of their dumpsters, including food waste
(in the summer the smell is pretty much unbearable), winter salt storage in a shipping container, (we did work with Mercy hospital to relocate this item), un-shovelled walkways, cigarette butts, and other blight.

These clear signs of neglect, combined with the highly visible trash and metal containers, seem to give permission to individuals to use these objects and spaces, as: a tagging site, a place to dump their no longer wanted furniture, large branches, and other garbage anywhere near the dumpster. I have seen this happen countless times. I watched two men dump a sofa off a truck, from my living room window. These places have also been sites, where because of the neglect and "cover" provided by the dumpster, encourages highly intoxicated individuals to gather. This

past Sunday there was someone passed out on the street in front of the parking lot across from me.

Our group of 23 has met several times with Jeff Tarling, who is working to get us tree replacements. But, our progress is very slow. Therefore, when several of us heard the chainsaws and watched a large streetscape being cut down on the 99 Winter Street side of the Thanos, LLC property, we immediately convened a meeting with the developer and several city officials.

Present at that meeting were: Spencer Thibodeau, Councilor District 2, Christine Grimando, Director, Planning Department, Ian Jacob, Historic Preservation, several members of our Winter Street group, including Elizabeth Parsons, and myself. It was a very emotional meeting. Several residents were crying and very distraught with what appeared to be to us: a removal of significant trees before a plan had been submitted and approved by the city. We did lose one large tree and several smaller that day. We were told the remaining major tree on the property, a 150 year-old sugar maple was also slated to come down. Shortly after the meeting, I was still on the property talking to the owner when Jeff Tarling came by, examined the tree and found it to be healthy.

To address the request from Thanos, LLC to reduce the required landscape space to zero, from the standard 20%, is completely unacceptable. They have already blighted the neighborhood and to further grant them a reduction to 0 % is really an insult to all who work for and care about this city. To me this seems especially so, in light of their skirting the rules and taking down trees before a plan was submitted. And, frankly, seeing my neighbors be so distraught, seeing the tree trimmers stop the cutting, and walk off the job that day, speaks to the intensity of this issue. If we did not act and come together, the site would now be completely felled of all tress. Exactly what they are asking you to do.

Regarding Thanos LLC, second request for the 50% increase of proposed building height over the guidelines, of the R6 zone. I also see no merit or reason for this request on this site. And I urge you to deny this request. It would set a really bad example for Portland. We have requirements because many of you and others have taken the time and care to think these issues through and have come up with standards that makes sense and take into account the greater good, and not the selfish good. Additionally, as I'm sure you are aware, Winter Street is in the West End Historic District. Many of us who own homes in the district, have filled out our forms, met with Preservation officials and have complied with the regulations. Developers, who are also individuals, should be held to the same highest standards within the Historic District.

I thank you for reading and considering my thoughts and observations. If I may provide you with any additional information please contact me.

Rose Marasco
Visual Artist + Distinguished Professor Emerita of Art

207-780-1965
info@rosemarasco.com
www.rosemarasco.com

Mr. Troy Moon, Sustainability Office
Ms. Jennifer Munson, Planning Department
Mr. Jeff Tarling, City Arborist
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Department
& the Planning Board City of Portland

Sarah Conly <sconly@bowdoin.edu> Dec 31, 2020, 11:40:59 AM (6 days ago)

to planning@portlandmaine.gov, Elizabeth Parsons

To whom it may concern:

In point of fact, this concerns all of us. All of us on Winter St., on State St., on Pine and Spring Streets, and anyone in Portland who doesn't want their neighborhood sold to the highest bidder.

The Solely Brothers, not content with already planning to make a huge profit by developing the old monastery at 99 Winter St., want to change the zoning to R7. Good-bye sunlight on Winter St., good-bye quiet, and good-bye, neighborhood once a massive new building is here where there is at present a garden. There are plenty of places in Portland that could benefit from a bit of development, even a large development. Winter Street is not one of them. The West End is a historic residential neighborhood. Huge, soulless apartment buildings will destroy this. *Is this what you want?* You know if you enact this zoning change they will take full advantage of it and cram every square foot with as much construction as they can possibly fit in. Livability does not mean cramming as many people as possible into a small space. It's about preserving quality of life. Please do not allow this change.

Sarah Conly

110 Winter St., #4

Portland, ME 04102

ZN-001021-2020

Seth White <whiteseth04@gmail.com> Apr 21, 2020 6:44 AM

Posted in group: **Planning Board**

Dear Members of the Planning Board,

I live two lots down from the proposed project on the same side of the street. I am very much for affordable housing being built on this lot. I am very much against allowing this zoning amendment for this lot.

I suspect in these letters from neighbors you are hearing about a healthy 150 year old sugar maple at the heart of this project. I suspect you are hearing about the developers' covert modus operandi both in eliminating the only canopy on this stretch of Winter St. with zero community outreach (the venerable maple was spared only by direct action from residents), and in dealing with the resulting fallout with residents. Now these developers are essentially asking taxpayers to reward them with a variance that allows a six story building on a stretch of Winter St. with no buildings above three stories, and a 0% landscaped footprint in the name of workforce housing. I understand the city has certain incentives for developers to create workforce housing with a caveat that the project must remain affordable housing for the "longest period allowable under federal, state, and local law," but I've been unable to find out how long that actually is. Are we really to allow a permanent footprint that flies in the face of any sort of "climate action plan" for a tenuous short term promise of affordability?

Further, we are likely facing a very large recession or worse. It seems to my mind a particularly poor time to be awarding higher density residential variances until we as a community have a sense of how this crisis is playing out.

Please, please reject this application. Thank you for reading this.

Sincerely,

Seth White
113 Winter St.

99 Winter Street aka 160 State Street

Shawn Hunt <hunt_shawn@hotmail.com> Apr 17, 2020 7:28 PM
Posted in group: **Planning Board**

Hello:

I'm just writing a quick note regarding a concern with the proposed 99 Winter Street/160 State Street development (former Precious Blood Monastery). This is a big change for our street. I am not writing fully opposed, but I have concerns.

I want to hear a *specific plan* about how trash/recycling and pet waste (if applicable) will be handled by the property management. What about cigarette butts?

With 50 new units (more than 50 people?) I am sure that without a plan this will get out of hand. With potentially high turnover in the many units, I anticipate a problem with abandoned furniture, junk, etc.

What is the plan?

With that number of units, I want strong reassurance that waste will be handled by a reputable private company -- or at the very least with strong and enforced guidelines from the property management. We will not tolerate poor waste management at this property.

Thank You,
Shawn Hunt
Pine Winter Condos

Fwd: 99 Winter Street/160 State Street Development

1 message

Suzanne Hunt <shuntdoherty@gwi.net> Thu, May 28, 2020 at 7:14 PM
To: atufts@portlandmaine.gov, planningboard@portlandmaine.gov
Cc: jmy@portlandmaine.gov

Subject: 99 Winter Street/160 State Street Development

City Staff and Planning Board Members;

First off, thank you for all you do, and thank you for your careful review of the proposed development at 99 Winter Street/160 State. In 1998 I was very fortunate to be part of the New Neighbors Program which allowed me to become the happy owner of a 3 unit apartment building at 36 Winter Street. Over these 22 years I have worked with the Historic Preservation Board and the Planning Department learning to follow all zoning requirements. I have witnessed many of my neighbors paying the same attention to zoning requirements.

Therefore when I received the proposed plans for 99 Winter Street I was dismayed. The proposal completely ignores the existing height and open space requirements for this zone. A professional developer surely was aware of the existing zoning requirements when the property was purchased. I see no reason why this development should be granted any variances. If a developer can ignore all pre existing zoning requirements why are the rest of us obeying them?

The height of the proposed apartment building is totally out of scale with Winter Street. The idea of reducing the green space from 20% to 0% seems ridiculous. Winter Street is a residential neighborhood and should be treated as such.

Thank you,

Suzanne Hunt
36 Winter Street
Portland, Maine. 04102
772 6695

Sent from my iPad

Developers & Portland Assets

Wayne@redhookdesignalliance.com <Wayne@redhookdesignalliance.com> Wed, Apr 22, 2020 at 1:20 PM
To: atufts@portlandmaine.gov, jmy@portlandmaine.gov, planningboard@portlandmaine.gov
Cc: Anne Pringle <oldmayor@maine.rr.com>, vestal@chesterandvestal.com, karsny@yahoo.com, sarahmichniewicz@me.com, Larry Julie <jlarry@portlandlandmarks.org>

Andrew, Jennifer, and Members of The Portland Planning Board,

I'm taking a moment to write a note questioning why situations like this have become business as usual in Portland. The Soley brothers have recently submitted a development proposal for the 99 Winter side of the Monastery lot. They are asking for a zoning waiver to build a significantly larger structure than current zoning allows. The plans as they stand now would definitely involve taking down the 150+ year old sugar maple near the old Monastery building (to be replaced by surface parking) and would almost certainly take out the other remaining trees that were spared last summer.

The summation, as I read it, is that a 60' tall building will be erected in a zone where structures are limited to 45', by virtue of a "work force" housing exemption, a number of trees will be forever removed, including one of significant age and stature, and the Soley brothers will do well for themselves at the expense of the neighborhood. I think it will be interesting to observe the evolution of Portland without a cruise ship industry, with a significant decline in tourism, with a decimated restaurant population, and a workforce without work. A very interesting turn of events !!!

I guess my point is that while economies grow and decline, and the same for populations (Portland's population is in decline after all), it would be comforting to feel assured that you will protect our right to live in a green, pleasant, and human scaled city. I ask you to rise to the challenge.

Thanks for your stewardship,

Wayne Valzania

27 Merrill Street

Portland, ME 04101